Western Refining Southwest LLC
A subsidiary of Marathon Petroleum Corporation
I-40 Exit 39
Jamestown, NM 87347

April 1, 2023

Mr. Dave Cobrain, Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Bldg. 1
Santa Fe, NM 87505-6303

RE: Response to Approval with Modifications
2022 Facility-Wide Groundwater Monitoring Work Plan
Western Refining Southwest LLC
(DBA Marathon Gallup Refinery)
EPA ID# NMD000333211
HWB-WRG-22-001

Dear Mr. Cobrain:

Attached please find the response to comments contained in the New Mexico Environment Department (NMED) Disapproval letter dated February 1, 2023. A timeline of the 2022 Facility-Wide Groundwater Monitoring Work Plan is provided below.

- Work Plan, submitted February 9, 2022
- Approval with Modifications, received April 25, 2022
- Response to Approval with Modifications, submitted September 21, 2022
- Approval with Modifications (2), received February 1, 2023

Two hard copies and an electronic version of the revised Report are included. A redline-strikeout version in electronic format is also included.

If you have any questions or comments regarding the information contained herein, please do not hesitate to contact Mr. John Moore at (505) 879-7643.

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Certification

I certify under penalty of law that this document and all attachments were prepared under my direction of supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

Western Refining Southwest LLC, DBA Marathon Gallup Refinery

Timothy J. Peterkoski
Director of Environment and Climate Strategy
Marathon Petroleum Company LP

Enclosures

cc: L. Andress, NMED HWB
L. Barr, NMOCD
K. Luka, Marathon Petroleum Corporation
J. Moore, Marathon Gallup Refinery
H. Jones, Trihydro Corporation
L. King, EPA Region 6

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ATTACHMENT A

RESPONSE TO COMMENTS

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 1:	**Response 1:**
NMED Approval with Modifications Comment 1 states "Since Appendix A [Historical Overview] must be provided in future work plans, the Permittee must ensure that the information provided is current and up-to date to the extent possible." The Permittee's response "Updates from January 2022 - December 2022 will be included in the 2023 work plan." This response is acceptable.	This comment is acknowledged.
Comment 2:	**Response 2:**
NMED Disapproval Comment 2 states "[the] Revised Natural Attenuation Assessment and Proposed Workplan for the Hydrocarbon Seep Area lists analytical parameters relevant to CVOCs [chlorinated volatile organic compounds] MNA [monitored natural attenuation] (e.g., total organic carbon, carbon dioxide, alkalinity, hydrogen, volatile fatty acid) that are not included in Table 3-1(MNA Groundwater Analytical List). Explain why these analytical parameters are not evaluated for CVOCs MNA in a response letter or include all analytical parameters necessary to fully evaluate for CVOCs MNA in the revised Work Plan..." The Permittee's response to NMED Approval with Modifications Comment 3 states "NMED had not previously requested the addition of these analytes in the approval process. As such, these analytes were not included in the 2022 Work Plan. Monitoring these analytes is not considered critical to the success of the MNA program..." The analytical parameters of total organic carbon, carbon dioxide, alkalinity, hydrogen, volatile fatty acids contribute to the data which	As the Refinery has previously stated, sampling has been conducted in accordance with the approved MNA work plan, which did not include the analytes suggested in this comment. The MNA Work plan was approved twice (Sept 28, 2021, and April 5, 2022). In both response to Approval with Modifications, the Refinery provided the analyte list and NMED did not comment at that time. However, the Refinery will add total organic carbon, carbon dioxide, alkalinity, hydrogen, and volatile fatty acid to the 2023 analyte list to be sampled during the annual event. The 2023 Work Plan was submitted to NMED on February 1, 2023; therefore, 2022 Work Plan is obsolete, and no changes were made to the Work Plan text or Table 3-1. In future events, the Refinery will sample for the additional analytes (total organic carbon, carbon dioxide, alkalinity, hydrogen, and volatile fatty acid) on a 3-year basis beginning in 2023. This is due to the length of time it will take to see trends

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
demonstrates whether or not natural processes are degrading contaminants at the site. Add these analytical parameters to the MNA program in future annual updates to the Work Plan.	in these parameters due to the presence of hydrocarbon and CVOCs.
Comment 3:	**Response 3:**
The Permittee's response to NMED Approval with Modifications Comment 3 states "The MNA [monitored natural attenuation] Work Plan was approved in email, May 5, 2022, without those analytes included." While NMED may conceptually approve proposed work in meetings, phone calls, and/or emails, NMED's final decisions are documented in formal written letter correspondence. The Response to Approval with Modifications, Natural Attenuation Assessment and Proposed Workplan for The Hydrocarbon Seep Area dated December 17, 2021, was approved with NMEDs letter dated April 5, 2022, rather than an email. The May 5, 2022 email that the Permittee referred to was to document that further modifications required by the April 5, 2022 letter were satisfactorily met. Furthermore, the Executive Summary, and Section 1.0, Introduction, of the Work Plan both state "Although, the "Response to Approval with Modifications" (Western 2021b) has not been approved by NMED..." The response was approved, as described above, in the April 5, 2022 letter from NMED. Revise the text accordingly and send a replacement page.	The reference to the MNA Work Plan was revised in the Executive Summary and Section 1.0 to state, "The Refinery is using the information from the "Response to Approval with Modifications" (Western 2021b) approved by NMED on April 5, 2022, as the basis for the MNA groundwater program presented in this document. Information regarding the MNA program is provided in Section 3.2."

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 4:	**Response 4:**
In response to Approval with Modifications Comment 5, the Permittee states "...new wells will be sampled quarterly. After one year of quarterly sampling, the wells will be evaluated to be sampled annually, if that matches the well group sampling frequency." New wells are typically sampled for eight quarters to establish baseline contaminant concentrations. Reductions in sampling frequency of less than eight quarters of baseline sampling must be justified in annual updates to the Work Plan.	This comment supersedes the previous Comment 5 response from NMED's April 25, 2022, comment set. The Refinery will conduct eight quarters of baseline sampling to establish baseline contaminant concentrations. The wells will then be evaluated for a change in sampling frequency. Additionally, Section 4.2, page 16 of the text was revised to state, "The new monitoring wells are incorporated into the LTU, MKTF, and eastern boundary monitoring groups. The new wells will be sampled quarterly. After two years of quarterly sampling, the wells will be evaluated to be sampled annually, if that matches the well group sampling frequency."

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 5:	**Response 5:**
NMED Approval with Modifications Comment 9.a. states "[in Appendices C-1 and C-2 as well as all applicable sections of the Work Plan] laboratory results that are presented as "not detected (ND)" must be presented as a numerical value, i.e., "<: RLs" [< Reporting Limits] rather than ND." The Permittee's response states, "The tables [in Appendices C-1 and C-2] report values less than the reporting limit as "ND(x)," which corresponds to "not detected at the reporting limit, where (x) denotes the reporting limit concentration." The tables in Appendix C do not portray this nomenclature, instead they show "ND" in italics with separate columns that show the laboratory reporting limits, laboratory method detection limits, and the relevant screening levels for each constituent. Because the RLs for each analyte are clearly shown in both cases, either representation is acceptable. Resolve the discrepancies in revised tables and pages and provide replacement pages.	This comment is acknowledged. The 2023 Work Plan was submitted on February 1, 2023; therefore the 2022 Work Plan is obsolete. The Refinery will update the Appendix C to be in the requested format in future Work Plans.

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 6:	**Response 6:**
The Permittee response to NMED Approval with Modifications Comment 9.a. states "Laboratory method detection limits (MDLs) are not reported in the tables [in Appendix C]." The Permittee response shows that Tables C-1a, C-b, C-1c, C-1d all include a column showing MDLs for each analyte. Resolve the discrepancies in in revised tables and pages and provide replacement pages. See Comment 5 above.	The Refinery acknowledges that there was a discrepancy between Appendix Tables C-1a, C-1b, C1-c, and C1-d, and the response to the previous NMED comment regarding the MDLs. The Refinery agrees that MDLs are shown in those tables. These comments supersede the first round of comments from NMED dated April 25, 2022. As such, no modifications were made regarding this comment.
Comment 7:	**Response 7:**
NMED Approval with Modifications Comment 9.b. states "Include the applicable SL for each analyte in a revised Appendix C-1." The Permittee's response states "The 2021 screening levels have been added to the Appendix C-1 tables." The footnote to Tables C-1a, C-1b, C-1c, C1-d, states, "[t]he screening levels shown are the same as selected in the 2021 Annual Groundwater Report." Reference the source and date of the specific screening levels in foot note (e.g., EPA Regional Screening levels, November 2021).	The references for the specific screening levels have been added to the footnotes in Appendix Tables C-1a, C-1b, C-1c, and C-1d.
Comment 8:	**Response 8:**
Tables C-2a, C-2b, C-2c and C-2d, do not include units for the highest and lowest contaminant concentration detections. Add relevant units to corresponding tables and provide replacement pages.	Units for the highest and lowest contaminant concentration detections (milligrams per liter) have been added to Appendix Tables C-2a, C-2b, C-2c, and C-2d.

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 9:	**Response 9:**
The Permittee's response to NMED Approval with Modifications Comment 10 states "in addition, the basis for the inclusion or exclusion was discussed and approved by NMED prior to work plan submittal." While NMED may conceptually approve proposed work in meetings, phone calls, and/or emails, NMED's final decisions are documented in written letter correspondence. See Comment 3 above.	This comment is acknowledged.
Comment 10:	**Response 10:**
In the Executive Summary the Permittee states "[t]he Refinery annually evaluates the facility wide monitoring program. Annual revisions to the work plan are presented to New Mexico Environment Department (NMED) for review." Revise the text to state what time of year the annual revisions will be submitted to NMED and provide a replacement page.	The Executive Summary and Section 1.0 were revised to state, "[t]he Refinery annually reviews the facility-wide monitoring data and evaluates the facility-wide monitoring program. Revisions and modifications are incorporated into the annual Facility-Wide Groundwater Monitoring Work Plans, due to NMED on April 1 of the same calendar year that the Plan is for."

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 11:	**Response 11:**
In the Executive Summary the Permittee states "...the "Response to Approval with Modifications" (Western 2021b) has not been approved by NMED..." The response was approved, as described above, in the April 5, 2022 letter from NMED. Revise the text accordingly and provide a replacement page. See Comment 3 above.	The sentence referenced in NMED's Comment 11 has been revised to state, "[t]he Refinery is using the information from the 'Response to Approval with Modifications' (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document." Additionally, Section 1.0, page 9 was revised to state, "[t]he Refinery is using the information from the 'Response to Approval with Modifications' (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document. A reference to the April 5, 2022, NMED letter was added to Section 5.0 "References."

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 12:	**Response 12:**
In Section 3.1, Facility-wide Groundwater Monitoring Program, the Permittee states "[g]roundwater samples will not be collected from monitoring wells that have measurable SPH of 0.01 ft or more. If an SPH recovery system is present in a well, recovery system operation will be halted to allow groundwater to equilibrate, and the fluid level will be measured." And in Appendix B, Section 2.1, Well Gauging, the Permittee states "If an SPH recovery system is present in a well, recovery system operation will be halted to allow groundwater to equilibrate, and the fluid level will be measured." State how long the groundwater will be allowed to equilibrate before sampling and provide replacement pages as necessary.	Groundwater will be allowed to equilibrate for 24 hours before a fluid level is measured and sampled. Section 3.1, page 14, has been revised to state, "[g]roundwater samples will not be collected from monitoring wells that have measurable SPH of 0.01 ft or more. If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured." Additionally, Appendix B, Section 2.1 (Well Gauging) has been revised to state, "If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured."
Comment 13:	**Response 13:**
In Table Attachment A-5, Well Information - Survey Data, Screened Interval, Stratigraphic Unit, Artesian Water Wells, Gallup Refinery, Gallup, New Mexico, it is unclear if the column for Total Well Depth is presented as an elevation or feet below ground surface. Clarify what this column is representing and provide a replacement table.	In Appendix B Attachment Table A-5, the "Total Well Depth" column represents depth in units of feet below ground surface. The column heading has been revised to, "Total Well Depth (ft bgs)".

New Mexico Environment Department (NMED) To Western Refining Southwest LLC (dba Marathon Gallup Refinery [Refinery]) Approval with Modifications Letter "2022 Facility-Wide Groundwater Monitoring Work Plan" (February 1, 2023)

NMED Comments	Refinery Responses
Comment 14:	**Response 14:**
In Table Attachment A-5, Well Information - Survey Data, Screened Interval, Stratigraphic Unit, Artesian Water Wells, Gallup Refinery, Gallup, New Mexico, the footnotes are not noted on the table itself to signify which footnote applies to what part of the table. For example, footnote 2 states "Actual well casing diameter is 12 inches. The 176 ft of 24 in steel casing is the actual cemented support for development of the well." As the footnote is not noted on the table, it is not clear which well this applies to. The Permittee must clearly identify the portion(s) of the table that the individual footnotes apply to and provide a replacement table.	Appendix B Attachment A-5 "Well Information – Survey Data, Screened Interval, Stratigraphic Unit, Artesian Water Wells, Gallup Refinery, Gallup, New Mexico" was revised to include the footnotes within the table, so that it is clear which wells the footnotes apply to.

ATTACHMENT B

REDLINE/STRIKEOUT

REVISED 2022 FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN

(ELECTRONIC COPY)

WESTERN REFINING SOUTHWEST LLC

D/B/A MARATHON GALLUP REFINERY

2022 FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN

FEBRUARY 11, 2022

REVISED SEPTEMBER 30, 2022

REVISED APRIL 1, 2023

Executive Summary

This 2022 Facility-Wide Groundwater Monitoring Work Plan (2022 Plan) has been prepared for the implementation of the facility-wide groundwater and monitored natural attenuation (MNA) groundwater programs at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This 2022 Plan is prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NMED 2022).

The Refinery annually reviews the facility-wide monitoring data and evaluates the facility-wide monitoring program. Revisions and modifications are incorporated into the annual Facility-Wide Groundwater Monitoring Work Plans, due to NMED on April 1 of the same calendar year that the Plan is for. ~~Revisions to the Annual 2022 Plan are presented to New Mexico Environment Department (NMED) for review.~~ These revisions may include, but are not limited to, a reduction or change in monitoring locations, monitoring frequency, and/or target constituents of concern to be analyzed. Due to delays in receiving approval on the 2021 Plan update, NMED requests presented in comments to the 2021 Facility-Wide Groundwater Monitoring Work Plan (NMED 2021b, NMED 2021c) are incorporated into the 2022 Plan, when applicable. General information regarding the facility-wide monitoring program is presented in Section 3.1. The revisions proposed for the 2022 Plan are discussed in Section 4.0.

The MNA groundwater evaluation was initiated in 2020 and a work plan was developed in 2021. The following presents the historical sequence of correspondence for the MNA Plan:

- "Natural Attenuation Assessment and Proposed Workplan for the Hydrocarbon Seep Area" (MPC 2020), submitted December 15, 2020
- "Disapproval" (NMED 2021d), received January 26, 2021
- "Response to Disapproval" (Western 2021a), submitted August 27, 2021
- "Approval with Modifications (NMED 2021e), received September 28, 2021
- "Response to Approval with Modifications" (Western 2021b), submitted December 17, 2021

Per Comment 11 provided by NMED on the 2021 Plan (NMED 2021c), the Refinery is including a discussion of the MNA groundwater program in the 2022 Plan. ~~Although, the "Response to Approval with Modifications" (Western 2021b) has not been approved by NMED, t~~The Refinery is using the information from the "Response to Approval with Modifications" (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document. Information regarding the MNA program is provided in Section 3.2.

The Refinery has created a groundwater monitoring work plan with quality assurance practices and controls, as well as standard procedures for sampling, and a schedule of activities to monitor groundwater and surface water at select locations of the Refinery. The persons responsible for the implementation and oversight of this plan are:

1.0 Introduction

This 2022 Facility-Wide Groundwater Monitoring Work Plan (2022 Plan) has been prepared for the implementation of the facility-wide groundwater and monitored natural attenuation (MNA) groundwater programs at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This 2022 Plan is prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NMED 2022). Figure 1-1 presents the Refinery location.

The Refinery annually reviews the facility-wide monitoring data and evaluates the facility-wide monitoring program. Revisions and modifications are incorporated into the annual Facility-Wide Groundwater Monitoring Work Plans, due to NMED on April 1 of the same calendar year that the Plan is for~~annually evaluates the facility-wide monitoring program~~. Annual revisions to the work plan are presented to New Mexico Environment Department (NMED) for review. These revisions may include, but are not limited to, a reduction or change in monitoring locations, monitoring frequency, and/or target constituents of concern (COC) to be analyzed. Because the 2021 Facility-Wide Groundwater Monitoring Work Plan (2021 Plan) was not approved in 2021, NMED requests presented in comments to the 2021 Plan (NMED 2021b, NMED 2021c) are incorporated into the 2022 Plan, when applicable. General information regarding the facility-wide monitoring program is presented in Section 3.1. The revisions proposed for the 2022 Plan are discussed in Section 4.0.

The MNA groundwater evaluation was initiated in 2020 and a work plan developed in 2021. The following presents the historical sequence of correspondence for the MNA work plan:

- "Natural Attenuation Assessment and Proposed Workplan for the Hydrocarbon Seep Area" (MPC 2020), submitted December 15, 2020
- "Disapproval" (NMED 2021d), received January 26, 2021
- "Response to Disapproval" (Western 2021a), submitted August 27, 2021
- "Approval with Modifications (NMED 2021e), received September 28, 2021
- "Response to Approval with Modifications" (Western 2021b), submitted December 17, 2021

Per Comment 11 provided by NMED on the 2021 Plan (NMED 2021c), the Refinery is including a discussion of the MNA groundwater program in the 2022 Plan. The Refinery is using the information from the "Response to Approval with Modifications" (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document. Information regarding the MNA program is provided in Section 3.2.

1.1 Refinery Information

Built in the 1950s, the Refinery is located within a rural and sparsely populated area east of Gallup, New Mexico (NM). The nearest population centers are the Pilot Flying J Travel Center refueling plaza, the

4.0 Facility-wide Groundwater Monitoring Program Revisions

Prior to preparing the 2022 Plan, NMED and the Refinery conducted a meeting on December 3, 2021, to discuss work plan and report presentation. Follow-up communications regarding the 2022 analyte list were conducted via email from January 5, 2022, through January 20, 2022, (Personal Communication 2022). The discussions between NMED and the Refinery are incorporated into this 2022 Plan. The proposed modifications and the rationale are presented in the following sections.

4.1 Modifications to Monitoring Locations

The monitoring locations are presented in Table 4-1 and shown on Figure 1-2. Six monitoring wells were plugged, abandoned, and replaced during 2021: MKTF-01, MKTF-02, MKTF-04, MKTF-17, MKTF-18, and RW-2. Plugging and abandonment were conducted following NM state guidelines (New Mexico Administrative Code 19.24.4). The wells were replaced because the well screens have historically been submerged (NMED 2018, Comment 40; NMED 2019b, Comment 4). The replacement wells are indicated by an "R" following the well designation (e.g., MKTF-01R).

In addition, five new monitoring wells were installed during 2021: OW-66, OW-67, OW-68, OW-70 (NDD-MW-1), and OW-12A (NDD-MW-2).

- Monitoring well OW-66 was installed approximately halfway the distance between OW-29 and OW-13 to evaluate the potential migration of MTBE within the Sonsela aquifer (NMED 2018, Comment 18.3).
- Monitoring wells OW-67 and OW-68 were installed north of EP-2 to evaluate the source of elevated chloride and sulfate concentrations detected in well SMW-2 (NMED 2019a).
- NDD-MW-1 and NDD-MW-2 were installed as part of the North Drainage Ditch investigation (Western 2021e). These identifiers were used during the August 2021 North Drainage Ditch Investigation. These monitoring wells were renamed OW-70 and OW-12A, respectively, to correspond to Refinery naming convention.

4.2 Modifications to Monitoring Frequency

The monitoring frequency was evaluated based on the 2021 sampling events and analytical data. Well OW-12 will be modified from an annual to a semiannual frequency. No other monitoring frequency changes are proposed for the 2022 Plan. Table 4-1 presents the 2022 frequency for the monitoring groups.

The new monitoring wells are incorporated into the LTU, MKTF, and eastern boundary monitoring groups. The new wells will be sampled quarterly. After two~~one~~ years of quarterly sampling, the wells will be evaluated to be sampled annually, if that matches the well group sampling frequency. The new wells have been added to Table 4-1.

3.0 Groundwater Monitoring Programs

Groundwater monitoring at the Refinery is conducted pursuant to the RCRA Post-Closure Permit (NMED 2022) and in accordance with this 2022 Plan. There are two objectives of the groundwater monitoring program at the Refinery. First, is to monitor facility-wide groundwater conditions and submit the information in a facility-wide annual groundwater report. Second, is to provide information on MNA occurring in the MKTF area. MNA data are submitted in an annual MNA report. Both programs are discussed below.

3.1 Facility-wide Groundwater Monitoring Program

The facility-wide program will consist of fluid-level measurement, and groundwater sample collection and analysis from a series of monitoring wells, recovery wells, outfalls, and evaporation pond locations. The monitoring network is divided into nine groups (Section 1.2 and Figure 1-2). The sampling frequency varies by individual wells. The analytes are consistent across the nine monitoring groups. Section 4.0 presents the 2022 sampling locations and analyte list.

Appendix B presents the procedures used for sample collection and analysis and includes the following activities:

- Well gauging (i.e., depth to groundwater and SPH, if present, and depth to the bottom of the well)
- Well purging and sampling, including equipment, groundwater stabilization criteria, and collection of field quality parameters
- Sample handling and waste management procedures
- Field and laboratory quality assurance procedures

Groundwater samples will not be collected from monitoring wells that have measurable SPH of 0.01 ft or more. If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured. If the well does not have measurable SPH, the recovery system will be removed from the well, and the well will be purged and sampled. For wells that are purged dry, samples will be collected if recharge volume is sufficient for sample collection within 24 hours. Wells not sampled due to insufficient recharge will be documented in the field log. If samples cannot be collected from a location due to safety concerns, such as elevated hydrogen sulfide, arrangements will be made to collect samples from the affected location at a different time by changing the scheduled sampling dates.

Data from the facility-wide groundwater will be presented in an annual report in accordance with the RCRA Post Closure Permit (NMED2022) Parts IV.C.3 and IV.L.4. The report will include:

NMED. 2021c. Second Disapproval, [Revised] Facility Wide Groundwater Monitoring Work Plan – Updates for 2021, Western Refining Southwest LLC, Gallup Refinery, McKinley County, Gallup, New Mexico, EPA ID #NMD000333211, HWB-WRG-21-006. November 15.

NMED. 2021d. Disapproval, Natural Attenuation Assessment and Proposed Work Plan for the Hydrocarbon Seep Area, French Drain Soil Investigation Work Plan, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-023. January 26.

NMED. 2021e. Approval with Modifications, Response to Disapproval, Natural Attenuation Assessment and Proposed Work Plan for the Hydrocarbon Seep Area. September 28.

NMED. 2022. Response to Approval with Modifications, Annual Groundwater Monitoring Report, Gallup Refinery – 2019, Western Refining Southwest LLC, Gallup Refinery, McKinley County, Gallup, New Mexico, EPA ID #NMD000333211, HWB-WRG-20-013. April 5.

Personal Communication. 2022. Marathon Gallup – 2022 Groundwater Work Plan Revised Analyte List. Email from Mr. Michiya Suzuki (NMED) to Ms. Lesli Alexander (Trihydro). January 5 through January 20.

United States Environmental Protection Agency (USEPA). 1997. Region 5 Waste Management Branch "Skinner List" Constituents of Concern for Waste from Petroleum Processes.

Western Refining Southwest LLC (Western). 2021a. Response to Disapproval, Natural Attenuation Assessment and Proposed Work Plan for the Hydrocarbon Seep Area, French Drain Soil Investigation Work Plan, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-023. August 27.

Western. 2021b. Response to Approval with Modifications, Natural Attenuation Assessment and Proposed Work Plan for the Hydrocarbon Seep Area, Western Refining Southwest LLC, Gallup Refinery, EPA ID #NMD000333211, HWB-WRG-20-023. December 17.

Western. 2021c. Investigation Report SMW-2 and GWM-1 Areas, Marathon Gallup Refinery, Western Refining Southwest LLC, Gallup, New Mexico. September.

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Appendix B – Investigation Methods

WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
APPENDIX B. INVESTIGATION METHODS

~~FEBRUARY 11, 2022~~

REVISED APRIL 1, 2023

2.0 Groundwater Sampling Methodology

All monitoring wells scheduled for sampling during a groundwater sampling event will be sampled within 15 working days of the start of the monitoring and sampling event, weather permitting.

2.1 Well Gauging

At the beginning of each quarterly, semiannual, or annual sampling event, monitoring and recovery wells listed in Section 4.0 of the annual "Facility-Wide Groundwater Monitoring Work Plan" will be gauged to record the depth to separate phase hydrocarbon (SPH), if present, the depth to water, and the depth to bottom of the well. The gauging will be performed using an oil/water interface probe attached to a measuring tape capable of recording measurements to the nearest 0.01 foot (ft). If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured.

Each well is field verified with the well number on the well casing or adjacent to the well to ensure that samples are collected at the correct well location. Wells have a permanent marked reference point on the well casing from which groundwater levels and well depths are measured. The portable pump intake is lowered to the midpoint of the listed screened interval for each specific well using the markings identified on the pump hose, which are set at 1-ft intervals. In wells with dedicated pumps, the pumps have been installed at the midpoint of the screened interval.

All water/SPH levels are measured to an accuracy of the nearest 0.01 feet using an oil/water interface meter. Water levels and well depths in the deeper wells are gauged with an electric water depth meter. After determining water levels, well volumes are calculated using the appropriate conversion factors for a given well based on its internal diameter. Volume is equal to the height of the liquid column times the internal cross-sectional area of the well.

Gauging measurements will be recorded in a logbook or on a field gauging form. Data obtained from the gauging will be reported in the annual groundwater monitoring report.

The potentiometric surfaces for the Alluvial/Fluvial Upper Sand, Alluvium/Chinle, and Sonsela aquifers are presented in Figures 1 through 3, respectively. Attachment A-1 is a summary of the fluid level data collected in 2020 for the non-Marketing Tank Farm (MKTF) wells. Attachment A-2 is a summary of the fluid level data collected in 2020 for the MKTF wells. Attachments A-3 and A-4 include well information for the non-MKTF wells and MKTF wells, respectively. The well information consists of the survey data, screened intervals, and stratigraphic unit in which the wells are screened. Attachment A-5 includes well information for artesian wells also known as Process or Production wells. Information provided for the artesian wells was gathered from well boring logs. These wells are encased; therefore, measurement for depth to bottom cannot be field verified.

2.2 Well Purging and Sampling

Each well will be purged by removing groundwater prior to sampling to ensure that formation water is being sampled. Generally, at least three well volumes (or a minimum of two if the well has low recharge

Attachment A – Water Levels and Well Information

ATTACHMENT A-5. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
ARTESIAN WATER WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Date of Installation	Submersible pump depth (ft)	Casing Diameter (in)	Well Head Elevation Mark* (North) (ft)	Well Head Elevation Mark* (West) (ft)	Well Head Elevation Mark* (Z) (ft)	Measuring Point Discription	Total Well Depth (ft bgs)
PW-2	9/24/1956	800	16.0	3300.40	4694.28	162.78	1st Discharge tee or elbow	1075.00
PW-3	4/1979	900	14.0	2932.83	1387.79	248.00	1st Discharge tee or elbow	1030.00
PW-4	11/12/1999	750	12.0 [2]	1895.73	2979.78	178.51	1st Discharge tee or elbow	1020.00 [3]

Well ID	Well Casing Bottom Elevation (ft)	Stratigraphic unit	Aquifer
PW-2	2225.40	Chinle	San Andreas/Yeso Aquifer
PW-3	1902.83	Chinle	San Andreas/Yeso Aquifer
PW-4	819.73	Chinle	San Andreas/Yeso Aquifer

Notes
bgs = below ground surface
ft = feet
ID = identification
in = inch
MSL = mean sea level
* Basis of survey Refinery Control Point at 1000W, 2575N, plant elevation = 254.87 ft and MSL elevation = 6959.41 ft

1) Well casing bottom elevation using Well Head Elevation Mark (North) as a reference point.
2) Actual well casing diameter is 12 inches. The 176 ft of 24 in steel casing is the actual cemented support for development of the well.
3) The actual total well depth is 1020 ft with additonal 56 ft x 7-7/8 in diameter open exploratory hole which was accounted for as total well depth of 1076 ft.

Appendix C – 2022 Analyte Evaluation

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-11	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-11	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-11	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-11	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-11	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-11	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-11	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-11	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-11	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-11	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-11	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-11	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-11	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-11	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-11	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-11	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-11	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-11	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-11	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-11	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-11	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-11	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-11	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-11	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-11	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-11	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-11	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-11	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-11	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-11	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-11	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-11	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-11	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-11	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-11	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-11	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-11	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-11	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-11	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-11	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-11	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-11	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-11	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-11	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-11	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-11	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-11	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-11	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-11	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-11	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-11	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-11	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-11	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-11	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-11	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-11	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-11	11/6/2012	Acetone	120	100	15	14064	ug/L
EP-11	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-11	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-11	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-11	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-11	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-11	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-11	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-11	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-11	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	11/6/2012	Carbon Disulfide	590	100	8.4	810	ug/L
EP-11	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-11	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-11	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-11	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-11	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-11	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-11	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-11	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-11	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-11	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-11	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-11	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-11	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-11	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-11	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-11	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-11	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-11	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-11	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-11	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-11	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-11	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-11	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-11	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-11	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-11	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-11	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-11	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-11	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-11	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-11	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-11	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-11	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-11	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-11	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-11	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-11	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-11	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-11	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-11	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-11	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-11	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-11	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-11	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-11	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-11	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-11	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-11	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-11	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-11	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-11	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-11	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-11	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-11	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-11	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-11	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-11	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-11	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-11	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-11	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-11	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-11	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-11	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-11	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-11	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-11	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-11	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-11	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-11	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-11	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-11	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-11	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-11	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-11	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-11	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-11	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-11	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-11	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-11	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-11	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-11	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-11	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-11	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-11	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-11	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-11	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-11	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-11	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-11	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-11	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-11	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-11	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-11	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-11	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-11	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-11	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-11	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-11	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-11	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-11	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-11	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-11	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-11	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-11	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-11	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-11	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-11	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-11	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-11	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-11	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-11	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-11	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-11	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-11	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-11	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-11	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-11	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-11	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-11	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-11	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-11	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-11	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-11	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-11	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-11	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-11	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-11	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-11	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-11	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-11	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-11	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-11	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-11	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-11	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-11	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-11	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-11	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-11	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-11	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-11	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-11	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-11	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-11	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-11	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-11	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-11	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-11	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-11	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-11	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-11	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-11	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-11	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-11	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-11	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-11	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-11	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-11	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-11	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-11	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-11	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-11	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-11	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-11	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-11	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-11	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-11	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-11	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-11	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-11	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-11	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-11	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-11	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-11	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-11	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-11	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-11	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-11	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-11	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-11	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-11	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-11	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-11	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-11	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-11	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-11	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-11	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-11	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-11	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-11	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-11	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-11	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-11	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-11	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-11	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-11	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-11	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-11	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-11	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-11	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-11	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-11	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-11	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-11	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-11	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-11	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-11	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-11	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-11	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-11	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-11	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-11	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-11	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-11	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-11	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-11	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-11	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-11	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-11	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-11	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-11	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-11	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-11	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-11	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-11	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-11	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-11	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-11	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-11	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-11	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-11	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-11	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-11	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-11	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-11	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-11	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-11	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-11	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-11	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-11	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-11	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-11	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-11	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-11	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-11	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-11	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-11	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-11	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-11	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-11	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-11	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-11	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-11	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-11	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-11	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-11	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-11	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-11	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-11	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-11	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-11	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-11	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-11	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-11	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-11	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-11	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-11	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-11	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-11	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-11	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-11	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-11	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-11	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-11	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-11	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-11	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-11	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-11	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-11	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-11	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-11	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-11	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-11	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-11	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-11	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-11	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-11	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-11	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-11	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-11	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-11	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-11	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-11	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-11	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-11	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-11	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-11	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-11	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-11	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-11	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-11	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-11	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-11	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-11	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-11	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-11	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-11	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-11	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-11	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-11	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-11	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-11	9/1/2015	Benzene	*ND*	*5.1*	0.65	5	ug/L
EP-11	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-11	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-11	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-11	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-11	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-11	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-11	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-11	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-11	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-11	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-11	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-11	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-11	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-11	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-11	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-11	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-11	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-11	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-11	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-11	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-11	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-11	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-11	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-11	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-11	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-11	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-11	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-11	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-11	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-11	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-11	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-11	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-11	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-11	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-11	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-11	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-11	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-11	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-11	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-11	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-11	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-11	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-11	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-11	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-11	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-11	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-11	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-11	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-11	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-11	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-11	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-11	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-11	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-11	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-11	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-11	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-11	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-11	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-11	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-11	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-11	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-11	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-11	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-11	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-11	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-11	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-11	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-11	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-11	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-11	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-11	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-11	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-11	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-11	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-11	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-11	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-11	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-11	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-11	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-11	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-11	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-11	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-11	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-11	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-11	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-11	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-11	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-11	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-11	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-11	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-11	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-11	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-11	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-11	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-11	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-11	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-11	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-11	3/30/2017	Acetone	9.2	50	8.8	14064	ug/L
EP-11	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-11	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-11	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-11	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-11	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-11	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-11	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-11	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-11	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-11	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-11	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-11	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-11	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-11	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-11	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-11	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-11	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-11	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-11	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-11	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-11	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-11	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-11	3/30/2017	1,2,4-Trimethylbenzene	2.5	5	1	56	ug/L
EP-11	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-11	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-11	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-11	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-11	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-11	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-11	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-11	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-11	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-11	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-11	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-11	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-11	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-11	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-11	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-11	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-11	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-11	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-11	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-11	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-11	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-11	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-11	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-11	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-11	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-11	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-11	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-11	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-11	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-11	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-11	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-11	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-11	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-11	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-11	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-11	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-11	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-11	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-11	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-11	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-11	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-11	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-11	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-11	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-11	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-11	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-11	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-11	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-11	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-11	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-11	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-11	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-11	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-11	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-11	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-11	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-11	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-11	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-11	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-11	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-11	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-11	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-11	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-11	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-11	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-11	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-11	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-11	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-11	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-11	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-11	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-11	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-11	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-11	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-11	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-11	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-11	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-11	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-11	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-11	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-11	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-11	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-11	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-11	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-11	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-11	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-11	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-11	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-11	2/23/2018	Acetone	36	10	0.82	14064	ug/L
EP-11	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-11	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-11	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-11	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-11	2/23/2018	Chloromethane	2.9	3	0.29	20.32	ug/L
EP-11	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-11	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-11	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-11	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-11	2/23/2018	Carbon Disulfide	0.7	10	0.4	810	ug/L
EP-11	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-11	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-11	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-11	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-11	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-11	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-11	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-11	2/23/2018	2-Butanone	3.1	10	1.1	5565	ug/L
EP-11	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-11	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-11	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-11	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-11	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-11	2/23/2018	1,2,4-Trimethylbenzene	0.43	1	0.11	56	ug/L
EP-11	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-11	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-11	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-11	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-11	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-11	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-11	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-11	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-11	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-11	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-11	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-11	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-11	2/23/2018	4-Methyl-2-Pentanone	0.72	10	0.71	1243	ug/L
EP-11	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-11	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-11	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-11	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-11	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-11	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-11	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-11	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-11	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-11	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-11	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-11	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-11	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-11	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-11	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-11	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-11	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-11	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-11	9/7/2018	Acetone	66	50	3.9	14064	ug/L
EP-11	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-11	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-11	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-11	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-11	9/7/2018	Chloromethane	**31**	3	0.29	20.32	ug/L
EP-11	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-11	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-11	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-11	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-11	9/7/2018	Carbon Disulfide	0.6	10	0.39	810	ug/L
EP-11	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-11	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-11	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-11	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-11	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-11	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-11	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-11	9/7/2018	2-Butanone	48	10	1.3	5565	ug/L
EP-11	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-11	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-11	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-11	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-11	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-11	9/7/2018	1,2,4-Trimethylbenzene	1.2	1	0.25	56	ug/L
EP-11	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-11	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-11	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-11	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-11	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-11	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-11	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-11	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-11	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-11	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-11	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-11	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-11	9/7/2018	4-Methyl-2-Pentanone	2.8	10	0.45	1243	ug/L
EP-11	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-11	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-11	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-11	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-11	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-11	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-11	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-11	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-11	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-11	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-11	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-11	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-11	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-11	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-11	9/7/2018	Xylenes, Total	1	1.5	0.64	620	ug/L
EP-11	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-11	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-11	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-11	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-11	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-11	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-11	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-11	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-11	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-11	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-11	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-11	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-11	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-11	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-11	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-11	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-11	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-11	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-11	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-11	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-11	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-11	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-11	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-11	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-11	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-11	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-11	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-11	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-11	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-11	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-11	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-11	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-11	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-11	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-11	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-11	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-11	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-11	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-11	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-11	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-11	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-11	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-11	4/29/2019	Chloromethane	*4.6*	*30*	3.209873	20.32	ug/L
EP-11	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-11	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-11	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-11	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-11	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-11	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-11	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-11	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-11	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-11	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-11	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-11	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-11	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-11	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-11	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-11	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-11	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-11	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-11	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-11	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-11	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-11	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-11	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-11	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-11	12/22/2020	Acetone	36.1	25	10	14064	ug/L
EP-11	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-11	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-11	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-11	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-11	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-11	12/22/2020	Carbon Disulfide	2.27	1	0.5	810	ug/L
EP-11	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-11	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-11	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-11	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-11	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-11	12/22/2020	Chloromethane	11.1	1	0.83	20.32	ug/L
EP-11	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-11	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-11	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-11	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-11	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-11	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-11	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-11	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-11	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-11	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-11	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-11	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-11	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-11	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-11	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-11	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-11	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-11	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-11	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-11	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-11	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-11	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-11	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-11	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-11	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-11	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-11	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-11	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-11	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-11	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-11	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-11	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-11	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-11	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-11	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-11	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-11	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-11	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-11	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-11	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-11	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-11	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-11	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-11	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-11	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-11	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-11	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-11	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-11	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-11	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-12A	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12A	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-12A	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12A	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12A	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12A	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12A	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-12A	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12A	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-12A	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12A	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-12A	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12A	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12A	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12A	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12A	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12A	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12A	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12A	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12A	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12A	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12A	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12A	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12A	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12A	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12A	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12A	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12A	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12A	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12A	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12A	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12A	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-12A	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12A	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-12A	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12A	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12A	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12A	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12A	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12A	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12A	5/29/2012	Toluene	ND	10	4.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12A	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12A	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12A	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12A	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12A	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12A	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12A	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12A	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12A	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12A	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12A	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12A	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-12A	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12A	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12A	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12A	11/6/2012	Acetone	150	100	15	14064	ug/L
EP-12A	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12A	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12A	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12A	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12A	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-12A	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12A	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-12A	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12A	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	11/6/2012	Carbon Disulfide	610	100	8.4	810	ug/L
EP-12A	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12A	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12A	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12A	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12A	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12A	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12A	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12A	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12A	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12A	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12A	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12A	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12A	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12A	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12A	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12A	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12A	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12A	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12A	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12A	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12A	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-12A	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12A	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-12A	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12A	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12A	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12A	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12A	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12A	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12A	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12A	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12A	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12A	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12A	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12A	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12A	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12A	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12A	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12A	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12A	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12A	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12A	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12A	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-12A	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12A	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12A	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12A	5/28/2013	Acetone	170	100	17	14064	ug/L
EP-12A	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12A	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12A	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12A	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12A	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12A	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12A	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12A	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	5/28/2013	Carbon Disulfide	140	100	8	810	ug/L
EP-12A	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12A	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12A	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12A	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12A	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12A	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12A	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12A	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12A	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12A	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12A	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12A	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12A	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12A	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12A	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12A	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12A	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12A	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12A	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12A	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12A	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-12A	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12A	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12A	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12A	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12A	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12A	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12A	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12A	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12A	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12A	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12A	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12A	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12A	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12A	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12A	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12A	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12A	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12A	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12A	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12A	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12A	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-12A	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12A	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12A	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-12A	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12A	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12A	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12A	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12A	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12A	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12A	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12A	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12A	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12A	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12A	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12A	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12A	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12A	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12A	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12A	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12A	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12A	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12A	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12A	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12A	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12A	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12A	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12A	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12A	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12A	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12A	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12A	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12A	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-12A	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12A	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12A	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12A	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12A	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12A	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12A	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12A	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12A	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12A	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12A	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12A	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12A	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12A	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12A	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12A	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12A	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12A	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12A	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12A	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12A	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-12A	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12A	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12A	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-12A	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12A	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-12A	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12A	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12A	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12A	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12A	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12A	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-12A	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12A	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12A	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12A	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12A	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12A	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12A	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12A	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12A	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12A	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12A	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12A	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12A	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12A	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12A	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12A	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12A	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12A	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12A	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12A	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12A	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12A	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-12A	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12A	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12A	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12A	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12A	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12A	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12A	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12A	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12A	3/5/2014	Toluene	ND	10	1.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12A	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12A	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12A	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12A	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12A	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12A	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12A	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12A	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12A	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12A	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12A	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-12A	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12A	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12A	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-12A	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12A	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-12A	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12A	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12A	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12A	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12A	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12A	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-12A	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12A	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12A	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12A	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12A	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12A	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12A	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12A	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12A	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12A	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12A	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12A	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12A	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12A	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12A	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12A	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12A	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12A	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12A	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12A	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12A	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-12A	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12A	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12A	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12A	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12A	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12A	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12A	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12A	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12A	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12A	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12A	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12A	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12A	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12A	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12A	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12A	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12A	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12A	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12A	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12A	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12A	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-12A	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12A	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12A	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12A	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12A	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12A	3/25/2015	Benzene	ND	5	0.65	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12A	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12A	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12A	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12A	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12A	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12A	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12A	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12A	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12A	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12A	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12A	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12A	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12A	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12A	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12A	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12A	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12A	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12A	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12A	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12A	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12A	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12A	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12A	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12A	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12A	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-12A	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12A	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12A	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12A	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12A	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12A	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12A	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12A	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12A	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12A	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12A	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12A	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12A	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12A	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12A	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12A	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12A	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12A	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12A	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-12A	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12A	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12A	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12A	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-12A	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12A	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12A	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12A	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12A	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12A	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12A	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12A	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12A	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12A	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12A	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12A	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12A	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12A	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12A	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12A	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12A	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12A	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12A	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12A	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12A	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12A	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12A	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12A	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-12A	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12A	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12A	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12A	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12A	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12A	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12A	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12A	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12A	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12A	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12A	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12A	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12A	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12A	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12A	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12A	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12A	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12A	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-12A	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-12A	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-12A	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-12A	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-12A	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-12A	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-12A	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-12A	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-12A	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-12A	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-12A	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-12A	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-12A	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-12A	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-12A	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-12A	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-12A	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-12A	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-12A	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-12A	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-12A	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-12A	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-12A	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-12A	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-12A	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-12A	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-12A	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-12A	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-12A	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-12A	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-12A	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-12A	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-12A	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-12A	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-12A	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-12A	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-12A	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-12A	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-12A	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-12A	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-12A	8/30/2016	Toluene	ND	10	1.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-12A	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-12A	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-12A	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-12A	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-12A	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-12A	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-12A	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-12A	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-12A	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-12A	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-12A	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12A	3/30/2017	Acetone	11	50	8.8	14064	ug/L
EP-12A	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-12A	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-12A	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12A	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-12A	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-12A	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-12A	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12A	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12A	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12A	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-12A	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12A	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12A	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-12A	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12A	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12A	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-12A	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12A	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12A	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12A	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-12A	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12A	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-12A	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12A	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-12A	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12A	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12A	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12A	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-12A	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-12A	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-12A	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-12A	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-12A	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-12A	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12A	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12A	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-12A	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12A	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-12A	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12A	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-12A	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12A	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-12A	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-12A	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-12A	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-12A	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12A	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12A	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-12A	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12A	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-12A	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-12A	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12A	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-12A	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-12A	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-12A	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12A	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-12A	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-12A	10/24/2017	Benzene	ND	5	0.62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12A	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-12A	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-12A	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-12A	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12A	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12A	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12A	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-12A	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12A	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12A	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-12A	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12A	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12A	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-12A	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12A	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12A	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12A	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-12A	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12A	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-12A	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12A	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-12A	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12A	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12A	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12A	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-12A	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-12A	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-12A	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-12A	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-12A	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-12A	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12A	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12A	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-12A	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12A	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-12A	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12A	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-12A	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12A	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-12A	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-12A	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-12A	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-12A	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12A	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12A	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-12A	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12A	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-12A	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-12A	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12A	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-12A	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-12A	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-12A	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-12A	9/7/2018	Acetone	98	10	0.79	14064	ug/L
EP-12A	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-12A	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-12A	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-12A	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-12A	9/7/2018	Chloromethane	1.4	3	0.29	20.32	ug/L
EP-12A	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-12A	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-12A	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-12A	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-12A	9/7/2018	Carbon Disulfide	0.77	10	0.39	810	ug/L
EP-12A	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-12A	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-12A	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-12A	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-12A	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-12A	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-12A	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-12A	9/7/2018	2-Butanone	8.3	10	1.3	5565	ug/L
EP-12A	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-12A	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-12A	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-12A	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-12A	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-12A	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-12A	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-12A	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-12A	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-12A	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-12A	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-12A	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-12A	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-12A	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-12A	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-12A	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-12A	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-12A	9/7/2018	4-Methyl-2-Pentanone	1.6	10	0.45	1243	ug/L
EP-12A	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-12A	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-12A	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-12A	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-12A	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-12A	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-12A	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-12A	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-12A	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-12A	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-12A	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-12A	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-12A	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-12A	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-12A	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-12A	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-12A	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-12A	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-12A	11/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
EP-12A	11/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
EP-12A	11/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
EP-12A	11/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
EP-12A	11/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
EP-12A	11/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
EP-12A	11/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
EP-12A	11/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
EP-12A	11/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
EP-12A	11/21/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
EP-12A	11/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
EP-12A	11/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
EP-12A	11/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
EP-12A	11/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
EP-12A	11/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
EP-12A	11/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
EP-12A	11/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
EP-12A	11/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
EP-12A	11/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
EP-12A	11/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
EP-12A	11/21/2019	2-Butanone	15	50	10.447083	5565	ug/L
EP-12A	11/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
EP-12A	11/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
EP-12A	11/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
EP-12A	11/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
EP-12A	11/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
EP-12A	11/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
EP-12A	11/21/2019	Acetone	140	50	5.996982	14064	ug/L
EP-12A	11/21/2019	Benzene	ND	5	0.833195	5	ug/L
EP-12A	11/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
EP-12A	11/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
EP-12A	11/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
EP-12A	11/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
EP-12A	11/21/2019	Carbon Disulfide	32	50	2.262784	810	ug/L
EP-12A	11/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
EP-12A	11/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
EP-12A	11/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
EP-12A	11/21/2019	Chloroform	ND	5	0.609453	100	ug/L
EP-12A	11/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
EP-12A	11/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
EP-12A	11/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
EP-12A	11/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
EP-12A	11/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
EP-12A	11/21/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
EP-12A	11/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
EP-12A	11/21/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
EP-12A	11/21/2019	MTBE	ND	5	2.280475	143	ug/L
EP-12A	11/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
EP-12A	11/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
EP-12A	11/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
EP-12A	11/21/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
EP-12A	11/21/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
EP-12A	11/21/2019	Styrene	ND	5	0.956617	100	ug/L
EP-12A	11/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
EP-12A	11/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
EP-12A	11/21/2019	Toluene	ND	5	1.752181	1000	ug/L
EP-12A	11/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
EP-12A	11/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
EP-12A	11/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
EP-12A	11/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
EP-12A	11/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
EP-12A	11/21/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
EP-12A	12/22/2020	Acetone	37.4	25	10	14064	ug/L
EP-12A	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-12A	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-12A	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-12A	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-12A	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-12A	12/22/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-12A	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-12A	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-12A	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-12A	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-12A	12/22/2020	Chloromethane	4.2	1	0.83	20.32	ug/L
EP-12A	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-12A	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-12A	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-12A	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12A	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-12A	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-12A	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-12A	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-12A	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-12A	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-12A	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-12A	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-12A	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-12A	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-12A	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-12A	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-12A	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-12A	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-12A	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-12A	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-12A	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-12A	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-12A	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-12A	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-12A	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-12A	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-12A	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-12A	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-12A	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-12A	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-12A	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-12A	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-12A	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-12A	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-12A	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-12A	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-12A	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-12A	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12A	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-12A	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-12A	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-12A	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-12A	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-12A	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-12A	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-12A	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-12A	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-12B	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12B	5/29/2012	Acetone	100	100	21	14064	ug/L
EP-12B	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12B	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12B	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12B	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12B	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-12B	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12B	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-12B	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12B	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-12B	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12B	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12B	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12B	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12B	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12B	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12B	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12B	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12B	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12B	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12B	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12B	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12B	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12B	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12B	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12B	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12B	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12B	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12B	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12B	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12B	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-12B	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12B	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-12B	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12B	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12B	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12B	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12B	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12B	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12B	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12B	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12B	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12B	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12B	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12B	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12B	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12B	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12B	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12B	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12B	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12B	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12B	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12B	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-12B	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12B	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12B	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12B	11/6/2012	Acetone	240	100	15	14064	ug/L
EP-12B	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12B	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12B	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12B	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12B	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-12B	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12B	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-12B	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	11/6/2012	Carbon Disulfide	470	100	8.4	810	ug/L
EP-12B	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12B	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12B	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12B	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12B	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12B	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12B	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12B	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12B	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12B	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12B	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12B	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12B	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12B	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12B	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12B	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12B	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12B	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12B	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12B	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12B	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-12B	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12B	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-12B	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12B	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12B	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12B	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12B	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12B	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12B	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12B	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12B	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12B	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12B	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12B	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12B	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12B	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12B	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12B	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12B	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12B	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12B	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12B	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-12B	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12B	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12B	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12B	5/28/2013	Acetone	530	100	17	14064	ug/L
EP-12B	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12B	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12B	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12B	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12B	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12B	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12B	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12B	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12B	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12B	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12B	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12B	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12B	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12B	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12B	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12B	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12B	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12B	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12B	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12B	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12B	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12B	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12B	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12B	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12B	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12B	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12B	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12B	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12B	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-12B	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12B	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12B	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12B	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12B	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12B	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12B	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12B	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12B	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12B	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12B	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12B	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12B	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12B	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12B	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12B	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12B	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12B	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12B	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12B	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12B	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-12B	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12B	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12B	10/15/2013	Acetone	280	100	17	14064	ug/L
EP-12B	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12B	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12B	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12B	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12B	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12B	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12B	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12B	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12B	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12B	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12B	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12B	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12B	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12B	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12B	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12B	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12B	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12B	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12B	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12B	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12B	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12B	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12B	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12B	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12B	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12B	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12B	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12B	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12B	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12B	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-12B	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12B	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12B	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12B	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12B	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12B	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12B	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12B	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12B	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12B	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12B	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12B	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12B	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12B	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12B	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12B	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12B	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12B	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12B	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12B	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-12B	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12B	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12B	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-12B	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12B	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-12B	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12B	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12B	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12B	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12B	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12B	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-12B	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12B	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12B	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12B	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12B	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12B	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12B	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12B	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12B	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12B	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12B	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12B	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12B	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12B	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12B	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12B	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12B	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12B	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12B	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12B	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12B	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12B	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-12B	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12B	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12B	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12B	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12B	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12B	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12B	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12B	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12B	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12B	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12B	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12B	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12B	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12B	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12B	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12B	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12B	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12B	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12B	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12B	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12B	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-12B	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12B	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12B	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-12B	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12B	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-12B	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12B	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12B	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12B	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12B	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12B	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12B	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12B	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12B	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12B	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12B	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12B	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12B	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12B	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12B	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12B	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12B	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12B	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12B	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12B	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12B	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12B	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12B	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12B	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12B	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12B	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-12B	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12B	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12B	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12B	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12B	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12B	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12B	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12B	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12B	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12B	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12B	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12B	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12B	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12B	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12B	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12B	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12B	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12B	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12B	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12B	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12B	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-12B	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12B	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12B	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12B	3/25/2015	Acetone	130	100	9.4	14064	ug/L
EP-12B	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12B	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-12B	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12B	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12B	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12B	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12B	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12B	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12B	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12B	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12B	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12B	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12B	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12B	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12B	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12B	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12B	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12B	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12B	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12B	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12B	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12B	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12B	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12B	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12B	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12B	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-12B	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12B	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12B	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12B	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12B	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12B	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12B	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12B	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12B	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12B	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12B	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12B	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12B	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12B	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12B	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12B	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12B	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12B	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-12B	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12B	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12B	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12B	9/1/2015	Benzene	**9.9**	5	0.65	5	ug/L
EP-12B	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12B	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12B	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12B	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12B	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12B	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12B	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12B	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12B	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12B	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12B	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12B	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12B	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12B	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12B	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12B	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12B	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12B	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12B	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12B	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12B	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12B	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12B	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12B	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12B	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-12B	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12B	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12B	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12B	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12B	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12B	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12B	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12B	9/1/2015	Toluene	21	10	1.1	1000	ug/L
EP-12B	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12B	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12B	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12B	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12B	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12B	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12B	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12B	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12B	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-12B	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-12B	8/30/2016	Acetone	170	100	49	14064	ug/L
EP-12B	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-12B	8/30/2016	Benzene	*3.5*	*10*	0.96	5	ug/L
EP-12B	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-12B	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-12B	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-12B	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-12B	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-12B	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-12B	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-12B	8/30/2016	Carbon Disulfide	16	100	6	810	ug/L
EP-12B	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-12B	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-12B	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-12B	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-12B	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-12B	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-12B	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-12B	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-12B	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-12B	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-12B	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-12B	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-12B	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-12B	8/30/2016	1,2,4-Trimethylbenzene	1.7	10	1.1	56	ug/L
EP-12B	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-12B	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-12B	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-12B	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-12B	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-12B	8/30/2016	Ethylbenzene	1.2	10	1.1	700	ug/L
EP-12B	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-12B	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-12B	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-12B	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-12B	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-12B	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-12B	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-12B	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-12B	8/30/2016	Toluene	2.4	10	1.2	1000	ug/L
EP-12B	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-12B	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-12B	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-12B	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-12B	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-12B	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-12B	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-12B	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-12B	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-12B	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-12B	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-12B	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12B	3/30/2017	Acetone	87	50	8.8	14064	ug/L
EP-12B	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-12B	3/30/2017	Benzene	**6.8**	5	0.96	5	ug/L
EP-12B	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12B	3/30/2017	Bromomethane	**9.1**	15	7.8	7.54	ug/L
EP-12B	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-12B	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-12B	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12B	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12B	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-12B	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12B	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12B	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-12B	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12B	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12B	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-12B	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12B	3/30/2017	2-Butanone	25	50	11	5565	ug/L
EP-12B	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12B	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-12B	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12B	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-12B	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12B	3/30/2017	1,2,4-Trimethylbenzene	5.5	5	1	56	ug/L
EP-12B	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12B	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12B	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12B	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-12B	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-12B	3/30/2017	Ethylbenzene	4.2	5	1.1	700	ug/L
EP-12B	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-12B	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-12B	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-12B	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12B	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12B	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-12B	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12B	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-12B	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12B	3/30/2017	Toluene	12	5	0.89	1000	ug/L
EP-12B	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12B	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-12B	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-12B	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-12B	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-12B	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12B	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12B	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-12B	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12B	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-12B	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-12B	3/30/2017	Xylenes, Total	13	7.5	3.2	620	ug/L
EP-12B	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-12B	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-12B	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-12B	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12B	10/24/2017	Acetone	130	50	8.2	14064	ug/L
EP-12B	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-12B	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-12B	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12B	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-12B	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-12B	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-12B	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12B	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12B	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12B	10/24/2017	Carbon Disulfide	12	50	4	810	ug/L
EP-12B	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12B	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12B	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-12B	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12B	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12B	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-12B	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12B	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12B	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12B	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-12B	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12B	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-12B	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12B	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-12B	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12B	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12B	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-12B	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-12B	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-12B	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-12B	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-12B	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-12B	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12B	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12B	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-12B	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12B	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-12B	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12B	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-12B	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12B	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-12B	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-12B	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-12B	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-12B	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12B	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12B	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-12B	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12B	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-12B	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-12B	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12B	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-12B	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-12B	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-12B	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-12B	2/22/2018	Acetone	110	50	4.1	14064	ug/L
EP-12B	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
EP-12B	2/22/2018	Benzene	1.4	1	0.062	5	ug/L
EP-12B	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-12B	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-12B	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
EP-12B	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-12B	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-12B	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-12B	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-12B	2/22/2018	Carbon Disulfide	29	10	0.4	810	ug/L
EP-12B	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-12B	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-12B	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-12B	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-12B	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-12B	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-12B	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-12B	2/22/2018	2-Butanone	34	10	1.1	5565	ug/L
EP-12B	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-12B	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-12B	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-12B	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-12B	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-12B	2/22/2018	1,2,4-Trimethylbenzene	0.87	1	0.11	56	ug/L
EP-12B	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-12B	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-12B	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-12B	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-12B	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-12B	2/22/2018	Ethylbenzene	0.34	1	0.093	700	ug/L
EP-12B	2/22/2018	Styrene	ND	1	0.16	100	ug/L
EP-12B	2/22/2018	n-Propylbenzene	0.18	1	0.074	660	ug/L
EP-12B	2/22/2018	n-Butylbenzene	0.2	3	0.13	1000	ug/L
EP-12B	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-12B	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-12B	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-12B	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-12B	2/22/2018	1,3,5-Trimethylbenzene	0.28	1	0.087	60	ug/L
EP-12B	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-12B	2/22/2018	Toluene	2.2	1	0.064	1000	ug/L
EP-12B	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-12B	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-12B	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-12B	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-12B	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-12B	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-12B	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-12B	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-12B	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-12B	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-12B	2/22/2018	Xylenes, Total	2.1	1.5	0.32	620	ug/L
EP-12B	2/22/2018	MTBE	ND	1	0.24	143	ug/L
EP-12B	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-12B	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-12B	9/7/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-12B	9/7/2018	Acetone	51	10	1.6	14064	ug/L
EP-12B	9/7/2018	Chloroform	ND	1	0.8	100	ug/L
EP-12B	9/7/2018	Benzene	ND	1	0.35	5	ug/L
EP-12B	9/7/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-12B	9/7/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-12B	9/7/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-12B	9/7/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-12B	9/7/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-12B	9/7/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-12B	9/7/2018	Methylene Chloride	ND	3	0.41	5	ug/L
EP-12B	9/7/2018	Carbon Disulfide	23	10	0.77	810	ug/L
EP-12B	9/7/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-12B	9/7/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-12B	9/7/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-12B	9/7/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-12B	9/7/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-12B	9/7/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-12B	9/7/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-12B	9/7/2018	2-Butanone	4.3	10	2.5	5565	ug/L
EP-12B	9/7/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-12B	9/7/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-12B	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-12B	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-12B	9/7/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-12B	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-12B	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-12B	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-12B	9/7/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-12B	9/7/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-12B	9/7/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-12B	9/7/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-12B	9/7/2018	Styrene	ND	1	0.5	100	ug/L
EP-12B	9/7/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-12B	9/7/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-12B	9/7/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-12B	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-12B	9/7/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-12B	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-12B	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-12B	9/7/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-12B	9/7/2018	Toluene	ND	1	0.34	1000	ug/L
EP-12B	9/7/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-12B	9/7/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-12B	9/7/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-12B	9/7/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-12B	9/7/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-12B	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-12B	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-12B	9/7/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-12B	9/7/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-12B	9/7/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-12B	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-12B	9/7/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-12B	9/7/2018	MTBE	ND	1	0.64	143	ug/L
EP-12B	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-12B	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-12B	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-12B	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-12B	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-12B	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-12B	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-12B	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-12B	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-12B	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-12B	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-12B	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-12B	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-12B	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-12B	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-12B	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-12B	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-12B	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-12B	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-12B	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-12B	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-12B	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-12B	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-12B	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-12B	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-12B	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-12B	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-12B	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-12B	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-12B	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-12B	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-12B	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-12B	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-12B	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-12B	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-12B	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-12B	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-12B	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-12B	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-12B	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-12B	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-12B	4/29/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-12B	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-12B	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-12B	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-12B	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-12B	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-12B	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-12B	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-12B	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-12B	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-12B	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-12B	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-12B	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-12B	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-12B	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-12B	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-12B	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-12B	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-12B	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-12B	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-12B	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-12B	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-12B	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-12B	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-12B	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-12B	11/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
EP-12B	11/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
EP-12B	11/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
EP-12B	11/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
EP-12B	11/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
EP-12B	11/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
EP-12B	11/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
EP-12B	11/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
EP-12B	11/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
EP-12B	11/21/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
EP-12B	11/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
EP-12B	11/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
EP-12B	11/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
EP-12B	11/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
EP-12B	11/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
EP-12B	11/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
EP-12B	11/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
EP-12B	11/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
EP-12B	11/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
EP-12B	11/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
EP-12B	11/21/2019	2-Butanone	17	50	10.447083	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
EP-12B	11/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
EP-12B	11/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
EP-12B	11/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
EP-12B	11/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
EP-12B	11/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
EP-12B	11/21/2019	Acetone	ND	50	5.996982	14064	ug/L
EP-12B	11/21/2019	Benzene	1.2	5	0.833195	5	ug/L
EP-12B	11/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
EP-12B	11/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
EP-12B	11/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
EP-12B	11/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
EP-12B	11/21/2019	Carbon Disulfide	31	50	2.262784	810	ug/L
EP-12B	11/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
EP-12B	11/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
EP-12B	11/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
EP-12B	11/21/2019	Chloroform	ND	5	0.609453	100	ug/L
EP-12B	11/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
EP-12B	11/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
EP-12B	11/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
EP-12B	11/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
EP-12B	11/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
EP-12B	11/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
EP-12B	11/21/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
EP-12B	11/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
EP-12B	11/21/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
EP-12B	11/21/2019	MTBE	ND	5	2.280475	143	ug/L
EP-12B	11/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
EP-12B	11/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
EP-12B	11/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
EP-12B	11/21/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
EP-12B	11/21/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
EP-12B	11/21/2019	Styrene	ND	5	0.956617	100	ug/L
EP-12B	11/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
EP-12B	11/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
EP-12B	11/21/2019	Toluene	ND	5	1.752181	1000	ug/L
EP-12B	11/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
EP-12B	11/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
EP-12B	11/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
EP-12B	11/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
EP-12B	11/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
EP-12B	11/21/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
EP-12B	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-12B	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-12B	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-12B	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-12B	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-12B	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-12B	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-12B	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-12B	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-12B	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-12B	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-12B	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-12B	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-12B	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-12B	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-12B	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-12B	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-12B	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-12B	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-12B	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-12B	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-12B	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-12B	9/18/2020	2-Butanone	1.8	10	1.1	5565	ug/L
EP-12B	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-12B	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-12B	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-12B	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-12B	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-12B	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-12B	9/18/2020	Acetone	24	10	2.3	14064	ug/L
EP-12B	9/18/2020	Benzene	ND	1	0.23	5	ug/L
EP-12B	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-12B	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-12B	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-12B	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-12B	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-12B	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-12B	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-12B	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
EP-12B	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-12B	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-12B	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-12B	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-12B	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-12B	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-12B	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-12B	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-12B	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-12B	9/18/2020	MTBE	ND	1	0.39	143	ug/L
EP-12B	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-12B	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-12B	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-12B	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-12B	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-12B	9/18/2020	Styrene	ND	1	0.13	100	ug/L
EP-12B	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-12B	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-12B	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
EP-12B	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-12B	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-12B	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-12B	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-12B	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-12B	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-12B	12/22/2020	Acetone	ND	25	10	14064	ug/L
EP-12B	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-12B	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-12B	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-12B	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-12B	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-12B	12/22/2020	Carbon Disulfide	1.21	1	0.5	810	ug/L
EP-12B	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-12B	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-12B	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-12B	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-12B	12/22/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-12B	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-12B	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-12B	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-12B	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12B	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-12B	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-12B	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-12B	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-12B	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-12B	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-12B	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-12B	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-12B	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-12B	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-12B	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-12B	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-12B	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-12B	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-12B	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-12B	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-12B	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-12B	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-12B	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-12B	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-12B	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-12B	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-12B	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-12B	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-12B	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-12B	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-12B	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-12B	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-12B	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-12B	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-12B	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-12B	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-12B	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12B	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-12B	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-12B	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-12B	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-12B	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-12B	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-12B	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-12B	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-12B	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-12B	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-2	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-2	5/29/2012	Acetone	430	100	21	14064	ug/L
EP-2	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-2	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-2	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-2	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-2	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-2	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-2	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-2	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-2	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-2	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-2	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-2	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-2	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-2	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-2	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-2	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-2	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-2	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-2	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-2	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-2	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-2	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-2	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-2	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-2	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-2	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-2	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-2	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-2	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-2	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-2	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-2	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-2	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-2	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-2	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-2	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-2	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-2	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-2	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-2	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-2	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-2	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-2	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-2	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-2	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-2	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-2	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-2	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-2	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-2	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-2	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-2	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-2	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-2	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-2	11/6/2012	Acetone	2400	500	75	14064	ug/L
EP-2	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-2	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-2	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-2	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-2	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-2	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-2	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-2	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-2	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-2	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-2	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-2	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-2	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-2	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-2	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-2	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-2	11/6/2012	2-Butanone	380	100	22	5565	ug/L
EP-2	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-2	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-2	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-2	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-2	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-2	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-2	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-2	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-2	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-2	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-2	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-2	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-2	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-2	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-2	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-2	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-2	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-2	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-2	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-2	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-2	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-2	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-2	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-2	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-2	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-2	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-2	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-2	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-2	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-2	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-2	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-2	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-2	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-2	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-2	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-2	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-2	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-2	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-2	5/28/2013	Acetone	4600	500	86	14064	ug/L
EP-2	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-2	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-2	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-2	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-2	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-2	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-2	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-2	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-2	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-2	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-2	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-2	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-2	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-2	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-2	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-2	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	2-Butanone	470	100	10	5565	ug/L
EP-2	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-2	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-2	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-2	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-2	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-2	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-2	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-2	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-2	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-2	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-2	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-2	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-2	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-2	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-2	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-2	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-2	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-2	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-2	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-2	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-2	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-2	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-2	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-2	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-2	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-2	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-2	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-2	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-2	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-2	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-2	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-2	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-2	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-2	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-2	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-2	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-2	10/15/2013	Acetone	600	100	17	14064	ug/L
EP-2	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-2	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-2	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-2	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-2	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-2	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-2	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-2	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-2	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-2	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-2	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-2	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-2	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-2	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-2	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-2	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-2	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-2	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-2	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-2	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-2	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-2	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-2	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-2	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-2	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-2	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-2	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-2	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-2	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-2	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-2	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-2	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-2	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-2	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-2	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-2	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-2	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-2	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-2	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-2	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-2	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-2	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-2	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-2	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-2	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-2	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-2	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-2	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-2	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-2	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-2	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-2	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-2	3/5/2014	Acetone	670	100	49	14064	ug/L
EP-2	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-2	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-2	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-2	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-2	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-2	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-2	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-2	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-2	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-2	3/5/2014	Carbon Disulfide	110	100	7.4	810	ug/L
EP-2	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-2	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-2	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-2	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-2	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-2	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-2	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-2	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-2	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-2	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-2	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-2	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-2	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-2	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-2	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-2	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-2	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-2	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-2	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-2	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-2	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-2	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-2	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-2	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-2	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-2	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-2	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-2	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-2	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-2	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-2	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-2	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-2	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-2	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-2	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-2	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-2	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-2	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-2	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-2	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-2	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-2	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-2	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-2	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-2	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-2	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-2	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-2	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-2	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-2	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-2	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-2	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-2	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-2	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-2	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-2	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-2	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-2	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-2	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-2	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-2	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-2	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-2	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-2	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-2	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-2	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-2	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-2	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-2	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-2	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-2	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-2	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-2	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-2	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-2	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-2	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-2	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-2	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-2	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-2	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-2	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-2	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-2	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-2	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-2	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-2	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-2	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-2	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-2	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-2	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-2	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-2	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-2	3/24/2015	Acetone	520	100	9.4	14064	ug/L
EP-2	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-2	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-2	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-2	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-2	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-2	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-2	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-2	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-2	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-2	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-2	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-2	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-2	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-2	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-2	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-2	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-2	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-2	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-2	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-2	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-2	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-2	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-2	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-2	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-2	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-2	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-2	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-2	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-2	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-2	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-2	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-2	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-2	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-2	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-2	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-2	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-2	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-2	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-2	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-2	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-2	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-2	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-2	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-2	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-2	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-2	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-2	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-2	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-2	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-2	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-2	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-2	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-2	9/1/2015	Benzene	**10**	5	0.65	5	ug/L
EP-2	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-2	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-2	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-2	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-2	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-2	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-2	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-2	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-2	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-2	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-2	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-2	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-2	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-2	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-2	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-2	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-2	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-2	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-2	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-2	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-2	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-2	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-2	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-2	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-2	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-2	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-2	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-2	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-2	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-2	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-2	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-2	9/1/2015	Toluene	22	10	1.1	1000	ug/L
EP-2	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-2	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-2	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-2	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-2	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-2	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-2	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-2	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-2	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-2	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-2	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-2	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-2	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-2	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-2	8/29/2016	Acetone	140	10	4.9	14064	ug/L
EP-2	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-2	8/29/2016	Benzene	3.9	1	0.096	5	ug/L
EP-2	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-2	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-2	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-2	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-2	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-2	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-2	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-2	8/29/2016	Carbon Disulfide	17	10	0.6	810	ug/L
EP-2	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-2	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-2	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-2	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-2	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-2	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-2	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-2	8/29/2016	2-Butanone	8.1	10	0.74	5565	ug/L
EP-2	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-2	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-2	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-2	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-2	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-2	8/29/2016	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
EP-2	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-2	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-2	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-2	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-2	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-2	8/29/2016	Ethylbenzene	0.43	1	0.11	700	ug/L
EP-2	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-2	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-2	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-2	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-2	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-2	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-2	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-2	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-2	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-2	8/29/2016	Toluene	2.9	1	0.12	1000	ug/L
EP-2	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-2	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-2	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-2	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-2	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-2	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-2	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-2	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-2	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-2	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-2	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-2	8/29/2016	Xylenes, Total	2.4	1.5	0.37	620	ug/L
EP-2	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-2	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-2	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-2	3/30/2017	Acetone	140	50	8.8	14064	ug/L
EP-2	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-2	3/30/2017	Benzene	**13**	5	0.96	5	ug/L
EP-2	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-2	3/30/2017	Bromomethane	**14**	15	7.8	7.54	ug/L
EP-2	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-2	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-2	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-2	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-2	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-2	3/30/2017	Carbon Disulfide	27	50	6	810	ug/L
EP-2	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-2	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-2	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-2	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-2	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-2	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-2	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-2	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-2	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-2	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-2	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-2	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-2	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-2	3/30/2017	1,2,4-Trimethylbenzene	8.5	5	1	56	ug/L
EP-2	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-2	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-2	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-2	3/30/2017	Isopropylbenzene	2.1	5	0.98	447	ug/L
EP-2	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-2	3/30/2017	Ethylbenzene	6.8	5	1.1	700	ug/L
EP-2	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-2	3/30/2017	n-Propylbenzene	3.3	5	1.3	660	ug/L
EP-2	3/30/2017	n-Butylbenzene	3.5	15	1.6	1000	ug/L
EP-2	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-2	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-2	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-2	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-2	3/30/2017	1,3,5-Trimethylbenzene	3.1	5	1.2	60	ug/L
EP-2	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-2	3/30/2017	Toluene	22	5	0.89	1000	ug/L
EP-2	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-2	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-2	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-2	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-2	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-2	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-2	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-2	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-2	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-2	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-2	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-2	3/30/2017	Xylenes, Total	23	7.5	3.2	620	ug/L
EP-2	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-2	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-2	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-2	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-2	10/24/2017	Acetone	82	50	8.2	14064	ug/L
EP-2	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-2	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-2	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-2	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-2	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-2	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-2	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-2	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-2	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-2	10/24/2017	Carbon Disulfide	13	50	4	810	ug/L
EP-2	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-2	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-2	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-2	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-2	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-2	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-2	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-2	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-2	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-2	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-2	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-2	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-2	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-2	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-2	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-2	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-2	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-2	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-2	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-2	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-2	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-2	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-2	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-2	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-2	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-2	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-2	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-2	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-2	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-2	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-2	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-2	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-2	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-2	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-2	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-2	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-2	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-2	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-2	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-2	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-2	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-2	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-2	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-2	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-2	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-2	2/21/2018	Acetone	460	50	4.1	14064	ug/L
EP-2	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-2	2/21/2018	Benzene	**21**	5	0.31	5	ug/L
EP-2	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-2	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-2	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-2	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-2	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-2	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-2	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-2	2/21/2018	Carbon Disulfide	25	50	2	810	ug/L
EP-2	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-2	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-2	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-2	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-2	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-2	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-2	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-2	2/21/2018	2-Butanone	ND	50	5.7	5565	ug/L
EP-2	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-2	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-2	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-2	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-2	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-2	2/21/2018	1,2,4-Trimethylbenzene	12	5	0.56	56	ug/L
EP-2	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-2	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-2	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-2	2/21/2018	Isopropylbenzene	1.1	5	0.26	447	ug/L
EP-2	2/21/2018	p-Isopropyltoluene	0.86	5	0.48	NA	ug/L
EP-2	2/21/2018	Ethylbenzene	5.7	5	0.47	700	ug/L
EP-2	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-2	2/21/2018	n-Propylbenzene	2.3	5	0.37	660	ug/L
EP-2	2/21/2018	n-Butylbenzene	1.6	15	0.65	1000	ug/L
EP-2	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-2	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-2	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-2	2/21/2018	1,3,5-Trimethylbenzene	3.9	5	0.44	60	ug/L
EP-2	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-2	2/21/2018	Toluene	34	5	0.32	1000	ug/L
EP-2	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-2	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-2	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-2	2/21/2018	sec-Butylbenzene	0.87	5	0.55	2000	ug/L
EP-2	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-2	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-2	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-2	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-2	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-2	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-2	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-2	2/21/2018	Xylenes, Total	35	7.5	1.6	620	ug/L
EP-2	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-2	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-2	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-2	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-2	9/6/2018	Acetone	110	10	1.6	14064	ug/L
EP-2	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-2	9/6/2018	Benzene	1.2	1	0.35	5	ug/L
EP-2	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-2	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-2	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-2	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-2	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-2	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-2	9/6/2018	Methylene Chloride	0.57	3	0.41	5	ug/L
EP-2	9/6/2018	Carbon Disulfide	2.3	10	0.77	810	ug/L
EP-2	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-2	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-2	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-2	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-2	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-2	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-2	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-2	9/6/2018	2-Butanone	5.4	10	2.5	5565	ug/L
EP-2	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-2	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-2	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-2	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-2	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-2	9/6/2018	1,2,4-Trimethylbenzene	0.53	1	0.51	56	ug/L
EP-2	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-2	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-2	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-2	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-2	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-2	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-2	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-2	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-2	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-2	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-2	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-2	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-2	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-2	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-2	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-2	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-2	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-2	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-2	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-2	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-2	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-2	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-2	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-2	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-2	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-2	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-2	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-2	9/6/2018	Xylenes, Total	1.8	1.5	1.3	620	ug/L
EP-2	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-2	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-2	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-2	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-2	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-2	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-2	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-2	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-2	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-2	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-2	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-2	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-2	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-2	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-2	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-2	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-2	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-2	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-2	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-2	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-2	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-2	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-2	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-2	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-2	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-2	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-2	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-2	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-2	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-2	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-2	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-2	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-2	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-2	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-2	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-2	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-2	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-2	4/30/2019	Carbon Disulfide	4.9	100	4.525567	810	ug/L
EP-2	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-2	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-2	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-2	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-2	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-2	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-2	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-2	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-2	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-2	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-2	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-2	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-2	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-2	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-2	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-2	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-2	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-2	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-2	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-2	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-2	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-2	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-2	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-2	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-2	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-2	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-2	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-2	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-2	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-2	11/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-2	11/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-2	11/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-2	11/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-2	11/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-2	11/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-2	11/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-2	11/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-2	11/21/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-2	11/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-2	11/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-2	11/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-2	11/21/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-2	11/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-2	11/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-2	11/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-2	11/21/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-2	11/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-2	11/21/2019	2-Butanone	46	100	20.894166	5565	ug/L
EP-2	11/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-2	11/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-2	11/21/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-2	11/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-2	11/21/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-2	11/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-2	11/21/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-2	11/21/2019	Benzene	**18**	10	1.666391	5	ug/L
EP-2	11/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-2	11/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-2	11/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-2	11/21/2019	Bromomethane	**11**	30	2.730824	7.54	ug/L
EP-2	11/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-2	11/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-2	11/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-2	11/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-2	11/21/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-2	11/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-2	11/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-2	11/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-2	11/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-2	11/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-2	11/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-2	11/21/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-2	11/21/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-2	11/21/2019	MTBE	ND	10	4.56095	143	ug/L
EP-2	11/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-2	11/21/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-2	11/21/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-2	11/21/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-2	11/21/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-2	11/21/2019	Styrene	ND	10	1.913234	100	ug/L
EP-2	11/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-2	11/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-2	11/21/2019	Toluene	9.9	10	3.504362	1000	ug/L
EP-2	11/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-2	11/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-2	11/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-2	11/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-2	11/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-2	11/21/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-2	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
EP-2	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
EP-2	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
EP-2	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
EP-2	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
EP-2	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
EP-2	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
EP-2	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
EP-2	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
EP-2	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
EP-2	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
EP-2	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
EP-2	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
EP-2	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
EP-2	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
EP-2	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
EP-2	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-2	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
EP-2	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
EP-2	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
EP-2	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
EP-2	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
EP-2	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
EP-2	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
EP-2	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	9/16/2020	Acetone	590	100	23	14064	ug/L
EP-2	9/16/2020	Benzene	ND	5	2.3	5	ug/L
EP-2	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
EP-2	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
EP-2	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
EP-2	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
EP-2	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
EP-2	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
EP-2	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
EP-2	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
EP-2	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
EP-2	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
EP-2	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
EP-2	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
EP-2	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
EP-2	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
EP-2	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
EP-2	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
EP-2	9/16/2020	MTBE	ND	10	3.9	143	ug/L
EP-2	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
EP-2	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
EP-2	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
EP-2	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
EP-2	9/16/2020	Styrene	ND	10	1.3	100	ug/L
EP-2	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
EP-2	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
EP-2	9/16/2020	Toluene	ND	10	2	1000	ug/L
EP-2	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
EP-2	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
EP-2	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
EP-2	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
EP-2	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-2	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
EP-2	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-2	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-2	9/17/2020	Acetone	2.4	10	2.3	14064	ug/L
EP-2	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-2	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-2	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-2	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-2	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-2	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-2	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-2	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-2	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-2	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-2	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-2	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-2	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-2	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-2	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-2	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-2	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-2	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-2	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-2	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-2	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-2	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-2	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-2	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-2	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-2	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-2	9/17/2020	2-Butanone	3.4	10	1.1	5565	ug/L
EP-2	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-2	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-2	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-2	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-2	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-2	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-2	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-2	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-2	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-2	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-2	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-2	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-2	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-2	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-2	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-2	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-2	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-2	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-2	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-2	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-2	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-2	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-2	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-2	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-2	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-2	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-2	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-2	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-2	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-2	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-2	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-2	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-2	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-2	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-2	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-2	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-2	12/21/2020	Carbon Disulfide	5.75	1	0.5	810	ug/L
EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-3	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-3	5/29/2012	Acetone	210	100	21	14064	ug/L
EP-3	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-3	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-3	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-3	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-3	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-3	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-3	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-3	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-3	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-3	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-3	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-3	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-3	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-3	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-3	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-3	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-3	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-3	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-3	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-3	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-3	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-3	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-3	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-3	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-3	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-3	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-3	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-3	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-3	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-3	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-3	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-3	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-3	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-3	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-3	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-3	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-3	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-3	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-3	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-3	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-3	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-3	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-3	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-3	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-3	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-3	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-3	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-3	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-3	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-3	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-3	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-3	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-3	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-3	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-3	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/6/2012	Acetone	240	100	15	14064	ug/L
EP-3	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-3	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-3	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-3	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-3	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-3	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-3	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-3	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-3	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	11/6/2012	Carbon Disulfide	380	100	8.4	810	ug/L
EP-3	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-3	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-3	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-3	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-3	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-3	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-3	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-3	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-3	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-3	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-3	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-3	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-3	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-3	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-3	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-3	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-3	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-3	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-3	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-3	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-3	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-3	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-3	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-3	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-3	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-3	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-3	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-3	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-3	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-3	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-3	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-3	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-3	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-3	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-3	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-3	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-3	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-3	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-3	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-3	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-3	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-3	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-3	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-3	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-3	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-3	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	5/28/2013	Acetone	200	100	17	14064	ug/L
EP-3	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-3	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-3	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-3	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-3	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-3	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	5/28/2013	2-Butanone	ND	100	10	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-3	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-3	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-3	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-3	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-3	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-3	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-3	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-3	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-3	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	10/15/2013	Acetone	160	100	17	14064	ug/L
EP-3	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-3	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-3	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-3	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-3	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-3	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-3	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-3	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-3	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-3	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-3	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-3	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-3	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-3	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-3	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	3/5/2014	Acetone	300	100	49	14064	ug/L
EP-3	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-3	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-3	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-3	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-3	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	3/5/2014	Carbon Disulfide	140	100	8	810	ug/L
EP-3	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-3	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-3	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-3	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-3	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-3	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-3	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-3	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-3	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-3	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-3	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-3	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-3	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-3	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-3	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-3	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-3	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-3	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-3	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-3	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-3	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-3	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-3	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-3	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-3	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-3	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-3	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-3	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-3	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-3	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-3	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-3	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-3	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-3	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-3	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-3	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-3	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-3	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-3	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-3	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-3	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-3	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-3	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-3	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-3	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-3	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-3	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-3	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-3	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-3	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-3	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-3	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-3	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-3	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-3	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-3	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-3	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-3	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-3	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-3	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-3	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-3	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-3	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-3	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-3	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-3	3/24/2015	Acetone	280	100	9.4	14064	ug/L
EP-3	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-3	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-3	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-3	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-3	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-3	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-3	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-3	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-3	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-3	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-3	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-3	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-3	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-3	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-3	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-3	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-3	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-3	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-3	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-3	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-3	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-3	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-3	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-3	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-3	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-3	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-3	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-3	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-3	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-3	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-3	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-3	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-3	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-3	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-3	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-3	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-3	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-3	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-3	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-3	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-3	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-3	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-3	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-3	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-3	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-3	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-3	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-3	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-3	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-3	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-3	9/1/2015	Benzene	**11**	5	0.65	5	ug/L
EP-3	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-3	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-3	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-3	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-3	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-3	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-3	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-3	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-3	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-3	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-3	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-3	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-3	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-3	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-3	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-3	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-3	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-3	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-3	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-3	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-3	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-3	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-3	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-3	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-3	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-3	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-3	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-3	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-3	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-3	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-3	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-3	9/1/2015	Toluene	19	10	1.1	1000	ug/L
EP-3	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-3	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-3	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-3	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-3	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-3	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-3	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-3	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-3	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-3	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-3	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-3	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-3	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-3	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-3	8/29/2016	Acetone	50	10	4.9	14064	ug/L
EP-3	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-3	8/29/2016	Benzene	**8.4**	1	0.096	5	ug/L
EP-3	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-3	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-3	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-3	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-3	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-3	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-3	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-3	8/29/2016	Carbon Disulfide	21	10	0.6	810	ug/L
EP-3	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-3	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-3	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-3	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-3	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-3	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-3	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-3	8/29/2016	2-Butanone	4	10	0.74	5565	ug/L
EP-3	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-3	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-3	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-3	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-3	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-3	8/29/2016	1,2,4-Trimethylbenzene	0.28	1	0.11	56	ug/L
EP-3	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-3	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-3	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-3	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-3	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-3	8/29/2016	Ethylbenzene	0.84	1	0.11	700	ug/L
EP-3	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-3	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-3	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-3	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-3	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-3	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-3	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-3	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-3	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-3	8/29/2016	Toluene	5.2	1	0.12	1000	ug/L
EP-3	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-3	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-3	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-3	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-3	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-3	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-3	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-3	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-3	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-3	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-3	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-3	8/29/2016	Xylenes, Total	3.9	1.5	0.37	620	ug/L
EP-3	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-3	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-3	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-3	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/30/2017	Acetone	120	50	8.8	14064	ug/L
EP-3	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-3	3/30/2017	Benzene	4	5	0.96	5	ug/L
EP-3	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-3	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-3	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-3	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-3	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-3	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-3	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-3	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-3	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-3	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-3	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-3	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-3	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-3	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-3	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-3	3/30/2017	2-Butanone	27	50	11	5565	ug/L
EP-3	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-3	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-3	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-3	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-3	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-3	3/30/2017	1,2,4-Trimethylbenzene	4.1	5	1	56	ug/L
EP-3	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-3	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-3	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-3	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-3	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-3	3/30/2017	Ethylbenzene	3.2	5	1.1	700	ug/L
EP-3	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-3	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-3	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-3	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-3	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-3	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-3	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-3	3/30/2017	1,3,5-Trimethylbenzene	1.6	5	1.2	60	ug/L
EP-3	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-3	3/30/2017	Toluene	6.9	5	0.89	1000	ug/L
EP-3	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-3	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-3	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-3	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-3	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-3	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-3	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-3	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-3	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-3	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-3	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-3	3/30/2017	Xylenes, Total	9.2	7.5	3.2	620	ug/L
EP-3	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-3	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-3	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-3	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-3	10/24/2017	Acetone	91	50	8.2	14064	ug/L
EP-3	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-3	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-3	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-3	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-3	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-3	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-3	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-3	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-3	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-3	10/24/2017	Carbon Disulfide	14	50	4	810	ug/L
EP-3	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-3	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-3	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-3	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-3	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-3	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-3	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-3	10/24/2017	2-Butanone	ND	50	11	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-3	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-3	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-3	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-3	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-3	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-3	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-3	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-3	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-3	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-3	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-3	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-3	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-3	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-3	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-3	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-3	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-3	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-3	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-3	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-3	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-3	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-3	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-3	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-3	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-3	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-3	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-3	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-3	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-3	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-3	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-3	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-3	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-3	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-3	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-3	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-3	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-3	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-3	2/21/2018	Acetone	310	50	4.1	14064	ug/L
EP-3	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-3	2/21/2018	Benzene	3.4	5	0.31	5	ug/L
EP-3	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-3	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-3	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-3	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-3	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-3	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-3	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-3	2/21/2018	Carbon Disulfide	23	50	2	810	ug/L
EP-3	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-3	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-3	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-3	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-3	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-3	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-3	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-3	2/21/2018	2-Butanone	55	50	5.7	5565	ug/L
EP-3	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-3	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-3	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-3	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-3	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-3	2/21/2018	1,2,4-Trimethylbenzene	2	5	0.56	56	ug/L
EP-3	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-3	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-3	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-3	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-3	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-3	2/21/2018	Ethylbenzene	0.82	5	0.47	700	ug/L
EP-3	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-3	2/21/2018	n-Propylbenzene	0.51	5	0.37	660	ug/L
EP-3	2/21/2018	n-Butylbenzene	0.69	15	0.65	1000	ug/L
EP-3	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-3	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-3	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-3	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	2/21/2018	1,3,5-Trimethylbenzene	0.58	5	0.44	60	ug/L
EP-3	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-3	2/21/2018	Toluene	5.4	5	0.32	1000	ug/L
EP-3	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-3	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-3	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-3	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-3	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-3	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-3	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-3	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-3	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-3	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-3	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-3	2/21/2018	Xylenes, Total	4.8	7.5	1.6	620	ug/L
EP-3	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-3	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-3	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-3	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-3	9/6/2018	Acetone	65	10	1.6	14064	ug/L
EP-3	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-3	9/6/2018	Benzene	0.39	1	0.35	5	ug/L
EP-3	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-3	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-3	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-3	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-3	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-3	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-3	9/6/2018	Methylene Chloride	0.64	3	0.41	5	ug/L
EP-3	9/6/2018	Carbon Disulfide	3.5	10	0.77	810	ug/L
EP-3	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-3	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-3	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-3	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-3	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-3	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-3	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-3	9/6/2018	2-Butanone	4.6	10	2.5	5565	ug/L
EP-3	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-3	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-3	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-3	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-3	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-3	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-3	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-3	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-3	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-3	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-3	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-3	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-3	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-3	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-3	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-3	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-3	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-3	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-3	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-3	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-3	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-3	9/6/2018	Toluene	0.54	1	0.34	1000	ug/L
EP-3	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-3	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-3	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-3	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-3	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-3	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-3	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-3	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-3	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-3	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-3	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-3	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-3	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-3	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-3	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-3	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-3	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-3	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-3	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	4/30/2019	Carbon Disulfide	6.4	100	4.525567	810	ug/L
EP-3	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-3	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-3	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-3	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	4/30/2019	Carbon Disulfide	5.9	100	4.525567	810	ug/L
EP-3	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	11/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-3	11/20/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	11/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	11/20/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	11/20/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	11/20/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	11/20/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	11/20/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	11/20/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	11/20/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	11/20/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	11/20/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	11/20/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	11/20/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	11/20/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	11/20/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	11/20/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	11/20/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	11/20/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	11/20/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	11/20/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	11/20/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	11/20/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/20/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	11/20/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	11/20/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	11/20/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	11/20/2019	Acetone	180	100	11.993964	14064	ug/L
EP-3	11/20/2019	Benzene	ND	5	1.666391	5	ug/L
EP-3	11/20/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	11/20/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	11/20/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	11/20/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	11/20/2019	Carbon Disulfide	29	100	4.525567	810	ug/L
EP-3	11/20/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	11/20/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	11/20/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	11/20/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	11/20/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	11/20/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	11/20/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	11/20/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	11/20/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	11/20/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	11/20/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	11/20/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	11/20/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	11/20/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	11/20/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	11/20/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	11/20/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	11/20/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	11/20/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	11/20/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	11/20/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	11/20/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	11/20/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	11/20/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	11/20/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	11/20/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	11/20/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	11/20/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	11/20/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
EP-3	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
EP-3	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
EP-3	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
EP-3	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
EP-3	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
EP-3	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
EP-3	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
EP-3	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
EP-3	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
EP-3	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-3	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
EP-3	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
EP-3	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
EP-3	9/16/2020	1,2-Dichloroethane	ND	0.5	2.2	5	ug/L
EP-3	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
EP-3	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
EP-3	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
EP-3	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-3	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-3	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
EP-3	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
EP-3	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
EP-3	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-3	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
EP-3	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
EP-3	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
EP-3	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
EP-3	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	9/16/2020	Acetone	500	100	23	14064	ug/L
EP-3	9/16/2020	Benzene	ND	5	2.3	5	ug/L
EP-3	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
EP-3	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
EP-3	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
EP-3	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
EP-3	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
EP-3	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-3	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
EP-3	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
EP-3	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
EP-3	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
EP-3	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
EP-3	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
EP-3	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
EP-3	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
EP-3	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
EP-3	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
EP-3	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
EP-3	9/16/2020	MTBE	ND	10	3.9	143	ug/L
EP-3	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
EP-3	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
EP-3	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
EP-3	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
EP-3	9/16/2020	Styrene	ND	10	1.3	100	ug/L
EP-3	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
EP-3	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
EP-3	9/16/2020	Toluene	ND	10	2	1000	ug/L
EP-3	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
EP-3	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
EP-3	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
EP-3	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
EP-3	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-3	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
EP-3	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-3	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-3	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-3	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-3	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-3	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-3	12/21/2020	Carbon Disulfide	1.54	1	0.5	810	ug/L
EP-3	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-3	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-3	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-3	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-3	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-3	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-3	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-3	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-3	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-3	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-3	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-3	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-3	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-3	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-3	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-3	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-3	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-3	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-3	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-3	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-3	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-3	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-3	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-3	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-3	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-3	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-3	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-3	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-3	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-3	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-3	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-3	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-3	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-3	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-3	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-3	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-3	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-3	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-3	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-3	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-3	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-3	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-3	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-3	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-3	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-3	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-3	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-3	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-3	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-3	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-3	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-3	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-3	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-3	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-3	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-3	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-4	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-4	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-4	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-4	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-4	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-4	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-4	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-4	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-4	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-4	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-4	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-4	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-4	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-4	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-4	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-4	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-4	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-4	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-4	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-4	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-4	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-4	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-4	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-4	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-4	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-4	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-4	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-4	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-4	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-4	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-4	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-4	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-4	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-4	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-4	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-4	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-4	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-4	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-4	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-4	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-4	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-4	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-4	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-4	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-4	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-4	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-4	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-4	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-4	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-4	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-4	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-4	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-4	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-4	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-4	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-4	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-4	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-4	11/6/2012	Acetone	130	100	15	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-4	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-4	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-4	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-4	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-4	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-4	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-4	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-4	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	11/6/2012	Carbon Disulfide	780	100	8.4	810	ug/L
EP-4	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-4	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-4	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-4	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-4	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-4	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-4	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-4	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-4	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-4	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-4	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-4	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-4	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-4	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-4	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-4	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-4	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-4	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-4	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-4	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-4	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-4	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-4	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-4	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-4	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-4	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-4	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-4	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-4	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-4	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-4	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-4	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-4	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-4	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-4	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-4	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-4	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-4	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-4	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-4	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-4	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-4	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-4	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-4	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-4	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-4	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	5/28/2013	Acetone	120	100	17	14064	ug/L
EP-4	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-4	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-4	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-4	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-4	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-4	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-4	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-4	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-4	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-4	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-4	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-4	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-4	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-4	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-4	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-4	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-4	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	10/15/2013	Acetone	120	100	17	14064	ug/L
EP-4	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-4	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-4	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-4	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-4	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-4	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-4	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-4	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-4	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-4	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-4	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-4	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-4	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-4	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-4	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-4	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-4	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	3/5/2014	Acetone	310	100	49	14064	ug/L
EP-4	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-4	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-4	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-4	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-4	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	3/5/2014	Carbon Disulfide	150	100	8	810	ug/L
EP-4	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-4	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-4	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-4	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-4	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-4	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-4	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-4	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-4	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-4	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-4	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-4	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-4	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-4	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-4	11/12/2014	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-4	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-4	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-4	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-4	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-4	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-4	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-4	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-4	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-4	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-4	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-4	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-4	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-4	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-4	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-4	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-4	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-4	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-4	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-4	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-4	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-4	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-4	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-4	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-4	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-4	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-4	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-4	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-4	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-4	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-4	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-4	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-4	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-4	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-4	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-4	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-4	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-4	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-4	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-4	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-4	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-4	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-4	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-4	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-4	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-4	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-4	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-4	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-4	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-4	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-4	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-4	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-4	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-4	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-4	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-4	3/24/2015	Acetone	ND	100	9.4	14064	ug/L
EP-4	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-4	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-4	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-4	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-4	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-4	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-4	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-4	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-4	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-4	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-4	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-4	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-4	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-4	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-4	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-4	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-4	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-4	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-4	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-4	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-4	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-4	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-4	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-4	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-4	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-4	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-4	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-4	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-4	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-4	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-4	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-4	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-4	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-4	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-4	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-4	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-4	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-4	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-4	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-4	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-4	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-4	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-4	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-4	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-4	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-4	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-4	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-4	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-4	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-4	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-4	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-4	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-4	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-4	9/1/2015	Benzene	**11**	5	0.65	5	ug/L
EP-4	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-4	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-4	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-4	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-4	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-4	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-4	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-4	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-4	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-4	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-4	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-4	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-4	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-4	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-4	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-4	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-4	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-4	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-4	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-4	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-4	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-4	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-4	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-4	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-4	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-4	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-4	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-4	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-4	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-4	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-4	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-4	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-4	9/1/2015	Toluene	21	10	1.1	1000	ug/L
EP-4	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-4	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-4	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-4	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-4	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-4	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-4	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-4	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-4	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-4	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-4	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-4	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-4	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-4	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-4	8/29/2016	Acetone	22	10	4.9	14064	ug/L
EP-4	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-4	8/29/2016	Benzene	2.5	1	0.096	5	ug/L
EP-4	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-4	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-4	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-4	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-4	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-4	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-4	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-4	8/29/2016	Carbon Disulfide	14	10	0.6	810	ug/L
EP-4	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-4	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-4	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-4	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-4	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-4	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-4	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-4	8/29/2016	2-Butanone	1.7	10	0.74	5565	ug/L
EP-4	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-4	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-4	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-4	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-4	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-4	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-4	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-4	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-4	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-4	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-4	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-4	8/29/2016	Ethylbenzene	0.29	1	0.11	700	ug/L
EP-4	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-4	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-4	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-4	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-4	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-4	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-4	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-4	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-4	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-4	8/29/2016	Toluene	1.5	1	0.12	1000	ug/L
EP-4	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-4	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-4	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-4	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-4	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-4	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-4	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-4	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-4	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-4	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-4	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-4	8/29/2016	Xylenes, Total	1.3	1.5	0.37	620	ug/L
EP-4	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-4	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-4	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-4	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-4	3/30/2017	Acetone	130	50	8.8	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-4	3/30/2017	Benzene	**7.1**	5	0.96	5	ug/L
EP-4	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-4	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-4	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-4	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-4	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-4	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-4	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-4	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-4	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-4	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-4	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-4	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-4	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-4	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-4	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-4	3/30/2017	2-Butanone	26	50	11	5565	ug/L
EP-4	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-4	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-4	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-4	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-4	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-4	3/30/2017	1,2,4-Trimethylbenzene	5.7	5	1	56	ug/L
EP-4	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-4	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-4	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-4	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-4	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-4	3/30/2017	Ethylbenzene	4.5	5	1.1	700	ug/L
EP-4	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-4	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-4	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-4	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-4	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-4	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-4	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-4	3/30/2017	1,3,5-Trimethylbenzene	2.3	5	1.2	60	ug/L
EP-4	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-4	3/30/2017	Toluene	13	5	0.89	1000	ug/L
EP-4	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-4	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-4	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-4	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-4	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-4	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-4	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-4	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-4	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-4	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-4	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-4	3/30/2017	Xylenes, Total	14	7.5	3.2	620	ug/L
EP-4	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-4	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-4	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-4	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-4	10/24/2017	Acetone	94	50	8.2	14064	ug/L
EP-4	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-4	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-4	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-4	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-4	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-4	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-4	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-4	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-4	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-4	10/24/2017	Carbon Disulfide	13	50	4	810	ug/L
EP-4	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-4	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-4	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-4	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-4	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-4	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-4	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-4	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-4	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-4	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-4	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-4	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-4	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-4	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-4	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-4	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-4	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-4	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-4	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-4	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-4	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-4	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-4	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-4	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-4	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-4	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-4	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-4	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-4	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-4	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-4	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-4	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-4	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-4	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-4	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-4	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-4	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-4	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-4	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-4	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-4	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-4	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-4	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-4	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-4	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-4	2/21/2018	Acetone	220	50	4.1	14064	ug/L
EP-4	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-4	2/21/2018	Benzene	1.3	5	0.31	5	ug/L
EP-4	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-4	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-4	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-4	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-4	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-4	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-4	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-4	2/21/2018	Carbon Disulfide	28	50	2	810	ug/L
EP-4	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-4	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-4	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-4	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-4	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-4	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-4	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-4	2/21/2018	2-Butanone	29	50	5.7	5565	ug/L
EP-4	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-4	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-4	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-4	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-4	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-4	2/21/2018	1,2,4-Trimethylbenzene	0.84	5	0.56	56	ug/L
EP-4	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-4	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-4	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-4	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-4	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-4	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-4	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-4	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-4	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-4	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-4	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-4	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-4	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-4	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-4	2/21/2018	Toluene	1.9	5	0.32	1000	ug/L
EP-4	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-4	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-4	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-4	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-4	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-4	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-4	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-4	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-4	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-4	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-4	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-4	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-4	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-4	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-4	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-4	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-4	9/6/2018	Acetone	27	10	1.6	14064	ug/L
EP-4	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-4	9/6/2018	Benzene	ND	1	0.35	5	ug/L
EP-4	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-4	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-4	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-4	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-4	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-4	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-4	9/6/2018	Methylene Chloride	0.54	3	0.41	5	ug/L
EP-4	9/6/2018	Carbon Disulfide	5.2	10	0.77	810	ug/L
EP-4	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-4	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-4	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-4	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-4	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-4	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-4	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-4	9/6/2018	2-Butanone	3.3	10	2.5	5565	ug/L
EP-4	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-4	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-4	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-4	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-4	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-4	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-4	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-4	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-4	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-4	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-4	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-4	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-4	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-4	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-4	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-4	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-4	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-4	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-4	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-4	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-4	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-4	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-4	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-4	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-4	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-4	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-4	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-4	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-4	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-4	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-4	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-4	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-4	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-4	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-4	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-4	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-4	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-4	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-4	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-4	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-4	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-4	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-4	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-4	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-4	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-4	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-4	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-4	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-4	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-4	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-4	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-4	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-4	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-4	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-4	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-4	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-4	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-4	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-4	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-4	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-4	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-4	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-4	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-4	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-4	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-4	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-4	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-4	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-4	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-4	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-4	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-4	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-4	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-4	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-4	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-4	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-4	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-4	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-4	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-4	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-4	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-4	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-4	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-4	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-4	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-4	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-4	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-4	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-4	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-4	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-4	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-4	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-4	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-4	4/30/2019	Carbon Disulfide	5.8	100	4.525567	810	ug/L
EP-4	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-4	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-4	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-4	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-4	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-4	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-4	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-4	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-4	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-4	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-4	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-4	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-4	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-4	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-4	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-4	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-4	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-4	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-4	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-4	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-4	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-4	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-4	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-4	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-4	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-4	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-4	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-4	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-4	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
EP-4	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-4	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-4	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-4	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-4	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-4	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-4	9/17/2020	Acetone	16	10	2.3	14064	ug/L
EP-4	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-4	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-4	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-4	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-4	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-4	9/17/2020	Carbon Disulfide	2.1	10	0.44	810	ug/L
EP-4	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-4	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-4	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-4	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-4	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-4	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-4	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-4	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-4	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-4	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-4	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-4	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-4	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-4	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-4	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-4	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-4	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-4	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-4	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-4	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-4	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-4	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-4	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-4	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-4	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-4	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-4	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-4	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-4	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-4	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-4	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-4	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-4	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-4	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-4	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-4	12/21/2020	Carbon Disulfide	1.06	1	0.5	810	ug/L
EP-4	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-4	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-4	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-4	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-4	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-4	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-4	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-4	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-4	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-4	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-4	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-4	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-4	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-4	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-4	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-4	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-4	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-4	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-4	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-4	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-4	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-4	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-4	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-4	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-4	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-4	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-4	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-4	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-4	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-4	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-4	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-4	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-4	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-4	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-4	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-4	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-4	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-4	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-4	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-4	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-4	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-4	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-4	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-4	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-4	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-4	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-4	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-4	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-4	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-4	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-4	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-4	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-4	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-4	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-4	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-4	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-5	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-5	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-5	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-5	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-5	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-5	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-5	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-5	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-5	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-5	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-5	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-5	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-5	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-5	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-5	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-5	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-5	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-5	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-5	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-5	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-5	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-5	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-5	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-5	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-5	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-5	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-5	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-5	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-5	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-5	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-5	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-5	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-5	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-5	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-5	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-5	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-5	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-5	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-5	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-5	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-5	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-5	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-5	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-5	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-5	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-5	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-5	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-5	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-5	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-5	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-5	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-5	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-5	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-5	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-5	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-5	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-5	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-5	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-5	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-5	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-5	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-5	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-5	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-5	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-5	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-5	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	11/6/2012	Carbon Disulfide	**1300**	100	8.4	810	ug/L
EP-5	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-5	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-5	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-5	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-5	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-5	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-5	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-5	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-5	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-5	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-5	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-5	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-5	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-5	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-5	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-5	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-5	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-5	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-5	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-5	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-5	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-5	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-5	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-5	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-5	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-5	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-5	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-5	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-5	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-5	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-5	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-5	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-5	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-5	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-5	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-5	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-5	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-5	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-5	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-5	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-5	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-5	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-5	11/6/2012	MTBE	ND	10	9.6	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-5	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-5	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	5/28/2013	Acetone	110	100	17	14064	ug/L
EP-5	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-5	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-5	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-5	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-5	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-5	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-5	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-5	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-5	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-5	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-5	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-5	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-5	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-5	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-5	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-5	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-5	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-5	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-5	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-5	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-5	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-5	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-5	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-5	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-5	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-5	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-5	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-5	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-5	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-5	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-5	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-5	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-5	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	3/5/2014	Acetone	280	100	49	14064	ug/L
EP-5	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-5	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-5	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-5	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-5	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	3/5/2014	Carbon Disulfide	120	100	8	810	ug/L
EP-5	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-5	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-5	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-5	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-5	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-5	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-5	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-5	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-5	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-5	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-5	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-5	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-5	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-5	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-5	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-5	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-5	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-5	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-5	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-5	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-5	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-5	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-5	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-5	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-5	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-5	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-5	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-5	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-5	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-5	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-5	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-5	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-5	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-5	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-5	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-5	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-5	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-5	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-5	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-5	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-5	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-5	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-5	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-5	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-5	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-5	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-5	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-5	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-5	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-5	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-5	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-5	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-5	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-5	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-5	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-5	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-5	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-5	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-5	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-5	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-5	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-5	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-5	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-5	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-5	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-5	11/12/2014	MTBE	ND	10	2.5	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-5	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-5	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-5	3/24/2015	Acetone	ND	100	9.4	14064	ug/L
EP-5	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-5	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-5	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-5	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-5	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-5	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-5	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-5	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-5	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-5	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-5	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-5	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-5	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-5	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-5	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-5	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-5	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-5	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-5	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-5	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-5	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-5	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-5	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-5	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-5	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-5	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-5	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-5	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-5	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-5	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-5	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-5	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-5	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-5	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-5	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-5	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-5	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-5	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-5	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-5	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-5	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-5	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-5	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-5	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-5	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-5	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-5	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-5	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-5	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-5	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-5	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-5	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-5	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-5	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-5	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-5	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-5	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-5	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-5	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-5	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-5	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-5	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-5	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-5	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-5	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-5	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-5	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-5	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-5	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-5	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-5	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-5	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-5	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-5	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-5	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-5	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-5	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-5	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-5	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-5	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-5	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-5	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-5	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-5	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-5	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-5	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-5	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-5	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-5	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-5	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-5	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-5	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-5	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-5	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-5	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-5	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-5	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-5	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-5	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-5	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-5	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-5	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-5	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-5	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-5	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-5	8/29/2016	Acetone	13	10	4.9	14064	ug/L
EP-5	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-5	8/29/2016	Benzene	0.11	1	0.096	5	ug/L
EP-5	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-5	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-5	8/29/2016	Chloromethane	0.25	3	0.21	20.32	ug/L
EP-5	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-5	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-5	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-5	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-5	8/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
EP-5	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-5	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-5	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-5	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-5	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-5	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-5	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-5	8/29/2016	2-Butanone	ND	10	0.74	5565	ug/L
EP-5	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-5	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-5	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-5	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-5	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-5	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-5	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-5	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-5	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-5	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-5	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-5	8/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
EP-5	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-5	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-5	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-5	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-5	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-5	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-5	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-5	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-5	8/29/2016	Toluene	ND	1	0.12	1000	ug/L
EP-5	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-5	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-5	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-5	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-5	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-5	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-5	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-5	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-5	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-5	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-5	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-5	8/29/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
EP-5	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-5	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-5	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-5	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-5	3/30/2017	Acetone	17	50	8.8	14064	ug/L
EP-5	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-5	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-5	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-5	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-5	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-5	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-5	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-5	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-5	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-5	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-5	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-5	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-5	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-5	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-5	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-5	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-5	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-5	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-5	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-5	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-5	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-5	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-5	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-5	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-5	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-5	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-5	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-5	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-5	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-5	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-5	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-5	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-5	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-5	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-5	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-5	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-5	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-5	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-5	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-5	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-5	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-5	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-5	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-5	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-5	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-5	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-5	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-5	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-5	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-5	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-5	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-5	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-5	3/30/2017	MTBE	ND	5	1.5	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-5	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-5	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-5	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-5	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-5	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-5	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-5	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-5	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-5	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-5	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-5	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-5	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-5	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-5	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-5	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-5	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-5	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-5	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-5	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-5	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-5	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-5	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-5	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-5	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-5	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-5	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-5	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-5	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-5	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-5	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-5	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-5	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-5	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-5	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-5	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-5	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-5	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-5	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-5	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-5	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-5	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-5	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-5	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-5	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-5	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-5	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-5	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-5	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-5	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-5	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-5	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-5	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-5	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-5	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-5	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-5	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-5	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-5	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-5	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-5	2/21/2018	Acetone	140	50	4.1	14064	ug/L
EP-5	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-5	2/21/2018	Benzene	0.41	5	0.31	5	ug/L
EP-5	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-5	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-5	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-5	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-5	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-5	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-5	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-5	2/21/2018	Carbon Disulfide	21	50	2	810	ug/L
EP-5	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-5	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-5	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-5	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-5	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-5	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-5	2/21/2018	2-Butanone	18	50	5.7	5565	ug/L
EP-5	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-5	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-5	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-5	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-5	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-5	2/21/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
EP-5	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-5	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-5	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-5	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-5	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-5	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-5	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-5	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-5	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-5	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-5	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-5	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-5	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-5	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
EP-5	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-5	2/21/2018	Toluene	0.52	5	0.32	1000	ug/L
EP-5	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-5	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-5	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-5	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-5	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-5	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-5	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-5	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-5	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-5	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-5	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-5	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-5	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-5	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-5	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-5	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-5	9/6/2018	Acetone	5.2	10	1.6	14064	ug/L
EP-5	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-5	9/6/2018	Benzene	ND	1	0.35	5	ug/L
EP-5	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-5	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-5	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-5	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-5	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-5	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-5	9/6/2018	Methylene Chloride	0.5	3	0.41	5	ug/L
EP-5	9/6/2018	Carbon Disulfide	1.7	10	0.77	810	ug/L
EP-5	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-5	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-5	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-5	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-5	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-5	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-5	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-5	9/6/2018	2-Butanone	ND	10	2.5	5565	ug/L
EP-5	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-5	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-5	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-5	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-5	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-5	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-5	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-5	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-5	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-5	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-5	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-5	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-5	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-5	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-5	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-5	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-5	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-5	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-5	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-5	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-5	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-5	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-5	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-5	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-5	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-5	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-5	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-5	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-5	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-5	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-5	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-5	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-5	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-5	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-5	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-5	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-5	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-5	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-5	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-5	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-5	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-5	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-5	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-5	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-5	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-5	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-5	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-5	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-5	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-5	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-5	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-5	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-5	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-5	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-5	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-5	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-5	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-5	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-5	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-5	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-5	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-5	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-5	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-5	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-5	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-5	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-5	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-5	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-5	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-5	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-5	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-5	4/30/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-5	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-5	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-5	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-5	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-5	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-5	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-5	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-5	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-5	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-5	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-5	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-5	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-5	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-5	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-5	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-5	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-5	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-5	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-5	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-5	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-5	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-5	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-5	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-5	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-5	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-5	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-5	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-5	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-5	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-5	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-5	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-5	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-5	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-5	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-5	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-5	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-5	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-5	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-5	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-5	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-5	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-5	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-5	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-5	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-5	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-5	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-5	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-5	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-5	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-5	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-5	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
EP-5	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-5	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-5	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-5	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-5	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-5	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-5	9/17/2020	Acetone	5.2	10	2.3	14064	ug/L
EP-5	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-5	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-5	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-5	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-5	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-5	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-5	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-5	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-5	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-5	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-5	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-5	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-5	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-5	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-5	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-5	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-5	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-5	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-5	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-5	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-5	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-5	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-5	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-5	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-5	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-5	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-5	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-5	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-5	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-5	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-5	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-5	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-5	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-5	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-5	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-5	12/21/2020	Acetone	ND	25	10	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-5	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-5	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-5	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-5	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-5	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-5	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-5	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-5	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-5	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-5	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-5	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-5	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-5	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-5	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-5	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-5	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-5	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-5	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-5	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-5	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-5	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-5	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-5	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-5	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-5	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-5	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-5	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-5	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-5	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-5	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-5	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-5	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-5	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-5	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-5	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-5	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-5	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-5	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-5	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-5	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-5	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-5	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-5	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-5	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-5	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-5	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-5	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-5	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-5	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-5	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-5	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-5	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-5	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-5	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-5	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-5	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-5	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-5	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-5	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-5	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-5	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-5	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-6	5/29/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
EP-6	5/29/2012	Acetone	ND	10	2.1	14064	ug/L
EP-6	5/29/2012	Chloroform	ND	1	0.35	100	ug/L
EP-6	5/29/2012	Benzene	ND	1	0.4	5	ug/L
EP-6	5/29/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
EP-6	5/29/2012	Bromomethane	ND	3	0.56	7.54	ug/L
EP-6	5/29/2012	Chloromethane	ND	3	0.56	20.32	ug/L
EP-6	5/29/2012	Dibromomethane	ND	1	0.65	8	ug/L
EP-6	5/29/2012	Chloroethane	ND	2	0.47	20857	ug/L
EP-6	5/29/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
EP-6	5/29/2012	Methylene Chloride	ND	3	0.35	5	ug/L
EP-6	5/29/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
EP-6	5/29/2012	Bromoform	ND	1	0.43	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/29/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
EP-6	5/29/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
EP-6	5/29/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
EP-6	5/29/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
EP-6	5/29/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
EP-6	5/29/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
EP-6	5/29/2012	2-Butanone	ND	10	2.2	5565	ug/L
EP-6	5/29/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
EP-6	5/29/2012	Trichloroethene	ND	1	0.3	5	ug/L
EP-6	5/29/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
EP-6	5/29/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
EP-6	5/29/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
EP-6	5/29/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
EP-6	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
EP-6	5/29/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
EP-6	5/29/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
EP-6	5/29/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
EP-6	5/29/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
EP-6	5/29/2012	Ethylbenzene	ND	1	0.38	700	ug/L
EP-6	5/29/2012	Styrene	ND	1	0.41	100	ug/L
EP-6	5/29/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
EP-6	5/29/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
EP-6	5/29/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
EP-6	5/29/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
EP-6	5/29/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
EP-6	5/29/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
EP-6	5/29/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
EP-6	5/29/2012	Bromobenzene	ND	1	0.63	62	ug/L
EP-6	5/29/2012	Toluene	ND	1	0.47	1000	ug/L
EP-6	5/29/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
EP-6	5/29/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
EP-6	5/29/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
EP-6	5/29/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
EP-6	5/29/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
EP-6	5/29/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
EP-6	5/29/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
EP-6	5/29/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
EP-6	5/29/2012	2-Hexanone	ND	10	0.89	38	ug/L
EP-6	5/29/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
EP-6	5/29/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
EP-6	5/29/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-6	5/29/2012	MTBE	ND	1	0.96	143	ug/L
EP-6	5/29/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
EP-6	5/29/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
EP-6	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-6	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-6	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-6	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-6	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-6	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-6	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-6	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-6	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-6	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-6	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-6	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-6	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-6	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-6	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-6	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-6	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-6	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-6	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-6	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-6	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-6	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-6	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-6	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-6	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-6	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-6	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-6	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-6	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-6	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-6	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-6	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-6	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-6	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-6	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-6	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-6	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-6	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-6	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-6	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-6	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-6	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-6	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-6	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-6	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-6	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-6	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-6	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-6	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-6	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-6	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-6	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-6	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-6	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-6	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-6	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-6	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-6	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-6	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-6	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-6	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-6	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-6	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-6	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-6	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-6	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	5/28/2013	Carbon Disulfide	110	100	8	810	ug/L
EP-6	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-6	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-6	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-6	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-6	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-6	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-6	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-6	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-6	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-6	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-6	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-6	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-6	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-6	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-6	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-6	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-6	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-6	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-6	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-6	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-6	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-6	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-6	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-6	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-6	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-6	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-6	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-6	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-6	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-6	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-6	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-6	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-6	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-6	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-6	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-6	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-6	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-6	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-6	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-6	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-6	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-6	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-6	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-6	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-6	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-6	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-6	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-6	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-6	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-6	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-6	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-6	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-6	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-6	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-6	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-6	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-6	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-6	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-6	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-6	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-6	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-6	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-6	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-6	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-6	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-6	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-6	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-6	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-6	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-6	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-6	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-6	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-6	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-6	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-6	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-6	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-6	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-6	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-6	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-6	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-6	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-6	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-6	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-6	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-6	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-6	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-6	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-6	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-6	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-6	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-6	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-6	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-6	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-6	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-6	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-6	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-6	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-6	3/5/2014	Acetone	140	100	49	14064	ug/L
EP-6	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-6	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-6	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-6	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-6	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-6	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-6	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-6	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-6	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-6	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-6	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-6	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-6	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-6	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-6	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-6	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-6	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-6	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-6	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-6	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-6	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-6	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-6	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-6	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-6	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-6	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-6	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-6	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-6	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-6	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-6	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-6	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-6	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-6	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-6	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-6	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-6	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-6	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-6	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-6	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-6	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-6	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-6	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-6	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-6	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-6	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-6	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-6	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-6	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-6	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-6	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-6	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-6	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-6	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-6	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-6	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-6	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-6	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-6	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-6	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-6	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-6	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-6	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-6	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-6	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-6	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-6	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-6	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-6	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-6	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-6	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-6	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-6	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-6	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-6	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-6	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-6	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-6	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-6	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-6	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-6	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-6	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-6	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-6	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-6	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-6	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-6	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-6	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-6	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-6	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-6	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-6	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-6	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-6	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-6	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-6	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-6	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-6	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-6	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-6	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-6	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-6	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-6	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-6	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-6	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-6	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-6	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-6	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-6	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-6	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-6	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-6	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-6	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-6	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-6	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-6	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-6	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-6	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-6	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-6	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-6	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-6	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-6	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-6	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-6	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-6	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-6	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-6	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-6	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-6	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-6	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-6	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-6	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-6	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-6	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-6	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-6	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-6	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-6	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-6	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-6	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-6	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-6	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-6	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-6	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-6	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-6	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-6	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-6	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-6	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-6	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-6	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-6	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-6	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-6	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-6	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-6	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-6	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-6	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-6	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-6	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-6	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-6	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-6	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-6	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-6	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-6	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-6	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-6	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-6	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-6	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-6	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-6	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-6	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-6	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-6	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-6	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-6	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-6	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-6	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-6	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-6	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-6	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-6	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-6	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-6	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-6	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-6	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-6	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-6	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-6	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-6	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-6	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-6	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-6	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-6	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-6	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-6	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-6	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-6	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-6	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-6	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-6	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-6	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-6	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-6	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-6	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-6	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-6	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-6	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-6	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-6	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-6	8/29/2016	Acetone	9	10	4.9	14064	ug/L
EP-6	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-6	8/29/2016	Benzene	ND	1	0.096	5	ug/L
EP-6	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-6	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-6	8/29/2016	Chloromethane	0.38	3	0.21	20.32	ug/L
EP-6	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-6	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-6	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-6	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-6	8/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
EP-6	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-6	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-6	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-6	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-6	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-6	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-6	8/29/2016	2-Butanone	ND	10	0.74	5565	ug/L
EP-6	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-6	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-6	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-6	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-6	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-6	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-6	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-6	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-6	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-6	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-6	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-6	8/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
EP-6	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-6	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-6	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-6	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-6	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-6	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-6	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-6	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-6	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-6	8/29/2016	Toluene	ND	1	0.12	1000	ug/L
EP-6	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-6	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-6	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-6	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-6	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-6	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-6	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-6	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-6	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-6	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-6	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-6	8/29/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
EP-6	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-6	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-6	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-6	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-6	3/30/2017	Acetone	17	50	8.8	14064	ug/L
EP-6	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-6	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-6	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-6	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-6	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-6	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-6	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-6	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-6	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-6	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-6	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-6	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-6	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-6	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-6	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-6	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-6	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-6	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-6	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-6	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-6	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-6	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-6	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-6	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-6	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-6	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-6	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-6	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-6	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-6	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-6	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-6	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-6	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-6	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-6	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-6	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-6	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-6	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-6	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-6	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-6	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-6	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-6	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-6	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-6	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-6	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-6	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-6	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-6	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-6	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-6	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-6	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-6	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-6	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-6	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-6	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-6	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-6	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-6	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-6	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-6	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-6	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-6	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-6	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-6	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-6	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-6	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-6	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-6	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-6	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-6	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-6	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-6	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-6	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-6	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-6	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-6	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-6	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-6	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-6	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-6	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-6	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-6	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-6	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-6	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-6	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-6	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-6	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-6	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-6	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-6	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-6	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-6	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-6	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-6	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-6	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-6	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-6	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-6	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-6	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-6	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-6	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-6	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-6	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-6	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-6	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-6	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-6	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-6	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-6	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-6	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-6	2/21/2018	Acetone	67	50	4.1	14064	ug/L
EP-6	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-6	2/21/2018	Benzene	ND	5	0.31	5	ug/L
EP-6	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-6	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-6	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-6	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-6	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-6	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-6	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-6	2/21/2018	Carbon Disulfide	11	50	2	810	ug/L
EP-6	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-6	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-6	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-6	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-6	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-6	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-6	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-6	2/21/2018	2-Butanone	6.4	50	5.7	5565	ug/L
EP-6	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-6	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-6	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-6	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-6	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-6	2/21/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
EP-6	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-6	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-6	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-6	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-6	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-6	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-6	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-6	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-6	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-6	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-6	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-6	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-6	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-6	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
EP-6	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-6	2/21/2018	Toluene	ND	5	0.32	1000	ug/L
EP-6	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-6	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-6	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-6	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-6	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-6	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-6	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-6	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-6	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-6	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-6	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-6	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-6	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-6	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-6	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-6	9/7/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-6	9/7/2018	Acetone	2	10	1.6	14064	ug/L
EP-6	9/7/2018	Chloroform	ND	1	0.8	100	ug/L
EP-6	9/7/2018	Benzene	ND	1	0.35	5	ug/L
EP-6	9/7/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-6	9/7/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-6	9/7/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-6	9/7/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-6	9/7/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-6	9/7/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-6	9/7/2018	Methylene Chloride	0.47	3	0.41	5	ug/L
EP-6	9/7/2018	Carbon Disulfide	ND	10	0.77	810	ug/L
EP-6	9/7/2018	Bromoform	ND	1	0.65	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/7/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-6	9/7/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-6	9/7/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-6	9/7/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-6	9/7/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-6	9/7/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-6	9/7/2018	2-Butanone	ND	10	2.5	5565	ug/L
EP-6	9/7/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-6	9/7/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-6	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-6	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-6	9/7/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-6	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-6	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-6	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-6	9/7/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-6	9/7/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-6	9/7/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-6	9/7/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-6	9/7/2018	Styrene	ND	1	0.5	100	ug/L
EP-6	9/7/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-6	9/7/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-6	9/7/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-6	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-6	9/7/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-6	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-6	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-6	9/7/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-6	9/7/2018	Toluene	ND	1	0.34	1000	ug/L
EP-6	9/7/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-6	9/7/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-6	9/7/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-6	9/7/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-6	9/7/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-6	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-6	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-6	9/7/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-6	9/7/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-6	9/7/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-6	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-6	9/7/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-6	9/7/2018	MTBE	ND	1	0.64	143	ug/L
EP-6	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-6	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-6	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-6	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-6	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-6	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-6	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-6	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-6	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-6	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-6	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-6	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-6	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-6	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-6	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-6	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-6	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-6	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-6	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-6	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-6	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-6	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-6	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-6	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-6	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-6	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-6	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-6	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-6	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-6	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-6	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-6	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-6	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-6	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-6	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-6	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-6	4/29/2019	Carbon Disulfide	13	100	4.525567	810	ug/L
EP-6	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-6	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-6	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-6	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-6	4/29/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-6	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-6	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-6	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-6	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-6	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-6	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-6	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-6	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-6	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-6	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-6	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-6	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-6	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-6	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-6	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-6	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-6	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-6	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-6	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-6	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-6	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-6	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-6	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-6	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-6	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-6	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-6	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-6	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-6	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-6	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-6	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-6	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-6	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-6	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-6	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-6	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-6	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-6	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-6	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-6	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-6	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-6	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-6	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-6	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-6	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-6	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-6	9/17/2020	2-Butanone	1.3	10	1.1	5565	ug/L
EP-6	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-6	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-6	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-6	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-6	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-6	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-6	9/17/2020	Acetone	3.6	10	2.3	14064	ug/L
EP-6	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-6	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-6	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-6	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-6	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-6	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-6	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-6	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-6	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-6	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-6	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-6	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-6	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-6	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-6	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-6	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-6	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-6	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-6	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-6	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-6	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-6	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-6	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-6	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-6	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-6	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-6	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-6	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-6	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-6	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-6	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-6	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-6	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-6	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-6	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-6	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-6	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-6	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-6	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-6	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-6	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-6	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-6	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-6	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-6	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-6	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-6	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-6	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-6	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-6	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-6	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-6	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-6	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-6	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-6	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-6	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-6	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-6	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-6	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-6	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-6	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-6	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-6	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-6	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-6	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-6	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-6	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-6	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-6	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-6	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-6	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-6	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-6	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-6	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-6	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-6	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-6	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-6	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-6	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-6	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-6	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-6	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-6	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-6	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-6	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-6	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-6	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-6	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-6	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-6	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-6	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-6	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-6	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-6	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-6	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-6	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-6	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acetone	ND	10	1.199396	14064	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbon Disulfide	1.5	10	0.452557	810	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-7	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-7	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-7	5/29/2012	Chloroform	ND	10	3.5	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-7	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-7	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-7	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-7	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-7	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-7	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-7	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-7	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-7	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-7	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-7	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-7	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-7	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-7	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-7	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-7	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-7	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-7	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-7	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-7	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-7	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-7	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-7	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-7	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-7	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-7	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-7	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-7	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-7	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-7	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-7	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-7	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-7	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-7	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-7	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-7	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-7	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-7	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-7	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-7	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-7	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-7	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-7	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-7	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-7	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-7	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-7	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-7	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-7	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-7	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-7	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-7	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-7	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-7	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-7	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-7	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-7	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-7	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-7	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-7	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-7	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-7	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-7	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-7	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-7	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-7	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-7	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-7	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-7	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-7	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-7	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-7	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-7	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-7	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-7	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-7	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-7	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-7	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-7	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-7	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-7	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-7	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-7	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-7	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-7	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-7	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-7	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-7	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-7	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-7	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-7	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-7	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-7	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-7	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-7	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-7	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-7	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-7	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-7	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-7	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-7	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-7	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-7	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-7	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-7	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-7	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-7	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-7	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-7	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-7	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-7	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-7	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-7	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-7	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-7	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-7	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-7	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-7	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-7	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-7	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-7	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-7	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-7	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-7	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-7	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-7	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-7	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-7	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-7	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-7	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-7	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-7	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-7	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-7	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-7	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-7	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-7	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-7	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-7	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-7	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-7	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-7	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-7	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-7	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-7	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-7	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-7	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-7	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-7	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-7	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-7	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-7	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-7	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-7	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-7	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-7	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-7	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-7	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-7	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-7	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-7	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-7	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-7	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-7	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-7	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-7	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-7	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-7	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-7	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-7	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-7	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-7	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-7	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-7	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-7	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-7	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-7	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-7	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-7	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-7	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-7	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-7	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-7	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-7	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-7	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-7	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-7	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-7	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-7	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-7	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-7	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-7	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-7	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-7	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-7	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-7	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-7	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-7	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-7	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-7	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-7	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-7	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-7	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-7	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-7	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-7	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-7	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-7	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-7	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-7	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-7	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-7	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-7	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-7	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-7	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-7	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-7	3/5/2014	Chloroform	ND	10	3.2	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-7	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-7	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-7	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-7	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-7	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-7	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-7	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-7	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-7	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-7	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-7	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-7	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-7	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-7	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-7	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-7	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-7	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-7	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-7	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-7	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-7	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-7	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-7	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-7	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-7	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-7	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-7	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-7	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-7	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-7	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-7	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-7	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-7	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-7	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-7	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-7	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-7	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-7	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-7	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-7	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-7	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-7	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-7	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-7	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-7	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-7	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-7	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-7	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-7	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-7	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-7	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-7	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-7	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-7	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-7	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-7	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-7	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-7	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-7	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-7	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-7	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-7	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-7	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-7	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-7	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-7	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-7	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-7	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-7	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-7	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-7	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-7	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-7	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-7	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-7	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-7	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-7	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-7	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-7	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-7	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-7	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-7	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-7	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-7	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-7	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-7	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-7	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-7	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-7	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-7	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-7	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-7	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-7	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-7	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-7	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-7	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-7	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-7	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-7	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-7	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-7	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-7	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-7	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-7	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-7	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-7	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-7	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-7	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-7	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-7	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-7	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-7	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-7	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-7	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-7	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-7	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-7	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-7	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-7	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-7	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-7	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-7	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-7	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-7	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-7	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-7	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-7	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-7	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-7	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-7	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-7	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-7	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-7	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-7	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-7	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-7	3/25/2015	Styrene	ND	10	1.1	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-7	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-7	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-7	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-7	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-7	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-7	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-7	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-7	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-7	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-7	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-7	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-7	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-7	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-7	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-7	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-7	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-7	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-7	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-7	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-7	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-7	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-7	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-7	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-7	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-7	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-7	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-7	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-7	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-7	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-7	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-7	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-7	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-7	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-7	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-7	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-7	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-7	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-7	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-7	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-7	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-7	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-7	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-7	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-7	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-7	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-7	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-7	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-7	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-7	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-7	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-7	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-7	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-7	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-7	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-7	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-7	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-7	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-7	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-7	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-7	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-7	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-7	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-7	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-7	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-7	8/30/2016	Chloroform	ND	10	0.89	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-7	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-7	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-7	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-7	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-7	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-7	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-7	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-7	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-7	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-7	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-7	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-7	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-7	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-7	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-7	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-7	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-7	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-7	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-7	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-7	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-7	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-7	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-7	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-7	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-7	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-7	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-7	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-7	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-7	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-7	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-7	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-7	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-7	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-7	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-7	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-7	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-7	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-7	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-7	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-7	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-7	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-7	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-7	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-7	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-7	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-7	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-7	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-7	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-7	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-7	3/30/2017	Acetone	9.5	50	8.8	14064	ug/L
EP-7	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-7	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-7	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-7	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-7	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-7	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-7	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-7	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-7	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-7	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-7	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-7	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-7	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-7	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-7	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-7	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-7	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-7	3/30/2017	2-Butanone	16	50	11	5565	ug/L
EP-7	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-7	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-7	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-7	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-7	3/30/2017	1,2,4-Trimethylbenzene	2.3	5	1	56	ug/L
EP-7	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-7	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-7	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-7	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-7	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-7	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-7	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-7	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-7	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-7	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-7	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-7	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-7	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-7	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-7	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-7	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-7	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-7	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-7	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-7	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-7	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-7	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-7	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-7	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-7	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-7	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-7	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-7	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-7	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-7	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-7	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-7	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-7	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-7	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-7	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-7	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-7	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-7	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-7	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-7	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-7	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-7	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-7	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-7	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-7	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-7	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-7	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-7	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-7	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-7	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-7	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-7	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-7	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-7	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-7	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-7	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-7	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-7	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-7	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-7	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-7	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-7	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-7	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-7	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-7	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-7	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-7	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-7	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-7	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-7	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-7	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-7	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-7	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-7	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-7	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-7	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-7	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-7	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-7	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-7	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-7	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-7	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-7	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-7	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-7	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-7	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-7	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-7	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-7	2/23/2018	Acetone	28	10	0.82	14064	ug/L
EP-7	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-7	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-7	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-7	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-7	2/23/2018	Chloromethane	2.4	3	0.29	20.32	ug/L
EP-7	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-7	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-7	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-7	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-7	2/23/2018	Carbon Disulfide	0.41	10	0.4	810	ug/L
EP-7	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-7	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-7	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-7	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-7	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-7	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-7	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-7	2/23/2018	2-Butanone	2.2	10	1.1	5565	ug/L
EP-7	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-7	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-7	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-7	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-7	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-7	2/23/2018	1,2,4-Trimethylbenzene	0.44	1	0.11	56	ug/L
EP-7	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-7	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-7	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-7	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-7	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-7	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-7	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-7	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-7	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-7	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-7	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-7	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-7	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-7	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-7	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-7	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-7	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-7	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-7	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-7	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-7	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-7	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-7	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-7	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-7	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-7	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-7	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-7	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-7	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-7	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-7	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-7	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-7	9/7/2018	Acetone	27	10	0.79	14064	ug/L
EP-7	9/7/2018	Chloroform	ND	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-7	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-7	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-7	9/7/2018	Chloromethane	2.1	3	0.29	20.32	ug/L
EP-7	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-7	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-7	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-7	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-7	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-7	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-7	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-7	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-7	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-7	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-7	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-7	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-7	9/7/2018	2-Butanone	1.7	10	1.3	5565	ug/L
EP-7	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-7	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-7	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-7	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-7	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-7	9/7/2018	1,2,4-Trimethylbenzene	0.47	1	0.25	56	ug/L
EP-7	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-7	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-7	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-7	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-7	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-7	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-7	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-7	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-7	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-7	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-7	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-7	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-7	9/7/2018	4-Methyl-2-Pentanone	0.58	10	0.45	1243	ug/L
EP-7	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-7	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-7	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-7	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-7	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-7	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-7	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-7	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-7	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-7	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-7	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-7	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-7	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-7	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-7	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-7	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-7	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-7	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-7	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-7	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-7	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-7	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-7	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-7	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-7	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-7	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-7	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-7	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-7	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-7	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-7	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-7	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-7	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-7	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-7	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-7	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-7	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-7	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-7	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-7	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-7	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-7	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-7	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-7	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-7	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-7	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-7	4/29/2019	Acetone	16	100	11.993964	14064	ug/L
EP-7	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-7	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-7	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-7	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-7	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-7	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-7	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-7	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-7	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-7	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-7	4/29/2019	Chloromethane	*4.7*	*30*	3.209873	20.32	ug/L
EP-7	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-7	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-7	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-7	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-7	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-7	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-7	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-7	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-7	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-7	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-7	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-7	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-7	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-7	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-7	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-7	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-7	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-7	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-7	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-7	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-7	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-7	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-7	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-7	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-7	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-7	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-7	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-7	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-7	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-7	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-7	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-7	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-7	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-7	11/20/2019	1,2,4-Trimethylbenzene	0.55	1	0.213199	56	ug/L
EP-7	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-7	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-7	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-7	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-7	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-7	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-7	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-7	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-7	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-7	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-7	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-7	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-7	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-7	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-7	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-7	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-7	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-7	11/20/2019	Acetone	58	10	1.199396	14064	ug/L
EP-7	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-7	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-7	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-7	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-7	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
EP-7	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-7	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-7	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-7	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-7	11/20/2019	Chloromethane	0.9	3	0.320987	20.32	ug/L
EP-7	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-7	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-7	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-7	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-7	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-7	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-7	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-7	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-7	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-7	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-7	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-7	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-7	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-7	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-7	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-7	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-7	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-7	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-7	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-7	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-7	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-7	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-7	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-7	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-7	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-7	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-7	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-7	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-7	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-7	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-7	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-7	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-7	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-7	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-7	9/17/2020	1,2,4-Trimethylbenzene	0.35	1	0.12	56	ug/L
EP-7	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-7	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-7	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-7	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-7	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-7	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-7	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-7	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-7	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-7	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-7	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-7	9/17/2020	2-Butanone	6.7	10	1.1	5565	ug/L
EP-7	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-7	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-7	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-7	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-7	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-7	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-7	9/17/2020	Acetone	58	10	2.3	14064	ug/L
EP-7	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-7	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-7	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-7	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-7	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-7	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-7	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-7	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-7	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-7	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-7	9/17/2020	Chloromethane	1.3	3	0.4	20.32	ug/L
EP-7	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-7	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-7	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-7	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-7	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-7	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-7	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-7	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-7	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-7	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-7	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-7	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-7	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-7	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-7	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-7	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-7	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-7	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-7	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-7	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-7	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-7	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-7	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-7	12/21/2020	Acetone	44.6	25	10	14064	ug/L
EP-7	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-7	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-7	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-7	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-7	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-7	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-7	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-7	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-7	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-7	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-7	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-7	12/21/2020	Chloromethane	3.01	1	0.83	20.32	ug/L
EP-7	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-7	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-7	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-7	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-7	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-7	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-7	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-7	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-7	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-7	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-7	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-7	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-7	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-7	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-7	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-7	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-7	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-7	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-7	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-7	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-7	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-7	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-7	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-7	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-7	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-7	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-7	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-7	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-7	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-7	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-7	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-7	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-7	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-7	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-7	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-7	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-7	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-7	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-7	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-7	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-7	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-7	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-7	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-7	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-7	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-7	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-7	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-7	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-7	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-7	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-8	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-8	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-8	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-8	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-8	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-8	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-8	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-8	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-8	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-8	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-8	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-8	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-8	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-8	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-8	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-8	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-8	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-8	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-8	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-8	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-8	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-8	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-8	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-8	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-8	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-8	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-8	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-8	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-8	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-8	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-8	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-8	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-8	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-8	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-8	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-8	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-8	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-8	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-8	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-8	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-8	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-8	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-8	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-8	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-8	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-8	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-8	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-8	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-8	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-8	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-8	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-8	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-8	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-8	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-8	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-8	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-8	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-8	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-8	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-8	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-8	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-8	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-8	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-8	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-8	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-8	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-8	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-8	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-8	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-8	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-8	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-8	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-8	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-8	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-8	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-8	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-8	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-8	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-8	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-8	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-8	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-8	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-8	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-8	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-8	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-8	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-8	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-8	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-8	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-8	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-8	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-8	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-8	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-8	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-8	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-8	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-8	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-8	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-8	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-8	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-8	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-8	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-8	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-8	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-8	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-8	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-8	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-8	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-8	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-8	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-8	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-8	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-8	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-8	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-8	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-8	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-8	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-8	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-8	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-8	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-8	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-8	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-8	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-8	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-8	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-8	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-8	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-8	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-8	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-8	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-8	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-8	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-8	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-8	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-8	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-8	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-8	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-8	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-8	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-8	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-8	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-8	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-8	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-8	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-8	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-8	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-8	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-8	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-8	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-8	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-8	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-8	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-8	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-8	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-8	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-8	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-8	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-8	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-8	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-8	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-8	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-8	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-8	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-8	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-8	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-8	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-8	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-8	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-8	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-8	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-8	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-8	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-8	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-8	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-8	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-8	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-8	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-8	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-8	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-8	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-8	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-8	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-8	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-8	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-8	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-8	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-8	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-8	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-8	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-8	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-8	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-8	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-8	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-8	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-8	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-8	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-8	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-8	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-8	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-8	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-8	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-8	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-8	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-8	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-8	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-8	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-8	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-8	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-8	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-8	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-8	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-8	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-8	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-8	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-8	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-8	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-8	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-8	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-8	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-8	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-8	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-8	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-8	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-8	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-8	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-8	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-8	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-8	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-8	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-8	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-8	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-8	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-8	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-8	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-8	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-8	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-8	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-8	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-8	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-8	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-8	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-8	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-8	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-8	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-8	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-8	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-8	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-8	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-8	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-8	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-8	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-8	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-8	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-8	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-8	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-8	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-8	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-8	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-8	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-8	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-8	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-8	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-8	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-8	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-8	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-8	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-8	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-8	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-8	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-8	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-8	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-8	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-8	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-8	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-8	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-8	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-8	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-8	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-8	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-8	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-8	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-8	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-8	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-8	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-8	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-8	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-8	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-8	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-8	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-8	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-8	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-8	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-8	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-8	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-8	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-8	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-8	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-8	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-8	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-8	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-8	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-8	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-8	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-8	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-8	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-8	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-8	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-8	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-8	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-8	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-8	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-8	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-8	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-8	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-8	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-8	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-8	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-8	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-8	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-8	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-8	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-8	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-8	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-8	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-8	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-8	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-8	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-8	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-8	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-8	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-8	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-8	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-8	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-8	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-8	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-8	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-8	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-8	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-8	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-8	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-8	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-8	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-8	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-8	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-8	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-8	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-8	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-8	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-8	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-8	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-8	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-8	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-8	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-8	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-8	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-8	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-8	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-8	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-8	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-8	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-8	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-8	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-8	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-8	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-8	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-8	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-8	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-8	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-8	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-8	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-8	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-8	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-8	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-8	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-8	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-8	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-8	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-8	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-8	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-8	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-8	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-8	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-8	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-8	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-8	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-8	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-8	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-8	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-8	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-8	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-8	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-8	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-8	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-8	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-8	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-8	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-8	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-8	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-8	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-8	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-8	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-8	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-8	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-8	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-8	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-8	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-8	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-8	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-8	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-8	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-8	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-8	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-8	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-8	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-8	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-8	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-8	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-8	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-8	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-8	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-8	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-8	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-8	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-8	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-8	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-8	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-8	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-8	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-8	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-8	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-8	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-8	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-8	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-8	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-8	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-8	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-8	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-8	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-8	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-8	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-8	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-8	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-8	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-8	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-8	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-8	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-8	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-8	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-8	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-8	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-8	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-8	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-8	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-8	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-8	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-8	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-8	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-8	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-8	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-8	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-8	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-8	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-8	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-8	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-8	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-8	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-8	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-8	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-8	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-8	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-8	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-8	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-8	3/30/2017	Acetone	12	50	8.8	14064	ug/L
EP-8	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-8	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-8	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-8	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-8	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-8	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-8	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-8	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-8	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-8	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-8	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-8	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-8	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-8	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-8	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-8	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-8	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-8	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-8	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-8	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-8	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-8	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-8	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-8	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-8	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-8	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-8	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-8	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-8	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-8	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-8	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-8	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-8	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-8	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-8	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-8	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-8	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-8	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-8	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-8	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-8	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-8	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-8	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-8	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-8	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-8	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-8	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-8	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-8	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-8	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-8	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-8	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-8	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-8	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-8	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-8	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-8	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-8	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-8	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-8	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-8	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-8	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-8	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-8	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-8	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-8	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-8	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-8	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-8	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-8	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-8	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-8	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-8	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-8	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-8	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-8	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-8	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-8	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-8	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-8	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-8	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-8	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-8	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-8	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-8	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-8	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-8	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-8	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-8	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-8	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-8	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-8	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-8	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-8	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-8	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-8	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-8	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-8	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-8	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-8	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-8	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-8	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-8	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-8	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-8	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-8	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-8	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-8	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-8	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-8	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-8	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-8	2/23/2018	Acetone	36	10	0.82	14064	ug/L
EP-8	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-8	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-8	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-8	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-8	2/23/2018	Chloromethane	0.87	3	0.29	20.32	ug/L
EP-8	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-8	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-8	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-8	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-8	2/23/2018	Carbon Disulfide	1.9	10	0.4	810	ug/L
EP-8	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-8	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-8	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-8	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-8	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-8	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-8	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-8	2/23/2018	2-Butanone	2.8	10	1.1	5565	ug/L
EP-8	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-8	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-8	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-8	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-8	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-8	2/23/2018	1,2,4-Trimethylbenzene	0.32	1	0.11	56	ug/L
EP-8	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-8	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-8	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-8	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-8	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-8	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-8	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-8	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-8	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-8	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-8	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-8	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-8	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-8	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-8	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-8	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-8	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-8	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-8	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-8	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-8	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-8	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-8	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-8	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-8	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-8	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-8	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-8	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-8	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-8	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-8	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-8	9/7/2018	Acetone	8.3	10	0.79	14064	ug/L
EP-8	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-8	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-8	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-8	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-8	9/7/2018	Chloromethane	1.2	3	0.29	20.32	ug/L
EP-8	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-8	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-8	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-8	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-8	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-8	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-8	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-8	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-8	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-8	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-8	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-8	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-8	9/7/2018	2-Butanone	ND	10	1.3	5565	ug/L
EP-8	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-8	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-8	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-8	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-8	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-8	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-8	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-8	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-8	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-8	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-8	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-8	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-8	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-8	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-8	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-8	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-8	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-8	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-8	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
EP-8	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-8	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-8	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-8	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-8	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-8	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-8	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-8	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-8	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-8	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-8	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-8	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-8	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-8	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-8	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-8	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-8	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-8	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-8	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-8	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-8	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-8	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-8	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-8	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-8	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-8	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-8	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-8	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-8	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-8	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-8	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-8	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-8	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-8	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-8	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-8	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-8	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-8	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-8	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-8	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-8	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-8	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-8	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-8	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-8	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-8	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-8	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-8	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-8	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-8	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-8	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-8	4/29/2019	Chloromethane	*4.2*	*30*	3.209873	20.32	ug/L
EP-8	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-8	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-8	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-8	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-8	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-8	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-8	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-8	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-8	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-8	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-8	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-8	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-8	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-8	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-8	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-8	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-8	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-8	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-8	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-8	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-8	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-8	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-8	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-8	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-8	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-8	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-8	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-8	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-8	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-8	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-8	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-8	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-8	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-8	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-8	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-8	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-8	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-8	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-8	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-8	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-8	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-8	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-8	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-8	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-8	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-8	4/29/2019	Acetone	17	100	11.993964	14064	ug/L
EP-8	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-8	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-8	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-8	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-8	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-8	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-8	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-8	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-8	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-8	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-8	4/29/2019	Chloromethane	*5*	*30*	3.209873	20.32	ug/L
EP-8	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-8	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-8	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-8	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-8	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-8	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-8	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-8	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-8	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-8	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-8	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-8	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-8	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-8	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-8	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-8	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-8	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-8	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-8	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-8	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-8	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-8	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-8	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-8	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-8	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-8	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-8	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-8	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-8	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-8	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-8	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-8	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-8	11/20/2019	1,2,4-Trimethylbenzene	0.5	1	0.213199	56	ug/L
EP-8	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-8	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-8	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-8	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-8	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-8	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-8	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-8	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-8	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-8	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-8	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-8	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-8	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-8	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-8	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-8	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-8	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-8	11/20/2019	Acetone	45	10	1.199396	14064	ug/L
EP-8	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-8	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-8	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-8	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-8	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-8	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-8	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-8	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-8	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-8	11/20/2019	Chloromethane	1.3	3	0.320987	20.32	ug/L
EP-8	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-8	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-8	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-8	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-8	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-8	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-8	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-8	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-8	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-8	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-8	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-8	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-8	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-8	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-8	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-8	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-8	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-8	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-8	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-8	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-8	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-8	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-8	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-8	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-8	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-8	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-8	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-8	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-8	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-8	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-8	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-8	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-8	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-8	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-8	9/17/2020	1,2,4-Trimethylbenzene	0.4	1	0.12	56	ug/L
EP-8	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-8	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-8	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-8	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-8	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-8	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-8	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-8	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-8	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-8	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-8	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-8	9/17/2020	2-Butanone	5.8	10	1.1	5565	ug/L
EP-8	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-8	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-8	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-8	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-8	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-8	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-8	9/17/2020	Acetone	69	10	2.3	14064	ug/L
EP-8	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-8	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-8	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-8	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-8	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-8	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-8	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-8	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-8	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-8	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-8	9/17/2020	Chloromethane	4.4	3	0.4	20.32	ug/L
EP-8	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-8	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-8	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-8	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-8	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-8	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-8	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-8	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-8	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-8	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-8	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-8	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-8	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-8	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-8	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-8	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-8	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-8	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-8	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-8	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-8	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-8	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-8	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-8	12/22/2020	Acetone	ND	25	10	14064	ug/L
EP-8	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-8	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-8	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-8	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-8	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-8	12/22/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-8	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-8	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-8	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-8	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-8	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-8	12/22/2020	Chloromethane	2.41	1	0.83	20.32	ug/L
EP-8	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-8	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-8	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-8	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-8	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-8	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-8	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-8	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-8	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-8	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-8	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-8	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-8	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-8	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-8	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-8	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-8	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-8	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-8	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-8	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-8	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-8	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-8	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-8	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-8	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-8	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-8	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-8	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-8	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-8	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-8	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-8	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-8	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-8	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-8	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-8	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-8	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-8	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-8	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-8	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-8	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-8	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-8	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-8	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-8	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-8	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-8	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-8	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-8	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-8	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-9	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-9	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-9	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-9	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-9	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-9	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-9	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-9	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-9	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-9	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-9	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-9	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-9	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-9	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-9	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-9	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-9	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-9	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-9	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-9	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-9	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-9	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-9	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-9	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-9	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-9	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-9	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-9	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-9	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-9	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-9	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-9	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-9	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-9	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-9	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-9	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-9	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-9	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-9	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-9	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-9	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-9	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-9	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-9	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-9	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-9	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-9	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-9	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-9	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-9	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-9	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-9	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-9	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-9	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-9	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-9	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-9	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-9	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-9	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-9	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-9	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-9	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-9	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-9	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-9	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-9	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-9	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-9	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-9	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-9	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-9	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-9	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-9	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-9	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-9	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-9	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-9	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-9	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-9	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-9	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-9	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-9	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-9	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-9	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-9	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-9	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-9	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-9	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-9	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-9	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-9	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-9	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-9	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-9	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-9	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-9	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-9	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-9	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-9	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-9	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-9	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-9	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-9	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-9	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-9	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-9	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-9	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-9	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-9	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-9	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-9	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-9	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-9	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-9	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-9	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-9	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-9	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-9	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-9	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-9	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-9	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-9	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-9	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-9	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-9	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-9	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-9	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-9	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-9	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-9	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-9	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-9	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-9	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-9	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-9	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-9	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-9	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-9	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-9	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-9	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-9	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-9	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-9	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-9	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-9	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-9	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-9	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-9	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-9	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-9	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-9	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-9	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-9	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-9	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-9	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-9	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-9	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-9	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-9	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-9	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-9	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-9	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-9	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-9	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-9	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-9	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-9	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-9	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-9	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-9	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-9	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-9	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-9	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-9	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-9	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-9	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-9	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-9	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-9	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-9	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-9	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-9	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-9	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-9	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-9	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-9	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-9	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-9	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-9	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-9	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-9	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-9	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-9	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-9	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-9	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-9	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-9	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-9	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-9	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-9	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-9	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-9	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-9	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-9	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-9	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-9	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-9	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-9	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-9	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-9	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-9	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-9	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-9	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-9	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-9	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-9	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-9	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-9	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-9	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-9	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-9	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-9	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-9	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-9	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-9	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-9	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-9	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-9	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-9	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-9	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-9	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-9	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-9	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-9	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-9	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-9	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-9	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-9	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-9	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-9	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-9	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-9	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-9	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-9	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-9	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-9	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-9	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-9	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-9	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-9	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-9	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-9	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-9	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-9	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-9	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-9	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-9	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-9	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-9	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-9	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-9	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-9	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-9	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-9	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-9	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-9	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-9	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-9	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-9	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-9	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-9	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-9	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-9	11/13/2014	Acetone	ND	100	49	14064	ug/L
EP-9	11/13/2014	Chloroform	ND	10	3.2	100	ug/L
EP-9	11/13/2014	Benzene	ND	5	1.5	5	ug/L
EP-9	11/13/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-9	11/13/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-9	11/13/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-9	11/13/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-9	11/13/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-9	11/13/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-9	11/13/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-9	11/13/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-9	11/13/2014	Bromoform	ND	10	2.5	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/13/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-9	11/13/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-9	11/13/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-9	11/13/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	11/13/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-9	11/13/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-9	11/13/2014	2-Butanone	ND	100	14	5565	ug/L
EP-9	11/13/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-9	11/13/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-9	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-9	11/13/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-9	11/13/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-9	11/13/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-9	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-9	11/13/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-9	11/13/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-9	11/13/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-9	11/13/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-9	11/13/2014	Styrene	ND	10	1.2	100	ug/L
EP-9	11/13/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-9	11/13/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-9	11/13/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-9	11/13/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-9	11/13/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-9	11/13/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-9	11/13/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-9	11/13/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-9	11/13/2014	Toluene	ND	10	1.7	1000	ug/L
EP-9	11/13/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-9	11/13/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-9	11/13/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-9	11/13/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-9	11/13/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-9	11/13/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	11/13/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-9	11/13/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-9	11/13/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-9	11/13/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-9	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-9	11/13/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-9	11/13/2014	MTBE	ND	10	2.5	143	ug/L
EP-9	11/13/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-9	11/13/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-9	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-9	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-9	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-9	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-9	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-9	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-9	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-9	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-9	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-9	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-9	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-9	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-9	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-9	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-9	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-9	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-9	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-9	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-9	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-9	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-9	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-9	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-9	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-9	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-9	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-9	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-9	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-9	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-9	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-9	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-9	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-9	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-9	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-9	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-9	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-9	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-9	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-9	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-9	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-9	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-9	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-9	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-9	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-9	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-9	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-9	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-9	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-9	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-9	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-9	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-9	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-9	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-9	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-9	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-9	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-9	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-9	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-9	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-9	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-9	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-9	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-9	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-9	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-9	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-9	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-9	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-9	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-9	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-9	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-9	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-9	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-9	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-9	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-9	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-9	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-9	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-9	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-9	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-9	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-9	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-9	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-9	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-9	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-9	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-9	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-9	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-9	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-9	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-9	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-9	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-9	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-9	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-9	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-9	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-9	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-9	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-9	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-9	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-9	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-9	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-9	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-9	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-9	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-9	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-9	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-9	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-9	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-9	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-9	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-9	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-9	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-9	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-9	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-9	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-9	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-9	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-9	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-9	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-9	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-9	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-9	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-9	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-9	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-9	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-9	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-9	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-9	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-9	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-9	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-9	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-9	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-9	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-9	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-9	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-9	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-9	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-9	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-9	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-9	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-9	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-9	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-9	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-9	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-9	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-9	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-9	3/30/2017	Acetone	12	50	8.8	14064	ug/L
EP-9	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-9	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-9	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-9	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-9	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-9	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-9	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-9	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-9	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-9	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-9	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-9	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-9	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-9	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-9	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-9	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-9	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-9	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-9	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-9	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-9	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-9	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-9	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-9	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-9	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-9	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-9	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-9	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-9	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-9	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-9	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-9	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-9	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-9	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-9	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-9	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-9	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-9	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-9	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-9	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-9	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-9	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-9	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-9	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-9	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-9	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-9	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-9	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-9	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-9	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-9	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-9	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-9	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-9	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-9	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-9	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-9	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-9	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-9	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-9	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-9	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-9	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-9	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-9	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-9	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-9	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-9	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-9	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-9	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-9	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-9	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-9	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-9	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-9	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-9	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-9	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-9	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-9	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-9	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-9	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-9	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-9	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-9	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-9	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-9	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-9	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-9	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-9	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-9	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-9	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-9	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-9	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-9	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-9	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-9	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-9	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-9	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-9	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-9	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-9	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-9	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-9	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-9	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-9	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-9	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-9	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-9	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-9	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-9	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-9	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-9	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-9	2/23/2018	Acetone	27	10	0.82	14064	ug/L
EP-9	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-9	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-9	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-9	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-9	2/23/2018	Chloromethane	0.73	3	0.29	20.32	ug/L
EP-9	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-9	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-9	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-9	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-9	2/23/2018	Carbon Disulfide	0.91	10	0.4	810	ug/L
EP-9	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-9	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-9	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-9	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-9	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-9	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-9	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-9	2/23/2018	2-Butanone	1.6	10	1.1	5565	ug/L
EP-9	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-9	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-9	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-9	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-9	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-9	2/23/2018	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
EP-9	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-9	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-9	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-9	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-9	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-9	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-9	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-9	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-9	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-9	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-9	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-9	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-9	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-9	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-9	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-9	2/23/2018	Toluene	0.17	1	0.064	1000	ug/L
EP-9	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-9	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-9	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-9	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-9	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-9	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-9	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-9	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-9	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-9	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-9	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-9	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-9	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-9	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-9	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-9	9/7/2018	Acetone	16	10	0.79	14064	ug/L
EP-9	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-9	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-9	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-9	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-9	9/7/2018	Chloromethane	2.5	3	0.29	20.32	ug/L
EP-9	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-9	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-9	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-9	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-9	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-9	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-9	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-9	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-9	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-9	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-9	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-9	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-9	9/7/2018	2-Butanone	1.5	10	1.3	5565	ug/L
EP-9	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-9	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-9	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-9	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-9	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-9	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-9	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-9	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-9	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-9	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-9	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-9	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-9	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-9	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-9	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-9	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-9	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-9	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-9	9/7/2018	4-Methyl-2-Pentanone	0.47	10	0.45	1243	ug/L
EP-9	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-9	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-9	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-9	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-9	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-9	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-9	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-9	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-9	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-9	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-9	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-9	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-9	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-9	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-9	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-9	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-9	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-9	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-9	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-9	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-9	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-9	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-9	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-9	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-9	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-9	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-9	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-9	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-9	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-9	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-9	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-9	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-9	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-9	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-9	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-9	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-9	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-9	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-9	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-9	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-9	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-9	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-9	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-9	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-9	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-9	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-9	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-9	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-9	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-9	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-9	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-9	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-9	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-9	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-9	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-9	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-9	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-9	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-9	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-9	4/29/2019	Chloromethane	*5.2*	*30*	3.209873	20.32	ug/L
EP-9	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-9	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-9	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-9	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-9	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-9	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-9	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-9	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-9	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-9	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-9	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-9	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-9	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-9	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-9	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-9	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-9	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-9	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-9	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-9	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-9	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-9	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-9	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-9	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-9	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-9	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-9	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-9	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-9	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-9	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-9	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-9	11/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
EP-9	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-9	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-9	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-9	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-9	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-9	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-9	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-9	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-9	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-9	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-9	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-9	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-9	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-9	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-9	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-9	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-9	11/20/2019	Acetone	13	10	1.199396	14064	ug/L
EP-9	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-9	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-9	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-9	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-9	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-9	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
EP-9	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-9	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-9	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-9	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-9	11/20/2019	Chloromethane	1.4	3	0.320987	20.32	ug/L
EP-9	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-9	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-9	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-9	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-9	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-9	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-9	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-9	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-9	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-9	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-9	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-9	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-9	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-9	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-9	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-9	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-9	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-9	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-9	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-9	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-9	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-9	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-9	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-9	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-9	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-9	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-9	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-9	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-9	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-9	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-9	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-9	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-9	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-9	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-9	9/17/2020	1,2,4-Trimethylbenzene	0.4	1	0.12	56	ug/L
EP-9	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-9	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-9	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-9	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-9	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-9	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-9	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-9	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-9	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-9	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-9	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-9	9/17/2020	2-Butanone	5.2	10	1.1	5565	ug/L
EP-9	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-9	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-9	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-9	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-9	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-9	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-9	9/17/2020	Acetone	56	10	2.3	14064	ug/L
EP-9	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-9	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-9	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-9	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-9	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-9	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-9	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-9	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-9	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-9	9/17/2020	Chloromethane	1.4	3	0.4	20.32	ug/L
EP-9	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-9	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-9	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-9	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-9	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-9	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-9	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-9	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-9	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-9	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-9	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-9	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-9	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-9	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-9	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-9	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-9	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-9	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-9	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-9	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-9	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-9	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-9	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-9	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-9	12/21/2020	Acetone	42.2	25	10	14064	ug/L
EP-9	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-9	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-9	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-9	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-9	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-9	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-9	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-9	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-9	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-9	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-9	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-9	12/21/2020	Chloromethane	1.67	1	0.83	20.32	ug/L
EP-9	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-9	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-9	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-9	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-9	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-9	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-9	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-9	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-9	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-9	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-9	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-9	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-9	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-9	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-9	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-9	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-9	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-9	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-9	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-9	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-9	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-9	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-9	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-9	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-9	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-9	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-9	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-9	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-9	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-9	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-9	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-9	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-9	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-9	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-9	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-9	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-9	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-9	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-9	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-9	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-9	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-9	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-9	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-9	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-9	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-9	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-9	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-9	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-9	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-9	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
KA-3	3/20/2012	Benzene	**15**	2	0.28	5	ug/L
KA-3	3/20/2012	Ethylbenzene	4.2	2	0.22	700	ug/L
KA-3	3/20/2012	Toluene	ND	2	0.24	1000	ug/L
KA-3	3/20/2012	Xylenes, Total	ND	4	0.66	620	ug/L
KA-3	3/20/2012	MTBE	35	5	0.29	143	ug/L
KA-3	6/12/2012	Benzene	**13**	1	0.14	5	ug/L
KA-3	6/12/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	6/12/2012	Ethylbenzene	4.5	1	0.11	700	ug/L
KA-3	6/12/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
KA-3	6/12/2012	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/12/2012	Xylenes, Total	ND	2	0.33	620	ug/L
KA-3	6/12/2012	MTBE	28	2.5	0.14	143	ug/L
KA-3	8/21/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
KA-3	8/21/2012	Acetone	ND	10	1.5	14064	ug/L
KA-3	8/21/2012	Chloroform	ND	1	0.35	100	ug/L
KA-3	8/21/2012	Benzene	ND	1	0.4	5	ug/L
KA-3	8/21/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
KA-3	8/21/2012	Bromomethane	ND	3	0.56	7.54	ug/L
KA-3	8/21/2012	Chloromethane	ND	3	0.65	20.32	ug/L
KA-3	8/21/2012	Dibromomethane	ND	1	0.65	8	ug/L
KA-3	8/21/2012	Chloroethane	ND	2	0.44	20857	ug/L
KA-3	8/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
KA-3	8/21/2012	Methylene Chloride	ND	3	0.35	5	ug/L
KA-3	8/21/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
KA-3	8/21/2012	Bromoform	ND	1	0.43	32.9	ug/L
KA-3	8/21/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
KA-3	8/21/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
KA-3	8/21/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
KA-3	8/21/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
KA-3	8/21/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
KA-3	8/21/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
KA-3	8/21/2012	2-Butanone	ND	10	2.2	5565	ug/L
KA-3	8/21/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
KA-3	8/21/2012	Trichloroethene	ND	1	0.3	5	ug/L
KA-3	8/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
KA-3	8/21/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
KA-3	8/21/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
KA-3	8/21/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
KA-3	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
KA-3	8/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
KA-3	8/21/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
KA-3	8/21/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
KA-3	8/21/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
KA-3	8/21/2012	Ethylbenzene	ND	1	0.38	700	ug/L
KA-3	8/21/2012	Styrene	ND	1	0.41	100	ug/L
KA-3	8/21/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
KA-3	8/21/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
KA-3	8/21/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
KA-3	8/21/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
KA-3	8/21/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
KA-3	8/21/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
KA-3	8/21/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
KA-3	8/21/2012	Bromobenzene	ND	1	0.63	62	ug/L
KA-3	8/21/2012	Toluene	ND	1	0.47	1000	ug/L
KA-3	8/21/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
KA-3	8/21/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
KA-3	8/21/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
KA-3	8/21/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
KA-3	8/21/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
KA-3	8/21/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/21/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
KA-3	8/21/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
KA-3	8/21/2012	2-Hexanone	ND	10	0.89	38	ug/L
KA-3	8/21/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
KA-3	8/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
KA-3	8/21/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
KA-3	8/21/2012	MTBE	23	1	0.96	143	ug/L
KA-3	8/21/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
KA-3	8/21/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
KA-3	11/28/2012	Benzene	ND	2	0.28	5	ug/L
KA-3	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
KA-3	11/28/2012	Ethylbenzene	ND	2	0.22	700	ug/L
KA-3	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
KA-3	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
KA-3	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
KA-3	11/28/2012	MTBE	ND	5	0.29	143	ug/L
KA-3	3/18/2013	Benzene	**11**	1	0.19	5	ug/L
KA-3	3/18/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
KA-3	3/18/2013	Ethylbenzene	11	1	0.18	700	ug/L
KA-3	3/18/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	3/18/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	3/18/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	3/18/2013	MTBE	17	2.5	0.21	143	ug/L
KA-3	6/12/2013	Benzene	**9**	1	0.19	5	ug/L
KA-3	6/12/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
KA-3	6/12/2013	Ethylbenzene	8.3	1	0.18	700	ug/L
KA-3	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	6/12/2013	MTBE	31	2.5	0.21	143	ug/L
KA-3	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
KA-3	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
KA-3	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
KA-3	9/3/2013	Benzene	3.4	1	0.46	5	ug/L
KA-3	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
KA-3	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
KA-3	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
KA-3	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
KA-3	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
KA-3	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
KA-3	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
KA-3	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
KA-3	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
KA-3	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
KA-3	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
KA-3	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
KA-3	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
KA-3	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
KA-3	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
KA-3	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
KA-3	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
KA-3	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L
KA-3	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
KA-3	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
KA-3	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
KA-3	9/3/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
KA-3	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
KA-3	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
KA-3	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
KA-3	9/3/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
KA-3	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
KA-3	9/3/2013	Ethylbenzene	1.4	1	0.45	700	ug/L
KA-3	9/3/2013	Styrene	ND	1	0.58	100	ug/L
KA-3	9/3/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
KA-3	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
KA-3	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
KA-3	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
KA-3	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
KA-3	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
KA-3	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
KA-3	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
KA-3	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
KA-3	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
KA-3	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
KA-3	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
KA-3	9/3/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
KA-3	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
KA-3	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
KA-3	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
KA-3	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
KA-3	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
KA-3	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
KA-3	9/3/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
KA-3	9/3/2013	MTBE	20	1	0.77	143	ug/L
KA-3	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
KA-3	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
KA-3	11/12/2013	Benzene	2.4	1	0.19	5	ug/L
KA-3	11/12/2013	Ethylbenzene	1.8	1	0.18	700	ug/L
KA-3	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	11/12/2013	MTBE	6.5	2.5	0.21	143	ug/L
KA-3	3/10/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	3/10/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	3/10/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	3/10/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	3/10/2014	MTBE	3.9	2.5	0.093	143	ug/L
KA-3	6/5/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	6/5/2014	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	6/5/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	6/5/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	6/5/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	6/5/2014	MTBE	5.6	2.5	0.093	143	ug/L
KA-3	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
KA-3	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
KA-3	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
KA-3	9/11/2014	Benzene	ND	1	0.15	5	ug/L
KA-3	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
KA-3	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
KA-3	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
KA-3	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
KA-3	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
KA-3	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
KA-3	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
KA-3	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
KA-3	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
KA-3	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
KA-3	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
KA-3	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
KA-3	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
KA-3	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
KA-3	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
KA-3	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
KA-3	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
KA-3	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
KA-3	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
KA-3	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
KA-3	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
KA-3	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
KA-3	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
KA-3	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
KA-3	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
KA-3	9/11/2014	Styrene	ND	1	0.12	100	ug/L
KA-3	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
KA-3	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
KA-3	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
KA-3	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
KA-3	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
KA-3	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
KA-3	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
KA-3	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
KA-3	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
KA-3	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
KA-3	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
KA-3	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
KA-3	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
KA-3	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
KA-3	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
KA-3	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
KA-3	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
KA-3	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
KA-3	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
KA-3	9/11/2014	MTBE	ND	1	0.25	143	ug/L
KA-3	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
KA-3	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
KA-3	11/11/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	11/11/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	11/11/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	11/11/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	11/11/2014	MTBE	13	2.5	0.093	143	ug/L
KA-3	3/10/2015	Benzene	ND	1	0.12	5	ug/L
KA-3	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
KA-3	3/10/2015	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
KA-3	3/10/2015	Xylenes, Total	ND	2	0.38	620	ug/L
KA-3	3/10/2015	MTBE	8.8	2.5	0.12	143	ug/L
KA-3	6/2/2015	Benzene	ND	1	0.12	5	ug/L
KA-3	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
KA-3	6/2/2015	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
KA-3	6/2/2015	MTBE	12	2.5	0.12	143	ug/L
KA-3	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
KA-3	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
KA-3	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
KA-3	8/11/2015	Benzene	ND	1	0.065	5	ug/L
KA-3	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
KA-3	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
KA-3	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
KA-3	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
KA-3	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
KA-3	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
KA-3	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
KA-3	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
KA-3	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
KA-3	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
KA-3	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
KA-3	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
KA-3	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
KA-3	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
KA-3	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
KA-3	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
KA-3	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
KA-3	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
KA-3	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
KA-3	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
KA-3	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
KA-3	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
KA-3	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
KA-3	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
KA-3	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
KA-3	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
KA-3	8/11/2015	Styrene	ND	1	0.11	100	ug/L
KA-3	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
KA-3	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
KA-3	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
KA-3	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
KA-3	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
KA-3	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
KA-3	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
KA-3	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
KA-3	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
KA-3	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
KA-3	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
KA-3	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
KA-3	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
KA-3	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
KA-3	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
KA-3	8/11/2015	MTBE	11	1	0.17	143	ug/L
KA-3	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
KA-3	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
KA-3	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
KA-3	10/28/2015	Benzene	ND	1	0.065	5	ug/L
KA-3	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
KA-3	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
KA-3	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
KA-3	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
KA-3	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
KA-3	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
KA-3	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
KA-3	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
KA-3	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
KA-3	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
KA-3	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
KA-3	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
KA-3	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
KA-3	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
KA-3	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
KA-3	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
KA-3	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
KA-3	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
KA-3	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
KA-3	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
KA-3	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
KA-3	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
KA-3	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
KA-3	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
KA-3	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
KA-3	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
KA-3	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
KA-3	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
KA-3	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
KA-3	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
KA-3	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
KA-3	10/28/2015	Styrene	ND	1	0.11	100	ug/L
KA-3	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
KA-3	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
KA-3	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
KA-3	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
KA-3	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
KA-3	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
KA-3	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
KA-3	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
KA-3	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
KA-3	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
KA-3	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
KA-3	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
KA-3	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
KA-3	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
KA-3	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
KA-3	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
KA-3	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
KA-3	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
KA-3	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
KA-3	10/28/2015	MTBE	11	1	0.17	143	ug/L
KA-3	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	3/3/2016	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	3/3/2016	Benzene	**5.4**	1	0.096	5	ug/L
KA-3	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
KA-3	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
KA-3	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
KA-3	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
KA-3	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
KA-3	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
KA-3	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
KA-3	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
KA-3	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
KA-3	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
KA-3	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
KA-3	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
KA-3	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
KA-3	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
KA-3	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
KA-3	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
KA-3	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
KA-3	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
KA-3	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
KA-3	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
KA-3	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	3/3/2016	Ethylbenzene	2.7	1	0.11	700	ug/L
KA-3	3/3/2016	Styrene	ND	1	0.095	100	ug/L
KA-3	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
KA-3	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
KA-3	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
KA-3	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
KA-3	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
KA-3	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
KA-3	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
KA-3	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
KA-3	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
KA-3	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	3/3/2016	MTBE	15	1	0.21	143	ug/L
KA-3	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
KA-3	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	6/7/2016	Acetone	ND	10	4.9	14064	ug/L
KA-3	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	6/7/2016	Benzene	**6**	1	0.096	5	ug/L
KA-3	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	6/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	6/7/2016	1-Methylnaphthalene	0.63	4	0.2	NA	ug/L
KA-3	6/7/2016	Naphthalene	1.1	2	0.093	30	ug/L
KA-3	6/7/2016	2-Methylnaphthalene	**0.46**	4	0.16		ug/L
KA-3	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	6/7/2016	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
KA-3	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	6/7/2016	tert-Butylbenzene	0.23	1	0.12	690	ug/L
KA-3	6/7/2016	Isopropylbenzene	0.17	1	0.1	447	ug/L
KA-3	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	6/7/2016	Ethylbenzene	1.5	1	0.11	700	ug/L
KA-3	6/7/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	6/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
KA-3	6/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	6/7/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	6/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
KA-3	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	6/7/2016	cis-1,2-Dichloroethene	0.16	1	0.12	70	ug/L
KA-3	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	6/7/2016	MTBE	37	1	0.21	143	ug/L
KA-3	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	9/1/2016	Acetone	9.7	10	4.9	14064	ug/L
KA-3	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	9/1/2016	Benzene	**7.1**	1	0.096	5	ug/L
KA-3	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	9/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	9/1/2016	1-Methylnaphthalene	2.8	4	0.2	NA	ug/L
KA-3	9/1/2016	Naphthalene	5	2	0.093	30	ug/L
KA-3	9/1/2016	2-Methylnaphthalene	**1.8**	4	0.16		ug/L
KA-3	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	9/1/2016	tert-Butylbenzene	0.2	1	0.12	690	ug/L
KA-3	9/1/2016	Isopropylbenzene	0.25	1	0.1	447	ug/L
KA-3	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	9/1/2016	Ethylbenzene	3.2	1	0.11	700	ug/L
KA-3	9/1/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	9/1/2016	n-Propylbenzene	0.26	1	0.13	660	ug/L
KA-3	9/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	9/1/2016	sec-Butylbenzene	0.18	1	0.12	2000	ug/L
KA-3	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
KA-3	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	9/1/2016	MTBE	45	1	0.21	143	ug/L
KA-3	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	11/14/2016	Acetone	5.4	10	4.9	14064	ug/L
KA-3	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	11/14/2016	Benzene	4.4	1	0.096	5	ug/L
KA-3	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	11/14/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	11/14/2016	1-Methylnaphthalene	1.1	4	0.2	NA	ug/L
KA-3	11/14/2016	Naphthalene	1.5	2	0.093	30	ug/L
KA-3	11/14/2016	2-Methylnaphthalene	**0.62**	4	0.16		ug/L
KA-3	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	11/14/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	11/14/2016	tert-Butylbenzene	0.26	1	0.12	690	ug/L
KA-3	11/14/2016	Isopropylbenzene	0.11	1	0.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	11/14/2016	Ethylbenzene	1.3	1	0.11	700	ug/L
KA-3	11/14/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	11/14/2016	n-Propylbenzene	0.25	1	0.13	660	ug/L
KA-3	11/14/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	11/14/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	11/14/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	11/14/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	11/14/2016	sec-Butylbenzene	0.36	1	0.12	2000	ug/L
KA-3	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	11/14/2016	cis-1,2-Dichloroethene	0.18	1	0.12	70	ug/L
KA-3	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	11/14/2016	MTBE	37	1	0.21	143	ug/L
KA-3	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	2/21/2017	Acetone	ND	10	4.9	14064	ug/L
KA-3	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
KA-3	2/21/2017	Benzene	**17**	1	0.096	5	ug/L
KA-3	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	2/21/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	2/21/2017	tert-Butylbenzene	0.19	1	0.12	690	ug/L
KA-3	2/21/2017	Isopropylbenzene	0.93	1	0.1	447	ug/L
KA-3	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	2/21/2017	Ethylbenzene	7.7	1	0.11	700	ug/L
KA-3	2/21/2017	Styrene	ND	1	0.11	100	ug/L
KA-3	2/21/2017	n-Propylbenzene	0.73	1	0.13	660	ug/L
KA-3	2/21/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	2/21/2017	Toluene	ND	1	0.12	1000	ug/L
KA-3	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	2/21/2017	sec-Butylbenzene	0.36	1	0.12	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	2/21/2017	cis-1,2-Dichloroethene	0.16	1	0.12	70	ug/L
KA-3	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	2/21/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	2/21/2017	MTBE	46	1	0.21	143	ug/L
KA-3	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	6/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	6/1/2017	Acetone	5.7	10	0.82	14064	ug/L
KA-3	6/1/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	6/1/2017	Benzene	0.48	1	0.062	5	ug/L
KA-3	6/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	6/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	6/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	6/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	6/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	6/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	6/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	6/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	6/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	6/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	6/1/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	6/1/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	6/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	6/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	6/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	6/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	6/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	6/1/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	6/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	6/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	6/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	6/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	6/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	6/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	6/1/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
KA-3	6/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	6/1/2017	Ethylbenzene	0.27	1	0.093	700	ug/L
KA-3	6/1/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	6/1/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
KA-3	6/1/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	6/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	6/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	6/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	6/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	6/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	6/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	6/1/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	6/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	6/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	6/1/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	6/1/2017	sec-Butylbenzene	0.46	1	0.11	2000	ug/L
KA-3	6/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	6/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	6/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	6/1/2017	Pentafluorobenzene	ND	0	0		None
KA-3	6/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	6/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	6/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	6/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	6/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	6/1/2017	MTBE	46	1	0.24	143	ug/L
KA-3	6/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	6/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	9/5/2017	Acetone	5.2	10	0.82	14064	ug/L
KA-3	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	9/5/2017	Benzene	2.5	1	0.062	5	ug/L
KA-3	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	9/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	9/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	9/5/2017	Isopropylbenzene	0.06	1	0.051	447	ug/L
KA-3	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	9/5/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
KA-3	9/5/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	9/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
KA-3	9/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	9/5/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	9/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	9/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	9/5/2017	MTBE	41	1	0.24	143	ug/L
KA-3	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	12/4/2017	Acetone	3	10	0.82	14064	ug/L
KA-3	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	12/4/2017	Benzene	4.2	1	0.062	5	ug/L
KA-3	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	12/4/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	12/4/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	12/4/2017	1-Methylnaphthalene	0.91	4	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/4/2017	Naphthalene	1.1	2	0.11	30	ug/L
KA-3	12/4/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
KA-3	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	12/4/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	12/4/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	12/4/2017	Isopropylbenzene	0.16	1	0.051	447	ug/L
KA-3	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	12/4/2017	Ethylbenzene	2	1	0.093	700	ug/L
KA-3	12/4/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	12/4/2017	n-Propylbenzene	0.15	1	0.074	660	ug/L
KA-3	12/4/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	12/4/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	12/4/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	12/4/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	12/4/2017	MTBE	40	1	0.24	143	ug/L
KA-3	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	2/9/2018	Acetone	ND	10	0.82	14064	ug/L
KA-3	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
KA-3	2/9/2018	Benzene	3.3	1	0.062	5	ug/L
KA-3	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	2/9/2018	1-Methylnaphthalene	0.92	4	0.16	NA	ug/L
KA-3	2/9/2018	Naphthalene	1	2	0.11	30	ug/L
KA-3	2/9/2018	2-Methylnaphthalene	**0.66**	4	0.15		ug/L
KA-3	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	2/9/2018	1,2,4-Trimethylbenzene	0.22	1	0.11	56	ug/L
KA-3	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	2/9/2018	tert-Butylbenzene	0.16	1	0.1	690	ug/L
KA-3	2/9/2018	Isopropylbenzene	0.2	1	0.051	447	ug/L
KA-3	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	2/9/2018	Ethylbenzene	1.8	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/9/2018	Styrene	ND	1	0.16	100	ug/L
KA-3	2/9/2018	n-Propylbenzene	0.21	1	0.074	660	ug/L
KA-3	2/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	2/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	2/9/2018	Toluene	ND	1	0.064	1000	ug/L
KA-3	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	2/9/2018	sec-Butylbenzene	0.13	1	0.11	2000	ug/L
KA-3	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	2/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	2/9/2018	MTBE	29	1	0.24	143	ug/L
KA-3	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	4/30/2018	Acetone	5.9	10	0.82	14064	ug/L
KA-3	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
KA-3	4/30/2018	Benzene	**590**	10	0.62	5	ug/L
KA-3	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	4/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	4/30/2018	1-Methylnaphthalene	3.5	4	0.16	NA	ug/L
KA-3	4/30/2018	Naphthalene	8.2	2	0.11	30	ug/L
KA-3	4/30/2018	2-Methylnaphthalene	**1.3**	4	0.15		ug/L
KA-3	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	4/30/2018	1,2,4-Trimethylbenzene	11	1	0.11	56	ug/L
KA-3	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	4/30/2018	tert-Butylbenzene	0.16	1	0.1	690	ug/L
KA-3	4/30/2018	Isopropylbenzene	4.4	1	0.051	447	ug/L
KA-3	4/30/2018	p-Isopropyltoluene	0.14	1	0.096	NA	ug/L
KA-3	4/30/2018	Ethylbenzene	54	1	0.093	700	ug/L
KA-3	4/30/2018	Styrene	ND	1	0.16	100	ug/L
KA-3	4/30/2018	n-Propylbenzene	3.2	1	0.074	660	ug/L
KA-3	4/30/2018	n-Butylbenzene	0.3	3	0.13	1000	ug/L
KA-3	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	4/30/2018	1,3,5-Trimethylbenzene	3.1	1	0.087	60	ug/L
KA-3	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	4/30/2018	Toluene	510	10	0.64	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	4/30/2018	sec-Butylbenzene	0.49	1	0.11	2000	ug/L
KA-3	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	4/30/2018	Xylenes, Total	58	1.5	0.32	620	ug/L
KA-3	4/30/2018	MTBE	32	1	0.24	143	ug/L
KA-3	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	4/9/2019	Benzene	**210**	10	1.666391	5	ug/L
KA-3	4/9/2019	Ethylbenzene	28	1	0.132341	700	ug/L
KA-3	4/9/2019	MTBE	61	1	0.456095	143	ug/L
KA-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	4/9/2019	Xylenes, Total	1.2	1.5	0.454415	620	ug/L
KA-3	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	5/28/2019	Ethylbenzene	15	1	0.132341	700	ug/L
KA-3	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	5/28/2019	Isopropylbenzene	1.3	1	0.191522	447	ug/L
KA-3	5/28/2019	MTBE	61	1	0.456095	143	ug/L
KA-3	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	5/28/2019	Naphthalene	5.7	2	0.275071	30	ug/L
KA-3	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
KA-3	5/28/2019	n-Propylbenzene	0.91	1	0.214308	660	ug/L
KA-3	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
KA-3	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
KA-3	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	5/28/2019	Xylenes, Total	0.57	1.5	0.454415	620	ug/L
KA-3	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
KA-3	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	5/28/2019	1,2,4-Trimethylbenzene	0.32	1	0.213199	56	ug/L
KA-3	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
KA-3	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	5/28/2019	1-Methylnaphthalene	5.6	4	0.314954	NA	ug/L
KA-3	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	5/28/2019	2-Methylnaphthalene	**2.2**	4	0.345376		ug/L
KA-3	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	5/28/2019	Acetone	5.5	10	1.199396	14064	ug/L
KA-3	5/28/2019	Benzene	**200**	10	1.666391	5	ug/L
KA-3	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
KA-3	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
KA-3	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
KA-3	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	8/22/2019	1-Methylnaphthalene	19	4	0.314954	NA	ug/L
KA-3	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
KA-3	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	8/22/2019	2-Methylnaphthalene	**11**	4	0.345376		ug/L
KA-3	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	8/22/2019	Acetone	3.9	10	1.199396	14064	ug/L
KA-3	8/22/2019	Benzene	**380**	10	1.666391	5	ug/L
KA-3	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	8/22/2019	Ethylbenzene	48	1	0.132341	700	ug/L
KA-3	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	8/22/2019	Isopropylbenzene	4.8	1	0.191522	447	ug/L
KA-3	8/22/2019	MTBE	68	1	0.456095	143	ug/L
KA-3	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	8/22/2019	Naphthalene	15	2	0.275071	30	ug/L
KA-3	8/22/2019	n-Butylbenzene	1.2	3	0.22757	1000	ug/L
KA-3	8/22/2019	n-Propylbenzene	4	1	0.214308	660	ug/L
KA-3	8/22/2019	sec-Butylbenzene	1.1	1	0.247731	2000	ug/L
KA-3	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	8/22/2019	tert-Butylbenzene	0.4	1	0.206985	690	ug/L
KA-3	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	8/22/2019	Xylenes, Total	0.62	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
KA-3	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	2.7	4	0.314954	NA	ug/L
KA-3	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
KA-3	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	**1.2**	4	0.345376		ug/L
KA-3	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
KA-3	10/21/2019	Benzene	**57**	1	0.166639	5	ug/L
KA-3	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	10/21/2019	Ethylbenzene	6.2	1	0.132341	700	ug/L
KA-3	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	10/21/2019	Isopropylbenzene	0.57	1	0.191522	447	ug/L
KA-3	10/21/2019	MTBE	56	1	0.456095	143	ug/L
KA-3	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	10/21/2019	Naphthalene	2.3	2	0.275071	30	ug/L
KA-3	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
KA-3	10/21/2019	n-Propylbenzene	0.48	1	0.214308	660	ug/L
KA-3	10/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
KA-3	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
KA-3	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
KA-3	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
KA-3	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
KA-3	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
KA-3	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
KA-3	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
KA-3	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
KA-3	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
KA-3	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
KA-3	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
KA-3	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
KA-3	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
KA-3	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
KA-3	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
KA-3	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
KA-3	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
KA-3	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
KA-3	3/4/2020	1-Methylnaphthalene	5.6	4	0.84	NA	ug/L
KA-3	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
KA-3	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
KA-3	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
KA-3	3/4/2020	2-Methylnaphthalene	**2.5**	4	0.69		ug/L
KA-3	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
KA-3	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
KA-3	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
KA-3	3/4/2020	Acetone	3.5	10	2.3	14064	ug/L
KA-3	3/4/2020	Benzene	**98**	1	0.23	5	ug/L
KA-3	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
KA-3	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
KA-3	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
KA-3	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
KA-3	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
KA-3	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
KA-3	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
KA-3	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
KA-3	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
KA-3	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
KA-3	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
KA-3	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
KA-3	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
KA-3	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
KA-3	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
KA-3	3/4/2020	Ethylbenzene	2.2	1	0.21	700	ug/L
KA-3	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
KA-3	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
KA-3	3/4/2020	MTBE	64	1	0.39	143	ug/L
KA-3	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
KA-3	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
KA-3	3/4/2020	Naphthalene	4.2	2	0.28	30	ug/L
KA-3	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
KA-3	3/4/2020	Styrene	ND	1	0.13	100	ug/L
KA-3	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
KA-3	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
KA-3	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
KA-3	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
KA-3	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
KA-3	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
KA-3	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
KA-3	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
KA-3	9/22/2020	Ethylbenzene	27	1	0.21	700	ug/L
KA-3	9/22/2020	MTBE	59	1	0.39	143	ug/L
KA-3	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
KA-3	9/22/2020	Xylenes, Total	0.64	1.5	0.55	620	ug/L
KA-3	9/22/2020	Benzene	**310**	10	2.3	5	ug/L
KA-3	9/22/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
KA-3	12/17/2020	Acetone	ND	25	10	14064	ug/L
KA-3	12/17/2020	Benzene	ND	1	0.38	5	ug/L
KA-3	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
KA-3	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
KA-3	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
KA-3	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
KA-3	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
KA-3	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
KA-3	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
KA-3	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
KA-3	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
KA-3	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
KA-3	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
KA-3	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
KA-3	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
KA-3	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
KA-3	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
KA-3	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
KA-3	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
KA-3	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
KA-3	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
KA-3	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
KA-3	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
KA-3	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
KA-3	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
KA-3	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
KA-3	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
KA-3	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
KA-3	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
KA-3	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
KA-3	12/17/2020	Ethylbenzene	3.03	1	0.5	700	ug/L
KA-3	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
KA-3	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
KA-3	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
KA-3	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
KA-3	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
KA-3	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
KA-3	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
KA-3	12/17/2020	MTBE	43.6	1	0.74	143	ug/L
KA-3	12/17/2020	Naphthalene	ND	1	1	30	ug/L
KA-3	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
KA-3	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
KA-3	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
KA-3	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
KA-3	12/17/2020	Styrene	ND	1	1	100	ug/L
KA-3	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
KA-3	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
KA-3	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
KA-3	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
KA-3	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
KA-3	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
KA-3	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
KA-3	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
KA-3	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
KA-3	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
KA-3	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
KA-3	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
KA-3	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
KA-3	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
KA-3	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
KA-3	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
KA-3	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
KA-3	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
LDU - East	3/20/2012	Benzene	**1400**	200	28	5	ug/L
LDU - East	3/20/2012	Ethylbenzene	560	200	22	700	ug/L
LDU - East	3/20/2012	Toluene	**3100**	200	24	1000	ug/L
LDU - East	3/20/2012	Xylenes, Total	**8000**	400	66	620	ug/L
LDU - East	3/20/2012	MTBE	*ND*	*500*	29	143	ug/L
LDU - East	6/12/2012	Benzene	**1300**	100	14	5	ug/L
LDU - East	6/12/2012	1,2,4-Trimethylbenzene	**940**	100	12	56	ug/L
LDU - East	6/12/2012	Ethylbenzene	460	100	11	700	ug/L
LDU - East	6/12/2012	1,3,5-Trimethylbenzene	**300**	100	11	60	ug/L
LDU - East	6/12/2012	Toluene	**1100**	100	12	1000	ug/L
LDU - East	6/12/2012	Xylenes, Total	**6300**	200	33	620	ug/L
LDU - East	6/12/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	8/21/2012	Benzene	**1200**	100	14	5	ug/L
LDU - East	8/21/2012	1,2,4-Trimethylbenzene	**840**	100	12	56	ug/L
LDU - East	8/21/2012	Ethylbenzene	460	100	11	700	ug/L
LDU - East	8/21/2012	1,3,5-Trimethylbenzene	**280**	100	11	60	ug/L
LDU - East	8/21/2012	Toluene	330	100	12	1000	ug/L
LDU - East	8/21/2012	Xylenes, Total	**5700**	200	33	620	ug/L
LDU - East	8/21/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	11/28/2012	Benzene	**1100**	100	14	5	ug/L
LDU - East	11/28/2012	Ethylbenzene	510	100	11	700	ug/L
LDU - East	11/28/2012	Toluene	890	100	12	1000	ug/L
LDU - East	11/28/2012	Xylenes, Total	**6700**	200	33	620	ug/L
LDU - East	11/28/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	3/18/2013	Benzene	**12000**	200	37	5	ug/L
LDU - East	3/18/2013	1,2,4-Trimethylbenzene	**900**	200	34	56	ug/L
LDU - East	3/18/2013	Ethylbenzene	610	200	36	700	ug/L
LDU - East	3/18/2013	1,3,5-Trimethylbenzene	**290**	200	36	60	ug/L
LDU - East	3/18/2013	Toluene	**4600**	200	36	1000	ug/L
LDU - East	3/18/2013	Xylenes, Total	**7000**	400	110	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/18/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	6/12/2013	Benzene	**9400**	200	37	5	ug/L
LDU - East	6/12/2013	1,2,4-Trimethylbenzene	**800**	200	34	56	ug/L
LDU - East	6/12/2013	Ethylbenzene	510	200	36	700	ug/L
LDU - East	6/12/2013	1,3,5-Trimethylbenzene	**280**	200	36	60	ug/L
LDU - East	6/12/2013	Toluene	**2200**	200	36	1000	ug/L
LDU - East	6/12/2013	Xylenes, Total	**6100**	400	110	620	ug/L
LDU - East	6/12/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	11/12/2013	Benzene	**190**	100	37	5	ug/L
LDU - East	11/12/2013	Ethylbenzene	130	100	36	700	ug/L
LDU - East	11/12/2013	Toluene	170	100	36	1000	ug/L
LDU - East	11/12/2013	Xylenes, Total	**5600**	400	110	620	ug/L
LDU - East	11/12/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	3/10/2014	Benzene	**9800**	200	24	5	ug/L
LDU - East	3/10/2014	1,2,4-Trimethylbenzene	**5800**	200	22	56	ug/L
LDU - East	3/10/2014	Ethylbenzene	**3800**	200	25	700	ug/L
LDU - East	3/10/2014	1,3,5-Trimethylbenzene	**1900**	200	25	60	ug/L
LDU - East	3/10/2014	Toluene	**27000**	2000	270	1000	ug/L
LDU - East	3/10/2014	Xylenes, Total	**25000**	400	78	620	ug/L
LDU - East	3/10/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	5/14/2014	Carbon tetrachloride	*ND*	*100*	14	5	ug/L
LDU - East	5/14/2014	Acetone	3500	1000	490	14064	ug/L
LDU - East	5/14/2014	Chloroform	ND	100	32	100	ug/L
LDU - East	5/14/2014	Benzene	**4100**	100	15	5	ug/L
LDU - East	5/14/2014	1,1,1-Trichloroethane	ND	100	12	200	ug/L
LDU - East	5/14/2014	Bromomethane	*ND*	*300*	41	7.54	ug/L
LDU - East	5/14/2014	Chloromethane	*ND*	*300*	52	20.32	ug/L
LDU - East	5/14/2014	Dibromomethane	*ND*	*100*	19	8	ug/L
LDU - East	5/14/2014	Chloroethane	ND	200	48	20857	ug/L
LDU - East	5/14/2014	Vinyl Chloride	*ND*	*100*	46	2	ug/L
LDU - East	5/14/2014	Methylene Chloride	*ND*	*300*	27	5	ug/L
LDU - East	5/14/2014	Carbon Disulfide	*ND*	*1000*	74	810	ug/L
LDU - East	5/14/2014	Bromoform	*ND*	*100*	25	32.9	ug/L
LDU - East	5/14/2014	Bromodichloromethane	*ND*	*100*	16	1.34	ug/L
LDU - East	5/14/2014	1,1-Dichloroethane	*ND*	*100*	28	25	ug/L
LDU - East	5/14/2014	1,1-Dichloroethene	*ND*	*100*	21	7	ug/L
LDU - East	5/14/2014	Trichlorofluoromethane	ND	100	13	1137	ug/L
LDU - East	5/14/2014	Dichlorodifluoromethane	ND	100	23	197	ug/L
LDU - East	5/14/2014	1,2-Dichloropropane	*ND*	*100*	21	5	ug/L
LDU - East	5/14/2014	2-Butanone	ND	1000	140	5565	ug/L
LDU - East	5/14/2014	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
LDU - East	5/14/2014	Trichloroethene	*ND*	*100*	19	5	ug/L
LDU - East	5/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*200*	22	10	ug/L
LDU - East	5/14/2014	1,2,3-Trichlorobenzene	*ND*	*100*	18	70	ug/L
LDU - East	5/14/2014	Hexachlorobutadiene	*ND*	*100*	28	1.39	ug/L
LDU - East	5/14/2014	1-Methylnaphthalene	ND	400	44	NA	ug/L
LDU - East	5/14/2014	Naphthalene	**660**	200	14	30	ug/L
LDU - East	5/14/2014	2-Methylnaphthalene	**450**	400	56		ug/L
LDU - East	5/14/2014	2-Chlorotoluene	ND	100	13	233	ug/L
LDU - East	5/14/2014	1,2-Dichlorobenzene	ND	100	13	600	ug/L
LDU - East	5/14/2014	1,2,4-Trimethylbenzene	**3200**	100	12	56	ug/L
LDU - East	5/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*200*	22	0.0033	ug/L
LDU - East	5/14/2014	1,2,3-Trichloropropane	*ND*	*200*	19	0.0084	ug/L
LDU - East	5/14/2014	tert-Butylbenzene	ND	100	14	690	ug/L
LDU - East	5/14/2014	Isopropylbenzene	130	100	16	447	ug/L
LDU - East	5/14/2014	p-Isopropyltoluene	ND	100	18	NA	ug/L
LDU - East	5/14/2014	Ethylbenzene	**860**	100	13	700	ug/L
LDU - East	5/14/2014	Styrene	ND	100	12	100	ug/L
LDU - East	5/14/2014	n-Propylbenzene	330	100	14	660	ug/L
LDU - East	5/14/2014	n-Butylbenzene	ND	300	21	1000	ug/L
LDU - East	5/14/2014	4-Chlorotoluene	ND	100	87	250	ug/L
LDU - East	5/14/2014	1,4-Dichlorobenzene	*ND*	*100*	26	75	ug/L
LDU - East	5/14/2014	1,2-Dibromoethane	*ND*	*100*	10	0.05	ug/L
LDU - East	5/14/2014	1,2-Dichloroethane	*ND*	*100*	26	5	ug/L
LDU - East	5/14/2014	4-Methyl-2-Pentanone	ND	1000	110	1243	ug/L
LDU - East	5/14/2014	1,3,5-Trimethylbenzene	**920**	100	13	60	ug/L
LDU - East	5/14/2014	Bromobenzene	*ND*	*100*	18	62	ug/L
LDU - East	5/14/2014	Toluene	**6100**	100	17	1000	ug/L
LDU - East	5/14/2014	Chlorobenzene	*ND*	*100*	14	77.6	ug/L
LDU - East	5/14/2014	1,2,4-Trichlorobenzene	*ND*	*100*	30	70	ug/L
LDU - East	5/14/2014	Dibromochloromethane	*ND*	*100*	12	1.68	ug/L
LDU - East	5/14/2014	Tetrachloroethene	*ND*	*100*	20	5	ug/L
LDU - East	5/14/2014	sec-Butylbenzene	ND	100	15	2000	ug/L
LDU - East	5/14/2014	1,3-Dichloropropane	ND	100	18	370	ug/L
LDU - East	5/14/2014	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
LDU - East	5/14/2014	trans-1,2-Dichloroethene	ND	100	25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	5/14/2014	1,3-Dichlorobenzene	ND	100	17	N/A	ug/L
LDU - East	5/14/2014	1,1-Dichloropropene	ND	100	23	NA	ug/L
LDU - East	5/14/2014	2-Hexanone	*ND*	*1000*	86	38	ug/L
LDU - East	5/14/2014	2,2-Dichloropropane	ND	200	27	NA	ug/L
LDU - East	5/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*100*	12	5.74	ug/L
LDU - East	5/14/2014	Xylenes, Total	**7400**	150	38	620	ug/L
LDU - East	5/14/2014	MTBE	ND	100	25	143	ug/L
LDU - East	5/14/2014	cis-1,3-Dichloropropene	ND	100	17	NA	ug/L
LDU - East	5/14/2014	trans-1,3-Dichloropropene	ND	100	18	NA	ug/L
LDU - East	6/3/2014	Benzene	**8900**	200	24	5	ug/L
LDU - East	6/3/2014	1,2,4-Trimethylbenzene	**3600**	200	22	56	ug/L
LDU - East	6/3/2014	Ethylbenzene	**2300**	200	25	700	ug/L
LDU - East	6/3/2014	1,3,5-Trimethylbenzene	**1200**	200	25	60	ug/L
LDU - East	6/3/2014	Toluene	**21000**	2000	270	1000	ug/L
LDU - East	6/3/2014	Xylenes, Total	**19000**	400	78	620	ug/L
LDU - East	6/3/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	10/16/2014	Benzene	**1800**	100	12	5	ug/L
LDU - East	10/16/2014	1,2,4-Trimethylbenzene	**1200**	100	11	56	ug/L
LDU - East	10/16/2014	Ethylbenzene	550	100	12	700	ug/L
LDU - East	10/16/2014	1,3,5-Trimethylbenzene	**340**	100	12	60	ug/L
LDU - East	10/16/2014	Toluene	**5500**	100	13	1000	ug/L
LDU - East	10/16/2014	Xylenes, Total	**6600**	200	39	620	ug/L
LDU - East	10/16/2014	MTBE	*ND*	*250*	9.3	143	ug/L
LDU - East	11/11/2014	Benzene	**1700**	200	24	5	ug/L
LDU - East	11/11/2014	Ethylbenzene	**720**	200	25	700	ug/L
LDU - East	11/11/2014	Toluene	**4800**	200	27	1000	ug/L
LDU - East	11/11/2014	Xylenes, Total	**8200**	400	78	620	ug/L
LDU - East	11/11/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	3/10/2015	Benzene	**1300**	20	2.3	5	ug/L
LDU - East	3/10/2015	1,2,4-Trimethylbenzene	**1100**	20	2.7	56	ug/L
LDU - East	3/10/2015	Ethylbenzene	470	20	2.4	700	ug/L
LDU - East	3/10/2015	1,3,5-Trimethylbenzene	**370**	20	2.6	60	ug/L
LDU - East	3/10/2015	Toluene	460	20	2.3	1000	ug/L
LDU - East	3/10/2015	Xylenes, Total	**1900**	40	7.7	620	ug/L
LDU - East	3/10/2015	MTBE	ND	50	2.4	143	ug/L
LDU - East	6/1/2015	Benzene	**1200**	20	1.3	5	ug/L
LDU - East	6/1/2015	1,2,4-Trimethylbenzene	**960**	20	3.2	56	ug/L
LDU - East	6/1/2015	Ethylbenzene	430	20	2	700	ug/L
LDU - East	6/1/2015	1,3,5-Trimethylbenzene	**300**	20	2.5	60	ug/L
LDU - East	6/1/2015	Toluene	1000	20	2.2	1000	ug/L
LDU - East	6/1/2015	Xylenes, Total	**2000**	30	5.6	620	ug/L
LDU - East	6/1/2015	MTBE	ND	20	3.5	143	ug/L
LDU - East	8/11/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
LDU - East	8/11/2015	Acetone	ND	200	19	14064	ug/L
LDU - East	8/11/2015	Chloroform	ND	20	4.3	100	ug/L
LDU - East	8/11/2015	Benzene	**1200**	20	1.3	5	ug/L
LDU - East	8/11/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
LDU - East	8/11/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
LDU - East	8/11/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
LDU - East	8/11/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
LDU - East	8/11/2015	Chloroethane	ND	40	2.1	20857	ug/L
LDU - East	8/11/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
LDU - East	8/11/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
LDU - East	8/11/2015	Carbon Disulfide	ND	200	13	810	ug/L
LDU - East	8/11/2015	Bromoform	ND	20	3.2	32.9	ug/L
LDU - East	8/11/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
LDU - East	8/11/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
LDU - East	8/11/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
LDU - East	8/11/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
LDU - East	8/11/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
LDU - East	8/11/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
LDU - East	8/11/2015	2-Butanone	460	200	7.3	5565	ug/L
LDU - East	8/11/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
LDU - East	8/11/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
LDU - East	8/11/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
LDU - East	8/11/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
LDU - East	8/11/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
LDU - East	8/11/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
LDU - East	8/11/2015	Naphthalene	**160**	40	4.4	30	ug/L
LDU - East	8/11/2015	2-Methylnaphthalene	**97**	80	12		ug/L
LDU - East	8/11/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
LDU - East	8/11/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
LDU - East	8/11/2015	1,2,4-Trimethylbenzene	**740**	20	3.2	56	ug/L
LDU - East	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
LDU - East	8/11/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
LDU - East	8/11/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/11/2015	Isopropylbenzene	32	20	3	447	ug/L
LDU - East	8/11/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
LDU - East	8/11/2015	Ethylbenzene	340	20	2	700	ug/L
LDU - East	8/11/2015	Styrene	ND	20	2.1	100	ug/L
LDU - East	8/11/2015	n-Propylbenzene	45	20	3.3	660	ug/L
LDU - East	8/11/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
LDU - East	8/11/2015	4-Chlorotoluene	ND	20	3	250	ug/L
LDU - East	8/11/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
LDU - East	8/11/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
LDU - East	8/11/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
LDU - East	8/11/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
LDU - East	8/11/2015	1,3,5-Trimethylbenzene	**240**	20	2.5	60	ug/L
LDU - East	8/11/2015	Bromobenzene	ND	20	2.2	62	ug/L
LDU - East	8/11/2015	Toluene	**1100**	20	2.2	1000	ug/L
LDU - East	8/11/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
LDU - East	8/11/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
LDU - East	8/11/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
LDU - East	8/11/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
LDU - East	8/11/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
LDU - East	8/11/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
LDU - East	8/11/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
LDU - East	8/11/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
LDU - East	8/11/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
LDU - East	8/11/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - East	8/11/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
LDU - East	8/11/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
LDU - East	8/11/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
LDU - East	8/11/2015	Xylenes, Total	**1700**	30	5.6	620	ug/L
LDU - East	8/11/2015	MTBE	ND	20	3.5	143	ug/L
LDU - East	8/11/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
LDU - East	8/11/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - East	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
LDU - East	10/29/2015	Acetone	ND	100	9.4	14064	ug/L
LDU - East	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
LDU - East	10/29/2015	Benzene	**560**	10	0.65	5	ug/L
LDU - East	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
LDU - East	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
LDU - East	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
LDU - East	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
LDU - East	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
LDU - East	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
LDU - East	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
LDU - East	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
LDU - East	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
LDU - East	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
LDU - East	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
LDU - East	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
LDU - East	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
LDU - East	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
LDU - East	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
LDU - East	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
LDU - East	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
LDU - East	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
LDU - East	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
LDU - East	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
LDU - East	10/29/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
LDU - East	10/29/2015	1-Methylnaphthalene	49	40	5.4	NA	ug/L
LDU - East	10/29/2015	Naphthalene	**170**	20	2.2	30	ug/L
LDU - East	10/29/2015	2-Methylnaphthalene	**69**	40	5.9		ug/L
LDU - East	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
LDU - East	10/29/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
LDU - East	10/29/2015	1,2,4-Trimethylbenzene	**310**	10	1.6	56	ug/L
LDU - East	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
LDU - East	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
LDU - East	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
LDU - East	10/29/2015	Isopropylbenzene	26	10	1.5	447	ug/L
LDU - East	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
LDU - East	10/29/2015	Ethylbenzene	250	10	1	700	ug/L
LDU - East	10/29/2015	Styrene	ND	10	1.1	100	ug/L
LDU - East	10/29/2015	n-Propylbenzene	36	10	1.6	660	ug/L
LDU - East	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
LDU - East	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
LDU - East	10/29/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
LDU - East	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
LDU - East	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
LDU - East	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	10/29/2015	1,3,5-Trimethylbenzene	**220**	10	1.2	60	ug/L
LDU - East	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
LDU - East	10/29/2015	Toluene	44	10	1.1	1000	ug/L
LDU - East	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
LDU - East	10/29/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
LDU - East	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
LDU - East	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
LDU - East	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
LDU - East	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
LDU - East	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
LDU - East	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
LDU - East	10/29/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L
LDU - East	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
LDU - East	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
LDU - East	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
LDU - East	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - East	10/29/2015	Xylenes, Total	**1100**	15	2.8	620	ug/L
LDU - East	10/29/2015	MTBE	22	10	1.7	143	ug/L
LDU - East	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - East	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - East	3/1/2016	Benzene	**410**	50	4.8	5	ug/L
LDU - East	3/1/2016	1,2,4-Trimethylbenzene	**180**	50	5.2	56	ug/L
LDU - East	3/1/2016	Ethylbenzene	270	50	5.6	700	ug/L
LDU - East	3/1/2016	1,3,5-Trimethylbenzene	**310**	50	5.8	60	ug/L
LDU - East	3/1/2016	Toluene	ND	50	4.5	1000	ug/L
LDU - East	3/1/2016	Xylenes, Total	140	75	16	620	ug/L
LDU - East	3/1/2016	MTBE	ND	50	11	143	ug/L
LDU - East	6/7/2016	Benzene	**360**	5	0.48	5	ug/L
LDU - East	6/7/2016	1,2,4-Trimethylbenzene	**130**	5	0.55	56	ug/L
LDU - East	6/7/2016	Ethylbenzene	250	5	0.56	700	ug/L
LDU - East	6/7/2016	1,3,5-Trimethylbenzene	**250**	5	0.58	60	ug/L
LDU - East	6/7/2016	Toluene	32	5	0.59	1000	ug/L
LDU - East	6/7/2016	Xylenes, Total	97	7.5	1.8	620	ug/L
LDU - East	6/7/2016	MTBE	13	5	1.1	143	ug/L
LDU - East	7/7/2016	Benzene	**430**	50	4.8	5	ug/L
LDU - East	7/7/2016	1,2,4-Trimethylbenzene	**340**	50	5.5	56	ug/L
LDU - East	7/7/2016	Ethylbenzene	270	50	5.6	700	ug/L
LDU - East	7/7/2016	1,3,5-Trimethylbenzene	**220**	50	5.8	60	ug/L
LDU - East	7/7/2016	Toluene	66	50	5.9	1000	ug/L
LDU - East	7/7/2016	Xylenes, Total	180	75	18	620	ug/L
LDU - East	7/7/2016	MTBE	ND	50	11	143	ug/L
LDU - East	11/17/2016	Benzene	**110**	5	0.48	5	ug/L
LDU - East	11/17/2016	1,2,4-Trimethylbenzene	7	5	0.55	56	ug/L
LDU - East	11/17/2016	Ethylbenzene	100	5	0.56	700	ug/L
LDU - East	11/17/2016	1,3,5-Trimethylbenzene	39	5	0.58	60	ug/L
LDU - East	11/17/2016	Toluene	8.2	5	0.59	1000	ug/L
LDU - East	11/17/2016	Xylenes, Total	9.8	7.5	1.8	620	ug/L
LDU - East	11/17/2016	MTBE	6.3	5	1.1	143	ug/L
LDU - East	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
LDU - East	2/21/2017	Acetone	2000	100	49	14064	ug/L
LDU - East	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
LDU - East	2/21/2017	Benzene	**230**	10	0.96	5	ug/L
LDU - East	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
LDU - East	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
LDU - East	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
LDU - East	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
LDU - East	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L
LDU - East	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
LDU - East	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
LDU - East	2/21/2017	Carbon Disulfide	ND	100	6	810	ug/L
LDU - East	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
LDU - East	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
LDU - East	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
LDU - East	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
LDU - East	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
LDU - East	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
LDU - East	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
LDU - East	2/21/2017	2-Butanone	360	100	7.4	5565	ug/L
LDU - East	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
LDU - East	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
LDU - East	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
LDU - East	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
LDU - East	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
LDU - East	2/21/2017	1-Methylnaphthalene	55	40	2	NA	ug/L
LDU - East	2/21/2017	Naphthalene	**92**	20	0.93	30	ug/L
LDU - East	2/21/2017	2-Methylnaphthalene	**58**	40	1.6		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
LDU - East	2/21/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
LDU - East	2/21/2017	1,2,4-Trimethylbenzene	**110**	10	1.1	56	ug/L
LDU - East	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
LDU - East	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
LDU - East	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
LDU - East	2/21/2017	Isopropylbenzene	18	10	1	447	ug/L
LDU - East	2/21/2017	p-Isopropyltoluene	7.5	10	1.4	NA	ug/L
LDU - East	2/21/2017	Ethylbenzene	140	10	1.1	700	ug/L
LDU - East	2/21/2017	Styrene	ND	10	1.1	100	ug/L
LDU - East	2/21/2017	n-Propylbenzene	28	10	1.3	660	ug/L
LDU - East	2/21/2017	n-Butylbenzene	6.8	30	1.6	1000	ug/L
LDU - East	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
LDU - East	2/21/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
LDU - East	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
LDU - East	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
LDU - East	2/21/2017	4-Methyl-2-Pentanone	52	100	4.3	1243	ug/L
LDU - East	2/21/2017	1,3,5-Trimethylbenzene	**100**	10	1.2	60	ug/L
LDU - East	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
LDU - East	2/21/2017	Toluene	140	10	1.2	1000	ug/L
LDU - East	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
LDU - East	2/21/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
LDU - East	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
LDU - East	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
LDU - East	2/21/2017	sec-Butylbenzene	6.5	10	1.2	2000	ug/L
LDU - East	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
LDU - East	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
LDU - East	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
LDU - East	2/21/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
LDU - East	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - East	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
LDU - East	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
LDU - East	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - East	2/21/2017	Xylenes, Total	300	15	3.7	620	ug/L
LDU - East	2/21/2017	MTBE	13	10	2.1	143	ug/L
LDU - East	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - East	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
LDU - East	6/2/2017	Benzene	**170**	10	0.62	5	ug/L
LDU - East	6/2/2017	Ethylbenzene	63	10	0.93	700	ug/L
LDU - East	6/2/2017	Toluene	6.6	10	0.64	1000	ug/L
LDU - East	6/2/2017	Pentafluorobenzene	ND	0	0		None
LDU - East	6/2/2017	Xylenes, Total	75	15	3.2	620	ug/L
LDU - East	6/2/2017	MTBE	2.5	10	2.4	143	ug/L
LDU - East	9/5/2017	Benzene	**530**	10	0.62	5	ug/L
LDU - East	9/5/2017	Ethylbenzene	190	10	0.93	700	ug/L
LDU - East	9/5/2017	Toluene	230	10	0.64	1000	ug/L
LDU - East	9/5/2017	Xylenes, Total	**900**	15	3.2	620	ug/L
LDU - East	9/5/2017	MTBE	ND	10	2.4	143	ug/L
LDU - East	12/4/2017	Benzene	**1700**	50	3.1	5	ug/L
LDU - East	12/4/2017	Ethylbenzene	180	5	0.47	700	ug/L
LDU - East	12/4/2017	Toluene	60	5	0.32	1000	ug/L
LDU - East	12/4/2017	Xylenes, Total	180	7.5	1.6	620	ug/L
LDU - East	12/4/2017	MTBE	ND	5	1.2	143	ug/L
LDU - East	2/12/2018	Benzene	**1900**	100	6.2	5	ug/L
LDU - East	2/12/2018	1,2,4-Trimethylbenzene	25	10	1.1	56	ug/L
LDU - East	2/12/2018	Ethylbenzene	290	10	0.93	700	ug/L
LDU - East	2/12/2018	1,3,5-Trimethylbenzene	**110**	10	0.87	60	ug/L
LDU - East	2/12/2018	Toluene	47	10	0.64	1000	ug/L
LDU - East	2/12/2018	Xylenes, Total	80	15	3.2	620	ug/L
LDU - East	2/12/2018	MTBE	ND	10	2.4	143	ug/L
LDU - East	4/30/2018	Benzene	**710**	10	0.62	5	ug/L
LDU - East	4/30/2018	1,2,4-Trimethylbenzene	**160**	10	1.1	56	ug/L
LDU - East	4/30/2018	Ethylbenzene	260	10	0.93	700	ug/L
LDU - East	4/30/2018	1,3,5-Trimethylbenzene	**150**	10	0.87	60	ug/L
LDU - East	4/30/2018	Toluene	37	10	0.64	1000	ug/L
LDU - East	4/30/2018	Xylenes, Total	600	15	3.2	620	ug/L
LDU - East	4/30/2018	MTBE	ND	10	2.4	143	ug/L
LDU - East	4/9/2019	Benzene	**1500**	20	3.332781	5	ug/L
LDU - East	4/9/2019	Ethylbenzene	150	2	0.264682	700	ug/L
LDU - East	4/9/2019	MTBE	1.2	2	0.91219	143	ug/L
LDU - East	4/9/2019	Toluene	28	2	0.700872	1000	ug/L
LDU - East	4/9/2019	Xylenes, Total	27	3	0.90883	620	ug/L
LDU - East	5/28/2019	Benzene	**890**	20	3.332781	5	ug/L
LDU - East	5/28/2019	Ethylbenzene	91	2	0.264682	700	ug/L
LDU - East	5/28/2019	Toluene	72	2	0.700872	1000	ug/L
LDU - East	5/28/2019	Xylenes, Total	56	3	0.90883	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/22/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
LDU - East	8/22/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
LDU - East	8/22/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
LDU - East	8/22/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
LDU - East	8/22/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
LDU - East	8/22/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
LDU - East	8/22/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
LDU - East	8/22/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
LDU - East	8/22/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
LDU - East	8/22/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
LDU - East	8/22/2019	1,2,4-Trimethylbenzene	37	2	0.426398	56	ug/L
LDU - East	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
LDU - East	8/22/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
LDU - East	8/22/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
LDU - East	8/22/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
LDU - East	8/22/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
LDU - East	8/22/2019	1,3,5-Trimethylbenzene	11	2	0.37732	60	ug/L
LDU - East	8/22/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
LDU - East	8/22/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
LDU - East	8/22/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
LDU - East	8/22/2019	1-Methylnaphthalene	16	8	0.629909	NA	ug/L
LDU - East	8/22/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
LDU - East	8/22/2019	2-Butanone	11	20	4.178833	5565	ug/L
LDU - East	8/22/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
LDU - East	8/22/2019	2-Hexanone	ND	20	3.094384	38	ug/L
LDU - East	8/22/2019	2-Methylnaphthalene	**14**	8	0.690752		ug/L
LDU - East	8/22/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
LDU - East	8/22/2019	p-Isopropyltoluene	2.6	2	0.434579	NA	ug/L
LDU - East	8/22/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
LDU - East	8/22/2019	Acetone	33	20	2.398793	14064	ug/L
LDU - East	8/22/2019	Benzene	**600**	20	3.332781	5	ug/L
LDU - East	8/22/2019	Bromobenzene	ND	2	0.489454	62	ug/L
LDU - East	8/22/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
LDU - East	8/22/2019	Bromoform	ND	2	0.577326	32.9	ug/L
LDU - East	8/22/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
LDU - East	8/22/2019	Carbon Disulfide	4.2	20	0.905113	810	ug/L
LDU - East	8/22/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
LDU - East	8/22/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
LDU - East	8/22/2019	Chloroethane	ND	4	0.355605	20857	ug/L
LDU - East	8/22/2019	Chloroform	ND	2	0.243781	100	ug/L
LDU - East	8/22/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
LDU - East	8/22/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
LDU - East	8/22/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
LDU - East	8/22/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
LDU - East	8/22/2019	Dibromomethane	ND	2	0.418417	8	ug/L
LDU - East	8/22/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
LDU - East	8/22/2019	Ethylbenzene	57	2	0.264682	700	ug/L
LDU - East	8/22/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
LDU - East	8/22/2019	Isopropylbenzene	7.4	2	0.383045	447	ug/L
LDU - East	8/22/2019	MTBE	2.4	2	0.91219	143	ug/L
LDU - East	8/22/2019	Methylene Chloride	*0.88*	*6*	0.309003	5	ug/L
LDU - East	8/22/2019	Naphthalene	30	4	0.550143	30	ug/L
LDU - East	8/22/2019	n-Butylbenzene	3.4	6	0.455139	1000	ug/L
LDU - East	8/22/2019	n-Propylbenzene	8.5	2	0.428616	660	ug/L
LDU - East	8/22/2019	sec-Butylbenzene	2.6	2	0.495463	2000	ug/L
LDU - East	8/22/2019	Styrene	ND	2	0.382647	100	ug/L
LDU - East	8/22/2019	tert-Butylbenzene	0.47	2	0.41397	690	ug/L
LDU - East	8/22/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
LDU - East	8/22/2019	Toluene	150	2	0.700872	1000	ug/L
LDU - East	8/22/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
LDU - East	8/22/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
LDU - East	8/22/2019	Trichloroethene	ND	2	0.332544	5	ug/L
LDU - East	8/22/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
LDU - East	8/22/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
LDU - East	8/22/2019	Xylenes, Total	150	3	0.90883	620	ug/L
LDU - East	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
LDU - East	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
LDU - East	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
LDU - East	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
LDU - East	11/19/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
LDU - East	11/19/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
LDU - East	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
LDU - East	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
LDU - East	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
LDU - East	11/19/2019	1,2,4-Trimethylbenzene	45	5	1.065995	56	ug/L
LDU - East	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
LDU - East	11/19/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
LDU - East	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
LDU - East	11/19/2019	1,3,5-Trimethylbenzene	19	5	0.943299	60	ug/L
LDU - East	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
LDU - East	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
LDU - East	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
LDU - East	11/19/2019	1-Methylnaphthalene	26	20	1.574772	NA	ug/L
LDU - East	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
LDU - East	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
LDU - East	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
LDU - East	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
LDU - East	11/19/2019	2-Methylnaphthalene	**22**	20	1.72688		ug/L
LDU - East	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
LDU - East	11/19/2019	p-Isopropyltoluene	3.9	5	1.086447	NA	ug/L
LDU - East	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
LDU - East	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
LDU - East	11/19/2019	Benzene	**1300**	50	8.331953	5	ug/L
LDU - East	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
LDU - East	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
LDU - East	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
LDU - East	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
LDU - East	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
LDU - East	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
LDU - East	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
LDU - East	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
LDU - East	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
LDU - East	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
LDU - East	11/19/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
LDU - East	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
LDU - East	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
LDU - East	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
LDU - East	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
LDU - East	11/19/2019	Ethylbenzene	82	5	0.661704	700	ug/L
LDU - East	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
LDU - East	11/19/2019	Isopropylbenzene	11	5	0.957611	447	ug/L
LDU - East	11/19/2019	MTBE	ND	5	2.280475	143	ug/L
LDU - East	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
LDU - East	11/19/2019	Naphthalene	**34**	10	1.375357	30	ug/L
LDU - East	11/19/2019	n-Butylbenzene	3.1	15	1.137848	1000	ug/L
LDU - East	11/19/2019	n-Propylbenzene	14	5	1.07154	660	ug/L
LDU - East	11/19/2019	sec-Butylbenzene	3.6	5	1.238656	2000	ug/L
LDU - East	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
LDU - East	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
LDU - East	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
LDU - East	11/19/2019	Toluene	360	5	1.752181	1000	ug/L
LDU - East	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
LDU - East	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
LDU - East	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L
LDU - East	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
LDU - East	11/19/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
LDU - East	11/19/2019	Xylenes, Total	210	7.5	2.272075	620	ug/L
LDU - East	3/10/2020	Toluene	38	5	1	1000	ug/L
LDU - East	3/10/2020	Xylenes, Total	57	7.5	2.8	620	ug/L
LDU - East	3/10/2020	Benzene	**620**	50	11	5	ug/L
LDU - East	3/10/2020	Ethylbenzene	50	5	1.1	700	ug/L
LDU - East	3/10/2020	MTBE	ND	5	2	143	ug/L
LDU - East	12/17/2020	Acetone	295	25	10	14064	ug/L
LDU - East	12/17/2020	Benzene	**285**	1	0.38	5	ug/L
LDU - East	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
LDU - East	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
LDU - East	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
LDU - East	12/17/2020	2-Butanone	35.1	25	2.6	5565	ug/L
LDU - East	12/17/2020	Carbon Disulfide	43.1	1	0.5	810	ug/L
LDU - East	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
LDU - East	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
LDU - East	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
LDU - East	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
LDU - East	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
LDU - East	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
LDU - East	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
LDU - East	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
LDU - East	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - East	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
LDU - East	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
LDU - East	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
LDU - East	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
LDU - East	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
LDU - East	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
LDU - East	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
LDU - East	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
LDU - East	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
LDU - East	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
LDU - East	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
LDU - East	12/17/2020	Ethylbenzene	56	1	0.5	700	ug/L
LDU - East	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
LDU - East	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
LDU - East	12/17/2020	Isopropylbenzene	9.47	1	0.53	447	ug/L
LDU - East	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
LDU - East	12/17/2020	1-Methylnaphthalene	11.5	5	4.2	NA	ug/L
LDU - East	12/17/2020	2-Methylnaphthalene	**11.4**	10	4.6		ug/L
LDU - East	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
LDU - East	12/17/2020	MTBE	3.5	1	0.74	143	ug/L
LDU - East	12/17/2020	Naphthalene	22.5	1	1	30	ug/L
LDU - East	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
LDU - East	12/17/2020	n-Propylbenzene	12.1	1	0.69	660	ug/L
LDU - East	12/17/2020	p-Isopropyltoluene	4.48	1	0.71	NA	ug/L
LDU - East	12/17/2020	sec-Butylbenzene	4.09	1	0.7	2000	ug/L
LDU - East	12/17/2020	Styrene	ND	1	1	100	ug/L
LDU - East	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
LDU - East	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
LDU - East	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
LDU - East	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
LDU - East	12/17/2020	Toluene	52.1	1	0.41	1000	ug/L
LDU - East	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
LDU - East	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - East	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
LDU - East	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
LDU - East	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
LDU - East	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
LDU - East	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
LDU - East	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
LDU - East	12/17/2020	1,2,4-Trimethylbenzene	32.2	1	0.82	56	ug/L
LDU - East	12/17/2020	1,3,5-Trimethylbenzene	24.1	1	0.56	60	ug/L
LDU - East	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
LDU - East	12/17/2020	Xylenes, Total	93.2	10	1.6	620	ug/L
LDU - West	3/20/2012	Benzene	**1600**	50	7.1	5	ug/L
LDU - West	3/20/2012	Ethylbenzene	690	50	5.6	700	ug/L
LDU - West	3/20/2012	Toluene	**6000**	100	12	1000	ug/L
LDU - West	3/20/2012	Xylenes, Total	**7600**	100	17	620	ug/L
LDU - West	3/20/2012	MTBE	ND	120	7.2	143	ug/L
LDU - West	6/12/2012	Benzene	**1400**	100	14	5	ug/L
LDU - West	6/12/2012	1,2,4-Trimethylbenzene	**810**	100	12	56	ug/L
LDU - West	6/12/2012	Ethylbenzene	410	100	11	700	ug/L
LDU - West	6/12/2012	1,3,5-Trimethylbenzene	**260**	100	11	60	ug/L
LDU - West	6/12/2012	Toluene	**3500**	100	12	1000	ug/L
LDU - West	6/12/2012	Xylenes, Total	**5700**	200	33	620	ug/L
LDU - West	6/12/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	8/21/2012	Benzene	**1800**	100	14	5	ug/L
LDU - West	8/21/2012	1,2,4-Trimethylbenzene	**550**	100	12	56	ug/L
LDU - West	8/21/2012	Ethylbenzene	660	100	11	700	ug/L
LDU - West	8/21/2012	1,3,5-Trimethylbenzene	**240**	100	11	60	ug/L
LDU - West	8/21/2012	Toluene	**3200**	100	12	1000	ug/L
LDU - West	8/21/2012	Xylenes, Total	**3100**	200	33	620	ug/L
LDU - West	8/21/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	11/28/2012	Benzene	**2000**	100	14	5	ug/L
LDU - West	11/28/2012	Ethylbenzene	570	100	11	700	ug/L
LDU - West	11/28/2012	Toluene	**1900**	100	12	1000	ug/L
LDU - West	11/28/2012	Xylenes, Total	**5100**	200	33	620	ug/L
LDU - West	11/28/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	3/18/2013	Benzene	**3900**	100	19	5	ug/L
LDU - West	3/18/2013	1,2,4-Trimethylbenzene	**610**	100	17	56	ug/L
LDU - West	3/18/2013	Ethylbenzene	380	100	18	700	ug/L
LDU - West	3/18/2013	1,3,5-Trimethylbenzene	**210**	100	18	60	ug/L
LDU - West	3/18/2013	Toluene	420	100	18	1000	ug/L
LDU - West	3/18/2013	Xylenes, Total	**4000**	200	54	620	ug/L
LDU - West	3/18/2013	MTBE	*ND*	*250*	21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	6/12/2013	Benzene	**6000**	100	19	5	ug/L
LDU - West	6/12/2013	1,2,4-Trimethylbenzene	**690**	100	17	56	ug/L
LDU - West	6/12/2013	Ethylbenzene	490	100	18	700	ug/L
LDU - West	6/12/2013	1,3,5-Trimethylbenzene	**230**	100	18	60	ug/L
LDU - West	6/12/2013	Toluene	**3000**	100	18	1000	ug/L
LDU - West	6/12/2013	Xylenes, Total	**5200**	200	54	620	ug/L
LDU - West	6/12/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	9/5/2013	Benzene	**1500**	100	19	5	ug/L
LDU - West	9/5/2013	1,2,4-Trimethylbenzene	**1800**	100	17	56	ug/L
LDU - West	9/5/2013	Ethylbenzene	280	100	18	700	ug/L
LDU - West	9/5/2013	1,3,5-Trimethylbenzene	**620**	100	18	60	ug/L
LDU - West	9/5/2013	Toluene	**3100**	100	18	1000	ug/L
LDU - West	9/5/2013	Xylenes, Total	**7800**	200	54	620	ug/L
LDU - West	9/5/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	11/12/2013	Benzene	**2800**	100	19	5	ug/L
LDU - West	11/12/2013	Ethylbenzene	310	100	18	700	ug/L
LDU - West	11/12/2013	Toluene	**3700**	100	18	1000	ug/L
LDU - West	11/12/2013	Xylenes, Total	**6000**	200	54	620	ug/L
LDU - West	11/12/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	3/10/2014	Benzene	**700**	100	12	5	ug/L
LDU - West	3/10/2014	1,2,4-Trimethylbenzene	**570**	100	11	56	ug/L
LDU - West	3/10/2014	Ethylbenzene	170	100	12	700	ug/L
LDU - West	3/10/2014	1,3,5-Trimethylbenzene	**190**	100	12	60	ug/L
LDU - West	3/10/2014	Toluene	140	100	13	1000	ug/L
LDU - West	3/10/2014	Xylenes, Total	**3300**	200	39	620	ug/L
LDU - West	3/10/2014	MTBE	*ND*	*250*	9.3	143	ug/L
LDU - West	5/14/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
LDU - West	5/14/2014	Acetone	ND	500	250	14064	ug/L
LDU - West	5/14/2014	Chloroform	ND	50	16	100	ug/L
LDU - West	5/14/2014	Benzene	**640**	50	7.7	5	ug/L
LDU - West	5/14/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
LDU - West	5/14/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
LDU - West	5/14/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
LDU - West	5/14/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
LDU - West	5/14/2014	Chloroethane	ND	100	24	20857	ug/L
LDU - West	5/14/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
LDU - West	5/14/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
LDU - West	5/14/2014	Carbon Disulfide	ND	500	37	810	ug/L
LDU - West	5/14/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
LDU - West	5/14/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
LDU - West	5/14/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
LDU - West	5/14/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
LDU - West	5/14/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
LDU - West	5/14/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
LDU - West	5/14/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
LDU - West	5/14/2014	2-Butanone	ND	500	71	5565	ug/L
LDU - West	5/14/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
LDU - West	5/14/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
LDU - West	5/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
LDU - West	5/14/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
LDU - West	5/14/2014	Hexachlorobutadiene	*ND*	*50*	14	1.39	ug/L
LDU - West	5/14/2014	1-Methylnaphthalene	ND	200	22	NA	ug/L
LDU - West	5/14/2014	Naphthalene	**140**	100	6.8	30	ug/L
LDU - West	5/14/2014	2-Methylnaphthalene	*ND*	*200*	28		ug/L
LDU - West	5/14/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
LDU - West	5/14/2014	1,2-Dichlorobenzene	ND	50	6.6	600	ug/L
LDU - West	5/14/2014	1,2,4-Trimethylbenzene	**590**	50	6.1	56	ug/L
LDU - West	5/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
LDU - West	5/14/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
LDU - West	5/14/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
LDU - West	5/14/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
LDU - West	5/14/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
LDU - West	5/14/2014	Ethylbenzene	170	50	6.4	700	ug/L
LDU - West	5/14/2014	Styrene	ND	50	5.8	100	ug/L
LDU - West	5/14/2014	n-Propylbenzene	ND	50	7	660	ug/L
LDU - West	5/14/2014	n-Butylbenzene	ND	150	11	1000	ug/L
LDU - West	5/14/2014	4-Chlorotoluene	ND	50	43	250	ug/L
LDU - West	5/14/2014	1,4-Dichlorobenzene	ND	50	13	75	ug/L
LDU - West	5/14/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
LDU - West	5/14/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
LDU - West	5/14/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
LDU - West	5/14/2014	1,3,5-Trimethylbenzene	**190**	50	6.6	60	ug/L
LDU - West	5/14/2014	Bromobenzene	ND	50	9.1	62	ug/L
LDU - West	5/14/2014	Toluene	ND	50	8.5	1000	ug/L
LDU - West	5/14/2014	Chlorobenzene	ND	50	7	77.6	ug/L
LDU - West	5/14/2014	1,2,4-Trichlorobenzene	ND	50	15	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	5/14/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
LDU - West	5/14/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
LDU - West	5/14/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
LDU - West	5/14/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
LDU - West	5/14/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
LDU - West	5/14/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
LDU - West	5/14/2014	1,3-Dichlorobenzene	ND	50	8.7	N/A	ug/L
LDU - West	5/14/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
LDU - West	5/14/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
LDU - West	5/14/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
LDU - West	5/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
LDU - West	5/14/2014	Xylenes, Total	**2400**	75	19	620	ug/L
LDU - West	5/14/2014	MTBE	ND	50	13	143	ug/L
LDU - West	5/14/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
LDU - West	5/14/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
LDU - West	6/3/2014	Benzene	**520**	20	2.4	5	ug/L
LDU - West	6/3/2014	1,2,4-Trimethylbenzene	**760**	20	2.2	56	ug/L
LDU - West	6/3/2014	Ethylbenzene	180	20	2.5	700	ug/L
LDU - West	6/3/2014	1,3,5-Trimethylbenzene	**250**	20	2.5	60	ug/L
LDU - West	6/3/2014	Toluene	35	20	2.7	1000	ug/L
LDU - West	6/3/2014	Xylenes, Total	**2800**	40	7.8	620	ug/L
LDU - West	6/3/2014	MTBE	ND	50	1.9	143	ug/L
LDU - West	9/11/2014	Benzene	**870**	50	6	5	ug/L
LDU - West	9/11/2014	1,2,4-Trimethylbenzene	**410**	50	5.5	56	ug/L
LDU - West	9/11/2014	Ethylbenzene	110	50	6.2	700	ug/L
LDU - West	9/11/2014	1,3,5-Trimethylbenzene	**150**	50	6.2	60	ug/L
LDU - West	9/11/2014	Toluene	300	50	6.6	1000	ug/L
LDU - West	9/11/2014	Xylenes, Total	**940**	100	19	620	ug/L
LDU - West	9/11/2014	MTBE	ND	120	4.7	143	ug/L
LDU - West	3/10/2015	Benzene	**450**	5	0.58	5	ug/L
LDU - West	3/10/2015	1,2,4-Trimethylbenzene	**91**	5	0.68	56	ug/L
LDU - West	3/10/2015	Ethylbenzene	85	5	0.61	700	ug/L
LDU - West	3/10/2015	1,3,5-Trimethylbenzene	37	5	0.66	60	ug/L
LDU - West	3/10/2015	Toluene	86	5	0.58	1000	ug/L
LDU - West	3/10/2015	Xylenes, Total	200	10	1.9	620	ug/L
LDU - West	3/10/2015	MTBE	ND	12	0.6	143	ug/L
LDU - West	8/11/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
LDU - West	8/11/2015	Acetone	ND	200	19	14064	ug/L
LDU - West	8/11/2015	Chloroform	ND	20	4.3	100	ug/L
LDU - West	8/11/2015	Benzene	**2700**	100	6.5	5	ug/L
LDU - West	8/11/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
LDU - West	8/11/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
LDU - West	8/11/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
LDU - West	8/11/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
LDU - West	8/11/2015	Chloroethane	ND	40	2.1	20857	ug/L
LDU - West	8/11/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
LDU - West	8/11/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
LDU - West	8/11/2015	Carbon Disulfide	ND	200	13	810	ug/L
LDU - West	8/11/2015	Bromoform	ND	20	3.2	32.9	ug/L
LDU - West	8/11/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
LDU - West	8/11/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
LDU - West	8/11/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
LDU - West	8/11/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
LDU - West	8/11/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
LDU - West	8/11/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
LDU - West	8/11/2015	2-Butanone	ND	200	7.3	5565	ug/L
LDU - West	8/11/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
LDU - West	8/11/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
LDU - West	8/11/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
LDU - West	8/11/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
LDU - West	8/11/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
LDU - West	8/11/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
LDU - West	8/11/2015	Naphthalene	**56**	40	4.4	30	ug/L
LDU - West	8/11/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
LDU - West	8/11/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
LDU - West	8/11/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
LDU - West	8/11/2015	1,2,4-Trimethylbenzene	**76**	20	3.2	56	ug/L
LDU - West	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
LDU - West	8/11/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
LDU - West	8/11/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
LDU - West	8/11/2015	Isopropylbenzene	ND	20	3	447	ug/L
LDU - West	8/11/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
LDU - West	8/11/2015	Ethylbenzene	83	20	2	700	ug/L
LDU - West	8/11/2015	Styrene	ND	20	2.1	100	ug/L
LDU - West	8/11/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
LDU - West	8/11/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/11/2015	4-Chlorotoluene	ND	20	3	250	ug/L
LDU - West	8/11/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
LDU - West	8/11/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
LDU - West	8/11/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
LDU - West	8/11/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
LDU - West	8/11/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
LDU - West	8/11/2015	Bromobenzene	ND	20	2.2	62	ug/L
LDU - West	8/11/2015	Toluene	740	20	2.2	1000	ug/L
LDU - West	8/11/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
LDU - West	8/11/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
LDU - West	8/11/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
LDU - West	8/11/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
LDU - West	8/11/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
LDU - West	8/11/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
LDU - West	8/11/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
LDU - West	8/11/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
LDU - West	8/11/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
LDU - West	8/11/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - West	8/11/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
LDU - West	8/11/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
LDU - West	8/11/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
LDU - West	8/11/2015	Xylenes, Total	440	30	5.6	620	ug/L
LDU - West	8/11/2015	MTBE	ND	20	3.5	143	ug/L
LDU - West	8/11/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
LDU - West	8/11/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - West	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
LDU - West	10/29/2015	Acetone	180	100	9.4	14064	ug/L
LDU - West	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
LDU - West	10/29/2015	Benzene	**500**	10	0.65	5	ug/L
LDU - West	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
LDU - West	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
LDU - West	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
LDU - West	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
LDU - West	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
LDU - West	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
LDU - West	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
LDU - West	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
LDU - West	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
LDU - West	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
LDU - West	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
LDU - West	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
LDU - West	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
LDU - West	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
LDU - West	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
LDU - West	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
LDU - West	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
LDU - West	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
LDU - West	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
LDU - West	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
LDU - West	10/29/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
LDU - West	10/29/2015	1-Methylnaphthalene	ND	40	5.4	NA	ug/L
LDU - West	10/29/2015	Naphthalene	**36**	20	2.2	30	ug/L
LDU - West	10/29/2015	2-Methylnaphthalene	**47**	40	5.9		ug/L
LDU - West	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
LDU - West	10/29/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
LDU - West	10/29/2015	1,2,4-Trimethylbenzene	48	10	1.6	56	ug/L
LDU - West	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
LDU - West	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
LDU - West	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
LDU - West	10/29/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
LDU - West	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
LDU - West	10/29/2015	Ethylbenzene	30	10	1	700	ug/L
LDU - West	10/29/2015	Styrene	ND	10	1.1	100	ug/L
LDU - West	10/29/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
LDU - West	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
LDU - West	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
LDU - West	10/29/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
LDU - West	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
LDU - West	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
LDU - West	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
LDU - West	10/29/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
LDU - West	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
LDU - West	10/29/2015	Toluene	190	10	1.1	1000	ug/L
LDU - West	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
LDU - West	10/29/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
LDU - West	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
LDU - West	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
LDU - West	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
LDU - West	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
LDU - West	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
LDU - West	10/29/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L
LDU - West	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
LDU - West	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
LDU - West	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
LDU - West	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - West	10/29/2015	Xylenes, Total	290	15	2.8	620	ug/L
LDU - West	10/29/2015	MTBE	ND	10	1.7	143	ug/L
LDU - West	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - West	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - West	3/1/2016	Benzene	**260**	20	1.9	5	ug/L
LDU - West	3/1/2016	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
LDU - West	3/1/2016	Ethylbenzene	27	20	2.2	700	ug/L
LDU - West	3/1/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
LDU - West	3/1/2016	Toluene	53	20	1.8	1000	ug/L
LDU - West	3/1/2016	Xylenes, Total	47	30	6.5	620	ug/L
LDU - West	3/1/2016	MTBE	ND	20	4.2	143	ug/L
LDU - West	6/7/2016	Benzene	**410**	10	0.96	5	ug/L
LDU - West	6/7/2016	1,2,4-Trimethylbenzene	**62**	1	0.11	56	ug/L
LDU - West	6/7/2016	Ethylbenzene	50	1	0.11	700	ug/L
LDU - West	6/7/2016	1,3,5-Trimethylbenzene	8.2	1	0.12	60	ug/L
LDU - West	6/7/2016	Toluene	49	1	0.12	1000	ug/L
LDU - West	6/7/2016	Xylenes, Total	140	1.5	0.37	620	ug/L
LDU - West	6/7/2016	MTBE	3.2	1	0.21	143	ug/L
LDU - West	7/7/2016	Benzene	**310**	10	0.96	5	ug/L
LDU - West	7/7/2016	1,2,4-Trimethylbenzene	34	10	1.1	56	ug/L
LDU - West	7/7/2016	Ethylbenzene	33	10	1.1	700	ug/L
LDU - West	7/7/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
LDU - West	7/7/2016	Toluene	38	10	1.2	1000	ug/L
LDU - West	7/7/2016	Xylenes, Total	77	15	3.7	620	ug/L
LDU - West	7/7/2016	MTBE	ND	10	2.1	143	ug/L
LDU - West	11/17/2016	Benzene	**140**	10	0.96	5	ug/L
LDU - West	11/17/2016	1,2,4-Trimethylbenzene	9.8	10	1.1	56	ug/L
LDU - West	11/17/2016	Ethylbenzene	38	10	1.1	700	ug/L
LDU - West	11/17/2016	1,3,5-Trimethylbenzene	3.4	10	1.2	60	ug/L
LDU - West	11/17/2016	Toluene	15	10	1.2	1000	ug/L
LDU - West	11/17/2016	Xylenes, Total	24	15	3.7	620	ug/L
LDU - West	11/17/2016	MTBE	ND	10	2.1	143	ug/L
LDU - West	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
LDU - West	2/21/2017	Acetone	ND	100	49	14064	ug/L
LDU - West	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
LDU - West	2/21/2017	Benzene	**290**	10	0.96	5	ug/L
LDU - West	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
LDU - West	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
LDU - West	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
LDU - West	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
LDU - West	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L
LDU - West	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
LDU - West	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
LDU - West	2/21/2017	Carbon Disulfide	19	100	6	810	ug/L
LDU - West	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
LDU - West	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
LDU - West	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
LDU - West	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
LDU - West	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
LDU - West	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
LDU - West	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
LDU - West	2/21/2017	2-Butanone	ND	100	7.4	5565	ug/L
LDU - West	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
LDU - West	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
LDU - West	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
LDU - West	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
LDU - West	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
LDU - West	2/21/2017	1-Methylnaphthalene	26	40	2	NA	ug/L
LDU - West	2/21/2017	Naphthalene	22	20	0.93	30	ug/L
LDU - West	2/21/2017	2-Methylnaphthalene	**23**	40	1.6		ug/L
LDU - West	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
LDU - West	2/21/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
LDU - West	2/21/2017	1,2,4-Trimethylbenzene	17	10	1.1	56	ug/L
LDU - West	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
LDU - West	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
LDU - West	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	2/21/2017	Isopropylbenzene	4.1	10	1	447	ug/L
LDU - West	2/21/2017	p-Isopropyltoluene	2	10	1.4	NA	ug/L
LDU - West	2/21/2017	Ethylbenzene	32	10	1.1	700	ug/L
LDU - West	2/21/2017	Styrene	ND	10	1.1	100	ug/L
LDU - West	2/21/2017	n-Propylbenzene	4	10	1.3	660	ug/L
LDU - West	2/21/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
LDU - West	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
LDU - West	2/21/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
LDU - West	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
LDU - West	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
LDU - West	2/21/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
LDU - West	2/21/2017	1,3,5-Trimethylbenzene	7.6	10	1.2	60	ug/L
LDU - West	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
LDU - West	2/21/2017	Toluene	24	10	1.2	1000	ug/L
LDU - West	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
LDU - West	2/21/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
LDU - West	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
LDU - West	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
LDU - West	2/21/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
LDU - West	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
LDU - West	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
LDU - West	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
LDU - West	2/21/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
LDU - West	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - West	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
LDU - West	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
LDU - West	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - West	2/21/2017	Xylenes, Total	60	15	3.7	620	ug/L
LDU - West	2/21/2017	MTBE	9.8	10	2.1	143	ug/L
LDU - West	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - West	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
LDU - West	6/2/2017	Benzene	**93**	2	0.12	5	ug/L
LDU - West	6/2/2017	Ethylbenzene	15	2	0.19	700	ug/L
LDU - West	6/2/2017	Toluene	4.1	2	0.13	1000	ug/L
LDU - West	6/2/2017	Pentafluorobenzene	ND	0	0		None
LDU - West	6/2/2017	Xylenes, Total	16	3	0.64	620	ug/L
LDU - West	6/2/2017	MTBE	2.5	2	0.48	143	ug/L
LDU - West	9/5/2017	Benzene	**88**	5	0.31	5	ug/L
LDU - West	9/5/2017	Ethylbenzene	15	5	0.47	700	ug/L
LDU - West	9/5/2017	Toluene	1.2	5	0.32	1000	ug/L
LDU - West	9/5/2017	Xylenes, Total	5.1	7.5	1.6	620	ug/L
LDU - West	9/5/2017	MTBE	3.3	5	1.2	143	ug/L
LDU - West	12/4/2017	Benzene	**63**	1	0.12	5	ug/L
LDU - West	12/4/2017	Ethylbenzene	33	1	0.19	700	ug/L
LDU - West	12/4/2017	Toluene	1.8	1	0.13	1000	ug/L
LDU - West	12/4/2017	Xylenes, Total	2.6	1.5	0.64	620	ug/L
LDU - West	12/4/2017	MTBE	1.8	1	0.48	143	ug/L
LDU - West	2/12/2018	Benzene	**1400**	100	6.2	5	ug/L
LDU - West	2/12/2018	1,2,4-Trimethylbenzene	2.9	10	1.1	56	ug/L
LDU - West	2/12/2018	Ethylbenzene	42	10	0.93	700	ug/L
LDU - West	2/12/2018	1,3,5-Trimethylbenzene	1.6	10	0.87	60	ug/L
LDU - West	2/12/2018	Toluene	130	10	0.64	1000	ug/L
LDU - West	2/12/2018	Xylenes, Total	74	15	3.2	620	ug/L
LDU - West	2/12/2018	MTBE	5.6	10	2.4	143	ug/L
LDU - West	4/30/2018	Benzene	**2700**	100	6.2	5	ug/L
LDU - West	4/30/2018	1,2,4-Trimethylbenzene	1.8	10	1.1	56	ug/L
LDU - West	4/30/2018	Ethylbenzene	72	10	0.93	700	ug/L
LDU - West	4/30/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
LDU - West	4/30/2018	Toluene	16	10	0.64	1000	ug/L
LDU - West	4/30/2018	Xylenes, Total	35	15	3.2	620	ug/L
LDU - West	4/30/2018	MTBE	ND	10	2.4	143	ug/L
LDU - West	4/9/2019	Benzene	**160**	2	0.333278	5	ug/L
LDU - West	4/9/2019	Ethylbenzene	20	2	0.264682	700	ug/L
LDU - West	4/9/2019	MTBE	2.9	2	0.91219	143	ug/L
LDU - West	4/9/2019	Toluene	ND	2	0.700872	1000	ug/L
LDU - West	4/9/2019	Xylenes, Total	2.4	3	0.90883	620	ug/L
LDU - West	5/28/2019	Benzene	**8.5**	2	0.333278	5	ug/L
LDU - West	5/28/2019	Ethylbenzene	4	2	0.264682	700	ug/L
LDU - West	5/28/2019	Toluene	ND	2	0.700872	1000	ug/L
LDU - West	5/28/2019	Xylenes, Total	2.3	3	0.90883	620	ug/L
LDU - West	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
LDU - West	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
LDU - West	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
LDU - West	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
LDU - West	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
LDU - West	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
LDU - West	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
LDU - West	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
LDU - West	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
LDU - West	8/22/2019	1,2,4-Trimethylbenzene	0.34	1	0.213199	56	ug/L
LDU - West	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
LDU - West	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
LDU - West	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
LDU - West	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
LDU - West	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
LDU - West	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
LDU - West	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
LDU - West	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
LDU - West	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
LDU - West	8/22/2019	1-Methylnaphthalene	4.5	4	0.314954	NA	ug/L
LDU - West	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
LDU - West	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
LDU - West	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
LDU - West	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
LDU - West	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
LDU - West	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
LDU - West	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
LDU - West	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
LDU - West	8/22/2019	Acetone	6.5	10	1.199396	14064	ug/L
LDU - West	8/22/2019	Benzene	0.98	1	0.166639	5	ug/L
LDU - West	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
LDU - West	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
LDU - West	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
LDU - West	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
LDU - West	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
LDU - West	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
LDU - West	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
LDU - West	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
LDU - West	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
LDU - West	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
LDU - West	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
LDU - West	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
LDU - West	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
LDU - West	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
LDU - West	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
LDU - West	8/22/2019	Ethylbenzene	0.23	1	0.132341	700	ug/L
LDU - West	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
LDU - West	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
LDU - West	8/22/2019	MTBE	3.9	1	0.456095	143	ug/L
LDU - West	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
LDU - West	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
LDU - West	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
LDU - West	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
LDU - West	8/22/2019	sec-Butylbenzene	0.75	1	0.247731	2000	ug/L
LDU - West	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
LDU - West	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
LDU - West	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
LDU - West	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
LDU - West	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
LDU - West	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
LDU - West	8/22/2019	Trichloroethene	0.46	1	0.166272	5	ug/L
LDU - West	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
LDU - West	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
LDU - West	8/22/2019	Xylenes, Total	1.1	1.5	0.454415	620	ug/L
LDU - West	11/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
LDU - West	11/19/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
LDU - West	11/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
LDU - West	11/19/2019	Chloroform	ND	1	0.121891	100	ug/L
LDU - West	11/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
LDU - West	11/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
LDU - West	11/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
LDU - West	11/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
LDU - West	11/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
LDU - West	11/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
LDU - West	11/19/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
LDU - West	11/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
LDU - West	11/19/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
LDU - West	11/19/2019	MTBE	2.7	1	0.456095	143	ug/L
LDU - West	11/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
LDU - West	11/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
LDU - West	11/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	11/19/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
LDU - West	11/19/2019	sec-Butylbenzene	0.37	1	0.247731	2000	ug/L
LDU - West	11/19/2019	Styrene	ND	1	0.191323	100	ug/L
LDU - West	11/19/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
LDU - West	11/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
LDU - West	11/19/2019	Toluene	ND	1	0.350436	1000	ug/L
LDU - West	11/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
LDU - West	11/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
LDU - West	11/19/2019	Trichloroethene	0.22	1	0.166272	5	ug/L
LDU - West	11/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
LDU - West	11/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
LDU - West	11/19/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
LDU - West	11/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
LDU - West	11/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
LDU - West	11/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
LDU - West	11/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
LDU - West	11/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
LDU - West	11/19/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
LDU - West	11/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
LDU - West	11/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
LDU - West	11/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
LDU - West	11/19/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
LDU - West	11/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
LDU - West	11/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
LDU - West	11/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
LDU - West	11/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
LDU - West	11/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
LDU - West	11/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
LDU - West	11/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
LDU - West	11/19/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
LDU - West	11/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
LDU - West	11/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
LDU - West	11/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
LDU - West	11/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
LDU - West	11/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
LDU - West	11/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
LDU - West	11/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
LDU - West	11/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
LDU - West	11/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
LDU - West	11/19/2019	Acetone	ND	10	1.199396	14064	ug/L
LDU - West	11/19/2019	Benzene	2.3	1	0.166639	5	ug/L
LDU - West	11/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
LDU - West	11/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
LDU - West	11/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
LDU - West	11/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
LDU - West	11/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
LDU - West	3/10/2020	Benzene	**150**	5	1.1	5	ug/L
LDU - West	3/10/2020	Ethylbenzene	14	5	1.1	700	ug/L
LDU - West	3/10/2020	MTBE	2.1	5	2	143	ug/L
LDU - West	3/10/2020	Toluene	41	5	1	1000	ug/L
LDU - West	3/10/2020	Xylenes, Total	44	7.5	2.8	620	ug/L
LDU - West	12/17/2020	Acetone	ND	25	10	14064	ug/L
LDU - West	12/17/2020	Benzene	**66.5**	1	0.38	5	ug/L
LDU - West	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
LDU - West	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
LDU - West	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
LDU - West	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
LDU - West	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
LDU - West	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
LDU - West	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
LDU - West	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
LDU - West	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
LDU - West	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
LDU - West	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
LDU - West	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
LDU - West	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
LDU - West	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - West	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
LDU - West	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
LDU - West	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
LDU - West	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
LDU - West	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
LDU - West	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
LDU - West	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
LDU - West	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
LDU - West	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
LDU - West	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
LDU - West	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
LDU - West	12/17/2020	Ethylbenzene	9.37	1	0.5	700	ug/L
LDU - West	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
LDU - West	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
LDU - West	12/17/2020	Isopropylbenzene	1.5	1	0.53	447	ug/L
LDU - West	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
LDU - West	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
LDU - West	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
LDU - West	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
LDU - West	12/17/2020	MTBE	1.74	1	0.74	143	ug/L
LDU - West	12/17/2020	Naphthalene	3.9	1	1	30	ug/L
LDU - West	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
LDU - West	12/17/2020	n-Propylbenzene	1.22	1	0.69	660	ug/L
LDU - West	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
LDU - West	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
LDU - West	12/17/2020	Styrene	ND	1	1	100	ug/L
LDU - West	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
LDU - West	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
LDU - West	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
LDU - West	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
LDU - West	12/17/2020	Toluene	5.91	1	0.41	1000	ug/L
LDU - West	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
LDU - West	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - West	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
LDU - West	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
LDU - West	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
LDU - West	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
LDU - West	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
LDU - West	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
LDU - West	12/17/2020	1,2,4-Trimethylbenzene	9.55	1	0.82	56	ug/L
LDU - West	12/17/2020	1,3,5-Trimethylbenzene	5.52	1	0.56	60	ug/L
LDU - West	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
LDU - West	12/17/2020	Xylenes, Total	16.1	10	1.6	620	ug/L
MKTF-02	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-02	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-02	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-02	4/8/2014	Benzene	**110**	2	0.31	5	ug/L
MKTF-02	4/8/2014	1,1,1-Trichloroethane	2.2	2	0.24	200	ug/L
MKTF-02	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-02	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-02	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-02	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-02	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-02	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-02	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-02	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-02	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-02	4/8/2014	1,1-Dichloroethane	**41**	2	0.57	25	ug/L
MKTF-02	4/8/2014	1,1-Dichloroethene	**34**	2	0.43	7	ug/L
MKTF-02	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-02	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-02	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-02	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-02	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-02	4/8/2014	Trichloroethene	3.4	2	0.39	5	ug/L
MKTF-02	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-02	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-02	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-02	4/8/2014	1,2,4-Trimethylbenzene	3.5	2	0.25	56	ug/L
MKTF-02	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-02	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-02	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-02	4/8/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-02	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-02	4/8/2014	Ethylbenzene	3.5	2	0.25	700	ug/L
MKTF-02	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-02	4/8/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-02	4/8/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-02	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-02	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	4/8/2014	1,2-Dichloroethane	**6.8**	2	0.53	5	ug/L
MKTF-02	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-02	4/8/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-02	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-02	4/8/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-02	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-02	4/8/2014	Dibromochloromethane	*ND*	2	0.24	1.68	ug/L
MKTF-02	4/8/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-02	4/8/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-02	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-02	4/8/2014	cis-1,2-Dichloroethene	5.2	2	0.24	70	ug/L
MKTF-02	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-02	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-02	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-02	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-02	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-02	4/8/2014	Xylenes, Total	7.6	3	0.75	620	ug/L
MKTF-02	4/8/2014	MTBE	36	2	0.5	143	ug/L
MKTF-02	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-02	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-02	6/6/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-02	6/6/2014	Acetone	12	10	4.9	14064	ug/L
MKTF-02	6/6/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-02	6/6/2014	Benzene	**230**	10	1.5	5	ug/L
MKTF-02	6/6/2014	1,1,1-Trichloroethane	3.5	1	0.12	200	ug/L
MKTF-02	6/6/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-02	6/6/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-02	6/6/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-02	6/6/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-02	6/6/2014	Vinyl Chloride	1	1	0.46	2	ug/L
MKTF-02	6/6/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-02	6/6/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-02	6/6/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-02	6/6/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-02	6/6/2014	1,1-Dichloroethane	**70**	1	0.28	25	ug/L
MKTF-02	6/6/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-02	6/6/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	6/6/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-02	6/6/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-02	6/6/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-02	6/6/2014	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-02	6/6/2014	Trichloroethene	4.1	1	0.19	5	ug/L
MKTF-02	6/6/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-02	6/6/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-02	6/6/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	6/6/2014	1,2,4-Trimethylbenzene	31	1	0.12	56	ug/L
MKTF-02	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-02	6/6/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-02	6/6/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-02	6/6/2014	Isopropylbenzene	3.1	1	0.16	447	ug/L
MKTF-02	6/6/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-02	6/6/2014	Ethylbenzene	22	1	0.13	700	ug/L
MKTF-02	6/6/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-02	6/6/2014	n-Propylbenzene	9	1	0.14	660	ug/L
MKTF-02	6/6/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-02	6/6/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-02	6/6/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-02	6/6/2014	1,2-Dichloroethane	**8.1**	1	0.26	5	ug/L
MKTF-02	6/6/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	6/6/2014	1,3,5-Trimethylbenzene	1.9	1	0.13	60	ug/L
MKTF-02	6/6/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-02	6/6/2014	Toluene	3.6	1	0.17	1000	ug/L
MKTF-02	6/6/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	6/6/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-02	6/6/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-02	6/6/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-02	6/6/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	6/6/2014	cis-1,2-Dichloroethene	11	1	0.12	70	ug/L
MKTF-02	6/6/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-02	6/6/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-02	6/6/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-02	6/6/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-02	6/6/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-02	6/6/2014	Xylenes, Total	34	1.5	0.38	620	ug/L
MKTF-02	6/6/2014	MTBE	42	1	0.25	143	ug/L
MKTF-02	6/6/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	9/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-02	9/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-02	9/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-02	9/18/2014	Benzene	**2100**	50	7.7	5	ug/L
MKTF-02	9/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-02	9/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-02	9/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-02	9/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-02	9/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-02	9/18/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-02	9/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-02	9/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-02	9/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-02	9/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-02	9/18/2014	1,1-Dichloroethane	**98**	5	1.4	25	ug/L
MKTF-02	9/18/2014	1,1-Dichloroethene	**24**	5	1.1	7	ug/L
MKTF-02	9/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-02	9/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-02	9/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-02	9/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-02	9/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-02	9/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-02	9/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-02	9/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-02	9/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-02	9/18/2014	1,2,4-Trimethylbenzene	**140**	5	0.61	56	ug/L
MKTF-02	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-02	9/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-02	9/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-02	9/18/2014	Isopropylbenzene	30	5	0.81	447	ug/L
MKTF-02	9/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-02	9/18/2014	Ethylbenzene	340	5	0.64	700	ug/L
MKTF-02	9/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-02	9/18/2014	n-Propylbenzene	130	5	0.7	660	ug/L
MKTF-02	9/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-02	9/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-02	9/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-02	9/18/2014	1,2-Dichloroethane	**5.1**	5	1.3	5	ug/L
MKTF-02	9/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-02	9/18/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-02	9/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-02	9/18/2014	Toluene	44	5	0.85	1000	ug/L
MKTF-02	9/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-02	9/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-02	9/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-02	9/18/2014	sec-Butylbenzene	6.8	5	0.77	2000	ug/L
MKTF-02	9/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-02	9/18/2014	cis-1,2-Dichloroethene	30	5	0.61	70	ug/L
MKTF-02	9/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-02	9/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	9/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-02	9/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-02	9/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-02	9/18/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-02	9/18/2014	MTBE	100	5	1.3	143	ug/L
MKTF-02	9/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-02	9/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-02	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-02	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-02	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-02	11/14/2014	Benzene	**200**	10	1.5	5	ug/L
MKTF-02	11/14/2014	1,1,1-Trichloroethane	3.6	1	0.12	200	ug/L
MKTF-02	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-02	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-02	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-02	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-02	11/14/2014	Vinyl Chloride	**9.7**	1	0.46	2	ug/L
MKTF-02	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-02	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-02	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-02	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-02	11/14/2014	1,1-Dichloroethane	**75**	1	0.28	25	ug/L
MKTF-02	11/14/2014	1,1-Dichloroethene	**78**	1	0.21	7	ug/L
MKTF-02	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-02	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-02	11/14/2014	1,1,2-Trichloroethane	2.4	1	0.14	5	ug/L
MKTF-02	11/14/2014	Trichloroethene	**7.1**	1	0.19	5	ug/L
MKTF-02	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-02	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-02	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	11/14/2014	1,2,4-Trimethylbenzene	2.1	1	0.12	56	ug/L
MKTF-02	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-02	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-02	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-02	11/14/2014	Isopropylbenzene	1.6	1	0.16	447	ug/L
MKTF-02	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-02	11/14/2014	Ethylbenzene	2.9	1	0.13	700	ug/L
MKTF-02	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-02	11/14/2014	n-Propylbenzene	1.2	1	0.14	660	ug/L
MKTF-02	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-02	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-02	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-02	11/14/2014	1,2-Dichloroethane	**16**	1	0.26	5	ug/L
MKTF-02	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-02	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-02	11/14/2014	Toluene	2.2	1	0.17	1000	ug/L
MKTF-02	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-02	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-02	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-02	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	11/14/2014	cis-1,2-Dichloroethene	11	1	0.12	70	ug/L
MKTF-02	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-02	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-02	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-02	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-02	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-02	11/14/2014	Xylenes, Total	1.6	1.5	0.38	620	ug/L
MKTF-02	11/14/2014	MTBE	59	1	0.25	143	ug/L
MKTF-02	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-02	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	3/11/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-02	3/11/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-02	3/11/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-02	3/11/2015	Benzene	**200**	10	0.65	5	ug/L
MKTF-02	3/11/2015	1,1,1-Trichloroethane	2.3	2	0.16	200	ug/L
MKTF-02	3/11/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-02	3/11/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-02	3/11/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-02	3/11/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-02	3/11/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-02	3/11/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-02	3/11/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-02	3/11/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-02	3/11/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-02	3/11/2015	1,1-Dichloroethane	**50**	2	0.8	25	ug/L
MKTF-02	3/11/2015	1,1-Dichloroethene	**31**	2	0.2	7	ug/L
MKTF-02	3/11/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-02	3/11/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-02	3/11/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-02	3/11/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-02	3/11/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-02	3/11/2015	Trichloroethene	2.4	2	0.33	5	ug/L
MKTF-02	3/11/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-02	3/11/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-02	3/11/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-02	3/11/2015	1,2,4-Trimethylbenzene	5.1	2	0.32	56	ug/L
MKTF-02	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-02	3/11/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-02	3/11/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-02	3/11/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-02	3/11/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-02	3/11/2015	Ethylbenzene	4.1	2	0.2	700	ug/L
MKTF-02	3/11/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-02	3/11/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-02	3/11/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-02	3/11/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-02	3/11/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/11/2015	1,2-Dichloroethane	4.5	2	0.35	5	ug/L
MKTF-02	3/11/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-02	3/11/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-02	3/11/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-02	3/11/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-02	3/11/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-02	3/11/2015	Dibromochloromethane	*ND*	2	0.19	1.68	ug/L
MKTF-02	3/11/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-02	3/11/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-02	3/11/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-02	3/11/2015	cis-1,2-Dichloroethene	9.3	2	0.16	70	ug/L
MKTF-02	3/11/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-02	3/11/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-02	3/11/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-02	3/11/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-02	3/11/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-02	3/11/2015	Xylenes, Total	7.6	3	0.56	620	ug/L
MKTF-02	3/11/2015	MTBE	44	2	0.35	143	ug/L
MKTF-02	3/11/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-02	3/11/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-02	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	6/9/2015	Benzene	**470**	10	0.65	5	ug/L
MKTF-02	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-02	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	6/9/2015	Vinyl Chloride	1.4	1	0.13	2	ug/L
MKTF-02	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	6/9/2015	1,1-Dichloroethane	**54**	1	0.4	25	ug/L
MKTF-02	6/9/2015	1,1-Dichloroethene	**26**	1	0.099	7	ug/L
MKTF-02	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-02	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-02	6/9/2015	Trichloroethene	2.5	1	0.16	5	ug/L
MKTF-02	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	6/9/2015	1,2,4-Trimethylbenzene	40	1	0.16	56	ug/L
MKTF-02	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	6/9/2015	Isopropylbenzene	9.4	1	0.15	447	ug/L
MKTF-02	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	6/9/2015	Ethylbenzene	62	1	0.1	700	ug/L
MKTF-02	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	6/9/2015	n-Propylbenzene	29	1	0.16	660	ug/L
MKTF-02	6/9/2015	n-Butylbenzene	3.2	3	0.25	1000	ug/L
MKTF-02	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	6/9/2015	1,2-Dichloroethane	4.1	1	0.18	5	ug/L
MKTF-02	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	6/9/2015	Toluene	11	1	0.11	1000	ug/L
MKTF-02	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	6/9/2015	sec-Butylbenzene	1.7	1	0.23	2000	ug/L
MKTF-02	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	6/9/2015	cis-1,2-Dichloroethene	9.9	1	0.081	70	ug/L
MKTF-02	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	6/9/2015	Xylenes, Total	39	1.5	0.28	620	ug/L
MKTF-02	6/9/2015	MTBE	37	1	0.17	143	ug/L
MKTF-02	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	8/21/2015	Benzene	**370**	10	0.65	5	ug/L
MKTF-02	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-02	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	8/21/2015	Vinyl Chloride	1.3	1	0.13	2	ug/L
MKTF-02	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	8/21/2015	1,1-Dichloroethane	**62**	1	0.4	25	ug/L
MKTF-02	8/21/2015	1,1-Dichloroethene	**59**	1	0.099	7	ug/L
MKTF-02	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-02	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	8/21/2015	1,1,2-Trichloroethane	1.2	1	0.079	5	ug/L
MKTF-02	8/21/2015	Trichloroethene	**5.3**	1	0.16	5	ug/L
MKTF-02	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	8/21/2015	1,2,4-Trimethylbenzene	1.7	1	0.16	56	ug/L
MKTF-02	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	8/21/2015	Isopropylbenzene	7.2	1	0.15	447	ug/L
MKTF-02	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	8/21/2015	Ethylbenzene	11	1	0.1	700	ug/L
MKTF-02	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	8/21/2015	n-Propylbenzene	5.6	1	0.16	660	ug/L
MKTF-02	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-02	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	8/21/2015	1,2-Dichloroethane	**9.1**	1	0.18	5	ug/L
MKTF-02	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	8/21/2015	Toluene	5.6	1	0.11	1000	ug/L
MKTF-02	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	8/21/2015	sec-Butylbenzene	1.3	1	0.23	2000	ug/L
MKTF-02	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	8/21/2015	cis-1,2-Dichloroethene	10	1	0.081	70	ug/L
MKTF-02	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	8/21/2015	Xylenes, Total	3.3	1.5	0.28	620	ug/L
MKTF-02	8/21/2015	MTBE	44	1	0.17	143	ug/L
MKTF-02	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	11/4/2015	Benzene	**440**	10	0.65	5	ug/L
MKTF-02	11/4/2015	1,1,1-Trichloroethane	1.9	1	0.078	200	ug/L
MKTF-02	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	11/4/2015	Vinyl Chloride	1.9	1	0.13	2	ug/L
MKTF-02	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	11/4/2015	1,1-Dichloroethane	**66**	1	0.4	25	ug/L
MKTF-02	11/4/2015	1,1-Dichloroethene	**30**	1	0.099	7	ug/L
MKTF-02	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-02	11/4/2015	Trichloroethene	3.5	1	0.16	5	ug/L
MKTF-02	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	11/4/2015	1,2,4-Trimethylbenzene	8.7	1	0.16	56	ug/L
MKTF-02	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	11/4/2015	Isopropylbenzene	9.7	1	0.15	447	ug/L
MKTF-02	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	11/4/2015	Ethylbenzene	72	1	0.1	700	ug/L
MKTF-02	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	11/4/2015	n-Propylbenzene	13	1	0.16	660	ug/L
MKTF-02	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-02	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	11/4/2015	1,2-Dichloroethane	4.8	1	0.18	5	ug/L
MKTF-02	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	11/4/2015	Toluene	13	1	0.11	1000	ug/L
MKTF-02	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	11/4/2015	sec-Butylbenzene	1.6	1	0.23	2000	ug/L
MKTF-02	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	11/4/2015	cis-1,2-Dichloroethene	13	1	0.081	70	ug/L
MKTF-02	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	11/4/2015	Xylenes, Total	6.3	1.5	0.28	620	ug/L
MKTF-02	11/4/2015	MTBE	58	1	0.17	143	ug/L
MKTF-02	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	2/24/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-02	2/24/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-02	2/24/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-02	2/24/2016	Benzene	**110**	5	0.48	5	ug/L
MKTF-02	2/24/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-02	2/24/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-02	2/24/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-02	2/24/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-02	2/24/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-02	2/24/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-02	2/24/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-02	2/24/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-02	2/24/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-02	2/24/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-02	2/24/2016	1,1-Dichloroethane	**58**	5	0.54	25	ug/L
MKTF-02	2/24/2016	1,1-Dichloroethene	**110**	5	0.38	7	ug/L
MKTF-02	2/24/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-02	2/24/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-02	2/24/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-02	2/24/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-02	2/24/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-02	2/24/2016	Trichloroethene	**7.3**	5	0.88	5	ug/L
MKTF-02	2/24/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-02	2/24/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-02	2/24/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	2/24/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-02	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-02	2/24/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-02	2/24/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-02	2/24/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-02	2/24/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-02	2/24/2016	Ethylbenzene	ND	5	0.56	700	ug/L
MKTF-02	2/24/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-02	2/24/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
MKTF-02	2/24/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-02	2/24/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-02	2/24/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/24/2016	1,2-Dichloroethane	**15**	5	0.26	5	ug/L
MKTF-02	2/24/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-02	2/24/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-02	2/24/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-02	2/24/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-02	2/24/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-02	2/24/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-02	2/24/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-02	2/24/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-02	2/24/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-02	2/24/2016	cis-1,2-Dichloroethene	5.8	5	0.62	70	ug/L
MKTF-02	2/24/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-02	2/24/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-02	2/24/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-02	2/24/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-02	2/24/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-02	2/24/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-02	2/24/2016	MTBE	36	5	1.1	143	ug/L
MKTF-02	2/24/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-02	2/24/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-02	6/10/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-02	6/10/2016	Acetone	ND	50	25	14064	ug/L
MKTF-02	6/10/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-02	6/10/2016	Benzene	**1200**	20	1.9	5	ug/L
MKTF-02	6/10/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-02	6/10/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-02	6/10/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-02	6/10/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-02	6/10/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-02	6/10/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-02	6/10/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-02	6/10/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-02	6/10/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-02	6/10/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-02	6/10/2016	1,1-Dichloroethane	**46**	5	0.54	25	ug/L
MKTF-02	6/10/2016	1,1-Dichloroethene	**18**	5	0.54	7	ug/L
MKTF-02	6/10/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-02	6/10/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-02	6/10/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-02	6/10/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-02	6/10/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-02	6/10/2016	Trichloroethene	2.9	5	0.88	5	ug/L
MKTF-02	6/10/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-02	6/10/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-02	6/10/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	6/10/2016	1,2,4-Trimethylbenzene	**130**	5	0.55	56	ug/L
MKTF-02	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-02	6/10/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-02	6/10/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-02	6/10/2016	Isopropylbenzene	13	5	0.52	447	ug/L
MKTF-02	6/10/2016	p-Isopropyltoluene	1.6	5	0.7	NA	ug/L
MKTF-02	6/10/2016	Ethylbenzene	210	5	0.56	700	ug/L
MKTF-02	6/10/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-02	6/10/2016	n-Propylbenzene	37	5	0.66	660	ug/L
MKTF-02	6/10/2016	n-Butylbenzene	4.9	15	0.8	1000	ug/L
MKTF-02	6/10/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-02	6/10/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-02	6/10/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-02	6/10/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-02	6/10/2016	1,3,5-Trimethylbenzene	9.7	5	0.58	60	ug/L
MKTF-02	6/10/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-02	6/10/2016	Toluene	26	5	0.59	1000	ug/L
MKTF-02	6/10/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-02	6/10/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-02	6/10/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-02	6/10/2016	sec-Butylbenzene	2.4	5	0.62	2000	ug/L
MKTF-02	6/10/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-02	6/10/2016	cis-1,2-Dichloroethene	12	5	0.62	70	ug/L
MKTF-02	6/10/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-02	6/10/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-02	6/10/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-02	6/10/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-02	6/10/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-02	6/10/2016	Xylenes, Total	160	7.5	1.8	620	ug/L
MKTF-02	6/10/2016	MTBE	87	5	1.1	143	ug/L
MKTF-02	6/10/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/10/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-02	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-02	9/7/2016	Acetone	10	10	4.9	14064	ug/L
MKTF-02	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-02	9/7/2016	Benzene	**1800**	100	9.6	5	ug/L
MKTF-02	9/7/2016	1,1,1-Trichloroethane	0.61	1	0.091	200	ug/L
MKTF-02	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-02	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-02	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-02	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-02	9/7/2016	Vinyl Chloride	1.1	1	0.2	2	ug/L
MKTF-02	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-02	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-02	9/7/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-02	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-02	9/7/2016	1,1-Dichloroethane	**48**	1	0.11	25	ug/L
MKTF-02	9/7/2016	1,1-Dichloroethene	**19**	1	0.11	7	ug/L
MKTF-02	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-02	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-02	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-02	9/7/2016	2-Butanone	3.6	10	0.74	5565	ug/L
MKTF-02	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-02	9/7/2016	Trichloroethene	2.5	1	0.18	5	ug/L
MKTF-02	9/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-02	9/7/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	9/7/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	9/7/2016	1,2,4-Trimethylbenzene	39	10	1.1	56	ug/L
MKTF-02	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-02	9/7/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-02	9/7/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-02	9/7/2016	Isopropylbenzene	12	10	1	447	ug/L
MKTF-02	9/7/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-02	9/7/2016	Ethylbenzene	160	10	1.1	700	ug/L
MKTF-02	9/7/2016	Styrene	0.59	1	0.11	100	ug/L
MKTF-02	9/7/2016	n-Propylbenzene	25	10	1.3	660	ug/L
MKTF-02	9/7/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-02	9/7/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-02	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-02	9/7/2016	1,2-Dichloroethane	3.9	1	0.12	5	ug/L
MKTF-02	9/7/2016	4-Methyl-2-Pentanone	0.98	10	0.43	1243	ug/L
MKTF-02	9/7/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-02	9/7/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-02	9/7/2016	Toluene	17	1	0.12	1000	ug/L
MKTF-02	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-02	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-02	9/7/2016	Tetrachloroethene	0.28	1	0.15	5	ug/L
MKTF-02	9/7/2016	sec-Butylbenzene	3.2	10	1.2	2000	ug/L
MKTF-02	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-02	9/7/2016	cis-1,2-Dichloroethene	15	1	0.12	70	ug/L
MKTF-02	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-02	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-02	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-02	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	9/7/2016	Xylenes, Total	28	1.5	0.37	620	ug/L
MKTF-02	9/7/2016	MTBE	110	1	0.21	143	ug/L
MKTF-02	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-02	10/28/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	10/28/2016	Acetone	ND	100	49	14064	ug/L
MKTF-02	10/28/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-02	10/28/2016	Benzene	**1600**	100	9.6	5	ug/L
MKTF-02	10/28/2016	1,1,1-Trichloroethane	1	10	0.91	200	ug/L
MKTF-02	10/28/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-02	10/28/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-02	10/28/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-02	10/28/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-02	10/28/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-02	10/28/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-02	10/28/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-02	10/28/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-02	10/28/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-02	10/28/2016	1,1-Dichloroethane	**62**	10	1.1	25	ug/L
MKTF-02	10/28/2016	1,1-Dichloroethene	**37**	10	1.1	7	ug/L
MKTF-02	10/28/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-02	10/28/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/28/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-02	10/28/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-02	10/28/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-02	10/28/2016	Trichloroethene	*2.9*	*10*	1.8	5	ug/L
MKTF-02	10/28/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-02	10/28/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	10/28/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	10/28/2016	1,2,4-Trimethylbenzene	20	10	1.1	56	ug/L
MKTF-02	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-02	10/28/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-02	10/28/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-02	10/28/2016	Isopropylbenzene	6.2	10	1	447	ug/L
MKTF-02	10/28/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-02	10/28/2016	Ethylbenzene	95	10	1.1	700	ug/L
MKTF-02	10/28/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-02	10/28/2016	n-Propylbenzene	12	10	1.3	660	ug/L
MKTF-02	10/28/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-02	10/28/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-02	10/28/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-02	10/28/2016	1,2-Dichloroethane	**7.2**	10	1.2	5	ug/L
MKTF-02	10/28/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-02	10/28/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-02	10/28/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-02	10/28/2016	Toluene	20	10	1.2	1000	ug/L
MKTF-02	10/28/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	10/28/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-02	10/28/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	10/28/2016	sec-Butylbenzene	1.8	10	1.2	2000	ug/L
MKTF-02	10/28/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-02	10/28/2016	cis-1,2-Dichloroethene	17	10	1.2	70	ug/L
MKTF-02	10/28/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-02	10/28/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-02	10/28/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-02	10/28/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-02	10/28/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-02	10/28/2016	Xylenes, Total	9.9	15	3.7	620	ug/L
MKTF-02	10/28/2016	MTBE	**150**	10	2.1	143	ug/L
MKTF-02	10/28/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-02	10/28/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-02	3/16/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	3/16/2017	Acetone	16	100	8.8	14064	ug/L
MKTF-02	3/16/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-02	3/16/2017	Benzene	**4000**	100	9.6	5	ug/L
MKTF-02	3/16/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-02	3/16/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-02	3/16/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-02	3/16/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-02	3/16/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-02	3/16/2017	Vinyl Chloride	**5.1**	10	1.8	2	ug/L
MKTF-02	3/16/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-02	3/16/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-02	3/16/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-02	3/16/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-02	3/16/2017	1,1-Dichloroethane	**62**	10	1	25	ug/L
MKTF-02	3/16/2017	1,1-Dichloroethene	**26**	10	0.81	7	ug/L
MKTF-02	3/16/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-02	3/16/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-02	3/16/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-02	3/16/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-02	3/16/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-02	3/16/2017	Trichloroethene	*4.2*	*10*	1.8	5	ug/L
MKTF-02	3/16/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-02	3/16/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	3/16/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	3/16/2017	1,2,4-Trimethylbenzene	**360**	10	1	56	ug/L
MKTF-02	3/16/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-02	3/16/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-02	3/16/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-02	3/16/2017	Isopropylbenzene	33	10	0.98	447	ug/L
MKTF-02	3/16/2017	p-Isopropyltoluene	2.6	10	1.4	NA	ug/L
MKTF-02	3/16/2017	Ethylbenzene	510	10	1.1	700	ug/L
MKTF-02	3/16/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-02	3/16/2017	n-Propylbenzene	96	10	1.3	660	ug/L
MKTF-02	3/16/2017	n-Butylbenzene	9.1	30	1.6	1000	ug/L
MKTF-02	3/16/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	3/16/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-02	3/16/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-02	3/16/2017	1,3,5-Trimethylbenzene	24	10	1.2	60	ug/L
MKTF-02	3/16/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-02	3/16/2017	Toluene	56	10	0.89	1000	ug/L
MKTF-02	3/16/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	3/16/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-02	3/16/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	3/16/2017	sec-Butylbenzene	5.2	10	1	2000	ug/L
MKTF-02	3/16/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-02	3/16/2017	cis-1,2-Dichloroethene	24	10	2	70	ug/L
MKTF-02	3/16/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	3/16/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-02	3/16/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-02	3/16/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-02	3/16/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-02	3/16/2017	Xylenes, Total	230	15	3.2	620	ug/L
MKTF-02	3/16/2017	MTBE	**150**	10	1.5	143	ug/L
MKTF-02	3/16/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-02	3/16/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-02	10/3/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	10/3/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-02	10/3/2017	Chloroform	ND	5	2	100	ug/L
MKTF-02	10/3/2017	Benzene	**2700**	50	3.1	5	ug/L
MKTF-02	10/3/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	10/3/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	10/3/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	10/3/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	10/3/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	10/3/2017	Vinyl Chloride	**5.1**	5	0.89	2	ug/L
MKTF-02	10/3/2017	Methylene Chloride	*1.8*	*15*	0.54	5	ug/L
MKTF-02	10/3/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	10/3/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	10/3/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	10/3/2017	1,1-Dichloroethane	**45**	5	2	25	ug/L
MKTF-02	10/3/2017	1,1-Dichloroethene	**21**	5	0.4	7	ug/L
MKTF-02	10/3/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	10/3/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-02	10/3/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	10/3/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	10/3/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-02	10/3/2017	Trichloroethene	1.9	5	0.56	5	ug/L
MKTF-02	10/3/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	10/3/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	10/3/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	10/3/2017	1,2,4-Trimethylbenzene	53	5	0.56	56	ug/L
MKTF-02	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	10/3/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	10/3/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	10/3/2017	Isopropylbenzene	17	5	0.26	447	ug/L
MKTF-02	10/3/2017	p-Isopropyltoluene	0.88	5	0.48	NA	ug/L
MKTF-02	10/3/2017	Ethylbenzene	150	5	0.47	700	ug/L
MKTF-02	10/3/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-02	10/3/2017	n-Propylbenzene	47	5	0.37	660	ug/L
MKTF-02	10/3/2017	n-Butylbenzene	4.5	15	0.65	1000	ug/L
MKTF-02	10/3/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	10/3/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	10/3/2017	1,2-Dichloroethane	3.5	5	2	5	ug/L
MKTF-02	10/3/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	10/3/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-02	10/3/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	10/3/2017	Toluene	28	5	0.32	1000	ug/L
MKTF-02	10/3/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	10/3/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	10/3/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	10/3/2017	sec-Butylbenzene	2.1	5	0.55	2000	ug/L
MKTF-02	10/3/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	10/3/2017	cis-1,2-Dichloroethene	17	5	1	70	ug/L
MKTF-02	10/3/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	10/3/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	10/3/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	10/3/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	10/3/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	10/3/2017	Xylenes, Total	37	7.5	1.6	620	ug/L
MKTF-02	10/3/2017	MTBE	130	5	1.2	143	ug/L
MKTF-02	10/3/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/3/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	11/20/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	11/20/2017	Acetone	7.4	50	4.1	14064	ug/L
MKTF-02	11/20/2017	Chloroform	ND	5	2	100	ug/L
MKTF-02	11/20/2017	Benzene	**2900**	50	3.1	5	ug/L
MKTF-02	11/20/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	11/20/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	11/20/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	11/20/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	11/20/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	11/20/2017	Vinyl Chloride	**3.9**	5	0.89	2	ug/L
MKTF-02	11/20/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-02	11/20/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	11/20/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	11/20/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	11/20/2017	1,1-Dichloroethane	**47**	5	2	25	ug/L
MKTF-02	11/20/2017	1,1-Dichloroethene	**21**	5	0.4	7	ug/L
MKTF-02	11/20/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	11/20/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-02	11/20/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	11/20/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	11/20/2017	1,1,2-Trichloroethane	0.95	5	0.7	5	ug/L
MKTF-02	11/20/2017	Trichloroethene	2.4	5	0.56	5	ug/L
MKTF-02	11/20/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	11/20/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	11/20/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	11/20/2017	1,2,4-Trimethylbenzene	**200**	5	0.56	56	ug/L
MKTF-02	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	11/20/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	11/20/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	11/20/2017	Isopropylbenzene	21	5	0.26	447	ug/L
MKTF-02	11/20/2017	p-Isopropyltoluene	1.1	5	0.48	NA	ug/L
MKTF-02	11/20/2017	Ethylbenzene	280	5	0.47	700	ug/L
MKTF-02	11/20/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-02	11/20/2017	n-Propylbenzene	59	5	0.37	660	ug/L
MKTF-02	11/20/2017	n-Butylbenzene	4.9	15	0.65	1000	ug/L
MKTF-02	11/20/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	11/20/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	11/20/2017	1,2-Dichloroethane	3.3	5	2	5	ug/L
MKTF-02	11/20/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	11/20/2017	1,3,5-Trimethylbenzene	3	5	0.44	60	ug/L
MKTF-02	11/20/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	11/20/2017	Toluene	50	5	0.32	1000	ug/L
MKTF-02	11/20/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	11/20/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	11/20/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	11/20/2017	sec-Butylbenzene	2.7	5	0.55	2000	ug/L
MKTF-02	11/20/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	11/20/2017	cis-1,2-Dichloroethene	16	5	1	70	ug/L
MKTF-02	11/20/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	11/20/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	11/20/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	11/20/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	11/20/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	11/20/2017	Xylenes, Total	69	7.5	1.6	620	ug/L
MKTF-02	11/20/2017	MTBE	130	5	1.2	143	ug/L
MKTF-02	11/20/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-02	11/20/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	2/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	2/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-02	2/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-02	2/6/2018	Benzene	**2600**	50	3.1	5	ug/L
MKTF-02	2/6/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	2/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	2/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	2/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	2/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	2/6/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-02	2/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-02	2/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	2/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	2/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	2/6/2018	1,1-Dichloroethane	**41**	5	2	25	ug/L
MKTF-02	2/6/2018	1,1-Dichloroethene	**18**	5	0.4	7	ug/L
MKTF-02	2/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	2/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	2/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	2/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-02	2/6/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-02	2/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	2/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	2/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	2/6/2018	1,2,4-Trimethylbenzene	**180**	5	0.56	56	ug/L
MKTF-02	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	2/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	2/6/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	2/6/2018	Isopropylbenzene	14	5	0.26	447	ug/L
MKTF-02	2/6/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-02	2/6/2018	Ethylbenzene	250	5	0.47	700	ug/L
MKTF-02	2/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-02	2/6/2018	n-Propylbenzene	38	5	0.37	660	ug/L
MKTF-02	2/6/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-02	2/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	2/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	2/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-02	2/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	2/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-02	2/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	2/6/2018	Toluene	49	5	0.32	1000	ug/L
MKTF-02	2/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	2/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	2/6/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	2/6/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
MKTF-02	2/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	2/6/2018	cis-1,2-Dichloroethene	14	5	1	70	ug/L
MKTF-02	2/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	2/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	2/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	2/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	2/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	2/6/2018	Xylenes, Total	89	7.5	1.6	620	ug/L
MKTF-02	2/6/2018	MTBE	110	5	1.2	143	ug/L
MKTF-02	2/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-02	2/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	5/1/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	5/1/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-02	5/1/2018	Chloroform	ND	10	4	100	ug/L
MKTF-02	5/1/2018	Benzene	**2900**	100	6.2	5	ug/L
MKTF-02	5/1/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-02	5/1/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-02	5/1/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-02	5/1/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-02	5/1/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-02	5/1/2018	Vinyl Chloride	**6.3**	10	1.8	2	ug/L
MKTF-02	5/1/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-02	5/1/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-02	5/1/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-02	5/1/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-02	5/1/2018	1,1-Dichloroethane	**33**	10	4	25	ug/L
MKTF-02	5/1/2018	1,1-Dichloroethene	**11**	10	0.81	7	ug/L
MKTF-02	5/1/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-02	5/1/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-02	5/1/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-02	5/1/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-02	5/1/2018	1,1,2-Trichloroethane	*1.6*	*10*	1.4	5	ug/L
MKTF-02	5/1/2018	Trichloroethene	*1.8*	*10*	1.1	5	ug/L
MKTF-02	5/1/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-02	5/1/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-02	5/1/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	5/1/2018	1,2,4-Trimethylbenzene	**200**	10	1.1	56	ug/L
MKTF-02	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-02	5/1/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-02	5/1/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-02	5/1/2018	Isopropylbenzene	15	10	0.51	447	ug/L
MKTF-02	5/1/2018	p-Isopropyltoluene	1.1	10	0.96	NA	ug/L
MKTF-02	5/1/2018	Ethylbenzene	240	10	0.93	700	ug/L
MKTF-02	5/1/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-02	5/1/2018	n-Propylbenzene	45	10	0.74	660	ug/L
MKTF-02	5/1/2018	n-Butylbenzene	4.1	30	1.3	1000	ug/L
MKTF-02	5/1/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	5/1/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/1/2018	1,2-Dichloroethane	*4.8*	*10*	4	5	ug/L
MKTF-02	5/1/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-02	5/1/2018	1,3,5-Trimethylbenzene	9.2	10	0.87	60	ug/L
MKTF-02	5/1/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-02	5/1/2018	Toluene	39	10	0.64	1000	ug/L
MKTF-02	5/1/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	5/1/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-02	5/1/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-02	5/1/2018	sec-Butylbenzene	2.4	10	1.1	2000	ug/L
MKTF-02	5/1/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-02	5/1/2018	cis-1,2-Dichloroethene	16	10	2	70	ug/L
MKTF-02	5/1/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	5/1/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-02	5/1/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-02	5/1/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-02	5/1/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-02	5/1/2018	Xylenes, Total	120	15	3.2	620	ug/L
MKTF-02	5/1/2018	MTBE	97	10	2.4	143	ug/L
MKTF-02	5/1/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-02	5/1/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-02	8/20/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-02	8/20/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-02	8/20/2018	Chloroform	ND	10	4	100	ug/L
MKTF-02	8/20/2018	Benzene	**2500**	100	17	5	ug/L
MKTF-02	8/20/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-02	8/20/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-02	8/20/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-02	8/20/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-02	8/20/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-02	8/20/2018	Vinyl Chloride	**7.1**	10	1.1	2	ug/L
MKTF-02	8/20/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-02	8/20/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-02	8/20/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-02	8/20/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-02	8/20/2018	1,1-Dichloroethane	**42**	10	4	25	ug/L
MKTF-02	8/20/2018	1,1-Dichloroethene	**24**	10	1.2	7	ug/L
MKTF-02	8/20/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-02	8/20/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-02	8/20/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-02	8/20/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-02	8/20/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-02	8/20/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-02	8/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-02	8/20/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-02	8/20/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	8/20/2018	1,2,4-Trimethylbenzene	**60**	10	2.5	56	ug/L
MKTF-02	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-02	8/20/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-02	8/20/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-02	8/20/2018	Isopropylbenzene	7.4	10	2.2	447	ug/L
MKTF-02	8/20/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-02	8/20/2018	Ethylbenzene	140	10	2.2	700	ug/L
MKTF-02	8/20/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-02	8/20/2018	n-Propylbenzene	18	10	2.4	660	ug/L
MKTF-02	8/20/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-02	8/20/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	8/20/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-02	8/20/2018	1,2-Dichloroethane	**7.8**	10	4	5	ug/L
MKTF-02	8/20/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-02	8/20/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-02	8/20/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-02	8/20/2018	Toluene	31	10	1.7	1000	ug/L
MKTF-02	8/20/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-02	8/20/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-02	8/20/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	8/20/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-02	8/20/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-02	8/20/2018	cis-1,2-Dichloroethene	9.9	10	3.8	70	ug/L
MKTF-02	8/20/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	8/20/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-02	8/20/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-02	8/20/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-02	8/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-02	8/20/2018	Xylenes, Total	31	15	6.4	620	ug/L
MKTF-02	8/20/2018	MTBE	100	10	3.2	143	ug/L
MKTF-02	8/20/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-02	11/28/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-02	11/28/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-02	11/28/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-02	11/28/2018	Benzene	**5500**	100	17	5	ug/L
MKTF-02	11/28/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-02	11/28/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-02	11/28/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-02	11/28/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-02	11/28/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-02	11/28/2018	Vinyl Chloride	**28**	10	1.2	2	ug/L
MKTF-02	11/28/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-02	11/28/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-02	11/28/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-02	11/28/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-02	11/28/2018	1,1-Dichloroethane	**44**	10	1.8	25	ug/L
MKTF-02	11/28/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
MKTF-02	11/28/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-02	11/28/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-02	11/28/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-02	11/28/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-02	11/28/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-02	11/28/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-02	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-02	11/28/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-02	11/28/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-02	11/28/2018	1,2,4-Trimethylbenzene	**460**	10	2.5	56	ug/L
MKTF-02	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-02	11/28/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-02	11/28/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-02	11/28/2018	Isopropylbenzene	27	10	2.2	447	ug/L
MKTF-02	11/28/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-02	11/28/2018	Ethylbenzene	510	10	2.2	700	ug/L
MKTF-02	11/28/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-02	11/28/2018	n-Propylbenzene	96	10	2.4	660	ug/L
MKTF-02	11/28/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-02	11/28/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-02	11/28/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-02	11/28/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-02	11/28/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-02	11/28/2018	1,3,5-Trimethylbenzene	22	10	2.3	60	ug/L
MKTF-02	11/28/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-02	11/28/2018	Toluene	82	10	1.7	1000	ug/L
MKTF-02	11/28/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-02	11/28/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-02	11/28/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	11/28/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-02	11/28/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-02	11/28/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-02	11/28/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	11/28/2018	Pentafluorobenzene	**100**	0	0		None
MKTF-02	11/28/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-02	11/28/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-02	11/28/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-02	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-02	11/28/2018	Xylenes, Total	170	15	6.4	620	ug/L
MKTF-02	11/28/2018	MTBE	99	10	4.6	143	ug/L
MKTF-02	11/28/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-02	11/28/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-02	3/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	3/28/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	3/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	3/28/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	3/28/2019	1,1-Dichloroethane	16	20	2.817172	25	ug/L
MKTF-02	3/28/2019	1,1-Dichloroethene	**7.3**	20	4.107764	7	ug/L
MKTF-02	3/28/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	3/28/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	3/28/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	3/28/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	3/28/2019	1,2,4-Trimethylbenzene	**130**	20	4.263982	56	ug/L
MKTF-02	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	3/28/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	3/28/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	3/28/2019	1,2-Dichloroethane	**6.9**	20	3.892755	5	ug/L
MKTF-02	3/28/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	3/28/2019	1,3,5-Trimethylbenzene	24	20	3.773197	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/28/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	3/28/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	3/28/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	3/28/2019	1-Methylnaphthalene	9.3	80	6.29909	NA	ug/L
MKTF-02	3/28/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	3/28/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	3/28/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	3/28/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	3/28/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	3/28/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-02	3/28/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	3/28/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	3/28/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	3/28/2019	Benzene	**620**	20	3.332781	5	ug/L
MKTF-02	3/28/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	3/28/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	3/28/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	3/28/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	3/28/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	3/28/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-02	3/28/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	3/28/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	3/28/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	3/28/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	3/28/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	3/28/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	3/28/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	3/28/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	3/28/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	3/28/2019	Ethylbenzene	10	20	2.646816	700	ug/L
MKTF-02	3/28/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	3/28/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
MKTF-02	3/28/2019	MTBE	47	20	9.1219	143	ug/L
MKTF-02	3/28/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	3/28/2019	Naphthalene	*9.5*	*40*	5.501427	30	ug/L
MKTF-02	3/28/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	3/28/2019	n-Propylbenzene	ND	20	4.28616	660	ug/L
MKTF-02	3/28/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	3/28/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	3/28/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	3/28/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	3/28/2019	Toluene	16	20	7.008724	1000	ug/L
MKTF-02	3/28/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	3/28/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	3/28/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	3/28/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	3/28/2019	Vinyl Chloride	**13**	20	3.581986	2	ug/L
MKTF-02	3/28/2019	Xylenes, Total	130	30	9.088299	620	ug/L
MKTF-02	3/28/2019	1,2-Dibromoethane	0.0086	0.00941	0.003279	0.05	ug/L
MKTF-02	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	5/6/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	5/6/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	5/6/2019	1,1-Dichloroethane	19	20	2.817172	25	ug/L
MKTF-02	5/6/2019	1,1-Dichloroethene	*6.4*	*20*	4.107764	7	ug/L
MKTF-02	5/6/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	5/6/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	5/6/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	5/6/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	5/6/2019	1,2,4-Trimethylbenzene	**130**	20	4.263982	56	ug/L
MKTF-02	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	5/6/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	5/6/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	5/6/2019	1,2-Dichloroethane	**6.4**	20	3.892755	5	ug/L
MKTF-02	5/6/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	5/6/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-02	5/6/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	5/6/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	5/6/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	5/6/2019	1-Methylnaphthalene	16	80	6.29909	NA	ug/L
MKTF-02	5/6/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	5/6/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	5/6/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	5/6/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	5/6/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	5/6/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	5/6/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	5/6/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	5/6/2019	Benzene	**950**	20	3.332781	5	ug/L
MKTF-02	5/6/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	5/6/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	5/6/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	5/6/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	5/6/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	5/6/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-02	5/6/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	5/6/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	5/6/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	5/6/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	5/6/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	5/6/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	5/6/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	5/6/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	5/6/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	5/6/2019	Ethylbenzene	43	20	2.646816	700	ug/L
MKTF-02	5/6/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	5/6/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
MKTF-02	5/6/2019	MTBE	49	20	9.1219	143	ug/L
MKTF-02	5/6/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	5/6/2019	Naphthalene	*12*	*40*	5.501427	30	ug/L
MKTF-02	5/6/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	5/6/2019	n-Propylbenzene	11	20	4.28616	660	ug/L
MKTF-02	5/6/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	5/6/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	5/6/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	5/6/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	5/6/2019	Toluene	19	20	7.008724	1000	ug/L
MKTF-02	5/6/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	5/6/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	5/6/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	5/6/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	5/6/2019	Vinyl Chloride	**19**	20	3.581986	2	ug/L
MKTF-02	5/6/2019	Xylenes, Total	110	30	9.088299	620	ug/L
MKTF-02	5/6/2019	1,2-Dibromoethane	0.013	0.00938	0.00327	0.05	ug/L
MKTF-02	8/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	8/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	8/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	8/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	8/23/2019	1,1-Dichloroethane	**27**	20	2.817172	25	ug/L
MKTF-02	8/23/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-02	8/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	8/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	8/23/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	8/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	8/23/2019	1,2,4-Trimethylbenzene	18	20	4.263982	56	ug/L
MKTF-02	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	8/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	8/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	8/23/2019	1,2-Dichloroethane	**12**	20	3.892755	5	ug/L
MKTF-02	8/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	8/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-02	8/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	8/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	8/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	8/23/2019	1-Methylnaphthalene	12	80	6.29909	NA	ug/L
MKTF-02	8/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	8/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	8/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	8/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	8/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	8/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-02	8/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	8/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	8/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	8/23/2019	Benzene	**990**	20	3.332781	5	ug/L
MKTF-02	8/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	8/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	8/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	8/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	8/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	8/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	8/23/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	8/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	8/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	8/23/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	8/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	8/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	8/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	8/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	8/23/2019	Ethylbenzene	78	20	2.646816	700	ug/L
MKTF-02	8/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	8/23/2019	Isopropylbenzene	11	20	3.830445	447	ug/L
MKTF-02	8/23/2019	MTBE	51	20	9.1219	143	ug/L
MKTF-02	8/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	8/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-02	8/23/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	8/23/2019	n-Propylbenzene	27	20	4.28616	660	ug/L
MKTF-02	8/23/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	8/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	8/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	8/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	8/23/2019	Toluene	12	20	7.008724	1000	ug/L
MKTF-02	8/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	8/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	8/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	8/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	8/23/2019	Vinyl Chloride	**28**	20	3.581986	2	ug/L
MKTF-02	8/23/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-02	8/23/2019	1,2-Dibromoethane	0.015	0.00949	0.003305	0.05	ug/L
MKTF-02	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-02	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-02	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-02	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethane	19	5	0.704293	25	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethene	1.6	5	1.026941	7	ug/L
MKTF-02	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-02	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trimethylbenzene	5.8	5	1.065995	56	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-02	11/19/2019	1,2-Dichloroethane	**5.7**	5	0.973189	5	ug/L
MKTF-02	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-02	11/19/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-02	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.9	20	1.574772	NA	ug/L
MKTF-02	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-02	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-02	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-02	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-02	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-02	11/19/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-02	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-02	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-02	11/19/2019	Benzene	**320**	5	0.833195	5	ug/L
MKTF-02	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-02	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-02	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-02	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-02	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-02	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-02	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-02	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-02	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-02	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-02	11/19/2019	cis-1,2-Dichloroethene	3.2	5	0.950575	70	ug/L
MKTF-02	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-02	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-02	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-02	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-02	11/19/2019	Ethylbenzene	39	5	0.661704	700	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-02	11/19/2019	Isopropylbenzene	3.8	5	0.957611	447	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	MTBE	25	5	2.280475	143	ug/L
MKTF-02	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-02	11/19/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-02	11/19/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-02	11/19/2019	n-Propylbenzene	5.6	5	1.07154	660	ug/L
MKTF-02	11/19/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-02	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-02	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-02	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-02	11/19/2019	Toluene	2.9	5	1.752181	1000	ug/L
MKTF-02	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-02	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-02	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-02	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-02	11/19/2019	Vinyl Chloride	**22**	5	0.895496	2	ug/L
MKTF-02	11/19/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-02	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-02	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-02	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-02	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethane	15	5	0.704293	25	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethene	1.4	5	1.026941	7	ug/L
MKTF-02	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-02	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trimethylbenzene	8.6	5	1.065995	56	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-02	11/19/2019	1,2-Dichloroethane	4.7	5	0.973189	5	ug/L
MKTF-02	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-02	11/19/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-02	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.9	20	1.574772	NA	ug/L
MKTF-02	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-02	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-02	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-02	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-02	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-02	11/19/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-02	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-02	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-02	11/19/2019	Benzene	**360**	5	0.833195	5	ug/L
MKTF-02	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-02	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-02	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-02	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-02	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-02	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-02	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-02	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-02	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-02	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-02	11/19/2019	cis-1,2-Dichloroethene	3.1	5	0.950575	70	ug/L
MKTF-02	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-02	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-02	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-02	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-02	11/19/2019	Ethylbenzene	46	5	0.661704	700	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-02	11/19/2019	Isopropylbenzene	4.4	5	0.957611	447	ug/L
MKTF-02	11/19/2019	MTBE	23	5	2.280475	143	ug/L
MKTF-02	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-02	11/19/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-02	11/19/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-02	11/19/2019	n-Propylbenzene	7.8	5	1.07154	660	ug/L
MKTF-02	11/19/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-02	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-02	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-02	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-02	11/19/2019	Toluene	3	5	1.752181	1000	ug/L
MKTF-02	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-02	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-02	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-02	11/19/2019	Vinyl Chloride	**17**	5	0.895496	2	ug/L
MKTF-02	11/19/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	0.016	0.00933	0.003253	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	0.023	0.00931	0.003244	0.05	ug/L
MKTF-02	2/25/2020	Benzene	**780**	50	11	5	ug/L
MKTF-02	2/25/2020	Ethylbenzene	570	50	11	700	ug/L
MKTF-02	2/25/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-02	2/25/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-02	2/25/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-02	2/25/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-02	2/25/2020	1,1-Dichloroethane	6.5	5	1.4	25	ug/L
MKTF-02	2/25/2020	1,1-Dichloroethene	1.8	5	0.65	7	ug/L
MKTF-02	2/25/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-02	2/25/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-02	2/25/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-02	2/25/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-02	2/25/2020	1,2,4-Trimethylbenzene	**60**	5	0.61	56	ug/L
MKTF-02	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-02	2/25/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-02	2/25/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-02	2/25/2020	1,2-Dichloroethane	2	5	1.1	5	ug/L
MKTF-02	2/25/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-02	2/25/2020	1,3,5-Trimethylbenzene	3.2	5	0.91	60	ug/L
MKTF-02	2/25/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-02	2/25/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-02	2/25/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-02	2/25/2020	1-Methylnaphthalene	60	20	4.2	NA	ug/L
MKTF-02	2/25/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-02	2/25/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-02	2/25/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-02	2/25/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-02	2/25/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
MKTF-02	2/25/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-02	2/25/2020	p-Isopropyltoluene	4.3	5	1	NA	ug/L
MKTF-02	2/25/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-02	2/25/2020	Acetone	18	50	12	14064	ug/L
MKTF-02	2/25/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-02	2/25/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-02	2/25/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-02	2/25/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-02	2/25/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-02	2/25/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-02	2/25/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-02	2/25/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-02	2/25/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-02	2/25/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-02	2/25/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-02	2/25/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-02	2/25/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-02	2/25/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-02	2/25/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-02	2/25/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-02	2/25/2020	Isopropylbenzene	42	5	0.91	447	ug/L
MKTF-02	2/25/2020	MTBE	9.1	5	2	143	ug/L
MKTF-02	2/25/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-02	2/25/2020	n-Butylbenzene	16	15	1.3	1000	ug/L
MKTF-02	2/25/2020	n-Propylbenzene	150	5	0.91	660	ug/L
MKTF-02	2/25/2020	Naphthalene	16	10	1.4	30	ug/L
MKTF-02	2/25/2020	sec-Butylbenzene	11	5	3	2000	ug/L
MKTF-02	2/25/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-02	2/25/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-02	2/25/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-02	2/25/2020	Toluene	10	5	1	1000	ug/L
MKTF-02	2/25/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-02	2/25/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-02	2/25/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-02	2/25/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-02	2/25/2020	Vinyl Chloride	**5**	5	0.98	2	ug/L
MKTF-02	2/25/2020	Xylenes, Total	48	7.5	2.8	620	ug/L
MKTF-02	2/25/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-02	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-02	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-02	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-02	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-02	9/21/2020	1,1-Dichloroethane	21	1	0.27	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	1,1-Dichloroethene	1.4	1	0.13	7	ug/L
MKTF-02	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-02	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-02	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-02	9/21/2020	1,2,4-Trimethylbenzene	37	1	0.12	56	ug/L
MKTF-02	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-02	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-02	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-02	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-02	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-02	9/21/2020	1,3,5-Trimethylbenzene	1.6	1	0.18	60	ug/L
MKTF-02	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-02	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-02	9/21/2020	1-Methylnaphthalene	53	4	0.84	NA	ug/L
MKTF-02	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-02	9/21/2020	2-Butanone	4.3	10	1.1	5565	ug/L
MKTF-02	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-02	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-02	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-02	9/21/2020	p-Isopropyltoluene	3.7	1	0.2	NA	ug/L
MKTF-02	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-02	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-02	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-02	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-02	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-02	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-02	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	9/21/2020	Chloroethane	16	2	0.38	20857	ug/L
MKTF-02	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-02	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-02	9/21/2020	cis-1,2-Dichloroethene	1.9	1	0.39	70	ug/L
MKTF-02	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-02	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-02	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-02	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-02	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-02	9/21/2020	Isopropylbenzene	33	1	0.18	447	ug/L
MKTF-02	9/21/2020	MTBE	61	1	0.39	143	ug/L
MKTF-02	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-02	9/21/2020	n-Butylbenzene	12	3	0.25	1000	ug/L
MKTF-02	9/21/2020	Naphthalene	4.6	2	0.28	30	ug/L
MKTF-02	9/21/2020	sec-Butylbenzene	8.1	1	0.61	2000	ug/L
MKTF-02	9/21/2020	Styrene	0.46	1	0.13	100	ug/L
MKTF-02	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-02	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-02	9/21/2020	Toluene	33	1	0.2	1000	ug/L
MKTF-02	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-02	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-02	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-02	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-02	9/21/2020	Vinyl Chloride	**27**	1	0.2	2	ug/L
MKTF-02	9/21/2020	Xylenes, Total	6.3	1.5	0.55	620	ug/L
MKTF-02	9/21/2020	Benzene	**4000**	50	11	5	ug/L
MKTF-02	9/21/2020	Ethylbenzene	520	50	11	700	ug/L
MKTF-02	9/21/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-02	9/21/2020	n-Propylbenzene	90	5	0.91	660	ug/L
MKTF-02	12/18/2020	1,2-Dibromoethane	ND	0.0205	0.00512	0.05	ug/L
MKTF-02	12/18/2020	Acetone	ND	125	50	14064	ug/L
MKTF-02	12/18/2020	Benzene	**885**	5	1.9	5	ug/L
MKTF-02	12/18/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-02	12/18/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-02	12/18/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-02	12/18/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-02	12/18/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-02	12/18/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-02	12/18/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-02	12/18/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-02	12/18/2020	Chloroform	ND	5	3	100	ug/L
MKTF-02	12/18/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-02	12/18/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-02	12/18/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	12/18/2020	cis-1,2-Dichloroethene	ND	5	2.5	70	ug/L
MKTF-02	12/18/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-02	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-02	12/18/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-02	12/18/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-02	12/18/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-02	12/18/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-02	12/18/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-02	12/18/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-02	12/18/2020	1,1-Dichloroethane	**29.1**	5	2.5	25	ug/L
MKTF-02	12/18/2020	1,2-Dichloroethane	**34**	5	2.5	5	ug/L
MKTF-02	12/18/2020	1,1-Dichloroethene	**8.76**	5	2.5	7	ug/L
MKTF-02	12/18/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-02	12/18/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-02	12/18/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-02	12/18/2020	Ethylbenzene	161	5	2.5	700	ug/L
MKTF-02	12/18/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-02	12/18/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-02	12/18/2020	Isopropylbenzene	8.53	5	2.65	447	ug/L
MKTF-02	12/18/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-02	12/18/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-02	12/18/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-02	12/18/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-02	12/18/2020	MTBE	31.7	5	3.7	143	ug/L
MKTF-02	12/18/2020	Naphthalene	10.3	5	5	30	ug/L
MKTF-02	12/18/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-02	12/18/2020	n-Propylbenzene	19.1	5	3.45	660	ug/L
MKTF-02	12/18/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-02	12/18/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-02	12/18/2020	Styrene	ND	5	5	100	ug/L
MKTF-02	12/18/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-02	12/18/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-02	12/18/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-02	12/18/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-02	12/18/2020	Toluene	11.9	5	2.05	1000	ug/L
MKTF-02	12/18/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-02	12/18/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-02	12/18/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L
MKTF-02	12/18/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-02	12/18/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-02	12/18/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-02	12/18/2020	Trichloroethene	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-02	12/18/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L
MKTF-02	12/18/2020	1,2,4-Trimethylbenzene	25.7	5	4.1	56	ug/L
MKTF-02	12/18/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-02	12/18/2020	Vinyl Chloride	**24.1**	5	2.5	2	ug/L
MKTF-02	12/18/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-04	4/11/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-04	4/11/2014	Acetone	ND	200	99	14064	ug/L
MKTF-04	4/11/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-04	4/11/2014	Benzene	**1000**	20	3.1	5	ug/L
MKTF-04	4/11/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-04	4/11/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-04	4/11/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-04	4/11/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-04	4/11/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-04	4/11/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-04	4/11/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-04	4/11/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-04	4/11/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-04	4/11/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-04	4/11/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
MKTF-04	4/11/2014	1,1-Dichloroethene	**28**	20	4.3	7	ug/L
MKTF-04	4/11/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-04	4/11/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-04	4/11/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-04	4/11/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-04	4/11/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-04	4/11/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-04	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-04	4/11/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-04	4/11/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-04	4/11/2014	1,2,4-Trimethylbenzene	**510**	20	2.5	56	ug/L
MKTF-04	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	4/11/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-04	4/11/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-04	4/11/2014	Isopropylbenzene	28	20	3.2	447	ug/L
MKTF-04	4/11/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-04	4/11/2014	Ethylbenzene	**800**	20	2.5	700	ug/L
MKTF-04	4/11/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-04	4/11/2014	n-Propylbenzene	77	20	2.8	660	ug/L
MKTF-04	4/11/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-04	4/11/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-04	4/11/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-04	4/11/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-04	4/11/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-04	4/11/2014	1,3,5-Trimethylbenzene	**94**	20	2.6	60	ug/L
MKTF-04	4/11/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-04	4/11/2014	Toluene	25	20	3.4	1000	ug/L
MKTF-04	4/11/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-04	4/11/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-04	4/11/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-04	4/11/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-04	4/11/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-04	4/11/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-04	4/11/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-04	4/11/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-04	4/11/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-04	4/11/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-04	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-04	4/11/2014	Xylenes, Total	**1000**	30	7.5	620	ug/L
MKTF-04	4/11/2014	MTBE	**2400**	20	5	143	ug/L
MKTF-04	4/11/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-04	4/11/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-04	6/4/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-04	6/4/2014	Acetone	ND	100	49	14064	ug/L
MKTF-04	6/4/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-04	6/4/2014	Benzene	**670**	10	1.5	5	ug/L
MKTF-04	6/4/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-04	6/4/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-04	6/4/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-04	6/4/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-04	6/4/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-04	6/4/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-04	6/4/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-04	6/4/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-04	6/4/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-04	6/4/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-04	6/4/2014	1,1-Dichloroethane	11	10	2.8	25	ug/L
MKTF-04	6/4/2014	1,1-Dichloroethene	**21**	10	2.1	7	ug/L
MKTF-04	6/4/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	6/4/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-04	6/4/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-04	6/4/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-04	6/4/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	6/4/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-04	6/4/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-04	6/4/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-04	6/4/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-04	6/4/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-04	6/4/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-04	6/4/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-04	6/4/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-04	6/4/2014	Isopropylbenzene	20	10	1.6	447	ug/L
MKTF-04	6/4/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	Ethylbenzene	570	10	1.3	700	ug/L
MKTF-04	6/4/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-04	6/4/2014	n-Propylbenzene	46	10	1.4	660	ug/L
MKTF-04	6/4/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-04	6/4/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-04	6/4/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-04	6/4/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-04	6/4/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-04	6/4/2014	1,3,5-Trimethylbenzene	49	10	1.3	60	ug/L
MKTF-04	6/4/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-04	6/4/2014	Toluene	19	10	1.7	1000	ug/L
MKTF-04	6/4/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-04	6/4/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-04	6/4/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-04	6/4/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-04	6/4/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-04	6/4/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-04	6/4/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-04	6/4/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-04	6/4/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-04	6/4/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-04	6/4/2014	Xylenes, Total	**680**	15	3.8	620	ug/L
MKTF-04	6/4/2014	MTBE	**1800**	10	2.5	143	ug/L
MKTF-04	6/4/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-04	6/4/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-04	9/15/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-04	9/15/2014	Acetone	ND	50	25	14064	ug/L
MKTF-04	9/15/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-04	9/15/2014	Benzene	**150**	5	0.77	5	ug/L
MKTF-04	9/15/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-04	9/15/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-04	9/15/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-04	9/15/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-04	9/15/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-04	9/15/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-04	9/15/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-04	9/15/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-04	9/15/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-04	9/15/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-04	9/15/2014	1,1-Dichloroethane	**37**	5	1.4	25	ug/L
MKTF-04	9/15/2014	1,1-Dichloroethene	**74**	5	1.1	7	ug/L
MKTF-04	9/15/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-04	9/15/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-04	9/15/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-04	9/15/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-04	9/15/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-04	9/15/2014	Trichloroethene	**5.1**	5	0.97	5	ug/L
MKTF-04	9/15/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-04	9/15/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-04	9/15/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-04	9/15/2014	1,2,4-Trimethylbenzene	**96**	5	0.61	56	ug/L
MKTF-04	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-04	9/15/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-04	9/15/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-04	9/15/2014	Isopropylbenzene	11	5	0.81	447	ug/L
MKTF-04	9/15/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-04	9/15/2014	Ethylbenzene	140	5	0.64	700	ug/L
MKTF-04	9/15/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-04	9/15/2014	n-Propylbenzene	19	5	0.7	660	ug/L
MKTF-04	9/15/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-04	9/15/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-04	9/15/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-04	9/15/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-04	9/15/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-04	9/15/2014	1,3,5-Trimethylbenzene	12	5	0.66	60	ug/L
MKTF-04	9/15/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-04	9/15/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-04	9/15/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-04	9/15/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-04	9/15/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-04	9/15/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-04	9/15/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-04	9/15/2014	cis-1,2-Dichloroethene	14	5	0.61	70	ug/L
MKTF-04	9/15/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-04	9/15/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	9/15/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-04	9/15/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-04	9/15/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-04	9/15/2014	Xylenes, Total	140	7.5	1.9	620	ug/L
MKTF-04	9/15/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-04	9/15/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-04	9/15/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-04	11/13/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-04	11/13/2014	Acetone	ND	100	49	14064	ug/L
MKTF-04	11/13/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-04	11/13/2014	Benzene	**180**	10	1.5	5	ug/L
MKTF-04	11/13/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-04	11/13/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-04	11/13/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-04	11/13/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-04	11/13/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-04	11/13/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-04	11/13/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-04	11/13/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-04	11/13/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-04	11/13/2014	1,1-Dichloroethane	**37**	10	2.8	25	ug/L
MKTF-04	11/13/2014	1,1-Dichloroethene	**59**	10	2.1	7	ug/L
MKTF-04	11/13/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	11/13/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-04	11/13/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-04	11/13/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-04	11/13/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	11/13/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-04	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-04	11/13/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-04	11/13/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-04	11/13/2014	1,2,4-Trimethylbenzene	**200**	10	1.2	56	ug/L
MKTF-04	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-04	11/13/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-04	11/13/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-04	11/13/2014	Isopropylbenzene	16	10	1.6	447	ug/L
MKTF-04	11/13/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	Ethylbenzene	280	10	1.3	700	ug/L
MKTF-04	11/13/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-04	11/13/2014	n-Propylbenzene	29	10	1.4	660	ug/L
MKTF-04	11/13/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-04	11/13/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-04	11/13/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-04	11/13/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-04	11/13/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-04	11/13/2014	1,3,5-Trimethylbenzene	19	10	1.3	60	ug/L
MKTF-04	11/13/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-04	11/13/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-04	11/13/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-04	11/13/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-04	11/13/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-04	11/13/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-04	11/13/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-04	11/13/2014	cis-1,2-Dichloroethene	14	10	1.2	70	ug/L
MKTF-04	11/13/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-04	11/13/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-04	11/13/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-04	11/13/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-04	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-04	11/13/2014	Xylenes, Total	260	15	3.8	620	ug/L
MKTF-04	11/13/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-04	11/13/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-04	11/13/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-04	3/16/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	3/16/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	3/16/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	3/16/2015	Benzene	**220**	10	0.65	5	ug/L
MKTF-04	3/16/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	3/16/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	3/16/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	3/16/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-04	3/16/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	3/16/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	3/16/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	3/16/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	3/16/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	3/16/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	3/16/2015	1,1-Dichloroethane	19	10	4	25	ug/L
MKTF-04	3/16/2015	1,1-Dichloroethene	**32**	10	0.99	7	ug/L
MKTF-04	3/16/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	3/16/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	3/16/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	3/16/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	3/16/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	3/16/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	3/16/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	3/16/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	3/16/2015	1,2,4-Trimethylbenzene	**200**	10	1.6	56	ug/L
MKTF-04	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/16/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	3/16/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	3/16/2015	Isopropylbenzene	10	10	1.5	447	ug/L
MKTF-04	3/16/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Ethylbenzene	260	10	1	700	ug/L
MKTF-04	3/16/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	3/16/2015	n-Propylbenzene	21	10	1.6	660	ug/L
MKTF-04	3/16/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	3/16/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	3/16/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	3/16/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	3/16/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	3/16/2015	1,3,5-Trimethylbenzene	24	10	1.2	60	ug/L
MKTF-04	3/16/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	3/16/2015	Toluene	ND	10	1.1	1000	ug/L
MKTF-04	3/16/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	3/16/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	3/16/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	3/16/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-04	3/16/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	3/16/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	3/16/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	3/16/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	3/16/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	3/16/2015	Xylenes, Total	340	15	2.8	620	ug/L
MKTF-04	3/16/2015	MTBE	**1200**	10	1.7	143	ug/L
MKTF-04	3/16/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	3/16/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	6/4/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	6/4/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	6/4/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	6/4/2015	Benzene	**310**	10	0.65	5	ug/L
MKTF-04	6/4/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	6/4/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	6/4/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	6/4/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-04	6/4/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	6/4/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	6/4/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	6/4/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	6/4/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	6/4/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	6/4/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-04	6/4/2015	1,1-Dichloroethene	**22**	10	0.99	7	ug/L
MKTF-04	6/4/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	6/4/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	6/4/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	6/4/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	6/4/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	6/4/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	6/4/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	6/4/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	6/4/2015	1,2,4-Trimethylbenzene	**270**	10	1.6	56	ug/L
MKTF-04	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-04	6/4/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	6/4/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	6/4/2015	Isopropylbenzene	21	10	1.5	447	ug/L
MKTF-04	6/4/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Ethylbenzene	450	10	1	700	ug/L
MKTF-04	6/4/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	6/4/2015	n-Propylbenzene	37	10	1.6	660	ug/L
MKTF-04	6/4/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	6/4/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	6/4/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	6/4/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	6/4/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	6/4/2015	1,3,5-Trimethylbenzene	23	10	1.2	60	ug/L
MKTF-04	6/4/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	6/4/2015	Toluene	13	10	1.1	1000	ug/L
MKTF-04	6/4/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	6/4/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	6/4/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	6/4/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	6/4/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	6/4/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	6/4/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	6/4/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	6/4/2015	Xylenes, Total	560	15	2.8	620	ug/L
MKTF-04	6/4/2015	MTBE	**1300**	10	1.7	143	ug/L
MKTF-04	6/4/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	6/4/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-04	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-04	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-04	8/18/2015	Benzene	**320**	5	0.33	5	ug/L
MKTF-04	8/18/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-04	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-04	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-04	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-04	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-04	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-04	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-04	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-04	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-04	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-04	8/18/2015	1,1-Dichloroethane	7.5	5	2	25	ug/L
MKTF-04	8/18/2015	1,1-Dichloroethene	**16**	5	0.5	7	ug/L
MKTF-04	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-04	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-04	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-04	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-04	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-04	8/18/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-04	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-04	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-04	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-04	8/18/2015	1,2,4-Trimethylbenzene	**270**	5	0.8	56	ug/L
MKTF-04	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-04	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-04	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-04	8/18/2015	Isopropylbenzene	16	5	0.76	447	ug/L
MKTF-04	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-04	8/18/2015	Ethylbenzene	430	5	0.51	700	ug/L
MKTF-04	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-04	8/18/2015	n-Propylbenzene	21	5	0.82	660	ug/L
MKTF-04	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-04	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-04	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-04	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-04	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-04	8/18/2015	1,3,5-Trimethylbenzene	26	5	0.61	60	ug/L
MKTF-04	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-04	8/18/2015	Toluene	11	5	0.54	1000	ug/L
MKTF-04	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-04	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-04	8/18/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-04	8/18/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-04	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-04	8/18/2015	cis-1,2-Dichloroethene	13	5	0.4	70	ug/L
MKTF-04	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-04	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-04	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-04	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-04	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-04	8/18/2015	Xylenes, Total	550	7.5	1.4	620	ug/L
MKTF-04	8/18/2015	MTBE	**1400**	50	8.7	143	ug/L
MKTF-04	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-04	11/3/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	11/3/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	11/3/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	11/3/2015	Benzene	**380**	10	0.65	5	ug/L
MKTF-04	11/3/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	11/3/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	11/3/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	11/3/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/3/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	11/3/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	11/3/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	11/3/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	11/3/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	11/3/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	11/3/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-04	11/3/2015	1,1-Dichloroethene	**20**	10	0.99	7	ug/L
MKTF-04	11/3/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	11/3/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	11/3/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	11/3/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	11/3/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	11/3/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	11/3/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	11/3/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	11/3/2015	1,2,4-Trimethylbenzene	**430**	10	1.6	56	ug/L
MKTF-04	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-04	11/3/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	11/3/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	11/3/2015	Isopropylbenzene	33	10	1.5	447	ug/L
MKTF-04	11/3/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Ethylbenzene	700	10	1	700	ug/L
MKTF-04	11/3/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	11/3/2015	n-Propylbenzene	67	10	1.6	660	ug/L
MKTF-04	11/3/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	11/3/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	11/3/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	11/3/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	11/3/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	11/3/2015	1,3,5-Trimethylbenzene	53	10	1.2	60	ug/L
MKTF-04	11/3/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	11/3/2015	Toluene	15	10	1.1	1000	ug/L
MKTF-04	11/3/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	11/3/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	11/3/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	11/3/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-04	11/3/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	11/3/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	11/3/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	11/3/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	11/3/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	11/3/2015	Xylenes, Total	**780**	15	2.8	620	ug/L
MKTF-04	11/3/2015	MTBE	**1500**	10	1.7	143	ug/L
MKTF-04	11/3/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	11/3/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	2/29/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	2/29/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-04	2/29/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	2/29/2016	Benzene	**800**	50	4.8	5	ug/L
MKTF-04	2/29/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-04	2/29/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	2/29/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	2/29/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	2/29/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-04	2/29/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-04	2/29/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-04	2/29/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	2/29/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	2/29/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-04	2/29/2016	1,1-Dichloroethane	5.9	5	0.54	25	ug/L
MKTF-04	2/29/2016	1,1-Dichloroethene	**14**	5	0.38	7	ug/L
MKTF-04	2/29/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-04	2/29/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-04	2/29/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-04	2/29/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-04	2/29/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-04	2/29/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	2/29/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-04	2/29/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	2/29/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	2/29/2016	1,2,4-Trimethylbenzene	**370**	5	0.52	56	ug/L
MKTF-04	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/29/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-04	2/29/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-04	2/29/2016	Isopropylbenzene	25	5	0.49	447	ug/L
MKTF-04	2/29/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-04	2/29/2016	Ethylbenzene	**730**	50	5.6	700	ug/L
MKTF-04	2/29/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-04	2/29/2016	n-Propylbenzene	52	5	0.66	660	ug/L
MKTF-04	2/29/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-04	2/29/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	2/29/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	2/29/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-04	2/29/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-04	2/29/2016	1,3,5-Trimethylbenzene	58	5	0.58	60	ug/L
MKTF-04	2/29/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-04	2/29/2016	Toluene	17	5	0.45	1000	ug/L
MKTF-04	2/29/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-04	2/29/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	2/29/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	2/29/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-04	2/29/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	2/29/2016	cis-1,2-Dichloroethene	5.5	5	0.62	70	ug/L
MKTF-04	2/29/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	2/29/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	2/29/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-04	2/29/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-04	2/29/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	2/29/2016	Xylenes, Total	**800**	7.5	1.6	620	ug/L
MKTF-04	2/29/2016	MTBE	**2200**	50	11	143	ug/L
MKTF-04	2/29/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-04	2/29/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-04	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	6/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-04	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-04	6/9/2016	Benzene	**630**	10	0.96	5	ug/L
MKTF-04	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-04	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-04	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-04	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-04	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-04	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-04	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-04	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-04	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-04	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-04	6/9/2016	1,1-Dichloroethane	12	10	1.1	25	ug/L
MKTF-04	6/9/2016	1,1-Dichloroethene	**21**	10	1.1	7	ug/L
MKTF-04	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-04	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-04	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-04	6/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-04	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-04	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-04	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-04	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-04	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	6/9/2016	1,2,4-Trimethylbenzene	**370**	10	1.1	56	ug/L
MKTF-04	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-04	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-04	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-04	6/9/2016	Isopropylbenzene	21	10	1	447	ug/L
MKTF-04	6/9/2016	p-Isopropyltoluene	4.3	10	1.4	NA	ug/L
MKTF-04	6/9/2016	Ethylbenzene	580	10	1.1	700	ug/L
MKTF-04	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-04	6/9/2016	n-Propylbenzene	45	10	1.3	660	ug/L
MKTF-04	6/9/2016	n-Butylbenzene	8.7	30	1.6	1000	ug/L
MKTF-04	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-04	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-04	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-04	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-04	6/9/2016	1,3,5-Trimethylbenzene	57	10	1.2	60	ug/L
MKTF-04	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-04	6/9/2016	Toluene	15	10	1.2	1000	ug/L
MKTF-04	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-04	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-04	6/9/2016	sec-Butylbenzene	4.6	10	1.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-04	6/9/2016	cis-1,2-Dichloroethene	7.7	10	1.2	70	ug/L
MKTF-04	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-04	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-04	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-04	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	6/9/2016	Xylenes, Total	**720**	15	3.7	620	ug/L
MKTF-04	6/9/2016	MTBE	**1800**	10	2.1	143	ug/L
MKTF-04	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-04	9/11/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	9/11/2016	Acetone	ND	50	25	14064	ug/L
MKTF-04	9/11/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	9/11/2016	Benzene	**880**	50	4.8	5	ug/L
MKTF-04	9/11/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-04	9/11/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	9/11/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	9/11/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	9/11/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-04	9/11/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	9/11/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-04	9/11/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	9/11/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	9/11/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-04	9/11/2016	1,1-Dichloroethane	6.2	5	0.54	25	ug/L
MKTF-04	9/11/2016	1,1-Dichloroethene	**12**	5	0.54	7	ug/L
MKTF-04	9/11/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-04	9/11/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-04	9/11/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-04	9/11/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-04	9/11/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-04	9/11/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	9/11/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-04	9/11/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	9/11/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	9/11/2016	1,2,4-Trimethylbenzene	**430**	5	0.55	56	ug/L
MKTF-04	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-04	9/11/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-04	9/11/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-04	9/11/2016	Isopropylbenzene	24	5	0.52	447	ug/L
MKTF-04	9/11/2016	p-Isopropyltoluene	3.3	5	0.7	NA	ug/L
MKTF-04	9/11/2016	Ethylbenzene	670	50	5.6	700	ug/L
MKTF-04	9/11/2016	Styrene	0.58	5	0.55	100	ug/L
MKTF-04	9/11/2016	n-Propylbenzene	54	5	0.66	660	ug/L
MKTF-04	9/11/2016	n-Butylbenzene	5.5	15	0.8	1000	ug/L
MKTF-04	9/11/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	9/11/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	9/11/2016	1,2-Dichloroethane	2.6	5	0.58	5	ug/L
MKTF-04	9/11/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-04	9/11/2016	1,3,5-Trimethylbenzene	**69**	5	0.58	60	ug/L
MKTF-04	9/11/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-04	9/11/2016	Toluene	15	5	0.59	1000	ug/L
MKTF-04	9/11/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-04	9/11/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	9/11/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	9/11/2016	sec-Butylbenzene	3.8	5	0.62	2000	ug/L
MKTF-04	9/11/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	9/11/2016	cis-1,2-Dichloroethene	10	5	0.62	70	ug/L
MKTF-04	9/11/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	9/11/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	9/11/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-04	9/11/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-04	9/11/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	9/11/2016	Xylenes, Total	**760**	7.5	1.8	620	ug/L
MKTF-04	9/11/2016	MTBE	**2400**	50	11	143	ug/L
MKTF-04	9/11/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-04	9/11/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-04	11/2/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	11/2/2016	Acetone	ND	50	25	14064	ug/L
MKTF-04	11/2/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	11/2/2016	Benzene	**880**	50	4.8	5	ug/L
MKTF-04	11/2/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-04	11/2/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	11/2/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	11/2/2016	Dibromomethane	ND	5	0.6	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-04	11/2/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	11/2/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-04	11/2/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	11/2/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	11/2/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-04	11/2/2016	1,1-Dichloroethane	10	5	0.54	25	ug/L
MKTF-04	11/2/2016	1,1-Dichloroethene	**14**	5	0.54	7	ug/L
MKTF-04	11/2/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-04	11/2/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-04	11/2/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-04	11/2/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-04	11/2/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-04	11/2/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	11/2/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-04	11/2/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	11/2/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	11/2/2016	1,2,4-Trimethylbenzene	**370**	5	0.55	56	ug/L
MKTF-04	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-04	11/2/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-04	11/2/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-04	11/2/2016	Isopropylbenzene	24	5	0.52	447	ug/L
MKTF-04	11/2/2016	p-Isopropyltoluene	3.7	5	0.7	NA	ug/L
MKTF-04	11/2/2016	Ethylbenzene	640	50	5.6	700	ug/L
MKTF-04	11/2/2016	Styrene	1.5	5	0.55	100	ug/L
MKTF-04	11/2/2016	n-Propylbenzene	43	5	0.66	660	ug/L
MKTF-04	11/2/2016	n-Butylbenzene	6.1	15	0.8	1000	ug/L
MKTF-04	11/2/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	11/2/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	11/2/2016	1,2-Dichloroethane	2.3	5	0.58	5	ug/L
MKTF-04	11/2/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-04	11/2/2016	1,3,5-Trimethylbenzene	**63**	5	0.58	60	ug/L
MKTF-04	11/2/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-04	11/2/2016	Toluene	18	5	0.59	1000	ug/L
MKTF-04	11/2/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-04	11/2/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	11/2/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	11/2/2016	sec-Butylbenzene	4.5	5	0.62	2000	ug/L
MKTF-04	11/2/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	11/2/2016	cis-1,2-Dichloroethene	5.5	5	0.62	70	ug/L
MKTF-04	11/2/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	11/2/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	11/2/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-04	11/2/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-04	11/2/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	11/2/2016	Xylenes, Total	**850**	7.5	1.8	620	ug/L
MKTF-04	11/2/2016	MTBE	**2100**	50	11	143	ug/L
MKTF-04	11/2/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-04	11/2/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-04	3/2/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	3/2/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-04	3/2/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	3/2/2017	Benzene	**980**	50	4.8	5	ug/L
MKTF-04	3/2/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	3/2/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	3/2/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	3/2/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	3/2/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	3/2/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	3/2/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	3/2/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	3/2/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	3/2/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	3/2/2017	1,1-Dichloroethane	4.6	5	0.52	25	ug/L
MKTF-04	3/2/2017	1,1-Dichloroethene	**7.5**	5	0.4	7	ug/L
MKTF-04	3/2/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	3/2/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-04	3/2/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	3/2/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	3/2/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	3/2/2017	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	3/2/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	3/2/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	3/2/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	3/2/2017	1,2,4-Trimethylbenzene	**490**	5	0.52	56	ug/L
MKTF-04	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	3/2/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	3/2/2017	Isopropylbenzene	23	5	0.49	447	ug/L
MKTF-04	3/2/2017	p-Isopropyltoluene	3.7	5	0.7	NA	ug/L
MKTF-04	3/2/2017	Ethylbenzene	680	50	5.6	700	ug/L
MKTF-04	3/2/2017	Styrene	0.86	5	0.78	100	ug/L
MKTF-04	3/2/2017	n-Propylbenzene	60	5	0.66	660	ug/L
MKTF-04	3/2/2017	n-Butylbenzene	5.9	15	0.8	1000	ug/L
MKTF-04	3/2/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	3/2/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	3/2/2017	1,2-Dichloroethane	2.5	5	0.58	5	ug/L
MKTF-04	3/2/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	3/2/2017	1,3,5-Trimethylbenzene	**88**	5	0.58	60	ug/L
MKTF-04	3/2/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	3/2/2017	Toluene	15	5	0.45	1000	ug/L
MKTF-04	3/2/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	3/2/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-04	3/2/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	3/2/2017	sec-Butylbenzene	5.2	5	0.51	2000	ug/L
MKTF-04	3/2/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	3/2/2017	cis-1,2-Dichloroethene	4.8	5	1	70	ug/L
MKTF-04	3/2/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	3/2/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	3/2/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	3/2/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-04	3/2/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	3/2/2017	Xylenes, Total	**880**	7.5	1.6	620	ug/L
MKTF-04	3/2/2017	MTBE	**2500**	50	7.4	143	ug/L
MKTF-04	3/2/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-04	3/2/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-04	6/8/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	6/8/2017	Acetone	23	50	4.1	14064	ug/L
MKTF-04	6/8/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	6/8/2017	Benzene	**920**	50	3.1	5	ug/L
MKTF-04	6/8/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	6/8/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	6/8/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-04	6/8/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	6/8/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	6/8/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	6/8/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	6/8/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	6/8/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	6/8/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	6/8/2017	1,1-Dichloroethane	6.3	5	2	25	ug/L
MKTF-04	6/8/2017	1,1-Dichloroethene	**13**	5	0.4	7	ug/L
MKTF-04	6/8/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	6/8/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	6/8/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	6/8/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	6/8/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	6/8/2017	Trichloroethene	1.4	5	0.56	5	ug/L
MKTF-04	6/8/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	6/8/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	6/8/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	6/8/2017	1,2,4-Trimethylbenzene	**470**	5	0.56	56	ug/L
MKTF-04	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	6/8/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	6/8/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	6/8/2017	Isopropylbenzene	19	5	0.26	447	ug/L
MKTF-04	6/8/2017	p-Isopropyltoluene	4.1	5	0.48	NA	ug/L
MKTF-04	6/8/2017	Ethylbenzene	590	50	4.7	700	ug/L
MKTF-04	6/8/2017	Styrene	1.3	5	0.78	100	ug/L
MKTF-04	6/8/2017	n-Propylbenzene	41	5	0.37	660	ug/L
MKTF-04	6/8/2017	n-Butylbenzene	6.2	15	0.65	1000	ug/L
MKTF-04	6/8/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	6/8/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	6/8/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	6/8/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	6/8/2017	1,3,5-Trimethylbenzene	**80**	5	0.44	60	ug/L
MKTF-04	6/8/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	6/8/2017	Toluene	16	5	0.32	1000	ug/L
MKTF-04	6/8/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	6/8/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	6/8/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	6/8/2017	sec-Butylbenzene	3.6	5	0.55	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/8/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	6/8/2017	cis-1,2-Dichloroethene	5.9	5	1	70	ug/L
MKTF-04	6/8/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	6/8/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-04	6/8/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	6/8/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	6/8/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	6/8/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	6/8/2017	Xylenes, Total	**890**	7.5	1.6	620	ug/L
MKTF-04	6/8/2017	MTBE	**2000**	50	12	143	ug/L
MKTF-04	6/8/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	6/8/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	9/26/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	9/26/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-04	9/26/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	9/26/2017	Benzene	**1100**	50	3.1	5	ug/L
MKTF-04	9/26/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	9/26/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	9/26/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-04	9/26/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	9/26/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	9/26/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	9/26/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	9/26/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	9/26/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	9/26/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	9/26/2017	1,1-Dichloroethane	3.4	5	2	25	ug/L
MKTF-04	9/26/2017	1,1-Dichloroethene	5.8	5	0.4	7	ug/L
MKTF-04	9/26/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	9/26/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	9/26/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	9/26/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	9/26/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	9/26/2017	Trichloroethene	1.3	5	0.56	5	ug/L
MKTF-04	9/26/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	9/26/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	9/26/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	9/26/2017	1,2,4-Trimethylbenzene	**570**	50	5.6	56	ug/L
MKTF-04	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	9/26/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	9/26/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	9/26/2017	Isopropylbenzene	30	5	0.26	447	ug/L
MKTF-04	9/26/2017	p-Isopropyltoluene	5	5	0.48	NA	ug/L
MKTF-04	9/26/2017	Ethylbenzene	**820**	50	4.7	700	ug/L
MKTF-04	9/26/2017	Styrene	1.4	5	0.78	100	ug/L
MKTF-04	9/26/2017	n-Propylbenzene	77	5	0.37	660	ug/L
MKTF-04	9/26/2017	n-Butylbenzene	10	15	0.65	1000	ug/L
MKTF-04	9/26/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	9/26/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	9/26/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	9/26/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	9/26/2017	1,3,5-Trimethylbenzene	**110**	5	0.44	60	ug/L
MKTF-04	9/26/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	9/26/2017	Toluene	19	5	0.32	1000	ug/L
MKTF-04	9/26/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	9/26/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	9/26/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	9/26/2017	sec-Butylbenzene	5.8	5	0.55	2000	ug/L
MKTF-04	9/26/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	9/26/2017	cis-1,2-Dichloroethene	5.2	5	1	70	ug/L
MKTF-04	9/26/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	9/26/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	9/26/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	9/26/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	9/26/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	9/26/2017	Xylenes, Total	**1100**	75	16	620	ug/L
MKTF-04	9/26/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-04	9/26/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	9/26/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	11/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	11/28/2017	Acetone	16	50	4.1	14064	ug/L
MKTF-04	11/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	11/28/2017	Benzene	**1200**	50	3.1	5	ug/L
MKTF-04	11/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	11/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	11/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	11/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	11/28/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	11/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	11/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	11/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	11/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	11/28/2017	1,1-Dichloroethane	5.7	5	2	25	ug/L
MKTF-04	11/28/2017	1,1-Dichloroethene	**8.7**	5	0.4	7	ug/L
MKTF-04	11/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	11/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	11/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	11/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	11/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	11/28/2017	Trichloroethene	2.2	5	0.56	5	ug/L
MKTF-04	11/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	11/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	11/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	11/28/2017	1,2,4-Trimethylbenzene	**580**	50	5.6	56	ug/L
MKTF-04	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	11/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	11/28/2017	tert-Butylbenzene	0.72	5	0.52	690	ug/L
MKTF-04	11/28/2017	Isopropylbenzene	29	5	0.26	447	ug/L
MKTF-04	11/28/2017	p-Isopropyltoluene	5.5	5	0.48	NA	ug/L
MKTF-04	11/28/2017	Ethylbenzene	**820**	50	4.7	700	ug/L
MKTF-04	11/28/2017	Styrene	1.7	5	0.78	100	ug/L
MKTF-04	11/28/2017	n-Propylbenzene	73	5	0.37	660	ug/L
MKTF-04	11/28/2017	n-Butylbenzene	10	15	0.65	1000	ug/L
MKTF-04	11/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	11/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	11/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	11/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	11/28/2017	1,3,5-Trimethylbenzene	**110**	5	0.44	60	ug/L
MKTF-04	11/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	11/28/2017	Toluene	19	5	0.32	1000	ug/L
MKTF-04	11/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	11/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	11/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	11/28/2017	sec-Butylbenzene	6	5	0.55	2000	ug/L
MKTF-04	11/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	11/28/2017	cis-1,2-Dichloroethene	6.1	5	1	70	ug/L
MKTF-04	11/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	11/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	11/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	11/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	11/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	11/28/2017	Xylenes, Total	**1100**	75	16	620	ug/L
MKTF-04	11/28/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-04	11/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	11/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	2/14/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	2/14/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-04	2/14/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	2/14/2018	Benzene	**900**	10	0.62	5	ug/L
MKTF-04	2/14/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-04	2/14/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	2/14/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	2/14/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-04	2/14/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-04	2/14/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-04	2/14/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-04	2/14/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-04	2/14/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-04	2/14/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-04	2/14/2018	1,1-Dichloroethane	8.4	10	4	25	ug/L
MKTF-04	2/14/2018	1,1-Dichloroethene	**12**	10	0.81	7	ug/L
MKTF-04	2/14/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-04	2/14/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	2/14/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-04	2/14/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-04	2/14/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	2/14/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-04	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-04	2/14/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-04	2/14/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	2/14/2018	1,2,4-Trimethylbenzene	**420**	10	1.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-04	2/14/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-04	2/14/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-04	2/14/2018	Isopropylbenzene	23	10	0.51	447	ug/L
MKTF-04	2/14/2018	p-Isopropyltoluene	3.9	10	0.96	NA	ug/L
MKTF-04	2/14/2018	Ethylbenzene	600	10	0.93	700	ug/L
MKTF-04	2/14/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-04	2/14/2018	n-Propylbenzene	48	10	0.74	660	ug/L
MKTF-04	2/14/2018	n-Butylbenzene	9.3	30	1.3	1000	ug/L
MKTF-04	2/14/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	2/14/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	2/14/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-04	2/14/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-04	2/14/2018	1,3,5-Trimethylbenzene	**68**	10	0.87	60	ug/L
MKTF-04	2/14/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-04	2/14/2018	Toluene	14	10	0.64	1000	ug/L
MKTF-04	2/14/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	2/14/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-04	2/14/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-04	2/14/2018	sec-Butylbenzene	2.8	10	1.1	2000	ug/L
MKTF-04	2/14/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	2/14/2018	cis-1,2-Dichloroethene	11	10	2	70	ug/L
MKTF-04	2/14/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	2/14/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-04	2/14/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-04	2/14/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-04	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-04	2/14/2018	Xylenes, Total	**710**	15	3.2	620	ug/L
MKTF-04	2/14/2018	MTBE	**2000**	10	2.4	143	ug/L
MKTF-04	2/14/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-04	2/14/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-04	5/2/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	5/2/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-04	5/2/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	5/2/2018	Benzene	**1100**	100	6.2	5	ug/L
MKTF-04	5/2/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-04	5/2/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	5/2/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	5/2/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-04	5/2/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-04	5/2/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-04	5/2/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-04	5/2/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-04	5/2/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-04	5/2/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-04	5/2/2018	1,1-Dichloroethane	14	10	4	25	ug/L
MKTF-04	5/2/2018	1,1-Dichloroethene	**20**	10	0.81	7	ug/L
MKTF-04	5/2/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-04	5/2/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	5/2/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-04	5/2/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-04	5/2/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	5/2/2018	Trichloroethene	*1.7*	*10*	1.1	5	ug/L
MKTF-04	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-04	5/2/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-04	5/2/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	5/2/2018	1,2,4-Trimethylbenzene	**520**	10	1.1	56	ug/L
MKTF-04	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-04	5/2/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-04	5/2/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-04	5/2/2018	Isopropylbenzene	27	10	0.51	447	ug/L
MKTF-04	5/2/2018	p-Isopropyltoluene	4.8	10	0.96	NA	ug/L
MKTF-04	5/2/2018	Ethylbenzene	**740**	10	0.93	700	ug/L
MKTF-04	5/2/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-04	5/2/2018	n-Propylbenzene	58	10	0.74	660	ug/L
MKTF-04	5/2/2018	n-Butylbenzene	7.8	30	1.3	1000	ug/L
MKTF-04	5/2/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	5/2/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	5/2/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-04	5/2/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-04	5/2/2018	1,3,5-Trimethylbenzene	**86**	10	0.87	60	ug/L
MKTF-04	5/2/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-04	5/2/2018	Toluene	16	10	0.64	1000	ug/L
MKTF-04	5/2/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	5/2/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-04	5/2/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/2/2018	sec-Butylbenzene	4.7	10	1.1	2000	ug/L
MKTF-04	5/2/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	5/2/2018	cis-1,2-Dichloroethene	9.5	10	2	70	ug/L
MKTF-04	5/2/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	5/2/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-04	5/2/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-04	5/2/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-04	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-04	5/2/2018	Xylenes, Total	**890**	15	3.2	620	ug/L
MKTF-04	5/2/2018	MTBE	**2300**	100	24	143	ug/L
MKTF-04	5/2/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-04	5/2/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-04	9/4/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-04	9/4/2018	Acetone	49	100	7.9	14064	ug/L
MKTF-04	9/4/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	9/4/2018	Benzene	**1100**	100	17	5	ug/L
MKTF-04	9/4/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-04	9/4/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	9/4/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	9/4/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-04	9/4/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-04	9/4/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-04	9/4/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-04	9/4/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-04	9/4/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-04	9/4/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-04	9/4/2018	1,1-Dichloroethane	7.4	10	4	25	ug/L
MKTF-04	9/4/2018	1,1-Dichloroethene	**7.7**	10	1.2	7	ug/L
MKTF-04	9/4/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-04	9/4/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	9/4/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	9/4/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-04	9/4/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-04	9/4/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-04	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-04	9/4/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-04	9/4/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	9/4/2018	1,2,4-Trimethylbenzene	**480**	10	2.5	56	ug/L
MKTF-04	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-04	9/4/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-04	9/4/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-04	9/4/2018	Isopropylbenzene	27	10	2.2	447	ug/L
MKTF-04	9/4/2018	p-Isopropyltoluene	4	10	2.4	NA	ug/L
MKTF-04	9/4/2018	Ethylbenzene	700	10	2.2	700	ug/L
MKTF-04	9/4/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-04	9/4/2018	n-Propylbenzene	68	10	2.4	660	ug/L
MKTF-04	9/4/2018	n-Butylbenzene	11	30	2.5	1000	ug/L
MKTF-04	9/4/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	9/4/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-04	9/4/2018	1,2-Dichloroethane	*4.3*	*10*	4	5	ug/L
MKTF-04	9/4/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-04	9/4/2018	1,3,5-Trimethylbenzene	**93**	10	2.3	60	ug/L
MKTF-04	9/4/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-04	9/4/2018	Toluene	14	10	1.7	1000	ug/L
MKTF-04	9/4/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-04	9/4/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-04	9/4/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-04	9/4/2018	sec-Butylbenzene	4.8	10	2	2000	ug/L
MKTF-04	9/4/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-04	9/4/2018	cis-1,2-Dichloroethene	8	10	3.8	70	ug/L
MKTF-04	9/4/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	9/4/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-04	9/4/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-04	9/4/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-04	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-04	9/4/2018	Xylenes, Total	**860**	15	6.4	620	ug/L
MKTF-04	9/4/2018	MTBE	**1800**	10	3.2	143	ug/L
MKTF-04	9/4/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-04	9/4/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-04	11/20/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-04	11/20/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-04	11/20/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-04	11/20/2018	Benzene	**1100**	20	3.5	5	ug/L
MKTF-04	11/20/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-04	11/20/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-04	11/20/2018	Chloromethane	ND	6	0.64	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/20/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-04	11/20/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-04	11/20/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-04	11/20/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-04	11/20/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-04	11/20/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-04	11/20/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-04	11/20/2018	1,1-Dichloroethane	11	2	0.35	25	ug/L
MKTF-04	11/20/2018	1,1-Dichloroethene	**17**	2	0.24	7	ug/L
MKTF-04	11/20/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-04	11/20/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-04	11/20/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-04	11/20/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-04	11/20/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-04	11/20/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-04	11/20/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-04	11/20/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-04	11/20/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-04	11/20/2018	1,2,4-Trimethylbenzene	**460**	20	5.1	56	ug/L
MKTF-04	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-04	11/20/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-04	11/20/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-04	11/20/2018	Isopropylbenzene	20	2	0.44	447	ug/L
MKTF-04	11/20/2018	p-Isopropyltoluene	3.9	2	0.48	NA	ug/L
MKTF-04	11/20/2018	Ethylbenzene	610	20	4.5	700	ug/L
MKTF-04	11/20/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-04	11/20/2018	n-Propylbenzene	49	2	0.49	660	ug/L
MKTF-04	11/20/2018	n-Butylbenzene	6.1	6	0.5	1000	ug/L
MKTF-04	11/20/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-04	11/20/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-04	11/20/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-04	11/20/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-04	11/20/2018	1,3,5-Trimethylbenzene	**73**	2	0.46	60	ug/L
MKTF-04	11/20/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-04	11/20/2018	Toluene	11	2	0.34	1000	ug/L
MKTF-04	11/20/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-04	11/20/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-04	11/20/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-04	11/20/2018	sec-Butylbenzene	3.7	2	0.4	2000	ug/L
MKTF-04	11/20/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-04	11/20/2018	cis-1,2-Dichloroethene	7.1	2	0.75	70	ug/L
MKTF-04	11/20/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-04	11/20/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-04	11/20/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-04	11/20/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-04	11/20/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-04	11/20/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-04	11/20/2018	Xylenes, Total	**650**	30	13	620	ug/L
MKTF-04	11/20/2018	MTBE	**2200**	20	9.1	143	ug/L
MKTF-04	11/20/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-04	11/20/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-04	5/13/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	5/13/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	5/13/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	5/13/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethane	5.4	5	0.704293	25	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethene	**7.5**	5	1.026941	7	ug/L
MKTF-04	5/13/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	5/13/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	5/13/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	5/13/2019	1,2,4-Trimethylbenzene	**410**	5	1.065995	56	ug/L
MKTF-04	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	5/13/2019	1,2-Dichloroethane	1.6	5	0.973189	5	ug/L
MKTF-04	5/13/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	5/13/2019	1,3,5-Trimethylbenzene	**83**	5	0.943299	60	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	5/13/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	210	20	1.574772	NA	ug/L
MKTF-04	5/13/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	5/13/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	5/13/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	5/13/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	2-Methylnaphthalene	**200**	20	1.72688		ug/L
MKTF-04	5/13/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	5/13/2019	p-Isopropyltoluene	4	5	1.086447	NA	ug/L
MKTF-04	5/13/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	5/13/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	5/13/2019	Benzene	**770**	50	8.331953	5	ug/L
MKTF-04	5/13/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	5/13/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	5/13/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	5/13/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	5/13/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	5/13/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	5/13/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	5/13/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	5/13/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	5/13/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	5/13/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	5/13/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	5/13/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	5/13/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	5/13/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	5/13/2019	Ethylbenzene	620	50	6.61704	700	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	5/13/2019	Isopropylbenzene	26	5	0.957611	447	ug/L
MKTF-04	5/13/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	5/13/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	5/13/2019	Naphthalene	**320**	10	1.375357	30	ug/L
MKTF-04	5/13/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	5/13/2019	n-Propylbenzene	54	5	1.07154	660	ug/L
MKTF-04	5/13/2019	sec-Butylbenzene	4.1	5	1.238656	2000	ug/L
MKTF-04	5/13/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	5/13/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	5/13/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	5/13/2019	Toluene	13	5	1.752181	1000	ug/L
MKTF-04	5/13/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	5/13/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	5/13/2019	Trichloroethene	0.87	5	0.831359	5	ug/L
MKTF-04	5/13/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	5/13/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	5/13/2019	Xylenes, Total	**730**	7.5	2.272075	620	ug/L
MKTF-04	5/13/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	5/13/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	5/13/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	5/13/2019	1,2,4-Trimethylbenzene	**420**	5	1.065995	56	ug/L
MKTF-04	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	5/13/2019	1,2-Dichloroethane	1.6	5	0.973189	5	ug/L
MKTF-04	5/13/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	5/13/2019	1,3,5-Trimethylbenzene	**85**	5	0.943299	60	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	5/13/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	220	20	1.574772	NA	ug/L
MKTF-04	5/13/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	5/13/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	5/13/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	5/13/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**200**	20	1.72688		ug/L
MKTF-04	5/13/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	5/13/2019	p-Isopropyltoluene	4.2	5	1.086447	NA	ug/L
MKTF-04	5/13/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	5/13/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	5/13/2019	Benzene	**810**	50	8.331953	5	ug/L
MKTF-04	5/13/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	5/13/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	5/13/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	5/13/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	5/13/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	5/13/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	5/13/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	5/13/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	5/13/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	5/13/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	5/13/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	5/13/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	5/13/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	5/13/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	5/13/2019	Ethylbenzene	630	50	6.61704	700	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	5/13/2019	Isopropylbenzene	25	5	0.957611	447	ug/L
MKTF-04	5/13/2019	MTBE	**1800**	50	22.804749	143	ug/L
MKTF-04	5/13/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	5/13/2019	Naphthalene	**340**	10	1.375357	30	ug/L
MKTF-04	5/13/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	5/13/2019	n-Propylbenzene	56	5	1.07154	660	ug/L
MKTF-04	5/13/2019	sec-Butylbenzene	4.1	5	1.238656	2000	ug/L
MKTF-04	5/13/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	5/13/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	5/13/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	5/13/2019	Toluene	13	5	1.752181	1000	ug/L
MKTF-04	5/13/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	5/13/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	5/13/2019	Trichloroethene	1	5	0.831359	5	ug/L
MKTF-04	5/13/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	5/13/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	5/13/2019	Xylenes, Total	**750**	7.5	2.272075	620	ug/L
MKTF-04	5/13/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	5/13/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	5/13/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	5/13/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethane	5	5	0.704293	25	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethene	**8.1**	5	1.026941	7	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-04	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-04	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-04	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-04	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethane	13	1	0.140859	25	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethene	**17**	1	0.205388	7	ug/L
MKTF-04	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-04	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-04	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-04	8/21/2019	1,2,4-Trimethylbenzene	**250**	10	2.131991	56	ug/L
MKTF-04	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-04	8/21/2019	1,2-Dichloroethane	1.5	1	0.194638	5	ug/L
MKTF-04	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-04	8/21/2019	1,3,5-Trimethylbenzene	57	1	0.18866	60	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-04	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	150	40	3.149545	NA	ug/L
MKTF-04	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-04	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-04	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-04	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**110**	40	3.45376		ug/L
MKTF-04	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-04	8/21/2019	p-Isopropyltoluene	3.5	1	0.217289	NA	ug/L
MKTF-04	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-04	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-04	8/21/2019	Benzene	**530**	10	1.666391	5	ug/L
MKTF-04	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-04	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-04	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-04	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-04	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-04	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-04	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-04	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-04	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-04	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-04	8/21/2019	cis-1,2-Dichloroethene	9.1	1	0.190115	70	ug/L
MKTF-04	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-04	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-04	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-04	8/21/2019	Ethylbenzene	420	10	1.323408	700	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-04	8/21/2019	Isopropylbenzene	20	1	0.191522	447	ug/L
MKTF-04	8/21/2019	MTBE	**1600**	10	4.56095	143	ug/L
MKTF-04	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-04	8/21/2019	Naphthalene	**220**	20	2.750713	30	ug/L
MKTF-04	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-04	8/21/2019	n-Propylbenzene	49	1	0.214308	660	ug/L
MKTF-04	8/21/2019	sec-Butylbenzene	4	1	0.247731	2000	ug/L
MKTF-04	8/21/2019	Styrene	0.45	1	0.191323	100	ug/L
MKTF-04	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-04	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-04	8/21/2019	Toluene	9.1	1	0.350436	1000	ug/L
MKTF-04	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-04	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-04	8/21/2019	Trichloroethene	0.83	1	0.166272	5	ug/L
MKTF-04	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-04	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-04	8/21/2019	Xylenes, Total	440	15	4.544149	620	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	8/21/2019	Isopropylbenzene	29	5	0.957611	447	ug/L
MKTF-04	8/21/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	8/21/2019	Methylene Chloride	*1.1*	*15*	0.772507	5	ug/L
MKTF-04	8/21/2019	Naphthalene	**360**	10	1.375357	30	ug/L
MKTF-04	8/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	8/21/2019	n-Propylbenzene	68	5	1.07154	660	ug/L
MKTF-04	8/21/2019	sec-Butylbenzene	5.3	5	1.238656	2000	ug/L
MKTF-04	8/21/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	8/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	8/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	8/21/2019	Toluene	12	5	1.752181	1000	ug/L
MKTF-04	8/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	8/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	8/21/2019	Trichloroethene	1.2	5	0.831359	5	ug/L
MKTF-04	8/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	8/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	8/21/2019	Xylenes, Total	**700**	7.5	2.272075	620	ug/L
MKTF-04	8/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	8/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	8/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	8/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethane	6.8	5	0.704293	25	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethene	**10**	5	1.026941	7	ug/L
MKTF-04	8/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	8/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	8/21/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	8/21/2019	1,2,4-Trimethylbenzene	**420**	5	1.065995	56	ug/L
MKTF-04	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	8/21/2019	1,2-Dichloroethane	2.7	5	0.973189	5	ug/L
MKTF-04	8/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	8/21/2019	1,3,5-Trimethylbenzene	**82**	5	0.943299	60	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	8/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	250	20	1.574772	NA	ug/L
MKTF-04	8/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	8/21/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	8/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	8/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**210**	20	1.72688		ug/L
MKTF-04	8/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	8/21/2019	p-Isopropyltoluene	4.5	5	1.086447	NA	ug/L
MKTF-04	8/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	8/21/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	8/21/2019	Benzene	**820**	50	8.331953	5	ug/L
MKTF-04	8/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	8/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	8/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	8/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	8/21/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	8/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	8/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	8/21/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	8/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	8/21/2019	cis-1,2-Dichloroethene	4	5	0.950575	70	ug/L
MKTF-04	8/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	8/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	8/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	8/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	8/21/2019	Ethylbenzene	630	50	6.61704	700	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-04	10/30/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	10/30/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	10/30/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	10/30/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethane	5.2	5	0.704293	25	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethene	6.7	5	1.026941	7	ug/L
MKTF-04	10/30/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	10/30/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trimethylbenzene	**350**	5	1.065995	56	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	10/30/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-04	10/30/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	10/30/2019	1,3,5-Trimethylbenzene	**64**	5	0.943299	60	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	10/30/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	170	20	1.574772	NA	ug/L
MKTF-04	10/30/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	10/30/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	10/30/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	10/30/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**150**	20	1.72688		ug/L
MKTF-04	10/30/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	10/30/2019	p-Isopropyltoluene	3.3	5	1.086447	NA	ug/L
MKTF-04	10/30/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	10/30/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	10/30/2019	Benzene	**790**	50	8.331953	5	ug/L
MKTF-04	10/30/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	10/30/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	10/30/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	10/30/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	10/30/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	10/30/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	10/30/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	10/30/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	10/30/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	10/30/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	10/30/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	10/30/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	10/30/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	10/30/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	10/30/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	10/30/2019	Ethylbenzene	600	50	6.61704	700	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	10/30/2019	Isopropylbenzene	23	5	0.957611	447	ug/L
MKTF-04	10/30/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	10/30/2019	Methylene Chloride	*1.2*	*15*	0.772507	5	ug/L
MKTF-04	10/30/2019	Naphthalene	**300**	10	1.375357	30	ug/L
MKTF-04	10/30/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	10/30/2019	n-Propylbenzene	51	5	1.07154	660	ug/L
MKTF-04	10/30/2019	sec-Butylbenzene	3.7	5	1.238656	2000	ug/L
MKTF-04	10/30/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	10/30/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	10/30/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	10/30/2019	Toluene	11	5	1.752181	1000	ug/L
MKTF-04	10/30/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	10/30/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	10/30/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-04	10/30/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	10/30/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	10/30/2019	Xylenes, Total	**630**	7.5	2.272075	620	ug/L
MKTF-04	10/30/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	10/30/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	10/30/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethane	5.5	5	0.704293	25	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethene	**7.3**	5	1.026941	7	ug/L
MKTF-04	10/30/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	10/30/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trimethylbenzene	**410**	5	1.065995	56	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	10/30/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-04	10/30/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	10/30/2019	1,3,5-Trimethylbenzene	**79**	5	0.943299	60	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	10/30/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	200	20	1.574772	NA	ug/L
MKTF-04	10/30/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	10/30/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	10/30/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	10/30/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**180**	20	1.72688		ug/L
MKTF-04	10/30/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	10/30/2019	p-Isopropyltoluene	3.8	5	1.086447	NA	ug/L
MKTF-04	10/30/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	10/30/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	10/30/2019	Benzene	**930**	50	8.331953	5	ug/L
MKTF-04	10/30/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	10/30/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	10/30/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	10/30/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	10/30/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	10/30/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	10/30/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	10/30/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	10/30/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	10/30/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	10/30/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	10/30/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	10/30/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	10/30/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	10/30/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	10/30/2019	Ethylbenzene	**710**	50	6.61704	700	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	10/30/2019	Isopropylbenzene	28	5	0.957611	447	ug/L
MKTF-04	10/30/2019	MTBE	**1800**	50	22.804749	143	ug/L
MKTF-04	10/30/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	10/30/2019	Naphthalene	**340**	10	1.375357	30	ug/L
MKTF-04	10/30/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	10/30/2019	n-Propylbenzene	61	5	1.07154	660	ug/L
MKTF-04	10/30/2019	sec-Butylbenzene	4.5	5	1.238656	2000	ug/L
MKTF-04	10/30/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	10/30/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	10/30/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	10/30/2019	Toluene	12	5	1.752181	1000	ug/L
MKTF-04	10/30/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	10/30/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	10/30/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-04	10/30/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	10/30/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	10/30/2019	Xylenes, Total	**740**	7.5	2.272075	620	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-04	3/3/2020	Benzene	**800**	50	11	5	ug/L
MKTF-04	3/3/2020	MTBE	**2100**	50	20	143	ug/L
MKTF-04	3/3/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-04	3/3/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-04	3/3/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-04	3/3/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-04	3/3/2020	1,1-Dichloroethane	9.1	5	1.4	25	ug/L
MKTF-04	3/3/2020	1,1-Dichloroethene	**13**	5	0.65	7	ug/L
MKTF-04	3/3/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-04	3/3/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-04	3/3/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-04	3/3/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-04	3/3/2020	1,2,4-Trimethylbenzene	**380**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-04	3/3/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-04	3/3/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-04	3/3/2020	1,2-Dichloroethane	2.3	5	1.1	5	ug/L
MKTF-04	3/3/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-04	3/3/2020	1,3,5-Trimethylbenzene	58	5	0.91	60	ug/L
MKTF-04	3/3/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-04	3/3/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-04	3/3/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-04	3/3/2020	1-Methylnaphthalene	140	20	4.2	NA	ug/L
MKTF-04	3/3/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-04	3/3/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-04	3/3/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-04	3/3/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-04	3/3/2020	2-Methylnaphthalene	**140**	20	3.5		ug/L
MKTF-04	3/3/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-04	3/3/2020	p-Isopropyltoluene	3.3	5	1	NA	ug/L
MKTF-04	3/3/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-04	3/3/2020	Acetone	17	50	12	14064	ug/L
MKTF-04	3/3/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-04	3/3/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-04	3/3/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-04	3/3/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-04	3/3/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-04	3/3/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-04	3/3/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-04	3/3/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-04	3/3/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-04	3/3/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-04	3/3/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-04	3/3/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-04	3/3/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-04	3/3/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-04	3/3/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-04	3/3/2020	Ethylbenzene	470	5	1.1	700	ug/L
MKTF-04	3/3/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-04	3/3/2020	Isopropylbenzene	17	5	0.91	447	ug/L
MKTF-04	3/3/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-04	3/3/2020	n-Butylbenzene	4.3	15	1.3	1000	ug/L
MKTF-04	3/3/2020	n-Propylbenzene	36	5	0.91	660	ug/L
MKTF-04	3/3/2020	Naphthalene	**230**	10	1.4	30	ug/L
MKTF-04	3/3/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
MKTF-04	3/3/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-04	3/3/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-04	3/3/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-04	3/3/2020	Toluene	10	5	1	1000	ug/L
MKTF-04	3/3/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-04	3/3/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-04	3/3/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-04	3/3/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-04	3/3/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	3/3/2020	Xylenes, Total	560	7.5	2.8	620	ug/L
MKTF-04	3/3/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-09	4/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-09	4/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-09	4/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-09	4/14/2014	Benzene	**1100**	50	7.7	5	ug/L
MKTF-09	4/14/2014	1,1,1-Trichloroethane	72	5	0.61	200	ug/L
MKTF-09	4/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-09	4/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-09	4/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-09	4/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-09	4/14/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-09	4/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-09	4/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-09	4/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-09	4/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-09	4/14/2014	1,1-Dichloroethane	24	5	1.4	25	ug/L
MKTF-09	4/14/2014	1,1-Dichloroethene	**46**	5	1.1	7	ug/L
MKTF-09	4/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	4/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-09	4/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-09	4/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-09	4/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-09	4/14/2014	Trichloroethene	**8.9**	5	0.97	5	ug/L
MKTF-09	4/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	4/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-09	4/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-09	4/14/2014	1,2,4-Trimethylbenzene	**74**	5	0.61	56	ug/L
MKTF-09	4/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-09	4/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-09	4/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-09	4/14/2014	Isopropylbenzene	13	5	0.81	447	ug/L
MKTF-09	4/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-09	4/14/2014	Ethylbenzene	140	5	0.64	700	ug/L
MKTF-09	4/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-09	4/14/2014	n-Propylbenzene	26	5	0.7	660	ug/L
MKTF-09	4/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-09	4/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-09	4/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-09	4/14/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-09	4/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-09	4/14/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-09	4/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-09	4/14/2014	Toluene	38	5	0.85	1000	ug/L
MKTF-09	4/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-09	4/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-09	4/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-09	4/14/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-09	4/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-09	4/14/2014	cis-1,2-Dichloroethene	12	5	0.61	70	ug/L
MKTF-09	4/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-09	4/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-09	4/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-09	4/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-09	4/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-09	4/14/2014	Xylenes, Total	75	7.5	1.9	620	ug/L
MKTF-09	4/14/2014	MTBE	**1200**	50	13	143	ug/L
MKTF-09	4/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-09	4/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-09	6/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/5/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	6/5/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	6/5/2014	Benzene	**1300**	100	15	5	ug/L
MKTF-09	6/5/2014	1,1,1-Trichloroethane	65	10	1.2	200	ug/L
MKTF-09	6/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	6/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	6/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	6/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	6/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	6/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	6/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	6/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	6/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	6/5/2014	1,1-Dichloroethane	**26**	10	2.8	25	ug/L
MKTF-09	6/5/2014	1,1-Dichloroethene	**41**	10	2.1	7	ug/L
MKTF-09	6/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	6/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	6/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	6/5/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	6/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-09	6/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	6/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	6/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	6/5/2014	1,2,4-Trimethylbenzene	**83**	10	1.2	56	ug/L
MKTF-09	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	6/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	6/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	6/5/2014	Isopropylbenzene	17	10	1.6	447	ug/L
MKTF-09	6/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	Ethylbenzene	200	10	1.3	700	ug/L
MKTF-09	6/5/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	6/5/2014	n-Propylbenzene	33	10	1.4	660	ug/L
MKTF-09	6/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	6/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	6/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	6/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	6/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	6/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	6/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	6/5/2014	Toluene	52	10	1.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	6/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	6/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	6/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	6/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	6/5/2014	cis-1,2-Dichloroethene	14	10	1.2	70	ug/L
MKTF-09	6/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	6/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	6/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	6/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	6/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	6/5/2014	Xylenes, Total	98	15	3.8	620	ug/L
MKTF-09	6/5/2014	MTBE	**1200**	10	2.5	143	ug/L
MKTF-09	6/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	6/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	9/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	9/18/2014	Benzene	**750**	10	1.5	5	ug/L
MKTF-09	9/18/2014	1,1,1-Trichloroethane	110	10	1.2	200	ug/L
MKTF-09	9/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	9/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	9/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	9/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	9/18/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	9/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	9/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	9/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	9/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	9/18/2014	1,1-Dichloroethane	**28**	10	2.8	25	ug/L
MKTF-09	9/18/2014	1,1-Dichloroethene	**65**	10	2.1	7	ug/L
MKTF-09	9/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	9/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	9/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	9/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	9/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-09	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	9/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	9/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	9/18/2014	1,2,4-Trimethylbenzene	38	10	1.2	56	ug/L
MKTF-09	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	9/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	9/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	9/18/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-09	9/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Ethylbenzene	96	10	1.3	700	ug/L
MKTF-09	9/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	9/18/2014	n-Propylbenzene	14	10	1.4	660	ug/L
MKTF-09	9/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	9/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	9/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	9/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	9/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	9/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	9/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	9/18/2014	Toluene	27	10	1.7	1000	ug/L
MKTF-09	9/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	9/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	9/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	9/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	9/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	9/18/2014	cis-1,2-Dichloroethene	21	10	1.2	70	ug/L
MKTF-09	9/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	9/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	9/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	9/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	9/18/2014	Xylenes, Total	43	15	3.8	620	ug/L
MKTF-09	9/18/2014	MTBE	**760**	10	2.5	143	ug/L
MKTF-09	9/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	9/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/14/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	11/14/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	11/14/2014	Benzene	**810**	10	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	1,1,1-Trichloroethane	96	10	1.2	200	ug/L
MKTF-09	11/14/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	11/14/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	11/14/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	11/14/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	11/14/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	11/14/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	11/14/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	11/14/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	11/14/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	11/14/2014	1,1-Dichloroethane	**35**	10	2.8	25	ug/L
MKTF-09	11/14/2014	1,1-Dichloroethene	**68**	10	2.1	7	ug/L
MKTF-09	11/14/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	11/14/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	11/14/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	11/14/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	11/14/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/14/2014	Trichloroethene	**11**	10	1.9	5	ug/L
MKTF-09	11/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	11/14/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	11/14/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	11/14/2014	1,2,4-Trimethylbenzene	**87**	10	1.2	56	ug/L
MKTF-09	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	11/14/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	11/14/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	11/14/2014	Isopropylbenzene	14	10	1.6	447	ug/L
MKTF-09	11/14/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Ethylbenzene	150	10	1.3	700	ug/L
MKTF-09	11/14/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	11/14/2014	n-Propylbenzene	30	10	1.4	660	ug/L
MKTF-09	11/14/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	11/14/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	11/14/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	11/14/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	11/14/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	11/14/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	11/14/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	11/14/2014	Toluene	33	10	1.7	1000	ug/L
MKTF-09	11/14/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	11/14/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	11/14/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	11/14/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	11/14/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	11/14/2014	cis-1,2-Dichloroethene	24	10	1.2	70	ug/L
MKTF-09	11/14/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	11/14/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	11/14/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	11/14/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	11/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	11/14/2014	Xylenes, Total	110	15	3.8	620	ug/L
MKTF-09	11/14/2014	MTBE	**770**	10	2.5	143	ug/L
MKTF-09	11/14/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	11/14/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	3/16/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	3/16/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	3/16/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	3/16/2015	Benzene	**490**	5	0.33	5	ug/L
MKTF-09	3/16/2015	1,1,1-Trichloroethane	130	5	0.39	200	ug/L
MKTF-09	3/16/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	3/16/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	3/16/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	3/16/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	3/16/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	3/16/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	3/16/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	3/16/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	3/16/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	3/16/2015	1,1-Dichloroethane	**34**	5	2	25	ug/L
MKTF-09	3/16/2015	1,1-Dichloroethene	**74**	5	0.5	7	ug/L
MKTF-09	3/16/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	3/16/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	3/16/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	3/16/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	3/16/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	3/16/2015	Trichloroethene	**9**	5	0.82	5	ug/L
MKTF-09	3/16/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/16/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	3/16/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	3/16/2015	1,2,4-Trimethylbenzene	18	5	0.8	56	ug/L
MKTF-09	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	3/16/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	3/16/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	3/16/2015	Isopropylbenzene	7.4	5	0.76	447	ug/L
MKTF-09	3/16/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	3/16/2015	Ethylbenzene	80	5	0.51	700	ug/L
MKTF-09	3/16/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	3/16/2015	n-Propylbenzene	13	5	0.82	660	ug/L
MKTF-09	3/16/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	3/16/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	3/16/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	3/16/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	3/16/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	3/16/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	3/16/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	3/16/2015	Toluene	13	5	0.54	1000	ug/L
MKTF-09	3/16/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	3/16/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	3/16/2015	Tetrachloroethene	**7.1**	5	0.8	5	ug/L
MKTF-09	3/16/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-09	3/16/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	3/16/2015	cis-1,2-Dichloroethene	36	5	0.4	70	ug/L
MKTF-09	3/16/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	3/16/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	3/16/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	3/16/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	3/16/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	3/16/2015	Xylenes, Total	18	7.5	1.4	620	ug/L
MKTF-09	3/16/2015	MTBE	**500**	5	0.87	143	ug/L
MKTF-09	3/16/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	3/16/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	6/4/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	6/4/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	6/4/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	6/4/2015	Benzene	**890**	50	3.3	5	ug/L
MKTF-09	6/4/2015	1,1,1-Trichloroethane	67	5	0.39	200	ug/L
MKTF-09	6/4/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	6/4/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	6/4/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	6/4/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	6/4/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	6/4/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	6/4/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	6/4/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	6/4/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	6/4/2015	1,1-Dichloroethane	**28**	5	2	25	ug/L
MKTF-09	6/4/2015	1,1-Dichloroethene	**55**	5	0.5	7	ug/L
MKTF-09	6/4/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	6/4/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	6/4/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	6/4/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	6/4/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	6/4/2015	Trichloroethene	**7.6**	5	0.82	5	ug/L
MKTF-09	6/4/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-09	6/4/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	6/4/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	6/4/2015	1,2,4-Trimethylbenzene	33	5	0.8	56	ug/L
MKTF-09	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	6/4/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	6/4/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	6/4/2015	Isopropylbenzene	15	5	0.76	447	ug/L
MKTF-09	6/4/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	6/4/2015	Ethylbenzene	150	5	0.51	700	ug/L
MKTF-09	6/4/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	6/4/2015	n-Propylbenzene	22	5	0.82	660	ug/L
MKTF-09	6/4/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	6/4/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	6/4/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	6/4/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	6/4/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	6/4/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	6/4/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	6/4/2015	Toluene	25	5	0.54	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/4/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	6/4/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	6/4/2015	Tetrachloroethene	**7.8**	5	0.8	5	ug/L
MKTF-09	6/4/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-09	6/4/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	6/4/2015	cis-1,2-Dichloroethene	30	5	0.4	70	ug/L
MKTF-09	6/4/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	6/4/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	6/4/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	6/4/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	6/4/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	6/4/2015	Xylenes, Total	39	7.5	1.4	620	ug/L
MKTF-09	6/4/2015	MTBE	**430**	5	0.87	143	ug/L
MKTF-09	6/4/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	6/4/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	8/18/2015	Benzene	**1200**	50	3.3	5	ug/L
MKTF-09	8/18/2015	1,1,1-Trichloroethane	52	5	0.39	200	ug/L
MKTF-09	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	8/18/2015	1,1-Dichloroethane	**26**	5	2	25	ug/L
MKTF-09	8/18/2015	1,1-Dichloroethene	**36**	5	0.5	7	ug/L
MKTF-09	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	8/18/2015	Trichloroethene	**5.9**	5	0.82	5	ug/L
MKTF-09	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-09	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	8/18/2015	1,2,4-Trimethylbenzene	50	5	0.8	56	ug/L
MKTF-09	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	8/18/2015	Isopropylbenzene	17	5	0.76	447	ug/L
MKTF-09	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	8/18/2015	Ethylbenzene	200	5	0.51	700	ug/L
MKTF-09	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	8/18/2015	n-Propylbenzene	29	5	0.82	660	ug/L
MKTF-09	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	8/18/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	8/18/2015	Toluene	35	5	0.54	1000	ug/L
MKTF-09	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	8/18/2015	Tetrachloroethene	**6.2**	5	0.8	5	ug/L
MKTF-09	8/18/2015	sec-Butylbenzene	5.4	5	1.1	2000	ug/L
MKTF-09	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	8/18/2015	cis-1,2-Dichloroethene	27	5	0.4	70	ug/L
MKTF-09	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	8/18/2015	Xylenes, Total	63	7.5	1.4	620	ug/L
MKTF-09	8/18/2015	MTBE	**600**	5	0.87	143	ug/L
MKTF-09	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-09	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-09	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-09	11/3/2015	Benzene	**1500**	100	6.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/3/2015	1,1,1-Trichloroethane	48	1	0.078	200	ug/L
MKTF-09	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-09	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-09	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-09	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-09	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-09	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-09	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-09	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-09	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-09	11/3/2015	1,1-Dichloroethane	**27**	1	0.4	25	ug/L
MKTF-09	11/3/2015	1,1-Dichloroethene	**33**	1	0.099	7	ug/L
MKTF-09	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-09	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-09	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-09	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-09	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-09	11/3/2015	Trichloroethene	**6.1**	1	0.16	5	ug/L
MKTF-09	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-09	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-09	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-09	11/3/2015	1,2,4-Trimethylbenzene	**73**	1	0.16	56	ug/L
MKTF-09	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-09	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-09	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-09	11/3/2015	Isopropylbenzene	19	1	0.15	447	ug/L
MKTF-09	11/3/2015	p-Isopropyltoluene	3.2	1	0.19	NA	ug/L
MKTF-09	11/3/2015	Ethylbenzene	230	10	1	700	ug/L
MKTF-09	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-09	11/3/2015	n-Propylbenzene	38	1	0.16	660	ug/L
MKTF-09	11/3/2015	n-Butylbenzene	9	3	0.25	1000	ug/L
MKTF-09	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-09	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-09	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-09	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-09	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-09	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-09	11/3/2015	Toluene	36	1	0.11	1000	ug/L
MKTF-09	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-09	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-09	11/3/2015	Tetrachloroethene	**6.7**	1	0.16	5	ug/L
MKTF-09	11/3/2015	sec-Butylbenzene	6.4	1	0.23	2000	ug/L
MKTF-09	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-09	11/3/2015	cis-1,2-Dichloroethene	30	1	0.081	70	ug/L
MKTF-09	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-09	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-09	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-09	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-09	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-09	11/3/2015	Xylenes, Total	70	1.5	0.28	620	ug/L
MKTF-09	11/3/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-09	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-09	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-09	2/29/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	2/29/2016	Acetone	ND	100	8.8	14064	ug/L
MKTF-09	2/29/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	2/29/2016	Benzene	**1600**	100	9.6	5	ug/L
MKTF-09	2/29/2016	1,1,1-Trichloroethane	46	10	0.63	200	ug/L
MKTF-09	2/29/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	2/29/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	2/29/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	2/29/2016	Chloroethane	ND	20	1.5	20857	ug/L
MKTF-09	2/29/2016	Vinyl Chloride	*ND*	*10*	0.63	2	ug/L
MKTF-09	2/29/2016	Methylene Chloride	*ND*	*30*	0.63	5	ug/L
MKTF-09	2/29/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	2/29/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	2/29/2016	Bromodichloromethane	*ND*	*10*	0.98	1.34	ug/L
MKTF-09	2/29/2016	1,1-Dichloroethane	**29**	10	1.1	25	ug/L
MKTF-09	2/29/2016	1,1-Dichloroethene	**36**	10	0.76	7	ug/L
MKTF-09	2/29/2016	Trichlorofluoromethane	ND	10	0.88	1137	ug/L
MKTF-09	2/29/2016	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-09	2/29/2016	1,2-Dichloropropane	*ND*	*10*	0.47	5	ug/L
MKTF-09	2/29/2016	2-Butanone	ND	100	3.2	5565	ug/L
MKTF-09	2/29/2016	1,1,2-Trichloroethane	*ND*	*10*	0.77	5	ug/L
MKTF-09	2/29/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-09	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.1	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/29/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	2/29/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	2/29/2016	1,2,4-Trimethylbenzene	**65**	10	1	56	ug/L
MKTF-09	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.5	0.0033	ug/L
MKTF-09	2/29/2016	1,2,3-Trichloropropane	*ND*	*20*	1.1	0.0084	ug/L
MKTF-09	2/29/2016	tert-Butylbenzene	ND	10	0.96	690	ug/L
MKTF-09	2/29/2016	Isopropylbenzene	18	10	0.98	447	ug/L
MKTF-09	2/29/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-09	2/29/2016	Ethylbenzene	240	10	1.1	700	ug/L
MKTF-09	2/29/2016	Styrene	ND	10	0.95	100	ug/L
MKTF-09	2/29/2016	n-Propylbenzene	32	10	1.3	660	ug/L
MKTF-09	2/29/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-09	2/29/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	2/29/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	2/29/2016	1,2-Dichloroethane	*ND*	*10*	0.53	5	ug/L
MKTF-09	2/29/2016	4-Methyl-2-Pentanone	ND	100	1.5	1243	ug/L
MKTF-09	2/29/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	2/29/2016	Bromobenzene	ND	10	0.8	62	ug/L
MKTF-09	2/29/2016	Toluene	29	10	0.89	1000	ug/L
MKTF-09	2/29/2016	Chlorobenzene	ND	10	1	77.6	ug/L
MKTF-09	2/29/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	2/29/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-09	2/29/2016	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-09	2/29/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	2/29/2016	cis-1,2-Dichloroethene	27	10	1.2	70	ug/L
MKTF-09	2/29/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	2/29/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	2/29/2016	2-Hexanone	*ND*	*100*	3.6	38	ug/L
MKTF-09	2/29/2016	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-09	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	2/29/2016	Xylenes, Total	64	15	3.2	620	ug/L
MKTF-09	2/29/2016	MTBE	**690**	10	2.1	143	ug/L
MKTF-09	2/29/2016	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	2/29/2016	trans-1,3-Dichloropropene	ND	10	0.85	NA	ug/L
MKTF-09	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-09	6/9/2016	Acetone	13	10	4.9	14064	ug/L
MKTF-09	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-09	6/9/2016	Benzene	**1400**	20	1.9	5	ug/L
MKTF-09	6/9/2016	1,1,1-Trichloroethane	40	1	0.091	200	ug/L
MKTF-09	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-09	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-09	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-09	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-09	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-09	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-09	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-09	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-09	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-09	6/9/2016	1,1-Dichloroethane	**32**	1	0.11	25	ug/L
MKTF-09	6/9/2016	1,1-Dichloroethene	**32**	1	0.11	7	ug/L
MKTF-09	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-09	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-09	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-09	6/9/2016	2-Butanone	5.6	10	0.74	5565	ug/L
MKTF-09	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-09	6/9/2016	Trichloroethene	**6.2**	1	0.18	5	ug/L
MKTF-09	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-09	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-09	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-09	6/9/2016	1,2,4-Trimethylbenzene	**58**	1	0.11	56	ug/L
MKTF-09	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-09	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-09	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-09	6/9/2016	Isopropylbenzene	16	1	0.1	447	ug/L
MKTF-09	6/9/2016	p-Isopropyltoluene	2.4	1	0.14	NA	ug/L
MKTF-09	6/9/2016	Ethylbenzene	210	20	2.2	700	ug/L
MKTF-09	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-09	6/9/2016	n-Propylbenzene	29	1	0.13	660	ug/L
MKTF-09	6/9/2016	n-Butylbenzene	6.8	3	0.16	1000	ug/L
MKTF-09	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-09	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-09	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-09	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-09	6/9/2016	1,3,5-Trimethylbenzene	0.75	1	0.12	60	ug/L
MKTF-09	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-09	6/9/2016	Toluene	29	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-09	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-09	6/9/2016	Tetrachloroethene	**6.5**	1	0.15	5	ug/L
MKTF-09	6/9/2016	sec-Butylbenzene	4.4	1	0.12	2000	ug/L
MKTF-09	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-09	6/9/2016	cis-1,2-Dichloroethene	30	1	0.12	70	ug/L
MKTF-09	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-09	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-09	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-09	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-09	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-09	6/9/2016	Xylenes, Total	56	1.5	0.37	620	ug/L
MKTF-09	6/9/2016	MTBE	**530**	20	4.2	143	ug/L
MKTF-09	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-09	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-09	9/11/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/11/2016	Acetone	ND	100	49	14064	ug/L
MKTF-09	9/11/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	9/11/2016	Benzene	**2000**	100	9.6	5	ug/L
MKTF-09	9/11/2016	1,1,1-Trichloroethane	37	10	0.91	200	ug/L
MKTF-09	9/11/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	9/11/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	9/11/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	9/11/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-09	9/11/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-09	9/11/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-09	9/11/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	9/11/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	9/11/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-09	9/11/2016	1,1-Dichloroethane	22	10	1.1	25	ug/L
MKTF-09	9/11/2016	1,1-Dichloroethene	**24**	10	1.1	7	ug/L
MKTF-09	9/11/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-09	9/11/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-09	9/11/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/11/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-09	9/11/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-09	9/11/2016	Trichloroethene	*4.5*	*10*	1.8	5	ug/L
MKTF-09	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-09	9/11/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	9/11/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	9/11/2016	1,2,4-Trimethylbenzene	53	10	1.1	56	ug/L
MKTF-09	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-09	9/11/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-09	9/11/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-09	9/11/2016	Isopropylbenzene	16	10	1	447	ug/L
MKTF-09	9/11/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-09	9/11/2016	Ethylbenzene	220	10	1.1	700	ug/L
MKTF-09	9/11/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-09	9/11/2016	n-Propylbenzene	27	10	1.3	660	ug/L
MKTF-09	9/11/2016	n-Butylbenzene	5	30	1.6	1000	ug/L
MKTF-09	9/11/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	9/11/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	9/11/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	9/11/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-09	9/11/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	9/11/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-09	9/11/2016	Toluene	30	10	1.2	1000	ug/L
MKTF-09	9/11/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	9/11/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	9/11/2016	Tetrachloroethene	*3.8*	*10*	1.5	5	ug/L
MKTF-09	9/11/2016	sec-Butylbenzene	3.1	10	1.2	2000	ug/L
MKTF-09	9/11/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	9/11/2016	cis-1,2-Dichloroethene	32	10	1.2	70	ug/L
MKTF-09	9/11/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	9/11/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	9/11/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-09	9/11/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-09	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	9/11/2016	Xylenes, Total	59	15	3.7	620	ug/L
MKTF-09	9/11/2016	MTBE	**620**	10	2.1	143	ug/L
MKTF-09	9/11/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-09	9/11/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	11/2/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/2/2016	Acetone	ND	100	49	14064	ug/L
MKTF-09	11/2/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	11/2/2016	Benzene	**1600**	100	9.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/2/2016	1,1,1-Trichloroethane	42	10	0.91	200	ug/L
MKTF-09	11/2/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	11/2/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	11/2/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	11/2/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-09	11/2/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-09	11/2/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-09	11/2/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	11/2/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	11/2/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-09	11/2/2016	1,1-Dichloroethane	**28**	10	1.1	25	ug/L
MKTF-09	11/2/2016	1,1-Dichloroethene	**25**	10	1.1	7	ug/L
MKTF-09	11/2/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-09	11/2/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-09	11/2/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/2/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-09	11/2/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-09	11/2/2016	Trichloroethene	*3.6*	*10*	1.8	5	ug/L
MKTF-09	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-09	11/2/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	11/2/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	11/2/2016	1,2,4-Trimethylbenzene	43	10	1.1	56	ug/L
MKTF-09	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-09	11/2/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-09	11/2/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-09	11/2/2016	Isopropylbenzene	14	10	1	447	ug/L
MKTF-09	11/2/2016	p-Isopropyltoluene	2.9	10	1.4	NA	ug/L
MKTF-09	11/2/2016	Ethylbenzene	210	10	1.1	700	ug/L
MKTF-09	11/2/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-09	11/2/2016	n-Propylbenzene	23	10	1.3	660	ug/L
MKTF-09	11/2/2016	n-Butylbenzene	6.5	30	1.6	1000	ug/L
MKTF-09	11/2/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	11/2/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	11/2/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	11/2/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-09	11/2/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	11/2/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-09	11/2/2016	Toluene	26	10	1.2	1000	ug/L
MKTF-09	11/2/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	11/2/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	11/2/2016	Tetrachloroethene	**5.3**	10	1.5	5	ug/L
MKTF-09	11/2/2016	sec-Butylbenzene	5	10	1.2	2000	ug/L
MKTF-09	11/2/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	11/2/2016	cis-1,2-Dichloroethene	27	10	1.2	70	ug/L
MKTF-09	11/2/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	11/2/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	11/2/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-09	11/2/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-09	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	11/2/2016	Xylenes, Total	52	15	3.7	620	ug/L
MKTF-09	11/2/2016	MTBE	**500**	10	2.1	143	ug/L
MKTF-09	11/2/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-09	11/2/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	3/15/2017	Acetone	13	100	8.8	14064	ug/L
MKTF-09	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	3/15/2017	Benzene	**2400**	100	9.6	5	ug/L
MKTF-09	3/15/2017	1,1,1-Trichloroethane	20	10	0.73	200	ug/L
MKTF-09	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	3/15/2017	1,1-Dichloroethane	19	10	1	25	ug/L
MKTF-09	3/15/2017	1,1-Dichloroethene	**21**	10	0.81	7	ug/L
MKTF-09	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-09	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	3/15/2017	Trichloroethene	**5.4**	10	1.8	5	ug/L
MKTF-09	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	3/15/2017	1,2,4-Trimethylbenzene	**78**	10	1	56	ug/L
MKTF-09	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	3/15/2017	Isopropylbenzene	20	10	0.98	447	ug/L
MKTF-09	3/15/2017	p-Isopropyltoluene	3.5	10	1.4	NA	ug/L
MKTF-09	3/15/2017	Ethylbenzene	300	10	1.1	700	ug/L
MKTF-09	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	3/15/2017	n-Propylbenzene	38	10	1.3	660	ug/L
MKTF-09	3/15/2017	n-Butylbenzene	10	30	1.6	1000	ug/L
MKTF-09	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	3/15/2017	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
MKTF-09	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	3/15/2017	Toluene	32	10	0.89	1000	ug/L
MKTF-09	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-09	3/15/2017	Tetrachloroethene	*3.3*	*10*	1.5	5	ug/L
MKTF-09	3/15/2017	sec-Butylbenzene	5.3	10	1	2000	ug/L
MKTF-09	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	3/15/2017	cis-1,2-Dichloroethene	20	10	2	70	ug/L
MKTF-09	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-09	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	3/15/2017	Xylenes, Total	83	15	3.2	620	ug/L
MKTF-09	3/15/2017	MTBE	**610**	10	1.5	143	ug/L
MKTF-09	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-09	6/12/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	6/12/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	6/12/2017	Chloroform	ND	10	4	100	ug/L
MKTF-09	6/12/2017	Benzene	**3000**	100	6.2	5	ug/L
MKTF-09	6/12/2017	1,1,1-Trichloroethane	17	10	0.73	200	ug/L
MKTF-09	6/12/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	6/12/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	6/12/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	6/12/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	6/12/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	6/12/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	6/12/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	6/12/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	6/12/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	6/12/2017	1,1-Dichloroethane	14	10	4	25	ug/L
MKTF-09	6/12/2017	1,1-Dichloroethene	**17**	10	0.81	7	ug/L
MKTF-09	6/12/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	6/12/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	6/12/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	6/12/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	6/12/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/12/2017	Trichloroethene	*2.7*	*10*	1.1	5	ug/L
MKTF-09	6/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	6/12/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	6/12/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	6/12/2017	1,2,4-Trimethylbenzene	**87**	10	1.1	56	ug/L
MKTF-09	6/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	6/12/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	6/12/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	6/12/2017	Isopropylbenzene	19	10	0.51	447	ug/L
MKTF-09	6/12/2017	p-Isopropyltoluene	2.4	10	0.96	NA	ug/L
MKTF-09	6/12/2017	Ethylbenzene	300	10	0.93	700	ug/L
MKTF-09	6/12/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	6/12/2017	n-Propylbenzene	42	10	0.74	660	ug/L
MKTF-09	6/12/2017	n-Butylbenzene	8.6	30	1.3	1000	ug/L
MKTF-09	6/12/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	6/12/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	6/12/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	6/12/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	6/12/2017	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
MKTF-09	6/12/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	6/12/2017	Toluene	32	10	0.64	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	6/12/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	6/12/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-09	6/12/2017	sec-Butylbenzene	4.4	10	1.1	2000	ug/L
MKTF-09	6/12/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	6/12/2017	cis-1,2-Dichloroethene	13	10	2	70	ug/L
MKTF-09	6/12/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	6/12/2017	Pentafluorobenzene	ND	0	0		None
MKTF-09	6/12/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	6/12/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	6/12/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	6/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	6/12/2017	Xylenes, Total	86	15	3.2	620	ug/L
MKTF-09	6/12/2017	MTBE	**680**	10	2.4	143	ug/L
MKTF-09	6/12/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	6/12/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	9/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/28/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	9/28/2017	Chloroform	ND	10	4	100	ug/L
MKTF-09	9/28/2017	Benzene	**3000**	100	6.2	5	ug/L
MKTF-09	9/28/2017	1,1,1-Trichloroethane	13	10	0.73	200	ug/L
MKTF-09	9/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	9/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	9/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	9/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	9/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	9/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	9/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	9/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	9/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	9/28/2017	1,1-Dichloroethane	9.8	10	4	25	ug/L
MKTF-09	9/28/2017	1,1-Dichloroethene	**13**	10	0.81	7	ug/L
MKTF-09	9/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	9/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	9/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	9/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	9/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/28/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	9/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	9/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	9/28/2017	1,2,4-Trimethylbenzene	**95**	10	1.1	56	ug/L
MKTF-09	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	9/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	9/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	9/28/2017	Isopropylbenzene	21	10	0.51	447	ug/L
MKTF-09	9/28/2017	p-Isopropyltoluene	2.5	10	0.96	NA	ug/L
MKTF-09	9/28/2017	Ethylbenzene	300	10	0.93	700	ug/L
MKTF-09	9/28/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	9/28/2017	n-Propylbenzene	43	10	0.74	660	ug/L
MKTF-09	9/28/2017	n-Butylbenzene	8.4	30	1.3	1000	ug/L
MKTF-09	9/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	9/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	9/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	9/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	9/28/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-09	9/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	9/28/2017	Toluene	30	10	0.64	1000	ug/L
MKTF-09	9/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	9/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	9/28/2017	Tetrachloroethene	*1.9*	*10*	1.3	5	ug/L
MKTF-09	9/28/2017	sec-Butylbenzene	4	10	1.1	2000	ug/L
MKTF-09	9/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	9/28/2017	cis-1,2-Dichloroethene	9.6	10	2	70	ug/L
MKTF-09	9/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	9/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	9/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	9/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	9/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	9/28/2017	Xylenes, Total	97	15	3.2	620	ug/L
MKTF-09	9/28/2017	MTBE	**530**	10	2.4	143	ug/L
MKTF-09	9/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	9/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	11/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/28/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	11/28/2017	Chloroform	ND	10	4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2017	Benzene	**3200**	100	6.2	5	ug/L
MKTF-09	11/28/2017	1,1,1-Trichloroethane	29	10	0.73	200	ug/L
MKTF-09	11/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	11/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	11/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	11/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	11/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	11/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	11/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	11/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	11/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	11/28/2017	1,1-Dichloroethane	19	10	4	25	ug/L
MKTF-09	11/28/2017	1,1-Dichloroethene	**30**	10	0.81	7	ug/L
MKTF-09	11/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	11/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	11/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	11/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	11/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/28/2017	Trichloroethene	*4.4*	*10*	1.1	5	ug/L
MKTF-09	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	11/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	11/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	11/28/2017	1,2,4-Trimethylbenzene	**93**	10	1.1	56	ug/L
MKTF-09	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	11/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	11/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	11/28/2017	Isopropylbenzene	17	10	0.51	447	ug/L
MKTF-09	11/28/2017	p-Isopropyltoluene	4.3	10	0.96	NA	ug/L
MKTF-09	11/28/2017	Ethylbenzene	260	10	0.93	700	ug/L
MKTF-09	11/28/2017	Styrene	2.2	10	1.6	100	ug/L
MKTF-09	11/28/2017	n-Propylbenzene	34	10	0.74	660	ug/L
MKTF-09	11/28/2017	n-Butylbenzene	9.5	30	1.3	1000	ug/L
MKTF-09	11/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	11/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	11/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	11/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	11/28/2017	1,3,5-Trimethylbenzene	2.8	10	0.87	60	ug/L
MKTF-09	11/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	11/28/2017	Toluene	27	10	0.64	1000	ug/L
MKTF-09	11/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	11/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	11/28/2017	Tetrachloroethene	*2.6*	*10*	1.3	5	ug/L
MKTF-09	11/28/2017	sec-Butylbenzene	5.8	10	1.1	2000	ug/L
MKTF-09	11/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	11/28/2017	cis-1,2-Dichloroethene	17	10	2	70	ug/L
MKTF-09	11/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	11/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	11/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	11/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	11/28/2017	Xylenes, Total	86	15	3.2	620	ug/L
MKTF-09	11/28/2017	MTBE	**510**	10	2.4	143	ug/L
MKTF-09	11/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	11/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	2/14/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	2/14/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	2/14/2018	Chloroform	ND	10	4	100	ug/L
MKTF-09	2/14/2018	Benzene	**2700**	100	6.2	5	ug/L
MKTF-09	2/14/2018	1,1,1-Trichloroethane	31	10	0.73	200	ug/L
MKTF-09	2/14/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	2/14/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	2/14/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	2/14/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	2/14/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	2/14/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	2/14/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	2/14/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	2/14/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	2/14/2018	1,1-Dichloroethane	15	10	4	25	ug/L
MKTF-09	2/14/2018	1,1-Dichloroethene	**28**	10	0.81	7	ug/L
MKTF-09	2/14/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	2/14/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	2/14/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	2/14/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	2/14/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	2/14/2018	Trichloroethene	*2.9*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	2/14/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	2/14/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	2/14/2018	1,2,4-Trimethylbenzene	**86**	10	1.1	56	ug/L
MKTF-09	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	2/14/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	2/14/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	2/14/2018	Isopropylbenzene	17	10	0.51	447	ug/L
MKTF-09	2/14/2018	p-Isopropyltoluene	2.4	10	0.96	NA	ug/L
MKTF-09	2/14/2018	Ethylbenzene	250	10	0.93	700	ug/L
MKTF-09	2/14/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-09	2/14/2018	n-Propylbenzene	31	10	0.74	660	ug/L
MKTF-09	2/14/2018	n-Butylbenzene	7.5	30	1.3	1000	ug/L
MKTF-09	2/14/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	2/14/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	2/14/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	2/14/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	2/14/2018	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
MKTF-09	2/14/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	2/14/2018	Toluene	24	10	0.64	1000	ug/L
MKTF-09	2/14/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	2/14/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	2/14/2018	Tetrachloroethene	*2*	*10*	1.3	5	ug/L
MKTF-09	2/14/2018	sec-Butylbenzene	4.3	10	1.1	2000	ug/L
MKTF-09	2/14/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	2/14/2018	cis-1,2-Dichloroethene	26	10	2	70	ug/L
MKTF-09	2/14/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	2/14/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	2/14/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	2/14/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	2/14/2018	Xylenes, Total	84	15	3.2	620	ug/L
MKTF-09	2/14/2018	MTBE	**480**	10	2.4	143	ug/L
MKTF-09	2/14/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	2/14/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	5/2/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	5/2/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	5/2/2018	Chloroform	ND	10	4	100	ug/L
MKTF-09	5/2/2018	Benzene	**2800**	100	6.2	5	ug/L
MKTF-09	5/2/2018	1,1,1-Trichloroethane	33	10	0.73	200	ug/L
MKTF-09	5/2/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	5/2/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	5/2/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	5/2/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	5/2/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	5/2/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	5/2/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	5/2/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	5/2/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	5/2/2018	1,1-Dichloroethane	**26**	10	4	25	ug/L
MKTF-09	5/2/2018	1,1-Dichloroethene	**36**	10	0.81	7	ug/L
MKTF-09	5/2/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	5/2/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	5/2/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	5/2/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	5/2/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	5/2/2018	Trichloroethene	*3.2*	*10*	1.1	5	ug/L
MKTF-09	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	5/2/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	5/2/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	5/2/2018	1,2,4-Trimethylbenzene	**95**	10	1.1	56	ug/L
MKTF-09	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	5/2/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	5/2/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	5/2/2018	Isopropylbenzene	19	10	0.51	447	ug/L
MKTF-09	5/2/2018	p-Isopropyltoluene	3.1	10	0.96	NA	ug/L
MKTF-09	5/2/2018	Ethylbenzene	280	10	0.93	700	ug/L
MKTF-09	5/2/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-09	5/2/2018	n-Propylbenzene	37	10	0.74	660	ug/L
MKTF-09	5/2/2018	n-Butylbenzene	8.7	30	1.3	1000	ug/L
MKTF-09	5/2/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	5/2/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	5/2/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	5/2/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	5/2/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-09	5/2/2018	Bromobenzene	ND	10	1.4	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/2/2018	Toluene	25	10	0.64	1000	ug/L
MKTF-09	5/2/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	5/2/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	5/2/2018	Tetrachloroethene	*2.5*	*10*	1.3	5	ug/L
MKTF-09	5/2/2018	sec-Butylbenzene	5	10	1.1	2000	ug/L
MKTF-09	5/2/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	5/2/2018	cis-1,2-Dichloroethene	23	10	2	70	ug/L
MKTF-09	5/2/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	5/2/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	5/2/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	5/2/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	5/2/2018	Xylenes, Total	98	15	3.2	620	ug/L
MKTF-09	5/2/2018	MTBE	**490**	10	2.4	143	ug/L
MKTF-09	5/2/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	5/2/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	9/4/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-09	9/4/2018	Acetone	ND	200	16	14064	ug/L
MKTF-09	9/4/2018	Chloroform	ND	20	8	100	ug/L
MKTF-09	9/4/2018	Benzene	**2700**	200	35	5	ug/L
MKTF-09	9/4/2018	1,1,1-Trichloroethane	28	20	3.1	200	ug/L
MKTF-09	9/4/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-09	9/4/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-09	9/4/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-09	9/4/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-09	9/4/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-09	9/4/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-09	9/4/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-09	9/4/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-09	9/4/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-09	9/4/2018	1,1-Dichloroethane	19	20	8	25	ug/L
MKTF-09	9/4/2018	1,1-Dichloroethene	**28**	20	2.4	7	ug/L
MKTF-09	9/4/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-09	9/4/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-09	9/4/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-09	9/4/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-09	9/4/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-09	9/4/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-09	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-09	9/4/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-09	9/4/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-09	9/4/2018	1,2,4-Trimethylbenzene	**99**	20	5.1	56	ug/L
MKTF-09	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-09	9/4/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-09	9/4/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-09	9/4/2018	Isopropylbenzene	17	20	4.4	447	ug/L
MKTF-09	9/4/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-09	9/4/2018	Ethylbenzene	250	20	4.5	700	ug/L
MKTF-09	9/4/2018	Styrene	ND	20	5	100	ug/L
MKTF-09	9/4/2018	n-Propylbenzene	39	20	4.9	660	ug/L
MKTF-09	9/4/2018	n-Butylbenzene	6.7	60	5	1000	ug/L
MKTF-09	9/4/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-09	9/4/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-09	9/4/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-09	9/4/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-09	9/4/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-09	9/4/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-09	9/4/2018	Toluene	19	20	3.4	1000	ug/L
MKTF-09	9/4/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-09	9/4/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-09	9/4/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-09	9/4/2018	sec-Butylbenzene	4.3	20	4	2000	ug/L
MKTF-09	9/4/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-09	9/4/2018	cis-1,2-Dichloroethene	21	20	7.5	70	ug/L
MKTF-09	9/4/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-09	9/4/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-09	9/4/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-09	9/4/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-09	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-09	9/4/2018	Xylenes, Total	84	30	13	620	ug/L
MKTF-09	9/4/2018	MTBE	**430**	20	6.4	143	ug/L
MKTF-09	9/4/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-09	9/4/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-09	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-09	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-09	11/28/2018	Chloroform	ND	20	4.7	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2018	Benzene	**3300**	200	35	5	ug/L
MKTF-09	11/28/2018	1,1,1-Trichloroethane	31	20	3.3	200	ug/L
MKTF-09	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-09	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-09	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-09	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-09	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-09	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-09	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-09	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-09	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-09	11/28/2018	1,1-Dichloroethane	22	20	3.5	25	ug/L
MKTF-09	11/28/2018	1,1-Dichloroethene	**34**	20	2.4	7	ug/L
MKTF-09	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-09	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-09	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-09	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-09	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-09	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-09	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-09	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-09	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-09	11/28/2018	1,2,4-Trimethylbenzene	**110**	20	5.1	56	ug/L
MKTF-09	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-09	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-09	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-09	11/28/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-09	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-09	11/28/2018	Ethylbenzene	190	20	4.5	700	ug/L
MKTF-09	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-09	11/28/2018	n-Propylbenzene	22	20	4.9	660	ug/L
MKTF-09	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-09	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-09	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-09	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-09	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-09	11/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-09	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-09	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-09	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-09	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-09	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-09	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-09	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-09	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-09	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-09	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-09	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-09	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-09	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-09	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-09	11/28/2018	Xylenes, Total	73	30	13	620	ug/L
MKTF-09	11/28/2018	MTBE	**560**	20	9.1	143	ug/L
MKTF-09	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-09	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-09	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-09	5/13/2019	1,1,1-Trichloroethane	5.9	10	1.729216	200	ug/L
MKTF-09	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-09	5/13/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-09	5/13/2019	1,1-Dichloroethane	6.8	10	1.408586	25	ug/L
MKTF-09	5/13/2019	1,1-Dichloroethene	*6.3*	*10*	2.053882	7	ug/L
MKTF-09	5/13/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-09	5/13/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-09	5/13/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-09	5/13/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-09	5/13/2019	1,2,4-Trimethylbenzene	**120**	10	2.131991	56	ug/L
MKTF-09	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-09	5/13/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-09	5/13/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-09	5/13/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-09	5/13/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-09	5/13/2019	1,3,5-Trimethylbenzene	2.1	10	1.886598	60	ug/L
MKTF-09	5/13/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-09	5/13/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-09	5/13/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-09	5/13/2019	1-Methylnaphthalene	120	40	3.149545	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/13/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-09	5/13/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-09	5/13/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-09	5/13/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-09	5/13/2019	2-Methylnaphthalene	**16**	40	3.45376		ug/L
MKTF-09	5/13/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-09	5/13/2019	p-Isopropyltoluene	2.4	10	2.172894	NA	ug/L
MKTF-09	5/13/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-09	5/13/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-09	5/13/2019	Benzene	**3200**	100	16.663906	5	ug/L
MKTF-09	5/13/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-09	5/13/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-09	5/13/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-09	5/13/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-09	5/13/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-09	5/13/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-09	5/13/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-09	5/13/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-09	5/13/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-09	5/13/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-09	5/13/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-09	5/13/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-09	5/13/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-09	5/13/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-09	5/13/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-09	5/13/2019	Ethylbenzene	280	10	1.323408	700	ug/L
MKTF-09	5/13/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-09	5/13/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-09	5/13/2019	MTBE	**310**	10	4.56095	143	ug/L
MKTF-09	5/13/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-09	5/13/2019	Naphthalene	**82**	20	2.750713	30	ug/L
MKTF-09	5/13/2019	n-Butylbenzene	8.1	30	2.275695	1000	ug/L
MKTF-09	5/13/2019	n-Propylbenzene	47	10	2.14308	660	ug/L
MKTF-09	5/13/2019	sec-Butylbenzene	4.7	10	2.477313	2000	ug/L
MKTF-09	5/13/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-09	5/13/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-09	5/13/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-09	5/13/2019	Toluene	25	10	3.504362	1000	ug/L
MKTF-09	5/13/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-09	5/13/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-09	5/13/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-09	5/13/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-09	5/13/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-09	5/13/2019	Xylenes, Total	95	15	4.544149	620	ug/L
MKTF-09	8/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-09	8/28/2019	1,1,1-Trichloroethane	11	20	3.458431	200	ug/L
MKTF-09	8/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-09	8/28/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-09	8/28/2019	1,1-Dichloroethane	14	20	2.817172	25	ug/L
MKTF-09	8/28/2019	1,1-Dichloroethene	**17**	20	4.107764	7	ug/L
MKTF-09	8/28/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-09	8/28/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-09	8/28/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-09	8/28/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-09	8/28/2019	1,2,4-Trimethylbenzene	**110**	20	4.263982	56	ug/L
MKTF-09	8/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-09	8/28/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-09	8/28/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-09	8/28/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-09	8/28/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-09	8/28/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-09	8/28/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-09	8/28/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-09	8/28/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-09	8/28/2019	1-Methylnaphthalene	78	80	6.29909	NA	ug/L
MKTF-09	8/28/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-09	8/28/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-09	8/28/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-09	8/28/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-09	8/28/2019	2-Methylnaphthalene	**26**	80	6.90752		ug/L
MKTF-09	8/28/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-09	8/28/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-09	8/28/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-09	8/28/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-09	8/28/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-09	8/28/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-09	8/28/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-09	8/28/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-09	8/28/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-09	8/28/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-09	8/28/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-09	8/28/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-09	8/28/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-09	8/28/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-09	8/28/2019	cis-1,2-Dichloroethene	12	20	3.802301	70	ug/L
MKTF-09	8/28/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-09	8/28/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-09	8/28/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-09	8/28/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-09	8/28/2019	Ethylbenzene	270	20	2.646816	700	ug/L
MKTF-09	8/28/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-09	8/28/2019	Isopropylbenzene	22	20	3.830445	447	ug/L
MKTF-09	8/28/2019	MTBE	**420**	20	9.1219	143	ug/L
MKTF-09	8/28/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-09	8/28/2019	Naphthalene	**54**	40	5.501427	30	ug/L
MKTF-09	8/28/2019	n-Butylbenzene	25	60	4.551391	1000	ug/L
MKTF-09	8/28/2019	n-Propylbenzene	46	20	4.28616	660	ug/L
MKTF-09	8/28/2019	sec-Butylbenzene	8.4	20	4.954626	2000	ug/L
MKTF-09	8/28/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-09	8/28/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-09	8/28/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-09	8/28/2019	Toluene	21	20	7.008724	1000	ug/L
MKTF-09	8/28/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-09	8/28/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-09	8/28/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-09	8/28/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-09	8/28/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-09	8/28/2019	Xylenes, Total	98	30	9.088299	620	ug/L
MKTF-09	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-09	11/18/2019	1,1,1-Trichloroethane	14	10	1.729216	200	ug/L
MKTF-09	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-09	11/18/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-09	11/18/2019	1,1-Dichloroethane	11	10	1.408586	25	ug/L
MKTF-09	11/18/2019	1,1-Dichloroethene	**15**	10	2.053882	7	ug/L
MKTF-09	11/18/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-09	11/18/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-09	11/18/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-09	11/18/2019	1,2,4-Trimethylbenzene	**88**	10	2.131991	56	ug/L
MKTF-09	11/18/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-09	11/18/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-09	11/18/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-09	11/18/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-09	11/18/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
MKTF-09	11/18/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-09	11/18/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-09	11/18/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-09	11/18/2019	1-Methylnaphthalene	74	40	3.149545	NA	ug/L
MKTF-09	11/18/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-09	11/18/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-09	11/18/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-09	11/18/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-09	11/18/2019	2-Methylnaphthalene	**12**	40	3.45376		ug/L
MKTF-09	11/18/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-09	11/18/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-09	11/18/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-09	11/18/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-09	11/18/2019	Benzene	**3700**	100	16.663906	5	ug/L
MKTF-09	11/18/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-09	11/18/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-09	11/18/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-09	11/18/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-09	11/18/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-09	11/18/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-09	11/18/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-09	11/18/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-09	11/18/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-09	11/18/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-09	11/18/2019	cis-1,2-Dichloroethene	11	10	1.901151	70	ug/L
MKTF-09	11/18/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-09	11/18/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-09	11/18/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/18/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-09	11/18/2019	Ethylbenzene	230	10	1.323408	700	ug/L
MKTF-09	11/18/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-09	11/18/2019	Isopropylbenzene	15	10	1.915223	447	ug/L
MKTF-09	11/18/2019	MTBE	**450**	10	4.56095	143	ug/L
MKTF-09	11/18/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-09	11/18/2019	Naphthalene	**52**	20	2.750713	30	ug/L
MKTF-09	11/18/2019	n-Butylbenzene	5.3	30	2.275695	1000	ug/L
MKTF-09	11/18/2019	n-Propylbenzene	34	10	2.14308	660	ug/L
MKTF-09	11/18/2019	sec-Butylbenzene	3.6	10	2.477313	2000	ug/L
MKTF-09	11/18/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-09	11/18/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-09	11/18/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-09	11/18/2019	Toluene	14	10	3.504362	1000	ug/L
MKTF-09	11/18/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-09	11/18/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-09	11/18/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-09	11/18/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-09	11/18/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-09	11/18/2019	Xylenes, Total	69	15	4.544149	620	ug/L
MKTF-09	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-09	3/3/2020	1,1,1-Trichloroethane	26	1	0.3	200	ug/L
MKTF-09	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-09	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethane	17	1	0.27	25	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethene	**35**	1	0.13	7	ug/L
MKTF-09	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-09	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-09	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-09	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-09	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	0.52	1	0.15	600	ug/L
MKTF-09	3/3/2020	1,2-Dichloroethane	0.45	1	0.22	5	ug/L
MKTF-09	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-09	3/3/2020	1,3,5-Trimethylbenzene	2.1	1	0.18	60	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-09	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	76	4	0.84	NA	ug/L
MKTF-09	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-09	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-09	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-09	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	**10**	4	0.69		ug/L
MKTF-09	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-09	3/3/2020	p-Isopropyltoluene	2	1	0.2	NA	ug/L
MKTF-09	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-09	3/3/2020	Acetone	11	10	2.3	14064	ug/L
MKTF-09	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-09	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-09	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-09	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-09	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-09	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-09	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-09	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-09	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-09	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-09	3/3/2020	cis-1,2-Dichloroethene	19	1	0.39	70	ug/L
MKTF-09	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-09	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-09	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-09	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-09	3/3/2020	Isopropylbenzene	12	1	0.18	447	ug/L
MKTF-09	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-09	3/3/2020	n-Butylbenzene	6.3	3	0.25	1000	ug/L
MKTF-09	3/3/2020	n-Propylbenzene	26	1	0.18	660	ug/L
MKTF-09	3/3/2020	Naphthalene	**41**	2	0.28	30	ug/L
MKTF-09	3/3/2020	sec-Butylbenzene	3.6	1	0.61	2000	ug/L
MKTF-09	3/3/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-09	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-09	3/3/2020	Tetrachloroethene	1.2	1	0.36	5	ug/L
MKTF-09	3/3/2020	Toluene	12	1	0.2	1000	ug/L
MKTF-09	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-09	3/3/2020	Trichloroethene	2.2	1	0.2	5	ug/L
MKTF-09	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-09	3/3/2020	Vinyl Chloride	0.42	1	0.2	2	ug/L
MKTF-09	3/3/2020	Xylenes, Total	59	1.5	0.55	620	ug/L
MKTF-09	3/3/2020	Benzene	**3200**	100	23	5	ug/L
MKTF-09	3/3/2020	1,2,4-Trimethylbenzene	**96**	10	1.2	56	ug/L
MKTF-09	3/3/2020	Ethylbenzene	200	10	2.1	700	ug/L
MKTF-09	3/3/2020	MTBE	**480**	10	3.9	143	ug/L
MKTF-09	3/3/2020	Benzene	**3300**	200	45	5	ug/L
MKTF-09	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-09	3/3/2020	1,1,1-Trichloroethane	28	20	6	200	ug/L
MKTF-09	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-09	3/3/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethane	19	20	5.5	25	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethene	**28**	20	2.6	7	ug/L
MKTF-09	3/3/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-09	3/3/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-09	3/3/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-09	3/3/2020	1,2,4-Trimethylbenzene	**96**	20	2.4	56	ug/L
MKTF-09	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-09	3/3/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-09	3/3/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-09	3/3/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-09	3/3/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-09	3/3/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	67	80	17	NA	ug/L
MKTF-09	3/3/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-09	3/3/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-09	3/3/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-09	3/3/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-09	3/3/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-09	3/3/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-09	3/3/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-09	3/3/2020	Acetone	ND	200	47	14064	ug/L
MKTF-09	3/3/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-09	3/3/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-09	3/3/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-09	3/3/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-09	3/3/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-09	3/3/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-09	3/3/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-09	3/3/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-09	3/3/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-09	3/3/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-09	3/3/2020	cis-1,2-Dichloroethene	21	20	7.8	70	ug/L
MKTF-09	3/3/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-09	3/3/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-09	3/3/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-09	3/3/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-09	3/3/2020	Ethylbenzene	190	20	4.3	700	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-09	3/3/2020	Isopropylbenzene	11	20	3.7	447	ug/L
MKTF-09	3/3/2020	MTBE	**530**	20	7.9	143	ug/L
MKTF-09	3/3/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-09	3/3/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-09	3/3/2020	n-Propylbenzene	25	20	3.6	660	ug/L
MKTF-09	3/3/2020	Naphthalene	**40**	40	5.6	30	ug/L
MKTF-09	3/3/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-09	3/3/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-09	3/3/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-09	3/3/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-09	3/3/2020	Toluene	9.9	20	4	1000	ug/L
MKTF-09	3/3/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-09	3/3/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-09	3/3/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-09	3/3/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-09	3/3/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-09	3/3/2020	Xylenes, Total	55	30	11	620	ug/L
MKTF-10	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-10	4/11/2014	Acetone	1200	500	250	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-10	4/11/2014	Benzene	**14000**	500	77	5	ug/L
MKTF-10	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-10	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-10	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-10	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-10	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-10	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-10	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-10	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-10	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-10	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-10	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-10	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-10	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-10	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-10	4/11/2014	2-Butanone	1000	500	71	5565	ug/L
MKTF-10	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-10	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-10	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-10	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-10	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-10	4/11/2014	1,2,4-Trimethylbenzene	**960**	50	6.1	56	ug/L
MKTF-10	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-10	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-10	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-10	4/11/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-10	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-10	4/11/2014	Ethylbenzene	**1500**	50	6.4	700	ug/L
MKTF-10	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-10	4/11/2014	n-Propylbenzene	130	50	7	660	ug/L
MKTF-10	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-10	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-10	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-10	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-10	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-10	4/11/2014	1,3,5-Trimethylbenzene	**210**	50	6.6	60	ug/L
MKTF-10	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-10	4/11/2014	Toluene	**19000**	500	85	1000	ug/L
MKTF-10	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-10	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-10	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-10	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-10	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-10	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-10	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-10	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-10	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-10	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-10	4/11/2014	Xylenes, Total	**6900**	75	19	620	ug/L
MKTF-10	4/11/2014	MTBE	ND	50	13	143	ug/L
MKTF-10	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-10	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-10	6/6/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-10	6/6/2014	Acetone	210	100	49	14064	ug/L
MKTF-10	6/6/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-10	6/6/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-10	6/6/2014	1,1,1-Trichloroethane	15	10	1.2	200	ug/L
MKTF-10	6/6/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-10	6/6/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-10	6/6/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-10	6/6/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-10	6/6/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-10	6/6/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-10	6/6/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-10	6/6/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-10	6/6/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-10	6/6/2014	1,1-Dichloroethane	**51**	10	2.8	25	ug/L
MKTF-10	6/6/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-10	6/6/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-10	6/6/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-10	6/6/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-10	6/6/2014	2-Butanone	1800	100	14	5565	ug/L
MKTF-10	6/6/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/6/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-10	6/6/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-10	6/6/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-10	6/6/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-10	6/6/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-10	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-10	6/6/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-10	6/6/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-10	6/6/2014	Isopropylbenzene	19	10	1.6	447	ug/L
MKTF-10	6/6/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-10	6/6/2014	Ethylbenzene	**740**	10	1.3	700	ug/L
MKTF-10	6/6/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-10	6/6/2014	n-Propylbenzene	38	10	1.4	660	ug/L
MKTF-10	6/6/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-10	6/6/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-10	6/6/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-10	6/6/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-10	6/6/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-10	6/6/2014	1,3,5-Trimethylbenzene	**65**	10	1.3	60	ug/L
MKTF-10	6/6/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-10	6/6/2014	Toluene	**14000**	200	34	1000	ug/L
MKTF-10	6/6/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-10	6/6/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-10	6/6/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-10	6/6/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-10	6/6/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-10	6/6/2014	cis-1,2-Dichloroethene	33	10	1.2	70	ug/L
MKTF-10	6/6/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-10	6/6/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-10	6/6/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-10	6/6/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-10	6/6/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-10	6/6/2014	Xylenes, Total	**3400**	300	75	620	ug/L
MKTF-10	6/6/2014	MTBE	19	10	2.5	143	ug/L
MKTF-10	6/6/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-10	6/6/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-10	9/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-10	9/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-10	9/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-10	9/18/2014	Benzene	**11000**	500	77	5	ug/L
MKTF-10	9/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-10	9/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-10	9/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-10	9/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-10	9/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-10	9/18/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-10	9/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-10	9/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-10	9/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-10	9/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-10	9/18/2014	1,1-Dichloroethane	**57**	50	14	25	ug/L
MKTF-10	9/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-10	9/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	9/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-10	9/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-10	9/18/2014	2-Butanone	2800	500	71	5565	ug/L
MKTF-10	9/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-10	9/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-10	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-10	9/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-10	9/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-10	9/18/2014	1,2,4-Trimethylbenzene	**500**	50	6.1	56	ug/L
MKTF-10	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-10	9/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-10	9/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-10	9/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-10	9/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-10	9/18/2014	Ethylbenzene	**930**	50	6.4	700	ug/L
MKTF-10	9/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-10	9/18/2014	n-Propylbenzene	68	50	7	660	ug/L
MKTF-10	9/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-10	9/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-10	9/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-10	9/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-10	9/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-10	9/18/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-10	9/18/2014	Toluene	**15000**	500	85	1000	ug/L
MKTF-10	9/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-10	9/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-10	9/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-10	9/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-10	9/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-10	9/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-10	9/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-10	9/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	9/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-10	9/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-10	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-10	9/18/2014	Xylenes, Total	**4000**	75	19	620	ug/L
MKTF-10	9/18/2014	MTBE	ND	50	13	143	ug/L
MKTF-10	9/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-10	9/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-10	11/14/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-10	11/14/2014	Acetone	ND	200	99	14064	ug/L
MKTF-10	11/14/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-10	11/14/2014	Benzene	**11000**	200	31	5	ug/L
MKTF-10	11/14/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-10	11/14/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-10	11/14/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-10	11/14/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-10	11/14/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-10	11/14/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-10	11/14/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-10	11/14/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-10	11/14/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-10	11/14/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-10	11/14/2014	1,1-Dichloroethane	**39**	20	5.7	25	ug/L
MKTF-10	11/14/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-10	11/14/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-10	11/14/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-10	11/14/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-10	11/14/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-10	11/14/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-10	11/14/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-10	11/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-10	11/14/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-10	11/14/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-10	11/14/2014	1,2,4-Trimethylbenzene	**1500**	200	25	56	ug/L
MKTF-10	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-10	11/14/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-10	11/14/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-10	11/14/2014	Isopropylbenzene	120	20	3.2	447	ug/L
MKTF-10	11/14/2014	p-Isopropyltoluene	34	20	3.5	NA	ug/L
MKTF-10	11/14/2014	Ethylbenzene	**1700**	200	25	700	ug/L
MKTF-10	11/14/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-10	11/14/2014	n-Propylbenzene	360	20	2.8	660	ug/L
MKTF-10	11/14/2014	n-Butylbenzene	84	60	4.3	1000	ug/L
MKTF-10	11/14/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-10	11/14/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-10	11/14/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-10	11/14/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-10	11/14/2014	1,3,5-Trimethylbenzene	**570**	20	2.6	60	ug/L
MKTF-10	11/14/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-10	11/14/2014	Toluene	**20000**	500	85	1000	ug/L
MKTF-10	11/14/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-10	11/14/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-10	11/14/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-10	11/14/2014	sec-Butylbenzene	40	20	3.1	2000	ug/L
MKTF-10	11/14/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-10	11/14/2014	cis-1,2-Dichloroethene	66	20	2.4	70	ug/L
MKTF-10	11/14/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-10	11/14/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-10	11/14/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-10	11/14/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-10	11/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-10	11/14/2014	Xylenes, Total	**7600**	300	75	620	ug/L
MKTF-10	11/14/2014	MTBE	ND	20	5	143	ug/L
MKTF-10	11/14/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-10	11/14/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-10	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	3/16/2015	Acetone	ND	500	47	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	3/16/2015	Benzene	**11000**	500	33	5	ug/L
MKTF-10	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	3/16/2015	1,1-Dichloroethane	**78**	50	20	25	ug/L
MKTF-10	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-10	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	3/16/2015	1,2,4-Trimethylbenzene	**960**	50	8	56	ug/L
MKTF-10	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	3/16/2015	Isopropylbenzene	51	50	7.6	447	ug/L
MKTF-10	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	3/16/2015	Ethylbenzene	**1600**	50	5.1	700	ug/L
MKTF-10	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	3/16/2015	n-Propylbenzene	140	50	8.2	660	ug/L
MKTF-10	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	3/16/2015	1,3,5-Trimethylbenzene	**240**	50	6.1	60	ug/L
MKTF-10	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	3/16/2015	Toluene	**21000**	500	54	1000	ug/L
MKTF-10	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	3/16/2015	Xylenes, Total	**6800**	75	14	620	ug/L
MKTF-10	3/16/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	6/4/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	6/4/2015	Acetone	ND	500	47	14064	ug/L
MKTF-10	6/4/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	6/4/2015	Benzene	**10000**	500	33	5	ug/L
MKTF-10	6/4/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	6/4/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	6/4/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	6/4/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	6/4/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	6/4/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	6/4/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	6/4/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	6/4/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	6/4/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	6/4/2015	1,1-Dichloroethane	**60**	50	20	25	ug/L
MKTF-10	6/4/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	6/4/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	6/4/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	6/4/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	6/4/2015	2-Butanone	1300	500	18	5565	ug/L
MKTF-10	6/4/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/4/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	6/4/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	6/4/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	6/4/2015	1,2,4-Trimethylbenzene	**790**	50	8	56	ug/L
MKTF-10	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	6/4/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	6/4/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	6/4/2015	Isopropylbenzene	54	50	7.6	447	ug/L
MKTF-10	6/4/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	6/4/2015	Ethylbenzene	**1500**	50	5.1	700	ug/L
MKTF-10	6/4/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	6/4/2015	n-Propylbenzene	130	50	8.2	660	ug/L
MKTF-10	6/4/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	6/4/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	6/4/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	6/4/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	6/4/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	6/4/2015	1,3,5-Trimethylbenzene	**210**	50	6.1	60	ug/L
MKTF-10	6/4/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	6/4/2015	Toluene	**20000**	500	54	1000	ug/L
MKTF-10	6/4/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	6/4/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	6/4/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	6/4/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	6/4/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	6/4/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	6/4/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	6/4/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	6/4/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	6/4/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	6/4/2015	Xylenes, Total	**6500**	75	14	620	ug/L
MKTF-10	6/4/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	6/4/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	6/4/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	8/18/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	8/18/2015	Acetone	520	500	47	14064	ug/L
MKTF-10	8/18/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	8/18/2015	Benzene	**9200**	500	33	5	ug/L
MKTF-10	8/18/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	8/18/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	8/18/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	8/18/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	8/18/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	8/18/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	8/18/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	8/18/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	8/18/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	8/18/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	8/18/2015	1,1-Dichloroethane	**67**	50	20	25	ug/L
MKTF-10	8/18/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	8/18/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	8/18/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	8/18/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	8/18/2015	2-Butanone	1600	500	18	5565	ug/L
MKTF-10	8/18/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	8/18/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	8/18/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	8/18/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	8/18/2015	1,2,4-Trimethylbenzene	**880**	50	8	56	ug/L
MKTF-10	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	8/18/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	8/18/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	8/18/2015	Isopropylbenzene	54	50	7.6	447	ug/L
MKTF-10	8/18/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	8/18/2015	Ethylbenzene	**1500**	50	5.1	700	ug/L
MKTF-10	8/18/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	8/18/2015	n-Propylbenzene	140	50	8.2	660	ug/L
MKTF-10	8/18/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	8/18/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	8/18/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	8/18/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	8/18/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	8/18/2015	1,3,5-Trimethylbenzene	**220**	50	6.1	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/18/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	8/18/2015	Toluene	**19000**	500	54	1000	ug/L
MKTF-10	8/18/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	8/18/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	8/18/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	8/18/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	8/18/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	8/18/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	8/18/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	8/18/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	8/18/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	8/18/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	8/18/2015	Xylenes, Total	**6500**	75	14	620	ug/L
MKTF-10	8/18/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	8/18/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	8/18/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-10	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	11/3/2015	Benzene	**12000**	500	33	5	ug/L
MKTF-10	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	11/3/2015	1,1-Dichloroethane	**78**	50	20	25	ug/L
MKTF-10	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-10	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	11/3/2015	1,2,4-Trimethylbenzene	**850**	50	8	56	ug/L
MKTF-10	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-10	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	11/3/2015	Ethylbenzene	**1600**	50	5.1	700	ug/L
MKTF-10	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	11/3/2015	n-Propylbenzene	120	50	8.2	660	ug/L
MKTF-10	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	11/3/2015	1,3,5-Trimethylbenzene	**210**	50	6.1	60	ug/L
MKTF-10	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	11/3/2015	Toluene	**22000**	500	54	1000	ug/L
MKTF-10	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	11/3/2015	cis-1,2-Dichloroethene	57	50	4	70	ug/L
MKTF-10	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	11/3/2015	Xylenes, Total	**6800**	75	14	620	ug/L
MKTF-10	11/3/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	2/29/2016	Acetone	ND	1000	88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	2/29/2016	Benzene	**11000**	1000	96	5	ug/L
MKTF-10	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-10	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-10	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-10	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-10	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-10	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-10	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-10	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-10	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-10	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-10	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-10	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-10	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	2/29/2016	1,2,4-Trimethylbenzene	**900**	100	10	56	ug/L
MKTF-10	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-10	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-10	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-10	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-10	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	2/29/2016	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-10	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-10	2/29/2016	n-Propylbenzene	120	100	13	660	ug/L
MKTF-10	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-10	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-10	2/29/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L
MKTF-10	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-10	2/29/2016	Toluene	**23000**	1000	89	1000	ug/L
MKTF-10	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-10	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-10	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-10	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-10	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-10	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	2/29/2016	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-10	2/29/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-10	6/9/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-10	6/9/2016	Acetone	290	200	98	14064	ug/L
MKTF-10	6/9/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-10	6/9/2016	Benzene	**15000**	200	19	5	ug/L
MKTF-10	6/9/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-10	6/9/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-10	6/9/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-10	6/9/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-10	6/9/2016	Chloroethane	39	40	3.8	20857	ug/L
MKTF-10	6/9/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-10	6/9/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-10	6/9/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-10	6/9/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-10	6/9/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-10	6/9/2016	1,1-Dichloroethane	**39**	20	2.2	25	ug/L
MKTF-10	6/9/2016	1,1-Dichloroethene	**7.1**	20	2.1	7	ug/L
MKTF-10	6/9/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-10	6/9/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-10	6/9/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-10	6/9/2016	2-Butanone	690	200	15	5565	ug/L
MKTF-10	6/9/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/9/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-10	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-10	6/9/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-10	6/9/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-10	6/9/2016	1,2,4-Trimethylbenzene	**900**	20	2.2	56	ug/L
MKTF-10	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-10	6/9/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-10	6/9/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-10	6/9/2016	Isopropylbenzene	52	20	2.1	447	ug/L
MKTF-10	6/9/2016	p-Isopropyltoluene	8.6	20	2.8	NA	ug/L
MKTF-10	6/9/2016	Ethylbenzene	**1700**	20	2.2	700	ug/L
MKTF-10	6/9/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-10	6/9/2016	n-Propylbenzene	130	20	2.6	660	ug/L
MKTF-10	6/9/2016	n-Butylbenzene	21	60	3.2	1000	ug/L
MKTF-10	6/9/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-10	6/9/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-10	6/9/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-10	6/9/2016	4-Methyl-2-Pentanone	72	200	8.6	1243	ug/L
MKTF-10	6/9/2016	1,3,5-Trimethylbenzene	**200**	20	2.3	60	ug/L
MKTF-10	6/9/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-10	6/9/2016	Toluene	**22000**	500	59	1000	ug/L
MKTF-10	6/9/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-10	6/9/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-10	6/9/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-10	6/9/2016	sec-Butylbenzene	11	20	2.5	2000	ug/L
MKTF-10	6/9/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-10	6/9/2016	cis-1,2-Dichloroethene	23	20	2.5	70	ug/L
MKTF-10	6/9/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-10	6/9/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-10	6/9/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-10	6/9/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-10	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-10	6/9/2016	Xylenes, Total	**8900**	300	73	620	ug/L
MKTF-10	6/9/2016	MTBE	18	20	4.2	143	ug/L
MKTF-10	6/9/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-10	6/9/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-10	9/11/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	9/11/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-10	9/11/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	9/11/2016	Benzene	**16000**	1000	96	5	ug/L
MKTF-10	9/11/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-10	9/11/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	9/11/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	9/11/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	9/11/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-10	9/11/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-10	9/11/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-10	9/11/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	9/11/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	9/11/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-10	9/11/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	9/11/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-10	9/11/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-10	9/11/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-10	9/11/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-10	9/11/2016	2-Butanone	1300	1000	74	5565	ug/L
MKTF-10	9/11/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-10	9/11/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-10	9/11/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	9/11/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	9/11/2016	1,2,4-Trimethylbenzene	**840**	100	11	56	ug/L
MKTF-10	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-10	9/11/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-10	9/11/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-10	9/11/2016	Isopropylbenzene	42	100	10	447	ug/L
MKTF-10	9/11/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	9/11/2016	Ethylbenzene	**1600**	100	11	700	ug/L
MKTF-10	9/11/2016	Styrene	ND	100	11	100	ug/L
MKTF-10	9/11/2016	n-Propylbenzene	120	100	13	660	ug/L
MKTF-10	9/11/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	9/11/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	9/11/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	9/11/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	9/11/2016	4-Methyl-2-Pentanone	120	1000	43	1243	ug/L
MKTF-10	9/11/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-10	9/11/2016	Toluene	**20000**	1000	120	1000	ug/L
MKTF-10	9/11/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	9/11/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	9/11/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	9/11/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-10	9/11/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	9/11/2016	cis-1,2-Dichloroethene	*32*	*100*	12	70	ug/L
MKTF-10	9/11/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	9/11/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	9/11/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-10	9/11/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-10	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	9/11/2016	Xylenes, Total	**7300**	150	37	620	ug/L
MKTF-10	9/11/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	9/11/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-10	9/11/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	11/2/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	11/2/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-10	11/2/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	11/2/2016	Benzene	**17000**	1000	96	5	ug/L
MKTF-10	11/2/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-10	11/2/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	11/2/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	11/2/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	11/2/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-10	11/2/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-10	11/2/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-10	11/2/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	11/2/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	11/2/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-10	11/2/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	11/2/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-10	11/2/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-10	11/2/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-10	11/2/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-10	11/2/2016	2-Butanone	690	1000	74	5565	ug/L
MKTF-10	11/2/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-10	11/2/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-10	11/2/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	11/2/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	11/2/2016	1,2,4-Trimethylbenzene	**850**	100	11	56	ug/L
MKTF-10	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-10	11/2/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-10	11/2/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-10	11/2/2016	Isopropylbenzene	49	100	10	447	ug/L
MKTF-10	11/2/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	11/2/2016	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-10	11/2/2016	Styrene	ND	100	11	100	ug/L
MKTF-10	11/2/2016	n-Propylbenzene	130	100	13	660	ug/L
MKTF-10	11/2/2016	n-Butylbenzene	32	300	16	1000	ug/L
MKTF-10	11/2/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	11/2/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	11/2/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	11/2/2016	4-Methyl-2-Pentanone	62	1000	43	1243	ug/L
MKTF-10	11/2/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L
MKTF-10	11/2/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-10	11/2/2016	Toluene	**22000**	1000	120	1000	ug/L
MKTF-10	11/2/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	11/2/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	11/2/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	11/2/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-10	11/2/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	11/2/2016	cis-1,2-Dichloroethene	*26*	*100*	12	70	ug/L
MKTF-10	11/2/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	11/2/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	11/2/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-10	11/2/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-10	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	11/2/2016	Xylenes, Total	**8000**	150	37	620	ug/L
MKTF-10	11/2/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	11/2/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-10	11/2/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	3/2/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	3/2/2017	Acetone	ND	1000	88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/2/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	3/2/2017	Benzene	**18000**	1000	96	5	ug/L
MKTF-10	3/2/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	3/2/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	3/2/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	3/2/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	3/2/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-10	3/2/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	3/2/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	3/2/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	3/2/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	3/2/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	3/2/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
MKTF-10	3/2/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	3/2/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	3/2/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-10	3/2/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	3/2/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	3/2/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	3/2/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	3/2/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	3/2/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	3/2/2017	1,2,4-Trimethylbenzene	**980**	100	10	56	ug/L
MKTF-10	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	3/2/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	3/2/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	3/2/2017	Isopropylbenzene	40	100	9.8	447	ug/L
MKTF-10	3/2/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	3/2/2017	Ethylbenzene	**1600**	100	11	700	ug/L
MKTF-10	3/2/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	3/2/2017	n-Propylbenzene	110	100	13	660	ug/L
MKTF-10	3/2/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	3/2/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	3/2/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	3/2/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	3/2/2017	4-Methyl-2-Pentanone	84	1000	71	1243	ug/L
MKTF-10	3/2/2017	1,3,5-Trimethylbenzene	**220**	100	12	60	ug/L
MKTF-10	3/2/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	3/2/2017	Toluene	**21000**	1000	89	1000	ug/L
MKTF-10	3/2/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	3/2/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-10	3/2/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	3/2/2017	sec-Butylbenzene	33	100	10	2000	ug/L
MKTF-10	3/2/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	3/2/2017	cis-1,2-Dichloroethene	*43*	*100*	20	70	ug/L
MKTF-10	3/2/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	3/2/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	3/2/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	3/2/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-10	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	3/2/2017	Xylenes, Total	**7800**	150	32	620	ug/L
MKTF-10	3/2/2017	MTBE	28	100	15	143	ug/L
MKTF-10	3/2/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	3/2/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-10	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	6/8/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	6/8/2017	Benzene	**12000**	1000	62	5	ug/L
MKTF-10	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	6/8/2017	Chloroethane	77	200	23	20857	ug/L
MKTF-10	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	6/8/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	6/8/2017	1,2,4-Trimethylbenzene	**930**	100	11	56	ug/L
MKTF-10	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	6/8/2017	Isopropylbenzene	55	100	5.1	447	ug/L
MKTF-10	6/8/2017	p-Isopropyltoluene	12	100	9.6	NA	ug/L
MKTF-10	6/8/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	6/8/2017	n-Propylbenzene	120	100	7.4	660	ug/L
MKTF-10	6/8/2017	n-Butylbenzene	18	300	13	1000	ug/L
MKTF-10	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-10	6/8/2017	1,3,5-Trimethylbenzene	**220**	100	8.7	60	ug/L
MKTF-10	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	6/8/2017	Toluene	**20000**	1000	64	1000	ug/L
MKTF-10	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	6/8/2017	sec-Butylbenzene	11	100	11	2000	ug/L
MKTF-10	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	6/8/2017	cis-1,2-Dichloroethene	*45*	*100*	20	70	ug/L
MKTF-10	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-10	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	6/8/2017	Xylenes, Total	**8200**	150	32	620	ug/L
MKTF-10	6/8/2017	MTBE	ND	100	24	143	ug/L
MKTF-10	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	9/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	9/28/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	9/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	9/28/2017	Benzene	**9500**	100	6.2	5	ug/L
MKTF-10	9/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	9/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	9/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	9/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	9/28/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-10	9/28/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	9/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	9/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	9/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	9/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	9/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	9/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	9/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	9/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	9/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	9/28/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	9/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	9/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	9/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	9/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	9/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	9/28/2017	1,2,4-Trimethylbenzene	**920**	100	11	56	ug/L
MKTF-10	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	9/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	9/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	9/28/2017	Isopropylbenzene	53	100	5.1	447	ug/L
MKTF-10	9/28/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-10	9/28/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	9/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	9/28/2017	n-Propylbenzene	130	100	7.4	660	ug/L
MKTF-10	9/28/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-10	9/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	9/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	9/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	9/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/28/2017	1,3,5-Trimethylbenzene	**210**	100	8.7	60	ug/L
MKTF-10	9/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	9/28/2017	Toluene	**8800**	100	6.4	1000	ug/L
MKTF-10	9/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	9/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	9/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	9/28/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-10	9/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	9/28/2017	cis-1,2-Dichloroethene	*53*	*100*	20	70	ug/L
MKTF-10	9/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	9/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	9/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	9/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	9/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	9/28/2017	Xylenes, Total	**8700**	150	32	620	ug/L
MKTF-10	9/28/2017	MTBE	ND	100	24	143	ug/L
MKTF-10	9/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	9/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	11/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	11/28/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	11/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	11/28/2017	Benzene	**9800**	100	6.2	5	ug/L
MKTF-10	11/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	11/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	11/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	11/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	11/28/2017	Chloroethane	67	200	23	20857	ug/L
MKTF-10	11/28/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	11/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	11/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	11/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	11/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	11/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	11/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	11/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	11/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	11/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	11/28/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	11/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	11/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	11/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	11/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	11/28/2017	1,2,4-Trimethylbenzene	**1000**	100	11	56	ug/L
MKTF-10	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	11/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	11/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	11/28/2017	Isopropylbenzene	68	100	5.1	447	ug/L
MKTF-10	11/28/2017	p-Isopropyltoluene	24	100	9.6	NA	ug/L
MKTF-10	11/28/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	11/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	11/28/2017	n-Propylbenzene	140	100	7.4	660	ug/L
MKTF-10	11/28/2017	n-Butylbenzene	34	300	13	1000	ug/L
MKTF-10	11/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	11/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	11/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	11/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-10	11/28/2017	1,3,5-Trimethylbenzene	**250**	100	8.7	60	ug/L
MKTF-10	11/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	11/28/2017	Toluene	**4700**	100	6.4	1000	ug/L
MKTF-10	11/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	11/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	11/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	11/28/2017	sec-Butylbenzene	23	100	11	2000	ug/L
MKTF-10	11/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	11/28/2017	cis-1,2-Dichloroethene	*51*	*100*	20	70	ug/L
MKTF-10	11/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	11/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	11/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	11/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	11/28/2017	Xylenes, Total	**8300**	150	32	620	ug/L
MKTF-10	11/28/2017	MTBE	35	100	24	143	ug/L
MKTF-10	11/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	11/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	2/14/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Acetone	ND	500	41	14064	ug/L
MKTF-10	2/14/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	2/14/2018	Benzene	**10000**	500	31	5	ug/L
MKTF-10	2/14/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-10	2/14/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	2/14/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	2/14/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-10	2/14/2018	Chloroethane	65	100	12	20857	ug/L
MKTF-10	2/14/2018	Vinyl Chloride	**18**	50	8.9	2	ug/L
MKTF-10	2/14/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-10	2/14/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-10	2/14/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-10	2/14/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-10	2/14/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	2/14/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-10	2/14/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-10	2/14/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	2/14/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-10	2/14/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-10	2/14/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-10	2/14/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-10	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-10	2/14/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-10	2/14/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	2/14/2018	1,2,4-Trimethylbenzene	**970**	50	5.6	56	ug/L
MKTF-10	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-10	2/14/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-10	2/14/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-10	2/14/2018	Isopropylbenzene	62	50	2.6	447	ug/L
MKTF-10	2/14/2018	p-Isopropyltoluene	7.5	50	4.8	NA	ug/L
MKTF-10	2/14/2018	Ethylbenzene	**1800**	50	4.7	700	ug/L
MKTF-10	2/14/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-10	2/14/2018	n-Propylbenzene	130	50	3.7	660	ug/L
MKTF-10	2/14/2018	n-Butylbenzene	22	150	6.5	1000	ug/L
MKTF-10	2/14/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	2/14/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-10	2/14/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	2/14/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-10	2/14/2018	1,3,5-Trimethylbenzene	**230**	50	4.4	60	ug/L
MKTF-10	2/14/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-10	2/14/2018	Toluene	**3700**	50	3.2	1000	ug/L
MKTF-10	2/14/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-10	2/14/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-10	2/14/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-10	2/14/2018	sec-Butylbenzene	11	50	5.5	2000	ug/L
MKTF-10	2/14/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-10	2/14/2018	cis-1,2-Dichloroethene	66	50	10	70	ug/L
MKTF-10	2/14/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	2/14/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-10	2/14/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-10	2/14/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-10	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-10	2/14/2018	Xylenes, Total	**8300**	75	16	620	ug/L
MKTF-10	2/14/2018	MTBE	14	50	12	143	ug/L
MKTF-10	2/14/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-10	2/14/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	5/2/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-10	5/2/2018	Acetone	ND	500	41	14064	ug/L
MKTF-10	5/2/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	5/2/2018	Benzene	**13000**	500	31	5	ug/L
MKTF-10	5/2/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-10	5/2/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	5/2/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	5/2/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-10	5/2/2018	Chloroethane	85	100	12	20857	ug/L
MKTF-10	5/2/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-10	5/2/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-10	5/2/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-10	5/2/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-10	5/2/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-10	5/2/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	5/2/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-10	5/2/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-10	5/2/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	5/2/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-10	5/2/2018	2-Butanone	ND	500	57	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/2/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-10	5/2/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-10	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-10	5/2/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-10	5/2/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	5/2/2018	1,2,4-Trimethylbenzene	**1200**	50	5.6	56	ug/L
MKTF-10	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-10	5/2/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-10	5/2/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-10	5/2/2018	Isopropylbenzene	73	50	2.6	447	ug/L
MKTF-10	5/2/2018	p-Isopropyltoluene	11	50	4.8	NA	ug/L
MKTF-10	5/2/2018	Ethylbenzene	**2100**	50	4.7	700	ug/L
MKTF-10	5/2/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-10	5/2/2018	n-Propylbenzene	170	50	3.7	660	ug/L
MKTF-10	5/2/2018	n-Butylbenzene	20	150	6.5	1000	ug/L
MKTF-10	5/2/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	5/2/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-10	5/2/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	5/2/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-10	5/2/2018	1,3,5-Trimethylbenzene	**270**	50	4.4	60	ug/L
MKTF-10	5/2/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-10	5/2/2018	Toluene	**4900**	50	3.2	1000	ug/L
MKTF-10	5/2/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-10	5/2/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-10	5/2/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-10	5/2/2018	sec-Butylbenzene	14	50	5.5	2000	ug/L
MKTF-10	5/2/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-10	5/2/2018	cis-1,2-Dichloroethene	60	50	10	70	ug/L
MKTF-10	5/2/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	5/2/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-10	5/2/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-10	5/2/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-10	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-10	5/2/2018	Xylenes, Total	**9600**	75	16	620	ug/L
MKTF-10	5/2/2018	MTBE	30	50	12	143	ug/L
MKTF-10	5/2/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-10	5/2/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	9/4/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-10	9/4/2018	Acetone	ND	500	39	14064	ug/L
MKTF-10	9/4/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	9/4/2018	Benzene	**10000**	500	87	5	ug/L
MKTF-10	9/4/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-10	9/4/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	9/4/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	9/4/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-10	9/4/2018	Chloroethane	63	100	8.2	20857	ug/L
MKTF-10	9/4/2018	Vinyl Chloride	**18**	50	5.5	2	ug/L
MKTF-10	9/4/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-10	9/4/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-10	9/4/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-10	9/4/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-10	9/4/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	9/4/2018	1,1-Dichloroethene	**12**	50	6	7	ug/L
MKTF-10	9/4/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-10	9/4/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	9/4/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-10	9/4/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-10	9/4/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-10	9/4/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-10	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-10	9/4/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-10	9/4/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	9/4/2018	1,2,4-Trimethylbenzene	**1000**	50	13	56	ug/L
MKTF-10	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-10	9/4/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-10	9/4/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-10	9/4/2018	Isopropylbenzene	62	50	11	447	ug/L
MKTF-10	9/4/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-10	9/4/2018	Ethylbenzene	**1800**	50	11	700	ug/L
MKTF-10	9/4/2018	Styrene	ND	50	13	100	ug/L
MKTF-10	9/4/2018	n-Propylbenzene	150	50	12	660	ug/L
MKTF-10	9/4/2018	n-Butylbenzene	14	150	12	1000	ug/L
MKTF-10	9/4/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	9/4/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-10	9/4/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	9/4/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	1,3,5-Trimethylbenzene	**230**	50	12	60	ug/L
MKTF-10	9/4/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-10	9/4/2018	Toluene	**2400**	50	8.4	1000	ug/L
MKTF-10	9/4/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-10	9/4/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-10	9/4/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-10	9/4/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-10	9/4/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-10	9/4/2018	cis-1,2-Dichloroethene	47	50	19	70	ug/L
MKTF-10	9/4/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	9/4/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-10	9/4/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-10	9/4/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-10	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-10	9/4/2018	Xylenes, Total	**8100**	75	32	620	ug/L
MKTF-10	9/4/2018	MTBE	ND	50	16	143	ug/L
MKTF-10	9/4/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-10	9/4/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-10	11/20/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-10	11/20/2018	Acetone	ND	200	15	14064	ug/L
MKTF-10	11/20/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-10	11/20/2018	Benzene	**11000**	200	35	5	ug/L
MKTF-10	11/20/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-10	11/20/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-10	11/20/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-10	11/20/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-10	11/20/2018	Chloroethane	73	40	3.3	20857	ug/L
MKTF-10	11/20/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-10	11/20/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-10	11/20/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-10	11/20/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-10	11/20/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-10	11/20/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-10	11/20/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-10	11/20/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-10	11/20/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-10	11/20/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-10	11/20/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-10	11/20/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-10	11/20/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-10	11/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-10	11/20/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-10	11/20/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-10	11/20/2018	1,2,4-Trimethylbenzene	**1100**	20	5.1	56	ug/L
MKTF-10	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-10	11/20/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-10	11/20/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-10	11/20/2018	Isopropylbenzene	60	20	4.4	447	ug/L
MKTF-10	11/20/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-10	11/20/2018	Ethylbenzene	**1900**	20	4.5	700	ug/L
MKTF-10	11/20/2018	Styrene	ND	20	5	100	ug/L
MKTF-10	11/20/2018	n-Propylbenzene	140	20	4.9	660	ug/L
MKTF-10	11/20/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-10	11/20/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-10	11/20/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-10	11/20/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-10	11/20/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-10	11/20/2018	1,3,5-Trimethylbenzene	**250**	20	4.6	60	ug/L
MKTF-10	11/20/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-10	11/20/2018	Toluene	**1900**	20	3.4	1000	ug/L
MKTF-10	11/20/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-10	11/20/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-10	11/20/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-10	11/20/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-10	11/20/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-10	11/20/2018	cis-1,2-Dichloroethene	58	20	7.5	70	ug/L
MKTF-10	11/20/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-10	11/20/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-10	11/20/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-10	11/20/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-10	11/20/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-10	11/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-10	11/20/2018	Xylenes, Total	**8000**	300	130	620	ug/L
MKTF-10	11/20/2018	MTBE	ND	20	9.1	143	ug/L
MKTF-10	11/20/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-10	11/20/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-10	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-10	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-10	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-10	5/13/2019	1,1-Dichloroethane	**27**	50	7.04293	25	ug/L
MKTF-10	5/13/2019	1,1-Dichloroethene	**13**	50	10.269409	7	ug/L
MKTF-10	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-10	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-10	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-10	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-10	5/13/2019	1,2,4-Trimethylbenzene	**830**	50	10.659955	56	ug/L
MKTF-10	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-10	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-10	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-10	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-10	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-10	5/13/2019	1,3,5-Trimethylbenzene	**220**	50	9.432992	60	ug/L
MKTF-10	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-10	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-10	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-10	5/13/2019	1-Methylnaphthalene	73	200	15.747724	NA	ug/L
MKTF-10	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-10	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-10	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-10	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-10	5/13/2019	2-Methylnaphthalene	**88**	200	17.2688		ug/L
MKTF-10	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-10	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-10	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-10	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-10	5/13/2019	Benzene	**5500**	500	83.319528	5	ug/L
MKTF-10	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-10	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-10	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-10	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-10	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-10	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-10	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-10	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-10	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-10	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-10	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-10	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-10	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-10	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-10	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-10	5/13/2019	Ethylbenzene	**1700**	50	6.61704	700	ug/L
MKTF-10	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-10	5/13/2019	Isopropylbenzene	60	50	9.576114	447	ug/L
MKTF-10	5/13/2019	MTBE	24	50	22.804749	143	ug/L
MKTF-10	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-10	5/13/2019	Naphthalene	**200**	100	13.753567	30	ug/L
MKTF-10	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-10	5/13/2019	n-Propylbenzene	130	50	10.7154	660	ug/L
MKTF-10	5/13/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
MKTF-10	5/13/2019	Styrene	ND	50	9.566168	100	ug/L
MKTF-10	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-10	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-10	5/13/2019	Toluene	900	50	17.521811	1000	ug/L
MKTF-10	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-10	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-10	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-10	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-10	5/13/2019	Vinyl Chloride	**23**	50	8.954964	2	ug/L
MKTF-10	5/13/2019	Xylenes, Total	**7900**	75	22.720747	620	ug/L
MKTF-10	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-10	8/22/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-10	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-10	8/22/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-10	8/22/2019	1,1-Dichloroethane	**37**	10	1.408586	25	ug/L
MKTF-10	8/22/2019	1,1-Dichloroethene	**7.5**	10	2.053882	7	ug/L
MKTF-10	8/22/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-10	8/22/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-10	8/22/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-10	8/22/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-10	8/22/2019	1,2,4-Trimethylbenzene	**850**	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-10	8/22/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-10	8/22/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-10	8/22/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-10	8/22/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-10	8/22/2019	1,3,5-Trimethylbenzene	**190**	10	1.886598	60	ug/L
MKTF-10	8/22/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-10	8/22/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-10	8/22/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-10	8/22/2019	1-Methylnaphthalene	66	40	3.149545	NA	ug/L
MKTF-10	8/22/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-10	8/22/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-10	8/22/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-10	8/22/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-10	8/22/2019	2-Methylnaphthalene	**85**	40	3.45376		ug/L
MKTF-10	8/22/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-10	8/22/2019	p-Isopropyltoluene	9	10	2.172894	NA	ug/L
MKTF-10	8/22/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-10	8/22/2019	Acetone	100	100	11.993964	14064	ug/L
MKTF-10	8/22/2019	Benzene	**4600**	100	16.663906	5	ug/L
MKTF-10	8/22/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-10	8/22/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-10	8/22/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-10	8/22/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-10	8/22/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-10	8/22/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-10	8/22/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-10	8/22/2019	Chloroethane	30	20	1.778026	20857	ug/L
MKTF-10	8/22/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-10	8/22/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-10	8/22/2019	cis-1,2-Dichloroethene	34	10	1.901151	70	ug/L
MKTF-10	8/22/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-10	8/22/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-10	8/22/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-10	8/22/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-10	8/22/2019	Ethylbenzene	**1600**	100	13.23408	700	ug/L
MKTF-10	8/22/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-10	8/22/2019	Isopropylbenzene	57	10	1.915223	447	ug/L
MKTF-10	8/22/2019	MTBE	19	10	4.56095	143	ug/L
MKTF-10	8/22/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-10	8/22/2019	Naphthalene	**180**	20	2.750713	30	ug/L
MKTF-10	8/22/2019	n-Butylbenzene	21	30	2.275695	1000	ug/L
MKTF-10	8/22/2019	n-Propylbenzene	120	10	2.14308	660	ug/L
MKTF-10	8/22/2019	sec-Butylbenzene	11	10	2.477313	2000	ug/L
MKTF-10	8/22/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-10	8/22/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-10	8/22/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-10	8/22/2019	Toluene	660	10	3.504362	1000	ug/L
MKTF-10	8/22/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-10	8/22/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-10	8/22/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-10	8/22/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-10	8/22/2019	Vinyl Chloride	**10**	10	1.790993	2	ug/L
MKTF-10	8/22/2019	Xylenes, Total	**7400**	150	45.441493	620	ug/L
MKTF-10	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-10	10/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-10	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-10	10/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-10	10/30/2019	1,1-Dichloroethane	**31**	10	1.408586	25	ug/L
MKTF-10	10/30/2019	1,1-Dichloroethene	*5.9*	*10*	2.053882	7	ug/L
MKTF-10	10/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-10	10/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-10	10/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-10	10/30/2019	1,2,4-Trimethylbenzene	**760**	10	2.131991	56	ug/L
MKTF-10	10/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-10	10/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-10	10/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-10	10/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-10	10/30/2019	1,3,5-Trimethylbenzene	**200**	10	1.886598	60	ug/L
MKTF-10	10/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-10	10/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-10	10/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-10	10/30/2019	1-Methylnaphthalene	65	40	3.149545	NA	ug/L
MKTF-10	10/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-10	10/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-10	10/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	10/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-10	10/30/2019	2-Methylnaphthalene	**80**	40	3.45376		ug/L
MKTF-10	10/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-10	10/30/2019	p-Isopropyltoluene	6.6	10	2.172894	NA	ug/L
MKTF-10	10/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-10	10/30/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-10	10/30/2019	Benzene	**5500**	100	16.663906	5	ug/L
MKTF-10	10/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-10	10/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-10	10/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-10	10/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-10	10/30/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-10	10/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-10	10/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-10	10/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-10	10/30/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-10	10/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-10	10/30/2019	cis-1,2-Dichloroethene	39	10	1.901151	70	ug/L
MKTF-10	10/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-10	10/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-10	10/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-10	10/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-10	10/30/2019	Ethylbenzene	**1700**	100	13.23408	700	ug/L
MKTF-10	10/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-10	10/30/2019	Isopropylbenzene	61	10	1.915223	447	ug/L
MKTF-10	10/30/2019	MTBE	17	10	4.56095	143	ug/L
MKTF-10	10/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-10	10/30/2019	Naphthalene	**180**	20	2.750713	30	ug/L
MKTF-10	10/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
MKTF-10	10/30/2019	n-Propylbenzene	120	10	2.14308	660	ug/L
MKTF-10	10/30/2019	sec-Butylbenzene	9.9	10	2.477313	2000	ug/L
MKTF-10	10/30/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-10	10/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-10	10/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-10	10/30/2019	Toluene	570	10	3.504362	1000	ug/L
MKTF-10	10/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-10	10/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-10	10/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-10	10/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-10	10/30/2019	Vinyl Chloride	**10**	10	1.790993	2	ug/L
MKTF-10	10/30/2019	Xylenes, Total	**7200**	150	45.441493	620	ug/L
MKTF-10	3/3/2020	Benzene	**4800**	100	23	5	ug/L
MKTF-10	3/3/2020	Ethylbenzene	**1700**	100	21	700	ug/L
MKTF-10	3/3/2020	Xylenes, Total	**8200**	150	55	620	ug/L
MKTF-10	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-10	3/3/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-10	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-10	3/3/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-10	3/3/2020	1,1-Dichloroethane	**47**	10	2.7	25	ug/L
MKTF-10	3/3/2020	1,1-Dichloroethene	*6.6*	*10*	1.3	7	ug/L
MKTF-10	3/3/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-10	3/3/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-10	3/3/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-10	3/3/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
MKTF-10	3/3/2020	1,2,4-Trimethylbenzene	**950**	10	1.2	56	ug/L
MKTF-10	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-10	3/3/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-10	3/3/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-10	3/3/2020	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-10	3/3/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-10	3/3/2020	1,3,5-Trimethylbenzene	**220**	10	1.8	60	ug/L
MKTF-10	3/3/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-10	3/3/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-10	3/3/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	3/3/2020	1-Methylnaphthalene	60	40	8.4	NA	ug/L
MKTF-10	3/3/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-10	3/3/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-10	3/3/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-10	3/3/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-10	3/3/2020	2-Methylnaphthalene	**95**	40	6.9		ug/L
MKTF-10	3/3/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-10	3/3/2020	p-Isopropyltoluene	7.6	10	2	NA	ug/L
MKTF-10	3/3/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-10	3/3/2020	Acetone	40	100	23	14064	ug/L
MKTF-10	3/3/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-10	3/3/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-10	3/3/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-10	3/3/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-10	3/3/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-10	3/3/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-10	3/3/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-10	3/3/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-10	3/3/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-10	3/3/2020	cis-1,2-Dichloroethene	41	10	3.9	70	ug/L
MKTF-10	3/3/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-10	3/3/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-10	3/3/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-10	3/3/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-10	3/3/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-10	3/3/2020	Isopropylbenzene	62	10	1.8	447	ug/L
MKTF-10	3/3/2020	MTBE	9.4	10	3.9	143	ug/L
MKTF-10	3/3/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-10	3/3/2020	n-Butylbenzene	12	30	2.5	1000	ug/L
MKTF-10	3/3/2020	n-Propylbenzene	110	10	1.8	660	ug/L
MKTF-10	3/3/2020	Naphthalene	**170**	20	2.8	30	ug/L
MKTF-10	3/3/2020	sec-Butylbenzene	9.9	10	6.1	2000	ug/L
MKTF-10	3/3/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-10	3/3/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-10	3/3/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-10	3/3/2020	Toluene	650	10	2	1000	ug/L
MKTF-10	3/3/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-10	3/3/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-10	3/3/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-10	3/3/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-10	3/3/2020	Vinyl Chloride	**8.9**	10	2	2	ug/L
MKTF-10	12/18/2020	Acetone	ND	625	250	14064	ug/L
MKTF-10	12/18/2020	Benzene	**4670**	25	9.5	5	ug/L
MKTF-10	12/18/2020	Bromodichloromethane	*ND*	*25*	12.5	1.34	ug/L
MKTF-10	12/18/2020	Bromoform	*ND*	*125*	17.8	32.9	ug/L
MKTF-10	12/18/2020	Bromomethane	*ND*	*25*	24.5	7.54	ug/L
MKTF-10	12/18/2020	2-Butanone	ND	625	65	5565	ug/L
MKTF-10	12/18/2020	Carbon Disulfide	104	25	12.5	810	ug/L
MKTF-10	12/18/2020	Carbon tetrachloride	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	Chlorobenzene	ND	25	12.5	77.6	ug/L
MKTF-10	12/18/2020	Dibromochloromethane	*ND*	*25*	12.5	1.68	ug/L
MKTF-10	12/18/2020	Chloroethane	ND	25	19	20857	ug/L
MKTF-10	12/18/2020	Chloroform	ND	25	15	100	ug/L
MKTF-10	12/18/2020	Chloromethane	*ND*	*25*	20.8	20.32	ug/L
MKTF-10	12/18/2020	2-Chlorotoluene	ND	25	14.3	233	ug/L
MKTF-10	12/18/2020	4-Chlorotoluene	ND	25	14	250	ug/L
MKTF-10	12/18/2020	cis-1,2-Dichloroethene	ND	25	12.5	70	ug/L
MKTF-10	12/18/2020	cis-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-10	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*125*	37.5	0.0033	ug/L
MKTF-10	12/18/2020	1,2-Dibromoethane	*ND*	*25*	12.5	0.05	ug/L
MKTF-10	12/18/2020	Dibromomethane	*ND*	*125*	14.8	8	ug/L
MKTF-10	12/18/2020	1,2-Dichlorobenzene	ND	25	12.5	600	ug/L
MKTF-10	12/18/2020	1,3-Dichlorobenzene	ND	25	13.5	N/A	ug/L
MKTF-10	12/18/2020	1,4-Dichlorobenzene	ND	25	16	75	ug/L
MKTF-10	12/18/2020	Dichlorodifluoromethane	ND	25	21.3	197	ug/L
MKTF-10	12/18/2020	1,1-Dichloroethane	**40**	25	12.5	25	ug/L
MKTF-10	12/18/2020	1,2-Dichloroethane	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	1,1-Dichloroethene	*ND*	*25*	12.5	7	ug/L
MKTF-10	12/18/2020	1,2-Dichloropropane	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	1,3-Dichloropropane	ND	25	12.5	370	ug/L
MKTF-10	12/18/2020	2,2-Dichloropropane	ND	25	12.5	NA	ug/L
MKTF-10	12/18/2020	1,1-Dichloropropene	ND	25	12.5	NA	ug/L
MKTF-10	12/18/2020	Ethylbenzene	**1800**	25	12.5	700	ug/L
MKTF-10	12/18/2020	Hexachlorobutadiene	*ND*	*125*	22.5	1.39	ug/L
MKTF-10	12/18/2020	2-Hexanone	*ND*	*625*	77.5	38	ug/L
MKTF-10	12/18/2020	Isopropylbenzene	70.4	25	13.3	447	ug/L
MKTF-10	12/18/2020	Methylene Chloride	*ND*	*125*	75	5	ug/L
MKTF-10	12/18/2020	1-Methylnaphthalene	ND	125	105	NA	ug/L
MKTF-10	12/18/2020	2-Methylnaphthalene	*ND*	*250*	115		ug/L
MKTF-10	12/18/2020	4-Methyl-2-Pentanone	ND	625	45	1243	ug/L
MKTF-10	12/18/2020	MTBE	ND	25	18.5	143	ug/L
MKTF-10	12/18/2020	Naphthalene	**189**	25	25	30	ug/L
MKTF-10	12/18/2020	n-Butylbenzene	ND	25	19	1000	ug/L
MKTF-10	12/18/2020	n-Propylbenzene	116	25	17.3	660	ug/L
MKTF-10	12/18/2020	p-Isopropyltoluene	ND	25	17.8	NA	ug/L
MKTF-10	12/18/2020	sec-Butylbenzene	ND	25	17.5	2000	ug/L
MKTF-10	12/18/2020	Styrene	ND	25	25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	tert-Butylbenzene	ND	25	15.8	690	ug/L
MKTF-10	12/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*25*	13	5.74	ug/L
MKTF-10	12/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*25*	12.5	10	ug/L
MKTF-10	12/18/2020	Tetrachloroethene	*ND*	*25*	14.5	5	ug/L
MKTF-10	12/18/2020	Toluene	284	25	10.3	1000	ug/L
MKTF-10	12/18/2020	trans-1,2-Dichloroethene	ND	25	12.5	100	ug/L
MKTF-10	12/18/2020	trans-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-10	12/18/2020	1,2,3-Trichlorobenzene	ND	25	17.5	70	ug/L
MKTF-10	12/18/2020	1,2,4-Trichlorobenzene	ND	25	20.5	70	ug/L
MKTF-10	12/18/2020	1,1,1-Trichloroethane	ND	25	12.5	200	ug/L
MKTF-10	12/18/2020	1,1,2-Trichloroethane	*ND*	*125*	12.5	5	ug/L
MKTF-10	12/18/2020	Trichloroethene	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	Trichlorofluoromethane	ND	25	13	1137	ug/L
MKTF-10	12/18/2020	1,2,3-Trichloropropane	*ND*	*125*	21	0.0084	ug/L
MKTF-10	12/18/2020	1,2,4-Trimethylbenzene	**1070**	25	20.5	56	ug/L
MKTF-10	12/18/2020	1,3,5-Trimethylbenzene	**246**	25	14	60	ug/L
MKTF-10	12/18/2020	Vinyl Chloride	*ND*	*25*	12.5	2	ug/L
MKTF-10	12/18/2020	Xylenes, Total	**8600**	250	40	620	ug/L
MKTF-11	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-11	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-11	4/11/2014	Benzene	**15000**	500	77	5	ug/L
MKTF-11	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-11	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-11	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-11	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-11	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-11	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-11	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-11	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-11	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-11	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-11	4/11/2014	1,1-Dichloroethane	**65**	50	14	25	ug/L
MKTF-11	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-11	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-11	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-11	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-11	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-11	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-11	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-11	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-11	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-11	4/11/2014	1,2,4-Trimethylbenzene	**410**	50	6.1	56	ug/L
MKTF-11	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-11	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-11	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-11	4/11/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-11	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-11	4/11/2014	Ethylbenzene	**930**	50	6.4	700	ug/L
MKTF-11	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-11	4/11/2014	n-Propylbenzene	97	50	7	660	ug/L
MKTF-11	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-11	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-11	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-11	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-11	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-11	4/11/2014	1,3,5-Trimethylbenzene	**62**	50	6.6	60	ug/L
MKTF-11	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-11	4/11/2014	Toluene	**7600**	500	85	1000	ug/L
MKTF-11	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-11	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-11	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-11	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-11	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-11	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-11	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-11	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-11	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-11	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-11	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-11	4/11/2014	Xylenes, Total	**2200**	75	19	620	ug/L
MKTF-11	4/11/2014	MTBE	**150**	50	13	143	ug/L
MKTF-11	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-11	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-11	6/5/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/5/2014	Acetone	290	50	25	14064	ug/L
MKTF-11	6/5/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-11	6/5/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-11	6/5/2014	1,1,1-Trichloroethane	14	5	0.61	200	ug/L
MKTF-11	6/5/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-11	6/5/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-11	6/5/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-11	6/5/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-11	6/5/2014	Vinyl Chloride	**18**	5	2.3	2	ug/L
MKTF-11	6/5/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-11	6/5/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-11	6/5/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-11	6/5/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-11	6/5/2014	1,1-Dichloroethane	**53**	5	1.4	25	ug/L
MKTF-11	6/5/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-11	6/5/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-11	6/5/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-11	6/5/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-11	6/5/2014	2-Butanone	170	50	7.1	5565	ug/L
MKTF-11	6/5/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-11	6/5/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-11	6/5/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-11	6/5/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-11	6/5/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-11	6/5/2014	1,2,4-Trimethylbenzene	**270**	5	0.61	56	ug/L
MKTF-11	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-11	6/5/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-11	6/5/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-11	6/5/2014	Isopropylbenzene	29	5	0.81	447	ug/L
MKTF-11	6/5/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-11	6/5/2014	Ethylbenzene	**750**	200	25	700	ug/L
MKTF-11	6/5/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-11	6/5/2014	n-Propylbenzene	68	5	0.7	660	ug/L
MKTF-11	6/5/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-11	6/5/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-11	6/5/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-11	6/5/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-11	6/5/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-11	6/5/2014	1,3,5-Trimethylbenzene	52	5	0.66	60	ug/L
MKTF-11	6/5/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-11	6/5/2014	Toluene	**7800**	200	34	1000	ug/L
MKTF-11	6/5/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-11	6/5/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-11	6/5/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-11	6/5/2014	sec-Butylbenzene	7.8	5	0.77	2000	ug/L
MKTF-11	6/5/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-11	6/5/2014	cis-1,2-Dichloroethene	16	5	0.61	70	ug/L
MKTF-11	6/5/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-11	6/5/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-11	6/5/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-11	6/5/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-11	6/5/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-11	6/5/2014	Xylenes, Total	**2200**	300	75	620	ug/L
MKTF-11	6/5/2014	MTBE	96	5	1.3	143	ug/L
MKTF-11	6/5/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-11	6/5/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-11	9/15/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	9/15/2014	Acetone	ND	500	250	14064	ug/L
MKTF-11	9/15/2014	Chloroform	ND	50	16	100	ug/L
MKTF-11	9/15/2014	Benzene	**9500**	500	77	5	ug/L
MKTF-11	9/15/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-11	9/15/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-11	9/15/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-11	9/15/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-11	9/15/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-11	9/15/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-11	9/15/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-11	9/15/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-11	9/15/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-11	9/15/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-11	9/15/2014	1,1-Dichloroethane	**57**	50	14	25	ug/L
MKTF-11	9/15/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-11	9/15/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	9/15/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-11	9/15/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-11	9/15/2014	2-Butanone	ND	500	71	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/15/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-11	9/15/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-11	9/15/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-11	9/15/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-11	9/15/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-11	9/15/2014	1,2,4-Trimethylbenzene	**360**	50	6.1	56	ug/L
MKTF-11	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-11	9/15/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-11	9/15/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-11	9/15/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-11	9/15/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-11	9/15/2014	Ethylbenzene	**720**	50	6.4	700	ug/L
MKTF-11	9/15/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-11	9/15/2014	n-Propylbenzene	69	50	7	660	ug/L
MKTF-11	9/15/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-11	9/15/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-11	9/15/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-11	9/15/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-11	9/15/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-11	9/15/2014	1,3,5-Trimethylbenzene	58	50	6.6	60	ug/L
MKTF-11	9/15/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-11	9/15/2014	Toluene	**7100**	500	85	1000	ug/L
MKTF-11	9/15/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-11	9/15/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-11	9/15/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-11	9/15/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-11	9/15/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-11	9/15/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-11	9/15/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-11	9/15/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-11	9/15/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-11	9/15/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-11	9/15/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-11	9/15/2014	Xylenes, Total	**2000**	75	19	620	ug/L
MKTF-11	9/15/2014	MTBE	83	50	13	143	ug/L
MKTF-11	9/15/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-11	9/15/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-11	11/13/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/13/2014	Acetone	ND	200	99	14064	ug/L
MKTF-11	11/13/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-11	11/13/2014	Benzene	**9500**	200	31	5	ug/L
MKTF-11	11/13/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-11	11/13/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-11	11/13/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-11	11/13/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-11	11/13/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-11	11/13/2014	Vinyl Chloride	**54**	20	9.1	2	ug/L
MKTF-11	11/13/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-11	11/13/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-11	11/13/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-11	11/13/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-11	11/13/2014	1,1-Dichloroethane	**47**	20	5.7	25	ug/L
MKTF-11	11/13/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-11	11/13/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	11/13/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-11	11/13/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-11	11/13/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-11	11/13/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/13/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-11	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-11	11/13/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-11	11/13/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-11	11/13/2014	1,2,4-Trimethylbenzene	**400**	20	2.5	56	ug/L
MKTF-11	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-11	11/13/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-11	11/13/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-11	11/13/2014	Isopropylbenzene	29	20	3.2	447	ug/L
MKTF-11	11/13/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-11	11/13/2014	Ethylbenzene	**770**	20	2.5	700	ug/L
MKTF-11	11/13/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-11	11/13/2014	n-Propylbenzene	78	20	2.8	660	ug/L
MKTF-11	11/13/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-11	11/13/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-11	11/13/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-11	11/13/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-11	11/13/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	1,3,5-Trimethylbenzene	60	20	2.6	60	ug/L
MKTF-11	11/13/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-11	11/13/2014	Toluene	**8200**	200	34	1000	ug/L
MKTF-11	11/13/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-11	11/13/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-11	11/13/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-11	11/13/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-11	11/13/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-11	11/13/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-11	11/13/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-11	11/13/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-11	11/13/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-11	11/13/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-11	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-11	11/13/2014	Xylenes, Total	**2300**	30	7.5	620	ug/L
MKTF-11	11/13/2014	MTBE	80	20	5	143	ug/L
MKTF-11	11/13/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-11	11/13/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-11	3/16/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-11	3/16/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	3/16/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	3/16/2015	Benzene	**10000**	200	13	5	ug/L
MKTF-11	3/16/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	3/16/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	3/16/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	3/16/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	3/16/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	3/16/2015	Vinyl Chloride	**45**	20	2.5	2	ug/L
MKTF-11	3/16/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	3/16/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	3/16/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	3/16/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	3/16/2015	1,1-Dichloroethane	**48**	20	8	25	ug/L
MKTF-11	3/16/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	3/16/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	3/16/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	3/16/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	3/16/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-11	3/16/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	3/16/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	3/16/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	3/16/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	3/16/2015	1,2,4-Trimethylbenzene	**510**	20	3.2	56	ug/L
MKTF-11	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	3/16/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	3/16/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	3/16/2015	Isopropylbenzene	33	20	3	447	ug/L
MKTF-11	3/16/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	3/16/2015	Ethylbenzene	**930**	20	2	700	ug/L
MKTF-11	3/16/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	3/16/2015	n-Propylbenzene	94	20	3.3	660	ug/L
MKTF-11	3/16/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	3/16/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	3/16/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	3/16/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/16/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	3/16/2015	1,3,5-Trimethylbenzene	**110**	20	2.5	60	ug/L
MKTF-11	3/16/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	3/16/2015	Toluene	**11000**	200	22	1000	ug/L
MKTF-11	3/16/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	3/16/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	3/16/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	3/16/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	3/16/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	3/16/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	3/16/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	3/16/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	3/16/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	3/16/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	3/16/2015	Xylenes, Total	**3700**	300	56	620	ug/L
MKTF-11	3/16/2015	MTBE	48	20	3.5	143	ug/L
MKTF-11	3/16/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	3/16/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	6/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	6/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	6/4/2015	Benzene	**12000**	200	13	5	ug/L
MKTF-11	6/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	6/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	6/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	6/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	6/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	6/4/2015	Vinyl Chloride	**34**	20	2.5	2	ug/L
MKTF-11	6/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	6/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	6/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	6/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	6/4/2015	1,1-Dichloroethane	**31**	20	8	25	ug/L
MKTF-11	6/4/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	6/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	6/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	6/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	6/4/2015	2-Butanone	430	200	7.3	5565	ug/L
MKTF-11	6/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	6/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	6/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	6/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	6/4/2015	1,2,4-Trimethylbenzene	**570**	20	3.2	56	ug/L
MKTF-11	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	6/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	6/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	6/4/2015	Isopropylbenzene	36	20	3	447	ug/L
MKTF-11	6/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	6/4/2015	Ethylbenzene	**1200**	20	2	700	ug/L
MKTF-11	6/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	6/4/2015	n-Propylbenzene	99	20	3.3	660	ug/L
MKTF-11	6/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	6/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	6/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	6/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	6/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	6/4/2015	1,3,5-Trimethylbenzene	**140**	20	2.5	60	ug/L
MKTF-11	6/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	6/4/2015	Toluene	**13000**	200	22	1000	ug/L
MKTF-11	6/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	6/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	6/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	6/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	6/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	6/4/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	6/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	6/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	6/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	6/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	6/4/2015	Xylenes, Total	**4900**	30	5.6	620	ug/L
MKTF-11	6/4/2015	MTBE	41	20	3.5	143	ug/L
MKTF-11	6/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	6/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	8/18/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-11	8/18/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	8/18/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	8/18/2015	Benzene	**3700**	200	13	5	ug/L
MKTF-11	8/18/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	8/18/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	8/18/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	8/18/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	8/18/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	8/18/2015	Vinyl Chloride	**49**	20	2.5	2	ug/L
MKTF-11	8/18/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	8/18/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	8/18/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	8/18/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	8/18/2015	1,1-Dichloroethane	**63**	20	8	25	ug/L
MKTF-11	8/18/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	8/18/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	8/18/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	8/18/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	8/18/2015	2-Butanone	ND	200	7.3	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/18/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	8/18/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	8/18/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	8/18/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	8/18/2015	1,2,4-Trimethylbenzene	**230**	20	3.2	56	ug/L
MKTF-11	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	8/18/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	8/18/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	8/18/2015	Isopropylbenzene	22	20	3	447	ug/L
MKTF-11	8/18/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	8/18/2015	Ethylbenzene	500	20	2	700	ug/L
MKTF-11	8/18/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	8/18/2015	n-Propylbenzene	51	20	3.3	660	ug/L
MKTF-11	8/18/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	8/18/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	8/18/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	8/18/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	8/18/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	8/18/2015	1,3,5-Trimethylbenzene	46	20	2.5	60	ug/L
MKTF-11	8/18/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	8/18/2015	Toluene	**4200**	200	22	1000	ug/L
MKTF-11	8/18/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	8/18/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	8/18/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	8/18/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	8/18/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	8/18/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	8/18/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	8/18/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	8/18/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	8/18/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	8/18/2015	Xylenes, Total	**1500**	30	5.6	620	ug/L
MKTF-11	8/18/2015	MTBE	82	20	3.5	143	ug/L
MKTF-11	8/18/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	8/18/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-11	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-11	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-11	11/3/2015	Benzene	**11000**	500	33	5	ug/L
MKTF-11	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-11	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-11	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-11	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-11	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-11	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-11	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-11	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-11	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-11	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-11	11/3/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-11	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-11	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-11	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-11	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-11	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-11	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-11	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-11	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-11	11/3/2015	1,2,4-Trimethylbenzene	**570**	50	8	56	ug/L
MKTF-11	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-11	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-11	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-11	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-11	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-11	11/3/2015	Ethylbenzene	**960**	50	5.1	700	ug/L
MKTF-11	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-11	11/3/2015	n-Propylbenzene	87	50	8.2	660	ug/L
MKTF-11	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-11	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-11	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-11	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/3/2015	1,3,5-Trimethylbenzene	**140**	50	6.1	60	ug/L
MKTF-11	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-11	11/3/2015	Toluene	**13000**	500	54	1000	ug/L
MKTF-11	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-11	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-11	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-11	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-11	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-11	11/3/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-11	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-11	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-11	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-11	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-11	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-11	11/3/2015	Xylenes, Total	**3900**	75	14	620	ug/L
MKTF-11	11/3/2015	MTBE	56	50	8.7	143	ug/L
MKTF-11	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-11	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-11	2/29/2016	Acetone	ND	1000	88	14064	ug/L
MKTF-11	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-11	2/29/2016	Benzene	**5100**	100	9.6	5	ug/L
MKTF-11	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-11	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-11	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-11	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-11	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-11	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-11	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-11	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-11	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-11	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-11	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-11	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-11	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-11	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-11	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-11	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-11	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-11	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-11	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-11	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-11	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-11	2/29/2016	1,2,4-Trimethylbenzene	**310**	100	10	56	ug/L
MKTF-11	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-11	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-11	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-11	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-11	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-11	2/29/2016	Ethylbenzene	670	100	11	700	ug/L
MKTF-11	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-11	2/29/2016	n-Propylbenzene	ND	100	13	660	ug/L
MKTF-11	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-11	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-11	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-11	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-11	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-11	2/29/2016	1,3,5-Trimethylbenzene	*ND*	*100*	12	60	ug/L
MKTF-11	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-11	2/29/2016	Toluene	**6400**	100	8.9	1000	ug/L
MKTF-11	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-11	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-11	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-11	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-11	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-11	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-11	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-11	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-11	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-11	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-11	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-11	2/29/2016	Xylenes, Total	**2200**	150	32	620	ug/L
MKTF-11	2/29/2016	MTBE	120	100	21	143	ug/L
MKTF-11	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-11	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-11	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/9/2016	Acetone	200	100	49	14064	ug/L
MKTF-11	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-11	6/9/2016	Benzene	**4500**	100	9.6	5	ug/L
MKTF-11	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-11	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-11	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-11	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-11	6/9/2016	Chloroethane	24	20	1.9	20857	ug/L
MKTF-11	6/9/2016	Vinyl Chloride	**62**	10	2	2	ug/L
MKTF-11	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-11	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-11	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-11	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-11	6/9/2016	1,1-Dichloroethane	**64**	10	1.1	25	ug/L
MKTF-11	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-11	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-11	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-11	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-11	6/9/2016	2-Butanone	170	100	7.4	5565	ug/L
MKTF-11	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-11	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-11	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-11	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-11	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-11	6/9/2016	1,2,4-Trimethylbenzene	**290**	10	1.1	56	ug/L
MKTF-11	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-11	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-11	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-11	6/9/2016	Isopropylbenzene	22	10	1	447	ug/L
MKTF-11	6/9/2016	p-Isopropyltoluene	3.5	10	1.4	NA	ug/L
MKTF-11	6/9/2016	Ethylbenzene	570	10	1.1	700	ug/L
MKTF-11	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-11	6/9/2016	n-Propylbenzene	58	10	1.3	660	ug/L
MKTF-11	6/9/2016	n-Butylbenzene	9.5	30	1.6	1000	ug/L
MKTF-11	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-11	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-11	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-11	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-11	6/9/2016	1,3,5-Trimethylbenzene	52	10	1.2	60	ug/L
MKTF-11	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-11	6/9/2016	Toluene	**5800**	100	12	1000	ug/L
MKTF-11	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-11	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-11	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-11	6/9/2016	sec-Butylbenzene	8.9	10	1.2	2000	ug/L
MKTF-11	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-11	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-11	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-11	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-11	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-11	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-11	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-11	6/9/2016	Xylenes, Total	**1800**	15	3.7	620	ug/L
MKTF-11	6/9/2016	MTBE	78	10	2.1	143	ug/L
MKTF-11	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-11	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-11	9/11/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-11	9/11/2016	Acetone	ND	500	250	14064	ug/L
MKTF-11	9/11/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-11	9/11/2016	Benzene	**4500**	50	4.8	5	ug/L
MKTF-11	9/11/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-11	9/11/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-11	9/11/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-11	9/11/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-11	9/11/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-11	9/11/2016	Vinyl Chloride	**56**	50	9.8	2	ug/L
MKTF-11	9/11/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-11	9/11/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-11	9/11/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-11	9/11/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-11	9/11/2016	1,1-Dichloroethane	**53**	50	5.4	25	ug/L
MKTF-11	9/11/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-11	9/11/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-11	9/11/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-11	9/11/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-11	9/11/2016	2-Butanone	270	500	37	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/11/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-11	9/11/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-11	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-11	9/11/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-11	9/11/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	9/11/2016	1,2,4-Trimethylbenzene	**250**	50	5.5	56	ug/L
MKTF-11	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-11	9/11/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-11	9/11/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-11	9/11/2016	Isopropylbenzene	19	50	5.2	447	ug/L
MKTF-11	9/11/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-11	9/11/2016	Ethylbenzene	530	50	5.6	700	ug/L
MKTF-11	9/11/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-11	9/11/2016	n-Propylbenzene	58	50	6.6	660	ug/L
MKTF-11	9/11/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-11	9/11/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-11	9/11/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-11	9/11/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-11	9/11/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
MKTF-11	9/11/2016	1,3,5-Trimethylbenzene	45	50	5.8	60	ug/L
MKTF-11	9/11/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-11	9/11/2016	Toluene	**4800**	50	5.9	1000	ug/L
MKTF-11	9/11/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-11	9/11/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-11	9/11/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	9/11/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-11	9/11/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-11	9/11/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-11	9/11/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-11	9/11/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	9/11/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-11	9/11/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-11	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-11	9/11/2016	Xylenes, Total	**1600**	75	18	620	ug/L
MKTF-11	9/11/2016	MTBE	81	50	11	143	ug/L
MKTF-11	9/11/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-11	9/11/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-11	11/2/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-11	11/2/2016	Acetone	ND	500	250	14064	ug/L
MKTF-11	11/2/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-11	11/2/2016	Benzene	**3900**	50	4.8	5	ug/L
MKTF-11	11/2/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-11	11/2/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-11	11/2/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-11	11/2/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-11	11/2/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-11	11/2/2016	Vinyl Chloride	**51**	50	9.8	2	ug/L
MKTF-11	11/2/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-11	11/2/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-11	11/2/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-11	11/2/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-11	11/2/2016	1,1-Dichloroethane	**57**	50	5.4	25	ug/L
MKTF-11	11/2/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-11	11/2/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-11	11/2/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-11	11/2/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-11	11/2/2016	2-Butanone	220	500	37	5565	ug/L
MKTF-11	11/2/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-11	11/2/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-11	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-11	11/2/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-11	11/2/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	11/2/2016	1,2,4-Trimethylbenzene	**250**	50	5.5	56	ug/L
MKTF-11	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-11	11/2/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-11	11/2/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-11	11/2/2016	Isopropylbenzene	21	50	5.2	447	ug/L
MKTF-11	11/2/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-11	11/2/2016	Ethylbenzene	520	50	5.6	700	ug/L
MKTF-11	11/2/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-11	11/2/2016	n-Propylbenzene	56	50	6.6	660	ug/L
MKTF-11	11/2/2016	n-Butylbenzene	17	150	8	1000	ug/L
MKTF-11	11/2/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-11	11/2/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-11	11/2/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-11	11/2/2016	4-Methyl-2-Pentanone	26	500	21	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	1,3,5-Trimethylbenzene	49	50	5.8	60	ug/L
MKTF-11	11/2/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-11	11/2/2016	Toluene	**4500**	50	5.9	1000	ug/L
MKTF-11	11/2/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-11	11/2/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-11	11/2/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/2/2016	sec-Butylbenzene	17	50	6.2	2000	ug/L
MKTF-11	11/2/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-11	11/2/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-11	11/2/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-11	11/2/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	11/2/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-11	11/2/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-11	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-11	11/2/2016	Xylenes, Total	**1600**	75	18	620	ug/L
MKTF-11	11/2/2016	MTBE	71	50	11	143	ug/L
MKTF-11	11/2/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-11	11/2/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-11	3/2/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	3/2/2017	Acetone	ND	200	18	14064	ug/L
MKTF-11	3/2/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-11	3/2/2017	Benzene	**3900**	200	19	5	ug/L
MKTF-11	3/2/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	3/2/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-11	3/2/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-11	3/2/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-11	3/2/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-11	3/2/2017	Vinyl Chloride	**54**	20	3.6	2	ug/L
MKTF-11	3/2/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	3/2/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-11	3/2/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	3/2/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	3/2/2017	1,1-Dichloroethane	**55**	20	2.1	25	ug/L
MKTF-11	3/2/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	3/2/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	3/2/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-11	3/2/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	3/2/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-11	3/2/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	3/2/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	3/2/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	3/2/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	3/2/2017	1,2,4-Trimethylbenzene	**330**	20	2.1	56	ug/L
MKTF-11	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	3/2/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	3/2/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	3/2/2017	Isopropylbenzene	23	20	2	447	ug/L
MKTF-11	3/2/2017	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-11	3/2/2017	Ethylbenzene	590	20	2.2	700	ug/L
MKTF-11	3/2/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	3/2/2017	n-Propylbenzene	67	20	2.6	660	ug/L
MKTF-11	3/2/2017	n-Butylbenzene	4.3	60	3.2	1000	ug/L
MKTF-11	3/2/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	3/2/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	3/2/2017	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-11	3/2/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-11	3/2/2017	1,3,5-Trimethylbenzene	58	20	2.3	60	ug/L
MKTF-11	3/2/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	3/2/2017	Toluene	**3400**	200	18	1000	ug/L
MKTF-11	3/2/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	3/2/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L
MKTF-11	3/2/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-11	3/2/2017	sec-Butylbenzene	14	20	2	2000	ug/L
MKTF-11	3/2/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-11	3/2/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	3/2/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	3/2/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	3/2/2017	2-Hexanone	*21*	*200*	13	38	ug/L
MKTF-11	3/2/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-11	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	3/2/2017	Xylenes, Total	**1600**	30	6.5	620	ug/L
MKTF-11	3/2/2017	MTBE	65	20	3	143	ug/L
MKTF-11	3/2/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-11	3/2/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-11	6/8/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/8/2017	Acetone	50	200	16	14064	ug/L
MKTF-11	6/8/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	6/8/2017	Benzene	**4500**	200	12	5	ug/L
MKTF-11	6/8/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	6/8/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	6/8/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	6/8/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	6/8/2017	Chloroethane	24	40	4.7	20857	ug/L
MKTF-11	6/8/2017	Vinyl Chloride	**42**	20	3.6	2	ug/L
MKTF-11	6/8/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	6/8/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	6/8/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	6/8/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	6/8/2017	1,1-Dichloroethane	**53**	20	8	25	ug/L
MKTF-11	6/8/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	6/8/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	6/8/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	6/8/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	6/8/2017	2-Butanone	130	200	23	5565	ug/L
MKTF-11	6/8/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	6/8/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	6/8/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	6/8/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	6/8/2017	1,2,4-Trimethylbenzene	**210**	20	2.3	56	ug/L
MKTF-11	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	6/8/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	6/8/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	6/8/2017	Isopropylbenzene	18	20	1	447	ug/L
MKTF-11	6/8/2017	p-Isopropyltoluene	2.9	20	1.9	NA	ug/L
MKTF-11	6/8/2017	Ethylbenzene	470	20	1.9	700	ug/L
MKTF-11	6/8/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	6/8/2017	n-Propylbenzene	42	20	1.5	660	ug/L
MKTF-11	6/8/2017	n-Butylbenzene	6.7	60	2.6	1000	ug/L
MKTF-11	6/8/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	6/8/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	6/8/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	6/8/2017	4-Methyl-2-Pentanone	16	200	14	1243	ug/L
MKTF-11	6/8/2017	1,3,5-Trimethylbenzene	44	20	1.7	60	ug/L
MKTF-11	6/8/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	6/8/2017	Toluene	**4700**	200	13	1000	ug/L
MKTF-11	6/8/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	6/8/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	6/8/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	6/8/2017	sec-Butylbenzene	8.6	20	2.2	2000	ug/L
MKTF-11	6/8/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	6/8/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	6/8/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	6/8/2017	Pentafluorobenzene	**200**	0	0		None
MKTF-11	6/8/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	6/8/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	6/8/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	6/8/2017	Xylenes, Total	**1500**	30	6.4	620	ug/L
MKTF-11	6/8/2017	MTBE	50	20	4.8	143	ug/L
MKTF-11	6/8/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	6/8/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	9/26/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	9/26/2017	Acetone	42	200	16	14064	ug/L
MKTF-11	9/26/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	9/26/2017	Benzene	**10000**	200	12	5	ug/L
MKTF-11	9/26/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	9/26/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	9/26/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	9/26/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	9/26/2017	Chloroethane	17	40	4.7	20857	ug/L
MKTF-11	9/26/2017	Vinyl Chloride	**22**	20	3.6	2	ug/L
MKTF-11	9/26/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	9/26/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	9/26/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	9/26/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	9/26/2017	1,1-Dichloroethane	25	20	8	25	ug/L
MKTF-11	9/26/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	9/26/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	9/26/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	9/26/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/26/2017	2-Butanone	200	200	23	5565	ug/L
MKTF-11	9/26/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	9/26/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	9/26/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	9/26/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	9/26/2017	1,2,4-Trimethylbenzene	**340**	20	2.3	56	ug/L
MKTF-11	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	9/26/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	9/26/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	9/26/2017	Isopropylbenzene	25	20	1	447	ug/L
MKTF-11	9/26/2017	p-Isopropyltoluene	4	20	1.9	NA	ug/L
MKTF-11	9/26/2017	Ethylbenzene	**810**	20	1.9	700	ug/L
MKTF-11	9/26/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	9/26/2017	n-Propylbenzene	65	20	1.5	660	ug/L
MKTF-11	9/26/2017	n-Butylbenzene	8.4	60	2.6	1000	ug/L
MKTF-11	9/26/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	9/26/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	9/26/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	9/26/2017	4-Methyl-2-Pentanone	47	200	14	1243	ug/L
MKTF-11	9/26/2017	1,3,5-Trimethylbenzene	**72**	20	1.7	60	ug/L
MKTF-11	9/26/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	9/26/2017	Toluene	**10000**	200	13	1000	ug/L
MKTF-11	9/26/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	9/26/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	9/26/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	9/26/2017	sec-Butylbenzene	8.8	20	2.2	2000	ug/L
MKTF-11	9/26/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	9/26/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	9/26/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	9/26/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	9/26/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	9/26/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	9/26/2017	Xylenes, Total	**2800**	30	6.4	620	ug/L
MKTF-11	9/26/2017	MTBE	54	20	4.8	143	ug/L
MKTF-11	9/26/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	9/26/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	11/28/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	11/28/2017	Acetone	94	200	16	14064	ug/L
MKTF-11	11/28/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	11/28/2017	Benzene	**9900**	200	12	5	ug/L
MKTF-11	11/28/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	11/28/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	11/28/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	11/28/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	11/28/2017	Chloroethane	23	40	4.7	20857	ug/L
MKTF-11	11/28/2017	Vinyl Chloride	**30**	20	3.6	2	ug/L
MKTF-11	11/28/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	11/28/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	11/28/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	11/28/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	11/28/2017	1,1-Dichloroethane	**40**	20	8	25	ug/L
MKTF-11	11/28/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	11/28/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	11/28/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	11/28/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	11/28/2017	2-Butanone	150	200	23	5565	ug/L
MKTF-11	11/28/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/28/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	11/28/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	11/28/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	11/28/2017	1,2,4-Trimethylbenzene	**330**	20	2.3	56	ug/L
MKTF-11	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	11/28/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	11/28/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	11/28/2017	Isopropylbenzene	27	20	1	447	ug/L
MKTF-11	11/28/2017	p-Isopropyltoluene	5.6	20	1.9	NA	ug/L
MKTF-11	11/28/2017	Ethylbenzene	**840**	20	1.9	700	ug/L
MKTF-11	11/28/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	11/28/2017	n-Propylbenzene	68	20	1.5	660	ug/L
MKTF-11	11/28/2017	n-Butylbenzene	10	60	2.6	1000	ug/L
MKTF-11	11/28/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	11/28/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	11/28/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	4-Methyl-2-Pentanone	29	200	14	1243	ug/L
MKTF-11	11/28/2017	1,3,5-Trimethylbenzene	**63**	20	1.7	60	ug/L
MKTF-11	11/28/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	11/28/2017	Toluene	**8800**	200	13	1000	ug/L
MKTF-11	11/28/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	11/28/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	11/28/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	11/28/2017	sec-Butylbenzene	12	20	2.2	2000	ug/L
MKTF-11	11/28/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	11/28/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	11/28/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	11/28/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	11/28/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	11/28/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	11/28/2017	Xylenes, Total	**2600**	30	6.4	620	ug/L
MKTF-11	11/28/2017	MTBE	68	20	4.8	143	ug/L
MKTF-11	11/28/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	11/28/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	2/8/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	2/8/2018	Acetone	110	200	16	14064	ug/L
MKTF-11	2/8/2018	Chloroform	ND	20	8	100	ug/L
MKTF-11	2/8/2018	Benzene	**13000**	200	12	5	ug/L
MKTF-11	2/8/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	2/8/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	2/8/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	2/8/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	2/8/2018	Chloroethane	23	40	4.7	20857	ug/L
MKTF-11	2/8/2018	Vinyl Chloride	**25**	20	3.6	2	ug/L
MKTF-11	2/8/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	2/8/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	2/8/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	2/8/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	2/8/2018	1,1-Dichloroethane	**31**	20	8	25	ug/L
MKTF-11	2/8/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	2/8/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	2/8/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	2/8/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	2/8/2018	2-Butanone	150	200	23	5565	ug/L
MKTF-11	2/8/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	2/8/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	2/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	2/8/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	2/8/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	2/8/2018	1,2,4-Trimethylbenzene	**370**	20	2.3	56	ug/L
MKTF-11	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	2/8/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	2/8/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	2/8/2018	Isopropylbenzene	29	20	1	447	ug/L
MKTF-11	2/8/2018	p-Isopropyltoluene	4.6	20	1.9	NA	ug/L
MKTF-11	2/8/2018	Ethylbenzene	**1000**	20	1.9	700	ug/L
MKTF-11	2/8/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-11	2/8/2018	n-Propylbenzene	70	20	1.5	660	ug/L
MKTF-11	2/8/2018	n-Butylbenzene	9.4	60	2.6	1000	ug/L
MKTF-11	2/8/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	2/8/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	2/8/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	2/8/2018	4-Methyl-2-Pentanone	33	200	14	1243	ug/L
MKTF-11	2/8/2018	1,3,5-Trimethylbenzene	**68**	20	1.7	60	ug/L
MKTF-11	2/8/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	2/8/2018	Toluene	**12000**	200	13	1000	ug/L
MKTF-11	2/8/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	2/8/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	2/8/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	2/8/2018	sec-Butylbenzene	9.7	20	2.2	2000	ug/L
MKTF-11	2/8/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	2/8/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	2/8/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	2/8/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	2/8/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	2/8/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	2/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	2/8/2018	Xylenes, Total	**3100**	30	6.4	620	ug/L
MKTF-11	2/8/2018	MTBE	59	20	4.8	143	ug/L
MKTF-11	2/8/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	2/8/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/2/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	5/2/2018	Acetone	71	200	16	14064	ug/L
MKTF-11	5/2/2018	Chloroform	ND	20	8	100	ug/L
MKTF-11	5/2/2018	Benzene	**13000**	200	12	5	ug/L
MKTF-11	5/2/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	5/2/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	5/2/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	5/2/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	5/2/2018	Chloroethane	24	40	4.7	20857	ug/L
MKTF-11	5/2/2018	Vinyl Chloride	**28**	20	3.6	2	ug/L
MKTF-11	5/2/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	5/2/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	5/2/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	5/2/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	5/2/2018	1,1-Dichloroethane	**32**	20	8	25	ug/L
MKTF-11	5/2/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	5/2/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	5/2/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	5/2/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	5/2/2018	2-Butanone	130	200	23	5565	ug/L
MKTF-11	5/2/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	5/2/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	5/2/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	5/2/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	5/2/2018	1,2,4-Trimethylbenzene	**500**	20	2.3	56	ug/L
MKTF-11	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	5/2/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	5/2/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	5/2/2018	Isopropylbenzene	35	20	1	447	ug/L
MKTF-11	5/2/2018	p-Isopropyltoluene	4.5	20	1.9	NA	ug/L
MKTF-11	5/2/2018	Ethylbenzene	**1200**	20	1.9	700	ug/L
MKTF-11	5/2/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-11	5/2/2018	n-Propylbenzene	96	20	1.5	660	ug/L
MKTF-11	5/2/2018	n-Butylbenzene	10	60	2.6	1000	ug/L
MKTF-11	5/2/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	5/2/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	5/2/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	5/2/2018	4-Methyl-2-Pentanone	21	200	14	1243	ug/L
MKTF-11	5/2/2018	1,3,5-Trimethylbenzene	**94**	20	1.7	60	ug/L
MKTF-11	5/2/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	5/2/2018	Toluene	**12000**	200	13	1000	ug/L
MKTF-11	5/2/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	5/2/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	5/2/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	5/2/2018	sec-Butylbenzene	11	20	2.2	2000	ug/L
MKTF-11	5/2/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	5/2/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	5/2/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	5/2/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	5/2/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	5/2/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	5/2/2018	Xylenes, Total	**3800**	30	6.4	620	ug/L
MKTF-11	5/2/2018	MTBE	75	20	4.8	143	ug/L
MKTF-11	5/2/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	5/2/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	9/4/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-11	9/4/2018	Acetone	ND	500	39	14064	ug/L
MKTF-11	9/4/2018	Chloroform	ND	50	20	100	ug/L
MKTF-11	9/4/2018	Benzene	**10000**	500	87	5	ug/L
MKTF-11	9/4/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-11	9/4/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-11	9/4/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-11	9/4/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-11	9/4/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-11	9/4/2018	Vinyl Chloride	**27**	50	5.5	2	ug/L
MKTF-11	9/4/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-11	9/4/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-11	9/4/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-11	9/4/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-11	9/4/2018	1,1-Dichloroethane	**29**	50	20	25	ug/L
MKTF-11	9/4/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-11	9/4/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-11	9/4/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-11	9/4/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-11	9/4/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-11	9/4/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-11	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-11	9/4/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-11	9/4/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	9/4/2018	1,2,4-Trimethylbenzene	**370**	50	13	56	ug/L
MKTF-11	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-11	9/4/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-11	9/4/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-11	9/4/2018	Isopropylbenzene	24	50	11	447	ug/L
MKTF-11	9/4/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-11	9/4/2018	Ethylbenzene	**810**	50	11	700	ug/L
MKTF-11	9/4/2018	Styrene	ND	50	13	100	ug/L
MKTF-11	9/4/2018	n-Propylbenzene	73	50	12	660	ug/L
MKTF-11	9/4/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	9/4/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-11	9/4/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-11	9/4/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-11	9/4/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-11	9/4/2018	1,3,5-Trimethylbenzene	**63**	50	12	60	ug/L
MKTF-11	9/4/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-11	9/4/2018	Toluene	**5700**	500	84	1000	ug/L
MKTF-11	9/4/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-11	9/4/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-11	9/4/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	9/4/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-11	9/4/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-11	9/4/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-11	9/4/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-11	9/4/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-11	9/4/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-11	9/4/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-11	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-11	9/4/2018	Xylenes, Total	**2500**	75	32	620	ug/L
MKTF-11	9/4/2018	MTBE	64	50	16	143	ug/L
MKTF-11	9/4/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-11	9/4/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-11	11/20/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	11/20/2018	Acetone	ND	500	38	14064	ug/L
MKTF-11	11/20/2018	Chloroform	ND	50	12	100	ug/L
MKTF-11	11/20/2018	Benzene	**11000**	200	35	5	ug/L
MKTF-11	11/20/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
MKTF-11	11/20/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
MKTF-11	11/20/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
MKTF-11	11/20/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-11	11/20/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-11	11/20/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
MKTF-11	11/20/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-11	11/20/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-11	11/20/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-11	11/20/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-11	11/20/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
MKTF-11	11/20/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-11	11/20/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
MKTF-11	11/20/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
MKTF-11	11/20/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
MKTF-11	11/20/2018	2-Butanone	ND	500	71	5565	ug/L
MKTF-11	11/20/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-11	11/20/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-11	11/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-11	11/20/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-11	11/20/2018	2-Chlorotoluene	ND	50	13	233	ug/L
MKTF-11	11/20/2018	1,2,4-Trimethylbenzene	**310**	50	13	56	ug/L
MKTF-11	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-11	11/20/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-11	11/20/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-11	11/20/2018	Isopropylbenzene	ND	50	11	447	ug/L
MKTF-11	11/20/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-11	11/20/2018	Ethylbenzene	470	50	11	700	ug/L
MKTF-11	11/20/2018	Styrene	ND	50	13	100	ug/L
MKTF-11	11/20/2018	n-Propylbenzene	ND	50	12	660	ug/L
MKTF-11	11/20/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	11/20/2018	4-Chlorotoluene	ND	50	14	250	ug/L
MKTF-11	11/20/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-11	11/20/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/20/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-11	11/20/2018	1,3,5-Trimethylbenzene	**70**	50	12	60	ug/L
MKTF-11	11/20/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-11	11/20/2018	Toluene	**4700**	50	8.4	1000	ug/L
MKTF-11	11/20/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-11	11/20/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-11	11/20/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/20/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-11	11/20/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-11	11/20/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-11	11/20/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
MKTF-11	11/20/2018	Pentafluorobenzene	**500**	0	0		None
MKTF-11	11/20/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-11	11/20/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-11	11/20/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
MKTF-11	11/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-11	11/20/2018	Xylenes, Total	**2500**	75	32	620	ug/L
MKTF-11	11/20/2018	MTBE	71	50	23	143	ug/L
MKTF-11	11/20/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-11	11/20/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-11	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-11	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-11	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-11	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-11	5/13/2019	1,1-Dichloroethane	**55**	50	7.04293	25	ug/L
MKTF-11	5/13/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
MKTF-11	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-11	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-11	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-11	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-11	5/13/2019	1,2,4-Trimethylbenzene	**260**	50	10.659955	56	ug/L
MKTF-11	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-11	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-11	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-11	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-11	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-11	5/13/2019	1,3,5-Trimethylbenzene	53	50	9.432992	60	ug/L
MKTF-11	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-11	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-11	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-11	5/13/2019	1-Methylnaphthalene	17	200	15.747724	NA	ug/L
MKTF-11	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-11	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-11	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-11	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-11	5/13/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
MKTF-11	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-11	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-11	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-11	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-11	5/13/2019	Benzene	**6100**	500	83.319528	5	ug/L
MKTF-11	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-11	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-11	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-11	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-11	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-11	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-11	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-11	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-11	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-11	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-11	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-11	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-11	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-11	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-11	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-11	5/13/2019	Ethylbenzene	570	50	6.61704	700	ug/L
MKTF-11	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-11	5/13/2019	Isopropylbenzene	19	50	9.576114	447	ug/L
MKTF-11	5/13/2019	MTBE	46	50	22.804749	143	ug/L
MKTF-11	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-11	5/13/2019	Naphthalene	**54**	100	13.753567	30	ug/L
MKTF-11	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-11	5/13/2019	n-Propylbenzene	47	50	10.7154	660	ug/L
MKTF-11	5/13/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
MKTF-11	5/13/2019	Styrene	ND	50	9.566168	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-11	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-11	5/13/2019	Toluene	**3400**	50	17.521811	1000	ug/L
MKTF-11	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-11	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-11	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-11	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-11	5/13/2019	Vinyl Chloride	**44**	50	8.954964	2	ug/L
MKTF-11	5/13/2019	Xylenes, Total	**1800**	75	22.720747	620	ug/L
MKTF-11	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-11	8/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-11	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-11	8/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-11	8/21/2019	1,1-Dichloroethane	**39**	10	1.408586	25	ug/L
MKTF-11	8/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-11	8/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-11	8/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-11	8/21/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-11	8/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-11	8/21/2019	1,2,4-Trimethylbenzene	**270**	10	2.131991	56	ug/L
MKTF-11	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-11	8/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-11	8/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-11	8/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-11	8/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-11	8/21/2019	1,3,5-Trimethylbenzene	44	10	1.886598	60	ug/L
MKTF-11	8/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-11	8/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-11	8/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-11	8/21/2019	1-Methylnaphthalene	15	40	3.149545	NA	ug/L
MKTF-11	8/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-11	8/21/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-11	8/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-11	8/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-11	8/21/2019	2-Methylnaphthalene	**17**	40	3.45376		ug/L
MKTF-11	8/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-11	8/21/2019	p-Isopropyltoluene	4.2	10	2.172894	NA	ug/L
MKTF-11	8/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-11	8/21/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-11	8/21/2019	Benzene	**9100**	100	16.663906	5	ug/L
MKTF-11	8/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-11	8/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-11	8/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-11	8/21/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-11	8/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-11	8/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-11	8/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-11	8/21/2019	Chloroethane	23	20	1.778026	20857	ug/L
MKTF-11	8/21/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-11	8/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-11	8/21/2019	cis-1,2-Dichloroethene	6.9	10	1.901151	70	ug/L
MKTF-11	8/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-11	8/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-11	8/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-11	8/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-11	8/21/2019	Ethylbenzene	670	10	1.323408	700	ug/L
MKTF-11	8/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-11	8/21/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-11	8/21/2019	MTBE	28	10	4.56095	143	ug/L
MKTF-11	8/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-11	8/21/2019	Naphthalene	**50**	20	2.750713	30	ug/L
MKTF-11	8/21/2019	n-Butylbenzene	13	30	2.275695	1000	ug/L
MKTF-11	8/21/2019	n-Propylbenzene	47	10	2.14308	660	ug/L
MKTF-11	8/21/2019	sec-Butylbenzene	8.2	10	2.477313	2000	ug/L
MKTF-11	8/21/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-11	8/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-11	8/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-11	8/21/2019	Toluene	**1400**	100	35.043621	1000	ug/L
MKTF-11	8/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-11	8/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-11	8/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-11	8/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-11	8/21/2019	Vinyl Chloride	**28**	10	1.790993	2	ug/L
MKTF-11	8/21/2019	Xylenes, Total	**1700**	15	4.544149	620	ug/L
MKTF-11	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-11	10/30/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-11	10/30/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-11	10/30/2019	1,1-Dichloroethane	**27**	20	2.817172	25	ug/L
MKTF-11	10/30/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-11	10/30/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-11	10/30/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-11	10/30/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-11	10/30/2019	1,2,4-Trimethylbenzene	**300**	20	4.263982	56	ug/L
MKTF-11	10/30/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-11	10/30/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-11	10/30/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-11	10/30/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-11	10/30/2019	1,3,5-Trimethylbenzene	55	20	3.773197	60	ug/L
MKTF-11	10/30/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-11	10/30/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-11	10/30/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-11	10/30/2019	1-Methylnaphthalene	14	80	6.29909	NA	ug/L
MKTF-11	10/30/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-11	10/30/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-11	10/30/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-11	10/30/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-11	10/30/2019	2-Methylnaphthalene	**13**	80	6.90752		ug/L
MKTF-11	10/30/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-11	10/30/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-11	10/30/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-11	10/30/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-11	10/30/2019	Benzene	**13000**	200	33.327811	5	ug/L
MKTF-11	10/30/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-11	10/30/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-11	10/30/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-11	10/30/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-11	10/30/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-11	10/30/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-11	10/30/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-11	10/30/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-11	10/30/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-11	10/30/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-11	10/30/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-11	10/30/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-11	10/30/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-11	10/30/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-11	10/30/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-11	10/30/2019	Ethylbenzene	**850**	20	2.646816	700	ug/L
MKTF-11	10/30/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-11	10/30/2019	Isopropylbenzene	25	20	3.830445	447	ug/L
MKTF-11	10/30/2019	MTBE	41	20	9.1219	143	ug/L
MKTF-11	10/30/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-11	10/30/2019	Naphthalene	**67**	40	5.501427	30	ug/L
MKTF-11	10/30/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-11	10/30/2019	n-Propylbenzene	58	20	4.28616	660	ug/L
MKTF-11	10/30/2019	sec-Butylbenzene	6.8	20	4.954626	2000	ug/L
MKTF-11	10/30/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-11	10/30/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-11	10/30/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-11	10/30/2019	Toluene	**1500**	20	7.008724	1000	ug/L
MKTF-11	10/30/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-11	10/30/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-11	10/30/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-11	10/30/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-11	10/30/2019	Vinyl Chloride	**23**	20	3.581986	2	ug/L
MKTF-11	10/30/2019	Xylenes, Total	**2200**	30	9.088299	620	ug/L
MKTF-11	3/3/2020	Benzene	**6000**	200	45	5	ug/L
MKTF-11	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-11	3/3/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-11	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-11	3/3/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-11	3/3/2020	1,1-Dichloroethane	**35**	20	5.5	25	ug/L
MKTF-11	3/3/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
MKTF-11	3/3/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-11	3/3/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-11	3/3/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-11	3/3/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-11	3/3/2020	1,2,4-Trimethylbenzene	**180**	20	2.4	56	ug/L
MKTF-11	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-11	3/3/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-11	3/3/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-11	3/3/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-11	3/3/2020	1,3,5-Trimethylbenzene	35	20	3.6	60	ug/L
MKTF-11	3/3/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-11	3/3/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-11	3/3/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-11	3/3/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-11	3/3/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-11	3/3/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-11	3/3/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-11	3/3/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-11	3/3/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-11	3/3/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-11	3/3/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-11	3/3/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-11	3/3/2020	Acetone	ND	200	47	14064	ug/L
MKTF-11	3/3/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-11	3/3/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-11	3/3/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-11	3/3/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-11	3/3/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-11	3/3/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/3/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-11	3/3/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-11	3/3/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-11	3/3/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-11	3/3/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-11	3/3/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-11	3/3/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-11	3/3/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-11	3/3/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-11	3/3/2020	Ethylbenzene	320	20	4.3	700	ug/L
MKTF-11	3/3/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-11	3/3/2020	Isopropylbenzene	12	20	3.7	447	ug/L
MKTF-11	3/3/2020	MTBE	59	20	7.9	143	ug/L
MKTF-11	3/3/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-11	3/3/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-11	3/3/2020	n-Propylbenzene	21	20	3.6	660	ug/L
MKTF-11	3/3/2020	Naphthalene	*30*	*40*	5.6	30	ug/L
MKTF-11	3/3/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-11	3/3/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-11	3/3/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-11	3/3/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-11	3/3/2020	Toluene	860	20	4	1000	ug/L
MKTF-11	3/3/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-11	3/3/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-11	3/3/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-11	3/3/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-11	3/3/2020	Vinyl Chloride	**27**	20	3.9	2	ug/L
MKTF-11	3/3/2020	Xylenes, Total	**1100**	30	11	620	ug/L
MKTF-13	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-13	3/15/2017	Acetone	30	100	8.8	14064	ug/L
MKTF-13	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-13	3/15/2017	Benzene	**3000**	100	9.6	5	ug/L
MKTF-13	3/15/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-13	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-13	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-13	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-13	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-13	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-13	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-13	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-13	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-13	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-13	3/15/2017	1,1-Dichloroethane	ND	10	1	25	ug/L
MKTF-13	3/15/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-13	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-13	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-13	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-13	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-13	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-13	3/15/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-13	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-13	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-13	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-13	3/15/2017	1,2,4-Trimethylbenzene	**680**	10	1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-13	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-13	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-13	3/15/2017	Isopropylbenzene	40	10	0.98	447	ug/L
MKTF-13	3/15/2017	p-Isopropyltoluene	9	10	1.4	NA	ug/L
MKTF-13	3/15/2017	Ethylbenzene	**870**	10	1.1	700	ug/L
MKTF-13	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-13	3/15/2017	n-Propylbenzene	83	10	1.3	660	ug/L
MKTF-13	3/15/2017	n-Butylbenzene	15	30	1.6	1000	ug/L
MKTF-13	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-13	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-13	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-13	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-13	3/15/2017	1,3,5-Trimethylbenzene	**170**	10	1.2	60	ug/L
MKTF-13	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-13	3/15/2017	Toluene	210	10	0.89	1000	ug/L
MKTF-13	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-13	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-13	3/15/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-13	3/15/2017	sec-Butylbenzene	10	10	1	2000	ug/L
MKTF-13	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-13	3/15/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-13	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-13	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-13	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-13	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-13	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-13	3/15/2017	Xylenes, Total	**4000**	150	32	620	ug/L
MKTF-13	3/15/2017	MTBE	**2300**	100	15	143	ug/L
MKTF-13	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-13	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-13	5/10/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-13	5/10/2018	Acetone	37	50	4.1	14064	ug/L
MKTF-13	5/10/2018	Chloroform	ND	5	2	100	ug/L
MKTF-13	5/10/2018	Benzene	**4800**	50	3.1	5	ug/L
MKTF-13	5/10/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-13	5/10/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-13	5/10/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-13	5/10/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-13	5/10/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-13	5/10/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-13	5/10/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-13	5/10/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-13	5/10/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-13	5/10/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-13	5/10/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-13	5/10/2018	1,1-Dichloroethene	2.5	5	0.4	7	ug/L
MKTF-13	5/10/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-13	5/10/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-13	5/10/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-13	5/10/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-13	5/10/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-13	5/10/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-13	5/10/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-13	5/10/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-13	5/10/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-13	5/10/2018	1,2,4-Trimethylbenzene	**690**	50	5.6	56	ug/L
MKTF-13	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-13	5/10/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-13	5/10/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-13	5/10/2018	Isopropylbenzene	40	5	0.26	447	ug/L
MKTF-13	5/10/2018	p-Isopropyltoluene	8.8	5	0.48	NA	ug/L
MKTF-13	5/10/2018	Ethylbenzene	**870**	50	4.7	700	ug/L
MKTF-13	5/10/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-13	5/10/2018	n-Propylbenzene	75	5	0.37	660	ug/L
MKTF-13	5/10/2018	n-Butylbenzene	13	15	0.65	1000	ug/L
MKTF-13	5/10/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-13	5/10/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-13	5/10/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-13	5/10/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-13	5/10/2018	1,3,5-Trimethylbenzene	**180**	5	0.44	60	ug/L
MKTF-13	5/10/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-13	5/10/2018	Toluene	150	5	0.32	1000	ug/L
MKTF-13	5/10/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-13	5/10/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-13	5/10/2018	Tetrachloroethene	ND	5	0.65	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/10/2018	sec-Butylbenzene	8.9	5	0.55	2000	ug/L
MKTF-13	5/10/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-13	5/10/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-13	5/10/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-13	5/10/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-13	5/10/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-13	5/10/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-13	5/10/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-13	5/10/2018	Xylenes, Total	**4000**	75	16	620	ug/L
MKTF-13	5/10/2018	MTBE	**2000**	50	12	143	ug/L
MKTF-13	5/10/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-13	5/10/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-13	8/30/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-13	8/30/2018	Acetone	17	200	16	14064	ug/L
MKTF-13	8/30/2018	Chloroform	ND	20	8	100	ug/L
MKTF-13	8/30/2018	Benzene	**3500**	200	35	5	ug/L
MKTF-13	8/30/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-13	8/30/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-13	8/30/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-13	8/30/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-13	8/30/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-13	8/30/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-13	8/30/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-13	8/30/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-13	8/30/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-13	8/30/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-13	8/30/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-13	8/30/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-13	8/30/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-13	8/30/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-13	8/30/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-13	8/30/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-13	8/30/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-13	8/30/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-13	8/30/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-13	8/30/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-13	8/30/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-13	8/30/2018	1,2,4-Trimethylbenzene	**580**	20	5.1	56	ug/L
MKTF-13	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-13	8/30/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-13	8/30/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-13	8/30/2018	Isopropylbenzene	29	20	4.4	447	ug/L
MKTF-13	8/30/2018	p-Isopropyltoluene	6.5	20	4.8	NA	ug/L
MKTF-13	8/30/2018	Ethylbenzene	650	20	4.5	700	ug/L
MKTF-13	8/30/2018	Styrene	ND	20	5	100	ug/L
MKTF-13	8/30/2018	n-Propylbenzene	59	20	4.9	660	ug/L
MKTF-13	8/30/2018	n-Butylbenzene	7	60	5	1000	ug/L
MKTF-13	8/30/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-13	8/30/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-13	8/30/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-13	8/30/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-13	8/30/2018	1,3,5-Trimethylbenzene	**150**	20	4.6	60	ug/L
MKTF-13	8/30/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-13	8/30/2018	Toluene	120	20	3.4	1000	ug/L
MKTF-13	8/30/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-13	8/30/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-13	8/30/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-13	8/30/2018	sec-Butylbenzene	5.8	20	4	2000	ug/L
MKTF-13	8/30/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-13	8/30/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-13	8/30/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-13	8/30/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-13	8/30/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-13	8/30/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-13	8/30/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-13	8/30/2018	Xylenes, Total	**3200**	30	13	620	ug/L
MKTF-13	8/30/2018	MTBE	**1200**	20	6.4	143	ug/L
MKTF-13	8/30/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-13	8/30/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-13	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-13	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-13	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-13	11/28/2018	Benzene	**4500**	200	35	5	ug/L
MKTF-13	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-13	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-13	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-13	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-13	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-13	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-13	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-13	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-13	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-13	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-13	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-13	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-13	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-13	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-13	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-13	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-13	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-13	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-13	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-13	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-13	11/28/2018	1,2,4-Trimethylbenzene	**520**	20	5.1	56	ug/L
MKTF-13	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-13	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-13	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-13	11/28/2018	Isopropylbenzene	22	20	4.4	447	ug/L
MKTF-13	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-13	11/28/2018	Ethylbenzene	530	20	4.5	700	ug/L
MKTF-13	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-13	11/28/2018	n-Propylbenzene	40	20	4.9	660	ug/L
MKTF-13	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-13	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-13	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-13	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-13	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-13	11/28/2018	1,3,5-Trimethylbenzene	**140**	20	4.6	60	ug/L
MKTF-13	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-13	11/28/2018	Toluene	130	20	3.4	1000	ug/L
MKTF-13	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-13	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-13	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-13	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-13	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-13	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-13	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-13	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-13	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-13	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-13	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-13	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-13	11/28/2018	Xylenes, Total	**2800**	30	13	620	ug/L
MKTF-13	11/28/2018	MTBE	**1400**	20	9.1	143	ug/L
MKTF-13	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-13	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-13	3/26/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	3/26/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	3/26/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	3/26/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	3/26/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	3/26/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	3/26/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	3/26/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	3/26/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-13	3/26/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	3/26/2019	1,2,4-Trimethylbenzene	**590**	20	4.263982	56	ug/L
MKTF-13	3/26/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-13	3/26/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	3/26/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	3/26/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	3/26/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	3/26/2019	1,3,5-Trimethylbenzene	**180**	20	3.773197	60	ug/L
MKTF-13	3/26/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	3/26/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	3/26/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	3/26/2019	1-Methylnaphthalene	120	80	6.29909	NA	ug/L
MKTF-13	3/26/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	3/26/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	3/26/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	3/26/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	2-Methylnaphthalene	**140**	80	6.90752		ug/L
MKTF-13	3/26/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	3/26/2019	p-Isopropyltoluene	9	20	4.345787	NA	ug/L
MKTF-13	3/26/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	3/26/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	3/26/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-13	3/26/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	3/26/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	3/26/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	3/26/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	3/26/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-13	3/26/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	3/26/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	3/26/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	3/26/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	3/26/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	3/26/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	3/26/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	3/26/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	3/26/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	3/26/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	3/26/2019	Ethylbenzene	600	20	2.646816	700	ug/L
MKTF-13	3/26/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	3/26/2019	Isopropylbenzene	33	20	3.830445	447	ug/L
MKTF-13	3/26/2019	MTBE	**440**	20	9.1219	143	ug/L
MKTF-13	3/26/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	3/26/2019	Naphthalene	**210**	40	5.501427	30	ug/L
MKTF-13	3/26/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	3/26/2019	n-Propylbenzene	60	20	4.28616	660	ug/L
MKTF-13	3/26/2019	sec-Butylbenzene	8.8	20	4.954626	2000	ug/L
MKTF-13	3/26/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	3/26/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	3/26/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	3/26/2019	Toluene	140	20	7.008724	1000	ug/L
MKTF-13	3/26/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	3/26/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	3/26/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	3/26/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	3/26/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	3/26/2019	Xylenes, Total	**3500**	30	9.088299	620	ug/L
MKTF-13	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	5/9/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	5/9/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-13	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	5/9/2019	1,2,4-Trimethylbenzene	**390**	20	4.263982	56	ug/L
MKTF-13	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-13	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	5/9/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-13	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	5/9/2019	1-Methylnaphthalene	110	80	6.29909	NA	ug/L
MKTF-13	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-13	5/9/2019	2-Methylnaphthalene	**120**	80	6.90752		ug/L
MKTF-13	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	5/9/2019	p-Isopropyltoluene	5.3	20	4.345787	NA	ug/L
MKTF-13	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	5/9/2019	Benzene	**3200**	200	33.327811	5	ug/L
MKTF-13	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	5/9/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	5/9/2019	Ethylbenzene	320	20	2.646816	700	ug/L
MKTF-13	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	5/9/2019	Isopropylbenzene	14	20	3.830445	447	ug/L
MKTF-13	5/9/2019	MTBE	**480**	20	9.1219	143	ug/L
MKTF-13	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	5/9/2019	Naphthalene	**170**	40	5.501427	30	ug/L
MKTF-13	5/9/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	5/9/2019	n-Propylbenzene	21	20	4.28616	660	ug/L
MKTF-13	5/9/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-13	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	5/9/2019	Toluene	120	20	7.008724	1000	ug/L
MKTF-13	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	5/9/2019	Xylenes, Total	**2600**	30	9.088299	620	ug/L
MKTF-13	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	10/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	10/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	10/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	10/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	10/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	10/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	10/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	10/29/2019	1,2,4-Trimethylbenzene	**350**	20	4.263982	56	ug/L
MKTF-13	10/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	10/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	10/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	10/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	10/29/2019	1,3,5-Trimethylbenzene	**100**	20	3.773197	60	ug/L
MKTF-13	10/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	10/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	10/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	10/29/2019	1-Methylnaphthalene	81	80	6.29909	NA	ug/L
MKTF-13	10/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	10/29/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	10/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	10/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-13	10/29/2019	2-Methylnaphthalene	**93**	80	6.90752		ug/L
MKTF-13	10/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	10/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-13	10/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	10/29/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	10/29/2019	Benzene	**4700**	200	33.327811	5	ug/L
MKTF-13	10/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	10/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	10/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	10/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	10/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-13	10/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	10/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	10/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	10/29/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	10/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	10/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	10/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	10/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	10/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	10/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	10/29/2019	Ethylbenzene	600	20	2.646816	700	ug/L
MKTF-13	10/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	10/29/2019	Isopropylbenzene	25	20	3.830445	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	10/29/2019	MTBE	**330**	20	9.1219	143	ug/L
MKTF-13	10/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	10/29/2019	Naphthalene	**150**	40	5.501427	30	ug/L
MKTF-13	10/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	10/29/2019	n-Propylbenzene	41	20	4.28616	660	ug/L
MKTF-13	10/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-13	10/29/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	10/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	10/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	10/29/2019	Toluene	110	20	7.008724	1000	ug/L
MKTF-13	10/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	10/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	10/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	10/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	10/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	10/29/2019	Xylenes, Total	**2600**	30	9.088299	620	ug/L
MKTF-15	4/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-15	4/10/2014	Acetone	ND	100	49	14064	ug/L
MKTF-15	4/10/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-15	4/10/2014	Benzene	**16000**	200	31	5	ug/L
MKTF-15	4/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-15	4/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-15	4/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-15	4/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-15	4/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-15	4/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-15	4/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-15	4/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-15	4/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-15	4/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-15	4/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-15	4/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-15	4/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-15	4/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-15	4/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-15	4/10/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-15	4/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-15	4/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-15	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-15	4/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-15	4/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-15	4/10/2014	1,2,4-Trimethylbenzene	**460**	10	1.2	56	ug/L
MKTF-15	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-15	4/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-15	4/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-15	4/10/2014	Isopropylbenzene	53	10	1.6	447	ug/L
MKTF-15	4/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-15	4/10/2014	Ethylbenzene	**1200**	200	25	700	ug/L
MKTF-15	4/10/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-15	4/10/2014	n-Propylbenzene	94	10	1.4	660	ug/L
MKTF-15	4/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-15	4/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-15	4/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-15	4/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-15	4/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-15	4/10/2014	1,3,5-Trimethylbenzene	**110**	10	1.3	60	ug/L
MKTF-15	4/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-15	4/10/2014	Toluene	**2400**	200	34	1000	ug/L
MKTF-15	4/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-15	4/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-15	4/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-15	4/10/2014	sec-Butylbenzene	12	10	1.5	2000	ug/L
MKTF-15	4/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-15	4/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-15	4/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-15	4/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-15	4/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-15	4/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-15	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-15	4/10/2014	Xylenes, Total	**6100**	300	75	620	ug/L
MKTF-15	4/10/2014	MTBE	**270**	10	2.5	143	ug/L
MKTF-15	4/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-15	4/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-15	6/5/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-15	6/5/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-15	6/5/2014	1,2,4-Trimethylbenzene	**330**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-15	6/5/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-15	6/5/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-15	6/5/2014	Isopropylbenzene	59	5	0.81	447	ug/L
MKTF-15	6/5/2014	p-Isopropyltoluene	5.9	5	0.88	NA	ug/L
MKTF-15	6/5/2014	Ethylbenzene	**1300**	200	25	700	ug/L
MKTF-15	6/5/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-15	6/5/2014	n-Propylbenzene	97	5	0.7	660	ug/L
MKTF-15	6/5/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-15	6/5/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-15	6/5/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-15	6/5/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-15	6/5/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-15	6/5/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-15	6/5/2014	Acetone	290	50	25	14064	ug/L
MKTF-15	6/5/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-15	6/5/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-15	6/5/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-15	6/5/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-15	6/5/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-15	6/5/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-15	6/5/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-15	6/5/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-15	6/5/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-15	6/5/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-15	6/5/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-15	6/5/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-15	6/5/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-15	6/5/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-15	6/5/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-15	6/5/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-15	6/5/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-15	6/5/2014	2-Butanone	62	50	7.1	5565	ug/L
MKTF-15	6/5/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-15	6/5/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-15	6/5/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-15	6/5/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-15	6/5/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-15	6/5/2014	sec-Butylbenzene	12	5	0.77	2000	ug/L
MKTF-15	6/5/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-15	6/5/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-15	6/5/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-15	6/5/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-15	6/5/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-15	6/5/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-15	6/5/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-15	6/5/2014	Xylenes, Total	**3700**	300	75	620	ug/L
MKTF-15	6/5/2014	MTBE	**270**	5	1.3	143	ug/L
MKTF-15	6/5/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-15	6/5/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-15	6/5/2014	1,3,5-Trimethylbenzene	**95**	5	0.66	60	ug/L
MKTF-15	6/5/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-15	6/5/2014	Toluene	**8800**	200	34	1000	ug/L
MKTF-15	6/5/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-15	9/17/2014	n-Propylbenzene	140	50	7	660	ug/L
MKTF-15	9/17/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-15	9/17/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-15	9/17/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-15	9/17/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-15	9/17/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-15	9/17/2014	1,3,5-Trimethylbenzene	**180**	50	6.6	60	ug/L
MKTF-15	9/17/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-15	9/17/2014	Toluene	**7000**	500	85	1000	ug/L
MKTF-15	9/17/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-15	9/17/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-15	9/17/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-15	9/17/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-15	9/17/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-15	9/17/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-15	9/17/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-15	9/17/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-15	9/17/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-15	9/17/2014	Acetone	ND	500	250	14064	ug/L
MKTF-15	9/17/2014	Chloroform	ND	50	16	100	ug/L
MKTF-15	9/17/2014	Benzene	**11000**	500	77	5	ug/L
MKTF-15	9/17/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/17/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-15	9/17/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-15	9/17/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-15	9/17/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-15	9/17/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-15	9/17/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-15	9/17/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-15	9/17/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-15	9/17/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-15	9/17/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-15	9/17/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-15	9/17/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-15	9/17/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-15	9/17/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-15	9/17/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-15	9/17/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-15	9/17/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-15	9/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-15	9/17/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-15	9/17/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-15	9/17/2014	1,2,4-Trimethylbenzene	**660**	50	6.1	56	ug/L
MKTF-15	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-15	9/17/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-15	9/17/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-15	9/17/2014	Isopropylbenzene	68	50	8.1	447	ug/L
MKTF-15	9/17/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-15	9/17/2014	Ethylbenzene	**1400**	50	6.4	700	ug/L
MKTF-15	9/17/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-15	9/17/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-15	9/17/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-15	9/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-15	9/17/2014	Xylenes, Total	**4300**	75	19	620	ug/L
MKTF-15	9/17/2014	MTBE	**380**	50	13	143	ug/L
MKTF-15	9/17/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-15	9/17/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-15	9/11/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-15	9/11/2016	Acetone	1200	500	250	14064	ug/L
MKTF-15	9/11/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-15	9/11/2016	Benzene	**24000**	500	48	5	ug/L
MKTF-15	9/11/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-15	9/11/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-15	9/11/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-15	9/11/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-15	9/11/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-15	9/11/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-15	9/11/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-15	9/11/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-15	9/11/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-15	9/11/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-15	9/11/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-15	9/11/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-15	9/11/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-15	9/11/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-15	9/11/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-15	9/11/2016	2-Butanone	1300	500	37	5565	ug/L
MKTF-15	9/11/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-15	9/11/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-15	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-15	9/11/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-15	9/11/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	9/11/2016	1,2,4-Trimethylbenzene	**570**	50	5.5	56	ug/L
MKTF-15	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-15	9/11/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-15	9/11/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-15	9/11/2016	Isopropylbenzene	120	50	5.2	447	ug/L
MKTF-15	9/11/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-15	9/11/2016	Ethylbenzene	**2000**	50	5.6	700	ug/L
MKTF-15	9/11/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-15	9/11/2016	n-Propylbenzene	140	50	6.6	660	ug/L
MKTF-15	9/11/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-15	9/11/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-15	9/11/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-15	9/11/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-15	9/11/2016	4-Methyl-2-Pentanone	83	500	21	1243	ug/L
MKTF-15	9/11/2016	1,3,5-Trimethylbenzene	**170**	50	5.8	60	ug/L
MKTF-15	9/11/2016	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/11/2016	Toluene	**16000**	500	59	1000	ug/L
MKTF-15	9/11/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-15	9/11/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-15	9/11/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	9/11/2016	sec-Butylbenzene	7.8	50	6.2	2000	ug/L
MKTF-15	9/11/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-15	9/11/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-15	9/11/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-15	9/11/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-15	9/11/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-15	9/11/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-15	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-15	9/11/2016	Xylenes, Total	**7300**	75	18	620	ug/L
MKTF-15	9/11/2016	MTBE	93	50	11	143	ug/L
MKTF-15	9/11/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-15	9/11/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-15	11/2/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-15	11/2/2016	Acetone	400	500	250	14064	ug/L
MKTF-15	11/2/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-15	11/2/2016	Benzene	**20000**	500	48	5	ug/L
MKTF-15	11/2/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-15	11/2/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-15	11/2/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-15	11/2/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-15	11/2/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-15	11/2/2016	Vinyl Chloride	**24**	50	9.8	2	ug/L
MKTF-15	11/2/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-15	11/2/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-15	11/2/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-15	11/2/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-15	11/2/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-15	11/2/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-15	11/2/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-15	11/2/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-15	11/2/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-15	11/2/2016	2-Butanone	660	500	37	5565	ug/L
MKTF-15	11/2/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-15	11/2/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-15	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-15	11/2/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-15	11/2/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	11/2/2016	1,2,4-Trimethylbenzene	**630**	50	5.5	56	ug/L
MKTF-15	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-15	11/2/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-15	11/2/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-15	11/2/2016	Isopropylbenzene	120	50	5.2	447	ug/L
MKTF-15	11/2/2016	p-Isopropyltoluene	17	50	7	NA	ug/L
MKTF-15	11/2/2016	Ethylbenzene	**2100**	50	5.6	700	ug/L
MKTF-15	11/2/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-15	11/2/2016	n-Propylbenzene	150	50	6.6	660	ug/L
MKTF-15	11/2/2016	n-Butylbenzene	19	150	8	1000	ug/L
MKTF-15	11/2/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-15	11/2/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-15	11/2/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-15	11/2/2016	4-Methyl-2-Pentanone	60	500	21	1243	ug/L
MKTF-15	11/2/2016	1,3,5-Trimethylbenzene	**190**	50	5.8	60	ug/L
MKTF-15	11/2/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-15	11/2/2016	Toluene	**16000**	500	59	1000	ug/L
MKTF-15	11/2/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-15	11/2/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-15	11/2/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	11/2/2016	sec-Butylbenzene	23	50	6.2	2000	ug/L
MKTF-15	11/2/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-15	11/2/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-15	11/2/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-15	11/2/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-15	11/2/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-15	11/2/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-15	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-15	11/2/2016	Xylenes, Total	**7600**	75	18	620	ug/L
MKTF-15	11/2/2016	MTBE	99	50	11	143	ug/L
MKTF-15	11/2/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-15	11/2/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-15	3/2/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	3/2/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-15	3/2/2017	Chloroform	ND	100	8.9	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Benzene	**24000**	1000	96	5	ug/L
MKTF-15	3/2/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	3/2/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-15	3/2/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-15	3/2/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-15	3/2/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	3/2/2017	Vinyl Chloride	**45**	100	18	2	ug/L
MKTF-15	3/2/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	3/2/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-15	3/2/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	3/2/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	3/2/2017	1,1-Dichloroethane	**42**	100	10	25	ug/L
MKTF-15	3/2/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	3/2/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	3/2/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-15	3/2/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	3/2/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-15	3/2/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	3/2/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-15	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	3/2/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-15	3/2/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	3/2/2017	1,2,4-Trimethylbenzene	**750**	100	10	56	ug/L
MKTF-15	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	3/2/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	3/2/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	3/2/2017	Isopropylbenzene	110	100	9.8	447	ug/L
MKTF-15	3/2/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-15	3/2/2017	Ethylbenzene	**2100**	100	11	700	ug/L
MKTF-15	3/2/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	3/2/2017	n-Propylbenzene	160	100	13	660	ug/L
MKTF-15	3/2/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-15	3/2/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	3/2/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	3/2/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-15	3/2/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	3/2/2017	1,3,5-Trimethylbenzene	**210**	100	12	60	ug/L
MKTF-15	3/2/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	3/2/2017	Toluene	**17000**	1000	89	1000	ug/L
MKTF-15	3/2/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	3/2/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-15	3/2/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-15	3/2/2017	sec-Butylbenzene	39	100	10	2000	ug/L
MKTF-15	3/2/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-15	3/2/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	3/2/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	3/2/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-15	3/2/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	3/2/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-15	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-15	3/2/2017	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-15	3/2/2017	MTBE	**160**	100	15	143	ug/L
MKTF-15	3/2/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-15	3/2/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-15	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	6/8/2017	Acetone	280	1000	82	14064	ug/L
MKTF-15	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-15	6/8/2017	Benzene	**23000**	1000	62	5	ug/L
MKTF-15	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	6/8/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-15	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-15	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	6/8/2017	2-Butanone	470	1000	110	5565	ug/L
MKTF-15	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	6/8/2017	1,2,4-Trimethylbenzene	**790**	100	11	56	ug/L
MKTF-15	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	6/8/2017	Isopropylbenzene	160	100	5.1	447	ug/L
MKTF-15	6/8/2017	p-Isopropyltoluene	23	100	9.6	NA	ug/L
MKTF-15	6/8/2017	Ethylbenzene	**2600**	100	9.3	700	ug/L
MKTF-15	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	6/8/2017	n-Propylbenzene	190	100	7.4	660	ug/L
MKTF-15	6/8/2017	n-Butylbenzene	23	300	13	1000	ug/L
MKTF-15	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	6/8/2017	1,3,5-Trimethylbenzene	**250**	100	8.7	60	ug/L
MKTF-15	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	6/8/2017	Toluene	**22000**	1000	64	1000	ug/L
MKTF-15	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	6/8/2017	sec-Butylbenzene	27	100	11	2000	ug/L
MKTF-15	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	6/8/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-15	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	6/8/2017	Xylenes, Total	**8700**	150	32	620	ug/L
MKTF-15	6/8/2017	MTBE	130	100	24	143	ug/L
MKTF-15	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	11/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	11/28/2017	Acetone	200	1000	82	14064	ug/L
MKTF-15	11/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-15	11/28/2017	Benzene	**18000**	1000	62	5	ug/L
MKTF-15	11/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	11/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	11/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	11/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	11/28/2017	Chloroethane	41	200	23	20857	ug/L
MKTF-15	11/28/2017	Vinyl Chloride	**18**	100	18	2	ug/L
MKTF-15	11/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	11/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	11/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	11/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	11/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-15	11/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	11/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	11/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	11/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	11/28/2017	2-Butanone	360	1000	110	5565	ug/L
MKTF-15	11/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	11/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-15	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	11/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	11/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	11/28/2017	1,2,4-Trimethylbenzene	**720**	100	11	56	ug/L
MKTF-15	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	11/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	11/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	11/28/2017	Isopropylbenzene	120	100	5.1	447	ug/L
MKTF-15	11/28/2017	p-Isopropyltoluene	27	100	9.6	NA	ug/L
MKTF-15	11/28/2017	Ethylbenzene	**2200**	100	9.3	700	ug/L
MKTF-15	11/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	11/28/2017	n-Propylbenzene	170	100	7.4	660	ug/L
MKTF-15	11/28/2017	n-Butylbenzene	31	300	13	1000	ug/L
MKTF-15	11/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	11/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	11/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	11/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	11/28/2017	1,3,5-Trimethylbenzene	**210**	100	8.7	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	11/28/2017	Toluene	**15000**	1000	64	1000	ug/L
MKTF-15	11/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	11/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	11/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	11/28/2017	sec-Butylbenzene	30	100	11	2000	ug/L
MKTF-15	11/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	11/28/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	11/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	11/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	11/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	11/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	11/28/2017	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-15	11/28/2017	MTBE	**160**	100	24	143	ug/L
MKTF-15	11/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	11/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	5/2/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	5/2/2018	Acetone	ND	1000	82	14064	ug/L
MKTF-15	5/2/2018	Chloroform	ND	100	40	100	ug/L
MKTF-15	5/2/2018	Benzene	**16000**	1000	62	5	ug/L
MKTF-15	5/2/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	5/2/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	5/2/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	5/2/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	5/2/2018	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	5/2/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-15	5/2/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	5/2/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	5/2/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	5/2/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	5/2/2018	1,1-Dichloroethane	**75**	100	40	25	ug/L
MKTF-15	5/2/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	5/2/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	5/2/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	5/2/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	5/2/2018	2-Butanone	ND	1000	110	5565	ug/L
MKTF-15	5/2/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	5/2/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-15	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	5/2/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	5/2/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	5/2/2018	1,2,4-Trimethylbenzene	**790**	100	11	56	ug/L
MKTF-15	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	5/2/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	5/2/2018	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	5/2/2018	Isopropylbenzene	120	100	5.1	447	ug/L
MKTF-15	5/2/2018	p-Isopropyltoluene	16	100	9.6	NA	ug/L
MKTF-15	5/2/2018	Ethylbenzene	**2400**	100	9.3	700	ug/L
MKTF-15	5/2/2018	Styrene	ND	100	16	100	ug/L
MKTF-15	5/2/2018	n-Propylbenzene	170	100	7.4	660	ug/L
MKTF-15	5/2/2018	n-Butylbenzene	21	300	13	1000	ug/L
MKTF-15	5/2/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	5/2/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	5/2/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	5/2/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	5/2/2018	1,3,5-Trimethylbenzene	**220**	100	8.7	60	ug/L
MKTF-15	5/2/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	5/2/2018	Toluene	**11000**	1000	64	1000	ug/L
MKTF-15	5/2/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	5/2/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	5/2/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	5/2/2018	sec-Butylbenzene	20	100	11	2000	ug/L
MKTF-15	5/2/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	5/2/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	5/2/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	5/2/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	5/2/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	5/2/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	5/2/2018	Xylenes, Total	**7900**	150	32	620	ug/L
MKTF-15	5/2/2018	MTBE	**180**	100	24	143	ug/L
MKTF-15	5/2/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	5/2/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	8/28/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-15	8/28/2018	Acetone	ND	500	39	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Chloroform	ND	50	20	100	ug/L
MKTF-15	8/28/2018	Benzene	**17000**	500	87	5	ug/L
MKTF-15	8/28/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-15	8/28/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-15	8/28/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-15	8/28/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-15	8/28/2018	Chloroethane	25	100	8.2	20857	ug/L
MKTF-15	8/28/2018	Vinyl Chloride	**21**	50	5.5	2	ug/L
MKTF-15	8/28/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-15	8/28/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-15	8/28/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-15	8/28/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-15	8/28/2018	1,1-Dichloroethane	**76**	50	20	25	ug/L
MKTF-15	8/28/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-15	8/28/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-15	8/28/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-15	8/28/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-15	8/28/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-15	8/28/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-15	8/28/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-15	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-15	8/28/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-15	8/28/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	8/28/2018	1,2,4-Trimethylbenzene	**710**	50	13	56	ug/L
MKTF-15	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-15	8/28/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-15	8/28/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-15	8/28/2018	Isopropylbenzene	97	50	11	447	ug/L
MKTF-15	8/28/2018	p-Isopropyltoluene	15	50	12	NA	ug/L
MKTF-15	8/28/2018	Ethylbenzene	**1800**	50	11	700	ug/L
MKTF-15	8/28/2018	Styrene	ND	50	13	100	ug/L
MKTF-15	8/28/2018	n-Propylbenzene	160	50	12	660	ug/L
MKTF-15	8/28/2018	n-Butylbenzene	19	150	12	1000	ug/L
MKTF-15	8/28/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-15	8/28/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-15	8/28/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-15	8/28/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-15	8/28/2018	1,3,5-Trimethylbenzene	**200**	50	12	60	ug/L
MKTF-15	8/28/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-15	8/28/2018	Toluene	**4600**	500	84	1000	ug/L
MKTF-15	8/28/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-15	8/28/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-15	8/28/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	8/28/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-15	8/28/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-15	8/28/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-15	8/28/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-15	8/28/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-15	8/28/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-15	8/28/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-15	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-15	8/28/2018	Xylenes, Total	**5800**	75	32	620	ug/L
MKTF-15	8/28/2018	MTBE	140	50	16	143	ug/L
MKTF-15	8/28/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-15	8/28/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-15	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-15	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-15	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-15	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-15	5/13/2019	1,1-Dichloroethane	*25*	*50*	7.04293	25	ug/L
MKTF-15	5/13/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
MKTF-15	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-15	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-15	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-15	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-15	5/13/2019	1,2,4-Trimethylbenzene	**510**	50	10.659955	56	ug/L
MKTF-15	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-15	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-15	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-15	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-15	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-15	5/13/2019	1,3,5-Trimethylbenzene	**170**	50	9.432992	60	ug/L
MKTF-15	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-15	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-15	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-15	5/13/2019	1-Methylnaphthalene	24	200	15.747724	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-15	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-15	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-15	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-15	5/13/2019	2-Methylnaphthalene	**20**	200	17.2688		ug/L
MKTF-15	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-15	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-15	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-15	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-15	5/13/2019	Benzene	**18000**	500	83.319528	5	ug/L
MKTF-15	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-15	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-15	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-15	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-15	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-15	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-15	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-15	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-15	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-15	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-15	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-15	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-15	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-15	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-15	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-15	5/13/2019	Ethylbenzene	**1800**	50	6.61704	700	ug/L
MKTF-15	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-15	5/13/2019	Isopropylbenzene	110	50	9.576114	447	ug/L
MKTF-15	5/13/2019	MTBE	68	50	22.804749	143	ug/L
MKTF-15	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-15	5/13/2019	Naphthalene	**87**	100	13.753567	30	ug/L
MKTF-15	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-15	5/13/2019	n-Propylbenzene	140	50	10.7154	660	ug/L
MKTF-15	5/13/2019	sec-Butylbenzene	15	50	12.386564	2000	ug/L
MKTF-15	5/13/2019	Styrene	ND	50	9.566168	100	ug/L
MKTF-15	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-15	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-15	5/13/2019	Toluene	**4900**	50	17.521811	1000	ug/L
MKTF-15	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-15	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-15	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-15	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-15	5/13/2019	Vinyl Chloride	**26**	50	8.954964	2	ug/L
MKTF-15	5/13/2019	Xylenes, Total	**5800**	75	22.720747	620	ug/L
MKTF-16	4/10/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-16	4/10/2014	Acetone	ND	200	99	14064	ug/L
MKTF-16	4/10/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-16	4/10/2014	Benzene	**11000**	200	31	5	ug/L
MKTF-16	4/10/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-16	4/10/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-16	4/10/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-16	4/10/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-16	4/10/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-16	4/10/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-16	4/10/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-16	4/10/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-16	4/10/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-16	4/10/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-16	4/10/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
MKTF-16	4/10/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-16	4/10/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-16	4/10/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-16	4/10/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-16	4/10/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-16	4/10/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-16	4/10/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-16	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-16	4/10/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-16	4/10/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-16	4/10/2014	1,2,4-Trimethylbenzene	**490**	20	2.5	56	ug/L
MKTF-16	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-16	4/10/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-16	4/10/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-16	4/10/2014	Isopropylbenzene	53	20	3.2	447	ug/L
MKTF-16	4/10/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-16	4/10/2014	Ethylbenzene	**1100**	20	2.5	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	4/10/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-16	4/10/2014	n-Propylbenzene	99	20	2.8	660	ug/L
MKTF-16	4/10/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-16	4/10/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-16	4/10/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-16	4/10/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-16	4/10/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-16	4/10/2014	1,3,5-Trimethylbenzene	**120**	20	2.6	60	ug/L
MKTF-16	4/10/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-16	4/10/2014	Toluene	**7500**	200	34	1000	ug/L
MKTF-16	4/10/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-16	4/10/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-16	4/10/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-16	4/10/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-16	4/10/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-16	4/10/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-16	4/10/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-16	4/10/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-16	4/10/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-16	4/10/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-16	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-16	4/10/2014	Xylenes, Total	**3600**	30	7.5	620	ug/L
MKTF-16	4/10/2014	MTBE	**270**	20	5	143	ug/L
MKTF-16	4/10/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-16	4/10/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-16	6/5/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	6/5/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	6/5/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	6/5/2014	Benzene	**18000**	500	77	5	ug/L
MKTF-16	6/5/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-16	6/5/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	6/5/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	6/5/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	6/5/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	6/5/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-16	6/5/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	6/5/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	6/5/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	6/5/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	6/5/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-16	6/5/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	6/5/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	6/5/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	6/5/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	6/5/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	6/5/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	6/5/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	6/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	6/5/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	6/5/2014	Hexachlorobutadiene	*ND*	*50*	14	1.39	ug/L
MKTF-16	6/5/2014	1-Methylnaphthalene	ND	200	22	NA	ug/L
MKTF-16	6/5/2014	Naphthalene	**240**	100	6.8	30	ug/L
MKTF-16	6/5/2014	2-Methylnaphthalene	*ND*	*200*	28		ug/L
MKTF-16	6/5/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	6/5/2014	1,2-Dichlorobenzene	ND	50	6.6	600	ug/L
MKTF-16	6/5/2014	1,2,4-Trimethylbenzene	**1200**	50	6.1	56	ug/L
MKTF-16	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	6/5/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	6/5/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	6/5/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	6/5/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	6/5/2014	Ethylbenzene	**1700**	50	6.4	700	ug/L
MKTF-16	6/5/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	6/5/2014	n-Propylbenzene	150	50	7	660	ug/L
MKTF-16	6/5/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	6/5/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	6/5/2014	1,4-Dichlorobenzene	ND	50	13	75	ug/L
MKTF-16	6/5/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	6/5/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	6/5/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	6/5/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	6/5/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	6/5/2014	Toluene	**3700**	50	8.5	1000	ug/L
MKTF-16	6/5/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	6/5/2014	1,2,4-Trichlorobenzene	ND	50	15	70	ug/L
MKTF-16	6/5/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/5/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	6/5/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	6/5/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	6/5/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	6/5/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	6/5/2014	1,3-Dichlorobenzene	ND	50	8.7	N/A	ug/L
MKTF-16	6/5/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	6/5/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	6/5/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	6/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	6/5/2014	Xylenes, Total	**8100**	75	19	620	ug/L
MKTF-16	6/5/2014	MTBE	**2000**	50	13	143	ug/L
MKTF-16	6/5/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	6/5/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	9/17/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	9/17/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	9/17/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	9/17/2014	Benzene	**17000**	500	77	5	ug/L
MKTF-16	9/17/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-16	9/17/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	9/17/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	9/17/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	9/17/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	9/17/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-16	9/17/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	9/17/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	9/17/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	9/17/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	9/17/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-16	9/17/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	9/17/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	9/17/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	9/17/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	9/17/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	9/17/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	9/17/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	9/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	9/17/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	9/17/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	9/17/2014	1,2,4-Trimethylbenzene	**1100**	50	6.1	56	ug/L
MKTF-16	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	9/17/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	9/17/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	9/17/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	9/17/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	9/17/2014	Ethylbenzene	**1200**	50	6.4	700	ug/L
MKTF-16	9/17/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	9/17/2014	n-Propylbenzene	120	50	7	660	ug/L
MKTF-16	9/17/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	9/17/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	9/17/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	9/17/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	9/17/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	9/17/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	9/17/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	9/17/2014	Toluene	**1400**	50	8.5	1000	ug/L
MKTF-16	9/17/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	9/17/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-16	9/17/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	9/17/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	9/17/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	9/17/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	9/17/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	9/17/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	9/17/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	9/17/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	9/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	9/17/2014	Xylenes, Total	**5300**	75	19	620	ug/L
MKTF-16	9/17/2014	MTBE	**2100**	50	13	143	ug/L
MKTF-16	9/17/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	9/17/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	11/18/2014	Benzene	**20000**	500	77	5	ug/L
MKTF-16	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-16	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	11/18/2014	1,1-Dichloroethane	**81**	50	14	25	ug/L
MKTF-16	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	11/18/2014	1,2,4-Trimethylbenzene	**1000**	50	6.1	56	ug/L
MKTF-16	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	11/18/2014	Ethylbenzene	**1300**	50	6.4	700	ug/L
MKTF-16	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	11/18/2014	n-Propylbenzene	90	50	7	660	ug/L
MKTF-16	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	11/18/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	11/18/2014	Toluene	**1200**	50	8.5	1000	ug/L
MKTF-16	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-16	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	11/18/2014	Xylenes, Total	**5800**	75	19	620	ug/L
MKTF-16	11/18/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-16	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	3/16/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	3/16/2015	Benzene	**19000**	500	33	5	ug/L
MKTF-16	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-16	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	3/16/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-16	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	3/16/2015	1,2,4-Trimethylbenzene	**940**	50	8	56	ug/L
MKTF-16	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	3/16/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	3/16/2015	Ethylbenzene	**1400**	50	5.1	700	ug/L
MKTF-16	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	3/16/2015	n-Propylbenzene	110	50	8.2	660	ug/L
MKTF-16	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	3/16/2015	1,3,5-Trimethylbenzene	**310**	50	6.1	60	ug/L
MKTF-16	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	3/16/2015	Toluene	450	50	5.4	1000	ug/L
MKTF-16	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-16	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	3/16/2015	Xylenes, Total	**5400**	75	14	620	ug/L
MKTF-16	3/16/2015	MTBE	**1600**	50	8.7	143	ug/L
MKTF-16	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	6/8/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	6/8/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	6/8/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	6/8/2015	Benzene	**23000**	500	33	5	ug/L
MKTF-16	6/8/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-16	6/8/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	6/8/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	6/8/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	6/8/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	6/8/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	6/8/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	6/8/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	6/8/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	6/8/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	6/8/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-16	6/8/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	6/8/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	6/8/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	6/8/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	6/8/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	6/8/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	6/8/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	6/8/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	6/8/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	6/8/2015	1,2,4-Trimethylbenzene	**770**	50	8	56	ug/L
MKTF-16	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	6/8/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	6/8/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	6/8/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	6/8/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	6/8/2015	Ethylbenzene	**1400**	50	5.1	700	ug/L
MKTF-16	6/8/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	6/8/2015	n-Propylbenzene	84	50	8.2	660	ug/L
MKTF-16	6/8/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	6/8/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	6/8/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	6/8/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	6/8/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	6/8/2015	1,3,5-Trimethylbenzene	**270**	50	6.1	60	ug/L
MKTF-16	6/8/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	6/8/2015	Toluene	**1300**	50	5.4	1000	ug/L
MKTF-16	6/8/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	6/8/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	6/8/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	6/8/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	6/8/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	6/8/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	6/8/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	6/8/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	6/8/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	6/8/2015	Xylenes, Total	**5300**	75	14	620	ug/L
MKTF-16	6/8/2015	MTBE	**2000**	50	8.7	143	ug/L
MKTF-16	6/8/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	6/8/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	8/23/2015	Carbon tetrachloride	*ND*	*100*	7.8	5	ug/L
MKTF-16	8/23/2015	Acetone	ND	1000	94	14064	ug/L
MKTF-16	8/23/2015	Chloroform	ND	100	21	100	ug/L
MKTF-16	8/23/2015	Benzene	**24000**	1000	65	5	ug/L
MKTF-16	8/23/2015	1,1,1-Trichloroethane	ND	100	7.8	200	ug/L
MKTF-16	8/23/2015	Bromomethane	*ND*	*300*	120	7.54	ug/L
MKTF-16	8/23/2015	Chloromethane	*ND*	*300*	17	20.32	ug/L
MKTF-16	8/23/2015	Dibromomethane	*ND*	*100*	23	8	ug/L
MKTF-16	8/23/2015	Chloroethane	ND	200	10	20857	ug/L
MKTF-16	8/23/2015	Vinyl Chloride	*ND*	*100*	13	2	ug/L
MKTF-16	8/23/2015	Methylene Chloride	*ND*	*300*	36	5	ug/L
MKTF-16	8/23/2015	Carbon Disulfide	*ND*	*1000*	67	810	ug/L
MKTF-16	8/23/2015	Bromoform	*ND*	*100*	16	32.9	ug/L
MKTF-16	8/23/2015	Bromodichloromethane	*ND*	*100*	9	1.34	ug/L
MKTF-16	8/23/2015	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	8/23/2015	1,1-Dichloroethene	*ND*	*100*	9.9	7	ug/L
MKTF-16	8/23/2015	Trichlorofluoromethane	ND	100	13	1137	ug/L
MKTF-16	8/23/2015	Dichlorodifluoromethane	ND	100	69	197	ug/L
MKTF-16	8/23/2015	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-16	8/23/2015	2-Butanone	ND	1000	36	5565	ug/L
MKTF-16	8/23/2015	1,1,2-Trichloroethane	*ND*	*100*	7.9	5	ug/L
MKTF-16	8/23/2015	Trichloroethene	*ND*	*100*	16	5	ug/L
MKTF-16	8/23/2015	1,1,2,2-Tetrachloroethane	*ND*	*200*	18	10	ug/L
MKTF-16	8/23/2015	1,2,3-Trichlorobenzene	*ND*	*100*	27	70	ug/L
MKTF-16	8/23/2015	2-Chlorotoluene	ND	100	7.9	233	ug/L
MKTF-16	8/23/2015	1,2,4-Trimethylbenzene	**890**	100	16	56	ug/L
MKTF-16	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*200*	14	0.0033	ug/L
MKTF-16	8/23/2015	1,2,3-Trichloropropane	*ND*	*200*	16	0.0084	ug/L
MKTF-16	8/23/2015	tert-Butylbenzene	ND	100	13	690	ug/L
MKTF-16	8/23/2015	Isopropylbenzene	ND	100	15	447	ug/L
MKTF-16	8/23/2015	p-Isopropyltoluene	ND	100	19	NA	ug/L
MKTF-16	8/23/2015	Ethylbenzene	**1400**	100	10	700	ug/L
MKTF-16	8/23/2015	Styrene	ND	100	11	100	ug/L
MKTF-16	8/23/2015	n-Propylbenzene	110	100	16	660	ug/L
MKTF-16	8/23/2015	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	8/23/2015	4-Chlorotoluene	ND	100	15	250	ug/L
MKTF-16	8/23/2015	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	8/23/2015	1,2-Dichloroethane	*ND*	*100*	18	5	ug/L
MKTF-16	8/23/2015	4-Methyl-2-Pentanone	ND	1000	26	1243	ug/L
MKTF-16	8/23/2015	1,3,5-Trimethylbenzene	**320**	100	12	60	ug/L
MKTF-16	8/23/2015	Bromobenzene	*ND*	*100*	11	62	ug/L
MKTF-16	8/23/2015	Toluene	640	100	11	1000	ug/L
MKTF-16	8/23/2015	Chlorobenzene	*ND*	*100*	9.3	77.6	ug/L
MKTF-16	8/23/2015	Dibromochloromethane	*ND*	*100*	9.7	1.68	ug/L
MKTF-16	8/23/2015	Tetrachloroethene	*ND*	*100*	16	5	ug/L
MKTF-16	8/23/2015	sec-Butylbenzene	ND	100	23	2000	ug/L
MKTF-16	8/23/2015	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	8/23/2015	cis-1,2-Dichloroethene	*ND*	*100*	8.1	70	ug/L
MKTF-16	8/23/2015	trans-1,2-Dichloroethene	ND	100	9.4	100	ug/L
MKTF-16	8/23/2015	1,1-Dichloropropene	ND	100	12	NA	ug/L
MKTF-16	8/23/2015	2-Hexanone	*ND*	*1000*	48	38	ug/L
MKTF-16	8/23/2015	2,2-Dichloropropane	ND	200	15	NA	ug/L
MKTF-16	8/23/2015	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	8/23/2015	Xylenes, Total	**5600**	150	28	620	ug/L
MKTF-16	8/23/2015	MTBE	**2100**	100	17	143	ug/L
MKTF-16	8/23/2015	cis-1,3-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	8/23/2015	trans-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	11/3/2015	Benzene	**28000**	500	33	5	ug/L
MKTF-16	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	11/3/2015	1,1-Dichloroethane	**61**	50	20	25	ug/L
MKTF-16	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	11/3/2015	1,2,4-Trimethylbenzene	**1100**	50	8	56	ug/L
MKTF-16	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	11/3/2015	Ethylbenzene	**1700**	50	5.1	700	ug/L
MKTF-16	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	11/3/2015	n-Propylbenzene	92	50	8.2	660	ug/L
MKTF-16	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	11/3/2015	1,3,5-Trimethylbenzene	**330**	50	6.1	60	ug/L
MKTF-16	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	11/3/2015	Toluene	620	50	5.4	1000	ug/L
MKTF-16	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-16	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	11/3/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	11/3/2015	Xylenes, Total	**6600**	75	14	620	ug/L
MKTF-16	11/3/2015	MTBE	**1700**	50	8.7	143	ug/L
MKTF-16	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	2/29/2016	Acetone	ND	1000	88	14064	ug/L
MKTF-16	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	2/29/2016	Benzene	**19000**	1000	96	5	ug/L
MKTF-16	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-16	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-16	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-16	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-16	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-16	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-16	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-16	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-16	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-16	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-16	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-16	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-16	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-16	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	2/29/2016	1,2,4-Trimethylbenzene	**690**	100	10	56	ug/L
MKTF-16	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-16	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-16	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-16	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-16	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	2/29/2016	Ethylbenzene	**1000**	100	11	700	ug/L
MKTF-16	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-16	2/29/2016	n-Propylbenzene	ND	100	13	660	ug/L
MKTF-16	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-16	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-16	2/29/2016	1,3,5-Trimethylbenzene	**240**	100	12	60	ug/L
MKTF-16	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-16	2/29/2016	Toluene	280	100	8.9	1000	ug/L
MKTF-16	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-16	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-16	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-16	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	2/29/2016	Xylenes, Total	**3900**	150	32	620	ug/L
MKTF-16	2/29/2016	MTBE	**1400**	100	21	143	ug/L
MKTF-16	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-16	6/9/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-16	6/9/2016	Acetone	ND	200	98	14064	ug/L
MKTF-16	6/9/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-16	6/9/2016	Benzene	**16000**	200	19	5	ug/L
MKTF-16	6/9/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-16	6/9/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-16	6/9/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-16	6/9/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-16	6/9/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-16	6/9/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-16	6/9/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-16	6/9/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-16	6/9/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-16	6/9/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-16	6/9/2016	1,1-Dichloroethane	**49**	20	2.2	25	ug/L
MKTF-16	6/9/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-16	6/9/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-16	6/9/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-16	6/9/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-16	6/9/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-16	6/9/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-16	6/9/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-16	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-16	6/9/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-16	6/9/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-16	6/9/2016	1,2,4-Trimethylbenzene	**730**	20	2.2	56	ug/L
MKTF-16	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-16	6/9/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-16	6/9/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-16	6/9/2016	Isopropylbenzene	22	20	2.1	447	ug/L
MKTF-16	6/9/2016	p-Isopropyltoluene	5	20	2.8	NA	ug/L
MKTF-16	6/9/2016	Ethylbenzene	**1100**	20	2.2	700	ug/L
MKTF-16	6/9/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-16	6/9/2016	n-Propylbenzene	67	20	2.6	660	ug/L
MKTF-16	6/9/2016	n-Butylbenzene	16	60	3.2	1000	ug/L
MKTF-16	6/9/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-16	6/9/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-16	6/9/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-16	6/9/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-16	6/9/2016	1,3,5-Trimethylbenzene	**240**	20	2.3	60	ug/L
MKTF-16	6/9/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-16	6/9/2016	Toluene	340	20	2.4	1000	ug/L
MKTF-16	6/9/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/9/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-16	6/9/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-16	6/9/2016	sec-Butylbenzene	5.9	20	2.5	2000	ug/L
MKTF-16	6/9/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-16	6/9/2016	cis-1,2-Dichloroethene	8.4	20	2.5	70	ug/L
MKTF-16	6/9/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-16	6/9/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-16	6/9/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-16	6/9/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-16	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-16	6/9/2016	Xylenes, Total	**3600**	30	7.3	620	ug/L
MKTF-16	6/9/2016	MTBE	**1400**	20	4.2	143	ug/L
MKTF-16	6/9/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-16	6/9/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-16	9/12/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	9/12/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-16	9/12/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	9/12/2016	Benzene	**23000**	1000	96	5	ug/L
MKTF-16	9/12/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-16	9/12/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	9/12/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	9/12/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	9/12/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-16	9/12/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-16	9/12/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-16	9/12/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	9/12/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	9/12/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-16	9/12/2016	1,1-Dichloroethane	**65**	100	11	25	ug/L
MKTF-16	9/12/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-16	9/12/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-16	9/12/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-16	9/12/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-16	9/12/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-16	9/12/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-16	9/12/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-16	9/12/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-16	9/12/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	9/12/2016	1,2,4-Trimethylbenzene	**780**	100	11	56	ug/L
MKTF-16	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-16	9/12/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-16	9/12/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-16	9/12/2016	Isopropylbenzene	19	100	10	447	ug/L
MKTF-16	9/12/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	9/12/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-16	9/12/2016	Styrene	ND	100	11	100	ug/L
MKTF-16	9/12/2016	n-Propylbenzene	82	100	13	660	ug/L
MKTF-16	9/12/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	9/12/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	9/12/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	9/12/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	9/12/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-16	9/12/2016	1,3,5-Trimethylbenzene	**270**	100	12	60	ug/L
MKTF-16	9/12/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-16	9/12/2016	Toluene	240	100	12	1000	ug/L
MKTF-16	9/12/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	9/12/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	9/12/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	9/12/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-16	9/12/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	9/12/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	9/12/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	9/12/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	9/12/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-16	9/12/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-16	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	9/12/2016	Xylenes, Total	**4300**	150	37	620	ug/L
MKTF-16	9/12/2016	MTBE	**1700**	100	21	143	ug/L
MKTF-16	9/12/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	9/12/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	11/3/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	11/3/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-16	11/3/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	11/3/2016	Benzene	**19000**	1000	96	5	ug/L
MKTF-16	11/3/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	11/3/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	11/3/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	11/3/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-16	11/3/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-16	11/3/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-16	11/3/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	11/3/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	11/3/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-16	11/3/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-16	11/3/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-16	11/3/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-16	11/3/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-16	11/3/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-16	11/3/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-16	11/3/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-16	11/3/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-16	11/3/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-16	11/3/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	11/3/2016	1,2,4-Trimethylbenzene	**560**	100	11	56	ug/L
MKTF-16	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-16	11/3/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-16	11/3/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-16	11/3/2016	Isopropylbenzene	15	100	10	447	ug/L
MKTF-16	11/3/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	11/3/2016	Ethylbenzene	**880**	100	11	700	ug/L
MKTF-16	11/3/2016	Styrene	ND	100	11	100	ug/L
MKTF-16	11/3/2016	n-Propylbenzene	52	100	13	660	ug/L
MKTF-16	11/3/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	11/3/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	11/3/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	11/3/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	11/3/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-16	11/3/2016	1,3,5-Trimethylbenzene	**210**	100	12	60	ug/L
MKTF-16	11/3/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-16	11/3/2016	Toluene	220	100	12	1000	ug/L
MKTF-16	11/3/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	11/3/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	11/3/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	11/3/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-16	11/3/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	11/3/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	11/3/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	11/3/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	11/3/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-16	11/3/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-16	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	11/3/2016	Xylenes, Total	**3400**	150	37	620	ug/L
MKTF-16	11/3/2016	MTBE	**970**	100	21	143	ug/L
MKTF-16	11/3/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	11/3/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	3/14/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	3/14/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-16	3/14/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	3/14/2017	Benzene	**22000**	1000	96	5	ug/L
MKTF-16	3/14/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	3/14/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	3/14/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	3/14/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	3/14/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	3/14/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	3/14/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	3/14/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	3/14/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	3/14/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	3/14/2017	1,1-Dichloroethane	**30**	100	10	25	ug/L
MKTF-16	3/14/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	3/14/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	3/14/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-16	3/14/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	3/14/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	3/14/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	3/14/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	3/14/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	3/14/2017	1,2,4-Trimethylbenzene	**750**	100	10	56	ug/L
MKTF-16	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	3/14/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	3/14/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	3/14/2017	Isopropylbenzene	33	100	9.8	447	ug/L
MKTF-16	3/14/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	3/14/2017	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-16	3/14/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	3/14/2017	n-Propylbenzene	86	100	13	660	ug/L
MKTF-16	3/14/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	3/14/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	3/14/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	3/14/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	3/14/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	3/14/2017	1,3,5-Trimethylbenzene	**230**	100	12	60	ug/L
MKTF-16	3/14/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	3/14/2017	Toluene	340	100	8.9	1000	ug/L
MKTF-16	3/14/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	3/14/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-16	3/14/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	3/14/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
MKTF-16	3/14/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	3/14/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	3/14/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	3/14/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	3/14/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	3/14/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-16	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	3/14/2017	Xylenes, Total	**4900**	150	32	620	ug/L
MKTF-16	3/14/2017	MTBE	**720**	100	15	143	ug/L
MKTF-16	3/14/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	3/14/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-16	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	6/8/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	6/8/2017	Benzene	**19000**	1000	62	5	ug/L
MKTF-16	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	6/8/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	6/8/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	6/8/2017	1,2,4-Trimethylbenzene	**440**	100	11	56	ug/L
MKTF-16	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	6/8/2017	Isopropylbenzene	13	100	5.1	447	ug/L
MKTF-16	6/8/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	6/8/2017	Ethylbenzene	**710**	100	9.3	700	ug/L
MKTF-16	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	6/8/2017	n-Propylbenzene	31	100	7.4	660	ug/L
MKTF-16	6/8/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	6/8/2017	1,3,5-Trimethylbenzene	**180**	100	8.7	60	ug/L
MKTF-16	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	6/8/2017	Toluene	220	100	6.4	1000	ug/L
MKTF-16	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	6/8/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	6/8/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-16	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	6/8/2017	Xylenes, Total	**2800**	150	32	620	ug/L
MKTF-16	6/8/2017	MTBE	**820**	100	24	143	ug/L
MKTF-16	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	9/26/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	9/26/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	9/26/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	9/26/2017	Benzene	**23000**	1000	62	5	ug/L
MKTF-16	9/26/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	9/26/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	9/26/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	9/26/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	9/26/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	9/26/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	9/26/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	9/26/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	9/26/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	9/26/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	9/26/2017	1,1-Dichloroethane	**42**	100	40	25	ug/L
MKTF-16	9/26/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	9/26/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	9/26/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	9/26/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	9/26/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	9/26/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	9/26/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	9/26/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	9/26/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	9/26/2017	1,2,4-Trimethylbenzene	**750**	100	11	56	ug/L
MKTF-16	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	9/26/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	9/26/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	9/26/2017	Isopropylbenzene	31	100	5.1	447	ug/L
MKTF-16	9/26/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	9/26/2017	Ethylbenzene	**1600**	100	9.3	700	ug/L
MKTF-16	9/26/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	9/26/2017	n-Propylbenzene	88	100	7.4	660	ug/L
MKTF-16	9/26/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	9/26/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	9/26/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	9/26/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	9/26/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	9/26/2017	1,3,5-Trimethylbenzene	**200**	100	8.7	60	ug/L
MKTF-16	9/26/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	9/26/2017	Toluene	240	100	6.4	1000	ug/L
MKTF-16	9/26/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	9/26/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	9/26/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	9/26/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	9/26/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	9/26/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	9/26/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	9/26/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	9/26/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	9/26/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	9/26/2017	Xylenes, Total	**3900**	150	32	620	ug/L
MKTF-16	9/26/2017	MTBE	**920**	100	24	143	ug/L
MKTF-16	9/26/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	9/26/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	11/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	11/29/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	11/29/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	11/29/2017	Benzene	**21000**	1000	62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	11/29/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	11/29/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	11/29/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	11/29/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	11/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	11/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	11/29/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	11/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	11/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	11/29/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	11/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	11/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	11/29/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	11/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	11/29/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	11/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	11/29/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	11/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	11/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	11/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	11/29/2017	1,2,4-Trimethylbenzene	**690**	100	11	56	ug/L
MKTF-16	11/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	11/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	11/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	11/29/2017	Isopropylbenzene	33	100	5.1	447	ug/L
MKTF-16	11/29/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	11/29/2017	Ethylbenzene	**1400**	100	9.3	700	ug/L
MKTF-16	11/29/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	11/29/2017	n-Propylbenzene	67	100	7.4	660	ug/L
MKTF-16	11/29/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	11/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	11/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	11/29/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	11/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	11/29/2017	1,3,5-Trimethylbenzene	**190**	100	8.7	60	ug/L
MKTF-16	11/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	11/29/2017	Toluene	210	100	6.4	1000	ug/L
MKTF-16	11/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	11/29/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	11/29/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	11/29/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	11/29/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	11/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	11/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	11/29/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	11/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	11/29/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	11/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	11/29/2017	Xylenes, Total	**3200**	150	32	620	ug/L
MKTF-16	11/29/2017	MTBE	**800**	100	24	143	ug/L
MKTF-16	11/29/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	11/29/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	2/15/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-16	2/15/2018	Acetone	50	100	8.2	14064	ug/L
MKTF-16	2/15/2018	Chloroform	ND	10	4	100	ug/L
MKTF-16	2/15/2018	Benzene	**1800**	100	6.2	5	ug/L
MKTF-16	2/15/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-16	2/15/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-16	2/15/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-16	2/15/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-16	2/15/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-16	2/15/2018	Vinyl Chloride	**5.8**	10	1.8	2	ug/L
MKTF-16	2/15/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-16	2/15/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-16	2/15/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-16	2/15/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-16	2/15/2018	1,1-Dichloroethane	6.2	10	4	25	ug/L
MKTF-16	2/15/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-16	2/15/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-16	2/15/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-16	2/15/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-16	2/15/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-16	2/15/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-16	2/15/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-16	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/15/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-16	2/15/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-16	2/15/2018	1,2,4-Trimethylbenzene	26	10	1.1	56	ug/L
MKTF-16	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-16	2/15/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-16	2/15/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-16	2/15/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
MKTF-16	2/15/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
MKTF-16	2/15/2018	Ethylbenzene	15	10	0.93	700	ug/L
MKTF-16	2/15/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-16	2/15/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
MKTF-16	2/15/2018	n-Butylbenzene	1.9	30	1.3	1000	ug/L
MKTF-16	2/15/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-16	2/15/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-16	2/15/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-16	2/15/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-16	2/15/2018	1,3,5-Trimethylbenzene	41	10	0.87	60	ug/L
MKTF-16	2/15/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-16	2/15/2018	Toluene	24	10	0.64	1000	ug/L
MKTF-16	2/15/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-16	2/15/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-16	2/15/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-16	2/15/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-16	2/15/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-16	2/15/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-16	2/15/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-16	2/15/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-16	2/15/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-16	2/15/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-16	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-16	2/15/2018	Xylenes, Total	230	15	3.2	620	ug/L
MKTF-16	2/15/2018	MTBE	40	10	2.4	143	ug/L
MKTF-16	2/15/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-16	2/15/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-16	5/11/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-16	5/11/2018	Acetone	ND	500	41	14064	ug/L
MKTF-16	5/11/2018	Chloroform	ND	50	20	100	ug/L
MKTF-16	5/11/2018	Benzene	**19000**	500	31	5	ug/L
MKTF-16	5/11/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-16	5/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-16	5/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-16	5/11/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-16	5/11/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-16	5/11/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-16	5/11/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-16	5/11/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-16	5/11/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-16	5/11/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-16	5/11/2018	1,1-Dichloroethane	**36**	50	20	25	ug/L
MKTF-16	5/11/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-16	5/11/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-16	5/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-16	5/11/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-16	5/11/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-16	5/11/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-16	5/11/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-16	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-16	5/11/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-16	5/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-16	5/11/2018	1,2,4-Trimethylbenzene	**690**	50	5.6	56	ug/L
MKTF-16	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-16	5/11/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-16	5/11/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-16	5/11/2018	Isopropylbenzene	30	50	2.6	447	ug/L
MKTF-16	5/11/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-16	5/11/2018	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-16	5/11/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-16	5/11/2018	n-Propylbenzene	78	50	3.7	660	ug/L
MKTF-16	5/11/2018	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-16	5/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-16	5/11/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-16	5/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-16	5/11/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-16	5/11/2018	1,3,5-Trimethylbenzene	**98**	50	4.4	60	ug/L
MKTF-16	5/11/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-16	5/11/2018	Toluene	170	50	3.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-16	5/11/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-16	5/11/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-16	5/11/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-16	5/11/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-16	5/11/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-16	5/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-16	5/11/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-16	5/11/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-16	5/11/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-16	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-16	5/11/2018	Xylenes, Total	**2000**	75	16	620	ug/L
MKTF-16	5/11/2018	MTBE	**640**	50	12	143	ug/L
MKTF-16	5/11/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-16	5/11/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	8/31/2018	Carbon tetrachloride	*ND*	*100*	13	5	ug/L
MKTF-16	8/31/2018	Acetone	ND	1000	79	14064	ug/L
MKTF-16	8/31/2018	Chloroform	ND	100	40	100	ug/L
MKTF-16	8/31/2018	Benzene	**17000**	1000	170	5	ug/L
MKTF-16	8/31/2018	1,1,1-Trichloroethane	ND	100	15	200	ug/L
MKTF-16	8/31/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	8/31/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	8/31/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-16	8/31/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-16	8/31/2018	Vinyl Chloride	*ND*	*100*	11	2	ug/L
MKTF-16	8/31/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L
MKTF-16	8/31/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-16	8/31/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-16	8/31/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-16	8/31/2018	1,1-Dichloroethane	**47**	100	40	25	ug/L
MKTF-16	8/31/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-16	8/31/2018	Trichlorofluoromethane	ND	100	17	1137	ug/L
MKTF-16	8/31/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	8/31/2018	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-16	8/31/2018	2-Butanone	ND	1000	130	5565	ug/L
MKTF-16	8/31/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-16	8/31/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-16	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-16	8/31/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-16	8/31/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	8/31/2018	1,2,4-Trimethylbenzene	**580**	100	25	56	ug/L
MKTF-16	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-16	8/31/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-16	8/31/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-16	8/31/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-16	8/31/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-16	8/31/2018	Ethylbenzene	**1300**	100	22	700	ug/L
MKTF-16	8/31/2018	Styrene	ND	100	25	100	ug/L
MKTF-16	8/31/2018	n-Propylbenzene	66	100	24	660	ug/L
MKTF-16	8/31/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	8/31/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	8/31/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-16	8/31/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	8/31/2018	4-Methyl-2-Pentanone	ND	1000	45	1243	ug/L
MKTF-16	8/31/2018	1,3,5-Trimethylbenzene	**70**	100	23	60	ug/L
MKTF-16	8/31/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-16	8/31/2018	Toluene	130	100	17	1000	ug/L
MKTF-16	8/31/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-16	8/31/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-16	8/31/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	8/31/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-16	8/31/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-16	8/31/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-16	8/31/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	8/31/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-16	8/31/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-16	8/31/2018	2,2-Dichloropropane	ND	200	18	NA	ug/L
MKTF-16	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-16	8/31/2018	Xylenes, Total	**1400**	150	64	620	ug/L
MKTF-16	8/31/2018	MTBE	**640**	100	32	143	ug/L
MKTF-16	8/31/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-16	8/31/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-16	11/29/2018	Carbon tetrachloride	*ND*	*100*	14	5	ug/L
MKTF-16	11/29/2018	Acetone	ND	1000	76	14064	ug/L
MKTF-16	11/29/2018	Chloroform	ND	100	24	100	ug/L
MKTF-16	11/29/2018	Benzene	**17000**	1000	170	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2018	1,1,1-Trichloroethane	ND	100	16	200	ug/L
MKTF-16	11/29/2018	Bromomethane	*ND*	*300*	27	7.54	ug/L
MKTF-16	11/29/2018	Chloromethane	*ND*	*300*	32	20.32	ug/L
MKTF-16	11/29/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-16	11/29/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-16	11/29/2018	Vinyl Chloride	*ND*	*100*	12	2	ug/L
MKTF-16	11/29/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L
MKTF-16	11/29/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-16	11/29/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-16	11/29/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-16	11/29/2018	1,1-Dichloroethane	*ND*	*100*	18	25	ug/L
MKTF-16	11/29/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-16	11/29/2018	Trichlorofluoromethane	ND	100	14	1137	ug/L
MKTF-16	11/29/2018	Dichlorodifluoromethane	ND	100	26	197	ug/L
MKTF-16	11/29/2018	1,2-Dichloropropane	*ND*	*100*	17	5	ug/L
MKTF-16	11/29/2018	2-Butanone	ND	1000	140	5565	ug/L
MKTF-16	11/29/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-16	11/29/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-16	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-16	11/29/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-16	11/29/2018	2-Chlorotoluene	ND	100	25	233	ug/L
MKTF-16	11/29/2018	1,2,4-Trimethylbenzene	**390**	100	25	56	ug/L
MKTF-16	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-16	11/29/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-16	11/29/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-16	11/29/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-16	11/29/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-16	11/29/2018	Ethylbenzene	**890**	100	22	700	ug/L
MKTF-16	11/29/2018	Styrene	ND	100	25	100	ug/L
MKTF-16	11/29/2018	n-Propylbenzene	42	100	24	660	ug/L
MKTF-16	11/29/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	11/29/2018	4-Chlorotoluene	ND	100	28	250	ug/L
MKTF-16	11/29/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-16	11/29/2018	1,2-Dichloroethane	*ND*	*100*	19	5	ug/L
MKTF-16	11/29/2018	4-Methyl-2-Pentanone	ND	1000	45	1243	ug/L
MKTF-16	11/29/2018	1,3,5-Trimethylbenzene	*36*	*100*	23	60	ug/L
MKTF-16	11/29/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-16	11/29/2018	Toluene	120	100	17	1000	ug/L
MKTF-16	11/29/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-16	11/29/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-16	11/29/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	11/29/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-16	11/29/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-16	11/29/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-16	11/29/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	11/29/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-16	11/29/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-16	11/29/2018	2,2-Dichloropropane	ND	200	23	NA	ug/L
MKTF-16	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-16	11/29/2018	Xylenes, Total	**720**	150	64	620	ug/L
MKTF-16	11/29/2018	MTBE	**690**	100	46	143	ug/L
MKTF-16	11/29/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-16	11/29/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-16	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	25.239924	5.74	ug/L
MKTF-16	2/20/2019	1,1,1-Trichloroethane	ND	100	16.381583	200	ug/L
MKTF-16	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	32.82991	10	ug/L
MKTF-16	2/20/2019	1,1,2-Trichloroethane	*ND*	*100*	23.272323	5	ug/L
MKTF-16	2/20/2019	1,1-Dichloroethane	**53**	100	17.519663	25	ug/L
MKTF-16	2/20/2019	1,1-Dichloroethene	*ND*	*100*	12.048782	7	ug/L
MKTF-16	2/20/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	2/20/2019	1,2,3-Trichlorobenzene	*ND*	*100*	28.030804	70	ug/L
MKTF-16	2/20/2019	1,2,3-Trichloropropane	*ND*	*200*	56.600446	0.0084	ug/L
MKTF-16	2/20/2019	1,2,4-Trichlorobenzene	*ND*	*100*	26.641017	70	ug/L
MKTF-16	2/20/2019	1,2,4-Trimethylbenzene	**540**	100	25.331434	56	ug/L
MKTF-16	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47.089717	0.0033	ug/L
MKTF-16	2/20/2019	1,2-Dibromoethane	*ND*	*100*	22.952854	0.05	ug/L
MKTF-16	2/20/2019	1,2-Dichlorobenzene	ND	100	31.146486	600	ug/L
MKTF-16	2/20/2019	1,2-Dichloroethane	*ND*	*100*	18.952538	5	ug/L
MKTF-16	2/20/2019	1,2-Dichloropropane	*ND*	*100*	16.522576	5	ug/L
MKTF-16	2/20/2019	1,3,5-Trimethylbenzene	**75**	100	23.141407	60	ug/L
MKTF-16	2/20/2019	1,3-Dichlorobenzene	ND	100	31.262236	N/A	ug/L
MKTF-16	2/20/2019	1,3-Dichloropropane	ND	100	27.075628	370	ug/L
MKTF-16	2/20/2019	1,4-Dichlorobenzene	*ND*	*100*	28.770684	75	ug/L
MKTF-16	2/20/2019	1-Methylnaphthalene	ND	400	33.581697	NA	ug/L
MKTF-16	2/20/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	2/20/2019	2-Butanone	ND	1000	141.086887	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/20/2019	2-Chlorotoluene	ND	100	25.013821	233	ug/L
MKTF-16	2/20/2019	2-Hexanone	*ND*	*1000*	90.657444	38	ug/L
MKTF-16	2/20/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	2/20/2019	4-Chlorotoluene	ND	100	28.080088	250	ug/L
MKTF-16	2/20/2019	p-Isopropyltoluene	ND	100	24.033856	NA	ug/L
MKTF-16	2/20/2019	4-Methyl-2-Pentanone	ND	1000	45.327736	1243	ug/L
MKTF-16	2/20/2019	Acetone	ND	1000	75.706961	14064	ug/L
MKTF-16	2/20/2019	Benzene	**21000**	1000	174.895719	5	ug/L
MKTF-16	2/20/2019	Bromobenzene	*ND*	*100*	31.790623	62	ug/L
MKTF-16	2/20/2019	Bromodichloromethane	*ND*	*100*	28.276698	1.34	ug/L
MKTF-16	2/20/2019	Bromoform	*ND*	*100*	32.331032	32.9	ug/L
MKTF-16	2/20/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	2/20/2019	Carbon Disulfide	*ND*	*1000*	38.503109	810	ug/L
MKTF-16	2/20/2019	Carbon tetrachloride	*ND*	*100*	13.734836	5	ug/L
MKTF-16	2/20/2019	Chlorobenzene	*ND*	*100*	29.052751	77.6	ug/L
MKTF-16	2/20/2019	Chloroethane	ND	200	16.433711	20857	ug/L
MKTF-16	2/20/2019	Chloroform	ND	100	23.522376	100	ug/L
MKTF-16	2/20/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	2/20/2019	cis-1,2-Dichloroethene	*ND*	*100*	37.598114	70	ug/L
MKTF-16	2/20/2019	cis-1,3-Dichloropropene	ND	100	29.822803	NA	ug/L
MKTF-16	2/20/2019	Dibromochloromethane	*ND*	*100*	23.701241	1.68	ug/L
MKTF-16	2/20/2019	Dibromomethane	*ND*	*100*	32.214742	8	ug/L
MKTF-16	2/20/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	2/20/2019	Ethylbenzene	**1400**	100	22.340224	700	ug/L
MKTF-16	2/20/2019	Hexachlorobutadiene	*ND*	*100*	39.118693	1.39	ug/L
MKTF-16	2/20/2019	Isopropylbenzene	29	100	22.110419	447	ug/L
MKTF-16	2/20/2019	MTBE	**610**	100	45.609498	143	ug/L
MKTF-16	2/20/2019	Methylene Chloride	*ND*	*300*	20.569479	5	ug/L
MKTF-16	2/20/2019	Naphthalene	**120**	200	28.962606	30	ug/L
MKTF-16	2/20/2019	n-Butylbenzene	ND	300	24.833047	1000	ug/L
MKTF-16	2/20/2019	n-Propylbenzene	75	100	24.258624	660	ug/L
MKTF-16	2/20/2019	sec-Butylbenzene	ND	100	20.22547	2000	ug/L
MKTF-16	2/20/2019	Styrene	ND	100	25.014573	100	ug/L
MKTF-16	2/20/2019	tert-Butylbenzene	ND	100	22.146975	690	ug/L
MKTF-16	2/20/2019	Tetrachloroethene	*ND*	*100*	15.145171	5	ug/L
MKTF-16	2/20/2019	Toluene	190	100	16.81394	1000	ug/L
MKTF-16	2/20/2019	trans-1,2-Dichloroethene	ND	100	18.226961	100	ug/L
MKTF-16	2/20/2019	trans-1,3-Dichloropropene	ND	100	27.546771	NA	ug/L
MKTF-16	2/20/2019	Trichloroethene	*ND*	*100*	25.755642	5	ug/L
MKTF-16	2/20/2019	Trichlorofluoromethane	ND	100	14.411616	1137	ug/L
MKTF-16	2/20/2019	Vinyl Chloride	*ND*	*100*	12.107431	2	ug/L
MKTF-16	2/20/2019	Xylenes, Total	**1600**	150	64.128772	620	ug/L
MKTF-16	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	5/14/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	5/14/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	5/14/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
MKTF-16	5/14/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	5/14/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	5/14/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	5/14/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
MKTF-16	5/14/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	5/14/2019	1,2,4-Trimethylbenzene	**240**	100	21.319909	56	ug/L
MKTF-16	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
MKTF-16	5/14/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	5/14/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	5/14/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	5/14/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	5/14/2019	1,3,5-Trimethylbenzene	*40*	*100*	18.865985	60	ug/L
MKTF-16	5/14/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	5/14/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	5/14/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	5/14/2019	1-Methylnaphthalene	ND	400	31.495448	NA	ug/L
MKTF-16	5/14/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	5/14/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	5/14/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	5/14/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	5/14/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	5/14/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	5/14/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	5/14/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	5/14/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	5/14/2019	Benzene	**14000**	1000	166.639056	5	ug/L
MKTF-16	5/14/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	5/14/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	5/14/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/14/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	5/14/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	5/14/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	5/14/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	5/14/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	5/14/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	5/14/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	5/14/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	5/14/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	5/14/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	5/14/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-16	5/14/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	5/14/2019	Ethylbenzene	**710**	100	13.23408	700	ug/L
MKTF-16	5/14/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	5/14/2019	Isopropylbenzene	ND	100	19.152227	447	ug/L
MKTF-16	5/14/2019	MTBE	**620**	100	45.609498	143	ug/L
MKTF-16	5/14/2019	Methylene Chloride	**18**	300	15.450147	5	ug/L
MKTF-16	5/14/2019	Naphthalene	**81**	200	27.507134	30	ug/L
MKTF-16	5/14/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	5/14/2019	n-Propylbenzene	29	100	21.4308	660	ug/L
MKTF-16	5/14/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	5/14/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	5/14/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	5/14/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-16	5/14/2019	Toluene	110	100	35.043621	1000	ug/L
MKTF-16	5/14/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	5/14/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	5/14/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	5/14/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	5/14/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	5/14/2019	Xylenes, Total	620	150	45.441493	620	ug/L
MKTF-16	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	8/22/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	8/22/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	8/22/2019	1,1-Dichloroethane	**64**	100	14.08586	25	ug/L
MKTF-16	8/22/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	8/22/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	8/22/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	8/22/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
MKTF-16	8/22/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	8/22/2019	1,2,4-Trimethylbenzene	**93**	100	21.319909	56	ug/L
MKTF-16	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
MKTF-16	8/22/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	8/22/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	8/22/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	8/22/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	8/22/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
MKTF-16	8/22/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	8/22/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	8/22/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	8/22/2019	1-Methylnaphthalene	ND	400	31.495448	NA	ug/L
MKTF-16	8/22/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	8/22/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	8/22/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	8/22/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	8/22/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	8/22/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	8/22/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	8/22/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	8/22/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	8/22/2019	Benzene	**9800**	100	16.663906	5	ug/L
MKTF-16	8/22/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	8/22/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	8/22/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-16	8/22/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	8/22/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	8/22/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	8/22/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	8/22/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	8/22/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	8/22/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	8/22/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	8/22/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	8/22/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	8/22/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/22/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	8/22/2019	Ethylbenzene	480	100	13.23408	700	ug/L
MKTF-16	8/22/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	8/22/2019	Isopropylbenzene	ND	100	19.152227	447	ug/L
MKTF-16	8/22/2019	MTBE	**550**	100	45.609498	143	ug/L
MKTF-16	8/22/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-16	8/22/2019	Naphthalene	**48**	200	27.507134	30	ug/L
MKTF-16	8/22/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	8/22/2019	n-Propylbenzene	ND	100	21.4308	660	ug/L
MKTF-16	8/22/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	8/22/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	8/22/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	8/22/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-16	8/22/2019	Toluene	43	100	35.043621	1000	ug/L
MKTF-16	8/22/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	8/22/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	8/22/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	8/22/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	8/22/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	8/22/2019	Xylenes, Total	110	150	45.441493	620	ug/L
MKTF-16	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	10/30/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	10/30/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	10/30/2019	1,1-Dichloroethane	**69**	100	14.08586	25	ug/L
MKTF-16	10/30/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	10/30/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	10/30/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	10/30/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	10/30/2019	1,2,4-Trimethylbenzene	**380**	100	21.319909	56	ug/L
MKTF-16	10/30/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	10/30/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	10/30/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	10/30/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	10/30/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
MKTF-16	10/30/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	10/30/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	10/30/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	10/30/2019	1-Methylnaphthalene	32	400	31.495448	NA	ug/L
MKTF-16	10/30/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	10/30/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	10/30/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	10/30/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	10/30/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	10/30/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	10/30/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	10/30/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	10/30/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	10/30/2019	Benzene	**15000**	1000	166.639056	5	ug/L
MKTF-16	10/30/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	10/30/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	10/30/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-16	10/30/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	10/30/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	10/30/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	10/30/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	10/30/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	10/30/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	10/30/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	10/30/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	10/30/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	10/30/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	10/30/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-16	10/30/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	10/30/2019	Ethylbenzene	**1500**	100	13.23408	700	ug/L
MKTF-16	10/30/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	10/30/2019	Isopropylbenzene	21	100	19.152227	447	ug/L
MKTF-16	10/30/2019	MTBE	**620**	100	45.609498	143	ug/L
MKTF-16	10/30/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-16	10/30/2019	Naphthalene	**140**	200	27.507134	30	ug/L
MKTF-16	10/30/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	10/30/2019	n-Propylbenzene	74	100	21.4308	660	ug/L
MKTF-16	10/30/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	10/30/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	10/30/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	10/30/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Toluene	95	100	35.043621	1000	ug/L
MKTF-16	10/30/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	10/30/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	10/30/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	10/30/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	10/30/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	10/30/2019	Xylenes, Total	430	150	45.441493	620	ug/L
MKTF-16	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
MKTF-16	12/23/2020	Benzene	**14700**	100	38	5	ug/L
MKTF-16	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
MKTF-16	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
MKTF-16	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
MKTF-16	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
MKTF-16	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
MKTF-16	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
MKTF-16	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
MKTF-16	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
MKTF-16	12/23/2020	Chloroform	ND	100	60	100	ug/L
MKTF-16	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
MKTF-16	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
MKTF-16	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
MKTF-16	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
MKTF-16	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-16	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
MKTF-16	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
MKTF-16	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
MKTF-16	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
MKTF-16	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
MKTF-16	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
MKTF-16	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
MKTF-16	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
MKTF-16	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
MKTF-16	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
MKTF-16	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
MKTF-16	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
MKTF-16	12/23/2020	Ethylbenzene	**1320**	100	50	700	ug/L
MKTF-16	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
MKTF-16	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
MKTF-16	12/23/2020	Isopropylbenzene	ND	100	53	447	ug/L
MKTF-16	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
MKTF-16	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
MKTF-16	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
MKTF-16	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
MKTF-16	12/23/2020	MTBE	**279**	100	74	143	ug/L
MKTF-16	12/23/2020	Naphthalene	*ND*	*100*	100	30	ug/L
MKTF-16	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
MKTF-16	12/23/2020	n-Propylbenzene	ND	100	69	660	ug/L
MKTF-16	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
MKTF-16	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
MKTF-16	12/23/2020	Styrene	ND	100	100	100	ug/L
MKTF-16	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
MKTF-16	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
MKTF-16	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
MKTF-16	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
MKTF-16	12/23/2020	Toluene	129	100	41	1000	ug/L
MKTF-16	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
MKTF-16	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-16	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
MKTF-16	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
MKTF-16	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
MKTF-16	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
MKTF-16	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
MKTF-16	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
MKTF-16	12/23/2020	1,2,4-Trimethylbenzene	**236**	100	82	56	ug/L
MKTF-16	12/23/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L
MKTF-16	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
MKTF-16	12/23/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
MKTF-16	12/23/2020	1,4-Dioxane	**19.4**	1	0.3	4.59	ug/L
MKTF-17	4/9/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	4/9/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	4/9/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	4/9/2014	Benzene	**3500**	100	15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	4/9/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	4/9/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	4/9/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	4/9/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	4/9/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	4/9/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	4/9/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	4/9/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	4/9/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	4/9/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	4/9/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	4/9/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	4/9/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	4/9/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	4/9/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	4/9/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	4/9/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	4/9/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	4/9/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-17	4/9/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	4/9/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	4/9/2014	1,2,4-Trimethylbenzene	**74**	10	1.2	56	ug/L
MKTF-17	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	4/9/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	4/9/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	4/9/2014	Isopropylbenzene	37	10	1.6	447	ug/L
MKTF-17	4/9/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	4/9/2014	Ethylbenzene	580	10	1.3	700	ug/L
MKTF-17	4/9/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	4/9/2014	n-Propylbenzene	96	10	1.4	660	ug/L
MKTF-17	4/9/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	4/9/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	4/9/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	4/9/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	4/9/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	4/9/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	4/9/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	4/9/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	4/9/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	4/9/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	4/9/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	4/9/2014	sec-Butylbenzene	10	10	1.5	2000	ug/L
MKTF-17	4/9/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	4/9/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	4/9/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	4/9/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	4/9/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	4/9/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	4/9/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	4/9/2014	Xylenes, Total	270	15	3.8	620	ug/L
MKTF-17	4/9/2014	MTBE	**1300**	10	2.5	143	ug/L
MKTF-17	4/9/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	4/9/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	6/6/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	6/6/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	6/6/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	6/6/2014	Benzene	**2600**	100	15	5	ug/L
MKTF-17	6/6/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	6/6/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	6/6/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	6/6/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	6/6/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	6/6/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	6/6/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	6/6/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	6/6/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	6/6/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	6/6/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	6/6/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	6/6/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	6/6/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	6/6/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	6/6/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	6/6/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	6/6/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	6/6/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/6/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	6/6/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
MKTF-17	6/6/2014	1-Methylnaphthalene	ND	40	4.4	NA	ug/L
MKTF-17	6/6/2014	Naphthalene	ND	20	1.4	30	ug/L
MKTF-17	6/6/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
MKTF-17	6/6/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	6/6/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
MKTF-17	6/6/2014	1,2,4-Trimethylbenzene	**64**	10	1.2	56	ug/L
MKTF-17	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	6/6/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	6/6/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	6/6/2014	Isopropylbenzene	30	10	1.6	447	ug/L
MKTF-17	6/6/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	6/6/2014	Ethylbenzene	480	10	1.3	700	ug/L
MKTF-17	6/6/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	6/6/2014	n-Propylbenzene	60	10	1.4	660	ug/L
MKTF-17	6/6/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	6/6/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	6/6/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
MKTF-17	6/6/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	6/6/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	6/6/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	6/6/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	6/6/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	6/6/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	6/6/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	6/6/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-17	6/6/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	6/6/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	6/6/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-17	6/6/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	6/6/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	6/6/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	6/6/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
MKTF-17	6/6/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	6/6/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	6/6/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	6/6/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	6/6/2014	Xylenes, Total	68	15	3.8	620	ug/L
MKTF-17	6/6/2014	MTBE	**1100**	10	2.5	143	ug/L
MKTF-17	6/6/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	6/6/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	9/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	9/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	9/18/2014	Benzene	**550**	10	1.5	5	ug/L
MKTF-17	9/18/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	9/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	9/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	9/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	9/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	9/18/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	9/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	9/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	9/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	9/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	9/18/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	9/18/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	9/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	9/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	9/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	9/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	9/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	9/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-17	9/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	9/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	9/18/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-17	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	9/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	9/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	9/18/2014	Isopropylbenzene	29	10	1.6	447	ug/L
MKTF-17	9/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Ethylbenzene	240	10	1.3	700	ug/L
MKTF-17	9/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	9/18/2014	n-Propylbenzene	66	10	1.4	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	9/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	9/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	9/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	9/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	9/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	9/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	9/18/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	9/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	9/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	9/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	9/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-17	9/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	9/18/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	9/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	9/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	9/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	9/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	9/18/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-17	9/18/2014	MTBE	**690**	10	2.5	143	ug/L
MKTF-17	9/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	9/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-17	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-17	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-17	11/18/2014	Benzene	**140**	10	1.5	5	ug/L
MKTF-17	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-17	11/18/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-17	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-17	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-17	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-17	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-17	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-17	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-17	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-17	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-17	11/18/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-17	11/18/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-17	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-17	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-17	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-17	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-17	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-17	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-17	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-17	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-17	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-17	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-17	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-17	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-17	11/18/2014	Isopropylbenzene	9.1	1	0.16	447	ug/L
MKTF-17	11/18/2014	p-Isopropyltoluene	3	1	0.18	NA	ug/L
MKTF-17	11/18/2014	Ethylbenzene	78	1	0.13	700	ug/L
MKTF-17	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-17	11/18/2014	n-Propylbenzene	13	1	0.14	660	ug/L
MKTF-17	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-17	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-17	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-17	11/18/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-17	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-17	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-17	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-17	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-17	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-17	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-17	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-17	11/18/2014	sec-Butylbenzene	2.1	1	0.15	2000	ug/L
MKTF-17	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-17	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-17	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-17	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-17	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-17	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-17	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-17	11/18/2014	MTBE	**570**	100	25	143	ug/L
MKTF-17	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-17	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-17	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	3/12/2015	Benzene	2.8	1	0.065	5	ug/L
MKTF-17	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-17	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-17	3/12/2015	p-Isopropyltoluene	1.2	1	0.19	NA	ug/L
MKTF-17	3/12/2015	Ethylbenzene	5.9	1	0.1	700	ug/L
MKTF-17	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-17	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-17	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-17	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-17	3/12/2015	MTBE	**590**	5	0.87	143	ug/L
MKTF-17	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	6/8/2015	Benzene	**11**	1	0.065	5	ug/L
MKTF-17	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	6/8/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	6/8/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	6/8/2015	Isopropylbenzene	1.1	1	0.15	447	ug/L
MKTF-17	6/8/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-17	6/8/2015	Ethylbenzene	18	1	0.1	700	ug/L
MKTF-17	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	6/8/2015	n-Propylbenzene	1.4	1	0.16	660	ug/L
MKTF-17	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	6/8/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	6/8/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-17	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	6/8/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-17	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	6/8/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	6/8/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-17	6/8/2015	MTBE	**500**	10	1.7	143	ug/L
MKTF-17	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	8/18/2015	Benzene	**36**	1	0.065	5	ug/L
MKTF-17	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-17	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	8/18/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	8/18/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	8/18/2015	Isopropylbenzene	19	1	0.15	447	ug/L
MKTF-17	8/18/2015	p-Isopropyltoluene	1.9	1	0.19	NA	ug/L
MKTF-17	8/18/2015	Ethylbenzene	300	10	1	700	ug/L
MKTF-17	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	8/18/2015	n-Propylbenzene	34	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/18/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	8/18/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	8/18/2015	Toluene	1.1	1	0.11	1000	ug/L
MKTF-17	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	8/18/2015	sec-Butylbenzene	2.6	1	0.23	2000	ug/L
MKTF-17	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	8/18/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	8/18/2015	Xylenes, Total	1.8	1.5	0.28	620	ug/L
MKTF-17	8/18/2015	MTBE	**640**	10	1.7	143	ug/L
MKTF-17	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	11/3/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-17	11/3/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-17	11/3/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-17	11/3/2015	Benzene	**29**	2	0.13	5	ug/L
MKTF-17	11/3/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-17	11/3/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-17	11/3/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-17	11/3/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-17	11/3/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-17	11/3/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-17	11/3/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-17	11/3/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-17	11/3/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-17	11/3/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-17	11/3/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-17	11/3/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-17	11/3/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-17	11/3/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-17	11/3/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-17	11/3/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-17	11/3/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-17	11/3/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-17	11/3/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-17	11/3/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-17	11/3/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-17	11/3/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-17	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-17	11/3/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-17	11/3/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-17	11/3/2015	Isopropylbenzene	22	2	0.3	447	ug/L
MKTF-17	11/3/2015	p-Isopropyltoluene	2.4	2	0.38	NA	ug/L
MKTF-17	11/3/2015	Ethylbenzene	310	20	2	700	ug/L
MKTF-17	11/3/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-17	11/3/2015	n-Propylbenzene	41	2	0.33	660	ug/L
MKTF-17	11/3/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-17	11/3/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-17	11/3/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-17	11/3/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-17	11/3/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-17	11/3/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-17	11/3/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-17	11/3/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-17	11/3/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-17	11/3/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-17	11/3/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-17	11/3/2015	sec-Butylbenzene	5	2	0.46	2000	ug/L
MKTF-17	11/3/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-17	11/3/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-17	11/3/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-17	11/3/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-17	11/3/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-17	11/3/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-17	11/3/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/3/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-17	11/3/2015	MTBE	**770**	20	3.5	143	ug/L
MKTF-17	11/3/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-17	11/3/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-17	2/26/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-17	2/26/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-17	2/26/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-17	2/26/2016	Benzene	**260**	5	0.48	5	ug/L
MKTF-17	2/26/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-17	2/26/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-17	2/26/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-17	2/26/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-17	2/26/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-17	2/26/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-17	2/26/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-17	2/26/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-17	2/26/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-17	2/26/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-17	2/26/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-17	2/26/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
MKTF-17	2/26/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-17	2/26/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-17	2/26/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-17	2/26/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-17	2/26/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-17	2/26/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-17	2/26/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-17	2/26/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-17	2/26/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	2/26/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-17	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-17	2/26/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-17	2/26/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-17	2/26/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-17	2/26/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-17	2/26/2016	Ethylbenzene	18	5	0.56	700	ug/L
MKTF-17	2/26/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-17	2/26/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
MKTF-17	2/26/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-17	2/26/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-17	2/26/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-17	2/26/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-17	2/26/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-17	2/26/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-17	2/26/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-17	2/26/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-17	2/26/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-17	2/26/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-17	2/26/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	2/26/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-17	2/26/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-17	2/26/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-17	2/26/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-17	2/26/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-17	2/26/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-17	2/26/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-17	2/26/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-17	2/26/2016	Xylenes, Total	23	7.5	1.6	620	ug/L
MKTF-17	2/26/2016	MTBE	**640**	5	1.1	143	ug/L
MKTF-17	2/26/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-17	2/26/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-17	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-17	6/10/2016	Acetone	40	10	4.9	14064	ug/L
MKTF-17	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-17	6/10/2016	Benzene	**1900**	50	4.8	5	ug/L
MKTF-17	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-17	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-17	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-17	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-17	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-17	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-17	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-17	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-17	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-17	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-17	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-17	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-17	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-17	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-17	6/10/2016	2-Butanone	6.4	10	0.74	5565	ug/L
MKTF-17	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-17	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-17	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-17	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-17	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-17	6/10/2016	1,2,4-Trimethylbenzene	**230**	50	5.5	56	ug/L
MKTF-17	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-17	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-17	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-17	6/10/2016	Isopropylbenzene	23	1	0.1	447	ug/L
MKTF-17	6/10/2016	p-Isopropyltoluene	2	1	0.14	NA	ug/L
MKTF-17	6/10/2016	Ethylbenzene	520	50	5.6	700	ug/L
MKTF-17	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-17	6/10/2016	n-Propylbenzene	43	1	0.13	660	ug/L
MKTF-17	6/10/2016	n-Butylbenzene	1.6	3	0.16	1000	ug/L
MKTF-17	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-17	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-17	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-17	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-17	6/10/2016	1,3,5-Trimethylbenzene	4.6	1	0.12	60	ug/L
MKTF-17	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-17	6/10/2016	Toluene	6	1	0.12	1000	ug/L
MKTF-17	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-17	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-17	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-17	6/10/2016	sec-Butylbenzene	2.9	1	0.12	2000	ug/L
MKTF-17	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-17	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-17	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-17	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-17	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-17	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	6/10/2016	Xylenes, Total	240	75	18	620	ug/L
MKTF-17	6/10/2016	MTBE	**490**	50	11	143	ug/L
MKTF-17	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-17	9/13/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-17	9/13/2016	Acetone	ND	100	49	14064	ug/L
MKTF-17	9/13/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-17	9/13/2016	Benzene	**1300**	100	9.6	5	ug/L
MKTF-17	9/13/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-17	9/13/2016	Bromomethane	**9.3**	30	7.8	7.54	ug/L
MKTF-17	9/13/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-17	9/13/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-17	9/13/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-17	9/13/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-17	9/13/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-17	9/13/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-17	9/13/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-17	9/13/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-17	9/13/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-17	9/13/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-17	9/13/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-17	9/13/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-17	9/13/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-17	9/13/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-17	9/13/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-17	9/13/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-17	9/13/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-17	9/13/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-17	9/13/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-17	9/13/2016	1,2,4-Trimethylbenzene	12	10	1.1	56	ug/L
MKTF-17	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-17	9/13/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-17	9/13/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-17	9/13/2016	Isopropylbenzene	33	10	1	447	ug/L
MKTF-17	9/13/2016	p-Isopropyltoluene	3.4	10	1.4	NA	ug/L
MKTF-17	9/13/2016	Ethylbenzene	550	10	1.1	700	ug/L
MKTF-17	9/13/2016	Styrene	3.1	10	1.1	100	ug/L
MKTF-17	9/13/2016	n-Propylbenzene	50	10	1.3	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	n-Butylbenzene	3.9	30	1.6	1000	ug/L
MKTF-17	9/13/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-17	9/13/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-17	9/13/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-17	9/13/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-17	9/13/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-17	9/13/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-17	9/13/2016	Toluene	2.1	10	1.2	1000	ug/L
MKTF-17	9/13/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-17	9/13/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-17	9/13/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-17	9/13/2016	sec-Butylbenzene	5.4	10	1.2	2000	ug/L
MKTF-17	9/13/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-17	9/13/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	9/13/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-17	9/13/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-17	9/13/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-17	9/13/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-17	9/13/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-17	9/13/2016	Xylenes, Total	ND	15	3.7	620	ug/L
MKTF-17	9/13/2016	MTBE	**380**	10	2.1	143	ug/L
MKTF-17	9/13/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-17	9/13/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-17	11/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-17	11/8/2016	Acetone	ND	50	25	14064	ug/L
MKTF-17	11/8/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-17	11/8/2016	Benzene	**760**	50	4.8	5	ug/L
MKTF-17	11/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-17	11/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-17	11/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-17	11/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-17	11/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-17	11/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-17	11/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-17	11/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-17	11/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-17	11/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-17	11/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-17	11/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-17	11/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-17	11/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-17	11/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-17	11/8/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-17	11/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-17	11/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-17	11/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-17	11/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-17	11/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	11/8/2016	1,2,4-Trimethylbenzene	1.7	5	0.55	56	ug/L
MKTF-17	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-17	11/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-17	11/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-17	11/8/2016	Isopropylbenzene	20	5	0.52	447	ug/L
MKTF-17	11/8/2016	p-Isopropyltoluene	2.3	5	0.7	NA	ug/L
MKTF-17	11/8/2016	Ethylbenzene	390	5	0.56	700	ug/L
MKTF-17	11/8/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-17	11/8/2016	n-Propylbenzene	32	5	0.66	660	ug/L
MKTF-17	11/8/2016	n-Butylbenzene	2.7	15	0.8	1000	ug/L
MKTF-17	11/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-17	11/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-17	11/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-17	11/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-17	11/8/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-17	11/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-17	11/8/2016	Toluene	1.9	5	0.59	1000	ug/L
MKTF-17	11/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-17	11/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-17	11/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	11/8/2016	sec-Butylbenzene	3.5	5	0.62	2000	ug/L
MKTF-17	11/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-17	11/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-17	11/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-17	11/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-17	11/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-17	11/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-17	11/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/8/2016	Xylenes, Total	4.3	7.5	1.8	620	ug/L
MKTF-17	11/8/2016	MTBE	**360**	5	1.1	143	ug/L
MKTF-17	11/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-17	11/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-17	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-17	3/15/2017	Acetone	18	100	8.8	14064	ug/L
MKTF-17	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-17	3/15/2017	Benzene	**290**	10	0.96	5	ug/L
MKTF-17	3/15/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-17	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-17	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-17	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-17	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-17	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-17	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-17	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-17	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-17	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-17	3/15/2017	1,1-Dichloroethane	ND	10	1	25	ug/L
MKTF-17	3/15/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-17	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-17	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-17	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-17	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-17	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	3/15/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-17	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-17	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-17	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-17	3/15/2017	1,2,4-Trimethylbenzene	34	10	1	56	ug/L
MKTF-17	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-17	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-17	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-17	3/15/2017	Isopropylbenzene	10	10	0.98	447	ug/L
MKTF-17	3/15/2017	p-Isopropyltoluene	2.2	10	1.4	NA	ug/L
MKTF-17	3/15/2017	Ethylbenzene	230	10	1.1	700	ug/L
MKTF-17	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-17	3/15/2017	n-Propylbenzene	16	10	1.3	660	ug/L
MKTF-17	3/15/2017	n-Butylbenzene	1.8	30	1.6	1000	ug/L
MKTF-17	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-17	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-17	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-17	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-17	3/15/2017	1,3,5-Trimethylbenzene	3.5	10	1.2	60	ug/L
MKTF-17	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-17	3/15/2017	Toluene	2.2	10	0.89	1000	ug/L
MKTF-17	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-17	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-17	3/15/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-17	3/15/2017	sec-Butylbenzene	2.2	10	1	2000	ug/L
MKTF-17	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-17	3/15/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-17	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-17	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-17	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-17	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-17	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-17	3/15/2017	Xylenes, Total	70	15	3.2	620	ug/L
MKTF-17	3/15/2017	MTBE	**280**	10	1.5	143	ug/L
MKTF-17	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-17	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-17	6/14/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	6/14/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	6/14/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	6/14/2017	Benzene	**260**	5	0.31	5	ug/L
MKTF-17	6/14/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	6/14/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	6/14/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	6/14/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	6/14/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	6/14/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	6/14/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	6/14/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	6/14/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	6/14/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	6/14/2017	1,1-Dichloroethane	ND	5	2	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/14/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	6/14/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	6/14/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	6/14/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	6/14/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	6/14/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	6/14/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	6/14/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	6/14/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	6/14/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	6/14/2017	1,2,4-Trimethylbenzene	**75**	5	0.56	56	ug/L
MKTF-17	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	6/14/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	6/14/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	6/14/2017	Isopropylbenzene	35	5	0.26	447	ug/L
MKTF-17	6/14/2017	p-Isopropyltoluene	2.1	5	0.48	NA	ug/L
MKTF-17	6/14/2017	Ethylbenzene	580	50	4.7	700	ug/L
MKTF-17	6/14/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-17	6/14/2017	n-Propylbenzene	77	5	0.37	660	ug/L
MKTF-17	6/14/2017	n-Butylbenzene	3.5	15	0.65	1000	ug/L
MKTF-17	6/14/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	6/14/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	6/14/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	6/14/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	6/14/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	6/14/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	6/14/2017	Toluene	1.7	5	0.32	1000	ug/L
MKTF-17	6/14/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	6/14/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	6/14/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	6/14/2017	sec-Butylbenzene	5.9	5	0.55	2000	ug/L
MKTF-17	6/14/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	6/14/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	6/14/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-17	6/14/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	6/14/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	6/14/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	6/14/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	6/14/2017	Xylenes, Total	4.8	7.5	1.6	620	ug/L
MKTF-17	6/14/2017	MTBE	**390**	5	1.2	143	ug/L
MKTF-17	6/14/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	6/14/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	9/26/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	9/26/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	9/26/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	9/26/2017	Benzene	**47**	5	0.31	5	ug/L
MKTF-17	9/26/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	9/26/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	9/26/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	9/26/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	9/26/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	9/26/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	9/26/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	9/26/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	9/26/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	9/26/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	9/26/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	9/26/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	9/26/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	9/26/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	9/26/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	9/26/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	9/26/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	9/26/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	9/26/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	9/26/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	9/26/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	9/26/2017	1,2,4-Trimethylbenzene	0.73	5	0.56	56	ug/L
MKTF-17	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	9/26/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	9/26/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	9/26/2017	Isopropylbenzene	49	5	0.26	447	ug/L
MKTF-17	9/26/2017	p-Isopropyltoluene	2.2	5	0.48	NA	ug/L
MKTF-17	9/26/2017	Ethylbenzene	680	50	4.7	700	ug/L
MKTF-17	9/26/2017	Styrene	ND	5	0.78	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/26/2017	n-Propylbenzene	110	5	0.37	660	ug/L
MKTF-17	9/26/2017	n-Butylbenzene	4.9	15	0.65	1000	ug/L
MKTF-17	9/26/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	9/26/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	9/26/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	9/26/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	9/26/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	9/26/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	9/26/2017	Toluene	1.1	5	0.32	1000	ug/L
MKTF-17	9/26/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	9/26/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	9/26/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	9/26/2017	sec-Butylbenzene	8.7	5	0.55	2000	ug/L
MKTF-17	9/26/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	9/26/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	9/26/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	9/26/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	9/26/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	9/26/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	9/26/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	9/26/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	9/26/2017	MTBE	**940**	5	1.2	143	ug/L
MKTF-17	9/26/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	9/26/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	12/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	12/1/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	12/1/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	12/1/2017	Benzene	**140**	5	0.31	5	ug/L
MKTF-17	12/1/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	12/1/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	12/1/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	12/1/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	12/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	12/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	12/1/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	12/1/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	12/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	12/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	12/1/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	12/1/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	12/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	12/1/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	12/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	12/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	12/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	12/1/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	12/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	12/1/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	12/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	12/1/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
MKTF-17	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	12/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	12/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	12/1/2017	Isopropylbenzene	9.7	5	0.26	447	ug/L
MKTF-17	12/1/2017	p-Isopropyltoluene	1.5	5	0.48	NA	ug/L
MKTF-17	12/1/2017	Ethylbenzene	170	5	0.47	700	ug/L
MKTF-17	12/1/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-17	12/1/2017	n-Propylbenzene	16	5	0.37	660	ug/L
MKTF-17	12/1/2017	n-Butylbenzene	1.6	15	0.65	1000	ug/L
MKTF-17	12/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	12/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	12/1/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	12/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	12/1/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	12/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	12/1/2017	Toluene	0.8	5	0.32	1000	ug/L
MKTF-17	12/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	12/1/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	12/1/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	12/1/2017	sec-Butylbenzene	2.5	5	0.55	2000	ug/L
MKTF-17	12/1/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	12/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	12/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	12/1/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	12/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	12/1/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	12/1/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	12/1/2017	MTBE	**1500**	50	12	143	ug/L
MKTF-17	12/1/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	12/1/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	2/16/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	2/16/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	2/16/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	2/16/2018	Benzene	**220**	5	0.31	5	ug/L
MKTF-17	2/16/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	2/16/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	2/16/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	2/16/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	2/16/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	2/16/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	2/16/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	2/16/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	2/16/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	2/16/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	2/16/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	2/16/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	2/16/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	2/16/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	2/16/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	2/16/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	2/16/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	2/16/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	2/16/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	2/16/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	2/16/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	2/16/2018	1,2,4-Trimethylbenzene	0.62	5	0.56	56	ug/L
MKTF-17	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	2/16/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	2/16/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	2/16/2018	Isopropylbenzene	9.9	5	0.26	447	ug/L
MKTF-17	2/16/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-17	2/16/2018	Ethylbenzene	210	5	0.47	700	ug/L
MKTF-17	2/16/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-17	2/16/2018	n-Propylbenzene	13	5	0.37	660	ug/L
MKTF-17	2/16/2018	n-Butylbenzene	0.83	15	0.65	1000	ug/L
MKTF-17	2/16/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	2/16/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	2/16/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	2/16/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	2/16/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	2/16/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	2/16/2018	Toluene	0.98	5	0.32	1000	ug/L
MKTF-17	2/16/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	2/16/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	2/16/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	2/16/2018	sec-Butylbenzene	1.5	5	0.55	2000	ug/L
MKTF-17	2/16/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	2/16/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	2/16/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	2/16/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	2/16/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	2/16/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	2/16/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	2/16/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	2/16/2018	MTBE	**4900**	50	12	143	ug/L
MKTF-17	2/16/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	2/16/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	5/4/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	5/4/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	5/4/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	5/4/2018	Benzene	**47**	5	0.31	5	ug/L
MKTF-17	5/4/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	5/4/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	5/4/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	5/4/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	5/4/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	5/4/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	5/4/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	5/4/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	5/4/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	5/4/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	5/4/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	5/4/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	5/4/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	5/4/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	5/4/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	5/4/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	5/4/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	5/4/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	5/4/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	5/4/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	5/4/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	5/4/2018	1,2,4-Trimethylbenzene	1.4	5	0.56	56	ug/L
MKTF-17	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	5/4/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	5/4/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	5/4/2018	Isopropylbenzene	7.2	5	0.26	447	ug/L
MKTF-17	5/4/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-17	5/4/2018	Ethylbenzene	140	5	0.47	700	ug/L
MKTF-17	5/4/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-17	5/4/2018	n-Propylbenzene	9.1	5	0.37	660	ug/L
MKTF-17	5/4/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-17	5/4/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	5/4/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	5/4/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	5/4/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	5/4/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	5/4/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	5/4/2018	Toluene	1.1	5	0.32	1000	ug/L
MKTF-17	5/4/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	5/4/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	5/4/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	5/4/2018	sec-Butylbenzene	1.5	5	0.55	2000	ug/L
MKTF-17	5/4/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	5/4/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	5/4/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	5/4/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	5/4/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	5/4/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	5/4/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	5/4/2018	Xylenes, Total	2	7.5	1.6	620	ug/L
MKTF-17	5/4/2018	MTBE	**7400**	50	12	143	ug/L
MKTF-17	5/4/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	5/4/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	8/24/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
MKTF-17	8/24/2018	Acetone	ND	50	3.9	14064	ug/L
MKTF-17	8/24/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	8/24/2018	Benzene	2.7	5	0.87	5	ug/L
MKTF-17	8/24/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
MKTF-17	8/24/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	8/24/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	8/24/2018	Dibromomethane	ND	5	1.6	8	ug/L
MKTF-17	8/24/2018	Chloroethane	ND	10	0.82	20857	ug/L
MKTF-17	8/24/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
MKTF-17	8/24/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
MKTF-17	8/24/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
MKTF-17	8/24/2018	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-17	8/24/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
MKTF-17	8/24/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	8/24/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
MKTF-17	8/24/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
MKTF-17	8/24/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	8/24/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
MKTF-17	8/24/2018	2-Butanone	ND	50	6.3	5565	ug/L
MKTF-17	8/24/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
MKTF-17	8/24/2018	Trichloroethene	ND	5	1.3	5	ug/L
MKTF-17	8/24/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
MKTF-17	8/24/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
MKTF-17	8/24/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	8/24/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
MKTF-17	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
MKTF-17	8/24/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
MKTF-17	8/24/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
MKTF-17	8/24/2018	Isopropylbenzene	8	5	1.1	447	ug/L
MKTF-17	8/24/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
MKTF-17	8/24/2018	Ethylbenzene	120	5	1.1	700	ug/L
MKTF-17	8/24/2018	Styrene	ND	5	1.3	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	n-Propylbenzene	14	5	1.2	660	ug/L
MKTF-17	8/24/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-17	8/24/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	8/24/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
MKTF-17	8/24/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	8/24/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
MKTF-17	8/24/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
MKTF-17	8/24/2018	Bromobenzene	ND	5	1.6	62	ug/L
MKTF-17	8/24/2018	Toluene	ND	5	0.84	1000	ug/L
MKTF-17	8/24/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
MKTF-17	8/24/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-17	8/24/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	8/24/2018	sec-Butylbenzene	1.5	5	1	2000	ug/L
MKTF-17	8/24/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
MKTF-17	8/24/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-17	8/24/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	8/24/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-17	8/24/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
MKTF-17	8/24/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
MKTF-17	8/24/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-17	8/24/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
MKTF-17	8/24/2018	MTBE	**5300**	50	16	143	ug/L
MKTF-17	8/24/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
MKTF-17	8/24/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
MKTF-17	11/28/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-17	11/28/2018	Acetone	ND	50	3.8	14064	ug/L
MKTF-17	11/28/2018	Chloroform	ND	5	1.2	100	ug/L
MKTF-17	11/28/2018	Benzene	ND	5	0.87	5	ug/L
MKTF-17	11/28/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
MKTF-17	11/28/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
MKTF-17	11/28/2018	Chloromethane	ND	15	1.6	20.32	ug/L
MKTF-17	11/28/2018	Dibromomethane	ND	5	1.6	8	ug/L
MKTF-17	11/28/2018	Chloroethane	ND	10	0.82	20857	ug/L
MKTF-17	11/28/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
MKTF-17	11/28/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
MKTF-17	11/28/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
MKTF-17	11/28/2018	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-17	11/28/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
MKTF-17	11/28/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
MKTF-17	11/28/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
MKTF-17	11/28/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
MKTF-17	11/28/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
MKTF-17	11/28/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
MKTF-17	11/28/2018	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-17	11/28/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
MKTF-17	11/28/2018	Trichloroethene	ND	5	1.3	5	ug/L
MKTF-17	11/28/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
MKTF-17	11/28/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
MKTF-17	11/28/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
MKTF-17	11/28/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
MKTF-17	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
MKTF-17	11/28/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
MKTF-17	11/28/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
MKTF-17	11/28/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
MKTF-17	11/28/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
MKTF-17	11/28/2018	Ethylbenzene	28	5	1.1	700	ug/L
MKTF-17	11/28/2018	Styrene	ND	5	1.3	100	ug/L
MKTF-17	11/28/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
MKTF-17	11/28/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-17	11/28/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
MKTF-17	11/28/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
MKTF-17	11/28/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
MKTF-17	11/28/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
MKTF-17	11/28/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
MKTF-17	11/28/2018	Bromobenzene	ND	5	1.6	62	ug/L
MKTF-17	11/28/2018	Toluene	ND	5	0.84	1000	ug/L
MKTF-17	11/28/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
MKTF-17	11/28/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-17	11/28/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	11/28/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
MKTF-17	11/28/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
MKTF-17	11/28/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-17	11/28/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
MKTF-17	11/28/2018	Pentafluorobenzene	**50**	0	0		None
MKTF-17	11/28/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-17	11/28/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/28/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
MKTF-17	11/28/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-17	11/28/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
MKTF-17	11/28/2018	MTBE	**5700**	50	23	143	ug/L
MKTF-17	11/28/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
MKTF-17	11/28/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
MKTF-17	5/9/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	5/9/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	5/9/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	5/9/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-17	5/9/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	5/9/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	5/9/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	5/9/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	5/9/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-17	5/9/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	5/9/2019	1,2,4-Trimethylbenzene	**190**	5	1.065995	56	ug/L
MKTF-17	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-17	5/9/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	5/9/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	5/9/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	5/9/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-17	5/9/2019	1,3,5-Trimethylbenzene	17	5	0.943299	60	ug/L
MKTF-17	5/9/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	5/9/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	5/9/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	5/9/2019	1-Methylnaphthalene	42	20	1.574772	NA	ug/L
MKTF-17	5/9/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	5/9/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	5/9/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	5/9/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-17	5/9/2019	2-Methylnaphthalene	**25**	20	1.72688		ug/L
MKTF-17	5/9/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	5/9/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-17	5/9/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-17	5/9/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-17	5/9/2019	Benzene	**2200**	50	8.331953	5	ug/L
MKTF-17	5/9/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	5/9/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	5/9/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	5/9/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	5/9/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	5/9/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	5/9/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	5/9/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	5/9/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	5/9/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	5/9/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	5/9/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	5/9/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	5/9/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	5/9/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	5/9/2019	Ethylbenzene	490	5	0.661704	700	ug/L
MKTF-17	5/9/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	5/9/2019	Isopropylbenzene	27	5	0.957611	447	ug/L
MKTF-17	5/9/2019	MTBE	**4300**	50	22.804749	143	ug/L
MKTF-17	5/9/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	5/9/2019	Naphthalene	**150**	10	1.375357	30	ug/L
MKTF-17	5/9/2019	n-Butylbenzene	2.7	15	1.137848	1000	ug/L
MKTF-17	5/9/2019	n-Propylbenzene	46	5	1.07154	660	ug/L
MKTF-17	5/9/2019	sec-Butylbenzene	3.1	5	1.238656	2000	ug/L
MKTF-17	5/9/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-17	5/9/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	5/9/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	5/9/2019	Toluene	2.2	5	1.752181	1000	ug/L
MKTF-17	5/9/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	5/9/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	5/9/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	5/9/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	5/9/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	5/9/2019	Xylenes, Total	150	7.5	2.272075	620	ug/L
MKTF-17	5/9/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-17	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-17	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	8/20/2019	1,2,4-Trimethylbenzene	**88**	5	1.065995	56	ug/L
MKTF-17	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-17	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-17	8/20/2019	1,3,5-Trimethylbenzene	1.8	5	0.943299	60	ug/L
MKTF-17	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	8/20/2019	1-Methylnaphthalene	24	20	1.574772	NA	ug/L
MKTF-17	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-17	8/20/2019	2-Methylnaphthalene	**6.9**	20	1.72688		ug/L
MKTF-17	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	8/20/2019	p-Isopropyltoluene	1.8	5	1.086447	NA	ug/L
MKTF-17	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-17	8/20/2019	Acetone	18	50	5.996982	14064	ug/L
MKTF-17	8/20/2019	Benzene	**870**	50	8.331953	5	ug/L
MKTF-17	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	8/20/2019	Ethylbenzene	640	50	6.61704	700	ug/L
MKTF-17	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	8/20/2019	Isopropylbenzene	34	5	0.957611	447	ug/L
MKTF-17	8/20/2019	MTBE	**4300**	50	22.804749	143	ug/L
MKTF-17	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	8/20/2019	Naphthalene	29	10	1.375357	30	ug/L
MKTF-17	8/20/2019	n-Butylbenzene	6.7	15	1.137848	1000	ug/L
MKTF-17	8/20/2019	n-Propylbenzene	66	5	1.07154	660	ug/L
MKTF-17	8/20/2019	sec-Butylbenzene	4.7	5	1.238656	2000	ug/L
MKTF-17	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-17	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	8/20/2019	Toluene	2.6	5	1.752181	1000	ug/L
MKTF-17	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	8/20/2019	Xylenes, Total	78	7.5	2.272075	620	ug/L
MKTF-17	8/20/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-17	10/29/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	10/29/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	10/29/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	10/29/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-17	10/29/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	10/29/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	10/29/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	10/29/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	10/29/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	10/29/2019	1,2,4-Trimethylbenzene	**150**	5	1.065995	56	ug/L
MKTF-17	10/29/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	10/29/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	10/29/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	10/29/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	1,3,5-Trimethylbenzene	38	5	0.943299	60	ug/L
MKTF-17	10/29/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	10/29/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	10/29/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	10/29/2019	1-Methylnaphthalene	42	20	1.574772	NA	ug/L
MKTF-17	10/29/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	10/29/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	10/29/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	10/29/2019	2-Hexanone	*8*	*50*	7.73596	38	ug/L
MKTF-17	10/29/2019	2-Methylnaphthalene	**11**	20	1.72688		ug/L
MKTF-17	10/29/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	10/29/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-17	10/29/2019	4-Methyl-2-Pentanone	4.4	50	3.569477	1243	ug/L
MKTF-17	10/29/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-17	10/29/2019	Benzene	**12000**	500	83.319528	5	ug/L
MKTF-17	10/29/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	10/29/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	10/29/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	10/29/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	10/29/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	10/29/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	10/29/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	10/29/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	10/29/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	10/29/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	10/29/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	10/29/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	10/29/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	10/29/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	10/29/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	10/29/2019	Ethylbenzene	**1100**	50	6.61704	700	ug/L
MKTF-17	10/29/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	10/29/2019	Isopropylbenzene	42	5	0.957611	447	ug/L
MKTF-17	10/29/2019	MTBE	**2500**	50	22.804749	143	ug/L
MKTF-17	10/29/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	10/29/2019	Naphthalene	**110**	10	1.375357	30	ug/L
MKTF-17	10/29/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-17	10/29/2019	n-Propylbenzene	85	5	1.07154	660	ug/L
MKTF-17	10/29/2019	sec-Butylbenzene	4.6	5	1.238656	2000	ug/L
MKTF-17	10/29/2019	Styrene	1.5	5	0.956617	100	ug/L
MKTF-17	10/29/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	10/29/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	10/29/2019	Toluene	**23000**	500	175.218107	1000	ug/L
MKTF-17	10/29/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	10/29/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	10/29/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	10/29/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	10/29/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	10/29/2019	Xylenes, Total	**3100**	75	22.720747	620	ug/L
MKTF-17	10/29/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-18	4/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	4/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	4/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	4/14/2014	Benzene	**290**	5	0.77	5	ug/L
MKTF-18	4/14/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	4/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	4/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	4/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	4/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	4/14/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	4/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	4/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	4/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	4/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	4/14/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	4/14/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	4/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	4/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	4/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	4/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	4/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	4/14/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	4/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	4/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	4/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	4/14/2014	1,2,4-Trimethylbenzene	**91**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	4/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	4/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	4/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	4/14/2014	Isopropylbenzene	5.2	5	0.81	447	ug/L
MKTF-18	4/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	4/14/2014	Ethylbenzene	58	5	0.64	700	ug/L
MKTF-18	4/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	4/14/2014	n-Propylbenzene	7.6	5	0.7	660	ug/L
MKTF-18	4/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	4/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	4/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	4/14/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	4/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	4/14/2014	1,3,5-Trimethylbenzene	24	5	0.66	60	ug/L
MKTF-18	4/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	4/14/2014	Toluene	15	5	0.85	1000	ug/L
MKTF-18	4/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	4/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	4/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	4/14/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	4/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	4/14/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-18	4/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	4/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	4/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	4/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	4/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	4/14/2014	Xylenes, Total	44	7.5	1.9	620	ug/L
MKTF-18	4/14/2014	MTBE	**150**	5	1.3	143	ug/L
MKTF-18	4/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	4/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	6/6/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	6/6/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	6/6/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	6/6/2014	Benzene	**290**	5	0.77	5	ug/L
MKTF-18	6/6/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	6/6/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	6/6/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	6/6/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	6/6/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	6/6/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	6/6/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	6/6/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	6/6/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	6/6/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	6/6/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	6/6/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	6/6/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	6/6/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	6/6/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	6/6/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	6/6/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	6/6/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	6/6/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	6/6/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	6/6/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	6/6/2014	1,2,4-Trimethylbenzene	**88**	5	0.61	56	ug/L
MKTF-18	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	6/6/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	6/6/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	6/6/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-18	6/6/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	6/6/2014	Ethylbenzene	36	5	0.64	700	ug/L
MKTF-18	6/6/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	6/6/2014	n-Propylbenzene	6.6	5	0.7	660	ug/L
MKTF-18	6/6/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	6/6/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	6/6/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	6/6/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	6/6/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	6/6/2014	1,3,5-Trimethylbenzene	29	5	0.66	60	ug/L
MKTF-18	6/6/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	6/6/2014	Toluene	14	5	0.85	1000	ug/L
MKTF-18	6/6/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	6/6/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	6/6/2014	Tetrachloroethene	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	6/6/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	6/6/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-18	6/6/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	6/6/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	6/6/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	6/6/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	6/6/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	6/6/2014	Xylenes, Total	55	7.5	1.9	620	ug/L
MKTF-18	6/6/2014	MTBE	140	5	1.3	143	ug/L
MKTF-18	6/6/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	6/6/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	9/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	9/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	9/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	9/18/2014	Benzene	**120**	5	0.77	5	ug/L
MKTF-18	9/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	9/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	9/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	9/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	9/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	9/18/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	9/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	9/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	9/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	9/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	9/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	9/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	9/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	9/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	9/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	9/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	9/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	9/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	9/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	9/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	9/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	9/18/2014	1,2,4-Trimethylbenzene	**95**	5	0.61	56	ug/L
MKTF-18	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	9/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	9/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	9/18/2014	Isopropylbenzene	7.8	5	0.81	447	ug/L
MKTF-18	9/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	9/18/2014	Ethylbenzene	69	5	0.64	700	ug/L
MKTF-18	9/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	9/18/2014	n-Propylbenzene	11	5	0.7	660	ug/L
MKTF-18	9/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	9/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	9/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	9/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	9/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	9/18/2014	1,3,5-Trimethylbenzene	25	5	0.66	60	ug/L
MKTF-18	9/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	9/18/2014	Toluene	13	5	0.85	1000	ug/L
MKTF-18	9/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	9/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	9/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	9/18/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	9/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	9/18/2014	cis-1,2-Dichloroethene	7.3	5	0.61	70	ug/L
MKTF-18	9/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	9/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	9/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	9/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	9/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	9/18/2014	Xylenes, Total	42	7.5	1.9	620	ug/L
MKTF-18	9/18/2014	MTBE	120	5	1.3	143	ug/L
MKTF-18	9/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	9/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	11/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	11/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	11/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	11/18/2014	Benzene	**96**	5	0.77	5	ug/L
MKTF-18	11/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	11/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	11/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	11/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	11/18/2014	Vinyl Chloride	*ND*	*5*	0.53	2	ug/L
MKTF-18	11/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	11/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	11/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	11/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	11/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	11/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	11/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	11/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	11/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	11/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	11/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	11/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	11/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	11/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	11/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	11/18/2014	1,2,4-Trimethylbenzene	**96**	5	0.61	56	ug/L
MKTF-18	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	11/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	11/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	11/18/2014	Isopropylbenzene	8.8	5	0.81	447	ug/L
MKTF-18	11/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	11/18/2014	Ethylbenzene	90	5	0.64	700	ug/L
MKTF-18	11/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	11/18/2014	n-Propylbenzene	13	5	0.7	660	ug/L
MKTF-18	11/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	11/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	11/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	11/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	11/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	11/18/2014	1,3,5-Trimethylbenzene	23	5	0.66	60	ug/L
MKTF-18	11/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	11/18/2014	Toluene	7.6	5	0.85	1000	ug/L
MKTF-18	11/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	11/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	11/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	11/18/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	11/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	11/18/2014	cis-1,2-Dichloroethene	5.6	5	0.61	70	ug/L
MKTF-18	11/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	11/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	11/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	11/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	11/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	11/18/2014	Xylenes, Total	47	7.5	1.9	620	ug/L
MKTF-18	11/18/2014	MTBE	100	5	1.3	143	ug/L
MKTF-18	11/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	11/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	3/17/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-18	3/17/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-18	3/17/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-18	3/17/2015	Benzene	**58**	5	0.33	5	ug/L
MKTF-18	3/17/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-18	3/17/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-18	3/17/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-18	3/17/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-18	3/17/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-18	3/17/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-18	3/17/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-18	3/17/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-18	3/17/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-18	3/17/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-18	3/17/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-18	3/17/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
MKTF-18	3/17/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	3/17/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-18	3/17/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-18	3/17/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-18	3/17/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-18	3/17/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-18	3/17/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-18	3/17/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-18	3/17/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-18	3/17/2015	1,2,4-Trimethylbenzene	**65**	5	0.8	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-18	3/17/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-18	3/17/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-18	3/17/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
MKTF-18	3/17/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-18	3/17/2015	Ethylbenzene	17	5	0.51	700	ug/L
MKTF-18	3/17/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-18	3/17/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
MKTF-18	3/17/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-18	3/17/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-18	3/17/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-18	3/17/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-18	3/17/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-18	3/17/2015	1,3,5-Trimethylbenzene	19	5	0.61	60	ug/L
MKTF-18	3/17/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-18	3/17/2015	Toluene	ND	5	0.54	1000	ug/L
MKTF-18	3/17/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-18	3/17/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-18	3/17/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-18	3/17/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-18	3/17/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-18	3/17/2015	cis-1,2-Dichloroethene	5.6	5	0.4	70	ug/L
MKTF-18	3/17/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-18	3/17/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-18	3/17/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-18	3/17/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-18	3/17/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-18	3/17/2015	Xylenes, Total	29	7.5	1.4	620	ug/L
MKTF-18	3/17/2015	MTBE	91	5	0.87	143	ug/L
MKTF-18	3/17/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-18	3/17/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-18	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-18	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-18	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-18	6/8/2015	Benzene	**50**	1	0.065	5	ug/L
MKTF-18	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-18	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-18	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-18	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-18	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-18	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-18	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-18	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-18	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-18	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-18	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-18	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-18	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-18	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-18	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-18	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-18	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-18	6/8/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-18	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-18	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-18	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-18	6/8/2015	1,2,4-Trimethylbenzene	51	1	0.16	56	ug/L
MKTF-18	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-18	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-18	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-18	6/8/2015	Isopropylbenzene	6	1	0.15	447	ug/L
MKTF-18	6/8/2015	p-Isopropyltoluene	2	1	0.19	NA	ug/L
MKTF-18	6/8/2015	Ethylbenzene	49	1	0.1	700	ug/L
MKTF-18	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-18	6/8/2015	n-Propylbenzene	7.1	1	0.16	660	ug/L
MKTF-18	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-18	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-18	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-18	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-18	6/8/2015	1,3,5-Trimethylbenzene	12	1	0.12	60	ug/L
MKTF-18	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-18	6/8/2015	Toluene	3.3	1	0.11	1000	ug/L
MKTF-18	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-18	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-18	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/8/2015	sec-Butylbenzene	1.9	1	0.23	2000	ug/L
MKTF-18	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-18	6/8/2015	cis-1,2-Dichloroethene	4.5	1	0.081	70	ug/L
MKTF-18	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-18	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-18	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-18	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-18	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	6/8/2015	Xylenes, Total	31	1.5	0.28	620	ug/L
MKTF-18	6/8/2015	MTBE	82	1	0.17	143	ug/L
MKTF-18	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-18	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-18	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-18	8/18/2015	Benzene	**32**	1	0.065	5	ug/L
MKTF-18	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-18	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-18	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-18	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-18	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-18	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-18	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-18	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-18	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-18	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-18	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-18	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-18	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-18	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-18	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-18	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-18	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-18	8/18/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-18	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-18	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-18	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-18	8/18/2015	1,2,4-Trimethylbenzene	47	1	0.16	56	ug/L
MKTF-18	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-18	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-18	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-18	8/18/2015	Isopropylbenzene	7.7	1	0.15	447	ug/L
MKTF-18	8/18/2015	p-Isopropyltoluene	2.3	1	0.19	NA	ug/L
MKTF-18	8/18/2015	Ethylbenzene	54	1	0.1	700	ug/L
MKTF-18	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-18	8/18/2015	n-Propylbenzene	12	1	0.16	660	ug/L
MKTF-18	8/18/2015	n-Butylbenzene	4.4	3	0.25	1000	ug/L
MKTF-18	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-18	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-18	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-18	8/18/2015	1,3,5-Trimethylbenzene	9	1	0.12	60	ug/L
MKTF-18	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-18	8/18/2015	Toluene	1.6	1	0.11	1000	ug/L
MKTF-18	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-18	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-18	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-18	8/18/2015	sec-Butylbenzene	3.4	1	0.23	2000	ug/L
MKTF-18	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-18	8/18/2015	cis-1,2-Dichloroethene	5.6	1	0.081	70	ug/L
MKTF-18	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-18	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-18	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-18	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-18	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	8/18/2015	Xylenes, Total	19	1.5	0.28	620	ug/L
MKTF-18	8/18/2015	MTBE	100	1	0.17	143	ug/L
MKTF-18	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	11/3/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-18	11/3/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-18	11/3/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-18	11/3/2015	Benzene	**19**	2	0.13	5	ug/L
MKTF-18	11/3/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-18	11/3/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-18	11/3/2015	Chloromethane	ND	6	0.35	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/3/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-18	11/3/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-18	11/3/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-18	11/3/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-18	11/3/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-18	11/3/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-18	11/3/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-18	11/3/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	11/3/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-18	11/3/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-18	11/3/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-18	11/3/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-18	11/3/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-18	11/3/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-18	11/3/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-18	11/3/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-18	11/3/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-18	11/3/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-18	11/3/2015	1,2,4-Trimethylbenzene	51	2	0.32	56	ug/L
MKTF-18	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-18	11/3/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-18	11/3/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-18	11/3/2015	Isopropylbenzene	6.7	2	0.3	447	ug/L
MKTF-18	11/3/2015	p-Isopropyltoluene	2.6	2	0.38	NA	ug/L
MKTF-18	11/3/2015	Ethylbenzene	41	2	0.2	700	ug/L
MKTF-18	11/3/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-18	11/3/2015	n-Propylbenzene	11	2	0.33	660	ug/L
MKTF-18	11/3/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-18	11/3/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-18	11/3/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-18	11/3/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-18	11/3/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-18	11/3/2015	1,3,5-Trimethylbenzene	7.2	2	0.25	60	ug/L
MKTF-18	11/3/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-18	11/3/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-18	11/3/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-18	11/3/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-18	11/3/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-18	11/3/2015	sec-Butylbenzene	3.7	2	0.46	2000	ug/L
MKTF-18	11/3/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-18	11/3/2015	cis-1,2-Dichloroethene	4.6	2	0.16	70	ug/L
MKTF-18	11/3/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-18	11/3/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-18	11/3/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-18	11/3/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-18	11/3/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-18	11/3/2015	Xylenes, Total	17	3	0.56	620	ug/L
MKTF-18	11/3/2015	MTBE	83	2	0.35	143	ug/L
MKTF-18	11/3/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-18	11/3/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-18	2/26/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	2/26/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-18	2/26/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	2/26/2016	Benzene	**17**	1	0.096	5	ug/L
MKTF-18	2/26/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-18	2/26/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	2/26/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	2/26/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	2/26/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-18	2/26/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-18	2/26/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-18	2/26/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	2/26/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	2/26/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-18	2/26/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	2/26/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-18	2/26/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-18	2/26/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-18	2/26/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-18	2/26/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-18	2/26/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-18	2/26/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	2/26/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-18	2/26/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	2/26/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	2/26/2016	1,2,4-Trimethylbenzene	14	1	0.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-18	2/26/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-18	2/26/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-18	2/26/2016	Isopropylbenzene	6	1	0.098	447	ug/L
MKTF-18	2/26/2016	p-Isopropyltoluene	1.7	1	0.14	NA	ug/L
MKTF-18	2/26/2016	Ethylbenzene	34	1	0.11	700	ug/L
MKTF-18	2/26/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-18	2/26/2016	n-Propylbenzene	7.1	1	0.13	660	ug/L
MKTF-18	2/26/2016	n-Butylbenzene	3	3	0.16	1000	ug/L
MKTF-18	2/26/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	2/26/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	2/26/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-18	2/26/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-18	2/26/2016	1,3,5-Trimethylbenzene	1.2	1	0.12	60	ug/L
MKTF-18	2/26/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-18	2/26/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-18	2/26/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-18	2/26/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	2/26/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	2/26/2016	sec-Butylbenzene	3.2	1	0.11	2000	ug/L
MKTF-18	2/26/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	2/26/2016	cis-1,2-Dichloroethene	4.2	1	0.12	70	ug/L
MKTF-18	2/26/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	2/26/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	2/26/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-18	2/26/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-18	2/26/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	2/26/2016	Xylenes, Total	5.6	1.5	0.32	620	ug/L
MKTF-18	2/26/2016	MTBE	71	1	0.21	143	ug/L
MKTF-18	2/26/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	2/26/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-18	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	6/10/2016	Acetone	9.8	10	4.9	14064	ug/L
MKTF-18	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	6/10/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	6/10/2016	1,1-Dichloroethane	0.82	1	0.11	25	ug/L
MKTF-18	6/10/2016	1,1-Dichloroethene	0.69	1	0.11	7	ug/L
MKTF-18	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	6/10/2016	2-Butanone	4.4	10	0.74	5565	ug/L
MKTF-18	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	6/10/2016	1,2,4-Trimethylbenzene	4	1	0.11	56	ug/L
MKTF-18	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	6/10/2016	tert-Butylbenzene	0.31	1	0.12	690	ug/L
MKTF-18	6/10/2016	Isopropylbenzene	3.6	1	0.1	447	ug/L
MKTF-18	6/10/2016	p-Isopropyltoluene	1.1	1	0.14	NA	ug/L
MKTF-18	6/10/2016	Ethylbenzene	21	1	0.11	700	ug/L
MKTF-18	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	6/10/2016	n-Propylbenzene	5.3	1	0.13	660	ug/L
MKTF-18	6/10/2016	n-Butylbenzene	2.2	3	0.16	1000	ug/L
MKTF-18	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-18	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	6/10/2016	1,3,5-Trimethylbenzene	0.4	1	0.12	60	ug/L
MKTF-18	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	6/10/2016	Toluene	0.48	1	0.12	1000	ug/L
MKTF-18	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/10/2016	sec-Butylbenzene	2.3	1	0.12	2000	ug/L
MKTF-18	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	6/10/2016	cis-1,2-Dichloroethene	3.6	1	0.12	70	ug/L
MKTF-18	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	6/10/2016	Xylenes, Total	2.5	1.5	0.37	620	ug/L
MKTF-18	6/10/2016	MTBE	92	1	0.21	143	ug/L
MKTF-18	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-18	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	9/13/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	9/13/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	9/13/2016	1,1-Dichloroethene	0.62	1	0.11	7	ug/L
MKTF-18	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-18	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	9/13/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	9/13/2016	1,2,4-Trimethylbenzene	1.1	1	0.11	56	ug/L
MKTF-18	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	9/13/2016	tert-Butylbenzene	0.37	1	0.12	690	ug/L
MKTF-18	9/13/2016	Isopropylbenzene	2.4	1	0.1	447	ug/L
MKTF-18	9/13/2016	p-Isopropyltoluene	0.91	1	0.14	NA	ug/L
MKTF-18	9/13/2016	Ethylbenzene	15	1	0.11	700	ug/L
MKTF-18	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	9/13/2016	n-Propylbenzene	3	1	0.13	660	ug/L
MKTF-18	9/13/2016	n-Butylbenzene	1.3	3	0.16	1000	ug/L
MKTF-18	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-18	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	9/13/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
MKTF-18	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	9/13/2016	Toluene	0.37	1	0.12	1000	ug/L
MKTF-18	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	9/13/2016	sec-Butylbenzene	1.6	1	0.12	2000	ug/L
MKTF-18	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	9/13/2016	cis-1,2-Dichloroethene	2.7	1	0.12	70	ug/L
MKTF-18	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	9/13/2016	Xylenes, Total	1.3	1.5	0.37	620	ug/L
MKTF-18	9/13/2016	MTBE	74	1	0.21	143	ug/L
MKTF-18	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	11/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	11/8/2016	Acetone	5.5	10	4.9	14064	ug/L
MKTF-18	11/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	11/8/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	11/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	11/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	11/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	11/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	11/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	11/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	11/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	11/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	11/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	11/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	11/8/2016	1,1-Dichloroethene	0.6	1	0.11	7	ug/L
MKTF-18	11/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	11/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	11/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	11/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-18	11/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	11/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	11/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	11/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	11/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	11/8/2016	1,2,4-Trimethylbenzene	0.78	1	0.11	56	ug/L
MKTF-18	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	11/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	11/8/2016	tert-Butylbenzene	0.32	1	0.12	690	ug/L
MKTF-18	11/8/2016	Isopropylbenzene	2	1	0.1	447	ug/L
MKTF-18	11/8/2016	p-Isopropyltoluene	0.99	1	0.14	NA	ug/L
MKTF-18	11/8/2016	Ethylbenzene	14	1	0.11	700	ug/L
MKTF-18	11/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	11/8/2016	n-Propylbenzene	2.6	1	0.13	660	ug/L
MKTF-18	11/8/2016	n-Butylbenzene	1.3	3	0.16	1000	ug/L
MKTF-18	11/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	11/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	11/8/2016	1,2-Dichloroethane	0.42	1	0.12	5	ug/L
MKTF-18	11/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	11/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-18	11/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	11/8/2016	Toluene	0.3	1	0.12	1000	ug/L
MKTF-18	11/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	11/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	11/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	11/8/2016	sec-Butylbenzene	1.5	1	0.12	2000	ug/L
MKTF-18	11/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	11/8/2016	cis-1,2-Dichloroethene	2.9	1	0.12	70	ug/L
MKTF-18	11/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	11/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	11/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	11/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	11/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	11/8/2016	Xylenes, Total	0.76	1.5	0.37	620	ug/L
MKTF-18	11/8/2016	MTBE	81	1	0.21	143	ug/L
MKTF-18	11/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	11/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	3/1/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-18	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	3/1/2017	Benzene	**27**	1	0.096	5	ug/L
MKTF-18	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-18	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-18	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-18	3/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-18	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-18	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-18	3/1/2017	1,1-Dichloroethane	0.85	1	0.1	25	ug/L
MKTF-18	3/1/2017	1,1-Dichloroethene	0.69	1	0.081	7	ug/L
MKTF-18	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-18	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-18	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-18	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-18	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-18	3/1/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-18	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	3/1/2017	1,2,4-Trimethylbenzene	1.3	1	0.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-18	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-18	3/1/2017	tert-Butylbenzene	0.31	1	0.1	690	ug/L
MKTF-18	3/1/2017	Isopropylbenzene	4.7	1	0.098	447	ug/L
MKTF-18	3/1/2017	p-Isopropyltoluene	1	1	0.14	NA	ug/L
MKTF-18	3/1/2017	Ethylbenzene	26	1	0.11	700	ug/L
MKTF-18	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-18	3/1/2017	n-Propylbenzene	8.3	1	0.13	660	ug/L
MKTF-18	3/1/2017	n-Butylbenzene	3	3	0.16	1000	ug/L
MKTF-18	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-18	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	3/1/2017	1,2-Dichloroethane	0.47	1	0.12	5	ug/L
MKTF-18	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-18	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-18	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-18	3/1/2017	Toluene	0.33	1	0.089	1000	ug/L
MKTF-18	3/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-18	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	3/1/2017	sec-Butylbenzene	3	1	0.1	2000	ug/L
MKTF-18	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	3/1/2017	cis-1,2-Dichloroethene	3.1	1	0.2	70	ug/L
MKTF-18	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-18	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-18	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-18	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	3/1/2017	Xylenes, Total	0.85	1.5	0.32	620	ug/L
MKTF-18	3/1/2017	MTBE	93	1	0.15	143	ug/L
MKTF-18	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-18	6/14/2017	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	6/14/2017	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	6/14/2017	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	6/14/2017	Benzene	**30**	2	0.12	5	ug/L
MKTF-18	6/14/2017	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	6/14/2017	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	6/14/2017	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	6/14/2017	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	6/14/2017	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	6/14/2017	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	6/14/2017	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	6/14/2017	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	6/14/2017	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	6/14/2017	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	6/14/2017	1,1-Dichloroethane	0.93	2	0.8	25	ug/L
MKTF-18	6/14/2017	1,1-Dichloroethene	0.8	2	0.16	7	ug/L
MKTF-18	6/14/2017	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	6/14/2017	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	6/14/2017	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	6/14/2017	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	6/14/2017	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	6/14/2017	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	6/14/2017	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	6/14/2017	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	6/14/2017	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	6/14/2017	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
MKTF-18	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	6/14/2017	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	6/14/2017	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-18	6/14/2017	Isopropylbenzene	4.2	2	0.1	447	ug/L
MKTF-18	6/14/2017	p-Isopropyltoluene	0.65	2	0.19	NA	ug/L
MKTF-18	6/14/2017	Ethylbenzene	22	2	0.19	700	ug/L
MKTF-18	6/14/2017	Styrene	ND	2	0.31	100	ug/L
MKTF-18	6/14/2017	n-Propylbenzene	7.3	2	0.15	660	ug/L
MKTF-18	6/14/2017	n-Butylbenzene	3.1	6	0.26	1000	ug/L
MKTF-18	6/14/2017	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	6/14/2017	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	6/14/2017	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	6/14/2017	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	6/14/2017	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	6/14/2017	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	6/14/2017	Toluene	ND	2	0.13	1000	ug/L
MKTF-18	6/14/2017	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	6/14/2017	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	6/14/2017	Tetrachloroethene	ND	2	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/14/2017	sec-Butylbenzene	3	2	0.22	2000	ug/L
MKTF-18	6/14/2017	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	6/14/2017	cis-1,2-Dichloroethene	3.3	2	0.41	70	ug/L
MKTF-18	6/14/2017	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-18	6/14/2017	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	6/14/2017	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	6/14/2017	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	6/14/2017	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	6/14/2017	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-18	6/14/2017	MTBE	100	2	0.48	143	ug/L
MKTF-18	6/14/2017	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	6/14/2017	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	2/16/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	2/16/2018	Acetone	1.8	20	1.6	14064	ug/L
MKTF-18	2/16/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	2/16/2018	Benzene	**130**	2	0.12	5	ug/L
MKTF-18	2/16/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	2/16/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	2/16/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	2/16/2018	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	2/16/2018	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	2/16/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	2/16/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	2/16/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	2/16/2018	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	2/16/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	2/16/2018	1,1-Dichloroethane	1	2	0.8	25	ug/L
MKTF-18	2/16/2018	1,1-Dichloroethene	0.72	2	0.16	7	ug/L
MKTF-18	2/16/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	2/16/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	2/16/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	2/16/2018	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	2/16/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	2/16/2018	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	2/16/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	2/16/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	2/16/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	2/16/2018	1,2,4-Trimethylbenzene	0.23	2	0.23	56	ug/L
MKTF-18	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	2/16/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	2/16/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-18	2/16/2018	Isopropylbenzene	3.8	2	0.1	447	ug/L
MKTF-18	2/16/2018	p-Isopropyltoluene	0.23	2	0.19	NA	ug/L
MKTF-18	2/16/2018	Ethylbenzene	21	2	0.19	700	ug/L
MKTF-18	2/16/2018	Styrene	ND	2	0.31	100	ug/L
MKTF-18	2/16/2018	n-Propylbenzene	5	2	0.15	660	ug/L
MKTF-18	2/16/2018	n-Butylbenzene	1.8	6	0.26	1000	ug/L
MKTF-18	2/16/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	2/16/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	2/16/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	2/16/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	2/16/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	2/16/2018	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	2/16/2018	Toluene	0.33	2	0.13	1000	ug/L
MKTF-18	2/16/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	2/16/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	2/16/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-18	2/16/2018	sec-Butylbenzene	2.1	2	0.22	2000	ug/L
MKTF-18	2/16/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	2/16/2018	cis-1,2-Dichloroethene	5.1	2	0.41	70	ug/L
MKTF-18	2/16/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	2/16/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	2/16/2018	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	2/16/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	2/16/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	2/16/2018	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-18	2/16/2018	MTBE	**160**	2	0.48	143	ug/L
MKTF-18	2/16/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	2/16/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	5/4/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	5/4/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	5/4/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	5/4/2018	Benzene	**110**	2	0.12	5	ug/L
MKTF-18	5/4/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	5/4/2018	Bromomethane	ND	6	0.51	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	5/4/2018	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	5/4/2018	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	5/4/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	5/4/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	5/4/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	5/4/2018	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	5/4/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	5/4/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	5/4/2018	1,1-Dichloroethene	0.62	2	0.16	7	ug/L
MKTF-18	5/4/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	5/4/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	5/4/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	5/4/2018	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	5/4/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	5/4/2018	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	5/4/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	5/4/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	5/4/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	5/4/2018	1,2,4-Trimethylbenzene	0.68	2	0.23	56	ug/L
MKTF-18	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	5/4/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	5/4/2018	tert-Butylbenzene	0.25	2	0.21	690	ug/L
MKTF-18	5/4/2018	Isopropylbenzene	2.7	2	0.1	447	ug/L
MKTF-18	5/4/2018	p-Isopropyltoluene	0.32	2	0.19	NA	ug/L
MKTF-18	5/4/2018	Ethylbenzene	14	2	0.19	700	ug/L
MKTF-18	5/4/2018	Styrene	ND	2	0.31	100	ug/L
MKTF-18	5/4/2018	n-Propylbenzene	3.4	2	0.15	660	ug/L
MKTF-18	5/4/2018	n-Butylbenzene	1.3	6	0.26	1000	ug/L
MKTF-18	5/4/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	5/4/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	5/4/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	5/4/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	5/4/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	5/4/2018	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	5/4/2018	Toluene	ND	2	0.13	1000	ug/L
MKTF-18	5/4/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	5/4/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	5/4/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-18	5/4/2018	sec-Butylbenzene	1.8	2	0.22	2000	ug/L
MKTF-18	5/4/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	5/4/2018	cis-1,2-Dichloroethene	3.2	2	0.41	70	ug/L
MKTF-18	5/4/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	5/4/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	5/4/2018	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	5/4/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	5/4/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	5/4/2018	Xylenes, Total	0.73	3	0.64	620	ug/L
MKTF-18	5/4/2018	MTBE	140	2	0.48	143	ug/L
MKTF-18	5/4/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	5/4/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	8/24/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-18	8/24/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	8/24/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	8/24/2018	Benzene	**190**	2	0.35	5	ug/L
MKTF-18	8/24/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-18	8/24/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	8/24/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	8/24/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-18	8/24/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-18	8/24/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-18	8/24/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-18	8/24/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-18	8/24/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-18	8/24/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-18	8/24/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	8/24/2018	1,1-Dichloroethene	0.39	2	0.24	7	ug/L
MKTF-18	8/24/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-18	8/24/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	8/24/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-18	8/24/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-18	8/24/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-18	8/24/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-18	8/24/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-18	8/24/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-18	8/24/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/24/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-18	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-18	8/24/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-18	8/24/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-18	8/24/2018	Isopropylbenzene	1.7	2	0.44	447	ug/L
MKTF-18	8/24/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-18	8/24/2018	Ethylbenzene	11	2	0.45	700	ug/L
MKTF-18	8/24/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-18	8/24/2018	n-Propylbenzene	1.9	2	0.49	660	ug/L
MKTF-18	8/24/2018	n-Butylbenzene	0.74	6	0.5	1000	ug/L
MKTF-18	8/24/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	8/24/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-18	8/24/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	8/24/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-18	8/24/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-18	8/24/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-18	8/24/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-18	8/24/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-18	8/24/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-18	8/24/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	8/24/2018	sec-Butylbenzene	0.69	2	0.4	2000	ug/L
MKTF-18	8/24/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-18	8/24/2018	cis-1,2-Dichloroethene	2	2	0.75	70	ug/L
MKTF-18	8/24/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	8/24/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-18	8/24/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-18	8/24/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-18	8/24/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-18	8/24/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-18	8/24/2018	MTBE	110	2	0.64	143	ug/L
MKTF-18	8/24/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-18	8/24/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-18	11/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-18	11/28/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-18	11/28/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-18	11/28/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-18	11/28/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-18	11/28/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-18	11/28/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-18	11/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-18	11/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-18	11/28/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-18	11/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-18	11/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-18	11/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-18	11/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-18	11/28/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-18	11/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-18	11/28/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-18	11/28/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-18	11/28/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-18	11/28/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-18	11/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-18	11/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-18	11/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-18	11/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-18	11/28/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-18	11/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-18	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-18	11/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-18	11/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-18	11/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-18	11/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-18	11/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-18	11/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-18	11/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-18	11/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-18	11/28/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-18	11/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-18	11/28/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-18	11/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-18	11/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-18	11/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-18	11/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-18	11/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-18	11/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	11/28/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-18	11/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-18	11/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-18	11/28/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-18	11/28/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-18	11/28/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	11/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-18	11/28/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-18	11/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-18	11/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-18	11/28/2018	MTBE	130	2	0.91	143	ug/L
MKTF-18	11/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-18	11/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-18	5/16/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-18	5/16/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-18	5/16/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-18	5/16/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-18	5/16/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-18	5/16/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-18	5/16/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-18	5/16/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-18	5/16/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-18	5/16/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-18	5/16/2019	1,2,4-Trimethylbenzene	0.44	2	0.426398	56	ug/L
MKTF-18	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-18	5/16/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-18	5/16/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-18	5/16/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-18	5/16/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-18	5/16/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-18	5/16/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-18	5/16/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-18	5/16/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-18	5/16/2019	1-Methylnaphthalene	120	8	0.629909	NA	ug/L
MKTF-18	5/16/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-18	5/16/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-18	5/16/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-18	5/16/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-18	5/16/2019	2-Methylnaphthalene	**28**	8	0.690752		ug/L
MKTF-18	5/16/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-18	5/16/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-18	5/16/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-18	5/16/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-18	5/16/2019	Benzene	**140**	2	0.333278	5	ug/L
MKTF-18	5/16/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-18	5/16/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-18	5/16/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-18	5/16/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-18	5/16/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-18	5/16/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-18	5/16/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-18	5/16/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-18	5/16/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-18	5/16/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-18	5/16/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-18	5/16/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-18	5/16/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-18	5/16/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-18	5/16/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-18	5/16/2019	Ethylbenzene	2.3	2	0.264682	700	ug/L
MKTF-18	5/16/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-18	5/16/2019	Isopropylbenzene	3.7	2	0.383045	447	ug/L
MKTF-18	5/16/2019	MTBE	130	2	0.91219	143	ug/L
MKTF-18	5/16/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-18	5/16/2019	Naphthalene	19	4	0.550143	30	ug/L
MKTF-18	5/16/2019	n-Butylbenzene	1.9	6	0.455139	1000	ug/L
MKTF-18	5/16/2019	n-Propylbenzene	5.4	2	0.428616	660	ug/L
MKTF-18	5/16/2019	sec-Butylbenzene	2.4	2	0.495463	2000	ug/L
MKTF-18	5/16/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-18	5/16/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-18	5/16/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-18	5/16/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-18	5/16/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-18	5/16/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-18	5/16/2019	Trichloroethene	ND	2	0.332544	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/16/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-18	5/16/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-18	5/16/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-18	5/16/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-18	10/29/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-18	10/29/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-18	10/29/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-18	10/29/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-18	10/29/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-18	10/29/2019	1,1-Dichloroethene	0.76	2	0.410776	7	ug/L
MKTF-18	10/29/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-18	10/29/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-18	10/29/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-18	10/29/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-18	10/29/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-18	10/29/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-18	10/29/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-18	10/29/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-18	10/29/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-18	10/29/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-18	10/29/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-18	10/29/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-18	10/29/2019	1-Methylnaphthalene	110	8	0.629909	NA	ug/L
MKTF-18	10/29/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-18	10/29/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-18	10/29/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-18	10/29/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-18	10/29/2019	2-Methylnaphthalene	**29**	8	0.690752		ug/L
MKTF-18	10/29/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-18	10/29/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-18	10/29/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-18	10/29/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-18	10/29/2019	Benzene	**160**	2	0.333278	5	ug/L
MKTF-18	10/29/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-18	10/29/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-18	10/29/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-18	10/29/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-18	10/29/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-18	10/29/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-18	10/29/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-18	10/29/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-18	10/29/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-18	10/29/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-18	10/29/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-18	10/29/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-18	10/29/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-18	10/29/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-18	10/29/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-18	10/29/2019	Ethylbenzene	0.83	2	0.264682	700	ug/L
MKTF-18	10/29/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-18	10/29/2019	Isopropylbenzene	2.1	2	0.383045	447	ug/L
MKTF-18	10/29/2019	MTBE	88	2	0.91219	143	ug/L
MKTF-18	10/29/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-18	10/29/2019	Naphthalene	21	4	0.550143	30	ug/L
MKTF-18	10/29/2019	n-Butylbenzene	0.75	6	0.455139	1000	ug/L
MKTF-18	10/29/2019	n-Propylbenzene	2.6	2	0.428616	660	ug/L
MKTF-18	10/29/2019	sec-Butylbenzene	1.1	2	0.495463	2000	ug/L
MKTF-18	10/29/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-18	10/29/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-18	10/29/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-18	10/29/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-18	10/29/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-18	10/29/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-18	10/29/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-18	10/29/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-18	10/29/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-18	10/29/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-18	10/29/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-18	2/6/2020	1,1,1,2-Tetrachloroethane	ND	2	0.41	5.74	ug/L
MKTF-18	2/6/2020	1,1,1-Trichloroethane	ND	2	0.35	200	ug/L
MKTF-18	2/6/2020	1,1,2,2-Tetrachloroethane	ND	4	1.1	10	ug/L
MKTF-18	2/6/2020	1,1,2-Trichloroethane	ND	2	0.43	5	ug/L
MKTF-18	2/6/2020	1,1-Dichloroethane	0.51	2	0.28	25	ug/L
MKTF-18	2/6/2020	1,1-Dichloroethene	ND	2	0.41	7	ug/L
MKTF-18	2/6/2020	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	2/6/2020	1,2,3-Trichlorobenzene	ND	2	0.6	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/6/2020	1,2,3-Trichloropropane	*ND*	*4*	0.59	0.0084	ug/L
MKTF-18	2/6/2020	1,2,4-Trichlorobenzene	ND	2	0.39	70	ug/L
MKTF-18	2/6/2020	1,2,4-Trimethylbenzene	ND	2	0.43	56	ug/L
MKTF-18	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65	0.0033	ug/L
MKTF-18	2/6/2020	1,2-Dibromoethane	*ND*	*2*	0.33	0.05	ug/L
MKTF-18	2/6/2020	1,2-Dichlorobenzene	ND	2	0.59	600	ug/L
MKTF-18	2/6/2020	1,2-Dichloroethane	ND	2	0.39	5	ug/L
MKTF-18	2/6/2020	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-18	2/6/2020	1,3,5-Trimethylbenzene	ND	2	0.38	60	ug/L
MKTF-18	2/6/2020	1,3-Dichlorobenzene	ND	2	0.5	N/A	ug/L
MKTF-18	2/6/2020	1,3-Dichloropropane	ND	2	0.4	370	ug/L
MKTF-18	2/6/2020	1,4-Dichlorobenzene	ND	2	0.59	75	ug/L
MKTF-18	2/6/2020	1-Methylnaphthalene	73	8	0.63	NA	ug/L
MKTF-18	2/6/2020	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-18	2/6/2020	2-Butanone	ND	20	4.2	5565	ug/L
MKTF-18	2/6/2020	2-Chlorotoluene	ND	2	0.49	233	ug/L
MKTF-18	2/6/2020	2-Hexanone	ND	20	3.1	38	ug/L
MKTF-18	2/6/2020	2-Methylnaphthalene	**15**	8	0.69		ug/L
MKTF-18	2/6/2020	4-Chlorotoluene	ND	2	0.47	250	ug/L
MKTF-18	2/6/2020	p-Isopropyltoluene	ND	2	0.43	NA	ug/L
MKTF-18	2/6/2020	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	2/6/2020	Acetone	6.2	20	2.4	14064	ug/L
MKTF-18	2/6/2020	Benzene	**190**	2	0.33	5	ug/L
MKTF-18	2/6/2020	Bromobenzene	ND	2	0.49	62	ug/L
MKTF-18	2/6/2020	Bromodichloromethane	*ND*	*2*	0.27	1.34	ug/L
MKTF-18	2/6/2020	Bromoform	ND	2	0.58	32.9	ug/L
MKTF-18	2/6/2020	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-18	2/6/2020	Carbon Disulfide	ND	20	0.91	810	ug/L
MKTF-18	2/6/2020	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-18	2/6/2020	Chlorobenzene	ND	2	0.39	77.6	ug/L
MKTF-18	2/6/2020	Chloroethane	ND	4	0.36	20857	ug/L
MKTF-18	2/6/2020	Chloroform	ND	2	0.24	100	ug/L
MKTF-18	2/6/2020	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-18	2/6/2020	cis-1,2-Dichloroethene	2.3	2	0.38	70	ug/L
MKTF-18	2/6/2020	cis-1,3-Dichloropropene	ND	2	0.28	NA	ug/L
MKTF-18	2/6/2020	Dibromochloromethane	*ND*	*2*	0.48	1.68	ug/L
MKTF-18	2/6/2020	Dibromomethane	ND	2	0.42	8	ug/L
MKTF-18	2/6/2020	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-18	2/6/2020	Ethylbenzene	ND	2	0.26	700	ug/L
MKTF-18	2/6/2020	Hexachlorobutadiene	*ND*	*2*	0.62	1.39	ug/L
MKTF-18	2/6/2020	Isopropylbenzene	ND	2	0.38	447	ug/L
MKTF-18	2/6/2020	MTBE	110	2	0.91	143	ug/L
MKTF-18	2/6/2020	Methylene Chloride	*ND*	*6*	0.31	5	ug/L
MKTF-18	2/6/2020	n-Butylbenzene	ND	6	0.46	1000	ug/L
MKTF-18	2/6/2020	n-Propylbenzene	ND	2	0.43	660	ug/L
MKTF-18	2/6/2020	Naphthalene	13	4	0.55	30	ug/L
MKTF-18	2/6/2020	sec-Butylbenzene	ND	2	0.5	2000	ug/L
MKTF-18	2/6/2020	Styrene	ND	2	0.38	100	ug/L
MKTF-18	2/6/2020	tert-Butylbenzene	ND	2	0.41	690	ug/L
MKTF-18	2/6/2020	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	2/6/2020	Toluene	24	2	0.7	1000	ug/L
MKTF-18	2/6/2020	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-18	2/6/2020	trans-1,3-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	2/6/2020	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-18	2/6/2020	Trichlorofluoromethane	ND	2	0.38	1137	ug/L
MKTF-18	2/6/2020	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	2/6/2020	Xylenes, Total	2.6	3	0.91	620	ug/L
MKTF-18	2/6/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-18	12/16/2020	1,2-Dibromoethane	ND	0.0193	0.00483	0.05	ug/L
MKTF-18	12/16/2020	Acetone	ND	50	20	14064	ug/L
MKTF-18	12/16/2020	Benzene	**371**	2	0.76	5	ug/L
MKTF-18	12/16/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
MKTF-18	12/16/2020	Bromoform	ND	10	1.42	32.9	ug/L
MKTF-18	12/16/2020	Bromomethane	ND	2	1.96	7.54	ug/L
MKTF-18	12/16/2020	2-Butanone	ND	50	5.2	5565	ug/L
MKTF-18	12/16/2020	Carbon Disulfide	ND	2	1	810	ug/L
MKTF-18	12/16/2020	Carbon tetrachloride	ND	2	1	5	ug/L
MKTF-18	12/16/2020	Chlorobenzene	ND	2	1	77.6	ug/L
MKTF-18	12/16/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
MKTF-18	12/16/2020	Chloroethane	ND	2	1.52	20857	ug/L
MKTF-18	12/16/2020	Chloroform	ND	2	1.2	100	ug/L
MKTF-18	12/16/2020	Chloromethane	ND	2	1.66	20.32	ug/L
MKTF-18	12/16/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
MKTF-18	12/16/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
MKTF-18	12/16/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
MKTF-18	12/16/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
MKTF-18	12/16/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
MKTF-18	12/16/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
MKTF-18	12/16/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
MKTF-18	12/16/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
MKTF-18	12/16/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
MKTF-18	12/16/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
MKTF-18	12/16/2020	1,1-Dichloroethane	ND	2	1	25	ug/L
MKTF-18	12/16/2020	1,2-Dichloroethane	ND	2	1	5	ug/L
MKTF-18	12/16/2020	1,1-Dichloroethene	ND	2	1	7	ug/L
MKTF-18	12/16/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
MKTF-18	12/16/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
MKTF-18	12/16/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
MKTF-18	12/16/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
MKTF-18	12/16/2020	Ethylbenzene	ND	2	1	700	ug/L
MKTF-18	12/16/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
MKTF-18	12/16/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L
MKTF-18	12/16/2020	Isopropylbenzene	ND	2	1.06	447	ug/L
MKTF-18	12/16/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
MKTF-18	12/16/2020	1-Methylnaphthalene	86.3	10	8.4	NA	ug/L
MKTF-18	12/16/2020	2-Methylnaphthalene	**22**	20	9.2		ug/L
MKTF-18	12/16/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
MKTF-18	12/16/2020	MTBE	96.7	2	1.48	143	ug/L
MKTF-18	12/16/2020	Naphthalene	13.4	2	2	30	ug/L
MKTF-18	12/16/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
MKTF-18	12/16/2020	n-Propylbenzene	ND	2	1.38	660	ug/L
MKTF-18	12/16/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
MKTF-18	12/16/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
MKTF-18	12/16/2020	Styrene	ND	2	2	100	ug/L
MKTF-18	12/16/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
MKTF-18	12/16/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
MKTF-18	12/16/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
MKTF-18	12/16/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
MKTF-18	12/16/2020	Toluene	ND	2	0.82	1000	ug/L
MKTF-18	12/16/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
MKTF-18	12/16/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-18	12/16/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
MKTF-18	12/16/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
MKTF-18	12/16/2020	1,1,1-Trichloroethane	ND	2	1	200	ug/L
MKTF-18	12/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
MKTF-18	12/16/2020	Trichloroethene	ND	2	1	5	ug/L
MKTF-18	12/16/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
MKTF-18	12/16/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
MKTF-18	12/16/2020	1,2,4-Trimethylbenzene	ND	2	1.64	56	ug/L
MKTF-18	12/16/2020	1,3,5-Trimethylbenzene	ND	2	1.12	60	ug/L
MKTF-18	12/16/2020	Vinyl Chloride	ND	2	1	2	ug/L
MKTF-18	12/16/2020	Xylenes, Total	ND	20	3.2	620	ug/L
MKTF-19	4/9/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	4/9/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	4/9/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	4/9/2014	Benzene	**1400**	50	7.7	5	ug/L
MKTF-19	4/9/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	4/9/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	4/9/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	4/9/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	4/9/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	4/9/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-19	4/9/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	4/9/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	4/9/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	4/9/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	4/9/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	4/9/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	4/9/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	4/9/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	4/9/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	4/9/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	4/9/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	4/9/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	4/9/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	4/9/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	4/9/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	4/9/2014	1,2,4-Trimethylbenzene	**590**	50	6.1	56	ug/L
MKTF-19	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	4/9/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	4/9/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	4/9/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	4/9/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	4/9/2014	Ethylbenzene	680	50	6.4	700	ug/L
MKTF-19	4/9/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	4/9/2014	n-Propylbenzene	86	50	7	660	ug/L
MKTF-19	4/9/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	4/9/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	4/9/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	4/9/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	4/9/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	4/9/2014	1,3,5-Trimethylbenzene	**99**	50	6.6	60	ug/L
MKTF-19	4/9/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	4/9/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	4/9/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	4/9/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	4/9/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	4/9/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	4/9/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	4/9/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-19	4/9/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	4/9/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	4/9/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	4/9/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	4/9/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	4/9/2014	Xylenes, Total	610	75	19	620	ug/L
MKTF-19	4/9/2014	MTBE	**9700**	50	13	143	ug/L
MKTF-19	4/9/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	4/9/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	9/24/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	9/24/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	9/24/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	9/24/2014	Benzene	**1800**	50	7.7	5	ug/L
MKTF-19	9/24/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	9/24/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	9/24/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	9/24/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	9/24/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	9/24/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-19	9/24/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	9/24/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	9/24/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	9/24/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	9/24/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	9/24/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	9/24/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	9/24/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	9/24/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	9/24/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	9/24/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	9/24/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	9/24/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	9/24/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	9/24/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	9/24/2014	1,2,4-Trimethylbenzene	**690**	50	6.1	56	ug/L
MKTF-19	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	9/24/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	9/24/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-19	9/24/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	9/24/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	9/24/2014	Ethylbenzene	**730**	50	6.4	700	ug/L
MKTF-19	9/24/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	9/24/2014	n-Propylbenzene	100	50	7	660	ug/L
MKTF-19	9/24/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	9/24/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	9/24/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	9/24/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	9/24/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	9/24/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L
MKTF-19	9/24/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	9/24/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	9/24/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	9/24/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	9/24/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	9/24/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	9/24/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	9/24/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/24/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	9/24/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	9/24/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	9/24/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	9/24/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	9/24/2014	Xylenes, Total	**760**	75	19	620	ug/L
MKTF-19	9/24/2014	MTBE	**11000**	500	130	143	ug/L
MKTF-19	9/24/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	9/24/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	11/18/2014	Benzene	**2300**	50	7.7	5	ug/L
MKTF-19	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-19	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	11/18/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	11/18/2014	1,2,4-Trimethylbenzene	**830**	50	6.1	56	ug/L
MKTF-19	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-19	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	11/18/2014	Ethylbenzene	**740**	50	6.4	700	ug/L
MKTF-19	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	11/18/2014	n-Propylbenzene	110	50	7	660	ug/L
MKTF-19	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	11/18/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L
MKTF-19	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	11/18/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-19	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	11/18/2014	Xylenes, Total	360	75	19	620	ug/L
MKTF-19	11/18/2014	MTBE	**9700**	500	130	143	ug/L
MKTF-19	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	3/12/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	3/12/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	3/12/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	3/12/2015	Benzene	**1400**	50	3.3	5	ug/L
MKTF-19	3/12/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	3/12/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	3/12/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	3/12/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	3/12/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	3/12/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/12/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	3/12/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	3/12/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	3/12/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	3/12/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	3/12/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	3/12/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	3/12/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	3/12/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	3/12/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	3/12/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	3/12/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	3/12/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	3/12/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	3/12/2015	1,2,4-Trimethylbenzene	**390**	10	1.6	56	ug/L
MKTF-19	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	3/12/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	3/12/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	3/12/2015	Isopropylbenzene	18	10	1.5	447	ug/L
MKTF-19	3/12/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	3/12/2015	Ethylbenzene	430	10	1	700	ug/L
MKTF-19	3/12/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	3/12/2015	n-Propylbenzene	37	10	1.6	660	ug/L
MKTF-19	3/12/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	3/12/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	3/12/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	3/12/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	3/12/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	3/12/2015	1,3,5-Trimethylbenzene	47	10	1.2	60	ug/L
MKTF-19	3/12/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	3/12/2015	Toluene	ND	10	1.1	1000	ug/L
MKTF-19	3/12/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	3/12/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	3/12/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	3/12/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	3/12/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	3/12/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	3/12/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	3/12/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	3/12/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	3/12/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	3/12/2015	Xylenes, Total	150	15	2.8	620	ug/L
MKTF-19	3/12/2015	MTBE	**9700**	50	8.7	143	ug/L
MKTF-19	3/12/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	3/12/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	6/8/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	6/8/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	6/8/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	6/8/2015	Benzene	**1800**	100	6.5	5	ug/L
MKTF-19	6/8/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	6/8/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	6/8/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	6/8/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	6/8/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	6/8/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	6/8/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	6/8/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	6/8/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	6/8/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	6/8/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	6/8/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	6/8/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	6/8/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	6/8/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	6/8/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	6/8/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	6/8/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	6/8/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	6/8/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	6/8/2015	1,2,4-Trimethylbenzene	**420**	10	1.6	56	ug/L
MKTF-19	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	6/8/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	6/8/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/8/2015	Isopropylbenzene	29	10	1.5	447	ug/L
MKTF-19	6/8/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Ethylbenzene	590	10	1	700	ug/L
MKTF-19	6/8/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	6/8/2015	n-Propylbenzene	62	10	1.6	660	ug/L
MKTF-19	6/8/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	6/8/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	6/8/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	6/8/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	6/8/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	6/8/2015	1,3,5-Trimethylbenzene	55	10	1.2	60	ug/L
MKTF-19	6/8/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	6/8/2015	Toluene	13	10	1.1	1000	ug/L
MKTF-19	6/8/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	6/8/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	6/8/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	6/8/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	6/8/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	6/8/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	6/8/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	6/8/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	6/8/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	6/8/2015	Xylenes, Total	310	15	2.8	620	ug/L
MKTF-19	6/8/2015	MTBE	**9100**	100	17	143	ug/L
MKTF-19	6/8/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	6/8/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	8/18/2015	Benzene	**2400**	100	6.5	5	ug/L
MKTF-19	8/18/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	8/18/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	8/18/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	8/18/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	8/18/2015	1,2,4-Trimethylbenzene	**520**	10	1.6	56	ug/L
MKTF-19	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	8/18/2015	Isopropylbenzene	31	10	1.5	447	ug/L
MKTF-19	8/18/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Ethylbenzene	**740**	10	1	700	ug/L
MKTF-19	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	8/18/2015	n-Propylbenzene	80	10	1.6	660	ug/L
MKTF-19	8/18/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	8/18/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	8/18/2015	1,3,5-Trimethylbenzene	**73**	10	1.2	60	ug/L
MKTF-19	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	8/18/2015	Toluene	15	10	1.1	1000	ug/L
MKTF-19	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	8/18/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	8/18/2015	Xylenes, Total	450	15	2.8	620	ug/L
MKTF-19	8/18/2015	MTBE	**8800**	100	17	143	ug/L
MKTF-19	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	11/3/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	11/3/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	11/3/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	11/3/2015	Benzene	**2800**	100	6.5	5	ug/L
MKTF-19	11/3/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	11/3/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	11/3/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	11/3/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	11/3/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	11/3/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	11/3/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	11/3/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	11/3/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	11/3/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	11/3/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	11/3/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	11/3/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	11/3/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	11/3/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	11/3/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	11/3/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	11/3/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	11/3/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	11/3/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	11/3/2015	1,2,4-Trimethylbenzene	**530**	10	1.6	56	ug/L
MKTF-19	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	11/3/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	11/3/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	11/3/2015	Isopropylbenzene	26	10	1.5	447	ug/L
MKTF-19	11/3/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Ethylbenzene	**760**	10	1	700	ug/L
MKTF-19	11/3/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	11/3/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-19	11/3/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	11/3/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	11/3/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	11/3/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	11/3/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	11/3/2015	1,3,5-Trimethylbenzene	**94**	10	1.2	60	ug/L
MKTF-19	11/3/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	11/3/2015	Toluene	22	10	1.1	1000	ug/L
MKTF-19	11/3/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	11/3/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	11/3/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	11/3/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	11/3/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	11/3/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	11/3/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	11/3/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	11/3/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	11/3/2015	Xylenes, Total	**930**	15	2.8	620	ug/L
MKTF-19	11/3/2015	MTBE	**8400**	100	17	143	ug/L
MKTF-19	11/3/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	11/3/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-19	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	2/25/2016	Benzene	**1500**	20	1.9	5	ug/L
MKTF-19	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-19	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-19	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-19	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	2/25/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-19	2/25/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	2/25/2016	1,1-Dichloroethene	*ND*	*20*	1.5	7	ug/L
MKTF-19	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-19	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-19	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-19	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-19	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-19	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-19	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	2/25/2016	1,2,4-Trimethylbenzene	**680**	20	2.1	56	ug/L
MKTF-19	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-19	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-19	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-19	2/25/2016	Isopropylbenzene	33	20	2	447	ug/L
MKTF-19	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-19	2/25/2016	Ethylbenzene	**790**	20	2.2	700	ug/L
MKTF-19	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-19	2/25/2016	n-Propylbenzene	99	20	2.6	660	ug/L
MKTF-19	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-19	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-19	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-19	2/25/2016	1,3,5-Trimethylbenzene	**82**	20	2.3	60	ug/L
MKTF-19	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-19	2/25/2016	Toluene	ND	20	1.8	1000	ug/L
MKTF-19	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-19	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	2/25/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-19	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-19	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-19	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	2/25/2016	Xylenes, Total	**670**	30	6.5	620	ug/L
MKTF-19	2/25/2016	MTBE	**8600**	200	42	143	ug/L
MKTF-19	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-19	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-19	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/10/2016	Acetone	ND	100	49	14064	ug/L
MKTF-19	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-19	6/10/2016	Benzene	**1500**	100	9.6	5	ug/L
MKTF-19	6/10/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-19	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-19	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-19	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-19	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-19	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-19	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-19	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-19	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-19	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-19	6/10/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-19	6/10/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-19	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-19	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-19	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/10/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-19	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-19	6/10/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-19	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-19	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-19	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	6/10/2016	1,2,4-Trimethylbenzene	**580**	10	1.1	56	ug/L
MKTF-19	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-19	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-19	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/10/2016	Isopropylbenzene	34	10	1	447	ug/L
MKTF-19	6/10/2016	p-Isopropyltoluene	5.4	10	1.4	NA	ug/L
MKTF-19	6/10/2016	Ethylbenzene	690	10	1.1	700	ug/L
MKTF-19	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-19	6/10/2016	n-Propylbenzene	90	10	1.3	660	ug/L
MKTF-19	6/10/2016	n-Butylbenzene	17	30	1.6	1000	ug/L
MKTF-19	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-19	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-19	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-19	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-19	6/10/2016	1,3,5-Trimethylbenzene	**79**	10	1.2	60	ug/L
MKTF-19	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-19	6/10/2016	Toluene	6.4	10	1.2	1000	ug/L
MKTF-19	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-19	6/10/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-19	6/10/2016	sec-Butylbenzene	6.5	10	1.2	2000	ug/L
MKTF-19	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-19	6/10/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-19	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-19	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-19	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-19	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	6/10/2016	Xylenes, Total	**660**	15	3.7	620	ug/L
MKTF-19	6/10/2016	MTBE	**7900**	100	21	143	ug/L
MKTF-19	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-19	9/13/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	9/13/2016	Acetone	ND	200	98	14064	ug/L
MKTF-19	9/13/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	9/13/2016	Benzene	**1400**	20	1.9	5	ug/L
MKTF-19	9/13/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-19	9/13/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	9/13/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	9/13/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	9/13/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-19	9/13/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-19	9/13/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-19	9/13/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	9/13/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	9/13/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-19	9/13/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	9/13/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-19	9/13/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-19	9/13/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-19	9/13/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-19	9/13/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-19	9/13/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-19	9/13/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	9/13/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-19	9/13/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	9/13/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	9/13/2016	1,2,4-Trimethylbenzene	**620**	20	2.2	56	ug/L
MKTF-19	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-19	9/13/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-19	9/13/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-19	9/13/2016	Isopropylbenzene	35	20	2.1	447	ug/L
MKTF-19	9/13/2016	p-Isopropyltoluene	6.9	20	2.8	NA	ug/L
MKTF-19	9/13/2016	Ethylbenzene	690	20	2.2	700	ug/L
MKTF-19	9/13/2016	Styrene	3.3	20	2.2	100	ug/L
MKTF-19	9/13/2016	n-Propylbenzene	85	20	2.6	660	ug/L
MKTF-19	9/13/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
MKTF-19	9/13/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	9/13/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	9/13/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-19	9/13/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-19	9/13/2016	1,3,5-Trimethylbenzene	**100**	20	2.3	60	ug/L
MKTF-19	9/13/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-19	9/13/2016	Toluene	7.5	20	2.4	1000	ug/L
MKTF-19	9/13/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-19	9/13/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	9/13/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	9/13/2016	sec-Butylbenzene	9	20	2.5	2000	ug/L
MKTF-19	9/13/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	9/13/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	9/13/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	9/13/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-19	9/13/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-19	9/13/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	9/13/2016	Xylenes, Total	**920**	30	7.3	620	ug/L
MKTF-19	9/13/2016	MTBE	**8900**	200	42	143	ug/L
MKTF-19	9/13/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	9/13/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	11/8/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	11/8/2016	Acetone	ND	200	98	14064	ug/L
MKTF-19	11/8/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	11/8/2016	Benzene	**1300**	20	1.9	5	ug/L
MKTF-19	11/8/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-19	11/8/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	11/8/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	11/8/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	11/8/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-19	11/8/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-19	11/8/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-19	11/8/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	11/8/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	11/8/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-19	11/8/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	11/8/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-19	11/8/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-19	11/8/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-19	11/8/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-19	11/8/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-19	11/8/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-19	11/8/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	11/8/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-19	11/8/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	11/8/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	11/8/2016	1,2,4-Trimethylbenzene	**630**	20	2.2	56	ug/L
MKTF-19	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-19	11/8/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-19	11/8/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-19	11/8/2016	Isopropylbenzene	32	20	2.1	447	ug/L
MKTF-19	11/8/2016	p-Isopropyltoluene	6.2	20	2.8	NA	ug/L
MKTF-19	11/8/2016	Ethylbenzene	700	20	2.2	700	ug/L
MKTF-19	11/8/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-19	11/8/2016	n-Propylbenzene	84	20	2.6	660	ug/L
MKTF-19	11/8/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
MKTF-19	11/8/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	11/8/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	11/8/2016	1,2-Dichloroethane	**7**	20	2.3	5	ug/L
MKTF-19	11/8/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-19	11/8/2016	1,3,5-Trimethylbenzene	**110**	20	2.3	60	ug/L
MKTF-19	11/8/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-19	11/8/2016	Toluene	6.8	20	2.4	1000	ug/L
MKTF-19	11/8/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-19	11/8/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	11/8/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	11/8/2016	sec-Butylbenzene	8.8	20	2.5	2000	ug/L
MKTF-19	11/8/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	11/8/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-19	11/8/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	11/8/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	11/8/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-19	11/8/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-19	11/8/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	11/8/2016	Xylenes, Total	**1000**	30	7.3	620	ug/L
MKTF-19	11/8/2016	MTBE	**10000**	200	42	143	ug/L
MKTF-19	11/8/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	11/8/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	3/15/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	3/15/2017	Acetone	ND	200	18	14064	ug/L
MKTF-19	3/15/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	3/15/2017	Benzene	**1800**	20	1.9	5	ug/L
MKTF-19	3/15/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-19	3/15/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	3/15/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	3/15/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	3/15/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-19	3/15/2017	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-19	3/15/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	3/15/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-19	3/15/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-19	3/15/2017	1,1-Dichloroethane	ND	20	2.1	25	ug/L
MKTF-19	3/15/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-19	3/15/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-19	3/15/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-19	3/15/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-19	3/15/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-19	3/15/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-19	3/15/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-19	3/15/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	3/15/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	3/15/2017	1,2,4-Trimethylbenzene	**660**	20	2.1	56	ug/L
MKTF-19	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-19	3/15/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-19	3/15/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-19	3/15/2017	Isopropylbenzene	24	20	2	447	ug/L
MKTF-19	3/15/2017	p-Isopropyltoluene	5.8	20	2.8	NA	ug/L
MKTF-19	3/15/2017	Ethylbenzene	600	20	2.2	700	ug/L
MKTF-19	3/15/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-19	3/15/2017	n-Propylbenzene	54	20	2.6	660	ug/L
MKTF-19	3/15/2017	n-Butylbenzene	11	60	3.2	1000	ug/L
MKTF-19	3/15/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	3/15/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-19	3/15/2017	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-19	3/15/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-19	3/15/2017	1,3,5-Trimethylbenzene	**98**	20	2.3	60	ug/L
MKTF-19	3/15/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-19	3/15/2017	Toluene	9.8	20	1.8	1000	ug/L
MKTF-19	3/15/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	3/15/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L
MKTF-19	3/15/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	3/15/2017	sec-Butylbenzene	5.2	20	2	2000	ug/L
MKTF-19	3/15/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	3/15/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-19	3/15/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	3/15/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	3/15/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-19	3/15/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-19	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	3/15/2017	Xylenes, Total	**920**	30	6.5	620	ug/L
MKTF-19	3/15/2017	MTBE	**9000**	200	30	143	ug/L
MKTF-19	3/15/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-19	3/15/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-19	6/14/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/14/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	6/14/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	6/14/2017	Benzene	**2300**	100	6.2	5	ug/L
MKTF-19	6/14/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	6/14/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	6/14/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	6/14/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	6/14/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	6/14/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	6/14/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	6/14/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	6/14/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	6/14/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	6/14/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	6/14/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	6/14/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	6/14/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	6/14/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	6/14/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	6/14/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	6/14/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	6/14/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	6/14/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	6/14/2017	1,2,4-Trimethylbenzene	**600**	10	1.1	56	ug/L
MKTF-19	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	6/14/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	6/14/2017	tert-Butylbenzene	ND	10	1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/14/2017	Isopropylbenzene	30	10	0.51	447	ug/L
MKTF-19	6/14/2017	p-Isopropyltoluene	4.2	10	0.96	NA	ug/L
MKTF-19	6/14/2017	Ethylbenzene	**780**	10	0.93	700	ug/L
MKTF-19	6/14/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	6/14/2017	n-Propylbenzene	81	10	0.74	660	ug/L
MKTF-19	6/14/2017	n-Butylbenzene	10	30	1.3	1000	ug/L
MKTF-19	6/14/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	6/14/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	6/14/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	6/14/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	6/14/2017	1,3,5-Trimethylbenzene	**87**	10	0.87	60	ug/L
MKTF-19	6/14/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	6/14/2017	Toluene	8.4	10	0.64	1000	ug/L
MKTF-19	6/14/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	6/14/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	6/14/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	6/14/2017	sec-Butylbenzene	5	10	1.1	2000	ug/L
MKTF-19	6/14/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	6/14/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	6/14/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-19	6/14/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	6/14/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	6/14/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	6/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	6/14/2017	Xylenes, Total	**900**	15	3.2	620	ug/L
MKTF-19	6/14/2017	MTBE	**10000**	100	24	143	ug/L
MKTF-19	6/14/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	6/14/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	9/26/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	9/26/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	9/26/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	9/26/2017	Benzene	**3200**	100	6.2	5	ug/L
MKTF-19	9/26/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	9/26/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	9/26/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	9/26/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	9/26/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	9/26/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	9/26/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	9/26/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	9/26/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	9/26/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	9/26/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	9/26/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	9/26/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	9/26/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	9/26/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	9/26/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	9/26/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	9/26/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	9/26/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	9/26/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	9/26/2017	1,2,4-Trimethylbenzene	**530**	10	1.1	56	ug/L
MKTF-19	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	9/26/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	9/26/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-19	9/26/2017	Isopropylbenzene	26	10	0.51	447	ug/L
MKTF-19	9/26/2017	p-Isopropyltoluene	5.2	10	0.96	NA	ug/L
MKTF-19	9/26/2017	Ethylbenzene	**800**	10	0.93	700	ug/L
MKTF-19	9/26/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	9/26/2017	n-Propylbenzene	73	10	0.74	660	ug/L
MKTF-19	9/26/2017	n-Butylbenzene	13	30	1.3	1000	ug/L
MKTF-19	9/26/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	9/26/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	9/26/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	9/26/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	9/26/2017	1,3,5-Trimethylbenzene	**67**	10	0.87	60	ug/L
MKTF-19	9/26/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	9/26/2017	Toluene	14	10	0.64	1000	ug/L
MKTF-19	9/26/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	9/26/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	9/26/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	9/26/2017	sec-Butylbenzene	6	10	1.1	2000	ug/L
MKTF-19	9/26/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	9/26/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	9/26/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	9/26/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	9/26/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	9/26/2017	Xylenes, Total	**870**	15	3.2	620	ug/L
MKTF-19	9/26/2017	MTBE	**12000**	100	24	143	ug/L
MKTF-19	9/26/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	9/26/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	12/1/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	12/1/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	12/1/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	12/1/2017	Benzene	**1900**	100	6.2	5	ug/L
MKTF-19	12/1/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	12/1/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	12/1/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	12/1/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	12/1/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	12/1/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	12/1/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	12/1/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	12/1/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	12/1/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	12/1/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	12/1/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	12/1/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	12/1/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	12/1/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	12/1/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	12/1/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	12/1/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	12/1/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	12/1/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	12/1/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	12/1/2017	1,2,4-Trimethylbenzene	**720**	10	1.1	56	ug/L
MKTF-19	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	12/1/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	12/1/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-19	12/1/2017	Isopropylbenzene	34	10	0.51	447	ug/L
MKTF-19	12/1/2017	p-Isopropyltoluene	6.3	10	0.96	NA	ug/L
MKTF-19	12/1/2017	Ethylbenzene	**750**	10	0.93	700	ug/L
MKTF-19	12/1/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	12/1/2017	n-Propylbenzene	100	10	0.74	660	ug/L
MKTF-19	12/1/2017	n-Butylbenzene	14	30	1.3	1000	ug/L
MKTF-19	12/1/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	12/1/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	12/1/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	12/1/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	12/1/2017	1,3,5-Trimethylbenzene	**100**	10	0.87	60	ug/L
MKTF-19	12/1/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	12/1/2017	Toluene	5.9	10	0.64	1000	ug/L
MKTF-19	12/1/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	12/1/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	12/1/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	12/1/2017	sec-Butylbenzene	7.4	10	1.1	2000	ug/L
MKTF-19	12/1/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	12/1/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	12/1/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	12/1/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	12/1/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	12/1/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	12/1/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	12/1/2017	Xylenes, Total	**750**	15	3.2	620	ug/L
MKTF-19	12/1/2017	MTBE	**11000**	100	24	143	ug/L
MKTF-19	12/1/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	12/1/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	2/16/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/16/2018	Acetone	ND	200	16	14064	ug/L
MKTF-19	2/16/2018	Chloroform	ND	20	8	100	ug/L
MKTF-19	2/16/2018	Benzene	**1900**	20	1.2	5	ug/L
MKTF-19	2/16/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-19	2/16/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-19	2/16/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-19	2/16/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-19	2/16/2018	Chloroethane	ND	40	4.7	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/16/2018	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L
MKTF-19	2/16/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-19	2/16/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-19	2/16/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-19	2/16/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-19	2/16/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-19	2/16/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-19	2/16/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-19	2/16/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-19	2/16/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-19	2/16/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-19	2/16/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-19	2/16/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/16/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-19	2/16/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	2/16/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	2/16/2018	1,2,4-Trimethylbenzene	**670**	20	2.3	56	ug/L
MKTF-19	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-19	2/16/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-19	2/16/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-19	2/16/2018	Isopropylbenzene	36	20	1	447	ug/L
MKTF-19	2/16/2018	p-Isopropyltoluene	4.8	20	1.9	NA	ug/L
MKTF-19	2/16/2018	Ethylbenzene	**740**	20	1.9	700	ug/L
MKTF-19	2/16/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-19	2/16/2018	n-Propylbenzene	97	20	1.5	660	ug/L
MKTF-19	2/16/2018	n-Butylbenzene	14	60	2.6	1000	ug/L
MKTF-19	2/16/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	2/16/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-19	2/16/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-19	2/16/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-19	2/16/2018	1,3,5-Trimethylbenzene	**85**	20	1.7	60	ug/L
MKTF-19	2/16/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-19	2/16/2018	Toluene	3.7	20	1.3	1000	ug/L
MKTF-19	2/16/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	2/16/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-19	2/16/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-19	2/16/2018	sec-Butylbenzene	6.1	20	2.2	2000	ug/L
MKTF-19	2/16/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-19	2/16/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-19	2/16/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	2/16/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-19	2/16/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-19	2/16/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-19	2/16/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-19	2/16/2018	Xylenes, Total	**640**	30	6.4	620	ug/L
MKTF-19	2/16/2018	MTBE	**10000**	200	48	143	ug/L
MKTF-19	2/16/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-19	2/16/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-19	5/4/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-19	5/4/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-19	5/4/2018	Chloroform	ND	5	2	100	ug/L
MKTF-19	5/4/2018	Benzene	**2000**	50	3.1	5	ug/L
MKTF-19	5/4/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-19	5/4/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-19	5/4/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-19	5/4/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-19	5/4/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-19	5/4/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-19	5/4/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-19	5/4/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-19	5/4/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-19	5/4/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-19	5/4/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-19	5/4/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-19	5/4/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-19	5/4/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-19	5/4/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-19	5/4/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-19	5/4/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-19	5/4/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-19	5/4/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-19	5/4/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-19	5/4/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-19	5/4/2018	1,2,4-Trimethylbenzene	**780**	50	5.6	56	ug/L
MKTF-19	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-19	5/4/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-19	5/4/2018	Isopropylbenzene	41	5	0.26	447	ug/L
MKTF-19	5/4/2018	p-Isopropyltoluene	6	5	0.48	NA	ug/L
MKTF-19	5/4/2018	Ethylbenzene	**870**	50	4.7	700	ug/L
MKTF-19	5/4/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-19	5/4/2018	n-Propylbenzene	120	5	0.37	660	ug/L
MKTF-19	5/4/2018	n-Butylbenzene	15	15	0.65	1000	ug/L
MKTF-19	5/4/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-19	5/4/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-19	5/4/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-19	5/4/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-19	5/4/2018	1,3,5-Trimethylbenzene	**100**	5	0.44	60	ug/L
MKTF-19	5/4/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-19	5/4/2018	Toluene	5.7	5	0.32	1000	ug/L
MKTF-19	5/4/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-19	5/4/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-19	5/4/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-19	5/4/2018	sec-Butylbenzene	7.8	5	0.55	2000	ug/L
MKTF-19	5/4/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-19	5/4/2018	cis-1,2-Dichloroethene	2	5	1	70	ug/L
MKTF-19	5/4/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-19	5/4/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-19	5/4/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-19	5/4/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-19	5/4/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-19	5/4/2018	Xylenes, Total	**820**	7.5	1.6	620	ug/L
MKTF-19	5/4/2018	MTBE	**11000**	500	120	143	ug/L
MKTF-19	5/4/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-19	5/4/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-19	8/24/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-19	8/24/2018	Acetone	ND	200	16	14064	ug/L
MKTF-19	8/24/2018	Chloroform	ND	20	8	100	ug/L
MKTF-19	8/24/2018	Benzene	**1700**	20	3.5	5	ug/L
MKTF-19	8/24/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-19	8/24/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-19	8/24/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-19	8/24/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-19	8/24/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-19	8/24/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-19	8/24/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-19	8/24/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-19	8/24/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-19	8/24/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-19	8/24/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-19	8/24/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-19	8/24/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-19	8/24/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-19	8/24/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-19	8/24/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-19	8/24/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-19	8/24/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-19	8/24/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-19	8/24/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-19	8/24/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	8/24/2018	1,2,4-Trimethylbenzene	**720**	20	5.1	56	ug/L
MKTF-19	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-19	8/24/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-19	8/24/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-19	8/24/2018	Isopropylbenzene	34	20	4.4	447	ug/L
MKTF-19	8/24/2018	p-Isopropyltoluene	6.4	20	4.8	NA	ug/L
MKTF-19	8/24/2018	Ethylbenzene	**710**	20	4.5	700	ug/L
MKTF-19	8/24/2018	Styrene	ND	20	5	100	ug/L
MKTF-19	8/24/2018	n-Propylbenzene	99	20	4.9	660	ug/L
MKTF-19	8/24/2018	n-Butylbenzene	16	60	5	1000	ug/L
MKTF-19	8/24/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	8/24/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-19	8/24/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-19	8/24/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-19	8/24/2018	1,3,5-Trimethylbenzene	**110**	20	4.6	60	ug/L
MKTF-19	8/24/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-19	8/24/2018	Toluene	4.3	20	3.4	1000	ug/L
MKTF-19	8/24/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-19	8/24/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-19	8/24/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	8/24/2018	sec-Butylbenzene	7.7	20	4	2000	ug/L
MKTF-19	8/24/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/24/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-19	8/24/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	8/24/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-19	8/24/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-19	8/24/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-19	8/24/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-19	8/24/2018	Xylenes, Total	**740**	30	13	620	ug/L
MKTF-19	8/24/2018	MTBE	**9700**	200	64	143	ug/L
MKTF-19	8/24/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-19	8/24/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-19	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-19	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-19	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-19	11/28/2018	Benzene	**1900**	20	3.5	5	ug/L
MKTF-19	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-19	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-19	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-19	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-19	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-19	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-19	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-19	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-19	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-19	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-19	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-19	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-19	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-19	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-19	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-19	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-19	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-19	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-19	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-19	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-19	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-19	11/28/2018	1,2,4-Trimethylbenzene	**580**	20	5.1	56	ug/L
MKTF-19	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-19	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-19	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-19	11/28/2018	Isopropylbenzene	28	20	4.4	447	ug/L
MKTF-19	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-19	11/28/2018	Ethylbenzene	630	20	4.5	700	ug/L
MKTF-19	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-19	11/28/2018	n-Propylbenzene	79	20	4.9	660	ug/L
MKTF-19	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-19	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-19	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-19	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-19	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-19	11/28/2018	1,3,5-Trimethylbenzene	**79**	20	4.6	60	ug/L
MKTF-19	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-19	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-19	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-19	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-19	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-19	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-19	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-19	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-19	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-19	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-19	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-19	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-19	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-19	11/28/2018	Xylenes, Total	570	30	13	620	ug/L
MKTF-19	11/28/2018	MTBE	**10000**	200	91	143	ug/L
MKTF-19	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-19	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-19	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	5/9/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	5/9/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	5/9/2019	1,2,4-Trimethylbenzene	**630**	20	4.263982	56	ug/L
MKTF-19	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	5/9/2019	1,3,5-Trimethylbenzene	**100**	20	3.773197	60	ug/L
MKTF-19	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	5/9/2019	1-Methylnaphthalene	270	80	6.29909	NA	ug/L
MKTF-19	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	5/9/2019	2-Methylnaphthalene	**360**	80	6.90752		ug/L
MKTF-19	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	5/9/2019	p-Isopropyltoluene	5.4	20	4.345787	NA	ug/L
MKTF-19	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	5/9/2019	Benzene	**1800**	20	3.332781	5	ug/L
MKTF-19	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	5/9/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	5/9/2019	Ethylbenzene	**770**	20	2.646816	700	ug/L
MKTF-19	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	5/9/2019	Isopropylbenzene	39	20	3.830445	447	ug/L
MKTF-19	5/9/2019	MTBE	**7800**	200	91.218997	143	ug/L
MKTF-19	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	5/9/2019	Naphthalene	**600**	40	5.501427	30	ug/L
MKTF-19	5/9/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-19	5/9/2019	n-Propylbenzene	110	20	4.28616	660	ug/L
MKTF-19	5/9/2019	sec-Butylbenzene	7.1	20	4.954626	2000	ug/L
MKTF-19	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	5/9/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	5/9/2019	Xylenes, Total	610	30	9.088299	620	ug/L
MKTF-19	5/9/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-19	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	8/19/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	8/19/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	8/19/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	8/19/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	8/19/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	8/19/2019	1,2,4-Trimethylbenzene	**680**	20	4.263982	56	ug/L
MKTF-19	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	8/19/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	8/19/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	8/19/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	220	80	6.29909	NA	ug/L
MKTF-19	8/19/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	8/19/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	8/19/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	8/19/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**290**	80	6.90752		ug/L
MKTF-19	8/19/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	8/19/2019	p-Isopropyltoluene	10	20	4.345787	NA	ug/L
MKTF-19	8/19/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	8/19/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	8/19/2019	Benzene	**1400**	20	3.332781	5	ug/L
MKTF-19	8/19/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	8/19/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	8/19/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	8/19/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	8/19/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	8/19/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	8/19/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	8/19/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	8/19/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	8/19/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	8/19/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	8/19/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	8/19/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	8/19/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	8/19/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	8/19/2019	Ethylbenzene	**720**	20	2.646816	700	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	8/19/2019	Isopropylbenzene	37	20	3.830445	447	ug/L
MKTF-19	8/19/2019	MTBE	**8100**	200	91.218997	143	ug/L
MKTF-19	8/19/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	8/19/2019	Naphthalene	**490**	40	5.501427	30	ug/L
MKTF-19	8/19/2019	n-Butylbenzene	33	60	4.551391	1000	ug/L
MKTF-19	8/19/2019	n-Propylbenzene	100	20	4.28616	660	ug/L
MKTF-19	8/19/2019	sec-Butylbenzene	11	20	4.954626	2000	ug/L
MKTF-19	8/19/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	8/19/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	8/19/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	8/19/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	8/19/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	8/19/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	8/19/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	8/19/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	8/19/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	8/19/2019	Xylenes, Total	**710**	30	9.088299	620	ug/L
MKTF-19	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	8/19/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	8/19/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	8/19/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	8/19/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	8/19/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	8/19/2019	1,2,4-Trimethylbenzene	**690**	20	4.263982	56	ug/L
MKTF-19	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	8/19/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	8/19/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	8/19/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	8/19/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	230	80	6.29909	NA	ug/L
MKTF-19	8/19/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	8/19/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	8/19/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	8/19/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**310**	80	6.90752		ug/L
MKTF-19	8/19/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	8/19/2019	p-Isopropyltoluene	10	20	4.345787	NA	ug/L
MKTF-19	8/19/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	8/19/2019	Benzene	**1400**	20	3.332781	5	ug/L
MKTF-19	8/19/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	8/19/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	8/19/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	8/19/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	8/19/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	8/19/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	8/19/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	8/19/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	8/19/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	8/19/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	8/19/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	8/19/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	8/19/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	8/19/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	8/19/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	8/19/2019	Ethylbenzene	**720**	20	2.646816	700	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	8/19/2019	Isopropylbenzene	37	20	3.830445	447	ug/L
MKTF-19	8/19/2019	MTBE	**8300**	200	91.218997	143	ug/L
MKTF-19	8/19/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	8/19/2019	Naphthalene	**500**	40	5.501427	30	ug/L
MKTF-19	8/19/2019	n-Butylbenzene	35	60	4.551391	1000	ug/L
MKTF-19	8/19/2019	n-Propylbenzene	110	20	4.28616	660	ug/L
MKTF-19	8/19/2019	sec-Butylbenzene	11	20	4.954626	2000	ug/L
MKTF-19	8/19/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	8/19/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	8/19/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	8/19/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	8/19/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	8/19/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	8/19/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	8/19/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	8/19/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	8/19/2019	Xylenes, Total	**690**	30	9.088299	620	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-19	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	10/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	10/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	10/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	10/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	10/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	10/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	10/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	10/29/2019	1,2,4-Trimethylbenzene	**480**	20	4.263982	56	ug/L
MKTF-19	10/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	10/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	10/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	10/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	10/29/2019	1,3,5-Trimethylbenzene	**86**	20	3.773197	60	ug/L
MKTF-19	10/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	10/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	10/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	10/29/2019	1-Methylnaphthalene	190	80	6.29909	NA	ug/L
MKTF-19	10/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	10/29/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	10/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	10/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	10/29/2019	2-Methylnaphthalene	**240**	80	6.90752		ug/L
MKTF-19	10/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	10/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-19	10/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	10/29/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	10/29/2019	Benzene	**1600**	20	3.332781	5	ug/L
MKTF-19	10/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	10/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	10/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	10/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	10/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	10/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	10/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	10/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	10/29/2019	Chloroform	ND	20	2.437811	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	10/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	10/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	10/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	10/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	10/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	10/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	10/29/2019	Ethylbenzene	610	20	2.646816	700	ug/L
MKTF-19	10/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	10/29/2019	Isopropylbenzene	26	20	3.830445	447	ug/L
MKTF-19	10/29/2019	MTBE	**7900**	200	91.218997	143	ug/L
MKTF-19	10/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	10/29/2019	Naphthalene	**450**	40	5.501427	30	ug/L
MKTF-19	10/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-19	10/29/2019	n-Propylbenzene	67	20	4.28616	660	ug/L
MKTF-19	10/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-19	10/29/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	10/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	10/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	10/29/2019	Toluene	13	20	7.008724	1000	ug/L
MKTF-19	10/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	10/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	10/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	10/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	10/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	10/29/2019	Xylenes, Total	610	30	9.088299	620	ug/L
MKTF-19	10/29/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
MKTF-20	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-20	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-20	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-20	4/11/2014	Benzene	**25000**	500	77	5	ug/L
MKTF-20	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-20	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-20	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-20	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-20	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-20	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-20	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-20	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-20	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-20	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-20	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-20	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-20	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-20	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-20	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-20	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-20	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-20	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-20	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-20	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-20	4/11/2014	1,2,4-Trimethylbenzene	**1900**	50	6.1	56	ug/L
MKTF-20	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-20	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-20	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-20	4/11/2014	Isopropylbenzene	76	50	8.1	447	ug/L
MKTF-20	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-20	4/11/2014	Ethylbenzene	**2800**	50	6.4	700	ug/L
MKTF-20	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-20	4/11/2014	n-Propylbenzene	260	50	7	660	ug/L
MKTF-20	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-20	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-20	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-20	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-20	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-20	4/11/2014	1,3,5-Trimethylbenzene	**500**	50	6.6	60	ug/L
MKTF-20	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-20	4/11/2014	Toluene	**17000**	500	85	1000	ug/L
MKTF-20	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-20	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-20	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-20	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-20	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-20	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-20	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-20	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-20	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-20	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-20	4/11/2014	Xylenes, Total	**14000**	75	19	620	ug/L
MKTF-20	4/11/2014	MTBE	**380**	50	13	143	ug/L
MKTF-20	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-20	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-20	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-20	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-20	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-20	11/18/2014	Benzene	**4400**	50	7.7	5	ug/L
MKTF-20	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-20	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-20	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-20	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-20	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-20	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-20	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-20	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-20	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-20	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-20	11/18/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-20	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-20	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-20	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-20	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-20	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-20	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-20	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-20	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-20	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-20	11/18/2014	1,2,4-Trimethylbenzene	**1800**	50	6.1	56	ug/L
MKTF-20	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-20	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-20	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-20	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-20	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-20	11/18/2014	Ethylbenzene	480	50	6.4	700	ug/L
MKTF-20	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-20	11/18/2014	n-Propylbenzene	120	50	7	660	ug/L
MKTF-20	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-20	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-20	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-20	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-20	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-20	11/18/2014	1,3,5-Trimethylbenzene	**530**	50	6.6	60	ug/L
MKTF-20	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-20	11/18/2014	Toluene	**1300**	50	8.5	1000	ug/L
MKTF-20	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-20	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-20	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-20	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-20	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-20	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-20	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-20	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-20	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-20	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-20	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-20	11/18/2014	Xylenes, Total	**10000**	75	19	620	ug/L
MKTF-20	11/18/2014	MTBE	83	50	13	143	ug/L
MKTF-20	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-20	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-20	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-20	3/16/2015	Acetone	ND	500	47	14064	ug/L
MKTF-20	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-20	3/16/2015	Benzene	**7000**	200	13	5	ug/L
MKTF-20	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-20	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-20	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-20	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-20	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-20	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-20	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-20	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-20	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-20	3/16/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-20	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-20	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-20	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-20	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-20	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-20	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-20	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-20	3/16/2015	1,2,4-Trimethylbenzene	**1300**	50	8	56	ug/L
MKTF-20	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-20	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-20	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-20	3/16/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-20	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-20	3/16/2015	Ethylbenzene	89	50	5.1	700	ug/L
MKTF-20	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-20	3/16/2015	n-Propylbenzene	ND	50	8.2	660	ug/L
MKTF-20	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-20	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-20	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-20	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-20	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-20	3/16/2015	1,3,5-Trimethylbenzene	**390**	50	6.1	60	ug/L
MKTF-20	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-20	3/16/2015	Toluene	**2300**	50	5.4	1000	ug/L
MKTF-20	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-20	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-20	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-20	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-20	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-20	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-20	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-20	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-20	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-20	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-20	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-20	3/16/2015	Xylenes, Total	**9600**	300	56	620	ug/L
MKTF-20	3/16/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-20	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-20	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-20	6/8/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-20	6/8/2015	Acetone	ND	500	47	14064	ug/L
MKTF-20	6/8/2015	Chloroform	ND	50	11	100	ug/L
MKTF-20	6/8/2015	Benzene	**5900**	500	33	5	ug/L
MKTF-20	6/8/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-20	6/8/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-20	6/8/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-20	6/8/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-20	6/8/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-20	6/8/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-20	6/8/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-20	6/8/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-20	6/8/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-20	6/8/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-20	6/8/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	6/8/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-20	6/8/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	6/8/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-20	6/8/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-20	6/8/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-20	6/8/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-20	6/8/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-20	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-20	6/8/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	6/8/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-20	6/8/2015	1,2,4-Trimethylbenzene	**940**	50	8	56	ug/L
MKTF-20	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-20	6/8/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-20	6/8/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-20	6/8/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-20	6/8/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/8/2015	Ethylbenzene	140	50	5.1	700	ug/L
MKTF-20	6/8/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-20	6/8/2015	n-Propylbenzene	ND	50	8.2	660	ug/L
MKTF-20	6/8/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-20	6/8/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-20	6/8/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-20	6/8/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-20	6/8/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-20	6/8/2015	1,3,5-Trimethylbenzene	**340**	50	6.1	60	ug/L
MKTF-20	6/8/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-20	6/8/2015	Toluene	620	50	5.4	1000	ug/L
MKTF-20	6/8/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-20	6/8/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-20	6/8/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-20	6/8/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-20	6/8/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-20	6/8/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-20	6/8/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-20	6/8/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-20	6/8/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-20	6/8/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-20	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-20	6/8/2015	Xylenes, Total	**7300**	75	14	620	ug/L
MKTF-20	6/8/2015	MTBE	65	50	8.7	143	ug/L
MKTF-20	6/8/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-20	6/8/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-20	3/1/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-20	3/1/2016	Acetone	ND	500	44	14064	ug/L
MKTF-20	3/1/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-20	3/1/2016	Benzene	**13000**	500	48	5	ug/L
MKTF-20	3/1/2016	1,1,1-Trichloroethane	ND	50	3.2	200	ug/L
MKTF-20	3/1/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-20	3/1/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-20	3/1/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-20	3/1/2016	Chloroethane	ND	100	7.3	20857	ug/L
MKTF-20	3/1/2016	Vinyl Chloride	*ND*	*50*	3.2	2	ug/L
MKTF-20	3/1/2016	Methylene Chloride	*ND*	*150*	3.1	5	ug/L
MKTF-20	3/1/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-20	3/1/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-20	3/1/2016	Bromodichloromethane	*ND*	*50*	4.9	1.34	ug/L
MKTF-20	3/1/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-20	3/1/2016	1,1-Dichloroethene	*ND*	*50*	3.8	7	ug/L
MKTF-20	3/1/2016	Trichlorofluoromethane	ND	50	4.4	1137	ug/L
MKTF-20	3/1/2016	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-20	3/1/2016	1,2-Dichloropropane	*ND*	*50*	2.4	5	ug/L
MKTF-20	3/1/2016	2-Butanone	ND	500	16	5565	ug/L
MKTF-20	3/1/2016	1,1,2-Trichloroethane	*ND*	*50*	3.8	5	ug/L
MKTF-20	3/1/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-20	3/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	5.3	10	ug/L
MKTF-20	3/1/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-20	3/1/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-20	3/1/2016	1,2,4-Trimethylbenzene	**1200**	50	5.2	56	ug/L
MKTF-20	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	7.7	0.0033	ug/L
MKTF-20	3/1/2016	1,2,3-Trichloropropane	*ND*	*100*	5.6	0.0084	ug/L
MKTF-20	3/1/2016	tert-Butylbenzene	ND	50	4.8	690	ug/L
MKTF-20	3/1/2016	Isopropylbenzene	ND	50	4.9	447	ug/L
MKTF-20	3/1/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-20	3/1/2016	Ethylbenzene	**1100**	50	5.6	700	ug/L
MKTF-20	3/1/2016	Styrene	ND	50	4.8	100	ug/L
MKTF-20	3/1/2016	n-Propylbenzene	73	50	6.6	660	ug/L
MKTF-20	3/1/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-20	3/1/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-20	3/1/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-20	3/1/2016	1,2-Dichloroethane	*ND*	*50*	2.6	5	ug/L
MKTF-20	3/1/2016	4-Methyl-2-Pentanone	ND	500	7.5	1243	ug/L
MKTF-20	3/1/2016	1,3,5-Trimethylbenzene	**380**	50	5.8	60	ug/L
MKTF-20	3/1/2016	Bromobenzene	ND	50	4	62	ug/L
MKTF-20	3/1/2016	Toluene	470	50	4.5	1000	ug/L
MKTF-20	3/1/2016	Chlorobenzene	ND	50	5.2	77.6	ug/L
MKTF-20	3/1/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-20	3/1/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-20	3/1/2016	sec-Butylbenzene	ND	50	5.4	2000	ug/L
MKTF-20	3/1/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-20	3/1/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-20	3/1/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-20	3/1/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/1/2016	2-Hexanone	*ND*	*500*	18	38	ug/L
MKTF-20	3/1/2016	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-20	3/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-20	3/1/2016	Xylenes, Total	**9200**	75	16	620	ug/L
MKTF-20	3/1/2016	MTBE	130	50	11	143	ug/L
MKTF-20	3/1/2016	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-20	3/1/2016	trans-1,3-Dichloropropene	ND	50	4.2	NA	ug/L
MKTF-20	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-20	6/9/2016	Acetone	120	100	49	14064	ug/L
MKTF-20	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-20	6/9/2016	Benzene	**11000**	200	19	5	ug/L
MKTF-20	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-20	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-20	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-20	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-20	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-20	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-20	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-20	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-20	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-20	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-20	6/9/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-20	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-20	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-20	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-20	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-20	6/9/2016	2-Butanone	47	100	7.4	5565	ug/L
MKTF-20	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-20	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-20	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-20	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-20	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-20	6/9/2016	1,2,4-Trimethylbenzene	**970**	10	1.1	56	ug/L
MKTF-20	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-20	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-20	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-20	6/9/2016	Isopropylbenzene	20	10	1	447	ug/L
MKTF-20	6/9/2016	p-Isopropyltoluene	4.5	10	1.4	NA	ug/L
MKTF-20	6/9/2016	Ethylbenzene	**850**	10	1.1	700	ug/L
MKTF-20	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-20	6/9/2016	n-Propylbenzene	58	10	1.3	660	ug/L
MKTF-20	6/9/2016	n-Butylbenzene	20	30	1.6	1000	ug/L
MKTF-20	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-20	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-20	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-20	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-20	6/9/2016	1,3,5-Trimethylbenzene	**310**	10	1.2	60	ug/L
MKTF-20	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-20	6/9/2016	Toluene	390	10	1.2	1000	ug/L
MKTF-20	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-20	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-20	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	6/9/2016	sec-Butylbenzene	4.3	10	1.2	2000	ug/L
MKTF-20	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-20	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-20	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-20	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-20	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-20	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-20	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-20	6/9/2016	Xylenes, Total	**7900**	300	73	620	ug/L
MKTF-20	6/9/2016	MTBE	**160**	10	2.1	143	ug/L
MKTF-20	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-20	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-20	9/12/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	9/12/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-20	9/12/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	9/12/2016	Benzene	**18000**	1000	96	5	ug/L
MKTF-20	9/12/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-20	9/12/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	9/12/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	9/12/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	9/12/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-20	9/12/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-20	9/12/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-20	9/12/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-20	9/12/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-20	9/12/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-20	9/12/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-20	9/12/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-20	9/12/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-20	9/12/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-20	9/12/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-20	9/12/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-20	9/12/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-20	9/12/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	9/12/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	9/12/2016	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-20	9/12/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-20	9/12/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-20	9/12/2016	Isopropylbenzene	28	100	10	447	ug/L
MKTF-20	9/12/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-20	9/12/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-20	9/12/2016	Styrene	ND	100	11	100	ug/L
MKTF-20	9/12/2016	n-Propylbenzene	110	100	13	660	ug/L
MKTF-20	9/12/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-20	9/12/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-20	9/12/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-20	9/12/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	9/12/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-20	9/12/2016	1,3,5-Trimethylbenzene	**410**	100	12	60	ug/L
MKTF-20	9/12/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-20	9/12/2016	Toluene	480	100	12	1000	ug/L
MKTF-20	9/12/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	9/12/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-20	9/12/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	9/12/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-20	9/12/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	9/12/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-20	9/12/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-20	9/12/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-20	9/12/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-20	9/12/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-20	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	9/12/2016	Xylenes, Total	**8800**	150	37	620	ug/L
MKTF-20	9/12/2016	MTBE	**160**	100	21	143	ug/L
MKTF-20	9/12/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-20	9/12/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	11/3/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	11/3/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-20	11/3/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	11/3/2016	Benzene	**13000**	1000	96	5	ug/L
MKTF-20	11/3/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-20	11/3/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	11/3/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	11/3/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	11/3/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-20	11/3/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-20	11/3/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-20	11/3/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-20	11/3/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-20	11/3/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-20	11/3/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-20	11/3/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-20	11/3/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-20	11/3/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-20	11/3/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-20	11/3/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-20	11/3/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-20	11/3/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-20	11/3/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	11/3/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	11/3/2016	1,2,4-Trimethylbenzene	**1200**	100	11	56	ug/L
MKTF-20	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-20	11/3/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-20	11/3/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-20	11/3/2016	Isopropylbenzene	35	100	10	447	ug/L
MKTF-20	11/3/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Ethylbenzene	**1100**	100	11	700	ug/L
MKTF-20	11/3/2016	Styrene	ND	100	11	100	ug/L
MKTF-20	11/3/2016	n-Propylbenzene	110	100	13	660	ug/L
MKTF-20	11/3/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-20	11/3/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-20	11/3/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-20	11/3/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	11/3/2016	4-Methyl-2-Pentanone	46	1000	43	1243	ug/L
MKTF-20	11/3/2016	1,3,5-Trimethylbenzene	**350**	100	12	60	ug/L
MKTF-20	11/3/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-20	11/3/2016	Toluene	400	100	12	1000	ug/L
MKTF-20	11/3/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	11/3/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-20	11/3/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	11/3/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-20	11/3/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	11/3/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-20	11/3/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-20	11/3/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-20	11/3/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-20	11/3/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-20	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	11/3/2016	Xylenes, Total	**9200**	150	37	620	ug/L
MKTF-20	11/3/2016	MTBE	**190**	100	21	143	ug/L
MKTF-20	11/3/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-20	11/3/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	3/14/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	3/14/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-20	3/14/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	3/14/2017	Benzene	**17000**	1000	96	5	ug/L
MKTF-20	3/14/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	3/14/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	3/14/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	3/14/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	3/14/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	3/14/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	3/14/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	3/14/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-20	3/14/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	3/14/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	3/14/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
MKTF-20	3/14/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	3/14/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	3/14/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-20	3/14/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	3/14/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	3/14/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	3/14/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	3/14/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	3/14/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	3/14/2017	1,2,4-Trimethylbenzene	**1200**	100	10	56	ug/L
MKTF-20	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	3/14/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	3/14/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	3/14/2017	Isopropylbenzene	14	100	9.8	447	ug/L
MKTF-20	3/14/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-20	3/14/2017	Ethylbenzene	260	100	11	700	ug/L
MKTF-20	3/14/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	3/14/2017	n-Propylbenzene	37	100	13	660	ug/L
MKTF-20	3/14/2017	n-Butylbenzene	19	300	16	1000	ug/L
MKTF-20	3/14/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	3/14/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	3/14/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	3/14/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	3/14/2017	1,3,5-Trimethylbenzene	**420**	100	12	60	ug/L
MKTF-20	3/14/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	3/14/2017	Toluene	**2200**	100	8.9	1000	ug/L
MKTF-20	3/14/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	3/14/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-20	3/14/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	3/14/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
MKTF-20	3/14/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	3/14/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	3/14/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	3/14/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/14/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	3/14/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-20	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	3/14/2017	Xylenes, Total	**9800**	150	32	620	ug/L
MKTF-20	3/14/2017	MTBE	**230**	100	15	143	ug/L
MKTF-20	3/14/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	3/14/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-20	6/12/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	6/12/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	6/12/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	6/12/2017	Benzene	**21000**	1000	62	5	ug/L
MKTF-20	6/12/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	6/12/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	6/12/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	6/12/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	6/12/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	6/12/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	6/12/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	6/12/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	6/12/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	6/12/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	6/12/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	6/12/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	6/12/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	6/12/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	6/12/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	6/12/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	6/12/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	6/12/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	6/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	6/12/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	6/12/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	6/12/2017	1,2,4-Trimethylbenzene	**1600**	100	11	56	ug/L
MKTF-20	6/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	6/12/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	6/12/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	6/12/2017	Isopropylbenzene	ND	100	5.1	447	ug/L
MKTF-20	6/12/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	6/12/2017	Ethylbenzene	700	100	9.3	700	ug/L
MKTF-20	6/12/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	6/12/2017	n-Propylbenzene	ND	100	7.4	660	ug/L
MKTF-20	6/12/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-20	6/12/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	6/12/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	6/12/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	6/12/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	6/12/2017	1,3,5-Trimethylbenzene	**480**	100	8.7	60	ug/L
MKTF-20	6/12/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	6/12/2017	Toluene	**3500**	100	6.4	1000	ug/L
MKTF-20	6/12/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	6/12/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	6/12/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	6/12/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	6/12/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	6/12/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	6/12/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	6/12/2017	Pentafluorobenzene	ND	0	0		None
MKTF-20	6/12/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	6/12/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	6/12/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	6/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	6/12/2017	Xylenes, Total	**14000**	150	32	620	ug/L
MKTF-20	6/12/2017	MTBE	**160**	100	24	143	ug/L
MKTF-20	6/12/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	6/12/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	9/26/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	9/26/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	9/26/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	9/26/2017	Benzene	**16000**	1000	62	5	ug/L
MKTF-20	9/26/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	9/26/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	9/26/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	9/26/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	9/26/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	9/26/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	9/26/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/26/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	9/26/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	9/26/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	9/26/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	9/26/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	9/26/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	9/26/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	9/26/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	9/26/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	9/26/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	9/26/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	9/26/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	9/26/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	9/26/2017	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	9/26/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	9/26/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	9/26/2017	Isopropylbenzene	ND	100	5.1	447	ug/L
MKTF-20	9/26/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	9/26/2017	Ethylbenzene	580	100	9.3	700	ug/L
MKTF-20	9/26/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	9/26/2017	n-Propylbenzene	ND	100	7.4	660	ug/L
MKTF-20	9/26/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-20	9/26/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	9/26/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	9/26/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	9/26/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	9/26/2017	1,3,5-Trimethylbenzene	**410**	100	8.7	60	ug/L
MKTF-20	9/26/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	9/26/2017	Toluene	340	100	6.4	1000	ug/L
MKTF-20	9/26/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	9/26/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	9/26/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	9/26/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	9/26/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	9/26/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	9/26/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	9/26/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	9/26/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	9/26/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	9/26/2017	Xylenes, Total	**11000**	150	32	620	ug/L
MKTF-20	9/26/2017	MTBE	**170**	100	24	143	ug/L
MKTF-20	9/26/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	9/26/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	11/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	11/29/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	11/29/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	11/29/2017	Benzene	**17000**	1000	62	5	ug/L
MKTF-20	11/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	11/29/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	11/29/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	11/29/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	11/29/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	11/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	11/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	11/29/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	11/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	11/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	11/29/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	11/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	11/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	11/29/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	11/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	11/29/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	11/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	11/29/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	11/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	11/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	11/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	11/29/2017	1,2,4-Trimethylbenzene	**1400**	100	11	56	ug/L
MKTF-20	11/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	11/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	11/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	11/29/2017	Isopropylbenzene	28	100	5.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	11/29/2017	Ethylbenzene	**800**	100	9.3	700	ug/L
MKTF-20	11/29/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	11/29/2017	n-Propylbenzene	57	100	7.4	660	ug/L
MKTF-20	11/29/2017	n-Butylbenzene	32	300	13	1000	ug/L
MKTF-20	11/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	11/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	11/29/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	11/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	11/29/2017	1,3,5-Trimethylbenzene	**410**	100	8.7	60	ug/L
MKTF-20	11/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	11/29/2017	Toluene	240	100	6.4	1000	ug/L
MKTF-20	11/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	11/29/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	11/29/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	11/29/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	11/29/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	11/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	11/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	11/29/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	11/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	11/29/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	11/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	11/29/2017	Xylenes, Total	**11000**	150	32	620	ug/L
MKTF-20	11/29/2017	MTBE	100	100	24	143	ug/L
MKTF-20	11/29/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	11/29/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	2/15/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	2/15/2018	Acetone	ND	1000	82	14064	ug/L
MKTF-20	2/15/2018	Chloroform	ND	100	40	100	ug/L
MKTF-20	2/15/2018	Benzene	**12000**	1000	62	5	ug/L
MKTF-20	2/15/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	2/15/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	2/15/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	2/15/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	2/15/2018	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	2/15/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	2/15/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	2/15/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	2/15/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	2/15/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	2/15/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	2/15/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	2/15/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	2/15/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	2/15/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	2/15/2018	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	2/15/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	2/15/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	2/15/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	2/15/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	2/15/2018	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	2/15/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	2/15/2018	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	2/15/2018	Isopropylbenzene	13	100	5.1	447	ug/L
MKTF-20	2/15/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	2/15/2018	Ethylbenzene	**960**	100	9.3	700	ug/L
MKTF-20	2/15/2018	Styrene	ND	100	16	100	ug/L
MKTF-20	2/15/2018	n-Propylbenzene	52	100	7.4	660	ug/L
MKTF-20	2/15/2018	n-Butylbenzene	25	300	13	1000	ug/L
MKTF-20	2/15/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	2/15/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	2/15/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	2/15/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	2/15/2018	1,3,5-Trimethylbenzene	**360**	100	8.7	60	ug/L
MKTF-20	2/15/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	2/15/2018	Toluene	190	100	6.4	1000	ug/L
MKTF-20	2/15/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	2/15/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	2/15/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	2/15/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	2/15/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	2/15/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	2/15/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/15/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	2/15/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	2/15/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	2/15/2018	Xylenes, Total	**12000**	150	32	620	ug/L
MKTF-20	2/15/2018	MTBE	55	100	24	143	ug/L
MKTF-20	2/15/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	2/15/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	5/11/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-20	5/11/2018	Acetone	ND	500	41	14064	ug/L
MKTF-20	5/11/2018	Chloroform	ND	50	20	100	ug/L
MKTF-20	5/11/2018	Benzene	**13000**	500	31	5	ug/L
MKTF-20	5/11/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-20	5/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-20	5/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-20	5/11/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-20	5/11/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-20	5/11/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-20	5/11/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-20	5/11/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-20	5/11/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-20	5/11/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-20	5/11/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	5/11/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-20	5/11/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-20	5/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-20	5/11/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-20	5/11/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-20	5/11/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-20	5/11/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-20	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-20	5/11/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-20	5/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-20	5/11/2018	1,2,4-Trimethylbenzene	**1600**	50	5.6	56	ug/L
MKTF-20	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-20	5/11/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-20	5/11/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-20	5/11/2018	Isopropylbenzene	21	50	2.6	447	ug/L
MKTF-20	5/11/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-20	5/11/2018	Ethylbenzene	**1300**	50	4.7	700	ug/L
MKTF-20	5/11/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-20	5/11/2018	n-Propylbenzene	64	50	3.7	660	ug/L
MKTF-20	5/11/2018	n-Butylbenzene	15	150	6.5	1000	ug/L
MKTF-20	5/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-20	5/11/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-20	5/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-20	5/11/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-20	5/11/2018	1,3,5-Trimethylbenzene	**470**	50	4.4	60	ug/L
MKTF-20	5/11/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-20	5/11/2018	Toluene	140	50	3.2	1000	ug/L
MKTF-20	5/11/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-20	5/11/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-20	5/11/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-20	5/11/2018	sec-Butylbenzene	7.5	50	5.5	2000	ug/L
MKTF-20	5/11/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-20	5/11/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-20	5/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-20	5/11/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-20	5/11/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-20	5/11/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-20	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-20	5/11/2018	Xylenes, Total	**13000**	75	16	620	ug/L
MKTF-20	5/11/2018	MTBE	130	50	12	143	ug/L
MKTF-20	5/11/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-20	5/11/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-20	8/31/2018	Carbon tetrachloride	*ND*	*100*	13	5	ug/L
MKTF-20	8/31/2018	Acetone	ND	1000	79	14064	ug/L
MKTF-20	8/31/2018	Chloroform	ND	100	40	100	ug/L
MKTF-20	8/31/2018	Benzene	**9900**	100	17	5	ug/L
MKTF-20	8/31/2018	1,1,1-Trichloroethane	ND	100	15	200	ug/L
MKTF-20	8/31/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	8/31/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	8/31/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-20	8/31/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-20	8/31/2018	Vinyl Chloride	*ND*	*100*	11	2	ug/L
MKTF-20	8/31/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/31/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-20	8/31/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-20	8/31/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-20	8/31/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	8/31/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-20	8/31/2018	Trichlorofluoromethane	ND	100	17	1137	ug/L
MKTF-20	8/31/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	8/31/2018	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-20	8/31/2018	2-Butanone	ND	1000	130	5565	ug/L
MKTF-20	8/31/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-20	8/31/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-20	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-20	8/31/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-20	8/31/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	8/31/2018	1,2,4-Trimethylbenzene	**1400**	100	25	56	ug/L
MKTF-20	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-20	8/31/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-20	8/31/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-20	8/31/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-20	8/31/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-20	8/31/2018	Ethylbenzene	**770**	100	22	700	ug/L
MKTF-20	8/31/2018	Styrene	ND	100	25	100	ug/L
MKTF-20	8/31/2018	n-Propylbenzene	63	100	24	660	ug/L
MKTF-20	8/31/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-20	8/31/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	8/31/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-20	8/31/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	8/31/2018	4-Methyl-2-Pentanone	50	1000	45	1243	ug/L
MKTF-20	8/31/2018	1,3,5-Trimethylbenzene	**430**	100	23	60	ug/L
MKTF-20	8/31/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-20	8/31/2018	Toluene	64	100	17	1000	ug/L
MKTF-20	8/31/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-20	8/31/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-20	8/31/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	8/31/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-20	8/31/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-20	8/31/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-20	8/31/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	8/31/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-20	8/31/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-20	8/31/2018	2,2-Dichloropropane	ND	200	18	NA	ug/L
MKTF-20	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-20	8/31/2018	Xylenes, Total	**9100**	150	64	620	ug/L
MKTF-20	8/31/2018	MTBE	96	100	32	143	ug/L
MKTF-20	8/31/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-20	8/31/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-20	11/29/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-20	11/29/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-20	11/29/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-20	11/29/2018	Benzene	**3000**	100	17	5	ug/L
MKTF-20	11/29/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-20	11/29/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-20	11/29/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-20	11/29/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-20	11/29/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-20	11/29/2018	Vinyl Chloride	*ND*	*10*	1.2	2	ug/L
MKTF-20	11/29/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-20	11/29/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-20	11/29/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-20	11/29/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-20	11/29/2018	1,1-Dichloroethane	ND	10	1.8	25	ug/L
MKTF-20	11/29/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
MKTF-20	11/29/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-20	11/29/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-20	11/29/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-20	11/29/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-20	11/29/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-20	11/29/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-20	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-20	11/29/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-20	11/29/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-20	11/29/2018	1,2,4-Trimethylbenzene	**530**	10	2.5	56	ug/L
MKTF-20	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-20	11/29/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-20	11/29/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-20	11/29/2018	Isopropylbenzene	3.7	10	2.2	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-20	11/29/2018	Ethylbenzene	120	10	2.2	700	ug/L
MKTF-20	11/29/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-20	11/29/2018	n-Propylbenzene	8.1	10	2.4	660	ug/L
MKTF-20	11/29/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-20	11/29/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-20	11/29/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-20	11/29/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-20	11/29/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-20	11/29/2018	1,3,5-Trimethylbenzene	**220**	10	2.3	60	ug/L
MKTF-20	11/29/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-20	11/29/2018	Toluene	20	10	1.7	1000	ug/L
MKTF-20	11/29/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-20	11/29/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-20	11/29/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	11/29/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-20	11/29/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-20	11/29/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-20	11/29/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-20	11/29/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-20	11/29/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-20	11/29/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-20	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-20	11/29/2018	Xylenes, Total	**2500**	15	6.4	620	ug/L
MKTF-20	11/29/2018	MTBE	26	10	4.6	143	ug/L
MKTF-20	11/29/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-20	11/29/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-20	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.523992	5.74	ug/L
MKTF-20	2/20/2019	1,1,1-Trichloroethane	ND	10	1.638158	200	ug/L
MKTF-20	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.282991	10	ug/L
MKTF-20	2/20/2019	1,1,2-Trichloroethane	*ND*	*10*	2.327232	5	ug/L
MKTF-20	2/20/2019	1,1-Dichloroethane	ND	10	1.751966	25	ug/L
MKTF-20	2/20/2019	1,1-Dichloroethene	*ND*	*10*	1.204878	7	ug/L
MKTF-20	2/20/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	2/20/2019	1,2,3-Trichlorobenzene	ND	10	2.80308	70	ug/L
MKTF-20	2/20/2019	1,2,3-Trichloropropane	*ND*	*20*	5.660045	0.0084	ug/L
MKTF-20	2/20/2019	1,2,4-Trichlorobenzene	ND	10	2.664102	70	ug/L
MKTF-20	2/20/2019	1,2,4-Trimethylbenzene	**160**	10	2.533143	56	ug/L
MKTF-20	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.708972	0.0033	ug/L
MKTF-20	2/20/2019	1,2-Dibromoethane	*ND*	*10*	2.295285	0.05	ug/L
MKTF-20	2/20/2019	1,2-Dichlorobenzene	ND	10	3.114649	600	ug/L
MKTF-20	2/20/2019	1,2-Dichloroethane	*ND*	*10*	1.895254	5	ug/L
MKTF-20	2/20/2019	1,2-Dichloropropane	*ND*	*10*	1.652258	5	ug/L
MKTF-20	2/20/2019	1,3,5-Trimethylbenzene	31	10	2.314141	60	ug/L
MKTF-20	2/20/2019	1,3-Dichlorobenzene	ND	10	3.126224	N/A	ug/L
MKTF-20	2/20/2019	1,3-Dichloropropane	ND	10	2.707563	370	ug/L
MKTF-20	2/20/2019	1,4-Dichlorobenzene	ND	10	2.877068	75	ug/L
MKTF-20	2/20/2019	1-Methylnaphthalene	4.5	40	3.35817	NA	ug/L
MKTF-20	2/20/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	2/20/2019	2-Butanone	ND	100	14.108689	5565	ug/L
MKTF-20	2/20/2019	2-Chlorotoluene	ND	10	2.501382	233	ug/L
MKTF-20	2/20/2019	2-Hexanone	*ND*	*100*	9.065744	38	ug/L
MKTF-20	2/20/2019	2-Methylnaphthalene	**4.4**	40	3.45376		ug/L
MKTF-20	2/20/2019	4-Chlorotoluene	ND	10	2.808009	250	ug/L
MKTF-20	2/20/2019	p-Isopropyltoluene	ND	10	2.403386	NA	ug/L
MKTF-20	2/20/2019	4-Methyl-2-Pentanone	40	100	4.532774	1243	ug/L
MKTF-20	2/20/2019	Acetone	ND	100	7.570696	14064	ug/L
MKTF-20	2/20/2019	Benzene	**2100**	100	17.489572	5	ug/L
MKTF-20	2/20/2019	Bromobenzene	ND	10	3.179062	62	ug/L
MKTF-20	2/20/2019	Bromodichloromethane	*ND*	*10*	2.82767	1.34	ug/L
MKTF-20	2/20/2019	Bromoform	ND	10	3.233103	32.9	ug/L
MKTF-20	2/20/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	2/20/2019	Carbon Disulfide	ND	100	3.850311	810	ug/L
MKTF-20	2/20/2019	Carbon tetrachloride	*ND*	*10*	1.373484	5	ug/L
MKTF-20	2/20/2019	Chlorobenzene	ND	10	2.905275	77.6	ug/L
MKTF-20	2/20/2019	Chloroethane	ND	20	1.643371	20857	ug/L
MKTF-20	2/20/2019	Chloroform	ND	10	2.352238	100	ug/L
MKTF-20	2/20/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	2/20/2019	cis-1,2-Dichloroethene	ND	10	3.759811	70	ug/L
MKTF-20	2/20/2019	cis-1,3-Dichloropropene	ND	10	2.98228	NA	ug/L
MKTF-20	2/20/2019	Dibromochloromethane	*ND*	*10*	2.370124	1.68	ug/L
MKTF-20	2/20/2019	Dibromomethane	*ND*	*10*	3.221474	8	ug/L
MKTF-20	2/20/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	2/20/2019	Ethylbenzene	230	10	2.234022	700	ug/L
MKTF-20	2/20/2019	Hexachlorobutadiene	*ND*	*10*	3.911869	1.39	ug/L
MKTF-20	2/20/2019	Isopropylbenzene	6.3	10	2.211042	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/20/2019	MTBE	**220**	10	4.56095	143	ug/L
MKTF-20	2/20/2019	Methylene Chloride	*ND*	*30*	2.056948	5	ug/L
MKTF-20	2/20/2019	Naphthalene	24	20	2.896261	30	ug/L
MKTF-20	2/20/2019	n-Butylbenzene	ND	30	2.483305	1000	ug/L
MKTF-20	2/20/2019	n-Propylbenzene	13	10	2.425862	660	ug/L
MKTF-20	2/20/2019	sec-Butylbenzene	ND	10	2.022547	2000	ug/L
MKTF-20	2/20/2019	Styrene	ND	10	2.501457	100	ug/L
MKTF-20	2/20/2019	tert-Butylbenzene	ND	10	2.214697	690	ug/L
MKTF-20	2/20/2019	Tetrachloroethene	*ND*	*10*	1.514517	5	ug/L
MKTF-20	2/20/2019	Toluene	2.1	10	1.681394	1000	ug/L
MKTF-20	2/20/2019	trans-1,2-Dichloroethene	ND	10	1.822696	100	ug/L
MKTF-20	2/20/2019	trans-1,3-Dichloropropene	ND	10	2.754677	NA	ug/L
MKTF-20	2/20/2019	Trichloroethene	*ND*	*10*	2.575564	5	ug/L
MKTF-20	2/20/2019	Trichlorofluoromethane	ND	10	1.441162	1137	ug/L
MKTF-20	2/20/2019	Vinyl Chloride	*ND*	*10*	1.210743	2	ug/L
MKTF-20	2/20/2019	Xylenes, Total	140	15	6.412877	620	ug/L
MKTF-20	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	5/14/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	5/14/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	5/14/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	5/14/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-20	5/14/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	5/14/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	5/14/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-20	5/14/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	5/14/2019	1,2,4-Trimethylbenzene	**840**	10	2.131991	56	ug/L
MKTF-20	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-20	5/14/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	5/14/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	5/14/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	5/14/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	5/14/2019	1,3,5-Trimethylbenzene	**230**	10	1.886598	60	ug/L
MKTF-20	5/14/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	5/14/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	5/14/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	5/14/2019	1-Methylnaphthalene	53	40	3.149545	NA	ug/L
MKTF-20	5/14/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	5/14/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-20	5/14/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	5/14/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	5/14/2019	2-Methylnaphthalene	**52**	40	3.45376		ug/L
MKTF-20	5/14/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	5/14/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-20	5/14/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	5/14/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-20	5/14/2019	Benzene	**2300**	100	16.663906	5	ug/L
MKTF-20	5/14/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	5/14/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	5/14/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	5/14/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	5/14/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	5/14/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	5/14/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	5/14/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	5/14/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	5/14/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	5/14/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	5/14/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	5/14/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	5/14/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	5/14/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	5/14/2019	Ethylbenzene	**1000**	100	13.23408	700	ug/L
MKTF-20	5/14/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	5/14/2019	Isopropylbenzene	3.2	10	1.915223	447	ug/L
MKTF-20	5/14/2019	MTBE	32	10	4.56095	143	ug/L
MKTF-20	5/14/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	5/14/2019	Naphthalene	**260**	20	2.750713	30	ug/L
MKTF-20	5/14/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
MKTF-20	5/14/2019	n-Propylbenzene	3.9	10	2.14308	660	ug/L
MKTF-20	5/14/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
MKTF-20	5/14/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	5/14/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	5/14/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	5/14/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-20	5/14/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/14/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	5/14/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	5/14/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	5/14/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	5/14/2019	Xylenes, Total	**3500**	150	45.441493	620	ug/L
MKTF-20	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	8/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	8/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	8/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	8/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-20	8/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	8/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	8/21/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-20	8/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	8/21/2019	1,2,4-Trimethylbenzene	**1100**	100	21.319909	56	ug/L
MKTF-20	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-20	8/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	8/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	8/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	8/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	8/21/2019	1,3,5-Trimethylbenzene	**200**	10	1.886598	60	ug/L
MKTF-20	8/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	8/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	8/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	8/21/2019	1-Methylnaphthalene	55	40	3.149545	NA	ug/L
MKTF-20	8/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	8/21/2019	2-Butanone	92	100	20.894166	5565	ug/L
MKTF-20	8/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	8/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	8/21/2019	2-Methylnaphthalene	**62**	40	3.45376		ug/L
MKTF-20	8/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	8/21/2019	p-Isopropyltoluene	4.9	10	2.172894	NA	ug/L
MKTF-20	8/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	8/21/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-20	8/21/2019	Benzene	**4800**	100	16.663906	5	ug/L
MKTF-20	8/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	8/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	8/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	8/21/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	8/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	8/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	8/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	8/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	8/21/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	8/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	8/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	8/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	8/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	8/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	8/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	8/21/2019	Ethylbenzene	**1100**	100	13.23408	700	ug/L
MKTF-20	8/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	8/21/2019	Isopropylbenzene	9.3	10	1.915223	447	ug/L
MKTF-20	8/21/2019	MTBE	35	10	4.56095	143	ug/L
MKTF-20	8/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	8/21/2019	Naphthalene	**290**	20	2.750713	30	ug/L
MKTF-20	8/21/2019	n-Butylbenzene	13	30	2.275695	1000	ug/L
MKTF-20	8/21/2019	n-Propylbenzene	17	10	2.14308	660	ug/L
MKTF-20	8/21/2019	sec-Butylbenzene	4	10	2.477313	2000	ug/L
MKTF-20	8/21/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	8/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	8/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	8/21/2019	Toluene	9	10	3.504362	1000	ug/L
MKTF-20	8/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-20	8/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	8/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	8/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	8/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	8/21/2019	Xylenes, Total	**3700**	150	45.441493	620	ug/L
MKTF-20	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	11/5/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	11/5/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	11/5/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	11/5/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/5/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	11/5/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	11/5/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	11/5/2019	1,2,4-Trimethylbenzene	**190**	10	2.131991	56	ug/L
MKTF-20	11/5/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	11/5/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	11/5/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	11/5/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	11/5/2019	1,3,5-Trimethylbenzene	31	10	1.886598	60	ug/L
MKTF-20	11/5/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	11/5/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	11/5/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	11/5/2019	1-Methylnaphthalene	9.6	40	3.149545	NA	ug/L
MKTF-20	11/5/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	11/5/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-20	11/5/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	11/5/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	11/5/2019	2-Methylnaphthalene	**9.1**	40	3.45376		ug/L
MKTF-20	11/5/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	11/5/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-20	11/5/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	11/5/2019	Acetone	33	100	11.993964	14064	ug/L
MKTF-20	11/5/2019	Benzene	**2400**	100	16.663906	5	ug/L
MKTF-20	11/5/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	11/5/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	11/5/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	11/5/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	11/5/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	11/5/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	11/5/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	11/5/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	11/5/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	11/5/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	11/5/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	11/5/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	11/5/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	11/5/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	11/5/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	11/5/2019	Ethylbenzene	260	10	1.323408	700	ug/L
MKTF-20	11/5/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	11/5/2019	Isopropylbenzene	8.5	10	1.915223	447	ug/L
MKTF-20	11/5/2019	MTBE	**170**	10	4.56095	143	ug/L
MKTF-20	11/5/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	11/5/2019	Naphthalene	**37**	20	2.750713	30	ug/L
MKTF-20	11/5/2019	n-Butylbenzene	2.8	30	2.275695	1000	ug/L
MKTF-20	11/5/2019	n-Propylbenzene	18	10	2.14308	660	ug/L
MKTF-20	11/5/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
MKTF-20	11/5/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	11/5/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	11/5/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	11/5/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-20	11/5/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-20	11/5/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	11/5/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	11/5/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	11/5/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	11/5/2019	Xylenes, Total	96	15	4.544149	620	ug/L
MKTF-20	2/5/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-20	2/5/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-20	2/5/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-20	2/5/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-20	2/5/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-20	2/5/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-20	2/5/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-20	2/5/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-20	2/5/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-20	2/5/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	2/5/2020	1,2,4-Trimethylbenzene	**170**	10	2.1	56	ug/L
MKTF-20	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-20	2/5/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-20	2/5/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-20	2/5/2020	1,2-Dichloroethane	ND	5	1.9	5	ug/L
MKTF-20	2/5/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-20	2/5/2020	1,3,5-Trimethylbenzene	49	10	1.9	60	ug/L
MKTF-20	2/5/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-20	2/5/2020	1,3-Dichloropropane	ND	10	2	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/5/2020	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MKTF-20	2/5/2020	1-Methylnaphthalene	7.2	40	3.1	NA	ug/L
MKTF-20	2/5/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-20	2/5/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-20	2/5/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-20	2/5/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-20	2/5/2020	2-Methylnaphthalene	**5.8**	40	3.5		ug/L
MKTF-20	2/5/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-20	2/5/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-20	2/5/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-20	2/5/2020	Acetone	19	100	12	14064	ug/L
MKTF-20	2/5/2020	Benzene	**620**	10	1.7	5	ug/L
MKTF-20	2/5/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-20	2/5/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-20	2/5/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-20	2/5/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-20	2/5/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-20	2/5/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-20	2/5/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-20	2/5/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-20	2/5/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-20	2/5/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-20	2/5/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-20	2/5/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-20	2/5/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-20	2/5/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-20	2/5/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-20	2/5/2020	Ethylbenzene	58	10	1.3	700	ug/L
MKTF-20	2/5/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-20	2/5/2020	Isopropylbenzene	ND	10	1.9	447	ug/L
MKTF-20	2/5/2020	MTBE	5.7	10	4.6	143	ug/L
MKTF-20	2/5/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-20	2/5/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-20	2/5/2020	n-Propylbenzene	2.2	10	2.1	660	ug/L
MKTF-20	2/5/2020	Naphthalene	6.6	20	2.8	30	ug/L
MKTF-20	2/5/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-20	2/5/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-20	2/5/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-20	2/5/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	2/5/2020	Toluene	3.9	10	3.5	1000	ug/L
MKTF-20	2/5/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-20	2/5/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-20	2/5/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-20	2/5/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-20	2/5/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-20	2/5/2020	Xylenes, Total	530	15	4.5	620	ug/L
MKTF-21	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-21	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-21	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-21	4/11/2014	Benzene	**7200**	500	77	5	ug/L
MKTF-21	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-21	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-21	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-21	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-21	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-21	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-21	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-21	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-21	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-21	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-21	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-21	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-21	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-21	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-21	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-21	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-21	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-21	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-21	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-21	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-21	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-21	4/11/2014	1,2,4-Trimethylbenzene	**2200**	50	6.1	56	ug/L
MKTF-21	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-21	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-21	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-21	4/11/2014	Isopropylbenzene	100	50	8.1	447	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-21	4/11/2014	Ethylbenzene	**2100**	50	6.4	700	ug/L
MKTF-21	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-21	4/11/2014	n-Propylbenzene	380	50	7	660	ug/L
MKTF-21	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-21	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-21	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-21	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-21	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-21	4/11/2014	1,3,5-Trimethylbenzene	**600**	50	6.6	60	ug/L
MKTF-21	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-21	4/11/2014	Toluene	**13000**	500	85	1000	ug/L
MKTF-21	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-21	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-21	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-21	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-21	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-21	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-21	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-21	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-21	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-21	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-21	4/11/2014	Xylenes, Total	**11000**	75	19	620	ug/L
MKTF-21	4/11/2014	MTBE	**580**	50	13	143	ug/L
MKTF-21	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-21	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-21	3/16/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-21	3/16/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-21	3/16/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-21	3/16/2015	Benzene	**3700**	50	3.3	5	ug/L
MKTF-21	3/16/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-21	3/16/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-21	3/16/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-21	3/16/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-21	3/16/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-21	3/16/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-21	3/16/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-21	3/16/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-21	3/16/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-21	3/16/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-21	3/16/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	3/16/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-21	3/16/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-21	3/16/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-21	3/16/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-21	3/16/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-21	3/16/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-21	3/16/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-21	3/16/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-21	3/16/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-21	3/16/2015	1,2,4-Trimethylbenzene	**110**	10	1.6	56	ug/L
MKTF-21	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-21	3/16/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-21	3/16/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-21	3/16/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
MKTF-21	3/16/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Ethylbenzene	13	10	1	700	ug/L
MKTF-21	3/16/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-21	3/16/2015	n-Propylbenzene	16	10	1.6	660	ug/L
MKTF-21	3/16/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-21	3/16/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-21	3/16/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	3/16/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-21	3/16/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-21	3/16/2015	1,3,5-Trimethylbenzene	51	10	1.2	60	ug/L
MKTF-21	3/16/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-21	3/16/2015	Toluene	260	10	1.1	1000	ug/L
MKTF-21	3/16/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-21	3/16/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-21	3/16/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	3/16/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-21	3/16/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	3/16/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-21	3/16/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-21	3/16/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-21	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	3/16/2015	Xylenes, Total	270	15	2.8	620	ug/L
MKTF-21	3/16/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-21	3/16/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	3/16/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	6/10/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-21	6/10/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-21	6/10/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-21	6/10/2015	Benzene	**6200**	100	6.5	5	ug/L
MKTF-21	6/10/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-21	6/10/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-21	6/10/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-21	6/10/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-21	6/10/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-21	6/10/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-21	6/10/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-21	6/10/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-21	6/10/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-21	6/10/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-21	6/10/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	6/10/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-21	6/10/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-21	6/10/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-21	6/10/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-21	6/10/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-21	6/10/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-21	6/10/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	6/10/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-21	6/10/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-21	6/10/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-21	6/10/2015	1,2,4-Trimethylbenzene	**110**	10	1.6	56	ug/L
MKTF-21	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-21	6/10/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-21	6/10/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-21	6/10/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
MKTF-21	6/10/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Ethylbenzene	180	10	1	700	ug/L
MKTF-21	6/10/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-21	6/10/2015	n-Propylbenzene	15	10	1.6	660	ug/L
MKTF-21	6/10/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-21	6/10/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-21	6/10/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	6/10/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-21	6/10/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-21	6/10/2015	1,3,5-Trimethylbenzene	47	10	1.2	60	ug/L
MKTF-21	6/10/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-21	6/10/2015	Toluene	480	10	1.1	1000	ug/L
MKTF-21	6/10/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-21	6/10/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-21	6/10/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	6/10/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-21	6/10/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	6/10/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-21	6/10/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-21	6/10/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	2-Hexanone	**110**	100	4.8	38	ug/L
MKTF-21	6/10/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-21	6/10/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	6/10/2015	Xylenes, Total	**810**	15	2.8	620	ug/L
MKTF-21	6/10/2015	MTBE	**820**	10	1.7	143	ug/L
MKTF-21	6/10/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	6/10/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	3/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	3/1/2016	Acetone	ND	100	8.8	14064	ug/L
MKTF-21	3/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-21	3/1/2016	Benzene	**4600**	100	9.6	5	ug/L
MKTF-21	3/1/2016	1,1,1-Trichloroethane	ND	10	0.63	200	ug/L
MKTF-21	3/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-21	3/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-21	3/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-21	3/1/2016	Chloroethane	ND	20	1.5	20857	ug/L
MKTF-21	3/1/2016	Vinyl Chloride	*ND*	*10*	0.63	2	ug/L
MKTF-21	3/1/2016	Methylene Chloride	*ND*	*30*	0.63	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-21	3/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-21	3/1/2016	Bromodichloromethane	*ND*	*10*	0.98	1.34	ug/L
MKTF-21	3/1/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-21	3/1/2016	1,1-Dichloroethene	*ND*	*10*	0.76	7	ug/L
MKTF-21	3/1/2016	Trichlorofluoromethane	ND	10	0.88	1137	ug/L
MKTF-21	3/1/2016	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-21	3/1/2016	1,2-Dichloropropane	*ND*	*10*	0.47	5	ug/L
MKTF-21	3/1/2016	2-Butanone	ND	100	3.2	5565	ug/L
MKTF-21	3/1/2016	1,1,2-Trichloroethane	*ND*	*10*	0.77	5	ug/L
MKTF-21	3/1/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-21	3/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.1	10	ug/L
MKTF-21	3/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-21	3/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	3/1/2016	1,2,4-Trimethylbenzene	**140**	10	1	56	ug/L
MKTF-21	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.5	0.0033	ug/L
MKTF-21	3/1/2016	1,2,3-Trichloropropane	*ND*	*20*	1.1	0.0084	ug/L
MKTF-21	3/1/2016	tert-Butylbenzene	ND	10	0.96	690	ug/L
MKTF-21	3/1/2016	Isopropylbenzene	ND	10	0.98	447	ug/L
MKTF-21	3/1/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-21	3/1/2016	Ethylbenzene	150	10	1.1	700	ug/L
MKTF-21	3/1/2016	Styrene	ND	10	0.95	100	ug/L
MKTF-21	3/1/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
MKTF-21	3/1/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-21	3/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-21	3/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-21	3/1/2016	1,2-Dichloroethane	*ND*	*10*	0.53	5	ug/L
MKTF-21	3/1/2016	4-Methyl-2-Pentanone	ND	100	1.5	1243	ug/L
MKTF-21	3/1/2016	1,3,5-Trimethylbenzene	**67**	10	1.2	60	ug/L
MKTF-21	3/1/2016	Bromobenzene	ND	10	0.8	62	ug/L
MKTF-21	3/1/2016	Toluene	340	10	0.89	1000	ug/L
MKTF-21	3/1/2016	Chlorobenzene	ND	10	1	77.6	ug/L
MKTF-21	3/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-21	3/1/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-21	3/1/2016	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-21	3/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-21	3/1/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-21	3/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-21	3/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	3/1/2016	2-Hexanone	*ND*	*100*	3.6	38	ug/L
MKTF-21	3/1/2016	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-21	3/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	3/1/2016	Xylenes, Total	**1300**	15	3.2	620	ug/L
MKTF-21	3/1/2016	MTBE	**480**	10	2.1	143	ug/L
MKTF-21	3/1/2016	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-21	3/1/2016	trans-1,3-Dichloropropene	ND	10	0.85	NA	ug/L
MKTF-21	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	6/9/2016	Acetone	170	100	49	14064	ug/L
MKTF-21	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-21	6/9/2016	Benzene	**7500**	100	9.6	5	ug/L
MKTF-21	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-21	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-21	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-21	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-21	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-21	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-21	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-21	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-21	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-21	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-21	6/9/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-21	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-21	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-21	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-21	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-21	6/9/2016	2-Butanone	110	100	7.4	5565	ug/L
MKTF-21	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-21	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-21	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-21	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-21	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
MKTF-21	6/9/2016	1-Methylnaphthalene	10	40	2	NA	ug/L
MKTF-21	6/9/2016	Naphthalene	19	20	0.93	30	ug/L
MKTF-21	6/9/2016	2-Methylnaphthalene	**12**	40	1.6		ug/L
MKTF-21	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	6/9/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	6/9/2016	1,2,4-Trimethylbenzene	**140**	10	1.1	56	ug/L
MKTF-21	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-21	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-21	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-21	6/9/2016	Isopropylbenzene	7.4	10	1	447	ug/L
MKTF-21	6/9/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-21	6/9/2016	Ethylbenzene	250	10	1.1	700	ug/L
MKTF-21	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-21	6/9/2016	n-Propylbenzene	13	10	1.3	660	ug/L
MKTF-21	6/9/2016	n-Butylbenzene	6.6	30	1.6	1000	ug/L
MKTF-21	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-21	6/9/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
MKTF-21	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-21	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-21	6/9/2016	4-Methyl-2-Pentanone	43	100	4.3	1243	ug/L
MKTF-21	6/9/2016	1,3,5-Trimethylbenzene	**66**	10	1.2	60	ug/L
MKTF-21	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-21	6/9/2016	Toluene	170	10	1.2	1000	ug/L
MKTF-21	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-21	6/9/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-21	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-21	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-21	6/9/2016	sec-Butylbenzene	1.6	10	1.2	2000	ug/L
MKTF-21	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-21	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-21	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-21	6/9/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
MKTF-21	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-21	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-21	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	6/9/2016	Xylenes, Total	**1300**	15	3.7	620	ug/L
MKTF-21	6/9/2016	MTBE	**550**	10	2.1	143	ug/L
MKTF-21	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-21	9/12/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-21	9/12/2016	Acetone	ND	500	250	14064	ug/L
MKTF-21	9/12/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-21	9/12/2016	Benzene	**9300**	500	48	5	ug/L
MKTF-21	9/12/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-21	9/12/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	9/12/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	9/12/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	9/12/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-21	9/12/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-21	9/12/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-21	9/12/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	9/12/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-21	9/12/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-21	9/12/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-21	9/12/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-21	9/12/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-21	9/12/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-21	9/12/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-21	9/12/2016	2-Butanone	ND	500	37	5565	ug/L
MKTF-21	9/12/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-21	9/12/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-21	9/12/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	9/12/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	9/12/2016	1,2,4-Trimethylbenzene	**240**	50	5.5	56	ug/L
MKTF-21	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-21	9/12/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-21	9/12/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-21	9/12/2016	Isopropylbenzene	8.2	50	5.2	447	ug/L
MKTF-21	9/12/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	9/12/2016	Ethylbenzene	480	50	5.6	700	ug/L
MKTF-21	9/12/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-21	9/12/2016	n-Propylbenzene	21	50	6.6	660	ug/L
MKTF-21	9/12/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	9/12/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-21	9/12/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-21	9/12/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	9/12/2016	4-Methyl-2-Pentanone	48	500	21	1243	ug/L
MKTF-21	9/12/2016	1,3,5-Trimethylbenzene	**110**	50	5.8	60	ug/L
MKTF-21	9/12/2016	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/12/2016	Toluene	59	50	5.9	1000	ug/L
MKTF-21	9/12/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-21	9/12/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-21	9/12/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	9/12/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-21	9/12/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	9/12/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-21	9/12/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-21	9/12/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	9/12/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-21	9/12/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-21	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	9/12/2016	Xylenes, Total	**2000**	75	18	620	ug/L
MKTF-21	9/12/2016	MTBE	**680**	50	11	143	ug/L
MKTF-21	9/12/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-21	9/12/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-21	11/3/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-21	11/3/2016	Acetone	ND	500	250	14064	ug/L
MKTF-21	11/3/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-21	11/3/2016	Benzene	**7600**	500	48	5	ug/L
MKTF-21	11/3/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-21	11/3/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	11/3/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	11/3/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	11/3/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-21	11/3/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-21	11/3/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-21	11/3/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	11/3/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-21	11/3/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-21	11/3/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-21	11/3/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-21	11/3/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-21	11/3/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-21	11/3/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-21	11/3/2016	2-Butanone	ND	500	37	5565	ug/L
MKTF-21	11/3/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-21	11/3/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-21	11/3/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	11/3/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	11/3/2016	1,2,4-Trimethylbenzene	**230**	50	5.5	56	ug/L
MKTF-21	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-21	11/3/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-21	11/3/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-21	11/3/2016	Isopropylbenzene	8.5	50	5.2	447	ug/L
MKTF-21	11/3/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	11/3/2016	Ethylbenzene	400	50	5.6	700	ug/L
MKTF-21	11/3/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-21	11/3/2016	n-Propylbenzene	19	50	6.6	660	ug/L
MKTF-21	11/3/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	11/3/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-21	11/3/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-21	11/3/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	11/3/2016	4-Methyl-2-Pentanone	32	500	21	1243	ug/L
MKTF-21	11/3/2016	1,3,5-Trimethylbenzene	**96**	50	5.8	60	ug/L
MKTF-21	11/3/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-21	11/3/2016	Toluene	68	50	5.9	1000	ug/L
MKTF-21	11/3/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-21	11/3/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-21	11/3/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	11/3/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-21	11/3/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	11/3/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-21	11/3/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-21	11/3/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	11/3/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-21	11/3/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-21	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	11/3/2016	Xylenes, Total	**2300**	75	18	620	ug/L
MKTF-21	11/3/2016	MTBE	**770**	50	11	143	ug/L
MKTF-21	11/3/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-21	11/3/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-21	3/14/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	3/14/2017	Acetone	ND	500	44	14064	ug/L
MKTF-21	3/14/2017	Chloroform	ND	50	4.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Benzene	**8000**	500	48	5	ug/L
MKTF-21	3/14/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	3/14/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	3/14/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	3/14/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	3/14/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	3/14/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	3/14/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	3/14/2017	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	3/14/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	3/14/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	3/14/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
MKTF-21	3/14/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	3/14/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	3/14/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-21	3/14/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	3/14/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	3/14/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	3/14/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	3/14/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	3/14/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	3/14/2017	1,2,4-Trimethylbenzene	**260**	50	5.2	56	ug/L
MKTF-21	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	3/14/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	3/14/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	3/14/2017	Isopropylbenzene	13	50	4.9	447	ug/L
MKTF-21	3/14/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	3/14/2017	Ethylbenzene	460	50	5.6	700	ug/L
MKTF-21	3/14/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	3/14/2017	n-Propylbenzene	20	50	6.6	660	ug/L
MKTF-21	3/14/2017	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	3/14/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	3/14/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	3/14/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	3/14/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	3/14/2017	1,3,5-Trimethylbenzene	**96**	50	5.8	60	ug/L
MKTF-21	3/14/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	3/14/2017	Toluene	38	50	4.5	1000	ug/L
MKTF-21	3/14/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	3/14/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
MKTF-21	3/14/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	3/14/2017	sec-Butylbenzene	ND	50	5.1	2000	ug/L
MKTF-21	3/14/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	3/14/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	3/14/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	3/14/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	3/14/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	3/14/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-21	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	3/14/2017	Xylenes, Total	**2000**	75	16	620	ug/L
MKTF-21	3/14/2017	MTBE	**610**	50	7.4	143	ug/L
MKTF-21	3/14/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-21	3/14/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
MKTF-21	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	6/21/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	6/21/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	6/21/2017	Benzene	**10000**	500	31	5	ug/L
MKTF-21	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	6/21/2017	1,2,4-Trimethylbenzene	**340**	50	5.6	56	ug/L
MKTF-21	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	6/21/2017	Isopropylbenzene	19	50	2.6	447	ug/L
MKTF-21	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	6/21/2017	Ethylbenzene	690	50	4.7	700	ug/L
MKTF-21	6/21/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	6/21/2017	n-Propylbenzene	31	50	3.7	660	ug/L
MKTF-21	6/21/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	6/21/2017	1,3,5-Trimethylbenzene	**120**	50	4.4	60	ug/L
MKTF-21	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	6/21/2017	Toluene	41	50	3.2	1000	ug/L
MKTF-21	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	6/21/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	6/21/2017	Pentafluorobenzene	**500**	0	0		None
MKTF-21	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	6/21/2017	Xylenes, Total	**2600**	75	16	620	ug/L
MKTF-21	6/21/2017	MTBE	**1200**	50	12	143	ug/L
MKTF-21	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	9/26/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	9/26/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	9/26/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	9/26/2017	Benzene	**6300**	500	31	5	ug/L
MKTF-21	9/26/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	9/26/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	9/26/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	9/26/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	9/26/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	9/26/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	9/26/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	9/26/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	9/26/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	9/26/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	9/26/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	9/26/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	9/26/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	9/26/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	9/26/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	9/26/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	9/26/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	9/26/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-21	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	9/26/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	9/26/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	9/26/2017	1,2,4-Trimethylbenzene	**290**	50	5.6	56	ug/L
MKTF-21	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	9/26/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	9/26/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	9/26/2017	Isopropylbenzene	18	50	2.6	447	ug/L
MKTF-21	9/26/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	9/26/2017	Ethylbenzene	610	50	4.7	700	ug/L
MKTF-21	9/26/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	9/26/2017	n-Propylbenzene	33	50	3.7	660	ug/L
MKTF-21	9/26/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	9/26/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	9/26/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	9/26/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	9/26/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	9/26/2017	1,3,5-Trimethylbenzene	**89**	50	4.4	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	9/26/2017	Toluene	16	50	3.2	1000	ug/L
MKTF-21	9/26/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	9/26/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	9/26/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	9/26/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	9/26/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	9/26/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	9/26/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	9/26/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	9/26/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	9/26/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	9/26/2017	Xylenes, Total	**830**	75	16	620	ug/L
MKTF-21	9/26/2017	MTBE	**630**	50	12	143	ug/L
MKTF-21	9/26/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	9/26/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	11/28/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	11/28/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	11/28/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	11/28/2017	Benzene	**4900**	50	3.1	5	ug/L
MKTF-21	11/28/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	11/28/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	11/28/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	11/28/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	11/28/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	11/28/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	11/28/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	11/28/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	11/28/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	11/28/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	11/28/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	11/28/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	11/28/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	11/28/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	11/28/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	11/28/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	11/28/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	11/28/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-21	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	11/28/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	11/28/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	11/28/2017	1,2,4-Trimethylbenzene	**290**	50	5.6	56	ug/L
MKTF-21	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	11/28/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	11/28/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	11/28/2017	Isopropylbenzene	18	50	2.6	447	ug/L
MKTF-21	11/28/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	11/28/2017	Ethylbenzene	520	50	4.7	700	ug/L
MKTF-21	11/28/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	11/28/2017	n-Propylbenzene	29	50	3.7	660	ug/L
MKTF-21	11/28/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	11/28/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	11/28/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	11/28/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	11/28/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	11/28/2017	1,3,5-Trimethylbenzene	**97**	50	4.4	60	ug/L
MKTF-21	11/28/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	11/28/2017	Toluene	18	50	3.2	1000	ug/L
MKTF-21	11/28/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	11/28/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	11/28/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	11/28/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	11/28/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	11/28/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	11/28/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	11/28/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	11/28/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	11/28/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	11/28/2017	Xylenes, Total	**1400**	75	16	620	ug/L
MKTF-21	11/28/2017	MTBE	**520**	50	12	143	ug/L
MKTF-21	11/28/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	11/28/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	2/15/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-21	2/15/2018	Acetone	52	200	16	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/15/2018	Chloroform	ND	20	8	100	ug/L
MKTF-21	2/15/2018	Benzene	**3400**	200	12	5	ug/L
MKTF-21	2/15/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-21	2/15/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-21	2/15/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-21	2/15/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-21	2/15/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-21	2/15/2018	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L
MKTF-21	2/15/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-21	2/15/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-21	2/15/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-21	2/15/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-21	2/15/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-21	2/15/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-21	2/15/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-21	2/15/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-21	2/15/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-21	2/15/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-21	2/15/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-21	2/15/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-21	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-21	2/15/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-21	2/15/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-21	2/15/2018	1,2,4-Trimethylbenzene	**220**	20	2.3	56	ug/L
MKTF-21	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-21	2/15/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-21	2/15/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-21	2/15/2018	Isopropylbenzene	7.4	20	1	447	ug/L
MKTF-21	2/15/2018	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-21	2/15/2018	Ethylbenzene	310	20	1.9	700	ug/L
MKTF-21	2/15/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-21	2/15/2018	n-Propylbenzene	15	20	1.5	660	ug/L
MKTF-21	2/15/2018	n-Butylbenzene	4.9	60	2.6	1000	ug/L
MKTF-21	2/15/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-21	2/15/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-21	2/15/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-21	2/15/2018	4-Methyl-2-Pentanone	23	200	14	1243	ug/L
MKTF-21	2/15/2018	1,3,5-Trimethylbenzene	46	20	1.7	60	ug/L
MKTF-21	2/15/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-21	2/15/2018	Toluene	3.5	20	1.3	1000	ug/L
MKTF-21	2/15/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-21	2/15/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-21	2/15/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-21	2/15/2018	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-21	2/15/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-21	2/15/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-21	2/15/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-21	2/15/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-21	2/15/2018	2-Hexanone	*17*	*200*	13	38	ug/L
MKTF-21	2/15/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-21	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-21	2/15/2018	Xylenes, Total	390	30	6.4	620	ug/L
MKTF-21	2/15/2018	MTBE	**390**	20	4.8	143	ug/L
MKTF-21	2/15/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-21	2/15/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-21	5/11/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	5/11/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-21	5/11/2018	Chloroform	ND	10	4	100	ug/L
MKTF-21	5/11/2018	Benzene	**4800**	100	6.2	5	ug/L
MKTF-21	5/11/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-21	5/11/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-21	5/11/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-21	5/11/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-21	5/11/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-21	5/11/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-21	5/11/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-21	5/11/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-21	5/11/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-21	5/11/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-21	5/11/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	5/11/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-21	5/11/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-21	5/11/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-21	5/11/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-21	5/11/2018	2-Butanone	48	100	11	5565	ug/L
MKTF-21	5/11/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/11/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-21	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-21	5/11/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-21	5/11/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	5/11/2018	1,2,4-Trimethylbenzene	**310**	10	1.1	56	ug/L
MKTF-21	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-21	5/11/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-21	5/11/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-21	5/11/2018	Isopropylbenzene	11	10	0.51	447	ug/L
MKTF-21	5/11/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
MKTF-21	5/11/2018	Ethylbenzene	470	10	0.93	700	ug/L
MKTF-21	5/11/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-21	5/11/2018	n-Propylbenzene	21	10	0.74	660	ug/L
MKTF-21	5/11/2018	n-Butylbenzene	2.2	30	1.3	1000	ug/L
MKTF-21	5/11/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-21	5/11/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	5/11/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-21	5/11/2018	4-Methyl-2-Pentanone	14	100	7.1	1243	ug/L
MKTF-21	5/11/2018	1,3,5-Trimethylbenzene	**62**	10	0.87	60	ug/L
MKTF-21	5/11/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-21	5/11/2018	Toluene	7.4	10	0.64	1000	ug/L
MKTF-21	5/11/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-21	5/11/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-21	5/11/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-21	5/11/2018	sec-Butylbenzene	1.3	10	1.1	2000	ug/L
MKTF-21	5/11/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	5/11/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-21	5/11/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-21	5/11/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-21	5/11/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-21	5/11/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-21	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-21	5/11/2018	Xylenes, Total	**670**	15	3.2	620	ug/L
MKTF-21	5/11/2018	MTBE	**520**	10	2.4	143	ug/L
MKTF-21	5/11/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-21	5/11/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-21	8/31/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-21	8/31/2018	Acetone	72	200	16	14064	ug/L
MKTF-21	8/31/2018	Chloroform	ND	20	8	100	ug/L
MKTF-21	8/31/2018	Benzene	**5900**	200	35	5	ug/L
MKTF-21	8/31/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-21	8/31/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-21	8/31/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-21	8/31/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-21	8/31/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-21	8/31/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-21	8/31/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-21	8/31/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-21	8/31/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-21	8/31/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-21	8/31/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-21	8/31/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-21	8/31/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-21	8/31/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-21	8/31/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-21	8/31/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-21	8/31/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-21	8/31/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-21	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-21	8/31/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-21	8/31/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-21	8/31/2018	1,2,4-Trimethylbenzene	**370**	20	5.1	56	ug/L
MKTF-21	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-21	8/31/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-21	8/31/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-21	8/31/2018	Isopropylbenzene	20	20	4.4	447	ug/L
MKTF-21	8/31/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-21	8/31/2018	Ethylbenzene	**800**	20	4.5	700	ug/L
MKTF-21	8/31/2018	Styrene	ND	20	5	100	ug/L
MKTF-21	8/31/2018	n-Propylbenzene	42	20	4.9	660	ug/L
MKTF-21	8/31/2018	n-Butylbenzene	5.3	60	5	1000	ug/L
MKTF-21	8/31/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-21	8/31/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-21	8/31/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-21	8/31/2018	4-Methyl-2-Pentanone	18	200	9.1	1243	ug/L
MKTF-21	8/31/2018	1,3,5-Trimethylbenzene	**100**	20	4.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/31/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-21	8/31/2018	Toluene	13	20	3.4	1000	ug/L
MKTF-21	8/31/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-21	8/31/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-21	8/31/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-21	8/31/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-21	8/31/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-21	8/31/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-21	8/31/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-21	8/31/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-21	8/31/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-21	8/31/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-21	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-21	8/31/2018	Xylenes, Total	**990**	30	13	620	ug/L
MKTF-21	8/31/2018	MTBE	**500**	20	6.4	143	ug/L
MKTF-21	8/31/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-21	8/31/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-21	11/29/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-21	11/29/2018	Acetone	ND	200	15	14064	ug/L
MKTF-21	11/29/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-21	11/29/2018	Benzene	**2000**	200	35	5	ug/L
MKTF-21	11/29/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-21	11/29/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-21	11/29/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-21	11/29/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-21	11/29/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-21	11/29/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-21	11/29/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-21	11/29/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-21	11/29/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-21	11/29/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-21	11/29/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-21	11/29/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-21	11/29/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-21	11/29/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-21	11/29/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-21	11/29/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-21	11/29/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-21	11/29/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-21	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-21	11/29/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-21	11/29/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-21	11/29/2018	1,2,4-Trimethylbenzene	**99**	20	5.1	56	ug/L
MKTF-21	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-21	11/29/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-21	11/29/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-21	11/29/2018	Isopropylbenzene	4.8	20	4.4	447	ug/L
MKTF-21	11/29/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-21	11/29/2018	Ethylbenzene	110	20	4.5	700	ug/L
MKTF-21	11/29/2018	Styrene	ND	20	5	100	ug/L
MKTF-21	11/29/2018	n-Propylbenzene	8.3	20	4.9	660	ug/L
MKTF-21	11/29/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-21	11/29/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-21	11/29/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-21	11/29/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-21	11/29/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-21	11/29/2018	1,3,5-Trimethylbenzene	30	20	4.6	60	ug/L
MKTF-21	11/29/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-21	11/29/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-21	11/29/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-21	11/29/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-21	11/29/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-21	11/29/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-21	11/29/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-21	11/29/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-21	11/29/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-21	11/29/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-21	11/29/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-21	11/29/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-21	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-21	11/29/2018	Xylenes, Total	140	30	13	620	ug/L
MKTF-21	11/29/2018	MTBE	**220**	20	9.1	143	ug/L
MKTF-21	11/29/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-21	11/29/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-21	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
MKTF-21	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
MKTF-21	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
MKTF-21	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
MKTF-21	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
MKTF-21	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
MKTF-21	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
MKTF-21	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
MKTF-21	2/20/2019	1,2,4-Trimethylbenzene	**1500**	20	5.066287	56	ug/L
MKTF-21	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
MKTF-21	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
MKTF-21	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
MKTF-21	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
MKTF-21	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
MKTF-21	2/20/2019	1,3,5-Trimethylbenzene	**590**	20	4.628281	60	ug/L
MKTF-21	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
MKTF-21	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
MKTF-21	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
MKTF-21	2/20/2019	1-Methylnaphthalene	74	80	6.716339	NA	ug/L
MKTF-21	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
MKTF-21	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
MKTF-21	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
MKTF-21	2/20/2019	2-Methylnaphthalene	**80**	80	6.90752		ug/L
MKTF-21	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
MKTF-21	2/20/2019	p-Isopropyltoluene	6	20	4.806771	NA	ug/L
MKTF-21	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
MKTF-21	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
MKTF-21	2/20/2019	Benzene	**2000**	200	34.979144	5	ug/L
MKTF-21	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
MKTF-21	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
MKTF-21	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
MKTF-21	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
MKTF-21	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
MKTF-21	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
MKTF-21	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
MKTF-21	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
MKTF-21	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
MKTF-21	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
MKTF-21	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
MKTF-21	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
MKTF-21	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	2/20/2019	Ethylbenzene	**1200**	20	4.468045	700	ug/L
MKTF-21	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
MKTF-21	2/20/2019	Isopropylbenzene	11	20	4.422084	447	ug/L
MKTF-21	2/20/2019	MTBE	15	20	9.1219	143	ug/L
MKTF-21	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
MKTF-21	2/20/2019	Naphthalene	**320**	40	5.792521	30	ug/L
MKTF-21	2/20/2019	n-Butylbenzene	16	60	4.966609	1000	ug/L
MKTF-21	2/20/2019	n-Propylbenzene	27	20	4.851725	660	ug/L
MKTF-21	2/20/2019	sec-Butylbenzene	6.5	20	4.045094	2000	ug/L
MKTF-21	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
MKTF-21	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
MKTF-21	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
MKTF-21	2/20/2019	Toluene	16	20	3.362788	1000	ug/L
MKTF-21	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
MKTF-21	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
MKTF-21	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
MKTF-21	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
MKTF-21	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
MKTF-21	2/20/2019	Xylenes, Total	**7100**	300	128.257545	620	ug/L
MKTF-21	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	5/14/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	5/14/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	5/14/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	5/14/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	5/14/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	5/14/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	5/14/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-21	5/14/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	5/14/2019	1,2,4-Trimethylbenzene	**150**	20	4.263982	56	ug/L
MKTF-21	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-21	5/14/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	5/14/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	5/14/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	5/14/2019	1,3,5-Trimethylbenzene	36	20	3.773197	60	ug/L
MKTF-21	5/14/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	5/14/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	5/14/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	5/14/2019	1-Methylnaphthalene	6.9	80	6.29909	NA	ug/L
MKTF-21	5/14/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	5/14/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	5/14/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-21	5/14/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	5/14/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-21	5/14/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	5/14/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-21	5/14/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-21	5/14/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	5/14/2019	Benzene	**2400**	200	33.327811	5	ug/L
MKTF-21	5/14/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	5/14/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	5/14/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	5/14/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	5/14/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	5/14/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-21	5/14/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	5/14/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	5/14/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	5/14/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	5/14/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	5/14/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	5/14/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	5/14/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	5/14/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	5/14/2019	Ethylbenzene	280	20	2.646816	700	ug/L
MKTF-21	5/14/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	5/14/2019	Isopropylbenzene	5.9	20	3.830445	447	ug/L
MKTF-21	5/14/2019	MTBE	**290**	20	9.1219	143	ug/L
MKTF-21	5/14/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	5/14/2019	Naphthalene	**33**	40	5.501427	30	ug/L
MKTF-21	5/14/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-21	5/14/2019	n-Propylbenzene	12	20	4.28616	660	ug/L
MKTF-21	5/14/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	5/14/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	5/14/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	5/14/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	5/14/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-21	5/14/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	5/14/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	5/14/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	5/14/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	5/14/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	5/14/2019	Xylenes, Total	220	30	9.088299	620	ug/L
MKTF-21	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	8/22/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	8/22/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	8/22/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	8/22/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	8/22/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	8/22/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	8/22/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-21	8/22/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	8/22/2019	1,2,4-Trimethylbenzene	**360**	20	4.263982	56	ug/L
MKTF-21	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-21	8/22/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-21	8/22/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	8/22/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	8/22/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	8/22/2019	1,3,5-Trimethylbenzene	**95**	20	3.773197	60	ug/L
MKTF-21	8/22/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	8/22/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	8/22/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	8/22/2019	1-Methylnaphthalene	18	80	6.29909	NA	ug/L
MKTF-21	8/22/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	8/22/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	8/22/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/22/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	8/22/2019	2-Methylnaphthalene	**20**	80	6.90752		ug/L
MKTF-21	8/22/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	8/22/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-21	8/22/2019	4-Methyl-2-Pentanone	19	200	14.27791	1243	ug/L
MKTF-21	8/22/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	8/22/2019	Benzene	**5400**	200	33.327811	5	ug/L
MKTF-21	8/22/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	8/22/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	8/22/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	8/22/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	8/22/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	8/22/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-21	8/22/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	8/22/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	8/22/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	8/22/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	8/22/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	8/22/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	8/22/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	8/22/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	8/22/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	8/22/2019	Ethylbenzene	680	20	2.646816	700	ug/L
MKTF-21	8/22/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	8/22/2019	Isopropylbenzene	18	20	3.830445	447	ug/L
MKTF-21	8/22/2019	MTBE	**290**	20	9.1219	143	ug/L
MKTF-21	8/22/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	8/22/2019	Naphthalene	**88**	40	5.501427	30	ug/L
MKTF-21	8/22/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-21	8/22/2019	n-Propylbenzene	35	20	4.28616	660	ug/L
MKTF-21	8/22/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	8/22/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	8/22/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	8/22/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	8/22/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-21	8/22/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	8/22/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	8/22/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	8/22/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	8/22/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	8/22/2019	Xylenes, Total	500	30	9.088299	620	ug/L
MKTF-21	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	11/5/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	11/5/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	11/5/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	11/5/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	11/5/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	11/5/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	11/5/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	11/5/2019	1,2,4-Trimethylbenzene	**1100**	20	4.263982	56	ug/L
MKTF-21	11/5/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-21	11/5/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	11/5/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	11/5/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	11/5/2019	1,3,5-Trimethylbenzene	26	20	3.773197	60	ug/L
MKTF-21	11/5/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	11/5/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	11/5/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	11/5/2019	1-Methylnaphthalene	49	80	6.29909	NA	ug/L
MKTF-21	11/5/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	11/5/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	11/5/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-21	11/5/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	11/5/2019	2-Methylnaphthalene	**51**	80	6.90752		ug/L
MKTF-21	11/5/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	11/5/2019	p-Isopropyltoluene	4.4	20	4.345787	NA	ug/L
MKTF-21	11/5/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-21	11/5/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	11/5/2019	Benzene	**5600**	200	33.327811	5	ug/L
MKTF-21	11/5/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	11/5/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	11/5/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	11/5/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	11/5/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	11/5/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/5/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	11/5/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	11/5/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	11/5/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	11/5/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	11/5/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	11/5/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	11/5/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	11/5/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	11/5/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
MKTF-21	11/5/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	11/5/2019	Isopropylbenzene	12	20	3.830445	447	ug/L
MKTF-21	11/5/2019	MTBE	29	20	9.1219	143	ug/L
MKTF-21	11/5/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	11/5/2019	Naphthalene	**270**	40	5.501427	30	ug/L
MKTF-21	11/5/2019	n-Butylbenzene	6.5	60	4.551391	1000	ug/L
MKTF-21	11/5/2019	n-Propylbenzene	32	20	4.28616	660	ug/L
MKTF-21	11/5/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	11/5/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	11/5/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	11/5/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	11/5/2019	Toluene	8.2	20	7.008724	1000	ug/L
MKTF-21	11/5/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	11/5/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	11/5/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	11/5/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	11/5/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	11/5/2019	Xylenes, Total	**2800**	30	9.088299	620	ug/L
MKTF-21	2/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
MKTF-21	2/5/2020	1,1,1-Trichloroethane	ND	5	0.86	200	ug/L
MKTF-21	2/5/2020	1,1,2,2-Tetrachloroethane	ND	10	2.7	10	ug/L
MKTF-21	2/5/2020	1,1,2-Trichloroethane	ND	5	1.1	5	ug/L
MKTF-21	2/5/2020	1,1-Dichloroethane	ND	5	0.7	25	ug/L
MKTF-21	2/5/2020	1,1-Dichloroethene	ND	5	1	7	ug/L
MKTF-21	2/5/2020	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-21	2/5/2020	1,2,3-Trichlorobenzene	ND	5	1.5	70	ug/L
MKTF-21	2/5/2020	1,2,3-Trichloropropane	*ND*	*10*	1.5	0.0084	ug/L
MKTF-21	2/5/2020	1,2,4-Trichlorobenzene	ND	5	0.98	70	ug/L
MKTF-21	2/5/2020	1,2,4-Trimethylbenzene	6.8	5	1.1	56	ug/L
MKTF-21	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.6	0.0033	ug/L
MKTF-21	2/5/2020	1,2-Dibromoethane	*ND*	*5*	0.83	0.05	ug/L
MKTF-21	2/5/2020	1,2-Dichlorobenzene	ND	5	1.5	600	ug/L
MKTF-21	2/5/2020	1,2-Dichloroethane	ND	5	0.97	5	ug/L
MKTF-21	2/5/2020	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-21	2/5/2020	1,3,5-Trimethylbenzene	ND	5	0.94	60	ug/L
MKTF-21	2/5/2020	1,3-Dichlorobenzene	ND	5	1.2	N/A	ug/L
MKTF-21	2/5/2020	1,3-Dichloropropane	ND	5	1	370	ug/L
MKTF-21	2/5/2020	1,4-Dichlorobenzene	ND	5	1.5	75	ug/L
MKTF-21	2/5/2020	1-Methylnaphthalene	ND	20	1.6	NA	ug/L
MKTF-21	2/5/2020	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
MKTF-21	2/5/2020	2-Butanone	ND	50	10	5565	ug/L
MKTF-21	2/5/2020	2-Chlorotoluene	ND	5	1.2	233	ug/L
MKTF-21	2/5/2020	2-Hexanone	*ND*	*50*	7.7	38	ug/L
MKTF-21	2/5/2020	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
MKTF-21	2/5/2020	4-Chlorotoluene	ND	5	1.2	250	ug/L
MKTF-21	2/5/2020	p-Isopropyltoluene	ND	5	1.1	NA	ug/L
MKTF-21	2/5/2020	4-Methyl-2-Pentanone	5.2	50	3.6	1243	ug/L
MKTF-21	2/5/2020	Acetone	22	50	6	14064	ug/L
MKTF-21	2/5/2020	Benzene	**58**	5	0.83	5	ug/L
MKTF-21	2/5/2020	Bromobenzene	ND	5	1.2	62	ug/L
MKTF-21	2/5/2020	Bromodichloromethane	*ND*	*5*	0.67	1.34	ug/L
MKTF-21	2/5/2020	Bromoform	ND	5	1.4	32.9	ug/L
MKTF-21	2/5/2020	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
MKTF-21	2/5/2020	Carbon Disulfide	ND	50	2.3	810	ug/L
MKTF-21	2/5/2020	Carbon tetrachloride	ND	5	0.7	5	ug/L
MKTF-21	2/5/2020	Chlorobenzene	ND	5	0.97	77.6	ug/L
MKTF-21	2/5/2020	Chloroethane	ND	10	0.89	20857	ug/L
MKTF-21	2/5/2020	Chloroform	9.7	5	0.61	100	ug/L
MKTF-21	2/5/2020	Chloromethane	ND	15	1.6	20.32	ug/L
MKTF-21	2/5/2020	cis-1,2-Dichloroethene	ND	5	0.95	70	ug/L
MKTF-21	2/5/2020	cis-1,3-Dichloropropene	ND	5	0.69	NA	ug/L
MKTF-21	2/5/2020	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-21	2/5/2020	Dibromomethane	ND	5	1	8	ug/L
MKTF-21	2/5/2020	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
MKTF-21	2/5/2020	Ethylbenzene	2.6	5	0.66	700	ug/L
MKTF-21	2/5/2020	Hexachlorobutadiene	*ND*	*5*	1.5	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/5/2020	Isopropylbenzene	ND	5	0.96	447	ug/L
MKTF-21	2/5/2020	MTBE	50	5	2.3	143	ug/L
MKTF-21	2/5/2020	Methylene Chloride	*ND*	*15*	0.77	5	ug/L
MKTF-21	2/5/2020	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-21	2/5/2020	n-Propylbenzene	ND	5	1.1	660	ug/L
MKTF-21	2/5/2020	Naphthalene	ND	10	1.4	30	ug/L
MKTF-21	2/5/2020	sec-Butylbenzene	ND	5	1.2	2000	ug/L
MKTF-21	2/5/2020	Styrene	ND	5	0.96	100	ug/L
MKTF-21	2/5/2020	tert-Butylbenzene	ND	5	1	690	ug/L
MKTF-21	2/5/2020	Tetrachloroethene	ND	5	0.75	5	ug/L
MKTF-21	2/5/2020	Toluene	ND	5	1.8	1000	ug/L
MKTF-21	2/5/2020	trans-1,2-Dichloroethene	ND	5	0.9	100	ug/L
MKTF-21	2/5/2020	trans-1,3-Dichloropropene	ND	5	0.83	NA	ug/L
MKTF-21	2/5/2020	Trichloroethene	ND	5	0.83	5	ug/L
MKTF-21	2/5/2020	Trichlorofluoromethane	ND	5	0.95	1137	ug/L
MKTF-21	2/5/2020	Vinyl Chloride	*ND*	*5*	0.9	2	ug/L
MKTF-21	2/5/2020	Xylenes, Total	ND	7.5	2.3	620	ug/L
MKTF-22	4/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-22	4/10/2014	Acetone	ND	100	49	14064	ug/L
MKTF-22	4/10/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-22	4/10/2014	Benzene	**2300**	100	15	5	ug/L
MKTF-22	4/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-22	4/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-22	4/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-22	4/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-22	4/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-22	4/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-22	4/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-22	4/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-22	4/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-22	4/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-22	4/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-22	4/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-22	4/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-22	4/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-22	4/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-22	4/10/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-22	4/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	4/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-22	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-22	4/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-22	4/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-22	4/10/2014	1,2,4-Trimethylbenzene	**89**	10	1.2	56	ug/L
MKTF-22	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-22	4/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-22	4/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-22	4/10/2014	Isopropylbenzene	15	10	1.6	447	ug/L
MKTF-22	4/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-22	4/10/2014	Ethylbenzene	280	10	1.3	700	ug/L
MKTF-22	4/10/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-22	4/10/2014	n-Propylbenzene	33	10	1.4	660	ug/L
MKTF-22	4/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-22	4/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-22	4/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-22	4/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-22	4/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-22	4/10/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-22	4/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-22	4/10/2014	Toluene	21	10	1.7	1000	ug/L
MKTF-22	4/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-22	4/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-22	4/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-22	4/10/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-22	4/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-22	4/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-22	4/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-22	4/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-22	4/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-22	4/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-22	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-22	4/10/2014	Xylenes, Total	32	15	3.8	620	ug/L
MKTF-22	4/10/2014	MTBE	**3700**	100	25	143	ug/L
MKTF-22	4/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-22	4/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/17/2014	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/17/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-22	11/17/2014	Benzene	**1600**	200	31	5	ug/L
MKTF-22	11/17/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-22	11/17/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-22	11/17/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-22	11/17/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-22	11/17/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-22	11/17/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-22	11/17/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-22	11/17/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-22	11/17/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-22	11/17/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-22	11/17/2014	1,1-Dichloroethane	15	10	2.8	25	ug/L
MKTF-22	11/17/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-22	11/17/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-22	11/17/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-22	11/17/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-22	11/17/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-22	11/17/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/17/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-22	11/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-22	11/17/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-22	11/17/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-22	11/17/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-22	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-22	11/17/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-22	11/17/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-22	11/17/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-22	11/17/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Ethylbenzene	90	10	1.3	700	ug/L
MKTF-22	11/17/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-22	11/17/2014	n-Propylbenzene	13	10	1.4	660	ug/L
MKTF-22	11/17/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-22	11/17/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-22	11/17/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-22	11/17/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-22	11/17/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-22	11/17/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-22	11/17/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-22	11/17/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-22	11/17/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-22	11/17/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-22	11/17/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-22	11/17/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-22	11/17/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-22	11/17/2014	cis-1,2-Dichloroethene	10	10	1.2	70	ug/L
MKTF-22	11/17/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-22	11/17/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-22	11/17/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-22	11/17/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-22	11/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-22	11/17/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-22	11/17/2014	MTBE	**3900**	200	50	143	ug/L
MKTF-22	11/17/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-22	11/17/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-22	3/12/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	3/12/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	3/12/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	3/12/2015	Benzene	**2600**	200	13	5	ug/L
MKTF-22	3/12/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	3/12/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	3/12/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	3/12/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	3/12/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	3/12/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	3/12/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	3/12/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	3/12/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	3/12/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	3/12/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	3/12/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	3/12/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	3/12/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	3/12/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	3/12/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	3/12/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/12/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	3/12/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	3/12/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	3/12/2015	1,2,4-Trimethylbenzene	**58**	20	3.2	56	ug/L
MKTF-22	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	3/12/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	3/12/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	3/12/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	3/12/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	3/12/2015	Ethylbenzene	250	20	2	700	ug/L
MKTF-22	3/12/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	3/12/2015	n-Propylbenzene	31	20	3.3	660	ug/L
MKTF-22	3/12/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	3/12/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	3/12/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	3/12/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	3/12/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	3/12/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	3/12/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	3/12/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	3/12/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	3/12/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	3/12/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	3/12/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	3/12/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	3/12/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	3/12/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	3/12/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	3/12/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	3/12/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	3/12/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	3/12/2015	MTBE	**5100**	200	35	143	ug/L
MKTF-22	3/12/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	3/12/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	6/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	6/9/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	6/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	6/9/2015	Benzene	**2900**	200	13	5	ug/L
MKTF-22	6/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	6/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	6/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	6/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	6/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	6/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	6/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	6/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	6/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	6/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	6/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	6/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	6/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	6/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	6/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	6/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	6/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	6/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	6/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	6/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	6/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	6/9/2015	1,2,4-Trimethylbenzene	53	20	3.2	56	ug/L
MKTF-22	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	6/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	6/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	6/9/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	6/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	6/9/2015	Ethylbenzene	320	20	2	700	ug/L
MKTF-22	6/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	6/9/2015	n-Propylbenzene	33	20	3.3	660	ug/L
MKTF-22	6/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	6/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	6/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	6/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	6/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	6/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	6/9/2015	Toluene	22	20	2.2	1000	ug/L
MKTF-22	6/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	6/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	6/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	6/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	6/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	6/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	6/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	6/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	6/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	6/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	6/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	6/9/2015	Xylenes, Total	47	30	5.6	620	ug/L
MKTF-22	6/9/2015	MTBE	**5700**	200	35	143	ug/L
MKTF-22	6/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	6/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	8/20/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	8/20/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	8/20/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	8/20/2015	Benzene	**1200**	20	1.3	5	ug/L
MKTF-22	8/20/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	8/20/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	8/20/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	8/20/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	8/20/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	8/20/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	8/20/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	8/20/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	8/20/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	8/20/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	8/20/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	8/20/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	8/20/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	8/20/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	8/20/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	8/20/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	8/20/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	8/20/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	8/20/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	8/20/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	8/20/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	8/20/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-22	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	8/20/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	8/20/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	8/20/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	8/20/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	8/20/2015	Ethylbenzene	97	20	2	700	ug/L
MKTF-22	8/20/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	8/20/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
MKTF-22	8/20/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	8/20/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	8/20/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	8/20/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	8/20/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	8/20/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	8/20/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	8/20/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	8/20/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	8/20/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	8/20/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	8/20/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	8/20/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	8/20/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	8/20/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	8/20/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	8/20/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	8/20/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	8/20/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	8/20/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	8/20/2015	MTBE	**4800**	200	35	143	ug/L
MKTF-22	8/20/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	8/20/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	11/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	11/9/2015	Acetone	ND	200	19	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	11/9/2015	Benzene	**2700**	200	13	5	ug/L
MKTF-22	11/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	11/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	11/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	11/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	11/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	11/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	11/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	11/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	11/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	11/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	11/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	11/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	11/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	11/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	11/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	11/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	11/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	11/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	11/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	11/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	11/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	11/9/2015	1,2,4-Trimethylbenzene	29	20	3.2	56	ug/L
MKTF-22	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	11/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	11/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	11/9/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	11/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	11/9/2015	Ethylbenzene	350	20	2	700	ug/L
MKTF-22	11/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	11/9/2015	n-Propylbenzene	32	20	3.3	660	ug/L
MKTF-22	11/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	11/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	11/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	11/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	11/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	11/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	11/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	11/9/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	11/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	11/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	11/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	11/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	11/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	11/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	11/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	11/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	11/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	11/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	11/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	11/9/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	11/9/2015	MTBE	**5500**	200	35	143	ug/L
MKTF-22	11/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	11/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-22	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-22	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-22	2/25/2016	Benzene	**4000**	200	19	5	ug/L
MKTF-22	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-22	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-22	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-22	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-22	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-22	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-22	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-22	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-22	2/25/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-22	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-22	2/25/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-22	2/25/2016	1,1-Dichloroethene	*ND*	*20*	1.5	7	ug/L
MKTF-22	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-22	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-22	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-22	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-22	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-22	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-22	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-22	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	2/25/2016	1,2,4-Trimethylbenzene	43	20	2.1	56	ug/L
MKTF-22	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-22	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-22	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-22	2/25/2016	Isopropylbenzene	20	20	2	447	ug/L
MKTF-22	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-22	2/25/2016	Ethylbenzene	570	20	2.2	700	ug/L
MKTF-22	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-22	2/25/2016	n-Propylbenzene	50	20	2.6	660	ug/L
MKTF-22	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-22	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-22	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-22	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-22	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-22	2/25/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-22	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-22	2/25/2016	Toluene	32	20	1.8	1000	ug/L
MKTF-22	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-22	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-22	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-22	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-22	2/25/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-22	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-22	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-22	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-22	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	2/25/2016	Xylenes, Total	70	30	6.5	620	ug/L
MKTF-22	2/25/2016	MTBE	**7200**	200	42	143	ug/L
MKTF-22	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-22	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-22	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/10/2016	Acetone	82	100	49	14064	ug/L
MKTF-22	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	6/10/2016	Benzene	**3800**	50	4.8	5	ug/L
MKTF-22	6/10/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-22	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-22	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-22	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-22	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-22	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-22	6/10/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-22	6/10/2016	1,1-Dichloroethene	*6.9*	*10*	1.1	7	ug/L
MKTF-22	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-22	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-22	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/10/2016	2-Butanone	31	100	7.4	5565	ug/L
MKTF-22	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-22	6/10/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-22	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	6/10/2016	1,2,4-Trimethylbenzene	25	10	1.1	56	ug/L
MKTF-22	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-22	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-22	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-22	6/10/2016	Isopropylbenzene	21	10	1	447	ug/L
MKTF-22	6/10/2016	p-Isopropyltoluene	3.8	10	1.4	NA	ug/L
MKTF-22	6/10/2016	Ethylbenzene	500	10	1.1	700	ug/L
MKTF-22	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-22	6/10/2016	n-Propylbenzene	51	10	1.3	660	ug/L
MKTF-22	6/10/2016	n-Butylbenzene	14	30	1.6	1000	ug/L
MKTF-22	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-22	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-22	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-22	6/10/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-22	6/10/2016	Toluene	35	10	1.2	1000	ug/L
MKTF-22	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-22	6/10/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	6/10/2016	sec-Butylbenzene	7.4	10	1.2	2000	ug/L
MKTF-22	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	6/10/2016	cis-1,2-Dichloroethene	8	10	1.2	70	ug/L
MKTF-22	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-22	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-22	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-22	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	6/10/2016	Xylenes, Total	62	15	3.7	620	ug/L
MKTF-22	6/10/2016	MTBE	**6500**	50	11	143	ug/L
MKTF-22	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-22	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	9/10/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-22	9/10/2016	Acetone	ND	200	98	14064	ug/L
MKTF-22	9/10/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-22	9/10/2016	Benzene	**4200**	200	19	5	ug/L
MKTF-22	9/10/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-22	9/10/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-22	9/10/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-22	9/10/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-22	9/10/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-22	9/10/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-22	9/10/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-22	9/10/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-22	9/10/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-22	9/10/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-22	9/10/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-22	9/10/2016	1,1-Dichloroethene	**9.4**	20	2.1	7	ug/L
MKTF-22	9/10/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-22	9/10/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-22	9/10/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-22	9/10/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-22	9/10/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-22	9/10/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-22	9/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-22	9/10/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-22	9/10/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	9/10/2016	1,2,4-Trimethylbenzene	15	20	2.2	56	ug/L
MKTF-22	9/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-22	9/10/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-22	9/10/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-22	9/10/2016	Isopropylbenzene	18	20	2.1	447	ug/L
MKTF-22	9/10/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-22	9/10/2016	Ethylbenzene	430	20	2.2	700	ug/L
MKTF-22	9/10/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-22	9/10/2016	n-Propylbenzene	43	20	2.6	660	ug/L
MKTF-22	9/10/2016	n-Butylbenzene	8.5	60	3.2	1000	ug/L
MKTF-22	9/10/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-22	9/10/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-22	9/10/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-22	9/10/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-22	9/10/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-22	9/10/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-22	9/10/2016	Toluene	30	20	2.4	1000	ug/L
MKTF-22	9/10/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-22	9/10/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-22	9/10/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	9/10/2016	sec-Butylbenzene	4.2	20	2.5	2000	ug/L
MKTF-22	9/10/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-22	9/10/2016	cis-1,2-Dichloroethene	11	20	2.5	70	ug/L
MKTF-22	9/10/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-22	9/10/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	9/10/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-22	9/10/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-22	9/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	9/10/2016	Xylenes, Total	49	30	7.3	620	ug/L
MKTF-22	9/10/2016	MTBE	**8800**	200	42	143	ug/L
MKTF-22	9/10/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-22	9/10/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-22	11/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/1/2016	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	11/1/2016	Benzene	**3700**	100	9.6	5	ug/L
MKTF-22	11/1/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-22	11/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	11/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	11/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	11/1/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-22	11/1/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-22	11/1/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-22	11/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	11/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-22	11/1/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-22	11/1/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-22	11/1/2016	1,1-Dichloroethene	*6.8*	*10*	1.1	7	ug/L
MKTF-22	11/1/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-22	11/1/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-22	11/1/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/1/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-22	11/1/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-22	11/1/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	11/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-22	11/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	11/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	11/1/2016	1,2,4-Trimethylbenzene	15	10	1.1	56	ug/L
MKTF-22	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-22	11/1/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-22	11/1/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-22	11/1/2016	Isopropylbenzene	18	10	1	447	ug/L
MKTF-22	11/1/2016	p-Isopropyltoluene	4.1	10	1.4	NA	ug/L
MKTF-22	11/1/2016	Ethylbenzene	460	10	1.1	700	ug/L
MKTF-22	11/1/2016	Styrene	2.1	10	1.1	100	ug/L
MKTF-22	11/1/2016	n-Propylbenzene	44	10	1.3	660	ug/L
MKTF-22	11/1/2016	n-Butylbenzene	13	30	1.6	1000	ug/L
MKTF-22	11/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-22	11/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-22	11/1/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	11/1/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-22	11/1/2016	1,3,5-Trimethylbenzene	1.9	10	1.2	60	ug/L
MKTF-22	11/1/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-22	11/1/2016	Toluene	32	10	1.2	1000	ug/L
MKTF-22	11/1/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	11/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-22	11/1/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	11/1/2016	sec-Butylbenzene	7.8	10	1.2	2000	ug/L
MKTF-22	11/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	11/1/2016	cis-1,2-Dichloroethene	6.6	10	1.2	70	ug/L
MKTF-22	11/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-22	11/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	11/1/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-22	11/1/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-22	11/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	11/1/2016	Xylenes, Total	54	15	3.7	620	ug/L
MKTF-22	11/1/2016	MTBE	**8000**	100	21	143	ug/L
MKTF-22	11/1/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-22	11/1/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	3/8/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	3/8/2017	Acetone	34	100	8.8	14064	ug/L
MKTF-22	3/8/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	3/8/2017	Benzene	**3500**	100	9.6	5	ug/L
MKTF-22	3/8/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	3/8/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	3/8/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	3/8/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	3/8/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	3/8/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	3/8/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	3/8/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	3/8/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	3/8/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	3/8/2017	1,1-Dichloroethane	1.7	10	1	25	ug/L
MKTF-22	3/8/2017	1,1-Dichloroethene	**8.6**	10	0.81	7	ug/L
MKTF-22	3/8/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	3/8/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-22	3/8/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	3/8/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	3/8/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	3/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	3/8/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	3/8/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	3/8/2017	1,2,4-Trimethylbenzene	12	10	1	56	ug/L
MKTF-22	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	3/8/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	3/8/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	3/8/2017	Isopropylbenzene	19	10	0.98	447	ug/L
MKTF-22	3/8/2017	p-Isopropyltoluene	3.2	10	1.4	NA	ug/L
MKTF-22	3/8/2017	Ethylbenzene	420	10	1.1	700	ug/L
MKTF-22	3/8/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	3/8/2017	n-Propylbenzene	50	10	1.3	660	ug/L
MKTF-22	3/8/2017	n-Butylbenzene	15	30	1.6	1000	ug/L
MKTF-22	3/8/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	3/8/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	3/8/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	3/8/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	3/8/2017	1,3,5-Trimethylbenzene	2.2	10	1.2	60	ug/L
MKTF-22	3/8/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	3/8/2017	Toluene	30	10	0.89	1000	ug/L
MKTF-22	3/8/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	3/8/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-22	3/8/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	3/8/2017	sec-Butylbenzene	7.6	10	1	2000	ug/L
MKTF-22	3/8/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	3/8/2017	cis-1,2-Dichloroethene	8.3	10	2	70	ug/L
MKTF-22	3/8/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	3/8/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	3/8/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	3/8/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-22	3/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	3/8/2017	Xylenes, Total	46	15	3.2	620	ug/L
MKTF-22	3/8/2017	MTBE	**6500**	100	15	143	ug/L
MKTF-22	3/8/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	3/8/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-22	6/8/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/8/2017	Acetone	21	100	8.2	14064	ug/L
MKTF-22	6/8/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	6/8/2017	Benzene	**2900**	100	6.2	5	ug/L
MKTF-22	6/8/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	6/8/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	6/8/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	6/8/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	6/8/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	6/8/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	6/8/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	6/8/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	6/8/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	6/8/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	6/8/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	6/8/2017	1,1-Dichloroethene	**9**	10	0.81	7	ug/L
MKTF-22	6/8/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	6/8/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	6/8/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	6/8/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	6/8/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	6/8/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	6/8/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	6/8/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	6/8/2017	1,2,4-Trimethylbenzene	4	10	1.1	56	ug/L
MKTF-22	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	6/8/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	6/8/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	6/8/2017	Isopropylbenzene	6.4	10	0.51	447	ug/L
MKTF-22	6/8/2017	p-Isopropyltoluene	1.7	10	0.96	NA	ug/L
MKTF-22	6/8/2017	Ethylbenzene	180	10	0.93	700	ug/L
MKTF-22	6/8/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	6/8/2017	n-Propylbenzene	13	10	0.74	660	ug/L
MKTF-22	6/8/2017	n-Butylbenzene	5.1	30	1.3	1000	ug/L
MKTF-22	6/8/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	6/8/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	6/8/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	6/8/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	6/8/2017	1,3,5-Trimethylbenzene	1.4	10	0.87	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/8/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	6/8/2017	Toluene	14	10	0.64	1000	ug/L
MKTF-22	6/8/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	6/8/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	6/8/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	6/8/2017	sec-Butylbenzene	2.7	10	1.1	2000	ug/L
MKTF-22	6/8/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	6/8/2017	cis-1,2-Dichloroethene	9.4	10	2	70	ug/L
MKTF-22	6/8/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	6/8/2017	Pentafluorobenzene	**100**	0	0		None
MKTF-22	6/8/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	6/8/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	6/8/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	6/8/2017	Xylenes, Total	22	15	3.2	620	ug/L
MKTF-22	6/8/2017	MTBE	**5900**	100	24	143	ug/L
MKTF-22	6/8/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	6/8/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	10/3/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	10/3/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	10/3/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	10/3/2017	Benzene	**2400**	100	6.2	5	ug/L
MKTF-22	10/3/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	10/3/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	10/3/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	10/3/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	10/3/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	10/3/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	10/3/2017	Methylene Chloride	*3.3*	*30*	1.1	5	ug/L
MKTF-22	10/3/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	10/3/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	10/3/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	10/3/2017	1,1-Dichloroethane	4.1	10	4	25	ug/L
MKTF-22	10/3/2017	1,1-Dichloroethene	*5.1*	*10*	0.81	7	ug/L
MKTF-22	10/3/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	10/3/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	10/3/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	10/3/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	10/3/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	10/3/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	10/3/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	10/3/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	10/3/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	10/3/2017	1,2,4-Trimethylbenzene	15	10	1.1	56	ug/L
MKTF-22	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	10/3/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	10/3/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	10/3/2017	Isopropylbenzene	15	10	0.51	447	ug/L
MKTF-22	10/3/2017	p-Isopropyltoluene	2.3	10	0.96	NA	ug/L
MKTF-22	10/3/2017	Ethylbenzene	280	10	0.93	700	ug/L
MKTF-22	10/3/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	10/3/2017	n-Propylbenzene	42	10	0.74	660	ug/L
MKTF-22	10/3/2017	n-Butylbenzene	13	30	1.3	1000	ug/L
MKTF-22	10/3/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	10/3/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	10/3/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	10/3/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	10/3/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-22	10/3/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	10/3/2017	Toluene	18	10	0.64	1000	ug/L
MKTF-22	10/3/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	10/3/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	10/3/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	10/3/2017	sec-Butylbenzene	6.6	10	1.1	2000	ug/L
MKTF-22	10/3/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	10/3/2017	cis-1,2-Dichloroethene	6.1	10	2	70	ug/L
MKTF-22	10/3/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	10/3/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	10/3/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	10/3/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	10/3/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	10/3/2017	Xylenes, Total	37	15	3.2	620	ug/L
MKTF-22	10/3/2017	MTBE	**4900**	100	24	143	ug/L
MKTF-22	10/3/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	10/3/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	11/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	Acetone	23	100	8.2	14064	ug/L
MKTF-22	11/28/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	11/28/2017	Benzene	**2500**	100	6.2	5	ug/L
MKTF-22	11/28/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	11/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	11/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	11/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	11/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	11/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	11/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	11/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	11/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	11/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	11/28/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	11/28/2017	1,1-Dichloroethene	*6.2*	*10*	0.81	7	ug/L
MKTF-22	11/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	11/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	11/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	11/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	11/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/28/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	11/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	11/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	11/28/2017	1,2,4-Trimethylbenzene	9.4	10	1.1	56	ug/L
MKTF-22	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	11/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	11/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	11/28/2017	Isopropylbenzene	10	10	0.51	447	ug/L
MKTF-22	11/28/2017	p-Isopropyltoluene	3.6	10	0.96	NA	ug/L
MKTF-22	11/28/2017	Ethylbenzene	180	10	0.93	700	ug/L
MKTF-22	11/28/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	11/28/2017	n-Propylbenzene	23	10	0.74	660	ug/L
MKTF-22	11/28/2017	n-Butylbenzene	11	30	1.3	1000	ug/L
MKTF-22	11/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	11/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	11/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	11/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	11/28/2017	1,3,5-Trimethylbenzene	1.7	10	0.87	60	ug/L
MKTF-22	11/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	11/28/2017	Toluene	13	10	0.64	1000	ug/L
MKTF-22	11/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	11/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	11/28/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	11/28/2017	sec-Butylbenzene	6.1	10	1.1	2000	ug/L
MKTF-22	11/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	11/28/2017	cis-1,2-Dichloroethene	8	10	2	70	ug/L
MKTF-22	11/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	11/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	11/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	11/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	11/28/2017	Xylenes, Total	25	15	3.2	620	ug/L
MKTF-22	11/28/2017	MTBE	**6000**	100	24	143	ug/L
MKTF-22	11/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	11/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	2/8/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	2/8/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	2/8/2018	Chloroform	ND	10	4	100	ug/L
MKTF-22	2/8/2018	Benzene	**2300**	100	6.2	5	ug/L
MKTF-22	2/8/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	2/8/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	2/8/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	2/8/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	2/8/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	2/8/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	2/8/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	2/8/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	2/8/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	2/8/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	2/8/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	2/8/2018	1,1-Dichloroethene	*6.8*	*10*	0.81	7	ug/L
MKTF-22	2/8/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	2/8/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	2/8/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	2/8/2018	2-Butanone	ND	100	11	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	2/8/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	2/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	2/8/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	2/8/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	2/8/2018	1,2,4-Trimethylbenzene	5.6	10	1.1	56	ug/L
MKTF-22	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	2/8/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	2/8/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	2/8/2018	Isopropylbenzene	7	10	0.51	447	ug/L
MKTF-22	2/8/2018	p-Isopropyltoluene	2.5	10	0.96	NA	ug/L
MKTF-22	2/8/2018	Ethylbenzene	140	10	0.93	700	ug/L
MKTF-22	2/8/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-22	2/8/2018	n-Propylbenzene	14	10	0.74	660	ug/L
MKTF-22	2/8/2018	n-Butylbenzene	8.1	30	1.3	1000	ug/L
MKTF-22	2/8/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	2/8/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	2/8/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	2/8/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	2/8/2018	1,3,5-Trimethylbenzene	1.1	10	0.87	60	ug/L
MKTF-22	2/8/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	2/8/2018	Toluene	9.3	10	0.64	1000	ug/L
MKTF-22	2/8/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	2/8/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	2/8/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	2/8/2018	sec-Butylbenzene	4	10	1.1	2000	ug/L
MKTF-22	2/8/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	2/8/2018	cis-1,2-Dichloroethene	7.8	10	2	70	ug/L
MKTF-22	2/8/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	2/8/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	2/8/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	2/8/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	2/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	2/8/2018	Xylenes, Total	18	15	3.2	620	ug/L
MKTF-22	2/8/2018	MTBE	**5700**	100	24	143	ug/L
MKTF-22	2/8/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	2/8/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	5/10/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	5/10/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	5/10/2018	Chloroform	ND	10	4	100	ug/L
MKTF-22	5/10/2018	Benzene	**2500**	100	6.2	5	ug/L
MKTF-22	5/10/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	5/10/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	5/10/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	5/10/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	5/10/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	5/10/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	5/10/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	5/10/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	5/10/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	5/10/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	5/10/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	5/10/2018	1,1-Dichloroethene	**8.2**	10	0.81	7	ug/L
MKTF-22	5/10/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	5/10/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	5/10/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	5/10/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	5/10/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	5/10/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	5/10/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	5/10/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	5/10/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	5/10/2018	1,2,4-Trimethylbenzene	4.7	10	1.1	56	ug/L
MKTF-22	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	5/10/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	5/10/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	5/10/2018	Isopropylbenzene	8.5	10	0.51	447	ug/L
MKTF-22	5/10/2018	p-Isopropyltoluene	2	10	0.96	NA	ug/L
MKTF-22	5/10/2018	Ethylbenzene	150	10	0.93	700	ug/L
MKTF-22	5/10/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-22	5/10/2018	n-Propylbenzene	18	10	0.74	660	ug/L
MKTF-22	5/10/2018	n-Butylbenzene	8.6	30	1.3	1000	ug/L
MKTF-22	5/10/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	5/10/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	5/10/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	5/10/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/10/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-22	5/10/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	5/10/2018	Toluene	8.8	10	0.64	1000	ug/L
MKTF-22	5/10/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	5/10/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	5/10/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	5/10/2018	sec-Butylbenzene	4.8	10	1.1	2000	ug/L
MKTF-22	5/10/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	5/10/2018	cis-1,2-Dichloroethene	9.4	10	2	70	ug/L
MKTF-22	5/10/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	5/10/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	5/10/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	5/10/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	5/10/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	5/10/2018	Xylenes, Total	14	15	3.2	620	ug/L
MKTF-22	5/10/2018	MTBE	**5900**	100	24	143	ug/L
MKTF-22	5/10/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	5/10/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	8/30/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-22	8/30/2018	Acetone	ND	200	16	14064	ug/L
MKTF-22	8/30/2018	Chloroform	ND	20	8	100	ug/L
MKTF-22	8/30/2018	Benzene	**2200**	200	35	5	ug/L
MKTF-22	8/30/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-22	8/30/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-22	8/30/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-22	8/30/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-22	8/30/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-22	8/30/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-22	8/30/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-22	8/30/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-22	8/30/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-22	8/30/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-22	8/30/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	8/30/2018	1,1-Dichloroethene	**8.1**	20	2.4	7	ug/L
MKTF-22	8/30/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-22	8/30/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-22	8/30/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-22	8/30/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-22	8/30/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-22	8/30/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-22	8/30/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-22	8/30/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-22	8/30/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	8/30/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-22	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-22	8/30/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-22	8/30/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-22	8/30/2018	Isopropylbenzene	5.8	20	4.4	447	ug/L
MKTF-22	8/30/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-22	8/30/2018	Ethylbenzene	120	20	4.5	700	ug/L
MKTF-22	8/30/2018	Styrene	ND	20	5	100	ug/L
MKTF-22	8/30/2018	n-Propylbenzene	13	20	4.9	660	ug/L
MKTF-22	8/30/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-22	8/30/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-22	8/30/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-22	8/30/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-22	8/30/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-22	8/30/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-22	8/30/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-22	8/30/2018	Toluene	5.6	20	3.4	1000	ug/L
MKTF-22	8/30/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-22	8/30/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-22	8/30/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	8/30/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-22	8/30/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-22	8/30/2018	cis-1,2-Dichloroethene	8	20	7.5	70	ug/L
MKTF-22	8/30/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-22	8/30/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-22	8/30/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-22	8/30/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-22	8/30/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-22	8/30/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-22	8/30/2018	MTBE	**5400**	200	64	143	ug/L
MKTF-22	8/30/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-22	8/30/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-22	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-22	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-22	11/28/2018	Benzene	**3000**	200	35	5	ug/L
MKTF-22	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-22	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-22	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-22	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-22	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-22	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-22	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-22	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-22	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-22	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-22	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-22	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-22	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-22	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-22	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-22	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-22	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-22	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-22	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-22	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-22	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-22	11/28/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-22	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-22	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-22	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-22	11/28/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-22	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-22	11/28/2018	Ethylbenzene	170	20	4.5	700	ug/L
MKTF-22	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-22	11/28/2018	n-Propylbenzene	ND	20	4.9	660	ug/L
MKTF-22	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-22	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-22	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-22	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-22	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-22	11/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-22	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-22	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-22	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-22	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-22	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-22	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-22	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-22	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-22	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-22	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-22	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-22	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-22	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-22	11/28/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-22	11/28/2018	MTBE	**6000**	200	91	143	ug/L
MKTF-22	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-22	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-22	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	5/9/2019	1,1-Dichloroethane	11	20	2.817172	25	ug/L
MKTF-22	5/9/2019	1,1-Dichloroethene	**15**	20	4.107764	7	ug/L
MKTF-22	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-22	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	5/9/2019	1,2,4-Trimethylbenzene	6.3	20	4.263982	56	ug/L
MKTF-22	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-22	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	5/9/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	5/9/2019	1-Methylnaphthalene	70	80	6.29909	NA	ug/L
MKTF-22	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	5/9/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	5/9/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-22	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-22	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	5/9/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-22	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-22	5/9/2019	cis-1,2-Dichloroethene	12	20	3.802301	70	ug/L
MKTF-22	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	5/9/2019	Ethylbenzene	330	20	2.646816	700	ug/L
MKTF-22	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	5/9/2019	Isopropylbenzene	15	20	3.830445	447	ug/L
MKTF-22	5/9/2019	MTBE	**3300**	20	9.1219	143	ug/L
MKTF-22	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	5/9/2019	Naphthalene	*15*	*40*	5.501427	30	ug/L
MKTF-22	5/9/2019	n-Butylbenzene	9.3	60	4.551391	1000	ug/L
MKTF-22	5/9/2019	n-Propylbenzene	35	20	4.28616	660	ug/L
MKTF-22	5/9/2019	sec-Butylbenzene	6	20	4.954626	2000	ug/L
MKTF-22	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	5/9/2019	Toluene	9.1	20	7.008724	1000	ug/L
MKTF-22	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	5/9/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-22	5/9/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-22	8/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	8/20/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	8/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	8/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	8/20/2019	1,1-Dichloroethane	13	20	2.817172	25	ug/L
MKTF-22	8/20/2019	1,1-Dichloroethene	**17**	20	4.107764	7	ug/L
MKTF-22	8/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	8/20/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	8/20/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-22	8/20/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	8/20/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-22	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-22	8/20/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	8/20/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	8/20/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	8/20/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	8/20/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	8/20/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	8/20/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-22	8/20/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	8/20/2019	1-Methylnaphthalene	34	80	6.29909	NA	ug/L
MKTF-22	8/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	8/20/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	8/20/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	8/20/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	8/20/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	8/20/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	8/20/2019	p-Isopropyltoluene	6.2	20	4.345787	NA	ug/L
MKTF-22	8/20/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	8/20/2019	Benzene	**3200**	200	33.327811	5	ug/L
MKTF-22	8/20/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	8/20/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	8/20/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	8/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	8/20/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	8/20/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	8/20/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	8/20/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	8/20/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	8/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-22	8/20/2019	cis-1,2-Dichloroethene	8.9	20	3.802301	70	ug/L
MKTF-22	8/20/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	8/20/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	8/20/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	8/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	8/20/2019	Ethylbenzene	260	20	2.646816	700	ug/L
MKTF-22	8/20/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	8/20/2019	Isopropylbenzene	16	20	3.830445	447	ug/L
MKTF-22	8/20/2019	MTBE	**2700**	20	9.1219	143	ug/L
MKTF-22	8/20/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	8/20/2019	Naphthalene	*13*	*40*	5.501427	30	ug/L
MKTF-22	8/20/2019	n-Butylbenzene	23	60	4.551391	1000	ug/L
MKTF-22	8/20/2019	n-Propylbenzene	29	20	4.28616	660	ug/L
MKTF-22	8/20/2019	sec-Butylbenzene	7.8	20	4.954626	2000	ug/L
MKTF-22	8/20/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	8/20/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	8/20/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	8/20/2019	Toluene	8.7	20	7.008724	1000	ug/L
MKTF-22	8/20/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	8/20/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	8/20/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	8/20/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	8/20/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	8/20/2019	Xylenes, Total	14	30	9.088299	620	ug/L
MKTF-22	8/20/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-22	10/24/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	10/24/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	10/24/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	10/24/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	10/24/2019	1,1-Dichloroethane	13	20	2.817172	25	ug/L
MKTF-22	10/24/2019	1,1-Dichloroethene	**13**	20	4.107764	7	ug/L
MKTF-22	10/24/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	10/24/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	10/24/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	10/24/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-22	10/24/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	10/24/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	10/24/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	10/24/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	10/24/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	10/24/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	10/24/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-22	10/24/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	35	80	6.29909	NA	ug/L
MKTF-22	10/24/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	10/24/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	10/24/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	10/24/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	10/24/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	10/24/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-22	10/24/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-22	10/24/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	10/24/2019	Benzene	**3400**	200	33.327811	5	ug/L
MKTF-22	10/24/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	10/24/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	10/24/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	10/24/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	10/24/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	10/24/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	10/24/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	10/24/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	10/24/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	10/24/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-22	10/24/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	10/24/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	10/24/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	10/24/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	10/24/2019	Ethylbenzene	270	20	2.646816	700	ug/L
MKTF-22	10/24/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	10/24/2019	Isopropylbenzene	13	20	3.830445	447	ug/L
MKTF-22	10/24/2019	MTBE	**2600**	20	9.1219	143	ug/L
MKTF-22	10/24/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	10/24/2019	Naphthalene	*7.7*	*40*	5.501427	30	ug/L
MKTF-22	10/24/2019	n-Butylbenzene	5	60	4.551391	1000	ug/L
MKTF-22	10/24/2019	n-Propylbenzene	27	20	4.28616	660	ug/L
MKTF-22	10/24/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-22	10/24/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	10/24/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	10/24/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	10/24/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-22	10/24/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	10/24/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	10/24/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	10/24/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	10/24/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	10/24/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-22	10/24/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-23	9/23/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-23	9/23/2014	Acetone	ND	100	49	14064	ug/L
MKTF-23	9/23/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-23	9/23/2014	Benzene	**2700**	100	15	5	ug/L
MKTF-23	9/23/2014	1,1,1-Trichloroethane	24	10	1.2	200	ug/L
MKTF-23	9/23/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-23	9/23/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-23	9/23/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-23	9/23/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-23	9/23/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-23	9/23/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-23	9/23/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-23	9/23/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-23	9/23/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-23	9/23/2014	1,1-Dichloroethane	**92**	10	2.8	25	ug/L
MKTF-23	9/23/2014	1,1-Dichloroethene	**47**	10	2.1	7	ug/L
MKTF-23	9/23/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	9/23/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-23	9/23/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-23	9/23/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-23	9/23/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-23	9/23/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-23	9/23/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-23	9/23/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-23	9/23/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-23	9/23/2014	1,2,4-Trimethylbenzene	**540**	10	1.2	56	ug/L
MKTF-23	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-23	9/23/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-23	9/23/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-23	9/23/2014	Isopropylbenzene	26	10	1.6	447	ug/L
MKTF-23	9/23/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-23	9/23/2014	Ethylbenzene	340	10	1.3	700	ug/L
MKTF-23	9/23/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-23	9/23/2014	n-Propylbenzene	58	10	1.4	660	ug/L
MKTF-23	9/23/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-23	9/23/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-23	9/23/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-23	9/23/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-23	9/23/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-23	9/23/2014	1,3,5-Trimethylbenzene	**150**	10	1.3	60	ug/L
MKTF-23	9/23/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-23	9/23/2014	Toluene	**1400**	100	17	1000	ug/L
MKTF-23	9/23/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-23	9/23/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-23	9/23/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-23	9/23/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-23	9/23/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-23	9/23/2014	cis-1,2-Dichloroethene	29	10	1.2	70	ug/L
MKTF-23	9/23/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-23	9/23/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-23	9/23/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	9/23/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-23	9/23/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-23	9/23/2014	Xylenes, Total	**1600**	15	3.8	620	ug/L
MKTF-23	9/23/2014	MTBE	**480**	10	2.5	143	ug/L
MKTF-23	9/23/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-23	9/23/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-23	11/17/2014	Acetone	ND	100	49	14064	ug/L
MKTF-23	11/17/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-23	11/17/2014	Benzene	**3600**	100	15	5	ug/L
MKTF-23	11/17/2014	1,1,1-Trichloroethane	24	10	1.2	200	ug/L
MKTF-23	11/17/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-23	11/17/2014	Chloromethane	**55**	30	5.2	20.32	ug/L
MKTF-23	11/17/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-23	11/17/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-23	11/17/2014	Vinyl Chloride	**22**	10	1.1	2	ug/L
MKTF-23	11/17/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-23	11/17/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-23	11/17/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-23	11/17/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-23	11/17/2014	1,1-Dichloroethane	**150**	10	2.8	25	ug/L
MKTF-23	11/17/2014	1,1-Dichloroethene	**64**	10	2.1	7	ug/L
MKTF-23	11/17/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	11/17/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-23	11/17/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-23	11/17/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-23	11/17/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-23	11/17/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-23	11/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-23	11/17/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-23	11/17/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-23	11/17/2014	1,2,4-Trimethylbenzene	**890**	10	1.2	56	ug/L
MKTF-23	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-23	11/17/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-23	11/17/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-23	11/17/2014	Isopropylbenzene	34	10	1.6	447	ug/L
MKTF-23	11/17/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Ethylbenzene	470	10	1.3	700	ug/L
MKTF-23	11/17/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-23	11/17/2014	n-Propylbenzene	66	10	1.4	660	ug/L
MKTF-23	11/17/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-23	11/17/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-23	11/17/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-23	11/17/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-23	11/17/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-23	11/17/2014	1,3,5-Trimethylbenzene	**220**	10	1.3	60	ug/L
MKTF-23	11/17/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-23	11/17/2014	Toluene	**3000**	100	17	1000	ug/L
MKTF-23	11/17/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-23	11/17/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-23	11/17/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-23	11/17/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-23	11/17/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-23	11/17/2014	cis-1,2-Dichloroethene	43	10	1.2	70	ug/L
MKTF-23	11/17/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-23	11/17/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-23	11/17/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-23	11/17/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-23	11/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-23	11/17/2014	Xylenes, Total	**4500**	150	38	620	ug/L
MKTF-23	11/17/2014	MTBE	**570**	100	25	143	ug/L
MKTF-23	11/17/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-23	11/17/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-23	3/12/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-23	3/12/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-23	3/12/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-23	3/12/2015	Benzene	**3300**	100	6.5	5	ug/L
MKTF-23	3/12/2015	1,1,1-Trichloroethane	49	10	0.78	200	ug/L
MKTF-23	3/12/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-23	3/12/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-23	3/12/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-23	3/12/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-23	3/12/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-23	3/12/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-23	3/12/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-23	3/12/2015	Bromoform	ND	10	1.6	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	3/12/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-23	3/12/2015	1,1-Dichloroethane	**120**	10	4	25	ug/L
MKTF-23	3/12/2015	1,1-Dichloroethene	**53**	10	0.99	7	ug/L
MKTF-23	3/12/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	3/12/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-23	3/12/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-23	3/12/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-23	3/12/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-23	3/12/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-23	3/12/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	3/12/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-23	3/12/2015	1,2,4-Trimethylbenzene	**1400**	100	16	56	ug/L
MKTF-23	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-23	3/12/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-23	3/12/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-23	3/12/2015	Isopropylbenzene	44	10	1.5	447	ug/L
MKTF-23	3/12/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-23	3/12/2015	Ethylbenzene	600	10	1	700	ug/L
MKTF-23	3/12/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-23	3/12/2015	n-Propylbenzene	93	10	1.6	660	ug/L
MKTF-23	3/12/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-23	3/12/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-23	3/12/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-23	3/12/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-23	3/12/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-23	3/12/2015	1,3,5-Trimethylbenzene	**380**	10	1.2	60	ug/L
MKTF-23	3/12/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-23	3/12/2015	Toluene	**4800**	100	11	1000	ug/L
MKTF-23	3/12/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-23	3/12/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-23	3/12/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	3/12/2015	sec-Butylbenzene	10	10	2.3	2000	ug/L
MKTF-23	3/12/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-23	3/12/2015	cis-1,2-Dichloroethene	55	10	0.81	70	ug/L
MKTF-23	3/12/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-23	3/12/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-23	3/12/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-23	3/12/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-23	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	3/12/2015	Xylenes, Total	**8100**	150	28	620	ug/L
MKTF-23	3/12/2015	MTBE	**1100**	10	1.7	143	ug/L
MKTF-23	3/12/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	3/12/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	6/9/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-23	6/9/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-23	6/9/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-23	6/9/2015	Benzene	**2900**	100	6.5	5	ug/L
MKTF-23	6/9/2015	1,1,1-Trichloroethane	34	10	0.78	200	ug/L
MKTF-23	6/9/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-23	6/9/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-23	6/9/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-23	6/9/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-23	6/9/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-23	6/9/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-23	6/9/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-23	6/9/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-23	6/9/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-23	6/9/2015	1,1-Dichloroethane	**130**	10	4	25	ug/L
MKTF-23	6/9/2015	1,1-Dichloroethene	**62**	10	0.99	7	ug/L
MKTF-23	6/9/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	6/9/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-23	6/9/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-23	6/9/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-23	6/9/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-23	6/9/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	6/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-23	6/9/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	6/9/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-23	6/9/2015	1,2,4-Trimethylbenzene	**1100**	100	16	56	ug/L
MKTF-23	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-23	6/9/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-23	6/9/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-23	6/9/2015	Isopropylbenzene	41	10	1.5	447	ug/L
MKTF-23	6/9/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Ethylbenzene	510	10	1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-23	6/9/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-23	6/9/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-23	6/9/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-23	6/9/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-23	6/9/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-23	6/9/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-23	6/9/2015	1,3,5-Trimethylbenzene	**280**	10	1.2	60	ug/L
MKTF-23	6/9/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-23	6/9/2015	Toluene	**3000**	100	11	1000	ug/L
MKTF-23	6/9/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-23	6/9/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-23	6/9/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	6/9/2015	sec-Butylbenzene	10	10	2.3	2000	ug/L
MKTF-23	6/9/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-23	6/9/2015	cis-1,2-Dichloroethene	42	10	0.81	70	ug/L
MKTF-23	6/9/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-23	6/9/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-23	6/9/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-23	6/9/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-23	6/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	6/9/2015	Xylenes, Total	**6500**	150	28	620	ug/L
MKTF-23	6/9/2015	MTBE	**1100**	10	1.7	143	ug/L
MKTF-23	6/9/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	6/9/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	8/21/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-23	8/21/2015	Acetone	ND	200	19	14064	ug/L
MKTF-23	8/21/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-23	8/21/2015	Benzene	**3000**	200	13	5	ug/L
MKTF-23	8/21/2015	1,1,1-Trichloroethane	31	20	1.6	200	ug/L
MKTF-23	8/21/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-23	8/21/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-23	8/21/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-23	8/21/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-23	8/21/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-23	8/21/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-23	8/21/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-23	8/21/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-23	8/21/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-23	8/21/2015	1,1-Dichloroethane	**130**	20	8	25	ug/L
MKTF-23	8/21/2015	1,1-Dichloroethene	**54**	20	2	7	ug/L
MKTF-23	8/21/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-23	8/21/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-23	8/21/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-23	8/21/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-23	8/21/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-23	8/21/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-23	8/21/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-23	8/21/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-23	8/21/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-23	8/21/2015	1,2,4-Trimethylbenzene	**920**	20	3.2	56	ug/L
MKTF-23	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-23	8/21/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-23	8/21/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-23	8/21/2015	Isopropylbenzene	29	20	3	447	ug/L
MKTF-23	8/21/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-23	8/21/2015	Ethylbenzene	420	20	2	700	ug/L
MKTF-23	8/21/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-23	8/21/2015	n-Propylbenzene	54	20	3.3	660	ug/L
MKTF-23	8/21/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-23	8/21/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-23	8/21/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-23	8/21/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-23	8/21/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-23	8/21/2015	1,3,5-Trimethylbenzene	**240**	20	2.5	60	ug/L
MKTF-23	8/21/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-23	8/21/2015	Toluene	**2700**	200	22	1000	ug/L
MKTF-23	8/21/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-23	8/21/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-23	8/21/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-23	8/21/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-23	8/21/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-23	8/21/2015	cis-1,2-Dichloroethene	45	20	1.6	70	ug/L
MKTF-23	8/21/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-23	8/21/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	8/21/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	8/21/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-23	8/21/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	8/21/2015	Xylenes, Total	**6200**	300	56	620	ug/L
MKTF-23	8/21/2015	MTBE	**1200**	20	3.5	143	ug/L
MKTF-23	8/21/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	8/21/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	11/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-23	11/9/2015	Acetone	ND	200	19	14064	ug/L
MKTF-23	11/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-23	11/9/2015	Benzene	**2600**	200	13	5	ug/L
MKTF-23	11/9/2015	1,1,1-Trichloroethane	27	20	1.6	200	ug/L
MKTF-23	11/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-23	11/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-23	11/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-23	11/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-23	11/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-23	11/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-23	11/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-23	11/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-23	11/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-23	11/9/2015	1,1-Dichloroethane	**110**	20	8	25	ug/L
MKTF-23	11/9/2015	1,1-Dichloroethene	**49**	20	2	7	ug/L
MKTF-23	11/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-23	11/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-23	11/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-23	11/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-23	11/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-23	11/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-23	11/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-23	11/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-23	11/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-23	11/9/2015	1,2,4-Trimethylbenzene	**1400**	20	3.2	56	ug/L
MKTF-23	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-23	11/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-23	11/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-23	11/9/2015	Isopropylbenzene	48	20	3	447	ug/L
MKTF-23	11/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-23	11/9/2015	Ethylbenzene	570	20	2	700	ug/L
MKTF-23	11/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-23	11/9/2015	n-Propylbenzene	92	20	3.3	660	ug/L
MKTF-23	11/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-23	11/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-23	11/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-23	11/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-23	11/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-23	11/9/2015	1,3,5-Trimethylbenzene	**380**	20	2.5	60	ug/L
MKTF-23	11/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-23	11/9/2015	Toluene	**3000**	200	22	1000	ug/L
MKTF-23	11/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-23	11/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-23	11/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-23	11/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-23	11/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-23	11/9/2015	cis-1,2-Dichloroethene	49	20	1.6	70	ug/L
MKTF-23	11/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-23	11/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	11/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-23	11/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-23	11/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	11/9/2015	Xylenes, Total	**7800**	300	56	620	ug/L
MKTF-23	11/9/2015	MTBE	**1400**	20	3.5	143	ug/L
MKTF-23	11/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	11/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-23	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-23	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-23	2/25/2016	Benzene	**3100**	200	19	5	ug/L
MKTF-23	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-23	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-23	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-23	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-23	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-23	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-23	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-23	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-23	2/25/2016	Bromoform	ND	20	2	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-23	2/25/2016	1,1-Dichloroethane	**110**	20	2.2	25	ug/L
MKTF-23	2/25/2016	1,1-Dichloroethene	**58**	20	1.5	7	ug/L
MKTF-23	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-23	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-23	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-23	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-23	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-23	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-23	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-23	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-23	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-23	2/25/2016	1,2,4-Trimethylbenzene	**1300**	20	2.1	56	ug/L
MKTF-23	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-23	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-23	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-23	2/25/2016	Isopropylbenzene	29	20	2	447	ug/L
MKTF-23	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-23	2/25/2016	Ethylbenzene	310	20	2.2	700	ug/L
MKTF-23	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-23	2/25/2016	n-Propylbenzene	48	20	2.6	660	ug/L
MKTF-23	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-23	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-23	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-23	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-23	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-23	2/25/2016	1,3,5-Trimethylbenzene	**350**	20	2.3	60	ug/L
MKTF-23	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-23	2/25/2016	Toluene	**1200**	20	1.8	1000	ug/L
MKTF-23	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-23	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-23	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-23	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-23	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-23	2/25/2016	cis-1,2-Dichloroethene	36	20	2.5	70	ug/L
MKTF-23	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-23	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-23	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-23	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	2/25/2016	Xylenes, Total	**6700**	300	65	620	ug/L
MKTF-23	2/25/2016	MTBE	**1600**	20	4.2	143	ug/L
MKTF-23	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-23	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-23	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-23	6/10/2016	Acetone	ND	100	49	14064	ug/L
MKTF-23	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-23	6/10/2016	Benzene	**3200**	50	4.8	5	ug/L
MKTF-23	6/10/2016	1,1,1-Trichloroethane	16	10	0.91	200	ug/L
MKTF-23	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-23	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-23	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-23	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-23	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-23	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-23	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-23	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-23	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-23	6/10/2016	1,1-Dichloroethane	**96**	10	1.1	25	ug/L
MKTF-23	6/10/2016	1,1-Dichloroethene	**56**	10	1.1	7	ug/L
MKTF-23	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-23	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-23	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-23	6/10/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-23	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-23	6/10/2016	Trichloroethene	*4.3*	*10*	1.8	5	ug/L
MKTF-23	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-23	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-23	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-23	6/10/2016	1,2,4-Trimethylbenzene	**1500**	50	5.5	56	ug/L
MKTF-23	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-23	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-23	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-23	6/10/2016	Isopropylbenzene	33	10	1	447	ug/L
MKTF-23	6/10/2016	p-Isopropyltoluene	20	10	1.4	NA	ug/L
MKTF-23	6/10/2016	Ethylbenzene	300	10	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-23	6/10/2016	n-Propylbenzene	65	10	1.3	660	ug/L
MKTF-23	6/10/2016	n-Butylbenzene	74	30	1.6	1000	ug/L
MKTF-23	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-23	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-23	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-23	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-23	6/10/2016	1,3,5-Trimethylbenzene	**520**	10	1.2	60	ug/L
MKTF-23	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-23	6/10/2016	Toluene	980	10	1.2	1000	ug/L
MKTF-23	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-23	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-23	6/10/2016	Tetrachloroethene	*1.5*	*10*	1.5	5	ug/L
MKTF-23	6/10/2016	sec-Butylbenzene	22	10	1.2	2000	ug/L
MKTF-23	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-23	6/10/2016	cis-1,2-Dichloroethene	34	10	1.2	70	ug/L
MKTF-23	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-23	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-23	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-23	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	6/10/2016	Xylenes, Total	**6100**	75	18	620	ug/L
MKTF-23	6/10/2016	MTBE	**1400**	10	2.1	143	ug/L
MKTF-23	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-23	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-23	10/29/2019	1,1,1-Trichloroethane	18	100	17.292157	200	ug/L
MKTF-23	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-23	10/29/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-23	10/29/2019	1,1-Dichloroethane	**61**	100	14.08586	25	ug/L
MKTF-23	10/29/2019	1,1-Dichloroethene	**42**	100	20.538818	7	ug/L
MKTF-23	10/29/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-23	10/29/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-23	10/29/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-23	10/29/2019	1,2,4-Trimethylbenzene	**910**	100	21.319909	56	ug/L
MKTF-23	10/29/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-23	10/29/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-23	10/29/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-23	10/29/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-23	10/29/2019	1,3,5-Trimethylbenzene	**260**	100	18.865985	60	ug/L
MKTF-23	10/29/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-23	10/29/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-23	10/29/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-23	10/29/2019	1-Methylnaphthalene	99	400	31.495448	NA	ug/L
MKTF-23	10/29/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-23	10/29/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-23	10/29/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-23	10/29/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-23	10/29/2019	2-Methylnaphthalene	**120**	400	34.537601		ug/L
MKTF-23	10/29/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-23	10/29/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-23	10/29/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-23	10/29/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-23	10/29/2019	Benzene	**4800**	100	16.663906	5	ug/L
MKTF-23	10/29/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-23	10/29/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-23	10/29/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-23	10/29/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-23	10/29/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-23	10/29/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-23	10/29/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-23	10/29/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-23	10/29/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-23	10/29/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-23	10/29/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-23	10/29/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-23	10/29/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-23	10/29/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-23	10/29/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-23	10/29/2019	Ethylbenzene	**1200**	100	13.23408	700	ug/L
MKTF-23	10/29/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-23	10/29/2019	Isopropylbenzene	34	100	19.152227	447	ug/L
MKTF-23	10/29/2019	MTBE	**330**	100	45.609498	143	ug/L
MKTF-23	10/29/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-23	10/29/2019	Naphthalene	**260**	200	27.507134	30	ug/L
MKTF-23	10/29/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	10/29/2019	n-Propylbenzene	100	100	21.4308	660	ug/L
MKTF-23	10/29/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-23	10/29/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-23	10/29/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-23	10/29/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-23	10/29/2019	Toluene	**8300**	100	35.043621	1000	ug/L
MKTF-23	10/29/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-23	10/29/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-23	10/29/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-23	10/29/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-23	10/29/2019	Vinyl Chloride	**53**	100	17.909928	2	ug/L
MKTF-23	10/29/2019	Xylenes, Total	**7100**	150	45.441493	620	ug/L
MKTF-23	10/29/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-24	4/8/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-24	4/8/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-24	4/8/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-24	4/8/2014	Benzene	**450**	10	1.5	5	ug/L
MKTF-24	4/8/2014	1,1,1-Trichloroethane	21	1	0.12	200	ug/L
MKTF-24	4/8/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-24	4/8/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-24	4/8/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-24	4/8/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-24	4/8/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-24	4/8/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-24	4/8/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-24	4/8/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-24	4/8/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-24	4/8/2014	1,1-Dichloroethane	**200**	10	2.8	25	ug/L
MKTF-24	4/8/2014	1,1-Dichloroethene	**88**	1	0.21	7	ug/L
MKTF-24	4/8/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-24	4/8/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-24	4/8/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-24	4/8/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-24	4/8/2014	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-24	4/8/2014	Trichloroethene	**5.2**	1	0.19	5	ug/L
MKTF-24	4/8/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-24	4/8/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-24	4/8/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-24	4/8/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-24	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-24	4/8/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-24	4/8/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-24	4/8/2014	Isopropylbenzene	20	1	0.16	447	ug/L
MKTF-24	4/8/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-24	4/8/2014	Ethylbenzene	65	1	0.13	700	ug/L
MKTF-24	4/8/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-24	4/8/2014	n-Propylbenzene	38	1	0.14	660	ug/L
MKTF-24	4/8/2014	n-Butylbenzene	9.1	3	0.21	1000	ug/L
MKTF-24	4/8/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-24	4/8/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-24	4/8/2014	1,2-Dichloroethane	**14**	1	0.26	5	ug/L
MKTF-24	4/8/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-24	4/8/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-24	4/8/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-24	4/8/2014	Toluene	6.7	1	0.17	1000	ug/L
MKTF-24	4/8/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-24	4/8/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-24	4/8/2014	Tetrachloroethene	1.9	1	0.2	5	ug/L
MKTF-24	4/8/2014	sec-Butylbenzene	5	1	0.15	2000	ug/L
MKTF-24	4/8/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-24	4/8/2014	cis-1,2-Dichloroethene	57	1	0.12	70	ug/L
MKTF-24	4/8/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-24	4/8/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-24	4/8/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-24	4/8/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-24	4/8/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-24	4/8/2014	Xylenes, Total	2.3	1.5	0.38	620	ug/L
MKTF-24	4/8/2014	MTBE	**180**	1	0.25	143	ug/L
MKTF-24	4/8/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-24	4/8/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-24	9/24/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-24	9/24/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-24	9/24/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-24	9/24/2014	Benzene	**1600**	20	3.1	5	ug/L
MKTF-24	9/24/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-24	9/24/2014	Bromomethane	ND	6	0.83	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/24/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-24	9/24/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-24	9/24/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-24	9/24/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-24	9/24/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-24	9/24/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-24	9/24/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-24	9/24/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-24	9/24/2014	1,1-Dichloroethane	**140**	2	0.57	25	ug/L
MKTF-24	9/24/2014	1,1-Dichloroethene	**67**	2	0.43	7	ug/L
MKTF-24	9/24/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-24	9/24/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-24	9/24/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-24	9/24/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-24	9/24/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-24	9/24/2014	Trichloroethene	5	2	0.39	5	ug/L
MKTF-24	9/24/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-24	9/24/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-24	9/24/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-24	9/24/2014	1,2,4-Trimethylbenzene	2.3	2	0.25	56	ug/L
MKTF-24	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-24	9/24/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-24	9/24/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-24	9/24/2014	Isopropylbenzene	24	2	0.32	447	ug/L
MKTF-24	9/24/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-24	9/24/2014	Ethylbenzene	58	2	0.25	700	ug/L
MKTF-24	9/24/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-24	9/24/2014	n-Propylbenzene	39	2	0.28	660	ug/L
MKTF-24	9/24/2014	n-Butylbenzene	8.7	6	0.43	1000	ug/L
MKTF-24	9/24/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-24	9/24/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-24	9/24/2014	1,2-Dichloroethane	**9.8**	2	0.53	5	ug/L
MKTF-24	9/24/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-24	9/24/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-24	9/24/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-24	9/24/2014	Toluene	8.7	2	0.34	1000	ug/L
MKTF-24	9/24/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-24	9/24/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-24	9/24/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-24	9/24/2014	sec-Butylbenzene	6.5	2	0.31	2000	ug/L
MKTF-24	9/24/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-24	9/24/2014	cis-1,2-Dichloroethene	44	2	0.24	70	ug/L
MKTF-24	9/24/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-24	9/24/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-24	9/24/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-24	9/24/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-24	9/24/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-24	9/24/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-24	9/24/2014	MTBE	**170**	2	0.5	143	ug/L
MKTF-24	9/24/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-24	9/24/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-24	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-24	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-24	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-24	11/14/2014	Benzene	**1600**	50	7.7	5	ug/L
MKTF-24	11/14/2014	1,1,1-Trichloroethane	4.6	1	0.12	200	ug/L
MKTF-24	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-24	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-24	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-24	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-24	11/14/2014	Vinyl Chloride	**14**	1	0.46	2	ug/L
MKTF-24	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-24	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-24	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-24	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-24	11/14/2014	1,1-Dichloroethane	**150**	10	2.8	25	ug/L
MKTF-24	11/14/2014	1,1-Dichloroethene	**58**	1	0.21	7	ug/L
MKTF-24	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-24	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-24	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-24	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-24	11/14/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-24	11/14/2014	Trichloroethene	4.9	1	0.19	5	ug/L
MKTF-24	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-24	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-24	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/14/2014	1,2,4-Trimethylbenzene	2.7	1	0.12	56	ug/L
MKTF-24	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-24	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-24	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-24	11/14/2014	Isopropylbenzene	18	1	0.16	447	ug/L
MKTF-24	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-24	11/14/2014	Ethylbenzene	49	1	0.13	700	ug/L
MKTF-24	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-24	11/14/2014	n-Propylbenzene	28	1	0.14	660	ug/L
MKTF-24	11/14/2014	n-Butylbenzene	5.8	3	0.21	1000	ug/L
MKTF-24	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-24	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-24	11/14/2014	1,2-Dichloroethane	**9.6**	1	0.26	5	ug/L
MKTF-24	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-24	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-24	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-24	11/14/2014	Toluene	9.5	1	0.17	1000	ug/L
MKTF-24	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-24	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-24	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-24	11/14/2014	sec-Butylbenzene	4	1	0.15	2000	ug/L
MKTF-24	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-24	11/14/2014	cis-1,2-Dichloroethene	39	1	0.12	70	ug/L
MKTF-24	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-24	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-24	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-24	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-24	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-24	11/14/2014	Xylenes, Total	2.9	1.5	0.38	620	ug/L
MKTF-24	11/14/2014	MTBE	63	1	0.25	143	ug/L
MKTF-24	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-24	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-24	3/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-24	3/11/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-24	3/11/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-24	3/11/2015	Benzene	**2600**	500	33	5	ug/L
MKTF-24	3/11/2015	1,1,1-Trichloroethane	10	5	0.39	200	ug/L
MKTF-24	3/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-24	3/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-24	3/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-24	3/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-24	3/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-24	3/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-24	3/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-24	3/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-24	3/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-24	3/11/2015	1,1-Dichloroethane	**100**	5	2	25	ug/L
MKTF-24	3/11/2015	1,1-Dichloroethene	**51**	5	0.5	7	ug/L
MKTF-24	3/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-24	3/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-24	3/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-24	3/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-24	3/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-24	3/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-24	3/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-24	3/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-24	3/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-24	3/11/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
MKTF-24	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-24	3/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-24	3/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-24	3/11/2015	Isopropylbenzene	16	5	0.76	447	ug/L
MKTF-24	3/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-24	3/11/2015	Ethylbenzene	31	5	0.51	700	ug/L
MKTF-24	3/11/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-24	3/11/2015	n-Propylbenzene	24	5	0.82	660	ug/L
MKTF-24	3/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-24	3/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-24	3/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-24	3/11/2015	1,2-Dichloroethane	**7**	5	0.88	5	ug/L
MKTF-24	3/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-24	3/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-24	3/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-24	3/11/2015	Toluene	12	5	0.54	1000	ug/L
MKTF-24	3/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-24	3/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-24	3/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-24	3/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-24	3/11/2015	cis-1,2-Dichloroethene	35	5	0.4	70	ug/L
MKTF-24	3/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-24	3/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-24	3/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-24	3/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-24	3/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-24	3/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-24	3/11/2015	MTBE	**170**	5	0.87	143	ug/L
MKTF-24	3/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	3/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-24	6/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-24	6/10/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-24	6/10/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-24	6/10/2015	Benzene	**2900**	50	3.3	5	ug/L
MKTF-24	6/10/2015	1,1,1-Trichloroethane	11	5	0.39	200	ug/L
MKTF-24	6/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-24	6/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-24	6/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-24	6/10/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-24	6/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-24	6/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-24	6/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-24	6/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-24	6/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-24	6/10/2015	1,1-Dichloroethane	**120**	5	2	25	ug/L
MKTF-24	6/10/2015	1,1-Dichloroethene	**58**	5	0.5	7	ug/L
MKTF-24	6/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-24	6/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-24	6/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-24	6/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-24	6/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-24	6/10/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-24	6/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-24	6/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-24	6/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-24	6/10/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
MKTF-24	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-24	6/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-24	6/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-24	6/10/2015	Isopropylbenzene	11	5	0.76	447	ug/L
MKTF-24	6/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-24	6/10/2015	Ethylbenzene	46	5	0.51	700	ug/L
MKTF-24	6/10/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-24	6/10/2015	n-Propylbenzene	16	5	0.82	660	ug/L
MKTF-24	6/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-24	6/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-24	6/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-24	6/10/2015	1,2-Dichloroethane	**8.3**	5	0.88	5	ug/L
MKTF-24	6/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-24	6/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-24	6/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-24	6/10/2015	Toluene	15	5	0.54	1000	ug/L
MKTF-24	6/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-24	6/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-24	6/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-24	6/10/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-24	6/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-24	6/10/2015	cis-1,2-Dichloroethene	36	5	0.4	70	ug/L
MKTF-24	6/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-24	6/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-24	6/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-24	6/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-24	6/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-24	6/10/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-24	6/10/2015	MTBE	**170**	5	0.87	143	ug/L
MKTF-24	6/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	6/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-24	8/20/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-24	8/20/2015	Acetone	ND	200	19	14064	ug/L
MKTF-24	8/20/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-24	8/20/2015	Benzene	**2700**	200	13	5	ug/L
MKTF-24	8/20/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-24	8/20/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-24	8/20/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-24	8/20/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-24	8/20/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-24	8/20/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-24	8/20/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-24	8/20/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-24	8/20/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-24	8/20/2015	1,1-Dichloroethane	**110**	20	8	25	ug/L
MKTF-24	8/20/2015	1,1-Dichloroethene	**49**	20	2	7	ug/L
MKTF-24	8/20/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-24	8/20/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-24	8/20/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-24	8/20/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-24	8/20/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-24	8/20/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-24	8/20/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-24	8/20/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-24	8/20/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-24	8/20/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-24	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-24	8/20/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-24	8/20/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-24	8/20/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-24	8/20/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-24	8/20/2015	Ethylbenzene	56	20	2	700	ug/L
MKTF-24	8/20/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-24	8/20/2015	n-Propylbenzene	28	20	3.3	660	ug/L
MKTF-24	8/20/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-24	8/20/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-24	8/20/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-24	8/20/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-24	8/20/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-24	8/20/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-24	8/20/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-24	8/20/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-24	8/20/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-24	8/20/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-24	8/20/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-24	8/20/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-24	8/20/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-24	8/20/2015	cis-1,2-Dichloroethene	28	20	1.6	70	ug/L
MKTF-24	8/20/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-24	8/20/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	8/20/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-24	8/20/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-24	8/20/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	8/20/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-24	8/20/2015	MTBE	**200**	20	3.5	143	ug/L
MKTF-24	8/20/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	8/20/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	11/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-24	11/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-24	11/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-24	11/4/2015	Benzene	**2800**	200	13	5	ug/L
MKTF-24	11/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-24	11/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-24	11/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-24	11/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-24	11/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-24	11/4/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-24	11/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-24	11/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-24	11/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-24	11/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-24	11/4/2015	1,1-Dichloroethane	**120**	20	8	25	ug/L
MKTF-24	11/4/2015	1,1-Dichloroethene	**46**	20	2	7	ug/L
MKTF-24	11/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-24	11/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-24	11/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-24	11/4/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-24	11/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-24	11/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-24	11/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-24	11/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-24	11/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-24	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-24	11/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-24	11/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-24	11/4/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-24	11/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-24	11/4/2015	Ethylbenzene	54	20	2	700	ug/L
MKTF-24	11/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-24	11/4/2015	n-Propylbenzene	33	20	3.3	660	ug/L
MKTF-24	11/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-24	11/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-24	11/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-24	11/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-24	11/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-24	11/4/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-24	11/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-24	11/4/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-24	11/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-24	11/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-24	11/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-24	11/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-24	11/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-24	11/4/2015	cis-1,2-Dichloroethene	34	20	1.6	70	ug/L
MKTF-24	11/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-24	11/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	11/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-24	11/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-24	11/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	11/4/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-24	11/4/2015	MTBE	**210**	20	3.5	143	ug/L
MKTF-24	11/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	11/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	2/22/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/22/2016	Acetone	ND	200	18	14064	ug/L
MKTF-24	2/22/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	2/22/2016	Benzene	**5600**	200	19	5	ug/L
MKTF-24	2/22/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-24	2/22/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	2/22/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	2/22/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	2/22/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-24	2/22/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-24	2/22/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-24	2/22/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	2/22/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	2/22/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-24	2/22/2016	1,1-Dichloroethane	**93**	20	2.2	25	ug/L
MKTF-24	2/22/2016	1,1-Dichloroethene	**51**	20	1.5	7	ug/L
MKTF-24	2/22/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	2/22/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-24	2/22/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-24	2/22/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-24	2/22/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-24	2/22/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	2/22/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-24	2/22/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	2/22/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	2/22/2016	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
MKTF-24	2/22/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-24	2/22/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-24	2/22/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-24	2/22/2016	Isopropylbenzene	37	20	2	447	ug/L
MKTF-24	2/22/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	2/22/2016	Ethylbenzene	310	20	2.2	700	ug/L
MKTF-24	2/22/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-24	2/22/2016	n-Propylbenzene	94	20	2.6	660	ug/L
MKTF-24	2/22/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-24	2/22/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	2/22/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	2/22/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-24	2/22/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-24	2/22/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	2/22/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-24	2/22/2016	Toluene	27	20	1.8	1000	ug/L
MKTF-24	2/22/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	2/22/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/22/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	2/22/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-24	2/22/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	2/22/2016	cis-1,2-Dichloroethene	32	20	2.5	70	ug/L
MKTF-24	2/22/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	2/22/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	2/22/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-24	2/22/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-24	2/22/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	2/22/2016	Xylenes, Total	ND	30	6.5	620	ug/L
MKTF-24	2/22/2016	MTBE	**210**	20	4.2	143	ug/L
MKTF-24	2/22/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-24	2/22/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-24	6/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-24	6/8/2016	Acetone	44	50	25	14064	ug/L
MKTF-24	6/8/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-24	6/8/2016	Benzene	**3000**	50	4.8	5	ug/L
MKTF-24	6/8/2016	1,1,1-Trichloroethane	3.6	5	0.46	200	ug/L
MKTF-24	6/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-24	6/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-24	6/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-24	6/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-24	6/8/2016	Vinyl Chloride	**4.9**	5	0.98	2	ug/L
MKTF-24	6/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-24	6/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-24	6/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-24	6/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-24	6/8/2016	1,1-Dichloroethane	**92**	5	0.54	25	ug/L
MKTF-24	6/8/2016	1,1-Dichloroethene	**46**	5	0.54	7	ug/L
MKTF-24	6/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-24	6/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-24	6/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-24	6/8/2016	2-Butanone	12	50	3.7	5565	ug/L
MKTF-24	6/8/2016	1,1,2-Trichloroethane	1.4	5	0.64	5	ug/L
MKTF-24	6/8/2016	Trichloroethene	4.3	5	0.88	5	ug/L
MKTF-24	6/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-24	6/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-24	6/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-24	6/8/2016	1,2,4-Trimethylbenzene	3.2	5	0.55	56	ug/L
MKTF-24	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-24	6/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-24	6/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-24	6/8/2016	Isopropylbenzene	13	5	0.52	447	ug/L
MKTF-24	6/8/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-24	6/8/2016	Ethylbenzene	74	5	0.56	700	ug/L
MKTF-24	6/8/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-24	6/8/2016	n-Propylbenzene	22	5	0.66	660	ug/L
MKTF-24	6/8/2016	n-Butylbenzene	4.2	15	0.8	1000	ug/L
MKTF-24	6/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-24	6/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-24	6/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-24	6/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-24	6/8/2016	1,3,5-Trimethylbenzene	0.75	5	0.58	60	ug/L
MKTF-24	6/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-24	6/8/2016	Toluene	18	5	0.59	1000	ug/L
MKTF-24	6/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-24	6/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-24	6/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-24	6/8/2016	sec-Butylbenzene	3.2	5	0.62	2000	ug/L
MKTF-24	6/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-24	6/8/2016	cis-1,2-Dichloroethene	28	5	0.62	70	ug/L
MKTF-24	6/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-24	6/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	6/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-24	6/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-24	6/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-24	6/8/2016	Xylenes, Total	6	7.5	1.8	620	ug/L
MKTF-24	6/8/2016	MTBE	**210**	5	1.1	143	ug/L
MKTF-24	6/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-24	6/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-24	9/7/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	9/7/2016	Acetone	ND	200	98	14064	ug/L
MKTF-24	9/7/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	9/7/2016	Benzene	**5300**	200	19	5	ug/L
MKTF-24	9/7/2016	1,1,1-Trichloroethane	3.5	20	1.8	200	ug/L
MKTF-24	9/7/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	9/7/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	9/7/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-24	9/7/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-24	9/7/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-24	9/7/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	9/7/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	9/7/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-24	9/7/2016	1,1-Dichloroethane	**94**	20	2.2	25	ug/L
MKTF-24	9/7/2016	1,1-Dichloroethene	**42**	20	2.1	7	ug/L
MKTF-24	9/7/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-24	9/7/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-24	9/7/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-24	9/7/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-24	9/7/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-24	9/7/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	9/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-24	9/7/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	9/7/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	9/7/2016	1,2,4-Trimethylbenzene	9.3	20	2.2	56	ug/L
MKTF-24	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-24	9/7/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-24	9/7/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-24	9/7/2016	Isopropylbenzene	35	20	2.1	447	ug/L
MKTF-24	9/7/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	9/7/2016	Ethylbenzene	210	20	2.2	700	ug/L
MKTF-24	9/7/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-24	9/7/2016	n-Propylbenzene	65	20	2.6	660	ug/L
MKTF-24	9/7/2016	n-Butylbenzene	15	60	3.2	1000	ug/L
MKTF-24	9/7/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	9/7/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	9/7/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-24	9/7/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-24	9/7/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	9/7/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-24	9/7/2016	Toluene	21	20	2.4	1000	ug/L
MKTF-24	9/7/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-24	9/7/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-24	9/7/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	9/7/2016	sec-Butylbenzene	11	20	2.5	2000	ug/L
MKTF-24	9/7/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	9/7/2016	cis-1,2-Dichloroethene	27	20	2.5	70	ug/L
MKTF-24	9/7/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	9/7/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	9/7/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-24	9/7/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-24	9/7/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	9/7/2016	Xylenes, Total	11	30	7.3	620	ug/L
MKTF-24	9/7/2016	MTBE	**170**	20	4.2	143	ug/L
MKTF-24	9/7/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	9/7/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	10/28/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/28/2016	Acetone	ND	200	98	14064	ug/L
MKTF-24	10/28/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	10/28/2016	Benzene	**6100**	200	19	5	ug/L
MKTF-24	10/28/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-24	10/28/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	10/28/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	10/28/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	10/28/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-24	10/28/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-24	10/28/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-24	10/28/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	10/28/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	10/28/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-24	10/28/2016	1,1-Dichloroethane	**88**	20	2.2	25	ug/L
MKTF-24	10/28/2016	1,1-Dichloroethene	**45**	20	2.1	7	ug/L
MKTF-24	10/28/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-24	10/28/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-24	10/28/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/28/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-24	10/28/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-24	10/28/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	10/28/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-24	10/28/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	10/28/2016	2-Chlorotoluene	ND	20	8	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/28/2016	1,2,4-Trimethylbenzene	10	20	2.2	56	ug/L
MKTF-24	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-24	10/28/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-24	10/28/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-24	10/28/2016	Isopropylbenzene	39	20	2.1	447	ug/L
MKTF-24	10/28/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	10/28/2016	Ethylbenzene	300	20	2.2	700	ug/L
MKTF-24	10/28/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-24	10/28/2016	n-Propylbenzene	93	20	2.6	660	ug/L
MKTF-24	10/28/2016	n-Butylbenzene	17	60	3.2	1000	ug/L
MKTF-24	10/28/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	10/28/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	10/28/2016	1,2-Dichloroethane	**7.9**	20	2.3	5	ug/L
MKTF-24	10/28/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-24	10/28/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	10/28/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-24	10/28/2016	Toluene	25	20	2.4	1000	ug/L
MKTF-24	10/28/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-24	10/28/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-24	10/28/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	10/28/2016	sec-Butylbenzene	12	20	2.5	2000	ug/L
MKTF-24	10/28/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	10/28/2016	cis-1,2-Dichloroethene	35	20	2.5	70	ug/L
MKTF-24	10/28/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	10/28/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	10/28/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-24	10/28/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-24	10/28/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	10/28/2016	Xylenes, Total	15	30	7.3	620	ug/L
MKTF-24	10/28/2016	MTBE	**230**	20	4.2	143	ug/L
MKTF-24	10/28/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	10/28/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	3/29/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	3/29/2017	Acetone	ND	200	18	14064	ug/L
MKTF-24	3/29/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	3/29/2017	Benzene	**3000**	200	19	5	ug/L
MKTF-24	3/29/2017	1,1,1-Trichloroethane	3.1	20	1.5	200	ug/L
MKTF-24	3/29/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	3/29/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	3/29/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	3/29/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	3/29/2017	Vinyl Chloride	**16**	20	3.6	2	ug/L
MKTF-24	3/29/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	3/29/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	3/29/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	3/29/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	3/29/2017	1,1-Dichloroethane	**79**	20	2.1	25	ug/L
MKTF-24	3/29/2017	1,1-Dichloroethene	**35**	20	1.6	7	ug/L
MKTF-24	3/29/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	3/29/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-24	3/29/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	3/29/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	3/29/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	3/29/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	3/29/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	3/29/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	3/29/2017	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
MKTF-24	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	3/29/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	3/29/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	3/29/2017	Isopropylbenzene	10	20	2	447	ug/L
MKTF-24	3/29/2017	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	3/29/2017	Ethylbenzene	42	20	2.2	700	ug/L
MKTF-24	3/29/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	3/29/2017	n-Propylbenzene	18	20	2.6	660	ug/L
MKTF-24	3/29/2017	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-24	3/29/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	3/29/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	3/29/2017	1,2-Dichloroethane	**10**	20	2.3	5	ug/L
MKTF-24	3/29/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	3/29/2017	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	3/29/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	3/29/2017	Toluene	15	20	1.8	1000	ug/L
MKTF-24	3/29/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	3/29/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	3/29/2017	sec-Butylbenzene	6.9	20	2	2000	ug/L
MKTF-24	3/29/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	3/29/2017	cis-1,2-Dichloroethene	22	20	4.1	70	ug/L
MKTF-24	3/29/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	3/29/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	3/29/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	3/29/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-24	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	3/29/2017	Xylenes, Total	ND	30	6.5	620	ug/L
MKTF-24	3/29/2017	MTBE	**190**	20	3	143	ug/L
MKTF-24	3/29/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-24	3/29/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-24	6/5/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	6/5/2017	Acetone	ND	200	16	14064	ug/L
MKTF-24	6/5/2017	Chloroform	ND	20	8	100	ug/L
MKTF-24	6/5/2017	Benzene	**6000**	200	12	5	ug/L
MKTF-24	6/5/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	6/5/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	6/5/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	6/5/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	6/5/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	6/5/2017	Vinyl Chloride	**27**	20	3.6	2	ug/L
MKTF-24	6/5/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	6/5/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	6/5/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	6/5/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	6/5/2017	1,1-Dichloroethane	**88**	20	8	25	ug/L
MKTF-24	6/5/2017	1,1-Dichloroethene	**39**	20	1.6	7	ug/L
MKTF-24	6/5/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	6/5/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	6/5/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	6/5/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	6/5/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	6/5/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	6/5/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	6/5/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	6/5/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	6/5/2017	1,2,4-Trimethylbenzene	4.2	20	2.3	56	ug/L
MKTF-24	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	6/5/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	6/5/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	6/5/2017	Isopropylbenzene	35	20	1	447	ug/L
MKTF-24	6/5/2017	p-Isopropyltoluene	2.7	20	1.9	NA	ug/L
MKTF-24	6/5/2017	Ethylbenzene	300	20	1.9	700	ug/L
MKTF-24	6/5/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	6/5/2017	n-Propylbenzene	89	20	1.5	660	ug/L
MKTF-24	6/5/2017	n-Butylbenzene	15	60	2.6	1000	ug/L
MKTF-24	6/5/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	6/5/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	6/5/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-24	6/5/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	6/5/2017	1,3,5-Trimethylbenzene	2.6	20	1.7	60	ug/L
MKTF-24	6/5/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	6/5/2017	Toluene	24	20	1.3	1000	ug/L
MKTF-24	6/5/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	6/5/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	6/5/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	6/5/2017	sec-Butylbenzene	8.8	20	2.2	2000	ug/L
MKTF-24	6/5/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	6/5/2017	cis-1,2-Dichloroethene	29	20	4.1	70	ug/L
MKTF-24	6/5/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	6/5/2017	Pentafluorobenzene	**200**	0	0		None
MKTF-24	6/5/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	6/5/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	6/5/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	6/5/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	6/5/2017	Xylenes, Total	8.3	30	6.4	620	ug/L
MKTF-24	6/5/2017	MTBE	**200**	20	4.8	143	ug/L
MKTF-24	6/5/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	6/5/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	10/3/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/3/2017	Acetone	ND	200	16	14064	ug/L
MKTF-24	10/3/2017	Chloroform	ND	20	8	100	ug/L
MKTF-24	10/3/2017	Benzene	**2600**	200	12	5	ug/L
MKTF-24	10/3/2017	1,1,1-Trichloroethane	4.3	20	1.5	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/3/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	10/3/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	10/3/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	10/3/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	10/3/2017	Vinyl Chloride	**18**	20	3.6	2	ug/L
MKTF-24	10/3/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	10/3/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	10/3/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	10/3/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	10/3/2017	1,1-Dichloroethane	**72**	20	8	25	ug/L
MKTF-24	10/3/2017	1,1-Dichloroethene	**35**	20	1.6	7	ug/L
MKTF-24	10/3/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	10/3/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	10/3/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	10/3/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	10/3/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	10/3/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/3/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	10/3/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	10/3/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	10/3/2017	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	10/3/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	10/3/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	10/3/2017	Isopropylbenzene	19	20	1	447	ug/L
MKTF-24	10/3/2017	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-24	10/3/2017	Ethylbenzene	71	20	1.9	700	ug/L
MKTF-24	10/3/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	10/3/2017	n-Propylbenzene	34	20	1.5	660	ug/L
MKTF-24	10/3/2017	n-Butylbenzene	4.6	60	2.6	1000	ug/L
MKTF-24	10/3/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	10/3/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	10/3/2017	1,2-Dichloroethane	**9.9**	20	8	5	ug/L
MKTF-24	10/3/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	10/3/2017	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	10/3/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	10/3/2017	Toluene	19	20	1.3	1000	ug/L
MKTF-24	10/3/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	10/3/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	10/3/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	10/3/2017	sec-Butylbenzene	3.1	20	2.2	2000	ug/L
MKTF-24	10/3/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	10/3/2017	cis-1,2-Dichloroethene	18	20	4.1	70	ug/L
MKTF-24	10/3/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	10/3/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	10/3/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	10/3/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	10/3/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	10/3/2017	Xylenes, Total	ND	30	6.4	620	ug/L
MKTF-24	10/3/2017	MTBE	**160**	20	4.8	143	ug/L
MKTF-24	10/3/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	10/3/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	11/20/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-24	11/20/2017	Acetone	16	100	8.2	14064	ug/L
MKTF-24	11/20/2017	Chloroform	ND	10	4	100	ug/L
MKTF-24	11/20/2017	Benzene	**5500**	100	6.2	5	ug/L
MKTF-24	11/20/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-24	11/20/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-24	11/20/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-24	11/20/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-24	11/20/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-24	11/20/2017	Vinyl Chloride	**31**	10	1.8	2	ug/L
MKTF-24	11/20/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-24	11/20/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-24	11/20/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-24	11/20/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-24	11/20/2017	1,1-Dichloroethane	**72**	10	4	25	ug/L
MKTF-24	11/20/2017	1,1-Dichloroethene	**24**	10	0.81	7	ug/L
MKTF-24	11/20/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-24	11/20/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-24	11/20/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-24	11/20/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-24	11/20/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-24	11/20/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-24	11/20/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-24	11/20/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-24	11/20/2017	1,2,4-Trimethylbenzene	3.9	10	1.1	56	ug/L
MKTF-24	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-24	11/20/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-24	11/20/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-24	11/20/2017	Isopropylbenzene	42	10	0.51	447	ug/L
MKTF-24	11/20/2017	p-Isopropyltoluene	1.5	10	0.96	NA	ug/L
MKTF-24	11/20/2017	Ethylbenzene	320	10	0.93	700	ug/L
MKTF-24	11/20/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-24	11/20/2017	n-Propylbenzene	91	10	0.74	660	ug/L
MKTF-24	11/20/2017	n-Butylbenzene	14	30	1.3	1000	ug/L
MKTF-24	11/20/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-24	11/20/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-24	11/20/2017	1,2-Dichloroethane	**5.6**	10	4	5	ug/L
MKTF-24	11/20/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-24	11/20/2017	1,3,5-Trimethylbenzene	2.2	10	0.87	60	ug/L
MKTF-24	11/20/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-24	11/20/2017	Toluene	23	10	0.64	1000	ug/L
MKTF-24	11/20/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-24	11/20/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-24	11/20/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-24	11/20/2017	sec-Butylbenzene	7.9	10	1.1	2000	ug/L
MKTF-24	11/20/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-24	11/20/2017	cis-1,2-Dichloroethene	19	10	2	70	ug/L
MKTF-24	11/20/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-24	11/20/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-24	11/20/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-24	11/20/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-24	11/20/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-24	11/20/2017	Xylenes, Total	18	15	3.2	620	ug/L
MKTF-24	11/20/2017	MTBE	**160**	10	2.4	143	ug/L
MKTF-24	11/20/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-24	11/20/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-24	2/6/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/6/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	2/6/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	2/6/2018	Benzene	**6300**	200	12	5	ug/L
MKTF-24	2/6/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	2/6/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	2/6/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	2/6/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	2/6/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	2/6/2018	Vinyl Chloride	**37**	20	3.6	2	ug/L
MKTF-24	2/6/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	2/6/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	2/6/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	2/6/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	2/6/2018	1,1-Dichloroethane	**82**	20	8	25	ug/L
MKTF-24	2/6/2018	1,1-Dichloroethene	**27**	20	1.6	7	ug/L
MKTF-24	2/6/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	2/6/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	2/6/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	2/6/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	2/6/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	2/6/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	2/6/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	2/6/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	2/6/2018	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	2/6/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	2/6/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	2/6/2018	Isopropylbenzene	43	20	1	447	ug/L
MKTF-24	2/6/2018	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-24	2/6/2018	Ethylbenzene	410	20	1.9	700	ug/L
MKTF-24	2/6/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-24	2/6/2018	n-Propylbenzene	95	20	1.5	660	ug/L
MKTF-24	2/6/2018	n-Butylbenzene	ND	60	2.6	1000	ug/L
MKTF-24	2/6/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	2/6/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	2/6/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-24	2/6/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	2/6/2018	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	2/6/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	2/6/2018	Toluene	30	20	1.3	1000	ug/L
MKTF-24	2/6/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/6/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	2/6/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	2/6/2018	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-24	2/6/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	2/6/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-24	2/6/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	2/6/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	2/6/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	2/6/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	2/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	2/6/2018	Xylenes, Total	ND	30	6.4	620	ug/L
MKTF-24	2/6/2018	MTBE	**170**	20	4.8	143	ug/L
MKTF-24	2/6/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	2/6/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	5/1/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	5/1/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	5/1/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	5/1/2018	Benzene	**5500**	200	12	5	ug/L
MKTF-24	5/1/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	5/1/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	5/1/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	5/1/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	5/1/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	5/1/2018	Vinyl Chloride	**31**	20	3.6	2	ug/L
MKTF-24	5/1/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	5/1/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	5/1/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	5/1/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	5/1/2018	1,1-Dichloroethane	**66**	20	8	25	ug/L
MKTF-24	5/1/2018	1,1-Dichloroethene	**16**	20	1.6	7	ug/L
MKTF-24	5/1/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	5/1/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	5/1/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	5/1/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	5/1/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	5/1/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	5/1/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	5/1/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	5/1/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	5/1/2018	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	5/1/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	5/1/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	5/1/2018	Isopropylbenzene	36	20	1	447	ug/L
MKTF-24	5/1/2018	p-Isopropyltoluene	2	20	1.9	NA	ug/L
MKTF-24	5/1/2018	Ethylbenzene	300	20	1.9	700	ug/L
MKTF-24	5/1/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-24	5/1/2018	n-Propylbenzene	76	20	1.5	660	ug/L
MKTF-24	5/1/2018	n-Butylbenzene	12	60	2.6	1000	ug/L
MKTF-24	5/1/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	5/1/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	5/1/2018	1,2-Dichloroethane	**8.3**	20	8	5	ug/L
MKTF-24	5/1/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	5/1/2018	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	5/1/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	5/1/2018	Toluene	29	20	1.3	1000	ug/L
MKTF-24	5/1/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	5/1/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	5/1/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	5/1/2018	sec-Butylbenzene	8.2	20	2.2	2000	ug/L
MKTF-24	5/1/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	5/1/2018	cis-1,2-Dichloroethene	22	20	4.1	70	ug/L
MKTF-24	5/1/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	5/1/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	5/1/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	5/1/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	5/1/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	5/1/2018	Xylenes, Total	6.5	30	6.4	620	ug/L
MKTF-24	5/1/2018	MTBE	130	20	4.8	143	ug/L
MKTF-24	5/1/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	5/1/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	8/20/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-24	8/20/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	8/20/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	8/20/2018	Benzene	**4800**	200	35	5	ug/L
MKTF-24	8/20/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	8/20/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	8/20/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-24	8/20/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-24	8/20/2018	Vinyl Chloride	**32**	20	2.2	2	ug/L
MKTF-24	8/20/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-24	8/20/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-24	8/20/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-24	8/20/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-24	8/20/2018	1,1-Dichloroethane	**74**	20	8	25	ug/L
MKTF-24	8/20/2018	1,1-Dichloroethene	**22**	20	2.4	7	ug/L
MKTF-24	8/20/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-24	8/20/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	8/20/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-24	8/20/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-24	8/20/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-24	8/20/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-24	8/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-24	8/20/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-24	8/20/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	8/20/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-24	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-24	8/20/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-24	8/20/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-24	8/20/2018	Isopropylbenzene	35	20	4.4	447	ug/L
MKTF-24	8/20/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-24	8/20/2018	Ethylbenzene	320	20	4.5	700	ug/L
MKTF-24	8/20/2018	Styrene	ND	20	5	100	ug/L
MKTF-24	8/20/2018	n-Propylbenzene	89	20	4.9	660	ug/L
MKTF-24	8/20/2018	n-Butylbenzene	13	60	5	1000	ug/L
MKTF-24	8/20/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	8/20/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-24	8/20/2018	1,2-Dichloroethane	**8.2**	20	8	5	ug/L
MKTF-24	8/20/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-24	8/20/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-24	8/20/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-24	8/20/2018	Toluene	25	20	3.4	1000	ug/L
MKTF-24	8/20/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-24	8/20/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-24	8/20/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	8/20/2018	sec-Butylbenzene	6.4	20	4	2000	ug/L
MKTF-24	8/20/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-24	8/20/2018	cis-1,2-Dichloroethene	11	20	7.5	70	ug/L
MKTF-24	8/20/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	8/20/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-24	8/20/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-24	8/20/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-24	8/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-24	8/20/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-24	8/20/2018	MTBE	120	20	6.4	143	ug/L
MKTF-24	8/20/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-24	8/20/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-24	10/10/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-24	10/10/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-24	10/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-24	10/10/2018	Benzene	**2500**	100	17	5	ug/L
MKTF-24	10/10/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-24	10/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-24	10/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-24	10/10/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-24	10/10/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-24	10/10/2018	Vinyl Chloride	**12**	1	0.11	2	ug/L
MKTF-24	10/10/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-24	10/10/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-24	10/10/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-24	10/10/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-24	10/10/2018	1,1-Dichloroethane	**80**	1	0.4	25	ug/L
MKTF-24	10/10/2018	1,1-Dichloroethene	**29**	1	0.12	7	ug/L
MKTF-24	10/10/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-24	10/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-24	10/10/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-24	10/10/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-24	10/10/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-24	10/10/2018	Trichloroethene	2.3	1	0.26	5	ug/L
MKTF-24	10/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-24	10/10/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/10/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
MKTF-24	10/10/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
MKTF-24	10/10/2018	Naphthalene	ND	2	0.29	30	ug/L
MKTF-24	10/10/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
MKTF-24	10/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-24	10/10/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
MKTF-24	10/10/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-24	10/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-24	10/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-24	10/10/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-24	10/10/2018	Isopropylbenzene	16	1	0.22	447	ug/L
MKTF-24	10/10/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-24	10/10/2018	Ethylbenzene	38	1	0.22	700	ug/L
MKTF-24	10/10/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-24	10/10/2018	n-Propylbenzene	24	1	0.24	660	ug/L
MKTF-24	10/10/2018	n-Butylbenzene	5.2	3	0.25	1000	ug/L
MKTF-24	10/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-24	10/10/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
MKTF-24	10/10/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-24	10/10/2018	1,2-Dichloroethane	**5.6**	1	0.4	5	ug/L
MKTF-24	10/10/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-24	10/10/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-24	10/10/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-24	10/10/2018	Toluene	14	1	0.17	1000	ug/L
MKTF-24	10/10/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-24	10/10/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-24	10/10/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-24	10/10/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-24	10/10/2018	sec-Butylbenzene	3.8	1	0.2	2000	ug/L
MKTF-24	10/10/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-24	10/10/2018	cis-1,2-Dichloroethene	14	1	0.38	70	ug/L
MKTF-24	10/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-24	10/10/2018	Pentafluorobenzene	ND	0	0		None
MKTF-24	10/10/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
MKTF-24	10/10/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-24	10/10/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-24	10/10/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-24	10/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-24	10/10/2018	Xylenes, Total	4.8	1.5	0.64	620	ug/L
MKTF-24	10/10/2018	MTBE	120	1	0.32	143	ug/L
MKTF-24	10/10/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-24	10/10/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-24	11/15/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-24	11/15/2018	Acetone	ND	200	15	14064	ug/L
MKTF-24	11/15/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-24	11/15/2018	Benzene	**4800**	200	35	5	ug/L
MKTF-24	11/15/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-24	11/15/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-24	11/15/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-24	11/15/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-24	11/15/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-24	11/15/2018	Vinyl Chloride	**28**	20	2.4	2	ug/L
MKTF-24	11/15/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-24	11/15/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-24	11/15/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-24	11/15/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-24	11/15/2018	1,1-Dichloroethane	**76**	20	3.5	25	ug/L
MKTF-24	11/15/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-24	11/15/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-24	11/15/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-24	11/15/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-24	11/15/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-24	11/15/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-24	11/15/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-24	11/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-24	11/15/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-24	11/15/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-24	11/15/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-24	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-24	11/15/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-24	11/15/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-24	11/15/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-24	11/15/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-24	11/15/2018	Ethylbenzene	200	20	4.5	700	ug/L
MKTF-24	11/15/2018	Styrene	ND	20	5	100	ug/L
MKTF-24	11/15/2018	n-Propylbenzene	31	20	4.9	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-24	11/15/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-24	11/15/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-24	11/15/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	11/15/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-24	11/15/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-24	11/15/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-24	11/15/2018	Toluene	21	20	3.4	1000	ug/L
MKTF-24	11/15/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-24	11/15/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-24	11/15/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	11/15/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-24	11/15/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-24	11/15/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-24	11/15/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-24	11/15/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-24	11/15/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-24	11/15/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-24	11/15/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-24	11/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-24	11/15/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-24	11/15/2018	MTBE	120	20	9.1	143	ug/L
MKTF-24	11/15/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-24	11/15/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-24	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	5/6/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	5/6/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	5/6/2019	1,1-Dichloroethane	**47**	20	2.817172	25	ug/L
MKTF-24	5/6/2019	1,1-Dichloroethene	**14**	20	4.107764	7	ug/L
MKTF-24	5/6/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	5/6/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	5/6/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-24	5/6/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	5/6/2019	1,2,4-Trimethylbenzene	4.7	20	4.263982	56	ug/L
MKTF-24	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-24	5/6/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	5/6/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	5/6/2019	1,2-Dichloroethane	**6.6**	20	3.892755	5	ug/L
MKTF-24	5/6/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	5/6/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	5/6/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	5/6/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	5/6/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	5/6/2019	1-Methylnaphthalene	ND	80	6.29909	NA	ug/L
MKTF-24	5/6/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	5/6/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	5/6/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	5/6/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	5/6/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	5/6/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	5/6/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	5/6/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	5/6/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	5/6/2019	Benzene	**3000**	200	33.327811	5	ug/L
MKTF-24	5/6/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	5/6/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	5/6/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	5/6/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	5/6/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	5/6/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	5/6/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	5/6/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-24	5/6/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	5/6/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	5/6/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-24	5/6/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	5/6/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	5/6/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	5/6/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	5/6/2019	Ethylbenzene	120	20	2.646816	700	ug/L
MKTF-24	5/6/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	5/6/2019	Isopropylbenzene	19	20	3.830445	447	ug/L
MKTF-24	5/6/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	5/6/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	5/6/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/6/2019	n-Butylbenzene	4.6	60	4.551391	1000	ug/L
MKTF-24	5/6/2019	n-Propylbenzene	36	20	4.28616	660	ug/L
MKTF-24	5/6/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-24	5/6/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	5/6/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	5/6/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	5/6/2019	Toluene	14	20	7.008724	1000	ug/L
MKTF-24	5/6/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	5/6/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	5/6/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-24	5/6/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	5/6/2019	Vinyl Chloride	**22**	20	3.581986	2	ug/L
MKTF-24	5/6/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-24	5/6/2019	1,2-Dibromoethane	0.012	0.00946	0.003297	0.05	ug/L
MKTF-24	8/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	8/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	8/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	8/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	8/23/2019	1,1-Dichloroethane	**53**	20	2.817172	25	ug/L
MKTF-24	8/23/2019	1,1-Dichloroethene	**19**	20	4.107764	7	ug/L
MKTF-24	8/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	8/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	8/23/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-24	8/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	8/23/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-24	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-24	8/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	8/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	8/23/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-24	8/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	8/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	8/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	8/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	8/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	8/23/2019	1-Methylnaphthalene	17	80	6.29909	NA	ug/L
MKTF-24	8/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	8/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	8/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	8/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	8/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	8/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	8/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	8/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	8/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	8/23/2019	Benzene	**4100**	200	33.327811	5	ug/L
MKTF-24	8/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	8/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	8/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	8/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	8/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	8/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	8/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	8/23/2019	Chloroethane	19	40	3.556052	20857	ug/L
MKTF-24	8/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	8/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	8/23/2019	cis-1,2-Dichloroethene	8.6	20	3.802301	70	ug/L
MKTF-24	8/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	8/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	8/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	8/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	8/23/2019	Ethylbenzene	240	20	2.646816	700	ug/L
MKTF-24	8/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	8/23/2019	Isopropylbenzene	33	20	3.830445	447	ug/L
MKTF-24	8/23/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	8/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	8/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-24	8/23/2019	n-Butylbenzene	27	60	4.551391	1000	ug/L
MKTF-24	8/23/2019	n-Propylbenzene	64	20	4.28616	660	ug/L
MKTF-24	8/23/2019	sec-Butylbenzene	10	20	4.954626	2000	ug/L
MKTF-24	8/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	8/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	8/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	8/23/2019	Toluene	22	20	7.008724	1000	ug/L
MKTF-24	8/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	8/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	8/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	8/23/2019	Vinyl Chloride	**38**	20	3.581986	2	ug/L
MKTF-24	8/23/2019	Xylenes, Total	12	30	9.088299	620	ug/L
MKTF-24	8/23/2019	1,2-Dibromoethane	0.0047	0.00938	0.00327	0.05	ug/L
MKTF-24	10/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	10/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	10/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	10/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	10/23/2019	1,1-Dichloroethane	**33**	20	2.817172	25	ug/L
MKTF-24	10/23/2019	1,1-Dichloroethene	**11**	20	4.107764	7	ug/L
MKTF-24	10/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	10/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	10/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	10/23/2019	1,2,4-Trimethylbenzene	5.3	20	4.263982	56	ug/L
MKTF-24	10/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	10/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	10/23/2019	1,2-Dichloroethane	**9.3**	20	3.892755	5	ug/L
MKTF-24	10/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	10/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	10/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	10/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	10/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	11	80	6.29909	NA	ug/L
MKTF-24	10/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	10/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	10/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	10/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	10/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	10/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	10/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	10/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	10/23/2019	Benzene	**5000**	200	33.327811	5	ug/L
MKTF-24	10/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	10/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	10/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	10/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	10/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	10/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	10/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	10/23/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-24	10/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	10/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	10/23/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-24	10/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	10/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	10/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	10/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	10/23/2019	Ethylbenzene	310	20	2.646816	700	ug/L
MKTF-24	10/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	10/23/2019	Isopropylbenzene	32	20	3.830445	447	ug/L
MKTF-24	10/23/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	10/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	10/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-24	10/23/2019	n-Butylbenzene	11	60	4.551391	1000	ug/L
MKTF-24	10/23/2019	n-Propylbenzene	64	20	4.28616	660	ug/L
MKTF-24	10/23/2019	sec-Butylbenzene	7.4	20	4.954626	2000	ug/L
MKTF-24	10/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	10/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	10/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	10/23/2019	Toluene	24	20	7.008724	1000	ug/L
MKTF-24	10/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	10/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	10/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-24	10/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	10/23/2019	Vinyl Chloride	**37**	20	3.581986	2	ug/L
MKTF-24	10/23/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-24	10/23/2019	1,2-Dibromoethane	0.0037	0.00943	0.003288	0.05	ug/L
MKTF-24	2/25/2020	Benzene	**2900**	200	45	5	ug/L
MKTF-24	2/25/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-24	2/25/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-24	2/25/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-24	2/25/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	2/25/2020	1,1-Dichloroethane	**38**	20	5.5	25	ug/L
MKTF-24	2/25/2020	1,1-Dichloroethene	**20**	20	2.6	7	ug/L
MKTF-24	2/25/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/25/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-24	2/25/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-24	2/25/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-24	2/25/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
MKTF-24	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-24	2/25/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-24	2/25/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-24	2/25/2020	1,2-Dichloroethane	**10**	20	4.4	5	ug/L
MKTF-24	2/25/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-24	2/25/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
MKTF-24	2/25/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-24	2/25/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-24	2/25/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-24	2/25/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-24	2/25/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-24	2/25/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-24	2/25/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-24	2/25/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-24	2/25/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-24	2/25/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-24	2/25/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-24	2/25/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-24	2/25/2020	Acetone	50	200	47	14064	ug/L
MKTF-24	2/25/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-24	2/25/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-24	2/25/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-24	2/25/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-24	2/25/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-24	2/25/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-24	2/25/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-24	2/25/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-24	2/25/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-24	2/25/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-24	2/25/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-24	2/25/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-24	2/25/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-24	2/25/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-24	2/25/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-24	2/25/2020	Ethylbenzene	83	20	4.3	700	ug/L
MKTF-24	2/25/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-24	2/25/2020	Isopropylbenzene	8.5	20	3.7	447	ug/L
MKTF-24	2/25/2020	MTBE	110	20	7.9	143	ug/L
MKTF-24	2/25/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-24	2/25/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-24	2/25/2020	n-Propylbenzene	13	20	3.6	660	ug/L
MKTF-24	2/25/2020	Naphthalene	*ND*	*40*	5.6	30	ug/L
MKTF-24	2/25/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-24	2/25/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-24	2/25/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-24	2/25/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-24	2/25/2020	Toluene	11	20	4	1000	ug/L
MKTF-24	2/25/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-24	2/25/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-24	2/25/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-24	2/25/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	2/25/2020	Vinyl Chloride	**28**	20	3.9	2	ug/L
MKTF-24	2/25/2020	Xylenes, Total	ND	30	11	620	ug/L
MKTF-24	2/25/2020	1,2-Dibromoethane	0.0076	0.0093	0.0061	0.05	ug/L
MKTF-24	9/19/2020	Benzene	**6100**	100	45	5	ug/L
MKTF-24	9/19/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-24	9/19/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-24	9/19/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-24	9/19/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	9/19/2020	1,1-Dichloroethane	**41**	20	5.5	25	ug/L
MKTF-24	9/19/2020	1,1-Dichloroethene	*6.1*	*20*	2.6	7	ug/L
MKTF-24	9/19/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-24	9/19/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-24	9/19/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-24	9/19/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-24	9/19/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
MKTF-24	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-24	9/19/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-24	9/19/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-24	9/19/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-24	9/19/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-24	9/19/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-24	9/19/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-24	9/19/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-24	9/19/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-24	9/19/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-24	9/19/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-24	9/19/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-24	9/19/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-24	9/19/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-24	9/19/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-24	9/19/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-24	9/19/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-24	9/19/2020	Acetone	ND	200	47	14064	ug/L
MKTF-24	9/19/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-24	9/19/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-24	9/19/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-24	9/19/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-24	9/19/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-24	9/19/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-24	9/19/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-24	9/19/2020	Chloroethane	27	40	7.5	20857	ug/L
MKTF-24	9/19/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-24	9/19/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-24	9/19/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-24	9/19/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-24	9/19/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-24	9/19/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-24	9/19/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-24	9/19/2020	Ethylbenzene	240	20	4.3	700	ug/L
MKTF-24	9/19/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-24	9/19/2020	Isopropylbenzene	13	20	3.7	447	ug/L
MKTF-24	9/19/2020	MTBE	120	20	7.9	143	ug/L
MKTF-24	9/19/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-24	9/19/2020	n-Butylbenzene	5.5	60	5.1	1000	ug/L
MKTF-24	9/19/2020	n-Propylbenzene	19	20	3.6	660	ug/L
MKTF-24	9/19/2020	Naphthalene	*ND*	*40*	5.6	30	ug/L
MKTF-24	9/19/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-24	9/19/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-24	9/19/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-24	9/19/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-24	9/19/2020	Toluene	24	20	4	1000	ug/L
MKTF-24	9/19/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-24	9/19/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-24	9/19/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-24	9/19/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	9/19/2020	Vinyl Chloride	**37**	20	3.9	2	ug/L
MKTF-24	9/19/2020	Xylenes, Total	ND	30	11	620	ug/L
MKTF-24	9/19/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
MKTF-24	12/18/2020	1,2-Dibromoethane	ND	0.0202	0.00504	0.05	ug/L
MKTF-24	12/18/2020	Acetone	ND	625	250	14064	ug/L
MKTF-24	12/18/2020	Benzene	**5020**	25	9.5	5	ug/L
MKTF-24	12/18/2020	Bromodichloromethane	*ND*	*25*	12.5	1.34	ug/L
MKTF-24	12/18/2020	Bromoform	*ND*	*125*	17.8	32.9	ug/L
MKTF-24	12/18/2020	Bromomethane	*ND*	*25*	24.5	7.54	ug/L
MKTF-24	12/18/2020	2-Butanone	ND	625	65	5565	ug/L
MKTF-24	12/18/2020	Carbon Disulfide	ND	25	12.5	810	ug/L
MKTF-24	12/18/2020	Carbon tetrachloride	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	Chlorobenzene	ND	25	12.5	77.6	ug/L
MKTF-24	12/18/2020	Dibromochloromethane	*ND*	*25*	12.5	1.68	ug/L
MKTF-24	12/18/2020	Chloroethane	ND	25	19	20857	ug/L
MKTF-24	12/18/2020	Chloroform	ND	25	15	100	ug/L
MKTF-24	12/18/2020	Chloromethane	*ND*	*25*	20.8	20.32	ug/L
MKTF-24	12/18/2020	2-Chlorotoluene	ND	25	14.3	233	ug/L
MKTF-24	12/18/2020	4-Chlorotoluene	ND	25	14	250	ug/L
MKTF-24	12/18/2020	cis-1,2-Dichloroethene	ND	25	12.5	70	ug/L
MKTF-24	12/18/2020	cis-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-24	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*125*	37.5	0.0033	ug/L
MKTF-24	12/18/2020	1,2-Dibromoethane	*ND*	*25*	12.5	0.05	ug/L
MKTF-24	12/18/2020	Dibromomethane	*ND*	*125*	14.8	8	ug/L
MKTF-24	12/18/2020	1,2-Dichlorobenzene	ND	25	12.5	600	ug/L
MKTF-24	12/18/2020	1,3-Dichlorobenzene	ND	25	13.5	N/A	ug/L
MKTF-24	12/18/2020	1,4-Dichlorobenzene	ND	25	16	75	ug/L
MKTF-24	12/18/2020	Dichlorodifluoromethane	ND	25	21.3	197	ug/L
MKTF-24	12/18/2020	1,1-Dichloroethane	**39.3**	25	12.5	25	ug/L
MKTF-24	12/18/2020	1,2-Dichloroethane	**163**	25	12.5	5	ug/L
MKTF-24	12/18/2020	1,1-Dichloroethene	*ND*	*25*	12.5	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	1,2-Dichloropropane	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	1,3-Dichloropropane	ND	25	12.5	370	ug/L
MKTF-24	12/18/2020	2,2-Dichloropropane	ND	25	12.5	NA	ug/L
MKTF-24	12/18/2020	1,1-Dichloropropene	ND	25	12.5	NA	ug/L
MKTF-24	12/18/2020	Ethylbenzene	223	25	12.5	700	ug/L
MKTF-24	12/18/2020	Hexachlorobutadiene	*ND*	*125*	22.5	1.39	ug/L
MKTF-24	12/18/2020	2-Hexanone	*ND*	*625*	77.5	38	ug/L
MKTF-24	12/18/2020	Isopropylbenzene	ND	25	13.3	447	ug/L
MKTF-24	12/18/2020	Methylene Chloride	*ND*	*125*	75	5	ug/L
MKTF-24	12/18/2020	1-Methylnaphthalene	ND	125	105	NA	ug/L
MKTF-24	12/18/2020	2-Methylnaphthalene	*ND*	*250*	115		ug/L
MKTF-24	12/18/2020	4-Methyl-2-Pentanone	ND	625	45	1243	ug/L
MKTF-24	12/18/2020	MTBE	98.9	25	18.5	143	ug/L
MKTF-24	12/18/2020	Naphthalene	ND	25	25	30	ug/L
MKTF-24	12/18/2020	n-Butylbenzene	ND	25	19	1000	ug/L
MKTF-24	12/18/2020	n-Propylbenzene	36	25	17.3	660	ug/L
MKTF-24	12/18/2020	p-Isopropyltoluene	ND	25	17.8	NA	ug/L
MKTF-24	12/18/2020	sec-Butylbenzene	ND	25	17.5	2000	ug/L
MKTF-24	12/18/2020	Styrene	ND	25	25	100	ug/L
MKTF-24	12/18/2020	tert-Butylbenzene	ND	25	15.8	690	ug/L
MKTF-24	12/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*25*	13	5.74	ug/L
MKTF-24	12/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*25*	12.5	10	ug/L
MKTF-24	12/18/2020	Tetrachloroethene	*ND*	*25*	14.5	5	ug/L
MKTF-24	12/18/2020	Toluene	ND	25	10.3	1000	ug/L
MKTF-24	12/18/2020	trans-1,2-Dichloroethene	ND	25	12.5	100	ug/L
MKTF-24	12/18/2020	trans-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-24	12/18/2020	1,2,3-Trichlorobenzene	ND	25	17.5	70	ug/L
MKTF-24	12/18/2020	1,2,4-Trichlorobenzene	ND	25	20.5	70	ug/L
MKTF-24	12/18/2020	1,1,1-Trichloroethane	ND	25	12.5	200	ug/L
MKTF-24	12/18/2020	1,1,2-Trichloroethane	*ND*	*125*	12.5	5	ug/L
MKTF-24	12/18/2020	Trichloroethene	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	Trichlorofluoromethane	ND	25	13	1137	ug/L
MKTF-24	12/18/2020	1,2,3-Trichloropropane	*ND*	*125*	21	0.0084	ug/L
MKTF-24	12/18/2020	1,2,4-Trimethylbenzene	ND	25	20.5	56	ug/L
MKTF-24	12/18/2020	1,3,5-Trimethylbenzene	ND	25	14	60	ug/L
MKTF-24	12/18/2020	Vinyl Chloride	**33.2**	25	12.5	2	ug/L
MKTF-24	12/18/2020	Xylenes, Total	ND	250	40	620	ug/L
MKTF-25	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-25	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-25	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-25	4/8/2014	Benzene	**1000**	20	3.1	5	ug/L
MKTF-25	4/8/2014	1,1,1-Trichloroethane	76	2	0.24	200	ug/L
MKTF-25	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-25	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-25	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-25	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-25	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-25	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-25	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-25	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-25	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-25	4/8/2014	1,1-Dichloroethane	**330**	20	5.7	25	ug/L
MKTF-25	4/8/2014	1,1-Dichloroethene	**150**	2	0.43	7	ug/L
MKTF-25	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-25	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-25	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-25	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-25	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-25	4/8/2014	Trichloroethene	**30**	2	0.39	5	ug/L
MKTF-25	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-25	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-25	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-25	4/8/2014	1,2,4-Trimethylbenzene	9.9	2	0.25	56	ug/L
MKTF-25	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-25	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-25	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-25	4/8/2014	Isopropylbenzene	34	2	0.32	447	ug/L
MKTF-25	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-25	4/8/2014	Ethylbenzene	130	2	0.25	700	ug/L
MKTF-25	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-25	4/8/2014	n-Propylbenzene	39	2	0.28	660	ug/L
MKTF-25	4/8/2014	n-Butylbenzene	14	6	0.43	1000	ug/L
MKTF-25	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-25	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-25	4/8/2014	1,2-Dichloroethane	**10**	2	0.53	5	ug/L
MKTF-25	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	4/8/2014	1,3,5-Trimethylbenzene	3	2	0.26	60	ug/L
MKTF-25	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-25	4/8/2014	Toluene	9.2	2	0.34	1000	ug/L
MKTF-25	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-25	4/8/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-25	4/8/2014	Tetrachloroethene	3.3	2	0.4	5	ug/L
MKTF-25	4/8/2014	sec-Butylbenzene	5.8	2	0.31	2000	ug/L
MKTF-25	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-25	4/8/2014	cis-1,2-Dichloroethene	54	2	0.24	70	ug/L
MKTF-25	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-25	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-25	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-25	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-25	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-25	4/8/2014	Xylenes, Total	13	3	0.75	620	ug/L
MKTF-25	4/8/2014	MTBE	**270**	2	0.5	143	ug/L
MKTF-25	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-25	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-25	9/23/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-25	9/23/2014	Acetone	ND	100	49	14064	ug/L
MKTF-25	9/23/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-25	9/23/2014	Benzene	**530**	10	1.5	5	ug/L
MKTF-25	9/23/2014	1,1,1-Trichloroethane	30	10	1.2	200	ug/L
MKTF-25	9/23/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-25	9/23/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-25	9/23/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-25	9/23/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-25	9/23/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-25	9/23/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-25	9/23/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-25	9/23/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-25	9/23/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-25	9/23/2014	1,1-Dichloroethane	**250**	10	2.8	25	ug/L
MKTF-25	9/23/2014	1,1-Dichloroethene	**100**	10	2.1	7	ug/L
MKTF-25	9/23/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-25	9/23/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-25	9/23/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-25	9/23/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-25	9/23/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-25	9/23/2014	Trichloroethene	**24**	10	1.9	5	ug/L
MKTF-25	9/23/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-25	9/23/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-25	9/23/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-25	9/23/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-25	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-25	9/23/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-25	9/23/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-25	9/23/2014	Isopropylbenzene	38	10	1.6	447	ug/L
MKTF-25	9/23/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	Ethylbenzene	12	10	1.3	700	ug/L
MKTF-25	9/23/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-25	9/23/2014	n-Propylbenzene	41	10	1.4	660	ug/L
MKTF-25	9/23/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-25	9/23/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-25	9/23/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-25	9/23/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-25	9/23/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-25	9/23/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-25	9/23/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-25	9/23/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-25	9/23/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-25	9/23/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-25	9/23/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-25	9/23/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-25	9/23/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-25	9/23/2014	cis-1,2-Dichloroethene	46	10	1.2	70	ug/L
MKTF-25	9/23/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-25	9/23/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-25	9/23/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-25	9/23/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-25	9/23/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-25	9/23/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-25	9/23/2014	MTBE	**230**	10	2.5	143	ug/L
MKTF-25	9/23/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-25	9/23/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-25	11/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-25	11/14/2014	Benzene	**580**	50	7.7	5	ug/L
MKTF-25	11/14/2014	1,1,1-Trichloroethane	23	5	0.61	200	ug/L
MKTF-25	11/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-25	11/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-25	11/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-25	11/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-25	11/14/2014	Vinyl Chloride	**46**	5	2.3	2	ug/L
MKTF-25	11/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-25	11/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-25	11/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-25	11/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-25	11/14/2014	1,1-Dichloroethane	**230**	5	1.4	25	ug/L
MKTF-25	11/14/2014	1,1-Dichloroethene	**98**	5	1.1	7	ug/L
MKTF-25	11/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	11/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-25	11/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-25	11/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-25	11/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-25	11/14/2014	Trichloroethene	**27**	5	0.97	5	ug/L
MKTF-25	11/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-25	11/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-25	11/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-25	11/14/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-25	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-25	11/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-25	11/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-25	11/14/2014	Isopropylbenzene	40	5	0.81	447	ug/L
MKTF-25	11/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-25	11/14/2014	Ethylbenzene	23	5	0.64	700	ug/L
MKTF-25	11/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-25	11/14/2014	n-Propylbenzene	37	5	0.7	660	ug/L
MKTF-25	11/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-25	11/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-25	11/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-25	11/14/2014	1,2-Dichloroethane	**12**	5	1.3	5	ug/L
MKTF-25	11/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-25	11/14/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-25	11/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-25	11/14/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-25	11/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-25	11/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-25	11/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-25	11/14/2014	sec-Butylbenzene	6.6	5	0.77	2000	ug/L
MKTF-25	11/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-25	11/14/2014	cis-1,2-Dichloroethene	44	5	0.61	70	ug/L
MKTF-25	11/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-25	11/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	11/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-25	11/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-25	11/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-25	11/14/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-25	11/14/2014	MTBE	**180**	5	1.3	143	ug/L
MKTF-25	11/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-25	11/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-25	3/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	3/11/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	3/11/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	3/11/2015	Benzene	**970**	50	3.3	5	ug/L
MKTF-25	3/11/2015	1,1,1-Trichloroethane	53	5	0.39	200	ug/L
MKTF-25	3/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	3/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	3/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	3/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	3/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	3/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	3/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	3/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	3/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	3/11/2015	1,1-Dichloroethane	**280**	50	20	25	ug/L
MKTF-25	3/11/2015	1,1-Dichloroethene	**140**	5	0.5	7	ug/L
MKTF-25	3/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	3/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	3/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	3/11/2015	2-Butanone	ND	50	1.8	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	3/11/2015	Trichloroethene	**31**	5	0.82	5	ug/L
MKTF-25	3/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	3/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	3/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	3/11/2015	1,2,4-Trimethylbenzene	8.6	5	0.8	56	ug/L
MKTF-25	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	3/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	3/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	3/11/2015	Isopropylbenzene	37	5	0.76	447	ug/L
MKTF-25	3/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	3/11/2015	Ethylbenzene	170	5	0.51	700	ug/L
MKTF-25	3/11/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	3/11/2015	n-Propylbenzene	51	5	0.82	660	ug/L
MKTF-25	3/11/2015	n-Butylbenzene	16	15	1.2	1000	ug/L
MKTF-25	3/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	3/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	3/11/2015	1,2-Dichloroethane	**12**	5	0.88	5	ug/L
MKTF-25	3/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	3/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	3/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	3/11/2015	Toluene	12	5	0.54	1000	ug/L
MKTF-25	3/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	3/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	3/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	3/11/2015	sec-Butylbenzene	7.3	5	1.1	2000	ug/L
MKTF-25	3/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	3/11/2015	cis-1,2-Dichloroethene	55	5	0.4	70	ug/L
MKTF-25	3/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	3/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	3/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	3/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	3/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	3/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-25	3/11/2015	MTBE	**270**	5	0.87	143	ug/L
MKTF-25	3/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	3/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	6/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	6/10/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	6/10/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	6/10/2015	Benzene	**1000**	50	3.3	5	ug/L
MKTF-25	6/10/2015	1,1,1-Trichloroethane	50	5	0.39	200	ug/L
MKTF-25	6/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	6/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	6/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	6/10/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	6/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	6/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	6/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	6/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	6/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	6/10/2015	1,1-Dichloroethane	**280**	5	2	25	ug/L
MKTF-25	6/10/2015	1,1-Dichloroethene	**120**	5	0.5	7	ug/L
MKTF-25	6/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	6/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	6/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	6/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	6/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	6/10/2015	Trichloroethene	**29**	5	0.82	5	ug/L
MKTF-25	6/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	6/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	6/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	6/10/2015	1,2,4-Trimethylbenzene	18	5	0.8	56	ug/L
MKTF-25	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	6/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	6/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	6/10/2015	Isopropylbenzene	40	5	0.76	447	ug/L
MKTF-25	6/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	6/10/2015	Ethylbenzene	99	5	0.51	700	ug/L
MKTF-25	6/10/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	6/10/2015	n-Propylbenzene	42	5	0.82	660	ug/L
MKTF-25	6/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-25	6/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	6/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	6/10/2015	1,2-Dichloroethane	**11**	5	0.88	5	ug/L
MKTF-25	6/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	6/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	6/10/2015	Toluene	6.6	5	0.54	1000	ug/L
MKTF-25	6/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	6/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	6/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	6/10/2015	sec-Butylbenzene	6.1	5	1.1	2000	ug/L
MKTF-25	6/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	6/10/2015	cis-1,2-Dichloroethene	44	5	0.4	70	ug/L
MKTF-25	6/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	6/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	6/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	6/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	6/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	6/10/2015	Xylenes, Total	16	7.5	1.4	620	ug/L
MKTF-25	6/10/2015	MTBE	**210**	5	0.87	143	ug/L
MKTF-25	6/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	6/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	8/21/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	8/21/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	8/21/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	8/21/2015	Benzene	**1200**	50	3.3	5	ug/L
MKTF-25	8/21/2015	1,1,1-Trichloroethane	61	5	0.39	200	ug/L
MKTF-25	8/21/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	8/21/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	8/21/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	8/21/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	8/21/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	8/21/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	8/21/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	8/21/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	8/21/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	8/21/2015	1,1-Dichloroethane	**320**	5	2	25	ug/L
MKTF-25	8/21/2015	1,1-Dichloroethene	**160**	5	0.5	7	ug/L
MKTF-25	8/21/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	8/21/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	8/21/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	8/21/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	8/21/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	8/21/2015	Trichloroethene	**37**	5	0.82	5	ug/L
MKTF-25	8/21/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	8/21/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	8/21/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	8/21/2015	1,2,4-Trimethylbenzene	5.6	5	0.8	56	ug/L
MKTF-25	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	8/21/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	8/21/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	8/21/2015	Isopropylbenzene	44	5	0.76	447	ug/L
MKTF-25	8/21/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	8/21/2015	Ethylbenzene	130	5	0.51	700	ug/L
MKTF-25	8/21/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	8/21/2015	n-Propylbenzene	57	5	0.82	660	ug/L
MKTF-25	8/21/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-25	8/21/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	8/21/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	8/21/2015	1,2-Dichloroethane	**12**	5	0.88	5	ug/L
MKTF-25	8/21/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	8/21/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	8/21/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	8/21/2015	Toluene	9.9	5	0.54	1000	ug/L
MKTF-25	8/21/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	8/21/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	8/21/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	8/21/2015	sec-Butylbenzene	8.3	5	1.1	2000	ug/L
MKTF-25	8/21/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	8/21/2015	cis-1,2-Dichloroethene	47	5	0.4	70	ug/L
MKTF-25	8/21/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	8/21/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	8/21/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	8/21/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	8/21/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	8/21/2015	Xylenes, Total	8.9	7.5	1.4	620	ug/L
MKTF-25	8/21/2015	MTBE	**240**	5	0.87	143	ug/L
MKTF-25	8/21/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	8/21/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	11/5/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/5/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	11/5/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	11/5/2015	Benzene	**1100**	50	3.3	5	ug/L
MKTF-25	11/5/2015	1,1,1-Trichloroethane	45	5	0.39	200	ug/L
MKTF-25	11/5/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	11/5/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	11/5/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	11/5/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	11/5/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	11/5/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	11/5/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	11/5/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	11/5/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	11/5/2015	1,1-Dichloroethane	**300**	5	2	25	ug/L
MKTF-25	11/5/2015	1,1-Dichloroethene	**130**	5	0.5	7	ug/L
MKTF-25	11/5/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	11/5/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	11/5/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	11/5/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	11/5/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	11/5/2015	Trichloroethene	**36**	5	0.82	5	ug/L
MKTF-25	11/5/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	11/5/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	11/5/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	11/5/2015	1,2,4-Trimethylbenzene	5.6	5	0.8	56	ug/L
MKTF-25	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	11/5/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	11/5/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	11/5/2015	Isopropylbenzene	49	5	0.76	447	ug/L
MKTF-25	11/5/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	11/5/2015	Ethylbenzene	140	5	0.51	700	ug/L
MKTF-25	11/5/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	11/5/2015	n-Propylbenzene	44	5	0.82	660	ug/L
MKTF-25	11/5/2015	n-Butylbenzene	16	15	1.2	1000	ug/L
MKTF-25	11/5/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	11/5/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	11/5/2015	1,2-Dichloroethane	**13**	5	0.88	5	ug/L
MKTF-25	11/5/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	11/5/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	11/5/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	11/5/2015	Toluene	8.7	5	0.54	1000	ug/L
MKTF-25	11/5/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	11/5/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	11/5/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	11/5/2015	sec-Butylbenzene	8.4	5	1.1	2000	ug/L
MKTF-25	11/5/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	11/5/2015	cis-1,2-Dichloroethene	49	5	0.4	70	ug/L
MKTF-25	11/5/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	11/5/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	11/5/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	11/5/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	11/5/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	11/5/2015	Xylenes, Total	16	7.5	1.4	620	ug/L
MKTF-25	11/5/2015	MTBE	**250**	5	0.87	143	ug/L
MKTF-25	11/5/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	11/5/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	2/23/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-25	2/23/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-25	2/23/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-25	2/23/2016	Benzene	**1200**	50	4.8	5	ug/L
MKTF-25	2/23/2016	1,1,1-Trichloroethane	46	5	0.32	200	ug/L
MKTF-25	2/23/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-25	2/23/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-25	2/23/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-25	2/23/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-25	2/23/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-25	2/23/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-25	2/23/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-25	2/23/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-25	2/23/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-25	2/23/2016	1,1-Dichloroethane	**300**	5	0.54	25	ug/L
MKTF-25	2/23/2016	1,1-Dichloroethene	**120**	5	0.38	7	ug/L
MKTF-25	2/23/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-25	2/23/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-25	2/23/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-25	2/23/2016	2-Butanone	ND	50	1.6	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-25	2/23/2016	Trichloroethene	**29**	5	0.88	5	ug/L
MKTF-25	2/23/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-25	2/23/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-25	2/23/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	2/23/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-25	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-25	2/23/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-25	2/23/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-25	2/23/2016	Isopropylbenzene	47	5	0.49	447	ug/L
MKTF-25	2/23/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-25	2/23/2016	Ethylbenzene	190	5	0.56	700	ug/L
MKTF-25	2/23/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-25	2/23/2016	n-Propylbenzene	55	5	0.66	660	ug/L
MKTF-25	2/23/2016	n-Butylbenzene	16	15	0.8	1000	ug/L
MKTF-25	2/23/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-25	2/23/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-25	2/23/2016	1,2-Dichloroethane	**13**	5	0.26	5	ug/L
MKTF-25	2/23/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-25	2/23/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-25	2/23/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-25	2/23/2016	Toluene	11	5	0.45	1000	ug/L
MKTF-25	2/23/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-25	2/23/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-25	2/23/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-25	2/23/2016	sec-Butylbenzene	5.6	5	0.54	2000	ug/L
MKTF-25	2/23/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-25	2/23/2016	cis-1,2-Dichloroethene	45	5	0.62	70	ug/L
MKTF-25	2/23/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-25	2/23/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	2/23/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-25	2/23/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-25	2/23/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-25	2/23/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-25	2/23/2016	MTBE	**200**	5	1.1	143	ug/L
MKTF-25	2/23/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-25	2/23/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-25	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-25	6/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	6/9/2016	Benzene	**990**	50	4.8	5	ug/L
MKTF-25	6/9/2016	1,1,1-Trichloroethane	64	10	0.91	200	ug/L
MKTF-25	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	6/9/2016	Vinyl Chloride	**6.6**	10	2	2	ug/L
MKTF-25	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	6/9/2016	1,1-Dichloroethane	**610**	10	1.1	25	ug/L
MKTF-25	6/9/2016	1,1-Dichloroethene	**240**	10	1.1	7	ug/L
MKTF-25	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	6/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	6/9/2016	Trichloroethene	**64**	10	1.8	5	ug/L
MKTF-25	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	6/9/2016	1,2,4-Trimethylbenzene	21	10	1.1	56	ug/L
MKTF-25	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	6/9/2016	Isopropylbenzene	93	10	1	447	ug/L
MKTF-25	6/9/2016	p-Isopropyltoluene	2.4	10	1.4	NA	ug/L
MKTF-25	6/9/2016	Ethylbenzene	190	10	1.1	700	ug/L
MKTF-25	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	6/9/2016	n-Propylbenzene	86	10	1.3	660	ug/L
MKTF-25	6/9/2016	n-Butylbenzene	29	30	1.6	1000	ug/L
MKTF-25	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-25	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/9/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
MKTF-25	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	6/9/2016	Toluene	13	10	1.2	1000	ug/L
MKTF-25	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	6/9/2016	Tetrachloroethene	**6**	10	1.5	5	ug/L
MKTF-25	6/9/2016	sec-Butylbenzene	15	10	1.2	2000	ug/L
MKTF-25	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	6/9/2016	cis-1,2-Dichloroethene	**100**	10	1.2	70	ug/L
MKTF-25	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	6/9/2016	Xylenes, Total	18	15	3.7	620	ug/L
MKTF-25	6/9/2016	MTBE	**480**	10	2.1	143	ug/L
MKTF-25	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	9/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-25	9/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	9/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	9/9/2016	Benzene	**920**	10	0.96	5	ug/L
MKTF-25	9/9/2016	1,1,1-Trichloroethane	5.9	10	0.91	200	ug/L
MKTF-25	9/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	9/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	9/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	9/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	9/9/2016	Vinyl Chloride	**5.9**	10	2	2	ug/L
MKTF-25	9/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	9/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	9/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	9/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	9/9/2016	1,1-Dichloroethane	**180**	10	1.1	25	ug/L
MKTF-25	9/9/2016	1,1-Dichloroethene	**55**	10	1.1	7	ug/L
MKTF-25	9/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	9/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	9/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	9/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	9/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	9/9/2016	Trichloroethene	**11**	10	1.8	5	ug/L
MKTF-25	9/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	9/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	9/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	9/9/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
MKTF-25	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	9/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	9/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	9/9/2016	Isopropylbenzene	25	10	1	447	ug/L
MKTF-25	9/9/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-25	9/9/2016	Ethylbenzene	18	10	1.1	700	ug/L
MKTF-25	9/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	9/9/2016	n-Propylbenzene	32	10	1.3	660	ug/L
MKTF-25	9/9/2016	n-Butylbenzene	9	30	1.6	1000	ug/L
MKTF-25	9/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	9/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	9/9/2016	1,2-Dichloroethane	**7.9**	10	1.2	5	ug/L
MKTF-25	9/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-25	9/9/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-25	9/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	9/9/2016	Toluene	5	10	1.2	1000	ug/L
MKTF-25	9/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	9/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	9/9/2016	Tetrachloroethene	*2.1*	*10*	1.5	5	ug/L
MKTF-25	9/9/2016	sec-Butylbenzene	5.9	10	1.2	2000	ug/L
MKTF-25	9/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	9/9/2016	cis-1,2-Dichloroethene	40	10	1.2	70	ug/L
MKTF-25	9/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	9/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	9/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	9/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	9/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	9/9/2016	Xylenes, Total	ND	15	3.7	620	ug/L
MKTF-25	9/9/2016	MTBE	**150**	10	2.1	143	ug/L
MKTF-25	9/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	9/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	11/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/1/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	11/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	11/1/2016	Benzene	**960**	10	0.96	5	ug/L
MKTF-25	11/1/2016	1,1,1-Trichloroethane	14	10	0.91	200	ug/L
MKTF-25	11/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	11/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	11/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	11/1/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	11/1/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-25	11/1/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	11/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	11/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	11/1/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	11/1/2016	1,1-Dichloroethane	**220**	10	1.1	25	ug/L
MKTF-25	11/1/2016	1,1-Dichloroethene	**88**	10	1.1	7	ug/L
MKTF-25	11/1/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	11/1/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	11/1/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	11/1/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	11/1/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	11/1/2016	Trichloroethene	**18**	10	1.8	5	ug/L
MKTF-25	11/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	11/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	11/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	11/1/2016	1,2,4-Trimethylbenzene	2.5	10	1.1	56	ug/L
MKTF-25	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	11/1/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	11/1/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	11/1/2016	Isopropylbenzene	23	10	1	447	ug/L
MKTF-25	11/1/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-25	11/1/2016	Ethylbenzene	46	10	1.1	700	ug/L
MKTF-25	11/1/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	11/1/2016	n-Propylbenzene	28	10	1.3	660	ug/L
MKTF-25	11/1/2016	n-Butylbenzene	8	30	1.6	1000	ug/L
MKTF-25	11/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	11/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	11/1/2016	1,2-Dichloroethane	**8.6**	10	1.2	5	ug/L
MKTF-25	11/1/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-25	11/1/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-25	11/1/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	11/1/2016	Toluene	6	10	1.2	1000	ug/L
MKTF-25	11/1/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	11/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	11/1/2016	Tetrachloroethene	*2.7*	*10*	1.5	5	ug/L
MKTF-25	11/1/2016	sec-Butylbenzene	5.4	10	1.2	2000	ug/L
MKTF-25	11/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	11/1/2016	cis-1,2-Dichloroethene	44	10	1.2	70	ug/L
MKTF-25	11/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	11/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	11/1/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	11/1/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	11/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	11/1/2016	Xylenes, Total	4.6	15	3.7	620	ug/L
MKTF-25	11/1/2016	MTBE	**190**	10	2.1	143	ug/L
MKTF-25	11/1/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	11/1/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	3/29/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	3/29/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-25	3/29/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-25	3/29/2017	Benzene	**780**	50	4.8	5	ug/L
MKTF-25	3/29/2017	1,1,1-Trichloroethane	21	5	0.36	200	ug/L
MKTF-25	3/29/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-25	3/29/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-25	3/29/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-25	3/29/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	3/29/2017	Vinyl Chloride	**2.7**	5	0.89	2	ug/L
MKTF-25	3/29/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	3/29/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-25	3/29/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	3/29/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	3/29/2017	1,1-Dichloroethane	**150**	5	0.52	25	ug/L
MKTF-25	3/29/2017	1,1-Dichloroethene	**74**	5	0.4	7	ug/L
MKTF-25	3/29/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	3/29/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-25	3/29/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	3/29/2017	2-Butanone	ND	50	5.7	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/29/2017	1,1,2-Trichloroethane	1.3	5	0.7	5	ug/L
MKTF-25	3/29/2017	Trichloroethene	**17**	5	0.88	5	ug/L
MKTF-25	3/29/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	3/29/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-25	3/29/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	3/29/2017	1,2,4-Trimethylbenzene	1.4	5	0.52	56	ug/L
MKTF-25	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	3/29/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	3/29/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	3/29/2017	Isopropylbenzene	27	5	0.49	447	ug/L
MKTF-25	3/29/2017	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-25	3/29/2017	Ethylbenzene	24	5	0.56	700	ug/L
MKTF-25	3/29/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	3/29/2017	n-Propylbenzene	25	5	0.66	660	ug/L
MKTF-25	3/29/2017	n-Butylbenzene	11	15	0.8	1000	ug/L
MKTF-25	3/29/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	3/29/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	3/29/2017	1,2-Dichloroethane	**5.7**	5	0.58	5	ug/L
MKTF-25	3/29/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	3/29/2017	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-25	3/29/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	3/29/2017	Toluene	4.5	5	0.45	1000	ug/L
MKTF-25	3/29/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	3/29/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-25	3/29/2017	Tetrachloroethene	0.84	5	0.76	5	ug/L
MKTF-25	3/29/2017	sec-Butylbenzene	5.3	5	0.51	2000	ug/L
MKTF-25	3/29/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-25	3/29/2017	cis-1,2-Dichloroethene	20	5	1	70	ug/L
MKTF-25	3/29/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	3/29/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	3/29/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	3/29/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-25	3/29/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-25	3/29/2017	Xylenes, Total	4.3	7.5	1.6	620	ug/L
MKTF-25	3/29/2017	MTBE	120	5	0.74	143	ug/L
MKTF-25	3/29/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-25	3/29/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-25	6/5/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	6/5/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	6/5/2017	Chloroform	ND	5	2	100	ug/L
MKTF-25	6/5/2017	Benzene	**620**	50	3.1	5	ug/L
MKTF-25	6/5/2017	1,1,1-Trichloroethane	17	5	0.36	200	ug/L
MKTF-25	6/5/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	6/5/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	6/5/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	6/5/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	6/5/2017	Vinyl Chloride	*0.96*	*5*	0.89	2	ug/L
MKTF-25	6/5/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	6/5/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	6/5/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	6/5/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	6/5/2017	1,1-Dichloroethane	**160**	5	2	25	ug/L
MKTF-25	6/5/2017	1,1-Dichloroethene	**86**	5	0.4	7	ug/L
MKTF-25	6/5/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	6/5/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	6/5/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	6/5/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	6/5/2017	1,1,2-Trichloroethane	1.3	5	0.7	5	ug/L
MKTF-25	6/5/2017	Trichloroethene	**19**	5	0.56	5	ug/L
MKTF-25	6/5/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	6/5/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	6/5/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	6/5/2017	1,2,4-Trimethylbenzene	1.3	5	0.56	56	ug/L
MKTF-25	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	6/5/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	6/5/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	6/5/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-25	6/5/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-25	6/5/2017	Ethylbenzene	21	5	0.47	700	ug/L
MKTF-25	6/5/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	6/5/2017	n-Propylbenzene	19	5	0.37	660	ug/L
MKTF-25	6/5/2017	n-Butylbenzene	8.3	15	0.65	1000	ug/L
MKTF-25	6/5/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	6/5/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	6/5/2017	1,2-Dichloroethane	**6.4**	5	2	5	ug/L
MKTF-25	6/5/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/5/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	6/5/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	6/5/2017	Toluene	2.8	5	0.32	1000	ug/L
MKTF-25	6/5/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	6/5/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	6/5/2017	Tetrachloroethene	0.76	5	0.65	5	ug/L
MKTF-25	6/5/2017	sec-Butylbenzene	3.6	5	0.55	2000	ug/L
MKTF-25	6/5/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	6/5/2017	cis-1,2-Dichloroethene	24	5	1	70	ug/L
MKTF-25	6/5/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	6/5/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-25	6/5/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	6/5/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	6/5/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	6/5/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	6/5/2017	Xylenes, Total	3	7.5	1.6	620	ug/L
MKTF-25	6/5/2017	MTBE	120	5	1.2	143	ug/L
MKTF-25	6/5/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	6/5/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-25	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-25	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-25	9/25/2017	Benzene	**1600**	100	6.2	5	ug/L
MKTF-25	9/25/2017	1,1,1-Trichloroethane	20	1	0.073	200	ug/L
MKTF-25	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-25	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-25	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-25	9/25/2017	Chloroethane	0.46	2	0.23	20857	ug/L
MKTF-25	9/25/2017	Vinyl Chloride	**3.1**	1	0.18	2	ug/L
MKTF-25	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-25	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-25	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-25	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-25	9/25/2017	1,1-Dichloroethane	**240**	10	4	25	ug/L
MKTF-25	9/25/2017	1,1-Dichloroethene	**110**	10	0.81	7	ug/L
MKTF-25	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-25	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-25	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-25	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-25	9/25/2017	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-25	9/25/2017	Trichloroethene	**27**	1	0.11	5	ug/L
MKTF-25	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-25	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-25	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-25	9/25/2017	1,2,4-Trimethylbenzene	3.5	1	0.11	56	ug/L
MKTF-25	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-25	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-25	9/25/2017	tert-Butylbenzene	0.12	1	0.1	690	ug/L
MKTF-25	9/25/2017	Isopropylbenzene	46	1	0.051	447	ug/L
MKTF-25	9/25/2017	p-Isopropyltoluene	0.89	1	0.096	NA	ug/L
MKTF-25	9/25/2017	Ethylbenzene	130	10	0.93	700	ug/L
MKTF-25	9/25/2017	Styrene	0.17	1	0.16	100	ug/L
MKTF-25	9/25/2017	n-Propylbenzene	57	1	0.074	660	ug/L
MKTF-25	9/25/2017	n-Butylbenzene	15	3	0.13	1000	ug/L
MKTF-25	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-25	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-25	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-25	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-25	9/25/2017	1,3,5-Trimethylbenzene	1.2	1	0.087	60	ug/L
MKTF-25	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-25	9/25/2017	Toluene	10	1	0.064	1000	ug/L
MKTF-25	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-25	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-25	9/25/2017	Tetrachloroethene	2.3	1	0.13	5	ug/L
MKTF-25	9/25/2017	sec-Butylbenzene	7.5	1	0.11	2000	ug/L
MKTF-25	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-25	9/25/2017	cis-1,2-Dichloroethene	52	1	0.2	70	ug/L
MKTF-25	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-25	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-25	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-25	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-25	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-25	9/25/2017	Xylenes, Total	14	1.5	0.32	620	ug/L
MKTF-25	9/25/2017	MTBE	**230**	10	2.4	143	ug/L
MKTF-25	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-25	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/21/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	11/21/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	11/21/2017	Chloroform	ND	5	2	100	ug/L
MKTF-25	11/21/2017	Benzene	**1600**	50	3.1	5	ug/L
MKTF-25	11/21/2017	1,1,1-Trichloroethane	16	5	0.36	200	ug/L
MKTF-25	11/21/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	11/21/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	11/21/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	11/21/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	11/21/2017	Vinyl Chloride	**3.2**	5	0.89	2	ug/L
MKTF-25	11/21/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	11/21/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	11/21/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	11/21/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	11/21/2017	1,1-Dichloroethane	**210**	5	2	25	ug/L
MKTF-25	11/21/2017	1,1-Dichloroethene	**94**	5	0.4	7	ug/L
MKTF-25	11/21/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	11/21/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	11/21/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	11/21/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	11/21/2017	1,1,2-Trichloroethane	1.2	5	0.7	5	ug/L
MKTF-25	11/21/2017	Trichloroethene	**21**	5	0.56	5	ug/L
MKTF-25	11/21/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	11/21/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	11/21/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	11/21/2017	1,2,4-Trimethylbenzene	4.5	5	0.56	56	ug/L
MKTF-25	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	11/21/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	11/21/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	11/21/2017	Isopropylbenzene	48	5	0.26	447	ug/L
MKTF-25	11/21/2017	p-Isopropyltoluene	0.53	5	0.48	NA	ug/L
MKTF-25	11/21/2017	Ethylbenzene	140	5	0.47	700	ug/L
MKTF-25	11/21/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	11/21/2017	n-Propylbenzene	57	5	0.37	660	ug/L
MKTF-25	11/21/2017	n-Butylbenzene	14	15	0.65	1000	ug/L
MKTF-25	11/21/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	11/21/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	11/21/2017	1,2-Dichloroethane	**9.7**	5	2	5	ug/L
MKTF-25	11/21/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	11/21/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	11/21/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	11/21/2017	Toluene	11	5	0.32	1000	ug/L
MKTF-25	11/21/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	11/21/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	11/21/2017	Tetrachloroethene	1.9	5	0.65	5	ug/L
MKTF-25	11/21/2017	sec-Butylbenzene	7	5	0.55	2000	ug/L
MKTF-25	11/21/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	11/21/2017	cis-1,2-Dichloroethene	47	5	1	70	ug/L
MKTF-25	11/21/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	11/21/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	11/21/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	11/21/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	11/21/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	11/21/2017	Xylenes, Total	13	7.5	1.6	620	ug/L
MKTF-25	11/21/2017	MTBE	**200**	5	1.2	143	ug/L
MKTF-25	11/21/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	11/21/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	2/5/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	2/5/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	2/5/2018	Chloroform	ND	5	2	100	ug/L
MKTF-25	2/5/2018	Benzene	**2000**	50	3.1	5	ug/L
MKTF-25	2/5/2018	1,1,1-Trichloroethane	14	5	0.36	200	ug/L
MKTF-25	2/5/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	2/5/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	2/5/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	2/5/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	2/5/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-25	2/5/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	2/5/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	2/5/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	2/5/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	2/5/2018	1,1-Dichloroethane	**220**	5	2	25	ug/L
MKTF-25	2/5/2018	1,1-Dichloroethene	**110**	5	0.4	7	ug/L
MKTF-25	2/5/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	2/5/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	2/5/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/5/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	2/5/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-25	2/5/2018	Trichloroethene	**25**	5	0.56	5	ug/L
MKTF-25	2/5/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	2/5/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	2/5/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	2/5/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
MKTF-25	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	2/5/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	2/5/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	2/5/2018	Isopropylbenzene	44	5	0.26	447	ug/L
MKTF-25	2/5/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-25	2/5/2018	Ethylbenzene	110	5	0.47	700	ug/L
MKTF-25	2/5/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-25	2/5/2018	n-Propylbenzene	45	5	0.37	660	ug/L
MKTF-25	2/5/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-25	2/5/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	2/5/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	2/5/2018	1,2-Dichloroethane	**10**	5	2	5	ug/L
MKTF-25	2/5/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	2/5/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	2/5/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	2/5/2018	Toluene	10	5	0.32	1000	ug/L
MKTF-25	2/5/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	2/5/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	2/5/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-25	2/5/2018	sec-Butylbenzene	6.9	5	0.55	2000	ug/L
MKTF-25	2/5/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	2/5/2018	cis-1,2-Dichloroethene	50	5	1	70	ug/L
MKTF-25	2/5/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	2/5/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	2/5/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	2/5/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	2/5/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	2/5/2018	Xylenes, Total	9.7	7.5	1.6	620	ug/L
MKTF-25	2/5/2018	MTBE	**250**	5	1.2	143	ug/L
MKTF-25	2/5/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	2/5/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	5/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	5/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	5/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-25	5/6/2018	Benzene	**3400**	50	3.1	5	ug/L
MKTF-25	5/6/2018	1,1,1-Trichloroethane	13	5	0.36	200	ug/L
MKTF-25	5/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	5/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	5/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	5/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	5/6/2018	Vinyl Chloride	**4**	5	0.89	2	ug/L
MKTF-25	5/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	5/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	5/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	5/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	5/6/2018	1,1-Dichloroethane	**230**	5	2	25	ug/L
MKTF-25	5/6/2018	1,1-Dichloroethene	**110**	5	0.4	7	ug/L
MKTF-25	5/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	5/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	5/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	5/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	5/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-25	5/6/2018	Trichloroethene	**26**	5	0.56	5	ug/L
MKTF-25	5/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	5/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	5/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	5/6/2018	1,2,4-Trimethylbenzene	4.6	5	0.56	56	ug/L
MKTF-25	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	5/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	5/6/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	5/6/2018	Isopropylbenzene	57	5	0.26	447	ug/L
MKTF-25	5/6/2018	p-Isopropyltoluene	1.4	5	0.48	NA	ug/L
MKTF-25	5/6/2018	Ethylbenzene	150	5	0.47	700	ug/L
MKTF-25	5/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-25	5/6/2018	n-Propylbenzene	85	5	0.37	660	ug/L
MKTF-25	5/6/2018	n-Butylbenzene	19	15	0.65	1000	ug/L
MKTF-25	5/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	5/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	5/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	5/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	5/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	5/6/2018	Toluene	15	5	0.32	1000	ug/L
MKTF-25	5/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	5/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	5/6/2018	Tetrachloroethene	2.7	5	0.65	5	ug/L
MKTF-25	5/6/2018	sec-Butylbenzene	9.5	5	0.55	2000	ug/L
MKTF-25	5/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	5/6/2018	cis-1,2-Dichloroethene	53	5	1	70	ug/L
MKTF-25	5/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	5/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	5/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	5/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	5/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	5/6/2018	Xylenes, Total	9	7.5	1.6	620	ug/L
MKTF-25	5/6/2018	MTBE	**260**	5	1.2	143	ug/L
MKTF-25	5/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	5/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	8/17/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-25	8/17/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-25	8/17/2018	Chloroform	ND	10	4	100	ug/L
MKTF-25	8/17/2018	Benzene	**4500**	100	17	5	ug/L
MKTF-25	8/17/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-25	8/17/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-25	8/17/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-25	8/17/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-25	8/17/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-25	8/17/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-25	8/17/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-25	8/17/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-25	8/17/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-25	8/17/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-25	8/17/2018	1,1-Dichloroethane	**140**	10	4	25	ug/L
MKTF-25	8/17/2018	1,1-Dichloroethene	**49**	10	1.2	7	ug/L
MKTF-25	8/17/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-25	8/17/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-25	8/17/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-25	8/17/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-25	8/17/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-25	8/17/2018	Trichloroethene	**6**	10	2.6	5	ug/L
MKTF-25	8/17/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-25	8/17/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-25	8/17/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	8/17/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
MKTF-25	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-25	8/17/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-25	8/17/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-25	8/17/2018	Isopropylbenzene	35	10	2.2	447	ug/L
MKTF-25	8/17/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-25	8/17/2018	Ethylbenzene	26	10	2.2	700	ug/L
MKTF-25	8/17/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-25	8/17/2018	n-Propylbenzene	64	10	2.4	660	ug/L
MKTF-25	8/17/2018	n-Butylbenzene	12	30	2.5	1000	ug/L
MKTF-25	8/17/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-25	8/17/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-25	8/17/2018	1,2-Dichloroethane	**8.5**	10	4	5	ug/L
MKTF-25	8/17/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-25	8/17/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-25	8/17/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-25	8/17/2018	Toluene	17	10	1.7	1000	ug/L
MKTF-25	8/17/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-25	8/17/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-25	8/17/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-25	8/17/2018	sec-Butylbenzene	5.6	10	2	2000	ug/L
MKTF-25	8/17/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-25	8/17/2018	cis-1,2-Dichloroethene	52	10	3.8	70	ug/L
MKTF-25	8/17/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-25	8/17/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-25	8/17/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-25	8/17/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-25	8/17/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-25	8/17/2018	Xylenes, Total	ND	15	6.4	620	ug/L
MKTF-25	8/17/2018	MTBE	**250**	10	3.2	143	ug/L
MKTF-25	8/17/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-25	8/17/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-25	11/15/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-25	11/15/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-25	11/15/2018	Benzene	**1700**	100	17	5	ug/L
MKTF-25	11/15/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-25	11/15/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-25	11/15/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-25	11/15/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-25	11/15/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-25	11/15/2018	Vinyl Chloride	*ND*	*10*	1.2	2	ug/L
MKTF-25	11/15/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-25	11/15/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-25	11/15/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-25	11/15/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-25	11/15/2018	1,1-Dichloroethane	**130**	10	1.8	25	ug/L
MKTF-25	11/15/2018	1,1-Dichloroethene	**27**	10	1.2	7	ug/L
MKTF-25	11/15/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-25	11/15/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-25	11/15/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-25	11/15/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-25	11/15/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-25	11/15/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-25	11/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-25	11/15/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-25	11/15/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-25	11/15/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
MKTF-25	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-25	11/15/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-25	11/15/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-25	11/15/2018	Isopropylbenzene	ND	10	2.2	447	ug/L
MKTF-25	11/15/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-25	11/15/2018	Ethylbenzene	ND	10	2.2	700	ug/L
MKTF-25	11/15/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-25	11/15/2018	n-Propylbenzene	ND	10	2.4	660	ug/L
MKTF-25	11/15/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-25	11/15/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-25	11/15/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-25	11/15/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-25	11/15/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-25	11/15/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-25	11/15/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-25	11/15/2018	Toluene	ND	10	1.7	1000	ug/L
MKTF-25	11/15/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-25	11/15/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-25	11/15/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-25	11/15/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-25	11/15/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-25	11/15/2018	cis-1,2-Dichloroethene	29	10	3.8	70	ug/L
MKTF-25	11/15/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-25	11/15/2018	Pentafluorobenzene	**100**	0	0		None
MKTF-25	11/15/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-25	11/15/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-25	11/15/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-25	11/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-25	11/15/2018	Xylenes, Total	ND	15	6.4	620	ug/L
MKTF-25	11/15/2018	MTBE	**200**	10	4.6	143	ug/L
MKTF-25	11/15/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-25	11/15/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-25	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-25	5/6/2019	1,1,1-Trichloroethane	3.2	10	1.729216	200	ug/L
MKTF-25	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-25	5/6/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-25	5/6/2019	1,1-Dichloroethane	**140**	10	1.408586	25	ug/L
MKTF-25	5/6/2019	1,1-Dichloroethene	**50**	10	2.053882	7	ug/L
MKTF-25	5/6/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-25	5/6/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-25	5/6/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-25	5/6/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-25	5/6/2019	1,2,4-Trimethylbenzene	2.3	10	2.131991	56	ug/L
MKTF-25	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-25	5/6/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-25	5/6/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-25	5/6/2019	1,2-Dichloroethane	**6.1**	10	1.946378	5	ug/L
MKTF-25	5/6/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-25	5/6/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
MKTF-25	5/6/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-25	5/6/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-25	5/6/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
MKTF-25	5/6/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-25	5/6/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-25	5/6/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-25	5/6/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-25	5/6/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
MKTF-25	5/6/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-25	5/6/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-25	5/6/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-25	5/6/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-25	5/6/2019	Benzene	**370**	10	1.666391	5	ug/L
MKTF-25	5/6/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-25	5/6/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-25	5/6/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-25	5/6/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-25	5/6/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-25	5/6/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-25	5/6/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-25	5/6/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-25	5/6/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-25	5/6/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-25	5/6/2019	cis-1,2-Dichloroethene	35	10	1.901151	70	ug/L
MKTF-25	5/6/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-25	5/6/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-25	5/6/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-25	5/6/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-25	5/6/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
MKTF-25	5/6/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-25	5/6/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-25	5/6/2019	MTBE	**290**	10	4.56095	143	ug/L
MKTF-25	5/6/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-25	5/6/2019	Naphthalene	ND	20	2.750713	30	ug/L
MKTF-25	5/6/2019	n-Butylbenzene	6.3	30	2.275695	1000	ug/L
MKTF-25	5/6/2019	n-Propylbenzene	5.7	10	2.14308	660	ug/L
MKTF-25	5/6/2019	sec-Butylbenzene	4.1	10	2.477313	2000	ug/L
MKTF-25	5/6/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-25	5/6/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-25	5/6/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-25	5/6/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-25	5/6/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-25	5/6/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-25	5/6/2019	Trichloroethene	**12**	10	1.662718	5	ug/L
MKTF-25	5/6/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-25	5/6/2019	Vinyl Chloride	**7**	10	1.790993	2	ug/L
MKTF-25	5/6/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
MKTF-25	5/6/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-25	8/27/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-25	8/27/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-25	8/27/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-25	8/27/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-25	8/27/2019	1,1-Dichloroethane	**130**	5	0.704293	25	ug/L
MKTF-25	8/27/2019	1,1-Dichloroethene	**52**	5	1.026941	7	ug/L
MKTF-25	8/27/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-25	8/27/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-25	8/27/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-25	8/27/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-25	8/27/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
MKTF-25	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-25	8/27/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-25	8/27/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-25	8/27/2019	1,2-Dichloroethane	**10**	5	0.973189	5	ug/L
MKTF-25	8/27/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-25	8/27/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-25	8/27/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-25	8/27/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-25	8/27/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-25	8/27/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
MKTF-25	8/27/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-25	8/27/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-25	8/27/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-25	8/27/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-25	8/27/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-25	8/27/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-25	8/27/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-25	8/27/2019	Acetone	14	50	5.996982	14064	ug/L
MKTF-25	8/27/2019	Benzene	**130**	5	0.833195	5	ug/L
MKTF-25	8/27/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-25	8/27/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-25	8/27/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-25	8/27/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-25	8/27/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-25	8/27/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-25	8/27/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-25	8/27/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-25	8/27/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-25	8/27/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-25	8/27/2019	cis-1,2-Dichloroethene	25	5	0.950575	70	ug/L
MKTF-25	8/27/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-25	8/27/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-25	8/27/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-25	8/27/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-25	8/27/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
MKTF-25	8/27/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-25	8/27/2019	Isopropylbenzene	2	5	0.957611	447	ug/L
MKTF-25	8/27/2019	MTBE	**850**	5	2.280475	143	ug/L
MKTF-25	8/27/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-25	8/27/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-25	8/27/2019	n-Butylbenzene	4.5	15	1.137848	1000	ug/L
MKTF-25	8/27/2019	n-Propylbenzene	1.4	5	1.07154	660	ug/L
MKTF-25	8/27/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-25	8/27/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-25	8/27/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-25	8/27/2019	Tetrachloroethene	1.6	5	0.747625	5	ug/L
MKTF-25	8/27/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-25	8/27/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-25	8/27/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-25	8/27/2019	Trichloroethene	**13**	5	0.831359	5	ug/L
MKTF-25	8/27/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-25	8/27/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-25	8/27/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-25	8/27/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-25	10/23/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-25	10/23/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-25	10/23/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-25	10/23/2019	1,1,2-Trichloroethane	1.5	5	1.07915	5	ug/L
MKTF-25	10/23/2019	1,1-Dichloroethane	**110**	5	0.704293	25	ug/L
MKTF-25	10/23/2019	1,1-Dichloroethene	**59**	5	1.026941	7	ug/L
MKTF-25	10/23/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-25	10/23/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-25	10/23/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-25	10/23/2019	1,2,4-Trimethylbenzene	1.3	5	1.065995	56	ug/L
MKTF-25	10/23/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-25	10/23/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-25	10/23/2019	1,2-Dichloroethane	**9.1**	5	0.973189	5	ug/L
MKTF-25	10/23/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-25	10/23/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-25	10/23/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-25	10/23/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-25	10/23/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
MKTF-25	10/23/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-25	10/23/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-25	10/23/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-25	10/23/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-25	10/23/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-25	10/23/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-25	10/23/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-25	10/23/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-25	10/23/2019	Benzene	**370**	5	0.833195	5	ug/L
MKTF-25	10/23/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-25	10/23/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-25	10/23/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-25	10/23/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-25	10/23/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-25	10/23/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-25	10/23/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-25	10/23/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-25	10/23/2019	Chloroform	ND	5	0.609453	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	10/23/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-25	10/23/2019	cis-1,2-Dichloroethene	27	5	0.950575	70	ug/L
MKTF-25	10/23/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-25	10/23/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-25	10/23/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-25	10/23/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-25	10/23/2019	Ethylbenzene	0.81	5	0.661704	700	ug/L
MKTF-25	10/23/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-25	10/23/2019	Isopropylbenzene	7.7	5	0.957611	447	ug/L
MKTF-25	10/23/2019	MTBE	**880**	5	2.280475	143	ug/L
MKTF-25	10/23/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-25	10/23/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-25	10/23/2019	n-Propylbenzene	3.3	5	1.07154	660	ug/L
MKTF-25	10/23/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-25	10/23/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-25	10/23/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-25	10/23/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-25	10/23/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-25	10/23/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-25	10/23/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-25	10/23/2019	Trichloroethene	**11**	5	0.831359	5	ug/L
MKTF-25	10/23/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-25	10/23/2019	Vinyl Chloride	**3.3**	5	0.895496	2	ug/L
MKTF-25	10/23/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-25	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-25	2/27/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-25	2/27/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-25	2/27/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-25	2/27/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-25	2/27/2020	1,1-Dichloroethane	**100**	5	1.4	25	ug/L
MKTF-25	2/27/2020	1,1-Dichloroethene	**63**	5	0.65	7	ug/L
MKTF-25	2/27/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-25	2/27/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-25	2/27/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-25	2/27/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-25	2/27/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-25	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-25	2/27/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-25	2/27/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-25	2/27/2020	1,2-Dichloroethane	**8.8**	5	1.1	5	ug/L
MKTF-25	2/27/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-25	2/27/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
MKTF-25	2/27/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-25	2/27/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-25	2/27/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-25	2/27/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
MKTF-25	2/27/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-25	2/27/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-25	2/27/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-25	2/27/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-25	2/27/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
MKTF-25	2/27/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-25	2/27/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
MKTF-25	2/27/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-25	2/27/2020	Acetone	16	50	12	14064	ug/L
MKTF-25	2/27/2020	Benzene	**420**	5	1.1	5	ug/L
MKTF-25	2/27/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-25	2/27/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-25	2/27/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-25	2/27/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-25	2/27/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-25	2/27/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-25	2/27/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-25	2/27/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-25	2/27/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-25	2/27/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-25	2/27/2020	cis-1,2-Dichloroethene	27	5	1.9	70	ug/L
MKTF-25	2/27/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-25	2/27/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-25	2/27/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-25	2/27/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-25	2/27/2020	Ethylbenzene	ND	5	1.1	700	ug/L
MKTF-25	2/27/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-25	2/27/2020	Isopropylbenzene	7.7	5	0.91	447	ug/L
MKTF-25	2/27/2020	MTBE	**620**	5	2	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/27/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-25	2/27/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
MKTF-25	2/27/2020	n-Propylbenzene	2.3	5	0.91	660	ug/L
MKTF-25	2/27/2020	Naphthalene	ND	10	1.4	30	ug/L
MKTF-25	2/27/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
MKTF-25	2/27/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-25	2/27/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-25	2/27/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-25	2/27/2020	Toluene	ND	5	1	1000	ug/L
MKTF-25	2/27/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-25	2/27/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-25	2/27/2020	Trichloroethene	**12**	5	1	5	ug/L
MKTF-25	2/27/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-25	2/27/2020	Vinyl Chloride	**4.2**	5	0.98	2	ug/L
MKTF-25	2/27/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
MKTF-25	2/27/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-25	12/18/2020	Acetone	211	125	50	14064	ug/L
MKTF-25	12/18/2020	Benzene	**629**	5	1.9	5	ug/L
MKTF-25	12/18/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-25	12/18/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-25	12/18/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-25	12/18/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-25	12/18/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-25	12/18/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-25	12/18/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-25	12/18/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-25	12/18/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-25	12/18/2020	Chloroform	ND	5	3	100	ug/L
MKTF-25	12/18/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-25	12/18/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-25	12/18/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L
MKTF-25	12/18/2020	cis-1,2-Dichloroethene	14.9	5	2.5	70	ug/L
MKTF-25	12/18/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-25	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-25	12/18/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-25	12/18/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-25	12/18/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-25	12/18/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-25	12/18/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-25	12/18/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-25	12/18/2020	1,1-Dichloroethane	**91.8**	5	2.5	25	ug/L
MKTF-25	12/18/2020	1,2-Dichloroethane	**32.1**	5	2.5	5	ug/L
MKTF-25	12/18/2020	1,1-Dichloroethene	**61.3**	5	2.5	7	ug/L
MKTF-25	12/18/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-25	12/18/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-25	12/18/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-25	12/18/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-25	12/18/2020	Ethylbenzene	ND	5	2.5	700	ug/L
MKTF-25	12/18/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-25	12/18/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-25	12/18/2020	Isopropylbenzene	ND	5	2.65	447	ug/L
MKTF-25	12/18/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-25	12/18/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-25	12/18/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-25	12/18/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-25	12/18/2020	MTBE	**795**	5	3.7	143	ug/L
MKTF-25	12/18/2020	Naphthalene	ND	5	5	30	ug/L
MKTF-25	12/18/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-25	12/18/2020	n-Propylbenzene	ND	5	3.45	660	ug/L
MKTF-25	12/18/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-25	12/18/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-25	12/18/2020	Styrene	ND	5	5	100	ug/L
MKTF-25	12/18/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-25	12/18/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-25	12/18/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-25	12/18/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-25	12/18/2020	Toluene	ND	5	2.05	1000	ug/L
MKTF-25	12/18/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-25	12/18/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-25	12/18/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L
MKTF-25	12/18/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-25	12/18/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-25	12/18/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-25	12/18/2020	Trichloroethene	**9.7**	5	2.5	5	ug/L
MKTF-25	12/18/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-25	12/18/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	12/18/2020	1,2,4-Trimethylbenzene	ND	5	4.1	56	ug/L
MKTF-25	12/18/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-25	12/18/2020	Vinyl Chloride	*ND*	*5*	2.5	2	ug/L
MKTF-25	12/18/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-25	12/18/2020	1,2-Dibromoethane	ND	0.0202	0.00504	0.05	ug/L
MKTF-27	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-27	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-27	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-27	4/8/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-27	4/8/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-27	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-27	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-27	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-27	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-27	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-27	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-27	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-27	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-27	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-27	4/8/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-27	4/8/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
MKTF-27	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-27	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-27	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-27	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-27	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-27	4/8/2014	Trichloroethene	ND	2	0.39	5	ug/L
MKTF-27	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-27	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-27	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-27	4/8/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-27	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-27	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-27	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-27	4/8/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-27	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-27	4/8/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-27	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-27	4/8/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-27	4/8/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-27	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-27	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-27	4/8/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-27	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-27	4/8/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-27	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-27	4/8/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-27	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-27	4/8/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-27	4/8/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-27	4/8/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-27	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-27	4/8/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-27	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-27	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-27	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-27	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-27	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-27	4/8/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-27	4/8/2014	MTBE	38	2	0.5	143	ug/L
MKTF-27	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-27	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-27	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-27	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-27	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-27	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-27	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-27	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-27	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-27	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-27	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-27	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-27	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-27	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/24/2014	1,1-Dichloroethane	2	1	0.28	25	ug/L
MKTF-27	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-27	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-27	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-27	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-27	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-27	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-27	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-27	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-27	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-27	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-27	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-27	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-27	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-27	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-27	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-27	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-27	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-27	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-27	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-27	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-27	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-27	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-27	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-27	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-27	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-27	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-27	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-27	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-27	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-27	9/24/2014	MTBE	11	1	0.25	143	ug/L
MKTF-27	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-27	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-27	11/14/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-27	11/14/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-27	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-27	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-27	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-27	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-27	11/14/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-27	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-27	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-27	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-27	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-27	11/14/2014	1,1-Dichloroethane	2.8	1	0.28	25	ug/L
MKTF-27	11/14/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-27	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-27	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-27	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	11/14/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	11/14/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-27	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-27	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-27	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	11/14/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-27	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-27	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-27	11/14/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-27	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-27	11/14/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-27	11/14/2014	Styrene	ND	1	0.12	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/14/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-27	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-27	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-27	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-27	11/14/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-27	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-27	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-27	11/14/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-27	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-27	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-27	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	11/14/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-27	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-27	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-27	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-27	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-27	11/14/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-27	11/14/2014	MTBE	19	1	0.25	143	ug/L
MKTF-27	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-27	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	3/11/2015	1,1-Dichloroethane	1.6	1	0.4	25	ug/L
MKTF-27	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	3/11/2015	MTBE	8.9	1	0.17	143	ug/L
MKTF-27	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	6/9/2015	1,1-Dichloroethane	2	1	0.4	25	ug/L
MKTF-27	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	6/9/2015	MTBE	34	1	0.17	143	ug/L
MKTF-27	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-27	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	8/20/2015	MTBE	33	1	0.17	143	ug/L
MKTF-27	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	11/4/2015	1,1-Dichloroethane	2.3	1	0.4	25	ug/L
MKTF-27	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	11/4/2015	Styrene	ND	1	0.11	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	11/4/2015	MTBE	31	1	0.17	143	ug/L
MKTF-27	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	2/22/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	2/22/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-27	2/22/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	2/22/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-27	2/22/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-27	2/22/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	2/22/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	2/22/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	2/22/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-27	2/22/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-27	2/22/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-27	2/22/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	2/22/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	2/22/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-27	2/22/2016	1,1-Dichloroethane	1.9	1	0.11	25	ug/L
MKTF-27	2/22/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-27	2/22/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-27	2/22/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-27	2/22/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-27	2/22/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-27	2/22/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-27	2/22/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	2/22/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-27	2/22/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	2/22/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	2/22/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-27	2/22/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-27	2/22/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-27	2/22/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-27	2/22/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-27	2/22/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	2/22/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	2/22/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-27	2/22/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	2/22/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	2/22/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	2/22/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	2/22/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-27	2/22/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-27	2/22/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	2/22/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-27	2/22/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-27	2/22/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-27	2/22/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	2/22/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	2/22/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	2/22/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	2/22/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	2/22/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	2/22/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	2/22/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-27	2/22/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/22/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	2/22/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	2/22/2016	MTBE	15	1	0.21	143	ug/L
MKTF-27	2/22/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	2/22/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-27	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	6/8/2016	Benzene	0.15	1	0.096	5	ug/L
MKTF-27	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	6/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-27	6/8/2016	1,1-Dichloroethane	2.8	1	0.11	25	ug/L
MKTF-27	6/8/2016	1,1-Dichloroethene	0.74	1	0.11	7	ug/L
MKTF-27	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-27	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	6/8/2016	1,2,4-Trimethylbenzene	0.49	1	0.11	56	ug/L
MKTF-27	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	6/8/2016	Ethylbenzene	0.15	1	0.11	700	ug/L
MKTF-27	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-27	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	6/8/2016	1,2-Dichloroethane	0.7	1	0.12	5	ug/L
MKTF-27	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	6/8/2016	1,3,5-Trimethylbenzene	0.17	1	0.12	60	ug/L
MKTF-27	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	6/8/2016	Toluene	0.4	1	0.12	1000	ug/L
MKTF-27	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	6/8/2016	sec-Butylbenzene	0.16	1	0.12	2000	ug/L
MKTF-27	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	6/8/2016	cis-1,2-Dichloroethene	0.22	1	0.12	70	ug/L
MKTF-27	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	6/8/2016	Xylenes, Total	0.91	1.5	0.37	620	ug/L
MKTF-27	6/8/2016	MTBE	42	1	0.21	143	ug/L
MKTF-27	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	9/7/2016	Benzene	0.31	1	0.096	5	ug/L
MKTF-27	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	1,1-Dichloroethane	1.7	1	0.11	25	ug/L
MKTF-27	9/7/2016	1,1-Dichloroethene	0.58	1	0.11	7	ug/L
MKTF-27	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	9/7/2016	1,2-Dichloropropane	0.41	1	0.11	5	ug/L
MKTF-27	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	9/7/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
MKTF-27	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-27	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	9/7/2016	1,2-Dichloroethane	0.76	1	0.12	5	ug/L
MKTF-27	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	9/7/2016	Toluene	0.21	1	0.12	1000	ug/L
MKTF-27	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	9/7/2016	sec-Butylbenzene	0.31	1	0.12	2000	ug/L
MKTF-27	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	9/7/2016	cis-1,2-Dichloroethene	0.32	1	0.12	70	ug/L
MKTF-27	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-27	9/7/2016	MTBE	26	1	0.21	143	ug/L
MKTF-27	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-27	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-27	10/28/2016	1,1-Dichloroethane	1.8	1	0.11	25	ug/L
MKTF-27	10/28/2016	1,1-Dichloroethene	0.39	1	0.11	7	ug/L
MKTF-27	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	10/28/2016	1,2-Dichloropropane	0.24	1	0.11	5	ug/L
MKTF-27	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	10/28/2016	Styrene	ND	1	0.11	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	10/28/2016	1,2-Dichloroethane	0.57	1	0.12	5	ug/L
MKTF-27	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-27	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-27	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	10/28/2016	cis-1,2-Dichloroethene	0.19	1	0.12	70	ug/L
MKTF-27	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-27	10/28/2016	MTBE	21	1	0.21	143	ug/L
MKTF-27	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	3/29/2017	Acetone	1.8	10	0.88	14064	ug/L
MKTF-27	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-27	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	3/29/2017	1,1-Dichloroethane	1.5	1	0.1	25	ug/L
MKTF-27	3/29/2017	1,1-Dichloroethene	0.36	1	0.081	7	ug/L
MKTF-27	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-27	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-27	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-27	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	3/29/2017	1,2-Dichloroethane	0.59	1	0.12	5	ug/L
MKTF-27	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-27	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-27	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-27	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	3/29/2017	MTBE	22	1	0.15	143	ug/L
MKTF-27	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-27	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	6/5/2017	Acetone	3.8	10	0.82	14064	ug/L
MKTF-27	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-27	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	6/5/2017	1,1-Dichloroethane	2.2	1	0.4	25	ug/L
MKTF-27	6/5/2017	1,1-Dichloroethene	0.32	1	0.081	7	ug/L
MKTF-27	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-27	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-27	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	6/5/2017	MTBE	31	1	0.24	143	ug/L
MKTF-27	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	10/3/2017	Acetone	9.7	10	0.82	14064	ug/L
MKTF-27	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	10/3/2017	Benzene	0.13	1	0.062	5	ug/L
MKTF-27	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	10/3/2017	1,1-Dichloroethane	1.7	1	0.4	25	ug/L
MKTF-27	10/3/2017	1,1-Dichloroethene	0.59	1	0.081	7	ug/L
MKTF-27	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	10/3/2017	1,2-Dichloroethane	0.63	1	0.4	5	ug/L
MKTF-27	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	10/3/2017	cis-1,2-Dichloroethene	0.29	1	0.2	70	ug/L
MKTF-27	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	10/3/2017	MTBE	25	1	0.24	143	ug/L
MKTF-27	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	11/20/2017	Acetone	2.2	10	0.82	14064	ug/L
MKTF-27	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-27	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	11/20/2017	1,1-Dichloroethane	1.9	1	0.4	25	ug/L
MKTF-27	11/20/2017	1,1-Dichloroethene	0.48	1	0.081	7	ug/L
MKTF-27	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	11/20/2017	1,2-Dichloropropane	0.14	1	0.1	5	ug/L
MKTF-27	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	11/20/2017	1,2,3-Trichloropropane	*ND*	2	0.39	0.0084	ug/L
MKTF-27	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	11/20/2017	1,2-Dichloroethane	0.51	1	0.4	5	ug/L
MKTF-27	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	11/20/2017	MTBE	23	1	0.24	143	ug/L
MKTF-27	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-27	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-27	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	2/6/2018	1,1-Dichloroethane	2.3	1	0.4	25	ug/L
MKTF-27	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-27	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-27	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-27	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	2/6/2018	MTBE	18	1	0.24	143	ug/L
MKTF-27	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	5/1/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-27	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-27	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	5/1/2018	1,1-Dichloroethane	1.5	1	0.4	25	ug/L
MKTF-27	5/1/2018	1,1-Dichloroethene	0.42	1	0.081	7	ug/L
MKTF-27	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-27	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	5/1/2018	1,2-Dichloroethane	0.53	1	0.4	5	ug/L
MKTF-27	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	5/1/2018	MTBE	25	1	0.24	143	ug/L
MKTF-27	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-27	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-27	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-27	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-27	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-27	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-27	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-27	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-27	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-27	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-27	8/20/2018	1,1-Dichloroethane	1.9	1	0.4	25	ug/L
MKTF-27	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-27	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-27	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-27	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-27	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-27	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-27	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-27	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-27	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-27	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-27	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-27	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-27	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-27	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-27	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-27	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-27	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-27	8/20/2018	1,2-Dichloroethane	0.53	1	0.4	5	ug/L
MKTF-27	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-27	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-27	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-27	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-27	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-27	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-27	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-27	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-27	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-27	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-27	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-27	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-27	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-27	8/20/2018	MTBE	14	1	0.32	143	ug/L
MKTF-27	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-27	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-27	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-27	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-27	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-27	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-27	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-27	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-27	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-27	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-27	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-27	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-27	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-27	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-27	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-27	11/15/2018	1,1-Dichloroethane	2	1	0.18	25	ug/L
MKTF-27	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-27	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-27	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-27	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-27	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-27	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-27	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-27	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-27	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-27	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-27	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-27	11/15/2018	1,2,3-Trichloropropane	*ND*	2	0.57	0.0084	ug/L
MKTF-27	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-27	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-27	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-27	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-27	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-27	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-27	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-27	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-27	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-27	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-27	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-27	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-27	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-27	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-27	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-27	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-27	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-27	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-27	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-27	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-27	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-27	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-27	11/15/2018	MTBE	21	1	0.46	143	ug/L
MKTF-27	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-27	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-27	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-27	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-27	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-27	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	3/28/2019	Acetone	5.4	10	1.199396	14064	ug/L
MKTF-27	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	3/28/2019	MTBE	1.8	1	0.456095	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	3/28/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-27	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	5/6/2019	1,1-Dichloroethane	0.83	1	0.140859	25	ug/L
MKTF-27	5/6/2019	1,1-Dichloroethene	0.26	1	0.205388	7	ug/L
MKTF-27	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	5/6/2019	1,2-Dichloroethane	0.33	1	0.194638	5	ug/L
MKTF-27	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	5/6/2019	Acetone	10	10	1.199396	14064	ug/L
MKTF-27	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	5/6/2019	MTBE	19	1	0.456095	143	ug/L
MKTF-27	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	5/6/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-27	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	8/21/2019	1,1-Dichloroethane	1.6	1	0.140859	25	ug/L
MKTF-27	8/21/2019	1,1-Dichloroethene	0.47	1	0.205388	7	ug/L
MKTF-27	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-27	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	8/21/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-27	8/21/2019	Benzene	**9.7**	1	0.166639	5	ug/L
MKTF-27	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	8/21/2019	MTBE	24	1	0.456095	143	ug/L
MKTF-27	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	8/21/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-27	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	10/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	10/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	1,1-Dichloroethane	1.1	1	0.140859	25	ug/L
MKTF-27	10/23/2019	1,1-Dichloroethene	0.4	1	0.205388	7	ug/L
MKTF-27	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	10/23/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
MKTF-27	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	10/23/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-27	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	10/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	10/23/2019	MTBE	14	1	0.456095	143	ug/L
MKTF-27	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	10/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	10/23/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-27	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-27	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-27	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-27	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-27	2/25/2020	1,1-Dichloroethane	0.43	1	0.27	25	ug/L
MKTF-27	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-27	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-27	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-27	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-27	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-27	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-27	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-27	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-27	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-27	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-27	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-27	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-27	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-27	2/25/2020	2-Butanone	2.6	10	1.1	5565	ug/L
MKTF-27	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-27	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-27	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-27	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-27	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	2/25/2020	Acetone	6	10	2.3	14064	ug/L
MKTF-27	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-27	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-27	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-27	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-27	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-27	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-27	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-27	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-27	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-27	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-27	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-27	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-27	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-27	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-27	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-27	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-27	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-27	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-27	2/25/2020	MTBE	6	1	0.39	143	ug/L
MKTF-27	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-27	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-27	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-27	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-27	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-27	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-27	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-27	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-27	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-27	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-27	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-27	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-27	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-27	2/25/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-27	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-27	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-27	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-27	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-27	9/20/2020	1,1-Dichloroethane	1.3	1	0.27	25	ug/L
MKTF-27	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-27	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-27	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-27	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-27	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-27	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-27	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-27	9/20/2020	1,2-Dichloroethane	0.39	1	0.22	5	ug/L
MKTF-27	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-27	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-27	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-27	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-27	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-27	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-27	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-27	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-27	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-27	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	9/20/2020	Acetone	4.4	10	2.3	14064	ug/L
MKTF-27	9/20/2020	Benzene	0.86	1	0.23	5	ug/L
MKTF-27	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-27	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-27	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-27	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-27	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-27	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-27	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-27	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-27	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-27	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-27	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-27	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-27	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-27	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-27	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-27	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-27	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-27	9/20/2020	MTBE	29	1	0.39	143	ug/L
MKTF-27	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-27	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-27	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-27	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-27	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-27	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-27	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-27	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-27	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-27	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-27	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-27	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-27	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-27	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-27	12/18/2020	1,2-Dibromoethane	ND	0.0204	0.0051	0.05	ug/L
MKTF-27	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-27	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-27	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-27	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-27	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-27	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-27	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-27	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-27	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-27	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-27	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-27	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-27	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-27	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-27	12/18/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-27	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-27	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-27	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-27	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-27	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-27	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-27	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-27	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-27	12/18/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-27	12/18/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-27	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-27	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-27	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-27	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-27	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-27	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-27	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-27	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-27	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-27	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-27	12/18/2020	MTBE	4.4	1	0.74	143	ug/L
MKTF-27	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-27	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-27	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-27	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-27	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-27	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-27	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-27	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-27	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-27	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-27	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-27	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-27	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-27	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-27	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-27	12/18/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-27	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-27	12/18/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-27	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-27	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-27	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-27	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-27	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-28	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-28	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-28	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-28	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-28	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-28	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-28	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-28	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-28	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-28	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-28	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-28	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-28	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-28	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-28	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-28	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-28	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-28	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-28	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-28	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-28	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-28	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-28	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-28	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-28	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-28	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-28	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-28	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-28	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-28	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-28	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-28	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-28	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-28	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-28	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-28	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-28	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-28	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-28	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-28	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-28	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-28	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-28	9/24/2014	MTBE	16	1	0.25	143	ug/L
MKTF-28	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-28	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-28	11/14/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-28	11/14/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-28	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-28	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-28	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-28	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-28	11/14/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-28	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-28	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-28	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-28	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-28	11/14/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-28	11/14/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-28	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-28	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-28	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	11/14/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	11/14/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-28	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-28	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-28	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	11/14/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-28	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-28	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-28	11/14/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-28	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-28	11/14/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-28	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-28	11/14/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-28	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-28	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-28	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-28	11/14/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-28	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-28	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-28	11/14/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-28	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-28	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-28	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	11/14/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-28	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-28	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-28	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-28	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-28	11/14/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-28	11/14/2014	MTBE	13	1	0.25	143	ug/L
MKTF-28	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-28	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-28	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-28	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	8/20/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	8/20/2015	MTBE	1.4	1	0.17	143	ug/L
MKTF-28	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	11/4/2015	MTBE	10	1	0.17	143	ug/L
MKTF-28	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-28	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-28	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-28	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-28	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-28	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-28	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-28	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-28	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-28	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-28	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-28	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-28	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-28	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-28	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-28	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-28	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-28	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-28	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-28	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-28	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-28	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-28	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-28	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-28	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-28	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	2/23/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-28	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-28	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	6/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	6/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	6/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	6/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	6/8/2016	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
MKTF-28	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	6/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	6/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	6/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	6/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	6/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	6/8/2016	MTBE	0.54	1	0.21	143	ug/L
MKTF-28	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	9/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	9/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-28	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	9/8/2016	MTBE	2.1	1	0.21	143	ug/L
MKTF-28	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	10/28/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	10/28/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-28	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	10/28/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	10/28/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	10/28/2016	MTBE	5.2	1	0.21	143	ug/L
MKTF-28	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	3/29/2017	Acetone	1.9	10	0.88	14064	ug/L
MKTF-28	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-28	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-28	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-28	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-28	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-28	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	3/29/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-28	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-28	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-28	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-28	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	3/29/2017	MTBE	0.97	1	0.15	143	ug/L
MKTF-28	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-28	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	6/5/2017	Acetone	3.3	10	0.82	14064	ug/L
MKTF-28	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-28	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	6/5/2017	MTBE	0.44	1	0.24	143	ug/L
MKTF-28	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	10/3/2017	Acetone	8.3	10	0.82	14064	ug/L
MKTF-28	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	10/3/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	10/3/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	10/3/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	10/3/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	10/3/2017	MTBE	0.35	1	0.24	143	ug/L
MKTF-28	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	11/20/2017	Acetone	2.8	10	0.82	14064	ug/L
MKTF-28	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	11/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	11/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	11/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	11/20/2017	MTBE	3.3	1	0.24	143	ug/L
MKTF-28	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-28	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-28	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	2/6/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-28	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	2/6/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-28	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	5/1/2018	Acetone	1.7	10	0.82	14064	ug/L
MKTF-28	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-28	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	5/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	5/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-28	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	5/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	5/1/2018	MTBE	0.94	1	0.24	143	ug/L
MKTF-28	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-28	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-28	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-28	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-28	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-28	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-28	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-28	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-28	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-28	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-28	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-28	8/20/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-28	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-28	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-28	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-28	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-28	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-28	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-28	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-28	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-28	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-28	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-28	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-28	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-28	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-28	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-28	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-28	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-28	8/20/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-28	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-28	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-28	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-28	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-28	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-28	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-28	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-28	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-28	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-28	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-28	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-28	8/20/2018	MTBE	8	1	0.32	143	ug/L
MKTF-28	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-28	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-28	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-28	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-28	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-28	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-28	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-28	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-28	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-28	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-28	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-28	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-28	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-28	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-28	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-28	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-28	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-28	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-28	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-28	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-28	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-28	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-28	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-28	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-28	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-28	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-28	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-28	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-28	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-28	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-28	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-28	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-28	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-28	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-28	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-28	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-28	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-28	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-28	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-28	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-28	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-28	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-28	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-28	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-28	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-28	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-28	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-28	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-28	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-28	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-28	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-28	11/15/2018	MTBE	2.8	1	0.46	143	ug/L
MKTF-28	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-28	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-28	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	3/28/2019	Acetone	3.7	10	1.199396	14064	ug/L
MKTF-28	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	3/28/2019	MTBE	0.82	1	0.456095	143	ug/L
MKTF-28	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	5/6/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	5/6/2019	Acetone	5.9	10	1.199396	14064	ug/L
MKTF-28	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	5/6/2019	MTBE	0.74	1	0.456095	143	ug/L
MKTF-28	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	8/21/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	8/21/2019	MTBE	4.5	1	0.456095	143	ug/L
MKTF-28	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/21/2019	1,1-Dichloroethane	0.98	1	0.140859	25	ug/L
MKTF-28	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/21/2019	1,2,4-Trimethylbenzene	6.4	1	0.213199	56	ug/L
MKTF-28	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/21/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
MKTF-28	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	26	4	0.314954	NA	ug/L
MKTF-28	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/21/2019	p-Isopropyltoluene	0.51	1	0.217289	NA	ug/L
MKTF-28	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/21/2019	Acetone	31	10	1.199396	14064	ug/L
MKTF-28	10/21/2019	Benzene	**140**	10	1.666391	5	ug/L
MKTF-28	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/21/2019	Ethylbenzene	14	1	0.132341	700	ug/L
MKTF-28	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/21/2019	Isopropylbenzene	1.3	1	0.191522	447	ug/L
MKTF-28	10/21/2019	MTBE	**240**	10	4.56095	143	ug/L
MKTF-28	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/21/2019	Naphthalene	1.3	2	0.275071	30	ug/L
MKTF-28	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/21/2019	n-Propylbenzene	1.5	1	0.214308	660	ug/L
MKTF-28	10/21/2019	sec-Butylbenzene	0.26	1	0.247731	2000	ug/L
MKTF-28	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/21/2019	Toluene	1.2	1	0.350436	1000	ug/L
MKTF-28	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/21/2019	Xylenes, Total	6.2	1.5	0.454415	620	ug/L
MKTF-28	10/21/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-28	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	10/22/2019	MTBE	8.3	1	0.456095	143	ug/L
MKTF-28	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	10/22/2019	MTBE	4.9	1	0.456095	143	ug/L
MKTF-28	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-28	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-28	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-28	2/25/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-28	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-28	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-28	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-28	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-28	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-28	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-28	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-28	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-28	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-28	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-28	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-28	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-28	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-28	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-28	2/25/2020	2-Butanone	4.2	10	1.1	5565	ug/L
MKTF-28	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-28	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-28	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-28	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-28	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	2/25/2020	Acetone	17	10	2.3	14064	ug/L
MKTF-28	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-28	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-28	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-28	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-28	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-28	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-28	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-28	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-28	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-28	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-28	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-28	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-28	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-28	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-28	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-28	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-28	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-28	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-28	2/25/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-28	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-28	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-28	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-28	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-28	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-28	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-28	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-28	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-28	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-28	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-28	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-28	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-28	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-28	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-28	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-28	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-28	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-28	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-28	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-28	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-28	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-28	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-28	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-28	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-28	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-28	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-28	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-28	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-28	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-28	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-28	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-28	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-28	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-28	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-28	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-28	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-28	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-28	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-28	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-28	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-28	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-28	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-28	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-28	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-28	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-28	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-28	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-28	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-28	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-28	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-28	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-28	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-28	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-28	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-28	9/20/2020	MTBE	2.3	1	0.39	143	ug/L
MKTF-28	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-28	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-28	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-28	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-28	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-28	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-28	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-28	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-28	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-28	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-28	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-28	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-28	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-28	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-28	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-28	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-28	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-28	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-28	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-28	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-28	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-28	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-28	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-28	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-28	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-28	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-28	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-28	12/18/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-28	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-28	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-28	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-28	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-28	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-28	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-28	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-28	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-28	12/18/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-28	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-28	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-28	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-28	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-28	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-28	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-28	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-28	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-28	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-28	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-28	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-28	12/18/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-28	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-28	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-28	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-28	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-28	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-28	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-28	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-28	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-28	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-28	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-28	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-28	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-28	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-28	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-28	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-28	12/18/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-28	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-28	12/18/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-28	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-28	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-28	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-28	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-28	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-29	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-29	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-29	4/9/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-29	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-29	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-29	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-29	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-29	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-29	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-29	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-29	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-29	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-29	4/9/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-29	4/9/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-29	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-29	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-29	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	4/9/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	4/9/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-29	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-29	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-29	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-29	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-29	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-29	4/9/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-29	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-29	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-29	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-29	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-29	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-29	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-29	4/9/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-29	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-29	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-29	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-29	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-29	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-29	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-29	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-29	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-29	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-29	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-29	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-29	4/9/2014	MTBE	12	1	0.25	143	ug/L
MKTF-29	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-29	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-29	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-29	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-29	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-29	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-29	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-29	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-29	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-29	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-29	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-29	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-29	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-29	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-29	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-29	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-29	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-29	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-29	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-29	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-29	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-29	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-29	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-29	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-29	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-29	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-29	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-29	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-29	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-29	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-29	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-29	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-29	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-29	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-29	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-29	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-29	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-29	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-29	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-29	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-29	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-29	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-29	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-29	9/24/2014	MTBE	13	1	0.25	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-29	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	3/11/2015	MTBE	17	1	0.17	143	ug/L
MKTF-29	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	6/10/2015	MTBE	14	1	0.17	143	ug/L
MKTF-29	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	8/20/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	8/20/2015	MTBE	11	1	0.17	143	ug/L
MKTF-29	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	11/4/2015	MTBE	10	1	0.17	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-29	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-29	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-29	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-29	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-29	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-29	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-29	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-29	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-29	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-29	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-29	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-29	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-29	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-29	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-29	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-29	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-29	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-29	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-29	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-29	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-29	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-29	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-29	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-29	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-29	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-29	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	2/23/2016	MTBE	12	1	0.21	143	ug/L
MKTF-29	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-29	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	6/9/2016	MTBE	8.8	1	0.21	143	ug/L
MKTF-29	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-29	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	9/7/2016	MTBE	2.4	1	0.21	143	ug/L
MKTF-29	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	10/28/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	10/28/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-29	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	10/28/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	10/28/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	10/28/2016	MTBE	5	1	0.21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-29	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-29	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-29	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-29	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-29	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-29	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	3/29/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-29	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-29	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-29	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-29	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	3/29/2017	MTBE	9.4	1	0.15	143	ug/L
MKTF-29	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-29	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	6/5/2017	Acetone	2.5	10	0.82	14064	ug/L
MKTF-29	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	6/5/2017	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
MKTF-29	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-29	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	6/5/2017	MTBE	5.8	1	0.24	143	ug/L
MKTF-29	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	10/3/2017	Acetone	4.6	10	0.82	14064	ug/L
MKTF-29	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	10/3/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	10/3/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	10/3/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	10/3/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	10/3/2017	MTBE	7.2	1	0.24	143	ug/L
MKTF-29	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	11/20/2017	Acetone	1.8	10	0.82	14064	ug/L
MKTF-29	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	11/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	11/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	11/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	MTBE	9.5	1	0.24	143	ug/L
MKTF-29	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-29	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-29	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	2/6/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-29	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	2/6/2018	MTBE	11	1	0.24	143	ug/L
MKTF-29	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	5/1/2018	Acetone	2.7	10	0.82	14064	ug/L
MKTF-29	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-29	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	5/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	5/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-29	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	5/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	5/1/2018	MTBE	7.3	1	0.24	143	ug/L
MKTF-29	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-29	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-29	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-29	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-29	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-29	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-29	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-29	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-29	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-29	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-29	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-29	8/20/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-29	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-29	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-29	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-29	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-29	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-29	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-29	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-29	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-29	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-29	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-29	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-29	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-29	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-29	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-29	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-29	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-29	8/20/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-29	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-29	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-29	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-29	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-29	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-29	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-29	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-29	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-29	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-29	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-29	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-29	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-29	8/20/2018	MTBE	4.7	1	0.32	143	ug/L
MKTF-29	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-29	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-29	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-29	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-29	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-29	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-29	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-29	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-29	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-29	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-29	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-29	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-29	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-29	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-29	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-29	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-29	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-29	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-29	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-29	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-29	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-29	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-29	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-29	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-29	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-29	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-29	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-29	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-29	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-29	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-29	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-29	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-29	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-29	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-29	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-29	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-29	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-29	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-29	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-29	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-29	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-29	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-29	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-29	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-29	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-29	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-29	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-29	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-29	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-29	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-29	11/15/2018	MTBE	3.7	1	0.46	143	ug/L
MKTF-29	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-29	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-29	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	3/28/2019	Acetone	3.3	10	1.199396	14064	ug/L
MKTF-29	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	3/28/2019	MTBE	4.1	1	0.456095	143	ug/L
MKTF-29	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	3/28/2019	1,2,4-Trimethylbenzene	0.21	1	0.213199	56	ug/L
MKTF-29	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	3/28/2019	Acetone	3.6	10	1.199396	14064	ug/L
MKTF-29	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	3/28/2019	MTBE	4.2	1	0.456095	143	ug/L
MKTF-29	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-29	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	5/6/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	5/6/2019	Acetone	5.6	10	1.199396	14064	ug/L
MKTF-29	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	5/6/2019	MTBE	4.8	1	0.456095	143	ug/L
MKTF-29	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	5/6/2019	1,2-Dibromoethane	ND	0.00967	0.003369	0.05	ug/L
MKTF-29	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	8/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	8/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	8/23/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	8/23/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-29	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	8/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	8/23/2019	MTBE	9	1	0.456095	143	ug/L
MKTF-29	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	8/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	8/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	8/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	8/23/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	8/23/2019	Acetone	2	10	1.199396	14064	ug/L
MKTF-29	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	8/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	8/23/2019	MTBE	8.6	1	0.456095	143	ug/L
MKTF-29	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	8/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-29	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	10/22/2019	1,1-Dichloroethane	0.56	1	0.140859	25	ug/L
MKTF-29	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-29	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	10/22/2019	MTBE	12	1	0.456095	143	ug/L
MKTF-29	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	10/22/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-29	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-29	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-29	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-29	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-29	2/25/2020	1,1-Dichloroethane	0.45	1	0.27	25	ug/L
MKTF-29	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-29	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-29	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-29	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-29	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-29	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-29	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-29	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-29	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-29	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-29	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-29	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-29	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-29	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-29	2/25/2020	2-Butanone	3	10	1.1	5565	ug/L
MKTF-29	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-29	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-29	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-29	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-29	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	2/25/2020	Acetone	7.5	10	2.3	14064	ug/L
MKTF-29	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-29	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-29	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-29	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-29	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-29	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-29	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-29	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-29	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-29	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-29	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-29	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-29	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-29	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-29	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-29	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-29	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-29	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-29	2/25/2020	MTBE	15	1	0.39	143	ug/L
MKTF-29	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-29	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-29	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-29	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-29	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-29	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-29	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-29	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-29	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-29	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-29	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-29	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-29	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-29	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-29	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-29	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-29	9/20/2020	1,1-Dichloroethane	0.29	1	0.27	25	ug/L
MKTF-29	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-29	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-29	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-29	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-29	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-29	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-29	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-29	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-29	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-29	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-29	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-29	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-29	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-29	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-29	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-29	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-29	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-29	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-29	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-29	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-29	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-29	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-29	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-29	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-29	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-29	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-29	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-29	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-29	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-29	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-29	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-29	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-29	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-29	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-29	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-29	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-29	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-29	9/20/2020	MTBE	19	1	0.39	143	ug/L
MKTF-29	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-29	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-29	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-29	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-29	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-29	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-29	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-29	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-29	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-29	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-29	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-29	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-29	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-29	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-29	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-29	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-29	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-29	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-29	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-29	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-29	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-29	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-29	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-29	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-29	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-29	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-29	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-29	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-29	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-29	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-29	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-29	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-29	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-29	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-29	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-29	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-29	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-29	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-29	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-29	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-29	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-29	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-29	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-29	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-29	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-29	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-29	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-29	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-29	12/15/2020	MTBE	16	1	0.74	143	ug/L
MKTF-29	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-29	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-29	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-29	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-29	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-29	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-29	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-29	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-29	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-29	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-29	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-29	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-29	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-29	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-29	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-29	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-29	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-29	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-29	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-29	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-29	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-29	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-29	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-30	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	4/9/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-30	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-30	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	4/9/2014	1,1-Dichloroethane	25	1	0.28	25	ug/L
MKTF-30	4/9/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	4/9/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-30	4/9/2014	Trichloroethene	1.4	1	0.19	5	ug/L
MKTF-30	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	4/9/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-30	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	4/9/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-30	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-30	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-30	4/9/2014	MTBE	21	1	0.25	143	ug/L
MKTF-30	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	9/24/2014	1,1,1-Trichloroethane	2.5	1	0.12	200	ug/L
MKTF-30	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-30	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	9/24/2014	1,1-Dichloroethane	**68**	1	0.28	25	ug/L
MKTF-30	9/24/2014	1,1-Dichloroethene	3.5	1	0.21	7	ug/L
MKTF-30	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	9/24/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-30	9/24/2014	Trichloroethene	4	1	0.19	5	ug/L
MKTF-30	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	9/24/2014	1,2-Dichloroethane	4.4	1	0.26	5	ug/L
MKTF-30	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	9/24/2014	cis-1,2-Dichloroethene	4.2	1	0.12	70	ug/L
MKTF-30	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-30	9/24/2014	MTBE	5.9	1	0.25	143	ug/L
MKTF-30	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	11/17/2014	1,1,1-Trichloroethane	3	1	0.12	200	ug/L
MKTF-30	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	11/17/2014	Vinyl Chloride	**4.8**	1	0.11	2	ug/L
MKTF-30	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	11/17/2014	1,1-Dichloroethane	**87**	1	0.28	25	ug/L
MKTF-30	11/17/2014	1,1-Dichloroethene	2.7	1	0.21	7	ug/L
MKTF-30	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	11/17/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-30	11/17/2014	Trichloroethene	4.4	1	0.19	5	ug/L
MKTF-30	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-30	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	11/17/2014	1,2-Dichloroethane	**5.3**	1	0.26	5	ug/L
MKTF-30	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	11/17/2014	cis-1,2-Dichloroethene	3.9	1	0.12	70	ug/L
MKTF-30	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/17/2014	MTBE	3.7	1	0.25	143	ug/L
MKTF-30	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	3/11/2015	1,1,1-Trichloroethane	1.9	1	0.078	200	ug/L
MKTF-30	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	3/11/2015	1,1-Dichloroethane	**81**	10	4	25	ug/L
MKTF-30	3/11/2015	1,1-Dichloroethene	4	1	0.099	7	ug/L
MKTF-30	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-30	3/11/2015	Trichloroethene	3.6	1	0.16	5	ug/L
MKTF-30	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	3/11/2015	1,2-Dichloroethane	4	1	0.18	5	ug/L
MKTF-30	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	3/11/2015	cis-1,2-Dichloroethene	4.5	1	0.081	70	ug/L
MKTF-30	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	3/11/2015	MTBE	1.9	1	0.17	143	ug/L
MKTF-30	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	6/10/2015	1,1,1-Trichloroethane	2.9	1	0.078	200	ug/L
MKTF-30	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	6/10/2015	1,1-Dichloroethane	**110**	10	4	25	ug/L
MKTF-30	6/10/2015	1,1-Dichloroethene	6.7	1	0.099	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-30	6/10/2015	Trichloroethene	**6.2**	1	0.16	5	ug/L
MKTF-30	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	6/10/2015	1,2-Dichloroethane	5	1	0.18	5	ug/L
MKTF-30	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	6/10/2015	cis-1,2-Dichloroethene	6.7	1	0.081	70	ug/L
MKTF-30	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	6/10/2015	MTBE	2.7	1	0.17	143	ug/L
MKTF-30	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	8/20/2015	1,1,1-Trichloroethane	2.5	1	0.078	200	ug/L
MKTF-30	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	8/20/2015	1,1-Dichloroethane	**110**	10	4	25	ug/L
MKTF-30	8/20/2015	1,1-Dichloroethene	**8.6**	1	0.099	7	ug/L
MKTF-30	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	8/20/2015	1,1,2-Trichloroethane	1	1	0.079	5	ug/L
MKTF-30	8/20/2015	Trichloroethene	**6.4**	1	0.16	5	ug/L
MKTF-30	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	8/20/2015	1,2-Dichloroethane	**5.1**	1	0.18	5	ug/L
MKTF-30	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	8/20/2015	cis-1,2-Dichloroethene	8.7	1	0.081	70	ug/L
MKTF-30	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	8/20/2015	MTBE	1.9	1	0.17	143	ug/L
MKTF-30	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	11/4/2015	1,1,1-Trichloroethane	3.3	1	0.078	200	ug/L
MKTF-30	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	11/4/2015	1,1-Dichloroethane	**130**	10	4	25	ug/L
MKTF-30	11/4/2015	1,1-Dichloroethene	**10**	1	0.099	7	ug/L
MKTF-30	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	11/4/2015	1,1,2-Trichloroethane	1.4	1	0.079	5	ug/L
MKTF-30	11/4/2015	Trichloroethene	**8.8**	1	0.16	5	ug/L
MKTF-30	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	11/4/2015	1,2-Dichloroethane	**6.8**	1	0.18	5	ug/L
MKTF-30	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	11/4/2015	cis-1,2-Dichloroethene	12	1	0.081	70	ug/L
MKTF-30	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/4/2015	MTBE	2.5	1	0.17	143	ug/L
MKTF-30	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-30	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	2/23/2016	1,1,1-Trichloroethane	3.7	1	0.063	200	ug/L
MKTF-30	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-30	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-30	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-30	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-30	2/23/2016	1,1-Dichloroethane	**130**	10	1.1	25	ug/L
MKTF-30	2/23/2016	1,1-Dichloroethene	**10**	1	0.076	7	ug/L
MKTF-30	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-30	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-30	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-30	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-30	2/23/2016	1,1,2-Trichloroethane	1.4	1	0.077	5	ug/L
MKTF-30	2/23/2016	Trichloroethene	**8**	1	0.18	5	ug/L
MKTF-30	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-30	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-30	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-30	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-30	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-30	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-30	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-30	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	2/23/2016	1,2-Dichloroethane	**6.7**	1	0.053	5	ug/L
MKTF-30	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-30	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-30	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-30	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-30	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-30	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	2/23/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-30	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-30	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	2/23/2016	MTBE	2.3	1	0.21	143	ug/L
MKTF-30	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-30	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	6/9/2016	1,1,1-Trichloroethane	4.1	1	0.091	200	ug/L
MKTF-30	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	6/9/2016	1,1-Dichloroethane	**130**	10	1.1	25	ug/L
MKTF-30	6/9/2016	1,1-Dichloroethene	**10**	1	0.11	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	6/9/2016	1,1,2-Trichloroethane	1.2	1	0.13	5	ug/L
MKTF-30	6/9/2016	Trichloroethene	**8.8**	1	0.18	5	ug/L
MKTF-30	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	6/9/2016	1,2-Dichloroethane	**6**	1	0.12	5	ug/L
MKTF-30	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	6/9/2016	Tetrachloroethene	0.77	1	0.15	5	ug/L
MKTF-30	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	6/9/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-30	6/9/2016	MTBE	3.6	1	0.21	143	ug/L
MKTF-30	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	9/7/2016	Benzene	0.6	1	0.096	5	ug/L
MKTF-30	9/7/2016	1,1,1-Trichloroethane	2.7	1	0.091	200	ug/L
MKTF-30	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	9/7/2016	Vinyl Chloride	1.8	1	0.2	2	ug/L
MKTF-30	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	9/7/2016	1,1-Dichloroethane	**110**	10	1.1	25	ug/L
MKTF-30	9/7/2016	1,1-Dichloroethene	**12**	1	0.11	7	ug/L
MKTF-30	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	9/7/2016	1,1,2-Trichloroethane	0.96	1	0.13	5	ug/L
MKTF-30	9/7/2016	Trichloroethene	**7.9**	1	0.18	5	ug/L
MKTF-30	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	9/7/2016	Ethylbenzene	0.19	1	0.11	700	ug/L
MKTF-30	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	9/7/2016	1,2-Dichloroethane	**5.7**	1	0.12	5	ug/L
MKTF-30	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	9/7/2016	Tetrachloroethene	0.66	1	0.15	5	ug/L
MKTF-30	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	9/7/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-30	9/7/2016	MTBE	0.84	1	0.21	143	ug/L
MKTF-30	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	10/28/2016	Chloroform	0.2	1	0.089	100	ug/L
MKTF-30	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	10/28/2016	1,1,1-Trichloroethane	2.6	1	0.091	200	ug/L
MKTF-30	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	10/28/2016	1,1-Dichloroethane	**110**	10	1.1	25	ug/L
MKTF-30	10/28/2016	1,1-Dichloroethene	**7.9**	1	0.11	7	ug/L
MKTF-30	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	10/28/2016	1,1,2-Trichloroethane	0.91	1	0.13	5	ug/L
MKTF-30	10/28/2016	Trichloroethene	**6.9**	1	0.18	5	ug/L
MKTF-30	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	10/28/2016	1,2-Dichloroethane	**5.2**	1	0.12	5	ug/L
MKTF-30	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	10/28/2016	Tetrachloroethene	0.47	1	0.15	5	ug/L
MKTF-30	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	10/28/2016	cis-1,2-Dichloroethene	10	1	0.12	70	ug/L
MKTF-30	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/28/2016	MTBE	2	1	0.21	143	ug/L
MKTF-30	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-30	3/29/2017	Chloroform	0.27	1	0.089	100	ug/L
MKTF-30	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-30	3/29/2017	1,1,1-Trichloroethane	1.6	1	0.073	200	ug/L
MKTF-30	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	3/29/2017	1,1-Dichloroethane	**97**	10	1	25	ug/L
MKTF-30	3/29/2017	1,1-Dichloroethene	6.6	1	0.081	7	ug/L
MKTF-30	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-30	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	3/29/2017	1,1,2-Trichloroethane	0.89	1	0.14	5	ug/L
MKTF-30	3/29/2017	Trichloroethene	**5.9**	1	0.18	5	ug/L
MKTF-30	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-30	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-30	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	3/29/2017	1,2-Dichloroethane	3.8	1	0.12	5	ug/L
MKTF-30	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-30	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-30	3/29/2017	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-30	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-30	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	3/29/2017	cis-1,2-Dichloroethene	8.8	1	0.2	70	ug/L
MKTF-30	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-30	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	3/29/2017	MTBE	2.8	1	0.15	143	ug/L
MKTF-30	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-30	6/5/2017	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-30	6/5/2017	Acetone	5	20	1.6	14064	ug/L
MKTF-30	6/5/2017	Chloroform	ND	2	0.8	100	ug/L
MKTF-30	6/5/2017	Benzene	ND	2	0.12	5	ug/L
MKTF-30	6/5/2017	1,1,1-Trichloroethane	0.72	2	0.15	200	ug/L
MKTF-30	6/5/2017	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-30	6/5/2017	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-30	6/5/2017	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-30	6/5/2017	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-30	6/5/2017	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-30	6/5/2017	Methylene Chloride	*1*	*6*	0.22	5	ug/L
MKTF-30	6/5/2017	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-30	6/5/2017	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-30	6/5/2017	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-30	6/5/2017	1,1-Dichloroethane	**57**	2	0.8	25	ug/L
MKTF-30	6/5/2017	1,1-Dichloroethene	4.4	2	0.16	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-30	6/5/2017	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-30	6/5/2017	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-30	6/5/2017	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-30	6/5/2017	1,1,2-Trichloroethane	0.34	2	0.28	5	ug/L
MKTF-30	6/5/2017	Trichloroethene	3.8	2	0.22	5	ug/L
MKTF-30	6/5/2017	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-30	6/5/2017	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-30	6/5/2017	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-30	6/5/2017	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
MKTF-30	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-30	6/5/2017	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-30	6/5/2017	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-30	6/5/2017	Isopropylbenzene	ND	2	0.1	447	ug/L
MKTF-30	6/5/2017	p-Isopropyltoluene	ND	2	0.19	NA	ug/L
MKTF-30	6/5/2017	Ethylbenzene	ND	2	0.19	700	ug/L
MKTF-30	6/5/2017	Styrene	ND	2	0.31	100	ug/L
MKTF-30	6/5/2017	n-Propylbenzene	ND	2	0.15	660	ug/L
MKTF-30	6/5/2017	n-Butylbenzene	ND	6	0.26	1000	ug/L
MKTF-30	6/5/2017	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-30	6/5/2017	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-30	6/5/2017	1,2-Dichloroethane	2.4	2	0.8	5	ug/L
MKTF-30	6/5/2017	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-30	6/5/2017	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-30	6/5/2017	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-30	6/5/2017	Toluene	ND	2	0.13	1000	ug/L
MKTF-30	6/5/2017	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-30	6/5/2017	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-30	6/5/2017	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-30	6/5/2017	sec-Butylbenzene	ND	2	0.22	2000	ug/L
MKTF-30	6/5/2017	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-30	6/5/2017	cis-1,2-Dichloroethene	4.4	2	0.41	70	ug/L
MKTF-30	6/5/2017	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-30	6/5/2017	Pentafluorobenzene	**20**	0	0		None
MKTF-30	6/5/2017	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-30	6/5/2017	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-30	6/5/2017	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-30	6/5/2017	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-30	6/5/2017	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-30	6/5/2017	MTBE	2	2	0.48	143	ug/L
MKTF-30	6/5/2017	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-30	6/5/2017	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-30	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	10/3/2017	Acetone	6.5	10	0.82	14064	ug/L
MKTF-30	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-30	10/3/2017	1,1,1-Trichloroethane	1.5	1	0.073	200	ug/L
MKTF-30	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	10/3/2017	1,1-Dichloroethane	**68**	1	0.4	25	ug/L
MKTF-30	10/3/2017	1,1-Dichloroethene	5	1	0.081	7	ug/L
MKTF-30	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	10/3/2017	1,1,2-Trichloroethane	0.69	1	0.14	5	ug/L
MKTF-30	10/3/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-30	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	10/3/2017	1,2-Dichloroethane	2.9	1	0.4	5	ug/L
MKTF-30	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	10/3/2017	Tetrachloroethene	0.27	1	0.13	5	ug/L
MKTF-30	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	10/3/2017	cis-1,2-Dichloroethene	5.6	1	0.2	70	ug/L
MKTF-30	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	10/3/2017	MTBE	1.1	1	0.24	143	ug/L
MKTF-30	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	11/20/2017	Acetone	1.3	10	0.82	14064	ug/L
MKTF-30	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-30	11/20/2017	1,1,1-Trichloroethane	1.5	1	0.073	200	ug/L
MKTF-30	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	11/20/2017	1,1-Dichloroethane	**68**	1	0.4	25	ug/L
MKTF-30	11/20/2017	1,1-Dichloroethene	4.9	1	0.081	7	ug/L
MKTF-30	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	11/20/2017	1,1,2-Trichloroethane	0.64	1	0.14	5	ug/L
MKTF-30	11/20/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-30	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	11/20/2017	1,2-Dichloroethane	3	1	0.4	5	ug/L
MKTF-30	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	11/20/2017	Tetrachloroethene	0.32	1	0.13	5	ug/L
MKTF-30	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	11/20/2017	cis-1,2-Dichloroethene	6.2	1	0.2	70	ug/L
MKTF-30	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	11/20/2017	MTBE	1.4	1	0.24	143	ug/L
MKTF-30	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-30	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-30	2/6/2018	1,1,1-Trichloroethane	1.4	1	0.073	200	ug/L
MKTF-30	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	2/6/2018	1,1-Dichloroethane	**78**	1	0.4	25	ug/L
MKTF-30	2/6/2018	1,1-Dichloroethene	6.2	1	0.081	7	ug/L
MKTF-30	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-30	2/6/2018	Trichloroethene	5	1	0.11	5	ug/L
MKTF-30	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-30	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	2/6/2018	1,2-Dichloroethane	3.4	1	0.4	5	ug/L
MKTF-30	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-30	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	2/6/2018	cis-1,2-Dichloroethene	7.6	1	0.2	70	ug/L
MKTF-30	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	2/6/2018	MTBE	2.8	1	0.24	143	ug/L
MKTF-30	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	5/1/2018	Acetone	1.7	10	0.82	14064	ug/L
MKTF-30	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-30	5/1/2018	1,1,1-Trichloroethane	0.44	1	0.073	200	ug/L
MKTF-30	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	5/1/2018	1,1-Dichloroethane	**33**	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/1/2018	1,1-Dichloroethene	2	1	0.081	7	ug/L
MKTF-30	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	5/1/2018	1,1,2-Trichloroethane	0.37	1	0.14	5	ug/L
MKTF-30	5/1/2018	Trichloroethene	2	1	0.11	5	ug/L
MKTF-30	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-30	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	5/1/2018	1,2-Dichloroethane	1.2	1	0.4	5	ug/L
MKTF-30	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	5/1/2018	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-30	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	5/1/2018	cis-1,2-Dichloroethene	2.4	1	0.2	70	ug/L
MKTF-30	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	5/1/2018	MTBE	1.8	1	0.24	143	ug/L
MKTF-30	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-30	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-30	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-30	8/20/2018	1,1,1-Trichloroethane	0.87	1	0.15	200	ug/L
MKTF-30	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-30	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-30	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-30	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-30	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-30	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-30	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-30	8/20/2018	1,1-Dichloroethane	**60**	1	0.4	25	ug/L
MKTF-30	8/20/2018	1,1-Dichloroethene	4.8	1	0.12	7	ug/L
MKTF-30	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-30	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-30	8/20/2018	1,1,2-Trichloroethane	0.52	1	0.23	5	ug/L
MKTF-30	8/20/2018	Trichloroethene	3.7	1	0.26	5	ug/L
MKTF-30	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-30	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-30	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-30	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-30	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-30	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-30	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-30	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-30	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-30	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-30	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-30	8/20/2018	1,2-Dichloroethane	3.1	1	0.4	5	ug/L
MKTF-30	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-30	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-30	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-30	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-30	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-30	8/20/2018	Tetrachloroethene	0.17	1	0.15	5	ug/L
MKTF-30	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-30	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-30	8/20/2018	cis-1,2-Dichloroethene	4.8	1	0.38	70	ug/L
MKTF-30	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-30	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-30	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-30	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-30	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-30	8/20/2018	MTBE	1.8	1	0.32	143	ug/L
MKTF-30	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-30	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-30	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-30	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-30	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-30	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-30	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-30	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-30	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-30	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-30	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-30	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-30	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-30	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-30	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-30	11/15/2018	1,1-Dichloroethane	**65**	1	0.18	25	ug/L
MKTF-30	11/15/2018	1,1-Dichloroethene	5.1	1	0.12	7	ug/L
MKTF-30	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-30	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-30	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-30	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-30	11/15/2018	Trichloroethene	3.8	1	0.26	5	ug/L
MKTF-30	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-30	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-30	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-30	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-30	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-30	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-30	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-30	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-30	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-30	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-30	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-30	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-30	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-30	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-30	11/15/2018	1,2-Dichloroethane	3	1	0.19	5	ug/L
MKTF-30	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-30	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-30	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-30	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-30	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-30	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-30	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-30	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-30	11/15/2018	cis-1,2-Dichloroethene	5.3	1	0.38	70	ug/L
MKTF-30	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-30	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-30	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-30	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-30	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-30	11/15/2018	MTBE	2.1	1	0.46	143	ug/L
MKTF-30	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-30	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-30	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-30	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	3/28/2019	1,1,2-Trichloroethane	0.25	1	0.21583	5	ug/L
MKTF-30	3/28/2019	1,1-Dichloroethane	**27**	1	0.140859	25	ug/L
MKTF-30	3/28/2019	1,1-Dichloroethene	1.7	1	0.205388	7	ug/L
MKTF-30	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	3/28/2019	1,2-Dichloroethane	1.1	1	0.194638	5	ug/L
MKTF-30	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	3/28/2019	Acetone	3.7	10	1.199396	14064	ug/L
MKTF-30	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	3/28/2019	cis-1,2-Dichloroethene	2	1	0.190115	70	ug/L
MKTF-30	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	3/28/2019	MTBE	1.3	1	0.456095	143	ug/L
MKTF-30	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	3/28/2019	Trichloroethene	1.6	1	0.166272	5	ug/L
MKTF-30	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	3/28/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
MKTF-30	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-30	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	5/6/2019	1,1,2-Trichloroethane	0.23	1	0.21583	5	ug/L
MKTF-30	5/6/2019	1,1-Dichloroethane	**36**	1	0.140859	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/6/2019	1,1-Dichloroethene	2.5	1	0.205388	7	ug/L
MKTF-30	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	5/6/2019	1,2-Dichloroethane	1.2	1	0.194638	5	ug/L
MKTF-30	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	5/6/2019	Acetone	5.5	10	1.199396	14064	ug/L
MKTF-30	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	5/6/2019	cis-1,2-Dichloroethene	2.8	1	0.190115	70	ug/L
MKTF-30	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	5/6/2019	MTBE	1.8	1	0.456095	143	ug/L
MKTF-30	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	5/6/2019	Trichloroethene	2.1	1	0.166272	5	ug/L
MKTF-30	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	5/6/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
MKTF-30	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	8/23/2019	1,1,1-Trichloroethane	0.22	1	0.172922	200	ug/L
MKTF-30	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	8/23/2019	1,1,2-Trichloroethane	0.31	1	0.21583	5	ug/L
MKTF-30	8/23/2019	1,1-Dichloroethane	**39**	1	0.140859	25	ug/L
MKTF-30	8/23/2019	1,1-Dichloroethene	3.1	1	0.205388	7	ug/L
MKTF-30	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	8/23/2019	1,2-Dichloroethane	1.7	1	0.194638	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	8/23/2019	Acetone	2	10	1.199396	14064	ug/L
MKTF-30	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	8/23/2019	cis-1,2-Dichloroethene	3.2	1	0.190115	70	ug/L
MKTF-30	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	8/23/2019	MTBE	1	1	0.456095	143	ug/L
MKTF-30	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	8/23/2019	Trichloroethene	2.6	1	0.166272	5	ug/L
MKTF-30	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	8/23/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-30	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	10/23/2019	1,1,1-Trichloroethane	0.28	1	0.172922	200	ug/L
MKTF-30	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	10/23/2019	1,1,2-Trichloroethane	0.35	1	0.21583	5	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethane	**47**	1	0.140859	25	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethene	4.4	1	0.205388	7	ug/L
MKTF-30	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	10/23/2019	1,2-Dichloroethane	2.1	1	0.194638	5	ug/L
MKTF-30	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	10/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-30	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	10/23/2019	cis-1,2-Dichloroethene	4.3	1	0.190115	70	ug/L
MKTF-30	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	10/23/2019	MTBE	1.5	1	0.456095	143	ug/L
MKTF-30	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	10/23/2019	Trichloroethene	3	1	0.166272	5	ug/L
MKTF-30	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	10/23/2019	1,1,1-Trichloroethane	0.28	1	0.172922	200	ug/L
MKTF-30	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	10/23/2019	1,1,2-Trichloroethane	0.35	1	0.21583	5	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethane	**47**	1	0.140859	25	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethene	4.5	1	0.205388	7	ug/L
MKTF-30	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	10/23/2019	1,2-Dichloroethane	2.1	1	0.194638	5	ug/L
MKTF-30	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	10/23/2019	Acetone	1.2	10	1.199396	14064	ug/L
MKTF-30	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	10/23/2019	cis-1,2-Dichloroethene	4.3	1	0.190115	70	ug/L
MKTF-30	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	10/23/2019	MTBE	1.2	1	0.456095	143	ug/L
MKTF-30	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	10/23/2019	Trichloroethene	3	1	0.166272	5	ug/L
MKTF-30	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-30	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-30	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-30	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-30	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-30	2/27/2020	1,1-Dichloroethane	**35**	1	0.27	25	ug/L
MKTF-30	2/27/2020	1,1-Dichloroethene	4	1	0.13	7	ug/L
MKTF-30	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-30	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-30	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-30	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-30	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-30	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-30	2/27/2020	1,2-Dichloroethane	1.6	1	0.22	5	ug/L
MKTF-30	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-30	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-30	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-30	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-30	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-30	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-30	2/27/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-30	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-30	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-30	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-30	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	2/27/2020	Acetone	3.3	10	2.3	14064	ug/L
MKTF-30	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-30	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-30	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-30	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-30	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-30	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-30	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-30	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-30	2/27/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-30	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-30	2/27/2020	cis-1,2-Dichloroethene	4	1	0.39	70	ug/L
MKTF-30	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-30	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-30	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-30	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-30	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-30	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-30	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	MTBE	2	1	0.39	143	ug/L
MKTF-30	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-30	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-30	2/27/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-30	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-30	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-30	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-30	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-30	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-30	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-30	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-30	2/27/2020	Trichloroethene	2.6	1	0.2	5	ug/L
MKTF-30	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-30	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-30	2/27/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-30	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-30	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-30	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-30	9/20/2020	1,1,2-Trichloroethane	0.2	1	0.19	5	ug/L
MKTF-30	9/20/2020	1,1-Dichloroethane	**36**	1	0.27	25	ug/L
MKTF-30	9/20/2020	1,1-Dichloroethene	2.2	1	0.13	7	ug/L
MKTF-30	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-30	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-30	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-30	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-30	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-30	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-30	9/20/2020	1,2-Dichloroethane	1.6	1	0.22	5	ug/L
MKTF-30	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-30	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-30	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-30	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-30	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-30	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-30	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-30	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-30	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-30	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-30	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	9/20/2020	Acetone	2.8	10	2.3	14064	ug/L
MKTF-30	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-30	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-30	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-30	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-30	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-30	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-30	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-30	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-30	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-30	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-30	9/20/2020	cis-1,2-Dichloroethene	2.8	1	0.39	70	ug/L
MKTF-30	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-30	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-30	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-30	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-30	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-30	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-30	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-30	9/20/2020	MTBE	3.5	1	0.39	143	ug/L
MKTF-30	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-30	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-30	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-30	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-30	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-30	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-30	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-30	9/20/2020	Toluene	ND	1	0.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-30	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-30	9/20/2020	Trichloroethene	1.6	1	0.2	5	ug/L
MKTF-30	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-30	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-30	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-30	12/15/2020	1,2-Dibromoethane	ND	0.02	0.005	0.05	ug/L
MKTF-30	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-30	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-30	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-30	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-30	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-30	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-30	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-30	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-30	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-30	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-30	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-30	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-30	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-30	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-30	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-30	12/15/2020	cis-1,2-Dichloroethene	1.75	1	0.5	70	ug/L
MKTF-30	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-30	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-30	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-30	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-30	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-30	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-30	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-30	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-30	12/15/2020	1,1-Dichloroethane	24.1	1	0.5	25	ug/L
MKTF-30	12/15/2020	1,2-Dichloroethane	1.22	1	0.5	5	ug/L
MKTF-30	12/15/2020	1,1-Dichloroethene	1.99	1	0.5	7	ug/L
MKTF-30	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-30	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-30	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-30	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-30	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-30	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-30	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-30	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-30	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-30	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-30	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-30	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-30	12/15/2020	MTBE	3.64	1	0.74	143	ug/L
MKTF-30	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-30	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-30	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-30	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-30	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-30	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-30	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-30	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-30	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-30	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-30	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-30	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-30	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-30	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-30	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-30	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-30	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-30	12/15/2020	Trichloroethene	1.11	1	0.5	5	ug/L
MKTF-30	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-30	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-30	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-30	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-30	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-30	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-31	4/8/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	4/8/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	4/8/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	4/8/2014	Benzene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	4/8/2014	1,1,1-Trichloroethane	5.8	1	0.12	200	ug/L
MKTF-31	4/8/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	4/8/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	4/8/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	4/8/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	4/8/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-31	4/8/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	4/8/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	4/8/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	4/8/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	4/8/2014	1,1-Dichloroethane	**28**	1	0.28	25	ug/L
MKTF-31	4/8/2014	1,1-Dichloroethene	**59**	1	0.21	7	ug/L
MKTF-31	4/8/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	4/8/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	4/8/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	4/8/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	4/8/2014	1,1,2-Trichloroethane	1.8	1	0.14	5	ug/L
MKTF-31	4/8/2014	Trichloroethene	3	1	0.19	5	ug/L
MKTF-31	4/8/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-31	4/8/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	4/8/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	4/8/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	4/8/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	4/8/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	4/8/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	4/8/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	4/8/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	4/8/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	4/8/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	4/8/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	4/8/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	4/8/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	4/8/2014	1,2-Dichloroethane	**21**	1	0.26	5	ug/L
MKTF-31	4/8/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	4/8/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	4/8/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	4/8/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	4/8/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	4/8/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	4/8/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	4/8/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	4/8/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	4/8/2014	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	4/8/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	4/8/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	4/8/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	4/8/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	4/8/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	4/8/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	4/8/2014	MTBE	55	1	0.25	143	ug/L
MKTF-31	4/8/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	4/8/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	9/23/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	9/23/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	9/23/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	9/23/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-31	9/23/2014	1,1,1-Trichloroethane	3.7	1	0.12	200	ug/L
MKTF-31	9/23/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	9/23/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	9/23/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	9/23/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	9/23/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-31	9/23/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	9/23/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	9/23/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	9/23/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	9/23/2014	1,1-Dichloroethane	22	1	0.28	25	ug/L
MKTF-31	9/23/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-31	9/23/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	9/23/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	9/23/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	9/23/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	9/23/2014	1,1,2-Trichloroethane	1.6	1	0.14	5	ug/L
MKTF-31	9/23/2014	Trichloroethene	2.4	1	0.19	5	ug/L
MKTF-31	9/23/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/23/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	9/23/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	9/23/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	9/23/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	9/23/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	9/23/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	9/23/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	9/23/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	9/23/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	9/23/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	9/23/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	9/23/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	9/23/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	9/23/2014	1,2-Dichloroethane	**13**	1	0.26	5	ug/L
MKTF-31	9/23/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	9/23/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	9/23/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	9/23/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	9/23/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	9/23/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	9/23/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	9/23/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	9/23/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	9/23/2014	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-31	9/23/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	9/23/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	9/23/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	9/23/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	9/23/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	9/23/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	9/23/2014	MTBE	55	1	0.25	143	ug/L
MKTF-31	9/23/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	9/23/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-31	11/17/2014	1,1,1-Trichloroethane	3.9	1	0.12	200	ug/L
MKTF-31	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	11/17/2014	Vinyl Chloride	1.9	1	0.11	2	ug/L
MKTF-31	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	11/17/2014	1,1-Dichloroethane	**29**	1	0.28	25	ug/L
MKTF-31	11/17/2014	1,1-Dichloroethene	**34**	1	0.21	7	ug/L
MKTF-31	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	11/17/2014	1,1,2-Trichloroethane	1.6	1	0.14	5	ug/L
MKTF-31	11/17/2014	Trichloroethene	2.4	1	0.19	5	ug/L
MKTF-31	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-31	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	11/17/2014	1,2-Dichloroethane	**16**	1	0.26	5	ug/L
MKTF-31	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	11/17/2014	Toluene	ND	1	0.17	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	11/17/2014	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-31	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	11/17/2014	MTBE	58	10	2.5	143	ug/L
MKTF-31	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	3/11/2015	1,1,1-Trichloroethane	3.9	1	0.078	200	ug/L
MKTF-31	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	3/11/2015	1,1-Dichloroethane	21	1	0.4	25	ug/L
MKTF-31	3/11/2015	1,1-Dichloroethene	**40**	1	0.099	7	ug/L
MKTF-31	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	3/11/2015	1,1,2-Trichloroethane	1.5	1	0.079	5	ug/L
MKTF-31	3/11/2015	Trichloroethene	2.5	1	0.16	5	ug/L
MKTF-31	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	3/11/2015	1,2-Dichloroethane	**14**	1	0.18	5	ug/L
MKTF-31	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	3/11/2015	cis-1,2-Dichloroethene	1.6	1	0.081	70	ug/L
MKTF-31	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	3/11/2015	MTBE	54	1	0.17	143	ug/L
MKTF-31	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	6/10/2015	Benzene	ND	1	0.065	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	1,1,1-Trichloroethane	4.9	1	0.078	200	ug/L
MKTF-31	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	6/10/2015	1,1-Dichloroethane	**29**	1	0.4	25	ug/L
MKTF-31	6/10/2015	1,1-Dichloroethene	**53**	1	0.099	7	ug/L
MKTF-31	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	6/10/2015	1,1,2-Trichloroethane	1.6	1	0.079	5	ug/L
MKTF-31	6/10/2015	Trichloroethene	3.1	1	0.16	5	ug/L
MKTF-31	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	6/10/2015	1,2-Dichloroethane	**18**	1	0.18	5	ug/L
MKTF-31	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	6/10/2015	cis-1,2-Dichloroethene	1.7	1	0.081	70	ug/L
MKTF-31	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	6/10/2015	MTBE	56	1	0.17	143	ug/L
MKTF-31	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	8/21/2015	1,1,1-Trichloroethane	4.8	1	0.078	200	ug/L
MKTF-31	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	8/21/2015	1,1-Dichloroethane	**28**	1	0.4	25	ug/L
MKTF-31	8/21/2015	1,1-Dichloroethene	**47**	1	0.099	7	ug/L
MKTF-31	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	8/21/2015	1,1,2-Trichloroethane	1.7	1	0.079	5	ug/L
MKTF-31	8/21/2015	Trichloroethene	3.2	1	0.16	5	ug/L
MKTF-31	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	8/21/2015	1,2-Dichloroethane	**18**	1	0.18	5	ug/L
MKTF-31	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	8/21/2015	cis-1,2-Dichloroethene	1.7	1	0.081	70	ug/L
MKTF-31	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	8/21/2015	MTBE	64	1	0.17	143	ug/L
MKTF-31	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	11/4/2015	1,1,1-Trichloroethane	5	1	0.078	200	ug/L
MKTF-31	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	11/4/2015	1,1-Dichloroethane	**33**	1	0.4	25	ug/L
MKTF-31	11/4/2015	1,1-Dichloroethene	**57**	1	0.099	7	ug/L
MKTF-31	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	11/4/2015	1,1,2-Trichloroethane	2.1	1	0.079	5	ug/L
MKTF-31	11/4/2015	Trichloroethene	3.5	1	0.16	5	ug/L
MKTF-31	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	11/4/2015	1,2-Dichloroethane	**22**	1	0.18	5	ug/L
MKTF-31	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	11/4/2015	Toluene	ND	1	0.11	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	11/4/2015	cis-1,2-Dichloroethene	2.1	1	0.081	70	ug/L
MKTF-31	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	11/4/2015	MTBE	79	1	0.17	143	ug/L
MKTF-31	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-31	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-31	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-31	2/23/2016	1,1,1-Trichloroethane	5.6	1	0.063	200	ug/L
MKTF-31	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-31	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-31	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-31	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-31	2/23/2016	1,1-Dichloroethane	**34**	1	0.11	25	ug/L
MKTF-31	2/23/2016	1,1-Dichloroethene	**57**	5	0.38	7	ug/L
MKTF-31	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-31	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-31	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-31	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-31	2/23/2016	1,1,2-Trichloroethane	2.4	1	0.077	5	ug/L
MKTF-31	2/23/2016	Trichloroethene	3.6	1	0.18	5	ug/L
MKTF-31	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-31	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-31	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-31	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-31	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-31	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-31	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-31	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-31	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	2/23/2016	1,2-Dichloroethane	**23**	1	0.053	5	ug/L
MKTF-31	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-31	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-31	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-31	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-31	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	2/23/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-31	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-31	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	2/23/2016	MTBE	61	1	0.21	143	ug/L
MKTF-31	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-31	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-31	6/9/2016	Benzene	0.75	1	0.096	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	1,1,1-Trichloroethane	5.5	1	0.091	200	ug/L
MKTF-31	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-31	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	6/9/2016	1,1-Dichloroethane	**37**	1	0.11	25	ug/L
MKTF-31	6/9/2016	1,1-Dichloroethene	**66**	1	0.11	7	ug/L
MKTF-31	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	6/9/2016	1,1,2-Trichloroethane	2.4	1	0.13	5	ug/L
MKTF-31	6/9/2016	Trichloroethene	4	1	0.18	5	ug/L
MKTF-31	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-31	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	6/9/2016	Isopropylbenzene	0.94	1	0.1	447	ug/L
MKTF-31	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	6/9/2016	n-Butylbenzene	0.26	3	0.16	1000	ug/L
MKTF-31	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	6/9/2016	1,2-Dichloroethane	**22**	1	0.12	5	ug/L
MKTF-31	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-31	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	6/9/2016	sec-Butylbenzene	0.42	1	0.12	2000	ug/L
MKTF-31	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	6/9/2016	cis-1,2-Dichloroethene	2	1	0.12	70	ug/L
MKTF-31	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	6/9/2016	MTBE	80	1	0.21	143	ug/L
MKTF-31	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	9/8/2016	Chloroform	0.29	1	0.089	100	ug/L
MKTF-31	9/8/2016	Benzene	0.77	1	0.096	5	ug/L
MKTF-31	9/8/2016	1,1,1-Trichloroethane	5.6	1	0.091	200	ug/L
MKTF-31	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	9/8/2016	Methylene Chloride	0.86	3	0.19	5	ug/L
MKTF-31	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	9/8/2016	1,1-Dichloroethane	**33**	1	0.11	25	ug/L
MKTF-31	9/8/2016	1,1-Dichloroethene	**69**	1	0.11	7	ug/L
MKTF-31	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	9/8/2016	1,1,2-Trichloroethane	2.4	1	0.13	5	ug/L
MKTF-31	9/8/2016	Trichloroethene	3.8	1	0.18	5	ug/L
MKTF-31	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	9/8/2016	Isopropylbenzene	1.6	1	0.1	447	ug/L
MKTF-31	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-31	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	9/8/2016	1,2-Dichloroethane	**24**	1	0.12	5	ug/L
MKTF-31	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-31	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	9/8/2016	sec-Butylbenzene	0.66	1	0.12	2000	ug/L
MKTF-31	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	9/8/2016	cis-1,2-Dichloroethene	1.4	1	0.12	70	ug/L
MKTF-31	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	9/8/2016	MTBE	63	1	0.21	143	ug/L
MKTF-31	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	10/31/2016	Chloroform	0.41	1	0.089	100	ug/L
MKTF-31	10/31/2016	Benzene	0.48	1	0.096	5	ug/L
MKTF-31	10/31/2016	1,1,1-Trichloroethane	4.8	1	0.091	200	ug/L
MKTF-31	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-31	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	10/31/2016	1,1-Dichloroethane	**31**	1	0.11	25	ug/L
MKTF-31	10/31/2016	1,1-Dichloroethene	**57**	1	0.11	7	ug/L
MKTF-31	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	10/31/2016	1,1,2-Trichloroethane	2.2	1	0.13	5	ug/L
MKTF-31	10/31/2016	Trichloroethene	3.7	1	0.18	5	ug/L
MKTF-31	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-31	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	10/31/2016	Isopropylbenzene	0.71	1	0.1	447	ug/L
MKTF-31	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	10/31/2016	n-Butylbenzene	0.32	3	0.16	1000	ug/L
MKTF-31	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	10/31/2016	1,2-Dichloroethane	**21**	1	0.12	5	ug/L
MKTF-31	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	10/31/2016	Toluene	0.15	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	10/31/2016	sec-Butylbenzene	0.37	1	0.12	2000	ug/L
MKTF-31	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	10/31/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	10/31/2016	MTBE	70	1	0.21	143	ug/L
MKTF-31	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	3/7/2017	Acetone	2.6	10	0.88	14064	ug/L
MKTF-31	3/7/2017	Chloroform	0.45	1	0.089	100	ug/L
MKTF-31	3/7/2017	Benzene	0.62	1	0.096	5	ug/L
MKTF-31	3/7/2017	1,1,1-Trichloroethane	4.7	1	0.073	200	ug/L
MKTF-31	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	3/7/2017	1,1-Dichloroethane	**35**	1	0.1	25	ug/L
MKTF-31	3/7/2017	1,1-Dichloroethene	**70**	1	0.081	7	ug/L
MKTF-31	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-31	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	3/7/2017	1,1,2-Trichloroethane	2.2	1	0.14	5	ug/L
MKTF-31	3/7/2017	Trichloroethene	4.1	1	0.18	5	ug/L
MKTF-31	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-31	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	3/7/2017	Isopropylbenzene	1	1	0.098	447	ug/L
MKTF-31	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	3/7/2017	n-Butylbenzene	0.27	3	0.16	1000	ug/L
MKTF-31	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	3/7/2017	1,2-Dichloroethane	**20**	1	0.12	5	ug/L
MKTF-31	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-31	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-31	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	3/7/2017	sec-Butylbenzene	0.35	1	0.1	2000	ug/L
MKTF-31	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	3/7/2017	cis-1,2-Dichloroethene	1.8	1	0.2	70	ug/L
MKTF-31	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-31	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	3/7/2017	MTBE	74	1	0.15	143	ug/L
MKTF-31	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-31	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	6/5/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	6/5/2017	Chloroform	0.47	1	0.4	100	ug/L
MKTF-31	6/5/2017	Benzene	0.66	1	0.062	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/5/2017	1,1,1-Trichloroethane	5.1	1	0.073	200	ug/L
MKTF-31	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	6/5/2017	1,1-Dichloroethane	**36**	1	0.4	25	ug/L
MKTF-31	6/5/2017	1,1-Dichloroethene	**70**	1	0.081	7	ug/L
MKTF-31	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	6/5/2017	1,1,2-Trichloroethane	2.3	1	0.14	5	ug/L
MKTF-31	6/5/2017	Trichloroethene	4.3	1	0.11	5	ug/L
MKTF-31	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	6/5/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-31	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	6/5/2017	n-Butylbenzene	0.24	3	0.13	1000	ug/L
MKTF-31	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	6/5/2017	1,2-Dichloroethane	**22**	1	0.4	5	ug/L
MKTF-31	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	6/5/2017	sec-Butylbenzene	0.36	1	0.11	2000	ug/L
MKTF-31	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	6/5/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-31	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-31	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	6/5/2017	MTBE	72	1	0.24	143	ug/L
MKTF-31	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	9/25/2017	Chloroform	0.52	1	0.4	100	ug/L
MKTF-31	9/25/2017	Benzene	0.85	1	0.062	5	ug/L
MKTF-31	9/25/2017	1,1,1-Trichloroethane	5.3	1	0.073	200	ug/L
MKTF-31	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	9/25/2017	1,1-Dichloroethane	**41**	1	0.4	25	ug/L
MKTF-31	9/25/2017	1,1-Dichloroethene	**80**	1	0.081	7	ug/L
MKTF-31	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	9/25/2017	1,1,2-Trichloroethane	2.7	1	0.14	5	ug/L
MKTF-31	9/25/2017	Trichloroethene	4.8	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	9/25/2017	Isopropylbenzene	1.8	1	0.051	447	ug/L
MKTF-31	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	9/25/2017	n-Butylbenzene	0.35	3	0.13	1000	ug/L
MKTF-31	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	9/25/2017	1,2-Dichloroethane	**25**	1	0.4	5	ug/L
MKTF-31	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	9/25/2017	sec-Butylbenzene	0.54	1	0.11	2000	ug/L
MKTF-31	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	9/25/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-31	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	9/25/2017	MTBE	76	1	0.24	143	ug/L
MKTF-31	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	11/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	11/21/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	11/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-31	11/21/2017	Benzene	0.62	1	0.062	5	ug/L
MKTF-31	11/21/2017	1,1,1-Trichloroethane	4.6	1	0.073	200	ug/L
MKTF-31	11/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	11/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	11/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	11/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	11/21/2017	Vinyl Chloride	0.29	1	0.18	2	ug/L
MKTF-31	11/21/2017	Methylene Chloride	0.29	3	0.11	5	ug/L
MKTF-31	11/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	11/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	11/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	11/21/2017	1,1-Dichloroethane	**35**	1	0.4	25	ug/L
MKTF-31	11/21/2017	1,1-Dichloroethene	**67**	1	0.081	7	ug/L
MKTF-31	11/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	11/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	11/21/2017	1,2-Dichloropropane	0.19	1	0.1	5	ug/L
MKTF-31	11/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	11/21/2017	1,1,2-Trichloroethane	2.4	1	0.14	5	ug/L
MKTF-31	11/21/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-31	11/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	11/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	11/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	11/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	11/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	11/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	11/21/2017	Isopropylbenzene	1.6	1	0.051	447	ug/L
MKTF-31	11/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	11/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	11/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	11/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	11/21/2017	n-Butylbenzene	0.17	3	0.13	1000	ug/L
MKTF-31	11/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	11/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	11/21/2017	1,2-Dichloroethane	**22**	1	0.4	5	ug/L
MKTF-31	11/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	11/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	11/21/2017	Bromobenzene	ND	1	0.14	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	11/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	11/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	11/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	11/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	11/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	11/21/2017	cis-1,2-Dichloroethene	1.6	1	0.2	70	ug/L
MKTF-31	11/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	11/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	11/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	11/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	11/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	11/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	11/21/2017	MTBE	66	1	0.24	143	ug/L
MKTF-31	11/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	11/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	2/5/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	2/5/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	2/5/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-31	2/5/2018	Benzene	1.3	1	0.062	5	ug/L
MKTF-31	2/5/2018	1,1,1-Trichloroethane	5.6	1	0.073	200	ug/L
MKTF-31	2/5/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	2/5/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	2/5/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	2/5/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	2/5/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	2/5/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	2/5/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	2/5/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	2/5/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	2/5/2018	1,1-Dichloroethane	**44**	1	0.4	25	ug/L
MKTF-31	2/5/2018	1,1-Dichloroethene	**91**	1	0.081	7	ug/L
MKTF-31	2/5/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	2/5/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	2/5/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	2/5/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	2/5/2018	1,1,2-Trichloroethane	2.9	1	0.14	5	ug/L
MKTF-31	2/5/2018	Trichloroethene	**5.6**	1	0.11	5	ug/L
MKTF-31	2/5/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	2/5/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	2/5/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	2/5/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	2/5/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	2/5/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	2/5/2018	Isopropylbenzene	1.7	1	0.051	447	ug/L
MKTF-31	2/5/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	2/5/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	2/5/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-31	2/5/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	2/5/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-31	2/5/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	2/5/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	2/5/2018	1,2-Dichloroethane	**26**	1	0.4	5	ug/L
MKTF-31	2/5/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	2/5/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	2/5/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	2/5/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	2/5/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	2/5/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	2/5/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	2/5/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	2/5/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	2/5/2018	cis-1,2-Dichloroethene	1.9	1	0.2	70	ug/L
MKTF-31	2/5/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	2/5/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	2/5/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	2/5/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	2/5/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	2/5/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	2/5/2018	MTBE	85	1	0.24	143	ug/L
MKTF-31	2/5/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	2/5/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	5/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	5/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	5/6/2018	Chloroform	0.71	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	Benzene	0.99	1	0.062	5	ug/L
MKTF-31	5/6/2018	1,1,1-Trichloroethane	5.8	1	0.073	200	ug/L
MKTF-31	5/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	5/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	5/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	5/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	5/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	5/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	5/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	5/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	5/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	5/6/2018	1,1-Dichloroethane	**49**	1	0.4	25	ug/L
MKTF-31	5/6/2018	1,1-Dichloroethene	**93**	1	0.081	7	ug/L
MKTF-31	5/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	5/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	5/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	5/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	5/6/2018	1,1,2-Trichloroethane	3	1	0.14	5	ug/L
MKTF-31	5/6/2018	Trichloroethene	**6**	1	0.11	5	ug/L
MKTF-31	5/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	5/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	5/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	5/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	5/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	5/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	5/6/2018	Isopropylbenzene	1.6	1	0.051	447	ug/L
MKTF-31	5/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	5/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	5/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-31	5/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	5/6/2018	n-Butylbenzene	0.46	3	0.13	1000	ug/L
MKTF-31	5/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	5/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	5/6/2018	1,2-Dichloroethane	**29**	1	0.4	5	ug/L
MKTF-31	5/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	5/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	5/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	5/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	5/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	5/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	5/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	5/6/2018	sec-Butylbenzene	0.7	1	0.11	2000	ug/L
MKTF-31	5/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	5/6/2018	cis-1,2-Dichloroethene	2.1	1	0.2	70	ug/L
MKTF-31	5/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	5/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	5/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	5/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	5/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	5/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	5/6/2018	MTBE	110	1	0.24	143	ug/L
MKTF-31	5/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	5/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	8/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-31	8/17/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-31	8/17/2018	Chloroform	0.44	1	0.4	100	ug/L
MKTF-31	8/17/2018	Benzene	0.73	1	0.17	5	ug/L
MKTF-31	8/17/2018	1,1,1-Trichloroethane	4.8	1	0.15	200	ug/L
MKTF-31	8/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	8/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	8/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-31	8/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-31	8/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-31	8/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-31	8/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-31	8/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-31	8/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-31	8/17/2018	1,1-Dichloroethane	**39**	1	0.4	25	ug/L
MKTF-31	8/17/2018	1,1-Dichloroethene	**73**	10	1.2	7	ug/L
MKTF-31	8/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-31	8/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	8/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	8/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-31	8/17/2018	1,1,2-Trichloroethane	2.4	1	0.23	5	ug/L
MKTF-31	8/17/2018	Trichloroethene	**5.1**	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-31	8/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-31	8/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	8/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-31	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-31	8/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-31	8/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-31	8/17/2018	Isopropylbenzene	1.2	1	0.22	447	ug/L
MKTF-31	8/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-31	8/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-31	8/17/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-31	8/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-31	8/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	8/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	8/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-31	8/17/2018	1,2-Dichloroethane	**26**	1	0.4	5	ug/L
MKTF-31	8/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-31	8/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-31	8/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-31	8/17/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	8/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-31	8/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-31	8/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	8/17/2018	sec-Butylbenzene	0.53	1	0.2	2000	ug/L
MKTF-31	8/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-31	8/17/2018	cis-1,2-Dichloroethene	1.6	1	0.38	70	ug/L
MKTF-31	8/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	8/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-31	8/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-31	8/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-31	8/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-31	8/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-31	8/17/2018	MTBE	88	1	0.32	143	ug/L
MKTF-31	8/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-31	8/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-31	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-31	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-31	11/15/2018	Benzene	1.1	1	0.17	5	ug/L
MKTF-31	11/15/2018	1,1,1-Trichloroethane	4.5	1	0.16	200	ug/L
MKTF-31	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-31	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-31	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-31	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-31	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-31	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-31	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-31	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-31	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-31	11/15/2018	1,1-Dichloroethane	**45**	1	0.18	25	ug/L
MKTF-31	11/15/2018	1,1-Dichloroethene	**69**	1	0.12	7	ug/L
MKTF-31	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-31	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-31	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-31	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	11/15/2018	1,1,2-Trichloroethane	2.6	1	0.23	5	ug/L
MKTF-31	11/15/2018	Trichloroethene	4.8	1	0.26	5	ug/L
MKTF-31	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-31	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-31	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-31	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-31	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-31	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-31	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-31	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-31	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-31	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-31	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-31	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-31	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-31	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-31	11/15/2018	1,2-Dichloroethane	**27**	1	0.19	5	ug/L
MKTF-31	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-31	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-31	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-31	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-31	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-31	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-31	11/15/2018	cis-1,2-Dichloroethene	1.7	1	0.38	70	ug/L
MKTF-31	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-31	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-31	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-31	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-31	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-31	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-31	11/15/2018	MTBE	88	1	0.46	143	ug/L
MKTF-31	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-31	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-31	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-31	2/20/2019	1,1,1-Trichloroethane	5.5	1	0.163816	200	ug/L
MKTF-31	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-31	2/20/2019	1,1,2-Trichloroethane	2.8	1	0.232723	5	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethane	**52**	1	0.175197	25	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethene	**95**	1	0.120488	7	ug/L
MKTF-31	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-31	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-31	2/20/2019	1,1,1-Trichloroethane	5.4	1	0.163816	200	ug/L
MKTF-31	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-31	2/20/2019	1,1,2-Trichloroethane	2.9	1	0.232723	5	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethane	**53**	1	0.175197	25	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethene	**95**	1	0.120488	7	ug/L
MKTF-31	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-31	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-31	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-31	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-31	2/20/2019	1,2-Dichloroethane	**31**	1	0.189525	5	ug/L
MKTF-31	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-31	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-31	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-31	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-31	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-31	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-31	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-31	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-31	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
MKTF-31	2/20/2019	Benzene	1.1	1	0.174896	5	ug/L
MKTF-31	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-31	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-31	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-31	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-31	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-31	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-31	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-31	2/20/2019	Chloroform	0.69	1	0.235224	100	ug/L
MKTF-31	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	2/20/2019	cis-1,2-Dichloroethene	2.1	1	0.375981	70	ug/L
MKTF-31	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-31	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-31	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-31	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-31	2/20/2019	Isopropylbenzene	1.4	1	0.221104	447	ug/L
MKTF-31	2/20/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-31	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-31	2/20/2019	n-Butylbenzene	0.42	3	0.24833	1000	ug/L
MKTF-31	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-31	2/20/2019	sec-Butylbenzene	0.49	1	0.202255	2000	ug/L
MKTF-31	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-31	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-31	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-31	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-31	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-31	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-31	2/20/2019	Trichloroethene	**6.3**	1	0.257556	5	ug/L
MKTF-31	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-31	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-31	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-31	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-31	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-31	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-31	2/20/2019	1,2-Dichloroethane	**30**	1	0.189525	5	ug/L
MKTF-31	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-31	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-31	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-31	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-31	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-31	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-31	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-31	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-31	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
MKTF-31	2/20/2019	Benzene	1	1	0.174896	5	ug/L
MKTF-31	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-31	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-31	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-31	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-31	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-31	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-31	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-31	2/20/2019	Chloroform	0.65	1	0.235224	100	ug/L
MKTF-31	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	2/20/2019	cis-1,2-Dichloroethene	1.9	1	0.375981	70	ug/L
MKTF-31	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-31	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-31	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-31	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-31	2/20/2019	Isopropylbenzene	1.5	1	0.221104	447	ug/L
MKTF-31	2/20/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-31	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-31	2/20/2019	n-Butylbenzene	0.44	3	0.24833	1000	ug/L
MKTF-31	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-31	2/20/2019	sec-Butylbenzene	0.54	1	0.202255	2000	ug/L
MKTF-31	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-31	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-31	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-31	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-31	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-31	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-31	2/20/2019	Trichloroethene	**6.1**	1	0.257556	5	ug/L
MKTF-31	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-31	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-31	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	0.0062	0.00933	0.003253	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	0.0039	0.00943	0.003288	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	5/6/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	5/6/2019	Benzene	0.45	1	0.166639	5	ug/L
MKTF-31	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	5/6/2019	Chloroform	0.39	1	0.121891	100	ug/L
MKTF-31	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	5/6/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-31	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	5/6/2019	Isopropylbenzene	0.57	1	0.191522	447	ug/L
MKTF-31	5/6/2019	MTBE	90	1	0.456095	143	ug/L
MKTF-31	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-31	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	5/6/2019	Trichloroethene	4.1	1	0.166272	5	ug/L
MKTF-31	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	5/6/2019	1,1,1-Trichloroethane	3.5	1	0.172922	200	ug/L
MKTF-31	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	5/6/2019	1,1,2-Trichloroethane	2	1	0.21583	5	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethane	**34**	1	0.140859	25	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethene	**50**	1	0.205388	7	ug/L
MKTF-31	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	5/6/2019	1,2-Dichloroethane	**19**	1	0.194638	5	ug/L
MKTF-31	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	5/6/2019	Benzene	0.41	1	0.166639	5	ug/L
MKTF-31	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	5/6/2019	Chloroform	0.39	1	0.121891	100	ug/L
MKTF-31	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	5/6/2019	cis-1,2-Dichloroethene	1.5	1	0.190115	70	ug/L
MKTF-31	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	5/6/2019	Isopropylbenzene	0.48	1	0.191522	447	ug/L
MKTF-31	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	5/6/2019	1,1,1-Trichloroethane	3.6	1	0.172922	200	ug/L
MKTF-31	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	5/6/2019	1,1,2-Trichloroethane	2	1	0.21583	5	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethane	**35**	1	0.140859	25	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethene	**52**	1	0.205388	7	ug/L
MKTF-31	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	5/6/2019	1,2-Dichloroethane	**19**	1	0.194638	5	ug/L
MKTF-31	5/6/2019	MTBE	90	1	0.456095	143	ug/L
MKTF-31	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-31	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	5/6/2019	Trichloroethene	3.9	1	0.166272	5	ug/L
MKTF-31	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	0.0063	0.00936	0.003261	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	0.0071	0.00949	0.003305	0.05	ug/L
MKTF-31	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	8/23/2019	1,1,1-Trichloroethane	3.9	1	0.172922	200	ug/L
MKTF-31	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	8/23/2019	1,1,2-Trichloroethane	2.5	1	0.21583	5	ug/L
MKTF-31	8/23/2019	1,1-Dichloroethane	**39**	1	0.140859	25	ug/L
MKTF-31	8/23/2019	1,1-Dichloroethene	**60**	1	0.205388	7	ug/L
MKTF-31	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	8/23/2019	1,2-Dichloroethane	**23**	1	0.194638	5	ug/L
MKTF-31	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	8/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	8/23/2019	Benzene	0.72	1	0.166639	5	ug/L
MKTF-31	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	8/23/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-31	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	8/23/2019	cis-1,2-Dichloroethene	1.9	1	0.190115	70	ug/L
MKTF-31	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	8/23/2019	Isopropylbenzene	1	1	0.191522	447	ug/L
MKTF-31	8/23/2019	MTBE	110	1	0.456095	143	ug/L
MKTF-31	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	8/23/2019	n-Butylbenzene	1.1	3	0.22757	1000	ug/L
MKTF-31	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	8/23/2019	sec-Butylbenzene	0.55	1	0.247731	2000	ug/L
MKTF-31	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	8/23/2019	Trichloroethene	4.8	1	0.166272	5	ug/L
MKTF-31	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	8/23/2019	1,2-Dibromoethane	0.0066	0.00941	0.003279	0.05	ug/L
MKTF-31	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	10/22/2019	1,1,1-Trichloroethane	3.6	1	0.172922	200	ug/L
MKTF-31	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	10/22/2019	1,1,2-Trichloroethane	2.3	1	0.21583	5	ug/L
MKTF-31	10/22/2019	1,1-Dichloroethane	**36**	1	0.140859	25	ug/L
MKTF-31	10/22/2019	1,1-Dichloroethene	**53**	1	0.205388	7	ug/L
MKTF-31	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	10/22/2019	1,2,4-Trimethylbenzene	0.22	1	0.213199	56	ug/L
MKTF-31	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	10/22/2019	1,2-Dichloroethane	**21**	1	0.194638	5	ug/L
MKTF-31	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	10/22/2019	Benzene	0.6	1	0.166639	5	ug/L
MKTF-31	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	10/22/2019	Chloroform	0.48	1	0.121891	100	ug/L
MKTF-31	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	10/22/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-31	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	10/22/2019	Isopropylbenzene	0.93	1	0.191522	447	ug/L
MKTF-31	10/22/2019	MTBE	100	1	0.456095	143	ug/L
MKTF-31	10/22/2019	Methylene Chloride	0.2	3	0.154501	5	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	10/22/2019	sec-Butylbenzene	0.4	1	0.247731	2000	ug/L
MKTF-31	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	10/22/2019	Trichloroethene	4.4	1	0.166272	5	ug/L
MKTF-31	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	10/22/2019	Vinyl Chloride	0.46	1	0.179099	2	ug/L
MKTF-31	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	10/22/2019	1,2-Dibromoethane	0.0055	0.00941	0.003279	0.05	ug/L
MKTF-31	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-31	2/25/2020	1,1,1-Trichloroethane	4.6	1	0.3	200	ug/L
MKTF-31	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-31	2/25/2020	1,1,2-Trichloroethane	3.1	1	0.19	5	ug/L
MKTF-31	2/25/2020	1,1-Dichloroethane	**39**	1	0.27	25	ug/L
MKTF-31	2/25/2020	1,1-Dichloroethene	**84**	1	0.13	7	ug/L
MKTF-31	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-31	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-31	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-31	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-31	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-31	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-31	2/25/2020	1,2-Dichloroethane	**28**	1	0.22	5	ug/L
MKTF-31	2/25/2020	1,2-Dichloropropane	0.39	1	0.13	5	ug/L
MKTF-31	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-31	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-31	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-31	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-31	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-31	2/25/2020	2-Butanone	2.6	10	1.1	5565	ug/L
MKTF-31	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-31	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-31	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-31	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-31	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	2/25/2020	Acetone	3.5	10	2.3	14064	ug/L
MKTF-31	2/25/2020	Benzene	0.92	1	0.23	5	ug/L
MKTF-31	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-31	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-31	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-31	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-31	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-31	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-31	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-31	2/25/2020	Chloroform	0.47	1	0.13	100	ug/L
MKTF-31	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-31	2/25/2020	cis-1,2-Dichloroethene	2.2	1	0.39	70	ug/L
MKTF-31	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-31	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-31	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-31	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-31	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-31	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-31	2/25/2020	MTBE	**180**	1	0.39	143	ug/L
MKTF-31	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-31	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-31	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-31	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-31	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-31	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-31	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-31	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-31	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-31	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-31	2/25/2020	Trichloroethene	**5.7**	1	0.2	5	ug/L
MKTF-31	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-31	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-31	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-31	9/19/2020	1,1,1-Trichloroethane	3.5	1	0.3	200	ug/L
MKTF-31	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-31	9/19/2020	1,1,2-Trichloroethane	2.2	1	0.19	5	ug/L
MKTF-31	9/19/2020	1,1-Dichloroethane	**48**	1	0.27	25	ug/L
MKTF-31	9/19/2020	1,1-Dichloroethene	**63**	1	0.13	7	ug/L
MKTF-31	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-31	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-31	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-31	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-31	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-31	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-31	9/19/2020	1,2-Dichloroethane	**24**	1	0.22	5	ug/L
MKTF-31	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-31	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-31	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-31	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-31	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-31	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-31	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-31	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-31	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-31	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-31	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-31	9/19/2020	Benzene	0.66	1	0.23	5	ug/L
MKTF-31	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-31	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-31	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-31	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-31	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-31	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-31	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-31	9/19/2020	Chloroform	0.35	1	0.13	100	ug/L
MKTF-31	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-31	9/19/2020	cis-1,2-Dichloroethene	2.4	1	0.39	70	ug/L
MKTF-31	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-31	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-31	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-31	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-31	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-31	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-31	9/19/2020	Isopropylbenzene	0.75	1	0.18	447	ug/L
MKTF-31	9/19/2020	MTBE	**190**	1	0.39	143	ug/L
MKTF-31	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-31	9/19/2020	n-Butylbenzene	0.29	3	0.25	1000	ug/L
MKTF-31	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-31	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-31	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-31	9/19/2020	Styrene	ND	1	0.13	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-31	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-31	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-31	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-31	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-31	9/19/2020	Trichloroethene	**5.8**	1	0.2	5	ug/L
MKTF-31	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-31	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-31	9/19/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	ND	0.0201	0.00501	0.05	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	ND	0.0206	0.00515	0.05	ug/L
MKTF-31	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-31	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-31	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-31	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-31	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-31	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-31	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-31	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-31	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-31	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-31	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-31	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-31	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-31	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-31	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-31	12/18/2020	cis-1,2-Dichloroethene	1.82	1	0.5	70	ug/L
MKTF-31	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-31	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-31	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-31	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethane	**43.3**	1	0.5	25	ug/L
MKTF-31	12/18/2020	1,2-Dichloroethane	**25.6**	1	0.5	5	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethene	**67.2**	1	0.5	7	ug/L
MKTF-31	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-31	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-31	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-31	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-31	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-31	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-31	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-31	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-31	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-31	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-31	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-31	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-31	12/18/2020	MTBE	**253**	1	0.74	143	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-31	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-31	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-31	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-31	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-31	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-31	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-31	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-31	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-31	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-31	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-31	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-31	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-31	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-31	12/18/2020	1,1,1-Trichloroethane	2.96	1	0.5	200	ug/L
MKTF-31	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-31	12/18/2020	Trichloroethene	**5.57**	1	0.5	5	ug/L
MKTF-31	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-31	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-31	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-31	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-31	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-31	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Acetone	ND	50	20	14064	ug/L
MKTF-31	12/18/2020	Benzene	ND	2	0.76	5	ug/L
MKTF-31	12/18/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
MKTF-31	12/18/2020	Bromoform	ND	10	1.42	32.9	ug/L
MKTF-31	12/18/2020	Bromomethane	ND	2	1.96	7.54	ug/L
MKTF-31	12/18/2020	2-Butanone	ND	50	5.2	5565	ug/L
MKTF-31	12/18/2020	Carbon Disulfide	ND	2	1	810	ug/L
MKTF-31	12/18/2020	Carbon tetrachloride	ND	2	1	5	ug/L
MKTF-31	12/18/2020	Chlorobenzene	ND	2	1	77.6	ug/L
MKTF-31	12/18/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
MKTF-31	12/18/2020	Chloroethane	ND	2	1.52	20857	ug/L
MKTF-31	12/18/2020	Chloroform	ND	2	1.2	100	ug/L
MKTF-31	12/18/2020	Chloromethane	ND	2	1.66	20.32	ug/L
MKTF-31	12/18/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
MKTF-31	12/18/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
MKTF-31	12/18/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
MKTF-31	12/18/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-31	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
MKTF-31	12/18/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
MKTF-31	12/18/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethane	**42.7**	2	1	25	ug/L
MKTF-31	12/18/2020	1,2-Dichloroethane	**25.5**	2	1	5	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethene	**69.2**	2	1	7	ug/L
MKTF-31	12/18/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
MKTF-31	12/18/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
MKTF-31	12/18/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
MKTF-31	12/18/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
MKTF-31	12/18/2020	Ethylbenzene	ND	2	1	700	ug/L
MKTF-31	12/18/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
MKTF-31	12/18/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L
MKTF-31	12/18/2020	Isopropylbenzene	ND	2	1.06	447	ug/L
MKTF-31	12/18/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
MKTF-31	12/18/2020	1-Methylnaphthalene	ND	10	8.4	NA	ug/L
MKTF-31	12/18/2020	2-Methylnaphthalene	*ND*	*20*	9.2		ug/L
MKTF-31	12/18/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
MKTF-31	12/18/2020	MTBE	**247**	2	1.48	143	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	2	2	30	ug/L
MKTF-31	12/18/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
MKTF-31	12/18/2020	n-Propylbenzene	ND	2	1.38	660	ug/L
MKTF-31	12/18/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
MKTF-31	12/18/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
MKTF-31	12/18/2020	Styrene	ND	2	2	100	ug/L
MKTF-31	12/18/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
MKTF-31	12/18/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
MKTF-31	12/18/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
MKTF-31	12/18/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
MKTF-31	12/18/2020	Toluene	ND	2	0.82	1000	ug/L
MKTF-31	12/18/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
MKTF-31	12/18/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-31	12/18/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
MKTF-31	12/18/2020	1,1,1-Trichloroethane	2.99	2	1	200	ug/L
MKTF-31	12/18/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
MKTF-31	12/18/2020	Trichloroethene	**5.37**	2	1	5	ug/L
MKTF-31	12/18/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
MKTF-31	12/18/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
MKTF-31	12/18/2020	1,2,4-Trimethylbenzene	ND	2	1.64	56	ug/L
MKTF-31	12/18/2020	1,3,5-Trimethylbenzene	ND	2	1.12	60	ug/L
MKTF-31	12/18/2020	Vinyl Chloride	ND	2	1	2	ug/L
MKTF-31	12/18/2020	Xylenes, Total	ND	20	3.2	620	ug/L
MKTF-32	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-32	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-32	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-32	4/9/2014	1,1,1-Trichloroethane	1.5	1	0.12	200	ug/L
MKTF-32	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-32	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-32	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-32	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-32	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-32	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-32	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-32	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-32	4/9/2014	1,1-Dichloroethane	22	1	0.28	25	ug/L
MKTF-32	4/9/2014	1,1-Dichloroethene	**36**	1	0.21	7	ug/L
MKTF-32	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-32	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-32	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-32	4/9/2014	1,1,2-Trichloroethane	2.3	1	0.14	5	ug/L
MKTF-32	4/9/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-32	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-32	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-32	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-32	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-32	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-32	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-32	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-32	4/9/2014	Isopropylbenzene	2.5	1	0.16	447	ug/L
MKTF-32	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-32	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-32	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-32	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-32	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-32	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-32	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-32	4/9/2014	1,2-Dichloroethane	**30**	1	0.26	5	ug/L
MKTF-32	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-32	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-32	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-32	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-32	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-32	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-32	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-32	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-32	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-32	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-32	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-32	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-32	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-32	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-32	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-32	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-32	4/9/2014	MTBE	**150**	1	0.25	143	ug/L
MKTF-32	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-32	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-32	9/23/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-32	9/23/2014	Acetone	ND	50	25	14064	ug/L
MKTF-32	9/23/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-32	9/23/2014	Benzene	ND	5	0.77	5	ug/L
MKTF-32	9/23/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-32	9/23/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-32	9/23/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-32	9/23/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-32	9/23/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-32	9/23/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-32	9/23/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-32	9/23/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-32	9/23/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-32	9/23/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-32	9/23/2014	1,1-Dichloroethane	23	5	1.4	25	ug/L
MKTF-32	9/23/2014	1,1-Dichloroethene	**54**	5	1.1	7	ug/L
MKTF-32	9/23/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-32	9/23/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-32	9/23/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-32	9/23/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-32	9/23/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-32	9/23/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-32	9/23/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-32	9/23/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-32	9/23/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-32	9/23/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-32	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-32	9/23/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-32	9/23/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-32	9/23/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-32	9/23/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/23/2014	Ethylbenzene	ND	5	0.64	700	ug/L
MKTF-32	9/23/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-32	9/23/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
MKTF-32	9/23/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-32	9/23/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-32	9/23/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-32	9/23/2014	1,2-Dichloroethane	**29**	5	1.3	5	ug/L
MKTF-32	9/23/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-32	9/23/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-32	9/23/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-32	9/23/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-32	9/23/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-32	9/23/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-32	9/23/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-32	9/23/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-32	9/23/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-32	9/23/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-32	9/23/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-32	9/23/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-32	9/23/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-32	9/23/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-32	9/23/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-32	9/23/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-32	9/23/2014	MTBE	**320**	5	1.3	143	ug/L
MKTF-32	9/23/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-32	9/23/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-32	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-32	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-32	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-32	11/17/2014	1,1,1-Trichloroethane	1.1	1	0.12	200	ug/L
MKTF-32	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-32	11/17/2014	Chloromethane	13	3	0.52	20.32	ug/L
MKTF-32	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-32	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-32	11/17/2014	Vinyl Chloride	2	1	0.11	2	ug/L
MKTF-32	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-32	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-32	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-32	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-32	11/17/2014	1,1-Dichloroethane	24	1	0.28	25	ug/L
MKTF-32	11/17/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-32	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-32	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-32	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-32	11/17/2014	1,1,2-Trichloroethane	2.5	1	0.14	5	ug/L
MKTF-32	11/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-32	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-32	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-32	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-32	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-32	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-32	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-32	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-32	11/17/2014	Isopropylbenzene	1.1	1	0.16	447	ug/L
MKTF-32	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-32	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-32	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-32	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-32	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-32	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-32	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-32	11/17/2014	1,2-Dichloroethane	**28**	1	0.26	5	ug/L
MKTF-32	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-32	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-32	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-32	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-32	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-32	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-32	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-32	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-32	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-32	11/17/2014	cis-1,2-Dichloroethene	1.2	1	0.12	70	ug/L
MKTF-32	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-32	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-32	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-32	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-32	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-32	11/17/2014	MTBE	**400**	20	5	143	ug/L
MKTF-32	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-32	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-32	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	3/12/2015	1,1,1-Trichloroethane	1.1	1	0.078	200	ug/L
MKTF-32	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-32	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	3/12/2015	1,1-Dichloroethane	19	1	0.4	25	ug/L
MKTF-32	3/12/2015	1,1-Dichloroethene	**48**	1	0.099	7	ug/L
MKTF-32	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	3/12/2015	1,1,2-Trichloroethane	1.7	1	0.079	5	ug/L
MKTF-32	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-32	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	3/12/2015	1,2-Dichloroethane	**25**	1	0.18	5	ug/L
MKTF-32	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-32	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	3/12/2015	cis-1,2-Dichloroethene	1.3	1	0.081	70	ug/L
MKTF-32	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-32	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	3/12/2015	MTBE	**540**	20	3.5	143	ug/L
MKTF-32	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-32	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	6/9/2015	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-32	6/9/2015	1,1-Dichloroethene	**36**	1	0.099	7	ug/L
MKTF-32	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	6/9/2015	1,1,2-Trichloroethane	2.1	1	0.079	5	ug/L
MKTF-32	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	6/9/2015	1,2,3-Trichloropropane	*ND*	2	0.16	0.0084	ug/L
MKTF-32	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	6/9/2015	1,2-Dichloroethane	**22**	1	0.18	5	ug/L
MKTF-32	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-32	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	6/9/2015	cis-1,2-Dichloroethene	1.5	1	0.081	70	ug/L
MKTF-32	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-32	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	6/9/2015	MTBE	**590**	20	3.5	143	ug/L
MKTF-32	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	8/21/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-32	8/21/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-32	8/21/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-32	8/21/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-32	8/21/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-32	8/21/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-32	8/21/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-32	8/21/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-32	8/21/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-32	8/21/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-32	8/21/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-32	8/21/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-32	8/21/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-32	8/21/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-32	8/21/2015	1,1-Dichloroethane	19	2	0.8	25	ug/L
MKTF-32	8/21/2015	1,1-Dichloroethene	**38**	2	0.2	7	ug/L
MKTF-32	8/21/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-32	8/21/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-32	8/21/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-32	8/21/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-32	8/21/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-32	8/21/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-32	8/21/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-32	8/21/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-32	8/21/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-32	8/21/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-32	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-32	8/21/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-32	8/21/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-32	8/21/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-32	8/21/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/21/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-32	8/21/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-32	8/21/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-32	8/21/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-32	8/21/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-32	8/21/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-32	8/21/2015	1,2-Dichloroethane	**22**	2	0.35	5	ug/L
MKTF-32	8/21/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-32	8/21/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-32	8/21/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-32	8/21/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-32	8/21/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-32	8/21/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-32	8/21/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-32	8/21/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-32	8/21/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-32	8/21/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-32	8/21/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-32	8/21/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-32	8/21/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-32	8/21/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-32	8/21/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	8/21/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-32	8/21/2015	MTBE	**490**	20	3.5	143	ug/L
MKTF-32	8/21/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	8/21/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-32	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	11/5/2015	1,1,1-Trichloroethane	1.1	1	0.078	200	ug/L
MKTF-32	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-32	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	11/5/2015	1,1-Dichloroethane	21	1	0.4	25	ug/L
MKTF-32	11/5/2015	1,1-Dichloroethene	**39**	1	0.099	7	ug/L
MKTF-32	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	11/5/2015	1,1,2-Trichloroethane	2.2	1	0.079	5	ug/L
MKTF-32	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-32	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	11/5/2015	1,2-Dichloroethane	**27**	1	0.18	5	ug/L
MKTF-32	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	11/5/2015	sec-Butylbenzene	1.5	1	0.23	2000	ug/L
MKTF-32	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	11/5/2015	cis-1,2-Dichloroethene	2	1	0.081	70	ug/L
MKTF-32	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	11/5/2015	MTBE	**590**	20	3.5	143	ug/L
MKTF-32	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-32	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-32	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-32	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-32	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-32	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-32	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-32	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-32	2/24/2016	1,1-Dichloroethane	17	1	0.11	25	ug/L
MKTF-32	2/24/2016	1,1-Dichloroethene	**28**	1	0.076	7	ug/L
MKTF-32	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-32	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-32	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-32	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-32	2/24/2016	1,1,2-Trichloroethane	1.6	1	0.077	5	ug/L
MKTF-32	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-32	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-32	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-32	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-32	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-32	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-32	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-32	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-32	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-32	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-32	2/24/2016	1,2-Dichloroethane	**19**	1	0.053	5	ug/L
MKTF-32	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-32	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-32	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-32	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-32	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-32	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-32	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	2/24/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-32	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-32	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-32	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-32	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	2/24/2016	MTBE	**620**	10	2.1	143	ug/L
MKTF-32	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-32	6/9/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-32	6/9/2016	Acetone	ND	20	9.8	14064	ug/L
MKTF-32	6/9/2016	Chloroform	ND	2	0.18	100	ug/L
MKTF-32	6/9/2016	Benzene	0.81	2	0.19	5	ug/L
MKTF-32	6/9/2016	1,1,1-Trichloroethane	1.2	2	0.18	200	ug/L
MKTF-32	6/9/2016	Bromomethane	ND	6	1.6	7.54	ug/L
MKTF-32	6/9/2016	Chloromethane	ND	6	0.43	20.32	ug/L
MKTF-32	6/9/2016	Dibromomethane	ND	2	0.24	8	ug/L
MKTF-32	6/9/2016	Chloroethane	ND	4	0.38	20857	ug/L
MKTF-32	6/9/2016	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	6/9/2016	Methylene Chloride	*ND*	*6*	0.37	5	ug/L
MKTF-32	6/9/2016	Carbon Disulfide	ND	20	1.2	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2016	Bromoform	ND	2	0.2	32.9	ug/L
MKTF-32	6/9/2016	Bromodichloromethane	*ND*	*2*	0.28	1.34	ug/L
MKTF-32	6/9/2016	1,1-Dichloroethane	23	2	0.22	25	ug/L
MKTF-32	6/9/2016	1,1-Dichloroethene	**46**	2	0.21	7	ug/L
MKTF-32	6/9/2016	Trichlorofluoromethane	ND	2	0.41	1137	ug/L
MKTF-32	6/9/2016	Dichlorodifluoromethane	ND	2	0.71	197	ug/L
MKTF-32	6/9/2016	1,2-Dichloropropane	ND	2	0.22	5	ug/L
MKTF-32	6/9/2016	2-Butanone	ND	20	1.5	5565	ug/L
MKTF-32	6/9/2016	1,1,2-Trichloroethane	1.9	2	0.25	5	ug/L
MKTF-32	6/9/2016	Trichloroethene	ND	2	0.35	5	ug/L
MKTF-32	6/9/2016	1,1,2,2-Tetrachloroethane	ND	4	0.26	10	ug/L
MKTF-32	6/9/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-32	6/9/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	6/9/2016	1,2,4-Trimethylbenzene	ND	2	0.22	56	ug/L
MKTF-32	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.47	0.0033	ug/L
MKTF-32	6/9/2016	1,2,3-Trichloropropane	*ND*	*4*	0.4	0.0084	ug/L
MKTF-32	6/9/2016	tert-Butylbenzene	ND	2	0.23	690	ug/L
MKTF-32	6/9/2016	Isopropylbenzene	0.54	2	0.21	447	ug/L
MKTF-32	6/9/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L
MKTF-32	6/9/2016	Ethylbenzene	ND	2	0.22	700	ug/L
MKTF-32	6/9/2016	Styrene	ND	2	0.22	100	ug/L
MKTF-32	6/9/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
MKTF-32	6/9/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
MKTF-32	6/9/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
MKTF-32	6/9/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
MKTF-32	6/9/2016	1,2-Dichloroethane	**26**	2	0.23	5	ug/L
MKTF-32	6/9/2016	4-Methyl-2-Pentanone	ND	20	0.86	1243	ug/L
MKTF-32	6/9/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
MKTF-32	6/9/2016	Bromobenzene	ND	2	0.2	62	ug/L
MKTF-32	6/9/2016	Toluene	ND	2	0.24	1000	ug/L
MKTF-32	6/9/2016	Chlorobenzene	ND	2	0.23	77.6	ug/L
MKTF-32	6/9/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
MKTF-32	6/9/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	6/9/2016	sec-Butylbenzene	1	2	0.25	2000	ug/L
MKTF-32	6/9/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
MKTF-32	6/9/2016	cis-1,2-Dichloroethene	2.1	2	0.25	70	ug/L
MKTF-32	6/9/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
MKTF-32	6/9/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	6/9/2016	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-32	6/9/2016	2,2-Dichloropropane	ND	4	0.33	NA	ug/L
MKTF-32	6/9/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	6/9/2016	Xylenes, Total	ND	3	0.73	620	ug/L
MKTF-32	6/9/2016	MTBE	**640**	20	4.2	143	ug/L
MKTF-32	6/9/2016	cis-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	6/9/2016	trans-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	9/9/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-32	9/9/2016	Acetone	ND	20	9.8	14064	ug/L
MKTF-32	9/9/2016	Chloroform	ND	2	0.18	100	ug/L
MKTF-32	9/9/2016	Benzene	0.47	2	0.19	5	ug/L
MKTF-32	9/9/2016	1,1,1-Trichloroethane	0.61	2	0.18	200	ug/L
MKTF-32	9/9/2016	Bromomethane	ND	6	1.6	7.54	ug/L
MKTF-32	9/9/2016	Chloromethane	ND	6	0.43	20.32	ug/L
MKTF-32	9/9/2016	Dibromomethane	ND	2	0.24	8	ug/L
MKTF-32	9/9/2016	Chloroethane	ND	4	0.38	20857	ug/L
MKTF-32	9/9/2016	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	9/9/2016	Methylene Chloride	*1*	*6*	0.37	5	ug/L
MKTF-32	9/9/2016	Carbon Disulfide	ND	20	1.2	810	ug/L
MKTF-32	9/9/2016	Bromoform	ND	2	0.2	32.9	ug/L
MKTF-32	9/9/2016	Bromodichloromethane	*ND*	*2*	0.28	1.34	ug/L
MKTF-32	9/9/2016	1,1-Dichloroethane	12	2	0.22	25	ug/L
MKTF-32	9/9/2016	1,1-Dichloroethene	**26**	2	0.21	7	ug/L
MKTF-32	9/9/2016	Trichlorofluoromethane	ND	2	0.41	1137	ug/L
MKTF-32	9/9/2016	Dichlorodifluoromethane	ND	2	0.71	197	ug/L
MKTF-32	9/9/2016	1,2-Dichloropropane	ND	2	0.22	5	ug/L
MKTF-32	9/9/2016	2-Butanone	ND	20	1.5	5565	ug/L
MKTF-32	9/9/2016	1,1,2-Trichloroethane	1.1	2	0.25	5	ug/L
MKTF-32	9/9/2016	Trichloroethene	ND	2	0.35	5	ug/L
MKTF-32	9/9/2016	1,1,2,2-Tetrachloroethane	ND	4	0.26	10	ug/L
MKTF-32	9/9/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-32	9/9/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	9/9/2016	1,2,4-Trimethylbenzene	ND	2	0.22	56	ug/L
MKTF-32	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.47	0.0033	ug/L
MKTF-32	9/9/2016	1,2,3-Trichloropropane	*ND*	*4*	0.4	0.0084	ug/L
MKTF-32	9/9/2016	tert-Butylbenzene	ND	2	0.23	690	ug/L
MKTF-32	9/9/2016	Isopropylbenzene	0.27	2	0.21	447	ug/L
MKTF-32	9/9/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/9/2016	Ethylbenzene	ND	2	0.22	700	ug/L
MKTF-32	9/9/2016	Styrene	ND	2	0.22	100	ug/L
MKTF-32	9/9/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
MKTF-32	9/9/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
MKTF-32	9/9/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
MKTF-32	9/9/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
MKTF-32	9/9/2016	1,2-Dichloroethane	**17**	2	0.23	5	ug/L
MKTF-32	9/9/2016	4-Methyl-2-Pentanone	ND	20	0.86	1243	ug/L
MKTF-32	9/9/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
MKTF-32	9/9/2016	Bromobenzene	ND	2	0.2	62	ug/L
MKTF-32	9/9/2016	Toluene	ND	2	0.24	1000	ug/L
MKTF-32	9/9/2016	Chlorobenzene	ND	2	0.23	77.6	ug/L
MKTF-32	9/9/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
MKTF-32	9/9/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	9/9/2016	sec-Butylbenzene	1.1	2	0.25	2000	ug/L
MKTF-32	9/9/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
MKTF-32	9/9/2016	cis-1,2-Dichloroethene	1.5	2	0.25	70	ug/L
MKTF-32	9/9/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
MKTF-32	9/9/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	9/9/2016	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-32	9/9/2016	2,2-Dichloropropane	ND	4	0.33	NA	ug/L
MKTF-32	9/9/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	9/9/2016	Xylenes, Total	ND	3	0.73	620	ug/L
MKTF-32	9/9/2016	MTBE	**750**	20	4.2	143	ug/L
MKTF-32	9/9/2016	cis-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	9/9/2016	trans-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	10/31/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	10/31/2016	Benzene	0.49	1	0.096	5	ug/L
MKTF-32	10/31/2016	1,1,1-Trichloroethane	0.47	1	0.091	200	ug/L
MKTF-32	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-32	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-32	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-32	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-32	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-32	10/31/2016	1,1-Dichloroethane	15	1	0.11	25	ug/L
MKTF-32	10/31/2016	1,1-Dichloroethene	**30**	1	0.11	7	ug/L
MKTF-32	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-32	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-32	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-32	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-32	10/31/2016	1,1,2-Trichloroethane	1.6	1	0.13	5	ug/L
MKTF-32	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-32	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-32	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-32	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-32	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-32	10/31/2016	Isopropylbenzene	0.22	1	0.1	447	ug/L
MKTF-32	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-32	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-32	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-32	10/31/2016	1,2-Dichloroethane	**20**	1	0.12	5	ug/L
MKTF-32	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-32	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-32	10/31/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-32	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-32	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	10/31/2016	sec-Butylbenzene	0.86	1	0.12	2000	ug/L
MKTF-32	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	10/31/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-32	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-32	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-32	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-32	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-32	10/31/2016	MTBE	**630**	10	2.1	143	ug/L
MKTF-32	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	3/7/2017	Acetone	2.4	10	0.88	14064	ug/L
MKTF-32	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	3/7/2017	Benzene	0.45	1	0.096	5	ug/L
MKTF-32	3/7/2017	1,1,1-Trichloroethane	0.58	1	0.073	200	ug/L
MKTF-32	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	3/7/2017	1,1-Dichloroethane	18	1	0.1	25	ug/L
MKTF-32	3/7/2017	1,1-Dichloroethene	**35**	1	0.081	7	ug/L
MKTF-32	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-32	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	3/7/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	3/7/2017	Trichloroethene	0.24	1	0.18	5	ug/L
MKTF-32	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-32	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	3/7/2017	Isopropylbenzene	0.22	1	0.098	447	ug/L
MKTF-32	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	3/7/2017	1,2-Dichloroethane	**18**	1	0.12	5	ug/L
MKTF-32	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-32	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-32	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	3/7/2017	sec-Butylbenzene	0.81	1	0.1	2000	ug/L
MKTF-32	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	3/7/2017	cis-1,2-Dichloroethene	1.9	1	0.2	70	ug/L
MKTF-32	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-32	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	3/7/2017	MTBE	**660**	10	1.5	143	ug/L
MKTF-32	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-32	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	6/6/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	6/6/2017	Benzene	0.42	1	0.062	5	ug/L
MKTF-32	6/6/2017	1,1,1-Trichloroethane	0.57	1	0.073	200	ug/L
MKTF-32	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	6/6/2017	1,1-Dichloroethane	19	1	0.4	25	ug/L
MKTF-32	6/6/2017	1,1-Dichloroethene	**38**	1	0.081	7	ug/L
MKTF-32	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	6/6/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	6/6/2017	Trichloroethene	0.26	1	0.11	5	ug/L
MKTF-32	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	6/6/2017	Isopropylbenzene	0.13	1	0.051	447	ug/L
MKTF-32	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	6/6/2017	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
MKTF-32	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	6/6/2017	sec-Butylbenzene	0.63	1	0.11	2000	ug/L
MKTF-32	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	6/6/2017	cis-1,2-Dichloroethene	2	1	0.2	70	ug/L
MKTF-32	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-32	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	6/6/2017	MTBE	**640**	10	2.4	143	ug/L
MKTF-32	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	9/25/2017	Acetone	4.9	10	0.82	14064	ug/L
MKTF-32	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	9/25/2017	Benzene	0.38	1	0.062	5	ug/L
MKTF-32	9/25/2017	1,1,1-Trichloroethane	0.47	1	0.073	200	ug/L
MKTF-32	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	9/25/2017	1,1-Dichloroethane	16	1	0.4	25	ug/L
MKTF-32	9/25/2017	1,1-Dichloroethene	**29**	1	0.081	7	ug/L
MKTF-32	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	9/25/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	9/25/2017	Trichloroethene	0.3	1	0.11	5	ug/L
MKTF-32	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	9/25/2017	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-32	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	9/25/2017	Isopropylbenzene	0.12	1	0.051	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	9/25/2017	1,2-Dichloroethane	**17**	1	0.4	5	ug/L
MKTF-32	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	9/25/2017	sec-Butylbenzene	0.79	1	0.11	2000	ug/L
MKTF-32	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	9/25/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-32	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	9/25/2017	MTBE	**690**	10	2.4	143	ug/L
MKTF-32	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	11/27/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	11/27/2017	Benzene	0.28	1	0.062	5	ug/L
MKTF-32	11/27/2017	1,1,1-Trichloroethane	0.29	1	0.073	200	ug/L
MKTF-32	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	11/27/2017	1,1-Dichloroethane	14	1	0.4	25	ug/L
MKTF-32	11/27/2017	1,1-Dichloroethene	**23**	1	0.081	7	ug/L
MKTF-32	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	11/27/2017	1,2-Dichloropropane	0.14	1	0.1	5	ug/L
MKTF-32	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	11/27/2017	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-32	11/27/2017	Trichloroethene	0.19	1	0.11	5	ug/L
MKTF-32	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	11/27/2017	1,2-Dichloroethane	**16**	1	0.4	5	ug/L
MKTF-32	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	11/27/2017	sec-Butylbenzene	0.66	1	0.11	2000	ug/L
MKTF-32	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	11/27/2017	cis-1,2-Dichloroethene	1.6	1	0.2	70	ug/L
MKTF-32	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	11/27/2017	MTBE	**600**	10	2.4	143	ug/L
MKTF-32	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-32	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-32	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	2/7/2018	1,1-Dichloroethane	17	1	0.4	25	ug/L
MKTF-32	2/7/2018	1,1-Dichloroethene	**34**	1	0.081	7	ug/L
MKTF-32	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	2/7/2018	1,1,2-Trichloroethane	1.5	1	0.14	5	ug/L
MKTF-32	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-32	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-32	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	2/7/2018	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
MKTF-32	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-32	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	2/7/2018	cis-1,2-Dichloroethene	2	1	0.2	70	ug/L
MKTF-32	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	2/7/2018	MTBE	**740**	10	2.4	143	ug/L
MKTF-32	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	5/9/2018	Benzene	0.4	1	0.062	5	ug/L
MKTF-32	5/9/2018	1,1,1-Trichloroethane	0.38	1	0.073	200	ug/L
MKTF-32	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	5/9/2018	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-32	5/9/2018	1,1-Dichloroethene	**29**	1	0.081	7	ug/L
MKTF-32	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	5/9/2018	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	5/9/2018	Trichloroethene	0.28	1	0.11	5	ug/L
MKTF-32	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-32	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	5/9/2018	1,2-Dichloroethane	**20**	1	0.4	5	ug/L
MKTF-32	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	5/9/2018	sec-Butylbenzene	0.75	1	0.11	2000	ug/L
MKTF-32	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	5/9/2018	cis-1,2-Dichloroethene	2.3	1	0.2	70	ug/L
MKTF-32	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	5/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	5/9/2018	MTBE	**820**	10	2.4	143	ug/L
MKTF-32	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	8/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-32	8/28/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-32	8/28/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-32	8/28/2018	Benzene	0.76	2	0.35	5	ug/L
MKTF-32	8/28/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-32	8/28/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-32	8/28/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-32	8/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-32	8/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-32	8/28/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-32	8/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-32	8/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-32	8/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-32	8/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-32	8/28/2018	1,1-Dichloroethane	17	2	0.8	25	ug/L
MKTF-32	8/28/2018	1,1-Dichloroethene	**26**	2	0.24	7	ug/L
MKTF-32	8/28/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-32	8/28/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-32	8/28/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-32	8/28/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-32	8/28/2018	1,1,2-Trichloroethane	1.1	2	0.47	5	ug/L
MKTF-32	8/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-32	8/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-32	8/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-32	8/28/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	8/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-32	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-32	8/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-32	8/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-32	8/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-32	8/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-32	8/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-32	8/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-32	8/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-32	8/28/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-32	8/28/2018	1,2-Dibromoethane	*ND*	2	0.46	0.05	ug/L
MKTF-32	8/28/2018	1,2-Dichloroethane	**19**	2	0.8	5	ug/L
MKTF-32	8/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-32	8/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-32	8/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-32	8/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-32	8/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-32	8/28/2018	Dibromochloromethane	*ND*	2	0.47	1.68	ug/L
MKTF-32	8/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	8/28/2018	sec-Butylbenzene	0.66	2	0.4	2000	ug/L
MKTF-32	8/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-32	8/28/2018	cis-1,2-Dichloroethene	1.8	2	0.75	70	ug/L
MKTF-32	8/28/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-32	8/28/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-32	8/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-32	8/28/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-32	8/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-32	8/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-32	8/28/2018	MTBE	**780**	10	3.2	143	ug/L
MKTF-32	8/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-32	8/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-32	11/15/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-32	11/15/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-32	11/15/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-32	11/15/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-32	11/15/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-32	11/15/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-32	11/15/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-32	11/15/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-32	11/15/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-32	11/15/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-32	11/15/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-32	11/15/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-32	11/15/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-32	11/15/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-32	11/15/2018	1,1-Dichloroethane	15	2	0.35	25	ug/L
MKTF-32	11/15/2018	1,1-Dichloroethene	**26**	2	0.24	7	ug/L
MKTF-32	11/15/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-32	11/15/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-32	11/15/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-32	11/15/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-32	11/15/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-32	11/15/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-32	11/15/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-32	11/15/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-32	11/15/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-32	11/15/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-32	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-32	11/15/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-32	11/15/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-32	11/15/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-32	11/15/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-32	11/15/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-32	11/15/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-32	11/15/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-32	11/15/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-32	11/15/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-32	11/15/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-32	11/15/2018	1,2-Dichloroethane	**15**	2	0.38	5	ug/L
MKTF-32	11/15/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-32	11/15/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-32	11/15/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-32	11/15/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-32	11/15/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-32	11/15/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-32	11/15/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	11/15/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-32	11/15/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-32	11/15/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-32	11/15/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/15/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-32	11/15/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-32	11/15/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-32	11/15/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-32	11/15/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-32	11/15/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-32	11/15/2018	MTBE	**810**	10	4.6	143	ug/L
MKTF-32	11/15/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-32	11/15/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-32	2/13/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
MKTF-32	2/13/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
MKTF-32	2/13/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
MKTF-32	2/13/2019	1,1,2-Trichloroethane	0.86	2	0.465446	5	ug/L
MKTF-32	2/13/2019	1,1-Dichloroethane	13	2	0.350393	25	ug/L
MKTF-32	2/13/2019	1,1-Dichloroethene	**27**	2	0.240976	7	ug/L
MKTF-32	2/13/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	2/13/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
MKTF-32	2/13/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
MKTF-32	2/13/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
MKTF-32	2/13/2019	1,2,4-Trimethylbenzene	ND	2	0.506629	56	ug/L
MKTF-32	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
MKTF-32	2/13/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
MKTF-32	2/13/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
MKTF-32	2/13/2019	1,2-Dichloroethane	**15**	2	0.379051	5	ug/L
MKTF-32	2/13/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
MKTF-32	2/13/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
MKTF-32	2/13/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
MKTF-32	2/13/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
MKTF-32	2/13/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
MKTF-32	2/13/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
MKTF-32	2/13/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	2/13/2019	2-Butanone	ND	20	2.821738	5565	ug/L
MKTF-32	2/13/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
MKTF-32	2/13/2019	2-Hexanone	ND	20	1.813149	38	ug/L
MKTF-32	2/13/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	2/13/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
MKTF-32	2/13/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
MKTF-32	2/13/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
MKTF-32	2/13/2019	Acetone	5	20	1.514139	14064	ug/L
MKTF-32	2/13/2019	Benzene	ND	2	0.349791	5	ug/L
MKTF-32	2/13/2019	Bromobenzene	ND	2	0.635812	62	ug/L
MKTF-32	2/13/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
MKTF-32	2/13/2019	Bromoform	ND	2	0.646621	32.9	ug/L
MKTF-32	2/13/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	2/13/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
MKTF-32	2/13/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
MKTF-32	2/13/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
MKTF-32	2/13/2019	Chloroethane	ND	4	0.328674	20857	ug/L
MKTF-32	2/13/2019	Chloroform	ND	2	0.470448	100	ug/L
MKTF-32	2/13/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	2/13/2019	cis-1,2-Dichloroethene	2.1	2	0.751962	70	ug/L
MKTF-32	2/13/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
MKTF-32	2/13/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
MKTF-32	2/13/2019	Dibromomethane	ND	2	0.644295	8	ug/L
MKTF-32	2/13/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	2/13/2019	Ethylbenzene	ND	2	0.446804	700	ug/L
MKTF-32	2/13/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
MKTF-32	2/13/2019	Isopropylbenzene	ND	2	0.442208	447	ug/L
MKTF-32	2/13/2019	MTBE	**840**	20	9.1219	143	ug/L
MKTF-32	2/13/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
MKTF-32	2/13/2019	Naphthalene	ND	4	0.579252	30	ug/L
MKTF-32	2/13/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
MKTF-32	2/13/2019	n-Propylbenzene	ND	2	0.485172	660	ug/L
MKTF-32	2/13/2019	sec-Butylbenzene	0.63	2	0.404509	2000	ug/L
MKTF-32	2/13/2019	Styrene	ND	2	0.500291	100	ug/L
MKTF-32	2/13/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
MKTF-32	2/13/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
MKTF-32	2/13/2019	Toluene	ND	2	0.336279	1000	ug/L
MKTF-32	2/13/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
MKTF-32	2/13/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
MKTF-32	2/13/2019	Trichloroethene	ND	2	0.515113	5	ug/L
MKTF-32	2/13/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
MKTF-32	2/13/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
MKTF-32	2/13/2019	Xylenes, Total	ND	3	1.282575	620	ug/L
MKTF-32	2/13/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-32	5/7/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/7/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-32	5/7/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-32	5/7/2019	1,1,2-Trichloroethane	0.86	2	0.43166	5	ug/L
MKTF-32	5/7/2019	1,1-Dichloroethane	13	2	0.281717	25	ug/L
MKTF-32	5/7/2019	1,1-Dichloroethene	**24**	2	0.410776	7	ug/L
MKTF-32	5/7/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	5/7/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-32	5/7/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-32	5/7/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-32	5/7/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-32	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-32	5/7/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-32	5/7/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-32	5/7/2019	1,2-Dichloroethane	**14**	2	0.389276	5	ug/L
MKTF-32	5/7/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-32	5/7/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-32	5/7/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-32	5/7/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-32	5/7/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-32	5/7/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-32	5/7/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	5/7/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-32	5/7/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-32	5/7/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-32	5/7/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	5/7/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-32	5/7/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-32	5/7/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-32	5/7/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-32	5/7/2019	Benzene	ND	2	0.333278	5	ug/L
MKTF-32	5/7/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-32	5/7/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-32	5/7/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-32	5/7/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	5/7/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-32	5/7/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-32	5/7/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-32	5/7/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-32	5/7/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-32	5/7/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	5/7/2019	cis-1,2-Dichloroethene	1.5	2	0.38023	70	ug/L
MKTF-32	5/7/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-32	5/7/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-32	5/7/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-32	5/7/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	5/7/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-32	5/7/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-32	5/7/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-32	5/7/2019	MTBE	**740**	20	9.1219	143	ug/L
MKTF-32	5/7/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-32	5/7/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-32	5/7/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-32	5/7/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-32	5/7/2019	sec-Butylbenzene	0.56	2	0.495463	2000	ug/L
MKTF-32	5/7/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-32	5/7/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-32	5/7/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-32	5/7/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-32	5/7/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-32	5/7/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-32	5/7/2019	Trichloroethene	0.34	2	0.332544	5	ug/L
MKTF-32	5/7/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-32	5/7/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-32	5/7/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-32	5/7/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-32	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-32	8/20/2019	1,1,1-Trichloroethane	0.22	1	0.172922	200	ug/L
MKTF-32	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-32	8/20/2019	1,1,2-Trichloroethane	1.2	1	0.21583	5	ug/L
MKTF-32	8/20/2019	1,1-Dichloroethane	14	1	0.140859	25	ug/L
MKTF-32	8/20/2019	1,1-Dichloroethene	**21**	1	0.205388	7	ug/L
MKTF-32	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-32	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-32	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-32	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-32	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-32	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-32	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-32	8/20/2019	1,2-Dichloroethane	**15**	1	0.194638	5	ug/L
MKTF-32	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-32	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-32	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-32	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-32	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-32	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-32	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-32	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-32	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-32	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-32	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-32	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-32	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-32	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-32	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-32	8/20/2019	Benzene	0.31	1	0.166639	5	ug/L
MKTF-32	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-32	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-32	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-32	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-32	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-32	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-32	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-32	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-32	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-32	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-32	8/20/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-32	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-32	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-32	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-32	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-32	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-32	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-32	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-32	8/20/2019	MTBE	**610**	10	4.56095	143	ug/L
MKTF-32	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-32	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-32	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-32	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-32	8/20/2019	sec-Butylbenzene	0.62	1	0.247731	2000	ug/L
MKTF-32	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-32	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-32	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-32	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-32	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-32	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-32	8/20/2019	Trichloroethene	0.28	1	0.166272	5	ug/L
MKTF-32	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-32	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-32	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-32	8/20/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
MKTF-32	10/23/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-32	10/23/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-32	10/23/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-32	10/23/2019	1,1,2-Trichloroethane	1.1	2	0.43166	5	ug/L
MKTF-32	10/23/2019	1,1-Dichloroethane	12	2	0.281717	25	ug/L
MKTF-32	10/23/2019	1,1-Dichloroethene	**18**	2	0.410776	7	ug/L
MKTF-32	10/23/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	10/23/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-32	10/23/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-32	10/23/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-32	10/23/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-32	10/23/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-32	10/23/2019	1,2-Dichloroethane	**14**	2	0.389276	5	ug/L
MKTF-32	10/23/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-32	10/23/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-32	10/23/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-32	10/23/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-32	10/23/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-32	10/23/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	10/23/2019	2-Butanone	ND	20	4.178833	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/23/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-32	10/23/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	10/23/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-32	10/23/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-32	10/23/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-32	10/23/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-32	10/23/2019	Benzene	0.36	2	0.333278	5	ug/L
MKTF-32	10/23/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-32	10/23/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-32	10/23/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-32	10/23/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	10/23/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-32	10/23/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-32	10/23/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-32	10/23/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-32	10/23/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-32	10/23/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	10/23/2019	cis-1,2-Dichloroethene	1.5	2	0.38023	70	ug/L
MKTF-32	10/23/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-32	10/23/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-32	10/23/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-32	10/23/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	10/23/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-32	10/23/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-32	10/23/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-32	10/23/2019	MTBE	**670**	20	9.1219	143	ug/L
MKTF-32	10/23/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-32	10/23/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-32	10/23/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-32	10/23/2019	sec-Butylbenzene	0.54	2	0.495463	2000	ug/L
MKTF-32	10/23/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-32	10/23/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-32	10/23/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-32	10/23/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-32	10/23/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-32	10/23/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-32	10/23/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-32	10/23/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-32	10/23/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-32	10/23/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-32	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-32	2/27/2020	MTBE	**900**	20	7.9	143	ug/L
MKTF-32	2/27/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-32	2/27/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-32	2/27/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-32	2/27/2020	1,1,2-Trichloroethane	0.41	2	0.38	5	ug/L
MKTF-32	2/27/2020	1,1-Dichloroethane	10	2	0.55	25	ug/L
MKTF-32	2/27/2020	1,1-Dichloroethene	**25**	2	0.26	7	ug/L
MKTF-32	2/27/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-32	2/27/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-32	2/27/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-32	2/27/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-32	2/27/2020	1,2,4-Trimethylbenzene	ND	2	0.24	56	ug/L
MKTF-32	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-32	2/27/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-32	2/27/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-32	2/27/2020	1,2-Dichloroethane	**13**	2	0.44	5	ug/L
MKTF-32	2/27/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-32	2/27/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-32	2/27/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-32	2/27/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-32	2/27/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-32	2/27/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-32	2/27/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-32	2/27/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-32	2/27/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-32	2/27/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-32	2/27/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-32	2/27/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-32	2/27/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-32	2/27/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-32	2/27/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-32	2/27/2020	Benzene	ND	2	0.45	5	ug/L
MKTF-32	2/27/2020	Bromobenzene	ND	2	0.57	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/27/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-32	2/27/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-32	2/27/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-32	2/27/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-32	2/27/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-32	2/27/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-32	2/27/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-32	2/27/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-32	2/27/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-32	2/27/2020	cis-1,2-Dichloroethene	2.1	2	0.78	70	ug/L
MKTF-32	2/27/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-32	2/27/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-32	2/27/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-32	2/27/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-32	2/27/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-32	2/27/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-32	2/27/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-32	2/27/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-32	2/27/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-32	2/27/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-32	2/27/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-32	2/27/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-32	2/27/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-32	2/27/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-32	2/27/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-32	2/27/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-32	2/27/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-32	2/27/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-32	2/27/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-32	2/27/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-32	2/27/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	2/27/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-32	9/21/2020	MTBE	**1100**	20	7.9	143	ug/L
MKTF-32	9/21/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-32	9/21/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-32	9/21/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-32	9/21/2020	1,1,2-Trichloroethane	0.71	2	0.38	5	ug/L
MKTF-32	9/21/2020	1,1-Dichloroethane	15	2	0.55	25	ug/L
MKTF-32	9/21/2020	1,1-Dichloroethene	**23**	2	0.26	7	ug/L
MKTF-32	9/21/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-32	9/21/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-32	9/21/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-32	9/21/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-32	9/21/2020	1,2,4-Trimethylbenzene	ND	2	0.24	56	ug/L
MKTF-32	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-32	9/21/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-32	9/21/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-32	9/21/2020	1,2-Dichloroethane	**13**	2	0.44	5	ug/L
MKTF-32	9/21/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-32	9/21/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-32	9/21/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-32	9/21/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-32	9/21/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-32	9/21/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-32	9/21/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-32	9/21/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-32	9/21/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-32	9/21/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-32	9/21/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-32	9/21/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-32	9/21/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-32	9/21/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-32	9/21/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-32	9/21/2020	Benzene	ND	2	0.45	5	ug/L
MKTF-32	9/21/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-32	9/21/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-32	9/21/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-32	9/21/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-32	9/21/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-32	9/21/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-32	9/21/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-32	9/21/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-32	9/21/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-32	9/21/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-32	9/21/2020	cis-1,2-Dichloroethene	2.5	2	0.78	70	ug/L
MKTF-32	9/21/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-32	9/21/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-32	9/21/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-32	9/21/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-32	9/21/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-32	9/21/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-32	9/21/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-32	9/21/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-32	9/21/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-32	9/21/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-32	9/21/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-32	9/21/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-32	9/21/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-32	9/21/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-32	9/21/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-32	9/21/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-32	9/21/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-32	9/21/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-32	9/21/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-32	9/21/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	9/21/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-32	12/15/2020	1,2-Dibromoethane	ND	0.0199	0.00499	0.05	ug/L
MKTF-32	12/15/2020	Acetone	ND	125	50	14064	ug/L
MKTF-32	12/15/2020	Benzene	ND	5	1.9	5	ug/L
MKTF-32	12/15/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-32	12/15/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-32	12/15/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-32	12/15/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-32	12/15/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-32	12/15/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-32	12/15/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-32	12/15/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-32	12/15/2020	Chloroform	ND	5	3	100	ug/L
MKTF-32	12/15/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-32	12/15/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-32	12/15/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L
MKTF-32	12/15/2020	cis-1,2-Dichloroethene	ND	5	2.5	70	ug/L
MKTF-32	12/15/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-32	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-32	12/15/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-32	12/15/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-32	12/15/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-32	12/15/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-32	12/15/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-32	12/15/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-32	12/15/2020	1,1-Dichloroethane	10.3	5	2.5	25	ug/L
MKTF-32	12/15/2020	1,2-Dichloroethane	**11.3**	5	2.5	5	ug/L
MKTF-32	12/15/2020	1,1-Dichloroethene	**17.5**	5	2.5	7	ug/L
MKTF-32	12/15/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-32	12/15/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-32	12/15/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-32	12/15/2020	Ethylbenzene	ND	5	2.5	700	ug/L
MKTF-32	12/15/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-32	12/15/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-32	12/15/2020	Isopropylbenzene	ND	5	2.65	447	ug/L
MKTF-32	12/15/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-32	12/15/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-32	12/15/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-32	12/15/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-32	12/15/2020	MTBE	**897**	5	3.7	143	ug/L
MKTF-32	12/15/2020	Naphthalene	ND	5	5	30	ug/L
MKTF-32	12/15/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-32	12/15/2020	n-Propylbenzene	ND	5	3.45	660	ug/L
MKTF-32	12/15/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-32	12/15/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-32	12/15/2020	Styrene	ND	5	5	100	ug/L
MKTF-32	12/15/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-32	12/15/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-32	12/15/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-32	12/15/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-32	12/15/2020	Toluene	ND	5	2.05	1000	ug/L
MKTF-32	12/15/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-32	12/15/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-32	12/15/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	12/15/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-32	12/15/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-32	12/15/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-32	12/15/2020	Trichloroethene	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-32	12/15/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L
MKTF-32	12/15/2020	1,2,4-Trimethylbenzene	ND	5	4.1	56	ug/L
MKTF-32	12/15/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-32	12/15/2020	Vinyl Chloride	*ND*	*5*	2.5	2	ug/L
MKTF-32	12/15/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-33	4/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-33	4/10/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	4/10/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-33	4/10/2014	Benzene	**28**	1	0.15	5	ug/L
MKTF-33	4/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-33	4/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-33	4/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-33	4/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-33	4/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-33	4/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-33	4/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-33	4/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-33	4/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-33	4/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-33	4/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-33	4/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-33	4/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	4/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-33	4/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-33	4/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-33	4/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	4/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-33	4/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-33	4/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-33	4/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-33	4/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-33	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-33	4/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-33	4/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-33	4/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-33	4/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-33	4/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-33	4/10/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-33	4/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-33	4/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-33	4/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-33	4/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-33	4/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-33	4/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-33	4/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-33	4/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-33	4/10/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-33	4/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-33	4/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-33	4/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-33	4/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-33	4/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-33	4/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	4/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-33	4/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-33	4/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-33	4/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-33	4/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-33	4/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-33	4/10/2014	MTBE	**360**	10	2.5	143	ug/L
MKTF-33	4/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-33	4/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-33	9/23/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-33	9/23/2014	Acetone	ND	50	25	14064	ug/L
MKTF-33	9/23/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-33	9/23/2014	Benzene	ND	5	0.77	5	ug/L
MKTF-33	9/23/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-33	9/23/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-33	9/23/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-33	9/23/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-33	9/23/2014	Chloroethane	ND	10	2.4	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/23/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-33	9/23/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-33	9/23/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-33	9/23/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-33	9/23/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-33	9/23/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-33	9/23/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-33	9/23/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-33	9/23/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-33	9/23/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-33	9/23/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-33	9/23/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-33	9/23/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-33	9/23/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-33	9/23/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-33	9/23/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-33	9/23/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-33	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-33	9/23/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-33	9/23/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-33	9/23/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-33	9/23/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-33	9/23/2014	Ethylbenzene	ND	5	0.64	700	ug/L
MKTF-33	9/23/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-33	9/23/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
MKTF-33	9/23/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-33	9/23/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-33	9/23/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-33	9/23/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-33	9/23/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-33	9/23/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-33	9/23/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-33	9/23/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-33	9/23/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-33	9/23/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-33	9/23/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-33	9/23/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-33	9/23/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-33	9/23/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-33	9/23/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-33	9/23/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-33	9/23/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-33	9/23/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-33	9/23/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-33	9/23/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-33	9/23/2014	MTBE	**450**	5	1.3	143	ug/L
MKTF-33	9/23/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-33	9/23/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-33	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-33	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-33	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-33	11/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-33	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-33	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-33	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-33	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-33	11/17/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-33	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-33	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-33	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-33	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-33	11/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-33	11/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-33	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-33	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-33	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-33	11/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	11/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-33	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-33	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-33	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-33	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-33	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-33	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-33	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-33	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-33	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-33	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-33	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-33	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-33	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-33	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-33	11/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-33	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-33	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-33	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-33	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-33	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-33	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-33	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-33	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-33	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-33	11/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-33	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-33	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-33	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-33	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-33	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-33	11/17/2014	MTBE	**410**	20	5	143	ug/L
MKTF-33	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-33	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-33	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	3/12/2015	MTBE	**480**	20	3.5	143	ug/L
MKTF-33	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	6/9/2015	MTBE	**490**	20	3.5	143	ug/L
MKTF-33	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	8/21/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-33	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	11/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	11/9/2015	MTBE	**580**	10	1.7	143	ug/L
MKTF-33	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	2/25/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	2/25/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-33	2/25/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	2/25/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	2/25/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-33	2/25/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	2/25/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	2/25/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	2/25/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-33	2/25/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-33	2/25/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-33	2/25/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	2/25/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	2/25/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-33	2/25/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	2/25/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-33	2/25/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-33	2/25/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-33	2/25/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-33	2/25/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-33	2/25/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-33	2/25/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	2/25/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-33	2/25/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	2/25/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	2/25/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-33	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-33	2/25/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-33	2/25/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-33	2/25/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-33	2/25/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	2/25/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	2/25/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-33	2/25/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	2/25/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	2/25/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	2/25/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	2/25/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-33	2/25/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-33	2/25/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	2/25/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-33	2/25/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-33	2/25/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-33	2/25/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	2/25/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	2/25/2016	sec-Butylbenzene	1.6	1	0.11	2000	ug/L
MKTF-33	2/25/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/25/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	2/25/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	2/25/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	2/25/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-33	2/25/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-33	2/25/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	2/25/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	2/25/2016	MTBE	**310**	10	2.1	143	ug/L
MKTF-33	2/25/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	2/25/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-33	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	6/10/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-33	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	6/10/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
MKTF-33	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	6/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-33	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	6/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-33	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	6/10/2016	sec-Butylbenzene	0.6	1	0.12	2000	ug/L
MKTF-33	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	6/10/2016	MTBE	**400**	10	2.1	143	ug/L
MKTF-33	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	9/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	9/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	9/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	9/10/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	9/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	9/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	9/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	9/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	9/10/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	9/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	9/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	9/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	9/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	9/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	9/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	9/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	9/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	9/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	9/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	9/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	9/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	9/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	9/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	9/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	9/10/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	9/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	9/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	9/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	9/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	9/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	9/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	9/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-33	9/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	9/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	9/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	9/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	9/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	9/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	9/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	9/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	9/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-33	9/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	9/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	9/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	9/10/2016	sec-Butylbenzene	0.81	1	0.12	2000	ug/L
MKTF-33	9/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	9/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	9/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	9/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	9/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	9/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	9/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	9/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	9/10/2016	MTBE	**270**	10	2.1	143	ug/L
MKTF-33	9/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	9/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	11/1/2016	1,2,4-Trimethylbenzene	0.3	1	0.11	56	ug/L
MKTF-33	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	11/1/2016	p-Isopropyltoluene	0.2	1	0.14	NA	ug/L
MKTF-33	11/1/2016	Ethylbenzene	0.19	1	0.11	700	ug/L
MKTF-33	11/1/2016	Styrene	0.28	1	0.11	100	ug/L
MKTF-33	11/1/2016	n-Propylbenzene	0.44	1	0.13	660	ug/L
MKTF-33	11/1/2016	n-Butylbenzene	0.42	3	0.16	1000	ug/L
MKTF-33	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	11/1/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	11/1/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-33	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	11/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	11/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	11/1/2016	1,2-Dichloroethane	0.34	1	0.12	5	ug/L
MKTF-33	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	11/1/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
MKTF-33	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	11/1/2016	Toluene	0.15	1	0.12	1000	ug/L
MKTF-33	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	11/1/2016	Tetrachloroethene	0.18	1	0.15	5	ug/L
MKTF-33	11/1/2016	sec-Butylbenzene	0.95	1	0.12	2000	ug/L
MKTF-33	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	11/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	11/1/2016	MTBE	**200**	10	2.1	143	ug/L
MKTF-33	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	3/8/2017	Acetone	1.6	10	0.88	14064	ug/L
MKTF-33	3/8/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-33	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-33	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-33	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-33	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	3/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-33	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-33	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-33	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	3/8/2017	sec-Butylbenzene	0.47	1	0.1	2000	ug/L
MKTF-33	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-33	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	3/8/2017	MTBE	**230**	10	1.5	143	ug/L
MKTF-33	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-33	6/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	6/8/2017	Acetone	3.7	10	0.82	14064	ug/L
MKTF-33	6/8/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	6/8/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-33	6/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	6/8/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	6/8/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	6/8/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	6/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	6/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	6/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	6/8/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	6/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	6/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	6/8/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	6/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	6/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	6/8/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	6/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	6/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	6/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	6/8/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	6/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	6/8/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	6/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	6/8/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	6/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	6/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	6/8/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	6/8/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	6/8/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	6/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	6/8/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	6/8/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	6/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	6/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	6/8/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	6/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	6/8/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	6/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	6/8/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	6/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	6/8/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	6/8/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	6/8/2017	sec-Butylbenzene	0.33	1	0.11	2000	ug/L
MKTF-33	6/8/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	6/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	6/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	6/8/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-33	6/8/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	6/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	6/8/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	6/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	6/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	6/8/2017	MTBE	**220**	10	2.4	143	ug/L
MKTF-33	6/8/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	6/8/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-33	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	9/25/2017	sec-Butylbenzene	0.29	1	0.11	2000	ug/L
MKTF-33	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	9/25/2017	MTBE	**250**	10	2.4	143	ug/L
MKTF-33	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	11/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	11/28/2017	Acetone	2.7	10	0.82	14064	ug/L
MKTF-33	11/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	11/28/2017	Benzene	0.11	1	0.062	5	ug/L
MKTF-33	11/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	11/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	11/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	11/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	11/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	11/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	11/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	11/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	11/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	11/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	11/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	11/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	11/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	11/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	11/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	11/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	11/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	11/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	11/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	11/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	11/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	11/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	11/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	11/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	11/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	11/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	11/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	11/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	11/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	11/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	11/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	11/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	11/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	11/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	11/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	11/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	11/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	11/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	11/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	11/28/2017	sec-Butylbenzene	0.21	1	0.11	2000	ug/L
MKTF-33	11/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	11/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	11/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	11/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	11/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	11/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	11/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	11/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	11/28/2017	MTBE	**530**	10	2.4	143	ug/L
MKTF-33	11/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	11/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	2/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	2/8/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	2/8/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	2/8/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-33	2/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	2/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	2/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	2/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	2/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	2/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	2/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	2/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	2/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	2/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	2/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	2/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	2/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	2/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	2/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	2/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	2/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	2/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	2/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	2/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	2/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	2/8/2018	1,2,4-Trimethylbenzene	0.37	1	0.11	56	ug/L
MKTF-33	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	2/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	2/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	2/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	2/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	2/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	2/8/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-33	2/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	2/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	2/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	2/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	2/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	2/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	2/8/2018	1,3,5-Trimethylbenzene	0.15	1	0.087	60	ug/L
MKTF-33	2/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	2/8/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	2/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	2/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	2/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	2/8/2018	sec-Butylbenzene	0.12	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	2/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	2/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	2/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	2/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	2/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	2/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	2/8/2018	Xylenes, Total	0.55	1.5	0.32	620	ug/L
MKTF-33	2/8/2018	MTBE	**410**	10	2.4	143	ug/L
MKTF-33	2/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	2/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	5/10/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	5/10/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	5/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	5/10/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-33	5/10/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	5/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	5/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	5/10/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	5/10/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	5/10/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	5/10/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	5/10/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	5/10/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	5/10/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	5/10/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	5/10/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	5/10/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	5/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	5/10/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	5/10/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	5/10/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	5/10/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	5/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	5/10/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	5/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	5/10/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	5/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	5/10/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	5/10/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	5/10/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	5/10/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	5/10/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-33	5/10/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	5/10/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	5/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	5/10/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	5/10/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	5/10/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	5/10/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	5/10/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	5/10/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	5/10/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	5/10/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	5/10/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	5/10/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-33	5/10/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	5/10/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	5/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	5/10/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	5/10/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	5/10/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	5/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	5/10/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	5/10/2018	MTBE	**570**	10	2.4	143	ug/L
MKTF-33	5/10/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	5/10/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	8/30/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-33	8/30/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-33	8/30/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-33	8/30/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-33	8/30/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-33	8/30/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-33	8/30/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-33	8/30/2018	Dibromomethane	ND	2	0.64	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-33	8/30/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-33	8/30/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-33	8/30/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-33	8/30/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-33	8/30/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-33	8/30/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-33	8/30/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-33	8/30/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-33	8/30/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-33	8/30/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-33	8/30/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-33	8/30/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-33	8/30/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-33	8/30/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-33	8/30/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-33	8/30/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-33	8/30/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-33	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-33	8/30/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-33	8/30/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-33	8/30/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-33	8/30/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-33	8/30/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-33	8/30/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-33	8/30/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-33	8/30/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-33	8/30/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-33	8/30/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-33	8/30/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-33	8/30/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-33	8/30/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-33	8/30/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-33	8/30/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-33	8/30/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-33	8/30/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-33	8/30/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-33	8/30/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-33	8/30/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-33	8/30/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-33	8/30/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-33	8/30/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-33	8/30/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-33	8/30/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-33	8/30/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-33	8/30/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-33	8/30/2018	MTBE	**580**	20	6.4	143	ug/L
MKTF-33	8/30/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-33	8/30/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-33	11/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-33	11/28/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-33	11/28/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-33	11/28/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-33	11/28/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-33	11/28/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-33	11/28/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-33	11/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-33	11/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-33	11/28/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-33	11/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-33	11/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-33	11/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-33	11/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-33	11/28/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-33	11/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-33	11/28/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-33	11/28/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-33	11/28/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-33	11/28/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-33	11/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-33	11/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-33	11/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-33	11/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-33	11/28/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-33	11/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-33	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-33	11/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-33	11/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-33	11/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-33	11/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-33	11/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-33	11/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-33	11/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-33	11/28/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-33	11/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-33	11/28/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-33	11/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-33	11/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-33	11/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-33	11/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-33	11/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-33	11/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-33	11/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-33	11/28/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-33	11/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-33	11/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-33	11/28/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-33	11/28/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-33	11/28/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-33	11/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-33	11/28/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-33	11/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-33	11/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-33	11/28/2018	MTBE	**450**	20	9.1	143	ug/L
MKTF-33	11/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-33	11/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-33	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	5/9/2019	MTBE	**440**	5	2.280475	143	ug/L
MKTF-33	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-33	5/9/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-33	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	5/9/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-33	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	5/9/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	2	0.327295	0.0033	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	5/9/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	5/9/2019	Benzene	0.27	1	0.166639	5	ug/L
MKTF-33	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	5/9/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-33	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	5/9/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	5/9/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-33	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	5/9/2019	MTBE	**300**	5	2.280475	143	ug/L
MKTF-33	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-33	5/9/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	5/9/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-33	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-33	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	8/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-33	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	8/20/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-33	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	8/20/2019	MTBE	**730**	10	4.56095	143	ug/L
MKTF-33	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	8/20/2019	sec-Butylbenzene	0.47	1	0.247731	2000	ug/L
MKTF-33	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-33	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	8/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-33	10/24/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-33	10/24/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-33	10/24/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-33	10/24/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-33	10/24/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-33	10/24/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-33	10/24/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-33	10/24/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-33	10/24/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-33	10/24/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-33	10/24/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-33	10/24/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-33	10/24/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-33	10/24/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-33	10/24/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-33	10/24/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-33	10/24/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-33	10/24/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-33	10/24/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-33	10/24/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-33	10/24/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-33	10/24/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-33	10/24/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-33	10/24/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-33	10/24/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-33	10/24/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-33	10/24/2019	Benzene	ND	2	0.333278	5	ug/L
MKTF-33	10/24/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-33	10/24/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-33	10/24/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-33	10/24/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-33	10/24/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-33	10/24/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-33	10/24/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-33	10/24/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-33	10/24/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-33	10/24/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-33	10/24/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-33	10/24/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-33	10/24/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-33	10/24/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-33	10/24/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-33	10/24/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-33	10/24/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-33	10/24/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-33	10/24/2019	MTBE	**670**	20	9.1219	143	ug/L
MKTF-33	10/24/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-33	10/24/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-33	10/24/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-33	10/24/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-33	10/24/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-33	10/24/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-33	10/24/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-33	10/24/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-33	10/24/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-33	10/24/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-33	10/24/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-33	10/24/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-33	10/24/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-33	10/24/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-33	10/24/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-33	2/28/2020	MTBE	**800**	20	7.9	143	ug/L
MKTF-33	2/28/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-33	2/28/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-33	2/28/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-33	2/28/2020	1,1,2-Trichloroethane	ND	2	0.38	5	ug/L
MKTF-33	2/28/2020	1,1-Dichloroethane	ND	2	0.55	25	ug/L
MKTF-33	2/28/2020	1,1-Dichloroethene	ND	2	0.26	7	ug/L
MKTF-33	2/28/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-33	2/28/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-33	2/28/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-33	2/28/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/28/2020	1,2,4-Trimethylbenzene	1.7	2	0.24	56	ug/L
MKTF-33	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-33	2/28/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-33	2/28/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-33	2/28/2020	1,2-Dichloroethane	ND	2	0.44	5	ug/L
MKTF-33	2/28/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-33	2/28/2020	1,3,5-Trimethylbenzene	0.38	2	0.36	60	ug/L
MKTF-33	2/28/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-33	2/28/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-33	2/28/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-33	2/28/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-33	2/28/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-33	2/28/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-33	2/28/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-33	2/28/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-33	2/28/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-33	2/28/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-33	2/28/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-33	2/28/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-33	2/28/2020	Acetone	14	20	4.7	14064	ug/L
MKTF-33	2/28/2020	Benzene	**82**	2	0.45	5	ug/L
MKTF-33	2/28/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-33	2/28/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-33	2/28/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-33	2/28/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-33	2/28/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-33	2/28/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-33	2/28/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-33	2/28/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-33	2/28/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-33	2/28/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-33	2/28/2020	cis-1,2-Dichloroethene	ND	2	0.78	70	ug/L
MKTF-33	2/28/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-33	2/28/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-33	2/28/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-33	2/28/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-33	2/28/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-33	2/28/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-33	2/28/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-33	2/28/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-33	2/28/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-33	2/28/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-33	2/28/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-33	2/28/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-33	2/28/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-33	2/28/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-33	2/28/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-33	2/28/2020	Toluene	2.6	2	0.4	1000	ug/L
MKTF-33	2/28/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-33	2/28/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-33	2/28/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-33	2/28/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-33	2/28/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-33	2/28/2020	Xylenes, Total	15	3	1.1	620	ug/L
MKTF-33	2/28/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-34	4/9/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-34	4/9/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-34	4/9/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-34	4/9/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-34	4/9/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-34	4/9/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-34	4/9/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-34	4/9/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-34	4/9/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-34	4/9/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-34	4/9/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-34	4/9/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-34	4/9/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-34	4/9/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-34	4/9/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-34	4/9/2014	1,1-Dichloroethene	2.8	2	0.43	7	ug/L
MKTF-34	4/9/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-34	4/9/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-34	4/9/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-34	4/9/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-34	4/9/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	4/9/2014	Trichloroethene	2.9	2	0.39	5	ug/L
MKTF-34	4/9/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-34	4/9/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-34	4/9/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-34	4/9/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-34	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-34	4/9/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-34	4/9/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-34	4/9/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-34	4/9/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-34	4/9/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-34	4/9/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-34	4/9/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-34	4/9/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-34	4/9/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-34	4/9/2014	1,2-Dibromoethane	*ND*	2	0.2	0.05	ug/L
MKTF-34	4/9/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-34	4/9/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-34	4/9/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-34	4/9/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-34	4/9/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-34	4/9/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-34	4/9/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-34	4/9/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-34	4/9/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-34	4/9/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-34	4/9/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-34	4/9/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-34	4/9/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-34	4/9/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-34	4/9/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-34	4/9/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-34	4/9/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-34	4/9/2014	MTBE	ND	2	0.5	143	ug/L
MKTF-34	4/9/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-34	4/9/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-34	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-34	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-34	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-34	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-34	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-34	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-34	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-34	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-34	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-34	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-34	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-34	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-34	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-34	9/24/2014	1,1-Dichloroethene	1.1	1	0.21	7	ug/L
MKTF-34	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-34	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	9/24/2014	Trichloroethene	2.2	1	0.19	5	ug/L
MKTF-34	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-34	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-34	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-34	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-34	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-34	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-34	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-34	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-34	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-34	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-34	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-34	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-34	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-34	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-34	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-34	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-34	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-34	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-34	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-34	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-34	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-34	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-34	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-34	9/24/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-34	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-34	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-34	11/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-34	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-34	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-34	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-34	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-34	11/17/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-34	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-34	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-34	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-34	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-34	11/17/2014	1,1-Dichloroethane	1.5	1	0.28	25	ug/L
MKTF-34	11/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-34	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-34	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	11/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	11/17/2014	Trichloroethene	1.4	1	0.19	5	ug/L
MKTF-34	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-34	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-34	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-34	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-34	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-34	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-34	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-34	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-34	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-34	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-34	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-34	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-34	11/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-34	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-34	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-34	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-34	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-34	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-34	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	11/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-34	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-34	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-34	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-34	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-34	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-34	11/17/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-34	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	3/12/2015	Acetone	ND	10	0.94	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	3/12/2015	Trichloroethene	1.2	1	0.16	5	ug/L
MKTF-34	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	3/12/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	6/8/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/8/2015	Trichloroethene	1.7	1	0.16	5	ug/L
MKTF-34	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	6/8/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	6/8/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	6/8/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	6/8/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	6/8/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	6/8/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	6/8/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	6/8/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	6/8/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	6/8/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	6/8/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	8/18/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	8/18/2015	Trichloroethene	1.9	1	0.16	5	ug/L
MKTF-34	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	8/18/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	8/18/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	8/18/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	8/18/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	8/18/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	8/18/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	8/18/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	8/18/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	8/18/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	8/18/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	8/18/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	8/18/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	11/3/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	11/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	11/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	11/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	11/3/2015	Trichloroethene	2.3	1	0.16	5	ug/L
MKTF-34	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	11/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	11/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	11/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	11/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	11/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	11/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	11/3/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	11/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	11/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	11/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	11/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	11/3/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	2/25/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	2/25/2016	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/25/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	2/25/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-34	2/25/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-34	2/25/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	2/25/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	2/25/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	2/25/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-34	2/25/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-34	2/25/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-34	2/25/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	2/25/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	2/25/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-34	2/25/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	2/25/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-34	2/25/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-34	2/25/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-34	2/25/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-34	2/25/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-34	2/25/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-34	2/25/2016	Trichloroethene	1.8	1	0.18	5	ug/L
MKTF-34	2/25/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-34	2/25/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	2/25/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	2/25/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-34	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-34	2/25/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-34	2/25/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-34	2/25/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-34	2/25/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	2/25/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	2/25/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-34	2/25/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	2/25/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	2/25/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	2/25/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	2/25/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-34	2/25/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-34	2/25/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	2/25/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-34	2/25/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-34	2/25/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-34	2/25/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	2/25/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	2/25/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	2/25/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	2/25/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	2/25/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	2/25/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	2/25/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-34	2/25/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-34	2/25/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	2/25/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	2/25/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-34	2/25/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	2/25/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-34	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	6/10/2016	Benzene	0.45	1	0.096	5	ug/L
MKTF-34	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	6/10/2016	1,1-Dichloroethane	0.24	1	0.11	25	ug/L
MKTF-34	6/10/2016	1,1-Dichloroethene	0.78	1	0.11	7	ug/L
MKTF-34	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	Trichloroethene	2	1	0.18	5	ug/L
MKTF-34	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	6/10/2016	1,2,4-Trimethylbenzene	0.59	1	0.11	56	ug/L
MKTF-34	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	6/10/2016	Ethylbenzene	0.26	1	0.11	700	ug/L
MKTF-34	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	6/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	6/10/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	6/10/2016	MTBE	0.58	1	0.21	143	ug/L
MKTF-34	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	9/13/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-34	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	9/13/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	9/13/2016	1,1-Dichloroethene	0.89	1	0.11	7	ug/L
MKTF-34	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-34	9/13/2016	Trichloroethene	1.9	1	0.18	5	ug/L
MKTF-34	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	9/13/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	9/13/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	9/13/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	9/13/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	9/13/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	9/13/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	9/13/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	9/13/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	9/13/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	9/13/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	9/13/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	9/13/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	9/13/2016	MTBE	0.35	1	0.21	143	ug/L
MKTF-34	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	11/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	11/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	11/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	11/8/2016	Benzene	0.14	1	0.096	5	ug/L
MKTF-34	11/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	11/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	11/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	11/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	11/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	11/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	11/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	11/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	11/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	11/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	11/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	11/8/2016	1,1-Dichloroethene	2.8	1	0.11	7	ug/L
MKTF-34	11/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	11/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	11/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	11/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	11/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-34	11/8/2016	Trichloroethene	4.8	1	0.18	5	ug/L
MKTF-34	11/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	11/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	11/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	11/8/2016	1,2,4-Trimethylbenzene	0.23	1	0.11	56	ug/L
MKTF-34	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	11/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	11/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	11/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	11/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	11/8/2016	Ethylbenzene	0.16	1	0.11	700	ug/L
MKTF-34	11/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	11/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	11/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	11/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	11/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	11/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	11/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	11/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	11/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	11/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	11/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	11/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	11/8/2016	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-34	11/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	11/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	11/8/2016	cis-1,2-Dichloroethene	0.26	1	0.12	70	ug/L
MKTF-34	11/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	11/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	11/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	11/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	11/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	11/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	11/8/2016	MTBE	0.97	1	0.21	143	ug/L
MKTF-34	11/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	11/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	3/1/2017	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	3/1/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-34	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	3/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	3/1/2017	1,1-Dichloroethane	0.47	1	0.1	25	ug/L
MKTF-34	3/1/2017	1,1-Dichloroethene	0.71	1	0.081	7	ug/L
MKTF-34	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-34	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	3/1/2017	Trichloroethene	2.2	1	0.18	5	ug/L
MKTF-34	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	3/1/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-34	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	3/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	3/1/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-34	3/1/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	3/1/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	3/1/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	3/1/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	3/1/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	3/1/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-34	3/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-34	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	3/1/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-34	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	3/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-34	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	3/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	3/1/2017	MTBE	0.58	1	0.15	143	ug/L
MKTF-34	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-34	6/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	6/14/2017	Acetone	5.3	10	0.82	14064	ug/L
MKTF-34	6/14/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	6/14/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-34	6/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	6/14/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	6/14/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	6/14/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	6/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	6/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	6/14/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	6/14/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	6/14/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	6/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	6/14/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	6/14/2017	1,1-Dichloroethene	0.59	1	0.081	7	ug/L
MKTF-34	6/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	6/14/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	6/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	6/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	6/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/14/2017	Trichloroethene	2	1	0.11	5	ug/L
MKTF-34	6/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	6/14/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	6/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	6/14/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	6/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	6/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	6/14/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	6/14/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	6/14/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	6/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	6/14/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	6/14/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	6/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	6/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	6/14/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	6/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	6/14/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	6/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	6/14/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	6/14/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	6/14/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	6/14/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	6/14/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	6/14/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	6/14/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	6/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-34	6/14/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	6/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	6/14/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	6/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	6/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	6/14/2017	MTBE	0.38	1	0.24	143	ug/L
MKTF-34	6/14/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	6/14/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	9/26/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	9/26/2017	Acetone	4.8	10	0.82	14064	ug/L
MKTF-34	9/26/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	9/26/2017	Benzene	0.3	1	0.062	5	ug/L
MKTF-34	9/26/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	9/26/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	9/26/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	9/26/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	9/26/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	9/26/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	9/26/2017	Methylene Chloride	0.14	3	0.11	5	ug/L
MKTF-34	9/26/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	9/26/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	9/26/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	9/26/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	9/26/2017	1,1-Dichloroethene	0.56	1	0.081	7	ug/L
MKTF-34	9/26/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	9/26/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	9/26/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	9/26/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	9/26/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	9/26/2017	Trichloroethene	1.9	1	0.11	5	ug/L
MKTF-34	9/26/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	9/26/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	9/26/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	9/26/2017	1,2,4-Trimethylbenzene	0.14	1	0.11	56	ug/L
MKTF-34	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	9/26/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	9/26/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	9/26/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	9/26/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	9/26/2017	Ethylbenzene	0.14	1	0.093	700	ug/L
MKTF-34	9/26/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	9/26/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	9/26/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	9/26/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	9/26/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	9/26/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	9/26/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/26/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	9/26/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	9/26/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	9/26/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	9/26/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	9/26/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	9/26/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	9/26/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	9/26/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	9/26/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	9/26/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	9/26/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	9/26/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	9/26/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	9/26/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	9/26/2017	MTBE	0.78	1	0.24	143	ug/L
MKTF-34	9/26/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	9/26/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	12/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	12/1/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-34	12/1/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	12/1/2017	Benzene	0.096	1	0.062	5	ug/L
MKTF-34	12/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	12/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	12/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	12/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	12/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	12/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	12/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	12/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	12/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	12/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	12/1/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	12/1/2017	1,1-Dichloroethene	1.2	1	0.081	7	ug/L
MKTF-34	12/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	12/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	12/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	12/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	12/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	12/1/2017	Trichloroethene	2.6	1	0.11	5	ug/L
MKTF-34	12/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	12/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	12/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	12/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	12/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	12/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	12/1/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	12/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	12/1/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	12/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	12/1/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	12/1/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	12/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	12/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	12/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	12/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	12/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	12/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	12/1/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	12/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	12/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	12/1/2017	Tetrachloroethene	0.14	1	0.13	5	ug/L
MKTF-34	12/1/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	12/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	12/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	12/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	12/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	12/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	12/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	12/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	12/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	12/1/2017	MTBE	0.75	1	0.24	143	ug/L
MKTF-34	12/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	12/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	2/16/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/16/2018	Acetone	0.89	10	0.82	14064	ug/L
MKTF-34	2/16/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	2/16/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-34	2/16/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	2/16/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	2/16/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	2/16/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	2/16/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	2/16/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	2/16/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	2/16/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	2/16/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	2/16/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	2/16/2018	1,1-Dichloroethane	0.47	1	0.4	25	ug/L
MKTF-34	2/16/2018	1,1-Dichloroethene	1.4	1	0.081	7	ug/L
MKTF-34	2/16/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	2/16/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	2/16/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	2/16/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/16/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	2/16/2018	Trichloroethene	3.1	1	0.11	5	ug/L
MKTF-34	2/16/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	2/16/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	2/16/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	2/16/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	2/16/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	2/16/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	2/16/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	2/16/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	2/16/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	2/16/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-34	2/16/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	2/16/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	2/16/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	2/16/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	2/16/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	2/16/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	2/16/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	2/16/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	2/16/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	2/16/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	2/16/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	2/16/2018	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-34	2/16/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	2/16/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	2/16/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	2/16/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	2/16/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	2/16/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	2/16/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	2/16/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	2/16/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	2/16/2018	MTBE	0.66	1	0.24	143	ug/L
MKTF-34	2/16/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	2/16/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	5/4/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	5/4/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-34	5/4/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	5/4/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-34	5/4/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	5/4/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	5/4/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	5/4/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	5/4/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	5/4/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	5/4/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	5/4/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	5/4/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	5/4/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	5/4/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	5/4/2018	1,1-Dichloroethene	1.4	1	0.081	7	ug/L
MKTF-34	5/4/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	5/4/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	5/4/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	5/4/2018	2-Butanone	ND	10	1.1	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	5/4/2018	Trichloroethene	2.7	1	0.11	5	ug/L
MKTF-34	5/4/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	5/4/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	5/4/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	5/4/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	5/4/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	5/4/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	5/4/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	5/4/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	5/4/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	5/4/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-34	5/4/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	5/4/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	5/4/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	5/4/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	5/4/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	5/4/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	5/4/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	5/4/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	5/4/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	5/4/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	5/4/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	5/4/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	5/4/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	5/4/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	5/4/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	5/4/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	5/4/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	5/4/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	5/4/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	5/4/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	5/4/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	5/4/2018	MTBE	0.87	1	0.24	143	ug/L
MKTF-34	5/4/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	5/4/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	8/24/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-34	8/24/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-34	8/24/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	8/24/2018	Benzene	0.24	1	0.17	5	ug/L
MKTF-34	8/24/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-34	8/24/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	8/24/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	8/24/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-34	8/24/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-34	8/24/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-34	8/24/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-34	8/24/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-34	8/24/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-34	8/24/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-34	8/24/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	8/24/2018	1,1-Dichloroethene	2.4	1	0.12	7	ug/L
MKTF-34	8/24/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-34	8/24/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	8/24/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	8/24/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-34	8/24/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-34	8/24/2018	Trichloroethene	3.6	1	0.26	5	ug/L
MKTF-34	8/24/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-34	8/24/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-34	8/24/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	8/24/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-34	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-34	8/24/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-34	8/24/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-34	8/24/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-34	8/24/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-34	8/24/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-34	8/24/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-34	8/24/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-34	8/24/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	8/24/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	8/24/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-34	8/24/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	8/24/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-34	8/24/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-34	8/24/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	8/24/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-34	8/24/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	8/24/2018	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-34	8/24/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-34	8/24/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-34	8/24/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-34	8/24/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	8/24/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	8/24/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-34	8/24/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-34	8/24/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-34	8/24/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-34	8/24/2018	MTBE	0.87	1	0.32	143	ug/L
MKTF-34	8/24/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-34	8/24/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-34	11/28/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	11/28/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-34	11/28/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-34	11/28/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-34	11/28/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-34	11/28/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-34	11/28/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-34	11/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-34	11/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-34	11/28/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-34	11/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-34	11/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-34	11/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-34	11/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-34	11/28/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-34	11/28/2018	1,1-Dichloroethene	2.1	1	0.12	7	ug/L
MKTF-34	11/28/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-34	11/28/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-34	11/28/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-34	11/28/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	11/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-34	11/28/2018	Trichloroethene	3.7	1	0.26	5	ug/L
MKTF-34	11/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-34	11/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-34	11/28/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-34	11/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-34	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-34	11/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-34	11/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-34	11/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-34	11/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-34	11/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-34	11/28/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-34	11/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-34	11/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	11/28/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-34	11/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-34	11/28/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-34	11/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-34	11/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-34	11/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-34	11/28/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	11/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-34	11/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	11/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	11/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-34	11/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-34	11/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-34	11/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	11/28/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-34	11/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	11/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-34	11/28/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-34	11/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-34	11/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-34	11/28/2018	MTBE	1	1	0.46	143	ug/L
MKTF-34	11/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-34	11/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-34	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-34	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-34	5/9/2019	1,2,4-Trimethylbenzene	0.22	1	0.213199	56	ug/L
MKTF-34	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-34	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-34	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	5/9/2019	Acetone	5.5	10	1.199396	14064	ug/L
MKTF-34	5/9/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	5/9/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-34	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	5/9/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	5/9/2019	Trichloroethene	0.49	1	0.166272	5	ug/L
MKTF-34	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	5/9/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
MKTF-34	8/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	8/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	8/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	8/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	8/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	8/19/2019	1,1-Dichloroethene	0.43	1	0.205388	7	ug/L
MKTF-34	8/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	8/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	8/19/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-34	8/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/19/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-34	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-34	8/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	8/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	8/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	8/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	8/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	8/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	8/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	8/19/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	8/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	8/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-34	8/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	8/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	8/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	8/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	8/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	8/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	8/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	8/19/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-34	8/19/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	8/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	8/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	8/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	8/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	8/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	8/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	8/19/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	8/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	8/19/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	8/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	8/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	8/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	8/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	8/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	8/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	8/19/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	8/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	8/19/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	8/19/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-34	8/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	8/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	8/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	8/19/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	8/19/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	8/19/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	8/19/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	8/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	8/19/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	8/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	8/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	8/19/2019	Trichloroethene	0.89	1	0.166272	5	ug/L
MKTF-34	8/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	8/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	8/19/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	8/19/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-34	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	10/29/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	10/29/2019	1,1-Dichloroethene	0.51	1	0.205388	7	ug/L
MKTF-34	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-34	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-34	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	10/29/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-34	10/29/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	10/29/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	10/29/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	10/29/2019	MTBE	0.58	1	0.456095	143	ug/L
MKTF-34	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	10/29/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	10/29/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	10/29/2019	Trichloroethene	1	1	0.166272	5	ug/L
MKTF-34	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	10/29/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-34	2/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.21	5.74	ug/L
MKTF-34	2/5/2020	1,1,1-Trichloroethane	ND	1	0.17	200	ug/L
MKTF-34	2/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.55	10	ug/L
MKTF-34	2/5/2020	1,1,2-Trichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/5/2020	1,1-Dichloroethane	ND	1	0.14	25	ug/L
MKTF-34	2/5/2020	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-34	2/5/2020	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	2/5/2020	1,2,3-Trichlorobenzene	ND	1	0.3	70	ug/L
MKTF-34	2/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.3	0.0084	ug/L
MKTF-34	2/5/2020	1,2,4-Trichlorobenzene	ND	1	0.2	70	ug/L
MKTF-34	2/5/2020	1,2,4-Trimethylbenzene	ND	1	0.21	56	ug/L
MKTF-34	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.33	0.0033	ug/L
MKTF-34	2/5/2020	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
MKTF-34	2/5/2020	1,2-Dichlorobenzene	ND	1	0.3	600	ug/L
MKTF-34	2/5/2020	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/5/2020	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	2/5/2020	1,3,5-Trimethylbenzene	ND	1	0.19	60	ug/L
MKTF-34	2/5/2020	1,3-Dichlorobenzene	ND	1	0.25	N/A	ug/L
MKTF-34	2/5/2020	1,3-Dichloropropane	ND	1	0.2	370	ug/L
MKTF-34	2/5/2020	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
MKTF-34	2/5/2020	1-Methylnaphthalene	ND	4	0.31	NA	ug/L
MKTF-34	2/5/2020	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-34	2/5/2020	2-Butanone	ND	10	2.1	5565	ug/L
MKTF-34	2/5/2020	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-34	2/5/2020	2-Hexanone	ND	10	1.5	38	ug/L
MKTF-34	2/5/2020	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
MKTF-34	2/5/2020	4-Chlorotoluene	ND	1	0.23	250	ug/L
MKTF-34	2/5/2020	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
MKTF-34	2/5/2020	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	2/5/2020	Acetone	ND	10	1.2	14064	ug/L
MKTF-34	2/5/2020	Benzene	ND	1	0.17	5	ug/L
MKTF-34	2/5/2020	Bromobenzene	ND	1	0.24	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	Bromodichloromethane	ND	1	0.13	1.34	ug/L
MKTF-34	2/5/2020	Bromoform	ND	1	0.29	32.9	ug/L
MKTF-34	2/5/2020	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-34	2/5/2020	Carbon Disulfide	ND	10	0.45	810	ug/L
MKTF-34	2/5/2020	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	2/5/2020	Chlorobenzene	ND	1	0.19	77.6	ug/L
MKTF-34	2/5/2020	Chloroethane	ND	2	0.18	20857	ug/L
MKTF-34	2/5/2020	Chloroform	ND	1	0.12	100	ug/L
MKTF-34	2/5/2020	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-34	2/5/2020	cis-1,2-Dichloroethene	ND	1	0.19	70	ug/L
MKTF-34	2/5/2020	cis-1,3-Dichloropropene	ND	1	0.14	NA	ug/L
MKTF-34	2/5/2020	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	2/5/2020	Dibromomethane	ND	1	0.21	8	ug/L
MKTF-34	2/5/2020	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-34	2/5/2020	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	2/5/2020	Hexachlorobutadiene	ND	1	0.31	1.39	ug/L
MKTF-34	2/5/2020	Isopropylbenzene	ND	1	0.19	447	ug/L
MKTF-34	2/5/2020	MTBE	ND	1	0.46	143	ug/L
MKTF-34	2/5/2020	Methylene Chloride	ND	3	0.15	5	ug/L
MKTF-34	2/5/2020	n-Butylbenzene	ND	3	0.23	1000	ug/L
MKTF-34	2/5/2020	n-Propylbenzene	ND	1	0.21	660	ug/L
MKTF-34	2/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/5/2020	sec-Butylbenzene	ND	1	0.25	2000	ug/L
MKTF-34	2/5/2020	Styrene	ND	1	0.19	100	ug/L
MKTF-34	2/5/2020	tert-Butylbenzene	ND	1	0.21	690	ug/L
MKTF-34	2/5/2020	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	2/5/2020	Toluene	ND	1	0.35	1000	ug/L
MKTF-34	2/5/2020	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	2/5/2020	trans-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	2/5/2020	Trichloroethene	0.4	1	0.17	5	ug/L
MKTF-34	2/5/2020	Trichlorofluoromethane	ND	1	0.19	1137	ug/L
MKTF-34	2/5/2020	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	2/5/2020	Xylenes, Total	ND	1.5	0.45	620	ug/L
MKTF-34	2/5/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
MKTF-34	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	2/28/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	2/28/2020	Acetone	4.8	10	2.3	14064	ug/L
MKTF-34	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	2/28/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-34	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	2/28/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	2/28/2020	Acetone	3	10	2.3	14064	ug/L
MKTF-34	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-34	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	2/28/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-34	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-34	9/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	9/16/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	9/16/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	9/16/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	9/16/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	9/16/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	9/16/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	9/16/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	9/16/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	9/16/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	9/16/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	9/16/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	9/16/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	9/16/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	9/16/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	9/16/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	9/16/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	9/16/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	9/16/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	9/16/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	9/16/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	9/16/2020	2-Butanone	1.2	10	1.1	5565	ug/L
MKTF-34	9/16/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	9/16/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	9/16/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	9/16/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	9/16/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	9/16/2020	Acetone	3.4	10	2.3	14064	ug/L
MKTF-34	9/16/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	9/16/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	9/16/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	9/16/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	9/16/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	9/16/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	9/16/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	9/16/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	9/16/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	9/16/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	9/16/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	9/16/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-34	9/16/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	9/16/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	9/16/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	9/16/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	9/16/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	9/16/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	9/16/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	9/16/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	9/16/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	9/16/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	9/16/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-34	9/16/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	9/16/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	9/16/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	9/16/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	9/16/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	9/16/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	9/16/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	9/16/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	9/16/2020	Trichloroethene	0.89	1	0.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	9/16/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	9/16/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	9/16/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-35	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-35	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-35	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-35	11/21/2014	Benzene	**39**	1	0.15	5	ug/L
MKTF-35	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-35	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-35	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-35	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-35	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-35	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-35	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-35	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-35	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-35	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-35	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-35	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-35	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-35	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-35	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-35	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	11/21/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-35	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-35	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-35	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-35	11/21/2014	1,2,4-Trimethylbenzene	**120**	10	1.2	56	ug/L
MKTF-35	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-35	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-35	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-35	11/21/2014	Isopropylbenzene	5.1	1	0.16	447	ug/L
MKTF-35	11/21/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-35	11/21/2014	Ethylbenzene	52	1	0.13	700	ug/L
MKTF-35	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-35	11/21/2014	n-Propylbenzene	28	1	0.14	660	ug/L
MKTF-35	11/21/2014	n-Butylbenzene	6.1	3	0.21	1000	ug/L
MKTF-35	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-35	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-35	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-35	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-35	11/21/2014	1,3,5-Trimethylbenzene	50	1	0.13	60	ug/L
MKTF-35	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-35	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-35	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-35	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-35	11/21/2014	sec-Butylbenzene	2.7	1	0.15	2000	ug/L
MKTF-35	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-35	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-35	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-35	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-35	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-35	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-35	11/21/2014	Xylenes, Total	73	1.5	0.38	620	ug/L
MKTF-35	11/21/2014	MTBE	66	1	0.25	143	ug/L
MKTF-35	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-35	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-35	3/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	3/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	3/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	3/17/2015	Benzene	**470**	20	1.3	5	ug/L
MKTF-35	3/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	3/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	3/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	3/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	3/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	3/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	3/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	3/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	3/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	3/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	3/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	3/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	3/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	3/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	3/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	3/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	3/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	3/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	3/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	3/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	3/17/2015	1,2,4-Trimethylbenzene	34	1	0.16	56	ug/L
MKTF-35	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	3/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	3/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	3/17/2015	Isopropylbenzene	8.2	1	0.15	447	ug/L
MKTF-35	3/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	3/17/2015	Ethylbenzene	320	20	2	700	ug/L
MKTF-35	3/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	3/17/2015	n-Propylbenzene	35	1	0.16	660	ug/L
MKTF-35	3/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	3/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	3/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	3/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	3/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	3/17/2015	1,3,5-Trimethylbenzene	46	20	2.5	60	ug/L
MKTF-35	3/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	3/17/2015	Toluene	5.2	1	0.11	1000	ug/L
MKTF-35	3/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	3/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	3/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	3/17/2015	sec-Butylbenzene	1.8	1	0.23	2000	ug/L
MKTF-35	3/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	3/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	3/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	3/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	3/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	3/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	3/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	3/17/2015	Xylenes, Total	170	1.5	0.28	620	ug/L
MKTF-35	3/17/2015	MTBE	33	1	0.17	143	ug/L
MKTF-35	3/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	3/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	6/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	6/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	6/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	6/4/2015	Benzene	**790**	10	0.65	5	ug/L
MKTF-35	6/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	6/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	6/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	6/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	6/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	6/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	6/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	6/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	6/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	6/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	6/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-35	6/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	6/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	6/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	6/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	6/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	6/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	6/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	6/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	6/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	6/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	6/4/2015	1,2,4-Trimethylbenzene	9.5	1	0.16	56	ug/L
MKTF-35	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	6/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	6/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	6/4/2015	Isopropylbenzene	8.4	1	0.15	447	ug/L
MKTF-35	6/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	6/4/2015	Ethylbenzene	190	10	1	700	ug/L
MKTF-35	6/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	6/4/2015	n-Propylbenzene	22	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	6/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	6/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	6/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	6/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	6/4/2015	1,3,5-Trimethylbenzene	2.3	1	0.12	60	ug/L
MKTF-35	6/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	6/4/2015	Toluene	2.3	1	0.11	1000	ug/L
MKTF-35	6/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	6/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	6/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	6/4/2015	sec-Butylbenzene	1.7	1	0.23	2000	ug/L
MKTF-35	6/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	6/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	6/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	6/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	6/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	6/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	6/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	6/4/2015	Xylenes, Total	2.1	1.5	0.28	620	ug/L
MKTF-35	6/4/2015	MTBE	27	1	0.17	143	ug/L
MKTF-35	6/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	6/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-35	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-35	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-35	8/18/2015	Benzene	**970**	50	3.3	5	ug/L
MKTF-35	8/18/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-35	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-35	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-35	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-35	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-35	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-35	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-35	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-35	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-35	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-35	8/18/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-35	8/18/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
MKTF-35	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-35	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-35	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-35	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-35	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-35	8/18/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-35	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-35	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-35	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-35	8/18/2015	1,2,4-Trimethylbenzene	22	5	0.8	56	ug/L
MKTF-35	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-35	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-35	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-35	8/18/2015	Isopropylbenzene	10	5	0.76	447	ug/L
MKTF-35	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-35	8/18/2015	Ethylbenzene	160	5	0.51	700	ug/L
MKTF-35	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-35	8/18/2015	n-Propylbenzene	36	5	0.82	660	ug/L
MKTF-35	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-35	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-35	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-35	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-35	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-35	8/18/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-35	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-35	8/18/2015	Toluene	ND	5	0.54	1000	ug/L
MKTF-35	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-35	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-35	8/18/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-35	8/18/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-35	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-35	8/18/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
MKTF-35	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-35	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-35	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-35	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-35	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/18/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-35	8/18/2015	MTBE	61	5	0.87	143	ug/L
MKTF-35	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-35	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-35	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	11/3/2015	Benzene	**190**	10	0.65	5	ug/L
MKTF-35	11/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	11/3/2015	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
MKTF-35	11/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	11/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	11/3/2015	1,2,4-Trimethylbenzene	9	1	0.16	56	ug/L
MKTF-35	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	11/3/2015	Isopropylbenzene	5.5	1	0.15	447	ug/L
MKTF-35	11/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	11/3/2015	Ethylbenzene	39	1	0.1	700	ug/L
MKTF-35	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	11/3/2015	n-Propylbenzene	16	1	0.16	660	ug/L
MKTF-35	11/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-35	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	11/3/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-35	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	11/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	11/3/2015	sec-Butylbenzene	2.6	1	0.23	2000	ug/L
MKTF-35	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	11/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	11/3/2015	Xylenes, Total	2.3	1.5	0.28	620	ug/L
MKTF-35	11/3/2015	MTBE	48	1	0.17	143	ug/L
MKTF-35	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	2/26/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-35	2/26/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-35	2/26/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-35	2/26/2016	Benzene	**46**	5	0.48	5	ug/L
MKTF-35	2/26/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-35	2/26/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-35	2/26/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-35	2/26/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-35	2/26/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-35	2/26/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-35	2/26/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-35	2/26/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-35	2/26/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-35	2/26/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-35	2/26/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/26/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
MKTF-35	2/26/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-35	2/26/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-35	2/26/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-35	2/26/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-35	2/26/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-35	2/26/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-35	2/26/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-35	2/26/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-35	2/26/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-35	2/26/2016	1,2,4-Trimethylbenzene	11	5	0.52	56	ug/L
MKTF-35	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-35	2/26/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-35	2/26/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-35	2/26/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-35	2/26/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-35	2/26/2016	Ethylbenzene	34	5	0.56	700	ug/L
MKTF-35	2/26/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-35	2/26/2016	n-Propylbenzene	12	5	0.66	660	ug/L
MKTF-35	2/26/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-35	2/26/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-35	2/26/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-35	2/26/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-35	2/26/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-35	2/26/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-35	2/26/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-35	2/26/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-35	2/26/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-35	2/26/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-35	2/26/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-35	2/26/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-35	2/26/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-35	2/26/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-35	2/26/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-35	2/26/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-35	2/26/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-35	2/26/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-35	2/26/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-35	2/26/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-35	2/26/2016	MTBE	20	5	1.1	143	ug/L
MKTF-35	2/26/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-35	2/26/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-35	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	6/10/2016	Acetone	6.8	10	4.9	14064	ug/L
MKTF-35	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	6/10/2016	Benzene	**67**	1	0.096	5	ug/L
MKTF-35	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	6/10/2016	1,1-Dichloroethane	0.45	1	0.11	25	ug/L
MKTF-35	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	6/10/2016	2-Butanone	2	10	0.74	5565	ug/L
MKTF-35	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	6/10/2016	1,2,4-Trimethylbenzene	1.2	1	0.11	56	ug/L
MKTF-35	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	6/10/2016	tert-Butylbenzene	0.19	1	0.12	690	ug/L
MKTF-35	6/10/2016	Isopropylbenzene	1.8	1	0.1	447	ug/L
MKTF-35	6/10/2016	p-Isopropyltoluene	0.41	1	0.14	NA	ug/L
MKTF-35	6/10/2016	Ethylbenzene	12	1	0.11	700	ug/L
MKTF-35	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-35	6/10/2016	n-Propylbenzene	4.5	1	0.13	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/10/2016	n-Butylbenzene	0.53	3	0.16	1000	ug/L
MKTF-35	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	6/10/2016	1,3,5-Trimethylbenzene	0.2	1	0.12	60	ug/L
MKTF-35	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	6/10/2016	Toluene	0.27	1	0.12	1000	ug/L
MKTF-35	6/10/2016	Chlorobenzene	0.69	1	0.11	77.6	ug/L
MKTF-35	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	6/10/2016	sec-Butylbenzene	1.9	1	0.12	2000	ug/L
MKTF-35	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	6/10/2016	Xylenes, Total	5.5	1.5	0.37	620	ug/L
MKTF-35	6/10/2016	MTBE	19	1	0.21	143	ug/L
MKTF-35	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	9/13/2016	Acetone	8.1	10	4.9	14064	ug/L
MKTF-35	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	9/13/2016	Benzene	**370**	1	0.096	5	ug/L
MKTF-35	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	9/13/2016	Bromomethane	1.1	3	0.78	7.54	ug/L
MKTF-35	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-35	9/13/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	9/13/2016	2-Butanone	8.8	10	0.74	5565	ug/L
MKTF-35	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	9/13/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	9/13/2016	1,2,4-Trimethylbenzene	3.6	1	0.11	56	ug/L
MKTF-35	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	9/13/2016	tert-Butylbenzene	0.18	1	0.12	690	ug/L
MKTF-35	9/13/2016	Isopropylbenzene	1.2	1	0.1	447	ug/L
MKTF-35	9/13/2016	p-Isopropyltoluene	0.29	1	0.14	NA	ug/L
MKTF-35	9/13/2016	Ethylbenzene	25	1	0.11	700	ug/L
MKTF-35	9/13/2016	Styrene	0.25	1	0.11	100	ug/L
MKTF-35	9/13/2016	n-Propylbenzene	2.5	1	0.13	660	ug/L
MKTF-35	9/13/2016	n-Butylbenzene	0.32	3	0.16	1000	ug/L
MKTF-35	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	9/13/2016	1,3,5-Trimethylbenzene	0.32	1	0.12	60	ug/L
MKTF-35	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	9/13/2016	Toluene	0.52	1	0.12	1000	ug/L
MKTF-35	9/13/2016	Chlorobenzene	1.1	1	0.11	77.6	ug/L
MKTF-35	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	9/13/2016	sec-Butylbenzene	1.4	1	0.12	2000	ug/L
MKTF-35	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	9/13/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Xylenes, Total	11	1.5	0.37	620	ug/L
MKTF-35	9/13/2016	MTBE	12	1	0.21	143	ug/L
MKTF-35	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	11/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	11/3/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-35	11/3/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	11/3/2016	Benzene	**65**	1	0.096	5	ug/L
MKTF-35	11/3/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	11/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	11/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	11/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	11/3/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	11/3/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	11/3/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	11/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	11/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	11/3/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	11/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-35	11/3/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	11/3/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	11/3/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	11/3/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	11/3/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-35	11/3/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	11/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	11/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	11/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	11/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	11/3/2016	1,2,4-Trimethylbenzene	18	1	0.11	56	ug/L
MKTF-35	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	11/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	11/3/2016	tert-Butylbenzene	0.25	1	0.12	690	ug/L
MKTF-35	11/3/2016	Isopropylbenzene	3.9	1	0.1	447	ug/L
MKTF-35	11/3/2016	p-Isopropyltoluene	0.49	1	0.14	NA	ug/L
MKTF-35	11/3/2016	Ethylbenzene	55	1	0.11	700	ug/L
MKTF-35	11/3/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-35	11/3/2016	n-Propylbenzene	11	1	0.13	660	ug/L
MKTF-35	11/3/2016	n-Butylbenzene	0.45	3	0.16	1000	ug/L
MKTF-35	11/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	11/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	11/3/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	11/3/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	11/3/2016	1,3,5-Trimethylbenzene	0.32	1	0.12	60	ug/L
MKTF-35	11/3/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	11/3/2016	Toluene	0.26	1	0.12	1000	ug/L
MKTF-35	11/3/2016	Chlorobenzene	1.2	1	0.11	77.6	ug/L
MKTF-35	11/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	11/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	11/3/2016	sec-Butylbenzene	2.1	1	0.12	2000	ug/L
MKTF-35	11/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	11/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	11/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	11/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	11/3/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	11/3/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	11/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	11/3/2016	Xylenes, Total	10	1.5	0.37	620	ug/L
MKTF-35	11/3/2016	MTBE	10	1	0.21	143	ug/L
MKTF-35	11/3/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	11/3/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	3/1/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-35	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	3/1/2017	Benzene	**53**	1	0.096	5	ug/L
MKTF-35	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	3/1/2017	Methylene Chloride	0.66	3	0.11	5	ug/L
MKTF-35	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	3/1/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-35	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	3/1/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	3/1/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-35	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	3/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	3/1/2017	Isopropylbenzene	1.4	1	0.098	447	ug/L
MKTF-35	3/1/2017	p-Isopropyltoluene	0.16	1	0.14	NA	ug/L
MKTF-35	3/1/2017	Ethylbenzene	2.7	1	0.11	700	ug/L
MKTF-35	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	3/1/2017	n-Propylbenzene	3.8	1	0.13	660	ug/L
MKTF-35	3/1/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-35	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	3/1/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-35	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	3/1/2017	Toluene	0.11	1	0.089	1000	ug/L
MKTF-35	3/1/2017	Chlorobenzene	0.51	1	0.11	77.6	ug/L
MKTF-35	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-35	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	3/1/2017	sec-Butylbenzene	2	1	0.1	2000	ug/L
MKTF-35	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	3/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-35	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	3/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	3/1/2017	MTBE	7.9	1	0.15	143	ug/L
MKTF-35	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-35	6/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	6/14/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	6/14/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	6/14/2017	Benzene	2.3	1	0.062	5	ug/L
MKTF-35	6/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	6/14/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	6/14/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	6/14/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	6/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	6/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	6/14/2017	Methylene Chloride	0.11	3	0.11	5	ug/L
MKTF-35	6/14/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	6/14/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	6/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	6/14/2017	1,1-Dichloroethane	0.43	1	0.4	25	ug/L
MKTF-35	6/14/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	6/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	6/14/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	6/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	6/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	6/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	6/14/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	6/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	6/14/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	6/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	6/14/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	6/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	6/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	6/14/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-35	6/14/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	6/14/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
MKTF-35	6/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	6/14/2017	n-Propylbenzene	2.7	1	0.074	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/14/2017	n-Butylbenzene	0.19	3	0.13	1000	ug/L
MKTF-35	6/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	6/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	6/14/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	6/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	6/14/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	6/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	6/14/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	6/14/2017	Chlorobenzene	0.4	1	0.11	77.6	ug/L
MKTF-35	6/14/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	6/14/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	6/14/2017	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
MKTF-35	6/14/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	6/14/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	6/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-35	6/14/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	6/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	6/14/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	6/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	6/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	6/14/2017	MTBE	33	1	0.24	143	ug/L
MKTF-35	6/14/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	6/14/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	9/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	9/27/2017	Acetone	10	10	0.82	14064	ug/L
MKTF-35	9/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	9/27/2017	Benzene	1.5	1	0.062	5	ug/L
MKTF-35	9/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	9/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	9/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	9/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	9/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	9/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	9/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	9/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	9/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	9/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	9/27/2017	1,1-Dichloroethane	0.67	1	0.4	25	ug/L
MKTF-35	9/27/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	9/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	9/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	9/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	9/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	9/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	9/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	9/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	9/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	9/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	9/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	9/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	9/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	9/27/2017	tert-Butylbenzene	0.14	1	0.1	690	ug/L
MKTF-35	9/27/2017	Isopropylbenzene	0.37	1	0.051	447	ug/L
MKTF-35	9/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	9/27/2017	Ethylbenzene	0.15	1	0.093	700	ug/L
MKTF-35	9/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	9/27/2017	n-Propylbenzene	0.13	1	0.074	660	ug/L
MKTF-35	9/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	9/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	9/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	9/27/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	9/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	9/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	9/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	9/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	9/27/2017	Chlorobenzene	0.43	1	0.11	77.6	ug/L
MKTF-35	9/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	9/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	9/27/2017	sec-Butylbenzene	1.2	1	0.11	2000	ug/L
MKTF-35	9/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	9/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	9/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	9/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	9/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	9/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	9/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	9/27/2017	MTBE	77	1	0.24	143	ug/L
MKTF-35	9/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	9/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	11/30/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	11/30/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	11/30/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	11/30/2017	Benzene	1.5	1	0.062	5	ug/L
MKTF-35	11/30/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	11/30/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	11/30/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	11/30/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	11/30/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	11/30/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	11/30/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	11/30/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	11/30/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	11/30/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	11/30/2017	1,1-Dichloroethane	0.86	1	0.4	25	ug/L
MKTF-35	11/30/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	11/30/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	11/30/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	11/30/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	11/30/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	11/30/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	11/30/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	11/30/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	11/30/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	11/30/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	11/30/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	11/30/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	11/30/2017	tert-Butylbenzene	0.24	1	0.1	690	ug/L
MKTF-35	11/30/2017	Isopropylbenzene	0.48	1	0.051	447	ug/L
MKTF-35	11/30/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	11/30/2017	Ethylbenzene	0.29	1	0.093	700	ug/L
MKTF-35	11/30/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	11/30/2017	n-Propylbenzene	0.26	1	0.074	660	ug/L
MKTF-35	11/30/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	11/30/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	11/30/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	11/30/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	11/30/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	11/30/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	11/30/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	11/30/2017	Toluene	0.1	1	0.064	1000	ug/L
MKTF-35	11/30/2017	Chlorobenzene	0.52	1	0.11	77.6	ug/L
MKTF-35	11/30/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	11/30/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	11/30/2017	sec-Butylbenzene	1.5	1	0.11	2000	ug/L
MKTF-35	11/30/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	11/30/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	11/30/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	11/30/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	11/30/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	11/30/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	11/30/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	11/30/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	11/30/2017	MTBE	110	1	0.24	143	ug/L
MKTF-35	11/30/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	11/30/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	2/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	2/15/2018	Acetone	0.86	10	0.82	14064	ug/L
MKTF-35	2/15/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	2/15/2018	Benzene	2.4	1	0.062	5	ug/L
MKTF-35	2/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	2/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	2/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	2/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	2/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	2/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	2/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	2/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	2/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	2/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/15/2018	1,1-Dichloroethane	0.94	1	0.4	25	ug/L
MKTF-35	2/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	2/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	2/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	2/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	2/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	2/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	2/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	2/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	2/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	2/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	2/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	2/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	2/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	2/15/2018	Isopropylbenzene	0.49	1	0.051	447	ug/L
MKTF-35	2/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	2/15/2018	Ethylbenzene	0.38	1	0.093	700	ug/L
MKTF-35	2/15/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-35	2/15/2018	n-Propylbenzene	0.44	1	0.074	660	ug/L
MKTF-35	2/15/2018	n-Butylbenzene	0.3	3	0.13	1000	ug/L
MKTF-35	2/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	2/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	2/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	2/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	2/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	2/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	2/15/2018	Toluene	3.4	1	0.064	1000	ug/L
MKTF-35	2/15/2018	Chlorobenzene	0.49	1	0.11	77.6	ug/L
MKTF-35	2/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	2/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	2/15/2018	sec-Butylbenzene	1.5	1	0.11	2000	ug/L
MKTF-35	2/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	2/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	2/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	2/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	2/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	2/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	2/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	2/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	2/15/2018	MTBE	78	1	0.24	143	ug/L
MKTF-35	2/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	2/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	5/3/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	5/3/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	5/3/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	5/3/2018	Benzene	**9.9**	1	0.062	5	ug/L
MKTF-35	5/3/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	5/3/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	5/3/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	5/3/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	5/3/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	5/3/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	5/3/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	5/3/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	5/3/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	5/3/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	5/3/2018	1,1-Dichloroethane	0.81	1	0.4	25	ug/L
MKTF-35	5/3/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	5/3/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	5/3/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	5/3/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	5/3/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	5/3/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	5/3/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	5/3/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	5/3/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	5/3/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	5/3/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	5/3/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	5/3/2018	tert-Butylbenzene	0.15	1	0.1	690	ug/L
MKTF-35	5/3/2018	Isopropylbenzene	0.47	1	0.051	447	ug/L
MKTF-35	5/3/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	5/3/2018	Ethylbenzene	0.74	1	0.093	700	ug/L
MKTF-35	5/3/2018	Styrene	ND	1	0.16	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/3/2018	n-Propylbenzene	0.35	1	0.074	660	ug/L
MKTF-35	5/3/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	5/3/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	5/3/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	5/3/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	5/3/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	5/3/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	5/3/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	5/3/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	5/3/2018	Chlorobenzene	0.56	1	0.11	77.6	ug/L
MKTF-35	5/3/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	5/3/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	5/3/2018	sec-Butylbenzene	1.9	1	0.11	2000	ug/L
MKTF-35	5/3/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	5/3/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	5/3/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	5/3/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	5/3/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	5/3/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	5/3/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	5/3/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	5/3/2018	MTBE	56	1	0.24	143	ug/L
MKTF-35	5/3/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	5/3/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	8/23/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-35	8/23/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-35	8/23/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	8/23/2018	Benzene	**11**	1	0.17	5	ug/L
MKTF-35	8/23/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-35	8/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	8/23/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	8/23/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-35	8/23/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-35	8/23/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-35	8/23/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-35	8/23/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-35	8/23/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-35	8/23/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-35	8/23/2018	1,1-Dichloroethane	0.74	1	0.4	25	ug/L
MKTF-35	8/23/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-35	8/23/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-35	8/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	8/23/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	8/23/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-35	8/23/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-35	8/23/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-35	8/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-35	8/23/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-35	8/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	8/23/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-35	8/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-35	8/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-35	8/23/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-35	8/23/2018	Isopropylbenzene	0.28	1	0.22	447	ug/L
MKTF-35	8/23/2018	p-Isopropyltoluene	1	1	0.24	NA	ug/L
MKTF-35	8/23/2018	Ethylbenzene	0.68	1	0.22	700	ug/L
MKTF-35	8/23/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-35	8/23/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-35	8/23/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	8/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	8/23/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-35	8/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	8/23/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-35	8/23/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-35	8/23/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-35	8/23/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	8/23/2018	Chlorobenzene	0.45	1	0.29	77.6	ug/L
MKTF-35	8/23/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-35	8/23/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	8/23/2018	sec-Butylbenzene	1.4	1	0.2	2000	ug/L
MKTF-35	8/23/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-35	8/23/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-35	8/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	8/23/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-35	8/23/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-35	8/23/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-35	8/23/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-35	8/23/2018	MTBE	63	1	0.32	143	ug/L
MKTF-35	8/23/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-35	8/23/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-35	11/28/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-35	11/28/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-35	11/28/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-35	11/28/2018	Benzene	**19**	1	0.17	5	ug/L
MKTF-35	11/28/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-35	11/28/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-35	11/28/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-35	11/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-35	11/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-35	11/28/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-35	11/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-35	11/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-35	11/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-35	11/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-35	11/28/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-35	11/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-35	11/28/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-35	11/28/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-35	11/28/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-35	11/28/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-35	11/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-35	11/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-35	11/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-35	11/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-35	11/28/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-35	11/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-35	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-35	11/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-35	11/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-35	11/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-35	11/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-35	11/28/2018	Ethylbenzene	1.2	1	0.22	700	ug/L
MKTF-35	11/28/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-35	11/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-35	11/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	11/28/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-35	11/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-35	11/28/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-35	11/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-35	11/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-35	11/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-35	11/28/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	11/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-35	11/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-35	11/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	11/28/2018	sec-Butylbenzene	1.2	1	0.2	2000	ug/L
MKTF-35	11/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-35	11/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-35	11/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	11/28/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-35	11/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-35	11/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-35	11/28/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-35	11/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-35	11/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-35	11/28/2018	MTBE	77	1	0.46	143	ug/L
MKTF-35	11/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-35	11/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-35	5/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	5/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	5/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	5/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	5/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	5/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	4.9	1	0.294981	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	5/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	5/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	5/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	5/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	5/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	5/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	5/16/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	5/16/2019	Benzene	**19**	1	0.166639	5	ug/L
MKTF-35	5/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	5/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	5/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	5/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	5/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	5/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	5/16/2019	Chlorobenzene	0.39	1	0.193853	77.6	ug/L
MKTF-35	5/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	5/16/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	5/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	5/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	5/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	5/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	5/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	5/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	5/16/2019	Ethylbenzene	2.5	1	0.132341	700	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	5/16/2019	Isopropylbenzene	0.67	1	0.191522	447	ug/L
MKTF-35	5/16/2019	MTBE	40	1	0.456095	143	ug/L
MKTF-35	5/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	5/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	5/16/2019	n-Propylbenzene	0.63	1	0.214308	660	ug/L
MKTF-35	5/16/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	5/16/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	5/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	5/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	5/16/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	5/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	5/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	5/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	5/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	5/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	5/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	5/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	5/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	5/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	5/16/2019	1,2,4-Trimethylbenzene	0.26	1	0.213199	56	ug/L
MKTF-35	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	5/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	5/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	5/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	5/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	5/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	5/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	5/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	5/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	5/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	5/16/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
MKTF-35	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	5/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	5/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	5/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	5/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	4.7	1	0.294981	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	0.5	4	0.314954	NA	ug/L
MKTF-35	5/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	5/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	5/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	5/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	5/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	5/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	5/16/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	5/16/2019	Benzene	**14**	1	0.166639	5	ug/L
MKTF-35	5/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	5/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	5/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	5/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	5/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	5/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	5/16/2019	Chlorobenzene	0.35	1	0.193853	77.6	ug/L
MKTF-35	5/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	5/16/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	5/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	5/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	5/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	5/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	5/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	5/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	5/16/2019	Ethylbenzene	2.4	1	0.132341	700	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	5/16/2019	Isopropylbenzene	0.67	1	0.191522	447	ug/L
MKTF-35	5/16/2019	MTBE	42	1	0.456095	143	ug/L
MKTF-35	5/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	5/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	5/16/2019	n-Propylbenzene	0.54	1	0.214308	660	ug/L
MKTF-35	5/16/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	5/16/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	5/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	5/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	5/16/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	5/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	5/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	5/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	5/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	5/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	5/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-35	8/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	8/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	8/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	8/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	8/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	8/19/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	8/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	8/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	8/19/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	8/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	8/19/2019	1,2,4-Trimethylbenzene	0.31	1	0.213199	56	ug/L
MKTF-35	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	8/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	8/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	8/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	8/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	8/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	8/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	8/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	8/19/2019	1,4-Dichlorobenzene	5.9	1	0.294981	75	ug/L
MKTF-35	8/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	8/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	8/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	8/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	8/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	8/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	8/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	8/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	8/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	8/19/2019	Acetone	5.4	10	1.199396	14064	ug/L
MKTF-35	8/19/2019	Benzene	**22**	1	0.166639	5	ug/L
MKTF-35	8/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	8/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	8/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	8/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	8/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	8/19/2019	Chlorobenzene	0.66	1	0.193853	77.6	ug/L
MKTF-35	8/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	8/19/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	8/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	8/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	8/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	8/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	8/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	8/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	8/19/2019	Ethylbenzene	3	1	0.132341	700	ug/L
MKTF-35	8/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	8/19/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
MKTF-35	8/19/2019	MTBE	26	1	0.456095	143	ug/L
MKTF-35	8/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	8/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	8/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	8/19/2019	n-Propylbenzene	0.81	1	0.214308	660	ug/L
MKTF-35	8/19/2019	sec-Butylbenzene	1.4	1	0.247731	2000	ug/L
MKTF-35	8/19/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	8/19/2019	tert-Butylbenzene	0.3	1	0.206985	690	ug/L
MKTF-35	8/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	8/19/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	8/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	8/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	8/19/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	8/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	8/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	8/19/2019	Xylenes, Total	0.66	1.5	0.454415	620	ug/L
MKTF-35	8/19/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
MKTF-35	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethane	0.68	1	0.140859	25	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	4.1	1	0.294981	75	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	10/29/2019	Benzene	**56**	1	0.166639	5	ug/L
MKTF-35	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-35	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	10/29/2019	Ethylbenzene	2.2	1	0.132341	700	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	10/29/2019	Isopropylbenzene	0.43	1	0.191522	447	ug/L
MKTF-35	10/29/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-35	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	10/29/2019	n-Propylbenzene	0.29	1	0.214308	660	ug/L
MKTF-35	10/29/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	10/29/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethane	0.66	1	0.140859	25	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	4.2	1	0.294981	75	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	10/29/2019	Benzene	**49**	1	0.166639	5	ug/L
MKTF-35	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-35	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	10/29/2019	Ethylbenzene	2	1	0.132341	700	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	10/29/2019	Isopropylbenzene	0.41	1	0.191522	447	ug/L
MKTF-35	10/29/2019	MTBE	110	1	0.456095	143	ug/L
MKTF-35	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	10/29/2019	n-Propylbenzene	0.29	1	0.214308	660	ug/L
MKTF-35	10/29/2019	sec-Butylbenzene	1.2	1	0.247731	2000	ug/L
MKTF-35	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	10/29/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-35	2/6/2020	Benzene	**6100**	100	17	5	ug/L
MKTF-35	2/6/2020	Toluene	**5300**	100	35	1000	ug/L
MKTF-35	2/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-35	2/6/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-35	2/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-35	2/6/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-35	2/6/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-35	2/6/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-35	2/6/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	2/6/2020	1,2,4-Trimethylbenzene	**240**	10	2.1	56	ug/L
MKTF-35	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-35	2/6/2020	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	2/6/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-35	2/6/2020	1,3,5-Trimethylbenzene	52	10	1.9	60	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-35	2/6/2020	1,3-Dichloropropane	ND	10	2	370	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	3.7	10	2.9	75	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	6.2	40	3.1	NA	ug/L
MKTF-35	2/6/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-35	2/6/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-35	2/6/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-35	2/6/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	**6.6**	40	3.5		ug/L
MKTF-35	2/6/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-35	2/6/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-35	2/6/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-35	2/6/2020	Acetone	ND	100	12	14064	ug/L
MKTF-35	2/6/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-35	2/6/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-35	2/6/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-35	2/6/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-35	2/6/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-35	2/6/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-35	2/6/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-35	2/6/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-35	2/6/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-35	2/6/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-35	2/6/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-35	2/6/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-35	2/6/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-35	2/6/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-35	2/6/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-35	2/6/2020	Ethylbenzene	**800**	10	1.3	700	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-35	2/6/2020	Isopropylbenzene	17	10	1.9	447	ug/L
MKTF-35	2/6/2020	MTBE	**320**	10	4.6	143	ug/L
MKTF-35	2/6/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-35	2/6/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-35	2/6/2020	n-Propylbenzene	37	10	2.1	660	ug/L
MKTF-35	2/6/2020	Naphthalene	**84**	20	2.8	30	ug/L
MKTF-35	2/6/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-35	2/6/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-35	2/6/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-35	2/6/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-35	2/6/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-35	2/6/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-35	2/6/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-35	2/6/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-35	2/6/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-35	2/6/2020	Xylenes, Total	**1800**	15	4.5	620	ug/L
MKTF-35	2/6/2020	Benzene	**6300**	100	17	5	ug/L
MKTF-35	2/6/2020	Toluene	**5300**	100	35	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-35	2/6/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-35	2/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-35	2/6/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-35	2/6/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-35	2/6/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-35	2/6/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	2/6/2020	1,2,4-Trimethylbenzene	**230**	10	2.1	56	ug/L
MKTF-35	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-35	2/6/2020	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	2/6/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-35	2/6/2020	1,3,5-Trimethylbenzene	50	10	1.9	60	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-35	2/6/2020	1,3-Dichloropropane	ND	10	2	370	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	3.8	10	2.9	75	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	8.1	40	3.1	NA	ug/L
MKTF-35	2/6/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-35	2/6/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-35	2/6/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-35	2/6/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	**7.1**	40	3.5		ug/L
MKTF-35	2/6/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-35	2/6/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-35	2/6/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-35	2/6/2020	Acetone	ND	100	12	14064	ug/L
MKTF-35	2/6/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-35	2/6/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-35	2/6/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-35	2/6/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-35	2/6/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-35	2/6/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-35	2/6/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-35	2/6/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-35	2/6/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-35	2/6/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-35	2/6/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-35	2/6/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-35	2/6/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-35	2/6/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-35	2/6/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-35	2/6/2020	Ethylbenzene	**770**	10	1.3	700	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-35	2/6/2020	Isopropylbenzene	15	10	1.9	447	ug/L
MKTF-35	2/6/2020	MTBE	**320**	10	4.6	143	ug/L
MKTF-35	2/6/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-35	2/6/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-35	2/6/2020	n-Propylbenzene	35	10	2.1	660	ug/L
MKTF-35	2/6/2020	Naphthalene	**86**	20	2.8	30	ug/L
MKTF-35	2/6/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-35	2/6/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-35	2/6/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-35	2/6/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-35	2/6/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-35	2/6/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-35	2/6/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-35	2/6/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-35	2/6/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-35	2/6/2020	Xylenes, Total	**1700**	15	4.5	620	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-35	9/16/2020	Benzene	**4000**	100	23	5	ug/L
MKTF-35	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-35	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-35	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-35	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
MKTF-35	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-35	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-35	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	1,2,4-Trimethylbenzene	**290**	10	1.2	56	ug/L
MKTF-35	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-35	9/16/2020	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-35	9/16/2020	1,3,5-Trimethylbenzene	7.4	10	1.8	60	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-35	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	3.1	10	2.1	75	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	9.4	40	8.4	NA	ug/L
MKTF-35	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-35	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-35	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-35	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	**11**	40	6.9		ug/L
MKTF-35	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-35	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
MKTF-35	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-35	9/16/2020	Acetone	27	100	23	14064	ug/L
MKTF-35	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-35	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
MKTF-35	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-35	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-35	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-35	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-35	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-35	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-35	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-35	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
MKTF-35	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-35	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-35	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-35	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-35	9/16/2020	Ethylbenzene	640	10	2.1	700	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-35	9/16/2020	Isopropylbenzene	20	10	1.8	447	ug/L
MKTF-35	9/16/2020	MTBE	**160**	10	3.9	143	ug/L
MKTF-35	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-35	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-35	9/16/2020	n-Propylbenzene	54	10	1.8	660	ug/L
MKTF-35	9/16/2020	Naphthalene	**71**	20	2.8	30	ug/L
MKTF-35	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
MKTF-35	9/16/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-35	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-35	9/16/2020	Toluene	130	10	2	1000	ug/L
MKTF-35	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-35	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-35	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-35	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-35	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-35	9/16/2020	Xylenes, Total	**910**	15	5.5	620	ug/L
MKTF-35	9/16/2020	Benzene	**4100**	50	23	5	ug/L
MKTF-35	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-35	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-35	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-35	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
MKTF-35	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-35	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-35	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
MKTF-35	9/16/2020	1,2,4-Trimethylbenzene	**290**	10	1.2	56	ug/L
MKTF-35	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-35	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
MKTF-35	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-35	9/16/2020	1,3,5-Trimethylbenzene	8.1	10	1.8	60	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-35	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	3.2	10	2.1	75	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-35	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-35	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-35	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	**9.9**	40	6.9		ug/L
MKTF-35	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-35	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
MKTF-35	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-35	9/16/2020	Acetone	ND	100	23	14064	ug/L
MKTF-35	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-35	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
MKTF-35	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-35	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-35	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-35	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-35	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-35	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-35	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-35	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
MKTF-35	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-35	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-35	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-35	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-35	9/16/2020	Ethylbenzene	650	10	2.1	700	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-35	9/16/2020	Isopropylbenzene	20	10	1.8	447	ug/L
MKTF-35	9/16/2020	MTBE	**160**	10	3.9	143	ug/L
MKTF-35	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-35	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-35	9/16/2020	n-Propylbenzene	55	10	1.8	660	ug/L
MKTF-35	9/16/2020	Naphthalene	**66**	20	2.8	30	ug/L
MKTF-35	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
MKTF-35	9/16/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-35	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-35	9/16/2020	Toluene	150	10	2	1000	ug/L
MKTF-35	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-35	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-35	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-35	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-35	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-35	9/16/2020	Xylenes, Total	**940**	15	5.5	620	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-36	11/21/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-36	11/21/2014	Acetone	ND	100	49	14064	ug/L
MKTF-36	11/21/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-36	11/21/2014	Benzene	**8400**	200	31	5	ug/L
MKTF-36	11/21/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-36	11/21/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-36	11/21/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-36	11/21/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-36	11/21/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-36	11/21/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-36	11/21/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-36	11/21/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-36	11/21/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-36	11/21/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-36	11/21/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-36	11/21/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-36	11/21/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	11/21/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-36	11/21/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-36	11/21/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-36	11/21/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-36	11/21/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-36	11/21/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-36	11/21/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-36	11/21/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-36	11/21/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-36	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-36	11/21/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-36	11/21/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-36	11/21/2014	Isopropylbenzene	41	10	1.6	447	ug/L
MKTF-36	11/21/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/21/2014	Ethylbenzene	**1500**	200	25	700	ug/L
MKTF-36	11/21/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-36	11/21/2014	n-Propylbenzene	99	10	1.4	660	ug/L
MKTF-36	11/21/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-36	11/21/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-36	11/21/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-36	11/21/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-36	11/21/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-36	11/21/2014	1,3,5-Trimethylbenzene	**62**	10	1.3	60	ug/L
MKTF-36	11/21/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-36	11/21/2014	Toluene	32	10	1.7	1000	ug/L
MKTF-36	11/21/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-36	11/21/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-36	11/21/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-36	11/21/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-36	11/21/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-36	11/21/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-36	11/21/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-36	11/21/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-36	11/21/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-36	11/21/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-36	11/21/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-36	11/21/2014	Xylenes, Total	560	15	3.8	620	ug/L
MKTF-36	11/21/2014	MTBE	**7200**	200	50	143	ug/L
MKTF-36	11/21/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-36	11/21/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-36	3/17/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-36	3/17/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-36	3/17/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-36	3/17/2015	Benzene	**8300**	1000	65	5	ug/L
MKTF-36	3/17/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-36	3/17/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-36	3/17/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-36	3/17/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-36	3/17/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-36	3/17/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-36	3/17/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-36	3/17/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-36	3/17/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-36	3/17/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-36	3/17/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-36	3/17/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-36	3/17/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	3/17/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-36	3/17/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-36	3/17/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-36	3/17/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-36	3/17/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	3/17/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-36	3/17/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	3/17/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-36	3/17/2015	1,2,4-Trimethylbenzene	31	10	1.6	56	ug/L
MKTF-36	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-36	3/17/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-36	3/17/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-36	3/17/2015	Isopropylbenzene	30	10	1.5	447	ug/L
MKTF-36	3/17/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Ethylbenzene	**1400**	100	10	700	ug/L
MKTF-36	3/17/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-36	3/17/2015	n-Propylbenzene	81	10	1.6	660	ug/L
MKTF-36	3/17/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-36	3/17/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-36	3/17/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-36	3/17/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-36	3/17/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-36	3/17/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-36	3/17/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-36	3/17/2015	Toluene	23	10	1.1	1000	ug/L
MKTF-36	3/17/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-36	3/17/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-36	3/17/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	3/17/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-36	3/17/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-36	3/17/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-36	3/17/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-36	3/17/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/17/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-36	3/17/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-36	3/17/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	3/17/2015	Xylenes, Total	78	15	2.8	620	ug/L
MKTF-36	3/17/2015	MTBE	**8300**	1000	170	143	ug/L
MKTF-36	3/17/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	3/17/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	6/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-36	6/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-36	6/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-36	6/4/2015	Benzene	**8100**	100	6.5	5	ug/L
MKTF-36	6/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-36	6/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-36	6/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-36	6/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-36	6/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-36	6/4/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-36	6/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-36	6/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-36	6/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-36	6/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-36	6/4/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-36	6/4/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-36	6/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-36	6/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-36	6/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-36	6/4/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-36	6/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-36	6/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-36	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-36	6/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-36	6/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-36	6/4/2015	1,2,4-Trimethylbenzene	**65**	20	3.2	56	ug/L
MKTF-36	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-36	6/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-36	6/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-36	6/4/2015	Isopropylbenzene	44	20	3	447	ug/L
MKTF-36	6/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-36	6/4/2015	Ethylbenzene	**1600**	20	2	700	ug/L
MKTF-36	6/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-36	6/4/2015	n-Propylbenzene	91	20	3.3	660	ug/L
MKTF-36	6/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-36	6/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-36	6/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-36	6/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-36	6/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-36	6/4/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-36	6/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-36	6/4/2015	Toluene	34	20	2.2	1000	ug/L
MKTF-36	6/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-36	6/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-36	6/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-36	6/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-36	6/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-36	6/4/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-36	6/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-36	6/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-36	6/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-36	6/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-36	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-36	6/4/2015	Xylenes, Total	140	30	5.6	620	ug/L
MKTF-36	6/4/2015	MTBE	**8400**	100	17	143	ug/L
MKTF-36	6/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-36	6/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-36	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-36	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-36	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-36	8/18/2015	Benzene	**9000**	200	13	5	ug/L
MKTF-36	8/18/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-36	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-36	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-36	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-36	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-36	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-36	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-36	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-36	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-36	8/18/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-36	8/18/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-36	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-36	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-36	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-36	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-36	8/18/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-36	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-36	8/18/2015	1,2,4-Trimethylbenzene	32	10	1.6	56	ug/L
MKTF-36	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-36	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-36	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-36	8/18/2015	Isopropylbenzene	33	10	1.5	447	ug/L
MKTF-36	8/18/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Ethylbenzene	**1600**	100	10	700	ug/L
MKTF-36	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-36	8/18/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-36	8/18/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-36	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-36	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-36	8/18/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-36	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-36	8/18/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-36	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-36	8/18/2015	Toluene	33	10	1.1	1000	ug/L
MKTF-36	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-36	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-36	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	8/18/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-36	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-36	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-36	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-36	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-36	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-36	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	8/18/2015	Xylenes, Total	64	15	2.8	620	ug/L
MKTF-36	8/18/2015	MTBE	**8000**	100	17	143	ug/L
MKTF-36	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	11/8/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-36	11/8/2016	Acetone	ND	100	49	14064	ug/L
MKTF-36	11/8/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-36	11/8/2016	Benzene	**8400**	100	9.6	5	ug/L
MKTF-36	11/8/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-36	11/8/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-36	11/8/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-36	11/8/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-36	11/8/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-36	11/8/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-36	11/8/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-36	11/8/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-36	11/8/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-36	11/8/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-36	11/8/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-36	11/8/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-36	11/8/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-36	11/8/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-36	11/8/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-36	11/8/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-36	11/8/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-36	11/8/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-36	11/8/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-36	11/8/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-36	11/8/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-36	11/8/2016	1,2,4-Trimethylbenzene	**60**	10	1.1	56	ug/L
MKTF-36	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-36	11/8/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-36	11/8/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-36	11/8/2016	Isopropylbenzene	28	10	1	447	ug/L
MKTF-36	11/8/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/8/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-36	11/8/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-36	11/8/2016	n-Propylbenzene	64	10	1.3	660	ug/L
MKTF-36	11/8/2016	n-Butylbenzene	8	30	1.6	1000	ug/L
MKTF-36	11/8/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-36	11/8/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-36	11/8/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-36	11/8/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-36	11/8/2016	1,3,5-Trimethylbenzene	13	10	1.2	60	ug/L
MKTF-36	11/8/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-36	11/8/2016	Toluene	21	10	1.2	1000	ug/L
MKTF-36	11/8/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-36	11/8/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-36	11/8/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-36	11/8/2016	sec-Butylbenzene	5.8	10	1.2	2000	ug/L
MKTF-36	11/8/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-36	11/8/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-36	11/8/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-36	11/8/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	11/8/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-36	11/8/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-36	11/8/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	11/8/2016	Xylenes, Total	130	15	3.7	620	ug/L
MKTF-36	11/8/2016	MTBE	**6000**	100	21	143	ug/L
MKTF-36	11/8/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	11/8/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-36	3/1/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	3/1/2017	Acetone	ND	500	44	14064	ug/L
MKTF-36	3/1/2017	Chloroform	ND	50	4.4	100	ug/L
MKTF-36	3/1/2017	Benzene	**8600**	500	48	5	ug/L
MKTF-36	3/1/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	3/1/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-36	3/1/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-36	3/1/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-36	3/1/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	3/1/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	3/1/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	3/1/2017	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-36	3/1/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	3/1/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	3/1/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
MKTF-36	3/1/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	3/1/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	3/1/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-36	3/1/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	3/1/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	3/1/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	3/1/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-36	3/1/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	3/1/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-36	3/1/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	3/1/2017	1,2,4-Trimethylbenzene	19	50	5.2	56	ug/L
MKTF-36	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	3/1/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	3/1/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	3/1/2017	Isopropylbenzene	31	50	4.9	447	ug/L
MKTF-36	3/1/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-36	3/1/2017	Ethylbenzene	**1400**	50	5.6	700	ug/L
MKTF-36	3/1/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	3/1/2017	n-Propylbenzene	78	50	6.6	660	ug/L
MKTF-36	3/1/2017	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-36	3/1/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	3/1/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	3/1/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-36	3/1/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	3/1/2017	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
MKTF-36	3/1/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	3/1/2017	Toluene	13	50	4.5	1000	ug/L
MKTF-36	3/1/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	3/1/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
MKTF-36	3/1/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-36	3/1/2017	sec-Butylbenzene	18	50	5.1	2000	ug/L
MKTF-36	3/1/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-36	3/1/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	3/1/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	3/1/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/1/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	3/1/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-36	3/1/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-36	3/1/2017	Xylenes, Total	32	75	16	620	ug/L
MKTF-36	3/1/2017	MTBE	**8000**	50	7.4	143	ug/L
MKTF-36	3/1/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-36	3/1/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
MKTF-36	6/14/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	6/14/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	6/14/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	6/14/2017	Benzene	**9400**	500	31	5	ug/L
MKTF-36	6/14/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	6/14/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	6/14/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	6/14/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	6/14/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	6/14/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	6/14/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	6/14/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	6/14/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	6/14/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	6/14/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	6/14/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	6/14/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	6/14/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	6/14/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	6/14/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	6/14/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	6/14/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	6/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	6/14/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	6/14/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	6/14/2017	1,2,4-Trimethylbenzene	**120**	50	5.6	56	ug/L
MKTF-36	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	6/14/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	6/14/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	6/14/2017	Isopropylbenzene	28	50	2.6	447	ug/L
MKTF-36	6/14/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	6/14/2017	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-36	6/14/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	6/14/2017	n-Propylbenzene	85	50	3.7	660	ug/L
MKTF-36	6/14/2017	n-Butylbenzene	7.6	150	6.5	1000	ug/L
MKTF-36	6/14/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	6/14/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	6/14/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	6/14/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	6/14/2017	1,3,5-Trimethylbenzene	24	50	4.4	60	ug/L
MKTF-36	6/14/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	6/14/2017	Toluene	17	50	3.2	1000	ug/L
MKTF-36	6/14/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	6/14/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	6/14/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	6/14/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-36	6/14/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	6/14/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	6/14/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-36	6/14/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	6/14/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	6/14/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	6/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	6/14/2017	Xylenes, Total	270	75	16	620	ug/L
MKTF-36	6/14/2017	MTBE	**3900**	50	12	143	ug/L
MKTF-36	6/14/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	6/14/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	9/27/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	9/27/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	9/27/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	9/27/2017	Benzene	**9100**	500	31	5	ug/L
MKTF-36	9/27/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	9/27/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	9/27/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	9/27/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	9/27/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	9/27/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	9/27/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/27/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	9/27/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	9/27/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	9/27/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	9/27/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	9/27/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	9/27/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	9/27/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	9/27/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	9/27/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	9/27/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	9/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	9/27/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	9/27/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	9/27/2017	1,2,4-Trimethylbenzene	23	50	5.6	56	ug/L
MKTF-36	9/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	9/27/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	9/27/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	9/27/2017	Isopropylbenzene	32	50	2.6	447	ug/L
MKTF-36	9/27/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	9/27/2017	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-36	9/27/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	9/27/2017	n-Propylbenzene	67	50	3.7	660	ug/L
MKTF-36	9/27/2017	n-Butylbenzene	11	150	6.5	1000	ug/L
MKTF-36	9/27/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	9/27/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	9/27/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	9/27/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	9/27/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
MKTF-36	9/27/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	9/27/2017	Toluene	23	50	3.2	1000	ug/L
MKTF-36	9/27/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	9/27/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	9/27/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	9/27/2017	sec-Butylbenzene	6.4	50	5.5	2000	ug/L
MKTF-36	9/27/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	9/27/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	9/27/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	9/27/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	9/27/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	9/27/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	9/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	9/27/2017	Xylenes, Total	67	75	16	620	ug/L
MKTF-36	9/27/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-36	9/27/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	9/27/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	11/30/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	11/30/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	11/30/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	11/30/2017	Benzene	**9500**	500	31	5	ug/L
MKTF-36	11/30/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	11/30/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	11/30/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	11/30/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	11/30/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	11/30/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	11/30/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	11/30/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	11/30/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	11/30/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	11/30/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	11/30/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	11/30/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	11/30/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	11/30/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	11/30/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	11/30/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	11/30/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	11/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	11/30/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	11/30/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	11/30/2017	1,2,4-Trimethylbenzene	**64**	50	5.6	56	ug/L
MKTF-36	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	11/30/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	11/30/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	11/30/2017	Isopropylbenzene	40	50	2.6	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/30/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	11/30/2017	Ethylbenzene	**1700**	50	4.7	700	ug/L
MKTF-36	11/30/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	11/30/2017	n-Propylbenzene	83	50	3.7	660	ug/L
MKTF-36	11/30/2017	n-Butylbenzene	18	150	6.5	1000	ug/L
MKTF-36	11/30/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	11/30/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	11/30/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	11/30/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	11/30/2017	1,3,5-Trimethylbenzene	14	50	4.4	60	ug/L
MKTF-36	11/30/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	11/30/2017	Toluene	30	50	3.2	1000	ug/L
MKTF-36	11/30/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	11/30/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	11/30/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	11/30/2017	sec-Butylbenzene	11	50	5.5	2000	ug/L
MKTF-36	11/30/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	11/30/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	11/30/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	11/30/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	11/30/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	11/30/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	11/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	11/30/2017	Xylenes, Total	220	75	16	620	ug/L
MKTF-36	11/30/2017	MTBE	**2900**	50	12	143	ug/L
MKTF-36	11/30/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	11/30/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	2/15/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	2/15/2018	Acetone	ND	500	41	14064	ug/L
MKTF-36	2/15/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	2/15/2018	Benzene	**8400**	500	31	5	ug/L
MKTF-36	2/15/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	2/15/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	2/15/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	2/15/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	2/15/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	2/15/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	2/15/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	2/15/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	2/15/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	2/15/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	2/15/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	2/15/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	2/15/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	2/15/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	2/15/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	2/15/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	2/15/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	2/15/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	2/15/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	2/15/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	2/15/2018	1,2,4-Trimethylbenzene	39	50	5.6	56	ug/L
MKTF-36	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	2/15/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	2/15/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	2/15/2018	Isopropylbenzene	35	50	2.6	447	ug/L
MKTF-36	2/15/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	2/15/2018	Ethylbenzene	**1500**	50	4.7	700	ug/L
MKTF-36	2/15/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-36	2/15/2018	n-Propylbenzene	74	50	3.7	660	ug/L
MKTF-36	2/15/2018	n-Butylbenzene	11	150	6.5	1000	ug/L
MKTF-36	2/15/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	2/15/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	2/15/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	2/15/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	2/15/2018	1,3,5-Trimethylbenzene	4.8	50	4.4	60	ug/L
MKTF-36	2/15/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	2/15/2018	Toluene	20	50	3.2	1000	ug/L
MKTF-36	2/15/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	2/15/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	2/15/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	2/15/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-36	2/15/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	2/15/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	2/15/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	2/15/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	2/15/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	2/15/2018	Xylenes, Total	160	*75*	16	620	ug/L
MKTF-36	2/15/2018	MTBE	**2500**	50	12	143	ug/L
MKTF-36	2/15/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	2/15/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	5/3/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	5/3/2018	Acetone	ND	500	41	14064	ug/L
MKTF-36	5/3/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	5/3/2018	Benzene	**9400**	500	31	5	ug/L
MKTF-36	5/3/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	5/3/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	5/3/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	5/3/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	5/3/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	5/3/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	5/3/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	5/3/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	5/3/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	5/3/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	5/3/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	5/3/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	5/3/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	5/3/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	5/3/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	5/3/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	5/3/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	5/3/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	5/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	5/3/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	5/3/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	5/3/2018	1,2,4-Trimethylbenzene	42	50	5.6	56	ug/L
MKTF-36	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	5/3/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	5/3/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	5/3/2018	Isopropylbenzene	43	50	2.6	447	ug/L
MKTF-36	5/3/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	5/3/2018	Ethylbenzene	**1900**	50	4.7	700	ug/L
MKTF-36	5/3/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-36	5/3/2018	n-Propylbenzene	90	50	3.7	660	ug/L
MKTF-36	5/3/2018	n-Butylbenzene	13	150	6.5	1000	ug/L
MKTF-36	5/3/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	5/3/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	5/3/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	5/3/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	5/3/2018	1,3,5-Trimethylbenzene	5.7	50	4.4	60	ug/L
MKTF-36	5/3/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	5/3/2018	Toluene	30	50	3.2	1000	ug/L
MKTF-36	5/3/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	5/3/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	5/3/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	5/3/2018	sec-Butylbenzene	7	50	5.5	2000	ug/L
MKTF-36	5/3/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	5/3/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	5/3/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	5/3/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	5/3/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	5/3/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	5/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	5/3/2018	Xylenes, Total	190	75	16	620	ug/L
MKTF-36	5/3/2018	MTBE	**2100**	50	12	143	ug/L
MKTF-36	5/3/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	5/3/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	9/5/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-36	9/5/2018	Acetone	ND	500	39	14064	ug/L
MKTF-36	9/5/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	9/5/2018	Benzene	**7400**	500	87	5	ug/L
MKTF-36	9/5/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-36	9/5/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	9/5/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	9/5/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-36	9/5/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-36	9/5/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
MKTF-36	9/5/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/5/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-36	9/5/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-36	9/5/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-36	9/5/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	9/5/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-36	9/5/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-36	9/5/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	9/5/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-36	9/5/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-36	9/5/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-36	9/5/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-36	9/5/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-36	9/5/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-36	9/5/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	9/5/2018	1,2,4-Trimethylbenzene	39	50	13	56	ug/L
MKTF-36	9/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-36	9/5/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-36	9/5/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-36	9/5/2018	Isopropylbenzene	36	50	11	447	ug/L
MKTF-36	9/5/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-36	9/5/2018	Ethylbenzene	**1500**	50	11	700	ug/L
MKTF-36	9/5/2018	Styrene	ND	50	13	100	ug/L
MKTF-36	9/5/2018	n-Propylbenzene	80	50	12	660	ug/L
MKTF-36	9/5/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-36	9/5/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	9/5/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-36	9/5/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	9/5/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-36	9/5/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
MKTF-36	9/5/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-36	9/5/2018	Toluene	19	50	8.4	1000	ug/L
MKTF-36	9/5/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-36	9/5/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-36	9/5/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-36	9/5/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-36	9/5/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-36	9/5/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-36	9/5/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	9/5/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-36	9/5/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-36	9/5/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-36	9/5/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-36	9/5/2018	Xylenes, Total	110	75	32	620	ug/L
MKTF-36	9/5/2018	MTBE	**1300**	50	16	143	ug/L
MKTF-36	9/5/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-36	9/5/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-36	9/18/2020	Benzene	**9700**	200	45	5	ug/L
MKTF-36	9/18/2020	Ethylbenzene	**2100**	200	43	700	ug/L
MKTF-36	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-36	9/18/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-36	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-36	9/18/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-36	9/18/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
MKTF-36	9/18/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
MKTF-36	9/18/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-36	9/18/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-36	9/18/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-36	9/18/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-36	9/18/2020	1,2,4-Trimethylbenzene	**650**	20	2.4	56	ug/L
MKTF-36	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-36	9/18/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-36	9/18/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-36	9/18/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-36	9/18/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-36	9/18/2020	1,3,5-Trimethylbenzene	**170**	20	3.6	60	ug/L
MKTF-36	9/18/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-36	9/18/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-36	9/18/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-36	9/18/2020	1-Methylnaphthalene	250	80	17	NA	ug/L
MKTF-36	9/18/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-36	9/18/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-36	9/18/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-36	9/18/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-36	9/18/2020	2-Methylnaphthalene	**420**	80	14		ug/L
MKTF-36	9/18/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-36	9/18/2020	p-Isopropyltoluene	4.2	20	4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-36	9/18/2020	Acetone	ND	200	47	14064	ug/L
MKTF-36	9/18/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-36	9/18/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-36	9/18/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-36	9/18/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-36	9/18/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-36	9/18/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-36	9/18/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-36	9/18/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-36	9/18/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-36	9/18/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-36	9/18/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-36	9/18/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-36	9/18/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-36	9/18/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-36	9/18/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-36	9/18/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-36	9/18/2020	Isopropylbenzene	73	20	3.7	447	ug/L
MKTF-36	9/18/2020	MTBE	**940**	20	7.9	143	ug/L
MKTF-36	9/18/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-36	9/18/2020	n-Butylbenzene	22	60	5.1	1000	ug/L
MKTF-36	9/18/2020	n-Propylbenzene	190	20	3.6	660	ug/L
MKTF-36	9/18/2020	Naphthalene	**610**	40	5.6	30	ug/L
MKTF-36	9/18/2020	sec-Butylbenzene	13	20	12	2000	ug/L
MKTF-36	9/18/2020	Styrene	3.3	20	2.6	100	ug/L
MKTF-36	9/18/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-36	9/18/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-36	9/18/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-36	9/18/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-36	9/18/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-36	9/18/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-36	9/18/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-36	9/18/2020	Xylenes, Total	**4400**	30	11	620	ug/L
MKTF-36	9/18/2020	Toluene	**22000**	2000	400	1000	ug/L
MKTF-36	9/18/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-37	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-37	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-37	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-37	11/21/2014	Benzene	**140**	20	3.1	5	ug/L
MKTF-37	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-37	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-37	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-37	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-37	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-37	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-37	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-37	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-37	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-37	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-37	11/21/2014	1,1-Dichloroethane	**34**	1	0.28	25	ug/L
MKTF-37	11/21/2014	1,1-Dichloroethene	**210**	20	4.3	7	ug/L
MKTF-37	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-37	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-37	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-37	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-37	11/21/2014	1,1,2-Trichloroethane	1.7	1	0.14	5	ug/L
MKTF-37	11/21/2014	Trichloroethene	**300**	20	3.9	5	ug/L
MKTF-37	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-37	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-37	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-37	11/21/2014	1,2,4-Trimethylbenzene	**510**	20	2.5	56	ug/L
MKTF-37	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-37	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-37	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-37	11/21/2014	Isopropylbenzene	78	1	0.16	447	ug/L
MKTF-37	11/21/2014	p-Isopropyltoluene	4.8	1	0.18	NA	ug/L
MKTF-37	11/21/2014	Ethylbenzene	9.3	1	0.13	700	ug/L
MKTF-37	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-37	11/21/2014	n-Propylbenzene	82	1	0.14	660	ug/L
MKTF-37	11/21/2014	n-Butylbenzene	26	3	0.21	1000	ug/L
MKTF-37	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-37	11/21/2014	1,2-Dibromoethane	**1.5**	1	0.1	0.05	ug/L
MKTF-37	11/21/2014	1,2-Dichloroethane	**17**	1	0.26	5	ug/L
MKTF-37	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-37	11/21/2014	1,3,5-Trimethylbenzene	**140**	20	2.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-37	11/21/2014	Toluene	200	20	3.4	1000	ug/L
MKTF-37	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-37	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-37	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-37	11/21/2014	sec-Butylbenzene	11	1	0.15	2000	ug/L
MKTF-37	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-37	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-37	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-37	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-37	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-37	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-37	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-37	11/21/2014	Xylenes, Total	**1300**	30	7.5	620	ug/L
MKTF-37	11/21/2014	MTBE	27	1	0.25	143	ug/L
MKTF-37	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-37	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-37	3/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-37	3/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-37	3/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-37	3/17/2015	Benzene	**820**	100	6.5	5	ug/L
MKTF-37	3/17/2015	1,1,1-Trichloroethane	8.7	1	0.078	200	ug/L
MKTF-37	3/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-37	3/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-37	3/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-37	3/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-37	3/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-37	3/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-37	3/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-37	3/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-37	3/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-37	3/17/2015	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-37	3/17/2015	1,1-Dichloroethene	**81**	10	0.99	7	ug/L
MKTF-37	3/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-37	3/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-37	3/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-37	3/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-37	3/17/2015	1,1,2-Trichloroethane	2.2	1	0.079	5	ug/L
MKTF-37	3/17/2015	Trichloroethene	**120**	10	1.6	5	ug/L
MKTF-37	3/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-37	3/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-37	3/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-37	3/17/2015	1,2,4-Trimethylbenzene	**240**	10	1.6	56	ug/L
MKTF-37	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-37	3/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-37	3/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-37	3/17/2015	Isopropylbenzene	47	1	0.15	447	ug/L
MKTF-37	3/17/2015	p-Isopropyltoluene	4.5	1	0.19	NA	ug/L
MKTF-37	3/17/2015	Ethylbenzene	29	1	0.1	700	ug/L
MKTF-37	3/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-37	3/17/2015	n-Propylbenzene	56	10	1.6	660	ug/L
MKTF-37	3/17/2015	n-Butylbenzene	20	3	0.25	1000	ug/L
MKTF-37	3/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-37	3/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-37	3/17/2015	1,2-Dichloroethane	**9.1**	1	0.18	5	ug/L
MKTF-37	3/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-37	3/17/2015	1,3,5-Trimethylbenzene	**110**	10	1.2	60	ug/L
MKTF-37	3/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-37	3/17/2015	Toluene	270	10	1.1	1000	ug/L
MKTF-37	3/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-37	3/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-37	3/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-37	3/17/2015	sec-Butylbenzene	7.3	1	0.23	2000	ug/L
MKTF-37	3/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-37	3/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-37	3/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-37	3/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-37	3/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-37	3/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-37	3/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-37	3/17/2015	Xylenes, Total	490	15	2.8	620	ug/L
MKTF-37	3/17/2015	MTBE	57	1	0.17	143	ug/L
MKTF-37	3/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-37	3/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-37	6/4/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-37	6/4/2015	Acetone	ND	100	9.4	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	6/4/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-37	6/4/2015	Benzene	**1200**	100	6.5	5	ug/L
MKTF-37	6/4/2015	1,1,1-Trichloroethane	19	10	0.78	200	ug/L
MKTF-37	6/4/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-37	6/4/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-37	6/4/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-37	6/4/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-37	6/4/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-37	6/4/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-37	6/4/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-37	6/4/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-37	6/4/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-37	6/4/2015	1,1-Dichloroethane	15	10	4	25	ug/L
MKTF-37	6/4/2015	1,1-Dichloroethene	**100**	10	0.99	7	ug/L
MKTF-37	6/4/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-37	6/4/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-37	6/4/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	6/4/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-37	6/4/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-37	6/4/2015	Trichloroethene	**170**	10	1.6	5	ug/L
MKTF-37	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-37	6/4/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	6/4/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-37	6/4/2015	1,2,4-Trimethylbenzene	**950**	100	16	56	ug/L
MKTF-37	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-37	6/4/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-37	6/4/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-37	6/4/2015	Isopropylbenzene	150	10	1.5	447	ug/L
MKTF-37	6/4/2015	p-Isopropyltoluene	21	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Ethylbenzene	17	10	1	700	ug/L
MKTF-37	6/4/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-37	6/4/2015	n-Propylbenzene	190	10	1.6	660	ug/L
MKTF-37	6/4/2015	n-Butylbenzene	140	30	2.5	1000	ug/L
MKTF-37	6/4/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-37	6/4/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	6/4/2015	1,2-Dichloroethane	**11**	10	1.8	5	ug/L
MKTF-37	6/4/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-37	6/4/2015	1,3,5-Trimethylbenzene	**330**	10	1.2	60	ug/L
MKTF-37	6/4/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-37	6/4/2015	Toluene	58	10	1.1	1000	ug/L
MKTF-37	6/4/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-37	6/4/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-37	6/4/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-37	6/4/2015	sec-Butylbenzene	45	10	2.3	2000	ug/L
MKTF-37	6/4/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	6/4/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-37	6/4/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-37	6/4/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-37	6/4/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-37	6/4/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-37	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	6/4/2015	Xylenes, Total	**930**	15	2.8	620	ug/L
MKTF-37	6/4/2015	MTBE	54	10	1.7	143	ug/L
MKTF-37	6/4/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	6/4/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-37	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-37	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-37	8/18/2015	Benzene	**760**	10	0.65	5	ug/L
MKTF-37	8/18/2015	1,1,1-Trichloroethane	13	10	0.78	200	ug/L
MKTF-37	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-37	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-37	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-37	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-37	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-37	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-37	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-37	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-37	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-37	8/18/2015	1,1-Dichloroethane	18	10	4	25	ug/L
MKTF-37	8/18/2015	1,1-Dichloroethene	**100**	10	0.99	7	ug/L
MKTF-37	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-37	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-37	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-37	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/18/2015	Trichloroethene	**270**	10	1.6	5	ug/L
MKTF-37	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-37	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-37	8/18/2015	1,2,4-Trimethylbenzene	**880**	10	1.6	56	ug/L
MKTF-37	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-37	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-37	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-37	8/18/2015	Isopropylbenzene	200	10	1.5	447	ug/L
MKTF-37	8/18/2015	p-Isopropyltoluene	17	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Ethylbenzene	24	10	1	700	ug/L
MKTF-37	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-37	8/18/2015	n-Propylbenzene	180	10	1.6	660	ug/L
MKTF-37	8/18/2015	n-Butylbenzene	110	30	2.5	1000	ug/L
MKTF-37	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-37	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	8/18/2015	1,2-Dichloroethane	**13**	10	1.8	5	ug/L
MKTF-37	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-37	8/18/2015	1,3,5-Trimethylbenzene	**270**	10	1.2	60	ug/L
MKTF-37	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-37	8/18/2015	Toluene	140	10	1.1	1000	ug/L
MKTF-37	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-37	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-37	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-37	8/18/2015	sec-Butylbenzene	35	10	2.3	2000	ug/L
MKTF-37	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-37	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-37	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-37	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-37	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	8/18/2015	Xylenes, Total	**1600**	300	56	620	ug/L
MKTF-37	8/18/2015	MTBE	50	10	1.7	143	ug/L
MKTF-37	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	11/3/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-37	11/3/2016	Acetone	ND	100	49	14064	ug/L
MKTF-37	11/3/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-37	11/3/2016	Benzene	**960**	10	0.96	5	ug/L
MKTF-37	11/3/2016	1,1,1-Trichloroethane	8.1	10	0.91	200	ug/L
MKTF-37	11/3/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-37	11/3/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-37	11/3/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-37	11/3/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-37	11/3/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-37	11/3/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-37	11/3/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-37	11/3/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-37	11/3/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-37	11/3/2016	1,1-Dichloroethane	**26**	10	1.1	25	ug/L
MKTF-37	11/3/2016	1,1-Dichloroethene	**110**	10	1.1	7	ug/L
MKTF-37	11/3/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-37	11/3/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-37	11/3/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-37	11/3/2016	2-Butanone	35	100	7.4	5565	ug/L
MKTF-37	11/3/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-37	11/3/2016	Trichloroethene	**200**	10	1.8	5	ug/L
MKTF-37	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-37	11/3/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-37	11/3/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	11/3/2016	1,2,4-Trimethylbenzene	**470**	10	1.1	56	ug/L
MKTF-37	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-37	11/3/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-37	11/3/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-37	11/3/2016	Isopropylbenzene	73	10	1	447	ug/L
MKTF-37	11/3/2016	p-Isopropyltoluene	5.5	10	1.4	NA	ug/L
MKTF-37	11/3/2016	Ethylbenzene	14	10	1.1	700	ug/L
MKTF-37	11/3/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-37	11/3/2016	n-Propylbenzene	78	10	1.3	660	ug/L
MKTF-37	11/3/2016	n-Butylbenzene	27	30	1.6	1000	ug/L
MKTF-37	11/3/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-37	11/3/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-37	11/3/2016	1,2-Dichloroethane	**9.3**	10	1.2	5	ug/L
MKTF-37	11/3/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-37	11/3/2016	1,3,5-Trimethylbenzene	**70**	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/3/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-37	11/3/2016	Toluene	12	10	1.2	1000	ug/L
MKTF-37	11/3/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-37	11/3/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-37	11/3/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-37	11/3/2016	sec-Butylbenzene	11	10	1.2	2000	ug/L
MKTF-37	11/3/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-37	11/3/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-37	11/3/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-37	11/3/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	11/3/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-37	11/3/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-37	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	11/3/2016	Xylenes, Total	**840**	15	3.7	620	ug/L
MKTF-37	11/3/2016	MTBE	30	10	2.1	143	ug/L
MKTF-37	11/3/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	11/3/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-37	3/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-37	3/1/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-37	3/1/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-37	3/1/2017	Benzene	**2000**	50	4.8	5	ug/L
MKTF-37	3/1/2017	1,1,1-Trichloroethane	24	5	0.36	200	ug/L
MKTF-37	3/1/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-37	3/1/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-37	3/1/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-37	3/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-37	3/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-37	3/1/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-37	3/1/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-37	3/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-37	3/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-37	3/1/2017	1,1-Dichloroethane	16	5	0.52	25	ug/L
MKTF-37	3/1/2017	1,1-Dichloroethene	**95**	5	0.4	7	ug/L
MKTF-37	3/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-37	3/1/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-37	3/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-37	3/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-37	3/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-37	3/1/2017	Trichloroethene	**210**	5	0.88	5	ug/L
MKTF-37	3/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-37	3/1/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-37	3/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-37	3/1/2017	1,2,4-Trimethylbenzene	**770**	50	5.2	56	ug/L
MKTF-37	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-37	3/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-37	3/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-37	3/1/2017	Isopropylbenzene	82	5	0.49	447	ug/L
MKTF-37	3/1/2017	p-Isopropyltoluene	6.4	5	0.7	NA	ug/L
MKTF-37	3/1/2017	Ethylbenzene	24	5	0.56	700	ug/L
MKTF-37	3/1/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-37	3/1/2017	n-Propylbenzene	110	5	0.66	660	ug/L
MKTF-37	3/1/2017	n-Butylbenzene	49	15	0.8	1000	ug/L
MKTF-37	3/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-37	3/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-37	3/1/2017	1,2-Dichloroethane	**8.3**	5	0.58	5	ug/L
MKTF-37	3/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-37	3/1/2017	1,3,5-Trimethylbenzene	**100**	5	0.58	60	ug/L
MKTF-37	3/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-37	3/1/2017	Toluene	180	5	0.45	1000	ug/L
MKTF-37	3/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-37	3/1/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-37	3/1/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-37	3/1/2017	sec-Butylbenzene	15	5	0.51	2000	ug/L
MKTF-37	3/1/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-37	3/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-37	3/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-37	3/1/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-37	3/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-37	3/1/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-37	3/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-37	3/1/2017	Xylenes, Total	**960**	75	16	620	ug/L
MKTF-37	3/1/2017	MTBE	32	5	0.74	143	ug/L
MKTF-37	3/1/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-37	3/1/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-37	5/3/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-37	5/3/2018	Acetone	ND	100	8.2	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	Chloroform	ND	10	4	100	ug/L
MKTF-37	5/3/2018	Benzene	**2100**	100	6.2	5	ug/L
MKTF-37	5/3/2018	1,1,1-Trichloroethane	4.4	10	0.73	200	ug/L
MKTF-37	5/3/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-37	5/3/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-37	5/3/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-37	5/3/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-37	5/3/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-37	5/3/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-37	5/3/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-37	5/3/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-37	5/3/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-37	5/3/2018	1,1-Dichloroethane	18	10	4	25	ug/L
MKTF-37	5/3/2018	1,1-Dichloroethene	**67**	10	0.81	7	ug/L
MKTF-37	5/3/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-37	5/3/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-37	5/3/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-37	5/3/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-37	5/3/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-37	5/3/2018	Trichloroethene	**190**	10	1.1	5	ug/L
MKTF-37	5/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-37	5/3/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-37	5/3/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	5/3/2018	1,2,4-Trimethylbenzene	**630**	10	1.1	56	ug/L
MKTF-37	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-37	5/3/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-37	5/3/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-37	5/3/2018	Isopropylbenzene	84	10	0.51	447	ug/L
MKTF-37	5/3/2018	p-Isopropyltoluene	7.4	10	0.96	NA	ug/L
MKTF-37	5/3/2018	Ethylbenzene	78	10	0.93	700	ug/L
MKTF-37	5/3/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-37	5/3/2018	n-Propylbenzene	100	10	0.74	660	ug/L
MKTF-37	5/3/2018	n-Butylbenzene	40	30	1.3	1000	ug/L
MKTF-37	5/3/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-37	5/3/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	5/3/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-37	5/3/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-37	5/3/2018	1,3,5-Trimethylbenzene	36	10	0.87	60	ug/L
MKTF-37	5/3/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-37	5/3/2018	Toluene	50	10	0.64	1000	ug/L
MKTF-37	5/3/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-37	5/3/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-37	5/3/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-37	5/3/2018	sec-Butylbenzene	15	10	1.1	2000	ug/L
MKTF-37	5/3/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	5/3/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-37	5/3/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-37	5/3/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-37	5/3/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-37	5/3/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-37	5/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-37	5/3/2018	Xylenes, Total	580	15	3.2	620	ug/L
MKTF-37	5/3/2018	MTBE	41	10	2.4	143	ug/L
MKTF-37	5/3/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-37	5/3/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-37	8/23/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-37	8/23/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-37	8/23/2018	Chloroform	ND	10	4	100	ug/L
MKTF-37	8/23/2018	Benzene	**1300**	100	17	5	ug/L
MKTF-37	8/23/2018	1,1,1-Trichloroethane	5.5	10	1.5	200	ug/L
MKTF-37	8/23/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-37	8/23/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-37	8/23/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-37	8/23/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-37	8/23/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-37	8/23/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-37	8/23/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-37	8/23/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-37	8/23/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-37	8/23/2018	1,1-Dichloroethane	24	10	4	25	ug/L
MKTF-37	8/23/2018	1,1-Dichloroethene	**76**	10	1.2	7	ug/L
MKTF-37	8/23/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-37	8/23/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-37	8/23/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/23/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-37	8/23/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/23/2018	Trichloroethene	**200**	10	2.6	5	ug/L
MKTF-37	8/23/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-37	8/23/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-37	8/23/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	8/23/2018	1,2,4-Trimethylbenzene	**530**	10	2.5	56	ug/L
MKTF-37	8/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-37	8/23/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-37	8/23/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-37	8/23/2018	Isopropylbenzene	67	10	2.2	447	ug/L
MKTF-37	8/23/2018	p-Isopropyltoluene	6.3	10	2.4	NA	ug/L
MKTF-37	8/23/2018	Ethylbenzene	36	10	2.2	700	ug/L
MKTF-37	8/23/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-37	8/23/2018	n-Propylbenzene	88	10	2.4	660	ug/L
MKTF-37	8/23/2018	n-Butylbenzene	34	30	2.5	1000	ug/L
MKTF-37	8/23/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-37	8/23/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-37	8/23/2018	1,2-Dichloroethane	**14**	10	4	5	ug/L
MKTF-37	8/23/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-37	8/23/2018	1,3,5-Trimethylbenzene	35	10	2.3	60	ug/L
MKTF-37	8/23/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-37	8/23/2018	Toluene	14	10	1.7	1000	ug/L
MKTF-37	8/23/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-37	8/23/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-37	8/23/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/23/2018	sec-Butylbenzene	13	10	2	2000	ug/L
MKTF-37	8/23/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-37	8/23/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-37	8/23/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-37	8/23/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-37	8/23/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-37	8/23/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-37	8/23/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-37	8/23/2018	Xylenes, Total	370	15	6.4	620	ug/L
MKTF-37	8/23/2018	MTBE	37	10	3.2	143	ug/L
MKTF-37	8/23/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-37	8/23/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-37	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-37	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-37	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-37	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-37	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-37	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-37	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-37	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-37	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-37	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-37	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-37	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-37	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-37	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-37	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-37	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-37	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-37	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-37	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-37	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-37	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-37	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-37	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-37	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-37	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-37	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-37	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-37	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-37	5/14/2019	Acetone	6.4	10	1.199396	14064	ug/L
MKTF-37	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-37	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-37	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-37	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-37	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-37	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-37	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-37	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-37	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-37	5/14/2019	Chloroform	0.79	1	0.121891	100	ug/L
MKTF-37	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-37	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-37	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-37	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-37	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-37	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-37	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-37	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-37	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-37	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-37	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-37	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-37	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-37	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-37	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-37	5/14/2019	Tetrachloroethene	0.45	1	0.149525	5	ug/L
MKTF-37	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-37	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-37	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-37	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-37	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-37	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-37	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-37	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-37	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-37	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-37	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-37	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-37	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-37	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-37	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-37	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-37	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-37	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-37	5/14/2019	Acetone	5.2	10	1.199396	14064	ug/L
MKTF-37	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-37	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-37	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-37	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-37	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-37	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-37	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-37	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-37	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-37	5/14/2019	Chloroform	0.78	1	0.121891	100	ug/L
MKTF-37	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-37	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-37	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-37	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-37	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-37	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-37	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-37	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-37	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-37	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-37	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-37	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-37	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-37	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-37	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-37	5/14/2019	Tetrachloroethene	0.51	1	0.149525	5	ug/L
MKTF-37	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-37	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-37	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-37	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-37	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-37	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-37	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-37	9/17/2020	1,2,4-Trimethylbenzene	**580**	50	6.1	56	ug/L
MKTF-37	9/17/2020	Benzene	**1300**	50	11	5	ug/L
MKTF-37	9/17/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-37	9/17/2020	1,1,1-Trichloroethane	2.3	5	1.5	200	ug/L
MKTF-37	9/17/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-37	9/17/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-37	9/17/2020	1,1-Dichloroethane	8.1	5	1.4	25	ug/L
MKTF-37	9/17/2020	1,1-Dichloroethene	**33**	5	0.65	7	ug/L
MKTF-37	9/17/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-37	9/17/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-37	9/17/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-37	9/17/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-37	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-37	9/17/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-37	9/17/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-37	9/17/2020	1,2-Dichloroethane	**5.4**	5	1.1	5	ug/L
MKTF-37	9/17/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-37	9/17/2020	1,3,5-Trimethylbenzene	30	5	0.91	60	ug/L
MKTF-37	9/17/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-37	9/17/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-37	9/17/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-37	9/17/2020	1-Methylnaphthalene	53	20	4.2	NA	ug/L
MKTF-37	9/17/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-37	9/17/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-37	9/17/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-37	9/17/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-37	9/17/2020	2-Methylnaphthalene	**77**	20	3.5		ug/L
MKTF-37	9/17/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-37	9/17/2020	p-Isopropyltoluene	7.1	5	1	NA	ug/L
MKTF-37	9/17/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-37	9/17/2020	Acetone	ND	50	12	14064	ug/L
MKTF-37	9/17/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-37	9/17/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-37	9/17/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-37	9/17/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-37	9/17/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-37	9/17/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-37	9/17/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-37	9/17/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-37	9/17/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-37	9/17/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-37	9/17/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-37	9/17/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-37	9/17/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-37	9/17/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-37	9/17/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-37	9/17/2020	Ethylbenzene	81	5	1.1	700	ug/L
MKTF-37	9/17/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-37	9/17/2020	Isopropylbenzene	71	5	0.91	447	ug/L
MKTF-37	9/17/2020	MTBE	33	5	2	143	ug/L
MKTF-37	9/17/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-37	9/17/2020	n-Butylbenzene	39	15	1.3	1000	ug/L
MKTF-37	9/17/2020	n-Propylbenzene	89	5	0.91	660	ug/L
MKTF-37	9/17/2020	Naphthalene	**280**	10	1.4	30	ug/L
MKTF-37	9/17/2020	sec-Butylbenzene	14	5	3	2000	ug/L
MKTF-37	9/17/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-37	9/17/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-37	9/17/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-37	9/17/2020	Toluene	26	5	1	1000	ug/L
MKTF-37	9/17/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-37	9/17/2020	Trichloroethene	**96**	5	1	5	ug/L
MKTF-37	9/17/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-37	9/17/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-37	9/17/2020	Xylenes, Total	420	7.5	2.8	620	ug/L
MKTF-37	9/17/2020	1,2-Dibromoethane	0.012	0.0094	0.0062	0.05	ug/L
MKTF-38	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-38	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-38	11/21/2014	Benzene	2.8	1	0.15	5	ug/L
MKTF-38	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-38	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-38	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-38	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-38	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-38	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-38	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-38	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-38	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-38	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-38	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-38	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-38	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-38	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-38	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-38	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	11/21/2014	Trichloroethene	1.1	1	0.19	5	ug/L
MKTF-38	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-38	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-38	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	11/21/2014	1,2,4-Trimethylbenzene	4.6	1	0.12	56	ug/L
MKTF-38	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-38	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-38	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-38	11/21/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-38	11/21/2014	p-Isopropyltoluene	1.4	1	0.18	NA	ug/L
MKTF-38	11/21/2014	Ethylbenzene	2.9	1	0.13	700	ug/L
MKTF-38	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-38	11/21/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-38	11/21/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-38	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-38	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-38	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-38	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	11/21/2014	1,3,5-Trimethylbenzene	1.5	1	0.13	60	ug/L
MKTF-38	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-38	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-38	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-38	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-38	11/21/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-38	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-38	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-38	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-38	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-38	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-38	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-38	11/21/2014	Xylenes, Total	3.1	1.5	0.38	620	ug/L
MKTF-38	11/21/2014	MTBE	7.4	1	0.25	143	ug/L
MKTF-38	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-38	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	3/16/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	3/16/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	3/16/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	3/16/2015	Benzene	**9.2**	1	0.065	5	ug/L
MKTF-38	3/16/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	3/16/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	3/16/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	3/16/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	3/16/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	3/16/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	3/16/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	3/16/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	3/16/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/16/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	3/16/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	3/16/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	3/16/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	3/16/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	3/16/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	3/16/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	3/16/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	3/16/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	3/16/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	3/16/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	3/16/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	3/16/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	3/16/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	3/16/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	3/16/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	3/16/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	3/16/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	3/16/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	3/16/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	3/16/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	3/16/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	3/16/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	3/16/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	3/16/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	3/16/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	3/16/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	3/16/2015	Toluene	18	1	0.11	1000	ug/L
MKTF-38	3/16/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	3/16/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	3/16/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	3/16/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	3/16/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	3/16/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	3/16/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	3/16/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	3/16/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	3/16/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	3/16/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	3/16/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	3/16/2015	MTBE	6	1	0.17	143	ug/L
MKTF-38	3/16/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	3/16/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	6/10/2015	Benzene	**5.4**	1	0.065	5	ug/L
MKTF-38	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	6/10/2015	MTBE	7.6	1	0.17	143	ug/L
MKTF-38	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	8/24/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	8/24/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	8/24/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	8/24/2015	Benzene	1.7	1	0.065	5	ug/L
MKTF-38	8/24/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	8/24/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	8/24/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	8/24/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	8/24/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	8/24/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	8/24/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	8/24/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	8/24/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	8/24/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	8/24/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	8/24/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	8/24/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	8/24/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	8/24/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	8/24/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	8/24/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	8/24/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	8/24/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	8/24/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	8/24/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	8/24/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	8/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	8/24/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	8/24/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	8/24/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	8/24/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	8/24/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	8/24/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	8/24/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	8/24/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	8/24/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	8/24/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	8/24/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	8/24/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	8/24/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	8/24/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	8/24/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	8/24/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	8/24/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	8/24/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	8/24/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	8/24/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	8/24/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	8/24/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	8/24/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	8/24/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/24/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	8/24/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	8/24/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	8/24/2015	MTBE	7.3	1	0.17	143	ug/L
MKTF-38	8/24/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	8/24/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	11/9/2015	Benzene	1.3	1	0.065	5	ug/L
MKTF-38	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	11/9/2015	MTBE	4.3	1	0.17	143	ug/L
MKTF-38	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	2/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	2/29/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-38	2/29/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	2/29/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-38	2/29/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-38	2/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	2/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	2/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	2/29/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-38	2/29/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-38	2/29/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-38	2/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	2/29/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-38	2/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-38	2/29/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-38	2/29/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-38	2/29/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-38	2/29/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-38	2/29/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-38	2/29/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-38	2/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-38	2/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-38	2/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	2/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	2/29/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-38	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-38	2/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-38	2/29/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-38	2/29/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-38	2/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	2/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	2/29/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-38	2/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	2/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	2/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	2/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	2/29/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-38	2/29/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-38	2/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	2/29/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-38	2/29/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-38	2/29/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-38	2/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	2/29/2016	Tetrachloroethene	1.1	1	0.15	5	ug/L
MKTF-38	2/29/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	2/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	2/29/2016	cis-1,2-Dichloroethene	1.3	1	0.12	70	ug/L
MKTF-38	2/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	2/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	2/29/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-38	2/29/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-38	2/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	2/29/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	2/29/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-38	2/29/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	2/29/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-38	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	6/8/2016	Benzene	1.2	1	0.096	5	ug/L
MKTF-38	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	6/8/2016	Vinyl Chloride	0.67	1	0.2	2	ug/L
MKTF-38	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	6/8/2016	1,1-Dichloroethane	2.2	1	0.11	25	ug/L
MKTF-38	6/8/2016	1,1-Dichloroethene	0.39	1	0.11	7	ug/L
MKTF-38	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	6/8/2016	Trichloroethene	0.23	1	0.18	5	ug/L
MKTF-38	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	6/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	6/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	6/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	6/8/2016	Tetrachloroethene	0.9	1	0.15	5	ug/L
MKTF-38	6/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	6/8/2016	cis-1,2-Dichloroethene	2.3	1	0.12	70	ug/L
MKTF-38	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-38	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	6/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	6/8/2016	MTBE	0.52	1	0.21	143	ug/L
MKTF-38	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	9/13/2016	Benzene	0.93	1	0.096	5	ug/L
MKTF-38	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	9/13/2016	Bromomethane	1.1	3	0.78	7.54	ug/L
MKTF-38	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	9/13/2016	1,1-Dichloroethane	2.1	1	0.11	25	ug/L
MKTF-38	9/13/2016	1,1-Dichloroethene	0.49	1	0.11	7	ug/L
MKTF-38	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	9/13/2016	Trichloroethene	0.2	1	0.18	5	ug/L
MKTF-38	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	9/13/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	9/13/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	9/13/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	9/13/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	9/13/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	9/13/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	9/13/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	9/13/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	9/13/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	9/13/2016	Tetrachloroethene	0.21	1	0.15	5	ug/L
MKTF-38	9/13/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	9/13/2016	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-38	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	9/13/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	9/13/2016	MTBE	0.6	1	0.21	143	ug/L
MKTF-38	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	11/1/2016	Chloroform	0.13	1	0.089	100	ug/L
MKTF-38	11/1/2016	Benzene	0.39	1	0.096	5	ug/L
MKTF-38	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	11/1/2016	1,1-Dichloroethane	2.9	1	0.11	25	ug/L
MKTF-38	11/1/2016	1,1-Dichloroethene	0.53	1	0.11	7	ug/L
MKTF-38	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	11/1/2016	Trichloroethene	0.22	1	0.18	5	ug/L
MKTF-38	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	11/1/2016	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-38	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	11/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	11/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	11/1/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	11/1/2016	n-Propylbenzene	0.21	1	0.13	660	ug/L
MKTF-38	11/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	11/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	11/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	11/1/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	11/1/2016	Tetrachloroethene	0.2	1	0.15	5	ug/L
MKTF-38	11/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	11/1/2016	cis-1,2-Dichloroethene	2.4	1	0.12	70	ug/L
MKTF-38	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-38	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	11/1/2016	MTBE	1	1	0.21	143	ug/L
MKTF-38	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	3/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	3/14/2017	Acetone	1.7	10	0.88	14064	ug/L
MKTF-38	3/14/2017	Chloroform	0.16	1	0.089	100	ug/L
MKTF-38	3/14/2017	Benzene	0.17	1	0.096	5	ug/L
MKTF-38	3/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	3/14/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	3/14/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	3/14/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	3/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	3/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	3/14/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	3/14/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	3/14/2017	Bromoform	ND	1	0.21	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	3/14/2017	1,1-Dichloroethane	1	1	0.1	25	ug/L
MKTF-38	3/14/2017	1,1-Dichloroethene	0.19	1	0.081	7	ug/L
MKTF-38	3/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	3/14/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-38	3/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	3/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	3/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	3/14/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-38	3/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	3/14/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	3/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	3/14/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-38	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	3/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	3/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	3/14/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-38	3/14/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	3/14/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	3/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	3/14/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	3/14/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	3/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	3/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	3/14/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	3/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	3/14/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	3/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	3/14/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-38	3/14/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	3/14/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-38	3/14/2017	Tetrachloroethene	0.58	1	0.15	5	ug/L
MKTF-38	3/14/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-38	3/14/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	3/14/2017	cis-1,2-Dichloroethene	0.88	1	0.2	70	ug/L
MKTF-38	3/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	3/14/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	3/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	3/14/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-38	3/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	3/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	3/14/2017	MTBE	0.48	1	0.15	143	ug/L
MKTF-38	3/14/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	3/14/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-38	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	6/21/2017	Acetone	3.3	10	0.82	14064	ug/L
MKTF-38	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	6/21/2017	Benzene	0.79	1	0.062	5	ug/L
MKTF-38	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	6/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	6/21/2017	tert-Butylbenzene	0.22	1	0.1	690	ug/L
MKTF-38	6/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	6/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	6/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	6/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	6/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	6/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	6/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	6/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	6/21/2017	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-38	6/21/2017	sec-Butylbenzene	0.89	1	0.11	2000	ug/L
MKTF-38	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	6/21/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-38	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	6/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	6/21/2017	MTBE	0.68	1	0.24	143	ug/L
MKTF-38	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	9/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	9/28/2017	Acetone	5.8	10	0.82	14064	ug/L
MKTF-38	9/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	9/28/2017	Benzene	2	1	0.062	5	ug/L
MKTF-38	9/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	9/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	9/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	9/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	9/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	9/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	9/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	9/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	9/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	9/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	9/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	9/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	9/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	9/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	9/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	9/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	9/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	9/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	9/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	9/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	9/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	9/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	9/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	9/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	9/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	9/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	9/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	9/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	9/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	9/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	9/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	9/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	9/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	9/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	9/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	9/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	9/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	9/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	9/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	9/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-38	9/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	9/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	9/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	9/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	9/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	9/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	9/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	9/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	9/28/2017	MTBE	0.49	1	0.24	143	ug/L
MKTF-38	9/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	9/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	11/30/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	11/30/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	11/30/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	11/30/2017	Benzene	1.2	1	0.062	5	ug/L
MKTF-38	11/30/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	11/30/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	11/30/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	11/30/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	11/30/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	11/30/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	11/30/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	11/30/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	11/30/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	11/30/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	11/30/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	11/30/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	11/30/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	11/30/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	11/30/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	11/30/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	11/30/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	11/30/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	11/30/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	11/30/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	11/30/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	11/30/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	11/30/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	11/30/2017	tert-Butylbenzene	0.16	1	0.1	690	ug/L
MKTF-38	11/30/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	11/30/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	11/30/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	11/30/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	11/30/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	11/30/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	11/30/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	11/30/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	11/30/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	11/30/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	11/30/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	11/30/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	11/30/2017	Toluene	0.074	1	0.064	1000	ug/L
MKTF-38	11/30/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	11/30/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	11/30/2017	Tetrachloroethene	0.19	1	0.13	5	ug/L
MKTF-38	11/30/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	11/30/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	11/30/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	11/30/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	11/30/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	11/30/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	11/30/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	11/30/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	11/30/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	11/30/2017	MTBE	1	1	0.24	143	ug/L
MKTF-38	11/30/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	11/30/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	2/12/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	2/12/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	2/12/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	2/12/2018	Benzene	0.18	1	0.062	5	ug/L
MKTF-38	2/12/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	2/12/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	2/12/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	2/12/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	2/12/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	2/12/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	2/12/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	2/12/2018	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/12/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	2/12/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	2/12/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	2/12/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	2/12/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	2/12/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	2/12/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	2/12/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	2/12/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	2/12/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	2/12/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	2/12/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	2/12/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	2/12/2018	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
MKTF-38	2/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	2/12/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	2/12/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	2/12/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	2/12/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	2/12/2018	Ethylbenzene	0.13	1	0.093	700	ug/L
MKTF-38	2/12/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-38	2/12/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	2/12/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	2/12/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	2/12/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	2/12/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	2/12/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	2/12/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	2/12/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	2/12/2018	Toluene	0.19	1	0.064	1000	ug/L
MKTF-38	2/12/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	2/12/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	2/12/2018	Tetrachloroethene	0.15	1	0.13	5	ug/L
MKTF-38	2/12/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	2/12/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	2/12/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	2/12/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	2/12/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	2/12/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	2/12/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	2/12/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	2/12/2018	Xylenes, Total	0.57	1.5	0.32	620	ug/L
MKTF-38	2/12/2018	MTBE	1	1	0.24	143	ug/L
MKTF-38	2/12/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	2/12/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	5/3/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	5/3/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	5/3/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	5/3/2018	Benzene	0.3	1	0.062	5	ug/L
MKTF-38	5/3/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	5/3/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	5/3/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	5/3/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	5/3/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	5/3/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	5/3/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	5/3/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	5/3/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	5/3/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	5/3/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	5/3/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	5/3/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	5/3/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	5/3/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	5/3/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	5/3/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	5/3/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	5/3/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	5/3/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	5/3/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	5/3/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	5/3/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	5/3/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	5/3/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	5/3/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	5/3/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-38	5/3/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	5/3/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	5/3/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	5/3/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	5/3/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	5/3/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	5/3/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	5/3/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	5/3/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	5/3/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	5/3/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	5/3/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-38	5/3/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	5/3/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	5/3/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	5/3/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	5/3/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	5/3/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	5/3/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	5/3/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	5/3/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	5/3/2018	MTBE	0.78	1	0.24	143	ug/L
MKTF-38	5/3/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	5/3/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	8/21/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-38	8/21/2018	Acetone	3.7	10	0.79	14064	ug/L
MKTF-38	8/21/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	8/21/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-38	8/21/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-38	8/21/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	8/21/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	8/21/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-38	8/21/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-38	8/21/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-38	8/21/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-38	8/21/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-38	8/21/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-38	8/21/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-38	8/21/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	8/21/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-38	8/21/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-38	8/21/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	8/21/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	8/21/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-38	8/21/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-38	8/21/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-38	8/21/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-38	8/21/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-38	8/21/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	8/21/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-38	8/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-38	8/21/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-38	8/21/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-38	8/21/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-38	8/21/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-38	8/21/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-38	8/21/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-38	8/21/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-38	8/21/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	8/21/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	8/21/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-38	8/21/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	8/21/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-38	8/21/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-38	8/21/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-38	8/21/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-38	8/21/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-38	8/21/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-38	8/21/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-38	8/21/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-38	8/21/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-38	8/21/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-38	8/21/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	8/21/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/21/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-38	8/21/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-38	8/21/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-38	8/21/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-38	8/21/2018	MTBE	0.36	1	0.32	143	ug/L
MKTF-38	8/21/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-38	8/21/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-38	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-38	11/20/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-38	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-38	11/20/2018	Benzene	1.2	1	0.17	5	ug/L
MKTF-38	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-38	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-38	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-38	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-38	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-38	11/20/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-38	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-38	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-38	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-38	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-38	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-38	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-38	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-38	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-38	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-38	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-38	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-38	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-38	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-38	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-38	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-38	11/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-38	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-38	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-38	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-38	11/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-38	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-38	11/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-38	11/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-38	11/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-38	11/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-38	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-38	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-38	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-38	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-38	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-38	11/20/2018	Toluene	53	1	0.17	1000	ug/L
MKTF-38	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-38	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-38	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-38	11/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-38	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-38	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-38	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	11/20/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-38	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-38	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-38	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-38	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-38	11/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-38	11/20/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-38	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-38	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-38	6/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-38	6/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-38	6/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-38	6/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-38	6/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-38	6/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-38	6/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-38	6/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-38	6/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-38	6/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-38	6/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-38	6/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-38	6/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-38	6/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-38	6/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-38	6/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-38	6/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-38	6/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-38	6/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-38	6/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-38	6/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-38	6/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-38	6/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-38	6/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-38	6/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-38	6/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-38	6/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-38	6/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-38	6/27/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-38	6/27/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-38	6/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-38	6/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-38	6/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-38	6/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-38	6/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-38	6/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-38	6/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-38	6/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-38	6/27/2019	Chloroform	1.1	1	0.121891	100	ug/L
MKTF-38	6/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-38	6/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-38	6/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-38	6/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-38	6/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-38	6/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-38	6/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-38	6/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-38	6/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-38	6/27/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-38	6/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-38	6/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-38	6/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-38	6/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-38	6/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-38	6/27/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-38	6/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-38	6/27/2019	Tetrachloroethene	0.79	1	0.149525	5	ug/L
MKTF-38	6/27/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-38	6/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-38	6/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-38	6/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-38	6/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-38	6/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-38	6/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-38	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-38	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-38	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-38	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-38	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-38	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-38	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-38	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-38	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-38	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-38	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-38	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-38	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-38	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-38	8/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-38	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-38	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-38	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-38	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-38	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-38	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-38	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-38	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-38	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-38	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-38	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-38	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-38	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-38	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-38	8/20/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-38	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-38	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-38	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-38	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-38	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-38	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-38	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-38	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-38	8/20/2019	Chloroform	0.36	1	0.121891	100	ug/L
MKTF-38	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-38	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-38	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-38	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-38	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-38	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-38	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-38	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-38	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-38	8/20/2019	MTBE	0.56	1	0.456095	143	ug/L
MKTF-38	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-38	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-38	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-38	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-38	8/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-38	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-38	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-38	8/20/2019	Tetrachloroethene	0.44	1	0.149525	5	ug/L
MKTF-38	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-38	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-38	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-38	8/20/2019	Trichloroethene	0.25	1	0.166272	5	ug/L
MKTF-38	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-38	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-38	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-38	3/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-38	3/5/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-38	3/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-38	3/5/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-38	3/5/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-38	3/5/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-38	3/5/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	3/5/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-38	3/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-38	3/5/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-38	3/5/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-38	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-38	3/5/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-38	3/5/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-38	3/5/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-38	3/5/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-38	3/5/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-38	3/5/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-38	3/5/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	3/5/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-38	3/5/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-38	3/5/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-38	3/5/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	3/5/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	3/5/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-38	3/5/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-38	3/5/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-38	3/5/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-38	3/5/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	3/5/2020	Acetone	3.6	10	2.3	14064	ug/L
MKTF-38	3/5/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-38	3/5/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-38	3/5/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/5/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-38	3/5/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-38	3/5/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-38	3/5/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-38	3/5/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	3/5/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-38	3/5/2020	Chloroform	0.53	1	0.13	100	ug/L
MKTF-38	3/5/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-38	3/5/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-38	3/5/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-38	3/5/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-38	3/5/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-38	3/5/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-38	3/5/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-38	3/5/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-38	3/5/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-38	3/5/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-38	3/5/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-38	3/5/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	3/5/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-38	3/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-38	3/5/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-38	3/5/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-38	3/5/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-38	3/5/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-38	3/5/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-38	3/5/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-38	3/5/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-38	3/5/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-38	3/5/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	3/5/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-38	3/5/2020	Toluene	**1300**	20	4	1000	ug/L
MKTF-38	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-38	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-38	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-38	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-38	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-38	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-38	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-38	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-38	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-38	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-38	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-38	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-38	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-38	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-38	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-38	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-38	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-38	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-38	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-38	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-38	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-38	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-38	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-38	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-38	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-38	9/19/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-38	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-38	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-38	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-38	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-38	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-38	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-38	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-38	9/19/2020	Chloroform	0.8	1	0.13	100	ug/L
MKTF-38	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-38	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-38	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-38	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-38	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-38	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-38	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-38	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-38	9/19/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-38	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-38	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-38	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-38	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-38	9/19/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-38	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-38	9/19/2020	Tetrachloroethene	0.57	1	0.36	5	ug/L
MKTF-38	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-38	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-38	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-38	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-38	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-38	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-39	11/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-39	11/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-39	11/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-39	11/18/2014	Benzene	**20**	5	0.77	5	ug/L
MKTF-39	11/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-39	11/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-39	11/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-39	11/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-39	11/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-39	11/18/2014	Vinyl Chloride	*ND*	*5*	0.53	2	ug/L
MKTF-39	11/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-39	11/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-39	11/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-39	11/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-39	11/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-39	11/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-39	11/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-39	11/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-39	11/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-39	11/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-39	11/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-39	11/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-39	11/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-39	11/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-39	11/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-39	11/18/2014	1,2,4-Trimethylbenzene	43	5	0.61	56	ug/L
MKTF-39	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-39	11/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-39	11/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-39	11/18/2014	Isopropylbenzene	15	5	0.81	447	ug/L
MKTF-39	11/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-39	11/18/2014	Ethylbenzene	60	5	0.64	700	ug/L
MKTF-39	11/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-39	11/18/2014	n-Propylbenzene	19	5	0.7	660	ug/L
MKTF-39	11/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-39	11/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-39	11/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-39	11/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-39	11/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-39	11/18/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-39	11/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-39	11/18/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-39	11/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-39	11/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-39	11/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-39	11/18/2014	sec-Butylbenzene	5.5	5	0.77	2000	ug/L
MKTF-39	11/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-39	11/18/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-39	11/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-39	11/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	11/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-39	11/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-39	11/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-39	11/18/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-39	11/18/2014	MTBE	ND	5	1.3	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-39	11/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-39	3/16/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-39	3/16/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-39	3/16/2015	Chloroform	2.2	2	0.43	100	ug/L
MKTF-39	3/16/2015	Benzene	**16**	2	0.13	5	ug/L
MKTF-39	3/16/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-39	3/16/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-39	3/16/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-39	3/16/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-39	3/16/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-39	3/16/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-39	3/16/2015	Methylene Chloride	**6.3**	6	0.72	5	ug/L
MKTF-39	3/16/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-39	3/16/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-39	3/16/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-39	3/16/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-39	3/16/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-39	3/16/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-39	3/16/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-39	3/16/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-39	3/16/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-39	3/16/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-39	3/16/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	3/16/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-39	3/16/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-39	3/16/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-39	3/16/2015	1,2,4-Trimethylbenzene	**64**	2	0.32	56	ug/L
MKTF-39	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-39	3/16/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-39	3/16/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-39	3/16/2015	Isopropylbenzene	11	2	0.3	447	ug/L
MKTF-39	3/16/2015	p-Isopropyltoluene	5.2	2	0.38	NA	ug/L
MKTF-39	3/16/2015	Ethylbenzene	39	2	0.2	700	ug/L
MKTF-39	3/16/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-39	3/16/2015	n-Propylbenzene	14	2	0.33	660	ug/L
MKTF-39	3/16/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-39	3/16/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-39	3/16/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-39	3/16/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-39	3/16/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-39	3/16/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-39	3/16/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-39	3/16/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-39	3/16/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-39	3/16/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-39	3/16/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-39	3/16/2015	sec-Butylbenzene	5.7	2	0.46	2000	ug/L
MKTF-39	3/16/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-39	3/16/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-39	3/16/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-39	3/16/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	3/16/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-39	3/16/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-39	3/16/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-39	3/16/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-39	3/16/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-39	3/16/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-39	3/16/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	6/10/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-39	6/10/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-39	6/10/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-39	6/10/2015	Benzene	**25**	2	0.13	5	ug/L
MKTF-39	6/10/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-39	6/10/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-39	6/10/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-39	6/10/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-39	6/10/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-39	6/10/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-39	6/10/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-39	6/10/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-39	6/10/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-39	6/10/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-39	6/10/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-39	6/10/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-39	6/10/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/10/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-39	6/10/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-39	6/10/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-39	6/10/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-39	6/10/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	6/10/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-39	6/10/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-39	6/10/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-39	6/10/2015	1,2,4-Trimethylbenzene	**120**	2	0.32	56	ug/L
MKTF-39	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-39	6/10/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-39	6/10/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-39	6/10/2015	Isopropylbenzene	20	2	0.3	447	ug/L
MKTF-39	6/10/2015	p-Isopropyltoluene	8.1	2	0.38	NA	ug/L
MKTF-39	6/10/2015	Ethylbenzene	64	2	0.2	700	ug/L
MKTF-39	6/10/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-39	6/10/2015	n-Propylbenzene	28	2	0.33	660	ug/L
MKTF-39	6/10/2015	n-Butylbenzene	7.1	6	0.49	1000	ug/L
MKTF-39	6/10/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-39	6/10/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-39	6/10/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-39	6/10/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-39	6/10/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-39	6/10/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-39	6/10/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-39	6/10/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-39	6/10/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-39	6/10/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-39	6/10/2015	sec-Butylbenzene	12	2	0.46	2000	ug/L
MKTF-39	6/10/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-39	6/10/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-39	6/10/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-39	6/10/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	6/10/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-39	6/10/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-39	6/10/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-39	6/10/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-39	6/10/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-39	6/10/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-39	6/10/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	8/23/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-39	8/23/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-39	8/23/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-39	8/23/2015	Benzene	**23**	1	0.065	5	ug/L
MKTF-39	8/23/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-39	8/23/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-39	8/23/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-39	8/23/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-39	8/23/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-39	8/23/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-39	8/23/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-39	8/23/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-39	8/23/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-39	8/23/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-39	8/23/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-39	8/23/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-39	8/23/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-39	8/23/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-39	8/23/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	8/23/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-39	8/23/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-39	8/23/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-39	8/23/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-39	8/23/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-39	8/23/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-39	8/23/2015	1,2,4-Trimethylbenzene	**98**	1	0.16	56	ug/L
MKTF-39	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-39	8/23/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-39	8/23/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-39	8/23/2015	Isopropylbenzene	20	1	0.15	447	ug/L
MKTF-39	8/23/2015	p-Isopropyltoluene	7.3	1	0.19	NA	ug/L
MKTF-39	8/23/2015	Ethylbenzene	60	1	0.1	700	ug/L
MKTF-39	8/23/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-39	8/23/2015	n-Propylbenzene	23	1	0.16	660	ug/L
MKTF-39	8/23/2015	n-Butylbenzene	3.8	3	0.25	1000	ug/L
MKTF-39	8/23/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-39	8/23/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-39	8/23/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-39	8/23/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	8/23/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-39	8/23/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-39	8/23/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-39	8/23/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-39	8/23/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-39	8/23/2015	sec-Butylbenzene	9.7	1	0.23	2000	ug/L
MKTF-39	8/23/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-39	8/23/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-39	8/23/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-39	8/23/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-39	8/23/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-39	8/23/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-39	8/23/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	8/23/2015	Xylenes, Total	1.6	1.5	0.28	620	ug/L
MKTF-39	8/23/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-39	8/23/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	8/23/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-39	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-39	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-39	11/9/2015	Benzene	**21**	1	0.065	5	ug/L
MKTF-39	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-39	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-39	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-39	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-39	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-39	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-39	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-39	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-39	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-39	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-39	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-39	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-39	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-39	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-39	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-39	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-39	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-39	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-39	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-39	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-39	11/9/2015	1,2,4-Trimethylbenzene	**85**	1	0.16	56	ug/L
MKTF-39	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-39	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-39	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-39	11/9/2015	Isopropylbenzene	24	1	0.15	447	ug/L
MKTF-39	11/9/2015	p-Isopropyltoluene	8.4	1	0.19	NA	ug/L
MKTF-39	11/9/2015	Ethylbenzene	64	1	0.1	700	ug/L
MKTF-39	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-39	11/9/2015	n-Propylbenzene	27	1	0.16	660	ug/L
MKTF-39	11/9/2015	n-Butylbenzene	6.6	3	0.25	1000	ug/L
MKTF-39	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-39	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-39	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-39	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-39	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-39	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-39	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-39	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-39	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-39	11/9/2015	sec-Butylbenzene	12	1	0.23	2000	ug/L
MKTF-39	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-39	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-39	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-39	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-39	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-39	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-39	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-39	11/9/2015	MTBE	ND	1	0.17	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-39	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-39	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-39	3/3/2016	Benzene	**19**	1	0.096	5	ug/L
MKTF-39	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-39	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-39	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-39	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-39	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-39	3/3/2016	Vinyl Chloride	**2.4**	1	0.063	2	ug/L
MKTF-39	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-39	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-39	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-39	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-39	3/3/2016	1,1-Dichloroethane	1.1	1	0.11	25	ug/L
MKTF-39	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-39	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-39	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-39	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-39	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-39	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-39	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-39	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-39	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-39	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	3/3/2016	1,2,4-Trimethylbenzene	**66**	1	0.1	56	ug/L
MKTF-39	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-39	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-39	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-39	3/3/2016	Isopropylbenzene	24	1	0.098	447	ug/L
MKTF-39	3/3/2016	p-Isopropyltoluene	7.4	1	0.14	NA	ug/L
MKTF-39	3/3/2016	Ethylbenzene	64	1	0.11	700	ug/L
MKTF-39	3/3/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-39	3/3/2016	n-Propylbenzene	30	1	0.13	660	ug/L
MKTF-39	3/3/2016	n-Butylbenzene	7.4	3	0.16	1000	ug/L
MKTF-39	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-39	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-39	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-39	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-39	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-39	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-39	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-39	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-39	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	3/3/2016	sec-Butylbenzene	13	1	0.11	2000	ug/L
MKTF-39	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-39	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-39	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-39	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-39	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-39	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-39	3/3/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-39	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-39	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-39	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-39	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-39	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-39	6/8/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-39	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-39	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-39	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-39	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-39	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-39	6/8/2016	Vinyl Chloride	**2.1**	1	0.2	2	ug/L
MKTF-39	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-39	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-39	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-39	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-39	6/8/2016	1,1-Dichloroethane	0.99	1	0.11	25	ug/L
MKTF-39	6/8/2016	1,1-Dichloroethene	0.48	1	0.11	7	ug/L
MKTF-39	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-39	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-39	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-39	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-39	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-39	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-39	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-39	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	6/8/2016	1,2,4-Trimethylbenzene	**82**	1	0.11	56	ug/L
MKTF-39	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-39	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-39	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-39	6/8/2016	Isopropylbenzene	24	1	0.1	447	ug/L
MKTF-39	6/8/2016	p-Isopropyltoluene	8	1	0.14	NA	ug/L
MKTF-39	6/8/2016	Ethylbenzene	61	1	0.11	700	ug/L
MKTF-39	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-39	6/8/2016	n-Propylbenzene	33	1	0.13	660	ug/L
MKTF-39	6/8/2016	n-Butylbenzene	10	3	0.16	1000	ug/L
MKTF-39	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-39	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-39	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-39	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-39	6/8/2016	1,3,5-Trimethylbenzene	0.21	1	0.12	60	ug/L
MKTF-39	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-39	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-39	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-39	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-39	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	6/8/2016	sec-Butylbenzene	15	1	0.12	2000	ug/L
MKTF-39	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-39	6/8/2016	cis-1,2-Dichloroethene	0.86	1	0.12	70	ug/L
MKTF-39	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-39	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-39	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-39	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	6/8/2016	Xylenes, Total	0.69	1.5	0.37	620	ug/L
MKTF-39	6/8/2016	MTBE	0.36	1	0.21	143	ug/L
MKTF-39	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-39	9/13/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-39	9/13/2016	Acetone	ND	50	25	14064	ug/L
MKTF-39	9/13/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	9/13/2016	Benzene	**16**	5	0.48	5	ug/L
MKTF-39	9/13/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-39	9/13/2016	Bromomethane	*4.6*	*15*	3.9	7.54	ug/L
MKTF-39	9/13/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	9/13/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	9/13/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-39	9/13/2016	Vinyl Chloride	**3**	5	0.98	2	ug/L
MKTF-39	9/13/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-39	9/13/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	9/13/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-39	9/13/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-39	9/13/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-39	9/13/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-39	9/13/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-39	9/13/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-39	9/13/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-39	9/13/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-39	9/13/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-39	9/13/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	9/13/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-39	9/13/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	9/13/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	9/13/2016	1,2,4-Trimethylbenzene	39	5	0.55	56	ug/L
MKTF-39	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-39	9/13/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-39	9/13/2016	tert-Butylbenzene	0.71	5	0.58	690	ug/L
MKTF-39	9/13/2016	Isopropylbenzene	25	5	0.52	447	ug/L
MKTF-39	9/13/2016	p-Isopropyltoluene	7.9	5	0.7	NA	ug/L
MKTF-39	9/13/2016	Ethylbenzene	60	5	0.56	700	ug/L
MKTF-39	9/13/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-39	9/13/2016	n-Propylbenzene	31	5	0.66	660	ug/L
MKTF-39	9/13/2016	n-Butylbenzene	10	15	0.8	1000	ug/L
MKTF-39	9/13/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/13/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-39	9/13/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	9/13/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-39	9/13/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	9/13/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-39	9/13/2016	Toluene	ND	5	0.59	1000	ug/L
MKTF-39	9/13/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-39	9/13/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-39	9/13/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	9/13/2016	sec-Butylbenzene	16	5	0.62	2000	ug/L
MKTF-39	9/13/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	9/13/2016	cis-1,2-Dichloroethene	1.4	5	0.62	70	ug/L
MKTF-39	9/13/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-39	9/13/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	9/13/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-39	9/13/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-39	9/13/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	9/13/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
MKTF-39	9/13/2016	MTBE	ND	5	1.1	143	ug/L
MKTF-39	9/13/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-39	9/13/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-39	11/1/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-39	11/1/2016	Acetone	ND	50	25	14064	ug/L
MKTF-39	11/1/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	11/1/2016	Benzene	**13**	5	0.48	5	ug/L
MKTF-39	11/1/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-39	11/1/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-39	11/1/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	11/1/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	11/1/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-39	11/1/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-39	11/1/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-39	11/1/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	11/1/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-39	11/1/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-39	11/1/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-39	11/1/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-39	11/1/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-39	11/1/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-39	11/1/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-39	11/1/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-39	11/1/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-39	11/1/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	11/1/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-39	11/1/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	11/1/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	11/1/2016	1,2,4-Trimethylbenzene	24	5	0.55	56	ug/L
MKTF-39	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-39	11/1/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-39	11/1/2016	tert-Butylbenzene	0.72	5	0.58	690	ug/L
MKTF-39	11/1/2016	Isopropylbenzene	23	5	0.52	447	ug/L
MKTF-39	11/1/2016	p-Isopropyltoluene	5.4	5	0.7	NA	ug/L
MKTF-39	11/1/2016	Ethylbenzene	59	5	0.56	700	ug/L
MKTF-39	11/1/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-39	11/1/2016	n-Propylbenzene	28	5	0.66	660	ug/L
MKTF-39	11/1/2016	n-Butylbenzene	7.6	15	0.8	1000	ug/L
MKTF-39	11/1/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-39	11/1/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-39	11/1/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	11/1/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-39	11/1/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	11/1/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-39	11/1/2016	Toluene	ND	5	0.59	1000	ug/L
MKTF-39	11/1/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-39	11/1/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-39	11/1/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	11/1/2016	sec-Butylbenzene	12	5	0.62	2000	ug/L
MKTF-39	11/1/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	11/1/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-39	11/1/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-39	11/1/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	11/1/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-39	11/1/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-39	11/1/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	11/1/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
MKTF-39	11/1/2016	MTBE	ND	5	1.1	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/1/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-39	11/1/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-39	3/14/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	3/14/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-39	3/14/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	3/14/2017	Benzene	**12**	5	0.48	5	ug/L
MKTF-39	3/14/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	3/14/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-39	3/14/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	3/14/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	3/14/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	3/14/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	3/14/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	3/14/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	3/14/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	3/14/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	3/14/2017	1,1-Dichloroethane	ND	5	0.52	25	ug/L
MKTF-39	3/14/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	3/14/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	3/14/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-39	3/14/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	3/14/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	3/14/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	3/14/2017	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	3/14/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	3/14/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	3/14/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	3/14/2017	1,2,4-Trimethylbenzene	27	5	0.52	56	ug/L
MKTF-39	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	3/14/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	3/14/2017	tert-Butylbenzene	0.82	5	0.52	690	ug/L
MKTF-39	3/14/2017	Isopropylbenzene	30	5	0.49	447	ug/L
MKTF-39	3/14/2017	p-Isopropyltoluene	8.7	5	0.7	NA	ug/L
MKTF-39	3/14/2017	Ethylbenzene	63	5	0.56	700	ug/L
MKTF-39	3/14/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	3/14/2017	n-Propylbenzene	43	5	0.66	660	ug/L
MKTF-39	3/14/2017	n-Butylbenzene	16	15	0.8	1000	ug/L
MKTF-39	3/14/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	3/14/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	3/14/2017	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	3/14/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	3/14/2017	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	3/14/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	3/14/2017	Toluene	ND	5	0.45	1000	ug/L
MKTF-39	3/14/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	3/14/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-39	3/14/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	3/14/2017	sec-Butylbenzene	27	5	0.51	2000	ug/L
MKTF-39	3/14/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	3/14/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	3/14/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	3/14/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	3/14/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	3/14/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-39	3/14/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	3/14/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	3/14/2017	MTBE	ND	5	0.74	143	ug/L
MKTF-39	3/14/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	3/14/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-39	6/8/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	6/8/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	6/8/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	6/8/2017	Benzene	**12**	5	0.31	5	ug/L
MKTF-39	6/8/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	6/8/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	6/8/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	6/8/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	6/8/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	6/8/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	6/8/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	6/8/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	6/8/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	6/8/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	6/8/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	6/8/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	6/8/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	6/8/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	6/8/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	6/8/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	6/8/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	6/8/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	6/8/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	6/8/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	6/8/2017	1,2,4-Trimethylbenzene	29	5	0.56	56	ug/L
MKTF-39	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	6/8/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	6/8/2017	tert-Butylbenzene	0.67	5	0.52	690	ug/L
MKTF-39	6/8/2017	Isopropylbenzene	28	5	0.26	447	ug/L
MKTF-39	6/8/2017	p-Isopropyltoluene	8.2	5	0.48	NA	ug/L
MKTF-39	6/8/2017	Ethylbenzene	57	5	0.47	700	ug/L
MKTF-39	6/8/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	6/8/2017	n-Propylbenzene	40	5	0.37	660	ug/L
MKTF-39	6/8/2017	n-Butylbenzene	16	15	0.65	1000	ug/L
MKTF-39	6/8/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	6/8/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	6/8/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	6/8/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	6/8/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	6/8/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	6/8/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	6/8/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	6/8/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	6/8/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	6/8/2017	sec-Butylbenzene	25	5	0.55	2000	ug/L
MKTF-39	6/8/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	6/8/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	6/8/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	6/8/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-39	6/8/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	6/8/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	6/8/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	6/8/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	6/8/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	6/8/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	6/8/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	6/8/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	9/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	9/28/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	9/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	9/28/2017	Benzene	**10**	5	0.31	5	ug/L
MKTF-39	9/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	9/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	9/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	9/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	9/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	9/28/2017	Vinyl Chloride	*1.9*	*5*	0.89	2	ug/L
MKTF-39	9/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	9/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	9/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	9/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	9/28/2017	1,1-Dichloroethane	2	5	2	25	ug/L
MKTF-39	9/28/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	9/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	9/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	9/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	9/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	9/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	9/28/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	9/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	9/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	9/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	9/28/2017	1,2,4-Trimethylbenzene	8	5	0.56	56	ug/L
MKTF-39	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	9/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	9/28/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-39	9/28/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-39	9/28/2017	p-Isopropyltoluene	3	5	0.48	NA	ug/L
MKTF-39	9/28/2017	Ethylbenzene	49	5	0.47	700	ug/L
MKTF-39	9/28/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	9/28/2017	n-Propylbenzene	30	5	0.37	660	ug/L
MKTF-39	9/28/2017	n-Butylbenzene	7.7	15	0.65	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	9/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	9/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	9/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	9/28/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	9/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	9/28/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	9/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	9/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	9/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	9/28/2017	sec-Butylbenzene	13	5	0.55	2000	ug/L
MKTF-39	9/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	9/28/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	9/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	9/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	9/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	9/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	9/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	9/28/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	9/28/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	9/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	9/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	11/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	11/28/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	11/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	11/28/2017	Benzene	**13**	5	0.31	5	ug/L
MKTF-39	11/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	11/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	11/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	11/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	11/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	11/28/2017	Vinyl Chloride	*0.96*	*5*	0.89	2	ug/L
MKTF-39	11/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	11/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	11/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	11/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	11/28/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	11/28/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	11/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	11/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	11/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	11/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	11/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	11/28/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	11/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	11/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	11/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	11/28/2017	1,2,4-Trimethylbenzene	10	5	0.56	56	ug/L
MKTF-39	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	11/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	11/28/2017	tert-Butylbenzene	1	5	0.52	690	ug/L
MKTF-39	11/28/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-39	11/28/2017	p-Isopropyltoluene	3.3	5	0.48	NA	ug/L
MKTF-39	11/28/2017	Ethylbenzene	50	5	0.47	700	ug/L
MKTF-39	11/28/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	11/28/2017	n-Propylbenzene	31	5	0.37	660	ug/L
MKTF-39	11/28/2017	n-Butylbenzene	8.5	15	0.65	1000	ug/L
MKTF-39	11/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	11/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	11/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	11/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	11/28/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	11/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	11/28/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	11/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	11/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	11/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	11/28/2017	sec-Butylbenzene	15	5	0.55	2000	ug/L
MKTF-39	11/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	11/28/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	11/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	11/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	11/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	11/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	11/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	11/28/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/28/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	11/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	11/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	2/8/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	2/8/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	2/8/2018	Chloroform	ND	5	2	100	ug/L
MKTF-39	2/8/2018	Benzene	**13**	5	0.31	5	ug/L
MKTF-39	2/8/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	2/8/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	2/8/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	2/8/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	2/8/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	2/8/2018	Vinyl Chloride	*0.93*	*5*	0.89	2	ug/L
MKTF-39	2/8/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	2/8/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	2/8/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	2/8/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	2/8/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	2/8/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	2/8/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	2/8/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	2/8/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	2/8/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	2/8/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	2/8/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	2/8/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	2/8/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	2/8/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	2/8/2018	1,2,4-Trimethylbenzene	8.6	5	0.56	56	ug/L
MKTF-39	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	2/8/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	2/8/2018	tert-Butylbenzene	0.67	5	0.52	690	ug/L
MKTF-39	2/8/2018	Isopropylbenzene	21	5	0.26	447	ug/L
MKTF-39	2/8/2018	p-Isopropyltoluene	2.2	5	0.48	NA	ug/L
MKTF-39	2/8/2018	Ethylbenzene	48	5	0.47	700	ug/L
MKTF-39	2/8/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-39	2/8/2018	n-Propylbenzene	27	5	0.37	660	ug/L
MKTF-39	2/8/2018	n-Butylbenzene	7.6	15	0.65	1000	ug/L
MKTF-39	2/8/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	2/8/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	2/8/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	2/8/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	2/8/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	2/8/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	2/8/2018	Toluene	2.4	5	0.32	1000	ug/L
MKTF-39	2/8/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	2/8/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	2/8/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	2/8/2018	sec-Butylbenzene	14	5	0.55	2000	ug/L
MKTF-39	2/8/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	2/8/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	2/8/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	2/8/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	2/8/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	2/8/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	2/8/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	2/8/2018	Xylenes, Total	2.1	7.5	1.6	620	ug/L
MKTF-39	2/8/2018	MTBE	ND	5	1.2	143	ug/L
MKTF-39	2/8/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	2/8/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	5/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	5/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	5/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-39	5/6/2018	Benzene	**12**	5	0.31	5	ug/L
MKTF-39	5/6/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	5/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	5/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	5/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	5/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	5/6/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	5/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	5/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	5/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	5/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	5/6/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	5/6/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	5/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	5/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	5/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	5/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	5/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	5/6/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	5/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	5/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	5/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	5/6/2018	1,2,4-Trimethylbenzene	8.3	5	0.56	56	ug/L
MKTF-39	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	5/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	5/6/2018	tert-Butylbenzene	0.63	5	0.52	690	ug/L
MKTF-39	5/6/2018	Isopropylbenzene	25	5	0.26	447	ug/L
MKTF-39	5/6/2018	p-Isopropyltoluene	2.5	5	0.48	NA	ug/L
MKTF-39	5/6/2018	Ethylbenzene	56	5	0.47	700	ug/L
MKTF-39	5/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-39	5/6/2018	n-Propylbenzene	35	5	0.37	660	ug/L
MKTF-39	5/6/2018	n-Butylbenzene	9	15	0.65	1000	ug/L
MKTF-39	5/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	5/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	5/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	5/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	5/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	5/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	5/6/2018	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	5/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	5/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	5/6/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	5/6/2018	sec-Butylbenzene	18	5	0.55	2000	ug/L
MKTF-39	5/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	5/6/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	5/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	5/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	5/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	5/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	5/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	5/6/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	5/6/2018	MTBE	ND	5	1.2	143	ug/L
MKTF-39	5/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	5/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	8/21/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-39	8/21/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-39	8/21/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-39	8/21/2018	Benzene	**8.3**	1	0.17	5	ug/L
MKTF-39	8/21/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-39	8/21/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-39	8/21/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-39	8/21/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-39	8/21/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-39	8/21/2018	Vinyl Chloride	1.4	1	0.11	2	ug/L
MKTF-39	8/21/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-39	8/21/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-39	8/21/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-39	8/21/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-39	8/21/2018	1,1-Dichloroethane	0.91	1	0.4	25	ug/L
MKTF-39	8/21/2018	1,1-Dichloroethene	0.46	1	0.12	7	ug/L
MKTF-39	8/21/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-39	8/21/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-39	8/21/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	8/21/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-39	8/21/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-39	8/21/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-39	8/21/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-39	8/21/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-39	8/21/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	8/21/2018	1,2,4-Trimethylbenzene	4.2	1	0.25	56	ug/L
MKTF-39	8/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-39	8/21/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-39	8/21/2018	tert-Butylbenzene	0.39	1	0.22	690	ug/L
MKTF-39	8/21/2018	Isopropylbenzene	22	1	0.22	447	ug/L
MKTF-39	8/21/2018	p-Isopropyltoluene	1	1	0.24	NA	ug/L
MKTF-39	8/21/2018	Ethylbenzene	45	1	0.22	700	ug/L
MKTF-39	8/21/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-39	8/21/2018	n-Propylbenzene	28	1	0.24	660	ug/L
MKTF-39	8/21/2018	n-Butylbenzene	7.8	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-39	8/21/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-39	8/21/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-39	8/21/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-39	8/21/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-39	8/21/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-39	8/21/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-39	8/21/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-39	8/21/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-39	8/21/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	8/21/2018	sec-Butylbenzene	13	1	0.2	2000	ug/L
MKTF-39	8/21/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-39	8/21/2018	cis-1,2-Dichloroethene	0.76	1	0.38	70	ug/L
MKTF-39	8/21/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-39	8/21/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-39	8/21/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-39	8/21/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-39	8/21/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-39	8/21/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-39	8/21/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-39	8/21/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-39	8/21/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-39	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-39	11/20/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-39	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-39	11/20/2018	Benzene	**8.4**	1	0.17	5	ug/L
MKTF-39	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-39	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-39	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-39	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-39	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-39	11/20/2018	Vinyl Chloride	1.1	1	0.12	2	ug/L
MKTF-39	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-39	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-39	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-39	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-39	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-39	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-39	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-39	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-39	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-39	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-39	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-39	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-39	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-39	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-39	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-39	11/20/2018	1,2,4-Trimethylbenzene	1.4	1	0.25	56	ug/L
MKTF-39	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-39	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-39	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-39	11/20/2018	Isopropylbenzene	14	1	0.22	447	ug/L
MKTF-39	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-39	11/20/2018	Ethylbenzene	30	1	0.22	700	ug/L
MKTF-39	11/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-39	11/20/2018	n-Propylbenzene	19	1	0.24	660	ug/L
MKTF-39	11/20/2018	n-Butylbenzene	4.8	3	0.25	1000	ug/L
MKTF-39	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-39	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-39	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-39	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-39	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-39	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-39	11/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-39	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-39	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-39	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	11/20/2018	sec-Butylbenzene	10	1	0.2	2000	ug/L
MKTF-39	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-39	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-39	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-39	11/20/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-39	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-39	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-39	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-39	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/20/2018	Xylenes, Total	3.9	1.5	0.64	620	ug/L
MKTF-39	11/20/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-39	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-39	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-39	6/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	6/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	6/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	6/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	6/5/2019	1,1-Dichloroethane	0.41	1	0.140859	25	ug/L
MKTF-39	6/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	6/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	6/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	6/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-39	6/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	6/5/2019	1,2,4-Trimethylbenzene	21	1	0.213199	56	ug/L
MKTF-39	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-39	6/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	6/5/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-39	6/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	6/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	6/5/2019	1,3,5-Trimethylbenzene	4.3	1	0.18866	60	ug/L
MKTF-39	6/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	6/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	6/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	6/5/2019	1-Methylnaphthalene	150	40	3.149545	NA	ug/L
MKTF-39	6/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	6/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	6/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	6/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	6/5/2019	2-Methylnaphthalene	**85**	4	0.345376		ug/L
MKTF-39	6/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	6/5/2019	p-Isopropyltoluene	2	1	0.217289	NA	ug/L
MKTF-39	6/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	6/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	6/5/2019	Benzene	**9.1**	1	0.166639	5	ug/L
MKTF-39	6/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	6/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	6/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	6/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	6/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	6/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	6/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	6/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	6/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	6/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	6/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	6/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	6/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-39	6/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	6/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	6/5/2019	Ethylbenzene	34	1	0.132341	700	ug/L
MKTF-39	6/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	6/5/2019	Isopropylbenzene	15	1	0.191522	447	ug/L
MKTF-39	6/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	6/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	6/5/2019	Naphthalene	**33**	2	0.275071	30	ug/L
MKTF-39	6/5/2019	n-Butylbenzene	6.2	3	0.22757	1000	ug/L
MKTF-39	6/5/2019	n-Propylbenzene	19	1	0.214308	660	ug/L
MKTF-39	6/5/2019	sec-Butylbenzene	8.2	1	0.247731	2000	ug/L
MKTF-39	6/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	6/5/2019	tert-Butylbenzene	0.21	1	0.206985	690	ug/L
MKTF-39	6/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	6/5/2019	Toluene	0.8	1	0.350436	1000	ug/L
MKTF-39	6/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	6/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	6/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	6/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	6/5/2019	Vinyl Chloride	0.44	1	0.179099	2	ug/L
MKTF-39	6/5/2019	Xylenes, Total	16	1.5	0.454415	620	ug/L
MKTF-39	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-39	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-39	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-39	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-39	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-39	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-39	8/20/2019	1,2,4-Trimethylbenzene	3.3	5	1.065995	56	ug/L
MKTF-39	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-39	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-39	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-39	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-39	8/20/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-39	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	110	20	1.574772	NA	ug/L
MKTF-39	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-39	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-39	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-39	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	**4.1**	20	1.72688		ug/L
MKTF-39	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-39	8/20/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-39	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-39	8/20/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-39	8/20/2019	Benzene	**8.3**	5	0.833195	5	ug/L
MKTF-39	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-39	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-39	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-39	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-39	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-39	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-39	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-39	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-39	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-39	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-39	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-39	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-39	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-39	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-39	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-39	8/20/2019	Ethylbenzene	38	5	0.661704	700	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-39	8/20/2019	Isopropylbenzene	17	5	0.957611	447	ug/L
MKTF-39	8/20/2019	MTBE	ND	5	2.280475	143	ug/L
MKTF-39	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-39	8/20/2019	Naphthalene	14	10	1.375357	30	ug/L
MKTF-39	8/20/2019	n-Butylbenzene	4	15	1.137848	1000	ug/L
MKTF-39	8/20/2019	n-Propylbenzene	20	5	1.07154	660	ug/L
MKTF-39	8/20/2019	sec-Butylbenzene	9.3	5	1.238656	2000	ug/L
MKTF-39	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-39	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-39	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-39	8/20/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-39	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-39	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-39	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-39	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-39	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-39	8/20/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-39	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-39	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-39	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-39	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-39	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-39	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-39	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-39	8/20/2019	1,2,4-Trimethylbenzene	3.5	5	1.065995	56	ug/L
MKTF-39	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-39	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-39	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-39	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-39	8/20/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	120	20	1.574772	NA	ug/L
MKTF-39	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-39	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-39	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-39	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	**4.5**	20	1.72688		ug/L
MKTF-39	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-39	8/20/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-39	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-39	8/20/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-39	8/20/2019	Benzene	**9.5**	5	0.833195	5	ug/L
MKTF-39	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-39	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-39	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-39	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-39	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-39	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-39	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-39	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-39	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-39	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-39	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-39	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-39	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-39	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-39	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-39	8/20/2019	Ethylbenzene	40	5	0.661704	700	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-39	8/20/2019	Isopropylbenzene	19	5	0.957611	447	ug/L
MKTF-39	8/20/2019	MTBE	ND	5	2.280475	143	ug/L
MKTF-39	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-39	8/20/2019	Naphthalene	15	10	1.375357	30	ug/L
MKTF-39	8/20/2019	n-Butylbenzene	5.7	15	1.137848	1000	ug/L
MKTF-39	8/20/2019	n-Propylbenzene	24	5	1.07154	660	ug/L
MKTF-39	8/20/2019	sec-Butylbenzene	12	5	1.238656	2000	ug/L
MKTF-39	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-39	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-39	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-39	8/20/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-39	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-39	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-39	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-39	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-39	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-39	8/20/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-39	11/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	11/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	11/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	11/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethane	0.49	1	0.140859	25	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	11/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	11/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trimethylbenzene	1.7	1	0.213199	56	ug/L
MKTF-39	11/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-39	11/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	11/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	11/5/2019	1,3,5-Trimethylbenzene	0.26	1	0.18866	60	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	11/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	120	40	3.149545	NA	ug/L
MKTF-39	11/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	11/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	11/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	11/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	**5**	4	0.345376		ug/L
MKTF-39	11/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	11/5/2019	p-Isopropyltoluene	0.98	1	0.217289	NA	ug/L
MKTF-39	11/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	11/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	11/5/2019	Benzene	**10**	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	11/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	11/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	11/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	11/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	11/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	11/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	11/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	11/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	11/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	11/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	11/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	11/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-39	11/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	11/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	11/5/2019	Ethylbenzene	41	1	0.132341	700	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	11/5/2019	Isopropylbenzene	19	1	0.191522	447	ug/L
MKTF-39	11/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	11/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	11/5/2019	Naphthalene	20	2	0.275071	30	ug/L
MKTF-39	11/5/2019	n-Butylbenzene	5.5	3	0.22757	1000	ug/L
MKTF-39	11/5/2019	n-Propylbenzene	26	1	0.214308	660	ug/L
MKTF-39	11/5/2019	sec-Butylbenzene	13	1	0.247731	2000	ug/L
MKTF-39	11/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	11/5/2019	tert-Butylbenzene	0.45	1	0.206985	690	ug/L
MKTF-39	11/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	11/5/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-39	11/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	11/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	11/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	11/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	11/5/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-39	11/5/2019	Xylenes, Total	1.4	1.5	0.454415	620	ug/L
MKTF-39	11/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	11/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	11/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	11/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethane	0.54	1	0.140859	25	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	11/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	11/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trimethylbenzene	1.7	1	0.213199	56	ug/L
MKTF-39	11/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	0.37	1	0.297198	600	ug/L
MKTF-39	11/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	11/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	11/5/2019	1,3,5-Trimethylbenzene	0.26	1	0.18866	60	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	11/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	180	40	3.149545	NA	ug/L
MKTF-39	11/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	11/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	11/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	11/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	**4.5**	4	0.345376		ug/L
MKTF-39	11/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	11/5/2019	p-Isopropyltoluene	0.91	1	0.217289	NA	ug/L
MKTF-39	11/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	11/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	11/5/2019	Benzene	**10**	1	0.166639	5	ug/L
MKTF-39	11/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	11/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	11/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	11/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	11/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	11/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	11/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	11/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	11/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	11/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	11/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	11/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	11/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	11/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	11/5/2019	Ethylbenzene	41	1	0.132341	700	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	11/5/2019	Isopropylbenzene	18	1	0.191522	447	ug/L
MKTF-39	11/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	11/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	11/5/2019	Naphthalene	20	2	0.275071	30	ug/L
MKTF-39	11/5/2019	n-Butylbenzene	4.6	3	0.22757	1000	ug/L
MKTF-39	11/5/2019	n-Propylbenzene	24	1	0.214308	660	ug/L
MKTF-39	11/5/2019	sec-Butylbenzene	11	1	0.247731	2000	ug/L
MKTF-39	11/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	11/5/2019	tert-Butylbenzene	0.41	1	0.206985	690	ug/L
MKTF-39	11/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	11/5/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-39	11/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	11/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	11/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	11/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	11/5/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-39	11/5/2019	Xylenes, Total	1.5	1.5	0.454415	620	ug/L
MKTF-39	2/5/2020	1,1,1,2-Tetrachloroethane	ND	2	0.41	5.74	ug/L
MKTF-39	2/5/2020	1,1,1-Trichloroethane	ND	2	0.35	200	ug/L
MKTF-39	2/5/2020	1,1,2,2-Tetrachloroethane	ND	4	1.1	10	ug/L
MKTF-39	2/5/2020	1,1,2-Trichloroethane	ND	2	0.43	5	ug/L
MKTF-39	2/5/2020	1,1-Dichloroethane	0.45	2	0.28	25	ug/L
MKTF-39	2/5/2020	1,1-Dichloroethene	ND	2	0.41	7	ug/L
MKTF-39	2/5/2020	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-39	2/5/2020	1,2,3-Trichlorobenzene	ND	2	0.6	70	ug/L
MKTF-39	2/5/2020	1,2,3-Trichloropropane	*ND*	*4*	0.59	0.0084	ug/L
MKTF-39	2/5/2020	1,2,4-Trichlorobenzene	ND	2	0.39	70	ug/L
MKTF-39	2/5/2020	1,2,4-Trimethylbenzene	3.4	2	0.43	56	ug/L
MKTF-39	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65	0.0033	ug/L
MKTF-39	2/5/2020	1,2-Dibromoethane	*ND*	*2*	0.33	0.05	ug/L
MKTF-39	2/5/2020	1,2-Dichlorobenzene	ND	2	0.59	600	ug/L
MKTF-39	2/5/2020	1,2-Dichloroethane	ND	2	0.39	5	ug/L
MKTF-39	2/5/2020	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-39	2/5/2020	1,3,5-Trimethylbenzene	0.38	2	0.38	60	ug/L
MKTF-39	2/5/2020	1,3-Dichlorobenzene	ND	2	0.5	N/A	ug/L
MKTF-39	2/5/2020	1,3-Dichloropropane	ND	2	0.4	370	ug/L
MKTF-39	2/5/2020	1,4-Dichlorobenzene	ND	2	0.59	75	ug/L
MKTF-39	2/5/2020	1-Methylnaphthalene	110	8	0.63	NA	ug/L
MKTF-39	2/5/2020	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-39	2/5/2020	2-Butanone	ND	20	4.2	5565	ug/L
MKTF-39	2/5/2020	2-Chlorotoluene	ND	2	0.49	233	ug/L
MKTF-39	2/5/2020	2-Hexanone	ND	20	3.1	38	ug/L
MKTF-39	2/5/2020	2-Methylnaphthalene	**7.8**	8	0.69		ug/L
MKTF-39	2/5/2020	4-Chlorotoluene	ND	2	0.47	250	ug/L
MKTF-39	2/5/2020	p-Isopropyltoluene	0.93	2	0.43	NA	ug/L
MKTF-39	2/5/2020	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-39	2/5/2020	Acetone	3.6	20	2.4	14064	ug/L
MKTF-39	2/5/2020	Benzene	**9.4**	2	0.33	5	ug/L
MKTF-39	2/5/2020	Bromobenzene	ND	2	0.49	62	ug/L
MKTF-39	2/5/2020	Bromodichloromethane	*ND*	*2*	0.27	1.34	ug/L
MKTF-39	2/5/2020	Bromoform	ND	2	0.58	32.9	ug/L
MKTF-39	2/5/2020	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-39	2/5/2020	Carbon Disulfide	ND	20	0.91	810	ug/L
MKTF-39	2/5/2020	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-39	2/5/2020	Chlorobenzene	ND	2	0.39	77.6	ug/L
MKTF-39	2/5/2020	Chloroethane	ND	4	0.36	20857	ug/L
MKTF-39	2/5/2020	Chloroform	ND	2	0.24	100	ug/L
MKTF-39	2/5/2020	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-39	2/5/2020	cis-1,2-Dichloroethene	ND	2	0.38	70	ug/L
MKTF-39	2/5/2020	cis-1,3-Dichloropropene	ND	2	0.28	NA	ug/L
MKTF-39	2/5/2020	Dibromochloromethane	*ND*	*2*	0.48	1.68	ug/L
MKTF-39	2/5/2020	Dibromomethane	ND	2	0.42	8	ug/L
MKTF-39	2/5/2020	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-39	2/5/2020	Ethylbenzene	38	2	0.26	700	ug/L
MKTF-39	2/5/2020	Hexachlorobutadiene	*ND*	*2*	0.62	1.39	ug/L
MKTF-39	2/5/2020	Isopropylbenzene	16	2	0.38	447	ug/L
MKTF-39	2/5/2020	MTBE	ND	2	0.91	143	ug/L
MKTF-39	2/5/2020	Methylene Chloride	*ND*	*6*	0.31	5	ug/L
MKTF-39	2/5/2020	n-Butylbenzene	5.1	6	0.46	1000	ug/L
MKTF-39	2/5/2020	n-Propylbenzene	22	2	0.43	660	ug/L
MKTF-39	2/5/2020	Naphthalene	25	4	0.55	30	ug/L
MKTF-39	2/5/2020	sec-Butylbenzene	11	2	0.5	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/5/2020	Styrene	ND	2	0.38	100	ug/L
MKTF-39	2/5/2020	tert-Butylbenzene	ND	2	0.41	690	ug/L
MKTF-39	2/5/2020	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-39	2/5/2020	Toluene	ND	2	0.7	1000	ug/L
MKTF-39	2/5/2020	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-39	2/5/2020	trans-1,3-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-39	2/5/2020	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	2/5/2020	Trichlorofluoromethane	ND	2	0.38	1137	ug/L
MKTF-39	2/5/2020	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-39	2/5/2020	Xylenes, Total	ND	3	0.91	620	ug/L
MKTF-39	9/19/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-39	9/19/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-39	9/19/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-39	9/19/2020	1,1,2-Trichloroethane	ND	2	0.38	5	ug/L
MKTF-39	9/19/2020	1,1-Dichloroethane	0.63	2	0.55	25	ug/L
MKTF-39	9/19/2020	1,1-Dichloroethene	ND	2	0.26	7	ug/L
MKTF-39	9/19/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-39	9/19/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-39	9/19/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-39	9/19/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-39	9/19/2020	1,2,4-Trimethylbenzene	12	2	0.24	56	ug/L
MKTF-39	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-39	9/19/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-39	9/19/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-39	9/19/2020	1,2-Dichloroethane	ND	2	0.44	5	ug/L
MKTF-39	9/19/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-39	9/19/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-39	9/19/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-39	9/19/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-39	9/19/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-39	9/19/2020	1-Methylnaphthalene	130	8	1.7	NA	ug/L
MKTF-39	9/19/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-39	9/19/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-39	9/19/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-39	9/19/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-39	9/19/2020	2-Methylnaphthalene	**20**	8	1.4		ug/L
MKTF-39	9/19/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-39	9/19/2020	p-Isopropyltoluene	2.1	2	0.4	NA	ug/L
MKTF-39	9/19/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-39	9/19/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-39	9/19/2020	Benzene	**18**	2	0.45	5	ug/L
MKTF-39	9/19/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-39	9/19/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-39	9/19/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-39	9/19/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-39	9/19/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-39	9/19/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-39	9/19/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-39	9/19/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-39	9/19/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-39	9/19/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-39	9/19/2020	cis-1,2-Dichloroethene	ND	2	0.78	70	ug/L
MKTF-39	9/19/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-39	9/19/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-39	9/19/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-39	9/19/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-39	9/19/2020	Ethylbenzene	43	2	0.43	700	ug/L
MKTF-39	9/19/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-39	9/19/2020	Isopropylbenzene	19	2	0.37	447	ug/L
MKTF-39	9/19/2020	MTBE	ND	2	0.79	143	ug/L
MKTF-39	9/19/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-39	9/19/2020	n-Butylbenzene	7.3	6	0.51	1000	ug/L
MKTF-39	9/19/2020	n-Propylbenzene	27	2	0.36	660	ug/L
MKTF-39	9/19/2020	Naphthalene	**41**	4	0.56	30	ug/L
MKTF-39	9/19/2020	sec-Butylbenzene	15	2	1.2	2000	ug/L
MKTF-39	9/19/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-39	9/19/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-39	9/19/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-39	9/19/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-39	9/19/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-39	9/19/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-39	9/19/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-39	9/19/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-39	9/19/2020	Vinyl Chloride	0.44	2	0.39	2	ug/L
MKTF-39	9/19/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-39	12/16/2020	Acetone	ND	25	10	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	Benzene	**14.4**	1	0.38	5	ug/L
MKTF-39	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-39	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-39	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-39	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-39	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-39	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-39	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-39	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-39	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-39	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-39	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-39	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-39	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-39	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-39	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-39	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-39	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-39	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-39	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-39	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-39	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-39	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-39	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-39	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-39	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-39	12/16/2020	Ethylbenzene	33.4	1	0.5	700	ug/L
MKTF-39	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-39	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-39	12/16/2020	Isopropylbenzene	12.2	1	0.53	447	ug/L
MKTF-39	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-39	12/16/2020	1-Methylnaphthalene	158	5	4.2	NA	ug/L
MKTF-39	12/16/2020	2-Methylnaphthalene	**16.8**	10	4.6		ug/L
MKTF-39	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-39	12/16/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-39	12/16/2020	Naphthalene	**47.4**	1	1	30	ug/L
MKTF-39	12/16/2020	n-Butylbenzene	3.32	1	0.76	1000	ug/L
MKTF-39	12/16/2020	n-Propylbenzene	16.1	1	0.69	660	ug/L
MKTF-39	12/16/2020	p-Isopropyltoluene	1.09	1	0.71	NA	ug/L
MKTF-39	12/16/2020	sec-Butylbenzene	7.74	1	0.7	2000	ug/L
MKTF-39	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-39	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-39	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-39	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-39	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-39	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-39	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-39	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-39	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-39	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-39	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-39	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-39	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-39	12/16/2020	1,2,4-Trimethylbenzene	6.59	1	0.82	56	ug/L
MKTF-39	12/16/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-39	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-39	12/16/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-40	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-40	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-40	11/21/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-40	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-40	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-40	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-40	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-40	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-40	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-40	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-40	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-40	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-40	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-40	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-40	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-40	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-40	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-40	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	11/21/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-40	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-40	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-40	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	11/21/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-40	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-40	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-40	11/21/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-40	11/21/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-40	11/21/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-40	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-40	11/21/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-40	11/21/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-40	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-40	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-40	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-40	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	11/21/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-40	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-40	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-40	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-40	11/21/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-40	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-40	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-40	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-40	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-40	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-40	11/21/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-40	11/21/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-40	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-40	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	6/10/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	11/4/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-40	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-40	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-40	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-40	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-40	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-40	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-40	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-40	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-40	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-40	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-40	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-40	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-40	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-40	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-40	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-40	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-40	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-40	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-40	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-40	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-40	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-40	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-40	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-40	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-40	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-40	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-40	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	2/23/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-40	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-40	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	6/9/2016	1,1-Dichloroethane	0.62	1	0.11	25	ug/L
MKTF-40	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-40	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	6/9/2016	MTBE	0.62	1	0.21	143	ug/L
MKTF-40	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	9/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	9/8/2016	1,1-Dichloroethane	0.65	1	0.11	25	ug/L
MKTF-40	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-40	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-40	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	9/8/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-40	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	10/31/2016	Chloroform	0.2	1	0.089	100	ug/L
MKTF-40	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	10/31/2016	1,1-Dichloroethane	0.64	1	0.11	25	ug/L
MKTF-40	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	10/31/2016	1,2-Dichloroethane	0.37	1	0.12	5	ug/L
MKTF-40	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	10/31/2016	Toluene	0.15	1	0.12	1000	ug/L
MKTF-40	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-40	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	10/31/2016	MTBE	0.3	1	0.21	143	ug/L
MKTF-40	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	3/7/2017	Acetone	2.3	10	0.88	14064	ug/L
MKTF-40	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	3/7/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-40	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	3/7/2017	1,1-Dichloroethane	0.62	1	0.1	25	ug/L
MKTF-40	3/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-40	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	3/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-40	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	3/7/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-40	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	3/7/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-40	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-40	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	3/7/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-40	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-40	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	3/7/2017	MTBE	0.41	1	0.15	143	ug/L
MKTF-40	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-40	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	6/5/2017	Acetone	4.6	10	0.82	14064	ug/L
MKTF-40	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	6/5/2017	1,1-Dichloroethane	0.66	1	0.4	25	ug/L
MKTF-40	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-40	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	6/5/2017	MTBE	0.46	1	0.24	143	ug/L
MKTF-40	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	9/25/2017	Acetone	5.5	10	0.82	14064	ug/L
MKTF-40	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	9/25/2017	1,1-Dichloroethane	0.81	1	0.4	25	ug/L
MKTF-40	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	9/25/2017	MTBE	0.46	1	0.24	143	ug/L
MKTF-40	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	11/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	11/21/2017	Acetone	2.7	10	0.82	14064	ug/L
MKTF-40	11/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	11/21/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	11/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	11/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	11/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	11/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	11/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	11/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	11/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	11/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	11/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	11/21/2017	1,1-Dichloroethane	0.59	1	0.4	25	ug/L
MKTF-40	11/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	11/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	11/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	11/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	11/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	11/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	11/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	11/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	11/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	11/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	11/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	11/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	11/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	11/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	11/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	11/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	11/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	11/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	11/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	11/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	11/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	11/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	11/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	11/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	11/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	11/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	11/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	11/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	11/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	11/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	11/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	11/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	11/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	11/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	11/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	11/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	11/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	11/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	11/21/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-40	11/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	11/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	2/5/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	2/5/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-40	2/5/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	2/5/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-40	2/5/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	2/5/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	2/5/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	2/5/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	2/5/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	2/5/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	2/5/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	2/5/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	2/5/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	2/5/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	2/5/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	2/5/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	2/5/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	2/5/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	2/5/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	2/5/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	2/5/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	2/5/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	2/5/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	2/5/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	2/5/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	2/5/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	2/5/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	2/5/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	2/5/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	2/5/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/5/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	2/5/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-40	2/5/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	2/5/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	2/5/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	2/5/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	2/5/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	2/5/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	2/5/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	2/5/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	2/5/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	2/5/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	2/5/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	2/5/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	2/5/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	2/5/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	2/5/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	2/5/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	2/5/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	2/5/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	2/5/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	2/5/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	2/5/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	2/5/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-40	2/5/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	2/5/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	5/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	5/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-40	5/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	5/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-40	5/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	5/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	5/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	5/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	5/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	5/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	5/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	5/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	5/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	5/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	5/6/2018	1,1-Dichloroethane	0.77	1	0.4	25	ug/L
MKTF-40	5/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	5/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	5/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	5/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	5/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	5/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	5/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	5/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	5/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	5/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	5/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	5/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	5/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	5/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	5/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	5/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	5/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-40	5/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	5/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	5/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	5/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	5/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	5/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	5/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	5/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	5/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	5/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	5/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	5/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	5/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	5/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	5/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	5/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	5/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	5/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	5/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	5/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	5/6/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-40	5/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	5/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	8/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-40	8/17/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-40	8/17/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	8/17/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-40	8/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-40	8/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	8/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	8/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-40	8/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-40	8/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-40	8/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-40	8/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-40	8/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-40	8/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-40	8/17/2018	1,1-Dichloroethane	0.82	1	0.4	25	ug/L
MKTF-40	8/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-40	8/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-40	8/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	8/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	8/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-40	8/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-40	8/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-40	8/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-40	8/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-40	8/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	8/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-40	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-40	8/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-40	8/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-40	8/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-40	8/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-40	8/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-40	8/17/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-40	8/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-40	8/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	8/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	8/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-40	8/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	8/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-40	8/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-40	8/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-40	8/17/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	8/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-40	8/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-40	8/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	8/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-40	8/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-40	8/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-40	8/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	8/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-40	8/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-40	8/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-40	8/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-40	8/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-40	8/17/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-40	8/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-40	8/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-40	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-40	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-40	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-40	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-40	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-40	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-40	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-40	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-40	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-40	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-40	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-40	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-40	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-40	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-40	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-40	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-40	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-40	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-40	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-40	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-40	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-40	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-40	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-40	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-40	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-40	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-40	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-40	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-40	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-40	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-40	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-40	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-40	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-40	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-40	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-40	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-40	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-40	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-40	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-40	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-40	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-40	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-40	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-40	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-40	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-40	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-40	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-40	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-40	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-40	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-40	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-40	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-40	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-40	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-40	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-40	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-40	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-40	2/20/2019	1,1-Dichloroethane	1	1	0.175197	25	ug/L
MKTF-40	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-40	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-40	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-40	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-40	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-40	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-40	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-40	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-40	2/20/2019	1,2-Dichloroethane	0.28	1	0.189525	5	ug/L
MKTF-40	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-40	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-40	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-40	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-40	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-40	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-40	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-40	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-40	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-40	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-40	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-40	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-40	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-40	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-40	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-40	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-40	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-40	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-40	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-40	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-40	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-40	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-40	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-40	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-40	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-40	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-40	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-40	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-40	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-40	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-40	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-40	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-40	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-40	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-40	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-40	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-40	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-40	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-40	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-40	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-40	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-40	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-40	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-40	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-40	2/20/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-40	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	5/6/2019	1,1-Dichloroethane	0.66	1	0.140859	25	ug/L
MKTF-40	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-40	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-40	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-40	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	5/6/2019	Acetone	5.3	10	1.199396	14064	ug/L
MKTF-40	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	5/6/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-40	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-40	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	5/6/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-40	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	8/22/2019	1,1-Dichloroethane	0.78	1	0.140859	25	ug/L
MKTF-40	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-40	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-40	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-40	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	8/22/2019	Acetone	1.7	10	1.199396	14064	ug/L
MKTF-40	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-40	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	8/22/2019	MTBE	ND	1	0.456095	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-40	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	8/22/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-40	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	10/22/2019	1,1-Dichloroethane	0.76	1	0.140859	25	ug/L
MKTF-40	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	10/22/2019	1,2-Dichloroethane	0.44	1	0.194638	5	ug/L
MKTF-40	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-40	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	10/22/2019	Chloroform	0.19	1	0.121891	100	ug/L
MKTF-40	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	10/22/2019	MTBE	0.72	1	0.456095	143	ug/L
MKTF-40	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	10/22/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
MKTF-40	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-40	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-40	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-40	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-40	2/28/2020	1,1-Dichloroethane	0.64	1	0.27	25	ug/L
MKTF-40	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-40	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-40	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-40	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-40	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-40	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-40	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-40	2/28/2020	1,2-Dichloroethane	0.37	1	0.22	5	ug/L
MKTF-40	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-40	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-40	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-40	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-40	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-40	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-40	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-40	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-40	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-40	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-40	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	2/28/2020	Acetone	4	10	2.3	14064	ug/L
MKTF-40	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-40	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-40	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-40	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-40	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-40	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-40	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-40	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-40	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-40	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-40	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-40	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-40	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-40	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-40	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-40	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-40	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-40	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-40	2/28/2020	MTBE	0.76	1	0.39	143	ug/L
MKTF-40	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-40	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-40	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-40	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-40	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-40	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-40	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-40	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-40	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-40	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-40	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-40	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-40	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-40	2/28/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-40	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-40	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-40	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-40	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-40	9/19/2020	1,1-Dichloroethane	0.79	1	0.27	25	ug/L
MKTF-40	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-40	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-40	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-40	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-40	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-40	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-40	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-40	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-40	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-40	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-40	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-40	9/19/2020	1-Methylnaphthalene	1.8	4	0.84	NA	ug/L
MKTF-40	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-40	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-40	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-40	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-40	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-40	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-40	9/19/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-40	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-40	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-40	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-40	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-40	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-40	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-40	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-40	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-40	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-40	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-40	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-40	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-40	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-40	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-40	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-40	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-40	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-40	9/19/2020	MTBE	0.58	1	0.39	143	ug/L
MKTF-40	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-40	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-40	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-40	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-40	9/19/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-40	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-40	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-40	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-40	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-40	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-40	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-40	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-40	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-40	9/19/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	ND	0.0196	0.00489	0.05	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	ND	0.0196	0.0049	0.05	ug/L
MKTF-40	12/17/2020	Acetone	ND	25	10	14064	ug/L
MKTF-40	12/17/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-40	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-40	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-40	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-40	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-40	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-40	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-40	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-40	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-40	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-40	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-40	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-40	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-40	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-40	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-40	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-40	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-40	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-40	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-40	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-40	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-40	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-40	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-40	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-40	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-40	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-40	12/17/2020	MTBE	1.03	1	0.74	143	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-40	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-40	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-40	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-40	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-40	12/17/2020	Styrene	ND	1	1	100	ug/L
MKTF-40	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-40	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-40	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-40	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-40	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-40	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-40	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-40	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-40	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-40	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-40	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-40	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-40	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-40	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-40	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-40	12/17/2020	Acetone	ND	25	10	14064	ug/L
MKTF-40	12/17/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-40	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-40	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-40	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-40	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-40	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-40	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-40	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-40	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-40	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-40	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-40	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-40	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-40	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-40	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-40	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-40	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-40	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-40	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-40	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-40	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-40	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-40	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-40	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-40	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-40	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-40	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-40	12/17/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-40	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-40	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-40	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-40	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-40	12/17/2020	Styrene	ND	1	1	100	ug/L
MKTF-40	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-40	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-40	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-40	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-40	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-40	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-40	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-40	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-40	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-40	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-40	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-40	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-40	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-40	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-40	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-41	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-41	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-41	11/18/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-41	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-41	11/18/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-41	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-41	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-41	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-41	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-41	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-41	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-41	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-41	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-41	11/18/2014	1,1-Dichloroethane	3.6	1	0.28	25	ug/L
MKTF-41	11/18/2014	1,1-Dichloroethene	3.8	1	0.21	7	ug/L
MKTF-41	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-41	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-41	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-41	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-41	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-41	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-41	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-41	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-41	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-41	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-41	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-41	11/18/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-41	11/18/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-41	11/18/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-41	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-41	11/18/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-41	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-41	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-41	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-41	11/18/2014	1,2-Dichloroethane	2	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-41	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-41	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-41	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-41	11/18/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-41	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-41	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-41	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-41	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-41	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-41	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-41	11/18/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-41	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-41	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	3/12/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-41	3/12/2015	1,1-Dichloroethene	1.6	1	0.099	7	ug/L
MKTF-41	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	3/12/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	3/12/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	6/9/2015	1,1-Dichloroethane	1.7	1	0.4	25	ug/L
MKTF-41	6/9/2015	1,1-Dichloroethene	1.9	1	0.099	7	ug/L
MKTF-41	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	6/9/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	8/21/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-41	8/21/2015	1,1-Dichloroethene	2.1	1	0.099	7	ug/L
MKTF-41	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	8/21/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	11/5/2015	1,1-Dichloroethane	3.1	1	0.4	25	ug/L
MKTF-41	11/5/2015	1,1-Dichloroethene	3.8	1	0.099	7	ug/L
MKTF-41	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	11/5/2015	1,2-Dichloroethane	2.3	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-41	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-41	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-41	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-41	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-41	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-41	2/24/2016	1,1-Dichloroethane	2.6	1	0.11	25	ug/L
MKTF-41	2/24/2016	1,1-Dichloroethene	4.1	1	0.076	7	ug/L
MKTF-41	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-41	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-41	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-41	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-41	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-41	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-41	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-41	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-41	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-41	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-41	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-41	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-41	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	2/24/2016	1,2-Dichloroethane	1.9	1	0.053	5	ug/L
MKTF-41	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-41	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-41	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-41	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-41	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-41	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-41	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-41	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	6/9/2016	1,1-Dichloroethane	2.7	1	0.11	25	ug/L
MKTF-41	6/9/2016	1,1-Dichloroethene	3.4	1	0.11	7	ug/L
MKTF-41	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-41	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	6/9/2016	1,1,2-Trichloroethane	0.54	1	0.13	5	ug/L
MKTF-41	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	6/9/2016	1,2-Dichloroethane	2.2	1	0.12	5	ug/L
MKTF-41	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	6/9/2016	MTBE	3	1	0.21	143	ug/L
MKTF-41	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	9/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	9/9/2016	1,1-Dichloroethane	2.5	1	0.11	25	ug/L
MKTF-41	9/9/2016	1,1-Dichloroethene	6.1	1	0.11	7	ug/L
MKTF-41	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	9/9/2016	1,1,2-Trichloroethane	0.53	1	0.13	5	ug/L
MKTF-41	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	9/9/2016	1,2-Dichloroethane	2.4	1	0.12	5	ug/L
MKTF-41	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	9/9/2016	MTBE	0.41	1	0.21	143	ug/L
MKTF-41	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	10/31/2016	Chloroform	0.14	1	0.089	100	ug/L
MKTF-41	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	10/31/2016	1,1-Dichloroethane	2.7	1	0.11	25	ug/L
MKTF-41	10/31/2016	1,1-Dichloroethene	5.4	1	0.11	7	ug/L
MKTF-41	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-41	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	10/31/2016	1,1,2-Trichloroethane	0.55	1	0.13	5	ug/L
MKTF-41	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	10/31/2016	1,2-Dichloroethane	2.4	1	0.12	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	10/31/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	10/31/2016	MTBE	0.91	1	0.21	143	ug/L
MKTF-41	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	3/7/2017	Acetone	1	10	0.88	14064	ug/L
MKTF-41	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	3/7/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-41	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	3/7/2017	1,1-Dichloroethane	3.6	1	0.1	25	ug/L
MKTF-41	3/7/2017	1,1-Dichloroethene	5.3	1	0.081	7	ug/L
MKTF-41	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-41	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	3/7/2017	1,1,2-Trichloroethane	0.52	1	0.14	5	ug/L
MKTF-41	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-41	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	3/7/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-41	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	3/7/2017	1,2-Dichloroethane	2.6	1	0.12	5	ug/L
MKTF-41	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-41	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-41	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	3/7/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-41	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-41	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	3/7/2017	MTBE	1.2	1	0.15	143	ug/L
MKTF-41	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	6/6/2017	Acetone	3.9	10	0.82	14064	ug/L
MKTF-41	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	6/6/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	6/6/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	6/6/2017	1,1-Dichloroethene	4.8	1	0.081	7	ug/L
MKTF-41	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	6/6/2017	1,1,2-Trichloroethane	0.47	1	0.14	5	ug/L
MKTF-41	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	6/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	6/6/2017	1,2-Dichloroethane	2.7	1	0.4	5	ug/L
MKTF-41	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	6/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-41	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	6/6/2017	MTBE	1.2	1	0.24	143	ug/L
MKTF-41	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	9/25/2017	MTBE	1.2	1	0.24	143	ug/L
MKTF-41	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	9/25/2017	Acetone	3.4	10	0.82	14064	ug/L
MKTF-41	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	9/25/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	9/25/2017	1,1-Dichloroethene	4.3	1	0.081	7	ug/L
MKTF-41	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	9/25/2017	1,1,2-Trichloroethane	0.63	1	0.14	5	ug/L
MKTF-41	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	9/25/2017	1,2-Dichloroethane	2.7	1	0.4	5	ug/L
MKTF-41	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/27/2017	Acetone	1.7	10	0.82	14064	ug/L
MKTF-41	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	11/27/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	11/27/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	11/27/2017	1,1-Dichloroethene	5.3	1	0.081	7	ug/L
MKTF-41	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	11/27/2017	1,1,2-Trichloroethane	0.57	1	0.14	5	ug/L
MKTF-41	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	1,2-Dichloroethane	2.8	1	0.4	5	ug/L
MKTF-41	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	11/27/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	11/27/2017	MTBE	0.81	1	0.24	143	ug/L
MKTF-41	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-41	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-41	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	2/7/2018	1,1-Dichloroethane	4.1	1	0.4	25	ug/L
MKTF-41	2/7/2018	1,1-Dichloroethene	6	1	0.081	7	ug/L
MKTF-41	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-41	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-41	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	2/7/2018	1,2-Dichloroethane	3.4	1	0.4	5	ug/L
MKTF-41	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	2/7/2018	MTBE	1.4	1	0.24	143	ug/L
MKTF-41	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-41	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	5/9/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-41	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	5/9/2018	1,1-Dichloroethane	4.8	1	0.4	25	ug/L
MKTF-41	5/9/2018	1,1-Dichloroethene	**7.3**	1	0.081	7	ug/L
MKTF-41	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	5/9/2018	1,1,2-Trichloroethane	0.79	1	0.14	5	ug/L
MKTF-41	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-41	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	5/9/2018	1,2-Dichloroethane	4	1	0.4	5	ug/L
MKTF-41	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	5/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	5/9/2018	Xylenes, Total	0.47	1.5	0.32	620	ug/L
MKTF-41	5/9/2018	MTBE	1.6	1	0.24	143	ug/L
MKTF-41	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	8/29/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-41	8/29/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-41	8/29/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	8/29/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-41	8/29/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-41	8/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	8/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	8/29/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-41	8/29/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-41	8/29/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-41	8/29/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-41	8/29/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-41	8/29/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-41	8/29/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-41	8/29/2018	1,1-Dichloroethane	5	1	0.4	25	ug/L
MKTF-41	8/29/2018	1,1-Dichloroethene	6.9	1	0.12	7	ug/L
MKTF-41	8/29/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-41	8/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	8/29/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-41	8/29/2018	1,1,2-Trichloroethane	0.62	1	0.23	5	ug/L
MKTF-41	8/29/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-41	8/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-41	8/29/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-41	8/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	8/29/2018	1,2,4-Trimethylbenzene	0.32	1	0.25	56	ug/L
MKTF-41	8/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-41	8/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-41	8/29/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-41	8/29/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-41	8/29/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-41	8/29/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-41	8/29/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-41	8/29/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-41	8/29/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	8/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	8/29/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-41	8/29/2018	1,2-Dichloroethane	3.9	1	0.4	5	ug/L
MKTF-41	8/29/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-41	8/29/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-41	8/29/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-41	8/29/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	8/29/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-41	8/29/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-41	8/29/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	8/29/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-41	8/29/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-41	8/29/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-41	8/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	8/29/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-41	8/29/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-41	8/29/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-41	8/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-41	8/29/2018	Xylenes, Total	0.82	1.5	0.64	620	ug/L
MKTF-41	8/29/2018	MTBE	1.1	1	0.32	143	ug/L
MKTF-41	8/29/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-41	8/29/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-41	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-41	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-41	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-41	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-41	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-41	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-41	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-41	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-41	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-41	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-41	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-41	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-41	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-41	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-41	11/15/2018	1,1-Dichloroethane	4.3	1	0.18	25	ug/L
MKTF-41	11/15/2018	1,1-Dichloroethene	7	1	0.12	7	ug/L
MKTF-41	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-41	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-41	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-41	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-41	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-41	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-41	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-41	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-41	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-41	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-41	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-41	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-41	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-41	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-41	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-41	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-41	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-41	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-41	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-41	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/15/2018	1,2-Dichloroethane	3.7	1	0.19	5	ug/L
MKTF-41	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-41	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-41	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-41	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-41	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-41	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-41	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-41	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-41	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-41	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-41	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-41	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-41	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-41	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-41	11/15/2018	MTBE	1.4	1	0.46	143	ug/L
MKTF-41	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-41	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-41	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-41	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-41	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-41	2/13/2019	1,1,2-Trichloroethane	0.57	1	0.232723	5	ug/L
MKTF-41	2/13/2019	1,1-Dichloroethane	4.3	1	0.175197	25	ug/L
MKTF-41	2/13/2019	1,1-Dichloroethene	**7.3**	1	0.120488	7	ug/L
MKTF-41	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-41	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-41	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-41	2/13/2019	1,2,4-Trimethylbenzene	0.53	1	0.253314	56	ug/L
MKTF-41	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-41	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-41	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-41	2/13/2019	1,2-Dichloroethane	3.7	1	0.189525	5	ug/L
MKTF-41	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-41	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-41	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-41	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-41	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-41	2/13/2019	1-Methylnaphthalene	0.8	4	0.335817	NA	ug/L
MKTF-41	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-41	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-41	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-41	2/13/2019	2-Methylnaphthalene	**0.81**	4	0.345376		ug/L
MKTF-41	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-41	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-41	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-41	2/13/2019	Acetone	1.2	10	0.75707	14064	ug/L
MKTF-41	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-41	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-41	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-41	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-41	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-41	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-41	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-41	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-41	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-41	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-41	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-41	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-41	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-41	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-41	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-41	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-41	2/13/2019	MTBE	0.99	1	0.456095	143	ug/L
MKTF-41	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-41	2/13/2019	Naphthalene	0.92	2	0.289626	30	ug/L
MKTF-41	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-41	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-41	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-41	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-41	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-41	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-41	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-41	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-41	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-41	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-41	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-41	2/13/2019	Xylenes, Total	1.3	1.5	0.641288	620	ug/L
MKTF-41	2/13/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-41	5/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	5/7/2019	1,1,2-Trichloroethane	0.52	1	0.21583	5	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethane	3.2	1	0.140859	25	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethene	5.4	1	0.205388	7	ug/L
MKTF-41	5/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	5/7/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	5/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	5/7/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	5/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	5/7/2019	1,2,4-Trimethylbenzene	0.49	1	0.213199	56	ug/L
MKTF-41	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	5/7/2019	1,2-Dichloroethane	2.6	1	0.194638	5	ug/L
MKTF-41	5/7/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	5/7/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	5/7/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	0.75	4	0.314954	NA	ug/L
MKTF-41	5/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	5/7/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	5/7/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	5/7/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	**0.68**	4	0.345376		ug/L
MKTF-41	5/7/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	5/7/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	5/7/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	5/7/2019	Acetone	6.2	10	1.199396	14064	ug/L
MKTF-41	5/7/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	5/7/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	5/7/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	5/7/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	5/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	5/7/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	5/7/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	5/7/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	5/7/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	5/7/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	5/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	5/7/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	5/7/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	5/7/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	5/7/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	5/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	5/7/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	5/7/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	5/7/2019	MTBE	0.99	1	0.456095	143	ug/L
MKTF-41	5/7/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	5/7/2019	Naphthalene	0.62	2	0.275071	30	ug/L
MKTF-41	5/7/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	5/7/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	5/7/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	5/7/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	5/7/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	5/7/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	5/7/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	5/7/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	5/7/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	5/7/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	5/7/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	5/7/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	5/7/2019	Xylenes, Total	0.53	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	5/7/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	5/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	5/7/2019	1,1,2-Trichloroethane	0.51	1	0.21583	5	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethane	3	1	0.140859	25	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethene	4	1	0.205388	7	ug/L
MKTF-41	5/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	5/7/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	5/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	5/7/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
MKTF-41	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	5/7/2019	1,2-Dichloroethane	2.5	1	0.194638	5	ug/L
MKTF-41	5/7/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	5/7/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	5/7/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-41	5/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	5/7/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	5/7/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	5/7/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-41	5/7/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	5/7/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	5/7/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	5/7/2019	Acetone	4.8	10	1.199396	14064	ug/L
MKTF-41	5/7/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	5/7/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	5/7/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	5/7/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	5/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	5/7/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	5/7/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	5/7/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	5/7/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	5/7/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	5/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	5/7/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	5/7/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	5/7/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	5/7/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	5/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	5/7/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	5/7/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	5/7/2019	MTBE	0.87	1	0.456095	143	ug/L
MKTF-41	5/7/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-41	5/7/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	5/7/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	5/7/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	5/7/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	5/7/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	5/7/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	5/7/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	5/7/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	5/7/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	5/7/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	5/7/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	5/7/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	5/7/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-41	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	8/22/2019	1,1,2-Trichloroethane	0.69	1	0.21583	5	ug/L
MKTF-41	8/22/2019	1,1-Dichloroethane	3.9	1	0.140859	25	ug/L
MKTF-41	8/22/2019	1,1-Dichloroethene	5.3	1	0.205388	7	ug/L
MKTF-41	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	8/22/2019	1,2,4-Trimethylbenzene	0.51	1	0.213199	56	ug/L
MKTF-41	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	8/22/2019	1,2-Dichloroethane	3.3	1	0.194638	5	ug/L
MKTF-41	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	8/22/2019	1-Methylnaphthalene	0.64	4	0.314954	NA	ug/L
MKTF-41	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	8/22/2019	2-Methylnaphthalene	**0.7**	4	0.345376		ug/L
MKTF-41	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	8/22/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-41	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	8/22/2019	MTBE	1.2	1	0.456095	143	ug/L
MKTF-41	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	8/22/2019	Naphthalene	0.63	2	0.275071	30	ug/L
MKTF-41	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	8/22/2019	Xylenes, Total	0.63	1.5	0.454415	620	ug/L
MKTF-41	8/22/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-41	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	10/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	10/23/2019	1,1,2-Trichloroethane	0.63	1	0.21583	5	ug/L
MKTF-41	10/23/2019	1,1-Dichloroethane	3.1	1	0.140859	25	ug/L
MKTF-41	10/23/2019	1,1-Dichloroethene	3.8	1	0.205388	7	ug/L
MKTF-41	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	10/23/2019	1,2,4-Trimethylbenzene	0.36	1	0.213199	56	ug/L
MKTF-41	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	10/23/2019	1,2-Dichloroethane	3	1	0.194638	5	ug/L
MKTF-41	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	10/23/2019	1-Methylnaphthalene	0.35	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-41	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	10/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-41	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	10/23/2019	Chloroform	0.2	1	0.121891	100	ug/L
MKTF-41	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	10/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	10/23/2019	MTBE	1.3	1	0.456095	143	ug/L
MKTF-41	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	10/23/2019	Naphthalene	0.33	2	0.275071	30	ug/L
MKTF-41	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	10/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-41	10/23/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-41	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-41	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-41	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-41	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-41	2/27/2020	1,1-Dichloroethane	3.3	1	0.27	25	ug/L
MKTF-41	2/27/2020	1,1-Dichloroethene	**7.6**	1	0.13	7	ug/L
MKTF-41	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-41	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-41	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-41	2/27/2020	1,2,4-Trimethylbenzene	1.3	1	0.12	56	ug/L
MKTF-41	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-41	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-41	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-41	2/27/2020	1,2-Dichloroethane	3.1	1	0.22	5	ug/L
MKTF-41	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-41	2/27/2020	1,3,5-Trimethylbenzene	0.51	1	0.18	60	ug/L
MKTF-41	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-41	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-41	2/27/2020	1-Methylnaphthalene	1.9	4	0.84	NA	ug/L
MKTF-41	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-41	2/27/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-41	2/27/2020	2-Methylnaphthalene	**2.6**	4	0.69		ug/L
MKTF-41	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-41	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-41	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	2/27/2020	Acetone	3.9	10	2.3	14064	ug/L
MKTF-41	2/27/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-41	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-41	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-41	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-41	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-41	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-41	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-41	2/27/2020	Chloroform	0.2	1	0.13	100	ug/L
MKTF-41	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-41	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-41	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-41	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-41	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-41	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-41	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-41	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-41	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-41	2/27/2020	MTBE	1.2	1	0.39	143	ug/L
MKTF-41	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-41	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-41	2/27/2020	Naphthalene	2	2	0.28	30	ug/L
MKTF-41	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-41	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-41	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-41	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-41	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-41	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-41	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-41	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-41	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-41	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	2/27/2020	Xylenes, Total	2.8	1.5	0.55	620	ug/L
MKTF-41	2/27/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-41	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-41	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-41	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-41	9/21/2020	1,1,2-Trichloroethane	0.65	1	0.19	5	ug/L
MKTF-41	9/21/2020	1,1-Dichloroethane	5.2	1	0.27	25	ug/L
MKTF-41	9/21/2020	1,1-Dichloroethene	**7.1**	1	0.13	7	ug/L
MKTF-41	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-41	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-41	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-41	9/21/2020	1,2,4-Trimethylbenzene	1.9	1	0.12	56	ug/L
MKTF-41	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-41	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-41	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-41	9/21/2020	1,2-Dichloroethane	4.1	1	0.22	5	ug/L
MKTF-41	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-41	9/21/2020	1,3,5-Trimethylbenzene	0.75	1	0.18	60	ug/L
MKTF-41	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-41	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-41	9/21/2020	1-Methylnaphthalene	2.6	4	0.84	NA	ug/L
MKTF-41	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-41	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-41	9/21/2020	2-Methylnaphthalene	**3.5**	4	0.69		ug/L
MKTF-41	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-41	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-41	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-41	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-41	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-41	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-41	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-41	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-41	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-41	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-41	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-41	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-41	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-41	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-41	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-41	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-41	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-41	9/21/2020	Ethylbenzene	0.36	1	0.21	700	ug/L
MKTF-41	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-41	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-41	9/21/2020	MTBE	1	1	0.39	143	ug/L
MKTF-41	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-41	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-41	9/21/2020	Naphthalene	2.6	2	0.28	30	ug/L
MKTF-41	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-41	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-41	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-41	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-41	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-41	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-41	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-41	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-41	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-41	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	9/21/2020	Xylenes, Total	4.3	1.5	0.55	620	ug/L
MKTF-41	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-41	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-41	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-41	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-41	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-41	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-41	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-41	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-41	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-41	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-41	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-41	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-41	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-41	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-41	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-41	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-41	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-41	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-41	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-41	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-41	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-41	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-41	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-41	12/15/2020	1,1-Dichloroethane	3.34	1	0.5	25	ug/L
MKTF-41	12/15/2020	1,2-Dichloroethane	2.99	1	0.5	5	ug/L
MKTF-41	12/15/2020	1,1-Dichloroethene	4.91	1	0.5	7	ug/L
MKTF-41	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-41	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-41	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-41	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-41	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-41	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-41	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-41	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-41	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-41	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-41	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-41	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-41	12/15/2020	Naphthalene	3.22	1	1	30	ug/L
MKTF-41	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-41	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-41	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-41	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-41	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-41	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-41	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-41	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-41	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-41	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-41	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-41	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-41	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-41	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-41	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-41	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-41	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-41	12/15/2020	1,2,4-Trimethylbenzene	1.22	1	0.82	56	ug/L
MKTF-41	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-41	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-41	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-41	12/15/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
MKTF-42	11/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-42	11/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-42	11/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-42	11/18/2014	Benzene	**12**	10	1.5	5	ug/L
MKTF-42	11/18/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-42	11/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-42	11/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-42	11/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-42	11/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-42	11/18/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-42	11/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-42	11/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-42	11/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-42	11/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-42	11/18/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-42	11/18/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-42	11/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-42	11/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-42	11/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-42	11/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-42	11/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-42	11/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-42	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-42	11/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-42	11/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-42	11/18/2014	1,2,4-Trimethylbenzene	27	10	1.2	56	ug/L
MKTF-42	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-42	11/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-42	11/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-42	11/18/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-42	11/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-42	11/18/2014	Ethylbenzene	ND	10	1.3	700	ug/L
MKTF-42	11/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-42	11/18/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
MKTF-42	11/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-42	11/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-42	11/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-42	11/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-42	11/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-42	11/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-42	11/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-42	11/18/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-42	11/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-42	11/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-42	11/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-42	11/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-42	11/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-42	11/18/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-42	11/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-42	11/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-42	11/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-42	11/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-42	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-42	11/18/2014	Xylenes, Total	56	15	3.8	620	ug/L
MKTF-42	11/18/2014	MTBE	ND	10	2.5	143	ug/L
MKTF-42	11/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-42	11/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-42	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	3/11/2015	Acetone	10	10	0.94	14064	ug/L
MKTF-42	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	3/11/2015	Benzene	1.7	1	0.065	5	ug/L
MKTF-42	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	3/11/2015	1,2,4-Trimethylbenzene	3.9	1	0.16	56	ug/L
MKTF-42	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-42	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	3/11/2015	1,3,5-Trimethylbenzene	2.6	1	0.12	60	ug/L
MKTF-42	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	3/11/2015	Xylenes, Total	10	1.5	0.28	620	ug/L
MKTF-42	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-42	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	6/9/2015	Benzene	1.6	1	0.065	5	ug/L
MKTF-42	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	1,2,4-Trimethylbenzene	3.4	1	0.16	56	ug/L
MKTF-42	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-42	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	6/9/2015	1,3,5-Trimethylbenzene	2.8	1	0.12	60	ug/L
MKTF-42	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	6/9/2015	Xylenes, Total	11	1.5	0.28	620	ug/L
MKTF-42	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	8/21/2015	Acetone	14	10	0.94	14064	ug/L
MKTF-42	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	8/21/2015	Benzene	2.8	1	0.065	5	ug/L
MKTF-42	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	8/21/2015	1,2,4-Trimethylbenzene	6	1	0.16	56	ug/L
MKTF-42	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	8/21/2015	Ethylbenzene	1	1	0.1	700	ug/L
MKTF-42	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	8/21/2015	1,3,5-Trimethylbenzene	4.1	1	0.12	60	ug/L
MKTF-42	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	8/21/2015	Xylenes, Total	17	1.5	0.28	620	ug/L
MKTF-42	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	11/5/2015	Acetone	14	10	0.94	14064	ug/L
MKTF-42	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	11/5/2015	Benzene	3.3	1	0.065	5	ug/L
MKTF-42	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	11/5/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	11/5/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	11/5/2015	1,2,4-Trimethylbenzene	8.3	1	0.16	56	ug/L
MKTF-42	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	11/5/2015	p-Isopropyltoluene	1.1	1	0.19	NA	ug/L
MKTF-42	11/5/2015	Ethylbenzene	1.7	1	0.1	700	ug/L
MKTF-42	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	11/5/2015	1,2-Dichloroethane	1.1	1	0.18	5	ug/L
MKTF-42	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	11/5/2015	1,3,5-Trimethylbenzene	5	1	0.12	60	ug/L
MKTF-42	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	11/5/2015	Xylenes, Total	22	1.5	0.28	620	ug/L
MKTF-42	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	2/24/2016	Acetone	23	10	0.88	14064	ug/L
MKTF-42	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	2/24/2016	Benzene	4.1	1	0.096	5	ug/L
MKTF-42	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-42	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-42	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-42	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-42	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-42	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-42	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-42	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-42	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-42	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-42	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-42	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-42	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	2/24/2016	1,2,4-Trimethylbenzene	6.6	1	0.1	56	ug/L
MKTF-42	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-42	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-42	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-42	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-42	2/24/2016	p-Isopropyltoluene	1.1	1	0.14	NA	ug/L
MKTF-42	2/24/2016	Ethylbenzene	1.1	1	0.11	700	ug/L
MKTF-42	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-42	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-42	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-42	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-42	2/24/2016	1,3,5-Trimethylbenzene	3.8	1	0.12	60	ug/L
MKTF-42	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-42	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-42	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-42	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-42	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-42	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-42	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	2/24/2016	Xylenes, Total	26	1.5	0.32	620	ug/L
MKTF-42	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-42	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-42	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-42	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-42	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-42	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-42	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-42	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-42	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-42	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-42	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-42	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-42	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-42	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-42	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-42	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-42	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-42	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-42	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	9/9/2016	Acetone	31	10	4.9	14064	ug/L
MKTF-42	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	9/9/2016	Benzene	4	1	0.096	5	ug/L
MKTF-42	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	9/9/2016	2-Butanone	8.3	10	0.74	5565	ug/L
MKTF-42	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	9/9/2016	1,2,4-Trimethylbenzene	6.6	1	0.11	56	ug/L
MKTF-42	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	9/9/2016	Isopropylbenzene	0.58	1	0.1	447	ug/L
MKTF-42	9/9/2016	p-Isopropyltoluene	1.8	1	0.14	NA	ug/L
MKTF-42	9/9/2016	Ethylbenzene	1.8	1	0.11	700	ug/L
MKTF-42	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	9/9/2016	n-Propylbenzene	0.72	1	0.13	660	ug/L
MKTF-42	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	9/9/2016	1,2-Dichloroethane	0.98	1	0.12	5	ug/L
MKTF-42	9/9/2016	4-Methyl-2-Pentanone	3.2	10	0.43	1243	ug/L
MKTF-42	9/9/2016	1,3,5-Trimethylbenzene	2.9	1	0.12	60	ug/L
MKTF-42	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	9/9/2016	Toluene	0.33	1	0.12	1000	ug/L
MKTF-42	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	9/9/2016	sec-Butylbenzene	0.41	1	0.12	2000	ug/L
MKTF-42	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	9/9/2016	2-Hexanone	2.2	10	0.84	38	ug/L
MKTF-42	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	9/9/2016	Xylenes, Total	25	1.5	0.37	620	ug/L
MKTF-42	9/9/2016	MTBE	0.56	1	0.21	143	ug/L
MKTF-42	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	10/31/2016	Acetone	30	10	4.9	14064	ug/L
MKTF-42	10/31/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	10/31/2016	Benzene	3.4	1	0.096	5	ug/L
MKTF-42	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	10/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	10/31/2016	2-Butanone	10	10	0.74	5565	ug/L
MKTF-42	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	10/31/2016	1,2,4-Trimethylbenzene	5.3	1	0.11	56	ug/L
MKTF-42	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	10/31/2016	Isopropylbenzene	0.54	1	0.1	447	ug/L
MKTF-42	10/31/2016	p-Isopropyltoluene	2.3	1	0.14	NA	ug/L
MKTF-42	10/31/2016	Ethylbenzene	1.9	1	0.11	700	ug/L
MKTF-42	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	10/31/2016	n-Propylbenzene	0.68	1	0.13	660	ug/L
MKTF-42	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	10/31/2016	1,2-Dichloroethane	1.1	1	0.12	5	ug/L
MKTF-42	10/31/2016	4-Methyl-2-Pentanone	3.7	10	0.43	1243	ug/L
MKTF-42	10/31/2016	1,3,5-Trimethylbenzene	2.7	1	0.12	60	ug/L
MKTF-42	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	10/31/2016	Toluene	0.49	1	0.12	1000	ug/L
MKTF-42	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	10/31/2016	sec-Butylbenzene	0.34	1	0.12	2000	ug/L
MKTF-42	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	10/31/2016	2-Hexanone	4.2	10	0.84	38	ug/L
MKTF-42	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	10/31/2016	Xylenes, Total	27	1.5	0.37	620	ug/L
MKTF-42	10/31/2016	MTBE	0.67	1	0.21	143	ug/L
MKTF-42	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	3/7/2017	Acetone	28	10	0.88	14064	ug/L
MKTF-42	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	3/7/2017	Benzene	4.9	1	0.096	5	ug/L
MKTF-42	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	3/7/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-42	3/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-42	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	3/7/2017	2-Butanone	9	10	1.1	5565	ug/L
MKTF-42	3/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	3/7/2017	1,2,4-Trimethylbenzene	4	1	0.1	56	ug/L
MKTF-42	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	3/7/2017	Isopropylbenzene	0.34	1	0.098	447	ug/L
MKTF-42	3/7/2017	p-Isopropyltoluene	3.1	1	0.14	NA	ug/L
MKTF-42	3/7/2017	Ethylbenzene	1.1	1	0.11	700	ug/L
MKTF-42	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	3/7/2017	n-Propylbenzene	0.28	1	0.13	660	ug/L
MKTF-42	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	3/7/2017	1,2-Dichloroethane	1.3	1	0.12	5	ug/L
MKTF-42	3/7/2017	4-Methyl-2-Pentanone	2.2	10	0.71	1243	ug/L
MKTF-42	3/7/2017	1,3,5-Trimethylbenzene	3.4	1	0.12	60	ug/L
MKTF-42	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	3/7/2017	Toluene	0.44	1	0.089	1000	ug/L
MKTF-42	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-42	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	3/7/2017	sec-Butylbenzene	0.2	1	0.1	2000	ug/L
MKTF-42	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-42	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	3/7/2017	Xylenes, Total	24	1.5	0.32	620	ug/L
MKTF-42	3/7/2017	MTBE	1.1	1	0.15	143	ug/L
MKTF-42	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-42	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	6/6/2017	Acetone	35	10	0.82	14064	ug/L
MKTF-42	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	6/6/2017	Benzene	4.9	1	0.062	5	ug/L
MKTF-42	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	6/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	6/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	6/6/2017	2-Butanone	9.9	10	1.1	5565	ug/L
MKTF-42	6/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/6/2017	1,2,4-Trimethylbenzene	4.7	1	0.11	56	ug/L
MKTF-42	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	6/6/2017	Isopropylbenzene	0.34	1	0.051	447	ug/L
MKTF-42	6/6/2017	p-Isopropyltoluene	3.2	1	0.096	NA	ug/L
MKTF-42	6/6/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
MKTF-42	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	6/6/2017	n-Propylbenzene	0.37	1	0.074	660	ug/L
MKTF-42	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	6/6/2017	1,2-Dichloroethane	1.5	1	0.4	5	ug/L
MKTF-42	6/6/2017	4-Methyl-2-Pentanone	1.8	10	0.71	1243	ug/L
MKTF-42	6/6/2017	1,3,5-Trimethylbenzene	2.4	1	0.087	60	ug/L
MKTF-42	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	6/6/2017	Toluene	0.37	1	0.064	1000	ug/L
MKTF-42	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	6/6/2017	sec-Butylbenzene	0.17	1	0.11	2000	ug/L
MKTF-42	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-42	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	6/6/2017	Xylenes, Total	21	1.5	0.32	620	ug/L
MKTF-42	6/6/2017	MTBE	1.4	1	0.24	143	ug/L
MKTF-42	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	9/25/2017	Acetone	37	10	0.82	14064	ug/L
MKTF-42	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	9/25/2017	Benzene	**9.3**	1	0.062	5	ug/L
MKTF-42	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	9/25/2017	1,1-Dichloroethene	0.19	1	0.081	7	ug/L
MKTF-42	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	9/25/2017	2-Butanone	10	10	1.1	5565	ug/L
MKTF-42	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	9/25/2017	1,2,4-Trimethylbenzene	18	1	0.11	56	ug/L
MKTF-42	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	9/25/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-42	9/25/2017	p-Isopropyltoluene	2	1	0.096	NA	ug/L
MKTF-42	9/25/2017	Ethylbenzene	3.9	1	0.093	700	ug/L
MKTF-42	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	9/25/2017	n-Propylbenzene	1.7	1	0.074	660	ug/L
MKTF-42	9/25/2017	n-Butylbenzene	0.59	3	0.13	1000	ug/L
MKTF-42	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	9/25/2017	1,2-Dichloroethane	1.7	1	0.4	5	ug/L
MKTF-42	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-42	9/25/2017	1,3,5-Trimethylbenzene	6.5	1	0.087	60	ug/L
MKTF-42	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	9/25/2017	Toluene	0.98	1	0.064	1000	ug/L
MKTF-42	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	9/25/2017	sec-Butylbenzene	0.46	1	0.11	2000	ug/L
MKTF-42	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	9/25/2017	Xylenes, Total	46	1.5	0.32	620	ug/L
MKTF-42	9/25/2017	MTBE	2	1	0.24	143	ug/L
MKTF-42	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	11/27/2017	Acetone	30	10	0.82	14064	ug/L
MKTF-42	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	11/27/2017	Benzene	**7.1**	1	0.062	5	ug/L
MKTF-42	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	11/27/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	11/27/2017	1,1-Dichloroethene	0.23	1	0.081	7	ug/L
MKTF-42	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	11/27/2017	2-Butanone	7.1	10	1.1	5565	ug/L
MKTF-42	11/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	11/27/2017	1,2,4-Trimethylbenzene	11	1	0.11	56	ug/L
MKTF-42	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	11/27/2017	Isopropylbenzene	0.73	1	0.051	447	ug/L
MKTF-42	11/27/2017	p-Isopropyltoluene	3.7	1	0.096	NA	ug/L
MKTF-42	11/27/2017	Ethylbenzene	2.6	1	0.093	700	ug/L
MKTF-42	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	11/27/2017	n-Propylbenzene	0.83	1	0.074	660	ug/L
MKTF-42	11/27/2017	n-Butylbenzene	0.37	3	0.13	1000	ug/L
MKTF-42	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	11/27/2017	1,2-Dichloroethane	1.3	1	0.4	5	ug/L
MKTF-42	11/27/2017	4-Methyl-2-Pentanone	3.4	10	0.71	1243	ug/L
MKTF-42	11/27/2017	1,3,5-Trimethylbenzene	5.2	1	0.087	60	ug/L
MKTF-42	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	11/27/2017	Toluene	0.8	1	0.064	1000	ug/L
MKTF-42	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	11/27/2017	sec-Butylbenzene	0.26	1	0.11	2000	ug/L
MKTF-42	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	11/27/2017	2-Hexanone	2.6	10	0.66	38	ug/L
MKTF-42	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	11/27/2017	Xylenes, Total	37	1.5	0.32	620	ug/L
MKTF-42	11/27/2017	MTBE	2	1	0.24	143	ug/L
MKTF-42	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	2/7/2018	Acetone	36	10	0.82	14064	ug/L
MKTF-42	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	2/7/2018	Benzene	**8.4**	1	0.062	5	ug/L
MKTF-42	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	2/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	2/7/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	2/7/2018	2-Butanone	12	10	1.1	5565	ug/L
MKTF-42	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	2/7/2018	1,2,4-Trimethylbenzene	6.5	1	0.11	56	ug/L
MKTF-42	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-42	2/7/2018	p-Isopropyltoluene	4.4	1	0.096	NA	ug/L
MKTF-42	2/7/2018	Ethylbenzene	1.5	1	0.093	700	ug/L
MKTF-42	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-42	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-42	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	2/7/2018	1,2-Dichloroethane	2	1	0.4	5	ug/L
MKTF-42	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-42	2/7/2018	1,3,5-Trimethylbenzene	3.9	1	0.087	60	ug/L
MKTF-42	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-42	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-42	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	2/7/2018	Xylenes, Total	32	1.5	0.32	620	ug/L
MKTF-42	2/7/2018	MTBE	3.3	1	0.24	143	ug/L
MKTF-42	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	5/9/2018	Acetone	37	10	0.82	14064	ug/L
MKTF-42	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	5/9/2018	Benzene	**9.3**	1	0.062	5	ug/L
MKTF-42	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	5/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	5/9/2018	1,1-Dichloroethene	0.26	1	0.081	7	ug/L
MKTF-42	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	5/9/2018	2-Butanone	8.8	10	1.1	5565	ug/L
MKTF-42	5/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	5/9/2018	1,2,4-Trimethylbenzene	8.6	1	0.11	56	ug/L
MKTF-42	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	5/9/2018	Isopropylbenzene	0.55	1	0.051	447	ug/L
MKTF-42	5/9/2018	p-Isopropyltoluene	3.6	1	0.096	NA	ug/L
MKTF-42	5/9/2018	Ethylbenzene	1.6	1	0.093	700	ug/L
MKTF-42	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-42	5/9/2018	n-Propylbenzene	0.56	1	0.074	660	ug/L
MKTF-42	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	5/9/2018	1,2-Dichloroethane	2.2	1	0.4	5	ug/L
MKTF-42	5/9/2018	4-Methyl-2-Pentanone	2.3	10	0.71	1243	ug/L
MKTF-42	5/9/2018	1,3,5-Trimethylbenzene	4	1	0.087	60	ug/L
MKTF-42	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	5/9/2018	Toluene	0.76	1	0.064	1000	ug/L
MKTF-42	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	5/9/2018	sec-Butylbenzene	0.28	1	0.11	2000	ug/L
MKTF-42	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	5/9/2018	Xylenes, Total	31	1.5	0.32	620	ug/L
MKTF-42	5/9/2018	MTBE	3.8	1	0.24	143	ug/L
MKTF-42	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	8/29/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-42	8/29/2018	Acetone	46	10	0.79	14064	ug/L
MKTF-42	8/29/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	8/29/2018	Benzene	**11**	1	0.17	5	ug/L
MKTF-42	8/29/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-42	8/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	8/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	8/29/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-42	8/29/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-42	8/29/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-42	8/29/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-42	8/29/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-42	8/29/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-42	8/29/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-42	8/29/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	8/29/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-42	8/29/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-42	8/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	8/29/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	8/29/2018	2-Butanone	12	10	1.3	5565	ug/L
MKTF-42	8/29/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-42	8/29/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-42	8/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-42	8/29/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-42	8/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	8/29/2018	1,2,4-Trimethylbenzene	11	1	0.25	56	ug/L
MKTF-42	8/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-42	8/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-42	8/29/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-42	8/29/2018	Isopropylbenzene	0.71	1	0.22	447	ug/L
MKTF-42	8/29/2018	p-Isopropyltoluene	3.7	1	0.24	NA	ug/L
MKTF-42	8/29/2018	Ethylbenzene	1.8	1	0.22	700	ug/L
MKTF-42	8/29/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-42	8/29/2018	n-Propylbenzene	0.93	1	0.24	660	ug/L
MKTF-42	8/29/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	8/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	8/29/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-42	8/29/2018	1,2-Dichloroethane	2.6	1	0.4	5	ug/L
MKTF-42	8/29/2018	4-Methyl-2-Pentanone	2.9	10	0.45	1243	ug/L
MKTF-42	8/29/2018	1,3,5-Trimethylbenzene	4.6	1	0.23	60	ug/L
MKTF-42	8/29/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-42	8/29/2018	Toluene	0.7	1	0.17	1000	ug/L
MKTF-42	8/29/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/29/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-42	8/29/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	8/29/2018	sec-Butylbenzene	0.32	1	0.2	2000	ug/L
MKTF-42	8/29/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-42	8/29/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-42	8/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	8/29/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-42	8/29/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-42	8/29/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-42	8/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-42	8/29/2018	Xylenes, Total	32	1.5	0.64	620	ug/L
MKTF-42	8/29/2018	MTBE	4.3	1	0.32	143	ug/L
MKTF-42	8/29/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-42	8/29/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-42	11/15/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-42	11/15/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-42	11/15/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-42	11/15/2018	Benzene	**30**	2	0.35	5	ug/L
MKTF-42	11/15/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-42	11/15/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-42	11/15/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-42	11/15/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-42	11/15/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-42	11/15/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-42	11/15/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-42	11/15/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-42	11/15/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-42	11/15/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-42	11/15/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-42	11/15/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-42	11/15/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-42	11/15/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-42	11/15/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-42	11/15/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-42	11/15/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-42	11/15/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-42	11/15/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-42	11/15/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-42	11/15/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-42	11/15/2018	1,2,4-Trimethylbenzene	**68**	2	0.51	56	ug/L
MKTF-42	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-42	11/15/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-42	11/15/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-42	11/15/2018	Isopropylbenzene	3.6	2	0.44	447	ug/L
MKTF-42	11/15/2018	p-Isopropyltoluene	2.1	2	0.48	NA	ug/L
MKTF-42	11/15/2018	Ethylbenzene	8.7	2	0.45	700	ug/L
MKTF-42	11/15/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-42	11/15/2018	n-Propylbenzene	4.7	2	0.49	660	ug/L
MKTF-42	11/15/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-42	11/15/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-42	11/15/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-42	11/15/2018	1,2-Dichloroethane	3.9	2	0.38	5	ug/L
MKTF-42	11/15/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-42	11/15/2018	1,3,5-Trimethylbenzene	21	2	0.46	60	ug/L
MKTF-42	11/15/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-42	11/15/2018	Toluene	2.1	2	0.34	1000	ug/L
MKTF-42	11/15/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-42	11/15/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-42	11/15/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-42	11/15/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-42	11/15/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-42	11/15/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-42	11/15/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-42	11/15/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-42	11/15/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-42	11/15/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-42	11/15/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-42	11/15/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-42	11/15/2018	Xylenes, Total	110	3	1.3	620	ug/L
MKTF-42	11/15/2018	MTBE	5	2	0.91	143	ug/L
MKTF-42	11/15/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-42	11/15/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-42	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.504798	5.74	ug/L
MKTF-42	2/13/2019	1,1,1-Trichloroethane	ND	1	0.327632	200	ug/L
MKTF-42	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.656598	10	ug/L
MKTF-42	2/13/2019	1,1,2-Trichloroethane	ND	1	0.465446	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	1,1-Dichloroethane	0.69	1	0.350393	25	ug/L
MKTF-42	2/13/2019	1,1-Dichloroethene	0.5	1	0.240976	7	ug/L
MKTF-42	2/13/2019	1,1-Dichloropropene	ND	1	0.325198	NA	ug/L
MKTF-42	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.560616	70	ug/L
MKTF-42	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	1.132009	0.0084	ug/L
MKTF-42	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.53282	70	ug/L
MKTF-42	2/13/2019	1,2,4-Trimethylbenzene	22	1	0.506629	56	ug/L
MKTF-42	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.941794	0.0033	ug/L
MKTF-42	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.459057	0.05	ug/L
MKTF-42	2/13/2019	1,2-Dichlorobenzene	ND	1	0.62293	600	ug/L
MKTF-42	2/13/2019	1,2-Dichloroethane	2.3	1	0.379051	5	ug/L
MKTF-42	2/13/2019	1,2-Dichloropropane	ND	1	0.330452	5	ug/L
MKTF-42	2/13/2019	1,3,5-Trimethylbenzene	8.1	1	0.462828	60	ug/L
MKTF-42	2/13/2019	1,3-Dichlorobenzene	ND	1	0.625245	N/A	ug/L
MKTF-42	2/13/2019	1,3-Dichloropropane	ND	1	0.541513	370	ug/L
MKTF-42	2/13/2019	1,4-Dichlorobenzene	ND	1	0.575414	75	ug/L
MKTF-42	2/13/2019	1-Methylnaphthalene	11	4	0.671634	NA	ug/L
MKTF-42	2/13/2019	2,2-Dichloropropane	ND	2	0.466868	NA	ug/L
MKTF-42	2/13/2019	2-Butanone	3.2	10	2.821738	5565	ug/L
MKTF-42	2/13/2019	2-Chlorotoluene	ND	1	0.500276	233	ug/L
MKTF-42	2/13/2019	2-Hexanone	ND	10	1.813149	38	ug/L
MKTF-42	2/13/2019	2-Methylnaphthalene	**15**	4	0.690752		ug/L
MKTF-42	2/13/2019	4-Chlorotoluene	ND	1	0.561602	250	ug/L
MKTF-42	2/13/2019	p-Isopropyltoluene	0.78	1	0.480677	NA	ug/L
MKTF-42	2/13/2019	4-Methyl-2-Pentanone	6.6	10	0.906555	1243	ug/L
MKTF-42	2/13/2019	Acetone	14	10	1.514139	14064	ug/L
MKTF-42	2/13/2019	Benzene	**17**	1	0.349791	5	ug/L
MKTF-42	2/13/2019	Bromobenzene	ND	1	0.635812	62	ug/L
MKTF-42	2/13/2019	Bromodichloromethane	ND	1	0.565534	1.34	ug/L
MKTF-42	2/13/2019	Bromoform	ND	1	0.646621	32.9	ug/L
MKTF-42	2/13/2019	Bromomethane	ND	3	0.546165	7.54	ug/L
MKTF-42	2/13/2019	Carbon Disulfide	ND	10	0.770062	810	ug/L
MKTF-42	2/13/2019	Carbon tetrachloride	ND	1	0.274697	5	ug/L
MKTF-42	2/13/2019	Chlorobenzene	ND	1	0.581055	77.6	ug/L
MKTF-42	2/13/2019	Chloroethane	ND	2	0.328674	20857	ug/L
MKTF-42	2/13/2019	Chloroform	ND	1	0.470448	100	ug/L
MKTF-42	2/13/2019	Chloromethane	ND	3	0.641975	20.32	ug/L
MKTF-42	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.751962	70	ug/L
MKTF-42	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.596456	NA	ug/L
MKTF-42	2/13/2019	Dibromochloromethane	ND	1	0.474025	1.68	ug/L
MKTF-42	2/13/2019	Dibromomethane	ND	1	0.644295	8	ug/L
MKTF-42	2/13/2019	Dichlorodifluoromethane	ND	1	0.519842	197	ug/L
MKTF-42	2/13/2019	Ethylbenzene	3.1	1	0.446804	700	ug/L
MKTF-42	2/13/2019	Hexachlorobutadiene	ND	1	0.782374	1.39	ug/L
MKTF-42	2/13/2019	Isopropylbenzene	1.1	1	0.442208	447	ug/L
MKTF-42	2/13/2019	MTBE	4.4	1	0.91219	143	ug/L
MKTF-42	2/13/2019	Methylene Chloride	ND	3	0.41139	5	ug/L
MKTF-42	2/13/2019	Naphthalene	**57**	2	0.579252	30	ug/L
MKTF-42	2/13/2019	n-Butylbenzene	ND	3	0.496661	1000	ug/L
MKTF-42	2/13/2019	n-Propylbenzene	1.1	1	0.485172	660	ug/L
MKTF-42	2/13/2019	sec-Butylbenzene	ND	1	0.404509	2000	ug/L
MKTF-42	2/13/2019	Styrene	ND	1	0.500291	100	ug/L
MKTF-42	2/13/2019	tert-Butylbenzene	ND	1	0.442939	690	ug/L
MKTF-42	2/13/2019	Tetrachloroethene	ND	1	0.302903	5	ug/L
MKTF-42	2/13/2019	Toluene	0.87	1	0.336279	1000	ug/L
MKTF-42	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.364539	100	ug/L
MKTF-42	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.550935	NA	ug/L
MKTF-42	2/13/2019	Trichloroethene	ND	1	0.515113	5	ug/L
MKTF-42	2/13/2019	Trichlorofluoromethane	ND	1	0.288232	1137	ug/L
MKTF-42	2/13/2019	Vinyl Chloride	ND	1	0.242149	2	ug/L
MKTF-42	2/13/2019	Xylenes, Total	51	1.5	1.282575	620	ug/L
MKTF-42	2/13/2019	1,2-Dibromoethane	**0.29**	0.09358	0.032613	0.05	ug/L
MKTF-42	5/7/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	5/7/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	5/7/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	5/7/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	5/7/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-42	5/7/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-42	5/7/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	5/7/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	5/7/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-42	5/7/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	5/7/2019	1,2,4-Trimethylbenzene	3.4	2	0.426398	56	ug/L
MKTF-42	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-42	5/7/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	5/7/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/7/2019	1,2-Dichloroethane	1.6	2	0.389276	5	ug/L
MKTF-42	5/7/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	5/7/2019	1,3,5-Trimethylbenzene	1.5	2	0.37732	60	ug/L
MKTF-42	5/7/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	5/7/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	5/7/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	5/7/2019	1-Methylnaphthalene	6.7	8	0.629909	NA	ug/L
MKTF-42	5/7/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	5/7/2019	2-Butanone	4.9	20	4.178833	5565	ug/L
MKTF-42	5/7/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-42	5/7/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	5/7/2019	2-Methylnaphthalene	**3.6**	8	0.690752		ug/L
MKTF-42	5/7/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	5/7/2019	p-Isopropyltoluene	1.9	2	0.434579	NA	ug/L
MKTF-42	5/7/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	5/7/2019	Acetone	17	20	2.398793	14064	ug/L
MKTF-42	5/7/2019	Benzene	**7**	2	0.333278	5	ug/L
MKTF-42	5/7/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	5/7/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	5/7/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	5/7/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	5/7/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-42	5/7/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	5/7/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	5/7/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	5/7/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	5/7/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	5/7/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	5/7/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	5/7/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	5/7/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	5/7/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	5/7/2019	Ethylbenzene	0.33	2	0.264682	700	ug/L
MKTF-42	5/7/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	5/7/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-42	5/7/2019	MTBE	4	2	0.91219	143	ug/L
MKTF-42	5/7/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	5/7/2019	Naphthalene	9.6	4	0.550143	30	ug/L
MKTF-42	5/7/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	5/7/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-42	5/7/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	5/7/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	5/7/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	5/7/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	5/7/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	5/7/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	5/7/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	5/7/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	5/7/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	5/7/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	5/7/2019	Xylenes, Total	15	3	0.90883	620	ug/L
MKTF-42	5/7/2019	1,2-Dibromoethane	**0.22**	0.01867	0.006505	0.05	ug/L
MKTF-42	8/22/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	8/22/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	8/22/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	8/22/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	8/22/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-42	8/22/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-42	8/22/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	8/22/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	8/22/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-42	8/22/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	8/22/2019	1,2,4-Trimethylbenzene	8.3	2	0.426398	56	ug/L
MKTF-42	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-42	8/22/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	8/22/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-42	8/22/2019	1,2-Dichloroethane	1.9	2	0.389276	5	ug/L
MKTF-42	8/22/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	8/22/2019	1,3,5-Trimethylbenzene	3	2	0.37732	60	ug/L
MKTF-42	8/22/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	8/22/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	8/22/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	8/22/2019	1-Methylnaphthalene	13	8	0.629909	NA	ug/L
MKTF-42	8/22/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	8/22/2019	2-Butanone	9.5	20	4.178833	5565	ug/L
MKTF-42	8/22/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	8/22/2019	2-Methylnaphthalene	**10**	8	0.690752		ug/L
MKTF-42	8/22/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	8/22/2019	p-Isopropyltoluene	2.1	2	0.434579	NA	ug/L
MKTF-42	8/22/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	8/22/2019	Acetone	19	20	2.398793	14064	ug/L
MKTF-42	8/22/2019	Benzene	**9.6**	2	0.333278	5	ug/L
MKTF-42	8/22/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	8/22/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	8/22/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	8/22/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	8/22/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-42	8/22/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	8/22/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	8/22/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	8/22/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	8/22/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	8/22/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	8/22/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	8/22/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	8/22/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	8/22/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	8/22/2019	Ethylbenzene	1.1	2	0.264682	700	ug/L
MKTF-42	8/22/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	8/22/2019	Isopropylbenzene	0.46	2	0.383045	447	ug/L
MKTF-42	8/22/2019	MTBE	4.1	2	0.91219	143	ug/L
MKTF-42	8/22/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	8/22/2019	Naphthalene	26	4	0.550143	30	ug/L
MKTF-42	8/22/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	8/22/2019	n-Propylbenzene	0.83	2	0.428616	660	ug/L
MKTF-42	8/22/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	8/22/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	8/22/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	8/22/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	8/22/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	8/22/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	8/22/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	8/22/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	8/22/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	8/22/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	8/22/2019	Xylenes, Total	22	3	0.90883	620	ug/L
MKTF-42	8/22/2019	1,2-Dibromoethane	**0.15**	0.00938	0.00327	0.05	ug/L
MKTF-42	10/23/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	10/23/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	10/23/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	10/23/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	10/23/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
MKTF-42	10/23/2019	1,1-Dichloroethene	0.9	2	0.410776	7	ug/L
MKTF-42	10/23/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	10/23/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	10/23/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	10/23/2019	1,2,4-Trimethylbenzene	6.3	2	0.426398	56	ug/L
MKTF-42	10/23/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	10/23/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-42	10/23/2019	1,2-Dichloroethane	2.3	2	0.389276	5	ug/L
MKTF-42	10/23/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	10/23/2019	1,3,5-Trimethylbenzene	2.5	2	0.37732	60	ug/L
MKTF-42	10/23/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	10/23/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	10/23/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	7	8	0.629909	NA	ug/L
MKTF-42	10/23/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	10/23/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-42	10/23/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-42	10/23/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	**6.4**	8	0.690752		ug/L
MKTF-42	10/23/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	10/23/2019	p-Isopropyltoluene	0.97	2	0.434579	NA	ug/L
MKTF-42	10/23/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	10/23/2019	Acetone	15	20	2.398793	14064	ug/L
MKTF-42	10/23/2019	Benzene	**11**	2	0.333278	5	ug/L
MKTF-42	10/23/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	10/23/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	10/23/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	10/23/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	10/23/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	10/23/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	10/23/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	10/23/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	10/23/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	10/23/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	10/23/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	10/23/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	10/23/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	10/23/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	10/23/2019	Ethylbenzene	1.1	2	0.264682	700	ug/L
MKTF-42	10/23/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	10/23/2019	Isopropylbenzene	0.43	2	0.383045	447	ug/L
MKTF-42	10/23/2019	MTBE	4.4	2	0.91219	143	ug/L
MKTF-42	10/23/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	10/23/2019	Naphthalene	18	4	0.550143	30	ug/L
MKTF-42	10/23/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	10/23/2019	n-Propylbenzene	0.7	2	0.428616	660	ug/L
MKTF-42	10/23/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	10/23/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	10/23/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	10/23/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	10/23/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	10/23/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	10/23/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	10/23/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	10/23/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	10/23/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	10/23/2019	Xylenes, Total	21	3	0.90883	620	ug/L
MKTF-42	10/23/2019	1,2-Dibromoethane	**0.26**	0.09409	0.032788	0.05	ug/L
MKTF-42	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-42	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-42	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-42	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-42	2/27/2020	1,1-Dichloroethane	0.74	1	0.27	25	ug/L
MKTF-42	2/27/2020	1,1-Dichloroethene	1.2	1	0.13	7	ug/L
MKTF-42	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-42	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-42	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-42	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-42	2/27/2020	1,2,4-Trimethylbenzene	30	1	0.12	56	ug/L
MKTF-42	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-42	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-42	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-42	2/27/2020	1,2-Dichloroethane	2.4	1	0.22	5	ug/L
MKTF-42	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-42	2/27/2020	1,3,5-Trimethylbenzene	12	1	0.18	60	ug/L
MKTF-42	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-42	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-42	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-42	2/27/2020	1-Methylnaphthalene	43	4	0.84	NA	ug/L
MKTF-42	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-42	2/27/2020	2-Butanone	4.3	10	1.1	5565	ug/L
MKTF-42	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-42	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-42	2/27/2020	2-Methylnaphthalene	**50**	4	0.69		ug/L
MKTF-42	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-42	2/27/2020	p-Isopropyltoluene	2.1	1	0.2	NA	ug/L
MKTF-42	2/27/2020	4-Methyl-2-Pentanone	4	10	1.1	1243	ug/L
MKTF-42	2/27/2020	Acetone	12	10	2.3	14064	ug/L
MKTF-42	2/27/2020	Benzene	**22**	1	0.23	5	ug/L
MKTF-42	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-42	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-42	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-42	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-42	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-42	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-42	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-42	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-42	2/27/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-42	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-42	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-42	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-42	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-42	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-42	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/27/2020	Ethylbenzene	3.7	1	0.21	700	ug/L
MKTF-42	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-42	2/27/2020	Isopropylbenzene	2.5	1	0.18	447	ug/L
MKTF-42	2/27/2020	MTBE	4.2	1	0.39	143	ug/L
MKTF-42	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-42	2/27/2020	n-Butylbenzene	0.8	3	0.25	1000	ug/L
MKTF-42	2/27/2020	n-Propylbenzene	2.8	1	0.18	660	ug/L
MKTF-42	2/27/2020	Naphthalene	**98**	2	0.28	30	ug/L
MKTF-42	2/27/2020	sec-Butylbenzene	0.87	1	0.61	2000	ug/L
MKTF-42	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-42	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-42	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-42	2/27/2020	Toluene	0.99	1	0.2	1000	ug/L
MKTF-42	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-42	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-42	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-42	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-42	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	2/27/2020	Xylenes, Total	70	1.5	0.55	620	ug/L
MKTF-42	2/27/2020	1,2-Dibromoethane	**0.22**	0.19	0.12	0.05	ug/L
MKTF-42	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-42	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-42	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-42	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-42	9/21/2020	1,1-Dichloroethane	1.2	1	0.27	25	ug/L
MKTF-42	9/21/2020	1,1-Dichloroethene	2.9	1	0.13	7	ug/L
MKTF-42	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-42	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-42	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-42	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-42	9/21/2020	1,2,4-Trimethylbenzene	47	1	0.12	56	ug/L
MKTF-42	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-42	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-42	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-42	9/21/2020	1,2-Dichloroethane	4.3	1	0.22	5	ug/L
MKTF-42	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-42	9/21/2020	1,3,5-Trimethylbenzene	15	1	0.18	60	ug/L
MKTF-42	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-42	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-42	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-42	9/21/2020	1-Methylnaphthalene	54	4	0.84	NA	ug/L
MKTF-42	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-42	9/21/2020	2-Butanone	2.5	10	1.1	5565	ug/L
MKTF-42	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-42	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-42	9/21/2020	2-Methylnaphthalene	**49**	4	0.69		ug/L
MKTF-42	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-42	9/21/2020	p-Isopropyltoluene	1.6	1	0.2	NA	ug/L
MKTF-42	9/21/2020	4-Methyl-2-Pentanone	3.1	10	1.1	1243	ug/L
MKTF-42	9/21/2020	Acetone	12	10	2.3	14064	ug/L
MKTF-42	9/21/2020	Benzene	**29**	1	0.23	5	ug/L
MKTF-42	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-42	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-42	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-42	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-42	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-42	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-42	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-42	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-42	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-42	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-42	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-42	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-42	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-42	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-42	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-42	9/21/2020	Ethylbenzene	3.7	1	0.21	700	ug/L
MKTF-42	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-42	9/21/2020	Isopropylbenzene	3.3	1	0.18	447	ug/L
MKTF-42	9/21/2020	MTBE	3.5	1	0.39	143	ug/L
MKTF-42	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-42	9/21/2020	n-Butylbenzene	1.4	3	0.25	1000	ug/L
MKTF-42	9/21/2020	n-Propylbenzene	3.9	1	0.18	660	ug/L
MKTF-42	9/21/2020	sec-Butylbenzene	1.2	1	0.61	2000	ug/L
MKTF-42	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-42	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-42	9/21/2020	Toluene	1.1	1	0.2	1000	ug/L
MKTF-42	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-42	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-42	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-42	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-42	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	9/21/2020	Xylenes, Total	80	1.5	0.55	620	ug/L
MKTF-42	9/21/2020	Naphthalene	**120**	20	2.8	30	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	**0.162**	0.0202	0.00504	0.05	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	**0.183**	0.0199	0.00497	0.05	ug/L
MKTF-42	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Acetone	ND	25	10	14064	ug/L
MKTF-42	12/16/2020	Benzene	**19.8**	1	0.38	5	ug/L
MKTF-42	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-42	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-42	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-42	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-42	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-42	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-42	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-42	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-42	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-42	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-42	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-42	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-42	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-42	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-42	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-42	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-42	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethene	2.78	1	0.5	7	ug/L
MKTF-42	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-42	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Ethylbenzene	2.44	1	0.5	700	ug/L
MKTF-42	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-42	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-42	12/16/2020	Isopropylbenzene	2.12	1	0.53	447	ug/L
MKTF-42	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-42	12/16/2020	1-Methylnaphthalene	26	5	4.2	NA	ug/L
MKTF-42	12/16/2020	2-Methylnaphthalene	**15.8**	10	4.6		ug/L
MKTF-42	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-42	12/16/2020	MTBE	2.22	1	0.74	143	ug/L
MKTF-42	12/16/2020	Naphthalene	**63.1**	1	1	30	ug/L
MKTF-42	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-42	12/16/2020	n-Propylbenzene	2.37	1	0.69	660	ug/L
MKTF-42	12/16/2020	p-Isopropyltoluene	1.14	1	0.71	NA	ug/L
MKTF-42	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-42	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-42	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-42	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-42	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-42	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-42	12/16/2020	Toluene	1.02	1	0.41	1000	ug/L
MKTF-42	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-42	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-42	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-42	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-42	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-42	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-42	12/16/2020	1,2,4-Trimethylbenzene	23.3	1	0.82	56	ug/L
MKTF-42	12/16/2020	1,3,5-Trimethylbenzene	9.17	1	0.56	60	ug/L
MKTF-42	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-42	12/16/2020	Xylenes, Total	53.8	10	1.6	620	ug/L
MKTF-42	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Acetone	27.1	25	10	14064	ug/L
MKTF-42	12/16/2020	Benzene	**14.2**	1	0.38	5	ug/L
MKTF-42	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-42	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-42	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-42	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-42	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-42	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-42	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-42	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-42	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-42	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-42	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-42	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-42	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-42	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-42	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-42	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-42	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethene	2.07	1	0.5	7	ug/L
MKTF-42	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-42	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Ethylbenzene	1.25	1	0.5	700	ug/L
MKTF-42	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-42	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-42	12/16/2020	Isopropylbenzene	1.11	1	0.53	447	ug/L
MKTF-42	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-42	12/16/2020	1-Methylnaphthalene	16.1	5	4.2	NA	ug/L
MKTF-42	12/16/2020	2-Methylnaphthalene	**12.7**	10	4.6		ug/L
MKTF-42	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-42	12/16/2020	MTBE	2.51	1	0.74	143	ug/L
MKTF-42	12/16/2020	Naphthalene	**32.2**	1	1	30	ug/L
MKTF-42	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-42	12/16/2020	n-Propylbenzene	1.36	1	0.69	660	ug/L
MKTF-42	12/16/2020	p-Isopropyltoluene	2.22	1	0.71	NA	ug/L
MKTF-42	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-42	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-42	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-42	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-42	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-42	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-42	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-42	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-42	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-42	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-42	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-42	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-42	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-42	12/16/2020	1,2,4-Trimethylbenzene	12.1	1	0.82	56	ug/L
MKTF-42	12/16/2020	1,3,5-Trimethylbenzene	4.15	1	0.56	60	ug/L
MKTF-42	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-42	12/16/2020	Xylenes, Total	26.5	10	1.6	620	ug/L
MKTF-43	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-43	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-43	11/18/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-43	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-43	11/18/2014	Bromomethane	*ND*	*10*	0.41	7.54	ug/L
MKTF-43	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-43	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-43	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-43	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-43	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-43	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-43	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-43	11/18/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-43	11/18/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-43	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-43	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-43	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-43	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-43	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-43	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-43	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-43	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-43	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-43	11/18/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-43	11/18/2014	p-Isopropyltoluene	3.6	1	0.18	NA	ug/L
MKTF-43	11/18/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-43	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-43	11/18/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-43	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-43	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-43	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-43	11/18/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-43	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-43	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-43	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-43	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-43	11/18/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-43	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-43	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-43	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-43	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-43	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-43	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-43	11/18/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-43	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-43	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	6/10/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	11/5/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	11/5/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	11/5/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-43	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-43	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-43	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-43	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-43	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-43	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-43	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-43	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-43	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-43	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-43	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-43	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-43	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-43	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-43	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-43	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-43	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-43	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-43	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-43	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-43	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-43	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-43	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-43	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-43	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-43	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-43	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-43	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	9/9/2016	Benzene	0.14	1	0.096	5	ug/L
MKTF-43	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-43	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-43	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	9/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	10/31/2016	Acetone	7	10	4.9	14064	ug/L
MKTF-43	10/31/2016	Chloroform	0.1	1	0.089	100	ug/L
MKTF-43	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	10/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	10/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	10/31/2016	Toluene	0.13	1	0.12	1000	ug/L
MKTF-43	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-43	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	10/31/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	3/8/2017	Acetone	3.7	10	0.88	14064	ug/L
MKTF-43	3/8/2017	Chloroform	0.16	1	0.089	100	ug/L
MKTF-43	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-43	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-43	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-43	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-43	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	3/8/2017	1,2,3-Trichloropropane	*ND*	2	0.39	0.0084	ug/L
MKTF-43	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-43	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-43	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-43	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	3/8/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-43	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-43	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	3/8/2017	MTBE	ND	1	0.15	143	ug/L
MKTF-43	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-43	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	6/6/2017	Acetone	5.4	10	0.82	14064	ug/L
MKTF-43	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	6/6/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	6/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	6/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	6/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	6/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	6/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	6/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-43	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	6/6/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	9/25/2017	Acetone	9.1	10	0.82	14064	ug/L
MKTF-43	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	9/25/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	11/27/2017	Acetone	3.6	10	0.82	14064	ug/L
MKTF-43	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	11/27/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	11/27/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	11/27/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	11/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	11/27/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	11/27/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	11/27/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-43	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-43	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	2/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	2/7/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-43	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	2/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	2/7/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-43	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-43	5/9/2018	Chloroform	0.72	1	0.4	100	ug/L
MKTF-43	5/9/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-43	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	5/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	5/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	5/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-43	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	5/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	5/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	5/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	5/9/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-43	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	8/30/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-43	8/30/2018	Acetone	12	10	0.79	14064	ug/L
MKTF-43	8/30/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	8/30/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-43	8/30/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-43	8/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	8/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	8/30/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-43	8/30/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-43	8/30/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-43	8/30/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-43	8/30/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-43	8/30/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-43	8/30/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-43	8/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	8/30/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-43	8/30/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-43	8/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	8/30/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	8/30/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-43	8/30/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-43	8/30/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-43	8/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-43	8/30/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-43	8/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	8/30/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-43	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-43	8/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-43	8/30/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-43	8/30/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-43	8/30/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-43	8/30/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-43	8/30/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-43	8/30/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-43	8/30/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	8/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	8/30/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-43	8/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	8/30/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-43	8/30/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-43	8/30/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-43	8/30/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	8/30/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-43	8/30/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-43	8/30/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	8/30/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-43	8/30/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-43	8/30/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-43	8/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	8/30/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-43	8/30/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-43	8/30/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-43	8/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-43	8/30/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-43	8/30/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-43	8/30/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-43	8/30/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-43	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-43	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-43	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-43	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-43	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-43	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-43	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-43	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-43	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-43	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-43	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-43	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-43	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-43	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-43	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-43	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-43	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-43	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-43	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-43	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-43	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-43	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-43	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-43	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-43	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-43	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-43	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-43	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-43	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-43	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-43	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-43	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-43	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-43	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-43	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-43	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-43	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-43	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-43	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-43	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-43	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-43	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-43	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-43	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-43	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-43	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-43	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-43	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-43	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-43	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-43	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-43	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-43	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-43	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-43	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-43	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-43	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-43	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-43	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-43	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-43	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-43	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-43	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-43	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-43	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-43	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-43	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-43	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-43	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-43	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-43	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-43	2/13/2019	Acetone	2.1	10	0.75707	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-43	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-43	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-43	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-43	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-43	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-43	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-43	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-43	2/13/2019	Chloroform	0.78	1	0.235224	100	ug/L
MKTF-43	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-43	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-43	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-43	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-43	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-43	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-43	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-43	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-43	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-43	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-43	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-43	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-43	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-43	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-43	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-43	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-43	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-43	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-43	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-43	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-43	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-43	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-43	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-43	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-43	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-43	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-43	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-43	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-43	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-43	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-43	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-43	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-43	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-43	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-43	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-43	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-43	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-43	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-43	2/13/2019	Acetone	2.7	10	0.75707	14064	ug/L
MKTF-43	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-43	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-43	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-43	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-43	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-43	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-43	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-43	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-43	2/13/2019	Chloroform	0.77	1	0.235224	100	ug/L
MKTF-43	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-43	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-43	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-43	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-43	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-43	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-43	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-43	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-43	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-43	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-43	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-43	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-43	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-43	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-43	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-43	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-43	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-43	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-43	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-43	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-43	5/8/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	5/8/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	5/8/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	5/8/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	5/8/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	5/8/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	5/8/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	5/8/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	5/8/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	5/8/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	5/8/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	5/8/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	5/8/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	5/8/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	5/8/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	5/8/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	5/8/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	5/8/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	5/8/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	5/8/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	5/8/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	5/8/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	5/8/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	5/8/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	5/8/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	5/8/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	5/8/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	5/8/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	5/8/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	5/8/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	5/8/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	5/8/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	5/8/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	5/8/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	5/8/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	5/8/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	5/8/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	5/8/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	5/8/2019	Chloroform	0.47	1	0.121891	100	ug/L
MKTF-43	5/8/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	5/8/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	5/8/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	5/8/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	5/8/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	5/8/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	5/8/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	5/8/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	5/8/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	5/8/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	5/8/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	5/8/2019	Naphthalene	ND	2	0.275071	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	5/8/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	5/8/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	5/8/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	5/8/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	5/8/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	5/8/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	5/8/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	5/8/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	5/8/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	5/8/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	5/8/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	5/8/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	5/8/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	8/22/2019	Acetone	1.2	10	1.199396	14064	ug/L
MKTF-43	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	8/22/2019	Chloroform	0.55	1	0.121891	100	ug/L
MKTF-43	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	0.82	4	0.314954	NA	ug/L
MKTF-43	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
MKTF-43	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	8/22/2019	Benzene	0.35	1	0.166639	5	ug/L
MKTF-43	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	8/22/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-43	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	8/22/2019	Xylenes, Total	0.7	1.5	0.454415	620	ug/L
MKTF-43	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-43	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	10/24/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-43	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	10/24/2019	Chloroform	0.56	1	0.121891	100	ug/L
MKTF-43	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-43	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	2/27/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-43	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	2/27/2020	2-Butanone	2.9	10	1.1	5565	ug/L
MKTF-43	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-43	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	2/27/2020	Acetone	5.9	10	2.3	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	2/27/2020	Chloroform	0.84	1	0.13	100	ug/L
MKTF-43	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-43	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	2/27/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-43	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	2/27/2020	Naphthalene	0.34	2	0.28	30	ug/L
MKTF-43	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	2/27/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-43	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	2/27/2020	2-Butanone	4.7	10	1.1	5565	ug/L
MKTF-43	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-43	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	2/27/2020	Acetone	6.6	10	2.3	14064	ug/L
MKTF-43	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	2/27/2020	Chloroform	0.6	1	0.13	100	ug/L
MKTF-43	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	2/27/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-43	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-43	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-43	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	9/21/2020	1-Methylnaphthalene	1.4	4	0.84	NA	ug/L
MKTF-43	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	9/21/2020	2-Methylnaphthalene	**1.3**	4	0.69		ug/L
MKTF-43	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-43	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	9/21/2020	Chloroform	0.36	1	0.13	100	ug/L
MKTF-43	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-43	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	9/21/2020	MTBE	ND	1	0.39	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	9/21/2020	Naphthalene	0.89	2	0.28	30	ug/L
MKTF-43	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-43	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-43	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-43	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-43	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-43	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-43	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-43	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-43	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-43	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-43	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-43	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-43	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-43	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-43	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-43	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-43	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-43	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-43	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-43	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-43	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-43	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-43	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-43	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-43	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-43	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-43	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-43	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-43	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-43	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-43	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-43	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-43	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-43	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-43	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-43	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-43	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-43	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-43	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-43	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-43	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-43	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-43	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-43	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-43	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-43	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-43	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-43	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-43	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-43	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-43	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-43	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-43	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-43	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-43	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-43	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-43	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-43	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-43	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-43	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-43	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-43	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-43	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-43	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-43	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-43	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-43	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-43	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-43	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-43	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-43	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-43	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-43	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-43	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-43	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-43	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-43	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-43	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-43	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-43	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-43	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-43	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-43	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-43	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-43	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-43	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-43	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-43	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-43	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-43	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-43	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-43	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-43	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-43	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-43	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-43	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-43	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-44	11/21/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-44	11/21/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-44	11/21/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-44	11/21/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-44	11/21/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-44	11/21/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-44	11/21/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-44	11/21/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-44	11/21/2014	Chloroethane	ND	4	0.95	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/21/2014	Vinyl Chloride	ND	2	0.21	2	ug/L
MKTF-44	11/21/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-44	11/21/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-44	11/21/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-44	11/21/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-44	11/21/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-44	11/21/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
MKTF-44	11/21/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	11/21/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-44	11/21/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-44	11/21/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-44	11/21/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-44	11/21/2014	Trichloroethene	ND	2	0.39	5	ug/L
MKTF-44	11/21/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-44	11/21/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-44	11/21/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-44	11/21/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-44	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-44	11/21/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-44	11/21/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-44	11/21/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-44	11/21/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-44	11/21/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-44	11/21/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-44	11/21/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-44	11/21/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-44	11/21/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-44	11/21/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-44	11/21/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-44	11/21/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-44	11/21/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-44	11/21/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-44	11/21/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-44	11/21/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-44	11/21/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-44	11/21/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-44	11/21/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-44	11/21/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-44	11/21/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-44	11/21/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-44	11/21/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-44	11/21/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-44	11/21/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-44	11/21/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-44	11/21/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-44	11/21/2014	MTBE	ND	2	0.5	143	ug/L
MKTF-44	11/21/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-44	11/21/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-44	3/12/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-44	3/12/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-44	3/12/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-44	3/12/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-44	3/12/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-44	3/12/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-44	3/12/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-44	3/12/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-44	3/12/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-44	3/12/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-44	3/12/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-44	3/12/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-44	3/12/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-44	3/12/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-44	3/12/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-44	3/12/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-44	3/12/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	3/12/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-44	3/12/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-44	3/12/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-44	3/12/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-44	3/12/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-44	3/12/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-44	3/12/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-44	3/12/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-44	3/12/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-44	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-44	3/12/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/12/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-44	3/12/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-44	3/12/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-44	3/12/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-44	3/12/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-44	3/12/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-44	3/12/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-44	3/12/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-44	3/12/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-44	3/12/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-44	3/12/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-44	3/12/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-44	3/12/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-44	3/12/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-44	3/12/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-44	3/12/2015	Dibromochloromethane	*ND*	2	0.19	1.68	ug/L
MKTF-44	3/12/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-44	3/12/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-44	3/12/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-44	3/12/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-44	3/12/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-44	3/12/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	3/12/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-44	3/12/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-44	3/12/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-44	3/12/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-44	3/12/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-44	3/12/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-44	3/12/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	6/10/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-44	6/10/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-44	6/10/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-44	6/10/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-44	6/10/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-44	6/10/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-44	6/10/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-44	6/10/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-44	6/10/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-44	6/10/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-44	6/10/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-44	6/10/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-44	6/10/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-44	6/10/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-44	6/10/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-44	6/10/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-44	6/10/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	6/10/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-44	6/10/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-44	6/10/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-44	6/10/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-44	6/10/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-44	6/10/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-44	6/10/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-44	6/10/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-44	6/10/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-44	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-44	6/10/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-44	6/10/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-44	6/10/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-44	6/10/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-44	6/10/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-44	6/10/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-44	6/10/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-44	6/10/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-44	6/10/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-44	6/10/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-44	6/10/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-44	6/10/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-44	6/10/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-44	6/10/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-44	6/10/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-44	6/10/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-44	6/10/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-44	6/10/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-44	6/10/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-44	6/10/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-44	6/10/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-44	6/10/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	6/10/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-44	6/10/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-44	6/10/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-44	6/10/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-44	6/10/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-44	6/10/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-44	6/10/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-44	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-44	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-44	8/17/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-44	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-44	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-44	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-44	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-44	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-44	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-44	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-44	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-44	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-44	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-44	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-44	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-44	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-44	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-44	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-44	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-44	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-44	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-44	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-44	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-44	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-44	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-44	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-44	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-44	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-44	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-44	8/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-44	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-44	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-44	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-44	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-44	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-44	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-44	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-44	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-44	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-44	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-44	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-44	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-44	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-44	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-44	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-44	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-44	8/17/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-44	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-44	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-44	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-44	11/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-44	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-44	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-44	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-44	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-44	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-44	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-44	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-44	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-44	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-44	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-44	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-44	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-44	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-44	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-44	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-44	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-44	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-44	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-44	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-44	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-44	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-44	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-44	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-44	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-44	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-44	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-44	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-44	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-44	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-44	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-44	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-44	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-44	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-44	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-44	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-44	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-44	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-44	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-44	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-44	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-44	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-44	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-44	11/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-44	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-44	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-44	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-44	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-44	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-44	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-44	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-44	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-44	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-44	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-44	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-44	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-44	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-44	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-44	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-44	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-44	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-44	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-44	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-44	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-44	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-44	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-44	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-44	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-44	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-44	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-44	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-44	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-44	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	9/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-44	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-44	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	9/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	11/1/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	11/1/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	11/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	11/1/2016	1,1-Dichloroethene	0.35	1	0.11	7	ug/L
MKTF-44	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	11/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	11/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	11/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	11/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	11/1/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	11/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	11/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	11/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	11/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	11/1/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	11/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	11/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	11/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	11/1/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	3/8/2017	Acetone	1.7	10	0.88	14064	ug/L
MKTF-44	3/8/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-44	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-44	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-44	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-44	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	3/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-44	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-44	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-44	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	3/8/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-44	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-44	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	3/8/2017	MTBE	ND	1	0.15	143	ug/L
MKTF-44	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-44	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	6/5/2017	Acetone	3.8	10	0.82	14064	ug/L
MKTF-44	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-44	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	6/5/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	9/25/2017	Acetone	2.6	10	0.82	14064	ug/L
MKTF-44	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	9/25/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	11/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	11/28/2017	Acetone	2.1	10	0.82	14064	ug/L
MKTF-44	11/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	11/28/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	11/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	11/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	11/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	11/28/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	11/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	11/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	11/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	11/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	11/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	11/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	11/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	11/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	11/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	11/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	11/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	11/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	11/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	11/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	11/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	11/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	11/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	11/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	11/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	11/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	11/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	11/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	11/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	11/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	11/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	11/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	11/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	11/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	11/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	11/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	11/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	11/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	11/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	11/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	11/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	11/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	11/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	11/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	11/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	11/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	11/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	11/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	11/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	11/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	11/28/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	11/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	11/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	2/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	2/8/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-44	2/8/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	2/8/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-44	2/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	2/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	2/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	2/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	2/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	2/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	2/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	2/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	2/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	2/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	2/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	2/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	2/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	2/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	2/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	2/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	2/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	2/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	2/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	2/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	2/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	2/8/2018	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-44	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	2/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	2/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	2/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	2/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	2/8/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-44	2/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	2/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	2/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	2/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	2/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	2/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	2/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	2/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	2/8/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	2/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	2/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	2/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	2/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	2/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	2/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	2/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	2/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	2/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	2/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	2/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	2/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	2/8/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-44	2/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	2/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	5/10/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	5/10/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-44	5/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	5/10/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-44	5/10/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	5/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	5/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	5/10/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	5/10/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	5/10/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	5/10/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	5/10/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	5/10/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	5/10/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	5/10/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	5/10/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	5/10/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	5/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	5/10/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	5/10/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	5/10/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	5/10/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	5/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	5/10/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	5/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	5/10/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	5/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	5/10/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	5/10/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	5/10/2018	p-Isopropyltoluene	0.16	1	0.096	NA	ug/L
MKTF-44	5/10/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	5/10/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-44	5/10/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	5/10/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	5/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	5/10/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	5/10/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	5/10/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	5/10/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	5/10/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	5/10/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	5/10/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	5/10/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	5/10/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	5/10/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	5/10/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	5/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	5/10/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	5/10/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	5/10/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	5/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	5/10/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	5/10/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-44	5/10/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	5/10/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	8/30/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-44	8/30/2018	Acetone	8.1	10	0.79	14064	ug/L
MKTF-44	8/30/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	8/30/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-44	8/30/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-44	8/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	8/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	8/30/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-44	8/30/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-44	8/30/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-44	8/30/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-44	8/30/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-44	8/30/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-44	8/30/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-44	8/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	8/30/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-44	8/30/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-44	8/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	8/30/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	8/30/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-44	8/30/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-44	8/30/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-44	8/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-44	8/30/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-44	8/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	8/30/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-44	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-44	8/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-44	8/30/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-44	8/30/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-44	8/30/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-44	8/30/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-44	8/30/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-44	8/30/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-44	8/30/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	8/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	8/30/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-44	8/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	8/30/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-44	8/30/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-44	8/30/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-44	8/30/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-44	8/30/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-44	8/30/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-44	8/30/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	8/30/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-44	8/30/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-44	8/30/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-44	8/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	8/30/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-44	8/30/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-44	8/30/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-44	8/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-44	8/30/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-44	8/30/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-44	8/30/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-44	8/30/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-44	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-44	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-44	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-44	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-44	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-44	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-44	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-44	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-44	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-44	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-44	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-44	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-44	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-44	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-44	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-44	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-44	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-44	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-44	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-44	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-44	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-44	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-44	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-44	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-44	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-44	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-44	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-44	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-44	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-44	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-44	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-44	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-44	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-44	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-44	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-44	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-44	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-44	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-44	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-44	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-44	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-44	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-44	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-44	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-44	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-44	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-44	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-44	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-44	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-44	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-44	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-44	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-44	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-44	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-44	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-44	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-44	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-44	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-44	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-44	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-44	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-44	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-44	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-44	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-44	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-44	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-44	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-44	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-44	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-44	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-44	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-44	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-44	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-44	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-44	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-44	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-44	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-44	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-44	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-44	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-44	2/13/2019	Acetone	1.4	10	0.75707	14064	ug/L
MKTF-44	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-44	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-44	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-44	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-44	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-44	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-44	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-44	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-44	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-44	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-44	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-44	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-44	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-44	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-44	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-44	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-44	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-44	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-44	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-44	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-44	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-44	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-44	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-44	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-44	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-44	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-44	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-44	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-44	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-44	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-44	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-44	5/8/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	5/8/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	5/8/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	5/8/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	5/8/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	5/8/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	5/8/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	5/8/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	5/8/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-44	5/8/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	5/8/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-44	5/8/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	5/8/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	5/8/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	5/8/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	5/8/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	5/8/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	5/8/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	5/8/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	5/8/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	5/8/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	5/8/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	5/8/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	5/8/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	5/8/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	5/8/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	5/8/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	5/8/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	5/8/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	5/8/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	5/8/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	5/8/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	5/8/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	5/8/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	5/8/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	5/8/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/8/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	5/8/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	5/8/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	5/8/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	5/8/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	5/8/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	5/8/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	5/8/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	5/8/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	5/8/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	5/8/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-44	5/8/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	5/8/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	5/8/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	5/8/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	5/8/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	5/8/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	5/8/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	5/8/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	5/8/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	5/8/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	5/8/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	5/8/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	5/8/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-44	5/8/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	5/8/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	5/8/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	5/8/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-44	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-44	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-44	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-44	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-44	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	10/24/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-44	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	3/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-44	3/5/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-44	3/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-44	3/5/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-44	3/5/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-44	3/5/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-44	3/5/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-44	3/5/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-44	3/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-44	3/5/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-44	3/5/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-44	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-44	3/5/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-44	3/5/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-44	3/5/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-44	3/5/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-44	3/5/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-44	3/5/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-44	3/5/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-44	3/5/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-44	3/5/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-44	3/5/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-44	3/5/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	3/5/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-44	3/5/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-44	3/5/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-44	3/5/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-44	3/5/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-44	3/5/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-44	3/5/2020	Acetone	3.6	10	2.3	14064	ug/L
MKTF-44	3/5/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-44	3/5/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-44	3/5/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-44	3/5/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-44	3/5/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-44	3/5/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-44	3/5/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-44	3/5/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-44	3/5/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-44	3/5/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-44	3/5/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-44	3/5/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-44	3/5/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-44	3/5/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-44	3/5/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-44	3/5/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-44	3/5/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-44	3/5/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-44	3/5/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-44	3/5/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-44	3/5/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-44	3/5/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	3/5/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-44	3/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-44	3/5/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-44	3/5/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-44	3/5/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-44	3/5/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-44	3/5/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-44	3/5/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-44	3/5/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-44	3/5/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-44	3/5/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-44	3/5/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	3/5/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-44	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-44	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-44	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-44	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-44	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-44	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-44	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-44	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-44	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-44	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-44	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-44	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-44	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-44	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-44	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-44	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-44	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-44	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-44	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-44	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-44	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-44	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-44	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-44	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-44	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-44	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-44	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-44	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-44	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-44	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-44	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-44	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-44	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-44	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-44	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-44	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-44	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-44	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-44	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-44	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-44	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-44	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-44	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-44	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-44	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-44	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-44	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-44	9/21/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-44	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-44	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-44	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-44	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-44	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-44	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-44	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-44	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-44	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-44	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-44	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-44	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-44	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-44	12/23/2020	Acetone	ND	25	10	14064	ug/L
MKTF-44	12/23/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-44	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-44	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-44	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-44	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-44	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-44	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-44	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-44	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-44	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-44	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-44	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-44	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-44	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-44	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-44	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-44	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-44	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-44	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-44	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-44	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-44	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-44	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-44	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-44	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-44	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-44	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-44	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-44	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-44	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-44	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-44	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-44	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-44	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-44	12/23/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-44	12/23/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-44	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-44	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-44	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-44	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-44	12/23/2020	Styrene	ND	1	1	100	ug/L
MKTF-44	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-44	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-44	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-44	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-44	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-44	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-44	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-44	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-44	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-44	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-44	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-44	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-44	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-44	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-44	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-44	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-44	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-46	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethane	0.66	1	0.27	25	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	3/6/2020	Acetone	2.8	10	2.3	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-46	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	3/6/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-46	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-46	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethane	0.67	1	0.27	25	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	3/6/2020	Acetone	3.5	10	2.3	14064	ug/L
MKTF-46	3/6/2020	Benzene	0.4	1	0.23	5	ug/L
MKTF-46	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	3/6/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-46	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-46	9/17/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-46	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	9/17/2020	1,1-Dichloroethane	0.51	1	0.27	25	ug/L
MKTF-46	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-46	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	9/17/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	9/17/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-46	12/16/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
MKTF-46	12/16/2020	Acetone	ND	25	10	14064	ug/L
MKTF-46	12/16/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-46	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-46	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-46	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-46	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-46	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-46	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-46	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-46	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-46	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-46	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-46	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-46	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-46	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-46	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-46	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-46	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-46	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-46	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-46	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-46	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-46	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-46	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-46	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-46	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-46	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-46	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-46	12/16/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-46	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-46	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-46	12/16/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-46	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-46	12/16/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-46	12/16/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-46	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-46	12/16/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-46	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-46	12/16/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-46	12/16/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-46	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-46	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-46	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-46	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-46	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-46	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-46	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-46	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-46	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-46	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-46	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-46	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-46	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-46	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-46	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-46	12/16/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-46	12/16/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-46	12/16/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-46	12/16/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-47	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-47	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-47	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-47	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-47	3/6/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-47	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-47	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-47	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-47	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-47	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-47	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-47	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-47	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-47	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-47	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-47	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-47	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-47	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-47	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-47	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-47	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-47	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-47	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-47	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-47	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-47	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-47	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-47	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-47	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-47	3/6/2020	Acetone	3.4	10	2.3	14064	ug/L
MKTF-47	3/6/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-47	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-47	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-47	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-47	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-47	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-47	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-47	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-47	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-47	3/6/2020	Chloroform	0.23	1	0.13	100	ug/L
MKTF-47	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-47	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-47	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-47	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-47	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-47	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-47	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-47	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-47	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-47	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-47	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-47	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-47	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-47	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-47	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-47	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-47	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-47	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-47	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-47	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-47	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-47	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-47	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-47	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-47	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-49	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-49	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-49	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-49	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-49	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-49	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-49	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-49	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-49	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-49	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-49	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-49	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-49	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-49	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-49	3/5/2020	1,3,5-Trimethylbenzene	**210**	5	0.91	60	ug/L
MKTF-49	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-49	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-49	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-49	3/5/2020	1-Methylnaphthalene	6.6	20	4.2	NA	ug/L
MKTF-49	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-49	3/5/2020	2-Butanone	26	50	5.6	5565	ug/L
MKTF-49	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-49	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-49	3/5/2020	2-Methylnaphthalene	**9**	20	3.5		ug/L
MKTF-49	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-49	3/5/2020	p-Isopropyltoluene	16	5	1	NA	ug/L
MKTF-49	3/5/2020	4-Methyl-2-Pentanone	7.9	50	5.6	1243	ug/L
MKTF-49	3/5/2020	Acetone	32	50	12	14064	ug/L
MKTF-49	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-49	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-49	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-49	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-49	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-49	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-49	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-49	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-49	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-49	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-49	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-49	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-49	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-49	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-49	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-49	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-49	3/5/2020	Isopropylbenzene	120	5	0.91	447	ug/L
MKTF-49	3/5/2020	MTBE	11	5	2	143	ug/L
MKTF-49	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-49	3/5/2020	n-Butylbenzene	9.7	15	1.3	1000	ug/L
MKTF-49	3/5/2020	n-Propylbenzene	120	5	0.91	660	ug/L
MKTF-49	3/5/2020	Naphthalene	**46**	10	1.4	30	ug/L
MKTF-49	3/5/2020	sec-Butylbenzene	16	5	3	2000	ug/L
MKTF-49	3/5/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-49	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-49	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-49	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-49	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-49	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-49	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-49	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-49	3/5/2020	Benzene	**20000**	1000	230	5	ug/L
MKTF-49	3/5/2020	1,2,4-Trimethylbenzene	**690**	100	12	56	ug/L
MKTF-49	3/5/2020	Ethylbenzene	**1300**	100	21	700	ug/L
MKTF-49	3/5/2020	Toluene	**8400**	100	20	1000	ug/L
MKTF-49	3/5/2020	Xylenes, Total	**6800**	150	55	620	ug/L
MKTF-49	9/20/2020	Benzene	**23000**	250	110	5	ug/L
MKTF-49	9/20/2020	Toluene	**9900**	500	100	1000	ug/L
MKTF-49	9/20/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-49	9/20/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
MKTF-49	9/20/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
MKTF-49	9/20/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
MKTF-49	9/20/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-49	9/20/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
MKTF-49	9/20/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
MKTF-49	9/20/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
MKTF-49	9/20/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
MKTF-49	9/20/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
MKTF-49	9/20/2020	1,2,4-Trimethylbenzene	**750**	50	6.1	56	ug/L
MKTF-49	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
MKTF-49	9/20/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
MKTF-49	9/20/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
MKTF-49	9/20/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
MKTF-49	9/20/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
MKTF-49	9/20/2020	1,3,5-Trimethylbenzene	**240**	50	9.1	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	9/20/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
MKTF-49	9/20/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-49	9/20/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
MKTF-49	9/20/2020	1-Methylnaphthalene	ND	200	42	NA	ug/L
MKTF-49	9/20/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-49	9/20/2020	2-Butanone	ND	500	56	5565	ug/L
MKTF-49	9/20/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
MKTF-49	9/20/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
MKTF-49	9/20/2020	2-Methylnaphthalene	*ND*	*200*	35		ug/L
MKTF-49	9/20/2020	4-Chlorotoluene	ND	50	26	250	ug/L
MKTF-49	9/20/2020	p-Isopropyltoluene	14	50	10	NA	ug/L
MKTF-49	9/20/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-49	9/20/2020	Acetone	ND	500	120	14064	ug/L
MKTF-49	9/20/2020	Bromobenzene	ND	50	14	62	ug/L
MKTF-49	9/20/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
MKTF-49	9/20/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-49	9/20/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
MKTF-49	9/20/2020	Carbon Disulfide	ND	500	22	810	ug/L
MKTF-49	9/20/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
MKTF-49	9/20/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
MKTF-49	9/20/2020	Chloroethane	ND	100	19	20857	ug/L
MKTF-49	9/20/2020	Chloroform	ND	50	6.7	100	ug/L
MKTF-49	9/20/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
MKTF-49	9/20/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-49	9/20/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
MKTF-49	9/20/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
MKTF-49	9/20/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
MKTF-49	9/20/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
MKTF-49	9/20/2020	Ethylbenzene	**1500**	50	11	700	ug/L
MKTF-49	9/20/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
MKTF-49	9/20/2020	Isopropylbenzene	130	50	9.1	447	ug/L
MKTF-49	9/20/2020	MTBE	ND	50	20	143	ug/L
MKTF-49	9/20/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
MKTF-49	9/20/2020	n-Butylbenzene	ND	150	13	1000	ug/L
MKTF-49	9/20/2020	n-Propylbenzene	130	50	9.1	660	ug/L
MKTF-49	9/20/2020	Naphthalene	**47**	100	14	30	ug/L
MKTF-49	9/20/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
MKTF-49	9/20/2020	Styrene	ND	50	6.5	100	ug/L
MKTF-49	9/20/2020	tert-Butylbenzene	ND	50	12	690	ug/L
MKTF-49	9/20/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
MKTF-49	9/20/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
MKTF-49	9/20/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
MKTF-49	9/20/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
MKTF-49	9/20/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
MKTF-49	9/20/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-49	9/20/2020	Xylenes, Total	**7500**	75	28	620	ug/L
MKTF-49	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
MKTF-49	12/23/2020	Benzene	**21800**	100	38	5	ug/L
MKTF-49	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
MKTF-49	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
MKTF-49	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
MKTF-49	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
MKTF-49	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
MKTF-49	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
MKTF-49	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
MKTF-49	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
MKTF-49	12/23/2020	Chloroform	ND	100	60	100	ug/L
MKTF-49	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
MKTF-49	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
MKTF-49	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
MKTF-49	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
MKTF-49	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-49	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
MKTF-49	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
MKTF-49	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
MKTF-49	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
MKTF-49	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
MKTF-49	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
MKTF-49	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
MKTF-49	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
MKTF-49	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
MKTF-49	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
MKTF-49	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
MKTF-49	12/23/2020	Ethylbenzene	**1430**	100	50	700	ug/L
MKTF-49	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
MKTF-49	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
MKTF-49	12/23/2020	Isopropylbenzene	116	100	53	447	ug/L
MKTF-49	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
MKTF-49	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
MKTF-49	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
MKTF-49	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
MKTF-49	12/23/2020	MTBE	ND	100	74	143	ug/L
MKTF-49	12/23/2020	Naphthalene	*ND*	*100*	100	30	ug/L
MKTF-49	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
MKTF-49	12/23/2020	n-Propylbenzene	123	100	69	660	ug/L
MKTF-49	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
MKTF-49	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
MKTF-49	12/23/2020	Styrene	ND	100	100	100	ug/L
MKTF-49	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
MKTF-49	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
MKTF-49	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
MKTF-49	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
MKTF-49	12/23/2020	Toluene	**10000**	100	41	1000	ug/L
MKTF-49	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
MKTF-49	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-49	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
MKTF-49	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
MKTF-49	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
MKTF-49	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
MKTF-49	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
MKTF-49	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
MKTF-49	12/23/2020	1,2,4-Trimethylbenzene	**637**	100	82	56	ug/L
MKTF-49	12/23/2020	1,3,5-Trimethylbenzene	**216**	100	56	60	ug/L
MKTF-49	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
MKTF-49	12/23/2020	Xylenes, Total	**7450**	1000	160	620	ug/L
MKTF-50	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-50	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-50	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-50	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-50	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-50	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-50	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-50	3/5/2020	1,2,4-Trimethylbenzene	30	5	0.61	56	ug/L
MKTF-50	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-50	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-50	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-50	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-50	3/5/2020	1,3,5-Trimethylbenzene	11	5	0.91	60	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-50	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	47	20	4.2	NA	ug/L
MKTF-50	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-50	3/5/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-50	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-50	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**57**	20	3.5		ug/L
MKTF-50	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-50	3/5/2020	p-Isopropyltoluene	1.7	5	1	NA	ug/L
MKTF-50	3/5/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-50	3/5/2020	Acetone	29	50	12	14064	ug/L
MKTF-50	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-50	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-50	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-50	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-50	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-50	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-50	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-50	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-50	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-50	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-50	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-50	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-50	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-50	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-50	3/5/2020	Isopropylbenzene	82	5	0.91	447	ug/L
MKTF-50	3/5/2020	MTBE	4.5	5	2	143	ug/L
MKTF-50	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-50	3/5/2020	n-Butylbenzene	13	15	1.3	1000	ug/L
MKTF-50	3/5/2020	n-Propylbenzene	130	5	0.91	660	ug/L
MKTF-50	3/5/2020	Naphthalene	**140**	10	1.4	30	ug/L
MKTF-50	3/5/2020	sec-Butylbenzene	13	5	3	2000	ug/L
MKTF-50	3/5/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-50	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-50	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-50	3/5/2020	Toluene	42	5	1	1000	ug/L
MKTF-50	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-50	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-50	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-50	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-50	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-50	3/5/2020	Xylenes, Total	81	7.5	2.8	620	ug/L
MKTF-50	3/5/2020	Benzene	**12000**	200	45	5	ug/L
MKTF-50	3/5/2020	Ethylbenzene	**1300**	200	43	700	ug/L
MKTF-50	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-50	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-50	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-50	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-50	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-50	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-50	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-50	3/5/2020	1,2,4-Trimethylbenzene	**68**	5	0.61	56	ug/L
MKTF-50	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-50	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-50	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-50	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-50	3/5/2020	1,3,5-Trimethylbenzene	24	5	0.91	60	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-50	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	51	20	4.2	NA	ug/L
MKTF-50	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-50	3/5/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-50	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-50	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**63**	20	3.5		ug/L
MKTF-50	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-50	3/5/2020	p-Isopropyltoluene	3.7	5	1	NA	ug/L
MKTF-50	3/5/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-50	3/5/2020	Acetone	30	50	12	14064	ug/L
MKTF-50	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-50	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-50	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-50	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-50	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-50	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-50	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-50	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-50	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-50	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-50	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-50	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-50	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-50	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-50	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-50	3/5/2020	Isopropylbenzene	78	5	0.91	447	ug/L
MKTF-50	3/5/2020	MTBE	4.6	5	2	143	ug/L
MKTF-50	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-50	3/5/2020	n-Butylbenzene	14	15	1.3	1000	ug/L
MKTF-50	3/5/2020	n-Propylbenzene	130	5	0.91	660	ug/L
MKTF-50	3/5/2020	Naphthalene	**150**	10	1.4	30	ug/L
MKTF-50	3/5/2020	sec-Butylbenzene	13	5	3	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Styrene	0.85	5	0.65	100	ug/L
MKTF-50	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-50	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-50	3/5/2020	Toluene	39	5	1	1000	ug/L
MKTF-50	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-50	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-50	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-50	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-50	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-50	3/5/2020	Xylenes, Total	140	7.5	2.8	620	ug/L
MKTF-50	3/5/2020	Benzene	**13000**	200	45	5	ug/L
MKTF-50	3/5/2020	Ethylbenzene	**1300**	200	43	700	ug/L
MKTF-50	12/16/2020	Acetone	ND	500	200	14064	ug/L
MKTF-50	12/16/2020	Benzene	**5970**	20	7.6	5	ug/L
MKTF-50	12/16/2020	Bromodichloromethane	*ND*	*20*	10	1.34	ug/L
MKTF-50	12/16/2020	Bromoform	*ND*	*100*	14.2	32.9	ug/L
MKTF-50	12/16/2020	Bromomethane	*ND*	*20*	19.6	7.54	ug/L
MKTF-50	12/16/2020	2-Butanone	ND	500	52	5565	ug/L
MKTF-50	12/16/2020	Carbon Disulfide	ND	20	10	810	ug/L
MKTF-50	12/16/2020	Carbon tetrachloride	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	Chlorobenzene	ND	20	10	77.6	ug/L
MKTF-50	12/16/2020	Dibromochloromethane	*ND*	*20*	10	1.68	ug/L
MKTF-50	12/16/2020	Chloroethane	ND	20	15.2	20857	ug/L
MKTF-50	12/16/2020	Chloroform	ND	20	12	100	ug/L
MKTF-50	12/16/2020	Chloromethane	ND	20	16.6	20.32	ug/L
MKTF-50	12/16/2020	2-Chlorotoluene	ND	20	11.4	233	ug/L
MKTF-50	12/16/2020	4-Chlorotoluene	ND	20	11.2	250	ug/L
MKTF-50	12/16/2020	cis-1,2-Dichloroethene	ND	20	10	70	ug/L
MKTF-50	12/16/2020	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-50	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	30	0.0033	ug/L
MKTF-50	12/16/2020	1,2-Dibromoethane	*ND*	*20*	10	0.05	ug/L
MKTF-50	12/16/2020	Dibromomethane	*ND*	*100*	11.8	8	ug/L
MKTF-50	12/16/2020	1,2-Dichlorobenzene	ND	20	10	600	ug/L
MKTF-50	12/16/2020	1,3-Dichlorobenzene	ND	20	10.8	N/A	ug/L
MKTF-50	12/16/2020	1,4-Dichlorobenzene	ND	20	12.8	75	ug/L
MKTF-50	12/16/2020	Dichlorodifluoromethane	ND	20	17	197	ug/L
MKTF-50	12/16/2020	1,1-Dichloroethane	ND	20	10	25	ug/L
MKTF-50	12/16/2020	1,2-Dichloroethane	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	1,1-Dichloroethene	*ND*	*20*	10	7	ug/L
MKTF-50	12/16/2020	1,2-Dichloropropane	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	1,3-Dichloropropane	ND	20	10	370	ug/L
MKTF-50	12/16/2020	2,2-Dichloropropane	ND	20	10	NA	ug/L
MKTF-50	12/16/2020	1,1-Dichloropropene	ND	20	10	NA	ug/L
MKTF-50	12/16/2020	Ethylbenzene	**1130**	20	10	700	ug/L
MKTF-50	12/16/2020	Hexachlorobutadiene	*ND*	*100*	18	1.39	ug/L
MKTF-50	12/16/2020	2-Hexanone	*ND*	*500*	62	38	ug/L
MKTF-50	12/16/2020	Isopropylbenzene	61.1	20	10.6	447	ug/L
MKTF-50	12/16/2020	Methylene Chloride	*ND*	*100*	60	5	ug/L
MKTF-50	12/16/2020	1-Methylnaphthalene	ND	100	84	NA	ug/L
MKTF-50	12/16/2020	2-Methylnaphthalene	*ND*	*200*	92		ug/L
MKTF-50	12/16/2020	4-Methyl-2-Pentanone	ND	500	36	1243	ug/L
MKTF-50	12/16/2020	MTBE	22.5	20	14.8	143	ug/L
MKTF-50	12/16/2020	Naphthalene	**135**	20	20	30	ug/L
MKTF-50	12/16/2020	n-Butylbenzene	ND	20	15.2	1000	ug/L
MKTF-50	12/16/2020	n-Propylbenzene	102	20	13.8	660	ug/L
MKTF-50	12/16/2020	p-Isopropyltoluene	ND	20	14.2	NA	ug/L
MKTF-50	12/16/2020	sec-Butylbenzene	ND	20	14	2000	ug/L
MKTF-50	12/16/2020	Styrene	ND	20	20	100	ug/L
MKTF-50	12/16/2020	tert-Butylbenzene	ND	20	12.6	690	ug/L
MKTF-50	12/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	10.4	5.74	ug/L
MKTF-50	12/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	10	10	ug/L
MKTF-50	12/16/2020	Tetrachloroethene	*ND*	*20*	11.6	5	ug/L
MKTF-50	12/16/2020	Toluene	27.3	20	8.2	1000	ug/L
MKTF-50	12/16/2020	trans-1,2-Dichloroethene	ND	20	10	100	ug/L
MKTF-50	12/16/2020	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-50	12/16/2020	1,2,3-Trichlorobenzene	ND	20	14	70	ug/L
MKTF-50	12/16/2020	1,2,4-Trichlorobenzene	ND	20	16.4	70	ug/L
MKTF-50	12/16/2020	1,1,1-Trichloroethane	ND	20	10	200	ug/L
MKTF-50	12/16/2020	1,1,2-Trichloroethane	*ND*	*100*	10	5	ug/L
MKTF-50	12/16/2020	Trichloroethene	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	Trichlorofluoromethane	ND	20	10.4	1137	ug/L
MKTF-50	12/16/2020	1,2,3-Trichloropropane	*ND*	*100*	16.8	0.0084	ug/L
MKTF-50	12/16/2020	1,2,4-Trimethylbenzene	**107**	20	16.4	56	ug/L
MKTF-50	12/16/2020	1,3,5-Trimethylbenzene	38.3	20	11.2	60	ug/L
MKTF-50	12/16/2020	Vinyl Chloride	*ND*	*20*	10	2	ug/L
MKTF-50	12/16/2020	Xylenes, Total	286	200	32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-1	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
MW-1	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
MW-1	8/24/2012	Benzene	ND	1	0.4	5	ug/L
MW-1	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-1	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-1	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-1	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-1	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-1	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-1	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-1	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-1	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-1	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-1	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-1	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-1	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-1	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-1	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-1	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-1	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-1	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-1	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-1	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-1	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-1	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-1	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-1	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-1	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-1	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-1	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-1	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-1	8/24/2012	Styrene	ND	1	0.41	100	ug/L
MW-1	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-1	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-1	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-1	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-1	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-1	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-1	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-1	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-1	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
MW-1	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-1	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-1	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-1	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-1	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-1	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-1	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-1	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-1	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-1	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-1	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-1	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-1	8/24/2012	MTBE	ND	1	0.96	143	ug/L
MW-1	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-1	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-1	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-1	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
MW-1	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
MW-1	9/9/2013	Benzene	ND	1	0.46	5	ug/L
MW-1	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-1	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-1	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-1	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-1	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-1	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-1	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-1	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-1	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-1	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-1	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-1	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-1	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-1	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-1	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
MW-1	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-1	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-1	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-1	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-1	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-1	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-1	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-1	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-1	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-1	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-1	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-1	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-1	9/9/2013	Styrene	ND	1	0.58	100	ug/L
MW-1	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-1	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-1	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-1	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-1	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-1	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-1	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-1	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-1	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
MW-1	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-1	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-1	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-1	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-1	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-1	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-1	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-1	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-1	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-1	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-1	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-1	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-1	9/9/2013	MTBE	ND	1	0.77	143	ug/L
MW-1	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-1	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-1	9/16/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-1	9/16/2014	Acetone	ND	10	4.9	14064	ug/L
MW-1	9/16/2014	Chloroform	ND	1	0.32	100	ug/L
MW-1	9/16/2014	Benzene	ND	1	0.15	5	ug/L
MW-1	9/16/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-1	9/16/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-1	9/16/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-1	9/16/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-1	9/16/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-1	9/16/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-1	9/16/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-1	9/16/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-1	9/16/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-1	9/16/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-1	9/16/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-1	9/16/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-1	9/16/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-1	9/16/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-1	9/16/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-1	9/16/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-1	9/16/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-1	9/16/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-1	9/16/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-1	9/16/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-1	9/16/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-1	9/16/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-1	9/16/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-1	9/16/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-1	9/16/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-1	9/16/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-1	9/16/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-1	9/16/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-1	9/16/2014	Styrene	ND	1	0.12	100	ug/L
MW-1	9/16/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-1	9/16/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-1	9/16/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-1	9/16/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-1	9/16/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/16/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-1	9/16/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-1	9/16/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-1	9/16/2014	Toluene	ND	1	0.17	1000	ug/L
MW-1	9/16/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-1	9/16/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-1	9/16/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-1	9/16/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-1	9/16/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-1	9/16/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-1	9/16/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-1	9/16/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-1	9/16/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-1	9/16/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-1	9/16/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-1	9/16/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-1	9/16/2014	MTBE	ND	1	0.25	143	ug/L
MW-1	9/16/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-1	9/16/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-1	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-1	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-1	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-1	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-1	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-1	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-1	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-1	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-1	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-1	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-1	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-1	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-1	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-1	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-1	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-1	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-1	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-1	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-1	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-1	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-1	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-1	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-1	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-1	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-1	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-1	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-1	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-1	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-1	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-1	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-1	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-1	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-1	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-1	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-1	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-1	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-1	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-1	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-1	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-1	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-1	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-1	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-1	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-1	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-1	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-1	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-1	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-1	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-1	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-1	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-1	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-1	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-1	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-1	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-1	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-1	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-1	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-1	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-1	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-1	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-1	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-1	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-1	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-1	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-1	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-1	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-1	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-1	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-1	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-1	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-1	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-1	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-1	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-1	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-1	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-1	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-1	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-1	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-1	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-1	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-1	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-1	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-1	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-1	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-1	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-1	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-1	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-1	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-1	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-1	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-1	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-1	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-1	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-1	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-1	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-1	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-1	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-1	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-1	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-1	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-1	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-1	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-1	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-1	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-1	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-1	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-1	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-1	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-1	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-1	9/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-1	9/20/2017	Acetone	4.4	10	0.82	14064	ug/L
MW-1	9/20/2017	Chloroform	ND	1	0.4	100	ug/L
MW-1	9/20/2017	Benzene	ND	1	0.062	5	ug/L
MW-1	9/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-1	9/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-1	9/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-1	9/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-1	9/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-1	9/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-1	9/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-1	9/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-1	9/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-1	9/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-1	9/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	9/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-1	9/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-1	9/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-1	9/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-1	9/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-1	9/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-1	9/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-1	9/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-1	9/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-1	9/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-1	9/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-1	9/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-1	9/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-1	9/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-1	9/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-1	9/20/2017	Styrene	ND	1	0.16	100	ug/L
MW-1	9/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-1	9/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-1	9/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-1	9/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-1	9/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-1	9/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-1	9/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-1	9/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-1	9/20/2017	Toluene	ND	1	0.064	1000	ug/L
MW-1	9/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-1	9/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-1	9/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-1	9/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-1	9/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-1	9/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-1	9/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	9/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-1	9/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-1	9/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-1	9/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-1	9/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-1	9/20/2017	MTBE	ND	1	0.24	143	ug/L
MW-1	9/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-1	9/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-1	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-1	9/13/2018	Acetone	ND	10	0.79	14064	ug/L
MW-1	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-1	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-1	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-1	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-1	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-1	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-1	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-1	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-1	9/13/2018	Methylene Chloride	0.41	3	0.21	5	ug/L
MW-1	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-1	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-1	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-1	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-1	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-1	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-1	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-1	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-1	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-1	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-1	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-1	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-1	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-1	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-1	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-1	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-1	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-1	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-1	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-1	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-1	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-1	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-1	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-1	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-1	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-1	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-1	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-1	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-1	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-1	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-1	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-1	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-1	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-1	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-1	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-1	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-1	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-1	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-1	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-1	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-1	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-1	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-1	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-1	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-1	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-1	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-1	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-1	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-1	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-1	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-1	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-1	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-1	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-1	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-1	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-1	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-1	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-1	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-1	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-1	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-1	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-1	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-1	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-1	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-1	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-1	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-1	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-1	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-1	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-1	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-1	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-1	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-1	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-1	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-1	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-1	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-1	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-1	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-1	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-1	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-1	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-1	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-1	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-1	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-1	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-1	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-1	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-1	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-1	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-1	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-1	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-1	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-1	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-1	12/6/2018	MTBE	ND	1	0.46	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-1	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-1	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-1	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-1	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-1	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-1	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-1	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-1	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-1	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-1	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-1	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-1	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-1	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-1	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-1	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-1	8/12/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-1	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-1	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-1	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-1	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-1	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-1	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-1	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-1	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-1	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-1	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-1	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-1	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-1	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-1	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-1	8/12/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-1	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
MW-1	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-1	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-1	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-1	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-1	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-1	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-1	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-1	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-1	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-1	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-1	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-1	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-1	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-1	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-1	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-1	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-1	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-1	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-1	8/12/2019	MTBE	ND	1	0.456095	143	ug/L
MW-1	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-1	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-1	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-1	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-1	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-1	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
MW-1	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-1	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-1	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-1	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-1	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-1	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-1	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-1	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-1	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-1	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-1	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-1	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-1	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-1	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-1	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-1	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-1	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-1	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-1	9/22/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-1	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-1	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-1	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-1	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-1	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-1	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-1	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-1	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-1	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-1	9/22/2020	1-Methylnaphthalene	1.2	4	0.84	NA	ug/L
MW-1	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-1	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-1	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-1	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-1	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-1	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-1	9/22/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-1	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-1	9/22/2020	Acetone	ND	10	2.3	14064	ug/L
MW-1	9/22/2020	Benzene	ND	1	0.23	5	ug/L
MW-1	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-1	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-1	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-1	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-1	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-1	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-1	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-1	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-1	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
MW-1	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-1	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-1	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-1	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-1	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-1	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-1	9/22/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-1	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-1	9/22/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-1	9/22/2020	MTBE	ND	1	0.39	143	ug/L
MW-1	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-1	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	9/22/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-1	9/22/2020	Naphthalene	0.33	2	0.28	30	ug/L
MW-1	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-1	9/22/2020	Styrene	ND	1	0.13	100	ug/L
MW-1	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-1	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-1	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
MW-1	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-1	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-1	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-1	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-1	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-1	9/22/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-2	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-2	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
MW-2	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
MW-2	8/24/2012	Benzene	ND	1	0.4	5	ug/L
MW-2	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-2	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-2	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-2	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-2	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-2	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-2	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-2	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-2	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-2	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-2	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-2	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-2	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-2	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-2	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-2	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-2	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-2	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-2	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-2	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-2	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-2	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-2	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-2	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-2	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-2	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-2	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-2	8/24/2012	Styrene	ND	1	0.41	100	ug/L
MW-2	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-2	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-2	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-2	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-2	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-2	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-2	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-2	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-2	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
MW-2	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-2	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-2	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-2	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-2	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-2	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-2	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-2	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-2	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-2	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-2	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-2	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-2	8/24/2012	MTBE	ND	1	0.96	143	ug/L
MW-2	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-2	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-2	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-2	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-2	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-2	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-2	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-2	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-2	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-2	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-2	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-2	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-2	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-2	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-2	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-2	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-2	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-2	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-2	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-2	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-2	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-2	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-2	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-2	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-2	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-2	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-2	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-2	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-2	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-2	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-2	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-2	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-2	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-2	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-2	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-2	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-2	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-2	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-2	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-2	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-2	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-2	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-2	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-2	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-2	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-2	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-2	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-2	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-2	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-2	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-2	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-2	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-2	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-2	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-2	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-2	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-2	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-2	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-2	9/16/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-2	9/16/2014	Acetone	ND	10	4.9	14064	ug/L
MW-2	9/16/2014	Chloroform	ND	1	0.32	100	ug/L
MW-2	9/16/2014	Benzene	ND	1	0.15	5	ug/L
MW-2	9/16/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-2	9/16/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-2	9/16/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-2	9/16/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-2	9/16/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-2	9/16/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-2	9/16/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-2	9/16/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-2	9/16/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-2	9/16/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-2	9/16/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-2	9/16/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-2	9/16/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-2	9/16/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-2	9/16/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-2	9/16/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-2	9/16/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-2	9/16/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-2	9/16/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-2	9/16/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-2	9/16/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-2	9/16/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-2	9/16/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-2	9/16/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-2	9/16/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-2	9/16/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-2	9/16/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-2	9/16/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-2	9/16/2014	Styrene	ND	1	0.12	100	ug/L
MW-2	9/16/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-2	9/16/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-2	9/16/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-2	9/16/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-2	9/16/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-2	9/16/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-2	9/16/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-2	9/16/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-2	9/16/2014	Toluene	ND	1	0.17	1000	ug/L
MW-2	9/16/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-2	9/16/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-2	9/16/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-2	9/16/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-2	9/16/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-2	9/16/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-2	9/16/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-2	9/16/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-2	9/16/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-2	9/16/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-2	9/16/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-2	9/16/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-2	9/16/2014	MTBE	ND	1	0.25	143	ug/L
MW-2	9/16/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-2	9/16/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-2	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-2	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-2	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-2	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-2	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-2	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-2	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-2	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-2	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-2	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-2	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-2	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-2	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-2	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-2	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-2	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-2	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-2	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-2	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-2	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-2	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-2	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-2	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-2	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-2	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-2	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-2	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-2	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-2	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-2	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-2	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-2	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-2	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-2	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-2	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-2	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-2	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-2	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-2	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-2	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-2	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-2	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-2	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-2	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-2	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-2	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-2	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-2	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-2	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-2	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-2	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-2	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-2	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-2	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-2	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-2	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-2	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-2	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-2	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-2	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-2	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-2	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-2	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-2	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-2	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-2	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-2	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-2	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-2	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-2	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-2	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-2	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-2	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-2	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-2	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-2	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-2	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-2	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-2	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-2	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-2	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-2	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-2	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-2	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-2	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-2	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-2	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-2	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-2	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-2	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-2	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-2	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-2	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-2	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-2	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-2	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-2	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-2	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-2	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-2	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-2	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-2	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-2	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-2	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-2	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-2	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-2	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-2	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-2	9/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-2	9/20/2017	Acetone	4.3	10	0.82	14064	ug/L
MW-2	9/20/2017	Chloroform	ND	1	0.4	100	ug/L
MW-2	9/20/2017	Benzene	ND	1	0.062	5	ug/L
MW-2	9/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-2	9/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-2	9/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-2	9/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-2	9/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-2	9/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-2	9/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-2	9/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-2	9/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-2	9/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-2	9/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	9/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-2	9/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-2	9/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-2	9/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-2	9/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-2	9/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-2	9/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-2	9/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-2	9/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-2	9/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-2	9/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-2	9/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-2	9/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-2	9/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-2	9/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-2	9/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-2	9/20/2017	Styrene	ND	1	0.16	100	ug/L
MW-2	9/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-2	9/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-2	9/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-2	9/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-2	9/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-2	9/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-2	9/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-2	9/20/2017	Toluene	ND	1	0.064	1000	ug/L
MW-2	9/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-2	9/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-2	9/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-2	9/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-2	9/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-2	9/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-2	9/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	9/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-2	9/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-2	9/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-2	9/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-2	9/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-2	9/20/2017	MTBE	ND	1	0.24	143	ug/L
MW-2	9/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-2	9/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-2	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-2	9/13/2018	Acetone	ND	10	0.79	14064	ug/L
MW-2	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-2	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-2	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-2	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-2	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-2	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-2	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-2	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-2	9/13/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-2	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-2	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-2	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-2	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-2	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-2	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-2	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-2	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-2	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-2	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-2	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-2	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-2	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-2	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-2	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-2	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-2	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-2	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-2	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-2	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-2	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-2	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-2	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-2	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-2	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-2	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-2	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-2	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-2	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-2	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-2	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-2	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-2	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-2	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-2	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-2	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-2	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-2	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-2	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-2	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-2	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-2	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-2	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-2	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-2	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-2	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-2	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-2	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-2	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-2	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-2	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-2	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-2	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-2	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-2	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-2	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-2	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-2	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-2	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-2	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-2	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-2	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-2	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-2	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-2	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-2	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-2	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-2	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-2	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-2	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-2	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-2	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-2	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-2	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-2	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-2	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-2	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-2	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-2	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-2	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-2	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-2	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-2	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-2	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-2	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-2	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-2	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-2	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-2	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-2	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-2	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-2	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-2	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-2	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-2	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-2	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-2	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-2	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-2	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-2	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-2	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-2	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-2	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-2	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-2	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-2	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-2	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-2	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-2	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-2	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-2	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-2	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-2	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-2	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-2	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-2	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-2	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-2	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-2	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-2	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-2	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-2	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-2	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-2	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-2	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-2	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
MW-2	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-2	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-2	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-2	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-2	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-2	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-2	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-2	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-2	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-2	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-2	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-2	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-2	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-2	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-2	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-2	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-2	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-2	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-2	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
MW-2	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-2	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-2	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-2	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-2	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-2	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
MW-2	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-2	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-2	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-2	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-2	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-2	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-2	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-2	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-2	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-2	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-2	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-2	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-2	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-2	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-2	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-2	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-2	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-2	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-2	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-2	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-2	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-2	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-2	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-2	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-2	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-2	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-2	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-2	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-2	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-2	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-2	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-2	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-2	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-2	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-2	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-2	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-2	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-2	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-2	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-2	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-2	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-2	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-2	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-2	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-2	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-2	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-2	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-2	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-2	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-2	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-2	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-2	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-2	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-2	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-2	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-2	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-2	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-2	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-2	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-2	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-2	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-2	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-2	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-2	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-2	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-2	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-2	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-2	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-2	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-2	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-2	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-2	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-4	8/21/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-4	8/21/2012	Acetone	ND	10	1.5	14064	ug/L
MW-4	8/21/2012	Chloroform	ND	1	0.35	100	ug/L
MW-4	8/21/2012	Benzene	ND	1	0.4	5	ug/L
MW-4	8/21/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-4	8/21/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-4	8/21/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-4	8/21/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-4	8/21/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-4	8/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-4	8/21/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-4	8/21/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-4	8/21/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-4	8/21/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-4	8/21/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-4	8/21/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-4	8/21/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-4	8/21/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-4	8/21/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-4	8/21/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-4	8/21/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-4	8/21/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-4	8/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-4	8/21/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-4	8/21/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-4	8/21/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-4	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-4	8/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-4	8/21/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-4	8/21/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-4	8/21/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-4	8/21/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-4	8/21/2012	Styrene	ND	1	0.41	100	ug/L
MW-4	8/21/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-4	8/21/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-4	8/21/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-4	8/21/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-4	8/21/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-4	8/21/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-4	8/21/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-4	8/21/2012	Toluene	ND	1	0.47	1000	ug/L
MW-4	8/21/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-4	8/21/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-4	8/21/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-4	8/21/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-4	8/21/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-4	8/21/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-4	8/21/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-4	8/21/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-4	8/21/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-4	8/21/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-4	8/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-4	8/21/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-4	8/21/2012	MTBE	ND	1	0.96	143	ug/L
MW-4	8/21/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-4	8/21/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-4	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-4	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-4	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-4	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-4	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-4	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-4	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-4	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-4	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-4	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-4	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-4	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-4	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-4	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-4	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-4	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-4	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-4	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-4	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-4	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-4	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-4	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-4	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-4	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-4	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-4	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-4	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-4	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-4	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-4	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-4	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-4	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-4	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-4	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-4	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-4	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-4	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-4	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-4	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-4	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-4	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-4	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-4	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-4	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-4	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-4	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-4	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-4	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-4	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-4	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-4	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-4	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-4	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-4	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-4	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-4	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-4	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-4	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-4	9/17/2014	Acetone	ND	10	4.9	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
MW-4	9/17/2014	Benzene	ND	1	0.15	5	ug/L
MW-4	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-4	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-4	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-4	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-4	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-4	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-4	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-4	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-4	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-4	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-4	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-4	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-4	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-4	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-4	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-4	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-4	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-4	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-4	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-4	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-4	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-4	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-4	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-4	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-4	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-4	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-4	9/17/2014	Styrene	ND	1	0.12	100	ug/L
MW-4	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-4	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-4	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-4	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-4	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-4	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-4	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-4	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
MW-4	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-4	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-4	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-4	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-4	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-4	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-4	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-4	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-4	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-4	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-4	9/17/2014	MTBE	ND	1	0.25	143	ug/L
MW-4	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-4	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-4	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
MW-4	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
MW-4	8/17/2015	Benzene	ND	1	0.065	5	ug/L
MW-4	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-4	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-4	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-4	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-4	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-4	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-4	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-4	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-4	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-4	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-4	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-4	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-4	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-4	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-4	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-4	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-4	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-4	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-4	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-4	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-4	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-4	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-4	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-4	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-4	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-4	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-4	8/17/2015	Styrene	ND	1	0.11	100	ug/L
MW-4	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-4	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-4	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-4	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-4	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-4	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-4	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-4	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
MW-4	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-4	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-4	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-4	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-4	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-4	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-4	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-4	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-4	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-4	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-4	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-4	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-4	8/17/2015	MTBE	ND	1	0.17	143	ug/L
MW-4	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-4	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-4	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-4	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-4	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-4	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-4	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-4	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-4	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-4	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-4	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-4	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-4	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-4	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-4	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-4	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-4	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-4	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-4	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-4	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-4	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-4	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-4	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-4	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-4	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-4	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-4	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-4	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-4	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-4	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-4	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-4	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-4	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-4	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-4	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-4	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-4	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-4	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-4	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-4	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-4	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-4	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-4	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-4	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-4	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-4	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-4	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-4	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-4	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-4	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-4	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-4	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-4	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-4	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-4	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-4	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-4	9/21/2017	Acetone	3.7	10	0.82	14064	ug/L
MW-4	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
MW-4	9/21/2017	Benzene	ND	1	0.062	5	ug/L
MW-4	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-4	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-4	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-4	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-4	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-4	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-4	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-4	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-4	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-4	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-4	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-4	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-4	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-4	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-4	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-4	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-4	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-4	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-4	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-4	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-4	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-4	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-4	9/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-4	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-4	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-4	9/21/2017	Styrene	ND	1	0.16	100	ug/L
MW-4	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-4	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-4	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-4	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-4	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-4	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-4	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-4	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-4	9/21/2017	Toluene	ND	1	0.064	1000	ug/L
MW-4	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-4	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-4	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-4	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-4	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-4	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-4	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-4	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-4	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-4	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-4	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-4	9/21/2017	MTBE	ND	1	0.24	143	ug/L
MW-4	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-4	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-4	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-4	9/13/2018	Acetone	ND	10	0.79	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-4	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-4	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-4	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-4	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-4	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-4	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-4	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-4	9/13/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-4	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-4	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-4	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-4	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-4	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-4	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-4	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-4	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-4	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-4	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-4	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-4	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-4	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-4	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-4	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-4	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-4	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-4	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-4	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-4	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-4	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-4	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-4	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-4	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-4	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-4	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-4	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-4	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-4	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-4	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-4	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-4	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-4	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-4	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-4	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-4	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-4	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-4	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-4	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-4	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-4	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-4	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-4	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-4	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-4	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-4	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-4	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-4	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-4	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-4	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-4	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-4	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-4	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-4	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-4	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-4	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-4	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-4	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-4	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-4	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-4	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-4	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-4	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-4	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-4	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-4	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-4	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-4	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-4	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-4	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-4	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-4	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-4	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-4	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-4	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-4	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-4	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-4	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-4	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-4	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-4	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-4	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-4	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-4	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-4	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-4	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-4	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-4	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-4	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-4	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-4	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-4	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-4	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-4	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-4	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-4	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-4	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-4	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-4	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-4	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-4	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-4	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-4	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-4	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-4	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-4	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-4	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-4	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-4	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-4	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-4	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-4	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-4	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-4	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-4	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-4	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-4	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-4	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-4	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-4	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-4	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-4	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-4	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-4	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-4	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-4	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
MW-4	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-4	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-4	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-4	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-4	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-4	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-4	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-4	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-4	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-4	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-4	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-4	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-4	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-4	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-4	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-4	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-4	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-4	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
MW-4	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-4	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-4	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-4	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-4	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-4	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
MW-4	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-4	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-4	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-4	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-4	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-4	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-4	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-4	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-4	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-4	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-4	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-4	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-4	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-4	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-4	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-4	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-4	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-4	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-4	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-4	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-4	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-4	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-4	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-4	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-4	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-4	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-4	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-4	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-4	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-4	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-4	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-4	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-4	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-4	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-4	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-4	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-4	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-4	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-4	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-4	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-4	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-4	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-4	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-4	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-4	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-4	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-4	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-4	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-4	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-4	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-4	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-4	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-4	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-4	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-4	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-4	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-4	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-4	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-4	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-4	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-4	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-4	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-4	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-4	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-4	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-4	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-4	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-4	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-4	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-4	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-4	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-4	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-4	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-4	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-4	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-4	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-4	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-4	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-4	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-4	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-4	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-4	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-4	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-4	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-4	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-4	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-4	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-4	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-4	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-4	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-4	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-4	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-4	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-4	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-4	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-4	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-4	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-4	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-4	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-4	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-4	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-4	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-4	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-4	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-4	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-4	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-4	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-5	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-5	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
MW-5	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
MW-5	8/23/2012	Benzene	ND	1	0.4	5	ug/L
MW-5	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-5	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-5	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-5	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-5	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-5	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-5	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-5	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-5	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-5	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-5	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-5	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-5	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-5	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-5	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-5	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-5	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-5	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-5	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-5	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-5	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-5	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-5	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-5	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-5	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-5	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-5	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-5	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-5	8/23/2012	Styrene	ND	1	0.41	100	ug/L
MW-5	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-5	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-5	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-5	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-5	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-5	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-5	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-5	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-5	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
MW-5	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-5	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-5	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-5	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-5	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-5	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-5	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-5	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-5	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-5	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-5	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-5	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-5	8/23/2012	MTBE	ND	1	0.96	143	ug/L
MW-5	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-5	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-5	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-5	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-5	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-5	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-5	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-5	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-5	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-5	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-5	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-5	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-5	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-5	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-5	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-5	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-5	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-5	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-5	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-5	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-5	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-5	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-5	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-5	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-5	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-5	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-5	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-5	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-5	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-5	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-5	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-5	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-5	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-5	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-5	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-5	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-5	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-5	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-5	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-5	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-5	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-5	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-5	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-5	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-5	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-5	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-5	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-5	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-5	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-5	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-5	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-5	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-5	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-5	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-5	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-5	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-5	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-5	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-5	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-5	9/17/2014	Acetone	ND	10	4.9	14064	ug/L
MW-5	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
MW-5	9/17/2014	Benzene	ND	1	0.15	5	ug/L
MW-5	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-5	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-5	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-5	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-5	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-5	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-5	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-5	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-5	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-5	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-5	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-5	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-5	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-5	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-5	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-5	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-5	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-5	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-5	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-5	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-5	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-5	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-5	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-5	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-5	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-5	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-5	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-5	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-5	9/17/2014	Styrene	ND	1	0.12	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-5	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-5	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-5	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-5	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-5	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-5	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-5	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-5	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
MW-5	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-5	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-5	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-5	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-5	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-5	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-5	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-5	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-5	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-5	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-5	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-5	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-5	9/17/2014	MTBE	ND	1	0.25	143	ug/L
MW-5	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-5	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-5	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-5	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-5	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-5	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-5	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-5	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-5	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-5	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-5	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-5	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-5	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-5	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-5	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-5	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-5	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-5	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-5	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-5	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-5	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-5	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-5	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-5	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-5	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-5	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-5	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-5	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-5	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-5	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-5	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-5	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-5	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-5	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-5	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-5	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-5	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-5	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-5	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-5	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-5	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-5	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-5	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-5	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-5	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-5	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-5	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-5	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-5	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-5	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-5	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-5	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-5	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-5	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-5	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-5	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-5	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-5	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-5	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-5	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-5	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-5	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-5	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-5	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-5	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-5	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-5	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-5	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-5	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-5	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-5	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-5	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-5	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-5	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-5	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-5	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-5	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-5	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-5	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-5	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-5	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-5	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-5	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-5	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-5	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-5	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-5	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-5	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-5	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-5	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-5	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-5	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-5	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-5	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-5	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-5	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-5	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-5	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-5	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-5	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-5	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-5	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-5	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-5	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-5	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-5	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-5	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-5	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-5	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-5	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-5	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-5	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-5	9/11/2017	Acetone	5	10	0.82	14064	ug/L
MW-5	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
MW-5	9/11/2017	Benzene	ND	1	0.062	5	ug/L
MW-5	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-5	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-5	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-5	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-5	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-5	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-5	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-5	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-5	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-5	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-5	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-5	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-5	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-5	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-5	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-5	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-5	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-5	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-5	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-5	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-5	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-5	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-5	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-5	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-5	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-5	9/11/2017	Styrene	ND	1	0.16	100	ug/L
MW-5	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-5	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-5	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-5	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-5	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-5	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-5	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-5	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-5	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
MW-5	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-5	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-5	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-5	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-5	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-5	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-5	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-5	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-5	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-5	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-5	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-5	9/11/2017	MTBE	ND	1	0.24	143	ug/L
MW-5	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-5	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-5	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-5	9/17/2018	Acetone	0.99	10	0.79	14064	ug/L
MW-5	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
MW-5	9/17/2018	Benzene	ND	1	0.17	5	ug/L
MW-5	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-5	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-5	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-5	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-5	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-5	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-5	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-5	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-5	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-5	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-5	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-5	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-5	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-5	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-5	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-5	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-5	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-5	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-5	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-5	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-5	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-5	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-5	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-5	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-5	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-5	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-5	9/17/2018	Styrene	ND	1	0.25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-5	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-5	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-5	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-5	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-5	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-5	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-5	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
MW-5	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-5	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-5	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-5	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-5	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-5	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-5	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-5	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-5	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-5	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-5	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-5	9/17/2018	MTBE	ND	1	0.32	143	ug/L
MW-5	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-5	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-5	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-5	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-5	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-5	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-5	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-5	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-5	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-5	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-5	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-5	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-5	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-5	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-5	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-5	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-5	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-5	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-5	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-5	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-5	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-5	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-5	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-5	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-5	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-5	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-5	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-5	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-5	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-5	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-5	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-5	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-5	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-5	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-5	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-5	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-5	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-5	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-5	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-5	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-5	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-5	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-5	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-5	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-5	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-5	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-5	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-5	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-5	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-5	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-5	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-5	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-5	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-5	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-5	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-5	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-5	8/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-5	8/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-5	8/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-5	8/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-5	8/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-5	8/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-5	8/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-5	8/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-5	8/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-5	8/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-5	8/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-5	8/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-5	8/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-5	8/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-5	8/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-5	8/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-5	8/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-5	8/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-5	8/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-5	8/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-5	8/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-5	8/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-5	8/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-5	8/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-5	8/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-5	8/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-5	8/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-5	8/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-5	8/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-5	8/14/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-5	8/14/2019	Benzene	ND	1	0.166639	5	ug/L
MW-5	8/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-5	8/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-5	8/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-5	8/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-5	8/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-5	8/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-5	8/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-5	8/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-5	8/14/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-5	8/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-5	8/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-5	8/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-5	8/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-5	8/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-5	8/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-5	8/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-5	8/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-5	8/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-5	8/14/2019	MTBE	ND	1	0.456095	143	ug/L
MW-5	8/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-5	8/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-5	8/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-5	8/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-5	8/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-5	8/14/2019	Styrene	ND	1	0.191323	100	ug/L
MW-5	8/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-5	8/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-5	8/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-5	8/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-5	8/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-5	8/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-5	8/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-5	8/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-5	8/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-5	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-5	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-5	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-5	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-5	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-5	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-5	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-5	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-5	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-5	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-5	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-5	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-5	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-5	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-5	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-5	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-5	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-5	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-5	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-5	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-5	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-5	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-5	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-5	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-5	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-5	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-5	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-5	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-5	9/21/2020	Acetone	13	10	2.3	14064	ug/L
MW-5	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MW-5	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-5	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-5	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-5	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-5	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-5	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-5	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-5	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-5	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MW-5	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-5	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-5	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-5	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-5	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-5	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-5	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-5	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-5	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-5	9/21/2020	MTBE	ND	1	0.39	143	ug/L
MW-5	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-5	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-5	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-5	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-5	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MW-5	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-5	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-5	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MW-5	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-5	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-5	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-5	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-5	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-5	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-2	3/20/2012	Benzene	**19**	10	1.4	5	ug/L
NAPIS-2	3/20/2012	Ethylbenzene	11	10	1.1	700	ug/L
NAPIS-2	3/20/2012	Toluene	ND	10	1.2	1000	ug/L
NAPIS-2	3/20/2012	Xylenes, Total	ND	20	3.3	620	ug/L
NAPIS-2	3/20/2012	MTBE	**370**	25	1.4	143	ug/L
NAPIS-2	6/12/2012	Benzene	**18**	10	1.4	5	ug/L
NAPIS-2	6/12/2012	1,2,4-Trimethylbenzene	15	10	1.2	56	ug/L
NAPIS-2	6/12/2012	Ethylbenzene	12	10	1.1	700	ug/L
NAPIS-2	6/12/2012	1,3,5-Trimethylbenzene	ND	10	1.1	60	ug/L
NAPIS-2	6/12/2012	Toluene	ND	10	1.2	1000	ug/L
NAPIS-2	6/12/2012	Xylenes, Total	ND	20	3.3	620	ug/L
NAPIS-2	6/12/2012	MTBE	**340**	25	1.4	143	ug/L
NAPIS-2	8/21/2012	Carbon tetrachloride	ND	5	1.8	5	ug/L
NAPIS-2	8/21/2012	Acetone	ND	50	7.5	14064	ug/L
NAPIS-2	8/21/2012	Chloroform	ND	5	1.8	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/21/2012	Benzene	**10**	5	2	5	ug/L
NAPIS-2	8/21/2012	1,1,1-Trichloroethane	ND	5	1.9	200	ug/L
NAPIS-2	8/21/2012	Bromomethane	*ND*	*15*	2.8	7.54	ug/L
NAPIS-2	8/21/2012	Chloromethane	ND	15	3.3	20.32	ug/L
NAPIS-2	8/21/2012	Dibromomethane	ND	5	3.3	8	ug/L
NAPIS-2	8/21/2012	Chloroethane	ND	10	2.2	20857	ug/L
NAPIS-2	8/21/2012	Vinyl Chloride	*ND*	*5*	2.4	2	ug/L
NAPIS-2	8/21/2012	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
NAPIS-2	8/21/2012	Carbon Disulfide	ND	50	4.2	810	ug/L
NAPIS-2	8/21/2012	Bromoform	ND	5	2.2	32.9	ug/L
NAPIS-2	8/21/2012	Bromodichloromethane	*ND*	*5*	1.7	1.34	ug/L
NAPIS-2	8/21/2012	1,1-Dichloroethane	ND	5	1.5	25	ug/L
NAPIS-2	8/21/2012	1,1-Dichloroethene	ND	5	1.9	7	ug/L
NAPIS-2	8/21/2012	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
NAPIS-2	8/21/2012	Dichlorodifluoromethane	ND	5	4.9	197	ug/L
NAPIS-2	8/21/2012	1,2-Dichloropropane	ND	5	1.9	5	ug/L
NAPIS-2	8/21/2012	2-Butanone	ND	50	11	5565	ug/L
NAPIS-2	8/21/2012	1,1,2-Trichloroethane	ND	5	2.7	5	ug/L
NAPIS-2	8/21/2012	Trichloroethene	ND	5	1.5	5	ug/L
NAPIS-2	8/21/2012	1,1,2,2-Tetrachloroethane	ND	10	3.1	10	ug/L
NAPIS-2	8/21/2012	1,2,3-Trichlorobenzene	ND	5	2.5	70	ug/L
NAPIS-2	8/21/2012	2-Chlorotoluene	ND	5	2.7	233	ug/L
NAPIS-2	8/21/2012	1,2,4-Trimethylbenzene	ND	5	2.3	56	ug/L
NAPIS-2	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.9	0.0033	ug/L
NAPIS-2	8/21/2012	1,2,3-Trichloropropane	*ND*	*10*	3.1	0.0084	ug/L
NAPIS-2	8/21/2012	tert-Butylbenzene	ND	5	2.1	690	ug/L
NAPIS-2	8/21/2012	Isopropylbenzene	ND	5	2.3	447	ug/L
NAPIS-2	8/21/2012	p-Isopropyltoluene	ND	5	2.5	NA	ug/L
NAPIS-2	8/21/2012	Ethylbenzene	ND	5	1.9	700	ug/L
NAPIS-2	8/21/2012	Styrene	ND	5	2	100	ug/L
NAPIS-2	8/21/2012	n-Propylbenzene	ND	5	2	660	ug/L
NAPIS-2	8/21/2012	n-Butylbenzene	ND	15	2	1000	ug/L
NAPIS-2	8/21/2012	4-Chlorotoluene	ND	5	2.1	250	ug/L
NAPIS-2	8/21/2012	1,2-Dibromoethane	*ND*	*5*	1.9	0.05	ug/L
NAPIS-2	8/21/2012	1,2-Dichloroethane	ND	5	1.4	5	ug/L
NAPIS-2	8/21/2012	4-Methyl-2-Pentanone	ND	50	4.9	1243	ug/L
NAPIS-2	8/21/2012	1,3,5-Trimethylbenzene	ND	5	1.9	60	ug/L
NAPIS-2	8/21/2012	Bromobenzene	ND	5	3.1	62	ug/L
NAPIS-2	8/21/2012	Toluene	ND	5	2.4	1000	ug/L
NAPIS-2	8/21/2012	Chlorobenzene	ND	5	1.9	77.6	ug/L
NAPIS-2	8/21/2012	Dibromochloromethane	*ND*	*5*	1.6	1.68	ug/L
NAPIS-2	8/21/2012	Tetrachloroethene	ND	5	2.4	5	ug/L
NAPIS-2	8/21/2012	sec-Butylbenzene	ND	5	2.3	2000	ug/L
NAPIS-2	8/21/2012	1,3-Dichloropropane	ND	5	2.6	370	ug/L
NAPIS-2	8/21/2012	cis-1,2-Dichloroethene	ND	5	1.7	70	ug/L
NAPIS-2	8/21/2012	trans-1,2-Dichloroethene	ND	5	1.6	100	ug/L
NAPIS-2	8/21/2012	1,1-Dichloropropene	ND	5	1.9	NA	ug/L
NAPIS-2	8/21/2012	2-Hexanone	*ND*	*50*	4.5	38	ug/L
NAPIS-2	8/21/2012	2,2-Dichloropropane	ND	10	2.3	NA	ug/L
NAPIS-2	8/21/2012	1,1,1,2-Tetrachloroethane	ND	5	2.4	5.74	ug/L
NAPIS-2	8/21/2012	Xylenes, Total	ND	7.5	6.4	620	ug/L
NAPIS-2	8/21/2012	MTBE	**160**	5	4.8	143	ug/L
NAPIS-2	8/21/2012	cis-1,3-Dichloropropene	ND	5	2.8	NA	ug/L
NAPIS-2	8/21/2012	trans-1,3-Dichloropropene	ND	5	3.2	NA	ug/L
NAPIS-2	11/28/2012	Benzene	**16**	2	0.28	5	ug/L
NAPIS-2	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
NAPIS-2	11/28/2012	Ethylbenzene	3	2	0.22	700	ug/L
NAPIS-2	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
NAPIS-2	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
NAPIS-2	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
NAPIS-2	11/28/2012	MTBE	**360**	50	2.9	143	ug/L
NAPIS-2	3/18/2013	Benzene	**70**	1	0.19	5	ug/L
NAPIS-2	3/18/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
NAPIS-2	3/18/2013	Ethylbenzene	56	1	0.18	700	ug/L
NAPIS-2	3/18/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	3/18/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	3/18/2013	Xylenes, Total	2.2	2	0.54	620	ug/L
NAPIS-2	3/18/2013	MTBE	**380**	25	2.1	143	ug/L
NAPIS-2	6/12/2013	Benzene	**13**	1	0.19	5	ug/L
NAPIS-2	6/12/2013	1,2,4-Trimethylbenzene	1.8	1	0.17	56	ug/L
NAPIS-2	6/12/2013	Ethylbenzene	47	1	0.18	700	ug/L
NAPIS-2	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-2	6/12/2013	MTBE	**300**	25	2.1	143	ug/L
NAPIS-2	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
NAPIS-2	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
NAPIS-2	9/3/2013	Benzene	**18**	1	0.46	5	ug/L
NAPIS-2	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
NAPIS-2	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
NAPIS-2	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
NAPIS-2	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
NAPIS-2	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
NAPIS-2	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
NAPIS-2	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
NAPIS-2	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
NAPIS-2	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
NAPIS-2	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
NAPIS-2	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
NAPIS-2	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
NAPIS-2	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
NAPIS-2	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
NAPIS-2	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
NAPIS-2	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
NAPIS-2	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
NAPIS-2	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L
NAPIS-2	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
NAPIS-2	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
NAPIS-2	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
NAPIS-2	9/3/2013	1,2,4-Trimethylbenzene	1.7	1	0.51	56	ug/L
NAPIS-2	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
NAPIS-2	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
NAPIS-2	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
NAPIS-2	9/3/2013	Isopropylbenzene	2.8	1	0.52	447	ug/L
NAPIS-2	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
NAPIS-2	9/3/2013	Ethylbenzene	13	1	0.45	700	ug/L
NAPIS-2	9/3/2013	Styrene	ND	1	0.58	100	ug/L
NAPIS-2	9/3/2013	n-Propylbenzene	2.2	1	0.41	660	ug/L
NAPIS-2	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
NAPIS-2	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
NAPIS-2	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
NAPIS-2	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
NAPIS-2	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
NAPIS-2	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
NAPIS-2	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
NAPIS-2	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
NAPIS-2	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
NAPIS-2	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-2	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
NAPIS-2	9/3/2013	sec-Butylbenzene	1.5	1	0.43	2000	ug/L
NAPIS-2	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
NAPIS-2	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
NAPIS-2	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
NAPIS-2	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-2	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
NAPIS-2	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
NAPIS-2	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
NAPIS-2	9/3/2013	Xylenes, Total	1.6	1.5	1.4	620	ug/L
NAPIS-2	9/3/2013	MTBE	**240**	10	7.7	143	ug/L
NAPIS-2	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
NAPIS-2	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-2	11/12/2013	Benzene	**10**	1	0.19	5	ug/L
NAPIS-2	11/12/2013	Ethylbenzene	8.3	1	0.18	700	ug/L
NAPIS-2	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-2	11/12/2013	MTBE	**250**	25	2.1	143	ug/L
NAPIS-2	3/10/2014	Benzene	**67**	2	0.24	5	ug/L
NAPIS-2	3/10/2014	Ethylbenzene	28	2	0.25	700	ug/L
NAPIS-2	3/10/2014	Toluene	ND	2	0.27	1000	ug/L
NAPIS-2	3/10/2014	Xylenes, Total	ND	4	0.78	620	ug/L
NAPIS-2	3/10/2014	MTBE	**210**	25	0.93	143	ug/L
NAPIS-2	6/5/2014	Benzene	**86**	1	0.12	5	ug/L
NAPIS-2	6/5/2014	1,2,4-Trimethylbenzene	2.9	1	0.11	56	ug/L
NAPIS-2	6/5/2014	Ethylbenzene	28	1	0.12	700	ug/L
NAPIS-2	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	6/5/2014	Toluene	2.1	1	0.13	1000	ug/L
NAPIS-2	6/5/2014	Xylenes, Total	3.7	2	0.39	620	ug/L
NAPIS-2	6/5/2014	MTBE	**200**	12	0.47	143	ug/L
NAPIS-2	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
NAPIS-2	9/11/2014	Acetone	22	10	4.9	14064	ug/L
NAPIS-2	9/11/2014	Chloroform	ND	1	0.32	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/11/2014	Benzene	**27**	1	0.15	5	ug/L
NAPIS-2	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
NAPIS-2	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
NAPIS-2	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
NAPIS-2	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
NAPIS-2	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
NAPIS-2	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
NAPIS-2	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
NAPIS-2	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
NAPIS-2	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
NAPIS-2	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
NAPIS-2	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
NAPIS-2	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
NAPIS-2	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
NAPIS-2	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
NAPIS-2	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
NAPIS-2	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
NAPIS-2	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
NAPIS-2	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
NAPIS-2	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-2	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-2	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
NAPIS-2	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
NAPIS-2	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
NAPIS-2	9/11/2014	Isopropylbenzene	1.1	1	0.16	447	ug/L
NAPIS-2	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
NAPIS-2	9/11/2014	Ethylbenzene	7	1	0.13	700	ug/L
NAPIS-2	9/11/2014	Styrene	ND	1	0.12	100	ug/L
NAPIS-2	9/11/2014	n-Propylbenzene	1.7	1	0.14	660	ug/L
NAPIS-2	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
NAPIS-2	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
NAPIS-2	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
NAPIS-2	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
NAPIS-2	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-2	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
NAPIS-2	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-2	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-2	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
NAPIS-2	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
NAPIS-2	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
NAPIS-2	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-2	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
NAPIS-2	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
NAPIS-2	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
NAPIS-2	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
NAPIS-2	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
NAPIS-2	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-2	9/11/2014	MTBE	**290**	10	2.5	143	ug/L
NAPIS-2	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
NAPIS-2	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-2	11/11/2014	Benzene	**16**	1	0.12	5	ug/L
NAPIS-2	11/11/2014	Ethylbenzene	5.2	1	0.12	700	ug/L
NAPIS-2	11/11/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-2	11/11/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-2	11/11/2014	MTBE	**340**	25	0.93	143	ug/L
NAPIS-2	3/10/2015	Benzene	**32**	1	0.12	5	ug/L
NAPIS-2	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-2	3/10/2015	Ethylbenzene	12	1	0.12	700	ug/L
NAPIS-2	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	3/10/2015	Xylenes, Total	2.7	2	0.38	620	ug/L
NAPIS-2	3/10/2015	MTBE	**220**	25	1.2	143	ug/L
NAPIS-2	6/2/2015	Benzene	**16**	1	0.12	5	ug/L
NAPIS-2	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-2	6/2/2015	Ethylbenzene	7.3	1	0.12	700	ug/L
NAPIS-2	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-2	6/2/2015	MTBE	**200**	25	1.2	143	ug/L
NAPIS-2	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-2	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-2	8/11/2015	Chloroform	ND	1	0.21	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/11/2015	Benzene	**12**	1	0.065	5	ug/L
NAPIS-2	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-2	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-2	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-2	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-2	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-2	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-2	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-2	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-2	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-2	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-2	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-2	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-2	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-2	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-2	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-2	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
NAPIS-2	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-2	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-2	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-2	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-2	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-2	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-2	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-2	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-2	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-2	8/11/2015	Ethylbenzene	2.8	1	0.1	700	ug/L
NAPIS-2	8/11/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-2	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-2	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-2	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-2	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-2	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-2	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-2	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-2	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-2	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-2	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-2	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-2	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-2	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-2	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-2	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-2	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-2	8/11/2015	MTBE	**200**	1	0.17	143	ug/L
NAPIS-2	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-2	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-2	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-2	10/28/2015	Benzene	**9.1**	1	0.065	5	ug/L
NAPIS-2	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-2	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-2	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-2	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-2	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-2	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-2	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-2	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-2	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-2	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-2	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-2	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-2	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-2	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-2	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-2	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-2	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-2	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
NAPIS-2	10/28/2015	1-Methylnaphthalene	6.1	4	0.54	NA	ug/L
NAPIS-2	10/28/2015	Naphthalene	2.9	2	0.22	30	ug/L
NAPIS-2	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
NAPIS-2	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-2	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
NAPIS-2	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-2	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-2	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-2	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-2	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-2	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-2	10/28/2015	Ethylbenzene	2.1	1	0.1	700	ug/L
NAPIS-2	10/28/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-2	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-2	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-2	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
NAPIS-2	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-2	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-2	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-2	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-2	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-2	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
NAPIS-2	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-2	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-2	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-2	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-2	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-2	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
NAPIS-2	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-2	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-2	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-2	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-2	10/28/2015	MTBE	**230**	10	1.7	143	ug/L
NAPIS-2	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	3/1/2016	Acetone	ND	10	0.88	14064	ug/L
NAPIS-2	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	3/1/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-2	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
NAPIS-2	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L
NAPIS-2	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
NAPIS-2	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
NAPIS-2	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
NAPIS-2	3/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-2	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
NAPIS-2	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
NAPIS-2	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
NAPIS-2	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
NAPIS-2	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
NAPIS-2	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
NAPIS-2	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
NAPIS-2	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	3/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	3/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-2	3/1/2016	Naphthalene	ND	2	0.083	30	ug/L
NAPIS-2	3/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	3/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	3/1/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
NAPIS-2	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
NAPIS-2	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
NAPIS-2	3/1/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
NAPIS-2	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	3/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-2	3/1/2016	Styrene	ND	1	0.095	100	ug/L
NAPIS-2	3/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-2	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-2	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	3/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
NAPIS-2	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
NAPIS-2	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
NAPIS-2	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
NAPIS-2	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
NAPIS-2	3/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-2	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	3/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
NAPIS-2	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
NAPIS-2	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	3/1/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-2	3/1/2016	MTBE	ND	1	0.21	143	ug/L
NAPIS-2	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
NAPIS-2	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	6/7/2016	Acetone	12	10	4.9	14064	ug/L
NAPIS-2	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	6/7/2016	Benzene	4.5	1	0.096	5	ug/L
NAPIS-2	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	6/7/2016	1,1-Dichloroethane	0.34	1	0.11	25	ug/L
NAPIS-2	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	6/7/2016	1-Methylnaphthalene	1.2	4	0.2	NA	ug/L
NAPIS-2	6/7/2016	Naphthalene	0.6	2	0.093	30	ug/L
NAPIS-2	6/7/2016	2-Methylnaphthalene	**0.44**	4	0.16		ug/L
NAPIS-2	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	6/7/2016	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
NAPIS-2	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	6/7/2016	tert-Butylbenzene	0.28	1	0.12	690	ug/L
NAPIS-2	6/7/2016	Isopropylbenzene	1.1	1	0.1	447	ug/L
NAPIS-2	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	6/7/2016	Ethylbenzene	5.1	1	0.11	700	ug/L
NAPIS-2	6/7/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	6/7/2016	n-Propylbenzene	0.91	1	0.13	660	ug/L
NAPIS-2	6/7/2016	n-Butylbenzene	0.4	3	0.16	1000	ug/L
NAPIS-2	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	6/7/2016	Toluene	0.13	1	0.12	1000	ug/L
NAPIS-2	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	6/7/2016	sec-Butylbenzene	0.54	1	0.12	2000	ug/L
NAPIS-2	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	6/7/2016	MTBE	140	1	0.21	143	ug/L
NAPIS-2	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	9/1/2016	Acetone	15	10	4.9	14064	ug/L
NAPIS-2	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	9/1/2016	Benzene	5	1	0.096	5	ug/L
NAPIS-2	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	9/1/2016	1,1-Dichloroethane	0.23	1	0.11	25	ug/L
NAPIS-2	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	9/1/2016	1-Methylnaphthalene	2	4	0.2	NA	ug/L
NAPIS-2	9/1/2016	Naphthalene	2.1	2	0.093	30	ug/L
NAPIS-2	9/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	9/1/2016	tert-Butylbenzene	0.24	1	0.12	690	ug/L
NAPIS-2	9/1/2016	Isopropylbenzene	0.42	1	0.1	447	ug/L
NAPIS-2	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	9/1/2016	Ethylbenzene	1.5	1	0.11	700	ug/L
NAPIS-2	9/1/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	9/1/2016	n-Propylbenzene	0.26	1	0.13	660	ug/L
NAPIS-2	9/1/2016	n-Butylbenzene	0.17	3	0.16	1000	ug/L
NAPIS-2	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	9/1/2016	sec-Butylbenzene	0.36	1	0.12	2000	ug/L
NAPIS-2	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	9/1/2016	MTBE	**180**	1	0.21	143	ug/L
NAPIS-2	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	11/14/2016	Acetone	7.1	10	4.9	14064	ug/L
NAPIS-2	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	11/14/2016	Benzene	4.1	1	0.096	5	ug/L
NAPIS-2	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	11/14/2016	Bromodichloromethane	0.23	1	0.14	1.34	ug/L
NAPIS-2	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-2	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	11/14/2016	1-Methylnaphthalene	1.7	4	0.2	NA	ug/L
NAPIS-2	11/14/2016	Naphthalene	1.4	2	0.093	30	ug/L
NAPIS-2	11/14/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	11/14/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
NAPIS-2	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	11/14/2016	tert-Butylbenzene	0.31	1	0.12	690	ug/L
NAPIS-2	11/14/2016	Isopropylbenzene	0.33	1	0.1	447	ug/L
NAPIS-2	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	11/14/2016	Ethylbenzene	1.4	1	0.11	700	ug/L
NAPIS-2	11/14/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	11/14/2016	n-Propylbenzene	0.6	1	0.13	660	ug/L
NAPIS-2	11/14/2016	n-Butylbenzene	0.48	3	0.16	1000	ug/L
NAPIS-2	11/14/2016	4-Chlorotoluene	0.5	1	0.13	250	ug/L
NAPIS-2	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	11/14/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	11/14/2016	Toluene	0.13	1	0.12	1000	ug/L
NAPIS-2	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	11/14/2016	sec-Butylbenzene	0.55	1	0.12	2000	ug/L
NAPIS-2	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	11/14/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	11/14/2016	MTBE	**160**	1	0.21	143	ug/L
NAPIS-2	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/21/2017	Acetone	6.6	10	4.9	14064	ug/L
NAPIS-2	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	2/21/2017	Benzene	**24**	1	0.096	5	ug/L
NAPIS-2	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	2/21/2017	1,1-Dichloroethane	0.24	1	0.11	25	ug/L
NAPIS-2	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	2/21/2017	tert-Butylbenzene	0.25	1	0.12	690	ug/L
NAPIS-2	2/21/2017	Isopropylbenzene	0.74	1	0.1	447	ug/L
NAPIS-2	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	2/21/2017	Ethylbenzene	3.1	1	0.11	700	ug/L
NAPIS-2	2/21/2017	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	2/21/2017	n-Propylbenzene	0.6	1	0.13	660	ug/L
NAPIS-2	2/21/2017	n-Butylbenzene	0.25	3	0.16	1000	ug/L
NAPIS-2	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	2/21/2017	Toluene	0.14	1	0.12	1000	ug/L
NAPIS-2	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	2/21/2017	sec-Butylbenzene	0.46	1	0.12	2000	ug/L
NAPIS-2	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	2/21/2017	cis-1,2-Dichloroethene	0.14	1	0.12	70	ug/L
NAPIS-2	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	2/21/2017	Xylenes, Total	0.53	1.5	0.37	620	ug/L
NAPIS-2	2/21/2017	MTBE	**180**	1	0.21	143	ug/L
NAPIS-2	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	6/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	6/1/2017	Acetone	ND	10	0.82	14064	ug/L
NAPIS-2	6/1/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	6/1/2017	Benzene	**35**	1	0.062	5	ug/L
NAPIS-2	6/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	6/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	6/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	6/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	6/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	6/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	6/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	6/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	6/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	6/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	6/1/2017	1,1-Dichloroethane	0.46	1	0.4	25	ug/L
NAPIS-2	6/1/2017	1,1-Dichloroethene	0.22	1	0.081	7	ug/L
NAPIS-2	6/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	6/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	6/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	6/1/2017	2-Butanone	ND	10	1.1	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	6/1/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	6/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	6/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	6/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	6/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	6/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	6/1/2017	tert-Butylbenzene	0.2	1	0.1	690	ug/L
NAPIS-2	6/1/2017	Isopropylbenzene	2.1	1	0.051	447	ug/L
NAPIS-2	6/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	6/1/2017	Ethylbenzene	16	1	0.093	700	ug/L
NAPIS-2	6/1/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	6/1/2017	n-Propylbenzene	1.2	1	0.074	660	ug/L
NAPIS-2	6/1/2017	n-Butylbenzene	0.14	3	0.13	1000	ug/L
NAPIS-2	6/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	6/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	6/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	6/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	6/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	6/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	6/1/2017	Toluene	0.25	1	0.064	1000	ug/L
NAPIS-2	6/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	6/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	6/1/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	6/1/2017	sec-Butylbenzene	0.98	1	0.11	2000	ug/L
NAPIS-2	6/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	6/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	6/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	6/1/2017	Pentafluorobenzene	ND	0	0		None
NAPIS-2	6/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	6/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	6/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	6/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	6/1/2017	Xylenes, Total	0.71	1.5	0.32	620	ug/L
NAPIS-2	6/1/2017	MTBE	140	1	0.24	143	ug/L
NAPIS-2	6/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	6/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	9/5/2017	Acetone	7.3	10	0.82	14064	ug/L
NAPIS-2	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	9/5/2017	Benzene	**30**	1	0.062	5	ug/L
NAPIS-2	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	9/5/2017	1,2,4-Trimethylbenzene	0.23	1	0.11	56	ug/L
NAPIS-2	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	9/5/2017	tert-Butylbenzene	0.18	1	0.1	690	ug/L
NAPIS-2	9/5/2017	Isopropylbenzene	3.4	1	0.051	447	ug/L
NAPIS-2	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	9/5/2017	Ethylbenzene	37	1	0.093	700	ug/L
NAPIS-2	9/5/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	9/5/2017	n-Propylbenzene	3.5	1	0.074	660	ug/L
NAPIS-2	9/5/2017	n-Butylbenzene	0.47	3	0.13	1000	ug/L
NAPIS-2	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	9/5/2017	Toluene	0.3	1	0.064	1000	ug/L
NAPIS-2	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	9/5/2017	sec-Butylbenzene	1.1	1	0.11	2000	ug/L
NAPIS-2	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	9/5/2017	Xylenes, Total	0.78	1.5	0.32	620	ug/L
NAPIS-2	9/5/2017	MTBE	140	1	0.24	143	ug/L
NAPIS-2	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	12/4/2017	Acetone	5.9	10	0.82	14064	ug/L
NAPIS-2	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	12/4/2017	Benzene	**21**	1	0.062	5	ug/L
NAPIS-2	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	12/4/2017	1,1-Dichloroethane	0.53	1	0.4	25	ug/L
NAPIS-2	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	12/4/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	12/4/2017	1-Methylnaphthalene	5.1	4	0.16	NA	ug/L
NAPIS-2	12/4/2017	Naphthalene	3.7	2	0.11	30	ug/L
NAPIS-2	12/4/2017	2-Methylnaphthalene	**0.34**	4	0.15		ug/L
NAPIS-2	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	12/4/2017	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
NAPIS-2	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	12/4/2017	tert-Butylbenzene	0.18	1	0.1	690	ug/L
NAPIS-2	12/4/2017	Isopropylbenzene	3.9	1	0.051	447	ug/L
NAPIS-2	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	12/4/2017	Ethylbenzene	38	1	0.093	700	ug/L
NAPIS-2	12/4/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	12/4/2017	n-Propylbenzene	3.8	1	0.074	660	ug/L
NAPIS-2	12/4/2017	n-Butylbenzene	0.43	3	0.13	1000	ug/L
NAPIS-2	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	12/4/2017	Toluene	0.31	1	0.064	1000	ug/L
NAPIS-2	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	12/4/2017	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
NAPIS-2	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	12/4/2017	Xylenes, Total	0.69	1.5	0.32	620	ug/L
NAPIS-2	12/4/2017	MTBE	**160**	1	0.24	143	ug/L
NAPIS-2	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	2/9/2018	Acetone	8.1	10	0.82	14064	ug/L
NAPIS-2	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	2/9/2018	Benzene	**27**	1	0.062	5	ug/L
NAPIS-2	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	2/9/2018	1-Methylnaphthalene	5.5	4	0.16	NA	ug/L
NAPIS-2	2/9/2018	Naphthalene	4.4	2	0.11	30	ug/L
NAPIS-2	2/9/2018	2-Methylnaphthalene	**1.4**	4	0.15		ug/L
NAPIS-2	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	2/9/2018	1,2,4-Trimethylbenzene	0.5	1	0.11	56	ug/L
NAPIS-2	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	2/9/2018	tert-Butylbenzene	0.32	1	0.1	690	ug/L
NAPIS-2	2/9/2018	Isopropylbenzene	3.3	1	0.051	447	ug/L
NAPIS-2	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	2/9/2018	Ethylbenzene	33	1	0.093	700	ug/L
NAPIS-2	2/9/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	2/9/2018	n-Propylbenzene	3	1	0.074	660	ug/L
NAPIS-2	2/9/2018	n-Butylbenzene	0.58	3	0.13	1000	ug/L
NAPIS-2	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	2/9/2018	1,3,5-Trimethylbenzene	0.15	1	0.087	60	ug/L
NAPIS-2	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	2/9/2018	Toluene	0.69	1	0.064	1000	ug/L
NAPIS-2	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	2/9/2018	sec-Butylbenzene	1.1	1	0.11	2000	ug/L
NAPIS-2	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-2	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	2/9/2018	Xylenes, Total	1.6	1.5	0.32	620	ug/L
NAPIS-2	2/9/2018	MTBE	130	1	0.24	143	ug/L
NAPIS-2	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	4/30/2018	Acetone	9.7	10	0.82	14064	ug/L
NAPIS-2	4/30/2018	Chloroform	ND	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	4/30/2018	Benzene	**32**	1	0.062	5	ug/L
NAPIS-2	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	4/30/2018	1,1-Dichloroethane	0.52	1	0.4	25	ug/L
NAPIS-2	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	4/30/2018	1-Methylnaphthalene	11	4	0.16	NA	ug/L
NAPIS-2	4/30/2018	Naphthalene	7.8	2	0.11	30	ug/L
NAPIS-2	4/30/2018	2-Methylnaphthalene	**1.7**	4	0.15		ug/L
NAPIS-2	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	4/30/2018	1,2,4-Trimethylbenzene	0.84	1	0.11	56	ug/L
NAPIS-2	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	4/30/2018	tert-Butylbenzene	0.25	1	0.1	690	ug/L
NAPIS-2	4/30/2018	Isopropylbenzene	3.7	1	0.051	447	ug/L
NAPIS-2	4/30/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	4/30/2018	Ethylbenzene	35	1	0.093	700	ug/L
NAPIS-2	4/30/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	4/30/2018	n-Propylbenzene	3.7	1	0.074	660	ug/L
NAPIS-2	4/30/2018	n-Butylbenzene	0.59	3	0.13	1000	ug/L
NAPIS-2	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	4/30/2018	1,3,5-Trimethylbenzene	0.2	1	0.087	60	ug/L
NAPIS-2	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	4/30/2018	Toluene	2.3	1	0.064	1000	ug/L
NAPIS-2	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	4/30/2018	sec-Butylbenzene	1.2	1	0.11	2000	ug/L
NAPIS-2	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-2	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	4/30/2018	Xylenes, Total	0.61	1.5	0.32	620	ug/L
NAPIS-2	4/30/2018	MTBE	99	1	0.24	143	ug/L
NAPIS-2	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	4/9/2019	Benzene	**340**	5	1.666391	5	ug/L
NAPIS-2	4/9/2019	Ethylbenzene	24	1	0.132341	700	ug/L
NAPIS-2	4/9/2019	MTBE	97	1	0.456095	143	ug/L
NAPIS-2	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	4/9/2019	Xylenes, Total	1	1.5	0.454415	620	ug/L
NAPIS-2	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-2	5/28/2019	Benzene	**270**	10	1.666391	5	ug/L
NAPIS-2	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-2	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	5/28/2019	Ethylbenzene	45	1	0.132341	700	ug/L
NAPIS-2	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	5/28/2019	Isopropylbenzene	8.3	1	0.191522	447	ug/L
NAPIS-2	5/28/2019	MTBE	98	1	0.456095	143	ug/L
NAPIS-2	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	5/28/2019	Naphthalene	11	2	0.275071	30	ug/L
NAPIS-2	5/28/2019	n-Butylbenzene	0.51	3	0.22757	1000	ug/L
NAPIS-2	5/28/2019	n-Propylbenzene	3.5	1	0.214308	660	ug/L
NAPIS-2	5/28/2019	sec-Butylbenzene	1.9	1	0.247731	2000	ug/L
NAPIS-2	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	5/28/2019	tert-Butylbenzene	0.29	1	0.206985	690	ug/L
NAPIS-2	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-2	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-2	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	5/28/2019	1,2,4-Trimethylbenzene	0.26	1	0.213199	56	ug/L
NAPIS-2	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-2	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-2	5/28/2019	1-Methylnaphthalene	20	4	0.314954	NA	ug/L
NAPIS-2	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	5/28/2019	2-Methylnaphthalene	**1.8**	4	0.345376		ug/L
NAPIS-2	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-2	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	8/22/2019	1,2,4-Trimethylbenzene	0.32	1	0.213199	56	ug/L
NAPIS-2	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-2	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	1-Methylnaphthalene	24	4	0.314954	NA	ug/L
NAPIS-2	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	8/22/2019	2-Methylnaphthalene	**4.8**	4	0.345376		ug/L
NAPIS-2	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	8/22/2019	Acetone	4.1	10	1.199396	14064	ug/L
NAPIS-2	8/22/2019	Benzene	**220**	10	1.666391	5	ug/L
NAPIS-2	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-2	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-2	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	8/22/2019	Ethylbenzene	44	1	0.132341	700	ug/L
NAPIS-2	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	8/22/2019	Isopropylbenzene	9.1	1	0.191522	447	ug/L
NAPIS-2	8/22/2019	MTBE	110	1	0.456095	143	ug/L
NAPIS-2	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	8/22/2019	Naphthalene	15	2	0.275071	30	ug/L
NAPIS-2	8/22/2019	n-Butylbenzene	1.6	3	0.22757	1000	ug/L
NAPIS-2	8/22/2019	n-Propylbenzene	4.7	1	0.214308	660	ug/L
NAPIS-2	8/22/2019	sec-Butylbenzene	2.4	1	0.247731	2000	ug/L
NAPIS-2	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	8/22/2019	tert-Butylbenzene	0.49	1	0.206985	690	ug/L
NAPIS-2	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	8/22/2019	Toluene	0.45	1	0.350436	1000	ug/L
NAPIS-2	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	8/22/2019	Xylenes, Total	0.85	1.5	0.454415	620	ug/L
NAPIS-2	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-2	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	25	4	0.314954	NA	ug/L
NAPIS-2	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	**3.8**	4	0.345376		ug/L
NAPIS-2	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-2	10/21/2019	Benzene	**210**	10	1.666391	5	ug/L
NAPIS-2	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-2	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	10/21/2019	Ethylbenzene	24	1	0.132341	700	ug/L
NAPIS-2	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	10/21/2019	Isopropylbenzene	6.6	1	0.191522	447	ug/L
NAPIS-2	10/21/2019	MTBE	100	1	0.456095	143	ug/L
NAPIS-2	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	10/21/2019	Naphthalene	17	2	0.275071	30	ug/L
NAPIS-2	10/21/2019	n-Butylbenzene	0.53	3	0.22757	1000	ug/L
NAPIS-2	10/21/2019	n-Propylbenzene	2.8	1	0.214308	660	ug/L
NAPIS-2	10/21/2019	sec-Butylbenzene	2.1	1	0.247731	2000	ug/L
NAPIS-2	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	10/21/2019	tert-Butylbenzene	0.34	1	0.206985	690	ug/L
NAPIS-2	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-2	3/4/2020	Benzene	**330**	10	2.3	5	ug/L
NAPIS-2	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-2	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-2	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-2	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-2	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-2	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-2	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-2	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-2	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-2	3/4/2020	1,2,4-Trimethylbenzene	0.59	1	0.12	56	ug/L
NAPIS-2	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-2	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-2	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-2	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-2	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-2	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-2	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-2	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-2	3/4/2020	1-Methylnaphthalene	33	4	0.84	NA	ug/L
NAPIS-2	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-2	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-2	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-2	3/4/2020	2-Methylnaphthalene	**8.2**	4	0.69		ug/L
NAPIS-2	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-2	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-2	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-2	3/4/2020	Acetone	7.3	10	2.3	14064	ug/L
NAPIS-2	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-2	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-2	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-2	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-2	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-2	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-2	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-2	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-2	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-2	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-2	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-2	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-2	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-2	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-2	3/4/2020	Ethylbenzene	40	1	0.21	700	ug/L
NAPIS-2	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-2	3/4/2020	Isopropylbenzene	6.3	1	0.18	447	ug/L
NAPIS-2	3/4/2020	MTBE	69	1	0.39	143	ug/L
NAPIS-2	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-2	3/4/2020	n-Butylbenzene	0.69	3	0.25	1000	ug/L
NAPIS-2	3/4/2020	n-Propylbenzene	3.1	1	0.18	660	ug/L
NAPIS-2	3/4/2020	Naphthalene	25	2	0.28	30	ug/L
NAPIS-2	3/4/2020	sec-Butylbenzene	2.1	1	0.61	2000	ug/L
NAPIS-2	3/4/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-2	3/4/2020	tert-Butylbenzene	0.42	1	0.24	690	ug/L
NAPIS-2	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-2	3/4/2020	Toluene	0.6	1	0.2	1000	ug/L
NAPIS-2	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-2	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-2	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-2	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-2	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	3/4/2020	Xylenes, Total	2.1	1.5	0.55	620	ug/L
NAPIS-2	9/22/2020	Benzene	**290**	10	2.3	5	ug/L
NAPIS-2	9/22/2020	Ethylbenzene	140	10	2.1	700	ug/L
NAPIS-2	9/22/2020	MTBE	57	1	0.39	143	ug/L
NAPIS-2	9/22/2020	Toluene	0.52	1	0.2	1000	ug/L
NAPIS-2	9/22/2020	Xylenes, Total	1.5	1.5	0.55	620	ug/L
NAPIS-2	12/17/2020	Acetone	ND	25	10	14064	ug/L
NAPIS-2	12/17/2020	Benzene	**204**	1	0.38	5	ug/L
NAPIS-2	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
NAPIS-2	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
NAPIS-2	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
NAPIS-2	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
NAPIS-2	12/17/2020	Carbon Disulfide	8.09	1	0.5	810	ug/L
NAPIS-2	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
NAPIS-2	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-2	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
NAPIS-2	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
NAPIS-2	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
NAPIS-2	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
NAPIS-2	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
NAPIS-2	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
NAPIS-2	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
NAPIS-2	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
NAPIS-2	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
NAPIS-2	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
NAPIS-2	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
NAPIS-2	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
NAPIS-2	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
NAPIS-2	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
NAPIS-2	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
NAPIS-2	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
NAPIS-2	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
NAPIS-2	12/17/2020	Ethylbenzene	50.4	1	0.5	700	ug/L
NAPIS-2	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
NAPIS-2	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
NAPIS-2	12/17/2020	Isopropylbenzene	5.3	1	0.53	447	ug/L
NAPIS-2	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
NAPIS-2	12/17/2020	1-Methylnaphthalene	33.4	5	4.2	NA	ug/L
NAPIS-2	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
NAPIS-2	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
NAPIS-2	12/17/2020	MTBE	73.6	1	0.74	143	ug/L
NAPIS-2	12/17/2020	Naphthalene	24.4	1	1	30	ug/L
NAPIS-2	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
NAPIS-2	12/17/2020	n-Propylbenzene	2.04	1	0.69	660	ug/L
NAPIS-2	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
NAPIS-2	12/17/2020	sec-Butylbenzene	1.16	1	0.7	2000	ug/L
NAPIS-2	12/17/2020	Styrene	ND	1	1	100	ug/L
NAPIS-2	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
NAPIS-2	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
NAPIS-2	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
NAPIS-2	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
NAPIS-2	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
NAPIS-2	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
NAPIS-2	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
NAPIS-2	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
NAPIS-2	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
NAPIS-2	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
NAPIS-2	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
NAPIS-2	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
NAPIS-2	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
NAPIS-2	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
NAPIS-2	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
NAPIS-3	3/20/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	3/20/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	3/20/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	3/20/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	3/20/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	6/12/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	6/12/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	6/12/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	6/12/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
NAPIS-3	6/12/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/12/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	6/12/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	10/2/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	10/2/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	10/2/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	10/2/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
NAPIS-3	10/2/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	10/2/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	10/2/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	11/28/2012	Benzene	ND	2	0.28	5	ug/L
NAPIS-3	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
NAPIS-3	11/28/2012	Ethylbenzene	ND	2	0.22	700	ug/L
NAPIS-3	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
NAPIS-3	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
NAPIS-3	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
NAPIS-3	11/28/2012	MTBE	ND	5	0.29	143	ug/L
NAPIS-3	3/18/2013	Benzene	ND	2	0.37	5	ug/L
NAPIS-3	3/18/2013	1,2,4-Trimethylbenzene	ND	2	0.34	56	ug/L
NAPIS-3	3/18/2013	Ethylbenzene	ND	2	0.36	700	ug/L
NAPIS-3	3/18/2013	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
NAPIS-3	3/18/2013	Toluene	ND	2	0.36	1000	ug/L
NAPIS-3	3/18/2013	Xylenes, Total	ND	4	1.1	620	ug/L
NAPIS-3	3/18/2013	MTBE	ND	5	0.42	143	ug/L
NAPIS-3	6/12/2013	Benzene	ND	1	0.19	5	ug/L
NAPIS-3	6/12/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
NAPIS-3	6/12/2013	Ethylbenzene	ND	1	0.18	700	ug/L
NAPIS-3	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-3	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-3	6/12/2013	MTBE	ND	2.5	0.21	143	ug/L
NAPIS-3	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
NAPIS-3	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
NAPIS-3	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
NAPIS-3	9/3/2013	Benzene	ND	1	0.46	5	ug/L
NAPIS-3	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
NAPIS-3	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
NAPIS-3	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
NAPIS-3	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
NAPIS-3	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
NAPIS-3	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
NAPIS-3	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
NAPIS-3	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
NAPIS-3	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
NAPIS-3	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
NAPIS-3	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
NAPIS-3	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
NAPIS-3	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
NAPIS-3	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
NAPIS-3	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
NAPIS-3	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
NAPIS-3	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
NAPIS-3	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
NAPIS-3	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
NAPIS-3	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
NAPIS-3	9/3/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
NAPIS-3	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
NAPIS-3	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
NAPIS-3	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
NAPIS-3	9/3/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
NAPIS-3	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
NAPIS-3	9/3/2013	Ethylbenzene	ND	1	0.45	700	ug/L
NAPIS-3	9/3/2013	Styrene	ND	1	0.58	100	ug/L
NAPIS-3	9/3/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
NAPIS-3	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
NAPIS-3	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
NAPIS-3	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
NAPIS-3	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
NAPIS-3	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
NAPIS-3	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
NAPIS-3	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
NAPIS-3	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
NAPIS-3	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
NAPIS-3	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-3	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
NAPIS-3	9/3/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
NAPIS-3	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
NAPIS-3	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
NAPIS-3	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
NAPIS-3	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-3	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
NAPIS-3	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
NAPIS-3	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
NAPIS-3	9/3/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
NAPIS-3	9/3/2013	MTBE	ND	1	0.77	143	ug/L
NAPIS-3	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
NAPIS-3	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-3	11/12/2013	Benzene	ND	1	0.19	5	ug/L
NAPIS-3	11/12/2013	Ethylbenzene	ND	1	0.18	700	ug/L
NAPIS-3	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-3	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-3	11/12/2013	MTBE	ND	2.5	0.21	143	ug/L
NAPIS-3	3/10/2014	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	3/10/2014	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	3/10/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-3	3/10/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-3	3/10/2014	MTBE	ND	2.5	0.093	143	ug/L
NAPIS-3	6/5/2014	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	6/5/2014	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/5/2014	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	6/5/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-3	6/5/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-3	6/5/2014	MTBE	ND	2.5	0.093	143	ug/L
NAPIS-3	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
NAPIS-3	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
NAPIS-3	9/11/2014	Benzene	3.8	1	0.15	5	ug/L
NAPIS-3	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
NAPIS-3	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
NAPIS-3	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
NAPIS-3	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
NAPIS-3	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
NAPIS-3	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
NAPIS-3	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
NAPIS-3	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
NAPIS-3	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
NAPIS-3	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
NAPIS-3	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
NAPIS-3	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
NAPIS-3	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
NAPIS-3	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
NAPIS-3	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
NAPIS-3	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
NAPIS-3	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
NAPIS-3	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
NAPIS-3	9/11/2014	Ethylbenzene	1.9	1	0.13	700	ug/L
NAPIS-3	9/11/2014	Styrene	ND	1	0.12	100	ug/L
NAPIS-3	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
NAPIS-3	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
NAPIS-3	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
NAPIS-3	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
NAPIS-3	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
NAPIS-3	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
NAPIS-3	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-3	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
NAPIS-3	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
NAPIS-3	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
NAPIS-3	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
NAPIS-3	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
NAPIS-3	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
NAPIS-3	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
NAPIS-3	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
NAPIS-3	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
NAPIS-3	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
NAPIS-3	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
NAPIS-3	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
NAPIS-3	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-3	9/11/2014	MTBE	11	1	0.25	143	ug/L
NAPIS-3	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
NAPIS-3	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	11/13/2014	Benzene	ND	1	0.15	5	ug/L
NAPIS-3	11/13/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	11/13/2014	Ethylbenzene	ND	1	0.13	700	ug/L
NAPIS-3	11/13/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	11/13/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-3	11/13/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-3	11/13/2014	MTBE	ND	1	0.25	143	ug/L
NAPIS-3	3/10/2015	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-3	3/10/2015	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	3/10/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-3	3/10/2015	MTBE	ND	2.5	0.12	143	ug/L
NAPIS-3	6/2/2015	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-3	6/2/2015	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-3	6/2/2015	MTBE	ND	2.5	0.12	143	ug/L
NAPIS-3	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-3	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-3	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-3	8/11/2015	Benzene	ND	1	0.065	5	ug/L
NAPIS-3	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-3	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-3	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-3	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-3	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-3	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-3	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-3	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-3	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-3	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-3	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-3	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-3	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-3	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-3	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-3	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-3	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-3	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-3	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-3	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-3	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-3	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-3	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-3	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-3	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
NAPIS-3	8/11/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-3	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-3	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-3	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-3	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-3	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-3	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-3	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-3	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-3	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-3	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-3	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-3	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-3	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-3	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-3	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-3	8/11/2015	MTBE	ND	1	0.17	143	ug/L
NAPIS-3	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-3	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-3	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-3	10/28/2015	Benzene	ND	1	0.065	5	ug/L
NAPIS-3	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-3	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-3	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-3	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-3	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-3	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-3	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-3	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-3	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-3	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-3	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-3	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-3	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-3	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-3	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-3	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
NAPIS-3	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-3	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-3	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
NAPIS-3	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
NAPIS-3	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
NAPIS-3	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
NAPIS-3	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-3	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
NAPIS-3	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-3	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-3	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-3	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-3	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-3	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-3	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
NAPIS-3	10/28/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-3	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
NAPIS-3	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-3	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-3	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-3	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-3	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-3	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
NAPIS-3	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-3	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-3	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-3	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-3	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-3	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
NAPIS-3	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-3	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-3	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-3	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-3	10/28/2015	MTBE	ND	1	0.17	143	ug/L
NAPIS-3	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	3/1/2016	Acetone	ND	10	0.88	14064	ug/L
NAPIS-3	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	3/1/2016	Benzene	**13**	1	0.096	5	ug/L
NAPIS-3	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
NAPIS-3	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L
NAPIS-3	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
NAPIS-3	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
NAPIS-3	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
NAPIS-3	3/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
NAPIS-3	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
NAPIS-3	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
NAPIS-3	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
NAPIS-3	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
NAPIS-3	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
NAPIS-3	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
NAPIS-3	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	3/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	3/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	3/1/2016	Naphthalene	ND	2	0.083	30	ug/L
NAPIS-3	3/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	3/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	3/1/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
NAPIS-3	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
NAPIS-3	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
NAPIS-3	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
NAPIS-3	3/1/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
NAPIS-3	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	3/1/2016	Ethylbenzene	5.3	1	0.11	700	ug/L
NAPIS-3	3/1/2016	Styrene	ND	1	0.095	100	ug/L
NAPIS-3	3/1/2016	n-Propylbenzene	1	1	0.13	660	ug/L
NAPIS-3	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	3/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
NAPIS-3	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
NAPIS-3	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
NAPIS-3	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
NAPIS-3	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
NAPIS-3	3/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	3/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
NAPIS-3	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
NAPIS-3	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	3/1/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	3/1/2016	MTBE	**160**	1	0.21	143	ug/L
NAPIS-3	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
NAPIS-3	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	6/7/2016	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	6/7/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	6/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	6/7/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	6/7/2016	Naphthalene	ND	2	0.093	30	ug/L
NAPIS-3	6/7/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	6/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	6/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	6/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	6/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	6/7/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	6/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	6/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	6/7/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	6/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	6/7/2016	MTBE	0.44	1	0.21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	9/1/2016	Acetone	11	10	4.9	14064	ug/L
NAPIS-3	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	9/1/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	9/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	9/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	9/1/2016	Naphthalene	0.1	2	0.093	30	ug/L
NAPIS-3	9/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	9/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	9/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	9/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	9/1/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	9/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	9/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	9/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	9/1/2016	MTBE	8.4	1	0.21	143	ug/L
NAPIS-3	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	11/14/2016	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	11/14/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	11/14/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	11/14/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	11/14/2016	Naphthalene	ND	2	0.093	30	ug/L
NAPIS-3	11/14/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	11/14/2016	1,2,4-Trimethylbenzene	0.25	1	0.11	56	ug/L
NAPIS-3	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	11/14/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	11/14/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	11/14/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	11/14/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	11/14/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	11/14/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	11/14/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	11/14/2016	1,2-Dichloroethane	0.34	1	0.12	5	ug/L
NAPIS-3	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	11/14/2016	Toluene	0.21	1	0.12	1000	ug/L
NAPIS-3	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	11/14/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	11/14/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	11/14/2016	MTBE	15	1	0.21	143	ug/L
NAPIS-3	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	2/21/2017	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	2/21/2017	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	2/21/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	2/21/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	2/21/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	2/21/2017	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	2/21/2017	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	2/21/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	2/21/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	2/21/2017	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	2/21/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	2/21/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	2/21/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	2/21/2017	MTBE	16	1	0.21	143	ug/L
NAPIS-3	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	6/2/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	6/2/2017	Acetone	4.2	10	0.82	14064	ug/L
NAPIS-3	6/2/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	6/2/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	6/2/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	6/2/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	6/2/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	6/2/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	6/2/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	6/2/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	6/2/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	6/2/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	6/2/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	6/2/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	6/2/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	6/2/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	6/2/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	6/2/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	6/2/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	6/2/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	6/2/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	6/2/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	6/2/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	6/2/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	6/2/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	6/2/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	6/2/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	6/2/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	6/2/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	6/2/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	6/2/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	6/2/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	6/2/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	6/2/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	6/2/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	6/2/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	6/2/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	6/2/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/2/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	6/2/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	6/2/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	6/2/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	6/2/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	6/2/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	6/2/2017	sec-Butylbenzene	0.45	1	0.11	2000	ug/L
NAPIS-3	6/2/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	6/2/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	6/2/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	6/2/2017	Pentafluorobenzene	ND	0	0		None
NAPIS-3	6/2/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	6/2/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	6/2/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	6/2/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	6/2/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	6/2/2017	MTBE	40	1	0.24	143	ug/L
NAPIS-3	6/2/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	6/2/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	9/5/2017	Acetone	3.9	10	0.82	14064	ug/L
NAPIS-3	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	9/5/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	9/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	9/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	9/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	9/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	9/5/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	9/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	9/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	9/5/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	9/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	9/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	9/5/2017	MTBE	18	1	0.24	143	ug/L
NAPIS-3	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	12/4/2017	Acetone	2.9	10	0.82	14064	ug/L
NAPIS-3	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	12/4/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	12/4/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	12/4/2017	2-Butanone	1.8	10	1.1	5565	ug/L
NAPIS-3	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	12/4/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
NAPIS-3	12/4/2017	Naphthalene	ND	2	0.11	30	ug/L
NAPIS-3	12/4/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	12/4/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	12/4/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	12/4/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	12/4/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	12/4/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	12/4/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	12/4/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	12/4/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	12/4/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	12/4/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	12/4/2017	MTBE	42	1	0.24	143	ug/L
NAPIS-3	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	2/9/2018	Acetone	ND	10	0.82	14064	ug/L
NAPIS-3	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	2/9/2018	Benzene	0.16	1	0.062	5	ug/L
NAPIS-3	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	2/9/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
NAPIS-3	2/9/2018	Naphthalene	ND	2	0.11	30	ug/L
NAPIS-3	2/9/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	2/9/2018	1,2,4-Trimethylbenzene	0.16	1	0.11	56	ug/L
NAPIS-3	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	2/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	2/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	2/9/2018	Ethylbenzene	0.098	1	0.093	700	ug/L
NAPIS-3	2/9/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	2/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	2/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	2/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	2/9/2018	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	2/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	2/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	2/9/2018	MTBE	33	1	0.24	143	ug/L
NAPIS-3	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	4/30/2018	Acetone	3.2	10	0.82	14064	ug/L
NAPIS-3	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	4/30/2018	Benzene	**290**	10	0.62	5	ug/L
NAPIS-3	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	4/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	4/30/2018	1-Methylnaphthalene	0.51	4	0.16	NA	ug/L
NAPIS-3	4/30/2018	Naphthalene	0.46	2	0.11	30	ug/L
NAPIS-3	4/30/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	4/30/2018	1,2,4-Trimethylbenzene	1.9	1	0.11	56	ug/L
NAPIS-3	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	4/30/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	4/30/2018	Isopropylbenzene	0.78	1	0.051	447	ug/L
NAPIS-3	4/30/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	4/30/2018	Ethylbenzene	8.3	1	0.093	700	ug/L
NAPIS-3	4/30/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	4/30/2018	n-Propylbenzene	0.37	1	0.074	660	ug/L
NAPIS-3	4/30/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	4/30/2018	1,3,5-Trimethylbenzene	0.68	1	0.087	60	ug/L
NAPIS-3	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	4/30/2018	Toluene	6.6	1	0.064	1000	ug/L
NAPIS-3	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	4/30/2018	sec-Butylbenzene	0.21	1	0.11	2000	ug/L
NAPIS-3	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	4/30/2018	Xylenes, Total	13	1.5	0.32	620	ug/L
NAPIS-3	4/30/2018	MTBE	32	1	0.24	143	ug/L
NAPIS-3	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	4/9/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	4/9/2019	Ethylbenzene	0.76	1	0.132341	700	ug/L
NAPIS-3	4/9/2019	MTBE	40	1	0.456095	143	ug/L
NAPIS-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	4/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	4/9/2019	Benzene	3.3	1	0.166639	5	ug/L
NAPIS-3	4/9/2019	Ethylbenzene	1.2	1	0.132341	700	ug/L
NAPIS-3	4/9/2019	MTBE	39	1	0.456095	143	ug/L
NAPIS-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	4/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	4/9/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
NAPIS-3	4/9/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
NAPIS-3	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-3	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-3	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
NAPIS-3	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	5/28/2019	Acetone	11	10	1.199396	14064	ug/L
NAPIS-3	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-3	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	5/28/2019	MTBE	31	1	0.456095	143	ug/L
NAPIS-3	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	5/28/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
NAPIS-3	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-3	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-3	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	8/22/2019	1-Methylnaphthalene	1.1	4	0.314954	NA	ug/L
NAPIS-3	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	8/22/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
NAPIS-3	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	8/22/2019	Acetone	2.4	10	1.199396	14064	ug/L
NAPIS-3	8/22/2019	Benzene	0.54	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-3	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	8/22/2019	MTBE	30	1	0.456095	143	ug/L
NAPIS-3	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
NAPIS-3	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
NAPIS-3	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-3	10/21/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	10/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	10/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	10/21/2019	MTBE	28	1	0.456095	143	ug/L
NAPIS-3	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	10/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	10/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	10/21/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
NAPIS-3	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-3	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-3	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-3	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-3	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-3	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-3	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-3	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-3	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-3	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-3	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-3	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-3	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-3	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-3	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-3	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
NAPIS-3	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-3	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-3	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
NAPIS-3	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-3	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-3	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	3/4/2020	Acetone	2.6	10	2.3	14064	ug/L
NAPIS-3	3/4/2020	Benzene	4.7	1	0.23	5	ug/L
NAPIS-3	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-3	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-3	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-3	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-3	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-3	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-3	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-3	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-3	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-3	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-3	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-3	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
NAPIS-3	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-3	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-3	3/4/2020	Ethylbenzene	3	1	0.21	700	ug/L
NAPIS-3	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-3	3/4/2020	Isopropylbenzene	0.37	1	0.18	447	ug/L
NAPIS-3	3/4/2020	MTBE	48	1	0.39	143	ug/L
NAPIS-3	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-3	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
NAPIS-3	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
NAPIS-3	3/4/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-3	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
NAPIS-3	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-3	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
NAPIS-3	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-3	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-3	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-3	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-3	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-3	3/4/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
NAPIS-3	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-3	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-3	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-3	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-3	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-3	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-3	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-3	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-3	9/22/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-3	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-3	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-3	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-3	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-3	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-3	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-3	9/22/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
NAPIS-3	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-3	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-3	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
NAPIS-3	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-3	9/22/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-3	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	9/22/2020	Acetone	3.4	10	2.3	14064	ug/L
NAPIS-3	9/22/2020	Benzene	1.4	1	0.23	5	ug/L
NAPIS-3	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-3	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-3	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-3	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-3	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-3	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-3	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-3	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-3	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-3	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-3	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-3	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
NAPIS-3	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-3	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-3	9/22/2020	Ethylbenzene	4.6	1	0.21	700	ug/L
NAPIS-3	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-3	9/22/2020	Isopropylbenzene	0.53	1	0.18	447	ug/L
NAPIS-3	9/22/2020	MTBE	59	1	0.39	143	ug/L
NAPIS-3	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-3	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	9/22/2020	n-Propylbenzene	0.21	1	0.18	660	ug/L
NAPIS-3	9/22/2020	Naphthalene	0.5	2	0.28	30	ug/L
NAPIS-3	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
NAPIS-3	9/22/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-3	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
NAPIS-3	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-3	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
NAPIS-3	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-3	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-3	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-3	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-3	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/22/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-3	9/22/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
NAPIS-3	12/17/2020	Acetone	ND	25	10	14064	ug/L
NAPIS-3	12/17/2020	Benzene	**42.8**	1	0.38	5	ug/L
NAPIS-3	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
NAPIS-3	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
NAPIS-3	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
NAPIS-3	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
NAPIS-3	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
NAPIS-3	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
NAPIS-3	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-3	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
NAPIS-3	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
NAPIS-3	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
NAPIS-3	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
NAPIS-3	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
NAPIS-3	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
NAPIS-3	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
NAPIS-3	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
NAPIS-3	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
NAPIS-3	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
NAPIS-3	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
NAPIS-3	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
NAPIS-3	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
NAPIS-3	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
NAPIS-3	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
NAPIS-3	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
NAPIS-3	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
NAPIS-3	12/17/2020	Ethylbenzene	4.13	1	0.5	700	ug/L
NAPIS-3	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
NAPIS-3	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
NAPIS-3	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
NAPIS-3	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
NAPIS-3	12/17/2020	1-Methylnaphthalene	6.95	5	4.2	NA	ug/L
NAPIS-3	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
NAPIS-3	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
NAPIS-3	12/17/2020	MTBE	41.9	1	0.74	143	ug/L
NAPIS-3	12/17/2020	Naphthalene	4.11	1	1	30	ug/L
NAPIS-3	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
NAPIS-3	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
NAPIS-3	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
NAPIS-3	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
NAPIS-3	12/17/2020	Styrene	ND	1	1	100	ug/L
NAPIS-3	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
NAPIS-3	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
NAPIS-3	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
NAPIS-3	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
NAPIS-3	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
NAPIS-3	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
NAPIS-3	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
NAPIS-3	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
NAPIS-3	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
NAPIS-3	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
NAPIS-3	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
NAPIS-3	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
NAPIS-3	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
NAPIS-3	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
NAPIS-3	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
NAPIS-3	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
NAPIS-3	12/17/2020	1,2-Dibromoethane	ND	0.0203	0.00509	0.05	ug/L
OAPIS-1	3/18/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OAPIS-1	3/18/2013	Acetone	ND	50	12	14064	ug/L
OAPIS-1	3/18/2013	Chloroform	ND	5	2.3	100	ug/L
OAPIS-1	3/18/2013	Benzene	**27**	5	2.6	5	ug/L
OAPIS-1	3/18/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OAPIS-1	3/18/2013	Bromomethane	*ND*	*15*	4.2	7.54	ug/L
OAPIS-1	3/18/2013	Chloromethane	ND	15	1.9	20.32	ug/L
OAPIS-1	3/18/2013	Dibromomethane	ND	5	2.6	8	ug/L
OAPIS-1	3/18/2013	Chloroethane	ND	10	2.9	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/18/2013	Vinyl Chloride	*ND*	*5*	1.7	2	ug/L
OAPIS-1	3/18/2013	Methylene Chloride	*ND*	*15*	2.1	5	ug/L
OAPIS-1	3/18/2013	Carbon Disulfide	ND	50	4	810	ug/L
OAPIS-1	3/18/2013	Bromoform	ND	5	2.2	32.9	ug/L
OAPIS-1	3/18/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OAPIS-1	3/18/2013	1,1-Dichloroethane	ND	5	2.4	25	ug/L
OAPIS-1	3/18/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OAPIS-1	3/18/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OAPIS-1	3/18/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OAPIS-1	3/18/2013	1,2-Dichloropropane	ND	5	2.7	5	ug/L
OAPIS-1	3/18/2013	2-Butanone	ND	50	5	5565	ug/L
OAPIS-1	3/18/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OAPIS-1	3/18/2013	Trichloroethene	ND	5	2.1	5	ug/L
OAPIS-1	3/18/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OAPIS-1	3/18/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OAPIS-1	3/18/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OAPIS-1	3/18/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OAPIS-1	3/18/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.6	0.0033	ug/L
OAPIS-1	3/18/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OAPIS-1	3/18/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OAPIS-1	3/18/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OAPIS-1	3/18/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OAPIS-1	3/18/2013	Ethylbenzene	ND	5	2.2	700	ug/L
OAPIS-1	3/18/2013	Styrene	ND	5	28	100	ug/L
OAPIS-1	3/18/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OAPIS-1	3/18/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OAPIS-1	3/18/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OAPIS-1	3/18/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OAPIS-1	3/18/2013	1,2-Dichloroethane	ND	5	1.9	5	ug/L
OAPIS-1	3/18/2013	4-Methyl-2-Pentanone	ND	50	4.5	1243	ug/L
OAPIS-1	3/18/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OAPIS-1	3/18/2013	Bromobenzene	ND	5	2.9	62	ug/L
OAPIS-1	3/18/2013	Toluene	ND	5	2.2	1000	ug/L
OAPIS-1	3/18/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OAPIS-1	3/18/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OAPIS-1	3/18/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OAPIS-1	3/18/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OAPIS-1	3/18/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OAPIS-1	3/18/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OAPIS-1	3/18/2013	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
OAPIS-1	3/18/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	3/18/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OAPIS-1	3/18/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OAPIS-1	3/18/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OAPIS-1	3/18/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OAPIS-1	3/18/2013	MTBE	**420**	5	3.8	143	ug/L
OAPIS-1	3/18/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OAPIS-1	3/18/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	6/12/2013	Carbon tetrachloride	ND	2	0.92	5	ug/L
OAPIS-1	6/12/2013	Acetone	ND	20	3.4	14064	ug/L
OAPIS-1	6/12/2013	Chloroform	ND	2	0.94	100	ug/L
OAPIS-1	6/12/2013	Benzene	**71**	2	0.92	5	ug/L
OAPIS-1	6/12/2013	1,1,1-Trichloroethane	ND	2	0.8	200	ug/L
OAPIS-1	6/12/2013	Bromomethane	ND	6	0.99	7.54	ug/L
OAPIS-1	6/12/2013	Chloromethane	ND	6	0.74	20.32	ug/L
OAPIS-1	6/12/2013	Dibromomethane	ND	2	1	8	ug/L
OAPIS-1	6/12/2013	Chloroethane	ND	4	0.61	20857	ug/L
OAPIS-1	6/12/2013	Vinyl Chloride	ND	2	0.61	2	ug/L
OAPIS-1	6/12/2013	Methylene Chloride	*ND*	*6*	0.7	5	ug/L
OAPIS-1	6/12/2013	Carbon Disulfide	ND	20	1.6	810	ug/L
OAPIS-1	6/12/2013	Bromoform	ND	2	0.74	32.9	ug/L
OAPIS-1	6/12/2013	Bromodichloromethane	*ND*	*2*	0.97	1.34	ug/L
OAPIS-1	6/12/2013	1,1-Dichloroethane	ND	2	0.67	25	ug/L
OAPIS-1	6/12/2013	1,1-Dichloroethene	ND	2	0.95	7	ug/L
OAPIS-1	6/12/2013	Trichlorofluoromethane	ND	2	0.94	1137	ug/L
OAPIS-1	6/12/2013	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OAPIS-1	6/12/2013	1,2-Dichloropropane	ND	2	0.66	5	ug/L
OAPIS-1	6/12/2013	2-Butanone	ND	20	2	5565	ug/L
OAPIS-1	6/12/2013	1,1,2-Trichloroethane	ND	2	0.83	5	ug/L
OAPIS-1	6/12/2013	Trichloroethene	ND	2	0.85	5	ug/L
OAPIS-1	6/12/2013	1,1,2,2-Tetrachloroethane	ND	4	1	10	ug/L
OAPIS-1	6/12/2013	1,2,3-Trichlorobenzene	ND	2	0.85	70	ug/L
OAPIS-1	6/12/2013	2-Chlorotoluene	ND	2	1	233	ug/L
OAPIS-1	6/12/2013	1,2,4-Trimethylbenzene	2	2	1	56	ug/L
OAPIS-1	6/12/2013	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.71	0.0033	ug/L
OAPIS-1	6/12/2013	1,2,3-Trichloropropane	*ND*	*4*	0.8	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/12/2013	tert-Butylbenzene	ND	2	1	690	ug/L
OAPIS-1	6/12/2013	Isopropylbenzene	2.2	2	1	447	ug/L
OAPIS-1	6/12/2013	p-Isopropyltoluene	ND	2	0.91	NA	ug/L
OAPIS-1	6/12/2013	Ethylbenzene	10	2	0.89	700	ug/L
OAPIS-1	6/12/2013	Styrene	ND	2	1.2	100	ug/L
OAPIS-1	6/12/2013	n-Propylbenzene	2.3	2	0.82	660	ug/L
OAPIS-1	6/12/2013	n-Butylbenzene	ND	6	0.82	1000	ug/L
OAPIS-1	6/12/2013	4-Chlorotoluene	ND	2	0.87	250	ug/L
OAPIS-1	6/12/2013	1,2-Dibromoethane	*ND*	*2*	0.9	0.05	ug/L
OAPIS-1	6/12/2013	1,2-Dichloroethane	ND	2	0.65	5	ug/L
OAPIS-1	6/12/2013	4-Methyl-2-Pentanone	ND	20	1.3	1243	ug/L
OAPIS-1	6/12/2013	1,3,5-Trimethylbenzene	ND	2	0.8	60	ug/L
OAPIS-1	6/12/2013	Bromobenzene	ND	2	1.1	62	ug/L
OAPIS-1	6/12/2013	Toluene	ND	2	0.88	1000	ug/L
OAPIS-1	6/12/2013	Chlorobenzene	ND	2	0.97	77.6	ug/L
OAPIS-1	6/12/2013	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OAPIS-1	6/12/2013	Tetrachloroethene	ND	2	0.98	5	ug/L
OAPIS-1	6/12/2013	sec-Butylbenzene	ND	2	0.86	2000	ug/L
OAPIS-1	6/12/2013	1,3-Dichloropropane	ND	2	0.86	370	ug/L
OAPIS-1	6/12/2013	cis-1,2-Dichloroethene	ND	2	0.94	70	ug/L
OAPIS-1	6/12/2013	trans-1,2-Dichloroethene	ND	2	0.96	100	ug/L
OAPIS-1	6/12/2013	1,1-Dichloropropene	ND	2	0.87	NA	ug/L
OAPIS-1	6/12/2013	2-Hexanone	ND	20	2.5	38	ug/L
OAPIS-1	6/12/2013	2,2-Dichloropropane	ND	4	1.6	NA	ug/L
OAPIS-1	6/12/2013	1,1,1,2-Tetrachloroethane	ND	2	1.1	5.74	ug/L
OAPIS-1	6/12/2013	Xylenes, Total	3.3	3	2.9	620	ug/L
OAPIS-1	6/12/2013	MTBE	**510**	10	7.7	143	ug/L
OAPIS-1	6/12/2013	cis-1,3-Dichloropropene	ND	2	0.91	NA	ug/L
OAPIS-1	6/12/2013	trans-1,3-Dichloropropene	ND	2	0.89	NA	ug/L
OAPIS-1	9/3/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OAPIS-1	9/3/2013	Acetone	ND	50	8.6	14064	ug/L
OAPIS-1	9/3/2013	Chloroform	ND	5	2.3	100	ug/L
OAPIS-1	9/3/2013	Benzene	**81**	5	2.3	5	ug/L
OAPIS-1	9/3/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OAPIS-1	9/3/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OAPIS-1	9/3/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OAPIS-1	9/3/2013	Dibromomethane	ND	5	2.6	8	ug/L
OAPIS-1	9/3/2013	Chloroethane	ND	10	1.5	20857	ug/L
OAPIS-1	9/3/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OAPIS-1	9/3/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	9/3/2013	Carbon Disulfide	ND	50	4	810	ug/L
OAPIS-1	9/3/2013	Bromoform	ND	5	1.9	32.9	ug/L
OAPIS-1	9/3/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OAPIS-1	9/3/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OAPIS-1	9/3/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OAPIS-1	9/3/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OAPIS-1	9/3/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OAPIS-1	9/3/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OAPIS-1	9/3/2013	2-Butanone	ND	50	5	5565	ug/L
OAPIS-1	9/3/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OAPIS-1	9/3/2013	Trichloroethene	ND	5	2.1	5	ug/L
OAPIS-1	9/3/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OAPIS-1	9/3/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OAPIS-1	9/3/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OAPIS-1	9/3/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OAPIS-1	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OAPIS-1	9/3/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OAPIS-1	9/3/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OAPIS-1	9/3/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OAPIS-1	9/3/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OAPIS-1	9/3/2013	Ethylbenzene	12	5	2.2	700	ug/L
OAPIS-1	9/3/2013	Styrene	ND	5	2.9	100	ug/L
OAPIS-1	9/3/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OAPIS-1	9/3/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OAPIS-1	9/3/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OAPIS-1	9/3/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OAPIS-1	9/3/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OAPIS-1	9/3/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OAPIS-1	9/3/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OAPIS-1	9/3/2013	Bromobenzene	ND	5	2.9	62	ug/L
OAPIS-1	9/3/2013	Toluene	ND	5	2.2	1000	ug/L
OAPIS-1	9/3/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OAPIS-1	9/3/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OAPIS-1	9/3/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OAPIS-1	9/3/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OAPIS-1	9/3/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/3/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OAPIS-1	9/3/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OAPIS-1	9/3/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	9/3/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OAPIS-1	9/3/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OAPIS-1	9/3/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OAPIS-1	9/3/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OAPIS-1	9/3/2013	MTBE	**420**	5	3.8	143	ug/L
OAPIS-1	9/3/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OAPIS-1	9/3/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OAPIS-1	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OAPIS-1	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OAPIS-1	11/11/2013	Benzene	**89**	1	0.46	5	ug/L
OAPIS-1	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OAPIS-1	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OAPIS-1	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OAPIS-1	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OAPIS-1	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OAPIS-1	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OAPIS-1	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OAPIS-1	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OAPIS-1	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OAPIS-1	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OAPIS-1	11/11/2013	1,1-Dichloroethane	1.1	1	0.33	25	ug/L
OAPIS-1	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OAPIS-1	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OAPIS-1	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OAPIS-1	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OAPIS-1	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OAPIS-1	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OAPIS-1	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OAPIS-1	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OAPIS-1	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OAPIS-1	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OAPIS-1	11/11/2013	1,2,4-Trimethylbenzene	1.6	1	0.51	56	ug/L
OAPIS-1	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OAPIS-1	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OAPIS-1	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OAPIS-1	11/11/2013	Isopropylbenzene	2.5	1	0.52	447	ug/L
OAPIS-1	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OAPIS-1	11/11/2013	Ethylbenzene	10	1	0.45	700	ug/L
OAPIS-1	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OAPIS-1	11/11/2013	n-Propylbenzene	2.5	1	0.41	660	ug/L
OAPIS-1	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OAPIS-1	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OAPIS-1	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OAPIS-1	11/11/2013	1,2-Dichloroethane	1	1	0.33	5	ug/L
OAPIS-1	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OAPIS-1	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OAPIS-1	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OAPIS-1	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OAPIS-1	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OAPIS-1	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OAPIS-1	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OAPIS-1	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OAPIS-1	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OAPIS-1	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OAPIS-1	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OAPIS-1	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OAPIS-1	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OAPIS-1	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OAPIS-1	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OAPIS-1	11/11/2013	Xylenes, Total	2.9	1.5	1.4	620	ug/L
OAPIS-1	11/11/2013	MTBE	**430**	10	7.7	143	ug/L
OAPIS-1	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OAPIS-1	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OAPIS-1	3/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OAPIS-1	3/10/2014	Acetone	16	10	4.9	14064	ug/L
OAPIS-1	3/10/2014	Chloroform	ND	1	0.32	100	ug/L
OAPIS-1	3/10/2014	Benzene	**70**	1	0.15	5	ug/L
OAPIS-1	3/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OAPIS-1	3/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OAPIS-1	3/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OAPIS-1	3/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OAPIS-1	3/10/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OAPIS-1	3/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OAPIS-1	3/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OAPIS-1	3/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OAPIS-1	3/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OAPIS-1	3/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OAPIS-1	3/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OAPIS-1	3/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OAPIS-1	3/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OAPIS-1	3/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OAPIS-1	3/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OAPIS-1	3/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OAPIS-1	3/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OAPIS-1	3/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OAPIS-1	3/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OAPIS-1	3/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	3/10/2014	1,2,4-Trimethylbenzene	2.5	1	0.12	56	ug/L
OAPIS-1	3/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OAPIS-1	3/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OAPIS-1	3/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OAPIS-1	3/10/2014	Isopropylbenzene	1.5	1	0.16	447	ug/L
OAPIS-1	3/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OAPIS-1	3/10/2014	Ethylbenzene	6.8	1	0.13	700	ug/L
OAPIS-1	3/10/2014	Styrene	ND	1	0.12	100	ug/L
OAPIS-1	3/10/2014	n-Propylbenzene	1.6	1	0.14	660	ug/L
OAPIS-1	3/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OAPIS-1	3/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OAPIS-1	3/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OAPIS-1	3/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OAPIS-1	3/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	3/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OAPIS-1	3/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OAPIS-1	3/10/2014	Toluene	ND	1	0.17	1000	ug/L
OAPIS-1	3/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	3/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OAPIS-1	3/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OAPIS-1	3/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OAPIS-1	3/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	3/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	3/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OAPIS-1	3/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OAPIS-1	3/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OAPIS-1	3/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OAPIS-1	3/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OAPIS-1	3/10/2014	Xylenes, Total	3.3	1.5	0.38	620	ug/L
OAPIS-1	3/10/2014	MTBE	**450**	10	2.5	143	ug/L
OAPIS-1	3/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OAPIS-1	3/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	6/5/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
OAPIS-1	6/5/2014	Acetone	ND	20	9.9	14064	ug/L
OAPIS-1	6/5/2014	Chloroform	ND	2	0.63	100	ug/L
OAPIS-1	6/5/2014	Benzene	**96**	2	0.31	5	ug/L
OAPIS-1	6/5/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
OAPIS-1	6/5/2014	Bromomethane	ND	6	0.83	7.54	ug/L
OAPIS-1	6/5/2014	Chloromethane	ND	6	1	20.32	ug/L
OAPIS-1	6/5/2014	Dibromomethane	ND	2	0.38	8	ug/L
OAPIS-1	6/5/2014	Chloroethane	ND	4	0.95	20857	ug/L
OAPIS-1	6/5/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
OAPIS-1	6/5/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
OAPIS-1	6/5/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
OAPIS-1	6/5/2014	Bromoform	ND	2	0.5	32.9	ug/L
OAPIS-1	6/5/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
OAPIS-1	6/5/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
OAPIS-1	6/5/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
OAPIS-1	6/5/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OAPIS-1	6/5/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
OAPIS-1	6/5/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
OAPIS-1	6/5/2014	2-Butanone	ND	20	2.8	5565	ug/L
OAPIS-1	6/5/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OAPIS-1	6/5/2014	Trichloroethene	ND	2	0.39	5	ug/L
OAPIS-1	6/5/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
OAPIS-1	6/5/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
OAPIS-1	6/5/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
OAPIS-1	6/5/2014	1,2,4-Trimethylbenzene	6.6	2	0.25	56	ug/L
OAPIS-1	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
OAPIS-1	6/5/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
OAPIS-1	6/5/2014	Isopropylbenzene	2.2	2	0.32	447	ug/L
OAPIS-1	6/5/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
OAPIS-1	6/5/2014	Ethylbenzene	10	2	0.25	700	ug/L
OAPIS-1	6/5/2014	Styrene	ND	2	0.23	100	ug/L
OAPIS-1	6/5/2014	n-Propylbenzene	2.3	2	0.28	660	ug/L
OAPIS-1	6/5/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
OAPIS-1	6/5/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
OAPIS-1	6/5/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
OAPIS-1	6/5/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
OAPIS-1	6/5/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
OAPIS-1	6/5/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
OAPIS-1	6/5/2014	Bromobenzene	ND	2	0.36	62	ug/L
OAPIS-1	6/5/2014	Toluene	ND	2	0.34	1000	ug/L
OAPIS-1	6/5/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
OAPIS-1	6/5/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
OAPIS-1	6/5/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
OAPIS-1	6/5/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
OAPIS-1	6/5/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
OAPIS-1	6/5/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
OAPIS-1	6/5/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
OAPIS-1	6/5/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
OAPIS-1	6/5/2014	2-Hexanone	ND	20	1.7	38	ug/L
OAPIS-1	6/5/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
OAPIS-1	6/5/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
OAPIS-1	6/5/2014	Xylenes, Total	4.9	3	0.75	620	ug/L
OAPIS-1	6/5/2014	MTBE	**360**	2	0.5	143	ug/L
OAPIS-1	6/5/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
OAPIS-1	6/5/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
OAPIS-1	9/12/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OAPIS-1	9/12/2014	Acetone	ND	50	25	14064	ug/L
OAPIS-1	9/12/2014	Chloroform	ND	5	1.6	100	ug/L
OAPIS-1	9/12/2014	Benzene	**120**	5	0.77	5	ug/L
OAPIS-1	9/12/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OAPIS-1	9/12/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OAPIS-1	9/12/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OAPIS-1	9/12/2014	Dibromomethane	ND	5	0.94	8	ug/L
OAPIS-1	9/12/2014	Chloroethane	ND	10	2.4	20857	ug/L
OAPIS-1	9/12/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OAPIS-1	9/12/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OAPIS-1	9/12/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OAPIS-1	9/12/2014	Bromoform	ND	5	1.3	32.9	ug/L
OAPIS-1	9/12/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OAPIS-1	9/12/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OAPIS-1	9/12/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OAPIS-1	9/12/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	9/12/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OAPIS-1	9/12/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OAPIS-1	9/12/2014	2-Butanone	ND	50	7.1	5565	ug/L
OAPIS-1	9/12/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OAPIS-1	9/12/2014	Trichloroethene	ND	5	0.97	5	ug/L
OAPIS-1	9/12/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OAPIS-1	9/12/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OAPIS-1	9/12/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OAPIS-1	9/12/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OAPIS-1	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OAPIS-1	9/12/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OAPIS-1	9/12/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OAPIS-1	9/12/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OAPIS-1	9/12/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OAPIS-1	9/12/2014	Ethylbenzene	13	5	0.64	700	ug/L
OAPIS-1	9/12/2014	Styrene	ND	5	0.58	100	ug/L
OAPIS-1	9/12/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OAPIS-1	9/12/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OAPIS-1	9/12/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OAPIS-1	9/12/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OAPIS-1	9/12/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OAPIS-1	9/12/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OAPIS-1	9/12/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OAPIS-1	9/12/2014	Bromobenzene	ND	5	0.91	62	ug/L
OAPIS-1	9/12/2014	Toluene	ND	5	0.85	1000	ug/L
OAPIS-1	9/12/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OAPIS-1	9/12/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OAPIS-1	9/12/2014	Tetrachloroethene	ND	5	1	5	ug/L
OAPIS-1	9/12/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OAPIS-1	9/12/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/12/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OAPIS-1	9/12/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OAPIS-1	9/12/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	9/12/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OAPIS-1	9/12/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OAPIS-1	9/12/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OAPIS-1	9/12/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OAPIS-1	9/12/2014	MTBE	**320**	5	1.3	143	ug/L
OAPIS-1	9/12/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OAPIS-1	9/12/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OAPIS-1	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OAPIS-1	11/11/2014	Acetone	ND	50	25	14064	ug/L
OAPIS-1	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OAPIS-1	11/11/2014	Benzene	**150**	5	0.77	5	ug/L
OAPIS-1	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OAPIS-1	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OAPIS-1	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OAPIS-1	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OAPIS-1	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OAPIS-1	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OAPIS-1	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OAPIS-1	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OAPIS-1	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OAPIS-1	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OAPIS-1	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OAPIS-1	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OAPIS-1	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OAPIS-1	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OAPIS-1	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OAPIS-1	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OAPIS-1	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OAPIS-1	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OAPIS-1	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OAPIS-1	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OAPIS-1	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OAPIS-1	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OAPIS-1	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OAPIS-1	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OAPIS-1	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OAPIS-1	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OAPIS-1	11/11/2014	Ethylbenzene	10	5	0.64	700	ug/L
OAPIS-1	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OAPIS-1	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OAPIS-1	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OAPIS-1	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OAPIS-1	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OAPIS-1	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OAPIS-1	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OAPIS-1	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OAPIS-1	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OAPIS-1	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OAPIS-1	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OAPIS-1	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OAPIS-1	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OAPIS-1	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OAPIS-1	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OAPIS-1	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OAPIS-1	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OAPIS-1	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OAPIS-1	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OAPIS-1	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OAPIS-1	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OAPIS-1	11/11/2014	MTBE	**400**	5	1.3	143	ug/L
OAPIS-1	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OAPIS-1	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OAPIS-1	3/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OAPIS-1	3/10/2015	Acetone	ND	50	4.7	14064	ug/L
OAPIS-1	3/10/2015	Chloroform	ND	5	1.1	100	ug/L
OAPIS-1	3/10/2015	Benzene	**65**	5	0.33	5	ug/L
OAPIS-1	3/10/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OAPIS-1	3/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OAPIS-1	3/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OAPIS-1	3/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
OAPIS-1	3/10/2015	Chloroethane	ND	10	0.52	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OAPIS-1	3/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	3/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OAPIS-1	3/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
OAPIS-1	3/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OAPIS-1	3/10/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	3/10/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OAPIS-1	3/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	3/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OAPIS-1	3/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OAPIS-1	3/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
OAPIS-1	3/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OAPIS-1	3/10/2015	Trichloroethene	ND	5	0.82	5	ug/L
OAPIS-1	3/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OAPIS-1	3/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OAPIS-1	3/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OAPIS-1	3/10/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OAPIS-1	3/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OAPIS-1	3/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OAPIS-1	3/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OAPIS-1	3/10/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OAPIS-1	3/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OAPIS-1	3/10/2015	Ethylbenzene	5.4	5	0.51	700	ug/L
OAPIS-1	3/10/2015	Styrene	ND	5	0.53	100	ug/L
OAPIS-1	3/10/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OAPIS-1	3/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OAPIS-1	3/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OAPIS-1	3/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OAPIS-1	3/10/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OAPIS-1	3/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OAPIS-1	3/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OAPIS-1	3/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
OAPIS-1	3/10/2015	Toluene	ND	5	0.54	1000	ug/L
OAPIS-1	3/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OAPIS-1	3/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OAPIS-1	3/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OAPIS-1	3/10/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OAPIS-1	3/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OAPIS-1	3/10/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OAPIS-1	3/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OAPIS-1	3/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OAPIS-1	3/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OAPIS-1	3/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OAPIS-1	3/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OAPIS-1	3/10/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OAPIS-1	3/10/2015	MTBE	**290**	5	0.87	143	ug/L
OAPIS-1	3/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	3/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OAPIS-1	6/2/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OAPIS-1	6/2/2015	Acetone	28	10	0.94	14064	ug/L
OAPIS-1	6/2/2015	Chloroform	ND	1	0.21	100	ug/L
OAPIS-1	6/2/2015	Benzene	**90**	1	0.065	5	ug/L
OAPIS-1	6/2/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OAPIS-1	6/2/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OAPIS-1	6/2/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OAPIS-1	6/2/2015	Dibromomethane	ND	1	0.23	8	ug/L
OAPIS-1	6/2/2015	Chloroethane	ND	2	0.1	20857	ug/L
OAPIS-1	6/2/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OAPIS-1	6/2/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OAPIS-1	6/2/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OAPIS-1	6/2/2015	Bromoform	ND	1	0.16	32.9	ug/L
OAPIS-1	6/2/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OAPIS-1	6/2/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OAPIS-1	6/2/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OAPIS-1	6/2/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OAPIS-1	6/2/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OAPIS-1	6/2/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OAPIS-1	6/2/2015	2-Butanone	ND	10	0.36	5565	ug/L
OAPIS-1	6/2/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OAPIS-1	6/2/2015	Trichloroethene	ND	1	0.16	5	ug/L
OAPIS-1	6/2/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OAPIS-1	6/2/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OAPIS-1	6/2/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OAPIS-1	6/2/2015	1,2,4-Trimethylbenzene	5.1	1	0.16	56	ug/L
OAPIS-1	6/2/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OAPIS-1	6/2/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/2/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OAPIS-1	6/2/2015	Isopropylbenzene	1.4	1	0.15	447	ug/L
OAPIS-1	6/2/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OAPIS-1	6/2/2015	Ethylbenzene	9	1	0.1	700	ug/L
OAPIS-1	6/2/2015	Styrene	ND	1	0.11	100	ug/L
OAPIS-1	6/2/2015	n-Propylbenzene	1.8	1	0.16	660	ug/L
OAPIS-1	6/2/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	6/2/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OAPIS-1	6/2/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OAPIS-1	6/2/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OAPIS-1	6/2/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OAPIS-1	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OAPIS-1	6/2/2015	Bromobenzene	ND	1	0.11	62	ug/L
OAPIS-1	6/2/2015	Toluene	ND	1	0.11	1000	ug/L
OAPIS-1	6/2/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OAPIS-1	6/2/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OAPIS-1	6/2/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OAPIS-1	6/2/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OAPIS-1	6/2/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OAPIS-1	6/2/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OAPIS-1	6/2/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OAPIS-1	6/2/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OAPIS-1	6/2/2015	2-Hexanone	ND	10	0.48	38	ug/L
OAPIS-1	6/2/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OAPIS-1	6/2/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	6/2/2015	Xylenes, Total	4.3	1.5	0.28	620	ug/L
OAPIS-1	6/2/2015	MTBE	**280**	10	1.7	143	ug/L
OAPIS-1	6/2/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	6/2/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OAPIS-1	8/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OAPIS-1	8/11/2015	Acetone	ND	50	4.7	14064	ug/L
OAPIS-1	8/11/2015	Chloroform	ND	5	1.1	100	ug/L
OAPIS-1	8/11/2015	Benzene	**140**	5	0.33	5	ug/L
OAPIS-1	8/11/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OAPIS-1	8/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OAPIS-1	8/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OAPIS-1	8/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
OAPIS-1	8/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
OAPIS-1	8/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OAPIS-1	8/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	8/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OAPIS-1	8/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
OAPIS-1	8/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OAPIS-1	8/11/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	8/11/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OAPIS-1	8/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	8/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OAPIS-1	8/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OAPIS-1	8/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
OAPIS-1	8/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OAPIS-1	8/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
OAPIS-1	8/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OAPIS-1	8/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OAPIS-1	8/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OAPIS-1	8/11/2015	1,2,4-Trimethylbenzene	6.2	5	0.8	56	ug/L
OAPIS-1	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OAPIS-1	8/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OAPIS-1	8/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OAPIS-1	8/11/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OAPIS-1	8/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OAPIS-1	8/11/2015	Ethylbenzene	15	5	0.51	700	ug/L
OAPIS-1	8/11/2015	Styrene	ND	5	0.53	100	ug/L
OAPIS-1	8/11/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OAPIS-1	8/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OAPIS-1	8/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OAPIS-1	8/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OAPIS-1	8/11/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OAPIS-1	8/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OAPIS-1	8/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OAPIS-1	8/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
OAPIS-1	8/11/2015	Toluene	ND	5	0.54	1000	ug/L
OAPIS-1	8/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OAPIS-1	8/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OAPIS-1	8/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OAPIS-1	8/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OAPIS-1	8/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/11/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OAPIS-1	8/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OAPIS-1	8/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OAPIS-1	8/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OAPIS-1	8/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OAPIS-1	8/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OAPIS-1	8/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OAPIS-1	8/11/2015	MTBE	**290**	5	0.87	143	ug/L
OAPIS-1	8/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	8/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OAPIS-1	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
OAPIS-1	10/29/2015	Acetone	ND	100	9.4	14064	ug/L
OAPIS-1	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
OAPIS-1	10/29/2015	Benzene	**130**	10	0.65	5	ug/L
OAPIS-1	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
OAPIS-1	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
OAPIS-1	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
OAPIS-1	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
OAPIS-1	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
OAPIS-1	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
OAPIS-1	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
OAPIS-1	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
OAPIS-1	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
OAPIS-1	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
OAPIS-1	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
OAPIS-1	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
OAPIS-1	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OAPIS-1	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
OAPIS-1	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
OAPIS-1	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
OAPIS-1	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
OAPIS-1	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
OAPIS-1	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
OAPIS-1	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
OAPIS-1	10/29/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
OAPIS-1	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
OAPIS-1	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
OAPIS-1	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
OAPIS-1	10/29/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
OAPIS-1	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
OAPIS-1	10/29/2015	Ethylbenzene	16	10	1	700	ug/L
OAPIS-1	10/29/2015	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	10/29/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
OAPIS-1	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
OAPIS-1	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
OAPIS-1	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OAPIS-1	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
OAPIS-1	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
OAPIS-1	10/29/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
OAPIS-1	10/29/2015	Toluene	ND	10	1.1	1000	ug/L
OAPIS-1	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
OAPIS-1	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
OAPIS-1	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
OAPIS-1	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
OAPIS-1	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OAPIS-1	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
OAPIS-1	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
OAPIS-1	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
OAPIS-1	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
OAPIS-1	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
OAPIS-1	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	10/29/2015	Xylenes, Total	ND	15	2.8	620	ug/L
OAPIS-1	10/29/2015	MTBE	**260**	10	1.7	143	ug/L
OAPIS-1	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	3/1/2016	Acetone	34	10	0.88	14064	ug/L
OAPIS-1	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
OAPIS-1	3/1/2016	Benzene	**76**	1	0.096	5	ug/L
OAPIS-1	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OAPIS-1	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OAPIS-1	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OAPIS-1	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OAPIS-1	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OAPIS-1	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OAPIS-1	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OAPIS-1	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OAPIS-1	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OAPIS-1	3/1/2016	1,1-Dichloroethane	1.2	1	0.11	25	ug/L
OAPIS-1	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OAPIS-1	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OAPIS-1	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OAPIS-1	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OAPIS-1	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
OAPIS-1	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OAPIS-1	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OAPIS-1	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OAPIS-1	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OAPIS-1	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	3/1/2016	1,2,4-Trimethylbenzene	2.8	1	0.1	56	ug/L
OAPIS-1	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OAPIS-1	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OAPIS-1	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OAPIS-1	3/1/2016	Isopropylbenzene	1.4	1	0.098	447	ug/L
OAPIS-1	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OAPIS-1	3/1/2016	Ethylbenzene	9.8	1	0.11	700	ug/L
OAPIS-1	3/1/2016	Styrene	ND	1	0.095	100	ug/L
OAPIS-1	3/1/2016	n-Propylbenzene	1.5	1	0.13	660	ug/L
OAPIS-1	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OAPIS-1	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OAPIS-1	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OAPIS-1	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OAPIS-1	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OAPIS-1	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OAPIS-1	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
OAPIS-1	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
OAPIS-1	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OAPIS-1	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OAPIS-1	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OAPIS-1	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OAPIS-1	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OAPIS-1	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
OAPIS-1	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OAPIS-1	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	3/1/2016	Xylenes, Total	3.7	1.5	0.32	620	ug/L
OAPIS-1	3/1/2016	MTBE	**260**	10	2.1	143	ug/L
OAPIS-1	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OAPIS-1	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OAPIS-1	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	6/7/2016	Acetone	25	10	4.9	14064	ug/L
OAPIS-1	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
OAPIS-1	6/7/2016	Benzene	**150**	5	0.48	5	ug/L
OAPIS-1	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OAPIS-1	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OAPIS-1	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OAPIS-1	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
OAPIS-1	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
OAPIS-1	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OAPIS-1	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OAPIS-1	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
OAPIS-1	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OAPIS-1	6/7/2016	1,1-Dichloroethane	1.3	1	0.11	25	ug/L
OAPIS-1	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OAPIS-1	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OAPIS-1	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OAPIS-1	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OAPIS-1	6/7/2016	2-Butanone	3.7	10	0.74	5565	ug/L
OAPIS-1	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OAPIS-1	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
OAPIS-1	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OAPIS-1	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OAPIS-1	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	6/7/2016	1,2,4-Trimethylbenzene	12	1	0.11	56	ug/L
OAPIS-1	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OAPIS-1	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OAPIS-1	6/7/2016	Isopropylbenzene	2.6	1	0.1	447	ug/L
OAPIS-1	6/7/2016	p-Isopropyltoluene	0.84	1	0.14	NA	ug/L
OAPIS-1	6/7/2016	Ethylbenzene	18	1	0.11	700	ug/L
OAPIS-1	6/7/2016	Styrene	ND	1	0.11	100	ug/L
OAPIS-1	6/7/2016	n-Propylbenzene	3.3	1	0.13	660	ug/L
OAPIS-1	6/7/2016	n-Butylbenzene	0.78	3	0.16	1000	ug/L
OAPIS-1	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OAPIS-1	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OAPIS-1	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OAPIS-1	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OAPIS-1	6/7/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
OAPIS-1	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
OAPIS-1	6/7/2016	Toluene	1.4	1	0.12	1000	ug/L
OAPIS-1	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OAPIS-1	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OAPIS-1	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	6/7/2016	sec-Butylbenzene	0.63	1	0.12	2000	ug/L
OAPIS-1	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OAPIS-1	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OAPIS-1	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
OAPIS-1	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OAPIS-1	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	6/7/2016	Xylenes, Total	8.3	1.5	0.37	620	ug/L
OAPIS-1	6/7/2016	MTBE	**240**	5	1.1	143	ug/L
OAPIS-1	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OAPIS-1	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OAPIS-1	9/1/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OAPIS-1	9/1/2016	Acetone	31	50	25	14064	ug/L
OAPIS-1	9/1/2016	Chloroform	ND	5	0.44	100	ug/L
OAPIS-1	9/1/2016	Benzene	**180**	5	0.48	5	ug/L
OAPIS-1	9/1/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OAPIS-1	9/1/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OAPIS-1	9/1/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OAPIS-1	9/1/2016	Dibromomethane	ND	5	0.6	8	ug/L
OAPIS-1	9/1/2016	Chloroethane	ND	10	0.96	20857	ug/L
OAPIS-1	9/1/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OAPIS-1	9/1/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OAPIS-1	9/1/2016	Carbon Disulfide	ND	50	3	810	ug/L
OAPIS-1	9/1/2016	Bromoform	ND	5	0.51	32.9	ug/L
OAPIS-1	9/1/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OAPIS-1	9/1/2016	1,1-Dichloroethane	1.4	5	0.54	25	ug/L
OAPIS-1	9/1/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OAPIS-1	9/1/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OAPIS-1	9/1/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OAPIS-1	9/1/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OAPIS-1	9/1/2016	2-Butanone	ND	50	3.7	5565	ug/L
OAPIS-1	9/1/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OAPIS-1	9/1/2016	Trichloroethene	ND	5	0.88	5	ug/L
OAPIS-1	9/1/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OAPIS-1	9/1/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OAPIS-1	9/1/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	9/1/2016	1,2,4-Trimethylbenzene	12	5	0.55	56	ug/L
OAPIS-1	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OAPIS-1	9/1/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OAPIS-1	9/1/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OAPIS-1	9/1/2016	Isopropylbenzene	3.1	5	0.52	447	ug/L
OAPIS-1	9/1/2016	p-Isopropyltoluene	0.99	5	0.7	NA	ug/L
OAPIS-1	9/1/2016	Ethylbenzene	23	5	0.56	700	ug/L
OAPIS-1	9/1/2016	Styrene	ND	5	0.55	100	ug/L
OAPIS-1	9/1/2016	n-Propylbenzene	4	5	0.66	660	ug/L
OAPIS-1	9/1/2016	n-Butylbenzene	1	15	0.8	1000	ug/L
OAPIS-1	9/1/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OAPIS-1	9/1/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OAPIS-1	9/1/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OAPIS-1	9/1/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OAPIS-1	9/1/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OAPIS-1	9/1/2016	Bromobenzene	ND	5	0.49	62	ug/L
OAPIS-1	9/1/2016	Toluene	1.5	5	0.59	1000	ug/L
OAPIS-1	9/1/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OAPIS-1	9/1/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OAPIS-1	9/1/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OAPIS-1	9/1/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OAPIS-1	9/1/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/1/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OAPIS-1	9/1/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OAPIS-1	9/1/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	9/1/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OAPIS-1	9/1/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OAPIS-1	9/1/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OAPIS-1	9/1/2016	Xylenes, Total	9.2	7.5	1.8	620	ug/L
OAPIS-1	9/1/2016	MTBE	**240**	5	1.1	143	ug/L
OAPIS-1	9/1/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OAPIS-1	9/1/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OAPIS-1	11/14/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OAPIS-1	11/14/2016	Acetone	ND	100	49	14064	ug/L
OAPIS-1	11/14/2016	Chloroform	4.4	10	0.89	100	ug/L
OAPIS-1	11/14/2016	Benzene	**150**	10	0.96	5	ug/L
OAPIS-1	11/14/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OAPIS-1	11/14/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OAPIS-1	11/14/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OAPIS-1	11/14/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OAPIS-1	11/14/2016	Chloroethane	ND	20	1.9	20857	ug/L
OAPIS-1	11/14/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OAPIS-1	11/14/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OAPIS-1	11/14/2016	Carbon Disulfide	ND	100	6	810	ug/L
OAPIS-1	11/14/2016	Bromoform	ND	10	1	32.9	ug/L
OAPIS-1	11/14/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OAPIS-1	11/14/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OAPIS-1	11/14/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OAPIS-1	11/14/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OAPIS-1	11/14/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OAPIS-1	11/14/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OAPIS-1	11/14/2016	2-Butanone	ND	100	7.4	5565	ug/L
OAPIS-1	11/14/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OAPIS-1	11/14/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OAPIS-1	11/14/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OAPIS-1	11/14/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OAPIS-1	11/14/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OAPIS-1	11/14/2016	1,2,4-Trimethylbenzene	7.7	10	1.1	56	ug/L
OAPIS-1	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OAPIS-1	11/14/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OAPIS-1	11/14/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OAPIS-1	11/14/2016	Isopropylbenzene	2.7	10	1	447	ug/L
OAPIS-1	11/14/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OAPIS-1	11/14/2016	Ethylbenzene	18	10	1.1	700	ug/L
OAPIS-1	11/14/2016	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	11/14/2016	n-Propylbenzene	4.4	10	1.3	660	ug/L
OAPIS-1	11/14/2016	n-Butylbenzene	3.1	30	1.6	1000	ug/L
OAPIS-1	11/14/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OAPIS-1	11/14/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OAPIS-1	11/14/2016	1,2-Dichloroethane	*3.2*	*10*	1.2	5	ug/L
OAPIS-1	11/14/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OAPIS-1	11/14/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	11/14/2016	Bromobenzene	ND	10	0.98	62	ug/L
OAPIS-1	11/14/2016	Toluene	1.6	10	1.2	1000	ug/L
OAPIS-1	11/14/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OAPIS-1	11/14/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OAPIS-1	11/14/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OAPIS-1	11/14/2016	sec-Butylbenzene	2.5	10	1.2	2000	ug/L
OAPIS-1	11/14/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OAPIS-1	11/14/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OAPIS-1	11/14/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OAPIS-1	11/14/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	11/14/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OAPIS-1	11/14/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OAPIS-1	11/14/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	11/14/2016	Xylenes, Total	ND	15	3.7	620	ug/L
OAPIS-1	11/14/2016	MTBE	**260**	10	2.1	143	ug/L
OAPIS-1	11/14/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	11/14/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OAPIS-1	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OAPIS-1	2/21/2017	Acetone	ND	100	49	14064	ug/L
OAPIS-1	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
OAPIS-1	2/21/2017	Benzene	**120**	10	0.96	5	ug/L
OAPIS-1	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OAPIS-1	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OAPIS-1	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OAPIS-1	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OAPIS-1	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OAPIS-1	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OAPIS-1	2/21/2017	Carbon Disulfide	ND	100	6	810	ug/L
OAPIS-1	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
OAPIS-1	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OAPIS-1	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OAPIS-1	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OAPIS-1	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OAPIS-1	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OAPIS-1	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OAPIS-1	2/21/2017	2-Butanone	ND	100	7.4	5565	ug/L
OAPIS-1	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OAPIS-1	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OAPIS-1	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OAPIS-1	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OAPIS-1	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OAPIS-1	2/21/2017	1,2,4-Trimethylbenzene	3.7	10	1.1	56	ug/L
OAPIS-1	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OAPIS-1	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OAPIS-1	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OAPIS-1	2/21/2017	Isopropylbenzene	1.6	10	1	447	ug/L
OAPIS-1	2/21/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OAPIS-1	2/21/2017	Ethylbenzene	10	10	1.1	700	ug/L
OAPIS-1	2/21/2017	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	2/21/2017	n-Propylbenzene	1.5	10	1.3	660	ug/L
OAPIS-1	2/21/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OAPIS-1	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OAPIS-1	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OAPIS-1	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OAPIS-1	2/21/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OAPIS-1	2/21/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
OAPIS-1	2/21/2017	Toluene	ND	10	1.2	1000	ug/L
OAPIS-1	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OAPIS-1	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OAPIS-1	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OAPIS-1	2/21/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OAPIS-1	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OAPIS-1	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OAPIS-1	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OAPIS-1	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OAPIS-1	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OAPIS-1	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	2/21/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OAPIS-1	2/21/2017	MTBE	**280**	10	2.1	143	ug/L
OAPIS-1	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OAPIS-1	6/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	6/1/2017	Acetone	ND	50	4.1	14064	ug/L
OAPIS-1	6/1/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	6/1/2017	Benzene	**200**	5	0.31	5	ug/L
OAPIS-1	6/1/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	6/1/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	6/1/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	6/1/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	6/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	6/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	6/1/2017	Methylene Chloride	*0.92*	*15*	0.54	5	ug/L
OAPIS-1	6/1/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	6/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	6/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	6/1/2017	1,1-Dichloroethane	2.2	5	2	25	ug/L
OAPIS-1	6/1/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	6/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	6/1/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	6/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	6/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	6/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	6/1/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	6/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	6/1/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	6/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	6/1/2017	1,2,4-Trimethylbenzene	20	5	0.56	56	ug/L
OAPIS-1	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	6/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	6/1/2017	Isopropylbenzene	3	5	0.26	447	ug/L
OAPIS-1	6/1/2017	p-Isopropyltoluene	0.59	5	0.48	NA	ug/L
OAPIS-1	6/1/2017	Ethylbenzene	26	5	0.47	700	ug/L
OAPIS-1	6/1/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	6/1/2017	n-Propylbenzene	4.1	5	0.37	660	ug/L
OAPIS-1	6/1/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OAPIS-1	6/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	6/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	6/1/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	6/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	6/1/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	6/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	6/1/2017	Toluene	1.9	5	0.32	1000	ug/L
OAPIS-1	6/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	6/1/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	6/1/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	6/1/2017	sec-Butylbenzene	2.6	5	0.55	2000	ug/L
OAPIS-1	6/1/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	6/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	6/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	6/1/2017	Pentafluorobenzene	ND	0	0		None
OAPIS-1	6/1/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	6/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	6/1/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	6/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	6/1/2017	Xylenes, Total	9.6	7.5	1.6	620	ug/L
OAPIS-1	6/1/2017	MTBE	**250**	5	1.2	143	ug/L
OAPIS-1	6/1/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	6/1/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	9/5/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	9/5/2017	Acetone	13	50	4.1	14064	ug/L
OAPIS-1	9/5/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	9/5/2017	Benzene	**230**	5	0.31	5	ug/L
OAPIS-1	9/5/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	9/5/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	9/5/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	9/5/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	9/5/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	9/5/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	9/5/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OAPIS-1	9/5/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	9/5/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	9/5/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	9/5/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	9/5/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	9/5/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	9/5/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	9/5/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	9/5/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	9/5/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	9/5/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	9/5/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	9/5/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	9/5/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	9/5/2017	1,2,4-Trimethylbenzene	16	5	0.56	56	ug/L
OAPIS-1	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	9/5/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OAPIS-1	9/5/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	9/5/2017	Isopropylbenzene	3.2	5	0.26	447	ug/L
OAPIS-1	9/5/2017	p-Isopropyltoluene	0.91	5	0.48	NA	ug/L
OAPIS-1	9/5/2017	Ethylbenzene	27	5	0.47	700	ug/L
OAPIS-1	9/5/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	9/5/2017	n-Propylbenzene	4.2	5	0.37	660	ug/L
OAPIS-1	9/5/2017	n-Butylbenzene	0.98	15	0.65	1000	ug/L
OAPIS-1	9/5/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	9/5/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	9/5/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	9/5/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	9/5/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	9/5/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	9/5/2017	Toluene	1.8	5	0.32	1000	ug/L
OAPIS-1	9/5/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	9/5/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	9/5/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	9/5/2017	sec-Butylbenzene	0.6	5	0.55	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/5/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	9/5/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	9/5/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	9/5/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	9/5/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	9/5/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	9/5/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	9/5/2017	Xylenes, Total	8.7	7.5	1.6	620	ug/L
OAPIS-1	9/5/2017	MTBE	**270**	5	1.2	143	ug/L
OAPIS-1	9/5/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	9/5/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	12/4/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	12/4/2017	Acetone	38	50	4.1	14064	ug/L
OAPIS-1	12/4/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	12/4/2017	Benzene	**130**	5	0.31	5	ug/L
OAPIS-1	12/4/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	12/4/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	12/4/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	12/4/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	12/4/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	12/4/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	12/4/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OAPIS-1	12/4/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	12/4/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	12/4/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	12/4/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	12/4/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	12/4/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	12/4/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	12/4/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	12/4/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	12/4/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	12/4/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	12/4/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	12/4/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	12/4/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	12/4/2017	1,2,4-Trimethylbenzene	4.9	5	0.56	56	ug/L
OAPIS-1	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	12/4/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OAPIS-1	12/4/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	12/4/2017	Isopropylbenzene	1.4	5	0.26	447	ug/L
OAPIS-1	12/4/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OAPIS-1	12/4/2017	Ethylbenzene	12	5	0.47	700	ug/L
OAPIS-1	12/4/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	12/4/2017	n-Propylbenzene	1.3	5	0.37	660	ug/L
OAPIS-1	12/4/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OAPIS-1	12/4/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	12/4/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	12/4/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	12/4/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	12/4/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	12/4/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	12/4/2017	Toluene	0.87	5	0.32	1000	ug/L
OAPIS-1	12/4/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	12/4/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	12/4/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	12/4/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OAPIS-1	12/4/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	12/4/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	12/4/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	12/4/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	12/4/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	12/4/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	12/4/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	12/4/2017	Xylenes, Total	3.4	7.5	1.6	620	ug/L
OAPIS-1	12/4/2017	MTBE	**290**	5	1.2	143	ug/L
OAPIS-1	12/4/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	12/4/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	2/9/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
OAPIS-1	2/9/2018	Acetone	41	20	1.6	14064	ug/L
OAPIS-1	2/9/2018	Chloroform	ND	2	0.8	100	ug/L
OAPIS-1	2/9/2018	Benzene	**68**	2	0.12	5	ug/L
OAPIS-1	2/9/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
OAPIS-1	2/9/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OAPIS-1	2/9/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OAPIS-1	2/9/2018	Dibromomethane	ND	2	0.18	8	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Chloroethane	ND	4	0.47	20857	ug/L
OAPIS-1	2/9/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
OAPIS-1	2/9/2018	Methylene Chloride	*0.47*	*6*	0.22	5	ug/L
OAPIS-1	2/9/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
OAPIS-1	2/9/2018	Bromoform	ND	2	0.42	32.9	ug/L
OAPIS-1	2/9/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
OAPIS-1	2/9/2018	1,1-Dichloroethane	1.1	2	0.8	25	ug/L
OAPIS-1	2/9/2018	1,1-Dichloroethene	ND	2	0.16	7	ug/L
OAPIS-1	2/9/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
OAPIS-1	2/9/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OAPIS-1	2/9/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
OAPIS-1	2/9/2018	2-Butanone	ND	20	2.3	5565	ug/L
OAPIS-1	2/9/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OAPIS-1	2/9/2018	Trichloroethene	ND	2	0.22	5	ug/L
OAPIS-1	2/9/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
OAPIS-1	2/9/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OAPIS-1	2/9/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OAPIS-1	2/9/2018	1,2,4-Trimethylbenzene	0.65	2	0.23	56	ug/L
OAPIS-1	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
OAPIS-1	2/9/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
OAPIS-1	2/9/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
OAPIS-1	2/9/2018	Isopropylbenzene	0.65	2	0.1	447	ug/L
OAPIS-1	2/9/2018	p-Isopropyltoluene	0.34	2	0.19	NA	ug/L
OAPIS-1	2/9/2018	Ethylbenzene	4.9	2	0.19	700	ug/L
OAPIS-1	2/9/2018	Styrene	ND	2	0.31	100	ug/L
OAPIS-1	2/9/2018	n-Propylbenzene	0.54	2	0.15	660	ug/L
OAPIS-1	2/9/2018	n-Butylbenzene	ND	6	0.26	1000	ug/L
OAPIS-1	2/9/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OAPIS-1	2/9/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
OAPIS-1	2/9/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OAPIS-1	2/9/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
OAPIS-1	2/9/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
OAPIS-1	2/9/2018	Bromobenzene	ND	2	0.28	62	ug/L
OAPIS-1	2/9/2018	Toluene	0.66	2	0.13	1000	ug/L
OAPIS-1	2/9/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
OAPIS-1	2/9/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
OAPIS-1	2/9/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
OAPIS-1	2/9/2018	sec-Butylbenzene	0.23	2	0.22	2000	ug/L
OAPIS-1	2/9/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
OAPIS-1	2/9/2018	cis-1,2-Dichloroethene	ND	2	0.41	70	ug/L
OAPIS-1	2/9/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OAPIS-1	2/9/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
OAPIS-1	2/9/2018	2-Hexanone	ND	20	1.3	38	ug/L
OAPIS-1	2/9/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
OAPIS-1	2/9/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
OAPIS-1	2/9/2018	Xylenes, Total	2.9	3	0.64	620	ug/L
OAPIS-1	2/9/2018	MTBE	**240**	2	0.48	143	ug/L
OAPIS-1	2/9/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
OAPIS-1	2/9/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
OAPIS-1	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	4/30/2018	Acetone	56	10	0.82	14064	ug/L
OAPIS-1	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
OAPIS-1	4/30/2018	Benzene	**68**	1	0.062	5	ug/L
OAPIS-1	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OAPIS-1	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OAPIS-1	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OAPIS-1	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
OAPIS-1	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
OAPIS-1	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OAPIS-1	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OAPIS-1	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OAPIS-1	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
OAPIS-1	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OAPIS-1	4/30/2018	1,1-Dichloroethane	1.1	1	0.4	25	ug/L
OAPIS-1	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OAPIS-1	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OAPIS-1	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OAPIS-1	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OAPIS-1	4/30/2018	2-Butanone	4.4	10	1.1	5565	ug/L
OAPIS-1	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OAPIS-1	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
OAPIS-1	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OAPIS-1	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OAPIS-1	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	4/30/2018	1,2,4-Trimethylbenzene	1.6	1	0.11	56	ug/L
OAPIS-1	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OAPIS-1	4/30/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OAPIS-1	4/30/2018	Isopropylbenzene	0.73	1	0.051	447	ug/L
OAPIS-1	4/30/2018	p-Isopropyltoluene	0.33	1	0.096	NA	ug/L
OAPIS-1	4/30/2018	Ethylbenzene	6.3	1	0.093	700	ug/L
OAPIS-1	4/30/2018	Styrene	ND	1	0.16	100	ug/L
OAPIS-1	4/30/2018	n-Propylbenzene	0.76	1	0.074	660	ug/L
OAPIS-1	4/30/2018	n-Butylbenzene	0.21	3	0.13	1000	ug/L
OAPIS-1	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OAPIS-1	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OAPIS-1	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OAPIS-1	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OAPIS-1	4/30/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OAPIS-1	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
OAPIS-1	4/30/2018	Toluene	0.66	1	0.064	1000	ug/L
OAPIS-1	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OAPIS-1	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OAPIS-1	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OAPIS-1	4/30/2018	sec-Butylbenzene	0.18	1	0.11	2000	ug/L
OAPIS-1	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OAPIS-1	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OAPIS-1	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OAPIS-1	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OAPIS-1	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
OAPIS-1	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OAPIS-1	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OAPIS-1	4/30/2018	Xylenes, Total	3.2	1.5	0.32	620	ug/L
OAPIS-1	4/30/2018	MTBE	**260**	10	2.4	143	ug/L
OAPIS-1	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OAPIS-1	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OAPIS-1	9/6/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OAPIS-1	9/6/2018	Acetone	43	10	0.79	14064	ug/L
OAPIS-1	9/6/2018	Chloroform	ND	1	0.4	100	ug/L
OAPIS-1	9/6/2018	Benzene	**110**	10	1.7	5	ug/L
OAPIS-1	9/6/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OAPIS-1	9/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OAPIS-1	9/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OAPIS-1	9/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
OAPIS-1	9/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
OAPIS-1	9/6/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OAPIS-1	9/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OAPIS-1	9/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OAPIS-1	9/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
OAPIS-1	9/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OAPIS-1	9/6/2018	1,1-Dichloroethane	1	1	0.4	25	ug/L
OAPIS-1	9/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OAPIS-1	9/6/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OAPIS-1	9/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OAPIS-1	9/6/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OAPIS-1	9/6/2018	2-Butanone	ND	10	1.3	5565	ug/L
OAPIS-1	9/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OAPIS-1	9/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
OAPIS-1	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OAPIS-1	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OAPIS-1	9/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	9/6/2018	1,2,4-Trimethylbenzene	4.5	1	0.25	56	ug/L
OAPIS-1	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OAPIS-1	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OAPIS-1	9/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OAPIS-1	9/6/2018	Isopropylbenzene	1	1	0.22	447	ug/L
OAPIS-1	9/6/2018	p-Isopropyltoluene	0.35	1	0.24	NA	ug/L
OAPIS-1	9/6/2018	Ethylbenzene	9.6	1	0.22	700	ug/L
OAPIS-1	9/6/2018	Styrene	ND	1	0.25	100	ug/L
OAPIS-1	9/6/2018	n-Propylbenzene	1	1	0.24	660	ug/L
OAPIS-1	9/6/2018	n-Butylbenzene	0.27	3	0.25	1000	ug/L
OAPIS-1	9/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OAPIS-1	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OAPIS-1	9/6/2018	1,2-Dichloroethane	0.4	1	0.4	5	ug/L
OAPIS-1	9/6/2018	4-Methyl-2-Pentanone	1.5	10	0.45	1243	ug/L
OAPIS-1	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OAPIS-1	9/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
OAPIS-1	9/6/2018	Toluene	0.8	1	0.17	1000	ug/L
OAPIS-1	9/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OAPIS-1	9/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OAPIS-1	9/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	9/6/2018	sec-Butylbenzene	0.22	1	0.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OAPIS-1	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OAPIS-1	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OAPIS-1	9/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OAPIS-1	9/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
OAPIS-1	9/6/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OAPIS-1	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OAPIS-1	9/6/2018	Xylenes, Total	5	1.5	0.64	620	ug/L
OAPIS-1	9/6/2018	MTBE	**250**	10	3.2	143	ug/L
OAPIS-1	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OAPIS-1	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OAPIS-1	11/19/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OAPIS-1	11/19/2018	Acetone	25	20	1.5	14064	ug/L
OAPIS-1	11/19/2018	Chloroform	ND	2	0.47	100	ug/L
OAPIS-1	11/19/2018	Benzene	**170**	2	0.35	5	ug/L
OAPIS-1	11/19/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
OAPIS-1	11/19/2018	Bromomethane	ND	6	0.55	7.54	ug/L
OAPIS-1	11/19/2018	Chloromethane	ND	6	0.64	20.32	ug/L
OAPIS-1	11/19/2018	Dibromomethane	ND	2	0.64	8	ug/L
OAPIS-1	11/19/2018	Chloroethane	ND	4	0.33	20857	ug/L
OAPIS-1	11/19/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
OAPIS-1	11/19/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OAPIS-1	11/19/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OAPIS-1	11/19/2018	Bromoform	ND	2	0.65	32.9	ug/L
OAPIS-1	11/19/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OAPIS-1	11/19/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
OAPIS-1	11/19/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OAPIS-1	11/19/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
OAPIS-1	11/19/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
OAPIS-1	11/19/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
OAPIS-1	11/19/2018	2-Butanone	ND	20	2.8	5565	ug/L
OAPIS-1	11/19/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OAPIS-1	11/19/2018	Trichloroethene	ND	2	0.52	5	ug/L
OAPIS-1	11/19/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
OAPIS-1	11/19/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OAPIS-1	11/19/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
OAPIS-1	11/19/2018	1,2,4-Trimethylbenzene	8.9	2	0.51	56	ug/L
OAPIS-1	11/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OAPIS-1	11/19/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OAPIS-1	11/19/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OAPIS-1	11/19/2018	Isopropylbenzene	2.1	2	0.44	447	ug/L
OAPIS-1	11/19/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OAPIS-1	11/19/2018	Ethylbenzene	17	2	0.45	700	ug/L
OAPIS-1	11/19/2018	Styrene	ND	2	0.5	100	ug/L
OAPIS-1	11/19/2018	n-Propylbenzene	2.7	2	0.49	660	ug/L
OAPIS-1	11/19/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OAPIS-1	11/19/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
OAPIS-1	11/19/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OAPIS-1	11/19/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
OAPIS-1	11/19/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OAPIS-1	11/19/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OAPIS-1	11/19/2018	Bromobenzene	ND	2	0.64	62	ug/L
OAPIS-1	11/19/2018	Toluene	ND	2	0.34	1000	ug/L
OAPIS-1	11/19/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OAPIS-1	11/19/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OAPIS-1	11/19/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OAPIS-1	11/19/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
OAPIS-1	11/19/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OAPIS-1	11/19/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OAPIS-1	11/19/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
OAPIS-1	11/19/2018	Pentafluorobenzene	**20**	0	0		None
OAPIS-1	11/19/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
OAPIS-1	11/19/2018	2-Hexanone	ND	20	1.8	38	ug/L
OAPIS-1	11/19/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
OAPIS-1	11/19/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OAPIS-1	11/19/2018	Xylenes, Total	7.1	3	1.3	620	ug/L
OAPIS-1	11/19/2018	MTBE	**290**	2	0.91	143	ug/L
OAPIS-1	11/19/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OAPIS-1	11/19/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OAPIS-1	3/28/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	3/28/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	3/28/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	3/28/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	3/28/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	3/28/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	3/28/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/28/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	3/28/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	3/28/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	3/28/2019	1,2,4-Trimethylbenzene	6.1	2	0.426398	56	ug/L
OAPIS-1	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
OAPIS-1	3/28/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	3/28/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	3/28/2019	1,2-Dichloroethane	0.66	2	0.389276	5	ug/L
OAPIS-1	3/28/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	3/28/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	3/28/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	3/28/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	3/28/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	3/28/2019	1-Methylnaphthalene	20	8	0.629909	NA	ug/L
OAPIS-1	3/28/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	3/28/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	3/28/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	3/28/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	3/28/2019	2-Methylnaphthalene	**3.6**	8	0.690752		ug/L
OAPIS-1	3/28/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	3/28/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
OAPIS-1	3/28/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OAPIS-1	3/28/2019	Acetone	14	20	2.398793	14064	ug/L
OAPIS-1	3/28/2019	Benzene	**77**	2	0.333278	5	ug/L
OAPIS-1	3/28/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	3/28/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	3/28/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	3/28/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	3/28/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	3/28/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	3/28/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	3/28/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	3/28/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	3/28/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	3/28/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	3/28/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	3/28/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	3/28/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	3/28/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	3/28/2019	Ethylbenzene	10	2	0.264682	700	ug/L
OAPIS-1	3/28/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	3/28/2019	Isopropylbenzene	0.99	2	0.383045	447	ug/L
OAPIS-1	3/28/2019	MTBE	**200**	2	0.91219	143	ug/L
OAPIS-1	3/28/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	3/28/2019	Naphthalene	8.2	4	0.550143	30	ug/L
OAPIS-1	3/28/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	3/28/2019	n-Propylbenzene	1.3	2	0.428616	660	ug/L
OAPIS-1	3/28/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	3/28/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	3/28/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	3/28/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	3/28/2019	Toluene	ND	2	0.700872	1000	ug/L
OAPIS-1	3/28/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	3/28/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	3/28/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	3/28/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	3/28/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	3/28/2019	Xylenes, Total	4	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	5/8/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	5/8/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	5/8/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	5/8/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	5/8/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	5/8/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	5/8/2019	1,2,4-Trimethylbenzene	5.4	2	0.426398	56	ug/L
OAPIS-1	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	5/8/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OAPIS-1	5/8/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	5/8/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	5/8/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	54	8	0.629909	NA	ug/L
OAPIS-1	5/8/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	5/8/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	5/8/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	5/8/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OAPIS-1	5/8/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	5/8/2019	p-Isopropyltoluene	0.53	2	0.434579	NA	ug/L
OAPIS-1	5/8/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OAPIS-1	5/8/2019	Acetone	ND	20	2.398793	14064	ug/L
OAPIS-1	5/8/2019	Benzene	**110**	2	0.333278	5	ug/L
OAPIS-1	5/8/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	5/8/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	5/8/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	5/8/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	5/8/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	5/8/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	5/8/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	5/8/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	5/8/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	5/8/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	5/8/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	5/8/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	5/8/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	5/8/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	5/8/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	5/8/2019	Ethylbenzene	14	2	0.264682	700	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	5/8/2019	Isopropylbenzene	1.3	2	0.383045	447	ug/L
OAPIS-1	5/8/2019	MTBE	**250**	2	0.91219	143	ug/L
OAPIS-1	5/8/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	5/8/2019	Naphthalene	4.5	4	0.550143	30	ug/L
OAPIS-1	5/8/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	5/8/2019	n-Propylbenzene	1.5	2	0.428616	660	ug/L
OAPIS-1	5/8/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	5/8/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	5/8/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	5/8/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	5/8/2019	Toluene	0.95	2	0.700872	1000	ug/L
OAPIS-1	5/8/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	5/8/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	5/8/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	5/8/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	5/8/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	5/8/2019	Xylenes, Total	6.5	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	5/8/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	5/8/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	5/8/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	5/8/2019	1,2,4-Trimethylbenzene	5.1	2	0.426398	56	ug/L
OAPIS-1	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	5/8/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OAPIS-1	5/8/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	5/8/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	5/8/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	51	8	0.629909	NA	ug/L
OAPIS-1	5/8/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	5/8/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	5/8/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	5/8/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OAPIS-1	5/8/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	5/8/2019	p-Isopropyltoluene	0.48	2	0.434579	NA	ug/L
OAPIS-1	5/8/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Acetone	18	20	2.398793	14064	ug/L
OAPIS-1	5/8/2019	Benzene	**110**	2	0.333278	5	ug/L
OAPIS-1	5/8/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	5/8/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	5/8/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	5/8/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	5/8/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	5/8/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	5/8/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	5/8/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	5/8/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	5/8/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	5/8/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	5/8/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	5/8/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	5/8/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	5/8/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	5/8/2019	Ethylbenzene	13	2	0.264682	700	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	5/8/2019	Isopropylbenzene	1.1	2	0.383045	447	ug/L
OAPIS-1	5/8/2019	MTBE	**240**	2	0.91219	143	ug/L
OAPIS-1	5/8/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	5/8/2019	Naphthalene	3.6	4	0.550143	30	ug/L
OAPIS-1	5/8/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	5/8/2019	n-Propylbenzene	1.5	2	0.428616	660	ug/L
OAPIS-1	5/8/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	5/8/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	5/8/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	5/8/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	5/8/2019	Toluene	0.87	2	0.700872	1000	ug/L
OAPIS-1	5/8/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	5/8/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	5/8/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	5/8/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	5/8/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	5/8/2019	Xylenes, Total	5.9	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
OAPIS-1	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethane	1.5	1	0.140859	25	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	8/22/2019	1,2,4-Trimethylbenzene	19	1	0.213199	56	ug/L
OAPIS-1	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OAPIS-1	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OAPIS-1	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	83	4	0.314954	NA	ug/L
OAPIS-1	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	8/22/2019	2-Butanone	6.5	10	2.089417	5565	ug/L
OAPIS-1	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	8/22/2019	p-Isopropyltoluene	1.2	1	0.217289	NA	ug/L
OAPIS-1	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	8/22/2019	Acetone	29	10	1.199396	14064	ug/L
OAPIS-1	8/22/2019	Benzene	**210**	10	1.666391	5	ug/L
OAPIS-1	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	8/22/2019	Ethylbenzene	32	1	0.132341	700	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	8/22/2019	Isopropylbenzene	3.5	1	0.191522	447	ug/L
OAPIS-1	8/22/2019	MTBE	**290**	10	4.56095	143	ug/L
OAPIS-1	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	8/22/2019	Naphthalene	4.3	2	0.275071	30	ug/L
OAPIS-1	8/22/2019	n-Butylbenzene	1.5	3	0.22757	1000	ug/L
OAPIS-1	8/22/2019	n-Propylbenzene	4.4	1	0.214308	660	ug/L
OAPIS-1	8/22/2019	sec-Butylbenzene	0.88	1	0.247731	2000	ug/L
OAPIS-1	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	8/22/2019	Toluene	2.1	1	0.350436	1000	ug/L
OAPIS-1	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OAPIS-1	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	8/22/2019	Xylenes, Total	12	1.5	0.454415	620	ug/L
OAPIS-1	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethane	1.4	1	0.140859	25	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	8/22/2019	1,2,4-Trimethylbenzene	19	1	0.213199	56	ug/L
OAPIS-1	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OAPIS-1	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OAPIS-1	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	84	4	0.314954	NA	ug/L
OAPIS-1	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	8/22/2019	2-Butanone	6.5	10	2.089417	5565	ug/L
OAPIS-1	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	8/22/2019	p-Isopropyltoluene	1.2	1	0.217289	NA	ug/L
OAPIS-1	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	8/22/2019	Acetone	33	10	1.199396	14064	ug/L
OAPIS-1	8/22/2019	Benzene	**210**	10	1.666391	5	ug/L
OAPIS-1	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OAPIS-1	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	8/22/2019	Ethylbenzene	32	1	0.132341	700	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	8/22/2019	Isopropylbenzene	3.5	1	0.191522	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	MTBE	**290**	10	4.56095	143	ug/L
OAPIS-1	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	8/22/2019	Naphthalene	4.2	2	0.275071	30	ug/L
OAPIS-1	8/22/2019	n-Butylbenzene	1.6	3	0.22757	1000	ug/L
OAPIS-1	8/22/2019	n-Propylbenzene	4.4	1	0.214308	660	ug/L
OAPIS-1	8/22/2019	sec-Butylbenzene	0.88	1	0.247731	2000	ug/L
OAPIS-1	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	8/22/2019	Toluene	2	1	0.350436	1000	ug/L
OAPIS-1	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OAPIS-1	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	8/22/2019	Xylenes, Total	12	1.5	0.454415	620	ug/L
OAPIS-1	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	10/21/2019	1,1-Dichloroethane	1.1	1	0.140859	25	ug/L
OAPIS-1	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	10/21/2019	1,2,4-Trimethylbenzene	9.4	1	0.213199	56	ug/L
OAPIS-1	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	10/21/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
OAPIS-1	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	49	4	0.314954	NA	ug/L
OAPIS-1	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OAPIS-1	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	10/21/2019	p-Isopropyltoluene	0.67	1	0.217289	NA	ug/L
OAPIS-1	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OAPIS-1	10/21/2019	Benzene	**170**	10	1.666391	5	ug/L
OAPIS-1	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OAPIS-1	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	10/21/2019	Ethylbenzene	21	1	0.132341	700	ug/L
OAPIS-1	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	10/21/2019	Isopropylbenzene	2	1	0.191522	447	ug/L
OAPIS-1	10/21/2019	MTBE	**250**	10	4.56095	143	ug/L
OAPIS-1	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	10/21/2019	Naphthalene	1.9	2	0.275071	30	ug/L
OAPIS-1	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OAPIS-1	10/21/2019	n-Propylbenzene	2.5	1	0.214308	660	ug/L
OAPIS-1	10/21/2019	sec-Butylbenzene	0.42	1	0.247731	2000	ug/L
OAPIS-1	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	10/21/2019	Toluene	1.5	1	0.350436	1000	ug/L
OAPIS-1	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	10/21/2019	Xylenes, Total	7.4	1.5	0.454415	620	ug/L
OAPIS-1	10/21/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OAPIS-1	3/4/2020	MTBE	**270**	10	3.9	143	ug/L
OAPIS-1	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OAPIS-1	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OAPIS-1	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OAPIS-1	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OAPIS-1	3/4/2020	1,1-Dichloroethane	0.86	1	0.27	25	ug/L
OAPIS-1	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OAPIS-1	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OAPIS-1	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OAPIS-1	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OAPIS-1	3/4/2020	1,2,4-Trimethylbenzene	1.9	1	0.12	56	ug/L
OAPIS-1	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OAPIS-1	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OAPIS-1	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OAPIS-1	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OAPIS-1	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OAPIS-1	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OAPIS-1	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OAPIS-1	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OAPIS-1	3/4/2020	1-Methylnaphthalene	7.5	4	0.84	NA	ug/L
OAPIS-1	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OAPIS-1	3/4/2020	2-Butanone	4.7	10	1.1	5565	ug/L
OAPIS-1	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OAPIS-1	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OAPIS-1	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OAPIS-1	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OAPIS-1	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	3/4/2020	Acetone	26	10	2.3	14064	ug/L
OAPIS-1	3/4/2020	Benzene	**46**	1	0.23	5	ug/L
OAPIS-1	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OAPIS-1	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OAPIS-1	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OAPIS-1	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OAPIS-1	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OAPIS-1	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OAPIS-1	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OAPIS-1	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OAPIS-1	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OAPIS-1	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OAPIS-1	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OAPIS-1	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OAPIS-1	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OAPIS-1	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OAPIS-1	3/4/2020	Ethylbenzene	5.2	1	0.21	700	ug/L
OAPIS-1	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OAPIS-1	3/4/2020	Isopropylbenzene	0.55	1	0.18	447	ug/L
OAPIS-1	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OAPIS-1	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	3/4/2020	n-Propylbenzene	0.64	1	0.18	660	ug/L
OAPIS-1	3/4/2020	Naphthalene	0.72	2	0.28	30	ug/L
OAPIS-1	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OAPIS-1	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OAPIS-1	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OAPIS-1	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OAPIS-1	3/4/2020	Toluene	0.39	1	0.2	1000	ug/L
OAPIS-1	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OAPIS-1	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OAPIS-1	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OAPIS-1	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OAPIS-1	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	3/4/2020	Xylenes, Total	1.7	1.5	0.55	620	ug/L
OAPIS-1	3/4/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
OAPIS-1	9/22/2020	MTBE	**250**	10	3.9	143	ug/L
OAPIS-1	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OAPIS-1	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OAPIS-1	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OAPIS-1	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OAPIS-1	9/22/2020	1,1-Dichloroethane	1.3	1	0.27	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OAPIS-1	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OAPIS-1	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OAPIS-1	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OAPIS-1	9/22/2020	1,2,4-Trimethylbenzene	2.2	1	0.12	56	ug/L
OAPIS-1	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OAPIS-1	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OAPIS-1	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OAPIS-1	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OAPIS-1	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OAPIS-1	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OAPIS-1	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OAPIS-1	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OAPIS-1	9/22/2020	1-Methylnaphthalene	7.3	4	0.84	NA	ug/L
OAPIS-1	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OAPIS-1	9/22/2020	2-Butanone	6.9	10	1.1	5565	ug/L
OAPIS-1	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
OAPIS-1	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OAPIS-1	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OAPIS-1	9/22/2020	p-Isopropyltoluene	0.34	1	0.2	NA	ug/L
OAPIS-1	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	9/22/2020	Acetone	54	10	2.3	14064	ug/L
OAPIS-1	9/22/2020	Benzene	**84**	1	0.23	5	ug/L
OAPIS-1	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
OAPIS-1	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OAPIS-1	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
OAPIS-1	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OAPIS-1	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OAPIS-1	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OAPIS-1	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
OAPIS-1	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
OAPIS-1	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OAPIS-1	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OAPIS-1	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OAPIS-1	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OAPIS-1	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
OAPIS-1	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OAPIS-1	9/22/2020	Ethylbenzene	11	1	0.21	700	ug/L
OAPIS-1	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OAPIS-1	9/22/2020	Isopropylbenzene	1.1	1	0.18	447	ug/L
OAPIS-1	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OAPIS-1	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	9/22/2020	n-Propylbenzene	1.3	1	0.18	660	ug/L
OAPIS-1	9/22/2020	Naphthalene	0.49	2	0.28	30	ug/L
OAPIS-1	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OAPIS-1	9/22/2020	Styrene	ND	1	0.13	100	ug/L
OAPIS-1	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OAPIS-1	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OAPIS-1	9/22/2020	Toluene	0.55	1	0.2	1000	ug/L
OAPIS-1	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OAPIS-1	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OAPIS-1	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
OAPIS-1	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OAPIS-1	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	9/22/2020	Xylenes, Total	2.9	1.5	0.55	620	ug/L
OAPIS-1	9/22/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OAPIS-1	12/17/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
OAPIS-1	12/17/2020	Acetone	27.9	25	10	14064	ug/L
OAPIS-1	12/17/2020	Benzene	**53.8**	1	0.38	5	ug/L
OAPIS-1	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OAPIS-1	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
OAPIS-1	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OAPIS-1	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
OAPIS-1	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OAPIS-1	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OAPIS-1	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OAPIS-1	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
OAPIS-1	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
OAPIS-1	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OAPIS-1	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OAPIS-1	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OAPIS-1	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OAPIS-1	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OAPIS-1	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
OAPIS-1	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OAPIS-1	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OAPIS-1	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OAPIS-1	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OAPIS-1	12/17/2020	1,1-Dichloroethane	1.04	1	0.5	25	ug/L
OAPIS-1	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OAPIS-1	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OAPIS-1	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OAPIS-1	12/17/2020	Ethylbenzene	5.49	1	0.5	700	ug/L
OAPIS-1	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OAPIS-1	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
OAPIS-1	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OAPIS-1	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
OAPIS-1	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OAPIS-1	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OAPIS-1	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OAPIS-1	12/17/2020	MTBE	**260**	1	0.74	143	ug/L
OAPIS-1	12/17/2020	Naphthalene	ND	1	1	30	ug/L
OAPIS-1	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OAPIS-1	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OAPIS-1	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OAPIS-1	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OAPIS-1	12/17/2020	Styrene	ND	1	1	100	ug/L
OAPIS-1	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OAPIS-1	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OAPIS-1	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OAPIS-1	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OAPIS-1	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
OAPIS-1	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OAPIS-1	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OAPIS-1	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OAPIS-1	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OAPIS-1	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OAPIS-1	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OAPIS-1	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OAPIS-1	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OAPIS-1	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OAPIS-1	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OAPIS-1	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-01	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-01	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-01	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-01	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-01	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-01	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-01	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-01	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-01	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-01	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-01	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-01	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-01	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-01	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-01	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-01	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-01	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-01	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-01	3/22/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-01	3/22/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-01	3/22/2012	Naphthalene	ND	2	0.53	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/22/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-01	3/22/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-01	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-01	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-01	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-01	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-01	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-01	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-01	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-01	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-01	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-01	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-01	3/22/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-01	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-01	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-01	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-01	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-01	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-01	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-01	3/22/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-01	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-01	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-01	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-01	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-01	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	3/22/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-01	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-01	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-01	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-01	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-01	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-01	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-01	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-01	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-01	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-01	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-01	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-01	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-01	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-01	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-01	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-01	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-01	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	6/13/2012	Styrene	ND	1	0.41	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-01	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-01	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-01	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-01	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-01	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-01	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-01	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-01	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-01	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-01	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-01	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-01	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-01	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-01	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-01	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-01	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-01	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-01	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-01	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-01	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-01	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-01	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-01	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-01	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-01	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-01	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-01	3/19/2013	Chloroform	ND	1	0.47	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-01	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-01	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-01	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-01	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-01	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-01	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-01	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-01	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-01	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-01	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-01	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-01	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L
OW-01	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-01	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-01	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	3/19/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	6/13/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	11/11/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-01	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-01	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	3/7/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-01	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-01	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	6/3/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	9/11/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
OW-01	9/11/2014	Acetone	ND	20	9.9	14064	ug/L
OW-01	9/11/2014	Chloroform	ND	2	0.63	100	ug/L
OW-01	9/11/2014	Benzene	ND	2	0.31	5	ug/L
OW-01	9/11/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
OW-01	9/11/2014	Bromomethane	ND	6	0.83	7.54	ug/L
OW-01	9/11/2014	Chloromethane	ND	6	1	20.32	ug/L
OW-01	9/11/2014	Dibromomethane	ND	2	0.38	8	ug/L
OW-01	9/11/2014	Chloroethane	ND	4	0.95	20857	ug/L
OW-01	9/11/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
OW-01	9/11/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
OW-01	9/11/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
OW-01	9/11/2014	Bromoform	ND	2	0.5	32.9	ug/L
OW-01	9/11/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
OW-01	9/11/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
OW-01	9/11/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
OW-01	9/11/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OW-01	9/11/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
OW-01	9/11/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
OW-01	9/11/2014	2-Butanone	ND	20	2.8	5565	ug/L
OW-01	9/11/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OW-01	9/11/2014	Trichloroethene	ND	2	0.39	5	ug/L
OW-01	9/11/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
OW-01	9/11/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
OW-01	9/11/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
OW-01	9/11/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
OW-01	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
OW-01	9/11/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
OW-01	9/11/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
OW-01	9/11/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
OW-01	9/11/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
OW-01	9/11/2014	Ethylbenzene	ND	2	0.25	700	ug/L
OW-01	9/11/2014	Styrene	ND	2	0.23	100	ug/L
OW-01	9/11/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
OW-01	9/11/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
OW-01	9/11/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
OW-01	9/11/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
OW-01	9/11/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
OW-01	9/11/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
OW-01	9/11/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
OW-01	9/11/2014	Bromobenzene	ND	2	0.36	62	ug/L
OW-01	9/11/2014	Toluene	ND	2	0.34	1000	ug/L
OW-01	9/11/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
OW-01	9/11/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
OW-01	9/11/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
OW-01	9/11/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
OW-01	9/11/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
OW-01	9/11/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
OW-01	9/11/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
OW-01	9/11/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
OW-01	9/11/2014	2-Hexanone	ND	20	1.7	38	ug/L
OW-01	9/11/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
OW-01	9/11/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
OW-01	9/11/2014	Xylenes, Total	ND	3	0.75	620	ug/L
OW-01	9/11/2014	MTBE	ND	2	0.5	143	ug/L
OW-01	9/11/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
OW-01	9/11/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
OW-01	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	11/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	11/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-01	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-01	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	11/10/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-01	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-01	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-01	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-01	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-01	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-01	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-01	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-01	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-01	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-01	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-01	3/9/2015	MTBE	ND	1	0.17	143	ug/L
OW-01	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	6/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	6/3/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	6/3/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	6/3/2015	Benzene	ND	1	0.065	5	ug/L
OW-01	6/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	6/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	6/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	6/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	6/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	6/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	6/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	6/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	6/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	6/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	6/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	6/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	6/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	6/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	6/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	6/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	6/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	6/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	6/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-01	6/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	6/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	6/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	6/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	6/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	6/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	6/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	6/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	6/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	6/3/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	6/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	6/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	6/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	6/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	6/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	6/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	6/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	6/3/2015	Toluene	ND	1	0.11	1000	ug/L
OW-01	6/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	6/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	6/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	6/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	6/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	6/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	6/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	6/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	6/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	6/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	6/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	6/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-01	6/3/2015	MTBE	ND	1	0.17	143	ug/L
OW-01	6/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	6/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	8/12/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
OW-01	8/12/2015	Acetone	ND	20	1.9	14064	ug/L
OW-01	8/12/2015	Chloroform	ND	2	0.43	100	ug/L
OW-01	8/12/2015	Benzene	ND	2	0.13	5	ug/L
OW-01	8/12/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
OW-01	8/12/2015	Bromomethane	ND	6	2.3	7.54	ug/L
OW-01	8/12/2015	Chloromethane	ND	6	0.35	20.32	ug/L
OW-01	8/12/2015	Dibromomethane	ND	2	0.47	8	ug/L
OW-01	8/12/2015	Chloroethane	ND	4	0.21	20857	ug/L
OW-01	8/12/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
OW-01	8/12/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
OW-01	8/12/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
OW-01	8/12/2015	Bromoform	ND	2	0.32	32.9	ug/L
OW-01	8/12/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
OW-01	8/12/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-01	8/12/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
OW-01	8/12/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OW-01	8/12/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OW-01	8/12/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
OW-01	8/12/2015	2-Butanone	ND	20	0.73	5565	ug/L
OW-01	8/12/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
OW-01	8/12/2015	Trichloroethene	ND	2	0.33	5	ug/L
OW-01	8/12/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
OW-01	8/12/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
OW-01	8/12/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
OW-01	8/12/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
OW-01	8/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
OW-01	8/12/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
OW-01	8/12/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
OW-01	8/12/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
OW-01	8/12/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
OW-01	8/12/2015	Ethylbenzene	ND	2	0.2	700	ug/L
OW-01	8/12/2015	Styrene	ND	2	0.21	100	ug/L
OW-01	8/12/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
OW-01	8/12/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
OW-01	8/12/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
OW-01	8/12/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
OW-01	8/12/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
OW-01	8/12/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
OW-01	8/12/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
OW-01	8/12/2015	Bromobenzene	ND	2	0.22	62	ug/L
OW-01	8/12/2015	Toluene	ND	2	0.22	1000	ug/L
OW-01	8/12/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
OW-01	8/12/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
OW-01	8/12/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
OW-01	8/12/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
OW-01	8/12/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
OW-01	8/12/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
OW-01	8/12/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
OW-01	8/12/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
OW-01	8/12/2015	2-Hexanone	ND	20	0.95	38	ug/L
OW-01	8/12/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
OW-01	8/12/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/12/2015	Xylenes, Total	ND	3	0.56	620	ug/L
OW-01	8/12/2015	MTBE	ND	2	0.35	143	ug/L
OW-01	8/12/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
OW-01	8/12/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
OW-01	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	10/28/2015	Benzene	1.4	1	0.065	5	ug/L
OW-01	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-01	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-01	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-01	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-01	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-01	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-01	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	10/28/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-01	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-01	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	10/28/2015	Toluene	2.4	1	0.11	1000	ug/L
OW-01	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-01	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	10/28/2015	Xylenes, Total	2.2	1.5	0.28	620	ug/L
OW-01	10/28/2015	MTBE	1.6	1	0.17	143	ug/L
OW-01	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
OW-01	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	3/3/2016	Benzene	ND	1	0.096	5	ug/L
OW-01	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-01	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-01	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-01	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-01	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-01	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-01	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-01	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-01	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-01	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-01	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-01	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-01	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-01	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-01	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OW-01	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-01	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-01	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-01	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	3/3/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	3/3/2016	Styrene	ND	1	0.095	100	ug/L
OW-01	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-01	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-01	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-01	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
OW-01	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-01	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-01	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-01	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	3/3/2016	MTBE	ND	1	0.21	143	ug/L
OW-01	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-01	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	6/6/2016	Benzene	0.13	1	0.096	5	ug/L
OW-01	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	6/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	6/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	6/6/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	6/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	6/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	6/6/2016	MTBE	1	1	0.21	143	ug/L
OW-01	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	9/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	9/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	9/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	9/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-01	9/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	9/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	9/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	9/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	9/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	9/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	9/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	9/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	9/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	9/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	9/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	9/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	9/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	9/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	9/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	9/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	9/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	9/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	9/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	9/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	9/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	9/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	9/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	9/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	9/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	9/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	9/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	9/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	9/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	9/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	9/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	9/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	9/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	9/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	9/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	9/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	9/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	9/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	9/6/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	9/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	9/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	9/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	9/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	9/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	9/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	9/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	9/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	9/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	9/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	9/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	9/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	9/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	9/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	9/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	9/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	9/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	9/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	9/6/2016	MTBE	0.88	1	0.21	143	ug/L
OW-01	9/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	9/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	11/15/2016	Benzene	1.6	1	0.096	5	ug/L
OW-01	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	11/15/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	11/15/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	11/15/2016	Ethylbenzene	0.39	1	0.11	700	ug/L
OW-01	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	11/15/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	11/15/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	11/15/2016	MTBE	0.88	1	0.21	143	ug/L
OW-01	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-01	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-01	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-01	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	2/27/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	2/27/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-01	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-01	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	2/27/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-01	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	2/27/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	2/27/2017	MTBE	1.4	1	0.21	143	ug/L
OW-01	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	5/31/2017	Acetone	5.2	10	0.82	14064	ug/L
OW-01	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	5/31/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	5/31/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	5/31/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	5/31/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-01	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	5/31/2017	MTBE	1.6	1	0.24	143	ug/L
OW-01	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	9/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	9/7/2017	Acetone	ND	10	0.82	14064	ug/L
OW-01	9/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	9/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	9/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	9/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	9/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	9/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	9/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	9/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	9/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	9/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	9/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	9/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	9/7/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	9/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	9/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	9/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	9/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	9/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	9/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	9/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	9/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	9/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	9/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	9/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	9/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	9/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	9/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	9/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	9/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	9/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	9/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	9/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	9/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	9/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	9/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	9/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	9/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	9/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	9/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	9/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	9/7/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	9/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	9/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	9/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	9/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	9/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	9/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	9/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	9/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	9/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	9/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	9/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	9/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	9/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	9/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	9/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	9/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	9/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	9/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	9/7/2017	MTBE	2	1	0.24	143	ug/L
OW-01	9/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	9/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	12/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	12/8/2017	Acetone	1.6	10	0.82	14064	ug/L
OW-01	12/8/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	12/8/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	12/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	12/8/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	12/8/2017	Chloromethane	ND	3	0.29	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/8/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	12/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	12/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	12/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	12/8/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	12/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	12/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	12/8/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	12/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	12/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	12/8/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	12/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	12/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	12/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	12/8/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	12/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	12/8/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	12/8/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	12/8/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	12/8/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	12/8/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	12/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	12/8/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	12/8/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	12/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	12/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	12/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	12/8/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	12/8/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	12/8/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	12/8/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	12/8/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	12/8/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	12/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	12/8/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	12/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	12/8/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	12/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	12/8/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	12/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	12/8/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	12/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	12/8/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	12/8/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	12/8/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	12/8/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	12/8/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	12/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	12/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	12/8/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	12/8/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	12/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	12/8/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	12/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	12/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	12/8/2017	MTBE	1.4	1	0.24	143	ug/L
OW-01	12/8/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	12/8/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	2/27/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	2/27/2018	Acetone	ND	10	0.82	14064	ug/L
OW-01	2/27/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	2/27/2018	Benzene	ND	1	0.062	5	ug/L
OW-01	2/27/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	2/27/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	2/27/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	2/27/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	2/27/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	2/27/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	2/27/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	2/27/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	2/27/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	2/27/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	2/27/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	2/27/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	2/27/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	2/27/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	2/27/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	2/27/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	2/27/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	2/27/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	2/27/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	2/27/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	2/27/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	2/27/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-01	2/27/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	2/27/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	2/27/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	2/27/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	2/27/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	2/27/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	2/27/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	2/27/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	2/27/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	2/27/2018	Styrene	ND	1	0.16	100	ug/L
OW-01	2/27/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	2/27/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	2/27/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	2/27/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	2/27/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	2/27/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	2/27/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	2/27/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	2/27/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	2/27/2018	Toluene	ND	1	0.064	1000	ug/L
OW-01	2/27/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	2/27/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	2/27/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	2/27/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	2/27/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	2/27/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	2/27/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	2/27/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	2/27/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	2/27/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	2/27/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	2/27/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	2/27/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	2/27/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	2/27/2018	MTBE	1.1	1	0.24	143	ug/L
OW-01	2/27/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	2/27/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-01	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-01	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	5/15/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-01	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-01	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-01	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	5/15/2018	MTBE	2	1	0.24	143	ug/L
OW-01	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-01	9/11/2018	Acetone	8.6	10	0.79	14064	ug/L
OW-01	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-01	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-01	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-01	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-01	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-01	9/11/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-01	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-01	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-01	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-01	9/11/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	9/11/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-01	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-01	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-01	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-01	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-01	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-01	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-01	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-01	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-01	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-01	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-01	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-01	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-01	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-01	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-01	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-01	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-01	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-01	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-01	9/11/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-01	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-01	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-01	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-01	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-01	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-01	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-01	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-01	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-01	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-01	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-01	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-01	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-01	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-01	9/11/2018	MTBE	1.9	1	0.32	143	ug/L
OW-01	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-01	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-01	11/8/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	11/8/2018	Acetone	ND	10	0.76	14064	ug/L
OW-01	11/8/2018	Chloroform	ND	1	0.24	100	ug/L
OW-01	11/8/2018	Benzene	ND	1	0.17	5	ug/L
OW-01	11/8/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-01	11/8/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-01	11/8/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-01	11/8/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-01	11/8/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-01	11/8/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-01	11/8/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-01	11/8/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-01	11/8/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-01	11/8/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-01	11/8/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-01	11/8/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-01	11/8/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-01	11/8/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-01	11/8/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-01	11/8/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	11/8/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-01	11/8/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-01	11/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	11/8/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	11/8/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-01	11/8/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-01	11/8/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-01	11/8/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-01	11/8/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-01	11/8/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-01	11/8/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-01	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-01	11/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-01	11/8/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-01	11/8/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-01	11/8/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-01	11/8/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-01	11/8/2018	Styrene	ND	1	0.25	100	ug/L
OW-01	11/8/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-01	11/8/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	11/8/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-01	11/8/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-01	11/8/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-01	11/8/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-01	11/8/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-01	11/8/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-01	11/8/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-01	11/8/2018	Toluene	ND	1	0.17	1000	ug/L
OW-01	11/8/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-01	11/8/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	11/8/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/8/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	11/8/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-01	11/8/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-01	11/8/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	11/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	11/8/2018	Pentafluorobenzene	ND	0	0		None
OW-01	11/8/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-01	11/8/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-01	11/8/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-01	11/8/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-01	11/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-01	11/8/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-01	11/8/2018	MTBE	1.8	1	0.46	143	ug/L
OW-01	11/8/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-01	11/8/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-01	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	3/27/2019	1,1-Dichloroethane	0.52	1	0.140859	25	ug/L
OW-01	3/27/2019	1,1-Dichloroethene	0.37	1	0.205388	7	ug/L
OW-01	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	3/27/2019	1,2-Dichloroethane	0.35	1	0.194638	5	ug/L
OW-01	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	3/27/2019	Acetone	3.9	10	1.199396	14064	ug/L
OW-01	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	3/27/2019	MTBE	7.3	1	0.456095	143	ug/L
OW-01	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	3/27/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-01	5/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	5/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	5/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	5/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	5/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-01	5/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	5/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	5/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	5/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	5/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	5/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	5/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	5/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	5/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	5/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	5/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	5/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	5/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	5/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	5/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	5/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	5/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	5/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	5/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	5/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	5/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	5/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	5/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	5/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	5/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	5/21/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	5/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	5/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	5/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	5/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	5/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	5/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	5/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	5/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	5/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	5/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	5/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	5/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	5/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	5/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	5/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	5/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	5/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	5/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	5/21/2019	MTBE	2.2	1	0.456095	143	ug/L
OW-01	5/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	5/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	5/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	5/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	5/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	5/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	5/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	5/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	5/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	5/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	5/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	5/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	5/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	5/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	5/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	5/21/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-01	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	8/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	8/15/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	8/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	8/15/2019	MTBE	1.9	1	0.456095	143	ug/L
OW-01	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	8/15/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OW-01	10/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	10/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	10/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	10/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	10/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-01	10/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	10/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	10/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	10/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	10/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	10/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	10/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	10/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	10/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	10/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	10/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	10/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	10/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	10/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	10/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	10/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	10/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	10/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	10/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	10/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	10/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	10/16/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	10/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	10/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	10/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	10/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	10/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	10/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	10/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	10/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	10/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	10/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	10/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	10/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	10/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	10/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	10/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	10/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	10/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	10/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	10/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	10/16/2019	MTBE	1.7	1	0.456095	143	ug/L
OW-01	10/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	10/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	10/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	10/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	10/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	10/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	10/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	10/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	10/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	10/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	10/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	10/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	10/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	10/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	10/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	10/16/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-01	3/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-01	3/9/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-01	3/9/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-01	3/9/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-01	3/9/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-01	3/9/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-01	3/9/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	3/9/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	3/9/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-01	3/9/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-01	3/9/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	3/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-01	3/9/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-01	3/9/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-01	3/9/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	3/9/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-01	3/9/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-01	3/9/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	3/9/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	3/9/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-01	3/9/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-01	3/9/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-01	3/9/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	3/9/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	3/9/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-01	3/9/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-01	3/9/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-01	3/9/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	3/9/2020	Acetone	ND	10	2.3	14064	ug/L
OW-01	3/9/2020	Benzene	ND	1	0.23	5	ug/L
OW-01	3/9/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-01	3/9/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-01	3/9/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	3/9/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-01	3/9/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-01	3/9/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-01	3/9/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	3/9/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-01	3/9/2020	Chloroform	ND	1	0.13	100	ug/L
OW-01	3/9/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-01	3/9/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-01	3/9/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-01	3/9/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-01	3/9/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-01	3/9/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-01	3/9/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-01	3/9/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-01	3/9/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-01	3/9/2020	MTBE	1.6	1	0.39	143	ug/L
OW-01	3/9/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-01	3/9/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	3/9/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-01	3/9/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-01	3/9/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-01	3/9/2020	Styrene	ND	1	0.13	100	ug/L
OW-01	3/9/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-01	3/9/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-01	3/9/2020	Toluene	ND	1	0.2	1000	ug/L
OW-01	3/9/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	3/9/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-01	3/9/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-01	3/9/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-01	3/9/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	3/9/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-01	3/9/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-01	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-01	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-01	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-01	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-01	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-01	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-01	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-01	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-01	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-01	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-01	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-01	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-01	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-01	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-01	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-01	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-01	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-01	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-01	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-01	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-01	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-01	9/20/2020	Benzene	ND	1	0.23	5	ug/L
OW-01	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-01	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-01	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-01	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-01	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-01	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-01	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-01	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-01	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-01	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-01	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-01	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-01	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-01	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-01	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-01	9/20/2020	MTBE	2.3	1	0.39	143	ug/L
OW-01	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-01	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-01	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-01	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-01	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-01	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-01	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-01	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-01	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-01	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-01	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-01	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-01	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-01	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-01	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-01	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-01	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-01	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-01	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-01	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-01	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-01	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-01	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-01	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-01	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-01	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-01	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-01	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-01	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-01	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-01	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-01	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-01	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-01	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-01	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-01	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-01	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-01	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-01	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-01	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-01	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-01	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-01	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-01	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-01	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-01	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-01	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-01	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-01	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-01	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-01	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-01	12/11/2020	MTBE	1.91	1	0.74	143	ug/L
OW-01	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-01	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-01	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-01	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-01	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-01	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-01	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-01	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-01	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-01	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-01	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-01	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-01	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-01	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-01	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-01	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-01	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-01	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-01	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-01	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-01	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-01	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-01	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-01	12/11/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-01	12/11/2020	1,2-Dibromoethane	ND	0.021	0.00524	0.05	ug/L
OW-10	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-10	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-10	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-10	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-10	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-10	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-10	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-10	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-10	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-10	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-10	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-10	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-10	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-10	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-10	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-10	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-10	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-10	3/22/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-10	3/22/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-10	3/22/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-10	3/22/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-10	3/22/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-10	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-10	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-10	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-10	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-10	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-10	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-10	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-10	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-10	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-10	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-10	3/22/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-10	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-10	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-10	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-10	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-10	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-10	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-10	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-10	3/22/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-10	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-10	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-10	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-10	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-10	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/22/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-10	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-10	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-10	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-10	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-10	3/22/2012	MTBE	31	1	0.52	143	ug/L
OW-10	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-10	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-10	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-10	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-10	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-10	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-10	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-10	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-10	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-10	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-10	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-10	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-10	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-10	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-10	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-10	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-10	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-10	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-10	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-10	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-10	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	6/13/2012	MTBE	130	1	0.96	143	ug/L
OW-10	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-10	8/22/2012	Chloroform	ND	1	0.35	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-10	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-10	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-10	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-10	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-10	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-10	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-10	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-10	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	8/22/2012	MTBE	44	1	0.96	143	ug/L
OW-10	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-10	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-10	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-10	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-10	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-10	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	11/27/2012	1,1-Dichloroethane	1.6	1	0.3	25	ug/L
OW-10	11/27/2012	1,1-Dichloroethene	2.1	1	0.38	7	ug/L
OW-10	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-10	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-10	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-10	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-10	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-10	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-10	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-10	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	11/27/2012	1,2-Dichloroethane	1.1	1	0.29	5	ug/L
OW-10	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-10	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-10	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	11/27/2012	MTBE	**230**	10	9.6	143	ug/L
OW-10	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-10	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-10	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-10	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-10	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-10	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-10	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	3/19/2013	1,1-Dichloroethane	1.5	1	0.48	25	ug/L
OW-10	3/19/2013	1,1-Dichloroethene	1.9	1	0.48	7	ug/L
OW-10	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-10	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-10	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-10	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-10	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-10	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-10	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	3/19/2013	1,2-Dichloroethane	1.3	1	0.38	5	ug/L
OW-10	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-10	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-10	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	3/19/2013	MTBE	**170**	1	0.77	143	ug/L
OW-10	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	6/13/2013	1,1-Dichloroethane	1.6	1	0.33	25	ug/L
OW-10	6/13/2013	1,1-Dichloroethene	1.9	1	0.48	7	ug/L
OW-10	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-10	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-10	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-10	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	6/13/2013	1,2-Dichloroethane	1	1	0.33	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	6/13/2013	MTBE	**220**	10	7.7	143	ug/L
OW-10	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-10	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-10	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-10	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	9/4/2013	MTBE	65	1	0.77	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-10	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-10	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-10	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-10	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-10	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-10	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	11/11/2013	MTBE	62	1	0.77	143	ug/L
OW-10	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-10	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-10	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-10	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	3/7/2014	MTBE	79	1	0.25	143	ug/L
OW-10	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	6/3/2014	1,1-Dichloroethane	1.2	1	0.28	25	ug/L
OW-10	6/3/2014	1,1-Dichloroethene	1.2	1	0.21	7	ug/L
OW-10	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-10	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	6/3/2014	MTBE	92	1	0.25	143	ug/L
OW-10	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	9/12/2014	1,1-Dichloroethane	1.6	1	0.28	25	ug/L
OW-10	9/12/2014	1,1-Dichloroethene	1.8	1	0.21	7	ug/L
OW-10	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	9/12/2014	1,2-Dichloroethane	1.1	1	0.26	5	ug/L
OW-10	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	9/12/2014	MTBE	110	1	0.25	143	ug/L
OW-10	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	11/10/2014	1,1-Dichloroethane	1.3	1	0.28	25	ug/L
OW-10	11/10/2014	1,1-Dichloroethene	1.7	1	0.21	7	ug/L
OW-10	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	11/10/2014	MTBE	98	1	0.25	143	ug/L
OW-10	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-10	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	3/9/2015	MTBE	61	1	0.17	143	ug/L
OW-10	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	6/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	6/3/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	6/3/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	6/3/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	6/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	6/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	6/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	6/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	6/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	6/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	6/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	6/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	6/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	6/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	6/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	6/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	6/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	6/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	6/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	6/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	6/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	6/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	6/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	6/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	6/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	6/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	6/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	6/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	6/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	6/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	6/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	6/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	6/3/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	6/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	6/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	6/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	6/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	6/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	6/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	6/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	6/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	6/3/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	6/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	6/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	6/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	6/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	6/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	6/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	6/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	6/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	6/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	6/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	6/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	6/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	6/3/2015	MTBE	55	1	0.17	143	ug/L
OW-10	6/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	6/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	8/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	8/12/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	8/12/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	8/12/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	8/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	8/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	8/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	8/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	8/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	8/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	8/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	8/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	8/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	8/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	8/12/2015	1,1-Dichloroethane	1.1	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	8/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	8/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	8/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	8/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	8/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	8/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	8/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	8/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	8/12/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	8/12/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-10	8/12/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	8/12/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	8/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	8/12/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	8/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	8/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	8/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	8/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	8/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	8/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	8/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	8/12/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	8/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	8/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	8/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	8/12/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	8/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	8/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	8/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	8/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	8/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	8/12/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	8/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	8/12/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	8/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	8/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	8/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	8/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	8/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	8/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	8/12/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	8/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	8/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	8/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	8/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	8/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	8/12/2015	MTBE	58	1	0.17	143	ug/L
OW-10	8/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	8/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	10/28/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	10/28/2015	1,2,4-Trimethylbenzene	1.6	1	0.16	56	ug/L
OW-10	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	10/28/2015	Ethylbenzene	1.1	1	0.1	700	ug/L
OW-10	10/28/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	10/28/2015	Toluene	2.3	1	0.11	1000	ug/L
OW-10	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	10/28/2015	Xylenes, Total	4.2	1.5	0.28	620	ug/L
OW-10	10/28/2015	MTBE	51	1	0.17	143	ug/L
OW-10	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
OW-10	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	3/3/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-10	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-10	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-10	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-10	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-10	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-10	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-10	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-10	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-10	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-10	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-10	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-10	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-10	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-10	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-10	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OW-10	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-10	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-10	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-10	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	3/3/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/3/2016	Styrene	ND	1	0.095	100	ug/L
OW-10	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-10	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-10	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-10	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
OW-10	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-10	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-10	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-10	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	3/3/2016	MTBE	39	1	0.21	143	ug/L
OW-10	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-10	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	6/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	6/6/2016	1,1-Dichloroethane	1.1	1	0.11	25	ug/L
OW-10	6/6/2016	1,1-Dichloroethene	0.9	1	0.11	7	ug/L
OW-10	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	6/6/2016	1,2-Dichloroethane	0.51	1	0.12	5	ug/L
OW-10	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	6/6/2016	Toluene	ND	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	6/6/2016	cis-1,2-Dichloroethene	0.31	1	0.12	70	ug/L
OW-10	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	6/6/2016	MTBE	33	1	0.21	143	ug/L
OW-10	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	9/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	9/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	9/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	9/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	9/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	9/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	9/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	9/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	9/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	9/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	9/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	9/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	9/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	9/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	9/6/2016	1,1-Dichloroethane	0.93	1	0.11	25	ug/L
OW-10	9/6/2016	1,1-Dichloroethene	0.76	1	0.11	7	ug/L
OW-10	9/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	9/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	9/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	9/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	9/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	9/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	9/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	9/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	9/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	9/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	9/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	9/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	9/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	9/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	9/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	9/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	9/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	9/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	9/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	9/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	9/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	9/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	9/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	9/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	9/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	9/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	9/6/2016	1,2-Dichloroethane	0.73	1	0.12	5	ug/L
OW-10	9/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	9/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	9/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	9/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-10	9/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	9/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	9/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	9/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	9/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	9/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	9/6/2016	cis-1,2-Dichloroethene	0.29	1	0.12	70	ug/L
OW-10	9/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	9/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	9/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	9/6/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	9/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	9/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	9/6/2016	MTBE	35	1	0.21	143	ug/L
OW-10	9/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	9/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	11/15/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	11/15/2016	1,1-Dichloroethane	0.85	1	0.11	25	ug/L
OW-10	11/15/2016	1,1-Dichloroethene	0.67	1	0.11	7	ug/L
OW-10	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	11/15/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	11/15/2016	1,2-Dichloroethane	0.52	1	0.12	5	ug/L
OW-10	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-10	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	11/15/2016	cis-1,2-Dichloroethene	0.28	1	0.12	70	ug/L
OW-10	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	11/15/2016	MTBE	28	1	0.21	143	ug/L
OW-10	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-10	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-10	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-10	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	2/27/2017	1,1-Dichloroethane	0.87	1	0.11	25	ug/L
OW-10	2/27/2017	1,1-Dichloroethene	0.63	1	0.11	7	ug/L
OW-10	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-10	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-10	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	2/27/2017	1,2-Dichloroethane	0.5	1	0.12	5	ug/L
OW-10	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-10	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	2/27/2017	cis-1,2-Dichloroethene	0.29	1	0.12	70	ug/L
OW-10	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	2/27/2017	MTBE	19	1	0.21	143	ug/L
OW-10	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	5/31/2017	Acetone	5	10	0.82	14064	ug/L
OW-10	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	5/31/2017	1,1-Dichloroethane	1.1	1	0.4	25	ug/L
OW-10	5/31/2017	1,1-Dichloroethene	0.9	1	0.081	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	5/31/2017	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	5/31/2017	cis-1,2-Dichloroethene	0.25	1	0.2	70	ug/L
OW-10	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-10	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	5/31/2017	MTBE	22	1	0.24	143	ug/L
OW-10	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	9/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	9/7/2017	Acetone	3.5	10	0.82	14064	ug/L
OW-10	9/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	9/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	9/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	9/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	9/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	9/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	9/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	9/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	9/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	9/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	9/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	9/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	9/7/2017	1,1-Dichloroethane	1.2	1	0.4	25	ug/L
OW-10	9/7/2017	1,1-Dichloroethene	0.9	1	0.081	7	ug/L
OW-10	9/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	9/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	9/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	9/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	9/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	9/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	9/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	9/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	9/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	9/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	9/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	9/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	9/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	9/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	9/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	9/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	9/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	9/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	9/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	9/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	9/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	9/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	9/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	9/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	9/7/2017	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	9/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	9/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	9/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	9/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	9/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	9/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	9/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	9/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	9/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	9/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	9/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-10	9/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	9/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	9/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	9/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	9/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	9/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	9/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	9/7/2017	MTBE	20	1	0.24	143	ug/L
OW-10	9/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	9/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	12/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	12/7/2017	Acetone	1.7	10	0.82	14064	ug/L
OW-10	12/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	12/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	12/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	12/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	12/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	12/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	12/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	12/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	12/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	12/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	12/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	12/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	12/7/2017	1,1-Dichloroethane	1	1	0.4	25	ug/L
OW-10	12/7/2017	1,1-Dichloroethene	0.86	1	0.081	7	ug/L
OW-10	12/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	12/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	12/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	12/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	12/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	12/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	12/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	12/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	12/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	12/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	12/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	12/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	12/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	12/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	12/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	12/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	12/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	12/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	12/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	12/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	12/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	12/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	12/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	12/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	12/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	12/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	12/7/2017	1,2-Dichloroethane	0.55	1	0.4	5	ug/L
OW-10	12/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	12/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	12/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	12/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	12/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	12/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	12/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	12/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	12/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	12/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	12/7/2017	cis-1,2-Dichloroethene	0.32	1	0.2	70	ug/L
OW-10	12/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	12/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	12/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	12/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	12/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	12/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	12/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	12/7/2017	MTBE	27	1	0.24	143	ug/L
OW-10	12/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	12/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	2/27/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	2/27/2018	Acetone	ND	10	0.82	14064	ug/L
OW-10	2/27/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	2/27/2018	Benzene	ND	1	0.062	5	ug/L
OW-10	2/27/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	2/27/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	2/27/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	2/27/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	2/27/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	2/27/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	2/27/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	2/27/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	2/27/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	2/27/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	2/27/2018	1,1-Dichloroethane	1.2	1	0.4	25	ug/L
OW-10	2/27/2018	1,1-Dichloroethene	0.9	1	0.081	7	ug/L
OW-10	2/27/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	2/27/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	2/27/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	2/27/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	2/27/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	2/27/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	2/27/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	2/27/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	2/27/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	2/27/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	2/27/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-10	2/27/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	2/27/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	2/27/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	2/27/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	2/27/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	2/27/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	2/27/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	2/27/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	2/27/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	2/27/2018	Styrene	ND	1	0.16	100	ug/L
OW-10	2/27/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	2/27/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	2/27/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	2/27/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	2/27/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	2/27/2018	1,2-Dichloroethane	0.6	1	0.4	5	ug/L
OW-10	2/27/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	2/27/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	2/27/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	2/27/2018	Toluene	ND	1	0.064	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	2/27/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	2/27/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	2/27/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	2/27/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	2/27/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	2/27/2018	cis-1,2-Dichloroethene	0.34	1	0.2	70	ug/L
OW-10	2/27/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	2/27/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	2/27/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	2/27/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	2/27/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	2/27/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	2/27/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	2/27/2018	MTBE	27	1	0.24	143	ug/L
OW-10	2/27/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	2/27/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-10	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-10	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	5/15/2018	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
OW-10	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-10	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-10	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-10	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-10	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-10	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-10	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	5/15/2018	MTBE	23	1	0.24	143	ug/L
OW-10	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-10	9/11/2018	Acetone	6.8	10	0.79	14064	ug/L
OW-10	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-10	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-10	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-10	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-10	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-10	9/11/2018	Methylene Chloride	0.27	3	0.21	5	ug/L
OW-10	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-10	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-10	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-10	9/11/2018	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
OW-10	9/11/2018	1,1-Dichloroethene	0.86	1	0.12	7	ug/L
OW-10	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-10	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-10	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-10	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-10	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-10	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-10	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-10	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-10	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-10	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-10	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-10	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-10	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-10	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-10	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-10	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-10	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-10	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-10	9/11/2018	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-10	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-10	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-10	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-10	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-10	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-10	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-10	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-10	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-10	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-10	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-10	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-10	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-10	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-10	9/11/2018	MTBE	19	1	0.32	143	ug/L
OW-10	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-10	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-10	11/8/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	11/8/2018	Acetone	ND	10	0.76	14064	ug/L
OW-10	11/8/2018	Chloroform	ND	1	0.24	100	ug/L
OW-10	11/8/2018	Benzene	ND	1	0.17	5	ug/L
OW-10	11/8/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/8/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-10	11/8/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-10	11/8/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-10	11/8/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-10	11/8/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-10	11/8/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-10	11/8/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-10	11/8/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-10	11/8/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-10	11/8/2018	1,1-Dichloroethane	1.2	1	0.18	25	ug/L
OW-10	11/8/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-10	11/8/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-10	11/8/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-10	11/8/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-10	11/8/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	11/8/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-10	11/8/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-10	11/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	11/8/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	11/8/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-10	11/8/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-10	11/8/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-10	11/8/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-10	11/8/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-10	11/8/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-10	11/8/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-10	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-10	11/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-10	11/8/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-10	11/8/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-10	11/8/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-10	11/8/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-10	11/8/2018	Styrene	ND	1	0.25	100	ug/L
OW-10	11/8/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-10	11/8/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	11/8/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-10	11/8/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-10	11/8/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-10	11/8/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-10	11/8/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-10	11/8/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-10	11/8/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-10	11/8/2018	Toluene	ND	1	0.17	1000	ug/L
OW-10	11/8/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-10	11/8/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	11/8/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-10	11/8/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	11/8/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-10	11/8/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-10	11/8/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	11/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	11/8/2018	Pentafluorobenzene	ND	0	0		None
OW-10	11/8/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-10	11/8/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-10	11/8/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-10	11/8/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-10	11/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-10	11/8/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-10	11/8/2018	MTBE	15	1	0.46	143	ug/L
OW-10	11/8/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-10	11/8/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-10	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-10	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-10	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	3/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	3/27/2019	Acetone	3.8	10	1.199396	14064	ug/L
OW-10	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	3/27/2019	MTBE	1.5	1	0.456095	143	ug/L
OW-10	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	3/27/2019	1,1-Dichloroethane	0.55	1	0.140859	25	ug/L
OW-10	3/27/2019	1,1-Dichloroethene	0.38	1	0.205388	7	ug/L
OW-10	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	3/27/2019	1,2-Dichloroethane	0.36	1	0.194638	5	ug/L
OW-10	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	3/27/2019	Acetone	3.7	10	1.199396	14064	ug/L
OW-10	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	3/27/2019	MTBE	7.8	1	0.456095	143	ug/L
OW-10	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
OW-10	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	5/28/2019	1,1-Dichloroethane	0.55	1	0.140859	25	ug/L
OW-10	5/28/2019	1,1-Dichloroethene	0.38	1	0.205388	7	ug/L
OW-10	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-10	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-10	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	5/28/2019	MTBE	9.2	1	0.456095	143	ug/L
OW-10	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	5/28/2019	1,1-Dichloroethane	0.56	1	0.140859	25	ug/L
OW-10	5/28/2019	1,1-Dichloroethene	0.39	1	0.205388	7	ug/L
OW-10	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-10	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-10	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	5/28/2019	MTBE	9.1	1	0.456095	143	ug/L
OW-10	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-10	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	8/15/2019	1,1-Dichloroethane	0.79	1	0.140859	25	ug/L
OW-10	8/15/2019	1,1-Dichloroethene	0.56	1	0.205388	7	ug/L
OW-10	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	8/15/2019	1,2-Dichloroethane	0.36	1	0.194638	5	ug/L
OW-10	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	8/15/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-10	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	8/15/2019	MTBE	10	1	0.456095	143	ug/L
OW-10	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	8/15/2019	1,1-Dichloroethane	0.75	1	0.140859	25	ug/L
OW-10	8/15/2019	1,1-Dichloroethene	0.52	1	0.205388	7	ug/L
OW-10	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	8/15/2019	1,2-Dichloroethane	0.33	1	0.194638	5	ug/L
OW-10	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	8/15/2019	Acetone	1.5	10	1.199396	14064	ug/L
OW-10	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	8/15/2019	MTBE	9.9	1	0.456095	143	ug/L
OW-10	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-10	10/17/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	10/17/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	10/17/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	10/17/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	10/17/2019	1,1-Dichloroethane	0.83	1	0.140859	25	ug/L
OW-10	10/17/2019	1,1-Dichloroethene	0.59	1	0.205388	7	ug/L
OW-10	10/17/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	10/17/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	10/17/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	10/17/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	10/17/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	10/17/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	10/17/2019	1,2-Dichloroethane	0.54	1	0.194638	5	ug/L
OW-10	10/17/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	10/17/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	10/17/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	10/17/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	10/17/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	10/17/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	10/17/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	10/17/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	10/17/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	10/17/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	10/17/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	10/17/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	10/17/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	10/17/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	10/17/2019	Acetone	5.8	10	1.199396	14064	ug/L
OW-10	10/17/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	10/17/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	10/17/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	10/17/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	10/17/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	10/17/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	10/17/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	10/17/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	10/17/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	10/17/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	10/17/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	10/17/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	10/17/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	10/17/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	10/17/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	10/17/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	10/17/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	10/17/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	10/17/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	10/17/2019	MTBE	10	1	0.456095	143	ug/L
OW-10	10/17/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	10/17/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	10/17/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	10/17/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	10/17/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	10/17/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	10/17/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	10/17/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	10/17/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	10/17/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	10/17/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	10/17/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	10/17/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	10/17/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	10/17/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	10/17/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-10	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	3/4/2020	1,1-Dichloroethane	0.69	1	0.27	25	ug/L
OW-10	3/4/2020	1,1-Dichloroethene	0.6	1	0.13	7	ug/L
OW-10	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-10	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-10	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/4/2020	Acetone	3.2	10	2.3	14064	ug/L
OW-10	3/4/2020	Benzene	ND	1	0.23	5	ug/L
OW-10	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	3/4/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	3/4/2020	MTBE	9.7	1	0.39	143	ug/L
OW-10	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	3/4/2020	1,1-Dichloroethane	0.71	1	0.27	25	ug/L
OW-10	3/4/2020	1,1-Dichloroethene	0.6	1	0.13	7	ug/L
OW-10	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	3/4/2020	1,2-Dichloroethane	0.49	1	0.22	5	ug/L
OW-10	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/4/2020	Acetone	3.1	10	2.3	14064	ug/L
OW-10	3/4/2020	Benzene	ND	1	0.23	5	ug/L
OW-10	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	3/4/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	3/4/2020	MTBE	9.7	1	0.39	143	ug/L
OW-10	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-10	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	9/20/2020	1,1-Dichloroethane	1.4	1	0.27	25	ug/L
OW-10	9/20/2020	1,1-Dichloroethene	0.75	1	0.13	7	ug/L
OW-10	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	9/20/2020	1,2-Dichloroethane	0.37	1	0.22	5	ug/L
OW-10	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-10	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-10	9/20/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	9/20/2020	MTBE	15	1	0.39	143	ug/L
OW-10	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	ND	0.022	0.0055	0.05	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-10	12/11/2020	1,4-Dioxane	2.27	1	0.3	4.59	ug/L
OW-10	12/11/2020	1,4-Dioxane	2.26	1	0.3	4.59	ug/L
OW-10	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-10	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-10	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-10	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-10	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-10	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-10	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-10	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-10	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-10	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-10	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-10	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-10	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-10	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-10	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-10	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-10	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-10	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-10	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-10	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-10	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-10	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-10	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-10	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-10	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-10	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-10	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-10	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-10	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-10	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-10	12/11/2020	MTBE	7.64	1	0.74	143	ug/L
OW-10	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-10	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-10	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-10	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-10	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-10	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-10	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-10	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-10	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-10	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-10	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-10	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-10	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-10	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-10	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-10	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-10	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-10	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-10	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-10	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-10	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-10	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-10	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-10	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-10	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-10	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-10	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-10	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-10	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-10	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-10	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-10	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-10	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-10	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-10	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-10	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-10	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-10	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-10	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-10	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-10	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-10	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-10	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-10	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-10	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-10	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-10	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-10	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-10	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-10	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-10	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-10	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-10	12/11/2020	MTBE	7.76	1	0.74	143	ug/L
OW-10	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-10	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-10	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-10	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-10	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-10	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-10	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-10	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-10	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-10	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-10	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-10	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-10	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-10	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-10	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-10	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-10	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-10	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-10	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-10	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-11	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-11	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-11	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-11	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-11	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-11	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-11	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-11	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-11	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-11	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-11	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-11	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-11	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-11	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-11	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-11	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-11	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-11	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-11	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-11	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-11	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-11	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-11	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-11	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-11	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-11	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-11	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-11	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-11	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-11	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-11	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-11	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-11	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-11	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-11	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-11	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-11	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-11	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-11	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-11	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-11	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-11	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-11	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-11	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-11	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-11	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-11	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-11	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-11	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-11	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-11	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-11	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-11	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-11	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-11	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-11	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-11	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-11	9/16/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-11	9/16/2013	Acetone	ND	10	1.7	14064	ug/L
OW-11	9/16/2013	Chloroform	ND	1	0.47	100	ug/L
OW-11	9/16/2013	Benzene	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-11	9/16/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-11	9/16/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-11	9/16/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-11	9/16/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-11	9/16/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-11	9/16/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-11	9/16/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-11	9/16/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-11	9/16/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-11	9/16/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-11	9/16/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-11	9/16/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-11	9/16/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-11	9/16/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-11	9/16/2013	2-Butanone	ND	10	1	5565	ug/L
OW-11	9/16/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-11	9/16/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-11	9/16/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-11	9/16/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-11	9/16/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-11	9/16/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-11	9/16/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-11	9/16/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-11	9/16/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-11	9/16/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-11	9/16/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-11	9/16/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-11	9/16/2013	Styrene	ND	1	0.58	100	ug/L
OW-11	9/16/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-11	9/16/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-11	9/16/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-11	9/16/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-11	9/16/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-11	9/16/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-11	9/16/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-11	9/16/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-11	9/16/2013	Toluene	ND	1	0.44	1000	ug/L
OW-11	9/16/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-11	9/16/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-11	9/16/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-11	9/16/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-11	9/16/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-11	9/16/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-11	9/16/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-11	9/16/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-11	9/16/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-11	9/16/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-11	9/16/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-11	9/16/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-11	9/16/2013	MTBE	ND	1	0.77	143	ug/L
OW-11	9/16/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-11	9/16/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-11	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-11	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-11	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-11	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-11	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-11	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-11	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-11	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-11	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-11	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-11	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-11	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-11	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-11	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-11	9/12/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-11	9/12/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-11	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-11	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-11	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-11	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-11	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-11	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-11	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-11	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-11	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-11	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-11	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-11	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-11	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-11	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-11	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-11	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-11	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-11	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-11	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-11	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-11	9/12/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-11	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-11	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-11	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-11	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-11	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-11	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-11	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-11	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-11	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-11	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-11	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-11	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-11	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-11	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-11	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-11	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-11	9/12/2014	MTBE	ND	1	0.25	143	ug/L
OW-11	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-11	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-11	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-11	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
OW-11	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
OW-11	8/17/2015	Benzene	ND	1	0.065	5	ug/L
OW-11	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-11	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-11	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-11	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-11	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-11	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-11	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-11	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-11	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-11	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-11	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-11	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-11	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-11	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-11	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-11	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-11	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-11	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-11	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-11	8/17/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-11	8/17/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-11	8/17/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-11	8/17/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-11	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-11	8/17/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-11	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-11	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-11	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-11	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-11	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-11	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-11	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-11	8/17/2015	Styrene	ND	1	0.11	100	ug/L
OW-11	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-11	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-11	8/17/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-11	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-11	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-11	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-11	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-11	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
OW-11	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-11	8/17/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-11	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-11	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-11	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-11	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-11	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-11	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-11	8/17/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-11	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-11	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-11	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-11	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-11	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-11	8/17/2015	MTBE	ND	1	0.17	143	ug/L
OW-11	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-11	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-11	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-11	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-11	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-11	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-11	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-11	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-11	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-11	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-11	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-11	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-11	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-11	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-11	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-11	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-11	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-11	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-11	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-11	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-11	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-11	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-11	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-11	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-11	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-11	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-11	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-11	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-11	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-11	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-11	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-11	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-11	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-11	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-11	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-11	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-11	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-11	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-11	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-11	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-11	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-11	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-11	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-11	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-11	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-11	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-11	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-11	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-11	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-11	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-11	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-11	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-11	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-11	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-11	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-11	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-11	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-11	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-11	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-11	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-11	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-11	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-11	9/9/2016	MTBE	ND	1	0.21	143	ug/L
OW-11	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-11	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-11	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-11	9/18/2017	Acetone	5.9	10	0.82	14064	ug/L
OW-11	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
OW-11	9/18/2017	Benzene	ND	1	0.062	5	ug/L
OW-11	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-11	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-11	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-11	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-11	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-11	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-11	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-11	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-11	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-11	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-11	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-11	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-11	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-11	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-11	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-11	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-11	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-11	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-11	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-11	9/18/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-11	9/18/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-11	9/18/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-11	9/18/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-11	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/18/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-11	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-11	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-11	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-11	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-11	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-11	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-11	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-11	9/18/2017	Styrene	ND	1	0.16	100	ug/L
OW-11	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-11	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-11	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-11	9/18/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-11	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-11	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-11	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-11	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-11	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-11	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
OW-11	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-11	9/18/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-11	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-11	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-11	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-11	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-11	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-11	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-11	9/18/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-11	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-11	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-11	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-11	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-11	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-11	9/18/2017	MTBE	ND	1	0.24	143	ug/L
OW-11	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-11	9/18/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-11	9/18/2018	Acetone	ND	10	0.79	14064	ug/L
OW-11	9/18/2018	Chloroform	ND	1	0.4	100	ug/L
OW-11	9/18/2018	Benzene	ND	1	0.17	5	ug/L
OW-11	9/18/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-11	9/18/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-11	9/18/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-11	9/18/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-11	9/18/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-11	9/18/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-11	9/18/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-11	9/18/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-11	9/18/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-11	9/18/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-11	9/18/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	9/18/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-11	9/18/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-11	9/18/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-11	9/18/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-11	9/18/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-11	9/18/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-11	9/18/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-11	9/18/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-11	9/18/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-11	9/18/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-11	9/18/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-11	9/18/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-11	9/18/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-11	9/18/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/18/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-11	9/18/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-11	9/18/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-11	9/18/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-11	9/18/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-11	9/18/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-11	9/18/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-11	9/18/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-11	9/18/2018	Styrene	ND	1	0.25	100	ug/L
OW-11	9/18/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-11	9/18/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	9/18/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-11	9/18/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-11	9/18/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-11	9/18/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-11	9/18/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-11	9/18/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-11	9/18/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-11	9/18/2018	Toluene	ND	1	0.17	1000	ug/L
OW-11	9/18/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-11	9/18/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-11	9/18/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-11	9/18/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-11	9/18/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-11	9/18/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-11	9/18/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-11	9/18/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-11	9/18/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-11	9/18/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-11	9/18/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-11	9/18/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-11	9/18/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-11	9/18/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-11	9/18/2018	MTBE	ND	1	0.32	143	ug/L
OW-11	9/18/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-11	9/18/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-11	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-11	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-11	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-11	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-11	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-11	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-11	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-11	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-11	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-11	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	8/20/2019	1,2,4-Trimethylbenzene	0.31	1	0.213199	56	ug/L
OW-11	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-11	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-11	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-11	8/20/2019	1,2-Dichloroethane	0.38	1	0.194638	5	ug/L
OW-11	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-11	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-11	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-11	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-11	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-11	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-11	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-11	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-11	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-11	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-11	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-11	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-11	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-11	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-11	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-11	8/20/2019	Benzene	0.48	1	0.166639	5	ug/L
OW-11	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-11	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-11	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-11	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-11	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-11	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-11	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-11	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-11	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-11	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-11	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-11	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-11	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-11	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-11	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-11	8/20/2019	Ethylbenzene	0.41	1	0.132341	700	ug/L
OW-11	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-11	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-11	8/20/2019	MTBE	ND	1	0.456095	143	ug/L
OW-11	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-11	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-11	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-11	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-11	8/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-11	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
OW-11	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-11	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-11	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-11	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-11	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-11	8/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-11	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-11	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-11	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-11	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-11	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-11	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-11	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-11	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-11	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-11	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-11	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-11	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-11	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-11	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-11	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-11	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-11	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-11	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-11	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-11	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-11	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-11	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-11	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-11	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-11	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-11	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-11	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-11	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-11	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-11	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-11	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-11	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-11	9/20/2020	Benzene	ND	1	0.23	5	ug/L
OW-11	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-11	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-11	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-11	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-11	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-11	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-11	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-11	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-11	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-11	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-11	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-11	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-11	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-11	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-11	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-11	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-11	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-11	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-11	9/20/2020	MTBE	ND	1	0.39	143	ug/L
OW-11	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-11	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-11	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-11	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-11	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-11	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-11	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-11	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-11	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-11	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-11	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-11	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-11	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-11	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-12	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-12	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-12	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-12	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-12	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-12	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-12	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-12	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-12	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-12	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-12	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-12	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-12	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-12	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-12	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-12	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-12	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-12	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-12	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-12	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-12	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-12	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-12	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-12	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-12	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-12	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-12	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-12	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-12	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-12	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-12	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-12	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-12	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-12	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-12	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-12	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-12	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-12	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-12	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-12	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-12	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-12	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-12	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-12	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-12	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-12	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-12	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-12	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-12	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-12	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-12	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-12	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-12	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-12	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-12	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-12	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-12	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-12	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
OW-12	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
OW-12	9/10/2013	Benzene	ND	1	0.46	5	ug/L
OW-12	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-12	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-12	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-12	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-12	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-12	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-12	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-12	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-12	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-12	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-12	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-12	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-12	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-12	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-12	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-12	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
OW-12	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-12	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-12	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-12	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-12	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-12	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-12	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-12	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-12	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-12	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-12	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-12	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-12	9/10/2013	Styrene	ND	1	0.58	100	ug/L
OW-12	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-12	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-12	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-12	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-12	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-12	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-12	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-12	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-12	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
OW-12	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-12	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-12	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-12	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-12	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-12	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-12	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-12	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-12	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-12	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-12	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-12	9/10/2013	MTBE	ND	1	0.77	143	ug/L
OW-12	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-12	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-12	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-12	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-12	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-12	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-12	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-12	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-12	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-12	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-12	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-12	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-12	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-12	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-12	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-12	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-12	9/12/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-12	9/12/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-12	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-12	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-12	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-12	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-12	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-12	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-12	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-12	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-12	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-12	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-12	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-12	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-12	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-12	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-12	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-12	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-12	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-12	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-12	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-12	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-12	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-12	9/12/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-12	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-12	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-12	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-12	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-12	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-12	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-12	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-12	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-12	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-12	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-12	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-12	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-12	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-12	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-12	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-12	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-12	9/12/2014	MTBE	ND	1	0.25	143	ug/L
OW-12	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-12	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-12	8/13/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-12	8/13/2015	Acetone	ND	10	0.94	14064	ug/L
OW-12	8/13/2015	Chloroform	ND	1	0.21	100	ug/L
OW-12	8/13/2015	Benzene	ND	1	0.065	5	ug/L
OW-12	8/13/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-12	8/13/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-12	8/13/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-12	8/13/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-12	8/13/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-12	8/13/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-12	8/13/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-12	8/13/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-12	8/13/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/13/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-12	8/13/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	8/13/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-12	8/13/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-12	8/13/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-12	8/13/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-12	8/13/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-12	8/13/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-12	8/13/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-12	8/13/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-12	8/13/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-12	8/13/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-12	8/13/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-12	8/13/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-12	8/13/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-12	8/13/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-12	8/13/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-12	8/13/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-12	8/13/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-12	8/13/2015	Styrene	ND	1	0.11	100	ug/L
OW-12	8/13/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-12	8/13/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	8/13/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-12	8/13/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-12	8/13/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-12	8/13/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-12	8/13/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-12	8/13/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-12	8/13/2015	Toluene	ND	1	0.11	1000	ug/L
OW-12	8/13/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-12	8/13/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-12	8/13/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-12	8/13/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-12	8/13/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-12	8/13/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-12	8/13/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-12	8/13/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-12	8/13/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-12	8/13/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-12	8/13/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-12	8/13/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-12	8/13/2015	MTBE	ND	1	0.17	143	ug/L
OW-12	8/13/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-12	8/13/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-12	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-12	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
OW-12	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
OW-12	9/8/2016	Benzene	ND	1	0.096	5	ug/L
OW-12	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-12	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-12	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-12	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-12	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-12	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-12	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-12	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-12	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-12	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-12	9/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-12	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-12	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-12	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-12	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-12	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-12	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-12	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-12	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-12	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-12	9/8/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-12	9/8/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-12	9/8/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-12	9/8/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-12	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/8/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-12	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-12	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-12	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-12	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-12	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-12	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-12	9/8/2016	Styrene	ND	1	0.11	100	ug/L
OW-12	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-12	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-12	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-12	9/8/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-12	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-12	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-12	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-12	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-12	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-12	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
OW-12	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-12	9/8/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-12	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-12	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-12	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-12	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-12	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-12	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-12	9/8/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-12	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-12	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-12	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-12	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-12	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-12	9/8/2016	MTBE	ND	1	0.21	143	ug/L
OW-12	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-12	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-12	9/19/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-12	9/19/2017	Acetone	1.8	10	0.82	14064	ug/L
OW-12	9/19/2017	Chloroform	ND	1	0.4	100	ug/L
OW-12	9/19/2017	Benzene	ND	1	0.062	5	ug/L
OW-12	9/19/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-12	9/19/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-12	9/19/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-12	9/19/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-12	9/19/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-12	9/19/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-12	9/19/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-12	9/19/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-12	9/19/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-12	9/19/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-12	9/19/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	9/19/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-12	9/19/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-12	9/19/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-12	9/19/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-12	9/19/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-12	9/19/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-12	9/19/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-12	9/19/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-12	9/19/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-12	9/19/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-12	9/19/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-12	9/19/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-12	9/19/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-12	9/19/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/19/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-12	9/19/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-12	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-12	9/19/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-12	9/19/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-12	9/19/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-12	9/19/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-12	9/19/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-12	9/19/2017	Styrene	ND	1	0.16	100	ug/L
OW-12	9/19/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-12	9/19/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-12	9/19/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-12	9/19/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-12	9/19/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-12	9/19/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-12	9/19/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-12	9/19/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-12	9/19/2017	Toluene	ND	1	0.064	1000	ug/L
OW-12	9/19/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-12	9/19/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-12	9/19/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-12	9/19/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-12	9/19/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-12	9/19/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-12	9/19/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-12	9/19/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-12	9/19/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-12	9/19/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-12	9/19/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-12	9/19/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-12	9/19/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-12	9/19/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-12	9/19/2017	MTBE	ND	1	0.24	143	ug/L
OW-12	9/19/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-12	9/19/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-12	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-12	9/19/2018	Acetone	4.2	10	0.79	14064	ug/L
OW-12	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
OW-12	9/19/2018	Benzene	ND	1	0.17	5	ug/L
OW-12	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-12	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-12	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-12	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-12	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-12	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-12	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-12	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-12	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-12	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-12	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-12	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-12	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-12	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-12	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-12	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-12	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-12	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-12	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-12	9/19/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-12	9/19/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-12	9/19/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-12	9/19/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-12	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/19/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-12	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-12	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-12	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-12	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-12	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-12	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-12	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-12	9/19/2018	Styrene	ND	1	0.25	100	ug/L
OW-12	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-12	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-12	9/19/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-12	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-12	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-12	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-12	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-12	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-12	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
OW-12	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-12	9/19/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-12	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-12	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-12	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-12	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-12	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-12	9/19/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-12	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-12	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-12	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-12	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-12	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-12	9/19/2018	MTBE	0.51	1	0.32	143	ug/L
OW-12	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-12	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-12	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-12	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-12	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-12	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-12	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-12	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-12	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-12	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-12	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-12	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-12	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-12	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-12	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-12	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-12	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-12	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-12	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-12	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-12	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-12	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-12	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-12	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-12	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-12	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-12	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-12	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-12	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-12	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-12	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-12	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-12	9/17/2020	Benzene	**29**	1	0.23	5	ug/L
OW-12	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-12	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-12	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-12	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-12	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-12	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-12	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-12	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-12	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-12	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-12	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-12	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-12	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-12	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-12	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-12	9/17/2020	Ethylbenzene	1.9	1	0.21	700	ug/L
OW-12	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-12	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-12	9/17/2020	MTBE	1.5	1	0.39	143	ug/L
OW-12	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-12	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-12	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-12	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-12	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-12	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-12	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-12	9/17/2020	Toluene	31	1	0.2	1000	ug/L
OW-12	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-12	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-12	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-12	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-12	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-12	9/17/2020	Xylenes, Total	6.7	1.5	0.55	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-13	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-13	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-13	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-13	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-13	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-13	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-13	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-13	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-13	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-13	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-13	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-13	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-13	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-13	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-13	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-13	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-13	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-13	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-13	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-13	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-13	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-13	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-13	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-13	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-13	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-13	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-13	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-13	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-13	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-13	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-13	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-13	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-13	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-13	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-13	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-13	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-13	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-13	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-13	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-13	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-13	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-13	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-13	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-13	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-13	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-13	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-13	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-13	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-13	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-13	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-13	3/21/2012	MTBE	8.2	1	0.52	143	ug/L
OW-13	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-13	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-13	6/14/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	6/14/2012	Acetone	ND	10	2.1	14064	ug/L
OW-13	6/14/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	6/14/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	6/14/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	6/14/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	6/14/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-13	6/14/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	6/14/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-13	6/14/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	6/14/2012	Methylene Chloride	ND	3	0.35	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/14/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-13	6/14/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	6/14/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	6/14/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	6/14/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	6/14/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	6/14/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	6/14/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	6/14/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	6/14/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	6/14/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-13	6/14/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	6/14/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	6/14/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	6/14/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-13	6/14/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-13	6/14/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	6/14/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	6/14/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	6/14/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	6/14/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-13	6/14/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	6/14/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	6/14/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	6/14/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	6/14/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	6/14/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	6/14/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-13	6/14/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	6/14/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	6/14/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	6/14/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	6/14/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	6/14/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	6/14/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	6/14/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	6/14/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	6/14/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	6/14/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	6/14/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	6/14/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	6/14/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	6/14/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	6/14/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	6/14/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	6/14/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	6/14/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	6/14/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	6/14/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	6/14/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	6/14/2012	MTBE	7.9	1	0.96	143	ug/L
OW-13	6/14/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	6/14/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-13	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-13	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-13	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-13	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-13	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-13	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-13	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-13	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	8/23/2012	MTBE	9.2	1	0.96	143	ug/L
OW-13	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-13	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-13	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-13	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-13	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-13	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-13	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-13	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-13	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	11/27/2012	MTBE	11	1	0.96	143	ug/L
OW-13	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-13	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-13	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-13	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-13	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-13	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-13	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-13	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-13	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-13	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-13	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-13	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-13	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-13	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-13	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-13	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	3/19/2013	MTBE	12	1	0.77	143	ug/L
OW-13	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	6/13/2013	MTBE	15	1	0.77	143	ug/L
OW-13	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	9/4/2013	MTBE	14	1	0.77	143	ug/L
OW-13	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	11/11/2013	MTBE	17	1	0.77	143	ug/L
OW-13	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	3/7/2014	MTBE	23	1	0.25	143	ug/L
OW-13	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	6/3/2014	MTBE	20	1	0.25	143	ug/L
OW-13	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	9/15/2014	MTBE	23	1	0.25	143	ug/L
OW-13	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	11/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	11/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	11/10/2014	MTBE	27	1	0.25	143	ug/L
OW-13	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	3/9/2015	MTBE	26	1	0.17	143	ug/L
OW-13	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	6/1/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	6/1/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	6/1/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	6/1/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	6/1/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	6/1/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	6/1/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	6/1/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	6/1/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	6/1/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	6/1/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	6/1/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	6/1/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	6/1/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	6/1/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	6/1/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	6/1/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	6/1/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	6/1/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	6/1/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	6/1/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	6/1/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	6/1/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	6/1/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	6/1/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	6/1/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	6/1/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	6/1/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	6/1/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	6/1/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	6/1/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	6/1/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	6/1/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	6/1/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	6/1/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	6/1/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	6/1/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	6/1/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	6/1/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	6/1/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	6/1/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	6/1/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	6/1/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	6/1/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	6/1/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	6/1/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	6/1/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	6/1/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	6/1/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	6/1/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	6/1/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	6/1/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	6/1/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	6/1/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	6/1/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	6/1/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	6/1/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	6/1/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	6/1/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	6/1/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	6/1/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	6/1/2015	MTBE	25	1	0.17	143	ug/L
OW-13	6/1/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	6/1/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	8/11/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	8/11/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	8/11/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	8/11/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	8/11/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	8/11/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	8/11/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	8/11/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	8/11/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	8/11/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	8/11/2015	MTBE	31	1	0.17	143	ug/L
OW-13	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	10/27/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	10/27/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	10/27/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	10/27/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	10/27/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	10/27/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	10/27/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	10/27/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	10/27/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	10/27/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	10/27/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	10/27/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	10/27/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	10/27/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	10/27/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	10/27/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	10/27/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	10/27/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	10/27/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	10/27/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	10/27/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	10/27/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	10/27/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	10/27/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	10/27/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	10/27/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	10/27/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	10/27/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	10/27/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	10/27/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	10/27/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	10/27/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	10/27/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	10/27/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	10/27/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	10/27/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	10/27/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	10/27/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	10/27/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	10/27/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	10/27/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	10/27/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	10/27/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	10/27/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	10/27/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	10/27/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	10/27/2015	Toluene	1.3	1	0.11	1000	ug/L
OW-13	10/27/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	10/27/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	10/27/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	10/27/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	10/27/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	10/27/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	10/27/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	10/27/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	10/27/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	10/27/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	10/27/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	10/27/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	10/27/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	10/27/2015	Xylenes, Total	1.6	1.5	0.28	620	ug/L
OW-13	10/27/2015	MTBE	35	1	0.17	143	ug/L
OW-13	10/27/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	10/27/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	3/4/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	3/4/2016	Acetone	ND	10	0.88	14064	ug/L
OW-13	3/4/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	3/4/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	3/4/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-13	3/4/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	3/4/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	3/4/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	3/4/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-13	3/4/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-13	3/4/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-13	3/4/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	3/4/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	3/4/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-13	3/4/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	3/4/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-13	3/4/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-13	3/4/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-13	3/4/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-13	3/4/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-13	3/4/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-13	3/4/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	3/4/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-13	3/4/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	3/4/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	3/4/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	3/4/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-13	3/4/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	3/4/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	3/4/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	3/4/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-13	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/4/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-13	3/4/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-13	3/4/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-13	3/4/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	3/4/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	3/4/2016	Styrene	ND	1	0.095	100	ug/L
OW-13	3/4/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	3/4/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	3/4/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	3/4/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	3/4/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	3/4/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-13	3/4/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-13	3/4/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	3/4/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-13	3/4/2016	Toluene	ND	1	0.089	1000	ug/L
OW-13	3/4/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-13	3/4/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/4/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	3/4/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	3/4/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	3/4/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	3/4/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	3/4/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	3/4/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	3/4/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	3/4/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-13	3/4/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-13	3/4/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	3/4/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	3/4/2016	MTBE	35	1	0.21	143	ug/L
OW-13	3/4/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	3/4/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-13	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	6/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	6/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	6/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/6/2016	1,2-Dichloroethane	0.75	1	0.12	5	ug/L
OW-13	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	6/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	6/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	6/6/2016	MTBE	36	1	0.21	143	ug/L
OW-13	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	8/31/2016	Benzene	0.13	1	0.096	5	ug/L
OW-13	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	8/31/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	8/31/2016	1,2-Dichloroethane	0.79	1	0.12	5	ug/L
OW-13	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	8/31/2016	MTBE	38	1	0.21	143	ug/L
OW-13	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	11/15/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	11/15/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	11/15/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	11/15/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	11/15/2016	1,2-Dichloroethane	0.76	1	0.12	5	ug/L
OW-13	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	11/15/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	11/15/2016	MTBE	44	1	0.21	143	ug/L
OW-13	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-13	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-13	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-13	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	2/27/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	2/27/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-13	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-13	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	2/27/2017	1,2-Dichloroethane	0.85	1	0.12	5	ug/L
OW-13	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-13	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	2/27/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	2/27/2017	MTBE	53	1	0.21	143	ug/L
OW-13	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	5/31/2017	Acetone	3.6	10	0.82	14064	ug/L
OW-13	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	5/31/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	5/31/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	5/31/2017	1,2-Dichloroethane	0.84	1	0.4	5	ug/L
OW-13	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	5/31/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-13	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	5/31/2017	MTBE	58	1	0.24	143	ug/L
OW-13	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	9/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	9/6/2017	Acetone	ND	10	0.82	14064	ug/L
OW-13	9/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	9/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	9/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	9/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	9/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	9/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	9/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	9/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	9/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	9/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	9/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	9/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	9/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	9/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	9/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	9/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	9/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	9/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	9/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	9/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	9/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	9/6/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	9/6/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	9/6/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	9/6/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	9/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	9/6/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	9/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	9/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	9/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	9/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	9/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	9/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	9/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	9/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	9/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	9/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	9/6/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	9/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	9/6/2017	1,2-Dichloroethane	0.77	1	0.4	5	ug/L
OW-13	9/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	9/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	9/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	9/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	9/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	9/6/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	9/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	9/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	9/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	9/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	9/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	9/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	9/6/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	9/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	9/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	9/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	9/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	9/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	9/6/2017	MTBE	56	1	0.24	143	ug/L
OW-13	9/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	9/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	12/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	12/11/2017	Acetone	3.6	10	0.82	14064	ug/L
OW-13	12/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	12/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	12/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	12/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	12/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	12/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	12/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	12/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	12/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	12/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	12/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	12/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	12/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	12/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	12/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	12/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	12/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	12/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	12/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	12/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	12/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	12/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	12/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	12/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	12/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	12/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	12/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	12/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	12/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	12/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	12/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	12/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	12/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	12/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	12/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	12/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	12/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	12/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	12/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	12/11/2017	1,2-Dichloroethane	0.87	1	0.4	5	ug/L
OW-13	12/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	12/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	12/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	12/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	12/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	12/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	12/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	12/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	12/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	12/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	12/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	12/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	12/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	12/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	12/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	12/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	12/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	12/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	12/11/2017	MTBE	56	1	0.24	143	ug/L
OW-13	12/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	12/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	2/28/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	2/28/2018	Acetone	1.2	10	0.82	14064	ug/L
OW-13	2/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	2/28/2018	Benzene	ND	1	0.062	5	ug/L
OW-13	2/28/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	2/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	2/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	2/28/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	2/28/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	2/28/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	2/28/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	2/28/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	2/28/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	2/28/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	2/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	2/28/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	2/28/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	2/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	2/28/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	2/28/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	2/28/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	2/28/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	2/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	2/28/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	2/28/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	2/28/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	2/28/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-13	2/28/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	2/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	2/28/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	2/28/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	2/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	2/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	2/28/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	2/28/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	2/28/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	2/28/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	2/28/2018	Styrene	ND	1	0.16	100	ug/L
OW-13	2/28/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	2/28/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	2/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	2/28/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	2/28/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/28/2018	1,2-Dichloroethane	0.77	1	0.4	5	ug/L
OW-13	2/28/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	2/28/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	2/28/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	2/28/2018	Toluene	ND	1	0.064	1000	ug/L
OW-13	2/28/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	2/28/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	2/28/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	2/28/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	2/28/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	2/28/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	2/28/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	2/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	2/28/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	2/28/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	2/28/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	2/28/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	2/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	2/28/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	2/28/2018	MTBE	58	1	0.24	143	ug/L
OW-13	2/28/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	2/28/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-13	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-13	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	5/15/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-13	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-13	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-13	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-13	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	5/15/2018	MTBE	68	1	0.24	143	ug/L
OW-13	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-13	9/11/2018	Acetone	4.5	10	0.79	14064	ug/L
OW-13	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-13	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-13	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-13	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-13	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-13	9/11/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-13	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-13	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-13	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-13	9/11/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	9/11/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-13	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-13	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-13	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-13	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-13	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-13	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-13	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-13	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-13	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-13	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-13	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-13	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-13	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-13	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-13	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-13	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-13	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-13	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-13	9/11/2018	1,2-Dichloroethane	0.76	1	0.4	5	ug/L
OW-13	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-13	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-13	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-13	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-13	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-13	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-13	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-13	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-13	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-13	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-13	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-13	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-13	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-13	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-13	9/11/2018	MTBE	75	1	0.32	143	ug/L
OW-13	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-13	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	11/6/2018	Acetone	ND	10	0.76	14064	ug/L
OW-13	11/6/2018	Chloroform	ND	1	0.24	100	ug/L
OW-13	11/6/2018	Benzene	ND	1	0.17	5	ug/L
OW-13	11/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-13	11/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-13	11/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-13	11/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-13	11/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-13	11/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-13	11/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-13	11/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-13	11/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-13	11/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-13	11/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-13	11/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-13	11/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-13	11/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-13	11/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-13	11/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	11/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-13	11/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-13	11/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	11/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	11/6/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-13	11/6/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-13	11/6/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-13	11/6/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-13	11/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-13	11/6/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-13	11/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-13	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-13	11/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-13	11/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-13	11/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-13	11/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-13	11/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-13	11/6/2018	Styrene	ND	1	0.25	100	ug/L
OW-13	11/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-13	11/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	11/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-13	11/6/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-13	11/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-13	11/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-13	11/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-13	11/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-13	11/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-13	11/6/2018	Toluene	ND	1	0.17	1000	ug/L
OW-13	11/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-13	11/6/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	11/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-13	11/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	11/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-13	11/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-13	11/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	11/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-13	11/6/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-13	11/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-13	11/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-13	11/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-13	11/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-13	11/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-13	11/6/2018	MTBE	62	1	0.46	143	ug/L
OW-13	11/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-13	11/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-13	2/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-13	2/5/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-13	2/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-13	2/5/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-13	2/5/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-13	2/5/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-13	2/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	2/5/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-13	2/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-13	2/5/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-13	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-13	2/5/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-13	2/5/2019	1,2-Dichloroethane	0.89	1	0.189525	5	ug/L
OW-13	2/5/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-13	2/5/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-13	2/5/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-13	2/5/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-13	2/5/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-13	2/5/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-13	2/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	2/5/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-13	2/5/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-13	2/5/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-13	2/5/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	2/5/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-13	2/5/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-13	2/5/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-13	2/5/2019	Acetone	ND	10	0.75707	14064	ug/L
OW-13	2/5/2019	Benzene	ND	1	0.174896	5	ug/L
OW-13	2/5/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-13	2/5/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-13	2/5/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-13	2/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	2/5/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-13	2/5/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-13	2/5/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-13	2/5/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-13	2/5/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-13	2/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	2/5/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-13	2/5/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-13	2/5/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-13	2/5/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-13	2/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	2/5/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-13	2/5/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-13	2/5/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-13	2/5/2019	MTBE	80	1	0.456095	143	ug/L
OW-13	2/5/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-13	2/5/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-13	2/5/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-13	2/5/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-13	2/5/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-13	2/5/2019	Styrene	ND	1	0.250146	100	ug/L
OW-13	2/5/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-13	2/5/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-13	2/5/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-13	2/5/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-13	2/5/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-13	2/5/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-13	2/5/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-13	2/5/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-13	2/5/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-13	2/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-13	2/5/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-13	2/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-13	2/5/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-13	2/5/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-13	2/5/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-13	2/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	2/5/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-13	2/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-13	2/5/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-13	2/5/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-13	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-13	2/5/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-13	2/5/2019	1,2-Dichloroethane	0.84	1	0.189525	5	ug/L
OW-13	2/5/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-13	2/5/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-13	2/5/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-13	2/5/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-13	2/5/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-13	2/5/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	2/5/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-13	2/5/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-13	2/5/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-13	2/5/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	2/5/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-13	2/5/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-13	2/5/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-13	2/5/2019	Acetone	ND	10	0.75707	14064	ug/L
OW-13	2/5/2019	Benzene	ND	1	0.174896	5	ug/L
OW-13	2/5/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-13	2/5/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-13	2/5/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-13	2/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	2/5/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-13	2/5/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-13	2/5/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-13	2/5/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-13	2/5/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-13	2/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	2/5/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-13	2/5/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-13	2/5/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-13	2/5/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-13	2/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	2/5/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-13	2/5/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-13	2/5/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-13	2/5/2019	MTBE	84	1	0.456095	143	ug/L
OW-13	2/5/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-13	2/5/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-13	2/5/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-13	2/5/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-13	2/5/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-13	2/5/2019	Styrene	ND	1	0.250146	100	ug/L
OW-13	2/5/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-13	2/5/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-13	2/5/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-13	2/5/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-13	2/5/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-13	2/5/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-13	2/5/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-13	2/5/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-13	2/5/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	ND	0.00959	0.003342	0.05	ug/L
OW-13	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	5/1/2019	1,2-Dichloroethane	0.62	1	0.194638	5	ug/L
OW-13	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/1/2019	Benzene	0.36	1	0.166639	5	ug/L
OW-13	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	5/1/2019	MTBE	82	1	0.456095	143	ug/L
OW-13	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	5/1/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-13	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/12/2019	1,2-Dichloroethane	0.91	1	0.194638	5	ug/L
OW-13	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/12/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-13	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/12/2019	MTBE	94	1	0.456095	143	ug/L
OW-13	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/12/2019	1,2-Dichloroethane	0.96	1	0.194638	5	ug/L
OW-13	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/12/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-13	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/12/2019	MTBE	99	1	0.456095	143	ug/L
OW-13	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-13	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-13	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-13	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
OW-13	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	10/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	10/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	10/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	10/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	10/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	10/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	10/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	10/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	10/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	10/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	10/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	10/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	10/14/2019	1,2-Dichloroethane	0.8	1	0.194638	5	ug/L
OW-13	10/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	10/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	10/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	10/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	10/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	10/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	10/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	10/14/2019	2-Butanone	3.7	10	2.089417	5565	ug/L
OW-13	10/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	10/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	10/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	10/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	10/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	10/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	10/14/2019	Acetone	6.4	10	1.199396	14064	ug/L
OW-13	10/14/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	10/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	10/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	10/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	10/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	10/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	10/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	10/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	10/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	10/14/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	10/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	10/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	10/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	10/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	10/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	10/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	10/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	10/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	10/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	10/14/2019	MTBE	77	1	0.456095	143	ug/L
OW-13	10/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	10/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	10/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	10/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	10/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	10/14/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	10/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	10/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	10/14/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	10/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	10/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	10/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	10/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	10/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	10/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	10/14/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
OW-13	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	3/2/2020	1,2-Dichloroethane	0.75	1	0.22	5	ug/L
OW-13	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-13	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/2/2020	Acetone	3	10	2.3	14064	ug/L
OW-13	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	3/2/2020	MTBE	86	1	0.39	143	ug/L
OW-13	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	3/2/2020	1,2-Dichloroethane	0.74	1	0.22	5	ug/L
OW-13	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-13	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/2/2020	Acetone	3.5	10	2.3	14064	ug/L
OW-13	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	3/2/2020	MTBE	84	1	0.39	143	ug/L
OW-13	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	9/17/2020	1,2-Dichloroethane	0.66	1	0.22	5	ug/L
OW-13	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-13	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	9/17/2020	MTBE	95	1	0.39	143	ug/L
OW-13	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	12/9/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-13	12/9/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
OW-13	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-13	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-13	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-13	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-13	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-13	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-13	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-13	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-13	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-13	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-13	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-13	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-13	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-13	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-13	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-13	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-13	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-13	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-13	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-13	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-13	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-13	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-13	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-13	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-13	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-13	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-13	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-13	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-13	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-13	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-13	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-13	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-13	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-13	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-13	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-13	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-13	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-13	12/9/2020	MTBE	134	1	0.74	143	ug/L
OW-13	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-13	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-13	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-13	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-13	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-13	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-13	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-13	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-13	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-13	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-13	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-13	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-13	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-13	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-13	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-13	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-13	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-13	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-13	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-13	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-13	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-13	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-13	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-13	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-14	3/21/2012	Carbon tetrachloride	*ND*	*10*	2.7	5	ug/L
OW-14	3/21/2012	Acetone	ND	100	21	14064	ug/L
OW-14	3/21/2012	Chloroform	ND	10	4	100	ug/L
OW-14	3/21/2012	Benzene	**2300**	50	12	5	ug/L
OW-14	3/21/2012	1,1,1-Trichloroethane	ND	10	2.4	200	ug/L
OW-14	3/21/2012	Bromomethane	*ND*	*30*	9.8	7.54	ug/L
OW-14	3/21/2012	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	3/21/2012	Dibromomethane	*ND*	*10*	1.5	8	ug/L
OW-14	3/21/2012	Chloroethane	ND	20	7	20857	ug/L
OW-14	3/21/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	3/21/2012	Methylene Chloride	*ND*	*30*	3	5	ug/L
OW-14	3/21/2012	Carbon Disulfide	ND	100	5.4	810	ug/L
OW-14	3/21/2012	Bromoform	ND	10	3.1	32.9	ug/L
OW-14	3/21/2012	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
OW-14	3/21/2012	1,1-Dichloroethane	ND	10	1.7	25	ug/L
OW-14	3/21/2012	1,1-Dichloroethene	*ND*	*10*	2.8	7	ug/L
OW-14	3/21/2012	Trichlorofluoromethane	ND	10	5.2	1137	ug/L
OW-14	3/21/2012	Dichlorodifluoromethane	ND	10	5.5	197	ug/L
OW-14	3/21/2012	1,2-Dichloropropane	*ND*	*10*	3.2	5	ug/L
OW-14	3/21/2012	2-Butanone	ND	100	11	5565	ug/L
OW-14	3/21/2012	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	3/21/2012	Trichloroethene	*ND*	*10*	3.7	5	ug/L
OW-14	3/21/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
OW-14	3/21/2012	1,2,3-Trichlorobenzene	ND	10	1.7	70	ug/L
OW-14	3/21/2012	Hexachlorobutadiene	*ND*	*10*	2.4	1.39	ug/L
OW-14	3/21/2012	1-Methylnaphthalene	ND	40	20	NA	ug/L
OW-14	3/21/2012	Naphthalene	ND	20	5.3	30	ug/L
OW-14	3/21/2012	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	3/21/2012	2-Chlorotoluene	ND	10	1.7	233	ug/L
OW-14	3/21/2012	1,2-Dichlorobenzene	ND	10	1.4	600	ug/L
OW-14	3/21/2012	1,2,4-Trimethylbenzene	ND	10	3.4	56	ug/L
OW-14	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.8	0.0033	ug/L
OW-14	3/21/2012	1,2,3-Trichloropropane	*ND*	*20*	1.8	0.0084	ug/L
OW-14	3/21/2012	tert-Butylbenzene	ND	10	2.3	690	ug/L
OW-14	3/21/2012	Isopropylbenzene	ND	10	1.9	447	ug/L
OW-14	3/21/2012	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
OW-14	3/21/2012	Ethylbenzene	51	10	1.1	700	ug/L
OW-14	3/21/2012	Styrene	ND	10	1.5	100	ug/L
OW-14	3/21/2012	n-Propylbenzene	ND	10	2	660	ug/L
OW-14	3/21/2012	n-Butylbenzene	ND	10	1.9	1000	ug/L
OW-14	3/21/2012	4-Chlorotoluene	ND	10	1.8	250	ug/L
OW-14	3/21/2012	1,4-Dichlorobenzene	ND	10	2.2	75	ug/L
OW-14	3/21/2012	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
OW-14	3/21/2012	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
OW-14	3/21/2012	4-Methyl-2-Pentanone	ND	100	5.5	1243	ug/L
OW-14	3/21/2012	1,3,5-Trimethylbenzene	ND	10	2.1	60	ug/L
OW-14	3/21/2012	Bromobenzene	ND	10	2.3	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/21/2012	Toluene	ND	10	1.7	1000	ug/L
OW-14	3/21/2012	Chlorobenzene	ND	10	1.2	77.6	ug/L
OW-14	3/21/2012	1,2,4-Trichlorobenzene	ND	10	2.3	70	ug/L
OW-14	3/21/2012	Dibromochloromethane	*ND*	*10*	0.94	1.68	ug/L
OW-14	3/21/2012	Tetrachloroethene	*ND*	*10*	3.9	5	ug/L
OW-14	3/21/2012	sec-Butylbenzene	ND	10	2.2	2000	ug/L
OW-14	3/21/2012	1,3-Dichloropropane	ND	10	1.5	370	ug/L
OW-14	3/21/2012	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
OW-14	3/21/2012	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
OW-14	3/21/2012	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
OW-14	3/21/2012	1,1-Dichloropropene	ND	10	2.7	NA	ug/L
OW-14	3/21/2012	2-Hexanone	*ND*	*100*	7.8	38	ug/L
OW-14	3/21/2012	2,2-Dichloropropane	ND	20	3.1	NA	ug/L
OW-14	3/21/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	0.71	5.74	ug/L
OW-14	3/21/2012	Xylenes, Total	ND	15	2	620	ug/L
OW-14	3/21/2012	MTBE	**1400**	10	5.2	143	ug/L
OW-14	3/21/2012	cis-1,3-Dichloropropene	ND	10	1.5	NA	ug/L
OW-14	3/21/2012	trans-1,3-Dichloropropene	ND	10	2.5	NA	ug/L
OW-14	6/14/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	6/14/2012	Acetone	ND	100	21	14064	ug/L
OW-14	6/14/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	6/14/2012	Benzene	**2600**	50	20	5	ug/L
OW-14	6/14/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	6/14/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	6/14/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
OW-14	6/14/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	6/14/2012	Chloroethane	ND	20	4.7	20857	ug/L
OW-14	6/14/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	6/14/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	6/14/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
OW-14	6/14/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	6/14/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	6/14/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	6/14/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	6/14/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	6/14/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	6/14/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	6/14/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	6/14/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	6/14/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	6/14/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	6/14/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	6/14/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	6/14/2012	1-Methylnaphthalene	ND	40	20	NA	ug/L
OW-14	6/14/2012	Naphthalene	ND	20	5.3	30	ug/L
OW-14	6/14/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	6/14/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	6/14/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	6/14/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	6/14/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	6/14/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	6/14/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	6/14/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	6/14/2012	Ethylbenzene	53	10	3.8	700	ug/L
OW-14	6/14/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	6/14/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	6/14/2012	n-Butylbenzene	ND	10	4	1000	ug/L
OW-14	6/14/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	6/14/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	6/14/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	6/14/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	6/14/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	6/14/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	6/14/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	6/14/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	6/14/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	6/14/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	6/14/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	6/14/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	6/14/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	6/14/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	6/14/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	6/14/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	6/14/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	6/14/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/14/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	6/14/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	6/14/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	6/14/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	6/14/2012	MTBE	**1200**	10	9.6	143	ug/L
OW-14	6/14/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	6/14/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	8/23/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	8/23/2012	Acetone	ND	100	15	14064	ug/L
OW-14	8/23/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	8/23/2012	Benzene	**2100**	50	20	5	ug/L
OW-14	8/23/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	8/23/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	8/23/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
OW-14	8/23/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	8/23/2012	Chloroethane	ND	20	4.4	20857	ug/L
OW-14	8/23/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	8/23/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	8/23/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
OW-14	8/23/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	8/23/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	8/23/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	8/23/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	8/23/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	8/23/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	8/23/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	8/23/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	8/23/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	8/23/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	8/23/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	8/23/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	8/23/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	8/23/2012	1-Methylnaphthalene	ND	40	7.2	NA	ug/L
OW-14	8/23/2012	Naphthalene	ND	20	3.7	30	ug/L
OW-14	8/23/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	8/23/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	8/23/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	8/23/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	8/23/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	8/23/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	8/23/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	8/23/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	8/23/2012	Ethylbenzene	37	10	3.8	700	ug/L
OW-14	8/23/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	8/23/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	8/23/2012	n-Butylbenzene	ND	30	4	1000	ug/L
OW-14	8/23/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	8/23/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	8/23/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	8/23/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	8/23/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	8/23/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	8/23/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	8/23/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	8/23/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	8/23/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	8/23/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	8/23/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	8/23/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	8/23/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	8/23/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	8/23/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	8/23/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	8/23/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
OW-14	8/23/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	8/23/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	8/23/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	8/23/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	8/23/2012	MTBE	**1600**	10	9.6	143	ug/L
OW-14	8/23/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	8/23/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	11/27/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	11/27/2012	Acetone	ND	100	15	14064	ug/L
OW-14	11/27/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	11/27/2012	Benzene	**2700**	100	40	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/27/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	11/27/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	11/27/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
OW-14	11/27/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	11/27/2012	Chloroethane	ND	20	4.4	20857	ug/L
OW-14	11/27/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	11/27/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	11/27/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
OW-14	11/27/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	11/27/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	11/27/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	11/27/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	11/27/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	11/27/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	11/27/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	11/27/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	11/27/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	11/27/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	11/27/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	11/27/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	11/27/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	11/27/2012	1-Methylnaphthalene	ND	40	7.2	NA	ug/L
OW-14	11/27/2012	Naphthalene	ND	20	3.7	30	ug/L
OW-14	11/27/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	11/27/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	11/27/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	11/27/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	11/27/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	11/27/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	11/27/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	11/27/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	11/27/2012	Ethylbenzene	56	10	3.8	700	ug/L
OW-14	11/27/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	11/27/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	11/27/2012	n-Butylbenzene	ND	30	4	1000	ug/L
OW-14	11/27/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	11/27/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	11/27/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	11/27/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	11/27/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	11/27/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	11/27/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	11/27/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	11/27/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	11/27/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	11/27/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	11/27/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	11/27/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	11/27/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	11/27/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	11/27/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	11/27/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	11/27/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
OW-14	11/27/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	11/27/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	11/27/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	11/27/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	11/27/2012	MTBE	**1400**	10	9.6	143	ug/L
OW-14	11/27/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	11/27/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	3/19/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
OW-14	3/19/2013	Acetone	ND	100	23	14064	ug/L
OW-14	3/19/2013	Chloroform	ND	10	4.7	100	ug/L
OW-14	3/19/2013	Benzene	**2800**	100	52	5	ug/L
OW-14	3/19/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
OW-14	3/19/2013	Bromomethane	*ND*	*30*	8.5	7.54	ug/L
OW-14	3/19/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
OW-14	3/19/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
OW-14	3/19/2013	Chloroethane	ND	20	5.7	20857	ug/L
OW-14	3/19/2013	Vinyl Chloride	*ND*	*10*	3.3	2	ug/L
OW-14	3/19/2013	Methylene Chloride	*ND*	*30*	4.2	5	ug/L
OW-14	3/19/2013	Carbon Disulfide	ND	100	8	810	ug/L
OW-14	3/19/2013	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	3/19/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
OW-14	3/19/2013	1,1-Dichloroethane	ND	10	4.8	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/19/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
OW-14	3/19/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
OW-14	3/19/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
OW-14	3/19/2013	1,2-Dichloropropane	*ND*	*10*	5.5	5	ug/L
OW-14	3/19/2013	2-Butanone	ND	100	10	5565	ug/L
OW-14	3/19/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
OW-14	3/19/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
OW-14	3/19/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
OW-14	3/19/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
OW-14	3/19/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
OW-14	3/19/2013	1-Methylnaphthalene	ND	40	6.1	NA	ug/L
OW-14	3/19/2013	Naphthalene	ND	20	3.4	30	ug/L
OW-14	3/19/2013	2-Methylnaphthalene	*ND*	*40*	5.7		ug/L
OW-14	3/19/2013	2-Chlorotoluene	ND	10	5	233	ug/L
OW-14	3/19/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
OW-14	3/19/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
OW-14	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.3	0.0033	ug/L
OW-14	3/19/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
OW-14	3/19/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
OW-14	3/19/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
OW-14	3/19/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
OW-14	3/19/2013	Ethylbenzene	65	10	4.5	700	ug/L
OW-14	3/19/2013	Styrene	ND	10	56	100	ug/L
OW-14	3/19/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
OW-14	3/19/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
OW-14	3/19/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
OW-14	3/19/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
OW-14	3/19/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
OW-14	3/19/2013	1,2-Dichloroethane	*ND*	*10*	3.8	5	ug/L
OW-14	3/19/2013	4-Methyl-2-Pentanone	ND	100	8.9	1243	ug/L
OW-14	3/19/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
OW-14	3/19/2013	Bromobenzene	ND	10	5.7	62	ug/L
OW-14	3/19/2013	Toluene	ND	10	4.4	1000	ug/L
OW-14	3/19/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
OW-14	3/19/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L
OW-14	3/19/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
OW-14	3/19/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
OW-14	3/19/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
OW-14	3/19/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
OW-14	3/19/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
OW-14	3/19/2013	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
OW-14	3/19/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
OW-14	3/19/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	3/19/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
OW-14	3/19/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
OW-14	3/19/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
OW-14	3/19/2013	Xylenes, Total	ND	15	14	620	ug/L
OW-14	3/19/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-14	3/19/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
OW-14	3/19/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	6/13/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
OW-14	6/13/2013	Acetone	ND	100	17	14064	ug/L
OW-14	6/13/2013	Chloroform	ND	10	4.7	100	ug/L
OW-14	6/13/2013	Benzene	**3400**	50	23	5	ug/L
OW-14	6/13/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
OW-14	6/13/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
OW-14	6/13/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
OW-14	6/13/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
OW-14	6/13/2013	Chloroethane	ND	20	3	20857	ug/L
OW-14	6/13/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
OW-14	6/13/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	6/13/2013	Carbon Disulfide	ND	100	8	810	ug/L
OW-14	6/13/2013	Bromoform	ND	10	3.7	32.9	ug/L
OW-14	6/13/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
OW-14	6/13/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
OW-14	6/13/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
OW-14	6/13/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
OW-14	6/13/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
OW-14	6/13/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
OW-14	6/13/2013	2-Butanone	ND	100	10	5565	ug/L
OW-14	6/13/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
OW-14	6/13/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
OW-14	6/13/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
OW-14	6/13/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
OW-14	6/13/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
OW-14	6/13/2013	1-Methylnaphthalene	ND	40	4.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/13/2013	Naphthalene	ND	20	2.9	30	ug/L
OW-14	6/13/2013	2-Methylnaphthalene	*ND*	*40*	3.9		ug/L
OW-14	6/13/2013	2-Chlorotoluene	ND	10	5	233	ug/L
OW-14	6/13/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
OW-14	6/13/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
OW-14	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
OW-14	6/13/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
OW-14	6/13/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
OW-14	6/13/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
OW-14	6/13/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
OW-14	6/13/2013	Ethylbenzene	73	10	4.5	700	ug/L
OW-14	6/13/2013	Styrene	ND	10	5.8	100	ug/L
OW-14	6/13/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
OW-14	6/13/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
OW-14	6/13/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
OW-14	6/13/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
OW-14	6/13/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
OW-14	6/13/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
OW-14	6/13/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
OW-14	6/13/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
OW-14	6/13/2013	Bromobenzene	ND	10	5.7	62	ug/L
OW-14	6/13/2013	Toluene	ND	10	4.4	1000	ug/L
OW-14	6/13/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
OW-14	6/13/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L
OW-14	6/13/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
OW-14	6/13/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
OW-14	6/13/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
OW-14	6/13/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
OW-14	6/13/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
OW-14	6/13/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
OW-14	6/13/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
OW-14	6/13/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	6/13/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
OW-14	6/13/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
OW-14	6/13/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
OW-14	6/13/2013	Xylenes, Total	ND	15	14	620	ug/L
OW-14	6/13/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-14	6/13/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
OW-14	6/13/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	9/4/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-14	9/4/2013	Acetone	ND	50	8.6	14064	ug/L
OW-14	9/4/2013	Chloroform	ND	5	2.3	100	ug/L
OW-14	9/4/2013	Benzene	**2600**	50	23	5	ug/L
OW-14	9/4/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-14	9/4/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OW-14	9/4/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OW-14	9/4/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-14	9/4/2013	Chloroethane	ND	10	1.5	20857	ug/L
OW-14	9/4/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OW-14	9/4/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-14	9/4/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-14	9/4/2013	Bromoform	ND	5	1.9	32.9	ug/L
OW-14	9/4/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-14	9/4/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OW-14	9/4/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-14	9/4/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-14	9/4/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-14	9/4/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OW-14	9/4/2013	2-Butanone	ND	50	5	5565	ug/L
OW-14	9/4/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-14	9/4/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-14	9/4/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-14	9/4/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-14	9/4/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-14	9/4/2013	1-Methylnaphthalene	24	20	2.1	NA	ug/L
OW-14	9/4/2013	Naphthalene	ND	10	1.5	30	ug/L
OW-14	9/4/2013	2-Methylnaphthalene	*ND*	*20*	1.9		ug/L
OW-14	9/4/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-14	9/4/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-14	9/4/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-14	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OW-14	9/4/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-14	9/4/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-14	9/4/2013	Isopropylbenzene	6	5	2.6	447	ug/L
OW-14	9/4/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-14	9/4/2013	Ethylbenzene	63	5	2.2	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/4/2013	Styrene	ND	5	2.9	100	ug/L
OW-14	9/4/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-14	9/4/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-14	9/4/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-14	9/4/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-14	9/4/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-14	9/4/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OW-14	9/4/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OW-14	9/4/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-14	9/4/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-14	9/4/2013	Toluene	ND	5	2.2	1000	ug/L
OW-14	9/4/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-14	9/4/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-14	9/4/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-14	9/4/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-14	9/4/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-14	9/4/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-14	9/4/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-14	9/4/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-14	9/4/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-14	9/4/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	9/4/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-14	9/4/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-14	9/4/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-14	9/4/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OW-14	9/4/2013	MTBE	**940**	5	3.8	143	ug/L
OW-14	9/4/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-14	9/4/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	11/11/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-14	11/11/2013	Acetone	ND	50	8.6	14064	ug/L
OW-14	11/11/2013	Chloroform	ND	5	2.3	100	ug/L
OW-14	11/11/2013	Benzene	**3300**	50	23	5	ug/L
OW-14	11/11/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-14	11/11/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OW-14	11/11/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OW-14	11/11/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-14	11/11/2013	Chloroethane	ND	10	1.5	20857	ug/L
OW-14	11/11/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OW-14	11/11/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-14	11/11/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-14	11/11/2013	Bromoform	ND	5	1.9	32.9	ug/L
OW-14	11/11/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-14	11/11/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OW-14	11/11/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-14	11/11/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-14	11/11/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-14	11/11/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OW-14	11/11/2013	2-Butanone	ND	50	5	5565	ug/L
OW-14	11/11/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-14	11/11/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-14	11/11/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-14	11/11/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-14	11/11/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-14	11/11/2013	1-Methylnaphthalene	27	20	2.1	NA	ug/L
OW-14	11/11/2013	Naphthalene	ND	10	1.5	30	ug/L
OW-14	11/11/2013	2-Methylnaphthalene	*ND*	*20*	1.9		ug/L
OW-14	11/11/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-14	11/11/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-14	11/11/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-14	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OW-14	11/11/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-14	11/11/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-14	11/11/2013	Isopropylbenzene	6.6	5	2.6	447	ug/L
OW-14	11/11/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-14	11/11/2013	Ethylbenzene	130	5	2.2	700	ug/L
OW-14	11/11/2013	Styrene	ND	5	2.9	100	ug/L
OW-14	11/11/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-14	11/11/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-14	11/11/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-14	11/11/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-14	11/11/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-14	11/11/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OW-14	11/11/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OW-14	11/11/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-14	11/11/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-14	11/11/2013	Toluene	46	5	2.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/11/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-14	11/11/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-14	11/11/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-14	11/11/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-14	11/11/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-14	11/11/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-14	11/11/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-14	11/11/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-14	11/11/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-14	11/11/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	11/11/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-14	11/11/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-14	11/11/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-14	11/11/2013	Xylenes, Total	19	7.5	7.2	620	ug/L
OW-14	11/11/2013	MTBE	**1100**	50	38	143	ug/L
OW-14	11/11/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-14	11/11/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	3/7/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
OW-14	3/7/2014	Acetone	ND	100	49	14064	ug/L
OW-14	3/7/2014	Chloroform	ND	10	3.2	100	ug/L
OW-14	3/7/2014	Benzene	**4000**	50	7.7	5	ug/L
OW-14	3/7/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
OW-14	3/7/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
OW-14	3/7/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	3/7/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
OW-14	3/7/2014	Chloroethane	ND	20	4.8	20857	ug/L
OW-14	3/7/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
OW-14	3/7/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
OW-14	3/7/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
OW-14	3/7/2014	Bromoform	ND	10	2.5	32.9	ug/L
OW-14	3/7/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
OW-14	3/7/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
OW-14	3/7/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
OW-14	3/7/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	3/7/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
OW-14	3/7/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
OW-14	3/7/2014	2-Butanone	ND	100	14	5565	ug/L
OW-14	3/7/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	3/7/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
OW-14	3/7/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
OW-14	3/7/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
OW-14	3/7/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
OW-14	3/7/2014	1-Methylnaphthalene	ND	40	4.4	NA	ug/L
OW-14	3/7/2014	Naphthalene	ND	20	1.4	30	ug/L
OW-14	3/7/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	3/7/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
OW-14	3/7/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
OW-14	3/7/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
OW-14	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
OW-14	3/7/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
OW-14	3/7/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
OW-14	3/7/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
OW-14	3/7/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
OW-14	3/7/2014	Ethylbenzene	140	10	1.3	700	ug/L
OW-14	3/7/2014	Styrene	ND	10	1.2	100	ug/L
OW-14	3/7/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
OW-14	3/7/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
OW-14	3/7/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
OW-14	3/7/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
OW-14	3/7/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
OW-14	3/7/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
OW-14	3/7/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
OW-14	3/7/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
OW-14	3/7/2014	Bromobenzene	ND	10	1.8	62	ug/L
OW-14	3/7/2014	Toluene	26	10	1.7	1000	ug/L
OW-14	3/7/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
OW-14	3/7/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
OW-14	3/7/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
OW-14	3/7/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
OW-14	3/7/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
OW-14	3/7/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
OW-14	3/7/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	3/7/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
OW-14	3/7/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
OW-14	3/7/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
OW-14	3/7/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/7/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
OW-14	3/7/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
OW-14	3/7/2014	Xylenes, Total	32	15	3.8	620	ug/L
OW-14	3/7/2014	MTBE	**1100**	10	2.5	143	ug/L
OW-14	3/7/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
OW-14	3/7/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
OW-14	6/3/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	6/3/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
OW-14	6/3/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
OW-14	6/3/2014	2-Butanone	ND	200	28	5565	ug/L
OW-14	6/3/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
OW-14	6/3/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
OW-14	6/3/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
OW-14	6/3/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
OW-14	6/3/2014	Hexachlorobutadiene	*ND*	*20*	5.6	1.39	ug/L
OW-14	6/3/2014	1-Methylnaphthalene	ND	80	8.8	NA	ug/L
OW-14	6/3/2014	Naphthalene	*ND*	*40*	2.7	30	ug/L
OW-14	6/3/2014	2-Methylnaphthalene	*ND*	*80*	11		ug/L
OW-14	6/3/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-14	6/3/2014	1,2-Dichlorobenzene	ND	20	2.6	600	ug/L
OW-14	6/3/2014	1,2,4-Trimethylbenzene	ND	20	2.5	56	ug/L
OW-14	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
OW-14	6/3/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
OW-14	6/3/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
OW-14	6/3/2014	Isopropylbenzene	ND	20	3.2	447	ug/L
OW-14	6/3/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
OW-14	6/3/2014	Ethylbenzene	120	20	2.5	700	ug/L
OW-14	6/3/2014	Styrene	ND	20	2.3	100	ug/L
OW-14	6/3/2014	n-Propylbenzene	ND	20	2.8	660	ug/L
OW-14	6/3/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
OW-14	6/3/2014	4-Chlorotoluene	ND	20	17	250	ug/L
OW-14	6/3/2014	1,4-Dichlorobenzene	ND	20	5.1	75	ug/L
OW-14	6/3/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
OW-14	6/3/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
OW-14	6/3/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
OW-14	6/3/2014	1,3,5-Trimethylbenzene	ND	20	2.6	60	ug/L
OW-14	6/3/2014	Bromobenzene	ND	20	3.6	62	ug/L
OW-14	6/3/2014	Toluene	ND	20	3.4	1000	ug/L
OW-14	6/3/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
OW-14	6/3/2014	1,2,4-Trichlorobenzene	ND	20	6	70	ug/L
OW-14	6/3/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
OW-14	6/3/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
OW-14	6/3/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
OW-14	6/3/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-14	6/3/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
OW-14	6/3/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
OW-14	6/3/2014	1,3-Dichlorobenzene	ND	20	3.5	N/A	ug/L
OW-14	6/3/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
OW-14	6/3/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-14	6/3/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
OW-14	6/3/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
OW-14	6/3/2014	Xylenes, Total	ND	30	7.5	620	ug/L
OW-14	6/3/2014	MTBE	**930**	20	5	143	ug/L
OW-14	6/3/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
OW-14	6/3/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
OW-14	6/3/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
OW-14	6/3/2014	Acetone	ND	200	99	14064	ug/L
OW-14	6/3/2014	Chloroform	ND	20	6.3	100	ug/L
OW-14	6/3/2014	Benzene	**3700**	200	31	5	ug/L
OW-14	6/3/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
OW-14	6/3/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
OW-14	6/3/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
OW-14	6/3/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
OW-14	6/3/2014	Chloroethane	ND	40	9.5	20857	ug/L
OW-14	6/3/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
OW-14	6/3/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
OW-14	6/3/2014	Carbon Disulfide	ND	200	15	810	ug/L
OW-14	6/3/2014	Bromoform	ND	20	5	32.9	ug/L
OW-14	6/3/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
OW-14	6/3/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
OW-14	6/3/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
OW-14	9/15/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
OW-14	9/15/2014	Acetone	ND	200	99	14064	ug/L
OW-14	9/15/2014	Chloroform	ND	20	6.3	100	ug/L
OW-14	9/15/2014	Benzene	**3800**	200	31	5	ug/L
OW-14	9/15/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/15/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
OW-14	9/15/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
OW-14	9/15/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
OW-14	9/15/2014	Chloroethane	ND	40	9.5	20857	ug/L
OW-14	9/15/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
OW-14	9/15/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
OW-14	9/15/2014	Carbon Disulfide	ND	200	15	810	ug/L
OW-14	9/15/2014	Bromoform	ND	20	5	32.9	ug/L
OW-14	9/15/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
OW-14	9/15/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
OW-14	9/15/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
OW-14	9/15/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	9/15/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
OW-14	9/15/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
OW-14	9/15/2014	2-Butanone	ND	200	28	5565	ug/L
OW-14	9/15/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
OW-14	9/15/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
OW-14	9/15/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
OW-14	9/15/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
OW-14	9/15/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-14	9/15/2014	1,2,4-Trimethylbenzene	ND	20	2.5	56	ug/L
OW-14	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
OW-14	9/15/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
OW-14	9/15/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
OW-14	9/15/2014	Isopropylbenzene	ND	20	3.2	447	ug/L
OW-14	9/15/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
OW-14	9/15/2014	Ethylbenzene	160	20	2.5	700	ug/L
OW-14	9/15/2014	Styrene	ND	20	2.3	100	ug/L
OW-14	9/15/2014	n-Propylbenzene	ND	20	2.8	660	ug/L
OW-14	9/15/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
OW-14	9/15/2014	4-Chlorotoluene	ND	20	17	250	ug/L
OW-14	9/15/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
OW-14	9/15/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
OW-14	9/15/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
OW-14	9/15/2014	1,3,5-Trimethylbenzene	ND	20	2.6	60	ug/L
OW-14	9/15/2014	Bromobenzene	ND	20	3.6	62	ug/L
OW-14	9/15/2014	Toluene	ND	20	3.4	1000	ug/L
OW-14	9/15/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
OW-14	9/15/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
OW-14	9/15/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
OW-14	9/15/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
OW-14	9/15/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-14	9/15/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
OW-14	9/15/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
OW-14	9/15/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
OW-14	9/15/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-14	9/15/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
OW-14	9/15/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
OW-14	9/15/2014	Xylenes, Total	ND	30	7.5	620	ug/L
OW-14	9/15/2014	MTBE	**820**	20	5	143	ug/L
OW-14	9/15/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
OW-14	9/15/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
OW-14	11/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
OW-14	11/10/2014	Acetone	ND	100	49	14064	ug/L
OW-14	11/10/2014	Chloroform	ND	10	3.2	100	ug/L
OW-14	11/10/2014	Benzene	**3600**	100	15	5	ug/L
OW-14	11/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
OW-14	11/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
OW-14	11/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	11/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
OW-14	11/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
OW-14	11/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
OW-14	11/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
OW-14	11/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
OW-14	11/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
OW-14	11/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
OW-14	11/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
OW-14	11/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
OW-14	11/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	11/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
OW-14	11/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
OW-14	11/10/2014	2-Butanone	ND	100	14	5565	ug/L
OW-14	11/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	11/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
OW-14	11/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
OW-14	11/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/10/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
OW-14	11/10/2014	1-Methylnaphthalene	44	40	4.4	NA	ug/L
OW-14	11/10/2014	Naphthalene	ND	20	1.4	30	ug/L
OW-14	11/10/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	11/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
OW-14	11/10/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
OW-14	11/10/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
OW-14	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
OW-14	11/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
OW-14	11/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
OW-14	11/10/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
OW-14	11/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
OW-14	11/10/2014	Ethylbenzene	170	10	1.3	700	ug/L
OW-14	11/10/2014	Styrene	ND	10	1.2	100	ug/L
OW-14	11/10/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
OW-14	11/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
OW-14	11/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
OW-14	11/10/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
OW-14	11/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
OW-14	11/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
OW-14	11/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
OW-14	11/10/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
OW-14	11/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
OW-14	11/10/2014	Toluene	15	10	1.7	1000	ug/L
OW-14	11/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
OW-14	11/10/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
OW-14	11/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
OW-14	11/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
OW-14	11/10/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
OW-14	11/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
OW-14	11/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	11/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
OW-14	11/10/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
OW-14	11/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
OW-14	11/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
OW-14	11/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
OW-14	11/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
OW-14	11/10/2014	Xylenes, Total	ND	15	3.8	620	ug/L
OW-14	11/10/2014	MTBE	**810**	10	2.5	143	ug/L
OW-14	11/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
OW-14	11/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
OW-14	3/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	3/9/2015	Acetone	ND	200	19	14064	ug/L
OW-14	3/9/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	3/9/2015	Benzene	**3900**	200	13	5	ug/L
OW-14	3/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	3/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	3/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	3/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	3/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	3/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	3/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	3/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	3/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	3/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	3/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	3/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	3/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	3/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	3/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	3/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	3/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	3/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	3/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	3/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	3/9/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	3/9/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	3/9/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	3/9/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	3/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	3/9/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	3/9/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	3/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	3/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	3/9/2015	Isopropylbenzene	ND	20	3	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	3/9/2015	Ethylbenzene	160	20	2	700	ug/L
OW-14	3/9/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	3/9/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	3/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	3/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	3/9/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	3/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	3/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	3/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	3/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
OW-14	3/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	3/9/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	3/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	3/9/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	3/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	3/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	3/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	3/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	3/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	3/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	3/9/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	3/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	3/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	3/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	3/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	3/9/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	3/9/2015	MTBE	**760**	20	3.5	143	ug/L
OW-14	3/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	3/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	6/1/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	6/1/2015	Acetone	ND	200	19	14064	ug/L
OW-14	6/1/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	6/1/2015	Benzene	**4600**	200	13	5	ug/L
OW-14	6/1/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	6/1/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	6/1/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	6/1/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	6/1/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	6/1/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	6/1/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	6/1/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	6/1/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	6/1/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	6/1/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	6/1/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	6/1/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	6/1/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	6/1/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	6/1/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	6/1/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	6/1/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	6/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	6/1/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	6/1/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	6/1/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	6/1/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	6/1/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	6/1/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	6/1/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	6/1/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	6/1/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	6/1/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	6/1/2015	Isopropylbenzene	ND	20	3	447	ug/L
OW-14	6/1/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	6/1/2015	Ethylbenzene	160	20	2	700	ug/L
OW-14	6/1/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	6/1/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	6/1/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	6/1/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	6/1/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	6/1/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	6/1/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	6/1/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	6/1/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/1/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	6/1/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	6/1/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	6/1/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	6/1/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	6/1/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	6/1/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	6/1/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	6/1/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	6/1/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	6/1/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	6/1/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	6/1/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	6/1/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	6/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	6/1/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	6/1/2015	MTBE	**740**	20	3.5	143	ug/L
OW-14	6/1/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	6/1/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	8/10/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
OW-14	8/10/2015	Acetone	ND	100	9.4	14064	ug/L
OW-14	8/10/2015	Chloroform	ND	10	2.1	100	ug/L
OW-14	8/10/2015	Benzene	**5400**	100	6.5	5	ug/L
OW-14	8/10/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
OW-14	8/10/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
OW-14	8/10/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
OW-14	8/10/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
OW-14	8/10/2015	Chloroethane	ND	20	1	20857	ug/L
OW-14	8/10/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
OW-14	8/10/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
OW-14	8/10/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
OW-14	8/10/2015	Bromoform	ND	10	1.6	32.9	ug/L
OW-14	8/10/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
OW-14	8/10/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-14	8/10/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
OW-14	8/10/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	8/10/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
OW-14	8/10/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
OW-14	8/10/2015	2-Butanone	ND	100	3.6	5565	ug/L
OW-14	8/10/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
OW-14	8/10/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
OW-14	8/10/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
OW-14	8/10/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-14	8/10/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
OW-14	8/10/2015	1-Methylnaphthalene	ND	40	5.4	NA	ug/L
OW-14	8/10/2015	Naphthalene	ND	20	2.2	30	ug/L
OW-14	8/10/2015	2-Methylnaphthalene	*ND*	*40*	5.9		ug/L
OW-14	8/10/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
OW-14	8/10/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
OW-14	8/10/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
OW-14	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
OW-14	8/10/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
OW-14	8/10/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
OW-14	8/10/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
OW-14	8/10/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
OW-14	8/10/2015	Ethylbenzene	160	10	1	700	ug/L
OW-14	8/10/2015	Styrene	ND	10	1.1	100	ug/L
OW-14	8/10/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
OW-14	8/10/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
OW-14	8/10/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
OW-14	8/10/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
OW-14	8/10/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-14	8/10/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
OW-14	8/10/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
OW-14	8/10/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-14	8/10/2015	Bromobenzene	ND	10	1.1	62	ug/L
OW-14	8/10/2015	Toluene	ND	10	1.1	1000	ug/L
OW-14	8/10/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
OW-14	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
OW-14	8/10/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
OW-14	8/10/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
OW-14	8/10/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
OW-14	8/10/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-14	8/10/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
OW-14	8/10/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
OW-14	8/10/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/10/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
OW-14	8/10/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
OW-14	8/10/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
OW-14	8/10/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	8/10/2015	Xylenes, Total	ND	15	2.8	620	ug/L
OW-14	8/10/2015	MTBE	**780**	10	1.7	143	ug/L
OW-14	8/10/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	8/10/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	10/27/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	10/27/2015	Acetone	ND	200	19	14064	ug/L
OW-14	10/27/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	10/27/2015	Benzene	**6200**	100	6.5	5	ug/L
OW-14	10/27/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	10/27/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	10/27/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	10/27/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	10/27/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	10/27/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	10/27/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	10/27/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	10/27/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	10/27/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	10/27/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	10/27/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	10/27/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	10/27/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	10/27/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	10/27/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	10/27/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	10/27/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	10/27/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	10/27/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	10/27/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	10/27/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	10/27/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	10/27/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	10/27/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	10/27/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	10/27/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	10/27/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	10/27/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	10/27/2015	Isopropylbenzene	ND	20	3	447	ug/L
OW-14	10/27/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	10/27/2015	Ethylbenzene	150	20	2	700	ug/L
OW-14	10/27/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	10/27/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	10/27/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	10/27/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	10/27/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	10/27/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	10/27/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	10/27/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	10/27/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
OW-14	10/27/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	10/27/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	10/27/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	10/27/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	10/27/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	10/27/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	10/27/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	10/27/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	10/27/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	10/27/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	10/27/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	10/27/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	10/27/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	10/27/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	10/27/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	10/27/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	10/27/2015	MTBE	**570**	20	3.5	143	ug/L
OW-14	10/27/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	10/27/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	3/4/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-14	3/4/2016	Acetone	ND	500	44	14064	ug/L
OW-14	3/4/2016	Chloroform	ND	50	4.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/4/2016	Benzene	**6500**	500	48	5	ug/L
OW-14	3/4/2016	1,1,1-Trichloroethane	ND	50	3.2	200	ug/L
OW-14	3/4/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-14	3/4/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-14	3/4/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-14	3/4/2016	Chloroethane	ND	100	7.3	20857	ug/L
OW-14	3/4/2016	Vinyl Chloride	*ND*	*50*	3.2	2	ug/L
OW-14	3/4/2016	Methylene Chloride	*ND*	*150*	3.1	5	ug/L
OW-14	3/4/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-14	3/4/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-14	3/4/2016	Bromodichloromethane	*ND*	*50*	4.9	1.34	ug/L
OW-14	3/4/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-14	3/4/2016	1,1-Dichloroethene	*ND*	*50*	3.8	7	ug/L
OW-14	3/4/2016	Trichlorofluoromethane	ND	50	4.4	1137	ug/L
OW-14	3/4/2016	Dichlorodifluoromethane	ND	50	16	197	ug/L
OW-14	3/4/2016	1,2-Dichloropropane	*ND*	*50*	2.4	5	ug/L
OW-14	3/4/2016	2-Butanone	ND	500	16	5565	ug/L
OW-14	3/4/2016	1,1,2-Trichloroethane	*ND*	*50*	3.8	5	ug/L
OW-14	3/4/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-14	3/4/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	5.3	10	ug/L
OW-14	3/4/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-14	3/4/2016	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-14	3/4/2016	1-Methylnaphthalene	ND	200	10	NA	ug/L
OW-14	3/4/2016	Naphthalene	*ND*	*100*	4.2	30	ug/L
OW-14	3/4/2016	2-Methylnaphthalene	*ND*	*200*	7.9		ug/L
OW-14	3/4/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	3/4/2016	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-14	3/4/2016	1,2,4-Trimethylbenzene	ND	50	5.2	56	ug/L
OW-14	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	7.7	0.0033	ug/L
OW-14	3/4/2016	1,2,3-Trichloropropane	*ND*	*100*	5.6	0.0084	ug/L
OW-14	3/4/2016	tert-Butylbenzene	ND	50	4.8	690	ug/L
OW-14	3/4/2016	Isopropylbenzene	ND	50	4.9	447	ug/L
OW-14	3/4/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-14	3/4/2016	Ethylbenzene	230	50	5.6	700	ug/L
OW-14	3/4/2016	Styrene	ND	50	4.8	100	ug/L
OW-14	3/4/2016	n-Propylbenzene	ND	50	6.6	660	ug/L
OW-14	3/4/2016	n-Butylbenzene	ND	150	8	1000	ug/L
OW-14	3/4/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-14	3/4/2016	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-14	3/4/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-14	3/4/2016	1,2-Dichloroethane	*ND*	*50*	2.6	5	ug/L
OW-14	3/4/2016	4-Methyl-2-Pentanone	ND	500	7.5	1243	ug/L
OW-14	3/4/2016	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-14	3/4/2016	Bromobenzene	ND	50	4	62	ug/L
OW-14	3/4/2016	Toluene	ND	50	4.5	1000	ug/L
OW-14	3/4/2016	Chlorobenzene	ND	50	5.2	77.6	ug/L
OW-14	3/4/2016	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-14	3/4/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-14	3/4/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	3/4/2016	sec-Butylbenzene	ND	50	5.4	2000	ug/L
OW-14	3/4/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-14	3/4/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-14	3/4/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-14	3/4/2016	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-14	3/4/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-14	3/4/2016	2-Hexanone	*ND*	*500*	18	38	ug/L
OW-14	3/4/2016	2,2-Dichloropropane	ND	100	6	NA	ug/L
OW-14	3/4/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-14	3/4/2016	Xylenes, Total	ND	75	16	620	ug/L
OW-14	3/4/2016	MTBE	**680**	50	11	143	ug/L
OW-14	3/4/2016	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
OW-14	3/4/2016	trans-1,3-Dichloropropene	ND	50	4.2	NA	ug/L
OW-14	6/6/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	6/6/2016	Acetone	ND	100	49	14064	ug/L
OW-14	6/6/2016	Chloroform	ND	10	0.89	100	ug/L
OW-14	6/6/2016	Benzene	**7800**	100	9.6	5	ug/L
OW-14	6/6/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-14	6/6/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-14	6/6/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-14	6/6/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-14	6/6/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-14	6/6/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-14	6/6/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-14	6/6/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-14	6/6/2016	Bromoform	ND	10	1	32.9	ug/L
OW-14	6/6/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/6/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-14	6/6/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-14	6/6/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-14	6/6/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-14	6/6/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-14	6/6/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-14	6/6/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-14	6/6/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-14	6/6/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-14	6/6/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-14	6/6/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-14	6/6/2016	1-Methylnaphthalene	33	40	2	NA	ug/L
OW-14	6/6/2016	Naphthalene	19	20	0.93	30	ug/L
OW-14	6/6/2016	2-Methylnaphthalene	**3.3**	40	1.6		ug/L
OW-14	6/6/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	6/6/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-14	6/6/2016	1,2,4-Trimethylbenzene	8	10	1.1	56	ug/L
OW-14	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-14	6/6/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-14	6/6/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-14	6/6/2016	Isopropylbenzene	9.6	10	1	447	ug/L
OW-14	6/6/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-14	6/6/2016	Ethylbenzene	230	10	1.1	700	ug/L
OW-14	6/6/2016	Styrene	ND	10	1.1	100	ug/L
OW-14	6/6/2016	n-Propylbenzene	11	10	1.3	660	ug/L
OW-14	6/6/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-14	6/6/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-14	6/6/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-14	6/6/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-14	6/6/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-14	6/6/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-14	6/6/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
OW-14	6/6/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-14	6/6/2016	Toluene	2.6	10	1.2	1000	ug/L
OW-14	6/6/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	6/6/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-14	6/6/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-14	6/6/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-14	6/6/2016	sec-Butylbenzene	3.1	10	1.2	2000	ug/L
OW-14	6/6/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-14	6/6/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	6/6/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-14	6/6/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-14	6/6/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	6/6/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-14	6/6/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-14	6/6/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	6/6/2016	Xylenes, Total	12	15	3.7	620	ug/L
OW-14	6/6/2016	MTBE	**620**	10	2.1	143	ug/L
OW-14	6/6/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	6/6/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-14	8/31/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-14	8/31/2016	Acetone	ND	50	25	14064	ug/L
OW-14	8/31/2016	Chloroform	ND	5	0.44	100	ug/L
OW-14	8/31/2016	Benzene	**8100**	500	48	5	ug/L
OW-14	8/31/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-14	8/31/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-14	8/31/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-14	8/31/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-14	8/31/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-14	8/31/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-14	8/31/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-14	8/31/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-14	8/31/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-14	8/31/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-14	8/31/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-14	8/31/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-14	8/31/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-14	8/31/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-14	8/31/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-14	8/31/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-14	8/31/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-14	8/31/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-14	8/31/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-14	8/31/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-14	8/31/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/31/2016	1-Methylnaphthalene	34	20	1	NA	ug/L
OW-14	8/31/2016	Naphthalene	18	10	0.46	30	ug/L
OW-14	8/31/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-14	8/31/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-14	8/31/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-14	8/31/2016	1,2,4-Trimethylbenzene	7.1	5	0.55	56	ug/L
OW-14	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-14	8/31/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-14	8/31/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-14	8/31/2016	Isopropylbenzene	8.5	5	0.52	447	ug/L
OW-14	8/31/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-14	8/31/2016	Ethylbenzene	250	5	0.56	700	ug/L
OW-14	8/31/2016	Styrene	ND	5	0.55	100	ug/L
OW-14	8/31/2016	n-Propylbenzene	11	5	0.66	660	ug/L
OW-14	8/31/2016	n-Butylbenzene	1.3	15	0.8	1000	ug/L
OW-14	8/31/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-14	8/31/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-14	8/31/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-14	8/31/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-14	8/31/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-14	8/31/2016	1,3,5-Trimethylbenzene	0.82	5	0.58	60	ug/L
OW-14	8/31/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-14	8/31/2016	Toluene	2.9	5	0.59	1000	ug/L
OW-14	8/31/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-14	8/31/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-14	8/31/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-14	8/31/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-14	8/31/2016	sec-Butylbenzene	2.2	5	0.62	2000	ug/L
OW-14	8/31/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-14	8/31/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-14	8/31/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-14	8/31/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-14	8/31/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-14	8/31/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-14	8/31/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-14	8/31/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-14	8/31/2016	Xylenes, Total	8	7.5	1.8	620	ug/L
OW-14	8/31/2016	MTBE	**580**	5	1.1	143	ug/L
OW-14	8/31/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-14	8/31/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-14	11/15/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	11/15/2016	Acetone	ND	100	49	14064	ug/L
OW-14	11/15/2016	Chloroform	ND	10	0.89	100	ug/L
OW-14	11/15/2016	Benzene	**8700**	100	9.6	5	ug/L
OW-14	11/15/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-14	11/15/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-14	11/15/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-14	11/15/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-14	11/15/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-14	11/15/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-14	11/15/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-14	11/15/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-14	11/15/2016	Bromoform	ND	10	1	32.9	ug/L
OW-14	11/15/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-14	11/15/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-14	11/15/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-14	11/15/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-14	11/15/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-14	11/15/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-14	11/15/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-14	11/15/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-14	11/15/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-14	11/15/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-14	11/15/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-14	11/15/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-14	11/15/2016	1-Methylnaphthalene	30	40	2	NA	ug/L
OW-14	11/15/2016	Naphthalene	20	20	0.93	30	ug/L
OW-14	11/15/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-14	11/15/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	11/15/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-14	11/15/2016	1,2,4-Trimethylbenzene	8.4	10	1.1	56	ug/L
OW-14	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-14	11/15/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-14	11/15/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-14	11/15/2016	Isopropylbenzene	10	10	1	447	ug/L
OW-14	11/15/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/15/2016	Ethylbenzene	300	10	1.1	700	ug/L
OW-14	11/15/2016	Styrene	ND	10	1.1	100	ug/L
OW-14	11/15/2016	n-Propylbenzene	13	10	1.3	660	ug/L
OW-14	11/15/2016	n-Butylbenzene	3.4	30	1.6	1000	ug/L
OW-14	11/15/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-14	11/15/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-14	11/15/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-14	11/15/2016	1,2-Dichloroethane	*3.4*	*10*	1.2	5	ug/L
OW-14	11/15/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-14	11/15/2016	1,3,5-Trimethylbenzene	1.5	10	1.2	60	ug/L
OW-14	11/15/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-14	11/15/2016	Toluene	5.7	10	1.2	1000	ug/L
OW-14	11/15/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	11/15/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-14	11/15/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-14	11/15/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-14	11/15/2016	sec-Butylbenzene	4.1	10	1.2	2000	ug/L
OW-14	11/15/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-14	11/15/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	11/15/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-14	11/15/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-14	11/15/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	11/15/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-14	11/15/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-14	11/15/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	11/15/2016	Xylenes, Total	13	15	3.7	620	ug/L
OW-14	11/15/2016	MTBE	**500**	10	2.1	143	ug/L
OW-14	11/15/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	11/15/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-14	2/27/2017	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-14	2/27/2017	Acetone	ND	500	250	14064	ug/L
OW-14	2/27/2017	Chloroform	ND	50	4.4	100	ug/L
OW-14	2/27/2017	Benzene	**12000**	500	48	5	ug/L
OW-14	2/27/2017	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-14	2/27/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-14	2/27/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-14	2/27/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-14	2/27/2017	Chloroethane	ND	100	9.6	20857	ug/L
OW-14	2/27/2017	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-14	2/27/2017	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-14	2/27/2017	Carbon Disulfide	ND	500	30	810	ug/L
OW-14	2/27/2017	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-14	2/27/2017	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-14	2/27/2017	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-14	2/27/2017	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-14	2/27/2017	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-14	2/27/2017	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-14	2/27/2017	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-14	2/27/2017	2-Butanone	ND	500	37	5565	ug/L
OW-14	2/27/2017	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-14	2/27/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-14	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-14	2/27/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-14	2/27/2017	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-14	2/27/2017	1-Methylnaphthalene	35	200	10	NA	ug/L
OW-14	2/27/2017	Naphthalene	*24*	*100*	4.6	30	ug/L
OW-14	2/27/2017	2-Methylnaphthalene	*ND*	*200*	7.9		ug/L
OW-14	2/27/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	2/27/2017	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-14	2/27/2017	1,2,4-Trimethylbenzene	7.4	50	5.5	56	ug/L
OW-14	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-14	2/27/2017	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-14	2/27/2017	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-14	2/27/2017	Isopropylbenzene	8.3	50	5.2	447	ug/L
OW-14	2/27/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-14	2/27/2017	Ethylbenzene	390	50	5.6	700	ug/L
OW-14	2/27/2017	Styrene	ND	50	5.5	100	ug/L
OW-14	2/27/2017	n-Propylbenzene	14	50	6.6	660	ug/L
OW-14	2/27/2017	n-Butylbenzene	ND	150	8	1000	ug/L
OW-14	2/27/2017	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-14	2/27/2017	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-14	2/27/2017	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-14	2/27/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-14	2/27/2017	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-14	2/27/2017	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-14	2/27/2017	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/27/2017	Toluene	6.2	50	5.9	1000	ug/L
OW-14	2/27/2017	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-14	2/27/2017	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-14	2/27/2017	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-14	2/27/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	2/27/2017	sec-Butylbenzene	ND	50	6.2	2000	ug/L
OW-14	2/27/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-14	2/27/2017	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-14	2/27/2017	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-14	2/27/2017	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-14	2/27/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-14	2/27/2017	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-14	2/27/2017	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-14	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-14	2/27/2017	Xylenes, Total	ND	75	18	620	ug/L
OW-14	2/27/2017	MTBE	**810**	50	11	143	ug/L
OW-14	2/27/2017	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-14	2/27/2017	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-14	5/30/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-14	5/30/2017	Acetone	ND	500	41	14064	ug/L
OW-14	5/30/2017	Chloroform	ND	50	20	100	ug/L
OW-14	5/30/2017	Benzene	**13000**	500	31	5	ug/L
OW-14	5/30/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-14	5/30/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-14	5/30/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-14	5/30/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-14	5/30/2017	Chloroethane	ND	100	12	20857	ug/L
OW-14	5/30/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-14	5/30/2017	Methylene Chloride	**7.3**	150	5.4	5	ug/L
OW-14	5/30/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-14	5/30/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-14	5/30/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-14	5/30/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-14	5/30/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-14	5/30/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-14	5/30/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-14	5/30/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-14	5/30/2017	2-Butanone	ND	500	57	5565	ug/L
OW-14	5/30/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-14	5/30/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-14	5/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-14	5/30/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-14	5/30/2017	Hexachlorobutadiene	*ND*	*50*	40	1.39	ug/L
OW-14	5/30/2017	1-Methylnaphthalene	37	200	8	NA	ug/L
OW-14	5/30/2017	Naphthalene	*28*	*100*	5.7	30	ug/L
OW-14	5/30/2017	2-Methylnaphthalene	*ND*	*200*	7.6		ug/L
OW-14	5/30/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	5/30/2017	1,2-Dichlorobenzene	ND	50	4.5	600	ug/L
OW-14	5/30/2017	1,2,4-Trimethylbenzene	11	50	5.6	56	ug/L
OW-14	5/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-14	5/30/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-14	5/30/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-14	5/30/2017	Isopropylbenzene	14	50	2.6	447	ug/L
OW-14	5/30/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-14	5/30/2017	Ethylbenzene	470	50	4.7	700	ug/L
OW-14	5/30/2017	Styrene	ND	50	7.8	100	ug/L
OW-14	5/30/2017	n-Propylbenzene	21	50	3.7	660	ug/L
OW-14	5/30/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-14	5/30/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-14	5/30/2017	1,4-Dichlorobenzene	ND	50	20	75	ug/L
OW-14	5/30/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-14	5/30/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-14	5/30/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-14	5/30/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-14	5/30/2017	Bromobenzene	ND	50	7	62	ug/L
OW-14	5/30/2017	Toluene	4	50	3.2	1000	ug/L
OW-14	5/30/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-14	5/30/2017	1,2,4-Trichlorobenzene	ND	50	7.1	70	ug/L
OW-14	5/30/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-14	5/30/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-14	5/30/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-14	5/30/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-14	5/30/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-14	5/30/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-14	5/30/2017	Pentafluorobenzene	**500**	0	0		None
OW-14	5/30/2017	1,3-Dichlorobenzene	ND	50	7.6	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/30/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-14	5/30/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-14	5/30/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-14	5/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-14	5/30/2017	Xylenes, Total	20	75	16	620	ug/L
OW-14	5/30/2017	MTBE	**700**	50	12	143	ug/L
OW-14	5/30/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-14	5/30/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-14	9/6/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-14	9/6/2017	Acetone	13	50	4.1	14064	ug/L
OW-14	9/6/2017	Chloroform	ND	5	2	100	ug/L
OW-14	9/6/2017	Benzene	**12000**	100	6.2	5	ug/L
OW-14	9/6/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-14	9/6/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-14	9/6/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-14	9/6/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-14	9/6/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-14	9/6/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-14	9/6/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-14	9/6/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-14	9/6/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-14	9/6/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-14	9/6/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-14	9/6/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-14	9/6/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-14	9/6/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-14	9/6/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-14	9/6/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-14	9/6/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-14	9/6/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-14	9/6/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-14	9/6/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-14	9/6/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-14	9/6/2017	1-Methylnaphthalene	38	20	0.8	NA	ug/L
OW-14	9/6/2017	Naphthalene	**38**	10	0.57	30	ug/L
OW-14	9/6/2017	2-Methylnaphthalene	**1.7**	20	0.76		ug/L
OW-14	9/6/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-14	9/6/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-14	9/6/2017	1,2,4-Trimethylbenzene	12	5	0.56	56	ug/L
OW-14	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-14	9/6/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-14	9/6/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-14	9/6/2017	Isopropylbenzene	14	5	0.26	447	ug/L
OW-14	9/6/2017	p-Isopropyltoluene	1.1	5	0.48	NA	ug/L
OW-14	9/6/2017	Ethylbenzene	540	100	9.3	700	ug/L
OW-14	9/6/2017	Styrene	ND	5	0.78	100	ug/L
OW-14	9/6/2017	n-Propylbenzene	25	5	0.37	660	ug/L
OW-14	9/6/2017	n-Butylbenzene	2.1	15	0.65	1000	ug/L
OW-14	9/6/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-14	9/6/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-14	9/6/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-14	9/6/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-14	9/6/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-14	9/6/2017	1,3,5-Trimethylbenzene	1.6	5	0.44	60	ug/L
OW-14	9/6/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-14	9/6/2017	Toluene	9.1	5	0.32	1000	ug/L
OW-14	9/6/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-14	9/6/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-14	9/6/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-14	9/6/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-14	9/6/2017	sec-Butylbenzene	2.7	5	0.55	2000	ug/L
OW-14	9/6/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-14	9/6/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-14	9/6/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-14	9/6/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-14	9/6/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-14	9/6/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-14	9/6/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-14	9/6/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-14	9/6/2017	Xylenes, Total	33	7.5	1.6	620	ug/L
OW-14	9/6/2017	MTBE	**660**	5	1.2	143	ug/L
OW-14	9/6/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-14	9/6/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-14	12/11/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	12/11/2017	Acetone	ND	100	8.2	14064	ug/L
OW-14	12/11/2017	Chloroform	ND	10	4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	12/11/2017	Benzene	**13000**	1000	62	5	ug/L
OW-14	12/11/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-14	12/11/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-14	12/11/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-14	12/11/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-14	12/11/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-14	12/11/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-14	12/11/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-14	12/11/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-14	12/11/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-14	12/11/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-14	12/11/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-14	12/11/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-14	12/11/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-14	12/11/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-14	12/11/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-14	12/11/2017	2-Butanone	ND	100	11	5565	ug/L
OW-14	12/11/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	12/11/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-14	12/11/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-14	12/11/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-14	12/11/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-14	12/11/2017	1-Methylnaphthalene	33	40	1.6	NA	ug/L
OW-14	12/11/2017	Naphthalene	**37**	20	1.1	30	ug/L
OW-14	12/11/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-14	12/11/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	12/11/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-14	12/11/2017	1,2,4-Trimethylbenzene	13	10	1.1	56	ug/L
OW-14	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-14	12/11/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-14	12/11/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-14	12/11/2017	Isopropylbenzene	16	10	0.51	447	ug/L
OW-14	12/11/2017	p-Isopropyltoluene	1.7	10	0.96	NA	ug/L
OW-14	12/11/2017	Ethylbenzene	640	10	0.93	700	ug/L
OW-14	12/11/2017	Styrene	ND	10	1.6	100	ug/L
OW-14	12/11/2017	n-Propylbenzene	28	10	0.74	660	ug/L
OW-14	12/11/2017	n-Butylbenzene	3	30	1.3	1000	ug/L
OW-14	12/11/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-14	12/11/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-14	12/11/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-14	12/11/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-14	12/11/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-14	12/11/2017	1,3,5-Trimethylbenzene	2.1	10	0.87	60	ug/L
OW-14	12/11/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-14	12/11/2017	Toluene	13	10	0.64	1000	ug/L
OW-14	12/11/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	12/11/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-14	12/11/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-14	12/11/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-14	12/11/2017	sec-Butylbenzene	3.2	10	1.1	2000	ug/L
OW-14	12/11/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-14	12/11/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-14	12/11/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-14	12/11/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-14	12/11/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-14	12/11/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-14	12/11/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-14	12/11/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-14	12/11/2017	Xylenes, Total	52	15	3.2	620	ug/L
OW-14	12/11/2017	MTBE	**630**	10	2.4	143	ug/L
OW-14	12/11/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-14	12/11/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-14	2/27/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-14	2/27/2018	Acetone	ND	1000	82	14064	ug/L
OW-14	2/27/2018	Chloroform	ND	100	40	100	ug/L
OW-14	2/27/2018	Benzene	**14000**	1000	62	5	ug/L
OW-14	2/27/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-14	2/27/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-14	2/27/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-14	2/27/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-14	2/27/2018	Chloroethane	ND	200	23	20857	ug/L
OW-14	2/27/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-14	2/27/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-14	2/27/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-14	2/27/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-14	2/27/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/27/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-14	2/27/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-14	2/27/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-14	2/27/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-14	2/27/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-14	2/27/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-14	2/27/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-14	2/27/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-14	2/27/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-14	2/27/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-14	2/27/2018	Hexachlorobutadiene	*ND*	*100*	80	1.39	ug/L
OW-14	2/27/2018	1-Methylnaphthalene	59	400	16	NA	ug/L
OW-14	2/27/2018	Naphthalene	**44**	200	11	30	ug/L
OW-14	2/27/2018	2-Methylnaphthalene	*ND*	*400*	15		ug/L
OW-14	2/27/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-14	2/27/2018	1,2-Dichlorobenzene	ND	100	9	600	ug/L
OW-14	2/27/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-14	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-14	2/27/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-14	2/27/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-14	2/27/2018	Isopropylbenzene	12	100	5.1	447	ug/L
OW-14	2/27/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-14	2/27/2018	Ethylbenzene	610	100	9.3	700	ug/L
OW-14	2/27/2018	Styrene	ND	100	16	100	ug/L
OW-14	2/27/2018	n-Propylbenzene	32	100	7.4	660	ug/L
OW-14	2/27/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-14	2/27/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-14	2/27/2018	1,4-Dichlorobenzene	*ND*	*100*	40	75	ug/L
OW-14	2/27/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-14	2/27/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-14	2/27/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-14	2/27/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-14	2/27/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-14	2/27/2018	Toluene	6.5	100	6.4	1000	ug/L
OW-14	2/27/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-14	2/27/2018	1,2,4-Trichlorobenzene	*ND*	*100*	14	70	ug/L
OW-14	2/27/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-14	2/27/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-14	2/27/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-14	2/27/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-14	2/27/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-14	2/27/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-14	2/27/2018	1,3-Dichlorobenzene	ND	100	15	N/A	ug/L
OW-14	2/27/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-14	2/27/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-14	2/27/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-14	2/27/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-14	2/27/2018	Xylenes, Total	ND	150	32	620	ug/L
OW-14	2/27/2018	MTBE	**660**	100	24	143	ug/L
OW-14	2/27/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-14	2/27/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-14	5/15/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-14	5/15/2018	Acetone	ND	1000	82	14064	ug/L
OW-14	5/15/2018	Chloroform	ND	100	40	100	ug/L
OW-14	5/15/2018	Benzene	**15000**	1000	62	5	ug/L
OW-14	5/15/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-14	5/15/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-14	5/15/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-14	5/15/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-14	5/15/2018	Chloroethane	ND	200	23	20857	ug/L
OW-14	5/15/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-14	5/15/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-14	5/15/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-14	5/15/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-14	5/15/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-14	5/15/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-14	5/15/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-14	5/15/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-14	5/15/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-14	5/15/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-14	5/15/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-14	5/15/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-14	5/15/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-14	5/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-14	5/15/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-14	5/15/2018	Hexachlorobutadiene	*ND*	*100*	80	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/15/2018	1-Methylnaphthalene	ND	400	16	NA	ug/L
OW-14	5/15/2018	Naphthalene	*ND*	*200*	11	30	ug/L
OW-14	5/15/2018	2-Methylnaphthalene	*ND*	*400*	15		ug/L
OW-14	5/15/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-14	5/15/2018	1,2-Dichlorobenzene	ND	100	9	600	ug/L
OW-14	5/15/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-14	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-14	5/15/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-14	5/15/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-14	5/15/2018	Isopropylbenzene	ND	100	5.1	447	ug/L
OW-14	5/15/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-14	5/15/2018	Ethylbenzene	**710**	100	9.3	700	ug/L
OW-14	5/15/2018	Styrene	ND	100	16	100	ug/L
OW-14	5/15/2018	n-Propylbenzene	ND	100	7.4	660	ug/L
OW-14	5/15/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-14	5/15/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-14	5/15/2018	1,4-Dichlorobenzene	*ND*	*100*	40	75	ug/L
OW-14	5/15/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-14	5/15/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-14	5/15/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-14	5/15/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-14	5/15/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-14	5/15/2018	Toluene	ND	100	6.4	1000	ug/L
OW-14	5/15/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-14	5/15/2018	1,2,4-Trichlorobenzene	*ND*	*100*	14	70	ug/L
OW-14	5/15/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-14	5/15/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-14	5/15/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-14	5/15/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-14	5/15/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-14	5/15/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-14	5/15/2018	1,3-Dichlorobenzene	ND	100	15	N/A	ug/L
OW-14	5/15/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-14	5/15/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-14	5/15/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-14	5/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-14	5/15/2018	Xylenes, Total	ND	150	32	620	ug/L
OW-14	5/15/2018	MTBE	**670**	100	24	143	ug/L
OW-14	5/15/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-14	5/15/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-14	9/11/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
OW-14	9/11/2018	Acetone	ND	500	39	14064	ug/L
OW-14	9/11/2018	Chloroform	ND	50	20	100	ug/L
OW-14	9/11/2018	Benzene	**17000**	500	87	5	ug/L
OW-14	9/11/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
OW-14	9/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-14	9/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-14	9/11/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-14	9/11/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-14	9/11/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
OW-14	9/11/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-14	9/11/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-14	9/11/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-14	9/11/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-14	9/11/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-14	9/11/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-14	9/11/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
OW-14	9/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-14	9/11/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
OW-14	9/11/2018	2-Butanone	ND	500	63	5565	ug/L
OW-14	9/11/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-14	9/11/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-14	9/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-14	9/11/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-14	9/11/2018	Hexachlorobutadiene	*ND*	*50*	40	1.39	ug/L
OW-14	9/11/2018	1-Methylnaphthalene	26	200	17	NA	ug/L
OW-14	9/11/2018	Naphthalene	*27*	*100*	14	30	ug/L
OW-14	9/11/2018	2-Methylnaphthalene	*ND*	*200*	12		ug/L
OW-14	9/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	9/11/2018	1,2-Dichlorobenzene	ND	50	16	600	ug/L
OW-14	9/11/2018	1,2,4-Trimethylbenzene	ND	50	13	56	ug/L
OW-14	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-14	9/11/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-14	9/11/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-14	9/11/2018	Isopropylbenzene	17	50	11	447	ug/L
OW-14	9/11/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/11/2018	Ethylbenzene	660	50	11	700	ug/L
OW-14	9/11/2018	Styrene	ND	50	13	100	ug/L
OW-14	9/11/2018	n-Propylbenzene	30	50	12	660	ug/L
OW-14	9/11/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-14	9/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-14	9/11/2018	1,4-Dichlorobenzene	ND	50	20	75	ug/L
OW-14	9/11/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-14	9/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-14	9/11/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-14	9/11/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-14	9/11/2018	Bromobenzene	ND	50	16	62	ug/L
OW-14	9/11/2018	Toluene	ND	50	8.4	1000	ug/L
OW-14	9/11/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-14	9/11/2018	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OW-14	9/11/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-14	9/11/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	9/11/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-14	9/11/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-14	9/11/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-14	9/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-14	9/11/2018	1,3-Dichlorobenzene	ND	50	16	N/A	ug/L
OW-14	9/11/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-14	9/11/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-14	9/11/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
OW-14	9/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-14	9/11/2018	Xylenes, Total	42	75	32	620	ug/L
OW-14	9/11/2018	MTBE	**740**	50	16	143	ug/L
OW-14	9/11/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-14	9/11/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-14	11/6/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
OW-14	11/6/2018	Acetone	ND	500	38	14064	ug/L
OW-14	11/6/2018	Chloroform	ND	50	12	100	ug/L
OW-14	11/6/2018	Benzene	**13000**	500	87	5	ug/L
OW-14	11/6/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
OW-14	11/6/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
OW-14	11/6/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
OW-14	11/6/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-14	11/6/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-14	11/6/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
OW-14	11/6/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-14	11/6/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-14	11/6/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-14	11/6/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-14	11/6/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
OW-14	11/6/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-14	11/6/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
OW-14	11/6/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
OW-14	11/6/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
OW-14	11/6/2018	2-Butanone	ND	500	71	5565	ug/L
OW-14	11/6/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-14	11/6/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-14	11/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-14	11/6/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-14	11/6/2018	Hexachlorobutadiene	*ND*	*50*	20	1.39	ug/L
OW-14	11/6/2018	1-Methylnaphthalene	ND	200	17	NA	ug/L
OW-14	11/6/2018	Naphthalene	*ND*	*100*	14	30	ug/L
OW-14	11/6/2018	2-Methylnaphthalene	*ND*	*200*	17		ug/L
OW-14	11/6/2018	2-Chlorotoluene	ND	50	13	233	ug/L
OW-14	11/6/2018	1,2-Dichlorobenzene	ND	50	16	600	ug/L
OW-14	11/6/2018	1,2,4-Trimethylbenzene	ND	50	13	56	ug/L
OW-14	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-14	11/6/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-14	11/6/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-14	11/6/2018	Isopropylbenzene	ND	50	11	447	ug/L
OW-14	11/6/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-14	11/6/2018	Ethylbenzene	640	50	11	700	ug/L
OW-14	11/6/2018	Styrene	ND	50	13	100	ug/L
OW-14	11/6/2018	n-Propylbenzene	ND	50	12	660	ug/L
OW-14	11/6/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-14	11/6/2018	4-Chlorotoluene	ND	50	14	250	ug/L
OW-14	11/6/2018	1,4-Dichlorobenzene	ND	50	14	75	ug/L
OW-14	11/6/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-14	11/6/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L
OW-14	11/6/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-14	11/6/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-14	11/6/2018	Bromobenzene	ND	50	16	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/6/2018	Toluene	ND	50	8.4	1000	ug/L
OW-14	11/6/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-14	11/6/2018	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OW-14	11/6/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-14	11/6/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	11/6/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-14	11/6/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-14	11/6/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-14	11/6/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
OW-14	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-14	11/6/2018	1,3-Dichlorobenzene	ND	50	16	N/A	ug/L
OW-14	11/6/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-14	11/6/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-14	11/6/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-14	11/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-14	11/6/2018	Xylenes, Total	ND	75	32	620	ug/L
OW-14	11/6/2018	MTBE	**600**	50	23	143	ug/L
OW-14	11/6/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-14	11/6/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-14	2/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	12.619962	5.74	ug/L
OW-14	2/5/2019	1,1,1-Trichloroethane	ND	50	8.190791	200	ug/L
OW-14	2/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	16.414955	10	ug/L
OW-14	2/5/2019	1,1,2-Trichloroethane	*ND*	*50*	11.636162	5	ug/L
OW-14	2/5/2019	1,1-Dichloroethane	*ND*	*50*	8.759832	25	ug/L
OW-14	2/5/2019	1,1-Dichloroethene	*ND*	*50*	6.024391	7	ug/L
OW-14	2/5/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-14	2/5/2019	1,2,3-Trichlorobenzene	ND	50	14.015402	70	ug/L
OW-14	2/5/2019	1,2,3-Trichloropropane	*ND*	*100*	28.300223	0.0084	ug/L
OW-14	2/5/2019	1,2,4-Trichlorobenzene	ND	50	13.320508	70	ug/L
OW-14	2/5/2019	1,2,4-Trimethylbenzene	ND	50	12.665717	56	ug/L
OW-14	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	23.544858	0.0033	ug/L
OW-14	2/5/2019	1,2-Dibromoethane	*ND*	*50*	11.476427	0.05	ug/L
OW-14	2/5/2019	1,2-Dichlorobenzene	ND	50	15.573243	600	ug/L
OW-14	2/5/2019	1,2-Dichloroethane	*ND*	*50*	9.476269	5	ug/L
OW-14	2/5/2019	1,2-Dichloropropane	*ND*	*50*	8.261288	5	ug/L
OW-14	2/5/2019	1,3,5-Trimethylbenzene	ND	50	11.570703	60	ug/L
OW-14	2/5/2019	1,3-Dichlorobenzene	ND	50	15.631118	N/A	ug/L
OW-14	2/5/2019	1,3-Dichloropropane	ND	50	13.537814	370	ug/L
OW-14	2/5/2019	1,4-Dichlorobenzene	ND	50	14.385342	75	ug/L
OW-14	2/5/2019	1-Methylnaphthalene	28	200	16.790848	NA	ug/L
OW-14	2/5/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-14	2/5/2019	2-Butanone	ND	500	70.543444	5565	ug/L
OW-14	2/5/2019	2-Chlorotoluene	ND	50	12.50691	233	ug/L
OW-14	2/5/2019	2-Hexanone	*ND*	*500*	45.328722	38	ug/L
OW-14	2/5/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-14	2/5/2019	4-Chlorotoluene	ND	50	14.040044	250	ug/L
OW-14	2/5/2019	p-Isopropyltoluene	ND	50	12.016928	NA	ug/L
OW-14	2/5/2019	4-Methyl-2-Pentanone	ND	500	22.663868	1243	ug/L
OW-14	2/5/2019	Acetone	ND	500	37.853481	14064	ug/L
OW-14	2/5/2019	Benzene	**16000**	500	87.447859	5	ug/L
OW-14	2/5/2019	Bromobenzene	ND	50	15.895311	62	ug/L
OW-14	2/5/2019	Bromodichloromethane	*ND*	*50*	14.138349	1.34	ug/L
OW-14	2/5/2019	Bromoform	*ND*	*50*	16.165516	32.9	ug/L
OW-14	2/5/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-14	2/5/2019	Carbon Disulfide	ND	500	19.251554	810	ug/L
OW-14	2/5/2019	Carbon tetrachloride	*ND*	*50*	6.867418	5	ug/L
OW-14	2/5/2019	Chlorobenzene	ND	50	14.526376	77.6	ug/L
OW-14	2/5/2019	Chloroethane	ND	100	8.216855	20857	ug/L
OW-14	2/5/2019	Chloroform	ND	50	11.761188	100	ug/L
OW-14	2/5/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-14	2/5/2019	cis-1,2-Dichloroethene	ND	50	18.799057	70	ug/L
OW-14	2/5/2019	cis-1,3-Dichloropropene	ND	50	14.911401	NA	ug/L
OW-14	2/5/2019	Dibromochloromethane	*ND*	*50*	11.85062	1.68	ug/L
OW-14	2/5/2019	Dibromomethane	*ND*	*50*	16.107371	8	ug/L
OW-14	2/5/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-14	2/5/2019	Ethylbenzene	680	50	11.170112	700	ug/L
OW-14	2/5/2019	Hexachlorobutadiene	*ND*	*50*	19.559347	1.39	ug/L
OW-14	2/5/2019	Isopropylbenzene	18	50	11.05521	447	ug/L
OW-14	2/5/2019	MTBE	**730**	50	22.804749	143	ug/L
OW-14	2/5/2019	Methylene Chloride	*ND*	*150*	10.284739	5	ug/L
OW-14	2/5/2019	Naphthalene	*27*	*100*	14.481303	30	ug/L
OW-14	2/5/2019	n-Butylbenzene	ND	150	12.416523	1000	ug/L
OW-14	2/5/2019	n-Propylbenzene	37	50	12.129312	660	ug/L
OW-14	2/5/2019	sec-Butylbenzene	ND	50	10.112735	2000	ug/L
OW-14	2/5/2019	Styrene	ND	50	12.507286	100	ug/L
OW-14	2/5/2019	tert-Butylbenzene	ND	50	11.073487	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/5/2019	Tetrachloroethene	*ND*	*50*	7.572586	5	ug/L
OW-14	2/5/2019	Toluene	12	50	8.40697	1000	ug/L
OW-14	2/5/2019	trans-1,2-Dichloroethene	ND	50	9.11348	100	ug/L
OW-14	2/5/2019	trans-1,3-Dichloropropene	ND	50	13.773386	NA	ug/L
OW-14	2/5/2019	Trichloroethene	*ND*	*50*	12.877821	5	ug/L
OW-14	2/5/2019	Trichlorofluoromethane	ND	50	7.205808	1137	ug/L
OW-14	2/5/2019	Vinyl Chloride	*ND*	*50*	6.053716	2	ug/L
OW-14	2/5/2019	Xylenes, Total	56	75	32.064386	620	ug/L
OW-14	2/5/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-14	5/1/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-14	5/1/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-14	5/1/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-14	5/1/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-14	5/1/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-14	5/1/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-14	5/1/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-14	5/1/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-14	5/1/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-14	5/1/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-14	5/1/2019	1,2,4-Trimethylbenzene	14	50	10.659955	56	ug/L
OW-14	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-14	5/1/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-14	5/1/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-14	5/1/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-14	5/1/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-14	5/1/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-14	5/1/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-14	5/1/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-14	5/1/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-14	5/1/2019	1-Methylnaphthalene	32	200	15.747724	NA	ug/L
OW-14	5/1/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-14	5/1/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-14	5/1/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-14	5/1/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-14	5/1/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-14	5/1/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-14	5/1/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-14	5/1/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-14	5/1/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-14	5/1/2019	Benzene	**16000**	500	83.319528	5	ug/L
OW-14	5/1/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-14	5/1/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-14	5/1/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-14	5/1/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-14	5/1/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-14	5/1/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-14	5/1/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-14	5/1/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-14	5/1/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-14	5/1/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-14	5/1/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-14	5/1/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-14	5/1/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-14	5/1/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-14	5/1/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-14	5/1/2019	Ethylbenzene	**710**	50	6.61704	700	ug/L
OW-14	5/1/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-14	5/1/2019	Isopropylbenzene	14	50	9.576114	447	ug/L
OW-14	5/1/2019	MTBE	**730**	50	22.804749	143	ug/L
OW-14	5/1/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-14	5/1/2019	Naphthalene	*24*	*100*	13.753567	30	ug/L
OW-14	5/1/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-14	5/1/2019	n-Propylbenzene	32	50	10.7154	660	ug/L
OW-14	5/1/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-14	5/1/2019	Styrene	ND	50	9.566168	100	ug/L
OW-14	5/1/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-14	5/1/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-14	5/1/2019	Toluene	ND	50	17.521811	1000	ug/L
OW-14	5/1/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-14	5/1/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-14	5/1/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-14	5/1/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-14	5/1/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-14	5/1/2019	Xylenes, Total	ND	75	22.720747	620	ug/L
OW-14	5/1/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-29	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-29	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-29	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-29	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-29	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-29	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-29	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-29	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-29	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-29	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-29	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-29	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-29	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-29	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-29	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-29	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-29	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-29	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-29	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-29	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-29	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-29	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-29	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-29	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-29	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-29	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-29	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-29	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-29	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-29	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-29	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-29	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-29	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-29	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-29	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-29	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-29	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-29	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-29	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-29	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-29	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-29	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-29	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-29	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-29	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-29	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-29	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-29	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-29	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-29	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-29	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-29	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-29	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-29	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-29	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-29	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-29	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-29	3/21/2012	MTBE	**620**	10	5.2	143	ug/L
OW-29	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-29	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-29	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-29	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-29	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-29	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-29	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-29	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-29	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-29	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-29	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	6/13/2012	MTBE	**470**	10	9.6	143	ug/L
OW-29	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-29	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-29	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-29	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-29	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-29	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-29	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-29	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-29	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	8/23/2012	MTBE	**1000**	10	9.6	143	ug/L
OW-29	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-29	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-29	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-29	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-29	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-29	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-29	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-29	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-29	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	11/27/2012	MTBE	**900**	10	9.6	143	ug/L
OW-29	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-29	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-29	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-29	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-29	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-29	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-29	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-29	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-29	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-29	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-29	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-29	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-29	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-29	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L
OW-29	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-29	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	3/19/2013	MTBE	**1100**	10	7.7	143	ug/L
OW-29	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-29	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-29	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-29	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-29	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-29	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-29	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-29	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-29	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-29	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-29	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-29	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-29	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-29	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-29	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-29	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	6/13/2013	MTBE	**1400**	10	7.7	143	ug/L
OW-29	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-29	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-29	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-29	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-29	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-29	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-29	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-29	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-29	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-29	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-29	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-29	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-29	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-29	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-29	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-29	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-29	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	9/4/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-29	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	11/11/2013	Carbon tetrachloride	ND	2	0.92	5	ug/L
OW-29	11/11/2013	Acetone	ND	20	3.4	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2013	Chloroform	ND	2	0.94	100	ug/L
OW-29	11/11/2013	Benzene	ND	2	0.92	5	ug/L
OW-29	11/11/2013	1,1,1-Trichloroethane	ND	2	0.8	200	ug/L
OW-29	11/11/2013	Bromomethane	ND	6	0.99	7.54	ug/L
OW-29	11/11/2013	Chloromethane	ND	6	0.74	20.32	ug/L
OW-29	11/11/2013	Dibromomethane	ND	2	1	8	ug/L
OW-29	11/11/2013	Chloroethane	ND	4	0.61	20857	ug/L
OW-29	11/11/2013	Vinyl Chloride	ND	2	0.61	2	ug/L
OW-29	11/11/2013	Methylene Chloride	*ND*	*6*	0.7	5	ug/L
OW-29	11/11/2013	Carbon Disulfide	ND	20	1.6	810	ug/L
OW-29	11/11/2013	Bromoform	ND	2	0.74	32.9	ug/L
OW-29	11/11/2013	Bromodichloromethane	*ND*	*2*	0.97	1.34	ug/L
OW-29	11/11/2013	1,1-Dichloroethane	ND	2	0.67	25	ug/L
OW-29	11/11/2013	1,1-Dichloroethene	ND	2	0.95	7	ug/L
OW-29	11/11/2013	Trichlorofluoromethane	ND	2	0.94	1137	ug/L
OW-29	11/11/2013	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OW-29	11/11/2013	1,2-Dichloropropane	ND	2	0.66	5	ug/L
OW-29	11/11/2013	2-Butanone	ND	20	2	5565	ug/L
OW-29	11/11/2013	1,1,2-Trichloroethane	ND	2	0.83	5	ug/L
OW-29	11/11/2013	Trichloroethene	ND	2	0.85	5	ug/L
OW-29	11/11/2013	1,1,2,2-Tetrachloroethane	ND	4	1	10	ug/L
OW-29	11/11/2013	1,2,3-Trichlorobenzene	ND	2	0.85	70	ug/L
OW-29	11/11/2013	Hexachlorobutadiene	*ND*	*2*	0.82	1.39	ug/L
OW-29	11/11/2013	1-Methylnaphthalene	ND	8	0.82	NA	ug/L
OW-29	11/11/2013	Naphthalene	ND	4	0.59	30	ug/L
OW-29	11/11/2013	2-Methylnaphthalene	*ND*	*8*	0.78		ug/L
OW-29	11/11/2013	2-Chlorotoluene	ND	2	1	233	ug/L
OW-29	11/11/2013	1,2-Dichlorobenzene	ND	2	0.86	600	ug/L
OW-29	11/11/2013	1,2,4-Trimethylbenzene	ND	2	1	56	ug/L
OW-29	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.71	0.0033	ug/L
OW-29	11/11/2013	1,2,3-Trichloropropane	*ND*	*4*	0.8	0.0084	ug/L
OW-29	11/11/2013	tert-Butylbenzene	ND	2	1	690	ug/L
OW-29	11/11/2013	Isopropylbenzene	ND	2	1	447	ug/L
OW-29	11/11/2013	p-Isopropyltoluene	ND	2	0.91	NA	ug/L
OW-29	11/11/2013	Ethylbenzene	ND	2	0.89	700	ug/L
OW-29	11/11/2013	Styrene	ND	2	1.2	100	ug/L
OW-29	11/11/2013	n-Propylbenzene	ND	2	0.82	660	ug/L
OW-29	11/11/2013	n-Butylbenzene	ND	6	0.82	1000	ug/L
OW-29	11/11/2013	4-Chlorotoluene	ND	2	0.87	250	ug/L
OW-29	11/11/2013	1,4-Dichlorobenzene	ND	2	0.91	75	ug/L
OW-29	11/11/2013	1,2-Dibromoethane	*ND*	*2*	0.9	0.05	ug/L
OW-29	11/11/2013	1,2-Dichloroethane	ND	2	0.65	5	ug/L
OW-29	11/11/2013	4-Methyl-2-Pentanone	ND	20	1.3	1243	ug/L
OW-29	11/11/2013	1,3,5-Trimethylbenzene	ND	2	0.8	60	ug/L
OW-29	11/11/2013	Bromobenzene	ND	2	1.1	62	ug/L
OW-29	11/11/2013	Toluene	ND	2	0.88	1000	ug/L
OW-29	11/11/2013	Chlorobenzene	ND	2	0.97	77.6	ug/L
OW-29	11/11/2013	1,2,4-Trichlorobenzene	ND	2	0.77	70	ug/L
OW-29	11/11/2013	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OW-29	11/11/2013	Tetrachloroethene	ND	2	0.98	5	ug/L
OW-29	11/11/2013	sec-Butylbenzene	ND	2	0.86	2000	ug/L
OW-29	11/11/2013	1,3-Dichloropropane	ND	2	0.86	370	ug/L
OW-29	11/11/2013	cis-1,2-Dichloroethene	ND	2	0.94	70	ug/L
OW-29	11/11/2013	trans-1,2-Dichloroethene	ND	2	0.96	100	ug/L
OW-29	11/11/2013	1,3-Dichlorobenzene	ND	2	0.96	N/A	ug/L
OW-29	11/11/2013	1,1-Dichloropropene	ND	2	0.87	NA	ug/L
OW-29	11/11/2013	2-Hexanone	ND	20	2.5	38	ug/L
OW-29	11/11/2013	2,2-Dichloropropane	ND	4	1.6	NA	ug/L
OW-29	11/11/2013	1,1,1,2-Tetrachloroethane	ND	2	1.1	5.74	ug/L
OW-29	11/11/2013	Xylenes, Total	ND	3	2.9	620	ug/L
OW-29	11/11/2013	MTBE	**1700**	20	15	143	ug/L
OW-29	11/11/2013	cis-1,3-Dichloropropene	ND	2	0.91	NA	ug/L
OW-29	11/11/2013	trans-1,3-Dichloropropene	ND	2	0.89	NA	ug/L
OW-29	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-29	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-29	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-29	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-29	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-29	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-29	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-29	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-29	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-29	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-29	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-29	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-29	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-29	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-29	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-29	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-29	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-29	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-29	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-29	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-29	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-29	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-29	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-29	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-29	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-29	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-29	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-29	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-29	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-29	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-29	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-29	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-29	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-29	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-29	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-29	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-29	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-29	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-29	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-29	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-29	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-29	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-29	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-29	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-29	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-29	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-29	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-29	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-29	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-29	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-29	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-29	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-29	3/7/2014	MTBE	**2100**	100	25	143	ug/L
OW-29	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-29	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	6/2/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-29	6/2/2014	Acetone	ND	10	4.9	14064	ug/L
OW-29	6/2/2014	Chloroform	ND	1	0.32	100	ug/L
OW-29	6/2/2014	Benzene	ND	1	0.15	5	ug/L
OW-29	6/2/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-29	6/2/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-29	6/2/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	6/2/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-29	6/2/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-29	6/2/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-29	6/2/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-29	6/2/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-29	6/2/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-29	6/2/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-29	6/2/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-29	6/2/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-29	6/2/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	6/2/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-29	6/2/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-29	6/2/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-29	6/2/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	6/2/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-29	6/2/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-29	6/2/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/2/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-29	6/2/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-29	6/2/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-29	6/2/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	6/2/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	6/2/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-29	6/2/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	6/2/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-29	6/2/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-29	6/2/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-29	6/2/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-29	6/2/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-29	6/2/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-29	6/2/2014	Styrene	ND	1	0.12	100	ug/L
OW-29	6/2/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-29	6/2/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-29	6/2/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-29	6/2/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-29	6/2/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-29	6/2/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-29	6/2/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	6/2/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-29	6/2/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-29	6/2/2014	Toluene	ND	1	0.17	1000	ug/L
OW-29	6/2/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	6/2/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-29	6/2/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-29	6/2/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-29	6/2/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-29	6/2/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	6/2/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-29	6/2/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-29	6/2/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-29	6/2/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-29	6/2/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-29	6/2/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-29	6/2/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-29	6/2/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-29	6/2/2014	MTBE	**2000**	50	13	143	ug/L
OW-29	6/2/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-29	6/2/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	9/15/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-29	9/15/2014	Acetone	ND	50	25	14064	ug/L
OW-29	9/15/2014	Chloroform	ND	5	1.6	100	ug/L
OW-29	9/15/2014	Benzene	ND	5	0.77	5	ug/L
OW-29	9/15/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-29	9/15/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-29	9/15/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-29	9/15/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-29	9/15/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-29	9/15/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-29	9/15/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-29	9/15/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-29	9/15/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-29	9/15/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-29	9/15/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	9/15/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-29	9/15/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	9/15/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-29	9/15/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-29	9/15/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	9/15/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-29	9/15/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-29	9/15/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-29	9/15/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-29	9/15/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-29	9/15/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-29	9/15/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-29	9/15/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-29	9/15/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-29	9/15/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-29	9/15/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-29	9/15/2014	Styrene	ND	5	0.58	100	ug/L
OW-29	9/15/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-29	9/15/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/15/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-29	9/15/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-29	9/15/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-29	9/15/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	9/15/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-29	9/15/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-29	9/15/2014	Toluene	ND	5	0.85	1000	ug/L
OW-29	9/15/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-29	9/15/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-29	9/15/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-29	9/15/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-29	9/15/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	9/15/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-29	9/15/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-29	9/15/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	9/15/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-29	9/15/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	9/15/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-29	9/15/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-29	9/15/2014	MTBE	**2500**	50	13	143	ug/L
OW-29	9/15/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-29	9/15/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-29	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-29	11/11/2014	Acetone	ND	50	25	14064	ug/L
OW-29	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OW-29	11/11/2014	Benzene	ND	5	0.77	5	ug/L
OW-29	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-29	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-29	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-29	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-29	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-29	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-29	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-29	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-29	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-29	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-29	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-29	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-29	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-29	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-29	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-29	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-29	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-29	11/11/2014	Hexachlorobutadiene	*ND*	*5*	1.4	1.39	ug/L
OW-29	11/11/2014	1-Methylnaphthalene	ND	20	2.2	NA	ug/L
OW-29	11/11/2014	Naphthalene	ND	10	0.68	30	ug/L
OW-29	11/11/2014	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L
OW-29	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-29	11/11/2014	1,2-Dichlorobenzene	ND	5	0.66	600	ug/L
OW-29	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-29	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-29	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-29	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-29	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-29	11/11/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-29	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OW-29	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-29	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OW-29	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-29	11/11/2014	1,4-Dichlorobenzene	ND	5	1.3	75	ug/L
OW-29	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-29	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-29	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-29	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-29	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OW-29	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-29	11/11/2014	1,2,4-Trichlorobenzene	ND	5	1.5	70	ug/L
OW-29	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-29	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-29	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-29	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-29	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-29	11/11/2014	1,3-Dichlorobenzene	ND	5	0.87	N/A	ug/L
OW-29	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-29	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-29	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-29	11/11/2014	MTBE	**3000**	100	25	143	ug/L
OW-29	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-29	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-29	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-29	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-29	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-29	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-29	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-29	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-29	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-29	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-29	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-29	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-29	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-29	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-29	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-29	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-29	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-29	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-29	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-29	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-29	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-29	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-29	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-29	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-29	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-29	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-29	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-29	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-29	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-29	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-29	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-29	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-29	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-29	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-29	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-29	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-29	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-29	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-29	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-29	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-29	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-29	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-29	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-29	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-29	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-29	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-29	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-29	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-29	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-29	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-29	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-29	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-29	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-29	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-29	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-29	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-29	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-29	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-29	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-29	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-29	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-29	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-29	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-29	3/9/2015	MTBE	**3200**	50	8.7	143	ug/L
OW-29	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-29	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/1/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	6/1/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	6/1/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	6/1/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	6/1/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	6/1/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	6/1/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	6/1/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	6/1/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	6/1/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	6/1/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-29	6/1/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	6/1/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	6/1/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	6/1/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	6/1/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	6/1/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	6/1/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	6/1/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	6/1/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	6/1/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	6/1/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-29	6/1/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	6/1/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	6/1/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	6/1/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	6/1/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	6/1/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	6/1/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	6/1/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	6/1/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	6/1/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	6/1/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	6/1/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	6/1/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	6/1/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	6/1/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	6/1/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	6/1/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	6/1/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	6/1/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	6/1/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	6/1/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	6/1/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	6/1/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	6/1/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	6/1/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	6/1/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	6/1/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	6/1/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	6/1/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	6/1/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	6/1/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	6/1/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	6/1/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	6/1/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	6/1/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	6/1/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	6/1/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	6/1/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	6/1/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	6/1/2015	MTBE	**2600**	100	17	143	ug/L
OW-29	6/1/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	6/1/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	8/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	8/11/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	8/11/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	8/11/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	8/11/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	8/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	8/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	8/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	8/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	8/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	8/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	8/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	8/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	8/11/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	8/11/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	8/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	8/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	8/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	8/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	8/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	8/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-29	8/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	8/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	8/11/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	8/11/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	8/11/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	8/11/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	8/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	8/11/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	8/11/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	8/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	8/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	8/11/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	8/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	8/11/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	8/11/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	8/11/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	8/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	8/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	8/11/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	8/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	8/11/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	8/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	8/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	8/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	8/11/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	8/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	8/11/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	8/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	8/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	8/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	8/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	8/11/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	8/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	8/11/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	8/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	8/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	8/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	8/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	8/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	8/11/2015	MTBE	**3100**	50	8.7	143	ug/L
OW-29	8/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	8/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	10/27/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	10/27/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	10/27/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	10/27/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	10/27/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	10/27/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	10/27/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	10/27/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	10/27/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	10/27/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	10/27/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-29	10/27/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	10/27/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	10/27/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	10/27/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	10/27/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	10/27/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	10/27/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	10/27/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	10/27/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	10/27/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	10/27/2015	Trichloroethene	ND	5	0.82	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/27/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	10/27/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	10/27/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	10/27/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	10/27/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	10/27/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	10/27/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	10/27/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	10/27/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	10/27/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	10/27/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	10/27/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	10/27/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	10/27/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	10/27/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	10/27/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	10/27/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	10/27/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	10/27/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	10/27/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	10/27/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	10/27/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	10/27/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	10/27/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	10/27/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	10/27/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	10/27/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	10/27/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	10/27/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	10/27/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	10/27/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	10/27/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	10/27/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	10/27/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	10/27/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	10/27/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	10/27/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	10/27/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	10/27/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	10/27/2015	MTBE	**3100**	50	8.7	143	ug/L
OW-29	10/27/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	10/27/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	3/4/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	3/4/2016	Acetone	ND	50	4.4	14064	ug/L
OW-29	3/4/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	3/4/2016	Benzene	ND	5	0.48	5	ug/L
OW-29	3/4/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
OW-29	3/4/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	3/4/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	3/4/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	3/4/2016	Chloroethane	ND	10	0.73	20857	ug/L
OW-29	3/4/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
OW-29	3/4/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
OW-29	3/4/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	3/4/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	3/4/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
OW-29	3/4/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	3/4/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
OW-29	3/4/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
OW-29	3/4/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
OW-29	3/4/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
OW-29	3/4/2016	2-Butanone	ND	50	1.6	5565	ug/L
OW-29	3/4/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
OW-29	3/4/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	3/4/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
OW-29	3/4/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	3/4/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	3/4/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	3/4/2016	Naphthalene	ND	10	0.42	30	ug/L
OW-29	3/4/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	3/4/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	3/4/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	3/4/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
OW-29	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
OW-29	3/4/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/4/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
OW-29	3/4/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
OW-29	3/4/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	3/4/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-29	3/4/2016	Styrene	ND	5	0.48	100	ug/L
OW-29	3/4/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	3/4/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	3/4/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	3/4/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	3/4/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	3/4/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
OW-29	3/4/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
OW-29	3/4/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	3/4/2016	Bromobenzene	ND	5	0.4	62	ug/L
OW-29	3/4/2016	Toluene	ND	5	0.45	1000	ug/L
OW-29	3/4/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
OW-29	3/4/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	3/4/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	3/4/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	3/4/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
OW-29	3/4/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	3/4/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	3/4/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	3/4/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	3/4/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	3/4/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
OW-29	3/4/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
OW-29	3/4/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	3/4/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	3/4/2016	MTBE	**3200**	50	11	143	ug/L
OW-29	3/4/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-29	3/4/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
OW-29	6/6/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	6/6/2016	Acetone	ND	50	25	14064	ug/L
OW-29	6/6/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	6/6/2016	Benzene	ND	5	0.48	5	ug/L
OW-29	6/6/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-29	6/6/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	6/6/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	6/6/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	6/6/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-29	6/6/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	6/6/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-29	6/6/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	6/6/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	6/6/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-29	6/6/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	6/6/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-29	6/6/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-29	6/6/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-29	6/6/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-29	6/6/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-29	6/6/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-29	6/6/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	6/6/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-29	6/6/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	6/6/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	6/6/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	6/6/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-29	6/6/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	6/6/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	6/6/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	6/6/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-29	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-29	6/6/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-29	6/6/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-29	6/6/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-29	6/6/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	6/6/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-29	6/6/2016	Styrene	ND	5	0.55	100	ug/L
OW-29	6/6/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	6/6/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	6/6/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	6/6/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	6/6/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	6/6/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/6/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-29	6/6/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	6/6/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-29	6/6/2016	Toluene	ND	5	0.59	1000	ug/L
OW-29	6/6/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-29	6/6/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	6/6/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	6/6/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	6/6/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-29	6/6/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	6/6/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	6/6/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	6/6/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	6/6/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	6/6/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-29	6/6/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-29	6/6/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	6/6/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-29	6/6/2016	MTBE	**3100**	50	11	143	ug/L
OW-29	6/6/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-29	6/6/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-29	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-29	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-29	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-29	8/31/2016	Benzene	0.54	1	0.096	5	ug/L
OW-29	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-29	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-29	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-29	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-29	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-29	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-29	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-29	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-29	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-29	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-29	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-29	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-29	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-29	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-29	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-29	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-29	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-29	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-29	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-29	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-29	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-29	8/31/2016	1-Methylnaphthalene	0.26	4	0.2	NA	ug/L
OW-29	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-29	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-29	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-29	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-29	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-29	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-29	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-29	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-29	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-29	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-29	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-29	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-29	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-29	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-29	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-29	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-29	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-29	8/31/2016	1,2-Dichloroethane	0.65	1	0.12	5	ug/L
OW-29	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-29	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-29	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-29	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-29	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-29	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-29	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-29	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-29	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-29	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-29	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-29	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-29	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-29	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-29	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-29	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-29	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-29	8/31/2016	MTBE	**3000**	50	11	143	ug/L
OW-29	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-29	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-29	11/15/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	11/15/2016	Acetone	ND	50	25	14064	ug/L
OW-29	11/15/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	11/15/2016	Benzene	**7.9**	5	0.48	5	ug/L
OW-29	11/15/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-29	11/15/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	11/15/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	11/15/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	11/15/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-29	11/15/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	11/15/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-29	11/15/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	11/15/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	11/15/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-29	11/15/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	11/15/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-29	11/15/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-29	11/15/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-29	11/15/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-29	11/15/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-29	11/15/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-29	11/15/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	11/15/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-29	11/15/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	11/15/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	11/15/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	11/15/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-29	11/15/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	11/15/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	11/15/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	11/15/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-29	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-29	11/15/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-29	11/15/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-29	11/15/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-29	11/15/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	11/15/2016	Ethylbenzene	1.1	5	0.56	700	ug/L
OW-29	11/15/2016	Styrene	ND	5	0.55	100	ug/L
OW-29	11/15/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	11/15/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	11/15/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	11/15/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	11/15/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	11/15/2016	1,2-Dichloroethane	1.8	5	0.58	5	ug/L
OW-29	11/15/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-29	11/15/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	11/15/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-29	11/15/2016	Toluene	ND	5	0.59	1000	ug/L
OW-29	11/15/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-29	11/15/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	11/15/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	11/15/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	11/15/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-29	11/15/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	11/15/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	11/15/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	11/15/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	11/15/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	11/15/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-29	11/15/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-29	11/15/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	11/15/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-29	11/15/2016	MTBE	**3400**	50	11	143	ug/L
OW-29	11/15/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-29	11/15/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-29	2/27/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2017	Acetone	ND	100	49	14064	ug/L
OW-29	2/27/2017	Chloroform	ND	10	0.89	100	ug/L
OW-29	2/27/2017	Benzene	*ND*	*10*	0.96	5	ug/L
OW-29	2/27/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-29	2/27/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-29	2/27/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-29	2/27/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-29	2/27/2017	Chloroethane	ND	20	1.9	20857	ug/L
OW-29	2/27/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-29	2/27/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-29	2/27/2017	Carbon Disulfide	ND	100	6	810	ug/L
OW-29	2/27/2017	Bromoform	ND	10	1	32.9	ug/L
OW-29	2/27/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-29	2/27/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-29	2/27/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-29	2/27/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-29	2/27/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-29	2/27/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-29	2/27/2017	2-Butanone	ND	100	7.4	5565	ug/L
OW-29	2/27/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-29	2/27/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-29	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-29	2/27/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-29	2/27/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-29	2/27/2017	1-Methylnaphthalene	ND	40	2	NA	ug/L
OW-29	2/27/2017	Naphthalene	ND	20	0.93	30	ug/L
OW-29	2/27/2017	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-29	2/27/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	2/27/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-29	2/27/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-29	2/27/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-29	2/27/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-29	2/27/2017	Isopropylbenzene	ND	10	1	447	ug/L
OW-29	2/27/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-29	2/27/2017	Ethylbenzene	ND	10	1.1	700	ug/L
OW-29	2/27/2017	Styrene	ND	10	1.1	100	ug/L
OW-29	2/27/2017	n-Propylbenzene	ND	10	1.3	660	ug/L
OW-29	2/27/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-29	2/27/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-29	2/27/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-29	2/27/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-29	2/27/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-29	2/27/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-29	2/27/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-29	2/27/2017	Bromobenzene	ND	10	0.98	62	ug/L
OW-29	2/27/2017	Toluene	ND	10	1.2	1000	ug/L
OW-29	2/27/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	2/27/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-29	2/27/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-29	2/27/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-29	2/27/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OW-29	2/27/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-29	2/27/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-29	2/27/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-29	2/27/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-29	2/27/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-29	2/27/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-29	2/27/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-29	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-29	2/27/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OW-29	2/27/2017	MTBE	**4300**	100	21	143	ug/L
OW-29	2/27/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-29	2/27/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-29	5/30/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-29	5/30/2017	Acetone	14	100	8.2	14064	ug/L
OW-29	5/30/2017	Chloroform	ND	10	4	100	ug/L
OW-29	5/30/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-29	5/30/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-29	5/30/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-29	5/30/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-29	5/30/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-29	5/30/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-29	5/30/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-29	5/30/2017	Methylene Chloride	*1.6*	*30*	1.1	5	ug/L
OW-29	5/30/2017	Carbon Disulfide	ND	100	4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/30/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-29	5/30/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-29	5/30/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-29	5/30/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-29	5/30/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-29	5/30/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-29	5/30/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-29	5/30/2017	2-Butanone	ND	100	11	5565	ug/L
OW-29	5/30/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-29	5/30/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-29	5/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-29	5/30/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-29	5/30/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-29	5/30/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-29	5/30/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-29	5/30/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-29	5/30/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	5/30/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-29	5/30/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	5/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-29	5/30/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-29	5/30/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-29	5/30/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-29	5/30/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-29	5/30/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-29	5/30/2017	Styrene	ND	10	1.6	100	ug/L
OW-29	5/30/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-29	5/30/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-29	5/30/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-29	5/30/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-29	5/30/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-29	5/30/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-29	5/30/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-29	5/30/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-29	5/30/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-29	5/30/2017	Toluene	ND	10	0.64	1000	ug/L
OW-29	5/30/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	5/30/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-29	5/30/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-29	5/30/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-29	5/30/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-29	5/30/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-29	5/30/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-29	5/30/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-29	5/30/2017	Pentafluorobenzene	**100**	0	0		None
OW-29	5/30/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-29	5/30/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-29	5/30/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-29	5/30/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-29	5/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-29	5/30/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-29	5/30/2017	MTBE	**4000**	100	24	143	ug/L
OW-29	5/30/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-29	5/30/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-29	9/6/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-29	9/6/2017	Acetone	ND	100	8.2	14064	ug/L
OW-29	9/6/2017	Chloroform	ND	10	4	100	ug/L
OW-29	9/6/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-29	9/6/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-29	9/6/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-29	9/6/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-29	9/6/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-29	9/6/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-29	9/6/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-29	9/6/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-29	9/6/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-29	9/6/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-29	9/6/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-29	9/6/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-29	9/6/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-29	9/6/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-29	9/6/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-29	9/6/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-29	9/6/2017	2-Butanone	ND	100	11	5565	ug/L
OW-29	9/6/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-29	9/6/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-29	9/6/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-29	9/6/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-29	9/6/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-29	9/6/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-29	9/6/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-29	9/6/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	9/6/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-29	9/6/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-29	9/6/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-29	9/6/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-29	9/6/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-29	9/6/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-29	9/6/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-29	9/6/2017	Styrene	ND	10	1.6	100	ug/L
OW-29	9/6/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-29	9/6/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-29	9/6/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-29	9/6/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-29	9/6/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-29	9/6/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-29	9/6/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-29	9/6/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-29	9/6/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-29	9/6/2017	Toluene	ND	10	0.64	1000	ug/L
OW-29	9/6/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	9/6/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-29	9/6/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-29	9/6/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-29	9/6/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-29	9/6/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-29	9/6/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-29	9/6/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-29	9/6/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-29	9/6/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-29	9/6/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-29	9/6/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-29	9/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-29	9/6/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-29	9/6/2017	MTBE	**3800**	100	24	143	ug/L
OW-29	9/6/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-29	9/6/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-29	12/11/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-29	12/11/2017	Acetone	14	50	4.1	14064	ug/L
OW-29	12/11/2017	Chloroform	ND	5	2	100	ug/L
OW-29	12/11/2017	Benzene	ND	5	0.31	5	ug/L
OW-29	12/11/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-29	12/11/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	12/11/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	12/11/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-29	12/11/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-29	12/11/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-29	12/11/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-29	12/11/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-29	12/11/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-29	12/11/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-29	12/11/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	12/11/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-29	12/11/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-29	12/11/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	12/11/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-29	12/11/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-29	12/11/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-29	12/11/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-29	12/11/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-29	12/11/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-29	12/11/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	12/11/2017	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-29	12/11/2017	Naphthalene	ND	10	0.57	30	ug/L
OW-29	12/11/2017	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-29	12/11/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	12/11/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-29	12/11/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-29	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-29	12/11/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/11/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-29	12/11/2017	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-29	12/11/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-29	12/11/2017	Ethylbenzene	ND	5	0.47	700	ug/L
OW-29	12/11/2017	Styrene	ND	5	0.78	100	ug/L
OW-29	12/11/2017	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-29	12/11/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-29	12/11/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	12/11/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	12/11/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-29	12/11/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-29	12/11/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-29	12/11/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-29	12/11/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-29	12/11/2017	Toluene	ND	5	0.32	1000	ug/L
OW-29	12/11/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-29	12/11/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-29	12/11/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-29	12/11/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-29	12/11/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-29	12/11/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-29	12/11/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-29	12/11/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	12/11/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-29	12/11/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-29	12/11/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-29	12/11/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-29	12/11/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-29	12/11/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	12/11/2017	MTBE	**3800**	50	12	143	ug/L
OW-29	12/11/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-29	12/11/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	2/27/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-29	2/27/2018	Acetone	ND	50	4.1	14064	ug/L
OW-29	2/27/2018	Chloroform	ND	5	2	100	ug/L
OW-29	2/27/2018	Benzene	ND	5	0.31	5	ug/L
OW-29	2/27/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-29	2/27/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	2/27/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	2/27/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-29	2/27/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-29	2/27/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-29	2/27/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-29	2/27/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-29	2/27/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-29	2/27/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-29	2/27/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	2/27/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-29	2/27/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-29	2/27/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	2/27/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-29	2/27/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-29	2/27/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-29	2/27/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-29	2/27/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-29	2/27/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-29	2/27/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	2/27/2018	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-29	2/27/2018	Naphthalene	ND	10	0.57	30	ug/L
OW-29	2/27/2018	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-29	2/27/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	2/27/2018	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-29	2/27/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-29	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-29	2/27/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-29	2/27/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-29	2/27/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-29	2/27/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-29	2/27/2018	Ethylbenzene	ND	5	0.47	700	ug/L
OW-29	2/27/2018	Styrene	ND	5	0.78	100	ug/L
OW-29	2/27/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-29	2/27/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-29	2/27/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	2/27/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	2/27/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-29	2/27/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-29	2/27/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-29	2/27/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-29	2/27/2018	Toluene	ND	5	0.32	1000	ug/L
OW-29	2/27/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-29	2/27/2018	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-29	2/27/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-29	2/27/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-29	2/27/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-29	2/27/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-29	2/27/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-29	2/27/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	2/27/2018	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-29	2/27/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-29	2/27/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-29	2/27/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-29	2/27/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-29	2/27/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	2/27/2018	MTBE	**3700**	50	12	143	ug/L
OW-29	2/27/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-29	2/27/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	5/16/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
OW-29	5/16/2018	Acetone	ND	20	1.6	14064	ug/L
OW-29	5/16/2018	Chloroform	ND	2	0.8	100	ug/L
OW-29	5/16/2018	Benzene	ND	2	0.12	5	ug/L
OW-29	5/16/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
OW-29	5/16/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OW-29	5/16/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OW-29	5/16/2018	Dibromomethane	ND	2	0.18	8	ug/L
OW-29	5/16/2018	Chloroethane	ND	4	0.47	20857	ug/L
OW-29	5/16/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
OW-29	5/16/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
OW-29	5/16/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
OW-29	5/16/2018	Bromoform	ND	2	0.42	32.9	ug/L
OW-29	5/16/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
OW-29	5/16/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-29	5/16/2018	1,1-Dichloroethene	ND	2	0.16	7	ug/L
OW-29	5/16/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
OW-29	5/16/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OW-29	5/16/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
OW-29	5/16/2018	2-Butanone	ND	20	2.3	5565	ug/L
OW-29	5/16/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OW-29	5/16/2018	Trichloroethene	ND	2	0.22	5	ug/L
OW-29	5/16/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
OW-29	5/16/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OW-29	5/16/2018	Hexachlorobutadiene	*ND*	*2*	1.6	1.39	ug/L
OW-29	5/16/2018	1-Methylnaphthalene	ND	8	0.32	NA	ug/L
OW-29	5/16/2018	Naphthalene	ND	4	0.23	30	ug/L
OW-29	5/16/2018	2-Methylnaphthalene	*ND*	*8*	0.3		ug/L
OW-29	5/16/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-29	5/16/2018	1,2-Dichlorobenzene	ND	2	0.18	600	ug/L
OW-29	5/16/2018	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
OW-29	5/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
OW-29	5/16/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
OW-29	5/16/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
OW-29	5/16/2018	Isopropylbenzene	ND	2	0.1	447	ug/L
OW-29	5/16/2018	p-Isopropyltoluene	ND	2	0.19	NA	ug/L
OW-29	5/16/2018	Ethylbenzene	ND	2	0.19	700	ug/L
OW-29	5/16/2018	Styrene	ND	2	0.31	100	ug/L
OW-29	5/16/2018	n-Propylbenzene	ND	2	0.15	660	ug/L
OW-29	5/16/2018	n-Butylbenzene	ND	6	0.26	1000	ug/L
OW-29	5/16/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OW-29	5/16/2018	1,4-Dichlorobenzene	ND	2	0.8	75	ug/L
OW-29	5/16/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
OW-29	5/16/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OW-29	5/16/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
OW-29	5/16/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
OW-29	5/16/2018	Bromobenzene	ND	2	0.28	62	ug/L
OW-29	5/16/2018	Toluene	ND	2	0.13	1000	ug/L
OW-29	5/16/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
OW-29	5/16/2018	1,2,4-Trichlorobenzene	ND	2	0.28	70	ug/L
OW-29	5/16/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
OW-29	5/16/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
OW-29	5/16/2018	sec-Butylbenzene	ND	2	0.22	2000	ug/L
OW-29	5/16/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
OW-29	5/16/2018	cis-1,2-Dichloroethene	ND	2	0.41	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/16/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OW-29	5/16/2018	1,3-Dichlorobenzene	ND	2	0.3	N/A	ug/L
OW-29	5/16/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
OW-29	5/16/2018	2-Hexanone	ND	20	1.3	38	ug/L
OW-29	5/16/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
OW-29	5/16/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
OW-29	5/16/2018	Xylenes, Total	ND	3	0.64	620	ug/L
OW-29	5/16/2018	MTBE	**3800**	100	24	143	ug/L
OW-29	5/16/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
OW-29	5/16/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
OW-29	9/11/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-29	9/11/2018	Acetone	11	50	3.9	14064	ug/L
OW-29	9/11/2018	Chloroform	ND	5	2	100	ug/L
OW-29	9/11/2018	Benzene	0.96	5	0.87	5	ug/L
OW-29	9/11/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-29	9/11/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	9/11/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	9/11/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-29	9/11/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-29	9/11/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-29	9/11/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-29	9/11/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-29	9/11/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	9/11/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-29	9/11/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	9/11/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-29	9/11/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-29	9/11/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	9/11/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-29	9/11/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-29	9/11/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-29	9/11/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-29	9/11/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-29	9/11/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	9/11/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	9/11/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-29	9/11/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-29	9/11/2018	2-Methylnaphthalene	*ND*	*20*	1.2		ug/L
OW-29	9/11/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	9/11/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-29	9/11/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-29	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-29	9/11/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-29	9/11/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-29	9/11/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-29	9/11/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-29	9/11/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	9/11/2018	Styrene	ND	5	1.3	100	ug/L
OW-29	9/11/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-29	9/11/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	9/11/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	9/11/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	9/11/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-29	9/11/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-29	9/11/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-29	9/11/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-29	9/11/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-29	9/11/2018	Toluene	ND	5	0.84	1000	ug/L
OW-29	9/11/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-29	9/11/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	9/11/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-29	9/11/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	9/11/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-29	9/11/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-29	9/11/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	9/11/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	9/11/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-29	9/11/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-29	9/11/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-29	9/11/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-29	9/11/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	9/11/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-29	9/11/2018	MTBE	**3900**	50	16	143	ug/L
OW-29	9/11/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-29	9/11/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-29	11/6/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/6/2018	Acetone	ND	50	3.8	14064	ug/L
OW-29	11/6/2018	Chloroform	ND	5	1.2	100	ug/L
OW-29	11/6/2018	Benzene	ND	5	0.87	5	ug/L
OW-29	11/6/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
OW-29	11/6/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
OW-29	11/6/2018	Chloromethane	ND	15	1.6	20.32	ug/L
OW-29	11/6/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-29	11/6/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-29	11/6/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
OW-29	11/6/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-29	11/6/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-29	11/6/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	11/6/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-29	11/6/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
OW-29	11/6/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-29	11/6/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
OW-29	11/6/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
OW-29	11/6/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
OW-29	11/6/2018	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	11/6/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-29	11/6/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-29	11/6/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-29	11/6/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	11/6/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
OW-29	11/6/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-29	11/6/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-29	11/6/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
OW-29	11/6/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
OW-29	11/6/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-29	11/6/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-29	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-29	11/6/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-29	11/6/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-29	11/6/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-29	11/6/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-29	11/6/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	11/6/2018	Styrene	ND	5	1.3	100	ug/L
OW-29	11/6/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-29	11/6/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	11/6/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
OW-29	11/6/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
OW-29	11/6/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-29	11/6/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
OW-29	11/6/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-29	11/6/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-29	11/6/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-29	11/6/2018	Toluene	ND	5	0.84	1000	ug/L
OW-29	11/6/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-29	11/6/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	11/6/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-29	11/6/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	11/6/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-29	11/6/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-29	11/6/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	11/6/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
OW-29	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-29	11/6/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-29	11/6/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-29	11/6/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-29	11/6/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
OW-29	11/6/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	11/6/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-29	11/6/2018	MTBE	**3200**	50	23	143	ug/L
OW-29	11/6/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-29	11/6/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-29	2/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.261996	5.74	ug/L
OW-29	2/5/2019	1,1,1-Trichloroethane	ND	5	0.819079	200	ug/L
OW-29	2/5/2019	1,1,2,2-Tetrachloroethane	ND	10	1.641495	10	ug/L
OW-29	2/5/2019	1,1,2-Trichloroethane	ND	5	1.163616	5	ug/L
OW-29	2/5/2019	1,1-Dichloroethane	ND	5	0.875983	25	ug/L
OW-29	2/5/2019	1,1-Dichloroethene	ND	5	0.602439	7	ug/L
OW-29	2/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	2/5/2019	1,2,3-Trichlorobenzene	ND	5	1.40154	70	ug/L
OW-29	2/5/2019	1,2,3-Trichloropropane	*ND*	*10*	2.830022	0.0084	ug/L
OW-29	2/5/2019	1,2,4-Trichlorobenzene	ND	5	1.332051	70	ug/L
OW-29	2/5/2019	1,2,4-Trimethylbenzene	ND	5	1.266572	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.354486	0.0033	ug/L
OW-29	2/5/2019	1,2-Dibromoethane	*ND*	*5*	1.147643	0.05	ug/L
OW-29	2/5/2019	1,2-Dichlorobenzene	ND	5	1.557324	600	ug/L
OW-29	2/5/2019	1,2-Dichloroethane	ND	5	0.947627	5	ug/L
OW-29	2/5/2019	1,2-Dichloropropane	ND	5	0.826129	5	ug/L
OW-29	2/5/2019	1,3,5-Trimethylbenzene	ND	5	1.15707	60	ug/L
OW-29	2/5/2019	1,3-Dichlorobenzene	ND	5	1.563112	N/A	ug/L
OW-29	2/5/2019	1,3-Dichloropropane	ND	5	1.353781	370	ug/L
OW-29	2/5/2019	1,4-Dichlorobenzene	ND	5	1.438534	75	ug/L
OW-29	2/5/2019	1-Methylnaphthalene	ND	20	1.679085	NA	ug/L
OW-29	2/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	2/5/2019	2-Butanone	ND	50	7.054344	5565	ug/L
OW-29	2/5/2019	2-Chlorotoluene	ND	5	1.250691	233	ug/L
OW-29	2/5/2019	2-Hexanone	*ND*	*50*	4.532872	38	ug/L
OW-29	2/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	2/5/2019	4-Chlorotoluene	ND	5	1.404004	250	ug/L
OW-29	2/5/2019	p-Isopropyltoluene	ND	5	1.201693	NA	ug/L
OW-29	2/5/2019	4-Methyl-2-Pentanone	ND	50	2.266387	1243	ug/L
OW-29	2/5/2019	Acetone	ND	50	3.785348	14064	ug/L
OW-29	2/5/2019	Benzene	1.1	5	0.874479	5	ug/L
OW-29	2/5/2019	Bromobenzene	ND	5	1.589531	62	ug/L
OW-29	2/5/2019	Bromodichloromethane	*ND*	*5*	1.413835	1.34	ug/L
OW-29	2/5/2019	Bromoform	ND	5	1.616552	32.9	ug/L
OW-29	2/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	2/5/2019	Carbon Disulfide	ND	50	1.925155	810	ug/L
OW-29	2/5/2019	Carbon tetrachloride	ND	5	0.686742	5	ug/L
OW-29	2/5/2019	Chlorobenzene	ND	5	1.452638	77.6	ug/L
OW-29	2/5/2019	Chloroethane	ND	10	0.821686	20857	ug/L
OW-29	2/5/2019	Chloroform	ND	5	1.176119	100	ug/L
OW-29	2/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	2/5/2019	cis-1,2-Dichloroethene	ND	5	1.879906	70	ug/L
OW-29	2/5/2019	cis-1,3-Dichloropropene	ND	5	1.49114	NA	ug/L
OW-29	2/5/2019	Dibromochloromethane	*ND*	*5*	1.185062	1.68	ug/L
OW-29	2/5/2019	Dibromomethane	ND	5	1.610737	8	ug/L
OW-29	2/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	2/5/2019	Ethylbenzene	ND	5	1.117011	700	ug/L
OW-29	2/5/2019	Hexachlorobutadiene	*ND*	*5*	1.955935	1.39	ug/L
OW-29	2/5/2019	Isopropylbenzene	ND	5	1.105521	447	ug/L
OW-29	2/5/2019	MTBE	**4000**	50	22.804749	143	ug/L
OW-29	2/5/2019	Methylene Chloride	*ND*	*15*	1.028474	5	ug/L
OW-29	2/5/2019	Naphthalene	ND	10	1.44813	30	ug/L
OW-29	2/5/2019	n-Butylbenzene	ND	15	1.241652	1000	ug/L
OW-29	2/5/2019	n-Propylbenzene	ND	5	1.212931	660	ug/L
OW-29	2/5/2019	sec-Butylbenzene	ND	5	1.011273	2000	ug/L
OW-29	2/5/2019	Styrene	ND	5	1.250729	100	ug/L
OW-29	2/5/2019	tert-Butylbenzene	ND	5	1.107349	690	ug/L
OW-29	2/5/2019	Tetrachloroethene	ND	5	0.757259	5	ug/L
OW-29	2/5/2019	Toluene	ND	5	0.840697	1000	ug/L
OW-29	2/5/2019	trans-1,2-Dichloroethene	ND	5	0.911348	100	ug/L
OW-29	2/5/2019	trans-1,3-Dichloropropene	ND	5	1.377339	NA	ug/L
OW-29	2/5/2019	Trichloroethene	ND	5	1.287782	5	ug/L
OW-29	2/5/2019	Trichlorofluoromethane	ND	5	0.720581	1137	ug/L
OW-29	2/5/2019	Vinyl Chloride	*ND*	*5*	0.605372	2	ug/L
OW-29	2/5/2019	Xylenes, Total	ND	7.5	3.206439	620	ug/L
OW-29	2/5/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
OW-29	5/1/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	5/1/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	5/1/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	5/1/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	5/1/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	5/1/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	5/1/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	5/1/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	5/1/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	5/1/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	5/1/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	5/1/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	5/1/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	5/1/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	5/1/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	5/1/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	5/1/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	5/1/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	5/1/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	5/1/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	5/1/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	5/1/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	5/1/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	5/1/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	5/1/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	5/1/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	5/1/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	5/1/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	5/1/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	5/1/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	5/1/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	5/1/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	5/1/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	5/1/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	5/1/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	5/1/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	5/1/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	5/1/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	5/1/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	5/1/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	5/1/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	5/1/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	5/1/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	5/1/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	5/1/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	5/1/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	5/1/2019	MTBE	**3700**	50	22.804749	143	ug/L
OW-29	5/1/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	5/1/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	5/1/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	5/1/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	5/1/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	5/1/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	5/1/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	5/1/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	5/1/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	5/1/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	5/1/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	5/1/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	5/1/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	5/1/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	5/1/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	5/1/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	5/1/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	5/1/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	5/1/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	5/1/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	5/1/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	5/1/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	5/1/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	5/1/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	5/1/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	5/1/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	5/1/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	5/1/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	5/1/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	5/1/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	5/1/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	5/1/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	5/1/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	5/1/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	5/1/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	5/1/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	5/1/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	5/1/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	5/1/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	5/1/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	5/1/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	5/1/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	5/1/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	5/1/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	5/1/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	5/1/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	5/1/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	5/1/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	5/1/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	5/1/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	5/1/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	5/1/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	5/1/2019	MTBE	**3900**	50	22.804749	143	ug/L
OW-29	5/1/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	5/1/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	5/1/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	5/1/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	5/1/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	5/1/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	5/1/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	5/1/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	5/1/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	5/1/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	5/1/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	5/1/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	5/1/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	5/1/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	5/1/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	5/1/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	5/1/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	5/1/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	5/1/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	5/1/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	5/1/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	5/1/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	5/1/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	5/1/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	ND	0.00959	0.003342	0.05	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-29	8/12/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	8/12/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	8/12/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	8/12/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	8/12/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	8/12/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	8/12/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	8/12/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	8/12/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	8/12/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	8/12/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	8/12/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	8/12/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	8/12/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	8/12/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	8/12/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	8/12/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	8/12/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	8/12/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	8/12/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	8/12/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	8/12/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	8/12/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	8/12/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	8/12/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	8/12/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	8/12/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	8/12/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	8/12/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	8/12/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	8/12/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	8/12/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	8/12/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	8/12/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	8/12/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	8/12/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	8/12/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	8/12/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	8/12/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	8/12/2019	Chloromethane	ND	15	1.604937	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	8/12/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	8/12/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	8/12/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	8/12/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	8/12/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	8/12/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	8/12/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	8/12/2019	MTBE	**3800**	50	22.804749	143	ug/L
OW-29	8/12/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	8/12/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	8/12/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	8/12/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	8/12/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	8/12/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	8/12/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	8/12/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	8/12/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	8/12/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	8/12/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	8/12/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	8/12/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	8/12/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	8/12/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	8/12/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-29	10/14/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	10/14/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	10/14/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	10/14/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	10/14/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	10/14/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	10/14/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	10/14/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	10/14/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	10/14/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	10/14/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	10/14/2019	1,2-Dichloroethane	2.1	5	0.973189	5	ug/L
OW-29	10/14/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	10/14/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	10/14/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	10/14/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	10/14/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	10/14/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	10/14/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	10/14/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	10/14/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	10/14/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	10/14/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	10/14/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	10/14/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	10/14/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	10/14/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	10/14/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	10/14/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	10/14/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	10/14/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	10/14/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	10/14/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	10/14/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	10/14/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	10/14/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	10/14/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	10/14/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	10/14/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	10/14/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	10/14/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	10/14/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	10/14/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	10/14/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	10/14/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	10/14/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	10/14/2019	MTBE	**3100**	50	22.804749	143	ug/L
OW-29	10/14/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	10/14/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	10/14/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	10/14/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	10/14/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	10/14/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	10/14/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	10/14/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	10/14/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	10/14/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	10/14/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	10/14/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	10/14/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	10/14/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	10/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-29	10/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-29	10/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-29	10/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-29	10/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-29	10/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-29	10/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-29	10/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-29	10/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-29	10/14/2019	1,2,4-Trimethylbenzene	0.27	1	0.213199	56	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-29	10/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-29	10/14/2019	1,2-Dichloroethane	0.57	1	0.194638	5	ug/L
OW-29	10/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-29	10/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-29	10/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-29	10/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-29	10/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-29	10/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-29	10/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-29	10/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-29	10/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-29	10/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-29	10/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-29	10/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-29	10/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-29	10/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-29	10/14/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-29	10/14/2019	Benzene	ND	1	0.166639	5	ug/L
OW-29	10/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-29	10/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-29	10/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-29	10/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-29	10/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-29	10/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-29	10/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-29	10/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-29	10/14/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-29	10/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-29	10/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-29	10/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-29	10/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-29	10/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-29	10/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-29	10/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-29	10/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-29	10/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-29	10/14/2019	MTBE	**3200**	50	22.804749	143	ug/L
OW-29	10/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-29	10/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-29	10/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-29	10/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-29	10/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-29	10/14/2019	Styrene	ND	1	0.191323	100	ug/L
OW-29	10/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-29	10/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-29	10/14/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-29	10/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-29	10/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-29	10/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-29	10/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-29	10/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-29	10/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-29	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-29	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-29	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-29	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-29	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-29	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-29	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-29	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-29	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-29	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-29	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-29	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-29	10/15/2019	1,2-Dichloroethane	0.48	1	0.194638	5	ug/L
OW-29	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-29	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-29	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-29	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-29	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-29	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-29	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-29	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-29	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-29	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-29	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-29	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-29	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-29	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-29	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-29	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-29	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-29	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-29	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-29	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-29	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-29	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-29	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-29	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-29	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-29	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-29	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-29	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-29	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-29	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-29	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-29	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-29	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-29	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-29	10/15/2019	MTBE	2	1	0.456095	143	ug/L
OW-29	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-29	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-29	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-29	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-29	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-29	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-29	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-29	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-29	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-29	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-29	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-29	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-29	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-29	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-29	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-29	10/15/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-29	2/24/2020	MTBE	**3800**	50	20	143	ug/L
OW-29	2/24/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	2/24/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
OW-29	2/24/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
OW-29	2/24/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
OW-29	2/24/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	2/24/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
OW-29	2/24/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
OW-29	2/24/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
OW-29	2/24/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
OW-29	2/24/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/24/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	2/24/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
OW-29	2/24/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
OW-29	2/24/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
OW-29	2/24/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
OW-29	2/24/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
OW-29	2/24/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
OW-29	2/24/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
OW-29	2/24/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	2/24/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-29	2/24/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
OW-29	2/24/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	2/24/2020	2-Butanone	ND	50	5.6	5565	ug/L
OW-29	2/24/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
OW-29	2/24/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
OW-29	2/24/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
OW-29	2/24/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
OW-29	2/24/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
OW-29	2/24/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	2/24/2020	Acetone	ND	50	12	14064	ug/L
OW-29	2/24/2020	Benzene	ND	5	1.1	5	ug/L
OW-29	2/24/2020	Bromobenzene	ND	5	1.4	62	ug/L
OW-29	2/24/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
OW-29	2/24/2020	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	2/24/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
OW-29	2/24/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
OW-29	2/24/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
OW-29	2/24/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
OW-29	2/24/2020	Chloroethane	ND	10	1.9	20857	ug/L
OW-29	2/24/2020	Chloroform	ND	5	0.67	100	ug/L
OW-29	2/24/2020	Chloromethane	ND	15	2	20.32	ug/L
OW-29	2/24/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	2/24/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
OW-29	2/24/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
OW-29	2/24/2020	Dibromomethane	ND	5	1.5	8	ug/L
OW-29	2/24/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
OW-29	2/24/2020	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	2/24/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
OW-29	2/24/2020	Isopropylbenzene	ND	5	0.91	447	ug/L
OW-29	2/24/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
OW-29	2/24/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
OW-29	2/24/2020	n-Propylbenzene	ND	5	0.91	660	ug/L
OW-29	2/24/2020	Naphthalene	ND	10	1.4	30	ug/L
OW-29	2/24/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
OW-29	2/24/2020	Styrene	ND	5	0.65	100	ug/L
OW-29	2/24/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
OW-29	2/24/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
OW-29	2/24/2020	Toluene	ND	5	1	1000	ug/L
OW-29	2/24/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-29	2/24/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
OW-29	2/24/2020	Trichloroethene	ND	5	1	5	ug/L
OW-29	2/24/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
OW-29	2/24/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	2/24/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
OW-29	2/24/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
OW-29	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-29	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-29	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-29	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-29	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-29	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-29	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-29	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-29	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-29	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-29	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-29	9/17/2020	1,2-Dichloroethane	0.43	1	0.22	5	ug/L
OW-29	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-29	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-29	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-29	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-29	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-29	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-29	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-29	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-29	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-29	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-29	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-29	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-29	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-29	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-29	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-29	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-29	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-29	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-29	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-29	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-29	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-29	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-29	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-29	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-29	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-29	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-29	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-29	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-29	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-29	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-29	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-29	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-29	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-29	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-29	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-29	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-29	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-29	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-29	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-29	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-29	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-29	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-29	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-29	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-29	9/17/2020	MTBE	**3900**	100	39	143	ug/L
OW-29	9/17/2020	MTBE	**3800**	50	20	143	ug/L
OW-29	9/17/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	9/17/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
OW-29	9/17/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
OW-29	9/17/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
OW-29	9/17/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	9/17/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
OW-29	9/17/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
OW-29	9/17/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
OW-29	9/17/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
OW-29	9/17/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
OW-29	9/17/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
OW-29	9/17/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
OW-29	9/17/2020	1,2-Dichloroethane	1.3	5	1.1	5	ug/L
OW-29	9/17/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
OW-29	9/17/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
OW-29	9/17/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
OW-29	9/17/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	9/17/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-29	9/17/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
OW-29	9/17/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	9/17/2020	2-Butanone	ND	50	5.6	5565	ug/L
OW-29	9/17/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
OW-29	9/17/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
OW-29	9/17/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
OW-29	9/17/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
OW-29	9/17/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
OW-29	9/17/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	9/17/2020	Acetone	ND	50	12	14064	ug/L
OW-29	9/17/2020	Benzene	ND	5	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	Bromobenzene	ND	5	1.4	62	ug/L
OW-29	9/17/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
OW-29	9/17/2020	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	9/17/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
OW-29	9/17/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
OW-29	9/17/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
OW-29	9/17/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
OW-29	9/17/2020	Chloroethane	ND	10	1.9	20857	ug/L
OW-29	9/17/2020	Chloroform	ND	5	0.67	100	ug/L
OW-29	9/17/2020	Chloromethane	ND	15	2	20.32	ug/L
OW-29	9/17/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	9/17/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
OW-29	9/17/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
OW-29	9/17/2020	Dibromomethane	ND	5	1.5	8	ug/L
OW-29	9/17/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
OW-29	9/17/2020	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	9/17/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
OW-29	9/17/2020	Isopropylbenzene	ND	5	0.91	447	ug/L
OW-29	9/17/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
OW-29	9/17/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
OW-29	9/17/2020	n-Propylbenzene	ND	5	0.91	660	ug/L
OW-29	9/17/2020	Naphthalene	ND	10	1.4	30	ug/L
OW-29	9/17/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
OW-29	9/17/2020	Styrene	ND	5	0.65	100	ug/L
OW-29	9/17/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
OW-29	9/17/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
OW-29	9/17/2020	Toluene	ND	5	1	1000	ug/L
OW-29	9/17/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-29	9/17/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
OW-29	9/17/2020	Trichloroethene	ND	5	1	5	ug/L
OW-29	9/17/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
OW-29	9/17/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	9/17/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-29	12/9/2020	Acetone	ND	500	200	14064	ug/L
OW-29	12/9/2020	Benzene	*ND*	*20*	7.6	5	ug/L
OW-29	12/9/2020	Bromodichloromethane	*ND*	*20*	10	1.34	ug/L
OW-29	12/9/2020	Bromoform	*ND*	*100*	14.2	32.9	ug/L
OW-29	12/9/2020	Bromomethane	*ND*	*20*	19.6	7.54	ug/L
OW-29	12/9/2020	2-Butanone	ND	500	52	5565	ug/L
OW-29	12/9/2020	Carbon Disulfide	ND	20	10	810	ug/L
OW-29	12/9/2020	Carbon tetrachloride	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	Chlorobenzene	ND	20	10	77.6	ug/L
OW-29	12/9/2020	Dibromochloromethane	*ND*	*20*	10	1.68	ug/L
OW-29	12/9/2020	Chloroethane	ND	20	15.2	20857	ug/L
OW-29	12/9/2020	Chloroform	ND	20	12	100	ug/L
OW-29	12/9/2020	Chloromethane	ND	20	16.6	20.32	ug/L
OW-29	12/9/2020	2-Chlorotoluene	ND	20	11.4	233	ug/L
OW-29	12/9/2020	4-Chlorotoluene	ND	20	11.2	250	ug/L
OW-29	12/9/2020	cis-1,2-Dichloroethene	ND	20	10	70	ug/L
OW-29	12/9/2020	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-29	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	30	0.0033	ug/L
OW-29	12/9/2020	1,2-Dibromoethane	*ND*	*20*	10	0.05	ug/L
OW-29	12/9/2020	Dibromomethane	*ND*	*100*	11.8	8	ug/L
OW-29	12/9/2020	1,2-Dichlorobenzene	ND	20	10	600	ug/L
OW-29	12/9/2020	1,3-Dichlorobenzene	ND	20	10.8	N/A	ug/L
OW-29	12/9/2020	1,4-Dichlorobenzene	ND	20	12.8	75	ug/L
OW-29	12/9/2020	Dichlorodifluoromethane	ND	20	17	197	ug/L
OW-29	12/9/2020	1,1-Dichloroethane	ND	20	10	25	ug/L
OW-29	12/9/2020	1,2-Dichloroethane	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	1,1-Dichloroethene	*ND*	*20*	10	7	ug/L
OW-29	12/9/2020	1,2-Dichloropropane	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	1,3-Dichloropropane	ND	20	10	370	ug/L
OW-29	12/9/2020	2,2-Dichloropropane	ND	20	10	NA	ug/L
OW-29	12/9/2020	1,1-Dichloropropene	ND	20	10	NA	ug/L
OW-29	12/9/2020	Ethylbenzene	ND	20	10	700	ug/L
OW-29	12/9/2020	Hexachlorobutadiene	*ND*	*100*	18	1.39	ug/L
OW-29	12/9/2020	2-Hexanone	*ND*	*500*	62	38	ug/L
OW-29	12/9/2020	Isopropylbenzene	ND	20	10.6	447	ug/L
OW-29	12/9/2020	Methylene Chloride	*ND*	*100*	60	5	ug/L
OW-29	12/9/2020	1-Methylnaphthalene	ND	100	84	NA	ug/L
OW-29	12/9/2020	2-Methylnaphthalene	*ND*	*200*	92		ug/L
OW-29	12/9/2020	4-Methyl-2-Pentanone	ND	500	36	1243	ug/L
OW-29	12/9/2020	MTBE	**3350**	20	14.8	143	ug/L
OW-29	12/9/2020	Naphthalene	ND	20	20	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/9/2020	n-Butylbenzene	ND	20	15.2	1000	ug/L
OW-29	12/9/2020	n-Propylbenzene	ND	20	13.8	660	ug/L
OW-29	12/9/2020	p-Isopropyltoluene	ND	20	14.2	NA	ug/L
OW-29	12/9/2020	sec-Butylbenzene	ND	20	14	2000	ug/L
OW-29	12/9/2020	Styrene	ND	20	20	100	ug/L
OW-29	12/9/2020	tert-Butylbenzene	ND	20	12.6	690	ug/L
OW-29	12/9/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	10.4	5.74	ug/L
OW-29	12/9/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	10	10	ug/L
OW-29	12/9/2020	Tetrachloroethene	*ND*	*20*	11.6	5	ug/L
OW-29	12/9/2020	Toluene	ND	20	8.2	1000	ug/L
OW-29	12/9/2020	trans-1,2-Dichloroethene	ND	20	10	100	ug/L
OW-29	12/9/2020	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-29	12/9/2020	1,2,3-Trichlorobenzene	ND	20	14	70	ug/L
OW-29	12/9/2020	1,2,4-Trichlorobenzene	ND	20	16.4	70	ug/L
OW-29	12/9/2020	1,1,1-Trichloroethane	ND	20	10	200	ug/L
OW-29	12/9/2020	1,1,2-Trichloroethane	*ND*	*100*	10	5	ug/L
OW-29	12/9/2020	Trichloroethene	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	Trichlorofluoromethane	ND	20	10.4	1137	ug/L
OW-29	12/9/2020	1,2,3-Trichloropropane	*ND*	*100*	16.8	0.0084	ug/L
OW-29	12/9/2020	1,2,4-Trimethylbenzene	ND	20	16.4	56	ug/L
OW-29	12/9/2020	1,3,5-Trimethylbenzene	ND	20	11.2	60	ug/L
OW-29	12/9/2020	Vinyl Chloride	*ND*	*20*	10	2	ug/L
OW-29	12/9/2020	Xylenes, Total	ND	200	32	620	ug/L
OW-29	12/9/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-29	12/9/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-30	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-30	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-30	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-30	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-30	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-30	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-30	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-30	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-30	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-30	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-30	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-30	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-30	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-30	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-30	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-30	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-30	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-30	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-30	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-30	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-30	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-30	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-30	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-30	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-30	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-30	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-30	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-30	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-30	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-30	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-30	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-30	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-30	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-30	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-30	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-30	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-30	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-30	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-30	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-30	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-30	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-30	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-30	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-30	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-30	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-30	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-30	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-30	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-30	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-30	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-30	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-30	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-30	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-30	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-30	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-30	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-30	3/21/2012	MTBE	**1600**	20	10	143	ug/L
OW-30	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-30	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-30	6/14/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	6/14/2012	Acetone	ND	10	2.1	14064	ug/L
OW-30	6/14/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	6/14/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	6/14/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	6/14/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	6/14/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-30	6/14/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-30	6/14/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-30	6/14/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	6/14/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	6/14/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-30	6/14/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	6/14/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	6/14/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	6/14/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	6/14/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	6/14/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	6/14/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	6/14/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	6/14/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	6/14/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	6/14/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	6/14/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	6/14/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	6/14/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-30	6/14/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-30	6/14/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	6/14/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	6/14/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	6/14/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	6/14/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	6/14/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	6/14/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	6/14/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	6/14/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	6/14/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	6/14/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	6/14/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-30	6/14/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	6/14/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	6/14/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	6/14/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	6/14/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	6/14/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	6/14/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	6/14/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	6/14/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	6/14/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	6/14/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	6/14/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	6/14/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	6/14/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	6/14/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	6/14/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	6/14/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	6/14/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	6/14/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	6/14/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	6/14/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	6/14/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/14/2012	MTBE	**1500**	20	19	143	ug/L
OW-30	6/14/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	6/14/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-30	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-30	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-30	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-30	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-30	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-30	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-30	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-30	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-30	8/23/2012	MTBE	**2300**	50	48	143	ug/L
OW-30	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-30	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-30	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-30	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-30	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-30	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-30	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-30	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-30	11/27/2012	MTBE	**2200**	50	48	143	ug/L
OW-30	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	3/19/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-30	3/19/2013	Acetone	ND	50	12	14064	ug/L
OW-30	3/19/2013	Chloroform	ND	5	2.3	100	ug/L
OW-30	3/19/2013	Benzene	ND	5	2.6	5	ug/L
OW-30	3/19/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-30	3/19/2013	Bromomethane	*ND*	*15*	4.2	7.54	ug/L
OW-30	3/19/2013	Chloromethane	ND	15	1.9	20.32	ug/L
OW-30	3/19/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-30	3/19/2013	Chloroethane	ND	10	2.9	20857	ug/L
OW-30	3/19/2013	Vinyl Chloride	*ND*	*5*	1.7	2	ug/L
OW-30	3/19/2013	Methylene Chloride	*ND*	*15*	2.1	5	ug/L
OW-30	3/19/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-30	3/19/2013	Bromoform	ND	5	2.2	32.9	ug/L
OW-30	3/19/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-30	3/19/2013	1,1-Dichloroethane	ND	5	2.4	25	ug/L
OW-30	3/19/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-30	3/19/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-30	3/19/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-30	3/19/2013	1,2-Dichloropropane	ND	5	2.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/19/2013	2-Butanone	ND	50	5	5565	ug/L
OW-30	3/19/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-30	3/19/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-30	3/19/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-30	3/19/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-30	3/19/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-30	3/19/2013	1-Methylnaphthalene	ND	20	3	NA	ug/L
OW-30	3/19/2013	Naphthalene	ND	10	1.7	30	ug/L
OW-30	3/19/2013	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L
OW-30	3/19/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-30	3/19/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-30	3/19/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-30	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.6	0.0033	ug/L
OW-30	3/19/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-30	3/19/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-30	3/19/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OW-30	3/19/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-30	3/19/2013	Ethylbenzene	ND	5	2.2	700	ug/L
OW-30	3/19/2013	Styrene	ND	5	28	100	ug/L
OW-30	3/19/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-30	3/19/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-30	3/19/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-30	3/19/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-30	3/19/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-30	3/19/2013	1,2-Dichloroethane	ND	5	1.9	5	ug/L
OW-30	3/19/2013	4-Methyl-2-Pentanone	ND	50	4.5	1243	ug/L
OW-30	3/19/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-30	3/19/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-30	3/19/2013	Toluene	ND	5	2.2	1000	ug/L
OW-30	3/19/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-30	3/19/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-30	3/19/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-30	3/19/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-30	3/19/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-30	3/19/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-30	3/19/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-30	3/19/2013	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
OW-30	3/19/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-30	3/19/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-30	3/19/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-30	3/19/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-30	3/19/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-30	3/19/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OW-30	3/19/2013	MTBE	**2000**	50	38	143	ug/L
OW-30	3/19/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-30	3/19/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-30	6/17/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	6/17/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	6/17/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	6/17/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	6/17/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	6/17/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	6/17/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	6/17/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	6/17/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-30	6/17/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	6/17/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	6/17/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	6/17/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	6/17/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	6/17/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	6/17/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	6/17/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	6/17/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	6/17/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	6/17/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	6/17/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	6/17/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	6/17/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	6/17/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	6/17/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	6/17/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	6/17/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	6/17/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	6/17/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	6/17/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/17/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	6/17/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	6/17/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	6/17/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	6/17/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	6/17/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	6/17/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	6/17/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	6/17/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	6/17/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	6/17/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-30	6/17/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	6/17/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	6/17/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	6/17/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	6/17/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	6/17/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	6/17/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	6/17/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	6/17/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	6/17/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	6/17/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-30	6/17/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	6/17/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	6/17/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	6/17/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	6/17/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	6/17/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	6/17/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	6/17/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	6/17/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	6/17/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	6/17/2013	MTBE	**2500**	20	15	143	ug/L
OW-30	6/17/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	6/17/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-30	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-30	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-30	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	9/4/2013	MTBE	**2100**	20	15	143	ug/L
OW-30	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	11/11/2013	Chloroethane	4.7	2	0.3	20857	ug/L
OW-30	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-30	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-30	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	11/11/2013	MTBE	**2600**	20	15	143	ug/L
OW-30	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-30	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-30	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-30	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-30	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-30	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-30	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-30	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-30	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	3/7/2014	MTBE	**2900**	100	25	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-30	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-30	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-30	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-30	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-30	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-30	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-30	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-30	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	6/3/2014	MTBE	**2700**	50	13	143	ug/L
OW-30	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	9/17/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	9/17/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	9/17/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	9/17/2014	MTBE	**2800**	50	13	143	ug/L
OW-30	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-30	11/11/2014	Acetone	ND	50	25	14064	ug/L
OW-30	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OW-30	11/11/2014	Benzene	ND	5	0.77	5	ug/L
OW-30	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-30	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-30	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-30	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-30	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-30	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-30	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-30	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-30	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-30	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-30	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-30	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-30	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-30	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-30	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-30	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-30	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-30	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-30	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-30	11/11/2014	Hexachlorobutadiene	*ND*	*5*	1.4	1.39	ug/L
OW-30	11/11/2014	1-Methylnaphthalene	ND	20	2.2	NA	ug/L
OW-30	11/11/2014	Naphthalene	ND	10	0.68	30	ug/L
OW-30	11/11/2014	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-30	11/11/2014	1,2-Dichlorobenzene	ND	5	0.66	600	ug/L
OW-30	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-30	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-30	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-30	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-30	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-30	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-30	11/11/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-30	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OW-30	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-30	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OW-30	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-30	11/11/2014	1,4-Dichlorobenzene	ND	5	1.3	75	ug/L
OW-30	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-30	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-30	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-30	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-30	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-30	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OW-30	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-30	11/11/2014	1,2,4-Trichlorobenzene	ND	5	1.5	70	ug/L
OW-30	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-30	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-30	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-30	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-30	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-30	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-30	11/11/2014	1,3-Dichlorobenzene	ND	5	0.87	N/A	ug/L
OW-30	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-30	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-30	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-30	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-30	11/11/2014	MTBE	**3600**	100	25	143	ug/L
OW-30	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-30	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-30	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-30	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-30	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-30	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-30	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-30	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-30	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-30	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-30	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-30	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-30	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-30	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-30	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-30	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-30	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-30	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-30	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-30	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-30	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-30	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-30	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-30	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-30	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-30	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-30	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-30	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-30	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-30	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-30	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-30	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-30	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-30	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-30	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-30	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-30	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-30	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-30	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-30	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-30	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-30	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-30	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-30	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-30	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-30	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-30	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-30	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-30	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-30	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-30	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-30	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-30	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-30	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-30	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-30	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-30	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-30	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-30	3/9/2015	MTBE	**4000**	50	8.7	143	ug/L
OW-30	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	6/2/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-30	6/2/2015	Acetone	ND	50	4.7	14064	ug/L
OW-30	6/2/2015	Chloroform	ND	5	1.1	100	ug/L
OW-30	6/2/2015	Benzene	ND	5	0.33	5	ug/L
OW-30	6/2/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-30	6/2/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-30	6/2/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-30	6/2/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-30	6/2/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-30	6/2/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-30	6/2/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-30	6/2/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-30	6/2/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-30	6/2/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-30	6/2/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	6/2/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-30	6/2/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	6/2/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-30	6/2/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-30	6/2/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-30	6/2/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-30	6/2/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-30	6/2/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-30	6/2/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	6/2/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-30	6/2/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-30	6/2/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-30	6/2/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-30	6/2/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-30	6/2/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-30	6/2/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-30	6/2/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-30	6/2/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-30	6/2/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-30	6/2/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-30	6/2/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-30	6/2/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-30	6/2/2015	Styrene	ND	5	0.53	100	ug/L
OW-30	6/2/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-30	6/2/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	6/2/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-30	6/2/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-30	6/2/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-30	6/2/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-30	6/2/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-30	6/2/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-30	6/2/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-30	6/2/2015	Toluene	ND	5	0.54	1000	ug/L
OW-30	6/2/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-30	6/2/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/2/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-30	6/2/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-30	6/2/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-30	6/2/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-30	6/2/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-30	6/2/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-30	6/2/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-30	6/2/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-30	6/2/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-30	6/2/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-30	6/2/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-30	6/2/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-30	6/2/2015	MTBE	**3100**	100	17	143	ug/L
OW-30	6/2/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	6/2/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-30	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-30	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-30	8/10/2015	Chloroform	ND	1	0.21	100	ug/L
OW-30	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-30	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-30	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-30	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-30	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-30	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-30	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-30	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-30	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-30	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-30	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-30	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-30	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-30	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-30	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-30	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-30	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-30	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-30	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-30	8/10/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-30	8/10/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-30	8/10/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-30	8/10/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-30	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-30	8/10/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-30	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-30	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-30	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-30	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-30	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-30	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-30	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-30	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-30	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-30	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-30	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-30	8/10/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-30	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-30	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-30	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-30	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-30	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-30	8/10/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-30	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-30	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-30	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-30	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-30	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-30	8/10/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-30	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-30	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-30	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-30	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-30	8/10/2015	MTBE	**3800**	100	17	143	ug/L
OW-30	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	10/27/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-30	10/27/2015	Acetone	ND	50	4.7	14064	ug/L
OW-30	10/27/2015	Chloroform	ND	5	1.1	100	ug/L
OW-30	10/27/2015	Benzene	ND	5	0.33	5	ug/L
OW-30	10/27/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-30	10/27/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-30	10/27/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-30	10/27/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-30	10/27/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-30	10/27/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-30	10/27/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-30	10/27/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-30	10/27/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-30	10/27/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-30	10/27/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	10/27/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-30	10/27/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	10/27/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-30	10/27/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-30	10/27/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-30	10/27/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-30	10/27/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-30	10/27/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-30	10/27/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	10/27/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-30	10/27/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-30	10/27/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-30	10/27/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-30	10/27/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-30	10/27/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-30	10/27/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-30	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-30	10/27/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-30	10/27/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-30	10/27/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-30	10/27/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-30	10/27/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-30	10/27/2015	Styrene	ND	5	0.53	100	ug/L
OW-30	10/27/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-30	10/27/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	10/27/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-30	10/27/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-30	10/27/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-30	10/27/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-30	10/27/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-30	10/27/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-30	10/27/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-30	10/27/2015	Toluene	ND	5	0.54	1000	ug/L
OW-30	10/27/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-30	10/27/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	10/27/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-30	10/27/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-30	10/27/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-30	10/27/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-30	10/27/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-30	10/27/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-30	10/27/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-30	10/27/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-30	10/27/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-30	10/27/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-30	10/27/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-30	10/27/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-30	10/27/2015	MTBE	**3500**	50	8.7	143	ug/L
OW-30	10/27/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	10/27/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-30	3/8/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
OW-30	3/8/2016	Acetone	ND	20	1.8	14064	ug/L
OW-30	3/8/2016	Chloroform	ND	2	0.18	100	ug/L
OW-30	3/8/2016	Benzene	3.1	2	0.19	5	ug/L
OW-30	3/8/2016	1,1,1-Trichloroethane	ND	2	0.13	200	ug/L
OW-30	3/8/2016	Bromomethane	ND	6	1.6	7.54	ug/L
OW-30	3/8/2016	Chloromethane	ND	6	0.43	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/8/2016	Dibromomethane	ND	2	0.24	8	ug/L
OW-30	3/8/2016	Chloroethane	ND	4	0.29	20857	ug/L
OW-30	3/8/2016	Vinyl Chloride	ND	2	0.13	2	ug/L
OW-30	3/8/2016	Methylene Chloride	*ND*	*6*	0.13	5	ug/L
OW-30	3/8/2016	Carbon Disulfide	ND	20	1.2	810	ug/L
OW-30	3/8/2016	Bromoform	ND	2	0.2	32.9	ug/L
OW-30	3/8/2016	Bromodichloromethane	*ND*	*2*	0.2	1.34	ug/L
OW-30	3/8/2016	1,1-Dichloroethane	ND	2	0.22	25	ug/L
OW-30	3/8/2016	1,1-Dichloroethene	ND	2	0.15	7	ug/L
OW-30	3/8/2016	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
OW-30	3/8/2016	Dichlorodifluoromethane	ND	2	0.65	197	ug/L
OW-30	3/8/2016	1,2-Dichloropropane	ND	2	0.094	5	ug/L
OW-30	3/8/2016	2-Butanone	ND	20	0.64	5565	ug/L
OW-30	3/8/2016	1,1,2-Trichloroethane	ND	2	0.15	5	ug/L
OW-30	3/8/2016	Trichloroethene	ND	2	0.35	5	ug/L
OW-30	3/8/2016	1,1,2,2-Tetrachloroethane	ND	4	0.21	10	ug/L
OW-30	3/8/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OW-30	3/8/2016	Hexachlorobutadiene	*ND*	*2*	0.4	1.39	ug/L
OW-30	3/8/2016	1-Methylnaphthalene	ND	8	0.41	NA	ug/L
OW-30	3/8/2016	Naphthalene	ND	4	0.17	30	ug/L
OW-30	3/8/2016	2-Methylnaphthalene	*ND*	*8*	0.32		ug/L
OW-30	3/8/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-30	3/8/2016	1,2-Dichlorobenzene	ND	2	0.8	600	ug/L
OW-30	3/8/2016	1,2,4-Trimethylbenzene	ND	2	0.21	56	ug/L
OW-30	3/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.31	0.0033	ug/L
OW-30	3/8/2016	1,2,3-Trichloropropane	*ND*	*4*	0.22	0.0084	ug/L
OW-30	3/8/2016	tert-Butylbenzene	ND	2	0.19	690	ug/L
OW-30	3/8/2016	Isopropylbenzene	ND	2	0.2	447	ug/L
OW-30	3/8/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L
OW-30	3/8/2016	Ethylbenzene	ND	2	0.22	700	ug/L
OW-30	3/8/2016	Styrene	ND	2	0.19	100	ug/L
OW-30	3/8/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
OW-30	3/8/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
OW-30	3/8/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
OW-30	3/8/2016	1,4-Dichlorobenzene	ND	2	0.29	75	ug/L
OW-30	3/8/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
OW-30	3/8/2016	1,2-Dichloroethane	ND	2	0.11	5	ug/L
OW-30	3/8/2016	4-Methyl-2-Pentanone	ND	20	0.3	1243	ug/L
OW-30	3/8/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
OW-30	3/8/2016	Bromobenzene	ND	2	0.16	62	ug/L
OW-30	3/8/2016	Toluene	ND	2	0.18	1000	ug/L
OW-30	3/8/2016	Chlorobenzene	ND	2	0.21	77.6	ug/L
OW-30	3/8/2016	1,2,4-Trichlorobenzene	ND	2	0.27	70	ug/L
OW-30	3/8/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
OW-30	3/8/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-30	3/8/2016	sec-Butylbenzene	ND	2	0.22	2000	ug/L
OW-30	3/8/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
OW-30	3/8/2016	cis-1,2-Dichloroethene	ND	2	0.25	70	ug/L
OW-30	3/8/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
OW-30	3/8/2016	1,3-Dichlorobenzene	ND	2	0.29	N/A	ug/L
OW-30	3/8/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
OW-30	3/8/2016	2-Hexanone	ND	20	0.72	38	ug/L
OW-30	3/8/2016	2,2-Dichloropropane	ND	4	0.24	NA	ug/L
OW-30	3/8/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
OW-30	3/8/2016	Xylenes, Total	ND	3	0.65	620	ug/L
OW-30	3/8/2016	MTBE	**3500**	50	11	143	ug/L
OW-30	3/8/2016	cis-1,3-Dichloropropene	ND	2	0.2	NA	ug/L
OW-30	3/8/2016	trans-1,3-Dichloropropene	ND	2	0.17	NA	ug/L
OW-30	6/6/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-30	6/6/2016	Acetone	ND	50	25	14064	ug/L
OW-30	6/6/2016	Chloroform	ND	5	0.44	100	ug/L
OW-30	6/6/2016	Benzene	1.2	5	0.48	5	ug/L
OW-30	6/6/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-30	6/6/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-30	6/6/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-30	6/6/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-30	6/6/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-30	6/6/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-30	6/6/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-30	6/6/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-30	6/6/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-30	6/6/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-30	6/6/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-30	6/6/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-30	6/6/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-30	6/6/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/6/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-30	6/6/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-30	6/6/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-30	6/6/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-30	6/6/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-30	6/6/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-30	6/6/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-30	6/6/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-30	6/6/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-30	6/6/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-30	6/6/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	6/6/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-30	6/6/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-30	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-30	6/6/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-30	6/6/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-30	6/6/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-30	6/6/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-30	6/6/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-30	6/6/2016	Styrene	ND	5	0.55	100	ug/L
OW-30	6/6/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-30	6/6/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-30	6/6/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-30	6/6/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-30	6/6/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-30	6/6/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-30	6/6/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-30	6/6/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-30	6/6/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-30	6/6/2016	Toluene	ND	5	0.59	1000	ug/L
OW-30	6/6/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-30	6/6/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-30	6/6/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-30	6/6/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	6/6/2016	sec-Butylbenzene	0.64	5	0.62	2000	ug/L
OW-30	6/6/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-30	6/6/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-30	6/6/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-30	6/6/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-30	6/6/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	6/6/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-30	6/6/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-30	6/6/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-30	6/6/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-30	6/6/2016	MTBE	**3100**	50	11	143	ug/L
OW-30	6/6/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-30	6/6/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-30	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-30	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-30	8/31/2016	Benzene	ND	1	0.096	5	ug/L
OW-30	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-30	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-30	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-30	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-30	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-30	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-30	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-30	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-30	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-30	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-30	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-30	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-30	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-30	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-30	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-30	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-30	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-30	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-30	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-30	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-30	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-30	8/31/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-30	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-30	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-30	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-30	8/31/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
OW-30	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-30	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-30	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-30	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-30	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-30	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-30	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-30	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-30	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-30	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-30	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-30	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-30	8/31/2016	1,2-Dichloroethane	0.32	1	0.12	5	ug/L
OW-30	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-30	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-30	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-30	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-30	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-30	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-30	8/31/2016	sec-Butylbenzene	0.37	1	0.12	2000	ug/L
OW-30	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-30	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-30	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-30	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-30	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-30	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-30	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-30	8/31/2016	MTBE	**3000**	50	11	143	ug/L
OW-30	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-30	11/14/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-30	11/14/2016	Acetone	ND	50	25	14064	ug/L
OW-30	11/14/2016	Chloroform	ND	5	0.44	100	ug/L
OW-30	11/14/2016	Benzene	ND	5	0.48	5	ug/L
OW-30	11/14/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-30	11/14/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-30	11/14/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-30	11/14/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-30	11/14/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-30	11/14/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-30	11/14/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-30	11/14/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-30	11/14/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-30	11/14/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-30	11/14/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-30	11/14/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-30	11/14/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-30	11/14/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-30	11/14/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-30	11/14/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-30	11/14/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-30	11/14/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-30	11/14/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-30	11/14/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-30	11/14/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-30	11/14/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-30	11/14/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-30	11/14/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-30	11/14/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	11/14/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-30	11/14/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-30	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-30	11/14/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-30	11/14/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-30	11/14/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-30	11/14/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-30	11/14/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-30	11/14/2016	Styrene	ND	5	0.55	100	ug/L
OW-30	11/14/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-30	11/14/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/14/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-30	11/14/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-30	11/14/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-30	11/14/2016	1,2-Dichloroethane	1.6	5	0.58	5	ug/L
OW-30	11/14/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-30	11/14/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-30	11/14/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-30	11/14/2016	Toluene	ND	5	0.59	1000	ug/L
OW-30	11/14/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-30	11/14/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-30	11/14/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-30	11/14/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	11/14/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-30	11/14/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-30	11/14/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-30	11/14/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-30	11/14/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-30	11/14/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	11/14/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-30	11/14/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-30	11/14/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-30	11/14/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-30	11/14/2016	MTBE	**3500**	50	11	143	ug/L
OW-30	11/14/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-30	11/14/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-30	2/27/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-30	2/27/2017	Acetone	ND	100	49	14064	ug/L
OW-30	2/27/2017	Chloroform	ND	10	0.89	100	ug/L
OW-30	2/27/2017	Benzene	*0.97*	*10*	0.96	5	ug/L
OW-30	2/27/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-30	2/27/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-30	2/27/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-30	2/27/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-30	2/27/2017	Chloroethane	ND	20	1.9	20857	ug/L
OW-30	2/27/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-30	2/27/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-30	2/27/2017	Carbon Disulfide	ND	100	6	810	ug/L
OW-30	2/27/2017	Bromoform	ND	10	1	32.9	ug/L
OW-30	2/27/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-30	2/27/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-30	2/27/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-30	2/27/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-30	2/27/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-30	2/27/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-30	2/27/2017	2-Butanone	ND	100	7.4	5565	ug/L
OW-30	2/27/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-30	2/27/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-30	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-30	2/27/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-30	2/27/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-30	2/27/2017	1-Methylnaphthalene	ND	40	2	NA	ug/L
OW-30	2/27/2017	Naphthalene	ND	20	0.93	30	ug/L
OW-30	2/27/2017	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-30	2/27/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-30	2/27/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-30	2/27/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-30	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-30	2/27/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-30	2/27/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-30	2/27/2017	Isopropylbenzene	ND	10	1	447	ug/L
OW-30	2/27/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-30	2/27/2017	Ethylbenzene	ND	10	1.1	700	ug/L
OW-30	2/27/2017	Styrene	ND	10	1.1	100	ug/L
OW-30	2/27/2017	n-Propylbenzene	ND	10	1.3	660	ug/L
OW-30	2/27/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-30	2/27/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-30	2/27/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-30	2/27/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-30	2/27/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-30	2/27/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-30	2/27/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-30	2/27/2017	Bromobenzene	ND	10	0.98	62	ug/L
OW-30	2/27/2017	Toluene	ND	10	1.2	1000	ug/L
OW-30	2/27/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-30	2/27/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-30	2/27/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	2/27/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-30	2/27/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OW-30	2/27/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-30	2/27/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-30	2/27/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-30	2/27/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-30	2/27/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-30	2/27/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-30	2/27/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-30	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-30	2/27/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OW-30	2/27/2017	MTBE	**4000**	100	21	143	ug/L
OW-30	2/27/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-30	2/27/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-30	5/31/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-30	5/31/2017	Acetone	ND	100	8.2	14064	ug/L
OW-30	5/31/2017	Chloroform	ND	10	4	100	ug/L
OW-30	5/31/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-30	5/31/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-30	5/31/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-30	5/31/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-30	5/31/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-30	5/31/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-30	5/31/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-30	5/31/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-30	5/31/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-30	5/31/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-30	5/31/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-30	5/31/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-30	5/31/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-30	5/31/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-30	5/31/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-30	5/31/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-30	5/31/2017	2-Butanone	ND	100	11	5565	ug/L
OW-30	5/31/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-30	5/31/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-30	5/31/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-30	5/31/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-30	5/31/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-30	5/31/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-30	5/31/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-30	5/31/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-30	5/31/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-30	5/31/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-30	5/31/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-30	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-30	5/31/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-30	5/31/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-30	5/31/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-30	5/31/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-30	5/31/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-30	5/31/2017	Styrene	ND	10	1.6	100	ug/L
OW-30	5/31/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-30	5/31/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-30	5/31/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-30	5/31/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-30	5/31/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-30	5/31/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-30	5/31/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-30	5/31/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-30	5/31/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-30	5/31/2017	Toluene	ND	10	0.64	1000	ug/L
OW-30	5/31/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-30	5/31/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-30	5/31/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-30	5/31/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-30	5/31/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-30	5/31/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-30	5/31/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-30	5/31/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-30	5/31/2017	Pentafluorobenzene	**100**	0	0		None
OW-30	5/31/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-30	5/31/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-30	5/31/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-30	5/31/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-30	5/31/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/31/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-30	5/31/2017	MTBE	**3300**	100	24	143	ug/L
OW-30	5/31/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-30	5/31/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-30	9/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	9/6/2017	Acetone	1.5	10	0.82	14064	ug/L
OW-30	9/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-30	9/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-30	9/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-30	9/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-30	9/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-30	9/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-30	9/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-30	9/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-30	9/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-30	9/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-30	9/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-30	9/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-30	9/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	9/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-30	9/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-30	9/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-30	9/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-30	9/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	9/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	9/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-30	9/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-30	9/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-30	9/6/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-30	9/6/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-30	9/6/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-30	9/6/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-30	9/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-30	9/6/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-30	9/6/2017	1,2,4-Trimethylbenzene	0.34	1	0.11	56	ug/L
OW-30	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-30	9/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-30	9/6/2017	tert-Butylbenzene	0.14	1	0.1	690	ug/L
OW-30	9/6/2017	Isopropylbenzene	0.09	1	0.051	447	ug/L
OW-30	9/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-30	9/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-30	9/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-30	9/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-30	9/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-30	9/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-30	9/6/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-30	9/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	9/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-30	9/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-30	9/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-30	9/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-30	9/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-30	9/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	9/6/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-30	9/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-30	9/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-30	9/6/2017	sec-Butylbenzene	0.68	1	0.11	2000	ug/L
OW-30	9/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	9/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-30	9/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-30	9/6/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-30	9/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-30	9/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-30	9/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-30	9/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-30	9/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-30	9/6/2017	MTBE	**3200**	100	24	143	ug/L
OW-30	9/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-30	9/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-30	12/12/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-30	12/12/2017	Acetone	11	50	4.1	14064	ug/L
OW-30	12/12/2017	Chloroform	ND	5	2	100	ug/L
OW-30	12/12/2017	Benzene	**12**	5	0.31	5	ug/L
OW-30	12/12/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-30	12/12/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	12/12/2017	Chloromethane	ND	15	1.5	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/12/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-30	12/12/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-30	12/12/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-30	12/12/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-30	12/12/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-30	12/12/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-30	12/12/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-30	12/12/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	12/12/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-30	12/12/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-30	12/12/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-30	12/12/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-30	12/12/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-30	12/12/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-30	12/12/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-30	12/12/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-30	12/12/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-30	12/12/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	12/12/2017	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-30	12/12/2017	Naphthalene	ND	10	0.57	30	ug/L
OW-30	12/12/2017	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-30	12/12/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	12/12/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-30	12/12/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-30	12/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-30	12/12/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-30	12/12/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-30	12/12/2017	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-30	12/12/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-30	12/12/2017	Ethylbenzene	ND	5	0.47	700	ug/L
OW-30	12/12/2017	Styrene	ND	5	0.78	100	ug/L
OW-30	12/12/2017	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-30	12/12/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-30	12/12/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	12/12/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	12/12/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-30	12/12/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	12/12/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-30	12/12/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-30	12/12/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-30	12/12/2017	Toluene	ND	5	0.32	1000	ug/L
OW-30	12/12/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-30	12/12/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-30	12/12/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-30	12/12/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-30	12/12/2017	sec-Butylbenzene	1.1	5	0.55	2000	ug/L
OW-30	12/12/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-30	12/12/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-30	12/12/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	12/12/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-30	12/12/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-30	12/12/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-30	12/12/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-30	12/12/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-30	12/12/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-30	12/12/2017	MTBE	**3100**	50	12	143	ug/L
OW-30	12/12/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-30	12/12/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	2/28/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-30	2/28/2018	Acetone	4.9	50	4.1	14064	ug/L
OW-30	2/28/2018	Chloroform	ND	5	2	100	ug/L
OW-30	2/28/2018	Benzene	**6.3**	5	0.31	5	ug/L
OW-30	2/28/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-30	2/28/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	2/28/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-30	2/28/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-30	2/28/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-30	2/28/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-30	2/28/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-30	2/28/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-30	2/28/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-30	2/28/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-30	2/28/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	2/28/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-30	2/28/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-30	2/28/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	2/28/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-30	2/28/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-30	2/28/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-30	2/28/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-30	2/28/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-30	2/28/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-30	2/28/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	2/28/2018	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-30	2/28/2018	Naphthalene	ND	10	0.57	30	ug/L
OW-30	2/28/2018	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-30	2/28/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	2/28/2018	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-30	2/28/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-30	2/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-30	2/28/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-30	2/28/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-30	2/28/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-30	2/28/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-30	2/28/2018	Ethylbenzene	ND	5	0.47	700	ug/L
OW-30	2/28/2018	Styrene	ND	5	0.78	100	ug/L
OW-30	2/28/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-30	2/28/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-30	2/28/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	2/28/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	2/28/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-30	2/28/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	2/28/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-30	2/28/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-30	2/28/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-30	2/28/2018	Toluene	ND	5	0.32	1000	ug/L
OW-30	2/28/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-30	2/28/2018	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-30	2/28/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-30	2/28/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-30	2/28/2018	sec-Butylbenzene	1.1	5	0.55	2000	ug/L
OW-30	2/28/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-30	2/28/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-30	2/28/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	2/28/2018	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-30	2/28/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-30	2/28/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-30	2/28/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-30	2/28/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-30	2/28/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-30	2/28/2018	MTBE	**2900**	50	12	143	ug/L
OW-30	2/28/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-30	2/28/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	5/16/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	5/16/2018	Acetone	ND	10	0.82	14064	ug/L
OW-30	5/16/2018	Chloroform	ND	1	0.4	100	ug/L
OW-30	5/16/2018	Benzene	ND	1	0.062	5	ug/L
OW-30	5/16/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-30	5/16/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-30	5/16/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-30	5/16/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-30	5/16/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-30	5/16/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-30	5/16/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-30	5/16/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-30	5/16/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-30	5/16/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-30	5/16/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	5/16/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-30	5/16/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-30	5/16/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-30	5/16/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-30	5/16/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	5/16/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	5/16/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-30	5/16/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-30	5/16/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-30	5/16/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-30	5/16/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-30	5/16/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-30	5/16/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-30	5/16/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/16/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-30	5/16/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-30	5/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-30	5/16/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-30	5/16/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-30	5/16/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-30	5/16/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-30	5/16/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-30	5/16/2018	Styrene	ND	1	0.16	100	ug/L
OW-30	5/16/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-30	5/16/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-30	5/16/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-30	5/16/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-30	5/16/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	5/16/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-30	5/16/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-30	5/16/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-30	5/16/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-30	5/16/2018	Toluene	ND	1	0.064	1000	ug/L
OW-30	5/16/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	5/16/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-30	5/16/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-30	5/16/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-30	5/16/2018	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
OW-30	5/16/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	5/16/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-30	5/16/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-30	5/16/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-30	5/16/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-30	5/16/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-30	5/16/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-30	5/16/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-30	5/16/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-30	5/16/2018	MTBE	**3200**	100	24	143	ug/L
OW-30	5/16/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-30	5/16/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-30	9/19/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-30	9/19/2018	Acetone	ND	50	3.9	14064	ug/L
OW-30	9/19/2018	Chloroform	ND	5	2	100	ug/L
OW-30	9/19/2018	Benzene	ND	5	0.87	5	ug/L
OW-30	9/19/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-30	9/19/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	9/19/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-30	9/19/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-30	9/19/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-30	9/19/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-30	9/19/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-30	9/19/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-30	9/19/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-30	9/19/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-30	9/19/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	9/19/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-30	9/19/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-30	9/19/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-30	9/19/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-30	9/19/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-30	9/19/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-30	9/19/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-30	9/19/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-30	9/19/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	9/19/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	9/19/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-30	9/19/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-30	9/19/2018	2-Methylnaphthalene	*ND*	*20*	1.2		ug/L
OW-30	9/19/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	9/19/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-30	9/19/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-30	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-30	9/19/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-30	9/19/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-30	9/19/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-30	9/19/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-30	9/19/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-30	9/19/2018	Styrene	ND	5	1.3	100	ug/L
OW-30	9/19/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-30	9/19/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/19/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	9/19/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	9/19/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-30	9/19/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	9/19/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-30	9/19/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-30	9/19/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-30	9/19/2018	Toluene	ND	5	0.84	1000	ug/L
OW-30	9/19/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-30	9/19/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	9/19/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-30	9/19/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	9/19/2018	sec-Butylbenzene	1.2	5	1	2000	ug/L
OW-30	9/19/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-30	9/19/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-30	9/19/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	9/19/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-30	9/19/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-30	9/19/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-30	9/19/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-30	9/19/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-30	9/19/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-30	9/19/2018	MTBE	**2900**	50	16	143	ug/L
OW-30	9/19/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-30	9/19/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-30	12/3/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-30	12/3/2018	Acetone	ND	50	3.8	14064	ug/L
OW-30	12/3/2018	Chloroform	ND	5	1.2	100	ug/L
OW-30	12/3/2018	Benzene	ND	5	0.87	5	ug/L
OW-30	12/3/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
OW-30	12/3/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
OW-30	12/3/2018	Chloromethane	ND	15	1.6	20.32	ug/L
OW-30	12/3/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-30	12/3/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-30	12/3/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
OW-30	12/3/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-30	12/3/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-30	12/3/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-30	12/3/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-30	12/3/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
OW-30	12/3/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-30	12/3/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
OW-30	12/3/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
OW-30	12/3/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
OW-30	12/3/2018	2-Butanone	ND	50	7.1	5565	ug/L
OW-30	12/3/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-30	12/3/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-30	12/3/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-30	12/3/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	12/3/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
OW-30	12/3/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-30	12/3/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-30	12/3/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
OW-30	12/3/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
OW-30	12/3/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-30	12/3/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-30	12/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-30	12/3/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-30	12/3/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-30	12/3/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-30	12/3/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-30	12/3/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-30	12/3/2018	Styrene	ND	5	1.3	100	ug/L
OW-30	12/3/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-30	12/3/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	12/3/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
OW-30	12/3/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
OW-30	12/3/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-30	12/3/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
OW-30	12/3/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-30	12/3/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-30	12/3/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-30	12/3/2018	Toluene	ND	5	0.84	1000	ug/L
OW-30	12/3/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-30	12/3/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	12/3/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/3/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	12/3/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-30	12/3/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-30	12/3/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-30	12/3/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
OW-30	12/3/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-30	12/3/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-30	12/3/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-30	12/3/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
OW-30	12/3/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-30	12/3/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-30	12/3/2018	MTBE	**2700**	50	23	143	ug/L
OW-30	12/3/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-30	12/3/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-30	3/27/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	3/27/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	3/27/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	3/27/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	3/27/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	3/27/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	3/27/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-30	3/27/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	3/27/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	3/27/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	3/27/2019	1,2,4-Trimethylbenzene	1.2	5	1.065995	56	ug/L
OW-30	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	3/27/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	3/27/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	3/27/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	3/27/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	3/27/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	3/27/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	3/27/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	3/27/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	3/27/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	3/27/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	3/27/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	3/27/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	3/27/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	3/27/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	3/27/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	3/27/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	3/27/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	3/27/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	3/27/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	3/27/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	3/27/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	3/27/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	3/27/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	3/27/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	3/27/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	3/27/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	3/27/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	3/27/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	3/27/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	3/27/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	3/27/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	3/27/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	3/27/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	3/27/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	3/27/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	3/27/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	3/27/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	3/27/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	3/27/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	3/27/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	3/27/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	3/27/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	3/27/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-30	3/27/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	3/27/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	3/27/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	3/27/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	3/27/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	3/27/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	3/27/2019	Trichloroethene	ND	5	0.831359	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/27/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	3/27/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	3/27/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	3/27/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
OW-30	6/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	6/5/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	6/5/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	6/5/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	6/5/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	6/5/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	6/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-30	6/5/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	6/5/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	6/5/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	6/5/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-30	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	6/5/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	6/5/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	6/5/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	6/5/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	6/5/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	6/5/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	6/5/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	6/5/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	6/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	6/5/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	6/5/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	6/5/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	6/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	6/5/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	6/5/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	6/5/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	6/5/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	6/5/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	6/5/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	6/5/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	6/5/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	6/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	6/5/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	6/5/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	6/5/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	6/5/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	6/5/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	6/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	6/5/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	6/5/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	6/5/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	6/5/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	6/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	6/5/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	6/5/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	6/5/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	6/5/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	6/5/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	6/5/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	6/5/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	6/5/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	6/5/2019	sec-Butylbenzene	1.5	5	1.238656	2000	ug/L
OW-30	6/5/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	6/5/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	6/5/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	6/5/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	6/5/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	6/5/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	6/5/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-30	6/5/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	6/5/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	6/5/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	6/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	6/5/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	6/5/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	6/5/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	6/5/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	6/5/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	6/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/5/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	6/5/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	6/5/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	6/5/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-30	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	6/5/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	6/5/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	6/5/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	6/5/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	6/5/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	6/5/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	6/5/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	6/5/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	6/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	6/5/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	6/5/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	6/5/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	6/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	6/5/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	6/5/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	6/5/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	6/5/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	6/5/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	6/5/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	6/5/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	6/5/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	6/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	6/5/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	6/5/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	6/5/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	6/5/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	6/5/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	6/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	6/5/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	6/5/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	6/5/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	6/5/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	6/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	6/5/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	6/5/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	6/5/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	6/5/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	6/5/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	6/5/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	6/5/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	6/5/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	6/5/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-30	6/5/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	6/5/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	6/5/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	6/5/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	6/5/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	6/5/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	6/5/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-30	6/5/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	6/5/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	6/5/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
OW-50	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-50	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-50	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-50	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-50	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-50	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-50	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-50	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-50	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-50	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-50	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-50	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-50	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-50	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-50	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-50	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-50	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-50	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-50	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-50	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-50	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-50	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-50	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-50	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-50	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-50	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-50	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-50	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-50	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-50	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-50	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-50	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-50	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-50	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-50	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-50	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-50	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-50	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-50	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-50	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-50	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-50	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-50	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-50	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-50	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-50	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-50	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-50	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-50	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-50	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-50	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-50	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-50	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-50	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-50	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-50	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-50	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-50	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-50	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-50	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/23/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-50	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-50	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-50	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-50	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-50	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-50	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-50	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-50	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-50	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-50	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-50	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-50	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-50	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-50	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-50	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-50	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-50	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-50	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-50	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-50	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-50	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-50	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-50	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-50	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-50	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-50	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-50	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-50	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-50	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-50	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-50	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-50	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-50	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-50	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-50	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-50	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-50	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-50	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-50	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-50	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-50	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-50	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-50	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-50	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-50	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-50	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-50	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-50	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-50	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-50	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-50	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-50	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-50	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-50	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-50	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-50	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-50	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-50	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-50	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-50	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-50	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-50	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-50	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-50	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-50	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-50	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-50	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-50	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-50	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-50	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-50	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-50	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-50	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-50	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-50	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-50	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-50	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-50	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-50	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-50	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-50	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-50	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-50	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-50	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-50	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-50	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-50	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-50	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-50	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-50	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-50	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-50	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-50	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-50	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-50	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-50	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-50	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-50	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-50	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-50	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-50	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-50	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-50	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-50	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-50	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-50	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-50	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-50	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-50	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-50	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-50	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-50	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-50	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-50	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-50	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-50	9/15/2014	MTBE	ND	1	0.25	143	ug/L
OW-50	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-50	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-50	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-50	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-50	8/10/2015	Chloroform	ND	1	0.21	100	ug/L
OW-50	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-50	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-50	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-50	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-50	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-50	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-50	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-50	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-50	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-50	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-50	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-50	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-50	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-50	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-50	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-50	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-50	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-50	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-50	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-50	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-50	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-50	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-50	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-50	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-50	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-50	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-50	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-50	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-50	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-50	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-50	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-50	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-50	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-50	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-50	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-50	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-50	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-50	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-50	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-50	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-50	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-50	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-50	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-50	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-50	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-50	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-50	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-50	8/10/2015	MTBE	ND	1	0.17	143	ug/L
OW-50	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-50	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-50	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-50	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-50	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-50	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-50	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-50	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-50	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-50	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-50	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-50	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-50	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-50	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-50	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-50	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-50	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-50	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-50	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-50	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-50	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-50	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-50	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-50	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-50	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-50	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-50	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-50	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-50	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-50	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-50	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-50	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-50	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-50	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-50	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-50	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-50	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-50	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-50	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-50	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-50	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-50	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-50	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-50	9/9/2016	1,2-Dichloroethane	0.5	1	0.12	5	ug/L
OW-50	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-50	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-50	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-50	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-50	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-50	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-50	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-50	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-50	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-50	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-50	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-50	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-50	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-50	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-50	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-50	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-50	9/9/2016	MTBE	2.4	1	0.21	143	ug/L
OW-50	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-50	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-50	9/11/2017	Acetone	2.6	10	0.82	14064	ug/L
OW-50	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-50	9/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-50	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-50	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-50	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-50	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-50	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-50	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-50	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-50	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-50	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-50	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-50	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-50	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-50	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-50	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-50	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-50	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-50	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-50	9/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-50	9/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-50	9/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-50	9/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-50	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-50	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-50	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-50	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-50	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-50	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-50	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-50	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-50	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-50	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-50	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-50	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-50	9/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-50	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-50	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-50	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-50	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-50	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-50	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-50	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-50	9/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-50	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-50	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-50	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-50	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-50	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-50	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	9/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-50	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-50	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-50	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-50	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-50	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-50	9/11/2017	MTBE	5.9	1	0.24	143	ug/L
OW-50	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-50	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-50	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-50	9/17/2018	Acetone	1.9	10	0.79	14064	ug/L
OW-50	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
OW-50	9/17/2018	Benzene	ND	1	0.17	5	ug/L
OW-50	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-50	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-50	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-50	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-50	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-50	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-50	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-50	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-50	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-50	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-50	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-50	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-50	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-50	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-50	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-50	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-50	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-50	9/17/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-50	9/17/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-50	9/17/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-50	9/17/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-50	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/17/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-50	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-50	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-50	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-50	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-50	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-50	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-50	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-50	9/17/2018	Styrene	ND	1	0.25	100	ug/L
OW-50	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-50	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-50	9/17/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-50	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-50	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-50	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-50	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-50	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-50	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
OW-50	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-50	9/17/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
OW-50	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-50	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-50	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-50	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	9/17/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-50	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-50	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-50	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-50	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-50	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-50	9/17/2018	MTBE	10	1	0.32	143	ug/L
OW-50	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-50	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-50	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-50	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-50	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-50	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-50	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-50	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-50	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-50	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-50	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-50	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-50	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-50	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-50	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-50	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-50	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-50	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-50	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-50	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-50	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-50	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-50	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-50	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-50	11/7/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-50	11/7/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-50	11/7/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-50	11/7/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-50	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-50	11/7/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-50	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-50	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-50	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-50	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-50	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-50	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-50	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-50	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-50	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-50	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-50	11/7/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-50	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-50	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-50	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-50	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-50	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-50	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-50	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-50	11/7/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-50	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-50	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-50	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-50	11/7/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-50	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-50	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-50	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-50	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-50	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-50	11/7/2018	MTBE	10	1	0.46	143	ug/L
OW-50	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-50	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-50	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	3/27/2019	1,2-Dichloroethane	0.38	1	0.194638	5	ug/L
OW-50	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	3/27/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	3/27/2019	Benzene	ND	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	3/27/2019	MTBE	13	1	0.456095	143	ug/L
OW-50	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	3/27/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-50	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	5/1/2019	1,2-Dichloroethane	0.34	1	0.194638	5	ug/L
OW-50	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	5/1/2019	Benzene	0.19	1	0.166639	5	ug/L
OW-50	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	5/1/2019	MTBE	18	1	0.456095	143	ug/L
OW-50	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	5/1/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
OW-50	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-50	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	8/16/2019	Acetone	1.5	10	1.199396	14064	ug/L
OW-50	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-50	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	8/16/2019	MTBE	21	1	0.456095	143	ug/L
OW-50	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	8/16/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-50	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	10/15/2019	1,2-Dichloroethane	0.5	1	0.194638	5	ug/L
OW-50	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-50	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	10/15/2019	MTBE	20	1	0.456095	143	ug/L
OW-50	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	10/15/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-50	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-50	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-50	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-50	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-50	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-50	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-50	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-50	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-50	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-50	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-50	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-50	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-50	3/2/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-50	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-50	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-50	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-50	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-50	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-50	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-50	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-50	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-50	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-50	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-50	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	3/2/2020	Acetone	3.3	10	2.3	14064	ug/L
OW-50	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-50	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-50	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-50	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-50	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-50	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-50	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-50	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-50	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-50	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-50	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-50	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-50	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-50	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-50	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-50	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-50	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-50	3/2/2020	MTBE	26	1	0.39	143	ug/L
OW-50	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-50	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-50	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-50	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-50	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-50	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-50	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-50	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-50	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-50	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-50	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-50	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-50	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
OW-50	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-50	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-50	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-50	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-50	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-50	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-50	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-50	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-50	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-50	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-50	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-50	9/17/2020	1,2-Dichloroethane	0.38	1	0.22	5	ug/L
OW-50	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-50	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-50	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-50	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-50	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-50	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-50	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-50	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-50	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-50	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-50	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-50	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-50	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-50	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-50	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-50	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-50	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-50	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-50	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-50	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-50	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-50	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-50	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-50	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-50	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-50	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-50	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-50	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-50	9/17/2020	MTBE	41	1	0.39	143	ug/L
OW-50	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-50	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-50	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-50	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-50	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-50	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-50	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-50	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-50	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-50	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-50	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-50	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-50	9/17/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
OW-50	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-50	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-50	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-50	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-50	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-50	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-50	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-50	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-50	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-50	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-50	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-50	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-50	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-50	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-50	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-50	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-50	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-50	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-50	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-50	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-50	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-50	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-50	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-50	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-50	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-50	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-50	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-50	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-50	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-50	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-50	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-50	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-50	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-50	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-50	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-50	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-50	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-50	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-50	12/9/2020	MTBE	52	1	0.74	143	ug/L
OW-50	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-50	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-50	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-50	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-50	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-50	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-50	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-50	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-50	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-50	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-50	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-50	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-50	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-50	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-50	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-50	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-50	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-50	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-50	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-50	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-50	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-50	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-50	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-50	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-50	12/9/2020	1,2-Dibromoethane	ND	0.0195	0.00487	0.05	ug/L
OW-52	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-52	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-52	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-52	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-52	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-52	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-52	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-52	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-52	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-52	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-52	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-52	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-52	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-52	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-52	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-52	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-52	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-52	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-52	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-52	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-52	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-52	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-52	3/22/2012	2-Chloroethyl vinyl ether	*ND*	*10*	0.78		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-52	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-52	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-52	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-52	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-52	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-52	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-52	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-52	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-52	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-52	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-52	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-52	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-52	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-52	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-52	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-52	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-52	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	8/23/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-52	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-52	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-52	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-52	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-52	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-52	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-52	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-52	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-52	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-52	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-52	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-52	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-52	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-52	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-52	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-52	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-52	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-52	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-52	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-52	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-52	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-52	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-52	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-52	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-52	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-52	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-52	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-52	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-52	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-52	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-52	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-52	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-52	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-52	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-52	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-52	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-52	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-52	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-52	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-52	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-52	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-52	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-52	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-52	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-52	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-52	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-52	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-52	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-52	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-52	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-52	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-52	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-52	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-52	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-52	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-52	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-52	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-52	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-52	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-52	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-52	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-52	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-52	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-52	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-52	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-52	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-52	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-52	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-52	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-52	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-52	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-52	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-52	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-52	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-52	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-52	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-52	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-52	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-52	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-52	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-52	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-52	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-52	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-52	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-52	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-52	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-52	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-52	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-52	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-52	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-52	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-52	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-52	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-52	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-52	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-52	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-52	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-52	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-52	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-52	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-52	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-52	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-52	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-52	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-52	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-52	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-52	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-52	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-52	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-52	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-52	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-52	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-52	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-52	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-52	9/15/2014	MTBE	ND	1	0.25	143	ug/L
OW-52	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-52	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-52	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-52	8/10/2015	Chloroform	ND	1	0.21	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-52	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-52	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-52	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-52	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-52	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-52	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-52	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-52	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-52	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-52	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-52	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-52	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-52	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-52	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-52	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-52	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-52	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-52	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-52	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-52	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-52	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-52	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-52	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-52	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-52	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-52	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-52	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-52	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-52	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-52	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-52	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-52	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-52	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-52	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-52	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-52	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-52	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-52	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-52	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-52	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-52	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-52	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-52	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-52	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-52	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-52	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-52	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-52	8/10/2015	MTBE	ND	1	0.17	143	ug/L
OW-52	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-52	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-52	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-52	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-52	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-52	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-52	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-52	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-52	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-52	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-52	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-52	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-52	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-52	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-52	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-52	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-52	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-52	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-52	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-52	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-52	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-52	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-52	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-52	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-52	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-52	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-52	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-52	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-52	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-52	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-52	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-52	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-52	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-52	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-52	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-52	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-52	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-52	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-52	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-52	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-52	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-52	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-52	9/9/2016	1,2-Dichloroethane	0.49	1	0.12	5	ug/L
OW-52	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-52	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-52	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-52	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-52	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-52	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-52	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-52	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-52	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-52	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-52	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-52	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-52	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-52	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-52	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-52	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-52	9/9/2016	MTBE	0.46	1	0.21	143	ug/L
OW-52	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-52	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-52	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-52	9/11/2017	Acetone	2.1	10	0.82	14064	ug/L
OW-52	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-52	9/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-52	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-52	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-52	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-52	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-52	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-52	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-52	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-52	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-52	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-52	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-52	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-52	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-52	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-52	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-52	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-52	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-52	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-52	9/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-52	9/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-52	9/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-52	9/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-52	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-52	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-52	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-52	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-52	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-52	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-52	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-52	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-52	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-52	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-52	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-52	9/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-52	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-52	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-52	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-52	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-52	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-52	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-52	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-52	9/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-52	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-52	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-52	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-52	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-52	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-52	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	9/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-52	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-52	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-52	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-52	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-52	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-52	9/11/2017	MTBE	1	1	0.24	143	ug/L
OW-52	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-52	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-52	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-52	9/17/2018	Acetone	1	10	0.79	14064	ug/L
OW-52	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
OW-52	9/17/2018	Benzene	ND	1	0.17	5	ug/L
OW-52	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-52	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-52	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-52	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-52	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-52	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-52	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-52	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-52	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-52	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-52	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-52	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-52	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-52	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-52	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-52	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-52	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-52	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-52	9/17/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-52	9/17/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-52	9/17/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-52	9/17/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-52	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/17/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-52	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-52	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-52	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-52	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-52	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-52	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-52	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-52	9/17/2018	Styrene	ND	1	0.25	100	ug/L
OW-52	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-52	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-52	9/17/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-52	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-52	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-52	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-52	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-52	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
OW-52	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-52	9/17/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
OW-52	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-52	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-52	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-52	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-52	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	9/17/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-52	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-52	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-52	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-52	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-52	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-52	9/17/2018	MTBE	1.1	1	0.32	143	ug/L
OW-52	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-52	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-52	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-52	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-52	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-52	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-52	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-52	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-52	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-52	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-52	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-52	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-52	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-52	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-52	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-52	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-52	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-52	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-52	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-52	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-52	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-52	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-52	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-52	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-52	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-52	11/7/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-52	11/7/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-52	11/7/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-52	11/7/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-52	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-52	11/7/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-52	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-52	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-52	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-52	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-52	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-52	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-52	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-52	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-52	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-52	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-52	11/7/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-52	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-52	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-52	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-52	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-52	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-52	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-52	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-52	11/7/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-52	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-52	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-52	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-52	11/7/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-52	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-52	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-52	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-52	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-52	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-52	11/7/2018	MTBE	1.5	1	0.46	143	ug/L
OW-52	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-52	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-52	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	3/27/2019	1,2-Dichloroethane	0.35	1	0.194638	5	ug/L
OW-52	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	3/27/2019	Acetone	4.3	10	1.199396	14064	ug/L
OW-52	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	3/27/2019	MTBE	1.6	1	0.456095	143	ug/L
OW-52	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	3/27/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-52	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	5/1/2019	1,2-Dichloroethane	0.32	1	0.194638	5	ug/L
OW-52	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-52	5/1/2019	Benzene	0.19	1	0.166639	5	ug/L
OW-52	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	5/1/2019	MTBE	1.9	1	0.456095	143	ug/L
OW-52	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	5/1/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-52	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-52	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	8/16/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-52	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	8/16/2019	MTBE	2.2	1	0.456095	143	ug/L
OW-52	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-52	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	8/16/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-52	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	8/16/2019	MTBE	2.3	1	0.456095	143	ug/L
OW-52	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
OW-52	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	10/15/2019	1,2-Dichloroethane	0.47	1	0.194638	5	ug/L
OW-52	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	10/15/2019	MTBE	2	1	0.456095	143	ug/L
OW-52	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	10/15/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-52	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-52	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-52	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-52	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-52	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-52	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-52	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-52	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-52	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-52	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-52	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-52	3/2/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-52	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-52	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-52	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-52	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-52	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-52	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-52	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-52	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-52	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-52	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-52	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	3/2/2020	Acetone	2.9	10	2.3	14064	ug/L
OW-52	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-52	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-52	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-52	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-52	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-52	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-52	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-52	3/2/2020	Chloroform	ND	1	0.13	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-52	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-52	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-52	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-52	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-52	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-52	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-52	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-52	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-52	3/2/2020	MTBE	2.3	1	0.39	143	ug/L
OW-52	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-52	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-52	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-52	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-52	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-52	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-52	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-52	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-52	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-52	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-52	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-52	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-52	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-52	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-52	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-52	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-52	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-52	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-52	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-52	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-52	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-52	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-52	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-52	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-52	9/17/2020	1,2-Dichloroethane	0.35	1	0.22	5	ug/L
OW-52	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-52	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-52	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-52	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-52	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-52	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-52	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-52	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-52	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-52	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-52	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-52	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-52	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-52	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-52	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-52	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-52	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-52	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-52	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-52	9/17/2020	Chloromethane	0.58	3	0.4	20.32	ug/L
OW-52	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-52	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-52	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-52	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-52	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-52	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-52	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-52	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-52	9/17/2020	MTBE	2.9	1	0.39	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-52	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-52	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-52	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-52	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-52	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-52	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-52	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-52	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-52	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-52	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-52	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-52	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-52	12/9/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
OW-52	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-52	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-52	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-52	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-52	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-52	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-52	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-52	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-52	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-52	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-52	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-52	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-52	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-52	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-52	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-52	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-52	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-52	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-52	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-52	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-52	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-52	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-52	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-52	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-52	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-52	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-52	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-52	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-52	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-52	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-52	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-52	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-52	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-52	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-52	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-52	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-52	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-52	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-52	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-52	12/9/2020	MTBE	2.69	1	0.74	143	ug/L
OW-52	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-52	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-52	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-52	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-52	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-52	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-52	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-52	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-52	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-52	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-52	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-52	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-52	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-52	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-52	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-52	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-52	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-52	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-52	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-52	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-52	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-52	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-52	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-54	6/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	6/1/2016	Acetone	21	10	4.9	14064	ug/L
OW-54	6/1/2016	Chloroform	ND	1	0.089	100	ug/L
OW-54	6/1/2016	Benzene	**160**	20	1.9	5	ug/L
OW-54	6/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-54	6/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-54	6/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-54	6/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-54	6/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-54	6/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-54	6/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-54	6/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-54	6/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-54	6/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-54	6/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-54	6/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-54	6/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-54	6/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-54	6/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-54	6/1/2016	2-Butanone	5.4	10	0.74	5565	ug/L
OW-54	6/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-54	6/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-54	6/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-54	6/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-54	6/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	6/1/2016	1,2,4-Trimethylbenzene	36	1	0.11	56	ug/L
OW-54	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-54	6/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-54	6/1/2016	tert-Butylbenzene	0.12	1	0.12	690	ug/L
OW-54	6/1/2016	Isopropylbenzene	1.7	1	0.1	447	ug/L
OW-54	6/1/2016	p-Isopropyltoluene	0.47	1	0.14	NA	ug/L
OW-54	6/1/2016	Ethylbenzene	55	1	0.11	700	ug/L
OW-54	6/1/2016	Styrene	ND	1	0.11	100	ug/L
OW-54	6/1/2016	n-Propylbenzene	7.4	1	0.13	660	ug/L
OW-54	6/1/2016	n-Butylbenzene	1.6	3	0.16	1000	ug/L
OW-54	6/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-54	6/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-54	6/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-54	6/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-54	6/1/2016	1,3,5-Trimethylbenzene	11	1	0.12	60	ug/L
OW-54	6/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-54	6/1/2016	Toluene	200	20	2.4	1000	ug/L
OW-54	6/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	6/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-54	6/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	6/1/2016	sec-Butylbenzene	1.2	1	0.12	2000	ug/L
OW-54	6/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-54	6/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-54	6/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-54	6/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-54	6/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-54	6/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-54	6/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-54	6/1/2016	Xylenes, Total	170	1.5	0.37	620	ug/L
OW-54	6/1/2016	MTBE	**2000**	20	4.2	143	ug/L
OW-54	6/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-54	6/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-54	9/16/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-54	9/16/2016	Acetone	ND	50	25	14064	ug/L
OW-54	9/16/2016	Chloroform	ND	5	0.44	100	ug/L
OW-54	9/16/2016	Benzene	**100**	5	0.48	5	ug/L
OW-54	9/16/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-54	9/16/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-54	9/16/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-54	9/16/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-54	9/16/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-54	9/16/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-54	9/16/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-54	9/16/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-54	9/16/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-54	9/16/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/16/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-54	9/16/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-54	9/16/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-54	9/16/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-54	9/16/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-54	9/16/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-54	9/16/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-54	9/16/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-54	9/16/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-54	9/16/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-54	9/16/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-54	9/16/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-54	9/16/2016	Naphthalene	4.2	10	0.46	30	ug/L
OW-54	9/16/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-54	9/16/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	9/16/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-54	9/16/2016	1,2,4-Trimethylbenzene	15	5	0.55	56	ug/L
OW-54	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-54	9/16/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-54	9/16/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-54	9/16/2016	Isopropylbenzene	1.2	5	0.52	447	ug/L
OW-54	9/16/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-54	9/16/2016	Ethylbenzene	29	5	0.56	700	ug/L
OW-54	9/16/2016	Styrene	ND	5	0.55	100	ug/L
OW-54	9/16/2016	n-Propylbenzene	3.7	5	0.66	660	ug/L
OW-54	9/16/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-54	9/16/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-54	9/16/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-54	9/16/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-54	9/16/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-54	9/16/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-54	9/16/2016	1,3,5-Trimethylbenzene	6.5	5	0.58	60	ug/L
OW-54	9/16/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-54	9/16/2016	Toluene	8	5	0.59	1000	ug/L
OW-54	9/16/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-54	9/16/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-54	9/16/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-54	9/16/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-54	9/16/2016	sec-Butylbenzene	1.7	5	0.62	2000	ug/L
OW-54	9/16/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-54	9/16/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-54	9/16/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-54	9/16/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-54	9/16/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-54	9/16/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-54	9/16/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-54	9/16/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-54	9/16/2016	Xylenes, Total	28	7.5	1.8	620	ug/L
OW-54	9/16/2016	MTBE	**2000**	50	11	143	ug/L
OW-54	9/16/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-54	9/16/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-54	11/9/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-54	11/9/2016	Acetone	ND	50	25	14064	ug/L
OW-54	11/9/2016	Chloroform	ND	5	0.44	100	ug/L
OW-54	11/9/2016	Benzene	**94**	5	0.48	5	ug/L
OW-54	11/9/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-54	11/9/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-54	11/9/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-54	11/9/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-54	11/9/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-54	11/9/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-54	11/9/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-54	11/9/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-54	11/9/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-54	11/9/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-54	11/9/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-54	11/9/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-54	11/9/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-54	11/9/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-54	11/9/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-54	11/9/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-54	11/9/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-54	11/9/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-54	11/9/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-54	11/9/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-54	11/9/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/9/2016	1-Methylnaphthalene	1.9	20	1	NA	ug/L
OW-54	11/9/2016	Naphthalene	3.7	10	0.46	30	ug/L
OW-54	11/9/2016	2-Methylnaphthalene	**2.1**	20	0.79		ug/L
OW-54	11/9/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	11/9/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-54	11/9/2016	1,2,4-Trimethylbenzene	16	5	0.55	56	ug/L
OW-54	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-54	11/9/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-54	11/9/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-54	11/9/2016	Isopropylbenzene	1.2	5	0.52	447	ug/L
OW-54	11/9/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-54	11/9/2016	Ethylbenzene	25	5	0.56	700	ug/L
OW-54	11/9/2016	Styrene	ND	5	0.55	100	ug/L
OW-54	11/9/2016	n-Propylbenzene	3.1	5	0.66	660	ug/L
OW-54	11/9/2016	n-Butylbenzene	1	15	0.8	1000	ug/L
OW-54	11/9/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-54	11/9/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-54	11/9/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-54	11/9/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-54	11/9/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-54	11/9/2016	1,3,5-Trimethylbenzene	4.8	5	0.58	60	ug/L
OW-54	11/9/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-54	11/9/2016	Toluene	6.5	5	0.59	1000	ug/L
OW-54	11/9/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-54	11/9/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-54	11/9/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-54	11/9/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-54	11/9/2016	sec-Butylbenzene	1.1	5	0.62	2000	ug/L
OW-54	11/9/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-54	11/9/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-54	11/9/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-54	11/9/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-54	11/9/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-54	11/9/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-54	11/9/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-54	11/9/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-54	11/9/2016	Xylenes, Total	20	7.5	1.8	620	ug/L
OW-54	11/9/2016	MTBE	**2100**	50	11	143	ug/L
OW-54	11/9/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-54	11/9/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-54	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
OW-54	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
OW-54	3/29/2017	Benzene	**150**	20	1.9	5	ug/L
OW-54	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-54	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-54	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-54	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-54	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-54	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-54	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-54	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-54	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-54	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-54	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
OW-54	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-54	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-54	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-54	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-54	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-54	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-54	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-54	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-54	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-54	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	3/29/2017	1,2,4-Trimethylbenzene	20	1	0.1	56	ug/L
OW-54	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-54	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-54	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-54	3/29/2017	Isopropylbenzene	1.3	1	0.098	447	ug/L
OW-54	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-54	3/29/2017	Ethylbenzene	42	1	0.11	700	ug/L
OW-54	3/29/2017	Styrene	ND	1	0.16	100	ug/L
OW-54	3/29/2017	n-Propylbenzene	5.3	1	0.13	660	ug/L
OW-54	3/29/2017	n-Butylbenzene	0.49	3	0.16	1000	ug/L
OW-54	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-54	3/29/2017	1,2-Dichloroethane	0.64	1	0.12	5	ug/L
OW-54	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-54	3/29/2017	1,3,5-Trimethylbenzene	2.1	1	0.12	60	ug/L
OW-54	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-54	3/29/2017	Toluene	4.7	1	0.089	1000	ug/L
OW-54	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
OW-54	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	3/29/2017	sec-Butylbenzene	1.1	1	0.1	2000	ug/L
OW-54	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-54	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-54	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-54	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-54	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-54	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-54	3/29/2017	Xylenes, Total	3.9	1.5	0.32	620	ug/L
OW-54	3/29/2017	MTBE	**2200**	20	3	143	ug/L
OW-54	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-54	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
OW-54	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	6/21/2017	Acetone	18	10	0.82	14064	ug/L
OW-54	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-54	6/21/2017	Benzene	**170**	100	6.2	5	ug/L
OW-54	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-54	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-54	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-54	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-54	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-54	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-54	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-54	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-54	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-54	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-54	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-54	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-54	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-54	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-54	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-54	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-54	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-54	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-54	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-54	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-54	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	6/21/2017	1,2,4-Trimethylbenzene	21	1	0.11	56	ug/L
OW-54	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-54	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-54	6/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-54	6/21/2017	Isopropylbenzene	1.4	1	0.051	447	ug/L
OW-54	6/21/2017	p-Isopropyltoluene	0.16	1	0.096	NA	ug/L
OW-54	6/21/2017	Ethylbenzene	46	1	0.093	700	ug/L
OW-54	6/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-54	6/21/2017	n-Propylbenzene	5	1	0.074	660	ug/L
OW-54	6/21/2017	n-Butylbenzene	0.54	3	0.13	1000	ug/L
OW-54	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-54	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-54	6/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-54	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-54	6/21/2017	1,3,5-Trimethylbenzene	2.2	1	0.087	60	ug/L
OW-54	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-54	6/21/2017	Toluene	4.7	1	0.064	1000	ug/L
OW-54	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-54	6/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-54	6/21/2017	sec-Butylbenzene	0.94	1	0.11	2000	ug/L
OW-54	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-54	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-54	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	6/21/2017	Pentafluorobenzene	**10**	0	0		None
OW-54	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-54	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-54	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-54	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-54	6/21/2017	Xylenes, Total	3.8	1.5	0.32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/21/2017	MTBE	**2300**	100	24	143	ug/L
OW-54	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-54	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-54	9/11/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	9/11/2017	Acetone	ND	50	4.1	14064	ug/L
OW-54	9/11/2017	Chloroform	ND	5	2	100	ug/L
OW-54	9/11/2017	Benzene	**140**	5	0.31	5	ug/L
OW-54	9/11/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	9/11/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	9/11/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	9/11/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	9/11/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	9/11/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	9/11/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	9/11/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	9/11/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	9/11/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	9/11/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	9/11/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	9/11/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	9/11/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	9/11/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	9/11/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	9/11/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	9/11/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	9/11/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	9/11/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	9/11/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	9/11/2017	1,2,4-Trimethylbenzene	18	5	0.56	56	ug/L
OW-54	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	9/11/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	9/11/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	9/11/2017	Isopropylbenzene	0.82	5	0.26	447	ug/L
OW-54	9/11/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	9/11/2017	Ethylbenzene	37	5	0.47	700	ug/L
OW-54	9/11/2017	Styrene	ND	5	0.78	100	ug/L
OW-54	9/11/2017	n-Propylbenzene	4	5	0.37	660	ug/L
OW-54	9/11/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	9/11/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	9/11/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	9/11/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	9/11/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	9/11/2017	1,3,5-Trimethylbenzene	1.1	5	0.44	60	ug/L
OW-54	9/11/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	9/11/2017	Toluene	3.1	5	0.32	1000	ug/L
OW-54	9/11/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	9/11/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	9/11/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	9/11/2017	sec-Butylbenzene	0.68	5	0.55	2000	ug/L
OW-54	9/11/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	9/11/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	9/11/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	9/11/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	9/11/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	9/11/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	9/11/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	9/11/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	9/11/2017	MTBE	**1900**	50	12	143	ug/L
OW-54	9/11/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	9/11/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	12/6/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	12/6/2017	Acetone	ND	50	4.1	14064	ug/L
OW-54	12/6/2017	Chloroform	ND	5	2	100	ug/L
OW-54	12/6/2017	Benzene	**55**	5	0.31	5	ug/L
OW-54	12/6/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	12/6/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	12/6/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	12/6/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	12/6/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	12/6/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	12/6/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	12/6/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	12/6/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	12/6/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	12/6/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	12/6/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	12/6/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	12/6/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	12/6/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	12/6/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	12/6/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	12/6/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	12/6/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	12/6/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	12/6/2017	1,2,4-Trimethylbenzene	9.4	5	0.56	56	ug/L
OW-54	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	12/6/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	12/6/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	12/6/2017	Isopropylbenzene	0.41	5	0.26	447	ug/L
OW-54	12/6/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	12/6/2017	Ethylbenzene	16	5	0.47	700	ug/L
OW-54	12/6/2017	Styrene	ND	5	0.78	100	ug/L
OW-54	12/6/2017	n-Propylbenzene	1.4	5	0.37	660	ug/L
OW-54	12/6/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	12/6/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	12/6/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	12/6/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	12/6/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	12/6/2017	1,3,5-Trimethylbenzene	0.52	5	0.44	60	ug/L
OW-54	12/6/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	12/6/2017	Toluene	0.93	5	0.32	1000	ug/L
OW-54	12/6/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	12/6/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	12/6/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	12/6/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-54	12/6/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	12/6/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	12/6/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	12/6/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	12/6/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	12/6/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	12/6/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	12/6/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	12/6/2017	MTBE	**1900**	50	12	143	ug/L
OW-54	12/6/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	12/6/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	2/22/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	2/22/2018	Acetone	ND	50	4.1	14064	ug/L
OW-54	2/22/2018	Chloroform	ND	5	2	100	ug/L
OW-54	2/22/2018	Benzene	**50**	5	0.31	5	ug/L
OW-54	2/22/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	2/22/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	2/22/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	2/22/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	2/22/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	2/22/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	2/22/2018	Methylene Chloride	*2.6*	*15*	0.54	5	ug/L
OW-54	2/22/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	2/22/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	2/22/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	2/22/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	2/22/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	2/22/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	2/22/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	2/22/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	2/22/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	2/22/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	2/22/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	2/22/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	2/22/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	2/22/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	2/22/2018	1,2,4-Trimethylbenzene	8.8	5	0.56	56	ug/L
OW-54	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	2/22/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	2/22/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	2/22/2018	Isopropylbenzene	0.28	5	0.26	447	ug/L
OW-54	2/22/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	2/22/2018	Ethylbenzene	13	5	0.47	700	ug/L
OW-54	2/22/2018	Styrene	ND	5	0.78	100	ug/L
OW-54	2/22/2018	n-Propylbenzene	1.8	5	0.37	660	ug/L
OW-54	2/22/2018	n-Butylbenzene	0.67	15	0.65	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/22/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	2/22/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	2/22/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	2/22/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	2/22/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-54	2/22/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	2/22/2018	Toluene	0.89	5	0.32	1000	ug/L
OW-54	2/22/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	2/22/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	2/22/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	2/22/2018	sec-Butylbenzene	0.78	5	0.55	2000	ug/L
OW-54	2/22/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	2/22/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	2/22/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	2/22/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	2/22/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	2/22/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	2/22/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	2/22/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	2/22/2018	MTBE	**1900**	50	12	143	ug/L
OW-54	2/22/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	2/22/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	5/8/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	5/8/2018	Acetone	ND	50	4.1	14064	ug/L
OW-54	5/8/2018	Chloroform	ND	5	2	100	ug/L
OW-54	5/8/2018	Benzene	**58**	5	0.31	5	ug/L
OW-54	5/8/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	5/8/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	5/8/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	5/8/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	5/8/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	5/8/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	5/8/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	5/8/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	5/8/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	5/8/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	5/8/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	5/8/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	5/8/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	5/8/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	5/8/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	5/8/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	5/8/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	5/8/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	5/8/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	5/8/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	5/8/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	5/8/2018	1,2,4-Trimethylbenzene	10	5	0.56	56	ug/L
OW-54	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	5/8/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	5/8/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	5/8/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-54	5/8/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	5/8/2018	Ethylbenzene	13	5	0.47	700	ug/L
OW-54	5/8/2018	Styrene	ND	5	0.78	100	ug/L
OW-54	5/8/2018	n-Propylbenzene	1.2	5	0.37	660	ug/L
OW-54	5/8/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	5/8/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	5/8/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	5/8/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	5/8/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	5/8/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-54	5/8/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	5/8/2018	Toluene	0.88	5	0.32	1000	ug/L
OW-54	5/8/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	5/8/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	5/8/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	5/8/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-54	5/8/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	5/8/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	5/8/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	5/8/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	5/8/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	5/8/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	5/8/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	5/8/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	MTBE	**1800**	50	12	143	ug/L
OW-54	5/8/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	5/8/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	8/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OW-54	8/28/2018	Acetone	ND	20	1.6	14064	ug/L
OW-54	8/28/2018	Chloroform	ND	2	0.8	100	ug/L
OW-54	8/28/2018	Benzene	**52**	2	0.35	5	ug/L
OW-54	8/28/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
OW-54	8/28/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OW-54	8/28/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OW-54	8/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
OW-54	8/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
OW-54	8/28/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
OW-54	8/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OW-54	8/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OW-54	8/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
OW-54	8/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OW-54	8/28/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-54	8/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OW-54	8/28/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
OW-54	8/28/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OW-54	8/28/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
OW-54	8/28/2018	2-Butanone	ND	20	2.5	5565	ug/L
OW-54	8/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OW-54	8/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
OW-54	8/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
OW-54	8/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OW-54	8/28/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-54	8/28/2018	1,2,4-Trimethylbenzene	7.9	2	0.51	56	ug/L
OW-54	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OW-54	8/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OW-54	8/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OW-54	8/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
OW-54	8/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OW-54	8/28/2018	Ethylbenzene	8.3	2	0.45	700	ug/L
OW-54	8/28/2018	Styrene	ND	2	0.5	100	ug/L
OW-54	8/28/2018	n-Propylbenzene	0.76	2	0.49	660	ug/L
OW-54	8/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OW-54	8/28/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OW-54	8/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OW-54	8/28/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OW-54	8/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OW-54	8/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OW-54	8/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
OW-54	8/28/2018	Toluene	1.1	2	0.34	1000	ug/L
OW-54	8/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OW-54	8/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OW-54	8/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-54	8/28/2018	sec-Butylbenzene	0.55	2	0.4	2000	ug/L
OW-54	8/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OW-54	8/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OW-54	8/28/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OW-54	8/28/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
OW-54	8/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
OW-54	8/28/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
OW-54	8/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OW-54	8/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
OW-54	8/28/2018	MTBE	**2000**	20	6.4	143	ug/L
OW-54	8/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OW-54	8/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OW-54	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-54	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-54	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-54	11/7/2018	Benzene	**52**	1	0.17	5	ug/L
OW-54	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-54	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-54	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-54	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-54	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-54	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-54	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-54	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-54	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-54	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-54	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-54	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-54	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-54	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-54	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-54	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-54	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-54	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-54	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-54	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-54	11/7/2018	1,2,4-Trimethylbenzene	10	1	0.25	56	ug/L
OW-54	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-54	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-54	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-54	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-54	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-54	11/7/2018	Ethylbenzene	15	1	0.22	700	ug/L
OW-54	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-54	11/7/2018	n-Propylbenzene	2.1	1	0.24	660	ug/L
OW-54	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-54	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-54	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-54	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-54	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-54	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-54	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-54	11/7/2018	Toluene	1.1	1	0.17	1000	ug/L
OW-54	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-54	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-54	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-54	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-54	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-54	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-54	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-54	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-54	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-54	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-54	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-54	11/7/2018	MTBE	**1500**	10	4.6	143	ug/L
OW-54	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-54	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-54	2/6/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
OW-54	2/6/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
OW-54	2/6/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
OW-54	2/6/2019	1,1,2-Trichloroethane	ND	2	0.465446	5	ug/L
OW-54	2/6/2019	1,1-Dichloroethane	ND	2	0.350393	25	ug/L
OW-54	2/6/2019	1,1-Dichloroethene	ND	2	0.240976	7	ug/L
OW-54	2/6/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-54	2/6/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
OW-54	2/6/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
OW-54	2/6/2019	1,2,4-Trimethylbenzene	14	2	0.506629	56	ug/L
OW-54	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
OW-54	2/6/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
OW-54	2/6/2019	1,2-Dichloroethane	0.67	2	0.379051	5	ug/L
OW-54	2/6/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
OW-54	2/6/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
OW-54	2/6/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
OW-54	2/6/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-54	2/6/2019	2-Butanone	ND	20	2.821738	5565	ug/L
OW-54	2/6/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
OW-54	2/6/2019	2-Hexanone	ND	20	1.813149	38	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-54	2/6/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
OW-54	2/6/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
OW-54	2/6/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
OW-54	2/6/2019	Acetone	ND	20	1.514139	14064	ug/L
OW-54	2/6/2019	Benzene	**70**	2	0.349791	5	ug/L
OW-54	2/6/2019	Bromobenzene	ND	2	0.635812	62	ug/L
OW-54	2/6/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
OW-54	2/6/2019	Bromoform	ND	2	0.646621	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-54	2/6/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
OW-54	2/6/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
OW-54	2/6/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
OW-54	2/6/2019	Chloroethane	ND	4	0.328674	20857	ug/L
OW-54	2/6/2019	Chloroform	ND	2	0.470448	100	ug/L
OW-54	2/6/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-54	2/6/2019	cis-1,2-Dichloroethene	ND	2	0.751962	70	ug/L
OW-54	2/6/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
OW-54	2/6/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
OW-54	2/6/2019	Dibromomethane	ND	2	0.644295	8	ug/L
OW-54	2/6/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-54	2/6/2019	Ethylbenzene	20	2	0.446804	700	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
OW-54	2/6/2019	Isopropylbenzene	0.57	2	0.442208	447	ug/L
OW-54	2/6/2019	MTBE	**1600**	20	9.1219	143	ug/L
OW-54	2/6/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
OW-54	2/6/2019	Naphthalene	ND	4	0.579252	30	ug/L
OW-54	2/6/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
OW-54	2/6/2019	n-Propylbenzene	2.2	2	0.485172	660	ug/L
OW-54	2/6/2019	sec-Butylbenzene	0.75	2	0.404509	2000	ug/L
OW-54	2/6/2019	Styrene	ND	2	0.500291	100	ug/L
OW-54	2/6/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
OW-54	2/6/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
OW-54	2/6/2019	Toluene	1.9	2	0.336279	1000	ug/L
OW-54	2/6/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
OW-54	2/6/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
OW-54	2/6/2019	Trichloroethene	ND	2	0.515113	5	ug/L
OW-54	2/6/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
OW-54	2/6/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
OW-54	2/6/2019	Xylenes, Total	1.3	3	1.282575	620	ug/L
OW-54	2/6/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
OW-54	2/6/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
OW-54	2/6/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
OW-54	2/6/2019	1,1,2-Trichloroethane	ND	2	0.465446	5	ug/L
OW-54	2/6/2019	1,1-Dichloroethane	ND	2	0.350393	25	ug/L
OW-54	2/6/2019	1,1-Dichloroethene	ND	2	0.240976	7	ug/L
OW-54	2/6/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-54	2/6/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
OW-54	2/6/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
OW-54	2/6/2019	1,2,4-Trimethylbenzene	15	2	0.506629	56	ug/L
OW-54	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
OW-54	2/6/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
OW-54	2/6/2019	1,2-Dichloroethane	0.67	2	0.379051	5	ug/L
OW-54	2/6/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
OW-54	2/6/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
OW-54	2/6/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
OW-54	2/6/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-54	2/6/2019	2-Butanone	ND	20	2.821738	5565	ug/L
OW-54	2/6/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
OW-54	2/6/2019	2-Hexanone	ND	20	1.813149	38	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-54	2/6/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
OW-54	2/6/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
OW-54	2/6/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
OW-54	2/6/2019	Acetone	ND	20	1.514139	14064	ug/L
OW-54	2/6/2019	Benzene	**73**	2	0.349791	5	ug/L
OW-54	2/6/2019	Bromobenzene	ND	2	0.635812	62	ug/L
OW-54	2/6/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
OW-54	2/6/2019	Bromoform	ND	2	0.646621	32.9	ug/L
OW-54	2/6/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-54	2/6/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
OW-54	2/6/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
OW-54	2/6/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
OW-54	2/6/2019	Chloroethane	ND	4	0.328674	20857	ug/L
OW-54	2/6/2019	Chloroform	ND	2	0.470448	100	ug/L
OW-54	2/6/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-54	2/6/2019	cis-1,2-Dichloroethene	ND	2	0.751962	70	ug/L
OW-54	2/6/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
OW-54	2/6/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
OW-54	2/6/2019	Dibromomethane	ND	2	0.644295	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-54	2/6/2019	Ethylbenzene	20	2	0.446804	700	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
OW-54	2/6/2019	Isopropylbenzene	0.55	2	0.442208	447	ug/L
OW-54	2/6/2019	MTBE	**1600**	20	9.1219	143	ug/L
OW-54	2/6/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
OW-54	2/6/2019	Naphthalene	ND	4	0.579252	30	ug/L
OW-54	2/6/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
OW-54	2/6/2019	n-Propylbenzene	2.3	2	0.485172	660	ug/L
OW-54	2/6/2019	sec-Butylbenzene	0.69	2	0.404509	2000	ug/L
OW-54	2/6/2019	Styrene	ND	2	0.500291	100	ug/L
OW-54	2/6/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
OW-54	2/6/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
OW-54	2/6/2019	Toluene	1.8	2	0.336279	1000	ug/L
OW-54	2/6/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
OW-54	2/6/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
OW-54	2/6/2019	Trichloroethene	ND	2	0.515113	5	ug/L
OW-54	2/6/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
OW-54	2/6/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
OW-54	2/6/2019	Xylenes, Total	1.4	3	1.282575	620	ug/L
OW-54	5/2/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	5/2/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	5/2/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	5/2/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	5/2/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	5/2/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	5/2/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	5/2/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	5/2/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	5/2/2019	1,2,4-Trimethylbenzene	15	5	1.065995	56	ug/L
OW-54	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	5/2/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	5/2/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	5/2/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	5/2/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	5/2/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	5/2/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	5/2/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	5/2/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	5/2/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	5/2/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	5/2/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	5/2/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	5/2/2019	Benzene	**97**	5	0.833195	5	ug/L
OW-54	5/2/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	5/2/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	5/2/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	5/2/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	5/2/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	5/2/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	5/2/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	5/2/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	5/2/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	5/2/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	5/2/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	5/2/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	5/2/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	5/2/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	5/2/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	5/2/2019	Ethylbenzene	28	5	0.661704	700	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	5/2/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-54	5/2/2019	MTBE	**1700**	50	22.804749	143	ug/L
OW-54	5/2/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	5/2/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	5/2/2019	n-Propylbenzene	2.8	5	1.07154	660	ug/L
OW-54	5/2/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-54	5/2/2019	Styrene	ND	5	0.956617	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	5/2/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	5/2/2019	Toluene	3.1	5	1.752181	1000	ug/L
OW-54	5/2/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	5/2/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	5/2/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	5/2/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	5/2/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	5/2/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-54	5/2/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	5/2/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	5/2/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	5/2/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	5/2/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	5/2/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	5/2/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	5/2/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	5/2/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	5/2/2019	1,2,4-Trimethylbenzene	16	5	1.065995	56	ug/L
OW-54	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	5/2/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	5/2/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	5/2/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	5/2/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	5/2/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	5/2/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	5/2/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	5/2/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	5/2/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	5/2/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	5/2/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	5/2/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	5/2/2019	Benzene	**100**	5	0.833195	5	ug/L
OW-54	5/2/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	5/2/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	5/2/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	5/2/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	5/2/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	5/2/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	5/2/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	5/2/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	5/2/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	5/2/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	5/2/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	5/2/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	5/2/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	5/2/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	5/2/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	5/2/2019	Ethylbenzene	31	5	0.661704	700	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	5/2/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-54	5/2/2019	MTBE	**1800**	50	22.804749	143	ug/L
OW-54	5/2/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	5/2/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	5/2/2019	n-Propylbenzene	3	5	1.07154	660	ug/L
OW-54	5/2/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-54	5/2/2019	Styrene	ND	5	0.956617	100	ug/L
OW-54	5/2/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	5/2/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	5/2/2019	Toluene	3.4	5	1.752181	1000	ug/L
OW-54	5/2/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	5/2/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	5/2/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	5/2/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	5/2/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	5/2/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-54	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-54	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-54	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-54	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-54	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-54	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-54	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-54	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-54	8/21/2019	1,2,4-Trimethylbenzene	13	1	0.213199	56	ug/L
OW-54	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-54	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-54	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-54	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-54	8/21/2019	1,3,5-Trimethylbenzene	0.33	1	0.18866	60	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-54	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-54	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-54	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-54	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-54	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-54	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-54	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-54	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-54	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-54	8/21/2019	Benzene	**78**	1	0.166639	5	ug/L
OW-54	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-54	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-54	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-54	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-54	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-54	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-54	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-54	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-54	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-54	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-54	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-54	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-54	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-54	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-54	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-54	8/21/2019	Ethylbenzene	23	1	0.132341	700	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-54	8/21/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
OW-54	8/21/2019	MTBE	**1600**	200	91.218997	143	ug/L
OW-54	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-54	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-54	8/21/2019	n-Butylbenzene	1.1	3	0.22757	1000	ug/L
OW-54	8/21/2019	n-Propylbenzene	2.5	1	0.214308	660	ug/L
OW-54	8/21/2019	sec-Butylbenzene	0.93	1	0.247731	2000	ug/L
OW-54	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-54	8/21/2019	tert-Butylbenzene	0.21	1	0.206985	690	ug/L
OW-54	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-54	8/21/2019	Toluene	1.7	1	0.350436	1000	ug/L
OW-54	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-54	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-54	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-54	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-54	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-54	8/21/2019	Xylenes, Total	2.6	1.5	0.454415	620	ug/L
OW-54	8/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	8/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	8/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	8/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	8/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	8/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	8/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	8/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	8/21/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	8/21/2019	1,2,4-Trimethylbenzene	12	5	1.065995	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	8/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	8/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	8/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	8/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	8/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	8/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	8/21/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	8/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	8/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	8/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	8/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	8/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	8/21/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	8/21/2019	Benzene	**75**	5	0.833195	5	ug/L
OW-54	8/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	8/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	8/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	8/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	8/21/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	8/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	8/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	8/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	8/21/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	8/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	8/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	8/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	8/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	8/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	8/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	8/21/2019	Ethylbenzene	22	5	0.661704	700	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	8/21/2019	Isopropylbenzene	1.5	5	0.957611	447	ug/L
OW-54	8/21/2019	MTBE	**1700**	50	22.804749	143	ug/L
OW-54	8/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	8/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	8/21/2019	n-Propylbenzene	3	5	1.07154	660	ug/L
OW-54	8/21/2019	sec-Butylbenzene	1.6	5	1.238656	2000	ug/L
OW-54	8/21/2019	Styrene	ND	5	0.956617	100	ug/L
OW-54	8/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	8/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	8/21/2019	Toluene	2	5	1.752181	1000	ug/L
OW-54	8/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	8/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	8/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	8/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	8/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	8/21/2019	Xylenes, Total	3.4	7.5	2.272075	620	ug/L
OW-55	6/1/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
OW-55	6/1/2016	Acetone	ND	200	98	14064	ug/L
OW-55	6/1/2016	Chloroform	ND	20	1.8	100	ug/L
OW-55	6/1/2016	Benzene	**24000**	500	48	5	ug/L
OW-55	6/1/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
OW-55	6/1/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
OW-55	6/1/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
OW-55	6/1/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
OW-55	6/1/2016	Chloroethane	ND	40	3.8	20857	ug/L
OW-55	6/1/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-55	6/1/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
OW-55	6/1/2016	Carbon Disulfide	ND	200	12	810	ug/L
OW-55	6/1/2016	Bromoform	ND	20	2	32.9	ug/L
OW-55	6/1/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
OW-55	6/1/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
OW-55	6/1/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
OW-55	6/1/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
OW-55	6/1/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
OW-55	6/1/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
OW-55	6/1/2016	2-Butanone	ND	200	15	5565	ug/L
OW-55	6/1/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
OW-55	6/1/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
OW-55	6/1/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
OW-55	6/1/2016	2-Chlorotoluene	ND	20	8	233	ug/L
OW-55	6/1/2016	1,2,4-Trimethylbenzene	**1800**	500	55	56	ug/L
OW-55	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
OW-55	6/1/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
OW-55	6/1/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
OW-55	6/1/2016	Isopropylbenzene	68	20	2.1	447	ug/L
OW-55	6/1/2016	p-Isopropyltoluene	11	20	2.8	NA	ug/L
OW-55	6/1/2016	Ethylbenzene	**2800**	500	56	700	ug/L
OW-55	6/1/2016	Styrene	ND	20	2.2	100	ug/L
OW-55	6/1/2016	n-Propylbenzene	340	20	2.6	660	ug/L
OW-55	6/1/2016	n-Butylbenzene	75	60	3.2	1000	ug/L
OW-55	6/1/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
OW-55	6/1/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
OW-55	6/1/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
OW-55	6/1/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
OW-55	6/1/2016	1,3,5-Trimethylbenzene	**700**	20	2.3	60	ug/L
OW-55	6/1/2016	Bromobenzene	ND	20	2	62	ug/L
OW-55	6/1/2016	Toluene	**34000**	500	59	1000	ug/L
OW-55	6/1/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
OW-55	6/1/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
OW-55	6/1/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	6/1/2016	sec-Butylbenzene	18	20	2.5	2000	ug/L
OW-55	6/1/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
OW-55	6/1/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
OW-55	6/1/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
OW-55	6/1/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
OW-55	6/1/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-55	6/1/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
OW-55	6/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-55	6/1/2016	Xylenes, Total	**16000**	750	180	620	ug/L
OW-55	6/1/2016	MTBE	**2000**	20	4.2	143	ug/L
OW-55	6/1/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-55	6/1/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-55	9/16/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-55	9/16/2016	Acetone	ND	100	49	14064	ug/L
OW-55	9/16/2016	Chloroform	ND	10	0.89	100	ug/L
OW-55	9/16/2016	Benzene	**12000**	1000	96	5	ug/L
OW-55	9/16/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-55	9/16/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-55	9/16/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-55	9/16/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-55	9/16/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-55	9/16/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-55	9/16/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-55	9/16/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-55	9/16/2016	Bromoform	ND	10	1	32.9	ug/L
OW-55	9/16/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-55	9/16/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-55	9/16/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-55	9/16/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-55	9/16/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-55	9/16/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-55	9/16/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-55	9/16/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-55	9/16/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-55	9/16/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-55	9/16/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-55	9/16/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-55	9/16/2016	1-Methylnaphthalene	30	40	2	NA	ug/L
OW-55	9/16/2016	Naphthalene	**120**	20	0.93	30	ug/L
OW-55	9/16/2016	2-Methylnaphthalene	**45**	40	1.6		ug/L
OW-55	9/16/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-55	9/16/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-55	9/16/2016	1,2,4-Trimethylbenzene	**880**	10	1.1	56	ug/L
OW-55	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-55	9/16/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-55	9/16/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-55	9/16/2016	Isopropylbenzene	35	10	1	447	ug/L
OW-55	9/16/2016	p-Isopropyltoluene	5.9	10	1.4	NA	ug/L
OW-55	9/16/2016	Ethylbenzene	**950**	10	1.1	700	ug/L
OW-55	9/16/2016	Styrene	4.1	10	1.1	100	ug/L
OW-55	9/16/2016	n-Propylbenzene	120	10	1.3	660	ug/L
OW-55	9/16/2016	n-Butylbenzene	17	30	1.6	1000	ug/L
OW-55	9/16/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/16/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-55	9/16/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-55	9/16/2016	1,2-Dichloroethane	**5.6**	10	1.2	5	ug/L
OW-55	9/16/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-55	9/16/2016	1,3,5-Trimethylbenzene	**280**	10	1.2	60	ug/L
OW-55	9/16/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-55	9/16/2016	Toluene	**4600**	1000	120	1000	ug/L
OW-55	9/16/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-55	9/16/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-55	9/16/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-55	9/16/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-55	9/16/2016	sec-Butylbenzene	9.3	10	1.2	2000	ug/L
OW-55	9/16/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-55	9/16/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-55	9/16/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-55	9/16/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-55	9/16/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-55	9/16/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-55	9/16/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-55	9/16/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-55	9/16/2016	Xylenes, Total	**4500**	1500	370	620	ug/L
OW-55	9/16/2016	MTBE	**1200**	10	2.1	143	ug/L
OW-55	9/16/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-55	9/16/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-55	11/9/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-55	11/9/2016	Acetone	ND	500	250	14064	ug/L
OW-55	11/9/2016	Chloroform	7.7	50	4.4	100	ug/L
OW-55	11/9/2016	Benzene	**11000**	500	48	5	ug/L
OW-55	11/9/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-55	11/9/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-55	11/9/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-55	11/9/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-55	11/9/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-55	11/9/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-55	11/9/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-55	11/9/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-55	11/9/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-55	11/9/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-55	11/9/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-55	11/9/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-55	11/9/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-55	11/9/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-55	11/9/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-55	11/9/2016	2-Butanone	ND	500	37	5565	ug/L
OW-55	11/9/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-55	11/9/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-55	11/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-55	11/9/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-55	11/9/2016	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-55	11/9/2016	1-Methylnaphthalene	29	200	10	NA	ug/L
OW-55	11/9/2016	Naphthalene	**74**	100	4.6	30	ug/L
OW-55	11/9/2016	2-Methylnaphthalene	**32**	200	7.9		ug/L
OW-55	11/9/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	11/9/2016	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-55	11/9/2016	1,2,4-Trimethylbenzene	**550**	50	5.5	56	ug/L
OW-55	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-55	11/9/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-55	11/9/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-55	11/9/2016	Isopropylbenzene	28	50	5.2	447	ug/L
OW-55	11/9/2016	p-Isopropyltoluene	7.7	50	7	NA	ug/L
OW-55	11/9/2016	Ethylbenzene	680	50	5.6	700	ug/L
OW-55	11/9/2016	Styrene	ND	50	5.5	100	ug/L
OW-55	11/9/2016	n-Propylbenzene	88	50	6.6	660	ug/L
OW-55	11/9/2016	n-Butylbenzene	20	150	8	1000	ug/L
OW-55	11/9/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-55	11/9/2016	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-55	11/9/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-55	11/9/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-55	11/9/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-55	11/9/2016	1,3,5-Trimethylbenzene	**170**	50	5.8	60	ug/L
OW-55	11/9/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-55	11/9/2016	Toluene	**3200**	50	5.9	1000	ug/L
OW-55	11/9/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-55	11/9/2016	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-55	11/9/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-55	11/9/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/9/2016	sec-Butylbenzene	11	50	6.2	2000	ug/L
OW-55	11/9/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-55	11/9/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-55	11/9/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-55	11/9/2016	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-55	11/9/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-55	11/9/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-55	11/9/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-55	11/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-55	11/9/2016	Xylenes, Total	**2400**	75	18	620	ug/L
OW-55	11/9/2016	MTBE	**1800**	50	11	143	ug/L
OW-55	11/9/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-55	11/9/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-55	3/29/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	3/29/2017	Acetone	ND	500	44	14064	ug/L
OW-55	3/29/2017	Chloroform	ND	50	4.4	100	ug/L
OW-55	3/29/2017	Benzene	**14000**	500	48	5	ug/L
OW-55	3/29/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	3/29/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-55	3/29/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-55	3/29/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-55	3/29/2017	Chloroethane	ND	100	12	20857	ug/L
OW-55	3/29/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	3/29/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	3/29/2017	Carbon Disulfide	ND	500	30	810	ug/L
OW-55	3/29/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	3/29/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	3/29/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
OW-55	3/29/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	3/29/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	3/29/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
OW-55	3/29/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	3/29/2017	2-Butanone	ND	500	57	5565	ug/L
OW-55	3/29/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	3/29/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-55	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	3/29/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-55	3/29/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	3/29/2017	1,2,4-Trimethylbenzene	**390**	50	5.2	56	ug/L
OW-55	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	3/29/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	3/29/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	3/29/2017	Isopropylbenzene	20	50	4.9	447	ug/L
OW-55	3/29/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-55	3/29/2017	Ethylbenzene	**740**	50	5.6	700	ug/L
OW-55	3/29/2017	Styrene	ND	50	7.8	100	ug/L
OW-55	3/29/2017	n-Propylbenzene	83	50	6.6	660	ug/L
OW-55	3/29/2017	n-Butylbenzene	ND	150	8	1000	ug/L
OW-55	3/29/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	3/29/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	3/29/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-55	3/29/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	3/29/2017	1,3,5-Trimethylbenzene	**100**	50	5.8	60	ug/L
OW-55	3/29/2017	Bromobenzene	ND	50	7	62	ug/L
OW-55	3/29/2017	Toluene	**1100**	50	4.5	1000	ug/L
OW-55	3/29/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	3/29/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
OW-55	3/29/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-55	3/29/2017	sec-Butylbenzene	17	50	5.1	2000	ug/L
OW-55	3/29/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-55	3/29/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	3/29/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	3/29/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-55	3/29/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	3/29/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
OW-55	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-55	3/29/2017	Xylenes, Total	**1100**	75	16	620	ug/L
OW-55	3/29/2017	MTBE	**2000**	50	7.4	143	ug/L
OW-55	3/29/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
OW-55	3/29/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
OW-55	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	6/21/2017	Acetone	ND	500	41	14064	ug/L
OW-55	6/21/2017	Chloroform	ND	50	20	100	ug/L
OW-55	6/21/2017	Benzene	**13000**	500	31	5	ug/L
OW-55	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
OW-55	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
OW-55	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	6/21/2017	1,2,4-Trimethylbenzene	**330**	50	5.6	56	ug/L
OW-55	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	6/21/2017	Isopropylbenzene	24	50	2.6	447	ug/L
OW-55	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	6/21/2017	Ethylbenzene	**720**	50	4.7	700	ug/L
OW-55	6/21/2017	Styrene	ND	50	7.8	100	ug/L
OW-55	6/21/2017	n-Propylbenzene	70	50	3.7	660	ug/L
OW-55	6/21/2017	n-Butylbenzene	13	150	6.5	1000	ug/L
OW-55	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	6/21/2017	1,3,5-Trimethylbenzene	**93**	50	4.4	60	ug/L
OW-55	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
OW-55	6/21/2017	Toluene	900	50	3.2	1000	ug/L
OW-55	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	6/21/2017	sec-Butylbenzene	6.1	50	5.5	2000	ug/L
OW-55	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	6/21/2017	Pentafluorobenzene	**500**	0	0		None
OW-55	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	6/21/2017	Xylenes, Total	**760**	75	16	620	ug/L
OW-55	6/21/2017	MTBE	**2400**	50	12	143	ug/L
OW-55	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	9/11/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-55	9/11/2017	Acetone	ND	1000	82	14064	ug/L
OW-55	9/11/2017	Chloroform	ND	100	40	100	ug/L
OW-55	9/11/2017	Benzene	**12000**	1000	62	5	ug/L
OW-55	9/11/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-55	9/11/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-55	9/11/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-55	9/11/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-55	9/11/2017	Chloroethane	ND	200	23	20857	ug/L
OW-55	9/11/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-55	9/11/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-55	9/11/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-55	9/11/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-55	9/11/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-55	9/11/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-55	9/11/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-55	9/11/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-55	9/11/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-55	9/11/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-55	9/11/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-55	9/11/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-55	9/11/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-55	9/11/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-55	9/11/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-55	9/11/2017	1,2,4-Trimethylbenzene	**230**	100	11	56	ug/L
OW-55	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-55	9/11/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-55	9/11/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-55	9/11/2017	Isopropylbenzene	16	100	5.1	447	ug/L
OW-55	9/11/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-55	9/11/2017	Ethylbenzene	690	100	9.3	700	ug/L
OW-55	9/11/2017	Styrene	ND	100	16	100	ug/L
OW-55	9/11/2017	n-Propylbenzene	58	100	7.4	660	ug/L
OW-55	9/11/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-55	9/11/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-55	9/11/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-55	9/11/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-55	9/11/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-55	9/11/2017	1,3,5-Trimethylbenzene	*50*	*100*	8.7	60	ug/L
OW-55	9/11/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-55	9/11/2017	Toluene	900	100	6.4	1000	ug/L
OW-55	9/11/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-55	9/11/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-55	9/11/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-55	9/11/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-55	9/11/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-55	9/11/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-55	9/11/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-55	9/11/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-55	9/11/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-55	9/11/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-55	9/11/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-55	9/11/2017	Xylenes, Total	**660**	150	32	620	ug/L
OW-55	9/11/2017	MTBE	**2000**	100	24	143	ug/L
OW-55	9/11/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-55	9/11/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-55	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-55	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-55	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-55	12/6/2017	Benzene	**7100**	100	6.2	5	ug/L
OW-55	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-55	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-55	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-55	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-55	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-55	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-55	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-55	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-55	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-55	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-55	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-55	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-55	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-55	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-55	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-55	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-55	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-55	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-55	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-55	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-55	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-55	12/6/2017	1,2,4-Trimethylbenzene	**130**	100	11	56	ug/L
OW-55	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-55	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-55	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-55	12/6/2017	Isopropylbenzene	18	100	5.1	447	ug/L
OW-55	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-55	12/6/2017	Ethylbenzene	560	100	9.3	700	ug/L
OW-55	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-55	12/6/2017	n-Propylbenzene	41	100	7.4	660	ug/L
OW-55	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-55	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-55	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-55	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-55	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-55	12/6/2017	1,3,5-Trimethylbenzene	*27*	*100*	8.7	60	ug/L
OW-55	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-55	12/6/2017	Toluene	360	100	6.4	1000	ug/L
OW-55	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-55	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-55	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-55	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-55	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-55	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-55	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-55	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-55	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-55	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-55	12/6/2017	Xylenes, Total	290	150	32	620	ug/L
OW-55	12/6/2017	MTBE	**1700**	100	24	143	ug/L
OW-55	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-55	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-55	2/22/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	2/22/2018	Acetone	ND	500	41	14064	ug/L
OW-55	2/22/2018	Chloroform	ND	50	20	100	ug/L
OW-55	2/22/2018	Benzene	**7700**	500	31	5	ug/L
OW-55	2/22/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	2/22/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-55	2/22/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	2/22/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	2/22/2018	Chloroethane	ND	100	12	20857	ug/L
OW-55	2/22/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	2/22/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	2/22/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	2/22/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	2/22/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	2/22/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	2/22/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	2/22/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	2/22/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	2/22/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	2/22/2018	2-Butanone	ND	500	57	5565	ug/L
OW-55	2/22/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	2/22/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	2/22/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	2/22/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	2/22/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	2/22/2018	1,2,4-Trimethylbenzene	**130**	50	5.6	56	ug/L
OW-55	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	2/22/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	2/22/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	2/22/2018	Isopropylbenzene	21	50	2.6	447	ug/L
OW-55	2/22/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	2/22/2018	Ethylbenzene	620	50	4.7	700	ug/L
OW-55	2/22/2018	Styrene	ND	50	7.8	100	ug/L
OW-55	2/22/2018	n-Propylbenzene	52	50	3.7	660	ug/L
OW-55	2/22/2018	n-Butylbenzene	8.8	150	6.5	1000	ug/L
OW-55	2/22/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	2/22/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	2/22/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	2/22/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	2/22/2018	1,3,5-Trimethylbenzene	28	50	4.4	60	ug/L
OW-55	2/22/2018	Bromobenzene	ND	50	7	62	ug/L
OW-55	2/22/2018	Toluene	350	50	3.2	1000	ug/L
OW-55	2/22/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	2/22/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	2/22/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	2/22/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-55	2/22/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	2/22/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	2/22/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	2/22/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	2/22/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	2/22/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	2/22/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	2/22/2018	Xylenes, Total	300	75	16	620	ug/L
OW-55	2/22/2018	MTBE	**1600**	50	12	143	ug/L
OW-55	2/22/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	2/22/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	5/8/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	5/8/2018	Acetone	ND	500	41	14064	ug/L
OW-55	5/8/2018	Chloroform	ND	50	20	100	ug/L
OW-55	5/8/2018	Benzene	**7500**	500	31	5	ug/L
OW-55	5/8/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/8/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-55	5/8/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	5/8/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	5/8/2018	Chloroethane	ND	100	12	20857	ug/L
OW-55	5/8/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	5/8/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	5/8/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	5/8/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	5/8/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	5/8/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	5/8/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	5/8/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	5/8/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	5/8/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	5/8/2018	2-Butanone	ND	500	57	5565	ug/L
OW-55	5/8/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	5/8/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	5/8/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	5/8/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	5/8/2018	1,2,4-Trimethylbenzene	**150**	50	5.6	56	ug/L
OW-55	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	5/8/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	5/8/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	5/8/2018	Isopropylbenzene	19	50	2.6	447	ug/L
OW-55	5/8/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	5/8/2018	Ethylbenzene	590	50	4.7	700	ug/L
OW-55	5/8/2018	Styrene	ND	50	7.8	100	ug/L
OW-55	5/8/2018	n-Propylbenzene	50	50	3.7	660	ug/L
OW-55	5/8/2018	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-55	5/8/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	5/8/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	5/8/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	5/8/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	5/8/2018	1,3,5-Trimethylbenzene	29	50	4.4	60	ug/L
OW-55	5/8/2018	Bromobenzene	ND	50	7	62	ug/L
OW-55	5/8/2018	Toluene	400	50	3.2	1000	ug/L
OW-55	5/8/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	5/8/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	5/8/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	5/8/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-55	5/8/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	5/8/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	5/8/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	5/8/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	5/8/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	5/8/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	5/8/2018	Xylenes, Total	330	75	16	620	ug/L
OW-55	5/8/2018	MTBE	**1700**	50	12	143	ug/L
OW-55	5/8/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	5/8/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	8/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-55	8/28/2018	Acetone	ND	200	16	14064	ug/L
OW-55	8/28/2018	Chloroform	ND	20	8	100	ug/L
OW-55	8/28/2018	Benzene	**7900**	200	35	5	ug/L
OW-55	8/28/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-55	8/28/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-55	8/28/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-55	8/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-55	8/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-55	8/28/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-55	8/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-55	8/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-55	8/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-55	8/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-55	8/28/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-55	8/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-55	8/28/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-55	8/28/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-55	8/28/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-55	8/28/2018	2-Butanone	ND	200	25	5565	ug/L
OW-55	8/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-55	8/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-55	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-55	8/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	8/28/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-55	8/28/2018	1,2,4-Trimethylbenzene	**120**	20	5.1	56	ug/L
OW-55	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-55	8/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-55	8/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-55	8/28/2018	Isopropylbenzene	22	20	4.4	447	ug/L
OW-55	8/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-55	8/28/2018	Ethylbenzene	650	20	4.5	700	ug/L
OW-55	8/28/2018	Styrene	ND	20	5	100	ug/L
OW-55	8/28/2018	n-Propylbenzene	58	20	4.9	660	ug/L
OW-55	8/28/2018	n-Butylbenzene	6.7	60	5	1000	ug/L
OW-55	8/28/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-55	8/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-55	8/28/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-55	8/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-55	8/28/2018	1,3,5-Trimethylbenzene	24	20	4.6	60	ug/L
OW-55	8/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-55	8/28/2018	Toluene	330	20	3.4	1000	ug/L
OW-55	8/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-55	8/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-55	8/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	8/28/2018	sec-Butylbenzene	4.8	20	4	2000	ug/L
OW-55	8/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-55	8/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-55	8/28/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-55	8/28/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-55	8/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-55	8/28/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-55	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-55	8/28/2018	Xylenes, Total	290	30	13	620	ug/L
OW-55	8/28/2018	MTBE	**1700**	20	6.4	143	ug/L
OW-55	8/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-55	8/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-55	11/7/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-55	11/7/2018	Acetone	ND	200	15	14064	ug/L
OW-55	11/7/2018	Chloroform	ND	20	4.7	100	ug/L
OW-55	11/7/2018	Benzene	**7000**	200	35	5	ug/L
OW-55	11/7/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-55	11/7/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-55	11/7/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-55	11/7/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-55	11/7/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-55	11/7/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-55	11/7/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-55	11/7/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-55	11/7/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-55	11/7/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-55	11/7/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-55	11/7/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-55	11/7/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-55	11/7/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-55	11/7/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-55	11/7/2018	2-Butanone	ND	200	28	5565	ug/L
OW-55	11/7/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-55	11/7/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-55	11/7/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-55	11/7/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-55	11/7/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-55	11/7/2018	1,2,4-Trimethylbenzene	**130**	20	5.1	56	ug/L
OW-55	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-55	11/7/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-55	11/7/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-55	11/7/2018	Isopropylbenzene	28	20	4.4	447	ug/L
OW-55	11/7/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-55	11/7/2018	Ethylbenzene	**750**	20	4.5	700	ug/L
OW-55	11/7/2018	Styrene	ND	20	5	100	ug/L
OW-55	11/7/2018	n-Propylbenzene	70	20	4.9	660	ug/L
OW-55	11/7/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-55	11/7/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-55	11/7/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-55	11/7/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-55	11/7/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-55	11/7/2018	1,3,5-Trimethylbenzene	29	20	4.6	60	ug/L
OW-55	11/7/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-55	11/7/2018	Toluene	350	20	3.4	1000	ug/L
OW-55	11/7/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-55	11/7/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	11/7/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-55	11/7/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-55	11/7/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-55	11/7/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-55	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-55	11/7/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-55	11/7/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-55	11/7/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-55	11/7/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-55	11/7/2018	Xylenes, Total	380	30	13	620	ug/L
OW-55	11/7/2018	MTBE	**1300**	20	9.1	143	ug/L
OW-55	11/7/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-55	11/7/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-55	2/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	12.619962	5.74	ug/L
OW-55	2/6/2019	1,1,1-Trichloroethane	ND	50	8.190791	200	ug/L
OW-55	2/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	16.414955	10	ug/L
OW-55	2/6/2019	1,1,2-Trichloroethane	*ND*	*50*	11.636162	5	ug/L
OW-55	2/6/2019	1,1-Dichloroethane	*ND*	*50*	8.759832	25	ug/L
OW-55	2/6/2019	1,1-Dichloroethene	*ND*	*50*	6.024391	7	ug/L
OW-55	2/6/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-55	2/6/2019	1,2,3-Trichlorobenzene	ND	50	14.015402	70	ug/L
OW-55	2/6/2019	1,2,3-Trichloropropane	*ND*	*100*	28.300223	0.0084	ug/L
OW-55	2/6/2019	1,2,4-Trichlorobenzene	ND	50	13.320508	70	ug/L
OW-55	2/6/2019	1,2,4-Trimethylbenzene	**190**	50	12.665717	56	ug/L
OW-55	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	23.544858	0.0033	ug/L
OW-55	2/6/2019	1,2-Dibromoethane	*ND*	*50*	11.476427	0.05	ug/L
OW-55	2/6/2019	1,2-Dichlorobenzene	ND	50	15.573243	600	ug/L
OW-55	2/6/2019	1,2-Dichloroethane	*ND*	*50*	9.476269	5	ug/L
OW-55	2/6/2019	1,2-Dichloropropane	*ND*	*50*	8.261288	5	ug/L
OW-55	2/6/2019	1,3,5-Trimethylbenzene	30	50	11.570703	60	ug/L
OW-55	2/6/2019	1,3-Dichlorobenzene	ND	50	15.631118	N/A	ug/L
OW-55	2/6/2019	1,3-Dichloropropane	ND	50	13.537814	370	ug/L
OW-55	2/6/2019	1,4-Dichlorobenzene	ND	50	14.385342	75	ug/L
OW-55	2/6/2019	1-Methylnaphthalene	21	200	16.790848	NA	ug/L
OW-55	2/6/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-55	2/6/2019	2-Butanone	ND	500	70.543444	5565	ug/L
OW-55	2/6/2019	2-Chlorotoluene	ND	50	12.50691	233	ug/L
OW-55	2/6/2019	2-Hexanone	*ND*	*500*	45.328722	38	ug/L
OW-55	2/6/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-55	2/6/2019	4-Chlorotoluene	ND	50	14.040044	250	ug/L
OW-55	2/6/2019	p-Isopropyltoluene	ND	50	12.016928	NA	ug/L
OW-55	2/6/2019	4-Methyl-2-Pentanone	ND	500	22.663868	1243	ug/L
OW-55	2/6/2019	Acetone	ND	500	37.853481	14064	ug/L
OW-55	2/6/2019	Benzene	**8600**	500	87.447859	5	ug/L
OW-55	2/6/2019	Bromobenzene	ND	50	15.895311	62	ug/L
OW-55	2/6/2019	Bromodichloromethane	*ND*	*50*	14.138349	1.34	ug/L
OW-55	2/6/2019	Bromoform	*ND*	*50*	16.165516	32.9	ug/L
OW-55	2/6/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-55	2/6/2019	Carbon Disulfide	ND	500	19.251554	810	ug/L
OW-55	2/6/2019	Carbon tetrachloride	*ND*	*50*	6.867418	5	ug/L
OW-55	2/6/2019	Chlorobenzene	ND	50	14.526376	77.6	ug/L
OW-55	2/6/2019	Chloroethane	ND	100	8.216855	20857	ug/L
OW-55	2/6/2019	Chloroform	ND	50	11.761188	100	ug/L
OW-55	2/6/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-55	2/6/2019	cis-1,2-Dichloroethene	ND	50	18.799057	70	ug/L
OW-55	2/6/2019	cis-1,3-Dichloropropene	ND	50	14.911401	NA	ug/L
OW-55	2/6/2019	Dibromochloromethane	*ND*	*50*	11.85062	1.68	ug/L
OW-55	2/6/2019	Dibromomethane	*ND*	*50*	16.107371	8	ug/L
OW-55	2/6/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-55	2/6/2019	Ethylbenzene	660	50	11.170112	700	ug/L
OW-55	2/6/2019	Hexachlorobutadiene	*ND*	*50*	19.559347	1.39	ug/L
OW-55	2/6/2019	Isopropylbenzene	21	50	11.05521	447	ug/L
OW-55	2/6/2019	MTBE	**1400**	50	22.804749	143	ug/L
OW-55	2/6/2019	Methylene Chloride	*ND*	*150*	10.284739	5	ug/L
OW-55	2/6/2019	Naphthalene	**37**	100	14.481303	30	ug/L
OW-55	2/6/2019	n-Butylbenzene	ND	150	12.416523	1000	ug/L
OW-55	2/6/2019	n-Propylbenzene	61	50	12.129312	660	ug/L
OW-55	2/6/2019	sec-Butylbenzene	ND	50	10.112735	2000	ug/L
OW-55	2/6/2019	Styrene	ND	50	12.507286	100	ug/L
OW-55	2/6/2019	tert-Butylbenzene	ND	50	11.073487	690	ug/L
OW-55	2/6/2019	Tetrachloroethene	*ND*	*50*	7.572586	5	ug/L
OW-55	2/6/2019	Toluene	560	50	8.40697	1000	ug/L
OW-55	2/6/2019	trans-1,2-Dichloroethene	ND	50	9.11348	100	ug/L
OW-55	2/6/2019	trans-1,3-Dichloropropene	ND	50	13.773386	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Trichloroethene	*ND*	*50*	12.877821	5	ug/L
OW-55	2/6/2019	Trichlorofluoromethane	ND	50	7.205808	1137	ug/L
OW-55	2/6/2019	Vinyl Chloride	*ND*	*50*	6.053716	2	ug/L
OW-55	2/6/2019	Xylenes, Total	480	75	32.064386	620	ug/L
OW-55	5/2/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-55	5/2/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-55	5/2/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-55	5/2/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-55	5/2/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-55	5/2/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-55	5/2/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-55	5/2/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-55	5/2/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-55	5/2/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-55	5/2/2019	1,2,4-Trimethylbenzene	**150**	50	10.659955	56	ug/L
OW-55	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-55	5/2/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-55	5/2/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-55	5/2/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-55	5/2/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-55	5/2/2019	1,3,5-Trimethylbenzene	28	50	9.432992	60	ug/L
OW-55	5/2/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-55	5/2/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-55	5/2/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-55	5/2/2019	1-Methylnaphthalene	21	200	15.747724	NA	ug/L
OW-55	5/2/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-55	5/2/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-55	5/2/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-55	5/2/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-55	5/2/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-55	5/2/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-55	5/2/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-55	5/2/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-55	5/2/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-55	5/2/2019	Benzene	**9000**	500	83.319528	5	ug/L
OW-55	5/2/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-55	5/2/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-55	5/2/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-55	5/2/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-55	5/2/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-55	5/2/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-55	5/2/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-55	5/2/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-55	5/2/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-55	5/2/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-55	5/2/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-55	5/2/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-55	5/2/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-55	5/2/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-55	5/2/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-55	5/2/2019	Ethylbenzene	660	50	6.61704	700	ug/L
OW-55	5/2/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-55	5/2/2019	Isopropylbenzene	18	50	9.576114	447	ug/L
OW-55	5/2/2019	MTBE	**1600**	50	22.804749	143	ug/L
OW-55	5/2/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-55	5/2/2019	Naphthalene	**34**	100	13.753567	30	ug/L
OW-55	5/2/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-55	5/2/2019	n-Propylbenzene	51	50	10.7154	660	ug/L
OW-55	5/2/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-55	5/2/2019	Styrene	ND	50	9.566168	100	ug/L
OW-55	5/2/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-55	5/2/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-55	5/2/2019	Toluene	700	50	17.521811	1000	ug/L
OW-55	5/2/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-55	5/2/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-55	5/2/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-55	5/2/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-55	5/2/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-55	5/2/2019	Xylenes, Total	560	75	22.720747	620	ug/L
OW-55	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-56	6/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	6/1/2016	Acetone	9.2	10	4.9	14064	ug/L
OW-56	6/1/2016	Chloroform	0.56	1	0.089	100	ug/L
OW-56	6/1/2016	Benzene	0.5	1	0.096	5	ug/L
OW-56	6/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-56	6/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	6/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	6/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	6/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-56	6/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	6/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-56	6/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	6/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-56	6/1/2016	Bromodichloromethane	0.47	1	0.14	1.34	ug/L
OW-56	6/1/2016	1,1-Dichloroethane	0.76	1	0.11	25	ug/L
OW-56	6/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-56	6/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-56	6/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-56	6/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-56	6/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-56	6/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-56	6/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	6/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-56	6/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	6/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	6/1/2016	1,2,4-Trimethylbenzene	0.49	1	0.11	56	ug/L
OW-56	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-56	6/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-56	6/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-56	6/1/2016	Isopropylbenzene	0.27	1	0.1	447	ug/L
OW-56	6/1/2016	p-Isopropyltoluene	0.37	1	0.14	NA	ug/L
OW-56	6/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	6/1/2016	Styrene	ND	1	0.11	100	ug/L
OW-56	6/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	6/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-56	6/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-56	6/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-56	6/1/2016	1,2-Dichloroethane	**15**	1	0.12	5	ug/L
OW-56	6/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-56	6/1/2016	1,3,5-Trimethylbenzene	0.46	1	0.12	60	ug/L
OW-56	6/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-56	6/1/2016	Toluene	0.44	1	0.12	1000	ug/L
OW-56	6/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	6/1/2016	Dibromochloromethane	0.31	1	0.087	1.68	ug/L
OW-56	6/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	6/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-56	6/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-56	6/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-56	6/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-56	6/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	6/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-56	6/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-56	6/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	6/1/2016	Xylenes, Total	1.4	1.5	0.37	620	ug/L
OW-56	6/1/2016	MTBE	**200**	1	0.21	143	ug/L
OW-56	6/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-56	6/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	9/16/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-56	9/16/2016	Acetone	ND	50	25	14064	ug/L
OW-56	9/16/2016	Chloroform	ND	5	0.44	100	ug/L
OW-56	9/16/2016	Benzene	2.5	5	0.48	5	ug/L
OW-56	9/16/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-56	9/16/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-56	9/16/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-56	9/16/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-56	9/16/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-56	9/16/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-56	9/16/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-56	9/16/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-56	9/16/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-56	9/16/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-56	9/16/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-56	9/16/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-56	9/16/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-56	9/16/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-56	9/16/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-56	9/16/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-56	9/16/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-56	9/16/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-56	9/16/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-56	9/16/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-56	9/16/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/16/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-56	9/16/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-56	9/16/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-56	9/16/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-56	9/16/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-56	9/16/2016	1,2,4-Trimethylbenzene	1.1	5	0.55	56	ug/L
OW-56	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-56	9/16/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-56	9/16/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-56	9/16/2016	Isopropylbenzene	1.1	5	0.52	447	ug/L
OW-56	9/16/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-56	9/16/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-56	9/16/2016	Styrene	ND	5	0.55	100	ug/L
OW-56	9/16/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-56	9/16/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-56	9/16/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-56	9/16/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-56	9/16/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-56	9/16/2016	1,2-Dichloroethane	**16**	5	0.58	5	ug/L
OW-56	9/16/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-56	9/16/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-56	9/16/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-56	9/16/2016	Toluene	0.92	5	0.59	1000	ug/L
OW-56	9/16/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-56	9/16/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-56	9/16/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-56	9/16/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-56	9/16/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-56	9/16/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-56	9/16/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-56	9/16/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-56	9/16/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-56	9/16/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-56	9/16/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-56	9/16/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-56	9/16/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-56	9/16/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-56	9/16/2016	MTBE	**150**	5	1.1	143	ug/L
OW-56	9/16/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-56	9/16/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-56	11/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	11/9/2016	Acetone	10	10	4.9	14064	ug/L
OW-56	11/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-56	11/9/2016	Benzene	1	1	0.096	5	ug/L
OW-56	11/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-56	11/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-56	11/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	11/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	11/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-56	11/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	11/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-56	11/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	11/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-56	11/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-56	11/9/2016	1,1-Dichloroethane	0.95	1	0.11	25	ug/L
OW-56	11/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-56	11/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-56	11/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-56	11/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-56	11/9/2016	2-Butanone	0.79	10	0.74	5565	ug/L
OW-56	11/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-56	11/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	11/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-56	11/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	11/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-56	11/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-56	11/9/2016	Naphthalene	0.12	2	0.093	30	ug/L
OW-56	11/9/2016	2-Methylnaphthalene	**0.19**	4	0.16		ug/L
OW-56	11/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	11/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-56	11/9/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
OW-56	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-56	11/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-56	11/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-56	11/9/2016	Isopropylbenzene	0.67	1	0.1	447	ug/L
OW-56	11/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	11/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-56	11/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	11/9/2016	n-Butylbenzene	0.21	3	0.16	1000	ug/L
OW-56	11/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-56	11/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-56	11/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-56	11/9/2016	1,2-Dichloroethane	**17**	1	0.12	5	ug/L
OW-56	11/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-56	11/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-56	11/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-56	11/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-56	11/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	11/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	11/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-56	11/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	11/9/2016	sec-Butylbenzene	0.19	1	0.12	2000	ug/L
OW-56	11/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-56	11/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-56	11/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-56	11/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-56	11/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	11/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-56	11/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-56	11/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	11/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-56	11/9/2016	MTBE	**160**	1	0.21	143	ug/L
OW-56	11/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-56	11/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
OW-56	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
OW-56	3/29/2017	Benzene	0.24	1	0.096	5	ug/L
OW-56	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-56	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	3/29/2017	1,1-Dichloroethane	0.64	1	0.1	25	ug/L
OW-56	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-56	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-56	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	3/29/2017	Isopropylbenzene	0.52	1	0.098	447	ug/L
OW-56	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-56	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	3/29/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-56	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	3/29/2017	1,2-Dichloroethane	4.7	1	0.12	5	ug/L
OW-56	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-56	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
OW-56	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
OW-56	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	3/29/2017	sec-Butylbenzene	0.34	1	0.1	2000	ug/L
OW-56	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-56	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	3/29/2017	MTBE	120	1	0.15	143	ug/L
OW-56	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
OW-56	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	6/21/2017	Acetone	16	10	0.82	14064	ug/L
OW-56	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	6/21/2017	Benzene	0.38	1	0.062	5	ug/L
OW-56	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-56	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	6/21/2017	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
OW-56	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	6/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	6/21/2017	Isopropylbenzene	0.28	1	0.051	447	ug/L
OW-56	6/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	6/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	6/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	6/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	6/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	6/21/2017	1,2-Dichloroethane	3.9	1	0.4	5	ug/L
OW-56	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	6/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	6/21/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	6/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	6/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-56	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	6/21/2017	Pentafluorobenzene	**10**	0	0		None
OW-56	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	6/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	6/21/2017	MTBE	140	1	0.24	143	ug/L
OW-56	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	9/11/2017	Acetone	7.6	10	0.82	14064	ug/L
OW-56	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	9/11/2017	Benzene	1.1	1	0.062	5	ug/L
OW-56	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	9/11/2017	1,1-Dichloroethane	0.57	1	0.4	25	ug/L
OW-56	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	9/11/2017	Isopropylbenzene	0.91	1	0.051	447	ug/L
OW-56	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	9/11/2017	n-Butylbenzene	0.15	3	0.13	1000	ug/L
OW-56	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	9/11/2017	1,2-Dichloroethane	**8.9**	1	0.4	5	ug/L
OW-56	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	9/11/2017	sec-Butylbenzene	0.14	1	0.11	2000	ug/L
OW-56	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	9/11/2017	MTBE	110	1	0.24	143	ug/L
OW-56	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	12/6/2017	Acetone	5.9	10	0.82	14064	ug/L
OW-56	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	12/6/2017	Benzene	2.1	1	0.062	5	ug/L
OW-56	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	12/6/2017	1,1-Dichloroethane	0.67	1	0.4	25	ug/L
OW-56	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	12/6/2017	Isopropylbenzene	1.6	1	0.051	447	ug/L
OW-56	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	12/6/2017	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
OW-56	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	12/6/2017	sec-Butylbenzene	0.27	1	0.11	2000	ug/L
OW-56	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	12/6/2017	MTBE	110	1	0.24	143	ug/L
OW-56	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	2/22/2018	Acetone	1.4	10	0.82	14064	ug/L
OW-56	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	2/22/2018	Benzene	0.22	1	0.062	5	ug/L
OW-56	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	2/22/2018	1,1-Dichloroethane	0.47	1	0.4	25	ug/L
OW-56	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	2/22/2018	Isopropylbenzene	2.5	1	0.051	447	ug/L
OW-56	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-56	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	2/22/2018	1,2-Dichloroethane	4.4	1	0.4	5	ug/L
OW-56	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	2/22/2018	Toluene	0.067	1	0.064	1000	ug/L
OW-56	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	2/22/2018	sec-Butylbenzene	0.23	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	2/22/2018	MTBE	100	1	0.24	143	ug/L
OW-56	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	5/8/2018	Acetone	4.3	10	0.82	14064	ug/L
OW-56	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	5/8/2018	Benzene	0.27	1	0.062	5	ug/L
OW-56	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-56	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	5/8/2018	Isopropylbenzene	1.2	1	0.051	447	ug/L
OW-56	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-56	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	5/8/2018	1,2-Dichloroethane	1.9	1	0.4	5	ug/L
OW-56	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-56	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-56	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	5/8/2018	MTBE	91	1	0.24	143	ug/L
OW-56	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-56	8/28/2018	Acetone	9.9	10	0.79	14064	ug/L
OW-56	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	8/28/2018	Benzene	1.1	1	0.17	5	ug/L
OW-56	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-56	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-56	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-56	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-56	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-56	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-56	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-56	8/28/2018	1,1-Dichloroethane	0.49	1	0.4	25	ug/L
OW-56	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-56	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-56	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-56	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-56	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-56	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-56	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-56	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-56	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-56	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-56	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-56	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-56	8/28/2018	Isopropylbenzene	0.48	1	0.22	447	ug/L
OW-56	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-56	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-56	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-56	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-56	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-56	8/28/2018	1,2-Dichloroethane	**12**	1	0.4	5	ug/L
OW-56	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-56	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-56	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-56	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-56	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-56	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-56	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-56	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-56	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-56	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-56	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-56	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-56	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-56	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-56	8/28/2018	MTBE	69	1	0.32	143	ug/L
OW-56	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-56	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-56	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-56	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-56	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-56	11/7/2018	Benzene	1.8	1	0.17	5	ug/L
OW-56	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-56	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-56	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-56	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-56	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-56	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-56	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-56	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-56	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-56	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-56	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-56	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-56	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-56	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-56	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-56	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-56	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-56	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-56	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-56	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-56	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-56	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-56	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-56	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-56	11/7/2018	Isopropylbenzene	2.3	1	0.22	447	ug/L
OW-56	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-56	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-56	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-56	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-56	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-56	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-56	11/7/2018	1,2-Dichloroethane	**13**	1	0.19	5	ug/L
OW-56	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-56	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-56	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-56	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-56	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-56	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-56	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-56	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-56	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-56	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-56	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-56	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-56	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-56	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-56	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-56	11/7/2018	MTBE	62	1	0.46	143	ug/L
OW-56	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-56	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-56	2/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-56	2/6/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-56	2/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-56	2/6/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-56	2/6/2019	1,1-Dichloroethane	0.42	1	0.175197	25	ug/L
OW-56	2/6/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-56	2/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	2/6/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-56	2/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-56	2/6/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-56	2/6/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-56	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-56	2/6/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-56	2/6/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-56	2/6/2019	1,2-Dichloroethane	**8.2**	1	0.189525	5	ug/L
OW-56	2/6/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-56	2/6/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-56	2/6/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-56	2/6/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-56	2/6/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-56	2/6/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-56	2/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	2/6/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-56	2/6/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-56	2/6/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-56	2/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	2/6/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-56	2/6/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-56	2/6/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-56	2/6/2019	Acetone	6	10	0.75707	14064	ug/L
OW-56	2/6/2019	Benzene	0.94	1	0.174896	5	ug/L
OW-56	2/6/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-56	2/6/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-56	2/6/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-56	2/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	2/6/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-56	2/6/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-56	2/6/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-56	2/6/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-56	2/6/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-56	2/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	2/6/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-56	2/6/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-56	2/6/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-56	2/6/2019	Dibromomethane	ND	1	0.322147	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	2/6/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-56	2/6/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-56	2/6/2019	Isopropylbenzene	0.77	1	0.221104	447	ug/L
OW-56	2/6/2019	MTBE	58	1	0.456095	143	ug/L
OW-56	2/6/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-56	2/6/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-56	2/6/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-56	2/6/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-56	2/6/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-56	2/6/2019	Styrene	ND	1	0.250146	100	ug/L
OW-56	2/6/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-56	2/6/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-56	2/6/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-56	2/6/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-56	2/6/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-56	2/6/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-56	2/6/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-56	2/6/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-56	2/6/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-56	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-56	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-56	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	5/2/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
OW-56	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-56	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	5/2/2019	1,2-Dichloroethane	4.1	1	0.194638	5	ug/L
OW-56	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-56	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	5/2/2019	Acetone	15	10	1.199396	14064	ug/L
OW-56	5/2/2019	Benzene	0.78	1	0.166639	5	ug/L
OW-56	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	5/2/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
OW-56	5/2/2019	MTBE	46	1	0.456095	143	ug/L
OW-56	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-56	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-56	5/2/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-56	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-56	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-56	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-56	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-56	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	8/21/2019	1,2-Dichloroethane	**9.1**	1	0.194638	5	ug/L
OW-56	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	8/21/2019	1-Methylnaphthalene	0.77	4	0.314954	NA	ug/L
OW-56	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	8/21/2019	Acetone	5.3	10	1.199396	14064	ug/L
OW-56	8/21/2019	Benzene	1.5	1	0.166639	5	ug/L
OW-56	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	8/21/2019	Isopropylbenzene	1.5	1	0.191522	447	ug/L
OW-56	8/21/2019	MTBE	17	1	0.456095	143	ug/L
OW-56	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	8/21/2019	n-Butylbenzene	0.98	3	0.22757	1000	ug/L
OW-56	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	8/21/2019	sec-Butylbenzene	0.43	1	0.247731	2000	ug/L
OW-56	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-56	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	10/15/2019	1,2-Dichloroethane	**7.7**	1	0.194638	5	ug/L
OW-56	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-56	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-56	10/15/2019	Benzene	1.1	1	0.166639	5	ug/L
OW-56	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	10/15/2019	Isopropylbenzene	1.4	1	0.191522	447	ug/L
OW-56	10/15/2019	MTBE	11	1	0.456095	143	ug/L
OW-56	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-56	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-56	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-56	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	10/15/2019	1,1-Dichloroethane	0.58	1	0.140859	25	ug/L
OW-56	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-56	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-56	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-56	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-56	3/2/2020	1,1-Dichloroethane	0.49	1	0.27	25	ug/L
OW-56	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-56	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-56	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-56	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-56	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-56	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-56	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-56	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/2/2020	1,2-Dichloroethane	**5.1**	1	0.22	5	ug/L
OW-56	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-56	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-56	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-56	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-56	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-56	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-56	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-56	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-56	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-56	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-56	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-56	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-56	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-56	3/2/2020	Acetone	9.9	10	2.3	14064	ug/L
OW-56	3/2/2020	Benzene	0.64	1	0.23	5	ug/L
OW-56	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-56	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-56	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-56	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-56	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-56	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-56	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-56	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-56	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-56	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-56	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-56	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-56	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-56	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-56	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-56	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-56	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-56	3/2/2020	Isopropylbenzene	1.1	1	0.18	447	ug/L
OW-56	3/2/2020	MTBE	14	1	0.39	143	ug/L
OW-56	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-56	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-56	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-56	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-56	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-56	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-56	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-56	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-56	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-56	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-56	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-56	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-56	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-56	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-56	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-56	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-56	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-56	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-56	9/21/2020	1,1-Dichloroethane	0.29	1	0.27	25	ug/L
OW-56	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-56	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-56	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-56	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-56	9/21/2020	1,2,4-Trimethylbenzene	1.2	1	0.12	56	ug/L
OW-56	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-56	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-56	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-56	9/21/2020	1,2-Dichloroethane	**10**	1	0.22	5	ug/L
OW-56	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-56	9/21/2020	1,3,5-Trimethylbenzene	1.6	1	0.18	60	ug/L
OW-56	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-56	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-56	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-56	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-56	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-56	9/21/2020	2-Butanone	1.5	10	1.1	5565	ug/L
OW-56	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-56	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-56	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-56	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-56	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-56	9/21/2020	Acetone	15	10	2.3	14064	ug/L
OW-56	9/21/2020	Benzene	**5.3**	1	0.23	5	ug/L
OW-56	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-56	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-56	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-56	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-56	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-56	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-56	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-56	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-56	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
OW-56	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-56	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-56	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-56	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-56	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-56	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-56	9/21/2020	Ethylbenzene	0.52	1	0.21	700	ug/L
OW-56	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-56	9/21/2020	Isopropylbenzene	0.25	1	0.18	447	ug/L
OW-56	9/21/2020	MTBE	32	1	0.39	143	ug/L
OW-56	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-56	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-56	9/21/2020	Naphthalene	0.48	2	0.28	30	ug/L
OW-56	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-56	9/21/2020	Styrene	ND	1	0.13	100	ug/L
OW-56	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-56	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-56	9/21/2020	Toluene	2.8	1	0.2	1000	ug/L
OW-56	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-56	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-56	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-56	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-56	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	9/21/2020	Xylenes, Total	45	1.5	0.55	620	ug/L
OW-56	9/21/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-56	12/23/2020	Acetone	ND	50	20	14064	ug/L
OW-56	12/23/2020	Benzene	**547**	2	0.76	5	ug/L
OW-56	12/23/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
OW-56	12/23/2020	Bromoform	ND	10	1.42	32.9	ug/L
OW-56	12/23/2020	Bromomethane	ND	2	1.96	7.54	ug/L
OW-56	12/23/2020	2-Butanone	ND	50	5.2	5565	ug/L
OW-56	12/23/2020	Carbon Disulfide	ND	2	1	810	ug/L
OW-56	12/23/2020	Carbon tetrachloride	ND	2	1	5	ug/L
OW-56	12/23/2020	Chlorobenzene	ND	2	1	77.6	ug/L
OW-56	12/23/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OW-56	12/23/2020	Chloroethane	ND	2	1.52	20857	ug/L
OW-56	12/23/2020	Chloroform	ND	2	1.2	100	ug/L
OW-56	12/23/2020	Chloromethane	ND	2	1.66	20.32	ug/L
OW-56	12/23/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
OW-56	12/23/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
OW-56	12/23/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
OW-56	12/23/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-56	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
OW-56	12/23/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
OW-56	12/23/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
OW-56	12/23/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
OW-56	12/23/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
OW-56	12/23/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
OW-56	12/23/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
OW-56	12/23/2020	1,1-Dichloroethane	ND	2	1	25	ug/L
OW-56	12/23/2020	1,2-Dichloroethane	**22.9**	2	1	5	ug/L
OW-56	12/23/2020	1,1-Dichloroethene	ND	2	1	7	ug/L
OW-56	12/23/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
OW-56	12/23/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
OW-56	12/23/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
OW-56	12/23/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
OW-56	12/23/2020	Ethylbenzene	76.9	2	1	700	ug/L
OW-56	12/23/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
OW-56	12/23/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/23/2020	Isopropylbenzene	7.02	2	1.06	447	ug/L
OW-56	12/23/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
OW-56	12/23/2020	1-Methylnaphthalene	ND	10	8.4	NA	ug/L
OW-56	12/23/2020	2-Methylnaphthalene	*ND*	*20*	9.2		ug/L
OW-56	12/23/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
OW-56	12/23/2020	MTBE	70.8	2	1.48	143	ug/L
OW-56	12/23/2020	Naphthalene	19.5	2	2	30	ug/L
OW-56	12/23/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
OW-56	12/23/2020	n-Propylbenzene	4.44	2	1.38	660	ug/L
OW-56	12/23/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
OW-56	12/23/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
OW-56	12/23/2020	Styrene	ND	2	2	100	ug/L
OW-56	12/23/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
OW-56	12/23/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
OW-56	12/23/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
OW-56	12/23/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
OW-56	12/23/2020	Toluene	125	2	0.82	1000	ug/L
OW-56	12/23/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
OW-56	12/23/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-56	12/23/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
OW-56	12/23/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
OW-56	12/23/2020	1,1,1-Trichloroethane	ND	2	1	200	ug/L
OW-56	12/23/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
OW-56	12/23/2020	Trichloroethene	ND	2	1	5	ug/L
OW-56	12/23/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
OW-56	12/23/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
OW-56	12/23/2020	1,2,4-Trimethylbenzene	**84.7**	2	1.64	56	ug/L
OW-56	12/23/2020	1,3,5-Trimethylbenzene	42.8	2	1.12	60	ug/L
OW-56	12/23/2020	Vinyl Chloride	ND	2	1	2	ug/L
OW-56	12/23/2020	Xylenes, Total	469	20	3.2	620	ug/L
OW-56	12/23/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-56	12/23/2020	1,2-Dibromoethane	ND	0.0197	0.00493	0.05	ug/L
OW-57	10/1/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-57	10/1/2016	Acetone	ND	500	250	14064	ug/L
OW-57	10/1/2016	Chloroform	ND	50	4.4	100	ug/L
OW-57	10/1/2016	Benzene	**11000**	500	48	5	ug/L
OW-57	10/1/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-57	10/1/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-57	10/1/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-57	10/1/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-57	10/1/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-57	10/1/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-57	10/1/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-57	10/1/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-57	10/1/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-57	10/1/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-57	10/1/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-57	10/1/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-57	10/1/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-57	10/1/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-57	10/1/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-57	10/1/2016	2-Butanone	ND	500	37	5565	ug/L
OW-57	10/1/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-57	10/1/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-57	10/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-57	10/1/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-57	10/1/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	10/1/2016	1,2,4-Trimethylbenzene	7.3	50	5.5	56	ug/L
OW-57	10/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-57	10/1/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-57	10/1/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-57	10/1/2016	Isopropylbenzene	22	50	5.2	447	ug/L
OW-57	10/1/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-57	10/1/2016	Ethylbenzene	570	50	5.6	700	ug/L
OW-57	10/1/2016	Styrene	ND	50	5.5	100	ug/L
OW-57	10/1/2016	n-Propylbenzene	48	50	6.6	660	ug/L
OW-57	10/1/2016	n-Butylbenzene	9.1	150	8	1000	ug/L
OW-57	10/1/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-57	10/1/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-57	10/1/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-57	10/1/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-57	10/1/2016	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-57	10/1/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-57	10/1/2016	Toluene	54	50	5.9	1000	ug/L
OW-57	10/1/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-57	10/1/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-57	10/1/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
OW-57	10/1/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-57	10/1/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-57	10/1/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-57	10/1/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-57	10/1/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-57	10/1/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-57	10/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-57	10/1/2016	Xylenes, Total	140	75	18	620	ug/L
OW-57	10/1/2016	MTBE	**180**	50	11	143	ug/L
OW-57	10/1/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-57	10/1/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-57	11/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-57	11/8/2016	Acetone	54	50	25	14064	ug/L
OW-57	11/8/2016	Chloroform	ND	5	0.44	100	ug/L
OW-57	11/8/2016	Benzene	**10000**	500	48	5	ug/L
OW-57	11/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-57	11/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-57	11/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-57	11/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-57	11/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-57	11/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-57	11/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-57	11/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-57	11/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-57	11/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-57	11/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-57	11/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-57	11/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-57	11/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-57	11/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-57	11/8/2016	2-Butanone	17	50	3.7	5565	ug/L
OW-57	11/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-57	11/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-57	11/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-57	11/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-57	11/8/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-57	11/8/2016	1-Methylnaphthalene	170	20	1	NA	ug/L
OW-57	11/8/2016	Naphthalene	**210**	10	0.46	30	ug/L
OW-57	11/8/2016	2-Methylnaphthalene	**130**	20	0.79		ug/L
OW-57	11/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-57	11/8/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-57	11/8/2016	1,2,4-Trimethylbenzene	0.96	5	0.55	56	ug/L
OW-57	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-57	11/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-57	11/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-57	11/8/2016	Isopropylbenzene	15	5	0.52	447	ug/L
OW-57	11/8/2016	p-Isopropyltoluene	1.8	5	0.7	NA	ug/L
OW-57	11/8/2016	Ethylbenzene	580	50	5.6	700	ug/L
OW-57	11/8/2016	Styrene	ND	5	0.55	100	ug/L
OW-57	11/8/2016	n-Propylbenzene	39	5	0.66	660	ug/L
OW-57	11/8/2016	n-Butylbenzene	3.3	15	0.8	1000	ug/L
OW-57	11/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-57	11/8/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-57	11/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-57	11/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-57	11/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-57	11/8/2016	1,3,5-Trimethylbenzene	1.6	5	0.58	60	ug/L
OW-57	11/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-57	11/8/2016	Toluene	35	5	0.59	1000	ug/L
OW-57	11/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-57	11/8/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-57	11/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-57	11/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-57	11/8/2016	sec-Butylbenzene	1.9	5	0.62	2000	ug/L
OW-57	11/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-57	11/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-57	11/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-57	11/8/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-57	11/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-57	11/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-57	11/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-57	11/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-57	11/8/2016	Xylenes, Total	110	7.5	1.8	620	ug/L
OW-57	11/8/2016	MTBE	**160**	5	1.1	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-57	11/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-57	3/30/2017	Carbon tetrachloride	*ND*	*50*	11	5	ug/L
OW-57	3/30/2017	Acetone	ND	500	88	14064	ug/L
OW-57	3/30/2017	Chloroform	ND	50	8.9	100	ug/L
OW-57	3/30/2017	Benzene	**8600**	50	9.6	5	ug/L
OW-57	3/30/2017	1,1,1-Trichloroethane	ND	50	7.3	200	ug/L
OW-57	3/30/2017	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-57	3/30/2017	Chloromethane	*ND*	*150*	21	20.32	ug/L
OW-57	3/30/2017	Dibromomethane	*ND*	*50*	12	8	ug/L
OW-57	3/30/2017	Chloroethane	ND	100	23	20857	ug/L
OW-57	3/30/2017	Vinyl Chloride	*ND*	*50*	18	2	ug/L
OW-57	3/30/2017	Methylene Chloride	*ND*	*150*	11	5	ug/L
OW-57	3/30/2017	Carbon Disulfide	ND	500	60	810	ug/L
OW-57	3/30/2017	Bromoform	*ND*	*50*	21	32.9	ug/L
OW-57	3/30/2017	Bromodichloromethane	*ND*	*50*	18	1.34	ug/L
OW-57	3/30/2017	1,1-Dichloroethane	*ND*	*50*	10	25	ug/L
OW-57	3/30/2017	1,1-Dichloroethene	*ND*	*50*	8.1	7	ug/L
OW-57	3/30/2017	Trichlorofluoromethane	ND	50	18	1137	ug/L
OW-57	3/30/2017	Dichlorodifluoromethane	ND	50	32	197	ug/L
OW-57	3/30/2017	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
OW-57	3/30/2017	2-Butanone	ND	500	110	5565	ug/L
OW-57	3/30/2017	1,1,2-Trichloroethane	*ND*	*50*	14	5	ug/L
OW-57	3/30/2017	Trichloroethene	*ND*	*50*	18	5	ug/L
OW-57	3/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-57	3/30/2017	1,2,3-Trichlorobenzene	ND	50	11	70	ug/L
OW-57	3/30/2017	2-Chlorotoluene	ND	50	40	233	ug/L
OW-57	3/30/2017	1,2,4-Trimethylbenzene	ND	50	10	56	ug/L
OW-57	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	140	0.0033	ug/L
OW-57	3/30/2017	1,2,3-Trichloropropane	*ND*	*100*	39	0.0084	ug/L
OW-57	3/30/2017	tert-Butylbenzene	ND	50	10	690	ug/L
OW-57	3/30/2017	Isopropylbenzene	20	50	9.8	447	ug/L
OW-57	3/30/2017	p-Isopropyltoluene	ND	50	14	NA	ug/L
OW-57	3/30/2017	Ethylbenzene	380	50	11	700	ug/L
OW-57	3/30/2017	Styrene	ND	50	16	100	ug/L
OW-57	3/30/2017	n-Propylbenzene	45	50	13	660	ug/L
OW-57	3/30/2017	n-Butylbenzene	ND	150	16	1000	ug/L
OW-57	3/30/2017	4-Chlorotoluene	ND	50	40	250	ug/L
OW-57	3/30/2017	1,2-Dibromoethane	*ND*	*50*	13	0.05	ug/L
OW-57	3/30/2017	1,2-Dichloroethane	*ND*	*50*	12	5	ug/L
OW-57	3/30/2017	4-Methyl-2-Pentanone	ND	500	71	1243	ug/L
OW-57	3/30/2017	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-57	3/30/2017	Bromobenzene	ND	50	14	62	ug/L
OW-57	3/30/2017	Toluene	24	50	8.9	1000	ug/L
OW-57	3/30/2017	Chlorobenzene	ND	50	11	77.6	ug/L
OW-57	3/30/2017	Dibromochloromethane	*ND*	*50*	7.8	1.68	ug/L
OW-57	3/30/2017	Tetrachloroethene	*ND*	*50*	15	5	ug/L
OW-57	3/30/2017	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-57	3/30/2017	1,3-Dichloropropane	ND	50	16	370	ug/L
OW-57	3/30/2017	cis-1,2-Dichloroethene	ND	50	20	70	ug/L
OW-57	3/30/2017	trans-1,2-Dichloroethene	ND	50	18	100	ug/L
OW-57	3/30/2017	1,1-Dichloropropene	ND	50	13	NA	ug/L
OW-57	3/30/2017	2-Hexanone	*ND*	*500*	66	38	ug/L
OW-57	3/30/2017	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-57	3/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	11	5.74	ug/L
OW-57	3/30/2017	Xylenes, Total	100	75	32	620	ug/L
OW-57	3/30/2017	MTBE	100	50	15	143	ug/L
OW-57	3/30/2017	cis-1,3-Dichloropropene	ND	50	10	NA	ug/L
OW-57	3/30/2017	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
OW-57	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	6/21/2017	Acetone	ND	500	41	14064	ug/L
OW-57	6/21/2017	Chloroform	ND	50	20	100	ug/L
OW-57	6/21/2017	Benzene	**14000**	500	31	5	ug/L
OW-57	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
OW-57	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
OW-57	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	6/21/2017	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	6/21/2017	Isopropylbenzene	15	50	2.6	447	ug/L
OW-57	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	6/21/2017	Ethylbenzene	540	50	4.7	700	ug/L
OW-57	6/21/2017	Styrene	ND	50	7.8	100	ug/L
OW-57	6/21/2017	n-Propylbenzene	34	50	3.7	660	ug/L
OW-57	6/21/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-57	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	6/21/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
OW-57	6/21/2017	Toluene	30	50	3.2	1000	ug/L
OW-57	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	6/21/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	6/21/2017	Pentafluorobenzene	**500**	0	0		None
OW-57	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	6/21/2017	Xylenes, Total	110	75	16	620	ug/L
OW-57	6/21/2017	MTBE	**150**	50	12	143	ug/L
OW-57	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	9/19/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	9/19/2017	Acetone	ND	500	41	14064	ug/L
OW-57	9/19/2017	Chloroform	ND	50	20	100	ug/L
OW-57	9/19/2017	Benzene	**9400**	500	31	5	ug/L
OW-57	9/19/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	9/19/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	9/19/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	9/19/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	9/19/2017	Chloroethane	ND	100	12	20857	ug/L
OW-57	9/19/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	9/19/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	9/19/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	9/19/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	9/19/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	9/19/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	9/19/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	9/19/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-57	9/19/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	9/19/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	9/19/2017	2-Butanone	ND	500	57	5565	ug/L
OW-57	9/19/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	9/19/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	9/19/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	9/19/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	9/19/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	9/19/2017	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	9/19/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	9/19/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	9/19/2017	Isopropylbenzene	14	50	2.6	447	ug/L
OW-57	9/19/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	9/19/2017	Ethylbenzene	460	50	4.7	700	ug/L
OW-57	9/19/2017	Styrene	ND	50	7.8	100	ug/L
OW-57	9/19/2017	n-Propylbenzene	33	50	3.7	660	ug/L
OW-57	9/19/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/19/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	9/19/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	9/19/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	9/19/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	9/19/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	9/19/2017	Bromobenzene	ND	50	7	62	ug/L
OW-57	9/19/2017	Toluene	25	50	3.2	1000	ug/L
OW-57	9/19/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	9/19/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	9/19/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	9/19/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	9/19/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	9/19/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	9/19/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	9/19/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	9/19/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	9/19/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	9/19/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	9/19/2017	Xylenes, Total	96	75	16	620	ug/L
OW-57	9/19/2017	MTBE	120	50	12	143	ug/L
OW-57	9/19/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	9/19/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-57	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-57	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-57	12/6/2017	Benzene	**11000**	1000	62	5	ug/L
OW-57	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-57	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-57	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-57	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-57	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-57	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-57	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-57	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-57	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-57	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-57	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-57	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-57	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-57	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-57	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-57	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-57	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-57	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-57	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-57	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-57	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-57	12/6/2017	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-57	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-57	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-57	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-57	12/6/2017	Isopropylbenzene	12	100	5.1	447	ug/L
OW-57	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-57	12/6/2017	Ethylbenzene	520	100	9.3	700	ug/L
OW-57	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-57	12/6/2017	n-Propylbenzene	29	100	7.4	660	ug/L
OW-57	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-57	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-57	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-57	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-57	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-57	12/6/2017	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-57	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-57	12/6/2017	Toluene	24	100	6.4	1000	ug/L
OW-57	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-57	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-57	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-57	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-57	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-57	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-57	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-57	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-57	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-57	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-57	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-57	12/6/2017	Xylenes, Total	83	150	32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/6/2017	MTBE	98	100	24	143	ug/L
OW-57	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-57	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-57	2/20/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	2/20/2018	Acetone	97	500	41	14064	ug/L
OW-57	2/20/2018	Chloroform	ND	50	20	100	ug/L
OW-57	2/20/2018	Benzene	**12000**	500	31	5	ug/L
OW-57	2/20/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	2/20/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	2/20/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	2/20/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	2/20/2018	Chloroethane	ND	100	12	20857	ug/L
OW-57	2/20/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	2/20/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	2/20/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	2/20/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	2/20/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	2/20/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	2/20/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	2/20/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-57	2/20/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	2/20/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	2/20/2018	2-Butanone	ND	500	57	5565	ug/L
OW-57	2/20/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	2/20/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	2/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	2/20/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	2/20/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	2/20/2018	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	2/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	2/20/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	2/20/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	2/20/2018	Isopropylbenzene	15	50	2.6	447	ug/L
OW-57	2/20/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	2/20/2018	Ethylbenzene	580	50	4.7	700	ug/L
OW-57	2/20/2018	Styrene	ND	50	7.8	100	ug/L
OW-57	2/20/2018	n-Propylbenzene	45	50	3.7	660	ug/L
OW-57	2/20/2018	n-Butylbenzene	7.6	150	6.5	1000	ug/L
OW-57	2/20/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	2/20/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	2/20/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	2/20/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	2/20/2018	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	2/20/2018	Bromobenzene	ND	50	7	62	ug/L
OW-57	2/20/2018	Toluene	35	50	3.2	1000	ug/L
OW-57	2/20/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	2/20/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	2/20/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	2/20/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	2/20/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	2/20/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	2/20/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	2/20/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	2/20/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	2/20/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	2/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	2/20/2018	Xylenes, Total	110	75	16	620	ug/L
OW-57	2/20/2018	MTBE	120	50	12	143	ug/L
OW-57	2/20/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	2/20/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	5/8/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-57	5/8/2018	Acetone	ND	1000	82	14064	ug/L
OW-57	5/8/2018	Chloroform	ND	100	40	100	ug/L
OW-57	5/8/2018	Benzene	**12000**	1000	62	5	ug/L
OW-57	5/8/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-57	5/8/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-57	5/8/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-57	5/8/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-57	5/8/2018	Chloroethane	ND	200	23	20857	ug/L
OW-57	5/8/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-57	5/8/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-57	5/8/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-57	5/8/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-57	5/8/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-57	5/8/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-57	5/8/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/8/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-57	5/8/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-57	5/8/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-57	5/8/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-57	5/8/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-57	5/8/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-57	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-57	5/8/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-57	5/8/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-57	5/8/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-57	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-57	5/8/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-57	5/8/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-57	5/8/2018	Isopropylbenzene	11	100	5.1	447	ug/L
OW-57	5/8/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-57	5/8/2018	Ethylbenzene	560	100	9.3	700	ug/L
OW-57	5/8/2018	Styrene	ND	100	16	100	ug/L
OW-57	5/8/2018	n-Propylbenzene	31	100	7.4	660	ug/L
OW-57	5/8/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-57	5/8/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-57	5/8/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-57	5/8/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-57	5/8/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-57	5/8/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-57	5/8/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-57	5/8/2018	Toluene	30	100	6.4	1000	ug/L
OW-57	5/8/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-57	5/8/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-57	5/8/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-57	5/8/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-57	5/8/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-57	5/8/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-57	5/8/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-57	5/8/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-57	5/8/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-57	5/8/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-57	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-57	5/8/2018	Xylenes, Total	110	150	32	620	ug/L
OW-57	5/8/2018	MTBE	120	100	24	143	ug/L
OW-57	5/8/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-57	5/8/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-57	8/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-57	8/28/2018	Acetone	85	200	16	14064	ug/L
OW-57	8/28/2018	Chloroform	ND	20	8	100	ug/L
OW-57	8/28/2018	Benzene	**12000**	200	35	5	ug/L
OW-57	8/28/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-57	8/28/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-57	8/28/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-57	8/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-57	8/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-57	8/28/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-57	8/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-57	8/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-57	8/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-57	8/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-57	8/28/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-57	8/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-57	8/28/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-57	8/28/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-57	8/28/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-57	8/28/2018	2-Butanone	ND	200	25	5565	ug/L
OW-57	8/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-57	8/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-57	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-57	8/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-57	8/28/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-57	8/28/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-57	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-57	8/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-57	8/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-57	8/28/2018	Isopropylbenzene	15	20	4.4	447	ug/L
OW-57	8/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-57	8/28/2018	Ethylbenzene	570	20	4.5	700	ug/L
OW-57	8/28/2018	Styrene	ND	20	5	100	ug/L
OW-57	8/28/2018	n-Propylbenzene	45	20	4.9	660	ug/L
OW-57	8/28/2018	n-Butylbenzene	6.2	60	5	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/28/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-57	8/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-57	8/28/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-57	8/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-57	8/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
OW-57	8/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-57	8/28/2018	Toluene	41	20	3.4	1000	ug/L
OW-57	8/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-57	8/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-57	8/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-57	8/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-57	8/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-57	8/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-57	8/28/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-57	8/28/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-57	8/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-57	8/28/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-57	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-57	8/28/2018	Xylenes, Total	120	30	13	620	ug/L
OW-57	8/28/2018	MTBE	120	20	6.4	143	ug/L
OW-57	8/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-57	8/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-57	11/29/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-57	11/29/2018	Acetone	ND	200	15	14064	ug/L
OW-57	11/29/2018	Chloroform	ND	20	4.7	100	ug/L
OW-57	11/29/2018	Benzene	**11000**	200	35	5	ug/L
OW-57	11/29/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-57	11/29/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-57	11/29/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-57	11/29/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-57	11/29/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-57	11/29/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-57	11/29/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-57	11/29/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-57	11/29/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-57	11/29/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-57	11/29/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-57	11/29/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-57	11/29/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-57	11/29/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-57	11/29/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-57	11/29/2018	2-Butanone	ND	200	28	5565	ug/L
OW-57	11/29/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-57	11/29/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-57	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-57	11/29/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-57	11/29/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-57	11/29/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-57	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-57	11/29/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-57	11/29/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-57	11/29/2018	Isopropylbenzene	14	20	4.4	447	ug/L
OW-57	11/29/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-57	11/29/2018	Ethylbenzene	510	20	4.5	700	ug/L
OW-57	11/29/2018	Styrene	ND	20	5	100	ug/L
OW-57	11/29/2018	n-Propylbenzene	40	20	4.9	660	ug/L
OW-57	11/29/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-57	11/29/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-57	11/29/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-57	11/29/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-57	11/29/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-57	11/29/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
OW-57	11/29/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-57	11/29/2018	Toluene	61	20	3.4	1000	ug/L
OW-57	11/29/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-57	11/29/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-57	11/29/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-57	11/29/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-57	11/29/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-57	11/29/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-57	11/29/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-57	11/29/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-57	11/29/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-57	11/29/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-57	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-57	11/29/2018	Xylenes, Total	110	30	13	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	MTBE	100	20	9.1	143	ug/L
OW-57	11/29/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-57	11/29/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-57	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
OW-57	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L
OW-57	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
OW-57	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
OW-57	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
OW-57	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
OW-57	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
OW-57	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
OW-57	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
OW-57	2/20/2019	1,2,4-Trimethylbenzene	ND	20	5.066287	56	ug/L
OW-57	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
OW-57	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
OW-57	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
OW-57	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
OW-57	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
OW-57	2/20/2019	1,3,5-Trimethylbenzene	ND	20	4.628281	60	ug/L
OW-57	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
OW-57	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
OW-57	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
OW-57	2/20/2019	1-Methylnaphthalene	120	80	6.716339	NA	ug/L
OW-57	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
OW-57	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
OW-57	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
OW-57	2/20/2019	2-Methylnaphthalene	**37**	80	6.90752		ug/L
OW-57	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
OW-57	2/20/2019	p-Isopropyltoluene	ND	20	4.806771	NA	ug/L
OW-57	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
OW-57	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
OW-57	2/20/2019	Benzene	**12000**	200	34.979144	5	ug/L
OW-57	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
OW-57	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
OW-57	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
OW-57	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
OW-57	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
OW-57	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
OW-57	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
OW-57	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
OW-57	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
OW-57	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
OW-57	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
OW-57	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
OW-57	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	2/20/2019	Ethylbenzene	560	20	4.468045	700	ug/L
OW-57	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
OW-57	2/20/2019	Isopropylbenzene	16	20	4.422084	447	ug/L
OW-57	2/20/2019	MTBE	110	20	9.1219	143	ug/L
OW-57	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
OW-57	2/20/2019	Naphthalene	**150**	40	5.792521	30	ug/L
OW-57	2/20/2019	n-Butylbenzene	5.8	60	4.966609	1000	ug/L
OW-57	2/20/2019	n-Propylbenzene	50	20	4.851725	660	ug/L
OW-57	2/20/2019	sec-Butylbenzene	ND	20	4.045094	2000	ug/L
OW-57	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
OW-57	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
OW-57	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
OW-57	2/20/2019	Toluene	89	20	3.362788	1000	ug/L
OW-57	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
OW-57	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
OW-57	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
OW-57	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
OW-57	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
OW-57	2/20/2019	Xylenes, Total	120	30	12.825754	620	ug/L
OW-57	5/16/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	5/16/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	5/16/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	5/16/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	5/16/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	5/16/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	5/16/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	5/16/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/16/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-57	5/16/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	5/16/2019	1,2,4-Trimethylbenzene	5	20	4.263982	56	ug/L
OW-57	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-57	5/16/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	5/16/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	5/16/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	5/16/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	5/16/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	5/16/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	5/16/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-57	5/16/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	5/16/2019	1-Methylnaphthalene	130	80	6.29909	NA	ug/L
OW-57	5/16/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	5/16/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	5/16/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	5/16/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	5/16/2019	2-Methylnaphthalene	**49**	80	6.90752		ug/L
OW-57	5/16/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	5/16/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	5/16/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	5/16/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-57	5/16/2019	Benzene	**11000**	200	33.327811	5	ug/L
OW-57	5/16/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-57	5/16/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	5/16/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	5/16/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	5/16/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	5/16/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	5/16/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	5/16/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	5/16/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	5/16/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	5/16/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	5/16/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	5/16/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	5/16/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	5/16/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	5/16/2019	Ethylbenzene	540	20	2.646816	700	ug/L
OW-57	5/16/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	5/16/2019	Isopropylbenzene	15	20	3.830445	447	ug/L
OW-57	5/16/2019	MTBE	95	20	9.1219	143	ug/L
OW-57	5/16/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	5/16/2019	Naphthalene	**130**	40	5.501427	30	ug/L
OW-57	5/16/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
OW-57	5/16/2019	n-Propylbenzene	39	20	4.28616	660	ug/L
OW-57	5/16/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
OW-57	5/16/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	5/16/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	5/16/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	5/16/2019	Toluene	89	20	7.008724	1000	ug/L
OW-57	5/16/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	5/16/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	5/16/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	5/16/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	5/16/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	5/16/2019	Xylenes, Total	110	30	9.088299	620	ug/L
OW-57	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	8/21/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	8/21/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	8/21/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	8/21/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	8/21/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	8/21/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-57	8/21/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-57	8/21/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	8/21/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
OW-57	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-57	8/21/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	8/21/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	8/21/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	8/21/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	8/21/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	8/21/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	8/21/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/21/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	8/21/2019	1-Methylnaphthalene	110	80	6.29909	NA	ug/L
OW-57	8/21/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	8/21/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	8/21/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	8/21/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	8/21/2019	2-Methylnaphthalene	**63**	80	6.90752		ug/L
OW-57	8/21/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	8/21/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	8/21/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	8/21/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-57	8/21/2019	Benzene	**12000**	200	33.327811	5	ug/L
OW-57	8/21/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-57	8/21/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	8/21/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	8/21/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	8/21/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	8/21/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	8/21/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	8/21/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	8/21/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	8/21/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	8/21/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	8/21/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	8/21/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	8/21/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	8/21/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	8/21/2019	Ethylbenzene	560	20	2.646816	700	ug/L
OW-57	8/21/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	8/21/2019	Isopropylbenzene	18	20	3.830445	447	ug/L
OW-57	8/21/2019	MTBE	100	20	9.1219	143	ug/L
OW-57	8/21/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	8/21/2019	Naphthalene	**150**	40	5.501427	30	ug/L
OW-57	8/21/2019	n-Butylbenzene	20	60	4.551391	1000	ug/L
OW-57	8/21/2019	n-Propylbenzene	44	20	4.28616	660	ug/L
OW-57	8/21/2019	sec-Butylbenzene	5.8	20	4.954626	2000	ug/L
OW-57	8/21/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	8/21/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	8/21/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	8/21/2019	Toluene	91	20	7.008724	1000	ug/L
OW-57	8/21/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	8/21/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	8/21/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	8/21/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	8/21/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	8/21/2019	Xylenes, Total	130	30	9.088299	620	ug/L
OW-57	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	11/5/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	11/5/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	11/5/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	11/5/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	11/5/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	11/5/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-57	11/5/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	11/5/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
OW-57	11/5/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	11/5/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	11/5/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	11/5/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	11/5/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	11/5/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	11/5/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-57	11/5/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	11/5/2019	1-Methylnaphthalene	140	80	6.29909	NA	ug/L
OW-57	11/5/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	11/5/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	11/5/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	11/5/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	11/5/2019	2-Methylnaphthalene	**53**	80	6.90752		ug/L
OW-57	11/5/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	11/5/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	11/5/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	11/5/2019	Acetone	50	200	23.987928	14064	ug/L
OW-57	11/5/2019	Benzene	**11000**	200	33.327811	5	ug/L
OW-57	11/5/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	11/5/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	11/5/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	11/5/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	11/5/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	11/5/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	11/5/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	11/5/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	11/5/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	11/5/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	11/5/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	11/5/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	11/5/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	11/5/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	11/5/2019	Ethylbenzene	540	20	2.646816	700	ug/L
OW-57	11/5/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	11/5/2019	Isopropylbenzene	16	20	3.830445	447	ug/L
OW-57	11/5/2019	MTBE	92	20	9.1219	143	ug/L
OW-57	11/5/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	11/5/2019	Naphthalene	**160**	40	5.501427	30	ug/L
OW-57	11/5/2019	n-Butylbenzene	5.4	60	4.551391	1000	ug/L
OW-57	11/5/2019	n-Propylbenzene	42	20	4.28616	660	ug/L
OW-57	11/5/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
OW-57	11/5/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	11/5/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	11/5/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	11/5/2019	Toluene	76	20	7.008724	1000	ug/L
OW-57	11/5/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	11/5/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	11/5/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	11/5/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	11/5/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	11/5/2019	Xylenes, Total	130	30	9.088299	620	ug/L
OW-57	3/5/2020	Benzene	**13000**	200	45	5	ug/L
OW-57	3/5/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-57	3/5/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-57	3/5/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
OW-57	3/5/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-57	3/5/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-57	3/5/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-57	3/5/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-57	3/5/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-57	3/5/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-57	3/5/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-57	3/5/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
OW-57	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-57	3/5/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-57	3/5/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
OW-57	3/5/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-57	3/5/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-57	3/5/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
OW-57	3/5/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-57	3/5/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-57	3/5/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-57	3/5/2020	1-Methylnaphthalene	120	80	17	NA	ug/L
OW-57	3/5/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-57	3/5/2020	2-Butanone	ND	200	22	5565	ug/L
OW-57	3/5/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-57	3/5/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-57	3/5/2020	2-Methylnaphthalene	**66**	80	14		ug/L
OW-57	3/5/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-57	3/5/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-57	3/5/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-57	3/5/2020	Acetone	94	200	47	14064	ug/L
OW-57	3/5/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-57	3/5/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-57	3/5/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-57	3/5/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-57	3/5/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-57	3/5/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-57	3/5/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-57	3/5/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-57	3/5/2020	Chloroform	ND	20	2.7	100	ug/L
OW-57	3/5/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-57	3/5/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-57	3/5/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-57	3/5/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-57	3/5/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-57	3/5/2020	Ethylbenzene	550	20	4.3	700	ug/L
OW-57	3/5/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-57	3/5/2020	Isopropylbenzene	15	20	3.7	447	ug/L
OW-57	3/5/2020	MTBE	89	20	7.9	143	ug/L
OW-57	3/5/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-57	3/5/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
OW-57	3/5/2020	n-Propylbenzene	41	20	3.6	660	ug/L
OW-57	3/5/2020	Naphthalene	**150**	40	5.6	30	ug/L
OW-57	3/5/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-57	3/5/2020	Styrene	ND	20	2.6	100	ug/L
OW-57	3/5/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-57	3/5/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-57	3/5/2020	Toluene	62	20	4	1000	ug/L
OW-57	3/5/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-57	3/5/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-57	3/5/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-57	3/5/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-57	3/5/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-57	3/5/2020	Xylenes, Total	130	30	11	620	ug/L
OW-57	3/5/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-57	9/18/2020	Benzene	**11000**	500	110	5	ug/L
OW-57	9/18/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-57	9/18/2020	Styrene	ND	50	6.5	100	ug/L
OW-57	9/18/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-57	9/18/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-57	9/18/2020	Toluene	54	50	10	1000	ug/L
OW-57	9/18/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-57	9/18/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-57	9/18/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-57	9/18/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-57	9/18/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-57	9/18/2020	Xylenes, Total	140	75	28	620	ug/L
OW-57	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-57	9/18/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-57	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-57	9/18/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-57	9/18/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-57	9/18/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-57	9/18/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-57	9/18/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-57	9/18/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-57	9/18/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-57	9/18/2020	1,2,4-Trimethylbenzene	ND	50	6.1	56	ug/L
OW-57	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-57	9/18/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-57	9/18/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-57	9/18/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-57	9/18/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-57	9/18/2020	1,3,5-Trimethylbenzene	ND	50	9.1	60	ug/L
OW-57	9/18/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-57	9/18/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-57	9/18/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-57	9/18/2020	1-Methylnaphthalene	93	200	42	NA	ug/L
OW-57	9/18/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-57	9/18/2020	2-Butanone	ND	500	56	5565	ug/L
OW-57	9/18/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-57	9/18/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-57	9/18/2020	2-Methylnaphthalene	**58**	200	35		ug/L
OW-57	9/18/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-57	9/18/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-57	9/18/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
OW-57	9/18/2020	Acetone	ND	500	120	14064	ug/L
OW-57	9/18/2020	Bromobenzene	ND	50	14	62	ug/L
OW-57	9/18/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-57	9/18/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-57	9/18/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-57	9/18/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-57	9/18/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-57	9/18/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-57	9/18/2020	Chloroethane	ND	100	19	20857	ug/L
OW-57	9/18/2020	Chloroform	ND	50	6.7	100	ug/L
OW-57	9/18/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
OW-57	9/18/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/18/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-57	9/18/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-57	9/18/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-57	9/18/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-57	9/18/2020	Ethylbenzene	550	50	11	700	ug/L
OW-57	9/18/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-57	9/18/2020	Isopropylbenzene	12	50	9.1	447	ug/L
OW-57	9/18/2020	MTBE	71	50	20	143	ug/L
OW-57	9/18/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-57	9/18/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-57	9/18/2020	n-Propylbenzene	34	50	9.1	660	ug/L
OW-57	9/18/2020	Naphthalene	**160**	100	14	30	ug/L
OW-57	9/18/2020	1,2-Dibromoethane	ND	0.009	0.006	0.05	ug/L
OW-57	12/23/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-57	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
OW-57	12/23/2020	Benzene	**10400**	100	38	5	ug/L
OW-57	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
OW-57	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
OW-57	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
OW-57	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
OW-57	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
OW-57	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
OW-57	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
OW-57	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
OW-57	12/23/2020	Chloroform	ND	100	60	100	ug/L
OW-57	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
OW-57	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
OW-57	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
OW-57	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
OW-57	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-57	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
OW-57	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
OW-57	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
OW-57	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
OW-57	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
OW-57	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
OW-57	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
OW-57	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
OW-57	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
OW-57	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
OW-57	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
OW-57	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
OW-57	12/23/2020	Ethylbenzene	218	100	50	700	ug/L
OW-57	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
OW-57	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
OW-57	12/23/2020	Isopropylbenzene	ND	100	53	447	ug/L
OW-57	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
OW-57	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
OW-57	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
OW-57	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
OW-57	12/23/2020	MTBE	ND	100	74	143	ug/L
OW-57	12/23/2020	Naphthalene	**103**	100	100	30	ug/L
OW-57	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
OW-57	12/23/2020	n-Propylbenzene	ND	100	69	660	ug/L
OW-57	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
OW-57	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
OW-57	12/23/2020	Styrene	ND	100	100	100	ug/L
OW-57	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
OW-57	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
OW-57	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
OW-57	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
OW-57	12/23/2020	Toluene	ND	100	41	1000	ug/L
OW-57	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
OW-57	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-57	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
OW-57	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
OW-57	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
OW-57	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
OW-57	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
OW-57	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
OW-57	12/23/2020	1,2,4-Trimethylbenzene	*ND*	*100*	82	56	ug/L
OW-57	12/23/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
OW-57	12/23/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
OW-58	9/30/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-58	9/30/2016	Acetone	ND	500	250	14064	ug/L
OW-58	9/30/2016	Chloroform	ND	50	4.4	100	ug/L
OW-58	9/30/2016	Benzene	**32000**	500	48	5	ug/L
OW-58	9/30/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-58	9/30/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-58	9/30/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-58	9/30/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-58	9/30/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-58	9/30/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58	9/30/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-58	9/30/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-58	9/30/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-58	9/30/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-58	9/30/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-58	9/30/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-58	9/30/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-58	9/30/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-58	9/30/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-58	9/30/2016	2-Butanone	ND	500	37	5565	ug/L
OW-58	9/30/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-58	9/30/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-58	9/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-58	9/30/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-58	9/30/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-58	9/30/2016	1,2,4-Trimethylbenzene	**690**	50	5.5	56	ug/L
OW-58	9/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-58	9/30/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-58	9/30/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-58	9/30/2016	Isopropylbenzene	72	50	5.2	447	ug/L
OW-58	9/30/2016	p-Isopropyltoluene	15	50	7	NA	ug/L
OW-58	9/30/2016	Ethylbenzene	**1500**	50	5.6	700	ug/L
OW-58	9/30/2016	Styrene	ND	50	5.5	100	ug/L
OW-58	9/30/2016	n-Propylbenzene	150	50	6.6	660	ug/L
OW-58	9/30/2016	n-Butylbenzene	21	150	8	1000	ug/L
OW-58	9/30/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-58	9/30/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-58	9/30/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-58	9/30/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-58	9/30/2016	1,3,5-Trimethylbenzene	**210**	50	5.8	60	ug/L
OW-58	9/30/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-58	9/30/2016	Toluene	**6600**	500	59	1000	ug/L
OW-58	9/30/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-58	9/30/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-58	9/30/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	9/30/2016	sec-Butylbenzene	18	50	6.2	2000	ug/L
OW-58	9/30/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-58	9/30/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-58	9/30/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-58	9/30/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-58	9/30/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-58	9/30/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-58	9/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-58	9/30/2016	Xylenes, Total	**4400**	75	18	620	ug/L
OW-58	9/30/2016	MTBE	**3300**	50	11	143	ug/L
OW-58	9/30/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-58	9/30/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-58	11/7/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
OW-58	11/7/2016	Acetone	ND	200	98	14064	ug/L
OW-58	11/7/2016	Chloroform	ND	20	1.8	100	ug/L
OW-58	11/7/2016	Benzene	**34000**	1000	96	5	ug/L
OW-58	11/7/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
OW-58	11/7/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
OW-58	11/7/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
OW-58	11/7/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
OW-58	11/7/2016	Chloroethane	ND	40	3.8	20857	ug/L
OW-58	11/7/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-58	11/7/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
OW-58	11/7/2016	Carbon Disulfide	ND	200	12	810	ug/L
OW-58	11/7/2016	Bromoform	ND	20	2	32.9	ug/L
OW-58	11/7/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
OW-58	11/7/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
OW-58	11/7/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
OW-58	11/7/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
OW-58	11/7/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
OW-58	11/7/2016	2-Butanone	ND	200	15	5565	ug/L
OW-58	11/7/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
OW-58	11/7/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
OW-58	11/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
OW-58	11/7/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
OW-58	11/7/2016	Hexachlorobutadiene	*ND*	*20*	4	1.39	ug/L
OW-58	11/7/2016	1-Methylnaphthalene	77	80	4.1	NA	ug/L
OW-58	11/7/2016	Naphthalene	**190**	40	1.9	30	ug/L
OW-58	11/7/2016	2-Methylnaphthalene	**61**	80	3.2		ug/L
OW-58	11/7/2016	2-Chlorotoluene	ND	20	8	233	ug/L
OW-58	11/7/2016	1,2-Dichlorobenzene	ND	20	8	600	ug/L
OW-58	11/7/2016	1,2,4-Trimethylbenzene	**210**	20	2.2	56	ug/L
OW-58	11/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
OW-58	11/7/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
OW-58	11/7/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
OW-58	11/7/2016	Isopropylbenzene	43	20	2.1	447	ug/L
OW-58	11/7/2016	p-Isopropyltoluene	7.5	20	2.8	NA	ug/L
OW-58	11/7/2016	Ethylbenzene	**1300**	20	2.2	700	ug/L
OW-58	11/7/2016	Styrene	ND	20	2.2	100	ug/L
OW-58	11/7/2016	n-Propylbenzene	110	20	2.6	660	ug/L
OW-58	11/7/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
OW-58	11/7/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
OW-58	11/7/2016	1,4-Dichlorobenzene	ND	20	2.9	75	ug/L
OW-58	11/7/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
OW-58	11/7/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
OW-58	11/7/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
OW-58	11/7/2016	1,3,5-Trimethylbenzene	**71**	20	2.3	60	ug/L
OW-58	11/7/2016	Bromobenzene	ND	20	2	62	ug/L
OW-58	11/7/2016	Toluene	**1100**	20	2.4	1000	ug/L
OW-58	11/7/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
OW-58	11/7/2016	1,2,4-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-58	11/7/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
OW-58	11/7/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-58	11/7/2016	sec-Butylbenzene	12	20	2.5	2000	ug/L
OW-58	11/7/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
OW-58	11/7/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
OW-58	11/7/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
OW-58	11/7/2016	1,3-Dichlorobenzene	ND	20	2.9	N/A	ug/L
OW-58	11/7/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
OW-58	11/7/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-58	11/7/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
OW-58	11/7/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-58	11/7/2016	Xylenes, Total	**1200**	30	7.3	620	ug/L
OW-58	11/7/2016	MTBE	**2700**	20	4.2	143	ug/L
OW-58	11/7/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-58	11/7/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-58	3/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	3/29/2017	Acetone	ND	1000	88	14064	ug/L
OW-58	3/29/2017	Chloroform	ND	100	8.9	100	ug/L
OW-58	3/29/2017	Benzene	**31000**	1000	96	5	ug/L
OW-58	3/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	3/29/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
OW-58	3/29/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
OW-58	3/29/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
OW-58	3/29/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	3/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	3/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	3/29/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
OW-58	3/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	3/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	3/29/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
OW-58	3/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	3/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	3/29/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
OW-58	3/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	3/29/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	3/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	3/29/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
OW-58	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	3/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
OW-58	3/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	3/29/2017	1,2,4-Trimethylbenzene	**170**	100	10	56	ug/L
OW-58	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	3/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	3/29/2017	Isopropylbenzene	26	100	9.8	447	ug/L
OW-58	3/29/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
OW-58	3/29/2017	Ethylbenzene	**1100**	100	11	700	ug/L
OW-58	3/29/2017	Styrene	ND	100	16	100	ug/L
OW-58	3/29/2017	n-Propylbenzene	90	100	13	660	ug/L
OW-58	3/29/2017	n-Butylbenzene	ND	300	16	1000	ug/L
OW-58	3/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	3/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	3/29/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
OW-58	3/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	3/29/2017	1,3,5-Trimethylbenzene	*44*	*100*	12	60	ug/L
OW-58	3/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	3/29/2017	Toluene	830	100	8.9	1000	ug/L
OW-58	3/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	3/29/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
OW-58	3/29/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
OW-58	3/29/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
OW-58	3/29/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
OW-58	3/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	3/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	3/29/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
OW-58	3/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	3/29/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
OW-58	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
OW-58	3/29/2017	Xylenes, Total	**970**	150	32	620	ug/L
OW-58	3/29/2017	MTBE	**3000**	100	15	143	ug/L
OW-58	3/29/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-58	3/29/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
OW-58	6/21/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	6/21/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	6/21/2017	Chloroform	ND	100	40	100	ug/L
OW-58	6/21/2017	Benzene	**38000**	1000	62	5	ug/L
OW-58	6/21/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	6/21/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	6/21/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	6/21/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	6/21/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	6/21/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	6/21/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	6/21/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	6/21/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	6/21/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	6/21/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	6/21/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	6/21/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	6/21/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	6/21/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	6/21/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	6/21/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	6/21/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	6/21/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	6/21/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	6/21/2017	1,2,4-Trimethylbenzene	**100**	100	11	56	ug/L
OW-58	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	6/21/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	6/21/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	6/21/2017	Isopropylbenzene	38	100	5.1	447	ug/L
OW-58	6/21/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	6/21/2017	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	6/21/2017	Styrene	ND	100	16	100	ug/L
OW-58	6/21/2017	n-Propylbenzene	98	100	7.4	660	ug/L
OW-58	6/21/2017	n-Butylbenzene	16	300	13	1000	ug/L
OW-58	6/21/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	6/21/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	6/21/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	6/21/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	6/21/2017	1,3,5-Trimethylbenzene	*38*	*100*	8.7	60	ug/L
OW-58	6/21/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	6/21/2017	Toluene	160	100	6.4	1000	ug/L
OW-58	6/21/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	6/21/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	6/21/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	6/21/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	6/21/2017	1,3-Dichloropropane	ND	100	17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	6/21/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	6/21/2017	Pentafluorobenzene	**1000**	0	0		None
OW-58	6/21/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	6/21/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	6/21/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	6/21/2017	Xylenes, Total	360	150	32	620	ug/L
OW-58	6/21/2017	MTBE	**3700**	100	24	143	ug/L
OW-58	6/21/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	6/21/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	9/19/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	9/19/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	9/19/2017	Chloroform	ND	100	40	100	ug/L
OW-58	9/19/2017	Benzene	**29000**	1000	62	5	ug/L
OW-58	9/19/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	9/19/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	9/19/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	9/19/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	9/19/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	9/19/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	9/19/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	9/19/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	9/19/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	9/19/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	9/19/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	9/19/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	9/19/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	9/19/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	9/19/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	9/19/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	9/19/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	9/19/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	9/19/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	9/19/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	9/19/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	9/19/2017	1,2,4-Trimethylbenzene	**110**	100	11	56	ug/L
OW-58	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	9/19/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	9/19/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	9/19/2017	Isopropylbenzene	36	100	5.1	447	ug/L
OW-58	9/19/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	9/19/2017	Ethylbenzene	**1100**	100	9.3	700	ug/L
OW-58	9/19/2017	Styrene	ND	100	16	100	ug/L
OW-58	9/19/2017	n-Propylbenzene	92	100	7.4	660	ug/L
OW-58	9/19/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	9/19/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	9/19/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	9/19/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	9/19/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	9/19/2017	1,3,5-Trimethylbenzene	*39*	*100*	8.7	60	ug/L
OW-58	9/19/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	9/19/2017	Toluene	220	100	6.4	1000	ug/L
OW-58	9/19/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	9/19/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	9/19/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	9/19/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	9/19/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	9/19/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	9/19/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	9/19/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	9/19/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	9/19/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	9/19/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	9/19/2017	Xylenes, Total	370	150	32	620	ug/L
OW-58	9/19/2017	MTBE	**3100**	100	24	143	ug/L
OW-58	9/19/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	9/19/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-58	12/6/2017	Benzene	**32000**	1000	62	5	ug/L
OW-58	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	12/6/2017	1,2,4-Trimethylbenzene	*24*	*100*	11	56	ug/L
OW-58	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	12/6/2017	Isopropylbenzene	33	100	5.1	447	ug/L
OW-58	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	12/6/2017	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-58	12/6/2017	n-Propylbenzene	89	100	7.4	660	ug/L
OW-58	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	12/6/2017	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	12/6/2017	Toluene	40	100	6.4	1000	ug/L
OW-58	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	12/6/2017	Xylenes, Total	120	150	32	620	ug/L
OW-58	12/6/2017	MTBE	**2900**	100	24	143	ug/L
OW-58	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	2/20/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	2/20/2018	Acetone	ND	1000	82	14064	ug/L
OW-58	2/20/2018	Chloroform	ND	100	40	100	ug/L
OW-58	2/20/2018	Benzene	**33000**	1000	62	5	ug/L
OW-58	2/20/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	2/20/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	2/20/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	2/20/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	2/20/2018	Chloroethane	ND	200	23	20857	ug/L
OW-58	2/20/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	2/20/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	2/20/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	2/20/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	2/20/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	2/20/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	2/20/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	2/20/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	2/20/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	2/20/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	2/20/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-58	2/20/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	2/20/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	2/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	2/20/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	2/20/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	2/20/2018	1,2,4-Trimethylbenzene	*23*	*100*	11	56	ug/L
OW-58	2/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	2/20/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	2/20/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	2/20/2018	Isopropylbenzene	29	100	5.1	447	ug/L
OW-58	2/20/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	2/20/2018	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	2/20/2018	Styrene	ND	100	16	100	ug/L
OW-58	2/20/2018	n-Propylbenzene	95	100	7.4	660	ug/L
OW-58	2/20/2018	n-Butylbenzene	16	300	13	1000	ug/L
OW-58	2/20/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	2/20/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	2/20/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	2/20/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	2/20/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	2/20/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	2/20/2018	Toluene	53	100	6.4	1000	ug/L
OW-58	2/20/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	2/20/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	2/20/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	2/20/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	2/20/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	2/20/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	2/20/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	2/20/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	2/20/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	2/20/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	2/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	2/20/2018	Xylenes, Total	130	150	32	620	ug/L
OW-58	2/20/2018	MTBE	**2900**	100	24	143	ug/L
OW-58	2/20/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	2/20/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	5/8/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	5/8/2018	Acetone	ND	1000	82	14064	ug/L
OW-58	5/8/2018	Chloroform	ND	100	40	100	ug/L
OW-58	5/8/2018	Benzene	**38000**	1000	62	5	ug/L
OW-58	5/8/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	5/8/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	5/8/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	5/8/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	5/8/2018	Chloroethane	ND	200	23	20857	ug/L
OW-58	5/8/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	5/8/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	5/8/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	5/8/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	5/8/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	5/8/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	5/8/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	5/8/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	5/8/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	5/8/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	5/8/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-58	5/8/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	5/8/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	5/8/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	5/8/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	5/8/2018	1,2,4-Trimethylbenzene	*30*	*100*	11	56	ug/L
OW-58	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	5/8/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	5/8/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	5/8/2018	Isopropylbenzene	32	100	5.1	447	ug/L
OW-58	5/8/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	5/8/2018	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	5/8/2018	Styrene	ND	100	16	100	ug/L
OW-58	5/8/2018	n-Propylbenzene	100	100	7.4	660	ug/L
OW-58	5/8/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	5/8/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	5/8/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	5/8/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	5/8/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	5/8/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	5/8/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	5/8/2018	Toluene	84	100	6.4	1000	ug/L
OW-58	5/8/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	5/8/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	5/8/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	5/8/2018	sec-Butylbenzene	ND	100	11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	5/8/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	5/8/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	5/8/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	5/8/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	5/8/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	5/8/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	5/8/2018	Xylenes, Total	180	150	32	620	ug/L
OW-58	5/8/2018	MTBE	**2800**	100	24	143	ug/L
OW-58	5/8/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	5/8/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	8/28/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
OW-58	8/28/2018	Acetone	ND	500	39	14064	ug/L
OW-58	8/28/2018	Chloroform	ND	50	20	100	ug/L
OW-58	8/28/2018	Benzene	**38000**	500	87	5	ug/L
OW-58	8/28/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
OW-58	8/28/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-58	8/28/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-58	8/28/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-58	8/28/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-58	8/28/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
OW-58	8/28/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-58	8/28/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-58	8/28/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58	8/28/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-58	8/28/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-58	8/28/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-58	8/28/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
OW-58	8/28/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-58	8/28/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
OW-58	8/28/2018	2-Butanone	ND	500	63	5565	ug/L
OW-58	8/28/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-58	8/28/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-58	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-58	8/28/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-58	8/28/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-58	8/28/2018	1,2,4-Trimethylbenzene	28	50	13	56	ug/L
OW-58	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-58	8/28/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-58	8/28/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-58	8/28/2018	Isopropylbenzene	32	50	11	447	ug/L
OW-58	8/28/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-58	8/28/2018	Ethylbenzene	**1200**	50	11	700	ug/L
OW-58	8/28/2018	Styrene	ND	50	13	100	ug/L
OW-58	8/28/2018	n-Propylbenzene	98	50	12	660	ug/L
OW-58	8/28/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-58	8/28/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-58	8/28/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-58	8/28/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-58	8/28/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-58	8/28/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-58	8/28/2018	Bromobenzene	ND	50	16	62	ug/L
OW-58	8/28/2018	Toluene	97	50	8.4	1000	ug/L
OW-58	8/28/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-58	8/28/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-58	8/28/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	8/28/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-58	8/28/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-58	8/28/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58	8/28/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-58	8/28/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-58	8/28/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-58	8/28/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
OW-58	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58	8/28/2018	Xylenes, Total	190	75	32	620	ug/L
OW-58	8/28/2018	MTBE	**2900**	50	16	143	ug/L
OW-58	8/28/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-58	8/28/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-58	11/29/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
OW-58	11/29/2018	Acetone	ND	500	38	14064	ug/L
OW-58	11/29/2018	Chloroform	ND	50	12	100	ug/L
OW-58	11/29/2018	Benzene	**35000**	500	87	5	ug/L
OW-58	11/29/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
OW-58	11/29/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
OW-58	11/29/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
OW-58	11/29/2018	Dibromomethane	*ND*	*50*	16	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/29/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-58	11/29/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
OW-58	11/29/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-58	11/29/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-58	11/29/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58	11/29/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-58	11/29/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
OW-58	11/29/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-58	11/29/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
OW-58	11/29/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
OW-58	11/29/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
OW-58	11/29/2018	2-Butanone	ND	500	71	5565	ug/L
OW-58	11/29/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-58	11/29/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-58	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-58	11/29/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-58	11/29/2018	2-Chlorotoluene	ND	50	13	233	ug/L
OW-58	11/29/2018	1,2,4-Trimethylbenzene	15	50	13	56	ug/L
OW-58	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-58	11/29/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-58	11/29/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-58	11/29/2018	Isopropylbenzene	30	50	11	447	ug/L
OW-58	11/29/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-58	11/29/2018	Ethylbenzene	**1200**	50	11	700	ug/L
OW-58	11/29/2018	Styrene	ND	50	13	100	ug/L
OW-58	11/29/2018	n-Propylbenzene	97	50	12	660	ug/L
OW-58	11/29/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-58	11/29/2018	4-Chlorotoluene	ND	50	14	250	ug/L
OW-58	11/29/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-58	11/29/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L
OW-58	11/29/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-58	11/29/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-58	11/29/2018	Bromobenzene	ND	50	16	62	ug/L
OW-58	11/29/2018	Toluene	110	50	8.4	1000	ug/L
OW-58	11/29/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-58	11/29/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-58	11/29/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	11/29/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-58	11/29/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-58	11/29/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58	11/29/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
OW-58	11/29/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-58	11/29/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-58	11/29/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-58	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58	11/29/2018	Xylenes, Total	190	75	32	620	ug/L
OW-58	11/29/2018	MTBE	**2500**	50	23	143	ug/L
OW-58	11/29/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-58	11/29/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-58	3/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
OW-58	3/28/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
OW-58	3/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
OW-58	3/28/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
OW-58	3/28/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
OW-58	3/28/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
OW-58	3/28/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
OW-58	3/28/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
OW-58	3/28/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
OW-58	3/28/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
OW-58	3/28/2019	1,2,4-Trimethylbenzene	*37*	*100*	21.319909	56	ug/L
OW-58	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
OW-58	3/28/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
OW-58	3/28/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
OW-58	3/28/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
OW-58	3/28/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
OW-58	3/28/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
OW-58	3/28/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
OW-58	3/28/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
OW-58	3/28/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
OW-58	3/28/2019	1-Methylnaphthalene	93	400	31.495448	NA	ug/L
OW-58	3/28/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
OW-58	3/28/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
OW-58	3/28/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
OW-58	3/28/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
OW-58	3/28/2019	2-Methylnaphthalene	**67**	400	34.537601		ug/L
OW-58	3/28/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/28/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
OW-58	3/28/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
OW-58	3/28/2019	Acetone	ND	1000	119.939642	14064	ug/L
OW-58	3/28/2019	Benzene	**25000**	1000	166.639056	5	ug/L
OW-58	3/28/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
OW-58	3/28/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
OW-58	3/28/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
OW-58	3/28/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
OW-58	3/28/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
OW-58	3/28/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
OW-58	3/28/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
OW-58	3/28/2019	Chloroethane	ND	200	17.780262	20857	ug/L
OW-58	3/28/2019	Chloroform	ND	100	12.189055	100	ug/L
OW-58	3/28/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
OW-58	3/28/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
OW-58	3/28/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
OW-58	3/28/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
OW-58	3/28/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
OW-58	3/28/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
OW-58	3/28/2019	Ethylbenzene	**1100**	100	13.23408	700	ug/L
OW-58	3/28/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
OW-58	3/28/2019	Isopropylbenzene	20	100	19.152227	447	ug/L
OW-58	3/28/2019	MTBE	**2300**	100	45.609498	143	ug/L
OW-58	3/28/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
OW-58	3/28/2019	Naphthalene	**170**	200	27.507134	30	ug/L
OW-58	3/28/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
OW-58	3/28/2019	n-Propylbenzene	83	100	21.4308	660	ug/L
OW-58	3/28/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
OW-58	3/28/2019	Styrene	ND	100	19.132336	100	ug/L
OW-58	3/28/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
OW-58	3/28/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
OW-58	3/28/2019	Toluene	100	100	35.043621	1000	ug/L
OW-58	3/28/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
OW-58	3/28/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
OW-58	3/28/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
OW-58	3/28/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
OW-58	3/28/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
OW-58	3/28/2019	Xylenes, Total	160	150	45.441493	620	ug/L
OW-58	6/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
OW-58	6/5/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
OW-58	6/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
OW-58	6/5/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
OW-58	6/5/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
OW-58	6/5/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
OW-58	6/5/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
OW-58	6/5/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
OW-58	6/5/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
OW-58	6/5/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
OW-58	6/5/2019	1,2,4-Trimethylbenzene	*ND*	*100*	21.319909	56	ug/L
OW-58	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
OW-58	6/5/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
OW-58	6/5/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
OW-58	6/5/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
OW-58	6/5/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
OW-58	6/5/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
OW-58	6/5/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
OW-58	6/5/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
OW-58	6/5/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
OW-58	6/5/2019	1-Methylnaphthalene	110	400	31.495448	NA	ug/L
OW-58	6/5/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
OW-58	6/5/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
OW-58	6/5/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
OW-58	6/5/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
OW-58	6/5/2019	2-Methylnaphthalene	**79**	400	34.537601		ug/L
OW-58	6/5/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
OW-58	6/5/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
OW-58	6/5/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
OW-58	6/5/2019	Acetone	ND	1000	119.939642	14064	ug/L
OW-58	6/5/2019	Benzene	**34000**	1000	166.639056	5	ug/L
OW-58	6/5/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
OW-58	6/5/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
OW-58	6/5/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
OW-58	6/5/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
OW-58	6/5/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
OW-58	6/5/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
OW-58	6/5/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	Chloroethane	ND	200	17.780262	20857	ug/L
OW-58	6/5/2019	Chloroform	ND	100	12.189055	100	ug/L
OW-58	6/5/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
OW-58	6/5/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
OW-58	6/5/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
OW-58	6/5/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
OW-58	6/5/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
OW-58	6/5/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
OW-58	6/5/2019	Ethylbenzene	**1200**	100	13.23408	700	ug/L
OW-58	6/5/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
OW-58	6/5/2019	Isopropylbenzene	28	100	19.152227	447	ug/L
OW-58	6/5/2019	MTBE	**2300**	100	45.609498	143	ug/L
OW-58	6/5/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
OW-58	6/5/2019	Naphthalene	**200**	200	27.507134	30	ug/L
OW-58	6/5/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
OW-58	6/5/2019	n-Propylbenzene	86	100	21.4308	660	ug/L
OW-58	6/5/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
OW-58	6/5/2019	Styrene	ND	100	19.132336	100	ug/L
OW-58	6/5/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
OW-58	6/5/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
OW-58	6/5/2019	Toluene	62	100	35.043621	1000	ug/L
OW-58	6/5/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
OW-58	6/5/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
OW-58	6/5/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
OW-58	6/5/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
OW-58	6/5/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
OW-58	6/5/2019	Xylenes, Total	130	150	45.441493	620	ug/L
OW-58	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-58	8/22/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-58	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-58	8/22/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-58	8/22/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-58	8/22/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-58	8/22/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-58	8/22/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-58	8/22/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-58	8/22/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-58	8/22/2019	1,2,4-Trimethylbenzene	24	50	10.659955	56	ug/L
OW-58	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-58	8/22/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-58	8/22/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-58	8/22/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-58	8/22/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-58	8/22/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-58	8/22/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-58	8/22/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-58	8/22/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-58	8/22/2019	1-Methylnaphthalene	83	200	15.747724	NA	ug/L
OW-58	8/22/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-58	8/22/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-58	8/22/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-58	8/22/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-58	8/22/2019	2-Methylnaphthalene	**80**	200	17.2688		ug/L
OW-58	8/22/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-58	8/22/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-58	8/22/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-58	8/22/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-58	8/22/2019	Benzene	**27000**	500	83.319528	5	ug/L
OW-58	8/22/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-58	8/22/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-58	8/22/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-58	8/22/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-58	8/22/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-58	8/22/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-58	8/22/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-58	8/22/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-58	8/22/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-58	8/22/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-58	8/22/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-58	8/22/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-58	8/22/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-58	8/22/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-58	8/22/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-58	8/22/2019	Ethylbenzene	**910**	50	6.61704	700	ug/L
OW-58	8/22/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-58	8/22/2019	Isopropylbenzene	31	50	9.576114	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/22/2019	MTBE	**2400**	50	22.804749	143	ug/L
OW-58	8/22/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-58	8/22/2019	Naphthalene	**150**	100	13.753567	30	ug/L
OW-58	8/22/2019	n-Butylbenzene	50	150	11.378477	1000	ug/L
OW-58	8/22/2019	n-Propylbenzene	70	50	10.7154	660	ug/L
OW-58	8/22/2019	sec-Butylbenzene	15	50	12.386564	2000	ug/L
OW-58	8/22/2019	Styrene	ND	50	9.566168	100	ug/L
OW-58	8/22/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-58	8/22/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-58	8/22/2019	Toluene	110	50	17.521811	1000	ug/L
OW-58	8/22/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-58	8/22/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-58	8/22/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-58	8/22/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-58	8/22/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-58	8/22/2019	Xylenes, Total	200	75	22.720747	620	ug/L
OW-58	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-58	11/18/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-58	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-58	11/18/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-58	11/18/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-58	11/18/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-58	11/18/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-58	11/18/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-58	11/18/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-58	11/18/2019	1,2,4-Trimethylbenzene	16	50	10.659955	56	ug/L
OW-58	11/18/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-58	11/18/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-58	11/18/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-58	11/18/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-58	11/18/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-58	11/18/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-58	11/18/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-58	11/18/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-58	11/18/2019	1-Methylnaphthalene	78	200	15.747724	NA	ug/L
OW-58	11/18/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-58	11/18/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-58	11/18/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-58	11/18/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-58	11/18/2019	2-Methylnaphthalene	**53**	200	17.2688		ug/L
OW-58	11/18/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-58	11/18/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-58	11/18/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-58	11/18/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-58	11/18/2019	Benzene	**33000**	500	83.319528	5	ug/L
OW-58	11/18/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-58	11/18/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-58	11/18/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-58	11/18/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-58	11/18/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-58	11/18/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-58	11/18/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-58	11/18/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-58	11/18/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-58	11/18/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-58	11/18/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-58	11/18/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-58	11/18/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-58	11/18/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-58	11/18/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-58	11/18/2019	Ethylbenzene	**1200**	50	6.61704	700	ug/L
OW-58	11/18/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-58	11/18/2019	Isopropylbenzene	26	50	9.576114	447	ug/L
OW-58	11/18/2019	MTBE	**2100**	50	22.804749	143	ug/L
OW-58	11/18/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-58	11/18/2019	Naphthalene	**180**	100	13.753567	30	ug/L
OW-58	11/18/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-58	11/18/2019	n-Propylbenzene	90	50	10.7154	660	ug/L
OW-58	11/18/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-58	11/18/2019	Styrene	ND	50	9.566168	100	ug/L
OW-58	11/18/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-58	11/18/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-58	11/18/2019	Toluene	85	50	17.521811	1000	ug/L
OW-58	11/18/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-58	11/18/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-58	11/18/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/18/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-58	11/18/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-58	11/18/2019	Xylenes, Total	160	75	22.720747	620	ug/L
OW-58	9/17/2020	Benzene	**27000**	1000	230	5	ug/L
OW-58	9/17/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	27	5.74	ug/L
OW-58	9/17/2020	1,1,1-Trichloroethane	ND	100	30	200	ug/L
OW-58	9/17/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	27	10	ug/L
OW-58	9/17/2020	1,1,2-Trichloroethane	*ND*	*100*	19	5	ug/L
OW-58	9/17/2020	1,1-Dichloroethane	*ND*	*100*	27	25	ug/L
OW-58	9/17/2020	1,1-Dichloroethene	*ND*	*100*	13	7	ug/L
OW-58	9/17/2020	1,1-Dichloropropene	ND	100	18	NA	ug/L
OW-58	9/17/2020	1,2,3-Trichlorobenzene	*ND*	*100*	13	70	ug/L
OW-58	9/17/2020	1,2,3-Trichloropropane	*ND*	*200*	44	0.0084	ug/L
OW-58	9/17/2020	1,2,4-Trichlorobenzene	*ND*	*100*	24	70	ug/L
OW-58	9/17/2020	1,2,4-Trimethylbenzene	*ND*	*100*	12	56	ug/L
OW-58	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*200*	59	0.0033	ug/L
OW-58	9/17/2020	1,2-Dibromoethane	*ND*	*100*	30	0.05	ug/L
OW-58	9/17/2020	1,2-Dichlorobenzene	ND	100	15	600	ug/L
OW-58	9/17/2020	1,2-Dichloroethane	*ND*	*100*	22	5	ug/L
OW-58	9/17/2020	1,2-Dichloropropane	*ND*	*100*	13	5	ug/L
OW-58	9/17/2020	1,3,5-Trimethylbenzene	*ND*	*100*	18	60	ug/L
OW-58	9/17/2020	1,3-Dichlorobenzene	ND	100	16	N/A	ug/L
OW-58	9/17/2020	1,3-Dichloropropane	ND	100	18	370	ug/L
OW-58	9/17/2020	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
OW-58	9/17/2020	1-Methylnaphthalene	ND	400	84	NA	ug/L
OW-58	9/17/2020	2,2-Dichloropropane	ND	200	26	NA	ug/L
OW-58	9/17/2020	2-Butanone	ND	1000	110	5565	ug/L
OW-58	9/17/2020	2-Chlorotoluene	ND	100	13	233	ug/L
OW-58	9/17/2020	2-Hexanone	*ND*	*1000*	180	38	ug/L
OW-58	9/17/2020	2-Methylnaphthalene	*ND*	*400*	69		ug/L
OW-58	9/17/2020	4-Chlorotoluene	ND	100	51	250	ug/L
OW-58	9/17/2020	p-Isopropyltoluene	ND	100	20	NA	ug/L
OW-58	9/17/2020	4-Methyl-2-Pentanone	ND	1000	110	1243	ug/L
OW-58	9/17/2020	Acetone	ND	1000	230	14064	ug/L
OW-58	9/17/2020	Bromobenzene	*ND*	*100*	28	62	ug/L
OW-58	9/17/2020	Bromodichloromethane	*ND*	*100*	20	1.34	ug/L
OW-58	9/17/2020	Bromoform	*ND*	*100*	31	32.9	ug/L
OW-58	9/17/2020	Bromomethane	*ND*	*300*	160	7.54	ug/L
OW-58	9/17/2020	Carbon Disulfide	*ND*	*1000*	44	810	ug/L
OW-58	9/17/2020	Carbon tetrachloride	*ND*	*100*	18	5	ug/L
OW-58	9/17/2020	Chlorobenzene	*ND*	*100*	14	77.6	ug/L
OW-58	9/17/2020	Chloroethane	ND	200	38	20857	ug/L
OW-58	9/17/2020	Chloroform	ND	100	13	100	ug/L
OW-58	9/17/2020	Chloromethane	*ND*	*300*	40	20.32	ug/L
OW-58	9/17/2020	cis-1,2-Dichloroethene	*ND*	*100*	39	70	ug/L
OW-58	9/17/2020	cis-1,3-Dichloropropene	ND	100	36	NA	ug/L
OW-58	9/17/2020	Dibromochloromethane	*ND*	*100*	28	1.68	ug/L
OW-58	9/17/2020	Dibromomethane	*ND*	*100*	31	8	ug/L
OW-58	9/17/2020	Dichlorodifluoromethane	ND	100	44	197	ug/L
OW-58	9/17/2020	Ethylbenzene	**1300**	100	21	700	ug/L
OW-58	9/17/2020	Hexachlorobutadiene	*ND*	*100*	33	1.39	ug/L
OW-58	9/17/2020	Isopropylbenzene	24	100	18	447	ug/L
OW-58	9/17/2020	MTBE	**1900**	100	39	143	ug/L
OW-58	9/17/2020	Methylene Chloride	*ND*	*300*	40	5	ug/L
OW-58	9/17/2020	n-Butylbenzene	ND	300	25	1000	ug/L
OW-58	9/17/2020	n-Propylbenzene	93	100	18	660	ug/L
OW-58	9/17/2020	Naphthalene	**190**	200	28	30	ug/L
OW-58	9/17/2020	sec-Butylbenzene	ND	100	61	2000	ug/L
OW-58	9/17/2020	Styrene	ND	100	13	100	ug/L
OW-58	9/17/2020	tert-Butylbenzene	ND	100	24	690	ug/L
OW-58	9/17/2020	Tetrachloroethene	*ND*	*100*	36	5	ug/L
OW-58	9/17/2020	Toluene	110	100	20	1000	ug/L
OW-58	9/17/2020	trans-1,2-Dichloroethene	ND	100	49	100	ug/L
OW-58	9/17/2020	trans-1,3-Dichloropropene	ND	100	34	NA	ug/L
OW-58	9/17/2020	Trichloroethene	*ND*	*100*	20	5	ug/L
OW-58	9/17/2020	Trichlorofluoromethane	ND	100	9.2	1137	ug/L
OW-58	9/17/2020	Vinyl Chloride	*ND*	*100*	20	2	ug/L
OW-58	9/17/2020	Xylenes, Total	160	150	55	620	ug/L
OW-58	9/17/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	ND	0.0208	0.00521	0.05	ug/L
OW-58	12/22/2020	Acetone	ND	5000	2000	14064	ug/L
OW-58	12/22/2020	Benzene	**33000**	200	76	5	ug/L
OW-58	12/22/2020	Bromodichloromethane	*ND*	*200*	100	1.34	ug/L
OW-58	12/22/2020	Bromoform	*ND*	*1000*	142	32.9	ug/L
OW-58	12/22/2020	Bromomethane	*ND*	*200*	196	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	2-Butanone	ND	5000	520	5565	ug/L
OW-58	12/22/2020	Carbon Disulfide	ND	200	100	810	ug/L
OW-58	12/22/2020	Carbon tetrachloride	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Chlorobenzene	*ND*	*200*	100	77.6	ug/L
OW-58	12/22/2020	Dibromochloromethane	*ND*	*200*	100	1.68	ug/L
OW-58	12/22/2020	Chloroethane	ND	200	152	20857	ug/L
OW-58	12/22/2020	Chloroform	*ND*	*200*	120	100	ug/L
OW-58	12/22/2020	Chloromethane	*ND*	*200*	166	20.32	ug/L
OW-58	12/22/2020	2-Chlorotoluene	ND	200	114	233	ug/L
OW-58	12/22/2020	4-Chlorotoluene	ND	200	112	250	ug/L
OW-58	12/22/2020	cis-1,2-Dichloroethene	*ND*	*200*	100	70	ug/L
OW-58	12/22/2020	cis-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*1000*	300	0.0033	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	*ND*	*200*	100	0.05	ug/L
OW-58	12/22/2020	Dibromomethane	*ND*	*1000*	118	8	ug/L
OW-58	12/22/2020	1,2-Dichlorobenzene	ND	200	100	600	ug/L
OW-58	12/22/2020	1,3-Dichlorobenzene	ND	200	108	N/A	ug/L
OW-58	12/22/2020	1,4-Dichlorobenzene	*ND*	*200*	128	75	ug/L
OW-58	12/22/2020	Dichlorodifluoromethane	*ND*	*200*	170	197	ug/L
OW-58	12/22/2020	1,1-Dichloroethane	*ND*	*200*	100	25	ug/L
OW-58	12/22/2020	1,2-Dichloroethane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,1-Dichloroethene	*ND*	*200*	100	7	ug/L
OW-58	12/22/2020	1,2-Dichloropropane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,3-Dichloropropane	ND	200	100	370	ug/L
OW-58	12/22/2020	2,2-Dichloropropane	ND	200	100	NA	ug/L
OW-58	12/22/2020	1,1-Dichloropropene	ND	200	100	NA	ug/L
OW-58	12/22/2020	Ethylbenzene	**1060**	200	100	700	ug/L
OW-58	12/22/2020	Hexachlorobutadiene	*ND*	*1000*	180	1.39	ug/L
OW-58	12/22/2020	2-Hexanone	*ND*	*5000*	620	38	ug/L
OW-58	12/22/2020	Isopropylbenzene	ND	200	106	447	ug/L
OW-58	12/22/2020	Methylene Chloride	*ND*	*1000*	600	5	ug/L
OW-58	12/22/2020	1-Methylnaphthalene	ND	1000	840	NA	ug/L
OW-58	12/22/2020	2-Methylnaphthalene	*ND*	*2000*	920		ug/L
OW-58	12/22/2020	4-Methyl-2-Pentanone	*ND*	*5000*	360	1243	ug/L
OW-58	12/22/2020	MTBE	**1830**	200	148	143	ug/L
OW-58	12/22/2020	Naphthalene	*ND*	*200*	200	30	ug/L
OW-58	12/22/2020	n-Butylbenzene	ND	200	152	1000	ug/L
OW-58	12/22/2020	n-Propylbenzene	ND	200	138	660	ug/L
OW-58	12/22/2020	p-Isopropyltoluene	ND	200	142	NA	ug/L
OW-58	12/22/2020	sec-Butylbenzene	ND	200	140	2000	ug/L
OW-58	12/22/2020	Styrene	*ND*	*200*	200	100	ug/L
OW-58	12/22/2020	tert-Butylbenzene	ND	200	126	690	ug/L
OW-58	12/22/2020	1,1,1,2-Tetrachloroethane	*ND*	*200*	104	5.74	ug/L
OW-58	12/22/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	100	10	ug/L
OW-58	12/22/2020	Tetrachloroethene	*ND*	*200*	116	5	ug/L
OW-58	12/22/2020	Toluene	ND	200	82	1000	ug/L
OW-58	12/22/2020	trans-1,2-Dichloroethene	*ND*	*200*	100	100	ug/L
OW-58	12/22/2020	trans-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2,3-Trichlorobenzene	*ND*	*200*	140	70	ug/L
OW-58	12/22/2020	1,2,4-Trichlorobenzene	*ND*	*200*	164	70	ug/L
OW-58	12/22/2020	1,1,1-Trichloroethane	ND	200	100	200	ug/L
OW-58	12/22/2020	1,1,2-Trichloroethane	*ND*	*1000*	100	5	ug/L
OW-58	12/22/2020	Trichloroethene	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Trichlorofluoromethane	ND	200	104	1137	ug/L
OW-58	12/22/2020	1,2,3-Trichloropropane	*ND*	*1000*	168	0.0084	ug/L
OW-58	12/22/2020	1,2,4-Trimethylbenzene	*ND*	*200*	164	56	ug/L
OW-58	12/22/2020	1,3,5-Trimethylbenzene	*ND*	*200*	112	60	ug/L
OW-58	12/22/2020	Vinyl Chloride	*ND*	*200*	100	2	ug/L
OW-58	12/22/2020	Xylenes, Total	*ND*	*2000*	320	620	ug/L
OW-58	12/22/2020	Acetone	ND	5000	2000	14064	ug/L
OW-58	12/22/2020	Benzene	**33200**	200	76	5	ug/L
OW-58	12/22/2020	Bromodichloromethane	*ND*	*200*	100	1.34	ug/L
OW-58	12/22/2020	Bromoform	*ND*	*1000*	142	32.9	ug/L
OW-58	12/22/2020	Bromomethane	*ND*	*200*	196	7.54	ug/L
OW-58	12/22/2020	2-Butanone	ND	5000	520	5565	ug/L
OW-58	12/22/2020	Carbon Disulfide	ND	200	100	810	ug/L
OW-58	12/22/2020	Carbon tetrachloride	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Chlorobenzene	*ND*	*200*	100	77.6	ug/L
OW-58	12/22/2020	Dibromochloromethane	*ND*	*200*	100	1.68	ug/L
OW-58	12/22/2020	Chloroethane	ND	200	152	20857	ug/L
OW-58	12/22/2020	Chloroform	*ND*	*200*	120	100	ug/L
OW-58	12/22/2020	Chloromethane	*ND*	*200*	166	20.32	ug/L
OW-58	12/22/2020	2-Chlorotoluene	ND	200	114	233	ug/L
OW-58	12/22/2020	4-Chlorotoluene	ND	200	112	250	ug/L
OW-58	12/22/2020	cis-1,2-Dichloroethene	*ND*	*200*	100	70	ug/L
OW-58	12/22/2020	cis-1,3-Dichloropropene	ND	1000	100	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*1000*	300	0.0033	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	*ND*	*200*	100	0.05	ug/L
OW-58	12/22/2020	Dibromomethane	*ND*	*1000*	118	8	ug/L
OW-58	12/22/2020	1,2-Dichlorobenzene	ND	200	100	600	ug/L
OW-58	12/22/2020	1,3-Dichlorobenzene	ND	200	108	N/A	ug/L
OW-58	12/22/2020	1,4-Dichlorobenzene	*ND*	*200*	128	75	ug/L
OW-58	12/22/2020	Dichlorodifluoromethane	*ND*	*200*	170	197	ug/L
OW-58	12/22/2020	1,1-Dichloroethane	*ND*	*200*	100	25	ug/L
OW-58	12/22/2020	1,2-Dichloroethane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,1-Dichloroethene	*ND*	*200*	100	7	ug/L
OW-58	12/22/2020	1,2-Dichloropropane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,3-Dichloropropane	ND	200	100	370	ug/L
OW-58	12/22/2020	2,2-Dichloropropane	ND	200	100	NA	ug/L
OW-58	12/22/2020	1,1-Dichloropropene	ND	200	100	NA	ug/L
OW-58	12/22/2020	Ethylbenzene	**1070**	200	100	700	ug/L
OW-58	12/22/2020	Hexachlorobutadiene	*ND*	*1000*	180	1.39	ug/L
OW-58	12/22/2020	2-Hexanone	*ND*	*5000*	620	38	ug/L
OW-58	12/22/2020	Isopropylbenzene	ND	200	106	447	ug/L
OW-58	12/22/2020	Methylene Chloride	*ND*	*1000*	600	5	ug/L
OW-58	12/22/2020	1-Methylnaphthalene	ND	1000	840	NA	ug/L
OW-58	12/22/2020	2-Methylnaphthalene	*ND*	*2000*	920		ug/L
OW-58	12/22/2020	4-Methyl-2-Pentanone	*ND*	*5000*	360	1243	ug/L
OW-58	12/22/2020	MTBE	**1820**	200	148	143	ug/L
OW-58	12/22/2020	Naphthalene	*ND*	*200*	200	30	ug/L
OW-58	12/22/2020	n-Butylbenzene	ND	200	152	1000	ug/L
OW-58	12/22/2020	n-Propylbenzene	ND	200	138	660	ug/L
OW-58	12/22/2020	p-Isopropyltoluene	ND	200	142	NA	ug/L
OW-58	12/22/2020	sec-Butylbenzene	ND	200	140	2000	ug/L
OW-58	12/22/2020	Styrene	*ND*	*200*	200	100	ug/L
OW-58	12/22/2020	tert-Butylbenzene	ND	200	126	690	ug/L
OW-58	12/22/2020	1,1,1,2-Tetrachloroethane	*ND*	*200*	104	5.74	ug/L
OW-58	12/22/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	100	10	ug/L
OW-58	12/22/2020	Tetrachloroethene	*ND*	*200*	116	5	ug/L
OW-58	12/22/2020	Toluene	ND	200	82	1000	ug/L
OW-58	12/22/2020	trans-1,2-Dichloroethene	*ND*	*200*	100	100	ug/L
OW-58	12/22/2020	trans-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2,3-Trichlorobenzene	*ND*	*200*	140	70	ug/L
OW-58	12/22/2020	1,2,4-Trichlorobenzene	*ND*	*200*	164	70	ug/L
OW-58	12/22/2020	1,1,1-Trichloroethane	ND	200	100	200	ug/L
OW-58	12/22/2020	1,1,2-Trichloroethane	*ND*	*1000*	100	5	ug/L
OW-58	12/22/2020	Trichloroethene	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Trichlorofluoromethane	ND	200	104	1137	ug/L
OW-58	12/22/2020	1,2,3-Trichloropropane	*ND*	*1000*	168	0.0084	ug/L
OW-58	12/22/2020	1,2,4-Trimethylbenzene	*ND*	*200*	164	56	ug/L
OW-58	12/22/2020	1,3,5-Trimethylbenzene	*ND*	*200*	112	60	ug/L
OW-58	12/22/2020	Vinyl Chloride	*ND*	*200*	100	2	ug/L
OW-58	12/22/2020	Xylenes, Total	*ND*	*2000*	320	620	ug/L
OW-58A	3/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58A	3/6/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-58A	3/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-58A	3/6/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-58A	3/6/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-58A	3/6/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-58A	3/6/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-58A	3/6/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-58A	3/6/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-58A	3/6/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-58A	3/6/2020	1,2,4-Trimethylbenzene	**440**	50	6.1	56	ug/L
OW-58A	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-58A	3/6/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-58A	3/6/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-58A	3/6/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-58A	3/6/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-58A	3/6/2020	1,3,5-Trimethylbenzene	**140**	50	9.1	60	ug/L
OW-58A	3/6/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-58A	3/6/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-58A	3/6/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-58A	3/6/2020	1-Methylnaphthalene	140	200	42	NA	ug/L
OW-58A	3/6/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-58A	3/6/2020	2-Butanone	ND	500	56	5565	ug/L
OW-58A	3/6/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-58A	3/6/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-58A	3/6/2020	2-Methylnaphthalene	**210**	200	35		ug/L
OW-58A	3/6/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-58A	3/6/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-58A	3/6/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	3/6/2020	Acetone	ND	500	120	14064	ug/L
OW-58A	3/6/2020	Bromobenzene	ND	50	14	62	ug/L
OW-58A	3/6/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-58A	3/6/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58A	3/6/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-58A	3/6/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-58A	3/6/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-58A	3/6/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-58A	3/6/2020	Chloroethane	ND	100	19	20857	ug/L
OW-58A	3/6/2020	Chloroform	ND	50	6.7	100	ug/L
OW-58A	3/6/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
OW-58A	3/6/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58A	3/6/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-58A	3/6/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-58A	3/6/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-58A	3/6/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-58A	3/6/2020	Ethylbenzene	620	50	11	700	ug/L
OW-58A	3/6/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-58A	3/6/2020	Isopropylbenzene	35	50	9.1	447	ug/L
OW-58A	3/6/2020	MTBE	**2800**	50	20	143	ug/L
OW-58A	3/6/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-58A	3/6/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-58A	3/6/2020	n-Propylbenzene	89	50	9.1	660	ug/L
OW-58A	3/6/2020	Naphthalene	**250**	100	14	30	ug/L
OW-58A	3/6/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-58A	3/6/2020	Styrene	ND	50	6.5	100	ug/L
OW-58A	3/6/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-58A	3/6/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-58A	3/6/2020	Toluene	490	50	10	1000	ug/L
OW-58A	3/6/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-58A	3/6/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-58A	3/6/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-58A	3/6/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-58A	3/6/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58A	3/6/2020	Xylenes, Total	**1800**	75	28	620	ug/L
OW-58A	3/6/2020	Benzene	**9700**	100	23	5	ug/L
OW-58A	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58A	9/18/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-58A	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-58A	9/18/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-58A	9/18/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-58A	9/18/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-58A	9/18/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-58A	9/18/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-58A	9/18/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-58A	9/18/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-58A	9/18/2020	1,2,4-Trimethylbenzene	**450**	50	6.1	56	ug/L
OW-58A	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-58A	9/18/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-58A	9/18/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-58A	9/18/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-58A	9/18/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-58A	9/18/2020	1,3,5-Trimethylbenzene	**150**	50	9.1	60	ug/L
OW-58A	9/18/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-58A	9/18/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-58A	9/18/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-58A	9/18/2020	1-Methylnaphthalene	120	200	42	NA	ug/L
OW-58A	9/18/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-58A	9/18/2020	2-Butanone	ND	500	56	5565	ug/L
OW-58A	9/18/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-58A	9/18/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-58A	9/18/2020	2-Methylnaphthalene	**180**	200	35		ug/L
OW-58A	9/18/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-58A	9/18/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-58A	9/18/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
OW-58A	9/18/2020	Acetone	ND	500	120	14064	ug/L
OW-58A	9/18/2020	Bromobenzene	ND	50	14	62	ug/L
OW-58A	9/18/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-58A	9/18/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58A	9/18/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-58A	9/18/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-58A	9/18/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-58A	9/18/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-58A	9/18/2020	Chloroethane	ND	100	19	20857	ug/L
OW-58A	9/18/2020	Chloroform	ND	50	6.7	100	ug/L
OW-58A	9/18/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	9/18/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58A	9/18/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-58A	9/18/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-58A	9/18/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-58A	9/18/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-58A	9/18/2020	Ethylbenzene	670	50	11	700	ug/L
OW-58A	9/18/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-58A	9/18/2020	Isopropylbenzene	36	50	9.1	447	ug/L
OW-58A	9/18/2020	MTBE	**2500**	50	20	143	ug/L
OW-58A	9/18/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-58A	9/18/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-58A	9/18/2020	n-Propylbenzene	97	50	9.1	660	ug/L
OW-58A	9/18/2020	Naphthalene	**280**	100	14	30	ug/L
OW-58A	9/18/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-58A	9/18/2020	Styrene	ND	50	6.5	100	ug/L
OW-58A	9/18/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-58A	9/18/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-58A	9/18/2020	Toluene	140	50	10	1000	ug/L
OW-58A	9/18/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-58A	9/18/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-58A	9/18/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-58A	9/18/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-58A	9/18/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58A	9/18/2020	Xylenes, Total	**1100**	75	28	620	ug/L
OW-58A	9/18/2020	Benzene	**6900**	500	110	5	ug/L
OW-58A	9/18/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
OW-58A	12/23/2020	Acetone	ND	1250	500	14064	ug/L
OW-58A	12/23/2020	Benzene	**6070**	50	19	5	ug/L
OW-58A	12/23/2020	Bromodichloromethane	*ND*	*50*	25	1.34	ug/L
OW-58A	12/23/2020	Bromoform	*ND*	*250*	35.5	32.9	ug/L
OW-58A	12/23/2020	Bromomethane	*ND*	*50*	49	7.54	ug/L
OW-58A	12/23/2020	2-Butanone	ND	1250	130	5565	ug/L
OW-58A	12/23/2020	Carbon Disulfide	ND	50	25	810	ug/L
OW-58A	12/23/2020	Carbon tetrachloride	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	Chlorobenzene	ND	50	25	77.6	ug/L
OW-58A	12/23/2020	Dibromochloromethane	*ND*	*50*	25	1.68	ug/L
OW-58A	12/23/2020	Chloroethane	ND	50	38	20857	ug/L
OW-58A	12/23/2020	Chloroform	ND	50	30	100	ug/L
OW-58A	12/23/2020	Chloromethane	*ND*	*50*	41.5	20.32	ug/L
OW-58A	12/23/2020	2-Chlorotoluene	ND	50	28.5	233	ug/L
OW-58A	12/23/2020	4-Chlorotoluene	ND	50	28	250	ug/L
OW-58A	12/23/2020	cis-1,2-Dichloroethene	ND	50	25	70	ug/L
OW-58A	12/23/2020	cis-1,3-Dichloropropene	ND	250	25	NA	ug/L
OW-58A	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*250*	75	0.0033	ug/L
OW-58A	12/23/2020	1,2-Dibromoethane	*ND*	*50*	25	0.05	ug/L
OW-58A	12/23/2020	Dibromomethane	*ND*	*250*	29.5	8	ug/L
OW-58A	12/23/2020	1,2-Dichlorobenzene	ND	50	25	600	ug/L
OW-58A	12/23/2020	1,3-Dichlorobenzene	ND	50	27	N/A	ug/L
OW-58A	12/23/2020	1,4-Dichlorobenzene	ND	50	32	75	ug/L
OW-58A	12/23/2020	Dichlorodifluoromethane	ND	50	42.5	197	ug/L
OW-58A	12/23/2020	1,1-Dichloroethane	*ND*	*50*	25	25	ug/L
OW-58A	12/23/2020	1,2-Dichloroethane	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	1,1-Dichloroethene	*ND*	*50*	25	7	ug/L
OW-58A	12/23/2020	1,2-Dichloropropane	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	1,3-Dichloropropane	ND	50	25	370	ug/L
OW-58A	12/23/2020	2,2-Dichloropropane	ND	50	25	NA	ug/L
OW-58A	12/23/2020	1,1-Dichloropropene	ND	50	25	NA	ug/L
OW-58A	12/23/2020	Ethylbenzene	203	50	25	700	ug/L
OW-58A	12/23/2020	Hexachlorobutadiene	*ND*	*250*	45	1.39	ug/L
OW-58A	12/23/2020	2-Hexanone	*ND*	*1250*	155	38	ug/L
OW-58A	12/23/2020	Isopropylbenzene	ND	50	26.5	447	ug/L
OW-58A	12/23/2020	Methylene Chloride	*ND*	*250*	150	5	ug/L
OW-58A	12/23/2020	1-Methylnaphthalene	ND	250	210	NA	ug/L
OW-58A	12/23/2020	2-Methylnaphthalene	*ND*	*500*	230		ug/L
OW-58A	12/23/2020	4-Methyl-2-Pentanone	*ND*	*1250*	90	1243	ug/L
OW-58A	12/23/2020	MTBE	**2430**	50	37	143	ug/L
OW-58A	12/23/2020	Naphthalene	**127**	50	50	30	ug/L
OW-58A	12/23/2020	n-Butylbenzene	ND	50	38	1000	ug/L
OW-58A	12/23/2020	n-Propylbenzene	ND	50	34.5	660	ug/L
OW-58A	12/23/2020	p-Isopropyltoluene	ND	50	35.5	NA	ug/L
OW-58A	12/23/2020	sec-Butylbenzene	ND	50	35	2000	ug/L
OW-58A	12/23/2020	Styrene	ND	50	50	100	ug/L
OW-58A	12/23/2020	tert-Butylbenzene	ND	50	31.5	690	ug/L
OW-58A	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	26	5.74	ug/L
OW-58A	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*50*	25	10	ug/L
OW-58A	12/23/2020	Tetrachloroethene	*ND*	*50*	29	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Toluene	52.6	50	20.5	1000	ug/L
OW-58A	12/23/2020	trans-1,2-Dichloroethene	ND	50	25	100	ug/L
OW-58A	12/23/2020	trans-1,3-Dichloropropene	ND	250	25	NA	ug/L
OW-58A	12/23/2020	1,2,3-Trichlorobenzene	ND	50	35	70	ug/L
OW-58A	12/23/2020	1,2,4-Trichlorobenzene	ND	50	41	70	ug/L
OW-58A	12/23/2020	1,1,1-Trichloroethane	ND	50	25	200	ug/L
OW-58A	12/23/2020	1,1,2-Trichloroethane	*ND*	*250*	25	5	ug/L
OW-58A	12/23/2020	Trichloroethene	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	Trichlorofluoromethane	ND	50	26	1137	ug/L
OW-58A	12/23/2020	1,2,3-Trichloropropane	*ND*	*250*	42	0.0084	ug/L
OW-58A	12/23/2020	1,2,4-Trimethylbenzene	**91.4**	50	41	56	ug/L
OW-58A	12/23/2020	1,3,5-Trimethylbenzene	ND	50	28	60	ug/L
OW-58A	12/23/2020	Vinyl Chloride	*ND*	*50*	25	2	ug/L
OW-58A	12/23/2020	Xylenes, Total	ND	500	80	620	ug/L
OW-58A	12/23/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
OW-59	6/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	6/28/2017	Acetone	6	10	0.82	14064	ug/L
OW-59	6/28/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	6/28/2017	Benzene	ND	1	0.062	5	ug/L
OW-59	6/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	6/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	6/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	6/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	6/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	6/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	6/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	6/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	6/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	6/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	6/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	6/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	6/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	6/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	6/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	6/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	6/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	6/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	6/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	6/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	6/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	6/28/2017	1,2,4-Trimethylbenzene	0.13	1	0.11	56	ug/L
OW-59	6/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	6/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	6/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	6/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	6/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	6/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	6/28/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	6/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	6/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	6/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	6/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	6/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	6/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	6/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	6/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	6/28/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	6/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	6/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	6/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	6/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	6/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	6/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	6/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	6/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	6/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	6/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	6/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	6/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	6/28/2017	MTBE	6.8	1	0.24	143	ug/L
OW-59	6/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	6/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	9/21/2017	Acetone	8.1	10	0.82	14064	ug/L
OW-59	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	9/21/2017	Benzene	ND	1	0.062	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	9/21/2017	Isopropylbenzene	0.073	1	0.051	447	ug/L
OW-59	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	9/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	9/21/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	9/21/2017	MTBE	7.2	1	0.24	143	ug/L
OW-59	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	12/6/2017	Acetone	2.8	10	0.82	14064	ug/L
OW-59	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	12/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-59	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	12/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	12/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	12/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	12/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	12/6/2017	MTBE	9.4	1	0.24	143	ug/L
OW-59	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	2/22/2018	Acetone	3.3	10	0.82	14064	ug/L
OW-59	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	2/22/2018	Benzene	ND	1	0.062	5	ug/L
OW-59	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-59	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	2/22/2018	Toluene	ND	1	0.064	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	2/22/2018	MTBE	9.2	1	0.24	143	ug/L
OW-59	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	5/8/2018	Acetone	1.5	10	0.82	14064	ug/L
OW-59	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	5/8/2018	Benzene	ND	1	0.062	5	ug/L
OW-59	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	5/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-59	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	5/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-59	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	5/8/2018	MTBE	9.2	1	0.24	143	ug/L
OW-59	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-59	8/28/2018	Acetone	4.3	10	0.79	14064	ug/L
OW-59	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	8/28/2018	Benzene	ND	1	0.17	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-59	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-59	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-59	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-59	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-59	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-59	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-59	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-59	8/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-59	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-59	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-59	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-59	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-59	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-59	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-59	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-59	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-59	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-59	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-59	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-59	8/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-59	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-59	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-59	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-59	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-59	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-59	8/28/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-59	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-59	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-59	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-59	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-59	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-59	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-59	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-59	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-59	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-59	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-59	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-59	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-59	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-59	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-59	8/28/2018	MTBE	10	1	0.32	143	ug/L
OW-59	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-59	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-59	11/7/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OW-59	11/7/2018	Acetone	ND	20	1.5	14064	ug/L
OW-59	11/7/2018	Chloroform	ND	2	0.47	100	ug/L
OW-59	11/7/2018	Benzene	ND	2	0.35	5	ug/L
OW-59	11/7/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
OW-59	11/7/2018	Bromomethane	ND	6	0.55	7.54	ug/L
OW-59	11/7/2018	Chloromethane	ND	6	0.64	20.32	ug/L
OW-59	11/7/2018	Dibromomethane	ND	2	0.64	8	ug/L
OW-59	11/7/2018	Chloroethane	ND	4	0.33	20857	ug/L
OW-59	11/7/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
OW-59	11/7/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OW-59	11/7/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OW-59	11/7/2018	Bromoform	ND	2	0.65	32.9	ug/L
OW-59	11/7/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OW-59	11/7/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
OW-59	11/7/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OW-59	11/7/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
OW-59	11/7/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
OW-59	11/7/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
OW-59	11/7/2018	2-Butanone	ND	20	2.8	5565	ug/L
OW-59	11/7/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OW-59	11/7/2018	Trichloroethene	ND	2	0.52	5	ug/L
OW-59	11/7/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	11/7/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OW-59	11/7/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
OW-59	11/7/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
OW-59	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OW-59	11/7/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OW-59	11/7/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OW-59	11/7/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
OW-59	11/7/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OW-59	11/7/2018	Ethylbenzene	ND	2	0.45	700	ug/L
OW-59	11/7/2018	Styrene	ND	2	0.5	100	ug/L
OW-59	11/7/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
OW-59	11/7/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OW-59	11/7/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
OW-59	11/7/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OW-59	11/7/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
OW-59	11/7/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OW-59	11/7/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OW-59	11/7/2018	Bromobenzene	ND	2	0.64	62	ug/L
OW-59	11/7/2018	Toluene	ND	2	0.34	1000	ug/L
OW-59	11/7/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OW-59	11/7/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OW-59	11/7/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-59	11/7/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
OW-59	11/7/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OW-59	11/7/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OW-59	11/7/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
OW-59	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-59	11/7/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
OW-59	11/7/2018	2-Hexanone	ND	20	1.8	38	ug/L
OW-59	11/7/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
OW-59	11/7/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OW-59	11/7/2018	Xylenes, Total	ND	3	1.3	620	ug/L
OW-59	11/7/2018	MTBE	7.7	2	0.91	143	ug/L
OW-59	11/7/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OW-59	11/7/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OW-59	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-59	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-59	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-59	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-59	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-59	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-59	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-59	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-59	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-59	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-59	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-59	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-59	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-59	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
OW-59	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-59	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-59	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-59	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-59	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-59	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-59	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-59	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-59	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-59	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-59	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-59	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-59	2/13/2019	Acetone	2.8	10	0.75707	14064	ug/L
OW-59	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
OW-59	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-59	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-59	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-59	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-59	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-59	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-59	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-59	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-59	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-59	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-59	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-59	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-59	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-59	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-59	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-59	2/13/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-59	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-59	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-59	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-59	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-59	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
OW-59	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-59	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-59	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-59	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-59	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-59	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-59	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-59	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-59	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-59	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-59	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	5/2/2019	1,2,4-Trimethylbenzene	0.3	1	0.213199	56	ug/L
OW-59	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-59	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	5/2/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-59	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	5/2/2019	Acetone	7.1	10	1.199396	14064	ug/L
OW-59	5/2/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	5/2/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	5/2/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	5/2/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-59	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-59	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-59	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-59	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-59	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	8/21/2019	Acetone	5.6	10	1.199396	14064	ug/L
OW-59	8/21/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	8/21/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-59	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-59	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	10/15/2019	1,2-Dichloroethane	0.39	1	0.194638	5	ug/L
OW-59	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-59	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	10/15/2019	MTBE	9.2	1	0.456095	143	ug/L
OW-59	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-59	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-59	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-59	3/3/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-59	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-59	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-59	3/3/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-59	3/3/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-59	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-59	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-59	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-59	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-59	3/3/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-59	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-59	3/3/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-59	3/3/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-59	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-59	3/3/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-59	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-59	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-59	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-59	3/3/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-59	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-59	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-59	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-59	3/3/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-59	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-59	3/3/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-59	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-59	3/3/2020	Acetone	3.9	10	2.3	14064	ug/L
OW-59	3/3/2020	Benzene	ND	1	0.23	5	ug/L
OW-59	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-59	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-59	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-59	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-59	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-59	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-59	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-59	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-59	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
OW-59	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-59	3/3/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-59	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-59	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-59	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-59	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-59	3/3/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-59	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-59	3/3/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-59	3/3/2020	MTBE	11	1	0.39	143	ug/L
OW-59	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-59	3/3/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	3/3/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-59	3/3/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-59	3/3/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-59	3/3/2020	Styrene	ND	1	0.13	100	ug/L
OW-59	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-59	3/3/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-59	3/3/2020	Toluene	ND	1	0.2	1000	ug/L
OW-59	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-59	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-59	3/3/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-59	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-59	3/3/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-59	3/3/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-59	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-59	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-59	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-59	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-59	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-59	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-59	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-59	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-59	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-59	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-59	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-59	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-59	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-59	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-59	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-59	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-59	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-59	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-59	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-59	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-59	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-59	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-59	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-59	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-59	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-59	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-59	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-59	9/19/2020	Acetone	2.4	10	2.3	14064	ug/L
OW-59	9/19/2020	Benzene	ND	1	0.23	5	ug/L
OW-59	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-59	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-59	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-59	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-59	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-59	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-59	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-59	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-59	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
OW-59	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-59	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-59	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-59	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-59	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-59	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-59	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-59	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-59	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-59	9/19/2020	MTBE	12	1	0.39	143	ug/L
OW-59	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-59	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-59	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-59	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-59	9/19/2020	Styrene	ND	1	0.13	100	ug/L
OW-59	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-59	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-59	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
OW-59	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-59	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-59	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-59	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-59	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-59	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-59	12/23/2020	Acetone	ND	25	10	14064	ug/L
OW-59	12/23/2020	Benzene	ND	1	0.38	5	ug/L
OW-59	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-59	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-59	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-59	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-59	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-59	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-59	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-59	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-59	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
OW-59	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-59	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-59	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-59	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-59	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-59	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-59	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-59	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-59	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-59	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-59	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-59	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-59	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-59	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-59	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-59	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-59	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-59	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-59	12/23/2020	MTBE	9.99	1	0.74	143	ug/L
OW-59	12/23/2020	Naphthalene	ND	1	1	30	ug/L
OW-59	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-59	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-59	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-59	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-59	12/23/2020	Styrene	ND	1	1	100	ug/L
OW-59	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-59	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-59	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-59	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-59	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
OW-59	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-59	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-59	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-59	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-59	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-59	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-59	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-59	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-59	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-59	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-59	12/23/2020	Acetone	ND	25	10	14064	ug/L
OW-59	12/23/2020	Benzene	ND	1	0.38	5	ug/L
OW-59	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-59	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-59	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-59	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-59	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-59	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-59	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-59	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-59	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
OW-59	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-59	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-59	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-59	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-59	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-59	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-59	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-59	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-59	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-59	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-59	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-59	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-59	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-59	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-59	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-59	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-59	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-59	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-59	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-59	12/23/2020	MTBE	10.1	1	0.74	143	ug/L
OW-59	12/23/2020	Naphthalene	ND	1	1	30	ug/L
OW-59	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-59	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-59	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-59	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	Styrene	ND	1	1	100	ug/L
OW-59	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-59	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-59	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-59	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-59	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
OW-59	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-59	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-59	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-59	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-59	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-59	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-59	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-59	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-59	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-59	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-60	6/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	6/28/2017	Acetone	13	10	0.82	14064	ug/L
OW-60	6/28/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	6/28/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	6/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	6/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	6/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	6/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	6/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	6/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	6/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	6/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	6/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	6/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	6/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	6/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	6/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	6/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	6/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	6/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	6/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	6/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	6/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	6/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	6/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	6/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	6/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	6/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	6/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	6/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	6/28/2017	p-Isopropyltoluene	0.21	1	0.096	NA	ug/L
OW-60	6/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	6/28/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	6/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	6/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	6/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	6/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	6/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	6/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	6/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	6/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	6/28/2017	Toluene	0.24	1	0.064	1000	ug/L
OW-60	6/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	6/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	6/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	6/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	6/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	6/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	6/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	6/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	6/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	6/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	6/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	6/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	6/28/2017	MTBE	0.86	1	0.24	143	ug/L
OW-60	6/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	6/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	9/21/2017	Acetone	3.3	10	0.82	14064	ug/L
OW-60	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	9/21/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	9/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	9/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	9/21/2017	Toluene	0.068	1	0.064	1000	ug/L
OW-60	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	9/21/2017	MTBE	0.59	1	0.24	143	ug/L
OW-60	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	12/6/2017	Acetone	2.5	10	0.82	14064	ug/L
OW-60	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	12/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	12/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	12/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	12/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-60	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	12/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	12/6/2017	MTBE	0.28	1	0.24	143	ug/L
OW-60	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	2/22/2018	Acetone	1.8	10	0.82	14064	ug/L
OW-60	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	2/22/2018	Benzene	ND	1	0.062	5	ug/L
OW-60	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-60	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	2/22/2018	Toluene	ND	1	0.064	1000	ug/L
OW-60	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	2/22/2018	MTBE	0.46	1	0.24	143	ug/L
OW-60	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	5/8/2018	Acetone	ND	10	0.82	14064	ug/L
OW-60	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	5/8/2018	Benzene	ND	1	0.062	5	ug/L
OW-60	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	5/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-60	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	5/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-60	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	5/8/2018	MTBE	0.42	1	0.24	143	ug/L
OW-60	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-60	8/28/2018	Acetone	3.2	10	0.79	14064	ug/L
OW-60	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	8/28/2018	Benzene	ND	1	0.17	5	ug/L
OW-60	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-60	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-60	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-60	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-60	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-60	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-60	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-60	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-60	8/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-60	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-60	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-60	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-60	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-60	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-60	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-60	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-60	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-60	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-60	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-60	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-60	8/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-60	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-60	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-60	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-60	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-60	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-60	8/28/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-60	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-60	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-60	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-60	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-60	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-60	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-60	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-60	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-60	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-60	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-60	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-60	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-60	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-60	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-60	8/28/2018	MTBE	0.54	1	0.32	143	ug/L
OW-60	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-60	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-60	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-60	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-60	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-60	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-60	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-60	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-60	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-60	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-60	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-60	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-60	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-60	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-60	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-60	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-60	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-60	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-60	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-60	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-60	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-60	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-60	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-60	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-60	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-60	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-60	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-60	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-60	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-60	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-60	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-60	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-60	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-60	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-60	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-60	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-60	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-60	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-60	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-60	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-60	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-60	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-60	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-60	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-60	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-60	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-60	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-60	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-60	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-60	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-60	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-60	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-60	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-60	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-60	11/7/2018	MTBE	ND	1	0.46	143	ug/L
OW-60	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-60	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-60	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-60	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-60	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-60	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-60	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-60	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-60	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-60	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-60	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-60	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-60	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-60	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-60	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-60	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
OW-60	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-60	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-60	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-60	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-60	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-60	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-60	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-60	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-60	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-60	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-60	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-60	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-60	2/13/2019	Acetone	1.7	10	0.75707	14064	ug/L
OW-60	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
OW-60	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-60	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-60	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-60	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-60	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-60	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-60	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-60	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-60	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-60	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-60	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-60	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-60	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-60	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-60	2/13/2019	MTBE	0.46	1	0.456095	143	ug/L
OW-60	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-60	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-60	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-60	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-60	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-60	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
OW-60	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-60	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-60	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-60	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-60	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-60	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-60	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-60	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-60	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-60	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-60	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	5/2/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-60	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	5/2/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-60	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	5/2/2019	Acetone	9.4	10	1.199396	14064	ug/L
OW-60	5/2/2019	Benzene	ND	1	0.166639	5	ug/L
OW-60	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	5/2/2019	MTBE	0.58	1	0.456095	143	ug/L
OW-60	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	5/2/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-60	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-60	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-60	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	8/21/2019	1-Methylnaphthalene	0.93	4	0.314954	NA	ug/L
OW-60	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	8/21/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
OW-60	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-60	8/21/2019	Benzene	0.29	1	0.166639	5	ug/L
OW-60	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-60	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	8/21/2019	MTBE	0.74	1	0.456095	143	ug/L
OW-60	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	10/15/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-60	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	10/15/2019	Acetone	3.8	10	1.199396	14064	ug/L
OW-60	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-60	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-60	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	10/15/2019	MTBE	0.75	1	0.456095	143	ug/L
OW-60	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-60	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-60	3/3/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-60	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-60	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-60	3/3/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-60	3/3/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-60	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-60	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-60	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-60	3/3/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-60	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-60	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-60	3/3/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-60	3/3/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-60	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-60	3/3/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-60	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-60	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-60	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-60	3/3/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-60	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-60	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-60	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-60	3/3/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-60	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-60	3/3/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-60	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-60	3/3/2020	Acetone	3.6	10	2.3	14064	ug/L
OW-60	3/3/2020	Benzene	ND	1	0.23	5	ug/L
OW-60	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-60	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-60	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-60	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-60	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-60	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-60	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-60	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-60	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
OW-60	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-60	3/3/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-60	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-60	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-60	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-60	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-60	3/3/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-60	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-60	3/3/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-60	3/3/2020	MTBE	ND	1	0.39	143	ug/L
OW-60	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-60	3/3/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	3/3/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-60	3/3/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-60	3/3/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-60	3/3/2020	Styrene	ND	1	0.13	100	ug/L
OW-60	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-60	3/3/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-60	3/3/2020	Toluene	ND	1	0.2	1000	ug/L
OW-60	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-60	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-60	3/3/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-60	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-60	3/3/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-60	3/3/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-60	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-60	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-60	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-60	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-60	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-60	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-60	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-60	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-60	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-60	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-60	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-60	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-60	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-60	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-60	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-60	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-60	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-60	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-60	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-60	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-60	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-60	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-60	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-60	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-60	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-60	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-60	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-60	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
OW-60	9/21/2020	Benzene	ND	1	0.23	5	ug/L
OW-60	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-60	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-60	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-60	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-60	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-60	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-60	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-60	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-60	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
OW-60	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-60	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-60	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-60	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-60	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-60	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-60	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-60	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-60	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-60	9/21/2020	MTBE	ND	1	0.39	143	ug/L
OW-60	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-60	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-60	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-60	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-60	9/21/2020	Styrene	ND	1	0.13	100	ug/L
OW-60	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-60	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-60	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
OW-60	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-60	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-60	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-60	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-60	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-60	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-60	12/11/2020	1,2-Dibromoethane	ND	0.0205	0.00513	0.05	ug/L
OW-60	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-60	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-60	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-60	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-60	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-60	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-60	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-60	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-60	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-60	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-60	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-60	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-60	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-60	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-60	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-60	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-60	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-60	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-60	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-60	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-60	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-60	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-60	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-60	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-60	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-60	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-60	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-60	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-60	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-60	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-60	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-60	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-60	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-60	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-60	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-60	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-60	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-60	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-60	12/11/2020	MTBE	ND	1	0.74	143	ug/L
OW-60	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-60	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-60	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-60	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-60	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-60	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-60	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-60	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-60	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-60	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-60	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-60	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-60	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-60	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-60	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-60	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-60	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-60	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-60	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-60	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-60	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-60	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-60	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-60	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-63	4/29/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-63	4/29/2018	Acetone	330	250	41	14064	ug/L
OW-63	4/29/2018	Chloroform	ND	1	0.4	100	ug/L
OW-63	4/29/2018	Benzene	**8900**	500	31	5	ug/L
OW-63	4/29/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-63	4/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-63	4/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-63	4/29/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-63	4/29/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-63	4/29/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-63	4/29/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-63	4/29/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-63	4/29/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-63	4/29/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-63	4/29/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-63	4/29/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-63	4/29/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-63	4/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-63	4/29/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-63	4/29/2018	2-Butanone	100	10	1.1	5565	ug/L
OW-63	4/29/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-63	4/29/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-63	4/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-63	4/29/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-63	4/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-63	4/29/2018	1,2,4-Trimethylbenzene	22	1	0.11	56	ug/L
OW-63	4/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-63	4/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-63	4/29/2018	tert-Butylbenzene	0.25	1	0.1	690	ug/L
OW-63	4/29/2018	Isopropylbenzene	58	1	0.051	447	ug/L
OW-63	4/29/2018	p-Isopropyltoluene	4.6	1	0.096	NA	ug/L
OW-63	4/29/2018	Ethylbenzene	**1400**	50	4.7	700	ug/L
OW-63	4/29/2018	Styrene	ND	1	0.16	100	ug/L
OW-63	4/29/2018	n-Propylbenzene	200	50	3.7	660	ug/L
OW-63	4/29/2018	n-Butylbenzene	24	3	0.13	1000	ug/L
OW-63	4/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-63	4/29/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-63	4/29/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-63	4/29/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-63	4/29/2018	1,3,5-Trimethylbenzene	43	1	0.087	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	4/29/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-63	4/29/2018	Toluene	120	50	3.2	1000	ug/L
OW-63	4/29/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-63	4/29/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-63	4/29/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-63	4/29/2018	sec-Butylbenzene	10	1	0.11	2000	ug/L
OW-63	4/29/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-63	4/29/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-63	4/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-63	4/29/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-63	4/29/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-63	4/29/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-63	4/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-63	4/29/2018	Xylenes, Total	**680**	75	16	620	ug/L
OW-63	4/29/2018	MTBE	37	1	0.24	143	ug/L
OW-63	4/29/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-63	4/29/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-63	8/22/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-63	8/22/2018	Acetone	590	200	16	14064	ug/L
OW-63	8/22/2018	Chloroform	ND	20	8	100	ug/L
OW-63	8/22/2018	Benzene	**9000**	200	35	5	ug/L
OW-63	8/22/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-63	8/22/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-63	8/22/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-63	8/22/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-63	8/22/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-63	8/22/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-63	8/22/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-63	8/22/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-63	8/22/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-63	8/22/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-63	8/22/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-63	8/22/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-63	8/22/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-63	8/22/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-63	8/22/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-63	8/22/2018	2-Butanone	ND	200	25	5565	ug/L
OW-63	8/22/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-63	8/22/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-63	8/22/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-63	8/22/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-63	8/22/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-63	8/22/2018	1,2,4-Trimethylbenzene	14	20	5.1	56	ug/L
OW-63	8/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-63	8/22/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-63	8/22/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-63	8/22/2018	Isopropylbenzene	54	20	4.4	447	ug/L
OW-63	8/22/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-63	8/22/2018	Ethylbenzene	**1100**	20	4.5	700	ug/L
OW-63	8/22/2018	Styrene	ND	20	5	100	ug/L
OW-63	8/22/2018	n-Propylbenzene	180	20	4.9	660	ug/L
OW-63	8/22/2018	n-Butylbenzene	22	60	5	1000	ug/L
OW-63	8/22/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-63	8/22/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-63	8/22/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-63	8/22/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-63	8/22/2018	1,3,5-Trimethylbenzene	36	20	4.6	60	ug/L
OW-63	8/22/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-63	8/22/2018	Toluene	84	20	3.4	1000	ug/L
OW-63	8/22/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-63	8/22/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-63	8/22/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-63	8/22/2018	sec-Butylbenzene	7.2	20	4	2000	ug/L
OW-63	8/22/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-63	8/22/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-63	8/22/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-63	8/22/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-63	8/22/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-63	8/22/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-63	8/22/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-63	8/22/2018	Xylenes, Total	520	30	13	620	ug/L
OW-63	8/22/2018	MTBE	48	20	6.4	143	ug/L
OW-63	8/22/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-63	8/22/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-63	12/3/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-63	12/3/2018	Acetone	ND	200	15	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/3/2018	Chloroform	ND	20	4.7	100	ug/L
OW-63	12/3/2018	Benzene	**8800**	200	35	5	ug/L
OW-63	12/3/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-63	12/3/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-63	12/3/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-63	12/3/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-63	12/3/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-63	12/3/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-63	12/3/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-63	12/3/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-63	12/3/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-63	12/3/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-63	12/3/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-63	12/3/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-63	12/3/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-63	12/3/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-63	12/3/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-63	12/3/2018	2-Butanone	ND	200	28	5565	ug/L
OW-63	12/3/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-63	12/3/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-63	12/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-63	12/3/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-63	12/3/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-63	12/3/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-63	12/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-63	12/3/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-63	12/3/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-63	12/3/2018	Isopropylbenzene	50	20	4.4	447	ug/L
OW-63	12/3/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-63	12/3/2018	Ethylbenzene	**1100**	20	4.5	700	ug/L
OW-63	12/3/2018	Styrene	ND	20	5	100	ug/L
OW-63	12/3/2018	n-Propylbenzene	160	20	4.9	660	ug/L
OW-63	12/3/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-63	12/3/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-63	12/3/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-63	12/3/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	12/3/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-63	12/3/2018	1,3,5-Trimethylbenzene	28	20	4.6	60	ug/L
OW-63	12/3/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-63	12/3/2018	Toluene	70	20	3.4	1000	ug/L
OW-63	12/3/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-63	12/3/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-63	12/3/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-63	12/3/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-63	12/3/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-63	12/3/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-63	12/3/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-63	12/3/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-63	12/3/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-63	12/3/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-63	12/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-63	12/3/2018	Xylenes, Total	430	30	13	620	ug/L
OW-63	12/3/2018	MTBE	33	20	9.1	143	ug/L
OW-63	12/3/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-63	12/3/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-63	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
OW-63	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L
OW-63	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
OW-63	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
OW-63	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
OW-63	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
OW-63	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
OW-63	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
OW-63	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
OW-63	2/20/2019	1,2,4-Trimethylbenzene	8.6	20	5.066287	56	ug/L
OW-63	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
OW-63	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
OW-63	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
OW-63	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
OW-63	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
OW-63	2/20/2019	1,3,5-Trimethylbenzene	22	20	4.628281	60	ug/L
OW-63	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
OW-63	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
OW-63	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
OW-63	2/20/2019	1-Methylnaphthalene	76	80	6.716339	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
OW-63	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
OW-63	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
OW-63	2/20/2019	2-Methylnaphthalene	**87**	80	6.90752		ug/L
OW-63	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
OW-63	2/20/2019	p-Isopropyltoluene	ND	20	4.806771	NA	ug/L
OW-63	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
OW-63	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
OW-63	2/20/2019	Benzene	**10000**	200	34.979144	5	ug/L
OW-63	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
OW-63	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
OW-63	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
OW-63	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
OW-63	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
OW-63	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
OW-63	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
OW-63	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
OW-63	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
OW-63	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
OW-63	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
OW-63	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
OW-63	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	2/20/2019	Ethylbenzene	**1100**	20	4.468045	700	ug/L
OW-63	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
OW-63	2/20/2019	Isopropylbenzene	51	20	4.422084	447	ug/L
OW-63	2/20/2019	MTBE	41	20	9.1219	143	ug/L
OW-63	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
OW-63	2/20/2019	Naphthalene	**320**	40	5.792521	30	ug/L
OW-63	2/20/2019	n-Butylbenzene	23	60	4.966609	1000	ug/L
OW-63	2/20/2019	n-Propylbenzene	170	20	4.851725	660	ug/L
OW-63	2/20/2019	sec-Butylbenzene	9.5	20	4.045094	2000	ug/L
OW-63	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
OW-63	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
OW-63	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
OW-63	2/20/2019	Toluene	65	20	3.362788	1000	ug/L
OW-63	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
OW-63	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
OW-63	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
OW-63	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
OW-63	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
OW-63	2/20/2019	Xylenes, Total	360	30	12.825754	620	ug/L
OW-63	5/15/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	5/15/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	5/15/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	5/15/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	5/15/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	5/15/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	5/15/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	5/15/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	5/15/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-63	5/15/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	5/15/2019	1,2,4-Trimethylbenzene	9.9	20	4.263982	56	ug/L
OW-63	5/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-63	5/15/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	5/15/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	5/15/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	5/15/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	5/15/2019	1,3,5-Trimethylbenzene	18	20	3.773197	60	ug/L
OW-63	5/15/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	5/15/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	5/15/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	5/15/2019	1-Methylnaphthalene	97	80	6.29909	NA	ug/L
OW-63	5/15/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	5/15/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	5/15/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	5/15/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	5/15/2019	2-Methylnaphthalene	**110**	80	6.90752		ug/L
OW-63	5/15/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	5/15/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	5/15/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	5/15/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	5/15/2019	Benzene	**8300**	200	33.327811	5	ug/L
OW-63	5/15/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	5/15/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	5/15/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	5/15/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	5/15/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	5/15/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	5/15/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	5/15/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	5/15/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	5/15/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	5/15/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	5/15/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	5/15/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	5/15/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	5/15/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	5/15/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	5/15/2019	Isopropylbenzene	58	20	3.830445	447	ug/L
OW-63	5/15/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	5/15/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	5/15/2019	Naphthalene	**330**	40	5.501427	30	ug/L
OW-63	5/15/2019	n-Butylbenzene	18	60	4.551391	1000	ug/L
OW-63	5/15/2019	n-Propylbenzene	160	20	4.28616	660	ug/L
OW-63	5/15/2019	sec-Butylbenzene	8.5	20	4.954626	2000	ug/L
OW-63	5/15/2019	Styrene	ND	20	3.826467	100	ug/L
OW-63	5/15/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	5/15/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	5/15/2019	Toluene	59	20	7.008724	1000	ug/L
OW-63	5/15/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	5/15/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	5/15/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	5/15/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	5/15/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	5/15/2019	Xylenes, Total	300	30	9.088299	620	ug/L
OW-63	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-63	8/19/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-63	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-63	8/19/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-63	8/19/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-63	8/19/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-63	8/19/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-63	8/19/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-63	8/19/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-63	8/19/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-63	8/19/2019	1,2,4-Trimethylbenzene	17	50	10.659955	56	ug/L
OW-63	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-63	8/19/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-63	8/19/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-63	8/19/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-63	8/19/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-63	8/19/2019	1,3,5-Trimethylbenzene	17	50	9.432992	60	ug/L
OW-63	8/19/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-63	8/19/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-63	8/19/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-63	8/19/2019	1-Methylnaphthalene	90	200	15.747724	NA	ug/L
OW-63	8/19/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-63	8/19/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-63	8/19/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-63	8/19/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-63	8/19/2019	2-Methylnaphthalene	**100**	200	17.2688		ug/L
OW-63	8/19/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-63	8/19/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-63	8/19/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-63	8/19/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-63	8/19/2019	Benzene	**8700**	500	83.319528	5	ug/L
OW-63	8/19/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-63	8/19/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-63	8/19/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-63	8/19/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-63	8/19/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-63	8/19/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-63	8/19/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-63	8/19/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-63	8/19/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-63	8/19/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-63	8/19/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-63	8/19/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/19/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-63	8/19/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-63	8/19/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-63	8/19/2019	Ethylbenzene	**1200**	50	6.61704	700	ug/L
OW-63	8/19/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-63	8/19/2019	Isopropylbenzene	56	50	9.576114	447	ug/L
OW-63	8/19/2019	MTBE	43	50	22.804749	143	ug/L
OW-63	8/19/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-63	8/19/2019	Naphthalene	**320**	100	13.753567	30	ug/L
OW-63	8/19/2019	n-Butylbenzene	17	150	11.378477	1000	ug/L
OW-63	8/19/2019	n-Propylbenzene	170	50	10.7154	660	ug/L
OW-63	8/19/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-63	8/19/2019	Styrene	ND	50	9.566168	100	ug/L
OW-63	8/19/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-63	8/19/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-63	8/19/2019	Toluene	67	50	17.521811	1000	ug/L
OW-63	8/19/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-63	8/19/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-63	8/19/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-63	8/19/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-63	8/19/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-63	8/19/2019	Xylenes, Total	310	75	22.720747	620	ug/L
OW-63	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	11/18/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	11/18/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	11/18/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	11/18/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	11/18/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	11/18/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	11/18/2019	1,2,4-Trimethylbenzene	7.7	20	4.263982	56	ug/L
OW-63	11/18/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	11/18/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	11/18/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	11/18/2019	1,3,5-Trimethylbenzene	14	20	3.773197	60	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	11/18/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	77	80	6.29909	NA	ug/L
OW-63	11/18/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	11/18/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	11/18/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	11/18/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**94**	80	6.90752		ug/L
OW-63	11/18/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	11/18/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	11/18/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	11/18/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	11/18/2019	Benzene	**8600**	200	33.327811	5	ug/L
OW-63	11/18/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-63	11/18/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	11/18/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	11/18/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	11/18/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	11/18/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	11/18/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	11/18/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	11/18/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	11/18/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	11/18/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	11/18/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	11/18/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	11/18/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	11/18/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	11/18/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	11/18/2019	Isopropylbenzene	53	20	3.830445	447	ug/L
OW-63	11/18/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	11/18/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	11/18/2019	Naphthalene	**300**	40	5.501427	30	ug/L
OW-63	11/18/2019	n-Butylbenzene	17	60	4.551391	1000	ug/L
OW-63	11/18/2019	n-Propylbenzene	150	20	4.28616	660	ug/L
OW-63	11/18/2019	sec-Butylbenzene	7.9	20	4.954626	2000	ug/L
OW-63	11/18/2019	Styrene	ND	20	3.826467	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	11/18/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	11/18/2019	Toluene	63	20	7.008724	1000	ug/L
OW-63	11/18/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	11/18/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	11/18/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	11/18/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	11/18/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	11/18/2019	Xylenes, Total	260	30	9.088299	620	ug/L
OW-63	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	11/18/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	11/18/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	11/18/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	11/18/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	11/18/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	11/18/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	11/18/2019	1,2,4-Trimethylbenzene	7.7	20	4.263982	56	ug/L
OW-63	11/18/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	11/18/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	11/18/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	11/18/2019	1,3,5-Trimethylbenzene	15	20	3.773197	60	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	11/18/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	82	80	6.29909	NA	ug/L
OW-63	11/18/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	11/18/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	11/18/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	11/18/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**97**	80	6.90752		ug/L
OW-63	11/18/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	11/18/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	11/18/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	11/18/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	11/18/2019	Benzene	**8500**	200	33.327811	5	ug/L
OW-63	11/18/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-63	11/18/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	11/18/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	11/18/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	11/18/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	11/18/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	11/18/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	11/18/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	11/18/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	11/18/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	11/18/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	11/18/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	11/18/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	11/18/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	11/18/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	11/18/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	11/18/2019	Isopropylbenzene	55	20	3.830445	447	ug/L
OW-63	11/18/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	11/18/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	11/18/2019	Naphthalene	**320**	40	5.501427	30	ug/L
OW-63	11/18/2019	n-Butylbenzene	19	60	4.551391	1000	ug/L
OW-63	11/18/2019	n-Propylbenzene	160	20	4.28616	660	ug/L
OW-63	11/18/2019	sec-Butylbenzene	8.7	20	4.954626	2000	ug/L
OW-63	11/18/2019	Styrene	ND	20	3.826467	100	ug/L
OW-63	11/18/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	11/18/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	11/18/2019	Toluene	62	20	7.008724	1000	ug/L
OW-63	11/18/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	11/18/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	11/18/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	11/18/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	11/18/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	11/18/2019	Xylenes, Total	260	30	9.088299	620	ug/L
OW-63	3/4/2020	Benzene	**9100**	200	45	5	ug/L
OW-63	3/4/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-63	3/4/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-63	3/4/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	3/4/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	3/4/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-63	3/4/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-63	3/4/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-63	3/4/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-63	3/4/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-63	3/4/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-63	3/4/2020	1,2,4-Trimethylbenzene	3.9	20	2.4	56	ug/L
OW-63	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-63	3/4/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-63	3/4/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
OW-63	3/4/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-63	3/4/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-63	3/4/2020	1,3,5-Trimethylbenzene	11	20	3.6	60	ug/L
OW-63	3/4/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-63	3/4/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-63	3/4/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-63	3/4/2020	1-Methylnaphthalene	76	80	17	NA	ug/L
OW-63	3/4/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-63	3/4/2020	2-Butanone	ND	200	22	5565	ug/L
OW-63	3/4/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-63	3/4/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-63	3/4/2020	2-Methylnaphthalene	**110**	80	14		ug/L
OW-63	3/4/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-63	3/4/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-63	3/4/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-63	3/4/2020	Acetone	67	200	47	14064	ug/L
OW-63	3/4/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-63	3/4/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-63	3/4/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-63	3/4/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-63	3/4/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-63	3/4/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-63	3/4/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-63	3/4/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-63	3/4/2020	Chloroform	ND	20	2.7	100	ug/L
OW-63	3/4/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-63	3/4/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-63	3/4/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
OW-63	3/4/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-63	3/4/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-63	3/4/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-63	3/4/2020	Ethylbenzene	**1100**	20	4.3	700	ug/L
OW-63	3/4/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-63	3/4/2020	Isopropylbenzene	54	20	3.7	447	ug/L
OW-63	3/4/2020	MTBE	33	20	7.9	143	ug/L
OW-63	3/4/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-63	3/4/2020	n-Butylbenzene	18	60	5.1	1000	ug/L
OW-63	3/4/2020	n-Propylbenzene	160	20	3.6	660	ug/L
OW-63	3/4/2020	Naphthalene	**280**	40	5.6	30	ug/L
OW-63	3/4/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-63	3/4/2020	Styrene	ND	20	2.6	100	ug/L
OW-63	3/4/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-63	3/4/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-63	3/4/2020	Toluene	61	20	4	1000	ug/L
OW-63	3/4/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-63	3/4/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-63	3/4/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-63	3/4/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-63	3/4/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-63	3/4/2020	Xylenes, Total	230	30	11	620	ug/L
OW-63	9/16/2020	Benzene	**8500**	200	45	5	ug/L
OW-63	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-63	9/16/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-63	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
OW-63	9/16/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	9/16/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-63	9/16/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-63	9/16/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-63	9/16/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-63	9/16/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-63	9/16/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-63	9/16/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
OW-63	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-63	9/16/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-63	9/16/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-63	9/16/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-63	9/16/2020	1,3,5-Trimethylbenzene	8.6	20	3.6	60	ug/L
OW-63	9/16/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-63	9/16/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-63	9/16/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-63	9/16/2020	1-Methylnaphthalene	61	80	17	NA	ug/L
OW-63	9/16/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-63	9/16/2020	2-Butanone	ND	200	22	5565	ug/L
OW-63	9/16/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-63	9/16/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-63	9/16/2020	2-Methylnaphthalene	**92**	80	14		ug/L
OW-63	9/16/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-63	9/16/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-63	9/16/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-63	9/16/2020	Acetone	ND	200	47	14064	ug/L
OW-63	9/16/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-63	9/16/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-63	9/16/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-63	9/16/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-63	9/16/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-63	9/16/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-63	9/16/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-63	9/16/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-63	9/16/2020	Chloroform	ND	20	2.7	100	ug/L
OW-63	9/16/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-63	9/16/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-63	9/16/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
OW-63	9/16/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-63	9/16/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-63	9/16/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-63	9/16/2020	Ethylbenzene	**1200**	20	4.3	700	ug/L
OW-63	9/16/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-63	9/16/2020	Isopropylbenzene	55	20	3.7	447	ug/L
OW-63	9/16/2020	MTBE	30	20	7.9	143	ug/L
OW-63	9/16/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-63	9/16/2020	n-Butylbenzene	18	60	5.1	1000	ug/L
OW-63	9/16/2020	n-Propylbenzene	150	20	3.6	660	ug/L
OW-63	9/16/2020	Naphthalene	**290**	40	5.6	30	ug/L
OW-63	9/16/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-63	9/16/2020	Styrene	ND	20	2.6	100	ug/L
OW-63	9/16/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-63	9/16/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-63	9/16/2020	Toluene	50	20	4	1000	ug/L
OW-63	9/16/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-63	9/16/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-63	9/16/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-63	9/16/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-63	9/16/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-63	9/16/2020	Xylenes, Total	210	30	11	620	ug/L
OW-63	12/11/2020	Acetone	ND	2500	1000	14064	ug/L
OW-63	12/11/2020	Benzene	**10000**	100	38	5	ug/L
OW-63	12/11/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
OW-63	12/11/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
OW-63	12/11/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
OW-63	12/11/2020	2-Butanone	ND	2500	260	5565	ug/L
OW-63	12/11/2020	Carbon Disulfide	ND	100	50	810	ug/L
OW-63	12/11/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
OW-63	12/11/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
OW-63	12/11/2020	Chloroethane	ND	100	76	20857	ug/L
OW-63	12/11/2020	Chloroform	ND	100	60	100	ug/L
OW-63	12/11/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
OW-63	12/11/2020	2-Chlorotoluene	ND	100	57	233	ug/L
OW-63	12/11/2020	4-Chlorotoluene	ND	100	56	250	ug/L
OW-63	12/11/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
OW-63	12/11/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-63	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
OW-63	12/11/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
OW-63	12/11/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
OW-63	12/11/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
OW-63	12/11/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
OW-63	12/11/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
OW-63	12/11/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
OW-63	12/11/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
OW-63	12/11/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
OW-63	12/11/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
OW-63	12/11/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
OW-63	12/11/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
OW-63	12/11/2020	Ethylbenzene	**1320**	100	50	700	ug/L
OW-63	12/11/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
OW-63	12/11/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
OW-63	12/11/2020	Isopropylbenzene	ND	100	53	447	ug/L
OW-63	12/11/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
OW-63	12/11/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
OW-63	12/11/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
OW-63	12/11/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
OW-63	12/11/2020	MTBE	ND	100	74	143	ug/L
OW-63	12/11/2020	Naphthalene	**350**	100	100	30	ug/L
OW-63	12/11/2020	n-Butylbenzene	ND	100	76	1000	ug/L
OW-63	12/11/2020	n-Propylbenzene	170	100	69	660	ug/L
OW-63	12/11/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
OW-63	12/11/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
OW-63	12/11/2020	Styrene	ND	100	100	100	ug/L
OW-63	12/11/2020	tert-Butylbenzene	ND	100	63	690	ug/L
OW-63	12/11/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
OW-63	12/11/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
OW-63	12/11/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
OW-63	12/11/2020	Toluene	ND	100	41	1000	ug/L
OW-63	12/11/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
OW-63	12/11/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-63	12/11/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
OW-63	12/11/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
OW-63	12/11/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
OW-63	12/11/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
OW-63	12/11/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
OW-63	12/11/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
OW-63	12/11/2020	1,2,4-Trimethylbenzene	*ND*	*100*	82	56	ug/L
OW-63	12/11/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L
OW-63	12/11/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
OW-63	12/11/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
OW-64	4/29/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-64	4/29/2018	Acetone	ND	50	4.1	14064	ug/L
OW-64	4/29/2018	Chloroform	ND	5	2	100	ug/L
OW-64	4/29/2018	Benzene	**590**	50	3.1	5	ug/L
OW-64	4/29/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-64	4/29/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-64	4/29/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-64	4/29/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-64	4/29/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-64	4/29/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-64	4/29/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-64	4/29/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-64	4/29/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-64	4/29/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-64	4/29/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-64	4/29/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-64	4/29/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-64	4/29/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-64	4/29/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-64	4/29/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-64	4/29/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-64	4/29/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-64	4/29/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-64	4/29/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-64	4/29/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-64	4/29/2018	1,2,4-Trimethylbenzene	**1200**	50	5.6	56	ug/L
OW-64	4/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-64	4/29/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-64	4/29/2018	tert-Butylbenzene	2.8	5	0.52	690	ug/L
OW-64	4/29/2018	Isopropylbenzene	180	5	0.26	447	ug/L
OW-64	4/29/2018	p-Isopropyltoluene	38	5	0.48	NA	ug/L
OW-64	4/29/2018	Ethylbenzene	360	5	0.47	700	ug/L
OW-64	4/29/2018	Styrene	ND	5	0.78	100	ug/L
OW-64	4/29/2018	n-Propylbenzene	170	5	0.37	660	ug/L
OW-64	4/29/2018	n-Butylbenzene	20	15	0.65	1000	ug/L
OW-64	4/29/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-64	4/29/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-64	4/29/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-64	4/29/2018	1,3,5-Trimethylbenzene	**280**	5	0.44	60	ug/L
OW-64	4/29/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-64	4/29/2018	Toluene	**1600**	50	3.2	1000	ug/L
OW-64	4/29/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-64	4/29/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-64	4/29/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-64	4/29/2018	sec-Butylbenzene	58	5	0.55	2000	ug/L
OW-64	4/29/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-64	4/29/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-64	4/29/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-64	4/29/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-64	4/29/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-64	4/29/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-64	4/29/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-64	4/29/2018	Xylenes, Total	**3200**	75	16	620	ug/L
OW-64	4/29/2018	MTBE	ND	5	1.2	143	ug/L
OW-64	4/29/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-64	4/29/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-64	8/22/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-64	8/22/2018	Acetone	46	50	3.9	14064	ug/L
OW-64	8/22/2018	Chloroform	ND	5	2	100	ug/L
OW-64	8/22/2018	Benzene	**180**	5	0.87	5	ug/L
OW-64	8/22/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-64	8/22/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-64	8/22/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-64	8/22/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-64	8/22/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-64	8/22/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-64	8/22/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-64	8/22/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-64	8/22/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-64	8/22/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-64	8/22/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-64	8/22/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-64	8/22/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-64	8/22/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-64	8/22/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-64	8/22/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-64	8/22/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-64	8/22/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-64	8/22/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-64	8/22/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-64	8/22/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-64	8/22/2018	1,2,4-Trimethylbenzene	**440**	5	1.3	56	ug/L
OW-64	8/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-64	8/22/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-64	8/22/2018	tert-Butylbenzene	1.1	5	1.1	690	ug/L
OW-64	8/22/2018	Isopropylbenzene	110	5	1.1	447	ug/L
OW-64	8/22/2018	p-Isopropyltoluene	14	5	1.2	NA	ug/L
OW-64	8/22/2018	Ethylbenzene	400	5	1.1	700	ug/L
OW-64	8/22/2018	Styrene	ND	5	1.3	100	ug/L
OW-64	8/22/2018	n-Propylbenzene	110	5	1.2	660	ug/L
OW-64	8/22/2018	n-Butylbenzene	11	15	1.2	1000	ug/L
OW-64	8/22/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-64	8/22/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-64	8/22/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-64	8/22/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-64	8/22/2018	1,3,5-Trimethylbenzene	**80**	5	1.2	60	ug/L
OW-64	8/22/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-64	8/22/2018	Toluene	550	50	8.4	1000	ug/L
OW-64	8/22/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-64	8/22/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-64	8/22/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-64	8/22/2018	sec-Butylbenzene	27	5	1	2000	ug/L
OW-64	8/22/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-64	8/22/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-64	8/22/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-64	8/22/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-64	8/22/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-64	8/22/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-64	8/22/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-64	8/22/2018	Xylenes, Total	**1500**	75	32	620	ug/L
OW-64	8/22/2018	MTBE	ND	5	1.6	143	ug/L
OW-64	8/22/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-64	8/22/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	5/15/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-64	5/15/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-64	5/15/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-64	5/15/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-64	5/15/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-64	5/15/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-64	5/15/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-64	5/15/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-64	5/15/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-64	5/15/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-64	5/15/2019	1,2,4-Trimethylbenzene	**190**	5	1.065995	56	ug/L
OW-64	5/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-64	5/15/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-64	5/15/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-64	5/15/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-64	5/15/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-64	5/15/2019	1,3,5-Trimethylbenzene	23	5	0.943299	60	ug/L
OW-64	5/15/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-64	5/15/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-64	5/15/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-64	5/15/2019	1-Methylnaphthalene	4.9	20	1.574772	NA	ug/L
OW-64	5/15/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-64	5/15/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-64	5/15/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-64	5/15/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-64	5/15/2019	2-Methylnaphthalene	**3**	20	1.72688		ug/L
OW-64	5/15/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-64	5/15/2019	p-Isopropyltoluene	9.5	5	1.086447	NA	ug/L
OW-64	5/15/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-64	5/15/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-64	5/15/2019	Benzene	**68**	5	0.833195	5	ug/L
OW-64	5/15/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-64	5/15/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-64	5/15/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-64	5/15/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-64	5/15/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-64	5/15/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-64	5/15/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-64	5/15/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-64	5/15/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-64	5/15/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-64	5/15/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-64	5/15/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-64	5/15/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-64	5/15/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-64	5/15/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-64	5/15/2019	Ethylbenzene	190	5	0.661704	700	ug/L
OW-64	5/15/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-64	5/15/2019	Isopropylbenzene	72	5	0.957611	447	ug/L
OW-64	5/15/2019	MTBE	ND	5	2.280475	143	ug/L
OW-64	5/15/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-64	5/15/2019	Naphthalene	9.3	10	1.375357	30	ug/L
OW-64	5/15/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-64	5/15/2019	n-Propylbenzene	63	5	1.07154	660	ug/L
OW-64	5/15/2019	sec-Butylbenzene	19	5	1.238656	2000	ug/L
OW-64	5/15/2019	Styrene	ND	5	0.956617	100	ug/L
OW-64	5/15/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-64	5/15/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-64	5/15/2019	Toluene	11	5	1.752181	1000	ug/L
OW-64	5/15/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-64	5/15/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-64	5/15/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-64	5/15/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-64	5/15/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-64	5/15/2019	Xylenes, Total	440	7.5	2.272075	620	ug/L
OW-64	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
OW-64	8/19/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
OW-64	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
OW-64	8/19/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
OW-64	8/19/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
OW-64	8/19/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
OW-64	8/19/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
OW-64	8/19/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
OW-64	8/19/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
OW-64	8/19/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
OW-64	8/19/2019	1,2,4-Trimethylbenzene	**110**	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
OW-64	8/19/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
OW-64	8/19/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
OW-64	8/19/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
OW-64	8/19/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
OW-64	8/19/2019	1,3,5-Trimethylbenzene	6.6	10	1.886598	60	ug/L
OW-64	8/19/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
OW-64	8/19/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
OW-64	8/19/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
OW-64	8/19/2019	1-Methylnaphthalene	4.7	40	3.149545	NA	ug/L
OW-64	8/19/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
OW-64	8/19/2019	2-Butanone	ND	100	20.894166	5565	ug/L
OW-64	8/19/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
OW-64	8/19/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
OW-64	8/19/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
OW-64	8/19/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
OW-64	8/19/2019	p-Isopropyltoluene	6.6	10	2.172894	NA	ug/L
OW-64	8/19/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
OW-64	8/19/2019	Acetone	14	100	11.993964	14064	ug/L
OW-64	8/19/2019	Benzene	**63**	10	1.666391	5	ug/L
OW-64	8/19/2019	Bromobenzene	ND	10	2.44727	62	ug/L
OW-64	8/19/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
OW-64	8/19/2019	Bromoform	ND	10	2.886632	32.9	ug/L
OW-64	8/19/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
OW-64	8/19/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
OW-64	8/19/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
OW-64	8/19/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
OW-64	8/19/2019	Chloroethane	ND	20	1.778026	20857	ug/L
OW-64	8/19/2019	Chloroform	ND	10	1.218906	100	ug/L
OW-64	8/19/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
OW-64	8/19/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
OW-64	8/19/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
OW-64	8/19/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
OW-64	8/19/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
OW-64	8/19/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
OW-64	8/19/2019	Ethylbenzene	110	10	1.323408	700	ug/L
OW-64	8/19/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
OW-64	8/19/2019	Isopropylbenzene	47	10	1.915223	447	ug/L
OW-64	8/19/2019	MTBE	ND	10	4.56095	143	ug/L
OW-64	8/19/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
OW-64	8/19/2019	Naphthalene	9.1	20	2.750713	30	ug/L
OW-64	8/19/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
OW-64	8/19/2019	n-Propylbenzene	37	10	2.14308	660	ug/L
OW-64	8/19/2019	sec-Butylbenzene	14	10	2.477313	2000	ug/L
OW-64	8/19/2019	Styrene	ND	10	1.913234	100	ug/L
OW-64	8/19/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
OW-64	8/19/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
OW-64	8/19/2019	Toluene	11	10	3.504362	1000	ug/L
OW-64	8/19/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
OW-64	8/19/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
OW-64	8/19/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
OW-64	8/19/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
OW-64	8/19/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
OW-64	8/19/2019	Xylenes, Total	170	15	4.544149	620	ug/L
OW-64	11/18/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OW-64	11/18/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OW-64	11/18/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OW-64	11/18/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OW-64	11/18/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
OW-64	11/18/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OW-64	11/18/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-64	11/18/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OW-64	11/18/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OW-64	11/18/2019	1,2,4-Trimethylbenzene	55	2	0.426398	56	ug/L
OW-64	11/18/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OW-64	11/18/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OW-64	11/18/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OW-64	11/18/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OW-64	11/18/2019	1,3,5-Trimethylbenzene	3	2	0.37732	60	ug/L
OW-64	11/18/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OW-64	11/18/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OW-64	11/18/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OW-64	11/18/2019	1-Methylnaphthalene	2.8	8	0.629909	NA	ug/L
OW-64	11/18/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-64	11/18/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OW-64	11/18/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OW-64	11/18/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-64	11/18/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OW-64	11/18/2019	p-Isopropyltoluene	7.1	2	0.434579	NA	ug/L
OW-64	11/18/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OW-64	11/18/2019	Acetone	5	20	2.398793	14064	ug/L
OW-64	11/18/2019	Benzene	**13**	2	0.333278	5	ug/L
OW-64	11/18/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OW-64	11/18/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OW-64	11/18/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OW-64	11/18/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-64	11/18/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OW-64	11/18/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OW-64	11/18/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OW-64	11/18/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OW-64	11/18/2019	Chloroform	ND	2	0.243781	100	ug/L
OW-64	11/18/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-64	11/18/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OW-64	11/18/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OW-64	11/18/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OW-64	11/18/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OW-64	11/18/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-64	11/18/2019	Ethylbenzene	39	2	0.264682	700	ug/L
OW-64	11/18/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OW-64	11/18/2019	Isopropylbenzene	37	2	0.383045	447	ug/L
OW-64	11/18/2019	MTBE	ND	2	0.91219	143	ug/L
OW-64	11/18/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OW-64	11/18/2019	Naphthalene	3.3	4	0.550143	30	ug/L
OW-64	11/18/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OW-64	11/18/2019	n-Propylbenzene	23	2	0.428616	660	ug/L
OW-64	11/18/2019	sec-Butylbenzene	12	2	0.495463	2000	ug/L
OW-64	11/18/2019	Styrene	ND	2	0.382647	100	ug/L
OW-64	11/18/2019	tert-Butylbenzene	0.97	2	0.41397	690	ug/L
OW-64	11/18/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OW-64	11/18/2019	Toluene	ND	2	0.700872	1000	ug/L
OW-64	11/18/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OW-64	11/18/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OW-64	11/18/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OW-64	11/18/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OW-64	11/18/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OW-64	11/18/2019	Xylenes, Total	50	3	0.90883	620	ug/L
OW-64	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-64	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-64	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-64	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-64	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-64	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-64	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-64	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-64	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-64	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-64	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-64	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-64	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-64	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-64	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-64	3/4/2020	1,3,5-Trimethylbenzene	7.1	1	0.18	60	ug/L
OW-64	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-64	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-64	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-64	3/4/2020	1-Methylnaphthalene	3.1	4	0.84	NA	ug/L
OW-64	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-64	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-64	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-64	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-64	3/4/2020	2-Methylnaphthalene	**1.5**	4	0.69		ug/L
OW-64	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-64	3/4/2020	p-Isopropyltoluene	5.5	1	0.2	NA	ug/L
OW-64	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-64	3/4/2020	Acetone	10	10	2.3	14064	ug/L
OW-64	3/4/2020	Benzene	**34**	1	0.23	5	ug/L
OW-64	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-64	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-64	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-64	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-64	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-64	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-64	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-64	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-64	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-64	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-64	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-64	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-64	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-64	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-64	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-64	3/4/2020	Isopropylbenzene	39	1	0.18	447	ug/L
OW-64	3/4/2020	MTBE	ND	1	0.39	143	ug/L
OW-64	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-64	3/4/2020	n-Butylbenzene	0.45	3	0.25	1000	ug/L
OW-64	3/4/2020	n-Propylbenzene	34	1	0.18	660	ug/L
OW-64	3/4/2020	Naphthalene	6.3	2	0.28	30	ug/L
OW-64	3/4/2020	sec-Butylbenzene	12	1	0.61	2000	ug/L
OW-64	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-64	3/4/2020	tert-Butylbenzene	1.5	1	0.24	690	ug/L
OW-64	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-64	3/4/2020	Toluene	0.73	1	0.2	1000	ug/L
OW-64	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-64	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-64	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-64	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-64	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-64	3/4/2020	Xylenes, Total	110	1.5	0.55	620	ug/L
OW-64	3/4/2020	1,2,4-Trimethylbenzene	**120**	10	1.2	56	ug/L
OW-64	3/4/2020	Ethylbenzene	110	10	2.1	700	ug/L
OW-64	9/22/2020	1,2,4-Trimethylbenzene	**100**	10	1.2	56	ug/L
OW-64	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-64	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-64	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-64	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-64	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-64	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-64	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-64	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-64	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-64	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-64	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-64	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-64	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-64	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-64	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-64	9/22/2020	1,3,5-Trimethylbenzene	5.7	1	0.18	60	ug/L
OW-64	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-64	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-64	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-64	9/22/2020	1-Methylnaphthalene	2.8	4	0.84	NA	ug/L
OW-64	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-64	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-64	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-64	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-64	9/22/2020	2-Methylnaphthalene	**1.7**	4	0.69		ug/L
OW-64	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-64	9/22/2020	p-Isopropyltoluene	4.9	1	0.2	NA	ug/L
OW-64	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-64	9/22/2020	Acetone	4	10	2.3	14064	ug/L
OW-64	9/22/2020	Benzene	**94**	1	0.23	5	ug/L
OW-64	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-64	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-64	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-64	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-64	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-64	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-64	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-64	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-64	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
OW-64	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-64	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-64	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-64	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-64	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-64	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	9/22/2020	Ethylbenzene	73	1	0.21	700	ug/L
OW-64	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-64	9/22/2020	Isopropylbenzene	22	1	0.18	447	ug/L
OW-64	9/22/2020	MTBE	ND	1	0.39	143	ug/L
OW-64	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-64	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-64	9/22/2020	n-Propylbenzene	14	1	0.18	660	ug/L
OW-64	9/22/2020	Naphthalene	8.4	2	0.28	30	ug/L
OW-64	9/22/2020	sec-Butylbenzene	7.1	1	0.61	2000	ug/L
OW-64	9/22/2020	Styrene	ND	1	0.13	100	ug/L
OW-64	9/22/2020	tert-Butylbenzene	1.1	1	0.24	690	ug/L
OW-64	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-64	9/22/2020	Toluene	31	1	0.2	1000	ug/L
OW-64	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-64	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-64	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-64	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-64	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-64	9/22/2020	Xylenes, Total	74	1.5	0.55	620	ug/L
OW-64	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-64	12/11/2020	Benzene	**13.5**	1	0.38	5	ug/L
OW-64	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-64	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-64	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-64	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-64	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-64	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-64	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-64	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-64	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-64	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-64	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-64	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-64	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-64	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-64	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-64	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-64	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-64	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-64	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-64	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-64	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-64	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-64	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-64	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-64	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-64	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-64	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-64	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-64	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-64	12/11/2020	Ethylbenzene	40.5	1	0.5	700	ug/L
OW-64	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-64	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-64	12/11/2020	Isopropylbenzene	15.7	1	0.53	447	ug/L
OW-64	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-64	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-64	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-64	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-64	12/11/2020	MTBE	ND	1	0.74	143	ug/L
OW-64	12/11/2020	Naphthalene	3.06	1	1	30	ug/L
OW-64	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-64	12/11/2020	n-Propylbenzene	10	1	0.69	660	ug/L
OW-64	12/11/2020	p-Isopropyltoluene	3.79	1	0.71	NA	ug/L
OW-64	12/11/2020	sec-Butylbenzene	5.79	1	0.7	2000	ug/L
OW-64	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-64	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-64	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-64	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-64	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-64	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-64	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-64	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-64	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-64	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-64	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-64	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-64	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-64	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-64	12/11/2020	1,2,4-Trimethylbenzene	**67.5**	1	0.82	56	ug/L
OW-64	12/11/2020	1,3,5-Trimethylbenzene	5.68	1	0.56	60	ug/L
OW-64	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-64	12/11/2020	Xylenes, Total	42.1	10	1.6	620	ug/L
PW-2	9/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-2	9/10/2014	Acetone	ND	10	4.9	14064	ug/L
PW-2	9/10/2014	Chloroform	ND	1	0.32	100	ug/L
PW-2	9/10/2014	Benzene	ND	1	0.15	5	ug/L
PW-2	9/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
PW-2	9/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
PW-2	9/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
PW-2	9/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
PW-2	9/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
PW-2	9/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
PW-2	9/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
PW-2	9/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
PW-2	9/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
PW-2	9/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
PW-2	9/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
PW-2	9/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
PW-2	9/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-2	9/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
PW-2	9/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
PW-2	9/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
PW-2	9/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-2	9/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
PW-2	9/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
PW-2	9/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
PW-2	9/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-2	9/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-2	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
PW-2	9/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
PW-2	9/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
PW-2	9/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
PW-2	9/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
PW-2	9/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
PW-2	9/10/2014	Styrene	ND	1	0.12	100	ug/L
PW-2	9/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
PW-2	9/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
PW-2	9/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
PW-2	9/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
PW-2	9/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
PW-2	9/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-2	9/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
PW-2	9/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
PW-2	9/10/2014	Toluene	ND	1	0.17	1000	ug/L
PW-2	9/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-2	9/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
PW-2	9/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
PW-2	9/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
PW-2	9/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-2	9/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-2	9/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
PW-2	9/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
PW-2	9/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
PW-2	9/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
PW-2	9/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
PW-2	9/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
PW-2	9/10/2014	MTBE	ND	1	0.25	143	ug/L
PW-2	9/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
PW-2	9/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
PW-2	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-2	9/18/2017	Acetone	24	10	0.82	14064	ug/L
PW-2	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-2	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-2	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-2	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-2	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-2	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-2	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-2	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-2	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-2	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-2	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-2	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-2	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-2	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-2	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-2	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-2	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-2	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-2	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-2	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-2	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-2	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-2	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-2	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-2	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-2	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-2	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-2	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-2	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-2	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-2	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-2	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-2	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-2	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-2	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-2	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-2	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-2	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-2	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-2	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-2	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-2	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-2	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-2	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-2	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-2	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-2	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-2	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-2	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-2	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-2	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-2	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-2	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-2	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-2	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-2	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
PW-2	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-2	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
PW-2	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-2	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-2	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-2	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-2	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-2	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-2	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-2	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-2	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-2	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-2	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-2	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-2	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-2	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-2	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-2	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-2	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-2	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-2	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-2	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-2	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-2	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-2	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-2	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-2	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-2	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-2	9/21/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-2	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-2	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-2	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-2	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-2	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-2	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-2	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-2	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-2	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-2	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-2	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-2	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-2	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-2	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-2	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-2	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-2	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-2	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-2	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-2	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-2	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-2	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-2	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-2	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-2	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-2	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-2	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-2	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-2	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-2	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-2	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-2	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-2	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-2	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-2	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-2	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-2	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-2	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-2	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-2	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-2	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-2	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-2	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-2	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-2	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-2	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-2	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-2	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-2	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-2	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-2	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-2	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-2	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-2	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-2	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-2	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-2	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-2	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-2	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-2	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-2	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-2	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-2	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-2	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-2	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-2	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-2	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-2	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-2	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-2	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-2	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-2	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-2	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-2	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-2	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-2	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-2	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-2	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-2	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-2	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-2	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-2	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-2	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-2	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-2	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-2	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-2	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-2	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-2	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-2	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-2	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-2	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-2	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-2	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-2	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-2	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-2	12/28/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
PW-3	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
PW-3	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
PW-3	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
PW-3	8/24/2012	Benzene	ND	1	0.4	5	ug/L
PW-3	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
PW-3	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
PW-3	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
PW-3	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
PW-3	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
PW-3	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
PW-3	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
PW-3	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
PW-3	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
PW-3	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
PW-3	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
PW-3	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
PW-3	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
PW-3	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
PW-3	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
PW-3	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
PW-3	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
PW-3	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
PW-3	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
PW-3	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
PW-3	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
PW-3	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
PW-3	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
PW-3	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
PW-3	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
PW-3	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
PW-3	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
PW-3	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
PW-3	8/24/2012	Styrene	ND	1	0.41	100	ug/L
PW-3	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
PW-3	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
PW-3	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
PW-3	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
PW-3	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
PW-3	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
PW-3	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
PW-3	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
PW-3	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
PW-3	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
PW-3	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
PW-3	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
PW-3	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
PW-3	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
PW-3	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
PW-3	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
PW-3	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
PW-3	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
PW-3	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
PW-3	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
PW-3	8/24/2012	MTBE	ND	1	0.96	143	ug/L
PW-3	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
PW-3	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
PW-3	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
PW-3	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
PW-3	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
PW-3	9/10/2013	Benzene	ND	1	0.46	5	ug/L
PW-3	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
PW-3	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
PW-3	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
PW-3	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
PW-3	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
PW-3	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
PW-3	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
PW-3	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
PW-3	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
PW-3	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
PW-3	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
PW-3	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
PW-3	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
PW-3	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
PW-3	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
PW-3	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
PW-3	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
PW-3	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
PW-3	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
PW-3	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
PW-3	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
PW-3	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
PW-3	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
PW-3	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
PW-3	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
PW-3	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
PW-3	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
PW-3	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
PW-3	9/10/2013	Styrene	ND	1	0.58	100	ug/L
PW-3	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
PW-3	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
PW-3	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
PW-3	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
PW-3	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
PW-3	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
PW-3	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
PW-3	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
PW-3	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
PW-3	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
PW-3	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
PW-3	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
PW-3	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
PW-3	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
PW-3	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
PW-3	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
PW-3	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
PW-3	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
PW-3	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
PW-3	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
PW-3	9/10/2013	MTBE	ND	1	0.77	143	ug/L
PW-3	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
PW-3	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
PW-3	9/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-3	9/10/2014	Acetone	ND	10	4.9	14064	ug/L
PW-3	9/10/2014	Chloroform	ND	1	0.32	100	ug/L
PW-3	9/10/2014	Benzene	ND	1	0.15	5	ug/L
PW-3	9/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
PW-3	9/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
PW-3	9/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
PW-3	9/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
PW-3	9/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
PW-3	9/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
PW-3	9/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
PW-3	9/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
PW-3	9/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
PW-3	9/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
PW-3	9/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
PW-3	9/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-3	9/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
PW-3	9/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
PW-3	9/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
PW-3	9/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-3	9/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
PW-3	9/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
PW-3	9/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
PW-3	9/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-3	9/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-3	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
PW-3	9/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
PW-3	9/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
PW-3	9/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
PW-3	9/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
PW-3	9/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
PW-3	9/10/2014	Styrene	ND	1	0.12	100	ug/L
PW-3	9/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
PW-3	9/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
PW-3	9/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
PW-3	9/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
PW-3	9/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
PW-3	9/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-3	9/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
PW-3	9/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
PW-3	9/10/2014	Toluene	ND	1	0.17	1000	ug/L
PW-3	9/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-3	9/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
PW-3	9/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
PW-3	9/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
PW-3	9/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-3	9/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-3	9/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
PW-3	9/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
PW-3	9/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
PW-3	9/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
PW-3	9/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
PW-3	9/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
PW-3	9/10/2014	MTBE	ND	1	0.25	143	ug/L
PW-3	9/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
PW-3	9/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
PW-3	8/23/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
PW-3	8/23/2015	Acetone	ND	10	0.94	14064	ug/L
PW-3	8/23/2015	Chloroform	ND	1	0.21	100	ug/L
PW-3	8/23/2015	Benzene	ND	1	0.065	5	ug/L
PW-3	8/23/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
PW-3	8/23/2015	Bromomethane	ND	3	1.2	7.54	ug/L
PW-3	8/23/2015	Chloromethane	ND	3	0.17	20.32	ug/L
PW-3	8/23/2015	Dibromomethane	ND	1	0.23	8	ug/L
PW-3	8/23/2015	Chloroethane	ND	2	0.1	20857	ug/L
PW-3	8/23/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
PW-3	8/23/2015	Methylene Chloride	ND	3	0.36	5	ug/L
PW-3	8/23/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
PW-3	8/23/2015	Bromoform	ND	1	0.16	32.9	ug/L
PW-3	8/23/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
PW-3	8/23/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-3	8/23/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
PW-3	8/23/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-3	8/23/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
PW-3	8/23/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-3	8/23/2015	2-Butanone	ND	10	0.36	5565	ug/L
PW-3	8/23/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
PW-3	8/23/2015	Trichloroethene	ND	1	0.16	5	ug/L
PW-3	8/23/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
PW-3	8/23/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
PW-3	8/23/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
PW-3	8/23/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
PW-3	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
PW-3	8/23/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
PW-3	8/23/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
PW-3	8/23/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
PW-3	8/23/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
PW-3	8/23/2015	Ethylbenzene	ND	1	0.1	700	ug/L
PW-3	8/23/2015	Styrene	ND	1	0.11	100	ug/L
PW-3	8/23/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	8/23/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
PW-3	8/23/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-3	8/23/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
PW-3	8/23/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
PW-3	8/23/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-3	8/23/2015	Bromobenzene	ND	1	0.11	62	ug/L
PW-3	8/23/2015	Toluene	ND	1	0.11	1000	ug/L
PW-3	8/23/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
PW-3	8/23/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
PW-3	8/23/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
PW-3	8/23/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
PW-3	8/23/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-3	8/23/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
PW-3	8/23/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
PW-3	8/23/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
PW-3	8/23/2015	2-Hexanone	ND	10	0.48	38	ug/L
PW-3	8/23/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
PW-3	8/23/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-3	8/23/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
PW-3	8/23/2015	MTBE	ND	1	0.17	143	ug/L
PW-3	8/23/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
PW-3	8/23/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-3	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-3	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
PW-3	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
PW-3	8/31/2016	Benzene	ND	1	0.096	5	ug/L
PW-3	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-3	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-3	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-3	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-3	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-3	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-3	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-3	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-3	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-3	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-3	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-3	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-3	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-3	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-3	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-3	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-3	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-3	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-3	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-3	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-3	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-3	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-3	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-3	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-3	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-3	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-3	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-3	8/31/2016	Styrene	ND	1	0.11	100	ug/L
PW-3	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-3	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-3	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-3	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-3	8/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-3	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-3	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-3	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-3	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
PW-3	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-3	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-3	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-3	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-3	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-3	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-3	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-3	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-3	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-3	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-3	8/31/2016	MTBE	0.84	1	0.21	143	ug/L
PW-3	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-3	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-3	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-3	9/18/2017	Acetone	ND	10	0.82	14064	ug/L
PW-3	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-3	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-3	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-3	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-3	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-3	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-3	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-3	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-3	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-3	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-3	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-3	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-3	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-3	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-3	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-3	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-3	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-3	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-3	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-3	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-3	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-3	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-3	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-3	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-3	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-3	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-3	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-3	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-3	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-3	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-3	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-3	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-3	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-3	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-3	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-3	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-3	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-3	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-3	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-3	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-3	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-3	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-3	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-3	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-3	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-3	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-3	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-3	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-3	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-3	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-3	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-3	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-3	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-3	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
PW-3	9/19/2018	Acetone	5.1	10	0.79	14064	ug/L
PW-3	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
PW-3	9/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-3	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
PW-3	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-3	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-3	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-3	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-3	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
PW-3	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-3	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-3	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-3	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-3	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-3	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
PW-3	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-3	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-3	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
PW-3	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-3	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-3	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-3	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-3	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-3	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-3	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-3	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-3	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-3	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-3	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-3	9/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-3	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-3	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-3	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-3	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-3	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-3	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-3	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-3	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-3	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-3	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-3	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-3	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-3	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-3	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-3	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-3	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
PW-3	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-3	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-3	9/19/2018	MTBE	ND	1	0.32	143	ug/L
PW-3	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-3	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-3	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-3	11/20/2018	Acetone	27	10	0.76	14064	ug/L
PW-3	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
PW-3	11/20/2018	Benzene	ND	1	0.17	5	ug/L
PW-3	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
PW-3	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
PW-3	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
PW-3	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-3	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-3	11/20/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
PW-3	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-3	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-3	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-3	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-3	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
PW-3	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-3	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
PW-3	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
PW-3	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
PW-3	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
PW-3	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-3	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-3	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-3	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-3	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
PW-3	11/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-3	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-3	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-3	11/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-3	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-3	11/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-3	11/20/2018	Styrene	ND	1	0.25	100	ug/L
PW-3	11/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-3	11/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
PW-3	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-3	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
PW-3	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-3	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-3	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-3	11/20/2018	Toluene	ND	1	0.17	1000	ug/L
PW-3	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-3	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-3	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	11/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-3	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-3	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-3	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	11/20/2018	Pentafluorobenzene	**10**	0	0		None
PW-3	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-3	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-3	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
PW-3	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-3	11/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-3	11/20/2018	MTBE	ND	1	0.46	143	ug/L
PW-3	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-3	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-3	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
PW-3	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
PW-3	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
PW-3	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
PW-3	2/20/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
PW-3	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
PW-3	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
PW-3	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
PW-3	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
PW-3	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
PW-3	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
PW-3	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
PW-3	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
PW-3	2/20/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
PW-3	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
PW-3	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
PW-3	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
PW-3	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
PW-3	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
PW-3	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
PW-3	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
PW-3	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
PW-3	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
PW-3	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
PW-3	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
PW-3	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
PW-3	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
PW-3	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
PW-3	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
PW-3	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
PW-3	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
PW-3	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
PW-3	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
PW-3	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
PW-3	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
PW-3	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
PW-3	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
PW-3	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
PW-3	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
PW-3	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
PW-3	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
PW-3	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
PW-3	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
PW-3	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
PW-3	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
PW-3	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
PW-3	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
PW-3	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
PW-3	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
PW-3	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
PW-3	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
PW-3	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
PW-3	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
PW-3	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
PW-3	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
PW-3	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
PW-3	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
PW-3	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-3	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-3	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-3	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-3	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-3	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-3	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-3	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-3	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-3	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-3	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-3	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-3	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-3	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-3	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-3	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-3	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-3	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-3	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-3	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-3	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-3	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-3	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-3	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-3	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-3	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-3	5/14/2019	Acetone	7	10	1.199396	14064	ug/L
PW-3	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
PW-3	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-3	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-3	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-3	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-3	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-3	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-3	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-3	5/14/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-3	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-3	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-3	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-3	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-3	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-3	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-3	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-3	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-3	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-3	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-3	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-3	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-3	5/14/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-3	5/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-3	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-3	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-3	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-3	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-3	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-3	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-3	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-3	8/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-3	8/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-3	8/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-3	8/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-3	8/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-3	8/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-3	8/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	8/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-3	8/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-3	8/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-3	8/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-3	8/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-3	8/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-3	8/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-3	8/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-3	8/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-3	8/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-3	8/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-3	8/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-3	8/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-3	8/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-3	8/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	8/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-3	8/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-3	8/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-3	8/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	8/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-3	8/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-3	8/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-3	8/28/2019	Acetone	2	10	1.199396	14064	ug/L
PW-3	8/28/2019	Benzene	ND	1	0.166639	5	ug/L
PW-3	8/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-3	8/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-3	8/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-3	8/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	8/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-3	8/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-3	8/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-3	8/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-3	8/28/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-3	8/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	8/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-3	8/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-3	8/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-3	8/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-3	8/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	8/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-3	8/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-3	8/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-3	8/28/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	8/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-3	8/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-3	8/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-3	8/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-3	8/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-3	8/28/2019	Styrene	ND	1	0.191323	100	ug/L
PW-3	8/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-3	8/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-3	8/28/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-3	8/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-3	8/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-3	8/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-3	8/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-3	8/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-3	8/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-3	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-3	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-3	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
PW-3	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-3	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-3	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-3	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-3	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-3	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-3	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-3	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-3	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-3	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-3	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-3	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-3	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-3	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-3	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-3	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-3	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-3	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-3	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-3	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-3	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-3	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-3	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-3	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-3	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-3	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-3	9/21/2020	Benzene	ND	1	0.23	5	ug/L
PW-3	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-3	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-3	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-3	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-3	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-3	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-3	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-3	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-3	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-3	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-3	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-3	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-3	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-3	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-3	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-3	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-3	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-3	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-3	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-3	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-3	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-3	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-3	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-3	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-3	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-3	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-3	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-3	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-3	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-3	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-3	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-3	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-3	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-3	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-3	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-3	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-3	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-3	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-3	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-3	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-3	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-3	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-3	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-3	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-3	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-3	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-3	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-3	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-3	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-3	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-3	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-3	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-3	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-3	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-3	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-3	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-3	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-3	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-3	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-3	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-3	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-3	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-3	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-3	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-3	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-3	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-3	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-3	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-3	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-3	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-3	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-3	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-3	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-3	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-3	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-3	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-3	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-3	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-3	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-3	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-3	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-3	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-3	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-3	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-3	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-3	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-3	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-3	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-3	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-3	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-3	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-3	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-3	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-3	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-3	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-3	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-3	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-3	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-3	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-3	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-3	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-3	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-3	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-3	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-3	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-3	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-3	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-3	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-3	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-3	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-3	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-3	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-3	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-3	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-3	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-3	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-3	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-3	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-3	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-3	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-3	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-3	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-3	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-3	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-3	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-3	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-3	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-3	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-3	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-3	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-3	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-3	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-3	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-4	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
PW-4	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
PW-4	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
PW-4	9/10/2013	Benzene	ND	1	0.46	5	ug/L
PW-4	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
PW-4	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
PW-4	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
PW-4	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
PW-4	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
PW-4	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
PW-4	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
PW-4	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
PW-4	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
PW-4	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
PW-4	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
PW-4	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
PW-4	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
PW-4	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
PW-4	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
PW-4	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
PW-4	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
PW-4	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
PW-4	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
PW-4	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
PW-4	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
PW-4	9/10/2013	1,2,4-Trimethylbenzene	6.8	1	0.51	56	ug/L
PW-4	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
PW-4	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
PW-4	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
PW-4	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
PW-4	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
PW-4	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
PW-4	9/10/2013	Styrene	ND	1	0.58	100	ug/L
PW-4	9/10/2013	n-Propylbenzene	1.3	1	0.41	660	ug/L
PW-4	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
PW-4	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
PW-4	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
PW-4	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
PW-4	9/10/2013	1,3,5-Trimethylbenzene	2.3	1	0.4	60	ug/L
PW-4	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
PW-4	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
PW-4	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
PW-4	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-4	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
PW-4	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
PW-4	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
PW-4	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
PW-4	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
PW-4	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
PW-4	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
PW-4	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
PW-4	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
PW-4	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
PW-4	9/10/2013	MTBE	ND	1	0.77	143	ug/L
PW-4	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
PW-4	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
PW-4	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
PW-4	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
PW-4	6/10/2016	Benzene	ND	1	0.096	5	ug/L
PW-4	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-4	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-4	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-4	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-4	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-4	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-4	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-4	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-4	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-4	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-4	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-4	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-4	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-4	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-4	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-4	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-4	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-4	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-4	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-4	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	6/10/2016	1,2,4-Trimethylbenzene	0.45	1	0.11	56	ug/L
PW-4	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-4	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-4	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-4	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-4	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-4	6/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-4	6/10/2016	Styrene	ND	1	0.11	100	ug/L
PW-4	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-4	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-4	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-4	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-4	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-4	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-4	6/10/2016	1,3,5-Trimethylbenzene	0.31	1	0.12	60	ug/L
PW-4	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-4	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
PW-4	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-4	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	6/10/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-4	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-4	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-4	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-4	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-4	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-4	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-4	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-4	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-4	6/10/2016	MTBE	ND	1	0.21	143	ug/L
PW-4	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-4	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
PW-4	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
PW-4	8/31/2016	Benzene	ND	1	0.096	5	ug/L
PW-4	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-4	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-4	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-4	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-4	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-4	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-4	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-4	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-4	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-4	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-4	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-4	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-4	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-4	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-4	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-4	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-4	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-4	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-4	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-4	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-4	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-4	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-4	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-4	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-4	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-4	8/31/2016	Styrene	ND	1	0.11	100	ug/L
PW-4	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-4	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-4	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-4	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-4	8/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-4	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-4	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-4	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-4	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
PW-4	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-4	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-4	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-4	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-4	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-4	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-4	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-4	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-4	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-4	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-4	8/31/2016	MTBE	ND	1	0.21	143	ug/L
PW-4	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-4	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-4	3/30/2017	Carbon tetrachloride	ND	0.5	0.11	5	ug/L
PW-4	3/30/2017	Acetone	1.2	5	0.88	14064	ug/L
PW-4	3/30/2017	Chloroform	ND	0.5	0.089	100	ug/L
PW-4	3/30/2017	Benzene	ND	0.5	0.096	5	ug/L
PW-4	3/30/2017	1,1,1-Trichloroethane	ND	0.5	0.073	200	ug/L
PW-4	3/30/2017	Bromomethane	ND	1.5	0.78	7.54	ug/L
PW-4	3/30/2017	Chloromethane	ND	1.5	0.21	20.32	ug/L
PW-4	3/30/2017	Dibromomethane	ND	0.5	0.12	8	ug/L
PW-4	3/30/2017	Chloroethane	ND	1	0.23	20857	ug/L
PW-4	3/30/2017	Vinyl Chloride	ND	0.5	0.18	2	ug/L
PW-4	3/30/2017	Methylene Chloride	ND	1.5	0.11	5	ug/L
PW-4	3/30/2017	Carbon Disulfide	ND	5	0.6	810	ug/L
PW-4	3/30/2017	Bromoform	ND	0.5	0.21	32.9	ug/L
PW-4	3/30/2017	Bromodichloromethane	ND	0.5	0.18	1.34	ug/L
PW-4	3/30/2017	1,1-Dichloroethane	ND	0.5	0.1	25	ug/L
PW-4	3/30/2017	1,1-Dichloroethene	ND	0.5	0.081	7	ug/L
PW-4	3/30/2017	Trichlorofluoromethane	ND	0.5	0.18	1137	ug/L
PW-4	3/30/2017	Dichlorodifluoromethane	ND	0.5	0.32	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/30/2017	1,2-Dichloropropane	ND	0.5	0.1	5	ug/L
PW-4	3/30/2017	2-Butanone	ND	5	1.1	5565	ug/L
PW-4	3/30/2017	1,1,2-Trichloroethane	ND	0.5	0.14	5	ug/L
PW-4	3/30/2017	Trichloroethene	ND	0.5	0.18	5	ug/L
PW-4	3/30/2017	1,1,2,2-Tetrachloroethane	ND	1	0.14	10	ug/L
PW-4	3/30/2017	1,2,3-Trichlorobenzene	ND	0.5	0.11	70	ug/L
PW-4	3/30/2017	2-Chlorotoluene	ND	0.5	0.4	233	ug/L
PW-4	3/30/2017	1,2,4-Trimethylbenzene	ND	0.5	0.1	56	ug/L
PW-4	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*1*	1.4	0.0033	ug/L
PW-4	3/30/2017	1,2,3-Trichloropropane	*ND*	*1*	0.39	0.0084	ug/L
PW-4	3/30/2017	tert-Butylbenzene	ND	0.5	0.1	690	ug/L
PW-4	3/30/2017	Isopropylbenzene	ND	0.5	0.098	447	ug/L
PW-4	3/30/2017	p-Isopropyltoluene	ND	0.5	0.14	NA	ug/L
PW-4	3/30/2017	Ethylbenzene	ND	0.5	0.11	700	ug/L
PW-4	3/30/2017	Styrene	ND	0.5	0.16	100	ug/L
PW-4	3/30/2017	n-Propylbenzene	ND	0.5	0.13	660	ug/L
PW-4	3/30/2017	n-Butylbenzene	ND	1.5	0.16	1000	ug/L
PW-4	3/30/2017	4-Chlorotoluene	ND	0.5	0.4	250	ug/L
PW-4	3/30/2017	1,2-Dibromoethane	*ND*	*0.5*	0.13	0.05	ug/L
PW-4	3/30/2017	1,2-Dichloroethane	ND	0.5	0.12	5	ug/L
PW-4	3/30/2017	4-Methyl-2-Pentanone	ND	5	0.71	1243	ug/L
PW-4	3/30/2017	1,3,5-Trimethylbenzene	ND	0.5	0.12	60	ug/L
PW-4	3/30/2017	Bromobenzene	ND	0.5	0.14	62	ug/L
PW-4	3/30/2017	Toluene	ND	0.5	0.089	1000	ug/L
PW-4	3/30/2017	Chlorobenzene	ND	0.5	0.11	77.6	ug/L
PW-4	3/30/2017	Dibromochloromethane	ND	0.5	0.078	1.68	ug/L
PW-4	3/30/2017	Tetrachloroethene	ND	0.5	0.15	5	ug/L
PW-4	3/30/2017	sec-Butylbenzene	ND	0.5	0.1	2000	ug/L
PW-4	3/30/2017	1,3-Dichloropropane	ND	0.5	0.16	370	ug/L
PW-4	3/30/2017	cis-1,2-Dichloroethene	ND	0.5	0.2	70	ug/L
PW-4	3/30/2017	trans-1,2-Dichloroethene	ND	0.5	0.18	100	ug/L
PW-4	3/30/2017	1,1-Dichloropropene	ND	0.5	0.13	NA	ug/L
PW-4	3/30/2017	2-Hexanone	ND	5	0.66	38	ug/L
PW-4	3/30/2017	2,2-Dichloropropane	ND	1	0.12	NA	ug/L
PW-4	3/30/2017	1,1,1,2-Tetrachloroethane	ND	0.5	0.11	5.74	ug/L
PW-4	3/30/2017	Xylenes, Total	ND	0.75	0.32	620	ug/L
PW-4	3/30/2017	MTBE	ND	0.5	0.15	143	ug/L
PW-4	3/30/2017	cis-1,3-Dichloropropene	ND	0.5	0.1	NA	ug/L
PW-4	3/30/2017	trans-1,3-Dichloropropene	ND	0.5	0.089	NA	ug/L
PW-4	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	9/18/2017	Acetone	ND	10	0.82	14064	ug/L
PW-4	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-4	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-4	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-4	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-4	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-4	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-4	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-4	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-4	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-4	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-4	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-4	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-4	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-4	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-4	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-4	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-4	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-4	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-4	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-4	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-4	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-4	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-4	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-4	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-4	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-4	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-4	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-4	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-4	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-4	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-4	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-4	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-4	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-4	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-4	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-4	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-4	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-4	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-4	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-4	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-4	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-4	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-4	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-4	3/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	3/1/2018	Acetone	ND	10	0.82	14064	ug/L
PW-4	3/1/2018	Chloroform	ND	1	0.4	100	ug/L
PW-4	3/1/2018	Benzene	ND	1	0.062	5	ug/L
PW-4	3/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-4	3/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	3/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	3/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
PW-4	3/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
PW-4	3/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-4	3/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
PW-4	3/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-4	3/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
PW-4	3/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-4	3/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	3/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-4	3/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-4	3/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	3/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-4	3/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	3/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-4	3/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
PW-4	3/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-4	3/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-4	3/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	3/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	3/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-4	3/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-4	3/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-4	3/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-4	3/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-4	3/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
PW-4	3/1/2018	Styrene	ND	1	0.16	100	ug/L
PW-4	3/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-4	3/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-4	3/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	3/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-4	3/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	3/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-4	3/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-4	3/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
PW-4	3/1/2018	Toluene	ND	1	0.064	1000	ug/L
PW-4	3/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	3/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-4	3/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-4	3/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-4	3/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-4	3/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-4	3/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	3/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-4	3/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
PW-4	3/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-4	3/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-4	3/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-4	3/1/2018	MTBE	ND	1	0.24	143	ug/L
PW-4	3/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-4	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
PW-4	9/19/2018	Acetone	ND	10	0.79	14064	ug/L
PW-4	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
PW-4	9/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-4	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
PW-4	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-4	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-4	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
PW-4	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-4	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-4	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-4	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-4	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-4	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
PW-4	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-4	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
PW-4	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-4	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-4	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-4	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-4	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-4	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-4	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-4	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-4	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-4	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-4	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-4	9/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-4	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-4	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-4	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-4	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-4	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-4	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-4	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-4	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-4	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-4	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-4	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-4	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-4	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-4	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
PW-4	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-4	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-4	9/19/2018	MTBE	ND	1	0.32	143	ug/L
PW-4	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-4	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-4	11/19/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-4	11/19/2018	Acetone	ND	10	0.76	14064	ug/L
PW-4	11/19/2018	Chloroform	ND	1	0.24	100	ug/L
PW-4	11/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-4	11/19/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
PW-4	11/19/2018	Bromomethane	ND	3	0.27	7.54	ug/L
PW-4	11/19/2018	Chloromethane	ND	3	0.32	20.32	ug/L
PW-4	11/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-4	11/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-4	11/19/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
PW-4	11/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-4	11/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-4	11/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-4	11/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-4	11/19/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
PW-4	11/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-4	11/19/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
PW-4	11/19/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	11/19/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
PW-4	11/19/2018	2-Butanone	ND	10	1.4	5565	ug/L
PW-4	11/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-4	11/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-4	11/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-4	11/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-4	11/19/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
PW-4	11/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-4	11/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-4	11/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-4	11/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-4	11/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-4	11/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-4	11/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-4	11/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-4	11/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-4	11/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	11/19/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
PW-4	11/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-4	11/19/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
PW-4	11/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-4	11/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-4	11/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-4	11/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-4	11/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-4	11/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-4	11/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	11/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-4	11/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-4	11/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-4	11/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	11/19/2018	Pentafluorobenzene	**10**	0	0		None
PW-4	11/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-4	11/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-4	11/19/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
PW-4	11/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-4	11/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-4	11/19/2018	MTBE	ND	1	0.46	143	ug/L
PW-4	11/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-4	11/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-4	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
PW-4	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
PW-4	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
PW-4	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
PW-4	2/20/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
PW-4	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
PW-4	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
PW-4	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
PW-4	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
PW-4	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
PW-4	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
PW-4	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
PW-4	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
PW-4	2/20/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
PW-4	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
PW-4	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
PW-4	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
PW-4	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
PW-4	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
PW-4	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
PW-4	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
PW-4	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
PW-4	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
PW-4	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
PW-4	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
PW-4	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
PW-4	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
PW-4	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
PW-4	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
PW-4	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
PW-4	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
PW-4	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
PW-4	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
PW-4	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
PW-4	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
PW-4	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
PW-4	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
PW-4	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
PW-4	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
PW-4	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
PW-4	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
PW-4	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
PW-4	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
PW-4	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
PW-4	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
PW-4	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
PW-4	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
PW-4	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
PW-4	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
PW-4	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
PW-4	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
PW-4	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
PW-4	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
PW-4	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
PW-4	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
PW-4	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
PW-4	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
PW-4	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	5/14/2019	1,2,4-Trimethylbenzene	0.23	1	0.213199	56	ug/L
PW-4	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	5/14/2019	Acetone	7.1	10	1.199396	14064	ug/L
PW-4	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	5/14/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	5/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-4	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	8/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	8/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	8/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	8/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	8/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	8/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	8/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	8/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	8/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	8/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-4	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	8/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	8/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	8/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	8/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	8/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	8/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	8/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	8/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	8/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	8/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	8/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	8/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	8/27/2019	Acetone	ND	10	1.199396	14064	ug/L
PW-4	8/27/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	8/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	8/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	8/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	8/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	8/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	8/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	8/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	8/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	8/27/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	8/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	8/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	8/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	8/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	8/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	8/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	8/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	8/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	8/27/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	8/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	8/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	8/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	8/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	8/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	8/27/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	8/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	8/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	8/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	8/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	8/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	8/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	8/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	8/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	8/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	8/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	8/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	8/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	8/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	8/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	8/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	8/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	8/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	8/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-4	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	8/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	8/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	8/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	8/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	8/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	8/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	8/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	8/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	8/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	8/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	8/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	8/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	8/27/2019	Acetone	ND	10	1.199396	14064	ug/L
PW-4	8/27/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	8/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	8/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	8/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	8/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	8/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	8/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	8/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	8/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	8/27/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	8/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	8/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	8/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	8/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	8/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	8/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	8/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	8/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	8/27/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	8/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	8/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	8/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	8/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	8/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	8/27/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	8/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	8/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-4	8/27/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	8/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	8/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	8/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	8/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	8/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	8/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-4	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
PW-4	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-4	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-4	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-4	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-4	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-4	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-4	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-4	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-4	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-4	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-4	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-4	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-4	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-4	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-4	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-4	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-4	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-4	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-4	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-4	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-4	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-4	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-4	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-4	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-4	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-4	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-4	9/21/2020	Benzene	ND	1	0.23	5	ug/L
PW-4	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-4	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-4	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-4	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-4	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-4	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-4	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-4	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-4	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-4	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-4	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-4	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-4	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-4	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-4	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-4	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-4	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-4	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-4	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-4	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-4	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-4	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-4	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-4	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-4	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-4	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-4	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-4	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-4	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-4	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-4	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-4	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-4	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-4	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-4	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-4	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-4	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-4	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-4	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-4	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-4	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-4	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-4	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-4	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-4	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-4	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-4	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-4	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-4	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-4	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-4	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-4	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-4	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-4	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-4	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-4	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-4	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-4	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-4	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-4	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-4	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-4	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-4	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-4	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-4	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-4	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-4	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-4	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-4	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-4	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-4	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-4	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-4	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-4	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-4	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-4	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-4	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-4	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-4	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-4	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-4	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-4	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-4	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-4	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-4	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-4	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-4	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-4	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-4	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-4	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-4	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-4	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-4	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-4	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-4	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
SMW-2	8/23/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
SMW-2	8/23/2012	Acetone	ND	100	15	14064	ug/L
SMW-2	8/23/2012	Chloroform	ND	10	3.5	100	ug/L
SMW-2	8/23/2012	Benzene	*ND*	*10*	4	5	ug/L
SMW-2	8/23/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
SMW-2	8/23/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
SMW-2	8/23/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
SMW-2	8/23/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
SMW-2	8/23/2012	Chloroethane	ND	20	4.4	20857	ug/L
SMW-2	8/23/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
SMW-2	8/23/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
SMW-2	8/23/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
SMW-2	8/23/2012	Bromoform	ND	10	4.3	32.9	ug/L
SMW-2	8/23/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
SMW-2	8/23/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
SMW-2	8/23/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
SMW-2	8/23/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
SMW-2	8/23/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
SMW-2	8/23/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
SMW-2	8/23/2012	2-Butanone	ND	100	22	5565	ug/L
SMW-2	8/23/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
SMW-2	8/23/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
SMW-2	8/23/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
SMW-2	8/23/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
SMW-2	8/23/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
SMW-2	8/23/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
SMW-2	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/23/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
SMW-2	8/23/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
SMW-2	8/23/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
SMW-2	8/23/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
SMW-2	8/23/2012	Ethylbenzene	ND	10	3.8	700	ug/L
SMW-2	8/23/2012	Styrene	ND	10	4.1	100	ug/L
SMW-2	8/23/2012	n-Propylbenzene	ND	10	4	660	ug/L
SMW-2	8/23/2012	n-Butylbenzene	ND	30	4	1000	ug/L
SMW-2	8/23/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
SMW-2	8/23/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
SMW-2	8/23/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
SMW-2	8/23/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
SMW-2	8/23/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
SMW-2	8/23/2012	Bromobenzene	ND	10	6.3	62	ug/L
SMW-2	8/23/2012	Toluene	ND	10	4.7	1000	ug/L
SMW-2	8/23/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
SMW-2	8/23/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
SMW-2	8/23/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
SMW-2	8/23/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
SMW-2	8/23/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
SMW-2	8/23/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
SMW-2	8/23/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
SMW-2	8/23/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
SMW-2	8/23/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
SMW-2	8/23/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
SMW-2	8/23/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
SMW-2	8/23/2012	Xylenes, Total	ND	15	13	620	ug/L
SMW-2	8/23/2012	MTBE	12	10	9.6	143	ug/L
SMW-2	8/23/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
SMW-2	8/23/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
SMW-2	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
SMW-2	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
SMW-2	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
SMW-2	9/9/2013	Benzene	ND	1	0.46	5	ug/L
SMW-2	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
SMW-2	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
SMW-2	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
SMW-2	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
SMW-2	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
SMW-2	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
SMW-2	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-2	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
SMW-2	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
SMW-2	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
SMW-2	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
SMW-2	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
SMW-2	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
SMW-2	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
SMW-2	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
SMW-2	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
SMW-2	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
SMW-2	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
SMW-2	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
SMW-2	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
SMW-2	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
SMW-2	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
SMW-2	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
SMW-2	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
SMW-2	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
SMW-2	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
SMW-2	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
SMW-2	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
SMW-2	9/9/2013	Styrene	ND	1	0.58	100	ug/L
SMW-2	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
SMW-2	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
SMW-2	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
SMW-2	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
SMW-2	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
SMW-2	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
SMW-2	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
SMW-2	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
SMW-2	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
SMW-2	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
SMW-2	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
SMW-2	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
SMW-2	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
SMW-2	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
SMW-2	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
SMW-2	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-2	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
SMW-2	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
SMW-2	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
SMW-2	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
SMW-2	9/9/2013	MTBE	9.7	1	0.77	143	ug/L
SMW-2	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
SMW-2	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-2	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-2	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
SMW-2	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
SMW-2	9/11/2014	Benzene	ND	1	0.15	5	ug/L
SMW-2	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
SMW-2	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
SMW-2	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
SMW-2	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
SMW-2	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
SMW-2	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
SMW-2	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
SMW-2	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
SMW-2	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
SMW-2	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
SMW-2	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
SMW-2	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
SMW-2	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-2	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
SMW-2	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
SMW-2	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
SMW-2	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-2	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
SMW-2	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
SMW-2	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
SMW-2	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-2	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-2	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
SMW-2	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
SMW-2	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
SMW-2	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
SMW-2	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
SMW-2	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
SMW-2	9/11/2014	Styrene	ND	1	0.12	100	ug/L
SMW-2	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
SMW-2	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
SMW-2	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
SMW-2	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
SMW-2	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
SMW-2	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-2	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
SMW-2	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
SMW-2	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
SMW-2	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-2	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
SMW-2	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
SMW-2	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
SMW-2	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-2	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-2	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
SMW-2	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
SMW-2	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
SMW-2	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
SMW-2	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
SMW-2	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
SMW-2	9/11/2014	MTBE	12	1	0.25	143	ug/L
SMW-2	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
SMW-2	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-2	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
SMW-2	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
SMW-2	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
SMW-2	8/17/2015	Benzene	ND	1	0.065	5	ug/L
SMW-2	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
SMW-2	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
SMW-2	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
SMW-2	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
SMW-2	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
SMW-2	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
SMW-2	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
SMW-2	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
SMW-2	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
SMW-2	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
SMW-2	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-2	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
SMW-2	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-2	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
SMW-2	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
SMW-2	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
SMW-2	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
SMW-2	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
SMW-2	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
SMW-2	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
SMW-2	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
SMW-2	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
SMW-2	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
SMW-2	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
SMW-2	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
SMW-2	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
SMW-2	8/17/2015	Styrene	ND	1	0.11	100	ug/L
SMW-2	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
SMW-2	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
SMW-2	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-2	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
SMW-2	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
SMW-2	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-2	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
SMW-2	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
SMW-2	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
SMW-2	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
SMW-2	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
SMW-2	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
SMW-2	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-2	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
SMW-2	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
SMW-2	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
SMW-2	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
SMW-2	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
SMW-2	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-2	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
SMW-2	8/17/2015	MTBE	11	1	0.17	143	ug/L
SMW-2	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-2	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-2	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
SMW-2	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-2	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
SMW-2	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
SMW-2	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-2	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
SMW-2	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-2	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
SMW-2	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
SMW-2	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-2	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
SMW-2	9/9/2016	MTBE	13	1	0.21	143	ug/L
SMW-2	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-2	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
SMW-2	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-2	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
SMW-2	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
SMW-2	9/9/2016	Benzene	ND	1	0.096	5	ug/L
SMW-2	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
SMW-2	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
SMW-2	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
SMW-2	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
SMW-2	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
SMW-2	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-2	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
SMW-2	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
SMW-2	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
SMW-2	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
SMW-2	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
SMW-2	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
SMW-2	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
SMW-2	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
SMW-2	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
SMW-2	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
SMW-2	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
SMW-2	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
SMW-2	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
SMW-2	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-2	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
SMW-2	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
SMW-2	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
SMW-2	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
SMW-2	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
SMW-2	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
SMW-2	9/9/2016	Styrene	ND	1	0.11	100	ug/L
SMW-2	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
SMW-2	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
SMW-2	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
SMW-2	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
SMW-2	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
SMW-2	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
SMW-2	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-2	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
SMW-2	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
SMW-2	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-2	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-2	9/11/2017	Acetone	6.2	10	0.82	14064	ug/L
SMW-2	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
SMW-2	9/11/2017	Benzene	ND	1	0.062	5	ug/L
SMW-2	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
SMW-2	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-2	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-2	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
SMW-2	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
SMW-2	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
SMW-2	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
SMW-2	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
SMW-2	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
SMW-2	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
SMW-2	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
SMW-2	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
SMW-2	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-2	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
SMW-2	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
SMW-2	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-2	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
SMW-2	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
SMW-2	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
SMW-2	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-2	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
SMW-2	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
SMW-2	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
SMW-2	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
SMW-2	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
SMW-2	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
SMW-2	9/11/2017	Styrene	ND	1	0.16	100	ug/L
SMW-2	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
SMW-2	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
SMW-2	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-2	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-2	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-2	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
SMW-2	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
SMW-2	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
SMW-2	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
SMW-2	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-2	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
SMW-2	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
SMW-2	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-2	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
SMW-2	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-2	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
SMW-2	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
SMW-2	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
SMW-2	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
SMW-2	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
SMW-2	9/11/2017	MTBE	11	1	0.24	143	ug/L
SMW-2	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
SMW-2	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
SMW-2	9/18/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
SMW-2	9/18/2018	Acetone	6.7	10	0.79	14064	ug/L
SMW-2	9/18/2018	Chloroform	ND	1	0.4	100	ug/L
SMW-2	9/18/2018	Benzene	ND	1	0.17	5	ug/L
SMW-2	9/18/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
SMW-2	9/18/2018	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-2	9/18/2018	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-2	9/18/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-2	9/18/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-2	9/18/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
SMW-2	9/18/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-2	9/18/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-2	9/18/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-2	9/18/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-2	9/18/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	9/18/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-2	9/18/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
SMW-2	9/18/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-2	9/18/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-2	9/18/2018	2-Butanone	ND	10	1.3	5565	ug/L
SMW-2	9/18/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-2	9/18/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-2	9/18/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-2	9/18/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-2	9/18/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/18/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-2	9/18/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-2	9/18/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-2	9/18/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-2	9/18/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-2	9/18/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-2	9/18/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-2	9/18/2018	Styrene	ND	1	0.25	100	ug/L
SMW-2	9/18/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-2	9/18/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	9/18/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-2	9/18/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-2	9/18/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-2	9/18/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-2	9/18/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-2	9/18/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-2	9/18/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-2	9/18/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-2	9/18/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-2	9/18/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-2	9/18/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-2	9/18/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-2	9/18/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-2	9/18/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-2	9/18/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-2	9/18/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-2	9/18/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
SMW-2	9/18/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-2	9/18/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-2	9/18/2018	MTBE	11	1	0.32	143	ug/L
SMW-2	9/18/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-2	9/18/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-2	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
SMW-2	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
SMW-2	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
SMW-2	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
SMW-2	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
SMW-2	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
SMW-2	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
SMW-2	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
SMW-2	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
SMW-2	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
SMW-2	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
SMW-2	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
SMW-2	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
SMW-2	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
SMW-2	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
SMW-2	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
SMW-2	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
SMW-2	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
SMW-2	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
SMW-2	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
SMW-2	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
SMW-2	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
SMW-2	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
SMW-2	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
SMW-2	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
SMW-2	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
SMW-2	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
SMW-2	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
SMW-2	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
SMW-2	8/22/2019	Benzene	0.23	1	0.166639	5	ug/L
SMW-2	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
SMW-2	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
SMW-2	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
SMW-2	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
SMW-2	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
SMW-2	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
SMW-2	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
SMW-2	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
SMW-2	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
SMW-2	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
SMW-2	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
SMW-2	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
SMW-2	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
SMW-2	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
SMW-2	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
SMW-2	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
SMW-2	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
SMW-2	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
SMW-2	8/22/2019	MTBE	12	1	0.456095	143	ug/L
SMW-2	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
SMW-2	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
SMW-2	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
SMW-2	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
SMW-2	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
SMW-2	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
SMW-2	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
SMW-2	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
SMW-2	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
SMW-2	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
SMW-2	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
SMW-2	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
SMW-2	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
SMW-2	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
SMW-2	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
SMW-2	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
SMW-2	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
SMW-2	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
SMW-2	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
SMW-2	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
SMW-2	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
SMW-2	9/19/2020	MTBE	13	1	0.39	143	ug/L
SMW-2	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
SMW-2	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
SMW-2	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
SMW-2	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
SMW-2	9/19/2020	Styrene	ND	1	0.13	100	ug/L
SMW-2	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
SMW-2	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
SMW-2	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
SMW-2	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
SMW-2	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
SMW-2	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
SMW-2	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-2	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
SMW-2	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
SMW-2	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
SMW-2	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
SMW-2	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
SMW-2	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
SMW-2	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
SMW-2	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-2	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
SMW-2	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
SMW-2	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
SMW-2	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-2	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
SMW-2	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
SMW-2	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
SMW-2	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
SMW-2	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
SMW-2	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
SMW-2	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
SMW-2	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-2	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
SMW-2	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
SMW-2	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
SMW-2	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
SMW-2	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-2	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
SMW-2	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
SMW-2	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
SMW-2	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
SMW-2	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-2	9/19/2020	Acetone	2.8	10	2.3	14064	ug/L
SMW-2	9/19/2020	Benzene	ND	1	0.23	5	ug/L
SMW-2	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
SMW-2	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
SMW-2	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
SMW-2	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
SMW-2	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
SMW-2	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
SMW-2	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-2	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
SMW-2	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
SMW-2	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
SMW-2	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
SMW-2	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
SMW-4	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
SMW-4	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
SMW-4	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
SMW-4	8/24/2012	Benzene	ND	1	0.4	5	ug/L
SMW-4	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
SMW-4	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
SMW-4	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
SMW-4	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
SMW-4	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
SMW-4	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
SMW-4	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-4	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
SMW-4	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
SMW-4	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
SMW-4	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
SMW-4	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
SMW-4	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
SMW-4	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
SMW-4	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
SMW-4	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
SMW-4	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
SMW-4	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
SMW-4	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
SMW-4	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
SMW-4	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
SMW-4	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
SMW-4	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
SMW-4	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
SMW-4	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
SMW-4	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
SMW-4	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
SMW-4	8/24/2012	Styrene	ND	1	0.41	100	ug/L
SMW-4	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
SMW-4	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
SMW-4	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
SMW-4	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
SMW-4	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
SMW-4	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
SMW-4	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
SMW-4	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
SMW-4	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
SMW-4	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
SMW-4	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
SMW-4	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
SMW-4	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
SMW-4	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
SMW-4	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
SMW-4	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
SMW-4	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
SMW-4	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
SMW-4	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
SMW-4	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
SMW-4	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
SMW-4	8/24/2012	MTBE	ND	1	0.96	143	ug/L
SMW-4	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
SMW-4	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
SMW-4	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
SMW-4	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
SMW-4	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
SMW-4	9/9/2013	Benzene	ND	1	0.46	5	ug/L
SMW-4	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
SMW-4	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
SMW-4	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
SMW-4	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
SMW-4	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
SMW-4	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
SMW-4	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-4	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
SMW-4	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
SMW-4	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
SMW-4	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
SMW-4	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
SMW-4	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
SMW-4	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
SMW-4	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
SMW-4	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
SMW-4	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
SMW-4	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
SMW-4	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
SMW-4	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
SMW-4	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
SMW-4	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
SMW-4	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
SMW-4	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
SMW-4	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
SMW-4	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
SMW-4	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
SMW-4	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
SMW-4	9/9/2013	Styrene	ND	1	0.58	100	ug/L
SMW-4	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
SMW-4	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
SMW-4	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
SMW-4	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
SMW-4	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
SMW-4	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
SMW-4	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
SMW-4	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
SMW-4	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
SMW-4	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
SMW-4	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
SMW-4	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
SMW-4	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
SMW-4	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
SMW-4	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
SMW-4	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-4	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
SMW-4	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
SMW-4	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
SMW-4	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
SMW-4	9/9/2013	MTBE	ND	1	0.77	143	ug/L
SMW-4	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
SMW-4	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-4	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-4	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
SMW-4	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
SMW-4	9/11/2014	Benzene	ND	1	0.15	5	ug/L
SMW-4	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
SMW-4	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
SMW-4	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
SMW-4	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
SMW-4	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
SMW-4	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
SMW-4	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
SMW-4	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
SMW-4	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
SMW-4	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
SMW-4	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
SMW-4	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
SMW-4	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-4	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
SMW-4	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
SMW-4	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
SMW-4	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-4	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
SMW-4	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
SMW-4	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
SMW-4	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-4	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-4	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
SMW-4	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
SMW-4	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
SMW-4	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
SMW-4	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
SMW-4	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
SMW-4	9/11/2014	Styrene	ND	1	0.12	100	ug/L
SMW-4	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
SMW-4	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
SMW-4	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
SMW-4	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
SMW-4	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
SMW-4	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-4	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
SMW-4	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
SMW-4	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
SMW-4	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-4	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
SMW-4	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
SMW-4	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
SMW-4	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-4	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-4	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
SMW-4	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
SMW-4	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
SMW-4	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
SMW-4	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
SMW-4	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
SMW-4	9/11/2014	MTBE	ND	1	0.25	143	ug/L
SMW-4	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
SMW-4	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-4	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
SMW-4	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
SMW-4	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
SMW-4	8/14/2015	Benzene	ND	1	0.065	5	ug/L
SMW-4	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
SMW-4	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
SMW-4	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
SMW-4	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
SMW-4	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
SMW-4	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
SMW-4	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
SMW-4	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
SMW-4	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
SMW-4	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
SMW-4	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-4	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
SMW-4	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-4	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
SMW-4	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
SMW-4	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
SMW-4	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
SMW-4	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
SMW-4	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
SMW-4	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
SMW-4	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
SMW-4	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
SMW-4	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
SMW-4	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
SMW-4	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
SMW-4	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
SMW-4	8/14/2015	Styrene	ND	1	0.11	100	ug/L
SMW-4	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
SMW-4	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
SMW-4	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-4	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
SMW-4	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
SMW-4	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-4	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
SMW-4	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
SMW-4	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
SMW-4	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
SMW-4	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
SMW-4	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
SMW-4	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-4	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
SMW-4	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
SMW-4	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
SMW-4	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
SMW-4	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
SMW-4	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-4	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
SMW-4	8/14/2015	MTBE	ND	1	0.17	143	ug/L
SMW-4	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-4	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-4	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-4	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
SMW-4	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
SMW-4	9/7/2016	Benzene	ND	1	0.096	5	ug/L
SMW-4	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
SMW-4	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
SMW-4	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
SMW-4	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
SMW-4	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
SMW-4	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-4	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
SMW-4	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
SMW-4	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
SMW-4	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
SMW-4	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
SMW-4	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
SMW-4	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
SMW-4	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
SMW-4	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
SMW-4	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
SMW-4	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
SMW-4	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
SMW-4	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
SMW-4	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
SMW-4	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-4	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
SMW-4	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
SMW-4	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
SMW-4	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
SMW-4	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
SMW-4	9/7/2016	Styrene	ND	1	0.11	100	ug/L
SMW-4	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
SMW-4	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
SMW-4	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
SMW-4	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
SMW-4	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
SMW-4	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
SMW-4	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-4	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
SMW-4	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
SMW-4	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-4	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
SMW-4	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
SMW-4	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
SMW-4	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-4	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
SMW-4	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-4	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
SMW-4	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
SMW-4	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-4	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
SMW-4	9/7/2016	MTBE	ND	1	0.21	143	ug/L
SMW-4	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-4	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
SMW-4	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-4	9/11/2017	Acetone	3.9	10	0.82	14064	ug/L
SMW-4	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
SMW-4	9/11/2017	Benzene	ND	1	0.062	5	ug/L
SMW-4	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
SMW-4	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-4	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-4	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
SMW-4	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
SMW-4	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
SMW-4	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
SMW-4	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
SMW-4	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
SMW-4	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
SMW-4	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
SMW-4	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
SMW-4	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-4	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
SMW-4	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
SMW-4	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-4	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
SMW-4	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
SMW-4	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
SMW-4	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-4	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
SMW-4	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
SMW-4	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
SMW-4	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
SMW-4	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
SMW-4	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
SMW-4	9/11/2017	Styrene	ND	1	0.16	100	ug/L
SMW-4	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
SMW-4	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
SMW-4	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-4	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-4	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-4	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
SMW-4	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
SMW-4	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
SMW-4	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
SMW-4	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-4	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
SMW-4	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
SMW-4	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
SMW-4	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-4	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
SMW-4	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
SMW-4	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
SMW-4	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
SMW-4	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
SMW-4	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
SMW-4	9/11/2017	MTBE	ND	1	0.24	143	ug/L
SMW-4	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
SMW-4	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
SMW-4	9/12/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
SMW-4	9/12/2018	Acetone	4.5	10	0.79	14064	ug/L
SMW-4	9/12/2018	Chloroform	ND	1	0.4	100	ug/L
SMW-4	9/12/2018	Benzene	ND	1	0.17	5	ug/L
SMW-4	9/12/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
SMW-4	9/12/2018	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-4	9/12/2018	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-4	9/12/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-4	9/12/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-4	9/12/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
SMW-4	9/12/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-4	9/12/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-4	9/12/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-4	9/12/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-4	9/12/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	9/12/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-4	9/12/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
SMW-4	9/12/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-4	9/12/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-4	9/12/2018	2-Butanone	ND	10	1.3	5565	ug/L
SMW-4	9/12/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-4	9/12/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-4	9/12/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-4	9/12/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-4	9/12/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/12/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-4	9/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-4	9/12/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-4	9/12/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-4	9/12/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-4	9/12/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-4	9/12/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-4	9/12/2018	Styrene	ND	1	0.25	100	ug/L
SMW-4	9/12/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-4	9/12/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	9/12/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-4	9/12/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-4	9/12/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-4	9/12/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-4	9/12/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-4	9/12/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-4	9/12/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-4	9/12/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-4	9/12/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
SMW-4	9/12/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-4	9/12/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	9/12/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-4	9/12/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-4	9/12/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-4	9/12/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-4	9/12/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-4	9/12/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-4	9/12/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
SMW-4	9/12/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-4	9/12/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-4	9/12/2018	MTBE	ND	1	0.32	143	ug/L
SMW-4	9/12/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-4	9/12/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-4	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-4	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
SMW-4	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
SMW-4	12/6/2018	Benzene	ND	1	0.17	5	ug/L
SMW-4	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
SMW-4	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
SMW-4	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
SMW-4	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-4	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-4	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-4	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-4	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-4	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-4	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
SMW-4	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-4	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
SMW-4	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
SMW-4	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
SMW-4	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
SMW-4	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-4	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-4	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-4	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-4	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
SMW-4	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-4	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-4	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-4	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-4	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-4	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-4	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-4	12/6/2018	Styrene	ND	1	0.25	100	ug/L
SMW-4	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-4	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
SMW-4	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-4	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
SMW-4	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-4	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-4	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-4	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-4	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-4	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
SMW-4	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-4	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-4	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-4	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-4	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-4	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-4	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-4	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
SMW-4	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-4	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-4	12/6/2018	MTBE	ND	1	0.46	143	ug/L
SMW-4	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-4	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-4	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
SMW-4	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
SMW-4	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
SMW-4	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
SMW-4	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
SMW-4	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
SMW-4	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
SMW-4	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
SMW-4	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
SMW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
SMW-4	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
SMW-4	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
SMW-4	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
SMW-4	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
SMW-4	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
SMW-4	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
SMW-4	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
SMW-4	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
SMW-4	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
SMW-4	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
SMW-4	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
SMW-4	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
SMW-4	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
SMW-4	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
SMW-4	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
SMW-4	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
SMW-4	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
SMW-4	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
SMW-4	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
SMW-4	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
SMW-4	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
SMW-4	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
SMW-4	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
SMW-4	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
SMW-4	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
SMW-4	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
SMW-4	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
SMW-4	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
SMW-4	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
SMW-4	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
SMW-4	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
SMW-4	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
SMW-4	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
SMW-4	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
SMW-4	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
SMW-4	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
SMW-4	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
SMW-4	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
SMW-4	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
SMW-4	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
SMW-4	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
SMW-4	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
SMW-4	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
SMW-4	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
SMW-4	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
SMW-4	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
SMW-4	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
SMW-4	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
SMW-4	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
SMW-4	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
SMW-4	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
SMW-4	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
SMW-4	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
SMW-4	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
SMW-4	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
SMW-4	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
SMW-4	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
SMW-4	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
SMW-4	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
SMW-4	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
SMW-4	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-4	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
SMW-4	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
SMW-4	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
SMW-4	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-4	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
SMW-4	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
SMW-4	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
SMW-4	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
SMW-4	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
SMW-4	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
SMW-4	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
SMW-4	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-4	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
SMW-4	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
SMW-4	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
SMW-4	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
SMW-4	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-4	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
SMW-4	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
SMW-4	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
SMW-4	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
SMW-4	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-4	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
SMW-4	9/20/2020	Benzene	ND	1	0.23	5	ug/L
SMW-4	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
SMW-4	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
SMW-4	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
SMW-4	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
SMW-4	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
SMW-4	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
SMW-4	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-4	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
SMW-4	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
SMW-4	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
SMW-4	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
SMW-4	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
SMW-4	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
SMW-4	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
SMW-4	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
SMW-4	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
SMW-4	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
SMW-4	9/20/2020	MTBE	ND	1	0.39	143	ug/L
SMW-4	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
SMW-4	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
SMW-4	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
SMW-4	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
SMW-4	9/20/2020	Styrene	ND	1	0.13	100	ug/L
SMW-4	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
SMW-4	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
SMW-4	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
SMW-4	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
SMW-4	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
SMW-4	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
SMW-4	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
SMW-4	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-4	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
STP-1 to EP-2	9/5/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
STP-1 to EP-2	9/5/2013	Acetone	2200	500	86	14064	ug/L
STP-1 to EP-2	9/5/2013	Chloroform	ND	10	4.7	100	ug/L
STP-1 to EP-2	9/5/2013	Benzene	**33**	10	4.6	5	ug/L
STP-1 to EP-2	9/5/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
STP-1 to EP-2	9/5/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
STP-1 to EP-2	9/5/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
STP-1 to EP-2	9/5/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
STP-1 to EP-2	9/5/2013	Chloroethane	ND	20	3	20857	ug/L
STP-1 to EP-2	9/5/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
STP-1 to EP-2	9/5/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
STP-1 to EP-2	9/5/2013	Carbon Disulfide	ND	100	8	810	ug/L
STP-1 to EP-2	9/5/2013	Bromoform	ND	10	3.7	32.9	ug/L
STP-1 to EP-2	9/5/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
STP-1 to EP-2	9/5/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
STP-1 to EP-2	9/5/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
STP-1 to EP-2	9/5/2013	2-Butanone	260	100	10	5565	ug/L
STP-1 to EP-2	9/5/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
STP-1 to EP-2	9/5/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
STP-1 to EP-2	9/5/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
STP-1 to EP-2	9/5/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
STP-1 to EP-2	9/5/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
STP-1 to EP-2	9/5/2013	1-Methylnaphthalene	ND	40	4.1	NA	ug/L
STP-1 to EP-2	9/5/2013	Naphthalene	ND	20	2.9	30	ug/L
STP-1 to EP-2	9/5/2013	2-Methylnaphthalene	*ND*	*40*	3.9		ug/L
STP-1 to EP-2	9/5/2013	2-Chlorotoluene	ND	10	5	233	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
STP-1 to EP-2	9/5/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
STP-1 to EP-2	9/5/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
STP-1 to EP-2	9/5/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
STP-1 to EP-2	9/5/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
STP-1 to EP-2	9/5/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
STP-1 to EP-2	9/5/2013	Ethylbenzene	ND	10	4.5	700	ug/L
STP-1 to EP-2	9/5/2013	Styrene	ND	10	5.8	100	ug/L
STP-1 to EP-2	9/5/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
STP-1 to EP-2	9/5/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
STP-1 to EP-2	9/5/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
STP-1 to EP-2	9/5/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
STP-1 to EP-2	9/5/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
STP-1 to EP-2	9/5/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
STP-1 to EP-2	9/5/2013	Bromobenzene	ND	10	5.7	62	ug/L
STP-1 to EP-2	9/5/2013	Toluene	13	10	4.4	1000	ug/L
STP-1 to EP-2	9/5/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
STP-1 to EP-2	9/5/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/5/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
STP-1 to EP-2	9/5/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
STP-1 to EP-2	9/5/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
STP-1 to EP-2	9/5/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
STP-1 to EP-2	9/5/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
STP-1 to EP-2	9/5/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
STP-1 to EP-2	9/5/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
STP-1 to EP-2	9/5/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
STP-1 to EP-2	9/5/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
STP-1 to EP-2	9/5/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
STP-1 to EP-2	9/5/2013	Xylenes, Total	ND	15	14	620	ug/L
STP-1 to EP-2	9/5/2013	MTBE	ND	10	7.7	143	ug/L
STP-1 to EP-2	9/5/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
STP-1 to EP-2	9/5/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
STP-1 to EP-2	9/10/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
STP-1 to EP-2	9/10/2014	Acetone	1300	200	99	14064	ug/L
STP-1 to EP-2	9/10/2014	Chloroform	ND	2	0.63	100	ug/L
STP-1 to EP-2	9/10/2014	Benzene	**18**	2	0.31	5	ug/L
STP-1 to EP-2	9/10/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
STP-1 to EP-2	9/10/2014	Bromomethane	ND	6	0.83	7.54	ug/L
STP-1 to EP-2	9/10/2014	Chloromethane	ND	6	1	20.32	ug/L
STP-1 to EP-2	9/10/2014	Dibromomethane	ND	2	0.38	8	ug/L
STP-1 to EP-2	9/10/2014	Chloroethane	ND	4	0.95	20857	ug/L
STP-1 to EP-2	9/10/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
STP-1 to EP-2	9/10/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
STP-1 to EP-2	9/10/2014	Carbon Disulfide	58	20	1.5	810	ug/L
STP-1 to EP-2	9/10/2014	Bromoform	ND	2	0.5	32.9	ug/L
STP-1 to EP-2	9/10/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
STP-1 to EP-2	9/10/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
STP-1 to EP-2	9/10/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
STP-1 to EP-2	9/10/2014	2-Butanone	160	20	2.8	5565	ug/L
STP-1 to EP-2	9/10/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
STP-1 to EP-2	9/10/2014	Trichloroethene	ND	2	0.39	5	ug/L
STP-1 to EP-2	9/10/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
STP-1 to EP-2	9/10/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
STP-1 to EP-2	9/10/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
STP-1 to EP-2	9/10/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
STP-1 to EP-2	9/10/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
STP-1 to EP-2	9/10/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
STP-1 to EP-2	9/10/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
STP-1 to EP-2	9/10/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
STP-1 to EP-2	9/10/2014	Ethylbenzene	ND	2	0.25	700	ug/L
STP-1 to EP-2	9/10/2014	Styrene	ND	2	0.23	100	ug/L
STP-1 to EP-2	9/10/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
STP-1 to EP-2	9/10/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
STP-1 to EP-2	9/10/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
STP-1 to EP-2	9/10/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
STP-1 to EP-2	9/10/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
STP-1 to EP-2	9/10/2014	Bromobenzene	ND	2	0.36	62	ug/L
STP-1 to EP-2	9/10/2014	Toluene	ND	2	0.34	1000	ug/L
STP-1 to EP-2	9/10/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
STP-1 to EP-2	9/10/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
STP-1 to EP-2	9/10/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
STP-1 to EP-2	9/10/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
STP-1 to EP-2	9/10/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
STP-1 to EP-2	9/10/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
STP-1 to EP-2	9/10/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
STP-1 to EP-2	9/10/2014	2-Hexanone	ND	20	1.7	38	ug/L
STP-1 to EP-2	9/10/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
STP-1 to EP-2	9/10/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
STP-1 to EP-2	9/10/2014	Xylenes, Total	ND	3	0.75	620	ug/L
STP-1 to EP-2	9/10/2014	MTBE	ND	2	0.5	143	ug/L
STP-1 to EP-2	9/10/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
STP-1 to EP-2	9/10/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
STP-1 to EP-2	8/24/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
STP-1 to EP-2	8/24/2015	Acetone	250	200	19	14064	ug/L
STP-1 to EP-2	8/24/2015	Chloroform	ND	2	0.43	100	ug/L
STP-1 to EP-2	8/24/2015	Benzene	ND	2	0.13	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/24/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
STP-1 to EP-2	8/24/2015	Bromomethane	ND	6	2.3	7.54	ug/L
STP-1 to EP-2	8/24/2015	Chloromethane	ND	6	0.35	20.32	ug/L
STP-1 to EP-2	8/24/2015	Dibromomethane	ND	2	0.47	8	ug/L
STP-1 to EP-2	8/24/2015	Chloroethane	ND	4	0.21	20857	ug/L
STP-1 to EP-2	8/24/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
STP-1 to EP-2	8/24/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
STP-1 to EP-2	8/24/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
STP-1 to EP-2	8/24/2015	Bromoform	ND	2	0.32	32.9	ug/L
STP-1 to EP-2	8/24/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
STP-1 to EP-2	8/24/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
STP-1 to EP-2	8/24/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
STP-1 to EP-2	8/24/2015	2-Butanone	ND	20	0.73	5565	ug/L
STP-1 to EP-2	8/24/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
STP-1 to EP-2	8/24/2015	Trichloroethene	ND	2	0.33	5	ug/L
STP-1 to EP-2	8/24/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
STP-1 to EP-2	8/24/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
STP-1 to EP-2	8/24/2015	Hexachlorobutadiene	*ND*	*2*	0.5	1.39	ug/L
STP-1 to EP-2	8/24/2015	1-Methylnaphthalene	ND	8	1.1	NA	ug/L
STP-1 to EP-2	8/24/2015	Naphthalene	ND	4	0.44	30	ug/L
STP-1 to EP-2	8/24/2015	2-Methylnaphthalene	*ND*	*8*	1.2		ug/L
STP-1 to EP-2	8/24/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichlorobenzene	ND	2	0.24	600	ug/L
STP-1 to EP-2	8/24/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
STP-1 to EP-2	8/24/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
STP-1 to EP-2	8/24/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
STP-1 to EP-2	8/24/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
STP-1 to EP-2	8/24/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
STP-1 to EP-2	8/24/2015	Ethylbenzene	ND	2	0.2	700	ug/L
STP-1 to EP-2	8/24/2015	Styrene	ND	2	0.21	100	ug/L
STP-1 to EP-2	8/24/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
STP-1 to EP-2	8/24/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
STP-1 to EP-2	8/24/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
STP-1 to EP-2	8/24/2015	1,4-Dichlorobenzene	ND	2	0.33	75	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
STP-1 to EP-2	8/24/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
STP-1 to EP-2	8/24/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
STP-1 to EP-2	8/24/2015	Bromobenzene	ND	2	0.22	62	ug/L
STP-1 to EP-2	8/24/2015	Toluene	ND	2	0.22	1000	ug/L
STP-1 to EP-2	8/24/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
STP-1 to EP-2	8/24/2015	1,2,4-Trichlorobenzene	ND	2	0.57	70	ug/L
STP-1 to EP-2	8/24/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
STP-1 to EP-2	8/24/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
STP-1 to EP-2	8/24/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
STP-1 to EP-2	8/24/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
STP-1 to EP-2	8/24/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
STP-1 to EP-2	8/24/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
STP-1 to EP-2	8/24/2015	1,3-Dichlorobenzene	ND	2	0.19	N/A	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
STP-1 to EP-2	8/24/2015	2-Hexanone	ND	20	0.95	38	ug/L
STP-1 to EP-2	8/24/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
STP-1 to EP-2	8/24/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
STP-1 to EP-2	8/24/2015	Xylenes, Total	ND	3	0.56	620	ug/L
STP-1 to EP-2	8/24/2015	MTBE	ND	2	0.35	143	ug/L
STP-1 to EP-2	8/24/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
STP-1 to EP-2	8/24/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
STP-1 to EP-2	6/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
STP-1 to EP-2	6/8/2016	Acetone	870	50	25	14064	ug/L
STP-1 to EP-2	6/8/2016	Chloroform	ND	5	0.44	100	ug/L
STP-1 to EP-2	6/8/2016	Benzene	ND	5	0.48	5	ug/L
STP-1 to EP-2	6/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
STP-1 to EP-2	6/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
STP-1 to EP-2	6/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
STP-1 to EP-2	6/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
STP-1 to EP-2	6/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
STP-1 to EP-2	6/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
STP-1 to EP-2	6/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
STP-1 to EP-2	6/8/2016	Carbon Disulfide	39	50	3	810	ug/L
STP-1 to EP-2	6/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
STP-1 to EP-2	6/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
STP-1 to EP-2	6/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	6/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
STP-1 to EP-2	6/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
STP-1 to EP-2	6/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
STP-1 to EP-2	6/8/2016	2-Butanone	24	50	3.7	5565	ug/L
STP-1 to EP-2	6/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
STP-1 to EP-2	6/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
STP-1 to EP-2	6/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
STP-1 to EP-2	6/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
STP-1 to EP-2	6/8/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
STP-1 to EP-2	6/8/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
STP-1 to EP-2	6/8/2016	Naphthalene	ND	10	0.46	30	ug/L
STP-1 to EP-2	6/8/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
STP-1 to EP-2	6/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
STP-1 to EP-2	6/8/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
STP-1 to EP-2	6/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
STP-1 to EP-2	6/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
STP-1 to EP-2	6/8/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
STP-1 to EP-2	6/8/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
STP-1 to EP-2	6/8/2016	Ethylbenzene	ND	5	0.56	700	ug/L
STP-1 to EP-2	6/8/2016	Styrene	ND	5	0.55	100	ug/L
STP-1 to EP-2	6/8/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
STP-1 to EP-2	6/8/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
STP-1 to EP-2	6/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
STP-1 to EP-2	6/8/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
STP-1 to EP-2	6/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
STP-1 to EP-2	6/8/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
STP-1 to EP-2	6/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
STP-1 to EP-2	6/8/2016	Toluene	ND	5	0.59	1000	ug/L
STP-1 to EP-2	6/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
STP-1 to EP-2	6/8/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
STP-1 to EP-2	6/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
STP-1 to EP-2	6/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
STP-1 to EP-2	6/8/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
STP-1 to EP-2	6/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
STP-1 to EP-2	6/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
STP-1 to EP-2	6/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
STP-1 to EP-2	6/8/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
STP-1 to EP-2	6/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
STP-1 to EP-2	6/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
STP-1 to EP-2	6/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
STP-1 to EP-2	6/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
STP-1 to EP-2	6/8/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
STP-1 to EP-2	6/8/2016	MTBE	ND	5	1.1	143	ug/L
STP-1 to EP-2	6/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
STP-1 to EP-2	6/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
STP-1 to EP-2	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	8/30/2016	Acetone	1100	100	49	14064	ug/L
STP-1 to EP-2	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
STP-1 to EP-2	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
STP-1 to EP-2	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
STP-1 to EP-2	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
STP-1 to EP-2	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
STP-1 to EP-2	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
STP-1 to EP-2	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
STP-1 to EP-2	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
STP-1 to EP-2	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
STP-1 to EP-2	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
STP-1 to EP-2	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
STP-1 to EP-2	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
STP-1 to EP-2	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
STP-1 to EP-2	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
STP-1 to EP-2	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
STP-1 to EP-2	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
STP-1 to EP-2	8/30/2016	1-Methylnaphthalene	ND	40	2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/30/2016	Naphthalene	ND	20	0.93	30	ug/L
STP-1 to EP-2	8/30/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
STP-1 to EP-2	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
STP-1 to EP-2	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
STP-1 to EP-2	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
STP-1 to EP-2	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
STP-1 to EP-2	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
STP-1 to EP-2	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
STP-1 to EP-2	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
STP-1 to EP-2	8/30/2016	Styrene	ND	10	1.1	100	ug/L
STP-1 to EP-2	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
STP-1 to EP-2	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
STP-1 to EP-2	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
STP-1 to EP-2	8/30/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
STP-1 to EP-2	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
STP-1 to EP-2	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
STP-1 to EP-2	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
STP-1 to EP-2	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
STP-1 to EP-2	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	8/30/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
STP-1 to EP-2	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
STP-1 to EP-2	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
STP-1 to EP-2	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
STP-1 to EP-2	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
STP-1 to EP-2	8/30/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
STP-1 to EP-2	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
STP-1 to EP-2	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
STP-1 to EP-2	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
STP-1 to EP-2	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
STP-1 to EP-2	8/30/2016	MTBE	ND	10	2.1	143	ug/L
STP-1 to EP-2	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
STP-1 to EP-2	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
STP-1 to EP-2	11/17/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	11/17/2016	Acetone	2400	1000	490	14064	ug/L
STP-1 to EP-2	11/17/2016	Chloroform	ND	10	0.89	100	ug/L
STP-1 to EP-2	11/17/2016	Benzene	*ND*	*10*	0.96	5	ug/L
STP-1 to EP-2	11/17/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
STP-1 to EP-2	11/17/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
STP-1 to EP-2	11/17/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
STP-1 to EP-2	11/17/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
STP-1 to EP-2	11/17/2016	Chloroethane	ND	20	1.9	20857	ug/L
STP-1 to EP-2	11/17/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	11/17/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
STP-1 to EP-2	11/17/2016	Carbon Disulfide	13	100	6	810	ug/L
STP-1 to EP-2	11/17/2016	Bromoform	ND	10	1	32.9	ug/L
STP-1 to EP-2	11/17/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
STP-1 to EP-2	11/17/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
STP-1 to EP-2	11/17/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	11/17/2016	2-Butanone	76	100	7.4	5565	ug/L
STP-1 to EP-2	11/17/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	11/17/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	11/17/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
STP-1 to EP-2	11/17/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
STP-1 to EP-2	11/17/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
STP-1 to EP-2	11/17/2016	1-Methylnaphthalene	ND	40	2	NA	ug/L
STP-1 to EP-2	11/17/2016	Naphthalene	ND	20	0.93	30	ug/L
STP-1 to EP-2	11/17/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
STP-1 to EP-2	11/17/2016	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
STP-1 to EP-2	11/17/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
STP-1 to EP-2	11/17/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
STP-1 to EP-2	11/17/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
STP-1 to EP-2	11/17/2016	Isopropylbenzene	ND	10	1	447	ug/L
STP-1 to EP-2	11/17/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
STP-1 to EP-2	11/17/2016	Ethylbenzene	ND	10	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/17/2016	Styrene	ND	10	1.1	100	ug/L
STP-1 to EP-2	11/17/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
STP-1 to EP-2	11/17/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
STP-1 to EP-2	11/17/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
STP-1 to EP-2	11/17/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
STP-1 to EP-2	11/17/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
STP-1 to EP-2	11/17/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
STP-1 to EP-2	11/17/2016	Bromobenzene	ND	10	0.98	62	ug/L
STP-1 to EP-2	11/17/2016	Toluene	ND	10	1.2	1000	ug/L
STP-1 to EP-2	11/17/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	11/17/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	11/17/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
STP-1 to EP-2	11/17/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	11/17/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
STP-1 to EP-2	11/17/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
STP-1 to EP-2	11/17/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
STP-1 to EP-2	11/17/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
STP-1 to EP-2	11/17/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
STP-1 to EP-2	11/17/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
STP-1 to EP-2	11/17/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
STP-1 to EP-2	11/17/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
STP-1 to EP-2	11/17/2016	Xylenes, Total	ND	15	3.7	620	ug/L
STP-1 to EP-2	11/17/2016	MTBE	ND	10	2.1	143	ug/L
STP-1 to EP-2	11/17/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
STP-1 to EP-2	11/17/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
STP-1 to EP-2	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
STP-1 to EP-2	3/30/2017	Acetone	1200	1000	88	14064	ug/L
STP-1 to EP-2	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
STP-1 to EP-2	3/30/2017	Benzene	1.9	5	0.96	5	ug/L
STP-1 to EP-2	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
STP-1 to EP-2	3/30/2017	Bromomethane	**11**	15	7.8	7.54	ug/L
STP-1 to EP-2	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
STP-1 to EP-2	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
STP-1 to EP-2	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
STP-1 to EP-2	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
STP-1 to EP-2	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
STP-1 to EP-2	3/30/2017	Carbon Disulfide	20	50	6	810	ug/L
STP-1 to EP-2	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
STP-1 to EP-2	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
STP-1 to EP-2	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
STP-1 to EP-2	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
STP-1 to EP-2	3/30/2017	2-Butanone	58	50	11	5565	ug/L
STP-1 to EP-2	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
STP-1 to EP-2	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
STP-1 to EP-2	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
STP-1 to EP-2	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
STP-1 to EP-2	3/30/2017	Hexachlorobutadiene	*ND*	*5*	3.7	1.39	ug/L
STP-1 to EP-2	3/30/2017	1-Methylnaphthalene	9.9	20	1.6	NA	ug/L
STP-1 to EP-2	3/30/2017	Naphthalene	ND	10	0.83	30	ug/L
STP-1 to EP-2	3/30/2017	2-Methylnaphthalene	**12**	20	1.5		ug/L
STP-1 to EP-2	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichlorobenzene	ND	5	1.2	600	ug/L
STP-1 to EP-2	3/30/2017	1,2,4-Trimethylbenzene	2.8	5	1	56	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
STP-1 to EP-2	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
STP-1 to EP-2	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
STP-1 to EP-2	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
STP-1 to EP-2	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
STP-1 to EP-2	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
STP-1 to EP-2	3/30/2017	Styrene	ND	5	1.6	100	ug/L
STP-1 to EP-2	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
STP-1 to EP-2	3/30/2017	n-Butylbenzene	3.2	15	1.6	1000	ug/L
STP-1 to EP-2	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
STP-1 to EP-2	3/30/2017	1,4-Dichlorobenzene	ND	5	4	75	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
STP-1 to EP-2	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
STP-1 to EP-2	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
STP-1 to EP-2	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
STP-1 to EP-2	3/30/2017	Toluene	2.2	5	0.89	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	3/30/2017	Chlorobenzene	2	5	1.1	77.6	ug/L
STP-1 to EP-2	3/30/2017	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
STP-1 to EP-2	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
STP-1 to EP-2	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
STP-1 to EP-2	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
STP-1 to EP-2	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
STP-1 to EP-2	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
STP-1 to EP-2	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
STP-1 to EP-2	3/30/2017	1,3-Dichlorobenzene	ND	5	1.4	N/A	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
STP-1 to EP-2	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
STP-1 to EP-2	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
STP-1 to EP-2	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
STP-1 to EP-2	3/30/2017	Xylenes, Total	3.5	7.5	3.2	620	ug/L
STP-1 to EP-2	3/30/2017	MTBE	ND	5	1.5	143	ug/L
STP-1 to EP-2	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
STP-1 to EP-2	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
STP-1 to EP-2	6/2/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	Acetone	1600	100	8.2	14064	ug/L
STP-1 to EP-2	6/2/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	6/2/2017	Benzene	*0.71*	*10*	0.62	5	ug/L
STP-1 to EP-2	6/2/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	6/2/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	6/2/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	6/2/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	6/2/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	6/2/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	6/2/2017	Methylene Chloride	*1.9*	*30*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	Carbon Disulfide	12	100	4	810	ug/L
STP-1 to EP-2	6/2/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	6/2/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	6/2/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	6/2/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	6/2/2017	2-Butanone	140	100	11	5565	ug/L
STP-1 to EP-2	6/2/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	6/2/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	6/2/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	6/2/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	6/2/2017	1-Methylnaphthalene	5.7	40	1.6	NA	ug/L
STP-1 to EP-2	6/2/2017	Naphthalene	1.8	20	1.1	30	ug/L
STP-1 to EP-2	6/2/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	6/2/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	6/2/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	6/2/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	6/2/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	6/2/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	6/2/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	6/2/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	6/2/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	6/2/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	6/2/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	6/2/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	6/2/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	6/2/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	6/2/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	6/2/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	6/2/2017	Toluene	ND	10	0.64	1000	ug/L
STP-1 to EP-2	6/2/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	6/2/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	6/2/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	6/2/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	6/2/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	6/2/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	6/2/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	6/2/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	6/2/2017	Pentafluorobenzene	ND	0	0		None
STP-1 to EP-2	6/2/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	6/2/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	6/2/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	6/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	6/2/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	6/2/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	6/2/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	6/2/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	9/7/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	Acetone	1100	100	8.2	14064	ug/L
STP-1 to EP-2	9/7/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	9/7/2017	Benzene	*2.6*	*10*	0.62	5	ug/L
STP-1 to EP-2	9/7/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	9/7/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	9/7/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	9/7/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	9/7/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	9/7/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	9/7/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	9/7/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	9/7/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	9/7/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	9/7/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	9/7/2017	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	9/7/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	9/7/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	9/7/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	9/7/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	9/7/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
STP-1 to EP-2	9/7/2017	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	9/7/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	9/7/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	9/7/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	9/7/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	9/7/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	9/7/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	9/7/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	9/7/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	9/7/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	9/7/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	9/7/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	9/7/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	9/7/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	9/7/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	9/7/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	9/7/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	9/7/2017	Toluene	1.4	10	0.64	1000	ug/L
STP-1 to EP-2	9/7/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	9/7/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	9/7/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	9/7/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	9/7/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	9/7/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	9/7/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	9/7/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	9/7/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	9/7/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	9/7/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	9/7/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	9/7/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	9/7/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	9/7/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	9/7/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	12/12/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	Acetone	1600	100	8.2	14064	ug/L
STP-1 to EP-2	12/12/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	12/12/2017	Benzene	**7.1**	10	0.62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/12/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	12/12/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	12/12/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	12/12/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	12/12/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	12/12/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	12/12/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	12/12/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	12/12/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	12/12/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	12/12/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	12/12/2017	2-Butanone	54	100	11	5565	ug/L
STP-1 to EP-2	12/12/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	12/12/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	12/12/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	12/12/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	12/12/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
STP-1 to EP-2	12/12/2017	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	12/12/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	12/12/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	12/12/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	12/12/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	12/12/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	12/12/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	12/12/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	12/12/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	12/12/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	12/12/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	12/12/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	12/12/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	12/12/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	12/12/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	12/12/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	12/12/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	12/12/2017	Toluene	2	10	0.64	1000	ug/L
STP-1 to EP-2	12/12/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	12/12/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	12/12/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	12/12/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	12/12/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	12/12/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	12/12/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	12/12/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	12/12/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	12/12/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	12/12/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	12/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	12/12/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	12/12/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	12/12/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	12/12/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	2/12/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	Acetone	1100	100	8.2	14064	ug/L
STP-1 to EP-2	2/12/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	2/12/2018	Benzene	*ND*	*10*	0.62	5	ug/L
STP-1 to EP-2	2/12/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	2/12/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	2/12/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	2/12/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	2/12/2018	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	2/12/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	2/12/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	2/12/2018	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	2/12/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	2/12/2018	1,1-Dichloroethane	ND	10	4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	2/12/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	2/12/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	2/12/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	2/12/2018	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	2/12/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	2/12/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	2/12/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	2/12/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	2/12/2018	1-Methylnaphthalene	28	40	1.6	NA	ug/L
STP-1 to EP-2	2/12/2018	Naphthalene	6.2	20	1.1	30	ug/L
STP-1 to EP-2	2/12/2018	2-Methylnaphthalene	**25**	40	1.5		ug/L
STP-1 to EP-2	2/12/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	2/12/2018	1,2,4-Trimethylbenzene	2.9	10	1.1	56	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	2/12/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	2/12/2018	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	2/12/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	2/12/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	2/12/2018	Ethylbenzene	1.3	10	0.93	700	ug/L
STP-1 to EP-2	2/12/2018	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	2/12/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	2/12/2018	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	2/12/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	2/12/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	2/12/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	2/12/2018	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
STP-1 to EP-2	2/12/2018	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	2/12/2018	Toluene	2.3	10	0.64	1000	ug/L
STP-1 to EP-2	2/12/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	2/12/2018	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	2/12/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	2/12/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	2/12/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	2/12/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	2/12/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	2/12/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	2/12/2018	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	2/12/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	2/12/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	2/12/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	2/12/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	2/12/2018	Xylenes, Total	7.1	15	3.2	620	ug/L
STP-1 to EP-2	2/12/2018	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	2/12/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	2/12/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	5/6/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	Acetone	1400	100	8.2	14064	ug/L
STP-1 to EP-2	5/6/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	5/6/2018	Benzene	*2.6*	*10*	0.62	5	ug/L
STP-1 to EP-2	5/6/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	5/6/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	5/6/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	5/6/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	5/6/2018	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	5/6/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	5/6/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	5/6/2018	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	5/6/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	5/6/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	5/6/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	5/6/2018	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	5/6/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	5/6/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	5/6/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	5/6/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	5/6/2018	1-Methylnaphthalene	5.3	40	1.6	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	5/6/2018	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	5/6/2018	2-Methylnaphthalene	**5.7**	40	1.5		ug/L
STP-1 to EP-2	5/6/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	5/6/2018	1,2,4-Trimethylbenzene	3.1	10	1.1	56	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	5/6/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	5/6/2018	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	5/6/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	5/6/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	5/6/2018	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	5/6/2018	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	5/6/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	5/6/2018	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	5/6/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	5/6/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	5/6/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	5/6/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	5/6/2018	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	5/6/2018	Toluene	1.8	10	0.64	1000	ug/L
STP-1 to EP-2	5/6/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	5/6/2018	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	5/6/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	5/6/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	5/6/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	5/6/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	5/6/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	5/6/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	5/6/2018	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	5/6/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	5/6/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	5/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	5/6/2018	Xylenes, Total	5.8	15	3.2	620	ug/L
STP-1 to EP-2	5/6/2018	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	5/6/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	5/6/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	8/31/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	8/31/2018	Acetone	1200	100	7.9	14064	ug/L
STP-1 to EP-2	8/31/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	8/31/2018	Benzene	*ND*	*10*	1.7	5	ug/L
STP-1 to EP-2	8/31/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
STP-1 to EP-2	8/31/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	8/31/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	8/31/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
STP-1 to EP-2	8/31/2018	Chloroethane	ND	20	1.6	20857	ug/L
STP-1 to EP-2	8/31/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
STP-1 to EP-2	8/31/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
STP-1 to EP-2	8/31/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
STP-1 to EP-2	8/31/2018	Bromoform	ND	10	3.2	32.9	ug/L
STP-1 to EP-2	8/31/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
STP-1 to EP-2	8/31/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
STP-1 to EP-2	8/31/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/31/2018	2-Butanone	170	100	13	5565	ug/L
STP-1 to EP-2	8/31/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
STP-1 to EP-2	8/31/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
STP-1 to EP-2	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
STP-1 to EP-2	8/31/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
STP-1 to EP-2	8/31/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	8/31/2018	1-Methylnaphthalene	ND	40	3.4	NA	ug/L
STP-1 to EP-2	8/31/2018	Naphthalene	ND	20	2.9	30	ug/L
STP-1 to EP-2	8/31/2018	2-Methylnaphthalene	*ND*	*40*	2.4		ug/L
STP-1 to EP-2	8/31/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichlorobenzene	ND	10	3.1	600	ug/L
STP-1 to EP-2	8/31/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
STP-1 to EP-2	8/31/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
STP-1 to EP-2	8/31/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
STP-1 to EP-2	8/31/2018	Isopropylbenzene	ND	10	2.2	447	ug/L
STP-1 to EP-2	8/31/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
STP-1 to EP-2	8/31/2018	Ethylbenzene	ND	10	2.2	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/31/2018	Styrene	ND	10	2.5	100	ug/L
STP-1 to EP-2	8/31/2018	n-Propylbenzene	ND	10	2.4	660	ug/L
STP-1 to EP-2	8/31/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
STP-1 to EP-2	8/31/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	8/31/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	8/31/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
STP-1 to EP-2	8/31/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
STP-1 to EP-2	8/31/2018	Bromobenzene	ND	10	3.2	62	ug/L
STP-1 to EP-2	8/31/2018	Toluene	ND	10	1.7	1000	ug/L
STP-1 to EP-2	8/31/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
STP-1 to EP-2	8/31/2018	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
STP-1 to EP-2	8/31/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
STP-1 to EP-2	8/31/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/31/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
STP-1 to EP-2	8/31/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
STP-1 to EP-2	8/31/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
STP-1 to EP-2	8/31/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	8/31/2018	1,3-Dichlorobenzene	ND	10	3.1	N/A	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
STP-1 to EP-2	8/31/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
STP-1 to EP-2	8/31/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
STP-1 to EP-2	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
STP-1 to EP-2	8/31/2018	Xylenes, Total	ND	15	6.4	620	ug/L
STP-1 to EP-2	8/31/2018	MTBE	ND	10	3.2	143	ug/L
STP-1 to EP-2	8/31/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
STP-1 to EP-2	8/31/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
STP-1 to EP-2	11/8/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
STP-1 to EP-2	11/8/2018	Acetone	ND	50	3.8	14064	ug/L
STP-1 to EP-2	11/8/2018	Chloroform	ND	5	1.2	100	ug/L
STP-1 to EP-2	11/8/2018	Benzene	ND	5	0.87	5	ug/L
STP-1 to EP-2	11/8/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
STP-1 to EP-2	11/8/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
STP-1 to EP-2	11/8/2018	Chloromethane	ND	15	1.6	20.32	ug/L
STP-1 to EP-2	11/8/2018	Dibromomethane	ND	5	1.6	8	ug/L
STP-1 to EP-2	11/8/2018	Chloroethane	ND	10	0.82	20857	ug/L
STP-1 to EP-2	11/8/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
STP-1 to EP-2	11/8/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
STP-1 to EP-2	11/8/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
STP-1 to EP-2	11/8/2018	Bromoform	ND	5	1.6	32.9	ug/L
STP-1 to EP-2	11/8/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
STP-1 to EP-2	11/8/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
STP-1 to EP-2	11/8/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
STP-1 to EP-2	11/8/2018	2-Butanone	920	500	71	5565	ug/L
STP-1 to EP-2	11/8/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
STP-1 to EP-2	11/8/2018	Trichloroethene	ND	5	1.3	5	ug/L
STP-1 to EP-2	11/8/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
STP-1 to EP-2	11/8/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
STP-1 to EP-2	11/8/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
STP-1 to EP-2	11/8/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
STP-1 to EP-2	11/8/2018	Naphthalene	ND	10	1.4	30	ug/L
STP-1 to EP-2	11/8/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
STP-1 to EP-2	11/8/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
STP-1 to EP-2	11/8/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
STP-1 to EP-2	11/8/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
STP-1 to EP-2	11/8/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
STP-1 to EP-2	11/8/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
STP-1 to EP-2	11/8/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
STP-1 to EP-2	11/8/2018	Ethylbenzene	ND	5	1.1	700	ug/L
STP-1 to EP-2	11/8/2018	Styrene	ND	5	1.3	100	ug/L
STP-1 to EP-2	11/8/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
STP-1 to EP-2	11/8/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
STP-1 to EP-2	11/8/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
STP-1 to EP-2	11/8/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
STP-1 to EP-2	11/8/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
STP-1 to EP-2	11/8/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
STP-1 to EP-2	11/8/2018	Bromobenzene	ND	5	1.6	62	ug/L
STP-1 to EP-2	11/8/2018	Toluene	ND	5	0.84	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/8/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
STP-1 to EP-2	11/8/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
STP-1 to EP-2	11/8/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
STP-1 to EP-2	11/8/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
STP-1 to EP-2	11/8/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
STP-1 to EP-2	11/8/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
STP-1 to EP-2	11/8/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
STP-1 to EP-2	11/8/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
STP-1 to EP-2	11/8/2018	Pentafluorobenzene	ND	0	0		None
STP-1 to EP-2	11/8/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
STP-1 to EP-2	11/8/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
STP-1 to EP-2	11/8/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
STP-1 to EP-2	11/8/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
STP-1 to EP-2	11/8/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
STP-1 to EP-2	11/8/2018	MTBE	ND	5	2.3	143	ug/L
STP-1 to EP-2	11/8/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
STP-1 to EP-2	11/8/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
STP-1 to EP-2	2/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
STP-1 to EP-2	2/7/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
STP-1 to EP-2	2/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
STP-1 to EP-2	2/7/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
STP-1 to EP-2	2/7/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
STP-1 to EP-2	2/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
STP-1 to EP-2	2/7/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
STP-1 to EP-2	2/7/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
STP-1 to EP-2	2/7/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
STP-1 to EP-2	2/7/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
STP-1 to EP-2	2/7/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
STP-1 to EP-2	2/7/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
STP-1 to EP-2	2/7/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
STP-1 to EP-2	2/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
STP-1 to EP-2	2/7/2019	2-Butanone	16	10	1.410869	5565	ug/L
STP-1 to EP-2	2/7/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
STP-1 to EP-2	2/7/2019	2-Hexanone	ND	10	0.906574	38	ug/L
STP-1 to EP-2	2/7/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
STP-1 to EP-2	2/7/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
STP-1 to EP-2	2/7/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
STP-1 to EP-2	2/7/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
STP-1 to EP-2	2/7/2019	Acetone	530	50	3.785348	14064	ug/L
STP-1 to EP-2	2/7/2019	Benzene	**15**	1	0.174896	5	ug/L
STP-1 to EP-2	2/7/2019	Bromobenzene	ND	1	0.317906	62	ug/L
STP-1 to EP-2	2/7/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
STP-1 to EP-2	2/7/2019	Bromoform	ND	1	0.32331	32.9	ug/L
STP-1 to EP-2	2/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
STP-1 to EP-2	2/7/2019	Carbon Disulfide	1.2	10	0.385031	810	ug/L
STP-1 to EP-2	2/7/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
STP-1 to EP-2	2/7/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
STP-1 to EP-2	2/7/2019	Chloroethane	ND	2	0.164337	20857	ug/L
STP-1 to EP-2	2/7/2019	Chloroform	ND	1	0.235224	100	ug/L
STP-1 to EP-2	2/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
STP-1 to EP-2	2/7/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
STP-1 to EP-2	2/7/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
STP-1 to EP-2	2/7/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
STP-1 to EP-2	2/7/2019	Dibromomethane	ND	1	0.322147	8	ug/L
STP-1 to EP-2	2/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
STP-1 to EP-2	2/7/2019	Ethylbenzene	0.28	1	0.223402	700	ug/L
STP-1 to EP-2	2/7/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
STP-1 to EP-2	2/7/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
STP-1 to EP-2	2/7/2019	MTBE	ND	1	0.456095	143	ug/L
STP-1 to EP-2	2/7/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
STP-1 to EP-2	2/7/2019	Naphthalene	ND	2	0.289626	30	ug/L
STP-1 to EP-2	2/7/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
STP-1 to EP-2	2/7/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
STP-1 to EP-2	2/7/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
STP-1 to EP-2	2/7/2019	Styrene	ND	1	0.250146	100	ug/L
STP-1 to EP-2	2/7/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
STP-1 to EP-2	2/7/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	2/7/2019	Toluene	8.9	1	0.168139	1000	ug/L
STP-1 to EP-2	2/7/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
STP-1 to EP-2	2/7/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
STP-1 to EP-2	2/7/2019	Trichloroethene	ND	1	0.257556	5	ug/L
STP-1 to EP-2	2/7/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
STP-1 to EP-2	2/7/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
STP-1 to EP-2	2/7/2019	Xylenes, Total	1.7	1.5	0.641288	620	ug/L
STP-1 to EP-2	5/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
STP-1 to EP-2	5/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
STP-1 to EP-2	5/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
STP-1 to EP-2	5/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
STP-1 to EP-2	5/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
STP-1 to EP-2	5/29/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
STP-1 to EP-2	5/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
STP-1 to EP-2	5/29/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
STP-1 to EP-2	5/29/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
STP-1 to EP-2	5/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
STP-1 to EP-2	5/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
STP-1 to EP-2	5/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
STP-1 to EP-2	5/29/2019	1-Methylnaphthalene	ND	80	6.29909	NA	ug/L
STP-1 to EP-2	5/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
STP-1 to EP-2	5/29/2019	2-Butanone	46	200	41.788332	5565	ug/L
STP-1 to EP-2	5/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
STP-1 to EP-2	5/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
STP-1 to EP-2	5/29/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
STP-1 to EP-2	5/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
STP-1 to EP-2	5/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
STP-1 to EP-2	5/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
STP-1 to EP-2	5/29/2019	Acetone	760	200	23.987928	14064	ug/L
STP-1 to EP-2	5/29/2019	Benzene	*ND*	*20*	3.332781	5	ug/L
STP-1 to EP-2	5/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
STP-1 to EP-2	5/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
STP-1 to EP-2	5/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
STP-1 to EP-2	5/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
STP-1 to EP-2	5/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
STP-1 to EP-2	5/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
STP-1 to EP-2	5/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
STP-1 to EP-2	5/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
STP-1 to EP-2	5/29/2019	Chloroform	ND	20	2.437811	100	ug/L
STP-1 to EP-2	5/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
STP-1 to EP-2	5/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
STP-1 to EP-2	5/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
STP-1 to EP-2	5/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
STP-1 to EP-2	5/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
STP-1 to EP-2	5/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
STP-1 to EP-2	5/29/2019	Ethylbenzene	ND	20	2.646816	700	ug/L
STP-1 to EP-2	5/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
STP-1 to EP-2	5/29/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
STP-1 to EP-2	5/29/2019	MTBE	ND	20	9.1219	143	ug/L
STP-1 to EP-2	5/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
STP-1 to EP-2	5/29/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
STP-1 to EP-2	5/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
STP-1 to EP-2	5/29/2019	n-Propylbenzene	ND	20	4.28616	660	ug/L
STP-1 to EP-2	5/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
STP-1 to EP-2	5/29/2019	Styrene	ND	20	3.826467	100	ug/L
STP-1 to EP-2	5/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
STP-1 to EP-2	5/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
STP-1 to EP-2	5/29/2019	Toluene	ND	20	7.008724	1000	ug/L
STP-1 to EP-2	5/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
STP-1 to EP-2	5/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
STP-1 to EP-2	5/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
STP-1 to EP-2	5/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
STP-1 to EP-2	5/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
STP-1 to EP-2	5/29/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
STP-1 to EP-2	10/9/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
STP-1 to EP-2	10/9/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
STP-1 to EP-2	10/9/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
STP-1 to EP-2	10/9/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	10/9/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
STP-1 to EP-2	10/9/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
STP-1 to EP-2	10/9/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
STP-1 to EP-2	10/9/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
STP-1 to EP-2	10/9/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
STP-1 to EP-2	10/9/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
STP-1 to EP-2	10/9/2019	1,2,4-Trimethylbenzene	0.59	2	0.426398	56	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichloroethane	0.77	2	0.389276	5	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
STP-1 to EP-2	10/9/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
STP-1 to EP-2	10/9/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
STP-1 to EP-2	10/9/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
STP-1 to EP-2	10/9/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
STP-1 to EP-2	10/9/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
STP-1 to EP-2	10/9/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
STP-1 to EP-2	10/9/2019	2-Butanone	12	20	4.178833	5565	ug/L
STP-1 to EP-2	10/9/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
STP-1 to EP-2	10/9/2019	2-Hexanone	ND	20	3.094384	38	ug/L
STP-1 to EP-2	10/9/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
STP-1 to EP-2	10/9/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
STP-1 to EP-2	10/9/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
STP-1 to EP-2	10/9/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
STP-1 to EP-2	10/9/2019	Acetone	760	200	23.987928	14064	ug/L
STP-1 to EP-2	10/9/2019	Benzene	3.9	2	0.333278	5	ug/L
STP-1 to EP-2	10/9/2019	Bromobenzene	ND	2	0.489454	62	ug/L
STP-1 to EP-2	10/9/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
STP-1 to EP-2	10/9/2019	Bromoform	ND	2	0.577326	32.9	ug/L
STP-1 to EP-2	10/9/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
STP-1 to EP-2	10/9/2019	Carbon Disulfide	3.3	20	0.905113	810	ug/L
STP-1 to EP-2	10/9/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
STP-1 to EP-2	10/9/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
STP-1 to EP-2	10/9/2019	Chloroethane	2.5	4	0.355605	20857	ug/L
STP-1 to EP-2	10/9/2019	Chloroform	ND	2	0.243781	100	ug/L
STP-1 to EP-2	10/9/2019	Chloromethane	2.7	6	0.641975	20.32	ug/L
STP-1 to EP-2	10/9/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
STP-1 to EP-2	10/9/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
STP-1 to EP-2	10/9/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
STP-1 to EP-2	10/9/2019	Dibromomethane	ND	2	0.418417	8	ug/L
STP-1 to EP-2	10/9/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
STP-1 to EP-2	10/9/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
STP-1 to EP-2	10/9/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
STP-1 to EP-2	10/9/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
STP-1 to EP-2	10/9/2019	MTBE	ND	2	0.91219	143	ug/L
STP-1 to EP-2	10/9/2019	Methylene Chloride	*0.45*	*6*	0.309003	5	ug/L
STP-1 to EP-2	10/9/2019	Naphthalene	ND	4	0.550143	30	ug/L
STP-1 to EP-2	10/9/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
STP-1 to EP-2	10/9/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
STP-1 to EP-2	10/9/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
STP-1 to EP-2	10/9/2019	Styrene	ND	2	0.382647	100	ug/L
STP-1 to EP-2	10/9/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
STP-1 to EP-2	10/9/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
STP-1 to EP-2	10/9/2019	Toluene	1.1	2	0.700872	1000	ug/L
STP-1 to EP-2	10/9/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
STP-1 to EP-2	10/9/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
STP-1 to EP-2	10/9/2019	Trichloroethene	ND	2	0.332544	5	ug/L
STP-1 to EP-2	10/9/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
STP-1 to EP-2	10/9/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
STP-1 to EP-2	10/9/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
STP-1 to EP-2	11/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
STP-1 to EP-2	11/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
STP-1 to EP-2	11/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
STP-1 to EP-2	11/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
STP-1 to EP-2	11/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
STP-1 to EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
STP-1 to EP-2	11/21/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
STP-1 to EP-2	11/21/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
STP-1 to EP-2	11/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
STP-1 to EP-2	11/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
STP-1 to EP-2	11/21/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
STP-1 to EP-2	11/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
STP-1 to EP-2	11/21/2019	2-Butanone	47	100	20.894166	5565	ug/L
STP-1 to EP-2	11/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
STP-1 to EP-2	11/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
STP-1 to EP-2	11/21/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
STP-1 to EP-2	11/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
STP-1 to EP-2	11/21/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
STP-1 to EP-2	11/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
STP-1 to EP-2	11/21/2019	Acetone	ND	100	11.993964	14064	ug/L
STP-1 to EP-2	11/21/2019	Benzene	**22**	10	1.666391	5	ug/L
STP-1 to EP-2	11/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
STP-1 to EP-2	11/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
STP-1 to EP-2	11/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
STP-1 to EP-2	11/21/2019	Bromomethane	**16**	30	2.730824	7.54	ug/L
STP-1 to EP-2	11/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
STP-1 to EP-2	11/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
STP-1 to EP-2	11/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
STP-1 to EP-2	11/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
STP-1 to EP-2	11/21/2019	Chloroform	ND	10	1.218906	100	ug/L
STP-1 to EP-2	11/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
STP-1 to EP-2	11/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
STP-1 to EP-2	11/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
STP-1 to EP-2	11/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
STP-1 to EP-2	11/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
STP-1 to EP-2	11/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
STP-1 to EP-2	11/21/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
STP-1 to EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
STP-1 to EP-2	11/21/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
STP-1 to EP-2	11/21/2019	MTBE	ND	10	4.56095	143	ug/L
STP-1 to EP-2	11/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
STP-1 to EP-2	11/21/2019	Naphthalene	ND	20	2.750713	30	ug/L
STP-1 to EP-2	11/21/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
STP-1 to EP-2	11/21/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
STP-1 to EP-2	11/21/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
STP-1 to EP-2	11/21/2019	Styrene	ND	10	1.913234	100	ug/L
STP-1 to EP-2	11/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
STP-1 to EP-2	11/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
STP-1 to EP-2	11/21/2019	Toluene	13	10	3.504362	1000	ug/L
STP-1 to EP-2	11/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
STP-1 to EP-2	11/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
STP-1 to EP-2	11/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
STP-1 to EP-2	11/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
STP-1 to EP-2	11/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
STP-1 to EP-2	11/21/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
STP-1 to EP-2	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
STP-1 to EP-2	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
STP-1 to EP-2	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
STP-1 to EP-2	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
STP-1 to EP-2	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
STP-1 to EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
STP-1 to EP-2	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
STP-1 to EP-2	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
STP-1 to EP-2	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
STP-1 to EP-2	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
STP-1 to EP-2	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
STP-1 to EP-2	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
STP-1 to EP-2	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
STP-1 to EP-2	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
STP-1 to EP-2	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
STP-1 to EP-2	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
STP-1 to EP-2	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
STP-1 to EP-2	9/16/2020	Benzene	ND	5	2.3	5	ug/L
STP-1 to EP-2	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
STP-1 to EP-2	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
STP-1 to EP-2	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
STP-1 to EP-2	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
STP-1 to EP-2	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
STP-1 to EP-2	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
STP-1 to EP-2	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
STP-1 to EP-2	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
STP-1 to EP-2	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
STP-1 to EP-2	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
STP-1 to EP-2	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
STP-1 to EP-2	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
STP-1 to EP-2	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
STP-1 to EP-2	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
STP-1 to EP-2	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
STP-1 to EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
STP-1 to EP-2	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
STP-1 to EP-2	9/16/2020	MTBE	ND	10	3.9	143	ug/L
STP-1 to EP-2	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
STP-1 to EP-2	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
STP-1 to EP-2	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
STP-1 to EP-2	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
STP-1 to EP-2	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
STP-1 to EP-2	9/16/2020	Styrene	ND	10	1.3	100	ug/L
STP-1 to EP-2	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
STP-1 to EP-2	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
STP-1 to EP-2	9/16/2020	Toluene	ND	10	2	1000	ug/L
STP-1 to EP-2	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
STP-1 to EP-2	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
STP-1 to EP-2	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
STP-1 to EP-2	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
STP-1 to EP-2	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
STP-1 to EP-2	9/16/2020	Acetone	12000	50	230	14064	ug/L
STP-1 to EP-2	12/21/2020	Acetone	104	25	10	14064	ug/L
STP-1 to EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
STP-1 to EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
STP-1 to EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
STP-1 to EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
STP-1 to EP-2	12/21/2020	2-Butanone	31	25	2.6	5565	ug/L
STP-1 to EP-2	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
STP-1 to EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
STP-1 to EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
STP-1 to EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
STP-1 to EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
STP-1 to EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
STP-1 to EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
STP-1 to EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
STP-1 to EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
STP-1 to EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
STP-1 to EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
STP-1 to EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
STP-1 to EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
STP-1 to EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
STP-1 to EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
STP-1 to EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
STP-1 to EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
STP-1 to EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
STP-1 to EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
STP-1 to EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
STP-1 to EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
STP-1 to EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
STP-1 to EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
STP-1 to EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
STP-1 to EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
STP-1 to EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
STP-1 to EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L
STP-1 to EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
STP-1 to EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
STP-1 to EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
STP-1 to EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
STP-1 to EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
STP-1 to EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
STP-1 to EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
STP-1 to EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
STP-1 to EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
STP-1 to EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
STP-1 to EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
STP-1 to EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
STP-1 to EP-2	12/21/2020	Acetone	99.8	25	10	14064	ug/L
STP-1 to EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
STP-1 to EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
STP-1 to EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
STP-1 to EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
STP-1 to EP-2	12/21/2020	2-Butanone	32.9	25	2.6	5565	ug/L
STP-1 to EP-2	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
STP-1 to EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
STP-1 to EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
STP-1 to EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
STP-1 to EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
STP-1 to EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
STP-1 to EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
STP-1 to EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
STP-1 to EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
STP-1 to EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
STP-1 to EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
STP-1 to EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
STP-1 to EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
STP-1 to EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
STP-1 to EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
STP-1 to EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
STP-1 to EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
STP-1 to EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
STP-1 to EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
STP-1 to EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
STP-1 to EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
STP-1 to EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
STP-1 to EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
STP-1 to EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
STP-1 to EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
STP-1 to EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
STP-1 to EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
STP-1 to EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L
STP-1 to EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
STP-1 to EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
STP-1 to EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
STP-1 to EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
STP-1 to EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
STP-1 to EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
STP-1 to EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
STP-1 to EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
STP-1 to EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
STP-1 to EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
STP-1 to EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-11	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-11	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-11	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-11	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-11	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-11	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-11	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-11	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-11	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-11	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-11	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-11	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-11	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-11	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-11	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-11	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-11	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-11	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-11	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-11	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-11	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-11	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-11	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-11	5/29/2012	2-Methylphenol	ND	50	14	190	ug/L
EP-11	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-11	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-11	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-11	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-11	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-11	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-11	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-11	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-11	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-11	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-11	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-11	5/29/2012	Phenol	ND	50	13	5761	ug/L
EP-11	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-11	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-11	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-11	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-11	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-11	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-11	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-11	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-11	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-11	5/29/2012	Dimethylphthalate	*ND*	*50*	13		ug/L
EP-11	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-11	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-11	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-11	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-11	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-11	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-11	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-11	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-11	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-11	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-11	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-11	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-11	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-11	5/29/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-11	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-11	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-11	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-11	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-11	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-11	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-11	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-11	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-11	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-11	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-11	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-11	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-11	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-11	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-11	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-11	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-11	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-11	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-11	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-11	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-11	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-11	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-11	11/6/2012	2-Methylphenol	200	50	14	NA	ug/L
EP-11	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-11	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-11	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-11	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-11	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-11	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-11	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-11	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-11	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-11	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-11	11/6/2012	Phenol	680	50	13	5761	ug/L
EP-11	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-11	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-11	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-11	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-11	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-11	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-11	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-11	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-11	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-11	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-11	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-11	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-11	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-11	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-11	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-11	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-11	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-11	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-11	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-11	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-11	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-11	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-11	11/6/2012	3,4-Methylphenol	330	50	14	NA	ug/L
EP-11	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-11	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-11	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-11	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-11	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-11	5/28/2013	Aniline	*ND*	*20*	4.4	13	ug/L
EP-11	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-11	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-11	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-11	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-11	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-11	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-11	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-11	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-11	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-11	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-11	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-11	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-11	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-11	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-11	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-11	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-11	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-11	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-11	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-11	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-11	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-11	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-11	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-11	5/28/2013	2-Methylphenol	ND	20	5.4	NA	ug/L
EP-11	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-11	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-11	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-11	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-11	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-11	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-11	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-11	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-11	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-11	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-11	5/28/2013	2,4-Dimethylphenol	ND	20	5.9	354	ug/L
EP-11	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-11	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-11	5/28/2013	Phenol	ND	20	4.4	5761	ug/L
EP-11	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-11	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-11	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-11	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-11	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-11	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-11	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-11	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-11	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-11	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-11	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-11	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-11	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-11	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-11	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-11	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-11	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-11	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-11	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-11	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-11	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-11	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-11	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-11	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-11	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-11	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-11	5/28/2013	3,4-Methylphenol	ND	20	7.5	NA	ug/L
EP-11	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-11	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-11	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-11	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-11	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-11	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-11	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-11	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-11	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-11	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-11	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-11	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-11	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-11	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-11	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-11	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-11	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-11	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-11	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-11	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-11	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-11	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-11	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-11	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-11	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-11	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-11	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-11	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-11	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-11	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-11	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-11	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-11	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-11	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-11	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-11	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-11	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-11	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-11	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-11	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-11	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-11	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-11	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-11	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-11	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-11	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-11	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-11	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-11	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-11	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-11	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-11	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-11	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-11	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-11	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-11	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-11	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-11	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-11	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-11	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-11	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-11	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-11	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-11	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-11	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-11	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-11	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-11	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-11	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-11	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-11	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-11	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-11	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-11	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-11	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-11	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-11	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-11	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-11	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-11	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-11	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-11	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-11	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-11	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-11	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-11	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-11	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-11	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-11	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-11	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-11	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-11	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-11	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-11	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-11	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-11	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-11	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-11	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-11	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-11	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-11	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-11	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-11	3/5/2014	Phenol	ND	50	7.9	5761	ug/L
EP-11	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-11	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-11	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-11	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-11	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-11	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-11	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-11	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-11	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-11	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-11	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-11	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-11	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-11	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-11	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-11	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-11	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-11	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-11	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-11	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-11	3/5/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-11	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-11	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-11	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-11	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-11	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-11	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-11	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-11	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-11	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-11	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-11	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-11	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-11	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-11	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-11	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-11	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-11	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-11	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-11	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-11	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-11	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-11	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-11	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-11	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-11	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-11	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-11	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-11	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-11	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-11	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-11	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-11	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-11	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-11	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-11	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-11	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-11	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-11	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-11	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-11	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-11	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-11	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-11	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-11	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-11	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-11	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-11	11/12/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
EP-11	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-11	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-11	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-11	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-11	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-11	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-11	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-11	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-11	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-11	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-11	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-11	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-11	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-11	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-11	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-11	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-11	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-11	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-11	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-11	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-11	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-11	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-11	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-11	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-11	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-11	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-11	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-11	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-11	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-11	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-11	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-11	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-11	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-11	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-11	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-11	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-11	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-11	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-11	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-11	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-11	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-11	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-11	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-11	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-11	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-11	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-11	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-11	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-11	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-11	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-11	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-11	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-11	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-11	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-11	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-11	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-11	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-11	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-11	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-11	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-11	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-11	3/25/2015	Bis(2-ethylhexyl)phthalate	11	10	3.3	55.64	ug/L
EP-11	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-11	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-11	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-11	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-11	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-11	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-11	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-11	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-11	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-11	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-11	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-11	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-11	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-11	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-11	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-11	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-11	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-11	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-11	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-11	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-11	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-11	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-11	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-11	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-11	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-11	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-11	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-11	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-11	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-11	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-11	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-11	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-11	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-11	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-11	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-11	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-11	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-11	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-11	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-11	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-11	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-11	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-11	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-11	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-11	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-11	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-11	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-11	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-11	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-11	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-11	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-11	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-11	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-11	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-11	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-11	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-11	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-11	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-11	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-11	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-11	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-11	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-11	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-11	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-11	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-11	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-11	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-11	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-11	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-11	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-11	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-11	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-11	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-11	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-11	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-11	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-11	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-11	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-11	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-11	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-11	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-11	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-11	8/30/2016	Benzoic Acid	7.6	20	2.6	75000	ug/L
EP-11	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-11	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-11	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-11	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-11	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-11	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-11	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-11	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-11	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-11	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-11	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-11	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-11	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-11	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-11	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-11	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-11	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-11	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-11	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-11	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-11	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-11	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-11	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-11	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-11	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-11	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-11	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-11	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-11	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-11	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-11	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-11	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-11	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-11	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-11	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-11	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-11	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-11	8/30/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
EP-11	8/30/2016	Di-n-octylphthalate	5.2	10	2	200	ug/L
EP-11	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-11	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-11	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-11	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-11	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-11	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-11	8/30/2016	Dimethylphthalate	4.4	10	2.4	612	ug/L
EP-11	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-11	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-11	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-11	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-11	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-11	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-11	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-11	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-11	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-11	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-11	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-11	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-11	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-11	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-11	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-11	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-11	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-11	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-11	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-11	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-11	3/30/2017	Benzoic Acid	33	100	20	75000	ug/L
EP-11	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-11	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-11	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-11	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-11	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-11	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-11	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-11	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-11	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-11	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-11	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-11	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-11	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-11	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-11	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-11	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-11	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-11	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-11	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-11	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-11	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-11	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-11	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-11	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-11	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-11	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-11	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-11	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-11	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-11	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-11	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-11	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-11	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-11	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-11	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-11	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-11	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-11	3/30/2017	Bis(2-ethylhexyl)phthalate	30	50	24	55.64	ug/L
EP-11	3/30/2017	Di-n-octylphthalate	31	50	23	200	ug/L
EP-11	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-11	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-11	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-11	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-11	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-11	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-11	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-11	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-11	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-11	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-11	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-11	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-11	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-11	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-11	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-11	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-11	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-11	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-11	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-11	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-11	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-11	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-11	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-11	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-11	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-11	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-11	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-11	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-11	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-11	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-11	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-11	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-11	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-11	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-11	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-11	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-11	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-11	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-11	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-11	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-11	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-11	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-11	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-11	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-11	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-11	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-11	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-11	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-11	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-11	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-11	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-11	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-11	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-11	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-11	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-11	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-11	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-11	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-11	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-11	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-11	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-11	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-11	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-11	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-11	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-11	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-11	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-11	10/24/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-11	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-11	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-11	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-11	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-11	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-11	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-11	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-11	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-11	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-11	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-11	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-11	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-11	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-11	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-11	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-11	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-11	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-11	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-11	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-11	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-11	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-11	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-11	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-11	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-11	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-11	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-11	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-11	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-11	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-11	2/23/2018	Benzoic Acid	41	100	20	75000	ug/L
EP-11	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-11	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-11	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-11	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-11	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-11	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-11	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-11	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-11	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-11	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-11	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-11	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-11	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-11	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-11	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-11	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-11	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-11	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-11	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-11	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-11	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-11	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-11	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-11	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-11	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-11	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-11	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-11	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-11	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-11	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-11	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-11	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-11	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-11	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-11	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-11	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-11	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-11	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-11	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-11	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-11	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-11	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-11	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-11	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-11	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-11	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-11	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-11	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-11	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-11	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-11	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-11	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-11	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-11	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-11	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-11	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-11	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-11	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-11	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-11	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-11	9/7/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-11	9/7/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-11	9/7/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-11	9/7/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-11	9/7/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-11	9/7/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-11	9/7/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-11	9/7/2018	Benzoic Acid	72	200	63	75000	ug/L
EP-11	9/7/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-11	9/7/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-11	9/7/2018	Isophorone	ND	100	62	781	ug/L
EP-11	9/7/2018	Acenaphthene	ND	100	58	535	ug/L
EP-11	9/7/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-11	9/7/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-11	9/7/2018	Phenanthrene	ND	100	60	170	ug/L
EP-11	9/7/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-11	9/7/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-11	9/7/2018	Fluorene	ND	100	63	288	ug/L
EP-11	9/7/2018	Carbazole	ND	100	63	NA	ug/L
EP-11	9/7/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-11	9/7/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-11	9/7/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-11	9/7/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-11	9/7/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-11	9/7/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-11	9/7/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-11	9/7/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-11	9/7/2018	2-Chloronaphthalene	ND	100	61	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-11	9/7/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-11	9/7/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-11	9/7/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-11	9/7/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-11	9/7/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-11	9/7/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-11	9/7/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-11	9/7/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-11	9/7/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-11	9/7/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-11	9/7/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-11	9/7/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-11	9/7/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-11	9/7/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-11	9/7/2018	Phenol	ND	100	60	5761	ug/L
EP-11	9/7/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-11	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-11	9/7/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-11	9/7/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-11	9/7/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-11	9/7/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-11	9/7/2018	Anthracene	ND	100	57	1721	ug/L
EP-11	9/7/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-11	9/7/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-11	9/7/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-11	9/7/2018	Pyrene	ND	100	65	117	ug/L
EP-11	9/7/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-11	9/7/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-11	9/7/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-11	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-11	9/7/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-11	9/7/2018	Fluoranthene	ND	100	58	802	ug/L
EP-11	9/7/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-11	9/7/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-11	9/7/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-11	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-11	9/7/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-11	9/7/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-11	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-11	9/7/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-11	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-11	9/7/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-11	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-11	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-11	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-11	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-11	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-11	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-11	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-11	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-11	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-11	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-11	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-11	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-11	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-11	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-11	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-11	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-11	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-11	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-11	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-11	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-11	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-11	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-11	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-11	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-11	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-11	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-11	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-11	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-11	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-11	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-11	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-11	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-11	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-11	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-11	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-11	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-11	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-11	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-11	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-11	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-11	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-11	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-11	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-11	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-11	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-11	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-11	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-11	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-11	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-11	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-11	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-11	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-11	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-11	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-11	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-11	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-11	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-11	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-11	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-11	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-11	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-11	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-11	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-11	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-11	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-11	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-11	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-11	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-11	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-11	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-11	12/22/2020	Acenaphthene	ND	20.9	0.334	535	ug/L
EP-11	12/22/2020	Acenaphthylene	ND	20.9	0.355	NA	ug/L
EP-11	12/22/2020	Anthracene	ND	20.9	0.376	1721	ug/L
EP-11	12/22/2020	Benzo(a)anthracene	*ND*	*20.9*	0.376	0.12	ug/L
EP-11	12/22/2020	Benzo(a)pyrene	*ND*	*20.9*	0.25	0.2	ug/L
EP-11	12/22/2020	Benzo(b)fluoranthene	*ND*	*20.9*	0.313	0.34	ug/L
EP-11	12/22/2020	Benzo(g,h,i)perylene	ND	20.9	0.48	NA	ug/L
EP-11	12/22/2020	Benzo(k)fluoranthene	*ND*	*20.9*	0.334	3.43	ug/L
EP-11	12/22/2020	Bis(2-chloroethoxy)methane	ND	20.9	0.334	59	ug/L
EP-11	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*20.9*	5.63	0.137	ug/L
EP-11	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	20.9	10.4	55.64	ug/L
EP-11	12/22/2020	4-Bromophenyl-phenylether	ND	20.9	0.417	NA	ug/L
EP-11	12/22/2020	Butylbenzylphthalate	*ND*	*20.9*	0.396	16	ug/L
EP-11	12/22/2020	Carbazole	ND	20.9	0.48	NA	ug/L
EP-11	12/22/2020	4-Chloroaniline	*ND*	*20.9*	7.1	0.37	ug/L
EP-11	12/22/2020	4-Chloro-3-Methylphenol	ND	20.9	7.93	NA	ug/L
EP-11	12/22/2020	2-Chloronaphthalene	ND	20.9	0.292	733	ug/L
EP-11	12/22/2020	2-Chlorophenol	ND	20.9	4.59	91	ug/L
EP-11	12/22/2020	4-Chlorophenyl-phenylether	ND	20.9	4.17	NA	ug/L
EP-11	12/22/2020	1,3-Dichlorobenzene	ND	20.9	0.376	NA	ug/L
EP-11	12/22/2020	Chrysene	ND	20.9	0.396	34.3	ug/L
EP-11	12/22/2020	Dibenzo(a,h)anthracene	ND	20.9	0.501	NA	ug/L
EP-11	12/22/2020	1,4-Dichlorobenzene	ND	20.9	0.334	75	ug/L
EP-11	12/22/2020	Dibenzofuran	ND	20.9	0.355	NA	ug/L
EP-11	12/22/2020	3,3-Dichlorobenzidine	*ND*	*20.9*	5.43	1.25	ug/L
EP-11	12/22/2020	2,4-Dichlorophenol	ND	20.9	6.26	45.3	ug/L
EP-11	12/22/2020	Diethylphthalate	ND	20.9	0.501	14801	ug/L
EP-11	12/22/2020	2,4-Dimethylphenol	ND	20.9	7.3	354	ug/L
EP-11	12/22/2020	Di-n-butylphthalate	ND	20.9	5.63	885	ug/L
EP-11	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*20.9*	3.34	1.52	ug/L
EP-11	12/22/2020	2,4-Dinitrophenol	*ND*	*62.6*	7.1	38.7	ug/L
EP-11	12/22/2020	2,4-Dinitrotoluene	ND	20.9	3.96	45.3	ug/L
EP-11	12/22/2020	2,6-Dinitrotoluene	*ND*	*20.9*	3.96	0.485	ug/L
EP-11	12/22/2020	Di-n-octylphthalate	ND	20.9	0.355	200	ug/L
EP-11	12/22/2020	Fluoranthene	ND	20.9	0.376	802	ug/L
EP-11	12/22/2020	Fluorene	ND	20.9	0.376	288	ug/L
EP-11	12/22/2020	Hexachlorobenzene	*ND*	*20.9*	0.355	0.0976	ug/L
EP-11	12/22/2020	Hexachlorocyclopentadiene	*ND*	*41.7*	5.43	0.41	ug/L
EP-11	12/22/2020	Hexachloroethane	*ND*	*20.9*	8.76	3.28	ug/L
EP-11	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*20.9*	0.459	0.343	ug/L
EP-11	12/22/2020	Isophorone	ND	20.9	0.292	781	ug/L
EP-11	12/22/2020	2-Methylphenol	ND	20.9	3.76	NA	ug/L
EP-11	12/22/2020	Naphthalene	ND	20.9	0.355	30	ug/L
EP-11	12/22/2020	2-Nitroaniline	ND	20.9	4.59	190	ug/L
EP-11	12/22/2020	3-Nitroaniline	ND	20.9	3.76	NA	ug/L
EP-11	12/22/2020	4-Nitroaniline	*ND*	*20.9*	3.13	3.8	ug/L
EP-11	12/22/2020	Nitrobenzene	*ND*	*20.9*	0.271	1.4	ug/L
EP-11	12/22/2020	2-Nitrophenol	ND	20.9	10.9	NA	ug/L
EP-11	12/22/2020	4-Nitrophenol	ND	20.9	4.38	NA	ug/L
EP-11	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*20.9*	6.89	0.011	ug/L
EP-11	12/22/2020	N-Nitrosodiphenylamine	ND	20.9	0.376	122	ug/L
EP-11	12/22/2020	Pentachlorophenol	*ND*	*41.7*	2.92	1	ug/L
EP-11	12/22/2020	Phenanthrene	ND	20.9	0.376	170	ug/L
EP-11	12/22/2020	Phenol	ND	20.9	5.43	5761	ug/L
EP-11	12/22/2020	Pyrene	ND	20.9	0.438	117	ug/L
EP-11	12/22/2020	2,4,5-Trichlorophenol	ND	20.9	7.72	1166	ug/L
EP-11	12/22/2020	2,4,6-Trichlorophenol	ND	20.9	7.3	11.9*	ug/L
EP-11	12/22/2020	Dimethylphthalate	ND	20.9	0.355	612	ug/L
EP-11	12/22/2020	Aniline	*ND*	*20.9*	7.93	13	ug/L
EP-11	12/22/2020	Benzoic Acid	ND	62.6	15.2	75000	ug/L
EP-11	12/22/2020	Benzyl Alcohol	ND	20.9	4.17	2000	ug/L
EP-11	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*20.9*	0.334	9.81	ug/L
EP-11	12/22/2020	N-Nitrosodimethylamine	*ND*	*20.9*	7.3	0.0049	ug/L
EP-11	12/22/2020	Pyridine	*ND*	*20.9*	6.68	20	ug/L
EP-11	12/22/2020	1,2,4-Trichlorobenzene	ND	20.9	0.376	70	ug/L
EP-11	12/22/2020	1,2-Dichlorobenzene	ND	20.9	0.355	600	ug/L
EP-11	12/22/2020	Azobenzene	*ND*	*20.9*	2.09	0.12	ug/L
EP-12A	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12A	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12A	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12A	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12A	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-12A	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12A	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12A	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12A	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12A	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-12A	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12A	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12A	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12A	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12A	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12A	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-12A	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-12A	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12A	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12A	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12A	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12A	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12A	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12A	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12A	5/29/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-12A	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12A	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12A	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12A	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12A	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-12A	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12A	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12A	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12A	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12A	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12A	5/29/2012	Phenol	ND	50	13	5761	ug/L
EP-12A	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12A	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12A	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12A	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12A	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12A	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-12A	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12A	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-12A	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12A	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12A	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12A	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12A	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12A	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12A	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12A	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12A	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12A	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12A	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12A	5/29/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12A	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12A	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12A	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-12A	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12A	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12A	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12A	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12A	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-12A	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12A	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12A	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12A	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12A	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12A	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-12A	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-12A	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12A	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12A	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12A	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12A	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12A	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12A	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12A	11/6/2012	2-Methylphenol	150	50	14	NA	ug/L
EP-12A	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12A	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12A	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12A	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12A	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-12A	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12A	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12A	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-12A	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12A	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12A	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12A	11/6/2012	Phenol	460	50	13	5761	ug/L
EP-12A	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12A	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12A	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12A	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-12A	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12A	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-12A	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12A	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-12A	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12A	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12A	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12A	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12A	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12A	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12A	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12A	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12A	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12A	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12A	11/6/2012	3,4-Methylphenol	210	50	14	NA	ug/L
EP-12A	5/28/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-12A	5/28/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12A	5/28/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-12A	5/28/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-12A	5/28/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-12A	5/28/2013	Aniline	**31**	10	2.2	13	ug/L
EP-12A	5/28/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/28/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-12A	5/28/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-12A	5/28/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-12A	5/28/2013	Isophorone	ND	10	1.8	781	ug/L
EP-12A	5/28/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-12A	5/28/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-12A	5/28/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-12A	5/28/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-12A	5/28/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-12A	5/28/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-12A	5/28/2013	Fluorene	ND	10	2.5	288	ug/L
EP-12A	5/28/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-12A	5/28/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-12A	5/28/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-12A	5/28/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-12A	5/28/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-12A	5/28/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-12A	5/28/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-12A	5/28/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-12A	5/28/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-12A	5/28/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-12A	5/28/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-12A	5/28/2013	2-Methylphenol	560	200	54	NA	ug/L
EP-12A	5/28/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-12A	5/28/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-12A	5/28/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-12A	5/28/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-12A	5/28/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-12A	5/28/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-12A	5/28/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-12A	5/28/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-12A	5/28/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-12A	5/28/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-12A	5/28/2013	2,4-Dimethylphenol	110	10	2.9	354	ug/L
EP-12A	5/28/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-12A	5/28/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-12A	5/28/2013	Phenol	2000	200	44	5761	ug/L
EP-12A	5/28/2013	Pyridine	ND	10	3.5	20	ug/L
EP-12A	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-12A	5/28/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-12A	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-12A	5/28/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-12A	5/28/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-12A	5/28/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-12A	5/28/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-12A	5/28/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-12A	5/28/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-12A	5/28/2013	Pyrene	ND	10	2.1	117	ug/L
EP-12A	5/28/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-12A	5/28/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-12A	5/28/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-12A	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-12A	5/28/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-12A	5/28/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-12A	5/28/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-12A	5/28/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-12A	5/28/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-12A	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12A	5/28/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-12A	5/28/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-12A	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-12A	5/28/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-12A	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-12A	5/28/2013	3,4-Methylphenol	1300	200	75	NA	ug/L
EP-12A	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-12A	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-12A	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12A	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-12A	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-12A	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-12A	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-12A	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-12A	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-12A	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-12A	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-12A	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12A	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-12A	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-12A	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12A	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-12A	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-12A	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-12A	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-12A	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-12A	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-12A	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-12A	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12A	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-12A	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-12A	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-12A	10/15/2013	2-Methylphenol	100	50	14	NA	ug/L
EP-12A	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-12A	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-12A	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-12A	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-12A	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-12A	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12A	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-12A	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-12A	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-12A	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-12A	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-12A	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-12A	10/15/2013	Phenol	350	50	11	5761	ug/L
EP-12A	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-12A	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-12A	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-12A	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-12A	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12A	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-12A	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12A	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-12A	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-12A	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-12A	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-12A	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-12A	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-12A	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-12A	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-12A	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-12A	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-12A	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12A	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-12A	10/15/2013	3,4-Methylphenol	160	50	19	NA	ug/L
EP-12A	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-12A	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-12A	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-12A	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-12A	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-12A	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-12A	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-12A	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-12A	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-12A	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-12A	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-12A	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-12A	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-12A	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-12A	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-12A	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-12A	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-12A	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12A	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-12A	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-12A	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-12A	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-12A	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12A	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-12A	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12A	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-12A	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-12A	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-12A	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-12A	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-12A	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-12A	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-12A	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-12A	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-12A	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12A	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12A	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-12A	3/5/2014	Phenol	200	50	7.9	5761	ug/L
EP-12A	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-12A	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-12A	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12A	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12A	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-12A	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-12A	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-12A	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-12A	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-12A	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-12A	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-12A	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-12A	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-12A	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12A	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-12A	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-12A	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12A	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-12A	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-12A	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-12A	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-12A	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-12A	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-12A	3/5/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-12A	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-12A	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12A	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-12A	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-12A	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-12A	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-12A	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-12A	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-12A	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-12A	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-12A	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-12A	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-12A	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-12A	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-12A	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-12A	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-12A	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-12A	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-12A	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-12A	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-12A	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-12A	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-12A	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-12A	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-12A	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-12A	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-12A	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-12A	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-12A	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-12A	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-12A	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-12A	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-12A	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-12A	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-12A	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-12A	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-12A	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-12A	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-12A	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-12A	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-12A	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-12A	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-12A	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-12A	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-12A	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12A	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-12A	11/12/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
EP-12A	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-12A	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-12A	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-12A	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-12A	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-12A	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-12A	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-12A	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-12A	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-12A	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-12A	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-12A	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-12A	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-12A	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-12A	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-12A	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-12A	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-12A	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-12A	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-12A	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-12A	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-12A	3/25/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-12A	3/25/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-12A	3/25/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-12A	3/25/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-12A	3/25/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-12A	3/25/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-12A	3/25/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-12A	3/25/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-12A	3/25/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-12A	3/25/2015	Isophorone	ND	100	20	781	ug/L
EP-12A	3/25/2015	Acenaphthene	ND	100	19	535	ug/L
EP-12A	3/25/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-12A	3/25/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-12A	3/25/2015	Phenanthrene	ND	100	20	170	ug/L
EP-12A	3/25/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-12A	3/25/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-12A	3/25/2015	Fluorene	ND	100	17	288	ug/L
EP-12A	3/25/2015	Carbazole	ND	100	15	NA	ug/L
EP-12A	3/25/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-12A	3/25/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-12A	3/25/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-12A	3/25/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-12A	3/25/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-12A	3/25/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-12A	3/25/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-12A	3/25/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-12A	3/25/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-12A	3/25/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-12A	3/25/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-12A	3/25/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-12A	3/25/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-12A	3/25/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-12A	3/25/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-12A	3/25/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-12A	3/25/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-12A	3/25/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-12A	3/25/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-12A	3/25/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-12A	3/25/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-12A	3/25/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-12A	3/25/2015	Phenol	ND	100	11	5761	ug/L
EP-12A	3/25/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-12A	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-12A	3/25/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-12A	3/25/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-12A	3/25/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-12A	3/25/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-12A	3/25/2015	Anthracene	ND	100	16	1721	ug/L
EP-12A	3/25/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-12A	3/25/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/25/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-12A	3/25/2015	Pyrene	ND	100	23	117	ug/L
EP-12A	3/25/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-12A	3/25/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-12A	3/25/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-12A	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-12A	3/25/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-12A	3/25/2015	Fluoranthene	ND	100	15	802	ug/L
EP-12A	3/25/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-12A	3/25/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-12A	3/25/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-12A	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-12A	3/25/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-12A	3/25/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-12A	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-12A	3/25/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-12A	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-12A	3/25/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-12A	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12A	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12A	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12A	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12A	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-12A	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12A	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12A	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12A	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12A	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-12A	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12A	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12A	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12A	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12A	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12A	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12A	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12A	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-12A	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12A	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12A	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12A	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12A	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12A	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12A	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12A	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12A	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12A	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12A	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12A	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12A	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12A	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12A	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12A	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12A	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12A	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12A	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12A	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12A	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-12A	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12A	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12A	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12A	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12A	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12A	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12A	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12A	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12A	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12A	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12A	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12A	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12A	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-12A	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12A	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12A	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12A	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12A	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12A	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12A	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12A	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12A	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12A	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12A	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12A	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-12A	8/30/2016	Benzo(a)pyrene	*ND*	*20*	5.4	0.2	ug/L
EP-12A	8/30/2016	2,4-Dinitrophenol	*ND*	*40*	5.5	38.7	ug/L
EP-12A	8/30/2016	Dibenzo(a,h)anthracene	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Benzo(a)anthracene	*ND*	*20*	5.3	0.12	ug/L
EP-12A	8/30/2016	4-Chloro-3-Methylphenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Aniline	*ND*	*20*	4.9	13	ug/L
EP-12A	8/30/2016	N-Nitrosodimethylamine	*ND*	*20*	4.3	0.0049	ug/L
EP-12A	8/30/2016	Benzoic Acid	ND	40	5.2	75000	ug/L
EP-12A	8/30/2016	Hexachloroethane	*ND*	*20*	4.7	3.28	ug/L
EP-12A	8/30/2016	Hexachlorocyclopentadiene	*ND*	*20*	4.6	0.41	ug/L
EP-12A	8/30/2016	Isophorone	ND	20	5.2	781	ug/L
EP-12A	8/30/2016	Acenaphthene	ND	20	5.1	535	ug/L
EP-12A	8/30/2016	Diethylphthalate	ND	20	5.4	14801	ug/L
EP-12A	8/30/2016	Di-n-butylphthalate	ND	20	4.9	885	ug/L
EP-12A	8/30/2016	Phenanthrene	ND	20	5.2	170	ug/L
EP-12A	8/30/2016	Butylbenzylphthalate	*ND*	*20*	5	16	ug/L
EP-12A	8/30/2016	N-Nitrosodiphenylamine	ND	20	4.6	122	ug/L
EP-12A	8/30/2016	Fluorene	ND	20	5.4	288	ug/L
EP-12A	8/30/2016	Carbazole	ND	20	4.6	NA	ug/L
EP-12A	8/30/2016	Hexachlorobutadiene	*ND*	*20*	4.4	0.14	ug/L
EP-12A	8/30/2016	Pentachlorophenol	*ND*	*40*	4.7	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	2,4,6-Trichlorophenol	ND	20	4.9	11.9*	ug/L
EP-12A	8/30/2016	2-Nitroaniline	ND	20	5.5	190	ug/L
EP-12A	8/30/2016	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-12A	8/30/2016	1-Methylnaphthalene	*ND*	*20*	5.8	11.38	ug/L
EP-12A	8/30/2016	Naphthalene	ND	20	5.2	30	ug/L
EP-12A	8/30/2016	2-Methylnaphthalene	ND	20	5.8	35.1	ug/L
EP-12A	8/30/2016	2-Chloronaphthalene	ND	20	4.5	733	ug/L
EP-12A	8/30/2016	3,3-Dichlorobenzidine	*ND*	*20*	4.8	1.25	ug/L
EP-12A	8/30/2016	2-Methylphenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	1,2-Dichlorobenzene	ND	20	4.6	600	ug/L
EP-12A	8/30/2016	2-Chlorophenol	ND	20	4.4	91	ug/L
EP-12A	8/30/2016	2,4,5-Trichlorophenol	ND	20	4.4	1166	ug/L
EP-12A	8/30/2016	Nitrobenzene	*ND*	*20*	5.5	1.4	ug/L
EP-12A	8/30/2016	3-Nitroaniline	ND	20	5.9	NA	ug/L
EP-12A	8/30/2016	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-12A	8/30/2016	4-Nitrophenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Benzyl Alcohol	ND	20	6	2000	ug/L
EP-12A	8/30/2016	4-Bromophenyl-phenylether	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Azobenzene	*ND*	*20*	5.3	0.12	ug/L
EP-12A	8/30/2016	2,4-Dimethylphenol	ND	20	6	354	ug/L
EP-12A	8/30/2016	1,4-Dichlorobenzene	ND	20	4.8	75	ug/L
EP-12A	8/30/2016	4-Chloroaniline	*ND*	*20*	5.4	0.37	ug/L
EP-12A	8/30/2016	Phenol	ND	20	4	5761	ug/L
EP-12A	8/30/2016	Pyridine	ND	20	4.3	20	ug/L
EP-12A	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*20*	5.3	0.137	ug/L
EP-12A	8/30/2016	Bis(2-chloroethoxy)methane	ND	20	5.6	59	ug/L
EP-12A	8/30/2016	Bis(2-ethylhexyl)phthalate	6.2	20	5.2	55.64	ug/L
EP-12A	8/30/2016	Di-n-octylphthalate	*7*	20	4	200	ug/L
EP-12A	8/30/2016	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-12A	8/30/2016	Anthracene	ND	20	5	1721	ug/L
EP-12A	8/30/2016	1,2,4-Trichlorobenzene	ND	20	5.2	70	ug/L
EP-12A	8/30/2016	2,4-Dichlorophenol	ND	40	4.7	45.3	ug/L
EP-12A	8/30/2016	2,4-Dinitrotoluene	ND	20	6.3	45.3	ug/L
EP-12A	8/30/2016	Pyrene	ND	20	6.2	117	ug/L
EP-12A	8/30/2016	Dimethylphthalate	8.4	20	4.9	612	ug/L
EP-12A	8/30/2016	Dibenzofuran	ND	20	5	NA	ug/L
EP-12A	8/30/2016	Benzo(g,h,i)perylene	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.9	0.343	ug/L
EP-12A	8/30/2016	Benzo(b)fluoranthene	*ND*	*20*	5.8	0.34	ug/L
EP-12A	8/30/2016	Fluoranthene	ND	20	5.2	802	ug/L
EP-12A	8/30/2016	Benzo(k)fluoranthene	*ND*	*20*	6	3.43	ug/L
EP-12A	8/30/2016	Acenaphthylene	ND	20	4.7	NA	ug/L
EP-12A	8/30/2016	Chrysene	ND	20	5.6	34.3	ug/L
EP-12A	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*40*	3.6	1.52	ug/L
EP-12A	8/30/2016	1,3-Dichlorobenzene	ND	20	4.5	NA	ug/L
EP-12A	8/30/2016	2,6-Dinitrotoluene	*ND*	*20*	5.5	0.485	ug/L
EP-12A	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*20*	4.8	0.011	ug/L
EP-12A	8/30/2016	4-Chlorophenyl-phenylether	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*20*	3.8	9.81	ug/L
EP-12A	8/30/2016	3,4-Methylphenol	ND	20	4.6	NA	ug/L
EP-12A	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-12A	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-12A	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-12A	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12A	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-12A	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-12A	3/30/2017	Benzoic Acid	32	100	20	75000	ug/L
EP-12A	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-12A	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12A	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-12A	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12A	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12A	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12A	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12A	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-12A	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12A	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-12A	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-12A	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-12A	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12A	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12A	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12A	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-12A	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-12A	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-12A	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12A	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-12A	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12A	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12A	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12A	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12A	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-12A	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12A	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-12A	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12A	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12A	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-12A	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12A	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12A	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-12A	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-12A	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-12A	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-12A	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12A	3/30/2017	Bis(2-ethylhexyl)phthalate	*27*	50	24	55.64	ug/L
EP-12A	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12A	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-12A	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-12A	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12A	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-12A	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-12A	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-12A	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12A	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12A	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12A	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-12A	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12A	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12A	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12A	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12A	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-12A	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12A	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12A	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12A	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12A	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12A	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-12A	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-12A	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-12A	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-12A	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-12A	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-12A	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-12A	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-12A	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-12A	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12A	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-12A	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-12A	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-12A	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-12A	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-12A	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-12A	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-12A	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-12A	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-12A	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-12A	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-12A	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-12A	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-12A	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-12A	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12A	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-12A	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-12A	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-12A	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-12A	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-12A	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-12A	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-12A	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-12A	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-12A	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-12A	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-12A	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-12A	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-12A	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-12A	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-12A	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-12A	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-12A	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-12A	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-12A	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-12A	10/24/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-12A	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-12A	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-12A	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-12A	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-12A	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-12A	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-12A	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-12A	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-12A	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-12A	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-12A	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-12A	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-12A	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-12A	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-12A	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-12A	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-12A	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-12A	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-12A	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-12A	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-12A	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-12A	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-12A	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-12A	9/7/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-12A	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-12A	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-12A	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-12A	9/7/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-12A	9/7/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-12A	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-12A	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-12A	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-12A	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-12A	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-12A	9/7/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-12A	9/7/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-12A	9/7/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-12A	9/7/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-12A	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-12A	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-12A	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-12A	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-12A	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-12A	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-12A	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-12A	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-12A	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-12A	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-12A	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-12A	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-12A	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-12A	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-12A	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-12A	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-12A	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-12A	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-12A	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-12A	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-12A	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-12A	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-12A	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-12A	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-12A	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-12A	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-12A	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-12A	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-12A	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-12A	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-12A	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-12A	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-12A	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-12A	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-12A	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-12A	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-12A	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-12A	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-12A	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-12A	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-12A	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-12A	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-12A	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-12A	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-12A	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-12A	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-12A	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-12A	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-12A	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-12A	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-12A	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-12A	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-12A	9/7/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-12A	9/7/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-12A	9/7/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-12A	9/7/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-12A	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-12A	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-12A	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-12A	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-12A	9/7/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-12A	9/7/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-12A	9/7/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-12A	9/7/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-12A	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-12A	9/7/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-12A	9/7/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-12A	9/7/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-12A	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-12A	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-12A	11/21/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-12A	11/21/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-12A	11/21/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-12A	11/21/2019	1,4-Dioxane	**5.3**	1	1	4.59	ug/L
EP-12A	11/21/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-12A	11/21/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-12A	11/21/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-12A	11/21/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-12A	11/21/2019	2,4-Dimethylphenol	12	2.5	2.5	354	ug/L
EP-12A	11/21/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-12A	11/21/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-12A	11/21/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-12A	11/21/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-12A	11/21/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-12A	11/21/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-12A	11/21/2019	2-Methylphenol	90	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-12A	11/21/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-12A	11/21/2019	3,4-Methylphenol	93	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-12A	11/21/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-12A	11/21/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-12A	11/21/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-12A	11/21/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-12A	11/21/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-12A	11/21/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-12A	11/21/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-12A	11/21/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-12A	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-12A	11/21/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-12A	11/21/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-12A	11/21/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-12A	11/21/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
EP-12A	11/21/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-12A	11/21/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-12A	11/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-12A	11/21/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-12A	11/21/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-12A	11/21/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-12A	11/21/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
EP-12A	11/21/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-12A	11/21/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-12A	11/21/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-12A	11/21/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-12A	11/21/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-12A	11/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-12A	11/21/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-12A	11/21/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-12A	11/21/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-12A	11/21/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-12A	11/21/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-12A	11/21/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-12A	11/21/2019	Phenol	220	2.5	2.5	5761	ug/L
EP-12A	11/21/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-12A	11/21/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-12A	11/21/2019	4,4-DDD	*ND*	*1*	0.8031	0.317	ug/L
EP-12A	11/21/2019	4,4-DDE	*ND*	*1*	0.8571	0.462	ug/L
EP-12A	11/21/2019	4,4-DDT	ND	1.25	1.0222	2.29	ug/L
EP-12A	11/21/2019	Aldrin	*ND*	*1*	0.8311	0.002	ug/L
EP-12A	11/21/2019	a-BHC	*ND*	*1*	0.8282	0.069	ug/L
EP-12A	11/21/2019	b-BHC	*ND*	*1*	0.9317	0.243	ug/L
EP-12A	11/21/2019	Chlordane	*ND*	*10*	5	0.448	ug/L
EP-12A	11/21/2019	d-BHC	ND	1	0.8642	NA	ug/L
EP-12A	11/21/2019	Dieldrin	*ND*	*1*	0.8413	0.018	ug/L
EP-12A	11/21/2019	Endosulfan I	ND	1	0.8485	98.7	ug/L
EP-12A	11/21/2019	Endosulfan II	ND	1	0.8724	98.7	ug/L
EP-12A	11/21/2019	Endosulfan sulfate	ND	1	0.9031	110	ug/L
EP-12A	11/21/2019	Endrin	ND	1.25	1.1342	2.23	ug/L
EP-12A	11/21/2019	Endrin aldehyde	ND	1	0.8155	NA	ug/L
EP-12A	11/21/2019	g-BHC (Lindane)	*ND*	*1*	0.8487	0.415	ug/L
EP-12A	11/21/2019	Heptachlor	*ND*	*1*	0.8575	0.0221	ug/L
EP-12A	11/21/2019	Heptachlor epoxide	*ND*	*1*	0.8738	0.0014	ug/L
EP-12A	11/21/2019	Methoxychlor	ND	1.25	1.124	37	ug/L
EP-12A	11/21/2019	Toxaphene	ND	10	5		ug/L
EP-12A	12/22/2020	Acenaphthene	ND	11.5	0.185	535	ug/L
EP-12A	12/22/2020	Acenaphthylene	ND	11.5	0.196	NA	ug/L
EP-12A	12/22/2020	Anthracene	ND	11.5	0.208	1721	ug/L
EP-12A	12/22/2020	Benzo(a)anthracene	*ND*	*11.5*	0.208	0.12	ug/L
EP-12A	12/22/2020	Benzo(a)pyrene	*ND*	*11.5*	0.139	0.2	ug/L
EP-12A	12/22/2020	Benzo(b)fluoranthene	*ND*	*11.5*	0.173	0.34	ug/L
EP-12A	12/22/2020	Benzo(g,h,i)perylene	ND	11.5	0.265	NA	ug/L
EP-12A	12/22/2020	Benzo(k)fluoranthene	*ND*	*11.5*	0.185	3.43	ug/L
EP-12A	12/22/2020	Bis(2-chloroethoxy)methane	ND	11.5	0.185	59	ug/L
EP-12A	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*11.5*	3.12	0.137	ug/L
EP-12A	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	11.5	5.77	55.64	ug/L
EP-12A	12/22/2020	4-Bromophenyl-phenylether	ND	11.5	0.231	NA	ug/L
EP-12A	12/22/2020	Butylbenzylphthalate	ND	11.5	0.219	16	ug/L
EP-12A	12/22/2020	Carbazole	ND	11.5	0.265	NA	ug/L
EP-12A	12/22/2020	4-Chloroaniline	*ND*	*11.5*	3.92	0.37	ug/L
EP-12A	12/22/2020	4-Chloro-3-Methylphenol	ND	11.5	4.39	NA	ug/L
EP-12A	12/22/2020	2-Chloronaphthalene	ND	11.5	0.162	733	ug/L
EP-12A	12/22/2020	2-Chlorophenol	ND	11.5	2.54	91	ug/L
EP-12A	12/22/2020	4-Chlorophenyl-phenylether	ND	11.5	2.31	NA	ug/L
EP-12A	12/22/2020	1,3-Dichlorobenzene	ND	11.5	0.208	NA	ug/L
EP-12A	12/22/2020	Chrysene	ND	11.5	0.219	34.3	ug/L
EP-12A	12/22/2020	Dibenzo(a,h)anthracene	ND	11.5	0.277	NA	ug/L
EP-12A	12/22/2020	1,4-Dichlorobenzene	ND	11.5	0.185	75	ug/L
EP-12A	12/22/2020	Dibenzofuran	ND	11.5	0.196	NA	ug/L
EP-12A	12/22/2020	3,3-Dichlorobenzidine	*ND*	*11.5*	3	1.25	ug/L
EP-12A	12/22/2020	2,4-Dichlorophenol	ND	11.5	3.46	45.3	ug/L
EP-12A	12/22/2020	Diethylphthalate	ND	11.5	0.277	14801	ug/L
EP-12A	12/22/2020	2,4-Dimethylphenol	ND	11.5	4.04	354	ug/L
EP-12A	12/22/2020	Di-n-butylphthalate	ND	11.5	3.12	885	ug/L
EP-12A	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.5*	1.85	1.52	ug/L
EP-12A	12/22/2020	2,4-Dinitrophenol	ND	34.6	3.92	38.7	ug/L
EP-12A	12/22/2020	2,4-Dinitrotoluene	ND	11.5	2.19	45.3	ug/L
EP-12A	12/22/2020	2,6-Dinitrotoluene	*ND*	*11.5*	2.19	0.485	ug/L
EP-12A	12/22/2020	Di-n-octylphthalate	ND	11.5	0.196	200	ug/L
EP-12A	12/22/2020	Fluoranthene	ND	11.5	0.208	802	ug/L
EP-12A	12/22/2020	Fluorene	ND	11.5	0.208	288	ug/L
EP-12A	12/22/2020	Hexachlorobenzene	*ND*	*11.5*	0.196	0.0976	ug/L
EP-12A	12/22/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	3	0.41	ug/L
EP-12A	12/22/2020	Hexachloroethane	*ND*	*11.5*	4.85	3.28	ug/L
EP-12A	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.5*	0.254	0.343	ug/L
EP-12A	12/22/2020	Isophorone	ND	11.5	0.162	781	ug/L
EP-12A	12/22/2020	2-Methylphenol	ND	11.5	2.08	NA	ug/L
EP-12A	12/22/2020	Naphthalene	ND	11.5	0.196	30	ug/L
EP-12A	12/22/2020	2-Nitroaniline	ND	11.5	2.54	190	ug/L
EP-12A	12/22/2020	3-Nitroaniline	ND	11.5	2.08	NA	ug/L
EP-12A	12/22/2020	4-Nitroaniline	*ND*	*11.5*	1.73	3.8	ug/L
EP-12A	12/22/2020	Nitrobenzene	*ND*	*11.5*	0.15	1.4	ug/L
EP-12A	12/22/2020	2-Nitrophenol	ND	11.5	6	NA	ug/L
EP-12A	12/22/2020	4-Nitrophenol	ND	11.5	2.42	NA	ug/L
EP-12A	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*11.5*	3.81	0.011	ug/L
EP-12A	12/22/2020	N-Nitrosodiphenylamine	ND	11.5	0.208	122	ug/L
EP-12A	12/22/2020	Pentachlorophenol	*ND*	*23.1*	1.62	1	ug/L
EP-12A	12/22/2020	Phenanthrene	ND	11.5	0.208	170	ug/L
EP-12A	12/22/2020	Phenol	ND	11.5	3	5761	ug/L
EP-12A	12/22/2020	Pyrene	ND	11.5	0.242	117	ug/L
EP-12A	12/22/2020	2,4,5-Trichlorophenol	ND	11.5	4.27	1166	ug/L
EP-12A	12/22/2020	2,4,6-Trichlorophenol	ND	11.5	4.04	11.9*	ug/L
EP-12A	12/22/2020	Dimethylphthalate	ND	11.5	0.196	612	ug/L
EP-12A	12/22/2020	Aniline	ND	11.5	4.39	13	ug/L
EP-12A	12/22/2020	Benzoic Acid	ND	34.6	8.43	75000	ug/L
EP-12A	12/22/2020	Benzyl Alcohol	ND	11.5	2.31	2000	ug/L
EP-12A	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.5*	0.185	9.81	ug/L
EP-12A	12/22/2020	N-Nitrosodimethylamine	*ND*	*11.5*	4.04	0.0049	ug/L
EP-12A	12/22/2020	Pyridine	ND	11.5	3.69	20	ug/L
EP-12A	12/22/2020	1,2,4-Trichlorobenzene	ND	11.5	0.208	70	ug/L
EP-12A	12/22/2020	1,2-Dichlorobenzene	ND	11.5	0.196	600	ug/L
EP-12A	12/22/2020	Azobenzene	*ND*	*11.5*	1.15	0.12	ug/L
EP-12B	5/29/2012	Benzo(a)pyrene	*ND*	*100*	26	0.2	ug/L
EP-12B	5/29/2012	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-12B	5/29/2012	Dibenzo(a,h)anthracene	ND	100	28	NA	ug/L
EP-12B	5/29/2012	Benzo(a)anthracene	*ND*	*100*	28	0.12	ug/L
EP-12B	5/29/2012	4-Chloro-3-Methylphenol	ND	100	23	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/29/2012	Aniline	*ND*	*100*	20	13	ug/L
EP-12B	5/29/2012	N-Nitrosodimethylamine	*ND*	*100*	28	0.0049	ug/L
EP-12B	5/29/2012	Benzoic Acid	ND	200	57	75000	ug/L
EP-12B	5/29/2012	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-12B	5/29/2012	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12B	5/29/2012	Isophorone	ND	100	24	781	ug/L
EP-12B	5/29/2012	Acenaphthene	ND	100	27	535	ug/L
EP-12B	5/29/2012	Diethylphthalate	ND	100	23	14801	ug/L
EP-12B	5/29/2012	Di-n-butylphthalate	ND	100	32	885	ug/L
EP-12B	5/29/2012	Phenanthrene	ND	100	21	170	ug/L
EP-12B	5/29/2012	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-12B	5/29/2012	N-Nitrosodiphenylamine	ND	100	27	122	ug/L
EP-12B	5/29/2012	Fluorene	ND	100	23	288	ug/L
EP-12B	5/29/2012	Carbazole	ND	100	26	NA	ug/L
EP-12B	5/29/2012	Hexachlorobutadiene	*ND*	*100*	30	0.14	ug/L
EP-12B	5/29/2012	Pentachlorophenol	*ND*	*200*	16	1	ug/L
EP-12B	5/29/2012	2,4,6-Trichlorophenol	ND	100	22	11.9*	ug/L
EP-12B	5/29/2012	2-Nitroaniline	ND	100	26	190	ug/L
EP-12B	5/29/2012	2-Nitrophenol	ND	100	24	NA	ug/L
EP-12B	5/29/2012	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-12B	5/29/2012	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12B	5/29/2012	2-Methylnaphthalene	*ND*	*100*	25	35.1	ug/L
EP-12B	5/29/2012	2-Chloronaphthalene	ND	100	27	733	ug/L
EP-12B	5/29/2012	3,3-Dichlorobenzidine	*ND*	*100*	43	1.25	ug/L
EP-12B	5/29/2012	2-Methylphenol	330	100	28	NA	ug/L
EP-12B	5/29/2012	1,2-Dichlorobenzene	ND	100	27	600	ug/L
EP-12B	5/29/2012	2-Chlorophenol	*ND*	*100*	28	91	ug/L
EP-12B	5/29/2012	2,4,5-Trichlorophenol	ND	100	25	1166	ug/L
EP-12B	5/29/2012	Nitrobenzene	*ND*	*100*	26	1.4	ug/L
EP-12B	5/29/2012	3-Nitroaniline	ND	100	25	NA	ug/L
EP-12B	5/29/2012	4-Nitroaniline	*ND*	*200*	27	3.8	ug/L
EP-12B	5/29/2012	4-Nitrophenol	ND	100	35	NA	ug/L
EP-12B	5/29/2012	Benzyl Alcohol	ND	100	21	2000	ug/L
EP-12B	5/29/2012	4-Bromophenyl-phenylether	ND	100	34	NA	ug/L
EP-12B	5/29/2012	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-12B	5/29/2012	2,4-Dimethylphenol	ND	100	32	354	ug/L
EP-12B	5/29/2012	1,4-Dichlorobenzene	*ND*	*100*	29	75	ug/L
EP-12B	5/29/2012	4-Chloroaniline	*ND*	*100*	34	0.37	ug/L
EP-12B	5/29/2012	Phenol	1100	100	25	5761	ug/L
EP-12B	5/29/2012	Pyridine	*ND*	*100*	24	20	ug/L
EP-12B	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*100*	21	0.137	ug/L
EP-12B	5/29/2012	Bis(2-chloroethoxy)methane	*ND*	*100*	36	59	ug/L
EP-12B	5/29/2012	Bis(2-ethylhexyl)phthalate	*ND*	*100*	30	55.64	ug/L
EP-12B	5/29/2012	Di-n-octylphthalate	ND	100	28	200	ug/L
EP-12B	5/29/2012	Hexachlorobenzene	*ND*	*100*	29	0.0976	ug/L
EP-12B	5/29/2012	Anthracene	ND	100	28	1721	ug/L
EP-12B	5/29/2012	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-12B	5/29/2012	2,4-Dichlorophenol	*ND*	*200*	31	45.3	ug/L
EP-12B	5/29/2012	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-12B	5/29/2012	Pyrene	ND	100	29	117	ug/L
EP-12B	5/29/2012	Dimethylphthalate	ND	100	25	612	ug/L
EP-12B	5/29/2012	Dibenzofuran	ND	100	28	NA	ug/L
EP-12B	5/29/2012	Benzo(g,h,i)perylene	ND	100	30	NA	ug/L
EP-12B	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*100*	31	0.343	ug/L
EP-12B	5/29/2012	Benzo(b)fluoranthene	*ND*	*100*	30	0.34	ug/L
EP-12B	5/29/2012	Fluoranthene	ND	100	27	802	ug/L
EP-12B	5/29/2012	Benzo(k)fluoranthene	*ND*	*100*	37	3.43	ug/L
EP-12B	5/29/2012	Acenaphthylene	ND	100	26	NA	ug/L
EP-12B	5/29/2012	Chrysene	*ND*	*100*	30	34.3	ug/L
EP-12B	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*200*	22	1.52	ug/L
EP-12B	5/29/2012	1,3-Dichlorobenzene	ND	100	30	NA	ug/L
EP-12B	5/29/2012	2,6-Dinitrotoluene	*ND*	*100*	26	0.485	ug/L
EP-12B	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*100*	33	0.011	ug/L
EP-12B	5/29/2012	4-Chlorophenyl-phenylether	ND	100	25	NA	ug/L
EP-12B	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*100*	25	9.81	ug/L
EP-12B	5/29/2012	3,4-Methylphenol	560	100	29	NA	ug/L
EP-12B	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12B	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12B	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12B	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12B	11/6/2012	Aniline	**93**	50	9.9	13	ug/L
EP-12B	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12B	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12B	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12B	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-12B	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12B	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12B	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12B	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12B	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12B	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12B	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-12B	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-12B	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12B	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12B	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12B	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12B	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12B	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12B	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12B	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12B	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12B	11/6/2012	2-Methylphenol	460	50	14	NA	ug/L
EP-12B	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12B	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12B	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12B	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12B	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12B	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-12B	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12B	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12B	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-12B	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12B	11/6/2012	2,4-Dimethylphenol	89	50	16	354	ug/L
EP-12B	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12B	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12B	11/6/2012	Phenol	1800	250	63	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12B	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12B	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12B	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12B	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-12B	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12B	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-12B	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12B	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12B	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12B	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-12B	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12B	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12B	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12B	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12B	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12B	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12B	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12B	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12B	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12B	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12B	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12B	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12B	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12B	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12B	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12B	11/6/2012	3,4-Methylphenol	960	50	14	NA	ug/L
EP-12B	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-12B	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-12B	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-12B	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-12B	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-12B	5/28/2013	Aniline	**110**	20	4.4	13	ug/L
EP-12B	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-12B	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-12B	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-12B	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-12B	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-12B	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-12B	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-12B	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-12B	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-12B	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-12B	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-12B	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-12B	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-12B	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-12B	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-12B	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-12B	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-12B	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-12B	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-12B	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-12B	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-12B	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-12B	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-12B	5/28/2013	2-Methylphenol	1400	400	110	NA	ug/L
EP-12B	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-12B	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-12B	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-12B	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-12B	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-12B	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-12B	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-12B	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-12B	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-12B	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-12B	5/28/2013	2,4-Dimethylphenol	200	20	5.9	354	ug/L
EP-12B	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-12B	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-12B	5/28/2013	Phenol	5500	400	88	5761	ug/L
EP-12B	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-12B	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-12B	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-12B	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-12B	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-12B	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-12B	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-12B	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-12B	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-12B	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-12B	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-12B	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-12B	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-12B	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-12B	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-12B	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-12B	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-12B	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-12B	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-12B	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-12B	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-12B	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-12B	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-12B	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-12B	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-12B	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-12B	5/28/2013	3,4-Methylphenol	3500	400	150	NA	ug/L
EP-12B	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-12B	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-12B	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12B	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-12B	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-12B	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-12B	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-12B	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-12B	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-12B	10/15/2013	Acenaphthene	ND	50	13	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-12B	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12B	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-12B	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-12B	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12B	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-12B	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-12B	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-12B	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-12B	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-12B	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-12B	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12B	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-12B	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-12B	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-12B	10/15/2013	2-Methylphenol	340	50	14	NA	ug/L
EP-12B	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-12B	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-12B	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-12B	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-12B	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-12B	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12B	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-12B	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-12B	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-12B	10/15/2013	2,4-Dimethylphenol	68	50	15	354	ug/L
EP-12B	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-12B	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-12B	10/15/2013	Phenol	1500	250	55	5761	ug/L
EP-12B	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-12B	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-12B	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-12B	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-12B	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-12B	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12B	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-12B	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-12B	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12B	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-12B	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-12B	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-12B	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-12B	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12B	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-12B	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-12B	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-12B	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-12B	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-12B	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12B	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12B	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12B	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-12B	10/15/2013	3,4-Methylphenol	730	50	19	NA	ug/L
EP-12B	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-12B	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-12B	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-12B	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-12B	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-12B	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-12B	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-12B	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-12B	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-12B	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-12B	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-12B	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-12B	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-12B	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-12B	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-12B	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12B	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-12B	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-12B	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12B	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12B	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-12B	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-12B	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-12B	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12B	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12B	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-12B	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12B	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-12B	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-12B	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-12B	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-12B	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12B	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-12B	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-12B	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-12B	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-12B	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-12B	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12B	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12B	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12B	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-12B	3/5/2014	Phenol	600	50	7.9	5761	ug/L
EP-12B	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-12B	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-12B	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12B	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12B	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12B	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-12B	3/5/2014	Anthracene	ND	50	12	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-12B	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12B	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-12B	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-12B	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-12B	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-12B	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-12B	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-12B	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12B	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-12B	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12B	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-12B	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-12B	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-12B	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-12B	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-12B	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-12B	3/5/2014	3,4-Methylphenol	79	50	9.1	NA	ug/L
EP-12B	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-12B	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12B	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-12B	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-12B	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-12B	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-12B	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-12B	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-12B	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-12B	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-12B	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-12B	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-12B	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-12B	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-12B	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-12B	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-12B	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-12B	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-12B	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-12B	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-12B	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-12B	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-12B	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-12B	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-12B	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-12B	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-12B	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-12B	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-12B	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-12B	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-12B	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-12B	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-12B	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-12B	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-12B	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-12B	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-12B	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-12B	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-12B	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-12B	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-12B	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-12B	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-12B	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-12B	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-12B	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-12B	11/12/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
EP-12B	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-12B	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-12B	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-12B	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-12B	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-12B	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-12B	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-12B	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-12B	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-12B	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-12B	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-12B	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-12B	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-12B	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-12B	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-12B	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-12B	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-12B	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-12B	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-12B	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-12B	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-12B	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12B	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12B	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12B	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-12B	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12B	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12B	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12B	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12B	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-12B	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12B	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12B	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12B	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12B	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12B	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12B	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12B	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12B	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12B	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12B	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12B	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12B	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12B	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12B	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12B	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12B	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12B	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12B	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12B	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12B	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12B	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12B	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12B	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12B	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12B	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12B	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12B	3/25/2015	Phenol	210	10	1.1	5761	ug/L
EP-12B	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12B	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12B	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12B	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12B	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12B	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12B	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12B	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12B	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12B	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12B	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12B	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-12B	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12B	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12B	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12B	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12B	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12B	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12B	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12B	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12B	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12B	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12B	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12B	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12B	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12B	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12B	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-12B	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12B	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12B	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12B	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12B	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-12B	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12B	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12B	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12B	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12B	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12B	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12B	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12B	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12B	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12B	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12B	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12B	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12B	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12B	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12B	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12B	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12B	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12B	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12B	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12B	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12B	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12B	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12B	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12B	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12B	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12B	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12B	9/1/2015	Phenol	86	10	1.1	5761	ug/L
EP-12B	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12B	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12B	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12B	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12B	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12B	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12B	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12B	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12B	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12B	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12B	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12B	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12B	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12B	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12B	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12B	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12B	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12B	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12B	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12B	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12B	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12B	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12B	9/1/2015	3,4-Methylphenol	34	10	1.5	NA	ug/L
EP-12B	8/30/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-12B	8/30/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-12B	8/30/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12B	8/30/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-12B	8/30/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-12B	8/30/2016	Benzoic Acid	31	100	13	75000	ug/L
EP-12B	8/30/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-12B	8/30/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-12B	8/30/2016	Isophorone	ND	50	13	781	ug/L
EP-12B	8/30/2016	Acenaphthene	ND	50	13	535	ug/L
EP-12B	8/30/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-12B	8/30/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12B	8/30/2016	Phenanthrene	ND	50	13	170	ug/L
EP-12B	8/30/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12B	8/30/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12B	8/30/2016	Fluorene	ND	50	14	288	ug/L
EP-12B	8/30/2016	Carbazole	ND	50	11	NA	ug/L
EP-12B	8/30/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-12B	8/30/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12B	8/30/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-12B	8/30/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	8/30/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	8/30/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12B	8/30/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-12B	8/30/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-12B	8/30/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-12B	8/30/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12B	8/30/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-12B	8/30/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-12B	8/30/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-12B	8/30/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-12B	8/30/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-12B	8/30/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12B	8/30/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-12B	8/30/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12B	8/30/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-12B	8/30/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12B	8/30/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-12B	8/30/2016	Phenol	ND	50	9.9	5761	ug/L
EP-12B	8/30/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-12B	8/30/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12B	8/30/2016	Bis(2-ethylhexyl)phthalate	17	50	13	55.64	ug/L
EP-12B	8/30/2016	Di-n-octylphthalate	19	50	9.9	200	ug/L
EP-12B	8/30/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12B	8/30/2016	Anthracene	ND	50	12	1721	ug/L
EP-12B	8/30/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12B	8/30/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-12B	8/30/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-12B	8/30/2016	Pyrene	ND	50	15	117	ug/L
EP-12B	8/30/2016	Dimethylphthalate	21	50	12	612	ug/L
EP-12B	8/30/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-12B	8/30/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12B	8/30/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-12B	8/30/2016	Fluoranthene	ND	50	13	802	ug/L
EP-12B	8/30/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-12B	8/30/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-12B	8/30/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12B	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-12B	8/30/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-12B	8/30/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12B	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-12B	8/30/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-12B	8/30/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-12B	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-12B	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-12B	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-12B	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12B	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-12B	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-12B	3/30/2017	Benzoic Acid	44	100	20	75000	ug/L
EP-12B	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-12B	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-12B	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12B	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12B	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12B	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12B	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-12B	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12B	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-12B	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-12B	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-12B	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12B	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12B	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12B	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-12B	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-12B	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12B	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-12B	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12B	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12B	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12B	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12B	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-12B	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12B	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-12B	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12B	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12B	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-12B	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12B	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12B	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-12B	3/30/2017	Phenol	45	50	16	5761	ug/L
EP-12B	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-12B	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12B	3/30/2017	Bis(2-ethylhexyl)phthalate	31	50	24	55.64	ug/L
EP-12B	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12B	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-12B	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-12B	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-12B	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-12B	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-12B	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12B	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12B	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-12B	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12B	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12B	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12B	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12B	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-12B	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12B	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12B	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12B	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12B	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12B	3/30/2017	3,4-Methylphenol	41	50	16	NA	ug/L
EP-12B	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-12B	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-12B	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-12B	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12B	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-12B	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-12B	10/24/2017	Benzoic Acid	41	100	20	75000	ug/L
EP-12B	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-12B	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-12B	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12B	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12B	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12B	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12B	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-12B	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12B	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-12B	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-12B	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-12B	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12B	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12B	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12B	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-12B	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-12B	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-12B	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12B	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-12B	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12B	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12B	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12B	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12B	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-12B	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12B	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-12B	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12B	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12B	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-12B	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12B	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12B	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-12B	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-12B	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-12B	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12B	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-12B	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12B	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-12B	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-12B	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-12B	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-12B	10/24/2017	Pyrene	26	50	22	117	ug/L
EP-12B	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12B	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12B	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-12B	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12B	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12B	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12B	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12B	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12B	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12B	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12B	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12B	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12B	10/24/2017	3,4-Methylphenol	26	50	16	NA	ug/L
EP-12B	2/22/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-12B	2/22/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-12B	2/22/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-12B	2/22/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-12B	2/22/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-12B	2/22/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-12B	2/22/2018	Benzoic Acid	110	200	39	75000	ug/L
EP-12B	2/22/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-12B	2/22/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12B	2/22/2018	Isophorone	ND	100	44	781	ug/L
EP-12B	2/22/2018	Acenaphthene	ND	100	36	535	ug/L
EP-12B	2/22/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-12B	2/22/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-12B	2/22/2018	Phenanthrene	ND	100	43	170	ug/L
EP-12B	2/22/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-12B	2/22/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-12B	2/22/2018	Fluorene	ND	100	40	288	ug/L
EP-12B	2/22/2018	Carbazole	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-12B	2/22/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-12B	2/22/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-12B	2/22/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-12B	2/22/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-12B	2/22/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-12B	2/22/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12B	2/22/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-12B	2/22/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-12B	2/22/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-12B	2/22/2018	2-Methylphenol	89	100	33	NA	ug/L
EP-12B	2/22/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-12B	2/22/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-12B	2/22/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-12B	2/22/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-12B	2/22/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-12B	2/22/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-12B	2/22/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-12B	2/22/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-12B	2/22/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-12B	2/22/2018	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-12B	2/22/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-12B	2/22/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-12B	2/22/2018	Phenol	360	100	31	5761	ug/L
EP-12B	2/22/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-12B	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-12B	2/22/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-12B	2/22/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-12B	2/22/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-12B	2/22/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-12B	2/22/2018	Anthracene	ND	100	35	1721	ug/L
EP-12B	2/22/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-12B	2/22/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-12B	2/22/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-12B	2/22/2018	Pyrene	ND	100	44	117	ug/L
EP-12B	2/22/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-12B	2/22/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-12B	2/22/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-12B	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-12B	2/22/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-12B	2/22/2018	Fluoranthene	ND	100	43	802	ug/L
EP-12B	2/22/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-12B	2/22/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-12B	2/22/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-12B	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-12B	2/22/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-12B	2/22/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-12B	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-12B	2/22/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-12B	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-12B	2/22/2018	3,4-Methylphenol	180	100	32	NA	ug/L
EP-12B	9/7/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-12B	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-12B	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-12B	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-12B	9/7/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-12B	9/7/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-12B	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-12B	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-12B	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-12B	9/7/2018	Benzoic Acid	32	100	32	75000	ug/L
EP-12B	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-12B	9/7/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-12B	9/7/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-12B	9/7/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-12B	9/7/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-12B	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-12B	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-12B	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-12B	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-12B	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-12B	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-12B	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-12B	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-12B	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-12B	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-12B	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-12B	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-12B	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-12B	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-12B	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-12B	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-12B	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-12B	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-12B	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-12B	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-12B	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-12B	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-12B	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-12B	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-12B	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-12B	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-12B	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-12B	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-12B	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-12B	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-12B	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-12B	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-12B	9/7/2018	Phenol	*37*	50	30	5761	ug/L
EP-12B	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-12B	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-12B	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-12B	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-12B	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-12B	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-12B	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-12B	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-12B	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-12B	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-12B	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-12B	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-12B	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-12B	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-12B	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-12B	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-12B	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-12B	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-12B	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-12B	9/7/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-12B	9/7/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-12B	9/7/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-12B	9/7/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-12B	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-12B	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-12B	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-12B	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-12B	9/7/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-12B	9/7/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-12B	9/7/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-12B	9/7/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-12B	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-12B	9/7/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-12B	9/7/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-12B	9/7/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-12B	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-12B	9/7/2018	3,4-Methylphenol	41	50	27	NA	ug/L
EP-12B	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-12B	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-12B	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-12B	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-12B	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-12B	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-12B	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-12B	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-12B	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-12B	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-12B	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-12B	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-12B	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-12B	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-12B	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-12B	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-12B	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-12B	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-12B	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-12B	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-12B	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-12B	4/29/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-12B	4/29/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-12B	4/29/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-12B	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-12B	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-12B	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-12B	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-12B	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-12B	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-12B	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-12B	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-12B	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-12B	4/29/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-12B	4/29/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-12B	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-12B	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-12B	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-12B	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-12B	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-12B	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-12B	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-12B	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-12B	4/29/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-12B	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-12B	4/29/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-12B	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-12B	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-12B	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-12B	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-12B	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-12B	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-12B	4/29/2019	Chlordane	*ND*	*50*	25	0.448	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-12B	4/29/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-12B	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-12B	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-12B	4/29/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-12B	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-12B	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-12B	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-12B	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-12B	4/29/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-12B	4/29/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-12B	4/29/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-12B	4/29/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-12B	4/29/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-12B	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-12B	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-12B	4/29/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-12B	4/29/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-12B	4/29/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-12B	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-12B	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-12B	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-12B	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-12B	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-12B	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-12B	4/29/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-12B	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-12B	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-12B	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-12B	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-12B	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-12B	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-12B	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-12B	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-12B	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-12B	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-12B	4/29/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-12B	11/21/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-12B	11/21/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-12B	11/21/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-12B	11/21/2019	1,4-Dioxane	**6.9**	1	1	4.59	ug/L
EP-12B	11/21/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-12B	11/21/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-12B	11/21/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-12B	11/21/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-12B	11/21/2019	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
EP-12B	11/21/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-12B	11/21/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-12B	11/21/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-12B	11/21/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-12B	11/21/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-12B	11/21/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-12B	11/21/2019	2-Methylphenol	94	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-12B	11/21/2019	2-Nitrophenol	5.6	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-12B	11/21/2019	3,4-Methylphenol	160	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-12B	11/21/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-12B	11/21/2019	4-Nitrophenol	6.4	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-12B	11/21/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-12B	11/21/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-12B	11/21/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-12B	11/21/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-12B	11/21/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-12B	11/21/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-12B	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-12B	11/21/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-12B	11/21/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-12B	11/21/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-12B	11/21/2019	Bis(2-ethylhexyl)phthalate	27	2.5	2.5	55.64	ug/L
EP-12B	11/21/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-12B	11/21/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-12B	11/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-12B	11/21/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
EP-12B	11/21/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-12B	11/21/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-12B	11/21/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-12B	11/21/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
EP-12B	11/21/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-12B	11/21/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-12B	11/21/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-12B	11/21/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-12B	11/21/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-12B	11/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-12B	11/21/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-12B	11/21/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-12B	11/21/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-12B	11/21/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-12B	11/21/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-12B	11/21/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-12B	11/21/2019	Phenol	560	2.5	2.5	5761	ug/L
EP-12B	11/21/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-12B	11/21/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-12B	11/21/2019	4,4-DDD	*ND*	*0.45455*	0.365045	0.317	ug/L
EP-12B	11/21/2019	4,4-DDE	ND	0.45455	0.389591	0.462	ug/L
EP-12B	11/21/2019	4,4-DDT	ND	0.56818	0.464636	2.29	ug/L
EP-12B	11/21/2019	Aldrin	*ND*	*0.45455*	0.377773	0.002	ug/L
EP-12B	11/21/2019	a-BHC	*ND*	*0.45455*	0.376455	0.069	ug/L
EP-12B	11/21/2019	b-BHC	*ND*	*0.45455*	0.4235	0.243	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	Chlordane	*ND*	*4.54545*	2.272727	0.448	ug/L
EP-12B	11/21/2019	d-BHC	ND	0.45455	0.392818	NA	ug/L
EP-12B	11/21/2019	Dieldrin	*ND*	*0.45455*	0.382409	0.018	ug/L
EP-12B	11/21/2019	Endosulfan I	ND	0.45455	0.385682	98.7	ug/L
EP-12B	11/21/2019	Endosulfan II	ND	0.45455	0.396545	98.7	ug/L
EP-12B	11/21/2019	Endosulfan sulfate	ND	0.45455	0.4105	110	ug/L
EP-12B	11/21/2019	Endrin	ND	0.56818	0.515545	2.23	ug/L
EP-12B	11/21/2019	Endrin aldehyde	ND	0.45455	0.370682	NA	ug/L
EP-12B	11/21/2019	g-BHC (Lindane)	*ND*	*0.45455*	0.385773	0.415	ug/L
EP-12B	11/21/2019	Heptachlor	*ND*	*0.45455*	0.389773	0.0221	ug/L
EP-12B	11/21/2019	Heptachlor epoxide	*ND*	*0.45455*	0.397182	0.0014	ug/L
EP-12B	11/21/2019	Methoxychlor	ND	0.56818	0.510909	37	ug/L
EP-12B	11/21/2019	Toxaphene	*ND*	*4.54545*	2.272727	0.158	ug/L
EP-12B	9/18/2020	1,2,4-Trichlorobenzene	ND	2.3	0.46	70	ug/L
EP-12B	9/18/2020	1,2-Dichlorobenzene	ND	2.3	0.46	600	ug/L
EP-12B	9/18/2020	1,3-Dichlorobenzene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	1,4-Dichlorobenzene	ND	2.3	0.46	75	ug/L
EP-12B	9/18/2020	1,4-Dioxane	ND	2.3	0.46	4.59	ug/L
EP-12B	9/18/2020	1-Methylnaphthalene	ND	2.3	0.46	11.38	ug/L
EP-12B	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	2.3	0.46	240	ug/L
EP-12B	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	2,4,5-Trichlorophenol	ND	2.3	0.46	1166	ug/L
EP-12B	9/18/2020	2,4,6-Trichlorophenol	ND	2.3	0.46	11.9*	ug/L
EP-12B	9/18/2020	2,4-Dichlorophenol	ND	2.3	0.46	45.3	ug/L
EP-12B	9/18/2020	2,4-Dimethylphenol	ND	2.3	0.46	354	ug/L
EP-12B	9/18/2020	2,4-Dinitrophenol	ND	2.3	0.46	38.7	ug/L
EP-12B	9/18/2020	2,4-Dinitrotoluene	ND	2.3	0.46	45.3	ug/L
EP-12B	9/18/2020	2,6-Dinitrotoluene	*ND*	*0.91*	0.46	0.485	ug/L
EP-12B	9/18/2020	2-Chloronaphthalene	ND	2.3	0.46	733	ug/L
EP-12B	9/18/2020	2-Chlorophenol	ND	2.3	0.46	91	ug/L
EP-12B	9/18/2020	2-Methylnaphthalene	ND	2.3	0.46	35.1	ug/L
EP-12B	9/18/2020	2-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	2-Nitroaniline	ND	2.3	0.46	190	ug/L
EP-12B	9/18/2020	2-Nitrophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	3,4-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	3,3-Dichlorobenzidine	*ND*	*2.3*	0.46	1.25	ug/L
EP-12B	9/18/2020	3-Nitroaniline	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.3*	0.46	1.52	ug/L
EP-12B	9/18/2020	4-Bromophenyl-phenylether	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Chloro-3-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Chloroaniline	*ND*	*2.3*	0.46	0.37	ug/L
EP-12B	9/18/2020	4-Chlorophenyl-phenylether	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Nitroaniline	ND	2.3	0.46	3.8	ug/L
EP-12B	9/18/2020	4-Nitrophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Acenaphthene	ND	2.3	0.46	535	ug/L
EP-12B	9/18/2020	Acenaphthylene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Aniline	ND	2.3	0.46	13	ug/L
EP-12B	9/18/2020	Anthracene	ND	2.3	0.46	1721	ug/L
EP-12B	9/18/2020	Benzo(a)anthracene	*ND*	*0.46*	0.23	0.12	ug/L
EP-12B	9/18/2020	Benzidine	*ND*	*2.3*	1.1	0.0011	ug/L
EP-12B	9/18/2020	Benzo(a)pyrene	*ND*	*0.46*	0.23	0.2	ug/L
EP-12B	9/18/2020	Benzo(b)fluoranthene	*ND*	*0.46*	0.23	0.34	ug/L
EP-12B	9/18/2020	Benzo(g,h,i)perylene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Benzo(k)fluoranthene	ND	2.3	0.46	3.43	ug/L
EP-12B	9/18/2020	Benzoic Acid	ND	2.3	0.91	75000	ug/L
EP-12B	9/18/2020	Benzyl Alcohol	ND	2.3	0.91	2000	ug/L
EP-12B	9/18/2020	Bis(2-chloroethoxy)methane	ND	2.3	0.46	59	ug/L
EP-12B	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*2.3*	0.46	0.137	ug/L
EP-12B	9/18/2020	Bis(2-chloroisopropyl)ether	ND	2.3	0.46	9.81	ug/L
EP-12B	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	2.3	0.91	55.64	ug/L
EP-12B	9/18/2020	Butylbenzylphthalate	ND	2.3	0.91	16	ug/L
EP-12B	9/18/2020	Carbazole	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Chrysene	ND	2.3	0.46	34.3	ug/L
EP-12B	9/18/2020	Di-n-butylphthalate	ND	2.3	0.91	885	ug/L
EP-12B	9/18/2020	Di-n-octylphthalate	ND	2.3	0.91	200	ug/L
EP-12B	9/18/2020	Dibenzo(a,h)anthracene	ND	0.14	0.091	NA	ug/L
EP-12B	9/18/2020	Dibenzofuran	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Diethylphthalate	ND	2.3	0.91	14801	ug/L
EP-12B	9/18/2020	Dimethylphthalate	ND	2.3	0.91	612	ug/L
EP-12B	9/18/2020	Fluoranthene	ND	2.3	0.46	802	ug/L
EP-12B	9/18/2020	Fluorene	ND	2.3	0.46	288	ug/L
EP-12B	9/18/2020	Hexachlorobenzene	*ND*	*2.3*	0.46	0.0976	ug/L
EP-12B	9/18/2020	Hexachlorobutadiene	*ND*	*2.3*	0.46	0.14	ug/L
EP-12B	9/18/2020	Hexachlorocyclopentadiene	*ND*	*2.3*	1.1	0.41	ug/L
EP-12B	9/18/2020	Hexachloroethane	ND	2.3	0.46	3.28	ug/L
EP-12B	9/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.91*	0.46	0.343	ug/L
EP-12B	9/18/2020	Isophorone	ND	2.3	0.46	781	ug/L
EP-12B	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*2.3*	0.46	0.011	ug/L
EP-12B	9/18/2020	N-Nitrosodimethylamine	*ND*	*2.3*	0.46	0.0049	ug/L
EP-12B	9/18/2020	N-Nitrosodiphenylamine	ND	2.3	0.46	122	ug/L
EP-12B	9/18/2020	Naphthalene	ND	2.3	0.46	30	ug/L
EP-12B	9/18/2020	Nitrobenzene	*ND*	*2.3*	0.46	1.4	ug/L
EP-12B	9/18/2020	Pentachlorophenol	*ND*	*2.3*	0.91	1	ug/L
EP-12B	9/18/2020	Phenanthrene	ND	2.3	0.46	170	ug/L
EP-12B	9/18/2020	Phenol	ND	2.3	0.46	5761	ug/L
EP-12B	9/18/2020	Pyrene	ND	2.3	0.46	117	ug/L
EP-12B	9/18/2020	Pyridine	ND	2.3	0.91	20	ug/L
EP-12B	12/22/2020	Acenaphthene	ND	23.3	0.373	535	ug/L
EP-12B	12/22/2020	Acenaphthylene	ND	23.3	0.396	NA	ug/L
EP-12B	12/22/2020	Anthracene	ND	23.3	0.42	1721	ug/L
EP-12B	12/22/2020	Benzo(a)anthracene	*ND*	*23.3*	0.42	0.12	ug/L
EP-12B	12/22/2020	Benzo(a)pyrene	*ND*	*23.3*	0.28	0.2	ug/L
EP-12B	12/22/2020	Benzo(b)fluoranthene	*ND*	*23.3*	0.35	0.34	ug/L
EP-12B	12/22/2020	Benzo(g,h,i)perylene	ND	23.3	0.536	NA	ug/L
EP-12B	12/22/2020	Benzo(k)fluoranthene	*ND*	*23.3*	0.373	3.43	ug/L
EP-12B	12/22/2020	Bis(2-chloroethoxy)methane	ND	23.3	0.373	59	ug/L
EP-12B	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*23.3*	6.3	0.137	ug/L
EP-12B	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	23.3	11.7	55.64	ug/L
EP-12B	12/22/2020	4-Bromophenyl-phenylether	ND	23.3	0.466	NA	ug/L
EP-12B	12/22/2020	Butylbenzylphthalate	*ND*	*23.3*	0.443	16	ug/L
EP-12B	12/22/2020	Carbazole	ND	23.3	0.536	NA	ug/L
EP-12B	12/22/2020	4-Chloroaniline	*ND*	*23.3*	7.93	0.37	ug/L
EP-12B	12/22/2020	4-Chloro-3-Methylphenol	ND	23.3	8.86	NA	ug/L
EP-12B	12/22/2020	2-Chloronaphthalene	ND	23.3	0.326	733	ug/L
EP-12B	12/22/2020	2-Chlorophenol	ND	23.3	5.13	91	ug/L
EP-12B	12/22/2020	4-Chlorophenyl-phenylether	ND	23.3	4.66	NA	ug/L
EP-12B	12/22/2020	1,3-Dichlorobenzene	ND	23.3	0.42	NA	ug/L
EP-12B	12/22/2020	Chrysene	ND	23.3	0.443	34.3	ug/L
EP-12B	12/22/2020	Dibenzo(a,h)anthracene	ND	23.3	0.56	NA	ug/L
EP-12B	12/22/2020	1,4-Dichlorobenzene	ND	23.3	0.373	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	12/22/2020	Dibenzofuran	ND	23.3	0.396	NA	ug/L
EP-12B	12/22/2020	3,3-Dichlorobenzidine	*ND*	*23.3*	6.06	1.25	ug/L
EP-12B	12/22/2020	2,4-Dichlorophenol	ND	23.3	7	45.3	ug/L
EP-12B	12/22/2020	Diethylphthalate	ND	23.3	0.56	14801	ug/L
EP-12B	12/22/2020	2,4-Dimethylphenol	ND	23.3	8.16	354	ug/L
EP-12B	12/22/2020	Di-n-butylphthalate	ND	23.3	6.3	885	ug/L
EP-12B	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*23.3*	3.73	1.52	ug/L
EP-12B	12/22/2020	2,4-Dinitrophenol	*ND*	*70*	7.93	38.7	ug/L
EP-12B	12/22/2020	2,4-Dinitrotoluene	ND	23.3	4.43	45.3	ug/L
EP-12B	12/22/2020	2,6-Dinitrotoluene	*ND*	*23.3*	4.43	0.485	ug/L
EP-12B	12/22/2020	Di-n-octylphthalate	ND	23.3	0.396	200	ug/L
EP-12B	12/22/2020	Fluoranthene	ND	23.3	0.42	802	ug/L
EP-12B	12/22/2020	Fluorene	ND	23.3	0.42	288	ug/L
EP-12B	12/22/2020	Hexachlorobenzene	*ND*	*23.3*	0.396	0.0976	ug/L
EP-12B	12/22/2020	Hexachlorocyclopentadiene	*ND*	*46.6*	6.06	0.41	ug/L
EP-12B	12/22/2020	Hexachloroethane	*ND*	*23.3*	9.79	3.28	ug/L
EP-12B	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*23.3*	0.513	0.343	ug/L
EP-12B	12/22/2020	Isophorone	ND	23.3	0.326	781	ug/L
EP-12B	12/22/2020	2-Methylphenol	ND	23.3	4.2	NA	ug/L
EP-12B	12/22/2020	Naphthalene	ND	23.3	0.396	30	ug/L
EP-12B	12/22/2020	2-Nitroaniline	ND	23.3	5.13	190	ug/L
EP-12B	12/22/2020	3-Nitroaniline	ND	23.3	4.2	NA	ug/L
EP-12B	12/22/2020	4-Nitroaniline	*ND*	*23.3*	3.5	3.8	ug/L
EP-12B	12/22/2020	Nitrobenzene	*ND*	*23.3*	0.303	1.4	ug/L
EP-12B	12/22/2020	2-Nitrophenol	ND	23.3	12.1	NA	ug/L
EP-12B	12/22/2020	4-Nitrophenol	ND	23.3	4.9	NA	ug/L
EP-12B	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*23.3*	7.7	0.011	ug/L
EP-12B	12/22/2020	N-Nitrosodiphenylamine	ND	23.3	0.42	122	ug/L
EP-12B	12/22/2020	Pentachlorophenol	*ND*	*46.6*	3.26	1	ug/L
EP-12B	12/22/2020	Phenanthrene	ND	23.3	0.42	170	ug/L
EP-12B	12/22/2020	Phenol	ND	23.3	6.06	5761	ug/L
EP-12B	12/22/2020	Pyrene	ND	23.3	0.49	117	ug/L
EP-12B	12/22/2020	2,4,5-Trichlorophenol	ND	23.3	8.63	1166	ug/L
EP-12B	12/22/2020	2,4,6-Trichlorophenol	ND	23.3	8.16	11.9*	ug/L
EP-12B	12/22/2020	Dimethylphthalate	ND	23.3	0.396	612	ug/L
EP-12B	12/22/2020	Aniline	*ND*	*23.3*	8.86	13	ug/L
EP-12B	12/22/2020	Benzoic Acid	ND	70	17	75000	ug/L
EP-12B	12/22/2020	Benzyl Alcohol	ND	23.3	4.66	2000	ug/L
EP-12B	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*23.3*	0.373	9.81	ug/L
EP-12B	12/22/2020	N-Nitrosodimethylamine	*ND*	*23.3*	8.16	0.0049	ug/L
EP-12B	12/22/2020	Pyridine	*ND*	*23.3*	7.46	20	ug/L
EP-12B	12/22/2020	1,2,4-Trichlorobenzene	ND	23.3	0.42	70	ug/L
EP-12B	12/22/2020	1,2-Dichlorobenzene	ND	23.3	0.396	600	ug/L
EP-12B	12/22/2020	Azobenzene	*ND*	*23.3*	2.33	0.12	ug/L
EP-2	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-2	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-2	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-2	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-2	5/29/2012	Aniline	**110**	50	9.9	13	ug/L
EP-2	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-2	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-2	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-2	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-2	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-2	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-2	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-2	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-2	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-2	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-2	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-2	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-2	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-2	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-2	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-2	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-2	5/29/2012	2-Methylphenol	580	50	14	NA	ug/L
EP-2	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-2	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-2	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-2	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-2	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-2	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-2	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-2	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-2	5/29/2012	2,4-Dimethylphenol	110	50	16	354	ug/L
EP-2	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-2	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-2	5/29/2012	Phenol	1700	250	63	5761	ug/L
EP-2	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-2	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-2	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-2	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-2	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-2	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-2	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-2	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-2	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-2	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-2	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-2	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-2	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-2	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-2	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-2	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-2	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-2	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-2	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-2	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-2	5/29/2012	3,4-Methylphenol	810	250	72	NA	ug/L
EP-2	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-2	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-2	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-2	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-2	11/6/2012	Aniline	**110**	50	9.9	13	ug/L
EP-2	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-2	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-2	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-2	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-2	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-2	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-2	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-2	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-2	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-2	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-2	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-2	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-2	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-2	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-2	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-2	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-2	11/6/2012	2-Methylphenol	920	50	14	NA	ug/L
EP-2	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-2	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-2	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-2	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-2	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-2	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-2	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-2	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-2	11/6/2012	2,4-Dimethylphenol	160	50	16	354	ug/L
EP-2	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-2	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-2	11/6/2012	Phenol	2300	250	63	5761	ug/L
EP-2	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-2	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-2	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-2	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-2	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-2	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-2	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-2	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-2	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-2	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-2	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-2	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-2	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-2	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-2	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-2	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-2	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-2	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-2	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-2	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-2	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-2	11/6/2012	3,4-Methylphenol	1300	250	72	NA	ug/L
EP-2	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-2	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-2	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-2	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-2	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-2	5/28/2013	Aniline	**160**	20	4.4	13	ug/L
EP-2	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-2	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-2	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-2	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-2	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-2	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-2	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-2	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-2	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-2	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-2	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-2	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-2	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-2	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-2	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-2	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-2	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-2	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-2	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-2	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-2	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-2	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-2	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-2	5/28/2013	2-Methylphenol	2200	1000	270	NA	ug/L
EP-2	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-2	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-2	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-2	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-2	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-2	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-2	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-2	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-2	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-2	5/28/2013	2,4-Dimethylphenol	**380**	20	5.9	354	ug/L
EP-2	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-2	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-2	5/28/2013	Phenol	**7400**	1000	220	5761	ug/L
EP-2	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-2	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-2	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-2	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-2	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-2	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-2	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-2	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-2	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-2	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-2	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-2	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-2	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-2	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-2	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-2	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-2	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-2	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-2	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-2	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-2	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-2	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-2	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-2	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-2	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-2	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-2	5/28/2013	3,4-Methylphenol	4300	1000	370	NA	ug/L
EP-2	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-2	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-2	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-2	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-2	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-2	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-2	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-2	10/15/2013	Benzoic Acid	57	40	5.7	75000	ug/L
EP-2	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-2	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-2	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-2	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-2	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-2	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-2	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-2	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-2	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-2	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-2	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-2	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-2	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-2	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-2	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-2	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-2	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-2	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-2	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-2	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-2	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-2	10/15/2013	2-Methylphenol	82	10	2.7	NA	ug/L
EP-2	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-2	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-2	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-2	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-2	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-2	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-2	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-2	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-2	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-2	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-2	10/15/2013	2,4-Dimethylphenol	15	10	2.9	354	ug/L
EP-2	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-2	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-2	10/15/2013	Phenol	420	50	11	5761	ug/L
EP-2	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-2	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-2	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-2	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-2	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-2	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-2	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-2	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-2	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-2	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-2	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-2	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-2	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-2	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-2	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-2	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-2	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-2	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-2	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-2	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-2	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-2	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-2	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-2	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-2	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-2	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-2	10/15/2013	3,4-Methylphenol	200	10	3.7	NA	ug/L
EP-2	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-2	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-2	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-2	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-2	3/5/2014	Aniline	**44**	10	2.4	13	ug/L
EP-2	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-2	3/5/2014	Benzoic Acid	97	20	2.2	75000	ug/L
EP-2	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-2	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-2	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-2	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-2	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-2	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-2	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-2	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-2	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-2	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-2	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-2	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-2	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-2	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-2	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-2	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-2	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-2	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-2	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-2	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-2	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-2	3/5/2014	2-Methylphenol	140	10	2.8	NA	ug/L
EP-2	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-2	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-2	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-2	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-2	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-2	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-2	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-2	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-2	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-2	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-2	3/5/2014	2,4-Dimethylphenol	29	10	3.1	354	ug/L
EP-2	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-2	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-2	3/5/2014	Phenol	870	100	16	5761	ug/L
EP-2	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-2	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-2	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-2	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-2	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-2	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-2	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-2	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-2	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-2	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-2	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-2	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-2	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-2	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-2	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-2	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-2	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-2	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-2	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-2	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-2	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-2	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-2	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-2	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-2	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-2	3/5/2014	3,4-Methylphenol	350	100	18	NA	ug/L
EP-2	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-2	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-2	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-2	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-2	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-2	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-2	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-2	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-2	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-2	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-2	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-2	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-2	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-2	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-2	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-2	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-2	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-2	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-2	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-2	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-2	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-2	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-2	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-2	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-2	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-2	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-2	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-2	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-2	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-2	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-2	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-2	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-2	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-2	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-2	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-2	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-2	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-2	11/12/2014	Phenol	58	50	7.9	5761	ug/L
EP-2	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-2	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-2	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-2	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-2	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-2	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-2	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-2	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-2	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-2	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-2	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-2	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-2	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-2	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-2	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-2	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-2	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-2	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-2	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-2	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-2	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-2	3/24/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-2	3/24/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-2	3/24/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-2	3/24/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-2	3/24/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-2	3/24/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-2	3/24/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-2	3/24/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-2	3/24/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-2	3/24/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-2	3/24/2015	Isophorone	ND	100	20	781	ug/L
EP-2	3/24/2015	Acenaphthene	ND	100	19	535	ug/L
EP-2	3/24/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-2	3/24/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-2	3/24/2015	Phenanthrene	ND	100	20	170	ug/L
EP-2	3/24/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-2	3/24/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-2	3/24/2015	Fluorene	ND	100	17	288	ug/L
EP-2	3/24/2015	Carbazole	ND	100	15	NA	ug/L
EP-2	3/24/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-2	3/24/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-2	3/24/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-2	3/24/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-2	3/24/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-2	3/24/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-2	3/24/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-2	3/24/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-2	3/24/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-2	3/24/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-2	3/24/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-2	3/24/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-2	3/24/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-2	3/24/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-2	3/24/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-2	3/24/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-2	3/24/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-2	3/24/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-2	3/24/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-2	3/24/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-2	3/24/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-2	3/24/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-2	3/24/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-2	3/24/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-2	3/24/2015	Phenol	ND	100	11	5761	ug/L
EP-2	3/24/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-2	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-2	3/24/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-2	3/24/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-2	3/24/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-2	3/24/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-2	3/24/2015	Anthracene	ND	100	16	1721	ug/L
EP-2	3/24/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-2	3/24/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-2	3/24/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-2	3/24/2015	Pyrene	ND	100	23	117	ug/L
EP-2	3/24/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-2	3/24/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-2	3/24/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-2	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-2	3/24/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-2	3/24/2015	Fluoranthene	ND	100	15	802	ug/L
EP-2	3/24/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-2	3/24/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-2	3/24/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-2	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-2	3/24/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-2	3/24/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-2	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-2	3/24/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-2	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-2	3/24/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-2	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-2	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-2	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-2	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-2	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-2	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-2	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-2	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-2	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-2	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-2	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-2	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-2	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-2	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-2	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-2	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-2	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-2	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-2	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-2	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-2	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-2	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-2	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-2	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-2	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-2	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-2	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-2	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-2	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-2	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-2	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-2	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-2	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-2	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-2	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-2	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-2	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-2	9/1/2015	Phenol	220	10	1.1	5761	ug/L
EP-2	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-2	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-2	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-2	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-2	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-2	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-2	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-2	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-2	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-2	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-2	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-2	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-2	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-2	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-2	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-2	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-2	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-2	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-2	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-2	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-2	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-2	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-2	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-2	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-2	9/1/2015	3,4-Methylphenol	68	10	1.5	NA	ug/L
EP-2	8/29/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-2	8/29/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-2	8/29/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-2	8/29/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-2	8/29/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-2	8/29/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-2	8/29/2016	Benzoic Acid	41	100	13	75000	ug/L
EP-2	8/29/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-2	8/29/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-2	8/29/2016	Isophorone	ND	50	13	781	ug/L
EP-2	8/29/2016	Acenaphthene	ND	50	13	535	ug/L
EP-2	8/29/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-2	8/29/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-2	8/29/2016	Phenanthrene	ND	50	13	170	ug/L
EP-2	8/29/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	8/29/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-2	8/29/2016	Fluorene	ND	50	14	288	ug/L
EP-2	8/29/2016	Carbazole	ND	50	11	NA	ug/L
EP-2	8/29/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-2	8/29/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-2	8/29/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-2	8/29/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-2	8/29/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	8/29/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	8/29/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-2	8/29/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-2	8/29/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-2	8/29/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-2	8/29/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-2	8/29/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-2	8/29/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-2	8/29/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-2	8/29/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-2	8/29/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-2	8/29/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-2	8/29/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-2	8/29/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-2	8/29/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-2	8/29/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-2	8/29/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-2	8/29/2016	Phenol	ND	50	9.9	5761	ug/L
EP-2	8/29/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-2	8/29/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-2	8/29/2016	Bis(2-ethylhexyl)phthalate	15	50	13	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	8/29/2016	Di-n-octylphthalate	19	50	9.9	200	ug/L
EP-2	8/29/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-2	8/29/2016	Anthracene	ND	50	12	1721	ug/L
EP-2	8/29/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	8/29/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-2	8/29/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-2	8/29/2016	Pyrene	ND	50	15	117	ug/L
EP-2	8/29/2016	Dimethylphthalate	23	50	12	612	ug/L
EP-2	8/29/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-2	8/29/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-2	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	8/29/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-2	8/29/2016	Fluoranthene	ND	50	13	802	ug/L
EP-2	8/29/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-2	8/29/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-2	8/29/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-2	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-2	8/29/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-2	8/29/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-2	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-2	8/29/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-2	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-2	8/29/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-2	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-2	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-2	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-2	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-2	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-2	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-2	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-2	3/30/2017	Benzoic Acid	51	100	20	75000	ug/L
EP-2	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-2	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-2	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-2	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-2	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-2	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-2	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-2	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-2	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-2	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-2	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-2	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-2	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-2	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-2	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-2	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-2	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-2	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-2	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-2	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-2	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-2	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-2	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-2	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-2	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-2	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-2	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-2	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-2	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-2	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-2	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-2	3/30/2017	2,4-Dimethylphenol	26	50	14	354	ug/L
EP-2	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-2	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-2	3/30/2017	Phenol	50	50	16	5761	ug/L
EP-2	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-2	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-2	3/30/2017	Bis(2-ethylhexyl)phthalate	39	50	24	55.64	ug/L
EP-2	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-2	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-2	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-2	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-2	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-2	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-2	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-2	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-2	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-2	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-2	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-2	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-2	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-2	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-2	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-2	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-2	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-2	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-2	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-2	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-2	3/30/2017	3,4-Methylphenol	36	50	16	NA	ug/L
EP-2	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-2	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-2	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-2	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-2	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-2	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-2	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-2	10/24/2017	Benzoic Acid	44	100	20	75000	ug/L
EP-2	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-2	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-2	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-2	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-2	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-2	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-2	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-2	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-2	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-2	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-2	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-2	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-2	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-2	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-2	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-2	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-2	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-2	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-2	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-2	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-2	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-2	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-2	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-2	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-2	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-2	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-2	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-2	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-2	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-2	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-2	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-2	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-2	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-2	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-2	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-2	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-2	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-2	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-2	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-2	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-2	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-2	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-2	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-2	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-2	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-2	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-2	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-2	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-2	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-2	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-2	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-2	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-2	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-2	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-2	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-2	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-2	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-2	10/24/2017	3,4-Methylphenol	31	50	16	NA	ug/L
EP-2	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-2	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-2	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-2	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-2	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-2	2/21/2018	Aniline	**40**	100	31	13	ug/L
EP-2	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-2	2/21/2018	Benzoic Acid	72	200	39	75000	ug/L
EP-2	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-2	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-2	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-2	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-2	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-2	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-2	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-2	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-2	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-2	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-2	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-2	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-2	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-2	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-2	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-2	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-2	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-2	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-2	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-2	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-2	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-2	2/21/2018	2-Methylphenol	110	100	33	NA	ug/L
EP-2	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-2	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-2	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-2	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-2	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-2	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-2	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-2	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-2	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-2	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-2	2/21/2018	2,4-Dimethylphenol	38	100	28	354	ug/L
EP-2	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-2	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-2	2/21/2018	Phenol	460	100	31	5761	ug/L
EP-2	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-2	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-2	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-2	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-2	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-2	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-2	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-2	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-2	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-2	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-2	2/21/2018	Pyrene	ND	100	44	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-2	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-2	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-2	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-2	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-2	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-2	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-2	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-2	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-2	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-2	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-2	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-2	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-2	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-2	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-2	2/21/2018	3,4-Methylphenol	290	100	32	NA	ug/L
EP-2	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-2	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-2	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-2	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-2	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-2	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-2	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-2	9/6/2018	Benzoic Acid	62	100	32	75000	ug/L
EP-2	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-2	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-2	9/6/2018	Isophorone	ND	50	31	781	ug/L
EP-2	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
EP-2	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-2	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-2	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
EP-2	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-2	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-2	9/6/2018	Fluorene	ND	50	32	288	ug/L
EP-2	9/6/2018	Carbazole	ND	50	31	NA	ug/L
EP-2	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-2	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-2	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-2	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-2	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-2	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-2	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-2	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-2	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-2	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-2	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-2	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-2	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-2	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-2	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-2	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-2	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-2	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-2	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-2	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-2	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-2	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-2	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-2	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-2	9/6/2018	Phenol	120	50	30	5761	ug/L
EP-2	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-2	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-2	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-2	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-2	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-2	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-2	9/6/2018	Anthracene	ND	50	29	1721	ug/L
EP-2	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-2	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-2	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-2	9/6/2018	Pyrene	ND	50	33	117	ug/L
EP-2	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-2	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-2	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-2	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-2	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-2	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
EP-2	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-2	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-2	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-2	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-2	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-2	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-2	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-2	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-2	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-2	9/6/2018	3,4-Methylphenol	140	50	27	NA	ug/L
EP-2	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-2	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-2	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-2	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-2	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-2	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-2	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-2	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-2	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-2	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-2	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-2	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-2	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-2	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-2	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-2	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-2	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-2	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-2	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-2	4/30/2019	3,4-Methylphenol	59	50	26.818372	NA	ug/L
EP-2	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-2	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-2	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-2	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-2	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-2	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-2	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-2	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-2	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-2	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-2	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-2	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-2	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-2	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-2	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-2	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-2	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-2	4/30/2019	Benzoic Acid	110	100	31.557804	75000	ug/L
EP-2	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-2	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-2	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-2	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-2	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-2	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-2	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-2	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-2	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-2	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-2	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-2	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-2	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-2	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-2	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-2	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-2	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-2	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-2	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-2	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-2	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-2	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-2	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-2	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-2	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-2	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-2	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-2	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-2	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-2	4/30/2019	Phenol	64	50	29.88676	5761	ug/L
EP-2	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-2	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-2	11/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-2	11/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-2	11/21/2019	1,4-Dioxane	**9.5**	1	1	4.59	ug/L
EP-2	11/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-2	11/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-2	11/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-2	11/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-2	11/21/2019	2,4-Dimethylphenol	2.7	0.5	0.5	354	ug/L
EP-2	11/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-2	11/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-2	11/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-2	11/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-2	11/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-2	11/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-2	11/21/2019	2-Methylphenol	29	0.5	0.5	NA	ug/L
EP-2	11/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-2	11/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-2	11/21/2019	3,4-Methylphenol	39	0.5	0.5	NA	ug/L
EP-2	11/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-2	11/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-2	11/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-2	11/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-2	11/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-2	11/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-2	11/21/2019	Benzo(a)pyrene	ND	0.05	0.05	0.2	ug/L
EP-2	11/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-2	11/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-2	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-2	11/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-2	11/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-2	11/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-2	11/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-2	11/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-2	11/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-2	11/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-2	11/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Diethylphthalate	0.69	0.5	0.5	14801	ug/L
EP-2	11/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-2	11/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-2	11/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-2	11/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-2	11/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-2	11/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-2	11/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-2	11/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-2	11/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-2	11/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-2	11/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-2	11/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-2	11/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-2	11/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-2	11/21/2019	Phenol	190	0.5	0.5	5761	ug/L
EP-2	11/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-2	11/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
EP-2	9/16/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
EP-2	9/16/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
EP-2	9/16/2020	1,4-Dioxane	1.3	2.5	0.5	4.59	ug/L
EP-2	9/16/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
EP-2	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
EP-2	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
EP-2	9/16/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
EP-2	9/16/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
EP-2	9/16/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
EP-2	9/16/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
EP-2	9/16/2020	2,4-Dinitrotoluene	ND	1	0.5	45.3	ug/L
EP-2	9/16/2020	2,6-Dinitrotoluene	*ND*	*2.5*	0.5	0.485	ug/L
EP-2	9/16/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
EP-2	9/16/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
EP-2	9/16/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
EP-2	9/16/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
EP-2	9/16/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	3,4-Methylphenol	360	2.5	0.5	NA	ug/L
EP-2	9/16/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
EP-2	9/16/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
EP-2	9/16/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
EP-2	9/16/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
EP-2	9/16/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
EP-2	9/16/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Aniline	ND	2.5	0.5	13	ug/L
EP-2	9/16/2020	Anthracene	ND	2.5	0.5	1721	ug/L
EP-2	9/16/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
EP-2	9/16/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
EP-2	9/16/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
EP-2	9/16/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
EP-2	9/16/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
EP-2	9/16/2020	Benzoic Acid	8.8	2.5	1	75000	ug/L
EP-2	9/16/2020	Benzyl Alcohol	ND	2.5	1	2000	ug/L
EP-2	9/16/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
EP-2	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
EP-2	9/16/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
EP-2	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	0.5	55.64	ug/L
EP-2	9/16/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
EP-2	9/16/2020	Carbazole	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
EP-2	9/16/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
EP-2	9/16/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
EP-2	9/16/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
EP-2	9/16/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
EP-2	9/16/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
EP-2	9/16/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
EP-2	9/16/2020	Fluorene	ND	2.5	0.5	288	ug/L
EP-2	9/16/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
EP-2	9/16/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
EP-2	9/16/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
EP-2	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
EP-2	9/16/2020	Isophorone	ND	2.5	0.5	781	ug/L
EP-2	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
EP-2	9/16/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
EP-2	9/16/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
EP-2	9/16/2020	Naphthalene	ND	2.5	0.5	30	ug/L
EP-2	9/16/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
EP-2	9/16/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
EP-2	9/16/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
EP-2	9/16/2020	Phenol	4.6	2.5	0.5	5761	ug/L
EP-2	9/16/2020	Pyrene	ND	2.5	0.5	117	ug/L
EP-2	9/16/2020	Pyridine	ND	2.5	1	20	ug/L
EP-2	12/21/2020	Benzo(a)anthracene	*ND*	*53.9*	0.971	0.12	ug/L
EP-2	12/21/2020	Benzo(a)pyrene	*ND*	*53.9*	0.647	0.2	ug/L
EP-2	12/21/2020	Benzo(b)fluoranthene	*ND*	*53.9*	0.809	0.34	ug/L
EP-2	12/21/2020	Benzo(g,h,i)perylene	ND	53.9	1.24	NA	ug/L
EP-2	12/21/2020	Benzo(k)fluoranthene	*ND*	*53.9*	0.863	3.43	ug/L
EP-2	12/21/2020	Bis(2-chloroethoxy)methane	ND	53.9	0.863	59	ug/L
EP-2	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*53.9*	14.6	0.137	ug/L
EP-2	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	53.9	27	55.64	ug/L
EP-2	12/21/2020	Butylbenzylphthalate	*ND*	*53.9*	1.02	16	ug/L
EP-2	12/21/2020	Carbazole	ND	53.9	1.24	NA	ug/L
EP-2	12/21/2020	4-Chloroaniline	*ND*	*53.9*	18.3	0.37	ug/L
EP-2	12/21/2020	4-Chloro-3-Methylphenol	ND	53.9	20.5	NA	ug/L
EP-2	12/21/2020	2-Chlorophenol	ND	53.9	11.9	91	ug/L
EP-2	12/21/2020	Chrysene	*ND*	*53.9*	1.02	34.3	ug/L
EP-2	12/21/2020	Dibenzo(a,h)anthracene	ND	53.9	1.29	NA	ug/L
EP-2	12/21/2020	1,4-Dichlorobenzene	ND	53.9	0.863	75	ug/L
EP-2	12/21/2020	3,3-Dichlorobenzidine	*ND*	*53.9*	14	1.25	ug/L
EP-2	12/21/2020	Diethylphthalate	ND	53.9	1.29	14801	ug/L
EP-2	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*53.9*	8.63	1.52	ug/L
EP-2	12/21/2020	2,4-Dinitrophenol	*ND*	*162*	18.3	38.7	ug/L
EP-2	12/21/2020	Fluorene	ND	53.9	0.971	288	ug/L
EP-2	12/21/2020	Hexachloroethane	*ND*	*53.9*	22.6	3.28	ug/L
EP-2	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*53.9*	1.19	0.343	ug/L
EP-2	12/21/2020	Isophorone	ND	53.9	0.755	781	ug/L
EP-2	12/21/2020	Naphthalene	*ND*	*53.9*	0.917	30	ug/L
EP-2	12/21/2020	2-Nitroaniline	ND	53.9	11.9	190	ug/L
EP-2	12/21/2020	3-Nitroaniline	ND	53.9	9.71	NA	ug/L
EP-2	12/21/2020	4-Nitroaniline	*ND*	*53.9*	8.09	3.8	ug/L
EP-2	12/21/2020	4-Nitrophenol	ND	53.9	11.3	NA	ug/L
EP-2	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*53.9*	17.8	0.011	ug/L
EP-2	12/21/2020	N-Nitrosodiphenylamine	ND	53.9	0.971	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	Pentachlorophenol	*ND*	*108*	7.55	1	ug/L
EP-2	12/21/2020	Phenanthrene	ND	53.9	0.971	170	ug/L
EP-2	12/21/2020	Phenol	ND	53.9	14	5761	ug/L
EP-2	12/21/2020	Pyrene	ND	53.9	1.13	117	ug/L
EP-2	12/21/2020	Benzoic Acid	ND	162	39.4	75000	ug/L
EP-2	12/21/2020	Benzyl Alcohol	ND	53.9	10.8	2000	ug/L
EP-2	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*53.9*	0.863	9.81	ug/L
EP-2	12/21/2020	N-Nitrosodimethylamine	*ND*	*53.9*	18.9	0.0049	ug/L
EP-2	12/21/2020	Pyridine	*ND*	*53.9*	17.3	20	ug/L
EP-2	12/21/2020	Azobenzene	*ND*	*53.9*	5.39	0.12	ug/L
EP-2	12/21/2020	Acenaphthene	ND	53.9	0.863	535	ug/L
EP-2	12/21/2020	Acenaphthylene	ND	53.9	0.917	NA	ug/L
EP-2	12/21/2020	Anthracene	ND	53.9	0.971	1721	ug/L
EP-2	12/21/2020	4-Bromophenyl-phenylether	ND	53.9	1.08	NA	ug/L
EP-2	12/21/2020	2-Chloronaphthalene	ND	53.9	0.755	733	ug/L
EP-2	12/21/2020	4-Chlorophenyl-phenylether	ND	53.9	10.8	NA	ug/L
EP-2	12/21/2020	1,3-Dichlorobenzene	ND	53.9	0.971	NA	ug/L
EP-2	12/21/2020	Dibenzofuran	ND	53.9	0.917	NA	ug/L
EP-2	12/21/2020	2,4-Dichlorophenol	*ND*	*53.9*	16.2	45.3	ug/L
EP-2	12/21/2020	2,4-Dimethylphenol	ND	53.9	18.9	354	ug/L
EP-2	12/21/2020	Di-n-butylphthalate	ND	53.9	14.6	885	ug/L
EP-2	12/21/2020	2,4-Dinitrotoluene	*ND*	*53.9*	10.2	45.3	ug/L
EP-2	12/21/2020	2,6-Dinitrotoluene	*ND*	*53.9*	10.2	0.485	ug/L
EP-2	12/21/2020	Di-n-octylphthalate	ND	53.9	0.917	200	ug/L
EP-2	12/21/2020	Fluoranthene	ND	53.9	0.971	802	ug/L
EP-2	12/21/2020	Hexachlorobenzene	*ND*	*53.9*	0.917	0.0976	ug/L
EP-2	12/21/2020	Hexachlorocyclopentadiene	*ND*	*108*	14	0.41	ug/L
EP-2	12/21/2020	2-Methylphenol	ND	53.9	9.71	NA	ug/L
EP-2	12/21/2020	Nitrobenzene	*ND*	*53.9*	0.701	1.4	ug/L
EP-2	12/21/2020	2-Nitrophenol	ND	53.9	28	NA	ug/L
EP-2	12/21/2020	2,4,5-Trichlorophenol	ND	53.9	20	1166	ug/L
EP-2	12/21/2020	2,4,6-Trichlorophenol	ND	53.9	18.9	11.9*	ug/L
EP-2	12/21/2020	Dimethylphthalate	ND	53.9	0.917	612	ug/L
EP-2	12/21/2020	Aniline	*ND*	*53.9*	20.5	13	ug/L
EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	53.9	0.971	70	ug/L
EP-2	12/21/2020	1,2-Dichlorobenzene	ND	53.9	0.917	600	ug/L
EP-3	5/29/2012	Benzo(a)pyrene	*ND*	*100*	26	0.2	ug/L
EP-3	5/29/2012	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-3	5/29/2012	Dibenzo(a,h)anthracene	ND	100	28	NA	ug/L
EP-3	5/29/2012	Benzo(a)anthracene	*ND*	*100*	28	0.12	ug/L
EP-3	5/29/2012	4-Chloro-3-Methylphenol	ND	100	23	NA	ug/L
EP-3	5/29/2012	Aniline	*ND*	*100*	20	13	ug/L
EP-3	5/29/2012	N-Nitrosodimethylamine	*ND*	*100*	28	0.0049	ug/L
EP-3	5/29/2012	Benzoic Acid	ND	200	57	75000	ug/L
EP-3	5/29/2012	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-3	5/29/2012	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-3	5/29/2012	Isophorone	ND	100	24	781	ug/L
EP-3	5/29/2012	Acenaphthene	ND	100	27	535	ug/L
EP-3	5/29/2012	Diethylphthalate	ND	100	23	14801	ug/L
EP-3	5/29/2012	Di-n-butylphthalate	ND	100	32	885	ug/L
EP-3	5/29/2012	Phenanthrene	ND	100	21	170	ug/L
EP-3	5/29/2012	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-3	5/29/2012	N-Nitrosodiphenylamine	ND	100	27	122	ug/L
EP-3	5/29/2012	Fluorene	ND	100	23	288	ug/L
EP-3	5/29/2012	Carbazole	ND	100	26	NA	ug/L
EP-3	5/29/2012	Hexachlorobutadiene	*ND*	*100*	30	0.14	ug/L
EP-3	5/29/2012	Pentachlorophenol	*ND*	*200*	16	1	ug/L
EP-3	5/29/2012	2,4,6-Trichlorophenol	ND	100	22	11.9*	ug/L
EP-3	5/29/2012	2-Nitroaniline	ND	100	26	190	ug/L
EP-3	5/29/2012	2-Nitrophenol	ND	100	24	NA	ug/L
EP-3	5/29/2012	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-3	5/29/2012	Naphthalene	*ND*	*100*	29	30	ug/L
EP-3	5/29/2012	2-Methylnaphthalene	*ND*	*100*	25	35.1	ug/L
EP-3	5/29/2012	2-Chloronaphthalene	ND	100	27	733	ug/L
EP-3	5/29/2012	3,3-Dichlorobenzidine	*ND*	*100*	43	1.25	ug/L
EP-3	5/29/2012	2-Methylphenol	870	100	28	NA	ug/L
EP-3	5/29/2012	1,2-Dichlorobenzene	ND	100	27	600	ug/L
EP-3	5/29/2012	2-Chlorophenol	*ND*	*100*	28	91	ug/L
EP-3	5/29/2012	2,4,5-Trichlorophenol	ND	100	25	1166	ug/L
EP-3	5/29/2012	Nitrobenzene	*ND*	*100*	26	1.4	ug/L
EP-3	5/29/2012	3-Nitroaniline	ND	100	25	NA	ug/L
EP-3	5/29/2012	4-Nitroaniline	*ND*	*200*	27	3.8	ug/L
EP-3	5/29/2012	4-Nitrophenol	ND	100	35	NA	ug/L
EP-3	5/29/2012	Benzyl Alcohol	ND	100	21	2000	ug/L
EP-3	5/29/2012	4-Bromophenyl-phenylether	ND	100	34	NA	ug/L
EP-3	5/29/2012	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-3	5/29/2012	2,4-Dimethylphenol	130	100	32	354	ug/L
EP-3	5/29/2012	1,4-Dichlorobenzene	*ND*	*100*	29	75	ug/L
EP-3	5/29/2012	4-Chloroaniline	*ND*	*100*	34	0.37	ug/L
EP-3	5/29/2012	Phenol	3300	200	50	5761	ug/L
EP-3	5/29/2012	Pyridine	*ND*	*100*	24	20	ug/L
EP-3	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*100*	21	0.137	ug/L
EP-3	5/29/2012	Bis(2-chloroethoxy)methane	*ND*	*100*	36	59	ug/L
EP-3	5/29/2012	Bis(2-ethylhexyl)phthalate	*ND*	*100*	30	55.64	ug/L
EP-3	5/29/2012	Di-n-octylphthalate	ND	100	28	200	ug/L
EP-3	5/29/2012	Hexachlorobenzene	*ND*	*100*	29	0.0976	ug/L
EP-3	5/29/2012	Anthracene	ND	100	28	1721	ug/L
EP-3	5/29/2012	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-3	5/29/2012	2,4-Dichlorophenol	*ND*	*200*	31	45.3	ug/L
EP-3	5/29/2012	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-3	5/29/2012	Pyrene	ND	100	29	117	ug/L
EP-3	5/29/2012	Dimethylphthalate	ND	100	25	612	ug/L
EP-3	5/29/2012	Dibenzofuran	ND	100	28	NA	ug/L
EP-3	5/29/2012	Benzo(g,h,i)perylene	ND	100	30	NA	ug/L
EP-3	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*100*	31	0.343	ug/L
EP-3	5/29/2012	Benzo(b)fluoranthene	*ND*	*100*	30	0.34	ug/L
EP-3	5/29/2012	Fluoranthene	ND	100	27	802	ug/L
EP-3	5/29/2012	Benzo(k)fluoranthene	*ND*	*100*	37	3.43	ug/L
EP-3	5/29/2012	Acenaphthylene	ND	100	26	NA	ug/L
EP-3	5/29/2012	Chrysene	*ND*	*100*	30	34.3	ug/L
EP-3	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*200*	22	1.52	ug/L
EP-3	5/29/2012	1,3-Dichlorobenzene	ND	100	30	NA	ug/L
EP-3	5/29/2012	2,6-Dinitrotoluene	*ND*	*100*	26	0.485	ug/L
EP-3	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*100*	33	0.011	ug/L
EP-3	5/29/2012	4-Chlorophenyl-phenylether	ND	100	25	NA	ug/L
EP-3	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*100*	25	9.81	ug/L
EP-3	5/29/2012	3,4-Methylphenol	1600	100	29	NA	ug/L
EP-3	11/6/2012	Benzo(a)pyrene	*ND*	*20*	5.3	0.2	ug/L
EP-3	11/6/2012	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-3	11/6/2012	Dibenzo(a,h)anthracene	ND	20	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/6/2012	Benzo(a)anthracene	*ND*	*20*	5.7	0.12	ug/L
EP-3	11/6/2012	4-Chloro-3-Methylphenol	ND	20	4.6	NA	ug/L
EP-3	11/6/2012	Aniline	**120**	20	4	13	ug/L
EP-3	11/6/2012	N-Nitrosodimethylamine	*ND*	*20*	5.6	0.0049	ug/L
EP-3	11/6/2012	Benzoic Acid	ND	40	11	75000	ug/L
EP-3	11/6/2012	Hexachloroethane	*ND*	*20*	5.7	3.28	ug/L
EP-3	11/6/2012	Hexachlorocyclopentadiene	*ND*	*20*	2.5	0.41	ug/L
EP-3	11/6/2012	Isophorone	ND	20	4.8	781	ug/L
EP-3	11/6/2012	Acenaphthene	ND	20	5.3	535	ug/L
EP-3	11/6/2012	Diethylphthalate	ND	20	4.6	14801	ug/L
EP-3	11/6/2012	Di-n-butylphthalate	ND	20	6.3	885	ug/L
EP-3	11/6/2012	Phenanthrene	ND	20	4.2	170	ug/L
EP-3	11/6/2012	Butylbenzylphthalate	*ND*	*20*	4.8	16	ug/L
EP-3	11/6/2012	N-Nitrosodiphenylamine	ND	20	5.4	122	ug/L
EP-3	11/6/2012	Fluorene	ND	20	4.7	288	ug/L
EP-3	11/6/2012	Carbazole	ND	20	5.2	NA	ug/L
EP-3	11/6/2012	Hexachlorobutadiene	*ND*	*20*	6	0.14	ug/L
EP-3	11/6/2012	Pentachlorophenol	*ND*	*40*	3.3	1	ug/L
EP-3	11/6/2012	2,4,6-Trichlorophenol	ND	20	4.5	11.9*	ug/L
EP-3	11/6/2012	2-Nitroaniline	ND	20	5.2	190	ug/L
EP-3	11/6/2012	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-3	11/6/2012	1-Methylnaphthalene	*ND*	*20*	5.9	11.38	ug/L
EP-3	11/6/2012	Naphthalene	ND	20	5.8	30	ug/L
EP-3	11/6/2012	2-Methylnaphthalene	ND	20	5.1	35.1	ug/L
EP-3	11/6/2012	2-Chloronaphthalene	ND	20	5.4	733	ug/L
EP-3	11/6/2012	3,3-Dichlorobenzidine	*ND*	*20*	8.6	1.25	ug/L
EP-3	11/6/2012	2-Methylphenol	520	200	56	NA	ug/L
EP-3	11/6/2012	1,2-Dichlorobenzene	ND	20	5.4	600	ug/L
EP-3	11/6/2012	2-Chlorophenol	ND	20	5.6	91	ug/L
EP-3	11/6/2012	2,4,5-Trichlorophenol	ND	20	5	1166	ug/L
EP-3	11/6/2012	Nitrobenzene	*ND*	*20*	5.2	1.4	ug/L
EP-3	11/6/2012	3-Nitroaniline	ND	20	4.9	NA	ug/L
EP-3	11/6/2012	4-Nitroaniline	*ND*	*20*	5.4	3.8	ug/L
EP-3	11/6/2012	4-Nitrophenol	ND	20	7.1	NA	ug/L
EP-3	11/6/2012	Benzyl Alcohol	26	20	4.2	2000	ug/L
EP-3	11/6/2012	4-Bromophenyl-phenylether	ND	20	6.8	NA	ug/L
EP-3	11/6/2012	Azobenzene	*ND*	*20*	5.5	0.12	ug/L
EP-3	11/6/2012	2,4-Dimethylphenol	100	20	6.4	354	ug/L
EP-3	11/6/2012	1,4-Dichlorobenzene	ND	20	5.7	75	ug/L
EP-3	11/6/2012	4-Chloroaniline	*ND*	*20*	6.7	0.37	ug/L
EP-3	11/6/2012	Phenol	2000	200	50	5761	ug/L
EP-3	11/6/2012	Pyridine	ND	20	4.8	20	ug/L
EP-3	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*20*	4.3	0.137	ug/L
EP-3	11/6/2012	Bis(2-chloroethoxy)methane	ND	20	7.3	59	ug/L
EP-3	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	20	6.1	55.64	ug/L
EP-3	11/6/2012	Di-n-octylphthalate	ND	40	5.7	200	ug/L
EP-3	11/6/2012	Hexachlorobenzene	*ND*	*20*	5.8	0.0976	ug/L
EP-3	11/6/2012	Anthracene	ND	20	5.6	1721	ug/L
EP-3	11/6/2012	1,2,4-Trichlorobenzene	ND	20	5.1	70	ug/L
EP-3	11/6/2012	2,4-Dichlorophenol	ND	40	6.1	45.3	ug/L
EP-3	11/6/2012	2,4-Dinitrotoluene	ND	20	5.6	45.3	ug/L
EP-3	11/6/2012	Pyrene	ND	20	5.8	117	ug/L
EP-3	11/6/2012	Dimethylphthalate	ND	20	5.1	612	ug/L
EP-3	11/6/2012	Dibenzofuran	ND	20	5.6	NA	ug/L
EP-3	11/6/2012	Benzo(g,h,i)perylene	ND	20	6	NA	ug/L
EP-3	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.1	0.343	ug/L
EP-3	11/6/2012	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-3	11/6/2012	Fluoranthene	ND	20	5.5	802	ug/L
EP-3	11/6/2012	Benzo(k)fluoranthene	*ND*	*20*	7.4	3.43	ug/L
EP-3	11/6/2012	Acenaphthylene	ND	20	5.2	NA	ug/L
EP-3	11/6/2012	Chrysene	ND	20	6	34.3	ug/L
EP-3	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*40*	4.3	1.52	ug/L
EP-3	11/6/2012	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-3	11/6/2012	2,6-Dinitrotoluene	*ND*	*20*	5.3	0.485	ug/L
EP-3	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*20*	6.5	0.011	ug/L
EP-3	11/6/2012	4-Chlorophenyl-phenylether	ND	20	4.9	NA	ug/L
EP-3	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*20*	5.1	9.81	ug/L
EP-3	11/6/2012	3,4-Methylphenol	960	200	58	NA	ug/L
EP-3	5/28/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-3	5/28/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	5/28/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-3	5/28/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	5/28/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	5/28/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-3	5/28/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-3	5/28/2013	Benzoic Acid	ND	100	29	75000	ug/L
EP-3	5/28/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-3	5/28/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-3	5/28/2013	Isophorone	ND	50	8.9	781	ug/L
EP-3	5/28/2013	Acenaphthene	ND	50	13	535	ug/L
EP-3	5/28/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-3	5/28/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	5/28/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-3	5/28/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-3	5/28/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	5/28/2013	Fluorene	ND	50	12	288	ug/L
EP-3	5/28/2013	Carbazole	ND	50	11	NA	ug/L
EP-3	5/28/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-3	5/28/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-3	5/28/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-3	5/28/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	5/28/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	5/28/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-3	5/28/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	5/28/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-3	5/28/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-3	5/28/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-3	5/28/2013	2-Methylphenol	960	50	14	NA	ug/L
EP-3	5/28/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-3	5/28/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-3	5/28/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-3	5/28/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-3	5/28/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-3	5/28/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	5/28/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-3	5/28/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-3	5/28/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	5/28/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-3	5/28/2013	2,4-Dimethylphenol	110	50	15	354	ug/L
EP-3	5/28/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-3	5/28/2013	Phenol	3700	500	110	5761	ug/L
EP-3	5/28/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-3	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-3	5/28/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-3	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-3	5/28/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-3	5/28/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	5/28/2013	Anthracene	ND	50	11	1721	ug/L
EP-3	5/28/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	5/28/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-3	5/28/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-3	5/28/2013	Pyrene	ND	50	11	117	ug/L
EP-3	5/28/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-3	5/28/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-3	5/28/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-3	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-3	5/28/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-3	5/28/2013	Fluoranthene	ND	50	12	802	ug/L
EP-3	5/28/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-3	5/28/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-3	5/28/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-3	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-3	5/28/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-3	5/28/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-3	5/28/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-3	5/28/2013	3,4-Methylphenol	1900	500	190	NA	ug/L
EP-3	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-3	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-3	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-3	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-3	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-3	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-3	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-3	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-3	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-3	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-3	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-3	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-3	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-3	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-3	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-3	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-3	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-3	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-3	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-3	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-3	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-3	10/15/2013	2-Methylphenol	250	50	14	NA	ug/L
EP-3	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-3	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-3	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-3	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-3	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-3	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-3	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-3	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-3	10/15/2013	2,4-Dimethylphenol	59	50	15	354	ug/L
EP-3	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-3	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-3	10/15/2013	Phenol	1000	50	11	5761	ug/L
EP-3	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-3	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-3	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-3	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-3	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-3	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-3	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-3	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-3	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-3	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-3	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-3	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-3	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-3	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-3	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-3	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-3	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-3	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-3	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-3	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-3	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-3	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-3	10/15/2013	3,4-Methylphenol	450	50	19	NA	ug/L
EP-3	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-3	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-3	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-3	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-3	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-3	3/5/2014	Aniline	**45**	10	2.4	13	ug/L
EP-3	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-3	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-3	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-3	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-3	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-3	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-3	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-3	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-3	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-3	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-3	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-3	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-3	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-3	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-3	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-3	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-3	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-3	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-3	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-3	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-3	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-3	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-3	3/5/2014	2-Methylphenol	110	10	2.8	NA	ug/L
EP-3	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-3	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-3	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-3	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-3	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-3	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-3	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-3	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-3	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-3	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-3	3/5/2014	2,4-Dimethylphenol	26	10	3.1	354	ug/L
EP-3	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-3	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-3	3/5/2014	Phenol	790	100	16	5761	ug/L
EP-3	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-3	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-3	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-3	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-3	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-3	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-3	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-3	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-3	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-3	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-3	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-3	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-3	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-3	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-3	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-3	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-3	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-3	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-3	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-3	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-3	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-3	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-3	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-3	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-3	3/5/2014	3,4-Methylphenol	290	100	18	NA	ug/L
EP-3	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-3	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-3	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-3	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-3	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-3	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-3	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-3	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-3	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-3	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-3	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-3	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-3	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-3	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-3	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-3	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-3	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-3	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-3	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-3	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-3	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-3	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-3	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-3	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-3	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-3	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-3	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-3	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-3	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-3	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-3	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-3	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-3	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-3	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-3	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-3	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-3	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-3	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-3	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-3	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-3	11/12/2014	Phenol	ND	50	7.9	5761	ug/L
EP-3	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-3	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-3	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-3	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-3	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-3	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-3	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-3	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-3	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-3	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-3	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-3	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-3	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-3	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-3	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-3	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-3	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-3	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-3	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-3	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-3	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-3	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-3	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-3	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-3	3/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-3	3/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-3	3/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-3	3/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-3	3/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Aniline	ND	10	1.5	13	ug/L
EP-3	3/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-3	3/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-3	3/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-3	3/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-3	3/24/2015	Isophorone	ND	10	2	781	ug/L
EP-3	3/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-3	3/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-3	3/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-3	3/24/2015	Phenanthrene	ND	10	2	170	ug/L
EP-3	3/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-3	3/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-3	3/24/2015	Fluorene	ND	10	1.7	288	ug/L
EP-3	3/24/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-3	3/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-3	3/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-3	3/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-3	3/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-3	3/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-3	3/24/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-3	3/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-3	3/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-3	3/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-3	3/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-3	3/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-3	3/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-3	3/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-3	3/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-3	3/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-3	3/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-3	3/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-3	3/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-3	3/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-3	3/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-3	3/24/2015	Phenol	340	50	5.4	5761	ug/L
EP-3	3/24/2015	Pyridine	ND	10	1.7	20	ug/L
EP-3	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	3/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-3	3/24/2015	Bis(2-ethylhexyl)phthalate	19	10	3.3	55.64	ug/L
EP-3	3/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-3	3/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-3	3/24/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-3	3/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-3	3/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-3	3/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-3	3/24/2015	Pyrene	ND	10	2.3	117	ug/L
EP-3	3/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-3	3/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-3	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-3	3/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-3	3/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-3	3/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-3	3/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-3	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-3	3/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-3	3/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-3	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-3	3/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-3	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-3	3/24/2015	3,4-Methylphenol	12	10	1.5	NA	ug/L
EP-3	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-3	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-3	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-3	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-3	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-3	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-3	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-3	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-3	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-3	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-3	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-3	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-3	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-3	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-3	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-3	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-3	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-3	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-3	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-3	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-3	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-3	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-3	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-3	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-3	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-3	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-3	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-3	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-3	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-3	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-3	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-3	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-3	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-3	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-3	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-3	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-3	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-3	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-3	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-3	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-3	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-3	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-3	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-3	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-3	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-3	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-3	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-3	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-3	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-3	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-3	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-3	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-3	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-3	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-3	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-3	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-3	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-3	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-3	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-3	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-3	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-3	9/1/2015	3,4-Methylphenol	36	10	1.5	NA	ug/L
EP-3	8/29/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-3	8/29/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-3	8/29/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-3	8/29/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	8/29/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-3	8/29/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-3	8/29/2016	Benzoic Acid	36	100	13	75000	ug/L
EP-3	8/29/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-3	8/29/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-3	8/29/2016	Isophorone	ND	50	13	781	ug/L
EP-3	8/29/2016	Acenaphthene	ND	50	13	535	ug/L
EP-3	8/29/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-3	8/29/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	8/29/2016	Phenanthrene	ND	50	13	170	ug/L
EP-3	8/29/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-3	8/29/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	8/29/2016	Fluorene	ND	50	14	288	ug/L
EP-3	8/29/2016	Carbazole	ND	50	11	NA	ug/L
EP-3	8/29/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-3	8/29/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-3	8/29/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-3	8/29/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	8/29/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	8/29/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-3	8/29/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-3	8/29/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-3	8/29/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-3	8/29/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-3	8/29/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-3	8/29/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-3	8/29/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-3	8/29/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-3	8/29/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-3	8/29/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	8/29/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-3	8/29/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	8/29/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-3	8/29/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-3	8/29/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-3	8/29/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-3	8/29/2016	Phenol	ND	50	9.9	5761	ug/L
EP-3	8/29/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-3	8/29/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-3	8/29/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
EP-3	8/29/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
EP-3	8/29/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	8/29/2016	Anthracene	ND	50	12	1721	ug/L
EP-3	8/29/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-3	8/29/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-3	8/29/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-3	8/29/2016	Pyrene	ND	50	15	117	ug/L
EP-3	8/29/2016	Dimethylphthalate	23	50	12	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	8/29/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-3	8/29/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-3	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-3	8/29/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-3	8/29/2016	Fluoranthene	ND	50	13	802	ug/L
EP-3	8/29/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-3	8/29/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-3	8/29/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-3	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-3	8/29/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-3	8/29/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-3	8/29/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-3	8/29/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-3	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-3	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-3	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-3	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-3	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-3	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-3	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-3	3/30/2017	Benzoic Acid	37	100	20	75000	ug/L
EP-3	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-3	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-3	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-3	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-3	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-3	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-3	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-3	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-3	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-3	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-3	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-3	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-3	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-3	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-3	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-3	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-3	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-3	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-3	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-3	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-3	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-3	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-3	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-3	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-3	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-3	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-3	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-3	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-3	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-3	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-3	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-3	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-3	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-3	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-3	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-3	3/30/2017	Phenol	22	50	16	5761	ug/L
EP-3	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-3	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-3	3/30/2017	Bis(2-ethylhexyl)phthalate	32	50	24	55.64	ug/L
EP-3	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-3	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-3	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-3	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-3	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-3	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-3	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-3	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-3	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-3	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-3	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-3	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-3	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-3	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-3	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-3	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-3	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-3	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-3	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-3	3/30/2017	3,4-Methylphenol	34	50	16	NA	ug/L
EP-3	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-3	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-3	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-3	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-3	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-3	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-3	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-3	10/24/2017	Benzoic Acid	37	100	20	75000	ug/L
EP-3	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-3	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-3	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-3	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-3	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-3	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-3	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-3	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-3	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-3	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-3	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-3	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-3	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-3	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-3	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-3	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-3	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-3	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-3	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-3	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-3	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-3	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-3	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-3	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-3	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-3	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-3	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-3	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-3	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-3	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-3	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-3	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-3	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-3	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-3	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-3	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-3	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-3	10/24/2017	Bis(2-ethylhexyl)phthalate	47	50	24	55.64	ug/L
EP-3	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-3	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-3	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-3	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-3	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-3	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-3	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-3	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-3	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-3	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-3	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-3	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-3	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-3	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-3	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-3	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-3	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-3	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-3	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-3	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-3	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-3	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-3	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-3	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-3	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-3	2/21/2018	Aniline	**41**	100	31	13	ug/L
EP-3	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-3	2/21/2018	Benzoic Acid	72	200	39	75000	ug/L
EP-3	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-3	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-3	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-3	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-3	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-3	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-3	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-3	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-3	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-3	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-3	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-3	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-3	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-3	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-3	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-3	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-3	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-3	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-3	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-3	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-3	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-3	2/21/2018	2-Methylphenol	110	100	33	NA	ug/L
EP-3	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-3	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-3	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-3	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-3	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-3	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-3	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-3	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-3	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-3	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-3	2/21/2018	2,4-Dimethylphenol	39	100	28	354	ug/L
EP-3	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-3	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-3	2/21/2018	Phenol	450	100	31	5761	ug/L
EP-3	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-3	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-3	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-3	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-3	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-3	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-3	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-3	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-3	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-3	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-3	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-3	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-3	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-3	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-3	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-3	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-3	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-3	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-3	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-3	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-3	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-3	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-3	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-3	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-3	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-3	2/21/2018	3,4-Methylphenol	350	100	32	NA	ug/L
EP-3	9/6/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-3	9/6/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-3	9/6/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-3	9/6/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-3	9/6/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-3	9/6/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-3	9/6/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-3	9/6/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-3	9/6/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-3	9/6/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-3	9/6/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-3	9/6/2018	Benzoic Acid	71	200	63	75000	ug/L
EP-3	9/6/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-3	9/6/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-3	9/6/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-3	9/6/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-3	9/6/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-3	9/6/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-3	9/6/2018	Isophorone	ND	100	62	781	ug/L
EP-3	9/6/2018	Acenaphthene	ND	100	58	535	ug/L
EP-3	9/6/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-3	9/6/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-3	9/6/2018	Phenanthrene	ND	100	60	170	ug/L
EP-3	9/6/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-3	9/6/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-3	9/6/2018	Fluorene	ND	100	63	288	ug/L
EP-3	9/6/2018	Carbazole	ND	100	63	NA	ug/L
EP-3	9/6/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-3	9/6/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-3	9/6/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-3	9/6/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-3	9/6/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-3	9/6/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-3	9/6/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-3	9/6/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-3	9/6/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-3	9/6/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-3	9/6/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-3	9/6/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-3	9/6/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-3	9/6/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-3	9/6/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-3	9/6/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-3	9/6/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-3	9/6/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-3	9/6/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-3	9/6/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-3	9/6/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-3	9/6/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-3	9/6/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-3	9/6/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-3	9/6/2018	Phenol	ND	100	60	5761	ug/L
EP-3	9/6/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-3	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-3	9/6/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-3	9/6/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-3	9/6/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-3	9/6/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-3	9/6/2018	Anthracene	ND	100	57	1721	ug/L
EP-3	9/6/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-3	9/6/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-3	9/6/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-3	9/6/2018	Pyrene	ND	100	65	117	ug/L
EP-3	9/6/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-3	9/6/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-3	9/6/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-3	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-3	9/6/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-3	9/6/2018	Fluoranthene	ND	100	58	802	ug/L
EP-3	9/6/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-3	9/6/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-3	9/6/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-3	9/6/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-3	9/6/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-3	9/6/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-3	9/6/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-3	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-3	9/6/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-3	9/6/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-3	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-3	9/6/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-3	9/6/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-3	9/6/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-3	9/6/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-3	9/6/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-3	9/6/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-3	9/6/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-3	9/6/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-3	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-3	9/6/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-3	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-3	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-3	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-3	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-3	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-3	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-3	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-3	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-3	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-3	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-3	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-3	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-3	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-3	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-3	4/30/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-3	4/30/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-3	4/30/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-3	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-3	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-3	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-3	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-3	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-3	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-3	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-3	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-3	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-3	4/30/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-3	4/30/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-3	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-3	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-3	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-3	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-3	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-3	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-3	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-3	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-3	4/30/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-3	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-3	4/30/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-3	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-3	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-3	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-3	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-3	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-3	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-3	4/30/2019	Chlordane	*ND*	*50*	25	0.448	ug/L
EP-3	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-3	4/30/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-3	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-3	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-3	4/30/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-3	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-3	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-3	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-3	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-3	4/30/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-3	4/30/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-3	4/30/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-3	4/30/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-3	4/30/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-3	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-3	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-3	4/30/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-3	4/30/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-3	4/30/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-3	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-3	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-3	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-3	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-3	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-3	4/30/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-3	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-3	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-3	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-3	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-3	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-3	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-3	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-3	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-3	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-3	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-3	4/30/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-3	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-3	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-3	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-3	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-3	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-3	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-3	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-3	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-3	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-3	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-3	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-3	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-3	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-3	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-3	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-3	4/30/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-3	4/30/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-3	4/30/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-3	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-3	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-3	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-3	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-3	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-3	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-3	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-3	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-3	4/30/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-3	4/30/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-3	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-3	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-3	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-3	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-3	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-3	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-3	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-3	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-3	4/30/2019	Benzoic Acid	55	100	31.557804	75000	ug/L
EP-3	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-3	4/30/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-3	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-3	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-3	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-3	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-3	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-3	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-3	4/30/2019	Chlordane	*ND*	*50*	25	0.448	ug/L
EP-3	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-3	4/30/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-3	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-3	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-3	4/30/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-3	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-3	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-3	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-3	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-3	4/30/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-3	4/30/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-3	4/30/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-3	4/30/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-3	4/30/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-3	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-3	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-3	4/30/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-3	4/30/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-3	4/30/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-3	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-3	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-3	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-3	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-3	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-3	4/30/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-3	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-3	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-3	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-3	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-3	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-3	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-3	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-3	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-3	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-3	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-3	4/30/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-3	11/20/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-3	11/20/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-3	11/20/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-3	11/20/2019	1,4-Dioxane	**8.9**	1	1	4.59	ug/L
EP-3	11/20/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-3	11/20/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-3	11/20/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-3	11/20/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-3	11/20/2019	2,4-Dimethylphenol	22	2.5	2.5	354	ug/L
EP-3	11/20/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-3	11/20/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-3	11/20/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-3	11/20/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-3	11/20/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-3	11/20/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-3	11/20/2019	2-Methylphenol	150	2.5	2.5	NA	ug/L
EP-3	11/20/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-3	11/20/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-3	11/20/2019	3,4-Methylphenol	210	2.5	2.5	NA	ug/L
EP-3	11/20/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-3	11/20/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-3	11/20/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-3	11/20/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-3	11/20/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-3	11/20/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-3	11/20/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-3	11/20/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-3	11/20/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-3	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-3	11/20/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-3	11/20/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-3	11/20/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-3	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
EP-3	11/20/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-3	11/20/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-3	11/20/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-3	11/20/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
EP-3	11/20/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-3	11/20/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-3	11/20/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-3	11/20/2019	Fluoranthene	ND	2.5	2.5	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/20/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-3	11/20/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-3	11/20/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-3	11/20/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-3	11/20/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-3	11/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-3	11/20/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-3	11/20/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-3	11/20/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-3	11/20/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-3	11/20/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-3	11/20/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-3	11/20/2019	Phenol	700	2.5	2.5	5761	ug/L
EP-3	11/20/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-3	11/20/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-3	11/21/2019	4,4-DDD	*ND*	*0.4*	0.32124	0.317	ug/L
EP-3	11/21/2019	4,4-DDE	ND	0.4	0.34284	0.462	ug/L
EP-3	11/21/2019	4,4-DDT	ND	0.5	0.40888	2.29	ug/L
EP-3	11/21/2019	Aldrin	*ND*	*0.4*	0.33244	0.002	ug/L
EP-3	11/21/2019	a-BHC	*ND*	*0.4*	0.33128	0.069	ug/L
EP-3	11/21/2019	b-BHC	*ND*	*0.4*	0.37268	0.243	ug/L
EP-3	11/21/2019	Chlordane	*ND*	*4*	2	0.448	ug/L
EP-3	11/21/2019	d-BHC	ND	0.4	0.34568	NA	ug/L
EP-3	11/21/2019	Dieldrin	*ND*	*0.4*	0.33652	0.018	ug/L
EP-3	11/21/2019	Endosulfan I	ND	0.4	0.3394	98.7	ug/L
EP-3	11/21/2019	Endosulfan II	ND	0.4	0.34896	98.7	ug/L
EP-3	11/21/2019	Endosulfan sulfate	ND	0.4	0.36124	110	ug/L
EP-3	11/21/2019	Endrin	ND	0.5	0.45368	2.23	ug/L
EP-3	11/21/2019	Endrin aldehyde	ND	0.4	0.3262	NA	ug/L
EP-3	11/21/2019	g-BHC (Lindane)	ND	0.4	0.33948	0.415	ug/L
EP-3	11/21/2019	Heptachlor	*ND*	*0.4*	0.343	0.0221	ug/L
EP-3	11/21/2019	Heptachlor epoxide	*ND*	*0.4*	0.34952	0.0014	ug/L
EP-3	11/21/2019	Methoxychlor	ND	0.5	0.4496	37	ug/L
EP-3	11/21/2019	Toxaphene	*ND*	*4*	2	0.158	ug/L
EP-3	9/16/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
EP-3	9/16/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
EP-3	9/16/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
EP-3	9/16/2020	1,4-Dioxane	1.3	2.5	0.5	4.59	ug/L
EP-3	9/16/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
EP-3	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
EP-3	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
EP-3	9/16/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
EP-3	9/16/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
EP-3	9/16/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
EP-3	9/16/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
EP-3	9/16/2020	2,4-Dinitrotoluene	ND	1	0.5	45.3	ug/L
EP-3	9/16/2020	2,6-Dinitrotoluene	*ND*	*2.5*	0.5	0.485	ug/L
EP-3	9/16/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
EP-3	9/16/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
EP-3	9/16/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
EP-3	9/16/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
EP-3	9/16/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	3,4-Methylphenol	260	2.5	0.5	NA	ug/L
EP-3	9/16/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
EP-3	9/16/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
EP-3	9/16/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
EP-3	9/16/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
EP-3	9/16/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
EP-3	9/16/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Aniline	ND	2.5	0.5	13	ug/L
EP-3	9/16/2020	Anthracene	ND	2.5	0.5	1721	ug/L
EP-3	9/16/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
EP-3	9/16/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
EP-3	9/16/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
EP-3	9/16/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
EP-3	9/16/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
EP-3	9/16/2020	Benzoic Acid	40	2.5	1	75000	ug/L
EP-3	9/16/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
EP-3	9/16/2020	Bis(2-chloroethoxy)methane	ND	2.5	1	59	ug/L
EP-3	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
EP-3	9/16/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
EP-3	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	0.5	55.64	ug/L
EP-3	9/16/2020	Butylbenzylphthalate	ND	2.5	0.5	16	ug/L
EP-3	9/16/2020	Carbazole	ND	2.5	1	NA	ug/L
EP-3	9/16/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
EP-3	9/16/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
EP-3	9/16/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
EP-3	9/16/2020	Dibenzo(a,h)anthracene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Dibenzofuran	ND	0.15	0.1	NA	ug/L
EP-3	9/16/2020	Diethylphthalate	ND	2.5	0.5	14801	ug/L
EP-3	9/16/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
EP-3	9/16/2020	Fluoranthene	ND	2.5	1	802	ug/L
EP-3	9/16/2020	Fluorene	ND	2.5	0.5	288	ug/L
EP-3	9/16/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
EP-3	9/16/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
EP-3	9/16/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
EP-3	9/16/2020	Hexachloroethane	ND	2.5	1.2	3.28	ug/L
EP-3	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2.5*	0.5	0.343	ug/L
EP-3	9/16/2020	Isophorone	ND	1	0.5	781	ug/L
EP-3	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
EP-3	9/16/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
EP-3	9/16/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
EP-3	9/16/2020	Naphthalene	ND	2.5	0.5	30	ug/L
EP-3	9/16/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
EP-3	9/16/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
EP-3	9/16/2020	Phenanthrene	ND	2.5	1	170	ug/L
EP-3	9/16/2020	Phenol	ND	2.5	0.5	5761	ug/L
EP-3	9/16/2020	Pyrene	ND	2.5	0.5	117	ug/L
EP-3	9/16/2020	Pyridine	ND	2.5	0.5	20	ug/L
EP-3	12/21/2020	Benzo(a)anthracene	*ND*	*10.5*	0.188	0.12	ug/L
EP-3	12/21/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.157	0.34	ug/L
EP-3	12/21/2020	Benzo(g,h,i)perylene	ND	10.5	0.241	NA	ug/L
EP-3	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.167	3.43	ug/L
EP-3	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.167	59	ug/L
EP-3	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.82	0.137	ug/L
EP-3	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.23	55.64	ug/L
EP-3	12/21/2020	Butylbenzylphthalate	ND	10.5	0.199	16	ug/L
EP-3	12/21/2020	Carbazole	ND	10.5	0.241	NA	ug/L
EP-3	12/21/2020	4-Chloroaniline	*ND*	*10.5*	3.56	0.37	ug/L
EP-3	12/21/2020	4-Chloro-3-Methylphenol	ND	10.5	3.97	NA	ug/L
EP-3	12/21/2020	2-Chlorophenol	ND	10.5	2.3	91	ug/L
EP-3	12/21/2020	Chrysene	ND	10.5	0.199	34.3	ug/L
EP-3	12/21/2020	Dibenzo(a,h)anthracene	ND	10.5	0.251	NA	ug/L
EP-3	12/21/2020	1,4-Dichlorobenzene	ND	10.5	0.167	75	ug/L
EP-3	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.72	1.25	ug/L
EP-3	12/21/2020	Diethylphthalate	ND	10.5	0.251	14801	ug/L
EP-3	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.67	1.52	ug/L
EP-3	12/21/2020	2,4-Dinitrophenol	ND	31.4	3.56	38.7	ug/L
EP-3	12/21/2020	Fluorene	ND	10.5	0.188	288	ug/L
EP-3	12/21/2020	Hexachloroethane	*ND*	*10.5*	4.39	3.28	ug/L
EP-3	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.23	0.343	ug/L
EP-3	12/21/2020	Isophorone	ND	10.5	0.146	781	ug/L
EP-3	12/21/2020	Naphthalene	ND	10.5	0.178	30	ug/L
EP-3	12/21/2020	2-Nitroaniline	ND	10.5	2.3	190	ug/L
EP-3	12/21/2020	3-Nitroaniline	ND	10.5	1.88	NA	ug/L
EP-3	12/21/2020	4-Nitroaniline	*ND*	*10.5*	1.57	3.8	ug/L
EP-3	12/21/2020	4-Nitrophenol	ND	10.5	2.2	NA	ug/L
EP-3	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.45	0.011	ug/L
EP-3	12/21/2020	N-Nitrosodiphenylamine	ND	10.5	0.188	122	ug/L
EP-3	12/21/2020	Pentachlorophenol	*ND*	*20.9*	1.46	1	ug/L
EP-3	12/21/2020	Phenanthrene	ND	10.5	0.188	170	ug/L
EP-3	12/21/2020	Phenol	ND	10.5	2.72	5761	ug/L
EP-3	12/21/2020	Pyrene	ND	10.5	0.22	117	ug/L
EP-3	12/21/2020	Benzoic Acid	ND	31.4	7.64	75000	ug/L
EP-3	12/21/2020	Benzyl Alcohol	ND	10.5	2.09	2000	ug/L
EP-3	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.167	9.81	ug/L
EP-3	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.66	0.0049	ug/L
EP-3	12/21/2020	Pyridine	ND	10.5	3.35	20	ug/L
EP-3	12/21/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
EP-3	12/21/2020	Acenaphthene	ND	10.5	0.167	535	ug/L
EP-3	12/21/2020	Acenaphthylene	ND	10.5	0.178	NA	ug/L
EP-3	12/21/2020	Anthracene	ND	10.5	0.188	1721	ug/L
EP-3	12/21/2020	4-Bromophenyl-phenylether	ND	10.5	0.209	NA	ug/L
EP-3	12/21/2020	2-Chloronaphthalene	ND	10.5	0.146	733	ug/L
EP-3	12/21/2020	4-Chlorophenyl-phenylether	ND	10.5	2.09	NA	ug/L
EP-3	12/21/2020	1,3-Dichlorobenzene	ND	10.5	0.188	NA	ug/L
EP-3	12/21/2020	Dibenzofuran	ND	10.5	0.178	NA	ug/L
EP-3	12/21/2020	2,4-Dichlorophenol	ND	10.5	3.14	45.3	ug/L
EP-3	12/21/2020	2,4-Dimethylphenol	ND	10.5	3.66	354	ug/L
EP-3	12/21/2020	Di-n-butylphthalate	ND	10.5	2.82	885	ug/L
EP-3	12/21/2020	2,4-Dinitrotoluene	ND	10.5	1.99	45.3	ug/L
EP-3	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.5*	1.99	0.485	ug/L
EP-3	12/21/2020	Di-n-octylphthalate	ND	10.5	0.178	200	ug/L
EP-3	12/21/2020	Fluoranthene	ND	10.5	0.188	802	ug/L
EP-3	12/21/2020	Hexachlorobenzene	*ND*	*10.5*	0.178	0.0976	ug/L
EP-3	12/21/2020	Hexachlorocyclopentadiene	*ND*	*20.9*	2.72	0.41	ug/L
EP-3	12/21/2020	2-Methylphenol	ND	10.5	1.88	NA	ug/L
EP-3	12/21/2020	Nitrobenzene	*ND*	*10.5*	0.136	1.4	ug/L
EP-3	12/21/2020	2-Nitrophenol	ND	10.5	5.44	NA	ug/L
EP-3	12/21/2020	2,4,5-Trichlorophenol	ND	10.5	3.87	1166	ug/L
EP-3	12/21/2020	2,4,6-Trichlorophenol	ND	10.5	3.66	11.9*	ug/L
EP-3	12/21/2020	Dimethylphthalate	ND	10.5	0.178	612	ug/L
EP-3	12/21/2020	Aniline	ND	10.5	3.97	13	ug/L
EP-3	12/21/2020	1,2,4-Trichlorobenzene	ND	10.5	0.188	70	ug/L
EP-3	12/21/2020	1,2-Dichlorobenzene	ND	10.5	0.178	600	ug/L
EP-4	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-4	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-4	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-4	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-4	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-4	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-4	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-4	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-4	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-4	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-4	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-4	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-4	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-4	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-4	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-4	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-4	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-4	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-4	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-4	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-4	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-4	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-4	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-4	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-4	5/29/2012	2-Methylphenol	780	50	14	NA	ug/L
EP-4	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-4	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-4	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-4	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-4	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-4	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-4	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-4	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-4	5/29/2012	2,4-Dimethylphenol	110	50	16	354	ug/L
EP-4	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-4	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-4	5/29/2012	Phenol	2900	250	63	5761	ug/L
EP-4	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-4	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-4	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-4	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-4	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-4	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-4	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-4	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-4	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-4	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-4	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-4	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-4	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-4	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-4	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-4	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-4	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-4	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-4	5/29/2012	3,4-Methylphenol	1200	250	72	NA	ug/L
EP-4	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-4	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-4	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-4	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-4	11/6/2012	Aniline	**60**	50	9.9	13	ug/L
EP-4	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-4	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-4	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-4	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-4	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-4	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-4	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-4	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-4	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-4	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-4	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-4	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-4	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-4	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-4	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-4	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-4	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-4	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-4	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-4	11/6/2012	2-Methylphenol	290	50	14	NA	ug/L
EP-4	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-4	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-4	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-4	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-4	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-4	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-4	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-4	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-4	11/6/2012	2,4-Dimethylphenol	72	50	16	354	ug/L
EP-4	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-4	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-4	11/6/2012	Phenol	1100	50	13	5761	ug/L
EP-4	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-4	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-4	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-4	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-4	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-4	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-4	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-4	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-4	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-4	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-4	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-4	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-4	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-4	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-4	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-4	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-4	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-4	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-4	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-4	11/6/2012	3,4-Methylphenol	530	50	14	NA	ug/L
EP-4	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-4	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-4	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-4	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-4	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-4	5/28/2013	Aniline	**29**	20	4.4	13	ug/L
EP-4	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-4	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-4	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-4	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-4	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-4	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-4	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-4	5/28/2013	Phenanthrene	ND	*20*	3.3	170	ug/L
EP-4	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-4	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-4	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-4	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-4	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-4	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-4	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-4	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-4	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-4	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-4	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-4	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-4	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-4	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-4	5/28/2013	2-Methylphenol	480	200	54	NA	ug/L
EP-4	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-4	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-4	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-4	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-4	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-4	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-4	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-4	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-4	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-4	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-4	5/28/2013	2,4-Dimethylphenol	71	20	5.9	354	ug/L
EP-4	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-4	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-4	5/28/2013	Phenol	1400	200	44	5761	ug/L
EP-4	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-4	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-4	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-4	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-4	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-4	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-4	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-4	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-4	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-4	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-4	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-4	5/28/2013	Dimethylphthalate	ND	*20*	5.6	612	ug/L
EP-4	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-4	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-4	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-4	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-4	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-4	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-4	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-4	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-4	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-4	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-4	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-4	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-4	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-4	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-4	5/28/2013	3,4-Methylphenol	1000	200	75	NA	ug/L
EP-4	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-4	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-4	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-4	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-4	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-4	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-4	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-4	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-4	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-4	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-4	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-4	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-4	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-4	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-4	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-4	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-4	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-4	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-4	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-4	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-4	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-4	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-4	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-4	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-4	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-4	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-4	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-4	10/15/2013	2-Methylphenol	180	50	14	NA	ug/L
EP-4	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-4	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-4	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-4	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-4	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-4	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-4	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-4	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-4	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-4	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-4	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-4	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-4	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-4	10/15/2013	Phenol	670	50	11	5761	ug/L
EP-4	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-4	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-4	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-4	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-4	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-4	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-4	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-4	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-4	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-4	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-4	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-4	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-4	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-4	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-4	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-4	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-4	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-4	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-4	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-4	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-4	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-4	10/15/2013	3,4-Methylphenol	340	50	19	NA	ug/L
EP-4	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-4	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-4	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-4	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-4	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-4	3/5/2014	Aniline	**40**	10	2.4	13	ug/L
EP-4	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-4	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-4	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-4	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-4	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-4	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-4	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-4	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-4	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-4	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-4	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-4	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-4	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-4	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-4	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-4	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-4	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-4	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-4	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-4	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-4	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-4	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-4	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-4	3/5/2014	2-Methylphenol	80	10	2.8	NA	ug/L
EP-4	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-4	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-4	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-4	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-4	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-4	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-4	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-4	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-4	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-4	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-4	3/5/2014	2,4-Dimethylphenol	22	10	3.1	354	ug/L
EP-4	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-4	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-4	3/5/2014	Phenol	420	50	7.9	5761	ug/L
EP-4	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-4	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-4	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-4	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-4	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-4	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-4	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-4	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-4	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-4	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-4	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-4	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-4	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-4	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-4	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-4	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-4	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-4	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-4	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-4	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-4	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-4	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-4	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-4	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-4	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-4	3/5/2014	3,4-Methylphenol	210	50	9.1	NA	ug/L
EP-4	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-4	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-4	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-4	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-4	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-4	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-4	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-4	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-4	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-4	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-4	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-4	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-4	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-4	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-4	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-4	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-4	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-4	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-4	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-4	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-4	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-4	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-4	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-4	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-4	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-4	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-4	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-4	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-4	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-4	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-4	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-4	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-4	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-4	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-4	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-4	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-4	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-4	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-4	11/12/2014	Phenol	ND	50	7.9	5761	ug/L
EP-4	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-4	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-4	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-4	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-4	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-4	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-4	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-4	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-4	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-4	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-4	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-4	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-4	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-4	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-4	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-4	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-4	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-4	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-4	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-4	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-4	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-4	3/24/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-4	3/24/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-4	3/24/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-4	3/24/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-4	3/24/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-4	3/24/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-4	3/24/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-4	3/24/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-4	3/24/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-4	3/24/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-4	3/24/2015	Isophorone	ND	100	20	781	ug/L
EP-4	3/24/2015	Acenaphthene	ND	100	19	535	ug/L
EP-4	3/24/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-4	3/24/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-4	3/24/2015	Phenanthrene	ND	100	20	170	ug/L
EP-4	3/24/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-4	3/24/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-4	3/24/2015	Fluorene	ND	100	17	288	ug/L
EP-4	3/24/2015	Carbazole	ND	100	15	NA	ug/L
EP-4	3/24/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-4	3/24/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-4	3/24/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-4	3/24/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-4	3/24/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-4	3/24/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-4	3/24/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-4	3/24/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-4	3/24/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-4	3/24/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-4	3/24/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-4	3/24/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-4	3/24/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-4	3/24/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-4	3/24/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-4	3/24/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-4	3/24/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-4	3/24/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-4	3/24/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-4	3/24/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-4	3/24/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-4	3/24/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-4	3/24/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-4	3/24/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-4	3/24/2015	Phenol	ND	100	11	5761	ug/L
EP-4	3/24/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-4	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-4	3/24/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-4	3/24/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-4	3/24/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-4	3/24/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-4	3/24/2015	Anthracene	ND	100	16	1721	ug/L
EP-4	3/24/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-4	3/24/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-4	3/24/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-4	3/24/2015	Pyrene	ND	100	23	117	ug/L
EP-4	3/24/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-4	3/24/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-4	3/24/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-4	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-4	3/24/2015	Fluoranthene	ND	100	15	802	ug/L
EP-4	3/24/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-4	3/24/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-4	3/24/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-4	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-4	3/24/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-4	3/24/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-4	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-4	3/24/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-4	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-4	3/24/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-4	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-4	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-4	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-4	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-4	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-4	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-4	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-4	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-4	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-4	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-4	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-4	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-4	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-4	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-4	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-4	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-4	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-4	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-4	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-4	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-4	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-4	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-4	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-4	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-4	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-4	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-4	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-4	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-4	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-4	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-4	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-4	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-4	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-4	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-4	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-4	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-4	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-4	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-4	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-4	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-4	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-4	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-4	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-4	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-4	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-4	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-4	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-4	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-4	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-4	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-4	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-4	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-4	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-4	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-4	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-4	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-4	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-4	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-4	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-4	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-4	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-4	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-4	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-4	9/1/2015	3,4-Methylphenol	45	10	1.5	NA	ug/L
EP-4	8/29/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-4	8/29/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
EP-4	8/29/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
EP-4	8/29/2016	Benzo(a)anthracene	**30**	100	26	0.12	ug/L
EP-4	8/29/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
EP-4	8/29/2016	Aniline	*ND*	*100*	24	13	ug/L
EP-4	8/29/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
EP-4	8/29/2016	Benzoic Acid	78	200	26	75000	ug/L
EP-4	8/29/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
EP-4	8/29/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
EP-4	8/29/2016	Isophorone	ND	100	26	781	ug/L
EP-4	8/29/2016	Acenaphthene	ND	100	26	535	ug/L
EP-4	8/29/2016	Diethylphthalate	ND	100	27	14801	ug/L
EP-4	8/29/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
EP-4	8/29/2016	Phenanthrene	ND	100	26	170	ug/L
EP-4	8/29/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
EP-4	8/29/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
EP-4	8/29/2016	Fluorene	ND	100	27	288	ug/L
EP-4	8/29/2016	Carbazole	ND	100	23	NA	ug/L
EP-4	8/29/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
EP-4	8/29/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
EP-4	8/29/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
EP-4	8/29/2016	2-Nitroaniline	ND	100	28	190	ug/L
EP-4	8/29/2016	2-Nitrophenol	ND	100	24	NA	ug/L
EP-4	8/29/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-4	8/29/2016	Naphthalene	*ND*	*100*	26	30	ug/L
EP-4	8/29/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	8/29/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
EP-4	8/29/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
EP-4	8/29/2016	2-Methylphenol	ND	100	25	NA	ug/L
EP-4	8/29/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
EP-4	8/29/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
EP-4	8/29/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
EP-4	8/29/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
EP-4	8/29/2016	3-Nitroaniline	ND	100	29	NA	ug/L
EP-4	8/29/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
EP-4	8/29/2016	4-Nitrophenol	ND	100	26	NA	ug/L
EP-4	8/29/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
EP-4	8/29/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
EP-4	8/29/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-4	8/29/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
EP-4	8/29/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
EP-4	8/29/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
EP-4	8/29/2016	Phenol	ND	100	20	5761	ug/L
EP-4	8/29/2016	Pyridine	*ND*	*100*	22	20	ug/L
EP-4	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
EP-4	8/29/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
EP-4	8/29/2016	Bis(2-ethylhexyl)phthalate	*31*	*100*	26	55.64	ug/L
EP-4	8/29/2016	Di-n-octylphthalate	36	100	20	200	ug/L
EP-4	8/29/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
EP-4	8/29/2016	Anthracene	ND	100	25	1721	ug/L
EP-4	8/29/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-4	8/29/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
EP-4	8/29/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
EP-4	8/29/2016	Pyrene	41	100	31	117	ug/L
EP-4	8/29/2016	Dimethylphthalate	45	100	24	612	ug/L
EP-4	8/29/2016	Dibenzofuran	ND	100	25	NA	ug/L
EP-4	8/29/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
EP-4	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
EP-4	8/29/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
EP-4	8/29/2016	Fluoranthene	30	100	26	802	ug/L
EP-4	8/29/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
EP-4	8/29/2016	Acenaphthylene	ND	100	24	NA	ug/L
EP-4	8/29/2016	Chrysene	*29*	*100*	28	34.3	ug/L
EP-4	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
EP-4	8/29/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
EP-4	8/29/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
EP-4	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
EP-4	8/29/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
EP-4	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
EP-4	8/29/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
EP-4	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-4	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-4	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-4	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-4	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-4	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-4	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-4	3/30/2017	Benzoic Acid	40	100	20	75000	ug/L
EP-4	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-4	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-4	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-4	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-4	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-4	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-4	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-4	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-4	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-4	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-4	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-4	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-4	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-4	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-4	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-4	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-4	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-4	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-4	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-4	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-4	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-4	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-4	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-4	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-4	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-4	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-4	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-4	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-4	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-4	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-4	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-4	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-4	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-4	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-4	3/30/2017	Phenol	32	50	16	5761	ug/L
EP-4	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-4	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-4	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-4	3/30/2017	Bis(2-ethylhexyl)phthalate	31	50	24	55.64	ug/L
EP-4	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-4	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-4	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-4	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-4	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-4	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-4	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-4	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-4	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-4	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-4	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-4	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-4	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-4	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-4	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-4	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-4	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-4	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-4	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-4	3/30/2017	3,4-Methylphenol	36	50	16	NA	ug/L
EP-4	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-4	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-4	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-4	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-4	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-4	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-4	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-4	10/24/2017	Benzoic Acid	39	100	20	75000	ug/L
EP-4	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-4	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-4	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-4	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-4	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-4	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-4	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-4	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-4	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-4	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-4	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-4	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-4	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-4	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-4	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-4	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-4	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-4	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-4	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-4	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-4	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-4	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-4	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-4	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-4	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-4	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-4	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-4	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-4	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-4	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-4	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-4	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-4	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-4	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-4	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-4	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-4	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-4	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-4	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-4	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-4	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-4	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-4	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-4	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-4	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-4	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-4	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-4	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-4	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-4	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-4	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-4	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-4	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-4	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-4	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-4	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-4	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-4	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-4	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-4	10/24/2017	3,4-Methylphenol	26	50	16	NA	ug/L
EP-4	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-4	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-4	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-4	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-4	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-4	2/21/2018	Aniline	**36**	100	31	13	ug/L
EP-4	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-4	2/21/2018	Benzoic Acid	71	200	39	75000	ug/L
EP-4	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-4	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-4	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-4	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-4	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-4	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-4	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-4	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-4	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-4	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-4	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-4	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-4	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-4	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-4	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-4	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-4	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-4	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-4	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-4	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-4	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-4	2/21/2018	2-Methylphenol	87	100	33	NA	ug/L
EP-4	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-4	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-4	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-4	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-4	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-4	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-4	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-4	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-4	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-4	2/21/2018	2,4-Dimethylphenol	37	100	28	354	ug/L
EP-4	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-4	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-4	2/21/2018	Phenol	380	100	31	5761	ug/L
EP-4	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-4	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-4	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-4	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-4	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-4	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-4	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-4	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-4	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-4	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-4	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-4	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-4	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-4	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-4	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-4	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-4	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-4	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-4	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-4	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-4	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-4	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-4	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-4	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-4	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-4	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-4	2/21/2018	3,4-Methylphenol	310	100	32	NA	ug/L
EP-4	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-4	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-4	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-4	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-4	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-4	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-4	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-4	9/6/2018	Benzoic Acid	33	100	32	75000	ug/L
EP-4	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-4	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-4	9/6/2018	Isophorone	ND	50	31	781	ug/L
EP-4	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
EP-4	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-4	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-4	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
EP-4	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-4	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-4	9/6/2018	Fluorene	ND	50	32	288	ug/L
EP-4	9/6/2018	Carbazole	ND	50	31	NA	ug/L
EP-4	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-4	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-4	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-4	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-4	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-4	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-4	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-4	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-4	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-4	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-4	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-4	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-4	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-4	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-4	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-4	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-4	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-4	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-4	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-4	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-4	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-4	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-4	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-4	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-4	9/6/2018	Phenol	ND	50	30	5761	ug/L
EP-4	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-4	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-4	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-4	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-4	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-4	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-4	9/6/2018	Anthracene	ND	50	29	1721	ug/L
EP-4	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-4	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-4	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-4	9/6/2018	Pyrene	ND	50	33	117	ug/L
EP-4	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-4	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-4	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-4	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-4	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-4	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
EP-4	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-4	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-4	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-4	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-4	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-4	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-4	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-4	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-4	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-4	9/6/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-4	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-4	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-4	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-4	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-4	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-4	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-4	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-4	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-4	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-4	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-4	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-4	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-4	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-4	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-4	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-4	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-4	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-4	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-4	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-4	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-4	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-4	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-4	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-4	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-4	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-4	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-4	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-4	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-4	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-4	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-4	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-4	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-4	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-4	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-4	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-4	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-4	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-4	4/30/2019	Benzoic Acid	37	100	31.557804	75000	ug/L
EP-4	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-4	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-4	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-4	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-4	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-4	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-4	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-4	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-4	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-4	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-4	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-4	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-4	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-4	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-4	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-4	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-4	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-4	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-4	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-4	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-4	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-4	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-4	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-4	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-4	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-4	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-4	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-4	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-4	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-4	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-4	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-4	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-4	9/17/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
EP-4	9/17/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
EP-4	9/17/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
EP-4	9/17/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
EP-4	9/17/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
EP-4	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
EP-4	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
EP-4	9/17/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
EP-4	9/17/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
EP-4	9/17/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
EP-4	9/17/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
EP-4	9/17/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
EP-4	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.52*	0.1	0.485	ug/L
EP-4	9/17/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
EP-4	9/17/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
EP-4	9/17/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
EP-4	9/17/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
EP-4	9/17/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
EP-4	9/17/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
EP-4	9/17/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
EP-4	9/17/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
EP-4	9/17/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
EP-4	9/17/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Aniline	ND	0.52	0.1	13	ug/L
EP-4	9/17/2020	Anthracene	ND	0.52	0.1	1721	ug/L
EP-4	9/17/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
EP-4	9/17/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
EP-4	9/17/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
EP-4	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
EP-4	9/17/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
EP-4	9/17/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
EP-4	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
EP-4	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
EP-4	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
EP-4	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
EP-4	9/17/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
EP-4	9/17/2020	Carbazole	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
EP-4	9/17/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
EP-4	9/17/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
EP-4	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
EP-4	9/17/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
EP-4	9/17/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
EP-4	9/17/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
EP-4	9/17/2020	Fluorene	ND	0.52	0.1	288	ug/L
EP-4	9/17/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
EP-4	9/17/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
EP-4	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
EP-4	9/17/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
EP-4	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
EP-4	9/17/2020	Isophorone	ND	0.52	0.1	781	ug/L
EP-4	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
EP-4	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
EP-4	9/17/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
EP-4	9/17/2020	Naphthalene	ND	0.52	0.1	30	ug/L
EP-4	9/17/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
EP-4	9/17/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
EP-4	9/17/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
EP-4	9/17/2020	Phenol	ND	0.52	0.1	5761	ug/L
EP-4	9/17/2020	Pyrene	ND	0.52	0.1	117	ug/L
EP-4	9/17/2020	Pyridine	ND	0.52	0.21	20	ug/L
EP-4	12/21/2020	Benzo(a)anthracene	*ND*	*10.7*	0.193	0.12	ug/L
EP-4	12/21/2020	Benzo(a)pyrene	*ND*	*10.7*	0.129	0.2	ug/L
EP-4	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.7*	0.161	0.34	ug/L
EP-4	12/21/2020	Benzo(g,h,i)perylene	ND	10.7	0.247	NA	ug/L
EP-4	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.7*	0.172	3.43	ug/L
EP-4	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.7	0.172	59	ug/L
EP-4	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.7*	2.89	0.137	ug/L
EP-4	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.7	5.36	55.64	ug/L
EP-4	12/21/2020	Butylbenzylphthalate	ND	10.7	0.204	16	ug/L
EP-4	12/21/2020	Carbazole	ND	10.7	0.247	NA	ug/L
EP-4	12/21/2020	4-Chloroaniline	*ND*	*10.7*	3.64	0.37	ug/L
EP-4	12/21/2020	4-Chloro-3-Methylphenol	ND	10.7	4.07	NA	ug/L
EP-4	12/21/2020	2-Chlorophenol	ND	10.7	2.36	91	ug/L
EP-4	12/21/2020	Chrysene	ND	10.7	0.204	34.3	ug/L
EP-4	12/21/2020	Dibenzo(a,h)anthracene	ND	10.7	0.257	NA	ug/L
EP-4	12/21/2020	1,4-Dichlorobenzene	ND	10.7	0.172	75	ug/L
EP-4	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.7*	2.79	1.25	ug/L
EP-4	12/21/2020	Diethylphthalate	ND	10.7	0.257	14801	ug/L
EP-4	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.7*	1.72	1.52	ug/L
EP-4	12/21/2020	2,4-Dinitrophenol	ND	32.2	3.64	38.7	ug/L
EP-4	12/21/2020	Fluorene	ND	10.7	0.193	288	ug/L
EP-4	12/21/2020	Hexachloroethane	*ND*	*10.7*	4.5	3.28	ug/L
EP-4	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.7*	0.236	0.343	ug/L
EP-4	12/21/2020	Isophorone	ND	10.7	0.15	781	ug/L
EP-4	12/21/2020	Naphthalene	ND	10.7	0.182	30	ug/L
EP-4	12/21/2020	2-Nitroaniline	ND	10.7	2.36	190	ug/L
EP-4	12/21/2020	3-Nitroaniline	ND	10.7	1.93	NA	ug/L
EP-4	12/21/2020	4-Nitroaniline	*ND*	*10.7*	1.61	3.8	ug/L
EP-4	12/21/2020	4-Nitrophenol	ND	10.7	2.25	NA	ug/L
EP-4	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.7*	3.54	0.011	ug/L
EP-4	12/21/2020	N-Nitrosodiphenylamine	ND	10.7	0.193	122	ug/L
EP-4	12/21/2020	Pentachlorophenol	*ND*	*21.4*	1.5	1	ug/L
EP-4	12/21/2020	Phenanthrene	ND	10.7	0.193	170	ug/L
EP-4	12/21/2020	Phenol	ND	10.7	2.79	5761	ug/L
EP-4	12/21/2020	Pyrene	ND	10.7	0.225	117	ug/L
EP-4	12/21/2020	Benzoic Acid	ND	32.2	7.83	75000	ug/L
EP-4	12/21/2020	Benzyl Alcohol	ND	10.7	2.14	2000	ug/L
EP-4	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.7*	0.172	9.81	ug/L
EP-4	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.7*	3.75	0.0049	ug/L
EP-4	12/21/2020	Pyridine	ND	10.7	3.43	20	ug/L
EP-4	12/21/2020	Azobenzene	*ND*	*10.7*	1.07	0.12	ug/L
EP-4	12/21/2020	Acenaphthene	ND	10.7	0.172	535	ug/L
EP-4	12/21/2020	Acenaphthylene	ND	10.7	0.182	NA	ug/L
EP-4	12/21/2020	Anthracene	ND	10.7	0.193	1721	ug/L
EP-4	12/21/2020	4-Bromophenyl-phenylether	ND	10.7	0.214	NA	ug/L
EP-4	12/21/2020	2-Chloronaphthalene	ND	10.7	0.15	733	ug/L
EP-4	12/21/2020	4-Chlorophenyl-phenylether	ND	10.7	2.14	NA	ug/L
EP-4	12/21/2020	1,3-Dichlorobenzene	ND	10.7	0.193	NA	ug/L
EP-4	12/21/2020	Dibenzofuran	ND	10.7	0.182	NA	ug/L
EP-4	12/21/2020	2,4-Dichlorophenol	ND	10.7	3.22	45.3	ug/L
EP-4	12/21/2020	2,4-Dimethylphenol	ND	10.7	3.75	354	ug/L
EP-4	12/21/2020	Di-n-butylphthalate	ND	10.7	2.89	885	ug/L
EP-4	12/21/2020	2,4-Dinitrotoluene	ND	10.7	2.04	45.3	ug/L
EP-4	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.7*	2.04	0.485	ug/L
EP-4	12/21/2020	Di-n-octylphthalate	ND	10.7	0.182	200	ug/L
EP-4	12/21/2020	Fluoranthene	ND	10.7	0.193	802	ug/L
EP-4	12/21/2020	Hexachlorobenzene	*ND*	*10.7*	0.182	0.0976	ug/L
EP-4	12/21/2020	Hexachlorocyclopentadiene	*ND*	*21.4*	2.79	0.41	ug/L
EP-4	12/21/2020	2-Methylphenol	ND	10.7	1.93	NA	ug/L
EP-4	12/21/2020	Nitrobenzene	*ND*	*10.7*	0.139	1.4	ug/L
EP-4	12/21/2020	2-Nitrophenol	ND	10.7	5.57	NA	ug/L
EP-4	12/21/2020	2,4,5-Trichlorophenol	ND	10.7	3.97	1166	ug/L
EP-4	12/21/2020	2,4,6-Trichlorophenol	ND	10.7	3.75	11.9*	ug/L
EP-4	12/21/2020	Dimethylphthalate	ND	10.7	0.182	612	ug/L
EP-4	12/21/2020	Aniline	ND	10.7	4.07	13	ug/L
EP-4	12/21/2020	1,2,4-Trichlorobenzene	ND	10.7	0.193	70	ug/L
EP-4	12/21/2020	1,2-Dichlorobenzene	ND	10.7	0.182	600	ug/L
EP-5	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-5	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-5	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-5	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-5	5/29/2012	Aniline	**57**	50	9.9	13	ug/L
EP-5	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-5	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-5	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-5	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-5	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-5	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-5	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-5	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-5	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-5	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-5	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-5	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-5	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-5	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-5	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-5	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-5	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-5	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-5	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-5	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-5	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-5	5/29/2012	2-Methylphenol	820	50	14	NA	ug/L
EP-5	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-5	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-5	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-5	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-5	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-5	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-5	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-5	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-5	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-5	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-5	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-5	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-5	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-5	5/29/2012	Phenol	2700	250	63	5761	ug/L
EP-5	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-5	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-5	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-5	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-5	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-5	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-5	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-5	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-5	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-5	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-5	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-5	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-5	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-5	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-5	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-5	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-5	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-5	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-5	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-5	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-5	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-5	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-5	5/29/2012	3,4-Methylphenol	1100	250	72	NA	ug/L
EP-5	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-5	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-5	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-5	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-5	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-5	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-5	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-5	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-5	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-5	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-5	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-5	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-5	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-5	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-5	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-5	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-5	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-5	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-5	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-5	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-5	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-5	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-5	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-5	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-5	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-5	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-5	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-5	11/6/2012	2-Methylphenol	270	50	14	NA	ug/L
EP-5	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-5	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-5	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-5	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-5	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-5	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-5	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-5	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-5	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-5	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-5	11/6/2012	2,4-Dimethylphenol	74	50	16	354	ug/L
EP-5	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-5	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-5	11/6/2012	Phenol	900	50	13	5761	ug/L
EP-5	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-5	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-5	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-5	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-5	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-5	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-5	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-5	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-5	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-5	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-5	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-5	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-5	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-5	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-5	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-5	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-5	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-5	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-5	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-5	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-5	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-5	11/6/2012	3,4-Methylphenol	400	50	14	NA	ug/L
EP-5	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-5	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-5	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-5	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-5	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-5	5/28/2013	Aniline	**32**	20	4.4	13	ug/L
EP-5	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-5	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-5	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-5	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-5	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-5	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-5	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-5	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-5	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-5	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-5	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-5	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-5	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-5	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-5	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-5	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-5	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-5	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-5	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-5	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-5	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-5	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-5	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-5	5/28/2013	2-Methylphenol	460	200	54	NA	ug/L
EP-5	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-5	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-5	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-5	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-5	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-5	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-5	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-5	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-5	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-5	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-5	5/28/2013	2,4-Dimethylphenol	84	20	5.9	354	ug/L
EP-5	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-5	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-5	5/28/2013	Phenol	1200	200	44	5761	ug/L
EP-5	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-5	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-5	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-5	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-5	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-5	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-5	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-5	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-5	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-5	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-5	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-5	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-5	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-5	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-5	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-5	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-5	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-5	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-5	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-5	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-5	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-5	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-5	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-5	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-5	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-5	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-5	5/28/2013	3,4-Methylphenol	930	200	75	NA	ug/L
EP-5	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-5	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-5	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-5	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-5	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-5	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-5	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-5	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-5	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-5	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-5	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-5	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-5	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-5	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-5	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-5	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-5	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-5	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-5	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-5	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-5	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-5	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-5	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-5	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-5	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-5	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-5	10/15/2013	2-Methylphenol	160	50	14	NA	ug/L
EP-5	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-5	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-5	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-5	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-5	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-5	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-5	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-5	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-5	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-5	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-5	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-5	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-5	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-5	10/15/2013	Phenol	540	50	11	5761	ug/L
EP-5	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-5	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-5	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-5	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-5	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-5	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-5	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-5	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-5	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-5	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-5	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-5	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-5	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-5	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-5	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-5	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-5	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-5	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-5	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-5	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-5	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-5	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-5	10/15/2013	3,4-Methylphenol	260	50	19	NA	ug/L
EP-5	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-5	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-5	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-5	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-5	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-5	3/5/2014	Aniline	**23**	10	2.4	13	ug/L
EP-5	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-5	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-5	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-5	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-5	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-5	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-5	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-5	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-5	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-5	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-5	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-5	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-5	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-5	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-5	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-5	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-5	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-5	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-5	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-5	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-5	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-5	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-5	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-5	3/5/2014	2-Methylphenol	82	10	2.8	NA	ug/L
EP-5	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-5	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-5	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-5	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-5	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-5	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-5	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-5	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-5	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-5	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-5	3/5/2014	2,4-Dimethylphenol	18	10	3.1	354	ug/L
EP-5	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-5	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-5	3/5/2014	Phenol	260	20	3.2	5761	ug/L
EP-5	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-5	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-5	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-5	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-5	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-5	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-5	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-5	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-5	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-5	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-5	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-5	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-5	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-5	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-5	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-5	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-5	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-5	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-5	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-5	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-5	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-5	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-5	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-5	3/5/2014	3,4-Methylphenol	200	20	3.7	NA	ug/L
EP-5	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-5	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-5	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-5	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-5	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-5	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-5	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-5	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-5	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-5	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-5	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-5	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-5	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-5	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-5	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-5	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-5	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-5	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-5	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-5	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-5	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-5	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-5	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-5	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-5	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-5	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-5	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-5	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-5	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-5	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-5	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-5	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-5	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-5	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-5	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-5	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-5	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-5	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-5	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-5	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-5	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-5	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-5	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-5	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-5	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-5	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-5	11/12/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
EP-5	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-5	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-5	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-5	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-5	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-5	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-5	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-5	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-5	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-5	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-5	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-5	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-5	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-5	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-5	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-5	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-5	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-5	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-5	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-5	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-5	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-5	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-5	3/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-5	3/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-5	3/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-5	3/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-5	3/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Aniline	ND	10	1.5	13	ug/L
EP-5	3/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-5	3/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-5	3/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-5	3/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-5	3/24/2015	Isophorone	ND	10	2	781	ug/L
EP-5	3/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-5	3/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-5	3/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-5	3/24/2015	Phenanthrene	ND	10	2	170	ug/L
EP-5	3/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-5	3/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-5	3/24/2015	Fluorene	ND	10	1.7	288	ug/L
EP-5	3/24/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-5	3/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-5	3/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-5	3/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-5	3/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-5	3/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-5	3/24/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-5	3/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-5	3/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-5	3/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-5	3/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-5	3/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-5	3/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-5	3/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-5	3/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-5	3/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-5	3/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-5	3/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-5	3/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-5	3/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-5	3/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-5	3/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-5	3/24/2015	Phenol	ND	10	1.1	5761	ug/L
EP-5	3/24/2015	Pyridine	ND	10	1.7	20	ug/L
EP-5	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	3/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-5	3/24/2015	Bis(2-ethylhexyl)phthalate	16	10	3.3	55.64	ug/L
EP-5	3/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-5	3/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-5	3/24/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-5	3/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-5	3/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-5	3/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-5	3/24/2015	Pyrene	ND	10	2.3	117	ug/L
EP-5	3/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-5	3/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-5	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-5	3/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-5	3/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-5	3/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-5	3/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-5	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-5	3/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-5	3/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-5	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-5	3/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-5	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-5	3/24/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-5	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-5	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-5	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-5	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-5	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-5	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-5	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-5	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-5	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-5	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-5	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-5	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-5	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-5	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-5	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
EP-5	9/1/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
EP-5	9/1/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
EP-5	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-5	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-5	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-5	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-5	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-5	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-5	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-5	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-5	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-5	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-5	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
EP-5	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-5	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-5	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-5	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-5	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-5	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-5	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
EP-5	9/1/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-5	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-5	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-5	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-5	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-5	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-5	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-5	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-5	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-5	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-5	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-5	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-5	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-5	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-5	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-5	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-5	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-5	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-5	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-5	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-5	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-5	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-5	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-5	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-5	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-5	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-5	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-5	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-5	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-5	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-5	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-5	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-5	8/29/2016	Benzo(a)pyrene	*ND*	*20*	5.4	0.2	ug/L
EP-5	8/29/2016	2,4-Dinitrophenol	*ND*	*40*	5.5	38.7	ug/L
EP-5	8/29/2016	Dibenzo(a,h)anthracene	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Benzo(a)anthracene	*ND*	*20*	5.3	0.12	ug/L
EP-5	8/29/2016	4-Chloro-3-Methylphenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Aniline	*ND*	*20*	4.9	13	ug/L
EP-5	8/29/2016	N-Nitrosodimethylamine	*ND*	*20*	4.3	0.0049	ug/L
EP-5	8/29/2016	Benzoic Acid	12	40	5.2	75000	ug/L
EP-5	8/29/2016	Hexachloroethane	*ND*	*20*	4.7	3.28	ug/L
EP-5	8/29/2016	Hexachlorocyclopentadiene	*ND*	*20*	4.6	0.41	ug/L
EP-5	8/29/2016	Isophorone	ND	20	5.2	781	ug/L
EP-5	8/29/2016	Acenaphthene	ND	20	5.1	535	ug/L
EP-5	8/29/2016	Diethylphthalate	ND	20	5.4	14801	ug/L
EP-5	8/29/2016	Di-n-butylphthalate	ND	20	4.9	885	ug/L
EP-5	8/29/2016	Phenanthrene	ND	20	5.2	170	ug/L
EP-5	8/29/2016	Butylbenzylphthalate	*ND*	*20*	5	16	ug/L
EP-5	8/29/2016	N-Nitrosodiphenylamine	ND	20	4.6	122	ug/L
EP-5	8/29/2016	Fluorene	ND	20	5.4	288	ug/L
EP-5	8/29/2016	Carbazole	ND	20	4.6	NA	ug/L
EP-5	8/29/2016	Hexachlorobutadiene	*ND*	*20*	4.4	0.14	ug/L
EP-5	8/29/2016	Pentachlorophenol	*ND*	*40*	4.7	1	ug/L
EP-5	8/29/2016	2,4,6-Trichlorophenol	ND	20	4.9	11.9*	ug/L
EP-5	8/29/2016	2-Nitroaniline	ND	20	5.5	190	ug/L
EP-5	8/29/2016	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-5	8/29/2016	1-Methylnaphthalene	*ND*	*20*	5.8	11.38	ug/L
EP-5	8/29/2016	Naphthalene	ND	20	5.2	30	ug/L
EP-5	8/29/2016	2-Methylnaphthalene	ND	20	5.8	35.1	ug/L
EP-5	8/29/2016	2-Chloronaphthalene	ND	20	4.5	733	ug/L
EP-5	8/29/2016	3,3-Dichlorobenzidine	*ND*	*20*	4.8	1.25	ug/L
EP-5	8/29/2016	2-Methylphenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	1,2-Dichlorobenzene	ND	20	4.6	600	ug/L
EP-5	8/29/2016	2-Chlorophenol	ND	20	4.4	91	ug/L
EP-5	8/29/2016	2,4,5-Trichlorophenol	ND	20	4.4	1166	ug/L
EP-5	8/29/2016	Nitrobenzene	*ND*	*20*	5.5	1.4	ug/L
EP-5	8/29/2016	3-Nitroaniline	ND	20	5.9	NA	ug/L
EP-5	8/29/2016	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-5	8/29/2016	4-Nitrophenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Benzyl Alcohol	ND	20	6	2000	ug/L
EP-5	8/29/2016	4-Bromophenyl-phenylether	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Azobenzene	*ND*	*20*	5.3	0.12	ug/L
EP-5	8/29/2016	2,4-Dimethylphenol	ND	20	6	354	ug/L
EP-5	8/29/2016	1,4-Dichlorobenzene	ND	20	4.8	75	ug/L
EP-5	8/29/2016	4-Chloroaniline	*ND*	*20*	5.4	0.37	ug/L
EP-5	8/29/2016	Phenol	ND	20	4	5761	ug/L
EP-5	8/29/2016	Pyridine	ND	20	4.3	20	ug/L
EP-5	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*20*	5.3	0.137	ug/L
EP-5	8/29/2016	Bis(2-chloroethoxy)methane	ND	20	5.6	59	ug/L
EP-5	8/29/2016	Bis(2-ethylhexyl)phthalate	5.9	20	5.2	55.64	ug/L
EP-5	8/29/2016	Di-n-octylphthalate	6.8	20	4	200	ug/L
EP-5	8/29/2016	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-5	8/29/2016	Anthracene	ND	20	5	1721	ug/L
EP-5	8/29/2016	1,2,4-Trichlorobenzene	ND	20	5.2	70	ug/L
EP-5	8/29/2016	2,4-Dichlorophenol	ND	40	4.7	45.3	ug/L
EP-5	8/29/2016	2,4-Dinitrotoluene	ND	20	6.3	45.3	ug/L
EP-5	8/29/2016	Pyrene	ND	20	6.2	117	ug/L
EP-5	8/29/2016	Dimethylphthalate	8.9	20	4.9	612	ug/L
EP-5	8/29/2016	Dibenzofuran	ND	20	5	NA	ug/L
EP-5	8/29/2016	Benzo(g,h,i)perylene	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.9	0.343	ug/L
EP-5	8/29/2016	Benzo(b)fluoranthene	*ND*	*20*	5.8	0.34	ug/L
EP-5	8/29/2016	Fluoranthene	ND	20	5.2	802	ug/L
EP-5	8/29/2016	Benzo(k)fluoranthene	*ND*	*20*	6	3.43	ug/L
EP-5	8/29/2016	Acenaphthylene	ND	20	4.7	NA	ug/L
EP-5	8/29/2016	Chrysene	ND	20	5.6	34.3	ug/L
EP-5	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*40*	3.6	1.52	ug/L
EP-5	8/29/2016	1,3-Dichlorobenzene	ND	20	4.5	NA	ug/L
EP-5	8/29/2016	2,6-Dinitrotoluene	*ND*	*20*	5.5	0.485	ug/L
EP-5	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*20*	4.8	0.011	ug/L
EP-5	8/29/2016	4-Chlorophenyl-phenylether	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*20*	3.8	9.81	ug/L
EP-5	8/29/2016	3,4-Methylphenol	ND	20	4.6	NA	ug/L
EP-5	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-5	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-5	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-5	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-5	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-5	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-5	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-5	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-5	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-5	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-5	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-5	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-5	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-5	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-5	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-5	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-5	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-5	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-5	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-5	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-5	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-5	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-5	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-5	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-5	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-5	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-5	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-5	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-5	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-5	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-5	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-5	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-5	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-5	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-5	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-5	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-5	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-5	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-5	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-5	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-5	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-5	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-5	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-5	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-5	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-5	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-5	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-5	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-5	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-5	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-5	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-5	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-5	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-5	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-5	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-5	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-5	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-5	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-5	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-5	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-5	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-5	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-5	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-5	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-5	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-5	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-5	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-5	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-5	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-5	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-5	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-5	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-5	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-5	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-5	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-5	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-5	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-5	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-5	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-5	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-5	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-5	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-5	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-5	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-5	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-5	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-5	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-5	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-5	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-5	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-5	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-5	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-5	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-5	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-5	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-5	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-5	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-5	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-5	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-5	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-5	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-5	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-5	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-5	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-5	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-5	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-5	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-5	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-5	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-5	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-5	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-5	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-5	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-5	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-5	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-5	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-5	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-5	10/24/2017	Bis(2-ethylhexyl)phthalate	**4800**	1000	480	55.64	ug/L
EP-5	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-5	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-5	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-5	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-5	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-5	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-5	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-5	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-5	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-5	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-5	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-5	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-5	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-5	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-5	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-5	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-5	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-5	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-5	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-5	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-5	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-5	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-5	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-5	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-5	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-5	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-5	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-5	2/21/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-5	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-5	2/21/2018	Benzoic Acid	ND	200	39	75000	ug/L
EP-5	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-5	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-5	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-5	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-5	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-5	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-5	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-5	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-5	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-5	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-5	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-5	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-5	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-5	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-5	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-5	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-5	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-5	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-5	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-5	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-5	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-5	2/21/2018	2-Methylphenol	68	100	33	NA	ug/L
EP-5	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-5	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-5	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-5	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-5	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-5	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-5	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-5	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-5	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-5	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-5	2/21/2018	2,4-Dimethylphenol	32	100	28	354	ug/L
EP-5	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-5	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-5	2/21/2018	Phenol	290	100	31	5761	ug/L
EP-5	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-5	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-5	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-5	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-5	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-5	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-5	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-5	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-5	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-5	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-5	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-5	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-5	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-5	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-5	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-5	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-5	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-5	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-5	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-5	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-5	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-5	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-5	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-5	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-5	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-5	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-5	2/21/2018	3,4-Methylphenol	220	100	32	NA	ug/L
EP-5	9/6/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-5	9/6/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-5	9/6/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-5	9/6/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-5	9/6/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-5	9/6/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-5	9/6/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-5	9/6/2018	Benzoic Acid	69	200	63	75000	ug/L
EP-5	9/6/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-5	9/6/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-5	9/6/2018	Isophorone	ND	100	62	781	ug/L
EP-5	9/6/2018	Acenaphthene	ND	100	58	535	ug/L
EP-5	9/6/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-5	9/6/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-5	9/6/2018	Phenanthrene	ND	100	60	170	ug/L
EP-5	9/6/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-5	9/6/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-5	9/6/2018	Fluorene	ND	100	63	288	ug/L
EP-5	9/6/2018	Carbazole	ND	100	63	NA	ug/L
EP-5	9/6/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-5	9/6/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-5	9/6/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-5	9/6/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-5	9/6/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-5	9/6/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-5	9/6/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-5	9/6/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-5	9/6/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-5	9/6/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-5	9/6/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-5	9/6/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-5	9/6/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-5	9/6/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-5	9/6/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-5	9/6/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-5	9/6/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-5	9/6/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-5	9/6/2018	Benzyl Alcohol	ND	100	63	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/6/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-5	9/6/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-5	9/6/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-5	9/6/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-5	9/6/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-5	9/6/2018	Phenol	ND	100	60	5761	ug/L
EP-5	9/6/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-5	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-5	9/6/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-5	9/6/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-5	9/6/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-5	9/6/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-5	9/6/2018	Anthracene	ND	100	57	1721	ug/L
EP-5	9/6/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-5	9/6/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-5	9/6/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-5	9/6/2018	Pyrene	ND	100	65	117	ug/L
EP-5	9/6/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-5	9/6/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-5	9/6/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-5	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-5	9/6/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-5	9/6/2018	Fluoranthene	ND	100	58	802	ug/L
EP-5	9/6/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-5	9/6/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-5	9/6/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-5	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-5	9/6/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-5	9/6/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-5	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-5	9/6/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-5	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-5	9/6/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-5	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-5	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-5	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-5	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-5	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-5	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-5	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-5	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-5	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-5	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-5	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-5	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-5	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-5	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-5	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-5	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-5	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-5	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-5	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-5	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-5	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-5	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-5	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-5	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-5	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-5	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-5	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-5	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-5	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-5	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-5	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-5	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-5	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-5	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-5	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-5	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-5	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-5	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-5	4/30/2019	Benzoic Acid	36	100	31.557804	75000	ug/L
EP-5	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-5	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-5	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-5	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-5	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-5	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-5	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-5	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-5	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-5	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-5	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-5	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-5	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-5	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-5	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-5	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-5	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-5	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-5	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-5	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-5	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-5	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-5	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-5	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-5	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-5	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-5	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-5	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-5	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-5	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-5	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-5	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-5	9/17/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
EP-5	9/17/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
EP-5	9/17/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
EP-5	9/17/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
EP-5	9/17/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
EP-5	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
EP-5	9/17/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
EP-5	9/17/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
EP-5	9/17/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
EP-5	9/17/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
EP-5	9/17/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
EP-5	9/17/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
EP-5	9/17/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
EP-5	9/17/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
EP-5	9/17/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
EP-5	9/17/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
EP-5	9/17/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
EP-5	9/17/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
EP-5	9/17/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
EP-5	9/17/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
EP-5	9/17/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
EP-5	9/17/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Aniline	ND	0.52	0.1	13	ug/L
EP-5	9/17/2020	Anthracene	ND	0.52	0.1	1721	ug/L
EP-5	9/17/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
EP-5	9/17/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
EP-5	9/17/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
EP-5	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
EP-5	9/17/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
EP-5	9/17/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
EP-5	9/17/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
EP-5	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
EP-5	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
EP-5	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
EP-5	9/17/2020	Bis(2-ethylhexyl)phthalate	0.89	0.52	0.21	55.64	ug/L
EP-5	9/17/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
EP-5	9/17/2020	Carbazole	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
EP-5	9/17/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
EP-5	9/17/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
EP-5	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
EP-5	9/17/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
EP-5	9/17/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
EP-5	9/17/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
EP-5	9/17/2020	Fluorene	ND	0.52	0.1	288	ug/L
EP-5	9/17/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
EP-5	9/17/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
EP-5	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
EP-5	9/17/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
EP-5	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
EP-5	9/17/2020	Isophorone	ND	0.52	0.1	781	ug/L
EP-5	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
EP-5	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
EP-5	9/17/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
EP-5	9/17/2020	Naphthalene	ND	0.52	0.1	30	ug/L
EP-5	9/17/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
EP-5	9/17/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
EP-5	9/17/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
EP-5	9/17/2020	Phenol	ND	0.52	0.1	5761	ug/L
EP-5	9/17/2020	Pyrene	ND	0.52	0.1	117	ug/L
EP-5	9/17/2020	Pyridine	ND	0.52	0.21	20	ug/L
EP-5	12/21/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
EP-5	12/21/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
EP-5	12/21/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
EP-5	12/21/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
EP-5	12/21/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.179	3.43	ug/L
EP-5	12/21/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.179	59	ug/L
EP-5	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
EP-5	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.61	55.64	ug/L
EP-5	12/21/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
EP-5	12/21/2020	Carbazole	ND	11.2	0.258	NA	ug/L
EP-5	12/21/2020	4-Chloroaniline	*ND*	*11.2*	3.81	0.37	ug/L
EP-5	12/21/2020	4-Chloro-3-Methylphenol	ND	11.2	4.26	NA	ug/L
EP-5	12/21/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
EP-5	12/21/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
EP-5	12/21/2020	Dibenzo(a,h)anthracene	ND	11.2	0.269	NA	ug/L
EP-5	12/21/2020	1,4-Dichlorobenzene	ND	11.2	0.179	75	ug/L
EP-5	12/21/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.91	1.25	ug/L
EP-5	12/21/2020	Diethylphthalate	ND	11.2	0.269	14801	ug/L
EP-5	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.79	1.52	ug/L
EP-5	12/21/2020	2,4-Dinitrophenol	ND	33.6	3.81	38.7	ug/L
EP-5	12/21/2020	Fluorene	ND	11.2	0.202	288	ug/L
EP-5	12/21/2020	Hexachloroethane	*ND*	*11.2*	4.71	3.28	ug/L
EP-5	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
EP-5	12/21/2020	Isophorone	ND	11.2	0.157	781	ug/L
EP-5	12/21/2020	Naphthalene	ND	11.2	0.191	30	ug/L
EP-5	12/21/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
EP-5	12/21/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
EP-5	12/21/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
EP-5	12/21/2020	4-Nitrophenol	ND	11.2	2.35	NA	ug/L
EP-5	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.7	0.011	ug/L
EP-5	12/21/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
EP-5	12/21/2020	Pentachlorophenol	*ND*	*22.4*	1.57	1	ug/L
EP-5	12/21/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
EP-5	12/21/2020	Phenol	ND	11.2	2.91	5761	ug/L
EP-5	12/21/2020	Pyrene	ND	11.2	0.235	117	ug/L
EP-5	12/21/2020	Benzoic Acid	ND	33.6	8.18	75000	ug/L
EP-5	12/21/2020	Benzyl Alcohol	ND	11.2	2.24	2000	ug/L
EP-5	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.179	9.81	ug/L
EP-5	12/21/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.92	0.0049	ug/L
EP-5	12/21/2020	Pyridine	ND	11.2	3.59	20	ug/L
EP-5	12/21/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
EP-5	12/21/2020	Acenaphthene	ND	11.2	0.179	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
EP-5	12/21/2020	Anthracene	ND	11.2	0.202	1721	ug/L
EP-5	12/21/2020	4-Bromophenyl-phenylether	ND	11.2	0.224	NA	ug/L
EP-5	12/21/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
EP-5	12/21/2020	4-Chlorophenyl-phenylether	ND	11.2	2.24	NA	ug/L
EP-5	12/21/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
EP-5	12/21/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
EP-5	12/21/2020	2,4-Dichlorophenol	ND	11.2	3.36	45.3	ug/L
EP-5	12/21/2020	2,4-Dimethylphenol	ND	11.2	3.92	354	ug/L
EP-5	12/21/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
EP-5	12/21/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
EP-5	12/21/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
EP-5	12/21/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
EP-5	12/21/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
EP-5	12/21/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
EP-5	12/21/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.91	0.41	ug/L
EP-5	12/21/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
EP-5	12/21/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
EP-5	12/21/2020	2-Nitrophenol	ND	11.2	5.83	NA	ug/L
EP-5	12/21/2020	2,4,5-Trichlorophenol	ND	11.2	4.15	1166	ug/L
EP-5	12/21/2020	2,4,6-Trichlorophenol	ND	11.2	3.92	11.9*	ug/L
EP-5	12/21/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
EP-5	12/21/2020	Aniline	ND	11.2	4.26	13	ug/L
EP-5	12/21/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
EP-5	12/21/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
EP-6	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-6	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-6	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-6	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-6	5/29/2012	Aniline	**36**	10	2	13	ug/L
EP-6	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-6	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-6	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-6	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-6	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-6	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-6	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-6	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-6	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-6	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-6	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-6	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-6	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-6	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-6	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-6	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-6	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-6	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-6	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-6	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-6	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-6	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-6	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-6	5/29/2012	2-Methylphenol	430	100	28	NA	ug/L
EP-6	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-6	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-6	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-6	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-6	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-6	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-6	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-6	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-6	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-6	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-6	5/29/2012	2,4-Dimethylphenol	34	10	3.2	354	ug/L
EP-6	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-6	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-6	5/29/2012	Phenol	720	100	25	5761	ug/L
EP-6	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-6	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-6	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-6	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-6	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-6	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-6	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-6	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-6	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-6	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-6	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-6	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-6	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-6	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-6	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-6	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-6	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-6	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-6	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-6	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-6	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-6	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-6	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-6	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-6	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-6	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-6	5/29/2012	3,4-Methylphenol	410	100	29	NA	ug/L
EP-6	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-6	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-6	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-6	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-6	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-6	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-6	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-6	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-6	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-6	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-6	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-6	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-6	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-6	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-6	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-6	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-6	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-6	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-6	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-6	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-6	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-6	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-6	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-6	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-6	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-6	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-6	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-6	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-6	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-6	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-6	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-6	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-6	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-6	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-6	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-6	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-6	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-6	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-6	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-6	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-6	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-6	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-6	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-6	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-6	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-6	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-6	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-6	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-6	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-6	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-6	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-6	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-6	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-6	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-6	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-6	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-6	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-6	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-6	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-6	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-6	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-6	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-6	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-6	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-6	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-6	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-6	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-6	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-6	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-6	5/28/2013	Benzo(a)pyrene	*ND*	*100*	25	0.2	ug/L
EP-6	5/28/2013	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-6	5/28/2013	Dibenzo(a,h)anthracene	ND	100	40	NA	ug/L
EP-6	5/28/2013	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
EP-6	5/28/2013	4-Chloro-3-Methylphenol	ND	100	27	NA	ug/L
EP-6	5/28/2013	Aniline	*ND*	*100*	22	13	ug/L
EP-6	5/28/2013	N-Nitrosodimethylamine	*ND*	*100*	48	0.0049	ug/L
EP-6	5/28/2013	Benzoic Acid	ND	200	57	75000	ug/L
EP-6	5/28/2013	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-6	5/28/2013	Hexachlorocyclopentadiene	*ND*	*100*	21	0.41	ug/L
EP-6	5/28/2013	Isophorone	ND	100	18	781	ug/L
EP-6	5/28/2013	Acenaphthene	ND	100	26	535	ug/L
EP-6	5/28/2013	Diethylphthalate	ND	100	30	14801	ug/L
EP-6	5/28/2013	Di-n-butylphthalate	ND	100	24	885	ug/L
EP-6	5/28/2013	Phenanthrene	ND	100	16	170	ug/L
EP-6	5/28/2013	Butylbenzylphthalate	*ND*	*100*	27	16	ug/L
EP-6	5/28/2013	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
EP-6	5/28/2013	Fluorene	ND	100	25	288	ug/L
EP-6	5/28/2013	Carbazole	ND	100	23	NA	ug/L
EP-6	5/28/2013	Hexachlorobutadiene	*ND*	*100*	27	0.14	ug/L
EP-6	5/28/2013	Pentachlorophenol	*ND*	*200*	14	1	ug/L
EP-6	5/28/2013	2,4,6-Trichlorophenol	ND	100	26	11.9*	ug/L
EP-6	5/28/2013	2-Nitroaniline	ND	100	29	190	ug/L
EP-6	5/28/2013	2-Nitrophenol	ND	100	23	NA	ug/L
EP-6	5/28/2013	1-Methylnaphthalene	*ND*	*100*	22	11.38	ug/L
EP-6	5/28/2013	Naphthalene	*ND*	*100*	24	30	ug/L
EP-6	5/28/2013	2-Methylnaphthalene	*ND*	*100*	24	35.1	ug/L
EP-6	5/28/2013	2-Chloronaphthalene	ND	100	24	733	ug/L
EP-6	5/28/2013	3,3-Dichlorobenzidine	*ND*	*100*	37	1.25	ug/L
EP-6	5/28/2013	2-Methylphenol	260	100	27	NA	ug/L
EP-6	5/28/2013	1,2-Dichlorobenzene	ND	100	30	600	ug/L
EP-6	5/28/2013	2-Chlorophenol	*ND*	*100*	27	91	ug/L
EP-6	5/28/2013	2,4,5-Trichlorophenol	ND	100	24	1166	ug/L
EP-6	5/28/2013	Nitrobenzene	*ND*	*100*	29	1.4	ug/L
EP-6	5/28/2013	3-Nitroaniline	ND	100	27	NA	ug/L
EP-6	5/28/2013	4-Nitroaniline	*ND*	*100*	25	3.8	ug/L
EP-6	5/28/2013	4-Nitrophenol	ND	100	21	NA	ug/L
EP-6	5/28/2013	Benzyl Alcohol	ND	100	25	2000	ug/L
EP-6	5/28/2013	4-Bromophenyl-phenylether	ND	100	25	NA	ug/L
EP-6	5/28/2013	Azobenzene	*ND*	*100*	23	0.12	ug/L
EP-6	5/28/2013	2,4-Dimethylphenol	ND	100	29	354	ug/L
EP-6	5/28/2013	1,4-Dichlorobenzene	*ND*	*100*	36	75	ug/L
EP-6	5/28/2013	4-Chloroaniline	*ND*	*100*	22	0.37	ug/L
EP-6	5/28/2013	Phenol	140	100	22	5761	ug/L
EP-6	5/28/2013	Pyridine	*ND*	*100*	35	20	ug/L
EP-6	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*100*	40	0.137	ug/L
EP-6	5/28/2013	Bis(2-chloroethoxy)methane	*ND*	*100*	24	59	ug/L
EP-6	5/28/2013	Bis(2-ethylhexyl)phthalate	*ND*	*100*	28	55.64	ug/L
EP-6	5/28/2013	Di-n-octylphthalate	ND	100	34	200	ug/L
EP-6	5/28/2013	Hexachlorobenzene	*ND*	*100*	27	0.0976	ug/L
EP-6	5/28/2013	Anthracene	ND	100	22	1721	ug/L
EP-6	5/28/2013	1,2,4-Trichlorobenzene	*ND*	*100*	22	70	ug/L
EP-6	5/28/2013	2,4-Dichlorophenol	*ND*	*200*	22	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/28/2013	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-6	5/28/2013	Pyrene	ND	100	21	117	ug/L
EP-6	5/28/2013	Dimethylphthalate	ND	100	28	612	ug/L
EP-6	5/28/2013	Dibenzofuran	ND	100	26	NA	ug/L
EP-6	5/28/2013	Benzo(g,h,i)perylene	ND	100	28	NA	ug/L
EP-6	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*100*	32	0.343	ug/L
EP-6	5/28/2013	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
EP-6	5/28/2013	Fluoranthene	ND	100	24	802	ug/L
EP-6	5/28/2013	Benzo(k)fluoranthene	*ND*	*100*	26	3.43	ug/L
EP-6	5/28/2013	Acenaphthylene	ND	100	28	NA	ug/L
EP-6	5/28/2013	Chrysene	*ND*	*100*	27	34.3	ug/L
EP-6	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-6	5/28/2013	1,3-Dichlorobenzene	ND	100	31	NA	ug/L
EP-6	5/28/2013	2,6-Dinitrotoluene	*ND*	*100*	28	0.485	ug/L
EP-6	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*100*	32	0.011	ug/L
EP-6	5/28/2013	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
EP-6	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*100*	33	9.81	ug/L
EP-6	5/28/2013	3,4-Methylphenol	230	100	37	NA	ug/L
EP-6	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-6	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-6	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-6	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-6	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-6	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-6	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-6	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-6	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-6	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-6	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-6	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-6	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-6	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-6	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-6	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-6	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-6	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-6	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-6	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-6	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-6	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-6	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-6	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-6	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-6	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-6	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-6	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-6	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-6	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-6	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-6	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-6	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-6	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-6	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-6	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-6	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-6	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-6	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-6	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-6	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-6	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-6	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-6	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-6	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-6	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-6	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-6	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-6	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-6	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-6	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-6	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-6	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-6	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-6	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-6	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-6	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-6	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-6	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-6	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-6	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-6	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-6	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-6	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-6	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-6	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-6	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-6	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-6	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-6	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-6	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-6	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-6	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-6	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-6	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-6	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-6	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-6	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-6	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-6	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-6	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-6	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-6	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-6	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-6	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-6	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-6	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-6	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-6	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-6	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-6	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-6	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-6	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-6	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-6	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-6	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-6	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-6	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-6	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-6	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-6	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-6	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-6	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-6	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-6	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-6	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-6	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-6	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-6	3/5/2014	Phenol	280	50	7.9	5761	ug/L
EP-6	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-6	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-6	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-6	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-6	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-6	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-6	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-6	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-6	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-6	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-6	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-6	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-6	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-6	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-6	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-6	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-6	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-6	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-6	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-6	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-6	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-6	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-6	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-6	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-6	3/5/2014	3,4-Methylphenol	88	50	9.1	NA	ug/L
EP-6	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-6	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-6	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-6	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-6	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-6	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-6	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-6	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-6	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-6	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-6	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-6	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-6	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-6	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-6	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-6	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-6	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-6	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-6	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-6	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-6	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-6	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-6	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-6	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-6	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-6	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-6	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-6	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-6	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-6	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-6	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-6	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-6	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-6	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-6	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-6	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-6	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-6	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-6	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-6	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-6	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-6	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-6	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-6	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-6	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-6	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-6	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-6	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-6	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-6	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-6	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-6	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-6	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-6	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-6	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-6	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-6	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-6	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-6	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-6	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-6	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-6	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-6	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-6	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-6	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-6	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-6	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-6	3/25/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-6	3/25/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-6	3/25/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-6	3/25/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-6	3/25/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-6	3/25/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-6	3/25/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-6	3/25/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-6	3/25/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-6	3/25/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-6	3/25/2015	Isophorone	ND	100	20	781	ug/L
EP-6	3/25/2015	Acenaphthene	ND	100	19	535	ug/L
EP-6	3/25/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-6	3/25/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-6	3/25/2015	Phenanthrene	ND	100	20	170	ug/L
EP-6	3/25/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-6	3/25/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-6	3/25/2015	Fluorene	ND	100	17	288	ug/L
EP-6	3/25/2015	Carbazole	ND	100	15	NA	ug/L
EP-6	3/25/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-6	3/25/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-6	3/25/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-6	3/25/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-6	3/25/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-6	3/25/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-6	3/25/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-6	3/25/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-6	3/25/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-6	3/25/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-6	3/25/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-6	3/25/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-6	3/25/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-6	3/25/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-6	3/25/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-6	3/25/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-6	3/25/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-6	3/25/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-6	3/25/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-6	3/25/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-6	3/25/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-6	3/25/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-6	3/25/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-6	3/25/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-6	3/25/2015	Phenol	ND	100	11	5761	ug/L
EP-6	3/25/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-6	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-6	3/25/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-6	3/25/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-6	3/25/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-6	3/25/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-6	3/25/2015	Anthracene	ND	100	16	1721	ug/L
EP-6	3/25/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-6	3/25/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-6	3/25/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-6	3/25/2015	Pyrene	ND	100	23	117	ug/L
EP-6	3/25/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-6	3/25/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-6	3/25/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-6	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-6	3/25/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-6	3/25/2015	Fluoranthene	ND	100	15	802	ug/L
EP-6	3/25/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-6	3/25/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-6	3/25/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-6	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-6	3/25/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-6	3/25/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-6	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-6	3/25/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-6	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-6	3/25/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-6	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-6	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-6	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-6	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-6	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-6	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-6	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-6	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-6	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-6	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-6	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-6	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-6	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-6	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-6	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
EP-6	9/1/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
EP-6	9/1/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
EP-6	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-6	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-6	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-6	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-6	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-6	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-6	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-6	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-6	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-6	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-6	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-6	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-6	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-6	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-6	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-6	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-6	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
EP-6	9/1/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-6	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-6	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-6	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-6	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-6	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-6	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-6	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-6	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-6	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-6	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-6	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-6	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-6	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-6	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-6	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-6	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-6	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-6	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-6	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-6	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-6	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-6	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-6	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-6	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
EP-6	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-6	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-6	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-6	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-6	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-6	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-6	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-6	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-6	8/29/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-6	8/29/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-6	8/29/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-6	8/29/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-6	8/29/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Aniline	ND	10	2.4	13	ug/L
EP-6	8/29/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-6	8/29/2016	Benzoic Acid	6.2	20	2.6	75000	ug/L
EP-6	8/29/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-6	8/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-6	8/29/2016	Isophorone	ND	10	2.6	781	ug/L
EP-6	8/29/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-6	8/29/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-6	8/29/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-6	8/29/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-6	8/29/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-6	8/29/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-6	8/29/2016	Fluorene	ND	10	2.7	288	ug/L
EP-6	8/29/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-6	8/29/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-6	8/29/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-6	8/29/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-6	8/29/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-6	8/29/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-6	8/29/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-6	8/29/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-6	8/29/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-6	8/29/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-6	8/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-6	8/29/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-6	8/29/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-6	8/29/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-6	8/29/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-6	8/29/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-6	8/29/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-6	8/29/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-6	8/29/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-6	8/29/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-6	8/29/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-6	8/29/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-6	8/29/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-6	8/29/2016	Phenol	ND	10	2	5761	ug/L
EP-6	8/29/2016	Pyridine	ND	10	2.2	20	ug/L
EP-6	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-6	8/29/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-6	8/29/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
EP-6	8/29/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
EP-6	8/29/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-6	8/29/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-6	8/29/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-6	8/29/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-6	8/29/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-6	8/29/2016	Pyrene	ND	10	3.1	117	ug/L
EP-6	8/29/2016	Dimethylphthalate	4.3	10	2.4	612	ug/L
EP-6	8/29/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-6	8/29/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-6	8/29/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-6	8/29/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-6	8/29/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-6	8/29/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-6	8/29/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-6	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-6	8/29/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-6	8/29/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-6	8/29/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-6	8/29/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-6	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-6	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-6	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-6	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-6	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-6	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-6	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-6	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-6	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-6	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-6	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-6	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-6	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-6	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-6	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-6	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-6	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-6	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-6	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-6	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-6	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-6	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-6	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-6	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-6	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-6	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-6	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-6	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-6	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-6	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-6	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-6	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-6	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-6	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-6	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-6	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-6	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-6	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-6	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-6	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-6	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-6	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-6	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-6	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-6	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-6	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-6	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-6	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-6	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-6	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-6	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-6	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-6	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-6	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-6	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-6	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-6	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-6	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-6	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-6	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-6	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-6	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-6	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-6	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-6	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-6	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-6	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-6	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-6	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-6	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-6	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-6	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-6	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-6	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-6	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-6	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-6	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-6	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-6	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-6	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-6	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-6	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-6	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-6	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-6	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-6	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-6	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-6	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-6	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-6	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-6	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-6	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-6	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-6	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-6	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-6	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-6	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-6	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-6	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-6	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-6	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-6	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-6	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-6	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-6	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-6	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-6	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-6	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-6	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-6	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-6	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-6	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-6	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-6	10/24/2017	Bis(2-ethylhexyl)phthalate	**1100**	100	48	55.64	ug/L
EP-6	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-6	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-6	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-6	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-6	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-6	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-6	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-6	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-6	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-6	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-6	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-6	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-6	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-6	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-6	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-6	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-6	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-6	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-6	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-6	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-6	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-6	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-6	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-6	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-6	2/21/2018	Benzo(a)anthracene	**51**	100	39	0.12	ug/L
EP-6	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-6	2/21/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-6	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-6	2/21/2018	Benzoic Acid	71	200	39	75000	ug/L
EP-6	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-6	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-6	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-6	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-6	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-6	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-6	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-6	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-6	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-6	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-6	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-6	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-6	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-6	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-6	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-6	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-6	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-6	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-6	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-6	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-6	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-6	2/21/2018	2-Methylphenol	34	100	33	NA	ug/L
EP-6	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-6	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-6	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-6	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-6	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-6	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-6	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-6	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-6	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-6	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-6	2/21/2018	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-6	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-6	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-6	2/21/2018	Phenol	130	100	31	5761	ug/L
EP-6	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-6	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-6	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-6	2/21/2018	Bis(2-ethylhexyl)phthalate	**63**	100	48	55.64	ug/L
EP-6	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-6	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-6	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-6	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-6	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-6	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-6	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-6	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-6	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-6	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-6	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-6	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-6	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-6	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-6	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-6	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-6	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-6	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-6	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-6	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-6	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-6	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-6	2/21/2018	3,4-Methylphenol	85	100	32	NA	ug/L
EP-6	9/7/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-6	9/7/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-6	9/7/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/7/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-6	9/7/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-6	9/7/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-6	9/7/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-6	9/7/2018	Benzoic Acid	65	200	63	75000	ug/L
EP-6	9/7/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-6	9/7/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-6	9/7/2018	Isophorone	ND	100	62	781	ug/L
EP-6	9/7/2018	Acenaphthene	ND	100	58	535	ug/L
EP-6	9/7/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-6	9/7/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-6	9/7/2018	Phenanthrene	ND	100	60	170	ug/L
EP-6	9/7/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-6	9/7/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-6	9/7/2018	Fluorene	ND	100	63	288	ug/L
EP-6	9/7/2018	Carbazole	ND	100	63	NA	ug/L
EP-6	9/7/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-6	9/7/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-6	9/7/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-6	9/7/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-6	9/7/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-6	9/7/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-6	9/7/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-6	9/7/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-6	9/7/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-6	9/7/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-6	9/7/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-6	9/7/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-6	9/7/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-6	9/7/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-6	9/7/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-6	9/7/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-6	9/7/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-6	9/7/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-6	9/7/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-6	9/7/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-6	9/7/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-6	9/7/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-6	9/7/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-6	9/7/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-6	9/7/2018	Phenol	ND	100	60	5761	ug/L
EP-6	9/7/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-6	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-6	9/7/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-6	9/7/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-6	9/7/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-6	9/7/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-6	9/7/2018	Anthracene	ND	100	57	1721	ug/L
EP-6	9/7/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-6	9/7/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-6	9/7/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-6	9/7/2018	Pyrene	ND	100	65	117	ug/L
EP-6	9/7/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-6	9/7/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-6	9/7/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-6	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-6	9/7/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-6	9/7/2018	Fluoranthene	ND	100	58	802	ug/L
EP-6	9/7/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-6	9/7/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-6	9/7/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-6	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-6	9/7/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-6	9/7/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-6	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-6	9/7/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-6	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-6	9/7/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-6	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-6	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-6	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-6	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-6	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-6	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-6	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-6	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-6	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-6	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-6	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-6	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-6	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-6	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-6	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-6	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-6	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-6	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-6	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-6	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-6	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-6	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-6	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-6	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-6	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-6	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-6	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-6	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-6	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-6	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-6	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-6	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-6	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-6	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-6	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-6	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-6	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-6	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-6	4/29/2019	Benzoic Acid	37	100	31.557804	75000	ug/L
EP-6	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-6	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-6	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-6	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-6	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-6	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-6	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-6	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-6	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-6	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-6	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-6	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-6	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-6	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-6	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-6	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-6	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-6	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-6	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-6	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-6	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-6	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-6	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-6	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-6	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-6	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-6	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-6	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-6	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-6	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-6	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-6	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-6	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-6	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-6	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-6	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-6	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-6	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-6	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-6	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-6	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-6	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-6	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-6	9/17/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
EP-6	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-6	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-6	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-6	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-6	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-6	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-6	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-6	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-6	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-6	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-6	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-6	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-6	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
EP-6	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-6	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-6	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-6	9/17/2020	Benzoic Acid	1.5	0.51	0.2	75000	ug/L
EP-6	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-6	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-6	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.1	0.137	ug/L
EP-6	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-6	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-6	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-6	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-6	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-6	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-6	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
EP-6	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-6	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-6	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-6	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-6	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-6	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-6	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
EP-6	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-6	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-6	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-6	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-6	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-6	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-6	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-6	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-6	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-6	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-6	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-6	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-6	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-6	12/21/2020	Benzo(a)anthracene	*ND*	*10.5*	0.19	0.12	ug/L
EP-6	12/21/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L
EP-6	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.158	0.34	ug/L
EP-6	12/21/2020	Benzo(g,h,i)perylene	ND	10.5	0.242	NA	ug/L
EP-6	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.168	3.43	ug/L
EP-6	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.168	59	ug/L
EP-6	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.84	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.27	55.64	ug/L
EP-6	12/21/2020	Butylbenzylphthalate	ND	10.5	0.2	16	ug/L
EP-6	12/21/2020	Carbazole	ND	10.5	0.242	NA	ug/L
EP-6	12/21/2020	4-Chloroaniline	*ND*	*10.5*	3.58	0.37	ug/L
EP-6	12/21/2020	4-Chloro-3-Methylphenol	ND	10.5	4	NA	ug/L
EP-6	12/21/2020	2-Chlorophenol	ND	10.5	2.32	91	ug/L
EP-6	12/21/2020	Chrysene	ND	10.5	0.2	34.3	ug/L
EP-6	12/21/2020	Dibenzo(a,h)anthracene	ND	10.5	0.253	NA	ug/L
EP-6	12/21/2020	1,4-Dichlorobenzene	ND	10.5	0.168	75	ug/L
EP-6	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.74	1.25	ug/L
EP-6	12/21/2020	Diethylphthalate	ND	10.5	0.253	14801	ug/L
EP-6	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.68	1.52	ug/L
EP-6	12/21/2020	2,4-Dinitrophenol	ND	31.6	3.58	38.7	ug/L
EP-6	12/21/2020	Fluorene	ND	10.5	0.19	288	ug/L
EP-6	12/21/2020	Hexachloroethane	*ND*	*10.5*	4.42	3.28	ug/L
EP-6	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.232	0.343	ug/L
EP-6	12/21/2020	Isophorone	ND	10.5	0.147	781	ug/L
EP-6	12/21/2020	Naphthalene	ND	10.5	0.179	30	ug/L
EP-6	12/21/2020	2-Nitroaniline	ND	10.5	2.32	190	ug/L
EP-6	12/21/2020	3-Nitroaniline	ND	10.5	1.9	NA	ug/L
EP-6	12/21/2020	4-Nitroaniline	*ND*	*10.5*	1.58	3.8	ug/L
EP-6	12/21/2020	4-Nitrophenol	ND	10.5	2.21	NA	ug/L
EP-6	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.48	0.011	ug/L
EP-6	12/21/2020	N-Nitrosodiphenylamine	ND	10.5	0.19	122	ug/L
EP-6	12/21/2020	Pentachlorophenol	*ND*	*21.1*	1.47	1	ug/L
EP-6	12/21/2020	Phenanthrene	ND	10.5	0.19	170	ug/L
EP-6	12/21/2020	Phenol	ND	10.5	2.74	5761	ug/L
EP-6	12/21/2020	Pyrene	ND	10.5	0.221	117	ug/L
EP-6	12/21/2020	Benzoic Acid	ND	31.6	7.69	75000	ug/L
EP-6	12/21/2020	Benzyl Alcohol	ND	10.5	2.11	2000	ug/L
EP-6	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.168	9.81	ug/L
EP-6	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.69	0.0049	ug/L
EP-6	12/21/2020	Pyridine	ND	10.5	3.37	20	ug/L
EP-6	12/21/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
EP-6	12/21/2020	Acenaphthene	ND	10.5	0.168	535	ug/L
EP-6	12/21/2020	Acenaphthylene	ND	10.5	0.179	NA	ug/L
EP-6	12/21/2020	Anthracene	ND	10.5	0.19	1721	ug/L
EP-6	12/21/2020	4-Bromophenyl-phenylether	ND	10.5	0.211	NA	ug/L
EP-6	12/21/2020	2-Chloronaphthalene	ND	10.5	0.147	733	ug/L
EP-6	12/21/2020	4-Chlorophenyl-phenylether	ND	10.5	2.11	NA	ug/L
EP-6	12/21/2020	1,3-Dichlorobenzene	ND	10.5	0.19	NA	ug/L
EP-6	12/21/2020	Dibenzofuran	ND	10.5	0.179	NA	ug/L
EP-6	12/21/2020	2,4-Dichlorophenol	ND	10.5	3.16	45.3	ug/L
EP-6	12/21/2020	2,4-Dimethylphenol	ND	10.5	3.69	354	ug/L
EP-6	12/21/2020	Di-n-butylphthalate	ND	10.5	2.84	885	ug/L
EP-6	12/21/2020	2,4-Dinitrotoluene	ND	10.5	2	45.3	ug/L
EP-6	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.5*	2	0.485	ug/L
EP-6	12/21/2020	Di-n-octylphthalate	ND	10.5	0.179	200	ug/L
EP-6	12/21/2020	Fluoranthene	ND	10.5	0.19	802	ug/L
EP-6	12/21/2020	Hexachlorobenzene	*ND*	*10.5*	0.179	0.0976	ug/L
EP-6	12/21/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.74	0.41	ug/L
EP-6	12/21/2020	2-Methylphenol	ND	10.5	1.9	NA	ug/L
EP-6	12/21/2020	Nitrobenzene	*ND*	*10.5*	0.137	1.4	ug/L
EP-6	12/21/2020	2-Nitrophenol	ND	10.5	5.48	NA	ug/L
EP-6	12/21/2020	2,4,5-Trichlorophenol	ND	10.5	3.9	1166	ug/L
EP-6	12/21/2020	2,4,6-Trichlorophenol	ND	10.5	3.69	11.9*	ug/L
EP-6	12/21/2020	Dimethylphthalate	ND	10.5	0.179	612	ug/L
EP-6	12/21/2020	Aniline	ND	10.5	4	13	ug/L
EP-6	12/21/2020	1,2,4-Trichlorobenzene	ND	10.5	0.19	70	ug/L
EP-6	12/21/2020	1,2-Dichlorobenzene	ND	10.5	0.179	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6 (Pond 4 & 5)	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Phenol	ND	0.5	0.5	5761	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-7	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-7	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-7	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-7	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-7	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-7	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-7	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-7	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-7	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-7	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-7	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-7	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-7	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-7	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-7	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-7	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-7	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-7	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-7	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-7	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-7	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-7	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-7	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-7	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-7	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-7	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-7	5/29/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-7	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-7	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-7	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-7	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-7	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-7	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-7	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-7	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-7	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-7	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-7	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-7	5/29/2012	Phenol	ND	10	2.5	5761	ug/L
EP-7	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-7	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-7	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-7	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-7	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-7	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-7	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-7	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-7	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-7	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-7	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-7	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-7	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-7	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-7	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-7	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-7	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-7	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-7	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-7	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-7	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-7	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-7	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-7	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-7	5/29/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
EP-7	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-7	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-7	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-7	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-7	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-7	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-7	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-7	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-7	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-7	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-7	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-7	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-7	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-7	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-7	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-7	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-7	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-7	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-7	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-7	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-7	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-7	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-7	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-7	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-7	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-7	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-7	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-7	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-7	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-7	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-7	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-7	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-7	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-7	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-7	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-7	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-7	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-7	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-7	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-7	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-7	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-7	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-7	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-7	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-7	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-7	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-7	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-7	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-7	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-7	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-7	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-7	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-7	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-7	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-7	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-7	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-7	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-7	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-7	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-7	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-7	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-7	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-7	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-7	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-7	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-7	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-7	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-7	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-7	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-7	5/28/2013	Benzo(a)pyrene	*ND*	*30*	7.5	0.2	ug/L
EP-7	5/28/2013	2,4-Dinitrophenol	*ND*	*60*	9.6	38.7	ug/L
EP-7	5/28/2013	Dibenzo(a,h)anthracene	ND	30	12	NA	ug/L
EP-7	5/28/2013	Benzo(a)anthracene	*ND*	*30*	7.8	0.12	ug/L
EP-7	5/28/2013	4-Chloro-3-Methylphenol	ND	30	8	NA	ug/L
EP-7	5/28/2013	Aniline	*ND*	*30*	6.6	13	ug/L
EP-7	5/28/2013	N-Nitrosodimethylamine	*ND*	*30*	14	0.0049	ug/L
EP-7	5/28/2013	Benzoic Acid	ND	60	17	75000	ug/L
EP-7	5/28/2013	Hexachloroethane	*ND*	*30*	8.7	3.28	ug/L
EP-7	5/28/2013	Hexachlorocyclopentadiene	*ND*	*30*	6.2	0.41	ug/L
EP-7	5/28/2013	Isophorone	ND	30	5.3	781	ug/L
EP-7	5/28/2013	Acenaphthene	ND	30	7.7	535	ug/L
EP-7	5/28/2013	Diethylphthalate	ND	30	9	14801	ug/L
EP-7	5/28/2013	Di-n-butylphthalate	ND	30	7.2	885	ug/L
EP-7	5/28/2013	Phenanthrene	ND	30	4.9	170	ug/L
EP-7	5/28/2013	Butylbenzylphthalate	*ND*	*30*	8.2	16	ug/L
EP-7	5/28/2013	N-Nitrosodiphenylamine	ND	30	7	122	ug/L
EP-7	5/28/2013	Fluorene	ND	30	7.4	288	ug/L
EP-7	5/28/2013	Carbazole	ND	30	6.9	NA	ug/L
EP-7	5/28/2013	Hexachlorobutadiene	*ND*	*30*	8.2	0.14	ug/L
EP-7	5/28/2013	Pentachlorophenol	*ND*	*60*	4.3	1	ug/L
EP-7	5/28/2013	2,4,6-Trichlorophenol	ND	30	7.9	11.9*	ug/L
EP-7	5/28/2013	2-Nitroaniline	ND	30	8.6	190	ug/L
EP-7	5/28/2013	2-Nitrophenol	ND	30	7	NA	ug/L
EP-7	5/28/2013	1-Methylnaphthalene	*ND*	*30*	6.7	11.38	ug/L
EP-7	5/28/2013	Naphthalene	ND	30	7.3	30	ug/L
EP-7	5/28/2013	2-Methylnaphthalene	ND	30	7.2	35.1	ug/L
EP-7	5/28/2013	2-Chloronaphthalene	ND	30	7.3	733	ug/L
EP-7	5/28/2013	3,3-Dichlorobenzidine	*ND*	*30*	11	1.25	ug/L
EP-7	5/28/2013	2-Methylphenol	ND	30	8.1	NA	ug/L
EP-7	5/28/2013	1,2-Dichlorobenzene	ND	30	9	600	ug/L
EP-7	5/28/2013	2-Chlorophenol	ND	30	8	91	ug/L
EP-7	5/28/2013	2,4,5-Trichlorophenol	ND	30	7.2	1166	ug/L
EP-7	5/28/2013	Nitrobenzene	*ND*	*30*	8.7	1.4	ug/L
EP-7	5/28/2013	3-Nitroaniline	ND	30	8	NA	ug/L
EP-7	5/28/2013	4-Nitroaniline	*ND*	*30*	7.6	3.8	ug/L
EP-7	5/28/2013	4-Nitrophenol	ND	30	6.4	NA	ug/L
EP-7	5/28/2013	Benzyl Alcohol	ND	30	7.4	2000	ug/L
EP-7	5/28/2013	4-Bromophenyl-phenylether	ND	30	7.5	NA	ug/L
EP-7	5/28/2013	Azobenzene	*ND*	*30*	6.9	0.12	ug/L
EP-7	5/28/2013	2,4-Dimethylphenol	ND	30	8.8	354	ug/L
EP-7	5/28/2013	1,4-Dichlorobenzene	ND	30	11	75	ug/L
EP-7	5/28/2013	4-Chloroaniline	*ND*	*30*	6.7	0.37	ug/L
EP-7	5/28/2013	Phenol	ND	30	6.6	5761	ug/L
EP-7	5/28/2013	Pyridine	*ND*	*30*	11	20	ug/L
EP-7	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*30*	12	0.137	ug/L
EP-7	5/28/2013	Bis(2-chloroethoxy)methane	ND	30	7.3	59	ug/L
EP-7	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	30	8.3	55.64	ug/L
EP-7	5/28/2013	Di-n-octylphthalate	ND	30	10	200	ug/L
EP-7	5/28/2013	Hexachlorobenzene	*ND*	*30*	8	0.0976	ug/L
EP-7	5/28/2013	Anthracene	ND	30	6.5	1721	ug/L
EP-7	5/28/2013	1,2,4-Trichlorobenzene	ND	30	6.7	70	ug/L
EP-7	5/28/2013	2,4-Dichlorophenol	*ND*	*60*	6.5	45.3	ug/L
EP-7	5/28/2013	2,4-Dinitrotoluene	ND	30	8.5	45.3	ug/L
EP-7	5/28/2013	Pyrene	ND	30	6.4	117	ug/L
EP-7	5/28/2013	Dimethylphthalate	ND	30	8.3	612	ug/L
EP-7	5/28/2013	Dibenzofuran	ND	30	7.7	NA	ug/L
EP-7	5/28/2013	Benzo(g,h,i)perylene	ND	30	8.3	NA	ug/L
EP-7	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*30*	9.5	0.343	ug/L
EP-7	5/28/2013	Benzo(b)fluoranthene	*ND*	*30*	8.8	0.34	ug/L
EP-7	5/28/2013	Fluoranthene	ND	30	7.2	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/28/2013	Benzo(k)fluoranthene	*ND*	*30*	7.8	3.43	ug/L
EP-7	5/28/2013	Acenaphthylene	ND	30	8.4	NA	ug/L
EP-7	5/28/2013	Chrysene	ND	30	8	34.3	ug/L
EP-7	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*60*	4.2	1.52	ug/L
EP-7	5/28/2013	1,3-Dichlorobenzene	ND	30	9.2	NA	ug/L
EP-7	5/28/2013	2,6-Dinitrotoluene	*ND*	*30*	8.5	0.485	ug/L
EP-7	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*30*	9.6	0.011	ug/L
EP-7	5/28/2013	4-Chlorophenyl-phenylether	ND	30	7.9	NA	ug/L
EP-7	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*30*	9.9	9.81	ug/L
EP-7	5/28/2013	3,4-Methylphenol	ND	30	11	NA	ug/L
EP-7	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-7	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-7	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-7	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-7	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-7	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-7	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-7	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-7	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-7	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-7	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-7	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-7	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-7	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-7	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-7	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-7	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-7	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-7	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-7	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-7	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-7	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-7	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-7	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-7	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-7	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-7	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-7	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-7	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-7	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-7	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-7	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-7	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-7	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-7	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-7	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-7	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-7	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-7	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-7	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-7	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-7	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-7	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-7	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-7	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-7	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-7	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-7	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-7	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-7	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-7	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-7	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-7	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-7	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-7	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-7	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-7	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-7	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-7	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-7	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-7	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-7	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-7	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-7	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-7	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-7	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-7	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-7	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-7	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-7	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-7	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-7	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-7	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-7	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-7	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-7	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-7	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-7	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-7	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-7	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-7	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-7	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-7	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-7	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-7	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-7	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-7	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-7	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-7	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-7	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-7	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-7	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-7	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-7	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-7	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-7	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-7	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-7	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-7	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-7	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-7	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-7	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-7	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-7	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-7	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-7	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-7	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-7	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-7	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-7	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-7	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-7	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-7	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-7	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-7	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-7	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-7	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-7	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-7	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-7	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-7	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-7	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-7	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-7	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-7	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-7	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-7	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-7	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-7	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-7	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-7	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-7	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-7	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-7	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-7	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-7	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-7	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-7	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-7	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-7	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-7	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-7	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-7	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-7	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-7	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-7	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-7	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-7	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-7	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-7	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-7	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-7	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-7	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-7	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-7	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-7	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-7	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-7	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-7	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-7	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-7	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-7	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-7	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-7	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-7	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-7	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-7	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-7	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-7	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-7	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-7	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-7	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-7	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-7	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-7	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-7	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-7	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-7	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L

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EP-7	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-7	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-7	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-7	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-7	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-7	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-7	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-7	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-7	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-7	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-7	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-7	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-7	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-7	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-7	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-7	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-7	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-7	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-7	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-7	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-7	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-7	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-7	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-7	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-7	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-7	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-7	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-7	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-7	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-7	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-7	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-7	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-7	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-7	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-7	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-7	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-7	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-7	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-7	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-7	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-7	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-7	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-7	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-7	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-7	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-7	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-7	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-7	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-7	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-7	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-7	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-7	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-7	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-7	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-7	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-7	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-7	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-7	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-7	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-7	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-7	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-7	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-7	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-7	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-7	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-7	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-7	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-7	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-7	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-7	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-7	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-7	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-7	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-7	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-7	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-7	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-7	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
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EP-7	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-7	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-7	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-7	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-7	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-7	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-7	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-7	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-7	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-7	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-7	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
EP-7	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-7	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-7	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-7	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-7	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-7	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-7	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-7	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L

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EP-7	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-7	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-7	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-7	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-7	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-7	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-7	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-7	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-7	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-7	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-7	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-7	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-7	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-7	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-7	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-7	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-7	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-7	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-7	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-7	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-7	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-7	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-7	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-7	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-7	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-7	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
EP-7	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-7	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-7	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-7	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-7	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-7	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-7	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-7	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-7	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-7	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-7	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-7	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-7	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-7	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-7	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-7	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-7	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-7	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-7	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-7	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-7	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-7	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-7	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-7	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-7	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-7	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-7	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-7	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-7	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-7	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-7	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-7	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-7	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-7	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-7	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-7	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-7	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-7	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-7	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-7	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-7	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-7	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-7	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-7	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-7	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-7	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-7	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-7	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-7	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-7	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	8/30/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
EP-7	8/30/2016	Di-n-octylphthalate	4.6	10	2	200	ug/L
EP-7	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-7	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-7	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-7	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-7	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-7	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-7	8/30/2016	Dimethylphthalate	4.1	10	2.4	612	ug/L
EP-7	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-7	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-7	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-7	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-7	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-7	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-7	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-7	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-7	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-7	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-7	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-7	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-7	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-7	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-7	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	3/30/2017	Benzoic Acid	36	100	20	75000	ug/L
EP-7	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-7	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-7	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-7	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-7	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-7	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-7	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-7	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	3/30/2017	Bis(2-ethylhexyl)phthalate	28	50	24	55.64	ug/L
EP-7	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-7	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-7	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-7	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-7	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-7	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-7	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-7	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-7	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-7	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-7	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-7	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-7	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-7	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-7	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-7	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-7	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-7	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-7	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	2/23/2018	Benzoic Acid	46	100	20	75000	ug/L
EP-7	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-7	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-7	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-7	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-7	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-7	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-7	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-7	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-7	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-7	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-7	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-7	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-7	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-7	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-7	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-7	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-7	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-7	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-7	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-7	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-7	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-7	9/7/2018	Isophorone	ND	50	31	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-7	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-7	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-7	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-7	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-7	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-7	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-7	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-7	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-7	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-7	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-7	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-7	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-7	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-7	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-7	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-7	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-7	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-7	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-7	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-7	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-7	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-7	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-7	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-7	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-7	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-7	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-7	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-7	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-7	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-7	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-7	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-7	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-7	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-7	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-7	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-7	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-7	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-7	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-7	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-7	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-7	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-7	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-7	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-7	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-7	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-7	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-7	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-7	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-7	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-7	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-7	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-7	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-7	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-7	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-7	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-7	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-7	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-7	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-7	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-7	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-7	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-7	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-7	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-7	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-7	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-7	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-7	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-7	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-7	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-7	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-7	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-7	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-7	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-7	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-7	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-7	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-7	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-7	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-7	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-7	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-7	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-7	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-7	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-7	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-7	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-7	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-7	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-7	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-7	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-7	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-7	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-7	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-7	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-7	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-7	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-7	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-7	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-7	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-7	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-7	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-7	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-7	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-7	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-7	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-7	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-7	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-7	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-7	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-7	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-7	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-7	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-7	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-7	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-7	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-7	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-7	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-7	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-7	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-7	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-7	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-7	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-7	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-7	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-7	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-7	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-7	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-7	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-7	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-7	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-7	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-7	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-7	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-7	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-7	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-7	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-7	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-7	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-7	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-7	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-7	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-7	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-7	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-7	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-7	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-7	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-7	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-7	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-7	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-7	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-7	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-7	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-7	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-7	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-7	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-7	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-7	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-7	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-7	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-7	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-7	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-7	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-7	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-7	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-7	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-7	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-7	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-7	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-7	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-7	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-7	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-7	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-7	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-7	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-7	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-7	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-7	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-7	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-7	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-7	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-7	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-7	11/20/2019	Phenol	ND	0.5	0.5	5761	ug/L
EP-7	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-7	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-7	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-7	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-7	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-7	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-7	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-7	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-7	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-7	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-7	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-7	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-7	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-7	9/17/2020	2,4-Dinitrotoluene	ND	0.2	0.1	45.3	ug/L
EP-7	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.51*	0.1	0.485	ug/L
EP-7	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-7	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-7	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-7	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-7	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-7	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-7	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-7	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-7	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-7	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-7	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-7	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-7	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
EP-7	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-7	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-7	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-7	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-7	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-7	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-7	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-7	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-7	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.1	55.64	ug/L
EP-7	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-7	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-7	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-7	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-7	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
EP-7	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-7	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-7	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-7	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-7	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-7	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-7	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
EP-7	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-7	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-7	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-7	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-7	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-7	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-7	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-7	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-7	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-7	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-7	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-7	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-7	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-7	12/21/2020	Benzo(a)anthracene	*ND*	*9.65*	0.174	0.12	ug/L
EP-7	12/21/2020	Benzo(a)pyrene	*ND*	*9.65*	0.116	0.2	ug/L
EP-7	12/21/2020	Benzo(b)fluoranthene	*ND*	*9.65*	0.145	0.34	ug/L
EP-7	12/21/2020	Benzo(g,h,i)perylene	ND	9.65	0.222	NA	ug/L
EP-7	12/21/2020	Benzo(k)fluoranthene	*ND*	*9.65*	0.154	3.43	ug/L
EP-7	12/21/2020	Bis(2-chloroethoxy)methane	ND	9.65	0.154	59	ug/L
EP-7	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*9.65*	2.61	0.137	ug/L
EP-7	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	9.65	4.83	55.64	ug/L
EP-7	12/21/2020	Butylbenzylphthalate	ND	9.65	0.183	16	ug/L
EP-7	12/21/2020	Carbazole	ND	9.65	0.222	NA	ug/L
EP-7	12/21/2020	4-Chloroaniline	*ND*	*9.65*	3.28	0.37	ug/L
EP-7	12/21/2020	4-Chloro-3-Methylphenol	ND	9.65	3.67	NA	ug/L
EP-7	12/21/2020	2-Chlorophenol	ND	9.65	2.12	91	ug/L
EP-7	12/21/2020	Chrysene	ND	9.65	0.183	34.3	ug/L
EP-7	12/21/2020	Dibenzo(a,h)anthracene	ND	9.65	0.232	NA	ug/L
EP-7	12/21/2020	1,4-Dichlorobenzene	ND	9.65	0.154	75	ug/L
EP-7	12/21/2020	3,3-Dichlorobenzidine	*ND*	*9.65*	2.51	1.25	ug/L
EP-7	12/21/2020	Diethylphthalate	ND	9.65	0.232	14801	ug/L
EP-7	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.65*	1.54	1.52	ug/L
EP-7	12/21/2020	2,4-Dinitrophenol	ND	29	3.28	38.7	ug/L
EP-7	12/21/2020	Fluorene	ND	9.65	0.174	288	ug/L
EP-7	12/21/2020	Hexachloroethane	*ND*	*9.65*	4.05	3.28	ug/L
EP-7	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.65*	0.212	0.343	ug/L
EP-7	12/21/2020	Isophorone	ND	9.65	0.135	781	ug/L
EP-7	12/21/2020	Naphthalene	ND	9.65	0.164	30	ug/L
EP-7	12/21/2020	2-Nitroaniline	ND	9.65	2.12	190	ug/L
EP-7	12/21/2020	3-Nitroaniline	ND	9.65	1.74	NA	ug/L
EP-7	12/21/2020	4-Nitroaniline	*ND*	*9.65*	1.45	3.8	ug/L
EP-7	12/21/2020	4-Nitrophenol	ND	9.65	2.03	NA	ug/L
EP-7	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*9.65*	3.19	0.011	ug/L
EP-7	12/21/2020	N-Nitrosodiphenylamine	ND	9.65	0.174	122	ug/L
EP-7	12/21/2020	Pentachlorophenol	*ND*	*19.3*	1.35	1	ug/L
EP-7	12/21/2020	Phenanthrene	ND	9.65	0.174	170	ug/L
EP-7	12/21/2020	Phenol	ND	9.65	2.51	5761	ug/L
EP-7	12/21/2020	Pyrene	ND	9.65	0.203	117	ug/L
EP-7	12/21/2020	Benzoic Acid	ND	29	7.05	75000	ug/L
EP-7	12/21/2020	Benzyl Alcohol	ND	9.65	1.93	2000	ug/L
EP-7	12/21/2020	Bis(2-chloroisopropyl)ether	ND	9.65	0.154	9.81	ug/L
EP-7	12/21/2020	N-Nitrosodimethylamine	*ND*	*9.65*	3.38	0.0049	ug/L
EP-7	12/21/2020	Pyridine	ND	9.65	3.09	20	ug/L
EP-7	12/21/2020	Azobenzene	*ND*	*9.65*	0.965	0.12	ug/L
EP-7	12/21/2020	Acenaphthene	ND	9.65	0.154	535	ug/L
EP-7	12/21/2020	Acenaphthylene	ND	9.65	0.164	NA	ug/L
EP-7	12/21/2020	Anthracene	ND	9.65	0.174	1721	ug/L
EP-7	12/21/2020	4-Bromophenyl-phenylether	ND	9.65	0.193	NA	ug/L
EP-7	12/21/2020	2-Chloronaphthalene	ND	9.65	0.135	733	ug/L
EP-7	12/21/2020	4-Chlorophenyl-phenylether	ND	9.65	1.93	NA	ug/L
EP-7	12/21/2020	1,3-Dichlorobenzene	ND	9.65	0.174	NA	ug/L
EP-7	12/21/2020	Dibenzofuran	ND	9.65	0.164	NA	ug/L
EP-7	12/21/2020	2,4-Dichlorophenol	ND	9.65	2.9	45.3	ug/L
EP-7	12/21/2020	2,4-Dimethylphenol	ND	9.65	3.38	354	ug/L
EP-7	12/21/2020	Di-n-butylphthalate	ND	9.65	2.61	885	ug/L
EP-7	12/21/2020	2,4-Dinitrotoluene	ND	9.65	1.83	45.3	ug/L
EP-7	12/21/2020	2,6-Dinitrotoluene	*ND*	*9.65*	1.83	0.485	ug/L
EP-7	12/21/2020	Di-n-octylphthalate	ND	9.65	0.164	200	ug/L
EP-7	12/21/2020	Fluoranthene	ND	9.65	0.174	802	ug/L
EP-7	12/21/2020	Hexachlorobenzene	*ND*	*9.65*	0.164	0.0976	ug/L
EP-7	12/21/2020	Hexachlorocyclopentadiene	*ND*	*19.3*	2.51	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	2-Methylphenol	ND	9.65	1.74	NA	ug/L
EP-7	12/21/2020	Nitrobenzene	*ND*	*9.65*	0.125	1.4	ug/L
EP-7	12/21/2020	2-Nitrophenol	ND	9.65	5.02	NA	ug/L
EP-7	12/21/2020	2,4,5-Trichlorophenol	ND	9.65	3.57	1166	ug/L
EP-7	12/21/2020	2,4,6-Trichlorophenol	ND	9.65	3.38	11.9*	ug/L
EP-7	12/21/2020	Dimethylphthalate	ND	9.65	0.164	612	ug/L
EP-7	12/21/2020	Aniline	ND	9.65	3.67	13	ug/L
EP-7	12/21/2020	1,2,4-Trichlorobenzene	ND	9.65	0.174	70	ug/L
EP-7	12/21/2020	1,2-Dichlorobenzene	ND	9.65	0.164	600	ug/L
EP-8	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-8	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-8	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-8	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-8	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-8	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-8	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-8	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-8	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-8	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-8	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-8	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-8	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-8	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-8	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-8	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-8	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-8	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-8	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-8	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-8	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-8	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-8	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-8	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-8	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-8	5/29/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-8	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-8	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-8	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-8	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-8	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-8	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-8	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-8	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-8	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-8	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-8	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-8	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-8	5/29/2012	Phenol	ND	10	2.5	5761	ug/L
EP-8	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-8	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-8	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-8	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-8	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-8	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-8	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-8	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-8	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-8	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-8	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-8	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-8	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-8	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-8	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-8	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-8	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-8	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-8	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-8	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-8	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-8	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-8	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-8	5/29/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
EP-8	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-8	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-8	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-8	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-8	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-8	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-8	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-8	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-8	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-8	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-8	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-8	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-8	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-8	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-8	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-8	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-8	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-8	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-8	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-8	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-8	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-8	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-8	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-8	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-8	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-8	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-8	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-8	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-8	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-8	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-8	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-8	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-8	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-8	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-8	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-8	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-8	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-8	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-8	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-8	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-8	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-8	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-8	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-8	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-8	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-8	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-8	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-8	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-8	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-8	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-8	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-8	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-8	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-8	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-8	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-8	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-8	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-8	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-8	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-8	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-8	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-8	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-8	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-8	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-8	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-8	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-8	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-8	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-8	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-8	5/28/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-8	5/28/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	5/28/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-8	5/28/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-8	5/28/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	Aniline	ND	10	2.2	13	ug/L
EP-8	5/28/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-8	5/28/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-8	5/28/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	5/28/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-8	5/28/2013	Isophorone	ND	10	1.8	781	ug/L
EP-8	5/28/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	5/28/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-8	5/28/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	5/28/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-8	5/28/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-8	5/28/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	5/28/2013	Fluorene	ND	10	2.5	288	ug/L
EP-8	5/28/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-8	5/28/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-8	5/28/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-8	5/28/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-8	5/28/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-8	5/28/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-8	5/28/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-8	5/28/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-8	5/28/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-8	5/28/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-8	5/28/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-8	5/28/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-8	5/28/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-8	5/28/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-8	5/28/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-8	5/28/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-8	5/28/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-8	5/28/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-8	5/28/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	5/28/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-8	5/28/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-8	5/28/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-8	5/28/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-8	5/28/2013	Phenol	ND	10	2.2	5761	ug/L
EP-8	5/28/2013	Pyridine	ND	10	3.5	20	ug/L
EP-8	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-8	5/28/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-8	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-8	5/28/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-8	5/28/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-8	5/28/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-8	5/28/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-8	5/28/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-8	5/28/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	5/28/2013	Pyrene	ND	10	2.1	117	ug/L
EP-8	5/28/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-8	5/28/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-8	5/28/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-8	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-8	5/28/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-8	5/28/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-8	5/28/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-8	5/28/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-8	5/28/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-8	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	5/28/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-8	5/28/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-8	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-8	5/28/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-8	5/28/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-8	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-8	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-8	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-8	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-8	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-8	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-8	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-8	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-8	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-8	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-8	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-8	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-8	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-8	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-8	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-8	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-8	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-8	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-8	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-8	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-8	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-8	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-8	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-8	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-8	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-8	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-8	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-8	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-8	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-8	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-8	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-8	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-8	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-8	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-8	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-8	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-8	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-8	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-8	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-8	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-8	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-8	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-8	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-8	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-8	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-8	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-8	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-8	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-8	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-8	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-8	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-8	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-8	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-8	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-8	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-8	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-8	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-8	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-8	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-8	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-8	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-8	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-8	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-8	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-8	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-8	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-8	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-8	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-8	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-8	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-8	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-8	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-8	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-8	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-8	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-8	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-8	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-8	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-8	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-8	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-8	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-8	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-8	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-8	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-8	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-8	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-8	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-8	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-8	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-8	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-8	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-8	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-8	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-8	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-8	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-8	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-8	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-8	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-8	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-8	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-8	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-8	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-8	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-8	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-8	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-8	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-8	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-8	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-8	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-8	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-8	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-8	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-8	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-8	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-8	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-8	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-8	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-8	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-8	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-8	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-8	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-8	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Benzo(a)pyrene	*ND*	*11*	3.6	0.2	ug/L
EP-8	11/12/2014	2,4-Dinitrophenol	ND	22	3.5	38.7	ug/L
EP-8	11/12/2014	Dibenzo(a,h)anthracene	ND	11	3.3	NA	ug/L
EP-8	11/12/2014	Benzo(a)anthracene	*ND*	*11*	3.4	0.12	ug/L
EP-8	11/12/2014	4-Chloro-3-Methylphenol	ND	11	4.1	NA	ug/L
EP-8	11/12/2014	Aniline	ND	11	2.7	13	ug/L
EP-8	11/12/2014	N-Nitrosodimethylamine	*ND*	*11*	2.7	0.0049	ug/L
EP-8	11/12/2014	Benzoic Acid	ND	22	2.4	75000	ug/L
EP-8	11/12/2014	Hexachloroethane	*ND*	*11*	2.1	3.28	ug/L
EP-8	11/12/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.4	0.41	ug/L
EP-8	11/12/2014	Isophorone	ND	11	3.4	781	ug/L
EP-8	11/12/2014	Acenaphthene	ND	11	3.2	535	ug/L
EP-8	11/12/2014	Diethylphthalate	ND	11	4.7	14801	ug/L
EP-8	11/12/2014	Di-n-butylphthalate	ND	11	4	885	ug/L
EP-8	11/12/2014	Phenanthrene	ND	11	2.8	170	ug/L
EP-8	11/12/2014	Butylbenzylphthalate	ND	11	3.5	16	ug/L
EP-8	11/12/2014	N-Nitrosodiphenylamine	ND	11	3.2	122	ug/L
EP-8	11/12/2014	Fluorene	ND	11	3.3	288	ug/L
EP-8	11/12/2014	Carbazole	ND	11	3.2	NA	ug/L
EP-8	11/12/2014	Hexachlorobutadiene	*ND*	*11*	3.4	0.14	ug/L
EP-8	11/12/2014	Pentachlorophenol	*ND*	*22*	2.8	1	ug/L
EP-8	11/12/2014	2,4,6-Trichlorophenol	ND	11	2	11.9*	ug/L
EP-8	11/12/2014	2-Nitroaniline	ND	11	3.1	190	ug/L
EP-8	11/12/2014	2-Nitrophenol	ND	11	3.5	NA	ug/L
EP-8	11/12/2014	1-Methylnaphthalene	ND	11	4	11.38	ug/L
EP-8	11/12/2014	Naphthalene	ND	11	2.6	30	ug/L
EP-8	11/12/2014	2-Methylnaphthalene	ND	11	2.9	35.1	ug/L
EP-8	11/12/2014	2-Chloronaphthalene	ND	11	3.4	733	ug/L
EP-8	11/12/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.6	1.25	ug/L
EP-8	11/12/2014	2-Methylphenol	ND	11	3.1	NA	ug/L
EP-8	11/12/2014	1,2-Dichlorobenzene	ND	11	1.9	600	ug/L
EP-8	11/12/2014	2-Chlorophenol	ND	11	2	91	ug/L
EP-8	11/12/2014	2,4,5-Trichlorophenol	ND	11	3.6	1166	ug/L
EP-8	11/12/2014	Nitrobenzene	*ND*	*11*	2.9	1.4	ug/L
EP-8	11/12/2014	3-Nitroaniline	ND	11	4	NA	ug/L
EP-8	11/12/2014	4-Nitroaniline	*ND*	*11*	4.6	3.8	ug/L
EP-8	11/12/2014	4-Nitrophenol	ND	11	4.8	NA	ug/L
EP-8	11/12/2014	Benzyl Alcohol	ND	11	2	2000	ug/L
EP-8	11/12/2014	4-Bromophenyl-phenylether	ND	11	3.3	NA	ug/L
EP-8	11/12/2014	Azobenzene	*ND*	*11*	2.8	0.12	ug/L
EP-8	11/12/2014	2,4-Dimethylphenol	ND	11	3.5	354	ug/L
EP-8	11/12/2014	1,4-Dichlorobenzene	ND	11	2.7	75	ug/L
EP-8	11/12/2014	4-Chloroaniline	*ND*	*11*	2.9	0.37	ug/L
EP-8	11/12/2014	Phenol	ND	11	1.8	5761	ug/L
EP-8	11/12/2014	Pyridine	ND	11	1.7	20	ug/L
EP-8	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*11*	2	0.137	ug/L
EP-8	11/12/2014	Bis(2-chloroethoxy)methane	ND	11	3.1	59	ug/L
EP-8	11/12/2014	Bis(2-ethylhexyl)phthalate	18	11	3.3	55.64	ug/L
EP-8	11/12/2014	Di-n-octylphthalate	ND	11	3	200	ug/L
EP-8	11/12/2014	Hexachlorobenzene	*ND*	*11*	3.5	0.0976	ug/L
EP-8	11/12/2014	Anthracene	ND	11	2.8	1721	ug/L
EP-8	11/12/2014	1,2,4-Trichlorobenzene	ND	11	3	70	ug/L
EP-8	11/12/2014	2,4-Dichlorophenol	ND	22	3.3	45.3	ug/L
EP-8	11/12/2014	2,4-Dinitrotoluene	ND	11	5	45.3	ug/L
EP-8	11/12/2014	Pyrene	ND	11	4.5	117	ug/L
EP-8	11/12/2014	Dimethylphthalate	ND	11	4.1	612	ug/L
EP-8	11/12/2014	Dibenzofuran	ND	11	4.2	NA	ug/L
EP-8	11/12/2014	Benzo(g,h,i)perylene	ND	11	3.7	NA	ug/L
EP-8	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.8	0.343	ug/L
EP-8	11/12/2014	Benzo(b)fluoranthene	*ND*	*11*	4.5	0.34	ug/L
EP-8	11/12/2014	Fluoranthene	ND	11	3.3	802	ug/L
EP-8	11/12/2014	Benzo(k)fluoranthene	*ND*	*11*	3.9	3.43	ug/L
EP-8	11/12/2014	Acenaphthylene	ND	11	2.7	NA	ug/L
EP-8	11/12/2014	Chrysene	ND	11	3.2	34.3	ug/L
EP-8	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*22*	2.7	1.52	ug/L
EP-8	11/12/2014	1,3-Dichlorobenzene	ND	11	2	NA	ug/L
EP-8	11/12/2014	2,6-Dinitrotoluene	*ND*	*11*	3.8	0.485	ug/L
EP-8	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2.2	0.011	ug/L
EP-8	11/12/2014	4-Chlorophenyl-phenylether	ND	11	3.9	NA	ug/L
EP-8	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.7	9.81	ug/L
EP-8	11/12/2014	3,4-Methylphenol	ND	11	2	NA	ug/L
EP-8	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-8	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-8	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-8	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-8	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-8	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-8	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-8	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-8	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-8	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-8	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-8	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-8	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-8	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-8	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-8	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-8	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-8	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-8	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-8	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-8	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-8	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-8	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-8	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-8	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-8	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-8	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-8	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-8	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-8	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-8	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-8	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-8	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-8	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-8	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-8	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-8	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-8	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-8	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-8	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-8	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-8	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-8	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-8	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-8	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-8	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-8	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-8	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-8	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-8	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-8	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-8	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-8	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-8	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-8	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-8	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-8	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-8	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-8	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-8	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-8	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-8	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-8	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-8	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-8	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-8	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-8	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-8	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-8	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-8	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-8	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-8	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-8	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-8	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-8	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-8	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-8	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-8	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-8	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-8	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-8	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-8	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-8	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-8	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-8	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-8	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-8	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-8	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-8	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-8	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-8	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-8	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-8	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-8	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-8	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-8	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-8	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-8	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-8	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-8	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-8	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-8	9/1/2015	Phenol	ND	10	1.1	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-8	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-8	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-8	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-8	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-8	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-8	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-8	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-8	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-8	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-8	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-8	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-8	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-8	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-8	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-8	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-8	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-8	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-8	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-8	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-8	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-8	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-8	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-8	8/30/2016	Benzo(a)pyrene	**4**	10	2.7	0.2	ug/L
EP-8	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-8	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-8	8/30/2016	Benzo(a)anthracene	**6.8**	10	2.6	0.12	ug/L
EP-8	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-8	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-8	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-8	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-8	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-8	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-8	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-8	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	8/30/2016	Phenanthrene	4.4	10	2.6	170	ug/L
EP-8	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-8	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-8	8/30/2016	Carbazole	2.8	10	2.3	NA	ug/L
EP-8	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-8	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-8	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-8	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-8	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-8	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-8	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-8	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-8	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-8	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-8	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-8	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-8	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-8	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-8	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-8	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-8	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-8	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-8	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-8	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-8	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-8	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-8	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-8	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-8	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-8	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-8	8/30/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
EP-8	8/30/2016	Di-n-octylphthalate	3.6	10	2	200	ug/L
EP-8	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-8	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-8	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-8	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-8	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-8	8/30/2016	Pyrene	12	10	3.1	117	ug/L
EP-8	8/30/2016	Dimethylphthalate	4	10	2.4	612	ug/L
EP-8	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-8	8/30/2016	Benzo(g,h,i)perylene	3.8	10	2.6	NA	ug/L
EP-8	8/30/2016	Indeno(1,2,3-cd)pyrene	**3.3**	10	3	0.343	ug/L
EP-8	8/30/2016	Benzo(b)fluoranthene	**7.8**	10	2.9	0.34	ug/L
EP-8	8/30/2016	Fluoranthene	13	10	2.6	802	ug/L
EP-8	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-8	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-8	8/30/2016	Chrysene	7.1	10	2.8	34.3	ug/L
EP-8	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-8	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-8	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-8	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-8	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-8	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-8	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-8	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-8	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-8	3/30/2017	Acenaphthene	ND	50	18	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-8	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-8	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-8	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-8	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-8	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-8	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-8	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-8	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-8	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-8	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-8	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-8	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-8	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-8	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-8	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-8	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-8	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	10/24/2017	Anthracene	ND	50	18	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-8	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-8	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-8	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	2/23/2018	Benzoic Acid	46	100	20	75000	ug/L
EP-8	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-8	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-8	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-8	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-8	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-8	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-8	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-8	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-8	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-8	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-8	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-8	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-8	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-8	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-8	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-8	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-8	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-8	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-8	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-8	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-8	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-8	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-8	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-8	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-8	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-8	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-8	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-8	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-8	9/7/2018	Carbazole	ND	50	31	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-8	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-8	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-8	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-8	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-8	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-8	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-8	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-8	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-8	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-8	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-8	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-8	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-8	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-8	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-8	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-8	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-8	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-8	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-8	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-8	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-8	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-8	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-8	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-8	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-8	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-8	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-8	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-8	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-8	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-8	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-8	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-8	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-8	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-8	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-8	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-8	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-8	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-8	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-8	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-8	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-8	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-8	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-8	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-8	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-8	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-8	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-8	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-8	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-8	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-8	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-8	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-8	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-8	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-8	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-8	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-8	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-8	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-8	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-8	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-8	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-8	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-8	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-8	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-8	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-8	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-8	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-8	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-8	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-8	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-8	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-8	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-8	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-8	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-8	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-8	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-8	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-8	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-8	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-8	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-8	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-8	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-8	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-8	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-8	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-8	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-8	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-8	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-8	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-8	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-8	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-8	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-8	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-8	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-8	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-8	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-8	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-8	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-8	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-8	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-8	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-8	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-8	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-8	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-8	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-8	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-8	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-8	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-8	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-8	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-8	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-8	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-8	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-8	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-8	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-8	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-8	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-8	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-8	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-8	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-8	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-8	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-8	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-8	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-8	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-8	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-8	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-8	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-8	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-8	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-8	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-8	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-8	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-8	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-8	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-8	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-8	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-8	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-8	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-8	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-8	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-8	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-8	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-8	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-8	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-8	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-8	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-8	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-8	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-8	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-8	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-8	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-8	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-8	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-8	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-8	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-8	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-8	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-8	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-8	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-8	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-8	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-8	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-8	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-8	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-8	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-8	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-8	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-8	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-8	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-8	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-8	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-8	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-8	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-8	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-8	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-8	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-8	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-8	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-8	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-8	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-8	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-8	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-8	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-8	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-8	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-8	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-8	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-8	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-8	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-8	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-8	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-8	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-8	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-8	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-8	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-8	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-8	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-8	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-8	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-8	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-8	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-8	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-8	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-8	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-8	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-8	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-8	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-8	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-8	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-8	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-8	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-8	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-8	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-8	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-8	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-8	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-8	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-8	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-8	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-8	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-8	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-8	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-8	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-8	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-8	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-8	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-8	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-8	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-8	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-8	11/20/2019	Phenol	11	0.5	0.5	5761	ug/L
EP-8	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-8	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-8	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-8	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-8	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-8	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-8	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-8	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-8	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-8	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-8	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-8	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-8	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-8	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-8	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.51*	0.1	0.485	ug/L
EP-8	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-8	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-8	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-8	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-8	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-8	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-8	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-8	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-8	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-8	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-8	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-8	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-8	9/17/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
EP-8	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-8	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-8	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-8	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-8	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-8	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-8	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-8	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-8	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-8	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-8	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-8	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-8	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-8	9/17/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
EP-8	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-8	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-8	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-8	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-8	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-8	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-8	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
EP-8	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-8	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-8	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-8	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-8	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-8	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-8	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-8	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-8	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-8	9/17/2020	Phenol	0.64	0.51	0.1	5761	ug/L
EP-8	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-8	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-8	12/22/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
EP-8	12/22/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
EP-8	12/22/2020	Anthracene	ND	11.3	0.204	1721	ug/L
EP-8	12/22/2020	Benzo(a)anthracene	*ND*	*11.3*	0.204	0.12	ug/L
EP-8	12/22/2020	Benzo(a)pyrene	*ND*	*11.3*	0.136	0.2	ug/L
EP-8	12/22/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.17	0.34	ug/L
EP-8	12/22/2020	Benzo(g,h,i)perylene	ND	11.3	0.26	NA	ug/L
EP-8	12/22/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
EP-8	12/22/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
EP-8	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
EP-8	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.66	55.64	ug/L
EP-8	12/22/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
EP-8	12/22/2020	Butylbenzylphthalate	ND	11.3	0.215	16	ug/L
EP-8	12/22/2020	Carbazole	ND	11.3	0.26	NA	ug/L
EP-8	12/22/2020	4-Chloroaniline	*ND*	*11.3*	3.85	0.37	ug/L
EP-8	12/22/2020	4-Chloro-3-Methylphenol	ND	11.3	4.3	NA	ug/L
EP-8	12/22/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
EP-8	12/22/2020	2-Chlorophenol	ND	11.3	2.49	91	ug/L
EP-8	12/22/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
EP-8	12/22/2020	1,3-Dichlorobenzene	ND	11.3	0.204	NA	ug/L
EP-8	12/22/2020	Chrysene	ND	11.3	0.215	34.3	ug/L
EP-8	12/22/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
EP-8	12/22/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
EP-8	12/22/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
EP-8	12/22/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.94	1.25	ug/L
EP-8	12/22/2020	2,4-Dichlorophenol	ND	11.3	3.39	45.3	ug/L
EP-8	12/22/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
EP-8	12/22/2020	2,4-Dimethylphenol	ND	11.3	3.96	354	ug/L
EP-8	12/22/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
EP-8	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
EP-8	12/22/2020	2,4-Dinitrophenol	ND	33.9	3.85	38.7	ug/L
EP-8	12/22/2020	2,4-Dinitrotoluene	ND	11.3	2.15	45.3	ug/L
EP-8	12/22/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.15	0.485	ug/L
EP-8	12/22/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
EP-8	12/22/2020	Fluoranthene	ND	11.3	0.204	802	ug/L
EP-8	12/22/2020	Fluorene	ND	11.3	0.204	288	ug/L
EP-8	12/22/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
EP-8	12/22/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.94	0.41	ug/L
EP-8	12/22/2020	Hexachloroethane	*ND*	*11.3*	4.75	3.28	ug/L
EP-8	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.249	0.343	ug/L
EP-8	12/22/2020	Isophorone	ND	11.3	0.158	781	ug/L
EP-8	12/22/2020	2-Methylphenol	ND	11.3	2.04	NA	ug/L
EP-8	12/22/2020	Naphthalene	ND	11.3	0.192	30	ug/L
EP-8	12/22/2020	2-Nitroaniline	ND	11.3	2.49	190	ug/L
EP-8	12/22/2020	3-Nitroaniline	ND	11.3	2.04	NA	ug/L
EP-8	12/22/2020	4-Nitroaniline	*ND*	*11.3*	1.7	3.8	ug/L
EP-8	12/22/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
EP-8	12/22/2020	2-Nitrophenol	ND	11.3	5.88	NA	ug/L
EP-8	12/22/2020	4-Nitrophenol	ND	11.3	2.38	NA	ug/L
EP-8	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.73	0.011	ug/L
EP-8	12/22/2020	N-Nitrosodiphenylamine	ND	11.3	0.204	122	ug/L
EP-8	12/22/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
EP-8	12/22/2020	Phenanthrene	ND	11.3	0.204	170	ug/L
EP-8	12/22/2020	Phenol	ND	11.3	2.94	5761	ug/L
EP-8	12/22/2020	Pyrene	ND	11.3	0.238	117	ug/L
EP-8	12/22/2020	2,4,5-Trichlorophenol	ND	11.3	4.19	1166	ug/L
EP-8	12/22/2020	2,4,6-Trichlorophenol	ND	11.3	3.96	11.9*	ug/L
EP-8	12/22/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
EP-8	12/22/2020	Aniline	ND	11.3	4.3	13	ug/L
EP-8	12/22/2020	Benzoic Acid	ND	33.9	8.26	75000	ug/L
EP-8	12/22/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
EP-8	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
EP-8	12/22/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.96	0.0049	ug/L
EP-8	12/22/2020	Pyridine	ND	11.3	3.62	20	ug/L
EP-8	12/22/2020	1,2,4-Trichlorobenzene	ND	11.3	0.204	70	ug/L
EP-8	12/22/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
EP-8	12/22/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
EP-9	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-9	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-9	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-9	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-9	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-9	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-9	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-9	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-9	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-9	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-9	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-9	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-9	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-9	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-9	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-9	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-9	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-9	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-9	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-9	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-9	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-9	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-9	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-9	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-9	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-9	5/29/2012	2-Methylphenol	70	10	2.8	NA	ug/L
EP-9	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-9	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-9	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-9	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-9	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-9	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-9	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-9	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-9	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-9	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-9	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-9	5/29/2012	Phenol	230	20	5	5761	ug/L
EP-9	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-9	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-9	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-9	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-9	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-9	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-9	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-9	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-9	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-9	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-9	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-9	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-9	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-9	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-9	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-9	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-9	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-9	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-9	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-9	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-9	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-9	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-9	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-9	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-9	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-9	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-9	5/29/2012	3,4-Methylphenol	120	10	2.9	NA	ug/L
EP-9	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-9	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-9	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-9	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-9	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-9	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-9	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-9	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-9	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-9	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-9	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-9	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-9	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-9	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-9	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-9	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-9	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-9	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-9	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-9	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-9	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-9	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-9	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-9	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-9	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-9	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-9	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-9	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-9	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-9	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-9	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-9	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-9	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-9	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-9	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-9	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-9	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-9	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-9	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-9	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-9	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-9	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-9	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-9	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-9	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-9	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-9	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-9	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-9	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-9	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-9	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-9	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-9	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-9	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-9	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-9	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-9	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-9	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-9	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-9	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-9	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-9	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-9	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-9	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-9	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-9	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-9	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-9	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-9	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-9	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-9	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-9	5/28/2013	Benzo(a)pyrene	*ND*	*30*	7.5	0.2	ug/L
EP-9	5/28/2013	2,4-Dinitrophenol	*ND*	*60*	9.6	38.7	ug/L
EP-9	5/28/2013	Dibenzo(a,h)anthracene	ND	30	12	NA	ug/L
EP-9	5/28/2013	Benzo(a)anthracene	*ND*	*30*	7.8	0.12	ug/L
EP-9	5/28/2013	4-Chloro-3-Methylphenol	ND	30	8	NA	ug/L
EP-9	5/28/2013	Aniline	*ND*	*30*	6.6	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	N-Nitrosodimethylamine	*ND*	*30*	14	0.0049	ug/L
EP-9	5/28/2013	Benzoic Acid	ND	60	17	75000	ug/L
EP-9	5/28/2013	Hexachloroethane	*ND*	*30*	8.7	3.28	ug/L
EP-9	5/28/2013	Hexachlorocyclopentadiene	*ND*	*30*	6.2	0.41	ug/L
EP-9	5/28/2013	Isophorone	ND	30	5.3	781	ug/L
EP-9	5/28/2013	Acenaphthene	ND	30	7.7	535	ug/L
EP-9	5/28/2013	Diethylphthalate	ND	30	9	14801	ug/L
EP-9	5/28/2013	Di-n-butylphthalate	ND	30	7.2	885	ug/L
EP-9	5/28/2013	Phenanthrene	ND	30	4.9	170	ug/L
EP-9	5/28/2013	Butylbenzylphthalate	*ND*	*30*	8.2	16	ug/L
EP-9	5/28/2013	N-Nitrosodiphenylamine	ND	30	7	122	ug/L
EP-9	5/28/2013	Fluorene	ND	30	7.4	288	ug/L
EP-9	5/28/2013	Carbazole	ND	30	6.9	NA	ug/L
EP-9	5/28/2013	Hexachlorobutadiene	*ND*	*30*	8.2	0.14	ug/L
EP-9	5/28/2013	Pentachlorophenol	*ND*	*60*	4.3	1	ug/L
EP-9	5/28/2013	2,4,6-Trichlorophenol	ND	30	7.9	11.9*	ug/L
EP-9	5/28/2013	2-Nitroaniline	ND	30	8.6	190	ug/L
EP-9	5/28/2013	2-Nitrophenol	ND	30	7	NA	ug/L
EP-9	5/28/2013	1-Methylnaphthalene	*ND*	*30*	6.7	11.38	ug/L
EP-9	5/28/2013	Naphthalene	ND	30	7.3	30	ug/L
EP-9	5/28/2013	2-Methylnaphthalene	ND	30	7.2	35.1	ug/L
EP-9	5/28/2013	2-Chloronaphthalene	ND	30	7.3	733	ug/L
EP-9	5/28/2013	3,3-Dichlorobenzidine	*ND*	*30*	11	1.25	ug/L
EP-9	5/28/2013	2-Methylphenol	ND	30	8.1	NA	ug/L
EP-9	5/28/2013	1,2-Dichlorobenzene	ND	30	9	600	ug/L
EP-9	5/28/2013	2-Chlorophenol	ND	30	8	91	ug/L
EP-9	5/28/2013	2,4,5-Trichlorophenol	ND	30	7.2	1166	ug/L
EP-9	5/28/2013	Nitrobenzene	*ND*	*30*	8.7	1.4	ug/L
EP-9	5/28/2013	3-Nitroaniline	ND	30	8	NA	ug/L
EP-9	5/28/2013	4-Nitroaniline	*ND*	*30*	7.6	3.8	ug/L
EP-9	5/28/2013	4-Nitrophenol	ND	30	6.4	NA	ug/L
EP-9	5/28/2013	Benzyl Alcohol	ND	30	7.4	2000	ug/L
EP-9	5/28/2013	4-Bromophenyl-phenylether	ND	30	7.5	NA	ug/L
EP-9	5/28/2013	Azobenzene	*ND*	*30*	6.9	0.12	ug/L
EP-9	5/28/2013	2,4-Dimethylphenol	ND	30	8.8	354	ug/L
EP-9	5/28/2013	1,4-Dichlorobenzene	ND	30	11	75	ug/L
EP-9	5/28/2013	4-Chloroaniline	*ND*	*30*	6.7	0.37	ug/L
EP-9	5/28/2013	Phenol	ND	30	6.6	5761	ug/L
EP-9	5/28/2013	Pyridine	*ND*	*30*	11	20	ug/L
EP-9	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*30*	12	0.137	ug/L
EP-9	5/28/2013	Bis(2-chloroethoxy)methane	ND	30	7.3	59	ug/L
EP-9	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	30	8.3	55.64	ug/L
EP-9	5/28/2013	Di-n-octylphthalate	ND	30	10	200	ug/L
EP-9	5/28/2013	Hexachlorobenzene	*ND*	*30*	8	0.0976	ug/L
EP-9	5/28/2013	Anthracene	ND	30	6.5	1721	ug/L
EP-9	5/28/2013	1,2,4-Trichlorobenzene	ND	30	6.7	70	ug/L
EP-9	5/28/2013	2,4-Dichlorophenol	*ND*	*60*	6.5	45.3	ug/L
EP-9	5/28/2013	2,4-Dinitrotoluene	ND	30	8.5	45.3	ug/L
EP-9	5/28/2013	Pyrene	ND	30	6.4	117	ug/L
EP-9	5/28/2013	Dimethylphthalate	ND	30	8.3	612	ug/L
EP-9	5/28/2013	Dibenzofuran	ND	30	7.7	NA	ug/L
EP-9	5/28/2013	Benzo(g,h,i)perylene	ND	30	8.3	NA	ug/L
EP-9	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*30*	9.5	0.343	ug/L
EP-9	5/28/2013	Benzo(b)fluoranthene	*ND*	*30*	8.8	0.34	ug/L
EP-9	5/28/2013	Fluoranthene	ND	30	7.2	802	ug/L
EP-9	5/28/2013	Benzo(k)fluoranthene	*ND*	*30*	7.8	3.43	ug/L
EP-9	5/28/2013	Acenaphthylene	ND	30	8.4	NA	ug/L
EP-9	5/28/2013	Chrysene	ND	30	8	34.3	ug/L
EP-9	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*60*	4.2	1.52	ug/L
EP-9	5/28/2013	1,3-Dichlorobenzene	ND	30	9.2	NA	ug/L
EP-9	5/28/2013	2,6-Dinitrotoluene	*ND*	*30*	8.5	0.485	ug/L
EP-9	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*30*	9.6	0.011	ug/L
EP-9	5/28/2013	4-Chlorophenyl-phenylether	ND	30	7.9	NA	ug/L
EP-9	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*30*	9.9	9.81	ug/L
EP-9	5/28/2013	3,4-Methylphenol	ND	30	11	NA	ug/L
EP-9	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-9	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-9	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-9	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-9	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-9	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-9	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-9	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-9	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-9	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-9	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-9	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-9	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-9	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-9	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-9	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-9	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-9	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-9	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-9	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-9	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-9	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-9	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-9	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-9	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-9	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-9	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-9	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-9	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-9	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-9	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-9	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-9	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-9	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-9	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-9	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-9	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-9	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-9	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-9	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-9	10/15/2013	Pyridine	ND	10	3.5	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-9	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-9	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-9	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-9	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-9	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-9	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-9	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-9	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-9	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-9	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-9	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-9	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-9	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-9	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-9	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-9	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-9	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-9	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-9	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-9	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-9	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-9	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-9	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-9	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-9	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-9	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-9	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-9	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-9	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-9	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-9	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-9	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-9	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-9	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-9	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-9	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-9	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-9	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-9	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-9	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-9	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-9	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-9	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-9	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-9	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-9	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-9	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-9	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-9	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-9	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-9	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-9	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-9	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-9	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-9	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-9	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-9	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-9	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-9	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-9	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-9	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-9	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-9	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-9	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-9	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-9	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-9	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-9	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-9	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-9	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-9	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-9	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-9	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-9	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-9	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-9	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-9	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-9	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-9	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-9	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-9	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-9	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-9	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-9	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	11/13/2014	Aniline	ND	10	2.4	13	ug/L
EP-9	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-9	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-9	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-9	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-9	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
EP-9	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-9	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-9	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-9	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-9	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-9	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
EP-9	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-9	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-9	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-9	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-9	11/13/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-9	11/13/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-9	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-9	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-9	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-9	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-9	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-9	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-9	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-9	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-9	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-9	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-9	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-9	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-9	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-9	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-9	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
EP-9	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
EP-9	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	11/13/2014	Bis(2-ethylhexyl)phthalate	18	10	3	55.64	ug/L
EP-9	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-9	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-9	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-9	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-9	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-9	11/13/2014	Pyrene	ND	10	4	117	ug/L
EP-9	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-9	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-9	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-9	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-9	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-9	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
EP-9	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-9	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-9	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-9	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-9	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-9	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-9	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-9	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-9	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-9	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-9	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-9	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-9	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-9	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-9	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-9	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-9	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-9	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-9	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-9	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-9	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-9	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-9	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-9	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-9	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-9	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-9	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-9	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-9	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-9	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-9	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-9	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-9	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-9	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-9	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-9	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-9	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-9	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-9	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-9	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-9	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-9	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-9	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-9	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-9	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-9	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-9	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-9	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-9	3/25/2015	Bis(2-ethylhexyl)phthalate	14	10	3.3	55.64	ug/L
EP-9	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-9	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-9	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-9	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-9	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-9	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-9	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-9	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-9	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-9	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-9	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-9	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-9	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-9	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-9	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-9	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-9	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-9	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-9	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-9	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-9	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-9	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-9	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-9	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-9	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-9	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-9	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-9	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-9	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-9	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-9	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-9	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-9	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-9	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-9	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-9	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-9	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-9	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-9	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-9	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-9	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-9	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-9	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-9	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-9	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-9	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-9	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-9	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-9	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-9	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-9	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-9	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-9	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-9	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-9	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-9	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-9	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-9	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-9	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-9	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-9	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-9	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-9	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-9	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-9	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-9	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-9	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-9	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-9	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-9	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-9	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-9	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-9	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-9	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-9	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-9	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-9	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-9	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-9	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-9	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-9	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-9	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-9	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-9	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-9	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-9	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-9	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-9	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-9	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-9	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-9	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-9	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-9	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-9	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-9	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-9	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-9	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-9	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-9	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-9	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-9	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-9	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-9	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-9	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-9	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-9	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-9	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-9	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-9	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-9	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-9	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-9	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-9	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-9	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-9	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	8/30/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
EP-9	8/30/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
EP-9	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-9	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-9	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-9	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-9	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-9	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-9	8/30/2016	Dimethylphthalate	4.2	10	2.4	612	ug/L
EP-9	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-9	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-9	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-9	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-9	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-9	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-9	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-9	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-9	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-9	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-9	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-9	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-9	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-9	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
EP-9	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
EP-9	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
EP-9	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	3/30/2017	Aniline	ND	10	3.1	13	ug/L
EP-9	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
EP-9	3/30/2017	Benzoic Acid	6.1	20	3.9	75000	ug/L
EP-9	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
EP-9	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
EP-9	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
EP-9	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
EP-9	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
EP-9	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
EP-9	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
EP-9	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
EP-9	3/30/2017	Fluorene	ND	10	4	288	ug/L
EP-9	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
EP-9	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
EP-9	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
EP-9	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
EP-9	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
EP-9	3/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
EP-9	3/30/2017	Naphthalene	ND	10	2.9	30	ug/L
EP-9	3/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
EP-9	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
EP-9	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
EP-9	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
EP-9	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
EP-9	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
EP-9	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
EP-9	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
EP-9	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
EP-9	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
EP-9	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
EP-9	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
EP-9	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
EP-9	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
EP-9	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-9	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
EP-9	3/30/2017	Phenol	ND	10	3.1	5761	ug/L
EP-9	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
EP-9	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
EP-9	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
EP-9	3/30/2017	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
EP-9	3/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
EP-9	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
EP-9	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
EP-9	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
EP-9	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
EP-9	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
EP-9	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
EP-9	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
EP-9	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
EP-9	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
EP-9	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
EP-9	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
EP-9	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
EP-9	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
EP-9	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
EP-9	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
EP-9	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
EP-9	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
EP-9	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
EP-9	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
EP-9	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
EP-9	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-9	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-9	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-9	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-9	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-9	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-9	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-9	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-9	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-9	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-9	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-9	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-9	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-9	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-9	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-9	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-9	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-9	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-9	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-9	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-9	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-9	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-9	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-9	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-9	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-9	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-9	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-9	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-9	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-9	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-9	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-9	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-9	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-9	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-9	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-9	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-9	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-9	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-9	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-9	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-9	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-9	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-9	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-9	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-9	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-9	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-9	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-9	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-9	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-9	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-9	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-9	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-9	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-9	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-9	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-9	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-9	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-9	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-9	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-9	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-9	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-9	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-9	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-9	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-9	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-9	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-9	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-9	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-9	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-9	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-9	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-9	2/23/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
EP-9	2/23/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
EP-9	2/23/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
EP-9	2/23/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	2/23/2018	Aniline	ND	10	3.1	13	ug/L
EP-9	2/23/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
EP-9	2/23/2018	Benzoic Acid	7.4	20	3.9	75000	ug/L
EP-9	2/23/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
EP-9	2/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	2/23/2018	Isophorone	ND	10	4.4	781	ug/L
EP-9	2/23/2018	Acenaphthene	ND	10	3.6	535	ug/L
EP-9	2/23/2018	Diethylphthalate	ND	10	4	14801	ug/L
EP-9	2/23/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
EP-9	2/23/2018	Phenanthrene	ND	10	4.3	170	ug/L
EP-9	2/23/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
EP-9	2/23/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
EP-9	2/23/2018	Fluorene	ND	10	4	288	ug/L
EP-9	2/23/2018	Carbazole	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
EP-9	2/23/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
EP-9	2/23/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
EP-9	2/23/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
EP-9	2/23/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
EP-9	2/23/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
EP-9	2/23/2018	Naphthalene	ND	10	2.9	30	ug/L
EP-9	2/23/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	2/23/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
EP-9	2/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
EP-9	2/23/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
EP-9	2/23/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
EP-9	2/23/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
EP-9	2/23/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
EP-9	2/23/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
EP-9	2/23/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
EP-9	2/23/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
EP-9	2/23/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
EP-9	2/23/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
EP-9	2/23/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
EP-9	2/23/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
EP-9	2/23/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-9	2/23/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
EP-9	2/23/2018	Phenol	ND	10	3.1	5761	ug/L
EP-9	2/23/2018	Pyridine	ND	10	2.3	20	ug/L
EP-9	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
EP-9	2/23/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
EP-9	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
EP-9	2/23/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
EP-9	2/23/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
EP-9	2/23/2018	Anthracene	ND	10	3.5	1721	ug/L
EP-9	2/23/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
EP-9	2/23/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
EP-9	2/23/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
EP-9	2/23/2018	Pyrene	ND	10	4.4	117	ug/L
EP-9	2/23/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
EP-9	2/23/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
EP-9	2/23/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
EP-9	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
EP-9	2/23/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
EP-9	2/23/2018	Fluoranthene	ND	10	4.3	802	ug/L
EP-9	2/23/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
EP-9	2/23/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
EP-9	2/23/2018	Chrysene	ND	10	3.8	34.3	ug/L
EP-9	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
EP-9	2/23/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	2/23/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
EP-9	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
EP-9	2/23/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
EP-9	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
EP-9	2/23/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
EP-9	9/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
EP-9	9/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
EP-9	9/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
EP-9	9/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Aniline	ND	10	6.2	13	ug/L
EP-9	9/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
EP-9	9/7/2018	Benzoic Acid	6.3	20	6.3	75000	ug/L
EP-9	9/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
EP-9	9/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
EP-9	9/7/2018	Isophorone	ND	10	6.2	781	ug/L
EP-9	9/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
EP-9	9/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
EP-9	9/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
EP-9	9/7/2018	Phenanthrene	ND	10	6	170	ug/L
EP-9	9/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
EP-9	9/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
EP-9	9/7/2018	Fluorene	ND	10	6.3	288	ug/L
EP-9	9/7/2018	Carbazole	ND	10	6.3	NA	ug/L
EP-9	9/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
EP-9	9/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
EP-9	9/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
EP-9	9/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
EP-9	9/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
EP-9	9/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
EP-9	9/7/2018	Naphthalene	ND	10	5	30	ug/L
EP-9	9/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
EP-9	9/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
EP-9	9/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
EP-9	9/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	9/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
EP-9	9/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
EP-9	9/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
EP-9	9/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
EP-9	9/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
EP-9	9/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
EP-9	9/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
EP-9	9/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
EP-9	9/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
EP-9	9/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
EP-9	9/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
EP-9	9/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
EP-9	9/7/2018	Phenol	ND	10	6	5761	ug/L
EP-9	9/7/2018	Pyridine	ND	10	5.4	20	ug/L
EP-9	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
EP-9	9/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
EP-9	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
EP-9	9/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
EP-9	9/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
EP-9	9/7/2018	Anthracene	ND	10	5.7	1721	ug/L
EP-9	9/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
EP-9	9/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
EP-9	9/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
EP-9	9/7/2018	Pyrene	ND	10	6.5	117	ug/L
EP-9	9/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
EP-9	9/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
EP-9	9/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
EP-9	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
EP-9	9/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
EP-9	9/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
EP-9	9/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
EP-9	9/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
EP-9	9/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
EP-9	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
EP-9	9/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
EP-9	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
EP-9	9/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
EP-9	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
EP-9	9/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
EP-9	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-9	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-9	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-9	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-9	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-9	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-9	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-9	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-9	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-9	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-9	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-9	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-9	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-9	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-9	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-9	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-9	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-9	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-9	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-9	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-9	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-9	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-9	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-9	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-9	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-9	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-9	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-9	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-9	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-9	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-9	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-9	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-9	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-9	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-9	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-9	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-9	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-9	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-9	4/29/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-9	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-9	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-9	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-9	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-9	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-9	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-9	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-9	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-9	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-9	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-9	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-9	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-9	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-9	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-9	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-9	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-9	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-9	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-9	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-9	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-9	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-9	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-9	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-9	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-9	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-9	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-9	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-9	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-9	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-9	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-9	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-9	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-9	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-9	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-9	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-9	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-9	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-9	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-9	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-9	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-9	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-9	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-9	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-9	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-9	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-9	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-9	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-9	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-9	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-9	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-9	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-9	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-9	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-9	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-9	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-9	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-9	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-9	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-9	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-9	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-9	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-9	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-9	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-9	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-9	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-9	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-9	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-9	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-9	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-9	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-9	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-9	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-9	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-9	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-9	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-9	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-9	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-9	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-9	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-9	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-9	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-9	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-9	11/20/2019	Phenol	0.62	0.5	0.5	5761	ug/L
EP-9	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-9	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-9	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-9	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-9	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-9	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-9	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-9	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-9	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-9	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-9	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-9	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-9	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-9	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-9	9/17/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
EP-9	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-9	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-9	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-9	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-9	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-9	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-9	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-9	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-9	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-9	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-9	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-9	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-9	9/17/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
EP-9	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-9	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-9	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-9	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-9	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-9	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-9	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-9	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-9	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-9	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-9	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-9	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-9	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-9	9/17/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
EP-9	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-9	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-9	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-9	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-9	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-9	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-9	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
EP-9	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-9	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-9	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-9	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-9	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-9	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-9	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-9	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-9	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-9	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-9	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-9	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-9	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-9	12/21/2020	Benzo(a)anthracene	*ND*	*9.75*	0.176	0.12	ug/L
EP-9	12/21/2020	Benzo(a)pyrene	*ND*	*9.75*	0.117	0.2	ug/L
EP-9	12/21/2020	Benzo(b)fluoranthene	*ND*	*9.75*	0.146	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	Benzo(g,h,i)perylene	ND	9.75	0.224	NA	ug/L
EP-9	12/21/2020	Benzo(k)fluoranthene	*ND*	*9.75*	0.156	3.43	ug/L
EP-9	12/21/2020	Bis(2-chloroethoxy)methane	ND	9.75	0.156	59	ug/L
EP-9	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*9.75*	2.63	0.137	ug/L
EP-9	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	9.75	4.88	55.64	ug/L
EP-9	12/21/2020	Butylbenzylphthalate	ND	9.75	0.185	16	ug/L
EP-9	12/21/2020	Carbazole	ND	9.75	0.224	NA	ug/L
EP-9	12/21/2020	4-Chloroaniline	*ND*	*9.75*	3.32	0.37	ug/L
EP-9	12/21/2020	4-Chloro-3-Methylphenol	ND	9.75	3.71	NA	ug/L
EP-9	12/21/2020	2-Chlorophenol	ND	9.75	2.15	91	ug/L
EP-9	12/21/2020	Chrysene	ND	9.75	0.185	34.3	ug/L
EP-9	12/21/2020	Dibenzo(a,h)anthracene	ND	9.75	0.234	NA	ug/L
EP-9	12/21/2020	1,4-Dichlorobenzene	ND	9.75	0.156	75	ug/L
EP-9	12/21/2020	3,3-Dichlorobenzidine	*ND*	*9.75*	2.54	1.25	ug/L
EP-9	12/21/2020	Diethylphthalate	ND	9.75	0.234	14801	ug/L
EP-9	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.75*	1.56	1.52	ug/L
EP-9	12/21/2020	2,4-Dinitrophenol	ND	29.3	3.32	38.7	ug/L
EP-9	12/21/2020	Fluorene	ND	9.75	0.176	288	ug/L
EP-9	12/21/2020	Hexachloroethane	*ND*	*9.75*	4.1	3.28	ug/L
EP-9	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.75*	0.215	0.343	ug/L
EP-9	12/21/2020	Isophorone	ND	9.75	0.137	781	ug/L
EP-9	12/21/2020	Naphthalene	ND	9.75	0.166	30	ug/L
EP-9	12/21/2020	2-Nitroaniline	ND	9.75	2.15	190	ug/L
EP-9	12/21/2020	3-Nitroaniline	ND	9.75	1.76	NA	ug/L
EP-9	12/21/2020	4-Nitroaniline	*ND*	*9.75*	1.46	3.8	ug/L
EP-9	12/21/2020	4-Nitrophenol	ND	9.75	2.05	NA	ug/L
EP-9	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*9.75*	3.22	0.011	ug/L
EP-9	12/21/2020	N-Nitrosodiphenylamine	ND	9.75	0.176	122	ug/L
EP-9	12/21/2020	Pentachlorophenol	*ND*	*19.5*	1.37	1	ug/L
EP-9	12/21/2020	Phenanthrene	ND	9.75	0.176	170	ug/L
EP-9	12/21/2020	Phenol	ND	9.75	2.54	5761	ug/L
EP-9	12/21/2020	Pyrene	ND	9.75	0.205	117	ug/L
EP-9	12/21/2020	Benzoic Acid	ND	29.3	7.12	75000	ug/L
EP-9	12/21/2020	Benzyl Alcohol	ND	9.75	1.95	2000	ug/L
EP-9	12/21/2020	Bis(2-chloroisopropyl)ether	ND	9.75	0.156	9.81	ug/L
EP-9	12/21/2020	N-Nitrosodimethylamine	*ND*	*9.75*	3.41	0.0049	ug/L
EP-9	12/21/2020	Pyridine	ND	9.75	3.12	20	ug/L
EP-9	12/21/2020	Azobenzene	*ND*	*9.75*	0.975	0.12	ug/L
EP-9	12/21/2020	Acenaphthene	ND	9.75	0.156	535	ug/L
EP-9	12/21/2020	Acenaphthylene	ND	9.75	0.166	NA	ug/L
EP-9	12/21/2020	Anthracene	ND	9.75	0.176	1721	ug/L
EP-9	12/21/2020	4-Bromophenyl-phenylether	ND	9.75	0.195	NA	ug/L
EP-9	12/21/2020	2-Chloronaphthalene	ND	9.75	0.137	733	ug/L
EP-9	12/21/2020	4-Chlorophenyl-phenylether	ND	9.75	1.95	NA	ug/L
EP-9	12/21/2020	1,3-Dichlorobenzene	ND	9.75	0.176	NA	ug/L
EP-9	12/21/2020	Dibenzofuran	ND	9.75	0.166	NA	ug/L
EP-9	12/21/2020	2,4-Dichlorophenol	ND	9.75	2.93	45.3	ug/L
EP-9	12/21/2020	2,4-Dimethylphenol	ND	9.75	3.41	354	ug/L
EP-9	12/21/2020	Di-n-butylphthalate	ND	9.75	2.63	885	ug/L
EP-9	12/21/2020	2,4-Dinitrotoluene	ND	9.75	1.85	45.3	ug/L
EP-9	12/21/2020	2,6-Dinitrotoluene	*ND*	*9.75*	1.85	0.485	ug/L
EP-9	12/21/2020	Di-n-octylphthalate	ND	9.75	0.166	200	ug/L
EP-9	12/21/2020	Fluoranthene	ND	9.75	0.176	802	ug/L
EP-9	12/21/2020	Hexachlorobenzene	*ND*	*9.75*	0.166	0.0976	ug/L
EP-9	12/21/2020	Hexachlorocyclopentadiene	*ND*	*19.5*	2.54	0.41	ug/L
EP-9	12/21/2020	2-Methylphenol	ND	9.75	1.76	NA	ug/L
EP-9	12/21/2020	Nitrobenzene	*ND*	*9.75*	0.127	1.4	ug/L
EP-9	12/21/2020	2-Nitrophenol	ND	9.75	5.07	NA	ug/L
EP-9	12/21/2020	2,4,5-Trichlorophenol	ND	9.75	3.61	1166	ug/L
EP-9	12/21/2020	2,4,6-Trichlorophenol	ND	9.75	3.41	11.9*	ug/L
EP-9	12/21/2020	Dimethylphthalate	ND	9.75	0.166	612	ug/L
EP-9	12/21/2020	Aniline	ND	9.75	3.71	13	ug/L
EP-9	12/21/2020	1,2,4-Trichlorobenzene	ND	9.75	0.176	70	ug/L
EP-9	12/21/2020	1,2-Dichlorobenzene	ND	9.75	0.166	600	ug/L
KA-3	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	3/20/2012	Aniline	ND	10	2	13	ug/L
KA-3	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	3/20/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	3/20/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	3/20/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	3/20/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	6/12/2012	Aniline	ND	10	2	13	ug/L
KA-3	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	6/12/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
KA-3	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	8/21/2012	Aniline	ND	10	2	13	ug/L
KA-3	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	12/5/2012	Aniline	ND	10	2	13	ug/L
KA-3	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
KA-3	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
KA-3	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
KA-3	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
KA-3	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	3/10/2014	Pyrene	ND	10	4	117	ug/L
KA-3	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	6/5/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
KA-3	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	6/5/2014	Pyrene	ND	10	4	117	ug/L
KA-3	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	9/11/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
KA-3	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
KA-3	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	9/11/2014	Pyrene	ND	10	4	117	ug/L
KA-3	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	11/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	11/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	11/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	11/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	11/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	11/11/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	11/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	11/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	11/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	11/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	11/11/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	11/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	11/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	11/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	11/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	11/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	11/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	11/11/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	11/11/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	11/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	11/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	11/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	11/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	11/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	11/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	11/11/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	11/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	11/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	11/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	11/11/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	11/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	11/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	11/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	11/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	11/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	11/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	11/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	11/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	11/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	11/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	11/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	11/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	11/11/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	11/11/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	11/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	11/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	11/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	11/11/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	11/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	11/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	11/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	11/11/2014	Pyrene	ND	10	4	117	ug/L
KA-3	11/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	11/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	11/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	11/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	11/11/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	11/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	11/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	11/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	11/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	11/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	11/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	11/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
KA-3	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
KA-3	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
KA-3	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
KA-3	3/10/2015	Aniline	ND	10	4.2	13	ug/L
KA-3	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
KA-3	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
KA-3	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
KA-3	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
KA-3	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
KA-3	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
KA-3	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
KA-3	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
KA-3	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
KA-3	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
KA-3	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
KA-3	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
KA-3	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
KA-3	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
KA-3	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
KA-3	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
KA-3	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
KA-3	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
KA-3	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
KA-3	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
KA-3	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
KA-3	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
KA-3	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
KA-3	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
KA-3	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
KA-3	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
KA-3	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
KA-3	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
KA-3	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
KA-3	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
KA-3	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
KA-3	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
KA-3	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
KA-3	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
KA-3	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
KA-3	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
KA-3	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
KA-3	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
KA-3	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
KA-3	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
KA-3	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
KA-3	3/10/2015	Anthracene	ND	10	4	1721	ug/L
KA-3	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
KA-3	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
KA-3	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
KA-3	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
KA-3	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
KA-3	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
KA-3	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
KA-3	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
KA-3	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
KA-3	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
KA-3	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
KA-3	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
KA-3	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
KA-3	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
KA-3	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
KA-3	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
KA-3	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
KA-3	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
KA-3	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
KA-3	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Aniline	ND	10	1.5	13	ug/L
KA-3	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
KA-3	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
KA-3	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
KA-3	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
KA-3	6/2/2015	Isophorone	ND	10	2	781	ug/L
KA-3	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
KA-3	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
KA-3	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
KA-3	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
KA-3	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
KA-3	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
KA-3	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
KA-3	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
KA-3	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
KA-3	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
KA-3	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
KA-3	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
KA-3	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
KA-3	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
KA-3	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
KA-3	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
KA-3	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
KA-3	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
KA-3	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
KA-3	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
KA-3	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
KA-3	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
KA-3	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
KA-3	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
KA-3	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
KA-3	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
KA-3	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
KA-3	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
KA-3	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
KA-3	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
KA-3	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
KA-3	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
KA-3	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
KA-3	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
KA-3	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
KA-3	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
KA-3	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
KA-3	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
KA-3	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
KA-3	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
KA-3	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
KA-3	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
KA-3	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
KA-3	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
KA-3	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
KA-3	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
KA-3	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
KA-3	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
KA-3	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
KA-3	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
KA-3	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
KA-3	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
KA-3	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
KA-3	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
KA-3	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
KA-3	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
KA-3	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Aniline	ND	10	1.5	13	ug/L
KA-3	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
KA-3	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
KA-3	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
KA-3	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
KA-3	8/11/2015	Isophorone	ND	10	2	781	ug/L
KA-3	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
KA-3	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
KA-3	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
KA-3	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
KA-3	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
KA-3	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
KA-3	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
KA-3	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
KA-3	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
KA-3	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
KA-3	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
KA-3	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
KA-3	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
KA-3	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
KA-3	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
KA-3	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
KA-3	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
KA-3	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
KA-3	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
KA-3	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
KA-3	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
KA-3	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
KA-3	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
KA-3	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
KA-3	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
KA-3	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
KA-3	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
KA-3	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
KA-3	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
KA-3	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
KA-3	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
KA-3	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
KA-3	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
KA-3	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
KA-3	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
KA-3	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
KA-3	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
KA-3	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
KA-3	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
KA-3	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
KA-3	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
KA-3	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
KA-3	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
KA-3	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
KA-3	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
KA-3	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
KA-3	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
KA-3	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
KA-3	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
KA-3	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
KA-3	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
KA-3	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
KA-3	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
KA-3	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Aniline	ND	10	2.4	13	ug/L
KA-3	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
KA-3	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
KA-3	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
KA-3	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
KA-3	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
KA-3	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
KA-3	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
KA-3	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
KA-3	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
KA-3	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
KA-3	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
KA-3	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
KA-3	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
KA-3	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
KA-3	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
KA-3	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
KA-3	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
KA-3	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
KA-3	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
KA-3	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
KA-3	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
KA-3	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
KA-3	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
KA-3	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
KA-3	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
KA-3	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
KA-3	2/21/2017	Phenol	ND	10	2	5761	ug/L
KA-3	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
KA-3	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
KA-3	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	2/21/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
KA-3	2/21/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
KA-3	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
KA-3	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
KA-3	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
KA-3	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
KA-3	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
KA-3	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
KA-3	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
KA-3	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
KA-3	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
KA-3	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
KA-3	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
KA-3	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
KA-3	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
KA-3	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
KA-3	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
KA-3	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
KA-3	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
KA-3	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
KA-3	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
KA-3	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
KA-3	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
KA-3	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
KA-3	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
KA-3	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
KA-3	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
KA-3	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/1/2017	Aniline	ND	10	3.1	13	ug/L
KA-3	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
KA-3	6/1/2017	Benzoic Acid	9.6	20	3.9	75000	ug/L
KA-3	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
KA-3	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
KA-3	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
KA-3	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
KA-3	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
KA-3	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
KA-3	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
KA-3	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
KA-3	6/1/2017	Fluorene	ND	10	4	288	ug/L
KA-3	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
KA-3	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
KA-3	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
KA-3	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
KA-3	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
KA-3	6/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
KA-3	6/1/2017	Naphthalene	ND	10	2.9	30	ug/L
KA-3	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
KA-3	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
KA-3	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
KA-3	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
KA-3	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
KA-3	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
KA-3	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
KA-3	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
KA-3	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
KA-3	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
KA-3	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
KA-3	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
KA-3	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
KA-3	6/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
KA-3	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
KA-3	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
KA-3	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
KA-3	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
KA-3	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
KA-3	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
KA-3	6/1/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
KA-3	6/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
KA-3	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
KA-3	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
KA-3	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
KA-3	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
KA-3	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
KA-3	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
KA-3	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
KA-3	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
KA-3	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
KA-3	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
KA-3	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
KA-3	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
KA-3	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
KA-3	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
KA-3	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
KA-3	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
KA-3	9/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
KA-3	9/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
KA-3	9/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
KA-3	9/5/2017	Aniline	ND	10	3.1	13	ug/L
KA-3	9/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
KA-3	9/5/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
KA-3	9/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
KA-3	9/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	9/5/2017	Isophorone	ND	10	4.4	781	ug/L
KA-3	9/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
KA-3	9/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
KA-3	9/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
KA-3	9/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
KA-3	9/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
KA-3	9/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
KA-3	9/5/2017	Fluorene	ND	10	4	288	ug/L
KA-3	9/5/2017	Carbazole	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
KA-3	9/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
KA-3	9/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
KA-3	9/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
KA-3	9/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
KA-3	9/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
KA-3	9/5/2017	Naphthalene	ND	10	2.9	30	ug/L
KA-3	9/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
KA-3	9/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
KA-3	9/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
KA-3	9/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
KA-3	9/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
KA-3	9/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
KA-3	9/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
KA-3	9/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
KA-3	9/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
KA-3	9/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
KA-3	9/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
KA-3	9/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
KA-3	9/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
KA-3	9/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
KA-3	9/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
KA-3	9/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
KA-3	9/5/2017	Phenol	ND	10	3.1	5761	ug/L
KA-3	9/5/2017	Pyridine	ND	10	2.3	20	ug/L
KA-3	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
KA-3	9/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
KA-3	9/5/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
KA-3	9/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
KA-3	9/5/2017	Anthracene	ND	10	3.5	1721	ug/L
KA-3	9/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
KA-3	9/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
KA-3	9/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
KA-3	9/5/2017	Pyrene	ND	10	4.4	117	ug/L
KA-3	9/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
KA-3	9/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	9/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
KA-3	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
KA-3	9/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
KA-3	9/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
KA-3	9/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
KA-3	9/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
KA-3	9/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
KA-3	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
KA-3	9/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
KA-3	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
KA-3	9/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
KA-3	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
KA-3	9/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
KA-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
KA-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
KA-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
KA-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
KA-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
KA-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
KA-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
KA-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
KA-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
KA-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
KA-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
KA-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
KA-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
KA-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
KA-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
KA-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
KA-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
KA-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
KA-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
KA-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
KA-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
KA-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
KA-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
KA-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
KA-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
KA-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
KA-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
KA-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
KA-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
KA-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
KA-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
KA-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
KA-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
KA-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
KA-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
KA-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
KA-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
KA-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
KA-3	4/9/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
KA-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
KA-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
KA-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
KA-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
KA-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
KA-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
KA-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
KA-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
KA-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
KA-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
KA-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
KA-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
KA-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
KA-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
KA-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
KA-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
KA-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
KA-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
KA-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
KA-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
KA-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
KA-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
KA-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
KA-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
KA-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
KA-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
KA-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
KA-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
KA-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
KA-3	4/9/2019	Phenol	11	10	5.977352	5761	ug/L
KA-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
KA-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
KA-3	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
KA-3	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
KA-3	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
KA-3	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
KA-3	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
KA-3	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
KA-3	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
KA-3	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
KA-3	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
KA-3	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
KA-3	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
KA-3	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
KA-3	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
KA-3	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
KA-3	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
KA-3	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
KA-3	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
KA-3	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
KA-3	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
KA-3	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
KA-3	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
KA-3	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
KA-3	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
KA-3	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
KA-3	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
KA-3	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
KA-3	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
KA-3	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
KA-3	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
KA-3	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
KA-3	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
KA-3	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
KA-3	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
KA-3	5/28/2019	1-Methylnaphthalene	3.5	10	3.069076	11.38	ug/L
KA-3	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
KA-3	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
KA-3	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
KA-3	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
KA-3	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
KA-3	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
KA-3	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
KA-3	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
KA-3	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
KA-3	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
KA-3	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
KA-3	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
KA-3	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
KA-3	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
KA-3	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
KA-3	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
KA-3	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
KA-3	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
KA-3	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
KA-3	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
KA-3	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
KA-3	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
KA-3	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
KA-3	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
KA-3	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
KA-3	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
KA-3	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
KA-3	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
KA-3	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
KA-3	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
KA-3	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
KA-3	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
KA-3	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
KA-3	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
KA-3	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
KA-3	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
KA-3	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
KA-3	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
KA-3	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
KA-3	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
KA-3	8/22/2019	1-Methylnaphthalene	**14**	10	3.069076	11.38	ug/L
KA-3	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
KA-3	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
KA-3	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
KA-3	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
KA-3	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
KA-3	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
KA-3	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
KA-3	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
KA-3	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
KA-3	8/22/2019	2-Methylnaphthalene	7.1	10	3.018863	35.1	ug/L
KA-3	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
KA-3	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
KA-3	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
KA-3	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
KA-3	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
KA-3	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
KA-3	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
KA-3	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
KA-3	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
KA-3	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
KA-3	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
KA-3	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
KA-3	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
KA-3	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
KA-3	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
KA-3	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
KA-3	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
KA-3	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
KA-3	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
KA-3	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
KA-3	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
KA-3	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
KA-3	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
KA-3	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
KA-3	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
KA-3	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
KA-3	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
KA-3	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
KA-3	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
KA-3	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
KA-3	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
KA-3	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
KA-3	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
KA-3	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
KA-3	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
KA-3	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
KA-3	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
KA-3	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
KA-3	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
KA-3	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
KA-3	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
KA-3	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
KA-3	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
KA-3	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
KA-3	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
KA-3	8/22/2019	Naphthalene	12	10	4.12221	30	ug/L
KA-3	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
KA-3	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
KA-3	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
KA-3	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
KA-3	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
KA-3	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
KA-3	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
KA-3	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
KA-3	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	8.7	3	1.234	11.38	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	1.6	3	1.229	35.1	ug/L
KA-3	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
KA-3	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
KA-3	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
KA-3	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
KA-3	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
KA-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
KA-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
KA-3	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
KA-3	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
KA-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
KA-3	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
KA-3	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
KA-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
KA-3	10/21/2019	Naphthalene	5.7	3	1.159	30	ug/L
KA-3	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
KA-3	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
KA-3	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
KA-3	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
KA-3	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
KA-3	10/21/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	2.2	0.5	0.5	11.38	ug/L
KA-3	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
KA-3	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
KA-3	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
KA-3	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
KA-3	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
KA-3	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
KA-3	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
KA-3	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
KA-3	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	1	0.5	0.5	35.1	ug/L
KA-3	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
KA-3	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
KA-3	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
KA-3	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
KA-3	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Acenaphthene	0.78	0.5	0.5	535	ug/L
KA-3	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
KA-3	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
KA-3	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
KA-3	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
KA-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
KA-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
KA-3	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
KA-3	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
KA-3	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
KA-3	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
KA-3	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
KA-3	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
KA-3	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
KA-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
KA-3	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
KA-3	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
KA-3	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
KA-3	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
KA-3	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
KA-3	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
KA-3	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
KA-3	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
KA-3	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
KA-3	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
KA-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
KA-3	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
KA-3	10/21/2019	Naphthalene	2	0.5	0.5	30	ug/L
KA-3	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
KA-3	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
KA-3	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
KA-3	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
KA-3	10/21/2019	Phenol	1.1	0.5	0.5	5761	ug/L
KA-3	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
KA-3	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
KA-3	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
KA-3	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
KA-3	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
KA-3	3/4/2020	1,4-Dioxane		*5*	1	4.59	ug/L
KA-3	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
KA-3	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
KA-3	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
KA-3	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
KA-3	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
KA-3	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
KA-3	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
KA-3	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
KA-3	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
KA-3	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
KA-3	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
KA-3	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
KA-3	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
KA-3	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
KA-3	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
KA-3	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
KA-3	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
KA-3	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
KA-3	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
KA-3	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
KA-3	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
KA-3	3/4/2020	Benzoic Acid	4.4	2.5	0.5	75000	ug/L
KA-3	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
KA-3	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
KA-3	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
KA-3	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
KA-3	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
KA-3	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
KA-3	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
KA-3	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
KA-3	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
KA-3	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
KA-3	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
KA-3	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
KA-3	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
KA-3	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
KA-3	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
KA-3	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
KA-3	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
KA-3	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
KA-3	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
KA-3	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
KA-3	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
KA-3	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
KA-3	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
KA-3	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
KA-3	3/4/2020	Phenol	22	2.5	0.5	5761	ug/L
KA-3	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
KA-3	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
KA-3	9/22/2020	1,2,4-Trichlorobenzene	ND	0.56	0.11	70	ug/L
KA-3	9/22/2020	1,2-Dichlorobenzene	ND	0.56	0.11	600	ug/L
KA-3	9/22/2020	1,3-Dichlorobenzene	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	1,4-Dichlorobenzene	ND	0.56	0.11	75	ug/L
KA-3	9/22/2020	1,4-Dioxane	2.8	0.56	0.11	4.59	ug/L
KA-3	9/22/2020	1-Methylnaphthalene	**24**	0.56	0.11	11.38	ug/L
KA-3	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.56	0.11	240	ug/L
KA-3	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	2,4,5-Trichlorophenol	ND	0.56	0.11	1166	ug/L
KA-3	9/22/2020	2,4,6-Trichlorophenol	ND	0.56	0.11	11.9*	ug/L
KA-3	9/22/2020	2,4-Dichlorophenol	ND	0.56	0.11	45.3	ug/L
KA-3	9/22/2020	2,4-Dimethylphenol	ND	0.56	0.11	354	ug/L
KA-3	9/22/2020	2,4-Dinitrophenol	ND	0.56	0.11	38.7	ug/L
KA-3	9/22/2020	2,4-Dinitrotoluene	ND	0.56	0.11	45.3	ug/L
KA-3	9/22/2020	2,6-Dinitrotoluene	ND	0.22	0.11	0.485	ug/L
KA-3	9/22/2020	2-Chloronaphthalene	ND	0.56	0.11	733	ug/L
KA-3	9/22/2020	2-Chlorophenol	ND	0.56	0.11	91	ug/L
KA-3	9/22/2020	2-Methylnaphthalene	10	0.56	0.11	35.1	ug/L
KA-3	9/22/2020	2-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	2-Nitroaniline	ND	0.56	0.11	190	ug/L
KA-3	9/22/2020	2-Nitrophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	3,4-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	3,3-Dichlorobenzidine	ND	0.56	0.11	1.25	ug/L
KA-3	9/22/2020	3-Nitroaniline	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.56	0.11	1.52	ug/L
KA-3	9/22/2020	4-Bromophenyl-phenylether	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Chloro-3-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Chloroaniline	*ND*	*0.56*	0.11	0.37	ug/L
KA-3	9/22/2020	4-Chlorophenyl-phenylether	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Nitroaniline	ND	0.56	0.11	3.8	ug/L
KA-3	9/22/2020	4-Nitrophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Acenaphthene	2.3	0.56	0.11	535	ug/L
KA-3	9/22/2020	Acenaphthylene	0.45	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Aniline	ND	0.56	0.11	13	ug/L
KA-3	9/22/2020	Anthracene	0.13	0.56	0.11	1721	ug/L
KA-3	9/22/2020	Benzo(a)anthracene	ND	0.11	0.056	0.12	ug/L
KA-3	9/22/2020	Benzidine	*ND*	*0.56*	0.28	0.0011	ug/L
KA-3	9/22/2020	Benzo(a)pyrene	ND	0.11	0.056	0.2	ug/L
KA-3	9/22/2020	Benzo(b)fluoranthene	ND	0.11	0.056	0.34	ug/L
KA-3	9/22/2020	Benzo(g,h,i)perylene	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Benzo(k)fluoranthene	ND	0.56	0.11	3.43	ug/L
KA-3	9/22/2020	Benzoic Acid	ND	0.56	0.22	75000	ug/L
KA-3	9/22/2020	Benzyl Alcohol	0.93	0.56	0.22	2000	ug/L
KA-3	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.56	0.11	59	ug/L
KA-3	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.56*	0.11	0.137	ug/L
KA-3	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.56	0.11	9.81	ug/L
KA-3	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.56	0.22	55.64	ug/L
KA-3	9/22/2020	Butylbenzylphthalate	ND	0.56	0.22	16	ug/L
KA-3	9/22/2020	Carbazole	0.34	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Chrysene	ND	0.56	0.11	34.3	ug/L
KA-3	9/22/2020	Di-n-butylphthalate	ND	0.56	0.22	885	ug/L
KA-3	9/22/2020	Di-n-octylphthalate	ND	0.56	0.22	200	ug/L
KA-3	9/22/2020	Dibenzo(a,h)anthracene	ND	0.034	0.022	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/22/2020	Dibenzofuran	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Diethylphthalate	ND	0.56	0.22	14801	ug/L
KA-3	9/22/2020	Dimethylphthalate	ND	0.56	0.22	612	ug/L
KA-3	9/22/2020	Fluoranthene	ND	0.56	0.11	802	ug/L
KA-3	9/22/2020	Fluorene	2.5	0.56	0.11	288	ug/L
KA-3	9/22/2020	Hexachlorobenzene	*ND*	*0.56*	0.11	0.0976	ug/L
KA-3	9/22/2020	Hexachlorobutadiene	*ND*	*0.56*	0.11	0.14	ug/L
KA-3	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.56*	0.28	0.41	ug/L
KA-3	9/22/2020	Hexachloroethane	ND	0.56	0.11	3.28	ug/L
KA-3	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.22	0.11	0.343	ug/L
KA-3	9/22/2020	Isophorone	ND	0.56	0.11	781	ug/L
KA-3	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.56*	0.11	0.011	ug/L
KA-3	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.56*	0.11	0.0049	ug/L
KA-3	9/22/2020	N-Nitrosodiphenylamine	ND	0.56	0.11	122	ug/L
KA-3	9/22/2020	Naphthalene	13	0.56	0.11	30	ug/L
KA-3	9/22/2020	Nitrobenzene	ND	0.56	0.11	1.4	ug/L
KA-3	9/22/2020	Pentachlorophenol	ND	0.56	0.22	1	ug/L
KA-3	9/22/2020	Phenanthrene	0.7	0.56	0.11	170	ug/L
KA-3	9/22/2020	Phenol	28	0.56	0.11	5761	ug/L
KA-3	9/22/2020	Pyrene	0.15	0.56	0.11	117	ug/L
KA-3	9/22/2020	Pyridine	ND	0.56	0.22	20	ug/L
KA-3	12/17/2020	Acenaphthene	ND	11	0.175	535	ug/L
KA-3	12/17/2020	Acenaphthylene	ND	11	0.186	NA	ug/L
KA-3	12/17/2020	Anthracene	ND	11	0.197	1721	ug/L
KA-3	12/17/2020	Benzo(a)anthracene	*ND*	*11*	0.197	0.12	ug/L
KA-3	12/17/2020	Benzo(a)pyrene	*ND*	*11*	0.132	0.2	ug/L
KA-3	12/17/2020	Benzo(b)fluoranthene	*ND*	*11*	0.164	0.34	ug/L
KA-3	12/17/2020	Benzo(g,h,i)perylene	ND	11	0.252	NA	ug/L
KA-3	12/17/2020	Benzo(k)fluoranthene	*ND*	*11*	0.175	3.43	ug/L
KA-3	12/17/2020	Bis(2-chloroethoxy)methane	ND	11	0.175	59	ug/L
KA-3	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11*	2.96	0.137	ug/L
KA-3	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11	5.48	55.64	ug/L
KA-3	12/17/2020	4-Bromophenyl-phenylether	ND	11	0.219	NA	ug/L
KA-3	12/17/2020	Butylbenzylphthalate	ND	11	0.208	16	ug/L
KA-3	12/17/2020	Carbazole	ND	11	0.252	NA	ug/L
KA-3	12/17/2020	4-Chloroaniline	*ND*	*11*	3.73	0.37	ug/L
KA-3	12/17/2020	4-Chloro-3-Methylphenol	ND	11	4.17	NA	ug/L
KA-3	12/17/2020	2-Chloronaphthalene	ND	11	0.154	733	ug/L
KA-3	12/17/2020	2-Chlorophenol	ND	11	2.41	91	ug/L
KA-3	12/17/2020	4-Chlorophenyl-phenylether	ND	11	2.19	NA	ug/L
KA-3	12/17/2020	1,3-Dichlorobenzene	ND	11	0.197	NA	ug/L
KA-3	12/17/2020	Chrysene	ND	11	0.208	34.3	ug/L
KA-3	12/17/2020	Dibenzo(a,h)anthracene	ND	11	0.263	NA	ug/L
KA-3	12/17/2020	1,4-Dichlorobenzene	ND	11	0.175	75	ug/L
KA-3	12/17/2020	Dibenzofuran	ND	11	0.186	NA	ug/L
KA-3	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11*	2.85	1.25	ug/L
KA-3	12/17/2020	2,4-Dichlorophenol	ND	11	3.29	45.3	ug/L
KA-3	12/17/2020	Diethylphthalate	ND	11	0.263	14801	ug/L
KA-3	12/17/2020	2,4-Dimethylphenol	ND	11	3.84	354	ug/L
KA-3	12/17/2020	Di-n-butylphthalate	ND	11	2.96	885	ug/L
KA-3	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11*	1.75	1.52	ug/L
KA-3	12/17/2020	2,4-Dinitrophenol	ND	32.9	3.73	38.7	ug/L
KA-3	12/17/2020	2,4-Dinitrotoluene	ND	11	2.08	45.3	ug/L
KA-3	12/17/2020	2,6-Dinitrotoluene	*ND*	*11*	2.08	0.485	ug/L
KA-3	12/17/2020	Di-n-octylphthalate	ND	11	0.186	200	ug/L
KA-3	12/17/2020	Fluoranthene	ND	11	0.197	802	ug/L
KA-3	12/17/2020	Fluorene	ND	11	0.197	288	ug/L
KA-3	12/17/2020	Hexachlorobenzene	*ND*	*11*	0.186	0.0976	ug/L
KA-3	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.9*	2.85	0.41	ug/L
KA-3	12/17/2020	Hexachloroethane	*ND*	*11*	4.61	3.28	ug/L
KA-3	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11*	0.241	0.343	ug/L
KA-3	12/17/2020	Isophorone	ND	11	0.154	781	ug/L
KA-3	12/17/2020	2-Methylphenol	ND	11	1.97	NA	ug/L
KA-3	12/17/2020	Naphthalene	ND	11	0.186	30	ug/L
KA-3	12/17/2020	2-Nitroaniline	ND	11	2.41	190	ug/L
KA-3	12/17/2020	3-Nitroaniline	ND	11	1.97	NA	ug/L
KA-3	12/17/2020	4-Nitroaniline	*ND*	*11*	1.64	3.8	ug/L
KA-3	12/17/2020	Nitrobenzene	*ND*	*11*	0.143	1.4	ug/L
KA-3	12/17/2020	2-Nitrophenol	ND	11	5.7	NA	ug/L
KA-3	12/17/2020	4-Nitrophenol	ND	11	2.3	NA	ug/L
KA-3	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11*	3.62	0.011	ug/L
KA-3	12/17/2020	N-Nitrosodiphenylamine	ND	11	0.197	122	ug/L
KA-3	12/17/2020	Pentachlorophenol	*ND*	*21.9*	1.54	1	ug/L
KA-3	12/17/2020	Phenanthrene	ND	11	0.197	170	ug/L
KA-3	12/17/2020	Phenol	ND	11	2.85	5761	ug/L
KA-3	12/17/2020	Pyrene	ND	11	0.23	117	ug/L
KA-3	12/17/2020	2,4,5-Trichlorophenol	ND	11	4.06	1166	ug/L
KA-3	12/17/2020	2,4,6-Trichlorophenol	ND	11	3.84	11.9*	ug/L
KA-3	12/17/2020	Dimethylphthalate	ND	11	0.186	612	ug/L
KA-3	12/17/2020	Aniline	ND	11	4.17	13	ug/L
KA-3	12/17/2020	Benzoic Acid	ND	32.9	8	75000	ug/L
KA-3	12/17/2020	Benzyl Alcohol	ND	11	2.19	2000	ug/L
KA-3	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11*	0.175	9.81	ug/L
KA-3	12/17/2020	N-Nitrosodimethylamine	*ND*	*11*	3.84	0.0049	ug/L
KA-3	12/17/2020	Pyridine	ND	11	3.51	20	ug/L
KA-3	12/17/2020	1,2,4-Trichlorobenzene	ND	11	0.197	70	ug/L
KA-3	12/17/2020	1,2-Dichlorobenzene	ND	11	0.186	600	ug/L
KA-3	12/17/2020	Azobenzene	*ND*	*11*	1.1	0.12	ug/L
MKTF-02	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	6/6/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	6/6/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	6/6/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	6/6/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	6/6/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	6/6/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	6/6/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	6/6/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	6/6/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	6/6/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	6/6/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	6/6/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	6/6/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	6/6/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	6/6/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	6/6/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	6/6/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	6/6/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	6/6/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	6/6/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	6/6/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	6/6/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	6/6/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	6/6/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	6/6/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	6/6/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	6/6/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	6/6/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	6/6/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	6/6/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	6/6/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	6/6/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	6/6/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	6/6/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	6/6/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	6/6/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	6/6/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	6/6/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	6/6/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	6/6/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	6/6/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	6/6/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	6/6/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	6/6/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	6/6/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	6/6/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	6/6/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	6/6/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	6/6/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	6/6/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	6/6/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	6/6/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	6/6/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	6/6/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	6/6/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	6/6/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	6/6/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	6/6/2014	Fluoranthene	ND	10	3	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	6/6/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	6/6/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	6/6/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	6/6/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	6/6/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	6/6/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	9/18/2014	1-Methylnaphthalene	**23**	10	3.6	11.38	ug/L
MKTF-02	9/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-02	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-02	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-02	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-02	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-02	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-02	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-02	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-02	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-02	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-02	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-02	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-02	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-02	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-02	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-02	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-02	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-02	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-02	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-02	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-02	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-02	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-02	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-02	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-02	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-02	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-02	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-02	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-02	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-02	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-02	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-02	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-02	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-02	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-02	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-02	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-02	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-02	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-02	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-02	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-02	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-02	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-02	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-02	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-02	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-02	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-02	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-02	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-02	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-02	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-02	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-02	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-02	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-02	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-02	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-02	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-02	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-02	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-02	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-02	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-02	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-02	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-02	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-02	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-02	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-02	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-02	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-02	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-02	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-02	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-02	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-02	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-02	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-02	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-02	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-02	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-02	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-02	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-02	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-02	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-02	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-02	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-02	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-02	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-02	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-02	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-02	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-02	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-02	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-02	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-02	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-02	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-02	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-02	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-02	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-02	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-02	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-02	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-02	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-02	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-02	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-02	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-02	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-02	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-02	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-02	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-02	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-02	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-02	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-02	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-02	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-02	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-02	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-02	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-02	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-02	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-02	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-02	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-02	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-02	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-02	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-02	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-02	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-02	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-02	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-02	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-02	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-02	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-02	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-02	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-02	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-02	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-02	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-02	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-02	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-02	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-02	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-02	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-02	6/10/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-02	6/10/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-02	6/10/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-02	6/10/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-02	6/10/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-02	6/10/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-02	6/10/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-02	6/10/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-02	6/10/2016	Isophorone	ND	50	13	781	ug/L
MKTF-02	6/10/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-02	6/10/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-02	6/10/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-02	6/10/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-02	6/10/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-02	6/10/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-02	6/10/2016	Fluorene	ND	50	14	288	ug/L
MKTF-02	6/10/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-02	6/10/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-02	6/10/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-02	6/10/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-02	6/10/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-02	6/10/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-02	6/10/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-02	6/10/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-02	6/10/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-02	6/10/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-02	6/10/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-02	6/10/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-02	6/10/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-02	6/10/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-02	6/10/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-02	6/10/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-02	6/10/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-02	6/10/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-02	6/10/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-02	6/10/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-02	6/10/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/10/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-02	6/10/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-02	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-02	6/10/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-02	6/10/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-02	6/10/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-02	6/10/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-02	6/10/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-02	6/10/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-02	6/10/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-02	6/10/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-02	6/10/2016	Pyrene	ND	50	15	117	ug/L
MKTF-02	6/10/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-02	6/10/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-02	6/10/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-02	6/10/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-02	6/10/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-02	6/10/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-02	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-02	6/10/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-02	6/10/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-02	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-02	6/10/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-02	6/10/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-02	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	9/7/2016	Benzo(a)anthracene	**2.8**	10	2.6	0.12	ug/L
MKTF-02	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-02	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	9/7/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-02	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-02	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-02	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	9/7/2016	1-Methylnaphthalene	8.2	10	2.9	11.38	ug/L
MKTF-02	9/7/2016	Naphthalene	5.1	10	2.6	30	ug/L
MKTF-02	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-02	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-02	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	9/7/2016	Phenol	6.7	10	2	5761	ug/L
MKTF-02	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	9/7/2016	Bis(2-ethylhexyl)phthalate	4.3	10	2.6	55.64	ug/L
MKTF-02	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-02	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-02	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	9/7/2016	Dimethylphthalate	5.4	10	2.4	612	ug/L
MKTF-02	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-02	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-02	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	10/28/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-02	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	10/28/2016	Isophorone	ND	10	2.6	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-02	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	10/28/2016	1-Methylnaphthalene	6	10	2.9	11.38	ug/L
MKTF-02	10/28/2016	Naphthalene	4.6	10	2.6	30	ug/L
MKTF-02	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-02	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-02	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-02	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	10/28/2016	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-02	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-02	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-02	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-02	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	3/16/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	3/16/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	3/16/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-02	3/16/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-02	3/16/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	3/16/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-02	3/16/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	3/16/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	3/16/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-02	3/16/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	3/16/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	3/16/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	3/16/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	3/16/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-02	3/16/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	3/16/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	3/16/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	3/16/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	3/16/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	3/16/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	3/16/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	3/16/2017	1-Methylnaphthalene	**30**	10	2.9	11.38	ug/L
MKTF-02	3/16/2017	Naphthalene	**38**	10	2.6	30	ug/L
MKTF-02	3/16/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	3/16/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	3/16/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	3/16/2017	2-Methylphenol	13	10	2.5	NA	ug/L
MKTF-02	3/16/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	3/16/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	3/16/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	3/16/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	3/16/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	3/16/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	3/16/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	3/16/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	3/16/2017	2,4-Dimethylphenol	11	10	3	354	ug/L
MKTF-02	3/16/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	3/16/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	3/16/2017	Phenol	16	10	2	5761	ug/L
MKTF-02	3/16/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	3/16/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	3/16/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	3/16/2017	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-02	3/16/2017	Di-n-octylphthalate	3.3	10	2	200	ug/L
MKTF-02	3/16/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	3/16/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	3/16/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	3/16/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	3/16/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	3/16/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-02	3/16/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	3/16/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	3/16/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	3/16/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	3/16/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	3/16/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	3/16/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	3/16/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	3/16/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	3/16/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	3/16/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	3/16/2017	3,4-Methylphenol	13	10	2.3	NA	ug/L
MKTF-02	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-02	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	10/3/2017	Benzoic Acid	13	20	3.9	75000	ug/L
MKTF-02	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-02	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	10/3/2017	1-Methylnaphthalene	9.7	10	3.3	11.38	ug/L
MKTF-02	10/3/2017	Naphthalene	5	10	2.9	30	ug/L
MKTF-02	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-02	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	10/3/2017	2,4-Dimethylphenol	3	10	2.8	354	ug/L
MKTF-02	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	10/3/2017	Phenol	19	10	3.1	5761	ug/L
MKTF-02	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-02	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-02	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-02	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	11/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-02	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	11/20/2017	Fluorene	ND	10	4	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	11/20/2017	1-Methylnaphthalene	**30**	10	3.3	11.38	ug/L
MKTF-02	11/20/2017	Naphthalene	17	10	2.9	30	ug/L
MKTF-02	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	11/20/2017	2-Methylphenol	6.4	10	3.3	NA	ug/L
MKTF-02	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	11/20/2017	2,4-Dimethylphenol	9.3	10	2.8	354	ug/L
MKTF-02	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	11/20/2017	Phenol	14	10	3.1	5761	ug/L
MKTF-02	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	11/20/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-02	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	11/20/2017	3,4-Methylphenol	11	10	3.2	NA	ug/L
MKTF-02	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-02	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-02	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-02	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	2/6/2018	1-Methylnaphthalene	**31**	10	3.3	11.38	ug/L
MKTF-02	2/6/2018	Naphthalene	20	10	2.9	30	ug/L
MKTF-02	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-02	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-02	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	2/6/2018	Phenol	16	10	3.1	5761	ug/L
MKTF-02	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-02	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	2/6/2018	3,4-Methylphenol	12	10	3.2	NA	ug/L
MKTF-02	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	5/1/2018	1-Methylnaphthalene	**22**	10	7	11.38	ug/L
MKTF-02	5/1/2018	Naphthalene	16	10	5	30	ug/L
MKTF-02	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-02	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	5/1/2018	Phenol	8.8	10	6	5761	ug/L
MKTF-02	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-02	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	5/1/2018	3,4-Methylphenol	9	10	5.4	NA	ug/L
MKTF-02	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	8/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	8/20/2018	1-Methylnaphthalene	9	10	7	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	Naphthalene	6.9	10	5	30	ug/L
MKTF-02	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	8/20/2018	2-Methylphenol	12	10	6.3	NA	ug/L
MKTF-02	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	8/20/2018	2,4-Dimethylphenol	9.9	10	5.9	354	ug/L
MKTF-02	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	8/20/2018	Phenol	15	10	6	5761	ug/L
MKTF-02	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-02	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	8/20/2018	3,4-Methylphenol	10	10	5.4	NA	ug/L
MKTF-02	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	11/28/2018	1-Methylnaphthalene	**34**	10	7	11.38	ug/L
MKTF-02	11/28/2018	Naphthalene	**35**	10	5	30	ug/L
MKTF-02	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	11/28/2018	2-Methylphenol	22	10	6.3	NA	ug/L
MKTF-02	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	11/28/2018	2,4-Dimethylphenol	30	10	5.9	354	ug/L
MKTF-02	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	11/28/2018	Phenol	14	10	6	5761	ug/L
MKTF-02	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	11/28/2018	3,4-Methylphenol	17	10	5.4	NA	ug/L
MKTF-02	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-02	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-02	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-02	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-02	3/28/2019	1-Methylnaphthalene	8.9	10	6.999122	11.38	ug/L
MKTF-02	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-02	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-02	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-02	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-02	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-02	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-02	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-02	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-02	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-02	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-02	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-02	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-02	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-02	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-02	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-02	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-02	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-02	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-02	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-02	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-02	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-02	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-02	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-02	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-02	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-02	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-02	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-02	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-02	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-02	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-02	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-02	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-02	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-02	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
MKTF-02	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-02	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-02	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-02	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-02	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-02	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-02	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-02	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-02	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-02	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-02	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-02	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-02	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-02	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-02	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-02	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-02	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-02	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-02	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-02	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-02	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-02	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-02	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-02	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-02	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-02	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-02	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-02	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-02	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-02	3/28/2019	Phenol	8.3	10	5.977352	5761	ug/L
MKTF-02	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-02	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-02	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-02	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-02	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-02	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-02	5/6/2019	1-Methylnaphthalene	**19**	10	3.069076	11.38	ug/L
MKTF-02	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-02	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-02	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-02	5/6/2019	2,4-Dimethylphenol	5.2	10	2.965993	354	ug/L
MKTF-02	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-02	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-02	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-02	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-02	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-02	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-02	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-02	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-02	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-02	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-02	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-02	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-02	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-02	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-02	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-02	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-02	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-02	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-02	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-02	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-02	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-02	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-02	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-02	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-02	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-02	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-02	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-02	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-02	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-02	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-02	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-02	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-02	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-02	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-02	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-02	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-02	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-02	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-02	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-02	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-02	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-02	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-02	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-02	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-02	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-02	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-02	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-02	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-02	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-02	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-02	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-02	5/6/2019	Naphthalene	7.5	10	4.12221	30	ug/L
MKTF-02	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-02	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-02	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-02	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-02	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-02	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-02	5/6/2019	Phenol	8.7	10	8.036586	5761	ug/L
MKTF-02	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-02	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-02	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-02	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-02	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-02	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-02	8/23/2019	1-Methylnaphthalene	**17**	10	3.069076	11.38	ug/L
MKTF-02	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-02	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-02	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-02	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-02	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-02	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-02	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-02	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-02	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-02	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-02	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-02	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-02	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-02	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-02	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-02	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-02	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-02	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-02	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-02	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-02	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-02	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-02	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-02	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-02	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-02	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-02	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-02	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-02	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-02	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-02	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-02	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-02	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-02	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-02	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-02	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-02	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-02	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-02	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-02	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-02	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-02	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-02	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-02	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-02	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-02	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-02	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-02	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-02	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-02	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-02	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-02	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-02	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-02	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-02	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-02	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-02	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-02	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-02	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-02	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-02	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-02	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-02	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-02	8/23/2019	Phenol	27	10	8.036586	5761	ug/L
MKTF-02	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-02	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-02	11/19/2019	1,4-Dioxane	**39**	1	1	4.59	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	4.8	0.5	0.5	11.38	ug/L
MKTF-02	11/19/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-02	11/19/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-02	11/19/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-02	11/19/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-02	11/19/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-02	11/19/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-02	11/19/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-02	11/19/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-02	11/19/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-02	11/19/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-02	11/19/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-02	11/19/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-02	11/19/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-02	11/19/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-02	11/19/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-02	11/19/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-02	11/19/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-02	11/19/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-02	11/19/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-02	11/19/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-02	11/19/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-02	11/19/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-02	11/19/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-02	11/19/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-02	11/19/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-02	11/19/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-02	11/19/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-02	11/19/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-02	11/19/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-02	11/19/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-02	11/19/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-02	11/19/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-02	11/19/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-02	11/19/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-02	11/19/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-02	11/19/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-02	11/19/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-02	11/19/2019	Naphthalene	0.65	0.5	0.5	30	ug/L
MKTF-02	11/19/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-02	11/19/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-02	11/19/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-02	11/19/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-02	11/19/2019	Phenol	5.8	0.5	0.5	5761	ug/L
MKTF-02	11/19/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-02	11/19/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-02	11/19/2019	1,4-Dioxane	**40**	1	1	4.59	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.1	0.5	0.5	11.38	ug/L
MKTF-02	11/19/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-02	11/19/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-02	11/19/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-02	11/19/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-02	11/19/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-02	11/19/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-02	11/19/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-02	11/19/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-02	11/19/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-02	11/19/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-02	11/19/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-02	11/19/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-02	11/19/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-02	11/19/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-02	11/19/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-02	11/19/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-02	11/19/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-02	11/19/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-02	11/19/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-02	11/19/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-02	11/19/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-02	11/19/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-02	11/19/2019	Bis(2-ethylhexyl)phthalate	1.8	0.5	0.5	55.64	ug/L
MKTF-02	11/19/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-02	11/19/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-02	11/19/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-02	11/19/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-02	11/19/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-02	11/19/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-02	11/19/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-02	11/19/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-02	11/19/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-02	11/19/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-02	11/19/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-02	11/19/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-02	11/19/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-02	11/19/2019	Naphthalene	0.66	0.5	0.5	30	ug/L
MKTF-02	11/19/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-02	11/19/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-02	11/19/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-02	11/19/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-02	11/19/2019	Phenol	4.9	0.5	0.5	5761	ug/L
MKTF-02	11/19/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-02	11/19/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-02	2/25/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-02	2/25/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-02	2/25/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
MKTF-02	2/25/2020	1,4-Dioxane	**5.9**	5	5	4.59	ug/L
MKTF-02	2/25/2020	1-Methylnaphthalene	**48**	2.5	2.5	11.38	ug/L
MKTF-02	2/25/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-02	2/25/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-02	2/25/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-02	2/25/2020	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
MKTF-02	2/25/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-02	2/25/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-02	2/25/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-02	2/25/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-02	2/25/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-02	2/25/2020	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
MKTF-02	2/25/2020	2-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-02	2/25/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-02	2/25/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-02	2/25/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-02	2/25/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Acenaphthene	ND	2.5	2.5	535	ug/L
MKTF-02	2/25/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-02	2/25/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-02	2/25/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-02	2/25/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-02	2/25/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-02	2/25/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-02	2/25/2020	Benzoic Acid	ND	2.5	2.5	75000	ug/L
MKTF-02	2/25/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-02	2/25/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-02	2/25/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-02	2/25/2020	Bis(2-ethylhexyl)phthalate	1.26	2.5	2.5	55.64	ug/L
MKTF-02	2/25/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-02	2/25/2020	Carbazole	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-02	2/25/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-02	2/25/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-02	2/25/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-02	2/25/2020	Dibenzofuran	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-02	2/25/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-02	2/25/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-02	2/25/2020	Fluorene	ND	2.5	2.5	288	ug/L
MKTF-02	2/25/2020	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
MKTF-02	2/25/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-02	2/25/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-02	2/25/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-02	2/25/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-02	2/25/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-02	2/25/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-02	2/25/2020	Naphthalene	15	2.5	2.5	30	ug/L
MKTF-02	2/25/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-02	2/25/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-02	2/25/2020	Phenanthrene	ND	2.5	2.5	170	ug/L
MKTF-02	2/25/2020	Phenol	7.7	2.5	2.5	5761	ug/L
MKTF-02	2/25/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-02	2/25/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-02	9/21/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-02	9/21/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-02	9/21/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-02	9/21/2020	1,4-Dioxane	**11**	2.5	0.5	4.59	ug/L
MKTF-02	9/21/2020	1-Methylnaphthalene	**34**	2.5	0.5	11.38	ug/L
MKTF-02	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
MKTF-02	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-02	9/21/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-02	9/21/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-02	9/21/2020	2,4-Dimethylphenol	4.6	2.5	0.5	354	ug/L
MKTF-02	9/21/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-02	9/21/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-02	9/21/2020	2,6-Dinitrotoluene	*ND*	*1*	0.5	0.485	ug/L
MKTF-02	9/21/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-02	9/21/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-02	9/21/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-02	9/21/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-02	9/21/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	3,4-Methylphenol	3.4	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-02	9/21/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-02	9/21/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
MKTF-02	9/21/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-02	9/21/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Acenaphthene	0.75	2.5	0.5	535	ug/L
MKTF-02	9/21/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-02	9/21/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-02	9/21/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
MKTF-02	9/21/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
MKTF-02	9/21/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
MKTF-02	9/21/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
MKTF-02	9/21/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-02	9/21/2020	Benzoic Acid	ND	2.5	1	75000	ug/L
MKTF-02	9/21/2020	Benzyl Alcohol	ND	2.5	1	2000	ug/L
MKTF-02	9/21/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-02	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
MKTF-02	9/21/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-02	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-02	9/21/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-02	9/21/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-02	9/21/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-02	9/21/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-02	9/21/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
MKTF-02	9/21/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-02	9/21/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-02	9/21/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-02	9/21/2020	Fluorene	0.65	2.5	0.5	288	ug/L
MKTF-02	9/21/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-02	9/21/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-02	9/21/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
MKTF-02	9/21/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-02	9/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
MKTF-02	9/21/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-02	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
MKTF-02	9/21/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
MKTF-02	9/21/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-02	9/21/2020	Naphthalene	4	2.5	0.5	30	ug/L
MKTF-02	9/21/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-02	9/21/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
MKTF-02	9/21/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-02	9/21/2020	Phenol	20	2.5	0.5	5761	ug/L
MKTF-02	9/21/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-02	9/21/2020	Pyridine	ND	2.5	1	20	ug/L
MKTF-02	12/18/2020	1,3-Dichlorobenzene	ND	11.4	2.16	NA	ug/L
MKTF-02	12/18/2020	1,4-Dichlorobenzene	ND	11.4	2.16	75	ug/L
MKTF-02	12/18/2020	2,4,5-Trichlorophenol	ND	11.4	1.25	1166	ug/L
MKTF-02	12/18/2020	2,4,6-Trichlorophenol	ND	11.4	1.82	11.9*	ug/L
MKTF-02	12/18/2020	2,4-Dichlorophenol	ND	11.4	1.71	45.3	ug/L
MKTF-02	12/18/2020	2,4-Dimethylphenol	ND	11.4	1.48	354	ug/L
MKTF-02	12/18/2020	2,4-Dinitrophenol	ND	34.1	5.23	38.7	ug/L
MKTF-02	12/18/2020	2-Chloronaphthalene	ND	11.4	1.71	733	ug/L
MKTF-02	12/18/2020	2-Chlorophenol	ND	11.4	1.93	91	ug/L
MKTF-02	12/18/2020	2-Methylphenol	ND	11.4	1.71	NA	ug/L
MKTF-02	12/18/2020	2-Nitroaniline	ND	11.4	2.05	190	ug/L
MKTF-02	12/18/2020	2-Nitrophenol	ND	11.4	2.27	NA	ug/L
MKTF-02	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	4.55	1.25	ug/L
MKTF-02	12/18/2020	3-Nitroaniline	ND	11.4	2.5	NA	ug/L
MKTF-02	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	4.55	1.52	ug/L
MKTF-02	12/18/2020	4-Bromophenyl-phenylether	ND	11.4	1.48	NA	ug/L
MKTF-02	12/18/2020	4-Chloro-3-Methylphenol	ND	11.4	1.59	NA	ug/L
MKTF-02	12/18/2020	4-Chloroaniline	*ND*	*11.4*	2.05	0.37	ug/L
MKTF-02	12/18/2020	4-Chlorophenyl-phenylether	ND	11.4	1.48	NA	ug/L
MKTF-02	12/18/2020	4-Nitroaniline	*ND*	*11.4*	4.66	3.8	ug/L
MKTF-02	12/18/2020	4-Nitrophenol	ND	11.4	3.75	NA	ug/L
MKTF-02	12/18/2020	Acenaphthene	ND	11.4	1.48	535	ug/L
MKTF-02	12/18/2020	Acenaphthylene	ND	11.4	1.59	NA	ug/L
MKTF-02	12/18/2020	Aniline	ND	11.4	3.98	13	ug/L
MKTF-02	12/18/2020	Anthracene	ND	11.4	1.48	1721	ug/L
MKTF-02	12/18/2020	Benzo(a)anthracene	*ND*	*11.4*	2.05	0.12	ug/L
MKTF-02	12/18/2020	Benzo(a)pyrene	*ND*	*11.4*	1.93	0.2	ug/L
MKTF-02	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.4*	1.93	0.34	ug/L
MKTF-02	12/18/2020	Benzo(g,h,i)perylene	ND	11.4	3.53	NA	ug/L
MKTF-02	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.4*	1.93	3.43	ug/L
MKTF-02	12/18/2020	Benzoic Acid	ND	34.1	6.48	75000	ug/L
MKTF-02	12/18/2020	Benzyl Alcohol	ND	11.4	2.5	2000	ug/L
MKTF-02	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.4	1.59	59	ug/L
MKTF-02	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	1.36	0.137	ug/L
MKTF-02	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	3.07	55.64	ug/L
MKTF-02	12/18/2020	Butylbenzylphthalate	ND	11.4	2.62	16	ug/L
MKTF-02	12/18/2020	Carbazole	ND	11.4	2.16	NA	ug/L
MKTF-02	12/18/2020	Chrysene	ND	11.4	2.05	34.3	ug/L
MKTF-02	12/18/2020	Di-n-butylphthalate	ND	11.4	1.93	885	ug/L
MKTF-02	12/18/2020	Di-n-octylphthalate	ND	11.4	1.82	200	ug/L
MKTF-02	12/18/2020	Dibenzo(a,h)anthracene	ND	11.4	3.07	NA	ug/L
MKTF-02	12/18/2020	Dibenzofuran	ND	11.4	1.71	NA	ug/L
MKTF-02	12/18/2020	Diethylphthalate	ND	11.4	1.25	14801	ug/L
MKTF-02	12/18/2020	Dimethylphthalate	ND	11.4	1.36	612	ug/L
MKTF-02	12/18/2020	Fluoranthene	ND	11.4	1.48	802	ug/L
MKTF-02	12/18/2020	Fluorene	ND	11.4	1.48	288	ug/L
MKTF-02	12/18/2020	Hexachlorobenzene	*ND*	*11.4*	1.36	0.0976	ug/L
MKTF-02	12/18/2020	Hexachlorocyclopentadiene	*ND*	*22.7*	2.16	0.41	ug/L
MKTF-02	12/18/2020	Hexachloroethane	*ND*	*11.4*	2.73	3.28	ug/L
MKTF-02	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	3.3	0.343	ug/L
MKTF-02	12/18/2020	Isophorone	ND	11.4	1.93	781	ug/L
MKTF-02	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	2.27	0.011	ug/L
MKTF-02	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.4*	2.5	0.0049	ug/L
MKTF-02	12/18/2020	N-Nitrosodiphenylamine	ND	11.4	1.25	122	ug/L
MKTF-02	12/18/2020	Naphthalene	ND	11.4	1.93	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	12/18/2020	Nitrobenzene	*ND*	*11.4*	1.82	1.4	ug/L
MKTF-02	12/18/2020	Pentachlorophenol	*ND*	*22.7*	4.21	1	ug/L
MKTF-02	12/18/2020	Phenanthrene	ND	11.4	1.59	170	ug/L
MKTF-02	12/18/2020	Phenol	20.1	11.4	1.48	5761	ug/L
MKTF-02	12/18/2020	Pyrene	ND	11.4	1.71	117	ug/L
MKTF-02	12/18/2020	Pyridine	ND	11.4	5	20	ug/L
MKTF-02	12/18/2020	1,2,4-Trichlorobenzene	ND	11.4	2.05	70	ug/L
MKTF-02	12/18/2020	1,2-Dichlorobenzene	ND	11.4	2.05	600	ug/L
MKTF-02	12/18/2020	2,4-Dinitrotoluene	ND	11.4	1.59	45.3	ug/L
MKTF-02	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.4*	1.48	0.485	ug/L
MKTF-02	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	1.93	9.81	ug/L
MKTF-02	12/18/2020	Azobenzene	*ND*	*11.4*	1.48	0.12	ug/L
MKTF-04	4/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	4/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	4/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	4/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	4/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	4/11/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	4/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	4/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	4/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	4/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	4/11/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	4/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	4/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	4/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	4/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	4/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	4/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	4/11/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	4/11/2014	Carbazole	17	10	2.9	NA	ug/L
MKTF-04	4/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	4/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	4/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	4/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	4/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	4/11/2014	1-Methylnaphthalene	**120**	10	3.6	11.38	ug/L
MKTF-04	4/11/2014	Naphthalene	**230**	20	4.6	30	ug/L
MKTF-04	4/11/2014	2-Methylnaphthalene	**160**	10	2.6	35.1	ug/L
MKTF-04	4/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	4/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	4/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	4/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	4/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	4/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	4/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	4/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	4/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	4/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	4/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	4/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	4/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	4/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	4/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	4/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	4/11/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	4/11/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	4/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	4/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	4/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	4/11/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	4/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	4/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	4/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	4/11/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	4/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	4/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	4/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	4/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	4/11/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	4/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	4/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	4/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	4/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	4/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	4/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	4/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	6/4/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	6/4/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	6/4/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	6/4/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	6/4/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	6/4/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	6/4/2014	Benzoic Acid	21	20	2.2	75000	ug/L
MKTF-04	6/4/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	6/4/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	6/4/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	6/4/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	6/4/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	6/4/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	6/4/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	6/4/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	6/4/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	6/4/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	6/4/2014	Carbazole	11	10	2.9	NA	ug/L
MKTF-04	6/4/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	6/4/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	6/4/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	6/4/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	6/4/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	6/4/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-04	6/4/2014	Naphthalene	**240**	20	4.6	30	ug/L
MKTF-04	6/4/2014	2-Methylnaphthalene	**140**	10	2.6	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	6/4/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	6/4/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	6/4/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	6/4/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	6/4/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	6/4/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	6/4/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	6/4/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	6/4/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	6/4/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	6/4/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	6/4/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	6/4/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	6/4/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	6/4/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	6/4/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	6/4/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	6/4/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	6/4/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	6/4/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	6/4/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	6/4/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	6/4/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	6/4/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	6/4/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	6/4/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	6/4/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	6/4/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	6/4/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	6/4/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	6/4/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	6/4/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	6/4/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	6/4/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	6/4/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	6/4/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	6/4/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	6/4/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	6/4/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	6/4/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	6/4/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	6/4/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	9/15/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	9/15/2014	Carbazole	15	10	2.9	NA	ug/L
MKTF-04	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	9/15/2014	1-Methylnaphthalene	**89**	10	3.6	11.38	ug/L
MKTF-04	9/15/2014	Naphthalene	**150**	10	2.3	30	ug/L
MKTF-04	9/15/2014	2-Methylnaphthalene	**97**	10	2.6	35.1	ug/L
MKTF-04	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-04	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	9/15/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-04	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	9/24/2014	1-Methylnaphthalene	**130**	10	3.6	11.38	ug/L
MKTF-04	9/24/2014	Naphthalene	**190**	10	2.3	30	ug/L
MKTF-04	9/24/2014	2-Methylnaphthalene	**160**	10	2.6	35.1	ug/L
MKTF-04	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-04	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	11/13/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	11/13/2014	Carbazole	17	10	2.9	NA	ug/L
MKTF-04	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	11/13/2014	1-Methylnaphthalene	**61**	10	3.6	11.38	ug/L
MKTF-04	11/13/2014	Naphthalene	**80**	10	2.3	30	ug/L
MKTF-04	11/13/2014	2-Methylnaphthalene	**47**	10	2.6	35.1	ug/L
MKTF-04	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-04	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	11/13/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	11/13/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	3/16/2015	Carbazole	14	10	1.5	NA	ug/L
MKTF-04	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	1-Methylnaphthalene	**51**	10	1.8	11.38	ug/L
MKTF-04	3/16/2015	Naphthalene	**59**	10	1.8	30	ug/L
MKTF-04	3/16/2015	2-Methylnaphthalene	25	10	2.2	35.1	ug/L
MKTF-04	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	6/4/2015	Carbazole	15	10	1.5	NA	ug/L
MKTF-04	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	1-Methylnaphthalene	**120**	10	1.8	11.38	ug/L
MKTF-04	6/4/2015	Naphthalene	**190**	10	1.8	30	ug/L
MKTF-04	6/4/2015	2-Methylnaphthalene	**76**	10	2.2	35.1	ug/L
MKTF-04	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	8/18/2015	Carbazole	21	10	1.5	NA	ug/L
MKTF-04	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	8/18/2015	1-Methylnaphthalene	**150**	10	1.8	11.38	ug/L
MKTF-04	8/18/2015	Naphthalene	**260**	20	3.7	30	ug/L
MKTF-04	8/18/2015	2-Methylnaphthalene	**96**	10	2.2	35.1	ug/L
MKTF-04	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	11/3/2015	Carbazole	19	10	1.5	NA	ug/L
MKTF-04	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	1-Methylnaphthalene	**150**	10	1.8	11.38	ug/L
MKTF-04	11/3/2015	Naphthalene	**270**	20	3.7	30	ug/L
MKTF-04	11/3/2015	2-Methylnaphthalene	**160**	10	2.2	35.1	ug/L
MKTF-04	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-04	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-04	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-04	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-04	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-04	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-04	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-04	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-04	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-04	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-04	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-04	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-04	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-04	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-04	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-04	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-04	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-04	2/29/2016	Carbazole	26	10	7.2	NA	ug/L
MKTF-04	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-04	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-04	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-04	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-04	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-04	2/29/2016	1-Methylnaphthalene	**170**	10	6.8	11.38	ug/L
MKTF-04	2/29/2016	Naphthalene	**330**	50	30	30	ug/L
MKTF-04	2/29/2016	2-Methylnaphthalene	**190**	10	7	35.1	ug/L
MKTF-04	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-04	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-04	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-04	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-04	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-04	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-04	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-04	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-04	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-04	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-04	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-04	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-04	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-04	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-04	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-04	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-04	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-04	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-04	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-04	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-04	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-04	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-04	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-04	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-04	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-04	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-04	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-04	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-04	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-04	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-04	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-04	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-04	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-04	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-04	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-04	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-04	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-04	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-04	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-04	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-04	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-04	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-04	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-04	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-04	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-04	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-04	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-04	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-04	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-04	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-04	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-04	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-04	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-04	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-04	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-04	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-04	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-04	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-04	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-04	6/9/2016	Carbazole	18	50	11	NA	ug/L
MKTF-04	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-04	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-04	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-04	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-04	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	1-Methylnaphthalene	**130**	50	15	11.38	ug/L
MKTF-04	6/9/2016	Naphthalene	**180**	50	13	30	ug/L
MKTF-04	6/9/2016	2-Methylnaphthalene	**130**	50	14	35.1	ug/L
MKTF-04	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-04	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-04	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-04	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-04	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-04	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-04	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-04	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-04	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-04	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-04	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-04	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-04	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-04	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-04	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-04	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-04	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-04	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/9/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-04	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-04	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-04	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-04	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-04	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-04	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-04	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-04	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-04	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-04	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-04	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-04	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-04	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-04	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-04	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-04	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-04	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-04	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-04	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	9/11/2016	Acenaphthene	4.9	10	2.6	535	ug/L
MKTF-04	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	9/11/2016	Phenanthrene	7.1	10	2.6	170	ug/L
MKTF-04	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-04	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	9/11/2016	Fluorene	5.2	10	2.7	288	ug/L
MKTF-04	9/11/2016	Carbazole	17	10	2.3	NA	ug/L
MKTF-04	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	9/11/2016	1-Methylnaphthalene	**140**	10	2.9	11.38	ug/L
MKTF-04	9/11/2016	Naphthalene	**220**	10	2.6	30	ug/L
MKTF-04	9/11/2016	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-04	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/11/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	9/11/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-04	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	9/11/2016	Phenol	3.7	10	2	5761	ug/L
MKTF-04	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/11/2016	Bis(2-ethylhexyl)phthalate	3.6	10	2.6	55.64	ug/L
MKTF-04	9/11/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-04	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	9/11/2016	Pyrene	3.3	10	3.1	117	ug/L
MKTF-04	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	9/11/2016	Dibenzofuran	2.5	10	2.5	NA	ug/L
MKTF-04	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	9/11/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-04	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	11/2/2016	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-04	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	11/2/2016	Phenanthrene	8	10	2.6	170	ug/L
MKTF-04	11/2/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	11/2/2016	Fluorene	8.2	10	2.7	288	ug/L
MKTF-04	11/2/2016	Carbazole	20	10	2.3	NA	ug/L
MKTF-04	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	11/2/2016	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-04	11/2/2016	Naphthalene	**250**	20	5.2	30	ug/L
MKTF-04	11/2/2016	2-Methylnaphthalene	**170**	10	2.9	35.1	ug/L
MKTF-04	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	11/2/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	11/2/2016	2,4-Dimethylphenol	4.3	10	3	354	ug/L
MKTF-04	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	11/2/2016	Phenol	2.6	10	2	5761	ug/L
MKTF-04	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	11/2/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-04	11/2/2016	Di-n-octylphthalate	7.3	10	2	200	ug/L
MKTF-04	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-04	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-04	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	11/2/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-04	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	3/2/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	3/2/2017	Acenaphthene	6.1	10	2.6	535	ug/L
MKTF-04	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	3/2/2017	Phenanthrene	6.1	10	2.6	170	ug/L
MKTF-04	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-04	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	3/2/2017	Fluorene	6.1	10	2.7	288	ug/L
MKTF-04	3/2/2017	Carbazole	20	10	2.3	NA	ug/L
MKTF-04	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	3/2/2017	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-04	3/2/2017	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-04	3/2/2017	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-04	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	3/2/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	3/2/2017	2,4-Dimethylphenol	3.8	10	3	354	ug/L
MKTF-04	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	3/2/2017	Phenol	5.2	10	2	5761	ug/L
MKTF-04	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	3/2/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-04	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-04	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	3/2/2017	Pyrene	ND	10	3.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-04	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	3/2/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	6/8/2017	Acenaphthene	5.2	10	3.6	535	ug/L
MKTF-04	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	6/8/2017	Phenanthrene	6.4	10	4.3	170	ug/L
MKTF-04	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	6/8/2017	Fluorene	4.8	10	4	288	ug/L
MKTF-04	6/8/2017	Carbazole	11	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	6/8/2017	1-Methylnaphthalene	**140**	10	3.3	11.38	ug/L
MKTF-04	6/8/2017	Naphthalene	**240**	20	5.7	30	ug/L
MKTF-04	6/8/2017	2-Methylnaphthalene	**150**	10	3.3	35.1	ug/L
MKTF-04	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	6/8/2017	2,4-Dimethylphenol	5.4	10	2.8	354	ug/L
MKTF-04	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	6/8/2017	Phenol	5.8	10	3.1	5761	ug/L
MKTF-04	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	6/8/2017	Bis(2-ethylhexyl)phthalate	55	10	4.8	55.64	ug/L
MKTF-04	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	9/26/2017	Acenaphthene	4.8	10	3.6	535	ug/L
MKTF-04	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	9/26/2017	Phenanthrene	6.3	10	4.3	170	ug/L
MKTF-04	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	9/26/2017	Fluorene	7.4	10	4	288	ug/L
MKTF-04	9/26/2017	Carbazole	19	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	9/26/2017	1-Methylnaphthalene	**180**	10	3.3	11.38	ug/L
MKTF-04	9/26/2017	Naphthalene	**300**	20	5.7	30	ug/L
MKTF-04	9/26/2017	2-Methylnaphthalene	**220**	10	3.3	35.1	ug/L
MKTF-04	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	9/26/2017	2,4-Dimethylphenol	4.9	10	2.8	354	ug/L
MKTF-04	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-04	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	11/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	11/28/2017	Acenaphthene	6.8	10	3.6	535	ug/L
MKTF-04	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	11/28/2017	Phenanthrene	6.8	10	4.3	170	ug/L
MKTF-04	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	11/28/2017	Fluorene	8.1	10	4	288	ug/L
MKTF-04	11/28/2017	Carbazole	21	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	11/28/2017	1-Methylnaphthalene	**160**	10	3.3	11.38	ug/L
MKTF-04	11/28/2017	Naphthalene	**270**	20	5.7	30	ug/L
MKTF-04	11/28/2017	2-Methylnaphthalene	**190**	10	3.3	35.1	ug/L
MKTF-04	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	11/28/2017	2,4-Dimethylphenol	5.4	10	2.8	354	ug/L
MKTF-04	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	11/28/2017	Phenol	4.3	10	3.1	5761	ug/L
MKTF-04	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-04	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	2/14/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	2/14/2018	Acenaphthene	5.8	10	3.6	535	ug/L
MKTF-04	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	2/14/2018	Phenanthrene	4.7	10	4.3	170	ug/L
MKTF-04	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	2/14/2018	Fluorene	6.9	10	4	288	ug/L
MKTF-04	2/14/2018	Carbazole	15	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	2/14/2018	1-Methylnaphthalene	**150**	10	3.3	11.38	ug/L
MKTF-04	2/14/2018	Naphthalene	**220**	10	2.9	30	ug/L
MKTF-04	2/14/2018	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-04	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	2/14/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	2/14/2018	2,4-Dimethylphenol	3.6	10	2.8	354	ug/L
MKTF-04	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	2/14/2018	Phenol	6.6	10	3.1	5761	ug/L
MKTF-04	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	2/14/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	5/2/2018	Carbazole	12	10	6.3	NA	ug/L
MKTF-04	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	5/2/2018	1-Methylnaphthalene	**94**	10	7	11.38	ug/L
MKTF-04	5/2/2018	Naphthalene	**150**	10	5	30	ug/L
MKTF-04	5/2/2018	2-Methylnaphthalene	**97**	10	6.3	35.1	ug/L
MKTF-04	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	5/2/2018	2-Methylphenol	ND	10	6.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	5/2/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-04	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	5/2/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-04	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	5/2/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	9/4/2018	Carbazole	19	10	6.3	NA	ug/L
MKTF-04	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	9/4/2018	1-Methylnaphthalene	**130**	10	7	11.38	ug/L
MKTF-04	9/4/2018	Naphthalene	**240**	20	10	30	ug/L
MKTF-04	9/4/2018	2-Methylnaphthalene	**160**	10	6.3	35.1	ug/L
MKTF-04	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	9/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	9/4/2018	2,4-Dimethylphenol	7.1	10	5.9	354	ug/L
MKTF-04	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	9/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	9/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	11/20/2018	Carbazole	15	10	6.3	NA	ug/L
MKTF-04	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	11/20/2018	1-Methylnaphthalene	**100**	10	7	11.38	ug/L
MKTF-04	11/20/2018	Naphthalene	**200**	10	5	30	ug/L
MKTF-04	11/20/2018	2-Methylnaphthalene	**110**	10	6.3	35.1	ug/L
MKTF-04	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-04	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	11/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-04	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
MKTF-04	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	5/13/2019	2,4-Dimethylphenol	3.5	10	2.965993	354	ug/L
MKTF-04	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**130**	10	3.018863	35.1	ug/L
MKTF-04	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	5/13/2019	Acenaphthene	4.4	10	2.955891	535	ug/L
MKTF-04	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	5/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-04	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	5/13/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-04	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	5/13/2019	Fluorene	7	10	2.888488	288	ug/L
MKTF-04	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	5/13/2019	Naphthalene	**220**	10	4.12221	30	ug/L
MKTF-04	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	5/13/2019	Phenanthrene	4.4	10	2.777122	170	ug/L
MKTF-04	5/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L
MKTF-04	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	5/13/2019	2,4-Dimethylphenol	4.4	10	2.965993	354	ug/L
MKTF-04	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	5/13/2019	Acenaphthene	5.7	10	2.955891	535	ug/L
MKTF-04	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	5/13/2019	Benzyl Alcohol	2.4	10	2.360341	2000	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	5/13/2019	Bis(2-ethylhexyl)phthalate	4.9	10	4.302128	55.64	ug/L
MKTF-04	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	5/13/2019	Carbazole	17	10	2.890507	NA	ug/L
MKTF-04	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	5/13/2019	Fluorene	8.2	10	2.888488	288	ug/L
MKTF-04	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	5/13/2019	Naphthalene	**250**	50	20.61105	30	ug/L
MKTF-04	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	5/13/2019	Phenanthrene	5.5	10	2.777122	170	ug/L
MKTF-04	5/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-04	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	8/21/2019	Acenaphthene	5.2	10	2.955891	535	ug/L
MKTF-04	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-04	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	8/21/2019	Carbazole	20	10	2.890507	NA	ug/L
MKTF-04	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	8/21/2019	Fluorene	6.5	10	2.888488	288	ug/L
MKTF-04	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	8/21/2019	Naphthalene	**340**	100	41.222099	30	ug/L
MKTF-04	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	8/21/2019	Phenanthrene	4.9	10	2.777122	170	ug/L
MKTF-04	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-04	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-04	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	8/21/2019	Acenaphthene	5.6	10	2.955891	535	ug/L
MKTF-04	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	8/21/2019	Carbazole	20	10	2.890507	NA	ug/L
MKTF-04	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	8/21/2019	Fluorene	7.6	10	2.888488	288	ug/L
MKTF-04	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	8/21/2019	Naphthalene	**440**	100	41.222099	30	ug/L
MKTF-04	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	8/21/2019	Phenanthrene	7.5	10	2.777122	170	ug/L
MKTF-04	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-04	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	**150**	5	5	11.38	ug/L
MKTF-04	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-04	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-04	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-04	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-04	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-04	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-04	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**160**	5	5	35.1	ug/L
MKTF-04	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-04	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-04	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-04	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-04	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Acenaphthene	5.2	5	5	535	ug/L
MKTF-04	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-04	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-04	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-04	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-04	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-04	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-04	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-04	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-04	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-04	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-04	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-04	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-04	10/30/2019	Carbazole	19	5	5	NA	ug/L
MKTF-04	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-04	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-04	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-04	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-04	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-04	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-04	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-04	10/30/2019	Fluorene	6.9	5	5	288	ug/L
MKTF-04	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-04	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-04	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-04	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-04	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-04	10/30/2019	Naphthalene	**230**	5	5	30	ug/L
MKTF-04	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-04	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-04	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-04	10/30/2019	Phenanthrene	5.7	5	5	170	ug/L
MKTF-04	10/30/2019	Phenol	ND	5	5	5761	ug/L
MKTF-04	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-04	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-04	10/30/2019	1,4-Dioxane	**11**	10	10	4.59	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	**130**	5	5	11.38	ug/L
MKTF-04	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-04	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-04	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-04	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-04	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-04	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-04	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**140**	5	5	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-04	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-04	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-04	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-04	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-04	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-04	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-04	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-04	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-04	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-04	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-04	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-04	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-04	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-04	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-04	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-04	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-04	10/30/2019	Carbazole	18	5	5	NA	ug/L
MKTF-04	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-04	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-04	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-04	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-04	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-04	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-04	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-04	10/30/2019	Fluorene	6.2	5	5	288	ug/L
MKTF-04	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-04	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-04	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-04	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-04	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-04	10/30/2019	Naphthalene	**220**	5	5	30	ug/L
MKTF-04	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-04	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-04	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-04	10/30/2019	Phenanthrene	5.9	5	5	170	ug/L
MKTF-04	10/30/2019	Phenol	ND	5	5	5761	ug/L
MKTF-04	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-04	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-04	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-04	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-04	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-04	3/3/2020	1,4-Dioxane	**18**	5	1	4.59	ug/L
MKTF-04	3/3/2020	1-Methylnaphthalene	**130**	2.5	0.5	11.38	ug/L
MKTF-04	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-04	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-04	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-04	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-04	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-04	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-04	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-04	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-04	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-04	3/3/2020	2-Methylnaphthalene	**120**	2.5	0.5	35.1	ug/L
MKTF-04	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-04	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	3,3-Dichlorobenzidine	*ND*	2.5	0.5	1.25	ug/L
MKTF-04	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-04	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-04	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Acenaphthene	4.5	2.5	0.5	535	ug/L
MKTF-04	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-04	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-04	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-04	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-04	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-04	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-04	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-04	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-04	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-04	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-04	3/3/2020	Bis(2-ethylhexyl)phthalate	8.7	2.5	1	55.64	ug/L
MKTF-04	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-04	3/3/2020	Carbazole	12	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-04	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-04	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-04	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-04	3/3/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-04	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-04	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-04	3/3/2020	Fluorene	5.4	2.5	0.5	288	ug/L
MKTF-04	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-04	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-04	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-04	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-04	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-04	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-04	3/3/2020	Naphthalene	**200**	2.5	0.5	30	ug/L
MKTF-04	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-04	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-04	3/3/2020	Phenanthrene	4	2.5	0.5	170	ug/L
MKTF-04	3/3/2020	Phenol	10	2.5	0.5	5761	ug/L
MKTF-04	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-04	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-09	4/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	4/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	4/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	4/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	4/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	4/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	4/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	4/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	4/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	4/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	4/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	4/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	4/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	4/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	4/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	4/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	4/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	4/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	4/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	4/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	4/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	4/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	4/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	4/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	4/14/2014	1-Methylnaphthalene	**46**	10	3.6	11.38	ug/L
MKTF-09	4/14/2014	Naphthalene	**31**	10	2.3	30	ug/L
MKTF-09	4/14/2014	2-Methylnaphthalene	10	10	2.6	35.1	ug/L
MKTF-09	4/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	4/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	4/14/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	4/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	4/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	4/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	4/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	4/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	4/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	4/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	4/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	4/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	4/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	4/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	4/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	4/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	4/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	4/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	4/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	4/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	4/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	4/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	4/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	4/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	4/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	4/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	4/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	4/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	4/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	4/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	4/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	4/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	4/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	4/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	4/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	4/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	4/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	4/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	4/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	4/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	4/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	4/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	4/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	4/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	6/5/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	6/5/2014	Carbazole	10	10	2.9	NA	ug/L
MKTF-09	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	6/5/2014	1-Methylnaphthalene	**58**	10	3.6	11.38	ug/L
MKTF-09	6/5/2014	Naphthalene	**41**	10	2.3	30	ug/L
MKTF-09	6/5/2014	2-Methylnaphthalene	14	10	2.6	35.1	ug/L
MKTF-09	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	9/18/2014	1-Methylnaphthalene	**31**	10	3.6	11.38	ug/L
MKTF-09	9/18/2014	Naphthalene	18	10	2.3	30	ug/L
MKTF-09	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-09	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-09	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	11/14/2014	1-Methylnaphthalene	**49**	10	3.6	11.38	ug/L
MKTF-09	11/14/2014	Naphthalene	21	10	2.3	30	ug/L
MKTF-09	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-09	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-09	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-09	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-09	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	3/16/2015	1-Methylnaphthalene	**27**	10	1.8	11.38	ug/L
MKTF-09	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-09	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	6/4/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-09	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	6/4/2015	1-Methylnaphthalene	**36**	10	1.8	11.38	ug/L
MKTF-09	6/4/2015	Naphthalene	12	10	1.8	30	ug/L
MKTF-09	6/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Aniline	ND	10	1.5	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	8/18/2015	Phenanthrene	11	10	2	170	ug/L
MKTF-09	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	8/18/2015	Carbazole	16	10	1.5	NA	ug/L
MKTF-09	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	8/18/2015	1-Methylnaphthalene	**80**	10	1.8	11.38	ug/L
MKTF-09	8/18/2015	Naphthalene	23	10	1.8	30	ug/L
MKTF-09	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	11/3/2015	Carbazole	13	10	1.5	NA	ug/L
MKTF-09	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	11/3/2015	1-Methylnaphthalene	**85**	10	1.8	11.38	ug/L
MKTF-09	11/3/2015	Naphthalene	**34**	10	1.8	30	ug/L
MKTF-09	11/3/2015	2-Methylnaphthalene	11	10	2.2	35.1	ug/L
MKTF-09	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	11/3/2015	Pyridine	ND	10	1.7	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-09	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-09	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-09	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-09	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-09	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-09	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-09	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-09	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-09	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-09	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-09	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-09	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-09	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-09	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-09	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-09	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-09	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-09	2/29/2016	Carbazole	12	10	7.2	NA	ug/L
MKTF-09	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-09	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-09	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-09	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-09	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-09	2/29/2016	1-Methylnaphthalene	**69**	10	6.8	11.38	ug/L
MKTF-09	2/29/2016	Naphthalene	**32**	10	5.9	30	ug/L
MKTF-09	2/29/2016	2-Methylnaphthalene	10	10	7	35.1	ug/L
MKTF-09	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-09	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-09	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-09	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-09	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-09	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-09	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-09	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-09	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-09	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-09	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-09	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-09	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-09	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-09	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-09	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-09	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-09	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-09	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-09	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-09	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-09	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-09	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-09	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-09	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-09	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-09	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-09	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-09	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-09	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-09	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-09	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-09	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-09	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-09	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-09	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-09	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-09	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-09	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-09	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-09	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-09	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-09	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-09	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	6/9/2016	Acenaphthene	3.4	10	2.6	535	ug/L
MKTF-09	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	6/9/2016	Phenanthrene	5.1	10	2.6	170	ug/L
MKTF-09	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-09	6/9/2016	Carbazole	8.8	10	2.3	NA	ug/L
MKTF-09	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	6/9/2016	1-Methylnaphthalene	**46**	10	2.9	11.38	ug/L
MKTF-09	6/9/2016	Naphthalene	18	10	2.6	30	ug/L
MKTF-09	6/9/2016	2-Methylnaphthalene	5.1	10	2.9	35.1	ug/L
MKTF-09	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	6/9/2016	Phenol	6.4	10	2	5761	ug/L
MKTF-09	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	6/9/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-09	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-09	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	9/11/2016	Acenaphthene	4.6	10	2.6	535	ug/L
MKTF-09	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	9/11/2016	Phenanthrene	6.5	10	2.6	170	ug/L
MKTF-09	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	9/11/2016	Fluorene	4.4	10	2.7	288	ug/L
MKTF-09	9/11/2016	Carbazole	11	10	2.3	NA	ug/L
MKTF-09	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	9/11/2016	Pentachlorophenol	**9.4**	20	2.3	1	ug/L
MKTF-09	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	9/11/2016	1-Methylnaphthalene	**64**	10	2.9	11.38	ug/L
MKTF-09	9/11/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-09	9/11/2016	2-Methylnaphthalene	5.2	10	2.9	35.1	ug/L
MKTF-09	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	9/11/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	9/11/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	9/11/2016	Phenol	12	10	2	5761	ug/L
MKTF-09	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	9/11/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-09	9/11/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-09	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	9/11/2016	Pyrene	7.1	10	3.1	117	ug/L
MKTF-09	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	9/11/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	11/2/2016	Acenaphthene	3.8	10	2.6	535	ug/L
MKTF-09	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	11/2/2016	Phenanthrene	6.6	10	2.6	170	ug/L
MKTF-09	11/2/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	11/2/2016	Fluorene	6.1	10	2.7	288	ug/L
MKTF-09	11/2/2016	Carbazole	10	10	2.3	NA	ug/L
MKTF-09	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	11/2/2016	1-Methylnaphthalene	**48**	10	2.9	11.38	ug/L
MKTF-09	11/2/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-09	11/2/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-09	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	11/2/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	11/2/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	11/2/2016	Phenol	2.5	10	2	5761	ug/L
MKTF-09	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	11/2/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-09	11/2/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-09	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	11/2/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-09	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	3/15/2017	Acenaphthene	4	10	2.6	535	ug/L
MKTF-09	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	3/15/2017	Phenanthrene	5.3	10	2.6	170	ug/L
MKTF-09	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	3/15/2017	Fluorene	4.9	10	2.7	288	ug/L
MKTF-09	3/15/2017	Carbazole	11	10	2.3	NA	ug/L
MKTF-09	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	3/15/2017	1-Methylnaphthalene	**48**	10	2.9	11.38	ug/L
MKTF-09	3/15/2017	Naphthalene	**32**	10	2.6	30	ug/L
MKTF-09	3/15/2017	2-Methylnaphthalene	4.7	10	2.9	35.1	ug/L
MKTF-09	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	3/15/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	3/15/2017	Phenol	5	10	2	5761	ug/L
MKTF-09	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	3/15/2017	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-09	3/15/2017	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-09	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	3/15/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	6/12/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	6/12/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	6/12/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	6/12/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	6/12/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	6/12/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	6/12/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	6/12/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	6/12/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	6/12/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	6/12/2017	Acenaphthene	5.3	10	3.6	535	ug/L
MKTF-09	6/12/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	6/12/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	6/12/2017	Phenanthrene	7.2	10	4.3	170	ug/L
MKTF-09	6/12/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	6/12/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	6/12/2017	Fluorene	6.1	10	4	288	ug/L
MKTF-09	6/12/2017	Carbazole	12	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	6/12/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	6/12/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	6/12/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	6/12/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	6/12/2017	1-Methylnaphthalene	**59**	10	3.3	11.38	ug/L
MKTF-09	6/12/2017	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	6/12/2017	2-Methylnaphthalene	7.9	10	3.3	35.1	ug/L
MKTF-09	6/12/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	6/12/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	6/12/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	6/12/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	6/12/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	6/12/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	6/12/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	6/12/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	6/12/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	6/12/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	6/12/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	6/12/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	6/12/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	6/12/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	6/12/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	6/12/2017	Phenol	13	10	3.1	5761	ug/L
MKTF-09	6/12/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	6/12/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	6/12/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	6/12/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-09	6/12/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	6/12/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	6/12/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	6/12/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	6/12/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	6/12/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	6/12/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	6/12/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	6/12/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	6/12/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	6/12/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	6/12/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	6/12/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	6/12/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	6/12/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	6/12/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	6/12/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	6/12/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	6/12/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	6/12/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	6/12/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	6/12/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	9/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	9/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	9/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	9/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	9/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	9/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	9/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	9/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	9/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	9/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	9/28/2017	Acenaphthene	5.5	10	3.6	535	ug/L
MKTF-09	9/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	9/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	9/28/2017	Phenanthrene	8.6	10	4.3	170	ug/L
MKTF-09	9/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	9/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	9/28/2017	Fluorene	8.5	10	4	288	ug/L
MKTF-09	9/28/2017	Carbazole	15	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	9/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	9/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	9/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	9/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	9/28/2017	1-Methylnaphthalene	**89**	10	3.3	11.38	ug/L
MKTF-09	9/28/2017	Naphthalene	**43**	10	2.9	30	ug/L
MKTF-09	9/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-09	9/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	9/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	9/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	9/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	9/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	9/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	9/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	9/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	9/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	9/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	9/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	9/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	9/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	9/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	9/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	9/28/2017	Phenol	12	10	3.1	5761	ug/L
MKTF-09	9/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	9/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	9/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	9/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	9/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	9/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	9/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	9/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	9/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	9/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	9/28/2017	Dimethylphthalate	4.9	10	3.6	612	ug/L
MKTF-09	9/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	9/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	9/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	9/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	9/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	9/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	9/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	9/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	9/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	9/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	9/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	11/28/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MKTF-09	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	11/28/2017	Acenaphthene	5.9	10	3.6	535	ug/L
MKTF-09	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	11/28/2017	Phenanthrene	8.8	10	4.3	170	ug/L
MKTF-09	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	11/28/2017	Fluorene	8	10	4	288	ug/L
MKTF-09	11/28/2017	Carbazole	15	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	11/28/2017	1-Methylnaphthalene	**77**	10	3.3	11.38	ug/L
MKTF-09	11/28/2017	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	11/28/2017	2-Methylnaphthalene	12	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	11/28/2017	Phenol	18	10	3.1	5761	ug/L
MKTF-09	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-09	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	2/14/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	2/14/2018	Acenaphthene	5.8	10	3.6	535	ug/L
MKTF-09	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	2/14/2018	Phenanthrene	7.3	10	4.3	170	ug/L
MKTF-09	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	2/14/2018	Fluorene	8.1	10	4	288	ug/L
MKTF-09	2/14/2018	Carbazole	13	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	2/14/2018	1-Methylnaphthalene	**70**	10	3.3	11.38	ug/L
MKTF-09	2/14/2018	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	2/14/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-09	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	2/14/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	2/14/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	2/14/2018	Phenol	14	10	3.1	5761	ug/L
MKTF-09	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	2/14/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	5/2/2018	Carbazole	10	10	6.3	NA	ug/L
MKTF-09	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	5/2/2018	1-Methylnaphthalene	**54**	10	7	11.38	ug/L
MKTF-09	5/2/2018	Naphthalene	**35**	10	5	30	ug/L
MKTF-09	5/2/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-09	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	5/2/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-09	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	5/2/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	5/2/2018	Phenol	13	10	6	5761	ug/L
MKTF-09	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	5/2/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	9/4/2018	Carbazole	9.6	10	6.3	NA	ug/L
MKTF-09	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	9/4/2018	1-Methylnaphthalene	**36**	10	7	11.38	ug/L
MKTF-09	9/4/2018	Naphthalene	29	10	5	30	ug/L
MKTF-09	9/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-09	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	9/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	9/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	9/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-09	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	9/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	11/28/2018	1-Methylnaphthalene	**65**	10	7	11.38	ug/L
MKTF-09	11/28/2018	Naphthalene	**46**	10	5	30	ug/L
MKTF-09	11/28/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
MKTF-09	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-09	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	11/28/2018	Phenol	14	10	6	5761	ug/L
MKTF-09	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-09	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-09	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-09	5/13/2019	1-Methylnaphthalene	**73**	10	3.069076	11.38	ug/L
MKTF-09	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-09	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-09	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-09	5/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-09	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-09	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-09	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-09	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-09	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-09	5/13/2019	2-Methylnaphthalene	10	10	3.018863	35.1	ug/L
MKTF-09	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-09	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-09	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-09	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-09	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-09	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-09	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-09	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-09	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-09	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-09	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-09	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-09	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-09	5/13/2019	Acenaphthene	5.4	10	2.955891	535	ug/L
MKTF-09	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-09	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-09	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-09	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-09	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-09	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-09	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-09	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-09	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-09	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-09	5/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-09	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-09	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-09	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-09	5/13/2019	Bis(2-ethylhexyl)phthalate	5.1	10	4.302128	55.64	ug/L
MKTF-09	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-09	5/13/2019	Carbazole	11	10	2.890507	NA	ug/L
MKTF-09	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-09	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-09	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-09	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-09	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-09	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-09	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-09	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-09	5/13/2019	Fluorene	8.9	10	2.888488	288	ug/L
MKTF-09	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-09	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-09	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-09	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-09	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-09	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-09	5/13/2019	Naphthalene	**56**	10	4.12221	30	ug/L
MKTF-09	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-09	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-09	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-09	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-09	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-09	5/13/2019	Phenanthrene	6.6	10	2.777122	170	ug/L
MKTF-09	5/13/2019	Phenol	13	10	8.036586	5761	ug/L
MKTF-09	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-09	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-09	8/28/2019	Acenaphthene	5.3	10	2.955891	535	ug/L
MKTF-09	8/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-09	8/28/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-09	8/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-09	8/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-09	8/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-09	8/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-09	8/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-09	8/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-09	8/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-09	8/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-09	8/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-09	8/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-09	8/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-09	8/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-09	8/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-09	8/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-09	8/28/2019	Carbazole	14	10	2.890507	NA	ug/L
MKTF-09	8/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-09	8/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-09	8/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-09	8/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-09	8/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-09	8/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-09	8/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-09	8/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-09	8/28/2019	Fluorene	7.8	10	2.888488	288	ug/L
MKTF-09	8/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-09	8/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-09	8/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-09	8/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-09	8/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-09	8/28/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-09	8/28/2019	Naphthalene	**54**	10	4.12221	30	ug/L
MKTF-09	8/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-09	8/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-09	8/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-09	8/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-09	8/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-09	8/28/2019	Phenanthrene	8.6	10	2.777122	170	ug/L
MKTF-09	8/28/2019	Phenol	14	10	8.036586	5761	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-09	8/28/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-09	8/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-09	8/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-09	8/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-09	8/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-09	8/28/2019	1-Methylnaphthalene	**81**	10	3.069076	11.38	ug/L
MKTF-09	8/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-09	8/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-09	8/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-09	8/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-09	8/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-09	8/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-09	8/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-09	8/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-09	8/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-09	8/28/2019	2-Methylnaphthalene	11	10	3.018863	35.1	ug/L
MKTF-09	8/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-09	8/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-09	8/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-09	8/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-09	8/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-09	8/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-09	8/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-09	8/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-09	8/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-09	8/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-09	8/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-09	8/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-09	8/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-09	11/18/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-09	11/18/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-09	11/18/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-09	11/18/2019	1,4-Dioxane	**12**	2	2	4.59	ug/L
MKTF-09	11/18/2019	1-Methylnaphthalene	**110**	1	1	11.38	ug/L
MKTF-09	11/18/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-09	11/18/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-09	11/18/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-09	11/18/2019	2,4-Dimethylphenol	1.1	1	1	354	ug/L
MKTF-09	11/18/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-09	11/18/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-09	11/18/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-09	11/18/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-09	11/18/2019	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-09	11/18/2019	2-Methylnaphthalene	19	1	1	35.1	ug/L
MKTF-09	11/18/2019	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-09	11/18/2019	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-09	11/18/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-09	11/18/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-09	11/18/2019	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Acenaphthene	6.6	1	1	535	ug/L
MKTF-09	11/18/2019	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Aniline	ND	1	1	13	ug/L
MKTF-09	11/18/2019	Anthracene	ND	1	1	1721	ug/L
MKTF-09	11/18/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-09	11/18/2019	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
MKTF-09	11/18/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-09	11/18/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-09	11/18/2019	Benzoic Acid	ND	1	1	75000	ug/L
MKTF-09	11/18/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-09	11/18/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-09	11/18/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-09	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-09	11/18/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-09	11/18/2019	Carbazole	18	1	1	NA	ug/L
MKTF-09	11/18/2019	Chrysene	ND	1	1	34.3	ug/L
MKTF-09	11/18/2019	Dibenzo(a,h)anthracene	ND	0.05	0.05	NA	ug/L
MKTF-09	11/18/2019	Dibenzofuran	3	1	1	NA	ug/L
MKTF-09	11/18/2019	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-09	11/18/2019	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-09	11/18/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-09	11/18/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-09	11/18/2019	Fluoranthene	ND	1	1	802	ug/L
MKTF-09	11/18/2019	Fluorene	9.2	1	1	288	ug/L
MKTF-09	11/18/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-09	11/18/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-09	11/18/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-09	11/18/2019	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-09	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-09	11/18/2019	Isophorone	ND	1	1	781	ug/L
MKTF-09	11/18/2019	Naphthalene	**75**	1	1	30	ug/L
MKTF-09	11/18/2019	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-09	11/18/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-09	11/18/2019	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-09	11/18/2019	Phenanthrene	11	1	1	170	ug/L
MKTF-09	11/18/2019	Phenol	26	1	1	5761	ug/L
MKTF-09	11/18/2019	Pyrene	ND	1	1	117	ug/L
MKTF-09	11/18/2019	Pyridine	ND	1	1	20	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-09	3/3/2020	1,4-Dioxane	**9.1**	5	1	4.59	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	**58**	2.5	0.5	11.38	ug/L
MKTF-09	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-09	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-09	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-09	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-09	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-09	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	7.5	2.5	0.5	35.1	ug/L
MKTF-09	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-09	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-09	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-09	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-09	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Acenaphthene	4.4	2.5	0.5	535	ug/L
MKTF-09	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-09	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-09	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-09	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-09	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-09	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-09	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-09	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-09	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-09	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-09	3/3/2020	Bis(2-ethylhexyl)phthalate	1.1	2.5	1	55.64	ug/L
MKTF-09	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-09	3/3/2020	Carbazole	5.6	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-09	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-09	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-09	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-09	3/3/2020	Dibenzofuran	2	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-09	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-09	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-09	3/3/2020	Fluorene	6.2	2.5	0.5	288	ug/L
MKTF-09	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-09	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-09	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-09	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-09	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-09	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-09	3/3/2020	Naphthalene	**34**	2.5	0.5	30	ug/L
MKTF-09	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-09	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-09	3/3/2020	Phenanthrene	6.9	2.5	0.5	170	ug/L
MKTF-09	3/3/2020	Phenol	43	2.5	0.5	5761	ug/L
MKTF-09	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-09	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-09	3/3/2020	1,4-Dioxane	**8.3**	5	1	4.59	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	**53**	2.5	0.5	11.38	ug/L
MKTF-09	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-09	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-09	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-09	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-09	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-09	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-09	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	7.5	2.5	0.5	35.1	ug/L
MKTF-09	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-09	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-09	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-09	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-09	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Acenaphthene	5.1	2.5	0.5	535	ug/L
MKTF-09	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-09	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-09	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-09	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-09	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-09	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-09	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-09	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-09	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-09	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-09	3/3/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-09	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-09	3/3/2020	Carbazole	4.3	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-09	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-09	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-09	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-09	3/3/2020	Dibenzofuran	2.01	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-09	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-09	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-09	3/3/2020	Fluorene	6.1	2.5	0.5	288	ug/L
MKTF-09	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-09	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-09	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-09	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-09	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-09	3/3/2020	Naphthalene	**35**	2.5	0.5	30	ug/L
MKTF-09	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-09	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-09	3/3/2020	Phenanthrene	6.4	2.5	0.5	170	ug/L
MKTF-09	3/3/2020	Phenol	44	2.5	0.5	5761	ug/L
MKTF-09	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-09	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-10	4/11/2014	Benzo(a)pyrene	*ND*	*12*	3.8	0.2	ug/L
MKTF-10	4/11/2014	2,4-Dinitrophenol	ND	23	3.7	38.7	ug/L
MKTF-10	4/11/2014	Dibenzo(a,h)anthracene	ND	12	3.5	NA	ug/L
MKTF-10	4/11/2014	Benzo(a)anthracene	*ND*	*12*	3.6	0.12	ug/L
MKTF-10	4/11/2014	4-Chloro-3-Methylphenol	ND	12	4.3	NA	ug/L
MKTF-10	4/11/2014	Aniline	**75**	12	2.8	13	ug/L
MKTF-10	4/11/2014	N-Nitrosodimethylamine	*ND*	*12*	2.8	0.0049	ug/L
MKTF-10	4/11/2014	Benzoic Acid	ND	23	2.5	75000	ug/L
MKTF-10	4/11/2014	Hexachloroethane	*ND*	*12*	2.2	3.28	ug/L
MKTF-10	4/11/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.5	0.41	ug/L
MKTF-10	4/11/2014	Isophorone	ND	12	3.6	781	ug/L
MKTF-10	4/11/2014	Acenaphthene	ND	12	3.4	535	ug/L
MKTF-10	4/11/2014	Diethylphthalate	ND	12	4.9	14801	ug/L
MKTF-10	4/11/2014	Di-n-butylphthalate	ND	12	4.2	885	ug/L
MKTF-10	4/11/2014	Phenanthrene	ND	12	2.9	170	ug/L
MKTF-10	4/11/2014	Butylbenzylphthalate	ND	12	3.6	16	ug/L
MKTF-10	4/11/2014	N-Nitrosodiphenylamine	ND	12	3.3	122	ug/L
MKTF-10	4/11/2014	Fluorene	ND	12	3.4	288	ug/L
MKTF-10	4/11/2014	Carbazole	ND	12	3.3	NA	ug/L
MKTF-10	4/11/2014	Hexachlorobutadiene	*ND*	*12*	3.5	0.14	ug/L
MKTF-10	4/11/2014	Pentachlorophenol	*ND*	*23*	2.9	1	ug/L
MKTF-10	4/11/2014	2,4,6-Trichlorophenol	ND	12	2.1	11.9*	ug/L
MKTF-10	4/11/2014	2-Nitroaniline	ND	12	3.3	190	ug/L
MKTF-10	4/11/2014	2-Nitrophenol	ND	12	3.6	NA	ug/L
MKTF-10	4/11/2014	1-Methylnaphthalene	**42**	12	4.2	11.38	ug/L
MKTF-10	4/11/2014	Naphthalene	**140**	12	2.7	30	ug/L
MKTF-10	4/11/2014	2-Methylnaphthalene	**56**	12	3.1	35.1	ug/L
MKTF-10	4/11/2014	2-Chloronaphthalene	ND	12	3.5	733	ug/L
MKTF-10	4/11/2014	3,3-Dichlorobenzidine	*ND*	*12*	2.7	1.25	ug/L
MKTF-10	4/11/2014	2-Methylphenol	300	100	14	NA	ug/L
MKTF-10	4/11/2014	1,2-Dichlorobenzene	ND	12	2	600	ug/L
MKTF-10	4/11/2014	2-Chlorophenol	ND	12	2.1	91	ug/L
MKTF-10	4/11/2014	2,4,5-Trichlorophenol	ND	12	3.8	1166	ug/L
MKTF-10	4/11/2014	Nitrobenzene	*ND*	*12*	3	1.4	ug/L
MKTF-10	4/11/2014	3-Nitroaniline	ND	12	4.2	NA	ug/L
MKTF-10	4/11/2014	4-Nitroaniline	*ND*	*12*	4.8	3.8	ug/L
MKTF-10	4/11/2014	4-Nitrophenol	ND	12	5	NA	ug/L
MKTF-10	4/11/2014	Benzyl Alcohol	ND	12	2.1	2000	ug/L
MKTF-10	4/11/2014	4-Bromophenyl-phenylether	ND	12	3.4	NA	ug/L
MKTF-10	4/11/2014	Azobenzene	*ND*	*12*	3	0.12	ug/L
MKTF-10	4/11/2014	2,4-Dimethylphenol	120	12	3.6	354	ug/L
MKTF-10	4/11/2014	1,4-Dichlorobenzene	ND	12	2.8	75	ug/L
MKTF-10	4/11/2014	4-Chloroaniline	*ND*	*12*	3	0.37	ug/L
MKTF-10	4/11/2014	Phenol	61	12	1.8	5761	ug/L
MKTF-10	4/11/2014	Pyridine	ND	12	1.8	20	ug/L
MKTF-10	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
MKTF-10	4/11/2014	Bis(2-chloroethoxy)methane	ND	12	3.3	59	ug/L
MKTF-10	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.5	55.64	ug/L
MKTF-10	4/11/2014	Di-n-octylphthalate	ND	12	3.2	200	ug/L
MKTF-10	4/11/2014	Hexachlorobenzene	*ND*	*12*	3.7	0.0976	ug/L
MKTF-10	4/11/2014	Anthracene	ND	12	2.9	1721	ug/L
MKTF-10	4/11/2014	1,2,4-Trichlorobenzene	ND	12	3.2	70	ug/L
MKTF-10	4/11/2014	2,4-Dichlorophenol	ND	23	3.5	45.3	ug/L
MKTF-10	4/11/2014	2,4-Dinitrotoluene	ND	12	5.2	45.3	ug/L
MKTF-10	4/11/2014	Pyrene	ND	12	4.7	117	ug/L
MKTF-10	4/11/2014	Dimethylphthalate	ND	12	4.3	612	ug/L
MKTF-10	4/11/2014	Dibenzofuran	ND	12	4.3	NA	ug/L
MKTF-10	4/11/2014	Benzo(g,h,i)perylene	ND	12	3.8	NA	ug/L
MKTF-10	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4	0.343	ug/L
MKTF-10	4/11/2014	Benzo(b)fluoranthene	*ND*	*12*	4.8	0.34	ug/L
MKTF-10	4/11/2014	Fluoranthene	ND	12	3.4	802	ug/L
MKTF-10	4/11/2014	Benzo(k)fluoranthene	*ND*	*12*	4.1	3.43	ug/L
MKTF-10	4/11/2014	Acenaphthylene	ND	12	2.9	NA	ug/L
MKTF-10	4/11/2014	Chrysene	ND	12	3.4	34.3	ug/L
MKTF-10	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*23*	2.8	1.52	ug/L
MKTF-10	4/11/2014	1,3-Dichlorobenzene	ND	12	2.1	NA	ug/L
MKTF-10	4/11/2014	2,6-Dinitrotoluene	*ND*	*12*	4	0.485	ug/L
MKTF-10	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.3	0.011	ug/L
MKTF-10	4/11/2014	4-Chlorophenyl-phenylether	ND	12	4.1	NA	ug/L
MKTF-10	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.8	9.81	ug/L
MKTF-10	4/11/2014	3,4-Methylphenol	260	50	9.1	NA	ug/L
MKTF-10	6/6/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	6/6/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	6/6/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	6/6/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	6/6/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	6/6/2014	Aniline	**75**	10	2.4	13	ug/L
MKTF-10	6/6/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	6/6/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	6/6/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	6/6/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	6/6/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	6/6/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	6/6/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	6/6/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	6/6/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	6/6/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	6/6/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	6/6/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	6/6/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	6/6/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	6/6/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	6/6/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	6/6/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	6/6/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	6/6/2014	1-Methylnaphthalene	**40**	10	3.6	11.38	ug/L
MKTF-10	6/6/2014	Naphthalene	**140**	10	2.3	30	ug/L
MKTF-10	6/6/2014	2-Methylnaphthalene	**53**	10	2.6	35.1	ug/L
MKTF-10	6/6/2014	2-Chloronaphthalene	ND	10	3	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/6/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	6/6/2014	2-Methylphenol	490	80	11	NA	ug/L
MKTF-10	6/6/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	6/6/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	6/6/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	6/6/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	6/6/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	6/6/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	6/6/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	6/6/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	6/6/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	6/6/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	6/6/2014	2,4-Dimethylphenol	110	10	3.1	354	ug/L
MKTF-10	6/6/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	6/6/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	6/6/2014	Phenol	370	40	6.3	5761	ug/L
MKTF-10	6/6/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	6/6/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-10	6/6/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-10	6/6/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	6/6/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	6/6/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	6/6/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	6/6/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	6/6/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	6/6/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	6/6/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	6/6/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	6/6/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	6/6/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	6/6/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	6/6/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	6/6/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	6/6/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	6/6/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-10	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	6/6/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	6/6/2014	3,4-Methylphenol	610	40	7.3	NA	ug/L
MKTF-10	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	9/18/2014	Aniline	**73**	10	2.4	13	ug/L
MKTF-10	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	9/18/2014	1-Methylnaphthalene	**36**	10	3.6	11.38	ug/L
MKTF-10	9/18/2014	Naphthalene	**98**	10	2.3	30	ug/L
MKTF-10	9/18/2014	2-Methylnaphthalene	**42**	10	2.6	35.1	ug/L
MKTF-10	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-10	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	9/18/2014	2-Methylphenol	320	100	14	NA	ug/L
MKTF-10	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	9/18/2014	2,4-Dimethylphenol	90	10	3.1	354	ug/L
MKTF-10	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	9/18/2014	Phenol	250	50	7.9	5761	ug/L
MKTF-10	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-10	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-10	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	9/18/2014	3,4-Methylphenol	380	50	9.1	NA	ug/L
MKTF-10	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	11/14/2014	Aniline	**54**	10	2.4	13	ug/L
MKTF-10	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	11/14/2014	1-Methylnaphthalene	**46**	10	3.6	11.38	ug/L
MKTF-10	11/14/2014	Naphthalene	**99**	10	2.3	30	ug/L
MKTF-10	11/14/2014	2-Methylnaphthalene	**51**	10	2.6	35.1	ug/L
MKTF-10	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-10	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	11/14/2014	2-Methylphenol	330	50	14	NA	ug/L
MKTF-10	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	11/14/2014	2,4-Dimethylphenol	63	10	3.1	354	ug/L
MKTF-10	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	11/14/2014	Phenol	290	50	7.9	5761	ug/L
MKTF-10	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	11/14/2014	Bis(2-ethylhexyl)phthalate	10	10	3	55.64	ug/L
MKTF-10	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-10	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-10	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	11/14/2014	3,4-Methylphenol	400	50	9.1	NA	ug/L
MKTF-10	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Aniline	**67**	10	1.5	13	ug/L
MKTF-10	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-10	3/16/2015	Naphthalene	**170**	10	1.8	30	ug/L
MKTF-10	3/16/2015	2-Methylnaphthalene	**88**	10	2.2	35.1	ug/L
MKTF-10	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	3/16/2015	2-Methylphenol	530	50	6.2	NA	ug/L
MKTF-10	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	3/16/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-10	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	3/16/2015	Phenol	420	50	5.4	5761	ug/L
MKTF-10	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	3/16/2015	3,4-Methylphenol	630	50	7.4	NA	ug/L
MKTF-10	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-10	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	6/4/2015	1-Methylnaphthalene	**66**	10	1.8	11.38	ug/L
MKTF-10	6/4/2015	Naphthalene	**180**	10	1.8	30	ug/L
MKTF-10	6/4/2015	2-Methylnaphthalene	**84**	10	2.2	35.1	ug/L
MKTF-10	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	6/4/2015	2-Methylphenol	350	50	6.2	NA	ug/L
MKTF-10	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	6/4/2015	2,4-Dimethylphenol	100	10	1.9	354	ug/L
MKTF-10	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	6/4/2015	Phenol	280	50	5.4	5761	ug/L
MKTF-10	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	6/4/2015	3,4-Methylphenol	540	50	7.4	NA	ug/L
MKTF-10	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Aniline	**60**	10	1.5	13	ug/L
MKTF-10	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	8/18/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-10	8/18/2015	Naphthalene	**250**	40	7.3	30	ug/L
MKTF-10	8/18/2015	2-Methylnaphthalene	**130**	10	2.2	35.1	ug/L
MKTF-10	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	8/18/2015	2-Methylphenol	450	40	5	NA	ug/L
MKTF-10	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	8/18/2015	2,4-Dimethylphenol	85	10	1.9	354	ug/L
MKTF-10	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	8/18/2015	Phenol	410	40	4.3	5761	ug/L
MKTF-10	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	8/18/2015	3,4-Methylphenol	650	40	5.9	NA	ug/L
MKTF-10	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Aniline	**29**	10	1.5	13	ug/L
MKTF-10	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	11/3/2015	1-Methylnaphthalene	**60**	10	1.8	11.38	ug/L
MKTF-10	11/3/2015	Naphthalene	**140**	10	1.8	30	ug/L
MKTF-10	11/3/2015	2-Methylnaphthalene	**69**	10	2.2	35.1	ug/L
MKTF-10	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	11/3/2015	2-Methylphenol	280	50	6.2	NA	ug/L
MKTF-10	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	11/3/2015	2,4-Dimethylphenol	93	10	1.9	354	ug/L
MKTF-10	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	11/3/2015	Phenol	240	50	5.4	5761	ug/L
MKTF-10	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	11/3/2015	3,4-Methylphenol	420	50	7.4	NA	ug/L
MKTF-10	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-10	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-10	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-10	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-10	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-10	2/29/2016	Aniline	**42**	10	9.8	13	ug/L
MKTF-10	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-10	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-10	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-10	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-10	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-10	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-10	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-10	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-10	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-10	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-10	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-10	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-10	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-10	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-10	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-10	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-10	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-10	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-10	2/29/2016	1-Methylnaphthalene	**57**	10	6.8	11.38	ug/L
MKTF-10	2/29/2016	Naphthalene	**200**	10	5.9	30	ug/L
MKTF-10	2/29/2016	2-Methylnaphthalene	**80**	10	7	35.1	ug/L
MKTF-10	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-10	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-10	2/29/2016	2-Methylphenol	770	100	82	NA	ug/L
MKTF-10	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-10	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-10	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-10	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-10	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-10	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-10	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-10	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-10	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-10	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-10	2/29/2016	2,4-Dimethylphenol	170	10	4.7	354	ug/L
MKTF-10	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-10	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-10	2/29/2016	Phenol	670	100	51	5761	ug/L
MKTF-10	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-10	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-10	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-10	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-10	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-10	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-10	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-10	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-10	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-10	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-10	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-10	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-10	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-10	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-10	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-10	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-10	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-10	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-10	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-10	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-10	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-10	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-10	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-10	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-10	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-10	2/29/2016	3,4-Methylphenol	1000	100	71	NA	ug/L
MKTF-10	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-10	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-10	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-10	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-10	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-10	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-10	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-10	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-10	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-10	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-10	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-10	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-10	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-10	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-10	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-10	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-10	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-10	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-10	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-10	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-10	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	1-Methylnaphthalene	**56**	50	15	11.38	ug/L
MKTF-10	6/9/2016	Naphthalene	**150**	50	13	30	ug/L
MKTF-10	6/9/2016	2-Methylnaphthalene	**72**	50	14	35.1	ug/L
MKTF-10	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-10	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-10	6/9/2016	2-Methylphenol	820	50	13	NA	ug/L
MKTF-10	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-10	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-10	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-10	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-10	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-10	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-10	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-10	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-10	6/9/2016	2,4-Dimethylphenol	210	50	15	354	ug/L
MKTF-10	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-10	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-10	6/9/2016	Phenol	360	50	9.9	5761	ug/L
MKTF-10	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-10	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-10	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-10	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-10	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-10	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-10	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-10	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-10	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-10	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-10	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-10	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-10	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-10	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-10	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-10	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-10	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-10	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-10	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-10	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-10	6/9/2016	3,4-Methylphenol	920	50	11	NA	ug/L
MKTF-10	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-10	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-10	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-10	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Aniline	**60**	10	2.4	13	ug/L
MKTF-10	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-10	9/11/2016	Benzoic Acid	50	20	2.6	75000	ug/L
MKTF-10	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-10	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-10	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-10	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-10	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-10	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-10	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-10	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-10	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-10	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-10	9/11/2016	Carbazole	4.4	10	2.3	NA	ug/L
MKTF-10	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-10	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-10	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-10	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-10	9/11/2016	1-Methylnaphthalene	**51**	10	2.9	11.38	ug/L
MKTF-10	9/11/2016	Naphthalene	**150**	10	2.6	30	ug/L
MKTF-10	9/11/2016	2-Methylnaphthalene	**77**	10	2.9	35.1	ug/L
MKTF-10	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-10	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	9/11/2016	2-Methylphenol	690	50	13	NA	ug/L
MKTF-10	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-10	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-10	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-10	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-10	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-10	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-10	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Benzyl Alcohol	6.2	10	3	2000	ug/L
MKTF-10	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-10	9/11/2016	2,4-Dimethylphenol	200	10	3	354	ug/L
MKTF-10	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-10	9/11/2016	Phenol	260	50	9.9	5761	ug/L
MKTF-10	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-10	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-10	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	9/11/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-10	9/11/2016	Di-n-octylphthalate	5	10	2	200	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-10	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-10	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-10	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-10	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-10	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-10	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-10	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-10	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-10	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-10	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-10	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-10	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-10	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-10	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-10	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-10	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-10	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-10	9/11/2016	3,4-Methylphenol	1100	50	11	NA	ug/L
MKTF-10	11/2/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-10	11/2/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-10	11/2/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-10	11/2/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-10	11/2/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-10	11/2/2016	Benzoic Acid	56	100	13	75000	ug/L
MKTF-10	11/2/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-10	11/2/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-10	11/2/2016	Isophorone	ND	50	13	781	ug/L
MKTF-10	11/2/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-10	11/2/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-10	11/2/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-10	11/2/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-10	11/2/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-10	11/2/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-10	11/2/2016	Fluorene	ND	50	14	288	ug/L
MKTF-10	11/2/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-10	11/2/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-10	11/2/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-10	11/2/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-10	11/2/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-10	11/2/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	1-Methylnaphthalene	**47**	50	15	11.38	ug/L
MKTF-10	11/2/2016	Naphthalene	**150**	50	13	30	ug/L
MKTF-10	11/2/2016	2-Methylnaphthalene	**70**	50	14	35.1	ug/L
MKTF-10	11/2/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-10	11/2/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-10	11/2/2016	2-Methylphenol	130	50	13	NA	ug/L
MKTF-10	11/2/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-10	11/2/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-10	11/2/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-10	11/2/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-10	11/2/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-10	11/2/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-10	11/2/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-10	11/2/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-10	11/2/2016	2,4-Dimethylphenol	39	50	15	354	ug/L
MKTF-10	11/2/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-10	11/2/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-10	11/2/2016	Phenol	79	50	9.9	5761	ug/L
MKTF-10	11/2/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-10	11/2/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-10	11/2/2016	Bis(2-ethylhexyl)phthalate	34	50	13	55.64	ug/L
MKTF-10	11/2/2016	Di-n-octylphthalate	*37*	50	9.9	200	ug/L
MKTF-10	11/2/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-10	11/2/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-10	11/2/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	11/2/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-10	11/2/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-10	11/2/2016	Pyrene	ND	50	15	117	ug/L
MKTF-10	11/2/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-10	11/2/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-10	11/2/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-10	11/2/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-10	11/2/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-10	11/2/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-10	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-10	11/2/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-10	11/2/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-10	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-10	11/2/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-10	11/2/2016	3,4-Methylphenol	180	50	11	NA	ug/L
MKTF-10	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-10	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-10	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-10	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Aniline	6.7	10	2.4	13	ug/L
MKTF-10	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-10	3/2/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-10	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-10	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-10	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-10	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-10	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-10	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-10	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-10	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-10	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-10	3/2/2017	Carbazole	3.2	10	2.3	NA	ug/L
MKTF-10	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-10	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-10	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-10	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-10	3/2/2017	1-Methylnaphthalene	**37**	10	2.9	11.38	ug/L
MKTF-10	3/2/2017	Naphthalene	**120**	10	2.6	30	ug/L
MKTF-10	3/2/2017	2-Methylnaphthalene	**49**	10	2.9	35.1	ug/L
MKTF-10	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-10	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	3/2/2017	2-Methylphenol	83	10	2.5	NA	ug/L
MKTF-10	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-10	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-10	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-10	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-10	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-10	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-10	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Benzyl Alcohol	4.5	10	3	2000	ug/L
MKTF-10	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-10	3/2/2017	2,4-Dimethylphenol	31	10	3	354	ug/L
MKTF-10	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-10	3/2/2017	Phenol	50	10	2	5761	ug/L
MKTF-10	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-10	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-10	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	3/2/2017	Bis(2-ethylhexyl)phthalate	6.7	10	2.6	55.64	ug/L
MKTF-10	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-10	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-10	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-10	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-10	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-10	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-10	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-10	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-10	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-10	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-10	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-10	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-10	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-10	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-10	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-10	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-10	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-10	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-10	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-10	3/2/2017	3,4-Methylphenol	130	10	2.3	NA	ug/L
MKTF-10	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-10	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-10	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-10	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	6/8/2017	Aniline	4.9	10	3.1	13	ug/L
MKTF-10	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-10	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-10	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-10	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-10	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-10	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-10	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-10	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-10	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-10	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-10	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-10	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-10	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-10	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-10	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-10	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-10	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-10	6/8/2017	1-Methylnaphthalene	**52**	10	3.3	11.38	ug/L
MKTF-10	6/8/2017	Naphthalene	**160**	10	2.9	30	ug/L
MKTF-10	6/8/2017	2-Methylnaphthalene	**66**	10	3.3	35.1	ug/L
MKTF-10	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-10	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-10	6/8/2017	2-Methylphenol	73	10	3.3	NA	ug/L
MKTF-10	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-10	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-10	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-10	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-10	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-10	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-10	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-10	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-10	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-10	6/8/2017	2,4-Dimethylphenol	29	10	2.8	354	ug/L
MKTF-10	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-10	6/8/2017	Phenol	49	10	3.1	5761	ug/L
MKTF-10	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-10	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-10	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-10	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-10	6/8/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
MKTF-10	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-10	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-10	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-10	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-10	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-10	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-10	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-10	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-10	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-10	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-10	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-10	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-10	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-10	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-10	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-10	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-10	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-10	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-10	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-10	6/8/2017	3,4-Methylphenol	98	10	3.2	NA	ug/L
MKTF-10	9/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-10	9/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-10	9/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-10	9/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-10	9/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-10	9/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-10	9/28/2017	Benzoic Acid	65	200	39	75000	ug/L
MKTF-10	9/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-10	9/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-10	9/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-10	9/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-10	9/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-10	9/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-10	9/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-10	9/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-10	9/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-10	9/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-10	9/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-10	9/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-10	9/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-10	9/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-10	9/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-10	9/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-10	9/28/2017	Naphthalene	**110**	100	29	30	ug/L
MKTF-10	9/28/2017	2-Methylnaphthalene	**42**	100	33	35.1	ug/L
MKTF-10	9/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-10	9/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-10	9/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-10	9/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-10	9/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-10	9/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-10	9/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-10	9/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-10	9/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-10	9/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-10	9/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-10	9/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-10	9/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-10	9/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-10	9/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-10	9/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-10	9/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-10	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-10	9/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-10	9/28/2017	Bis(2-ethylhexyl)phthalate	**82**	100	48	55.64	ug/L
MKTF-10	9/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-10	9/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-10	9/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-10	9/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-10	9/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-10	9/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-10	9/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-10	9/28/2017	Dimethylphthalate	61	100	36	612	ug/L
MKTF-10	9/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-10	9/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-10	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-10	9/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-10	9/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-10	9/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-10	9/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-10	9/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-10	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-10	9/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-10	9/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-10	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-10	9/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-10	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-10	9/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-10	11/28/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-10	11/28/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-10	11/28/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-10	11/28/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-10	11/28/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-10	11/28/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-10	11/28/2017	Benzoic Acid	60	100	20	75000	ug/L
MKTF-10	11/28/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-10	11/28/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-10	11/28/2017	Isophorone	ND	50	22	781	ug/L
MKTF-10	11/28/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-10	11/28/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-10	11/28/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-10	11/28/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-10	11/28/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-10	11/28/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-10	11/28/2017	Fluorene	ND	50	20	288	ug/L
MKTF-10	11/28/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-10	11/28/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-10	11/28/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-10	11/28/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-10	11/28/2017	2-Nitrophenol	ND	50	26	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/28/2017	1-Methylnaphthalene	**47**	50	17	11.38	ug/L
MKTF-10	11/28/2017	Naphthalene	**140**	50	14	30	ug/L
MKTF-10	11/28/2017	2-Methylnaphthalene	**79**	50	16	35.1	ug/L
MKTF-10	11/28/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-10	11/28/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-10	11/28/2017	2-Methylphenol	24	50	17	NA	ug/L
MKTF-10	11/28/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-10	11/28/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-10	11/28/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-10	11/28/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-10	11/28/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-10	11/28/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-10	11/28/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-10	11/28/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-10	11/28/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-10	11/28/2017	2,4-Dimethylphenol	16	50	14	354	ug/L
MKTF-10	11/28/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-10	11/28/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-10	11/28/2017	Phenol	31	50	16	5761	ug/L
MKTF-10	11/28/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-10	11/28/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-10	11/28/2017	Bis(2-ethylhexyl)phthalate	**1000**	50	24	55.64	ug/L
MKTF-10	11/28/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-10	11/28/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-10	11/28/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-10	11/28/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-10	11/28/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-10	11/28/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-10	11/28/2017	Pyrene	ND	50	22	117	ug/L
MKTF-10	11/28/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-10	11/28/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-10	11/28/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-10	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-10	11/28/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-10	11/28/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-10	11/28/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-10	11/28/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-10	11/28/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-10	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-10	11/28/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-10	11/28/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-10	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-10	11/28/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-10	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-10	11/28/2017	3,4-Methylphenol	28	50	16	NA	ug/L
MKTF-10	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-10	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-10	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-10	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-10	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-10	2/14/2018	Benzoic Acid	22	20	3.9	75000	ug/L
MKTF-10	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-10	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-10	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-10	2/14/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-10	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-10	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-10	2/14/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-10	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-10	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-10	2/14/2018	Fluorene	ND	10	4	288	ug/L
MKTF-10	2/14/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-10	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-10	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-10	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-10	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-10	2/14/2018	1-Methylnaphthalene	**53**	10	3.3	11.38	ug/L
MKTF-10	2/14/2018	Naphthalene	**150**	10	2.9	30	ug/L
MKTF-10	2/14/2018	2-Methylnaphthalene	**82**	10	3.3	35.1	ug/L
MKTF-10	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-10	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-10	2/14/2018	2-Methylphenol	36	10	3.3	NA	ug/L
MKTF-10	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-10	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-10	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-10	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-10	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-10	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-10	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-10	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-10	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-10	2/14/2018	2,4-Dimethylphenol	25	10	2.8	354	ug/L
MKTF-10	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-10	2/14/2018	Phenol	42	10	3.1	5761	ug/L
MKTF-10	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-10	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-10	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-10	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-10	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-10	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-10	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-10	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-10	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-10	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-10	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-10	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-10	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-10	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-10	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-10	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-10	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-10	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-10	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-10	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-10	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-10	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-10	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-10	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-10	2/14/2018	3,4-Methylphenol	37	10	3.2	NA	ug/L
MKTF-10	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	5/2/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	5/2/2018	1-Methylnaphthalene	**42**	10	7	11.38	ug/L
MKTF-10	5/2/2018	Naphthalene	**110**	10	5	30	ug/L
MKTF-10	5/2/2018	2-Methylnaphthalene	**55**	10	6.3	35.1	ug/L
MKTF-10	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	5/2/2018	2-Methylphenol	21	10	6.3	NA	ug/L
MKTF-10	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-10	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	5/2/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
MKTF-10	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	5/2/2018	Phenol	36	10	6	5761	ug/L
MKTF-10	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-10	5/2/2018	3,4-Methylphenol	22	10	5.4	NA	ug/L
MKTF-10	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	9/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	9/4/2018	1-Methylnaphthalene	**50**	10	7	11.38	ug/L
MKTF-10	9/4/2018	Naphthalene	**130**	10	5	30	ug/L
MKTF-10	9/4/2018	2-Methylnaphthalene	**64**	10	6.3	35.1	ug/L
MKTF-10	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	9/4/2018	2-Methylphenol	10	10	6.3	NA	ug/L
MKTF-10	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	9/4/2018	2,4-Dimethylphenol	13	10	5.9	354	ug/L
MKTF-10	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	9/4/2018	Phenol	30	10	6	5761	ug/L
MKTF-10	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-10	9/4/2018	3,4-Methylphenol	10	10	5.4	NA	ug/L
MKTF-10	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	11/20/2018	1-Methylnaphthalene	**34**	10	7	11.38	ug/L
MKTF-10	11/20/2018	Naphthalene	**98**	10	5	30	ug/L
MKTF-10	11/20/2018	2-Methylnaphthalene	**51**	10	6.3	35.1	ug/L
MKTF-10	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-10	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	11/20/2018	2,4-Dimethylphenol	14	10	5.9	354	ug/L
MKTF-10	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	11/20/2018	Phenol	28	10	6	5761	ug/L
MKTF-10	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-10	5/13/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-10	5/13/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-10	5/13/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-10	5/13/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-10	5/13/2019	1-Methylnaphthalene	**68**	50	15.345382	11.38	ug/L
MKTF-10	5/13/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-10	5/13/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-10	5/13/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-10	5/13/2019	2,4-Dimethylphenol	17	50	14.829964	354	ug/L
MKTF-10	5/13/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-10	5/13/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-10	5/13/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-10	5/13/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-10	5/13/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-10	5/13/2019	2-Methylnaphthalene	**93**	50	15.094314	35.1	ug/L
MKTF-10	5/13/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-10	5/13/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-10	5/13/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-10	5/13/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-10	5/13/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-10	5/13/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-10	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-10	5/13/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-10	5/13/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-10	5/13/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-10	5/13/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-10	5/13/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-10	5/13/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-10	5/13/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-10	5/13/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-10	5/13/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-10	5/13/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-10	5/13/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-10	5/13/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-10	5/13/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-10	5/13/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-10	5/13/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-10	5/13/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-10	5/13/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-10	5/13/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-10	5/13/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-10	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-10	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-10	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-10	5/13/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-10	5/13/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-10	5/13/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-10	5/13/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-10	5/13/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-10	5/13/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-10	5/13/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-10	5/13/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-10	5/13/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-10	5/13/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-10	5/13/2019	Fluorene	15	50	14.442442	288	ug/L
MKTF-10	5/13/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-10	5/13/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-10	5/13/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-10	5/13/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-10	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-10	5/13/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-10	5/13/2019	Naphthalene	**170**	50	20.61105	30	ug/L
MKTF-10	5/13/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-10	5/13/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-10	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-10	5/13/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-10	5/13/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-10	5/13/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-10	5/13/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-10	5/13/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-10	5/13/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-10	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-10	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-10	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-10	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-10	8/22/2019	1-Methylnaphthalene	**54**	10	3.069076	11.38	ug/L
MKTF-10	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-10	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-10	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-10	8/22/2019	2,4-Dimethylphenol	23	10	2.965993	354	ug/L
MKTF-10	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-10	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-10	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-10	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-10	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-10	8/22/2019	2-Methylnaphthalene	**76**	10	3.018863	35.1	ug/L
MKTF-10	8/22/2019	2-Methylphenol	9.2	10	2.858438	NA	ug/L
MKTF-10	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-10	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-10	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-10	8/22/2019	3,4-Methylphenol	4.7	10	3.584453	NA	ug/L
MKTF-10	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-10	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-10	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-10	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-10	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-10	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-10	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-10	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-10	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-10	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-10	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-10	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-10	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-10	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-10	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-10	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-10	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-10	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-10	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-10	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-10	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-10	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-10	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-10	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-10	8/22/2019	Carbazole	3.1	10	2.890507	NA	ug/L
MKTF-10	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-10	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-10	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-10	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-10	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-10	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-10	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-10	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-10	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-10	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-10	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-10	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-10	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-10	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-10	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-10	8/22/2019	Naphthalene	**160**	10	4.12221	30	ug/L
MKTF-10	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-10	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-10	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-10	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-10	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-10	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-10	8/22/2019	Phenol	26	10	8.036586	5761	ug/L
MKTF-10	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-10	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-10	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-10	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-10	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-10	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-10	10/30/2019	1-Methylnaphthalene	**57**	5	5	11.38	ug/L
MKTF-10	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-10	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-10	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-10	10/30/2019	2,4-Dimethylphenol	14	5	5	354	ug/L
MKTF-10	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-10	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-10	10/30/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-10	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-10	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-10	10/30/2019	2-Methylnaphthalene	**84**	5	5	35.1	ug/L
MKTF-10	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-10	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-10	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-10	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-10	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-10	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-10	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-10	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-10	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-10	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-10	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-10	10/30/2019	Benzoic Acid	45	5	5	75000	ug/L
MKTF-10	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-10	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-10	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-10	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-10	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-10	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-10	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-10	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-10	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-10	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-10	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-10	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-10	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-10	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-10	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-10	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-10	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-10	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-10	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-10	10/30/2019	Naphthalene	**140**	5	5	30	ug/L
MKTF-10	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-10	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-10	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-10	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-10	10/30/2019	Phenol	5.4	5	5	5761	ug/L
MKTF-10	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-10	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-10	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-10	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-10	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-10	3/3/2020	1,4-Dioxane	**6.6**	5	1	4.59	ug/L
MKTF-10	3/3/2020	1-Methylnaphthalene	**54**	2.5	0.5	11.38	ug/L
MKTF-10	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-10	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-10	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-10	3/3/2020	2,4-Dimethylphenol	3.2	2.5	0.5	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-10	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-10	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-10	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-10	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-10	3/3/2020	2-Methylnaphthalene	**84**	2.5	0.5	35.1	ug/L
MKTF-10	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-10	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	3,4-Methylphenol	4.3	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-10	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-10	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-10	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Acenaphthene	0.9	2.5	0.5	535	ug/L
MKTF-10	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-10	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-10	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-10	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-10	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-10	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-10	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-10	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-10	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-10	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-10	3/3/2020	Bis(2-ethylhexyl)phthalate	1.21	2.5	1	55.64	ug/L
MKTF-10	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-10	3/3/2020	Carbazole	2.8	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-10	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-10	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-10	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-10	3/3/2020	Dibenzofuran	1.33	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-10	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-10	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-10	3/3/2020	Fluorene	2.12	2.5	0.5	288	ug/L
MKTF-10	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-10	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-10	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-10	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-10	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-10	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-10	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-10	3/3/2020	Naphthalene	**150**	2.5	0.5	30	ug/L
MKTF-10	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-10	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-10	3/3/2020	Phenanthrene	1.72	2.5	0.5	170	ug/L
MKTF-10	3/3/2020	Phenol	64	2.5	0.5	5761	ug/L
MKTF-10	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-10	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-10	12/18/2020	1,3-Dichlorobenzene	ND	10.2	1.93	NA	ug/L
MKTF-10	12/18/2020	1,4-Dichlorobenzene	ND	10.2	1.93	75	ug/L
MKTF-10	12/18/2020	2,4,5-Trichlorophenol	ND	10.2	1.12	1166	ug/L
MKTF-10	12/18/2020	2,4,6-Trichlorophenol	ND	10.2	1.62	11.9*	ug/L
MKTF-10	12/18/2020	2,4-Dichlorophenol	ND	10.2	1.52	45.3	ug/L
MKTF-10	12/18/2020	2,4-Dimethylphenol	26.6	10.2	1.32	354	ug/L
MKTF-10	12/18/2020	2,4-Dinitrophenol	ND	30.5	4.67	38.7	ug/L
MKTF-10	12/18/2020	2-Chloronaphthalene	ND	10.2	1.52	733	ug/L
MKTF-10	12/18/2020	2-Chlorophenol	ND	10.2	1.73	91	ug/L
MKTF-10	12/18/2020	2-Methylphenol	ND	10.2	1.52	NA	ug/L
MKTF-10	12/18/2020	2-Nitroaniline	ND	10.2	1.83	190	ug/L
MKTF-10	12/18/2020	2-Nitrophenol	ND	10.2	2.03	NA	ug/L
MKTF-10	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10.2*	4.06	1.25	ug/L
MKTF-10	12/18/2020	3-Nitroaniline	ND	10.2	2.23	NA	ug/L
MKTF-10	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.2*	4.06	1.52	ug/L
MKTF-10	12/18/2020	4-Bromophenyl-phenylether	ND	10.2	1.32	NA	ug/L
MKTF-10	12/18/2020	4-Chloro-3-Methylphenol	ND	10.2	1.42	NA	ug/L
MKTF-10	12/18/2020	4-Chloroaniline	*ND*	*10.2*	1.83	0.37	ug/L
MKTF-10	12/18/2020	4-Chlorophenyl-phenylether	ND	10.2	1.32	NA	ug/L
MKTF-10	12/18/2020	4-Nitroaniline	*ND*	*10.2*	4.16	3.8	ug/L
MKTF-10	12/18/2020	4-Nitrophenol	ND	10.2	3.35	NA	ug/L
MKTF-10	12/18/2020	Acenaphthene	ND	10.2	1.32	535	ug/L
MKTF-10	12/18/2020	Acenaphthylene	ND	10.2	1.42	NA	ug/L
MKTF-10	12/18/2020	Aniline	ND	10.2	3.55	13	ug/L
MKTF-10	12/18/2020	Anthracene	ND	10.2	1.32	1721	ug/L
MKTF-10	12/18/2020	Benzo(a)anthracene	*ND*	*10.2*	1.83	0.12	ug/L
MKTF-10	12/18/2020	Benzo(a)pyrene	*ND*	*10.2*	1.73	0.2	ug/L
MKTF-10	12/18/2020	Benzo(b)fluoranthene	*ND*	*10.2*	1.73	0.34	ug/L
MKTF-10	12/18/2020	Benzo(g,h,i)perylene	ND	10.2	3.15	NA	ug/L
MKTF-10	12/18/2020	Benzo(k)fluoranthene	*ND*	*10.2*	1.73	3.43	ug/L
MKTF-10	12/18/2020	Benzoic Acid	ND	30.5	5.79	75000	ug/L
MKTF-10	12/18/2020	Benzyl Alcohol	ND	10.2	2.23	2000	ug/L
MKTF-10	12/18/2020	Bis(2-chloroethoxy)methane	ND	10.2	1.42	59	ug/L
MKTF-10	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10.2*	1.22	0.137	ug/L
MKTF-10	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10.2	2.74	55.64	ug/L
MKTF-10	12/18/2020	Butylbenzylphthalate	ND	10.2	2.34	16	ug/L
MKTF-10	12/18/2020	Carbazole	ND	10.2	1.93	NA	ug/L
MKTF-10	12/18/2020	Chrysene	ND	10.2	1.83	34.3	ug/L
MKTF-10	12/18/2020	Di-n-butylphthalate	ND	10.2	1.73	885	ug/L
MKTF-10	12/18/2020	Di-n-octylphthalate	ND	10.2	1.62	200	ug/L
MKTF-10	12/18/2020	Dibenzo(a,h)anthracene	ND	10.2	2.74	NA	ug/L
MKTF-10	12/18/2020	Dibenzofuran	ND	10.2	1.52	NA	ug/L
MKTF-10	12/18/2020	Diethylphthalate	ND	10.2	1.12	14801	ug/L
MKTF-10	12/18/2020	Dimethylphthalate	ND	10.2	1.22	612	ug/L
MKTF-10	12/18/2020	Fluoranthene	ND	10.2	1.32	802	ug/L
MKTF-10	12/18/2020	Fluorene	ND	10.2	1.32	288	ug/L
MKTF-10	12/18/2020	Hexachlorobenzene	*ND*	*10.2*	1.22	0.0976	ug/L
MKTF-10	12/18/2020	Hexachlorocyclopentadiene	*ND*	*20.3*	1.93	0.41	ug/L
MKTF-10	12/18/2020	Hexachloroethane	*ND*	*10.2*	2.44	3.28	ug/L
MKTF-10	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.2*	2.94	0.343	ug/L
MKTF-10	12/18/2020	Isophorone	ND	10.2	1.73	781	ug/L
MKTF-10	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10.2*	2.03	0.011	ug/L
MKTF-10	12/18/2020	N-Nitrosodimethylamine	*ND*	*10.2*	2.23	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	N-Nitrosodiphenylamine	ND	10.2	1.12	122	ug/L
MKTF-10	12/18/2020	Naphthalene	**104**	10.2	1.73	30	ug/L
MKTF-10	12/18/2020	Nitrobenzene	*ND*	*10.2*	1.62	1.4	ug/L
MKTF-10	12/18/2020	Pentachlorophenol	*ND*	*20.3*	3.76	1	ug/L
MKTF-10	12/18/2020	Phenanthrene	ND	10.2	1.42	170	ug/L
MKTF-10	12/18/2020	Phenol	30.1	10.2	1.32	5761	ug/L
MKTF-10	12/18/2020	Pyrene	ND	10.2	1.52	117	ug/L
MKTF-10	12/18/2020	Pyridine	ND	10.2	4.47	20	ug/L
MKTF-10	12/18/2020	1,2,4-Trichlorobenzene	ND	10.2	1.83	70	ug/L
MKTF-10	12/18/2020	1,2-Dichlorobenzene	ND	10.2	1.83	600	ug/L
MKTF-10	12/18/2020	2,4-Dinitrotoluene	ND	10.2	1.42	45.3	ug/L
MKTF-10	12/18/2020	2,6-Dinitrotoluene	*ND*	*10.2*	1.32	0.485	ug/L
MKTF-10	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.2*	1.73	9.81	ug/L
MKTF-10	12/18/2020	Azobenzene	*ND*	*10.2*	1.32	0.12	ug/L
MKTF-11	4/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	4/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	4/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	4/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	4/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	4/11/2014	Aniline	**23**	10	2.4	13	ug/L
MKTF-11	4/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	4/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	4/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	4/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	4/11/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	4/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	4/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	4/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	4/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	4/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	4/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	4/11/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	4/11/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	4/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	4/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	4/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	4/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	4/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	4/11/2014	1-Methylnaphthalene	**12**	10	3.6	11.38	ug/L
MKTF-11	4/11/2014	Naphthalene	**38**	10	2.3	30	ug/L
MKTF-11	4/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	4/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	4/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	4/11/2014	2-Methylphenol	160	20	2.8	NA	ug/L
MKTF-11	4/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	4/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	4/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	4/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	4/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	4/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	4/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	4/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	4/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	4/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	4/11/2014	2,4-Dimethylphenol	78	10	3.1	354	ug/L
MKTF-11	4/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	4/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	4/11/2014	Phenol	21	10	1.6	5761	ug/L
MKTF-11	4/11/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	4/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	4/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	4/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	4/11/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	4/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	4/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	4/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	4/11/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	4/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	4/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	4/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	4/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	4/11/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	4/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	4/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	4/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	4/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	4/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	4/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	4/11/2014	3,4-Methylphenol	110	10	1.8	NA	ug/L
MKTF-11	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	6/5/2014	Aniline	**25**	10	2.4	13	ug/L
MKTF-11	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	6/5/2014	1-Methylnaphthalene	11	10	3.6	11.38	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/5/2014	Naphthalene	**46**	10	2.3	30	ug/L
MKTF-11	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	6/5/2014	2-Methylphenol	180	20	2.8	NA	ug/L
MKTF-11	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	6/5/2014	2,4-Dimethylphenol	92	10	3.1	354	ug/L
MKTF-11	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	6/5/2014	Phenol	32	10	1.6	5761	ug/L
MKTF-11	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	6/5/2014	3,4-Methylphenol	130	10	1.8	NA	ug/L
MKTF-11	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	9/15/2014	Aniline	**24**	10	2.4	13	ug/L
MKTF-11	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	9/15/2014	1-Methylnaphthalene	**14**	10	3.6	11.38	ug/L
MKTF-11	9/15/2014	Naphthalene	**39**	10	2.3	30	ug/L
MKTF-11	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/15/2014	2-Methylphenol	150	20	2.8	NA	ug/L
MKTF-11	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	9/15/2014	2,4-Dimethylphenol	59	10	3.1	354	ug/L
MKTF-11	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	9/15/2014	Phenol	31	10	1.6	5761	ug/L
MKTF-11	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-11	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	9/15/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	9/15/2014	3,4-Methylphenol	110	10	1.8	NA	ug/L
MKTF-11	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	9/24/2014	Aniline	**27**	10	2.4	13	ug/L
MKTF-11	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	9/24/2014	1-Methylnaphthalene	**24**	10	3.6	11.38	ug/L
MKTF-11	9/24/2014	Naphthalene	**67**	10	2.3	30	ug/L
MKTF-11	9/24/2014	2-Methylnaphthalene	22	10	2.6	35.1	ug/L
MKTF-11	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/24/2014	2-Methylphenol	350	40	5.5	NA	ug/L
MKTF-11	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	9/24/2014	2,4-Dimethylphenol	190	10	3.1	354	ug/L
MKTF-11	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	9/24/2014	Phenol	78	10	1.6	5761	ug/L
MKTF-11	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-11	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	9/24/2014	3,4-Methylphenol	240	20	3.7	NA	ug/L
MKTF-11	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	11/13/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-11	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	11/13/2014	1-Methylnaphthalene	**15**	10	3.6	11.38	ug/L
MKTF-11	11/13/2014	Naphthalene	**31**	10	2.3	30	ug/L
MKTF-11	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	11/13/2014	2-Methylphenol	70	10	2.8	NA	ug/L
MKTF-11	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	11/13/2014	2,4-Dimethylphenol	12	10	3.1	354	ug/L
MKTF-11	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	11/13/2014	Phenol	20	10	1.6	5761	ug/L
MKTF-11	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	11/13/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-11	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	11/13/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	11/13/2014	3,4-Methylphenol	46	10	1.8	NA	ug/L
MKTF-11	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Aniline	**44**	10	1.5	13	ug/L
MKTF-11	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	3/16/2015	1-Methylnaphthalene	**25**	10	1.8	11.38	ug/L
MKTF-11	3/16/2015	Naphthalene	**69**	10	1.8	30	ug/L
MKTF-11	3/16/2015	2-Methylnaphthalene	20	10	2.2	35.1	ug/L
MKTF-11	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	3/16/2015	2-Methylphenol	270	20	2.5	NA	ug/L
MKTF-11	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	3/16/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-11	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	3/16/2015	Phenol	52	10	1.1	5761	ug/L
MKTF-11	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	3/16/2015	3,4-Methylphenol	240	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Aniline	**46**	10	1.5	13	ug/L
MKTF-11	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	6/4/2015	1-Methylnaphthalene	**20**	10	1.8	11.38	ug/L
MKTF-11	6/4/2015	Naphthalene	**70**	10	1.8	30	ug/L
MKTF-11	6/4/2015	2-Methylnaphthalene	21	10	2.2	35.1	ug/L
MKTF-11	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	6/4/2015	2-Methylphenol	300	50	6.2	NA	ug/L
MKTF-11	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	6/4/2015	2,4-Dimethylphenol	140	10	1.9	354	ug/L
MKTF-11	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	6/4/2015	Phenol	53	10	1.1	5761	ug/L
MKTF-11	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	6/4/2015	3,4-Methylphenol	230	50	7.4	NA	ug/L
MKTF-11	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	8/18/2015	2,4-Dinitrophenol	ND	29	1.5	38.7	ug/L
MKTF-11	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	8/18/2015	4-Chloro-3-Methylphenol	ND	14	1.9	NA	ug/L
MKTF-11	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-11	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	8/18/2015	Benzoic Acid	ND	29	1.5	75000	ug/L
MKTF-11	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	8/18/2015	Pentachlorophenol	*ND*	*29*	1.6	1	ug/L
MKTF-11	8/18/2015	2,4,6-Trichlorophenol	ND	14	1.8	11.9*	ug/L
MKTF-11	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	8/18/2015	2-Nitrophenol	ND	14	1.8	NA	ug/L
MKTF-11	8/18/2015	1-Methylnaphthalene	10	10	1.8	11.38	ug/L
MKTF-11	8/18/2015	Naphthalene	17	10	1.8	30	ug/L
MKTF-11	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-11	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	8/18/2015	2-Methylphenol	49	14	1.8	NA	ug/L
MKTF-11	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	8/18/2015	2-Chlorophenol	ND	14	1.7	91	ug/L
MKTF-11	8/18/2015	2,4,5-Trichlorophenol	ND	14	2.3	1166	ug/L
MKTF-11	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	8/18/2015	4-Nitrophenol	ND	14	2	NA	ug/L
MKTF-11	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	8/18/2015	2,4-Dimethylphenol	15	14	2.6	354	ug/L
MKTF-11	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	8/18/2015	Phenol	27	14	1.6	5761	ug/L
MKTF-11	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	8/18/2015	2,4-Dichlorophenol	ND	29	2	45.3	ug/L
MKTF-11	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*29*	2	1.52	ug/L
MKTF-11	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	8/18/2015	3,4-Methylphenol	29	14	2.1	NA	ug/L
MKTF-11	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Aniline	**38**	10	1.5	13	ug/L
MKTF-11	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	11/3/2015	1-Methylnaphthalene	**22**	10	1.8	11.38	ug/L
MKTF-11	11/3/2015	Naphthalene	**73**	10	1.8	30	ug/L
MKTF-11	11/3/2015	2-Methylnaphthalene	23	10	2.2	35.1	ug/L
MKTF-11	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	11/3/2015	2-Methylphenol	300	50	6.2	NA	ug/L
MKTF-11	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	11/3/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-11	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	11/3/2015	Phenol	90	10	1.1	5761	ug/L
MKTF-11	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	11/3/2015	3,4-Methylphenol	270	50	7.4	NA	ug/L
MKTF-11	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-11	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-11	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-11	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-11	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-11	2/29/2016	Aniline	11	10	9.8	13	ug/L
MKTF-11	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-11	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-11	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-11	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-11	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-11	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-11	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-11	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-11	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-11	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-11	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-11	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-11	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-11	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-11	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-11	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-11	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-11	2/29/2016	1-Methylnaphthalene	**14**	10	6.8	11.38	ug/L
MKTF-11	2/29/2016	Naphthalene	**38**	10	5.9	30	ug/L
MKTF-11	2/29/2016	2-Methylnaphthalene	11	10	7	35.1	ug/L
MKTF-11	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-11	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-11	2/29/2016	2-Methylphenol	84	10	8.2	NA	ug/L
MKTF-11	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-11	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-11	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-11	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-11	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-11	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-11	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-11	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-11	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-11	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-11	2/29/2016	2,4-Dimethylphenol	18	10	4.7	354	ug/L
MKTF-11	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-11	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-11	2/29/2016	Phenol	29	10	5.1	5761	ug/L
MKTF-11	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-11	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-11	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-11	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-11	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-11	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-11	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-11	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-11	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-11	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-11	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-11	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-11	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-11	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-11	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-11	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-11	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-11	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-11	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-11	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-11	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-11	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-11	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-11	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-11	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-11	2/29/2016	3,4-Methylphenol	49	10	7.1	NA	ug/L
MKTF-11	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Aniline	3.7	10	2.4	13	ug/L
MKTF-11	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	6/9/2016	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
MKTF-11	6/9/2016	Naphthalene	**33**	10	2.6	30	ug/L
MKTF-11	6/9/2016	2-Methylnaphthalene	10	10	2.9	35.1	ug/L
MKTF-11	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	6/9/2016	2-Methylphenol	88	10	2.5	NA	ug/L
MKTF-11	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	6/9/2016	2,4-Dimethylphenol	22	10	3	354	ug/L
MKTF-11	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	6/9/2016	Phenol	45	10	2	5761	ug/L
MKTF-11	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	6/9/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-11	6/9/2016	Di-n-octylphthalate	4.8	10	2	200	ug/L
MKTF-11	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	6/9/2016	3,4-Methylphenol	63	10	2.3	NA	ug/L
MKTF-11	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Aniline	9.3	10	2.4	13	ug/L
MKTF-11	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	9/11/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	9/11/2016	1-Methylnaphthalene	**12**	10	2.9	11.38	ug/L
MKTF-11	9/11/2016	Naphthalene	30	10	2.6	30	ug/L
MKTF-11	9/11/2016	2-Methylnaphthalene	9	10	2.9	35.1	ug/L
MKTF-11	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/11/2016	2-Methylphenol	130	10	2.5	NA	ug/L
MKTF-11	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	9/11/2016	2,4-Dimethylphenol	42	10	3	354	ug/L
MKTF-11	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	9/11/2016	Phenol	49	10	2	5761	ug/L
MKTF-11	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/11/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-11	9/11/2016	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-11	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	9/11/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-11	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	9/11/2016	3,4-Methylphenol	120	10	2.3	NA	ug/L
MKTF-11	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Aniline	7	10	2.4	13	ug/L
MKTF-11	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	11/2/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	11/2/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-11	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	11/2/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	11/2/2016	Carbazole	2.4	10	2.3	NA	ug/L
MKTF-11	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	11/2/2016	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
MKTF-11	11/2/2016	Naphthalene	**34**	10	2.6	30	ug/L
MKTF-11	11/2/2016	2-Methylnaphthalene	9.5	10	2.9	35.1	ug/L
MKTF-11	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	11/2/2016	2-Methylphenol	96	10	2.5	NA	ug/L
MKTF-11	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	11/2/2016	2,4-Dimethylphenol	13	10	3	354	ug/L
MKTF-11	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	11/2/2016	Phenol	40	10	2	5761	ug/L
MKTF-11	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	11/2/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-11	11/2/2016	Di-n-octylphthalate	7.2	10	2	200	ug/L
MKTF-11	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	11/2/2016	3,4-Methylphenol	89	10	2.3	NA	ug/L
MKTF-11	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-11	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	3/2/2017	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-11	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	3/2/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	3/2/2017	1-Methylnaphthalene	9.2	10	2.9	11.38	ug/L
MKTF-11	3/2/2017	Naphthalene	24	10	2.6	30	ug/L
MKTF-11	3/2/2017	2-Methylnaphthalene	6.9	10	2.9	35.1	ug/L
MKTF-11	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	3/2/2017	2-Methylphenol	40	10	2.5	NA	ug/L
MKTF-11	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	3/2/2017	2,4-Dimethylphenol	13	10	3	354	ug/L
MKTF-11	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	3/2/2017	Phenol	15	10	2	5761	ug/L
MKTF-11	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	3/2/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-11	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-11	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	3/2/2017	3,4-Methylphenol	31	10	2.3	NA	ug/L
MKTF-11	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	6/8/2017	Aniline	**14**	10	3.1	13	ug/L
MKTF-11	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	6/8/2017	1-Methylnaphthalene	11	10	3.3	11.38	ug/L
MKTF-11	6/8/2017	Naphthalene	**31**	10	2.9	30	ug/L
MKTF-11	6/8/2017	2-Methylnaphthalene	8.4	10	3.3	35.1	ug/L
MKTF-11	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	6/8/2017	2-Methylphenol	210	10	3.3	NA	ug/L
MKTF-11	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	6/8/2017	2,4-Dimethylphenol	62	10	2.8	354	ug/L
MKTF-11	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	6/8/2017	Phenol	73	10	3.1	5761	ug/L
MKTF-11	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	6/8/2017	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
MKTF-11	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	6/8/2017	3,4-Methylphenol	230	10	3.2	NA	ug/L
MKTF-11	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	9/26/2017	Aniline	**26**	10	3.1	13	ug/L
MKTF-11	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	9/26/2017	1-Methylnaphthalene	**13**	10	3.3	11.38	ug/L
MKTF-11	9/26/2017	Naphthalene	**44**	10	2.9	30	ug/L
MKTF-11	9/26/2017	2-Methylnaphthalene	13	10	3.3	35.1	ug/L
MKTF-11	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	9/26/2017	2-Methylphenol	330	20	6.6	NA	ug/L
MKTF-11	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	9/26/2017	2,4-Dimethylphenol	86	10	2.8	354	ug/L
MKTF-11	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	9/26/2017	Phenol	94	10	3.1	5761	ug/L
MKTF-11	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	9/26/2017	3,4-Methylphenol	390	20	6.4	NA	ug/L
MKTF-11	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	11/28/2017	Aniline	**21**	10	3.1	13	ug/L
MKTF-11	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	11/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	11/28/2017	1-Methylnaphthalene	**14**	10	3.3	11.38	ug/L
MKTF-11	11/28/2017	Naphthalene	**45**	10	2.9	30	ug/L
MKTF-11	11/28/2017	2-Methylnaphthalene	12	10	3.3	35.1	ug/L
MKTF-11	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	11/28/2017	2-Methylphenol	220	10	3.3	NA	ug/L
MKTF-11	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	11/28/2017	2,4-Dimethylphenol	55	10	2.8	354	ug/L
MKTF-11	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	11/28/2017	Phenol	88	10	3.1	5761	ug/L
MKTF-11	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	11/28/2017	3,4-Methylphenol	270	20	6.4	NA	ug/L
MKTF-11	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	2/8/2018	Aniline	**20**	10	3.1	13	ug/L
MKTF-11	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	2/8/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-11	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	2/8/2018	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
MKTF-11	2/8/2018	Naphthalene	**54**	10	2.9	30	ug/L
MKTF-11	2/8/2018	2-Methylnaphthalene	12	10	3.3	35.1	ug/L
MKTF-11	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	2/8/2018	2-Methylphenol	200	10	3.3	NA	ug/L
MKTF-11	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	2/8/2018	2,4-Dimethylphenol	54	10	2.8	354	ug/L
MKTF-11	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	2/8/2018	Phenol	80	10	3.1	5761	ug/L
MKTF-11	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	2/8/2018	3,4-Methylphenol	260	100	32	NA	ug/L
MKTF-11	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Aniline	12	10	6.2	13	ug/L
MKTF-11	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	5/2/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-11	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	5/2/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	5/2/2018	1-Methylnaphthalene	9.9	10	7	11.38	ug/L
MKTF-11	5/2/2018	Naphthalene	**39**	10	5	30	ug/L
MKTF-11	5/2/2018	2-Methylnaphthalene	9.1	10	6.3	35.1	ug/L
MKTF-11	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	5/2/2018	2-Methylphenol	120	10	6.3	NA	ug/L
MKTF-11	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	5/2/2018	2,4-Dimethylphenol	33	10	5.9	354	ug/L
MKTF-11	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	5/2/2018	Phenol	52	10	6	5761	ug/L
MKTF-11	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-11	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	5/2/2018	3,4-Methylphenol	150	10	5.4	NA	ug/L
MKTF-11	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Aniline	11	10	6.2	13	ug/L
MKTF-11	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-11	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	9/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	9/4/2018	1-Methylnaphthalene	9.9	10	7	11.38	ug/L
MKTF-11	9/4/2018	Naphthalene	**47**	10	5	30	ug/L
MKTF-11	9/4/2018	2-Methylnaphthalene	11	10	6.3	35.1	ug/L
MKTF-11	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-11	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	9/4/2018	2-Methylphenol	110	10	6.3	NA	ug/L
MKTF-11	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	9/4/2018	2,4-Dimethylphenol	38	10	5.9	354	ug/L
MKTF-11	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	9/4/2018	Phenol	56	10	6	5761	ug/L
MKTF-11	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	9/4/2018	3,4-Methylphenol	120	10	5.4	NA	ug/L
MKTF-11	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-11	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-11	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	11/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-11	11/20/2018	Naphthalene	**38**	10	5	30	ug/L
MKTF-11	11/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-11	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-11	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	11/20/2018	2-Methylphenol	98	10	6.3	NA	ug/L
MKTF-11	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	11/20/2018	2,4-Dimethylphenol	28	10	5.9	354	ug/L
MKTF-11	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	11/20/2018	Phenol	92	10	6	5761	ug/L
MKTF-11	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-11	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	11/20/2018	3,4-Methylphenol	100	10	5.4	NA	ug/L
MKTF-11	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-11	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-11	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-11	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-11	5/13/2019	1-Methylnaphthalene	11	10	3.069076	11.38	ug/L
MKTF-11	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-11	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-11	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-11	5/13/2019	2,4-Dimethylphenol	15	10	2.965993	354	ug/L
MKTF-11	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-11	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-11	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-11	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-11	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-11	5/13/2019	2-Methylnaphthalene	8.3	10	3.018863	35.1	ug/L
MKTF-11	5/13/2019	2-Methylphenol	40	10	2.858438	NA	ug/L
MKTF-11	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-11	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-11	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-11	5/13/2019	3,4-Methylphenol	46	10	3.584453	NA	ug/L
MKTF-11	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-11	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-11	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-11	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-11	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-11	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-11	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-11	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-11	5/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-11	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-11	5/13/2019	Aniline	4.9	10	3.579516	13	ug/L
MKTF-11	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-11	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-11	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-11	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-11	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-11	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-11	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-11	5/13/2019	Benzyl Alcohol	2.6	10	2.360341	2000	ug/L
MKTF-11	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-11	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-11	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-11	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-11	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-11	5/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-11	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-11	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-11	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-11	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-11	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-11	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-11	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-11	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-11	5/13/2019	Fluorene	3.1	10	2.888488	288	ug/L
MKTF-11	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-11	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-11	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-11	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-11	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-11	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-11	5/13/2019	Naphthalene	**32**	10	4.12221	30	ug/L
MKTF-11	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-11	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-11	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-11	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-11	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-11	5/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-11	5/13/2019	Phenol	24	10	8.036586	5761	ug/L
MKTF-11	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-11	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-11	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-11	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-11	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-11	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-11	8/21/2019	1-Methylnaphthalene	9.8	10	3.069076	11.38	ug/L
MKTF-11	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-11	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-11	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-11	8/21/2019	2,4-Dimethylphenol	6.1	10	2.965993	354	ug/L
MKTF-11	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-11	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-11	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-11	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-11	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-11	8/21/2019	2-Methylnaphthalene	7.3	10	3.018863	35.1	ug/L
MKTF-11	8/21/2019	2-Methylphenol	31	10	2.858438	NA	ug/L
MKTF-11	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-11	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-11	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-11	8/21/2019	3,4-Methylphenol	24	10	3.584453	NA	ug/L
MKTF-11	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-11	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-11	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-11	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-11	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-11	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-11	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-11	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-11	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-11	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-11	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-11	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-11	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-11	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-11	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-11	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-11	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-11	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-11	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-11	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-11	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-11	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-11	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-11	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-11	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-11	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-11	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-11	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-11	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-11	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-11	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-11	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-11	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-11	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-11	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-11	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-11	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-11	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-11	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-11	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-11	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-11	8/21/2019	Naphthalene	**36**	10	4.12221	30	ug/L
MKTF-11	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-11	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-11	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-11	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-11	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-11	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-11	8/21/2019	Phenol	23	10	8.036586	5761	ug/L
MKTF-11	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-11	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-11	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-11	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-11	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-11	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-11	10/30/2019	1-Methylnaphthalene	11	5	5	11.38	ug/L
MKTF-11	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-11	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-11	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-11	10/30/2019	2,4-Dimethylphenol	19	5	5	354	ug/L
MKTF-11	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-11	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-11	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-11	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-11	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-11	10/30/2019	2-Methylnaphthalene	11	5	5	35.1	ug/L
MKTF-11	10/30/2019	2-Methylphenol	21	5	5	NA	ug/L
MKTF-11	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-11	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-11	10/30/2019	3,4-Methylphenol	17	5	5	NA	ug/L
MKTF-11	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-11	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-11	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-11	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-11	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-11	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-11	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-11	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-11	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-11	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-11	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-11	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-11	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-11	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-11	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-11	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-11	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-11	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-11	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-11	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-11	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-11	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-11	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-11	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-11	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-11	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-11	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-11	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-11	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-11	10/30/2019	Naphthalene	**49**	5	5	30	ug/L
MKTF-11	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-11	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-11	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-11	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-11	10/30/2019	Phenol	18	5	5	5761	ug/L
MKTF-11	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-11	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-11	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-11	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-11	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-11	3/3/2020	1,4-Dioxane	**20**	5	1	4.59	ug/L
MKTF-11	3/3/2020	1-Methylnaphthalene	7.8	2.5	0.5	11.38	ug/L
MKTF-11	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-11	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-11	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-11	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-11	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-11	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-11	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-11	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-11	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-11	3/3/2020	2-Methylnaphthalene	7.4	2.5	0.5	35.1	ug/L
MKTF-11	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-11	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	3,4-Methylphenol	28	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-11	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-11	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-11	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-11	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-11	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-11	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-11	3/3/2020	Benzo(a)pyrene	*ND*	*2.5*	0.5	0.2	ug/L
MKTF-11	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-11	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-11	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-11	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-11	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-11	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-11	3/3/2020	Bis(2-ethylhexyl)phthalate	4.3	2.5	1	55.64	ug/L
MKTF-11	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-11	3/3/2020	Carbazole	1.25	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-11	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-11	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-11	3/3/2020	Dibenzofuran	0.67	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-11	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-11	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-11	3/3/2020	Fluorene	0.68	2.5	0.5	288	ug/L
MKTF-11	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-11	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-11	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-11	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-11	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-11	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-11	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-11	3/3/2020	Naphthalene	27	2.5	0.5	30	ug/L
MKTF-11	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-11	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-11	3/3/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-11	3/3/2020	Phenol	99	2.5	0.5	5761	ug/L
MKTF-11	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-11	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-13	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-13	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-13	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-13	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-13	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-13	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-13	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-13	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-13	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-13	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-13	3/15/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-13	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-13	3/15/2017	Di-n-butylphthalate	2.8	10	2.4	885	ug/L
MKTF-13	3/15/2017	Phenanthrene	3	10	2.6	170	ug/L
MKTF-13	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-13	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-13	3/15/2017	Fluorene	3.4	10	2.7	288	ug/L
MKTF-13	3/15/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-13	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-13	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-13	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-13	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-13	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-13	3/15/2017	1-Methylnaphthalene	**45**	10	2.9	11.38	ug/L
MKTF-13	3/15/2017	Naphthalene	**84**	10	2.6	30	ug/L
MKTF-13	3/15/2017	2-Methylnaphthalene	**63**	10	2.9	35.1	ug/L
MKTF-13	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-13	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-13	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-13	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-13	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-13	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-13	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-13	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-13	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-13	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-13	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-13	3/15/2017	2,4-Dimethylphenol	6.7	10	3	354	ug/L
MKTF-13	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-13	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-13	3/15/2017	Phenol	8.2	10	2	5761	ug/L
MKTF-13	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-13	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-13	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-13	3/15/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-13	3/15/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-13	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-13	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-13	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-13	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-13	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-13	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-13	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-13	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-13	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-13	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-13	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-13	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-13	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-13	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-13	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-13	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-13	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-13	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-13	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-13	3/15/2017	3,4-Methylphenol	3.4	10	2.3	NA	ug/L
MKTF-13	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-13	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-13	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-13	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-13	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-13	5/10/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-13	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-13	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-13	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-13	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-13	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-13	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-13	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-13	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-13	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-13	5/10/2018	Fluorene	ND	10	6.3	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-13	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-13	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-13	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-13	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-13	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-13	5/10/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
MKTF-13	5/10/2018	Naphthalene	**120**	10	5	30	ug/L
MKTF-13	5/10/2018	2-Methylnaphthalene	**85**	10	6.3	35.1	ug/L
MKTF-13	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-13	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-13	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-13	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-13	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-13	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-13	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-13	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-13	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-13	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-13	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-13	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-13	5/10/2018	2,4-Dimethylphenol	14	10	5.9	354	ug/L
MKTF-13	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-13	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-13	5/10/2018	Phenol	30	10	6	5761	ug/L
MKTF-13	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-13	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-13	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-13	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-13	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-13	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-13	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-13	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-13	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-13	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-13	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-13	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-13	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-13	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-13	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-13	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-13	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-13	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-13	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-13	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-13	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-13	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-13	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-13	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-13	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-13	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-13	5/10/2018	3,4-Methylphenol	6	10	5.4	NA	ug/L
MKTF-13	8/30/2018	Benzo(a)pyrene	*ND*	*20*	12	0.2	ug/L
MKTF-13	8/30/2018	2,4-Dinitrophenol	*ND*	*40*	7.4	38.7	ug/L
MKTF-13	8/30/2018	Dibenzo(a,h)anthracene	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Benzo(a)anthracene	*ND*	*20*	11	0.12	ug/L
MKTF-13	8/30/2018	4-Chloro-3-Methylphenol	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Aniline	*ND*	*20*	12	13	ug/L
MKTF-13	8/30/2018	N-Nitrosodimethylamine	*ND*	*20*	14	0.0049	ug/L
MKTF-13	8/30/2018	Benzoic Acid	ND	40	13	75000	ug/L
MKTF-13	8/30/2018	Hexachloroethane	*ND*	*20*	12	3.28	ug/L
MKTF-13	8/30/2018	Hexachlorocyclopentadiene	*ND*	*20*	7.9	0.41	ug/L
MKTF-13	8/30/2018	Isophorone	ND	20	12	781	ug/L
MKTF-13	8/30/2018	Acenaphthene	ND	20	12	535	ug/L
MKTF-13	8/30/2018	Diethylphthalate	ND	20	13	14801	ug/L
MKTF-13	8/30/2018	Di-n-butylphthalate	ND	20	14	885	ug/L
MKTF-13	8/30/2018	Phenanthrene	ND	20	12	170	ug/L
MKTF-13	8/30/2018	Butylbenzylphthalate	*ND*	*20*	13	16	ug/L
MKTF-13	8/30/2018	N-Nitrosodiphenylamine	ND	20	13	122	ug/L
MKTF-13	8/30/2018	Fluorene	ND	20	13	288	ug/L
MKTF-13	8/30/2018	Carbazole	ND	20	13	NA	ug/L
MKTF-13	8/30/2018	Hexachlorobutadiene	*ND*	*20*	13	0.14	ug/L
MKTF-13	8/30/2018	Pentachlorophenol	*ND*	*40*	11	1	ug/L
MKTF-13	8/30/2018	2,4,6-Trichlorophenol	ND	20	13	11.9*	ug/L
MKTF-13	8/30/2018	2-Nitroaniline	ND	20	12	190	ug/L
MKTF-13	8/30/2018	2-Nitrophenol	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	1-Methylnaphthalene	**41**	12	8.2	11.38	ug/L
MKTF-13	8/30/2018	Naphthalene	**57**	12	5.9	30	ug/L
MKTF-13	8/30/2018	2-Methylnaphthalene	**46**	12	7.4	35.1	ug/L
MKTF-13	8/30/2018	2-Chloronaphthalene	ND	20	12	733	ug/L
MKTF-13	8/30/2018	3,3-Dichlorobenzidine	*ND*	*20*	14	1.25	ug/L
MKTF-13	8/30/2018	2-Methylphenol	ND	20	13	NA	ug/L
MKTF-13	8/30/2018	1,2-Dichlorobenzene	ND	20	12	600	ug/L
MKTF-13	8/30/2018	2-Chlorophenol	ND	20	12	91	ug/L
MKTF-13	8/30/2018	2,4,5-Trichlorophenol	ND	20	12	1166	ug/L
MKTF-13	8/30/2018	Nitrobenzene	*ND*	*20*	12	1.4	ug/L
MKTF-13	8/30/2018	3-Nitroaniline	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	4-Nitroaniline	*ND*	*20*	12	3.8	ug/L
MKTF-13	8/30/2018	4-Nitrophenol	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Benzyl Alcohol	ND	20	13	2000	ug/L
MKTF-13	8/30/2018	4-Bromophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	Azobenzene	*ND*	*20*	13	0.12	ug/L
MKTF-13	8/30/2018	2,4-Dimethylphenol	ND	20	12	354	ug/L
MKTF-13	8/30/2018	1,4-Dichlorobenzene	ND	20	12	75	ug/L
MKTF-13	8/30/2018	4-Chloroaniline	*ND*	*20*	12	0.37	ug/L
MKTF-13	8/30/2018	Phenol	ND	20	12	5761	ug/L
MKTF-13	8/30/2018	Pyridine	ND	20	11	20	ug/L
MKTF-13	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*20*	13	0.137	ug/L
MKTF-13	8/30/2018	Bis(2-chloroethoxy)methane	ND	20	12	59	ug/L
MKTF-13	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	20	16	55.64	ug/L
MKTF-13	8/30/2018	Di-n-octylphthalate	ND	20	13	200	ug/L
MKTF-13	8/30/2018	Hexachlorobenzene	*ND*	*20*	12	0.0976	ug/L
MKTF-13	8/30/2018	Anthracene	ND	20	11	1721	ug/L
MKTF-13	8/30/2018	1,2,4-Trichlorobenzene	ND	20	13	70	ug/L
MKTF-13	8/30/2018	2,4-Dichlorophenol	ND	40	12	45.3	ug/L
MKTF-13	8/30/2018	2,4-Dinitrotoluene	ND	20	12	45.3	ug/L
MKTF-13	8/30/2018	Pyrene	ND	20	13	117	ug/L
MKTF-13	8/30/2018	Dimethylphthalate	ND	20	12	612	ug/L
MKTF-13	8/30/2018	Dibenzofuran	ND	20	14	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	8/30/2018	Benzo(g,h,i)perylene	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*20*	14	0.343	ug/L
MKTF-13	8/30/2018	Benzo(b)fluoranthene	*ND*	*20*	14	0.34	ug/L
MKTF-13	8/30/2018	Fluoranthene	ND	20	12	802	ug/L
MKTF-13	8/30/2018	Benzo(k)fluoranthene	*ND*	*20*	13	3.43	ug/L
MKTF-13	8/30/2018	Acenaphthylene	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	Chrysene	ND	20	14	34.3	ug/L
MKTF-13	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*40*	11	1.52	ug/L
MKTF-13	8/30/2018	1,3-Dichlorobenzene	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	2,6-Dinitrotoluene	*ND*	*20*	12	0.485	ug/L
MKTF-13	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*20*	12	0.011	ug/L
MKTF-13	8/30/2018	4-Chlorophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*20*	9.8	9.81	ug/L
MKTF-13	8/30/2018	3,4-Methylphenol	ND	20	11	NA	ug/L
MKTF-13	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-13	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-13	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-13	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-13	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-13	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-13	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-13	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-13	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-13	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-13	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-13	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-13	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-13	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-13	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-13	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-13	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-13	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-13	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-13	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-13	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-13	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-13	11/28/2018	1-Methylnaphthalene	**91**	10	7	11.38	ug/L
MKTF-13	11/28/2018	Naphthalene	**150**	10	5	30	ug/L
MKTF-13	11/28/2018	2-Methylnaphthalene	**100**	10	6.3	35.1	ug/L
MKTF-13	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-13	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-13	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-13	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-13	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-13	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-13	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-13	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-13	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-13	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-13	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-13	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-13	11/28/2018	2,4-Dimethylphenol	21	10	5.9	354	ug/L
MKTF-13	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-13	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-13	11/28/2018	Phenol	45	10	6	5761	ug/L
MKTF-13	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-13	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-13	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-13	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-13	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-13	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-13	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-13	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-13	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-13	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-13	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-13	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-13	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-13	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-13	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-13	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-13	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-13	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-13	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-13	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-13	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-13	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-13	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-13	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-13	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-13	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-13	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-13	3/26/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-13	3/26/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-13	3/26/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-13	3/26/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-13	3/26/2019	1-Methylnaphthalene	**72**	50	34.99561	11.38	ug/L
MKTF-13	3/26/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-13	3/26/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-13	3/26/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-13	3/26/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-13	3/26/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-13	3/26/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-13	3/26/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-13	3/26/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-13	3/26/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-13	3/26/2019	2-Methylnaphthalene	**80**	50	31.661952	35.1	ug/L
MKTF-13	3/26/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-13	3/26/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
MKTF-13	3/26/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-13	3/26/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-13	3/26/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
MKTF-13	3/26/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-13	3/26/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-13	3/26/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-13	3/26/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-13	3/26/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-13	3/26/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-13	3/26/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-13	3/26/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-13	3/26/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-13	3/26/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-13	3/26/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-13	3/26/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-13	3/26/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-13	3/26/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-13	3/26/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-13	3/26/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-13	3/26/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-13	3/26/2019	Benzoic Acid	73	100	31.557804	75000	ug/L
MKTF-13	3/26/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-13	3/26/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-13	3/26/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-13	3/26/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-13	3/26/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
MKTF-13	3/26/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-13	3/26/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-13	3/26/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-13	3/26/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-13	3/26/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-13	3/26/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-13	3/26/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-13	3/26/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-13	3/26/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-13	3/26/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-13	3/26/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-13	3/26/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-13	3/26/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-13	3/26/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-13	3/26/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-13	3/26/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-13	3/26/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-13	3/26/2019	Naphthalene	**96**	50	25.207014	30	ug/L
MKTF-13	3/26/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-13	3/26/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-13	3/26/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-13	3/26/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-13	3/26/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-13	3/26/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-13	3/26/2019	Phenol	38	50	29.88676	5761	ug/L
MKTF-13	3/26/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-13	3/26/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-13	5/9/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-13	5/9/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-13	5/9/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-13	5/9/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-13	5/9/2019	1-Methylnaphthalene	**230**	50	15.345382	11.38	ug/L
MKTF-13	5/9/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-13	5/9/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-13	5/9/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-13	5/9/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-13	5/9/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-13	5/9/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-13	5/9/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-13	5/9/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-13	5/9/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-13	5/9/2019	2-Methylnaphthalene	**180**	50	15.094314	35.1	ug/L
MKTF-13	5/9/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-13	5/9/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-13	5/9/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-13	5/9/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-13	5/9/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-13	5/9/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-13	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-13	5/9/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-13	5/9/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-13	5/9/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-13	5/9/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-13	5/9/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-13	5/9/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-13	5/9/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-13	5/9/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-13	5/9/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-13	5/9/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-13	5/9/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-13	5/9/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-13	5/9/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-13	5/9/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-13	5/9/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-13	5/9/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-13	5/9/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-13	5/9/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-13	5/9/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-13	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-13	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-13	5/9/2019	Bis(2-ethylhexyl)phthalate	25	50	21.510641	55.64	ug/L
MKTF-13	5/9/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-13	5/9/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-13	5/9/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-13	5/9/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-13	5/9/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-13	5/9/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-13	5/9/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-13	5/9/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-13	5/9/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-13	5/9/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-13	5/9/2019	Fluorene	44	50	14.442442	288	ug/L
MKTF-13	5/9/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-13	5/9/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-13	5/9/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-13	5/9/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-13	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-13	5/9/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-13	5/9/2019	Naphthalene	**140**	50	20.61105	30	ug/L
MKTF-13	5/9/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-13	5/9/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-13	5/9/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-13	5/9/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-13	5/9/2019	Phenanthrene	48	50	13.88561	170	ug/L
MKTF-13	5/9/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-13	5/9/2019	Pyrene	19	50	12.517998	117	ug/L
MKTF-13	5/9/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-13	10/29/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-13	10/29/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-13	10/29/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-13	10/29/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-13	10/29/2019	1-Methylnaphthalene	**73**	5	5	11.38	ug/L
MKTF-13	10/29/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-13	10/29/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-13	10/29/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-13	10/29/2019	2,4-Dimethylphenol	15	5	5	354	ug/L
MKTF-13	10/29/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-13	10/29/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-13	10/29/2019	2,6-Dinitrotoluene	*ND*	*4*	4	0.485	ug/L
MKTF-13	10/29/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-13	10/29/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-13	10/29/2019	2-Methylnaphthalene	**99**	5	5	35.1	ug/L
MKTF-13	10/29/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-13	10/29/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-13	10/29/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-13	10/29/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-13	10/29/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-13	10/29/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Aniline	ND	5	5	13	ug/L
MKTF-13	10/29/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-13	10/29/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-13	10/29/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-13	10/29/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-13	10/29/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-13	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-13	10/29/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-13	10/29/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-13	10/29/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-13	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-13	10/29/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-13	10/29/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-13	10/29/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-13	10/29/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-13	10/29/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-13	10/29/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-13	10/29/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-13	10/29/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-13	10/29/2019	Fluorene	7.2	5	5	288	ug/L
MKTF-13	10/29/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-13	10/29/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-13	10/29/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-13	10/29/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-13	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-13	10/29/2019	Isophorone	ND	5	5	781	ug/L
MKTF-13	10/29/2019	Naphthalene	**130**	5	5	30	ug/L
MKTF-13	10/29/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-13	10/29/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-13	10/29/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-13	10/29/2019	Phenanthrene	7.8	5	5	170	ug/L
MKTF-13	10/29/2019	Phenol	38	5	5	5761	ug/L
MKTF-13	10/29/2019	Pyrene	ND	5	5	117	ug/L
MKTF-13	10/29/2019	Pyridine	ND	5	5	20	ug/L
MKTF-15	4/10/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-15	4/10/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-15	4/10/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-15	4/10/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-15	4/10/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-15	4/10/2014	Aniline	ND	12	3	13	ug/L
MKTF-15	4/10/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-15	4/10/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-15	4/10/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-15	4/10/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-15	4/10/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-15	4/10/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-15	4/10/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-15	4/10/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-15	4/10/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-15	4/10/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-15	4/10/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-15	4/10/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-15	4/10/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-15	4/10/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-15	4/10/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L
MKTF-15	4/10/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-15	4/10/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-15	4/10/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-15	4/10/2014	1-Methylnaphthalene	**20**	12	4.5	11.38	ug/L
MKTF-15	4/10/2014	Naphthalene	**48**	12	2.9	30	ug/L
MKTF-15	4/10/2014	2-Methylnaphthalene	21	12	3.3	35.1	ug/L
MKTF-15	4/10/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-15	4/10/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-15	4/10/2014	2-Methylphenol	43	25	3.4	NA	ug/L
MKTF-15	4/10/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-15	4/10/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-15	4/10/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-15	4/10/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-15	4/10/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-15	4/10/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	4/10/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-15	4/10/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-15	4/10/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-15	4/10/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-15	4/10/2014	2,4-Dimethylphenol	16	12	3.9	354	ug/L
MKTF-15	4/10/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-15	4/10/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-15	4/10/2014	Phenol	15	12	2	5761	ug/L
MKTF-15	4/10/2014	Pyridine	ND	12	2	20	ug/L
MKTF-15	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-15	4/10/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-15	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-15	4/10/2014	Di-n-octylphthalate	ND	12	3.4	200	ug/L
MKTF-15	4/10/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-15	4/10/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-15	4/10/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-15	4/10/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-15	4/10/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-15	4/10/2014	Pyrene	ND	12	5	117	ug/L
MKTF-15	4/10/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-15	4/10/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-15	4/10/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-15	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-15	4/10/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-15	4/10/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-15	4/10/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-15	4/10/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-15	4/10/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-15	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-15	4/10/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-15	4/10/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-15	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-15	4/10/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-15	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-15	4/10/2014	3,4-Methylphenol	ND	12	2.3	NA	ug/L
MKTF-15	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-15	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-15	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-15	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-15	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-15	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-15	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-15	6/5/2014	1-Methylnaphthalene	**21**	10	3.6	11.38	ug/L
MKTF-15	6/5/2014	Naphthalene	**50**	10	2.3	30	ug/L
MKTF-15	6/5/2014	2-Methylnaphthalene	21	10	2.6	35.1	ug/L
MKTF-15	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-15	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	6/5/2014	2-Methylphenol	28	20	2.8	NA	ug/L
MKTF-15	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-15	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-15	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-15	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-15	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-15	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-15	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-15	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-15	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-15	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-15	6/5/2014	2,4-Dimethylphenol	13	10	3.1	354	ug/L
MKTF-15	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-15	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-15	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-15	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-15	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-15	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-15	6/5/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-15	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-15	6/5/2014	Benzoic Acid	23	20	2.2	75000	ug/L
MKTF-15	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-15	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-15	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-15	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-15	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-15	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-15	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-15	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-15	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-15	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-15	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-15	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-15	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-15	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-15	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-15	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-15	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-15	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-15	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-15	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-15	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-15	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-15	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-15	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-15	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-15	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-15	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-15	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-15	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-15	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-15	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-15	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-15	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-15	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-15	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-15	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-15	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-15	9/17/2014	2,4-Dimethylphenol	13	10	3.1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-15	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-15	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-15	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-15	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-15	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-15	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-15	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-15	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-15	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-15	9/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-15	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-15	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-15	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-15	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-15	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-15	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-15	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-15	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-15	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-15	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-15	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-15	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-15	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-15	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-15	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-15	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-15	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-15	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-15	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-15	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-15	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-15	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-15	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-15	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-15	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-15	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-15	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-15	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-15	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-15	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-15	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-15	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-15	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-15	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-15	9/17/2014	1-Methylnaphthalene	**35**	10	3.6	11.38	ug/L
MKTF-15	9/17/2014	Naphthalene	**48**	10	2.3	30	ug/L
MKTF-15	9/17/2014	2-Methylnaphthalene	33	10	2.6	35.1	ug/L
MKTF-15	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-15	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	9/17/2014	2-Methylphenol	24	20	2.8	NA	ug/L
MKTF-15	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-15	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-15	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-15	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-15	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-15	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-15	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-15	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-15	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-15	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-15	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-15	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-15	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-15	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-15	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-15	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-15	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-15	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-15	9/11/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-15	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-15	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-15	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-15	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-15	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-15	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-15	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-15	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-15	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-15	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-15	9/11/2016	Carbazole	4	10	2.3	NA	ug/L
MKTF-15	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-15	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-15	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-15	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-15	9/11/2016	1-Methylnaphthalene	**13**	10	2.9	11.38	ug/L
MKTF-15	9/11/2016	Naphthalene	**53**	10	2.6	30	ug/L
MKTF-15	9/11/2016	2-Methylnaphthalene	14	10	2.9	35.1	ug/L
MKTF-15	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-15	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	9/11/2016	2-Methylphenol	1800	500	130	NA	ug/L
MKTF-15	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-15	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-15	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-15	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-15	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-15	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-15	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-15	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-15	9/11/2016	2,4-Dimethylphenol	230	10	3	354	ug/L
MKTF-15	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/11/2016	Phenol	**5800**	500	99	5761	ug/L
MKTF-15	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-15	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-15	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	9/11/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-15	9/11/2016	Di-n-octylphthalate	4.5	10	2	200	ug/L
MKTF-15	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-15	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-15	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-15	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-15	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-15	9/11/2016	Dimethylphthalate	17	10	2.4	612	ug/L
MKTF-15	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-15	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-15	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-15	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-15	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-15	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-15	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-15	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-15	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-15	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-15	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-15	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-15	9/11/2016	3,4-Methylphenol	2600	500	110	NA	ug/L
MKTF-15	11/2/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-15	11/2/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-15	11/2/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-15	11/2/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-15	11/2/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-15	11/2/2016	Benzoic Acid	65	100	13	75000	ug/L
MKTF-15	11/2/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-15	11/2/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-15	11/2/2016	Isophorone	ND	50	13	781	ug/L
MKTF-15	11/2/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-15	11/2/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-15	11/2/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-15	11/2/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-15	11/2/2016	Butylbenzylphthalate	*13*	*50*	12	16	ug/L
MKTF-15	11/2/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-15	11/2/2016	Fluorene	ND	50	14	288	ug/L
MKTF-15	11/2/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-15	11/2/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-15	11/2/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-15	11/2/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-15	11/2/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-15	11/2/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-15	11/2/2016	Naphthalene	**59**	50	13	30	ug/L
MKTF-15	11/2/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-15	11/2/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-15	11/2/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-15	11/2/2016	2-Methylphenol	460	50	13	NA	ug/L
MKTF-15	11/2/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-15	11/2/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-15	11/2/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-15	11/2/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-15	11/2/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-15	11/2/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-15	11/2/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-15	11/2/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-15	11/2/2016	2,4-Dimethylphenol	79	50	15	354	ug/L
MKTF-15	11/2/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-15	11/2/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-15	11/2/2016	Phenol	2000	250	50	5761	ug/L
MKTF-15	11/2/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-15	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-15	11/2/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-15	11/2/2016	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-15	11/2/2016	Di-n-octylphthalate	36	50	9.9	200	ug/L
MKTF-15	11/2/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-15	11/2/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-15	11/2/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-15	11/2/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-15	11/2/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-15	11/2/2016	Pyrene	ND	50	15	117	ug/L
MKTF-15	11/2/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-15	11/2/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-15	11/2/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-15	11/2/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-15	11/2/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-15	11/2/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-15	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-15	11/2/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-15	11/2/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-15	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-15	11/2/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-15	11/2/2016	3,4-Methylphenol	550	50	11	NA	ug/L
MKTF-15	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-15	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-15	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-15	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-15	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-15	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-15	3/2/2017	Benzoic Acid	21	20	2.6	75000	ug/L
MKTF-15	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-15	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-15	3/2/2017	Isophorone	ND	10	2.6	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-15	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-15	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-15	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-15	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-15	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-15	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-15	3/2/2017	Carbazole	3.2	10	2.3	NA	ug/L
MKTF-15	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-15	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-15	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-15	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-15	3/2/2017	1-Methylnaphthalene	**16**	10	2.9	11.38	ug/L
MKTF-15	3/2/2017	Naphthalene	**60**	10	2.6	30	ug/L
MKTF-15	3/2/2017	2-Methylnaphthalene	17	10	2.9	35.1	ug/L
MKTF-15	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-15	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	3/2/2017	2-Methylphenol	280	50	13	NA	ug/L
MKTF-15	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-15	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-15	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-15	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-15	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-15	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-15	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Benzyl Alcohol	4.9	10	3	2000	ug/L
MKTF-15	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-15	3/2/2017	2,4-Dimethylphenol	55	10	3	354	ug/L
MKTF-15	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-15	3/2/2017	Phenol	ND	10	2	5761	ug/L
MKTF-15	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-15	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-15	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	3/2/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-15	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-15	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-15	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-15	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-15	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-15	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-15	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-15	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-15	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-15	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-15	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-15	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-15	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-15	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-15	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-15	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-15	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-15	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-15	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-15	3/2/2017	3,4-Methylphenol	290	50	11	NA	ug/L
MKTF-15	6/8/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-15	6/8/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-15	6/8/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-15	6/8/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-15	6/8/2017	Aniline	**52**	50	15	13	ug/L
MKTF-15	6/8/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-15	6/8/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-15	6/8/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-15	6/8/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-15	6/8/2017	Isophorone	ND	50	22	781	ug/L
MKTF-15	6/8/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-15	6/8/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-15	6/8/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-15	6/8/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-15	6/8/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-15	6/8/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-15	6/8/2017	Fluorene	ND	50	20	288	ug/L
MKTF-15	6/8/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-15	6/8/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-15	6/8/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-15	6/8/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-15	6/8/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-15	6/8/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-15	6/8/2017	Naphthalene	**42**	50	14	30	ug/L
MKTF-15	6/8/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
MKTF-15	6/8/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-15	6/8/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-15	6/8/2017	2-Methylphenol	250	50	17	NA	ug/L
MKTF-15	6/8/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-15	6/8/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-15	6/8/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-15	6/8/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-15	6/8/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-15	6/8/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-15	6/8/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-15	6/8/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-15	6/8/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-15	6/8/2017	2,4-Dimethylphenol	88	50	14	354	ug/L
MKTF-15	6/8/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-15	6/8/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-15	6/8/2017	Phenol	140	50	16	5761	ug/L
MKTF-15	6/8/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-15	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-15	6/8/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-15	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-15	6/8/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-15	6/8/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/8/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-15	6/8/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-15	6/8/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-15	6/8/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-15	6/8/2017	Pyrene	ND	50	22	117	ug/L
MKTF-15	6/8/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-15	6/8/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-15	6/8/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-15	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-15	6/8/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-15	6/8/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-15	6/8/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-15	6/8/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-15	6/8/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-15	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-15	6/8/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-15	6/8/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-15	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-15	6/8/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-15	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-15	6/8/2017	3,4-Methylphenol	190	50	16	NA	ug/L
MKTF-15	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-15	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-15	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Benzo(a)anthracene	**54**	100	39	0.12	ug/L
MKTF-15	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-15	11/28/2017	Aniline	**41**	100	31	13	ug/L
MKTF-15	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-15	11/28/2017	Benzoic Acid	51	200	39	75000	ug/L
MKTF-15	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-15	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-15	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-15	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-15	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-15	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-15	11/28/2017	Phenanthrene	54	100	43	170	ug/L
MKTF-15	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-15	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-15	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-15	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-15	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-15	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-15	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-15	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-15	11/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-15	11/28/2017	Naphthalene	**72**	100	29	30	ug/L
MKTF-15	11/28/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
MKTF-15	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-15	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-15	11/28/2017	2-Methylphenol	380	100	33	NA	ug/L
MKTF-15	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-15	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-15	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-15	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-15	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-15	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-15	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-15	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-15	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-15	11/28/2017	2,4-Dimethylphenol	67	100	28	354	ug/L
MKTF-15	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-15	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-15	11/28/2017	Phenol	710	100	31	5761	ug/L
MKTF-15	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-15	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-15	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-15	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-15	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-15	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-15	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-15	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-15	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-15	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-15	11/28/2017	Pyrene	62	100	44	117	ug/L
MKTF-15	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-15	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-15	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-15	11/28/2017	Indeno(1,2,3-cd)pyrene	**43**	100	42	0.343	ug/L
MKTF-15	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-15	11/28/2017	Fluoranthene	60	100	43	802	ug/L
MKTF-15	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-15	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-15	11/28/2017	Chrysene	**53**	100	38	34.3	ug/L
MKTF-15	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-15	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-15	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-15	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-15	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-15	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-15	11/28/2017	3,4-Methylphenol	340	100	32	NA	ug/L
MKTF-15	5/2/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-15	5/2/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-15	5/2/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-15	5/2/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-15	5/2/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-15	5/2/2018	Benzoic Acid	130	100	32	75000	ug/L
MKTF-15	5/2/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-15	5/2/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-15	5/2/2018	Isophorone	ND	50	31	781	ug/L
MKTF-15	5/2/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-15	5/2/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-15	5/2/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-15	5/2/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-15	5/2/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-15	5/2/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-15	5/2/2018	Fluorene	ND	50	32	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	5/2/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-15	5/2/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-15	5/2/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-15	5/2/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-15	5/2/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-15	5/2/2018	2-Nitrophenol	ND	50	30	NA	ug/L
MKTF-15	5/2/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
MKTF-15	5/2/2018	Naphthalene	**44**	50	25	30	ug/L
MKTF-15	5/2/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-15	5/2/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-15	5/2/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-15	5/2/2018	2-Methylphenol	350	50	32	NA	ug/L
MKTF-15	5/2/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-15	5/2/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-15	5/2/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-15	5/2/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-15	5/2/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-15	5/2/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-15	5/2/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-15	5/2/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-15	5/2/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-15	5/2/2018	2,4-Dimethylphenol	70	50	30	354	ug/L
MKTF-15	5/2/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-15	5/2/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-15	5/2/2018	Phenol	660	50	30	5761	ug/L
MKTF-15	5/2/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-15	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-15	5/2/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-15	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-15	5/2/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-15	5/2/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-15	5/2/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-15	5/2/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-15	5/2/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-15	5/2/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-15	5/2/2018	Pyrene	ND	50	33	117	ug/L
MKTF-15	5/2/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-15	5/2/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-15	5/2/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-15	5/2/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-15	5/2/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-15	5/2/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-15	5/2/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-15	5/2/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-15	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-15	5/2/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-15	5/2/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-15	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-15	5/2/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-15	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-15	5/2/2018	3,4-Methylphenol	230	50	27	NA	ug/L
MKTF-15	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-15	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-15	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-15	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-15	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-15	8/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-15	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-15	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-15	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-15	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-15	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-15	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-15	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-15	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-15	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-15	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-15	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-15	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-15	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-15	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-15	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-15	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-15	8/28/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
MKTF-15	8/28/2018	Naphthalene	**50**	10	5	30	ug/L
MKTF-15	8/28/2018	2-Methylnaphthalene	14	10	6.3	35.1	ug/L
MKTF-15	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-15	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-15	8/28/2018	2-Methylphenol	370	20	13	NA	ug/L
MKTF-15	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-15	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-15	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-15	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-15	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-15	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-15	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-15	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-15	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-15	8/28/2018	2,4-Dimethylphenol	59	10	5.9	354	ug/L
MKTF-15	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-15	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-15	8/28/2018	Phenol	440	20	12	5761	ug/L
MKTF-15	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-15	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-15	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-15	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-15	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-15	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-15	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-15	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-15	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-15	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-15	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-15	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-15	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-15	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-15	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-15	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-15	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-15	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-15	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-15	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-15	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-15	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-15	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-15	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-15	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-15	8/28/2018	3,4-Methylphenol	170	10	5.4	NA	ug/L
MKTF-15	5/13/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-15	5/13/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-15	5/13/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-15	5/13/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-15	5/13/2019	1-Methylnaphthalene	**16**	50	15.345382	11.38	ug/L
MKTF-15	5/13/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-15	5/13/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-15	5/13/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-15	5/13/2019	2,4-Dimethylphenol	40	50	14.829964	354	ug/L
MKTF-15	5/13/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-15	5/13/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-15	5/13/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-15	5/13/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-15	5/13/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-15	5/13/2019	2-Methylnaphthalene	*16*	*50*	15.094314	35.1	ug/L
MKTF-15	5/13/2019	2-Methylphenol	180	50	14.292191	NA	ug/L
MKTF-15	5/13/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-15	5/13/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-15	5/13/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-15	5/13/2019	3,4-Methylphenol	26	50	17.922265	NA	ug/L
MKTF-15	5/13/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-15	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-15	5/13/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-15	5/13/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-15	5/13/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-15	5/13/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-15	5/13/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-15	5/13/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-15	5/13/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-15	5/13/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-15	5/13/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-15	5/13/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-15	5/13/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-15	5/13/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-15	5/13/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-15	5/13/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-15	5/13/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-15	5/13/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-15	5/13/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-15	5/13/2019	Benzyl Alcohol	14	50	11.801706	2000	ug/L
MKTF-15	5/13/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-15	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-15	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-15	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-15	5/13/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-15	5/13/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-15	5/13/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-15	5/13/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-15	5/13/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-15	5/13/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-15	5/13/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-15	5/13/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-15	5/13/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-15	5/13/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-15	5/13/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-15	5/13/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-15	5/13/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-15	5/13/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-15	5/13/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-15	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-15	5/13/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-15	5/13/2019	Naphthalene	**58**	50	20.61105	30	ug/L
MKTF-15	5/13/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-15	5/13/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-15	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-15	5/13/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-15	5/13/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-15	5/13/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-15	5/13/2019	Phenol	67	50	40.182932	5761	ug/L
MKTF-15	5/13/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-15	5/13/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-16	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	4/10/2014	Aniline	**15**	10	2.4	13	ug/L
MKTF-16	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	4/10/2014	1-Methylnaphthalene	**35**	10	3.6	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	4/10/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-16	4/10/2014	2-Methylnaphthalene	**44**	10	2.6	35.1	ug/L
MKTF-16	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	4/10/2014	2-Methylphenol	160	20	2.8	NA	ug/L
MKTF-16	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	4/10/2014	2,4-Dimethylphenol	200	10	3.1	354	ug/L
MKTF-16	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	4/10/2014	Phenol	90	10	1.6	5761	ug/L
MKTF-16	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	4/10/2014	3,4-Methylphenol	91	10	1.8	NA	ug/L
MKTF-16	6/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	6/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	6/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	6/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	6/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	6/16/2014	Aniline	11	10	2.4	13	ug/L
MKTF-16	6/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	6/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	6/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	6/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	6/16/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	6/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	6/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	6/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	6/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	6/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	6/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	6/16/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	6/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	6/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	6/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	6/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	6/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	6/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	6/16/2014	1-Methylnaphthalene	**37**	10	3.6	11.38	ug/L
MKTF-16	6/16/2014	Naphthalene	**140**	10	2.3	30	ug/L
MKTF-16	6/16/2014	2-Methylnaphthalene	**42**	10	2.6	35.1	ug/L
MKTF-16	6/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	6/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	6/16/2014	2-Methylphenol	220	20	2.8	NA	ug/L
MKTF-16	6/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	6/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	6/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	6/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	6/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	6/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	6/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	6/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	6/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	6/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	6/16/2014	2,4-Dimethylphenol	170	10	3.1	354	ug/L
MKTF-16	6/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	6/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	6/16/2014	Phenol	420	50	7.9	5761	ug/L
MKTF-16	6/16/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	6/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	6/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	6/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	6/16/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	6/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	6/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	6/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	6/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	6/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	6/16/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	6/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	6/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	6/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	6/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	6/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	6/16/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	6/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	6/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	6/16/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	6/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	6/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	6/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	6/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	6/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	6/16/2014	3,4-Methylphenol	160	10	1.8	NA	ug/L
MKTF-16	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	9/17/2014	Aniline	**24**	10	2.4	13	ug/L
MKTF-16	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	9/17/2014	1-Methylnaphthalene	**53**	10	3.6	11.38	ug/L
MKTF-16	9/17/2014	Naphthalene	**180**	10	2.3	30	ug/L
MKTF-16	9/17/2014	2-Methylnaphthalene	**62**	10	2.6	35.1	ug/L
MKTF-16	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	9/17/2014	2-Methylphenol	150	20	2.8	NA	ug/L
MKTF-16	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	9/17/2014	2,4-Dimethylphenol	180	10	3.1	354	ug/L
MKTF-16	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	9/17/2014	Phenol	31	10	1.6	5761	ug/L
MKTF-16	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-16	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	9/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	9/17/2014	3,4-Methylphenol	30	10	1.8	NA	ug/L
MKTF-16	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	11/18/2014	Aniline	**18**	10	2.4	13	ug/L
MKTF-16	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	11/18/2014	1-Methylnaphthalene	**47**	10	3.6	11.38	ug/L
MKTF-16	11/18/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-16	11/18/2014	2-Methylnaphthalene	**51**	10	2.6	35.1	ug/L
MKTF-16	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	11/18/2014	2-Methylphenol	140	10	2.8	NA	ug/L
MKTF-16	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	11/18/2014	2,4-Dimethylphenol	80	10	3.1	354	ug/L
MKTF-16	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	11/18/2014	Phenol	38	10	1.6	5761	ug/L
MKTF-16	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-16	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	11/18/2014	3,4-Methylphenol	16	10	1.8	NA	ug/L
MKTF-16	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Aniline	**20**	10	1.5	13	ug/L
MKTF-16	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	3/16/2015	1-Methylnaphthalene	**45**	10	1.8	11.38	ug/L
MKTF-16	3/16/2015	Naphthalene	**150**	10	1.8	30	ug/L
MKTF-16	3/16/2015	2-Methylnaphthalene	**53**	10	2.2	35.1	ug/L
MKTF-16	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	3/16/2015	2-Methylphenol	150	10	1.2	NA	ug/L
MKTF-16	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	3/16/2015	2,4-Dimethylphenol	190	10	1.9	354	ug/L
MKTF-16	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	3/16/2015	Phenol	31	10	1.1	5761	ug/L
MKTF-16	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Aniline	**21**	10	1.5	13	ug/L
MKTF-16	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	6/8/2015	1-Methylnaphthalene	**42**	10	1.8	11.38	ug/L
MKTF-16	6/8/2015	Naphthalene	**140**	10	1.8	30	ug/L
MKTF-16	6/8/2015	2-Methylnaphthalene	**46**	10	2.2	35.1	ug/L
MKTF-16	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	6/8/2015	2-Methylphenol	120	10	1.2	NA	ug/L
MKTF-16	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	6/8/2015	2,4-Dimethylphenol	180	10	1.9	354	ug/L
MKTF-16	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	6/8/2015	Phenol	48	10	1.1	5761	ug/L
MKTF-16	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	8/23/2015	Aniline	**25**	10	1.5	13	ug/L
MKTF-16	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	8/23/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	8/23/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	8/23/2015	1-Methylnaphthalene	**44**	10	1.8	11.38	ug/L
MKTF-16	8/23/2015	Naphthalene	**160**	10	1.8	30	ug/L
MKTF-16	8/23/2015	2-Methylnaphthalene	**55**	10	2.2	35.1	ug/L
MKTF-16	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	8/23/2015	2-Methylphenol	100	10	1.2	NA	ug/L
MKTF-16	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	8/23/2015	2,4-Dimethylphenol	130	10	1.9	354	ug/L
MKTF-16	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	8/23/2015	Phenol	42	10	1.1	5761	ug/L
MKTF-16	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	8/23/2015	3,4-Methylphenol	15	10	1.5	NA	ug/L
MKTF-16	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Aniline	**20**	10	1.5	13	ug/L
MKTF-16	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	11/3/2015	1-Methylnaphthalene	**35**	10	1.8	11.38	ug/L
MKTF-16	11/3/2015	Naphthalene	**130**	10	1.8	30	ug/L
MKTF-16	11/3/2015	2-Methylnaphthalene	**46**	10	2.2	35.1	ug/L
MKTF-16	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	11/3/2015	2-Methylphenol	81	10	1.2	NA	ug/L
MKTF-16	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	11/3/2015	2,4-Dimethylphenol	120	10	1.9	354	ug/L
MKTF-16	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	11/3/2015	Phenol	57	10	1.1	5761	ug/L
MKTF-16	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-16	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-16	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-16	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-16	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-16	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-16	2/29/2016	Aniline	11	10	9.8	13	ug/L
MKTF-16	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-16	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-16	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-16	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-16	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-16	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-16	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-16	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-16	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-16	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-16	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-16	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-16	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-16	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-16	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-16	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-16	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-16	2/29/2016	1-Methylnaphthalene	**33**	10	6.8	11.38	ug/L
MKTF-16	2/29/2016	Naphthalene	**110**	10	5.9	30	ug/L
MKTF-16	2/29/2016	2-Methylnaphthalene	**42**	10	7	35.1	ug/L
MKTF-16	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-16	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-16	2/29/2016	2-Methylphenol	79	10	8.2	NA	ug/L
MKTF-16	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-16	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-16	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-16	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-16	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-16	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-16	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-16	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-16	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-16	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-16	2/29/2016	2,4-Dimethylphenol	91	10	4.7	354	ug/L
MKTF-16	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-16	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-16	2/29/2016	Phenol	30	10	5.1	5761	ug/L
MKTF-16	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-16	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-16	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-16	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-16	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-16	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-16	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-16	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-16	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-16	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-16	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-16	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-16	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-16	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-16	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-16	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-16	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-16	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-16	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-16	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-16	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-16	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-16	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-16	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-16	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-16	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-16	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-16	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-16	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-16	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-16	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-16	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-16	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-16	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-16	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-16	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-16	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-16	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-16	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-16	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-16	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-16	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-16	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-16	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-16	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-16	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-16	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-16	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	1-Methylnaphthalene	**35**	50	15	11.38	ug/L
MKTF-16	6/9/2016	Naphthalene	**100**	50	13	30	ug/L
MKTF-16	6/9/2016	2-Methylnaphthalene	**38**	50	14	35.1	ug/L
MKTF-16	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-16	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-16	6/9/2016	2-Methylphenol	61	50	13	NA	ug/L
MKTF-16	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-16	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-16	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-16	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-16	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-16	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-16	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-16	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-16	6/9/2016	2,4-Dimethylphenol	83	50	15	354	ug/L
MKTF-16	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-16	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-16	6/9/2016	Phenol	170	50	9.9	5761	ug/L
MKTF-16	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-16	6/9/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
MKTF-16	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-16	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-16	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-16	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-16	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-16	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-16	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-16	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-16	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-16	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-16	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-16	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-16	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-16	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-16	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-16	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-16	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-16	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-16	9/12/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	9/12/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	9/12/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	9/12/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	9/12/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Aniline	5.6	10	2.4	13	ug/L
MKTF-16	9/12/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	9/12/2016	Benzoic Acid	24	20	2.6	75000	ug/L
MKTF-16	9/12/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	9/12/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	9/12/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	9/12/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	9/12/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	9/12/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-16	9/12/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	9/12/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-16	9/12/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	9/12/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-16	9/12/2016	Carbazole	3.6	10	2.3	NA	ug/L
MKTF-16	9/12/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	9/12/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	9/12/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	9/12/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	9/12/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	9/12/2016	1-Methylnaphthalene	**46**	10	2.9	11.38	ug/L
MKTF-16	9/12/2016	Naphthalene	**130**	10	2.6	30	ug/L
MKTF-16	9/12/2016	2-Methylnaphthalene	**51**	10	2.9	35.1	ug/L
MKTF-16	9/12/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	9/12/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	9/12/2016	2-Methylphenol	71	10	2.5	NA	ug/L
MKTF-16	9/12/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	9/12/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	9/12/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	9/12/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	9/12/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	9/12/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	9/12/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	9/12/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	9/12/2016	2,4-Dimethylphenol	84	10	3	354	ug/L
MKTF-16	9/12/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	9/12/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	9/12/2016	Phenol	140	10	2	5761	ug/L
MKTF-16	9/12/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	9/12/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	9/12/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-16	9/12/2016	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-16	9/12/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	9/12/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	9/12/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	9/12/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-16	9/12/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	9/12/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	9/12/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	9/12/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	9/12/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	9/12/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	9/12/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	9/12/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	9/12/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	9/12/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	9/12/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	9/12/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	9/12/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	9/12/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-16	11/3/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	11/3/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	11/3/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	11/3/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	11/3/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-16	11/3/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	11/3/2016	Benzoic Acid	38	20	2.6	75000	ug/L
MKTF-16	11/3/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	11/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	11/3/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	11/3/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	11/3/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	11/3/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	11/3/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-16	11/3/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	11/3/2016	Fluorene	3.5	10	2.7	288	ug/L
MKTF-16	11/3/2016	Carbazole	3.5	10	2.3	NA	ug/L
MKTF-16	11/3/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	11/3/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	11/3/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	11/3/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	11/3/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	11/3/2016	1-Methylnaphthalene	**40**	10	2.9	11.38	ug/L
MKTF-16	11/3/2016	Naphthalene	**130**	10	2.6	30	ug/L
MKTF-16	11/3/2016	2-Methylnaphthalene	**37**	10	2.9	35.1	ug/L
MKTF-16	11/3/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	11/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	11/3/2016	2-Methylphenol	26	10	2.5	NA	ug/L
MKTF-16	11/3/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	11/3/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	11/3/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	11/3/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	11/3/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	11/3/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	11/3/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	11/3/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	11/3/2016	2,4-Dimethylphenol	59	10	3	354	ug/L
MKTF-16	11/3/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	11/3/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	11/3/2016	Phenol	180	10	2	5761	ug/L
MKTF-16	11/3/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	11/3/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	11/3/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-16	11/3/2016	Di-n-octylphthalate	7.4	10	2	200	ug/L
MKTF-16	11/3/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	11/3/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	11/3/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	11/3/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-16	11/3/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	11/3/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	11/3/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	11/3/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	11/3/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	11/3/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	11/3/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	11/3/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	11/3/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	11/3/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	11/3/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	11/3/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	11/3/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	11/3/2016	3,4-Methylphenol	3	10	2.3	NA	ug/L
MKTF-16	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Aniline	3.8	10	2.4	13	ug/L
MKTF-16	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	3/14/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-16	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-16	3/14/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-16	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	3/14/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-16	3/14/2017	Carbazole	3	10	2.3	NA	ug/L
MKTF-16	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	3/14/2017	1-Methylnaphthalene	**26**	10	2.9	11.38	ug/L
MKTF-16	3/14/2017	Naphthalene	**98**	10	2.6	30	ug/L
MKTF-16	3/14/2017	2-Methylnaphthalene	28	10	2.9	35.1	ug/L
MKTF-16	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	3/14/2017	2-Methylphenol	35	10	2.5	NA	ug/L
MKTF-16	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	3/14/2017	2,4-Dimethylphenol	34	10	3	354	ug/L
MKTF-16	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	3/14/2017	Phenol	29	10	2	5761	ug/L
MKTF-16	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	3/14/2017	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-16	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-16	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	3/14/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	3/14/2017	3,4-Methylphenol	2.8	10	2.3	NA	ug/L
MKTF-16	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-16	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-16	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-16	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-16	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-16	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-16	6/8/2017	Benzoic Acid	16	20	3.9	75000	ug/L
MKTF-16	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-16	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-16	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-16	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-16	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-16	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-16	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-16	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-16	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-16	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-16	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-16	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-16	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-16	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-16	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-16	6/8/2017	1-Methylnaphthalene	**34**	10	3.3	11.38	ug/L
MKTF-16	6/8/2017	Naphthalene	**94**	10	2.9	30	ug/L
MKTF-16	6/8/2017	2-Methylnaphthalene	25	10	3.3	35.1	ug/L
MKTF-16	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-16	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-16	6/8/2017	2-Methylphenol	24	10	3.3	NA	ug/L
MKTF-16	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-16	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-16	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-16	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-16	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-16	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-16	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-16	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-16	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-16	6/8/2017	2,4-Dimethylphenol	110	10	2.8	354	ug/L
MKTF-16	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-16	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-16	6/8/2017	Phenol	450	50	16	5761	ug/L
MKTF-16	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-16	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-16	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-16	6/8/2017	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
MKTF-16	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-16	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-16	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-16	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-16	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-16	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-16	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-16	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-16	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-16	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-16	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-16	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-16	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-16	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-16	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-16	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-16	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-16	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-16	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-16	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-16	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-16	6/8/2017	3,4-Methylphenol	8.1	10	3.2	NA	ug/L
MKTF-16	9/26/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-16	9/26/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-16	9/26/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-16	9/26/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-16	9/26/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-16	9/26/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-16	9/26/2017	Benzoic Acid	51	100	20	75000	ug/L
MKTF-16	9/26/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-16	9/26/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-16	9/26/2017	Isophorone	ND	50	22	781	ug/L
MKTF-16	9/26/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-16	9/26/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-16	9/26/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-16	9/26/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-16	9/26/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-16	9/26/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-16	9/26/2017	Fluorene	ND	50	20	288	ug/L
MKTF-16	9/26/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-16	9/26/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-16	9/26/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-16	9/26/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-16	9/26/2017	1-Methylnaphthalene	**18**	50	17	11.38	ug/L
MKTF-16	9/26/2017	Naphthalene	**100**	50	14	30	ug/L
MKTF-16	9/26/2017	2-Methylnaphthalene	*26*	*50*	16	35.1	ug/L
MKTF-16	9/26/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-16	9/26/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-16	9/26/2017	2-Methylphenol	36	50	17	NA	ug/L
MKTF-16	9/26/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-16	9/26/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-16	9/26/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-16	9/26/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-16	9/26/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-16	9/26/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-16	9/26/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-16	9/26/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-16	9/26/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-16	9/26/2017	2,4-Dimethylphenol	50	50	14	354	ug/L
MKTF-16	9/26/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-16	9/26/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-16	9/26/2017	Phenol	110	50	16	5761	ug/L
MKTF-16	9/26/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-16	9/26/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-16	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-16	9/26/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-16	9/26/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-16	9/26/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-16	9/26/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-16	9/26/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-16	9/26/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-16	9/26/2017	Pyrene	ND	50	22	117	ug/L
MKTF-16	9/26/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-16	9/26/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-16	9/26/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-16	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-16	9/26/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-16	9/26/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-16	9/26/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-16	9/26/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-16	9/26/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-16	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-16	9/26/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-16	9/26/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-16	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-16	9/26/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-16	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-16	9/26/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-16	11/29/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-16	11/29/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-16	11/29/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-16	11/29/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-16	11/29/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-16	11/29/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-16	11/29/2017	Benzoic Acid	50	100	20	75000	ug/L
MKTF-16	11/29/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-16	11/29/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-16	11/29/2017	Isophorone	ND	50	22	781	ug/L
MKTF-16	11/29/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-16	11/29/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-16	11/29/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-16	11/29/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-16	11/29/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-16	11/29/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-16	11/29/2017	Fluorene	ND	50	20	288	ug/L
MKTF-16	11/29/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-16	11/29/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-16	11/29/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-16	11/29/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-16	11/29/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-16	11/29/2017	1-Methylnaphthalene	**26**	50	17	11.38	ug/L
MKTF-16	11/29/2017	Naphthalene	**90**	50	14	30	ug/L
MKTF-16	11/29/2017	2-Methylnaphthalene	*23*	*50*	16	35.1	ug/L
MKTF-16	11/29/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-16	11/29/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-16	11/29/2017	2-Methylphenol	29	50	17	NA	ug/L
MKTF-16	11/29/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-16	11/29/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-16	11/29/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-16	11/29/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-16	11/29/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-16	11/29/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-16	11/29/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-16	11/29/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-16	11/29/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-16	11/29/2017	2,4-Dimethylphenol	59	50	14	354	ug/L
MKTF-16	11/29/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-16	11/29/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-16	11/29/2017	Phenol	490	50	16	5761	ug/L
MKTF-16	11/29/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	11/29/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-16	11/29/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-16	11/29/2017	Bis(2-ethylhexyl)phthalate	35	50	24	55.64	ug/L
MKTF-16	11/29/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-16	11/29/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-16	11/29/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-16	11/29/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-16	11/29/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-16	11/29/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-16	11/29/2017	Pyrene	ND	50	22	117	ug/L
MKTF-16	11/29/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-16	11/29/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-16	11/29/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-16	11/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-16	11/29/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-16	11/29/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-16	11/29/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-16	11/29/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-16	11/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-16	11/29/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-16	11/29/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-16	11/29/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-16	11/29/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-16	11/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-16	11/29/2017	3,4-Methylphenol	16	50	16	NA	ug/L
MKTF-16	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-16	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-16	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-16	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-16	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-16	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-16	2/15/2018	Benzoic Acid	7.7	20	3.9	75000	ug/L
MKTF-16	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-16	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-16	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-16	2/15/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-16	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-16	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-16	2/15/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-16	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-16	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-16	2/15/2018	Fluorene	ND	10	4	288	ug/L
MKTF-16	2/15/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-16	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-16	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-16	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-16	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-16	2/15/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-16	2/15/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-16	2/15/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-16	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-16	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-16	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-16	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-16	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-16	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-16	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-16	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-16	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-16	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-16	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-16	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-16	2/15/2018	2,4-Dimethylphenol	3.6	10	2.8	354	ug/L
MKTF-16	2/15/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-16	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-16	2/15/2018	Phenol	62	10	3.1	5761	ug/L
MKTF-16	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-16	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-16	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-16	2/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-16	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-16	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-16	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-16	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-16	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-16	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-16	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-16	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-16	2/15/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-16	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-16	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-16	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-16	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-16	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-16	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-16	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-16	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-16	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-16	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-16	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-16	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-16	2/15/2018	3,4-Methylphenol	6.3	10	3.2	NA	ug/L
MKTF-16	5/11/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	5/11/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	5/11/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	5/11/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	5/11/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	5/11/2018	Benzoic Acid	41	20	6.3	75000	ug/L
MKTF-16	5/11/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	5/11/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	5/11/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	5/11/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	5/11/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	5/11/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	5/11/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	5/11/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	5/11/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	5/11/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	5/11/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	5/11/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	5/11/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	5/11/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	5/11/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	5/11/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	5/11/2018	1-Methylnaphthalene	**22**	10	7	11.38	ug/L
MKTF-16	5/11/2018	Naphthalene	**63**	10	5	30	ug/L
MKTF-16	5/11/2018	2-Methylnaphthalene	16	10	6.3	35.1	ug/L
MKTF-16	5/11/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	5/11/2018	2-Methylphenol	12	10	6.3	NA	ug/L
MKTF-16	5/11/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	5/11/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	5/11/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	5/11/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	5/11/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	5/11/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	5/11/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	5/11/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	5/11/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	5/11/2018	2,4-Dimethylphenol	37	10	5.9	354	ug/L
MKTF-16	5/11/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	5/11/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	5/11/2018	Phenol	290	20	12	5761	ug/L
MKTF-16	5/11/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	5/11/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	5/11/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	5/11/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	5/11/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	5/11/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	5/11/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	5/11/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	5/11/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	5/11/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	5/11/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	5/11/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	5/11/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	5/11/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	5/11/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	5/11/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	5/11/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	5/11/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	5/11/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	5/11/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-16	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	5/11/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	5/11/2018	3,4-Methylphenol	5.8	10	5.4	NA	ug/L
MKTF-16	8/31/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	8/31/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	8/31/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	8/31/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	8/31/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	8/31/2018	Benzoic Acid	25	20	6.3	75000	ug/L
MKTF-16	8/31/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	8/31/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	8/31/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	8/31/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	8/31/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	8/31/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	8/31/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	8/31/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	8/31/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	8/31/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	8/31/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	8/31/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	8/31/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	8/31/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	8/31/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	8/31/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	8/31/2018	1-Methylnaphthalene	**17**	10	7	11.38	ug/L
MKTF-16	8/31/2018	Naphthalene	**72**	10	5	30	ug/L
MKTF-16	8/31/2018	2-Methylnaphthalene	11	10	6.3	35.1	ug/L
MKTF-16	8/31/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-16	8/31/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	8/31/2018	2-Methylphenol	15	10	6.3	NA	ug/L
MKTF-16	8/31/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	8/31/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	8/31/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	8/31/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	8/31/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	8/31/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	8/31/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	8/31/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	8/31/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	8/31/2018	2,4-Dimethylphenol	43	10	5.9	354	ug/L
MKTF-16	8/31/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	8/31/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	8/31/2018	Phenol	330	20	12	5761	ug/L
MKTF-16	8/31/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	8/31/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	8/31/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	8/31/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	8/31/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	8/31/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	8/31/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	8/31/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	8/31/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	8/31/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	8/31/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	8/31/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	8/31/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	8/31/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	8/31/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	8/31/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	8/31/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	8/31/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	8/31/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	8/31/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	8/31/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-16	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	11/29/2018	Benzoic Acid	32	20	6.3	75000	ug/L
MKTF-16	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	11/29/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
MKTF-16	11/29/2018	Naphthalene	**62**	10	5	30	ug/L
MKTF-16	11/29/2018	2-Methylnaphthalene	18	10	6.3	35.1	ug/L
MKTF-16	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-16	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	11/29/2018	2-Methylphenol	13	10	6.3	NA	ug/L
MKTF-16	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	11/29/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
MKTF-16	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	11/29/2018	Phenol	150	10	6	5761	ug/L
MKTF-16	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	11/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-16	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-16	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-16	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-16	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-16	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-16	2/20/2019	1-Methylnaphthalene	**28**	10	6.999122	11.38	ug/L
MKTF-16	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-16	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-16	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-16	2/20/2019	2,4-Dimethylphenol	12	10	5.912084	354	ug/L
MKTF-16	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-16	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-16	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-16	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-16	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-16	2/20/2019	2-Methylnaphthalene	25	10	6.33239	35.1	ug/L
MKTF-16	2/20/2019	2-Methylphenol	9.4	10	6.316864	NA	ug/L
MKTF-16	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-16	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-16	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-16	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-16	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-16	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-16	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-16	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-16	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-16	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-16	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-16	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-16	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-16	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-16	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-16	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-16	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-16	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-16	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-16	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-16	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-16	2/20/2019	Benzoic Acid	20	20	6.311561	75000	ug/L
MKTF-16	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-16	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-16	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-16	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-16	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-16	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-16	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-16	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-16	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-16	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-16	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-16	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-16	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-16	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-16	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-16	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-16	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-16	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-16	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-16	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-16	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-16	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-16	2/20/2019	Naphthalene	**100**	10	5.041403	30	ug/L
MKTF-16	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-16	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-16	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-16	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-16	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-16	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-16	2/20/2019	Phenol	64	10	5.977352	5761	ug/L
MKTF-16	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-16	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-16	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-16	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-16	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-16	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-16	5/14/2019	1-Methylnaphthalene	**19**	10	3.069076	11.38	ug/L
MKTF-16	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-16	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-16	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-16	5/14/2019	2,4-Dimethylphenol	13	10	2.965993	354	ug/L
MKTF-16	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-16	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-16	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-16	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-16	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-16	5/14/2019	2-Methylnaphthalene	15	10	3.018863	35.1	ug/L
MKTF-16	5/14/2019	2-Methylphenol	6.4	10	2.858438	NA	ug/L
MKTF-16	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-16	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-16	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-16	5/14/2019	3,4-Methylphenol	4.3	10	3.584453	NA	ug/L
MKTF-16	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-16	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-16	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-16	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-16	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-16	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-16	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-16	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-16	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-16	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-16	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-16	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-16	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-16	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-16	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-16	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-16	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-16	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-16	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-16	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-16	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-16	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-16	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-16	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-16	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-16	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-16	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-16	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-16	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-16	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-16	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-16	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-16	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-16	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-16	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-16	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-16	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-16	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-16	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-16	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-16	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-16	5/14/2019	Naphthalene	**58**	10	4.12221	30	ug/L
MKTF-16	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-16	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-16	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-16	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-16	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-16	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-16	5/14/2019	Phenol	130	10	8.036586	5761	ug/L
MKTF-16	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-16	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-16	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-16	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-16	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-16	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-16	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-16	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-16	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-16	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-16	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-16	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-16	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-16	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-16	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-16	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-16	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-16	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-16	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-16	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-16	8/22/2019	3,4-Methylphenol	5.8	10	3.584453	NA	ug/L
MKTF-16	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-16	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-16	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-16	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-16	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-16	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-16	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-16	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-16	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-16	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-16	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-16	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-16	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-16	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-16	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-16	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-16	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-16	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-16	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-16	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-16	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-16	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-16	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-16	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-16	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-16	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-16	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-16	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-16	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-16	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-16	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-16	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-16	8/22/2019	Di-n-octylphthalate	4.7	10	3.516366	200	ug/L
MKTF-16	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-16	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-16	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-16	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-16	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-16	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-16	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-16	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-16	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-16	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-16	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-16	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-16	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-16	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-16	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-16	8/22/2019	Phenol	34	10	8.036586	5761	ug/L
MKTF-16	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-16	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-16	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-16	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-16	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-16	10/30/2019	1,4-Dioxane	**53**	10	10	4.59	ug/L
MKTF-16	10/30/2019	1-Methylnaphthalene	**25**	5	5	11.38	ug/L
MKTF-16	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-16	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-16	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-16	10/30/2019	2,4-Dimethylphenol	13	5	5	354	ug/L
MKTF-16	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-16	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-16	10/30/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-16	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-16	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-16	10/30/2019	2-Methylnaphthalene	31	5	5	35.1	ug/L
MKTF-16	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-16	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-16	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-16	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-16	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-16	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-16	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-16	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-16	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-16	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-16	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-16	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-16	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-16	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-16	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-16	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-16	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-16	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-16	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-16	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-16	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-16	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-16	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-16	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-16	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-16	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-16	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-16	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-16	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-16	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-16	10/30/2019	Naphthalene	**120**	5	5	30	ug/L
MKTF-16	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-16	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-16	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-16	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-16	10/30/2019	Phenol	44	5	5	5761	ug/L
MKTF-16	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-16	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-17	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	4/9/2014	Naphthalene	24	10	2.3	30	ug/L
MKTF-17	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	6/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	6/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	6/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	6/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	6/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	6/16/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	6/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	6/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	6/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	6/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	6/16/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	6/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	6/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	6/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	6/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	6/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	6/16/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	6/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	6/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	6/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	6/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	6/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	6/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	6/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	6/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	6/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	6/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	6/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	6/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	6/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	6/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	6/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	6/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	6/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	6/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	6/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	6/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	6/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	6/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	6/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	6/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	6/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	6/16/2014	Phenol	39	10	1.6	5761	ug/L
MKTF-17	6/16/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	6/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	6/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	6/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	6/16/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	6/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	6/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	6/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	6/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	6/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	6/16/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	6/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	6/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	6/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	6/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	6/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	6/16/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	6/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	6/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	6/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	6/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	6/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	6/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	6/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	6/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	6/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	6/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	9/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	9/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-17	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-17	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	11/18/2014	Bis(2-ethylhexyl)phthalate	10	10	3	55.64	ug/L
MKTF-17	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-17	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-17	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-17	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-17	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-17	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-17	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-17	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-17	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-17	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-17	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-17	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-17	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-17	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-17	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-17	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-17	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-17	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-17	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-17	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-17	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-17	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-17	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-17	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-17	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-17	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-17	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-17	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-17	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-17	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-17	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-17	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-17	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-17	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-17	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-17	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-17	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-17	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-17	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-17	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-17	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-17	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-17	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-17	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-17	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-17	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-17	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-17	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-17	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-17	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-17	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-17	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-17	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-17	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-17	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-17	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-17	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-17	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-17	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-17	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-17	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-17	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-17	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-17	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-17	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	6/8/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	6/8/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	6/8/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-17	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-17	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-17	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-17	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-17	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-17	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-17	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-17	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-17	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-17	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-17	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-17	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-17	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-17	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-17	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-17	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-17	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-17	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-17	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-17	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-17	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-17	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-17	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-17	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-17	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-17	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-17	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-17	2/26/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-17	2/26/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-17	2/26/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-17	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-17	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-17	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-17	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-17	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-17	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-17	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-17	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-17	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-17	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-17	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-17	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-17	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-17	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-17	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-17	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-17	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-17	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-17	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-17	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-17	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-17	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-17	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-17	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-17	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-17	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-17	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-17	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-17	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-17	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-17	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-17	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-17	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-17	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-17	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-17	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-17	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-17	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-17	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-17	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-17	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-17	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-17	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	6/10/2016	1-Methylnaphthalene	**26**	10	2.9	11.38	ug/L
MKTF-17	6/10/2016	Naphthalene	**62**	10	2.6	30	ug/L
MKTF-17	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	6/10/2016	2,4-Dimethylphenol	4.4	10	3	354	ug/L
MKTF-17	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	6/10/2016	Phenol	9.8	10	2	5761	ug/L
MKTF-17	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	6/10/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-17	6/10/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-17	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	9/13/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	9/13/2016	1-Methylnaphthalene	6.3	10	2.9	11.38	ug/L
MKTF-17	9/13/2016	Naphthalene	6.4	10	2.6	30	ug/L
MKTF-17	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	9/13/2016	Phenol	2.9	10	2	5761	ug/L
MKTF-17	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	9/13/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MKTF-17	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-17	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	11/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	11/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	11/8/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-17	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	11/8/2016	Fluorene	3	10	2.7	288	ug/L
MKTF-17	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	11/8/2016	1-Methylnaphthalene	11	10	2.9	11.38	ug/L
MKTF-17	11/8/2016	Naphthalene	7.7	10	2.6	30	ug/L
MKTF-17	11/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	11/8/2016	Phenol	3.5	10	2	5761	ug/L
MKTF-17	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	11/8/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-17	11/8/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-17	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-17	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	3/15/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	3/15/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	3/15/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	3/15/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	3/15/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-17	3/15/2017	Naphthalene	4.9	10	2.6	30	ug/L
MKTF-17	3/15/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	3/15/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	3/15/2017	Phenol	5	10	2	5761	ug/L
MKTF-17	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	3/15/2017	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
MKTF-17	3/15/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-17	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	3/15/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-17	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	6/14/2017	1-Methylnaphthalene	**18**	10	3.3	11.38	ug/L
MKTF-17	6/14/2017	Naphthalene	27	10	2.9	30	ug/L
MKTF-17	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	6/14/2017	Phenol	5.5	10	3.1	5761	ug/L
MKTF-17	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	6/14/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-17	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	9/26/2017	Fluorene	4.6	10	4	288	ug/L
MKTF-17	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	9/26/2017	1-Methylnaphthalene	10	10	3.3	11.38	ug/L
MKTF-17	9/26/2017	Naphthalene	8	10	2.9	30	ug/L
MKTF-17	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	9/26/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-17	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	9/26/2017	Bis(2-ethylhexyl)phthalate	**310**	20	9.6	55.64	ug/L
MKTF-17	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	12/1/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-17	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	12/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-17	12/1/2017	Naphthalene	3.3	10	2.9	30	ug/L
MKTF-17	12/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-17	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-17	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-17	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	2/16/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	2/16/2018	Fluorene	ND	10	4	288	ug/L
MKTF-17	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	2/16/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-17	2/16/2018	Naphthalene	6.1	10	2.9	30	ug/L
MKTF-17	2/16/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	2/16/2018	Phenol	7.1	10	3.1	5761	ug/L
MKTF-17	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-17	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	5/4/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-17	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-17	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	5/4/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	5/4/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	5/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-17	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	8/24/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-17	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	8/24/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	8/24/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	8/24/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-17	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-17	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-17	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-17	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-17	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-17	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-17	5/9/2019	1-Methylnaphthalene	**37**	10	3.069076	11.38	ug/L
MKTF-17	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-17	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-17	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-17	5/9/2019	2,4-Dimethylphenol	7.6	10	2.965993	354	ug/L
MKTF-17	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-17	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-17	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-17	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-17	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-17	5/9/2019	2-Methylnaphthalene	21	10	3.018863	35.1	ug/L
MKTF-17	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-17	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-17	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-17	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-17	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-17	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-17	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-17	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-17	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-17	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-17	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-17	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-17	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-17	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-17	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-17	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-17	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-17	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-17	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-17	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-17	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-17	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-17	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-17	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-17	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-17	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-17	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-17	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-17	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-17	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-17	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-17	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-17	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-17	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-17	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-17	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-17	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-17	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-17	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-17	5/9/2019	Fluorene	4.5	10	2.888488	288	ug/L
MKTF-17	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-17	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-17	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-17	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-17	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-17	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-17	5/9/2019	Naphthalene	**110**	10	4.12221	30	ug/L
MKTF-17	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-17	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-17	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-17	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-17	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-17	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-17	5/9/2019	Phenol	21	10	8.036586	5761	ug/L
MKTF-17	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-17	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-17	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-17	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-17	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-17	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-17	8/20/2019	1-Methylnaphthalene	**17**	10	3.069076	11.38	ug/L
MKTF-17	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-17	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-17	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-17	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-17	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-17	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-17	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-17	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-17	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-17	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-17	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-17	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-17	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-17	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-17	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-17	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-17	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-17	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-17	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-17	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-17	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-17	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-17	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-17	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-17	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-17	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-17	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-17	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-17	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-17	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-17	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-17	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-17	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-17	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-17	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-17	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-17	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-17	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-17	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-17	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-17	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-17	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-17	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-17	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-17	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-17	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-17	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-17	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-17	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-17	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-17	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-17	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-17	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-17	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-17	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-17	8/20/2019	Naphthalene	22	10	4.12221	30	ug/L
MKTF-17	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-17	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-17	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-17	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-17	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-17	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-17	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-17	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-17	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-17	10/29/2019	1,2,4-Trichlorobenzene	ND	10	10	70	ug/L
MKTF-17	10/29/2019	1,2-Dichlorobenzene	ND	10	10	600	ug/L
MKTF-17	10/29/2019	1,3-Dichlorobenzene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	1,4-Dichlorobenzene	ND	10	10	75	ug/L
MKTF-17	10/29/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-17	10/29/2019	1-Methylnaphthalene	**22**	10	10	11.38	ug/L
MKTF-17	10/29/2019	2,4,5-Trichlorophenol	ND	10	10	1166	ug/L
MKTF-17	10/29/2019	2,4,6-Trichlorophenol	ND	10	10	11.9*	ug/L
MKTF-17	10/29/2019	2,4-Dichlorophenol	ND	10	10	45.3	ug/L
MKTF-17	10/29/2019	2,4-Dimethylphenol	300	10	10	354	ug/L
MKTF-17	10/29/2019	2,4-Dinitrophenol	ND	10	10	38.7	ug/L
MKTF-17	10/29/2019	2,4-Dinitrotoluene	ND	10	10	45.3	ug/L
MKTF-17	10/29/2019	2,6-Dinitrotoluene	*ND*	*8*	8	0.485	ug/L
MKTF-17	10/29/2019	2-Chloronaphthalene	ND	10	10	733	ug/L
MKTF-17	10/29/2019	2-Chlorophenol	ND	10	10	91	ug/L
MKTF-17	10/29/2019	2-Methylnaphthalene	ND	10	10	35.1	ug/L
MKTF-17	10/29/2019	2-Methylphenol	710	10	10	NA	ug/L
MKTF-17	10/29/2019	2-Nitroaniline	ND	10	10	190	ug/L
MKTF-17	10/29/2019	2-Nitrophenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	10	1.25	ug/L
MKTF-17	10/29/2019	3,4-Methylphenol	680	10	10	NA	ug/L
MKTF-17	10/29/2019	3-Nitroaniline	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*10*	10	1.52	ug/L
MKTF-17	10/29/2019	4-Bromophenyl-phenylether	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Chloro-3-Methylphenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Chlorophenyl-phenylether	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Nitroaniline	*ND*	*10*	10	3.8	ug/L
MKTF-17	10/29/2019	4-Nitrophenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Acenaphthene	ND	10	10	535	ug/L
MKTF-17	10/29/2019	Acenaphthylene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Aniline	ND	10	10	13	ug/L
MKTF-17	10/29/2019	Anthracene	ND	10	10	1721	ug/L
MKTF-17	10/29/2019	Benzo(a)anthracene	*ND*	*2*	2	0.12	ug/L
MKTF-17	10/29/2019	Benzo(a)pyrene	*ND*	*2*	2	0.2	ug/L
MKTF-17	10/29/2019	Benzo(b)fluoranthene	*ND*	*2*	2	0.34	ug/L
MKTF-17	10/29/2019	Benzo(g,h,i)perylene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Benzo(k)fluoranthene	*ND*	*10*	10	3.43	ug/L
MKTF-17	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-17	10/29/2019	Benzyl Alcohol	ND	10	10	2000	ug/L
MKTF-17	10/29/2019	Bis(2-chloroethoxy)methane	ND	10	10	59	ug/L
MKTF-17	10/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	10	9.81	ug/L
MKTF-17	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	10	55.64	ug/L
MKTF-17	10/29/2019	Butylbenzylphthalate	ND	10	10	16	ug/L
MKTF-17	10/29/2019	Carbazole	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Chrysene	ND	10	10	34.3	ug/L
MKTF-17	10/29/2019	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MKTF-17	10/29/2019	Dibenzofuran	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Diethylphthalate	ND	10	10	14801	ug/L
MKTF-17	10/29/2019	Dimethylphthalate	ND	10	10	612	ug/L
MKTF-17	10/29/2019	Di-n-butylphthalate	ND	10	10	885	ug/L
MKTF-17	10/29/2019	Di-n-octylphthalate	ND	10	10	200	ug/L
MKTF-17	10/29/2019	Fluoranthene	ND	10	10	802	ug/L
MKTF-17	10/29/2019	Fluorene	ND	10	10	288	ug/L
MKTF-17	10/29/2019	Hexachlorobenzene	*ND*	*10*	10	0.0976	ug/L
MKTF-17	10/29/2019	Hexachlorobutadiene	*ND*	*10*	10	0.14	ug/L
MKTF-17	10/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	10	0.41	ug/L
MKTF-17	10/29/2019	Hexachloroethane	*ND*	*10*	10	3.28	ug/L
MKTF-17	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*4*	4	0.343	ug/L
MKTF-17	10/29/2019	Isophorone	ND	10	10	781	ug/L
MKTF-17	10/29/2019	Naphthalene	**66**	10	10	30	ug/L
MKTF-17	10/29/2019	Nitrobenzene	*ND*	*10*	10	1.4	ug/L
MKTF-17	10/29/2019	N-Nitrosodiphenylamine	ND	10	10	122	ug/L
MKTF-17	10/29/2019	Pentachlorophenol	*ND*	*10*	10	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	Phenanthrene	ND	10	10	170	ug/L
MKTF-17	10/29/2019	Phenol	100	10	10	5761	ug/L
MKTF-17	10/29/2019	Pyrene	ND	10	10	117	ug/L
MKTF-17	10/29/2019	Pyridine	ND	10	10	20	ug/L
MKTF-18	4/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	4/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	4/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-18	4/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	4/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	4/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	4/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	4/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	4/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	4/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	4/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	4/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	4/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	4/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	4/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	4/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	4/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	4/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	4/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	4/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	4/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	4/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	4/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	4/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	4/14/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-18	4/14/2014	Naphthalene	**61**	10	2.3	30	ug/L
MKTF-18	4/14/2014	2-Methylnaphthalene	35	10	2.6	35.1	ug/L
MKTF-18	4/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	4/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	4/14/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-18	4/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	4/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	4/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	4/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	4/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	4/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	4/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	4/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	4/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	4/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	4/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	4/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	4/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	4/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	4/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	4/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	4/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	4/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-18	4/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-18	4/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	4/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	4/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	4/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	4/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	4/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	4/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	4/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	4/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	4/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	4/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	4/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	4/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	4/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	4/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	4/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	4/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	4/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	4/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	4/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	4/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	4/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	6/6/2014	Benzo(a)pyrene	*ND*	*14*	4.6	0.2	ug/L
MKTF-18	6/6/2014	2,4-Dinitrophenol	ND	29	4.5	38.7	ug/L
MKTF-18	6/6/2014	Dibenzo(a,h)anthracene	ND	14	4.3	NA	ug/L
MKTF-18	6/6/2014	Benzo(a)anthracene	*ND*	*14*	4.4	0.12	ug/L
MKTF-18	6/6/2014	4-Chloro-3-Methylphenol	ND	14	5.2	NA	ug/L
MKTF-18	6/6/2014	Aniline	*ND*	*14*	3.5	13	ug/L
MKTF-18	6/6/2014	N-Nitrosodimethylamine	*ND*	*14*	3.4	0.0049	ug/L
MKTF-18	6/6/2014	Benzoic Acid	ND	29	3.1	75000	ug/L
MKTF-18	6/6/2014	Hexachloroethane	*ND*	*14*	2.7	3.28	ug/L
MKTF-18	6/6/2014	Hexachlorocyclopentadiene	*ND*	*14*	4.3	0.41	ug/L
MKTF-18	6/6/2014	Isophorone	ND	14	4.4	781	ug/L
MKTF-18	6/6/2014	Acenaphthene	ND	14	4.2	535	ug/L
MKTF-18	6/6/2014	Diethylphthalate	ND	14	6	14801	ug/L
MKTF-18	6/6/2014	Di-n-butylphthalate	ND	14	5.2	885	ug/L
MKTF-18	6/6/2014	Phenanthrene	ND	14	3.6	170	ug/L
MKTF-18	6/6/2014	Butylbenzylphthalate	ND	14	4.5	16	ug/L
MKTF-18	6/6/2014	N-Nitrosodiphenylamine	ND	14	4.1	122	ug/L
MKTF-18	6/6/2014	Fluorene	ND	14	4.2	288	ug/L
MKTF-18	6/6/2014	Carbazole	ND	14	4.1	NA	ug/L
MKTF-18	6/6/2014	Hexachlorobutadiene	*ND*	*14*	4.3	0.14	ug/L
MKTF-18	6/6/2014	Pentachlorophenol	*ND*	*29*	3.5	1	ug/L
MKTF-18	6/6/2014	2,4,6-Trichlorophenol	ND	14	2.6	11.9*	ug/L
MKTF-18	6/6/2014	2-Nitroaniline	ND	14	4	190	ug/L
MKTF-18	6/6/2014	2-Nitrophenol	ND	14	4.5	NA	ug/L
MKTF-18	6/6/2014	1-Methylnaphthalene	**64**	14	5.2	11.38	ug/L
MKTF-18	6/6/2014	Naphthalene	26	14	3.3	30	ug/L
MKTF-18	6/6/2014	2-Methylnaphthalene	ND	14	3.8	35.1	ug/L
MKTF-18	6/6/2014	2-Chloronaphthalene	ND	14	4.3	733	ug/L
MKTF-18	6/6/2014	3,3-Dichlorobenzidine	*ND*	*14*	3.4	1.25	ug/L
MKTF-18	6/6/2014	2-Methylphenol	ND	29	3.9	NA	ug/L
MKTF-18	6/6/2014	1,2-Dichlorobenzene	ND	14	2.4	600	ug/L
MKTF-18	6/6/2014	2-Chlorophenol	ND	14	2.5	91	ug/L
MKTF-18	6/6/2014	2,4,5-Trichlorophenol	ND	14	4.7	1166	ug/L
MKTF-18	6/6/2014	Nitrobenzene	*ND*	*14*	3.7	1.4	ug/L
MKTF-18	6/6/2014	3-Nitroaniline	ND	14	5.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	4-Nitroaniline	*ND*	*14*	5.9	3.8	ug/L
MKTF-18	6/6/2014	4-Nitrophenol	ND	14	6.1	NA	ug/L
MKTF-18	6/6/2014	Benzyl Alcohol	ND	14	2.6	2000	ug/L
MKTF-18	6/6/2014	4-Bromophenyl-phenylether	ND	14	4.2	NA	ug/L
MKTF-18	6/6/2014	Azobenzene	*ND*	*14*	3.6	0.12	ug/L
MKTF-18	6/6/2014	2,4-Dimethylphenol	ND	14	4.5	354	ug/L
MKTF-18	6/6/2014	1,4-Dichlorobenzene	ND	14	3.4	75	ug/L
MKTF-18	6/6/2014	4-Chloroaniline	*ND*	*14*	3.7	0.37	ug/L
MKTF-18	6/6/2014	Phenol	ND	14	2.3	5761	ug/L
MKTF-18	6/6/2014	Pyridine	ND	14	2.2	20	ug/L
MKTF-18	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*14*	2.5	0.137	ug/L
MKTF-18	6/6/2014	Bis(2-chloroethoxy)methane	ND	14	4	59	ug/L
MKTF-18	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	14	4.2	55.64	ug/L
MKTF-18	6/6/2014	Di-n-octylphthalate	ND	14	3.9	200	ug/L
MKTF-18	6/6/2014	Hexachlorobenzene	*ND*	*14*	4.5	0.0976	ug/L
MKTF-18	6/6/2014	Anthracene	ND	14	3.6	1721	ug/L
MKTF-18	6/6/2014	1,2,4-Trichlorobenzene	ND	14	3.9	70	ug/L
MKTF-18	6/6/2014	2,4-Dichlorophenol	ND	29	4.3	45.3	ug/L
MKTF-18	6/6/2014	2,4-Dinitrotoluene	ND	14	6.4	45.3	ug/L
MKTF-18	6/6/2014	Pyrene	ND	14	5.7	117	ug/L
MKTF-18	6/6/2014	Dimethylphthalate	ND	14	5.2	612	ug/L
MKTF-18	6/6/2014	Dibenzofuran	ND	14	5.3	NA	ug/L
MKTF-18	6/6/2014	Benzo(g,h,i)perylene	ND	14	4.7	NA	ug/L
MKTF-18	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*14*	4.9	0.343	ug/L
MKTF-18	6/6/2014	Benzo(b)fluoranthene	*ND*	*14*	5.8	0.34	ug/L
MKTF-18	6/6/2014	Fluoranthene	ND	14	4.2	802	ug/L
MKTF-18	6/6/2014	Benzo(k)fluoranthene	*ND*	*14*	5	3.43	ug/L
MKTF-18	6/6/2014	Acenaphthylene	ND	14	3.5	NA	ug/L
MKTF-18	6/6/2014	Chrysene	ND	14	4.1	34.3	ug/L
MKTF-18	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*29*	3.4	1.52	ug/L
MKTF-18	6/6/2014	1,3-Dichlorobenzene	ND	14	2.5	NA	ug/L
MKTF-18	6/6/2014	2,6-Dinitrotoluene	*ND*	*14*	4.9	0.485	ug/L
MKTF-18	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*14*	2.8	0.011	ug/L
MKTF-18	6/6/2014	4-Chlorophenyl-phenylether	ND	14	5	NA	ug/L
MKTF-18	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*14*	3.4	9.81	ug/L
MKTF-18	6/6/2014	3,4-Methylphenol	ND	14	2.6	NA	ug/L
MKTF-18	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-18	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	9/18/2014	1-Methylnaphthalene	**120**	10	3.6	11.38	ug/L
MKTF-18	9/18/2014	Naphthalene	**59**	10	2.3	30	ug/L
MKTF-18	9/18/2014	2-Methylnaphthalene	23	10	2.6	35.1	ug/L
MKTF-18	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-18	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-18	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-18	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-18	11/18/2014	Naphthalene	**55**	10	2.3	30	ug/L
MKTF-18	11/18/2014	2-Methylnaphthalene	**36**	10	2.6	35.1	ug/L
MKTF-18	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-18	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	11/18/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-18	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-18	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	3/17/2015	1-Methylnaphthalene	**100**	10	1.8	11.38	ug/L
MKTF-18	3/17/2015	Naphthalene	**32**	10	1.8	30	ug/L
MKTF-18	3/17/2015	2-Methylnaphthalene	28	10	2.2	35.1	ug/L
MKTF-18	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	6/8/2015	1-Methylnaphthalene	**77**	10	1.8	11.38	ug/L
MKTF-18	6/8/2015	Naphthalene	29	10	1.8	30	ug/L
MKTF-18	6/8/2015	2-Methylnaphthalene	13	10	2.2	35.1	ug/L
MKTF-18	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	8/18/2015	Phenanthrene	12	10	2	170	ug/L
MKTF-18	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	8/18/2015	Fluorene	11	10	1.7	288	ug/L
MKTF-18	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	8/18/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-18	8/18/2015	Naphthalene	**42**	10	1.8	30	ug/L
MKTF-18	8/18/2015	2-Methylnaphthalene	**42**	10	2.2	35.1	ug/L
MKTF-18	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	11/3/2015	1-Methylnaphthalene	**79**	10	1.8	11.38	ug/L
MKTF-18	11/3/2015	Naphthalene	23	10	1.8	30	ug/L
MKTF-18	11/3/2015	2-Methylnaphthalene	17	10	2.2	35.1	ug/L
MKTF-18	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-18	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-18	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-18	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-18	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-18	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-18	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-18	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-18	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-18	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-18	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-18	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-18	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-18	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-18	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-18	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-18	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-18	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-18	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-18	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-18	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-18	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-18	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-18	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-18	2/26/2016	1-Methylnaphthalene	**60**	10	6.8	11.38	ug/L
MKTF-18	2/26/2016	Naphthalene	16	10	5.9	30	ug/L
MKTF-18	2/26/2016	2-Methylnaphthalene	17	10	7	35.1	ug/L
MKTF-18	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-18	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-18	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-18	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-18	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-18	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-18	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-18	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-18	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-18	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-18	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-18	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-18	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-18	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-18	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-18	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-18	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-18	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-18	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-18	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-18	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-18	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-18	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-18	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-18	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-18	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-18	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-18	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-18	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-18	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-18	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-18	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-18	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-18	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-18	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-18	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-18	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-18	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-18	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-18	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-18	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-18	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-18	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-18	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	6/10/2016	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-18	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	6/10/2016	Phenanthrene	3.7	10	2.6	170	ug/L
MKTF-18	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/10/2016	Fluorene	4.1	10	2.7	288	ug/L
MKTF-18	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	6/10/2016	1-Methylnaphthalene	**54**	10	2.9	11.38	ug/L
MKTF-18	6/10/2016	Naphthalene	13	10	2.6	30	ug/L
MKTF-18	6/10/2016	2-Methylnaphthalene	14	10	2.9	35.1	ug/L
MKTF-18	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	6/10/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-18	6/10/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-18	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-18	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	9/13/2016	Benzoic Acid	6.4	20	2.6	75000	ug/L
MKTF-18	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	9/13/2016	Acenaphthene	4.3	10	2.6	535	ug/L
MKTF-18	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	9/13/2016	Phenanthrene	3.6	10	2.6	170	ug/L
MKTF-18	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	9/13/2016	Fluorene	6	10	2.7	288	ug/L
MKTF-18	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	9/13/2016	1-Methylnaphthalene	**49**	10	2.9	11.38	ug/L
MKTF-18	9/13/2016	Naphthalene	14	10	2.6	30	ug/L
MKTF-18	9/13/2016	2-Methylnaphthalene	20	10	2.9	35.1	ug/L
MKTF-18	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-18	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-18	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	11/8/2016	Acenaphthene	5.6	10	2.6	535	ug/L
MKTF-18	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	11/8/2016	Phenanthrene	3.7	10	2.6	170	ug/L
MKTF-18	11/8/2016	Butylbenzylphthalate	2.6	10	2.5	16	ug/L
MKTF-18	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	11/8/2016	Fluorene	7.1	10	2.7	288	ug/L
MKTF-18	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	11/8/2016	1-Methylnaphthalene	**57**	10	2.9	11.38	ug/L
MKTF-18	11/8/2016	Naphthalene	18	10	2.6	30	ug/L
MKTF-18	11/8/2016	2-Methylnaphthalene	20	10	2.9	35.1	ug/L
MKTF-18	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	11/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	11/8/2016	Bis(2-ethylhexyl)phthalate	6.5	10	2.6	55.64	ug/L
MKTF-18	11/8/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-18	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-18	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-18	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	3/1/2017	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-18	3/1/2017	Diethylphthalate	2.8	10	2.7	14801	ug/L
MKTF-18	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	3/1/2017	Phenanthrene	4.9	10	2.6	170	ug/L
MKTF-18	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	3/1/2017	Fluorene	6.2	10	2.7	288	ug/L
MKTF-18	3/1/2017	Carbazole	2.6	10	2.3	NA	ug/L
MKTF-18	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	1-Methylnaphthalene	**63**	10	2.9	11.38	ug/L
MKTF-18	3/1/2017	Naphthalene	17	10	2.6	30	ug/L
MKTF-18	3/1/2017	2-Methylnaphthalene	24	10	2.9	35.1	ug/L
MKTF-18	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-18	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	3/1/2017	Bis(2-ethylhexyl)phthalate	7.5	10	2.6	55.64	ug/L
MKTF-18	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-18	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	3/1/2017	Dimethylphthalate	3.2	10	2.4	612	ug/L
MKTF-18	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-18	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-18	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-18	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-18	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-18	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-18	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-18	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-18	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-18	6/14/2017	Acenaphthene	8.5	10	3.6	535	ug/L
MKTF-18	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-18	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-18	6/14/2017	Phenanthrene	8	10	4.3	170	ug/L
MKTF-18	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-18	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-18	6/14/2017	Fluorene	7	10	4	288	ug/L
MKTF-18	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-18	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-18	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-18	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-18	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-18	6/14/2017	1-Methylnaphthalene	**79**	10	3.3	11.38	ug/L
MKTF-18	6/14/2017	Naphthalene	19	10	2.9	30	ug/L
MKTF-18	6/14/2017	2-Methylnaphthalene	23	10	3.3	35.1	ug/L
MKTF-18	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-18	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-18	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-18	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-18	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-18	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-18	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-18	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-18	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-18	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-18	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-18	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-18	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-18	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-18	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-18	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-18	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-18	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-18	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-18	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-18	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-18	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-18	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-18	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-18	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-18	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-18	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-18	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-18	6/14/2017	Dibenzofuran	5.1	10	4.1	NA	ug/L
MKTF-18	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-18	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-18	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-18	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-18	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-18	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-18	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-18	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-18	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-18	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-18	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-18	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-18	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-18	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-18	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-18	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-18	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-18	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-18	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-18	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-18	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-18	2/16/2018	Acenaphthene	7.8	10	3.6	535	ug/L
MKTF-18	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-18	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-18	2/16/2018	Phenanthrene	5	10	4.3	170	ug/L
MKTF-18	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-18	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-18	2/16/2018	Fluorene	8.2	10	4	288	ug/L
MKTF-18	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-18	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-18	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-18	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-18	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-18	2/16/2018	1-Methylnaphthalene	**87**	10	3.3	11.38	ug/L
MKTF-18	2/16/2018	Naphthalene	20	10	2.9	30	ug/L
MKTF-18	2/16/2018	2-Methylnaphthalene	25	10	3.3	35.1	ug/L
MKTF-18	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-18	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-18	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-18	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-18	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-18	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-18	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-18	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-18	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-18	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-18	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-18	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-18	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-18	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-18	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-18	2/16/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-18	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-18	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-18	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-18	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-18	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-18	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-18	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-18	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-18	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-18	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-18	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-18	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-18	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-18	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-18	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-18	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-18	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-18	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-18	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-18	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-18	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-18	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-18	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-18	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-18	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-18	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-18	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	5/4/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-18	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	5/4/2018	1-Methylnaphthalene	**43**	10	7	11.38	ug/L
MKTF-18	5/4/2018	Naphthalene	10	10	5	30	ug/L
MKTF-18	5/4/2018	2-Methylnaphthalene	14	10	6.3	35.1	ug/L
MKTF-18	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-18	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	8/24/2018	Benzoic Acid	12	20	6.3	75000	ug/L
MKTF-18	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	8/24/2018	1-Methylnaphthalene	**80**	10	7	11.38	ug/L
MKTF-18	8/24/2018	Naphthalene	20	10	5	30	ug/L
MKTF-18	8/24/2018	2-Methylnaphthalene	25	10	6.3	35.1	ug/L
MKTF-18	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-18	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-18	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-18	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-18	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-18	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-18	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-18	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	5/16/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
MKTF-18	5/16/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
MKTF-18	5/16/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
MKTF-18	5/16/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
MKTF-18	5/16/2019	1-Methylnaphthalene	**80**	20	6.138153	11.38	ug/L
MKTF-18	5/16/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
MKTF-18	5/16/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
MKTF-18	5/16/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
MKTF-18	5/16/2019	2,4-Dimethylphenol	ND	20	5.931986	354	ug/L
MKTF-18	5/16/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
MKTF-18	5/16/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
MKTF-18	5/16/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
MKTF-18	5/16/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
MKTF-18	5/16/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
MKTF-18	5/16/2019	2-Methylnaphthalene	20	20	6.037726	35.1	ug/L
MKTF-18	5/16/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
MKTF-18	5/16/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
MKTF-18	5/16/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
MKTF-18	5/16/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
MKTF-18	5/16/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
MKTF-18	5/16/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
MKTF-18	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
MKTF-18	5/16/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
MKTF-18	5/16/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
MKTF-18	5/16/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
MKTF-18	5/16/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
MKTF-18	5/16/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
MKTF-18	5/16/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
MKTF-18	5/16/2019	Acenaphthene	7.2	20	5.911782	535	ug/L
MKTF-18	5/16/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
MKTF-18	5/16/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
MKTF-18	5/16/2019	Anthracene	ND	20	5.314345	1721	ug/L
MKTF-18	5/16/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
MKTF-18	5/16/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
MKTF-18	5/16/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
MKTF-18	5/16/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
MKTF-18	5/16/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
MKTF-18	5/16/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/16/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
MKTF-18	5/16/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
MKTF-18	5/16/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
MKTF-18	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
MKTF-18	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
MKTF-18	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
MKTF-18	5/16/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
MKTF-18	5/16/2019	Carbazole	ND	20	5.781013	NA	ug/L
MKTF-18	5/16/2019	Chrysene	ND	20	5.573246	34.3	ug/L
MKTF-18	5/16/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
MKTF-18	5/16/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
MKTF-18	5/16/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
MKTF-18	5/16/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
MKTF-18	5/16/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
MKTF-18	5/16/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
MKTF-18	5/16/2019	Fluoranthene	ND	20	4.824429	802	ug/L
MKTF-18	5/16/2019	Fluorene	11	20	5.776977	288	ug/L
MKTF-18	5/16/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
MKTF-18	5/16/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
MKTF-18	5/16/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
MKTF-18	5/16/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
MKTF-18	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L
MKTF-18	5/16/2019	Isophorone	ND	20	6.092069	781	ug/L
MKTF-18	5/16/2019	Naphthalene	12	20	8.24442	30	ug/L
MKTF-18	5/16/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
MKTF-18	5/16/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
MKTF-18	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
MKTF-18	5/16/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
MKTF-18	5/16/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
MKTF-18	5/16/2019	Phenanthrene	ND	20	5.554244	170	ug/L
MKTF-18	5/16/2019	Phenol	ND	20	16.073173	5761	ug/L
MKTF-18	5/16/2019	Pyrene	ND	20	5.007199	117	ug/L
MKTF-18	5/16/2019	Pyridine	ND	20	19.206273	20	ug/L
MKTF-18	10/29/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-18	10/29/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-18	10/29/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-18	10/29/2019	1,4-Dioxane	**10**	10	10	4.59	ug/L
MKTF-18	10/29/2019	1-Methylnaphthalene	**81**	1	1	11.38	ug/L
MKTF-18	10/29/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-18	10/29/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-18	10/29/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-18	10/29/2019	2,4-Dimethylphenol	ND	1	1	354	ug/L
MKTF-18	10/29/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-18	10/29/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-18	10/29/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-18	10/29/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-18	10/29/2019	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-18	10/29/2019	2-Methylnaphthalene	26	1	1	35.1	ug/L
MKTF-18	10/29/2019	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-18	10/29/2019	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-18	10/29/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-18	10/29/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-18	10/29/2019	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Acenaphthene	6.9	1	1	535	ug/L
MKTF-18	10/29/2019	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Aniline	ND	1	1	13	ug/L
MKTF-18	10/29/2019	Anthracene	ND	1	1	1721	ug/L
MKTF-18	10/29/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-18	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-18	10/29/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-18	10/29/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-18	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-18	10/29/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-18	10/29/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-18	10/29/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-18	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-18	10/29/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-18	10/29/2019	Carbazole	1.8	1	1	NA	ug/L
MKTF-18	10/29/2019	Chrysene	ND	1	1	34.3	ug/L
MKTF-18	10/29/2019	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-18	10/29/2019	Dibenzofuran	2.7	1	1	NA	ug/L
MKTF-18	10/29/2019	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-18	10/29/2019	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-18	10/29/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-18	10/29/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-18	10/29/2019	Fluoranthene	ND	1	1	802	ug/L
MKTF-18	10/29/2019	Fluorene	6.9	1	1	288	ug/L
MKTF-18	10/29/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-18	10/29/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-18	10/29/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-18	10/29/2019	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-18	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-18	10/29/2019	Isophorone	ND	1	1	781	ug/L
MKTF-18	10/29/2019	Naphthalene	18	1	1	30	ug/L
MKTF-18	10/29/2019	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-18	10/29/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-18	10/29/2019	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-18	10/29/2019	Phenanthrene	4.4	1	1	170	ug/L
MKTF-18	10/29/2019	Phenol	1.8	1	1	5761	ug/L
MKTF-18	10/29/2019	Pyrene	ND	1	1	117	ug/L
MKTF-18	10/29/2019	Pyridine	ND	1	1	20	ug/L
MKTF-18	2/6/2020	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-18	2/6/2020	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-18	2/6/2020	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-18	2/6/2020	1,4-Dioxane	**11**	1	1	4.59	ug/L
MKTF-18	2/6/2020	1-Methylnaphthalene	**55**	1	1	11.38	ug/L
MKTF-18	2/6/2020	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-18	2/6/2020	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-18	2/6/2020	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-18	2/6/2020	2,4-Dimethylphenol	ND	1	1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/6/2020	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-18	2/6/2020	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-18	2/6/2020	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-18	2/6/2020	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-18	2/6/2020	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-18	2/6/2020	2-Methylnaphthalene	8.3	1	1	35.1	ug/L
MKTF-18	2/6/2020	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-18	2/6/2020	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-18	2/6/2020	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-18	2/6/2020	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-18	2/6/2020	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Acenaphthene	7	1	1	535	ug/L
MKTF-18	2/6/2020	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Aniline	ND	1	1	13	ug/L
MKTF-18	2/6/2020	Anthracene	ND	1	1	1721	ug/L
MKTF-18	2/6/2020	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-18	2/6/2020	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
MKTF-18	2/6/2020	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-18	2/6/2020	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-18	2/6/2020	Benzoic Acid	ND	1	1	75000	ug/L
MKTF-18	2/6/2020	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-18	2/6/2020	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-18	2/6/2020	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-18	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-18	2/6/2020	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-18	2/6/2020	Carbazole	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Chrysene	ND	1	1	34.3	ug/L
MKTF-18	2/6/2020	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-18	2/6/2020	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-18	2/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-18	2/6/2020	Dibenzofuran	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-18	2/6/2020	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-18	2/6/2020	Fluoranthene	ND	1	1	802	ug/L
MKTF-18	2/6/2020	Fluorene	6.8	1	1	288	ug/L
MKTF-18	2/6/2020	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-18	2/6/2020	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-18	2/6/2020	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-18	2/6/2020	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-18	2/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-18	2/6/2020	Isophorone	ND	1	1	781	ug/L
MKTF-18	2/6/2020	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-18	2/6/2020	Naphthalene	11	1	1	30	ug/L
MKTF-18	2/6/2020	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-18	2/6/2020	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-18	2/6/2020	Phenanthrene	2.5	1	1	170	ug/L
MKTF-18	2/6/2020	Phenol	1.9	1	1	5761	ug/L
MKTF-18	2/6/2020	Pyrene	ND	1	1	117	ug/L
MKTF-18	2/6/2020	Pyridine	ND	1	1	20	ug/L
MKTF-18	12/16/2020	Acenaphthene	ND	10.9	0.174	535	ug/L
MKTF-18	12/16/2020	Acenaphthylene	ND	10.9	0.185	NA	ug/L
MKTF-18	12/16/2020	Anthracene	ND	10.9	0.196	1721	ug/L
MKTF-18	12/16/2020	Benzo(a)anthracene	*ND*	*10.9*	0.196	0.12	ug/L
MKTF-18	12/16/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-18	12/16/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.163	0.34	ug/L
MKTF-18	12/16/2020	Benzo(g,h,i)perylene	ND	10.9	0.25	NA	ug/L
MKTF-18	12/16/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.174	3.43	ug/L
MKTF-18	12/16/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.174	59	ug/L
MKTF-18	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.94	0.137	ug/L
MKTF-18	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.44	55.64	ug/L
MKTF-18	12/16/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-18	12/16/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-18	12/16/2020	Carbazole	ND	10.9	0.25	NA	ug/L
MKTF-18	12/16/2020	4-Chloroaniline	*ND*	*10.9*	3.7	0.37	ug/L
MKTF-18	12/16/2020	4-Chloro-3-Methylphenol	ND	10.9	4.13	NA	ug/L
MKTF-18	12/16/2020	2-Chloronaphthalene	ND	10.9	0.152	733	ug/L
MKTF-18	12/16/2020	2-Chlorophenol	ND	10.9	2.39	91	ug/L
MKTF-18	12/16/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-18	12/16/2020	1,3-Dichlorobenzene	ND	10.9	0.196	NA	ug/L
MKTF-18	12/16/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-18	12/16/2020	Dibenzo(a,h)anthracene	ND	10.9	0.261	NA	ug/L
MKTF-18	12/16/2020	1,4-Dichlorobenzene	ND	10.9	0.174	75	ug/L
MKTF-18	12/16/2020	Dibenzofuran	ND	10.9	0.185	NA	ug/L
MKTF-18	12/16/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.83	1.25	ug/L
MKTF-18	12/16/2020	2,4-Dichlorophenol	ND	10.9	3.26	45.3	ug/L
MKTF-18	12/16/2020	Diethylphthalate	ND	10.9	0.261	14801	ug/L
MKTF-18	12/16/2020	2,4-Dimethylphenol	ND	10.9	3.81	354	ug/L
MKTF-18	12/16/2020	Di-n-butylphthalate	ND	10.9	2.94	885	ug/L
MKTF-18	12/16/2020	2,4-Dinitrophenol	ND	32.6	3.7	38.7	ug/L
MKTF-18	12/16/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-18	12/16/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-18	12/16/2020	Fluoranthene	ND	10.9	0.196	802	ug/L
MKTF-18	12/16/2020	Fluorene	ND	10.9	0.196	288	ug/L
MKTF-18	12/16/2020	Hexachlorobenzene	*ND*	*10.9*	0.185	0.0976	ug/L
MKTF-18	12/16/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.83	0.41	ug/L
MKTF-18	12/16/2020	Hexachloroethane	*ND*	*10.9*	4.57	3.28	ug/L
MKTF-18	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.239	0.343	ug/L
MKTF-18	12/16/2020	Isophorone	ND	10.9	0.152	781	ug/L
MKTF-18	12/16/2020	2-Methylphenol	ND	10.9	1.96	NA	ug/L
MKTF-18	12/16/2020	Naphthalene	12.5	10.9	0.185	30	ug/L
MKTF-18	12/16/2020	2-Nitroaniline	ND	10.9	2.39	190	ug/L
MKTF-18	12/16/2020	3-Nitroaniline	ND	10.9	1.96	NA	ug/L
MKTF-18	12/16/2020	4-Nitroaniline	*ND*	*10.9*	1.63	3.8	ug/L
MKTF-18	12/16/2020	Nitrobenzene	*ND*	*10.9*	0.141	1.4	ug/L
MKTF-18	12/16/2020	2-Nitrophenol	ND	10.9	5.66	NA	ug/L
MKTF-18	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.59	0.011	ug/L
MKTF-18	12/16/2020	N-Nitrosodiphenylamine	ND	10.9	0.196	122	ug/L
MKTF-18	12/16/2020	Pentachlorophenol	*ND*	*21.8*	1.52	1	ug/L
MKTF-18	12/16/2020	Phenanthrene	ND	10.9	0.196	170	ug/L
MKTF-18	12/16/2020	Phenol	ND	10.9	2.83	5761	ug/L
MKTF-18	12/16/2020	Pyrene	ND	10.9	0.228	117	ug/L
MKTF-18	12/16/2020	2,4,5-Trichlorophenol	ND	10.9	4.03	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	2,4,6-Trichlorophenol	ND	10.9	3.81	11.9*	ug/L
MKTF-18	12/16/2020	Dimethylphthalate	ND	10.9	0.185	612	ug/L
MKTF-18	12/16/2020	Aniline	ND	10.9	4.13	13	ug/L
MKTF-18	12/16/2020	Benzoic Acid	ND	32.6	7.94	75000	ug/L
MKTF-18	12/16/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-18	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.174	9.81	ug/L
MKTF-18	12/16/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.81	0.0049	ug/L
MKTF-18	12/16/2020	Pyridine	ND	10.9	3.48	20	ug/L
MKTF-18	12/16/2020	1,2,4-Trichlorobenzene	ND	10.9	0.196	70	ug/L
MKTF-18	12/16/2020	1,2-Dichlorobenzene	ND	10.9	0.185	600	ug/L
MKTF-18	12/16/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-18	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.74	1.52	ug/L
MKTF-18	12/16/2020	Di-n-octylphthalate	ND	10.9	0.185	200	ug/L
MKTF-18	12/16/2020	4-Nitrophenol	ND	10.9	2.28	NA	ug/L
MKTF-19	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-19	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	4/9/2014	1-Methylnaphthalene	**160**	10	3.6	11.38	ug/L
MKTF-19	4/9/2014	Naphthalene	**320**	20	4.6	30	ug/L
MKTF-19	4/9/2014	2-Methylnaphthalene	**250**	20	5.3	35.1	ug/L
MKTF-19	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-19	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	4/9/2014	Phenol	12	10	1.6	5761	ug/L
MKTF-19	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-19	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-19	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-19	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	9/24/2014	Carbazole	10	10	2.9	NA	ug/L
MKTF-19	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	9/24/2014	1-Methylnaphthalene	**180**	10	3.6	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/24/2014	Naphthalene	**310**	20	4.6	30	ug/L
MKTF-19	9/24/2014	2-Methylnaphthalene	**290**	20	5.3	35.1	ug/L
MKTF-19	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-19	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	9/24/2014	Phenol	11	10	1.6	5761	ug/L
MKTF-19	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-19	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-19	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-19	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-19	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-19	11/18/2014	Naphthalene	**54**	10	2.3	30	ug/L
MKTF-19	11/18/2014	2-Methylnaphthalene	33	10	2.6	35.1	ug/L
MKTF-19	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-19	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-19	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	11/18/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-19	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-19	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-19	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-19	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-19	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-19	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-19	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-19	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-19	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-19	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-19	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-19	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-19	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-19	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-19	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-19	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-19	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-19	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-19	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-19	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-19	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-19	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-19	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-19	3/12/2015	1-Methylnaphthalene	**170**	10	3.8	11.38	ug/L
MKTF-19	3/12/2015	Naphthalene	**340**	50	9.2	30	ug/L
MKTF-19	3/12/2015	2-Methylnaphthalene	**270**	50	11	35.1	ug/L
MKTF-19	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-19	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-19	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-19	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-19	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-19	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-19	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-19	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-19	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-19	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-19	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-19	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-19	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-19	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-19	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-19	3/12/2015	Phenol	15	10	4.2	5761	ug/L
MKTF-19	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-19	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-19	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-19	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-19	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-19	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-19	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-19	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-19	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-19	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-19	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-19	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-19	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-19	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-19	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-19	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-19	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-19	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-19	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-19	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-19	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-19	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-19	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-19	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-19	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-19	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-19	6/8/2015	Naphthalene	**310**	50	9.2	30	ug/L
MKTF-19	6/8/2015	2-Methylnaphthalene	**210**	10	2.2	35.1	ug/L
MKTF-19	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	6/8/2015	Phenol	13	10	1.1	5761	ug/L
MKTF-19	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-19	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	8/18/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-19	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	1-Methylnaphthalene	**180**	10	1.8	11.38	ug/L
MKTF-19	8/18/2015	Naphthalene	**400**	40	7.3	30	ug/L
MKTF-19	8/18/2015	2-Methylnaphthalene	**300**	40	9	35.1	ug/L
MKTF-19	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-19	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-19	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	11/3/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-19	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	1-Methylnaphthalene	**160**	10	1.8	11.38	ug/L
MKTF-19	11/3/2015	Naphthalene	**370**	50	9.2	30	ug/L
MKTF-19	11/3/2015	2-Methylnaphthalene	**290**	50	11	35.1	ug/L
MKTF-19	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-19	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	11/3/2015	Phenol	21	10	1.1	5761	ug/L
MKTF-19	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-19	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-19	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-19	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-19	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-19	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-19	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-19	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-19	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-19	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-19	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-19	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-19	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-19	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-19	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-19	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-19	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-19	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-19	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-19	2/25/2016	Carbazole	10	10	7.2	NA	ug/L
MKTF-19	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-19	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-19	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-19	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-19	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-19	2/25/2016	1-Methylnaphthalene	**150**	10	6.8	11.38	ug/L
MKTF-19	2/25/2016	Naphthalene	**350**	100	59	30	ug/L
MKTF-19	2/25/2016	2-Methylnaphthalene	**240**	10	7	35.1	ug/L
MKTF-19	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-19	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-19	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-19	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-19	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-19	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-19	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-19	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-19	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-19	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-19	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-19	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-19	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-19	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-19	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-19	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-19	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-19	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-19	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-19	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-19	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-19	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-19	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-19	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-19	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-19	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-19	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-19	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-19	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-19	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-19	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-19	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-19	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-19	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-19	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-19	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-19	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-19	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-19	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-19	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-19	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-19	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-19	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	6/10/2016	Acenaphthene	5.8	10	2.6	535	ug/L
MKTF-19	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	6/10/2016	Phenanthrene	4.6	10	2.6	170	ug/L
MKTF-19	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	6/10/2016	Fluorene	4.4	10	2.7	288	ug/L
MKTF-19	6/10/2016	Carbazole	7.2	10	2.3	NA	ug/L
MKTF-19	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	6/10/2016	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-19	6/10/2016	Naphthalene	**240**	20	5.2	30	ug/L
MKTF-19	6/10/2016	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-19	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-19	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	6/10/2016	Phenol	7	10	2	5761	ug/L
MKTF-19	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	6/10/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-19	6/10/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-19	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	9/13/2016	Acenaphthene	4.8	10	2.6	535	ug/L
MKTF-19	9/13/2016	Diethylphthalate	5.9	10	2.7	14801	ug/L
MKTF-19	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	9/13/2016	Phenanthrene	4.3	10	2.6	170	ug/L
MKTF-19	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	9/13/2016	Fluorene	6.9	10	2.7	288	ug/L
MKTF-19	9/13/2016	Carbazole	5.2	10	2.3	NA	ug/L
MKTF-19	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	9/13/2016	1-Methylnaphthalene	**110**	10	2.9	11.38	ug/L
MKTF-19	9/13/2016	Naphthalene	**240**	10	2.6	30	ug/L
MKTF-19	9/13/2016	2-Methylnaphthalene	**140**	10	2.9	35.1	ug/L
MKTF-19	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	9/13/2016	2,4-Dimethylphenol	4.3	10	3	354	ug/L
MKTF-19	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	9/13/2016	Phenol	6.2	10	2	5761	ug/L
MKTF-19	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-19	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-19	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	11/8/2016	Acenaphthene	5	10	2.6	535	ug/L
MKTF-19	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	11/8/2016	Phenanthrene	5.5	10	2.6	170	ug/L
MKTF-19	11/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	11/8/2016	Fluorene	7.3	10	2.7	288	ug/L
MKTF-19	11/8/2016	Carbazole	6	10	2.3	NA	ug/L
MKTF-19	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	11/8/2016	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-19	11/8/2016	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-19	11/8/2016	2-Methylnaphthalene	**180**	10	2.9	35.1	ug/L
MKTF-19	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	11/8/2016	2,4-Dimethylphenol	5.6	10	3	354	ug/L
MKTF-19	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	11/8/2016	Phenol	6.6	10	2	5761	ug/L
MKTF-19	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	11/8/2016	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-19	11/8/2016	Di-n-octylphthalate	8	10	2	200	ug/L
MKTF-19	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	11/8/2016	Pyrene	4.4	10	3.1	117	ug/L
MKTF-19	11/8/2016	Dimethylphthalate	3.5	10	2.4	612	ug/L
MKTF-19	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-19	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	3/15/2017	Acenaphthene	3.6	10	2.6	535	ug/L
MKTF-19	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	3/15/2017	Phenanthrene	3.1	10	2.6	170	ug/L
MKTF-19	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	3/15/2017	Fluorene	3.9	10	2.7	288	ug/L
MKTF-19	3/15/2017	Carbazole	4.6	10	2.3	NA	ug/L
MKTF-19	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	3/15/2017	1-Methylnaphthalene	**88**	10	2.9	11.38	ug/L
MKTF-19	3/15/2017	Naphthalene	**210**	10	2.6	30	ug/L
MKTF-19	3/15/2017	2-Methylnaphthalene	**120**	10	2.9	35.1	ug/L
MKTF-19	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	3/15/2017	2,4-Dimethylphenol	5.2	10	3	354	ug/L
MKTF-19	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	3/15/2017	Phenol	7.9	10	2	5761	ug/L
MKTF-19	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	3/15/2017	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-19	3/15/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-19	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	3/15/2017	3,4-Methylphenol	2.4	10	2.3	NA	ug/L
MKTF-19	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	6/14/2017	Acenaphthene	4.2	10	3.6	535	ug/L
MKTF-19	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/14/2017	Phenanthrene	5.5	10	4.3	170	ug/L
MKTF-19	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	6/14/2017	Fluorene	4.5	10	4	288	ug/L
MKTF-19	6/14/2017	Carbazole	6.2	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	6/14/2017	1-Methylnaphthalene	**110**	10	3.3	11.38	ug/L
MKTF-19	6/14/2017	Naphthalene	**280**	20	5.7	30	ug/L
MKTF-19	6/14/2017	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-19	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	6/14/2017	2,4-Dimethylphenol	6	10	2.8	354	ug/L
MKTF-19	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	6/14/2017	Phenol	15	10	3.1	5761	ug/L
MKTF-19	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	6/14/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
MKTF-19	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-19	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	9/26/2017	Fluorene	4.3	10	4	288	ug/L
MKTF-19	9/26/2017	Carbazole	5.5	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	9/26/2017	1-Methylnaphthalene	**100**	10	3.3	11.38	ug/L
MKTF-19	9/26/2017	Naphthalene	**210**	10	2.9	30	ug/L
MKTF-19	9/26/2017	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-19	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	9/26/2017	2,4-Dimethylphenol	3	10	2.8	354	ug/L
MKTF-19	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	9/26/2017	Phenol	9.1	10	3.1	5761	ug/L
MKTF-19	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	9/26/2017	Bis(2-ethylhexyl)phthalate	9.7	10	4.8	55.64	ug/L
MKTF-19	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	12/1/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-19	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-19	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	12/1/2017	1-Methylnaphthalene	**18**	10	3.3	11.38	ug/L
MKTF-19	12/1/2017	Naphthalene	**34**	10	2.9	30	ug/L
MKTF-19	12/1/2017	2-Methylnaphthalene	27	10	3.3	35.1	ug/L
MKTF-19	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-19	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-19	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-19	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-19	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	2/16/2018	Acenaphthene	4.9	10	3.6	535	ug/L
MKTF-19	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	2/16/2018	Fluorene	6.5	10	4	288	ug/L
MKTF-19	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	2/16/2018	1-Methylnaphthalene	**120**	10	3.3	11.38	ug/L
MKTF-19	2/16/2018	Naphthalene	**310**	50	14	30	ug/L
MKTF-19	2/16/2018	2-Methylnaphthalene	**220**	10	3.3	35.1	ug/L
MKTF-19	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	2/16/2018	2,4-Dimethylphenol	4.1	10	2.8	354	ug/L
MKTF-19	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	2/16/2018	Phenol	14	10	3.1	5761	ug/L
MKTF-19	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-19	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	5/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-19	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	5/4/2018	1-Methylnaphthalene	**91**	10	7	11.38	ug/L
MKTF-19	5/4/2018	Naphthalene	**240**	20	10	30	ug/L
MKTF-19	5/4/2018	2-Methylnaphthalene	**170**	10	6.3	35.1	ug/L
MKTF-19	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-19	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-19	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	5/4/2018	Phenol	13	10	6	5761	ug/L
MKTF-19	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	8/24/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	8/24/2018	Carbazole	7.8	10	6.3	NA	ug/L
MKTF-19	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	8/24/2018	1-Methylnaphthalene	**140**	10	7	11.38	ug/L
MKTF-19	8/24/2018	Naphthalene	**310**	20	10	30	ug/L
MKTF-19	8/24/2018	2-Methylnaphthalene	**230**	10	6.3	35.1	ug/L
MKTF-19	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-19	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	8/24/2018	2,4-Dimethylphenol	7.4	10	5.9	354	ug/L
MKTF-19	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	8/24/2018	Phenol	15	10	6	5761	ug/L
MKTF-19	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-19	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-19	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	11/28/2018	1-Methylnaphthalene	**120**	10	7	11.38	ug/L
MKTF-19	11/28/2018	Naphthalene	**400**	100	50	30	ug/L
MKTF-19	11/28/2018	2-Methylnaphthalene	**210**	10	6.3	35.1	ug/L
MKTF-19	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-19	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	11/28/2018	Phenol	11	10	6	5761	ug/L
MKTF-19	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-19	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	5/9/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L
MKTF-19	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	5/9/2019	2-Methylnaphthalene	**230**	10	3.018863	35.1	ug/L
MKTF-19	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-19	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-19	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-19	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-19	5/9/2019	Acenaphthene	5.7	10	2.955891	535	ug/L
MKTF-19	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-19	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-19	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-19	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-19	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	5/9/2019	Bis(2-ethylhexyl)phthalate	4.9	10	4.302128	55.64	ug/L
MKTF-19	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	5/9/2019	Carbazole	10	10	2.890507	NA	ug/L
MKTF-19	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-19	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-19	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	5/9/2019	Fluorene	8.8	10	2.888488	288	ug/L
MKTF-19	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	5/9/2019	Naphthalene	**320**	50	20.61105	30	ug/L
MKTF-19	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Phenanthrene	5.5	10	2.777122	170	ug/L
MKTF-19	5/9/2019	Phenol	11	10	8.036586	5761	ug/L
MKTF-19	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-19	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**310**	100	30.188629	35.1	ug/L
MKTF-19	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-19	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-19	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-19	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-19	8/19/2019	Acenaphthene	5.5	10	2.955891	535	ug/L
MKTF-19	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-19	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-19	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-19	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-19	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-19	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	8/19/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-19	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	8/19/2019	Diethylphthalate	5.7	10	2.872488	14801	ug/L
MKTF-19	8/19/2019	Dimethylphthalate	3.5	10	3.238016	612	ug/L
MKTF-19	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	8/19/2019	Fluorene	7.3	10	2.888488	288	ug/L
MKTF-19	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	8/19/2019	Naphthalene	**440**	100	41.222099	30	ug/L
MKTF-19	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-19	8/19/2019	Phenanthrene	6.6	10	2.777122	170	ug/L
MKTF-19	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-19	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-19	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**320**	100	30.188629	35.1	ug/L
MKTF-19	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-19	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-19	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-19	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-19	8/19/2019	Acenaphthene	5.3	10	2.955891	535	ug/L
MKTF-19	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-19	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-19	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-19	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-19	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	8/19/2019	Carbazole	11	10	2.890507	NA	ug/L
MKTF-19	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-19	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-19	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	8/19/2019	Fluorene	7.1	10	2.888488	288	ug/L
MKTF-19	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	8/19/2019	Naphthalene	**450**	100	41.222099	30	ug/L
MKTF-19	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-19	8/19/2019	Phenanthrene	5.9	10	2.777122	170	ug/L
MKTF-19	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-19	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	10/29/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-19	10/29/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-19	10/29/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-19	10/29/2019	1,4-Dioxane	**43**	10	10	4.59	ug/L
MKTF-19	10/29/2019	1-Methylnaphthalene	**150**	5	5	11.38	ug/L
MKTF-19	10/29/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-19	10/29/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-19	10/29/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-19	10/29/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-19	10/29/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-19	10/29/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-19	10/29/2019	2,6-Dinitrotoluene	*ND*	*4*	4	0.485	ug/L
MKTF-19	10/29/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-19	10/29/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-19	10/29/2019	2-Methylnaphthalene	**230**	5	5	35.1	ug/L
MKTF-19	10/29/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-19	10/29/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-19	10/29/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-19	10/29/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-19	10/29/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-19	10/29/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Aniline	ND	5	5	13	ug/L
MKTF-19	10/29/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-19	10/29/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-19	10/29/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-19	10/29/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-19	10/29/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-19	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-19	10/29/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-19	10/29/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-19	10/29/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-19	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-19	10/29/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-19	10/29/2019	Carbazole	8.6	5	5	NA	ug/L
MKTF-19	10/29/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-19	10/29/2019	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MKTF-19	10/29/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-19	10/29/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-19	10/29/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-19	10/29/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-19	10/29/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-19	10/29/2019	Fluorene	6.7	5	5	288	ug/L
MKTF-19	10/29/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-19	10/29/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-19	10/29/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-19	10/29/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-19	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-19	10/29/2019	Isophorone	ND	5	5	781	ug/L
MKTF-19	10/29/2019	Naphthalene	8	5	5	30	ug/L
MKTF-19	10/29/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-19	10/29/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-19	10/29/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-19	10/29/2019	Phenanthrene	5.8	5	5	170	ug/L
MKTF-19	10/29/2019	Phenol	27	5	5	5761	ug/L
MKTF-19	10/29/2019	Pyrene	ND	5	5	117	ug/L
MKTF-19	10/29/2019	Pyridine	ND	5	5	20	ug/L
MKTF-20	4/11/2014	Benzo(a)pyrene	*ND*	*13*	4.3	0.2	ug/L
MKTF-20	4/11/2014	2,4-Dinitrophenol	ND	26	4.2	38.7	ug/L
MKTF-20	4/11/2014	Dibenzo(a,h)anthracene	ND	13	4	NA	ug/L
MKTF-20	4/11/2014	Benzo(a)anthracene	*ND*	*13*	4.1	0.12	ug/L
MKTF-20	4/11/2014	4-Chloro-3-Methylphenol	ND	13	4.8	NA	ug/L
MKTF-20	4/11/2014	Aniline	**22**	13	3.2	13	ug/L
MKTF-20	4/11/2014	N-Nitrosodimethylamine	*ND*	*13*	3.2	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	4/11/2014	Benzoic Acid	ND	26	2.9	75000	ug/L
MKTF-20	4/11/2014	Hexachloroethane	*ND*	*13*	2.5	3.28	ug/L
MKTF-20	4/11/2014	Hexachlorocyclopentadiene	*ND*	*13*	4	0.41	ug/L
MKTF-20	4/11/2014	Isophorone	ND	13	4.1	781	ug/L
MKTF-20	4/11/2014	Acenaphthene	ND	13	3.8	535	ug/L
MKTF-20	4/11/2014	Diethylphthalate	ND	13	5.5	14801	ug/L
MKTF-20	4/11/2014	Di-n-butylphthalate	ND	13	4.7	885	ug/L
MKTF-20	4/11/2014	Phenanthrene	ND	13	3.3	170	ug/L
MKTF-20	4/11/2014	Butylbenzylphthalate	ND	13	4.1	16	ug/L
MKTF-20	4/11/2014	N-Nitrosodiphenylamine	ND	13	3.8	122	ug/L
MKTF-20	4/11/2014	Fluorene	ND	13	3.9	288	ug/L
MKTF-20	4/11/2014	Carbazole	ND	13	3.8	NA	ug/L
MKTF-20	4/11/2014	Hexachlorobutadiene	*ND*	*13*	4	0.14	ug/L
MKTF-20	4/11/2014	Pentachlorophenol	*ND*	*26*	3.3	1	ug/L
MKTF-20	4/11/2014	2,4,6-Trichlorophenol	ND	13	2.4	11.9*	ug/L
MKTF-20	4/11/2014	2-Nitroaniline	ND	13	3.7	190	ug/L
MKTF-20	4/11/2014	2-Nitrophenol	ND	13	4.1	NA	ug/L
MKTF-20	4/11/2014	1-Methylnaphthalene	**88**	13	4.8	11.38	ug/L
MKTF-20	4/11/2014	Naphthalene	**250**	13	3.1	30	ug/L
MKTF-20	4/11/2014	2-Methylnaphthalene	**120**	13	3.5	35.1	ug/L
MKTF-20	4/11/2014	2-Chloronaphthalene	ND	13	4	733	ug/L
MKTF-20	4/11/2014	3,3-Dichlorobenzidine	*ND*	*13*	3.1	1.25	ug/L
MKTF-20	4/11/2014	2-Methylphenol	120	26	3.6	NA	ug/L
MKTF-20	4/11/2014	1,2-Dichlorobenzene	ND	13	2.2	600	ug/L
MKTF-20	4/11/2014	2-Chlorophenol	ND	13	2.3	91	ug/L
MKTF-20	4/11/2014	2,4,5-Trichlorophenol	ND	13	4.3	1166	ug/L
MKTF-20	4/11/2014	Nitrobenzene	*ND*	*13*	3.4	1.4	ug/L
MKTF-20	4/11/2014	3-Nitroaniline	ND	13	4.7	NA	ug/L
MKTF-20	4/11/2014	4-Nitroaniline	*ND*	*13*	5.4	3.8	ug/L
MKTF-20	4/11/2014	4-Nitrophenol	ND	13	5.7	NA	ug/L
MKTF-20	4/11/2014	Benzyl Alcohol	ND	13	2.4	2000	ug/L
MKTF-20	4/11/2014	4-Bromophenyl-phenylether	ND	13	3.9	NA	ug/L
MKTF-20	4/11/2014	Azobenzene	*ND*	*13*	3.3	0.12	ug/L
MKTF-20	4/11/2014	2,4-Dimethylphenol	130	13	4.1	354	ug/L
MKTF-20	4/11/2014	1,4-Dichlorobenzene	ND	13	3.2	75	ug/L
MKTF-20	4/11/2014	4-Chloroaniline	*ND*	*13*	3.4	0.37	ug/L
MKTF-20	4/11/2014	Phenol	ND	13	2.1	5761	ug/L
MKTF-20	4/11/2014	Pyridine	ND	13	2.1	20	ug/L
MKTF-20	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*13*	2.3	0.137	ug/L
MKTF-20	4/11/2014	Bis(2-chloroethoxy)methane	ND	13	3.7	59	ug/L
MKTF-20	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	13	3.9	55.64	ug/L
MKTF-20	4/11/2014	Di-n-octylphthalate	ND	13	3.6	200	ug/L
MKTF-20	4/11/2014	Hexachlorobenzene	*ND*	*13*	4.2	0.0976	ug/L
MKTF-20	4/11/2014	Anthracene	ND	13	3.3	1721	ug/L
MKTF-20	4/11/2014	1,2,4-Trichlorobenzene	ND	13	3.6	70	ug/L
MKTF-20	4/11/2014	2,4-Dichlorophenol	ND	26	3.9	45.3	ug/L
MKTF-20	4/11/2014	2,4-Dinitrotoluene	ND	13	5.9	45.3	ug/L
MKTF-20	4/11/2014	Pyrene	ND	13	5.3	117	ug/L
MKTF-20	4/11/2014	Dimethylphthalate	ND	13	4.8	612	ug/L
MKTF-20	4/11/2014	Dibenzofuran	ND	13	4.9	NA	ug/L
MKTF-20	4/11/2014	Benzo(g,h,i)perylene	ND	13	4.4	NA	ug/L
MKTF-20	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*13*	4.5	0.343	ug/L
MKTF-20	4/11/2014	Benzo(b)fluoranthene	*ND*	*13*	5.4	0.34	ug/L
MKTF-20	4/11/2014	Fluoranthene	ND	13	3.9	802	ug/L
MKTF-20	4/11/2014	Benzo(k)fluoranthene	*ND*	*13*	4.6	3.43	ug/L
MKTF-20	4/11/2014	Acenaphthylene	ND	13	3.2	NA	ug/L
MKTF-20	4/11/2014	Chrysene	ND	13	3.8	34.3	ug/L
MKTF-20	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*26*	3.1	1.52	ug/L
MKTF-20	4/11/2014	1,3-Dichlorobenzene	ND	13	2.3	NA	ug/L
MKTF-20	4/11/2014	2,6-Dinitrotoluene	*ND*	*13*	4.5	0.485	ug/L
MKTF-20	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*13*	2.6	0.011	ug/L
MKTF-20	4/11/2014	4-Chlorophenyl-phenylether	ND	13	4.6	NA	ug/L
MKTF-20	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*13*	3.2	9.81	ug/L
MKTF-20	4/11/2014	3,4-Methylphenol	76	13	2.4	NA	ug/L
MKTF-20	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-20	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-20	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-20	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-20	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-20	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-20	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-20	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-20	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-20	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-20	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-20	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-20	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-20	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-20	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-20	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-20	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-20	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-20	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-20	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-20	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-20	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-20	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-20	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-20	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-20	11/18/2014	Naphthalene	**100**	10	2.3	30	ug/L
MKTF-20	11/18/2014	2-Methylnaphthalene	**66**	10	2.6	35.1	ug/L
MKTF-20	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-20	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-20	11/18/2014	2-Methylphenol	120	10	2.8	NA	ug/L
MKTF-20	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-20	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-20	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-20	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-20	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-20	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-20	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-20	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-20	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-20	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	11/18/2014	2,4-Dimethylphenol	**610**	100	31	354	ug/L
MKTF-20	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-20	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-20	11/18/2014	Phenol	37	10	1.6	5761	ug/L
MKTF-20	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-20	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-20	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-20	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-20	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-20	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-20	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-20	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-20	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-20	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-20	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-20	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-20	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-20	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-20	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-20	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-20	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-20	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-20	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-20	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-20	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-20	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-20	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-20	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-20	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-20	11/18/2014	3,4-Methylphenol	51	10	1.8	NA	ug/L
MKTF-20	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-20	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-20	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-20	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-20	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-20	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-20	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-20	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-20	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-20	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-20	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-20	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-20	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-20	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-20	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-20	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-20	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-20	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-20	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-20	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-20	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-20	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-20	3/16/2015	1-Methylnaphthalene	**45**	10	1.8	11.38	ug/L
MKTF-20	3/16/2015	Naphthalene	**130**	10	1.8	30	ug/L
MKTF-20	3/16/2015	2-Methylnaphthalene	**37**	10	2.2	35.1	ug/L
MKTF-20	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-20	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-20	3/16/2015	2-Methylphenol	210	10	1.2	NA	ug/L
MKTF-20	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-20	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-20	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-20	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-20	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-20	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-20	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-20	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-20	3/16/2015	2,4-Dimethylphenol	320	20	3.7	354	ug/L
MKTF-20	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-20	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-20	3/16/2015	Phenol	210	10	1.1	5761	ug/L
MKTF-20	3/16/2015	Pyridine	16	10	1.7	20	ug/L
MKTF-20	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-20	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-20	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-20	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-20	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-20	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-20	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-20	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-20	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-20	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-20	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-20	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-20	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-20	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-20	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-20	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-20	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-20	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-20	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-20	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-20	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-20	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-20	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-20	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-20	3/16/2015	3,4-Methylphenol	360	20	3	NA	ug/L
MKTF-20	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-20	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-20	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-20	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-20	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-20	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-20	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-20	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-20	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-20	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-20	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-20	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-20	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-20	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-20	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-20	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-20	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-20	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-20	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-20	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-20	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-20	6/8/2015	1-Methylnaphthalene	**37**	10	1.8	11.38	ug/L
MKTF-20	6/8/2015	Naphthalene	**56**	10	1.8	30	ug/L
MKTF-20	6/8/2015	2-Methylnaphthalene	**36**	10	2.2	35.1	ug/L
MKTF-20	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-20	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-20	6/8/2015	2-Methylphenol	49	10	1.2	NA	ug/L
MKTF-20	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-20	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-20	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-20	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-20	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-20	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-20	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-20	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-20	6/8/2015	2,4-Dimethylphenol	230	10	1.9	354	ug/L
MKTF-20	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-20	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-20	6/8/2015	Phenol	50	10	1.1	5761	ug/L
MKTF-20	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-20	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-20	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-20	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-20	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-20	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-20	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-20	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-20	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-20	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-20	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-20	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-20	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-20	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-20	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-20	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-20	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-20	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-20	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-20	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-20	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-20	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-20	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-20	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-20	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-20	6/8/2015	3,4-Methylphenol	130	10	1.5	NA	ug/L
MKTF-20	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-20	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-20	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-20	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-20	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-20	3/1/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-20	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-20	3/1/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-20	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-20	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-20	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-20	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-20	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-20	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-20	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-20	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-20	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-20	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-20	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-20	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-20	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-20	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-20	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-20	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-20	3/1/2016	1-Methylnaphthalene	**36**	10	6.8	11.38	ug/L
MKTF-20	3/1/2016	Naphthalene	**50**	10	5.9	30	ug/L
MKTF-20	3/1/2016	2-Methylnaphthalene	23	10	7	35.1	ug/L
MKTF-20	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-20	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-20	3/1/2016	2-Methylphenol	96	10	8.2	NA	ug/L
MKTF-20	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-20	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-20	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-20	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-20	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-20	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-20	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-20	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-20	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-20	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-20	3/1/2016	2,4-Dimethylphenol	280	50	23	354	ug/L
MKTF-20	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-20	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-20	3/1/2016	Phenol	11	10	5.1	5761	ug/L
MKTF-20	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-20	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-20	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-20	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-20	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-20	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-20	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-20	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-20	3/1/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-20	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-20	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-20	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-20	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-20	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-20	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-20	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-20	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-20	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-20	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-20	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-20	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-20	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-20	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-20	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-20	3/1/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-20	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-20	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-20	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-20	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-20	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-20	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	1-Methylnaphthalene	**51**	50	15	11.38	ug/L
MKTF-20	6/9/2016	Naphthalene	**77**	50	13	30	ug/L
MKTF-20	6/9/2016	2-Methylnaphthalene	*29*	*50*	14	35.1	ug/L
MKTF-20	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	6/9/2016	2-Methylphenol	250	50	13	NA	ug/L
MKTF-20	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	6/9/2016	2,4-Dimethylphenol	230	50	15	354	ug/L
MKTF-20	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	6/9/2016	Phenol	240	50	9.9	5761	ug/L
MKTF-20	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-20	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-20	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-20	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-20	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-20	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	6/9/2016	3,4-Methylphenol	280	50	11	NA	ug/L
MKTF-20	9/12/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-20	9/12/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-20	9/12/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-20	9/12/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-20	9/12/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-20	9/12/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-20	9/12/2016	Benzoic Acid	130	200	26	75000	ug/L
MKTF-20	9/12/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-20	9/12/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-20	9/12/2016	Isophorone	ND	100	26	781	ug/L
MKTF-20	9/12/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-20	9/12/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-20	9/12/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-20	9/12/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-20	9/12/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-20	9/12/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-20	9/12/2016	Fluorene	ND	100	27	288	ug/L
MKTF-20	9/12/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-20	9/12/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-20	9/12/2016	Pentachlorophenol	**25**	200	23	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-20	9/12/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-20	9/12/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-20	9/12/2016	1-Methylnaphthalene	**48**	100	29	11.38	ug/L
MKTF-20	9/12/2016	Naphthalene	**110**	100	26	30	ug/L
MKTF-20	9/12/2016	2-Methylnaphthalene	**43**	100	29	35.1	ug/L
MKTF-20	9/12/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-20	9/12/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-20	9/12/2016	2-Methylphenol	190	100	25	NA	ug/L
MKTF-20	9/12/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-20	9/12/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-20	9/12/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-20	9/12/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-20	9/12/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-20	9/12/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-20	9/12/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-20	9/12/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-20	9/12/2016	2,4-Dimethylphenol	**390**	100	30	354	ug/L
MKTF-20	9/12/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-20	9/12/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-20	9/12/2016	Phenol	61	100	20	5761	ug/L
MKTF-20	9/12/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-20	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-20	9/12/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-20	9/12/2016	Bis(2-ethylhexyl)phthalate	*36*	*100*	26	55.64	ug/L
MKTF-20	9/12/2016	Di-n-octylphthalate	38	100	20	200	ug/L
MKTF-20	9/12/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-20	9/12/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-20	9/12/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-20	9/12/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-20	9/12/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-20	9/12/2016	Pyrene	ND	100	31	117	ug/L
MKTF-20	9/12/2016	Dimethylphthalate	29	100	24	612	ug/L
MKTF-20	9/12/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-20	9/12/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-20	9/12/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-20	9/12/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-20	9/12/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-20	9/12/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-20	9/12/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-20	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-20	9/12/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-20	9/12/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-20	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-20	9/12/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-20	9/12/2016	3,4-Methylphenol	61	100	23	NA	ug/L
MKTF-20	11/3/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	11/3/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	11/3/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	11/3/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	11/3/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	11/3/2016	Benzoic Acid	61	100	13	75000	ug/L
MKTF-20	11/3/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	11/3/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	11/3/2016	Isophorone	ND	50	13	781	ug/L
MKTF-20	11/3/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	11/3/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	11/3/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	11/3/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	11/3/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-20	11/3/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	11/3/2016	Fluorene	ND	50	14	288	ug/L
MKTF-20	11/3/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-20	11/3/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	11/3/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	11/3/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	11/3/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	11/3/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	1-Methylnaphthalene	**50**	50	15	11.38	ug/L
MKTF-20	11/3/2016	Naphthalene	**110**	50	13	30	ug/L
MKTF-20	11/3/2016	2-Methylnaphthalene	**38**	50	14	35.1	ug/L
MKTF-20	11/3/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	11/3/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	11/3/2016	2-Methylphenol	160	50	13	NA	ug/L
MKTF-20	11/3/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	11/3/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	11/3/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	11/3/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	11/3/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	11/3/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	11/3/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	11/3/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	11/3/2016	2,4-Dimethylphenol	**430**	50	15	354	ug/L
MKTF-20	11/3/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	11/3/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	11/3/2016	Phenol	130	50	9.9	5761	ug/L
MKTF-20	11/3/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	11/3/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	11/3/2016	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-20	11/3/2016	Di-n-octylphthalate	36	50	9.9	200	ug/L
MKTF-20	11/3/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	11/3/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-20	11/3/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	11/3/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	11/3/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	11/3/2016	Pyrene	ND	50	15	117	ug/L
MKTF-20	11/3/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	11/3/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	11/3/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	11/3/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	11/3/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	11/3/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	11/3/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	11/3/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	11/3/2016	3,4-Methylphenol	89	50	11	NA	ug/L
MKTF-20	3/14/2017	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	3/14/2017	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	3/14/2017	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	3/14/2017	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	3/14/2017	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	3/14/2017	Benzoic Acid	67	100	13	75000	ug/L
MKTF-20	3/14/2017	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	3/14/2017	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	3/14/2017	Isophorone	ND	50	13	781	ug/L
MKTF-20	3/14/2017	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	3/14/2017	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	3/14/2017	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	3/14/2017	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	3/14/2017	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-20	3/14/2017	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	3/14/2017	Fluorene	ND	50	14	288	ug/L
MKTF-20	3/14/2017	Carbazole	ND	50	11	NA	ug/L
MKTF-20	3/14/2017	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	3/14/2017	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	3/14/2017	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	3/14/2017	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	3/14/2017	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	1-Methylnaphthalene	**29**	50	15	11.38	ug/L
MKTF-20	3/14/2017	Naphthalene	**72**	50	13	30	ug/L
MKTF-20	3/14/2017	2-Methylnaphthalene	*28*	*50*	14	35.1	ug/L
MKTF-20	3/14/2017	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	3/14/2017	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	3/14/2017	2-Methylphenol	340	50	13	NA	ug/L
MKTF-20	3/14/2017	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	3/14/2017	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	3/14/2017	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	3/14/2017	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	3/14/2017	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	3/14/2017	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	3/14/2017	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	3/14/2017	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	3/14/2017	2,4-Dimethylphenol	340	50	15	354	ug/L
MKTF-20	3/14/2017	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	3/14/2017	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	3/14/2017	Phenol	310	50	9.9	5761	ug/L
MKTF-20	3/14/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	3/14/2017	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	3/14/2017	Bis(2-ethylhexyl)phthalate	36	50	13	55.64	ug/L
MKTF-20	3/14/2017	Di-n-octylphthalate	18	50	9.9	200	ug/L
MKTF-20	3/14/2017	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	3/14/2017	Anthracene	ND	50	12	1721	ug/L
MKTF-20	3/14/2017	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	3/14/2017	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	3/14/2017	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	3/14/2017	Pyrene	ND	50	15	117	ug/L
MKTF-20	3/14/2017	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	3/14/2017	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	3/14/2017	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-20	3/14/2017	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	3/14/2017	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	3/14/2017	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	3/14/2017	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	3/14/2017	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	3/14/2017	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	3/14/2017	3,4-Methylphenol	190	50	11	NA	ug/L
MKTF-20	6/12/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	6/12/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	6/12/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	6/12/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	6/12/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	6/12/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	6/12/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-20	6/12/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	6/12/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	6/12/2017	Isophorone	ND	50	22	781	ug/L
MKTF-20	6/12/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	6/12/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	6/12/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	6/12/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	6/12/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	6/12/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	6/12/2017	Fluorene	ND	50	20	288	ug/L
MKTF-20	6/12/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	6/12/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	6/12/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	6/12/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	6/12/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	6/12/2017	1-Methylnaphthalene	**28**	50	17	11.38	ug/L
MKTF-20	6/12/2017	Naphthalene	**180**	50	14	30	ug/L
MKTF-20	6/12/2017	2-Methylnaphthalene	**37**	50	16	35.1	ug/L
MKTF-20	6/12/2017	2-Chloronaphthalene	ND	50	18	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/12/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	6/12/2017	2-Methylphenol	130	50	17	NA	ug/L
MKTF-20	6/12/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	6/12/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	6/12/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	6/12/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	6/12/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-20	6/12/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	6/12/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	6/12/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	6/12/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	6/12/2017	2,4-Dimethylphenol	110	50	14	354	ug/L
MKTF-20	6/12/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	6/12/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	6/12/2017	Phenol	73	50	16	5761	ug/L
MKTF-20	6/12/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	6/12/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	6/12/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	6/12/2017	Bis(2-ethylhexyl)phthalate	25	50	24	55.64	ug/L
MKTF-20	6/12/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	6/12/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	6/12/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-20	6/12/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	6/12/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	6/12/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	6/12/2017	Pyrene	ND	50	22	117	ug/L
MKTF-20	6/12/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	6/12/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	6/12/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	6/12/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	6/12/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	6/12/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	6/12/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	6/12/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	6/12/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	6/12/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	6/12/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	6/12/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	6/12/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	6/12/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	6/12/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	6/12/2017	3,4-Methylphenol	130	50	16	NA	ug/L
MKTF-20	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-20	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-20	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-20	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-20	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-20	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-20	9/26/2017	Benzoic Acid	25	20	3.9	75000	ug/L
MKTF-20	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-20	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-20	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-20	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-20	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-20	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-20	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-20	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-20	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-20	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-20	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-20	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-20	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-20	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-20	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-20	9/26/2017	1-Methylnaphthalene	**37**	10	3.3	11.38	ug/L
MKTF-20	9/26/2017	Naphthalene	**160**	10	2.9	30	ug/L
MKTF-20	9/26/2017	2-Methylnaphthalene	**41**	10	3.3	35.1	ug/L
MKTF-20	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-20	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-20	9/26/2017	2-Methylphenol	75	10	3.3	NA	ug/L
MKTF-20	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-20	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-20	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-20	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-20	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-20	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-20	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-20	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-20	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-20	9/26/2017	2,4-Dimethylphenol	66	10	2.8	354	ug/L
MKTF-20	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-20	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-20	9/26/2017	Phenol	78	10	3.1	5761	ug/L
MKTF-20	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-20	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-20	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-20	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-20	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-20	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-20	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-20	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-20	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-20	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-20	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-20	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-20	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-20	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-20	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-20	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-20	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-20	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-20	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-20	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-20	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-20	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-20	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-20	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-20	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-20	9/26/2017	3,4-Methylphenol	22	10	3.2	NA	ug/L
MKTF-20	11/29/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	11/29/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	11/29/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	11/29/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	11/29/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	11/29/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	11/29/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-20	11/29/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	11/29/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	11/29/2017	Isophorone	ND	50	22	781	ug/L
MKTF-20	11/29/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	11/29/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	11/29/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	11/29/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	11/29/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	11/29/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	11/29/2017	Fluorene	ND	50	20	288	ug/L
MKTF-20	11/29/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	11/29/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	11/29/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	11/29/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	11/29/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	11/29/2017	1-Methylnaphthalene	**59**	50	17	11.38	ug/L
MKTF-20	11/29/2017	Naphthalene	**200**	50	14	30	ug/L
MKTF-20	11/29/2017	2-Methylnaphthalene	**61**	50	16	35.1	ug/L
MKTF-20	11/29/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-20	11/29/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	11/29/2017	2-Methylphenol	28	50	17	NA	ug/L
MKTF-20	11/29/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	11/29/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	11/29/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	11/29/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	11/29/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-20	11/29/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	11/29/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	11/29/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	11/29/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	11/29/2017	2,4-Dimethylphenol	44	50	14	354	ug/L
MKTF-20	11/29/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	11/29/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	11/29/2017	Phenol	85	50	16	5761	ug/L
MKTF-20	11/29/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	11/29/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	11/29/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	11/29/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-20	11/29/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	11/29/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	11/29/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-20	11/29/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	11/29/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	11/29/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	11/29/2017	Pyrene	ND	50	22	117	ug/L
MKTF-20	11/29/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	11/29/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	11/29/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	11/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	11/29/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	11/29/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	11/29/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	11/29/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	11/29/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	11/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	11/29/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	11/29/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	11/29/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	11/29/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	11/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	11/29/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-20	2/15/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	2/15/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	2/15/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	2/15/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	2/15/2018	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	2/15/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	2/15/2018	Benzoic Acid	71	100	20	75000	ug/L
MKTF-20	2/15/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	2/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	2/15/2018	Isophorone	ND	50	22	781	ug/L
MKTF-20	2/15/2018	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	2/15/2018	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	2/15/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	2/15/2018	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	2/15/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	2/15/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	2/15/2018	Fluorene	ND	50	20	288	ug/L
MKTF-20	2/15/2018	Carbazole	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	2/15/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	2/15/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	2/15/2018	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	2/15/2018	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	2/15/2018	1-Methylnaphthalene	**65**	50	17	11.38	ug/L
MKTF-20	2/15/2018	Naphthalene	**310**	50	14	30	ug/L
MKTF-20	2/15/2018	2-Methylnaphthalene	**77**	50	16	35.1	ug/L
MKTF-20	2/15/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-20	2/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	2/15/2018	2-Methylphenol	27	50	17	NA	ug/L
MKTF-20	2/15/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	2/15/2018	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	2/15/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	2/15/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	2/15/2018	3-Nitroaniline	ND	50	22	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/15/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	2/15/2018	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	2/15/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	2/15/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	2/15/2018	2,4-Dimethylphenol	**400**	50	14	354	ug/L
MKTF-20	2/15/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	2/15/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	2/15/2018	Phenol	230	50	16	5761	ug/L
MKTF-20	2/15/2018	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	2/15/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	2/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-20	2/15/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	2/15/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	2/15/2018	Anthracene	ND	50	18	1721	ug/L
MKTF-20	2/15/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	2/15/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	2/15/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	2/15/2018	Pyrene	ND	50	22	117	ug/L
MKTF-20	2/15/2018	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	2/15/2018	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	2/15/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	2/15/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	2/15/2018	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	2/15/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	2/15/2018	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	2/15/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	2/15/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	2/15/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	2/15/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	2/15/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-20	5/11/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-20	5/11/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-20	5/11/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-20	5/11/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-20	5/11/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-20	5/11/2018	Benzoic Acid	160	200	63	75000	ug/L
MKTF-20	5/11/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-20	5/11/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-20	5/11/2018	Isophorone	ND	100	62	781	ug/L
MKTF-20	5/11/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-20	5/11/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-20	5/11/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-20	5/11/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-20	5/11/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-20	5/11/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-20	5/11/2018	Fluorene	ND	100	63	288	ug/L
MKTF-20	5/11/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-20	5/11/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-20	5/11/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-20	5/11/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-20	5/11/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-20	5/11/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-20	5/11/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-20	5/11/2018	Naphthalene	**150**	100	50	30	ug/L
MKTF-20	5/11/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-20	5/11/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-20	5/11/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-20	5/11/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-20	5/11/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-20	5/11/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-20	5/11/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-20	5/11/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-20	5/11/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-20	5/11/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-20	5/11/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-20	5/11/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-20	5/11/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-20	5/11/2018	2,4-Dimethylphenol	240	100	59	354	ug/L
MKTF-20	5/11/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-20	5/11/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-20	5/11/2018	Phenol	73	100	60	5761	ug/L
MKTF-20	5/11/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-20	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-20	5/11/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-20	5/11/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-20	5/11/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-20	5/11/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-20	5/11/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-20	5/11/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-20	5/11/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-20	5/11/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-20	5/11/2018	Pyrene	ND	100	65	117	ug/L
MKTF-20	5/11/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-20	5/11/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-20	5/11/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-20	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-20	5/11/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-20	5/11/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-20	5/11/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-20	5/11/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-20	5/11/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-20	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-20	5/11/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-20	5/11/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-20	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-20	5/11/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-20	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-20	5/11/2018	3,4-Methylphenol	54	100	54	NA	ug/L
MKTF-20	8/31/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-20	8/31/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-20	8/31/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/31/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-20	8/31/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-20	8/31/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-20	8/31/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-20	8/31/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-20	8/31/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-20	8/31/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-20	8/31/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-20	8/31/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-20	8/31/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-20	8/31/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-20	8/31/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-20	8/31/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-20	8/31/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-20	8/31/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-20	8/31/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-20	8/31/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-20	8/31/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-20	8/31/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-20	8/31/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-20	8/31/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-20	8/31/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-20	8/31/2018	Naphthalene	16	10	5	30	ug/L
MKTF-20	8/31/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-20	8/31/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-20	8/31/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-20	8/31/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-20	8/31/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-20	8/31/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-20	8/31/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-20	8/31/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-20	8/31/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-20	8/31/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-20	8/31/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-20	8/31/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-20	8/31/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-20	8/31/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-20	8/31/2018	2,4-Dimethylphenol	35	10	5.9	354	ug/L
MKTF-20	8/31/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-20	8/31/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-20	8/31/2018	Phenol	ND	10	6	5761	ug/L
MKTF-20	8/31/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-20	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-20	8/31/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-20	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-20	8/31/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	8/31/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-20	8/31/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-20	8/31/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-20	8/31/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-20	8/31/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-20	8/31/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-20	8/31/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-20	8/31/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-20	8/31/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-20	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-20	8/31/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-20	8/31/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-20	8/31/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-20	8/31/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-20	8/31/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-20	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-20	8/31/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-20	8/31/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-20	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-20	8/31/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-20	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-20	8/31/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-20	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-20	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-20	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-20	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-20	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-20	11/29/2018	Benzoic Acid	23	20	6.3	75000	ug/L
MKTF-20	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-20	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-20	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-20	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-20	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-20	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-20	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-20	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-20	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-20	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-20	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-20	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-20	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-20	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-20	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-20	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-20	11/29/2018	1-Methylnaphthalene	11	10	7	11.38	ug/L
MKTF-20	11/29/2018	Naphthalene	**31**	10	5	30	ug/L
MKTF-20	11/29/2018	2-Methylnaphthalene	6.3	10	6.3	35.1	ug/L
MKTF-20	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-20	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-20	11/29/2018	2-Methylphenol	9.5	10	6.3	NA	ug/L
MKTF-20	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-20	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-20	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-20	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-20	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-20	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-20	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-20	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-20	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-20	11/29/2018	2,4-Dimethylphenol	240	10	5.9	354	ug/L
MKTF-20	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-20	11/29/2018	Phenol	28	10	6	5761	ug/L
MKTF-20	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-20	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-20	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-20	11/29/2018	Bis(2-ethylhexyl)phthalate	12	10	8.1	55.64	ug/L
MKTF-20	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-20	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-20	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-20	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-20	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-20	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-20	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-20	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-20	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-20	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-20	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-20	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-20	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-20	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-20	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-20	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-20	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-20	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-20	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-20	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-20	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-20	11/29/2018	3,4-Methylphenol	16	10	5.4	NA	ug/L
MKTF-20	2/20/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-20	2/20/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-20	2/20/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-20	2/20/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-20	2/20/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
MKTF-20	2/20/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-20	2/20/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-20	2/20/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-20	2/20/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-20	2/20/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-20	2/20/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-20	2/20/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-20	2/20/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-20	2/20/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-20	2/20/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
MKTF-20	2/20/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-20	2/20/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
MKTF-20	2/20/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-20	2/20/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-20	2/20/2019	3,4-Methylphenol	670	50	26.818372	NA	ug/L
MKTF-20	2/20/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-20	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-20	2/20/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-20	2/20/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-20	2/20/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
MKTF-20	2/20/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-20	2/20/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-20	2/20/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-20	2/20/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-20	2/20/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-20	2/20/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-20	2/20/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-20	2/20/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-20	2/20/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-20	2/20/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-20	2/20/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-20	2/20/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-20	2/20/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-20	2/20/2019	Benzoic Acid	44	100	31.557804	75000	ug/L
MKTF-20	2/20/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-20	2/20/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-20	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-20	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-20	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
MKTF-20	2/20/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-20	2/20/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-20	2/20/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-20	2/20/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-20	2/20/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-20	2/20/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-20	2/20/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-20	2/20/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-20	2/20/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-20	2/20/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-20	2/20/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-20	2/20/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-20	2/20/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-20	2/20/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-20	2/20/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-20	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-20	2/20/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-20	2/20/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
MKTF-20	2/20/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-20	2/20/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-20	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-20	2/20/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-20	2/20/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-20	2/20/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-20	2/20/2019	Phenol	ND	50	29.88676	5761	ug/L
MKTF-20	2/20/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-20	2/20/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-20	5/14/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-20	5/14/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-20	5/14/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-20	5/14/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-20	5/14/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-20	5/14/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-20	5/14/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-20	5/14/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-20	5/14/2019	2,4-Dimethylphenol	39	50	14.829964	354	ug/L
MKTF-20	5/14/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/14/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-20	5/14/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-20	5/14/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-20	5/14/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-20	5/14/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-20	5/14/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-20	5/14/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-20	5/14/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-20	5/14/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-20	5/14/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-20	5/14/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-20	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-20	5/14/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-20	5/14/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-20	5/14/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-20	5/14/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-20	5/14/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-20	5/14/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-20	5/14/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-20	5/14/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-20	5/14/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-20	5/14/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-20	5/14/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-20	5/14/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-20	5/14/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-20	5/14/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-20	5/14/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-20	5/14/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-20	5/14/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-20	5/14/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-20	5/14/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-20	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-20	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-20	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-20	5/14/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-20	5/14/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-20	5/14/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-20	5/14/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-20	5/14/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-20	5/14/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-20	5/14/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-20	5/14/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-20	5/14/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-20	5/14/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-20	5/14/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-20	5/14/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-20	5/14/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-20	5/14/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-20	5/14/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-20	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-20	5/14/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-20	5/14/2019	Naphthalene	**65**	50	20.61105	30	ug/L
MKTF-20	5/14/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-20	5/14/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-20	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-20	5/14/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-20	5/14/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-20	5/14/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-20	5/14/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-20	5/14/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-20	5/14/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-20	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-20	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-20	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-20	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-20	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-20	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-20	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-20	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-20	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-20	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-20	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-20	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-20	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-20	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-20	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-20	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-20	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-20	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-20	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-20	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-20	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-20	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-20	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-20	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-20	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-20	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-20	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-20	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-20	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-20	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-20	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-20	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-20	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-20	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-20	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-20	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-20	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-20	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-20	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-20	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-20	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-20	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-20	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-20	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-20	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-20	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-20	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-20	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-20	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-20	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-20	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-20	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-20	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-20	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-20	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-20	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-20	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-20	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-20	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-20	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-20	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-20	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-20	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-20	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-20	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-20	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-20	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-20	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-20	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-20	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-20	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-20	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-20	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-20	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-20	11/5/2019	1-Methylnaphthalene	8.6	5	5	11.38	ug/L
MKTF-20	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-20	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-20	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-20	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-20	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-20	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-20	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-20	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-20	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-20	11/5/2019	2-Methylnaphthalene	11	5	5	35.1	ug/L
MKTF-20	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-20	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-20	11/5/2019	3,4-Methylphenol	28	5	5	NA	ug/L
MKTF-20	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-20	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-20	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-20	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-20	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-20	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-20	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-20	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-20	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-20	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-20	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-20	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-20	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-20	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-20	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-20	11/5/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-20	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-20	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-20	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-20	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-20	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-20	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-20	11/5/2019	Fluorene	ND	5	5	288	ug/L
MKTF-20	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-20	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-20	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-20	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-20	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-20	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-20	11/5/2019	Naphthalene	**35**	5	5	30	ug/L
MKTF-20	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-20	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-20	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-20	11/5/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-20	11/5/2019	Phenol	30	5	5	5761	ug/L
MKTF-20	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-20	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-21	4/11/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-21	4/11/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-21	4/11/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-21	4/11/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-21	4/11/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-21	4/11/2014	Aniline	ND	12	3	13	ug/L
MKTF-21	4/11/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-21	4/11/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-21	4/11/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-21	4/11/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-21	4/11/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-21	4/11/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-21	4/11/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-21	4/11/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-21	4/11/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-21	4/11/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-21	4/11/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-21	4/11/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-21	4/11/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-21	4/11/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-21	4/11/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	4/11/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-21	4/11/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-21	4/11/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-21	4/11/2014	1-Methylnaphthalene	**69**	12	4.5	11.38	ug/L
MKTF-21	4/11/2014	Naphthalene	**270**	20	4.6	30	ug/L
MKTF-21	4/11/2014	2-Methylnaphthalene	**110**	12	3.3	35.1	ug/L
MKTF-21	4/11/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-21	4/11/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-21	4/11/2014	2-Methylphenol	140	25	3.4	NA	ug/L
MKTF-21	4/11/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-21	4/11/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-21	4/11/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-21	4/11/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-21	4/11/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-21	4/11/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L
MKTF-21	4/11/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-21	4/11/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-21	4/11/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-21	4/11/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-21	4/11/2014	2,4-Dimethylphenol	100	12	3.9	354	ug/L
MKTF-21	4/11/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-21	4/11/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-21	4/11/2014	Phenol	13	12	2	5761	ug/L
MKTF-21	4/11/2014	Pyridine	ND	12	2	20	ug/L
MKTF-21	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-21	4/11/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-21	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-21	4/11/2014	Di-n-octylphthalate	ND	12	3.4	200	ug/L
MKTF-21	4/11/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-21	4/11/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-21	4/11/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-21	4/11/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-21	4/11/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-21	4/11/2014	Pyrene	ND	12	5	117	ug/L
MKTF-21	4/11/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-21	4/11/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-21	4/11/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-21	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-21	4/11/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-21	4/11/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-21	4/11/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-21	4/11/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-21	4/11/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-21	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-21	4/11/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-21	4/11/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-21	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-21	4/11/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-21	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-21	4/11/2014	3,4-Methylphenol	100	12	2.3	NA	ug/L
MKTF-21	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-21	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-21	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-21	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-21	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-21	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-21	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-21	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-21	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-21	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-21	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-21	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-21	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-21	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-21	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-21	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-21	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-21	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-21	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-21	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-21	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-21	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-21	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-21	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-21	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-21	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-21	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-21	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-21	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-21	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-21	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-21	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-21	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-21	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-21	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-21	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-21	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-21	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-21	3/16/2015	Phenol	38	10	1.1	5761	ug/L
MKTF-21	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-21	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-21	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-21	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-21	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-21	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-21	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-21	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-21	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-21	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-21	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-21	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-21	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-21	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-21	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-21	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-21	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-21	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-21	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-21	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-21	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-21	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-21	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-21	3/16/2015	3,4-Methylphenol	69	10	1.5	NA	ug/L
MKTF-21	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-21	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-21	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-21	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-21	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-21	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-21	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-21	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-21	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-21	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-21	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-21	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-21	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-21	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-21	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-21	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-21	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-21	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-21	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-21	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-21	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-21	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-21	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-21	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-21	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-21	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-21	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-21	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-21	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-21	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-21	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-21	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-21	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-21	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-21	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-21	6/10/2015	2,4-Dimethylphenol	11	10	1.9	354	ug/L
MKTF-21	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-21	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-21	6/10/2015	Phenol	35	10	1.1	5761	ug/L
MKTF-21	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-21	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-21	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-21	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-21	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-21	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-21	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-21	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-21	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-21	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-21	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-21	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-21	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-21	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-21	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-21	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-21	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-21	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-21	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-21	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-21	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-21	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-21	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-21	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-21	6/10/2015	3,4-Methylphenol	110	10	1.5	NA	ug/L
MKTF-21	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-21	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-21	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-21	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-21	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-21	3/1/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-21	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-21	3/1/2016	Benzoic Acid	36	20	9.8	75000	ug/L
MKTF-21	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-21	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-21	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-21	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-21	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-21	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-21	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-21	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-21	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-21	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-21	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-21	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-21	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-21	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-21	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-21	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-21	3/1/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-21	3/1/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-21	3/1/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-21	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-21	3/1/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-21	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-21	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-21	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-21	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-21	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-21	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-21	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-21	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-21	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-21	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-21	3/1/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-21	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-21	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-21	3/1/2016	Phenol	37	10	5.1	5761	ug/L
MKTF-21	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-21	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-21	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-21	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-21	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-21	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-21	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-21	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-21	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-21	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-21	3/1/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-21	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-21	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-21	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-21	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-21	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-21	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-21	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-21	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-21	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-21	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-21	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-21	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-21	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-21	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-21	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-21	3/1/2016	3,4-Methylphenol	120	10	7.1	NA	ug/L
MKTF-21	9/12/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-21	9/12/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-21	9/12/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-21	9/12/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-21	9/12/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-21	9/12/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-21	9/12/2016	Benzoic Acid	63	200	26	75000	ug/L
MKTF-21	9/12/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-21	9/12/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-21	9/12/2016	Isophorone	ND	100	26	781	ug/L
MKTF-21	9/12/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-21	9/12/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-21	9/12/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-21	9/12/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-21	9/12/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-21	9/12/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-21	9/12/2016	Fluorene	ND	100	27	288	ug/L
MKTF-21	9/12/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-21	9/12/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-21	9/12/2016	Pentachlorophenol	**24**	200	23	1	ug/L
MKTF-21	9/12/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-21	9/12/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-21	9/12/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-21	9/12/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-21	9/12/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-21	9/12/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-21	9/12/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-21	9/12/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-21	9/12/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-21	9/12/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-21	9/12/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-21	9/12/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-21	9/12/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-21	9/12/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-21	9/12/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-21	9/12/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-21	9/12/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-21	9/12/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-21	9/12/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-21	9/12/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-21	9/12/2016	Phenol	80	100	20	5761	ug/L
MKTF-21	9/12/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-21	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-21	9/12/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-21	9/12/2016	Bis(2-ethylhexyl)phthalate	**56**	100	26	55.64	ug/L
MKTF-21	9/12/2016	Di-n-octylphthalate	35	100	20	200	ug/L
MKTF-21	9/12/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-21	9/12/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-21	9/12/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-21	9/12/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-21	9/12/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-21	9/12/2016	Pyrene	ND	100	31	117	ug/L
MKTF-21	9/12/2016	Dimethylphthalate	29	100	24	612	ug/L
MKTF-21	9/12/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-21	9/12/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-21	9/12/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-21	9/12/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-21	9/12/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-21	9/12/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-21	9/12/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-21	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-21	9/12/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-21	9/12/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-21	9/12/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-21	9/12/2016	3,4-Methylphenol	420	100	23	NA	ug/L
MKTF-21	11/3/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-21	11/3/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-21	11/3/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-21	11/3/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-21	11/3/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-21	11/3/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-21	11/3/2016	Benzoic Acid	110	200	26	75000	ug/L
MKTF-21	11/3/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-21	11/3/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-21	11/3/2016	Isophorone	ND	100	26	781	ug/L
MKTF-21	11/3/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-21	11/3/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-21	11/3/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-21	11/3/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-21	11/3/2016	Butylbenzylphthalate	**27**	100	25	16	ug/L
MKTF-21	11/3/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-21	11/3/2016	Fluorene	ND	100	27	288	ug/L
MKTF-21	11/3/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-21	11/3/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-21	11/3/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-21	11/3/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-21	11/3/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-21	11/3/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-21	11/3/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-21	11/3/2016	Naphthalene	**49**	100	26	30	ug/L
MKTF-21	11/3/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-21	11/3/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-21	11/3/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-21	11/3/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-21	11/3/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-21	11/3/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-21	11/3/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-21	11/3/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-21	11/3/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-21	11/3/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-21	11/3/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-21	11/3/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-21	11/3/2016	2,4-Dimethylphenol	30	100	30	354	ug/L
MKTF-21	11/3/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-21	11/3/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-21	11/3/2016	Phenol	30	100	20	5761	ug/L
MKTF-21	11/3/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-21	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-21	11/3/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-21	11/3/2016	Bis(2-ethylhexyl)phthalate	**64**	100	26	55.64	ug/L
MKTF-21	11/3/2016	Di-n-octylphthalate	81	100	20	200	ug/L
MKTF-21	11/3/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-21	11/3/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-21	11/3/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-21	11/3/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-21	11/3/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-21	11/3/2016	Pyrene	ND	100	31	117	ug/L
MKTF-21	11/3/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-21	11/3/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-21	11/3/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-21	11/3/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-21	11/3/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-21	11/3/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-21	11/3/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-21	11/3/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-21	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-21	11/3/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-21	11/3/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-21	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-21	11/3/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-21	11/3/2016	3,4-Methylphenol	30	100	23	NA	ug/L
MKTF-21	3/14/2017	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-21	3/14/2017	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-21	3/14/2017	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-21	3/14/2017	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Aniline	*ND*	*50*	12	13	ug/L
MKTF-21	3/14/2017	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-21	3/14/2017	Benzoic Acid	33	100	13	75000	ug/L
MKTF-21	3/14/2017	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-21	3/14/2017	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-21	3/14/2017	Isophorone	ND	50	13	781	ug/L
MKTF-21	3/14/2017	Acenaphthene	ND	50	13	535	ug/L
MKTF-21	3/14/2017	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-21	3/14/2017	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-21	3/14/2017	Phenanthrene	ND	50	13	170	ug/L
MKTF-21	3/14/2017	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-21	3/14/2017	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-21	3/14/2017	Fluorene	ND	50	14	288	ug/L
MKTF-21	3/14/2017	Carbazole	ND	50	11	NA	ug/L
MKTF-21	3/14/2017	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-21	3/14/2017	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-21	3/14/2017	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-21	3/14/2017	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-21	3/14/2017	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-21	3/14/2017	Naphthalene	*20*	*50*	13	30	ug/L
MKTF-21	3/14/2017	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-21	3/14/2017	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-21	3/14/2017	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-21	3/14/2017	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-21	3/14/2017	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-21	3/14/2017	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-21	3/14/2017	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-21	3/14/2017	3-Nitroaniline	ND	50	15	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-21	3/14/2017	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-21	3/14/2017	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-21	3/14/2017	2,4-Dimethylphenol	21	50	15	354	ug/L
MKTF-21	3/14/2017	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-21	3/14/2017	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-21	3/14/2017	Phenol	36	50	9.9	5761	ug/L
MKTF-21	3/14/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-21	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-21	3/14/2017	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-21	3/14/2017	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-21	3/14/2017	Di-n-octylphthalate	17	50	9.9	200	ug/L
MKTF-21	3/14/2017	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-21	3/14/2017	Anthracene	ND	50	12	1721	ug/L
MKTF-21	3/14/2017	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-21	3/14/2017	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-21	3/14/2017	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-21	3/14/2017	Pyrene	ND	50	15	117	ug/L
MKTF-21	3/14/2017	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-21	3/14/2017	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-21	3/14/2017	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-21	3/14/2017	Fluoranthene	ND	50	13	802	ug/L
MKTF-21	3/14/2017	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-21	3/14/2017	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-21	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-21	3/14/2017	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-21	3/14/2017	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-21	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-21	3/14/2017	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-21	3/14/2017	3,4-Methylphenol	30	50	11	NA	ug/L
MKTF-21	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-21	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-21	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-21	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	6/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-21	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-21	6/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-21	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-21	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-21	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-21	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-21	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-21	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-21	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-21	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-21	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-21	6/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-21	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-21	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-21	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-21	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-21	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-21	6/21/2017	1-Methylnaphthalene	8	10	3.3	11.38	ug/L
MKTF-21	6/21/2017	Naphthalene	28	10	2.9	30	ug/L
MKTF-21	6/21/2017	2-Methylnaphthalene	4.9	10	3.3	35.1	ug/L
MKTF-21	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-21	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-21	6/21/2017	2-Methylphenol	21	10	3.3	NA	ug/L
MKTF-21	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-21	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-21	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-21	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-21	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-21	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-21	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-21	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-21	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-21	6/21/2017	2,4-Dimethylphenol	38	10	2.8	354	ug/L
MKTF-21	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-21	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-21	6/21/2017	Phenol	60	10	3.1	5761	ug/L
MKTF-21	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-21	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-21	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-21	6/21/2017	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
MKTF-21	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-21	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-21	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-21	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-21	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-21	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-21	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-21	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-21	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-21	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-21	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-21	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-21	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-21	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-21	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-21	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-21	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-21	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-21	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-21	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-21	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-21	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-21	6/21/2017	3,4-Methylphenol	150	10	3.2	NA	ug/L
MKTF-21	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-21	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-21	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-21	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-21	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-21	9/26/2017	Benzoic Acid	12	20	3.9	75000	ug/L
MKTF-21	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-21	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-21	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-21	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-21	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-21	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-21	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-21	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-21	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-21	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-21	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-21	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-21	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-21	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-21	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-21	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-21	9/26/2017	1-Methylnaphthalene	7.1	10	3.3	11.38	ug/L
MKTF-21	9/26/2017	Naphthalene	17	10	2.9	30	ug/L
MKTF-21	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-21	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-21	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-21	9/26/2017	2-Methylphenol	9.3	10	3.3	NA	ug/L
MKTF-21	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-21	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-21	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-21	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-21	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-21	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-21	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-21	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-21	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-21	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-21	9/26/2017	2,4-Dimethylphenol	15	10	2.8	354	ug/L
MKTF-21	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-21	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-21	9/26/2017	Phenol	31	10	3.1	5761	ug/L
MKTF-21	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-21	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-21	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-21	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-21	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-21	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-21	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-21	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-21	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-21	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-21	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-21	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-21	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-21	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-21	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-21	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-21	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-21	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-21	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-21	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-21	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-21	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-21	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-21	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-21	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-21	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-21	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-21	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-21	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-21	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-21	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-21	11/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-21	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-21	11/28/2017	Benzoic Acid	70	200	39	75000	ug/L
MKTF-21	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-21	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-21	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-21	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-21	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-21	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-21	11/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-21	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-21	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-21	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-21	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-21	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-21	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-21	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-21	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-21	11/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-21	11/28/2017	Naphthalene	**47**	100	29	30	ug/L
MKTF-21	11/28/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
MKTF-21	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-21	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-21	11/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-21	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-21	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-21	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-21	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-21	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-21	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-21	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-21	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-21	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-21	11/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-21	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-21	11/28/2017	Phenol	120	100	31	5761	ug/L
MKTF-21	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-21	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-21	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-21	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-21	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-21	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-21	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-21	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-21	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-21	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-21	11/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-21	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-21	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-21	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-21	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-21	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-21	11/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-21	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-21	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-21	11/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-21	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-21	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-21	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-21	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-21	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-21	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-21	11/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-21	2/15/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-21	2/15/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-21	2/15/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-21	2/15/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-21	2/15/2018	Aniline	*ND*	*50*	15	13	ug/L
MKTF-21	2/15/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-21	2/15/2018	Benzoic Acid	48	100	20	75000	ug/L
MKTF-21	2/15/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-21	2/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-21	2/15/2018	Isophorone	ND	50	22	781	ug/L
MKTF-21	2/15/2018	Acenaphthene	ND	50	18	535	ug/L
MKTF-21	2/15/2018	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-21	2/15/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-21	2/15/2018	Phenanthrene	ND	50	22	170	ug/L
MKTF-21	2/15/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-21	2/15/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-21	2/15/2018	Fluorene	ND	50	20	288	ug/L
MKTF-21	2/15/2018	Carbazole	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-21	2/15/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-21	2/15/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-21	2/15/2018	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-21	2/15/2018	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-21	2/15/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-21	2/15/2018	Naphthalene	**40**	50	14	30	ug/L
MKTF-21	2/15/2018	2-Methylnaphthalene	*26*	*50*	16	35.1	ug/L
MKTF-21	2/15/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-21	2/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-21	2/15/2018	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-21	2/15/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-21	2/15/2018	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-21	2/15/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-21	2/15/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-21	2/15/2018	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-21	2/15/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-21	2/15/2018	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-21	2/15/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-21	2/15/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-21	2/15/2018	2,4-Dimethylphenol	17	50	14	354	ug/L
MKTF-21	2/15/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-21	2/15/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-21	2/15/2018	Phenol	35	50	16	5761	ug/L
MKTF-21	2/15/2018	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-21	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-21	2/15/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-21	2/15/2018	Bis(2-ethylhexyl)phthalate	**110**	50	24	55.64	ug/L
MKTF-21	2/15/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-21	2/15/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-21	2/15/2018	Anthracene	ND	50	18	1721	ug/L
MKTF-21	2/15/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-21	2/15/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-21	2/15/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-21	2/15/2018	Pyrene	ND	50	22	117	ug/L
MKTF-21	2/15/2018	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-21	2/15/2018	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-21	2/15/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-21	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-21	2/15/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-21	2/15/2018	Fluoranthene	ND	50	21	802	ug/L
MKTF-21	2/15/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-21	2/15/2018	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-21	2/15/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-21	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-21	2/15/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-21	2/15/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-21	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-21	2/15/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-21	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-21	2/15/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-21	5/11/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-21	5/11/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-21	5/11/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-21	5/11/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-21	5/11/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-21	5/11/2018	Benzoic Acid	160	200	63	75000	ug/L
MKTF-21	5/11/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-21	5/11/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/11/2018	Isophorone	ND	100	62	781	ug/L
MKTF-21	5/11/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-21	5/11/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-21	5/11/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-21	5/11/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-21	5/11/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-21	5/11/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-21	5/11/2018	Fluorene	ND	100	63	288	ug/L
MKTF-21	5/11/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-21	5/11/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-21	5/11/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-21	5/11/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-21	5/11/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-21	5/11/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-21	5/11/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-21	5/11/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-21	5/11/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-21	5/11/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-21	5/11/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-21	5/11/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-21	5/11/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-21	5/11/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-21	5/11/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-21	5/11/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-21	5/11/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-21	5/11/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-21	5/11/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-21	5/11/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-21	5/11/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-21	5/11/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-21	5/11/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-21	5/11/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-21	5/11/2018	Phenol	ND	100	60	5761	ug/L
MKTF-21	5/11/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-21	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-21	5/11/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-21	5/11/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-21	5/11/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-21	5/11/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-21	5/11/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-21	5/11/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-21	5/11/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-21	5/11/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-21	5/11/2018	Pyrene	ND	100	65	117	ug/L
MKTF-21	5/11/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-21	5/11/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-21	5/11/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-21	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-21	5/11/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-21	5/11/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-21	5/11/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-21	5/11/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-21	5/11/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-21	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-21	5/11/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-21	5/11/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-21	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-21	5/11/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-21	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-21	5/11/2018	3,4-Methylphenol	71	100	54	NA	ug/L
MKTF-21	8/31/2018	Benzo(a)pyrene	*ND*	*20*	12	0.2	ug/L
MKTF-21	8/31/2018	2,4-Dinitrophenol	*ND*	*40*	7.4	38.7	ug/L
MKTF-21	8/31/2018	Dibenzo(a,h)anthracene	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Benzo(a)anthracene	*ND*	*20*	11	0.12	ug/L
MKTF-21	8/31/2018	4-Chloro-3-Methylphenol	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Aniline	*ND*	*20*	12	13	ug/L
MKTF-21	8/31/2018	N-Nitrosodimethylamine	*ND*	*20*	14	0.0049	ug/L
MKTF-21	8/31/2018	Benzoic Acid	13	40	13	75000	ug/L
MKTF-21	8/31/2018	Hexachloroethane	*ND*	*20*	12	3.28	ug/L
MKTF-21	8/31/2018	Hexachlorocyclopentadiene	*ND*	*20*	7.9	0.41	ug/L
MKTF-21	8/31/2018	Isophorone	ND	20	12	781	ug/L
MKTF-21	8/31/2018	Acenaphthene	ND	20	12	535	ug/L
MKTF-21	8/31/2018	Diethylphthalate	ND	20	13	14801	ug/L
MKTF-21	8/31/2018	Di-n-butylphthalate	ND	20	14	885	ug/L
MKTF-21	8/31/2018	Phenanthrene	ND	20	12	170	ug/L
MKTF-21	8/31/2018	Butylbenzylphthalate	*ND*	*20*	13	16	ug/L
MKTF-21	8/31/2018	N-Nitrosodiphenylamine	ND	20	13	122	ug/L
MKTF-21	8/31/2018	Fluorene	ND	20	13	288	ug/L
MKTF-21	8/31/2018	Carbazole	ND	20	13	NA	ug/L
MKTF-21	8/31/2018	Hexachlorobutadiene	*ND*	*20*	13	0.14	ug/L
MKTF-21	8/31/2018	Pentachlorophenol	*ND*	*40*	11	1	ug/L
MKTF-21	8/31/2018	2,4,6-Trichlorophenol	ND	20	13	11.9*	ug/L
MKTF-21	8/31/2018	2-Nitroaniline	ND	20	12	190	ug/L
MKTF-21	8/31/2018	2-Nitrophenol	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	1-Methylnaphthalene	*ND*	*20*	14	11.38	ug/L
MKTF-21	8/31/2018	Naphthalene	ND	20	10	30	ug/L
MKTF-21	8/31/2018	2-Methylnaphthalene	ND	20	13	35.1	ug/L
MKTF-21	8/31/2018	2-Chloronaphthalene	ND	20	12	733	ug/L
MKTF-21	8/31/2018	3,3-Dichlorobenzidine	*ND*	*20*	14	1.25	ug/L
MKTF-21	8/31/2018	2-Methylphenol	ND	20	13	NA	ug/L
MKTF-21	8/31/2018	1,2-Dichlorobenzene	ND	20	12	600	ug/L
MKTF-21	8/31/2018	2-Chlorophenol	ND	20	12	91	ug/L
MKTF-21	8/31/2018	2,4,5-Trichlorophenol	ND	20	12	1166	ug/L
MKTF-21	8/31/2018	Nitrobenzene	*ND*	*20*	12	1.4	ug/L
MKTF-21	8/31/2018	3-Nitroaniline	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	4-Nitroaniline	*ND*	*20*	12	3.8	ug/L
MKTF-21	8/31/2018	4-Nitrophenol	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Benzyl Alcohol	ND	20	13	2000	ug/L
MKTF-21	8/31/2018	4-Bromophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Azobenzene	*ND*	*20*	13	0.12	ug/L
MKTF-21	8/31/2018	2,4-Dimethylphenol	ND	20	12	354	ug/L
MKTF-21	8/31/2018	1,4-Dichlorobenzene	ND	20	12	75	ug/L
MKTF-21	8/31/2018	4-Chloroaniline	*ND*	*20*	12	0.37	ug/L
MKTF-21	8/31/2018	Phenol	ND	20	12	5761	ug/L
MKTF-21	8/31/2018	Pyridine	ND	20	11	20	ug/L
MKTF-21	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*20*	13	0.137	ug/L
MKTF-21	8/31/2018	Bis(2-chloroethoxy)methane	ND	20	12	59	ug/L
MKTF-21	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	20	16	55.64	ug/L
MKTF-21	8/31/2018	Di-n-octylphthalate	ND	20	13	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/31/2018	Hexachlorobenzene	*ND*	*20*	12	0.0976	ug/L
MKTF-21	8/31/2018	Anthracene	ND	20	11	1721	ug/L
MKTF-21	8/31/2018	1,2,4-Trichlorobenzene	ND	20	13	70	ug/L
MKTF-21	8/31/2018	2,4-Dichlorophenol	ND	40	12	45.3	ug/L
MKTF-21	8/31/2018	2,4-Dinitrotoluene	ND	20	12	45.3	ug/L
MKTF-21	8/31/2018	Pyrene	ND	20	13	117	ug/L
MKTF-21	8/31/2018	Dimethylphthalate	ND	20	12	612	ug/L
MKTF-21	8/31/2018	Dibenzofuran	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Benzo(g,h,i)perylene	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*20*	14	0.343	ug/L
MKTF-21	8/31/2018	Benzo(b)fluoranthene	*ND*	*20*	14	0.34	ug/L
MKTF-21	8/31/2018	Fluoranthene	ND	20	12	802	ug/L
MKTF-21	8/31/2018	Benzo(k)fluoranthene	*ND*	*20*	13	3.43	ug/L
MKTF-21	8/31/2018	Acenaphthylene	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	Chrysene	ND	20	14	34.3	ug/L
MKTF-21	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*40*	11	1.52	ug/L
MKTF-21	8/31/2018	1,3-Dichlorobenzene	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	2,6-Dinitrotoluene	*ND*	*20*	12	0.485	ug/L
MKTF-21	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*20*	12	0.011	ug/L
MKTF-21	8/31/2018	4-Chlorophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*20*	9.8	9.81	ug/L
MKTF-21	8/31/2018	3,4-Methylphenol	16	20	11	NA	ug/L
MKTF-21	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-21	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-21	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-21	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-21	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-21	11/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-21	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-21	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-21	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-21	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-21	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-21	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-21	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-21	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-21	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-21	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-21	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-21	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-21	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-21	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-21	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-21	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-21	11/29/2018	1-Methylnaphthalene	**12**	10	7	11.38	ug/L
MKTF-21	11/29/2018	Naphthalene	7.7	10	5	30	ug/L
MKTF-21	11/29/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-21	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-21	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-21	11/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-21	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-21	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-21	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-21	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-21	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-21	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-21	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-21	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-21	11/29/2018	2,4-Dimethylphenol	27	10	5.9	354	ug/L
MKTF-21	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-21	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-21	11/29/2018	Phenol	210	100	60	5761	ug/L
MKTF-21	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-21	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-21	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-21	11/29/2018	Bis(2-ethylhexyl)phthalate	47	10	8.1	55.64	ug/L
MKTF-21	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-21	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-21	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-21	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-21	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-21	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-21	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-21	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-21	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-21	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-21	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-21	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-21	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-21	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-21	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-21	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-21	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-21	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-21	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-21	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-21	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-21	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-21	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-21	2/20/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-21	2/20/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-21	2/20/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-21	2/20/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-21	2/20/2019	1-Methylnaphthalene	**79**	50	34.99561	11.38	ug/L
MKTF-21	2/20/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-21	2/20/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-21	2/20/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-21	2/20/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-21	2/20/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-21	2/20/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-21	2/20/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-21	2/20/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-21	2/20/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-21	2/20/2019	2-Methylnaphthalene	**69**	50	31.661952	35.1	ug/L
MKTF-21	2/20/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-21	2/20/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-21	2/20/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-21	2/20/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
MKTF-21	2/20/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-21	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-21	2/20/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-21	2/20/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-21	2/20/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
MKTF-21	2/20/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-21	2/20/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-21	2/20/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-21	2/20/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-21	2/20/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-21	2/20/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-21	2/20/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-21	2/20/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-21	2/20/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-21	2/20/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-21	2/20/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-21	2/20/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-21	2/20/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-21	2/20/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
MKTF-21	2/20/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-21	2/20/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-21	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-21	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-21	2/20/2019	Bis(2-ethylhexyl)phthalate	43	50	40.28171	55.64	ug/L
MKTF-21	2/20/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-21	2/20/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-21	2/20/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-21	2/20/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-21	2/20/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-21	2/20/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-21	2/20/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-21	2/20/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-21	2/20/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-21	2/20/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-21	2/20/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-21	2/20/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-21	2/20/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-21	2/20/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-21	2/20/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-21	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-21	2/20/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-21	2/20/2019	Naphthalene	**160**	50	25.207014	30	ug/L
MKTF-21	2/20/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-21	2/20/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-21	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-21	2/20/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-21	2/20/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-21	2/20/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-21	2/20/2019	Phenol	ND	50	29.88676	5761	ug/L
MKTF-21	2/20/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-21	2/20/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-21	5/14/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-21	5/14/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-21	5/14/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-21	5/14/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-21	5/14/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-21	5/14/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-21	5/14/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-21	5/14/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-21	5/14/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-21	5/14/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-21	5/14/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-21	5/14/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-21	5/14/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-21	5/14/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-21	5/14/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-21	5/14/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-21	5/14/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-21	5/14/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-21	5/14/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-21	5/14/2019	3,4-Methylphenol	410	50	17.922265	NA	ug/L
MKTF-21	5/14/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-21	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-21	5/14/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-21	5/14/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-21	5/14/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-21	5/14/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-21	5/14/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-21	5/14/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-21	5/14/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-21	5/14/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-21	5/14/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-21	5/14/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-21	5/14/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-21	5/14/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-21	5/14/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-21	5/14/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-21	5/14/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-21	5/14/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-21	5/14/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-21	5/14/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-21	5/14/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-21	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-21	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-21	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-21	5/14/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-21	5/14/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-21	5/14/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-21	5/14/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-21	5/14/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-21	5/14/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-21	5/14/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-21	5/14/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-21	5/14/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-21	5/14/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-21	5/14/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-21	5/14/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-21	5/14/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-21	5/14/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-21	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-21	5/14/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-21	5/14/2019	Naphthalene	*22*	*50*	20.61105	30	ug/L
MKTF-21	5/14/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-21	5/14/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-21	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-21	5/14/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-21	5/14/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-21	5/14/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-21	5/14/2019	Phenol	42	50	40.182932	5761	ug/L
MKTF-21	5/14/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-21	5/14/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-21	8/22/2019	1,2,4-Trichlorobenzene	ND	10.75269	4.348888	70	ug/L
MKTF-21	8/22/2019	1,2-Dichlorobenzene	ND	10.75269	5.133799	600	ug/L
MKTF-21	8/22/2019	1,3-Dichlorobenzene	ND	10.75269	5.661694	NA	ug/L
MKTF-21	8/22/2019	1,4-Dichlorobenzene	ND	10.75269	4.756164	75	ug/L
MKTF-21	8/22/2019	1-Methylnaphthalene	9.3	10.75269	3.300082	11.38	ug/L
MKTF-21	8/22/2019	2,4,5-Trichlorophenol	ND	10.75269	3.191012	1166	ug/L
MKTF-21	8/22/2019	2,4,6-Trichlorophenol	ND	10.75269	2.509388	11.9*	ug/L
MKTF-21	8/22/2019	2,4-Dichlorophenol	ND	21.50538	3.140652	45.3	ug/L
MKTF-21	8/22/2019	2,4-Dimethylphenol	ND	10.75269	3.18924	354	ug/L
MKTF-21	8/22/2019	2,4-Dinitrophenol	ND	21.50538	2.787585	38.7	ug/L
MKTF-21	8/22/2019	2,4-Dinitrotoluene	ND	10.75269	4.131468	45.3	ug/L
MKTF-21	8/22/2019	2,6-Dinitrotoluene	*ND*	*10.75269*	2.611704	0.485	ug/L
MKTF-21	8/22/2019	2-Chloronaphthalene	ND	10.75269	3.301202	733	ug/L
MKTF-21	8/22/2019	2-Chlorophenol	ND	10.75269	2.888105	91	ug/L
MKTF-21	8/22/2019	2-Methylnaphthalene	6.4	10.75269	3.246089	35.1	ug/L
MKTF-21	8/22/2019	2-Methylphenol	ND	10.75269	3.07359	NA	ug/L
MKTF-21	8/22/2019	2-Nitroaniline	ND	10.75269	3.412583	190	ug/L
MKTF-21	8/22/2019	2-Nitrophenol	ND	10.75269	3.195678	NA	ug/L
MKTF-21	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10.75269*	2.991829	1.25	ug/L
MKTF-21	8/22/2019	3,4-Methylphenol	ND	10.75269	3.854251	NA	ug/L
MKTF-21	8/22/2019	3-Nitroaniline	ND	10.75269	3.487948	NA	ug/L
MKTF-21	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*21.50538*	3.111044	1.52	ug/L
MKTF-21	8/22/2019	4-Bromophenyl-phenylether	ND	10.75269	3.222788	NA	ug/L
MKTF-21	8/22/2019	4-Chloro-3-Methylphenol	ND	10.75269	3.664924	NA	ug/L
MKTF-21	8/22/2019	4-Chloroaniline	*ND*	*10.75269*	2.426454	0.37	ug/L
MKTF-21	8/22/2019	4-Chlorophenyl-phenylether	ND	10.75269	2.622425	NA	ug/L
MKTF-21	8/22/2019	4-Nitroaniline	*ND*	*10.75269*	2.89495	3.8	ug/L
MKTF-21	8/22/2019	4-Nitrophenol	ND	10.75269	8.141577	NA	ug/L
MKTF-21	8/22/2019	Acenaphthene	ND	10.75269	3.178377	535	ug/L
MKTF-21	8/22/2019	Acenaphthylene	ND	10.75269	2.575813	NA	ug/L
MKTF-21	8/22/2019	Aniline	ND	10.75269	3.848942	13	ug/L
MKTF-21	8/22/2019	Anthracene	ND	10.75269	2.857175	1721	ug/L
MKTF-21	8/22/2019	Azobenzene	*ND*	*10.75269*	3.49959	0.12	ug/L
MKTF-21	8/22/2019	Benzo(a)anthracene	*ND*	*10.75269*	3.872885	0.12	ug/L
MKTF-21	8/22/2019	Benzo(a)pyrene	*ND*	*10.75269*	3.815341	0.2	ug/L
MKTF-21	8/22/2019	Benzo(b)fluoranthene	*ND*	*10.75269*	3.621641	0.34	ug/L
MKTF-21	8/22/2019	Benzo(g,h,i)perylene	ND	10.75269	2.402401	NA	ug/L
MKTF-21	8/22/2019	Benzo(k)fluoranthene	*ND*	*10.75269*	3.100539	3.43	ug/L
MKTF-21	8/22/2019	Benzoic Acid	38	21.50538	11.530455	75000	ug/L
MKTF-21	8/22/2019	Benzyl Alcohol	ND	10.75269	2.538001	2000	ug/L
MKTF-21	8/22/2019	Bis(2-chloroethoxy)methane	ND	10.75269	2.799886	59	ug/L
MKTF-21	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10.75269*	3.476862	0.137	ug/L
MKTF-21	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10.75269*	4.148752	9.81	ug/L
MKTF-21	8/22/2019	Bis(2-ethylhexyl)phthalate	5.4	10.75269	4.625944	55.64	ug/L
MKTF-21	8/22/2019	Butylbenzylphthalate	ND	10.75269	3.578868	16	ug/L
MKTF-21	8/22/2019	Carbazole	ND	10.75269	3.108072	NA	ug/L
MKTF-21	8/22/2019	Chrysene	ND	10.75269	2.996369	34.3	ug/L
MKTF-21	8/22/2019	Dibenzo(a,h)anthracene	ND	10.75269	3.182651	NA	ug/L
MKTF-21	8/22/2019	Dibenzofuran	ND	10.75269	3.425688	NA	ug/L
MKTF-21	8/22/2019	Diethylphthalate	ND	10.75269	3.088696	14801	ug/L
MKTF-21	8/22/2019	Dimethylphthalate	ND	10.75269	3.481738	612	ug/L
MKTF-21	8/22/2019	Di-n-butylphthalate	ND	10.75269	2.910685	885	ug/L
MKTF-21	8/22/2019	Di-n-octylphthalate	ND	10.75269	3.781039	200	ug/L
MKTF-21	8/22/2019	Fluoranthene	ND	10.75269	2.593779	802	ug/L
MKTF-21	8/22/2019	Fluorene	ND	10.75269	3.105901	288	ug/L
MKTF-21	8/22/2019	Hexachlorobenzene	*ND*	*10.75269*	3.31501	0.0976	ug/L
MKTF-21	8/22/2019	Hexachlorobutadiene	*ND*	*10.75269*	5.088457	0.14	ug/L
MKTF-21	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10.75269*	3.847501	0.41	ug/L
MKTF-21	8/22/2019	Hexachloroethane	*ND*	*10.75269*	5.148163	3.28	ug/L
MKTF-21	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10.75269*	2.908144	0.343	ug/L
MKTF-21	8/22/2019	Isophorone	ND	10.75269	3.275306	781	ug/L
MKTF-21	8/22/2019	Naphthalene	**37**	10.75269	4.432484	30	ug/L
MKTF-21	8/22/2019	Nitrobenzene	*ND*	*10.75269*	2.999307	1.4	ug/L
MKTF-21	8/22/2019	N-Nitrosodimethylamine	*ND*	*10.75269*	5.42317	0.0049	ug/L
MKTF-21	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10.75269*	6.981132	0.011	ug/L
MKTF-21	8/22/2019	N-Nitrosodiphenylamine	ND	10.75269	2.559549	122	ug/L
MKTF-21	8/22/2019	Pentachlorophenol	*ND*	*21.50538*	2.952125	1	ug/L
MKTF-21	8/22/2019	Phenanthrene	ND	10.75269	2.986153	170	ug/L
MKTF-21	8/22/2019	Phenol	69	10.75269	8.641491	5761	ug/L
MKTF-21	8/22/2019	Pyrene	ND	10.75269	2.692043	117	ug/L
MKTF-21	8/22/2019	Pyridine	ND	10.75269	10.325953	20	ug/L
MKTF-21	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-21	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-21	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-21	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-21	11/5/2019	1-Methylnaphthalene	**49**	5	5	11.38	ug/L
MKTF-21	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-21	11/5/2019	2,4,6-Trichlorophenol	19	5	5	11.9*	ug/L
MKTF-21	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-21	11/5/2019	2,4-Dimethylphenol	260	5	5	354	ug/L
MKTF-21	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-21	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-21	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-21	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-21	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-21	11/5/2019	2-Methylnaphthalene	**57**	5	5	35.1	ug/L
MKTF-21	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-21	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-21	11/5/2019	3,4-Methylphenol	30	5	5	NA	ug/L
MKTF-21	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-21	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-21	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-21	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-21	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-21	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-21	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-21	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-21	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-21	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-21	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-21	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-21	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-21	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-21	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-21	11/5/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-21	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-21	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-21	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-21	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-21	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-21	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-21	11/5/2019	Fluorene	ND	5	5	288	ug/L
MKTF-21	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-21	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-21	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-21	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-21	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-21	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-21	11/5/2019	Naphthalene	**220**	5	5	30	ug/L
MKTF-21	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-21	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-21	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-21	11/5/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-21	11/5/2019	Phenol	95	5	5	5761	ug/L
MKTF-21	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-21	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-22	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-22	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-22	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-22	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-22	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	4/10/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-22	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-22	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-22	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-22	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-22	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-22	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-22	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-22	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-22	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-22	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-22	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-22	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-22	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-22	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-22	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-22	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-22	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-22	4/10/2014	1-Methylnaphthalene	**45**	10	3.6	11.38	ug/L
MKTF-22	4/10/2014	Naphthalene	13	10	2.3	30	ug/L
MKTF-22	4/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-22	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-22	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	4/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-22	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-22	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-22	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-22	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-22	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-22	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-22	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-22	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-22	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-22	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	4/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-22	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-22	4/10/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-22	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-22	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-22	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-22	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-22	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-22	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-22	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-22	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-22	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-22	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-22	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-22	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-22	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-22	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-22	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-22	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-22	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-22	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-22	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-22	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-22	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-22	4/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-22	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-22	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-22	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-22	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-22	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-22	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-22	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-22	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-22	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-22	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-22	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-22	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-22	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-22	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-22	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-22	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-22	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-22	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-22	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-22	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-22	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-22	11/17/2014	1-Methylnaphthalene	**45**	10	3.6	11.38	ug/L
MKTF-22	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-22	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-22	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-22	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-22	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-22	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-22	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-22	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-22	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-22	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-22	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-22	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-22	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-22	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-22	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-22	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-22	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-22	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	11/17/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-22	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-22	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-22	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-22	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-22	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-22	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-22	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-22	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-22	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-22	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-22	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-22	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-22	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-22	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-22	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-22	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-22	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-22	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-22	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-22	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-22	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-22	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-22	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-22	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-22	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-22	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-22	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-22	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-22	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-22	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-22	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-22	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-22	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-22	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-22	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-22	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-22	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-22	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-22	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-22	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-22	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-22	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-22	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-22	3/12/2015	1-Methylnaphthalene	**66**	10	3.8	11.38	ug/L
MKTF-22	3/12/2015	Naphthalene	16	10	3.6	30	ug/L
MKTF-22	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-22	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-22	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-22	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-22	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-22	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-22	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-22	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-22	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-22	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-22	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-22	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-22	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-22	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-22	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-22	3/12/2015	Phenol	14	10	4.2	5761	ug/L
MKTF-22	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-22	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-22	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-22	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-22	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-22	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-22	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-22	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-22	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-22	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-22	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-22	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-22	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-22	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-22	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-22	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-22	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-22	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-22	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-22	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-22	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-22	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-22	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-22	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-22	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-22	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	6/9/2015	1-Methylnaphthalene	**62**	10	1.8	11.38	ug/L
MKTF-22	6/9/2015	Naphthalene	13	10	1.8	30	ug/L
MKTF-22	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-22	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	6/9/2015	Phenol	18	10	1.1	5761	ug/L
MKTF-22	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	8/20/2015	1-Methylnaphthalene	**18**	10	1.8	11.38	ug/L
MKTF-22	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-22	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-22	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	8/20/2015	Phenol	14	10	1.1	5761	ug/L
MKTF-22	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-22	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	11/9/2015	1-Methylnaphthalene	**40**	10	1.8	11.38	ug/L
MKTF-22	11/9/2015	Naphthalene	11	10	1.8	30	ug/L
MKTF-22	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	11/9/2015	Phenol	10	10	1.1	5761	ug/L
MKTF-22	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-22	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-22	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-22	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-22	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-22	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-22	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-22	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-22	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-22	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-22	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-22	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-22	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-22	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-22	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-22	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-22	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-22	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-22	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-22	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-22	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-22	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-22	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-22	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-22	2/25/2016	1-Methylnaphthalene	**42**	10	6.8	11.38	ug/L
MKTF-22	2/25/2016	Naphthalene	29	10	5.9	30	ug/L
MKTF-22	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-22	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-22	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-22	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-22	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-22	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-22	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-22	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-22	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-22	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-22	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-22	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-22	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-22	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-22	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-22	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-22	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-22	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-22	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-22	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-22	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-22	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-22	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-22	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-22	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-22	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-22	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-22	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-22	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-22	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-22	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-22	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-22	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-22	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-22	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-22	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-22	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-22	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-22	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-22	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-22	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-22	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-22	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-22	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-22	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-22	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	6/10/2016	Acenaphthene	3.9	10	2.6	535	ug/L
MKTF-22	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-22	6/10/2016	Carbazole	5.3	10	2.3	NA	ug/L
MKTF-22	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	6/10/2016	1-Methylnaphthalene	**67**	10	2.9	11.38	ug/L
MKTF-22	6/10/2016	Naphthalene	**46**	10	2.6	30	ug/L
MKTF-22	6/10/2016	2-Methylnaphthalene	11	10	2.9	35.1	ug/L
MKTF-22	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	6/10/2016	Phenol	19	10	2	5761	ug/L
MKTF-22	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	6/10/2016	Bis(2-ethylhexyl)phthalate	4.6	10	2.6	55.64	ug/L
MKTF-22	6/10/2016	Di-n-octylphthalate	9.1	10	2	200	ug/L
MKTF-22	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	9/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	9/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	9/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	9/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	9/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	9/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	9/10/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-22	9/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	9/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	9/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	9/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-22	9/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	9/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	9/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	9/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	9/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	9/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-22	9/10/2016	Carbazole	2.4	10	2.3	NA	ug/L
MKTF-22	9/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	9/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	9/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	9/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	9/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	9/10/2016	1-Methylnaphthalene	**39**	10	2.9	11.38	ug/L
MKTF-22	9/10/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-22	9/10/2016	2-Methylnaphthalene	5	10	2.9	35.1	ug/L
MKTF-22	9/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	9/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	9/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	9/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	9/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	9/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	9/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	9/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	9/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	9/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	9/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	9/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	9/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	9/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	9/10/2016	Phenol	7.7	10	2	5761	ug/L
MKTF-22	9/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	9/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	9/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	9/10/2016	Bis(2-ethylhexyl)phthalate	3	10	2.6	55.64	ug/L
MKTF-22	9/10/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	9/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	9/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	9/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	9/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	9/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	9/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	9/10/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-22	9/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	9/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	9/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	9/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	9/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	9/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	9/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	9/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	9/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	9/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	9/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	9/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	9/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	11/1/2016	Benzoic Acid	18	20	2.6	75000	ug/L
MKTF-22	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	11/1/2016	Acenaphthene	3.8	10	2.6	535	ug/L
MKTF-22	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	11/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	11/1/2016	Fluorene	5.7	10	2.7	288	ug/L
MKTF-22	11/1/2016	Carbazole	4.9	10	2.3	NA	ug/L
MKTF-22	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	11/1/2016	1-Methylnaphthalene	**70**	10	2.9	11.38	ug/L
MKTF-22	11/1/2016	Naphthalene	**52**	10	2.6	30	ug/L
MKTF-22	11/1/2016	2-Methylnaphthalene	13	10	2.9	35.1	ug/L
MKTF-22	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	11/1/2016	2,4-Dimethylphenol	3.7	10	3	354	ug/L
MKTF-22	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	11/1/2016	Phenol	23	10	2	5761	ug/L
MKTF-22	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	11/1/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-22	11/1/2016	Di-n-octylphthalate	7.3	10	2	200	ug/L
MKTF-22	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-22	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	3/8/2017	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-22	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-22	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	3/8/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Fluorene	3	10	2.7	288	ug/L
MKTF-22	3/8/2017	Carbazole	4.6	10	2.3	NA	ug/L
MKTF-22	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	3/8/2017	1-Methylnaphthalene	**44**	10	2.9	11.38	ug/L
MKTF-22	3/8/2017	Naphthalene	**31**	10	2.6	30	ug/L
MKTF-22	3/8/2017	2-Methylnaphthalene	8.6	10	2.9	35.1	ug/L
MKTF-22	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	3/8/2017	Phenol	9.5	10	2	5761	ug/L
MKTF-22	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	3/8/2017	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-22	3/8/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-22	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	3/8/2017	3,4-Methylphenol	2.5	10	2.3	NA	ug/L
MKTF-22	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	6/8/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MKTF-22	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-22	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	6/8/2017	1-Methylnaphthalene	**47**	10	3.3	11.38	ug/L
MKTF-22	6/8/2017	Naphthalene	27	10	2.9	30	ug/L
MKTF-22	6/8/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	6/8/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	6/8/2017	Phenol	20	10	3.1	5761	ug/L
MKTF-22	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	6/8/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-22	6/8/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
MKTF-22	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	10/3/2017	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-22	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-22	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	10/3/2017	1-Methylnaphthalene	**75**	10	3.3	11.38	ug/L
MKTF-22	10/3/2017	Naphthalene	28	10	2.9	30	ug/L
MKTF-22	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	10/3/2017	Phenol	14	10	3.1	5761	ug/L
MKTF-22	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-22	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	11/28/2017	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-22	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	11/28/2017	Fluorene	5.3	10	4	288	ug/L
MKTF-22	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	1-Methylnaphthalene	**58**	10	3.3	11.38	ug/L
MKTF-22	11/28/2017	Naphthalene	22	10	2.9	30	ug/L
MKTF-22	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	11/28/2017	Phenol	22	10	3.1	5761	ug/L
MKTF-22	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	11/28/2017	Bis(2-ethylhexyl)phthalate	**100**	10	4.8	55.64	ug/L
MKTF-22	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-22	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	2/8/2018	Benzoic Acid	17	20	3.9	75000	ug/L
MKTF-22	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	2/8/2018	Fluorene	5	10	4	288	ug/L
MKTF-22	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	2/8/2018	1-Methylnaphthalene	**53**	10	3.3	11.38	ug/L
MKTF-22	2/8/2018	Naphthalene	18	10	2.9	30	ug/L
MKTF-22	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	2/8/2018	Phenol	24	10	3.1	5761	ug/L
MKTF-22	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-22	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	5/10/2018	Benzoic Acid	17	20	6.3	75000	ug/L
MKTF-22	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	5/10/2018	1-Methylnaphthalene	**33**	10	7	11.38	ug/L
MKTF-22	5/10/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-22	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-22	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	5/10/2018	Phenol	17	10	6	5761	ug/L
MKTF-22	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-22	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	8/30/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-22	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	8/30/2018	1-Methylnaphthalene	**36**	10	7	11.38	ug/L
MKTF-22	8/30/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	8/30/2018	2,4-Dimethylphenol	6.9	10	5.9	354	ug/L
MKTF-22	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	8/30/2018	Phenol	19	10	6	5761	ug/L
MKTF-22	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-22	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	11/28/2018	Benzoic Acid	25	20	6.3	75000	ug/L
MKTF-22	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	11/28/2018	1-Methylnaphthalene	**32**	10	7	11.38	ug/L
MKTF-22	11/28/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-22	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-22	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	11/28/2018	Phenol	23	10	6	5761	ug/L
MKTF-22	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-22	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-22	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-22	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-22	5/9/2019	1-Methylnaphthalene	**40**	10	3.069076	11.38	ug/L
MKTF-22	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-22	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-22	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-22	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-22	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-22	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-22	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-22	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-22	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-22	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-22	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-22	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-22	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-22	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-22	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-22	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-22	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-22	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-22	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-22	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-22	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-22	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-22	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-22	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-22	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-22	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-22	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-22	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-22	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-22	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-22	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-22	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-22	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-22	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-22	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-22	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-22	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-22	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-22	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-22	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-22	5/9/2019	Carbazole	4.7	10	2.890507	NA	ug/L
MKTF-22	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-22	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-22	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-22	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-22	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-22	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-22	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-22	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-22	5/9/2019	Fluorene	6	10	2.888488	288	ug/L
MKTF-22	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-22	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-22	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-22	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-22	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-22	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-22	5/9/2019	Naphthalene	8.6	10	4.12221	30	ug/L
MKTF-22	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-22	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-22	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-22	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-22	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-22	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-22	5/9/2019	Phenol	22	10	8.036586	5761	ug/L
MKTF-22	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-22	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-22	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-22	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-22	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-22	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-22	8/20/2019	1-Methylnaphthalene	**35**	10	3.069076	11.38	ug/L
MKTF-22	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-22	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-22	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-22	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-22	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-22	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-22	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-22	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-22	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-22	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-22	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-22	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-22	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-22	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-22	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-22	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-22	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-22	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-22	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-22	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-22	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-22	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-22	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-22	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-22	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-22	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-22	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-22	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-22	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-22	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-22	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-22	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-22	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-22	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-22	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-22	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-22	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-22	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-22	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-22	8/20/2019	Carbazole	6.9	10	2.890507	NA	ug/L
MKTF-22	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-22	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-22	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-22	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-22	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-22	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-22	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-22	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-22	8/20/2019	Fluorene	3.6	10	2.888488	288	ug/L
MKTF-22	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-22	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-22	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-22	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-22	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-22	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-22	8/20/2019	Naphthalene	11	10	4.12221	30	ug/L
MKTF-22	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-22	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-22	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-22	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-22	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-22	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-22	8/20/2019	Phenol	22	10	8.036586	5761	ug/L
MKTF-22	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-22	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	**33**	3	1.234	11.38	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-22	10/24/2019	Acenaphthene	1.2	3	1.14	535	ug/L
MKTF-22	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-22	10/24/2019	Anthracene	0.2	0.6	0.161	1721	ug/L
MKTF-22	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-22	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-22	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-22	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-22	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-22	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-22	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-22	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-22	10/24/2019	Fluorene	2.2	0.8	0.338	288	ug/L
MKTF-22	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-22	10/24/2019	Naphthalene	**33**	3	1.159	30	ug/L
MKTF-22	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-22	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-22	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-22	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-22	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-22	10/24/2019	1,4-Dioxane	**15**	1	1	4.59	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	**41**	0.5	0.5	11.38	ug/L
MKTF-22	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-22	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-22	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-22	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-22	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-22	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-22	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-22	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-22	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	1.5	0.5	0.5	35.1	ug/L
MKTF-22	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-22	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-22	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-22	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-22	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Acenaphthene	3.6	0.5	0.5	535	ug/L
MKTF-22	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-22	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-22	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-22	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-22	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-22	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-22	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-22	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-22	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-22	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-22	10/24/2019	Bis(2-ethylhexyl)phthalate	2.3	0.5	0.5	55.64	ug/L
MKTF-22	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-22	10/24/2019	Carbazole	12	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-22	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-22	10/24/2019	Dibenzofuran	2.4	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-22	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-22	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-22	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-22	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-22	10/24/2019	Fluorene	5	0.5	0.5	288	ug/L
MKTF-22	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-22	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-22	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-22	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-22	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-22	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	Naphthalene	11	0.5	0.5	30	ug/L
MKTF-22	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-22	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-22	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-22	10/24/2019	Phenanthrene	0.59	0.5	0.5	170	ug/L
MKTF-22	10/24/2019	Phenol	36	0.5	0.5	5761	ug/L
MKTF-22	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-22	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-23	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-23	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-23	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-23	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-23	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-23	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-23	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-23	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-23	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-23	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-23	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-23	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-23	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-23	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-23	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-23	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-23	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-23	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-23	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-23	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-23	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-23	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-23	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-23	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-23	9/23/2014	1-Methylnaphthalene	**75**	10	3.6	11.38	ug/L
MKTF-23	9/23/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-23	9/23/2014	2-Methylnaphthalene	**79**	10	2.6	35.1	ug/L
MKTF-23	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-23	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-23	9/23/2014	2-Methylphenol	34	20	2.8	NA	ug/L
MKTF-23	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-23	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-23	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-23	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-23	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-23	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-23	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-23	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-23	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-23	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	9/23/2014	2,4-Dimethylphenol	27	10	3.1	354	ug/L
MKTF-23	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-23	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-23	9/23/2014	Phenol	22	10	1.6	5761	ug/L
MKTF-23	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-23	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-23	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-23	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-23	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-23	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-23	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-23	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-23	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-23	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-23	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-23	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-23	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-23	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-23	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-23	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-23	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-23	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-23	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-23	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-23	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-23	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-23	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-23	9/23/2014	3,4-Methylphenol	25	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-23	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-23	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-23	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-23	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-23	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-23	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-23	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-23	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-23	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-23	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-23	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-23	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-23	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-23	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-23	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-23	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-23	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-23	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-23	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-23	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-23	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-23	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-23	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-23	11/17/2014	1-Methylnaphthalene	**84**	10	3.6	11.38	ug/L
MKTF-23	11/17/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-23	11/17/2014	2-Methylnaphthalene	**92**	10	2.6	35.1	ug/L
MKTF-23	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-23	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-23	11/17/2014	2-Methylphenol	58	10	2.8	NA	ug/L
MKTF-23	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-23	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-23	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-23	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-23	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-23	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-23	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-23	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-23	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	11/17/2014	2,4-Dimethylphenol	31	10	3.1	354	ug/L
MKTF-23	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-23	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-23	11/17/2014	Phenol	27	10	1.6	5761	ug/L
MKTF-23	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-23	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	11/17/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-23	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-23	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-23	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-23	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-23	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-23	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-23	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-23	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-23	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-23	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-23	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-23	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-23	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-23	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-23	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-23	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-23	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-23	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-23	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-23	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-23	11/17/2014	3,4-Methylphenol	53	10	1.8	NA	ug/L
MKTF-23	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-23	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-23	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-23	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-23	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-23	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-23	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-23	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-23	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-23	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-23	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-23	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-23	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-23	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-23	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-23	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-23	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-23	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-23	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-23	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-23	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-23	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-23	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-23	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-23	3/12/2015	1-Methylnaphthalene	**79**	10	3.8	11.38	ug/L
MKTF-23	3/12/2015	Naphthalene	**150**	10	3.6	30	ug/L
MKTF-23	3/12/2015	2-Methylnaphthalene	**82**	10	3.7	35.1	ug/L
MKTF-23	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-23	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-23	3/12/2015	2-Methylphenol	42	10	3.7	NA	ug/L
MKTF-23	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-23	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-23	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-23	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-23	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-23	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-23	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-23	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-23	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-23	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-23	3/12/2015	2,4-Dimethylphenol	94	10	4.3	354	ug/L
MKTF-23	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-23	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-23	3/12/2015	Phenol	21	10	4.2	5761	ug/L
MKTF-23	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-23	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-23	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-23	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-23	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-23	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-23	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-23	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-23	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-23	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-23	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-23	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-23	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-23	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-23	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-23	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-23	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-23	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-23	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-23	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-23	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-23	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-23	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-23	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	3/12/2015	3,4-Methylphenol	63	10	4.7	NA	ug/L
MKTF-23	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-23	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-23	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	6/9/2015	1-Methylnaphthalene	**110**	10	1.8	11.38	ug/L
MKTF-23	6/9/2015	Naphthalene	**200**	10	1.8	30	ug/L
MKTF-23	6/9/2015	2-Methylnaphthalene	**140**	10	2.2	35.1	ug/L
MKTF-23	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	6/9/2015	2-Methylphenol	71	10	1.2	NA	ug/L
MKTF-23	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-23	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	6/9/2015	2,4-Dimethylphenol	120	10	1.9	354	ug/L
MKTF-23	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	6/9/2015	Phenol	34	10	1.1	5761	ug/L
MKTF-23	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	6/9/2015	3,4-Methylphenol	64	10	1.5	NA	ug/L
MKTF-23	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	8/21/2015	Phenanthrene	16	10	2	170	ug/L
MKTF-23	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-23	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	8/21/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-23	8/21/2015	Naphthalene	**270**	20	3.7	30	ug/L
MKTF-23	8/21/2015	2-Methylnaphthalene	**190**	10	2.2	35.1	ug/L
MKTF-23	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	8/21/2015	2-Methylphenol	61	10	1.2	NA	ug/L
MKTF-23	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	8/21/2015	2,4-Dimethylphenol	100	10	1.9	354	ug/L
MKTF-23	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-23	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	8/21/2015	3,4-Methylphenol	47	10	1.5	NA	ug/L
MKTF-23	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	11/9/2015	Phenanthrene	22	10	2	170	ug/L
MKTF-23	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	11/9/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-23	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	11/9/2015	1-Methylnaphthalene	**170**	10	1.8	11.38	ug/L
MKTF-23	11/9/2015	Naphthalene	**230**	10	1.8	30	ug/L
MKTF-23	11/9/2015	2-Methylnaphthalene	**210**	10	2.2	35.1	ug/L
MKTF-23	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	11/9/2015	2-Methylphenol	60	10	1.2	NA	ug/L
MKTF-23	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-23	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	11/9/2015	2,4-Dimethylphenol	65	10	1.9	354	ug/L
MKTF-23	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	11/9/2015	Phenol	36	10	1.1	5761	ug/L
MKTF-23	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	11/9/2015	3,4-Methylphenol	54	10	1.5	NA	ug/L
MKTF-23	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-23	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-23	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-23	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-23	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-23	2/25/2016	Aniline	ND	10	9.8	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-23	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-23	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-23	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-23	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-23	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-23	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-23	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-23	2/25/2016	Phenanthrene	29	10	6.8	170	ug/L
MKTF-23	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-23	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-23	2/25/2016	Fluorene	11	10	7.2	288	ug/L
MKTF-23	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-23	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-23	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-23	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-23	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-23	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-23	2/25/2016	1-Methylnaphthalene	**220**	10	6.8	11.38	ug/L
MKTF-23	2/25/2016	Naphthalene	**230**	200	120	30	ug/L
MKTF-23	2/25/2016	2-Methylnaphthalene	**230**	10	7	35.1	ug/L
MKTF-23	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-23	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-23	2/25/2016	2-Methylphenol	37	10	8.2	NA	ug/L
MKTF-23	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-23	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-23	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-23	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-23	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-23	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-23	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-23	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-23	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-23	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-23	2/25/2016	2,4-Dimethylphenol	110	10	4.7	354	ug/L
MKTF-23	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-23	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-23	2/25/2016	Phenol	17	10	5.1	5761	ug/L
MKTF-23	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-23	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-23	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-23	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-23	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-23	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-23	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-23	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-23	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-23	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-23	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-23	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-23	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-23	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-23	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-23	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-23	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-23	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-23	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-23	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-23	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-23	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-23	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-23	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-23	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-23	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-23	2/25/2016	3,4-Methylphenol	24	10	7.1	NA	ug/L
MKTF-23	6/10/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-23	6/10/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-23	6/10/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-23	6/10/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-23	6/10/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-23	6/10/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-23	6/10/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-23	6/10/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-23	6/10/2016	Isophorone	ND	50	13	781	ug/L
MKTF-23	6/10/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-23	6/10/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-23	6/10/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-23	6/10/2016	Phenanthrene	**720**	50	13	170	ug/L
MKTF-23	6/10/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-23	6/10/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-23	6/10/2016	Fluorene	**380**	50	14	288	ug/L
MKTF-23	6/10/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-23	6/10/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-23	6/10/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-23	6/10/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-23	6/10/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-23	6/10/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	1-Methylnaphthalene	**7800**	500	150	11.38	ug/L
MKTF-23	6/10/2016	Naphthalene	**2300**	500	130	30	ug/L
MKTF-23	6/10/2016	2-Methylnaphthalene	**5600**	500	140	35.1	ug/L
MKTF-23	6/10/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-23	6/10/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-23	6/10/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-23	6/10/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-23	6/10/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-23	6/10/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-23	6/10/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-23	6/10/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-23	6/10/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-23	6/10/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-23	6/10/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-23	6/10/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-23	6/10/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-23	6/10/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-23	6/10/2016	Pyridine	*ND*	*50*	11	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-23	6/10/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-23	6/10/2016	Bis(2-ethylhexyl)phthalate	**70**	50	13	55.64	ug/L
MKTF-23	6/10/2016	Di-n-octylphthalate	30	50	9.9	200	ug/L
MKTF-23	6/10/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-23	6/10/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-23	6/10/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-23	6/10/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-23	6/10/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-23	6/10/2016	Pyrene	**190**	50	15	117	ug/L
MKTF-23	6/10/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-23	6/10/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-23	6/10/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-23	6/10/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-23	6/10/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-23	6/10/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-23	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-23	6/10/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-23	6/10/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-23	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-23	6/10/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-23	6/10/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-23	10/29/2019	1,2,4-Trichlorobenzene	ND	30	30	70	ug/L
MKTF-23	10/29/2019	1,2-Dichlorobenzene	ND	30	30	600	ug/L
MKTF-23	10/29/2019	1,3-Dichlorobenzene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	1,4-Dichlorobenzene	ND	30	30	75	ug/L
MKTF-23	10/29/2019	1,4-Dioxane	*ND*	*50*	50	4.59	ug/L
MKTF-23	10/29/2019	1-Methylnaphthalene	**2400**	30	30	11.38	ug/L
MKTF-23	10/29/2019	2,4,5-Trichlorophenol	ND	30	30	1166	ug/L
MKTF-23	10/29/2019	2,4,6-Trichlorophenol	ND	30	30	11.9*	ug/L
MKTF-23	10/29/2019	2,4-Dichlorophenol	ND	30	30	45.3	ug/L
MKTF-23	10/29/2019	2,4-Dimethylphenol	ND	30	30	354	ug/L
MKTF-23	10/29/2019	2,4-Dinitrophenol	ND	30	30	38.7	ug/L
MKTF-23	10/29/2019	2,4-Dinitrotoluene	ND	30	30	45.3	ug/L
MKTF-23	10/29/2019	2,6-Dinitrotoluene	*ND*	*30*	30	0.485	ug/L
MKTF-23	10/29/2019	2-Chloronaphthalene	ND	30	30	733	ug/L
MKTF-23	10/29/2019	2-Chlorophenol	ND	30	30	91	ug/L
MKTF-23	10/29/2019	2-Methylnaphthalene	**3500**	30	30	35.1	ug/L
MKTF-23	10/29/2019	2-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	2-Nitroaniline	ND	30	30	190	ug/L
MKTF-23	10/29/2019	2-Nitrophenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	3,3-Dichlorobenzidine	*ND*	*30*	30	1.25	ug/L
MKTF-23	10/29/2019	3,4-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	3-Nitroaniline	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*30*	30	1.52	ug/L
MKTF-23	10/29/2019	4-Bromophenyl-phenylether	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Chloro-3-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Chlorophenyl-phenylether	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Nitroaniline	*ND*	*30*	30	3.8	ug/L
MKTF-23	10/29/2019	4-Nitrophenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Acenaphthene	80	30	30	535	ug/L
MKTF-23	10/29/2019	Acenaphthylene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Aniline	*ND*	*30*	30	13	ug/L
MKTF-23	10/29/2019	Anthracene	ND	30	30	1721	ug/L
MKTF-23	10/29/2019	Benzo(a)anthracene	*ND*	*30*	30	0.12	ug/L
MKTF-23	10/29/2019	Benzo(a)pyrene	*ND*	*30*	30	0.2	ug/L
MKTF-23	10/29/2019	Benzo(b)fluoranthene	*ND*	*30*	30	0.34	ug/L
MKTF-23	10/29/2019	Benzo(g,h,i)perylene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Benzo(k)fluoranthene	*ND*	*30*	30	3.43	ug/L
MKTF-23	10/29/2019	Benzoic Acid	ND	25	25	75000	ug/L
MKTF-23	10/29/2019	Benzyl Alcohol	ND	30	30	2000	ug/L
MKTF-23	10/29/2019	Bis(2-chloroethoxy)methane	ND	30	30	59	ug/L
MKTF-23	10/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*30*	30	9.81	ug/L
MKTF-23	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	30	30	55.64	ug/L
MKTF-23	10/29/2019	Butylbenzylphthalate	*ND*	*30*	30	16	ug/L
MKTF-23	10/29/2019	Carbazole	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Chrysene	ND	30	30	34.3	ug/L
MKTF-23	10/29/2019	Dibenzo(a,h)anthracene	ND	1	1	NA	ug/L
MKTF-23	10/29/2019	Dibenzofuran	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Diethylphthalate	ND	30	30	14801	ug/L
MKTF-23	10/29/2019	Dimethylphthalate	ND	30	30	612	ug/L
MKTF-23	10/29/2019	Di-n-butylphthalate	ND	30	30	885	ug/L
MKTF-23	10/29/2019	Di-n-octylphthalate	ND	30	30	200	ug/L
MKTF-23	10/29/2019	Fluoranthene	ND	30	30	802	ug/L
MKTF-23	10/29/2019	Fluorene	200	30	30	288	ug/L
MKTF-23	10/29/2019	Hexachlorobenzene	*ND*	*30*	30	0.0976	ug/L
MKTF-23	10/29/2019	Hexachlorobutadiene	*ND*	*30*	30	0.14	ug/L
MKTF-23	10/29/2019	Hexachlorocyclopentadiene	*ND*	*30*	30	0.41	ug/L
MKTF-23	10/29/2019	Hexachloroethane	*ND*	*30*	30	3.28	ug/L
MKTF-23	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*30*	30	0.343	ug/L
MKTF-23	10/29/2019	Isophorone	ND	30	30	781	ug/L
MKTF-23	10/29/2019	Naphthalene	**1200**	30	30	30	ug/L
MKTF-23	10/29/2019	Nitrobenzene	*ND*	*30*	30	1.4	ug/L
MKTF-23	10/29/2019	N-Nitrosodiphenylamine	ND	30	30	122	ug/L
MKTF-23	10/29/2019	Pentachlorophenol	*ND*	*30*	30	1	ug/L
MKTF-23	10/29/2019	Phenanthrene	**340**	30	30	170	ug/L
MKTF-23	10/29/2019	Phenol	ND	30	30	5761	ug/L
MKTF-23	10/29/2019	Pyrene	61	30	30	117	ug/L
MKTF-23	10/29/2019	Pyridine	*ND*	*30*	30	20	ug/L
MKTF-24	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-24	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-24	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-24	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-24	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-24	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-24	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-24	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-24	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-24	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-24	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-24	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-24	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-24	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-24	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-24	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-24	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-24	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-24	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-24	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-24	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-24	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-24	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-24	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-24	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-24	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-24	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-24	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-24	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-24	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-24	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-24	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-24	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-24	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-24	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-24	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-24	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-24	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-24	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-24	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-24	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-24	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-24	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-24	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-24	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-24	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-24	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-24	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-24	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-24	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-24	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-24	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-24	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-24	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-24	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-24	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-24	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-24	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-24	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-24	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-24	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-24	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-24	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-24	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-24	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-24	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-24	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-24	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-24	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-24	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-24	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-24	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-24	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-24	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-24	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-24	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-24	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-24	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-24	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-24	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-24	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-24	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	2/22/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-24	2/22/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-24	2/22/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-24	2/22/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-24	2/22/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-24	2/22/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-24	2/22/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-24	2/22/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-24	2/22/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-24	2/22/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-24	2/22/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-24	2/22/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-24	2/22/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-24	2/22/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-24	2/22/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-24	2/22/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-24	2/22/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-24	2/22/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-24	2/22/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-24	2/22/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-24	2/22/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-24	2/22/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-24	2/22/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-24	2/22/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-24	2/22/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-24	2/22/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-24	2/22/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-24	2/22/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-24	2/22/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-24	2/22/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-24	2/22/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-24	2/22/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-24	2/22/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-24	2/22/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-24	2/22/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-24	2/22/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-24	2/22/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-24	2/22/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-24	2/22/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-24	2/22/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-24	2/22/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-24	2/22/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-24	2/22/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-24	2/22/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-24	2/22/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-24	2/22/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-24	2/22/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-24	2/22/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-24	2/22/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	2/22/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-24	2/22/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-24	2/22/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-24	2/22/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-24	2/22/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-24	2/22/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-24	2/22/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-24	2/22/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-24	2/22/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-24	2/22/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-24	2/22/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-24	2/22/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-24	2/22/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-24	2/22/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-24	2/22/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-24	2/22/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-24	2/22/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-24	2/22/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-24	2/22/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-24	2/22/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-24	2/22/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/22/2016	3,4-Methylphenol	12	10	7.1	NA	ug/L
MKTF-24	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-24	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-24	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	6/8/2016	1-Methylnaphthalene	3.4	10	2.9	11.38	ug/L
MKTF-24	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-24	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-24	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	6/8/2016	Phenol	5.6	10	2	5761	ug/L
MKTF-24	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	6/8/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-24	6/8/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-24	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-24	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	6/8/2016	3,4-Methylphenol	4.5	10	2.3	NA	ug/L
MKTF-24	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	9/7/2016	Benzoic Acid	10	20	2.6	75000	ug/L
MKTF-24	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-24	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	9/7/2016	1-Methylnaphthalene	4.2	10	2.9	11.38	ug/L
MKTF-24	9/7/2016	Naphthalene	2.9	10	2.6	30	ug/L
MKTF-24	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-24	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	9/7/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-24	9/7/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-24	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	9/7/2016	Dimethylphthalate	7.3	10	2.4	612	ug/L
MKTF-24	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	10/28/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-24	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-24	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	10/28/2016	1-Methylnaphthalene	7.3	10	2.9	11.38	ug/L
MKTF-24	10/28/2016	Naphthalene	5.5	10	2.6	30	ug/L
MKTF-24	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-24	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-24	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	10/28/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-24	10/28/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-24	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-24	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-24	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	3/29/2017	Aniline	ND	10	3.1	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	3/29/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-24	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	3/29/2017	Phenol	4.7	10	3.1	5761	ug/L
MKTF-24	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	3/29/2017	Bis(2-ethylhexyl)phthalate	7.6	10	4.8	55.64	ug/L
MKTF-24	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	6/5/2017	Benzoic Acid	10	20	3.9	75000	ug/L
MKTF-24	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	6/5/2017	1-Methylnaphthalene	6.3	10	3.3	11.38	ug/L
MKTF-24	6/5/2017	Naphthalene	7.2	10	2.9	30	ug/L
MKTF-24	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	6/5/2017	Phenol	3.6	10	3.1	5761	ug/L
MKTF-24	6/5/2017	Pyridine	ND	10	2.3	20	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	6/5/2017	Bis(2-ethylhexyl)phthalate	6	10	4.8	55.64	ug/L
MKTF-24	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	10/3/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-24	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	10/3/2017	Phenol	10	10	3.1	5761	ug/L
MKTF-24	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	11/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	11/20/2017	1-Methylnaphthalene	9	10	3.3	11.38	ug/L
MKTF-24	11/20/2017	Naphthalene	5.8	10	2.9	30	ug/L
MKTF-24	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	11/20/2017	Phenol	3.2	10	3.1	5761	ug/L
MKTF-24	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-24	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-24	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	2/6/2018	1-Methylnaphthalene	10	10	3.3	11.38	ug/L
MKTF-24	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-24	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	5/1/2018	Benzoic Acid	34	20	6.3	75000	ug/L
MKTF-24	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-24	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-24	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	8/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-24	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-24	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-24	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-24	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-24	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-24	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-24	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-24	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-24	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-24	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-24	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-24	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-24	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-24	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-24	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-24	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-24	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-24	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-24	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-24	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-24	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-24	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-24	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-24	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-24	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-24	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-24	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-24	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-24	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-24	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-24	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-24	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-24	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-24	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-24	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-24	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-24	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-24	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-24	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-24	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-24	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-24	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-24	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-24	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-24	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-24	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-24	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-24	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-24	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-24	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-24	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-24	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-24	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-24	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-24	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-24	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-24	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-24	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-24	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-24	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-24	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-24	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-24	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-24	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-24	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-24	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-24	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-24	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-24	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-24	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-24	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-24	5/6/2019	Phenol	16	10	8.036586	5761	ug/L
MKTF-24	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-24	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-24	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-24	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-24	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-24	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-24	8/23/2019	1-Methylnaphthalene	5.3	10	3.069076	11.38	ug/L
MKTF-24	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-24	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-24	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-24	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-24	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-24	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-24	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-24	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-24	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-24	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-24	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-24	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-24	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-24	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-24	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-24	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-24	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-24	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-24	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-24	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-24	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-24	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-24	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-24	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-24	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-24	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-24	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-24	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-24	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-24	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-24	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-24	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-24	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-24	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-24	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-24	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-24	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-24	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-24	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-24	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-24	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-24	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-24	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-24	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-24	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-24	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-24	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-24	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-24	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-24	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-24	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-24	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-24	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-24	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-24	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-24	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-24	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-24	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-24	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-24	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-24	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-24	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-24	8/23/2019	Phenol	11	10	8.036586	5761	ug/L
MKTF-24	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-24	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	5.1	3	1.234	11.38	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-24	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-24	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-24	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-24	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-24	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-24	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-24	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-24	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-24	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-24	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-24	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-24	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-24	10/23/2019	Indeno(1,2,3-cd)pyrene	0.11	0.25	0.07	0.343	ug/L
MKTF-24	10/23/2019	Naphthalene	2.5	3	1.159	30	ug/L
MKTF-24	10/23/2019	Phenanthrene	0.19	0.6	0.152	170	ug/L
MKTF-24	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-24	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-24	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-24	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-24	10/23/2019	1,4-Dioxane	**31**	1	1	4.59	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	5.4	0.5	0.5	11.38	ug/L
MKTF-24	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-24	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-24	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-24	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-24	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-24	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-24	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-24	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-24	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-24	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-24	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-24	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-24	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-24	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Acenaphthene	0.55	0.5	0.5	535	ug/L
MKTF-24	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-24	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-24	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-24	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-24	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-24	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-24	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-24	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-24	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-24	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-24	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-24	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-24	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-24	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-24	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-24	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-24	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-24	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-24	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-24	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-24	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-24	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-24	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-24	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-24	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-24	10/23/2019	Naphthalene	1	0.5	0.5	30	ug/L
MKTF-24	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-24	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-24	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-24	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-24	10/23/2019	Phenol	21	0.5	0.5	5761	ug/L
MKTF-24	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-24	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-24	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-24	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-24	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-24	2/25/2020	1,4-Dioxane	**40**	1	1	4.59	ug/L
MKTF-24	2/25/2020	1-Methylnaphthalene	8.1	0.5	0.5	11.38	ug/L
MKTF-24	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-24	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-24	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-24	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-24	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-24	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-24	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-24	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-24	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-24	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-24	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-24	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-24	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-24	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-24	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-24	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-24	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-24	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-24	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-24	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-24	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-24	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-24	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-24	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-24	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-24	2/25/2020	Bis(2-ethylhexyl)phthalate	1.8	0.5	0.5	55.64	ug/L
MKTF-24	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-24	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-24	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-24	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-24	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-24	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-24	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-24	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-24	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-24	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-24	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-24	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-24	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-24	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-24	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-24	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-24	2/25/2020	Naphthalene	1.6	0.5	0.5	30	ug/L
MKTF-24	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-24	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-24	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-24	2/25/2020	Phenol	31	0.5	0.5	5761	ug/L
MKTF-24	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-24	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-24	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-24	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-24	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-24	9/19/2020	1,4-Dioxane	**31**	0.51	0.1	4.59	ug/L
MKTF-24	9/19/2020	1-Methylnaphthalene	3.6	0.51	0.1	11.38	ug/L
MKTF-24	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-24	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-24	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-24	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-24	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-24	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-24	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-24	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-24	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-24	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-24	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-24	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-24	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-24	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-24	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-24	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-24	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Acenaphthene	0.31	0.51	0.1	535	ug/L
MKTF-24	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-24	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-24	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-24	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-24	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-24	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-24	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-24	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-24	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-24	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-24	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-24	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-24	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-24	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-24	9/19/2020	Carbazole	0.22	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-24	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-24	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-24	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-24	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-24	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-24	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-24	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-24	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-24	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-24	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-24	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-24	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-24	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-24	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-24	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-24	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-24	9/19/2020	Naphthalene	0.78	0.51	0.1	30	ug/L
MKTF-24	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-24	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-24	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-24	9/19/2020	Phenol	72	1.5	0.31	5761	ug/L
MKTF-24	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-24	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-24	12/18/2020	1,3-Dichlorobenzene	ND	10	1.91	NA	ug/L
MKTF-24	12/18/2020	1,4-Dichlorobenzene	ND	10	1.91	75	ug/L
MKTF-24	12/18/2020	2,4,5-Trichlorophenol	ND	10	1.1	1166	ug/L
MKTF-24	12/18/2020	2,4,6-Trichlorophenol	ND	10	1.61	11.9*	ug/L
MKTF-24	12/18/2020	2,4-Dichlorophenol	ND	10	1.51	45.3	ug/L
MKTF-24	12/18/2020	2,4-Dimethylphenol	ND	10	1.31	354	ug/L
MKTF-24	12/18/2020	2,4-Dinitrophenol	ND	30.1	4.62	38.7	ug/L
MKTF-24	12/18/2020	2-Chloronaphthalene	ND	10	1.51	733	ug/L
MKTF-24	12/18/2020	2-Chlorophenol	ND	10	1.71	91	ug/L
MKTF-24	12/18/2020	2-Methylphenol	ND	10	1.51	NA	ug/L
MKTF-24	12/18/2020	2-Nitroaniline	ND	10	1.81	190	ug/L
MKTF-24	12/18/2020	2-Nitrophenol	ND	10	2.01	NA	ug/L
MKTF-24	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10*	4.02	1.25	ug/L
MKTF-24	12/18/2020	3-Nitroaniline	ND	10	2.21	NA	ug/L
MKTF-24	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10*	4.02	1.52	ug/L
MKTF-24	12/18/2020	4-Bromophenyl-phenylether	ND	10	1.31	NA	ug/L
MKTF-24	12/18/2020	4-Chloro-3-Methylphenol	ND	10	1.41	NA	ug/L
MKTF-24	12/18/2020	4-Chloroaniline	*ND*	*10*	1.81	0.37	ug/L
MKTF-24	12/18/2020	4-Chlorophenyl-phenylether	ND	10	1.31	NA	ug/L
MKTF-24	12/18/2020	4-Nitroaniline	*ND*	*10*	4.12	3.8	ug/L
MKTF-24	12/18/2020	4-Nitrophenol	ND	10	3.31	NA	ug/L
MKTF-24	12/18/2020	Acenaphthene	ND	10	1.31	535	ug/L
MKTF-24	12/18/2020	Acenaphthylene	ND	10	1.41	NA	ug/L
MKTF-24	12/18/2020	Aniline	ND	10	3.51	13	ug/L
MKTF-24	12/18/2020	Anthracene	ND	10	1.31	1721	ug/L
MKTF-24	12/18/2020	Benzo(a)anthracene	*ND*	*10*	1.81	0.12	ug/L
MKTF-24	12/18/2020	Benzo(a)pyrene	*ND*	*10*	1.71	0.2	ug/L
MKTF-24	12/18/2020	Benzo(b)fluoranthene	*ND*	*10*	1.71	0.34	ug/L
MKTF-24	12/18/2020	Benzo(g,h,i)perylene	ND	10	3.11	NA	ug/L
MKTF-24	12/18/2020	Benzo(k)fluoranthene	*ND*	*10*	1.71	3.43	ug/L
MKTF-24	12/18/2020	Benzoic Acid	ND	30.1	5.72	75000	ug/L
MKTF-24	12/18/2020	Benzyl Alcohol	ND	10	2.21	2000	ug/L
MKTF-24	12/18/2020	Bis(2-chloroethoxy)methane	ND	10	1.41	59	ug/L
MKTF-24	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10*	1.2	0.137	ug/L
MKTF-24	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10	2.71	55.64	ug/L
MKTF-24	12/18/2020	Butylbenzylphthalate	ND	10	2.31	16	ug/L
MKTF-24	12/18/2020	Carbazole	ND	10	1.91	NA	ug/L
MKTF-24	12/18/2020	Chrysene	ND	10	1.81	34.3	ug/L
MKTF-24	12/18/2020	Di-n-butylphthalate	ND	10	1.71	885	ug/L
MKTF-24	12/18/2020	Di-n-octylphthalate	ND	10	1.61	200	ug/L
MKTF-24	12/18/2020	Dibenzo(a,h)anthracene	ND	10	2.71	NA	ug/L
MKTF-24	12/18/2020	Dibenzofuran	ND	10	1.51	NA	ug/L
MKTF-24	12/18/2020	Diethylphthalate	ND	10	1.1	14801	ug/L
MKTF-24	12/18/2020	Dimethylphthalate	ND	10	1.2	612	ug/L
MKTF-24	12/18/2020	Fluoranthene	ND	10	1.31	802	ug/L
MKTF-24	12/18/2020	Fluorene	ND	10	1.31	288	ug/L
MKTF-24	12/18/2020	Hexachlorobenzene	*ND*	*10*	1.2	0.0976	ug/L
MKTF-24	12/18/2020	Hexachlorocyclopentadiene	*ND*	*20.1*	1.91	0.41	ug/L
MKTF-24	12/18/2020	Hexachloroethane	*ND*	*10*	2.41	3.28	ug/L
MKTF-24	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.91	0.343	ug/L
MKTF-24	12/18/2020	Isophorone	ND	10	1.71	781	ug/L
MKTF-24	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10*	2.01	0.011	ug/L
MKTF-24	12/18/2020	N-Nitrosodimethylamine	*ND*	*10*	2.21	0.0049	ug/L
MKTF-24	12/18/2020	N-Nitrosodiphenylamine	ND	10	1.1	122	ug/L
MKTF-24	12/18/2020	Naphthalene	ND	10	1.71	30	ug/L
MKTF-24	12/18/2020	Nitrobenzene	*ND*	*10*	1.61	1.4	ug/L
MKTF-24	12/18/2020	Pentachlorophenol	*ND*	*20.1*	3.71	1	ug/L
MKTF-24	12/18/2020	Phenanthrene	ND	10	1.41	170	ug/L
MKTF-24	12/18/2020	Phenol	54.8	10	1.31	5761	ug/L
MKTF-24	12/18/2020	Pyrene	ND	10	1.51	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	Pyridine	ND	10	4.42	20	ug/L
MKTF-24	12/18/2020	1,2,4-Trichlorobenzene	ND	10	1.81	70	ug/L
MKTF-24	12/18/2020	1,2-Dichlorobenzene	ND	10	1.81	600	ug/L
MKTF-24	12/18/2020	2,4-Dinitrotoluene	ND	10	1.41	45.3	ug/L
MKTF-24	12/18/2020	2,6-Dinitrotoluene	*ND*	*10*	1.31	0.485	ug/L
MKTF-24	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.71	9.81	ug/L
MKTF-24	12/18/2020	Azobenzene	*ND*	*10*	1.31	0.12	ug/L
MKTF-25	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	4/8/2014	Naphthalene	21	10	2.3	30	ug/L
MKTF-25	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-25	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-25	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	4/8/2014	Phenol	13	10	1.6	5761	ug/L
MKTF-25	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-25	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-25	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-25	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-25	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-25	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-25	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-25	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-25	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-25	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-25	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-25	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-25	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-25	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-25	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-25	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-25	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-25	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-25	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-25	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-25	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-25	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-25	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-25	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-25	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-25	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-25	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-25	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-25	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-25	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-25	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-25	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-25	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-25	3/11/2015	Naphthalene	17	10	3.6	30	ug/L
MKTF-25	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-25	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-25	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-25	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-25	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-25	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-25	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-25	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-25	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-25	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-25	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-25	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-25	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-25	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-25	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-25	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-25	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-25	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-25	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-25	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-25	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-25	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-25	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-25	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-25	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-25	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-25	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-25	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-25	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-25	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-25	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-25	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-25	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-25	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-25	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-25	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-25	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-25	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-25	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-25	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-25	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-25	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-25	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-25	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-25	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-25	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-25	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-25	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-25	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-25	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-25	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-25	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-25	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-25	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-25	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-25	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-25	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-25	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-25	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-25	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-25	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-25	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-25	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-25	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-25	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-25	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-25	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-25	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-25	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-25	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-25	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-25	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-25	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-25	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-25	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-25	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-25	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-25	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-25	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-25	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-25	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-25	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-25	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-25	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-25	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-25	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-25	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-25	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-25	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-25	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-25	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-25	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-25	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-25	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-25	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-25	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-25	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-25	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-25	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-25	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-25	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-25	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-25	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-25	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-25	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-25	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-25	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-25	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-25	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-25	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-25	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-25	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-25	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-25	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-25	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-25	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	6/9/2016	1-Methylnaphthalene	3.8	10	2.9	11.38	ug/L
MKTF-25	6/9/2016	Naphthalene	3.7	10	2.6	30	ug/L
MKTF-25	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	6/9/2016	Phenol	7.9	10	2	5761	ug/L
MKTF-25	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	6/9/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-25	6/9/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-25	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-25	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-25	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	9/9/2016	Benzoic Acid	9.9	20	2.6	75000	ug/L
MKTF-25	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-25	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	9/9/2016	1-Methylnaphthalene	4.1	10	2.9	11.38	ug/L
MKTF-25	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-25	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	9/9/2016	Phenol	12	10	2	5761	ug/L
MKTF-25	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	9/9/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MKTF-25	9/9/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
MKTF-25	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-25	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	9/9/2016	Dimethylphthalate	3.1	10	2.4	612	ug/L
MKTF-25	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	11/1/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-25	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-25	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-25	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	11/1/2016	1-Methylnaphthalene	5.5	10	2.9	11.38	ug/L
MKTF-25	11/1/2016	Naphthalene	3.7	10	2.6	30	ug/L
MKTF-25	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	11/1/2016	Phenol	6.8	10	2	5761	ug/L
MKTF-25	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	11/1/2016	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-25	11/1/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-25	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-25	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	3/29/2017	Benzoic Acid	8	20	3.9	75000	ug/L
MKTF-25	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	3/29/2017	1-Methylnaphthalene	3.5	10	3.3	11.38	ug/L
MKTF-25	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	3/29/2017	Phenol	5.3	10	3.1	5761	ug/L
MKTF-25	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-25	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	6/5/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
MKTF-25	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-25	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	6/5/2017	Phenol	7.6	10	3.1	5761	ug/L
MKTF-25	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	6/5/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-25	6/5/2017	Di-n-octylphthalate	4.9	10	4.7	200	ug/L
MKTF-25	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	9/25/2017	1-Methylnaphthalene	7.5	10	3.3	11.38	ug/L
MKTF-25	9/25/2017	Naphthalene	7	10	2.9	30	ug/L
MKTF-25	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	9/25/2017	Phenol	12	10	3.1	5761	ug/L
MKTF-25	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	11/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	11/21/2017	1-Methylnaphthalene	5.9	10	3.3	11.38	ug/L
MKTF-25	11/21/2017	Naphthalene	4.5	10	2.9	30	ug/L
MKTF-25	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	11/21/2017	Phenol	4.4	10	3.1	5761	ug/L
MKTF-25	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	11/21/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-25	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-25	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-25	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-25	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-25	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	5/6/2018	Benzoic Acid	21	20	6.3	75000	ug/L
MKTF-25	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-25	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	5/6/2018	Phenol	8.9	10	6	5761	ug/L
MKTF-25	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-25	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	8/17/2018	Benzoic Acid	9.9	20	6.3	75000	ug/L
MKTF-25	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	8/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-25	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	8/17/2018	Phenol	23	10	6	5761	ug/L
MKTF-25	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-25	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-25	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-25	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	11/15/2018	Phenol	40	10	6	5761	ug/L
MKTF-25	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	11/15/2018	Bis(2-ethylhexyl)phthalate	**110**	10	8.1	55.64	ug/L
MKTF-25	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-25	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-25	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-25	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-25	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-25	5/6/2019	1-Methylnaphthalene	3.3	10	3.069076	11.38	ug/L
MKTF-25	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-25	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-25	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-25	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-25	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-25	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-25	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-25	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-25	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-25	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-25	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-25	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-25	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-25	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-25	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-25	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-25	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-25	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-25	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-25	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-25	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-25	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-25	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-25	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-25	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-25	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-25	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-25	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-25	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-25	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-25	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-25	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-25	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-25	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-25	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-25	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-25	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-25	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-25	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-25	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-25	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-25	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-25	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-25	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-25	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-25	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-25	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-25	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-25	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-25	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-25	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-25	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-25	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-25	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-25	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-25	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-25	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-25	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-25	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-25	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-25	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-25	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-25	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-25	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-25	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-25	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-25	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-25	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-25	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-25	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-25	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-25	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-25	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-25	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-25	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-25	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-25	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-25	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-25	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-25	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-25	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-25	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-25	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-25	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-25	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-25	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-25	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-25	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-25	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-25	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-25	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-25	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-25	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-25	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-25	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-25	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-25	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-25	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-25	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-25	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-25	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-25	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-25	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-25	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-25	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-25	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-25	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-25	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-25	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-25	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-25	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-25	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-25	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-25	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-25	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-25	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-25	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-25	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-25	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-25	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-25	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-25	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-25	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-25	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-25	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-25	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-25	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-25	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-25	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-25	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-25	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-25	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-25	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-25	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-25	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-25	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-25	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-25	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-25	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-25	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-25	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-25	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-25	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-25	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-25	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-25	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-25	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-25	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-25	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-25	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-25	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-25	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-25	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-25	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-25	10/23/2019	1,4-Dioxane	**100**	1	1	4.59	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-25	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-25	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-25	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-25	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-25	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-25	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-25	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-25	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-25	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-25	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-25	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-25	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-25	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-25	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-25	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-25	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-25	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-25	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-25	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-25	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-25	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-25	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-25	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-25	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-25	10/23/2019	Bis(2-ethylhexyl)phthalate	1.4	0.5	0.5	55.64	ug/L
MKTF-25	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-25	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-25	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-25	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-25	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-25	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-25	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-25	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-25	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-25	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-25	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-25	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-25	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-25	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-25	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-25	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-25	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-25	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-25	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-25	10/23/2019	Phenol	21	0.5	0.5	5761	ug/L
MKTF-25	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-25	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-25	2/27/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-25	2/27/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-25	2/27/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-25	2/27/2020	1,4-Dioxane	**100**	5	1	4.59	ug/L
MKTF-25	2/27/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
MKTF-25	2/27/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-25	2/27/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-25	2/27/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-25	2/27/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-25	2/27/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-25	2/27/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-25	2/27/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-25	2/27/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-25	2/27/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-25	2/27/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-25	2/27/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-25	2/27/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-25	2/27/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-25	2/27/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-25	2/27/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-25	2/27/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-25	2/27/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-25	2/27/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-25	2/27/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-25	2/27/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-25	2/27/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-25	2/27/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-25	2/27/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-25	2/27/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-25	2/27/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-25	2/27/2020	Bis(2-ethylhexyl)phthalate	1.42	2.5	1	55.64	ug/L
MKTF-25	2/27/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-25	2/27/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-25	2/27/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-25	2/27/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-25	2/27/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-25	2/27/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-25	2/27/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-25	2/27/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-25	2/27/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-25	2/27/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-25	2/27/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-25	2/27/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-25	2/27/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-25	2/27/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-25	2/27/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-25	2/27/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-25	2/27/2020	Naphthalene	ND	2.5	0.5	30	ug/L
MKTF-25	2/27/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-25	2/27/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-25	2/27/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-25	2/27/2020	Phenol	17	2.5	0.5	5761	ug/L
MKTF-25	2/27/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-25	2/27/2020	Pyridine	ND	2.5	0.5	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	12/18/2020	1,3-Dichlorobenzene	ND	11.2	2.13	NA	ug/L
MKTF-25	12/18/2020	1,4-Dichlorobenzene	ND	11.2	2.13	75	ug/L
MKTF-25	12/18/2020	2,4,5-Trichlorophenol	ND	11.2	1.23	1166	ug/L
MKTF-25	12/18/2020	2,4,6-Trichlorophenol	ND	11.2	1.79	11.9*	ug/L
MKTF-25	12/18/2020	2,4-Dichlorophenol	ND	11.2	1.68	45.3	ug/L
MKTF-25	12/18/2020	2,4-Dimethylphenol	ND	11.2	1.46	354	ug/L
MKTF-25	12/18/2020	2,4-Dinitrophenol	ND	33.6	5.16	38.7	ug/L
MKTF-25	12/18/2020	2-Chloronaphthalene	ND	11.2	1.68	733	ug/L
MKTF-25	12/18/2020	2-Chlorophenol	ND	11.2	1.91	91	ug/L
MKTF-25	12/18/2020	2-Methylphenol	ND	11.2	1.68	NA	ug/L
MKTF-25	12/18/2020	2-Nitroaniline	ND	11.2	2.02	190	ug/L
MKTF-25	12/18/2020	2-Nitrophenol	ND	11.2	2.24	NA	ug/L
MKTF-25	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	4.48	1.25	ug/L
MKTF-25	12/18/2020	3-Nitroaniline	ND	11.2	2.47	NA	ug/L
MKTF-25	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	4.48	1.52	ug/L
MKTF-25	12/18/2020	4-Bromophenyl-phenylether	ND	11.2	1.46	NA	ug/L
MKTF-25	12/18/2020	4-Chloro-3-Methylphenol	ND	11.2	1.57	NA	ug/L
MKTF-25	12/18/2020	4-Chloroaniline	*ND*	*11.2*	2.02	0.37	ug/L
MKTF-25	12/18/2020	4-Chlorophenyl-phenylether	ND	11.2	1.46	NA	ug/L
MKTF-25	12/18/2020	4-Nitroaniline	*ND*	*11.2*	4.6	3.8	ug/L
MKTF-25	12/18/2020	4-Nitrophenol	ND	11.2	3.7	NA	ug/L
MKTF-25	12/18/2020	Acenaphthene	ND	11.2	1.46	535	ug/L
MKTF-25	12/18/2020	Acenaphthylene	ND	11.2	1.57	NA	ug/L
MKTF-25	12/18/2020	Aniline	ND	11.2	3.92	13	ug/L
MKTF-25	12/18/2020	Anthracene	ND	11.2	1.46	1721	ug/L
MKTF-25	12/18/2020	Benzo(a)anthracene	*ND*	*11.2*	2.02	0.12	ug/L
MKTF-25	12/18/2020	Benzo(a)pyrene	*ND*	*11.2*	1.91	0.2	ug/L
MKTF-25	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.2*	1.91	0.34	ug/L
MKTF-25	12/18/2020	Benzo(g,h,i)perylene	ND	11.2	3.48	NA	ug/L
MKTF-25	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.2*	1.91	3.43	ug/L
MKTF-25	12/18/2020	Benzoic Acid	ND	33.6	6.39	75000	ug/L
MKTF-25	12/18/2020	Benzyl Alcohol	ND	11.2	2.47	2000	ug/L
MKTF-25	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.2	1.57	59	ug/L
MKTF-25	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	1.35	0.137	ug/L
MKTF-25	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	3.03	55.64	ug/L
MKTF-25	12/18/2020	Butylbenzylphthalate	ND	11.2	2.58	16	ug/L
MKTF-25	12/18/2020	Carbazole	ND	11.2	2.13	NA	ug/L
MKTF-25	12/18/2020	Chrysene	ND	11.2	2.02	34.3	ug/L
MKTF-25	12/18/2020	Di-n-butylphthalate	ND	11.2	1.91	885	ug/L
MKTF-25	12/18/2020	Di-n-octylphthalate	ND	11.2	1.79	200	ug/L
MKTF-25	12/18/2020	Dibenzo(a,h)anthracene	ND	11.2	3.03	NA	ug/L
MKTF-25	12/18/2020	Dibenzofuran	ND	11.2	1.68	NA	ug/L
MKTF-25	12/18/2020	Diethylphthalate	ND	11.2	1.23	14801	ug/L
MKTF-25	12/18/2020	Dimethylphthalate	ND	11.2	1.35	612	ug/L
MKTF-25	12/18/2020	Fluoranthene	ND	11.2	1.46	802	ug/L
MKTF-25	12/18/2020	Fluorene	ND	11.2	1.46	288	ug/L
MKTF-25	12/18/2020	Hexachlorobenzene	*ND*	*11.2*	1.35	0.0976	ug/L
MKTF-25	12/18/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.13	0.41	ug/L
MKTF-25	12/18/2020	Hexachloroethane	*ND*	*11.2*	2.69	3.28	ug/L
MKTF-25	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	3.25	0.343	ug/L
MKTF-25	12/18/2020	Isophorone	ND	11.2	1.91	781	ug/L
MKTF-25	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	2.24	0.011	ug/L
MKTF-25	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.2*	2.47	0.0049	ug/L
MKTF-25	12/18/2020	N-Nitrosodiphenylamine	ND	11.2	1.23	122	ug/L
MKTF-25	12/18/2020	Naphthalene	ND	11.2	1.91	30	ug/L
MKTF-25	12/18/2020	Nitrobenzene	*ND*	*11.2*	1.79	1.4	ug/L
MKTF-25	12/18/2020	Pentachlorophenol	*ND*	*22.4*	4.15	1	ug/L
MKTF-25	12/18/2020	Phenanthrene	ND	11.2	1.57	170	ug/L
MKTF-25	12/18/2020	Phenol	21.4	11.2	1.46	5761	ug/L
MKTF-25	12/18/2020	Pyrene	ND	11.2	1.68	117	ug/L
MKTF-25	12/18/2020	Pyridine	ND	11.2	4.93	20	ug/L
MKTF-25	12/18/2020	1,2,4-Trichlorobenzene	ND	11.2	2.02	70	ug/L
MKTF-25	12/18/2020	1,2-Dichlorobenzene	ND	11.2	2.02	600	ug/L
MKTF-25	12/18/2020	2,4-Dinitrotoluene	ND	11.2	1.57	45.3	ug/L
MKTF-25	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.2*	1.46	0.485	ug/L
MKTF-25	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	1.91	9.81	ug/L
MKTF-25	12/18/2020	Azobenzene	*ND*	*11.2*	1.46	0.12	ug/L
MKTF-27	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-27	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-27	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-27	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-27	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-27	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-27	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-27	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	11/14/2014	Isophorone	ND	10	3.1	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-27	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-27	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-27	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-27	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-27	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-27	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-27	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-27	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-27	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-27	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-27	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-27	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-27	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-27	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-27	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-27	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-27	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-27	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-27	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-27	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-27	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-27	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-27	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-27	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-27	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-27	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-27	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-27	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-27	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-27	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-27	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-27	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-27	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-27	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-27	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-27	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-27	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-27	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-27	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-27	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-27	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-27	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-27	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-27	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-27	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-27	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-27	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-27	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-27	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-27	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-27	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-27	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-27	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-27	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-27	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-27	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-27	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-27	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-27	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-27	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-27	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-27	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-27	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-27	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-27	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-27	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-27	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-27	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-27	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	8/20/2015	Fluorene	ND	10	1.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-27	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-27	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	2/22/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-27	2/22/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-27	2/22/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-27	2/22/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-27	2/22/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-27	2/22/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-27	2/22/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-27	2/22/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-27	2/22/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-27	2/22/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-27	2/22/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-27	2/22/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-27	2/22/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-27	2/22/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-27	2/22/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-27	2/22/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-27	2/22/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-27	2/22/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-27	2/22/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-27	2/22/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-27	2/22/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-27	2/22/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-27	2/22/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-27	2/22/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-27	2/22/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-27	2/22/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-27	2/22/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-27	2/22/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-27	2/22/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-27	2/22/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-27	2/22/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-27	2/22/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-27	2/22/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-27	2/22/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-27	2/22/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-27	2/22/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-27	2/22/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-27	2/22/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-27	2/22/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-27	2/22/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-27	2/22/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-27	2/22/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-27	2/22/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-27	2/22/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-27	2/22/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-27	2/22/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-27	2/22/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-27	2/22/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-27	2/22/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	2/22/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-27	2/22/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-27	2/22/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-27	2/22/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-27	2/22/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-27	2/22/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-27	2/22/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-27	2/22/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-27	2/22/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-27	2/22/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-27	2/22/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-27	2/22/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-27	2/22/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-27	2/22/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-27	2/22/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-27	2/22/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-27	2/22/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-27	2/22/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-27	2/22/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-27	2/22/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-27	2/22/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-27	2/22/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-27	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-27	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-27	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	6/8/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-27	6/8/2016	Di-n-octylphthalate	5.3	10	2	200	ug/L
MKTF-27	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-27	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-27	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	9/7/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MKTF-27	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-27	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-27	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	9/7/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-27	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-27	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	9/7/2016	Dimethylphthalate	6.4	10	2.4	612	ug/L
MKTF-27	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	10/28/2016	Benzoic Acid	8.4	20	2.6	75000	ug/L
MKTF-27	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-27	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-27	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	10/28/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-27	10/28/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-27	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-27	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-27	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	3/29/2017	Benzoic Acid	6.4	20	3.9	75000	ug/L
MKTF-27	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	3/29/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L
MKTF-27	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	6/5/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-27	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	6/5/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
MKTF-27	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	10/3/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-27	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	11/20/2017	Benzoic Acid	10	20	3.9	75000	ug/L
MKTF-27	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-27	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-27	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-27	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-27	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-27	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-27	8/20/2018	Benzoic Acid	8	20	6.3	75000	ug/L
MKTF-27	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-27	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-27	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-27	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-27	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-27	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-27	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-27	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-27	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-27	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-27	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-27	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-27	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-27	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-27	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-27	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-27	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-27	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-27	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-27	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-27	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-27	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-27	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-27	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-27	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-27	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-27	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-27	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-27	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-27	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-27	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-27	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-27	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-27	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-27	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-27	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-27	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-27	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-27	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-27	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-27	3/28/2019	Benzoic Acid	7.6	20	6.311561	75000	ug/L
MKTF-27	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-27	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-27	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-27	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-27	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-27	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-27	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-27	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-27	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-27	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-27	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-27	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-27	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-27	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-27	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-27	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-27	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-27	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-27	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-27	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-27	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-27	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-27	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-27	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-27	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-27	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-27	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-27	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-27	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-27	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-27	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-27	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-27	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-27	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-27	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-27	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-27	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-27	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-27	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-27	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-27	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-27	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-27	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-27	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-27	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-27	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-27	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-27	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-27	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-27	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-27	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-27	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-27	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-27	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-27	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-27	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-27	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-27	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-27	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-27	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-27	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-27	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-27	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-27	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-27	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-27	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-27	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-27	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-27	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-27	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-27	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-27	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-27	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-27	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-27	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-27	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-27	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-27	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-27	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-27	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-27	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-27	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-27	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-27	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-27	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-27	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-27	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-27	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-27	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-27	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-27	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-27	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-27	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-27	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-27	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-27	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-27	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-27	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-27	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-27	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-27	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-27	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-27	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-27	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-27	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-27	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-27	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-27	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-27	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-27	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-27	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-27	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-27	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-27	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-27	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-27	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-27	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-27	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-27	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-27	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-27	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-27	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-27	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-27	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-27	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-27	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-27	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-27	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-27	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-27	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-27	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-27	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-27	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-27	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-27	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-27	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-27	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-27	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-27	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-27	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-27	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-27	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-27	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-27	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-27	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-27	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-27	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-27	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-27	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-27	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-27	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-27	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-27	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-27	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-27	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-27	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-27	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-27	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-27	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-27	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-27	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-27	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-27	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-27	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-27	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-27	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-27	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-27	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-27	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-27	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-27	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-27	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-27	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-27	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-27	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-27	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-27	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-27	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-27	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-27	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-27	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-27	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-27	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-27	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-27	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-27	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-27	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-27	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-27	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-27	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-27	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-27	10/23/2019	1,4-Dioxane	**6.8**	1	1	4.59	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-27	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-27	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-27	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-27	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-27	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-27	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-27	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-27	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-27	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-27	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-27	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-27	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-27	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-27	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-27	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-27	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-27	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-27	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-27	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-27	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-27	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-27	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-27	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-27	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-27	10/23/2019	Bis(2-ethylhexyl)phthalate	2.4	0.5	0.5	55.64	ug/L
MKTF-27	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-27	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-27	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-27	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-27	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-27	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-27	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-27	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-27	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-27	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-27	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-27	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-27	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-27	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-27	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-27	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-27	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-27	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-27	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-27	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-27	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-27	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-27	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-27	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-27	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-27	2/25/2020	1,4-Dioxane	2.1	1	1	4.59	ug/L
MKTF-27	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-27	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-27	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-27	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-27	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-27	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-27	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-27	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-27	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-27	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-27	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-27	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-27	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-27	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-27	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-27	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-27	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-27	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-27	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-27	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-27	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-27	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-27	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-27	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-27	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-27	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-27	2/25/2020	Bis(2-ethylhexyl)phthalate	0.36	0.5	0.5	55.64	ug/L
MKTF-27	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-27	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-27	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-27	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-27	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-27	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-27	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-27	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-27	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-27	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-27	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-27	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-27	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-27	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-27	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-27	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-27	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-27	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-27	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-27	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-27	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-27	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-27	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-27	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-27	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-27	9/20/2020	1,4-Dioxane	4.1	0.51	0.1	4.59	ug/L
MKTF-27	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-27	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-27	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-27	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-27	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-27	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-27	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-27	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-27	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-27	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-27	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-27	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-27	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-27	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-27	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-27	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-27	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-27	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-27	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-27	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-27	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-27	9/20/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-27	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-27	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-27	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-27	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-27	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-27	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-27	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-27	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-27	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-27	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-27	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-27	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-27	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-27	9/20/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-27	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-27	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-27	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-27	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-27	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-27	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.25	0.14	ug/L
MKTF-27	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.1	0.41	ug/L
MKTF-27	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-27	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-27	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-27	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-27	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-27	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-27	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-27	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-27	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-27	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-27	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-27	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-27	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-27	12/18/2020	1,3-Dichlorobenzene	ND	12.3	2.34	NA	ug/L
MKTF-27	12/18/2020	1,4-Dichlorobenzene	ND	12.3	2.34	75	ug/L
MKTF-27	12/18/2020	2,4,5-Trichlorophenol	ND	12.3	1.36	1166	ug/L
MKTF-27	12/18/2020	2,4,6-Trichlorophenol	ND	12.3	1.97	11.9*	ug/L
MKTF-27	12/18/2020	2,4-Dichlorophenol	ND	12.3	1.85	45.3	ug/L
MKTF-27	12/18/2020	2,4-Dimethylphenol	ND	12.3	1.6	354	ug/L
MKTF-27	12/18/2020	2,4-Dinitrophenol	ND	37	5.67	38.7	ug/L
MKTF-27	12/18/2020	2-Chloronaphthalene	ND	12.3	1.85	733	ug/L
MKTF-27	12/18/2020	2-Chlorophenol	ND	12.3	2.1	91	ug/L
MKTF-27	12/18/2020	2-Methylphenol	ND	12.3	1.85	NA	ug/L
MKTF-27	12/18/2020	2-Nitroaniline	ND	12.3	2.22	190	ug/L
MKTF-27	12/18/2020	2-Nitrophenol	ND	12.3	2.47	NA	ug/L
MKTF-27	12/18/2020	3,3-Dichlorobenzidine	*ND*	*12.3*	4.93	1.25	ug/L
MKTF-27	12/18/2020	3-Nitroaniline	ND	12.3	2.71	NA	ug/L
MKTF-27	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.3*	4.93	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	4-Bromophenyl-phenylether	ND	12.3	1.6	NA	ug/L
MKTF-27	12/18/2020	4-Chloro-3-Methylphenol	ND	12.3	1.73	NA	ug/L
MKTF-27	12/18/2020	4-Chloroaniline	*ND*	*12.3*	2.22	0.37	ug/L
MKTF-27	12/18/2020	4-Chlorophenyl-phenylether	ND	12.3	1.6	NA	ug/L
MKTF-27	12/18/2020	4-Nitroaniline	*ND*	*12.3*	5.05	3.8	ug/L
MKTF-27	12/18/2020	4-Nitrophenol	ND	12.3	4.07	NA	ug/L
MKTF-27	12/18/2020	Acenaphthene	ND	12.3	1.6	535	ug/L
MKTF-27	12/18/2020	Acenaphthylene	ND	12.3	1.73	NA	ug/L
MKTF-27	12/18/2020	Aniline	ND	12.3	4.31	13	ug/L
MKTF-27	12/18/2020	Anthracene	ND	12.3	1.6	1721	ug/L
MKTF-27	12/18/2020	Benzo(a)anthracene	*ND*	*12.3*	2.22	0.12	ug/L
MKTF-27	12/18/2020	Benzo(a)pyrene	*ND*	*12.3*	2.1	0.2	ug/L
MKTF-27	12/18/2020	Benzo(b)fluoranthene	*ND*	*12.3*	2.1	0.34	ug/L
MKTF-27	12/18/2020	Benzo(g,h,i)perylene	ND	12.3	3.82	NA	ug/L
MKTF-27	12/18/2020	Benzo(k)fluoranthene	*ND*	*12.3*	2.1	3.43	ug/L
MKTF-27	12/18/2020	Benzoic Acid	ND	37	7.03	75000	ug/L
MKTF-27	12/18/2020	Benzyl Alcohol	ND	12.3	2.71	2000	ug/L
MKTF-27	12/18/2020	Bis(2-chloroethoxy)methane	ND	12.3	1.73	59	ug/L
MKTF-27	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*12.3*	1.48	0.137	ug/L
MKTF-27	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	12.3	3.33	55.64	ug/L
MKTF-27	12/18/2020	Butylbenzylphthalate	ND	12.3	2.84	16	ug/L
MKTF-27	12/18/2020	Carbazole	ND	12.3	2.34	NA	ug/L
MKTF-27	12/18/2020	Chrysene	ND	12.3	2.22	34.3	ug/L
MKTF-27	12/18/2020	Di-n-butylphthalate	ND	12.3	2.1	885	ug/L
MKTF-27	12/18/2020	Di-n-octylphthalate	ND	12.3	1.97	200	ug/L
MKTF-27	12/18/2020	Dibenzo(a,h)anthracene	ND	12.3	3.33	NA	ug/L
MKTF-27	12/18/2020	Dibenzofuran	ND	12.3	1.85	NA	ug/L
MKTF-27	12/18/2020	Diethylphthalate	ND	12.3	1.36	14801	ug/L
MKTF-27	12/18/2020	Dimethylphthalate	ND	12.3	1.48	612	ug/L
MKTF-27	12/18/2020	Fluoranthene	ND	12.3	1.6	802	ug/L
MKTF-27	12/18/2020	Fluorene	ND	12.3	1.6	288	ug/L
MKTF-27	12/18/2020	Hexachlorobenzene	*ND*	*12.3*	1.48	0.0976	ug/L
MKTF-27	12/18/2020	Hexachlorocyclopentadiene	*ND*	*24.7*	2.34	0.41	ug/L
MKTF-27	12/18/2020	Hexachloroethane	*ND*	*12.3*	2.96	3.28	ug/L
MKTF-27	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.3*	3.57	0.343	ug/L
MKTF-27	12/18/2020	Isophorone	ND	12.3	2.1	781	ug/L
MKTF-27	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*12.3*	2.47	0.011	ug/L
MKTF-27	12/18/2020	N-Nitrosodimethylamine	*ND*	*12.3*	2.71	0.0049	ug/L
MKTF-27	12/18/2020	N-Nitrosodiphenylamine	ND	12.3	1.36	122	ug/L
MKTF-27	12/18/2020	Naphthalene	ND	12.3	2.1	30	ug/L
MKTF-27	12/18/2020	Nitrobenzene	*ND*	*12.3*	1.97	1.4	ug/L
MKTF-27	12/18/2020	Pentachlorophenol	*ND*	*24.7*	4.56	1	ug/L
MKTF-27	12/18/2020	Phenanthrene	ND	12.3	1.73	170	ug/L
MKTF-27	12/18/2020	Phenol	ND	12.3	1.6	5761	ug/L
MKTF-27	12/18/2020	Pyrene	ND	12.3	1.85	117	ug/L
MKTF-27	12/18/2020	Pyridine	ND	12.3	5.42	20	ug/L
MKTF-27	12/18/2020	1,2,4-Trichlorobenzene	ND	12.3	2.22	70	ug/L
MKTF-27	12/18/2020	1,2-Dichlorobenzene	ND	12.3	2.22	600	ug/L
MKTF-27	12/18/2020	2,4-Dinitrotoluene	ND	12.3	1.73	45.3	ug/L
MKTF-27	12/18/2020	2,6-Dinitrotoluene	*ND*	*12.3*	1.6	0.485	ug/L
MKTF-27	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.3*	2.1	9.81	ug/L
MKTF-27	12/18/2020	Azobenzene	*ND*	*12.3*	1.6	0.12	ug/L
MKTF-28	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-28	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-28	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-28	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-28	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-28	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-28	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-28	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-28	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-28	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-28	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-28	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-28	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-28	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-28	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-28	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-28	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-28	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-28	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-28	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-28	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-28	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-28	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-28	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-28	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-28	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-28	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-28	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-28	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-28	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-28	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-28	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-28	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-28	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-28	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-28	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-28	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-28	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-28	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-28	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-28	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-28	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-28	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-28	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-28	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-28	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-28	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-28	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-28	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-28	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-28	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-28	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-28	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-28	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-28	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-28	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-28	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-28	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-28	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-28	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-28	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-28	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-28	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-28	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-28	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-28	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-28	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-28	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-28	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-28	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-28	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-28	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-28	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-28	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-28	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-28	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-28	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-28	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-28	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-28	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-28	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-28	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-28	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-28	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-28	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-28	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-28	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-28	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-28	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-28	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-28	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-28	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-28	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-28	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-28	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-28	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-28	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-28	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-28	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-28	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-28	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-28	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-28	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-28	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-28	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-28	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-28	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-28	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-28	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-28	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-28	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-28	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-28	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-28	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-28	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-28	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-28	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-28	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-28	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-28	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-28	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-28	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-28	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-28	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-28	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-28	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-28	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-28	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-28	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-28	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-28	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-28	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-28	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-28	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-28	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-28	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-28	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-28	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-28	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-28	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-28	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-28	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-28	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-28	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-28	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-28	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-28	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-28	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-28	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-28	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-28	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-28	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-28	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-28	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-28	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-28	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-28	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-28	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-28	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-28	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-28	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-28	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-28	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-28	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-28	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-28	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-28	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-28	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-28	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-28	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-28	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-28	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-28	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-28	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-28	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-28	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-28	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-28	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-28	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-28	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-28	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-28	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-28	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-28	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-28	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-28	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-28	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-28	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-28	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-28	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-28	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-28	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-28	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-28	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-28	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-28	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-28	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-28	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-28	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-28	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-28	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-28	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-28	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-28	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-28	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-28	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-28	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-28	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-28	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-28	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-28	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-28	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-28	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-28	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-28	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-28	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-28	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-28	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-28	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-28	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-28	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-28	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-28	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-28	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-28	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-28	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-28	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-28	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-28	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-28	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-28	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-28	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-28	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-28	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-28	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-28	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-28	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-28	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-28	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-28	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-28	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-28	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-28	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-28	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-28	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-28	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-28	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-28	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-28	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-28	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-28	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-28	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-28	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-28	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-28	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-28	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-28	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-28	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-28	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-28	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-28	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-28	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-28	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-28	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-28	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	6/8/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
MKTF-28	6/8/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-28	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-28	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	9/8/2016	Benzoic Acid	7.3	20	2.6	75000	ug/L
MKTF-28	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-28	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	9/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-28	9/8/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-28	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	9/8/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-28	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	10/28/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-28	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-28	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-28	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	10/28/2016	Bis(2-ethylhexyl)phthalate	9	10	2.6	55.64	ug/L
MKTF-28	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-28	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-28	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	3/29/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	3/29/2017	Bis(2-ethylhexyl)phthalate	6.6	10	4.8	55.64	ug/L
MKTF-28	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	6/5/2017	Benzoic Acid	7	20	3.9	75000	ug/L
MKTF-28	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/5/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
MKTF-28	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	10/3/2017	Benzoic Acid	6.7	20	3.9	75000	ug/L
MKTF-28	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-28	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	11/20/2017	Benzoic Acid	5.2	20	3.9	75000	ug/L
MKTF-28	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	11/20/2017	Bis(2-ethylhexyl)phthalate	12	10	4.8	55.64	ug/L
MKTF-28	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-28	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-28	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-28	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-28	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	5/1/2018	Benzoic Acid	20	20	6.3	75000	ug/L
MKTF-28	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-28	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-28	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-28	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-28	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-28	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-28	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	8/20/2018	Benzoic Acid	7.9	20	6.3	75000	ug/L
MKTF-28	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-28	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-28	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-28	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-28	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-28	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-28	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-28	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-28	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-28	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-28	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-28	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-28	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-28	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-28	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-28	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-28	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-28	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-28	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-28	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-28	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-28	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-28	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-28	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-28	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-28	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-28	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-28	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-28	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-28	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-28	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-28	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-28	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-28	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-28	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-28	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-28	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-28	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-28	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-28	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-28	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-28	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-28	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-28	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-28	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-28	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-28	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-28	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-28	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-28	3/28/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
MKTF-28	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-28	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-28	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-28	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-28	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-28	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-28	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-28	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-28	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-28	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-28	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-28	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-28	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-28	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-28	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-28	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-28	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-28	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-28	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-28	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-28	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-28	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-28	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-28	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-28	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-28	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-28	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-28	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-28	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-28	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-28	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-28	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-28	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-28	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-28	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-28	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-28	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-28	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-28	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-28	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-28	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-28	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-28	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-28	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-28	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-28	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-28	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-28	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-28	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-28	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-28	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-28	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-28	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-28	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-28	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-28	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-28	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-28	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-28	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-28	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-28	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-28	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-28	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-28	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-28	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-28	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-28	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-28	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-28	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-28	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-28	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-28	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-28	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-28	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-28	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-28	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-28	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-28	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-28	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-28	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-28	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-28	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-28	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-28	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-28	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-28	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-28	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-28	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-28	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-28	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-28	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-28	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-28	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-28	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-28	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-28	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-28	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-28	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-28	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-28	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-28	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-28	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-28	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-28	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-28	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-28	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-28	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-28	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-28	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-28	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-28	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-28	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-28	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-28	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-28	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-28	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-28	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-28	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-28	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-28	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-28	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-28	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-28	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-28	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-28	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-28	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-28	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-28	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-28	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-28	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-28	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-28	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-28	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-28	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-28	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-28	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-28	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-28	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-28	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-28	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-28	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-28	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-28	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-28	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-28	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-28	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-28	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-28	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-28	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-28	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-28	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-28	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-28	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-28	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-28	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-28	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-28	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-28	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-28	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-28	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-28	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-28	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-28	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-28	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-28	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-28	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-28	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-28	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-28	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-28	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-28	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-28	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-28	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/21/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/21/2019	1,4-Dioxane	3.2	1	1	4.59	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/22/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/22/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	2/25/2020	1,4-Dioxane	0.42	1	1	4.59	ug/L
MKTF-28	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	2/25/2020	Bis(2-ethylhexyl)phthalate	0.37	0.5	0.5	55.64	ug/L
MKTF-28	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-28	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-28	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-28	9/20/2020	1,4-Dioxane	0.27	0.51	0.1	4.59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-28	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-28	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-28	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-28	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-28	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-28	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-28	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-28	9/20/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-28	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-28	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-28	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-28	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-28	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-28	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-28	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-28	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-28	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-28	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-28	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-28	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-28	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-28	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-28	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-28	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-28	9/20/2020	Benzoic Acid	ND	0.51	0.21	75000	ug/L
MKTF-28	9/20/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
MKTF-28	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-28	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-28	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-28	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-28	9/20/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
MKTF-28	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-28	9/20/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
MKTF-28	9/20/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
MKTF-28	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-28	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
MKTF-28	9/20/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
MKTF-28	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-28	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-28	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-28	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-28	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-28	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-28	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-28	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-28	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-28	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-28	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-28	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-28	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-28	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-28	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-28	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-28	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-28	9/20/2020	Pyridine	ND	0.51	0.21	20	ug/L
MKTF-28	12/18/2020	1,3-Dichlorobenzene	ND	12.1	2.3	NA	ug/L
MKTF-28	12/18/2020	1,4-Dichlorobenzene	ND	12.1	2.3	75	ug/L
MKTF-28	12/18/2020	2,4,5-Trichlorophenol	ND	12.1	1.33	1166	ug/L
MKTF-28	12/18/2020	2,4,6-Trichlorophenol	ND	12.1	1.94	11.9*	ug/L
MKTF-28	12/18/2020	2,4-Dichlorophenol	ND	12.1	1.82	45.3	ug/L
MKTF-28	12/18/2020	2,4-Dimethylphenol	ND	12.1	1.57	354	ug/L
MKTF-28	12/18/2020	2,4-Dinitrophenol	ND	36.3	5.57	38.7	ug/L
MKTF-28	12/18/2020	2-Chloronaphthalene	ND	12.1	1.82	733	ug/L
MKTF-28	12/18/2020	2-Chlorophenol	ND	12.1	2.06	91	ug/L
MKTF-28	12/18/2020	2-Methylphenol	ND	12.1	1.82	NA	ug/L
MKTF-28	12/18/2020	2-Nitroaniline	ND	12.1	2.18	190	ug/L
MKTF-28	12/18/2020	2-Nitrophenol	ND	12.1	2.42	NA	ug/L
MKTF-28	12/18/2020	3,3-Dichlorobenzidine	*ND*	*12.1*	4.84	1.25	ug/L
MKTF-28	12/18/2020	3-Nitroaniline	ND	12.1	2.66	NA	ug/L
MKTF-28	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.1*	4.84	1.52	ug/L
MKTF-28	12/18/2020	4-Bromophenyl-phenylether	ND	12.1	1.57	NA	ug/L
MKTF-28	12/18/2020	4-Chloro-3-Methylphenol	ND	12.1	1.69	NA	ug/L
MKTF-28	12/18/2020	4-Chloroaniline	*ND*	*12.1*	2.18	0.37	ug/L
MKTF-28	12/18/2020	4-Chlorophenyl-phenylether	ND	12.1	1.57	NA	ug/L
MKTF-28	12/18/2020	4-Nitroaniline	*ND*	*12.1*	4.96	3.8	ug/L
MKTF-28	12/18/2020	4-Nitrophenol	ND	12.1	3.99	NA	ug/L
MKTF-28	12/18/2020	Acenaphthene	ND	12.1	1.57	535	ug/L
MKTF-28	12/18/2020	Acenaphthylene	ND	12.1	1.69	NA	ug/L
MKTF-28	12/18/2020	Aniline	ND	12.1	4.24	13	ug/L
MKTF-28	12/18/2020	Anthracene	ND	12.1	1.57	1721	ug/L
MKTF-28	12/18/2020	Benzo(a)anthracene	*ND*	*12.1*	2.18	0.12	ug/L
MKTF-28	12/18/2020	Benzo(a)pyrene	*ND*	*12.1*	2.06	0.2	ug/L
MKTF-28	12/18/2020	Benzo(b)fluoranthene	*ND*	*12.1*	2.06	0.34	ug/L
MKTF-28	12/18/2020	Benzo(g,h,i)perylene	ND	12.1	3.75	NA	ug/L
MKTF-28	12/18/2020	Benzo(k)fluoranthene	*ND*	*12.1*	2.06	3.43	ug/L
MKTF-28	12/18/2020	Benzoic Acid	ND	36.3	6.9	75000	ug/L
MKTF-28	12/18/2020	Benzyl Alcohol	ND	12.1	2.66	2000	ug/L
MKTF-28	12/18/2020	Bis(2-chloroethoxy)methane	ND	12.1	1.69	59	ug/L
MKTF-28	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*12.1*	1.45	0.137	ug/L
MKTF-28	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	12.1	3.27	55.64	ug/L
MKTF-28	12/18/2020	Butylbenzylphthalate	ND	12.1	2.78	16	ug/L
MKTF-28	12/18/2020	Carbazole	ND	12.1	2.3	NA	ug/L
MKTF-28	12/18/2020	Chrysene	ND	12.1	2.18	34.3	ug/L
MKTF-28	12/18/2020	Di-n-butylphthalate	ND	12.1	2.06	885	ug/L
MKTF-28	12/18/2020	Di-n-octylphthalate	ND	12.1	1.94	200	ug/L
MKTF-28	12/18/2020	Dibenzo(a,h)anthracene	ND	12.1	3.27	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	Dibenzofuran	ND	12.1	1.82	NA	ug/L
MKTF-28	12/18/2020	Diethylphthalate	ND	12.1	1.33	14801	ug/L
MKTF-28	12/18/2020	Dimethylphthalate	ND	12.1	1.45	612	ug/L
MKTF-28	12/18/2020	Fluoranthene	ND	12.1	1.57	802	ug/L
MKTF-28	12/18/2020	Fluorene	ND	12.1	1.57	288	ug/L
MKTF-28	12/18/2020	Hexachlorobenzene	*ND*	*12.1*	1.45	0.0976	ug/L
MKTF-28	12/18/2020	Hexachlorocyclopentadiene	*ND*	*24.2*	2.3	0.41	ug/L
MKTF-28	12/18/2020	Hexachloroethane	*ND*	*12.1*	2.9	3.28	ug/L
MKTF-28	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.1*	3.51	0.343	ug/L
MKTF-28	12/18/2020	Isophorone	ND	12.1	2.06	781	ug/L
MKTF-28	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*12.1*	2.42	0.011	ug/L
MKTF-28	12/18/2020	N-Nitrosodimethylamine	*ND*	*12.1*	2.66	0.0049	ug/L
MKTF-28	12/18/2020	N-Nitrosodiphenylamine	ND	12.1	1.33	122	ug/L
MKTF-28	12/18/2020	Naphthalene	ND	12.1	2.06	30	ug/L
MKTF-28	12/18/2020	Nitrobenzene	*ND*	*12.1*	1.94	1.4	ug/L
MKTF-28	12/18/2020	Pentachlorophenol	*ND*	*24.2*	4.48	1	ug/L
MKTF-28	12/18/2020	Phenanthrene	ND	12.1	1.69	170	ug/L
MKTF-28	12/18/2020	Phenol	ND	12.1	1.57	5761	ug/L
MKTF-28	12/18/2020	Pyrene	ND	12.1	1.82	117	ug/L
MKTF-28	12/18/2020	Pyridine	ND	12.1	5.32	20	ug/L
MKTF-28	12/18/2020	1,2,4-Trichlorobenzene	ND	12.1	2.18	70	ug/L
MKTF-28	12/18/2020	1,2-Dichlorobenzene	ND	12.1	2.18	600	ug/L
MKTF-28	12/18/2020	2,4-Dinitrotoluene	ND	12.1	1.69	45.3	ug/L
MKTF-28	12/18/2020	2,6-Dinitrotoluene	*ND*	*12.1*	1.57	0.485	ug/L
MKTF-28	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.1*	2.06	9.81	ug/L
MKTF-28	12/18/2020	Azobenzene	*ND*	*12.1*	1.57	0.12	ug/L
MKTF-29	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-29	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-29	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-29	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-29	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-29	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-29	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-29	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-29	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-29	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-29	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-29	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-29	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-29	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-29	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-29	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-29	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-29	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-29	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-29	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-29	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-29	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-29	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-29	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-29	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-29	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-29	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-29	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-29	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-29	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-29	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-29	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-29	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-29	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-29	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-29	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-29	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-29	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-29	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-29	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-29	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-29	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-29	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-29	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-29	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-29	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-29	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-29	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-29	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-29	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-29	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-29	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-29	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-29	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-29	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-29	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-29	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-29	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-29	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-29	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-29	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-29	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-29	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-29	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-29	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-29	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-29	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-29	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-29	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-29	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-29	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-29	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-29	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-29	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-29	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-29	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-29	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-29	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-29	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-29	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-29	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-29	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-29	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-29	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-29	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-29	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-29	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-29	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-29	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-29	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-29	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-29	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-29	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-29	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-29	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-29	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-29	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-29	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-29	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-29	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-29	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-29	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-29	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-29	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-29	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-29	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-29	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-29	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-29	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-29	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-29	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-29	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-29	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-29	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-29	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-29	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-29	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-29	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-29	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-29	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-29	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-29	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-29	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-29	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-29	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-29	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-29	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-29	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-29	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-29	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-29	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-29	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-29	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-29	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-29	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-29	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-29	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-29	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-29	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-29	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-29	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-29	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-29	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-29	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-29	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-29	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-29	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-29	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-29	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-29	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-29	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-29	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-29	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-29	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-29	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-29	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-29	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-29	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-29	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-29	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-29	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-29	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-29	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-29	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-29	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-29	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-29	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-29	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-29	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-29	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-29	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-29	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-29	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-29	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-29	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-29	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-29	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-29	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-29	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-29	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-29	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-29	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-29	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-29	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-29	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-29	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-29	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-29	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-29	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-29	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-29	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-29	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-29	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-29	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-29	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-29	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-29	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-29	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-29	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-29	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-29	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-29	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-29	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-29	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-29	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-29	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-29	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-29	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-29	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-29	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-29	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-29	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-29	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-29	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-29	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-29	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-29	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-29	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-29	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-29	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-29	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-29	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-29	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-29	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-29	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-29	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-29	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-29	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-29	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-29	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-29	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-29	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-29	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-29	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-29	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-29	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-29	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-29	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-29	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-29	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-29	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-29	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-29	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-29	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-29	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-29	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-29	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-29	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-29	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-29	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-29	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-29	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-29	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-29	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-29	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-29	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-29	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-29	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-29	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-29	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-29	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-29	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-29	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-29	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	6/9/2016	Bis(2-ethylhexyl)phthalate	4.2	10	2.6	55.64	ug/L
MKTF-29	6/9/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-29	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-29	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-29	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	9/7/2016	Benzo(a)anthracene	**2.9**	10	2.6	0.12	ug/L
MKTF-29	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	9/7/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-29	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-29	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	9/7/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-29	9/7/2016	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-29	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	9/7/2016	Dimethylphthalate	6.5	10	2.4	612	ug/L
MKTF-29	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-29	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	10/28/2016	Benzoic Acid	15	20	2.6	75000	ug/L
MKTF-29	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	10/28/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-29	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	10/28/2016	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
MKTF-29	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-29	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-29	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	3/29/2017	Benzoic Acid	6.2	20	3.9	75000	ug/L
MKTF-29	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-29	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	6/5/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-29	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	6/5/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-29	6/5/2017	Di-n-octylphthalate	5.6	10	4.7	200	ug/L
MKTF-29	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	10/3/2017	Benzoic Acid	8.7	20	3.9	75000	ug/L
MKTF-29	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	11/20/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-29	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-29	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-29	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-29	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-29	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-29	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	8/20/2018	Benzoic Acid	8.4	20	6.3	75000	ug/L
MKTF-29	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-29	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-29	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-29	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-29	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-29	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-29	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-29	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-29	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-29	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-29	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-29	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-29	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-29	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-29	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-29	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-29	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-29	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-29	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-29	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-29	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-29	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-29	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-29	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-29	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-29	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-29	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-29	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-29	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-29	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-29	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-29	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-29	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-29	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-29	3/28/2019	Benzoic Acid	6.8	20	6.311561	75000	ug/L
MKTF-29	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-29	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-29	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-29	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-29	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-29	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-29	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-29	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-29	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-29	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-29	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-29	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-29	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-29	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-29	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-29	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-29	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-29	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-29	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-29	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-29	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-29	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-29	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-29	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-29	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-29	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-29	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-29	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-29	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-29	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-29	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-29	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-29	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-29	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-29	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-29	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-29	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-29	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-29	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-29	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-29	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-29	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-29	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-29	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-29	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-29	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-29	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-29	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-29	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-29	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-29	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-29	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-29	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-29	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-29	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-29	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-29	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-29	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-29	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
MKTF-29	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-29	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-29	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-29	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-29	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-29	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-29	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-29	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-29	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-29	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-29	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-29	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-29	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-29	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-29	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-29	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-29	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-29	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-29	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-29	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-29	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-29	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-29	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-29	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-29	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-29	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-29	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-29	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-29	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-29	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-29	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-29	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-29	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-29	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-29	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-29	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-29	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-29	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-29	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-29	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-29	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-29	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-29	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-29	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-29	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-29	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-29	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-29	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-29	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-29	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-29	10/22/2019	1,4-Dioxane	2.2	1	1	4.59	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-29	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-29	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-29	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-29	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-29	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-29	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-29	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-29	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-29	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-29	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-29	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-29	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-29	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-29	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-29	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-29	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-29	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-29	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-29	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-29	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-29	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-29	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-29	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-29	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-29	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-29	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-29	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-29	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-29	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-29	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-29	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-29	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-29	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-29	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-29	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-29	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-29	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-29	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-29	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-29	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-29	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-29	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-29	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-29	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-29	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-29	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-29	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-29	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-29	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-29	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-29	2/25/2020	1,4-Dioxane	3.1	1	1	4.59	ug/L
MKTF-29	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-29	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-29	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-29	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-29	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-29	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-29	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-29	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-29	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-29	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-29	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-29	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-29	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-29	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-29	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-29	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-29	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-29	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-29	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-29	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-29	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-29	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-29	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-29	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-29	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-29	2/25/2020	Bis(2-ethylhexyl)phthalate	0.54	0.5	0.5	55.64	ug/L
MKTF-29	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-29	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-29	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-29	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-29	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-29	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-29	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-29	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-29	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-29	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-29	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-29	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-29	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-29	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-29	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-29	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-29	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-29	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-29	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-29	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-29	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-29	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-29	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-29	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-29	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-29	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-29	9/20/2020	1,4-Dioxane	2.6	0.51	0.1	4.59	ug/L
MKTF-29	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-29	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-29	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-29	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-29	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-29	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-29	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-29	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-29	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-29	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-29	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-29	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-29	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-29	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-29	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-29	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-29	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-29	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-29	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-29	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-29	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-29	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-29	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-29	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-29	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-29	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-29	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-29	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-29	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-29	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-29	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-29	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-29	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-29	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-29	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-29	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-29	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-29	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-29	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-29	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-29	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-29	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-29	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-29	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-29	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-29	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-29	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-29	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-29	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-29	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-29	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-29	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-29	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-29	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-29	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-29	12/15/2020	Acenaphthene	ND	11	0.176	535	ug/L
MKTF-29	12/15/2020	Acenaphthylene	ND	11	0.187	NA	ug/L
MKTF-29	12/15/2020	Anthracene	ND	11	0.198	1721	ug/L
MKTF-29	12/15/2020	Benzo(a)anthracene	*ND*	*11*	0.198	0.12	ug/L
MKTF-29	12/15/2020	Benzo(a)pyrene	*ND*	*11*	0.132	0.2	ug/L
MKTF-29	12/15/2020	Benzo(b)fluoranthene	*ND*	*11*	0.165	0.34	ug/L
MKTF-29	12/15/2020	Benzo(g,h,i)perylene	ND	11	0.254	NA	ug/L
MKTF-29	12/15/2020	Benzo(k)fluoranthene	*ND*	*11*	0.176	3.43	ug/L
MKTF-29	12/15/2020	Bis(2-chloroethoxy)methane	ND	11	0.176	59	ug/L
MKTF-29	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11*	2.98	0.137	ug/L
MKTF-29	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11	5.51	55.64	ug/L
MKTF-29	12/15/2020	4-Bromophenyl-phenylether	ND	11	0.22	NA	ug/L
MKTF-29	12/15/2020	Butylbenzylphthalate	ND	11	0.209	16	ug/L
MKTF-29	12/15/2020	Carbazole	ND	11	0.254	NA	ug/L
MKTF-29	12/15/2020	4-Chloroaniline	*ND*	*11*	3.75	0.37	ug/L
MKTF-29	12/15/2020	4-Chloro-3-Methylphenol	ND	11	4.19	NA	ug/L
MKTF-29	12/15/2020	2-Chloronaphthalene	ND	11	0.154	733	ug/L
MKTF-29	12/15/2020	2-Chlorophenol	ND	11	2.43	91	ug/L
MKTF-29	12/15/2020	4-Chlorophenyl-phenylether	ND	11	2.2	NA	ug/L
MKTF-29	12/15/2020	1,3-Dichlorobenzene	ND	11	0.198	NA	ug/L
MKTF-29	12/15/2020	Chrysene	ND	11	0.209	34.3	ug/L
MKTF-29	12/15/2020	Dibenzo(a,h)anthracene	ND	11	0.265	NA	ug/L
MKTF-29	12/15/2020	1,4-Dichlorobenzene	ND	11	0.176	75	ug/L
MKTF-29	12/15/2020	Dibenzofuran	ND	11	0.187	NA	ug/L
MKTF-29	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11*	2.87	1.25	ug/L
MKTF-29	12/15/2020	2,4-Dichlorophenol	ND	11	3.31	45.3	ug/L
MKTF-29	12/15/2020	Diethylphthalate	ND	11	0.265	14801	ug/L
MKTF-29	12/15/2020	2,4-Dimethylphenol	ND	11	3.86	354	ug/L
MKTF-29	12/15/2020	Di-n-butylphthalate	ND	11	2.98	885	ug/L
MKTF-29	12/15/2020	2,4-Dinitrophenol	ND	33.1	3.75	38.7	ug/L
MKTF-29	12/15/2020	2,4-Dinitrotoluene	ND	11	2.09	45.3	ug/L
MKTF-29	12/15/2020	2,6-Dinitrotoluene	*ND*	*11*	2.09	0.485	ug/L
MKTF-29	12/15/2020	Fluoranthene	ND	11	0.198	802	ug/L
MKTF-29	12/15/2020	Fluorene	ND	11	0.198	288	ug/L
MKTF-29	12/15/2020	Hexachlorobenzene	*ND*	*11*	0.187	0.0976	ug/L
MKTF-29	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22*	2.87	0.41	ug/L
MKTF-29	12/15/2020	Hexachloroethane	*ND*	*11*	4.63	3.28	ug/L
MKTF-29	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11*	0.243	0.343	ug/L
MKTF-29	12/15/2020	Isophorone	ND	11	0.154	781	ug/L
MKTF-29	12/15/2020	2-Methylphenol	ND	11	1.98	NA	ug/L
MKTF-29	12/15/2020	Naphthalene	ND	11	0.187	30	ug/L
MKTF-29	12/15/2020	2-Nitroaniline	ND	11	2.43	190	ug/L
MKTF-29	12/15/2020	3-Nitroaniline	ND	11	1.98	NA	ug/L
MKTF-29	12/15/2020	4-Nitroaniline	*ND*	*11*	1.65	3.8	ug/L
MKTF-29	12/15/2020	Nitrobenzene	*ND*	*11*	0.143	1.4	ug/L
MKTF-29	12/15/2020	2-Nitrophenol	ND	11	5.73	NA	ug/L
MKTF-29	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11*	3.64	0.011	ug/L
MKTF-29	12/15/2020	N-Nitrosodiphenylamine	ND	11	0.198	122	ug/L
MKTF-29	12/15/2020	Pentachlorophenol	*ND*	*22*	1.54	1	ug/L
MKTF-29	12/15/2020	Phenanthrene	ND	11	0.198	170	ug/L
MKTF-29	12/15/2020	Phenol	ND	11	2.87	5761	ug/L
MKTF-29	12/15/2020	Pyrene	ND	11	0.231	117	ug/L
MKTF-29	12/15/2020	2,4,5-Trichlorophenol	ND	11	4.08	1166	ug/L
MKTF-29	12/15/2020	2,4,6-Trichlorophenol	ND	11	3.86	11.9*	ug/L
MKTF-29	12/15/2020	Dimethylphthalate	ND	11	0.187	612	ug/L
MKTF-29	12/15/2020	Aniline	ND	11	4.19	13	ug/L
MKTF-29	12/15/2020	Benzoic Acid	ND	33.1	8.05	75000	ug/L
MKTF-29	12/15/2020	Benzyl Alcohol	ND	11	2.2	2000	ug/L
MKTF-29	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11*	0.176	9.81	ug/L
MKTF-29	12/15/2020	N-Nitrosodimethylamine	*ND*	*11*	3.86	0.0049	ug/L
MKTF-29	12/15/2020	Pyridine	ND	11	3.53	20	ug/L
MKTF-29	12/15/2020	1,2,4-Trichlorobenzene	ND	11	0.198	70	ug/L
MKTF-29	12/15/2020	1,2-Dichlorobenzene	ND	11	0.187	600	ug/L
MKTF-29	12/15/2020	Azobenzene	*ND*	*11*	1.1	0.12	ug/L
MKTF-29	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11*	1.76	1.52	ug/L
MKTF-29	12/15/2020	Di-n-octylphthalate	ND	11	0.187	200	ug/L
MKTF-29	12/15/2020	4-Nitrophenol	ND	11	2.31	NA	ug/L
MKTF-30	4/9/2014	Benzo(a)pyrene	*ND*	*11*	3.4	0.2	ug/L
MKTF-30	4/9/2014	2,4-Dinitrophenol	ND	21	3.3	38.7	ug/L
MKTF-30	4/9/2014	Dibenzo(a,h)anthracene	ND	11	3.2	NA	ug/L
MKTF-30	4/9/2014	Benzo(a)anthracene	*ND*	*11*	3.2	0.12	ug/L
MKTF-30	4/9/2014	4-Chloro-3-Methylphenol	ND	11	3.8	NA	ug/L
MKTF-30	4/9/2014	Aniline	ND	11	2.5	13	ug/L
MKTF-30	4/9/2014	N-Nitrosodimethylamine	*ND*	*11*	2.5	0.0049	ug/L
MKTF-30	4/9/2014	Benzoic Acid	ND	21	2.3	75000	ug/L
MKTF-30	4/9/2014	Hexachloroethane	*ND*	*11*	2	3.28	ug/L
MKTF-30	4/9/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.2	0.41	ug/L
MKTF-30	4/9/2014	Isophorone	ND	11	3.3	781	ug/L
MKTF-30	4/9/2014	Acenaphthene	ND	11	3.1	535	ug/L
MKTF-30	4/9/2014	Diethylphthalate	ND	11	4.4	14801	ug/L
MKTF-30	4/9/2014	Di-n-butylphthalate	ND	11	3.8	885	ug/L
MKTF-30	4/9/2014	Phenanthrene	ND	11	2.6	170	ug/L
MKTF-30	4/9/2014	Butylbenzylphthalate	ND	11	3.3	16	ug/L
MKTF-30	4/9/2014	N-Nitrosodiphenylamine	ND	11	3	122	ug/L
MKTF-30	4/9/2014	Fluorene	ND	11	3.1	288	ug/L
MKTF-30	4/9/2014	Carbazole	ND	11	3	NA	ug/L
MKTF-30	4/9/2014	Hexachlorobutadiene	*ND*	*11*	3.2	0.14	ug/L
MKTF-30	4/9/2014	Pentachlorophenol	*ND*	*21*	2.6	1	ug/L
MKTF-30	4/9/2014	2,4,6-Trichlorophenol	ND	11	1.9	11.9*	ug/L
MKTF-30	4/9/2014	2-Nitroaniline	ND	11	3	190	ug/L
MKTF-30	4/9/2014	2-Nitrophenol	ND	11	3.3	NA	ug/L
MKTF-30	4/9/2014	1-Methylnaphthalene	ND	11	3.8	11.38	ug/L
MKTF-30	4/9/2014	Naphthalene	ND	11	2.4	30	ug/L
MKTF-30	4/9/2014	2-Methylnaphthalene	ND	11	2.8	35.1	ug/L
MKTF-30	4/9/2014	2-Chloronaphthalene	ND	11	3.2	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	4/9/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.5	1.25	ug/L
MKTF-30	4/9/2014	2-Methylphenol	ND	21	2.9	NA	ug/L
MKTF-30	4/9/2014	1,2-Dichlorobenzene	ND	11	1.8	600	ug/L
MKTF-30	4/9/2014	2-Chlorophenol	ND	11	1.9	91	ug/L
MKTF-30	4/9/2014	2,4,5-Trichlorophenol	ND	11	3.4	1166	ug/L
MKTF-30	4/9/2014	Nitrobenzene	*ND*	*11*	2.7	1.4	ug/L
MKTF-30	4/9/2014	3-Nitroaniline	ND	11	3.8	NA	ug/L
MKTF-30	4/9/2014	4-Nitroaniline	*ND*	*11*	4.3	3.8	ug/L
MKTF-30	4/9/2014	4-Nitrophenol	ND	11	4.5	NA	ug/L
MKTF-30	4/9/2014	Benzyl Alcohol	ND	11	1.9	2000	ug/L
MKTF-30	4/9/2014	4-Bromophenyl-phenylether	ND	11	3.1	NA	ug/L
MKTF-30	4/9/2014	Azobenzene	*ND*	*11*	2.7	0.12	ug/L
MKTF-30	4/9/2014	2,4-Dimethylphenol	ND	11	3.3	354	ug/L
MKTF-30	4/9/2014	1,4-Dichlorobenzene	ND	11	2.5	75	ug/L
MKTF-30	4/9/2014	4-Chloroaniline	*ND*	*11*	2.7	0.37	ug/L
MKTF-30	4/9/2014	Phenol	ND	11	1.7	5761	ug/L
MKTF-30	4/9/2014	Pyridine	ND	11	1.6	20	ug/L
MKTF-30	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*11*	1.9	0.137	ug/L
MKTF-30	4/9/2014	Bis(2-chloroethoxy)methane	ND	11	3	59	ug/L
MKTF-30	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	11	3.1	55.64	ug/L
MKTF-30	4/9/2014	Di-n-octylphthalate	ND	11	2.9	200	ug/L
MKTF-30	4/9/2014	Hexachlorobenzene	*ND*	*11*	3.3	0.0976	ug/L
MKTF-30	4/9/2014	Anthracene	ND	11	2.6	1721	ug/L
MKTF-30	4/9/2014	1,2,4-Trichlorobenzene	ND	11	2.9	70	ug/L
MKTF-30	4/9/2014	2,4-Dichlorophenol	ND	21	3.2	45.3	ug/L
MKTF-30	4/9/2014	2,4-Dinitrotoluene	ND	11	4.7	45.3	ug/L
MKTF-30	4/9/2014	Pyrene	ND	11	4.2	117	ug/L
MKTF-30	4/9/2014	Dimethylphthalate	ND	11	3.9	612	ug/L
MKTF-30	4/9/2014	Dibenzofuran	ND	11	3.9	NA	ug/L
MKTF-30	4/9/2014	Benzo(g,h,i)perylene	ND	11	3.5	NA	ug/L
MKTF-30	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.6	0.343	ug/L
MKTF-30	4/9/2014	Benzo(b)fluoranthene	*ND*	*11*	4.3	0.34	ug/L
MKTF-30	4/9/2014	Fluoranthene	ND	11	3.1	802	ug/L
MKTF-30	4/9/2014	Benzo(k)fluoranthene	*ND*	*11*	3.7	3.43	ug/L
MKTF-30	4/9/2014	Acenaphthylene	ND	11	2.6	NA	ug/L
MKTF-30	4/9/2014	Chrysene	ND	11	3	34.3	ug/L
MKTF-30	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*21*	2.5	1.52	ug/L
MKTF-30	4/9/2014	1,3-Dichlorobenzene	ND	11	1.9	NA	ug/L
MKTF-30	4/9/2014	2,6-Dinitrotoluene	*ND*	*11*	3.6	0.485	ug/L
MKTF-30	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2	0.011	ug/L
MKTF-30	4/9/2014	4-Chlorophenyl-phenylether	ND	11	3.7	NA	ug/L
MKTF-30	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.5	9.81	ug/L
MKTF-30	4/9/2014	3,4-Methylphenol	ND	11	1.9	NA	ug/L
MKTF-30	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-30	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-30	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-30	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-30	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-30	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-30	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-30	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-30	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-30	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-30	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-30	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-30	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-30	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-30	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-30	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-30	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-30	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-30	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-30	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-30	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-30	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-30	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-30	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-30	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-30	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-30	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-30	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-30	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-30	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-30	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-30	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-30	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-30	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-30	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-30	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-30	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-30	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-30	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-30	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-30	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-30	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-30	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-30	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-30	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-30	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-30	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-30	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-30	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-30	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-30	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-30	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-30	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-30	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-30	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-30	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-30	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-30	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-30	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-30	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-30	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-30	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-30	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-30	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-30	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-30	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-30	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-30	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-30	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-30	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-30	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-30	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-30	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-30	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-30	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-30	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-30	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-30	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-30	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-30	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-30	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-30	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-30	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-30	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-30	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-30	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-30	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-30	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-30	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-30	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-30	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-30	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-30	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-30	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-30	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-30	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-30	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-30	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-30	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-30	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-30	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-30	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	11/17/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-30	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-30	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-30	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-30	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-30	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-30	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-30	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-30	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-30	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-30	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-30	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-30	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-30	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-30	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-30	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-30	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-30	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-30	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-30	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-30	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-30	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-30	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-30	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-30	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-30	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-30	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-30	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-30	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-30	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-30	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-30	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-30	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-30	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-30	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-30	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-30	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-30	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-30	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-30	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-30	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-30	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-30	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-30	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-30	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-30	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-30	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-30	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-30	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-30	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-30	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-30	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-30	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-30	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-30	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-30	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-30	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-30	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-30	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-30	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-30	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-30	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-30	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-30	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-30	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-30	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-30	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-30	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-30	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-30	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-30	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-30	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-30	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-30	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-30	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-30	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-30	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-30	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-30	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-30	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-30	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-30	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-30	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-30	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-30	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-30	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-30	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-30	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-30	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-30	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-30	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-30	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-30	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-30	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-30	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-30	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-30	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-30	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-30	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-30	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-30	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-30	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-30	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-30	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-30	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-30	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-30	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-30	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-30	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-30	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-30	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-30	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-30	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-30	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-30	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-30	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-30	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-30	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-30	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-30	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-30	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-30	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-30	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-30	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-30	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-30	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-30	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-30	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-30	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-30	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-30	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-30	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-30	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-30	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-30	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-30	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-30	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-30	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-30	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-30	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-30	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-30	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-30	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-30	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-30	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-30	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-30	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-30	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-30	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-30	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-30	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-30	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-30	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-30	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-30	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-30	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-30	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-30	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-30	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-30	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-30	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-30	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-30	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	6/9/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-30	6/9/2016	Di-n-octylphthalate	5.5	10	2	200	ug/L
MKTF-30	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-30	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	9/7/2016	Benzoic Acid	7.2	20	2.6	75000	ug/L
MKTF-30	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-30	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-30	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	9/7/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-30	9/7/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	9/7/2016	Dimethylphthalate	5.9	10	2.4	612	ug/L
MKTF-30	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	10/28/2016	Benzoic Acid	8.6	20	2.6	75000	ug/L
MKTF-30	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-30	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-30	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	10/28/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-30	10/28/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-30	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-30	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	3/29/2017	Benzoic Acid	6.3	20	3.9	75000	ug/L
MKTF-30	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-30	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	6/5/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
MKTF-30	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	6/5/2017	Bis(2-ethylhexyl)phthalate	13	10	4.8	55.64	ug/L
MKTF-30	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	10/3/2017	Benzoic Acid	8.5	20	3.9	75000	ug/L
MKTF-30	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	11/20/2017	Benzoic Acid	7.9	20	3.9	75000	ug/L
MKTF-30	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-30	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-30	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-30	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	5/1/2018	Benzoic Acid	15	20	6.3	75000	ug/L
MKTF-30	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-30	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-30	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	8/20/2018	Benzoic Acid	8.3	20	6.3	75000	ug/L
MKTF-30	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-30	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-30	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-30	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-30	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-30	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-30	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-30	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-30	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-30	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-30	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-30	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-30	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-30	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-30	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-30	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-30	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-30	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-30	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-30	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-30	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-30	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-30	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-30	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-30	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-30	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-30	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-30	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-30	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-30	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-30	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-30	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-30	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-30	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-30	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-30	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-30	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-30	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-30	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-30	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-30	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-30	3/28/2019	Benzoic Acid	7.4	20	6.311561	75000	ug/L
MKTF-30	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-30	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-30	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-30	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-30	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-30	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-30	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-30	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-30	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-30	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-30	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-30	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-30	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-30	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-30	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-30	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-30	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-30	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-30	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-30	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-30	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-30	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-30	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-30	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-30	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-30	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-30	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-30	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-30	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-30	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-30	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-30	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-30	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-30	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-30	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-30	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-30	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-30	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-30	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-30	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-30	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-30	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-30	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-30	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-30	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-30	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-30	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-30	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-30	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-30	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-30	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-30	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-30	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-30	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-30	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-30	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-30	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-30	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-30	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-30	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-30	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-30	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-30	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-30	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-30	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-30	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-30	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-30	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-30	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-30	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-30	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-30	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-30	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-30	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-30	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-30	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-30	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-30	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-30	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-30	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-30	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-30	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-30	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-30	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-30	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-30	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-30	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-30	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-30	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-30	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-30	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-30	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-30	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-30	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-30	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-30	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-30	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-30	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-30	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-30	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-30	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-30	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-30	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-30	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-30	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-30	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-30	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-30	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-30	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-30	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-30	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-30	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-30	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-30	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-30	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-30	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-30	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-30	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-30	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-30	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-30	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-30	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-30	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-30	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-30	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-30	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-30	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-30	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-30	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-30	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-30	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-30	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-30	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-30	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-30	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-30	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-30	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-30	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-30	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-30	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-30	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-30	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-30	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-30	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-30	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-30	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-30	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-30	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-30	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-30	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-30	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-30	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-30	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-30	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-30	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-30	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-30	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-30	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-30	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-30	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-30	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-30	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-30	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-30	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-30	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-30	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-30	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-30	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-30	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-30	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-30	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-30	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-30	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-30	10/23/2019	1,4-Dioxane	**43**	1	1	4.59	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-30	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-30	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-30	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-30	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-30	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-30	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-30	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-30	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-30	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-30	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-30	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-30	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-30	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-30	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-30	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-30	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-30	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-30	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-30	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-30	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-30	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-30	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-30	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-30	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-30	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-30	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-30	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-30	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-30	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-30	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-30	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-30	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-30	10/23/2019	1,4-Dioxane	**39**	1	1	4.59	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-30	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-30	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-30	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-30	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-30	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-30	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-30	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-30	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-30	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-30	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-30	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-30	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-30	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-30	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-30	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-30	10/23/2019	Bis(2-ethylhexyl)phthalate	6.2	0.5	0.5	55.64	ug/L
MKTF-30	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-30	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-30	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-30	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-30	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-30	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-30	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-30	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-30	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-30	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-30	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-30	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-30	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-30	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-30	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-30	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-30	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-30	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-30	2/27/2020	1,4-Dioxane	**35**	1	0.2	4.59	ug/L
MKTF-30	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-30	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-30	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-30	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-30	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-30	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-30	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-30	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-30	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-30	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-30	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-30	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-30	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-30	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-30	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-30	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-30	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-30	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-30	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-30	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-30	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-30	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-30	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-30	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-30	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-30	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-30	2/27/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-30	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-30	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-30	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-30	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-30	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-30	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-30	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-30	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-30	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-30	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-30	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-30	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-30	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-30	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-30	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-30	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-30	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-30	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-30	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-30	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-30	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-30	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-30	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-30	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-30	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-30	9/20/2020	1,4-Dioxane	**35**	0.51	0.1	4.59	ug/L
MKTF-30	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-30	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-30	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-30	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-30	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-30	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-30	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-30	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-30	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-30	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-30	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-30	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-30	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-30	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-30	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-30	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-30	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-30	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-30	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-30	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-30	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-30	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-30	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-30	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-30	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-30	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-30	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-30	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-30	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-30	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-30	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-30	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-30	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-30	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-30	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-30	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-30	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-30	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-30	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-30	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-30	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-30	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-30	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-30	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-30	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-30	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-30	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-30	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-30	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-30	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-30	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-30	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-30	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-30	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-30	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-30	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-30	12/15/2020	Acenaphthene	ND	11.2	0.18	535	ug/L
MKTF-30	12/15/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
MKTF-30	12/15/2020	Anthracene	ND	11.2	0.202	1721	ug/L
MKTF-30	12/15/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
MKTF-30	12/15/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
MKTF-30	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
MKTF-30	12/15/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
MKTF-30	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.18	3.43	ug/L
MKTF-30	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.18	59	ug/L
MKTF-30	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
MKTF-30	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.61	55.64	ug/L
MKTF-30	12/15/2020	4-Bromophenyl-phenylether	ND	11.2	0.224	NA	ug/L
MKTF-30	12/15/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
MKTF-30	12/15/2020	Carbazole	ND	11.2	0.258	NA	ug/L
MKTF-30	12/15/2020	4-Chloroaniline	*ND*	*11.2*	3.82	0.37	ug/L
MKTF-30	12/15/2020	4-Chloro-3-Methylphenol	ND	11.2	4.26	NA	ug/L
MKTF-30	12/15/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
MKTF-30	12/15/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
MKTF-30	12/15/2020	4-Chlorophenyl-phenylether	ND	11.2	2.24	NA	ug/L
MKTF-30	12/15/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
MKTF-30	12/15/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
MKTF-30	12/15/2020	Dibenzo(a,h)anthracene	ND	11.2	0.269	NA	ug/L
MKTF-30	12/15/2020	1,4-Dichlorobenzene	ND	11.2	0.18	75	ug/L
MKTF-30	12/15/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
MKTF-30	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.92	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	12/15/2020	2,4-Dichlorophenol	ND	11.2	3.37	45.3	ug/L
MKTF-30	12/15/2020	Diethylphthalate	ND	11.2	0.269	14801	ug/L
MKTF-30	12/15/2020	2,4-Dimethylphenol	ND	11.2	3.93	354	ug/L
MKTF-30	12/15/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
MKTF-30	12/15/2020	2,4-Dinitrophenol	ND	33.7	3.82	38.7	ug/L
MKTF-30	12/15/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
MKTF-30	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
MKTF-30	12/15/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
MKTF-30	12/15/2020	Fluorene	ND	11.2	0.202	288	ug/L
MKTF-30	12/15/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
MKTF-30	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.92	0.41	ug/L
MKTF-30	12/15/2020	Hexachloroethane	*ND*	*11.2*	4.71	3.28	ug/L
MKTF-30	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
MKTF-30	12/15/2020	Isophorone	ND	11.2	0.157	781	ug/L
MKTF-30	12/15/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
MKTF-30	12/15/2020	Naphthalene	ND	11.2	0.191	30	ug/L
MKTF-30	12/15/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
MKTF-30	12/15/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
MKTF-30	12/15/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
MKTF-30	12/15/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
MKTF-30	12/15/2020	2-Nitrophenol	ND	11.2	5.83	NA	ug/L
MKTF-30	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.7	0.011	ug/L
MKTF-30	12/15/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
MKTF-30	12/15/2020	Pentachlorophenol	*ND*	*22.4*	1.57	1	ug/L
MKTF-30	12/15/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
MKTF-30	12/15/2020	Phenol	ND	11.2	2.92	5761	ug/L
MKTF-30	12/15/2020	Pyrene	ND	11.2	0.236	117	ug/L
MKTF-30	12/15/2020	2,4,5-Trichlorophenol	ND	11.2	4.15	1166	ug/L
MKTF-30	12/15/2020	2,4,6-Trichlorophenol	ND	11.2	3.93	11.9*	ug/L
MKTF-30	12/15/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
MKTF-30	12/15/2020	Aniline	ND	11.2	4.26	13	ug/L
MKTF-30	12/15/2020	Benzoic Acid	ND	33.7	8.19	75000	ug/L
MKTF-30	12/15/2020	Benzyl Alcohol	ND	11.2	2.24	2000	ug/L
MKTF-30	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.18	9.81	ug/L
MKTF-30	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.93	0.0049	ug/L
MKTF-30	12/15/2020	Pyridine	ND	11.2	3.59	20	ug/L
MKTF-30	12/15/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
MKTF-30	12/15/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
MKTF-30	12/15/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
MKTF-30	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.8	1.52	ug/L
MKTF-30	12/15/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
MKTF-30	12/15/2020	4-Nitrophenol	ND	11.2	2.36	NA	ug/L
MKTF-31	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-31	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-31	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-31	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-31	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-31	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-31	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-31	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-31	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-31	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-31	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-31	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-31	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-31	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-31	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-31	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-31	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-31	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-31	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-31	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-31	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-31	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-31	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-31	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-31	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-31	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-31	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-31	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-31	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-31	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-31	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-31	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-31	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-31	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-31	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-31	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-31	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-31	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-31	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-31	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-31	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-31	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-31	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-31	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-31	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-31	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-31	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-31	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-31	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-31	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-31	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-31	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-31	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-31	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-31	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-31	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-31	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-31	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-31	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-31	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-31	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-31	9/23/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-31	9/23/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-31	9/23/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-31	9/23/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-31	9/23/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-31	9/23/2014	Aniline	ND	12	3	13	ug/L
MKTF-31	9/23/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-31	9/23/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-31	9/23/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-31	9/23/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-31	9/23/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-31	9/23/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-31	9/23/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-31	9/23/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-31	9/23/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-31	9/23/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-31	9/23/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-31	9/23/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-31	9/23/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-31	9/23/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-31	9/23/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L
MKTF-31	9/23/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-31	9/23/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-31	9/23/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-31	9/23/2014	1-Methylnaphthalene	*ND*	*12*	4.5	11.38	ug/L
MKTF-31	9/23/2014	Naphthalene	ND	12	2.9	30	ug/L
MKTF-31	9/23/2014	2-Methylnaphthalene	ND	12	3.3	35.1	ug/L
MKTF-31	9/23/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-31	9/23/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-31	9/23/2014	2-Methylphenol	ND	25	3.4	NA	ug/L
MKTF-31	9/23/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-31	9/23/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-31	9/23/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-31	9/23/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-31	9/23/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-31	9/23/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L
MKTF-31	9/23/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-31	9/23/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-31	9/23/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-31	9/23/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-31	9/23/2014	2,4-Dimethylphenol	ND	12	3.9	354	ug/L
MKTF-31	9/23/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-31	9/23/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-31	9/23/2014	Phenol	ND	12	2	5761	ug/L
MKTF-31	9/23/2014	Pyridine	ND	12	2	20	ug/L
MKTF-31	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-31	9/23/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-31	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-31	9/23/2014	Di-n-octylphthalate	ND	25	3.4	200	ug/L
MKTF-31	9/23/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-31	9/23/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-31	9/23/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-31	9/23/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-31	9/23/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-31	9/23/2014	Pyrene	ND	12	5	117	ug/L
MKTF-31	9/23/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-31	9/23/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-31	9/23/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-31	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-31	9/23/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-31	9/23/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-31	9/23/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-31	9/23/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-31	9/23/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-31	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-31	9/23/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-31	9/23/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-31	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-31	9/23/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-31	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-31	9/23/2014	3,4-Methylphenol	ND	12	2.3	NA	ug/L
MKTF-31	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-31	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-31	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-31	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-31	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-31	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-31	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-31	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-31	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-31	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-31	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-31	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-31	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-31	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-31	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-31	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-31	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-31	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-31	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-31	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-31	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-31	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-31	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-31	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-31	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-31	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-31	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-31	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-31	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-31	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-31	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-31	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-31	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-31	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-31	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-31	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-31	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-31	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-31	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-31	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	11/17/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-31	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-31	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-31	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-31	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-31	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-31	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-31	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-31	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-31	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-31	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-31	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-31	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-31	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-31	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-31	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-31	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-31	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-31	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-31	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-31	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-31	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-31	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-31	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-31	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-31	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-31	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-31	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-31	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-31	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-31	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-31	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-31	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-31	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-31	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-31	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-31	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-31	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-31	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-31	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-31	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-31	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-31	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-31	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-31	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-31	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-31	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-31	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-31	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-31	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-31	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-31	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-31	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-31	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-31	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-31	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-31	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-31	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-31	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-31	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-31	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-31	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-31	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-31	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-31	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-31	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-31	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-31	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-31	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-31	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-31	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-31	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-31	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-31	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-31	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-31	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-31	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-31	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-31	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-31	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-31	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-31	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-31	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-31	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-31	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-31	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-31	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-31	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-31	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-31	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-31	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-31	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-31	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-31	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-31	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-31	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-31	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-31	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-31	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-31	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-31	2/23/2016	Isophorone	ND	10	8.1	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-31	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-31	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-31	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-31	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-31	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-31	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-31	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-31	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-31	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-31	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-31	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-31	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-31	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-31	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-31	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-31	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-31	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-31	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-31	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-31	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-31	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-31	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-31	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-31	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-31	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-31	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-31	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-31	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-31	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-31	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-31	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-31	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-31	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-31	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-31	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-31	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-31	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-31	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-31	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-31	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-31	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-31	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-31	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-31	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-31	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-31	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-31	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-31	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-31	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-31	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-31	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-31	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-31	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-31	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-31	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-31	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-31	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-31	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-31	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-31	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	6/9/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-31	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-31	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	9/8/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
MKTF-31	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	9/8/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-31	9/8/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-31	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	9/8/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-31	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	10/31/2016	Benzoic Acid	9.3	20	2.6	75000	ug/L
MKTF-31	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	10/31/2016	Butylbenzylphthalate	2.9	10	2.5	16	ug/L
MKTF-31	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	10/31/2016	Fluorene	ND	10	2.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	10/31/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-31	10/31/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-31	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-31	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	3/7/2017	Benzoic Acid	6.8	20	2.6	75000	ug/L
MKTF-31	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-31	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	3/7/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-31	3/7/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-31	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	6/5/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
MKTF-31	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	6/5/2017	Bis(2-ethylhexyl)phthalate	7.5	10	4.8	55.64	ug/L
MKTF-31	6/5/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-31	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-31	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	9/25/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-31	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	11/21/2017	Benzoic Acid	6.2	20	3.9	75000	ug/L
MKTF-31	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	11/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	11/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	11/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-31	11/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-31	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-31	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-31	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-31	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-31	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-31	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-31	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-31	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-31	5/6/2018	Benzoic Acid	12	20	6.3	75000	ug/L
MKTF-31	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-31	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-31	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-31	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-31	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-31	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-31	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-31	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-31	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-31	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-31	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-31	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-31	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-31	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-31	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-31	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-31	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-31	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-31	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-31	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-31	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-31	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-31	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-31	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-31	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-31	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-31	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-31	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-31	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-31	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-31	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-31	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-31	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-31	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-31	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-31	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-31	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-31	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-31	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-31	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-31	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-31	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-31	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-31	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-31	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-31	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-31	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-31	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-31	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-31	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-31	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-31	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-31	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-31	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-31	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-31	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-31	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-31	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-31	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-31	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-31	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-31	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-31	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-31	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-31	8/17/2018	Benzoic Acid	6.5	20	6.3	75000	ug/L
MKTF-31	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-31	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-31	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-31	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-31	8/17/2018	Diethylphthalate	6.8	10	6.3	14801	ug/L
MKTF-31	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-31	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-31	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-31	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-31	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-31	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-31	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-31	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-31	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-31	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-31	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-31	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-31	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-31	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-31	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-31	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-31	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-31	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-31	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-31	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-31	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-31	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-31	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-31	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-31	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-31	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-31	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-31	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-31	8/17/2018	Phenol	ND	10	6	5761	ug/L
MKTF-31	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-31	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-31	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-31	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-31	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-31	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-31	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-31	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-31	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-31	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-31	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-31	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-31	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-31	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-31	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-31	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-31	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-31	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-31	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-31	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-31	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-31	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-31	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-31	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-31	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-31	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Benzo(a)pyrene	*ND*	*1000*	600	0.2	ug/L
MKTF-31	11/15/2018	2,4-Dinitrophenol	*ND*	*2000*	370	38.7	ug/L
MKTF-31	11/15/2018	Dibenzo(a,h)anthracene	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Benzo(a)anthracene	*ND*	*1000*	530	0.12	ug/L
MKTF-31	11/15/2018	4-Chloro-3-Methylphenol	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Aniline	*ND*	*1000*	620	13	ug/L
MKTF-31	11/15/2018	N-Nitrosodimethylamine	*ND*	*1000*	690	0.0049	ug/L
MKTF-31	11/15/2018	Benzoic Acid	ND	2000	630	75000	ug/L
MKTF-31	11/15/2018	Hexachloroethane	*ND*	*1000*	600	3.28	ug/L
MKTF-31	11/15/2018	Hexachlorocyclopentadiene	*ND*	*1000*	390	0.41	ug/L
MKTF-31	11/15/2018	Isophorone	*ND*	*1000*	620	781	ug/L
MKTF-31	11/15/2018	Acenaphthene	*ND*	*1000*	580	535	ug/L
MKTF-31	11/15/2018	Diethylphthalate	ND	1000	630	14801	ug/L
MKTF-31	11/15/2018	Di-n-butylphthalate	*ND*	*1000*	680	885	ug/L
MKTF-31	11/15/2018	Phenanthrene	*ND*	*1000*	600	170	ug/L
MKTF-31	11/15/2018	Butylbenzylphthalate	*ND*	*1000*	630	16	ug/L
MKTF-31	11/15/2018	N-Nitrosodiphenylamine	*ND*	*1000*	670	122	ug/L
MKTF-31	11/15/2018	Fluorene	*ND*	*1000*	630	288	ug/L
MKTF-31	11/15/2018	Carbazole	ND	1000	630	NA	ug/L
MKTF-31	11/15/2018	Hexachlorobutadiene	*ND*	*1000*	640	0.14	ug/L
MKTF-31	11/15/2018	Pentachlorophenol	*ND*	*2000*	530	1	ug/L
MKTF-31	11/15/2018	2,4,6-Trichlorophenol	ND	1000	640	11.9*	ug/L
MKTF-31	11/15/2018	2-Nitroaniline	*ND*	*1000*	590	190	ug/L
MKTF-31	11/15/2018	2-Nitrophenol	ND	1000	600	NA	ug/L
MKTF-31	11/15/2018	1-Methylnaphthalene	*ND*	*1000*	700	11.38	ug/L
MKTF-31	11/15/2018	Naphthalene	*ND*	*1000*	500	30	ug/L
MKTF-31	11/15/2018	2-Methylnaphthalene	*ND*	*1000*	630	35.1	ug/L
MKTF-31	11/15/2018	2-Chloronaphthalene	*ND*	*1000*	610	733	ug/L
MKTF-31	11/15/2018	3,3-Dichlorobenzidine	*ND*	*1000*	680	1.25	ug/L
MKTF-31	11/15/2018	2-Methylphenol	ND	1000	630	NA	ug/L
MKTF-31	11/15/2018	1,2-Dichlorobenzene	*ND*	*1000*	600	600	ug/L
MKTF-31	11/15/2018	2-Chlorophenol	*ND*	*1000*	580	91	ug/L
MKTF-31	11/15/2018	2,4,5-Trichlorophenol	ND	1000	580	1166	ug/L
MKTF-31	11/15/2018	Nitrobenzene	*ND*	*1000*	600	1.4	ug/L
MKTF-31	11/15/2018	3-Nitroaniline	ND	1000	680	NA	ug/L
MKTF-31	11/15/2018	4-Nitroaniline	*ND*	*1000*	600	3.8	ug/L
MKTF-31	11/15/2018	4-Nitrophenol	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Benzyl Alcohol	ND	1000	630	2000	ug/L
MKTF-31	11/15/2018	4-Bromophenyl-phenylether	ND	1000	690	NA	ug/L
MKTF-31	11/15/2018	Azobenzene	*ND*	*1000*	670	0.12	ug/L
MKTF-31	11/15/2018	2,4-Dimethylphenol	*ND*	*1000*	590	354	ug/L
MKTF-31	11/15/2018	1,4-Dichlorobenzene	*ND*	*1000*	580	75	ug/L
MKTF-31	11/15/2018	4-Chloroaniline	*ND*	*1000*	600	0.37	ug/L
MKTF-31	11/15/2018	Phenol	ND	1000	600	5761	ug/L
MKTF-31	11/15/2018	Pyridine	*ND*	*1000*	540	20	ug/L
MKTF-31	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*1000*	630	0.137	ug/L
MKTF-31	11/15/2018	Bis(2-chloroethoxy)methane	*ND*	*1000*	610	59	ug/L
MKTF-31	11/15/2018	Bis(2-ethylhexyl)phthalate	*ND*	*1000*	810	55.64	ug/L
MKTF-31	11/15/2018	Di-n-octylphthalate	*ND*	*1000*	630	200	ug/L
MKTF-31	11/15/2018	Hexachlorobenzene	*ND*	*1000*	620	0.0976	ug/L
MKTF-31	11/15/2018	Anthracene	ND	1000	570	1721	ug/L
MKTF-31	11/15/2018	1,2,4-Trichlorobenzene	*ND*	*1000*	640	70	ug/L
MKTF-31	11/15/2018	2,4-Dichlorophenol	*ND*	*2000*	580	45.3	ug/L
MKTF-31	11/15/2018	2,4-Dinitrotoluene	*ND*	*1000*	580	45.3	ug/L
MKTF-31	11/15/2018	Pyrene	*ND*	*1000*	650	117	ug/L
MKTF-31	11/15/2018	Dimethylphthalate	*ND*	*1000*	600	612	ug/L
MKTF-31	11/15/2018	Dibenzofuran	ND	1000	690	NA	ug/L
MKTF-31	11/15/2018	Benzo(g,h,i)perylene	ND	1000	570	NA	ug/L
MKTF-31	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*1000*	700	0.343	ug/L
MKTF-31	11/15/2018	Benzo(b)fluoranthene	*ND*	*1000*	710	0.34	ug/L
MKTF-31	11/15/2018	Fluoranthene	*ND*	*1000*	580	802	ug/L
MKTF-31	11/15/2018	Benzo(k)fluoranthene	*ND*	*1000*	640	3.43	ug/L
MKTF-31	11/15/2018	Acenaphthylene	ND	1000	620	NA	ug/L
MKTF-31	11/15/2018	Chrysene	*ND*	*1000*	680	34.3	ug/L
MKTF-31	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*2000*	540	1.52	ug/L
MKTF-31	11/15/2018	1,3-Dichlorobenzene	ND	1000	580	NA	ug/L
MKTF-31	11/15/2018	2,6-Dinitrotoluene	*ND*	*1000*	600	0.485	ug/L
MKTF-31	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*1000*	610	0.011	ug/L
MKTF-31	11/15/2018	4-Chlorophenyl-phenylether	ND	1000	720	NA	ug/L
MKTF-31	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*1000*	490	9.81	ug/L
MKTF-31	11/15/2018	3,4-Methylphenol	ND	1000	540	NA	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-31	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-31	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-31	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-31	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-31	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-31	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-31	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-31	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-31	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-31	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-31	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-31	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-31	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-31	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-31	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-31	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-31	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-31	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-31	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-31	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-31	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-31	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-31	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-31	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-31	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-31	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-31	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-31	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-31	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-31	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-31	2/20/2019	Benzoic Acid	7.1	20	6.311561	75000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-31	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-31	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-31	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-31	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-31	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-31	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-31	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-31	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-31	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-31	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-31	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-31	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-31	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-31	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-31	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-31	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-31	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-31	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-31	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-31	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-31	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-31	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-31	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-31	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-31	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-31	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-31	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-31	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-31	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-31	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-31	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-31	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-31	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-31	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-31	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-31	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-31	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-31	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-31	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-31	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-31	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-31	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-31	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-31	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-31	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-31	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-31	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-31	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-31	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-31	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-31	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-31	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-31	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-31	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-31	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-31	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-31	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-31	2/20/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
MKTF-31	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-31	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-31	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-31	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-31	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-31	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-31	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-31	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-31	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-31	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-31	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-31	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-31	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-31	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-31	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-31	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-31	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-31	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-31	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-31	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-31	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-31	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-31	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-31	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-31	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-31	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-31	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-31	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-31	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-31	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-31	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-31	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-31	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-31	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-31	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-31	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-31	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-31	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-31	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-31	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-31	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-31	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-31	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-31	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-31	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-31	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-31	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-31	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-31	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-31	10/22/2019	1,4-Dioxane	**140**	1	1	4.59	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-31	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-31	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-31	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-31	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-31	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-31	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-31	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-31	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-31	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-31	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-31	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-31	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-31	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-31	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-31	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-31	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-31	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-31	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-31	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-31	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-31	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-31	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-31	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-31	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-31	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-31	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-31	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-31	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-31	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-31	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-31	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-31	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-31	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-31	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-31	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-31	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-31	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-31	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-31	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-31	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-31	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-31	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-31	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-31	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-31	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-31	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-31	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-31	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-31	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-31	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-31	2/25/2020	1,4-Dioxane	**210**	1	1	4.59	ug/L
MKTF-31	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-31	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-31	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-31	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-31	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-31	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-31	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-31	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-31	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-31	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-31	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-31	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-31	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-31	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-31	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-31	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-31	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-31	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-31	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-31	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-31	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-31	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-31	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-31	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-31	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-31	2/25/2020	Bis(2-ethylhexyl)phthalate	0.36	0.5	0.5	55.64	ug/L
MKTF-31	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-31	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-31	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-31	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-31	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-31	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-31	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-31	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-31	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-31	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-31	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-31	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-31	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-31	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-31	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-31	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-31	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-31	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-31	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-31	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-31	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-31	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-31	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-31	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-31	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-31	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-31	9/19/2020	1,4-Dioxane	**150**	0.51	0.1	4.59	ug/L
MKTF-31	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-31	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-31	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-31	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-31	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-31	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-31	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-31	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-31	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-31	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-31	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-31	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-31	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-31	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-31	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-31	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-31	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-31	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-31	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-31	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-31	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-31	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-31	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-31	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-31	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-31	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-31	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-31	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-31	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-31	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-31	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-31	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-31	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-31	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-31	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-31	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-31	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-31	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-31	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-31	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-31	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-31	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-31	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-31	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-31	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-31	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-31	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-31	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-31	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-31	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-31	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-31	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-31	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-31	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-31	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-31	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	10.5	2	NA	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	10.5	2	75	ug/L
MKTF-31	12/18/2020	2,4,5-Trichlorophenol	ND	10.5	1.16	1166	ug/L
MKTF-31	12/18/2020	2,4,6-Trichlorophenol	ND	10.5	1.69	11.9*	ug/L
MKTF-31	12/18/2020	2,4-Dichlorophenol	ND	10.5	1.58	45.3	ug/L
MKTF-31	12/18/2020	2,4-Dimethylphenol	ND	10.5	1.37	354	ug/L
MKTF-31	12/18/2020	2,4-Dinitrophenol	ND	31.6	4.85	38.7	ug/L
MKTF-31	12/18/2020	2-Chloronaphthalene	ND	10.5	1.58	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	2-Chlorophenol	ND	10.5	1.79	91	ug/L
MKTF-31	12/18/2020	2-Methylphenol	ND	10.5	1.58	NA	ug/L
MKTF-31	12/18/2020	2-Nitroaniline	ND	10.5	1.9	190	ug/L
MKTF-31	12/18/2020	2-Nitrophenol	ND	10.5	2.11	NA	ug/L
MKTF-31	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	4.22	1.25	ug/L
MKTF-31	12/18/2020	3-Nitroaniline	ND	10.5	2.32	NA	ug/L
MKTF-31	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	4.22	1.52	ug/L
MKTF-31	12/18/2020	4-Bromophenyl-phenylether	ND	10.5	1.37	NA	ug/L
MKTF-31	12/18/2020	4-Chloro-3-Methylphenol	ND	10.5	1.48	NA	ug/L
MKTF-31	12/18/2020	4-Chloroaniline	*ND*	*10.5*	1.9	0.37	ug/L
MKTF-31	12/18/2020	4-Chlorophenyl-phenylether	ND	10.5	1.37	NA	ug/L
MKTF-31	12/18/2020	4-Nitroaniline	*ND*	*10.5*	4.32	3.8	ug/L
MKTF-31	12/18/2020	4-Nitrophenol	ND	10.5	3.48	NA	ug/L
MKTF-31	12/18/2020	Acenaphthene	ND	10.5	1.37	535	ug/L
MKTF-31	12/18/2020	Acenaphthylene	ND	10.5	1.48	NA	ug/L
MKTF-31	12/18/2020	Aniline	ND	10.5	3.69	13	ug/L
MKTF-31	12/18/2020	Anthracene	ND	10.5	1.37	1721	ug/L
MKTF-31	12/18/2020	Benzo(a)anthracene	*ND*	*10.5*	1.9	0.12	ug/L
MKTF-31	12/18/2020	Benzo(a)pyrene	*ND*	*10.5*	1.79	0.2	ug/L
MKTF-31	12/18/2020	Benzo(b)fluoranthene	*ND*	*10.5*	1.79	0.34	ug/L
MKTF-31	12/18/2020	Benzo(g,h,i)perylene	ND	10.5	3.27	NA	ug/L
MKTF-31	12/18/2020	Benzo(k)fluoranthene	*ND*	*10.5*	1.79	3.43	ug/L
MKTF-31	12/18/2020	Benzoic Acid	ND	31.6	6.01	75000	ug/L
MKTF-31	12/18/2020	Benzyl Alcohol	ND	10.5	2.32	2000	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethoxy)methane	ND	10.5	1.48	59	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	1.27	0.137	ug/L
MKTF-31	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	2.85	55.64	ug/L
MKTF-31	12/18/2020	Butylbenzylphthalate	ND	10.5	2.43	16	ug/L
MKTF-31	12/18/2020	Carbazole	ND	10.5	2	NA	ug/L
MKTF-31	12/18/2020	Chrysene	ND	10.5	1.9	34.3	ug/L
MKTF-31	12/18/2020	Di-n-butylphthalate	ND	10.5	1.79	885	ug/L
MKTF-31	12/18/2020	Di-n-octylphthalate	ND	10.5	1.69	200	ug/L
MKTF-31	12/18/2020	Dibenzo(a,h)anthracene	ND	10.5	2.85	NA	ug/L
MKTF-31	12/18/2020	Dibenzofuran	ND	10.5	1.58	NA	ug/L
MKTF-31	12/18/2020	Diethylphthalate	ND	10.5	1.16	14801	ug/L
MKTF-31	12/18/2020	Dimethylphthalate	ND	10.5	1.27	612	ug/L
MKTF-31	12/18/2020	Fluoranthene	ND	10.5	1.37	802	ug/L
MKTF-31	12/18/2020	Fluorene	ND	10.5	1.37	288	ug/L
MKTF-31	12/18/2020	Hexachlorobenzene	*ND*	*10.5*	1.27	0.0976	ug/L
MKTF-31	12/18/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2	0.41	ug/L
MKTF-31	12/18/2020	Hexachloroethane	*ND*	*10.5*	2.53	3.28	ug/L
MKTF-31	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	3.06	0.343	ug/L
MKTF-31	12/18/2020	Isophorone	ND	10.5	1.79	781	ug/L
MKTF-31	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	2.11	0.011	ug/L
MKTF-31	12/18/2020	N-Nitrosodimethylamine	*ND*	*10.5*	2.32	0.0049	ug/L
MKTF-31	12/18/2020	N-Nitrosodiphenylamine	ND	10.5	1.16	122	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	10.5	1.79	30	ug/L
MKTF-31	12/18/2020	Nitrobenzene	*ND*	*10.5*	1.69	1.4	ug/L
MKTF-31	12/18/2020	Pentachlorophenol	*ND*	*21.1*	3.9	1	ug/L
MKTF-31	12/18/2020	Phenanthrene	ND	10.5	1.48	170	ug/L
MKTF-31	12/18/2020	Phenol	ND	10.5	1.37	5761	ug/L
MKTF-31	12/18/2020	Pyrene	ND	10.5	1.58	117	ug/L
MKTF-31	12/18/2020	Pyridine	ND	10.5	4.64	20	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	10.5	1.9	70	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	10.5	1.9	600	ug/L
MKTF-31	12/18/2020	2,4-Dinitrotoluene	ND	10.5	1.48	45.3	ug/L
MKTF-31	12/18/2020	2,6-Dinitrotoluene	*ND*	*10.5*	1.37	0.485	ug/L
MKTF-31	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	1.79	9.81	ug/L
MKTF-31	12/18/2020	Azobenzene	*ND*	*10.5*	1.37	0.12	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	11.6	2.2	NA	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	11.6	2.2	75	ug/L
MKTF-31	12/18/2020	2,4,5-Trichlorophenol	ND	11.6	1.27	1166	ug/L
MKTF-31	12/18/2020	2,4,6-Trichlorophenol	ND	11.6	1.85	11.9*	ug/L
MKTF-31	12/18/2020	2,4-Dichlorophenol	ND	11.6	1.74	45.3	ug/L
MKTF-31	12/18/2020	2,4-Dimethylphenol	ND	11.6	1.5	354	ug/L
MKTF-31	12/18/2020	2,4-Dinitrophenol	ND	34.7	5.32	38.7	ug/L
MKTF-31	12/18/2020	2-Chloronaphthalene	ND	11.6	1.74	733	ug/L
MKTF-31	12/18/2020	2-Chlorophenol	ND	11.6	1.97	91	ug/L
MKTF-31	12/18/2020	2-Methylphenol	ND	11.6	1.74	NA	ug/L
MKTF-31	12/18/2020	2-Nitroaniline	ND	11.6	2.08	190	ug/L
MKTF-31	12/18/2020	2-Nitrophenol	ND	11.6	2.31	NA	ug/L
MKTF-31	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	4.63	1.25	ug/L
MKTF-31	12/18/2020	3-Nitroaniline	ND	11.6	2.55	NA	ug/L
MKTF-31	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	4.63	1.52	ug/L
MKTF-31	12/18/2020	4-Bromophenyl-phenylether	ND	11.6	1.5	NA	ug/L
MKTF-31	12/18/2020	4-Chloro-3-Methylphenol	ND	11.6	1.62	NA	ug/L
MKTF-31	12/18/2020	4-Chloroaniline	*ND*	*11.6*	2.08	0.37	ug/L
MKTF-31	12/18/2020	4-Chlorophenyl-phenylether	ND	11.6	1.5	NA	ug/L
MKTF-31	12/18/2020	4-Nitroaniline	*ND*	*11.6*	4.75	3.8	ug/L
MKTF-31	12/18/2020	4-Nitrophenol	ND	11.6	3.82	NA	ug/L
MKTF-31	12/18/2020	Acenaphthene	ND	11.6	1.5	535	ug/L
MKTF-31	12/18/2020	Acenaphthylene	ND	11.6	1.62	NA	ug/L
MKTF-31	12/18/2020	Aniline	ND	11.6	4.05	13	ug/L
MKTF-31	12/18/2020	Anthracene	ND	11.6	1.5	1721	ug/L
MKTF-31	12/18/2020	Benzo(a)anthracene	*ND*	*11.6*	2.08	0.12	ug/L
MKTF-31	12/18/2020	Benzo(a)pyrene	*ND*	*11.6*	1.97	0.2	ug/L
MKTF-31	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.6*	1.97	0.34	ug/L
MKTF-31	12/18/2020	Benzo(g,h,i)perylene	ND	11.6	3.59	NA	ug/L
MKTF-31	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.6*	1.97	3.43	ug/L
MKTF-31	12/18/2020	Benzoic Acid	ND	34.7	6.6	75000	ug/L
MKTF-31	12/18/2020	Benzyl Alcohol	ND	11.6	2.55	2000	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.6	1.62	59	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	1.39	0.137	ug/L
MKTF-31	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	3.13	55.64	ug/L
MKTF-31	12/18/2020	Butylbenzylphthalate	ND	11.6	2.66	16	ug/L
MKTF-31	12/18/2020	Carbazole	ND	11.6	2.2	NA	ug/L
MKTF-31	12/18/2020	Chrysene	ND	11.6	2.08	34.3	ug/L
MKTF-31	12/18/2020	Di-n-butylphthalate	ND	11.6	1.97	885	ug/L
MKTF-31	12/18/2020	Di-n-octylphthalate	ND	11.6	1.85	200	ug/L
MKTF-31	12/18/2020	Dibenzo(a,h)anthracene	ND	11.6	3.13	NA	ug/L
MKTF-31	12/18/2020	Dibenzofuran	ND	11.6	1.74	NA	ug/L
MKTF-31	12/18/2020	Diethylphthalate	ND	11.6	1.27	14801	ug/L
MKTF-31	12/18/2020	Dimethylphthalate	ND	11.6	1.39	612	ug/L
MKTF-31	12/18/2020	Fluoranthene	ND	11.6	1.5	802	ug/L
MKTF-31	12/18/2020	Fluorene	ND	11.6	1.5	288	ug/L
MKTF-31	12/18/2020	Hexachlorobenzene	*ND*	*11.6*	1.39	0.0976	ug/L
MKTF-31	12/18/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	2.2	0.41	ug/L
MKTF-31	12/18/2020	Hexachloroethane	*ND*	*11.6*	2.78	3.28	ug/L
MKTF-31	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	3.36	0.343	ug/L
MKTF-31	12/18/2020	Isophorone	ND	11.6	1.97	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	2.31	0.011	ug/L
MKTF-31	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.6*	2.55	0.0049	ug/L
MKTF-31	12/18/2020	N-Nitrosodiphenylamine	ND	11.6	1.27	122	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	11.6	1.97	30	ug/L
MKTF-31	12/18/2020	Nitrobenzene	*ND*	*11.6*	1.85	1.4	ug/L
MKTF-31	12/18/2020	Pentachlorophenol	*ND*	*23.1*	4.28	1	ug/L
MKTF-31	12/18/2020	Phenanthrene	ND	11.6	1.62	170	ug/L
MKTF-31	12/18/2020	Phenol	ND	11.6	1.5	5761	ug/L
MKTF-31	12/18/2020	Pyrene	ND	11.6	1.74	117	ug/L
MKTF-31	12/18/2020	Pyridine	ND	11.6	5.09	20	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	11.6	2.08	70	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	11.6	2.08	600	ug/L
MKTF-31	12/18/2020	2,4-Dinitrotoluene	ND	11.6	1.62	45.3	ug/L
MKTF-31	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.6*	1.5	0.485	ug/L
MKTF-31	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	1.97	9.81	ug/L
MKTF-31	12/18/2020	Azobenzene	*ND*	*11.6*	1.5	0.12	ug/L
MKTF-32	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-32	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-32	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-32	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-32	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-32	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-32	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-32	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-32	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-32	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	11/17/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-32	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-32	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-32	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-32	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-32	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-32	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-32	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-32	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-32	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-32	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-32	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-32	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-32	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-32	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-32	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-32	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-32	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-32	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-32	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-32	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-32	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-32	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-32	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-32	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-32	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-32	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-32	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-32	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-32	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-32	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-32	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-32	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-32	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-32	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-32	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-32	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-32	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-32	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-32	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-32	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-32	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-32	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-32	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-32	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-32	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-32	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-32	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-32	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-32	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-32	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-32	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-32	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-32	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-32	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-32	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-32	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-32	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-32	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-32	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-32	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-32	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-32	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-32	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-32	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-32	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-32	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-32	6/9/2015	Benzo(a)pyrene	*ND*	*10*	5.4	0.2	ug/L
MKTF-32	6/9/2015	2,4-Dinitrophenol	ND	20	2.1	38.7	ug/L
MKTF-32	6/9/2015	Dibenzo(a,h)anthracene	ND	10	6.5	NA	ug/L
MKTF-32	6/9/2015	Benzo(a)anthracene	*ND*	*10*	5	0.12	ug/L
MKTF-32	6/9/2015	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MKTF-32	6/9/2015	Aniline	ND	10	3.1	13	ug/L
MKTF-32	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MKTF-32	6/9/2015	Benzoic Acid	ND	20	2.1	75000	ug/L
MKTF-32	6/9/2015	Hexachloroethane	*ND*	*10*	3.2	3.28	ug/L
MKTF-32	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-32	6/9/2015	Isophorone	ND	10	3.9	781	ug/L
MKTF-32	6/9/2015	Acenaphthene	ND	10	3.8	535	ug/L
MKTF-32	6/9/2015	Diethylphthalate	ND	10	3.3	14801	ug/L
MKTF-32	6/9/2015	Di-n-butylphthalate	ND	10	4.2	885	ug/L
MKTF-32	6/9/2015	Phenanthrene	ND	10	4	170	ug/L
MKTF-32	6/9/2015	Butylbenzylphthalate	ND	10	4.7	16	ug/L
MKTF-32	6/9/2015	N-Nitrosodiphenylamine	ND	10	4.9	122	ug/L
MKTF-32	6/9/2015	Fluorene	ND	10	3.3	288	ug/L
MKTF-32	6/9/2015	Carbazole	ND	10	3	NA	ug/L
MKTF-32	6/9/2015	Hexachlorobutadiene	*ND*	*10*	3.9	0.14	ug/L
MKTF-32	6/9/2015	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	6/9/2015	2,4,6-Trichlorophenol	ND	10	2.5	11.9*	ug/L
MKTF-32	6/9/2015	2-Nitroaniline	ND	10	3.6	190	ug/L
MKTF-32	6/9/2015	2-Nitrophenol	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2015	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	6/9/2015	Naphthalene	ND	10	3.7	30	ug/L
MKTF-32	6/9/2015	2-Methylnaphthalene	ND	10	4.5	35.1	ug/L
MKTF-32	6/9/2015	2-Chloronaphthalene	ND	10	3.4	733	ug/L
MKTF-32	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	5.2	1.25	ug/L
MKTF-32	6/9/2015	2-Methylphenol	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2015	1,2-Dichlorobenzene	ND	10	3.8	600	ug/L
MKTF-32	6/9/2015	2-Chlorophenol	ND	10	2.4	91	ug/L
MKTF-32	6/9/2015	2,4,5-Trichlorophenol	ND	10	3.2	1166	ug/L
MKTF-32	6/9/2015	Nitrobenzene	*ND*	*10*	3	1.4	ug/L
MKTF-32	6/9/2015	3-Nitroaniline	ND	10	3	NA	ug/L
MKTF-32	6/9/2015	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MKTF-32	6/9/2015	4-Nitrophenol	ND	10	2.8	NA	ug/L
MKTF-32	6/9/2015	Benzyl Alcohol	ND	10	2.3	2000	ug/L
MKTF-32	6/9/2015	4-Bromophenyl-phenylether	ND	10	2.8	NA	ug/L
MKTF-32	6/9/2015	Azobenzene	*ND*	*10*	4	0.12	ug/L
MKTF-32	6/9/2015	2,4-Dimethylphenol	ND	10	3.7	354	ug/L
MKTF-32	6/9/2015	1,4-Dichlorobenzene	ND	10	2.5	75	ug/L
MKTF-32	6/9/2015	4-Chloroaniline	*ND*	*10*	3.7	0.37	ug/L
MKTF-32	6/9/2015	Phenol	ND	10	2.2	5761	ug/L
MKTF-32	6/9/2015	Pyridine	ND	10	3.3	20	ug/L
MKTF-32	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	3.5	0.137	ug/L
MKTF-32	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MKTF-32	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	6.7	55.64	ug/L
MKTF-32	6/9/2015	Di-n-octylphthalate	ND	10	3.9	200	ug/L
MKTF-32	6/9/2015	Hexachlorobenzene	*ND*	*10*	4	0.0976	ug/L
MKTF-32	6/9/2015	Anthracene	ND	10	3.2	1721	ug/L
MKTF-32	6/9/2015	1,2,4-Trichlorobenzene	ND	10	4	70	ug/L
MKTF-32	6/9/2015	2,4-Dichlorophenol	ND	20	2.8	45.3	ug/L
MKTF-32	6/9/2015	2,4-Dinitrotoluene	ND	10	2.9	45.3	ug/L
MKTF-32	6/9/2015	Pyrene	ND	10	4.6	117	ug/L
MKTF-32	6/9/2015	Dimethylphthalate	ND	10	4	612	ug/L
MKTF-32	6/9/2015	Dibenzofuran	ND	10	3.8	NA	ug/L
MKTF-32	6/9/2015	Benzo(g,h,i)perylene	ND	10	6.3	NA	ug/L
MKTF-32	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.9	0.343	ug/L
MKTF-32	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	4.8	0.34	ug/L
MKTF-32	6/9/2015	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	5	3.43	ug/L
MKTF-32	6/9/2015	Acenaphthylene	ND	10	3.7	NA	ug/L
MKTF-32	6/9/2015	Chrysene	ND	10	4.3	34.3	ug/L
MKTF-32	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.7	1.52	ug/L
MKTF-32	6/9/2015	1,3-Dichlorobenzene	ND	10	3.4	NA	ug/L
MKTF-32	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	3	0.485	ug/L
MKTF-32	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	4.1	0.011	ug/L
MKTF-32	6/9/2015	4-Chlorophenyl-phenylether	ND	10	4	NA	ug/L
MKTF-32	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.1	9.81	ug/L
MKTF-32	6/9/2015	3,4-Methylphenol	ND	10	3	NA	ug/L
MKTF-32	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-32	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-32	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-32	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-32	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-32	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-32	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-32	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-32	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-32	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-32	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-32	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-32	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-32	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-32	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-32	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-32	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-32	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-32	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-32	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-32	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-32	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-32	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-32	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-32	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-32	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-32	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-32	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-32	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-32	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-32	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-32	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-32	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-32	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-32	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-32	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-32	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-32	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-32	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-32	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-32	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-32	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-32	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-32	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-32	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-32	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-32	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-32	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-32	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-32	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-32	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-32	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-32	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-32	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-32	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-32	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-32	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-32	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-32	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-32	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-32	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-32	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-32	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-32	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-32	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-32	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-32	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-32	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-32	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-32	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-32	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-32	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-32	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-32	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-32	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-32	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-32	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-32	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-32	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-32	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-32	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-32	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-32	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-32	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-32	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-32	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-32	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-32	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-32	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-32	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-32	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-32	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-32	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-32	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-32	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-32	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-32	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-32	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-32	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-32	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-32	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-32	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-32	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-32	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-32	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-32	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-32	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-32	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-32	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-32	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-32	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-32	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-32	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-32	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-32	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-32	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-32	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-32	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-32	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-32	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-32	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-32	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-32	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-32	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-32	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-32	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-32	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-32	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-32	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-32	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-32	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-32	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-32	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-32	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-32	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-32	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-32	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-32	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-32	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-32	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-32	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-32	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-32	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-32	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-32	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-32	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-32	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-32	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-32	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-32	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-32	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-32	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-32	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-32	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-32	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-32	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-32	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-32	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-32	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-32	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-32	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-32	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-32	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-32	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-32	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-32	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-32	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-32	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-32	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-32	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-32	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-32	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-32	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-32	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-32	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-32	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-32	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-32	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-32	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-32	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-32	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-32	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-32	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-32	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-32	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-32	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-32	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-32	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-32	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-32	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-32	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-32	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-32	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-32	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-32	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-32	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	6/9/2016	Bis(2-ethylhexyl)phthalate	5.6	10	2.6	55.64	ug/L
MKTF-32	6/9/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-32	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	9/9/2016	Benzoic Acid	12	20	2.6	75000	ug/L
MKTF-32	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-32	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	9/9/2016	Bis(2-ethylhexyl)phthalate	4.6	10	2.6	55.64	ug/L
MKTF-32	9/9/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
MKTF-32	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-32	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	10/31/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
MKTF-32	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-32	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	10/31/2016	Phenol	ND	10	2	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	10/31/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-32	10/31/2016	Di-n-octylphthalate	7.6	10	2	200	ug/L
MKTF-32	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-32	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	3/7/2017	Benzoic Acid	26	20	2.6	75000	ug/L
MKTF-32	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	3/7/2017	Di-n-butylphthalate	2.5	10	2.4	885	ug/L
MKTF-32	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-32	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	3/7/2017	Bis(2-ethylhexyl)phthalate	7.7	10	2.6	55.64	ug/L
MKTF-32	3/7/2017	Di-n-octylphthalate	4	10	2	200	ug/L
MKTF-32	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	6/6/2017	Benzoic Acid	8.1	20	3.9	75000	ug/L
MKTF-32	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	6/6/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
MKTF-32	6/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-32	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	11/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	11/27/2017	Benzoic Acid	5.3	20	3.9	75000	ug/L
MKTF-32	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-32	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-32	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-32	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	5/9/2018	Benzoic Acid	28	20	6.3	75000	ug/L
MKTF-32	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-32	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	8/28/2018	Benzoic Acid	8.4	20	6.3	75000	ug/L
MKTF-32	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	8/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-32	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	8/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-32	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-32	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	11/15/2018	Naphthalene	ND	10	5	30	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-32	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-32	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-32	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-32	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-32	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-32	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-32	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-32	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-32	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-32	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-32	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-32	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-32	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-32	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-32	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-32	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-32	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-32	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-32	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-32	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-32	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-32	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-32	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-32	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-32	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-32	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-32	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-32	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-32	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-32	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-32	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-32	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-32	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-32	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-32	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-32	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-32	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-32	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-32	2/13/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
MKTF-32	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-32	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-32	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-32	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-32	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-32	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-32	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-32	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-32	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-32	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-32	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-32	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-32	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-32	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-32	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-32	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-32	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-32	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-32	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-32	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-32	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-32	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-32	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-32	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-32	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-32	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-32	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-32	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-32	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-32	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-32	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-32	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-32	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-32	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-32	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-32	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-32	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-32	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-32	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-32	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-32	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-32	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-32	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-32	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-32	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-32	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-32	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-32	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-32	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-32	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-32	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-32	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-32	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-32	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-32	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-32	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-32	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-32	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-32	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-32	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-32	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-32	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-32	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-32	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-32	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-32	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-32	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-32	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-32	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-32	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-32	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-32	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-32	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-32	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-32	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-32	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-32	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-32	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-32	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-32	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-32	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-32	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-32	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-32	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-32	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-32	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-32	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-32	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-32	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-32	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-32	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-32	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-32	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-32	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-32	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-32	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-32	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-32	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-32	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-32	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-32	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-32	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-32	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-32	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-32	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-32	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-32	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-32	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-32	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-32	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-32	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-32	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-32	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-32	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-32	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-32	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-32	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-32	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-32	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-32	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-32	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-32	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-32	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-32	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-32	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-32	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-32	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-32	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-32	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-32	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-32	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-32	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-32	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-32	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-32	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-32	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-32	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-32	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-32	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-32	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-32	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-32	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-32	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-32	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-32	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-32	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-32	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-32	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-32	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-32	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-32	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-32	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-32	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-32	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-32	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-32	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-32	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-32	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-32	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-32	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-32	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-32	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-32	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-32	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-32	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-32	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-32	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-32	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-32	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-32	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-32	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-32	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-32	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-32	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-32	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-32	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-32	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-32	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-32	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-32	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-32	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-32	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-32	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-32	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-32	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-32	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-32	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-32	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-32	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-32	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-32	10/23/2019	1,4-Dioxane	**97**	1	1	4.59	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-32	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-32	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-32	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-32	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-32	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-32	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-32	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-32	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-32	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-32	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-32	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-32	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-32	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-32	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-32	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-32	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-32	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-32	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-32	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-32	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-32	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-32	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-32	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-32	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-32	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-32	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-32	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-32	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-32	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-32	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-32	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-32	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-32	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-32	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-32	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-32	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-32	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-32	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-32	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-32	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-32	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-32	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-32	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-32	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-32	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-32	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-32	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-32	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-32	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-32	2/27/2020	1,4-Dioxane	**87**	1	0.2	4.59	ug/L
MKTF-32	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-32	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-32	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-32	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-32	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-32	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-32	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-32	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-32	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-32	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-32	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-32	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-32	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-32	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-32	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-32	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-32	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-32	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-32	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-32	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-32	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-32	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-32	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-32	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-32	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-32	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-32	2/27/2020	Bis(2-ethylhexyl)phthalate	0.32	0.5	0.2	55.64	ug/L
MKTF-32	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-32	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-32	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-32	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-32	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-32	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-32	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-32	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-32	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-32	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-32	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-32	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-32	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-32	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-32	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-32	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-32	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-32	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-32	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-32	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-32	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-32	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-32	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-32	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-32	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-32	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-32	9/21/2020	1,4-Dioxane	**68**	0.52	0.1	4.59	ug/L
MKTF-32	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
MKTF-32	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-32	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-32	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-32	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-32	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-32	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-32	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-32	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-32	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-32	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-32	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
MKTF-32	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-32	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-32	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-32	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
MKTF-32	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-32	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-32	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-32	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-32	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-32	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-32	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-32	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-32	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
MKTF-32	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
MKTF-32	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-32	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-32	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-32	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-32	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-32	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-32	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-32	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-32	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-32	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-32	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-32	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-32	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-32	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-32	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-32	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-32	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-32	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-32	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-32	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-32	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-32	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-32	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
MKTF-32	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-32	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-32	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-32	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-32	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-32	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-32	12/15/2020	Acenaphthene	ND	10.9	0.175	535	ug/L
MKTF-32	12/15/2020	Acenaphthylene	ND	10.9	0.186	NA	ug/L
MKTF-32	12/15/2020	Anthracene	ND	10.9	0.197	1721	ug/L
MKTF-32	12/15/2020	Benzo(a)anthracene	*ND*	*10.9*	0.197	0.12	ug/L
MKTF-32	12/15/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-32	12/15/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.164	0.34	ug/L
MKTF-32	12/15/2020	Benzo(g,h,i)perylene	ND	10.9	0.251	NA	ug/L
MKTF-32	12/15/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.175	3.43	ug/L
MKTF-32	12/15/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.175	59	ug/L
MKTF-32	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.95	0.137	ug/L
MKTF-32	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.46	55.64	ug/L
MKTF-32	12/15/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-32	12/15/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-32	12/15/2020	Carbazole	ND	10.9	0.251	NA	ug/L
MKTF-32	12/15/2020	4-Chloroaniline	*ND*	*10.9*	3.71	0.37	ug/L
MKTF-32	12/15/2020	4-Chloro-3-Methylphenol	ND	10.9	4.15	NA	ug/L
MKTF-32	12/15/2020	2-Chloronaphthalene	ND	10.9	0.153	733	ug/L
MKTF-32	12/15/2020	2-Chlorophenol	ND	10.9	2.4	91	ug/L
MKTF-32	12/15/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-32	12/15/2020	1,3-Dichlorobenzene	ND	10.9	0.197	NA	ug/L
MKTF-32	12/15/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-32	12/15/2020	Dibenzo(a,h)anthracene	ND	10.9	0.262	NA	ug/L
MKTF-32	12/15/2020	1,4-Dichlorobenzene	ND	10.9	0.175	75	ug/L
MKTF-32	12/15/2020	Dibenzofuran	ND	10.9	0.186	NA	ug/L
MKTF-32	12/15/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.84	1.25	ug/L
MKTF-32	12/15/2020	2,4-Dichlorophenol	ND	10.9	3.28	45.3	ug/L
MKTF-32	12/15/2020	Diethylphthalate	ND	10.9	0.262	14801	ug/L
MKTF-32	12/15/2020	2,4-Dimethylphenol	ND	10.9	3.82	354	ug/L
MKTF-32	12/15/2020	Di-n-butylphthalate	ND	10.9	2.95	885	ug/L
MKTF-32	12/15/2020	2,4-Dinitrophenol	ND	32.8	3.71	38.7	ug/L
MKTF-32	12/15/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-32	12/15/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-32	12/15/2020	Fluoranthene	ND	10.9	0.197	802	ug/L
MKTF-32	12/15/2020	Fluorene	ND	10.9	0.197	288	ug/L
MKTF-32	12/15/2020	Hexachlorobenzene	*ND*	*10.9*	0.186	0.0976	ug/L
MKTF-32	12/15/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.84	0.41	ug/L
MKTF-32	12/15/2020	Hexachloroethane	*ND*	*10.9*	4.59	3.28	ug/L
MKTF-32	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.24	0.343	ug/L
MKTF-32	12/15/2020	Isophorone	ND	10.9	0.153	781	ug/L
MKTF-32	12/15/2020	2-Methylphenol	ND	10.9	1.97	NA	ug/L
MKTF-32	12/15/2020	Naphthalene	ND	10.9	0.186	30	ug/L
MKTF-32	12/15/2020	2-Nitroaniline	ND	10.9	2.4	190	ug/L
MKTF-32	12/15/2020	3-Nitroaniline	ND	10.9	1.97	NA	ug/L
MKTF-32	12/15/2020	4-Nitroaniline	*ND*	*10.9*	1.64	3.8	ug/L
MKTF-32	12/15/2020	Nitrobenzene	*ND*	*10.9*	0.142	1.4	ug/L
MKTF-32	12/15/2020	2-Nitrophenol	ND	10.9	5.68	NA	ug/L
MKTF-32	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.6	0.011	ug/L
MKTF-32	12/15/2020	N-Nitrosodiphenylamine	ND	10.9	0.197	122	ug/L
MKTF-32	12/15/2020	Pentachlorophenol	*ND*	*21.8*	1.53	1	ug/L
MKTF-32	12/15/2020	Phenanthrene	ND	10.9	0.197	170	ug/L
MKTF-32	12/15/2020	Phenol	ND	10.9	2.84	5761	ug/L
MKTF-32	12/15/2020	Pyrene	ND	10.9	0.229	117	ug/L
MKTF-32	12/15/2020	2,4,5-Trichlorophenol	ND	10.9	4.04	1166	ug/L
MKTF-32	12/15/2020	2,4,6-Trichlorophenol	ND	10.9	3.82	11.9*	ug/L
MKTF-32	12/15/2020	Dimethylphthalate	ND	10.9	0.186	612	ug/L
MKTF-32	12/15/2020	Aniline	ND	10.9	4.15	13	ug/L
MKTF-32	12/15/2020	Benzoic Acid	ND	32.8	7.97	75000	ug/L
MKTF-32	12/15/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-32	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.175	9.81	ug/L
MKTF-32	12/15/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.82	0.0049	ug/L
MKTF-32	12/15/2020	Pyridine	ND	10.9	3.49	20	ug/L
MKTF-32	12/15/2020	1,2,4-Trichlorobenzene	ND	10.9	0.197	70	ug/L
MKTF-32	12/15/2020	1,2-Dichlorobenzene	ND	10.9	0.186	600	ug/L
MKTF-32	12/15/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-32	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.75	1.52	ug/L
MKTF-32	12/15/2020	Di-n-octylphthalate	ND	10.9	0.186	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	12/15/2020	4-Nitrophenol	ND	10.9	2.29	NA	ug/L
MKTF-33	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	4/10/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	4/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	4/10/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	4/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	4/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-33	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-33	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	4/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	4/10/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-33	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-33	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	4/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-33	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-33	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-33	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-33	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-33	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	11/17/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-33	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-33	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-33	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-33	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-33	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-33	3/12/2015	Aniline	ND	10	4.2	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-33	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-33	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-33	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-33	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-33	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-33	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-33	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-33	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-33	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-33	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-33	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-33	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-33	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-33	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-33	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-33	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-33	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-33	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-33	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-33	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-33	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-33	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-33	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-33	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-33	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-33	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-33	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-33	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-33	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-33	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-33	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-33	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-33	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-33	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-33	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-33	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-33	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-33	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-33	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-33	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-33	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-33	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-33	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-33	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-33	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-33	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-33	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-33	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-33	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-33	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-33	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-33	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-33	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-33	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-33	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-33	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-33	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-33	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-33	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-33	6/9/2015	Benzo(a)pyrene	*ND*	*10*	5.4	0.2	ug/L
MKTF-33	6/9/2015	2,4-Dinitrophenol	ND	20	2.1	38.7	ug/L
MKTF-33	6/9/2015	Dibenzo(a,h)anthracene	ND	10	6.5	NA	ug/L
MKTF-33	6/9/2015	Benzo(a)anthracene	*ND*	*10*	5	0.12	ug/L
MKTF-33	6/9/2015	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MKTF-33	6/9/2015	Aniline	ND	10	3.1	13	ug/L
MKTF-33	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MKTF-33	6/9/2015	Benzoic Acid	ND	20	2.1	75000	ug/L
MKTF-33	6/9/2015	Hexachloroethane	*ND*	*10*	3.2	3.28	ug/L
MKTF-33	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-33	6/9/2015	Isophorone	ND	10	3.9	781	ug/L
MKTF-33	6/9/2015	Acenaphthene	ND	10	3.8	535	ug/L
MKTF-33	6/9/2015	Diethylphthalate	ND	10	3.3	14801	ug/L
MKTF-33	6/9/2015	Di-n-butylphthalate	ND	10	4.2	885	ug/L
MKTF-33	6/9/2015	Phenanthrene	ND	10	4	170	ug/L
MKTF-33	6/9/2015	Butylbenzylphthalate	ND	10	4.7	16	ug/L
MKTF-33	6/9/2015	N-Nitrosodiphenylamine	ND	10	4.9	122	ug/L
MKTF-33	6/9/2015	Fluorene	ND	10	3.3	288	ug/L
MKTF-33	6/9/2015	Carbazole	ND	10	3	NA	ug/L
MKTF-33	6/9/2015	Hexachlorobutadiene	*ND*	*10*	3.9	0.14	ug/L
MKTF-33	6/9/2015	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	6/9/2015	2,4,6-Trichlorophenol	ND	10	2.5	11.9*	ug/L
MKTF-33	6/9/2015	2-Nitroaniline	ND	10	3.6	190	ug/L
MKTF-33	6/9/2015	2-Nitrophenol	ND	10	2.5	NA	ug/L
MKTF-33	6/9/2015	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	6/9/2015	Naphthalene	ND	10	3.7	30	ug/L
MKTF-33	6/9/2015	2-Methylnaphthalene	ND	10	4.5	35.1	ug/L
MKTF-33	6/9/2015	2-Chloronaphthalene	ND	10	3.4	733	ug/L
MKTF-33	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	5.2	1.25	ug/L
MKTF-33	6/9/2015	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	6/9/2015	1,2-Dichlorobenzene	ND	10	3.8	600	ug/L
MKTF-33	6/9/2015	2-Chlorophenol	ND	10	2.4	91	ug/L
MKTF-33	6/9/2015	2,4,5-Trichlorophenol	ND	10	3.2	1166	ug/L
MKTF-33	6/9/2015	Nitrobenzene	*ND*	*10*	3	1.4	ug/L
MKTF-33	6/9/2015	3-Nitroaniline	ND	10	3	NA	ug/L
MKTF-33	6/9/2015	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MKTF-33	6/9/2015	4-Nitrophenol	ND	10	2.8	NA	ug/L
MKTF-33	6/9/2015	Benzyl Alcohol	ND	10	2.3	2000	ug/L
MKTF-33	6/9/2015	4-Bromophenyl-phenylether	ND	10	2.8	NA	ug/L
MKTF-33	6/9/2015	Azobenzene	*ND*	*10*	4	0.12	ug/L
MKTF-33	6/9/2015	2,4-Dimethylphenol	ND	10	3.7	354	ug/L
MKTF-33	6/9/2015	1,4-Dichlorobenzene	ND	10	2.5	75	ug/L
MKTF-33	6/9/2015	4-Chloroaniline	*ND*	*10*	3.7	0.37	ug/L
MKTF-33	6/9/2015	Phenol	ND	10	2.2	5761	ug/L
MKTF-33	6/9/2015	Pyridine	ND	10	3.3	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	3.5	0.137	ug/L
MKTF-33	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MKTF-33	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	6.7	55.64	ug/L
MKTF-33	6/9/2015	Di-n-octylphthalate	ND	10	3.9	200	ug/L
MKTF-33	6/9/2015	Hexachlorobenzene	*ND*	*10*	4	0.0976	ug/L
MKTF-33	6/9/2015	Anthracene	ND	10	3.2	1721	ug/L
MKTF-33	6/9/2015	1,2,4-Trichlorobenzene	ND	10	4	70	ug/L
MKTF-33	6/9/2015	2,4-Dichlorophenol	ND	20	2.8	45.3	ug/L
MKTF-33	6/9/2015	2,4-Dinitrotoluene	ND	10	2.9	45.3	ug/L
MKTF-33	6/9/2015	Pyrene	ND	10	4.6	117	ug/L
MKTF-33	6/9/2015	Dimethylphthalate	ND	10	4	612	ug/L
MKTF-33	6/9/2015	Dibenzofuran	ND	10	3.8	NA	ug/L
MKTF-33	6/9/2015	Benzo(g,h,i)perylene	ND	10	6.3	NA	ug/L
MKTF-33	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.9	0.343	ug/L
MKTF-33	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	4.8	0.34	ug/L
MKTF-33	6/9/2015	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	5	3.43	ug/L
MKTF-33	6/9/2015	Acenaphthylene	ND	10	3.7	NA	ug/L
MKTF-33	6/9/2015	Chrysene	ND	10	4.3	34.3	ug/L
MKTF-33	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.7	1.52	ug/L
MKTF-33	6/9/2015	1,3-Dichlorobenzene	ND	10	3.4	NA	ug/L
MKTF-33	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	3	0.485	ug/L
MKTF-33	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	4.1	0.011	ug/L
MKTF-33	6/9/2015	4-Chlorophenyl-phenylether	ND	10	4	NA	ug/L
MKTF-33	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.1	9.81	ug/L
MKTF-33	6/9/2015	3,4-Methylphenol	ND	10	3	NA	ug/L
MKTF-33	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-33	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-33	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-33	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-33	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-33	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-33	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-33	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-33	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-33	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-33	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-33	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-33	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-33	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-33	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-33	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-33	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-33	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-33	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-33	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-33	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-33	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-33	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-33	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-33	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-33	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-33	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-33	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-33	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-33	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-33	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-33	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-33	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-33	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-33	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-33	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-33	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-33	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-33	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-33	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-33	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-33	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-33	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-33	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-33	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-33	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-33	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-33	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-33	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-33	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-33	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-33	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-33	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-33	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-33	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-33	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-33	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-33	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-33	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-33	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-33	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-33	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-33	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-33	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-33	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-33	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-33	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-33	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-33	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-33	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-33	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-33	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-33	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-33	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-33	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-33	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-33	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-33	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-33	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-33	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-33	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-33	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-33	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-33	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-33	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-33	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-33	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-33	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-33	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-33	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-33	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-33	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-33	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-33	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-33	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-33	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-33	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-33	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-33	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-33	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-33	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-33	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-33	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-33	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-33	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-33	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-33	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-33	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-33	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-33	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-33	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-33	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-33	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-33	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-33	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-33	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-33	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-33	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-33	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-33	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-33	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-33	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-33	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-33	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-33	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-33	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-33	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-33	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-33	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-33	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-33	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-33	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-33	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-33	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-33	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-33	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-33	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-33	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-33	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-33	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-33	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-33	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-33	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-33	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-33	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-33	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-33	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-33	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-33	2/25/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-33	2/25/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-33	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-33	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-33	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-33	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-33	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-33	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-33	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-33	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-33	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-33	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-33	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-33	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-33	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-33	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-33	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-33	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-33	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-33	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-33	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-33	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-33	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-33	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-33	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-33	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-33	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-33	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-33	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-33	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-33	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-33	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-33	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-33	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-33	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-33	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-33	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-33	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-33	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-33	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-33	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-33	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-33	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-33	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-33	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-33	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-33	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	6/10/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-33	6/10/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-33	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	9/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	9/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	9/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	9/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	9/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	9/10/2016	Benzoic Acid	7.1	20	2.6	75000	ug/L
MKTF-33	9/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	9/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	9/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	9/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	9/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	9/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	9/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	9/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	9/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	9/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	9/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	9/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	9/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	9/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	9/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	9/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	9/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	9/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	9/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	9/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	9/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	9/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	9/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	9/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	9/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	9/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	9/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	9/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	9/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	9/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	9/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	9/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	9/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	9/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	9/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	9/10/2016	Bis(2-ethylhexyl)phthalate	3.6	10	2.6	55.64	ug/L
MKTF-33	9/10/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-33	9/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	9/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	9/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	9/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	9/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	9/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	9/10/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-33	9/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	9/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	9/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	9/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	9/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	9/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	9/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	9/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	9/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	9/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	9/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	9/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-33	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	11/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	11/1/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	11/1/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-33	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	11/1/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-33	11/1/2016	Di-n-octylphthalate	7.8	10	2	200	ug/L
MKTF-33	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-33	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	3/8/2017	Benzoic Acid	7.7	20	2.6	75000	ug/L
MKTF-33	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	3/8/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-33	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	3/8/2017	Bis(2-ethylhexyl)phthalate	8.3	10	2.6	55.64	ug/L
MKTF-33	3/8/2017	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-33	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	6/8/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-33	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	6/8/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	6/8/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	6/8/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	6/8/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	6/8/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-33	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	11/28/2017	Benzoic Acid	4.5	20	3.9	75000	ug/L
MKTF-33	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	11/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	11/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	11/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	11/28/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-33	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-33	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	2/8/2018	Benzoic Acid	7.2	20	3.9	75000	ug/L
MKTF-33	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-33	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	2/8/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	2/8/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-33	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-33	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-33	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-33	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-33	5/10/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-33	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-33	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-33	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-33	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-33	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-33	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-33	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-33	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-33	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-33	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-33	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-33	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-33	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-33	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-33	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-33	5/10/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-33	5/10/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-33	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-33	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-33	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-33	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-33	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-33	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-33	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-33	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-33	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-33	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-33	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-33	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-33	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-33	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-33	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-33	5/10/2018	Phenol	ND	10	6	5761	ug/L
MKTF-33	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-33	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-33	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-33	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-33	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-33	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-33	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-33	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-33	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-33	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-33	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-33	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-33	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-33	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-33	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-33	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-33	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-33	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-33	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-33	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-33	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-33	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-33	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-33	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-33	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-33	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-33	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-33	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-33	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-33	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-33	8/30/2018	Benzoic Acid	6.9	20	6.3	75000	ug/L
MKTF-33	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-33	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-33	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-33	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-33	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-33	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-33	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-33	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-33	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-33	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-33	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-33	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-33	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-33	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-33	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-33	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-33	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-33	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-33	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-33	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-33	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-33	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-33	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-33	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-33	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-33	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-33	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-33	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-33	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-33	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-33	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-33	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-33	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-33	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-33	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-33	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-33	8/30/2018	Bis(2-ethylhexyl)phthalate	14	10	8.1	55.64	ug/L
MKTF-33	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-33	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-33	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-33	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-33	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-33	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-33	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-33	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-33	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-33	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-33	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-33	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-33	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-33	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-33	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-33	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-33	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-33	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-33	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-33	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-33	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-33	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-33	11/28/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-33	11/28/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-33	11/28/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-33	11/28/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-33	11/28/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-33	11/28/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-33	11/28/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-33	11/28/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-33	11/28/2018	Isophorone	ND	100	62	781	ug/L
MKTF-33	11/28/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-33	11/28/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-33	11/28/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-33	11/28/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-33	11/28/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-33	11/28/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-33	11/28/2018	Fluorene	ND	100	63	288	ug/L
MKTF-33	11/28/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-33	11/28/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-33	11/28/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-33	11/28/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-33	11/28/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-33	11/28/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-33	11/28/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-33	11/28/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-33	11/28/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-33	11/28/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-33	11/28/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-33	11/28/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-33	11/28/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-33	11/28/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-33	11/28/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-33	11/28/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-33	11/28/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-33	11/28/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-33	11/28/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-33	11/28/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-33	11/28/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-33	11/28/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-33	11/28/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-33	11/28/2018	Phenol	ND	100	60	5761	ug/L
MKTF-33	11/28/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-33	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-33	11/28/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-33	11/28/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-33	11/28/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-33	11/28/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-33	11/28/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-33	11/28/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-33	11/28/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-33	11/28/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-33	11/28/2018	Pyrene	ND	100	65	117	ug/L
MKTF-33	11/28/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-33	11/28/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-33	11/28/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-33	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-33	11/28/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-33	11/28/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-33	11/28/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-33	11/28/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-33	11/28/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-33	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-33	11/28/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-33	11/28/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-33	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-33	11/28/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-33	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-33	11/28/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-33	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-33	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-33	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-33	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-33	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-33	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-33	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-33	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-33	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-33	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-33	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-33	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-33	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-33	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-33	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-33	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-33	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-33	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-33	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-33	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-33	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-33	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-33	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-33	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-33	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-33	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-33	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-33	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-33	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-33	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-33	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-33	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-33	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-33	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-33	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-33	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-33	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-33	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-33	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-33	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-33	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-33	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-33	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-33	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-33	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-33	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-33	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-33	10/24/2019	Bis(2-ethylhexyl)phthalate	1.9	0.5	0.5	55.64	ug/L
MKTF-33	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-33	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-33	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-33	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-33	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-33	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-33	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-33	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-33	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-33	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-33	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-33	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-33	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-33	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-33	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-33	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-33	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-33	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-33	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-33	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-33	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-33	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-33	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-33	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-33	2/28/2020	1,4-Dioxane	3.4	1	0.2	4.59	ug/L
MKTF-33	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-33	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-33	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-33	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-33	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-33	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-33	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-33	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-33	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-33	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-33	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-33	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-33	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-33	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-33	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-33	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-33	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-33	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-33	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-33	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-33	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-33	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-33	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-33	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-33	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-33	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-33	2/28/2020	Bis(2-ethylhexyl)phthalate	0.48	0.5	0.2	55.64	ug/L
MKTF-33	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-33	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-33	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-33	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-33	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-33	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-33	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-33	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-33	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-33	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-33	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-33	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-33	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-33	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-33	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-33	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-33	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-33	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-33	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-33	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-33	2/28/2020	Phenol	2.6	0.5	0.1	5761	ug/L
MKTF-33	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-33	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-34	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	4/9/2014	2-Methylphenol	ND	25	2.8	NA	ug/L
MKTF-34	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	4/9/2014	Pyridine	ND	10	1.6	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-34	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-34	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-34	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-34	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-34	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-34	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-34	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-34	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-34	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	11/17/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-34	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-34	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-34	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-34	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-34	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-34	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-34	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-34	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-34	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-34	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-34	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-34	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-34	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-34	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-34	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-34	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-34	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-34	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-34	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-34	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-34	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-34	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-34	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-34	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-34	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-34	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-34	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-34	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-34	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-34	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-34	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-34	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-34	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-34	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-34	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-34	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-34	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-34	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-34	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-34	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-34	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-34	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-34	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-34	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-34	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-34	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-34	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-34	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-34	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-34	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-34	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-34	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-34	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-34	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-34	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-34	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-34	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-34	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-34	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-34	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-34	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-34	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-34	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-34	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-34	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-34	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-34	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	6/8/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	6/8/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	6/8/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-34	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-34	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-34	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-34	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-34	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-34	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-34	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-34	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-34	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-34	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-34	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-34	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-34	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-34	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-34	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-34	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-34	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-34	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-34	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-34	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-34	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-34	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-34	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-34	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-34	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-34	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-34	2/25/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-34	2/25/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-34	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-34	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-34	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-34	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-34	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-34	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-34	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-34	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-34	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-34	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-34	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-34	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-34	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-34	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-34	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-34	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-34	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-34	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-34	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-34	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-34	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-34	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-34	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-34	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-34	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-34	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-34	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-34	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-34	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-34	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-34	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-34	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-34	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-34	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-34	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-34	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-34	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-34	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-34	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-34	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-34	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-34	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-34	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-34	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-34	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-34	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	6/10/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-34	6/10/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-34	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	9/13/2016	Benzoic Acid	8.4	20	2.6	75000	ug/L
MKTF-34	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	9/13/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-34	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-34	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	11/8/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-34	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	11/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	11/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	11/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	11/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	11/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	11/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	11/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	11/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	11/8/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-34	11/8/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-34	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-34	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-34	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	3/1/2017	Di-n-butylphthalate	2.7	10	2.4	885	ug/L
MKTF-34	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	3/1/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	3/1/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	3/1/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-34	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	3/1/2017	Bis(2-ethylhexyl)phthalate	7.8	10	2.6	55.64	ug/L
MKTF-34	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-34	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	6/14/2017	Benzoic Acid	9	20	3.9	75000	ug/L
MKTF-34	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	6/14/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	6/14/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	6/14/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
MKTF-34	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	9/26/2017	Benzoic Acid	6	20	3.9	75000	ug/L
MKTF-34	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	9/26/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	9/26/2017	Naphthalene	4.8	10	2.9	30	ug/L
MKTF-34	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	9/26/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	9/26/2017	Bis(2-ethylhexyl)phthalate	**210**	10	4.8	55.64	ug/L
MKTF-34	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	12/1/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
MKTF-34	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	12/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	12/1/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	12/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-34	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-34	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	2/16/2018	Benzoic Acid	8.9	20	3.9	75000	ug/L
MKTF-34	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	2/16/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	2/16/2018	Fluorene	ND	10	4	288	ug/L
MKTF-34	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	2/16/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	2/16/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	2/16/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	2/16/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-34	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-34	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-34	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-34	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-34	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-34	5/4/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-34	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-34	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-34	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-34	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-34	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-34	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-34	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-34	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-34	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-34	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-34	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-34	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-34	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-34	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-34	5/4/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-34	5/4/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-34	5/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-34	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-34	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-34	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-34	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-34	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-34	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-34	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-34	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-34	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-34	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-34	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-34	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-34	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-34	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-34	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-34	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-34	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-34	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-34	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-34	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-34	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-34	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-34	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-34	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-34	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-34	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-34	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-34	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-34	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-34	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-34	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-34	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-34	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-34	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-34	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-34	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-34	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-34	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-34	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-34	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-34	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-34	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-34	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-34	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-34	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-34	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-34	8/24/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
MKTF-34	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-34	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-34	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-34	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-34	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-34	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-34	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-34	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-34	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-34	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-34	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-34	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-34	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-34	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-34	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-34	8/24/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-34	8/24/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-34	8/24/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-34	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-34	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-34	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-34	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-34	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-34	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-34	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-34	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-34	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-34	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-34	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-34	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-34	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-34	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-34	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-34	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-34	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-34	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-34	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-34	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-34	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-34	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-34	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-34	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-34	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-34	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-34	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-34	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-34	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-34	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-34	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-34	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-34	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-34	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-34	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-34	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-34	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-34	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-34	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-34	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-34	11/28/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-34	11/28/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-34	11/28/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-34	11/28/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-34	11/28/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-34	11/28/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-34	11/28/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-34	11/28/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-34	11/28/2018	Isophorone	ND	100	62	781	ug/L
MKTF-34	11/28/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-34	11/28/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-34	11/28/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-34	11/28/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-34	11/28/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-34	11/28/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-34	11/28/2018	Fluorene	ND	100	63	288	ug/L
MKTF-34	11/28/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-34	11/28/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-34	11/28/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-34	11/28/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-34	11/28/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-34	11/28/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-34	11/28/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-34	11/28/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-34	11/28/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-34	11/28/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-34	11/28/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-34	11/28/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-34	11/28/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-34	11/28/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-34	11/28/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-34	11/28/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-34	11/28/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-34	11/28/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-34	11/28/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-34	11/28/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-34	11/28/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-34	11/28/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-34	11/28/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-34	11/28/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-34	11/28/2018	Phenol	ND	100	60	5761	ug/L
MKTF-34	11/28/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-34	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-34	11/28/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-34	11/28/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-34	11/28/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-34	11/28/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-34	11/28/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-34	11/28/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-34	11/28/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-34	11/28/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-34	11/28/2018	Pyrene	ND	100	65	117	ug/L
MKTF-34	11/28/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-34	11/28/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-34	11/28/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-34	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-34	11/28/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-34	11/28/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-34	11/28/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-34	11/28/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-34	11/28/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-34	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-34	11/28/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-34	11/28/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-34	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-34	11/28/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-34	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-34	11/28/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-34	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-34	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-34	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-34	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-34	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-34	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-34	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-34	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-34	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-34	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-34	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-34	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-34	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-34	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-34	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-34	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-34	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-34	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-34	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-34	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-34	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-34	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-34	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-34	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-34	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-34	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-34	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-34	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-34	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-34	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-34	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-34	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-34	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-34	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-34	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-34	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-34	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-34	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-34	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-34	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-34	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-34	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-34	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-34	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-34	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-34	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-34	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-34	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-34	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-34	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-34	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-34	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-34	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-34	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-34	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-34	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-34	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-34	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-34	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-34	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-34	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-34	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-34	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-34	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-34	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-34	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-34	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-34	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-34	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-34	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-34	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-34	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-34	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-34	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-34	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-34	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-34	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-34	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-34	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-34	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-34	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-34	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-34	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-34	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-34	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-34	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-34	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-34	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-34	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-34	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-34	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-34	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-34	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-34	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-34	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-34	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-34	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-34	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-34	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-34	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-34	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-34	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-34	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-34	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-34	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-34	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-34	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-34	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-34	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-34	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-34	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-34	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-34	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-34	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-34	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-34	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-34	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-34	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-34	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-34	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-34	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-34	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-34	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-34	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-34	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-34	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-34	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-34	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-34	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-34	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-34	8/19/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-34	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-34	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-34	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-34	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-34	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-34	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-34	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-34	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-34	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-34	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-34	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-34	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-34	10/29/2019	1,4-Dioxane	3	1	1	4.59	ug/L
MKTF-34	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-34	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-34	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-34	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-34	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-34	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-34	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-34	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-34	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-34	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-34	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-34	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-34	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-34	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-34	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-34	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-34	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-34	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-34	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-34	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-34	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-34	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-34	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-34	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-34	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-34	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-34	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-34	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-34	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-34	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-34	10/29/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-34	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-34	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-34	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-34	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-34	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-34	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-34	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-34	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-34	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-34	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-34	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-34	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-34	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-34	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-34	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-34	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-34	10/29/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-34	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-34	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-34	2/5/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-34	2/5/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-34	2/5/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-34	2/5/2020	1,4-Dioxane	0.7	1	1	4.59	ug/L
MKTF-34	2/5/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-34	2/5/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-34	2/5/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-34	2/5/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-34	2/5/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-34	2/5/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-34	2/5/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-34	2/5/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-34	2/5/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-34	2/5/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-34	2/5/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-34	2/5/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-34	2/5/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-34	2/5/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-34	2/5/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-34	2/5/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-34	2/5/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-34	2/5/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-34	2/5/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-34	2/5/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-34	2/5/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-34	2/5/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-34	2/5/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-34	2/5/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-34	2/5/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-34	2/5/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-34	2/5/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-34	2/5/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-34	2/5/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-34	2/5/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-34	2/5/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-34	2/5/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-34	2/5/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-34	2/5/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-34	2/5/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-34	2/5/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-34	2/5/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-34	2/5/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-34	2/5/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-34	2/5/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-34	2/5/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-34	2/5/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-34	2/5/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-34	2/5/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-34	2/5/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-34	2/5/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-34	2/5/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-34	2/5/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-34	2/5/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-34	2/28/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-34	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-34	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-34	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-34	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-34	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-34	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-34	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-34	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-34	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-34	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-34	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-34	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-34	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-34	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-34	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-34	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-34	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-34	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-34	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-34	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-34	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-34	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-34	2/28/2020	Bis(2-ethylhexyl)phthalate	0.32	0.5	0.2	55.64	ug/L
MKTF-34	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-34	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-34	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-34	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-34	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-34	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-34	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-34	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-34	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-34	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-34	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-34	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-34	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-34	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-34	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-34	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-34	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-34	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-34	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-34	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-34	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-34	2/28/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-34	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-34	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-34	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-34	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-34	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-34	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-34	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-34	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-34	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-34	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-34	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-34	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-34	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-34	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-34	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-34	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-34	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-34	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-34	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-34	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-34	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-34	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-34	2/28/2020	Bis(2-ethylhexyl)phthalate	0.24	0.5	0.2	55.64	ug/L
MKTF-34	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-34	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-34	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-34	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-34	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-34	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-34	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-34	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-34	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-34	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-34	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-34	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-34	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-34	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-34	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-34	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-34	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-34	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-34	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-34	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-34	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	9/16/2020	1,2,4-Trichlorobenzene	ND	1	0.2	70	ug/L
MKTF-34	9/16/2020	1,2-Dichlorobenzene	ND	1	0.2	600	ug/L
MKTF-34	9/16/2020	1,3-Dichlorobenzene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	1,4-Dichlorobenzene	ND	1	0.2	75	ug/L
MKTF-34	9/16/2020	1,4-Dioxane	2	1	0.2	4.59	ug/L
MKTF-34	9/16/2020	1-Methylnaphthalene	ND	1	0.2	11.38	ug/L
MKTF-34	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	1	0.2	240	ug/L
MKTF-34	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	2,4,5-Trichlorophenol	ND	1	0.2	1166	ug/L
MKTF-34	9/16/2020	2,4,6-Trichlorophenol	ND	1	0.2	11.9*	ug/L
MKTF-34	9/16/2020	2,4-Dichlorophenol	ND	1	0.2	45.3	ug/L
MKTF-34	9/16/2020	2,4-Dimethylphenol	ND	1	0.2	354	ug/L
MKTF-34	9/16/2020	2,4-Dinitrophenol	ND	1	0.2	38.7	ug/L
MKTF-34	9/16/2020	2,4-Dinitrotoluene	ND	1	0.2	45.3	ug/L
MKTF-34	9/16/2020	2,6-Dinitrotoluene	ND	0.4	0.2	0.485	ug/L
MKTF-34	9/16/2020	2-Chloronaphthalene	ND	1	0.2	733	ug/L
MKTF-34	9/16/2020	2-Chlorophenol	ND	1	0.2	91	ug/L
MKTF-34	9/16/2020	2-Methylnaphthalene	ND	1	0.2	35.1	ug/L
MKTF-34	9/16/2020	2-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	2-Nitroaniline	ND	1	0.2	190	ug/L
MKTF-34	9/16/2020	2-Nitrophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	3,4-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	3,3-Dichlorobenzidine	ND	1	0.2	1.25	ug/L
MKTF-34	9/16/2020	3-Nitroaniline	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4,6-Dinitro-2-methylphenol	ND	1	0.2	1.52	ug/L
MKTF-34	9/16/2020	4-Bromophenyl-phenylether	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Chloro-3-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Chloroaniline	*ND*	*1*	0.2	0.37	ug/L
MKTF-34	9/16/2020	4-Chlorophenyl-phenylether	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Nitroaniline	ND	1	0.2	3.8	ug/L
MKTF-34	9/16/2020	4-Nitrophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Acenaphthene	ND	1	0.2	535	ug/L
MKTF-34	9/16/2020	Acenaphthylene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Aniline	ND	1	0.2	13	ug/L
MKTF-34	9/16/2020	Anthracene	ND	1	0.2	1721	ug/L
MKTF-34	9/16/2020	Benzo(a)anthracene	*ND*	*0.2*	0.1	0.12	ug/L
MKTF-34	9/16/2020	Benzidine	*ND*	*1*	0.5	0.0011	ug/L
MKTF-34	9/16/2020	Benzo(a)pyrene	ND	0.2	0.1	0.2	ug/L
MKTF-34	9/16/2020	Benzo(b)fluoranthene	ND	0.2	0.1	0.34	ug/L
MKTF-34	9/16/2020	Benzo(g,h,i)perylene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Benzo(k)fluoranthene	ND	1	0.2	3.43	ug/L
MKTF-34	9/16/2020	Benzoic Acid	ND	1	0.4	75000	ug/L
MKTF-34	9/16/2020	Benzyl Alcohol	ND	1	0.4	2000	ug/L
MKTF-34	9/16/2020	Bis(2-chloroethoxy)methane	ND	1	0.2	59	ug/L
MKTF-34	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*1*	0.2	0.137	ug/L
MKTF-34	9/16/2020	Bis(2-chloroisopropyl)ether	ND	1	0.2	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	1	0.4	55.64	ug/L
MKTF-34	9/16/2020	Butylbenzylphthalate	ND	1	0.4	16	ug/L
MKTF-34	9/16/2020	Carbazole	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Chrysene	ND	1	0.2	34.3	ug/L
MKTF-34	9/16/2020	Di-n-butylphthalate	ND	1	0.4	885	ug/L
MKTF-34	9/16/2020	Di-n-octylphthalate	ND	1	0.4	200	ug/L
MKTF-34	9/16/2020	Dibenzo(a,h)anthracene	ND	0.06	0.04	NA	ug/L
MKTF-34	9/16/2020	Dibenzofuran	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Diethylphthalate	ND	1	0.4	14801	ug/L
MKTF-34	9/16/2020	Dimethylphthalate	ND	1	0.4	612	ug/L
MKTF-34	9/16/2020	Fluoranthene	ND	1	0.2	802	ug/L
MKTF-34	9/16/2020	Fluorene	ND	1	0.2	288	ug/L
MKTF-34	9/16/2020	Hexachlorobenzene	*ND*	*1*	0.2	0.0976	ug/L
MKTF-34	9/16/2020	Hexachlorobutadiene	*ND*	*1*	0.2	0.14	ug/L
MKTF-34	9/16/2020	Hexachlorocyclopentadiene	*ND*	*1*	0.5	0.41	ug/L
MKTF-34	9/16/2020	Hexachloroethane	ND	1	0.2	3.28	ug/L
MKTF-34	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.2	0.343	ug/L
MKTF-34	9/16/2020	Isophorone	ND	1	0.2	781	ug/L
MKTF-34	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*1*	0.2	0.011	ug/L
MKTF-34	9/16/2020	N-Nitrosodimethylamine	*ND*	*1*	0.2	0.0049	ug/L
MKTF-34	9/16/2020	N-Nitrosodiphenylamine	ND	1	0.2	122	ug/L
MKTF-34	9/16/2020	Naphthalene	ND	1	0.2	30	ug/L
MKTF-34	9/16/2020	Nitrobenzene	ND	1	0.2	1.4	ug/L
MKTF-34	9/16/2020	Pentachlorophenol	ND	1	0.4	1	ug/L
MKTF-34	9/16/2020	Phenanthrene	ND	1	0.2	170	ug/L
MKTF-34	9/16/2020	Phenol	ND	1	0.2	5761	ug/L
MKTF-34	9/16/2020	Pyrene	ND	1	0.2	117	ug/L
MKTF-34	9/16/2020	Pyridine	ND	1	0.4	20	ug/L
MKTF-35	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-35	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-35	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-35	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-35	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-35	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-35	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-35	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-35	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-35	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-35	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-35	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-35	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-35	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-35	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-35	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-35	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-35	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-35	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-35	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-35	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-35	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-35	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-35	11/21/2014	1-Methylnaphthalene	**34**	10	3.6	11.38	ug/L
MKTF-35	11/21/2014	Naphthalene	**36**	10	2.3	30	ug/L
MKTF-35	11/21/2014	2-Methylnaphthalene	**45**	10	2.6	35.1	ug/L
MKTF-35	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-35	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-35	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-35	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-35	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-35	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-35	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-35	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-35	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-35	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-35	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-35	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-35	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-35	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-35	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-35	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-35	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-35	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-35	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-35	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-35	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-35	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-35	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-35	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-35	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-35	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-35	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-35	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-35	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-35	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-35	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-35	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-35	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-35	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-35	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-35	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-35	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-35	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	3/17/2015	Isophorone	ND	10	2	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	3/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	3/17/2015	Naphthalene	28	10	1.8	30	ug/L
MKTF-35	3/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	6/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	6/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	6/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	11/3/2015	Fluorene	ND	10	1.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-35	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-35	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-35	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-35	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-35	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-35	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-35	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-35	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-35	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-35	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-35	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-35	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-35	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-35	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-35	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-35	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-35	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-35	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-35	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-35	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-35	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-35	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-35	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-35	2/26/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-35	2/26/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-35	2/26/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-35	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-35	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-35	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-35	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-35	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-35	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-35	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-35	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-35	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-35	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-35	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-35	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-35	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-35	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-35	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-35	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-35	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-35	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-35	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-35	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-35	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-35	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-35	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-35	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-35	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-35	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-35	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-35	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-35	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-35	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-35	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-35	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-35	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-35	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-35	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-35	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-35	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-35	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-35	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-35	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-35	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-35	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-35	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-35	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-35	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-35	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-35	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	6/10/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-35	6/10/2016	Di-n-octylphthalate	5.9	10	2	200	ug/L
MKTF-35	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-35	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	9/13/2016	Benzoic Acid	5	20	2.6	75000	ug/L
MKTF-35	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	9/13/2016	Phenol	2.9	10	2	5761	ug/L
MKTF-35	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-35	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-35	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	11/3/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-35	11/3/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-35	11/3/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-35	11/3/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-35	11/3/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-35	11/3/2016	Benzoic Acid	55	100	13	75000	ug/L
MKTF-35	11/3/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-35	11/3/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-35	11/3/2016	Isophorone	ND	50	13	781	ug/L
MKTF-35	11/3/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-35	11/3/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-35	11/3/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-35	11/3/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-35	11/3/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-35	11/3/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-35	11/3/2016	Fluorene	ND	50	14	288	ug/L
MKTF-35	11/3/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-35	11/3/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-35	11/3/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-35	11/3/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-35	11/3/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-35	11/3/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-35	11/3/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-35	11/3/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-35	11/3/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-35	11/3/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-35	11/3/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-35	11/3/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-35	11/3/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-35	11/3/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-35	11/3/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-35	11/3/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-35	11/3/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-35	11/3/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-35	11/3/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-35	11/3/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-35	11/3/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-35	11/3/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-35	11/3/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-35	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-35	11/3/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-35	11/3/2016	Bis(2-ethylhexyl)phthalate	34	50	13	55.64	ug/L
MKTF-35	11/3/2016	Di-n-octylphthalate	34	50	9.9	200	ug/L
MKTF-35	11/3/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-35	11/3/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-35	11/3/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-35	11/3/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-35	11/3/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-35	11/3/2016	Pyrene	ND	50	15	117	ug/L
MKTF-35	11/3/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-35	11/3/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-35	11/3/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-35	11/3/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-35	11/3/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-35	11/3/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	Chrysene	*ND*	*50*	14	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-35	11/3/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-35	11/3/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-35	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-35	11/3/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-35	11/3/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-35	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-35	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-35	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	3/1/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-35	3/1/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	3/1/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-35	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	3/1/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-35	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-35	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	6/14/2017	Benzoic Acid	13	20	3.9	75000	ug/L
MKTF-35	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	6/14/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	6/14/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-35	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	9/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	9/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	9/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	9/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	9/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	9/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	9/27/2017	Benzoic Acid	7.5	20	3.9	75000	ug/L
MKTF-35	9/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	9/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	9/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	9/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	9/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	9/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	9/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	9/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	9/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	9/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	9/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	9/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	9/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	9/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	9/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	9/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	9/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	9/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	9/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	9/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	9/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	9/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	9/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	9/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	9/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	9/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	9/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	9/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	9/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	9/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	9/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	9/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	9/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	9/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	9/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	9/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	9/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	9/27/2017	Bis(2-ethylhexyl)phthalate	5.7	10	4.8	55.64	ug/L
MKTF-35	9/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	9/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	9/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	9/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	9/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	9/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	9/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	9/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	9/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	9/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	9/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	9/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	9/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	9/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	9/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	9/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	9/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	9/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	9/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	9/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	9/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	9/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	9/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	11/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	11/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	11/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	11/30/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	11/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	11/30/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
MKTF-35	11/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	11/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	11/30/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	11/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	11/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	11/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	11/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	11/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	11/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	11/30/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	11/30/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	11/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	11/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	11/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	11/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	11/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	11/30/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	11/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	11/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	11/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	11/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	11/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	11/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	11/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	11/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	11/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	11/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	11/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	11/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	11/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	11/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	11/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	11/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	11/30/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	11/30/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	11/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	11/30/2017	Bis(2-ethylhexyl)phthalate	11	10	4.8	55.64	ug/L
MKTF-35	11/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	11/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	11/30/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	11/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	11/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	11/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	11/30/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	11/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	11/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	11/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	11/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	11/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	11/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	11/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	11/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	11/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	11/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	11/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	11/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-35	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	2/15/2018	Benzoic Acid	8	20	3.9	75000	ug/L
MKTF-35	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	2/15/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	2/15/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	2/15/2018	Fluorene	ND	10	4	288	ug/L
MKTF-35	2/15/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	2/15/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	2/15/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	2/15/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	2/15/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	2/15/2018	1,4-Dichlorobenzene	3.1	10	2.1	75	ug/L
MKTF-35	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	2/15/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	2/15/2018	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
MKTF-35	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	2/15/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	2/15/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-35	5/3/2018	Benzoic Acid	14	20	6.3	75000	ug/L
MKTF-35	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	5/3/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	5/3/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	5/3/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	5/3/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-35	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	8/23/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	8/23/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	8/23/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	8/23/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	8/23/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/23/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
MKTF-35	8/23/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	8/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	8/23/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	8/23/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	8/23/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	8/23/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	8/23/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	8/23/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	8/23/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	8/23/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	8/23/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	8/23/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	8/23/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	8/23/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	8/23/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	8/23/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	8/23/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	8/23/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	8/23/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	8/23/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	8/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	8/23/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	8/23/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	8/23/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	8/23/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	8/23/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	8/23/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	8/23/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	8/23/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	8/23/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	8/23/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	8/23/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	8/23/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	8/23/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	8/23/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	8/23/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	8/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-35	8/23/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	8/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	8/23/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	8/23/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	8/23/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	8/23/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	8/23/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	8/23/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	8/23/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	8/23/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	8/23/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	8/23/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	8/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	8/23/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	8/23/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	8/23/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	8/23/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	8/23/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	8/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	8/23/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	8/23/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	8/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	8/23/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	8/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	8/23/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-35	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-35	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	5/16/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	5/16/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	5/16/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	5/16/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	5/16/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	5/16/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	5/16/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	5/16/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	5/16/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	5/16/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	5/16/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	5/16/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	5/16/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	5/16/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	5/16/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	5/16/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	5/16/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	5/16/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	5/16/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	5/16/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	5/16/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	5/16/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	5/16/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	5/16/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	5/16/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	5/16/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	5/16/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	5/16/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	5/16/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	5/16/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	5/16/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-35	5/16/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	5/16/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	5/16/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	5/16/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	5/16/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	5/16/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	5/16/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	5/16/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	5/16/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-35	5/16/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	5/16/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	5/16/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	5/16/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	5/16/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	5/16/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	5/16/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	5/16/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	5/16/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	5/16/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	5/16/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	5/16/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	5/16/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	5/16/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	5/16/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	5/16/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	5/16/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	5/16/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	5/16/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	5/16/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	5/16/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	5/16/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	5/16/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	5/16/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	5/16/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	5/16/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	5/16/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	5/16/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	5/16/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	5/16/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	5/16/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	5/16/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	5/16/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	5/16/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	5/16/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	5/16/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	5/16/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	5/16/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	5/16/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	5/16/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	5/16/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	5/16/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	5/16/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	5/16/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	5/16/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	5/16/2019	Bis(2-ethylhexyl)phthalate	4.3	10	4.302128	55.64	ug/L
MKTF-35	5/16/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	5/16/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	5/16/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	5/16/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	5/16/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	5/16/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	5/16/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	5/16/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	5/16/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-35	5/16/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	5/16/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	5/16/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	5/16/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	5/16/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	5/16/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	5/16/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	5/16/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	5/16/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	5/16/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	5/16/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	5/16/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	5/16/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	5/16/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-35	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-35	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	8/19/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	3.2	0.5	0.5	75	ug/L
MKTF-35	10/29/2019	1,4-Dioxane	2.6	1	1	4.59	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-35	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-35	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-35	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Acenaphthene	1.2	0.5	0.5	535	ug/L
MKTF-35	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-35	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-35	10/29/2019	Dibenzofuran	1.1	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-35	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	10/29/2019	Phenol	3.2	0.5	0.5	5761	ug/L
MKTF-35	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	3.7	0.5	0.5	75	ug/L
MKTF-35	10/29/2019	1,4-Dioxane	**6.5**	1	1	4.59	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-35	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-35	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-35	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Acenaphthene	1.3	0.5	0.5	535	ug/L
MKTF-35	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-35	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-35	10/29/2019	Dibenzofuran	1.2	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-35	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	10/29/2019	Phenol	2.2	0.5	0.5	5761	ug/L
MKTF-35	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	4.7	2.5	2.5	75	ug/L
MKTF-35	2/6/2020	1,4-Dioxane	*3.3*	*5*	5	4.59	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	5.5	2.5	2.5	11.38	ug/L
MKTF-35	2/6/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-35	2/6/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-35	2/6/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-35	2/6/2020	2,4-Dimethylphenol	25	2.5	2.5	354	ug/L
MKTF-35	2/6/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-35	2/6/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-35	2/6/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-35	2/6/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-35	2/6/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	5	2.5	2.5	35.1	ug/L
MKTF-35	2/6/2020	2-Methylphenol	30	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-35	2/6/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	3,4-Methylphenol	13	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-35	2/6/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-35	2/6/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-35	2/6/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Acenaphthene	1.57	2.5	2.5	535	ug/L
MKTF-35	2/6/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-35	2/6/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-35	2/6/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-35	2/6/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-35	2/6/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-35	2/6/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-35	2/6/2020	Benzoic Acid	2.3	2.5	2.5	75000	ug/L
MKTF-35	2/6/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-35	2/6/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-35	2/6/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-35	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
MKTF-35	2/6/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-35	2/6/2020	Carbazole	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-35	2/6/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-35	2/6/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-35	2/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-35	2/6/2020	Dibenzofuran	1.67	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-35	2/6/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-35	2/6/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-35	2/6/2020	Fluorene	ND	2.5	2.5	288	ug/L
MKTF-35	2/6/2020	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-35	2/6/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-35	2/6/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-35	2/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-35	2/6/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-35	2/6/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-35	2/6/2020	Naphthalene	**93**	2.5	2.5	30	ug/L
MKTF-35	2/6/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-35	2/6/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-35	2/6/2020	Phenanthrene	ND	2.5	2.5	170	ug/L
MKTF-35	2/6/2020	Phenol	25	2.5	2.5	5761	ug/L
MKTF-35	2/6/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-35	2/6/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	4.3	0.5	0.5	75	ug/L
MKTF-35	2/6/2020	1,4-Dioxane	*3.29*	*5*	5	4.59	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	5	0.5	0.5	11.38	ug/L
MKTF-35	2/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	2/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	2/6/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	2/6/2020	2,4-Dimethylphenol	24	0.5	0.5	354	ug/L
MKTF-35	2/6/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	2/6/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	2/6/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	2/6/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	2/6/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	5.7	0.5	0.5	35.1	ug/L
MKTF-35	2/6/2020	2-Methylphenol	39	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	2/6/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	3,4-Methylphenol	15	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	2/6/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	2/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	2/6/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-35	2/6/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	2/6/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	2/6/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	2/6/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	2/6/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	2/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	2/6/2020	Benzoic Acid	3.2	0.5	0.5	75000	ug/L
MKTF-35	2/6/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	2/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	2/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	2/6/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	2/6/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	2/6/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	2/6/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	2/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-35	2/6/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	2/6/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	2/6/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	2/6/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	2/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	2/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	2/6/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	2/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	2/6/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	2/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	2/6/2020	Naphthalene	**93**	0.5	0.5	30	ug/L
MKTF-35	2/6/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	2/6/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	2/6/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	2/6/2020	Phenol	33	0.5	0.5	5761	ug/L
MKTF-35	2/6/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	2/6/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-35	9/16/2020	1,4-Dioxane	*2*	*5*	1	4.59	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	7.1	5	1	11.38	ug/L
MKTF-35	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-35	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-35	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-35	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,4-Dimethylphenol	ND	5	1	354	ug/L
MKTF-35	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-35	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,6-Dinitrotoluene	*ND*	*2*	1	0.485	ug/L
MKTF-35	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-35	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	6.7	5	1	35.1	ug/L
MKTF-35	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-35	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-35	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-35	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-35	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-35	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-35	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Aniline	ND	5	1	13	ug/L
MKTF-35	9/16/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-35	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-35	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-35	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-35	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-35	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-35	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-35	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-35	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-35	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-35	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-35	9/16/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-35	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-35	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-35	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-35	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-35	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-35	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-35	9/16/2020	Fluorene	ND	5	1	288	ug/L
MKTF-35	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-35	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-35	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-35	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-35	9/16/2020	Isophorone	ND	5	1	781	ug/L
MKTF-35	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-35	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-35	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-35	9/16/2020	Naphthalene	**53**	5	1	30	ug/L
MKTF-35	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-35	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-35	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-35	9/16/2020	Phenol	25	5	1	5761	ug/L
MKTF-35	9/16/2020	Pyrene	ND	5	1	117	ug/L
MKTF-35	9/16/2020	Pyridine	ND	5	2	20	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-35	9/16/2020	1,4-Dioxane	2.2	*5*	1	4.59	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	7.1	5	1	11.38	ug/L
MKTF-35	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-35	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-35	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-35	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,4-Dimethylphenol	5.3	5	1	354	ug/L
MKTF-35	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-35	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-35	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-35	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	6.8	5	1	35.1	ug/L
MKTF-35	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-35	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-35	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-35	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-35	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-35	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-35	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Aniline	ND	5	1	13	ug/L
MKTF-35	9/16/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-35	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-35	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-35	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-35	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-35	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-35	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-35	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-35	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-35	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-35	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-35	9/16/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-35	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-35	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-35	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-35	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-35	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-35	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-35	9/16/2020	Fluorene	ND	5	1	288	ug/L
MKTF-35	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-35	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-35	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-35	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-35	9/16/2020	Isophorone	ND	5	1	781	ug/L
MKTF-35	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-35	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-35	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-35	9/16/2020	Naphthalene	**54**	5	1	30	ug/L
MKTF-35	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-35	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-35	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-35	9/16/2020	Phenol	34	5	1	5761	ug/L
MKTF-35	9/16/2020	Pyrene	ND	5	1	117	ug/L
MKTF-35	9/16/2020	Pyridine	ND	5	2	20	ug/L
MKTF-36	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-36	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-36	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-36	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-36	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-36	11/21/2014	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-36	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-36	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-36	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-36	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-36	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-36	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-36	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-36	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-36	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-36	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-36	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-36	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-36	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-36	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-36	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-36	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-36	11/21/2014	1-Methylnaphthalene	**160**	10	3.6	11.38	ug/L
MKTF-36	11/21/2014	Naphthalene	**280**	20	4.6	30	ug/L
MKTF-36	11/21/2014	2-Methylnaphthalene	**230**	10	2.6	35.1	ug/L
MKTF-36	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-36	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-36	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-36	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-36	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-36	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-36	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-36	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-36	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-36	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-36	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-36	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-36	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-36	11/21/2014	Phenol	15	10	1.6	5761	ug/L
MKTF-36	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-36	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-36	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-36	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-36	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-36	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-36	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-36	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-36	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-36	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-36	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-36	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-36	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-36	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-36	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-36	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-36	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-36	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-36	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-36	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-36	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-36	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-36	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-36	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	3/17/2015	Fluorene	10	10	1.7	288	ug/L
MKTF-36	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	3/17/2015	1-Methylnaphthalene	**240**	10	1.8	11.38	ug/L
MKTF-36	3/17/2015	Naphthalene	**470**	50	9.2	30	ug/L
MKTF-36	3/17/2015	2-Methylnaphthalene	**390**	50	11	35.1	ug/L
MKTF-36	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	3/17/2015	Phenol	44	10	1.1	5761	ug/L
MKTF-36	3/17/2015	Pyridine	ND	10	1.7	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-36	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	6/4/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-36	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	6/4/2015	1-Methylnaphthalene	**330**	50	9	11.38	ug/L
MKTF-36	6/4/2015	Naphthalene	**490**	50	9.2	30	ug/L
MKTF-36	6/4/2015	2-Methylnaphthalene	**510**	50	11	35.1	ug/L
MKTF-36	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	6/4/2015	Phenol	56	10	1.1	5761	ug/L
MKTF-36	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-36	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	8/18/2015	Fluorene	12	10	1.7	288	ug/L
MKTF-36	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	1-Methylnaphthalene	**340**	40	7.2	11.38	ug/L
MKTF-36	8/18/2015	Naphthalene	**520**	40	7.3	30	ug/L
MKTF-36	8/18/2015	2-Methylnaphthalene	**510**	40	9	35.1	ug/L
MKTF-36	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	8/18/2015	Phenol	48	10	1.1	5761	ug/L
MKTF-36	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-36	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-36	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-36	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-36	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-36	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-36	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-36	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-36	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-36	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-36	11/8/2016	Acenaphthene	5.1	10	2.6	535	ug/L
MKTF-36	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-36	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-36	11/8/2016	Phenanthrene	4.4	10	2.6	170	ug/L
MKTF-36	11/8/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-36	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-36	11/8/2016	Fluorene	8	10	2.7	288	ug/L
MKTF-36	11/8/2016	Carbazole	6	10	2.3	NA	ug/L
MKTF-36	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-36	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-36	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-36	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-36	11/8/2016	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-36	11/8/2016	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-36	11/8/2016	2-Methylnaphthalene	**230**	10	2.9	35.1	ug/L
MKTF-36	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-36	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-36	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-36	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-36	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-36	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-36	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-36	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-36	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-36	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-36	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-36	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-36	11/8/2016	Phenol	28	10	2	5761	ug/L
MKTF-36	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-36	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-36	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	11/8/2016	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-36	11/8/2016	Di-n-octylphthalate	8	10	2	200	ug/L
MKTF-36	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-36	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-36	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-36	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-36	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-36	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-36	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-36	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-36	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-36	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-36	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-36	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-36	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-36	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-36	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-36	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-36	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-36	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-36	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-36	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-36	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-36	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-36	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-36	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-36	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-36	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-36	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-36	3/1/2017	Acenaphthene	6.7	10	2.6	535	ug/L
MKTF-36	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-36	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-36	3/1/2017	Phenanthrene	5.7	10	2.6	170	ug/L
MKTF-36	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-36	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-36	3/1/2017	Fluorene	8.6	10	2.7	288	ug/L
MKTF-36	3/1/2017	Carbazole	6.4	10	2.3	NA	ug/L
MKTF-36	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-36	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-36	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-36	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-36	3/1/2017	1-Methylnaphthalene	**190**	10	2.9	11.38	ug/L
MKTF-36	3/1/2017	Naphthalene	**280**	50	13	30	ug/L
MKTF-36	3/1/2017	2-Methylnaphthalene	**320**	50	14	35.1	ug/L
MKTF-36	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-36	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-36	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-36	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-36	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-36	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-36	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-36	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-36	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-36	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-36	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-36	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-36	3/1/2017	Phenol	29	10	2	5761	ug/L
MKTF-36	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-36	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-36	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	3/1/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-36	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-36	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-36	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-36	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-36	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-36	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-36	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-36	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-36	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-36	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-36	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-36	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-36	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-36	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-36	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-36	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-36	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-36	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-36	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-36	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-36	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-36	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-36	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-36	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-36	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-36	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-36	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-36	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-36	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-36	6/14/2017	Acenaphthene	9.9	10	3.6	535	ug/L
MKTF-36	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-36	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-36	6/14/2017	Phenanthrene	8.7	10	4.3	170	ug/L
MKTF-36	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-36	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-36	6/14/2017	Fluorene	12	10	4	288	ug/L
MKTF-36	6/14/2017	Carbazole	9.9	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-36	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-36	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-36	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-36	6/14/2017	1-Methylnaphthalene	**350**	50	17	11.38	ug/L
MKTF-36	6/14/2017	Naphthalene	**520**	50	14	30	ug/L
MKTF-36	6/14/2017	2-Methylnaphthalene	**540**	50	16	35.1	ug/L
MKTF-36	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-36	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-36	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-36	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-36	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-36	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-36	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-36	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-36	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-36	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-36	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-36	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-36	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-36	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-36	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-36	6/14/2017	Phenol	80	10	3.1	5761	ug/L
MKTF-36	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-36	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-36	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-36	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-36	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-36	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-36	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-36	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-36	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-36	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-36	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-36	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-36	6/14/2017	Dibenzofuran	4.8	10	4.1	NA	ug/L
MKTF-36	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-36	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-36	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-36	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-36	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-36	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-36	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-36	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-36	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-36	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-36	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-36	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-36	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-36	9/27/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-36	9/27/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-36	9/27/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-36	9/27/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-36	9/27/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-36	9/27/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-36	9/27/2017	Benzoic Acid	64	200	39	75000	ug/L
MKTF-36	9/27/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-36	9/27/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-36	9/27/2017	Isophorone	ND	100	44	781	ug/L
MKTF-36	9/27/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-36	9/27/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-36	9/27/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-36	9/27/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-36	9/27/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-36	9/27/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-36	9/27/2017	Fluorene	ND	100	40	288	ug/L
MKTF-36	9/27/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-36	9/27/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-36	9/27/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-36	9/27/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-36	9/27/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-36	9/27/2017	1-Methylnaphthalene	**270**	100	33	11.38	ug/L
MKTF-36	9/27/2017	Naphthalene	**360**	100	29	30	ug/L
MKTF-36	9/27/2017	2-Methylnaphthalene	**440**	100	33	35.1	ug/L
MKTF-36	9/27/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-36	9/27/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-36	9/27/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-36	9/27/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-36	9/27/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-36	9/27/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-36	9/27/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-36	9/27/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-36	9/27/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-36	9/27/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-36	9/27/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-36	9/27/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-36	9/27/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-36	9/27/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-36	9/27/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-36	9/27/2017	Phenol	ND	100	31	5761	ug/L
MKTF-36	9/27/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-36	9/27/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-36	9/27/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-36	9/27/2017	Bis(2-ethylhexyl)phthalate	**210**	100	48	55.64	ug/L
MKTF-36	9/27/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-36	9/27/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-36	9/27/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-36	9/27/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-36	9/27/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-36	9/27/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-36	9/27/2017	Pyrene	ND	100	44	117	ug/L
MKTF-36	9/27/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-36	9/27/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-36	9/27/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-36	9/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/27/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-36	9/27/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-36	9/27/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-36	9/27/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-36	9/27/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-36	9/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-36	9/27/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-36	9/27/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-36	9/27/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-36	9/27/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-36	9/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-36	9/27/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-36	11/30/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-36	11/30/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-36	11/30/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-36	11/30/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-36	11/30/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-36	11/30/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-36	11/30/2017	Benzoic Acid	ND	200	39	75000	ug/L
MKTF-36	11/30/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-36	11/30/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-36	11/30/2017	Isophorone	ND	100	44	781	ug/L
MKTF-36	11/30/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-36	11/30/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-36	11/30/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-36	11/30/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-36	11/30/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-36	11/30/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-36	11/30/2017	Fluorene	ND	100	40	288	ug/L
MKTF-36	11/30/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-36	11/30/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-36	11/30/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-36	11/30/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-36	11/30/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-36	11/30/2017	1-Methylnaphthalene	**290**	100	33	11.38	ug/L
MKTF-36	11/30/2017	Naphthalene	**420**	100	29	30	ug/L
MKTF-36	11/30/2017	2-Methylnaphthalene	**440**	100	33	35.1	ug/L
MKTF-36	11/30/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-36	11/30/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-36	11/30/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-36	11/30/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-36	11/30/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-36	11/30/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-36	11/30/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-36	11/30/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-36	11/30/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-36	11/30/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-36	11/30/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-36	11/30/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-36	11/30/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-36	11/30/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-36	11/30/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-36	11/30/2017	Phenol	62	100	31	5761	ug/L
MKTF-36	11/30/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-36	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-36	11/30/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-36	11/30/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-36	11/30/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-36	11/30/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-36	11/30/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-36	11/30/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-36	11/30/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-36	11/30/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-36	11/30/2017	Pyrene	ND	100	44	117	ug/L
MKTF-36	11/30/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-36	11/30/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-36	11/30/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-36	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-36	11/30/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-36	11/30/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-36	11/30/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-36	11/30/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-36	11/30/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-36	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-36	11/30/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-36	11/30/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-36	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-36	11/30/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-36	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-36	11/30/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-36	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-36	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-36	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-36	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-36	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-36	2/15/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-36	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-36	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-36	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-36	2/15/2018	Acenaphthene	9.7	10	3.6	535	ug/L
MKTF-36	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-36	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-36	2/15/2018	Phenanthrene	8.6	10	4.3	170	ug/L
MKTF-36	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-36	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-36	2/15/2018	Fluorene	14	10	4	288	ug/L
MKTF-36	2/15/2018	Carbazole	8.3	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-36	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-36	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-36	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-36	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-36	2/15/2018	1-Methylnaphthalene	**310**	100	33	11.38	ug/L
MKTF-36	2/15/2018	Naphthalene	**440**	100	29	30	ug/L
MKTF-36	2/15/2018	2-Methylnaphthalene	**450**	100	33	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-36	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-36	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-36	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-36	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-36	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-36	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-36	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-36	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-36	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-36	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-36	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-36	2/15/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-36	2/15/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-36	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-36	2/15/2018	Phenol	*67*	10	3.1	5761	ug/L
MKTF-36	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-36	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-36	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-36	2/15/2018	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
MKTF-36	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-36	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-36	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-36	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-36	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-36	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-36	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-36	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-36	2/15/2018	Dibenzofuran	4.5	10	4.1	NA	ug/L
MKTF-36	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-36	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-36	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-36	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-36	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-36	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-36	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-36	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-36	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-36	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-36	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-36	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-36	2/15/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-36	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-36	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-36	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-36	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-36	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-36	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-36	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-36	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-36	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-36	5/3/2018	Acenaphthene	7.8	10	5.8	535	ug/L
MKTF-36	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-36	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-36	5/3/2018	Phenanthrene	6.3	10	6	170	ug/L
MKTF-36	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-36	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-36	5/3/2018	Fluorene	10	10	6.3	288	ug/L
MKTF-36	5/3/2018	Carbazole	7.4	10	6.3	NA	ug/L
MKTF-36	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-36	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-36	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-36	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-36	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-36	5/3/2018	1-Methylnaphthalene	**190**	10	7	11.38	ug/L
MKTF-36	5/3/2018	Naphthalene	**330**	20	10	30	ug/L
MKTF-36	5/3/2018	2-Methylnaphthalene	**320**	20	13	35.1	ug/L
MKTF-36	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-36	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-36	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-36	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-36	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-36	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-36	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-36	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-36	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-36	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-36	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-36	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-36	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-36	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-36	5/3/2018	Phenol	48	10	6	5761	ug/L
MKTF-36	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-36	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-36	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-36	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-36	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-36	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-36	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-36	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-36	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-36	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-36	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-36	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-36	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-36	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-36	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-36	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-36	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-36	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-36	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-36	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-36	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-36	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-36	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-36	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-36	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-36	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-36	9/5/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-36	9/5/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-36	9/5/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-36	9/5/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-36	9/5/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-36	9/5/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-36	9/5/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-36	9/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-36	9/5/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-36	9/5/2018	Acenaphthene	11	10	5.8	535	ug/L
MKTF-36	9/5/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-36	9/5/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-36	9/5/2018	Phenanthrene	10	10	6	170	ug/L
MKTF-36	9/5/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-36	9/5/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-36	9/5/2018	Fluorene	14	10	6.3	288	ug/L
MKTF-36	9/5/2018	Carbazole	8.9	10	6.3	NA	ug/L
MKTF-36	9/5/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-36	9/5/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-36	9/5/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-36	9/5/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-36	9/5/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-36	9/5/2018	1-Methylnaphthalene	**270**	20	14	11.38	ug/L
MKTF-36	9/5/2018	Naphthalene	**420**	20	10	30	ug/L
MKTF-36	9/5/2018	2-Methylnaphthalene	**410**	20	13	35.1	ug/L
MKTF-36	9/5/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-36	9/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-36	9/5/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	9/5/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-36	9/5/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-36	9/5/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-36	9/5/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-36	9/5/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-36	9/5/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-36	9/5/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-36	9/5/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-36	9/5/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-36	9/5/2018	2,4-Dimethylphenol	9.2	10	5.9	354	ug/L
MKTF-36	9/5/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-36	9/5/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-36	9/5/2018	Phenol	48	10	6	5761	ug/L
MKTF-36	9/5/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-36	9/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-36	9/5/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-36	9/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-36	9/5/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-36	9/5/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-36	9/5/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-36	9/5/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-36	9/5/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-36	9/5/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-36	9/5/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-36	9/5/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-36	9/5/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-36	9/5/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-36	9/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-36	9/5/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-36	9/5/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-36	9/5/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-36	9/5/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-36	9/5/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-36	9/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-36	9/5/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-36	9/5/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-36	9/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-36	9/5/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-36	9/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-36	9/5/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-36	9/18/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-36	9/18/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-36	9/18/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-36	9/18/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-36	9/18/2020	1-Methylnaphthalene	**440**	5	1	11.38	ug/L
MKTF-36	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-36	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-36	9/18/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-36	9/18/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-36	9/18/2020	2,4-Dimethylphenol	100	5	1	354	ug/L
MKTF-36	9/18/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-36	9/18/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-36	9/18/2020	2,6-Dinitrotoluene	*ND*	*2*	1	0.485	ug/L
MKTF-36	9/18/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-36	9/18/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-36	9/18/2020	2-Methylnaphthalene	**780**	5	1	35.1	ug/L
MKTF-36	9/18/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-36	9/18/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	3,4-Methylphenol	240	5	1	NA	ug/L
MKTF-36	9/18/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-36	9/18/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-36	9/18/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-36	9/18/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-36	9/18/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Acenaphthene	12	5	1	535	ug/L
MKTF-36	9/18/2020	Acenaphthylene	3.6	5	1	NA	ug/L
MKTF-36	9/18/2020	Aniline	ND	5	1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-36	9/18/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-36	9/18/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-36	9/18/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-36	9/18/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-36	9/18/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-36	9/18/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-36	9/18/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-36	9/18/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-36	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-36	9/18/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-36	9/18/2020	Bis(2-ethylhexyl)phthalate	4.7	5	2	55.64	ug/L
MKTF-36	9/18/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-36	9/18/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-36	9/18/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-36	9/18/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-36	9/18/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-36	9/18/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Diethylphthalate	3.1	5	2	14801	ug/L
MKTF-36	9/18/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-36	9/18/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-36	9/18/2020	Fluorene	24	5	1	288	ug/L
MKTF-36	9/18/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-36	9/18/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-36	9/18/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-36	9/18/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-36	9/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	2	1	0.343	ug/L
MKTF-36	9/18/2020	Isophorone	ND	5	1	781	ug/L
MKTF-36	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-36	9/18/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-36	9/18/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-36	9/18/2020	Naphthalene	**810**	5	1	30	ug/L
MKTF-36	9/18/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-36	9/18/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-36	9/18/2020	Phenanthrene	23	5	1	170	ug/L
MKTF-36	9/18/2020	Phenol	770	5	1	5761	ug/L
MKTF-36	9/18/2020	Pyrene	ND	5	1	117	ug/L
MKTF-36	9/18/2020	Pyridine	ND	5	2	20	ug/L
MKTF-37	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-37	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-37	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-37	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-37	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-37	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-37	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-37	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-37	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-37	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-37	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-37	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-37	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-37	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-37	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-37	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-37	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-37	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-37	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-37	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-37	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-37	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-37	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-37	11/21/2014	1-Methylnaphthalene	**50**	10	3.6	11.38	ug/L
MKTF-37	11/21/2014	Naphthalene	**270**	20	4.6	30	ug/L
MKTF-37	11/21/2014	2-Methylnaphthalene	**56**	10	2.6	35.1	ug/L
MKTF-37	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-37	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-37	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-37	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-37	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-37	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-37	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-37	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-37	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-37	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-37	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-37	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-37	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-37	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-37	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-37	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-37	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-37	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-37	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-37	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-37	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-37	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-37	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-37	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-37	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-37	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-37	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-37	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-37	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-37	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-37	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-37	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-37	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-37	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-37	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-37	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-37	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-37	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	3/17/2015	1-Methylnaphthalene	**72**	10	1.8	11.38	ug/L
MKTF-37	3/17/2015	Naphthalene	**160**	10	1.8	30	ug/L
MKTF-37	3/17/2015	2-Methylnaphthalene	**96**	10	2.2	35.1	ug/L
MKTF-37	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	3/17/2015	2-Methylphenol	33	10	1.2	NA	ug/L
MKTF-37	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-37	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	6/4/2015	1-Methylnaphthalene	**74**	10	1.8	11.38	ug/L
MKTF-37	6/4/2015	Naphthalene	**230**	10	1.8	30	ug/L
MKTF-37	6/4/2015	2-Methylnaphthalene	**110**	10	2.2	35.1	ug/L
MKTF-37	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	6/4/2015	2-Methylphenol	28	10	1.2	NA	ug/L
MKTF-37	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	1-Methylnaphthalene	**830**	100	18	11.38	ug/L
MKTF-37	8/18/2015	Naphthalene	**1700**	100	18	30	ug/L
MKTF-37	8/18/2015	2-Methylnaphthalene	**1400**	100	22	35.1	ug/L
MKTF-37	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-37	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	11/3/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	11/3/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-37	11/3/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-37	11/3/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-37	11/3/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/3/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-37	11/3/2016	Benzoic Acid	19	20	2.6	75000	ug/L
MKTF-37	11/3/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-37	11/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-37	11/3/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-37	11/3/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-37	11/3/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-37	11/3/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-37	11/3/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-37	11/3/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-37	11/3/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-37	11/3/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-37	11/3/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-37	11/3/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-37	11/3/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-37	11/3/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-37	11/3/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	11/3/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-37	11/3/2016	1-Methylnaphthalene	**51**	10	2.9	11.38	ug/L
MKTF-37	11/3/2016	Naphthalene	**200**	10	2.6	30	ug/L
MKTF-37	11/3/2016	2-Methylnaphthalene	**64**	10	2.9	35.1	ug/L
MKTF-37	11/3/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-37	11/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	11/3/2016	2-Methylphenol	12	10	2.5	NA	ug/L
MKTF-37	11/3/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-37	11/3/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-37	11/3/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-37	11/3/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-37	11/3/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-37	11/3/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-37	11/3/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-37	11/3/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-37	11/3/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-37	11/3/2016	1,4-Dichlorobenzene	3.2	10	2.4	75	ug/L
MKTF-37	11/3/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-37	11/3/2016	Phenol	7.4	10	2	5761	ug/L
MKTF-37	11/3/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-37	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-37	11/3/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	11/3/2016	Bis(2-ethylhexyl)phthalate	8.4	10	2.6	55.64	ug/L
MKTF-37	11/3/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-37	11/3/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-37	11/3/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	11/3/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-37	11/3/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-37	11/3/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-37	11/3/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-37	11/3/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-37	11/3/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-37	11/3/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-37	11/3/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-37	11/3/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-37	11/3/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-37	11/3/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-37	11/3/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-37	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-37	11/3/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-37	11/3/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-37	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-37	11/3/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-37	11/3/2016	3,4-Methylphenol	3.5	10	2.3	NA	ug/L
MKTF-37	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-37	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-37	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-37	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-37	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-37	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-37	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-37	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-37	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-37	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-37	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-37	3/1/2017	Di-n-butylphthalate	3.6	10	2.4	885	ug/L
MKTF-37	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-37	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-37	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-37	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-37	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-37	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-37	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-37	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-37	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-37	3/1/2017	1-Methylnaphthalene	**420**	50	15	11.38	ug/L
MKTF-37	3/1/2017	Naphthalene	**890**	50	13	30	ug/L
MKTF-37	3/1/2017	2-Methylnaphthalene	**690**	50	14	35.1	ug/L
MKTF-37	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-37	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-37	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-37	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-37	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-37	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-37	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-37	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-37	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-37	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-37	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-37	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-37	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-37	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-37	3/1/2017	Pyridine	ND	10	2.2	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-37	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	3/1/2017	Bis(2-ethylhexyl)phthalate	20	10	2.6	55.64	ug/L
MKTF-37	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-37	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-37	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-37	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-37	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-37	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-37	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-37	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-37	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-37	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-37	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-37	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-37	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-37	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-37	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-37	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-37	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-37	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-37	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-37	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-37	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-37	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-37	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-37	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-37	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-37	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-37	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-37	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-37	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-37	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-37	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-37	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-37	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-37	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-37	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-37	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-37	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-37	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-37	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-37	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-37	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-37	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-37	5/3/2018	1-Methylnaphthalene	**88**	10	7	11.38	ug/L
MKTF-37	5/3/2018	Naphthalene	**280**	20	10	30	ug/L
MKTF-37	5/3/2018	2-Methylnaphthalene	**100**	10	6.3	35.1	ug/L
MKTF-37	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-37	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-37	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-37	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-37	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-37	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-37	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-37	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-37	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-37	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-37	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-37	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-37	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-37	5/3/2018	1,4-Dichlorobenzene	7	10	5.8	75	ug/L
MKTF-37	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-37	5/3/2018	Phenol	23	10	6	5761	ug/L
MKTF-37	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-37	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-37	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-37	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-37	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-37	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-37	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-37	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-37	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-37	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-37	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-37	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-37	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-37	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-37	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-37	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-37	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-37	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-37	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-37	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-37	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-37	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-37	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-37	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-37	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-37	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-37	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-37	8/23/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-37	8/23/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-37	8/23/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-37	8/23/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-37	8/23/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-37	8/23/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-37	8/23/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-37	8/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-37	8/23/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-37	8/23/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-37	8/23/2018	Diethylphthalate	ND	10	6.3	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/23/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-37	8/23/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-37	8/23/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-37	8/23/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-37	8/23/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-37	8/23/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-37	8/23/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-37	8/23/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-37	8/23/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-37	8/23/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-37	8/23/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-37	8/23/2018	1-Methylnaphthalene	**68**	10	7	11.38	ug/L
MKTF-37	8/23/2018	Naphthalene	**280**	20	10	30	ug/L
MKTF-37	8/23/2018	2-Methylnaphthalene	**84**	10	6.3	35.1	ug/L
MKTF-37	8/23/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-37	8/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-37	8/23/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-37	8/23/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-37	8/23/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-37	8/23/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-37	8/23/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-37	8/23/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-37	8/23/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-37	8/23/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-37	8/23/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-37	8/23/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-37	8/23/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-37	8/23/2018	1,4-Dichlorobenzene	6.2	10	5.8	75	ug/L
MKTF-37	8/23/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-37	8/23/2018	Phenol	18	10	6	5761	ug/L
MKTF-37	8/23/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-37	8/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-37	8/23/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-37	8/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-37	8/23/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-37	8/23/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-37	8/23/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-37	8/23/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-37	8/23/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-37	8/23/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-37	8/23/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-37	8/23/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-37	8/23/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-37	8/23/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-37	8/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-37	8/23/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-37	8/23/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-37	8/23/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-37	8/23/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-37	8/23/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-37	8/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-37	8/23/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-37	8/23/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-37	8/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-37	8/23/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-37	8/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-37	8/23/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-37	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-37	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-37	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-37	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-37	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-37	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-37	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-37	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-37	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-37	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-37	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-37	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-37	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-37	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-37	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-37	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-37	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-37	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-37	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-37	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-37	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-37	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-37	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-37	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-37	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-37	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-37	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-37	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-37	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-37	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-37	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-37	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-37	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-37	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-37	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-37	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-37	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-37	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-37	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-37	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-37	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-37	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-37	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-37	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-37	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-37	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-37	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-37	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-37	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-37	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-37	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-37	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-37	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-37	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-37	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-37	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-37	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-37	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-37	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-37	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-37	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-37	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-37	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-37	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-37	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-37	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-37	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-37	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-37	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-37	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-37	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-37	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-37	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-37	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-37	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-37	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-37	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-37	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-37	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-37	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-37	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-37	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-37	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-37	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-37	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-37	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-37	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-37	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-37	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-37	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-37	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-37	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-37	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-37	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-37	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-37	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-37	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-37	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-37	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-37	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-37	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-37	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-37	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-37	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-37	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-37	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-37	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-37	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-37	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-37	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-37	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-37	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-37	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-37	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-37	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-37	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-37	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-37	9/17/2020	1,2,4-Trichlorobenzene	ND	4.2	0.83	70	ug/L
MKTF-37	9/17/2020	1,2-Dichlorobenzene	ND	4.2	0.83	600	ug/L
MKTF-37	9/17/2020	1,3-Dichlorobenzene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	1,4-Dichlorobenzene	ND	4.2	0.83	75	ug/L
MKTF-37	9/17/2020	1,4-Dioxane	**46**	4.2	0.83	4.59	ug/L
MKTF-37	9/17/2020	1-Methylnaphthalene	**79**	4.2	0.83	11.38	ug/L
MKTF-37	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	4.2	0.83	240	ug/L
MKTF-37	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	2,4,5-Trichlorophenol	ND	4.2	0.83	1166	ug/L
MKTF-37	9/17/2020	2,4,6-Trichlorophenol	ND	4.2	0.83	11.9*	ug/L
MKTF-37	9/17/2020	2,4-Dichlorophenol	ND	4.2	0.83	45.3	ug/L
MKTF-37	9/17/2020	2,4-Dimethylphenol	ND	4.2	0.83	354	ug/L
MKTF-37	9/17/2020	2,4-Dinitrophenol	ND	4.2	0.83	38.7	ug/L
MKTF-37	9/17/2020	2,4-Dinitrotoluene	ND	4.2	0.83	45.3	ug/L
MKTF-37	9/17/2020	2,6-Dinitrotoluene	*ND*	*1.7*	0.83	0.485	ug/L
MKTF-37	9/17/2020	2-Chloronaphthalene	ND	4.2	0.83	733	ug/L
MKTF-37	9/17/2020	2-Chlorophenol	ND	4.2	0.83	91	ug/L
MKTF-37	9/17/2020	2-Methylnaphthalene	**100**	4.2	0.83	35.1	ug/L
MKTF-37	9/17/2020	2-Methylphenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	2-Nitroaniline	ND	4.2	0.83	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	2-Nitrophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	3,4-Methylphenol	10	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	3,3-Dichlorobenzidine	*ND*	*4.2*	0.83	1.25	ug/L
MKTF-37	9/17/2020	3-Nitroaniline	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*4.2*	0.83	1.52	ug/L
MKTF-37	9/17/2020	4-Bromophenyl-phenylether	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Chloro-3-Methylphenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Chloroaniline	*ND*	*4.2*	0.83	0.37	ug/L
MKTF-37	9/17/2020	4-Chlorophenyl-phenylether	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Nitroaniline	*ND*	*4.2*	0.83	3.8	ug/L
MKTF-37	9/17/2020	4-Nitrophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Acenaphthene	ND	4.2	0.83	535	ug/L
MKTF-37	9/17/2020	Acenaphthylene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Aniline	ND	4.2	0.83	13	ug/L
MKTF-37	9/17/2020	Anthracene	ND	4.2	0.83	1721	ug/L
MKTF-37	9/17/2020	Benzo(a)anthracene	*ND*	*0.83*	0.42	0.12	ug/L
MKTF-37	9/17/2020	Benzidine	*ND*	*4.2*	2.1	0.0011	ug/L
MKTF-37	9/17/2020	Benzo(a)pyrene	*ND*	*0.83*	0.42	0.2	ug/L
MKTF-37	9/17/2020	Benzo(b)fluoranthene	*ND*	*0.83*	0.42	0.34	ug/L
MKTF-37	9/17/2020	Benzo(g,h,i)perylene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Benzo(k)fluoranthene	*ND*	*4.2*	0.83	3.43	ug/L
MKTF-37	9/17/2020	Benzoic Acid	ND	4.2	1.7	75000	ug/L
MKTF-37	9/17/2020	Benzyl Alcohol	ND	4.2	1.7	2000	ug/L
MKTF-37	9/17/2020	Bis(2-chloroethoxy)methane	ND	4.2	0.83	59	ug/L
MKTF-37	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*4.2*	0.83	0.137	ug/L
MKTF-37	9/17/2020	Bis(2-chloroisopropyl)ether	ND	4.2	0.83	9.81	ug/L
MKTF-37	9/17/2020	Bis(2-ethylhexyl)phthalate	40	4.2	1.7	55.64	ug/L
MKTF-37	9/17/2020	Butylbenzylphthalate	ND	4.2	0.83	16	ug/L
MKTF-37	9/17/2020	Carbazole	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Chrysene	ND	4.2	0.83	34.3	ug/L
MKTF-37	9/17/2020	Di-n-butylphthalate	ND	4.2	1.7	885	ug/L
MKTF-37	9/17/2020	Di-n-octylphthalate	ND	4.2	1.7	200	ug/L
MKTF-37	9/17/2020	Dibenzo(a,h)anthracene	ND	4.2	0.17	NA	ug/L
MKTF-37	9/17/2020	Dibenzofuran	ND	0.25	0.83	NA	ug/L
MKTF-37	9/17/2020	Diethylphthalate	2.2	4.2	1.7	14801	ug/L
MKTF-37	9/17/2020	Dimethylphthalate	ND	4.2	1.7	612	ug/L
MKTF-37	9/17/2020	Fluoranthene	ND	4.2	0.83	802	ug/L
MKTF-37	9/17/2020	Fluorene	ND	4.2	0.83	288	ug/L
MKTF-37	9/17/2020	Hexachlorobenzene	*ND*	*4.2*	0.83	0.0976	ug/L
MKTF-37	9/17/2020	Hexachlorobutadiene	*ND*	*4.2*	0.83	0.14	ug/L
MKTF-37	9/17/2020	Hexachlorocyclopentadiene	*ND*	*4.2*	2.1	0.41	ug/L
MKTF-37	9/17/2020	Hexachloroethane	*ND*	*4.2*	0.83	3.28	ug/L
MKTF-37	9/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1.7*	0.83	0.343	ug/L
MKTF-37	9/17/2020	Isophorone	ND	4.2	0.83	781	ug/L
MKTF-37	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*4.2*	0.83	0.011	ug/L
MKTF-37	9/17/2020	N-Nitrosodimethylamine	*ND*	*4.2*	0.83	0.0049	ug/L
MKTF-37	9/17/2020	N-Nitrosodiphenylamine	ND	4.2	0.83	122	ug/L
MKTF-37	9/17/2020	Naphthalene	**290**	4.2	0.83	30	ug/L
MKTF-37	9/17/2020	Nitrobenzene	*ND*	*4.2*	0.83	1.4	ug/L
MKTF-37	9/17/2020	Pentachlorophenol	*ND*	*4.2*	1.7	1	ug/L
MKTF-37	9/17/2020	Phenanthrene	ND	4.2	0.83	170	ug/L
MKTF-37	9/17/2020	Phenol	21	4.2	0.83	5761	ug/L
MKTF-37	9/17/2020	Pyrene	ND	4.2	0.83	117	ug/L
MKTF-37	9/17/2020	Pyridine	ND	4.2	1.7	20	ug/L
MKTF-38	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-38	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-38	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-38	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-38	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-38	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-38	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-38	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-38	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-38	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-38	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-38	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-38	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-38	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-38	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-38	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-38	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-38	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-38	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-38	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-38	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-38	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-38	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-38	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-38	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-38	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-38	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-38	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-38	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-38	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-38	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-38	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-38	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-38	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-38	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-38	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-38	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-38	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-38	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-38	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-38	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-38	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-38	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-38	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-38	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-38	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-38	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-38	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-38	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-38	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-38	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-38	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-38	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-38	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-38	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-38	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-38	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-38	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-38	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-38	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-38	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-38	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-38	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	8/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	8/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	8/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	8/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	8/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	8/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	8/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	8/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	8/24/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	8/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	8/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	8/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	8/24/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	8/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	8/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	8/24/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	8/24/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	8/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	8/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	8/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	8/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	8/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	8/24/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	8/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	8/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	8/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	8/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	8/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	8/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	8/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	8/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	8/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	8/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	8/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	8/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	8/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	8/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	8/24/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	8/24/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	8/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	8/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	8/24/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	8/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	8/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	8/24/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	8/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	8/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	8/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	8/24/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	8/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	8/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	8/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	8/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	8/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	8/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	8/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	8/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	8/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	8/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	8/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	8/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	8/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	8/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	8/24/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-38	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-38	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-38	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-38	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-38	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-38	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-38	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-38	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-38	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-38	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-38	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-38	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-38	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-38	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-38	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-38	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-38	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-38	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-38	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-38	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-38	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-38	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-38	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-38	2/29/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-38	2/29/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-38	2/29/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-38	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-38	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-38	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-38	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-38	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-38	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-38	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-38	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-38	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-38	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-38	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-38	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-38	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-38	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-38	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-38	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-38	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-38	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-38	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-38	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-38	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-38	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-38	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-38	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-38	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-38	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-38	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-38	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-38	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-38	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-38	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-38	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-38	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-38	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-38	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-38	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-38	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-38	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-38	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-38	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-38	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-38	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-38	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-38	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	6/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-38	6/8/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-38	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	9/13/2016	Benzoic Acid	4.6	20	2.6	75000	ug/L
MKTF-38	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	9/13/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-38	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-38	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	11/1/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
MKTF-38	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-38	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	11/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	11/1/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	11/1/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-38	11/1/2016	Di-n-octylphthalate	7.8	10	2	200	ug/L
MKTF-38	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-38	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	3/14/2017	Benzoic Acid	7.5	20	2.6	75000	ug/L
MKTF-38	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	3/14/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	3/14/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	3/14/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	3/14/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	3/14/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	3/14/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	3/14/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	3/14/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	3/14/2017	Phenol	ND	10	2	5761	ug/L
MKTF-38	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	3/14/2017	Bis(2-ethylhexyl)phthalate	7.4	10	2.6	55.64	ug/L
MKTF-38	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-38	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	3/14/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	3/14/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	6/21/2017	Aniline	ND	10	3.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	6/21/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
MKTF-38	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	6/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	6/21/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
MKTF-38	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	9/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	9/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	9/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	9/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	9/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-38	9/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	9/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-38	9/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	9/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	9/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	9/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	9/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	9/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	9/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	9/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	9/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	9/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	9/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	9/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	9/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	9/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	9/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	9/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	9/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	9/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	9/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	9/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	9/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	9/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	9/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	9/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	9/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	9/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	9/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	9/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	9/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	9/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	9/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	9/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	9/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	9/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	9/28/2017	Pyridine	ND	10	2.3	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	9/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	9/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	9/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	9/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	9/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	9/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	9/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	9/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	9/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	9/28/2017	Dimethylphthalate	6.2	10	3.6	612	ug/L
MKTF-38	9/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	9/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	9/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	9/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	9/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	9/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	9/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	9/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	9/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	9/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	9/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	11/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	11/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	11/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	11/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	11/30/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-38	11/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	11/30/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-38	11/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	11/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	11/30/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	11/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	11/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	11/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	11/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	11/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	11/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	11/30/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	11/30/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	11/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	11/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	11/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	11/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	11/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	11/30/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	11/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	11/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	11/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	11/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	11/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	11/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	11/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	11/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	11/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	11/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	11/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	11/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	11/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	11/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	11/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	11/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	11/30/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	11/30/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	11/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	11/30/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	11/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	11/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	11/30/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	11/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	11/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	11/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	11/30/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	11/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	11/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	11/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	11/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	11/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	11/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	11/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	11/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	11/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	11/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	11/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	11/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	2/12/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	2/12/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	2/12/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	2/12/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	2/12/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-38	2/12/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	2/12/2018	Benzoic Acid	8.1	20	3.9	75000	ug/L
MKTF-38	2/12/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	2/12/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	2/12/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	2/12/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	2/12/2018	Diethylphthalate	ND	10	4	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/12/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	2/12/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	2/12/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	2/12/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	2/12/2018	Fluorene	ND	10	4	288	ug/L
MKTF-38	2/12/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	2/12/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	2/12/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	2/12/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	2/12/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	2/12/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	2/12/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	2/12/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	2/12/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	2/12/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	2/12/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	2/12/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	2/12/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	2/12/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	2/12/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	2/12/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	2/12/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	2/12/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	2/12/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	2/12/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	2/12/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	2/12/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	2/12/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	2/12/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	2/12/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	2/12/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	2/12/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	2/12/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	2/12/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	2/12/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	2/12/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	2/12/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	2/12/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	2/12/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	2/12/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	2/12/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	2/12/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	2/12/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	2/12/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	2/12/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	2/12/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	2/12/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	2/12/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	2/12/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	2/12/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	2/12/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	2/12/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	2/12/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	2/12/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	2/12/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	2/12/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-38	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-38	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-38	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-38	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-38	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-38	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-38	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-38	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-38	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-38	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-38	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-38	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-38	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-38	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-38	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-38	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-38	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-38	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-38	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-38	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-38	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-38	5/3/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-38	5/3/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-38	5/3/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-38	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-38	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-38	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-38	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-38	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-38	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-38	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-38	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-38	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-38	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-38	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-38	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-38	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-38	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-38	5/3/2018	Phenol	ND	10	6	5761	ug/L
MKTF-38	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-38	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-38	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-38	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-38	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-38	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-38	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-38	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-38	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-38	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-38	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-38	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-38	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-38	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-38	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-38	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-38	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-38	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-38	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-38	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-38	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-38	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-38	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-38	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-38	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-38	8/21/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-38	8/21/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-38	8/21/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-38	8/21/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-38	8/21/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-38	8/21/2018	Benzoic Acid	8.6	20	6.3	75000	ug/L
MKTF-38	8/21/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-38	8/21/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-38	8/21/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-38	8/21/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-38	8/21/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-38	8/21/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-38	8/21/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-38	8/21/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-38	8/21/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-38	8/21/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-38	8/21/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-38	8/21/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-38	8/21/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-38	8/21/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-38	8/21/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-38	8/21/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-38	8/21/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-38	8/21/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-38	8/21/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-38	8/21/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-38	8/21/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-38	8/21/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	8/21/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-38	8/21/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-38	8/21/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-38	8/21/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-38	8/21/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-38	8/21/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-38	8/21/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-38	8/21/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-38	8/21/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-38	8/21/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-38	8/21/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-38	8/21/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-38	8/21/2018	Phenol	ND	10	6	5761	ug/L
MKTF-38	8/21/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-38	8/21/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-38	8/21/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-38	8/21/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-38	8/21/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	8/21/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-38	8/21/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-38	8/21/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-38	8/21/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-38	8/21/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-38	8/21/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-38	8/21/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-38	8/21/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-38	8/21/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-38	8/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-38	8/21/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-38	8/21/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-38	8/21/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-38	8/21/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-38	8/21/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-38	8/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-38	8/21/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-38	8/21/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-38	8/21/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-38	8/21/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-38	8/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-38	8/21/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-38	11/20/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-38	11/20/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-38	11/20/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-38	11/20/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-38	11/20/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-38	11/20/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-38	11/20/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-38	11/20/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-38	11/20/2018	Isophorone	ND	100	62	781	ug/L
MKTF-38	11/20/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-38	11/20/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-38	11/20/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-38	11/20/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-38	11/20/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-38	11/20/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-38	11/20/2018	Fluorene	ND	100	63	288	ug/L
MKTF-38	11/20/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-38	11/20/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/20/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-38	11/20/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-38	11/20/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-38	11/20/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-38	11/20/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-38	11/20/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-38	11/20/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-38	11/20/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-38	11/20/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-38	11/20/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-38	11/20/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-38	11/20/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-38	11/20/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-38	11/20/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-38	11/20/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-38	11/20/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-38	11/20/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-38	11/20/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-38	11/20/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-38	11/20/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-38	11/20/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-38	11/20/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-38	11/20/2018	Phenol	ND	100	60	5761	ug/L
MKTF-38	11/20/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-38	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-38	11/20/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-38	11/20/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-38	11/20/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-38	11/20/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-38	11/20/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-38	11/20/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-38	11/20/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-38	11/20/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-38	11/20/2018	Pyrene	ND	100	65	117	ug/L
MKTF-38	11/20/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-38	11/20/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-38	11/20/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-38	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-38	11/20/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-38	11/20/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-38	11/20/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-38	11/20/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-38	11/20/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-38	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-38	11/20/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-38	11/20/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-38	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-38	11/20/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-38	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-38	11/20/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-38	6/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-38	6/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-38	6/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-38	6/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-38	6/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-38	6/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-38	6/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-38	6/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-38	6/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-38	6/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-38	6/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-38	6/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-38	6/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-38	6/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-38	6/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-38	6/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-38	6/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-38	6/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-38	6/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-38	6/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-38	6/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-38	6/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-38	6/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-38	6/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-38	6/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-38	6/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-38	6/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-38	6/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-38	6/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-38	6/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-38	6/27/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-38	6/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-38	6/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-38	6/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-38	6/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-38	6/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-38	6/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-38	6/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-38	6/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-38	6/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-38	6/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-38	6/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-38	6/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-38	6/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-38	6/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-38	6/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-38	6/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-38	6/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-38	6/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-38	6/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-38	6/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-38	6/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-38	6/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-38	6/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-38	6/27/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-38	6/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-38	6/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-38	6/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-38	6/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-38	6/27/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-38	6/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-38	6/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-38	6/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-38	6/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-38	6/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-38	6/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-38	6/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-38	6/27/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-38	6/27/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-38	6/27/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-38	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-38	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-38	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-38	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-38	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-38	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-38	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-38	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-38	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-38	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-38	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-38	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-38	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-38	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-38	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-38	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-38	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-38	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-38	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-38	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-38	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-38	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-38	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-38	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-38	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-38	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-38	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-38	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-38	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-38	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-38	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-38	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-38	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-38	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-38	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-38	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-38	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-38	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-38	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-38	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-38	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-38	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-38	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-38	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-38	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-38	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-38	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-38	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-38	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-38	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-38	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-38	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-38	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-38	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-38	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-38	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-38	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-38	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-38	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-38	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-38	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-38	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-38	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-38	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-38	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-38	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-38	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-38	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-38	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-38	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-38	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-38	3/5/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-38	3/5/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-38	3/5/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-38	3/5/2020	1,4-Dioxane	1.1	1	0.2	4.59	ug/L
MKTF-38	3/5/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-38	3/5/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-38	3/5/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-38	3/5/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-38	3/5/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-38	3/5/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-38	3/5/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-38	3/5/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-38	3/5/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-38	3/5/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-38	3/5/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-38	3/5/2020	2-Methylphenol	120	10	2	NA	ug/L
MKTF-38	3/5/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-38	3/5/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	3,4-Methylphenol	8.8	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-38	3/5/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-38	3/5/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/5/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-38	3/5/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-38	3/5/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-38	3/5/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-38	3/5/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-38	3/5/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-38	3/5/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-38	3/5/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-38	3/5/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-38	3/5/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-38	3/5/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-38	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-38	3/5/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-38	3/5/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-38	3/5/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-38	3/5/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-38	3/5/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-38	3/5/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-38	3/5/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-38	3/5/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-38	3/5/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-38	3/5/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-38	3/5/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-38	3/5/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-38	3/5/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-38	3/5/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-38	3/5/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-38	3/5/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-38	3/5/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-38	3/5/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-38	3/5/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-38	3/5/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-38	3/5/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-38	3/5/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-38	3/5/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-38	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-38	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-38	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-38	9/19/2020	1,4-Dioxane	1.2	0.51	0.1	4.59	ug/L
MKTF-38	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-38	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-38	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-38	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-38	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-38	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-38	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-38	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-38	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-38	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-38	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-38	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-38	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-38	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-38	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-38	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-38	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-38	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-38	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-38	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-38	9/19/2020	Benzo(a)anthracene	*ND*	*0.51*	0.1	0.12	ug/L
MKTF-38	9/19/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-38	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-38	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-38	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Benzo(k)fluoranthene	ND	0.1	0.051	3.43	ug/L
MKTF-38	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-38	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-38	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-38	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-38	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-38	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-38	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-38	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-38	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-38	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-38	9/19/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-38	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-38	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-38	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-38	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-38	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-38	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-38	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MKTF-38	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-38	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-38	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-38	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-38	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-38	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-38	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-38	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-38	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-38	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-38	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-38	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-39	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-39	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-39	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-39	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-39	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-39	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-39	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-39	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-39	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-39	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-39	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-39	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-39	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-39	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-39	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-39	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-39	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-39	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-39	11/18/2014	Carbazole	21	10	2.9	NA	ug/L
MKTF-39	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-39	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-39	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-39	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-39	11/18/2014	1-Methylnaphthalene	**79**	10	3.6	11.38	ug/L
MKTF-39	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-39	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-39	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-39	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-39	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-39	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-39	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-39	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-39	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-39	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-39	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-39	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-39	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-39	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-39	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-39	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-39	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-39	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	11/18/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-39	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-39	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-39	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-39	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-39	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-39	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-39	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-39	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-39	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-39	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-39	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-39	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-39	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-39	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-39	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-39	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-39	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-39	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-39	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-39	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-39	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-39	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-39	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	3/16/2015	Carbazole	11	10	1.5	NA	ug/L
MKTF-39	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	3/16/2015	1-Methylnaphthalene	**56**	10	1.8	11.38	ug/L
MKTF-39	3/16/2015	Naphthalene	20	10	1.8	30	ug/L
MKTF-39	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-39	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	6/10/2015	Phenanthrene	14	10	2	170	ug/L
MKTF-39	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	6/10/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-39	6/10/2015	Carbazole	26	10	1.5	NA	ug/L
MKTF-39	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	6/10/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-39	6/10/2015	Naphthalene	**64**	10	1.8	30	ug/L
MKTF-39	6/10/2015	2-Methylnaphthalene	**43**	10	2.2	35.1	ug/L
MKTF-39	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	8/23/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	8/23/2015	Carbazole	25	10	1.5	NA	ug/L
MKTF-39	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	8/23/2015	1-Methylnaphthalene	**84**	10	1.8	11.38	ug/L
MKTF-39	8/23/2015	Naphthalene	**51**	10	1.8	30	ug/L
MKTF-39	8/23/2015	2-Methylnaphthalene	21	10	2.2	35.1	ug/L
MKTF-39	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	8/23/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	8/23/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	8/23/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	8/23/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	11/9/2015	Carbazole	21	10	1.5	NA	ug/L
MKTF-39	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	11/9/2015	1-Methylnaphthalene	**89**	10	1.8	11.38	ug/L
MKTF-39	11/9/2015	Naphthalene	**62**	10	1.8	30	ug/L
MKTF-39	11/9/2015	2-Methylnaphthalene	32	10	2.2	35.1	ug/L
MKTF-39	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	3/3/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-39	3/3/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-39	3/3/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-39	3/3/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-39	3/3/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-39	3/3/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-39	3/3/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-39	3/3/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-39	3/3/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-39	3/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-39	3/3/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-39	3/3/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-39	3/3/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-39	3/3/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-39	3/3/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-39	3/3/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-39	3/3/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-39	3/3/2016	Fluorene	10	10	7.2	288	ug/L
MKTF-39	3/3/2016	Carbazole	28	10	7.2	NA	ug/L
MKTF-39	3/3/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-39	3/3/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-39	3/3/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-39	3/3/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-39	3/3/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-39	3/3/2016	1-Methylnaphthalene	**110**	10	6.8	11.38	ug/L
MKTF-39	3/3/2016	Naphthalene	**45**	10	5.9	30	ug/L
MKTF-39	3/3/2016	2-Methylnaphthalene	**37**	10	7	35.1	ug/L
MKTF-39	3/3/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-39	3/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-39	3/3/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-39	3/3/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-39	3/3/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-39	3/3/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-39	3/3/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-39	3/3/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-39	3/3/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-39	3/3/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-39	3/3/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-39	3/3/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-39	3/3/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-39	3/3/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-39	3/3/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-39	3/3/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-39	3/3/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-39	3/3/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-39	3/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-39	3/3/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-39	3/3/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-39	3/3/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	3/3/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-39	3/3/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-39	3/3/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-39	3/3/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-39	3/3/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-39	3/3/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-39	3/3/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-39	3/3/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-39	3/3/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-39	3/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-39	3/3/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-39	3/3/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-39	3/3/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-39	3/3/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-39	3/3/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-39	3/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-39	3/3/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-39	3/3/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-39	3/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-39	3/3/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-39	3/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-39	3/3/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-39	6/8/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-39	6/8/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-39	6/8/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-39	6/8/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-39	6/8/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-39	6/8/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-39	6/8/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-39	6/8/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2016	Isophorone	ND	50	13	781	ug/L
MKTF-39	6/8/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-39	6/8/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-39	6/8/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-39	6/8/2016	Phenanthrene	13	50	13	170	ug/L
MKTF-39	6/8/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-39	6/8/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-39	6/8/2016	Fluorene	ND	50	14	288	ug/L
MKTF-39	6/8/2016	Carbazole	26	50	11	NA	ug/L
MKTF-39	6/8/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-39	6/8/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-39	6/8/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-39	6/8/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-39	6/8/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	1-Methylnaphthalene	**110**	50	15	11.38	ug/L
MKTF-39	6/8/2016	Naphthalene	**49**	50	13	30	ug/L
MKTF-39	6/8/2016	2-Methylnaphthalene	**42**	50	14	35.1	ug/L
MKTF-39	6/8/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-39	6/8/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-39	6/8/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-39	6/8/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-39	6/8/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-39	6/8/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-39	6/8/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-39	6/8/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-39	6/8/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-39	6/8/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-39	6/8/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-39	6/8/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-39	6/8/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-39	6/8/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-39	6/8/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-39	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-39	6/8/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-39	6/8/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
MKTF-39	6/8/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-39	6/8/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-39	6/8/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-39	6/8/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-39	6/8/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-39	6/8/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-39	6/8/2016	Pyrene	ND	50	15	117	ug/L
MKTF-39	6/8/2016	Dimethylphthalate	14	50	12	612	ug/L
MKTF-39	6/8/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-39	6/8/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-39	6/8/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-39	6/8/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-39	6/8/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-39	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-39	6/8/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-39	6/8/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-39	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-39	6/8/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-39	6/8/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-39	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-39	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	9/13/2016	Benzoic Acid	12	20	2.6	75000	ug/L
MKTF-39	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-39	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	9/13/2016	Phenanthrene	6.7	10	2.6	170	ug/L
MKTF-39	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-39	9/13/2016	Fluorene	7.8	10	2.7	288	ug/L
MKTF-39	9/13/2016	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	9/13/2016	1-Methylnaphthalene	**77**	10	2.9	11.38	ug/L
MKTF-39	9/13/2016	Naphthalene	**44**	10	2.6	30	ug/L
MKTF-39	9/13/2016	2-Methylnaphthalene	28	10	2.9	35.1	ug/L
MKTF-39	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-39	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	9/13/2016	Bis(2-ethylhexyl)phthalate	2.6	10	2.6	55.64	ug/L
MKTF-39	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-39	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	9/13/2016	Dibenzofuran	2.6	10	2.5	NA	ug/L
MKTF-39	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-39	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	11/1/2016	Benzoic Acid	16	20	2.6	75000	ug/L
MKTF-39	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	11/1/2016	Acenaphthene	2.6	10	2.6	535	ug/L
MKTF-39	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	11/1/2016	Phenanthrene	7.4	10	2.6	170	ug/L
MKTF-39	11/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-39	11/1/2016	Fluorene	8.6	10	2.7	288	ug/L
MKTF-39	11/1/2016	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	11/1/2016	1-Methylnaphthalene	**98**	10	2.9	11.38	ug/L
MKTF-39	11/1/2016	Naphthalene	**54**	10	2.6	30	ug/L
MKTF-39	11/1/2016	2-Methylnaphthalene	**39**	10	2.9	35.1	ug/L
MKTF-39	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-39	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	11/1/2016	Bis(2-ethylhexyl)phthalate	6.7	10	2.6	55.64	ug/L
MKTF-39	11/1/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-39	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	11/1/2016	Pyrene	4.8	10	3.1	117	ug/L
MKTF-39	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	11/1/2016	Dibenzofuran	3.2	10	2.5	NA	ug/L
MKTF-39	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-39	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	3/14/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-39	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-39	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	3/14/2017	Phenanthrene	14	10	2.6	170	ug/L
MKTF-39	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/14/2017	Fluorene	10	10	2.7	288	ug/L
MKTF-39	3/14/2017	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	3/14/2017	1-Methylnaphthalene	**130**	10	2.9	11.38	ug/L
MKTF-39	3/14/2017	Naphthalene	**65**	10	2.6	30	ug/L
MKTF-39	3/14/2017	2-Methylnaphthalene	**59**	10	2.9	35.1	ug/L
MKTF-39	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	3/14/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	3/14/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	3/14/2017	Phenol	ND	10	2	5761	ug/L
MKTF-39	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	3/14/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-39	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-39	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	3/14/2017	Pyrene	4	10	3.1	117	ug/L
MKTF-39	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-39	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	3/14/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	6/8/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-39	6/8/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-39	6/8/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-39	6/8/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-39	6/8/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-39	6/8/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-39	6/8/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-39	6/8/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-39	6/8/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-39	6/8/2017	Isophorone	ND	50	22	781	ug/L
MKTF-39	6/8/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-39	6/8/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-39	6/8/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-39	6/8/2017	Phenanthrene	74	50	22	170	ug/L
MKTF-39	6/8/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-39	6/8/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-39	6/8/2017	Fluorene	41	50	20	288	ug/L
MKTF-39	6/8/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-39	6/8/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-39	6/8/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-39	6/8/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-39	6/8/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-39	6/8/2017	1-Methylnaphthalene	**360**	50	17	11.38	ug/L
MKTF-39	6/8/2017	Naphthalene	**98**	50	14	30	ug/L
MKTF-39	6/8/2017	2-Methylnaphthalene	**110**	50	16	35.1	ug/L
MKTF-39	6/8/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-39	6/8/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-39	6/8/2017	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-39	6/8/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-39	6/8/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-39	6/8/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-39	6/8/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-39	6/8/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-39	6/8/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-39	6/8/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-39	6/8/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-39	6/8/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-39	6/8/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
MKTF-39	6/8/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-39	6/8/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-39	6/8/2017	Phenol	ND	50	16	5761	ug/L
MKTF-39	6/8/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-39	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-39	6/8/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-39	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-39	6/8/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-39	6/8/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-39	6/8/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-39	6/8/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-39	6/8/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-39	6/8/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-39	6/8/2017	Pyrene	ND	50	22	117	ug/L
MKTF-39	6/8/2017	Dimethylphthalate	ND	50	18	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-39	6/8/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-39	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-39	6/8/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-39	6/8/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-39	6/8/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-39	6/8/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-39	6/8/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-39	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-39	6/8/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-39	6/8/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-39	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-39	6/8/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-39	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-39	6/8/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-39	9/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-39	9/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-39	9/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-39	9/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-39	9/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-39	9/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-39	9/28/2017	Benzoic Acid	69	200	39	75000	ug/L
MKTF-39	9/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-39	9/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-39	9/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-39	9/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-39	9/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-39	9/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-39	9/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-39	9/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-39	9/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-39	9/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-39	9/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-39	9/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-39	9/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-39	9/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-39	9/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-39	9/28/2017	1-Methylnaphthalene	**170**	100	33	11.38	ug/L
MKTF-39	9/28/2017	Naphthalene	**51**	100	29	30	ug/L
MKTF-39	9/28/2017	2-Methylnaphthalene	**48**	100	33	35.1	ug/L
MKTF-39	9/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-39	9/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-39	9/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-39	9/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-39	9/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-39	9/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-39	9/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-39	9/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-39	9/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-39	9/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-39	9/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-39	9/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-39	9/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-39	9/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-39	9/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-39	9/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-39	9/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-39	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-39	9/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-39	9/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-39	9/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-39	9/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-39	9/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-39	9/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-39	9/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-39	9/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-39	9/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-39	9/28/2017	Dimethylphthalate	51	100	36	612	ug/L
MKTF-39	9/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-39	9/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-39	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-39	9/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-39	9/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-39	9/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-39	9/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-39	9/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-39	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-39	9/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-39	9/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-39	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-39	9/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-39	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-39	9/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-39	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-39	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-39	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-39	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-39	11/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-39	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-39	11/28/2017	Benzoic Acid	60	200	39	75000	ug/L
MKTF-39	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-39	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-39	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-39	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-39	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-39	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-39	11/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-39	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-39	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-39	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-39	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-39	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-39	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-39	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-39	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/28/2017	1-Methylnaphthalene	**120**	100	33	11.38	ug/L
MKTF-39	11/28/2017	Naphthalene	**64**	100	29	30	ug/L
MKTF-39	11/28/2017	2-Methylnaphthalene	**52**	100	33	35.1	ug/L
MKTF-39	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-39	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-39	11/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-39	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-39	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-39	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-39	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-39	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-39	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-39	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-39	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-39	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-39	11/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-39	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-39	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-39	11/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-39	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-39	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-39	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-39	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-39	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-39	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-39	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-39	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-39	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-39	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-39	11/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-39	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-39	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-39	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-39	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-39	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-39	11/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-39	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-39	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-39	11/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-39	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-39	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-39	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-39	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-39	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-39	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-39	11/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-39	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-39	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-39	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-39	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-39	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-39	2/8/2018	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-39	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-39	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-39	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-39	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-39	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-39	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-39	2/8/2018	Phenanthrene	6.4	10	4.3	170	ug/L
MKTF-39	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-39	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-39	2/8/2018	Fluorene	7.7	10	4	288	ug/L
MKTF-39	2/8/2018	Carbazole	6.8	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-39	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-39	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-39	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-39	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-39	2/8/2018	1-Methylnaphthalene	**81**	10	3.3	11.38	ug/L
MKTF-39	2/8/2018	Naphthalene	**38**	10	2.9	30	ug/L
MKTF-39	2/8/2018	2-Methylnaphthalene	34	10	3.3	35.1	ug/L
MKTF-39	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-39	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-39	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-39	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-39	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-39	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-39	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-39	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-39	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-39	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-39	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-39	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-39	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-39	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-39	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-39	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-39	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-39	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-39	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-39	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-39	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-39	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-39	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-39	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-39	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-39	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-39	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-39	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-39	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-39	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-39	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-39	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-39	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-39	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-39	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-39	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-39	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-39	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-39	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-39	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-39	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-39	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-39	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	5/6/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	5/6/2018	Phenanthrene	24	10	6	170	ug/L
MKTF-39	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	5/6/2018	Fluorene	21	10	6.3	288	ug/L
MKTF-39	5/6/2018	Carbazole	14	10	6.3	NA	ug/L
MKTF-39	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	5/6/2018	1-Methylnaphthalene	**160**	10	7	11.38	ug/L
MKTF-39	5/6/2018	Naphthalene	**58**	10	5	30	ug/L
MKTF-39	5/6/2018	2-Methylnaphthalene	**61**	10	6.3	35.1	ug/L
MKTF-39	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-39	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	5/6/2018	Dibenzofuran	8.3	10	6.9	NA	ug/L
MKTF-39	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-39	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	8/21/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	8/21/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	8/21/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	8/21/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	8/21/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	8/21/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	8/21/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	8/21/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	8/21/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	8/21/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	8/21/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	8/21/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	8/21/2018	Phenanthrene	9.6	10	6	170	ug/L
MKTF-39	8/21/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	8/21/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	8/21/2018	Fluorene	9.9	10	6.3	288	ug/L
MKTF-39	8/21/2018	Carbazole	10	10	6.3	NA	ug/L
MKTF-39	8/21/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	8/21/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	8/21/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	8/21/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	8/21/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	8/21/2018	1-Methylnaphthalene	**120**	10	7	11.38	ug/L
MKTF-39	8/21/2018	Naphthalene	**57**	10	5	30	ug/L
MKTF-39	8/21/2018	2-Methylnaphthalene	**53**	10	6.3	35.1	ug/L
MKTF-39	8/21/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	8/21/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	8/21/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	8/21/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	8/21/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	8/21/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	8/21/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	8/21/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	8/21/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	8/21/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	8/21/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	8/21/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	8/21/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	8/21/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	8/21/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	8/21/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	8/21/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	8/21/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	8/21/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	8/21/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	8/21/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	8/21/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	8/21/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	8/21/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	8/21/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	8/21/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	8/21/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	8/21/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-39	8/21/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	8/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	8/21/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	8/21/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	8/21/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	8/21/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	8/21/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	8/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	8/21/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	8/21/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	8/21/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	8/21/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	8/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-39	8/21/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-39	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-39	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-39	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	11/20/2018	1-Methylnaphthalene	**39**	10	7	11.38	ug/L
MKTF-39	11/20/2018	Naphthalene	20	10	5	30	ug/L
MKTF-39	11/20/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
MKTF-39	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-39	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	11/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-39	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	6/5/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	6/5/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	6/5/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	6/5/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	6/5/2019	1-Methylnaphthalene	**340**	50	15.345382	11.38	ug/L
MKTF-39	6/5/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	6/5/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	6/5/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	6/5/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	6/5/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	6/5/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	6/5/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	6/5/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	6/5/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	6/5/2019	2-Methylnaphthalene	**230**	10	3.018863	35.1	ug/L
MKTF-39	6/5/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	6/5/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	6/5/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	6/5/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	6/5/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	6/5/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	6/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	6/5/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	6/5/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	6/5/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	6/5/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	6/5/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	6/5/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	6/5/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-39	6/5/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	6/5/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	6/5/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	6/5/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	6/5/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	6/5/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	6/5/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	6/5/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	6/5/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-39	6/5/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	6/5/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	6/5/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	6/5/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	6/5/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	6/5/2019	Bis(2-ethylhexyl)phthalate	9.9	10	4.302128	55.64	ug/L
MKTF-39	6/5/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	6/5/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-39	6/5/2019	Chrysene	4.6	10	2.786623	34.3	ug/L
MKTF-39	6/5/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	6/5/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	6/5/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	6/5/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	6/5/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	6/5/2019	Di-n-octylphthalate	4.5	10	3.516366	200	ug/L
MKTF-39	6/5/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	6/5/2019	Fluorene	47	10	2.888488	288	ug/L
MKTF-39	6/5/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	6/5/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	6/5/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	6/5/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	6/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	6/5/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	6/5/2019	Naphthalene	**57**	10	4.12221	30	ug/L
MKTF-39	6/5/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	6/5/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	6/5/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	6/5/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	6/5/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	6/5/2019	Phenanthrene	86	10	2.777122	170	ug/L
MKTF-39	6/5/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	6/5/2019	Pyrene	15	10	2.5036	117	ug/L
MKTF-39	6/5/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	**120**	10	3.069076	11.38	ug/L
MKTF-39	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-39	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-39	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-39	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	8/20/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-39	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-39	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-39	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	8/20/2019	Fluorene	14	10	2.888488	288	ug/L
MKTF-39	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	8/20/2019	Naphthalene	15	10	4.12221	30	ug/L
MKTF-39	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	8/20/2019	Phenanthrene	17	10	2.777122	170	ug/L
MKTF-39	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-39	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
MKTF-39	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-39	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	8/20/2019	Acenaphthene	3.9	10	2.955891	535	ug/L
MKTF-39	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-39	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-39	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	8/20/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-39	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-39	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-39	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	8/20/2019	Fluorene	16	10	2.888488	288	ug/L
MKTF-39	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	8/20/2019	Naphthalene	17	10	4.12221	30	ug/L
MKTF-39	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	8/20/2019	Phenanthrene	18	10	2.777122	170	ug/L
MKTF-39	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-39	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-39	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-39	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-39	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-39	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-39	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	10	5	5	35.1	ug/L
MKTF-39	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-39	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-39	11/5/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-39	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-39	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-39	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-39	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-39	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-39	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-39	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-39	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-39	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-39	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-39	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-39	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-39	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-39	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-39	11/5/2019	Carbazole	14	5	5	NA	ug/L
MKTF-39	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-39	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-39	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-39	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-39	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-39	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-39	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-39	11/5/2019	Fluorene	27	5	5	288	ug/L
MKTF-39	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-39	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-39	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-39	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-39	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-39	11/5/2019	Naphthalene	20	5	5	30	ug/L
MKTF-39	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-39	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-39	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-39	11/5/2019	Phenanthrene	37	5	5	170	ug/L
MKTF-39	11/5/2019	Phenol	ND	5	5	5761	ug/L
MKTF-39	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-39	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-39	11/5/2019	1,4-Dioxane	**11**	10	10	4.59	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	ND	5	5	11.38	ug/L
MKTF-39	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-39	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-39	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	**120**	5	5	11.38	ug/L
MKTF-39	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-39	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-39	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-39	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-39	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-39	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-39	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-39	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-39	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	ND	5	5	35.1	ug/L
MKTF-39	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-39	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-39	11/5/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-39	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-39	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-39	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-39	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-39	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-39	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-39	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-39	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Benzo(k)fluoranthene	*ND*	5	5	3.43	ug/L
MKTF-39	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-39	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-39	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-39	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-39	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-39	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-39	11/5/2019	Carbazole	12	5	5	NA	ug/L
MKTF-39	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-39	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-39	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-39	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-39	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-39	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-39	11/5/2019	Fluorene	19	5	5	288	ug/L
MKTF-39	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-39	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-39	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-39	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-39	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-39	11/5/2019	Naphthalene	17	5	5	30	ug/L
MKTF-39	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-39	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-39	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-39	11/5/2019	Phenanthrene	28	5	5	170	ug/L
MKTF-39	11/5/2019	Phenol	ND	5	5	5761	ug/L
MKTF-39	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-39	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-39	2/5/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-39	2/5/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-39	2/5/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
MKTF-39	2/5/2020	1,4-Dioxane	**19**	5	5	4.59	ug/L
MKTF-39	2/5/2020	1-Methylnaphthalene	**87**	2.5	2.5	11.38	ug/L
MKTF-39	2/5/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-39	2/5/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-39	2/5/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-39	2/5/2020	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
MKTF-39	2/5/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-39	2/5/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-39	2/5/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-39	2/5/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-39	2/5/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-39	2/5/2020	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
MKTF-39	2/5/2020	2-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-39	2/5/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-39	2/5/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-39	2/5/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-39	2/5/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Acenaphthene	2.15	2.5	2.5	535	ug/L
MKTF-39	2/5/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-39	2/5/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-39	2/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-39	2/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-39	2/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-39	2/5/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-39	2/5/2020	Benzoic Acid	10	2.5	2.5	75000	ug/L
MKTF-39	2/5/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-39	2/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-39	2/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-39	2/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
MKTF-39	2/5/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-39	2/5/2020	Carbazole	16	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-39	2/5/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-39	2/5/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-39	2/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-39	2/5/2020	Dibenzofuran	5.4	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-39	2/5/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-39	2/5/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-39	2/5/2020	Fluorene	10	2.5	2.5	288	ug/L
MKTF-39	2/5/2020	Hexachlorobenzene	*ND*	2.5	2.5	0.0976	ug/L
MKTF-39	2/5/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-39	2/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-39	2/5/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-39	2/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-39	2/5/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-39	2/5/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-39	2/5/2020	Naphthalene	23	2.5	2.5	30	ug/L
MKTF-39	2/5/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-39	2/5/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-39	2/5/2020	Phenanthrene	8.9	2.5	2.5	170	ug/L
MKTF-39	2/5/2020	Phenol	2.01	2.5	2.5	5761	ug/L
MKTF-39	2/5/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-39	2/5/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-39	9/19/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-39	9/19/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-39	9/19/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-39	9/19/2020	1,4-Dioxane	**13**	5	1	4.59	ug/L
MKTF-39	9/19/2020	1-Methylnaphthalene	**160**	5	1	11.38	ug/L
MKTF-39	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-39	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-39	9/19/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-39	9/19/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-39	9/19/2020	2,4-Dimethylphenol	ND	5	1	354	ug/L
MKTF-39	9/19/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-39	9/19/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-39	9/19/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-39	9/19/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-39	9/19/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-39	9/19/2020	2-Methylnaphthalene	20	5	1	35.1	ug/L
MKTF-39	9/19/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-39	9/19/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-39	9/19/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/19/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-39	9/19/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-39	9/19/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Acenaphthene	3.4	5	1	535	ug/L
MKTF-39	9/19/2020	Acenaphthylene	1.9	5	1	NA	ug/L
MKTF-39	9/19/2020	Aniline	ND	5	1	13	ug/L
MKTF-39	9/19/2020	Anthracene	1	5	1	1721	ug/L
MKTF-39	9/19/2020	Benzo(a)anthracene	**1.5**	1	0.5	0.12	ug/L
MKTF-39	9/19/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-39	9/19/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-39	9/19/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-39	9/19/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-39	9/19/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-39	9/19/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-39	9/19/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-39	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-39	9/19/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-39	9/19/2020	Bis(2-ethylhexyl)phthalate	2.9	5	2	55.64	ug/L
MKTF-39	9/19/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-39	9/19/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Chrysene	1.2	5	1	34.3	ug/L
MKTF-39	9/19/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-39	9/19/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-39	9/19/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-39	9/19/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-39	9/19/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-39	9/19/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-39	9/19/2020	Fluorene	22	5	1	288	ug/L
MKTF-39	9/19/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-39	9/19/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-39	9/19/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-39	9/19/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-39	9/19/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-39	9/19/2020	Isophorone	ND	5	1	781	ug/L
MKTF-39	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-39	9/19/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-39	9/19/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-39	9/19/2020	Naphthalene	**32**	5	1	30	ug/L
MKTF-39	9/19/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-39	9/19/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-39	9/19/2020	Phenanthrene	38	5	1	170	ug/L
MKTF-39	9/19/2020	Phenol	ND	5	1	5761	ug/L
MKTF-39	9/19/2020	Pyrene	5.2	5	1	117	ug/L
MKTF-39	9/19/2020	Pyridine	ND	5	2	20	ug/L
MKTF-39	12/16/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
MKTF-39	12/16/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
MKTF-39	12/16/2020	Anthracene	ND	11.3	0.203	1721	ug/L
MKTF-39	12/16/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
MKTF-39	12/16/2020	Benzo(a)pyrene	*ND*	*11.3*	0.136	0.2	ug/L
MKTF-39	12/16/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.17	0.34	ug/L
MKTF-39	12/16/2020	Benzo(g,h,i)perylene	ND	11.3	0.26	NA	ug/L
MKTF-39	12/16/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
MKTF-39	12/16/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
MKTF-39	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
MKTF-39	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.65	55.64	ug/L
MKTF-39	12/16/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
MKTF-39	12/16/2020	Butylbenzylphthalate	ND	11.3	0.215	16	ug/L
MKTF-39	12/16/2020	Carbazole	24.6	11.3	0.26	NA	ug/L
MKTF-39	12/16/2020	4-Chloroaniline	*ND*	*11.3*	3.84	0.37	ug/L
MKTF-39	12/16/2020	4-Chloro-3-Methylphenol	ND	11.3	4.29	NA	ug/L
MKTF-39	12/16/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
MKTF-39	12/16/2020	2-Chlorophenol	ND	11.3	2.49	91	ug/L
MKTF-39	12/16/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
MKTF-39	12/16/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
MKTF-39	12/16/2020	Chrysene	ND	11.3	0.215	34.3	ug/L
MKTF-39	12/16/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
MKTF-39	12/16/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
MKTF-39	12/16/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
MKTF-39	12/16/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.94	1.25	ug/L
MKTF-39	12/16/2020	2,4-Dichlorophenol	ND	11.3	3.39	45.3	ug/L
MKTF-39	12/16/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
MKTF-39	12/16/2020	2,4-Dimethylphenol	ND	11.3	3.96	354	ug/L
MKTF-39	12/16/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
MKTF-39	12/16/2020	2,4-Dinitrophenol	ND	33.9	3.84	38.7	ug/L
MKTF-39	12/16/2020	2,4-Dinitrotoluene	ND	11.3	2.15	45.3	ug/L
MKTF-39	12/16/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.15	0.485	ug/L
MKTF-39	12/16/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
MKTF-39	12/16/2020	Fluorene	16.7	11.3	0.203	288	ug/L
MKTF-39	12/16/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
MKTF-39	12/16/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.94	0.41	ug/L
MKTF-39	12/16/2020	Hexachloroethane	*ND*	*11.3*	4.75	3.28	ug/L
MKTF-39	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.249	0.343	ug/L
MKTF-39	12/16/2020	Isophorone	ND	11.3	0.158	781	ug/L
MKTF-39	12/16/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
MKTF-39	12/16/2020	Naphthalene	**31.5**	11.3	0.192	30	ug/L
MKTF-39	12/16/2020	2-Nitroaniline	ND	11.3	2.49	190	ug/L
MKTF-39	12/16/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
MKTF-39	12/16/2020	4-Nitroaniline	*ND*	*11.3*	1.7	3.8	ug/L
MKTF-39	12/16/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
MKTF-39	12/16/2020	2-Nitrophenol	ND	11.3	5.88	NA	ug/L
MKTF-39	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.73	0.011	ug/L
MKTF-39	12/16/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
MKTF-39	12/16/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
MKTF-39	12/16/2020	Phenanthrene	21.2	11.3	0.203	170	ug/L
MKTF-39	12/16/2020	Phenol	ND	11.3	2.94	5761	ug/L
MKTF-39	12/16/2020	Pyrene	ND	11.3	0.237	117	ug/L
MKTF-39	12/16/2020	2,4,5-Trichlorophenol	ND	11.3	4.18	1166	ug/L
MKTF-39	12/16/2020	2,4,6-Trichlorophenol	ND	11.3	3.96	11.9*	ug/L
MKTF-39	12/16/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
MKTF-39	12/16/2020	Aniline	ND	11.3	4.29	13	ug/L
MKTF-39	12/16/2020	Benzoic Acid	ND	33.9	8.25	75000	ug/L
MKTF-39	12/16/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
MKTF-39	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
MKTF-39	12/16/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.96	0.0049	ug/L
MKTF-39	12/16/2020	Pyridine	ND	11.3	3.62	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
MKTF-39	12/16/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
MKTF-39	12/16/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
MKTF-39	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
MKTF-39	12/16/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
MKTF-39	12/16/2020	4-Nitrophenol	ND	11.3	2.37	NA	ug/L
MKTF-40	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-40	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-40	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-40	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-40	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-40	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-40	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-40	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-40	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-40	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-40	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-40	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-40	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-40	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-40	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-40	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-40	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-40	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-40	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-40	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-40	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-40	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-40	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-40	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-40	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-40	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-40	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-40	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-40	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-40	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-40	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-40	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-40	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-40	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-40	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-40	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-40	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-40	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-40	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-40	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-40	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-40	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-40	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-40	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-40	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-40	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-40	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-40	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-40	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-40	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-40	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-40	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-40	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-40	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-40	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-40	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-40	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-40	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-40	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-40	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-40	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-40	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-40	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-40	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-40	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-40	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-40	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-40	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-40	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-40	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-40	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-40	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-40	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-40	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-40	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-40	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-40	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-40	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-40	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-40	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-40	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-40	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-40	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-40	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-40	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-40	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-40	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-40	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-40	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-40	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-40	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-40	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-40	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-40	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-40	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-40	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-40	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-40	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-40	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-40	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-40	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-40	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-40	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-40	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-40	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-40	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-40	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-40	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-40	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-40	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-40	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-40	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-40	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-40	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-40	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-40	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-40	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-40	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-40	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-40	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-40	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-40	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-40	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-40	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-40	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-40	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-40	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-40	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-40	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-40	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-40	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-40	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-40	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-40	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-40	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-40	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-40	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-40	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-40	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-40	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-40	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-40	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-40	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-40	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-40	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-40	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-40	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-40	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-40	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-40	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-40	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-40	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-40	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-40	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-40	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-40	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-40	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-40	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-40	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-40	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-40	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-40	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-40	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-40	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-40	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-40	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-40	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-40	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-40	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-40	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-40	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-40	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-40	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-40	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-40	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-40	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-40	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-40	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-40	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-40	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-40	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-40	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-40	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-40	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-40	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-40	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-40	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-40	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-40	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-40	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-40	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-40	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-40	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-40	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-40	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-40	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-40	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-40	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-40	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-40	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-40	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	6/9/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-40	6/9/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-40	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	9/8/2016	Benzoic Acid	8.6	20	2.6	75000	ug/L
MKTF-40	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-40	9/8/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
MKTF-40	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	9/8/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-40	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	10/31/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
MKTF-40	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-40	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	10/31/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-40	10/31/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-40	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-40	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	3/7/2017	Benzoic Acid	10	20	2.6	75000	ug/L
MKTF-40	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-40	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	3/7/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-40	3/7/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-40	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	6/5/2017	Benzoic Acid	8.5	20	3.9	75000	ug/L
MKTF-40	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	6/5/2017	Bis(2-ethylhexyl)phthalate	8.2	10	4.8	55.64	ug/L
MKTF-40	6/5/2017	Di-n-octylphthalate	5.3	10	4.7	200	ug/L
MKTF-40	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	9/25/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
MKTF-40	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	9/25/2017	Bis(2-ethylhexyl)phthalate	26	10	4.8	55.64	ug/L
MKTF-40	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	11/21/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
MKTF-40	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	11/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	11/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	11/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-40	11/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-40	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-40	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-40	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-40	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	5/6/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-40	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-40	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-40	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	8/17/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
MKTF-40	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	8/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	8/17/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-40	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-40	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-40	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-40	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-40	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-40	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-40	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-40	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-40	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-40	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-40	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-40	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-40	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-40	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-40	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-40	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-40	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-40	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-40	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-40	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-40	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-40	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-40	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-40	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-40	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-40	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-40	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-40	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-40	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-40	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-40	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-40	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-40	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-40	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-40	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-40	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-40	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-40	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-40	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-40	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-40	2/20/2019	Benzoic Acid	8.2	20	6.311561	75000	ug/L
MKTF-40	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-40	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-40	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-40	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-40	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-40	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-40	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-40	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-40	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-40	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-40	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-40	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-40	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-40	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-40	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-40	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-40	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-40	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-40	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-40	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-40	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-40	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-40	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-40	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-40	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-40	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-40	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-40	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-40	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-40	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-40	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-40	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-40	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-40	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-40	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-40	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-40	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-40	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-40	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-40	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-40	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-40	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-40	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-40	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-40	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-40	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-40	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-40	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-40	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-40	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-40	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-40	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-40	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-40	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-40	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-40	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-40	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-40	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-40	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-40	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-40	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-40	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-40	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-40	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-40	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-40	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-40	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-40	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-40	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-40	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-40	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-40	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-40	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-40	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-40	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-40	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-40	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-40	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-40	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-40	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-40	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-40	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-40	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-40	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-40	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-40	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-40	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-40	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-40	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-40	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-40	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-40	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-40	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-40	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-40	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-40	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-40	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-40	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-40	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-40	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-40	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-40	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-40	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-40	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-40	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-40	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-40	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-40	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-40	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-40	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-40	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-40	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-40	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-40	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-40	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-40	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-40	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-40	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-40	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-40	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-40	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-40	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-40	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-40	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-40	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-40	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-40	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-40	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-40	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-40	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-40	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-40	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-40	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-40	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-40	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-40	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-40	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-40	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-40	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-40	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-40	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-40	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-40	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-40	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-40	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-40	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-40	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-40	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-40	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-40	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-40	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-40	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-40	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-40	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-40	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-40	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-40	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-40	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-40	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-40	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-40	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-40	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-40	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-40	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-40	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-40	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-40	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-40	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-40	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-40	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-40	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-40	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-40	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-40	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-40	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-40	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-40	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-40	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-40	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-40	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-40	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-40	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-40	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-40	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-40	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-40	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-40	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-40	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-40	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-40	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-40	10/22/2019	1,4-Dioxane	**8.7**	1	1	4.59	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-40	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-40	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-40	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-40	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-40	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-40	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-40	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-40	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-40	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-40	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-40	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-40	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-40	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-40	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-40	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-40	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-40	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-40	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-40	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-40	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-40	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-40	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-40	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-40	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-40	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-40	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-40	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-40	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-40	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-40	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-40	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-40	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-40	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-40	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-40	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-40	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-40	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-40	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-40	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-40	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-40	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-40	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-40	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-40	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-40	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-40	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-40	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-40	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-40	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-40	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-40	2/28/2020	1,4-Dioxane	**8.2**	1	0.2	4.59	ug/L
MKTF-40	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-40	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-40	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-40	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-40	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-40	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-40	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-40	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-40	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-40	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-40	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-40	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-40	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-40	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-40	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-40	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-40	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-40	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-40	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-40	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-40	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-40	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-40	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-40	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-40	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-40	2/28/2020	Bis(2-ethylhexyl)phthalate	0.39	0.5	0.2	55.64	ug/L
MKTF-40	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-40	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-40	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-40	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-40	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-40	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-40	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-40	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-40	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-40	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-40	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-40	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-40	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-40	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-40	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-40	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-40	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-40	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-40	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-40	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-40	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-40	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-40	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-40	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-40	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-40	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-40	9/19/2020	1,4-Dioxane	**10**	0.51	0.1	4.59	ug/L
MKTF-40	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-40	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-40	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-40	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-40	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-40	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-40	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-40	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-40	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-40	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-40	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-40	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-40	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-40	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-40	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-40	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-40	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-40	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-40	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-40	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-40	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-40	9/19/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-40	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-40	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-40	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-40	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-40	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-40	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-40	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-40	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-40	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-40	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-40	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-40	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-40	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-40	9/19/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-40	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-40	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-40	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-40	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-40	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-40	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-40	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MKTF-40	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-40	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-40	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-40	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-40	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-40	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-40	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-40	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-40	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-40	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-40	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-40	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-40	12/17/2020	Acenaphthene	ND	11.3	0.18	535	ug/L
MKTF-40	12/17/2020	Acenaphthylene	ND	11.3	0.191	NA	ug/L
MKTF-40	12/17/2020	Anthracene	ND	11.3	0.203	1721	ug/L
MKTF-40	12/17/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
MKTF-40	12/17/2020	Benzo(a)pyrene	*ND*	*11.3*	0.135	0.2	ug/L
MKTF-40	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.169	0.34	ug/L
MKTF-40	12/17/2020	Benzo(g,h,i)perylene	ND	11.3	0.259	NA	ug/L
MKTF-40	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.18	3.43	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.18	59	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.04	0.137	ug/L
MKTF-40	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.63	55.64	ug/L
MKTF-40	12/17/2020	4-Bromophenyl-phenylether	ND	11.3	0.225	NA	ug/L
MKTF-40	12/17/2020	Butylbenzylphthalate	ND	11.3	0.214	16	ug/L
MKTF-40	12/17/2020	Carbazole	ND	11.3	0.259	NA	ug/L
MKTF-40	12/17/2020	4-Chloroaniline	*ND*	*11.3*	3.83	0.37	ug/L
MKTF-40	12/17/2020	4-Chloro-3-Methylphenol	ND	11.3	4.28	NA	ug/L
MKTF-40	12/17/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
MKTF-40	12/17/2020	2-Chlorophenol	ND	11.3	2.48	91	ug/L
MKTF-40	12/17/2020	4-Chlorophenyl-phenylether	ND	11.3	2.25	NA	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
MKTF-40	12/17/2020	Chrysene	ND	11.3	0.214	34.3	ug/L
MKTF-40	12/17/2020	Dibenzo(a,h)anthracene	ND	11.3	0.27	NA	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	11.3	0.18	75	ug/L
MKTF-40	12/17/2020	Dibenzofuran	ND	11.3	0.191	NA	ug/L
MKTF-40	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.93	1.25	ug/L
MKTF-40	12/17/2020	2,4-Dichlorophenol	ND	11.3	3.38	45.3	ug/L
MKTF-40	12/17/2020	Diethylphthalate	ND	11.3	0.27	14801	ug/L
MKTF-40	12/17/2020	2,4-Dimethylphenol	ND	11.3	3.94	354	ug/L
MKTF-40	12/17/2020	Di-n-butylphthalate	ND	11.3	3.04	885	ug/L
MKTF-40	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.8	1.52	ug/L
MKTF-40	12/17/2020	2,4-Dinitrophenol	ND	33.8	3.83	38.7	ug/L
MKTF-40	12/17/2020	2,4-Dinitrotoluene	ND	11.3	2.14	45.3	ug/L
MKTF-40	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.14	0.485	ug/L
MKTF-40	12/17/2020	Di-n-octylphthalate	ND	11.3	0.191	200	ug/L
MKTF-40	12/17/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
MKTF-40	12/17/2020	Fluorene	ND	11.3	0.203	288	ug/L
MKTF-40	12/17/2020	Hexachlorobenzene	*ND*	*11.3*	0.191	0.0976	ug/L
MKTF-40	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.5*	2.93	0.41	ug/L
MKTF-40	12/17/2020	Hexachloroethane	*ND*	*11.3*	4.73	3.28	ug/L
MKTF-40	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.248	0.343	ug/L
MKTF-40	12/17/2020	Isophorone	ND	11.3	0.158	781	ug/L
MKTF-40	12/17/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	11.3	0.191	30	ug/L
MKTF-40	12/17/2020	2-Nitroaniline	ND	11.3	2.48	190	ug/L
MKTF-40	12/17/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
MKTF-40	12/17/2020	4-Nitroaniline	*ND*	*11.3*	1.69	3.8	ug/L
MKTF-40	12/17/2020	Nitrobenzene	*ND*	*11.3*	0.146	1.4	ug/L
MKTF-40	12/17/2020	2-Nitrophenol	ND	11.3	5.86	NA	ug/L
MKTF-40	12/17/2020	4-Nitrophenol	ND	11.3	2.36	NA	ug/L
MKTF-40	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.72	0.011	ug/L
MKTF-40	12/17/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
MKTF-40	12/17/2020	Pentachlorophenol	*ND*	*22.5*	1.58	1	ug/L
MKTF-40	12/17/2020	Phenanthrene	ND	11.3	0.203	170	ug/L
MKTF-40	12/17/2020	Phenol	ND	11.3	2.93	5761	ug/L
MKTF-40	12/17/2020	Pyrene	ND	11.3	0.236	117	ug/L
MKTF-40	12/17/2020	2,4,5-Trichlorophenol	ND	11.3	4.17	1166	ug/L
MKTF-40	12/17/2020	2,4,6-Trichlorophenol	ND	11.3	3.94	11.9*	ug/L
MKTF-40	12/17/2020	Dimethylphthalate	ND	11.3	0.191	612	ug/L
MKTF-40	12/17/2020	Aniline	ND	11.3	4.28	13	ug/L
MKTF-40	12/17/2020	Benzoic Acid	ND	33.8	8.22	75000	ug/L
MKTF-40	12/17/2020	Benzyl Alcohol	ND	11.3	2.25	2000	ug/L
MKTF-40	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.18	9.81	ug/L
MKTF-40	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.94	0.0049	ug/L
MKTF-40	12/17/2020	Pyridine	ND	11.3	3.6	20	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	11.3	0.191	600	ug/L
MKTF-40	12/17/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
MKTF-40	12/17/2020	Acenaphthene	ND	11.4	0.183	535	ug/L
MKTF-40	12/17/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-40	12/17/2020	Anthracene	ND	11.4	0.206	1721	ug/L
MKTF-40	12/17/2020	Benzo(a)anthracene	*ND*	*11.4*	0.206	0.12	ug/L
MKTF-40	12/17/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-40	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-40	12/17/2020	Benzo(g,h,i)perylene	ND	11.4	0.263	NA	ug/L
MKTF-40	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.183	3.43	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.183	59	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.09	0.137	ug/L
MKTF-40	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.71	55.64	ug/L
MKTF-40	12/17/2020	4-Bromophenyl-phenylether	ND	11.4	0.229	NA	ug/L
MKTF-40	12/17/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-40	12/17/2020	Carbazole	ND	11.4	0.263	NA	ug/L
MKTF-40	12/17/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-40	12/17/2020	4-Chloro-3-Methylphenol	ND	11.4	4.34	NA	ug/L
MKTF-40	12/17/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-40	12/17/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-40	12/17/2020	4-Chlorophenyl-phenylether	ND	11.4	2.29	NA	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	11.4	0.206	NA	ug/L
MKTF-40	12/17/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-40	12/17/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	11.4	0.183	75	ug/L
MKTF-40	12/17/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-40	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-40	12/17/2020	2,4-Dichlorophenol	ND	11.4	3.43	45.3	ug/L
MKTF-40	12/17/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-40	12/17/2020	2,4-Dimethylphenol	ND	11.4	4	354	ug/L
MKTF-40	12/17/2020	Di-n-butylphthalate	ND	11.4	3.09	885	ug/L
MKTF-40	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.83	1.52	ug/L
MKTF-40	12/17/2020	2,4-Dinitrophenol	ND	34.3	3.88	38.7	ug/L
MKTF-40	12/17/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-40	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-40	12/17/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-40	12/17/2020	Fluoranthene	ND	11.4	0.206	802	ug/L
MKTF-40	12/17/2020	Fluorene	ND	11.4	0.206	288	ug/L
MKTF-40	12/17/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-40	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.9*	2.97	0.41	ug/L
MKTF-40	12/17/2020	Hexachloroethane	*ND*	*11.4*	4.8	3.28	ug/L
MKTF-40	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-40	12/17/2020	Isophorone	ND	11.4	0.16	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	2-Methylphenol	ND	11.4	2.06	NA	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	11.4	0.194	30	ug/L
MKTF-40	12/17/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-40	12/17/2020	3-Nitroaniline	ND	11.4	2.06	NA	ug/L
MKTF-40	12/17/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-40	12/17/2020	Nitrobenzene	*ND*	*11.4*	0.149	1.4	ug/L
MKTF-40	12/17/2020	2-Nitrophenol	ND	11.4	5.94	NA	ug/L
MKTF-40	12/17/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-40	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.77	0.011	ug/L
MKTF-40	12/17/2020	N-Nitrosodiphenylamine	ND	11.4	0.206	122	ug/L
MKTF-40	12/17/2020	Pentachlorophenol	*ND*	*22.9*	1.6	1	ug/L
MKTF-40	12/17/2020	Phenanthrene	ND	11.4	0.206	170	ug/L
MKTF-40	12/17/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-40	12/17/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-40	12/17/2020	2,4,5-Trichlorophenol	ND	11.4	4.23	1166	ug/L
MKTF-40	12/17/2020	2,4,6-Trichlorophenol	ND	11.4	4	11.9*	ug/L
MKTF-40	12/17/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-40	12/17/2020	Aniline	ND	11.4	4.34	13	ug/L
MKTF-40	12/17/2020	Benzoic Acid	ND	34.3	8.34	75000	ug/L
MKTF-40	12/17/2020	Benzyl Alcohol	ND	11.4	2.29	2000	ug/L
MKTF-40	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.183	9.81	ug/L
MKTF-40	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.4*	4	0.0049	ug/L
MKTF-40	12/17/2020	Pyridine	ND	11.4	3.66	20	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	11.4	0.206	70	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-40	12/17/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-41	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-41	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-41	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-41	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-41	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-41	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-41	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-41	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-41	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-41	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-41	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-41	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-41	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-41	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-41	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-41	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-41	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-41	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-41	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-41	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-41	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-41	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-41	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-41	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-41	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-41	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-41	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-41	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-41	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-41	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-41	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-41	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-41	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-41	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-41	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-41	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-41	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-41	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-41	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-41	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-41	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-41	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-41	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-41	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-41	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-41	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-41	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-41	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-41	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-41	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-41	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-41	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-41	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-41	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-41	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-41	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-41	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-41	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-41	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-41	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-41	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-41	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-41	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-41	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-41	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-41	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-41	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-41	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-41	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-41	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-41	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-41	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-41	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-41	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-41	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-41	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-41	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-41	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-41	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-41	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-41	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-41	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-41	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-41	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-41	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-41	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-41	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-41	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-41	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-41	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-41	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-41	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-41	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-41	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-41	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-41	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-41	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-41	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-41	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-41	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-41	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-41	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-41	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-41	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-41	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-41	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-41	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-41	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-41	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-41	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-41	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-41	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-41	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-41	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-41	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-41	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-41	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-41	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-41	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-41	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-41	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-41	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-41	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-41	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-41	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-41	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-41	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-41	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-41	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-41	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-41	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-41	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-41	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-41	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-41	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-41	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-41	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-41	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-41	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-41	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-41	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-41	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-41	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-41	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-41	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-41	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-41	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-41	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-41	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-41	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-41	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-41	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-41	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-41	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-41	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-41	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-41	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-41	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-41	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-41	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-41	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-41	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-41	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-41	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-41	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-41	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-41	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-41	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-41	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-41	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-41	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-41	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-41	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-41	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-41	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-41	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-41	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-41	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-41	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-41	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-41	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-41	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-41	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-41	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-41	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-41	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-41	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-41	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-41	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-41	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-41	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-41	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-41	8/21/2015	Benzo(a)pyrene	*ND*	*14*	3.9	0.2	ug/L
MKTF-41	8/21/2015	2,4-Dinitrophenol	ND	29	1.5	38.7	ug/L
MKTF-41	8/21/2015	Dibenzo(a,h)anthracene	ND	14	4.7	NA	ug/L
MKTF-41	8/21/2015	Benzo(a)anthracene	*ND*	*14*	3.6	0.12	ug/L
MKTF-41	8/21/2015	4-Chloro-3-Methylphenol	ND	14	1.9	NA	ug/L
MKTF-41	8/21/2015	Aniline	*ND*	*14*	2.2	13	ug/L
MKTF-41	8/21/2015	N-Nitrosodimethylamine	*ND*	*14*	2	0.0049	ug/L
MKTF-41	8/21/2015	Benzoic Acid	ND	29	1.5	75000	ug/L
MKTF-41	8/21/2015	Hexachloroethane	*ND*	*14*	2.3	3.28	ug/L
MKTF-41	8/21/2015	Hexachlorocyclopentadiene	*ND*	*14*	2.1	0.41	ug/L
MKTF-41	8/21/2015	Isophorone	ND	14	2.8	781	ug/L
MKTF-41	8/21/2015	Acenaphthene	ND	14	2.7	535	ug/L
MKTF-41	8/21/2015	Diethylphthalate	ND	14	2.4	14801	ug/L
MKTF-41	8/21/2015	Di-n-butylphthalate	ND	14	3	885	ug/L
MKTF-41	8/21/2015	Phenanthrene	ND	14	2.9	170	ug/L
MKTF-41	8/21/2015	Butylbenzylphthalate	ND	14	3.4	16	ug/L
MKTF-41	8/21/2015	N-Nitrosodiphenylamine	ND	14	3.5	122	ug/L
MKTF-41	8/21/2015	Fluorene	ND	14	2.4	288	ug/L
MKTF-41	8/21/2015	Carbazole	ND	14	2.1	NA	ug/L
MKTF-41	8/21/2015	Hexachlorobutadiene	*ND*	*14*	2.8	0.14	ug/L
MKTF-41	8/21/2015	Pentachlorophenol	*ND*	*29*	1.6	1	ug/L
MKTF-41	8/21/2015	2,4,6-Trichlorophenol	ND	14	1.8	11.9*	ug/L
MKTF-41	8/21/2015	2-Nitroaniline	ND	14	2.6	190	ug/L
MKTF-41	8/21/2015	2-Nitrophenol	ND	14	1.8	NA	ug/L
MKTF-41	8/21/2015	1-Methylnaphthalene	*ND*	*14*	2.6	11.38	ug/L
MKTF-41	8/21/2015	Naphthalene	ND	14	2.6	30	ug/L
MKTF-41	8/21/2015	2-Methylnaphthalene	ND	14	3.2	35.1	ug/L
MKTF-41	8/21/2015	2-Chloronaphthalene	ND	14	2.5	733	ug/L
MKTF-41	8/21/2015	3,3-Dichlorobenzidine	*ND*	*14*	3.7	1.25	ug/L
MKTF-41	8/21/2015	2-Methylphenol	ND	14	1.8	NA	ug/L
MKTF-41	8/21/2015	1,2-Dichlorobenzene	ND	14	2.7	600	ug/L
MKTF-41	8/21/2015	2-Chlorophenol	ND	14	1.7	91	ug/L
MKTF-41	8/21/2015	2,4,5-Trichlorophenol	ND	14	2.3	1166	ug/L
MKTF-41	8/21/2015	Nitrobenzene	*ND*	*14*	2.1	1.4	ug/L
MKTF-41	8/21/2015	3-Nitroaniline	ND	14	2.1	NA	ug/L
MKTF-41	8/21/2015	4-Nitroaniline	*ND*	*14*	1.8	3.8	ug/L
MKTF-41	8/21/2015	4-Nitrophenol	ND	14	2	NA	ug/L
MKTF-41	8/21/2015	Benzyl Alcohol	ND	14	1.7	2000	ug/L
MKTF-41	8/21/2015	4-Bromophenyl-phenylether	ND	14	2	NA	ug/L
MKTF-41	8/21/2015	Azobenzene	*ND*	*14*	2.9	0.12	ug/L
MKTF-41	8/21/2015	2,4-Dimethylphenol	ND	14	2.6	354	ug/L
MKTF-41	8/21/2015	1,4-Dichlorobenzene	ND	14	1.8	75	ug/L
MKTF-41	8/21/2015	4-Chloroaniline	*ND*	*14*	2.7	0.37	ug/L
MKTF-41	8/21/2015	Phenol	ND	14	1.6	5761	ug/L
MKTF-41	8/21/2015	Pyridine	ND	14	2.4	20	ug/L
MKTF-41	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*14*	2.5	0.137	ug/L
MKTF-41	8/21/2015	Bis(2-chloroethoxy)methane	ND	14	2.6	59	ug/L
MKTF-41	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	14	4.8	55.64	ug/L
MKTF-41	8/21/2015	Di-n-octylphthalate	ND	14	2.8	200	ug/L
MKTF-41	8/21/2015	Hexachlorobenzene	*ND*	*14*	2.9	0.0976	ug/L
MKTF-41	8/21/2015	Anthracene	ND	14	2.3	1721	ug/L
MKTF-41	8/21/2015	1,2,4-Trichlorobenzene	ND	14	2.8	70	ug/L
MKTF-41	8/21/2015	2,4-Dichlorophenol	ND	29	2	45.3	ug/L
MKTF-41	8/21/2015	2,4-Dinitrotoluene	ND	14	2	45.3	ug/L
MKTF-41	8/21/2015	Pyrene	ND	14	3.3	117	ug/L
MKTF-41	8/21/2015	Dimethylphthalate	ND	14	2.8	612	ug/L
MKTF-41	8/21/2015	Dibenzofuran	ND	14	2.7	NA	ug/L
MKTF-41	8/21/2015	Benzo(g,h,i)perylene	ND	14	4.5	NA	ug/L
MKTF-41	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*14*	3.5	0.343	ug/L
MKTF-41	8/21/2015	Benzo(b)fluoranthene	*ND*	*14*	3.4	0.34	ug/L
MKTF-41	8/21/2015	Fluoranthene	ND	14	2.1	802	ug/L
MKTF-41	8/21/2015	Benzo(k)fluoranthene	*ND*	*14*	3.6	3.43	ug/L
MKTF-41	8/21/2015	Acenaphthylene	ND	14	2.7	NA	ug/L
MKTF-41	8/21/2015	Chrysene	ND	14	3.1	34.3	ug/L
MKTF-41	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*29*	2	1.52	ug/L
MKTF-41	8/21/2015	1,3-Dichlorobenzene	ND	14	2.4	NA	ug/L
MKTF-41	8/21/2015	2,6-Dinitrotoluene	*ND*	*14*	2.1	0.485	ug/L
MKTF-41	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*14*	2.9	0.011	ug/L
MKTF-41	8/21/2015	4-Chlorophenyl-phenylether	ND	14	2.9	NA	ug/L
MKTF-41	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*14*	2.9	9.81	ug/L
MKTF-41	8/21/2015	3,4-Methylphenol	ND	14	2.1	NA	ug/L
MKTF-41	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-41	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-41	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-41	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-41	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-41	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-41	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-41	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-41	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-41	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-41	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-41	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-41	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-41	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-41	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-41	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-41	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-41	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-41	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-41	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-41	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-41	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-41	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-41	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-41	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-41	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-41	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-41	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-41	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-41	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-41	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-41	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-41	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-41	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-41	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-41	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-41	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-41	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-41	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-41	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-41	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-41	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-41	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-41	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-41	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-41	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-41	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-41	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-41	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-41	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-41	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-41	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-41	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-41	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-41	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-41	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-41	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-41	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-41	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-41	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-41	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-41	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-41	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-41	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-41	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-41	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-41	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-41	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-41	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-41	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-41	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-41	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-41	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-41	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-41	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-41	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-41	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-41	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-41	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-41	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-41	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-41	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-41	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-41	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-41	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-41	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-41	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-41	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-41	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-41	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-41	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-41	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-41	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-41	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-41	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-41	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-41	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-41	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-41	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-41	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-41	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-41	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-41	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-41	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-41	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-41	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-41	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-41	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-41	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-41	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-41	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-41	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-41	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-41	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-41	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-41	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-41	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-41	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-41	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-41	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-41	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-41	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-41	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-41	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-41	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-41	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-41	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-41	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-41	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-41	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-41	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-41	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-41	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-41	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-41	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-41	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-41	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-41	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-41	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-41	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-41	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-41	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-41	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-41	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-41	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-41	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-41	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-41	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-41	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-41	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-41	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-41	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-41	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-41	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-41	6/9/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-41	6/9/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-41	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-41	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-41	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-41	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-41	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-41	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-41	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-41	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-41	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-41	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-41	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-41	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-41	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-41	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-41	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-41	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-41	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-41	6/9/2016	Bis(2-ethylhexyl)phthalate	24	50	13	55.64	ug/L
MKTF-41	6/9/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-41	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-41	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-41	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-41	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-41	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-41	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-41	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-41	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-41	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-41	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-41	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-41	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-41	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-41	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-41	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-41	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-41	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-41	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-41	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-41	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	9/9/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MKTF-41	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-41	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-41	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	9/9/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-41	9/9/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-41	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-41	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-41	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-41	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	10/31/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-41	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-41	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	10/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-41	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-41	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	10/31/2016	Bis(2-ethylhexyl)phthalate	6.5	10	2.6	55.64	ug/L
MKTF-41	10/31/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-41	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-41	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-41	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	3/7/2017	Benzoic Acid	8.2	20	2.6	75000	ug/L
MKTF-41	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	3/7/2017	Di-n-butylphthalate	2.5	10	2.4	885	ug/L
MKTF-41	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-41	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-41	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	3/7/2017	Bis(2-ethylhexyl)phthalate	7.7	10	2.6	55.64	ug/L
MKTF-41	3/7/2017	Di-n-octylphthalate	4.2	10	2	200	ug/L
MKTF-41	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-41	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-41	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	6/6/2017	Benzoic Acid	8.8	20	3.9	75000	ug/L
MKTF-41	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	6/6/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L
MKTF-41	6/6/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
MKTF-41	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-41	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-41	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	11/27/2017	Aniline	ND	10	3.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	11/27/2017	Benzoic Acid	4.7	20	3.9	75000	ug/L
MKTF-41	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-41	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-41	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-41	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	5/9/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-41	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-41	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-41	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	8/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	8/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	8/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	8/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	8/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	8/29/2018	Benzoic Acid	6.6	20	6.3	75000	ug/L
MKTF-41	8/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	8/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	8/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	8/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	8/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	8/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	8/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	8/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	8/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	8/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	8/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	8/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	8/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	8/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	8/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	8/29/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	8/29/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	8/29/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	8/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	8/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	8/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	8/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	8/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	8/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	8/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	8/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	8/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	8/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	8/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	8/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	8/29/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	8/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	8/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	8/29/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	8/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	8/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	8/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	8/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-41	8/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	8/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	8/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	8/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	8/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	8/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	8/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	8/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	8/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	8/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	8/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	8/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	8/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	8/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	8/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	8/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	8/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	8/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	8/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	8/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	8/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	8/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	8/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-41	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-41	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-41	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-41	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-41	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-41	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-41	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-41	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-41	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-41	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-41	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-41	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-41	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-41	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-41	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-41	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-41	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-41	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-41	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-41	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-41	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-41	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-41	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-41	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-41	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-41	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-41	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-41	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-41	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-41	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-41	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-41	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-41	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-41	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-41	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-41	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-41	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-41	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-41	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-41	2/13/2019	Benzoic Acid	8.3	20	6.311561	75000	ug/L
MKTF-41	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-41	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-41	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-41	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-41	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-41	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-41	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-41	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-41	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-41	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-41	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-41	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-41	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-41	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-41	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-41	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-41	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-41	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-41	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-41	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-41	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-41	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-41	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-41	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-41	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-41	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-41	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-41	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-41	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-41	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-41	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-41	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-41	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-41	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-41	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-41	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-41	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-41	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-41	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-41	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-41	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-41	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-41	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-41	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-41	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-41	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-41	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-41	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-41	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-41	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-41	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-41	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-41	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-41	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-41	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-41	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-41	10/23/2019	1,4-Dioxane	4	1	1	4.59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-41	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-41	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-41	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-41	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-41	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-41	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-41	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-41	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-41	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-41	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-41	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-41	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-41	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-41	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-41	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-41	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-41	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-41	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-41	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-41	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-41	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-41	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-41	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-41	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-41	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-41	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-41	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-41	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-41	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-41	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-41	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-41	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-41	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-41	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-41	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-41	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-41	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-41	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-41	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-41	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-41	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-41	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-41	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-41	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-41	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-41	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-41	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-41	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-41	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-41	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-41	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-41	2/27/2020	1,4-Dioxane	3.5	1	0.2	4.59	ug/L
MKTF-41	2/27/2020	1-Methylnaphthalene	1.9	0.5	0.1	11.38	ug/L
MKTF-41	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-41	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-41	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-41	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-41	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-41	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-41	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-41	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-41	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-41	2/27/2020	2-Methylnaphthalene	2.1	0.5	0.1	35.1	ug/L
MKTF-41	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-41	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-41	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-41	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-41	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-41	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-41	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-41	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-41	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-41	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-41	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-41	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-41	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-41	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-41	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-41	2/27/2020	Bis(2-ethylhexyl)phthalate	0.75	0.5	0.2	55.64	ug/L
MKTF-41	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-41	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-41	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-41	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-41	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-41	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-41	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-41	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-41	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-41	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-41	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-41	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-41	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-41	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-41	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-41	2/27/2020	Naphthalene	1.6	0.5	0.1	30	ug/L
MKTF-41	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-41	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-41	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-41	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-41	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-41	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-41	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-41	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-41	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-41	9/21/2020	1,4-Dioxane	3	0.52	0.1	4.59	ug/L
MKTF-41	9/21/2020	1-Methylnaphthalene	1.9	0.52	0.1	11.38	ug/L
MKTF-41	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-41	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-41	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-41	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-41	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-41	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-41	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-41	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-41	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-41	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-41	9/21/2020	2-Methylnaphthalene	2.1	0.52	0.1	35.1	ug/L
MKTF-41	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-41	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-41	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-41	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
MKTF-41	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
MKTF-41	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-41	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-41	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-41	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-41	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-41	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-41	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-41	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-41	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
MKTF-41	9/21/2020	Benzyl Alcohol	0.74	0.52	0.21	2000	ug/L
MKTF-41	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-41	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-41	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-41	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-41	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-41	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-41	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-41	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-41	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-41	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-41	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-41	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-41	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-41	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-41	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-41	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-41	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-41	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-41	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-41	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-41	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-41	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-41	9/21/2020	Naphthalene	1.6	0.52	0.1	30	ug/L
MKTF-41	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-41	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-41	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-41	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-41	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-41	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-41	12/15/2020	Acenaphthene	ND	10.9	0.174	535	ug/L
MKTF-41	12/15/2020	Acenaphthylene	ND	10.9	0.185	NA	ug/L
MKTF-41	12/15/2020	Anthracene	ND	10.9	0.196	1721	ug/L
MKTF-41	12/15/2020	Benzo(a)anthracene	*ND*	*10.9*	0.196	0.12	ug/L
MKTF-41	12/15/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-41	12/15/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.163	0.34	ug/L
MKTF-41	12/15/2020	Benzo(g,h,i)perylene	ND	10.9	0.25	NA	ug/L
MKTF-41	12/15/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.174	3.43	ug/L
MKTF-41	12/15/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.174	59	ug/L
MKTF-41	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.94	0.137	ug/L
MKTF-41	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.44	55.64	ug/L
MKTF-41	12/15/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-41	12/15/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-41	12/15/2020	Carbazole	ND	10.9	0.25	NA	ug/L
MKTF-41	12/15/2020	4-Chloroaniline	*ND*	*10.9*	3.7	0.37	ug/L
MKTF-41	12/15/2020	4-Chloro-3-Methylphenol	ND	10.9	4.13	NA	ug/L
MKTF-41	12/15/2020	2-Chloronaphthalene	ND	10.9	0.152	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	2-Chlorophenol	ND	10.9	2.39	91	ug/L
MKTF-41	12/15/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-41	12/15/2020	1,3-Dichlorobenzene	ND	10.9	0.196	NA	ug/L
MKTF-41	12/15/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-41	12/15/2020	Dibenzo(a,h)anthracene	ND	10.9	0.261	NA	ug/L
MKTF-41	12/15/2020	1,4-Dichlorobenzene	ND	10.9	0.174	75	ug/L
MKTF-41	12/15/2020	Dibenzofuran	ND	10.9	0.185	NA	ug/L
MKTF-41	12/15/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.83	1.25	ug/L
MKTF-41	12/15/2020	2,4-Dichlorophenol	ND	10.9	3.26	45.3	ug/L
MKTF-41	12/15/2020	Diethylphthalate	ND	10.9	0.261	14801	ug/L
MKTF-41	12/15/2020	2,4-Dimethylphenol	ND	10.9	3.81	354	ug/L
MKTF-41	12/15/2020	Di-n-butylphthalate	ND	10.9	2.94	885	ug/L
MKTF-41	12/15/2020	2,4-Dinitrophenol	ND	32.6	3.7	38.7	ug/L
MKTF-41	12/15/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-41	12/15/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-41	12/15/2020	Fluoranthene	ND	10.9	0.196	802	ug/L
MKTF-41	12/15/2020	Fluorene	ND	10.9	0.196	288	ug/L
MKTF-41	12/15/2020	Hexachlorobenzene	*ND*	*10.9*	0.185	0.0976	ug/L
MKTF-41	12/15/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.83	0.41	ug/L
MKTF-41	12/15/2020	Hexachloroethane	*ND*	*10.9*	4.57	3.28	ug/L
MKTF-41	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.239	0.343	ug/L
MKTF-41	12/15/2020	Isophorone	ND	10.9	0.152	781	ug/L
MKTF-41	12/15/2020	2-Methylphenol	ND	10.9	1.96	NA	ug/L
MKTF-41	12/15/2020	Naphthalene	ND	10.9	0.185	30	ug/L
MKTF-41	12/15/2020	2-Nitroaniline	ND	10.9	2.39	190	ug/L
MKTF-41	12/15/2020	3-Nitroaniline	ND	10.9	1.96	NA	ug/L
MKTF-41	12/15/2020	4-Nitroaniline	*ND*	*10.9*	1.63	3.8	ug/L
MKTF-41	12/15/2020	Nitrobenzene	*ND*	*10.9*	0.141	1.4	ug/L
MKTF-41	12/15/2020	2-Nitrophenol	ND	10.9	5.66	NA	ug/L
MKTF-41	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.59	0.011	ug/L
MKTF-41	12/15/2020	N-Nitrosodiphenylamine	ND	10.9	0.196	122	ug/L
MKTF-41	12/15/2020	Pentachlorophenol	*ND*	*21.8*	1.52	1	ug/L
MKTF-41	12/15/2020	Phenanthrene	ND	10.9	0.196	170	ug/L
MKTF-41	12/15/2020	Phenol	ND	10.9	2.83	5761	ug/L
MKTF-41	12/15/2020	Pyrene	ND	10.9	0.228	117	ug/L
MKTF-41	12/15/2020	2,4,5-Trichlorophenol	ND	10.9	4.03	1166	ug/L
MKTF-41	12/15/2020	2,4,6-Trichlorophenol	ND	10.9	3.81	11.9*	ug/L
MKTF-41	12/15/2020	Dimethylphthalate	ND	10.9	0.185	612	ug/L
MKTF-41	12/15/2020	Aniline	ND	10.9	4.13	13	ug/L
MKTF-41	12/15/2020	Benzoic Acid	ND	32.6	7.94	75000	ug/L
MKTF-41	12/15/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-41	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.174	9.81	ug/L
MKTF-41	12/15/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.81	0.0049	ug/L
MKTF-41	12/15/2020	Pyridine	ND	10.9	3.48	20	ug/L
MKTF-41	12/15/2020	1,2,4-Trichlorobenzene	ND	10.9	0.196	70	ug/L
MKTF-41	12/15/2020	1,2-Dichlorobenzene	ND	10.9	0.185	600	ug/L
MKTF-41	12/15/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-41	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.74	1.52	ug/L
MKTF-41	12/15/2020	Di-n-octylphthalate	ND	10.9	0.185	200	ug/L
MKTF-41	12/15/2020	4-Nitrophenol	ND	10.9	2.28	NA	ug/L
MKTF-42	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-42	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-42	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-42	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-42	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-42	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-42	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-42	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-42	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-42	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-42	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-42	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-42	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-42	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-42	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-42	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-42	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-42	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-42	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-42	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-42	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-42	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-42	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-42	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-42	11/18/2014	1-Methylnaphthalene	**72**	10	3.6	11.38	ug/L
MKTF-42	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-42	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-42	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-42	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-42	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-42	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-42	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-42	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-42	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-42	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-42	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-42	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-42	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-42	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-42	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-42	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-42	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-42	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-42	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-42	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	11/18/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-42	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-42	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-42	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-42	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-42	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-42	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-42	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-42	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-42	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-42	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-42	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-42	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-42	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-42	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-42	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-42	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-42	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-42	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-42	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-42	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-42	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-42	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-42	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-42	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-42	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-42	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-42	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-42	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-42	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-42	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-42	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-42	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-42	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-42	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-42	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-42	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-42	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-42	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-42	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-42	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-42	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-42	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-42	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-42	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-42	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-42	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-42	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-42	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-42	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-42	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-42	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-42	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-42	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-42	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-42	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-42	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-42	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-42	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-42	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-42	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-42	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-42	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-42	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-42	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-42	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-42	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-42	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-42	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-42	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-42	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-42	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-42	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-42	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-42	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-42	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-42	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-42	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-42	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-42	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-42	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-42	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-42	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-42	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-42	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-42	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-42	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-42	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-42	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-42	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-42	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-42	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-42	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-42	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-42	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-42	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-42	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-42	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-42	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-42	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-42	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-42	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-42	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-42	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-42	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-42	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-42	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-42	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-42	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-42	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-42	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-42	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-42	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-42	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-42	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-42	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-42	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-42	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-42	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-42	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-42	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-42	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-42	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-42	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-42	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-42	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-42	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-42	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-42	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-42	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-42	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-42	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-42	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-42	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-42	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-42	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-42	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-42	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-42	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-42	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-42	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-42	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-42	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-42	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-42	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-42	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-42	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-42	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-42	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-42	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-42	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-42	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-42	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-42	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-42	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-42	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-42	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-42	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-42	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-42	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-42	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-42	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-42	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-42	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-42	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-42	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-42	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-42	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-42	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-42	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-42	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-42	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-42	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-42	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-42	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-42	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-42	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-42	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-42	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-42	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-42	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-42	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-42	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-42	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-42	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-42	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-42	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-42	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-42	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-42	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-42	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-42	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-42	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-42	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-42	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-42	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-42	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-42	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-42	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-42	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-42	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-42	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-42	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-42	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-42	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-42	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-42	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-42	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-42	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-42	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-42	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-42	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-42	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-42	11/5/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-42	11/5/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
MKTF-42	11/5/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
MKTF-42	11/5/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
MKTF-42	11/5/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Aniline	*ND*	*100*	15	13	ug/L
MKTF-42	11/5/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
MKTF-42	11/5/2015	Benzoic Acid	ND	200	10	75000	ug/L
MKTF-42	11/5/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
MKTF-42	11/5/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
MKTF-42	11/5/2015	Isophorone	ND	100	20	781	ug/L
MKTF-42	11/5/2015	Acenaphthene	ND	100	19	535	ug/L
MKTF-42	11/5/2015	Diethylphthalate	ND	100	17	14801	ug/L
MKTF-42	11/5/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
MKTF-42	11/5/2015	Phenanthrene	ND	100	20	170	ug/L
MKTF-42	11/5/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
MKTF-42	11/5/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
MKTF-42	11/5/2015	Fluorene	ND	100	17	288	ug/L
MKTF-42	11/5/2015	Carbazole	ND	100	15	NA	ug/L
MKTF-42	11/5/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
MKTF-42	11/5/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
MKTF-42	11/5/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
MKTF-42	11/5/2015	2-Nitroaniline	ND	100	18	190	ug/L
MKTF-42	11/5/2015	2-Nitrophenol	ND	100	12	NA	ug/L
MKTF-42	11/5/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
MKTF-42	11/5/2015	Naphthalene	*ND*	*100*	18	30	ug/L
MKTF-42	11/5/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
MKTF-42	11/5/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
MKTF-42	11/5/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
MKTF-42	11/5/2015	2-Methylphenol	ND	100	12	NA	ug/L
MKTF-42	11/5/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
MKTF-42	11/5/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
MKTF-42	11/5/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
MKTF-42	11/5/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
MKTF-42	11/5/2015	3-Nitroaniline	ND	100	15	NA	ug/L
MKTF-42	11/5/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
MKTF-42	11/5/2015	4-Nitrophenol	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
MKTF-42	11/5/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
MKTF-42	11/5/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
MKTF-42	11/5/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
MKTF-42	11/5/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
MKTF-42	11/5/2015	Phenol	ND	100	11	5761	ug/L
MKTF-42	11/5/2015	Pyridine	*ND*	*100*	17	20	ug/L
MKTF-42	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
MKTF-42	11/5/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
MKTF-42	11/5/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
MKTF-42	11/5/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
MKTF-42	11/5/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
MKTF-42	11/5/2015	Anthracene	ND	100	16	1721	ug/L
MKTF-42	11/5/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
MKTF-42	11/5/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
MKTF-42	11/5/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
MKTF-42	11/5/2015	Pyrene	ND	100	23	117	ug/L
MKTF-42	11/5/2015	Dimethylphthalate	ND	100	20	612	ug/L
MKTF-42	11/5/2015	Dibenzofuran	ND	100	19	NA	ug/L
MKTF-42	11/5/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
MKTF-42	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
MKTF-42	11/5/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
MKTF-42	11/5/2015	Fluoranthene	ND	100	15	802	ug/L
MKTF-42	11/5/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
MKTF-42	11/5/2015	Acenaphthylene	ND	100	19	NA	ug/L
MKTF-42	11/5/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
MKTF-42	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
MKTF-42	11/5/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
MKTF-42	11/5/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
MKTF-42	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
MKTF-42	11/5/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
MKTF-42	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
MKTF-42	11/5/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
MKTF-42	2/24/2016	Benzo(a)pyrene	*ND*	*100*	63	0.2	ug/L
MKTF-42	2/24/2016	2,4-Dinitrophenol	*ND*	*200*	99	38.7	ug/L
MKTF-42	2/24/2016	Dibenzo(a,h)anthracene	ND	100	68	NA	ug/L
MKTF-42	2/24/2016	Benzo(a)anthracene	*ND*	*100*	61	0.12	ug/L
MKTF-42	2/24/2016	4-Chloro-3-Methylphenol	ND	100	80	NA	ug/L
MKTF-42	2/24/2016	Aniline	*ND*	*100*	98	13	ug/L
MKTF-42	2/24/2016	N-Nitrosodimethylamine	*ND*	*100*	91	0.0049	ug/L
MKTF-42	2/24/2016	Benzoic Acid	ND	200	98	75000	ug/L
MKTF-42	2/24/2016	Hexachloroethane	*ND*	*100*	58	3.28	ug/L
MKTF-42	2/24/2016	Hexachlorocyclopentadiene	*ND*	*100*	52	0.41	ug/L
MKTF-42	2/24/2016	Isophorone	ND	100	81	781	ug/L
MKTF-42	2/24/2016	Acenaphthene	ND	100	80	535	ug/L
MKTF-42	2/24/2016	Diethylphthalate	ND	100	82	14801	ug/L
MKTF-42	2/24/2016	Di-n-butylphthalate	ND	100	81	885	ug/L
MKTF-42	2/24/2016	Phenanthrene	ND	100	68	170	ug/L
MKTF-42	2/24/2016	Butylbenzylphthalate	*ND*	*100*	78	16	ug/L
MKTF-42	2/24/2016	N-Nitrosodiphenylamine	ND	100	62	122	ug/L
MKTF-42	2/24/2016	Fluorene	ND	100	72	288	ug/L
MKTF-42	2/24/2016	Carbazole	ND	100	72	NA	ug/L
MKTF-42	2/24/2016	Hexachlorobutadiene	*ND*	*100*	52	0.14	ug/L
MKTF-42	2/24/2016	Pentachlorophenol	*ND*	*200*	76	1	ug/L
MKTF-42	2/24/2016	2,4,6-Trichlorophenol	ND	100	88	11.9*	ug/L
MKTF-42	2/24/2016	2-Nitroaniline	ND	100	90	190	ug/L
MKTF-42	2/24/2016	2-Nitrophenol	ND	100	76	NA	ug/L
MKTF-42	2/24/2016	1-Methylnaphthalene	**270**	100	68	11.38	ug/L
MKTF-42	2/24/2016	Naphthalene	*ND*	*100*	59	30	ug/L
MKTF-42	2/24/2016	2-Methylnaphthalene	*ND*	*100*	70	35.1	ug/L
MKTF-42	2/24/2016	2-Chloronaphthalene	ND	100	72	733	ug/L
MKTF-42	2/24/2016	3,3-Dichlorobenzidine	*ND*	*100*	47	1.25	ug/L
MKTF-42	2/24/2016	2-Methylphenol	ND	100	82	NA	ug/L
MKTF-42	2/24/2016	1,2-Dichlorobenzene	ND	100	64	600	ug/L
MKTF-42	2/24/2016	2-Chlorophenol	*ND*	*100*	87	91	ug/L
MKTF-42	2/24/2016	2,4,5-Trichlorophenol	ND	100	84	1166	ug/L
MKTF-42	2/24/2016	Nitrobenzene	*ND*	*100*	78	1.4	ug/L
MKTF-42	2/24/2016	3-Nitroaniline	ND	100	88	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/24/2016	4-Nitroaniline	*ND*	*100*	91	3.8	ug/L
MKTF-42	2/24/2016	4-Nitrophenol	ND	100	67	NA	ug/L
MKTF-42	2/24/2016	Benzyl Alcohol	ND	100	80	2000	ug/L
MKTF-42	2/24/2016	4-Bromophenyl-phenylether	ND	100	86	NA	ug/L
MKTF-42	2/24/2016	Azobenzene	*ND*	*100*	93	0.12	ug/L
MKTF-42	2/24/2016	2,4-Dimethylphenol	ND	100	47	354	ug/L
MKTF-42	2/24/2016	1,4-Dichlorobenzene	*ND*	*100*	63	75	ug/L
MKTF-42	2/24/2016	4-Chloroaniline	*ND*	*100*	71	0.37	ug/L
MKTF-42	2/24/2016	Phenol	ND	100	51	5761	ug/L
MKTF-42	2/24/2016	Pyridine	*ND*	*100*	67	20	ug/L
MKTF-42	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*100*	83	0.137	ug/L
MKTF-42	2/24/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	73	59	ug/L
MKTF-42	2/24/2016	Bis(2-ethylhexyl)phthalate	*ND*	*100*	75	55.64	ug/L
MKTF-42	2/24/2016	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-42	2/24/2016	Hexachlorobenzene	*ND*	*100*	71	0.0976	ug/L
MKTF-42	2/24/2016	Anthracene	ND	100	66	1721	ug/L
MKTF-42	2/24/2016	1,2,4-Trichlorobenzene	*ND*	*100*	62	70	ug/L
MKTF-42	2/24/2016	2,4-Dichlorophenol	*ND*	*200*	76	45.3	ug/L
MKTF-42	2/24/2016	2,4-Dinitrotoluene	*ND*	*100*	85	45.3	ug/L
MKTF-42	2/24/2016	Pyrene	ND	100	55	117	ug/L
MKTF-42	2/24/2016	Dimethylphthalate	ND	100	75	612	ug/L
MKTF-42	2/24/2016	Dibenzofuran	ND	100	86	NA	ug/L
MKTF-42	2/24/2016	Benzo(g,h,i)perylene	ND	100	68	NA	ug/L
MKTF-42	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	56	0.343	ug/L
MKTF-42	2/24/2016	Benzo(b)fluoranthene	*ND*	*100*	66	0.34	ug/L
MKTF-42	2/24/2016	Fluoranthene	ND	100	61	802	ug/L
MKTF-42	2/24/2016	Benzo(k)fluoranthene	*ND*	*100*	72	3.43	ug/L
MKTF-42	2/24/2016	Acenaphthylene	ND	100	72	NA	ug/L
MKTF-42	2/24/2016	Chrysene	*ND*	*100*	66	34.3	ug/L
MKTF-42	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	73	1.52	ug/L
MKTF-42	2/24/2016	1,3-Dichlorobenzene	ND	100	61	NA	ug/L
MKTF-42	2/24/2016	2,6-Dinitrotoluene	*ND*	*100*	75	0.485	ug/L
MKTF-42	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	78	0.011	ug/L
MKTF-42	2/24/2016	4-Chlorophenyl-phenylether	ND	100	82	NA	ug/L
MKTF-42	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	91	9.81	ug/L
MKTF-42	2/24/2016	3,4-Methylphenol	ND	100	71	NA	ug/L
MKTF-42	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-42	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-42	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-42	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-42	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-42	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-42	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-42	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-42	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-42	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-42	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-42	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-42	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-42	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-42	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-42	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-42	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-42	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-42	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-42	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-42	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-42	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-42	6/9/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-42	6/9/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-42	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-42	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-42	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-42	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-42	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-42	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-42	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-42	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-42	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-42	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-42	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-42	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-42	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-42	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-42	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-42	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-42	6/9/2016	Bis(2-ethylhexyl)phthalate	21	50	13	55.64	ug/L
MKTF-42	6/9/2016	Di-n-octylphthalate	ND	50	9.9	200	ug/L
MKTF-42	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-42	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-42	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-42	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-42	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-42	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-42	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-42	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-42	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-42	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-42	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-42	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-42	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-42	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-42	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-42	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-42	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-42	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-42	9/9/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-42	9/9/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-42	9/9/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/9/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-42	9/9/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-42	9/9/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-42	9/9/2016	Benzoic Acid	72	200	26	75000	ug/L
MKTF-42	9/9/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-42	9/9/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-42	9/9/2016	Isophorone	ND	100	26	781	ug/L
MKTF-42	9/9/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-42	9/9/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-42	9/9/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-42	9/9/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-42	9/9/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-42	9/9/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-42	9/9/2016	Fluorene	ND	100	27	288	ug/L
MKTF-42	9/9/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-42	9/9/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-42	9/9/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-42	9/9/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-42	9/9/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-42	9/9/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-42	9/9/2016	1-Methylnaphthalene	**170**	100	29	11.38	ug/L
MKTF-42	9/9/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-42	9/9/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-42	9/9/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-42	9/9/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-42	9/9/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-42	9/9/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-42	9/9/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-42	9/9/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-42	9/9/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-42	9/9/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-42	9/9/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-42	9/9/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-42	9/9/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-42	9/9/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-42	9/9/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-42	9/9/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-42	9/9/2016	Phenol	ND	100	20	5761	ug/L
MKTF-42	9/9/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-42	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-42	9/9/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-42	9/9/2016	Bis(2-ethylhexyl)phthalate	*ND*	*100*	26	55.64	ug/L
MKTF-42	9/9/2016	Di-n-octylphthalate	ND	100	20	200	ug/L
MKTF-42	9/9/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-42	9/9/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-42	9/9/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-42	9/9/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-42	9/9/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-42	9/9/2016	Pyrene	ND	100	31	117	ug/L
MKTF-42	9/9/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-42	9/9/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-42	9/9/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-42	9/9/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-42	9/9/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-42	9/9/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-42	9/9/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-42	9/9/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-42	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-42	9/9/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-42	9/9/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-42	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-42	9/9/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-42	9/9/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
MKTF-42	10/31/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-42	10/31/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-42	10/31/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-42	10/31/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-42	10/31/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-42	10/31/2016	Benzoic Acid	56	100	13	75000	ug/L
MKTF-42	10/31/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-42	10/31/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-42	10/31/2016	Isophorone	ND	50	13	781	ug/L
MKTF-42	10/31/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-42	10/31/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-42	10/31/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-42	10/31/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-42	10/31/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-42	10/31/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-42	10/31/2016	Fluorene	ND	50	14	288	ug/L
MKTF-42	10/31/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-42	10/31/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-42	10/31/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-42	10/31/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-42	10/31/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-42	10/31/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	1-Methylnaphthalene	**190**	50	15	11.38	ug/L
MKTF-42	10/31/2016	Naphthalene	*16*	*50*	13	30	ug/L
MKTF-42	10/31/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-42	10/31/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-42	10/31/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-42	10/31/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-42	10/31/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-42	10/31/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-42	10/31/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-42	10/31/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-42	10/31/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-42	10/31/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-42	10/31/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-42	10/31/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-42	10/31/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/31/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-42	10/31/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-42	10/31/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-42	10/31/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-42	10/31/2016	Bis(2-ethylhexyl)phthalate	33	50	13	55.64	ug/L
MKTF-42	10/31/2016	Di-n-octylphthalate	37	50	9.9	200	ug/L
MKTF-42	10/31/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-42	10/31/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-42	10/31/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-42	10/31/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-42	10/31/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-42	10/31/2016	Pyrene	ND	50	15	117	ug/L
MKTF-42	10/31/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-42	10/31/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-42	10/31/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-42	10/31/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-42	10/31/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-42	10/31/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-42	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-42	10/31/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-42	10/31/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-42	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-42	10/31/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-42	10/31/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-42	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-42	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-42	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-42	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-42	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-42	3/7/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-42	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-42	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-42	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-42	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-42	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-42	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-42	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-42	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-42	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-42	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-42	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-42	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-42	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-42	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-42	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-42	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-42	3/7/2017	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-42	3/7/2017	Naphthalene	14	10	2.6	30	ug/L
MKTF-42	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-42	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-42	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-42	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-42	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-42	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-42	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-42	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-42	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-42	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-42	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-42	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-42	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-42	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-42	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-42	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-42	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-42	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-42	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	3/7/2017	Bis(2-ethylhexyl)phthalate	9.6	10	2.6	55.64	ug/L
MKTF-42	3/7/2017	Di-n-octylphthalate	4.4	10	2	200	ug/L
MKTF-42	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-42	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-42	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-42	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-42	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-42	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-42	3/7/2017	Dimethylphthalate	22	10	2.4	612	ug/L
MKTF-42	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-42	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Indeno(1,2,3-cd)pyrene	**3.3**	10	3	0.343	ug/L
MKTF-42	3/7/2017	Benzo(b)fluoranthene	**3.5**	10	2.9	0.34	ug/L
MKTF-42	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-42	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-42	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-42	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-42	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-42	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-42	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-42	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-42	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-42	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-42	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-42	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-42	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-42	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-42	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-42	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-42	6/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-42	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-42	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-42	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-42	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-42	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-42	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-42	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-42	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-42	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-42	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-42	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-42	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-42	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-42	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-42	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-42	6/6/2017	Naphthalene	12	10	2.9	30	ug/L
MKTF-42	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-42	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-42	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-42	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-42	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-42	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-42	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-42	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-42	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-42	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-42	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-42	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-42	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-42	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-42	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-42	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-42	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-42	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-42	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-42	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-42	6/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-42	6/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-42	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-42	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-42	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-42	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-42	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-42	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-42	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-42	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-42	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-42	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-42	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-42	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-42	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-42	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-42	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-42	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-42	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-42	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-42	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-42	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-42	9/25/2017	Benzo(a)pyrene	*ND*	*200*	80	0.2	ug/L
MKTF-42	9/25/2017	2,4-Dinitrophenol	*ND*	*400*	52	38.7	ug/L
MKTF-42	9/25/2017	Dibenzo(a,h)anthracene	ND	200	93	NA	ug/L
MKTF-42	9/25/2017	Benzo(a)anthracene	*ND*	*200*	77	0.12	ug/L
MKTF-42	9/25/2017	4-Chloro-3-Methylphenol	ND	200	130	NA	ug/L
MKTF-42	9/25/2017	Aniline	*ND*	*200*	61	13	ug/L
MKTF-42	9/25/2017	N-Nitrosodimethylamine	*ND*	*200*	70	0.0049	ug/L
MKTF-42	9/25/2017	Benzoic Acid	ND	400	79	75000	ug/L
MKTF-42	9/25/2017	Hexachloroethane	*ND*	*200*	24	3.28	ug/L
MKTF-42	9/25/2017	Hexachlorocyclopentadiene	*ND*	*200*	25	0.41	ug/L
MKTF-42	9/25/2017	Isophorone	ND	200	87	781	ug/L
MKTF-42	9/25/2017	Acenaphthene	ND	200	72	535	ug/L
MKTF-42	9/25/2017	Diethylphthalate	ND	200	81	14801	ug/L
MKTF-42	9/25/2017	Di-n-butylphthalate	ND	200	100	885	ug/L
MKTF-42	9/25/2017	Phenanthrene	*ND*	*200*	87	170	ug/L
MKTF-42	9/25/2017	Butylbenzylphthalate	*ND*	*200*	93	16	ug/L
MKTF-42	9/25/2017	N-Nitrosodiphenylamine	*ND*	*200*	78	122	ug/L
MKTF-42	9/25/2017	Fluorene	ND	200	80	288	ug/L
MKTF-42	9/25/2017	Carbazole	ND	200	92	NA	ug/L
MKTF-42	9/25/2017	Hexachlorobutadiene	*ND*	*200*	27	0.14	ug/L
MKTF-42	9/25/2017	Pentachlorophenol	*ND*	*400*	98	1	ug/L
MKTF-42	9/25/2017	2,4,6-Trichlorophenol	ND	200	110	11.9*	ug/L
MKTF-42	9/25/2017	2-Nitroaniline	*ND*	*200*	99	190	ug/L
MKTF-42	9/25/2017	2-Nitrophenol	ND	200	100	NA	ug/L
MKTF-42	9/25/2017	1-Methylnaphthalene	**270**	200	66	11.38	ug/L
MKTF-42	9/25/2017	Naphthalene	*ND*	*200*	57	30	ug/L
MKTF-42	9/25/2017	2-Methylnaphthalene	*ND*	*200*	65	35.1	ug/L
MKTF-42	9/25/2017	2-Chloronaphthalene	ND	200	74	733	ug/L
MKTF-42	9/25/2017	3,3-Dichlorobenzidine	*ND*	*200*	78	1.25	ug/L
MKTF-42	9/25/2017	2-Methylphenol	ND	200	66	NA	ug/L
MKTF-42	9/25/2017	1,2-Dichlorobenzene	ND	200	40	600	ug/L
MKTF-42	9/25/2017	2-Chlorophenol	*ND*	*200*	150	91	ug/L
MKTF-42	9/25/2017	2,4,5-Trichlorophenol	ND	200	100	1166	ug/L
MKTF-42	9/25/2017	Nitrobenzene	*ND*	*200*	72	1.4	ug/L
MKTF-42	9/25/2017	3-Nitroaniline	ND	200	87	NA	ug/L
MKTF-42	9/25/2017	4-Nitroaniline	*ND*	*200*	81	3.8	ug/L
MKTF-42	9/25/2017	4-Nitrophenol	ND	200	110	NA	ug/L
MKTF-42	9/25/2017	Benzyl Alcohol	ND	200	92	2000	ug/L
MKTF-42	9/25/2017	4-Bromophenyl-phenylether	ND	200	92	NA	ug/L
MKTF-42	9/25/2017	Azobenzene	*ND*	*200*	91	0.12	ug/L
MKTF-42	9/25/2017	2,4-Dimethylphenol	ND	200	57	354	ug/L
MKTF-42	9/25/2017	1,4-Dichlorobenzene	*ND*	*200*	43	75	ug/L
MKTF-42	9/25/2017	4-Chloroaniline	*ND*	*200*	70	0.37	ug/L
MKTF-42	9/25/2017	Phenol	ND	200	62	5761	ug/L
MKTF-42	9/25/2017	Pyridine	*ND*	*200*	46	20	ug/L
MKTF-42	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*200*	87	0.137	ug/L
MKTF-42	9/25/2017	Bis(2-chloroethoxy)methane	*ND*	*200*	86	59	ug/L
MKTF-42	9/25/2017	Bis(2-ethylhexyl)phthalate	*ND*	*200*	96	55.64	ug/L
MKTF-42	9/25/2017	Di-n-octylphthalate	ND	200	94	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Hexachlorobenzene	*ND*	*200*	77	0.0976	ug/L
MKTF-42	9/25/2017	Anthracene	ND	200	71	1721	ug/L
MKTF-42	9/25/2017	1,2,4-Trichlorobenzene	*ND*	*200*	43	70	ug/L
MKTF-42	9/25/2017	2,4-Dichlorophenol	*ND*	*400*	110	45.3	ug/L
MKTF-42	9/25/2017	2,4-Dinitrotoluene	*ND*	*200*	79	45.3	ug/L
MKTF-42	9/25/2017	Pyrene	*ND*	*200*	89	117	ug/L
MKTF-42	9/25/2017	Dimethylphthalate	ND	200	72	612	ug/L
MKTF-42	9/25/2017	Dibenzofuran	ND	200	82	NA	ug/L
MKTF-42	9/25/2017	Benzo(g,h,i)perylene	ND	200	81	NA	ug/L
MKTF-42	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*200*	83	0.343	ug/L
MKTF-42	9/25/2017	Benzo(b)fluoranthene	*ND*	*200*	79	0.34	ug/L
MKTF-42	9/25/2017	Fluoranthene	ND	200	85	802	ug/L
MKTF-42	9/25/2017	Benzo(k)fluoranthene	*ND*	*200*	88	3.43	ug/L
MKTF-42	9/25/2017	Acenaphthylene	ND	200	71	NA	ug/L
MKTF-42	9/25/2017	Chrysene	*ND*	*200*	76	34.3	ug/L
MKTF-42	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*400*	77	1.52	ug/L
MKTF-42	9/25/2017	1,3-Dichlorobenzene	ND	200	37	NA	ug/L
MKTF-42	9/25/2017	2,6-Dinitrotoluene	*ND*	*200*	90	0.485	ug/L
MKTF-42	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*200*	91	0.011	ug/L
MKTF-42	9/25/2017	4-Chlorophenyl-phenylether	ND	200	72	NA	ug/L
MKTF-42	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*200*	77	9.81	ug/L
MKTF-42	9/25/2017	3,4-Methylphenol	ND	200	64	NA	ug/L
MKTF-42	11/27/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-42	11/27/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-42	11/27/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-42	11/27/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	11/27/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-42	11/27/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-42	11/27/2017	Benzoic Acid	52	100	20	75000	ug/L
MKTF-42	11/27/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-42	11/27/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-42	11/27/2017	Isophorone	ND	50	22	781	ug/L
MKTF-42	11/27/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-42	11/27/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-42	11/27/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-42	11/27/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-42	11/27/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-42	11/27/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-42	11/27/2017	Fluorene	ND	50	20	288	ug/L
MKTF-42	11/27/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-42	11/27/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-42	11/27/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-42	11/27/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-42	11/27/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-42	11/27/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-42	11/27/2017	Naphthalene	**34**	50	14	30	ug/L
MKTF-42	11/27/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
MKTF-42	11/27/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-42	11/27/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-42	11/27/2017	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-42	11/27/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-42	11/27/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-42	11/27/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-42	11/27/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-42	11/27/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-42	11/27/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-42	11/27/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-42	11/27/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-42	11/27/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-42	11/27/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
MKTF-42	11/27/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-42	11/27/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-42	11/27/2017	Phenol	ND	50	16	5761	ug/L
MKTF-42	11/27/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-42	11/27/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-42	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-42	11/27/2017	Di-n-octylphthalate	25	50	23	200	ug/L
MKTF-42	11/27/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-42	11/27/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-42	11/27/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-42	11/27/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-42	11/27/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-42	11/27/2017	Pyrene	ND	50	22	117	ug/L
MKTF-42	11/27/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-42	11/27/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-42	11/27/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-42	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-42	11/27/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-42	11/27/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-42	11/27/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-42	11/27/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-42	11/27/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-42	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-42	11/27/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-42	11/27/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-42	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-42	11/27/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-42	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-42	11/27/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-42	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-42	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-42	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-42	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-42	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-42	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-42	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-42	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-42	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-42	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-42	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-42	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-42	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-42	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-42	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-42	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-42	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-42	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-42	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-42	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-42	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-42	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-42	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-42	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-42	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-42	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-42	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-42	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-42	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-42	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-42	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-42	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-42	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-42	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-42	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-42	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-42	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-42	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-42	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-42	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-42	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-42	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-42	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-42	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-42	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-42	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-42	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-42	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-42	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-42	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-42	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-42	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-42	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-42	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-42	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-42	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-42	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-42	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-42	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-42	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-42	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-42	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-42	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-42	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-42	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-42	5/9/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-42	5/9/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-42	5/9/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-42	5/9/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-42	5/9/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-42	5/9/2018	Benzoic Acid	69	100	32	75000	ug/L
MKTF-42	5/9/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-42	5/9/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-42	5/9/2018	Isophorone	ND	50	31	781	ug/L
MKTF-42	5/9/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-42	5/9/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-42	5/9/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-42	5/9/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-42	5/9/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-42	5/9/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-42	5/9/2018	Fluorene	ND	50	32	288	ug/L
MKTF-42	5/9/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-42	5/9/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-42	5/9/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-42	5/9/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-42	5/9/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-42	5/9/2018	2-Nitrophenol	ND	50	30	NA	ug/L
MKTF-42	5/9/2018	1-Methylnaphthalene	**340**	50	35	11.38	ug/L
MKTF-42	5/9/2018	Naphthalene	*ND*	*50*	25	30	ug/L
MKTF-42	5/9/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-42	5/9/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-42	5/9/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-42	5/9/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	5/9/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-42	5/9/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-42	5/9/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-42	5/9/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-42	5/9/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-42	5/9/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-42	5/9/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-42	5/9/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-42	5/9/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-42	5/9/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-42	5/9/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-42	5/9/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-42	5/9/2018	Phenol	ND	50	30	5761	ug/L
MKTF-42	5/9/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-42	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-42	5/9/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-42	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-42	5/9/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-42	5/9/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-42	5/9/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-42	5/9/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-42	5/9/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-42	5/9/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-42	5/9/2018	Pyrene	ND	50	33	117	ug/L
MKTF-42	5/9/2018	Dimethylphthalate	ND	50	30	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/9/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-42	5/9/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-42	5/9/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-42	5/9/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-42	5/9/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-42	5/9/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-42	5/9/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-42	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-42	5/9/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-42	5/9/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-42	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-42	5/9/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-42	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-42	5/9/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-42	8/29/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-42	8/29/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-42	8/29/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-42	8/29/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-42	8/29/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-42	8/29/2018	Benzoic Acid	91	200	63	75000	ug/L
MKTF-42	8/29/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-42	8/29/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-42	8/29/2018	Isophorone	ND	100	62	781	ug/L
MKTF-42	8/29/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-42	8/29/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-42	8/29/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-42	8/29/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-42	8/29/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-42	8/29/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-42	8/29/2018	Fluorene	ND	100	63	288	ug/L
MKTF-42	8/29/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-42	8/29/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-42	8/29/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-42	8/29/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-42	8/29/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-42	8/29/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-42	8/29/2018	1-Methylnaphthalene	**200**	100	70	11.38	ug/L
MKTF-42	8/29/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-42	8/29/2018	2-Methylnaphthalene	**300**	100	63	35.1	ug/L
MKTF-42	8/29/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-42	8/29/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-42	8/29/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-42	8/29/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-42	8/29/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-42	8/29/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-42	8/29/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-42	8/29/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-42	8/29/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-42	8/29/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-42	8/29/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-42	8/29/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-42	8/29/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-42	8/29/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-42	8/29/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-42	8/29/2018	Phenol	ND	100	60	5761	ug/L
MKTF-42	8/29/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-42	8/29/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-42	8/29/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-42	8/29/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-42	8/29/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-42	8/29/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-42	8/29/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-42	8/29/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-42	8/29/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-42	8/29/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-42	8/29/2018	Pyrene	ND	100	65	117	ug/L
MKTF-42	8/29/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-42	8/29/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-42	8/29/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-42	8/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-42	8/29/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-42	8/29/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-42	8/29/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-42	8/29/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-42	8/29/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-42	8/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-42	8/29/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-42	8/29/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-42	8/29/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-42	8/29/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-42	8/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-42	8/29/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-42	11/15/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-42	11/15/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-42	11/15/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-42	11/15/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-42	11/15/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-42	11/15/2018	Benzoic Acid	110	100	32	75000	ug/L
MKTF-42	11/15/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-42	11/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-42	11/15/2018	Isophorone	ND	50	31	781	ug/L
MKTF-42	11/15/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-42	11/15/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-42	11/15/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-42	11/15/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-42	11/15/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-42	11/15/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-42	11/15/2018	Fluorene	ND	50	32	288	ug/L
MKTF-42	11/15/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-42	11/15/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-42	11/15/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-42	11/15/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-42	11/15/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-42	11/15/2018	2-Nitrophenol	ND	50	30	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/15/2018	1-Methylnaphthalene	**290**	50	35	11.38	ug/L
MKTF-42	11/15/2018	Naphthalene	**160**	50	25	30	ug/L
MKTF-42	11/15/2018	2-Methylnaphthalene	**130**	50	32	35.1	ug/L
MKTF-42	11/15/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-42	11/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-42	11/15/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	11/15/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-42	11/15/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-42	11/15/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-42	11/15/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-42	11/15/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-42	11/15/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-42	11/15/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-42	11/15/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-42	11/15/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-42	11/15/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-42	11/15/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-42	11/15/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-42	11/15/2018	Phenol	ND	50	30	5761	ug/L
MKTF-42	11/15/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-42	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-42	11/15/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-42	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-42	11/15/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-42	11/15/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-42	11/15/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-42	11/15/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-42	11/15/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-42	11/15/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-42	11/15/2018	Pyrene	ND	50	33	117	ug/L
MKTF-42	11/15/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-42	11/15/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-42	11/15/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-42	11/15/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-42	11/15/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-42	11/15/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-42	11/15/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-42	11/15/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-42	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-42	11/15/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-42	11/15/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-42	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-42	11/15/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-42	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-42	11/15/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-42	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-42	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-42	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-42	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-42	2/13/2019	1-Methylnaphthalene	**41**	10	6.999122	11.38	ug/L
MKTF-42	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-42	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-42	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-42	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-42	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-42	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-42	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-42	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-42	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-42	2/13/2019	2-Methylnaphthalene	**48**	10	6.33239	35.1	ug/L
MKTF-42	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-42	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-42	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-42	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-42	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-42	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-42	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-42	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-42	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-42	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-42	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-42	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-42	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-42	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-42	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-42	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-42	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-42	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-42	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-42	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-42	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-42	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-42	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-42	2/13/2019	Benzoic Acid	16	20	6.311561	75000	ug/L
MKTF-42	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-42	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-42	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-42	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-42	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-42	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-42	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-42	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-42	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-42	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-42	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-42	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-42	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-42	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-42	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-42	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-42	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-42	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-42	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-42	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-42	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-42	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-42	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-42	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-42	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-42	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-42	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-42	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-42	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-42	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-42	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-42	5/7/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-42	5/7/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-42	5/7/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-42	5/7/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-42	5/7/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-42	5/7/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-42	5/7/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-42	5/7/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-42	5/7/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-42	5/7/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-42	5/7/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-42	5/7/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-42	5/7/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-42	5/7/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-42	5/7/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-42	5/7/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-42	5/7/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-42	5/7/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-42	5/7/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-42	5/7/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-42	5/7/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-42	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-42	5/7/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-42	5/7/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-42	5/7/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-42	5/7/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-42	5/7/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-42	5/7/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-42	5/7/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-42	5/7/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-42	5/7/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-42	5/7/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-42	5/7/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-42	5/7/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-42	5/7/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-42	5/7/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-42	5/7/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-42	5/7/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-42	5/7/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-42	5/7/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-42	5/7/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-42	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-42	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-42	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-42	5/7/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-42	5/7/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-42	5/7/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-42	5/7/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-42	5/7/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-42	5/7/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-42	5/7/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-42	5/7/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-42	5/7/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-42	5/7/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-42	5/7/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-42	5/7/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-42	5/7/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-42	5/7/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-42	5/7/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-42	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-42	5/7/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-42	5/7/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
MKTF-42	5/7/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-42	5/7/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-42	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-42	5/7/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-42	5/7/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-42	5/7/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-42	5/7/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-42	5/7/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-42	5/7/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-42	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-42	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-42	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-42	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-42	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-42	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-42	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-42	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-42	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-42	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-42	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-42	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-42	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-42	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-42	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-42	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-42	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-42	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-42	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-42	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-42	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-42	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-42	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-42	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-42	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-42	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-42	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-42	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-42	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-42	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-42	8/22/2019	Aniline	ND	10	3.579516	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-42	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-42	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-42	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-42	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-42	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-42	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-42	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-42	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-42	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-42	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-42	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-42	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-42	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-42	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-42	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-42	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-42	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-42	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-42	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-42	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-42	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-42	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-42	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-42	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-42	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-42	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-42	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-42	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-42	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-42	8/22/2019	Naphthalene	11	10	4.12221	30	ug/L
MKTF-42	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-42	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-42	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-42	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-42	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-42	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-42	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-42	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-42	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	3	3	1.234	11.38	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	2.3	3	1.229	35.1	ug/L
MKTF-42	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-42	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-42	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-42	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-42	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-42	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-42	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-42	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-42	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-42	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-42	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-42	10/23/2019	Fluorene	1.8	0.8	0.338	288	ug/L
MKTF-42	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-42	10/23/2019	Naphthalene	11	3	1.159	30	ug/L
MKTF-42	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-42	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-42	10/23/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-42	10/23/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-42	10/23/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-42	10/23/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	ND	5	5	11.38	ug/L
MKTF-42	10/23/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-42	10/23/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-42	10/23/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-42	10/23/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-42	10/23/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-42	10/23/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-42	10/23/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-42	10/23/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-42	10/23/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	ND	5	5	35.1	ug/L
MKTF-42	10/23/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-42	10/23/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-42	10/23/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-42	10/23/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-42	10/23/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-42	10/23/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Aniline	ND	5	5	13	ug/L
MKTF-42	10/23/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-42	10/23/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-42	10/23/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-42	10/23/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-42	10/23/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-42	10/23/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-42	10/23/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-42	10/23/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-42	10/23/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-42	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-42	10/23/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-42	10/23/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-42	10/23/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-42	10/23/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-42	10/23/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-42	10/23/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-42	10/23/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-42	10/23/2019	Fluoranthene	ND	5	5	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Fluorene	ND	5	5	288	ug/L
MKTF-42	10/23/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-42	10/23/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-42	10/23/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-42	10/23/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-42	10/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-42	10/23/2019	Isophorone	ND	5	5	781	ug/L
MKTF-42	10/23/2019	Naphthalene	ND	5	5	30	ug/L
MKTF-42	10/23/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-42	10/23/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-42	10/23/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-42	10/23/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-42	10/23/2019	Phenol	ND	5	5	5761	ug/L
MKTF-42	10/23/2019	Pyrene	ND	5	5	117	ug/L
MKTF-42	10/23/2019	Pyridine	ND	5	5	20	ug/L
MKTF-42	2/27/2020	1,2,4-Trichlorobenzene	ND	50	10	70	ug/L
MKTF-42	2/27/2020	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-42	2/27/2020	1,3-Dichlorobenzene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
MKTF-42	2/27/2020	1,4-Dioxane	*ND*	*50*	10	4.59	ug/L
MKTF-42	2/27/2020	1-Methylnaphthalene	**81**	50	10	11.38	ug/L
MKTF-42	2/27/2020	2,4,5-Trichlorophenol	ND	50	10	1166	ug/L
MKTF-42	2/27/2020	2,4,6-Trichlorophenol	ND	50	10	11.9*	ug/L
MKTF-42	2/27/2020	2,4-Dichlorophenol	*ND*	*50*	10	45.3	ug/L
MKTF-42	2/27/2020	2,4-Dimethylphenol	ND	50	10	354	ug/L
MKTF-42	2/27/2020	2,4-Dinitrophenol	*ND*	*50*	10	38.7	ug/L
MKTF-42	2/27/2020	2,4-Dinitrotoluene	*ND*	*50*	10	45.3	ug/L
MKTF-42	2/27/2020	2,6-Dinitrotoluene	*ND*	*20*	4	0.485	ug/L
MKTF-42	2/27/2020	2-Chloronaphthalene	ND	50	10	733	ug/L
MKTF-42	2/27/2020	2-Chlorophenol	ND	50	10	91	ug/L
MKTF-42	2/27/2020	2-Methylnaphthalene	**73**	50	10	35.1	ug/L
MKTF-42	2/27/2020	2-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	2-Nitroaniline	ND	50	10	190	ug/L
MKTF-42	2/27/2020	2-Nitrophenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	3,4-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	3,3-Dichlorobenzidine	*ND*	*50*	10	1.25	ug/L
MKTF-42	2/27/2020	3-Nitroaniline	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4,6-Dinitro-2-methylphenol	*ND*	*50*	10	1.52	ug/L
MKTF-42	2/27/2020	4-Bromophenyl-phenylether	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Chloro-3-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Chlorophenyl-phenylether	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Nitroaniline	*ND*	*50*	10	3.8	ug/L
MKTF-42	2/27/2020	4-Nitrophenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Acenaphthene	ND	50	10	535	ug/L
MKTF-42	2/27/2020	Acenaphthylene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Aniline	*ND*	*50*	10	13	ug/L
MKTF-42	2/27/2020	Anthracene	ND	50	10	1721	ug/L
MKTF-42	2/27/2020	Benzo(a)anthracene	*ND*	*10*	2	0.12	ug/L
MKTF-42	2/27/2020	Benzo(a)pyrene	*ND*	*10*	2	0.2	ug/L
MKTF-42	2/27/2020	Benzo(b)fluoranthene	*ND*	*10*	2	0.34	ug/L
MKTF-42	2/27/2020	Benzo(g,h,i)perylene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Benzo(k)fluoranthene	*ND*	*50*	10	3.43	ug/L
MKTF-42	2/27/2020	Benzoic Acid	ND	25	5	75000	ug/L
MKTF-42	2/27/2020	Benzyl Alcohol	ND	50	10	2000	ug/L
MKTF-42	2/27/2020	Bis(2-chloroethoxy)methane	ND	50	10	59	ug/L
MKTF-42	2/27/2020	Bis(2-chloroisopropyl)ether	*ND*	*50*	10	9.81	ug/L
MKTF-42	2/27/2020	Bis(2-ethylhexyl)phthalate	21	50	20	55.64	ug/L
MKTF-42	2/27/2020	Butylbenzylphthalate	*ND*	*50*	20	16	ug/L
MKTF-42	2/27/2020	Carbazole	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Chrysene	*ND*	*50*	10	34.3	ug/L
MKTF-42	2/27/2020	Di-n-butylphthalate	ND	50	20	885	ug/L
MKTF-42	2/27/2020	Di-n-octylphthalate	ND	50	20	200	ug/L
MKTF-42	2/27/2020	Dibenzo(a,h)anthracene	ND	1.2	0.25	NA	ug/L
MKTF-42	2/27/2020	Dibenzofuran	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-42	2/27/2020	Dimethylphthalate	ND	50	20	612	ug/L
MKTF-42	2/27/2020	Fluoranthene	ND	50	10	802	ug/L
MKTF-42	2/27/2020	Fluorene	ND	50	10	288	ug/L
MKTF-42	2/27/2020	Hexachlorobenzene	*ND*	*50*	10	0.0976	ug/L
MKTF-42	2/27/2020	Hexachlorobutadiene	*ND*	*50*	10	0.14	ug/L
MKTF-42	2/27/2020	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
MKTF-42	2/27/2020	Hexachloroethane	*ND*	*50*	10	3.28	ug/L
MKTF-42	2/27/2020	Indeno(1,2,3-cd)pyrene	*ND*	*20*	4	0.343	ug/L
MKTF-42	2/27/2020	Isophorone	ND	50	10	781	ug/L
MKTF-42	2/27/2020	N-Nitrosodiphenylamine	ND	50	10	122	ug/L
MKTF-42	2/27/2020	Naphthalene	**150**	50	10	30	ug/L
MKTF-42	2/27/2020	Nitrobenzene	*ND*	*50*	10	1.4	ug/L
MKTF-42	2/27/2020	Pentachlorophenol	*ND*	*50*	10	1	ug/L
MKTF-42	2/27/2020	Phenanthrene	ND	50	10	170	ug/L
MKTF-42	2/27/2020	Phenol	ND	50	10	5761	ug/L
MKTF-42	2/27/2020	Pyrene	ND	50	10	117	ug/L
MKTF-42	2/27/2020	Pyridine	*ND*	*50*	10	20	ug/L
MKTF-42	9/21/2020	1,2,4-Trichlorobenzene	ND	2.1	0.41	70	ug/L
MKTF-42	9/21/2020	1,2-Dichlorobenzene	ND	2.1	0.41	600	ug/L
MKTF-42	9/21/2020	1,3-Dichlorobenzene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	1,4-Dichlorobenzene	ND	2.1	0.41	75	ug/L
MKTF-42	9/21/2020	1,4-Dioxane	**4.7**	2.1	0.41	4.59	ug/L
MKTF-42	9/21/2020	1-Methylnaphthalene	**27**	2.1	0.41	11.38	ug/L
MKTF-42	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	2.1	0.41	240	ug/L
MKTF-42	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	2,4,5-Trichlorophenol	ND	2.1	0.41	1166	ug/L
MKTF-42	9/21/2020	2,4,6-Trichlorophenol	ND	2.1	0.41	11.9*	ug/L
MKTF-42	9/21/2020	2,4-Dichlorophenol	ND	2.1	0.41	45.3	ug/L
MKTF-42	9/21/2020	2,4-Dimethylphenol	ND	2.1	0.41	354	ug/L
MKTF-42	9/21/2020	2,4-Dinitrophenol	ND	2.1	0.41	38.7	ug/L
MKTF-42	9/21/2020	2,4-Dinitrotoluene	ND	2.1	0.41	45.3	ug/L
MKTF-42	9/21/2020	2,6-Dinitrotoluene	*ND*	*0.82*	0.41	0.485	ug/L
MKTF-42	9/21/2020	2-Chloronaphthalene	ND	2.1	0.41	733	ug/L
MKTF-42	9/21/2020	2-Chlorophenol	ND	2.1	0.41	91	ug/L
MKTF-42	9/21/2020	2-Methylnaphthalene	22	2.1	0.41	35.1	ug/L
MKTF-42	9/21/2020	2-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	2-Nitroaniline	ND	2.1	0.41	190	ug/L
MKTF-42	9/21/2020	2-Nitrophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	3,4-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	3,3-Dichlorobenzidine	*ND*	*2.1*	0.41	1.25	ug/L
MKTF-42	9/21/2020	3-Nitroaniline	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.1*	0.41	1.52	ug/L
MKTF-42	9/21/2020	4-Bromophenyl-phenylether	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Chloro-3-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Chloroaniline	*ND*	*2.1*	0.41	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/21/2020	4-Chlorophenyl-phenylether	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Nitroaniline	ND	2.1	0.41	3.8	ug/L
MKTF-42	9/21/2020	4-Nitrophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Acenaphthene	0.78	2.1	0.41	535	ug/L
MKTF-42	9/21/2020	Acenaphthylene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Aniline	ND	2.1	0.41	13	ug/L
MKTF-42	9/21/2020	Anthracene	ND	2.1	0.41	1721	ug/L
MKTF-42	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-42	9/21/2020	Benzidine	*ND*	*2.1*	1	0.0011	ug/L
MKTF-42	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-42	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-42	9/21/2020	Benzo(g,h,i)perylene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Benzo(k)fluoranthene	ND	2.1	0.41	3.43	ug/L
MKTF-42	9/21/2020	Benzoic Acid	ND	2.1	0.82	75000	ug/L
MKTF-42	9/21/2020	Benzyl Alcohol	ND	2.1	0.82	2000	ug/L
MKTF-42	9/21/2020	Bis(2-chloroethoxy)methane	ND	2.1	0.41	59	ug/L
MKTF-42	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*2.1*	0.41	0.137	ug/L
MKTF-42	9/21/2020	Bis(2-chloroisopropyl)ether	ND	2.1	0.41	9.81	ug/L
MKTF-42	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	2.1	0.82	55.64	ug/L
MKTF-42	9/21/2020	Butylbenzylphthalate	ND	2.1	0.82	16	ug/L
MKTF-42	9/21/2020	Carbazole	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Chrysene	ND	2.1	0.41	34.3	ug/L
MKTF-42	9/21/2020	Di-n-butylphthalate	ND	2.1	0.82	885	ug/L
MKTF-42	9/21/2020	Di-n-octylphthalate	ND	2.1	0.82	200	ug/L
MKTF-42	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-42	9/21/2020	Dibenzofuran	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Diethylphthalate	ND	2.1	0.82	14801	ug/L
MKTF-42	9/21/2020	Dimethylphthalate	ND	2.1	0.82	612	ug/L
MKTF-42	9/21/2020	Fluoranthene	ND	2.1	0.41	802	ug/L
MKTF-42	9/21/2020	Fluorene	ND	2.1	0.41	288	ug/L
MKTF-42	9/21/2020	Hexachlorobenzene	*ND*	*2.1*	0.41	0.0976	ug/L
MKTF-42	9/21/2020	Hexachlorobutadiene	*ND*	*2.1*	0.41	0.14	ug/L
MKTF-42	9/21/2020	Hexachlorocyclopentadiene	*ND*	*2.1*	1	0.41	ug/L
MKTF-42	9/21/2020	Hexachloroethane	ND	2.1	0.41	3.28	ug/L
MKTF-42	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.41	0.343	ug/L
MKTF-42	9/21/2020	Isophorone	ND	2.1	0.41	781	ug/L
MKTF-42	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*2.1*	0.41	0.011	ug/L
MKTF-42	9/21/2020	N-Nitrosodimethylamine	*ND*	*2.1*	0.41	0.0049	ug/L
MKTF-42	9/21/2020	N-Nitrosodiphenylamine	ND	2.1	0.41	122	ug/L
MKTF-42	9/21/2020	Naphthalene	**46**	2.1	0.41	30	ug/L
MKTF-42	9/21/2020	Nitrobenzene	*ND*	*2.1*	0.41	1.4	ug/L
MKTF-42	9/21/2020	Pentachlorophenol	*ND*	*2.1*	0.82	1	ug/L
MKTF-42	9/21/2020	Phenanthrene	ND	2.1	0.41	170	ug/L
MKTF-42	9/21/2020	Phenol	ND	2.1	0.41	5761	ug/L
MKTF-42	9/21/2020	Pyrene	ND	2.1	0.41	117	ug/L
MKTF-42	9/21/2020	Pyridine	ND	2.1	0.82	20	ug/L
MKTF-42	12/16/2020	Acenaphthene	ND	59.9	0.959	535	ug/L
MKTF-42	12/16/2020	Acenaphthylene	ND	59.9	1.02	NA	ug/L
MKTF-42	12/16/2020	Anthracene	ND	59.9	1.08	1721	ug/L
MKTF-42	12/16/2020	Benzo(a)anthracene	*ND*	*59.9*	1.08	0.12	ug/L
MKTF-42	12/16/2020	Benzo(a)pyrene	*ND*	*59.9*	0.719	0.2	ug/L
MKTF-42	12/16/2020	Benzo(b)fluoranthene	*ND*	*59.9*	0.899	0.34	ug/L
MKTF-42	12/16/2020	Benzo(g,h,i)perylene	ND	59.9	1.38	NA	ug/L
MKTF-42	12/16/2020	Benzo(k)fluoranthene	*ND*	*59.9*	0.959	3.43	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethoxy)methane	*ND*	*59.9*	0.959	59	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*59.9*	16.2	0.137	ug/L
MKTF-42	12/16/2020	Bis(2-ethylhexyl)phthalate	*ND*	*59.9*	30	55.64	ug/L
MKTF-42	12/16/2020	4-Bromophenyl-phenylether	ND	59.9	1.2	NA	ug/L
MKTF-42	12/16/2020	Butylbenzylphthalate	*ND*	*59.9*	1.14	16	ug/L
MKTF-42	12/16/2020	Carbazole	ND	59.9	1.38	NA	ug/L
MKTF-42	12/16/2020	4-Chloroaniline	*ND*	*59.9*	20.4	0.37	ug/L
MKTF-42	12/16/2020	4-Chloro-3-Methylphenol	ND	59.9	22.8	NA	ug/L
MKTF-42	12/16/2020	2-Chloronaphthalene	ND	59.9	0.839	733	ug/L
MKTF-42	12/16/2020	2-Chlorophenol	ND	59.9	13.2	91	ug/L
MKTF-42	12/16/2020	4-Chlorophenyl-phenylether	ND	59.9	12	NA	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	59.9	1.08	NA	ug/L
MKTF-42	12/16/2020	Chrysene	*ND*	*59.9*	1.14	34.3	ug/L
MKTF-42	12/16/2020	Dibenzo(a,h)anthracene	ND	59.9	1.44	NA	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	59.9	0.959	75	ug/L
MKTF-42	12/16/2020	Dibenzofuran	ND	59.9	1.02	NA	ug/L
MKTF-42	12/16/2020	3,3-Dichlorobenzidine	*ND*	*59.9*	15.6	1.25	ug/L
MKTF-42	12/16/2020	2,4-Dichlorophenol	*ND*	*59.9*	18	45.3	ug/L
MKTF-42	12/16/2020	Diethylphthalate	ND	59.9	1.44	14801	ug/L
MKTF-42	12/16/2020	2,4-Dimethylphenol	ND	59.9	21	354	ug/L
MKTF-42	12/16/2020	Di-n-butylphthalate	ND	59.9	16.2	885	ug/L
MKTF-42	12/16/2020	2,4-Dinitrophenol	*ND*	*180*	20.4	38.7	ug/L
MKTF-42	12/16/2020	2,4-Dinitrotoluene	*ND*	*59.9*	11.4	45.3	ug/L
MKTF-42	12/16/2020	2,6-Dinitrotoluene	*ND*	*59.9*	11.4	0.485	ug/L
MKTF-42	12/16/2020	Fluoranthene	ND	59.9	1.08	802	ug/L
MKTF-42	12/16/2020	Fluorene	ND	59.9	1.08	288	ug/L
MKTF-42	12/16/2020	Hexachlorobenzene	*ND*	*59.9*	1.02	0.0976	ug/L
MKTF-42	12/16/2020	Hexachlorocyclopentadiene	*ND*	*120*	15.6	0.41	ug/L
MKTF-42	12/16/2020	Hexachloroethane	*ND*	*59.9*	25.2	3.28	ug/L
MKTF-42	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*59.9*	1.32	0.343	ug/L
MKTF-42	12/16/2020	Isophorone	ND	59.9	0.839	781	ug/L
MKTF-42	12/16/2020	2-Methylphenol	ND	59.9	10.8	NA	ug/L
MKTF-42	12/16/2020	Naphthalene	*ND*	*59.9*	1.02	30	ug/L
MKTF-42	12/16/2020	2-Nitroaniline	ND	59.9	13.2	190	ug/L
MKTF-42	12/16/2020	3-Nitroaniline	ND	59.9	10.8	NA	ug/L
MKTF-42	12/16/2020	4-Nitroaniline	*ND*	*59.9*	8.99	3.8	ug/L
MKTF-42	12/16/2020	Nitrobenzene	*ND*	*59.9*	0.779	1.4	ug/L
MKTF-42	12/16/2020	2-Nitrophenol	ND	59.9	31.2	NA	ug/L
MKTF-42	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*59.9*	19.8	0.011	ug/L
MKTF-42	12/16/2020	N-Nitrosodiphenylamine	ND	59.9	1.08	122	ug/L
MKTF-42	12/16/2020	Pentachlorophenol	*ND*	*120*	8.39	1	ug/L
MKTF-42	12/16/2020	Phenanthrene	ND	59.9	1.08	170	ug/L
MKTF-42	12/16/2020	Phenol	ND	59.9	15.6	5761	ug/L
MKTF-42	12/16/2020	Pyrene	ND	59.9	1.26	117	ug/L
MKTF-42	12/16/2020	2,4,5-Trichlorophenol	ND	59.9	22.2	1166	ug/L
MKTF-42	12/16/2020	2,4,6-Trichlorophenol	ND	59.9	21	11.9*	ug/L
MKTF-42	12/16/2020	Dimethylphthalate	ND	59.9	1.02	612	ug/L
MKTF-42	12/16/2020	Aniline	*ND*	*59.9*	22.8	13	ug/L
MKTF-42	12/16/2020	Benzoic Acid	ND	180	43.7	75000	ug/L
MKTF-42	12/16/2020	Benzyl Alcohol	ND	59.9	12	2000	ug/L
MKTF-42	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*59.9*	0.959	9.81	ug/L
MKTF-42	12/16/2020	N-Nitrosodimethylamine	*ND*	*59.9*	21	0.0049	ug/L
MKTF-42	12/16/2020	Pyridine	*ND*	*59.9*	19.2	20	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	59.9	1.08	70	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	59.9	1.02	600	ug/L
MKTF-42	12/16/2020	Azobenzene	*ND*	*59.9*	5.99	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*59.9*	9.59	1.52	ug/L
MKTF-42	12/16/2020	Di-n-octylphthalate	ND	59.9	1.02	200	ug/L
MKTF-42	12/16/2020	4-Nitrophenol	ND	59.9	12.6	NA	ug/L
MKTF-42	12/16/2020	Acenaphthene	ND	55.1	0.882	535	ug/L
MKTF-42	12/16/2020	Acenaphthylene	ND	55.1	0.937	NA	ug/L
MKTF-42	12/16/2020	Anthracene	ND	55.1	0.992	1721	ug/L
MKTF-42	12/16/2020	Benzo(a)anthracene	*ND*	*55.1*	0.992	0.12	ug/L
MKTF-42	12/16/2020	Benzo(a)pyrene	*ND*	*55.1*	0.661	0.2	ug/L
MKTF-42	12/16/2020	Benzo(b)fluoranthene	*ND*	*55.1*	0.827	0.34	ug/L
MKTF-42	12/16/2020	Benzo(g,h,i)perylene	ND	55.1	1.27	NA	ug/L
MKTF-42	12/16/2020	Benzo(k)fluoranthene	*ND*	*55.1*	0.882	3.43	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethoxy)methane	ND	55.1	0.882	59	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*55.1*	14.9	0.137	ug/L
MKTF-42	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	55.1	27.6	55.64	ug/L
MKTF-42	12/16/2020	4-Bromophenyl-phenylether	ND	55.1	1.1	NA	ug/L
MKTF-42	12/16/2020	Butylbenzylphthalate	*ND*	*55.1*	1.05	16	ug/L
MKTF-42	12/16/2020	Carbazole	ND	55.1	1.27	NA	ug/L
MKTF-42	12/16/2020	4-Chloroaniline	*ND*	*55.1*	18.7	0.37	ug/L
MKTF-42	12/16/2020	4-Chloro-3-Methylphenol	ND	55.1	20.9	NA	ug/L
MKTF-42	12/16/2020	2-Chloronaphthalene	ND	55.1	0.772	733	ug/L
MKTF-42	12/16/2020	2-Chlorophenol	ND	55.1	12.1	91	ug/L
MKTF-42	12/16/2020	4-Chlorophenyl-phenylether	ND	55.1	11	NA	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	55.1	0.992	NA	ug/L
MKTF-42	12/16/2020	Chrysene	*ND*	*55.1*	1.05	34.3	ug/L
MKTF-42	12/16/2020	Dibenzo(a,h)anthracene	ND	55.1	1.32	NA	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	55.1	0.882	75	ug/L
MKTF-42	12/16/2020	Dibenzofuran	ND	55.1	0.937	NA	ug/L
MKTF-42	12/16/2020	3,3-Dichlorobenzidine	*ND*	*55.1*	14.3	1.25	ug/L
MKTF-42	12/16/2020	2,4-Dichlorophenol	*ND*	*55.1*	16.5	45.3	ug/L
MKTF-42	12/16/2020	Diethylphthalate	ND	55.1	1.32	14801	ug/L
MKTF-42	12/16/2020	2,4-Dimethylphenol	ND	55.1	19.3	354	ug/L
MKTF-42	12/16/2020	Di-n-butylphthalate	ND	55.1	14.9	885	ug/L
MKTF-42	12/16/2020	2,4-Dinitrophenol	*ND*	*165*	18.7	38.7	ug/L
MKTF-42	12/16/2020	2,4-Dinitrotoluene	*ND*	*55.1*	10.5	45.3	ug/L
MKTF-42	12/16/2020	2,6-Dinitrotoluene	*ND*	*55.1*	10.5	0.485	ug/L
MKTF-42	12/16/2020	Fluoranthene	ND	55.1	0.992	802	ug/L
MKTF-42	12/16/2020	Fluorene	ND	55.1	0.992	288	ug/L
MKTF-42	12/16/2020	Hexachlorobenzene	*ND*	*55.1*	0.937	0.0976	ug/L
MKTF-42	12/16/2020	Hexachlorocyclopentadiene	*ND*	*110*	14.3	0.41	ug/L
MKTF-42	12/16/2020	Hexachloroethane	*ND*	*55.1*	23.1	3.28	ug/L
MKTF-42	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*55.1*	1.21	0.343	ug/L
MKTF-42	12/16/2020	Isophorone	ND	55.1	0.772	781	ug/L
MKTF-42	12/16/2020	2-Methylphenol	ND	55.1	9.92	NA	ug/L
MKTF-42	12/16/2020	Naphthalene	*ND*	*55.1*	0.937	30	ug/L
MKTF-42	12/16/2020	2-Nitroaniline	ND	55.1	12.1	190	ug/L
MKTF-42	12/16/2020	3-Nitroaniline	ND	55.1	9.92	NA	ug/L
MKTF-42	12/16/2020	4-Nitroaniline	*ND*	*55.1*	8.27	3.8	ug/L
MKTF-42	12/16/2020	Nitrobenzene	*ND*	*55.1*	0.716	1.4	ug/L
MKTF-42	12/16/2020	2-Nitrophenol	ND	55.1	28.7	NA	ug/L
MKTF-42	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*55.1*	18.2	0.011	ug/L
MKTF-42	12/16/2020	N-Nitrosodiphenylamine	ND	55.1	0.992	122	ug/L
MKTF-42	12/16/2020	Pentachlorophenol	*ND*	*110*	7.72	1	ug/L
MKTF-42	12/16/2020	Phenanthrene	ND	55.1	0.992	170	ug/L
MKTF-42	12/16/2020	Phenol	ND	55.1	14.3	5761	ug/L
MKTF-42	12/16/2020	Pyrene	ND	55.1	1.16	117	ug/L
MKTF-42	12/16/2020	2,4,5-Trichlorophenol	ND	55.1	20.4	1166	ug/L
MKTF-42	12/16/2020	2,4,6-Trichlorophenol	ND	55.1	19.3	11.9*	ug/L
MKTF-42	12/16/2020	Dimethylphthalate	ND	55.1	0.937	612	ug/L
MKTF-42	12/16/2020	Aniline	*ND*	*55.1*	20.9	13	ug/L
MKTF-42	12/16/2020	Benzoic Acid	ND	165	40.2	75000	ug/L
MKTF-42	12/16/2020	Benzyl Alcohol	ND	55.1	11	2000	ug/L
MKTF-42	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*55.1*	0.882	9.81	ug/L
MKTF-42	12/16/2020	N-Nitrosodimethylamine	*ND*	*55.1*	19.3	0.0049	ug/L
MKTF-42	12/16/2020	Pyridine	*ND*	*55.1*	17.6	20	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	55.1	0.992	70	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	55.1	0.937	600	ug/L
MKTF-42	12/16/2020	Azobenzene	*ND*	*55.1*	5.51	0.12	ug/L
MKTF-42	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*55.1*	8.82	1.52	ug/L
MKTF-42	12/16/2020	Di-n-octylphthalate	ND	55.1	0.937	200	ug/L
MKTF-42	12/16/2020	4-Nitrophenol	ND	55.1	11.6	NA	ug/L
MKTF-43	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-43	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-43	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-43	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-43	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-43	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-43	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-43	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-43	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-43	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-43	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-43	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-43	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-43	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-43	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-43	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-43	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-43	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-43	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-43	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-43	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-43	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-43	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-43	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-43	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-43	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-43	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-43	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-43	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-43	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-43	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-43	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-43	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-43	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-43	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-43	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-43	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-43	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-43	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-43	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-43	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-43	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	11/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-43	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-43	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-43	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-43	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-43	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-43	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-43	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-43	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-43	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-43	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-43	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-43	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-43	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-43	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-43	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-43	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-43	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-43	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-43	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-43	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-43	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-43	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	3/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-43	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	3/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	3/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	3/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-43	3/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	3/11/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	3/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	3/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	3/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	3/11/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	3/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	3/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	3/11/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	3/11/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	3/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	3/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-43	3/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-43	3/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	3/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-43	3/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	3/11/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	3/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	3/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	3/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-43	3/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	3/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-43	3/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-43	3/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	3/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	3/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	3/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	3/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	3/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-43	3/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	3/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	3/11/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-43	3/11/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-43	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	3/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	3/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	3/11/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	3/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	3/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-43	3/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	3/11/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	3/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	3/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	3/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	3/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	3/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-43	3/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	3/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	3/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-43	6/10/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
MKTF-43	6/10/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
MKTF-43	6/10/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-43	6/10/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
MKTF-43	6/10/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
MKTF-43	6/10/2015	Aniline	ND	12	1.8	13	ug/L
MKTF-43	6/10/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
MKTF-43	6/10/2015	Benzoic Acid	ND	24	1.2	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
MKTF-43	6/10/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
MKTF-43	6/10/2015	Isophorone	ND	12	2.3	781	ug/L
MKTF-43	6/10/2015	Acenaphthene	ND	12	2.2	535	ug/L
MKTF-43	6/10/2015	Diethylphthalate	ND	12	2	14801	ug/L
MKTF-43	6/10/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
MKTF-43	6/10/2015	Phenanthrene	ND	12	2.3	170	ug/L
MKTF-43	6/10/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
MKTF-43	6/10/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
MKTF-43	6/10/2015	Fluorene	ND	12	2	288	ug/L
MKTF-43	6/10/2015	Carbazole	ND	12	1.8	NA	ug/L
MKTF-43	6/10/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
MKTF-43	6/10/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
MKTF-43	6/10/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
MKTF-43	6/10/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
MKTF-43	6/10/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
MKTF-43	6/10/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
MKTF-43	6/10/2015	Naphthalene	ND	12	2.2	30	ug/L
MKTF-43	6/10/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
MKTF-43	6/10/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
MKTF-43	6/10/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
MKTF-43	6/10/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
MKTF-43	6/10/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
MKTF-43	6/10/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
MKTF-43	6/10/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
MKTF-43	6/10/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
MKTF-43	6/10/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
MKTF-43	6/10/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
MKTF-43	6/10/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
MKTF-43	6/10/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
MKTF-43	6/10/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
MKTF-43	6/10/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
MKTF-43	6/10/2015	Phenol	ND	12	1.3	5761	ug/L
MKTF-43	6/10/2015	Pyridine	ND	12	2	20	ug/L
MKTF-43	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
MKTF-43	6/10/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
MKTF-43	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
MKTF-43	6/10/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
MKTF-43	6/10/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
MKTF-43	6/10/2015	Anthracene	ND	12	1.9	1721	ug/L
MKTF-43	6/10/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
MKTF-43	6/10/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
MKTF-43	6/10/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
MKTF-43	6/10/2015	Pyrene	ND	12	2.7	117	ug/L
MKTF-43	6/10/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
MKTF-43	6/10/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
MKTF-43	6/10/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
MKTF-43	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
MKTF-43	6/10/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
MKTF-43	6/10/2015	Fluoranthene	ND	12	1.7	802	ug/L
MKTF-43	6/10/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
MKTF-43	6/10/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
MKTF-43	6/10/2015	Chrysene	ND	12	2.5	34.3	ug/L
MKTF-43	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
MKTF-43	6/10/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
MKTF-43	6/10/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
MKTF-43	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-43	6/10/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
MKTF-43	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
MKTF-43	6/10/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
MKTF-43	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	8/21/2015	2,4-Dinitrophenol	ND	25	1.3	38.7	ug/L
MKTF-43	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	8/21/2015	4-Chloro-3-Methylphenol	ND	12	1.7	NA	ug/L
MKTF-43	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	8/21/2015	Benzoic Acid	ND	25	1.3	75000	ug/L
MKTF-43	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	8/21/2015	Pentachlorophenol	*ND*	*25*	1.4	1	ug/L
MKTF-43	8/21/2015	2,4,6-Trichlorophenol	ND	12	1.6	11.9*	ug/L
MKTF-43	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	8/21/2015	2-Nitrophenol	ND	12	1.5	NA	ug/L
MKTF-43	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	8/21/2015	2-Methylphenol	ND	12	1.6	NA	ug/L
MKTF-43	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	8/21/2015	2-Chlorophenol	ND	12	1.5	91	ug/L
MKTF-43	8/21/2015	2,4,5-Trichlorophenol	ND	12	2	1166	ug/L
MKTF-43	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	8/21/2015	4-Nitrophenol	ND	12	1.8	NA	ug/L
MKTF-43	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	8/21/2015	2,4-Dimethylphenol	ND	12	2.3	354	ug/L
MKTF-43	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	8/21/2015	Phenol	ND	12	1.4	5761	ug/L
MKTF-43	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	8/21/2015	2,4-Dichlorophenol	ND	25	1.7	45.3	ug/L
MKTF-43	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*25*	1.7	1.52	ug/L
MKTF-43	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	8/21/2015	3,4-Methylphenol	ND	12	1.8	NA	ug/L
MKTF-43	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-43	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-43	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-43	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-43	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-43	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-43	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-43	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-43	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-43	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-43	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-43	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-43	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-43	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-43	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-43	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-43	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-43	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-43	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-43	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-43	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-43	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-43	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-43	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-43	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-43	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-43	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-43	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-43	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-43	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-43	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-43	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-43	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-43	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-43	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-43	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-43	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-43	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-43	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-43	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-43	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-43	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-43	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-43	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-43	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-43	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-43	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-43	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-43	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-43	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-43	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-43	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-43	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-43	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-43	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-43	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-43	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-43	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-43	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-43	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-43	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-43	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-43	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-43	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-43	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-43	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-43	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-43	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-43	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-43	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-43	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-43	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-43	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-43	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-43	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-43	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-43	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-43	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-43	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-43	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-43	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-43	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-43	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-43	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-43	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	6/9/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-43	6/9/2016	Di-n-octylphthalate	5.6	10	2	200	ug/L
MKTF-43	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	6/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-43	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	9/9/2016	Benzoic Acid	17	20	2.6	75000	ug/L
MKTF-43	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	9/9/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
MKTF-43	9/9/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-43	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-43	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	10/31/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-43	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-43	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	10/31/2016	Bis(2-ethylhexyl)phthalate	6.3	10	2.6	55.64	ug/L
MKTF-43	10/31/2016	Di-n-octylphthalate	8.3	10	2	200	ug/L
MKTF-43	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-43	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-43	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	3/8/2017	Benzoic Acid	6.3	20	2.6	75000	ug/L
MKTF-43	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	3/8/2017	Di-n-butylphthalate	2.6	10	2.4	885	ug/L
MKTF-43	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-43	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	3/8/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-43	3/8/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-43	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-43	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	6/6/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-43	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	6/6/2017	Bis(2-ethylhexyl)phthalate	9.1	10	4.8	55.64	ug/L
MKTF-43	6/6/2017	Di-n-octylphthalate	5	10	4.7	200	ug/L
MKTF-43	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-43	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	11/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	11/27/2017	Benzoic Acid	8.6	20	3.9	75000	ug/L
MKTF-43	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-43	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-43	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-43	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-43	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	5/9/2018	Benzoic Acid	10	20	6.3	75000	ug/L
MKTF-43	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-43	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	8/30/2018	Benzoic Acid	6.4	20	6.3	75000	ug/L
MKTF-43	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-43	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-43	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-43	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-43	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-43	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-43	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-43	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-43	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-43	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-43	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-43	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-43	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-43	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-43	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-43	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-43	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-43	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-43	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-43	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-43	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-43	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-43	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-43	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-43	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-43	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-43	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-43	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-43	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-43	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-43	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-43	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-43	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-43	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-43	2/13/2019	Benzoic Acid	13	20	6.311561	75000	ug/L
MKTF-43	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-43	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Bis(2-ethylhexyl)phthalate	8.3	10	8.056342	55.64	ug/L
MKTF-43	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-43	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-43	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-43	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-43	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-43	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-43	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-43	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-43	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-43	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-43	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-43	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-43	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-43	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-43	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-43	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-43	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-43	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-43	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-43	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-43	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-43	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-43	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-43	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-43	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-43	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-43	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-43	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-43	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-43	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-43	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-43	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-43	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-43	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-43	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-43	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-43	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-43	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-43	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-43	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-43	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-43	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-43	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-43	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-43	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-43	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-43	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-43	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-43	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-43	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-43	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-43	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-43	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-43	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-43	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-43	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-43	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-43	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-43	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-43	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-43	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-43	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-43	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-43	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-43	2/13/2019	Benzoic Acid	8.5	20	6.311561	75000	ug/L
MKTF-43	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-43	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-43	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-43	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-43	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-43	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-43	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-43	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-43	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-43	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-43	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-43	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-43	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-43	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-43	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-43	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-43	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-43	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-43	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-43	5/8/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-43	5/8/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-43	5/8/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-43	5/8/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-43	5/8/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-43	5/8/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-43	5/8/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-43	5/8/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-43	5/8/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-43	5/8/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-43	5/8/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-43	5/8/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-43	5/8/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-43	5/8/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-43	5/8/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-43	5/8/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-43	5/8/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-43	5/8/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-43	5/8/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-43	5/8/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-43	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-43	5/8/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-43	5/8/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-43	5/8/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-43	5/8/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-43	5/8/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-43	5/8/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-43	5/8/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-43	5/8/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-43	5/8/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-43	5/8/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-43	5/8/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-43	5/8/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-43	5/8/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-43	5/8/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-43	5/8/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-43	5/8/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-43	5/8/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-43	5/8/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-43	5/8/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-43	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-43	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-43	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-43	5/8/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-43	5/8/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-43	5/8/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-43	5/8/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-43	5/8/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-43	5/8/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-43	5/8/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-43	5/8/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-43	5/8/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-43	5/8/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-43	5/8/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-43	5/8/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-43	5/8/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-43	5/8/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-43	5/8/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-43	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-43	5/8/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-43	5/8/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-43	5/8/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-43	5/8/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-43	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-43	5/8/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-43	5/8/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-43	5/8/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-43	5/8/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-43	5/8/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-43	5/8/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-43	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-43	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-43	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-43	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-43	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-43	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-43	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-43	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-43	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-43	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-43	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-43	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-43	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-43	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-43	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-43	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-43	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-43	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-43	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-43	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-43	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-43	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-43	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-43	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-43	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-43	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-43	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-43	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-43	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-43	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-43	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-43	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-43	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-43	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-43	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-43	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-43	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-43	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-43	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-43	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-43	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-43	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-43	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-43	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-43	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-43	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-43	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-43	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-43	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-43	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-43	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-43	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-43	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-43	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-43	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-43	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-43	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-43	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-43	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-43	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-43	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-43	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-43	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-43	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-43	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-43	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-43	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-43	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-43	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-43	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-43	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-43	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-43	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-43	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-43	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-43	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-43	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-43	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-43	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-43	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-43	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-43	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-43	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-43	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-43	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-43	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-43	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-43	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-43	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-43	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-43	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-43	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-43	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-43	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-43	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-43	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-43	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-43	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-43	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-43	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-43	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-43	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-43	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-43	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-43	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-43	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-43	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-43	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-43	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-43	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-43	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-43	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-43	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-43	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-43	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-43	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-43	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-43	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-43	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-43	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-43	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-43	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-43	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-43	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-43	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-43	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-43	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-43	2/27/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-43	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-43	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-43	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-43	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-43	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-43	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-43	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-43	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-43	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-43	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-43	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-43	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-43	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-43	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-43	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-43	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-43	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-43	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-43	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-43	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-43	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-43	2/27/2020	Bis(2-ethylhexyl)phthalate	0.23	0.5	0.2	55.64	ug/L
MKTF-43	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-43	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-43	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-43	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-43	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-43	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-43	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-43	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-43	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-43	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-43	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-43	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-43	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-43	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-43	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-43	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-43	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-43	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-43	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-43	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-43	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-43	2/27/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-43	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-43	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-43	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-43	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-43	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-43	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-43	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-43	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-43	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-43	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-43	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-43	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-43	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-43	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-43	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-43	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-43	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-43	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-43	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-43	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-43	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-43	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-43	2/27/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-43	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-43	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-43	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-43	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-43	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-43	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-43	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-43	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-43	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-43	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-43	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-43	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-43	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-43	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-43	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-43	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-43	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-43	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-43	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-43	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-43	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-43	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-43	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-43	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-43	9/21/2020	1,4-Dioxane	0.26	0.51	0.1	4.59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-43	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-43	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-43	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-43	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-43	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-43	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-43	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-43	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-43	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-43	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-43	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-43	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-43	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-43	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-43	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-43	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-43	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-43	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-43	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-43	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-43	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-43	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-43	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-43	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-43	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-43	9/21/2020	Benzyl Alcohol	0.92	0.51	0.2	2000	ug/L
MKTF-43	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-43	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-43	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-43	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-43	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-43	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-43	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-43	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-43	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-43	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-43	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-43	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-43	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-43	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-43	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-43	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-43	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-43	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-43	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-43	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-43	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-43	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-43	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-43	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-43	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-43	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-43	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-43	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-43	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.4	0.182	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.4	0.205	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.182	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.182	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.7	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.4	4.33	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.4	0.182	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.4	3.99	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.4	0.205	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.4	0.16	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.4	0.194	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.4	5.93	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.76	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.4	3.99	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.4	4.33	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.182	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.4*	3.99	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.4	3.65	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.82	1.52	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.4	0.182	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.4	0.205	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.182	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.182	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.7	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.4	4.33	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.4	0.182	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.4	3.99	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.82	1.52	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.4	0.205	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.4	0.16	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.4	0.194	30	ug/L
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.4	5.93	NA	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.76	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.4	3.99	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.4	4.33	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.182	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.4*	3.99	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.4	3.65	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.1	0.177	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.1	0.188	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.1	0.199	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.1*	0.199	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.1*	0.133	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.1*	0.166	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.1	0.254	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.1*	0.177	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.1	0.177	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.1*	2.98	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.1	5.53	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.1	0.221	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.1	0.21	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.1	0.254	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.1*	3.76	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.1	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.1	0.155	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.1	2.43	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.1	2.21	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.1	0.199	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.1	0.21	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.1	0.265	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.1	0.177	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.1	0.188	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.1*	2.87	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.1	3.32	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.1	0.265	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.1	3.87	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.1	2.98	885	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	33.2	3.76	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.1	2.1	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.1*	2.1	0.485	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.1	0.199	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.1	0.199	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.1*	0.188	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.1*	2.87	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.1*	4.64	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.1*	0.243	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.1	0.155	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.1	1.99	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.1	0.188	30	ug/L
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.1	2.43	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.1	1.99	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.1*	1.66	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.1*	0.144	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.1	5.75	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.1*	3.65	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.1	0.199	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.1*	1.55	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.1	0.199	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.1	2.87	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.1	0.232	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.1	4.09	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.1	3.87	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.1	0.188	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.1	4.2	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	33.2	8.07	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.1	2.21	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.1*	0.177	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.1*	3.87	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.1	3.54	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.1	0.199	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.1	0.188	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.1*	1.11	0.12	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.1*	1.77	1.52	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.1	0.188	200	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.1	2.32	NA	ug/L
MKTF-44	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-44	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-44	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-44	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-44	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-44	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-44	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-44	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-44	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-44	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-44	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-44	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-44	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-44	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-44	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-44	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-44	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-44	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-44	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-44	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-44	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-44	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-44	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-44	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-44	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-44	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-44	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-44	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-44	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-44	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-44	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-44	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-44	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-44	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-44	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-44	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-44	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-44	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-44	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-44	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-44	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-44	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-44	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-44	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-44	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-44	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-44	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-44	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-44	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-44	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-44	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-44	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-44	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-44	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-44	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-44	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-44	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-44	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-44	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-44	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-44	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-44	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-44	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-44	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-44	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-44	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-44	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-44	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-44	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-44	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-44	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-44	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-44	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-44	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-44	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-44	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-44	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-44	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-44	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-44	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-44	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-44	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-44	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-44	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-44	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-44	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-44	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-44	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-44	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-44	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-44	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-44	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-44	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-44	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-44	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-44	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-44	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-44	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-44	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-44	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-44	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-44	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-44	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-44	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-44	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-44	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-44	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-44	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-44	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-44	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-44	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-44	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-44	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-44	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-44	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-44	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-44	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-44	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-44	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-44	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-44	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-44	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-44	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-44	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-44	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-44	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-44	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-44	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-44	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-44	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	8/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	8/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-44	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-44	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-44	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-44	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-44	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-44	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-44	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-44	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-44	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-44	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-44	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-44	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-44	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-44	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-44	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-44	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-44	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-44	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-44	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-44	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-44	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-44	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-44	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-44	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-44	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-44	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-44	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-44	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-44	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-44	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-44	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-44	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-44	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-44	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-44	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-44	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-44	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-44	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-44	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-44	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-44	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-44	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-44	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-44	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-44	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-44	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-44	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-44	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-44	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-44	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-44	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-44	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-44	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-44	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-44	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-44	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-44	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-44	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-44	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-44	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-44	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-44	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-44	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-44	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-44	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-44	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-44	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-44	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-44	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-44	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-44	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-44	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-44	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-44	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-44	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-44	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-44	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	6/9/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-44	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-44	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-44	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-44	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	9/9/2016	Benzoic Acid	6.5	20	2.6	75000	ug/L
MKTF-44	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-44	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-44	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	9/9/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-44	9/9/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-44	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-44	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	11/1/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-44	11/1/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-44	11/1/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-44	11/1/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-44	11/1/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-44	11/1/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-44	11/1/2016	Benzoic Acid	110	200	26	75000	ug/L
MKTF-44	11/1/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-44	11/1/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-44	11/1/2016	Isophorone	ND	100	26	781	ug/L
MKTF-44	11/1/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-44	11/1/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-44	11/1/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-44	11/1/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-44	11/1/2016	Butylbenzylphthalate	***27***	100	25	16	ug/L
MKTF-44	11/1/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-44	11/1/2016	Fluorene	ND	100	27	288	ug/L
MKTF-44	11/1/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-44	11/1/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-44	11/1/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-44	11/1/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-44	11/1/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-44	11/1/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-44	11/1/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-44	11/1/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-44	11/1/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-44	11/1/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-44	11/1/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-44	11/1/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-44	11/1/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-44	11/1/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-44	11/1/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-44	11/1/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-44	11/1/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-44	11/1/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-44	11/1/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-44	11/1/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-44	11/1/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-44	11/1/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-44	11/1/2016	Phenol	ND	100	20	5761	ug/L
MKTF-44	11/1/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-44	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-44	11/1/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-44	11/1/2016	Bis(2-ethylhexyl)phthalate	**66**	100	26	55.64	ug/L
MKTF-44	11/1/2016	Di-n-octylphthalate	75	100	20	200	ug/L
MKTF-44	11/1/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-44	11/1/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-44	11/1/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-44	11/1/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-44	11/1/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-44	11/1/2016	Pyrene	ND	100	31	117	ug/L
MKTF-44	11/1/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-44	11/1/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-44	11/1/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-44	11/1/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-44	11/1/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-44	11/1/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-44	11/1/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-44	11/1/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-44	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-44	11/1/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-44	11/1/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-44	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-44	11/1/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-44	11/1/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
MKTF-44	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-44	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-44	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	3/8/2017	Benzoic Acid	6.2	20	2.6	75000	ug/L
MKTF-44	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	3/8/2017	Di-n-butylphthalate	2.6	10	2.4	885	ug/L
MKTF-44	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-44	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	3/8/2017	Bis(2-ethylhexyl)phthalate	8	10	2.6	55.64	ug/L
MKTF-44	3/8/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-44	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-44	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	6/5/2017	Benzoic Acid	7	20	3.9	75000	ug/L
MKTF-44	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	6/5/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
MKTF-44	6/5/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-44	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-44	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	9/25/2017	Bis(2-ethylhexyl)phthalate	24	10	4.8	55.64	ug/L
MKTF-44	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	11/28/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-44	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	11/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	11/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	11/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-44	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-44	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-44	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	2/8/2018	Benzoic Acid	12	20	3.9	75000	ug/L
MKTF-44	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-44	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	2/8/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	2/8/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-44	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-44	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-44	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-44	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-44	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-44	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-44	5/10/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-44	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-44	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-44	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-44	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-44	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-44	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-44	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-44	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-44	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-44	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-44	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-44	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-44	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-44	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-44	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-44	5/10/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-44	5/10/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-44	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-44	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-44	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-44	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-44	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-44	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-44	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-44	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-44	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-44	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-44	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-44	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-44	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-44	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-44	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-44	5/10/2018	Phenol	ND	10	6	5761	ug/L
MKTF-44	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-44	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-44	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-44	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-44	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-44	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-44	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-44	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-44	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-44	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-44	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-44	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-44	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-44	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-44	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-44	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-44	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-44	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-44	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-44	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-44	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-44	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-44	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-44	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-44	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-44	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-44	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-44	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-44	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-44	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-44	8/30/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-44	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-44	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-44	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-44	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-44	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-44	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-44	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-44	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-44	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-44	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-44	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-44	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-44	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-44	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-44	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-44	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-44	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-44	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-44	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-44	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-44	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-44	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-44	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-44	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-44	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-44	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-44	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-44	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-44	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-44	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-44	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-44	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-44	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-44	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-44	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-44	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-44	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-44	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-44	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-44	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-44	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-44	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-44	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-44	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-44	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-44	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-44	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-44	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-44	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-44	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-44	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-44	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-44	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-44	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-44	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-44	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-44	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-44	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-44	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-44	11/15/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-44	11/15/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-44	11/15/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-44	11/15/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-44	11/15/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-44	11/15/2018	Benzoic Acid	ND	100	32	75000	ug/L
MKTF-44	11/15/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-44	11/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-44	11/15/2018	Isophorone	ND	50	31	781	ug/L
MKTF-44	11/15/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-44	11/15/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-44	11/15/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-44	11/15/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-44	11/15/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-44	11/15/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-44	11/15/2018	Fluorene	ND	50	32	288	ug/L
MKTF-44	11/15/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-44	11/15/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-44	11/15/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-44	11/15/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-44	11/15/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-44	11/15/2018	2-Nitrophenol	ND	50	30	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
MKTF-44	11/15/2018	Naphthalene	*ND*	*50*	25	30	ug/L
MKTF-44	11/15/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-44	11/15/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-44	11/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-44	11/15/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-44	11/15/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-44	11/15/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-44	11/15/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-44	11/15/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-44	11/15/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-44	11/15/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-44	11/15/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-44	11/15/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-44	11/15/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-44	11/15/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-44	11/15/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-44	11/15/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-44	11/15/2018	Phenol	ND	50	30	5761	ug/L
MKTF-44	11/15/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-44	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-44	11/15/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-44	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-44	11/15/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-44	11/15/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-44	11/15/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-44	11/15/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-44	11/15/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-44	11/15/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-44	11/15/2018	Pyrene	ND	50	33	117	ug/L
MKTF-44	11/15/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-44	11/15/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-44	11/15/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-44	11/15/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-44	11/15/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-44	11/15/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-44	11/15/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-44	11/15/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-44	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-44	11/15/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-44	11/15/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-44	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-44	11/15/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-44	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-44	11/15/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-44	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-44	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-44	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-44	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-44	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-44	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-44	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-44	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-44	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-44	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-44	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-44	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-44	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-44	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-44	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-44	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-44	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-44	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-44	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-44	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-44	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-44	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-44	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-44	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-44	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-44	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-44	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-44	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-44	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-44	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-44	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-44	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-44	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-44	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-44	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-44	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-44	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-44	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-44	2/13/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
MKTF-44	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-44	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-44	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-44	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-44	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-44	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-44	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-44	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-44	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-44	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-44	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-44	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-44	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-44	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-44	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-44	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-44	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-44	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-44	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-44	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-44	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-44	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-44	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-44	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-44	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-44	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-44	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-44	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-44	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-44	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-44	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-44	5/8/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-44	5/8/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-44	5/8/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-44	5/8/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-44	5/8/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-44	5/8/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-44	5/8/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-44	5/8/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-44	5/8/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-44	5/8/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-44	5/8/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-44	5/8/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-44	5/8/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-44	5/8/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-44	5/8/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-44	5/8/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-44	5/8/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-44	5/8/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-44	5/8/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-44	5/8/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-44	5/8/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-44	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-44	5/8/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-44	5/8/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-44	5/8/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-44	5/8/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-44	5/8/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-44	5/8/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-44	5/8/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-44	5/8/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-44	5/8/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-44	5/8/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-44	5/8/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-44	5/8/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-44	5/8/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-44	5/8/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-44	5/8/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-44	5/8/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-44	5/8/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-44	5/8/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-44	5/8/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-44	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-44	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-44	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-44	5/8/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-44	5/8/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-44	5/8/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-44	5/8/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-44	5/8/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-44	5/8/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-44	5/8/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-44	5/8/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-44	5/8/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-44	5/8/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-44	5/8/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-44	5/8/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-44	5/8/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-44	5/8/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-44	5/8/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-44	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-44	5/8/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-44	5/8/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-44	5/8/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-44	5/8/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-44	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-44	5/8/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-44	5/8/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-44	5/8/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-44	5/8/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-44	5/8/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-44	5/8/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-44	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-44	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-44	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-44	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-44	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-44	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-44	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-44	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-44	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-44	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-44	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-44	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-44	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-44	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-44	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-44	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-44	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-44	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-44	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-44	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-44	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-44	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-44	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-44	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-44	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-44	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-44	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-44	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-44	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-44	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-44	8/22/2019	Aniline	ND	10	3.579516	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-44	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-44	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-44	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-44	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-44	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-44	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-44	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-44	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-44	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-44	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-44	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-44	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-44	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-44	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-44	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-44	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-44	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-44	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-44	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-44	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-44	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-44	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-44	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-44	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-44	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-44	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-44	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-44	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-44	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-44	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-44	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-44	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-44	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-44	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-44	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-44	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-44	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-44	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-44	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-44	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-44	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-44	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-44	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-44	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-44	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-44	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-44	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-44	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-44	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-44	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-44	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-44	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-44	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-44	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-44	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-44	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-44	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-44	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-44	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-44	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-44	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-44	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-44	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-44	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-44	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-44	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-44	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-44	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-44	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-44	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-44	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-44	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-44	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-44	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-44	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-44	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-44	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-44	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-44	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-44	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-44	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-44	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-44	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-44	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-44	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-44	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-44	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-44	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-44	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-44	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-44	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-44	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-44	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-44	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-44	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-44	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-44	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-44	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-44	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-44	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-44	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-44	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-44	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-44	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-44	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-44	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-44	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-44	3/5/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-44	3/5/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
MKTF-44	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-44	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-44	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-44	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-44	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-44	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-44	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-44	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-44	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-44	3/5/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-44	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-44	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-44	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-44	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-44	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-44	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-44	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-44	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-44	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-44	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-44	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-44	3/5/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-44	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-44	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-44	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-44	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-44	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-44	3/5/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-44	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-44	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-44	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-44	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-44	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-44	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-44	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-44	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-44	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-44	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-44	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-44	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-44	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-44	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-44	3/5/2020	Naphthalene	ND	2.5	0.5	30	ug/L
MKTF-44	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-44	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-44	3/5/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-44	3/5/2020	Phenol	ND	2.5	0.5	5761	ug/L
MKTF-44	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-44	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-44	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-44	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-44	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-44	9/21/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
MKTF-44	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
MKTF-44	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-44	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-44	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-44	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-44	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-44	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-44	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-44	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-44	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-44	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-44	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
MKTF-44	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-44	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-44	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-44	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
MKTF-44	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-44	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-44	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-44	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-44	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-44	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-44	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-44	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-44	9/21/2020	Benzoic Acid	0.21	0.52	0.21	75000	ug/L
MKTF-44	9/21/2020	Benzyl Alcohol	1.7	0.52	0.21	2000	ug/L
MKTF-44	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-44	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-44	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-44	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-44	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-44	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-44	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-44	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-44	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-44	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-44	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-44	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-44	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-44	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-44	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-44	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-44	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-44	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-44	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-44	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-44	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-44	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-44	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
MKTF-44	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-44	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-44	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-44	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-44	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-44	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-44	12/23/2020	Acenaphthene	ND	12.2	0.195	535	ug/L
MKTF-44	12/23/2020	Acenaphthylene	ND	12.2	0.207	NA	ug/L
MKTF-44	12/23/2020	Anthracene	ND	12.2	0.219	1721	ug/L
MKTF-44	12/23/2020	Benzo(a)anthracene	*ND*	*12.2*	0.219	0.12	ug/L
MKTF-44	12/23/2020	Benzo(a)pyrene	*ND*	*12.2*	0.146	0.2	ug/L
MKTF-44	12/23/2020	Benzo(b)fluoranthene	*ND*	*12.2*	0.183	0.34	ug/L
MKTF-44	12/23/2020	Benzo(g,h,i)perylene	ND	12.2	0.28	NA	ug/L
MKTF-44	12/23/2020	Benzo(k)fluoranthene	*ND*	*12.2*	0.195	3.43	ug/L
MKTF-44	12/23/2020	Bis(2-chloroethoxy)methane	ND	12.2	0.195	59	ug/L
MKTF-44	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*12.2*	3.29	0.137	ug/L
MKTF-44	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	12.2	6.09	55.64	ug/L
MKTF-44	12/23/2020	4-Bromophenyl-phenylether	ND	12.2	0.244	NA	ug/L
MKTF-44	12/23/2020	Butylbenzylphthalate	ND	12.2	0.231	16	ug/L
MKTF-44	12/23/2020	Carbazole	ND	12.2	0.28	NA	ug/L
MKTF-44	12/23/2020	4-Chloroaniline	*ND*	*12.2*	4.14	0.37	ug/L
MKTF-44	12/23/2020	4-Chloro-3-Methylphenol	ND	12.2	4.63	NA	ug/L
MKTF-44	12/23/2020	2-Chloronaphthalene	ND	12.2	0.171	733	ug/L
MKTF-44	12/23/2020	2-Chlorophenol	ND	12.2	2.68	91	ug/L
MKTF-44	12/23/2020	4-Chlorophenyl-phenylether	ND	12.2	2.44	NA	ug/L
MKTF-44	12/23/2020	1,3-Dichlorobenzene	ND	12.2	0.219	NA	ug/L
MKTF-44	12/23/2020	Chrysene	ND	12.2	0.231	34.3	ug/L
MKTF-44	12/23/2020	Dibenzo(a,h)anthracene	ND	12.2	0.292	NA	ug/L
MKTF-44	12/23/2020	1,4-Dichlorobenzene	ND	12.2	0.195	75	ug/L
MKTF-44	12/23/2020	Dibenzofuran	ND	12.2	0.207	NA	ug/L
MKTF-44	12/23/2020	3,3-Dichlorobenzidine	*ND*	*12.2*	3.17	1.25	ug/L
MKTF-44	12/23/2020	2,4-Dichlorophenol	ND	12.2	3.65	45.3	ug/L
MKTF-44	12/23/2020	Diethylphthalate	ND	12.2	0.292	14801	ug/L
MKTF-44	12/23/2020	2,4-Dimethylphenol	ND	12.2	4.26	354	ug/L
MKTF-44	12/23/2020	Di-n-butylphthalate	ND	12.2	3.29	885	ug/L
MKTF-44	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.2*	1.95	1.52	ug/L
MKTF-44	12/23/2020	2,4-Dinitrophenol	ND	36.5	4.14	38.7	ug/L
MKTF-44	12/23/2020	2,4-Dinitrotoluene	ND	12.2	2.31	45.3	ug/L
MKTF-44	12/23/2020	2,6-Dinitrotoluene	*ND*	*12.2*	2.31	0.485	ug/L
MKTF-44	12/23/2020	Di-n-octylphthalate	ND	12.2	0.207	200	ug/L
MKTF-44	12/23/2020	Fluoranthene	ND	12.2	0.219	802	ug/L
MKTF-44	12/23/2020	Fluorene	ND	12.2	0.219	288	ug/L
MKTF-44	12/23/2020	Hexachlorobenzene	*ND*	*12.2*	0.207	0.0976	ug/L
MKTF-44	12/23/2020	Hexachlorocyclopentadiene	*ND*	*24.4*	3.17	0.41	ug/L
MKTF-44	12/23/2020	Hexachloroethane	*ND*	*12.2*	5.12	3.28	ug/L
MKTF-44	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.2*	0.268	0.343	ug/L
MKTF-44	12/23/2020	Isophorone	ND	12.2	0.171	781	ug/L
MKTF-44	12/23/2020	2-Methylphenol	ND	12.2	2.19	NA	ug/L
MKTF-44	12/23/2020	Naphthalene	ND	12.2	0.207	30	ug/L
MKTF-44	12/23/2020	2-Nitroaniline	ND	12.2	2.68	190	ug/L
MKTF-44	12/23/2020	3-Nitroaniline	ND	12.2	2.19	NA	ug/L
MKTF-44	12/23/2020	4-Nitroaniline	*ND*	*12.2*	1.83	3.8	ug/L
MKTF-44	12/23/2020	Nitrobenzene	*ND*	*12.2*	0.158	1.4	ug/L
MKTF-44	12/23/2020	2-Nitrophenol	ND	12.2	6.34	NA	ug/L
MKTF-44	12/23/2020	4-Nitrophenol	ND	12.2	2.56	NA	ug/L
MKTF-44	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*12.2*	4.02	0.011	ug/L
MKTF-44	12/23/2020	N-Nitrosodiphenylamine	ND	12.2	0.219	122	ug/L
MKTF-44	12/23/2020	Pentachlorophenol	*ND*	*24.4*	1.71	1	ug/L
MKTF-44	12/23/2020	Phenanthrene	ND	12.2	0.219	170	ug/L
MKTF-44	12/23/2020	Phenol	ND	12.2	3.17	5761	ug/L
MKTF-44	12/23/2020	Pyrene	ND	12.2	0.256	117	ug/L
MKTF-44	12/23/2020	2,4,5-Trichlorophenol	ND	12.2	4.51	1166	ug/L
MKTF-44	12/23/2020	2,4,6-Trichlorophenol	ND	12.2	4.26	11.9*	ug/L
MKTF-44	12/23/2020	Dimethylphthalate	ND	12.2	0.207	612	ug/L
MKTF-44	12/23/2020	Aniline	ND	12.2	4.63	13	ug/L
MKTF-44	12/23/2020	Benzoic Acid	ND	36.5	8.89	75000	ug/L
MKTF-44	12/23/2020	Benzyl Alcohol	ND	12.2	2.44	2000	ug/L
MKTF-44	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.2*	0.195	9.81	ug/L
MKTF-44	12/23/2020	N-Nitrosodimethylamine	*ND*	*12.2*	4.26	0.0049	ug/L
MKTF-44	12/23/2020	Pyridine	ND	12.2	3.9	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	1,2,4-Trichlorobenzene	ND	12.2	0.219	70	ug/L
MKTF-44	12/23/2020	1,2-Dichlorobenzene	ND	12.2	0.207	600	ug/L
MKTF-44	12/23/2020	Azobenzene	*ND*	*12.2*	1.22	0.12	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-46	3/6/2020	1,4-Dioxane	1.5	1	0.2	4.59	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-46	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-46	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-46	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-46	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-46	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-46	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-46	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-46	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-46	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-46	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-46	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-46	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-46	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-46	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-46	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-46	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-46	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-46	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-46	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-46	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-46	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-46	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-46	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-46	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-46	3/6/2020	Bis(2-ethylhexyl)phthalate	0.33	0.5	0.2	55.64	ug/L
MKTF-46	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-46	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-46	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-46	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-46	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-46	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-46	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-46	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-46	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-46	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-46	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-46	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-46	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-46	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-46	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-46	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-46	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-46	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-46	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-46	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-46	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-46	3/6/2020	1,4-Dioxane	1.4	1	0.2	4.59	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-46	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-46	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-46	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-46	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-46	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-46	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-46	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-46	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-46	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-46	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-46	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-46	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-46	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-46	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-46	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-46	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-46	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-46	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-46	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-46	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-46	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-46	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-46	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-46	3/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-46	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-46	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-46	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-46	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-46	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-46	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-46	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-46	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-46	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-46	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-46	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-46	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-46	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-46	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-46	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-46	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-46	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-46	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-46	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-46	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-46	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-46	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-46	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-46	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-46	9/17/2020	1,4-Dioxane	1.7	0.51	0.1	4.59	ug/L
MKTF-46	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-46	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-46	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-46	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-46	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-46	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-46	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-46	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-46	9/17/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-46	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-46	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-46	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-46	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-46	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-46	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-46	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-46	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-46	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-46	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-46	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-46	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-46	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-46	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-46	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-46	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-46	9/17/2020	Benzoic Acid	0.8	0.51	0.21	75000	ug/L
MKTF-46	9/17/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
MKTF-46	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-46	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-46	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-46	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.21	55.64	ug/L
MKTF-46	9/17/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
MKTF-46	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-46	9/17/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
MKTF-46	9/17/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
MKTF-46	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-46	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
MKTF-46	9/17/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
MKTF-46	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-46	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-46	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-46	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-46	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-46	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-46	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-46	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-46	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-46	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-46	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-46	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-46	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-46	9/17/2020	Pentachlorophenol	ND	0.51	0.21	1	ug/L
MKTF-46	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-46	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-46	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-46	9/17/2020	Pyridine	ND	0.51	0.21	20	ug/L
MKTF-46	12/16/2020	Acenaphthene	ND	9.68	0.155	535	ug/L
MKTF-46	12/16/2020	Acenaphthylene	ND	9.68	0.165	NA	ug/L
MKTF-46	12/16/2020	Anthracene	ND	9.68	0.174	1721	ug/L
MKTF-46	12/16/2020	Benzo(a)anthracene	*ND*	*9.68*	0.174	0.12	ug/L
MKTF-46	12/16/2020	Benzo(a)pyrene	*ND*	*9.68*	0.116	0.2	ug/L
MKTF-46	12/16/2020	Benzo(b)fluoranthene	*ND*	*9.68*	0.145	0.34	ug/L
MKTF-46	12/16/2020	Benzo(g,h,i)perylene	ND	9.68	0.223	NA	ug/L
MKTF-46	12/16/2020	Benzo(k)fluoranthene	*ND*	*9.68*	0.155	3.43	ug/L
MKTF-46	12/16/2020	Bis(2-chloroethoxy)methane	ND	9.68	0.155	59	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*9.68*	2.61	0.137	ug/L
MKTF-46	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	9.68	4.84	55.64	ug/L
MKTF-46	12/16/2020	4-Bromophenyl-phenylether	ND	9.68	0.194	NA	ug/L
MKTF-46	12/16/2020	Butylbenzylphthalate	ND	9.68	0.184	16	ug/L
MKTF-46	12/16/2020	Carbazole	ND	9.68	0.223	NA	ug/L
MKTF-46	12/16/2020	4-Chloroaniline	*ND*	*9.68*	3.29	0.37	ug/L
MKTF-46	12/16/2020	4-Chloro-3-Methylphenol	ND	9.68	3.68	NA	ug/L
MKTF-46	12/16/2020	2-Chloronaphthalene	ND	9.68	0.136	733	ug/L
MKTF-46	12/16/2020	2-Chlorophenol	ND	9.68	2.13	91	ug/L
MKTF-46	12/16/2020	4-Chlorophenyl-phenylether	ND	9.68	1.94	NA	ug/L
MKTF-46	12/16/2020	1,3-Dichlorobenzene	ND	9.68	0.174	NA	ug/L
MKTF-46	12/16/2020	Chrysene	ND	9.68	0.184	34.3	ug/L
MKTF-46	12/16/2020	Dibenzo(a,h)anthracene	ND	9.68	0.232	NA	ug/L
MKTF-46	12/16/2020	1,4-Dichlorobenzene	ND	9.68	0.155	75	ug/L
MKTF-46	12/16/2020	Dibenzofuran	ND	9.68	0.165	NA	ug/L
MKTF-46	12/16/2020	3,3-Dichlorobenzidine	*ND*	*9.68*	2.52	1.25	ug/L
MKTF-46	12/16/2020	2,4-Dichlorophenol	ND	9.68	2.9	45.3	ug/L
MKTF-46	12/16/2020	Diethylphthalate	ND	9.68	0.232	14801	ug/L
MKTF-46	12/16/2020	2,4-Dimethylphenol	ND	9.68	3.39	354	ug/L
MKTF-46	12/16/2020	Di-n-butylphthalate	ND	9.68	2.61	885	ug/L
MKTF-46	12/16/2020	2,4-Dinitrophenol	ND	29	3.29	38.7	ug/L
MKTF-46	12/16/2020	2,4-Dinitrotoluene	ND	9.68	1.84	45.3	ug/L
MKTF-46	12/16/2020	2,6-Dinitrotoluene	*ND*	*9.68*	1.84	0.485	ug/L
MKTF-46	12/16/2020	Fluoranthene	ND	9.68	0.174	802	ug/L
MKTF-46	12/16/2020	Fluorene	ND	9.68	0.174	288	ug/L
MKTF-46	12/16/2020	Hexachlorobenzene	*ND*	*9.68*	0.165	0.0976	ug/L
MKTF-46	12/16/2020	Hexachlorocyclopentadiene	*ND*	*19.4*	2.52	0.41	ug/L
MKTF-46	12/16/2020	Hexachloroethane	*ND*	*9.68*	4.07	3.28	ug/L
MKTF-46	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.68*	0.213	0.343	ug/L
MKTF-46	12/16/2020	Isophorone	ND	9.68	0.136	781	ug/L
MKTF-46	12/16/2020	2-Methylphenol	ND	9.68	1.74	NA	ug/L
MKTF-46	12/16/2020	Naphthalene	ND	9.68	0.165	30	ug/L
MKTF-46	12/16/2020	2-Nitroaniline	ND	9.68	2.13	190	ug/L
MKTF-46	12/16/2020	3-Nitroaniline	ND	9.68	1.74	NA	ug/L
MKTF-46	12/16/2020	4-Nitroaniline	*ND*	*9.68*	1.45	3.8	ug/L
MKTF-46	12/16/2020	Nitrobenzene	*ND*	*9.68*	0.126	1.4	ug/L
MKTF-46	12/16/2020	2-Nitrophenol	ND	9.68	5.03	NA	ug/L
MKTF-46	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*9.68*	3.2	0.011	ug/L
MKTF-46	12/16/2020	N-Nitrosodiphenylamine	ND	9.68	0.174	122	ug/L
MKTF-46	12/16/2020	Pentachlorophenol	*ND*	*19.4*	1.36	1	ug/L
MKTF-46	12/16/2020	Phenanthrene	ND	9.68	0.174	170	ug/L
MKTF-46	12/16/2020	Phenol	ND	9.68	2.52	5761	ug/L
MKTF-46	12/16/2020	Pyrene	ND	9.68	0.203	117	ug/L
MKTF-46	12/16/2020	2,4,5-Trichlorophenol	ND	9.68	3.58	1166	ug/L
MKTF-46	12/16/2020	2,4,6-Trichlorophenol	ND	9.68	3.39	11.9*	ug/L
MKTF-46	12/16/2020	Dimethylphthalate	ND	9.68	0.165	612	ug/L
MKTF-46	12/16/2020	Aniline	ND	9.68	3.68	13	ug/L
MKTF-46	12/16/2020	Benzoic Acid	ND	29	7.07	75000	ug/L
MKTF-46	12/16/2020	Benzyl Alcohol	ND	9.68	1.94	2000	ug/L
MKTF-46	12/16/2020	Bis(2-chloroisopropyl)ether	ND	9.68	0.155	9.81	ug/L
MKTF-46	12/16/2020	N-Nitrosodimethylamine	*ND*	*9.68*	3.39	0.0049	ug/L
MKTF-46	12/16/2020	Pyridine	ND	9.68	3.1	20	ug/L
MKTF-46	12/16/2020	1,2,4-Trichlorobenzene	ND	9.68	0.174	70	ug/L
MKTF-46	12/16/2020	1,2-Dichlorobenzene	ND	9.68	0.165	600	ug/L
MKTF-46	12/16/2020	Azobenzene	*ND*	*9.68*	0.968	0.12	ug/L
MKTF-46	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.68*	1.55	1.52	ug/L
MKTF-46	12/16/2020	Di-n-octylphthalate	ND	9.68	0.165	200	ug/L
MKTF-46	12/16/2020	4-Nitrophenol	ND	9.68	2.03	NA	ug/L
MKTF-47	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-47	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-47	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-47	3/6/2020	1,4-Dioxane	2.4	1	0.2	4.59	ug/L
MKTF-47	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-47	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-47	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-47	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-47	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-47	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-47	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-47	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-47	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-47	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-47	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-47	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-47	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-47	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-47	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-47	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-47	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-47	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-47	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-47	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-47	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-47	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-47	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-47	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-47	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-47	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-47	3/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-47	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-47	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-47	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-47	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-47	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-47	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-47	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-47	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-47	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-47	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-47	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-47	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-47	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-47	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-47	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-47	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-47	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-47	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-47	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-47	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-47	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-47	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-47	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-49	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-49	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-49	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-49	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-49	3/5/2020	1-Methylnaphthalene	5.5	2.5	0.5	11.38	ug/L
MKTF-49	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-49	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-49	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-49	3/5/2020	2,4-Dimethylphenol	24	2.5	0.5	354	ug/L
MKTF-49	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-49	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-49	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-49	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-49	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-49	3/5/2020	2-Methylnaphthalene	7	2.5	0.5	35.1	ug/L
MKTF-49	3/5/2020	2-Methylphenol	21	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-49	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	3,4-Methylphenol	25	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-49	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-49	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-49	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-49	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-49	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-49	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-49	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-49	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-49	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-49	3/5/2020	Benzoic Acid	120	2.5	0.5	75000	ug/L
MKTF-49	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-49	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-49	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-49	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-49	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-49	3/5/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-49	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-49	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-49	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-49	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-49	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-49	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-49	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-49	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-49	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-49	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-49	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-49	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-49	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-49	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-49	3/5/2020	Naphthalene	**42**	2.5	0.5	30	ug/L
MKTF-49	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-49	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-49	3/5/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-49	3/5/2020	Phenol	130	2.5	0.5	5761	ug/L
MKTF-49	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-49	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-49	9/20/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-49	9/20/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-49	9/20/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-49	9/20/2020	1,4-Dioxane	*1.8*	*5*	1	4.59	ug/L
MKTF-49	9/20/2020	1-Methylnaphthalene	5.2	5	1	11.38	ug/L
MKTF-49	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-49	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-49	9/20/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-49	9/20/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-49	9/20/2020	2,4-Dimethylphenol	12	5	1	354	ug/L
MKTF-49	9/20/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-49	9/20/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-49	9/20/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-49	9/20/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-49	9/20/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-49	9/20/2020	2-Methylnaphthalene	6.2	5	1	35.1	ug/L
MKTF-49	9/20/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-49	9/20/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	3,4-Methylphenol	26	5	1	NA	ug/L
MKTF-49	9/20/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-49	9/20/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-49	9/20/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	9/20/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-49	9/20/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-49	9/20/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Aniline	ND	5	1	13	ug/L
MKTF-49	9/20/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-49	9/20/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-49	9/20/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-49	9/20/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-49	9/20/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-49	9/20/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-49	9/20/2020	Benzoic Acid	190	5	2	75000	ug/L
MKTF-49	9/20/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-49	9/20/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-49	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-49	9/20/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-49	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-49	9/20/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-49	9/20/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-49	9/20/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-49	9/20/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-49	9/20/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-49	9/20/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-49	9/20/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-49	9/20/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-49	9/20/2020	Fluorene	ND	5	1	288	ug/L
MKTF-49	9/20/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-49	9/20/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-49	9/20/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-49	9/20/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-49	9/20/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-49	9/20/2020	Isophorone	ND	5	1	781	ug/L
MKTF-49	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-49	9/20/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-49	9/20/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-49	9/20/2020	Naphthalene	**36**	5	1	30	ug/L
MKTF-49	9/20/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-49	9/20/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-49	9/20/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-49	9/20/2020	Phenol	120	5	1	5761	ug/L
MKTF-49	9/20/2020	Pyrene	ND	5	1	117	ug/L
MKTF-49	9/20/2020	Pyridine	ND	5	2	20	ug/L
MKTF-49	12/23/2020	Acenaphthene	ND	10.6	0.169	535	ug/L
MKTF-49	12/23/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
MKTF-49	12/23/2020	Anthracene	ND	10.6	0.19	1721	ug/L
MKTF-49	12/23/2020	Benzo(a)anthracene	*ND*	*10.6*	0.19	0.12	ug/L
MKTF-49	12/23/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
MKTF-49	12/23/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.158	0.34	ug/L
MKTF-49	12/23/2020	Benzo(g,h,i)perylene	ND	10.6	0.243	NA	ug/L
MKTF-49	12/23/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.169	3.43	ug/L
MKTF-49	12/23/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.169	59	ug/L
MKTF-49	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.85	0.137	ug/L
MKTF-49	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.28	55.64	ug/L
MKTF-49	12/23/2020	4-Bromophenyl-phenylether	ND	10.6	0.211	NA	ug/L
MKTF-49	12/23/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
MKTF-49	12/23/2020	Carbazole	ND	10.6	0.243	NA	ug/L
MKTF-49	12/23/2020	4-Chloroaniline	*ND*	*10.6*	3.59	0.37	ug/L
MKTF-49	12/23/2020	4-Chloro-3-Methylphenol	ND	10.6	4.02	NA	ug/L
MKTF-49	12/23/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
MKTF-49	12/23/2020	2-Chlorophenol	ND	10.6	2.32	91	ug/L
MKTF-49	12/23/2020	4-Chlorophenyl-phenylether	ND	10.6	2.11	NA	ug/L
MKTF-49	12/23/2020	1,3-Dichlorobenzene	ND	10.6	0.19	NA	ug/L
MKTF-49	12/23/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
MKTF-49	12/23/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
MKTF-49	12/23/2020	1,4-Dichlorobenzene	ND	10.6	0.169	75	ug/L
MKTF-49	12/23/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
MKTF-49	12/23/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.75	1.25	ug/L
MKTF-49	12/23/2020	2,4-Dichlorophenol	ND	10.6	3.17	45.3	ug/L
MKTF-49	12/23/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
MKTF-49	12/23/2020	2,4-Dimethylphenol	19.2	10.6	3.7	354	ug/L
MKTF-49	12/23/2020	Di-n-butylphthalate	ND	10.6	2.85	885	ug/L
MKTF-49	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.69	1.52	ug/L
MKTF-49	12/23/2020	2,4-Dinitrophenol	ND	31.7	3.59	38.7	ug/L
MKTF-49	12/23/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
MKTF-49	12/23/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
MKTF-49	12/23/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
MKTF-49	12/23/2020	Fluoranthene	ND	10.6	0.19	802	ug/L
MKTF-49	12/23/2020	Fluorene	ND	10.6	0.19	288	ug/L
MKTF-49	12/23/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
MKTF-49	12/23/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.75	0.41	ug/L
MKTF-49	12/23/2020	Hexachloroethane	*ND*	*10.6*	4.44	3.28	ug/L
MKTF-49	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.232	0.343	ug/L
MKTF-49	12/23/2020	Isophorone	ND	10.6	0.148	781	ug/L
MKTF-49	12/23/2020	2-Methylphenol	25.1	10.6	1.9	NA	ug/L
MKTF-49	12/23/2020	Naphthalene	**44**	10.6	0.18	30	ug/L
MKTF-49	12/23/2020	2-Nitroaniline	ND	10.6	2.32	190	ug/L
MKTF-49	12/23/2020	3-Nitroaniline	ND	10.6	1.9	NA	ug/L
MKTF-49	12/23/2020	4-Nitroaniline	*ND*	*10.6*	1.58	3.8	ug/L
MKTF-49	12/23/2020	Nitrobenzene	*ND*	*10.6*	0.137	1.4	ug/L
MKTF-49	12/23/2020	2-Nitrophenol	ND	10.6	5.49	NA	ug/L
MKTF-49	12/23/2020	4-Nitrophenol	ND	10.6	2.22	NA	ug/L
MKTF-49	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.49	0.011	ug/L
MKTF-49	12/23/2020	N-Nitrosodiphenylamine	ND	10.6	0.19	122	ug/L
MKTF-49	12/23/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
MKTF-49	12/23/2020	Phenanthrene	ND	10.6	0.19	170	ug/L
MKTF-49	12/23/2020	Phenol	135	10.6	2.75	5761	ug/L
MKTF-49	12/23/2020	Pyrene	ND	10.6	0.222	117	ug/L
MKTF-49	12/23/2020	2,4,5-Trichlorophenol	ND	10.6	3.91	1166	ug/L
MKTF-49	12/23/2020	2,4,6-Trichlorophenol	ND	10.6	3.7	11.9*	ug/L
MKTF-49	12/23/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
MKTF-49	12/23/2020	Aniline	ND	10.6	4.02	13	ug/L
MKTF-49	12/23/2020	Benzoic Acid	163	31.7	7.71	75000	ug/L
MKTF-49	12/23/2020	Benzyl Alcohol	ND	10.6	2.11	2000	ug/L
MKTF-49	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.169	9.81	ug/L
MKTF-49	12/23/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.7	0.0049	ug/L
MKTF-49	12/23/2020	Pyridine	ND	10.6	3.38	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	1,2,4-Trichlorobenzene	ND	10.6	0.19	70	ug/L
MKTF-49	12/23/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
MKTF-49	12/23/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-50	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	**45**	2.5	0.5	11.38	ug/L
MKTF-50	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-50	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-50	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-50	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-50	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-50	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-50	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**51**	2.5	0.5	35.1	ug/L
MKTF-50	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-50	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-50	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-50	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-50	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-50	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-50	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-50	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-50	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-50	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-50	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-50	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-50	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-50	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-50	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-50	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-50	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-50	3/5/2020	Carbazole	1.78	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-50	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-50	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-50	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-50	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-50	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-50	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-50	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-50	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-50	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-50	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-50	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-50	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-50	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-50	3/5/2020	Naphthalene	**120**	2.5	0.5	30	ug/L
MKTF-50	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-50	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-50	3/5/2020	Phenanthrene	2.6	2.5	0.5	170	ug/L
MKTF-50	3/5/2020	Phenol	51	2.5	0.5	5761	ug/L
MKTF-50	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-50	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-50	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	**62**	2.5	0.5	11.38	ug/L
MKTF-50	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-50	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-50	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-50	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-50	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-50	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-50	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**76**	2.5	0.5	35.1	ug/L
MKTF-50	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-50	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-50	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-50	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-50	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Acenaphthene	1.21	2.5	0.5	535	ug/L
MKTF-50	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-50	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-50	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-50	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-50	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-50	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-50	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-50	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-50	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-50	3/5/2020	Bis(2-ethylhexyl)phthalate	1.1	2.5	1	55.64	ug/L
MKTF-50	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-50	3/5/2020	Carbazole	1.69	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-50	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-50	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-50	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-50	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-50	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-50	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-50	3/5/2020	Fluorene	2.8	2.5	0.5	288	ug/L
MKTF-50	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-50	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-50	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-50	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-50	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-50	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-50	3/5/2020	Naphthalene	**150**	2.5	0.5	30	ug/L
MKTF-50	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-50	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-50	3/5/2020	Phenanthrene	4.5	2.5	0.5	170	ug/L
MKTF-50	3/5/2020	Phenol	120	2.5	0.5	5761	ug/L
MKTF-50	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-50	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-50	12/16/2020	Acenaphthene	ND	11.6	0.186	535	ug/L
MKTF-50	12/16/2020	Acenaphthylene	ND	11.6	0.197	NA	ug/L
MKTF-50	12/16/2020	Anthracene	ND	11.6	0.209	1721	ug/L
MKTF-50	12/16/2020	Benzo(a)anthracene	*ND*	*11.6*	0.209	0.12	ug/L
MKTF-50	12/16/2020	Benzo(a)pyrene	*ND*	*11.6*	0.139	0.2	ug/L
MKTF-50	12/16/2020	Benzo(b)fluoranthene	*ND*	*11.6*	0.174	0.34	ug/L
MKTF-50	12/16/2020	Benzo(g,h,i)perylene	ND	11.6	0.267	NA	ug/L
MKTF-50	12/16/2020	Benzo(k)fluoranthene	*ND*	*11.6*	0.186	3.43	ug/L
MKTF-50	12/16/2020	Bis(2-chloroethoxy)methane	ND	11.6	0.186	59	ug/L
MKTF-50	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	3.14	0.137	ug/L
MKTF-50	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	5.81	55.64	ug/L
MKTF-50	12/16/2020	4-Bromophenyl-phenylether	ND	11.6	0.232	NA	ug/L
MKTF-50	12/16/2020	Butylbenzylphthalate	ND	11.6	0.221	16	ug/L
MKTF-50	12/16/2020	Carbazole	ND	11.6	0.267	NA	ug/L
MKTF-50	12/16/2020	4-Chloroaniline	*ND*	*11.6*	3.95	0.37	ug/L
MKTF-50	12/16/2020	4-Chloro-3-Methylphenol	ND	11.6	4.41	NA	ug/L
MKTF-50	12/16/2020	2-Chloronaphthalene	ND	11.6	0.163	733	ug/L
MKTF-50	12/16/2020	2-Chlorophenol	ND	11.6	2.56	91	ug/L
MKTF-50	12/16/2020	4-Chlorophenyl-phenylether	ND	11.6	2.32	NA	ug/L
MKTF-50	12/16/2020	1,3-Dichlorobenzene	ND	11.6	0.209	NA	ug/L
MKTF-50	12/16/2020	Chrysene	ND	11.6	0.221	34.3	ug/L
MKTF-50	12/16/2020	Dibenzo(a,h)anthracene	ND	11.6	0.279	NA	ug/L
MKTF-50	12/16/2020	1,4-Dichlorobenzene	ND	11.6	0.186	75	ug/L
MKTF-50	12/16/2020	Dibenzofuran	ND	11.6	0.197	NA	ug/L
MKTF-50	12/16/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	3.02	1.25	ug/L
MKTF-50	12/16/2020	2,4-Dichlorophenol	ND	11.6	3.49	45.3	ug/L
MKTF-50	12/16/2020	Diethylphthalate	ND	11.6	0.279	14801	ug/L
MKTF-50	12/16/2020	2,4-Dimethylphenol	ND	11.6	4.07	354	ug/L
MKTF-50	12/16/2020	Di-n-butylphthalate	ND	11.6	3.14	885	ug/L
MKTF-50	12/16/2020	2,4-Dinitrophenol	ND	34.9	3.95	38.7	ug/L
MKTF-50	12/16/2020	2,4-Dinitrotoluene	ND	11.6	2.21	45.3	ug/L
MKTF-50	12/16/2020	2,6-Dinitrotoluene	*ND*	*11.6*	2.21	0.485	ug/L
MKTF-50	12/16/2020	Fluoranthene	ND	11.6	0.209	802	ug/L
MKTF-50	12/16/2020	Fluorene	ND	11.6	0.209	288	ug/L
MKTF-50	12/16/2020	Hexachlorobenzene	*ND*	*11.6*	0.197	0.0976	ug/L
MKTF-50	12/16/2020	Hexachlorocyclopentadiene	*ND*	*23.2*	3.02	0.41	ug/L
MKTF-50	12/16/2020	Hexachloroethane	*ND*	*11.6*	4.88	3.28	ug/L
MKTF-50	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	0.256	0.343	ug/L
MKTF-50	12/16/2020	Isophorone	ND	11.6	0.163	781	ug/L
MKTF-50	12/16/2020	2-Methylphenol	ND	11.6	2.09	NA	ug/L
MKTF-50	12/16/2020	Naphthalene	**120**	11.6	0.197	30	ug/L
MKTF-50	12/16/2020	2-Nitroaniline	ND	11.6	2.56	190	ug/L
MKTF-50	12/16/2020	3-Nitroaniline	ND	11.6	2.09	NA	ug/L
MKTF-50	12/16/2020	4-Nitroaniline	*ND*	*11.6*	1.74	3.8	ug/L
MKTF-50	12/16/2020	Nitrobenzene	*ND*	*11.6*	0.151	1.4	ug/L
MKTF-50	12/16/2020	2-Nitrophenol	ND	11.6	6.04	NA	ug/L
MKTF-50	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	3.83	0.011	ug/L
MKTF-50	12/16/2020	N-Nitrosodiphenylamine	ND	11.6	0.209	122	ug/L
MKTF-50	12/16/2020	Pentachlorophenol	*ND*	*23.2*	1.63	1	ug/L
MKTF-50	12/16/2020	Phenanthrene	ND	11.6	0.209	170	ug/L
MKTF-50	12/16/2020	Pyrene	ND	11.6	0.244	117	ug/L
MKTF-50	12/16/2020	2,4,5-Trichlorophenol	ND	11.6	4.3	1166	ug/L
MKTF-50	12/16/2020	2,4,6-Trichlorophenol	ND	11.6	4.07	11.9*	ug/L
MKTF-50	12/16/2020	Dimethylphthalate	ND	11.6	0.197	612	ug/L
MKTF-50	12/16/2020	Aniline	ND	11.6	4.41	13	ug/L
MKTF-50	12/16/2020	Benzoic Acid	ND	34.9	8.48	75000	ug/L
MKTF-50	12/16/2020	Benzyl Alcohol	ND	11.6	2.32	2000	ug/L
MKTF-50	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	0.186	9.81	ug/L
MKTF-50	12/16/2020	N-Nitrosodimethylamine	*ND*	*11.6*	4.07	0.0049	ug/L
MKTF-50	12/16/2020	Pyridine	ND	11.6	3.72	20	ug/L
MKTF-50	12/16/2020	1,2,4-Trichlorobenzene	ND	11.6	0.209	70	ug/L
MKTF-50	12/16/2020	1,2-Dichlorobenzene	ND	11.6	0.197	600	ug/L
MKTF-50	12/16/2020	Azobenzene	*ND*	*11.6*	1.16	0.12	ug/L
MKTF-50	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	1.86	1.52	ug/L
MKTF-50	12/16/2020	Di-n-octylphthalate	ND	11.6	0.197	200	ug/L
MKTF-50	12/16/2020	4-Nitrophenol	ND	11.6	2.44	NA	ug/L
MKTF-50	12/16/2020	Phenol	25.8	11.6	3.02	5761	ug/L
MW-1	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-1	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-1	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-1	8/24/2012	Aniline	ND	10	2	13	ug/L
MW-1	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-1	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-1	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-1	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-1	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
MW-1	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-1	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-1	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-1	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-1	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-1	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
MW-1	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-1	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-1	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-1	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-1	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-1	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-1	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-1	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-1	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-1	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-1	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-1	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-1	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-1	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-1	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-1	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-1	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-1	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-1	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-1	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-1	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-1	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-1	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-1	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-1	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
MW-1	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
MW-1	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-1	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-1	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-1	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-1	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-1	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-1	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-1	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-1	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-1	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
MW-1	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-1	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-1	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-1	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-1	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-1	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-1	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-1	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
MW-1	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-1	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-1	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-1	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-1	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-1	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-1	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-1	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-1	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-1	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-1	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	Aniline	ND	10	2.2	13	ug/L
MW-1	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-1	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-1	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-1	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-1	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
MW-1	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-1	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-1	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-1	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-1	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-1	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-1	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
MW-1	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-1	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-1	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-1	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-1	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-1	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-1	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-1	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-1	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-1	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-1	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-1	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-1	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-1	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-1	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-1	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-1	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-1	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-1	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-1	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-1	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-1	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-1	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-1	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
MW-1	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
MW-1	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-1	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-1	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-1	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-1	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-1	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-1	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-1	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-1	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-1	9/9/2013	Pyrene	ND	10	2.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-1	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-1	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-1	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-1	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-1	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-1	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-1	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-1	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-1	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-1	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-1	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-1	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-1	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-1	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-1	9/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	9/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-1	9/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-1	9/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Aniline	ND	10	2.4	13	ug/L
MW-1	9/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-1	9/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-1	9/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-1	9/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-1	9/16/2014	Isophorone	ND	10	3.1	781	ug/L
MW-1	9/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-1	9/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-1	9/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-1	9/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-1	9/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-1	9/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-1	9/16/2014	Fluorene	ND	10	2.9	288	ug/L
MW-1	9/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-1	9/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-1	9/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-1	9/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-1	9/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-1	9/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-1	9/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-1	9/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-1	9/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-1	9/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-1	9/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-1	9/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-1	9/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-1	9/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-1	9/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-1	9/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-1	9/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-1	9/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-1	9/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-1	9/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-1	9/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-1	9/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-1	9/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-1	9/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-1	9/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-1	9/16/2014	Phenol	ND	10	1.6	5761	ug/L
MW-1	9/16/2014	Pyridine	ND	10	1.6	20	ug/L
MW-1	9/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-1	9/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-1	9/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-1	9/16/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-1	9/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-1	9/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-1	9/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-1	9/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-1	9/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-1	9/16/2014	Pyrene	ND	10	4	117	ug/L
MW-1	9/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-1	9/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-1	9/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-1	9/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-1	9/16/2014	Fluoranthene	ND	10	3	802	ug/L
MW-1	9/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-1	9/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-1	9/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-1	9/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-1	9/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-1	9/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-1	9/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-1	9/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-1	9/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-1	9/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-1	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-1	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-1	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-1	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-1	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-1	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-1	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-1	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-1	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-1	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-1	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-1	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-1	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-1	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-1	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-1	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-1	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-1	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-1	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-1	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-1	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-1	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-1	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-1	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-1	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-1	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-1	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-1	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-1	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-1	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-1	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-1	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-1	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-1	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-1	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-1	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-1	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-1	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-1	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-1	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-1	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-1	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-1	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-1	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-1	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-1	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-1	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-1	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-1	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-1	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-1	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-1	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-1	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-1	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-1	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-1	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-1	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-1	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-1	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-1	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-1	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-1	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-1	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-1	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-1	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-1	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-1	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-1	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-1	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-1	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-1	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-1	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-1	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-1	9/7/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MW-1	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-1	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-1	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-1	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-1	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-1	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-1	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-1	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-1	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-1	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-1	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-1	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-1	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-1	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-1	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-1	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-1	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-1	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-1	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-1	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-1	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-1	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-1	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MW-1	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-1	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-1	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-1	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-1	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-1	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-1	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-1	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-1	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-1	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-1	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-1	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-1	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-1	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-1	9/7/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MW-1	9/7/2016	Di-n-octylphthalate	4.4	10	2	200	ug/L
MW-1	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-1	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-1	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-1	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-1	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-1	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MW-1	9/7/2016	Dimethylphthalate	5.1	10	2.4	612	ug/L
MW-1	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-1	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-1	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-1	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-1	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-1	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-1	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-1	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-1	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-1	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-1	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-1	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-1	9/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-1	9/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-1	9/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-1	9/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-1	9/20/2017	Aniline	ND	10	3.1	13	ug/L
MW-1	9/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-1	9/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MW-1	9/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-1	9/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-1	9/20/2017	Isophorone	ND	10	4.4	781	ug/L
MW-1	9/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-1	9/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-1	9/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-1	9/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-1	9/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-1	9/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-1	9/20/2017	Fluorene	ND	10	4	288	ug/L
MW-1	9/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-1	9/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-1	9/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-1	9/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-1	9/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-1	9/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-1	9/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-1	9/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-1	9/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-1	9/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-1	9/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-1	9/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-1	9/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-1	9/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-1	9/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-1	9/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-1	9/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-1	9/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-1	9/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-1	9/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-1	9/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-1	9/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-1	9/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-1	9/20/2017	Phenol	ND	10	3.1	5761	ug/L
MW-1	9/20/2017	Pyridine	ND	10	2.3	20	ug/L
MW-1	9/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-1	9/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-1	9/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MW-1	9/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-1	9/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-1	9/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-1	9/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-1	9/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-1	9/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-1	9/20/2017	Pyrene	ND	10	4.4	117	ug/L
MW-1	9/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-1	9/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-1	9/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-1	9/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-1	9/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-1	9/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-1	9/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-1	9/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-1	9/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-1	9/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-1	9/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-1	9/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-1	9/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-1	9/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-1	9/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-1	9/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-1	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-1	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-1	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-1	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-1	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-1	9/13/2018	Benzoic Acid	6.6	20	6.3	75000	ug/L
MW-1	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-1	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-1	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-1	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-1	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-1	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-1	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-1	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-1	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-1	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-1	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-1	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-1	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-1	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-1	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-1	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-1	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-1	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-1	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-1	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-1	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-1	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-1	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-1	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-1	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-1	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-1	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-1	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-1	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-1	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-1	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-1	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-1	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-1	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-1	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-1	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-1	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-1	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-1	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-1	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-1	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-1	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-1	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-1	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-1	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-1	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-1	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-1	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-1	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-1	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-1	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-1	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-1	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-1	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-1	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-1	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-1	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-1	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-1	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-1	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-1	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-1	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-1	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-1	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-1	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-1	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-1	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-1	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-1	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-1	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-1	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-1	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-1	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-1	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-1	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-1	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-1	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-1	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-1	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-1	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-1	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-1	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-1	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-1	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-1	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-1	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-1	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-1	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-1	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-1	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-1	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-1	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-1	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-1	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-1	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-1	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-1	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-1	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-1	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-1	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-1	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-1	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-1	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-1	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-1	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-1	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-1	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-1	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-1	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-1	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-1	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-1	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-1	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-1	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-1	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-1	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-1	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-1	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-1	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-1	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-1	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-1	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	8/12/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-1	8/12/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-1	8/12/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-1	8/12/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-1	8/12/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-1	8/12/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-1	8/12/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-1	8/12/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-1	8/12/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-1	8/12/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-1	8/12/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-1	8/12/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-1	8/12/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-1	8/12/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-1	8/12/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-1	8/12/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-1	8/12/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-1	8/12/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-1	8/12/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-1	8/12/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-1	8/12/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-1	8/12/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-1	8/12/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-1	8/12/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-1	8/12/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-1	8/12/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-1	8/12/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-1	8/12/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-1	8/12/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-1	8/12/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-1	8/12/2019	Aniline	ND	10	3.579516	13	ug/L
MW-1	8/12/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-1	8/12/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-1	8/12/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-1	8/12/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-1	8/12/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-1	8/12/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-1	8/12/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-1	8/12/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-1	8/12/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-1	8/12/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-1	8/12/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-1	8/12/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-1	8/12/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-1	8/12/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-1	8/12/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-1	8/12/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-1	8/12/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-1	8/12/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-1	8/12/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-1	8/12/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-1	8/12/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-1	8/12/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-1	8/12/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-1	8/12/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-1	8/12/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-1	8/12/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-1	8/12/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-1	8/12/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-1	8/12/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-1	8/12/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-1	8/12/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-1	8/12/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-1	8/12/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-1	8/12/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-1	8/12/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-1	8/12/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-1	8/12/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-1	8/12/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-1	8/12/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-1	8/12/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-1	9/22/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-1	9/22/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-1	9/22/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-1	9/22/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-1	9/22/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-1	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-1	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-1	9/22/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-1	9/22/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-1	9/22/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-1	9/22/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-1	9/22/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-1	9/22/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-1	9/22/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-1	9/22/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-1	9/22/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-1	9/22/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-1	9/22/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-1	9/22/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-1	9/22/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-1	9/22/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-1	9/22/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-1	9/22/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-1	9/22/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-1	9/22/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-1	9/22/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MW-1	9/22/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-1	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-1	9/22/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-1	9/22/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-1	9/22/2020	Benzyl Alcohol	0.77	0.51	0.2	2000	ug/L
MW-1	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-1	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-1	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-1	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-1	9/22/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-1	9/22/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-1	9/22/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-1	9/22/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-1	9/22/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-1	9/22/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-1	9/22/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-1	9/22/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-1	9/22/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-1	9/22/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-1	9/22/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-1	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-1	9/22/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-1	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-1	9/22/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-1	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-1	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-1	9/22/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-1	9/22/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-1	9/22/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-1	9/22/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-1	9/22/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-1	9/22/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-1	9/22/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-1	9/22/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-2	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-2	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-2	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-2	8/24/2012	Aniline	ND	10	2	13	ug/L
MW-2	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-2	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-2	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-2	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-2	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
MW-2	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-2	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-2	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-2	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-2	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-2	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-2	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
MW-2	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-2	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-2	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-2	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-2	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-2	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-2	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-2	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-2	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-2	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-2	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-2	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-2	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-2	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-2	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-2	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-2	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-2	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-2	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-2	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-2	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-2	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-2	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-2	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-2	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
MW-2	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
MW-2	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-2	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-2	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-2	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-2	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-2	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-2	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-2	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-2	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-2	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
MW-2	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-2	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-2	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-2	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-2	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-2	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-2	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-2	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
MW-2	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-2	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-2	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-2	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-2	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-2	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-2	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-2	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-2	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-2	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-2	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-2	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-2	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-2	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-2	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-2	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-2	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-2	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-2	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-2	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-2	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-2	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-2	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-2	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-2	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-2	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-2	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-2	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-2	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-2	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-2	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-2	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-2	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-2	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-2	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-2	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-2	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-2	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-2	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-2	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-2	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-2	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-2	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-2	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-2	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-2	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-2	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-2	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-2	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-2	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-2	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-2	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-2	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-2	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-2	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-2	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-2	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-2	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-2	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-2	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-2	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-2	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-2	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-2	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-2	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-2	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-2	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-2	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-2	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-2	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-2	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-2	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-2	9/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	9/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-2	9/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-2	9/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Aniline	ND	10	2.4	13	ug/L
MW-2	9/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-2	9/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-2	9/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-2	9/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-2	9/16/2014	Isophorone	ND	10	3.1	781	ug/L
MW-2	9/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-2	9/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-2	9/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-2	9/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-2	9/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-2	9/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-2	9/16/2014	Fluorene	ND	10	2.9	288	ug/L
MW-2	9/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-2	9/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-2	9/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-2	9/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-2	9/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-2	9/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-2	9/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-2	9/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-2	9/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-2	9/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-2	9/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-2	9/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-2	9/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-2	9/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-2	9/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-2	9/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-2	9/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-2	9/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-2	9/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-2	9/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-2	9/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-2	9/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-2	9/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-2	9/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-2	9/16/2014	Phenol	ND	10	1.6	5761	ug/L
MW-2	9/16/2014	Pyridine	ND	10	1.6	20	ug/L
MW-2	9/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-2	9/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-2	9/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-2	9/16/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-2	9/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-2	9/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-2	9/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-2	9/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-2	9/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-2	9/16/2014	Pyrene	ND	10	4	117	ug/L
MW-2	9/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-2	9/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-2	9/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-2	9/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-2	9/16/2014	Fluoranthene	ND	10	3	802	ug/L
MW-2	9/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-2	9/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-2	9/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-2	9/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-2	9/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-2	9/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-2	9/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-2	9/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-2	9/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-2	9/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-2	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-2	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-2	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-2	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-2	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-2	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-2	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-2	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-2	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-2	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-2	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-2	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-2	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-2	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-2	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-2	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-2	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-2	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-2	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-2	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-2	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-2	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-2	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-2	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-2	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-2	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-2	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-2	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-2	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-2	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-2	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-2	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-2	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-2	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-2	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-2	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-2	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-2	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-2	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-2	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-2	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-2	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-2	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-2	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-2	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-2	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-2	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-2	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-2	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-2	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-2	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-2	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-2	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-2	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-2	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-2	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-2	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-2	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-2	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-2	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-2	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-2	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-2	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-2	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-2	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-2	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-2	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-2	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-2	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-2	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-2	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-2	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-2	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-2	9/7/2016	Benzoic Acid	18	20	2.6	75000	ug/L
MW-2	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-2	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-2	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-2	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-2	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-2	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-2	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-2	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-2	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-2	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-2	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-2	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-2	9/7/2016	Pentachlorophenol	**3.9**	20	2.3	1	ug/L
MW-2	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-2	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-2	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-2	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-2	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-2	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-2	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-2	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-2	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-2	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MW-2	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-2	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-2	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-2	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-2	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-2	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-2	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-2	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-2	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-2	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-2	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-2	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-2	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-2	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-2	9/7/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MW-2	9/7/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MW-2	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-2	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-2	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-2	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-2	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-2	9/7/2016	Pyrene	5.2	10	3.1	117	ug/L
MW-2	9/7/2016	Dimethylphthalate	5	10	2.4	612	ug/L
MW-2	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-2	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-2	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-2	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-2	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-2	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-2	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-2	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-2	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-2	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-2	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-2	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-2	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-2	9/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-2	9/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-2	9/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-2	9/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-2	9/20/2017	Aniline	ND	10	3.1	13	ug/L
MW-2	9/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-2	9/20/2017	Benzoic Acid	7.3	20	3.9	75000	ug/L
MW-2	9/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-2	9/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-2	9/20/2017	Isophorone	ND	10	4.4	781	ug/L
MW-2	9/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-2	9/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-2	9/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-2	9/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-2	9/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-2	9/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-2	9/20/2017	Fluorene	ND	10	4	288	ug/L
MW-2	9/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-2	9/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-2	9/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-2	9/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-2	9/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-2	9/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-2	9/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-2	9/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-2	9/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-2	9/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-2	9/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-2	9/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-2	9/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-2	9/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-2	9/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-2	9/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-2	9/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-2	9/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-2	9/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-2	9/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-2	9/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-2	9/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-2	9/20/2017	Phenol	ND	10	3.1	5761	ug/L
MW-2	9/20/2017	Pyridine	ND	10	2.3	20	ug/L
MW-2	9/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-2	9/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-2	9/20/2017	Bis(2-ethylhexyl)phthalate	6	10	4.8	55.64	ug/L
MW-2	9/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-2	9/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-2	9/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-2	9/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-2	9/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-2	9/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-2	9/20/2017	Pyrene	ND	10	4.4	117	ug/L
MW-2	9/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-2	9/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-2	9/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-2	9/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-2	9/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-2	9/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-2	9/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-2	9/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-2	9/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-2	9/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-2	9/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-2	9/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-2	9/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-2	9/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-2	9/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-2	9/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-2	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-2	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-2	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-2	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-2	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-2	9/13/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
MW-2	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-2	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-2	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-2	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-2	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-2	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-2	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-2	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-2	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-2	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-2	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-2	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-2	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-2	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-2	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-2	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-2	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-2	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-2	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-2	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-2	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-2	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-2	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-2	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-2	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-2	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-2	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-2	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-2	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-2	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-2	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-2	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-2	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-2	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-2	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-2	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-2	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-2	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-2	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-2	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-2	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-2	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-2	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-2	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-2	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-2	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-2	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-2	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-2	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-2	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-2	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-2	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-2	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-2	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-2	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-2	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-2	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-2	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-2	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-2	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-2	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-2	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-2	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-2	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-2	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-2	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-2	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-2	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-2	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-2	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-2	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-2	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-2	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-2	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-2	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-2	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-2	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-2	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-2	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-2	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-2	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-2	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-2	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-2	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-2	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-2	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-2	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-2	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-2	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-2	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-2	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-2	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-2	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-2	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-2	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-2	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-2	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-2	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-2	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-2	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-2	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-2	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-2	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-2	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-2	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-2	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-2	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-2	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-2	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-2	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-2	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-2	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-2	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-2	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-2	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-2	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-2	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-2	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-2	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-2	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-2	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-2	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-2	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-2	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-2	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-2	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-2	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-2	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-2	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-2	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-2	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-2	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-2	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-2	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-2	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-2	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-2	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-2	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-2	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-2	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-2	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-2	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-2	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-2	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-2	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-2	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-2	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-2	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-2	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-2	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-2	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-2	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
MW-2	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-2	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-2	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-2	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-2	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-2	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-2	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-2	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-2	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-2	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-2	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-2	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-2	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-2	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-2	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-2	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-2	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-2	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-2	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-2	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-2	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-2	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-2	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-2	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-2	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-2	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-2	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-2	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-2	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-2	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-2	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-2	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-2	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-2	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-2	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-2	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-2	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-2	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-2	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-2	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-2	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-2	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-2	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-2	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-2	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-2	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-2	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-2	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-2	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-2	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-2	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-2	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-2	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-2	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-2	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-2	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-2	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-2	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-2	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-2	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-2	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-2	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-2	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-2	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-2	9/18/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-2	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-2	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-2	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-2	9/18/2020	Benzoic Acid	1.1	0.51	0.2	75000	ug/L
MW-2	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-2	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-2	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-2	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-2	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-2	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-2	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-2	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-2	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-2	9/18/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-2	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-2	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-2	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-2	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-2	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-2	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-2	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MW-2	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-2	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-2	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-2	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-2	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-2	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-2	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-2	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-2	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-2	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-2	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-2	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-2	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-4	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-4	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-4	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-4	8/21/2012	Aniline	ND	10	2	13	ug/L
MW-4	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-4	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-4	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-4	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
MW-4	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-4	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-4	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-4	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-4	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-4	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-4	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
MW-4	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-4	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-4	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-4	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-4	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-4	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-4	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-4	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-4	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-4	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-4	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-4	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-4	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-4	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-4	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-4	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-4	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-4	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-4	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-4	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-4	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-4	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-4	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-4	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-4	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
MW-4	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
MW-4	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-4	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-4	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-4	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-4	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-4	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-4	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-4	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-4	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-4	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
MW-4	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-4	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-4	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-4	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-4	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-4	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-4	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-4	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
MW-4	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-4	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-4	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-4	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-4	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-4	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-4	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-4	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-4	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-4	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-4	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-4	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-4	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-4	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-4	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-4	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-4	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-4	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-4	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-4	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-4	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-4	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-4	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-4	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-4	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-4	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-4	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-4	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-4	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-4	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-4	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-4	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-4	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-4	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-4	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-4	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-4	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-4	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-4	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-4	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-4	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-4	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-4	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-4	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-4	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-4	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-4	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-4	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-4	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-4	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-4	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-4	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-4	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-4	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-4	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-4	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-4	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-4	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-4	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-4	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-4	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-4	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-4	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-4	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-4	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-4	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-4	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-4	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-4	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-4	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-4	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-4	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-4	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-4	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-4	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-4	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MW-4	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-4	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-4	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-4	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-4	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MW-4	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-4	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-4	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-4	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-4	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-4	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-4	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MW-4	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-4	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-4	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-4	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-4	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-4	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-4	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-4	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-4	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-4	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-4	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-4	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-4	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-4	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-4	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-4	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-4	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-4	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-4	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-4	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-4	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-4	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-4	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-4	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-4	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-4	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MW-4	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MW-4	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-4	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-4	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-4	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-4	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-4	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-4	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-4	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-4	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-4	9/17/2014	Pyrene	ND	10	4	117	ug/L
MW-4	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-4	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-4	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-4	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-4	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MW-4	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-4	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-4	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-4	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-4	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-4	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-4	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-4	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-4	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-4	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-4	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-4	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-4	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-4	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-4	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Aniline	ND	10	1.5	13	ug/L
MW-4	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-4	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-4	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-4	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-4	8/17/2015	Isophorone	ND	10	2	781	ug/L
MW-4	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-4	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-4	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-4	8/17/2015	Phenanthrene	ND	10	2	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-4	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-4	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
MW-4	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-4	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-4	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-4	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-4	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-4	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-4	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-4	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-4	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-4	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-4	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-4	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-4	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-4	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-4	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-4	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-4	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-4	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-4	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-4	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-4	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-4	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-4	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-4	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
MW-4	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
MW-4	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-4	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-4	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-4	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-4	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-4	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-4	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-4	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-4	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-4	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
MW-4	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-4	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-4	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-4	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-4	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-4	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-4	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-4	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-4	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-4	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-4	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-4	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-4	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-4	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-4	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-4	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-4	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-4	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-4	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-4	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-4	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-4	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-4	9/7/2016	Benzoic Acid	9.3	20	2.6	75000	ug/L
MW-4	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-4	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-4	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-4	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-4	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-4	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-4	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-4	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-4	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-4	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-4	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-4	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-4	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-4	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-4	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-4	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-4	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-4	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-4	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-4	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-4	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-4	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-4	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MW-4	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-4	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-4	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-4	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-4	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-4	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-4	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-4	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-4	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-4	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-4	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-4	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-4	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-4	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-4	9/7/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MW-4	9/7/2016	Di-n-octylphthalate	3.7	10	2	200	ug/L
MW-4	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-4	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-4	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-4	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-4	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/7/2016	Pyrene	3.2	10	3.1	117	ug/L
MW-4	9/7/2016	Dimethylphthalate	4.5	10	2.4	612	ug/L
MW-4	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-4	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-4	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-4	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-4	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-4	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-4	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-4	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-4	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-4	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-4	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-4	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-4	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-4	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-4	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-4	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-4	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-4	9/21/2017	Aniline	ND	10	3.1	13	ug/L
MW-4	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-4	9/21/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MW-4	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-4	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-4	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
MW-4	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-4	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-4	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-4	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-4	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-4	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-4	9/21/2017	Fluorene	ND	10	4	288	ug/L
MW-4	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-4	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-4	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-4	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-4	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-4	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-4	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-4	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-4	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-4	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-4	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-4	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-4	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-4	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-4	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-4	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-4	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-4	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-4	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-4	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-4	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-4	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-4	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-4	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
MW-4	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
MW-4	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-4	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-4	9/21/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
MW-4	9/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-4	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-4	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-4	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-4	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-4	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-4	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
MW-4	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-4	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-4	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-4	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-4	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-4	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-4	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-4	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-4	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-4	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-4	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-4	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-4	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-4	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-4	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-4	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-4	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-4	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-4	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-4	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-4	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-4	9/13/2018	Benzoic Acid	6.5	20	6.3	75000	ug/L
MW-4	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-4	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-4	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-4	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-4	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-4	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-4	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-4	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-4	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-4	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-4	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-4	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-4	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-4	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-4	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-4	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-4	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-4	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-4	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-4	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-4	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-4	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-4	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-4	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-4	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-4	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-4	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-4	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-4	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-4	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-4	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-4	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-4	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-4	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-4	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-4	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-4	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-4	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-4	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-4	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-4	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-4	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-4	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-4	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-4	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-4	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-4	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-4	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-4	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-4	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-4	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-4	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-4	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-4	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-4	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-4	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-4	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-4	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-4	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-4	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-4	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-4	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-4	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-4	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-4	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-4	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-4	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-4	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-4	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-4	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-4	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-4	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-4	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-4	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-4	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-4	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-4	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-4	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-4	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-4	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-4	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-4	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-4	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-4	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-4	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-4	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-4	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-4	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-4	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-4	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-4	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-4	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-4	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-4	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-4	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-4	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-4	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-4	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-4	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-4	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-4	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-4	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-4	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-4	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-4	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-4	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-4	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-4	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-4	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-4	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-4	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-4	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-4	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-4	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-4	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-4	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-4	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-4	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-4	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-4	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-4	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-4	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-4	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-4	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-4	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-4	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-4	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-4	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-4	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-4	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-4	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-4	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-4	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-4	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-4	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-4	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-4	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-4	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-4	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-4	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-4	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-4	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-4	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-4	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-4	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-4	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-4	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-4	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-4	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-4	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-4	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-4	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
MW-4	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-4	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-4	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-4	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-4	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-4	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-4	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-4	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-4	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-4	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-4	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-4	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-4	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-4	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-4	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-4	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-4	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-4	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-4	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-4	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-4	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-4	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-4	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-4	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-4	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-4	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-4	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-4	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-4	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-4	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-4	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-4	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-4	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-4	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-4	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-4	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-4	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-4	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-4	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-4	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-4	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-4	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-4	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-4	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-4	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-4	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-4	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-4	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-4	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-4	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-4	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-4	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-4	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-4	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-4	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-4	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-4	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-4	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-4	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-4	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-4	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-4	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-4	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-4	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-4	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-4	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-4	9/18/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MW-4	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-4	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-4	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-4	9/18/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-4	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-4	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-4	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-4	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-4	9/18/2020	Bis(2-ethylhexyl)phthalate	0.28	0.51	0.2	55.64	ug/L
MW-4	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-4	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-4	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-4	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-4	9/18/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-4	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-4	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-4	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-4	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-4	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-4	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-4	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-4	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-4	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-4	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-4	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-4	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-4	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-4	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-4	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-4	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-4	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-4	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-4	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-4	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-4	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-4	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-4	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-4	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-4	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-4	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-4	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-4	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-4	9/18/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-4	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-4	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-4	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-4	9/18/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-4	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-4	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-4	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-4	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-4	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-4	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-4	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-4	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-4	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-4	9/18/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MW-4	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-4	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-4	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-4	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-4	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-4	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-4	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-4	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-4	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-4	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-4	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-4	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-4	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-4	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-4	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-4	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-4	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-4	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-4	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-5	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-5	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-5	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-5	8/23/2012	Aniline	ND	10	2	13	ug/L
MW-5	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-5	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-5	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-5	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-5	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
MW-5	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-5	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-5	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-5	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-5	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-5	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-5	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
MW-5	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-5	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-5	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-5	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-5	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-5	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-5	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-5	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-5	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-5	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-5	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-5	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-5	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-5	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-5	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-5	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-5	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-5	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-5	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-5	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-5	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-5	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-5	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-5	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-5	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
MW-5	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
MW-5	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-5	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-5	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-5	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-5	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-5	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-5	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-5	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-5	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-5	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
MW-5	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-5	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-5	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-5	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-5	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-5	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-5	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-5	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
MW-5	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-5	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-5	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-5	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-5	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-5	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-5	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-5	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-5	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-5	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-5	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-5	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-5	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-5	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-5	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-5	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-5	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-5	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-5	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-5	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-5	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-5	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-5	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-5	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-5	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-5	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-5	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-5	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-5	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-5	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-5	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-5	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-5	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-5	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-5	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-5	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-5	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-5	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-5	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-5	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-5	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-5	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-5	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-5	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-5	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-5	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-5	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-5	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-5	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-5	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-5	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-5	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-5	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-5	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-5	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-5	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-5	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-5	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-5	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-5	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-5	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-5	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-5	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-5	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-5	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-5	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-5	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-5	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-5	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-5	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-5	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-5	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-5	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-5	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-5	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MW-5	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-5	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-5	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-5	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-5	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MW-5	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-5	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-5	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-5	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-5	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-5	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-5	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MW-5	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-5	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-5	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-5	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-5	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-5	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-5	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-5	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-5	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-5	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-5	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-5	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-5	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-5	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-5	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-5	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-5	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-5	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-5	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-5	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-5	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-5	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-5	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-5	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-5	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-5	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MW-5	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MW-5	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-5	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-5	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-5	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-5	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-5	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-5	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-5	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-5	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-5	9/17/2014	Pyrene	ND	10	4	117	ug/L
MW-5	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-5	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-5	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-5	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-5	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MW-5	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-5	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-5	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-5	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-5	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-5	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-5	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-5	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-5	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-5	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-5	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-5	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-5	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-5	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-5	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-5	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-5	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-5	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-5	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-5	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-5	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-5	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-5	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-5	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-5	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-5	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-5	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-5	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-5	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-5	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-5	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-5	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-5	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-5	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-5	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-5	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-5	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-5	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-5	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-5	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-5	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-5	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-5	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-5	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-5	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-5	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-5	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-5	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-5	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-5	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-5	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-5	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-5	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-5	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-5	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-5	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-5	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-5	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-5	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-5	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-5	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-5	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-5	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-5	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-5	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-5	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-5	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-5	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-5	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-5	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-5	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-5	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-5	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-5	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-5	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-5	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-5	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-5	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-5	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-5	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-5	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-5	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-5	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-5	9/7/2016	Benzoic Acid	6.5	20	2.6	75000	ug/L
MW-5	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-5	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-5	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-5	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-5	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-5	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-5	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-5	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-5	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-5	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-5	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-5	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-5	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-5	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-5	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-5	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-5	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-5	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-5	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-5	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-5	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-5	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-5	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-5	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-5	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-5	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-5	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-5	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-5	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-5	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-5	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-5	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-5	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-5	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-5	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-5	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-5	9/7/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MW-5	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MW-5	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-5	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-5	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-5	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-5	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-5	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MW-5	9/7/2016	Dimethylphthalate	5.1	10	2.4	612	ug/L
MW-5	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-5	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-5	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-5	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-5	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-5	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-5	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-5	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-5	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-5	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-5	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-5	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-5	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-5	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-5	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-5	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-5	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-5	9/11/2017	Aniline	ND	10	3.1	13	ug/L
MW-5	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-5	9/11/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MW-5	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-5	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-5	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
MW-5	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-5	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-5	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-5	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-5	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-5	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-5	9/11/2017	Fluorene	ND	10	4	288	ug/L
MW-5	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-5	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-5	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-5	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-5	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-5	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-5	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-5	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-5	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-5	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-5	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-5	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-5	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-5	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-5	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-5	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-5	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-5	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-5	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-5	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-5	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-5	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-5	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-5	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
MW-5	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
MW-5	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-5	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-5	9/11/2017	Bis(2-ethylhexyl)phthalate	5.7	10	4.8	55.64	ug/L
MW-5	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-5	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-5	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-5	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-5	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-5	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-5	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
MW-5	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-5	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-5	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-5	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-5	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-5	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-5	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-5	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-5	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-5	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-5	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-5	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-5	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-5	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-5	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-5	9/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-5	9/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-5	9/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-5	9/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Aniline	ND	10	6.2	13	ug/L
MW-5	9/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-5	9/17/2018	Benzoic Acid	7	20	6.3	75000	ug/L
MW-5	9/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-5	9/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-5	9/17/2018	Isophorone	ND	10	6.2	781	ug/L
MW-5	9/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-5	9/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-5	9/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-5	9/17/2018	Phenanthrene	ND	10	6	170	ug/L
MW-5	9/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-5	9/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-5	9/17/2018	Fluorene	ND	10	6.3	288	ug/L
MW-5	9/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-5	9/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-5	9/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-5	9/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-5	9/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-5	9/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-5	9/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-5	9/17/2018	Naphthalene	ND	10	5	30	ug/L
MW-5	9/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-5	9/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-5	9/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-5	9/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-5	9/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-5	9/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-5	9/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-5	9/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-5	9/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-5	9/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-5	9/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-5	9/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-5	9/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-5	9/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-5	9/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-5	9/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-5	9/17/2018	Phenol	ND	10	6	5761	ug/L
MW-5	9/17/2018	Pyridine	ND	10	5.4	20	ug/L
MW-5	9/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-5	9/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-5	9/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-5	9/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-5	9/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-5	9/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-5	9/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-5	9/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-5	9/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-5	9/17/2018	Pyrene	ND	10	6.5	117	ug/L
MW-5	9/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-5	9/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-5	9/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-5	9/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-5	9/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-5	9/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-5	9/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-5	9/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-5	9/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-5	9/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-5	9/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-5	9/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-5	9/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-5	9/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-5	9/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-5	9/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-5	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-5	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-5	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-5	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-5	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-5	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-5	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-5	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-5	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-5	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-5	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-5	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-5	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-5	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-5	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-5	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-5	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-5	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-5	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-5	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-5	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-5	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-5	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-5	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-5	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-5	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-5	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-5	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-5	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-5	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-5	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-5	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-5	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-5	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-5	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-5	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-5	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-5	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-5	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-5	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-5	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-5	12/6/2018	Bis(2-ethylhexyl)phthalate	1.1	0.5	0.5	55.64	ug/L
MW-5	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-5	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-5	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-5	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-5	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-5	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-5	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-5	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-5	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-5	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-5	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-5	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-5	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-5	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-5	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-5	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-5	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-5	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-5	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	8/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-5	8/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-5	8/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-5	8/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-5	8/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-5	8/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-5	8/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-5	8/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-5	8/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-5	8/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-5	8/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-5	8/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-5	8/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-5	8/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-5	8/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-5	8/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-5	8/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-5	8/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-5	8/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-5	8/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-5	8/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-5	8/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-5	8/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-5	8/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-5	8/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-5	8/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-5	8/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-5	8/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-5	8/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-5	8/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-5	8/14/2019	Aniline	ND	10	3.579516	13	ug/L
MW-5	8/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-5	8/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-5	8/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-5	8/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-5	8/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-5	8/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-5	8/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-5	8/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-5	8/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-5	8/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-5	8/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-5	8/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-5	8/14/2019	Bis(2-ethylhexyl)phthalate	18	10	4.302128	55.64	ug/L
MW-5	8/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-5	8/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-5	8/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-5	8/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-5	8/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-5	8/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-5	8/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-5	8/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-5	8/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-5	8/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-5	8/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-5	8/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-5	8/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-5	8/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-5	8/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-5	8/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-5	8/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-5	8/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-5	8/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-5	8/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-5	8/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-5	8/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-5	8/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-5	8/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-5	8/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-5	8/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-5	8/14/2019	Pyridine	ND	10	9.603136	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-5	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-5	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-5	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-5	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-5	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-5	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-5	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-5	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-5	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-5	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-5	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-5	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-5	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-5	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-5	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-5	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-5	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-5	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-5	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-5	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-5	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-5	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-5	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-5	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-5	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-5	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-5	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-5	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-5	9/21/2020	Benzoic Acid	3.3	0.51	0.2	75000	ug/L
MW-5	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-5	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-5	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-5	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-5	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-5	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-5	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-5	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-5	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-5	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MW-5	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-5	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-5	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-5	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-5	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-5	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-5	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MW-5	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-5	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-5	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-5	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-5	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-5	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-5	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-5	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-5	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-5	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-5	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-5	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-5	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
NAPIS-2	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	3/20/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	3/20/2012	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
NAPIS-2	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	3/20/2012	2-Methylphenol	15	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	3/20/2012	Phenol	78	10	2.5	5761	ug/L
NAPIS-2	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	3/20/2012	3,4-Methylphenol	34	10	2.9	NA	ug/L
NAPIS-2	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-2	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	6/12/2012	Phenol	16	10	2.5	5761	ug/L
NAPIS-2	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
NAPIS-2	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	8/21/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-2	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-2	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	12/5/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-2	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-2	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
NAPIS-2	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	6/12/2013	Isophorone	ND	10	1.8	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-2	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-2	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	3/10/2014	Fluorene	ND	10	2.9	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-2	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	3/10/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	6/5/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-2	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-2	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-2	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	6/5/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	9/11/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-2	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-2	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
NAPIS-2	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	9/11/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-2	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	11/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
NAPIS-2	11/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
NAPIS-2	11/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
NAPIS-2	11/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
NAPIS-2	11/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
NAPIS-2	11/11/2014	Aniline	*ND*	*50*	12	13	ug/L
NAPIS-2	11/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
NAPIS-2	11/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
NAPIS-2	11/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
NAPIS-2	11/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
NAPIS-2	11/11/2014	Isophorone	ND	50	15	781	ug/L
NAPIS-2	11/11/2014	Acenaphthene	ND	50	15	535	ug/L
NAPIS-2	11/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
NAPIS-2	11/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
NAPIS-2	11/11/2014	Phenanthrene	ND	50	13	170	ug/L
NAPIS-2	11/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
NAPIS-2	11/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
NAPIS-2	11/11/2014	Fluorene	ND	50	15	288	ug/L
NAPIS-2	11/11/2014	Carbazole	ND	50	14	NA	ug/L
NAPIS-2	11/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
NAPIS-2	11/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
NAPIS-2	11/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
NAPIS-2	11/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
NAPIS-2	11/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L
NAPIS-2	11/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	11/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
NAPIS-2	11/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
NAPIS-2	11/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
NAPIS-2	11/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
NAPIS-2	11/11/2014	2-Methylphenol	ND	50	14	NA	ug/L
NAPIS-2	11/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
NAPIS-2	11/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
NAPIS-2	11/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
NAPIS-2	11/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
NAPIS-2	11/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
NAPIS-2	11/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
NAPIS-2	11/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
NAPIS-2	11/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
NAPIS-2	11/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
NAPIS-2	11/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
NAPIS-2	11/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
NAPIS-2	11/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
NAPIS-2	11/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
NAPIS-2	11/11/2014	Phenol	ND	50	7.9	5761	ug/L
NAPIS-2	11/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
NAPIS-2	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
NAPIS-2	11/11/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
NAPIS-2	11/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
NAPIS-2	11/11/2014	Anthracene	ND	50	12	1721	ug/L
NAPIS-2	11/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
NAPIS-2	11/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
NAPIS-2	11/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
NAPIS-2	11/11/2014	Pyrene	ND	50	20	117	ug/L
NAPIS-2	11/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
NAPIS-2	11/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
NAPIS-2	11/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
NAPIS-2	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
NAPIS-2	11/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
NAPIS-2	11/11/2014	Fluoranthene	ND	50	15	802	ug/L
NAPIS-2	11/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
NAPIS-2	11/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
NAPIS-2	11/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
NAPIS-2	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
NAPIS-2	11/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
NAPIS-2	11/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
NAPIS-2	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
NAPIS-2	11/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
NAPIS-2	11/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-2	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
NAPIS-2	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
NAPIS-2	3/10/2015	Aniline	ND	10	4.2	13	ug/L
NAPIS-2	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
NAPIS-2	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
NAPIS-2	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
NAPIS-2	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
NAPIS-2	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
NAPIS-2	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
NAPIS-2	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
NAPIS-2	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
NAPIS-2	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
NAPIS-2	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
NAPIS-2	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
NAPIS-2	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
NAPIS-2	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
NAPIS-2	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
NAPIS-2	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
NAPIS-2	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
NAPIS-2	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
NAPIS-2	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
NAPIS-2	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
NAPIS-2	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
NAPIS-2	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
NAPIS-2	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
NAPIS-2	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
NAPIS-2	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
NAPIS-2	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
NAPIS-2	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
NAPIS-2	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
NAPIS-2	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
NAPIS-2	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
NAPIS-2	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
NAPIS-2	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
NAPIS-2	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
NAPIS-2	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
NAPIS-2	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
NAPIS-2	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
NAPIS-2	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
NAPIS-2	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
NAPIS-2	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
NAPIS-2	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
NAPIS-2	3/10/2015	Anthracene	ND	10	4	1721	ug/L
NAPIS-2	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
NAPIS-2	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
NAPIS-2	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
NAPIS-2	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
NAPIS-2	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
NAPIS-2	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
NAPIS-2	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
NAPIS-2	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
NAPIS-2	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
NAPIS-2	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
NAPIS-2	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
NAPIS-2	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
NAPIS-2	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
NAPIS-2	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
NAPIS-2	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
NAPIS-2	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-2	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-2	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-2	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-2	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-2	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-2	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-2	6/2/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-2	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-2	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-2	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-2	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-2	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-2	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-2	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-2	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-2	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-2	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-2	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-2	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-2	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-2	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-2	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-2	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-2	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-2	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-2	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-2	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-2	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-2	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-2	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-2	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-2	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-2	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-2	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-2	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-2	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-2	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-2	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-2	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-2	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-2	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-2	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-2	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-2	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-2	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-2	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-2	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-2	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-2	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-2	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-2	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-2	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-2	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-2	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-2	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-2	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-2	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-2	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-2	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-2	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-2	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-2	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-2	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-2	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-2	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-2	8/11/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-2	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-2	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-2	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-2	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-2	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-2	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-2	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-2	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-2	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-2	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-2	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-2	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-2	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-2	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-2	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-2	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-2	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-2	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-2	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-2	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-2	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-2	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-2	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-2	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-2	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-2	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-2	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-2	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-2	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-2	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-2	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-2	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-2	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-2	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-2	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-2	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-2	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-2	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-2	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-2	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-2	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-2	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-2	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-2	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-2	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-2	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-2	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-2	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-2	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-2	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-2	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
NAPIS-2	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
NAPIS-2	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
NAPIS-2	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
NAPIS-2	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
NAPIS-2	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
NAPIS-2	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
NAPIS-2	2/21/2017	Di-n-butylphthalate	3.4	10	2.4	885	ug/L
NAPIS-2	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
NAPIS-2	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
NAPIS-2	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
NAPIS-2	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
NAPIS-2	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
NAPIS-2	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
NAPIS-2	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
NAPIS-2	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
NAPIS-2	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
NAPIS-2	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
NAPIS-2	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
NAPIS-2	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
NAPIS-2	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
NAPIS-2	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
NAPIS-2	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
NAPIS-2	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
NAPIS-2	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
NAPIS-2	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
NAPIS-2	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
NAPIS-2	2/21/2017	Phenol	ND	10	2	5761	ug/L
NAPIS-2	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	2/21/2017	Bis(2-ethylhexyl)phthalate	8	10	2.6	55.64	ug/L
NAPIS-2	2/21/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
NAPIS-2	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
NAPIS-2	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
NAPIS-2	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
NAPIS-2	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
NAPIS-2	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
NAPIS-2	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
NAPIS-2	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
NAPIS-2	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
NAPIS-2	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
NAPIS-2	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
NAPIS-2	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
NAPIS-2	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
NAPIS-2	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
NAPIS-2	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
NAPIS-2	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
NAPIS-2	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
NAPIS-2	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-2	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-2	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-2	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-2	6/1/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-2	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-2	6/1/2017	Benzoic Acid	8.2	20	3.9	75000	ug/L
NAPIS-2	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-2	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-2	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-2	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-2	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-2	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
NAPIS-2	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-2	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-2	6/1/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-2	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-2	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-2	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-2	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-2	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-2	6/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-2	6/1/2017	Naphthalene	3.3	10	2.9	30	ug/L
NAPIS-2	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-2	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-2	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-2	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-2	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-2	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-2	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-2	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-2	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-2	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-2	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-2	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-2	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-2	6/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-2	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-2	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-2	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-2	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-2	6/1/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
NAPIS-2	6/1/2017	Di-n-octylphthalate	4.9	10	4.7	200	ug/L
NAPIS-2	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-2	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-2	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-2	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-2	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-2	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-2	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-2	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-2	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-2	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-2	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-2	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-2	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-2	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-2	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-2	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
NAPIS-2	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-2	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-2	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-2	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-2	9/5/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
NAPIS-2	9/5/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
NAPIS-2	9/5/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
NAPIS-2	9/5/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
NAPIS-2	9/5/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
NAPIS-2	9/5/2017	Aniline	*ND*	*50*	15	13	ug/L
NAPIS-2	9/5/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
NAPIS-2	9/5/2017	Benzoic Acid	40	100	20	75000	ug/L
NAPIS-2	9/5/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
NAPIS-2	9/5/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
NAPIS-2	9/5/2017	Isophorone	ND	50	22	781	ug/L
NAPIS-2	9/5/2017	Acenaphthene	ND	50	18	535	ug/L
NAPIS-2	9/5/2017	Diethylphthalate	ND	50	20	14801	ug/L
NAPIS-2	9/5/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
NAPIS-2	9/5/2017	Phenanthrene	ND	50	22	170	ug/L
NAPIS-2	9/5/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
NAPIS-2	9/5/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
NAPIS-2	9/5/2017	Fluorene	ND	50	20	288	ug/L
NAPIS-2	9/5/2017	Carbazole	ND	50	23	NA	ug/L
NAPIS-2	9/5/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
NAPIS-2	9/5/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
NAPIS-2	9/5/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
NAPIS-2	9/5/2017	2-Nitroaniline	ND	50	25	190	ug/L
NAPIS-2	9/5/2017	2-Nitrophenol	ND	50	26	NA	ug/L
NAPIS-2	9/5/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
NAPIS-2	9/5/2017	Naphthalene	*ND*	*50*	14	30	ug/L
NAPIS-2	9/5/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
NAPIS-2	9/5/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
NAPIS-2	9/5/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
NAPIS-2	9/5/2017	2-Methylphenol	ND	50	17	NA	ug/L
NAPIS-2	9/5/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
NAPIS-2	9/5/2017	2-Chlorophenol	ND	50	38	91	ug/L
NAPIS-2	9/5/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
NAPIS-2	9/5/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
NAPIS-2	9/5/2017	3-Nitroaniline	ND	50	22	NA	ug/L
NAPIS-2	9/5/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
NAPIS-2	9/5/2017	4-Nitrophenol	ND	50	27	NA	ug/L
NAPIS-2	9/5/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
NAPIS-2	9/5/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
NAPIS-2	9/5/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
NAPIS-2	9/5/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
NAPIS-2	9/5/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
NAPIS-2	9/5/2017	Phenol	ND	50	16	5761	ug/L
NAPIS-2	9/5/2017	Pyridine	*ND*	*50*	11	20	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
NAPIS-2	9/5/2017	Bis(2-ethylhexyl)phthalate	25	50	24	55.64	ug/L
NAPIS-2	9/5/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
NAPIS-2	9/5/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
NAPIS-2	9/5/2017	Anthracene	ND	50	18	1721	ug/L
NAPIS-2	9/5/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
NAPIS-2	9/5/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
NAPIS-2	9/5/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
NAPIS-2	9/5/2017	Pyrene	ND	50	22	117	ug/L
NAPIS-2	9/5/2017	Dimethylphthalate	ND	50	18	612	ug/L
NAPIS-2	9/5/2017	Dibenzofuran	ND	50	20	NA	ug/L
NAPIS-2	9/5/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
NAPIS-2	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
NAPIS-2	9/5/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
NAPIS-2	9/5/2017	Fluoranthene	ND	50	21	802	ug/L
NAPIS-2	9/5/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
NAPIS-2	9/5/2017	Acenaphthylene	ND	50	18	NA	ug/L
NAPIS-2	9/5/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
NAPIS-2	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
NAPIS-2	9/5/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
NAPIS-2	9/5/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
NAPIS-2	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
NAPIS-2	9/5/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
NAPIS-2	9/5/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
NAPIS-2	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-2	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-2	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-2	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-2	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-2	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-2	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-2	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-2	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-2	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-2	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-2	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-2	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-2	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-2	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-2	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-2	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-2	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-2	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-2	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-2	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-2	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-2	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-2	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-2	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-2	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-2	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-2	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-2	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-2	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-2	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-2	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-2	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-2	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-2	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-2	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-2	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-2	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-2	4/9/2019	Benzoic Acid	6.5	20	6.311561	75000	ug/L
NAPIS-2	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-2	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-2	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-2	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-2	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-2	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-2	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-2	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-2	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-2	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-2	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-2	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
NAPIS-2	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-2	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-2	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-2	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-2	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-2	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-2	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-2	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-2	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-2	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-2	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-2	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-2	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-2	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-2	4/9/2019	Phenol	29	10	5.977352	5761	ug/L
NAPIS-2	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-2	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-2	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-2	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-2	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-2	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-2	5/28/2019	1-Methylnaphthalene	**20**	10	3.069076	11.38	ug/L
NAPIS-2	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-2	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-2	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-2	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-2	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-2	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-2	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-2	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-2	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-2	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-2	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-2	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-2	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-2	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-2	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-2	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-2	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-2	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-2	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-2	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-2	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-2	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-2	5/28/2019	Acenaphthene	4.9	10	2.955891	535	ug/L
NAPIS-2	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-2	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-2	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-2	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-2	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-2	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-2	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-2	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-2	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-2	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-2	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-2	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-2	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-2	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-2	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-2	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-2	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-2	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-2	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-2	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-2	5/28/2019	Fluorene	4	10	2.888488	288	ug/L
NAPIS-2	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-2	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-2	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-2	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-2	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-2	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-2	5/28/2019	Naphthalene	9.4	10	4.12221	30	ug/L
NAPIS-2	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-2	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-2	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-2	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-2	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-2	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-2	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-2	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-2	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-2	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-2	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-2	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-2	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-2	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-2	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-2	8/22/2019	1-Methylnaphthalene	**16**	10	3.069076	11.38	ug/L
NAPIS-2	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-2	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-2	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-2	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-2	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-2	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-2	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-2	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-2	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-2	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-2	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-2	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-2	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-2	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-2	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-2	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-2	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-2	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-2	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-2	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-2	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-2	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-2	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-2	8/22/2019	Acenaphthene	4.8	10	2.955891	535	ug/L
NAPIS-2	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-2	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-2	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-2	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-2	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-2	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-2	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-2	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-2	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-2	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-2	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-2	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-2	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-2	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-2	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-2	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-2	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-2	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-2	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-2	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-2	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-2	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-2	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-2	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-2	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-2	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-2	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-2	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-2	8/22/2019	Naphthalene	13	10	4.12221	30	ug/L
NAPIS-2	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-2	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-2	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-2	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-2	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-2	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-2	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-2	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-2	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	**44**	3	1.234	11.38	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	2	3	1.229	35.1	ug/L
NAPIS-2	10/21/2019	Acenaphthene	2.6	3	1.14	535	ug/L
NAPIS-2	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
NAPIS-2	10/21/2019	Anthracene	0.78	0.6	0.161	1721	ug/L
NAPIS-2	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
NAPIS-2	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
NAPIS-2	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
NAPIS-2	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
NAPIS-2	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
NAPIS-2	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
NAPIS-2	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
NAPIS-2	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
NAPIS-2	10/21/2019	Fluorene	1.3	0.8	0.338	288	ug/L
NAPIS-2	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
NAPIS-2	10/21/2019	Naphthalene	**51**	3	1.159	30	ug/L
NAPIS-2	10/21/2019	Phenanthrene	1.4	0.6	0.152	170	ug/L
NAPIS-2	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
NAPIS-2	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
NAPIS-2	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
NAPIS-2	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
NAPIS-2	10/21/2019	1,4-Dioxane	2.3	1	1	4.59	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	**23**	0.5	0.5	11.38	ug/L
NAPIS-2	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
NAPIS-2	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
NAPIS-2	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
NAPIS-2	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
NAPIS-2	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
NAPIS-2	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
NAPIS-2	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
NAPIS-2	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
NAPIS-2	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	3.8	0.5	0.5	35.1	ug/L
NAPIS-2	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
NAPIS-2	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
NAPIS-2	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
NAPIS-2	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
NAPIS-2	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Acenaphthene	6	0.5	0.5	535	ug/L
NAPIS-2	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
NAPIS-2	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
NAPIS-2	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
NAPIS-2	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
NAPIS-2	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
NAPIS-2	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
NAPIS-2	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
NAPIS-2	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
NAPIS-2	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
NAPIS-2	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
NAPIS-2	10/21/2019	Bis(2-ethylhexyl)phthalate	0.73	0.5	0.5	55.64	ug/L
NAPIS-2	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
NAPIS-2	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
NAPIS-2	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
NAPIS-2	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
NAPIS-2	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
NAPIS-2	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
NAPIS-2	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
NAPIS-2	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
NAPIS-2	10/21/2019	Fluorene	2.6	0.5	0.5	288	ug/L
NAPIS-2	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
NAPIS-2	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
NAPIS-2	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
NAPIS-2	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
NAPIS-2	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
NAPIS-2	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
NAPIS-2	10/21/2019	Naphthalene	18	0.5	0.5	30	ug/L
NAPIS-2	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
NAPIS-2	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
NAPIS-2	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
NAPIS-2	10/21/2019	Phenanthrene	0.7	0.5	0.5	170	ug/L
NAPIS-2	10/21/2019	Phenol	2.4	0.5	0.5	5761	ug/L
NAPIS-2	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
NAPIS-2	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
NAPIS-2	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
NAPIS-2	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
NAPIS-2	3/4/2020	1,4-Dioxane	*2.81*	*5*	1	4.59	ug/L
NAPIS-2	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
NAPIS-2	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
NAPIS-2	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
NAPIS-2	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
NAPIS-2	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
NAPIS-2	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
NAPIS-2	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
NAPIS-2	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
NAPIS-2	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
NAPIS-2	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
NAPIS-2	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
NAPIS-2	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
NAPIS-2	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
NAPIS-2	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
NAPIS-2	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
NAPIS-2	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
NAPIS-2	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
NAPIS-2	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
NAPIS-2	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
NAPIS-2	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
NAPIS-2	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
NAPIS-2	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
NAPIS-2	3/4/2020	Benzoic Acid	2.39	2.5	0.5	75000	ug/L
NAPIS-2	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
NAPIS-2	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
NAPIS-2	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
NAPIS-2	3/4/2020	Bis(2-ethylhexyl)phthalate	5.2	2.5	1	55.64	ug/L
NAPIS-2	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
NAPIS-2	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
NAPIS-2	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
NAPIS-2	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
NAPIS-2	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
NAPIS-2	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
NAPIS-2	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
NAPIS-2	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
NAPIS-2	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
NAPIS-2	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
NAPIS-2	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
NAPIS-2	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
NAPIS-2	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
NAPIS-2	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
NAPIS-2	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
NAPIS-2	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
NAPIS-2	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
NAPIS-2	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
NAPIS-2	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
NAPIS-2	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
NAPIS-2	3/4/2020	Phenol	65	2.5	0.5	5761	ug/L
NAPIS-2	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
NAPIS-2	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
NAPIS-2	9/22/2020	1,2,4-Trichlorobenzene	ND	0.67	0.13	70	ug/L
NAPIS-2	9/22/2020	1,2-Dichlorobenzene	ND	0.67	0.13	600	ug/L
NAPIS-2	9/22/2020	1,3-Dichlorobenzene	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	1,4-Dichlorobenzene	ND	0.67	0.13	75	ug/L
NAPIS-2	9/22/2020	1,4-Dioxane	4.2	0.67	0.13	4.59	ug/L
NAPIS-2	9/22/2020	1-Methylnaphthalene	**19**	0.67	0.13	11.38	ug/L
NAPIS-2	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.67	0.13	240	ug/L
NAPIS-2	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	2,4,5-Trichlorophenol	ND	0.67	0.13	1166	ug/L
NAPIS-2	9/22/2020	2,4,6-Trichlorophenol	ND	0.67	0.13	11.9*	ug/L
NAPIS-2	9/22/2020	2,4-Dichlorophenol	ND	0.67	0.13	45.3	ug/L
NAPIS-2	9/22/2020	2,4-Dimethylphenol	ND	0.67	0.13	354	ug/L
NAPIS-2	9/22/2020	2,4-Dinitrophenol	ND	0.67	0.13	38.7	ug/L
NAPIS-2	9/22/2020	2,4-Dinitrotoluene	ND	0.67	0.13	45.3	ug/L
NAPIS-2	9/22/2020	2,6-Dinitrotoluene	ND	0.27	0.13	0.485	ug/L
NAPIS-2	9/22/2020	2-Chloronaphthalene	ND	0.67	0.13	733	ug/L
NAPIS-2	9/22/2020	2-Chlorophenol	ND	0.67	0.13	91	ug/L
NAPIS-2	9/22/2020	2-Methylnaphthalene	2	0.67	0.13	35.1	ug/L
NAPIS-2	9/22/2020	2-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	2-Nitroaniline	ND	0.67	0.13	190	ug/L
NAPIS-2	9/22/2020	2-Nitrophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	3,4-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	3,3-Dichlorobenzidine	ND	0.67	0.13	1.25	ug/L
NAPIS-2	9/22/2020	3-Nitroaniline	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.67	0.13	1.52	ug/L
NAPIS-2	9/22/2020	4-Bromophenyl-phenylether	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Chloro-3-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Chloroaniline	*ND*	*0.67*	0.13	0.37	ug/L
NAPIS-2	9/22/2020	4-Chlorophenyl-phenylether	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Nitroaniline	ND	0.67	0.13	3.8	ug/L
NAPIS-2	9/22/2020	4-Nitrophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Acenaphthene	4.1	0.67	0.13	535	ug/L
NAPIS-2	9/22/2020	Acenaphthylene	0.39	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Aniline	ND	0.67	0.13	13	ug/L
NAPIS-2	9/22/2020	Anthracene	ND	0.67	0.13	1721	ug/L
NAPIS-2	9/22/2020	Benzo(a)anthracene	*ND*	*0.13*	0.067	0.12	ug/L
NAPIS-2	9/22/2020	Benzidine	*ND*	*0.67*	0.33	0.0011	ug/L
NAPIS-2	9/22/2020	Benzo(a)pyrene	ND	0.13	0.067	0.2	ug/L
NAPIS-2	9/22/2020	Benzo(b)fluoranthene	ND	0.13	0.067	0.34	ug/L
NAPIS-2	9/22/2020	Benzo(g,h,i)perylene	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Benzo(k)fluoranthene	ND	0.67	0.13	3.43	ug/L
NAPIS-2	9/22/2020	Benzoic Acid	ND	0.67	0.27	75000	ug/L
NAPIS-2	9/22/2020	Benzyl Alcohol	ND	0.67	0.27	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.67	0.13	59	ug/L
NAPIS-2	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.67*	0.13	0.137	ug/L
NAPIS-2	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.67	0.13	9.81	ug/L
NAPIS-2	9/22/2020	Bis(2-ethylhexyl)phthalate	1	0.67	0.27	55.64	ug/L
NAPIS-2	9/22/2020	Butylbenzylphthalate	ND	0.67	0.27	16	ug/L
NAPIS-2	9/22/2020	Carbazole	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Chrysene	ND	0.67	0.13	34.3	ug/L
NAPIS-2	9/22/2020	Di-n-butylphthalate	ND	0.67	0.27	885	ug/L
NAPIS-2	9/22/2020	Di-n-octylphthalate	ND	0.67	0.27	200	ug/L
NAPIS-2	9/22/2020	Dibenzo(a,h)anthracene	ND	0.04	0.027	NA	ug/L
NAPIS-2	9/22/2020	Dibenzofuran	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Diethylphthalate	ND	0.67	0.27	14801	ug/L
NAPIS-2	9/22/2020	Dimethylphthalate	ND	0.67	0.27	612	ug/L
NAPIS-2	9/22/2020	Fluoranthene	ND	0.67	0.13	802	ug/L
NAPIS-2	9/22/2020	Fluorene	1.5	0.67	0.13	288	ug/L
NAPIS-2	9/22/2020	Hexachlorobenzene	*ND*	*0.67*	0.13	0.0976	ug/L
NAPIS-2	9/22/2020	Hexachlorobutadiene	*ND*	*0.67*	0.13	0.14	ug/L
NAPIS-2	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.67*	0.33	0.41	ug/L
NAPIS-2	9/22/2020	Hexachloroethane	ND	0.67	0.13	3.28	ug/L
NAPIS-2	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.27	0.13	0.343	ug/L
NAPIS-2	9/22/2020	Isophorone	ND	0.67	0.13	781	ug/L
NAPIS-2	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.67*	0.13	0.011	ug/L
NAPIS-2	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.67*	0.13	0.0049	ug/L
NAPIS-2	9/22/2020	N-Nitrosodiphenylamine	ND	0.67	0.13	122	ug/L
NAPIS-2	9/22/2020	Naphthalene	13	0.67	0.13	30	ug/L
NAPIS-2	9/22/2020	Nitrobenzene	ND	0.67	0.13	1.4	ug/L
NAPIS-2	9/22/2020	Pentachlorophenol	ND	0.67	0.27	1	ug/L
NAPIS-2	9/22/2020	Phenanthrene	ND	0.67	0.13	170	ug/L
NAPIS-2	9/22/2020	Phenol	40	0.67	0.13	5761	ug/L
NAPIS-2	9/22/2020	Pyrene	ND	0.67	0.13	117	ug/L
NAPIS-2	9/22/2020	Pyridine	ND	0.67	0.27	20	ug/L
NAPIS-2	12/17/2020	Acenaphthene	ND	10.6	0.169	535	ug/L
NAPIS-2	12/17/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
NAPIS-2	12/17/2020	Anthracene	ND	10.6	0.19	1721	ug/L
NAPIS-2	12/17/2020	Benzo(a)anthracene	*ND*	*10.6*	0.19	0.12	ug/L
NAPIS-2	12/17/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
NAPIS-2	12/17/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.158	0.34	ug/L
NAPIS-2	12/17/2020	Benzo(g,h,i)perylene	ND	10.6	0.243	NA	ug/L
NAPIS-2	12/17/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.169	3.43	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.169	59	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.85	0.137	ug/L
NAPIS-2	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.28	55.64	ug/L
NAPIS-2	12/17/2020	4-Bromophenyl-phenylether	ND	10.6	0.211	NA	ug/L
NAPIS-2	12/17/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
NAPIS-2	12/17/2020	Carbazole	ND	10.6	0.243	NA	ug/L
NAPIS-2	12/17/2020	4-Chloroaniline	*ND*	*10.6*	3.59	0.37	ug/L
NAPIS-2	12/17/2020	4-Chloro-3-Methylphenol	ND	10.6	4.02	NA	ug/L
NAPIS-2	12/17/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
NAPIS-2	12/17/2020	2-Chlorophenol	ND	10.6	2.32	91	ug/L
NAPIS-2	12/17/2020	4-Chlorophenyl-phenylether	ND	10.6	2.11	NA	ug/L
NAPIS-2	12/17/2020	1,3-Dichlorobenzene	ND	10.6	0.19	NA	ug/L
NAPIS-2	12/17/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
NAPIS-2	12/17/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
NAPIS-2	12/17/2020	1,4-Dichlorobenzene	ND	10.6	0.169	75	ug/L
NAPIS-2	12/17/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
NAPIS-2	12/17/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.75	1.25	ug/L
NAPIS-2	12/17/2020	2,4-Dichlorophenol	ND	10.6	3.17	45.3	ug/L
NAPIS-2	12/17/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
NAPIS-2	12/17/2020	2,4-Dimethylphenol	ND	10.6	3.7	354	ug/L
NAPIS-2	12/17/2020	Di-n-butylphthalate	ND	10.6	2.85	885	ug/L
NAPIS-2	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.69	1.52	ug/L
NAPIS-2	12/17/2020	2,4-Dinitrophenol	ND	31.7	3.59	38.7	ug/L
NAPIS-2	12/17/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
NAPIS-2	12/17/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
NAPIS-2	12/17/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
NAPIS-2	12/17/2020	Fluoranthene	ND	10.6	0.19	802	ug/L
NAPIS-2	12/17/2020	Fluorene	ND	10.6	0.19	288	ug/L
NAPIS-2	12/17/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
NAPIS-2	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.75	0.41	ug/L
NAPIS-2	12/17/2020	Hexachloroethane	*ND*	*10.6*	4.44	3.28	ug/L
NAPIS-2	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.232	0.343	ug/L
NAPIS-2	12/17/2020	Isophorone	ND	10.6	0.148	781	ug/L
NAPIS-2	12/17/2020	2-Methylphenol	ND	10.6	1.9	NA	ug/L
NAPIS-2	12/17/2020	Naphthalene	ND	10.6	0.18	30	ug/L
NAPIS-2	12/17/2020	2-Nitroaniline	ND	10.6	2.32	190	ug/L
NAPIS-2	12/17/2020	3-Nitroaniline	ND	10.6	1.9	NA	ug/L
NAPIS-2	12/17/2020	4-Nitroaniline	*ND*	*10.6*	1.58	3.8	ug/L
NAPIS-2	12/17/2020	Nitrobenzene	*ND*	*10.6*	0.137	1.4	ug/L
NAPIS-2	12/17/2020	2-Nitrophenol	ND	10.6	5.49	NA	ug/L
NAPIS-2	12/17/2020	4-Nitrophenol	ND	10.6	2.22	NA	ug/L
NAPIS-2	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.49	0.011	ug/L
NAPIS-2	12/17/2020	N-Nitrosodiphenylamine	ND	10.6	0.19	122	ug/L
NAPIS-2	12/17/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
NAPIS-2	12/17/2020	Phenanthrene	ND	10.6	0.19	170	ug/L
NAPIS-2	12/17/2020	Phenol	23	10.6	2.75	5761	ug/L
NAPIS-2	12/17/2020	Pyrene	ND	10.6	0.222	117	ug/L
NAPIS-2	12/17/2020	2,4,5-Trichlorophenol	ND	10.6	3.91	1166	ug/L
NAPIS-2	12/17/2020	2,4,6-Trichlorophenol	ND	10.6	3.7	11.9*	ug/L
NAPIS-2	12/17/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
NAPIS-2	12/17/2020	Aniline	ND	10.6	4.02	13	ug/L
NAPIS-2	12/17/2020	Benzoic Acid	ND	31.7	7.71	75000	ug/L
NAPIS-2	12/17/2020	Benzyl Alcohol	ND	10.6	2.11	2000	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.169	9.81	ug/L
NAPIS-2	12/17/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.7	0.0049	ug/L
NAPIS-2	12/17/2020	Pyridine	ND	10.6	3.38	20	ug/L
NAPIS-2	12/17/2020	1,2,4-Trichlorobenzene	ND	10.6	0.19	70	ug/L
NAPIS-2	12/17/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
NAPIS-2	12/17/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
NAPIS-3	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	3/20/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	3/20/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	3/20/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-3	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	3/20/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	3/20/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-3	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	6/12/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
NAPIS-3	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	10/2/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	10/2/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	10/2/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	10/2/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	10/2/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	10/2/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	10/2/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	10/2/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	10/2/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	10/2/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	10/2/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	10/2/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	10/2/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	10/2/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	10/2/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	10/2/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	10/2/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	10/2/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	10/2/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	10/2/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	10/2/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	10/2/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	10/2/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	10/2/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	10/2/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	10/2/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	10/2/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	10/2/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	10/2/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	10/2/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	10/2/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	10/2/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	10/2/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	10/2/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-3	10/2/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	10/2/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	10/2/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	10/2/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	10/2/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	10/2/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	10/2/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	10/2/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	10/2/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	10/2/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	10/2/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	10/2/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	10/2/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	10/2/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	10/2/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	10/2/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	10/2/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	10/2/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	10/2/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	10/2/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	10/2/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	10/2/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	10/2/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	10/2/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	10/2/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	10/2/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	10/2/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	10/2/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	10/2/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	10/2/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	10/2/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	12/5/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-3	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
NAPIS-3	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-3	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-3	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	3/10/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	6/5/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-3	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	6/5/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	9/11/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-3	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
NAPIS-3	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	9/11/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	11/13/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	11/13/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	11/13/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	11/13/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	11/13/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-3	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
NAPIS-3	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
NAPIS-3	3/10/2015	Aniline	ND	10	4.2	13	ug/L
NAPIS-3	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
NAPIS-3	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
NAPIS-3	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
NAPIS-3	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
NAPIS-3	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
NAPIS-3	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
NAPIS-3	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
NAPIS-3	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
NAPIS-3	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
NAPIS-3	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
NAPIS-3	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
NAPIS-3	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
NAPIS-3	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
NAPIS-3	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
NAPIS-3	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
NAPIS-3	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
NAPIS-3	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
NAPIS-3	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
NAPIS-3	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
NAPIS-3	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
NAPIS-3	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
NAPIS-3	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
NAPIS-3	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
NAPIS-3	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
NAPIS-3	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
NAPIS-3	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
NAPIS-3	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
NAPIS-3	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
NAPIS-3	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
NAPIS-3	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
NAPIS-3	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
NAPIS-3	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
NAPIS-3	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
NAPIS-3	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
NAPIS-3	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
NAPIS-3	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
NAPIS-3	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
NAPIS-3	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
NAPIS-3	3/10/2015	Anthracene	ND	10	4	1721	ug/L
NAPIS-3	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
NAPIS-3	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
NAPIS-3	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
NAPIS-3	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
NAPIS-3	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
NAPIS-3	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
NAPIS-3	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
NAPIS-3	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
NAPIS-3	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
NAPIS-3	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
NAPIS-3	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
NAPIS-3	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
NAPIS-3	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
NAPIS-3	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
NAPIS-3	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
NAPIS-3	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
NAPIS-3	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-3	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-3	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-3	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-3	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-3	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-3	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-3	6/2/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-3	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-3	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-3	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-3	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-3	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-3	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-3	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-3	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-3	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-3	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-3	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-3	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-3	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-3	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-3	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-3	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-3	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-3	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-3	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-3	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-3	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-3	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-3	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-3	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-3	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-3	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-3	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-3	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-3	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-3	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-3	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-3	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-3	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-3	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-3	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-3	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-3	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-3	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-3	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-3	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-3	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-3	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-3	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-3	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-3	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-3	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-3	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-3	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-3	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-3	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-3	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-3	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-3	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-3	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-3	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-3	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-3	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-3	8/11/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-3	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-3	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-3	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-3	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-3	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-3	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-3	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-3	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-3	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-3	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-3	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-3	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-3	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-3	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-3	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-3	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-3	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-3	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-3	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-3	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-3	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-3	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-3	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-3	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-3	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-3	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-3	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-3	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-3	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-3	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-3	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-3	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-3	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-3	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-3	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-3	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-3	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-3	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-3	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-3	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-3	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-3	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-3	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-3	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-3	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-3	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-3	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-3	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-3	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-3	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-3	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-3	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
NAPIS-3	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
NAPIS-3	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
NAPIS-3	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
NAPIS-3	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
NAPIS-3	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
NAPIS-3	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
NAPIS-3	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
NAPIS-3	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
NAPIS-3	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
NAPIS-3	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
NAPIS-3	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
NAPIS-3	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
NAPIS-3	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
NAPIS-3	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
NAPIS-3	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
NAPIS-3	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
NAPIS-3	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
NAPIS-3	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
NAPIS-3	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
NAPIS-3	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
NAPIS-3	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
NAPIS-3	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
NAPIS-3	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
NAPIS-3	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
NAPIS-3	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
NAPIS-3	2/21/2017	Phenol	ND	10	2	5761	ug/L
NAPIS-3	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
NAPIS-3	2/21/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
NAPIS-3	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
NAPIS-3	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
NAPIS-3	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
NAPIS-3	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
NAPIS-3	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
NAPIS-3	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
NAPIS-3	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
NAPIS-3	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
NAPIS-3	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
NAPIS-3	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
NAPIS-3	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
NAPIS-3	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
NAPIS-3	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
NAPIS-3	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
NAPIS-3	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
NAPIS-3	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
NAPIS-3	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/2/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-3	6/2/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-3	6/2/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-3	6/2/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-3	6/2/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-3	6/2/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-3	6/2/2017	Benzoic Acid	6.7	20	3.9	75000	ug/L
NAPIS-3	6/2/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-3	6/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	6/2/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-3	6/2/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-3	6/2/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-3	6/2/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-3	6/2/2017	Phenanthrene	ND	10	4.3	170	ug/L
NAPIS-3	6/2/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-3	6/2/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-3	6/2/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-3	6/2/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-3	6/2/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-3	6/2/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-3	6/2/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-3	6/2/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-3	6/2/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-3	6/2/2017	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	6/2/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-3	6/2/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-3	6/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-3	6/2/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-3	6/2/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-3	6/2/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-3	6/2/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-3	6/2/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-3	6/2/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-3	6/2/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-3	6/2/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-3	6/2/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-3	6/2/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-3	6/2/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-3	6/2/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-3	6/2/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-3	6/2/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-3	6/2/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-3	6/2/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
NAPIS-3	6/2/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
NAPIS-3	6/2/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-3	6/2/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-3	6/2/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-3	6/2/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-3	6/2/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-3	6/2/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-3	6/2/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-3	6/2/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	6/2/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-3	6/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-3	6/2/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-3	6/2/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-3	6/2/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-3	6/2/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-3	6/2/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-3	6/2/2017	4,6-Dinitro-2-methylphenol	**5**	20	3.9	1.52	ug/L
NAPIS-3	6/2/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	6/2/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-3	6/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-3	6/2/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-3	6/2/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-3	9/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-3	9/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-3	9/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-3	9/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-3	9/5/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-3	9/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-3	9/5/2017	Benzoic Acid	7.7	20	3.9	75000	ug/L
NAPIS-3	9/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-3	9/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	9/5/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-3	9/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-3	9/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-3	9/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-3	9/5/2017	Phenanthrene	ND	10	4.3	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-3	9/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-3	9/5/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-3	9/5/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-3	9/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-3	9/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-3	9/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-3	9/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-3	9/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-3	9/5/2017	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	9/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-3	9/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-3	9/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-3	9/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-3	9/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-3	9/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-3	9/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-3	9/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-3	9/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-3	9/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-3	9/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-3	9/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-3	9/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-3	9/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-3	9/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-3	9/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-3	9/5/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-3	9/5/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-3	9/5/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
NAPIS-3	9/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
NAPIS-3	9/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-3	9/5/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-3	9/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-3	9/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-3	9/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-3	9/5/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-3	9/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-3	9/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	9/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-3	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-3	9/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-3	9/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-3	9/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-3	9/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-3	9/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-3	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
NAPIS-3	9/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	9/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-3	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-3	9/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-3	9/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-3	4/9/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
NAPIS-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-3	4/9/2019	Phenol	ND	10	5.977352	5761	ug/L
NAPIS-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-3	4/9/2019	Benzoic Acid	6.6	20	6.311561	75000	ug/L
NAPIS-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
NAPIS-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-3	4/9/2019	Phenol	ND	10	5.977352	5761	ug/L
NAPIS-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-3	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-3	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-3	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-3	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
NAPIS-3	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-3	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-3	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-3	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-3	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-3	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-3	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-3	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-3	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-3	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-3	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-3	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-3	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-3	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-3	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-3	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-3	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-3	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-3	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-3	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-3	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-3	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-3	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
NAPIS-3	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-3	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-3	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-3	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-3	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-3	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-3	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-3	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-3	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-3	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-3	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-3	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-3	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-3	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-3	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-3	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-3	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-3	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-3	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-3	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-3	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-3	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-3	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-3	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-3	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-3	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-3	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-3	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-3	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-3	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
NAPIS-3	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-3	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-3	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-3	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-3	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-3	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-3	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-3	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-3	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-3	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-3	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-3	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-3	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-3	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-3	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
NAPIS-3	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-3	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-3	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-3	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-3	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-3	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-3	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-3	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-3	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-3	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-3	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-3	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-3	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-3	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-3	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-3	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-3	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-3	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-3	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-3	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-3	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-3	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-3	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-3	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
NAPIS-3	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-3	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-3	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-3	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-3	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-3	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-3	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-3	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-3	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-3	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-3	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-3	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-3	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-3	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-3	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-3	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-3	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-3	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-3	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-3	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-3	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-3	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-3	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-3	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-3	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-3	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-3	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-3	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-3	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
NAPIS-3	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-3	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-3	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-3	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-3	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-3	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-3	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-3	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-3	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
NAPIS-3	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
NAPIS-3	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
NAPIS-3	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
NAPIS-3	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
NAPIS-3	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
NAPIS-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
NAPIS-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
NAPIS-3	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
NAPIS-3	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
NAPIS-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
NAPIS-3	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
NAPIS-3	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
NAPIS-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	3	1.159	30	ug/L
NAPIS-3	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
NAPIS-3	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
NAPIS-3	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
NAPIS-3	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
NAPIS-3	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
NAPIS-3	10/21/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
NAPIS-3	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
NAPIS-3	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
NAPIS-3	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
NAPIS-3	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
NAPIS-3	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
NAPIS-3	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
NAPIS-3	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
NAPIS-3	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
NAPIS-3	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
NAPIS-3	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
NAPIS-3	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
NAPIS-3	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
NAPIS-3	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
NAPIS-3	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
NAPIS-3	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
NAPIS-3	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
NAPIS-3	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
NAPIS-3	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
NAPIS-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
NAPIS-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
NAPIS-3	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
NAPIS-3	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
NAPIS-3	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
NAPIS-3	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
NAPIS-3	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
NAPIS-3	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
NAPIS-3	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
NAPIS-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
NAPIS-3	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
NAPIS-3	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
NAPIS-3	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
NAPIS-3	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
NAPIS-3	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
NAPIS-3	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
NAPIS-3	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
NAPIS-3	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
NAPIS-3	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
NAPIS-3	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
NAPIS-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
NAPIS-3	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
NAPIS-3	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
NAPIS-3	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
NAPIS-3	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
NAPIS-3	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
NAPIS-3	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
NAPIS-3	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
NAPIS-3	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
NAPIS-3	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
NAPIS-3	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
NAPIS-3	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
NAPIS-3	3/4/2020	1,4-Dioxane	0.75	1	0.2	4.59	ug/L
NAPIS-3	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
NAPIS-3	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
NAPIS-3	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
NAPIS-3	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
NAPIS-3	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
NAPIS-3	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
NAPIS-3	3/4/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
NAPIS-3	3/4/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
NAPIS-3	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
NAPIS-3	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
NAPIS-3	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
NAPIS-3	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
NAPIS-3	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
NAPIS-3	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
NAPIS-3	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
NAPIS-3	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
NAPIS-3	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
NAPIS-3	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
NAPIS-3	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
NAPIS-3	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
NAPIS-3	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
NAPIS-3	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
NAPIS-3	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
NAPIS-3	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
NAPIS-3	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
NAPIS-3	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
NAPIS-3	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
NAPIS-3	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
NAPIS-3	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
NAPIS-3	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
NAPIS-3	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
NAPIS-3	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
NAPIS-3	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
NAPIS-3	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
NAPIS-3	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
NAPIS-3	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
NAPIS-3	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
NAPIS-3	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
NAPIS-3	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
NAPIS-3	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
NAPIS-3	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
NAPIS-3	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
NAPIS-3	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
NAPIS-3	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
NAPIS-3	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
NAPIS-3	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
NAPIS-3	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
NAPIS-3	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L
NAPIS-3	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
NAPIS-3	9/22/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
NAPIS-3	9/22/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
NAPIS-3	9/22/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
NAPIS-3	9/22/2020	1,4-Dioxane	1.7	0.52	0.1	4.59	ug/L
NAPIS-3	9/22/2020	1-Methylnaphthalene	0.11	0.52	0.1	11.38	ug/L
NAPIS-3	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
NAPIS-3	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
NAPIS-3	9/22/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
NAPIS-3	9/22/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
NAPIS-3	9/22/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
NAPIS-3	9/22/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
NAPIS-3	9/22/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
NAPIS-3	9/22/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
NAPIS-3	9/22/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
NAPIS-3	9/22/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
NAPIS-3	9/22/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
NAPIS-3	9/22/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
NAPIS-3	9/22/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
NAPIS-3	9/22/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
NAPIS-3	9/22/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
NAPIS-3	9/22/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
NAPIS-3	9/22/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Acenaphthene	0.37	0.52	0.1	535	ug/L
NAPIS-3	9/22/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Aniline	ND	0.52	0.1	13	ug/L
NAPIS-3	9/22/2020	Anthracene	ND	0.52	0.1	1721	ug/L
NAPIS-3	9/22/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
NAPIS-3	9/22/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
NAPIS-3	9/22/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
NAPIS-3	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
NAPIS-3	9/22/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
NAPIS-3	9/22/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
NAPIS-3	9/22/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
NAPIS-3	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
NAPIS-3	9/22/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
NAPIS-3	9/22/2020	Carbazole	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
NAPIS-3	9/22/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
NAPIS-3	9/22/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
NAPIS-3	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
NAPIS-3	9/22/2020	Dibenzofuran	0.2	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
NAPIS-3	9/22/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
NAPIS-3	9/22/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
NAPIS-3	9/22/2020	Fluorene	ND	0.52	0.1	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/22/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
NAPIS-3	9/22/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
NAPIS-3	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
NAPIS-3	9/22/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
NAPIS-3	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
NAPIS-3	9/22/2020	Isophorone	ND	0.52	0.1	781	ug/L
NAPIS-3	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
NAPIS-3	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
NAPIS-3	9/22/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
NAPIS-3	9/22/2020	Naphthalene	0.21	0.52	0.1	30	ug/L
NAPIS-3	9/22/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
NAPIS-3	9/22/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
NAPIS-3	9/22/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
NAPIS-3	9/22/2020	Phenol	ND	0.52	0.1	5761	ug/L
NAPIS-3	9/22/2020	Pyrene	ND	0.52	0.1	117	ug/L
NAPIS-3	9/22/2020	Pyridine	0.5	0.52	0.21	20	ug/L
NAPIS-3	12/17/2020	Acenaphthene	ND	11.2	0.18	535	ug/L
NAPIS-3	12/17/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
NAPIS-3	12/17/2020	Anthracene	ND	11.2	0.202	1721	ug/L
NAPIS-3	12/17/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
NAPIS-3	12/17/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
NAPIS-3	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
NAPIS-3	12/17/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
NAPIS-3	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.18	3.43	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.18	59	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
NAPIS-3	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.62	55.64	ug/L
NAPIS-3	12/17/2020	4-Bromophenyl-phenylether	ND	11.2	0.225	NA	ug/L
NAPIS-3	12/17/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
NAPIS-3	12/17/2020	Carbazole	ND	11.2	0.258	NA	ug/L
NAPIS-3	12/17/2020	4-Chloroaniline	*ND*	*11.2*	3.82	0.37	ug/L
NAPIS-3	12/17/2020	4-Chloro-3-Methylphenol	ND	11.2	4.27	NA	ug/L
NAPIS-3	12/17/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
NAPIS-3	12/17/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
NAPIS-3	12/17/2020	4-Chlorophenyl-phenylether	ND	11.2	2.25	NA	ug/L
NAPIS-3	12/17/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
NAPIS-3	12/17/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
NAPIS-3	12/17/2020	Dibenzo(a,h)anthracene	ND	11.2	0.27	NA	ug/L
NAPIS-3	12/17/2020	1,4-Dichlorobenzene	ND	11.2	0.18	75	ug/L
NAPIS-3	12/17/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
NAPIS-3	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.92	1.25	ug/L
NAPIS-3	12/17/2020	2,4-Dichlorophenol	ND	11.2	3.37	45.3	ug/L
NAPIS-3	12/17/2020	Diethylphthalate	ND	11.2	0.27	14801	ug/L
NAPIS-3	12/17/2020	2,4-Dimethylphenol	ND	11.2	3.93	354	ug/L
NAPIS-3	12/17/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
NAPIS-3	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.8	1.52	ug/L
NAPIS-3	12/17/2020	2,4-Dinitrophenol	ND	33.7	3.82	38.7	ug/L
NAPIS-3	12/17/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
NAPIS-3	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
NAPIS-3	12/17/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
NAPIS-3	12/17/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
NAPIS-3	12/17/2020	Fluorene	ND	11.2	0.202	288	ug/L
NAPIS-3	12/17/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
NAPIS-3	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.5*	2.92	0.41	ug/L
NAPIS-3	12/17/2020	Hexachloroethane	*ND*	*11.2*	4.72	3.28	ug/L
NAPIS-3	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
NAPIS-3	12/17/2020	Isophorone	ND	11.2	0.157	781	ug/L
NAPIS-3	12/17/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
NAPIS-3	12/17/2020	Naphthalene	ND	11.2	0.191	30	ug/L
NAPIS-3	12/17/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
NAPIS-3	12/17/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
NAPIS-3	12/17/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
NAPIS-3	12/17/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
NAPIS-3	12/17/2020	2-Nitrophenol	ND	11.2	5.84	NA	ug/L
NAPIS-3	12/17/2020	4-Nitrophenol	ND	11.2	2.36	NA	ug/L
NAPIS-3	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.71	0.011	ug/L
NAPIS-3	12/17/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
NAPIS-3	12/17/2020	Pentachlorophenol	*ND*	*22.5*	1.57	1	ug/L
NAPIS-3	12/17/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
NAPIS-3	12/17/2020	Phenol	ND	11.2	2.92	5761	ug/L
NAPIS-3	12/17/2020	Pyrene	ND	11.2	0.236	117	ug/L
NAPIS-3	12/17/2020	2,4,5-Trichlorophenol	ND	11.2	4.16	1166	ug/L
NAPIS-3	12/17/2020	2,4,6-Trichlorophenol	ND	11.2	3.93	11.9*	ug/L
NAPIS-3	12/17/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
NAPIS-3	12/17/2020	Aniline	ND	11.2	4.27	13	ug/L
NAPIS-3	12/17/2020	Benzoic Acid	ND	33.7	8.2	75000	ug/L
NAPIS-3	12/17/2020	Benzyl Alcohol	ND	11.2	2.25	2000	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.18	9.81	ug/L
NAPIS-3	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.93	0.0049	ug/L
NAPIS-3	12/17/2020	Pyridine	ND	11.2	3.59	20	ug/L
NAPIS-3	12/17/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
NAPIS-3	12/17/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
NAPIS-3	12/17/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
OAPIS-1	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
OAPIS-1	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OAPIS-1	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	3/18/2013	Phenol	10	10	2.2	5761	ug/L
OAPIS-1	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
OAPIS-1	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	6/12/2013	2,4-Dimethylphenol	23	10	2.9	354	ug/L
OAPIS-1	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OAPIS-1	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	9/3/2013	2,4-Dimethylphenol	22	10	2.9	354	ug/L
OAPIS-1	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	11/11/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	11/11/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	11/11/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	11/11/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	11/11/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	11/11/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	11/11/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OAPIS-1	11/11/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	11/11/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	11/11/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	11/11/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	11/11/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	11/11/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	11/11/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	11/11/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	11/11/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	11/11/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	11/11/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	11/11/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	11/11/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	11/11/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	11/11/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	11/11/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	11/11/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	11/11/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	11/11/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	11/11/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	11/11/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	11/11/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	11/11/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	11/11/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	11/11/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/11/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	11/11/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	11/11/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	11/11/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	11/11/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	11/11/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OAPIS-1	11/11/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	11/11/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	11/11/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	11/11/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	11/11/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	11/11/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	11/11/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	11/11/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	11/11/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	11/11/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	11/11/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	11/11/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	11/11/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	11/11/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	11/11/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	11/11/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	11/11/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	11/11/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	11/11/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	11/11/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	11/11/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	11/11/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	11/11/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	11/11/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	11/11/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	11/11/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	11/11/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OAPIS-1	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
OAPIS-1	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OAPIS-1	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
OAPIS-1	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	3/10/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	6/5/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OAPIS-1	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OAPIS-1	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	6/5/2014	2,4-Dimethylphenol	32	10	3.1	354	ug/L
OAPIS-1	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
OAPIS-1	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	6/5/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	9/12/2014	1-Methylnaphthalene	**16**	10	3.6	11.38	ug/L
OAPIS-1	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OAPIS-1	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	9/12/2014	2,4-Dimethylphenol	28	10	3.1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OAPIS-1	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	9/12/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	11/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
OAPIS-1	11/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
OAPIS-1	11/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
OAPIS-1	11/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
OAPIS-1	11/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
OAPIS-1	11/11/2014	Aniline	*ND*	*50*	12	13	ug/L
OAPIS-1	11/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
OAPIS-1	11/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
OAPIS-1	11/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
OAPIS-1	11/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
OAPIS-1	11/11/2014	Isophorone	ND	50	15	781	ug/L
OAPIS-1	11/11/2014	Acenaphthene	ND	50	15	535	ug/L
OAPIS-1	11/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
OAPIS-1	11/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
OAPIS-1	11/11/2014	Phenanthrene	ND	50	13	170	ug/L
OAPIS-1	11/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
OAPIS-1	11/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
OAPIS-1	11/11/2014	Fluorene	ND	50	15	288	ug/L
OAPIS-1	11/11/2014	Carbazole	ND	50	14	NA	ug/L
OAPIS-1	11/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
OAPIS-1	11/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OAPIS-1	11/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
OAPIS-1	11/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
OAPIS-1	11/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L
OAPIS-1	11/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
OAPIS-1	11/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
OAPIS-1	11/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
OAPIS-1	11/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
OAPIS-1	11/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OAPIS-1	11/11/2014	2-Methylphenol	ND	50	14	NA	ug/L
OAPIS-1	11/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
OAPIS-1	11/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
OAPIS-1	11/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
OAPIS-1	11/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
OAPIS-1	11/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
OAPIS-1	11/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
OAPIS-1	11/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
OAPIS-1	11/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
OAPIS-1	11/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
OAPIS-1	11/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	11/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
OAPIS-1	11/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OAPIS-1	11/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
OAPIS-1	11/11/2014	Phenol	ND	50	7.9	5761	ug/L
OAPIS-1	11/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OAPIS-1	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
OAPIS-1	11/11/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
OAPIS-1	11/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
OAPIS-1	11/11/2014	Anthracene	ND	50	12	1721	ug/L
OAPIS-1	11/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
OAPIS-1	11/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
OAPIS-1	11/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
OAPIS-1	11/11/2014	Pyrene	ND	50	20	117	ug/L
OAPIS-1	11/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
OAPIS-1	11/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
OAPIS-1	11/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
OAPIS-1	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
OAPIS-1	11/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OAPIS-1	11/11/2014	Fluoranthene	ND	50	15	802	ug/L
OAPIS-1	11/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
OAPIS-1	11/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
OAPIS-1	11/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
OAPIS-1	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
OAPIS-1	11/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
OAPIS-1	11/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
OAPIS-1	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
OAPIS-1	11/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
OAPIS-1	11/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OAPIS-1	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
OAPIS-1	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
OAPIS-1	3/10/2015	Aniline	ND	10	4.2	13	ug/L
OAPIS-1	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
OAPIS-1	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
OAPIS-1	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
OAPIS-1	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
OAPIS-1	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
OAPIS-1	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
OAPIS-1	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
OAPIS-1	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
OAPIS-1	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
OAPIS-1	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
OAPIS-1	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
OAPIS-1	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
OAPIS-1	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
OAPIS-1	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
OAPIS-1	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
OAPIS-1	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
OAPIS-1	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
OAPIS-1	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
OAPIS-1	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
OAPIS-1	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
OAPIS-1	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
OAPIS-1	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
OAPIS-1	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
OAPIS-1	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
OAPIS-1	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
OAPIS-1	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
OAPIS-1	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
OAPIS-1	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
OAPIS-1	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
OAPIS-1	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
OAPIS-1	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
OAPIS-1	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
OAPIS-1	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
OAPIS-1	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
OAPIS-1	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
OAPIS-1	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
OAPIS-1	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
OAPIS-1	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
OAPIS-1	3/10/2015	Anthracene	ND	10	4	1721	ug/L
OAPIS-1	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
OAPIS-1	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
OAPIS-1	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
OAPIS-1	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
OAPIS-1	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
OAPIS-1	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
OAPIS-1	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
OAPIS-1	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
OAPIS-1	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
OAPIS-1	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
OAPIS-1	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
OAPIS-1	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
OAPIS-1	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
OAPIS-1	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
OAPIS-1	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
OAPIS-1	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
OAPIS-1	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OAPIS-1	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OAPIS-1	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Aniline	ND	10	1.5	13	ug/L
OAPIS-1	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OAPIS-1	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
OAPIS-1	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OAPIS-1	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OAPIS-1	6/2/2015	Isophorone	ND	10	2	781	ug/L
OAPIS-1	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
OAPIS-1	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OAPIS-1	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OAPIS-1	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
OAPIS-1	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OAPIS-1	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OAPIS-1	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
OAPIS-1	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
OAPIS-1	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OAPIS-1	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OAPIS-1	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OAPIS-1	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OAPIS-1	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OAPIS-1	6/2/2015	1-Methylnaphthalene	**23**	10	1.8	11.38	ug/L
OAPIS-1	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
OAPIS-1	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OAPIS-1	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OAPIS-1	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OAPIS-1	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OAPIS-1	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OAPIS-1	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OAPIS-1	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OAPIS-1	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OAPIS-1	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OAPIS-1	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OAPIS-1	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OAPIS-1	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OAPIS-1	6/2/2015	2,4-Dimethylphenol	29	10	1.9	354	ug/L
OAPIS-1	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OAPIS-1	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OAPIS-1	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
OAPIS-1	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OAPIS-1	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OAPIS-1	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OAPIS-1	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
OAPIS-1	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OAPIS-1	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OAPIS-1	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OAPIS-1	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
OAPIS-1	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
OAPIS-1	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OAPIS-1	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OAPIS-1	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OAPIS-1	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
OAPIS-1	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OAPIS-1	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OAPIS-1	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
OAPIS-1	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OAPIS-1	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OAPIS-1	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OAPIS-1	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OAPIS-1	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OAPIS-1	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OAPIS-1	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Aniline	ND	10	1.5	13	ug/L
OAPIS-1	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OAPIS-1	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
OAPIS-1	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OAPIS-1	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OAPIS-1	8/11/2015	Isophorone	ND	10	2	781	ug/L
OAPIS-1	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
OAPIS-1	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OAPIS-1	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OAPIS-1	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
OAPIS-1	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OAPIS-1	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OAPIS-1	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
OAPIS-1	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OAPIS-1	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OAPIS-1	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OAPIS-1	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OAPIS-1	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OAPIS-1	8/11/2015	1-Methylnaphthalene	**21**	10	1.8	11.38	ug/L
OAPIS-1	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
OAPIS-1	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OAPIS-1	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OAPIS-1	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OAPIS-1	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OAPIS-1	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OAPIS-1	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OAPIS-1	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OAPIS-1	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OAPIS-1	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OAPIS-1	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OAPIS-1	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OAPIS-1	8/11/2015	2,4-Dimethylphenol	24	10	1.9	354	ug/L
OAPIS-1	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OAPIS-1	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OAPIS-1	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
OAPIS-1	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OAPIS-1	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OAPIS-1	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OAPIS-1	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OAPIS-1	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
OAPIS-1	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OAPIS-1	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OAPIS-1	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OAPIS-1	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
OAPIS-1	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
OAPIS-1	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OAPIS-1	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OAPIS-1	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OAPIS-1	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
OAPIS-1	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OAPIS-1	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OAPIS-1	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
OAPIS-1	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OAPIS-1	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OAPIS-1	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OAPIS-1	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OAPIS-1	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OAPIS-1	10/29/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
OAPIS-1	10/29/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
OAPIS-1	10/29/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
OAPIS-1	10/29/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
OAPIS-1	10/29/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Aniline	*ND*	*100*	15	13	ug/L
OAPIS-1	10/29/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
OAPIS-1	10/29/2015	Benzoic Acid	ND	200	10	75000	ug/L
OAPIS-1	10/29/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
OAPIS-1	10/29/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
OAPIS-1	10/29/2015	Isophorone	ND	100	20	781	ug/L
OAPIS-1	10/29/2015	Acenaphthene	ND	100	19	535	ug/L
OAPIS-1	10/29/2015	Diethylphthalate	ND	100	17	14801	ug/L
OAPIS-1	10/29/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
OAPIS-1	10/29/2015	Phenanthrene	ND	100	20	170	ug/L
OAPIS-1	10/29/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/29/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
OAPIS-1	10/29/2015	Fluorene	ND	100	17	288	ug/L
OAPIS-1	10/29/2015	Carbazole	ND	100	15	NA	ug/L
OAPIS-1	10/29/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
OAPIS-1	10/29/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
OAPIS-1	10/29/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
OAPIS-1	10/29/2015	2-Nitroaniline	ND	100	18	190	ug/L
OAPIS-1	10/29/2015	2-Nitrophenol	ND	100	12	NA	ug/L
OAPIS-1	10/29/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
OAPIS-1	10/29/2015	Naphthalene	*ND*	*100*	18	30	ug/L
OAPIS-1	10/29/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
OAPIS-1	10/29/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
OAPIS-1	10/29/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
OAPIS-1	10/29/2015	2-Methylphenol	ND	100	12	NA	ug/L
OAPIS-1	10/29/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
OAPIS-1	10/29/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
OAPIS-1	10/29/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
OAPIS-1	10/29/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
OAPIS-1	10/29/2015	3-Nitroaniline	ND	100	15	NA	ug/L
OAPIS-1	10/29/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
OAPIS-1	10/29/2015	4-Nitrophenol	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
OAPIS-1	10/29/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
OAPIS-1	10/29/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
OAPIS-1	10/29/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
OAPIS-1	10/29/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
OAPIS-1	10/29/2015	Phenol	ND	100	11	5761	ug/L
OAPIS-1	10/29/2015	Pyridine	*ND*	*100*	17	20	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
OAPIS-1	10/29/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
OAPIS-1	10/29/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
OAPIS-1	10/29/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
OAPIS-1	10/29/2015	Anthracene	ND	100	16	1721	ug/L
OAPIS-1	10/29/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
OAPIS-1	10/29/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
OAPIS-1	10/29/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
OAPIS-1	10/29/2015	Pyrene	ND	100	23	117	ug/L
OAPIS-1	10/29/2015	Dimethylphthalate	ND	100	20	612	ug/L
OAPIS-1	10/29/2015	Dibenzofuran	ND	100	19	NA	ug/L
OAPIS-1	10/29/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
OAPIS-1	10/29/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
OAPIS-1	10/29/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
OAPIS-1	10/29/2015	Fluoranthene	ND	100	15	802	ug/L
OAPIS-1	10/29/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
OAPIS-1	10/29/2015	Acenaphthylene	ND	100	19	NA	ug/L
OAPIS-1	10/29/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
OAPIS-1	10/29/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
OAPIS-1	10/29/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
OAPIS-1	10/29/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
OAPIS-1	10/29/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
OAPIS-1	10/29/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
OAPIS-1	10/29/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
OAPIS-1	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
OAPIS-1	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
OAPIS-1	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
OAPIS-1	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
OAPIS-1	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
OAPIS-1	3/1/2016	Aniline	ND	10	9.8	13	ug/L
OAPIS-1	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
OAPIS-1	3/1/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
OAPIS-1	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
OAPIS-1	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
OAPIS-1	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
OAPIS-1	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
OAPIS-1	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
OAPIS-1	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
OAPIS-1	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
OAPIS-1	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
OAPIS-1	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
OAPIS-1	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
OAPIS-1	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
OAPIS-1	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
OAPIS-1	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
OAPIS-1	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
OAPIS-1	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
OAPIS-1	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
OAPIS-1	3/1/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
OAPIS-1	3/1/2016	Naphthalene	ND	10	5.9	30	ug/L
OAPIS-1	3/1/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
OAPIS-1	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
OAPIS-1	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
OAPIS-1	3/1/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
OAPIS-1	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
OAPIS-1	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
OAPIS-1	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
OAPIS-1	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
OAPIS-1	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
OAPIS-1	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
OAPIS-1	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
OAPIS-1	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
OAPIS-1	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
OAPIS-1	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
OAPIS-1	3/1/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
OAPIS-1	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
OAPIS-1	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
OAPIS-1	3/1/2016	Phenol	ND	10	5.1	5761	ug/L
OAPIS-1	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
OAPIS-1	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
OAPIS-1	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OAPIS-1	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
OAPIS-1	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
OAPIS-1	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
OAPIS-1	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
OAPIS-1	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
OAPIS-1	3/1/2016	Pyrene	ND	10	5.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
OAPIS-1	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
OAPIS-1	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
OAPIS-1	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
OAPIS-1	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
OAPIS-1	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
OAPIS-1	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
OAPIS-1	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
OAPIS-1	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
OAPIS-1	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
OAPIS-1	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
OAPIS-1	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
OAPIS-1	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
OAPIS-1	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
OAPIS-1	3/1/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
OAPIS-1	6/7/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
OAPIS-1	6/7/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
OAPIS-1	6/7/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	6/7/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Aniline	*ND*	*50*	12	13	ug/L
OAPIS-1	6/7/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
OAPIS-1	6/7/2016	Benzoic Acid	ND	100	13	75000	ug/L
OAPIS-1	6/7/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
OAPIS-1	6/7/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
OAPIS-1	6/7/2016	Isophorone	ND	50	13	781	ug/L
OAPIS-1	6/7/2016	Acenaphthene	ND	50	13	535	ug/L
OAPIS-1	6/7/2016	Diethylphthalate	ND	50	14	14801	ug/L
OAPIS-1	6/7/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
OAPIS-1	6/7/2016	Phenanthrene	ND	50	13	170	ug/L
OAPIS-1	6/7/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
OAPIS-1	6/7/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
OAPIS-1	6/7/2016	Fluorene	ND	50	14	288	ug/L
OAPIS-1	6/7/2016	Carbazole	ND	50	11	NA	ug/L
OAPIS-1	6/7/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
OAPIS-1	6/7/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OAPIS-1	6/7/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
OAPIS-1	6/7/2016	2-Nitroaniline	ND	50	14	190	ug/L
OAPIS-1	6/7/2016	2-Nitrophenol	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	1-Methylnaphthalene	**21**	50	15	11.38	ug/L
OAPIS-1	6/7/2016	Naphthalene	*ND*	*50*	13	30	ug/L
OAPIS-1	6/7/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
OAPIS-1	6/7/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
OAPIS-1	6/7/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OAPIS-1	6/7/2016	2-Methylphenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
OAPIS-1	6/7/2016	2-Chlorophenol	ND	50	11	91	ug/L
OAPIS-1	6/7/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
OAPIS-1	6/7/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
OAPIS-1	6/7/2016	3-Nitroaniline	ND	50	15	NA	ug/L
OAPIS-1	6/7/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
OAPIS-1	6/7/2016	4-Nitrophenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
OAPIS-1	6/7/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	6/7/2016	2,4-Dimethylphenol	28	50	15	354	ug/L
OAPIS-1	6/7/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OAPIS-1	6/7/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
OAPIS-1	6/7/2016	Phenol	ND	50	9.9	5761	ug/L
OAPIS-1	6/7/2016	Pyridine	*ND*	*50*	11	20	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OAPIS-1	6/7/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
OAPIS-1	6/7/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
OAPIS-1	6/7/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
OAPIS-1	6/7/2016	Anthracene	ND	50	12	1721	ug/L
OAPIS-1	6/7/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OAPIS-1	6/7/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
OAPIS-1	6/7/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
OAPIS-1	6/7/2016	Pyrene	ND	50	15	117	ug/L
OAPIS-1	6/7/2016	Dimethylphthalate	ND	50	12	612	ug/L
OAPIS-1	6/7/2016	Dibenzofuran	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
OAPIS-1	6/7/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
OAPIS-1	6/7/2016	Fluoranthene	ND	50	13	802	ug/L
OAPIS-1	6/7/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
OAPIS-1	6/7/2016	Acenaphthylene	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
OAPIS-1	6/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
OAPIS-1	6/7/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
OAPIS-1	6/7/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
OAPIS-1	6/7/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
OAPIS-1	6/7/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
OAPIS-1	6/7/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
OAPIS-1	9/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	9/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	9/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	9/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	9/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	9/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	9/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OAPIS-1	9/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	9/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	9/1/2016	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	9/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	9/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	9/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	9/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	9/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	9/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	9/1/2016	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	9/1/2016	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	9/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	9/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	9/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	9/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	9/1/2016	1-Methylnaphthalene	**23**	10	2.9	11.38	ug/L
OAPIS-1	9/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OAPIS-1	9/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	9/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	9/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	9/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	9/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	9/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	9/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	9/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	9/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	9/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	9/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	9/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	9/1/2016	2,4-Dimethylphenol	11	10	3	354	ug/L
OAPIS-1	9/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	9/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	9/1/2016	Phenol	ND	10	2	5761	ug/L
OAPIS-1	9/1/2016	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	9/1/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
OAPIS-1	9/1/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
OAPIS-1	9/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	9/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	9/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	9/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	9/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	9/1/2016	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	9/1/2016	Dimethylphthalate	6	10	2.4	612	ug/L
OAPIS-1	9/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	9/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	9/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	9/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	9/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OAPIS-1	9/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	9/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	9/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	9/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	9/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	9/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	9/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	9/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	11/14/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	11/14/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	11/14/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	11/14/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	11/14/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	11/14/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
OAPIS-1	11/14/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	11/14/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	11/14/2016	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	11/14/2016	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	11/14/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	11/14/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	11/14/2016	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	11/14/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	11/14/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	11/14/2016	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	11/14/2016	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	11/14/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	11/14/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	11/14/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	11/14/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	11/14/2016	1-Methylnaphthalene	**19**	10	2.9	11.38	ug/L
OAPIS-1	11/14/2016	Naphthalene	3.3	10	2.6	30	ug/L
OAPIS-1	11/14/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	11/14/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	11/14/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	11/14/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	11/14/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	11/14/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	11/14/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	11/14/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	11/14/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	11/14/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	11/14/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	11/14/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	11/14/2016	2,4-Dimethylphenol	19	10	3	354	ug/L
OAPIS-1	11/14/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	11/14/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	11/14/2016	Phenol	ND	10	2	5761	ug/L
OAPIS-1	11/14/2016	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	11/14/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
OAPIS-1	11/14/2016	Di-n-octylphthalate	7.1	10	2	200	ug/L
OAPIS-1	11/14/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	11/14/2016	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	11/14/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	11/14/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	11/14/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	11/14/2016	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	11/14/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OAPIS-1	11/14/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	11/14/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	11/14/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	11/14/2016	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	11/14/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/14/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	11/14/2016	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	11/14/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	11/14/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	11/14/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	11/14/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	11/14/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
OAPIS-1	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	2/21/2017	1-Methylnaphthalene	10	10	2.9	11.38	ug/L
OAPIS-1	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
OAPIS-1	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	2/21/2017	2,4-Dimethylphenol	13	10	3	354	ug/L
OAPIS-1	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	2/21/2017	Phenol	ND	10	2	5761	ug/L
OAPIS-1	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	2/21/2017	Bis(2-ethylhexyl)phthalate	7.8	10	2.6	55.64	ug/L
OAPIS-1	2/21/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
OAPIS-1	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
OAPIS-1	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OAPIS-1	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OAPIS-1	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OAPIS-1	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OAPIS-1	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OAPIS-1	6/1/2017	Aniline	ND	10	3.1	13	ug/L
OAPIS-1	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OAPIS-1	6/1/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
OAPIS-1	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OAPIS-1	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OAPIS-1	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
OAPIS-1	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
OAPIS-1	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
OAPIS-1	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OAPIS-1	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
OAPIS-1	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OAPIS-1	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OAPIS-1	6/1/2017	Fluorene	ND	10	4	288	ug/L
OAPIS-1	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OAPIS-1	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OAPIS-1	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OAPIS-1	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OAPIS-1	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OAPIS-1	6/1/2017	1-Methylnaphthalene	5.3	10	3.3	11.38	ug/L
OAPIS-1	6/1/2017	Naphthalene	ND	10	2.9	30	ug/L
OAPIS-1	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OAPIS-1	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OAPIS-1	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OAPIS-1	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OAPIS-1	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OAPIS-1	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OAPIS-1	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OAPIS-1	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OAPIS-1	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OAPIS-1	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OAPIS-1	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OAPIS-1	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OAPIS-1	6/1/2017	2,4-Dimethylphenol	7.3	10	2.8	354	ug/L
OAPIS-1	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OAPIS-1	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OAPIS-1	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
OAPIS-1	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OAPIS-1	6/1/2017	Bis(2-ethylhexyl)phthalate	10	10	4.8	55.64	ug/L
OAPIS-1	6/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OAPIS-1	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OAPIS-1	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
OAPIS-1	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OAPIS-1	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OAPIS-1	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OAPIS-1	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
OAPIS-1	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OAPIS-1	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OAPIS-1	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OAPIS-1	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OAPIS-1	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
OAPIS-1	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OAPIS-1	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OAPIS-1	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
OAPIS-1	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OAPIS-1	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OAPIS-1	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OAPIS-1	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OAPIS-1	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OAPIS-1	9/5/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
OAPIS-1	9/5/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
OAPIS-1	9/5/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
OAPIS-1	9/5/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
OAPIS-1	9/5/2017	Aniline	*ND*	*100*	31	13	ug/L
OAPIS-1	9/5/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
OAPIS-1	9/5/2017	Benzoic Acid	ND	200	39	75000	ug/L
OAPIS-1	9/5/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
OAPIS-1	9/5/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
OAPIS-1	9/5/2017	Isophorone	ND	100	44	781	ug/L
OAPIS-1	9/5/2017	Acenaphthene	ND	100	36	535	ug/L
OAPIS-1	9/5/2017	Diethylphthalate	ND	100	40	14801	ug/L
OAPIS-1	9/5/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
OAPIS-1	9/5/2017	Phenanthrene	ND	100	43	170	ug/L
OAPIS-1	9/5/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
OAPIS-1	9/5/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
OAPIS-1	9/5/2017	Fluorene	ND	100	40	288	ug/L
OAPIS-1	9/5/2017	Carbazole	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
OAPIS-1	9/5/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
OAPIS-1	9/5/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
OAPIS-1	9/5/2017	2-Nitroaniline	ND	100	49	190	ug/L
OAPIS-1	9/5/2017	2-Nitrophenol	ND	100	52	NA	ug/L
OAPIS-1	9/5/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
OAPIS-1	9/5/2017	Naphthalene	*ND*	*100*	29	30	ug/L
OAPIS-1	9/5/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
OAPIS-1	9/5/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
OAPIS-1	9/5/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
OAPIS-1	9/5/2017	2-Methylphenol	ND	100	33	NA	ug/L
OAPIS-1	9/5/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
OAPIS-1	9/5/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
OAPIS-1	9/5/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
OAPIS-1	9/5/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
OAPIS-1	9/5/2017	3-Nitroaniline	ND	100	43	NA	ug/L
OAPIS-1	9/5/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
OAPIS-1	9/5/2017	4-Nitrophenol	ND	100	55	NA	ug/L
OAPIS-1	9/5/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
OAPIS-1	9/5/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
OAPIS-1	9/5/2017	2,4-Dimethylphenol	32	100	28	354	ug/L
OAPIS-1	9/5/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
OAPIS-1	9/5/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
OAPIS-1	9/5/2017	Phenol	ND	100	31	5761	ug/L
OAPIS-1	9/5/2017	Pyridine	*ND*	*100*	23	20	ug/L
OAPIS-1	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
OAPIS-1	9/5/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
OAPIS-1	9/5/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
OAPIS-1	9/5/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
OAPIS-1	9/5/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
OAPIS-1	9/5/2017	Anthracene	ND	100	35	1721	ug/L
OAPIS-1	9/5/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
OAPIS-1	9/5/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
OAPIS-1	9/5/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
OAPIS-1	9/5/2017	Pyrene	ND	100	44	117	ug/L
OAPIS-1	9/5/2017	Dimethylphthalate	ND	100	36	612	ug/L
OAPIS-1	9/5/2017	Dibenzofuran	ND	100	41	NA	ug/L
OAPIS-1	9/5/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
OAPIS-1	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
OAPIS-1	9/5/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
OAPIS-1	9/5/2017	Fluoranthene	ND	100	43	802	ug/L
OAPIS-1	9/5/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
OAPIS-1	9/5/2017	Acenaphthylene	ND	100	35	NA	ug/L
OAPIS-1	9/5/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
OAPIS-1	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
OAPIS-1	9/5/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
OAPIS-1	9/5/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
OAPIS-1	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
OAPIS-1	9/5/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
OAPIS-1	9/5/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
OAPIS-1	12/4/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
OAPIS-1	12/4/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
OAPIS-1	12/4/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
OAPIS-1	12/4/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	12/4/2017	Aniline	*ND*	*50*	15	13	ug/L
OAPIS-1	12/4/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
OAPIS-1	12/4/2017	Benzoic Acid	24	100	20	75000	ug/L
OAPIS-1	12/4/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
OAPIS-1	12/4/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
OAPIS-1	12/4/2017	Isophorone	ND	50	22	781	ug/L
OAPIS-1	12/4/2017	Acenaphthene	ND	50	18	535	ug/L
OAPIS-1	12/4/2017	Diethylphthalate	ND	50	20	14801	ug/L
OAPIS-1	12/4/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
OAPIS-1	12/4/2017	Phenanthrene	ND	50	22	170	ug/L
OAPIS-1	12/4/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
OAPIS-1	12/4/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
OAPIS-1	12/4/2017	Fluorene	ND	50	20	288	ug/L
OAPIS-1	12/4/2017	Carbazole	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
OAPIS-1	12/4/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
OAPIS-1	12/4/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
OAPIS-1	12/4/2017	2-Nitroaniline	ND	50	25	190	ug/L
OAPIS-1	12/4/2017	2-Nitrophenol	ND	50	26	NA	ug/L
OAPIS-1	12/4/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
OAPIS-1	12/4/2017	Naphthalene	*ND*	*50*	14	30	ug/L
OAPIS-1	12/4/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
OAPIS-1	12/4/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
OAPIS-1	12/4/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
OAPIS-1	12/4/2017	2-Methylphenol	ND	50	17	NA	ug/L
OAPIS-1	12/4/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
OAPIS-1	12/4/2017	2-Chlorophenol	ND	50	38	91	ug/L
OAPIS-1	12/4/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
OAPIS-1	12/4/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
OAPIS-1	12/4/2017	3-Nitroaniline	ND	50	22	NA	ug/L
OAPIS-1	12/4/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
OAPIS-1	12/4/2017	4-Nitrophenol	ND	50	27	NA	ug/L
OAPIS-1	12/4/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
OAPIS-1	12/4/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
OAPIS-1	12/4/2017	2,4-Dimethylphenol	34	50	14	354	ug/L
OAPIS-1	12/4/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
OAPIS-1	12/4/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
OAPIS-1	12/4/2017	Phenol	ND	50	16	5761	ug/L
OAPIS-1	12/4/2017	Pyridine	*ND*	*50*	11	20	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
OAPIS-1	12/4/2017	Bis(2-ethylhexyl)phthalate	44	50	24	55.64	ug/L
OAPIS-1	12/4/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
OAPIS-1	12/4/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
OAPIS-1	12/4/2017	Anthracene	ND	50	18	1721	ug/L
OAPIS-1	12/4/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
OAPIS-1	12/4/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
OAPIS-1	12/4/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
OAPIS-1	12/4/2017	Pyrene	ND	50	22	117	ug/L
OAPIS-1	12/4/2017	Dimethylphthalate	ND	50	18	612	ug/L
OAPIS-1	12/4/2017	Dibenzofuran	ND	50	20	NA	ug/L
OAPIS-1	12/4/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
OAPIS-1	12/4/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
OAPIS-1	12/4/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OAPIS-1	12/4/2017	Fluoranthene	ND	50	21	802	ug/L
OAPIS-1	12/4/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
OAPIS-1	12/4/2017	Acenaphthylene	ND	50	18	NA	ug/L
OAPIS-1	12/4/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
OAPIS-1	12/4/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
OAPIS-1	12/4/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
OAPIS-1	12/4/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
OAPIS-1	12/4/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
OAPIS-1	12/4/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
OAPIS-1	12/4/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
OAPIS-1	2/9/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OAPIS-1	2/9/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OAPIS-1	2/9/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OAPIS-1	2/9/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OAPIS-1	2/9/2018	Aniline	ND	10	3.1	13	ug/L
OAPIS-1	2/9/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OAPIS-1	2/9/2018	Benzoic Acid	8.3	20	3.9	75000	ug/L
OAPIS-1	2/9/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OAPIS-1	2/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OAPIS-1	2/9/2018	Isophorone	ND	10	4.4	781	ug/L
OAPIS-1	2/9/2018	Acenaphthene	ND	10	3.6	535	ug/L
OAPIS-1	2/9/2018	Diethylphthalate	ND	10	4	14801	ug/L
OAPIS-1	2/9/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OAPIS-1	2/9/2018	Phenanthrene	ND	10	4.3	170	ug/L
OAPIS-1	2/9/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OAPIS-1	2/9/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OAPIS-1	2/9/2018	Fluorene	ND	10	4	288	ug/L
OAPIS-1	2/9/2018	Carbazole	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OAPIS-1	2/9/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OAPIS-1	2/9/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OAPIS-1	2/9/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OAPIS-1	2/9/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OAPIS-1	2/9/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OAPIS-1	2/9/2018	Naphthalene	ND	10	2.9	30	ug/L
OAPIS-1	2/9/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OAPIS-1	2/9/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OAPIS-1	2/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OAPIS-1	2/9/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OAPIS-1	2/9/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OAPIS-1	2/9/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OAPIS-1	2/9/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OAPIS-1	2/9/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OAPIS-1	2/9/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OAPIS-1	2/9/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OAPIS-1	2/9/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OAPIS-1	2/9/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OAPIS-1	2/9/2018	2,4-Dimethylphenol	12	10	2.8	354	ug/L
OAPIS-1	2/9/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OAPIS-1	2/9/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OAPIS-1	2/9/2018	Phenol	4.1	10	3.1	5761	ug/L
OAPIS-1	2/9/2018	Pyridine	ND	10	2.3	20	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OAPIS-1	2/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OAPIS-1	2/9/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OAPIS-1	2/9/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OAPIS-1	2/9/2018	Anthracene	ND	10	3.5	1721	ug/L
OAPIS-1	2/9/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OAPIS-1	2/9/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OAPIS-1	2/9/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OAPIS-1	2/9/2018	Pyrene	ND	10	4.4	117	ug/L
OAPIS-1	2/9/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OAPIS-1	2/9/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	2/9/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OAPIS-1	2/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OAPIS-1	2/9/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OAPIS-1	2/9/2018	Fluoranthene	ND	10	4.3	802	ug/L
OAPIS-1	2/9/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OAPIS-1	2/9/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OAPIS-1	2/9/2018	Chrysene	ND	10	3.8	34.3	ug/L
OAPIS-1	2/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OAPIS-1	2/9/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	2/9/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OAPIS-1	2/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OAPIS-1	2/9/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OAPIS-1	2/9/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OAPIS-1	4/30/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	4/30/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	4/30/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	4/30/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	4/30/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	4/30/2018	Benzoic Acid	92	100	32	75000	ug/L
OAPIS-1	4/30/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	4/30/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	4/30/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	4/30/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	4/30/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	4/30/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	4/30/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	4/30/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	4/30/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	4/30/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	4/30/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	4/30/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	4/30/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	4/30/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	4/30/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	4/30/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	4/30/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	4/30/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	4/30/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	4/30/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	4/30/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	4/30/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	4/30/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	4/30/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	4/30/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	4/30/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	4/30/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	4/30/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	4/30/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	4/30/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	4/30/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	4/30/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	4/30/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	4/30/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	4/30/2018	Phenol	ND	50	30	5761	ug/L
OAPIS-1	4/30/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	4/30/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OAPIS-1	4/30/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	4/30/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	4/30/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	4/30/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	4/30/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	4/30/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	4/30/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	4/30/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	4/30/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	4/30/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	4/30/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	4/30/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	4/30/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	4/30/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	4/30/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	4/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	4/30/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	4/30/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	4/30/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	4/30/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	4/30/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	9/6/2018	Benzoic Acid	34	100	32	75000	ug/L
OAPIS-1	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	9/6/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	9/6/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	9/6/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	9/6/2018	Phenol	ND	50	30	5761	ug/L
OAPIS-1	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OAPIS-1	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	9/6/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	9/6/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	9/6/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	11/19/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	11/19/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	11/19/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	11/19/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	11/19/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	11/19/2018	Benzoic Acid	ND	100	32	75000	ug/L
OAPIS-1	11/19/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	11/19/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	11/19/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	11/19/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	11/19/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	11/19/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	11/19/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	11/19/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	11/19/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	11/19/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	11/19/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	11/19/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	11/19/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	11/19/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	11/19/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	11/19/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	11/19/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	11/19/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	11/19/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	11/19/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	11/19/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	11/19/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	11/19/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	11/19/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	11/19/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	11/19/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	11/19/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	11/19/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	11/19/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	11/19/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	11/19/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	11/19/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	11/19/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	11/19/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	11/19/2018	Phenol	ND	50	30	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/19/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	11/19/2018	Bis(2-ethylhexyl)phthalate	**90**	50	40	55.64	ug/L
OAPIS-1	11/19/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	11/19/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	11/19/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	11/19/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	11/19/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	11/19/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	11/19/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	11/19/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	11/19/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	11/19/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	11/19/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	11/19/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	11/19/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	11/19/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	11/19/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	11/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	11/19/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	11/19/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	11/19/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	11/19/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	11/19/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OAPIS-1	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OAPIS-1	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OAPIS-1	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OAPIS-1	3/28/2019	1-Methylnaphthalene	11	10	6.999122	11.38	ug/L
OAPIS-1	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OAPIS-1	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OAPIS-1	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OAPIS-1	3/28/2019	2,4-Dimethylphenol	14	10	5.912084	354	ug/L
OAPIS-1	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OAPIS-1	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OAPIS-1	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OAPIS-1	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OAPIS-1	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OAPIS-1	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OAPIS-1	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OAPIS-1	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OAPIS-1	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OAPIS-1	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OAPIS-1	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OAPIS-1	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OAPIS-1	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OAPIS-1	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OAPIS-1	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OAPIS-1	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OAPIS-1	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OAPIS-1	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OAPIS-1	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OAPIS-1	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OAPIS-1	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OAPIS-1	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
OAPIS-1	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
OAPIS-1	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OAPIS-1	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OAPIS-1	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OAPIS-1	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OAPIS-1	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OAPIS-1	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OAPIS-1	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OAPIS-1	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OAPIS-1	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OAPIS-1	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OAPIS-1	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
OAPIS-1	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OAPIS-1	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OAPIS-1	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OAPIS-1	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OAPIS-1	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OAPIS-1	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OAPIS-1	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OAPIS-1	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OAPIS-1	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
OAPIS-1	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OAPIS-1	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OAPIS-1	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OAPIS-1	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OAPIS-1	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OAPIS-1	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
OAPIS-1	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
OAPIS-1	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OAPIS-1	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OAPIS-1	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OAPIS-1	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OAPIS-1	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OAPIS-1	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OAPIS-1	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
OAPIS-1	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
OAPIS-1	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	**30**	50	15.345382	11.38	ug/L
OAPIS-1	5/8/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
OAPIS-1	5/8/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
OAPIS-1	5/8/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
OAPIS-1	5/8/2019	2,4-Dimethylphenol	27	50	14.829964	354	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
OAPIS-1	5/8/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
OAPIS-1	5/8/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
OAPIS-1	5/8/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
OAPIS-1	5/8/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
OAPIS-1	5/8/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
OAPIS-1	5/8/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
OAPIS-1	5/8/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
OAPIS-1	5/8/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
OAPIS-1	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
OAPIS-1	5/8/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
OAPIS-1	5/8/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
OAPIS-1	5/8/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
OAPIS-1	5/8/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
OAPIS-1	5/8/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
OAPIS-1	5/8/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
OAPIS-1	5/8/2019	Acenaphthene	ND	50	14.779454	535	ug/L
OAPIS-1	5/8/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
OAPIS-1	5/8/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
OAPIS-1	5/8/2019	Anthracene	ND	50	13.285863	1721	ug/L
OAPIS-1	5/8/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
OAPIS-1	5/8/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
OAPIS-1	5/8/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
OAPIS-1	5/8/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
OAPIS-1	5/8/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
OAPIS-1	5/8/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
OAPIS-1	5/8/2019	Bis(2-ethylhexyl)phthalate	31	50	21.510641	55.64	ug/L
OAPIS-1	5/8/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
OAPIS-1	5/8/2019	Carbazole	ND	50	14.452533	NA	ug/L
OAPIS-1	5/8/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
OAPIS-1	5/8/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
OAPIS-1	5/8/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
OAPIS-1	5/8/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
OAPIS-1	5/8/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
OAPIS-1	5/8/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
OAPIS-1	5/8/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
OAPIS-1	5/8/2019	Fluoranthene	ND	50	12.061072	802	ug/L
OAPIS-1	5/8/2019	Fluorene	ND	50	14.442442	288	ug/L
OAPIS-1	5/8/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
OAPIS-1	5/8/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
OAPIS-1	5/8/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
OAPIS-1	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
OAPIS-1	5/8/2019	Isophorone	ND	50	15.230173	781	ug/L
OAPIS-1	5/8/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
OAPIS-1	5/8/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
OAPIS-1	5/8/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
OAPIS-1	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
OAPIS-1	5/8/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
OAPIS-1	5/8/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
OAPIS-1	5/8/2019	Phenanthrene	ND	50	13.88561	170	ug/L
OAPIS-1	5/8/2019	Phenol	ND	50	40.182932	5761	ug/L
OAPIS-1	5/8/2019	Pyrene	ND	50	12.517998	117	ug/L
OAPIS-1	5/8/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	**30**	50	15.345382	11.38	ug/L
OAPIS-1	5/8/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
OAPIS-1	5/8/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
OAPIS-1	5/8/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
OAPIS-1	5/8/2019	2,4-Dimethylphenol	24	50	14.829964	354	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
OAPIS-1	5/8/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
OAPIS-1	5/8/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
OAPIS-1	5/8/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
OAPIS-1	5/8/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
OAPIS-1	5/8/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
OAPIS-1	5/8/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
OAPIS-1	5/8/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
OAPIS-1	5/8/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
OAPIS-1	5/8/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
OAPIS-1	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
OAPIS-1	5/8/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
OAPIS-1	5/8/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
OAPIS-1	5/8/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
OAPIS-1	5/8/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
OAPIS-1	5/8/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
OAPIS-1	5/8/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
OAPIS-1	5/8/2019	Acenaphthene	ND	50	14.779454	535	ug/L
OAPIS-1	5/8/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
OAPIS-1	5/8/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
OAPIS-1	5/8/2019	Anthracene	ND	50	13.285863	1721	ug/L
OAPIS-1	5/8/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
OAPIS-1	5/8/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
OAPIS-1	5/8/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
OAPIS-1	5/8/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
OAPIS-1	5/8/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
OAPIS-1	5/8/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
OAPIS-1	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
OAPIS-1	5/8/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
OAPIS-1	5/8/2019	Carbazole	ND	50	14.452533	NA	ug/L
OAPIS-1	5/8/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
OAPIS-1	5/8/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
OAPIS-1	5/8/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
OAPIS-1	5/8/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
OAPIS-1	5/8/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
OAPIS-1	5/8/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
OAPIS-1	5/8/2019	Fluoranthene	ND	50	12.061072	802	ug/L
OAPIS-1	5/8/2019	Fluorene	ND	50	14.442442	288	ug/L
OAPIS-1	5/8/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
OAPIS-1	5/8/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
OAPIS-1	5/8/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
OAPIS-1	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
OAPIS-1	5/8/2019	Isophorone	ND	50	15.230173	781	ug/L
OAPIS-1	5/8/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
OAPIS-1	5/8/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
OAPIS-1	5/8/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
OAPIS-1	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
OAPIS-1	5/8/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
OAPIS-1	5/8/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
OAPIS-1	5/8/2019	Phenanthrene	ND	50	13.88561	170	ug/L
OAPIS-1	5/8/2019	Phenol	ND	50	40.182932	5761	ug/L
OAPIS-1	5/8/2019	Pyrene	ND	50	12.517998	117	ug/L
OAPIS-1	5/8/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	**73**	10	3.069076	11.38	ug/L
OAPIS-1	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OAPIS-1	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OAPIS-1	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OAPIS-1	8/22/2019	2,4-Dimethylphenol	23	10	2.965993	354	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OAPIS-1	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OAPIS-1	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OAPIS-1	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OAPIS-1	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OAPIS-1	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OAPIS-1	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OAPIS-1	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OAPIS-1	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OAPIS-1	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OAPIS-1	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OAPIS-1	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OAPIS-1	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OAPIS-1	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OAPIS-1	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OAPIS-1	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OAPIS-1	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OAPIS-1	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OAPIS-1	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OAPIS-1	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OAPIS-1	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OAPIS-1	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OAPIS-1	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OAPIS-1	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OAPIS-1	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OAPIS-1	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OAPIS-1	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OAPIS-1	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OAPIS-1	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OAPIS-1	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OAPIS-1	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OAPIS-1	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OAPIS-1	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OAPIS-1	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OAPIS-1	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OAPIS-1	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OAPIS-1	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OAPIS-1	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OAPIS-1	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
OAPIS-1	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OAPIS-1	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OAPIS-1	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OAPIS-1	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OAPIS-1	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OAPIS-1	8/22/2019	Naphthalene	5.6	10	4.12221	30	ug/L
OAPIS-1	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OAPIS-1	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OAPIS-1	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OAPIS-1	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OAPIS-1	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OAPIS-1	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OAPIS-1	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
OAPIS-1	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OAPIS-1	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	**89**	10	3.069076	11.38	ug/L
OAPIS-1	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OAPIS-1	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OAPIS-1	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OAPIS-1	8/22/2019	2,4-Dimethylphenol	24	10	2.965993	354	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OAPIS-1	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OAPIS-1	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OAPIS-1	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OAPIS-1	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OAPIS-1	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OAPIS-1	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OAPIS-1	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OAPIS-1	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OAPIS-1	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OAPIS-1	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OAPIS-1	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OAPIS-1	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OAPIS-1	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OAPIS-1	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OAPIS-1	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OAPIS-1	8/22/2019	Acenaphthene	3.7	10	2.955891	535	ug/L
OAPIS-1	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OAPIS-1	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OAPIS-1	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OAPIS-1	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OAPIS-1	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OAPIS-1	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OAPIS-1	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OAPIS-1	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OAPIS-1	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OAPIS-1	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OAPIS-1	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OAPIS-1	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OAPIS-1	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OAPIS-1	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OAPIS-1	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OAPIS-1	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OAPIS-1	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OAPIS-1	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OAPIS-1	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OAPIS-1	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OAPIS-1	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
OAPIS-1	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OAPIS-1	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OAPIS-1	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OAPIS-1	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OAPIS-1	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OAPIS-1	8/22/2019	Naphthalene	*7*	10	4.12221	30	ug/L
OAPIS-1	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OAPIS-1	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OAPIS-1	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OAPIS-1	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OAPIS-1	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OAPIS-1	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OAPIS-1	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
OAPIS-1	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OAPIS-1	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	**32**	3	1.234	11.38	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
OAPIS-1	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
OAPIS-1	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
OAPIS-1	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
OAPIS-1	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
OAPIS-1	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
OAPIS-1	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
OAPIS-1	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
OAPIS-1	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
OAPIS-1	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
OAPIS-1	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
OAPIS-1	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
OAPIS-1	10/21/2019	Fluorene	0.91	0.8	0.338	288	ug/L
OAPIS-1	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
OAPIS-1	10/21/2019	Naphthalene	4.1	3	1.159	30	ug/L
OAPIS-1	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
OAPIS-1	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
OAPIS-1	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OAPIS-1	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OAPIS-1	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OAPIS-1	10/21/2019	1,4-Dioxane	3.5	1	1	4.59	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	**58**	0.5	0.5	11.38	ug/L
OAPIS-1	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OAPIS-1	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OAPIS-1	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OAPIS-1	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OAPIS-1	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OAPIS-1	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OAPIS-1	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OAPIS-1	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OAPIS-1	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OAPIS-1	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OAPIS-1	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OAPIS-1	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OAPIS-1	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OAPIS-1	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Acenaphthene	2.5	0.5	0.5	535	ug/L
OAPIS-1	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
OAPIS-1	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OAPIS-1	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OAPIS-1	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OAPIS-1	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OAPIS-1	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OAPIS-1	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OAPIS-1	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OAPIS-1	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OAPIS-1	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OAPIS-1	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OAPIS-1	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OAPIS-1	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OAPIS-1	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OAPIS-1	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OAPIS-1	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OAPIS-1	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OAPIS-1	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OAPIS-1	10/21/2019	Fluorene	2.4	0.5	0.5	288	ug/L
OAPIS-1	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OAPIS-1	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OAPIS-1	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OAPIS-1	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OAPIS-1	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OAPIS-1	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
OAPIS-1	10/21/2019	Naphthalene	3.3	0.5	0.5	30	ug/L
OAPIS-1	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OAPIS-1	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
OAPIS-1	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OAPIS-1	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
OAPIS-1	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
OAPIS-1	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
OAPIS-1	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
OAPIS-1	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OAPIS-1	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OAPIS-1	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OAPIS-1	3/4/2020	1,4-Dioxane	*3.88*	*5*	1	4.59	ug/L
OAPIS-1	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
OAPIS-1	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OAPIS-1	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OAPIS-1	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OAPIS-1	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OAPIS-1	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OAPIS-1	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OAPIS-1	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OAPIS-1	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OAPIS-1	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OAPIS-1	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
OAPIS-1	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OAPIS-1	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OAPIS-1	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OAPIS-1	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OAPIS-1	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OAPIS-1	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
OAPIS-1	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OAPIS-1	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OAPIS-1	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OAPIS-1	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OAPIS-1	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OAPIS-1	3/4/2020	Benzoic Acid	5.2	2.5	0.5	75000	ug/L
OAPIS-1	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OAPIS-1	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OAPIS-1	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OAPIS-1	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OAPIS-1	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OAPIS-1	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OAPIS-1	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OAPIS-1	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OAPIS-1	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OAPIS-1	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OAPIS-1	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OAPIS-1	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OAPIS-1	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
OAPIS-1	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OAPIS-1	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OAPIS-1	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OAPIS-1	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OAPIS-1	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OAPIS-1	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
OAPIS-1	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OAPIS-1	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
OAPIS-1	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OAPIS-1	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OAPIS-1	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
OAPIS-1	3/4/2020	Phenol	2.5	2.5	0.5	5761	ug/L
OAPIS-1	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
OAPIS-1	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
OAPIS-1	9/22/2020	1,2,4-Trichlorobenzene	ND	2.1	0.41	70	ug/L
OAPIS-1	9/22/2020	1,2-Dichlorobenzene	ND	2.1	0.41	600	ug/L
OAPIS-1	9/22/2020	1,3-Dichlorobenzene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	1,4-Dichlorobenzene	ND	2.1	0.41	75	ug/L
OAPIS-1	9/22/2020	1,4-Dioxane	2.4	2.1	0.41	4.59	ug/L
OAPIS-1	9/22/2020	1-Methylnaphthalene	ND	2.1	0.41	11.38	ug/L
OAPIS-1	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	2.1	0.41	240	ug/L
OAPIS-1	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	2,4,5-Trichlorophenol	ND	2.1	0.41	1166	ug/L
OAPIS-1	9/22/2020	2,4,6-Trichlorophenol	ND	2.1	0.41	11.9*	ug/L
OAPIS-1	9/22/2020	2,4-Dichlorophenol	ND	2.1	0.41	45.3	ug/L
OAPIS-1	9/22/2020	2,4-Dimethylphenol	ND	2.1	0.41	354	ug/L
OAPIS-1	9/22/2020	2,4-Dinitrophenol	ND	2.1	0.41	38.7	ug/L
OAPIS-1	9/22/2020	2,4-Dinitrotoluene	ND	2.1	0.41	45.3	ug/L
OAPIS-1	9/22/2020	2,6-Dinitrotoluene	*ND*	*0.82*	0.41	0.485	ug/L
OAPIS-1	9/22/2020	2-Chloronaphthalene	ND	2.1	0.41	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	2-Chlorophenol	ND	2.1	0.41	91	ug/L
OAPIS-1	9/22/2020	2-Methylnaphthalene	ND	2.1	0.41	35.1	ug/L
OAPIS-1	9/22/2020	2-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	2-Nitroaniline	ND	2.1	0.41	190	ug/L
OAPIS-1	9/22/2020	2-Nitrophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	3,4-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	3,3-Dichlorobenzidine	*ND*	*2.1*	0.41	1.25	ug/L
OAPIS-1	9/22/2020	3-Nitroaniline	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.1*	0.41	1.52	ug/L
OAPIS-1	9/22/2020	4-Bromophenyl-phenylether	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Chloro-3-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Chloroaniline	*ND*	*2.1*	0.41	0.37	ug/L
OAPIS-1	9/22/2020	4-Chlorophenyl-phenylether	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Nitroaniline	ND	2.1	0.41	3.8	ug/L
OAPIS-1	9/22/2020	4-Nitrophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Acenaphthene	ND	2.1	0.41	535	ug/L
OAPIS-1	9/22/2020	Acenaphthylene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Aniline	ND	2.1	0.41	13	ug/L
OAPIS-1	9/22/2020	Anthracene	ND	2.1	0.41	1721	ug/L
OAPIS-1	9/22/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
OAPIS-1	9/22/2020	Benzidine	*ND*	*2.1*	1	0.0011	ug/L
OAPIS-1	9/22/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
OAPIS-1	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
OAPIS-1	9/22/2020	Benzo(g,h,i)perylene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Benzo(k)fluoranthene	ND	2.1	0.41	3.43	ug/L
OAPIS-1	9/22/2020	Benzoic Acid	ND	2.1	0.82	75000	ug/L
OAPIS-1	9/22/2020	Benzyl Alcohol	ND	2.1	0.82	2000	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroethoxy)methane	ND	2.1	0.41	59	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*2.1*	0.41	0.137	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroisopropyl)ether	ND	2.1	0.41	9.81	ug/L
OAPIS-1	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	2.1	0.82	55.64	ug/L
OAPIS-1	9/22/2020	Butylbenzylphthalate	ND	2.1	0.82	16	ug/L
OAPIS-1	9/22/2020	Carbazole	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Chrysene	ND	2.1	0.41	34.3	ug/L
OAPIS-1	9/22/2020	Di-n-butylphthalate	ND	2.1	0.82	885	ug/L
OAPIS-1	9/22/2020	Di-n-octylphthalate	ND	2.1	0.82	200	ug/L
OAPIS-1	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OAPIS-1	9/22/2020	Dibenzofuran	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Diethylphthalate	ND	2.1	0.82	14801	ug/L
OAPIS-1	9/22/2020	Dimethylphthalate	ND	2.1	0.82	612	ug/L
OAPIS-1	9/22/2020	Fluoranthene	ND	2.1	0.41	802	ug/L
OAPIS-1	9/22/2020	Fluorene	ND	2.1	0.41	288	ug/L
OAPIS-1	9/22/2020	Hexachlorobenzene	*ND*	*2.1*	0.41	0.0976	ug/L
OAPIS-1	9/22/2020	Hexachlorobutadiene	*ND*	*2.1*	0.41	0.14	ug/L
OAPIS-1	9/22/2020	Hexachlorocyclopentadiene	*ND*	*2.1*	1	0.41	ug/L
OAPIS-1	9/22/2020	Hexachloroethane	ND	2.1	0.41	3.28	ug/L
OAPIS-1	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OAPIS-1	9/22/2020	Isophorone	ND	2.1	0.41	781	ug/L
OAPIS-1	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*2.1*	0.41	0.011	ug/L
OAPIS-1	9/22/2020	N-Nitrosodimethylamine	*ND*	*2.1*	0.41	0.0049	ug/L
OAPIS-1	9/22/2020	N-Nitrosodiphenylamine	ND	2.1	0.41	122	ug/L
OAPIS-1	9/22/2020	Naphthalene	ND	2.1	0.41	30	ug/L
OAPIS-1	9/22/2020	Nitrobenzene	*ND*	*2.1*	0.41	1.4	ug/L
OAPIS-1	9/22/2020	Pentachlorophenol	*ND*	*2.1*	0.82	1	ug/L
OAPIS-1	9/22/2020	Phenanthrene	ND	2.1	0.41	170	ug/L
OAPIS-1	9/22/2020	Phenol	3.9	2.1	0.41	5761	ug/L
OAPIS-1	9/22/2020	Pyrene	ND	2.1	0.41	117	ug/L
OAPIS-1	9/22/2020	Pyridine	ND	2.1	0.82	20	ug/L
OAPIS-1	12/17/2020	Acenaphthene	ND	10.6	0.17	535	ug/L
OAPIS-1	12/17/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
OAPIS-1	12/17/2020	Anthracene	ND	10.6	0.191	1721	ug/L
OAPIS-1	12/17/2020	Benzo(a)anthracene	*ND*	*10.6*	0.191	0.12	ug/L
OAPIS-1	12/17/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
OAPIS-1	12/17/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.159	0.34	ug/L
OAPIS-1	12/17/2020	Benzo(g,h,i)perylene	ND	10.6	0.244	NA	ug/L
OAPIS-1	12/17/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.17	3.43	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.17	59	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.86	0.137	ug/L
OAPIS-1	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.3	55.64	ug/L
OAPIS-1	12/17/2020	4-Bromophenyl-phenylether	ND	10.6	0.212	NA	ug/L
OAPIS-1	12/17/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
OAPIS-1	12/17/2020	Carbazole	ND	10.6	0.244	NA	ug/L
OAPIS-1	12/17/2020	4-Chloroaniline	*ND*	*10.6*	3.6	0.37	ug/L
OAPIS-1	12/17/2020	4-Chloro-3-Methylphenol	ND	10.6	4.03	NA	ug/L
OAPIS-1	12/17/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
OAPIS-1	12/17/2020	2-Chlorophenol	ND	10.6	2.33	91	ug/L
OAPIS-1	12/17/2020	4-Chlorophenyl-phenylether	ND	10.6	2.12	NA	ug/L
OAPIS-1	12/17/2020	1,3-Dichlorobenzene	ND	10.6	0.191	NA	ug/L
OAPIS-1	12/17/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
OAPIS-1	12/17/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
OAPIS-1	12/17/2020	1,4-Dichlorobenzene	ND	10.6	0.17	75	ug/L
OAPIS-1	12/17/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
OAPIS-1	12/17/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.76	1.25	ug/L
OAPIS-1	12/17/2020	2,4-Dichlorophenol	ND	10.6	3.18	45.3	ug/L
OAPIS-1	12/17/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
OAPIS-1	12/17/2020	2,4-Dimethylphenol	ND	10.6	3.71	354	ug/L
OAPIS-1	12/17/2020	Di-n-butylphthalate	ND	10.6	2.86	885	ug/L
OAPIS-1	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.7	1.52	ug/L
OAPIS-1	12/17/2020	2,4-Dinitrophenol	ND	31.8	3.6	38.7	ug/L
OAPIS-1	12/17/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
OAPIS-1	12/17/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
OAPIS-1	12/17/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
OAPIS-1	12/17/2020	Fluoranthene	ND	10.6	0.191	802	ug/L
OAPIS-1	12/17/2020	Fluorene	ND	10.6	0.191	288	ug/L
OAPIS-1	12/17/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
OAPIS-1	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.2*	2.76	0.41	ug/L
OAPIS-1	12/17/2020	Hexachloroethane	*ND*	*10.6*	4.45	3.28	ug/L
OAPIS-1	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.233	0.343	ug/L
OAPIS-1	12/17/2020	Isophorone	ND	10.6	0.148	781	ug/L
OAPIS-1	12/17/2020	2-Methylphenol	ND	10.6	1.91	NA	ug/L
OAPIS-1	12/17/2020	Naphthalene	ND	10.6	0.18	30	ug/L
OAPIS-1	12/17/2020	2-Nitroaniline	ND	10.6	2.33	190	ug/L
OAPIS-1	12/17/2020	3-Nitroaniline	ND	10.6	1.91	NA	ug/L
OAPIS-1	12/17/2020	4-Nitroaniline	*ND*	*10.6*	1.59	3.8	ug/L
OAPIS-1	12/17/2020	Nitrobenzene	*ND*	*10.6*	0.138	1.4	ug/L
OAPIS-1	12/17/2020	2-Nitrophenol	ND	10.6	5.51	NA	ug/L
OAPIS-1	12/17/2020	4-Nitrophenol	ND	10.6	2.23	NA	ug/L
OAPIS-1	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.5	0.011	ug/L
OAPIS-1	12/17/2020	N-Nitrosodiphenylamine	ND	10.6	0.191	122	ug/L
OAPIS-1	12/17/2020	Pentachlorophenol	*ND*	*21.2*	1.48	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	12/17/2020	Phenanthrene	ND	10.6	0.191	170	ug/L
OAPIS-1	12/17/2020	Phenol	ND	10.6	2.76	5761	ug/L
OAPIS-1	12/17/2020	Pyrene	ND	10.6	0.223	117	ug/L
OAPIS-1	12/17/2020	2,4,5-Trichlorophenol	ND	10.6	3.92	1166	ug/L
OAPIS-1	12/17/2020	2,4,6-Trichlorophenol	ND	10.6	3.71	11.9*	ug/L
OAPIS-1	12/17/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
OAPIS-1	12/17/2020	Aniline	ND	10.6	4.03	13	ug/L
OAPIS-1	12/17/2020	Benzoic Acid	ND	31.8	7.74	75000	ug/L
OAPIS-1	12/17/2020	Benzyl Alcohol	ND	10.6	2.12	2000	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.17	9.81	ug/L
OAPIS-1	12/17/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.71	0.0049	ug/L
OAPIS-1	12/17/2020	Pyridine	ND	10.6	3.39	20	ug/L
OAPIS-1	12/17/2020	1,2,4-Trichlorobenzene	ND	10.6	0.191	70	ug/L
OAPIS-1	12/17/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
OAPIS-1	12/17/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
OW-01	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-01	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-01	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-01	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-01	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-01	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-01	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-01	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-01	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-01	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-01	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-01	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-01	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-01	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-01	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-01	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-01	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-01	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-01	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-01	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-01	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-01	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-01	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-01	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-01	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-01	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-01	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-01	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-01	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-01	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-01	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-01	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-01	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-01	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-01	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-01	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-01	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-01	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-01	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-01	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-01	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-01	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-01	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-01	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-01	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-01	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-01	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-01	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-01	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-01	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-01	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-01	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-01	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-01	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-01	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-01	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-01	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-01	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-01	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-01	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-01	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-01	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-01	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-01	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-01	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-01	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-01	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-01	9/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
OW-01	9/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
OW-01	9/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
OW-01	9/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
OW-01	9/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
OW-01	9/11/2014	Aniline	*ND*	*50*	12	13	ug/L
OW-01	9/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
OW-01	9/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
OW-01	9/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
OW-01	9/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
OW-01	9/11/2014	Isophorone	ND	50	15	781	ug/L
OW-01	9/11/2014	Acenaphthene	ND	50	15	535	ug/L
OW-01	9/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
OW-01	9/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
OW-01	9/11/2014	Phenanthrene	ND	50	13	170	ug/L
OW-01	9/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
OW-01	9/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
OW-01	9/11/2014	Fluorene	ND	50	15	288	ug/L
OW-01	9/11/2014	Carbazole	ND	50	14	NA	ug/L
OW-01	9/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
OW-01	9/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OW-01	9/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
OW-01	9/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
OW-01	9/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
OW-01	9/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
OW-01	9/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
OW-01	9/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
OW-01	9/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OW-01	9/11/2014	2-Methylphenol	ND	100	14	NA	ug/L
OW-01	9/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
OW-01	9/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
OW-01	9/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
OW-01	9/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
OW-01	9/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
OW-01	9/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
OW-01	9/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
OW-01	9/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
OW-01	9/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
OW-01	9/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
OW-01	9/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
OW-01	9/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OW-01	9/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
OW-01	9/11/2014	Phenol	ND	50	7.9	5761	ug/L
OW-01	9/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
OW-01	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
OW-01	9/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OW-01	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
OW-01	9/11/2014	Di-n-octylphthalate	ND	100	14	200	ug/L
OW-01	9/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
OW-01	9/11/2014	Anthracene	ND	50	12	1721	ug/L
OW-01	9/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
OW-01	9/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
OW-01	9/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
OW-01	9/11/2014	Pyrene	ND	50	20	117	ug/L
OW-01	9/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
OW-01	9/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
OW-01	9/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
OW-01	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
OW-01	9/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OW-01	9/11/2014	Fluoranthene	ND	50	15	802	ug/L
OW-01	9/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
OW-01	9/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
OW-01	9/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
OW-01	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
OW-01	9/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
OW-01	9/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
OW-01	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
OW-01	9/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
OW-01	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
OW-01	9/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
OW-01	6/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-01	6/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-01	6/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-01	6/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-01	6/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Aniline	ND	10	1.5	13	ug/L
OW-01	6/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-01	6/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-01	6/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-01	6/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-01	6/3/2015	Isophorone	ND	10	2	781	ug/L
OW-01	6/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-01	6/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-01	6/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-01	6/3/2015	Phenanthrene	ND	10	2	170	ug/L
OW-01	6/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	6/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-01	6/3/2015	Fluorene	ND	10	1.7	288	ug/L
OW-01	6/3/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-01	6/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-01	6/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-01	6/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-01	6/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-01	6/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-01	6/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-01	6/3/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-01	6/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-01	6/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-01	6/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-01	6/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-01	6/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-01	6/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-01	6/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-01	6/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-01	6/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-01	6/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-01	6/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-01	6/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-01	6/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-01	6/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-01	6/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-01	6/3/2015	Phenol	ND	10	1.1	5761	ug/L
OW-01	6/3/2015	Pyridine	ND	10	1.7	20	ug/L
OW-01	6/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-01	6/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-01	6/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-01	6/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-01	6/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-01	6/3/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-01	6/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-01	6/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-01	6/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-01	6/3/2015	Pyrene	ND	10	2.3	117	ug/L
OW-01	6/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-01	6/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-01	6/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-01	6/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-01	6/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-01	6/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-01	6/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-01	6/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-01	6/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-01	6/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-01	6/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-01	6/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-01	6/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-01	6/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-01	6/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-01	8/12/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-01	8/12/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-01	8/12/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-01	8/12/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Aniline	ND	10	1.5	13	ug/L
OW-01	8/12/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-01	8/12/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-01	8/12/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-01	8/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-01	8/12/2015	Isophorone	ND	10	2	781	ug/L
OW-01	8/12/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-01	8/12/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-01	8/12/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-01	8/12/2015	Phenanthrene	ND	10	2	170	ug/L
OW-01	8/12/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	8/12/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-01	8/12/2015	Fluorene	ND	10	1.7	288	ug/L
OW-01	8/12/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-01	8/12/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-01	8/12/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-01	8/12/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-01	8/12/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-01	8/12/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-01	8/12/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-01	8/12/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-01	8/12/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-01	8/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-01	8/12/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-01	8/12/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-01	8/12/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-01	8/12/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-01	8/12/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-01	8/12/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-01	8/12/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-01	8/12/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-01	8/12/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-01	8/12/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-01	8/12/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-01	8/12/2015	Phenol	ND	10	1.1	5761	ug/L
OW-01	8/12/2015	Pyridine	ND	10	1.7	20	ug/L
OW-01	8/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-01	8/12/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-01	8/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-01	8/12/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-01	8/12/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-01	8/12/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-01	8/12/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-01	8/12/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-01	8/12/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-01	8/12/2015	Pyrene	ND	10	2.3	117	ug/L
OW-01	8/12/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-01	8/12/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-01	8/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-01	8/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-01	8/12/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-01	8/12/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-01	8/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-01	8/12/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-01	8/12/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-01	8/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-01	8/12/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-01	8/12/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-01	8/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-01	8/12/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-01	8/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-01	8/12/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-01	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-01	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-01	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-01	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-01	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-01	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-01	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-01	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-01	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-01	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-01	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-01	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-01	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-01	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-01	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-01	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-01	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-01	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-01	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-01	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-01	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-01	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-01	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-01	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-01	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-01	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-01	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-01	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-01	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-01	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-01	3/27/2019	Aniline	ND	10	6.210394	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-01	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-01	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-01	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-01	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-01	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-01	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-01	3/27/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-01	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-01	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-01	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-01	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-01	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-01	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-01	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-01	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-01	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-01	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-01	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-01	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-01	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-01	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-01	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-01	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-01	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-01	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-01	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-01	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-01	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-01	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-01	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-01	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-01	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-01	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-01	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-01	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-01	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-01	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-01	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-01	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-01	5/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-01	5/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-01	5/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-01	5/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-01	5/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-01	5/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-01	5/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-01	5/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-01	5/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-01	5/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-01	5/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-01	5/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-01	5/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-01	5/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-01	5/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-01	5/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-01	5/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-01	5/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-01	5/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-01	5/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-01	5/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-01	5/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-01	5/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-01	5/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-01	5/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-01	5/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-01	5/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-01	5/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-01	5/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-01	5/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-01	5/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-01	5/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-01	5/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-01	5/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-01	5/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-01	5/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-01	5/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-01	5/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-01	5/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-01	5/21/2019	Benzyl Alcohol	2.4	10	2.360341	2000	ug/L
OW-01	5/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-01	5/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-01	5/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-01	5/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-01	5/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-01	5/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-01	5/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-01	5/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-01	5/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-01	5/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-01	5/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-01	5/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-01	5/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-01	5/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-01	5/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-01	5/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-01	5/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-01	5/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-01	5/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-01	5/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-01	5/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-01	5/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-01	5/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-01	5/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-01	5/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-01	5/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-01	5/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-01	5/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-01	5/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-01	5/21/2019	Pyrene	ND	10	2.5036	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-01	3/9/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-01	3/9/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-01	3/9/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-01	3/9/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-01	3/9/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-01	3/9/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-01	3/9/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-01	3/9/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-01	3/9/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-01	3/9/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-01	3/9/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-01	3/9/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-01	3/9/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-01	3/9/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-01	3/9/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-01	3/9/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-01	3/9/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-01	3/9/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-01	3/9/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-01	3/9/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-01	3/9/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-01	3/9/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-01	3/9/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-01	3/9/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-01	3/9/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-01	3/9/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-01	3/9/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-01	3/9/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-01	3/9/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-01	3/9/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-01	3/9/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-01	3/9/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-01	3/9/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-01	3/9/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-01	3/9/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-01	3/9/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-01	3/9/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-01	3/9/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-01	3/9/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-01	3/9/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-01	3/9/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-01	3/9/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-01	3/9/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-01	3/9/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-01	3/9/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-01	3/9/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-01	3/9/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-01	3/9/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-01	3/9/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-01	3/9/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-01	3/9/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-01	3/9/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-01	3/9/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-01	3/9/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-01	9/20/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
OW-10	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-10	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-10	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-10	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-10	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-10	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-10	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-10	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-10	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-10	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-10	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-10	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-10	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-10	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-10	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-10	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-10	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-10	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-10	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-10	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-10	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-10	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-10	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-10	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-10	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-10	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-10	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-10	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-10	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-10	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-10	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-10	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-10	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-10	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-10	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-10	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-10	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-10	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-10	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-10	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-10	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-10	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-10	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-10	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-10	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-10	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-10	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-10	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-10	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-10	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-10	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-10	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-10	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-10	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-10	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-10	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-10	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-10	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-10	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-10	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-10	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-10	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-10	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-10	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-10	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-10	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-10	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-10	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-10	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-10	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-10	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-10	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-10	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-10	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-10	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-10	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-10	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-10	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-10	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-10	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-10	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-10	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-10	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-10	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-10	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-10	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-10	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-10	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-10	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-10	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-10	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-10	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-10	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-10	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-10	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-10	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-10	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-10	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-10	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-10	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-10	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-10	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-10	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-10	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-10	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-10	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-10	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-10	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-10	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-10	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-10	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-10	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-10	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-10	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-10	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-10	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-10	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-10	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-10	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-10	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-10	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-10	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-10	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-10	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-10	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-10	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-10	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-10	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-10	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-10	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-10	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-10	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-10	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-10	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-10	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-10	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-10	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-10	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-10	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-10	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-10	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-10	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-10	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-10	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-10	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-10	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-10	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-10	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-10	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-10	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-10	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-10	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-10	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-10	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-10	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-10	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-10	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-10	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-10	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-10	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-10	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-10	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-10	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-10	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-10	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-10	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-10	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-10	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-10	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-10	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-10	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-10	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-10	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-10	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-10	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-10	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-10	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-10	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-10	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-10	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-10	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-10	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-10	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-10	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-10	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-10	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-10	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-10	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-10	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-10	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-10	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-10	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-10	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-10	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-10	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-10	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-10	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-10	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-10	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-10	6/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-10	6/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-10	6/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-10	6/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-10	6/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Aniline	ND	10	1.5	13	ug/L
OW-10	6/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-10	6/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-10	6/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-10	6/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-10	6/3/2015	Isophorone	ND	10	2	781	ug/L
OW-10	6/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-10	6/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-10	6/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-10	6/3/2015	Phenanthrene	ND	10	2	170	ug/L
OW-10	6/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-10	6/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-10	6/3/2015	Fluorene	ND	10	1.7	288	ug/L
OW-10	6/3/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-10	6/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-10	6/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-10	6/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-10	6/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-10	6/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-10	6/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-10	6/3/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-10	6/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-10	6/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-10	6/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-10	6/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-10	6/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-10	6/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-10	6/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-10	6/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-10	6/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-10	6/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-10	6/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-10	6/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-10	6/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-10	6/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-10	6/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-10	6/3/2015	Phenol	ND	10	1.1	5761	ug/L
OW-10	6/3/2015	Pyridine	ND	10	1.7	20	ug/L
OW-10	6/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-10	6/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-10	6/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-10	6/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-10	6/3/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-10	6/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-10	6/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-10	6/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-10	6/3/2015	Pyrene	ND	10	2.3	117	ug/L
OW-10	6/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-10	6/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-10	6/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-10	6/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-10	6/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-10	6/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-10	6/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-10	6/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-10	6/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-10	6/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-10	6/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-10	6/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-10	6/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-10	6/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-10	6/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-10	6/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-10	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-10	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-10	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-10	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-10	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-10	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-10	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-10	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-10	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-10	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-10	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-10	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-10	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-10	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-10	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-10	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-10	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-10	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-10	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-10	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-10	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-10	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-10	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-10	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-10	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-10	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-10	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-10	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-10	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-10	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-10	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-10	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-10	3/27/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-10	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-10	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-10	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-10	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-10	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-10	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-10	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-10	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-10	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-10	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-10	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-10	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-10	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-10	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-10	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-10	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-10	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-10	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-10	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-10	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-10	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-10	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-10	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-10	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-10	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-10	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-10	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-10	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-10	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-10	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-10	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-10	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-10	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-10	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-10	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-10	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-10	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-10	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-10	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-10	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-10	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-10	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-10	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-10	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-10	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-10	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-10	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-10	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-10	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-10	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-10	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-10	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-10	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-10	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-10	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-10	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-10	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-10	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-10	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-10	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-10	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-10	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-10	3/27/2019	Benzoic Acid	6.4	20	6.311561	75000	ug/L
OW-10	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-10	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-10	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-10	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-10	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-10	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-10	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-10	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-10	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-10	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-10	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-10	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-10	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-10	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-10	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-10	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-10	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-10	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-10	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-10	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-10	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-10	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-10	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-10	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-10	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-10	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-10	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-10	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-10	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-10	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-10	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-10	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-10	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-10	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-10	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-10	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-10	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-10	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-10	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-10	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-10	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-10	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-10	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-10	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-10	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-10	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-10	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-10	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-10	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-10	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-10	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-10	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-10	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-10	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-10	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-10	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
OW-10	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-10	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-10	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-10	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-10	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-10	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-10	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-10	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-10	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-10	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-10	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-10	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-10	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-10	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-10	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-10	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-10	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-10	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-10	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-10	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-10	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-10	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-10	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-10	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-10	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-10	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-10	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-10	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-10	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-10	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-10	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-10	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-10	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-10	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-10	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-10	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-10	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-10	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-10	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-10	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-10	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-10	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-10	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-10	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-10	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-10	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-10	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-10	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-10	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-10	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-10	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-10	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-10	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-10	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
OW-10	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-10	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-10	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-10	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-10	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-10	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-10	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-10	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-10	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-10	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-10	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-10	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-10	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-10	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-10	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-10	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-10	5/28/2019	Benzoic Acid	12	20	10.723324	75000	ug/L
OW-10	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-10	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-10	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-10	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-10	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-10	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-10	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-10	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-10	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-10	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-10	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-10	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-10	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-10	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-10	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-10	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-10	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-10	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-10	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-10	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-10	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-10	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-10	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-10	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-10	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-10	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-10	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-10	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-10	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-10	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-10	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-10	3/4/2020	1,4-Dioxane	3.4	1	0.2	4.59	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-10	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-10	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-10	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-10	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-10	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-10	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-10	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-10	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-10	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-10	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-10	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-10	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-10	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-10	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-10	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-10	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-10	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-10	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-10	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-10	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-10	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-10	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-10	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-10	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-10	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-10	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-10	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-10	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-10	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-10	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-10	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-10	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-10	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-10	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-10	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-10	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-10	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-10	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-10	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-10	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-10	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-10	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-10	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-10	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-10	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-10	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-10	3/4/2020	1,4-Dioxane	2.6	1	0.2	4.59	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-10	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-10	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-10	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-10	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-10	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-10	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-10	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-10	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-10	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-10	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-10	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-10	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-10	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-10	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-10	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-10	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-10	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-10	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-10	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-10	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-10	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-10	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-10	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-10	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-10	3/4/2020	Bis(2-ethylhexyl)phthalate	3.1	0.5	0.2	55.64	ug/L
OW-10	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-10	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-10	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-10	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-10	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-10	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-10	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-10	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-10	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-10	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-10	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-10	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-10	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-10	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-10	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-10	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-10	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-10	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-10	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-10	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-10	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-10	9/20/2020	1,4-Dioxane	0.58	1	0.094	4.59	ug/L
OW-11	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-11	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-11	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-11	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-11	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-11	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-11	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-11	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-11	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-11	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-11	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-11	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-11	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-11	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-11	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-11	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-11	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-11	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-11	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-11	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-11	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-11	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-11	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-11	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-11	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-11	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-11	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-11	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-11	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-11	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-11	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-11	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-11	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-11	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-11	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-11	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-11	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-11	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-11	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-11	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-11	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-11	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-11	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-11	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-11	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-11	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-11	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-11	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-11	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-11	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-11	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-11	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-11	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-11	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-11	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-11	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-11	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-11	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-11	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-11	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-11	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-11	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-11	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-11	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-11	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-11	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-11	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-11	9/16/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-11	9/16/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	9/16/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-11	9/16/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-11	9/16/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	Aniline	ND	10	2.2	13	ug/L
OW-11	9/16/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-11	9/16/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-11	9/16/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-11	9/16/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-11	9/16/2013	Isophorone	ND	10	1.8	781	ug/L
OW-11	9/16/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-11	9/16/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-11	9/16/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-11	9/16/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-11	9/16/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-11	9/16/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-11	9/16/2013	Fluorene	ND	10	2.5	288	ug/L
OW-11	9/16/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-11	9/16/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-11	9/16/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-11	9/16/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-11	9/16/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-11	9/16/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-11	9/16/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-11	9/16/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-11	9/16/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-11	9/16/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-11	9/16/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-11	9/16/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-11	9/16/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-11	9/16/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-11	9/16/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-11	9/16/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-11	9/16/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-11	9/16/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-11	9/16/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-11	9/16/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-11	9/16/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-11	9/16/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-11	9/16/2013	Phenol	ND	10	2.2	5761	ug/L
OW-11	9/16/2013	Pyridine	ND	10	3.5	20	ug/L
OW-11	9/16/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-11	9/16/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-11	9/16/2013	Bis(2-ethylhexyl)phthalate	11	10	2.8	55.64	ug/L
OW-11	9/16/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-11	9/16/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-11	9/16/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-11	9/16/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-11	9/16/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-11	9/16/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-11	9/16/2013	Pyrene	ND	10	2.1	117	ug/L
OW-11	9/16/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-11	9/16/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-11	9/16/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-11	9/16/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-11	9/16/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-11	9/16/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-11	9/16/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-11	9/16/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-11	9/16/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-11	9/16/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-11	9/16/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-11	9/16/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-11	9/16/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-11	9/16/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-11	9/16/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-11	9/16/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-11	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-11	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-11	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-11	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-11	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-11	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-11	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-11	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-11	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-11	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-11	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-11	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-11	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-11	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-11	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-11	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-11	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-11	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-11	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-11	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-11	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-11	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-11	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-11	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-11	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-11	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-11	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-11	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-11	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-11	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-11	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-11	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-11	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-11	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-11	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-11	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-11	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-11	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-11	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-11	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-11	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-11	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-11	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-11	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-11	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-11	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-11	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-11	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-11	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-11	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-11	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-11	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-11	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-11	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-11	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-11	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-11	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-11	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-11	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-11	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-11	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-11	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-11	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-11	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-11	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-11	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-11	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-12	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-12	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-12	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-12	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-12	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-12	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-12	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-12	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-12	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-12	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-12	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-12	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-12	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-12	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-12	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-12	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-12	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-12	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-12	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-12	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-12	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-12	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-12	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-12	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-12	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-12	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-12	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-12	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-12	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-12	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-12	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-12	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-12	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-12	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-12	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-12	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-12	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-12	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-12	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-12	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-12	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-12	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-12	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-12	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-12	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-12	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-12	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-12	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-12	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-12	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-12	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-12	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-12	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-12	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-12	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-12	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-12	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-12	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-12	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-12	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-12	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-12	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-12	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-12	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-12	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-12	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-12	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-12	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-12	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-12	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	Aniline	ND	10	2.2	13	ug/L
OW-12	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-12	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-12	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-12	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-12	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
OW-12	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-12	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-12	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-12	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-12	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-12	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-12	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
OW-12	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-12	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-12	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-12	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-12	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-12	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-12	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-12	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-12	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-12	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-12	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-12	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-12	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-12	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-12	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-12	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-12	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-12	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-12	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-12	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-12	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-12	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-12	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-12	9/10/2013	Phenol	ND	10	2.2	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
OW-12	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-12	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-12	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-12	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-12	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-12	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-12	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-12	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-12	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-12	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
OW-12	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-12	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-12	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-12	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-12	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-12	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-12	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-12	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-12	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-12	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-12	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-12	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-12	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-12	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-12	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-12	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-12	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-12	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-12	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-12	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-12	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-12	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-12	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-12	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-12	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-12	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-12	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-12	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-12	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-12	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-12	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-12	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-12	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-12	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-12	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-12	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-12	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-12	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-12	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-12	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-12	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-12	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-12	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-12	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-12	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-12	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-12	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-12	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-12	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-12	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-12	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-12	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-12	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-12	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-12	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-12	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-12	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-12	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-12	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-12	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-12	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-12	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-12	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-12	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-12	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-12	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-12	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-12	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-12	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-12	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-12	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-12	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-12	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-12	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-12	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-12	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-12	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-12	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-12	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-12	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-12	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-12	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-12	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-12	8/13/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-12	8/13/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-12	8/13/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-12	8/13/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-12	8/13/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Aniline	ND	10	1.5	13	ug/L
OW-12	8/13/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-12	8/13/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-12	8/13/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-12	8/13/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-12	8/13/2015	Isophorone	ND	10	2	781	ug/L
OW-12	8/13/2015	Acenaphthene	ND	10	1.9	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/13/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-12	8/13/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-12	8/13/2015	Phenanthrene	ND	10	2	170	ug/L
OW-12	8/13/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-12	8/13/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-12	8/13/2015	Fluorene	ND	10	1.7	288	ug/L
OW-12	8/13/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-12	8/13/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-12	8/13/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-12	8/13/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-12	8/13/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-12	8/13/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-12	8/13/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-12	8/13/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-12	8/13/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-12	8/13/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-12	8/13/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-12	8/13/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-12	8/13/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-12	8/13/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-12	8/13/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-12	8/13/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-12	8/13/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-12	8/13/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-12	8/13/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-12	8/13/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-12	8/13/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-12	8/13/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-12	8/13/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-12	8/13/2015	Phenol	ND	10	1.1	5761	ug/L
OW-12	8/13/2015	Pyridine	ND	10	1.7	20	ug/L
OW-12	8/13/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-12	8/13/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-12	8/13/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-12	8/13/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-12	8/13/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-12	8/13/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-12	8/13/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-12	8/13/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-12	8/13/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-12	8/13/2015	Pyrene	ND	10	2.3	117	ug/L
OW-12	8/13/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-12	8/13/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-12	8/13/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-12	8/13/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-12	8/13/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-12	8/13/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-12	8/13/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-12	8/13/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-12	8/13/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-12	8/13/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-12	8/13/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-12	8/13/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-12	8/13/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-12	8/13/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-12	8/13/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-12	8/13/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-13	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-13	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-13	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-13	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-13	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-13	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-13	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-13	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-13	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-13	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-13	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-13	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-13	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-13	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-13	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-13	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-13	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-13	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-13	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-13	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-13	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-13	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-13	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-13	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-13	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-13	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-13	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-13	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-13	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-13	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-13	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-13	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-13	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-13	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-13	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-13	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-13	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-13	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-13	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-13	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-13	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-13	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-13	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-13	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-13	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-13	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-13	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-13	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-13	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-13	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-13	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-13	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-13	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-13	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-13	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-13	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-13	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-13	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-13	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-13	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-13	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-13	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-13	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-13	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-13	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-13	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-13	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-13	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-13	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-13	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-13	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-13	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-13	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-13	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-13	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-13	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-13	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-13	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-13	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-13	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-13	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-13	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-13	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-13	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-13	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-13	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-13	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-13	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-13	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-13	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-13	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-13	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-13	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-13	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-13	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-13	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-13	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-13	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-13	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-13	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-13	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
OW-13	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-13	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-13	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-13	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-13	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-13	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-13	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-13	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-13	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-13	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-13	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-13	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-13	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-13	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-13	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-13	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-13	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-13	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-13	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-13	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-13	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-13	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-13	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-13	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-13	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-13	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-13	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-13	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-13	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-13	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-13	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-13	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-13	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-13	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-13	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-13	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-13	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-13	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-13	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-13	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-13	3/2/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-13	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-13	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-13	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-13	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-13	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-13	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-13	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-13	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-13	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-13	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-13	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-13	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-13	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-13	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-13	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-13	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-13	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-13	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-13	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-13	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-13	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-13	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-13	3/2/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-13	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-13	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-13	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-13	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-13	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-13	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-13	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-13	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-13	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-13	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-13	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-13	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-13	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-13	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-13	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-13	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-13	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-13	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-13	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-13	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-13	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-13	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-13	3/2/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-13	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-13	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-13	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-13	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-13	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-13	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-13	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-13	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-13	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-13	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-13	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-13	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-13	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-13	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-13	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-13	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-13	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-13	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-13	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-13	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-13	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-13	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-13	3/2/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-13	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-13	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-13	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-13	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-13	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-13	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-13	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-13	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-13	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-13	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-13	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-13	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-13	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-13	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-13	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-13	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-13	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-13	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-13	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-13	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-13	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-13	9/17/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
OW-14	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-14	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-14	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-14	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-14	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-14	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-14	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-14	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-14	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-14	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-14	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-14	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-14	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-14	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-14	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-14	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-14	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-14	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-14	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-14	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-14	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-14	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-14	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-14	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-14	9/15/2014	1-Methylnaphthalene	**16**	10	3.6	11.38	ug/L
OW-14	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-14	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-14	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-14	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-14	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-14	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-14	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-14	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-14	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-14	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-14	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-14	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-14	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-14	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-14	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-14	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-14	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-14	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-14	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-14	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-14	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-14	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-14	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-14	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-14	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-14	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-14	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-14	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-14	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-14	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-14	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-14	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-14	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-14	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-14	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-14	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-14	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-14	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-14	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-14	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-14	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-14	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-14	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-14	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-14	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-14	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-29	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-29	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-29	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-29	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-29	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-29	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-29	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-29	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-29	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-29	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-29	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-29	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-29	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-29	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-29	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-29	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-29	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-29	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-29	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-29	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-29	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-29	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-29	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-29	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-29	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-29	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-29	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-29	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-29	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-29	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-29	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-29	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-29	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-29	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-29	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-29	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-29	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-29	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-29	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-29	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-29	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-29	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-29	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-29	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-29	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-29	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-29	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-29	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-29	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-29	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-29	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-29	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-29	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-29	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-29	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-29	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-29	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-29	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-29	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-29	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-29	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-29	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-29	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-29	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-29	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-29	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-29	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-29	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-29	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-29	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-29	2/24/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-29	2/24/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-29	2/24/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-29	2/24/2020	1,4-Dioxane	1.3	1	1	4.59	ug/L
OW-29	2/24/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
OW-29	2/24/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-29	2/24/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-29	2/24/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-29	2/24/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OW-29	2/24/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-29	2/24/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-29	2/24/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OW-29	2/24/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-29	2/24/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-29	2/24/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OW-29	2/24/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-29	2/24/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-29	2/24/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-29	2/24/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-29	2/24/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-29	2/24/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Aniline	ND	0.5	0.5	13	ug/L
OW-29	2/24/2020	Anthracene	ND	0.5	0.5	1721	ug/L
OW-29	2/24/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OW-29	2/24/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OW-29	2/24/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OW-29	2/24/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-29	2/24/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OW-29	2/24/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-29	2/24/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-29	2/24/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-29	2/24/2020	Bis(2-ethylhexyl)phthalate	0.4	0.5	0.5	55.64	ug/L
OW-29	2/24/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-29	2/24/2020	Carbazole	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-29	2/24/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-29	2/24/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-29	2/24/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-29	2/24/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-29	2/24/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-29	2/24/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-29	2/24/2020	Fluorene	ND	0.5	0.5	288	ug/L
OW-29	2/24/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-29	2/24/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-29	2/24/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-29	2/24/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-29	2/24/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OW-29	2/24/2020	Isophorone	ND	0.5	0.5	781	ug/L
OW-29	2/24/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
OW-29	2/24/2020	Naphthalene	ND	0.5	0.5	30	ug/L
OW-29	2/24/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-29	2/24/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-29	2/24/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
OW-29	2/24/2020	Phenol	ND	0.5	0.5	5761	ug/L
OW-29	2/24/2020	Pyrene	ND	0.5	0.5	117	ug/L
OW-29	2/24/2020	Pyridine	ND	0.5	0.5	20	ug/L
OW-29	9/17/2020	1,4-Dioxane	0.3	1	0.094	4.59	ug/L
OW-29	9/17/2020	1,4-Dioxane	0.26	1	0.094	4.59	ug/L
OW-30	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-30	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-30	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-30	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-30	9/17/2014	Aniline	ND	10	2.4	13	ug/L
OW-30	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-30	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-30	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-30	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-30	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
OW-30	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-30	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-30	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-30	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-30	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-30	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-30	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
OW-30	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-30	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-30	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-30	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-30	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-30	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-30	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-30	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-30	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-30	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-30	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-30	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-30	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-30	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-30	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-30	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-30	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-30	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-30	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-30	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-30	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-30	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-30	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-30	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-30	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-30	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
OW-30	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
OW-30	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-30	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-30	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-30	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-30	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-30	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-30	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-30	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-30	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-30	9/17/2014	Pyrene	ND	10	4	117	ug/L
OW-30	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-30	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-30	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-30	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-30	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-30	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
OW-30	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-30	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-30	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-30	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-30	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-30	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-30	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-30	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-30	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-30	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-50	3/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	3/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	3/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	3/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	3/22/2012	Aniline	ND	10	2	13	ug/L
OW-50	3/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	3/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	3/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	3/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	3/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	3/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	3/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	3/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	3/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	3/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	3/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	3/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	3/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	3/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	3/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	3/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	3/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	3/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	3/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	3/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	3/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	3/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	3/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	3/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	3/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	3/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	3/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	3/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	3/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	3/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	3/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	3/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	3/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	3/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	3/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	3/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	3/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	3/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	3/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	3/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	3/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	3/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	3/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	3/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	3/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	3/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	3/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	3/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	3/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	3/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	3/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	3/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	3/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	3/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	3/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	3/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	3/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	3/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	3/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	3/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	3/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	3/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	6/13/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	6/13/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	6/13/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	6/13/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	6/13/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	6/13/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	6/13/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	6/13/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	6/13/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	6/13/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	6/13/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	6/13/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	6/13/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	6/13/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	6/13/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	6/13/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	6/13/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	6/13/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	6/13/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	6/13/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	6/13/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	6/13/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	6/13/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	6/13/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	6/13/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	6/13/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	6/13/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	6/13/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	6/13/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	6/13/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	6/13/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	6/13/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	6/13/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	6/13/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	6/13/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	6/13/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	6/13/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	6/13/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	6/13/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	6/13/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	6/13/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	6/13/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	6/13/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	6/13/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	6/13/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	6/13/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	6/13/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	6/13/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	6/13/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	6/13/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	6/13/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	6/13/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	6/13/2012	Aniline	ND	10	2	13	ug/L
OW-50	6/13/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	6/13/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	6/13/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	6/13/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	6/13/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	6/13/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	6/13/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	6/13/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	6/13/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	6/13/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	6/13/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	6/13/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	6/13/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	6/13/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	6/13/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	8/23/2012	Aniline	ND	10	2	13	ug/L
OW-50	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	12/5/2012	Aniline	ND	10	2	13	ug/L
OW-50	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
OW-50	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-50	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-50	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-50	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-50	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-50	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-50	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-50	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-50	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-50	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-50	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-50	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-50	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-50	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-50	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-50	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-50	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-50	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-50	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-50	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-50	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-50	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-50	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-50	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-50	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-50	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-50	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-50	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-50	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-50	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-50	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-50	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-50	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-50	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-50	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-50	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-50	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-50	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-50	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-50	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-50	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-50	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-50	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-50	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-50	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-50	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-50	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-50	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-50	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-50	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-50	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-50	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-50	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-50	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-50	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-50	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-50	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-50	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-50	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-50	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-50	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-50	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-50	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-50	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-50	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-50	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-50	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-50	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-50	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-50	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-50	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-50	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-50	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-50	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-50	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-50	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-50	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-50	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-50	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-50	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-50	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-50	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-50	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-50	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-50	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-50	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-50	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-50	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-50	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-50	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-50	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-50	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-50	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-50	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-50	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-50	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-50	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-50	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-50	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-50	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-50	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-50	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-50	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-50	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-50	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-50	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-50	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-50	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-50	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-50	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-50	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-50	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-50	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-50	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-50	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-50	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-50	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-50	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-50	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-50	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-50	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-50	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-50	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-50	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-50	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-50	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-50	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-50	8/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-50	8/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-50	8/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-50	8/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-50	8/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Aniline	ND	10	1.5	13	ug/L
OW-50	8/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-50	8/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-50	8/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-50	8/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-50	8/10/2015	Isophorone	ND	10	2	781	ug/L
OW-50	8/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-50	8/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-50	8/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-50	8/10/2015	Phenanthrene	ND	10	2	170	ug/L
OW-50	8/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	8/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-50	8/10/2015	Fluorene	ND	10	1.7	288	ug/L
OW-50	8/10/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-50	8/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-50	8/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-50	8/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-50	8/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-50	8/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-50	8/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-50	8/10/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-50	8/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-50	8/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-50	8/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-50	8/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-50	8/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-50	8/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-50	8/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-50	8/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-50	8/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-50	8/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-50	8/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-50	8/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-50	8/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-50	8/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-50	8/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-50	8/10/2015	Phenol	ND	10	1.1	5761	ug/L
OW-50	8/10/2015	Pyridine	ND	10	1.7	20	ug/L
OW-50	8/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-50	8/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-50	8/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-50	8/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-50	8/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-50	8/10/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-50	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-50	8/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-50	8/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-50	8/10/2015	Pyrene	ND	10	2.3	117	ug/L
OW-50	8/10/2015	Dimethylphthalate	ND	10	2	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-50	8/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-50	8/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-50	8/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-50	8/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-50	8/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-50	8/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-50	8/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-50	8/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-50	8/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-50	8/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-50	8/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-50	8/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-50	8/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-50	8/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-50	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-50	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-50	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-50	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-50	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-50	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-50	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-50	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-50	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-50	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-50	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-50	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-50	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-50	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-50	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-50	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-50	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-50	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-50	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-50	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-50	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-50	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-50	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-50	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-50	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-50	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-50	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-50	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-50	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-50	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-50	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-50	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-50	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-50	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-50	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-50	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-50	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-50	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-50	3/27/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
OW-50	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-50	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-50	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-50	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-50	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-50	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-50	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-50	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-50	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-50	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-50	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-50	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-50	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-50	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-50	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-50	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-50	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-50	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-50	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-50	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-50	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-50	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-50	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-50	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-50	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-50	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-50	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-50	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-50	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-50	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-50	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-50	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-52	3/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	3/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	3/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	3/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	3/22/2012	Aniline	ND	10	2	13	ug/L
OW-52	3/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	3/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	3/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	3/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	3/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	3/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	3/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	3/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	3/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	3/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	3/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	3/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	3/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	3/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	3/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	3/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	3/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	3/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	3/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	3/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	3/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	3/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	3/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	3/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	3/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	3/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	3/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	3/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	3/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	3/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	3/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	3/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	3/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	3/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	3/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	3/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	3/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	3/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	3/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	3/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	3/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	3/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	3/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	3/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	3/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	3/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	3/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	3/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	3/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	3/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	3/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	3/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	3/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	3/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	3/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	3/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	3/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	3/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	3/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	3/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	3/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	3/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	6/13/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	6/13/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	6/13/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	6/13/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	6/13/2012	Aniline	ND	10	2	13	ug/L
OW-52	6/13/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	6/13/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	6/13/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	6/13/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	6/13/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	6/13/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	6/13/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	6/13/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	6/13/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	6/13/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	6/13/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	6/13/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	6/13/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	6/13/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	6/13/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	6/13/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	6/13/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	6/13/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	6/13/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	6/13/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	6/13/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	6/13/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	6/13/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	6/13/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	6/13/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	6/13/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	6/13/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	6/13/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	6/13/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	6/13/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	6/13/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	6/13/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	6/13/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	6/13/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	6/13/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	6/13/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	6/13/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	6/13/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	6/13/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	6/13/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	6/13/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	6/13/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	6/13/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	6/13/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	6/13/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	6/13/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	6/13/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	6/13/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	6/13/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	6/13/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	6/13/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	6/13/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	6/13/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	6/13/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	6/13/2012	Acenaphthylene	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	6/13/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	6/13/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	6/13/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	6/13/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	6/13/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	6/13/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	6/13/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	6/13/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	8/23/2012	Aniline	ND	10	2	13	ug/L
OW-52	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	12/5/2012	Aniline	ND	10	2	13	ug/L
OW-52	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
OW-52	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
OW-52	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-52	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-52	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-52	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-52	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-52	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-52	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-52	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-52	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-52	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-52	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-52	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-52	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-52	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-52	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-52	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-52	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-52	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-52	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-52	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-52	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-52	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-52	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-52	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-52	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-52	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-52	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-52	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-52	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-52	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-52	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-52	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-52	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-52	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-52	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-52	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-52	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-52	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-52	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-52	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-52	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-52	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-52	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-52	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-52	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-52	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-52	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-52	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-52	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-52	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-52	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-52	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-52	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-52	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-52	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-52	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-52	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-52	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-52	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-52	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-52	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-52	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-52	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-52	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-52	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-52	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-52	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-52	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-52	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-52	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-52	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-52	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-52	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-52	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-52	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-52	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-52	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-52	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-52	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-52	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-52	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-52	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-52	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-52	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-52	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-52	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-52	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-52	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-52	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-52	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-52	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-52	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-52	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-52	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-52	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-52	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-52	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-52	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-52	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-52	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-52	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-52	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-52	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-52	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-52	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-52	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-52	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-52	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-52	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-52	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-52	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-52	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-52	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-52	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-52	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-52	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-52	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-52	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-52	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-52	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-52	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-52	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-52	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-52	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-52	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-52	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-52	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-52	8/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-52	8/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-52	8/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-52	8/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-52	8/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Aniline	ND	10	1.5	13	ug/L
OW-52	8/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-52	8/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-52	8/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-52	8/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-52	8/10/2015	Isophorone	ND	10	2	781	ug/L
OW-52	8/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-52	8/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-52	8/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-52	8/10/2015	Phenanthrene	ND	10	2	170	ug/L
OW-52	8/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	8/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-52	8/10/2015	Fluorene	ND	10	1.7	288	ug/L
OW-52	8/10/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-52	8/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-52	8/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-52	8/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-52	8/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-52	8/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-52	8/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-52	8/10/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-52	8/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-52	8/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-52	8/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-52	8/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-52	8/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-52	8/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-52	8/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-52	8/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-52	8/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-52	8/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-52	8/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-52	8/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-52	8/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-52	8/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-52	8/10/2015	Phenol	ND	10	1.1	5761	ug/L
OW-52	8/10/2015	Pyridine	ND	10	1.7	20	ug/L
OW-52	8/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-52	8/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-52	8/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-52	8/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-52	8/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-52	8/10/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-52	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-52	8/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-52	8/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-52	8/10/2015	Pyrene	ND	10	2.3	117	ug/L
OW-52	8/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-52	8/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-52	8/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-52	8/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-52	8/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-52	8/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-52	8/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-52	8/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-52	8/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-52	8/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-52	8/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-52	8/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-52	8/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-52	8/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-52	8/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-52	8/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-52	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-52	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-52	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-52	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-52	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-52	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-52	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-52	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-52	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-52	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-52	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-52	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-52	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-52	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-52	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-52	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-52	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-52	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-52	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-52	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-52	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-52	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-52	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-52	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-52	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-52	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-52	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-52	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-52	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-52	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-52	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-52	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-52	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-52	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-52	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-52	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-52	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-52	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-52	3/27/2019	Benzoic Acid	6.6	20	6.311561	75000	ug/L
OW-52	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-52	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-52	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-52	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-52	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-52	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-52	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-52	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-52	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-52	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-52	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-52	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-52	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-52	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-52	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-52	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-52	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-52	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-52	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-52	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-52	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-52	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-52	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-52	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-52	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-52	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-52	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-52	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-52	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-52	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-52	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-52	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-54	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-54	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-54	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-54	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-54	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-54	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-54	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-54	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-54	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-54	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-54	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-54	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-54	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-54	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-54	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-54	6/1/2016	Carbazole	ND	10	2.3	NA	ug/L
OW-54	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-54	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-54	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-54	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-54	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-54	6/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-54	6/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OW-54	6/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OW-54	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-54	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-54	6/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OW-54	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-54	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-54	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-54	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-54	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-54	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-54	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Benzyl Alcohol	5.8	10	3	2000	ug/L
OW-54	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-54	6/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
OW-54	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-54	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-54	6/1/2016	Phenol	ND	10	2	5761	ug/L
OW-54	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-54	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-54	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-54	6/1/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
OW-54	6/1/2016	Di-n-octylphthalate	5	10	2	200	ug/L
OW-54	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-54	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-54	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-54	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-54	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-54	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-54	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-54	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-54	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-54	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-54	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-54	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-54	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-54	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-54	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-54	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-54	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-54	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-54	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-54	6/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-54	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	3/29/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
OW-54	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-54	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	3/29/2017	Pyridine	ND	10	2.3	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	3/29/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
OW-54	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	6/21/2017	Benzoic Acid	9.6	20	3.9	75000	ug/L
OW-54	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-54	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	9/11/2017	Benzoic Acid	7.5	20	3.9	75000	ug/L
OW-54	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-54	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-54	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-54	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-54	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	2/22/2018	Benzoic Acid	9.4	20	3.9	75000	ug/L
OW-54	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-54	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-54	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-54	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-54	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-54	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-54	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-54	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	5/8/2018	Benzoic Acid	16	20	6.3	75000	ug/L
OW-54	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-54	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-54	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-54	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-54	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	8/28/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-54	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-54	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-54	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-54	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-54	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-54	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-54	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-54	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	11/7/2018	Bis(2-ethylhexyl)phthalate	10	10	8.1	55.64	ug/L
OW-54	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-54	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-54	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	2/6/2019	2,4-Dinitrophenol	6.8	20	3.702104	38.7	ug/L
OW-54	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	2/6/2019	Benzoic Acid	7	20	6.311561	75000	ug/L
OW-54	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	2/6/2019	2,4-Dinitrophenol	6.9	20	3.702104	38.7	ug/L
OW-54	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	2/6/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-54	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	2/6/2019	Bis(2-ethylhexyl)phthalate	8.9	10	8.056342	55.64	ug/L
OW-54	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-54	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	5/2/2019	Benzoic Acid	8.9	20	6.311561	75000	ug/L
OW-54	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-54	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-54	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-54	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-54	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-54	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-54	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-54	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-54	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-54	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-54	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-54	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-54	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-54	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-54	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-54	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-54	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-54	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-54	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-54	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-54	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-54	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-54	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-54	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-54	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-54	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-54	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-54	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-54	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-54	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-54	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-54	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-54	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-54	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-54	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-54	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-54	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-54	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-54	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-54	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-54	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-54	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-54	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-54	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-54	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-54	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-54	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-54	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-54	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-54	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-54	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-54	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-54	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-54	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-54	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-54	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-54	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-54	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-54	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-54	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-54	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-54	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-54	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-54	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-54	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-54	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-54	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-54	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-54	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-54	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-54	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-54	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-54	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-54	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-54	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-54	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-54	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-54	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-54	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-54	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-54	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-54	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-54	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-54	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-54	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-54	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-54	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-54	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-54	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-54	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-54	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-54	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-54	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-54	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-54	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-54	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-54	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-54	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-54	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-54	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-54	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-54	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-54	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-54	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-54	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-54	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-54	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-54	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-54	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-54	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-54	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-54	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-54	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-54	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-54	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-54	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-54	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-54	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-54	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-54	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-54	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-54	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-54	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-54	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-54	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-54	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-54	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-54	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-54	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-55	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-55	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-55	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-55	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-55	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-55	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-55	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-55	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-55	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-55	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-55	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-55	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-55	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-55	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-55	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-55	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-55	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-55	6/1/2016	Carbazole	2.4	10	2.3	NA	ug/L
OW-55	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-55	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-55	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-55	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-55	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-55	6/1/2016	1-Methylnaphthalene	**41**	10	2.9	11.38	ug/L
OW-55	6/1/2016	Naphthalene	**220**	10	2.6	30	ug/L
OW-55	6/1/2016	2-Methylnaphthalene	**69**	10	2.9	35.1	ug/L
OW-55	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-55	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-55	6/1/2016	2-Methylphenol	19	10	2.5	NA	ug/L
OW-55	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-55	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-55	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-55	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-55	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-55	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-55	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-55	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-55	6/1/2016	2,4-Dimethylphenol	6.6	10	3	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-55	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-55	6/1/2016	Phenol	*27*	10	2	5761	ug/L
OW-55	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-55	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-55	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-55	6/1/2016	Bis(2-ethylhexyl)phthalate	10	10	2.6	55.64	ug/L
OW-55	6/1/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
OW-55	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-55	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-55	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-55	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-55	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-55	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-55	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-55	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-55	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-55	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-55	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-55	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-55	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-55	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-55	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-55	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-55	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-55	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-55	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-55	6/1/2016	3,4-Methylphenol	28	10	2.3	NA	ug/L
OW-55	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	3/29/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-55	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	3/29/2017	1-Methylnaphthalene	11	10	3.3	11.38	ug/L
OW-55	3/29/2017	Naphthalene	**35**	10	2.9	30	ug/L
OW-55	3/29/2017	2-Methylnaphthalene	15	10	3.3	35.1	ug/L
OW-55	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	3/29/2017	Phenol	26	10	3.1	5761	ug/L
OW-55	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	3/29/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
OW-55	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	3/29/2017	3,4-Methylphenol	3.9	10	3.2	NA	ug/L
OW-55	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	6/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-55	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	6/21/2017	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
OW-55	6/21/2017	Naphthalene	**33**	10	2.9	30	ug/L
OW-55	6/21/2017	2-Methylnaphthalene	15	10	3.3	35.1	ug/L
OW-55	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	6/21/2017	Phenol	42	10	3.1	5761	ug/L
OW-55	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	6/21/2017	Bis(2-ethylhexyl)phthalate	6.6	10	4.8	55.64	ug/L
OW-55	6/21/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
OW-55	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	9/11/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-55	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	9/11/2017	1-Methylnaphthalene	**20**	10	3.3	11.38	ug/L
OW-55	9/11/2017	Naphthalene	**41**	10	2.9	30	ug/L
OW-55	9/11/2017	2-Methylnaphthalene	16	10	3.3	35.1	ug/L
OW-55	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	9/11/2017	Phenol	35	10	3.1	5761	ug/L
OW-55	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	9/11/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-55	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	12/6/2017	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
OW-55	12/6/2017	Naphthalene	17	10	2.9	30	ug/L
OW-55	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-55	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	12/6/2017	Phenol	26	10	3.1	5761	ug/L
OW-55	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	12/6/2017	Bis(2-ethylhexyl)phthalate	13	10	4.8	55.64	ug/L
OW-55	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-55	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	2/22/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-55	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-55	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	2/22/2018	1-Methylnaphthalene	**19**	10	3.3	11.38	ug/L
OW-55	2/22/2018	Naphthalene	21	10	2.9	30	ug/L
OW-55	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-55	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	2/22/2018	Phenol	37	10	3.1	5761	ug/L
OW-55	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-55	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	2/22/2018	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
OW-55	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-55	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-55	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	5/8/2018	Benzoic Acid	17	20	6.3	75000	ug/L
OW-55	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-55	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	5/8/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
OW-55	5/8/2018	Naphthalene	17	10	5	30	ug/L
OW-55	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	5/8/2018	Phenol	20	10	6	5761	ug/L
OW-55	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	5/8/2018	Pyrene	ND	10	6.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	8/28/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-55	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-55	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	8/28/2018	1-Methylnaphthalene	8	10	7	11.38	ug/L
OW-55	8/28/2018	Naphthalene	11	10	5	30	ug/L
OW-55	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	8/28/2018	Phenol	15	10	6	5761	ug/L
OW-55	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-55	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-55	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	11/7/2018	1-Methylnaphthalene	**15**	10	7	11.38	ug/L
OW-55	11/7/2018	Naphthalene	16	10	5	30	ug/L
OW-55	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	11/7/2018	Phenol	19	10	6	5761	ug/L
OW-55	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-55	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-55	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-55	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-55	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-55	2/6/2019	1-Methylnaphthalene	**16**	10	6.999122	11.38	ug/L
OW-55	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-55	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-55	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-55	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-55	2/6/2019	2,4-Dinitrophenol	7.9	20	3.702104	38.7	ug/L
OW-55	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-55	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-55	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-55	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-55	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-55	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-55	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-55	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-55	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-55	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-55	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-55	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-55	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-55	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-55	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-55	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-55	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-55	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-55	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-55	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-55	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-55	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-55	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-55	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-55	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-55	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-55	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-55	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-55	2/6/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-55	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-55	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-55	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-55	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-55	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-55	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-55	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-55	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-55	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-55	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-55	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-55	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-55	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-55	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-55	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-55	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-55	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-55	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-55	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-55	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-55	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-55	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-55	2/6/2019	Naphthalene	20	10	5.041403	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-55	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-55	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-55	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-55	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-55	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-55	2/6/2019	Phenol	26	10	5.977352	5761	ug/L
OW-55	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-55	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-55	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-55	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-55	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-55	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-55	5/2/2019	1-Methylnaphthalene	**17**	10	6.999122	11.38	ug/L
OW-55	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-55	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-55	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-55	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-55	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-55	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-55	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-55	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-55	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-55	5/2/2019	2-Methylnaphthalene	6.9	10	6.33239	35.1	ug/L
OW-55	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-55	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-55	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-55	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-55	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-55	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-55	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-55	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-55	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-55	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-55	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-55	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-55	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-55	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-55	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-55	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-55	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-55	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-55	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-55	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-55	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-55	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-55	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-55	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-55	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-55	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-55	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-55	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-55	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-55	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-55	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-55	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-55	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-55	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-55	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-55	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-55	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-55	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-55	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-55	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-55	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-55	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-55	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-55	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-55	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-55	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-55	5/2/2019	Naphthalene	26	10	5.041403	30	ug/L
OW-55	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-55	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-55	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-55	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-55	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-55	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-55	5/2/2019	Phenol	34	10	5.977352	5761	ug/L
OW-55	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-55	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-56	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-56	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-56	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-56	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-56	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-56	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-56	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-56	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-56	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-56	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-56	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-56	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-56	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-56	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-56	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-56	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-56	6/1/2016	Carbazole	2.8	10	2.3	NA	ug/L
OW-56	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-56	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-56	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-56	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-56	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-56	6/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-56	6/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OW-56	6/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OW-56	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-56	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-56	6/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-56	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-56	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-56	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-56	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-56	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-56	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-56	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-56	6/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
OW-56	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-56	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-56	6/1/2016	Phenol	ND	10	2	5761	ug/L
OW-56	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-56	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-56	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-56	6/1/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
OW-56	6/1/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
OW-56	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-56	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-56	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-56	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-56	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-56	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-56	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-56	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-56	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-56	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-56	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-56	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-56	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-56	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-56	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-56	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-56	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-56	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-56	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-56	6/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-56	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	3/29/2017	Benzoic Acid	7.7	20	3.9	75000	ug/L
OW-56	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-56	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	3/29/2017	Bis(2-ethylhexyl)phthalate	5.6	10	4.8	55.64	ug/L
OW-56	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	6/21/2017	Benzoic Acid	8.2	20	3.9	75000	ug/L
OW-56	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-56	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	6/21/2017	Di-n-octylphthalate	5.7	10	4.7	200	ug/L
OW-56	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	9/11/2017	Benzoic Acid	7.9	20	3.9	75000	ug/L
OW-56	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-56	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-56	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-56	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-56	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	2/22/2018	Benzoic Acid	8.6	20	3.9	75000	ug/L
OW-56	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-56	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-56	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-56	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-56	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-56	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-56	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-56	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	5/8/2018	Benzoic Acid	14	20	6.3	75000	ug/L
OW-56	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-56	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	5/8/2018	Phenol	ND	10	6	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	8/28/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
OW-56	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-56	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-56	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-56	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-56	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-56	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-56	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-56	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-56	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-56	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-56	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-56	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-56	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-56	2/6/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-56	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-56	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-56	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-56	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-56	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-56	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-56	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-56	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-56	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-56	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-56	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-56	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-56	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-56	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-56	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-56	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-56	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-56	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-56	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-56	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-56	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-56	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-56	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-56	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-56	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-56	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-56	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-56	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-56	2/6/2019	Benzoic Acid	7.3	20	6.311561	75000	ug/L
OW-56	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-56	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-56	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-56	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-56	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-56	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-56	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-56	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-56	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-56	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-56	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-56	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-56	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-56	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-56	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-56	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-56	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-56	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-56	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-56	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-56	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-56	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-56	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-56	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-56	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-56	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-56	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-56	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-56	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-56	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-56	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-56	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-56	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-56	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-56	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-56	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-56	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-56	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-56	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-56	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-56	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-56	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-56	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-56	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-56	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-56	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-56	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-56	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-56	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-56	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-56	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-56	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-56	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-56	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-56	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-56	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-56	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-56	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-56	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-56	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-56	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-56	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-56	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-56	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-56	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-56	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-56	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-56	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-56	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-56	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-56	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-56	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-56	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-56	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-56	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-56	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-56	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-56	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-56	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-56	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-56	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-56	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-56	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-56	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-56	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-56	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-56	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-56	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-56	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-56	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-56	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-56	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-56	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-56	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-56	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-56	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-56	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-56	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-56	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-56	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-56	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-56	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-56	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-56	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-56	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-56	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-56	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-56	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-56	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-56	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-56	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-56	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-56	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-56	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-56	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-56	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-56	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-56	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-56	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-56	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-56	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-56	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-56	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-56	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-56	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-56	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-56	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-56	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-56	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-56	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-56	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-56	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-56	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-56	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-56	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-56	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-56	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-56	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-56	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-56	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-56	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-56	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-56	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-56	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-56	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-56	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-56	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-56	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-56	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-56	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-56	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-56	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-56	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-56	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-56	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-56	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-56	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-56	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-56	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-56	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-56	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-56	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-56	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-56	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-56	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-56	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-56	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-56	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-56	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-56	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-56	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-56	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-56	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-56	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-56	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-56	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-56	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-56	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-56	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-56	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-56	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-56	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-56	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-56	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-56	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-56	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-56	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-56	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-56	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-56	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-56	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-56	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-56	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-56	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-56	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-56	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-56	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-56	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-56	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-56	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-56	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-56	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-56	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-56	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-56	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-56	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-56	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-56	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-56	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-56	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-56	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-56	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-56	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-56	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-56	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-56	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-56	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-56	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-56	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-56	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-56	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-56	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-56	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-56	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-56	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-56	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-56	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-56	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-56	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-56	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-56	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-56	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-56	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-56	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-56	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-56	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-56	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-56	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-56	3/2/2020	1,4-Dioxane	0.8	1	0.2	4.59	ug/L
OW-56	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-56	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-56	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-56	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-56	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-56	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-56	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-56	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-56	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-56	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-56	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-56	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-56	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-56	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-56	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-56	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-56	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-56	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-56	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-56	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-56	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-56	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-56	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-56	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-56	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-56	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-56	3/2/2020	Bis(2-ethylhexyl)phthalate	0.84	0.5	0.2	55.64	ug/L
OW-56	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-56	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-56	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-56	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-56	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-56	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-56	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-56	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-56	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-56	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-56	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-56	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-56	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-56	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-56	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-56	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-56	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-56	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-56	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-56	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-56	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-56	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-56	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-56	9/21/2020	1,4-Dioxane	**6.1**	1	0.094	4.59	ug/L
OW-57	10/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-57	10/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-57	10/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-57	10/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-57	10/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-57	10/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-57	10/1/2016	Benzoic Acid	32	20	2.6	75000	ug/L
OW-57	10/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-57	10/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-57	10/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-57	10/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-57	10/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-57	10/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-57	10/1/2016	Phenanthrene	7.6	10	2.6	170	ug/L
OW-57	10/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-57	10/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-57	10/1/2016	Fluorene	7.2	10	2.7	288	ug/L
OW-57	10/1/2016	Carbazole	4.2	10	2.3	NA	ug/L
OW-57	10/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-57	10/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-57	10/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-57	10/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-57	10/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-57	10/1/2016	1-Methylnaphthalene	**110**	10	2.9	11.38	ug/L
OW-57	10/1/2016	Naphthalene	**140**	10	2.6	30	ug/L
OW-57	10/1/2016	2-Methylnaphthalene	**98**	10	2.9	35.1	ug/L
OW-57	10/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-57	10/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-57	10/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OW-57	10/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-57	10/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-57	10/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-57	10/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-57	10/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-57	10/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-57	10/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-57	10/1/2016	2,4-Dimethylphenol	8.4	10	3	354	ug/L
OW-57	10/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-57	10/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-57	10/1/2016	Phenol	88	10	2	5761	ug/L
OW-57	10/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-57	10/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-57	10/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-57	10/1/2016	Bis(2-ethylhexyl)phthalate	4.2	10	2.6	55.64	ug/L
OW-57	10/1/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
OW-57	10/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-57	10/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-57	10/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-57	10/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-57	10/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-57	10/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-57	10/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-57	10/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-57	10/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-57	10/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-57	10/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-57	10/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-57	10/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-57	10/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-57	10/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-57	10/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-57	10/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-57	10/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-57	10/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-57	10/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-57	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	3/30/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	3/30/2017	Benzoic Acid	19	20	3.9	75000	ug/L
OW-57	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-57	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	3/30/2017	Fluorene	ND	10	4	288	ug/L
OW-57	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	3/30/2017	1-Methylnaphthalene	**45**	10	3.3	11.38	ug/L
OW-57	3/30/2017	Naphthalene	**58**	10	2.9	30	ug/L
OW-57	3/30/2017	2-Methylnaphthalene	28	10	3.3	35.1	ug/L
OW-57	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	3/30/2017	Phenol	7.1	10	3.1	5761	ug/L
OW-57	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	3/30/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
OW-57	3/30/2017	Di-n-octylphthalate	5.1	10	4.7	200	ug/L
OW-57	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	6/21/2017	Benzoic Acid	36	20	3.9	75000	ug/L
OW-57	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-57	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-57	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	6/21/2017	1-Methylnaphthalene	**51**	10	3.3	11.38	ug/L
OW-57	6/21/2017	Naphthalene	**43**	10	2.9	30	ug/L
OW-57	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-57	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	6/21/2017	Phenol	210	10	3.1	5761	ug/L
OW-57	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	6/21/2017	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
OW-57	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	9/19/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
OW-57	9/19/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
OW-57	9/19/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
OW-57	9/19/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
OW-57	9/19/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
OW-57	9/19/2017	Aniline	*ND*	*50*	15	13	ug/L
OW-57	9/19/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
OW-57	9/19/2017	Benzoic Acid	69	100	20	75000	ug/L
OW-57	9/19/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
OW-57	9/19/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
OW-57	9/19/2017	Isophorone	ND	50	22	781	ug/L
OW-57	9/19/2017	Acenaphthene	ND	50	18	535	ug/L
OW-57	9/19/2017	Diethylphthalate	ND	50	20	14801	ug/L
OW-57	9/19/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
OW-57	9/19/2017	Phenanthrene	ND	50	22	170	ug/L
OW-57	9/19/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
OW-57	9/19/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
OW-57	9/19/2017	Fluorene	ND	50	20	288	ug/L
OW-57	9/19/2017	Carbazole	ND	50	23	NA	ug/L
OW-57	9/19/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
OW-57	9/19/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
OW-57	9/19/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
OW-57	9/19/2017	2-Nitroaniline	ND	50	25	190	ug/L
OW-57	9/19/2017	2-Nitrophenol	ND	50	26	NA	ug/L
OW-57	9/19/2017	1-Methylnaphthalene	**100**	50	17	11.38	ug/L
OW-57	9/19/2017	Naphthalene	**75**	50	14	30	ug/L
OW-57	9/19/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
OW-57	9/19/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
OW-57	9/19/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
OW-57	9/19/2017	2-Methylphenol	ND	50	17	NA	ug/L
OW-57	9/19/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
OW-57	9/19/2017	2-Chlorophenol	ND	50	38	91	ug/L
OW-57	9/19/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
OW-57	9/19/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
OW-57	9/19/2017	3-Nitroaniline	ND	50	22	NA	ug/L
OW-57	9/19/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
OW-57	9/19/2017	4-Nitrophenol	ND	50	27	NA	ug/L
OW-57	9/19/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
OW-57	9/19/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
OW-57	9/19/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
OW-57	9/19/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/19/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
OW-57	9/19/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
OW-57	9/19/2017	Phenol	290	50	16	5761	ug/L
OW-57	9/19/2017	Pyridine	*ND*	*50*	11	20	ug/L
OW-57	9/19/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
OW-57	9/19/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
OW-57	9/19/2017	Bis(2-ethylhexyl)phthalate	30	50	24	55.64	ug/L
OW-57	9/19/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
OW-57	9/19/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
OW-57	9/19/2017	Anthracene	ND	50	18	1721	ug/L
OW-57	9/19/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
OW-57	9/19/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
OW-57	9/19/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
OW-57	9/19/2017	Pyrene	ND	50	22	117	ug/L
OW-57	9/19/2017	Dimethylphthalate	ND	50	18	612	ug/L
OW-57	9/19/2017	Dibenzofuran	ND	50	20	NA	ug/L
OW-57	9/19/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
OW-57	9/19/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
OW-57	9/19/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OW-57	9/19/2017	Fluoranthene	ND	50	21	802	ug/L
OW-57	9/19/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
OW-57	9/19/2017	Acenaphthylene	ND	50	18	NA	ug/L
OW-57	9/19/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
OW-57	9/19/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
OW-57	9/19/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
OW-57	9/19/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
OW-57	9/19/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
OW-57	9/19/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
OW-57	9/19/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
OW-57	9/19/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
OW-57	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	12/6/2017	Benzoic Acid	39	20	3.9	75000	ug/L
OW-57	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	12/6/2017	Acenaphthene	4.2	10	3.6	535	ug/L
OW-57	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	12/6/2017	Fluorene	5.4	10	4	288	ug/L
OW-57	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	12/6/2017	1-Methylnaphthalene	**92**	10	3.3	11.38	ug/L
OW-57	12/6/2017	Naphthalene	**64**	10	2.9	30	ug/L
OW-57	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-57	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	12/6/2017	Phenol	130	10	3.1	5761	ug/L
OW-57	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-57	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	2/20/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	2/20/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	2/20/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	2/20/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	2/20/2018	Aniline	ND	10	3.1	13	ug/L
OW-57	2/20/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	2/20/2018	Benzoic Acid	43	20	3.9	75000	ug/L
OW-57	2/20/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	2/20/2018	Isophorone	ND	10	4.4	781	ug/L
OW-57	2/20/2018	Acenaphthene	5.3	10	3.6	535	ug/L
OW-57	2/20/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	2/20/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	2/20/2018	Phenanthrene	6.3	10	4.3	170	ug/L
OW-57	2/20/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	2/20/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	2/20/2018	Fluorene	6	10	4	288	ug/L
OW-57	2/20/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	2/20/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	2/20/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	2/20/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	2/20/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	2/20/2018	1-Methylnaphthalene	**98**	10	3.3	11.38	ug/L
OW-57	2/20/2018	Naphthalene	**73**	10	2.9	30	ug/L
OW-57	2/20/2018	2-Methylnaphthalene	29	10	3.3	35.1	ug/L
OW-57	2/20/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	2/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	2/20/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	2/20/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	2/20/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	2/20/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	2/20/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	2/20/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	2/20/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	2/20/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	2/20/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	2/20/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	2/20/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	2/20/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	2/20/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	2/20/2018	Phenol	67	10	3.1	5761	ug/L
OW-57	2/20/2018	Pyridine	ND	10	2.3	20	ug/L
OW-57	2/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	2/20/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	2/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-57	2/20/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	2/20/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	2/20/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-57	2/20/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	2/20/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	2/20/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	2/20/2018	Pyrene	ND	10	4.4	117	ug/L
OW-57	2/20/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	2/20/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	2/20/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	2/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	2/20/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	2/20/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	2/20/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	2/20/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	2/20/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	2/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	2/20/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	2/20/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	2/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	2/20/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	2/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	2/20/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	5/8/2018	Benzoic Acid	19	20	6.3	75000	ug/L
OW-57	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-57	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	5/8/2018	1-Methylnaphthalene	**38**	10	7	11.38	ug/L
OW-57	5/8/2018	Naphthalene	25	10	5	30	ug/L
OW-57	5/8/2018	2-Methylnaphthalene	10	10	6.3	35.1	ug/L
OW-57	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	5/8/2018	Phenol	27	10	6	5761	ug/L
OW-57	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	8/28/2018	Benzoic Acid	38	20	6.3	75000	ug/L
OW-57	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-57	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	8/28/2018	1-Methylnaphthalene	**89**	10	7	11.38	ug/L
OW-57	8/28/2018	Naphthalene	**73**	10	5	30	ug/L
OW-57	8/28/2018	2-Methylnaphthalene	16	10	6.3	35.1	ug/L
OW-57	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	8/28/2018	Phenol	68	10	6	5761	ug/L
OW-57	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-57	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	11/29/2018	Benzoic Acid	37	20	6.3	75000	ug/L
OW-57	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	11/29/2018	1-Methylnaphthalene	**54**	10	7	11.38	ug/L
OW-57	11/29/2018	Naphthalene	**51**	10	5	30	ug/L
OW-57	11/29/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
OW-57	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	11/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	11/29/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	11/29/2018	Phenol	24	10	6	5761	ug/L
OW-57	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	11/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-57	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-57	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-57	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-57	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-57	2/20/2019	1-Methylnaphthalene	**97**	10	6.999122	11.38	ug/L
OW-57	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-57	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-57	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-57	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-57	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-57	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-57	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-57	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-57	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-57	2/20/2019	2-Methylnaphthalene	30	10	6.33239	35.1	ug/L
OW-57	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-57	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-57	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-57	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-57	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-57	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-57	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-57	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-57	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-57	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-57	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-57	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-57	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-57	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-57	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-57	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
OW-57	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-57	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-57	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-57	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-57	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-57	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-57	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-57	2/20/2019	Benzoic Acid	36	20	6.311561	75000	ug/L
OW-57	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-57	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-57	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-57	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-57	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-57	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-57	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-57	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-57	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-57	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-57	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-57	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-57	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-57	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-57	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-57	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-57	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-57	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-57	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-57	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-57	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-57	2/20/2019	Naphthalene	**89**	10	5.041403	30	ug/L
OW-57	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-57	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-57	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-57	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-57	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-57	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-57	2/20/2019	Phenol	58	10	5.977352	5761	ug/L
OW-57	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-57	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-57	5/16/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
OW-57	5/16/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
OW-57	5/16/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
OW-57	5/16/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
OW-57	5/16/2019	1-Methylnaphthalene	**79**	20	6.138153	11.38	ug/L
OW-57	5/16/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
OW-57	5/16/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
OW-57	5/16/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
OW-57	5/16/2019	2,4-Dimethylphenol	ND	20	5.931986	354	ug/L
OW-57	5/16/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
OW-57	5/16/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
OW-57	5/16/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
OW-57	5/16/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
OW-57	5/16/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
OW-57	5/16/2019	2-Methylnaphthalene	**38**	20	6.037726	35.1	ug/L
OW-57	5/16/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
OW-57	5/16/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
OW-57	5/16/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
OW-57	5/16/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
OW-57	5/16/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
OW-57	5/16/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
OW-57	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
OW-57	5/16/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
OW-57	5/16/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
OW-57	5/16/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
OW-57	5/16/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
OW-57	5/16/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
OW-57	5/16/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
OW-57	5/16/2019	Acenaphthene	ND	20	5.911782	535	ug/L
OW-57	5/16/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
OW-57	5/16/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
OW-57	5/16/2019	Anthracene	ND	20	5.314345	1721	ug/L
OW-57	5/16/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
OW-57	5/16/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
OW-57	5/16/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
OW-57	5/16/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
OW-57	5/16/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
OW-57	5/16/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L
OW-57	5/16/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
OW-57	5/16/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
OW-57	5/16/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
OW-57	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
OW-57	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
OW-57	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
OW-57	5/16/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
OW-57	5/16/2019	Carbazole	ND	20	5.781013	NA	ug/L
OW-57	5/16/2019	Chrysene	ND	20	5.573246	34.3	ug/L
OW-57	5/16/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
OW-57	5/16/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
OW-57	5/16/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
OW-57	5/16/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
OW-57	5/16/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
OW-57	5/16/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
OW-57	5/16/2019	Fluoranthene	ND	20	4.824429	802	ug/L
OW-57	5/16/2019	Fluorene	8.4	20	5.776977	288	ug/L
OW-57	5/16/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
OW-57	5/16/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
OW-57	5/16/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
OW-57	5/16/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
OW-57	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L
OW-57	5/16/2019	Isophorone	ND	20	6.092069	781	ug/L
OW-57	5/16/2019	Naphthalene	**80**	20	8.24442	30	ug/L
OW-57	5/16/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
OW-57	5/16/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
OW-57	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
OW-57	5/16/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
OW-57	5/16/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
OW-57	5/16/2019	Phenanthrene	ND	20	5.554244	170	ug/L
OW-57	5/16/2019	Phenol	36	20	16.073173	5761	ug/L
OW-57	5/16/2019	Pyrene	ND	20	5.007199	117	ug/L
OW-57	5/16/2019	Pyridine	ND	20	19.206273	20	ug/L
OW-57	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-57	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-57	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-57	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-57	8/21/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
OW-57	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-57	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-57	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-57	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-57	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-57	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-57	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-57	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-57	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-57	8/21/2019	2-Methylnaphthalene	**47**	10	3.018863	35.1	ug/L
OW-57	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-57	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-57	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-57	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-57	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-57	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-57	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-57	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-57	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-57	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-57	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-57	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-57	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-57	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-57	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-57	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-57	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-57	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-57	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-57	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-57	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-57	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-57	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-57	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-57	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-57	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-57	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-57	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-57	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-57	8/21/2019	Carbazole	5	10	2.890507	NA	ug/L
OW-57	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-57	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-57	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-57	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-57	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-57	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-57	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-57	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-57	8/21/2019	Fluorene	3.9	10	2.888488	288	ug/L
OW-57	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-57	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-57	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-57	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-57	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-57	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-57	8/21/2019	Naphthalene	**110**	10	4.12221	30	ug/L
OW-57	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-57	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-57	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-57	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-57	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-57	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-57	8/21/2019	Phenol	29	10	8.036586	5761	ug/L
OW-57	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-57	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-57	11/5/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-57	11/5/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-57	11/5/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-57	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
OW-57	11/5/2019	1-Methylnaphthalene	**120**	0.5	0.5	11.38	ug/L
OW-57	11/5/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-57	11/5/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-57	11/5/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-57	11/5/2019	2,4-Dimethylphenol	6.9	0.5	0.5	354	ug/L
OW-57	11/5/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-57	11/5/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-57	11/5/2019	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
OW-57	11/5/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-57	11/5/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-57	11/5/2019	2-Methylnaphthalene	**62**	0.5	0.5	35.1	ug/L
OW-57	11/5/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-57	11/5/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-57	11/5/2019	3,4-Methylphenol	1	0.5	0.5	NA	ug/L
OW-57	11/5/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-57	11/5/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-57	11/5/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-57	11/5/2019	Acenaphthylene	1.5	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Aniline	ND	0.5	0.5	13	ug/L
OW-57	11/5/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OW-57	11/5/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-57	11/5/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-57	11/5/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-57	11/5/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-57	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
OW-57	11/5/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-57	11/5/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-57	11/5/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-57	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OW-57	11/5/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-57	11/5/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-57	11/5/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-57	11/5/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-57	11/5/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-57	11/5/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-57	11/5/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-57	11/5/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-57	11/5/2019	Fluorene	2.4	0.5	0.5	288	ug/L
OW-57	11/5/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-57	11/5/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-57	11/5/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-57	11/5/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-57	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
OW-57	11/5/2019	Isophorone	ND	0.5	0.5	781	ug/L
OW-57	11/5/2019	Naphthalene	**140**	0.5	0.5	30	ug/L
OW-57	11/5/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-57	11/5/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-57	11/5/2019	Phenanthrene	7.5	0.5	0.5	170	ug/L
OW-57	11/5/2019	Phenol	91	0.5	0.5	5761	ug/L
OW-57	11/5/2019	Pyrene	ND	0.5	0.5	117	ug/L
OW-57	11/5/2019	Pyridine	ND	0.5	0.5	20	ug/L
OW-57	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-57	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-57	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-57	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-57	3/5/2020	1-Methylnaphthalene	**120**	2.5	0.5	11.38	ug/L
OW-57	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-57	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-57	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-57	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OW-57	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-57	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-57	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-57	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-57	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-57	3/5/2020	2-Methylnaphthalene	**58**	2.5	0.5	35.1	ug/L
OW-57	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-57	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-57	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	2.5	0.5	1.52	ug/L
OW-57	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-57	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Acenaphthene	1.48	2.5	0.5	535	ug/L
OW-57	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-57	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-57	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-57	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-57	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-57	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-57	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-57	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-57	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-57	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-57	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-57	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-57	3/5/2020	Carbazole	6.4	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-57	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-57	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-57	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-57	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-57	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-57	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-57	3/5/2020	Fluorene	3.3	2.5	0.5	288	ug/L
OW-57	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-57	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-57	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-57	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-57	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-57	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-57	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-57	3/5/2020	Naphthalene	**130**	2.5	0.5	30	ug/L
OW-57	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-57	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-57	3/5/2020	Phenanthrene	8	2.5	0.5	170	ug/L
OW-57	3/5/2020	Phenol	89	2.5	0.5	5761	ug/L
OW-57	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-57	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-58	9/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-58	9/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-58	9/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-58	9/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-58	9/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Aniline	ND	10	2.4	13	ug/L
OW-58	9/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-58	9/30/2016	Benzoic Acid	16	20	2.6	75000	ug/L
OW-58	9/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-58	9/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-58	9/30/2016	Isophorone	ND	10	2.6	781	ug/L
OW-58	9/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-58	9/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-58	9/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-58	9/30/2016	Phenanthrene	2.9	10	2.6	170	ug/L
OW-58	9/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-58	9/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-58	9/30/2016	Fluorene	3.8	10	2.7	288	ug/L
OW-58	9/30/2016	Carbazole	2.8	10	2.3	NA	ug/L
OW-58	9/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-58	9/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-58	9/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-58	9/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-58	9/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-58	9/30/2016	1-Methylnaphthalene	**65**	10	2.9	11.38	ug/L
OW-58	9/30/2016	Naphthalene	**160**	10	2.6	30	ug/L
OW-58	9/30/2016	2-Methylnaphthalene	**71**	10	2.9	35.1	ug/L
OW-58	9/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-58	9/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-58	9/30/2016	2-Methylphenol	5.2	10	2.5	NA	ug/L
OW-58	9/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-58	9/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-58	9/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-58	9/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-58	9/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-58	9/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-58	9/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-58	9/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-58	9/30/2016	2,4-Dimethylphenol	3.9	10	3	354	ug/L
OW-58	9/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-58	9/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-58	9/30/2016	Phenol	51	10	2	5761	ug/L
OW-58	9/30/2016	Pyridine	ND	10	2.2	20	ug/L
OW-58	9/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-58	9/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-58	9/30/2016	Bis(2-ethylhexyl)phthalate	2.8	10	2.6	55.64	ug/L
OW-58	9/30/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
OW-58	9/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-58	9/30/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-58	9/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-58	9/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-58	9/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-58	9/30/2016	Pyrene	ND	10	3.1	117	ug/L
OW-58	9/30/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-58	9/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-58	9/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-58	9/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-58	9/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-58	9/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-58	9/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-58	9/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-58	9/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	9/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-58	9/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-58	9/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-58	9/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-58	9/30/2016	3,4-Methylphenol	7.9	10	2.3	NA	ug/L
OW-58	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	3/29/2017	Benzoic Acid	14	20	3.9	75000	ug/L
OW-58	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-58	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-58	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	3/29/2017	1-Methylnaphthalene	**57**	10	3.3	11.38	ug/L
OW-58	3/29/2017	Naphthalene	**99**	10	2.9	30	ug/L
OW-58	3/29/2017	2-Methylnaphthalene	**45**	10	3.3	35.1	ug/L
OW-58	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	3/29/2017	Phenol	24	10	3.1	5761	ug/L
OW-58	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	3/29/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
OW-58	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	3/29/2017	3,4-Methylphenol	5.4	10	3.2	NA	ug/L
OW-58	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	6/21/2017	Benzoic Acid	20	20	3.9	75000	ug/L
OW-58	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	6/21/2017	Phenanthrene	5	10	4.3	170	ug/L
OW-58	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-58	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	6/21/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	6/21/2017	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	6/21/2017	2-Methylnaphthalene	**60**	10	3.3	35.1	ug/L
OW-58	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	6/21/2017	Phenol	58	10	3.1	5761	ug/L
OW-58	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	6/21/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
OW-58	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	6/21/2017	3,4-Methylphenol	8	10	3.2	NA	ug/L
OW-58	9/19/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	9/19/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	9/19/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	9/19/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	9/19/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	9/19/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	9/19/2017	Benzoic Acid	21	20	3.9	75000	ug/L
OW-58	9/19/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	9/19/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	9/19/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	9/19/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	9/19/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	9/19/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	9/19/2017	Phenanthrene	4.9	10	4.3	170	ug/L
OW-58	9/19/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	9/19/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	9/19/2017	Fluorene	ND	10	4	288	ug/L
OW-58	9/19/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	9/19/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	9/19/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	9/19/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	9/19/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	9/19/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	9/19/2017	Naphthalene	**110**	10	2.9	30	ug/L
OW-58	9/19/2017	2-Methylnaphthalene	**56**	10	3.3	35.1	ug/L
OW-58	9/19/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	9/19/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	9/19/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	9/19/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	9/19/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	9/19/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	9/19/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	9/19/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	9/19/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	9/19/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	9/19/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	9/19/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	9/19/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	9/19/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	9/19/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	9/19/2017	Phenol	47	10	3.1	5761	ug/L
OW-58	9/19/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	9/19/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	9/19/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	9/19/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
OW-58	9/19/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	9/19/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	9/19/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	9/19/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	9/19/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	9/19/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	9/19/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	9/19/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	9/19/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	9/19/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	9/19/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	9/19/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	9/19/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	9/19/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	9/19/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	9/19/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	9/19/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	9/19/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	9/19/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	9/19/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	9/19/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	9/19/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	9/19/2017	3,4-Methylphenol	4.7	10	3.2	NA	ug/L
OW-58	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	12/6/2017	Benzoic Acid	22	20	3.9	75000	ug/L
OW-58	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-58	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-58	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	12/6/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	12/6/2017	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	12/6/2017	2-Methylnaphthalene	**53**	10	3.3	35.1	ug/L
OW-58	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	12/6/2017	Phenol	50	10	3.1	5761	ug/L
OW-58	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-58	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-58	2/20/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	2/20/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	2/20/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	2/20/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	2/20/2018	Aniline	ND	10	3.1	13	ug/L
OW-58	2/20/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	2/20/2018	Benzoic Acid	23	20	3.9	75000	ug/L
OW-58	2/20/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	2/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	2/20/2018	Isophorone	ND	10	4.4	781	ug/L
OW-58	2/20/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	2/20/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	2/20/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	2/20/2018	Phenanthrene	4.8	10	4.3	170	ug/L
OW-58	2/20/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	2/20/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	2/20/2018	Fluorene	4.9	10	4	288	ug/L
OW-58	2/20/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	2/20/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	2/20/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	2/20/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	2/20/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	2/20/2018	1-Methylnaphthalene	**90**	10	3.3	11.38	ug/L
OW-58	2/20/2018	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	2/20/2018	2-Methylnaphthalene	**68**	10	3.3	35.1	ug/L
OW-58	2/20/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	2/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	2/20/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	2/20/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	2/20/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	2/20/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	2/20/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	2/20/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	2/20/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	2/20/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	2/20/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	2/20/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	2/20/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	2/20/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	2/20/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	2/20/2018	Phenol	52	10	3.1	5761	ug/L
OW-58	2/20/2018	Pyridine	ND	10	2.3	20	ug/L
OW-58	2/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	2/20/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	2/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-58	2/20/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	2/20/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	2/20/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-58	2/20/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	2/20/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	2/20/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	2/20/2018	Pyrene	ND	10	4.4	117	ug/L
OW-58	2/20/2018	Dimethylphthalate	3.7	10	3.6	612	ug/L
OW-58	2/20/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	2/20/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	2/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	2/20/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	2/20/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	2/20/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	2/20/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	2/20/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	2/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	2/20/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	2/20/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	2/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	2/20/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	2/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	2/20/2018	3,4-Methylphenol	5.7	10	3.2	NA	ug/L
OW-58	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-58	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-58	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-58	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-58	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-58	5/8/2018	Benzoic Acid	25	20	6.3	75000	ug/L
OW-58	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-58	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-58	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-58	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-58	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-58	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-58	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-58	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-58	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-58	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-58	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-58	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-58	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-58	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-58	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-58	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-58	5/8/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
OW-58	5/8/2018	Naphthalene	**99**	10	5	30	ug/L
OW-58	5/8/2018	2-Methylnaphthalene	**42**	10	6.3	35.1	ug/L
OW-58	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-58	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-58	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-58	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-58	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-58	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-58	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-58	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-58	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-58	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-58	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-58	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-58	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-58	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-58	5/8/2018	Phenol	50	10	6	5761	ug/L
OW-58	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-58	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-58	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-58	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-58	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-58	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-58	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-58	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-58	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-58	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-58	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-58	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-58	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-58	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-58	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-58	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-58	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-58	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-58	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-58	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-58	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-58	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-58	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-58	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-58	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-58	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-58	5/8/2018	3,4-Methylphenol	7.1	10	5.4	NA	ug/L
OW-58	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-58	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-58	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-58	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-58	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-58	8/28/2018	Benzoic Acid	23	20	6.3	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-58	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-58	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-58	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-58	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-58	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-58	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-58	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-58	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-58	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-58	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-58	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-58	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-58	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-58	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-58	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-58	8/28/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
OW-58	8/28/2018	Naphthalene	**110**	10	5	30	ug/L
OW-58	8/28/2018	2-Methylnaphthalene	**53**	10	6.3	35.1	ug/L
OW-58	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-58	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-58	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-58	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-58	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-58	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-58	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-58	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-58	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-58	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-58	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-58	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-58	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-58	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-58	8/28/2018	Phenol	52	10	6	5761	ug/L
OW-58	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-58	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-58	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-58	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-58	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-58	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-58	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-58	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-58	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-58	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-58	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-58	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-58	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-58	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-58	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-58	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-58	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-58	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-58	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-58	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-58	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-58	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-58	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-58	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-58	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-58	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-58	8/28/2018	3,4-Methylphenol	5.4	10	5.4	NA	ug/L
OW-58	11/29/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
OW-58	11/29/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
OW-58	11/29/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
OW-58	11/29/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
OW-58	11/29/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
OW-58	11/29/2018	Aniline	*ND*	*100*	62	13	ug/L
OW-58	11/29/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
OW-58	11/29/2018	Benzoic Acid	170	200	63	75000	ug/L
OW-58	11/29/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
OW-58	11/29/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
OW-58	11/29/2018	Isophorone	ND	100	62	781	ug/L
OW-58	11/29/2018	Acenaphthene	ND	100	58	535	ug/L
OW-58	11/29/2018	Diethylphthalate	ND	100	63	14801	ug/L
OW-58	11/29/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
OW-58	11/29/2018	Phenanthrene	ND	100	60	170	ug/L
OW-58	11/29/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
OW-58	11/29/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
OW-58	11/29/2018	Fluorene	ND	100	63	288	ug/L
OW-58	11/29/2018	Carbazole	ND	100	63	NA	ug/L
OW-58	11/29/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
OW-58	11/29/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
OW-58	11/29/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
OW-58	11/29/2018	2-Nitroaniline	ND	100	59	190	ug/L
OW-58	11/29/2018	2-Nitrophenol	ND	100	60	NA	ug/L
OW-58	11/29/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
OW-58	11/29/2018	Naphthalene	*ND*	*100*	50	30	ug/L
OW-58	11/29/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
OW-58	11/29/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
OW-58	11/29/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
OW-58	11/29/2018	2-Methylphenol	ND	100	63	NA	ug/L
OW-58	11/29/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
OW-58	11/29/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
OW-58	11/29/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
OW-58	11/29/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
OW-58	11/29/2018	3-Nitroaniline	ND	100	68	NA	ug/L
OW-58	11/29/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
OW-58	11/29/2018	4-Nitrophenol	ND	100	56	NA	ug/L
OW-58	11/29/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
OW-58	11/29/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
OW-58	11/29/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
OW-58	11/29/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
OW-58	11/29/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
OW-58	11/29/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
OW-58	11/29/2018	Phenol	ND	100	60	5761	ug/L
OW-58	11/29/2018	Pyridine	*ND*	*100*	54	20	ug/L
OW-58	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
OW-58	11/29/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/29/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
OW-58	11/29/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
OW-58	11/29/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
OW-58	11/29/2018	Anthracene	ND	100	57	1721	ug/L
OW-58	11/29/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
OW-58	11/29/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
OW-58	11/29/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
OW-58	11/29/2018	Pyrene	ND	100	65	117	ug/L
OW-58	11/29/2018	Dimethylphthalate	ND	100	60	612	ug/L
OW-58	11/29/2018	Dibenzofuran	ND	100	69	NA	ug/L
OW-58	11/29/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
OW-58	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
OW-58	11/29/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
OW-58	11/29/2018	Fluoranthene	ND	100	58	802	ug/L
OW-58	11/29/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
OW-58	11/29/2018	Acenaphthylene	ND	100	62	NA	ug/L
OW-58	11/29/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
OW-58	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
OW-58	11/29/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
OW-58	11/29/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
OW-58	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
OW-58	11/29/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
OW-58	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
OW-58	11/29/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
OW-58	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-58	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-58	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-58	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-58	3/28/2019	1-Methylnaphthalene	**69**	10	6.999122	11.38	ug/L
OW-58	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-58	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-58	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-58	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-58	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-58	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-58	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-58	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-58	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-58	3/28/2019	2-Methylnaphthalene	**51**	10	6.33239	35.1	ug/L
OW-58	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-58	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-58	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-58	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-58	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-58	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-58	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-58	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-58	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-58	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-58	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-58	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-58	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-58	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-58	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-58	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
OW-58	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-58	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-58	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-58	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-58	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-58	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-58	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-58	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-58	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-58	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-58	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-58	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-58	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-58	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-58	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-58	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-58	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-58	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-58	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-58	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-58	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-58	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-58	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-58	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-58	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-58	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-58	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-58	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-58	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-58	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-58	3/28/2019	Naphthalene	**110**	10	5.041403	30	ug/L
OW-58	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-58	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-58	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-58	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-58	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-58	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-58	3/28/2019	Phenol	51	10	5.977352	5761	ug/L
OW-58	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-58	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-58	6/5/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-58	6/5/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-58	6/5/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-58	6/5/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-58	6/5/2019	1-Methylnaphthalene	**85**	10	3.069076	11.38	ug/L
OW-58	6/5/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-58	6/5/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-58	6/5/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-58	6/5/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-58	6/5/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-58	6/5/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-58	6/5/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-58	6/5/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-58	6/5/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-58	6/5/2019	2-Methylnaphthalene	**61**	10	3.018863	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-58	6/5/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-58	6/5/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-58	6/5/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-58	6/5/2019	3,4-Methylphenol	6.8	10	3.584453	NA	ug/L
OW-58	6/5/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-58	6/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-58	6/5/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-58	6/5/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-58	6/5/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-58	6/5/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-58	6/5/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-58	6/5/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-58	6/5/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-58	6/5/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-58	6/5/2019	Aniline	ND	10	3.579516	13	ug/L
OW-58	6/5/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-58	6/5/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-58	6/5/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-58	6/5/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-58	6/5/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-58	6/5/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-58	6/5/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-58	6/5/2019	Benzoic Acid	25	20	10.723324	75000	ug/L
OW-58	6/5/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-58	6/5/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-58	6/5/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-58	6/5/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-58	6/5/2019	Bis(2-ethylhexyl)phthalate	5.6	10	4.302128	55.64	ug/L
OW-58	6/5/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-58	6/5/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-58	6/5/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-58	6/5/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-58	6/5/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-58	6/5/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-58	6/5/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-58	6/5/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-58	6/5/2019	Di-n-octylphthalate	5.2	10	3.516366	200	ug/L
OW-58	6/5/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-58	6/5/2019	Fluorene	4.9	10	2.888488	288	ug/L
OW-58	6/5/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-58	6/5/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-58	6/5/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-58	6/5/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-58	6/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-58	6/5/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-58	6/5/2019	Naphthalene	**140**	10	4.12221	30	ug/L
OW-58	6/5/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-58	6/5/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-58	6/5/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-58	6/5/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-58	6/5/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-58	6/5/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-58	6/5/2019	Phenol	62	10	8.036586	5761	ug/L
OW-58	6/5/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-58	6/5/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-58	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-58	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-58	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-58	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-58	8/22/2019	1-Methylnaphthalene	**87**	10	3.069076	11.38	ug/L
OW-58	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-58	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-58	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-58	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-58	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-58	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-58	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-58	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-58	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-58	8/22/2019	2-Methylnaphthalene	**53**	10	3.018863	35.1	ug/L
OW-58	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-58	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-58	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-58	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-58	8/22/2019	3,4-Methylphenol	5.2	10	3.584453	NA	ug/L
OW-58	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-58	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-58	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-58	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-58	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-58	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-58	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-58	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-58	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-58	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-58	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OW-58	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-58	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-58	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-58	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-58	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-58	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-58	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-58	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-58	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-58	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-58	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-58	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-58	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-58	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-58	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-58	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-58	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-58	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-58	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-58	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-58	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-58	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-58	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/22/2019	Fluorene	3	10	2.888488	288	ug/L
OW-58	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-58	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-58	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-58	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-58	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-58	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-58	8/22/2019	Naphthalene	**140**	10	4.12221	30	ug/L
OW-58	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-58	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-58	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-58	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-58	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-58	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-58	8/22/2019	Phenol	83	10	8.036586	5761	ug/L
OW-58	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-58	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-58	11/18/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
OW-58	11/18/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
OW-58	11/18/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
OW-58	11/18/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
OW-58	11/18/2019	1,4-Dioxane	3.3	2	2	4.59	ug/L
OW-58	11/18/2019	1-Methylnaphthalene	**86**	1	1	11.38	ug/L
OW-58	11/18/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
OW-58	11/18/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
OW-58	11/18/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
OW-58	11/18/2019	2,4-Dimethylphenol	12	1	1	354	ug/L
OW-58	11/18/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
OW-58	11/18/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
OW-58	11/18/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
OW-58	11/18/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
OW-58	11/18/2019	2-Chlorophenol	ND	1	1	91	ug/L
OW-58	11/18/2019	2-Methylnaphthalene	**72**	1	1	35.1	ug/L
OW-58	11/18/2019	2-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	2-Nitroaniline	ND	1	1	190	ug/L
OW-58	11/18/2019	2-Nitrophenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
OW-58	11/18/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	3-Nitroaniline	ND	1	1	NA	ug/L
OW-58	11/18/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
OW-58	11/18/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
OW-58	11/18/2019	4-Nitrophenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	Acenaphthene	2.3	1	1	535	ug/L
OW-58	11/18/2019	Acenaphthylene	ND	1	1	NA	ug/L
OW-58	11/18/2019	Aniline	ND	1	1	13	ug/L
OW-58	11/18/2019	Anthracene	ND	1	1	1721	ug/L
OW-58	11/18/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
OW-58	11/18/2019	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
OW-58	11/18/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
OW-58	11/18/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
OW-58	11/18/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
OW-58	11/18/2019	Benzoic Acid	ND	1	1	75000	ug/L
OW-58	11/18/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
OW-58	11/18/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
OW-58	11/18/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
OW-58	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
OW-58	11/18/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
OW-58	11/18/2019	Carbazole	3.2	1	1	NA	ug/L
OW-58	11/18/2019	Chrysene	ND	1	1	34.3	ug/L
OW-58	11/18/2019	Dibenzo(a,h)anthracene	ND	0.05	0.05	NA	ug/L
OW-58	11/18/2019	Dibenzofuran	1.4	1	1	NA	ug/L
OW-58	11/18/2019	Diethylphthalate	ND	1	1	14801	ug/L
OW-58	11/18/2019	Dimethylphthalate	ND	1	1	612	ug/L
OW-58	11/18/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
OW-58	11/18/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
OW-58	11/18/2019	Fluoranthene	ND	1	1	802	ug/L
OW-58	11/18/2019	Fluorene	3.6	1	1	288	ug/L
OW-58	11/18/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
OW-58	11/18/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
OW-58	11/18/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
OW-58	11/18/2019	Hexachloroethane	ND	1	1	3.28	ug/L
OW-58	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
OW-58	11/18/2019	Isophorone	ND	1	1	781	ug/L
OW-58	11/18/2019	Naphthalene	**180**	1	1	30	ug/L
OW-58	11/18/2019	Nitrobenzene	ND	1	1	1.4	ug/L
OW-58	11/18/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
OW-58	11/18/2019	Pentachlorophenol	ND	1	1	1	ug/L
OW-58	11/18/2019	Phenanthrene	3.6	1	1	170	ug/L
OW-58	11/18/2019	Phenol	97	1	1	5761	ug/L
OW-58	11/18/2019	Pyrene	ND	1	1	117	ug/L
OW-58	11/18/2019	Pyridine	ND	1	1	20	ug/L
OW-58A	3/6/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-58A	3/6/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-58A	3/6/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-58A	3/6/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-58A	3/6/2020	1-Methylnaphthalene	**130**	2.5	0.5	11.38	ug/L
OW-58A	3/6/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-58A	3/6/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-58A	3/6/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-58A	3/6/2020	2,4-Dimethylphenol	14	2.5	0.5	354	ug/L
OW-58A	3/6/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-58A	3/6/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-58A	3/6/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-58A	3/6/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-58A	3/6/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-58A	3/6/2020	2-Methylnaphthalene	**190**	2.5	0.5	35.1	ug/L
OW-58A	3/6/2020	2-Methylphenol	19	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-58A	3/6/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	3,4-Methylphenol	17	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-58A	3/6/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-58A	3/6/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	3/6/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-58A	3/6/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Acenaphthene	5.3	2.5	0.5	535	ug/L
OW-58A	3/6/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-58A	3/6/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-58A	3/6/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-58A	3/6/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-58A	3/6/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-58A	3/6/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-58A	3/6/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-58A	3/6/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-58A	3/6/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-58A	3/6/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-58A	3/6/2020	Bis(2-ethylhexyl)phthalate	1.5	2.5	1	55.64	ug/L
OW-58A	3/6/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-58A	3/6/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-58A	3/6/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-58A	3/6/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-58A	3/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-58A	3/6/2020	Dibenzofuran	2.49	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-58A	3/6/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-58A	3/6/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-58A	3/6/2020	Fluorene	6.9	2.5	0.5	288	ug/L
OW-58A	3/6/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-58A	3/6/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-58A	3/6/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-58A	3/6/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-58A	3/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-58A	3/6/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-58A	3/6/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-58A	3/6/2020	Naphthalene	**250**	2.5	0.5	30	ug/L
OW-58A	3/6/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-58A	3/6/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-58A	3/6/2020	Phenanthrene	6.1	2.5	0.5	170	ug/L
OW-58A	3/6/2020	Phenol	58	2.5	0.5	5761	ug/L
OW-58A	3/6/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-58A	3/6/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-59	6/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	6/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	6/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	6/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	6/28/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	6/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	6/28/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
OW-59	6/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	6/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	6/28/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	6/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	6/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	6/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	6/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	6/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	6/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	6/28/2017	Fluorene	ND	10	4	288	ug/L
OW-59	6/28/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	6/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	6/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	6/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	6/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	6/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	6/28/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	6/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	6/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	6/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	6/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	6/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	6/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	6/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	6/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	6/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	6/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	6/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	6/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	6/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	6/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	6/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	6/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	6/28/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	6/28/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	6/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	6/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	6/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	6/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	6/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	6/28/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	6/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	6/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	6/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	6/28/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	6/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	6/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	6/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	6/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	6/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	6/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	6/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	6/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	6/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	6/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	6/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	6/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	6/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	6/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	6/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	6/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	9/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	9/21/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
OW-59	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	9/21/2017	Fluorene	ND	10	4	288	ug/L
OW-59	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	9/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	9/21/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
OW-59	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	12/6/2017	Benzoic Acid	4.5	20	3.9	75000	ug/L
OW-59	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-59	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-59	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	2/22/2018	Benzoic Acid	14	20	3.9	75000	ug/L
OW-59	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-59	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-59	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-59	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-59	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-59	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-59	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-59	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	5/8/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-59	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	8/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	8/28/2018	Phenol	ND	10	6	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-59	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-59	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-59	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-59	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-59	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-59	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-59	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-59	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-59	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-59	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-59	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-59	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-59	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-59	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-59	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-59	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-59	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-59	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-59	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-59	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-59	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-59	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-59	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-59	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-59	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-59	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-59	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-59	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-59	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-59	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
OW-59	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-59	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-59	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-59	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-59	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-59	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-59	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-59	2/13/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-59	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-59	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-59	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-59	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-59	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-59	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-59	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-59	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-59	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-59	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-59	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-59	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-59	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-59	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-59	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-59	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-59	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-59	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-59	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-59	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-59	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-59	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-59	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-59	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-59	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-59	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-59	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-59	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-59	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-59	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-59	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-59	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-59	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-59	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-59	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-59	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-59	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-59	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-59	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-59	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-59	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-59	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-59	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-59	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-59	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-59	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-59	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-59	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-59	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-59	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-59	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-59	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-59	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-59	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-59	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-59	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-59	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-59	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-59	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-59	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-59	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-59	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-59	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-59	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-59	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-59	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-59	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-59	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-59	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-59	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-59	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-59	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-59	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-59	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-59	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-59	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-59	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-59	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-59	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-59	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-59	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-59	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-59	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-59	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-59	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-59	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-59	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-59	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-59	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-59	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-59	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-59	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-59	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-59	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-59	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-59	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-59	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-59	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-59	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-59	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-59	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-59	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-59	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-59	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-59	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-59	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-59	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-59	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-59	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-59	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-59	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-59	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-59	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-59	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-59	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-59	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-59	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-59	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-59	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-59	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-59	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-59	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-59	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-59	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-59	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-59	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-59	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-59	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-59	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-59	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-59	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-59	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-59	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-59	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-59	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-59	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-59	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-59	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-59	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-59	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-59	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-59	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-59	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-59	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-59	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-59	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-59	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-59	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-59	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-59	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-59	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-59	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-59	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-59	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-59	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-59	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-59	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-59	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-59	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-59	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-59	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-59	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-59	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-59	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-59	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-59	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-59	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-59	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-59	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-59	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-59	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-59	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-59	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-59	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-59	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-59	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-59	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-59	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-59	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-59	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-59	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-59	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-59	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-59	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-59	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-59	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-59	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-59	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-59	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-59	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-59	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-59	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-59	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-59	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-59	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-59	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-59	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-59	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-59	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-59	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-59	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-59	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-59	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-59	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-59	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-59	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-59	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-59	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-59	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-59	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-59	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-59	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-59	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-59	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-59	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-59	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-59	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-59	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-59	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-59	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-59	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-59	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-59	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-59	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-59	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-59	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-59	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-59	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-59	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-59	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-59	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-59	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-59	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-59	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-59	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-59	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-59	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-59	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-59	3/3/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-59	3/3/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-59	3/3/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-59	3/3/2020	1,4-Dioxane	**6.2**	1	0.2	4.59	ug/L
OW-59	3/3/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-59	3/3/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-59	3/3/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-59	3/3/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-59	3/3/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-59	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-59	3/3/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-59	3/3/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-59	3/3/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-59	3/3/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-59	3/3/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-59	3/3/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-59	3/3/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-59	3/3/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-59	3/3/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-59	3/3/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-59	3/3/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-59	3/3/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-59	3/3/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-59	3/3/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-59	3/3/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-59	3/3/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-59	3/3/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-59	3/3/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-59	3/3/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-59	3/3/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-59	3/3/2020	Bis(2-ethylhexyl)phthalate	0.52	0.5	0.2	55.64	ug/L
OW-59	3/3/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-59	3/3/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-59	3/3/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-59	3/3/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-59	3/3/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-59	3/3/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-59	3/3/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-59	3/3/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-59	3/3/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-59	3/3/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-59	3/3/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-59	3/3/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-59	3/3/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-59	3/3/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-59	3/3/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-59	3/3/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-59	3/3/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-59	3/3/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-59	3/3/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-59	3/3/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-59	3/3/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-59	3/3/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-59	9/19/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-59	9/19/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-59	9/19/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-59	9/19/2020	1,4-Dioxane	**8.8**	2.5	0.5	4.59	ug/L
OW-59	9/19/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
OW-59	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
OW-59	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-59	9/19/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-59	9/19/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-59	9/19/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OW-59	9/19/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-59	9/19/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-59	9/19/2020	2,6-Dinitrotoluene	*ND*	*1*	0.5	0.485	ug/L
OW-59	9/19/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-59	9/19/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-59	9/19/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
OW-59	9/19/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-59	9/19/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-59	9/19/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-59	9/19/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
OW-59	9/19/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-59	9/19/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OW-59	9/19/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-59	9/19/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-59	9/19/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
OW-59	9/19/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
OW-59	9/19/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
OW-59	9/19/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
OW-59	9/19/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-59	9/19/2020	Benzoic Acid	4.8	2.5	1	75000	ug/L
OW-59	9/19/2020	Benzyl Alcohol	1.8	2.5	1	2000	ug/L
OW-59	9/19/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-59	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
OW-59	9/19/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-59	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-59	9/19/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-59	9/19/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-59	9/19/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-59	9/19/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-59	9/19/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
OW-59	9/19/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-59	9/19/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-59	9/19/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-59	9/19/2020	Fluorene	ND	2.5	0.5	288	ug/L
OW-59	9/19/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-59	9/19/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-59	9/19/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
OW-59	9/19/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-59	9/19/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
OW-59	9/19/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-59	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
OW-59	9/19/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
OW-59	9/19/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-59	9/19/2020	Naphthalene	ND	2.5	0.5	30	ug/L
OW-59	9/19/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-59	9/19/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
OW-59	9/19/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
OW-59	9/19/2020	Phenol	ND	2.5	0.5	5761	ug/L
OW-59	9/19/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-59	9/19/2020	Pyridine	ND	2.5	1	20	ug/L
OW-59	12/23/2020	Acenaphthene	ND	11.6	0.185	535	ug/L
OW-59	12/23/2020	Acenaphthylene	ND	11.6	0.197	NA	ug/L
OW-59	12/23/2020	Anthracene	ND	11.6	0.208	1721	ug/L
OW-59	12/23/2020	Benzo(a)anthracene	*ND*	*11.6*	0.208	0.12	ug/L
OW-59	12/23/2020	Benzo(a)pyrene	*ND*	*11.6*	0.139	0.2	ug/L
OW-59	12/23/2020	Benzo(b)fluoranthene	*ND*	*11.6*	0.174	0.34	ug/L
OW-59	12/23/2020	Benzo(g,h,i)perylene	ND	11.6	0.266	NA	ug/L
OW-59	12/23/2020	Benzo(k)fluoranthene	*ND*	*11.6*	0.185	3.43	ug/L
OW-59	12/23/2020	Bis(2-chloroethoxy)methane	ND	11.6	0.185	59	ug/L
OW-59	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	3.13	0.137	ug/L
OW-59	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	5.79	55.64	ug/L
OW-59	12/23/2020	4-Bromophenyl-phenylether	ND	11.6	0.231	NA	ug/L
OW-59	12/23/2020	Butylbenzylphthalate	ND	11.6	0.22	16	ug/L
OW-59	12/23/2020	Carbazole	ND	11.6	0.266	NA	ug/L
OW-59	12/23/2020	4-Chloroaniline	*ND*	*11.6*	3.94	0.37	ug/L
OW-59	12/23/2020	4-Chloro-3-Methylphenol	ND	11.6	4.4	NA	ug/L
OW-59	12/23/2020	2-Chloronaphthalene	ND	11.6	0.162	733	ug/L
OW-59	12/23/2020	2-Chlorophenol	ND	11.6	2.55	91	ug/L
OW-59	12/23/2020	4-Chlorophenyl-phenylether	ND	11.6	2.31	NA	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	11.6	0.208	NA	ug/L
OW-59	12/23/2020	Chrysene	ND	11.6	0.22	34.3	ug/L
OW-59	12/23/2020	Dibenzo(a,h)anthracene	ND	11.6	0.278	NA	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	11.6	0.185	75	ug/L
OW-59	12/23/2020	Dibenzofuran	ND	11.6	0.197	NA	ug/L
OW-59	12/23/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	3.01	1.25	ug/L
OW-59	12/23/2020	2,4-Dichlorophenol	ND	11.6	3.47	45.3	ug/L
OW-59	12/23/2020	Diethylphthalate	ND	11.6	0.278	14801	ug/L
OW-59	12/23/2020	2,4-Dimethylphenol	ND	11.6	4.05	354	ug/L
OW-59	12/23/2020	Di-n-butylphthalate	ND	11.6	3.13	885	ug/L
OW-59	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	1.85	1.52	ug/L
OW-59	12/23/2020	2,4-Dinitrophenol	ND	34.7	3.94	38.7	ug/L
OW-59	12/23/2020	2,4-Dinitrotoluene	ND	11.6	2.2	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	2,6-Dinitrotoluene	*ND*	*11.6*	2.2	0.485	ug/L
OW-59	12/23/2020	Di-n-octylphthalate	ND	11.6	0.197	200	ug/L
OW-59	12/23/2020	Fluoranthene	ND	11.6	0.208	802	ug/L
OW-59	12/23/2020	Fluorene	ND	11.6	0.208	288	ug/L
OW-59	12/23/2020	Hexachlorobenzene	*ND*	*11.6*	0.197	0.0976	ug/L
OW-59	12/23/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	3.01	0.41	ug/L
OW-59	12/23/2020	Hexachloroethane	*ND*	*11.6*	4.86	3.28	ug/L
OW-59	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	0.255	0.343	ug/L
OW-59	12/23/2020	Isophorone	ND	11.6	0.162	781	ug/L
OW-59	12/23/2020	2-Methylphenol	ND	11.6	2.08	NA	ug/L
OW-59	12/23/2020	Naphthalene	ND	11.6	0.197	30	ug/L
OW-59	12/23/2020	2-Nitroaniline	ND	11.6	2.55	190	ug/L
OW-59	12/23/2020	3-Nitroaniline	ND	11.6	2.08	NA	ug/L
OW-59	12/23/2020	4-Nitroaniline	*ND*	*11.6*	1.74	3.8	ug/L
OW-59	12/23/2020	Nitrobenzene	*ND*	*11.6*	0.15	1.4	ug/L
OW-59	12/23/2020	2-Nitrophenol	ND	11.6	6.02	NA	ug/L
OW-59	12/23/2020	4-Nitrophenol	ND	11.6	2.43	NA	ug/L
OW-59	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	3.82	0.011	ug/L
OW-59	12/23/2020	N-Nitrosodiphenylamine	ND	11.6	0.208	122	ug/L
OW-59	12/23/2020	Pentachlorophenol	*ND*	*23.1*	1.62	1	ug/L
OW-59	12/23/2020	Phenanthrene	ND	11.6	0.208	170	ug/L
OW-59	12/23/2020	Phenol	ND	11.6	3.01	5761	ug/L
OW-59	12/23/2020	Pyrene	ND	11.6	0.243	117	ug/L
OW-59	12/23/2020	2,4,5-Trichlorophenol	ND	11.6	4.28	1166	ug/L
OW-59	12/23/2020	2,4,6-Trichlorophenol	ND	11.6	4.05	11.9*	ug/L
OW-59	12/23/2020	Dimethylphthalate	ND	11.6	0.197	612	ug/L
OW-59	12/23/2020	Aniline	ND	11.6	4.4	13	ug/L
OW-59	12/23/2020	Benzoic Acid	ND	34.7	8.45	75000	ug/L
OW-59	12/23/2020	Benzyl Alcohol	ND	11.6	2.31	2000	ug/L
OW-59	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	0.185	9.81	ug/L
OW-59	12/23/2020	N-Nitrosodimethylamine	*ND*	*11.6*	4.05	0.0049	ug/L
OW-59	12/23/2020	Pyridine	ND	11.6	3.7	20	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	11.6	0.208	70	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	11.6	0.197	600	ug/L
OW-59	12/23/2020	Azobenzene	*ND*	*11.6*	1.16	0.12	ug/L
OW-59	12/23/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
OW-59	12/23/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
OW-59	12/23/2020	Anthracene	ND	11.3	0.203	1721	ug/L
OW-59	12/23/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
OW-59	12/23/2020	Benzo(a)pyrene	*ND*	*11.3*	0.135	0.2	ug/L
OW-59	12/23/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.169	0.34	ug/L
OW-59	12/23/2020	Benzo(g,h,i)perylene	ND	11.3	0.259	NA	ug/L
OW-59	12/23/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
OW-59	12/23/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
OW-59	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
OW-59	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.64	55.64	ug/L
OW-59	12/23/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
OW-59	12/23/2020	Butylbenzylphthalate	ND	11.3	0.214	16	ug/L
OW-59	12/23/2020	Carbazole	ND	11.3	0.259	NA	ug/L
OW-59	12/23/2020	4-Chloroaniline	*ND*	*11.3*	3.84	0.37	ug/L
OW-59	12/23/2020	4-Chloro-3-Methylphenol	ND	11.3	4.29	NA	ug/L
OW-59	12/23/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
OW-59	12/23/2020	2-Chlorophenol	ND	11.3	2.48	91	ug/L
OW-59	12/23/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
OW-59	12/23/2020	Chrysene	ND	11.3	0.214	34.3	ug/L
OW-59	12/23/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
OW-59	12/23/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
OW-59	12/23/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.93	1.25	ug/L
OW-59	12/23/2020	2,4-Dichlorophenol	ND	11.3	3.38	45.3	ug/L
OW-59	12/23/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
OW-59	12/23/2020	2,4-Dimethylphenol	ND	11.3	3.95	354	ug/L
OW-59	12/23/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
OW-59	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
OW-59	12/23/2020	2,4-Dinitrophenol	ND	33.8	3.84	38.7	ug/L
OW-59	12/23/2020	2,4-Dinitrotoluene	ND	11.3	2.14	45.3	ug/L
OW-59	12/23/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.14	0.485	ug/L
OW-59	12/23/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
OW-59	12/23/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
OW-59	12/23/2020	Fluorene	ND	11.3	0.203	288	ug/L
OW-59	12/23/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
OW-59	12/23/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.93	0.41	ug/L
OW-59	12/23/2020	Hexachloroethane	*ND*	*11.3*	4.74	3.28	ug/L
OW-59	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.248	0.343	ug/L
OW-59	12/23/2020	Isophorone	ND	11.3	0.158	781	ug/L
OW-59	12/23/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
OW-59	12/23/2020	Naphthalene	ND	11.3	0.192	30	ug/L
OW-59	12/23/2020	2-Nitroaniline	ND	11.3	2.48	190	ug/L
OW-59	12/23/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
OW-59	12/23/2020	4-Nitroaniline	*ND*	*11.3*	1.69	3.8	ug/L
OW-59	12/23/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
OW-59	12/23/2020	2-Nitrophenol	ND	11.3	5.87	NA	ug/L
OW-59	12/23/2020	4-Nitrophenol	ND	11.3	2.37	NA	ug/L
OW-59	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.72	0.011	ug/L
OW-59	12/23/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
OW-59	12/23/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
OW-59	12/23/2020	Phenanthrene	ND	11.3	0.203	170	ug/L
OW-59	12/23/2020	Phenol	ND	11.3	2.93	5761	ug/L
OW-59	12/23/2020	Pyrene	ND	11.3	0.237	117	ug/L
OW-59	12/23/2020	2,4,5-Trichlorophenol	ND	11.3	4.17	1166	ug/L
OW-59	12/23/2020	2,4,6-Trichlorophenol	ND	11.3	3.95	11.9*	ug/L
OW-59	12/23/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
OW-59	12/23/2020	Aniline	ND	11.3	4.29	13	ug/L
OW-59	12/23/2020	Benzoic Acid	ND	33.8	8.24	75000	ug/L
OW-59	12/23/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
OW-59	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
OW-59	12/23/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.95	0.0049	ug/L
OW-59	12/23/2020	Pyridine	ND	11.3	3.61	20	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
OW-59	12/23/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
OW-60	6/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	6/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	6/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	6/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	6/28/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	6/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	6/28/2017	Benzoic Acid	7.8	20	3.9	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	6/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	6/28/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	6/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	6/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	6/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	6/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	6/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	6/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	6/28/2017	Fluorene	ND	10	4	288	ug/L
OW-60	6/28/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	6/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	6/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	6/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	6/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	6/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	6/28/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	6/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	6/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	6/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	6/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	6/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	6/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	6/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	6/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	6/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	6/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	6/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	6/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	6/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	6/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	6/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	6/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	6/28/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	6/28/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	6/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	6/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	6/28/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
OW-60	6/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	6/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	6/28/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	6/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	6/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	6/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	6/28/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	6/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	6/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	6/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	6/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	6/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	6/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	6/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	6/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	6/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	6/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	6/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	6/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	6/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	6/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	6/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	6/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	9/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	9/21/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
OW-60	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	9/21/2017	Fluorene	ND	10	4	288	ug/L
OW-60	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-60	9/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-60	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-60	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	12/6/2017	Bis(2-ethylhexyl)phthalate	45	10	4.8	55.64	ug/L
OW-60	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-60	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	2/22/2018	Benzoic Acid	5.7	20	3.9	75000	ug/L
OW-60	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-60	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-60	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-60	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-60	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-60	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-60	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-60	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-60	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	5/8/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-60	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-60	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-60	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	8/28/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
OW-60	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-60	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-60	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-60	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-60	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-60	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-60	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-60	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-60	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-60	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-60	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-60	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-60	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-60	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-60	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-60	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-60	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-60	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-60	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-60	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-60	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-60	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-60	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-60	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-60	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-60	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-60	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-60	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-60	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-60	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-60	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-60	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-60	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-60	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-60	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-60	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-60	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
OW-60	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-60	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-60	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-60	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-60	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-60	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-60	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-60	2/13/2019	Benzoic Acid	8.4	20	6.311561	75000	ug/L
OW-60	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-60	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-60	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-60	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-60	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-60	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-60	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-60	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-60	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-60	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-60	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-60	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-60	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-60	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-60	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-60	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-60	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-60	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-60	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-60	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-60	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-60	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-60	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-60	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-60	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-60	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-60	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-60	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-60	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-60	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-60	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-60	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-60	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-60	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-60	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-60	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-60	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-60	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-60	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-60	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-60	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-60	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-60	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-60	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-60	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-60	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-60	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-60	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-60	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-60	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-60	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-60	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-60	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-60	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-60	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-60	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-60	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-60	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-60	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-60	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-60	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-60	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-60	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-60	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-60	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-60	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-60	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-60	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-60	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-60	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-60	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-60	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-60	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-60	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-60	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-60	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-60	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-60	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-60	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-60	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-60	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-60	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-60	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-60	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-60	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-60	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-60	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-60	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-60	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-60	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-60	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-60	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-60	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-60	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-60	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-60	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-60	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-60	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-60	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-60	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-60	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-60	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-60	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-60	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-60	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-60	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-60	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-60	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-60	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-60	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-60	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-60	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-60	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-60	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-60	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-60	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-60	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-60	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-60	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-60	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-60	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-60	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-60	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-60	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-60	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-60	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-60	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-60	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-60	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-60	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-60	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-60	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-60	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-60	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-60	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-60	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-60	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-60	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-60	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-60	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-60	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-60	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-60	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-60	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-60	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-60	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-60	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-60	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-60	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-60	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-60	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-60	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-60	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-60	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-60	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-60	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-60	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-60	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-60	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-60	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-60	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-60	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-60	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-60	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-60	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-60	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-60	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-60	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-60	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-60	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-60	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-60	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-60	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-60	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-60	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-60	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-60	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-60	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-60	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-60	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-60	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-60	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-60	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-60	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-60	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-60	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-60	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-60	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-60	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-60	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-60	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-60	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-60	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-60	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-60	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-60	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-60	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-60	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-60	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-60	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-60	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-60	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-60	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-60	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-60	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-60	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-60	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-60	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-60	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-60	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-60	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-60	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-60	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-60	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-60	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-60	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-60	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-60	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-60	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-60	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-60	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-60	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-60	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-60	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-60	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-60	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-60	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-60	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-60	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-60	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-60	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-60	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-60	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-60	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-60	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-60	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-60	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-60	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-60	3/3/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-60	3/3/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	3/3/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-60	3/3/2020	1,4-Dioxane	0.51	1	0.2	4.59	ug/L
OW-60	3/3/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-60	3/3/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-60	3/3/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-60	3/3/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-60	3/3/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-60	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-60	3/3/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-60	3/3/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-60	3/3/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-60	3/3/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-60	3/3/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-60	3/3/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-60	3/3/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-60	3/3/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-60	3/3/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-60	3/3/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-60	3/3/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-60	3/3/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-60	3/3/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-60	3/3/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-60	3/3/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-60	3/3/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-60	3/3/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-60	3/3/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-60	3/3/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-60	3/3/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-60	3/3/2020	Bis(2-ethylhexyl)phthalate	0.47	0.5	0.2	55.64	ug/L
OW-60	3/3/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-60	3/3/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-60	3/3/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-60	3/3/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-60	3/3/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-60	3/3/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-60	3/3/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-60	3/3/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-60	3/3/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-60	3/3/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-60	3/3/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-60	3/3/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-60	3/3/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-60	3/3/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-60	3/3/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-60	3/3/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-60	3/3/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-60	3/3/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-60	3/3/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-60	3/3/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-60	3/3/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-60	3/3/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-60	3/3/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-60	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
OW-60	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
OW-60	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
OW-60	9/21/2020	1,4-Dioxane	0.37	0.52	0.1	4.59	ug/L
OW-60	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
OW-60	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
OW-60	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
OW-60	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
OW-60	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
OW-60	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
OW-60	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
OW-60	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
OW-60	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
OW-60	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
OW-60	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
OW-60	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
OW-60	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
OW-60	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
OW-60	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
OW-60	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
OW-60	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
OW-60	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
OW-60	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
OW-60	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
OW-60	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
OW-60	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
OW-60	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
OW-60	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
OW-60	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
OW-60	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
OW-60	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
OW-60	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
OW-60	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
OW-60	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
OW-60	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
OW-60	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
OW-60	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
OW-60	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
OW-60	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OW-60	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
OW-60	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
OW-60	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
OW-60	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
OW-60	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
OW-60	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
OW-60	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
OW-60	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
OW-60	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OW-60	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
OW-60	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
OW-60	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
OW-60	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
OW-60	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
OW-60	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
OW-60	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
OW-60	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
OW-60	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
OW-60	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
OW-60	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
OW-60	12/11/2020	Acenaphthene	ND	9.88	0.158	535	ug/L
OW-60	12/11/2020	Acenaphthylene	ND	9.88	0.168	NA	ug/L
OW-60	12/11/2020	Anthracene	ND	9.88	0.178	1721	ug/L
OW-60	12/11/2020	Benzo(a)pyrene	*ND*	*9.88*	0.119	0.2	ug/L
OW-60	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.88*	0.148	0.34	ug/L
OW-60	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.88*	0.158	3.43	ug/L
OW-60	12/11/2020	4-Chloroaniline	*ND*	*9.88*	3.36	0.37	ug/L
OW-60	12/11/2020	2-Chloronaphthalene	ND	9.88	0.138	733	ug/L
OW-60	12/11/2020	4-Chlorophenyl-phenylether	ND	9.88	1.98	NA	ug/L
OW-60	12/11/2020	1,3-Dichlorobenzene	ND	9.88	0.178	NA	ug/L
OW-60	12/11/2020	1,4-Dichlorobenzene	ND	9.88	0.158	75	ug/L
OW-60	12/11/2020	Dibenzofuran	ND	9.88	0.168	NA	ug/L
OW-60	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.88*	2.57	1.25	ug/L
OW-60	12/11/2020	2,4-Dichlorophenol	ND	9.88	2.96	45.3	ug/L
OW-60	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.88*	1.58	1.52	ug/L
OW-60	12/11/2020	2,4-Dinitrophenol	ND	29.6	3.36	38.7	ug/L
OW-60	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.88*	1.88	0.485	ug/L
OW-60	12/11/2020	Fluorene	ND	9.88	0.178	288	ug/L
OW-60	12/11/2020	Hexachlorocyclopentadiene	*ND*	*19.8*	2.57	0.41	ug/L
OW-60	12/11/2020	2-Methylphenol	ND	9.88	1.78	NA	ug/L
OW-60	12/11/2020	Naphthalene	ND	9.88	0.168	30	ug/L
OW-60	12/11/2020	Pentachlorophenol	*ND*	*19.8*	1.38	1	ug/L
OW-60	12/11/2020	Phenol	ND	9.88	2.57	5761	ug/L
OW-60	12/11/2020	Pyrene	ND	9.88	0.208	117	ug/L
OW-60	12/11/2020	2,4,5-Trichlorophenol	ND	9.88	3.66	1166	ug/L
OW-60	12/11/2020	2,4,6-Trichlorophenol	ND	9.88	3.46	11.9*	ug/L
OW-60	12/11/2020	Aniline	ND	9.88	3.75	13	ug/L
OW-60	12/11/2020	Benzoic Acid	ND	29.6	7.21	75000	ug/L
OW-60	12/11/2020	Pyridine	ND	9.88	3.16	20	ug/L
OW-60	12/11/2020	1,2,4-Trichlorobenzene	ND	9.88	0.178	70	ug/L
OW-60	12/11/2020	1,2-Dichlorobenzene	ND	9.88	0.168	600	ug/L
OW-60	12/11/2020	Benzo(a)anthracene	*ND*	*9.88*	0.178	0.12	ug/L
OW-60	12/11/2020	Benzo(g,h,i)perylene	ND	9.88	0.227	NA	ug/L
OW-60	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.88	0.158	59	ug/L
OW-60	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.88*	2.67	0.137	ug/L
OW-60	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.88	4.94	55.64	ug/L
OW-60	12/11/2020	4-Bromophenyl-phenylether	ND	9.88	0.198	NA	ug/L
OW-60	12/11/2020	Butylbenzylphthalate	ND	9.88	0.188	16	ug/L
OW-60	12/11/2020	Carbazole	ND	9.88	0.227	NA	ug/L
OW-60	12/11/2020	4-Chloro-3-Methylphenol	ND	9.88	3.75	NA	ug/L
OW-60	12/11/2020	2-Chlorophenol	ND	9.88	2.17	91	ug/L
OW-60	12/11/2020	Chrysene	ND	9.88	0.188	34.3	ug/L
OW-60	12/11/2020	Dibenzo(a,h)anthracene	ND	9.88	0.237	NA	ug/L
OW-60	12/11/2020	Diethylphthalate	ND	9.88	0.237	14801	ug/L
OW-60	12/11/2020	2,4-Dimethylphenol	ND	9.88	3.46	354	ug/L
OW-60	12/11/2020	Di-n-butylphthalate	ND	9.88	2.67	885	ug/L
OW-60	12/11/2020	2,4-Dinitrotoluene	ND	9.88	1.88	45.3	ug/L
OW-60	12/11/2020	Di-n-octylphthalate	ND	9.88	0.168	200	ug/L
OW-60	12/11/2020	Fluoranthene	ND	9.88	0.178	802	ug/L
OW-60	12/11/2020	Hexachlorobenzene	*ND*	*9.88*	0.168	0.0976	ug/L
OW-60	12/11/2020	Hexachloroethane	*ND*	*9.88*	4.15	3.28	ug/L
OW-60	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.88*	0.217	0.343	ug/L
OW-60	12/11/2020	Isophorone	ND	9.88	0.138	781	ug/L
OW-60	12/11/2020	2-Nitroaniline	ND	9.88	2.17	190	ug/L
OW-60	12/11/2020	3-Nitroaniline	ND	9.88	1.78	NA	ug/L
OW-60	12/11/2020	4-Nitroaniline	*ND*	*9.88*	1.48	3.8	ug/L
OW-60	12/11/2020	Nitrobenzene	*ND*	*9.88*	0.128	1.4	ug/L
OW-60	12/11/2020	2-Nitrophenol	ND	9.88	5.14	NA	ug/L
OW-60	12/11/2020	4-Nitrophenol	ND	9.88	2.08	NA	ug/L
OW-60	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.88*	3.26	0.011	ug/L
OW-60	12/11/2020	N-Nitrosodiphenylamine	ND	9.88	0.178	122	ug/L
OW-60	12/11/2020	Phenanthrene	ND	9.88	0.178	170	ug/L
OW-60	12/11/2020	Dimethylphthalate	ND	9.88	0.168	612	ug/L
OW-60	12/11/2020	Benzyl Alcohol	ND	9.88	1.98	2000	ug/L
OW-60	12/11/2020	Bis(2-chloroisopropyl)ether	*ND*	*9.88*	0.158	9.81	ug/L
OW-60	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.88*	3.46	0.0049	ug/L
OW-60	12/11/2020	Azobenzene	*ND*	*9.88*	0.988	0.12	ug/L
OW-63	4/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-63	4/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-63	4/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-63	4/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-63	4/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-63	4/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-63	4/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-63	4/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-63	4/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-63	4/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-63	4/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-63	4/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	4/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-63	4/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-63	4/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-63	4/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-63	4/29/2018	Carbazole	7.2	10	6.3	NA	ug/L
OW-63	4/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-63	4/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-63	4/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-63	4/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-63	4/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-63	4/29/2018	1-Methylnaphthalene	**57**	10	7	11.38	ug/L
OW-63	4/29/2018	Naphthalene	**190**	10	5	30	ug/L
OW-63	4/29/2018	2-Methylnaphthalene	**69**	10	6.3	35.1	ug/L
OW-63	4/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-63	4/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-63	4/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-63	4/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-63	4/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-63	4/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-63	4/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-63	4/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-63	4/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-63	4/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-63	4/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-63	4/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-63	4/29/2018	2,4-Dimethylphenol	13	10	5.9	354	ug/L
OW-63	4/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-63	4/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-63	4/29/2018	Phenol	17	10	6	5761	ug/L
OW-63	4/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-63	4/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-63	4/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-63	4/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-63	4/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-63	4/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-63	4/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-63	4/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-63	4/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-63	4/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-63	4/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-63	4/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-63	4/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-63	4/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-63	4/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-63	4/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-63	4/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-63	4/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-63	4/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-63	4/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-63	4/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-63	4/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-63	4/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-63	4/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-63	4/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-63	4/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-63	4/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-63	8/22/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-63	8/22/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-63	8/22/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-63	8/22/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Aniline	ND	10	6.2	13	ug/L
OW-63	8/22/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-63	8/22/2018	Benzoic Acid	39	20	6.3	75000	ug/L
OW-63	8/22/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-63	8/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-63	8/22/2018	Isophorone	ND	10	6.2	781	ug/L
OW-63	8/22/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-63	8/22/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-63	8/22/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-63	8/22/2018	Phenanthrene	ND	10	6	170	ug/L
OW-63	8/22/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-63	8/22/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-63	8/22/2018	Fluorene	ND	10	6.3	288	ug/L
OW-63	8/22/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-63	8/22/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-63	8/22/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-63	8/22/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-63	8/22/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-63	8/22/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-63	8/22/2018	1-Methylnaphthalene	**77**	10	7	11.38	ug/L
OW-63	8/22/2018	Naphthalene	**210**	10	5	30	ug/L
OW-63	8/22/2018	2-Methylnaphthalene	**91**	10	6.3	35.1	ug/L
OW-63	8/22/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-63	8/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-63	8/22/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-63	8/22/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-63	8/22/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-63	8/22/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-63	8/22/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-63	8/22/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-63	8/22/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-63	8/22/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-63	8/22/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-63	8/22/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-63	8/22/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
OW-63	8/22/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-63	8/22/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-63	8/22/2018	Phenol	25	10	6	5761	ug/L
OW-63	8/22/2018	Pyridine	ND	10	5.4	20	ug/L
OW-63	8/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-63	8/22/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-63	8/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-63	8/22/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-63	8/22/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-63	8/22/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-63	8/22/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-63	8/22/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/22/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-63	8/22/2018	Pyrene	ND	10	6.5	117	ug/L
OW-63	8/22/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-63	8/22/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-63	8/22/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-63	8/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-63	8/22/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-63	8/22/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-63	8/22/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-63	8/22/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-63	8/22/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-63	8/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-63	8/22/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-63	8/22/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-63	8/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-63	8/22/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-63	8/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-63	8/22/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-63	12/3/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OW-63	12/3/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OW-63	12/3/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OW-63	12/3/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OW-63	12/3/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OW-63	12/3/2018	Aniline	*ND*	*50*	31	13	ug/L
OW-63	12/3/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OW-63	12/3/2018	Benzoic Acid	120	100	32	75000	ug/L
OW-63	12/3/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OW-63	12/3/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OW-63	12/3/2018	Isophorone	ND	50	31	781	ug/L
OW-63	12/3/2018	Acenaphthene	ND	50	29	535	ug/L
OW-63	12/3/2018	Diethylphthalate	ND	50	31	14801	ug/L
OW-63	12/3/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OW-63	12/3/2018	Phenanthrene	ND	50	30	170	ug/L
OW-63	12/3/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OW-63	12/3/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OW-63	12/3/2018	Fluorene	ND	50	32	288	ug/L
OW-63	12/3/2018	Carbazole	ND	50	31	NA	ug/L
OW-63	12/3/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OW-63	12/3/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OW-63	12/3/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OW-63	12/3/2018	2-Nitroaniline	ND	50	29	190	ug/L
OW-63	12/3/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OW-63	12/3/2018	1-Methylnaphthalene	**75**	50	35	11.38	ug/L
OW-63	12/3/2018	Naphthalene	**230**	50	25	30	ug/L
OW-63	12/3/2018	2-Methylnaphthalene	**88**	50	32	35.1	ug/L
OW-63	12/3/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OW-63	12/3/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OW-63	12/3/2018	2-Methylphenol	ND	50	32	NA	ug/L
OW-63	12/3/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OW-63	12/3/2018	2-Chlorophenol	ND	50	29	91	ug/L
OW-63	12/3/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OW-63	12/3/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OW-63	12/3/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OW-63	12/3/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OW-63	12/3/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OW-63	12/3/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OW-63	12/3/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OW-63	12/3/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OW-63	12/3/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OW-63	12/3/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OW-63	12/3/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OW-63	12/3/2018	Phenol	ND	50	30	5761	ug/L
OW-63	12/3/2018	Pyridine	*ND*	*50*	27	20	ug/L
OW-63	12/3/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OW-63	12/3/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OW-63	12/3/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OW-63	12/3/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OW-63	12/3/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OW-63	12/3/2018	Anthracene	ND	50	29	1721	ug/L
OW-63	12/3/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OW-63	12/3/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OW-63	12/3/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OW-63	12/3/2018	Pyrene	ND	50	33	117	ug/L
OW-63	12/3/2018	Dimethylphthalate	ND	50	30	612	ug/L
OW-63	12/3/2018	Dibenzofuran	ND	50	34	NA	ug/L
OW-63	12/3/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OW-63	12/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OW-63	12/3/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OW-63	12/3/2018	Fluoranthene	ND	50	29	802	ug/L
OW-63	12/3/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OW-63	12/3/2018	Acenaphthylene	ND	50	31	NA	ug/L
OW-63	12/3/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OW-63	12/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OW-63	12/3/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OW-63	12/3/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OW-63	12/3/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OW-63	12/3/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OW-63	12/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OW-63	12/3/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OW-63	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-63	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-63	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-63	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-63	2/20/2019	1-Methylnaphthalene	**64**	10	6.999122	11.38	ug/L
OW-63	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-63	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-63	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-63	2/20/2019	2,4-Dimethylphenol	11	10	5.912084	354	ug/L
OW-63	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-63	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-63	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-63	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-63	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-63	2/20/2019	2-Methylnaphthalene	**70**	10	6.33239	35.1	ug/L
OW-63	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-63	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-63	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-63	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-63	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-63	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-63	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-63	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-63	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-63	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-63	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-63	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-63	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-63	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-63	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
OW-63	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-63	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-63	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-63	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-63	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-63	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-63	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-63	2/20/2019	Benzoic Acid	37	20	6.311561	75000	ug/L
OW-63	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-63	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-63	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-63	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-63	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-63	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-63	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-63	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-63	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-63	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-63	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-63	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-63	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-63	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-63	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-63	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-63	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-63	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-63	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-63	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-63	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-63	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-63	2/20/2019	Naphthalene	**180**	10	5.041403	30	ug/L
OW-63	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-63	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-63	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-63	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-63	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-63	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-63	2/20/2019	Phenol	23	10	5.977352	5761	ug/L
OW-63	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-63	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-63	5/15/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
OW-63	5/15/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
OW-63	5/15/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
OW-63	5/15/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
OW-63	5/15/2019	1-Methylnaphthalene	**84**	20	6.138153	11.38	ug/L
OW-63	5/15/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
OW-63	5/15/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
OW-63	5/15/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
OW-63	5/15/2019	2,4-Dimethylphenol	16	20	5.931986	354	ug/L
OW-63	5/15/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
OW-63	5/15/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
OW-63	5/15/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
OW-63	5/15/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
OW-63	5/15/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
OW-63	5/15/2019	2-Methylnaphthalene	**93**	20	6.037726	35.1	ug/L
OW-63	5/15/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
OW-63	5/15/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
OW-63	5/15/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
OW-63	5/15/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
OW-63	5/15/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
OW-63	5/15/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
OW-63	5/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
OW-63	5/15/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
OW-63	5/15/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
OW-63	5/15/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
OW-63	5/15/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
OW-63	5/15/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
OW-63	5/15/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
OW-63	5/15/2019	Acenaphthene	ND	20	5.911782	535	ug/L
OW-63	5/15/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
OW-63	5/15/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
OW-63	5/15/2019	Anthracene	ND	20	5.314345	1721	ug/L
OW-63	5/15/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
OW-63	5/15/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
OW-63	5/15/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
OW-63	5/15/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
OW-63	5/15/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
OW-63	5/15/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L
OW-63	5/15/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
OW-63	5/15/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
OW-63	5/15/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
OW-63	5/15/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
OW-63	5/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
OW-63	5/15/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
OW-63	5/15/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
OW-63	5/15/2019	Carbazole	6.4	20	5.781013	NA	ug/L
OW-63	5/15/2019	Chrysene	ND	20	5.573246	34.3	ug/L
OW-63	5/15/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
OW-63	5/15/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
OW-63	5/15/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
OW-63	5/15/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
OW-63	5/15/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
OW-63	5/15/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
OW-63	5/15/2019	Fluoranthene	ND	20	4.824429	802	ug/L
OW-63	5/15/2019	Fluorene	6.5	20	5.776977	288	ug/L
OW-63	5/15/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
OW-63	5/15/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
OW-63	5/15/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
OW-63	5/15/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
OW-63	5/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Isophorone	ND	20	6.092069	781	ug/L
OW-63	5/15/2019	Naphthalene	**260**	20	8.24442	30	ug/L
OW-63	5/15/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
OW-63	5/15/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
OW-63	5/15/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
OW-63	5/15/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
OW-63	5/15/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
OW-63	5/15/2019	Phenanthrene	ND	20	5.554244	170	ug/L
OW-63	5/15/2019	Phenol	25	20	16.073173	5761	ug/L
OW-63	5/15/2019	Pyrene	ND	20	5.007199	117	ug/L
OW-63	5/15/2019	Pyridine	ND	20	19.206273	20	ug/L
OW-63	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-63	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-63	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-63	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-63	8/19/2019	1-Methylnaphthalene	**50**	10	3.069076	11.38	ug/L
OW-63	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-63	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-63	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-63	8/19/2019	2,4-Dimethylphenol	8.9	10	2.965993	354	ug/L
OW-63	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-63	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-63	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-63	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-63	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-63	8/19/2019	2-Methylnaphthalene	**61**	10	3.018863	35.1	ug/L
OW-63	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-63	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-63	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-63	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-63	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-63	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-63	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-63	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-63	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-63	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-63	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-63	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-63	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-63	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-63	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-63	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
OW-63	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-63	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-63	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-63	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-63	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-63	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-63	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-63	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-63	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-63	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-63	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-63	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-63	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-63	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-63	8/19/2019	Carbazole	4.2	10	2.890507	NA	ug/L
OW-63	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-63	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-63	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-63	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-63	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-63	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-63	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-63	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-63	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-63	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-63	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-63	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-63	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-63	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-63	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-63	8/19/2019	Naphthalene	**180**	10	4.12221	30	ug/L
OW-63	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-63	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-63	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-63	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-63	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-63	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-63	8/19/2019	Phenol	18	10	8.036586	5761	ug/L
OW-63	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-63	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
OW-63	11/18/2019	1,4-Dioxane	*ND*	*5*	5	4.59	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	**77**	2.5	2.5	11.38	ug/L
OW-63	11/18/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
OW-63	11/18/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
OW-63	11/18/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,4-Dimethylphenol	19	2.5	2.5	354	ug/L
OW-63	11/18/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
OW-63	11/18/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
OW-63	11/18/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
OW-63	11/18/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**120**	2.5	2.5	35.1	ug/L
OW-63	11/18/2019	2-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
OW-63	11/18/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
OW-63	11/18/2019	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
OW-63	11/18/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
OW-63	11/18/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
OW-63	11/18/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Aniline	ND	2.5	2.5	13	ug/L
OW-63	11/18/2019	Anthracene	ND	2.5	2.5	1721	ug/L
OW-63	11/18/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-63	11/18/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-63	11/18/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-63	11/18/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
OW-63	11/18/2019	Benzoic Acid	ND	2.5	2.5	75000	ug/L
OW-63	11/18/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
OW-63	11/18/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
OW-63	11/18/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
OW-63	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
OW-63	11/18/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
OW-63	11/18/2019	Carbazole	7.2	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
OW-63	11/18/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
OW-63	11/18/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
OW-63	11/18/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
OW-63	11/18/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
OW-63	11/18/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
OW-63	11/18/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
OW-63	11/18/2019	Fluorene	ND	2.5	2.5	288	ug/L
OW-63	11/18/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
OW-63	11/18/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
OW-63	11/18/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
OW-63	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
OW-63	11/18/2019	Isophorone	ND	2.5	2.5	781	ug/L
OW-63	11/18/2019	Naphthalene	**320**	2.5	2.5	30	ug/L
OW-63	11/18/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
OW-63	11/18/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
OW-63	11/18/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
OW-63	11/18/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
OW-63	11/18/2019	Phenol	44	2.5	2.5	5761	ug/L
OW-63	11/18/2019	Pyrene	ND	2.5	2.5	117	ug/L
OW-63	11/18/2019	Pyridine	ND	2.5	2.5	20	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
OW-63	11/18/2019	1,4-Dioxane	*ND*	*5*	5	4.59	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	**78**	2.5	2.5	11.38	ug/L
OW-63	11/18/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
OW-63	11/18/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
OW-63	11/18/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,4-Dimethylphenol	13	2.5	2.5	354	ug/L
OW-63	11/18/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
OW-63	11/18/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
OW-63	11/18/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
OW-63	11/18/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**130**	2.5	2.5	35.1	ug/L
OW-63	11/18/2019	2-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
OW-63	11/18/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
OW-63	11/18/2019	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
OW-63	11/18/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
OW-63	11/18/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
OW-63	11/18/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Aniline	ND	2.5	2.5	13	ug/L
OW-63	11/18/2019	Anthracene	ND	2.5	2.5	1721	ug/L
OW-63	11/18/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-63	11/18/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-63	11/18/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-63	11/18/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
OW-63	11/18/2019	Benzoic Acid	ND	2.5	2.5	75000	ug/L
OW-63	11/18/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
OW-63	11/18/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
OW-63	11/18/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
OW-63	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
OW-63	11/18/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
OW-63	11/18/2019	Carbazole	6.6	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
OW-63	11/18/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
OW-63	11/18/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
OW-63	11/18/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
OW-63	11/18/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
OW-63	11/18/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
OW-63	11/18/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
OW-63	11/18/2019	Fluorene	ND	2.5	2.5	288	ug/L
OW-63	11/18/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
OW-63	11/18/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
OW-63	11/18/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
OW-63	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
OW-63	11/18/2019	Isophorone	ND	2.5	2.5	781	ug/L
OW-63	11/18/2019	Naphthalene	**350**	2.5	2.5	30	ug/L
OW-63	11/18/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
OW-63	11/18/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
OW-63	11/18/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
OW-63	11/18/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
OW-63	11/18/2019	Phenol	44	2.5	2.5	5761	ug/L
OW-63	11/18/2019	Pyrene	ND	2.5	2.5	117	ug/L
OW-63	11/18/2019	Pyridine	ND	2.5	2.5	20	ug/L
OW-63	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-63	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-63	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	3/4/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-63	3/4/2020	1-Methylnaphthalene	**66**	2.5	0.5	11.38	ug/L
OW-63	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-63	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-63	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-63	3/4/2020	2,4-Dimethylphenol	19	2.5	0.5	354	ug/L
OW-63	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-63	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-63	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-63	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-63	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-63	3/4/2020	2-Methylnaphthalene	**90**	2.5	0.5	35.1	ug/L
OW-63	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-63	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-63	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-63	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-63	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OW-63	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-63	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-63	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-63	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-63	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-63	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-63	3/4/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-63	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-63	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-63	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-63	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-63	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-63	3/4/2020	Carbazole	7.1	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-63	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-63	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-63	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-63	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-63	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-63	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-63	3/4/2020	Fluorene	1.44	2.5	0.5	288	ug/L
OW-63	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-63	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-63	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-63	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-63	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-63	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-63	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-63	3/4/2020	Naphthalene	**250**	2.5	0.5	30	ug/L
OW-63	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-63	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-63	3/4/2020	Phenanthrene	1.4	2.5	0.5	170	ug/L
OW-63	3/4/2020	Phenol	50	2.5	0.5	5761	ug/L
OW-63	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-63	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-63	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
OW-63	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
OW-63	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
OW-63	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-63	9/16/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-63	9/16/2020	1-Methylnaphthalene	**70**	5	1	11.38	ug/L
OW-63	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
OW-63	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
OW-63	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
OW-63	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
OW-63	9/16/2020	2,4-Dimethylphenol	17	5	1	354	ug/L
OW-63	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
OW-63	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
OW-63	9/16/2020	2,6-Dinitrotoluene	ND	0.2	1	0.485	ug/L
OW-63	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
OW-63	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
OW-63	9/16/2020	2-Methylnaphthalene	**100**	5	1	35.1	ug/L
OW-63	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
OW-63	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
OW-63	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
OW-63	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
OW-63	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
OW-63	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
OW-63	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
OW-63	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
OW-63	9/16/2020	Aniline	ND	5	1	13	ug/L
OW-63	9/16/2020	Anthracene	ND	5	1	1721	ug/L
OW-63	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
OW-63	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
OW-63	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
OW-63	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
OW-63	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
OW-63	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
OW-63	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
OW-63	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
OW-63	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
OW-63	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
OW-63	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
OW-63	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
OW-63	9/16/2020	Carbazole	5.6	5	1	NA	ug/L
OW-63	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
OW-63	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
OW-63	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
OW-63	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
OW-63	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
OW-63	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
OW-63	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
OW-63	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
OW-63	9/16/2020	Fluorene	ND	5	1	288	ug/L
OW-63	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
OW-63	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
OW-63	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
OW-63	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
OW-63	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	2	1	0.343	ug/L
OW-63	9/16/2020	Isophorone	ND	5	1	781	ug/L
OW-63	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
OW-63	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
OW-63	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
OW-63	9/16/2020	Naphthalene	**260**	5	1	30	ug/L
OW-63	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
OW-63	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
OW-63	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
OW-63	9/16/2020	Phenol	46	5	1	5761	ug/L
OW-63	9/16/2020	Pyrene	ND	5	2	117	ug/L
OW-63	9/16/2020	Pyridine	ND	5	1	20	ug/L
OW-63	12/11/2020	Acenaphthene	ND	9.24	0.148	535	ug/L
OW-63	12/11/2020	Acenaphthylene	ND	9.24	0.157	NA	ug/L
OW-63	12/11/2020	Anthracene	ND	9.24	0.166	1721	ug/L
OW-63	12/11/2020	Benzo(a)pyrene	*ND*	*9.24*	0.111	0.2	ug/L
OW-63	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.24*	0.139	0.34	ug/L
OW-63	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.24*	0.148	3.43	ug/L
OW-63	12/11/2020	4-Chloroaniline	*ND*	*9.24*	3.14	0.37	ug/L
OW-63	12/11/2020	2-Chloronaphthalene	ND	9.24	0.129	733	ug/L
OW-63	12/11/2020	4-Chlorophenyl-phenylether	ND	9.24	1.85	NA	ug/L
OW-63	12/11/2020	1,3-Dichlorobenzene	ND	9.24	0.166	NA	ug/L
OW-63	12/11/2020	1,4-Dichlorobenzene	ND	9.24	0.148	75	ug/L
OW-63	12/11/2020	Dibenzofuran	ND	9.24	0.157	NA	ug/L
OW-63	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.24*	2.4	1.25	ug/L
OW-63	12/11/2020	2,4-Dichlorophenol	ND	9.24	2.77	45.3	ug/L
OW-63	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.24*	1.48	1.52	ug/L
OW-63	12/11/2020	2,4-Dinitrophenol	ND	27.7	3.14	38.7	ug/L
OW-63	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.24*	1.76	0.485	ug/L
OW-63	12/11/2020	Fluorene	ND	9.24	0.166	288	ug/L
OW-63	12/11/2020	Hexachlorocyclopentadiene	*ND*	*18.5*	2.4	0.41	ug/L
OW-63	12/11/2020	2-Methylphenol	ND	9.24	1.66	NA	ug/L
OW-63	12/11/2020	Pentachlorophenol	*ND*	*18.5*	1.29	1	ug/L
OW-63	12/11/2020	Phenol	53.9	9.24	2.4	5761	ug/L
OW-63	12/11/2020	Pyrene	ND	9.24	0.194	117	ug/L
OW-63	12/11/2020	2,4,5-Trichlorophenol	ND	9.24	3.42	1166	ug/L
OW-63	12/11/2020	2,4,6-Trichlorophenol	ND	9.24	3.23	11.9*	ug/L
OW-63	12/11/2020	Aniline	ND	9.24	3.51	13	ug/L
OW-63	12/11/2020	Benzoic Acid	ND	27.7	6.74	75000	ug/L
OW-63	12/11/2020	Pyridine	ND	9.24	2.96	20	ug/L
OW-63	12/11/2020	1,2,4-Trichlorobenzene	ND	9.24	0.166	70	ug/L
OW-63	12/11/2020	1,2-Dichlorobenzene	ND	9.24	0.157	600	ug/L
OW-63	12/11/2020	Benzo(a)anthracene	*ND*	*9.24*	0.166	0.12	ug/L
OW-63	12/11/2020	Benzo(g,h,i)perylene	ND	9.24	0.212	NA	ug/L
OW-63	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.24	0.148	59	ug/L
OW-63	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.24*	2.49	0.137	ug/L
OW-63	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.24	4.62	55.64	ug/L
OW-63	12/11/2020	4-Bromophenyl-phenylether	ND	9.24	0.185	NA	ug/L
OW-63	12/11/2020	Butylbenzylphthalate	ND	9.24	0.176	16	ug/L
OW-63	12/11/2020	Carbazole	11.4	9.24	0.212	NA	ug/L
OW-63	12/11/2020	4-Chloro-3-Methylphenol	ND	9.24	3.51	NA	ug/L
OW-63	12/11/2020	2-Chlorophenol	ND	9.24	2.03	91	ug/L
OW-63	12/11/2020	Chrysene	ND	9.24	0.176	34.3	ug/L
OW-63	12/11/2020	Dibenzo(a,h)anthracene	ND	9.24	0.222	NA	ug/L
OW-63	12/11/2020	Diethylphthalate	ND	9.24	0.222	14801	ug/L
OW-63	12/11/2020	2,4-Dimethylphenol	15.5	9.24	3.23	354	ug/L
OW-63	12/11/2020	Di-n-butylphthalate	ND	9.24	2.49	885	ug/L
OW-63	12/11/2020	2,4-Dinitrotoluene	ND	9.24	1.76	45.3	ug/L
OW-63	12/11/2020	Di-n-octylphthalate	ND	9.24	0.157	200	ug/L
OW-63	12/11/2020	Fluoranthene	ND	9.24	0.166	802	ug/L
OW-63	12/11/2020	Hexachlorobenzene	*ND*	*9.24*	0.157	0.0976	ug/L
OW-63	12/11/2020	Hexachloroethane	*ND*	*9.24*	3.88	3.28	ug/L
OW-63	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.24*	0.203	0.343	ug/L
OW-63	12/11/2020	Isophorone	ND	9.24	0.129	781	ug/L
OW-63	12/11/2020	Naphthalene	**256**	9.24	0.157	30	ug/L
OW-63	12/11/2020	2-Nitroaniline	ND	9.24	2.03	190	ug/L
OW-63	12/11/2020	3-Nitroaniline	ND	9.24	1.66	NA	ug/L
OW-63	12/11/2020	4-Nitroaniline	*ND*	*9.24*	1.39	3.8	ug/L
OW-63	12/11/2020	Nitrobenzene	*ND*	*9.24*	0.12	1.4	ug/L
OW-63	12/11/2020	2-Nitrophenol	ND	9.24	4.8	NA	ug/L
OW-63	12/11/2020	4-Nitrophenol	ND	9.24	1.94	NA	ug/L
OW-63	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.24*	3.05	0.011	ug/L
OW-63	12/11/2020	N-Nitrosodiphenylamine	ND	9.24	0.166	122	ug/L
OW-63	12/11/2020	Phenanthrene	ND	9.24	0.166	170	ug/L
OW-63	12/11/2020	Dimethylphthalate	ND	9.24	0.157	612	ug/L
OW-63	12/11/2020	Benzyl Alcohol	ND	9.24	1.85	2000	ug/L
OW-63	12/11/2020	Bis(2-chloroisopropyl)ether	ND	9.24	0.148	9.81	ug/L
OW-63	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.24*	3.23	0.0049	ug/L
OW-63	12/11/2020	Azobenzene	*ND*	*9.24*	0.924	0.12	ug/L
OW-64	4/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-64	4/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-64	4/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-64	4/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-64	4/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-64	4/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-64	4/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-64	4/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-64	4/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-64	4/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-64	4/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-64	4/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-64	4/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-64	4/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-64	4/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-64	4/29/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-64	4/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-64	4/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-64	4/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-64	4/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-64	4/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-64	4/29/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-64	4/29/2018	Naphthalene	18	10	5	30	ug/L
OW-64	4/29/2018	2-Methylnaphthalene	7.2	10	6.3	35.1	ug/L
OW-64	4/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-64	4/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-64	4/29/2018	2-Methylphenol	31	10	6.3	NA	ug/L
OW-64	4/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-64	4/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-64	4/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-64	4/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-64	4/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-64	4/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-64	4/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-64	4/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-64	4/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-64	4/29/2018	2,4-Dimethylphenol	7.6	10	5.9	354	ug/L
OW-64	4/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-64	4/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-64	4/29/2018	Phenol	6.9	10	6	5761	ug/L
OW-64	4/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-64	4/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-64	4/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-64	4/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-64	4/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-64	4/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-64	4/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-64	4/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-64	4/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-64	4/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-64	4/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-64	4/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-64	4/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-64	4/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-64	4/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-64	4/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-64	4/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-64	4/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-64	4/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-64	4/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-64	4/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-64	4/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-64	4/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-64	4/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-64	4/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-64	4/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-64	4/29/2018	3,4-Methylphenol	5.8	10	5.4	NA	ug/L
OW-64	8/22/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-64	8/22/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-64	8/22/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-64	8/22/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Aniline	ND	10	6.2	13	ug/L
OW-64	8/22/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-64	8/22/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-64	8/22/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-64	8/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-64	8/22/2018	Isophorone	ND	10	6.2	781	ug/L
OW-64	8/22/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-64	8/22/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-64	8/22/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-64	8/22/2018	Phenanthrene	ND	10	6	170	ug/L
OW-64	8/22/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-64	8/22/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-64	8/22/2018	Fluorene	ND	10	6.3	288	ug/L
OW-64	8/22/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-64	8/22/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-64	8/22/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-64	8/22/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-64	8/22/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-64	8/22/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-64	8/22/2018	1-Methylnaphthalene	9.1	10	7	11.38	ug/L
OW-64	8/22/2018	Naphthalene	17	10	5	30	ug/L
OW-64	8/22/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-64	8/22/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-64	8/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-64	8/22/2018	2-Methylphenol	9.9	10	6.3	NA	ug/L
OW-64	8/22/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-64	8/22/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-64	8/22/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-64	8/22/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-64	8/22/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-64	8/22/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-64	8/22/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-64	8/22/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-64	8/22/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-64	8/22/2018	2,4-Dimethylphenol	24	10	5.9	354	ug/L
OW-64	8/22/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-64	8/22/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-64	8/22/2018	Phenol	ND	10	6	5761	ug/L
OW-64	8/22/2018	Pyridine	ND	10	5.4	20	ug/L
OW-64	8/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-64	8/22/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-64	8/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-64	8/22/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-64	8/22/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-64	8/22/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-64	8/22/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-64	8/22/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-64	8/22/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-64	8/22/2018	Pyrene	ND	10	6.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/22/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-64	8/22/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-64	8/22/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-64	8/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-64	8/22/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-64	8/22/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-64	8/22/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-64	8/22/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-64	8/22/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-64	8/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-64	8/22/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-64	8/22/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-64	8/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-64	8/22/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-64	8/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-64	8/22/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-64	5/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-64	5/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-64	5/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-64	5/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-64	5/15/2019	1-Methylnaphthalene	4.6	10	3.069076	11.38	ug/L
OW-64	5/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-64	5/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-64	5/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-64	5/15/2019	2,4-Dimethylphenol	9.4	10	2.965993	354	ug/L
OW-64	5/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-64	5/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-64	5/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-64	5/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-64	5/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-64	5/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-64	5/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-64	5/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-64	5/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-64	5/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-64	5/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-64	5/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-64	5/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-64	5/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-64	5/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-64	5/15/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-64	5/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-64	5/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-64	5/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-64	5/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-64	5/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-64	5/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-64	5/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-64	5/15/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-64	5/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-64	5/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-64	5/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-64	5/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-64	5/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-64	5/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-64	5/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-64	5/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-64	5/15/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-64	5/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-64	5/15/2019	Bis(2-ethylhexyl)phthalate	4.3	10	4.302128	55.64	ug/L
OW-64	5/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-64	5/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-64	5/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-64	5/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-64	5/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-64	5/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-64	5/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-64	5/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-64	5/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-64	5/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-64	5/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-64	5/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-64	5/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-64	5/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-64	5/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-64	5/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-64	5/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-64	5/15/2019	Naphthalene	5.3	10	4.12221	30	ug/L
OW-64	5/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-64	5/15/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-64	5/15/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-64	5/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-64	5/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-64	5/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-64	5/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-64	5/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-64	5/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-64	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-64	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-64	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-64	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-64	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-64	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-64	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-64	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-64	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-64	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-64	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-64	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-64	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-64	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-64	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-64	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-64	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-64	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-64	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-64	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-64	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-64	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-64	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-64	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-64	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-64	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-64	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-64	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-64	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-64	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
OW-64	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-64	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-64	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-64	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-64	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-64	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-64	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-64	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-64	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-64	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-64	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-64	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-64	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-64	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-64	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-64	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-64	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-64	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-64	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-64	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-64	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-64	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-64	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-64	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-64	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-64	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-64	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-64	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-64	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-64	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-64	8/19/2019	Naphthalene	4.3	10	4.12221	30	ug/L
OW-64	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-64	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-64	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-64	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-64	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-64	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-64	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-64	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-64	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-64	11/18/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-64	11/18/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-64	11/18/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-64	11/18/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
OW-64	11/18/2019	1-Methylnaphthalene	1.9	0.5	0.5	11.38	ug/L
OW-64	11/18/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-64	11/18/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-64	11/18/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-64	11/18/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OW-64	11/18/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-64	11/18/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-64	11/18/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OW-64	11/18/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-64	11/18/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-64	11/18/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OW-64	11/18/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-64	11/18/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-64	11/18/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-64	11/18/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-64	11/18/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-64	11/18/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Aniline	ND	0.5	0.5	13	ug/L
OW-64	11/18/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OW-64	11/18/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OW-64	11/18/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OW-64	11/18/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OW-64	11/18/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-64	11/18/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OW-64	11/18/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-64	11/18/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-64	11/18/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-64	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OW-64	11/18/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-64	11/18/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-64	11/18/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-64	11/18/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-64	11/18/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-64	11/18/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-64	11/18/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-64	11/18/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-64	11/18/2019	Fluorene	ND	0.5	0.5	288	ug/L
OW-64	11/18/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-64	11/18/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-64	11/18/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-64	11/18/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-64	11/18/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OW-64	11/18/2019	Isophorone	ND	0.5	0.5	781	ug/L
OW-64	11/18/2019	Naphthalene	2.3	0.5	0.5	30	ug/L
OW-64	11/18/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-64	11/18/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-64	11/18/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
OW-64	11/18/2019	Phenol	ND	0.5	0.5	5761	ug/L
OW-64	11/18/2019	Pyrene	ND	0.5	0.5	117	ug/L
OW-64	11/18/2019	Pyridine	ND	0.5	0.5	20	ug/L
OW-64	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-64	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-64	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-64	3/4/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-64	3/4/2020	1-Methylnaphthalene	2.1	0.5	0.1	11.38	ug/L
OW-64	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-64	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-64	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-64	3/4/2020	2,4-Dimethylphenol	1.8	0.5	0.1	354	ug/L
OW-64	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-64	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-64	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-64	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-64	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-64	3/4/2020	2-Methylnaphthalene	0.94	0.5	0.1	35.1	ug/L
OW-64	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-64	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	3,4-Methylphenol	0.28	0.5	0.1	NA	ug/L
OW-64	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-64	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-64	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-64	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-64	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-64	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-64	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-64	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-64	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-64	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-64	3/4/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-64	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-64	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-64	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-64	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-64	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-64	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-64	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-64	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-64	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-64	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-64	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-64	3/4/2020	Fluoranthene	0.28	0.5	0.1	802	ug/L
OW-64	3/4/2020	Fluorene	0.25	0.5	0.1	288	ug/L
OW-64	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-64	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-64	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-64	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-64	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-64	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-64	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-64	3/4/2020	Naphthalene	4.6	0.5	0.1	30	ug/L
OW-64	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-64	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-64	3/4/2020	Phenanthrene	1.3	0.5	0.1	170	ug/L
OW-64	3/4/2020	Phenol	0.62	0.5	0.1	5761	ug/L
OW-64	3/4/2020	Pyrene	0.21	0.5	0.1	117	ug/L
OW-64	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-64	9/22/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
OW-64	9/22/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
OW-64	9/22/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
OW-64	9/22/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
OW-64	9/22/2020	1-Methylnaphthalene	1.7	0.51	0.1	11.38	ug/L
OW-64	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
OW-64	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
OW-64	9/22/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
OW-64	9/22/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
OW-64	9/22/2020	2,4-Dimethylphenol	1.6	0.51	0.1	354	ug/L
OW-64	9/22/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
OW-64	9/22/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
OW-64	9/22/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
OW-64	9/22/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
OW-64	9/22/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
OW-64	9/22/2020	2-Methylnaphthalene	0.86	0.51	0.1	35.1	ug/L
OW-64	9/22/2020	2-Methylphenol	1.1	0.51	0.1	NA	ug/L
OW-64	9/22/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
OW-64	9/22/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	3,4-Methylphenol	3.7	0.51	0.1	NA	ug/L
OW-64	9/22/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
OW-64	9/22/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
OW-64	9/22/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
OW-64	9/22/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
OW-64	9/22/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Acenaphthene	0.14	0.51	0.1	535	ug/L
OW-64	9/22/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Aniline	ND	0.51	0.1	13	ug/L
OW-64	9/22/2020	Anthracene	ND	0.51	0.1	1721	ug/L
OW-64	9/22/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
OW-64	9/22/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
OW-64	9/22/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
OW-64	9/22/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
OW-64	9/22/2020	Benzoic Acid	ND	0.51	0.21	75000	ug/L
OW-64	9/22/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
OW-64	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
OW-64	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
OW-64	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
OW-64	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.21	55.64	ug/L
OW-64	9/22/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
OW-64	9/22/2020	Carbazole	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
OW-64	9/22/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
OW-64	9/22/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
OW-64	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OW-64	9/22/2020	Dibenzofuran	0.12	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
OW-64	9/22/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
OW-64	9/22/2020	Fluoranthene	0.27	0.51	0.1	802	ug/L
OW-64	9/22/2020	Fluorene	0.27	0.51	0.1	288	ug/L
OW-64	9/22/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
OW-64	9/22/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
OW-64	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
OW-64	9/22/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
OW-64	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OW-64	9/22/2020	Isophorone	ND	0.51	0.1	781	ug/L
OW-64	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
OW-64	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
OW-64	9/22/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
OW-64	9/22/2020	Naphthalene	6	0.51	0.1	30	ug/L
OW-64	9/22/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
OW-64	9/22/2020	Pentachlorophenol	ND	0.51	0.21	1	ug/L
OW-64	9/22/2020	Phenanthrene	0.88	0.51	0.1	170	ug/L
OW-64	9/22/2020	Phenol	3.1	0.51	0.1	5761	ug/L
OW-64	9/22/2020	Pyrene	0.18	0.51	0.1	117	ug/L
OW-64	9/22/2020	Pyridine	ND	0.51	0.21	20	ug/L
OW-64	12/11/2020	Acenaphthene	ND	9.41	0.151	535	ug/L
OW-64	12/11/2020	Acenaphthylene	ND	9.41	0.16	NA	ug/L
OW-64	12/11/2020	Anthracene	ND	9.41	0.169	1721	ug/L
OW-64	12/11/2020	Benzo(a)pyrene	*ND*	*9.41*	0.113	0.2	ug/L
OW-64	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.41*	0.141	0.34	ug/L
OW-64	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.41*	0.151	3.43	ug/L
OW-64	12/11/2020	4-Chloroaniline	*ND*	*9.41*	3.2	0.37	ug/L
OW-64	12/11/2020	2-Chloronaphthalene	ND	9.41	0.132	733	ug/L
OW-64	12/11/2020	4-Chlorophenyl-phenylether	ND	9.41	1.88	NA	ug/L
OW-64	12/11/2020	1,3-Dichlorobenzene	ND	9.41	0.169	NA	ug/L
OW-64	12/11/2020	1,4-Dichlorobenzene	ND	9.41	0.151	75	ug/L
OW-64	12/11/2020	Dibenzofuran	ND	9.41	0.16	NA	ug/L
OW-64	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.41*	2.45	1.25	ug/L
OW-64	12/11/2020	2,4-Dichlorophenol	ND	9.41	2.82	45.3	ug/L
OW-64	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.41*	1.51	1.52	ug/L
OW-64	12/11/2020	2,4-Dinitrophenol	ND	28.2	3.2	38.7	ug/L
OW-64	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.41*	1.79	0.485	ug/L
OW-64	12/11/2020	Fluorene	ND	9.41	0.169	288	ug/L
OW-64	12/11/2020	Hexachlorocyclopentadiene	*ND*	*18.8*	2.45	0.41	ug/L
OW-64	12/11/2020	2-Methylphenol	ND	9.41	1.69	NA	ug/L
OW-64	12/11/2020	Naphthalene	ND	9.41	0.16	30	ug/L
OW-64	12/11/2020	Pentachlorophenol	*ND*	*18.8*	1.32	1	ug/L
OW-64	12/11/2020	Phenol	ND	9.41	2.45	5761	ug/L
OW-64	12/11/2020	Pyrene	ND	9.41	0.198	117	ug/L
OW-64	12/11/2020	2,4,5-Trichlorophenol	ND	9.41	3.48	1166	ug/L
OW-64	12/11/2020	2,4,6-Trichlorophenol	ND	9.41	3.29	11.9*	ug/L
OW-64	12/11/2020	Aniline	ND	9.41	3.58	13	ug/L
OW-64	12/11/2020	Benzoic Acid	ND	28.2	6.87	75000	ug/L
OW-64	12/11/2020	Pyridine	ND	9.41	3.01	20	ug/L
OW-64	12/11/2020	1,2,4-Trichlorobenzene	ND	9.41	0.169	70	ug/L
OW-64	12/11/2020	1,2-Dichlorobenzene	ND	9.41	0.16	600	ug/L
OW-64	12/11/2020	Benzo(a)anthracene	*ND*	*9.41*	0.169	0.12	ug/L
OW-64	12/11/2020	Benzo(g,h,i)perylene	ND	9.41	0.216	NA	ug/L
OW-64	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.41	0.151	59	ug/L
OW-64	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.41*	2.54	0.137	ug/L
OW-64	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.41	4.71	55.64	ug/L
OW-64	12/11/2020	4-Bromophenyl-phenylether	ND	9.41	0.188	NA	ug/L
OW-64	12/11/2020	Butylbenzylphthalate	ND	9.41	0.179	16	ug/L
OW-64	12/11/2020	Carbazole	ND	9.41	0.216	NA	ug/L
OW-64	12/11/2020	4-Chloro-3-Methylphenol	ND	9.41	3.58	NA	ug/L
OW-64	12/11/2020	2-Chlorophenol	ND	9.41	2.07	91	ug/L
OW-64	12/11/2020	Chrysene	ND	9.41	0.179	34.3	ug/L
OW-64	12/11/2020	Dibenzo(a,h)anthracene	ND	9.41	0.226	NA	ug/L
OW-64	12/11/2020	Diethylphthalate	ND	9.41	0.226	14801	ug/L
OW-64	12/11/2020	2,4-Dimethylphenol	ND	9.41	3.29	354	ug/L
OW-64	12/11/2020	Di-n-butylphthalate	ND	9.41	2.54	885	ug/L
OW-64	12/11/2020	2,4-Dinitrotoluene	ND	9.41	1.79	45.3	ug/L
OW-64	12/11/2020	Di-n-octylphthalate	ND	9.41	0.16	200	ug/L
OW-64	12/11/2020	Fluoranthene	ND	9.41	0.169	802	ug/L
OW-64	12/11/2020	Hexachlorobenzene	*ND*	*9.41*	0.16	0.0976	ug/L
OW-64	12/11/2020	Hexachloroethane	*ND*	*9.41*	3.95	3.28	ug/L
OW-64	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.41*	0.207	0.343	ug/L
OW-64	12/11/2020	Isophorone	ND	9.41	0.132	781	ug/L
OW-64	12/11/2020	2-Nitroaniline	ND	9.41	2.07	190	ug/L
OW-64	12/11/2020	3-Nitroaniline	ND	9.41	1.69	NA	ug/L
OW-64	12/11/2020	4-Nitroaniline	*ND*	*9.41*	1.41	3.8	ug/L
OW-64	12/11/2020	Nitrobenzene	*ND*	*9.41*	0.122	1.4	ug/L
OW-64	12/11/2020	2-Nitrophenol	ND	9.41	4.89	NA	ug/L
OW-64	12/11/2020	4-Nitrophenol	ND	9.41	1.98	NA	ug/L
OW-64	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.41*	3.11	0.011	ug/L
OW-64	12/11/2020	N-Nitrosodiphenylamine	ND	9.41	0.169	122	ug/L
OW-64	12/11/2020	Phenanthrene	ND	9.41	0.169	170	ug/L
OW-64	12/11/2020	Dimethylphthalate	ND	9.41	0.16	612	ug/L
OW-64	12/11/2020	Benzyl Alcohol	ND	9.41	1.88	2000	ug/L
OW-64	12/11/2020	Bis(2-chloroisopropyl)ether	ND	9.41	0.151	9.81	ug/L
OW-64	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.41*	3.29	0.0049	ug/L
OW-64	12/11/2020	Azobenzene	*ND*	*9.41*	0.941	0.12	ug/L
PW-2	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
PW-2	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-2	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
PW-2	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
PW-2	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
PW-2	9/10/2014	Aniline	ND	10	2.4	13	ug/L
PW-2	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
PW-2	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
PW-2	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
PW-2	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
PW-2	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
PW-2	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
PW-2	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
PW-2	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
PW-2	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
PW-2	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
PW-2	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
PW-2	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
PW-2	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-2	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
PW-2	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
PW-2	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-2	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
PW-2	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
PW-2	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
PW-2	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
PW-2	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
PW-2	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-2	9/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
PW-2	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
PW-2	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
PW-2	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
PW-2	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-2	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
PW-2	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
PW-2	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
PW-2	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
PW-2	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
PW-2	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
PW-2	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
PW-2	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-2	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
PW-2	9/10/2014	Phenol	ND	10	1.6	5761	ug/L
PW-2	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
PW-2	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-2	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-2	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-2	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
PW-2	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
PW-2	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
PW-2	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
PW-2	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
PW-2	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
PW-2	9/10/2014	Pyrene	ND	10	4	117	ug/L
PW-2	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
PW-2	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
PW-2	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
PW-2	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
PW-2	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
PW-2	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
PW-2	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
PW-2	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
PW-2	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
PW-2	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
PW-2	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-2	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
PW-2	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
PW-2	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
PW-2	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
PW-2	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
PW-2	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-2	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-2	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-2	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-2	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-2	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-2	9/18/2017	Benzoic Acid	10	20	3.9	75000	ug/L
PW-2	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-2	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-2	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-2	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-2	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-2	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-2	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-2	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-2	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-2	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-2	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-2	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-2	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-2	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-2	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-2	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-2	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-2	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-2	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-2	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-2	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-2	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-2	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-2	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-2	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-2	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-2	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-2	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-2	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-2	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-2	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-2	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-2	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-2	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-2	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-2	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-2	9/18/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
PW-2	9/18/2017	Di-n-octylphthalate	5.1	10	4.7	200	ug/L
PW-2	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-2	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-2	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-2	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-2	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-2	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-2	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-2	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-2	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-2	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-2	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-2	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-2	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-2	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-2	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-2	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-2	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-2	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-2	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-2	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-2	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-2	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-2	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
PW-2	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
PW-2	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
PW-2	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
PW-2	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
PW-2	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
PW-2	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
PW-2	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
PW-2	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
PW-2	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
PW-2	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
PW-2	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
PW-2	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
PW-2	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
PW-2	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
PW-2	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
PW-2	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
PW-2	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
PW-2	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
PW-2	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
PW-2	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
PW-2	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
PW-2	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
PW-2	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
PW-2	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
PW-2	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
PW-2	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
PW-2	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
PW-2	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
PW-2	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
PW-2	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
PW-2	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
PW-2	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
PW-2	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
PW-2	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
PW-2	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
PW-2	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
PW-2	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
PW-2	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
PW-2	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
PW-2	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
PW-2	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
PW-2	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
PW-2	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
PW-2	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
PW-2	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
PW-2	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
PW-2	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
PW-2	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
PW-2	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
PW-2	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
PW-2	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
PW-2	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
PW-2	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
PW-2	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
PW-2	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
PW-2	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
PW-2	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
PW-2	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
PW-2	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
PW-2	12/28/2020	Acenaphthene	ND	11.4	0.183	535	ug/L
PW-2	12/28/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
PW-2	12/28/2020	Anthracene	ND	11.4	0.205	1721	ug/L
PW-2	12/28/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
PW-2	12/28/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
PW-2	12/28/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
PW-2	12/28/2020	Benzo(g,h,i)perylene	ND	11.4	0.263	NA	ug/L
PW-2	12/28/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.183	3.43	ug/L
PW-2	12/28/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.183	59	ug/L
PW-2	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
PW-2	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.71	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	12/28/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
PW-2	12/28/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
PW-2	12/28/2020	Carbazole	ND	11.4	0.263	NA	ug/L
PW-2	12/28/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
PW-2	12/28/2020	4-Chloro-3-Methylphenol	ND	11.4	4.34	NA	ug/L
PW-2	12/28/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
PW-2	12/28/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
PW-2	12/28/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
PW-2	12/28/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
PW-2	12/28/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
PW-2	12/28/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
PW-2	12/28/2020	1,4-Dichlorobenzene	ND	11.4	0.183	75	ug/L
PW-2	12/28/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
PW-2	12/28/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
PW-2	12/28/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
PW-2	12/28/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
PW-2	12/28/2020	2,4-Dimethylphenol	ND	11.4	4	354	ug/L
PW-2	12/28/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
PW-2	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.83	1.52	ug/L
PW-2	12/28/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
PW-2	12/28/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
PW-2	12/28/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
PW-2	12/28/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
PW-2	12/28/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
PW-2	12/28/2020	Fluorene	ND	11.4	0.205	288	ug/L
PW-2	12/28/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
PW-2	12/28/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
PW-2	12/28/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
PW-2	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
PW-2	12/28/2020	Isophorone	ND	11.4	0.16	781	ug/L
PW-2	12/28/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
PW-2	12/28/2020	Naphthalene	ND	11.4	0.194	30	ug/L
PW-2	12/28/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
PW-2	12/28/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
PW-2	12/28/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
PW-2	12/28/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
PW-2	12/28/2020	2-Nitrophenol	ND	11.4	5.94	NA	ug/L
PW-2	12/28/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
PW-2	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.77	0.011	ug/L
PW-2	12/28/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
PW-2	12/28/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
PW-2	12/28/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
PW-2	12/28/2020	Phenol	ND	11.4	2.97	5761	ug/L
PW-2	12/28/2020	Pyrene	ND	11.4	0.24	117	ug/L
PW-2	12/28/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
PW-2	12/28/2020	2,4,6-Trichlorophenol	ND	11.4	4	11.9*	ug/L
PW-2	12/28/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
PW-2	12/28/2020	Aniline	ND	11.4	4.34	13	ug/L
PW-2	12/28/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
PW-2	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.183	9.81	ug/L
PW-2	12/28/2020	N-Nitrosodimethylamine	*ND*	*11.4*	4	0.0049	ug/L
PW-2	12/28/2020	Pyridine	ND	11.4	3.65	20	ug/L
PW-2	12/28/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
PW-2	12/28/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
PW-2	12/28/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
PW-2	12/28/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
PW-3	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
PW-3	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
PW-3	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
PW-3	8/24/2012	Aniline	ND	10	2	13	ug/L
PW-3	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
PW-3	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
PW-3	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-3	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-3	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
PW-3	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
PW-3	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
PW-3	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
PW-3	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
PW-3	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
PW-3	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
PW-3	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
PW-3	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
PW-3	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-3	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
PW-3	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
PW-3	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
PW-3	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-3	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-3	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
PW-3	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
PW-3	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
PW-3	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
PW-3	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
PW-3	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
PW-3	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
PW-3	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-3	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
PW-3	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
PW-3	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
PW-3	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
PW-3	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
PW-3	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-3	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
PW-3	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
PW-3	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
PW-3	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
PW-3	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
PW-3	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
PW-3	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
PW-3	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-3	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
PW-3	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
PW-3	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
PW-3	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-3	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
PW-3	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
PW-3	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
PW-3	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
PW-3	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
PW-3	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
PW-3	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
PW-3	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
PW-3	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
PW-3	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
PW-3	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
PW-3	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
PW-3	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
PW-3	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
PW-3	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-3	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
PW-3	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
PW-3	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
PW-3	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
PW-3	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-3	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	Aniline	ND	10	2.2	13	ug/L
PW-3	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
PW-3	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
PW-3	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-3	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
PW-3	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
PW-3	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
PW-3	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
PW-3	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-3	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
PW-3	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
PW-3	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-3	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
PW-3	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
PW-3	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
PW-3	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
PW-3	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
PW-3	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
PW-3	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
PW-3	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
PW-3	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
PW-3	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
PW-3	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
PW-3	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
PW-3	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
PW-3	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
PW-3	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
PW-3	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
PW-3	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
PW-3	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
PW-3	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
PW-3	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-3	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
PW-3	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
PW-3	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
PW-3	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
PW-3	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
PW-3	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
PW-3	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
PW-3	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
PW-3	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
PW-3	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
PW-3	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
PW-3	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
PW-3	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
PW-3	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
PW-3	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
PW-3	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
PW-3	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
PW-3	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
PW-3	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
PW-3	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
PW-3	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-3	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
PW-3	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
PW-3	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
PW-3	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
PW-3	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-3	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
PW-3	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
PW-3	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
PW-3	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
PW-3	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
PW-3	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
PW-3	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
PW-3	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Aniline	ND	10	2.4	13	ug/L
PW-3	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
PW-3	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
PW-3	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
PW-3	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
PW-3	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
PW-3	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
PW-3	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
PW-3	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
PW-3	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
PW-3	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
PW-3	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
PW-3	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
PW-3	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
PW-3	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-3	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
PW-3	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-3	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
PW-3	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
PW-3	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
PW-3	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
PW-3	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
PW-3	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-3	9/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
PW-3	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
PW-3	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
PW-3	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
PW-3	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-3	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
PW-3	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
PW-3	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
PW-3	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
PW-3	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
PW-3	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
PW-3	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
PW-3	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-3	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
PW-3	9/10/2014	Phenol	ND	10	1.6	5761	ug/L
PW-3	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
PW-3	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-3	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-3	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-3	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
PW-3	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
PW-3	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
PW-3	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
PW-3	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
PW-3	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
PW-3	9/10/2014	Pyrene	ND	10	4	117	ug/L
PW-3	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
PW-3	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
PW-3	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
PW-3	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
PW-3	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
PW-3	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
PW-3	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
PW-3	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
PW-3	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
PW-3	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-3	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
PW-3	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
PW-3	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
PW-3	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
PW-3	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
PW-3	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-3	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
PW-3	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
PW-3	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
PW-3	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Aniline	ND	10	1.5	13	ug/L
PW-3	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
PW-3	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
PW-3	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
PW-3	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
PW-3	8/23/2015	Isophorone	ND	10	2	781	ug/L
PW-3	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
PW-3	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
PW-3	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
PW-3	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
PW-3	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
PW-3	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
PW-3	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
PW-3	8/23/2015	Carbazole	ND	10	1.5	NA	ug/L
PW-3	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
PW-3	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
PW-3	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
PW-3	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
PW-3	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
PW-3	8/23/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
PW-3	8/23/2015	Naphthalene	ND	10	1.8	30	ug/L
PW-3	8/23/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
PW-3	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
PW-3	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
PW-3	8/23/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
PW-3	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
PW-3	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
PW-3	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
PW-3	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
PW-3	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
PW-3	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
PW-3	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
PW-3	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
PW-3	8/23/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
PW-3	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
PW-3	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
PW-3	8/23/2015	Phenol	ND	10	1.1	5761	ug/L
PW-3	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
PW-3	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-3	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
PW-3	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
PW-3	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
PW-3	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
PW-3	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
PW-3	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
PW-3	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
PW-3	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
PW-3	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
PW-3	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
PW-3	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
PW-3	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
PW-3	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
PW-3	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
PW-3	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
PW-3	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
PW-3	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
PW-3	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-3	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
PW-3	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
PW-3	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
PW-3	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
PW-3	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
PW-3	8/23/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
PW-3	8/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-3	8/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-3	8/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-3	8/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-3	8/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Aniline	ND	10	2.4	13	ug/L
PW-3	8/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-3	8/31/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
PW-3	8/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-3	8/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-3	8/31/2016	Isophorone	ND	10	2.6	781	ug/L
PW-3	8/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-3	8/31/2016	Diethylphthalate	3.7	10	2.7	14801	ug/L
PW-3	8/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-3	8/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-3	8/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-3	8/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-3	8/31/2016	Fluorene	ND	10	2.7	288	ug/L
PW-3	8/31/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-3	8/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-3	8/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-3	8/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-3	8/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-3	8/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-3	8/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-3	8/31/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-3	8/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-3	8/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-3	8/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-3	8/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-3	8/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-3	8/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-3	8/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-3	8/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-3	8/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-3	8/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-3	8/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-3	8/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-3	8/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-3	8/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-3	8/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-3	8/31/2016	Phenol	ND	10	2	5761	ug/L
PW-3	8/31/2016	Pyridine	ND	10	2.2	20	ug/L
PW-3	8/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-3	8/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-3	8/31/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
PW-3	8/31/2016	Di-n-octylphthalate	4.3	10	2	200	ug/L
PW-3	8/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-3	8/31/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-3	8/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-3	8/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-3	8/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-3	8/31/2016	Pyrene	ND	10	3.1	117	ug/L
PW-3	8/31/2016	Dimethylphthalate	7.9	10	2.4	612	ug/L
PW-3	8/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-3	8/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-3	8/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-3	8/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-3	8/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-3	8/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-3	8/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-3	8/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-3	8/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-3	8/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-3	8/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-3	8/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-3	8/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-3	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-3	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-3	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-3	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-3	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-3	9/18/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-3	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-3	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-3	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-3	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-3	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-3	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-3	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-3	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-3	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-3	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-3	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-3	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-3	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-3	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-3	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-3	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-3	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-3	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-3	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-3	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-3	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-3	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-3	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-3	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-3	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-3	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-3	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-3	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-3	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-3	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-3	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-3	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-3	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-3	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-3	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-3	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-3	9/18/2017	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
PW-3	9/18/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
PW-3	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-3	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-3	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-3	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-3	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-3	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-3	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-3	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-3	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-3	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-3	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-3	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-3	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-3	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-3	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-3	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-3	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-3	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-3	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-3	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-3	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-3	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-3	9/19/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
PW-3	9/19/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
PW-3	9/19/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
PW-3	9/19/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Aniline	ND	10	6.2	13	ug/L
PW-3	9/19/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
PW-3	9/19/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
PW-3	9/19/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
PW-3	9/19/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
PW-3	9/19/2018	Isophorone	ND	10	6.2	781	ug/L
PW-3	9/19/2018	Acenaphthene	ND	10	5.8	535	ug/L
PW-3	9/19/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
PW-3	9/19/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
PW-3	9/19/2018	Phenanthrene	ND	10	6	170	ug/L
PW-3	9/19/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
PW-3	9/19/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
PW-3	9/19/2018	Fluorene	ND	10	6.3	288	ug/L
PW-3	9/19/2018	Carbazole	ND	10	6.3	NA	ug/L
PW-3	9/19/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
PW-3	9/19/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
PW-3	9/19/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
PW-3	9/19/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
PW-3	9/19/2018	2-Nitrophenol	ND	10	6	NA	ug/L
PW-3	9/19/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
PW-3	9/19/2018	Naphthalene	ND	10	5	30	ug/L
PW-3	9/19/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
PW-3	9/19/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
PW-3	9/19/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
PW-3	9/19/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	9/19/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
PW-3	9/19/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
PW-3	9/19/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
PW-3	9/19/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
PW-3	9/19/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
PW-3	9/19/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
PW-3	9/19/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
PW-3	9/19/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
PW-3	9/19/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
PW-3	9/19/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
PW-3	9/19/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
PW-3	9/19/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
PW-3	9/19/2018	Phenol	ND	10	6	5761	ug/L
PW-3	9/19/2018	Pyridine	ND	10	5.4	20	ug/L
PW-3	9/19/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
PW-3	9/19/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
PW-3	9/19/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
PW-3	9/19/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
PW-3	9/19/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
PW-3	9/19/2018	Anthracene	ND	10	5.7	1721	ug/L
PW-3	9/19/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
PW-3	9/19/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
PW-3	9/19/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
PW-3	9/19/2018	Pyrene	ND	10	6.5	117	ug/L
PW-3	9/19/2018	Dimethylphthalate	ND	10	6	612	ug/L
PW-3	9/19/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
PW-3	9/19/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
PW-3	9/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
PW-3	9/19/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
PW-3	9/19/2018	Fluoranthene	ND	10	5.8	802	ug/L
PW-3	9/19/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
PW-3	9/19/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
PW-3	9/19/2018	Chrysene	ND	10	6.8	34.3	ug/L
PW-3	9/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
PW-3	9/19/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
PW-3	9/19/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
PW-3	9/19/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
PW-3	9/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
PW-3	9/19/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
PW-3	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
PW-3	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
PW-3	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
PW-3	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Aniline	ND	10	6.2	13	ug/L
PW-3	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
PW-3	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
PW-3	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
PW-3	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
PW-3	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
PW-3	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
PW-3	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
PW-3	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
PW-3	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
PW-3	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
PW-3	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
PW-3	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
PW-3	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
PW-3	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
PW-3	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
PW-3	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
PW-3	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
PW-3	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
PW-3	11/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
PW-3	11/20/2018	Naphthalene	ND	10	5	30	ug/L
PW-3	11/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
PW-3	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
PW-3	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
PW-3	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
PW-3	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
PW-3	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
PW-3	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
PW-3	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
PW-3	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
PW-3	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
PW-3	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
PW-3	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
PW-3	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
PW-3	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
PW-3	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
PW-3	11/20/2018	Phenol	ND	10	6	5761	ug/L
PW-3	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
PW-3	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
PW-3	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
PW-3	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
PW-3	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
PW-3	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
PW-3	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
PW-3	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
PW-3	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
PW-3	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
PW-3	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
PW-3	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
PW-3	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
PW-3	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
PW-3	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
PW-3	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
PW-3	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
PW-3	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
PW-3	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
PW-3	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
PW-3	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
PW-3	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
PW-3	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
PW-3	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
PW-3	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
PW-3	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
PW-3	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
PW-3	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
PW-3	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
PW-3	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
PW-3	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
PW-3	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
PW-3	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
PW-3	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
PW-3	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
PW-3	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
PW-3	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
PW-3	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
PW-3	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
PW-3	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
PW-3	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
PW-3	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
PW-3	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
PW-3	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
PW-3	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
PW-3	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
PW-3	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
PW-3	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
PW-3	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
PW-3	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
PW-3	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
PW-3	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
PW-3	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
PW-3	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
PW-3	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
PW-3	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
PW-3	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
PW-3	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
PW-3	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
PW-3	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
PW-3	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
PW-3	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
PW-3	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
PW-3	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
PW-3	2/20/2019	Benzoic Acid	14	20	6.311561	75000	ug/L
PW-3	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
PW-3	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
PW-3	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
PW-3	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
PW-3	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
PW-3	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
PW-3	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
PW-3	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
PW-3	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
PW-3	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
PW-3	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
PW-3	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
PW-3	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
PW-3	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
PW-3	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
PW-3	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
PW-3	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
PW-3	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
PW-3	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
PW-3	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
PW-3	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
PW-3	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
PW-3	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
PW-3	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
PW-3	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
PW-3	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
PW-3	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
PW-3	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
PW-3	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
PW-3	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
PW-3	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
PW-3	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
PW-3	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-3	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-3	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-3	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-3	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-3	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-3	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-3	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-3	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-3	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-3	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-3	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-3	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-3	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-3	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-3	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-3	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-3	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-3	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-3	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-3	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-3	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-3	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-3	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-3	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-3	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-3	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-3	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-3	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-3	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-3	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
PW-3	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-3	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-3	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-3	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-3	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-3	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-3	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-3	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-3	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-3	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-3	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-3	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-3	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-3	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-3	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-3	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-3	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-3	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-3	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-3	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-3	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-3	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-3	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-3	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-3	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-3	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-3	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-3	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-3	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-3	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-3	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-3	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-3	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-3	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-3	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-3	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-3	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-3	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-3	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-3	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-3	8/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-3	8/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-3	8/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-3	8/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-3	8/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-3	8/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-3	8/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-3	8/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-3	8/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-3	8/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-3	8/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-3	8/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-3	8/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-3	8/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-3	8/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-3	8/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-3	8/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-3	8/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-3	8/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-3	8/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-3	8/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-3	8/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-3	8/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-3	8/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-3	8/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-3	8/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-3	8/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-3	8/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-3	8/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-3	8/28/2019	Aniline	ND	10	3.579516	13	ug/L
PW-3	8/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-3	8/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-3	8/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-3	8/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-3	8/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-3	8/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-3	8/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-3	8/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-3	8/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-3	8/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-3	8/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-3	8/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-3	8/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-3	8/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-3	8/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-3	8/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-3	8/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-3	8/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-3	8/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-3	8/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-3	8/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-3	8/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-3	8/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-3	8/28/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-3	8/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-3	8/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-3	8/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-3	8/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-3	8/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-3	8/28/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-3	8/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-3	8/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-3	8/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-3	8/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-3	8/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-3	8/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-3	8/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-3	8/28/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-3	8/28/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-3	8/28/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-3	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
PW-3	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
PW-3	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
PW-3	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
PW-3	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
PW-3	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
PW-3	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
PW-3	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
PW-3	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
PW-3	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
PW-3	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
PW-3	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
PW-3	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
PW-3	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
PW-3	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
PW-3	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
PW-3	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
PW-3	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
PW-3	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
PW-3	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
PW-3	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
PW-3	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
PW-3	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
PW-3	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
PW-3	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
PW-3	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
PW-3	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
PW-3	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
PW-3	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
PW-3	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
PW-3	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
PW-3	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
PW-3	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
PW-3	9/21/2020	Bis(2-ethylhexyl)phthalate	0.41	0.51	0.2	55.64	ug/L
PW-3	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
PW-3	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
PW-3	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
PW-3	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
PW-3	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
PW-3	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
PW-3	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
PW-3	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
PW-3	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
PW-3	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
PW-3	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
PW-3	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
PW-3	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
PW-3	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
PW-3	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
PW-3	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
PW-3	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
PW-3	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
PW-3	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
PW-3	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
PW-3	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
PW-3	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
PW-3	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
PW-3	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
PW-3	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
PW-3	12/28/2020	Acenaphthene	ND	10.5	0.169	535	ug/L
PW-3	12/28/2020	Acenaphthylene	ND	10.5	0.179	NA	ug/L
PW-3	12/28/2020	Anthracene	ND	10.5	0.19	1721	ug/L
PW-3	12/28/2020	Benzo(a)anthracene	*ND*	*10.5*	0.19	0.12	ug/L
PW-3	12/28/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L
PW-3	12/28/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.158	0.34	ug/L
PW-3	12/28/2020	Benzo(g,h,i)perylene	ND	10.5	0.242	NA	ug/L
PW-3	12/28/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.169	3.43	ug/L
PW-3	12/28/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.169	59	ug/L
PW-3	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.85	0.137	ug/L
PW-3	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.27	55.64	ug/L
PW-3	12/28/2020	4-Bromophenyl-phenylether	ND	10.5	0.211	NA	ug/L
PW-3	12/28/2020	Butylbenzylphthalate	ND	10.5	0.2	16	ug/L
PW-3	12/28/2020	Carbazole	ND	10.5	0.242	NA	ug/L
PW-3	12/28/2020	4-Chloroaniline	*ND*	*10.5*	3.58	0.37	ug/L
PW-3	12/28/2020	4-Chloro-3-Methylphenol	ND	10.5	4.01	NA	ug/L
PW-3	12/28/2020	2-Chloronaphthalene	ND	10.5	0.148	733	ug/L
PW-3	12/28/2020	2-Chlorophenol	ND	10.5	2.32	91	ug/L
PW-3	12/28/2020	4-Chlorophenyl-phenylether	ND	10.5	2.11	NA	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	10.5	0.19	NA	ug/L
PW-3	12/28/2020	Chrysene	ND	10.5	0.2	34.3	ug/L
PW-3	12/28/2020	Dibenzo(a,h)anthracene	ND	10.5	0.253	NA	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	10.5	0.169	75	ug/L
PW-3	12/28/2020	Dibenzofuran	ND	10.5	0.179	NA	ug/L
PW-3	12/28/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.74	1.25	ug/L
PW-3	12/28/2020	2,4-Dichlorophenol	ND	10.5	3.16	45.3	ug/L
PW-3	12/28/2020	Diethylphthalate	ND	10.5	0.253	14801	ug/L
PW-3	12/28/2020	2,4-Dimethylphenol	ND	10.5	3.69	354	ug/L
PW-3	12/28/2020	Di-n-butylphthalate	ND	10.5	2.85	885	ug/L
PW-3	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.69	1.52	ug/L
PW-3	12/28/2020	2,4-Dinitrophenol	ND	31.6	3.58	38.7	ug/L
PW-3	12/28/2020	2,4-Dinitrotoluene	ND	10.5	2	45.3	ug/L
PW-3	12/28/2020	2,6-Dinitrotoluene	*ND*	*10.5*	2	0.485	ug/L
PW-3	12/28/2020	Di-n-octylphthalate	ND	10.5	0.179	200	ug/L
PW-3	12/28/2020	Fluoranthene	ND	10.5	0.19	802	ug/L
PW-3	12/28/2020	Fluorene	ND	10.5	0.19	288	ug/L
PW-3	12/28/2020	Hexachlorobenzene	*ND*	*10.5*	0.179	0.0976	ug/L
PW-3	12/28/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.74	0.41	ug/L
PW-3	12/28/2020	Hexachloroethane	*ND*	*10.5*	4.43	3.28	ug/L
PW-3	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.232	0.343	ug/L
PW-3	12/28/2020	Isophorone	ND	10.5	0.148	781	ug/L
PW-3	12/28/2020	2-Methylphenol	ND	10.5	1.9	NA	ug/L
PW-3	12/28/2020	Naphthalene	ND	10.5	0.179	30	ug/L
PW-3	12/28/2020	2-Nitroaniline	ND	10.5	2.32	190	ug/L
PW-3	12/28/2020	3-Nitroaniline	ND	10.5	1.9	NA	ug/L
PW-3	12/28/2020	4-Nitroaniline	*ND*	*10.5*	1.58	3.8	ug/L
PW-3	12/28/2020	Nitrobenzene	*ND*	*10.5*	0.137	1.4	ug/L
PW-3	12/28/2020	2-Nitrophenol	ND	10.5	5.48	NA	ug/L
PW-3	12/28/2020	4-Nitrophenol	ND	10.5	2.21	NA	ug/L
PW-3	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.48	0.011	ug/L
PW-3	12/28/2020	N-Nitrosodiphenylamine	ND	10.5	0.19	122	ug/L
PW-3	12/28/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
PW-3	12/28/2020	Phenanthrene	ND	10.5	0.19	170	ug/L
PW-3	12/28/2020	Phenol	ND	10.5	2.74	5761	ug/L
PW-3	12/28/2020	Pyrene	ND	10.5	0.221	117	ug/L
PW-3	12/28/2020	2,4,5-Trichlorophenol	ND	10.5	3.9	1166	ug/L
PW-3	12/28/2020	2,4,6-Trichlorophenol	ND	10.5	3.69	11.9*	ug/L
PW-3	12/28/2020	Dimethylphthalate	ND	10.5	0.179	612	ug/L
PW-3	12/28/2020	Aniline	ND	10.5	4.01	13	ug/L
PW-3	12/28/2020	Benzyl Alcohol	ND	10.5	2.11	2000	ug/L
PW-3	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.169	9.81	ug/L
PW-3	12/28/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.69	0.0049	ug/L
PW-3	12/28/2020	Pyridine	ND	10.5	3.37	20	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	10.5	0.19	70	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	10.5	0.179	600	ug/L
PW-3	12/28/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
PW-3	12/28/2020	Benzoic Acid	ND	31.6	7.69	75000	ug/L
PW-3	12/28/2020	Acenaphthene	ND	10.7	0.171	535	ug/L
PW-3	12/28/2020	Acenaphthylene	ND	10.7	0.182	NA	ug/L
PW-3	12/28/2020	Anthracene	ND	10.7	0.192	1721	ug/L
PW-3	12/28/2020	Benzo(a)anthracene	*ND*	*10.7*	0.192	0.12	ug/L
PW-3	12/28/2020	Benzo(a)pyrene	*ND*	*10.7*	0.128	0.2	ug/L
PW-3	12/28/2020	Benzo(b)fluoranthene	*ND*	*10.7*	0.16	0.34	ug/L
PW-3	12/28/2020	Benzo(g,h,i)perylene	ND	10.7	0.246	NA	ug/L
PW-3	12/28/2020	Benzo(k)fluoranthene	*ND*	*10.7*	0.171	3.43	ug/L
PW-3	12/28/2020	Bis(2-chloroethoxy)methane	ND	10.7	0.171	59	ug/L
PW-3	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*10.7*	2.88	0.137	ug/L
PW-3	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	10.7	5.34	55.64	ug/L
PW-3	12/28/2020	4-Bromophenyl-phenylether	ND	10.7	0.214	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	Butylbenzylphthalate	ND	10.7	0.203	16	ug/L
PW-3	12/28/2020	Carbazole	ND	10.7	0.246	NA	ug/L
PW-3	12/28/2020	4-Chloroaniline	*ND*	*10.7*	3.63	0.37	ug/L
PW-3	12/28/2020	4-Chloro-3-Methylphenol	ND	10.7	4.06	NA	ug/L
PW-3	12/28/2020	2-Chloronaphthalene	ND	10.7	0.15	733	ug/L
PW-3	12/28/2020	2-Chlorophenol	ND	10.7	2.35	91	ug/L
PW-3	12/28/2020	4-Chlorophenyl-phenylether	ND	10.7	2.14	NA	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	10.7	0.192	NA	ug/L
PW-3	12/28/2020	Chrysene	ND	10.7	0.203	34.3	ug/L
PW-3	12/28/2020	Dibenzo(a,h)anthracene	ND	10.7	0.256	NA	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	10.7	0.171	75	ug/L
PW-3	12/28/2020	Dibenzofuran	ND	10.7	0.182	NA	ug/L
PW-3	12/28/2020	3,3-Dichlorobenzidine	*ND*	*10.7*	2.78	1.25	ug/L
PW-3	12/28/2020	2,4-Dichlorophenol	ND	10.7	3.21	45.3	ug/L
PW-3	12/28/2020	Diethylphthalate	ND	10.7	0.256	14801	ug/L
PW-3	12/28/2020	2,4-Dimethylphenol	ND	10.7	3.74	354	ug/L
PW-3	12/28/2020	Di-n-butylphthalate	ND	10.7	2.88	885	ug/L
PW-3	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.7*	1.71	1.52	ug/L
PW-3	12/28/2020	2,4-Dinitrophenol	ND	32.1	3.63	38.7	ug/L
PW-3	12/28/2020	2,4-Dinitrotoluene	ND	10.7	2.03	45.3	ug/L
PW-3	12/28/2020	2,6-Dinitrotoluene	*ND*	*10.7*	2.03	0.485	ug/L
PW-3	12/28/2020	Di-n-octylphthalate	ND	10.7	0.182	200	ug/L
PW-3	12/28/2020	Fluoranthene	ND	10.7	0.192	802	ug/L
PW-3	12/28/2020	Fluorene	ND	10.7	0.192	288	ug/L
PW-3	12/28/2020	Hexachlorobenzene	*ND*	*10.7*	0.182	0.0976	ug/L
PW-3	12/28/2020	Hexachlorocyclopentadiene	*ND*	*21.4*	2.78	0.41	ug/L
PW-3	12/28/2020	Hexachloroethane	*ND*	*10.7*	4.49	3.28	ug/L
PW-3	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.7*	0.235	0.343	ug/L
PW-3	12/28/2020	Isophorone	ND	10.7	0.15	781	ug/L
PW-3	12/28/2020	2-Methylphenol	ND	10.7	1.92	NA	ug/L
PW-3	12/28/2020	Naphthalene	ND	10.7	0.182	30	ug/L
PW-3	12/28/2020	2-Nitroaniline	ND	10.7	2.35	190	ug/L
PW-3	12/28/2020	3-Nitroaniline	ND	10.7	1.92	NA	ug/L
PW-3	12/28/2020	4-Nitroaniline	*ND*	*10.7*	1.6	3.8	ug/L
PW-3	12/28/2020	Nitrobenzene	*ND*	*10.7*	0.139	1.4	ug/L
PW-3	12/28/2020	2-Nitrophenol	ND	10.7	5.56	NA	ug/L
PW-3	12/28/2020	4-Nitrophenol	ND	10.7	2.24	NA	ug/L
PW-3	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*10.7*	3.53	0.011	ug/L
PW-3	12/28/2020	N-Nitrosodiphenylamine	ND	10.7	0.192	122	ug/L
PW-3	12/28/2020	Pentachlorophenol	*ND*	*21.4*	1.5	1	ug/L
PW-3	12/28/2020	Phenanthrene	ND	10.7	0.192	170	ug/L
PW-3	12/28/2020	Phenol	ND	10.7	2.78	5761	ug/L
PW-3	12/28/2020	Pyrene	ND	10.7	0.224	117	ug/L
PW-3	12/28/2020	2,4,5-Trichlorophenol	ND	10.7	3.95	1166	ug/L
PW-3	12/28/2020	2,4,6-Trichlorophenol	ND	10.7	3.74	11.9*	ug/L
PW-3	12/28/2020	Dimethylphthalate	ND	10.7	0.182	612	ug/L
PW-3	12/28/2020	Aniline	ND	10.7	4.06	13	ug/L
PW-3	12/28/2020	Benzyl Alcohol	ND	10.7	2.14	2000	ug/L
PW-3	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.7*	0.171	9.81	ug/L
PW-3	12/28/2020	N-Nitrosodimethylamine	*ND*	*10.7*	3.74	0.0049	ug/L
PW-3	12/28/2020	Pyridine	ND	10.7	3.42	20	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	10.7	0.192	70	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	10.7	0.182	600	ug/L
PW-3	12/28/2020	Azobenzene	*ND*	*10.7*	1.07	0.12	ug/L
PW-3	12/28/2020	Benzoic Acid	ND	32.1	7.8	75000	ug/L
PW-4	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
PW-4	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-4	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
PW-4	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	Aniline	ND	10	2.2	13	ug/L
PW-4	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
PW-4	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
PW-4	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-4	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
PW-4	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
PW-4	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
PW-4	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
PW-4	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
PW-4	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
PW-4	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
PW-4	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
PW-4	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
PW-4	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
PW-4	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
PW-4	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
PW-4	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
PW-4	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
PW-4	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
PW-4	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
PW-4	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
PW-4	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
PW-4	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
PW-4	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
PW-4	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
PW-4	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
PW-4	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
PW-4	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
PW-4	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-4	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
PW-4	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
PW-4	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
PW-4	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
PW-4	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
PW-4	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
PW-4	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
PW-4	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
PW-4	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
PW-4	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
PW-4	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
PW-4	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
PW-4	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
PW-4	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
PW-4	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
PW-4	9/10/2013	Pyrene	ND	10	2.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
PW-4	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
PW-4	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
PW-4	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
PW-4	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
PW-4	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
PW-4	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
PW-4	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
PW-4	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-4	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
PW-4	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
PW-4	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
PW-4	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
PW-4	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
PW-4	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-4	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-4	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-4	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Aniline	ND	10	2.4	13	ug/L
PW-4	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-4	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
PW-4	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-4	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-4	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
PW-4	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
PW-4	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-4	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-4	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
PW-4	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-4	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-4	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-4	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-4	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-4	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-4	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-4	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-4	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-4	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-4	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-4	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-4	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-4	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-4	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-4	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-4	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-4	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-4	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-4	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-4	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-4	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-4	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-4	6/10/2016	Phenol	ND	10	2	5761	ug/L
PW-4	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
PW-4	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-4	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-4	6/10/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
PW-4	6/10/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
PW-4	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-4	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-4	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-4	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-4	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-4	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
PW-4	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
PW-4	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-4	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-4	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-4	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-4	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-4	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-4	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-4	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-4	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-4	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-4	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-4	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-4	8/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-4	8/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-4	8/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	8/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Aniline	ND	10	2.4	13	ug/L
PW-4	8/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-4	8/31/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
PW-4	8/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-4	8/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-4	8/31/2016	Isophorone	ND	10	2.6	781	ug/L
PW-4	8/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	8/31/2016	Diethylphthalate	2.9	10	2.7	14801	ug/L
PW-4	8/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	8/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-4	8/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-4	8/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	8/31/2016	Fluorene	ND	10	2.7	288	ug/L
PW-4	8/31/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-4	8/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-4	8/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-4	8/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-4	8/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-4	8/31/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-4	8/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-4	8/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-4	8/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-4	8/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-4	8/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-4	8/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-4	8/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-4	8/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-4	8/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-4	8/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-4	8/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-4	8/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-4	8/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-4	8/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-4	8/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-4	8/31/2016	Phenol	ND	10	2	5761	ug/L
PW-4	8/31/2016	Pyridine	ND	10	2.2	20	ug/L
PW-4	8/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-4	8/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-4	8/31/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
PW-4	8/31/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
PW-4	8/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-4	8/31/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-4	8/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-4	8/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-4	8/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-4	8/31/2016	Pyrene	ND	10	3.1	117	ug/L
PW-4	8/31/2016	Dimethylphthalate	6.4	10	2.4	612	ug/L
PW-4	8/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-4	8/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-4	8/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	8/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-4	8/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-4	8/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-4	8/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-4	8/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-4	8/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-4	8/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-4	8/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-4	8/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-4	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	3/30/2017	Aniline	ND	10	3.1	13	ug/L
PW-4	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	3/30/2017	Benzoic Acid	7.4	20	3.9	75000	ug/L
PW-4	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
PW-4	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	3/30/2017	Fluorene	ND	10	4	288	ug/L
PW-4	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	3/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	3/30/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-4	3/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-4	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	3/30/2017	Phenol	ND	10	3.1	5761	ug/L
PW-4	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
PW-4	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	3/30/2017	Bis(2-ethylhexyl)phthalate	6.9	10	4.8	55.64	ug/L
PW-4	3/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-4	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
PW-4	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-4	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	9/18/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-4	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-4	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-4	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-4	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-4	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-4	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-4	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	9/18/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
PW-4	9/18/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-4	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-4	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-4	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	3/1/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	3/1/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	3/1/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	3/1/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	3/1/2018	Aniline	ND	10	3.1	13	ug/L
PW-4	3/1/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	3/1/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-4	3/1/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	3/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	3/1/2018	Isophorone	ND	10	4.4	781	ug/L
PW-4	3/1/2018	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	3/1/2018	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	3/1/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	3/1/2018	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	3/1/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	3/1/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	3/1/2018	Fluorene	ND	10	4	288	ug/L
PW-4	3/1/2018	Carbazole	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	3/1/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	3/1/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	3/1/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	3/1/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	3/1/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	3/1/2018	Naphthalene	ND	10	2.9	30	ug/L
PW-4	3/1/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	3/1/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	3/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	3/1/2018	2-Methylphenol	ND	10	3.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/1/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	3/1/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	3/1/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	3/1/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	3/1/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	3/1/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	3/1/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	3/1/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	3/1/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	3/1/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	3/1/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	3/1/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	3/1/2018	Phenol	ND	10	3.1	5761	ug/L
PW-4	3/1/2018	Pyridine	ND	10	2.3	20	ug/L
PW-4	3/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	3/1/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	3/1/2018	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
PW-4	3/1/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	3/1/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	3/1/2018	Anthracene	ND	10	3.5	1721	ug/L
PW-4	3/1/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	3/1/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	3/1/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	3/1/2018	Pyrene	ND	10	4.4	117	ug/L
PW-4	3/1/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	3/1/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	3/1/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	3/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	3/1/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	3/1/2018	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	3/1/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-4	3/1/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	3/1/2018	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	3/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	3/1/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	3/1/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	3/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	3/1/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	3/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	3/1/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	9/19/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
PW-4	9/19/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
PW-4	9/19/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
PW-4	9/19/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
PW-4	9/19/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
PW-4	9/19/2018	Aniline	*ND*	*100*	62	13	ug/L
PW-4	9/19/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
PW-4	9/19/2018	Benzoic Acid	ND	200	63	75000	ug/L
PW-4	9/19/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
PW-4	9/19/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
PW-4	9/19/2018	Isophorone	ND	100	62	781	ug/L
PW-4	9/19/2018	Acenaphthene	ND	100	58	535	ug/L
PW-4	9/19/2018	Diethylphthalate	ND	100	63	14801	ug/L
PW-4	9/19/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
PW-4	9/19/2018	Phenanthrene	ND	100	60	170	ug/L
PW-4	9/19/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
PW-4	9/19/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
PW-4	9/19/2018	Fluorene	ND	100	63	288	ug/L
PW-4	9/19/2018	Carbazole	ND	100	63	NA	ug/L
PW-4	9/19/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
PW-4	9/19/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
PW-4	9/19/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
PW-4	9/19/2018	2-Nitroaniline	ND	100	59	190	ug/L
PW-4	9/19/2018	2-Nitrophenol	ND	100	60	NA	ug/L
PW-4	9/19/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
PW-4	9/19/2018	Naphthalene	*ND*	*100*	50	30	ug/L
PW-4	9/19/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
PW-4	9/19/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
PW-4	9/19/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
PW-4	9/19/2018	2-Methylphenol	ND	100	63	NA	ug/L
PW-4	9/19/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
PW-4	9/19/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
PW-4	9/19/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
PW-4	9/19/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
PW-4	9/19/2018	3-Nitroaniline	ND	100	68	NA	ug/L
PW-4	9/19/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
PW-4	9/19/2018	4-Nitrophenol	ND	100	56	NA	ug/L
PW-4	9/19/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
PW-4	9/19/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
PW-4	9/19/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
PW-4	9/19/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
PW-4	9/19/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
PW-4	9/19/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
PW-4	9/19/2018	Phenol	ND	100	60	5761	ug/L
PW-4	9/19/2018	Pyridine	*ND*	*100*	54	20	ug/L
PW-4	9/19/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
PW-4	9/19/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
PW-4	9/19/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
PW-4	9/19/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
PW-4	9/19/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
PW-4	9/19/2018	Anthracene	ND	100	57	1721	ug/L
PW-4	9/19/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
PW-4	9/19/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
PW-4	9/19/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
PW-4	9/19/2018	Pyrene	ND	100	65	117	ug/L
PW-4	9/19/2018	Dimethylphthalate	ND	100	60	612	ug/L
PW-4	9/19/2018	Dibenzofuran	ND	100	69	NA	ug/L
PW-4	9/19/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
PW-4	9/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
PW-4	9/19/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
PW-4	9/19/2018	Fluoranthene	ND	100	58	802	ug/L
PW-4	9/19/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
PW-4	9/19/2018	Acenaphthylene	ND	100	62	NA	ug/L
PW-4	9/19/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
PW-4	9/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
PW-4	9/19/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
PW-4	9/19/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
PW-4	9/19/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
PW-4	9/19/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
PW-4	9/19/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
PW-4	11/19/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
PW-4	11/19/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
PW-4	11/19/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
PW-4	11/19/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
PW-4	11/19/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
PW-4	11/19/2018	Aniline	*ND*	*100*	62	13	ug/L
PW-4	11/19/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
PW-4	11/19/2018	Benzoic Acid	ND	200	63	75000	ug/L
PW-4	11/19/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
PW-4	11/19/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
PW-4	11/19/2018	Isophorone	ND	100	62	781	ug/L
PW-4	11/19/2018	Acenaphthene	ND	100	58	535	ug/L
PW-4	11/19/2018	Diethylphthalate	ND	100	63	14801	ug/L
PW-4	11/19/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
PW-4	11/19/2018	Phenanthrene	ND	100	60	170	ug/L
PW-4	11/19/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
PW-4	11/19/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
PW-4	11/19/2018	Fluorene	ND	100	63	288	ug/L
PW-4	11/19/2018	Carbazole	ND	100	63	NA	ug/L
PW-4	11/19/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
PW-4	11/19/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
PW-4	11/19/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
PW-4	11/19/2018	2-Nitroaniline	ND	100	59	190	ug/L
PW-4	11/19/2018	2-Nitrophenol	ND	100	60	NA	ug/L
PW-4	11/19/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
PW-4	11/19/2018	Naphthalene	*ND*	*100*	50	30	ug/L
PW-4	11/19/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
PW-4	11/19/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
PW-4	11/19/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
PW-4	11/19/2018	2-Methylphenol	ND	100	63	NA	ug/L
PW-4	11/19/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
PW-4	11/19/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
PW-4	11/19/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
PW-4	11/19/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
PW-4	11/19/2018	3-Nitroaniline	ND	100	68	NA	ug/L
PW-4	11/19/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
PW-4	11/19/2018	4-Nitrophenol	ND	100	56	NA	ug/L
PW-4	11/19/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
PW-4	11/19/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
PW-4	11/19/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
PW-4	11/19/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
PW-4	11/19/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
PW-4	11/19/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
PW-4	11/19/2018	Phenol	ND	100	60	5761	ug/L
PW-4	11/19/2018	Pyridine	*ND*	*100*	54	20	ug/L
PW-4	11/19/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
PW-4	11/19/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
PW-4	11/19/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
PW-4	11/19/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
PW-4	11/19/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
PW-4	11/19/2018	Anthracene	ND	100	57	1721	ug/L
PW-4	11/19/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
PW-4	11/19/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
PW-4	11/19/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
PW-4	11/19/2018	Pyrene	ND	100	65	117	ug/L
PW-4	11/19/2018	Dimethylphthalate	ND	100	60	612	ug/L
PW-4	11/19/2018	Dibenzofuran	ND	100	69	NA	ug/L
PW-4	11/19/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
PW-4	11/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
PW-4	11/19/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
PW-4	11/19/2018	Fluoranthene	ND	100	58	802	ug/L
PW-4	11/19/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
PW-4	11/19/2018	Acenaphthylene	ND	100	62	NA	ug/L
PW-4	11/19/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
PW-4	11/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
PW-4	11/19/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
PW-4	11/19/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
PW-4	11/19/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
PW-4	11/19/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
PW-4	11/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
PW-4	11/19/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
PW-4	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
PW-4	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
PW-4	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
PW-4	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
PW-4	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
PW-4	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
PW-4	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
PW-4	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
PW-4	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
PW-4	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
PW-4	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
PW-4	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
PW-4	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
PW-4	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
PW-4	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
PW-4	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
PW-4	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
PW-4	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
PW-4	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
PW-4	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
PW-4	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
PW-4	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
PW-4	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
PW-4	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
PW-4	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
PW-4	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
PW-4	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
PW-4	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
PW-4	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
PW-4	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
PW-4	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
PW-4	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
PW-4	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
PW-4	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
PW-4	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
PW-4	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
PW-4	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
PW-4	2/20/2019	Benzoic Acid	7.5	20	6.311561	75000	ug/L
PW-4	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
PW-4	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
PW-4	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
PW-4	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
PW-4	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
PW-4	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
PW-4	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
PW-4	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
PW-4	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
PW-4	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
PW-4	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
PW-4	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
PW-4	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
PW-4	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
PW-4	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
PW-4	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
PW-4	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
PW-4	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
PW-4	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
PW-4	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
PW-4	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
PW-4	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
PW-4	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
PW-4	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
PW-4	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
PW-4	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
PW-4	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
PW-4	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
PW-4	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
PW-4	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
PW-4	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
PW-4	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
PW-4	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-4	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-4	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-4	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-4	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
PW-4	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
PW-4	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
PW-4	9/21/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
PW-4	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
PW-4	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
PW-4	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
PW-4	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
PW-4	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
PW-4	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
PW-4	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
PW-4	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
PW-4	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
PW-4	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
PW-4	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
PW-4	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
PW-4	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
PW-4	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
PW-4	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
PW-4	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
PW-4	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
PW-4	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
PW-4	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
PW-4	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
PW-4	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
PW-4	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
PW-4	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
PW-4	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
PW-4	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
PW-4	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
PW-4	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
PW-4	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
PW-4	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
PW-4	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
PW-4	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
PW-4	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
PW-4	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
PW-4	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
PW-4	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
PW-4	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
PW-4	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
PW-4	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
PW-4	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
PW-4	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
PW-4	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
PW-4	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
PW-4	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
PW-4	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
PW-4	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
PW-4	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
PW-4	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
PW-4	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
PW-4	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
PW-4	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
PW-4	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
PW-4	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
PW-4	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
PW-4	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
PW-4	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
PW-4	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
PW-4	12/28/2020	Acenaphthene	ND	9.3	0.149	535	ug/L
PW-4	12/28/2020	Acenaphthylene	ND	9.3	0.158	NA	ug/L
PW-4	12/28/2020	Anthracene	ND	9.3	0.167	1721	ug/L
PW-4	12/28/2020	Benzo(a)anthracene	*ND*	*9.3*	0.167	0.12	ug/L
PW-4	12/28/2020	Benzo(a)pyrene	*ND*	*9.3*	0.112	0.2	ug/L
PW-4	12/28/2020	Benzo(b)fluoranthene	*ND*	*9.3*	0.14	0.34	ug/L
PW-4	12/28/2020	Benzo(g,h,i)perylene	ND	9.3	0.214	NA	ug/L
PW-4	12/28/2020	Benzo(k)fluoranthene	*ND*	*9.3*	0.149	3.43	ug/L
PW-4	12/28/2020	Bis(2-chloroethoxy)methane	ND	9.3	0.149	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*9.3*	2.51	0.137	ug/L
PW-4	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	9.3	4.65	55.64	ug/L
PW-4	12/28/2020	4-Bromophenyl-phenylether	ND	9.3	0.186	NA	ug/L
PW-4	12/28/2020	Butylbenzylphthalate	ND	9.3	0.177	16	ug/L
PW-4	12/28/2020	Carbazole	ND	9.3	0.214	NA	ug/L
PW-4	12/28/2020	4-Chloroaniline	*ND*	*9.3*	3.16	0.37	ug/L
PW-4	12/28/2020	4-Chloro-3-Methylphenol	ND	9.3	3.53	NA	ug/L
PW-4	12/28/2020	2-Chloronaphthalene	ND	9.3	0.13	733	ug/L
PW-4	12/28/2020	2-Chlorophenol	ND	9.3	2.05	91	ug/L
PW-4	12/28/2020	4-Chlorophenyl-phenylether	ND	9.3	1.86	NA	ug/L
PW-4	12/28/2020	1,3-Dichlorobenzene	ND	9.3	0.167	NA	ug/L
PW-4	12/28/2020	Chrysene	ND	9.3	0.177	34.3	ug/L
PW-4	12/28/2020	Dibenzo(a,h)anthracene	ND	9.3	0.223	NA	ug/L
PW-4	12/28/2020	1,4-Dichlorobenzene	ND	9.3	0.149	75	ug/L
PW-4	12/28/2020	Dibenzofuran	ND	9.3	0.158	NA	ug/L
PW-4	12/28/2020	3,3-Dichlorobenzidine	*ND*	*9.3*	2.42	1.25	ug/L
PW-4	12/28/2020	2,4-Dichlorophenol	ND	9.3	2.79	45.3	ug/L
PW-4	12/28/2020	Diethylphthalate	ND	9.3	0.223	14801	ug/L
PW-4	12/28/2020	2,4-Dimethylphenol	ND	9.3	3.26	354	ug/L
PW-4	12/28/2020	Di-n-butylphthalate	ND	9.3	2.51	885	ug/L
PW-4	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.3*	1.49	1.52	ug/L
PW-4	12/28/2020	2,4-Dinitrophenol	ND	27.9	3.16	38.7	ug/L
PW-4	12/28/2020	2,4-Dinitrotoluene	ND	9.3	1.77	45.3	ug/L
PW-4	12/28/2020	2,6-Dinitrotoluene	*ND*	*9.3*	1.77	0.485	ug/L
PW-4	12/28/2020	Di-n-octylphthalate	ND	9.3	0.158	200	ug/L
PW-4	12/28/2020	Fluoranthene	ND	9.3	0.167	802	ug/L
PW-4	12/28/2020	Fluorene	ND	9.3	0.167	288	ug/L
PW-4	12/28/2020	Hexachlorobenzene	*ND*	*9.3*	0.158	0.0976	ug/L
PW-4	12/28/2020	Hexachlorocyclopentadiene	*ND*	*18.6*	2.42	0.41	ug/L
PW-4	12/28/2020	Hexachloroethane	*ND*	*9.3*	3.91	3.28	ug/L
PW-4	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.3*	0.205	0.343	ug/L
PW-4	12/28/2020	Isophorone	ND	9.3	0.13	781	ug/L
PW-4	12/28/2020	2-Methylphenol	ND	9.3	1.67	NA	ug/L
PW-4	12/28/2020	Naphthalene	ND	9.3	0.158	30	ug/L
PW-4	12/28/2020	2-Nitroaniline	ND	9.3	2.05	190	ug/L
PW-4	12/28/2020	3-Nitroaniline	ND	9.3	1.67	NA	ug/L
PW-4	12/28/2020	4-Nitroaniline	*ND*	*9.3*	1.4	3.8	ug/L
PW-4	12/28/2020	Nitrobenzene	*ND*	*9.3*	0.121	1.4	ug/L
PW-4	12/28/2020	2-Nitrophenol	ND	9.3	4.84	NA	ug/L
PW-4	12/28/2020	4-Nitrophenol	ND	9.3	1.95	NA	ug/L
PW-4	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*9.3*	3.07	0.011	ug/L
PW-4	12/28/2020	N-Nitrosodiphenylamine	ND	9.3	0.167	122	ug/L
PW-4	12/28/2020	Pentachlorophenol	*ND*	*18.6*	1.3	1	ug/L
PW-4	12/28/2020	Phenanthrene	ND	9.3	0.167	170	ug/L
PW-4	12/28/2020	Phenol	ND	9.3	2.42	5761	ug/L
PW-4	12/28/2020	Pyrene	ND	9.3	0.195	117	ug/L
PW-4	12/28/2020	2,4,5-Trichlorophenol	ND	9.3	3.44	1166	ug/L
PW-4	12/28/2020	2,4,6-Trichlorophenol	ND	9.3	3.26	11.9*	ug/L
PW-4	12/28/2020	Dimethylphthalate	ND	9.3	0.158	612	ug/L
PW-4	12/28/2020	Aniline	ND	9.3	3.53	13	ug/L
PW-4	12/28/2020	Benzyl Alcohol	ND	9.3	1.86	2000	ug/L
PW-4	12/28/2020	Bis(2-chloroisopropyl)ether	ND	9.3	0.149	9.81	ug/L
PW-4	12/28/2020	N-Nitrosodimethylamine	*ND*	*9.3*	3.26	0.0049	ug/L
PW-4	12/28/2020	Pyridine	ND	9.3	2.98	20	ug/L
PW-4	12/28/2020	1,2,4-Trichlorobenzene	ND	9.3	0.167	70	ug/L
PW-4	12/28/2020	1,2-Dichlorobenzene	ND	9.3	0.158	600	ug/L
PW-4	12/28/2020	Azobenzene	*ND*	*9.3*	0.93	0.12	ug/L
PW-4	12/28/2020	Benzoic Acid	ND	27.9	6.79	75000	ug/L
SMW-2	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
SMW-2	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-2	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
SMW-2	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
SMW-2	8/23/2012	Aniline	ND	10	2	13	ug/L
SMW-2	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
SMW-2	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
SMW-2	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-2	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-2	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
SMW-2	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
SMW-2	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
SMW-2	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
SMW-2	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
SMW-2	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-2	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
SMW-2	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
SMW-2	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
SMW-2	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-2	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
SMW-2	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
SMW-2	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
SMW-2	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-2	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-2	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
SMW-2	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
SMW-2	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
SMW-2	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
SMW-2	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
SMW-2	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
SMW-2	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
SMW-2	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-2	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
SMW-2	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
SMW-2	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
SMW-2	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
SMW-2	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
SMW-2	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-2	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
SMW-2	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
SMW-2	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
SMW-2	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
SMW-2	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
SMW-2	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
SMW-2	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
SMW-2	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-2	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
SMW-2	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
SMW-2	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
SMW-2	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
SMW-2	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-2	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
SMW-2	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
SMW-2	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
SMW-2	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
SMW-2	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
SMW-2	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
SMW-2	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
SMW-2	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
SMW-2	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
SMW-2	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
SMW-2	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
SMW-2	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
SMW-2	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
SMW-2	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-2	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
SMW-2	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
SMW-2	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
SMW-2	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-2	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
SMW-2	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-2	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	Aniline	ND	10	2.2	13	ug/L
SMW-2	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
SMW-2	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
SMW-2	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-2	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
SMW-2	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
SMW-2	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
SMW-2	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
SMW-2	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-2	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
SMW-2	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
SMW-2	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-2	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
SMW-2	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
SMW-2	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
SMW-2	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
SMW-2	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
SMW-2	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
SMW-2	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
SMW-2	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
SMW-2	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
SMW-2	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
SMW-2	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
SMW-2	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
SMW-2	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
SMW-2	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
SMW-2	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
SMW-2	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
SMW-2	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
SMW-2	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
SMW-2	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
SMW-2	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-2	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
SMW-2	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
SMW-2	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
SMW-2	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
SMW-2	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
SMW-2	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
SMW-2	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
SMW-2	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
SMW-2	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
SMW-2	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
SMW-2	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
SMW-2	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
SMW-2	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
SMW-2	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
SMW-2	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-2	9/9/2013	Pyrene	ND	10	2.1	117	ug/L
SMW-2	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
SMW-2	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
SMW-2	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
SMW-2	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
SMW-2	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-2	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
SMW-2	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
SMW-2	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
SMW-2	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
SMW-2	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-2	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
SMW-2	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
SMW-2	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
SMW-2	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
SMW-2	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
SMW-2	9/11/2014	Benzo(a)pyrene	*ND*	*11*	3.6	0.2	ug/L
SMW-2	9/11/2014	2,4-Dinitrophenol	ND	22	3.5	38.7	ug/L
SMW-2	9/11/2014	Dibenzo(a,h)anthracene	ND	11	3.3	NA	ug/L
SMW-2	9/11/2014	Benzo(a)anthracene	*ND*	*11*	3.4	0.12	ug/L
SMW-2	9/11/2014	4-Chloro-3-Methylphenol	ND	11	4.1	NA	ug/L
SMW-2	9/11/2014	Aniline	ND	11	2.7	13	ug/L
SMW-2	9/11/2014	N-Nitrosodimethylamine	*ND*	*11*	2.7	0.0049	ug/L
SMW-2	9/11/2014	Benzoic Acid	ND	22	2.4	75000	ug/L
SMW-2	9/11/2014	Hexachloroethane	*ND*	*11*	2.1	3.28	ug/L
SMW-2	9/11/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.4	0.41	ug/L
SMW-2	9/11/2014	Isophorone	ND	11	3.4	781	ug/L
SMW-2	9/11/2014	Acenaphthene	ND	11	3.2	535	ug/L
SMW-2	9/11/2014	Diethylphthalate	ND	11	4.7	14801	ug/L
SMW-2	9/11/2014	Di-n-butylphthalate	ND	11	4	885	ug/L
SMW-2	9/11/2014	Phenanthrene	ND	11	2.8	170	ug/L
SMW-2	9/11/2014	Butylbenzylphthalate	ND	11	3.5	16	ug/L
SMW-2	9/11/2014	N-Nitrosodiphenylamine	ND	11	3.2	122	ug/L
SMW-2	9/11/2014	Fluorene	ND	11	3.3	288	ug/L
SMW-2	9/11/2014	Carbazole	ND	11	3.2	NA	ug/L
SMW-2	9/11/2014	Hexachlorobutadiene	*ND*	*11*	3.4	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2014	Pentachlorophenol	*ND*	*22*	2.8	1	ug/L
SMW-2	9/11/2014	2,4,6-Trichlorophenol	ND	11	2	11.9*	ug/L
SMW-2	9/11/2014	2-Nitroaniline	ND	11	3.1	190	ug/L
SMW-2	9/11/2014	2-Nitrophenol	ND	11	3.5	NA	ug/L
SMW-2	9/11/2014	1-Methylnaphthalene	ND	11	4	11.38	ug/L
SMW-2	9/11/2014	Naphthalene	ND	11	2.6	30	ug/L
SMW-2	9/11/2014	2-Methylnaphthalene	ND	11	2.9	35.1	ug/L
SMW-2	9/11/2014	2-Chloronaphthalene	ND	11	3.4	733	ug/L
SMW-2	9/11/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.6	1.25	ug/L
SMW-2	9/11/2014	2-Methylphenol	ND	22	3.1	NA	ug/L
SMW-2	9/11/2014	1,2-Dichlorobenzene	ND	11	1.9	600	ug/L
SMW-2	9/11/2014	2-Chlorophenol	ND	11	2	91	ug/L
SMW-2	9/11/2014	2,4,5-Trichlorophenol	ND	11	3.6	1166	ug/L
SMW-2	9/11/2014	Nitrobenzene	*ND*	*11*	2.9	1.4	ug/L
SMW-2	9/11/2014	3-Nitroaniline	ND	11	4	NA	ug/L
SMW-2	9/11/2014	4-Nitroaniline	*ND*	*11*	4.6	3.8	ug/L
SMW-2	9/11/2014	4-Nitrophenol	ND	11	4.8	NA	ug/L
SMW-2	9/11/2014	Benzyl Alcohol	ND	11	2	2000	ug/L
SMW-2	9/11/2014	4-Bromophenyl-phenylether	ND	11	3.3	NA	ug/L
SMW-2	9/11/2014	Azobenzene	*ND*	*11*	2.8	0.12	ug/L
SMW-2	9/11/2014	2,4-Dimethylphenol	ND	11	3.5	354	ug/L
SMW-2	9/11/2014	1,4-Dichlorobenzene	ND	11	2.7	75	ug/L
SMW-2	9/11/2014	4-Chloroaniline	*ND*	*11*	2.9	0.37	ug/L
SMW-2	9/11/2014	Phenol	ND	11	1.8	5761	ug/L
SMW-2	9/11/2014	Pyridine	ND	11	1.7	20	ug/L
SMW-2	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*11*	2	0.137	ug/L
SMW-2	9/11/2014	Bis(2-chloroethoxy)methane	ND	11	3.1	59	ug/L
SMW-2	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	11	3.3	55.64	ug/L
SMW-2	9/11/2014	Di-n-octylphthalate	ND	22	3	200	ug/L
SMW-2	9/11/2014	Hexachlorobenzene	*ND*	*11*	3.5	0.0976	ug/L
SMW-2	9/11/2014	Anthracene	ND	11	2.8	1721	ug/L
SMW-2	9/11/2014	1,2,4-Trichlorobenzene	ND	11	3	70	ug/L
SMW-2	9/11/2014	2,4-Dichlorophenol	ND	22	3.3	45.3	ug/L
SMW-2	9/11/2014	2,4-Dinitrotoluene	ND	11	5	45.3	ug/L
SMW-2	9/11/2014	Pyrene	ND	11	4.5	117	ug/L
SMW-2	9/11/2014	Dimethylphthalate	ND	11	4.1	612	ug/L
SMW-2	9/11/2014	Dibenzofuran	ND	11	4.2	NA	ug/L
SMW-2	9/11/2014	Benzo(g,h,i)perylene	ND	11	3.7	NA	ug/L
SMW-2	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.8	0.343	ug/L
SMW-2	9/11/2014	Benzo(b)fluoranthene	*ND*	*11*	4.5	0.34	ug/L
SMW-2	9/11/2014	Fluoranthene	ND	11	3.3	802	ug/L
SMW-2	9/11/2014	Benzo(k)fluoranthene	*ND*	*11*	3.9	3.43	ug/L
SMW-2	9/11/2014	Acenaphthylene	ND	11	2.7	NA	ug/L
SMW-2	9/11/2014	Chrysene	ND	11	3.2	34.3	ug/L
SMW-2	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*22*	2.7	1.52	ug/L
SMW-2	9/11/2014	1,3-Dichlorobenzene	ND	11	2	NA	ug/L
SMW-2	9/11/2014	2,6-Dinitrotoluene	*ND*	*11*	3.8	0.485	ug/L
SMW-2	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2.2	0.011	ug/L
SMW-2	9/11/2014	4-Chlorophenyl-phenylether	ND	11	3.9	NA	ug/L
SMW-2	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.7	9.81	ug/L
SMW-2	9/11/2014	3,4-Methylphenol	ND	11	2	NA	ug/L
SMW-2	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-2	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
SMW-2	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
SMW-2	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
SMW-2	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Aniline	ND	10	1.5	13	ug/L
SMW-2	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
SMW-2	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
SMW-2	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
SMW-2	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
SMW-2	8/17/2015	Isophorone	ND	10	2	781	ug/L
SMW-2	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
SMW-2	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
SMW-2	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
SMW-2	8/17/2015	Phenanthrene	ND	10	2	170	ug/L
SMW-2	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-2	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
SMW-2	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
SMW-2	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
SMW-2	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
SMW-2	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
SMW-2	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
SMW-2	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
SMW-2	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
SMW-2	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
SMW-2	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
SMW-2	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
SMW-2	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
SMW-2	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
SMW-2	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
SMW-2	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
SMW-2	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
SMW-2	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
SMW-2	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
SMW-2	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
SMW-2	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
SMW-2	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
SMW-2	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
SMW-2	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
SMW-2	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
SMW-2	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
SMW-2	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
SMW-2	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
SMW-2	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-2	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
SMW-2	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
SMW-2	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
SMW-2	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
SMW-2	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
SMW-2	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
SMW-2	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
SMW-2	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
SMW-2	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
SMW-2	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
SMW-2	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
SMW-2	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
SMW-2	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
SMW-2	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
SMW-2	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
SMW-2	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
SMW-2	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
SMW-2	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-2	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
SMW-2	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
SMW-2	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
SMW-2	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
SMW-2	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
SMW-2	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
SMW-2	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
SMW-2	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-2	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
SMW-2	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
SMW-2	9/9/2016	Pyrene	4.6	10	3.1	117	ug/L
SMW-2	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
SMW-2	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
SMW-2	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
SMW-2	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-2	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
SMW-2	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
SMW-2	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
SMW-2	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
SMW-2	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
SMW-2	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
SMW-2	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
SMW-2	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
SMW-2	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-2	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
SMW-2	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
SMW-2	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-2	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Aniline	ND	10	2.4	13	ug/L
SMW-2	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
SMW-2	9/9/2016	Benzoic Acid	6.9	20	2.6	75000	ug/L
SMW-2	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
SMW-2	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
SMW-2	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
SMW-2	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
SMW-2	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
SMW-2	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-2	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
SMW-2	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
SMW-2	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-2	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
SMW-2	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
SMW-2	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
SMW-2	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
SMW-2	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-2	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-2	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-2	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
SMW-2	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
SMW-2	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
SMW-2	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-2	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
SMW-2	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
SMW-2	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
SMW-2	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
SMW-2	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
SMW-2	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
SMW-2	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
SMW-2	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
SMW-2	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-2	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
SMW-2	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-2	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
SMW-2	9/9/2016	Phenol	ND	10	2	5761	ug/L
SMW-2	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
SMW-2	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
SMW-2	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-2	9/9/2016	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
SMW-2	9/9/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
SMW-2	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
SMW-2	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
SMW-2	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
SMW-2	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
SMW-2	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
SMW-2	9/11/2017	Aniline	ND	10	3.1	13	ug/L
SMW-2	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
SMW-2	9/11/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
SMW-2	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
SMW-2	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-2	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
SMW-2	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
SMW-2	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
SMW-2	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
SMW-2	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
SMW-2	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
SMW-2	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
SMW-2	9/11/2017	Fluorene	ND	10	4	288	ug/L
SMW-2	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
SMW-2	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
SMW-2	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
SMW-2	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
SMW-2	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
SMW-2	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
SMW-2	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
SMW-2	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
SMW-2	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
SMW-2	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
SMW-2	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
SMW-2	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
SMW-2	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
SMW-2	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
SMW-2	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
SMW-2	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
SMW-2	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
SMW-2	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
SMW-2	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
SMW-2	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
SMW-2	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
SMW-2	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
SMW-2	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
SMW-2	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
SMW-2	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
SMW-2	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
SMW-2	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
SMW-2	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
SMW-2	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
SMW-2	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
SMW-2	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
SMW-2	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
SMW-2	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
SMW-2	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
SMW-2	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
SMW-2	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
SMW-2	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
SMW-2	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
SMW-2	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
SMW-2	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
SMW-2	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
SMW-2	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
SMW-2	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
SMW-2	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
SMW-2	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
SMW-2	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
SMW-2	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
SMW-2	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
SMW-2	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
SMW-2	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
SMW-2	9/18/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
SMW-2	9/18/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
SMW-2	9/18/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
SMW-2	9/18/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Aniline	ND	10	6.2	13	ug/L
SMW-2	9/18/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
SMW-2	9/18/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
SMW-2	9/18/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
SMW-2	9/18/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
SMW-2	9/18/2018	Isophorone	ND	10	6.2	781	ug/L
SMW-2	9/18/2018	Acenaphthene	ND	10	5.8	535	ug/L
SMW-2	9/18/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
SMW-2	9/18/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
SMW-2	9/18/2018	Phenanthrene	ND	10	6	170	ug/L
SMW-2	9/18/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
SMW-2	9/18/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
SMW-2	9/18/2018	Fluorene	ND	10	6.3	288	ug/L
SMW-2	9/18/2018	Carbazole	ND	10	6.3	NA	ug/L
SMW-2	9/18/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
SMW-2	9/18/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
SMW-2	9/18/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
SMW-2	9/18/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
SMW-2	9/18/2018	2-Nitrophenol	ND	10	6	NA	ug/L
SMW-2	9/18/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
SMW-2	9/18/2018	Naphthalene	ND	10	5	30	ug/L
SMW-2	9/18/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
SMW-2	9/18/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
SMW-2	9/18/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
SMW-2	9/18/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
SMW-2	9/18/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
SMW-2	9/18/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
SMW-2	9/18/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
SMW-2	9/18/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
SMW-2	9/18/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
SMW-2	9/18/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
SMW-2	9/18/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
SMW-2	9/18/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
SMW-2	9/18/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
SMW-2	9/18/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
SMW-2	9/18/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
SMW-2	9/18/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
SMW-2	9/18/2018	Phenol	ND	10	6	5761	ug/L
SMW-2	9/18/2018	Pyridine	ND	10	5.4	20	ug/L
SMW-2	9/18/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
SMW-2	9/18/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
SMW-2	9/18/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
SMW-2	9/18/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
SMW-2	9/18/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
SMW-2	9/18/2018	Anthracene	ND	10	5.7	1721	ug/L
SMW-2	9/18/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
SMW-2	9/18/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
SMW-2	9/18/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
SMW-2	9/18/2018	Pyrene	ND	10	6.5	117	ug/L
SMW-2	9/18/2018	Dimethylphthalate	ND	10	6	612	ug/L
SMW-2	9/18/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
SMW-2	9/18/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
SMW-2	9/18/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
SMW-2	9/18/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
SMW-2	9/18/2018	Fluoranthene	ND	10	5.8	802	ug/L
SMW-2	9/18/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
SMW-2	9/18/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
SMW-2	9/18/2018	Chrysene	ND	10	6.8	34.3	ug/L
SMW-2	9/18/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
SMW-2	9/18/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/18/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
SMW-2	9/18/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
SMW-2	9/18/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
SMW-2	9/18/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
SMW-2	9/18/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
SMW-2	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
SMW-2	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
SMW-2	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
SMW-2	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
SMW-2	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
SMW-2	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
SMW-2	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
SMW-2	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
SMW-2	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
SMW-2	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
SMW-2	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
SMW-2	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
SMW-2	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
SMW-2	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
SMW-2	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
SMW-2	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
SMW-2	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
SMW-2	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
SMW-2	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
SMW-2	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
SMW-2	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
SMW-2	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
SMW-2	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
SMW-2	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
SMW-2	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
SMW-2	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
SMW-2	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
SMW-2	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
SMW-2	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
SMW-2	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
SMW-2	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
SMW-2	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
SMW-2	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
SMW-2	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
SMW-2	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
SMW-2	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
SMW-2	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
SMW-2	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
SMW-2	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
SMW-2	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
SMW-2	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
SMW-2	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
SMW-2	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
SMW-2	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
SMW-2	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
SMW-2	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
SMW-2	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
SMW-2	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
SMW-2	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
SMW-2	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
SMW-2	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
SMW-2	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
SMW-2	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
SMW-2	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
SMW-2	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
SMW-2	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
SMW-2	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
SMW-2	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
SMW-2	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
SMW-2	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
SMW-2	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
SMW-2	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
SMW-2	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
SMW-2	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
SMW-2	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
SMW-2	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
SMW-2	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
SMW-2	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
SMW-2	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
SMW-2	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
SMW-2	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
SMW-2	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
SMW-2	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
SMW-2	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
SMW-2	9/19/2020	1,4-Dioxane	**9.1**	0.51	0.1	4.59	ug/L
SMW-2	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
SMW-2	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
SMW-2	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
SMW-2	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
SMW-2	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
SMW-2	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
SMW-2	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
SMW-2	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
SMW-2	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
SMW-2	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
SMW-2	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
SMW-2	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
SMW-2	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
SMW-2	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
SMW-2	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
SMW-2	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
SMW-2	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
SMW-2	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
SMW-2	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
SMW-2	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
SMW-2	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
SMW-2	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
SMW-2	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
SMW-2	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
SMW-2	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
SMW-2	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
SMW-2	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
SMW-2	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
SMW-2	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
SMW-2	9/19/2020	Bis(2-ethylhexyl)phthalate	0.23	0.51	0.2	55.64	ug/L
SMW-2	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
SMW-2	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
SMW-2	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
SMW-2	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
SMW-2	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
SMW-2	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
SMW-2	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
SMW-2	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
SMW-2	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
SMW-2	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
SMW-2	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
SMW-2	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
SMW-2	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
SMW-2	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
SMW-2	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
SMW-2	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
SMW-2	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
SMW-2	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
SMW-2	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
SMW-2	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
SMW-2	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
SMW-2	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
SMW-2	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
SMW-2	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
SMW-2	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
SMW-4	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
SMW-4	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
SMW-4	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
SMW-4	8/24/2012	Aniline	ND	10	2	13	ug/L
SMW-4	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
SMW-4	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
SMW-4	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-4	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-4	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
SMW-4	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
SMW-4	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
SMW-4	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
SMW-4	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
SMW-4	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-4	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
SMW-4	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
SMW-4	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
SMW-4	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-4	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
SMW-4	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
SMW-4	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
SMW-4	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-4	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-4	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
SMW-4	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
SMW-4	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
SMW-4	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
SMW-4	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
SMW-4	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
SMW-4	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
SMW-4	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-4	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
SMW-4	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
SMW-4	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
SMW-4	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
SMW-4	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
SMW-4	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-4	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
SMW-4	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
SMW-4	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
SMW-4	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
SMW-4	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
SMW-4	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
SMW-4	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
SMW-4	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-4	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
SMW-4	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
SMW-4	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
SMW-4	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-4	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
SMW-4	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-4	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
SMW-4	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
SMW-4	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
SMW-4	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
SMW-4	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
SMW-4	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
SMW-4	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
SMW-4	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
SMW-4	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
SMW-4	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
SMW-4	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
SMW-4	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
SMW-4	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
SMW-4	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-4	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
SMW-4	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
SMW-4	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
SMW-4	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-4	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	Aniline	ND	10	2.2	13	ug/L
SMW-4	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
SMW-4	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
SMW-4	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-4	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
SMW-4	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
SMW-4	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
SMW-4	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
SMW-4	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-4	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
SMW-4	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
SMW-4	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-4	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
SMW-4	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
SMW-4	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
SMW-4	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
SMW-4	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
SMW-4	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
SMW-4	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
SMW-4	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
SMW-4	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
SMW-4	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
SMW-4	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
SMW-4	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
SMW-4	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
SMW-4	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
SMW-4	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
SMW-4	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
SMW-4	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
SMW-4	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
SMW-4	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
SMW-4	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-4	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
SMW-4	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
SMW-4	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
SMW-4	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
SMW-4	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
SMW-4	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
SMW-4	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
SMW-4	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
SMW-4	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
SMW-4	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
SMW-4	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
SMW-4	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
SMW-4	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
SMW-4	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
SMW-4	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-4	9/9/2013	Pyrene	ND	10	2.1	117	ug/L
SMW-4	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
SMW-4	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
SMW-4	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
SMW-4	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
SMW-4	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-4	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
SMW-4	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
SMW-4	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
SMW-4	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
SMW-4	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-4	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
SMW-4	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
SMW-4	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
SMW-4	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
SMW-4	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
SMW-4	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
SMW-4	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
SMW-4	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Aniline	ND	10	2.4	13	ug/L
SMW-4	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
SMW-4	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
SMW-4	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
SMW-4	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
SMW-4	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
SMW-4	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
SMW-4	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
SMW-4	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
SMW-4	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
SMW-4	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
SMW-4	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
SMW-4	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
SMW-4	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
SMW-4	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-4	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
SMW-4	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
SMW-4	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-4	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
SMW-4	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
SMW-4	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
SMW-4	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
SMW-4	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
SMW-4	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-4	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
SMW-4	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
SMW-4	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
SMW-4	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
SMW-4	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-4	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
SMW-4	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
SMW-4	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
SMW-4	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
SMW-4	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
SMW-4	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
SMW-4	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-4	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
SMW-4	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
SMW-4	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
SMW-4	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-4	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-4	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-4	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
SMW-4	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
SMW-4	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
SMW-4	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
SMW-4	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
SMW-4	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
SMW-4	9/11/2014	Pyrene	ND	10	4	117	ug/L
SMW-4	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
SMW-4	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
SMW-4	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
SMW-4	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
SMW-4	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
SMW-4	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
SMW-4	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
SMW-4	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
SMW-4	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
SMW-4	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
SMW-4	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
SMW-4	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
SMW-4	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
SMW-4	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
SMW-4	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
SMW-4	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-4	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
SMW-4	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
SMW-4	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
SMW-4	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Aniline	ND	10	1.5	13	ug/L
SMW-4	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
SMW-4	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
SMW-4	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
SMW-4	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
SMW-4	8/14/2015	Isophorone	ND	10	2	781	ug/L
SMW-4	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
SMW-4	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
SMW-4	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
SMW-4	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
SMW-4	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-4	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
SMW-4	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
SMW-4	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
SMW-4	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
SMW-4	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
SMW-4	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
SMW-4	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
SMW-4	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
SMW-4	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
SMW-4	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
SMW-4	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
SMW-4	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
SMW-4	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
SMW-4	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
SMW-4	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
SMW-4	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
SMW-4	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
SMW-4	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
SMW-4	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
SMW-4	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
SMW-4	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
SMW-4	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
SMW-4	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
SMW-4	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
SMW-4	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
SMW-4	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
SMW-4	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
SMW-4	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-4	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
SMW-4	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
SMW-4	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
SMW-4	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
SMW-4	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
SMW-4	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
SMW-4	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
SMW-4	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
SMW-4	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
SMW-4	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
SMW-4	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
SMW-4	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
SMW-4	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
SMW-4	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
SMW-4	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
SMW-4	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
SMW-4	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
SMW-4	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
SMW-4	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-4	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
SMW-4	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
SMW-4	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
SMW-4	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
SMW-4	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
SMW-4	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
SMW-4	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-4	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
SMW-4	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
SMW-4	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-4	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
SMW-4	9/7/2016	Benzoic Acid	9.9	20	2.6	75000	ug/L
SMW-4	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
SMW-4	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
SMW-4	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
SMW-4	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
SMW-4	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
SMW-4	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-4	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
SMW-4	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
SMW-4	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-4	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
SMW-4	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
SMW-4	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
SMW-4	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
SMW-4	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
SMW-4	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-4	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-4	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-4	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
SMW-4	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
SMW-4	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
SMW-4	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-4	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
SMW-4	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
SMW-4	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
SMW-4	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
SMW-4	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
SMW-4	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
SMW-4	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
SMW-4	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
SMW-4	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-4	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
SMW-4	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-4	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
SMW-4	9/7/2016	Phenol	ND	10	2	5761	ug/L
SMW-4	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
SMW-4	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
SMW-4	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-4	9/7/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
SMW-4	9/7/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
SMW-4	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
SMW-4	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
SMW-4	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-4	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
SMW-4	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
SMW-4	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
SMW-4	9/7/2016	Dimethylphthalate	5.4	10	2.4	612	ug/L
SMW-4	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
SMW-4	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
SMW-4	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-4	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
SMW-4	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
SMW-4	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
SMW-4	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
SMW-4	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
SMW-4	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
SMW-4	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
SMW-4	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
SMW-4	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
SMW-4	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
SMW-4	9/11/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
SMW-4	9/11/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
SMW-4	9/11/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
SMW-4	9/11/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
SMW-4	9/11/2017	Aniline	*ND*	*50*	15	13	ug/L
SMW-4	9/11/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
SMW-4	9/11/2017	Benzoic Acid	33	100	20	75000	ug/L
SMW-4	9/11/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
SMW-4	9/11/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
SMW-4	9/11/2017	Isophorone	ND	50	22	781	ug/L
SMW-4	9/11/2017	Acenaphthene	ND	50	18	535	ug/L
SMW-4	9/11/2017	Diethylphthalate	ND	50	20	14801	ug/L
SMW-4	9/11/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
SMW-4	9/11/2017	Phenanthrene	ND	50	22	170	ug/L
SMW-4	9/11/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
SMW-4	9/11/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
SMW-4	9/11/2017	Fluorene	ND	50	20	288	ug/L
SMW-4	9/11/2017	Carbazole	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
SMW-4	9/11/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
SMW-4	9/11/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
SMW-4	9/11/2017	2-Nitroaniline	ND	50	25	190	ug/L
SMW-4	9/11/2017	2-Nitrophenol	ND	50	26	NA	ug/L
SMW-4	9/11/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
SMW-4	9/11/2017	Naphthalene	*ND*	*50*	14	30	ug/L
SMW-4	9/11/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
SMW-4	9/11/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
SMW-4	9/11/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
SMW-4	9/11/2017	2-Methylphenol	ND	50	17	NA	ug/L
SMW-4	9/11/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
SMW-4	9/11/2017	2-Chlorophenol	ND	50	38	91	ug/L
SMW-4	9/11/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
SMW-4	9/11/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
SMW-4	9/11/2017	3-Nitroaniline	ND	50	22	NA	ug/L
SMW-4	9/11/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
SMW-4	9/11/2017	4-Nitrophenol	ND	50	27	NA	ug/L
SMW-4	9/11/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
SMW-4	9/11/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
SMW-4	9/11/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
SMW-4	9/11/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
SMW-4	9/11/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
SMW-4	9/11/2017	Phenol	ND	50	16	5761	ug/L
SMW-4	9/11/2017	Pyridine	*ND*	*50*	11	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
SMW-4	9/11/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
SMW-4	9/11/2017	Bis(2-ethylhexyl)phthalate	34	50	24	55.64	ug/L
SMW-4	9/11/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
SMW-4	9/11/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
SMW-4	9/11/2017	Anthracene	ND	50	18	1721	ug/L
SMW-4	9/11/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
SMW-4	9/11/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
SMW-4	9/11/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
SMW-4	9/11/2017	Pyrene	ND	50	22	117	ug/L
SMW-4	9/11/2017	Dimethylphthalate	ND	50	18	612	ug/L
SMW-4	9/11/2017	Dibenzofuran	ND	50	20	NA	ug/L
SMW-4	9/11/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
SMW-4	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
SMW-4	9/11/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
SMW-4	9/11/2017	Fluoranthene	ND	50	21	802	ug/L
SMW-4	9/11/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
SMW-4	9/11/2017	Acenaphthylene	ND	50	18	NA	ug/L
SMW-4	9/11/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
SMW-4	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
SMW-4	9/11/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
SMW-4	9/11/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
SMW-4	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
SMW-4	9/11/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
SMW-4	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
SMW-4	9/11/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
SMW-4	9/12/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
SMW-4	9/12/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
SMW-4	9/12/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
SMW-4	9/12/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Aniline	ND	10	6.2	13	ug/L
SMW-4	9/12/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
SMW-4	9/12/2018	Benzoic Acid	6.4	20	6.3	75000	ug/L
SMW-4	9/12/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
SMW-4	9/12/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
SMW-4	9/12/2018	Isophorone	ND	10	6.2	781	ug/L
SMW-4	9/12/2018	Acenaphthene	ND	10	5.8	535	ug/L
SMW-4	9/12/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
SMW-4	9/12/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
SMW-4	9/12/2018	Phenanthrene	ND	10	6	170	ug/L
SMW-4	9/12/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
SMW-4	9/12/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
SMW-4	9/12/2018	Fluorene	ND	10	6.3	288	ug/L
SMW-4	9/12/2018	Carbazole	ND	10	6.3	NA	ug/L
SMW-4	9/12/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
SMW-4	9/12/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
SMW-4	9/12/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
SMW-4	9/12/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
SMW-4	9/12/2018	2-Nitrophenol	ND	10	6	NA	ug/L
SMW-4	9/12/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
SMW-4	9/12/2018	Naphthalene	ND	10	5	30	ug/L
SMW-4	9/12/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
SMW-4	9/12/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
SMW-4	9/12/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
SMW-4	9/12/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
SMW-4	9/12/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
SMW-4	9/12/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
SMW-4	9/12/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
SMW-4	9/12/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
SMW-4	9/12/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
SMW-4	9/12/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
SMW-4	9/12/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
SMW-4	9/12/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
SMW-4	9/12/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
SMW-4	9/12/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
SMW-4	9/12/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
SMW-4	9/12/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
SMW-4	9/12/2018	Phenol	ND	10	6	5761	ug/L
SMW-4	9/12/2018	Pyridine	ND	10	5.4	20	ug/L
SMW-4	9/12/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
SMW-4	9/12/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
SMW-4	9/12/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
SMW-4	9/12/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
SMW-4	9/12/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
SMW-4	9/12/2018	Anthracene	ND	10	5.7	1721	ug/L
SMW-4	9/12/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
SMW-4	9/12/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
SMW-4	9/12/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
SMW-4	9/12/2018	Pyrene	ND	10	6.5	117	ug/L
SMW-4	9/12/2018	Dimethylphthalate	ND	10	6	612	ug/L
SMW-4	9/12/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
SMW-4	9/12/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
SMW-4	9/12/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
SMW-4	9/12/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
SMW-4	9/12/2018	Fluoranthene	ND	10	5.8	802	ug/L
SMW-4	9/12/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
SMW-4	9/12/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
SMW-4	9/12/2018	Chrysene	ND	10	6.8	34.3	ug/L
SMW-4	9/12/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
SMW-4	9/12/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
SMW-4	9/12/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
SMW-4	9/12/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
SMW-4	9/12/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
SMW-4	9/12/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
SMW-4	9/12/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
SMW-4	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
SMW-4	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
SMW-4	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
SMW-4	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
SMW-4	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
SMW-4	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
SMW-4	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
SMW-4	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
SMW-4	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
SMW-4	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
SMW-4	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
SMW-4	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
SMW-4	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
SMW-4	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
SMW-4	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
SMW-4	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
SMW-4	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
SMW-4	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
SMW-4	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
SMW-4	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
SMW-4	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
SMW-4	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
SMW-4	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
SMW-4	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
SMW-4	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
SMW-4	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
SMW-4	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
SMW-4	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
SMW-4	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
SMW-4	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
SMW-4	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
SMW-4	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
SMW-4	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
SMW-4	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
SMW-4	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
SMW-4	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
SMW-4	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
SMW-4	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
SMW-4	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
SMW-4	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
SMW-4	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
SMW-4	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
SMW-4	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
SMW-4	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
SMW-4	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
SMW-4	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
SMW-4	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
SMW-4	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
SMW-4	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
SMW-4	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
SMW-4	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
SMW-4	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
SMW-4	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
SMW-4	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
SMW-4	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
SMW-4	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
SMW-4	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
SMW-4	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
SMW-4	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
SMW-4	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
SMW-4	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
SMW-4	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
SMW-4	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
SMW-4	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
SMW-4	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
SMW-4	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
SMW-4	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
SMW-4	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
SMW-4	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
SMW-4	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
SMW-4	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
SMW-4	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
SMW-4	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
SMW-4	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
SMW-4	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
SMW-4	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
SMW-4	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
SMW-4	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
SMW-4	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
SMW-4	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
SMW-4	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
SMW-4	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
SMW-4	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
SMW-4	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
SMW-4	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
SMW-4	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
SMW-4	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
SMW-4	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
SMW-4	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
SMW-4	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
SMW-4	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
SMW-4	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
SMW-4	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
SMW-4	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
SMW-4	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
SMW-4	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
SMW-4	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
SMW-4	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
SMW-4	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
SMW-4	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
SMW-4	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
SMW-4	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
SMW-4	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
SMW-4	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
SMW-4	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
SMW-4	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
SMW-4	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
SMW-4	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
SMW-4	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
SMW-4	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
SMW-4	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
SMW-4	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
SMW-4	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
SMW-4	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
SMW-4	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
SMW-4	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
SMW-4	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
SMW-4	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
SMW-4	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
SMW-4	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
SMW-4	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
SMW-4	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
SMW-4	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
SMW-4	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
SMW-4	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
SMW-4	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
SMW-4	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
SMW-4	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
SMW-4	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
SMW-4	9/20/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
SMW-4	9/20/2020	1,2,4-Trichlorobenzene	ND	0.57	0.11	70	ug/L
SMW-4	9/20/2020	1,2-Dichlorobenzene	ND	0.57	0.11	600	ug/L
SMW-4	9/20/2020	1,3-Dichlorobenzene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	1,4-Dichlorobenzene	ND	0.57	0.11	75	ug/L
SMW-4	9/20/2020	1,4-Dioxane	ND	0.57	0.11	4.59	ug/L
SMW-4	9/20/2020	1-Methylnaphthalene	ND	0.57	0.11	11.38	ug/L
SMW-4	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.57	0.11	240	ug/L
SMW-4	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	2,4,5-Trichlorophenol	ND	0.57	0.11	1166	ug/L
SMW-4	9/20/2020	2,4,6-Trichlorophenol	ND	0.57	0.11	11.9*	ug/L
SMW-4	9/20/2020	2,4-Dichlorophenol	ND	0.57	0.11	45.3	ug/L
SMW-4	9/20/2020	2,4-Dimethylphenol	ND	0.57	0.11	354	ug/L
SMW-4	9/20/2020	2,4-Dinitrophenol	ND	0.57	0.11	38.7	ug/L
SMW-4	9/20/2020	2,4-Dinitrotoluene	ND	0.57	0.11	45.3	ug/L
SMW-4	9/20/2020	2,6-Dinitrotoluene	ND	0.23	0.11	0.485	ug/L
SMW-4	9/20/2020	2-Chloronaphthalene	ND	0.57	0.11	733	ug/L
SMW-4	9/20/2020	2-Chlorophenol	ND	0.57	0.11	91	ug/L
SMW-4	9/20/2020	2-Methylnaphthalene	ND	0.57	0.11	35.1	ug/L
SMW-4	9/20/2020	2-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	2-Nitroaniline	ND	0.57	0.11	190	ug/L
SMW-4	9/20/2020	2-Nitrophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	3,4-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	3,3-Dichlorobenzidine	ND	0.57	0.11	1.25	ug/L
SMW-4	9/20/2020	3-Nitroaniline	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.57	0.11	1.52	ug/L
SMW-4	9/20/2020	4-Bromophenyl-phenylether	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Chloro-3-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Chloroaniline	*ND*	*0.57*	0.11	0.37	ug/L
SMW-4	9/20/2020	4-Chlorophenyl-phenylether	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Nitroaniline	ND	0.57	0.11	3.8	ug/L
SMW-4	9/20/2020	4-Nitrophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Acenaphthene	ND	0.57	0.11	535	ug/L
SMW-4	9/20/2020	Acenaphthylene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Aniline	ND	0.57	0.11	13	ug/L
SMW-4	9/20/2020	Anthracene	ND	0.57	0.11	1721	ug/L
SMW-4	9/20/2020	Benzo(a)anthracene	ND	0.11	0.057	0.12	ug/L
SMW-4	9/20/2020	Benzidine	*ND*	*0.57*	0.28	0.0011	ug/L
SMW-4	9/20/2020	Benzo(a)pyrene	ND	0.11	0.057	0.2	ug/L
SMW-4	9/20/2020	Benzo(b)fluoranthene	ND	0.11	0.057	0.34	ug/L
SMW-4	9/20/2020	Benzo(g,h,i)perylene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Benzo(k)fluoranthene	ND	0.57	0.11	3.43	ug/L
SMW-4	9/20/2020	Benzoic Acid	ND	0.57	0.23	75000	ug/L
SMW-4	9/20/2020	Benzyl Alcohol	0.49	0.57	0.23	2000	ug/L
SMW-4	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.57	0.11	59	ug/L
SMW-4	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.57*	0.11	0.137	ug/L
SMW-4	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.57	0.11	9.81	ug/L
SMW-4	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.57	0.23	55.64	ug/L
SMW-4	9/20/2020	Butylbenzylphthalate	ND	0.57	0.23	16	ug/L
SMW-4	9/20/2020	Carbazole	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Chrysene	ND	0.57	0.11	34.3	ug/L
SMW-4	9/20/2020	Di-n-butylphthalate	ND	0.57	0.23	885	ug/L
SMW-4	9/20/2020	Di-n-octylphthalate	ND	0.57	0.23	200	ug/L
SMW-4	9/20/2020	Dibenzo(a,h)anthracene	ND	0.034	0.023	NA	ug/L
SMW-4	9/20/2020	Dibenzofuran	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Diethylphthalate	ND	0.57	0.23	14801	ug/L
SMW-4	9/20/2020	Dimethylphthalate	ND	0.57	0.23	612	ug/L
SMW-4	9/20/2020	Fluoranthene	ND	0.57	0.11	802	ug/L
SMW-4	9/20/2020	Fluorene	ND	0.57	0.11	288	ug/L
SMW-4	9/20/2020	Hexachlorobenzene	*ND*	*0.57*	0.11	0.0976	ug/L
SMW-4	9/20/2020	Hexachlorobutadiene	*ND*	*0.57*	0.11	0.14	ug/L
SMW-4	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.57*	0.28	0.41	ug/L
SMW-4	9/20/2020	Hexachloroethane	ND	0.57	0.11	3.28	ug/L
SMW-4	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.23	0.11	0.343	ug/L
SMW-4	9/20/2020	Isophorone	ND	0.57	0.11	781	ug/L
SMW-4	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.57*	0.11	0.011	ug/L
SMW-4	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.57*	0.11	0.0049	ug/L
SMW-4	9/20/2020	N-Nitrosodiphenylamine	ND	0.57	0.11	122	ug/L
SMW-4	9/20/2020	Naphthalene	ND	0.57	0.11	30	ug/L
SMW-4	9/20/2020	Nitrobenzene	ND	0.57	0.11	1.4	ug/L
SMW-4	9/20/2020	Pentachlorophenol	ND	0.57	0.23	1	ug/L
SMW-4	9/20/2020	Phenanthrene	ND	0.57	0.11	170	ug/L
SMW-4	9/20/2020	Phenol	ND	0.57	0.11	5761	ug/L
SMW-4	9/20/2020	Pyrene	ND	0.57	0.11	117	ug/L
SMW-4	9/20/2020	Pyridine	ND	0.57	0.23	20	ug/L
STP-1 to EP-2	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
STP-1 to EP-2	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
STP-1 to EP-2	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
STP-1 to EP-2	9/10/2014	Aniline	ND	10	2.4	13	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
STP-1 to EP-2	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
STP-1 to EP-2	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
STP-1 to EP-2	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
STP-1 to EP-2	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
STP-1 to EP-2	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
STP-1 to EP-2	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
STP-1 to EP-2	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
STP-1 to EP-2	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
STP-1 to EP-2	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
STP-1 to EP-2	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
STP-1 to EP-2	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
STP-1 to EP-2	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
STP-1 to EP-2	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
STP-1 to EP-2	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
STP-1 to EP-2	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
STP-1 to EP-2	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
STP-1 to EP-2	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
STP-1 to EP-2	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
STP-1 to EP-2	9/10/2014	2-Methylphenol	22	20	2.8	NA	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
STP-1 to EP-2	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
STP-1 to EP-2	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
STP-1 to EP-2	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
STP-1 to EP-2	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
STP-1 to EP-2	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
STP-1 to EP-2	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
STP-1 to EP-2	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
STP-1 to EP-2	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
STP-1 to EP-2	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
STP-1 to EP-2	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
STP-1 to EP-2	9/10/2014	Phenol	140	10	1.6	5761	ug/L
STP-1 to EP-2	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
STP-1 to EP-2	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
STP-1 to EP-2	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
STP-1 to EP-2	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
STP-1 to EP-2	9/10/2014	Pyrene	ND	10	4	117	ug/L
STP-1 to EP-2	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
STP-1 to EP-2	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
STP-1 to EP-2	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
STP-1 to EP-2	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
STP-1 to EP-2	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
STP-1 to EP-2	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
STP-1 to EP-2	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
STP-1 to EP-2	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
STP-1 to EP-2	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
STP-1 to EP-2	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
STP-1 to EP-2	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
STP-1 to EP-2	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
STP-1 to EP-2	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	Aluminum, Total	0.5	0.1	0.012441	19914000	mg/L
EP-11	4/29/2019	Antimony, Total	0.009	0.02	0.007788	6000	mg/L
EP-11	4/29/2019	Arsenic, Total	0.12	0.02	0.006244	10000	mg/L
EP-11	4/29/2019	Barium, Total	0.2	0.01	0.003242	2000000	mg/L
EP-11	4/29/2019	Beryllium, Total	0.0027	0.01	0.001419	4000	mg/L
EP-11	4/29/2019	Boron, Total	4	0.2	0.022653	3949	mg/L
EP-11	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-11	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-11	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-11	4/29/2019	Copper, Total	0.02	0.03	0.020359	790000	mg/L
EP-11	4/29/2019	Iron, Total	0.19	0.1	0.043734	13822000	mg/L
EP-11	4/29/2019	Lead, Total	0.0011	0.01	0.001098	15000	mg/L
EP-11	4/29/2019	Manganese, Total	0.63	0.01	0.00145	2017000	mg/L
EP-11	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-11	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-11	4/29/2019	Nickel, Total	0.13	0.05	0.020043	372000	mg/L
EP-11	4/29/2019	Selenium, Total	0.017	0.02	0.00956	50000	mg/L
EP-11	4/29/2019	Silver, Total	0.019	0.025	0.007092	50000	mg/L
EP-11	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-11	4/29/2019	Uranium, Total	0.0045	0.01	0.001697	30000	mg/L
EP-11	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-11	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-11	4/29/2019	Antimony, Dissolved	0.02	0.05	0.019471	6000	mg/L
EP-11	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-11	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-11	4/29/2019	Beryllium, Dissolved	0.0017	0.01	0.001419	4000	mg/L
EP-11	4/29/2019	Boron, Dissolved	3.9	0.2	0.022653	3949110	mg/L
EP-11	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-11	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-11	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-11	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-11	4/29/2019	Copper, Dissolved	0.02	0.03	0.006481	790000	mg/L
EP-11	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-11	4/29/2019	Lead, Dissolved	ND	0.025	0.002744	NA	mg/L
EP-11	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-11	4/29/2019	Manganese, Dissolved	0.41	0.01	0.00145	2017400	mg/L
EP-11	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-11	4/29/2019	Nickel, Dissolved	0.13	0.05	0.020043	372000	mg/L
EP-11	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-11	4/29/2019	Selenium, Dissolved	0.011	0.05	0.008567	50000	mg/L
EP-11	4/29/2019	Silver, Dissolved	0.018	0.025	0.004712	81200	mg/L
EP-11	4/29/2019	Sodium, Dissolved	36000	1000	416.176299	NA	mg/L
EP-11	4/29/2019	Thallium, Dissolved	ND	0.025	0.002418	2000	mg/L
EP-11	4/29/2019	Uranium, Dissolved	0.0059	0.025	0.003737	NA	mg/L
EP-11	4/29/2019	Zinc, Dissolved	0.032	0.05	0.01126	5960450	mg/L
EP-11	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-11	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-11	12/22/2020	Manganese, Dissolved	8.5	0.01	0.003	2017400	mg/L
EP-11	12/22/2020	Zinc, Dissolved	0.02	0.02	0.008	5960450	mg/L
EP-11	12/22/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-11	12/22/2020	Aluminum, Total	1.17	1	0.255	19914000	mg/L
EP-11	12/22/2020	Boron, Total	18.6	0.5	0.11	3949	mg/L
EP-11	12/22/2020	Barium, Total	ND	0.05	0.015	2000000	mg/L
EP-11	12/22/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-11	12/22/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-11	12/22/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-11	12/22/2020	Chromium, Total	0.0959	0.05	0.025	50000	mg/L
EP-11	12/22/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-11	12/22/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-11	12/22/2020	Manganese, Total	9.55	0.05	0.015	2017000	mg/L
EP-11	12/22/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-11	12/22/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-11	12/22/2020	Aluminum, Dissolved	ND	2	0.51	19913930	mg/L
EP-11	12/22/2020	Barium, Dissolved	ND	0.1	0.03	2000000	mg/L
EP-11	12/22/2020	Boron, Dissolved	18.8	1	0.22	3949110	mg/L
EP-11	12/22/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-11	12/22/2020	Chromium, Dissolved	0.112	0.1	0.05	100000	mg/L
EP-11	12/22/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-11	12/22/2020	Iron, Dissolved	ND	2	0.75	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	12/22/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-11	12/22/2020	Nickel, Dissolved	0.669	0.06	0.03	372000	mg/L
EP-11	12/22/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-11	12/22/2020	Nickel, Total	0.674	0.03	0.015	372000	mg/L
EP-11	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	2000	ug/L
EP-11	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-11	12/22/2020	Arsenic, Dissolved	**580**	10	2.86	10	ug/L
EP-11	12/22/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-11	12/22/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-11	12/22/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-11	12/22/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-11	12/22/2020	Arsenic, Total Recoverable	**423**	10	2.86	10	ug/L
EP-11	12/22/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-11	12/22/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-11	12/22/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-11	12/22/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-11	12/22/2020	Selenium, Total Recoverable	*ND*	*500*	143	50	ug/L
EP-11	12/22/2020	Selenium, Dissolved	*ND*	*500*	143	50	ug/L
EP-11	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-11	3/5/2014	Arsenic, Total	0.042	0.01	0.0036	10000	mg/L
EP-11	3/5/2014	Barium, Total	0.081	0.002	0.00057	2000000	mg/L
EP-11	3/5/2014	Calcium, Total	330	5	0.41	NA	mg/L
EP-11	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-11	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-11	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-11	3/5/2014	Iron, Total	0.79	0.02	0.0072	13822000	mg/L
EP-11	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-11	3/5/2014	Potassium, Total	430	50	4.7	NA	mg/L
EP-11	3/5/2014	Magnesium, Total	230	5	0.09	NA	mg/L
EP-11	3/5/2014	Manganese, Total	0.99	0.002	0.00049	2017000	mg/L
EP-11	3/5/2014	Sodium, Total	7900	500	200	NA	mg/L
EP-11	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-11	3/5/2014	Selenium, Total	0.041	0.01	0.0051	50000	mg/L
EP-11	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-11	3/5/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-11	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-11	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-11	11/12/2014	Barium, Total	0.16	0.01	0.0025	2000000	mg/L
EP-11	11/12/2014	Calcium, Total	1100	50	4.1	NA	mg/L
EP-11	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-11	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-11	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-11	11/12/2014	Iron, Total	0.38	0.1	0.036	13822000	mg/L
EP-11	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-11	11/12/2014	Potassium, Total	1800	50	4.7	NA	mg/L
EP-11	11/12/2014	Magnesium, Total	1300	50	0.9	NA	mg/L
EP-11	11/12/2014	Manganese, Total	1.2	0.01	0.0024	2017000	mg/L
EP-11	11/12/2014	Sodium, Total	34000	500	200	NA	mg/L
EP-11	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-11	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-11	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-11	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-11	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-11	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-11	3/25/2015	Barium, Total	0.13	0.01	0.0037	2000000	mg/L
EP-11	3/25/2015	Calcium, Total	830	50	2.8	NA	mg/L
EP-11	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-11	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-11	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-11	3/25/2015	Iron, Total	0.22	0.1	0.036	13822000	mg/L
EP-11	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-11	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-11	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-11	3/25/2015	Manganese, Total	0.66	0.01	0.0076	2017000	mg/L
EP-11	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-11	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-11	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-11	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-11	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-11	9/1/2015	Arsenic, Total	0.17	0.1	0.029	10000	mg/L
EP-11	9/1/2015	Barium, Total	0.17	0.01	0.0053	2000000	mg/L
EP-11	9/1/2015	Calcium, Total	1100	50	2.8	NA	mg/L
EP-11	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-11	9/1/2015	Chromium, Total	0.036	0.03	0.011	50000	mg/L
EP-11	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-11	9/1/2015	Iron, Total	0.18	0.1	0.036	13822000	mg/L
EP-11	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-11	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-11	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-11	9/1/2015	Manganese, Total	0.48	0.01	0.0076	2017000	mg/L
EP-11	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-11	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-11	9/1/2015	Selenium, Total	0.21	0.1	0.012	50000	mg/L
EP-11	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-11	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-11	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-11	8/30/2016	Arsenic, Total	0.16	0.1	0.014	10000	mg/L
EP-11	8/30/2016	Barium, Total	0.19	0.01	0.0066	2000000	mg/L
EP-11	8/30/2016	Calcium, Total	730	10	5	NA	mg/L
EP-11	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-11	8/30/2016	Chromium, Total	0.016	0.03	0.0088	50000	mg/L
EP-11	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-11	8/30/2016	Mercury, Total	0.000078	0.0002	0.000053	2000	mg/L
EP-11	8/30/2016	Potassium, Total	1800	50	25	NA	mg/L
EP-11	8/30/2016	Magnesium, Total	1300	50	25	NA	mg/L
EP-11	8/30/2016	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
EP-11	8/30/2016	Sodium, Total	35000	500	250	NA	mg/L
EP-11	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-11	8/30/2016	Selenium, Total	0.21	0.1	0.021	50000	mg/L
EP-11	8/30/2016	Uranium, Total	0.0091	0.05	0.0051	30000	mg/L
EP-11	8/30/2016	Zinc, Total	0.045	0.05	0.014	5960000	mg/L
EP-11	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-11	3/30/2017	Arsenic, Total	0.17	0.05	0.011	10000	mg/L
EP-11	3/30/2017	Barium, Total	0.18	0.01	0.004	2000000	mg/L
EP-11	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-11	3/30/2017	Chromium, Total	0.018	0.03	0.013	50000	mg/L
EP-11	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-11	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-11	3/30/2017	Arsenic, Dissolved	0.15	0.05	0.0089	10000	mg/L
EP-11	3/30/2017	Barium, Dissolved	0.2	0.02	0.0085	2000000	mg/L
EP-11	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-11	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	3/30/2017	Chromium, Dissolved	0.014	0.06	0.01	100000	mg/L
EP-11	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-11	3/30/2017	Potassium, Dissolved	1800	100	50	NA	mg/L
EP-11	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-11	3/30/2017	Manganese, Dissolved	0.37	0.02	0.0038	2017400	mg/L
EP-11	3/30/2017	Sodium, Dissolved	53000	1000	500	NA	mg/L
EP-11	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-11	3/30/2017	Selenium, Dissolved	0.27	0.05	0.019	50000	mg/L
EP-11	3/30/2017	Uranium, Dissolved	0.0053	0.025	0.0025	NA	mg/L
EP-11	3/30/2017	Zinc, Dissolved	0.055	0.1	0.011	5960450	mg/L
EP-11	3/30/2017	Iron, Total	0.31	0.2	0.2	13822000	mg/L
EP-11	3/30/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
EP-11	3/30/2017	Manganese, Total	0.59	0.01	0.0014	2017000	mg/L
EP-11	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-11	3/30/2017	Selenium, Total	0.32	0.05	0.0094	50000	mg/L
EP-11	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-11	3/30/2017	Zinc, Total	0.019	0.05	0.013	5960000	mg/L
EP-11	10/24/2017	Silver, Total	ND	0.05	0.012	50000	mg/L
EP-11	10/24/2017	Arsenic, Total	0.24	0.1	0.041	10000	mg/L
EP-11	10/24/2017	Barium, Total	0.17	0.02	0.01	2000000	mg/L
EP-11	10/24/2017	Cadmium, Total	ND	0.02	0.0058	5000	mg/L
EP-11	10/24/2017	Chromium, Total	0.044	0.06	0.018	50000	mg/L
EP-11	10/24/2017	Copper, Total	ND	0.06	0.041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	Silver, Dissolved	ND	0.05	0.018	81200	mg/L
EP-11	10/24/2017	Arsenic, Dissolved	0.25	0.05	0.014	10000	mg/L
EP-11	10/24/2017	Barium, Dissolved	0.21	0.02	0.0099	2000000	mg/L
EP-11	10/24/2017	Calcium, Dissolved	680	10	0.78	NA	mg/L
EP-11	10/24/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	10/24/2017	Chromium, Dissolved	0.058	0.06	0.013	100000	mg/L
EP-11	10/24/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	10/24/2017	Iron, Dissolved	0.38	0.2	0.16	13821880	mg/L
EP-11	10/24/2017	Potassium, Dissolved	4700	50	5.6	NA	mg/L
EP-11	10/24/2017	Magnesium, Dissolved	3500	50	12	NA	mg/L
EP-11	10/24/2017	Manganese, Dissolved	2.3	0.02	0.0039	2017400	mg/L
EP-11	10/24/2017	Sodium, Dissolved	81000	1000	160	NA	mg/L
EP-11	10/24/2017	Lead, Dissolved	ND	0.05	0.017	NA	mg/L
EP-11	10/24/2017	Selenium, Dissolved	ND	1	0.76	50000	mg/L
EP-11	10/24/2017	Uranium, Dissolved	0.011	0.05	0.0096	NA	mg/L
EP-11	10/24/2017	Zinc, Dissolved	ND	0.1	0.021	5960450	mg/L
EP-11	10/24/2017	Iron, Total	0.31	0.04	0.02	13822000	mg/L
EP-11	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-11	10/24/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
EP-11	10/24/2017	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-11	10/24/2017	Selenium, Total	0.35	0.2	0.2	50000	mg/L
EP-11	10/24/2017	Uranium, Total	ND	0.05	0.015	30000	mg/L
EP-11	10/24/2017	Zinc, Total	ND	0.1	0.033	5960000	mg/L
EP-11	2/23/2018	Silver, Total	0.025	0.025	0.0061	50000	mg/L
EP-11	2/23/2018	Arsenic, Total	0.15	0.2	0.083	10000	mg/L
EP-11	2/23/2018	Barium, Total	0.19	0.01	0.005	2000000	mg/L
EP-11	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-11	2/23/2018	Chromium, Total	0.01	0.03	0.0088	50000	mg/L
EP-11	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	2/23/2018	Silver, Dissolved	0.027	0.05	0.018	81200	mg/L
EP-11	2/23/2018	Arsenic, Dissolved	0.15	0.2	0.084	10000	mg/L
EP-11	2/23/2018	Barium, Dissolved	0.19	0.02	0.0099	2000000	mg/L
EP-11	2/23/2018	Calcium, Dissolved	720	50	3.9	NA	mg/L
EP-11	2/23/2018	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-11	2/23/2018	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	2/23/2018	Iron, Dissolved	0.2	0.2	0.16	13821880	mg/L
EP-11	2/23/2018	Potassium, Dissolved	2000	50	5.6	NA	mg/L
EP-11	2/23/2018	Magnesium, Dissolved	1500	50	12	NA	mg/L
EP-11	2/23/2018	Manganese, Dissolved	0.9	0.02	0.0039	2017400	mg/L
EP-11	2/23/2018	Sodium, Dissolved	40000	500	82	NA	mg/L
EP-11	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-11	2/23/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-11	2/23/2018	Uranium, Dissolved	0.0052	0.025	0.0048	NA	mg/L
EP-11	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-11	2/23/2018	Iron, Total	0.67	0.1	0.051	13822000	mg/L
EP-11	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-11	2/23/2018	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
EP-11	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L
EP-11	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-11	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-11	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-11	9/7/2018	Silver, Total	0.01	0.025	0.0061	50000	mg/L
EP-11	9/7/2018	Arsenic, Total	0.96	0.1	0.041	10000	mg/L
EP-11	9/7/2018	Barium, Total	0.027	0.01	0.005	2000000	mg/L
EP-11	9/7/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-11	9/7/2018	Chromium, Total	0.064	0.03	0.0088	50000	mg/L
EP-11	9/7/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	9/7/2018	Silver, Dissolved	0.014	0.025	0.0092	81200	mg/L
EP-11	9/7/2018	Arsenic, Dissolved	0.86	0.1	0.042	10000	mg/L
EP-11	9/7/2018	Barium, Dissolved	0.027	0.01	0.0049	2000000	mg/L
EP-11	9/7/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
EP-11	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-11	9/7/2018	Chromium, Dissolved	0.047	0.03	0.0064	100000	mg/L
EP-11	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-11	9/7/2018	Iron, Dissolved	0.09	0.1	0.082	13821880	mg/L
EP-11	9/7/2018	Potassium, Dissolved	7800	500	56	NA	mg/L
EP-11	9/7/2018	Magnesium, Dissolved	9200	100	25	NA	mg/L
EP-11	9/7/2018	Manganese, Dissolved	12	0.1	0.02	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	Sodium, Dissolved	91000	1000	160	NA	mg/L
EP-11	9/7/2018	Lead, Dissolved	ND	0.1	0.035	NA	mg/L
EP-11	9/7/2018	Selenium, Dissolved	ND	0.1	0.076	50000	mg/L
EP-11	9/7/2018	Uranium, Dissolved	ND	0.1	0.019	NA	mg/L
EP-11	9/7/2018	Zinc, Dissolved	0.021	0.05	0.011	5960450	mg/L
EP-11	9/7/2018	Iron, Total	0.26	0.1	0.051	13822000	mg/L
EP-11	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-11	9/7/2018	Manganese, Total	9	0.02	0.011	2017000	mg/L
EP-11	9/7/2018	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-11	9/7/2018	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-11	9/7/2018	Uranium, Total	0.013	0.05	0.0068	30000	mg/L
EP-11	9/7/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-11	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-11	5/29/2012	Arsenic, Total	0.03	0.01	0.0011	10000	mg/L
EP-11	5/29/2012	Barium, Total	0.081	0.002	0.00031	2000000	mg/L
EP-11	5/29/2012	Calcium, Total	360	10	0.26	NA	mg/L
EP-11	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-11	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-11	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-11	5/29/2012	Iron, Total	0.16	0.02	0.0019	13822000	mg/L
EP-11	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-11	5/29/2012	Potassium, Total	310	10	4.8	NA	mg/L
EP-11	5/29/2012	Magnesium, Total	160	10	0.13	NA	mg/L
EP-11	5/29/2012	Manganese, Total	0.78	0.002	0.00062	2017000	mg/L
EP-11	5/29/2012	Sodium, Total	4800	100	4.5	NA	mg/L
EP-11	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-11	5/29/2012	Selenium, Total	0.019	0.01	0.0033	50000	mg/L
EP-11	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-11	5/29/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L
EP-11	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-11	11/6/2012	Arsenic, Total	0.017	0.0025	0.0014	10000	mg/L
EP-11	11/6/2012	Barium, Total	0.051	0.002	0.00039	2000000	mg/L
EP-11	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-11	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-11	11/6/2012	Chromium, Total	0.0065	0.006	0.001	50000	mg/L
EP-11	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-11	11/6/2012	Iron, Total	0.99	0.02	0.013	13822000	mg/L
EP-11	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-11	11/6/2012	Potassium, Total	210	10	4.8	NA	mg/L
EP-11	11/6/2012	Magnesium, Total	80	1	0.013	NA	mg/L
EP-11	11/6/2012	Manganese, Total	0.35	0.002	0.00026	2017000	mg/L
EP-11	11/6/2012	Sodium, Total	2800	100	4.5	NA	mg/L
EP-11	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-11	11/6/2012	Selenium, Total	0.014	0.0025	0.0025	50000	mg/L
EP-11	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-11	11/6/2012	Zinc, Total	0.024	0.01	0.0011	5960000	mg/L
EP-11	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-11	5/28/2013	Arsenic, Total	0.04	0.02	0.0026	10000	mg/L
EP-11	5/28/2013	Barium, Total	0.068	0.01	0.0048	2000000	mg/L
EP-11	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-11	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-11	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-11	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-11	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-11	5/28/2013	Manganese, Total	0.48	0.01	0.00082	2017000	mg/L
EP-11	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-11	5/28/2013	Selenium, Total	0.022	0.02	0.011	50000	mg/L
EP-11	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-11	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-11	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-11	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-11	10/15/2013	Barium, Total	0.067	0.002	0.00095	2000000	mg/L
EP-11	10/15/2013	Calcium, Total	360	5	0.34	NA	mg/L
EP-11	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-11	10/15/2013	Chromium, Total	0.0096	0.006	0.00084	50000	mg/L
EP-11	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-11	10/15/2013	Iron, Total	0.21	0.02	0.0089	13822000	mg/L
EP-11	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-11	10/15/2013	Potassium, Total	460	20	6	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/15/2013	Magnesium, Total	240	5	0.26	NA	mg/L
EP-11	10/15/2013	Manganese, Total	0.41	0.002	0.00016	2017000	mg/L
EP-11	10/15/2013	Sodium, Total	8000	200	71	NA	mg/L
EP-11	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-11	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-11	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-11	10/15/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
EP-12A	12/22/2020	Arsenic, Total Recoverable	**22.4**	5	1.43	10	ug/L
EP-12A	12/22/2020	Lead, Total Recoverable	**17.3**	5	0.665	15	ug/L
EP-12A	12/22/2020	Antimony, Total Recoverable	*ND*	*10*	1.76	6	ug/L
EP-12A	12/22/2020	Selenium, Total Recoverable	ND	25	7.15	50	ug/L
EP-12A	12/22/2020	Thallium, Total Recoverable	*ND*	*5*	1.7	2	ug/L
EP-12A	12/22/2020	Uranium, Total Recoverable	ND	25	5.6	30	ug/L
EP-12A	12/22/2020	Arsenic, Dissolved	**19.4**	5	1.43	10	ug/L
EP-12A	12/22/2020	Lead, Dissolved	ND	5	0.665	NA	ug/L
EP-12A	12/22/2020	Antimony, Dissolved	*ND*	*10*	1.76	6	ug/L
EP-12A	12/22/2020	Selenium, Dissolved	ND	25	7.15	50	ug/L
EP-12A	12/22/2020	Thallium, Dissolved	*ND*	*5*	1.7	2	ug/L
EP-12A	12/22/2020	Uranium, Dissolved	ND	25	5.6	NA	ug/L
EP-12A	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-12A	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-12A	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-12A	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-12A	12/22/2020	Chromium, Dissolved	0.018	0.01	0.005	100000	mg/L
EP-12A	12/22/2020	Cobalt, Dissolved	0.0117	0.01	0.003	5980	mg/L
EP-12A	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-12A	12/22/2020	Manganese, Dissolved	5.27	0.01	0.003	2017400	mg/L
EP-12A	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-12A	12/22/2020	Zinc, Dissolved	0.0514	0.02	0.008	5960450	mg/L
EP-12A	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-12A	12/22/2020	Aluminum, Total	34.7	0.2	0.051	19914000	mg/L
EP-12A	12/22/2020	Boron, Total	1.36	0.1	0.022	3949	mg/L
EP-12A	12/22/2020	Barium, Total	0.347	0.01	0.003	2000000	mg/L
EP-12A	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-12A	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-12A	12/22/2020	Cobalt, Total	0.0171	0.01	0.003	5980	mg/L
EP-12A	12/22/2020	Chromium, Total	0.041	0.01	0.005	50000	mg/L
EP-12A	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-12A	12/22/2020	Manganese, Total	5.43	0.01	0.003	2017000	mg/L
EP-12A	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-12A	12/22/2020	Zinc, Total	0.0778	0.02	0.008	5960000	mg/L
EP-12A	12/22/2020	Aluminum, Dissolved	8.26	0.4	0.102	19913930	mg/L
EP-12A	12/22/2020	Barium, Dissolved	0.162	0.02	0.006	2000000	mg/L
EP-12A	12/22/2020	Boron, Dissolved	1.41	0.2	0.044	3949110	mg/L
EP-12A	12/22/2020	Iron, Dissolved	6.79	0.4	0.15	13821880	mg/L
EP-12A	12/22/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
EP-12A	12/22/2020	Nickel, Dissolved	0.211	0.012	0.006	372000	mg/L
EP-12A	12/22/2020	Iron, Total	28.8	0.2	0.075	13822000	mg/L
EP-12A	12/22/2020	Nickel, Total	0.219	0.006	0.003	372000	mg/L
EP-12A	11/21/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-12A	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-12A	11/21/2019	Arsenic, Dissolved	0.011	0.005	0.000504	10000	mg/L
EP-12A	11/21/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
EP-12A	11/21/2019	Beryllium, Dissolved	0.00061	0.002	0.000284	4000	mg/L
EP-12A	11/21/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
EP-12A	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12A	11/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
EP-12A	11/21/2019	Chromium, Dissolved	0.01	0.006	0.001533	100000	mg/L
EP-12A	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12A	11/21/2019	Copper, Dissolved	0.003	0.006	0.001296	790000	mg/L
EP-12A	11/21/2019	Iron, Dissolved	4.9	0.1	0.043734	13821880	mg/L
EP-12A	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12A	11/21/2019	Magnesium, Dissolved	68	5	0.251452	NA	mg/L
EP-12A	11/21/2019	Manganese, Dissolved	0.57	0.002	0.00029	2017400	mg/L
EP-12A	11/21/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
EP-12A	11/21/2019	Nickel, Dissolved	0.086	0.01	0.004009	372000	mg/L
EP-12A	11/21/2019	Potassium, Dissolved	380	5	0.811441	NA	mg/L
EP-12A	11/21/2019	Selenium, Dissolved	0.0045	0.005	0.000857	50000	mg/L
EP-12A	11/21/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Sodium, Dissolved	1500	20	8.323526	NA	mg/L
EP-12A	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12A	11/21/2019	Uranium, Dissolved	0.0015	0.0025	0.000374	NA	mg/L
EP-12A	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L
EP-12A	11/21/2019	Aluminum, Total	1.2	0.2	0.024883	19914000	mg/L
EP-12A	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12A	11/21/2019	Arsenic, Total	0.013	0.01	0.003122	10000	mg/L
EP-12A	11/21/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
EP-12A	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-12A	11/21/2019	Boron, Total	0.71	0.04	0.004531	3949	mg/L
EP-12A	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12A	11/21/2019	Chromium, Total	0.011	0.006	0.001533	50000	mg/L
EP-12A	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12A	11/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
EP-12A	11/21/2019	Iron, Total	6.3	0.2	0.087469	13822000	mg/L
EP-12A	11/21/2019	Lead, Total	0.00061	0.0025	0.000274	15000	mg/L
EP-12A	11/21/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
EP-12A	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-12A	11/21/2019	Molybdenum, Total	0.033	0.008	0.006735	98700	mg/L
EP-12A	11/21/2019	Nickel, Total	0.087	0.01	0.004009	372000	mg/L
EP-12A	11/21/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
EP-12A	11/21/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
EP-12A	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12A	11/21/2019	Uranium, Total	0.0019	0.0025	0.000424	30000	mg/L
EP-12A	11/21/2019	Zinc, Total	0.022	0.01	0.005772	5960000	mg/L
EP-12A	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12A	5/28/2013	Arsenic, Total	0.015	0.01	0.0013	10000	mg/L
EP-12A	5/28/2013	Barium, Total	0.057	0.01	0.0048	2000000	mg/L
EP-12A	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-12A	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-12A	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-12A	5/28/2013	Iron, Total	0.49	0.1	0.045	13822000	mg/L
EP-12A	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12A	5/28/2013	Manganese, Total	0.25	0.01	0.00082	2017000	mg/L
EP-12A	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-12A	5/28/2013	Selenium, Total	0.018	0.01	0.0055	50000	mg/L
EP-12A	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-12A	5/28/2013	Zinc, Total	0.069	0.05	0.0038	5960000	mg/L
EP-12A	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12A	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-12A	10/15/2013	Barium, Total	0.066	0.002	0.00095	2000000	mg/L
EP-12A	10/15/2013	Calcium, Total	120	5	0.34	NA	mg/L
EP-12A	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-12A	10/15/2013	Chromium, Total	0.0098	0.006	0.00084	50000	mg/L
EP-12A	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12A	10/15/2013	Iron, Total	0.53	0.02	0.0089	13822000	mg/L
EP-12A	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12A	10/15/2013	Potassium, Total	140	50	15	NA	mg/L
EP-12A	10/15/2013	Magnesium, Total	45	1	0.051	NA	mg/L
EP-12A	10/15/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
EP-12A	10/15/2013	Sodium, Total	1700	50	18	NA	mg/L
EP-12A	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-12A	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-12A	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12A	10/15/2013	Zinc, Total	0.013	0.01	0.00076	5960000	mg/L
EP-12A	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12A	3/5/2014	Arsenic, Total	0.019	0.01	0.0036	10000	mg/L
EP-12A	3/5/2014	Barium, Total	0.059	0.002	0.00057	2000000	mg/L
EP-12A	3/5/2014	Calcium, Total	67	1	0.082	NA	mg/L
EP-12A	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12A	3/5/2014	Chromium, Total	0.014	0.006	0.0028	50000	mg/L
EP-12A	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-12A	3/5/2014	Iron, Total	1.9	0.1	0.036	13822000	mg/L
EP-12A	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12A	3/5/2014	Potassium, Total	170	50	4.7	NA	mg/L
EP-12A	3/5/2014	Magnesium, Total	34	1	0.018	NA	mg/L
EP-12A	3/5/2014	Manganese, Total	0.95	0.002	0.00049	2017000	mg/L
EP-12A	3/5/2014	Sodium, Total	1700	50	20	NA	mg/L
EP-12A	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/5/2014	Selenium, Total	0.02	0.01	0.0051	50000	mg/L
EP-12A	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-12A	3/5/2014	Zinc, Total	0.021	0.01	0.0035	5960000	mg/L
EP-12A	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12A	11/12/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
EP-12A	11/12/2014	Barium, Total	0.14	0.002	0.0005	2000000	mg/L
EP-12A	11/12/2014	Calcium, Total	130	10	0.82	NA	mg/L
EP-12A	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12A	11/12/2014	Chromium, Total	0.018	0.006	0.0028	50000	mg/L
EP-12A	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-12A	11/12/2014	Iron, Total	4.1	0.1	0.036	13822000	mg/L
EP-12A	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12A	11/12/2014	Potassium, Total	180	10	0.93	NA	mg/L
EP-12A	11/12/2014	Magnesium, Total	63	10	0.18	NA	mg/L
EP-12A	11/12/2014	Manganese, Total	0.44	0.002	0.00049	2017000	mg/L
EP-12A	11/12/2014	Sodium, Total	2500	50	20	NA	mg/L
EP-12A	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-12A	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-12A	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12A	11/12/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-12A	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12A	3/25/2015	Arsenic, Total	0.019	0.01	0.0044	10000	mg/L
EP-12A	3/25/2015	Barium, Total	0.076	0.002	0.00073	2000000	mg/L
EP-12A	3/25/2015	Calcium, Total	160	5	0.28	NA	mg/L
EP-12A	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-12A	3/25/2015	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
EP-12A	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12A	3/25/2015	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
EP-12A	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12A	3/25/2015	Potassium, Total	110	5	0.89	NA	mg/L
EP-12A	3/25/2015	Magnesium, Total	62	1	0.039	NA	mg/L
EP-12A	3/25/2015	Manganese, Total	0.095	0.002	0.0015	2017000	mg/L
EP-12A	3/25/2015	Sodium, Total	1900	50	3.6	NA	mg/L
EP-12A	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-12A	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-12A	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-12A	3/25/2015	Zinc, Total	0.015	0.01	0.0036	5960000	mg/L
EP-12A	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12A	9/1/2015	Arsenic, Total	0.029	0.01	0.0029	10000	mg/L
EP-12A	9/1/2015	Barium, Total	0.099	0.002	0.0011	2000000	mg/L
EP-12A	9/1/2015	Calcium, Total	150	5	0.28	NA	mg/L
EP-12A	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-12A	9/1/2015	Chromium, Total	0.02	0.006	0.0022	50000	mg/L
EP-12A	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12A	9/1/2015	Iron, Total	0.28	0.02	0.0072	13822000	mg/L
EP-12A	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12A	9/1/2015	Potassium, Total	170	5	0.89	NA	mg/L
EP-12A	9/1/2015	Magnesium, Total	110	5	0.2	NA	mg/L
EP-12A	9/1/2015	Manganese, Total	0.14	0.002	0.0015	2017000	mg/L
EP-12A	9/1/2015	Sodium, Total	3400	50	3.6	NA	mg/L
EP-12A	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-12A	9/1/2015	Selenium, Total	0.038	0.01	0.0012	50000	mg/L
EP-12A	9/1/2015	Uranium, Total	0.0029	0.0025	0.000025	30000	mg/L
EP-12A	9/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
EP-12A	8/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
EP-12A	8/30/2016	Arsenic, Total	0.018	0.01	0.0014	10000	mg/L
EP-12A	8/30/2016	Barium, Total	0.12	0.002	0.0013	2000000	mg/L
EP-12A	8/30/2016	Calcium, Total	380	5	2.5	NA	mg/L
EP-12A	8/30/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
EP-12A	8/30/2016	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-12A	8/30/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
EP-12A	8/30/2016	Iron, Total	1	0.1	0.1	13822000	mg/L
EP-12A	8/30/2016	Mercury, Total	0.000093	0.0002	0.000053	2000	mg/L
EP-12A	8/30/2016	Potassium, Total	120	5	2.5	NA	mg/L
EP-12A	8/30/2016	Magnesium, Total	120	5	2.5	NA	mg/L
EP-12A	8/30/2016	Manganese, Total	0.41	0.002	0.00032	2017000	mg/L
EP-12A	8/30/2016	Sodium, Total	3200	50	25	NA	mg/L
EP-12A	8/30/2016	Lead, Total	ND	0.005	0.0038	15000	mg/L
EP-12A	8/30/2016	Selenium, Total	0.03	0.01	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	Uranium, Total	0.002	0.005	0.00051	30000	mg/L
EP-12A	8/30/2016	Zinc, Total	0.042	0.01	0.0028	5960000	mg/L
EP-12A	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-12A	3/30/2017	Arsenic, Total	0.026	0.005	0.0011	10000	mg/L
EP-12A	3/30/2017	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
EP-12A	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12A	3/30/2017	Chromium, Total	0.0079	0.006	0.0027	50000	mg/L
EP-12A	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-12A	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-12A	3/30/2017	Arsenic, Dissolved	0.023	0.005	0.00089	10000	mg/L
EP-12A	3/30/2017	Barium, Dissolved	0.12	0.002	0.00085	2000000	mg/L
EP-12A	3/30/2017	Calcium, Dissolved	370	10	5	NA	mg/L
EP-12A	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	3/30/2017	Chromium, Dissolved	0.01	0.006	0.001	100000	mg/L
EP-12A	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12A	3/30/2017	Iron, Dissolved	0.3	0.02	0.02	13821880	mg/L
EP-12A	3/30/2017	Potassium, Dissolved	270	10	5	NA	mg/L
EP-12A	3/30/2017	Magnesium, Dissolved	130	10	5	NA	mg/L
EP-12A	3/30/2017	Manganese, Dissolved	0.36	0.002	0.00038	2017400	mg/L
EP-12A	3/30/2017	Sodium, Dissolved	3800	100	50	NA	mg/L
EP-12A	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-12A	3/30/2017	Selenium, Dissolved	0.042	0.005	0.0019	50000	mg/L
EP-12A	3/30/2017	Uranium, Dissolved	0.0012	0.0025	0.00025	NA	mg/L
EP-12A	3/30/2017	Zinc, Dissolved	0.0076	0.01	0.0011	5960450	mg/L
EP-12A	3/30/2017	Iron, Total	0.7	0.02	0.02	13822000	mg/L
EP-12A	3/30/2017	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
EP-12A	3/30/2017	Manganese, Total	0.41	0.002	0.00027	2017000	mg/L
EP-12A	3/30/2017	Lead, Total	0.0005	0.0025	0.00041	15000	mg/L
EP-12A	3/30/2017	Selenium, Total	0.048	0.005	0.00094	50000	mg/L
EP-12A	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-12A	3/30/2017	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
EP-12A	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-12A	10/24/2017	Arsenic, Total	0.036	0.01	0.0041	10000	mg/L
EP-12A	10/24/2017	Barium, Total	0.21	0.002	0.001	2000000	mg/L
EP-12A	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12A	10/24/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-12A	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12A	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-12A	10/24/2017	Arsenic, Dissolved	0.036	0.01	0.0029	10000	mg/L
EP-12A	10/24/2017	Barium, Dissolved	0.19	0.002	0.00099	2000000	mg/L
EP-12A	10/24/2017	Calcium, Dissolved	700	10	0.78	NA	mg/L
EP-12A	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	10/24/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
EP-12A	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12A	10/24/2017	Iron, Dissolved	0.22	0.02	0.016	13821880	mg/L
EP-12A	10/24/2017	Potassium, Dissolved	720	10	1.1	NA	mg/L
EP-12A	10/24/2017	Magnesium, Dissolved	320	10	2.5	NA	mg/L
EP-12A	10/24/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
EP-12A	10/24/2017	Sodium, Dissolved	8400	100	16	NA	mg/L
EP-12A	10/24/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-12A	10/24/2017	Selenium, Dissolved	ND	0.5	0.38	50000	mg/L
EP-12A	10/24/2017	Uranium, Dissolved	0.0023	0.005	0.00096	NA	mg/L
EP-12A	10/24/2017	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
EP-12A	10/24/2017	Iron, Total	0.54	0.02	0.01	13822000	mg/L
EP-12A	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-12A	10/24/2017	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
EP-12A	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12A	10/24/2017	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-12A	10/24/2017	Uranium, Total	0.0028	0.005	0.0015	30000	mg/L
EP-12A	10/24/2017	Zinc, Total	0.0088	0.01	0.0033	5960000	mg/L
EP-12A	9/7/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-12A	9/7/2018	Arsenic, Total	0.052	0.02	0.0083	10000	mg/L
EP-12A	9/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
EP-12A	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12A	9/7/2018	Chromium, Total	0.018	0.006	0.0018	50000	mg/L
EP-12A	9/7/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
EP-12A	9/7/2018	Silver, Dissolved	0.017	0.005	0.0018	81200	mg/L
EP-12A	9/7/2018	Arsenic, Dissolved	0.049	0.02	0.0084	10000	mg/L
EP-12A	9/7/2018	Barium, Dissolved	0.084	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	Calcium, Dissolved	740	10	0.78	NA	mg/L
EP-12A	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	9/7/2018	Chromium, Dissolved	0.0087	0.006	0.0013	100000	mg/L
EP-12A	9/7/2018	Copper, Dissolved	0.0062	0.006	0.0032	790000	mg/L
EP-12A	9/7/2018	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
EP-12A	9/7/2018	Potassium, Dissolved	1700	50	5.6	NA	mg/L
EP-12A	9/7/2018	Magnesium, Dissolved	820	10	2.5	NA	mg/L
EP-12A	9/7/2018	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
EP-12A	9/7/2018	Sodium, Dissolved	15000	500	82	NA	mg/L
EP-12A	9/7/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-12A	9/7/2018	Selenium, Dissolved	0.021	0.02	0.015	50000	mg/L
EP-12A	9/7/2018	Uranium, Dissolved	0.015	0.01	0.0019	NA	mg/L
EP-12A	9/7/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
EP-12A	9/7/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
EP-12A	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-12A	9/7/2018	Manganese, Total	3.1	0.01	0.0055	2017000	mg/L
EP-12A	9/7/2018	Lead, Total	0.0054	0.01	0.0046	15000	mg/L
EP-12A	9/7/2018	Selenium, Total	0.022	0.02	0.02	50000	mg/L
EP-12A	9/7/2018	Uranium, Total	0.017	0.01	0.0014	30000	mg/L
EP-12A	9/7/2018	Zinc, Total	0.021	0.01	0.0033	5960000	mg/L
EP-12A	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-12A	5/29/2012	Arsenic, Total	0.026	0.01	0.0011	10000	mg/L
EP-12A	5/29/2012	Barium, Total	0.075	0.002	0.00031	2000000	mg/L
EP-12A	5/29/2012	Calcium, Total	310	10	0.26	NA	mg/L
EP-12A	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-12A	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-12A	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-12A	5/29/2012	Iron, Total	0.16	0.02	0.0019	13822000	mg/L
EP-12A	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12A	5/29/2012	Potassium, Total	240	10	4.8	NA	mg/L
EP-12A	5/29/2012	Magnesium, Total	130	10	0.13	NA	mg/L
EP-12A	5/29/2012	Manganese, Total	0.73	0.002	0.00062	2017000	mg/L
EP-12A	5/29/2012	Sodium, Total	4000	50	2.2	NA	mg/L
EP-12A	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-12A	5/29/2012	Selenium, Total	0.018	0.01	0.0033	50000	mg/L
EP-12A	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-12A	5/29/2012	Zinc, Total	0.08	0.01	0.00062	5960000	mg/L
EP-12A	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-12A	11/6/2012	Arsenic, Total	0.015	0.0025	0.0014	10000	mg/L
EP-12A	11/6/2012	Barium, Total	0.053	0.002	0.00039	2000000	mg/L
EP-12A	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-12A	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-12A	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-12A	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12A	11/6/2012	Iron, Total	0.86	0.02	0.013	13822000	mg/L
EP-12A	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12A	11/6/2012	Potassium, Total	220	10	4.8	NA	mg/L
EP-12A	11/6/2012	Magnesium, Total	80	1	0.013	NA	mg/L
EP-12A	11/6/2012	Manganese, Total	0.32	0.002	0.00026	2017000	mg/L
EP-12A	11/6/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-12A	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-12A	11/6/2012	Selenium, Total	0.013	0.0025	0.0025	50000	mg/L
EP-12A	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-12A	11/6/2012	Zinc, Total	0.02	0.01	0.0011	5960000	mg/L
EP-12B	11/21/2019	Aluminum, Dissolved	0.16	0.02	0.002488	19913930	mg/L
EP-12B	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-12B	11/21/2019	Arsenic, Dissolved	0.0066	0.005	0.000504	10000	mg/L
EP-12B	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
EP-12B	11/21/2019	Beryllium, Dissolved	0.00057	0.002	0.000284	4000	mg/L
EP-12B	11/21/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
EP-12B	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12B	11/21/2019	Calcium, Dissolved	99	5	0.309446	NA	mg/L
EP-12B	11/21/2019	Chromium, Dissolved	0.012	0.006	0.001533	100000	mg/L
EP-12B	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12B	11/21/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L
EP-12B	11/21/2019	Iron, Dissolved	7	0.4	0.174937	13821880	mg/L
EP-12B	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12B	11/21/2019	Magnesium, Dissolved	41	5	0.251452	NA	mg/L
EP-12B	11/21/2019	Manganese, Dissolved	0.39	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	Molybdenum, Dissolved	0.018	0.008	0.006735	98700	mg/L
EP-12B	11/21/2019	Nickel, Dissolved	0.059	0.01	0.004009	372000	mg/L
EP-12B	11/21/2019	Potassium, Dissolved	250	5	0.811441	NA	mg/L
EP-12B	11/21/2019	Selenium, Dissolved	0.0054	0.005	0.000857	50000	mg/L
EP-12B	11/21/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
EP-12B	11/21/2019	Sodium, Dissolved	890	20	8.323526	NA	mg/L
EP-12B	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12B	11/21/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-12B	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L
EP-12B	11/21/2019	Aluminum, Total	0.37	0.02	0.002488	19914000	mg/L
EP-12B	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12B	11/21/2019	Arsenic, Total	0.0098	0.005	0.001561	10000	mg/L
EP-12B	11/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
EP-12B	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-12B	11/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
EP-12B	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12B	11/21/2019	Chromium, Total	0.013	0.006	0.001533	50000	mg/L
EP-12B	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12B	11/21/2019	Copper, Total	0.0048	0.006	0.004072	790000	mg/L
EP-12B	11/21/2019	Iron, Total	8	0.2	0.087469	13822000	mg/L
EP-12B	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-12B	11/21/2019	Manganese, Total	0.4	0.002	0.00029	2017000	mg/L
EP-12B	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-12B	11/21/2019	Molybdenum, Total	0.05	0.008	0.006735	98700	mg/L
EP-12B	11/21/2019	Nickel, Total	0.064	0.01	0.004009	372000	mg/L
EP-12B	11/21/2019	Selenium, Total	0.0037	0.005	0.00239	50000	mg/L
EP-12B	11/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
EP-12B	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12B	11/21/2019	Uranium, Total	0.0025	0.0025	0.000424	30000	mg/L
EP-12B	11/21/2019	Zinc, Total	0.032	0.01	0.005772	5960000	mg/L
EP-12B	4/29/2019	Aluminum, Total	0.74	0.02	0.002488	19914000	mg/L
EP-12B	4/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12B	4/29/2019	Arsenic, Total	0.021	0.005	0.001561	10000	mg/L
EP-12B	4/29/2019	Barium, Total	0.097	0.002	0.000648	2000000	mg/L
EP-12B	4/29/2019	Beryllium, Total	0.00065	0.002	0.000284	4000	mg/L
EP-12B	4/29/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
EP-12B	4/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12B	4/29/2019	Chromium, Total	0.0028	0.006	0.001533	50000	mg/L
EP-12B	4/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12B	4/29/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
EP-12B	4/29/2019	Iron, Total	0.49	0.02	0.008747	13822000	mg/L
EP-12B	4/29/2019	Lead, Total	0.00038	0.0025	0.000274	15000	mg/L
EP-12B	4/29/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
EP-12B	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-12B	4/29/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
EP-12B	4/29/2019	Nickel, Total	0.03	0.01	0.004009	372000	mg/L
EP-12B	4/29/2019	Selenium, Total	0.0078	0.005	0.00239	50000	mg/L
EP-12B	4/29/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
EP-12B	4/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12B	4/29/2019	Uranium, Total	0.0018	0.0025	0.000424	30000	mg/L
EP-12B	4/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-12B	4/29/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-12B	4/29/2019	Antimony, Dissolved	0.0024	0.005	0.001947	6000	mg/L
EP-12B	4/29/2019	Arsenic, Dissolved	0.019	0.005	0.000504	10000	mg/L
EP-12B	4/29/2019	Barium, Dissolved	0.093	0.002	0.000648	2000000	mg/L
EP-12B	4/29/2019	Beryllium, Dissolved	0.00042	0.002	0.000284	4000	mg/L
EP-12B	4/29/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
EP-12B	4/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12B	4/29/2019	Calcium, Dissolved	200	5	0.309446	NA	mg/L
EP-12B	4/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-12B	4/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12B	4/29/2019	Copper, Dissolved	0.0046	0.006	0.001296	790000	mg/L
EP-12B	4/29/2019	Iron, Dissolved	0.13	0.02	0.008747	13821880	mg/L
EP-12B	4/29/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12B	4/29/2019	Magnesium, Dissolved	250	5	0.251452	NA	mg/L
EP-12B	4/29/2019	Manganese, Dissolved	0.066	0.002	0.00029	2017400	mg/L
EP-12B	4/29/2019	Molybdenum, Dissolved	0.014	0.008	0.006735	98700	mg/L
EP-12B	4/29/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
EP-12B	4/29/2019	Potassium, Dissolved	810	10	1.622881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	Selenium, Dissolved	0.0052	0.005	0.000857	50000	mg/L
EP-12B	4/29/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
EP-12B	4/29/2019	Sodium, Dissolved	4700	100	41.61763	NA	mg/L
EP-12B	4/29/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12B	4/29/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-12B	4/29/2019	Zinc, Dissolved	0.036	0.01	0.002252	5960450	mg/L
EP-12B	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-12B	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-12B	12/22/2020	Chromium, Dissolved	0.0107	0.01	0.005	100000	mg/L
EP-12B	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-12B	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-12B	12/22/2020	Manganese, Dissolved	1.11	0.01	0.003	2017400	mg/L
EP-12B	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-12B	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-12B	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-12B	12/22/2020	Aluminum, Total	0.409	0.2	0.051	19914000	mg/L
EP-12B	12/22/2020	Boron, Total	0.905	0.1	0.022	3949	mg/L
EP-12B	12/22/2020	Barium, Total	0.195	0.01	0.003	2000000	mg/L
EP-12B	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-12B	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-12B	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-12B	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-12B	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-12B	12/22/2020	Manganese, Total	1.05	0.01	0.003	2017000	mg/L
EP-12B	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-12B	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-12B	12/22/2020	Aluminum, Dissolved	ND	0.4	0.102	19913930	mg/L
EP-12B	12/22/2020	Barium, Dissolved	0.202	0.02	0.006	2000000	mg/L
EP-12B	12/22/2020	Boron, Dissolved	0.92	0.2	0.044	3949110	mg/L
EP-12B	12/22/2020	Iron, Dissolved	0.828	0.4	0.15	13821880	mg/L
EP-12B	12/22/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
EP-12B	12/22/2020	Nickel, Dissolved	0.125	0.012	0.006	372000	mg/L
EP-12B	12/22/2020	Iron, Total	0.956	0.2	0.075	13822000	mg/L
EP-12B	12/22/2020	Nickel, Total	0.126	0.006	0.003	372000	mg/L
EP-12B	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-12B	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-12B	12/22/2020	Arsenic, Total Recoverable	**16**	5	1.43	10	ug/L
EP-12B	12/22/2020	Lead, Total Recoverable	ND	5	0.665	15	ug/L
EP-12B	12/22/2020	Antimony, Total Recoverable	*ND*	*10*	1.76	6	ug/L
EP-12B	12/22/2020	Selenium, Total Recoverable	ND	25	7.15	50	ug/L
EP-12B	12/22/2020	Thallium, Total Recoverable	*ND*	*5*	1.7	2	ug/L
EP-12B	12/22/2020	Uranium, Total Recoverable	ND	25	5.6	30	ug/L
EP-12B	12/22/2020	Arsenic, Dissolved	**15.9**	5	1.43	10	ug/L
EP-12B	12/22/2020	Lead, Dissolved	ND	5	0.665	NA	ug/L
EP-12B	12/22/2020	Antimony, Dissolved	*ND*	*10*	1.76	6	ug/L
EP-12B	12/22/2020	Selenium, Dissolved	ND	25	7.15	50	ug/L
EP-12B	12/22/2020	Thallium, Dissolved	*ND*	*5*	1.7	2	ug/L
EP-12B	12/22/2020	Uranium, Dissolved	ND	25	5.6	NA	ug/L
EP-12B	9/18/2020	Antimony, Dissolved	0.0052	0.005	0.0035	6000	mg/L
EP-12B	9/18/2020	Arsenic, Dissolved	0.019	0.005	0.001	10000	mg/L
EP-12B	9/18/2020	Lead, Dissolved	0.00022	0.0025	0.00017	NA	mg/L
EP-12B	9/18/2020	Selenium, Dissolved	0.0043	0.005	0.0033	50000	mg/L
EP-12B	9/18/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-12B	9/18/2020	Uranium, Dissolved	0.0016	0.0025	0.00033	NA	mg/L
EP-12B	9/18/2020	Magnesium, Dissolved	280	5	0.34	NA	mg/L
EP-12B	9/18/2020	Manganese, Dissolved	1.2	0.01	0.0029	2017400	mg/L
EP-12B	9/18/2020	Nickel, Dissolved	0.039	0.05	0.016	372000	mg/L
EP-12B	9/18/2020	Silver, Dissolved	0.027	0.025	0.0063	81200	mg/L
EP-12B	9/18/2020	Calcium, Dissolved	1000	50	5.7	NA	mg/L
EP-12B	9/18/2020	Potassium, Dissolved	510	50	8	NA	mg/L
EP-12B	9/18/2020	Sodium, Dissolved	5400	100	14	NA	mg/L
EP-12B	9/18/2020	Aluminum, Dissolved	0.041	0.02	0.0056	19913930	mg/L
EP-12B	9/18/2020	Barium, Dissolved	0.26	0.002	0.0011	2000000	mg/L
EP-12B	9/18/2020	Beryllium, Dissolved	0.0011	0.002	0.00088	4000	mg/L
EP-12B	9/18/2020	Boron, Dissolved	0.9	0.04	0.0067	3949110	mg/L
EP-12B	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-12B	9/18/2020	Chromium, Dissolved	0.0062	0.006	0.002	100000	mg/L
EP-12B	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-12B	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/18/2020	Iron, Dissolved	0.22	0.02	0.01	13821880	mg/L
EP-12B	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-12B	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
EP-12B	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-12B	9/18/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-12B	9/18/2020	Arsenic, Total	0.022	0.01	0.0026	10000	mg/L
EP-12B	9/18/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-12B	9/18/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-12B	9/18/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-12B	9/18/2020	Uranium, Total	0.0018	0.005	0.00065	30000	mg/L
EP-12B	9/18/2020	Aluminum, Total	0.46	0.02	0.0074	19914000	mg/L
EP-12B	9/18/2020	Barium, Total	0.26	0.003	0.0016	2000000	mg/L
EP-12B	9/18/2020	Beryllium, Total	0.0012	0.002	0.00088	4000	mg/L
EP-12B	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12B	9/18/2020	Chromium, Total	0.0043	0.006	0.0021	50000	mg/L
EP-12B	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-12B	9/18/2020	Iron, Total	0.42	0.05	0.013	13822000	mg/L
EP-12B	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-12B	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12B	9/18/2020	Nickel, Total	0.039	0.01	0.0033	372000	mg/L
EP-12B	9/18/2020	Silver, Total	0.016	0.005	0.0013	50000	mg/L
EP-12B	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
EP-12B	9/18/2020	Manganese, Total	1.2	0.01	0.0041	2017000	mg/L
EP-12B	9/18/2020	Boron, Total	0.95	0.04	0.0074	3949	mg/L
EP-12B	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-12B	5/29/2012	Arsenic, Total	0.019	0.01	0.0011	10000	mg/L
EP-12B	5/29/2012	Barium, Total	0.067	0.002	0.00031	2000000	mg/L
EP-12B	5/29/2012	Calcium, Total	290	10	0.26	NA	mg/L
EP-12B	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-12B	5/29/2012	Chromium, Total	0.0071	0.006	0.00056	50000	mg/L
EP-12B	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-12B	5/29/2012	Iron, Total	0.18	0.02	0.0019	13822000	mg/L
EP-12B	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12B	5/29/2012	Potassium, Total	190	10	4.8	NA	mg/L
EP-12B	5/29/2012	Magnesium, Total	130	10	0.13	NA	mg/L
EP-12B	5/29/2012	Manganese, Total	0.11	0.002	0.00062	2017000	mg/L
EP-12B	5/29/2012	Sodium, Total	4300	50	2.2	NA	mg/L
EP-12B	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-12B	5/29/2012	Selenium, Total	0.024	0.01	0.0033	50000	mg/L
EP-12B	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-12B	5/29/2012	Zinc, Total	0.015	0.01	0.00062	5960000	mg/L
EP-12B	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-12B	11/6/2012	Arsenic, Total	0.0092	0.0025	0.0014	10000	mg/L
EP-12B	11/6/2012	Barium, Total	0.04	0.002	0.00039	2000000	mg/L
EP-12B	11/6/2012	Calcium, Total	150	10	0.26	NA	mg/L
EP-12B	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-12B	11/6/2012	Chromium, Total	0.0069	0.006	0.001	50000	mg/L
EP-12B	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	11/6/2012	Iron, Total	1.6	0.1	0.066	13822000	mg/L
EP-12B	11/6/2012	Mercury, Total	0.00042	0.0002	0.000025	2000	mg/L
EP-12B	11/6/2012	Potassium, Total	100	10	4.8	NA	mg/L
EP-12B	11/6/2012	Magnesium, Total	49	1	0.013	NA	mg/L
EP-12B	11/6/2012	Manganese, Total	0.47	0.002	0.00026	2017000	mg/L
EP-12B	11/6/2012	Sodium, Total	1700	50	2.2	NA	mg/L
EP-12B	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-12B	11/6/2012	Selenium, Total	0.0089	0.0025	0.0025	50000	mg/L
EP-12B	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-12B	11/6/2012	Zinc, Total	0.031	0.01	0.0011	5960000	mg/L
EP-12B	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12B	5/28/2013	Arsenic, Total	ND	0.01	0.0013	10000	mg/L
EP-12B	5/28/2013	Barium, Total	0.052	0.01	0.0048	2000000	mg/L
EP-12B	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-12B	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-12B	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-12B	5/28/2013	Iron, Total	0.78	0.1	0.045	13822000	mg/L
EP-12B	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12B	5/28/2013	Manganese, Total	0.27	0.01	0.00082	2017000	mg/L
EP-12B	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-12B	5/28/2013	Selenium, Total	0.014	0.01	0.0055	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-12B	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-12B	10/15/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
EP-12B	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-12B	10/15/2013	Barium, Total	0.074	0.002	0.00095	2000000	mg/L
EP-12B	10/15/2013	Calcium, Total	82	1	0.069	NA	mg/L
EP-12B	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-12B	10/15/2013	Chromium, Total	0.0083	0.006	0.00084	50000	mg/L
EP-12B	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12B	10/15/2013	Iron, Total	0.26	0.02	0.0089	13822000	mg/L
EP-12B	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12B	10/15/2013	Potassium, Total	130	50	15	NA	mg/L
EP-12B	10/15/2013	Magnesium, Total	31	1	0.051	NA	mg/L
EP-12B	10/15/2013	Manganese, Total	0.2	0.002	0.00016	2017000	mg/L
EP-12B	10/15/2013	Sodium, Total	1300	50	18	NA	mg/L
EP-12B	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-12B	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-12B	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12B	10/15/2013	Zinc, Total	0.016	0.01	0.00076	5960000	mg/L
EP-12B	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12B	3/5/2014	Arsenic, Total	0.014	0.01	0.0036	10000	mg/L
EP-12B	3/5/2014	Barium, Total	0.08	0.002	0.00057	2000000	mg/L
EP-12B	3/5/2014	Calcium, Total	59	1	0.082	NA	mg/L
EP-12B	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12B	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-12B	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-12B	3/5/2014	Iron, Total	1.2	0.1	0.036	13822000	mg/L
EP-12B	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12B	3/5/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-12B	3/5/2014	Magnesium, Total	32	1	0.018	NA	mg/L
EP-12B	3/5/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
EP-12B	3/5/2014	Sodium, Total	1600	50	20	NA	mg/L
EP-12B	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-12B	3/5/2014	Selenium, Total	0.014	0.01	0.0051	50000	mg/L
EP-12B	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-12B	3/5/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
EP-12B	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12B	11/12/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
EP-12B	11/12/2014	Barium, Total	0.087	0.002	0.0005	2000000	mg/L
EP-12B	11/12/2014	Calcium, Total	150	5	0.41	NA	mg/L
EP-12B	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12B	11/12/2014	Chromium, Total	0.011	0.006	0.0028	50000	mg/L
EP-12B	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-12B	11/12/2014	Iron, Total	1.4	0.1	0.036	13822000	mg/L
EP-12B	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12B	11/12/2014	Potassium, Total	150	5	0.47	NA	mg/L
EP-12B	11/12/2014	Magnesium, Total	44	1	0.018	NA	mg/L
EP-12B	11/12/2014	Manganese, Total	0.27	0.002	0.00049	2017000	mg/L
EP-12B	11/12/2014	Sodium, Total	1600	20	7.8	NA	mg/L
EP-12B	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-12B	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-12B	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12B	11/12/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-12B	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12B	3/25/2015	Arsenic, Total	0.018	0.01	0.0044	10000	mg/L
EP-12B	3/25/2015	Barium, Total	0.1	0.002	0.00073	2000000	mg/L
EP-12B	3/25/2015	Calcium, Total	240	5	0.28	NA	mg/L
EP-12B	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-12B	3/25/2015	Chromium, Total	0.011	0.006	0.0022	50000	mg/L
EP-12B	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12B	3/25/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
EP-12B	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12B	3/25/2015	Potassium, Total	92	1	0.18	NA	mg/L
EP-12B	3/25/2015	Magnesium, Total	67	1	0.039	NA	mg/L
EP-12B	3/25/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
EP-12B	3/25/2015	Sodium, Total	1900	50	3.6	NA	mg/L
EP-12B	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-12B	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-12B	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Zinc, Total	0.02	0.01	0.0036	5960000	mg/L
EP-12B	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12B	9/1/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
EP-12B	9/1/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
EP-12B	9/1/2015	Calcium, Total	180	5	0.28	NA	mg/L
EP-12B	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-12B	9/1/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
EP-12B	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12B	9/1/2015	Iron, Total	0.55	0.02	0.0072	13822000	mg/L
EP-12B	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12B	9/1/2015	Potassium, Total	90	5	0.89	NA	mg/L
EP-12B	9/1/2015	Magnesium, Total	63	1	0.039	NA	mg/L
EP-12B	9/1/2015	Manganese, Total	0.26	0.002	0.0015	2017000	mg/L
EP-12B	9/1/2015	Sodium, Total	2200	50	3.6	NA	mg/L
EP-12B	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-12B	9/1/2015	Selenium, Total	0.017	0.005	0.00062	50000	mg/L
EP-12B	9/1/2015	Uranium, Total	0.0035	0.0025	0.000025	30000	mg/L
EP-12B	9/1/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
EP-12B	8/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
EP-12B	8/30/2016	Arsenic, Total	0.016	0.01	0.0014	10000	mg/L
EP-12B	8/30/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
EP-12B	8/30/2016	Calcium, Total	310	10	5	NA	mg/L
EP-12B	8/30/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
EP-12B	8/30/2016	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-12B	8/30/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
EP-12B	8/30/2016	Iron, Total	2.6	0.1	0.1	13822000	mg/L
EP-12B	8/30/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
EP-12B	8/30/2016	Potassium, Total	90	5	2.5	NA	mg/L
EP-12B	8/30/2016	Magnesium, Total	81	5	2.5	NA	mg/L
EP-12B	8/30/2016	Manganese, Total	0.43	0.002	0.00032	2017000	mg/L
EP-12B	8/30/2016	Sodium, Total	2200	50	25	NA	mg/L
EP-12B	8/30/2016	Lead, Total	ND	0.005	0.0038	15000	mg/L
EP-12B	8/30/2016	Selenium, Total	0.031	0.01	0.0021	50000	mg/L
EP-12B	8/30/2016	Uranium, Total	0.0013	0.005	0.00051	30000	mg/L
EP-12B	8/30/2016	Zinc, Total	0.045	0.01	0.0028	5960000	mg/L
EP-12B	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-12B	3/30/2017	Arsenic, Total	0.017	0.005	0.0011	10000	mg/L
EP-12B	3/30/2017	Barium, Total	0.21	0.002	0.00079	2000000	mg/L
EP-12B	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12B	3/30/2017	Chromium, Total	0.0083	0.006	0.0027	50000	mg/L
EP-12B	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-12B	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-12B	3/30/2017	Arsenic, Dissolved	0.017	0.005	0.00089	10000	mg/L
EP-12B	3/30/2017	Barium, Dissolved	0.19	0.002	0.00085	2000000	mg/L
EP-12B	3/30/2017	Calcium, Dissolved	340	10	5	NA	mg/L
EP-12B	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	3/30/2017	Chromium, Dissolved	0.0086	0.006	0.001	100000	mg/L
EP-12B	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	3/30/2017	Iron, Dissolved	0.49	0.02	0.02	13821880	mg/L
EP-12B	3/30/2017	Potassium, Dissolved	290	10	5	NA	mg/L
EP-12B	3/30/2017	Magnesium, Dissolved	100	10	5	NA	mg/L
EP-12B	3/30/2017	Manganese, Dissolved	0.38	0.002	0.00038	2017400	mg/L
EP-12B	3/30/2017	Sodium, Dissolved	3100	100	50	NA	mg/L
EP-12B	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-12B	3/30/2017	Selenium, Dissolved	0.03	0.005	0.0019	50000	mg/L
EP-12B	3/30/2017	Uranium, Dissolved	0.0021	0.0025	0.00025	NA	mg/L
EP-12B	3/30/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
EP-12B	3/30/2017	Iron, Total	0.93	0.02	0.02	13822000	mg/L
EP-12B	3/30/2017	Mercury, Total	0.000096	0.0002	0.000037	2000	mg/L
EP-12B	3/30/2017	Manganese, Total	0.37	0.002	0.00027	2017000	mg/L
EP-12B	3/30/2017	Lead, Total	0.00087	0.0025	0.00041	15000	mg/L
EP-12B	3/30/2017	Selenium, Total	0.03	0.005	0.00094	50000	mg/L
EP-12B	3/30/2017	Uranium, Total	0.0012	0.0025	0.00087	30000	mg/L
EP-12B	3/30/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
EP-12B	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-12B	10/24/2017	Arsenic, Total	0.012	0.01	0.0041	10000	mg/L
EP-12B	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-12B	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	10/24/2017	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-12B	10/24/2017	Arsenic, Dissolved	0.011	0.005	0.0014	10000	mg/L
EP-12B	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-12B	10/24/2017	Calcium, Dissolved	230	10	0.78	NA	mg/L
EP-12B	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	10/24/2017	Chromium, Dissolved	0.0044	0.006	0.0013	100000	mg/L
EP-12B	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	10/24/2017	Iron, Dissolved	0.63	0.02	0.016	13821880	mg/L
EP-12B	10/24/2017	Potassium, Dissolved	370	10	1.1	NA	mg/L
EP-12B	10/24/2017	Magnesium, Dissolved	77	1	0.25	NA	mg/L
EP-12B	10/24/2017	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
EP-12B	10/24/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
EP-12B	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	10/24/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
EP-12B	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-12B	10/24/2017	Zinc, Dissolved	0.0098	0.01	0.0021	5960450	mg/L
EP-12B	10/24/2017	Iron, Total	0.85	0.02	0.01	13822000	mg/L
EP-12B	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-12B	10/24/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
EP-12B	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12B	10/24/2017	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-12B	10/24/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
EP-12B	10/24/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
EP-12B	2/22/2018	Silver, Total	0.0059	0.005	0.0012	50000	mg/L
EP-12B	2/22/2018	Arsenic, Total	0.013	0.02	0.0083	10000	mg/L
EP-12B	2/22/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
EP-12B	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	2/22/2018	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L
EP-12B	2/22/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
EP-12B	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-12B	2/22/2018	Arsenic, Dissolved	0.012	0.02	0.0084	10000	mg/L
EP-12B	2/22/2018	Barium, Dissolved	0.13	0.01	0.0049	2000000	mg/L
EP-12B	2/22/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
EP-12B	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-12B	2/22/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-12B	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-12B	2/22/2018	Iron, Dissolved	0.52	0.1	0.082	13821880	mg/L
EP-12B	2/22/2018	Potassium, Dissolved	310	5	0.56	NA	mg/L
EP-12B	2/22/2018	Magnesium, Dissolved	72	5	1.2	NA	mg/L
EP-12B	2/22/2018	Manganese, Dissolved	0.23	0.01	0.002	2017400	mg/L
EP-12B	2/22/2018	Sodium, Dissolved	1800	50	8.2	NA	mg/L
EP-12B	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	2/22/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
EP-12B	2/22/2018	Uranium, Dissolved	0.00079	0.0025	0.00048	NA	mg/L
EP-12B	2/22/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
EP-12B	2/22/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
EP-12B	2/22/2018	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
EP-12B	2/22/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
EP-12B	2/22/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-12B	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
EP-12B	2/22/2018	Uranium, Total	0.00098	0.0025	0.00034	30000	mg/L
EP-12B	2/22/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
EP-12B	9/7/2018	Silver, Total	0.0068	0.005	0.0012	50000	mg/L
EP-12B	9/7/2018	Arsenic, Total	0.017	0.005	0.0021	10000	mg/L
EP-12B	9/7/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-12B	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	9/7/2018	Chromium, Total	0.0038	0.006	0.0018	50000	mg/L
EP-12B	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	9/7/2018	Silver, Dissolved	0.0073	0.005	0.0018	81200	mg/L
EP-12B	9/7/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
EP-12B	9/7/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-12B	9/7/2018	Calcium, Dissolved	280	10	0.78	NA	mg/L
EP-12B	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	9/7/2018	Chromium, Dissolved	0.002	0.006	0.0013	100000	mg/L
EP-12B	9/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	9/7/2018	Iron, Dissolved	0.12	0.02	0.016	13821880	mg/L
EP-12B	9/7/2018	Potassium, Dissolved	560	10	1.1	NA	mg/L
EP-12B	9/7/2018	Magnesium, Dissolved	140	10	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/7/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
EP-12B	9/7/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
EP-12B	9/7/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	9/7/2018	Selenium, Dissolved	0.0041	0.005	0.0038	50000	mg/L
EP-12B	9/7/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-12B	9/7/2018	Zinc, Dissolved	0.0072	0.01	0.0021	5960450	mg/L
EP-12B	9/7/2018	Iron, Total	0.18	0.02	0.01	13822000	mg/L
EP-12B	9/7/2018	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
EP-12B	9/7/2018	Manganese, Total	0.27	0.002	0.0011	2017000	mg/L
EP-12B	9/7/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12B	9/7/2018	Selenium, Total	0.0059	0.005	0.0049	50000	mg/L
EP-12B	9/7/2018	Uranium, Total	0.0017	0.005	0.00068	30000	mg/L
EP-12B	9/7/2018	Zinc, Total	0.0035	0.01	0.0033	5960000	mg/L
EP-2	9/17/2020	Antimony, Dissolved	0.0014	0.001	0.0007	6000	mg/L
EP-2	9/17/2020	Arsenic, Dissolved	ND	0.001	0.00021	10000	mg/L
EP-2	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
EP-2	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
EP-2	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
EP-2	9/17/2020	Uranium, Dissolved	ND	0.0005	0.000065	NA	mg/L
EP-2	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
EP-2	9/17/2020	Aluminum, Dissolved	0.0065	0.02	0.0056	19913930	mg/L
EP-2	9/17/2020	Barium, Dissolved	0.0013	0.002	0.0011	2000000	mg/L
EP-2	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-2	9/17/2020	Boron, Dissolved	ND	0.04	0.0067	3949110	mg/L
EP-2	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-2	9/17/2020	Calcium, Dissolved	0.45	1	0.11	NA	mg/L
EP-2	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
EP-2	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-2	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-2	9/17/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
EP-2	9/17/2020	Magnesium, Dissolved	ND	1	0.067	NA	mg/L
EP-2	9/17/2020	Manganese, Dissolved	0.0008	0.002	0.00058	2017400	mg/L
EP-2	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-2	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
EP-2	9/17/2020	Potassium, Dissolved	ND	1	0.16	NA	mg/L
EP-2	9/17/2020	Sodium, Dissolved	0.5	1	0.14	NA	mg/L
EP-2	9/17/2020	Zinc, Dissolved	0.59	0.01	0.006	5960450	mg/L
EP-2	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-2	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
EP-2	9/17/2020	Arsenic, Total	ND	0.001	0.00026	10000	mg/L
EP-2	9/17/2020	Lead, Total	0.000043	0.0005	0.000034	15000	mg/L
EP-2	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
EP-2	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-2	9/17/2020	Uranium, Total	ND	0.0005	0.000065	30000	mg/L
EP-2	9/17/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
EP-2	9/17/2020	Barium, Total	ND	0.003	0.0016	2000000	mg/L
EP-2	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-2	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	9/17/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
EP-2	9/17/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-2	9/17/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
EP-2	9/17/2020	Manganese, Total	ND	0.002	0.00081	2017000	mg/L
EP-2	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-2	9/17/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	9/17/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
EP-2	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
EP-2	9/17/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
EP-2	9/17/2020	Boron, Total	ND	0.04	0.0074	3949	mg/L
EP-2	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-2	12/21/2020	Aluminum, Dissolved	0.29	0.2	0.051	19913930	mg/L
EP-2	12/21/2020	Barium, Dissolved	0.177	0.01	0.003	2000000	mg/L
EP-2	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-2	12/21/2020	Boron, Dissolved	0.432	0.1	0.022	3949110	mg/L
EP-2	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-2	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-2	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-2	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-2	12/21/2020	Iron, Dissolved	1.58	0.2	0.075	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	Manganese, Dissolved	0.312	0.01	0.003	2017400	mg/L
EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-2	12/21/2020	Nickel, Dissolved	0.098	0.006	0.003	372000	mg/L
EP-2	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-2	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-2	12/21/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
EP-2	12/21/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
EP-2	12/21/2020	Barium, Total	0.0333	0.01	0.003	2000000	mg/L
EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-2	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-2	12/21/2020	Manganese, Total	0.0657	0.01	0.003	2017000	mg/L
EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-2	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-2	12/21/2020	Iron, Total	0.366	0.2	0.075	13822000	mg/L
EP-2	12/21/2020	Nickel, Total	0.0166	0.006	0.003	372000	mg/L
EP-2	12/21/2020	Arsenic, Total Recoverable	5.37	1	0.286	10	ug/L
EP-2	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-2	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-2	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-2	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-2	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-2	12/21/2020	Arsenic, Dissolved	5.09	1	0.286	10	ug/L
EP-2	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-2	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-2	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-2	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-2	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-2	9/16/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
EP-2	9/16/2020	Arsenic, Dissolved	0.0062	0.005	0.001	10000	mg/L
EP-2	9/16/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
EP-2	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
EP-2	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-2	9/16/2020	Uranium, Dissolved	0.00073	0.0025	0.00033	NA	mg/L
EP-2	9/16/2020	Aluminum, Dissolved	0.3	0.02	0.0056	19913930	mg/L
EP-2	9/16/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-2	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-2	9/16/2020	Boron, Dissolved	0.43	0.04	0.0067	3949110	mg/L
EP-2	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-2	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
EP-2	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-2	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-2	9/16/2020	Magnesium, Dissolved	88	1	0.067	NA	mg/L
EP-2	9/16/2020	Manganese, Dissolved	0.11	0.002	0.00058	2017400	mg/L
EP-2	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-2	9/16/2020	Nickel, Dissolved	0.051	0.01	0.0033	372000	mg/L
EP-2	9/16/2020	Silver, Dissolved	0.0028	0.005	0.0013	81200	mg/L
EP-2	9/16/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
EP-2	9/16/2020	Calcium, Dissolved	150	5	0.57	NA	mg/L
EP-2	9/16/2020	Potassium, Dissolved	200	5	0.8	NA	mg/L
EP-2	9/16/2020	Iron, Dissolved	1.9	1	0.52	13821880	mg/L
EP-2	9/16/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
EP-2	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-2	9/16/2020	Arsenic, Total	0.0064	0.001	0.00026	10000	mg/L
EP-2	9/16/2020	Selenium, Total	0.0027	0.001	0.00066	50000	mg/L
EP-2	9/16/2020	Aluminum, Total	0.36	0.02	0.0074	19914000	mg/L
EP-2	9/16/2020	Barium, Total	0.22	0.003	0.0016	2000000	mg/L
EP-2	9/16/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-2	9/16/2020	Boron, Total	0.45	0.04	0.0074	3949	mg/L
EP-2	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	9/16/2020	Chromium, Total	0.0034	0.006	0.0021	50000	mg/L
EP-2	9/16/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-2	9/16/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	9/16/2020	Manganese, Total	0.12	0.002	0.00081	2017000	mg/L
EP-2	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-2	9/16/2020	Silver, Total	0.0028	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/16/2020	Zinc, Total	0.017	0.01	0.0064	5960000	mg/L
EP-2	9/16/2020	Iron, Total	2.3	0.25	0.064	13822000	mg/L
EP-2	9/16/2020	Antimony, Total	0.00075	0.001	0.0007	6000	mg/L
EP-2	9/16/2020	Lead, Total	0.00029	0.0005	0.000034	15000	mg/L
EP-2	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-2	9/16/2020	Uranium, Total	0.00091	0.0005	0.000065	30000	mg/L
EP-2	9/16/2020	Nickel, Total	0.056	0.01	0.0033	372000	mg/L
EP-2	4/30/2019	Aluminum, Total	0.17	0.02	0.002488	19914000	mg/L
EP-2	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-2	4/30/2019	Arsenic, Total	0.0068	0.005	0.001561	10000	mg/L
EP-2	4/30/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
EP-2	4/30/2019	Beryllium, Total	0.00041	0.002	0.000284	4000	mg/L
EP-2	4/30/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
EP-2	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-2	4/30/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
EP-2	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-2	4/30/2019	Copper, Total	0.0057	0.006	0.004072	790000	mg/L
EP-2	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-2	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-2	4/30/2019	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
EP-2	4/30/2019	Mercury, Total	0.000088	0.0002	0.000038	2000	mg/L
EP-2	4/30/2019	Molybdenum, Total	0.0084	0.008	0.006735	98700	mg/L
EP-2	4/30/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
EP-2	4/30/2019	Selenium, Total	0.0082	0.005	0.00239	50000	mg/L
EP-2	4/30/2019	Silver, Total	0.0047	0.005	0.001418	50000	mg/L
EP-2	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-2	4/30/2019	Uranium, Total	0.0021	0.0025	0.000424	30000	mg/L
EP-2	4/30/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
EP-2	4/30/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-2	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-2	4/30/2019	Arsenic, Dissolved	0.0047	0.005	0.000504	10000	mg/L
EP-2	4/30/2019	Barium, Dissolved	0.25	0.002	0.000648	2000000	mg/L
EP-2	4/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
EP-2	4/30/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
EP-2	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-2	4/30/2019	Calcium, Dissolved	210	5	0.309446	NA	mg/L
EP-2	4/30/2019	Chromium, Dissolved	0.0018	0.006	0.001533	100000	mg/L
EP-2	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-2	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-2	4/30/2019	Iron, Dissolved	0.3	0.02	0.008747	13821880	mg/L
EP-2	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-2	4/30/2019	Magnesium, Dissolved	56	1	0.05029	NA	mg/L
EP-2	4/30/2019	Manganese, Dissolved	0.27	0.002	0.00029	2017400	mg/L
EP-2	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-2	4/30/2019	Nickel, Dissolved	0.0092	0.01	0.004009	372000	mg/L
EP-2	4/30/2019	Potassium, Dissolved	190	5	0.811441	NA	mg/L
EP-2	4/30/2019	Selenium, Dissolved	0.0049	0.005	0.000857	50000	mg/L
EP-2	4/30/2019	Silver, Dissolved	0.0036	0.005	0.000942	81200	mg/L
EP-2	4/30/2019	Sodium, Dissolved	1100	20	8.323526	NA	mg/L
EP-2	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-2	4/30/2019	Uranium, Dissolved	0.0014	0.0025	0.000374	NA	mg/L
EP-2	4/30/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
EP-2	11/21/2019	Aluminum, Dissolved	0.13	0.02	0.002488	19913930	mg/L
EP-2	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-2	11/21/2019	Arsenic, Dissolved	0.0079	0.005	0.000504	10000	mg/L
EP-2	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
EP-2	11/21/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
EP-2	11/21/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
EP-2	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-2	11/21/2019	Calcium, Dissolved	100	10	0.618891	NA	mg/L
EP-2	11/21/2019	Chromium, Dissolved	0.0089	0.006	0.001533	100000	mg/L
EP-2	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-2	11/21/2019	Copper, Dissolved	0.004	0.006	0.001296	790000	mg/L
EP-2	11/21/2019	Iron, Dissolved	2.7	0.2	0.087469	13821880	mg/L
EP-2	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-2	11/21/2019	Magnesium, Dissolved	25	1	0.05029	NA	mg/L
EP-2	11/21/2019	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
EP-2	11/21/2019	Molybdenum, Dissolved	0.062	0.008	0.006735	98700	mg/L
EP-2	11/21/2019	Nickel, Dissolved	0.015	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	Potassium, Dissolved	42	1	0.162288	NA	mg/L
EP-2	11/21/2019	Selenium, Dissolved	0.0063	0.005	0.000857	50000	mg/L
EP-2	11/21/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
EP-2	11/21/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L
EP-2	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-2	11/21/2019	Uranium, Dissolved	0.00065	0.0025	0.000374	NA	mg/L
EP-2	11/21/2019	Zinc, Dissolved	0.064	0.01	0.002252	5960450	mg/L
EP-2	11/21/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
EP-2	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-2	11/21/2019	Arsenic, Total	0.0094	0.005	0.001561	10000	mg/L
EP-2	11/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
EP-2	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-2	11/21/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
EP-2	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-2	11/21/2019	Chromium, Total	0.0083	0.006	0.001533	50000	mg/L
EP-2	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-2	11/21/2019	Copper, Total	0.01	0.006	0.004072	790000	mg/L
EP-2	11/21/2019	Iron, Total	2.9	0.1	0.043734	13822000	mg/L
EP-2	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-2	11/21/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
EP-2	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-2	11/21/2019	Molybdenum, Total	0.071	0.008	0.006735	98700	mg/L
EP-2	11/21/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
EP-2	11/21/2019	Selenium, Total	0.0032	0.005	0.00239	50000	mg/L
EP-2	11/21/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
EP-2	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-2	11/21/2019	Uranium, Total	0.0016	0.0025	0.000424	30000	mg/L
EP-2	11/21/2019	Zinc, Total	0.037	0.01	0.005772	5960000	mg/L
EP-2	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-2	5/29/2012	Arsenic, Total	0.011	0.005	0.00055	10000	mg/L
EP-2	5/29/2012	Barium, Total	0.06	0.002	0.00031	2000000	mg/L
EP-2	5/29/2012	Calcium, Total	200	10	0.26	NA	mg/L
EP-2	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-2	5/29/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
EP-2	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-2	5/29/2012	Iron, Total	0.46	0.02	0.0019	13822000	mg/L
EP-2	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-2	5/29/2012	Potassium, Total	150	10	4.8	NA	mg/L
EP-2	5/29/2012	Magnesium, Total	73	1	0.013	NA	mg/L
EP-2	5/29/2012	Manganese, Total	0.15	0.002	0.00062	2017000	mg/L
EP-2	5/29/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-2	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-2	5/29/2012	Selenium, Total	0.011	0.005	0.0016	50000	mg/L
EP-2	5/29/2012	Uranium, Total	ND	0.005	0.0003	30000	mg/L
EP-2	5/29/2012	Zinc, Total	0.024	0.01	0.00062	5960000	mg/L
EP-2	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-2	11/6/2012	Arsenic, Total	0.0093	0.0025	0.0014	10000	mg/L
EP-2	11/6/2012	Barium, Total	0.037	0.002	0.00039	2000000	mg/L
EP-2	11/6/2012	Calcium, Total	38	1	0.026	NA	mg/L
EP-2	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-2	11/6/2012	Chromium, Total	0.014	0.006	0.001	50000	mg/L
EP-2	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-2	11/6/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
EP-2	11/6/2012	Mercury, Total	0.00033	0.0002	0.000025	2000	mg/L
EP-2	11/6/2012	Potassium, Total	31	1	0.48	NA	mg/L
EP-2	11/6/2012	Magnesium, Total	14	1	0.013	NA	mg/L
EP-2	11/6/2012	Manganese, Total	0.37	0.002	0.00026	2017000	mg/L
EP-2	11/6/2012	Sodium, Total	830	10	0.45	NA	mg/L
EP-2	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-2	11/6/2012	Selenium, Total	0.0053	0.0025	0.0025	50000	mg/L
EP-2	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-2	11/6/2012	Zinc, Total	0.025	0.01	0.0011	5960000	mg/L
EP-2	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-2	5/28/2013	Arsenic, Total	0.012	0.01	0.0013	10000	mg/L
EP-2	5/28/2013	Barium, Total	0.059	0.01	0.0048	2000000	mg/L
EP-2	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-2	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-2	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-2	5/28/2013	Iron, Total	3.2	0.1	0.045	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-2	5/28/2013	Manganese, Total	0.48	0.01	0.00082	2017000	mg/L
EP-2	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-2	5/28/2013	Selenium, Total	0.024	0.01	0.0055	50000	mg/L
EP-2	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-2	5/28/2013	Zinc, Total	0.092	0.05	0.0038	5960000	mg/L
EP-2	10/15/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
EP-2	10/15/2013	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
EP-2	10/15/2013	Barium, Total	0.085	0.002	0.00095	2000000	mg/L
EP-2	10/15/2013	Calcium, Total	89	1	0.069	NA	mg/L
EP-2	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-2	10/15/2013	Chromium, Total	0.0071	0.006	0.00084	50000	mg/L
EP-2	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	10/15/2013	Iron, Total	0.27	0.02	0.0089	13822000	mg/L
EP-2	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-2	10/15/2013	Potassium, Total	130	5	1.5	NA	mg/L
EP-2	10/15/2013	Magnesium, Total	30	1	0.051	NA	mg/L
EP-2	10/15/2013	Manganese, Total	0.19	0.002	0.00016	2017000	mg/L
EP-2	10/15/2013	Sodium, Total	1200	20	7.1	NA	mg/L
EP-2	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-2	10/15/2013	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
EP-2	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-2	10/15/2013	Zinc, Total	0.017	0.01	0.00076	5960000	mg/L
EP-2	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-2	3/5/2014	Arsenic, Total	0.012	0.01	0.0036	10000	mg/L
EP-2	3/5/2014	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
EP-2	3/5/2014	Calcium, Total	140	5	0.41	NA	mg/L
EP-2	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-2	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-2	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-2	3/5/2014	Iron, Total	1.2	0.1	0.036	13822000	mg/L
EP-2	3/5/2014	Mercury, Total	ND	0.001	0.00044	2000	mg/L
EP-2	3/5/2014	Potassium, Total	150	5	0.47	NA	mg/L
EP-2	3/5/2014	Magnesium, Total	36	1	0.018	NA	mg/L
EP-2	3/5/2014	Manganese, Total	0.36	0.002	0.00049	2017000	mg/L
EP-2	3/5/2014	Sodium, Total	1500	50	20	NA	mg/L
EP-2	3/5/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
EP-2	3/5/2014	Selenium, Total	0.023	0.01	0.0051	50000	mg/L
EP-2	3/5/2014	Uranium, Total	0.0051	0.001	0.00018	30000	mg/L
EP-2	3/5/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
EP-2	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-2	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-2	11/12/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
EP-2	11/12/2014	Calcium, Total	230	5	0.41	NA	mg/L
EP-2	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-2	11/12/2014	Chromium, Total	0.012	0.006	0.0028	50000	mg/L
EP-2	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-2	11/12/2014	Iron, Total	2.8	0.1	0.036	13822000	mg/L
EP-2	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-2	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-2	11/12/2014	Magnesium, Total	54	1	0.018	NA	mg/L
EP-2	11/12/2014	Manganese, Total	0.24	0.002	0.00049	2017000	mg/L
EP-2	11/12/2014	Sodium, Total	1700	20	7.8	NA	mg/L
EP-2	11/12/2014	Lead, Total	0.002	0.001	0.00026	15000	mg/L
EP-2	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-2	11/12/2014	Uranium, Total	0.0071	0.001	0.0000072	30000	mg/L
EP-2	11/12/2014	Zinc, Total	0.025	0.01	0.0035	5960000	mg/L
EP-2	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-2	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-2	3/24/2015	Barium, Total	0.14	0.002	0.00073	2000000	mg/L
EP-2	3/24/2015	Calcium, Total	190	5	0.28	NA	mg/L
EP-2	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-2	3/24/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-2	3/24/2015	Copper, Total	0.0073	0.006	0.0051	790000	mg/L
EP-2	3/24/2015	Iron, Total	4.4	0.2	0.072	13822000	mg/L
EP-2	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-2	3/24/2015	Potassium, Total	64	1	0.18	NA	mg/L
EP-2	3/24/2015	Magnesium, Total	45	1	0.039	NA	mg/L
EP-2	3/24/2015	Manganese, Total	0.42	0.002	0.0015	2017000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/24/2015	Sodium, Total	1400	50	3.6	NA	mg/L
EP-2	3/24/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-2	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-2	3/24/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-2	3/24/2015	Zinc, Total	0.089	0.01	0.0036	5960000	mg/L
EP-2	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-2	9/1/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
EP-2	9/1/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
EP-2	9/1/2015	Calcium, Total	180	5	0.28	NA	mg/L
EP-2	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-2	9/1/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
EP-2	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-2	9/1/2015	Iron, Total	0.58	0.02	0.0072	13822000	mg/L
EP-2	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-2	9/1/2015	Potassium, Total	86	1	0.18	NA	mg/L
EP-2	9/1/2015	Magnesium, Total	58	1	0.039	NA	mg/L
EP-2	9/1/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
EP-2	9/1/2015	Sodium, Total	2000	50	3.6	NA	mg/L
EP-2	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-2	9/1/2015	Selenium, Total	0.013	0.005	0.00062	50000	mg/L
EP-2	9/1/2015	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
EP-2	9/1/2015	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
EP-2	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-2	8/29/2016	Arsenic, Total	0.014	0.05	0.0069	10000	mg/L
EP-2	8/29/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
EP-2	8/29/2016	Calcium, Total	280	5	2.5	NA	mg/L
EP-2	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	8/29/2016	Chromium, Total	0.012	0.006	0.0027	50000	mg/L
EP-2	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-2	8/29/2016	Iron, Total	3.5	0.1	0.1	13822000	mg/L
EP-2	8/29/2016	Mercury, Total	0.000069	0.0002	0.000053	2000	mg/L
EP-2	8/29/2016	Potassium, Total	88	5	2.5	NA	mg/L
EP-2	8/29/2016	Magnesium, Total	79	5	2.5	NA	mg/L
EP-2	8/29/2016	Manganese, Total	0.43	0.002	0.00027	2017000	mg/L
EP-2	8/29/2016	Sodium, Total	2200	50	25	NA	mg/L
EP-2	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-2	8/29/2016	Selenium, Total	0.03	0.05	0.011	50000	mg/L
EP-2	8/29/2016	Uranium, Total	0.0015	0.0025	0.00026	30000	mg/L
EP-2	8/29/2016	Zinc, Total	0.038	0.01	0.0027	5960000	mg/L
EP-2	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-2	3/30/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
EP-2	3/30/2017	Barium, Total	0.24	0.002	0.00079	2000000	mg/L
EP-2	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	3/30/2017	Chromium, Total	0.0075	0.006	0.0027	50000	mg/L
EP-2	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-2	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-2	3/30/2017	Arsenic, Dissolved	0.015	0.005	0.00089	10000	mg/L
EP-2	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-2	3/30/2017	Calcium, Dissolved	310	10	5	NA	mg/L
EP-2	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	3/30/2017	Chromium, Dissolved	0.013	0.006	0.001	100000	mg/L
EP-2	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	3/30/2017	Iron, Dissolved	1.1	0.2	0.2	13821880	mg/L
EP-2	3/30/2017	Potassium, Dissolved	260	10	5	NA	mg/L
EP-2	3/30/2017	Magnesium, Dissolved	85	1	0.5	NA	mg/L
EP-2	3/30/2017	Manganese, Dissolved	0.34	0.002	0.00038	2017400	mg/L
EP-2	3/30/2017	Sodium, Dissolved	2500	100	50	NA	mg/L
EP-2	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-2	3/30/2017	Selenium, Dissolved	0.026	0.005	0.0019	50000	mg/L
EP-2	3/30/2017	Uranium, Dissolved	0.0013	0.0025	0.00025	NA	mg/L
EP-2	3/30/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
EP-2	3/30/2017	Iron, Total	1.4	0.2	0.2	13822000	mg/L
EP-2	3/30/2017	Mercury, Total	0.00014	0.0002	0.000037	2000	mg/L
EP-2	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-2	3/30/2017	Lead, Total	0.00087	0.0025	0.00041	15000	mg/L
EP-2	3/30/2017	Selenium, Total	0.032	0.005	0.00094	50000	mg/L
EP-2	3/30/2017	Uranium, Total	0.0017	0.0025	0.00087	30000	mg/L
EP-2	3/30/2017	Zinc, Total	0.024	0.01	0.0027	5960000	mg/L
EP-2	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	Arsenic, Total	0.012	0.005	0.0021	10000	mg/L
EP-2	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-2	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	10/24/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
EP-2	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-2	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-2	10/24/2017	Arsenic, Dissolved	0.0093	0.005	0.0014	10000	mg/L
EP-2	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-2	10/24/2017	Calcium, Dissolved	250	10	0.78	NA	mg/L
EP-2	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	10/24/2017	Chromium, Dissolved	0.0054	0.006	0.0013	100000	mg/L
EP-2	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	10/24/2017	Iron, Dissolved	0.64	0.02	0.016	13821880	mg/L
EP-2	10/24/2017	Potassium, Dissolved	400	10	1.1	NA	mg/L
EP-2	10/24/2017	Magnesium, Dissolved	90	1	0.25	NA	mg/L
EP-2	10/24/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
EP-2	10/24/2017	Sodium, Dissolved	2600	50	8.2	NA	mg/L
EP-2	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-2	10/24/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
EP-2	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-2	10/24/2017	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
EP-2	10/24/2017	Iron, Total	0.89	0.02	0.01	13822000	mg/L
EP-2	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-2	10/24/2017	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
EP-2	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	10/24/2017	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
EP-2	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-2	10/24/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
EP-2	2/21/2018	Silver, Total	0.0094	0.005	0.0012	50000	mg/L
EP-2	2/21/2018	Arsenic, Total	0.0087	0.005	0.0021	10000	mg/L
EP-2	2/21/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-2	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	2/21/2018	Chromium, Total	0.0027	0.006	0.0018	50000	mg/L
EP-2	2/21/2018	Copper, Total	0.0093	0.006	0.0041	790000	mg/L
EP-2	2/21/2018	Silver, Dissolved	0.0037	0.005	0.0018	81200	mg/L
EP-2	2/21/2018	Arsenic, Dissolved	0.0064	0.005	0.0021	10000	mg/L
EP-2	2/21/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
EP-2	2/21/2018	Calcium, Dissolved	260	5	0.39	NA	mg/L
EP-2	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-2	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	2/21/2018	Iron, Dissolved	0.47	0.02	0.016	13821880	mg/L
EP-2	2/21/2018	Potassium, Dissolved	380	5	0.56	NA	mg/L
EP-2	2/21/2018	Magnesium, Dissolved	83	1	0.25	NA	mg/L
EP-2	2/21/2018	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
EP-2	2/21/2018	Sodium, Dissolved	1700	50	8.2	NA	mg/L
EP-2	2/21/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
EP-2	2/21/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
EP-2	2/21/2018	Uranium, Dissolved	0.00048	0.0005	0.000096	NA	mg/L
EP-2	2/21/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
EP-2	2/21/2018	Iron, Total	0.94	0.02	0.01	13822000	mg/L
EP-2	2/21/2018	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
EP-2	2/21/2018	Manganese, Total	0.17	0.002	0.0011	2017000	mg/L
EP-2	2/21/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	2/21/2018	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
EP-2	2/21/2018	Uranium, Total	0.00071	0.0025	0.00034	30000	mg/L
EP-2	2/21/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
EP-2	9/6/2018	Silver, Total	0.0065	0.005	0.0012	50000	mg/L
EP-2	9/6/2018	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
EP-2	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-2	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	9/6/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
EP-2	9/6/2018	Copper, Total	0.01	0.006	0.0041	790000	mg/L
EP-2	9/6/2018	Silver, Dissolved	0.0068	0.005	0.0018	81200	mg/L
EP-2	9/6/2018	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
EP-2	9/6/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-2	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-2	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	9/6/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	9/6/2018	Iron, Dissolved	0.095	0.02	0.016	13821880	mg/L
EP-2	9/6/2018	Potassium, Dissolved	240	10	1.1	NA	mg/L
EP-2	9/6/2018	Magnesium, Dissolved	82	1	0.25	NA	mg/L
EP-2	9/6/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-2	9/6/2018	Sodium, Dissolved	1200	50	8.2	NA	mg/L
EP-2	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-2	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-2	9/6/2018	Uranium, Dissolved	0.0013	0.0025	0.00048	NA	mg/L
EP-2	9/6/2018	Zinc, Dissolved	0.0066	0.01	0.0021	5960450	mg/L
EP-2	9/6/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
EP-2	9/6/2018	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
EP-2	9/6/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
EP-2	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	9/6/2018	Selenium, Total	0.0057	0.005	0.0049	50000	mg/L
EP-2	9/6/2018	Uranium, Total	0.0015	0.0025	0.00034	30000	mg/L
EP-2	9/6/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
EP-3	11/20/2019	Aluminum, Dissolved	0.13	0.2	0.024883	19913930	mg/L
EP-3	11/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	11/20/2019	Arsenic, Dissolved	0.0057	0.005	0.000504	10000	mg/L
EP-3	11/20/2019	Barium, Dissolved	0.15	0.02	0.006484	2000000	mg/L
EP-3	11/20/2019	Beryllium, Dissolved	ND	0.02	0.002838	4000	mg/L
EP-3	11/20/2019	Boron, Dissolved	0.45	0.4	0.045305	3949110	mg/L
EP-3	11/20/2019	Cadmium, Dissolved	ND	0.02	0.005523	5000	mg/L
EP-3	11/20/2019	Calcium, Dissolved	97	10	0.618891	NA	mg/L
EP-3	11/20/2019	Chromium, Dissolved	ND	0.06	0.015332	100000	mg/L
EP-3	11/20/2019	Cobalt, Dissolved	ND	0.06	0.030913	5980	mg/L
EP-3	11/20/2019	Copper, Dissolved	ND	0.06	0.012962	790000	mg/L
EP-3	11/20/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
EP-3	11/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	11/20/2019	Magnesium, Dissolved	34	10	0.502904	NA	mg/L
EP-3	11/20/2019	Manganese, Dissolved	0.35	0.02	0.002899	2017400	mg/L
EP-3	11/20/2019	Molybdenum, Dissolved	ND	0.08	0.067349	98700	mg/L
EP-3	11/20/2019	Nickel, Dissolved	0.042	0.1	0.040087	372000	mg/L
EP-3	11/20/2019	Potassium, Dissolved	210	10	1.622881	NA	mg/L
EP-3	11/20/2019	Selenium, Dissolved	0.0061	0.005	0.000857	50000	mg/L
EP-3	11/20/2019	Silver, Dissolved	ND	0.05	0.009424	81200	mg/L
EP-3	11/20/2019	Sodium, Dissolved	860	10	4.161763	NA	mg/L
EP-3	11/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-3	11/20/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
EP-3	11/20/2019	Zinc, Dissolved	0.055	0.1	0.02252	5960450	mg/L
EP-3	11/20/2019	Aluminum, Total	0.25	0.02	0.002488	19914000	mg/L
EP-3	11/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	11/20/2019	Arsenic, Total	0.0092	0.01	0.003122	10000	mg/L
EP-3	11/20/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
EP-3	11/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-3	11/20/2019	Boron, Total	0.47	0.04	0.004531	3949	mg/L
EP-3	11/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-3	11/20/2019	Chromium, Total	0.014	0.006	0.001533	50000	mg/L
EP-3	11/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	11/20/2019	Copper, Total	0.0075	0.006	0.004072	790000	mg/L
EP-3	11/20/2019	Iron, Total	9.6	0.2	0.087469	13822000	mg/L
EP-3	11/20/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-3	11/20/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
EP-3	11/20/2019	Mercury, Total	0.00022	0.0002	0.000121	2000	mg/L
EP-3	11/20/2019	Molybdenum, Total	0.063	0.008	0.006735	98700	mg/L
EP-3	11/20/2019	Nickel, Total	0.057	0.01	0.004009	372000	mg/L
EP-3	11/20/2019	Selenium, Total	0.0055	0.01	0.00478	50000	mg/L
EP-3	11/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
EP-3	11/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	11/20/2019	Uranium, Total	0.0029	0.0025	0.000424	30000	mg/L
EP-3	11/20/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
EP-3	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Total	0.0087	0.005	0.001561	10000	mg/L
EP-3	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
EP-3	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
EP-3	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Total	0.0056	0.006	0.004072	790000	mg/L
EP-3	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-3	4/30/2019	Lead, Total	0.00075	0.0025	0.000274	15000	mg/L
EP-3	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
EP-3	4/30/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
EP-3	4/30/2019	Molybdenum, Total	0.0075	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Selenium, Total	0.0087	0.005	0.00239	50000	mg/L
EP-3	4/30/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
EP-3	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	4/30/2019	Uranium, Total	0.002	0.0025	0.000424	30000	mg/L
EP-3	4/30/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Dissolved	0.086	0.02	0.002488	19913930	mg/L
EP-3	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Dissolved	0.0066	0.005	0.000504	10000	mg/L
EP-3	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
EP-3	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-3	4/30/2019	Calcium, Dissolved	260	10	0.618891	NA	mg/L
EP-3	4/30/2019	Chromium, Dissolved	0.0016	0.006	0.001533	100000	mg/L
EP-3	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
EP-3	4/30/2019	Iron, Dissolved	0.33	0.02	0.008747	13821880	mg/L
EP-3	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	4/30/2019	Magnesium, Dissolved	68	1	0.05029	NA	mg/L
EP-3	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-3	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Potassium, Dissolved	230	10	1.622881	NA	mg/L
EP-3	4/30/2019	Selenium, Dissolved	0.0085	0.005	0.000857	50000	mg/L
EP-3	4/30/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
EP-3	4/30/2019	Sodium, Dissolved	1400	20	8.323526	NA	mg/L
EP-3	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-3	4/30/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
EP-3	4/30/2019	Zinc, Dissolved	0.045	0.01	0.002252	5960450	mg/L
EP-3	9/16/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
EP-3	9/16/2020	Arsenic, Dissolved	0.0065	0.005	0.001	10000	mg/L
EP-3	9/16/2020	Lead, Dissolved	0.0005	0.0025	0.00017	NA	mg/L
EP-3	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
EP-3	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-3	9/16/2020	Uranium, Dissolved	0.001	0.0025	0.00033	NA	mg/L
EP-3	9/16/2020	Aluminum, Dissolved	0.65	0.02	0.0056	19913930	mg/L
EP-3	9/16/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-3	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-3	9/16/2020	Boron, Dissolved	0.46	0.04	0.0067	3949110	mg/L
EP-3	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-3	9/16/2020	Chromium, Dissolved	0.0034	0.006	0.002	100000	mg/L
EP-3	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-3	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-3	9/16/2020	Magnesium, Dissolved	94	1	0.067	NA	mg/L
EP-3	9/16/2020	Manganese, Dissolved	0.16	0.002	0.00058	2017400	mg/L
EP-3	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-3	9/16/2020	Nickel, Dissolved	0.056	0.01	0.0033	372000	mg/L
EP-3	9/16/2020	Silver, Dissolved	0.0032	0.005	0.0013	81200	mg/L
EP-3	9/16/2020	Zinc, Dissolved	0.032	0.01	0.006	5960450	mg/L
EP-3	9/16/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
EP-3	9/16/2020	Iron, Dissolved	2.5	0.1	0.052	13821880	mg/L
EP-3	9/16/2020	Potassium, Dissolved	210	5	0.8	NA	mg/L
EP-3	9/16/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
EP-3	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-3	9/16/2020	Barium, Total	0.32	0.003	0.0016	2000000	mg/L
EP-3	9/16/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-3	9/16/2020	Boron, Total	0.48	0.04	0.0074	3949	mg/L
EP-3	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	9/16/2020	Chromium, Total	0.0074	0.006	0.0021	50000	mg/L
EP-3	9/16/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Copper, Total	0.0088	0.006	0.0047	790000	mg/L
EP-3	9/16/2020	Manganese, Total	0.25	0.002	0.00081	2017000	mg/L
EP-3	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-3	9/16/2020	Nickel, Total	0.061	0.01	0.0033	372000	mg/L
EP-3	9/16/2020	Silver, Total	0.0029	0.005	0.0013	50000	mg/L
EP-3	9/16/2020	Zinc, Total	0.053	0.01	0.0064	5960000	mg/L
EP-3	9/16/2020	Aluminum, Total	5.7	0.2	0.074	19914000	mg/L
EP-3	9/16/2020	Antimony, Total	0.00087	0.001	0.0007	6000	mg/L
EP-3	9/16/2020	Arsenic, Total	0.0096	0.001	0.00026	10000	mg/L
EP-3	9/16/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
EP-3	9/16/2020	Selenium, Total	0.0053	0.001	0.00066	50000	mg/L
EP-3	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-3	9/16/2020	Uranium, Total	0.0018	0.0005	0.000065	30000	mg/L
EP-3	9/16/2020	Iron, Total	14	2.5	0.64	13822000	mg/L
EP-3	12/21/2020	Arsenic, Total Recoverable	**10.1**	1	0.286	10	ug/L
EP-3	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-3	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-3	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-3	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-3	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-3	12/21/2020	Arsenic, Dissolved	10	1	0.286	10	ug/L
EP-3	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-3	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-3	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-3	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-3	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-3	12/21/2020	Aluminum, Dissolved	0.28	0.2	0.051	19913930	mg/L
EP-3	12/21/2020	Barium, Dissolved	0.154	0.01	0.003	2000000	mg/L
EP-3	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-3	12/21/2020	Boron, Dissolved	0.738	0.1	0.022	3949110	mg/L
EP-3	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-3	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-3	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-3	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-3	12/21/2020	Iron, Dissolved	2.25	0.2	0.075	13821880	mg/L
EP-3	12/21/2020	Manganese, Dissolved	0.286	0.01	0.003	2017400	mg/L
EP-3	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-3	12/21/2020	Nickel, Dissolved	0.129	0.006	0.003	372000	mg/L
EP-3	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-3	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-3	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-3	12/21/2020	Aluminum, Total	1.55	0.2	0.051	19914000	mg/L
EP-3	12/21/2020	Boron, Total	0.678	0.1	0.022	3949	mg/L
EP-3	12/21/2020	Barium, Total	0.146	0.01	0.003	2000000	mg/L
EP-3	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-3	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-3	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-3	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-3	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-3	12/21/2020	Manganese, Total	0.281	0.01	0.003	2017000	mg/L
EP-3	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-3	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-3	12/21/2020	Iron, Total	3.05	0.2	0.075	13822000	mg/L
EP-3	12/21/2020	Nickel, Total	0.124	0.006	0.003	372000	mg/L
EP-3	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-3	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-3	4/30/2019	Aluminum, Total	0.34	0.02	0.002488	19914000	mg/L
EP-3	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Total	0.0084	0.005	0.001561	10000	mg/L
EP-3	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
EP-3	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-3	4/30/2019	Chromium, Total	0.0029	0.006	0.001533	50000	mg/L
EP-3	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
EP-3	4/30/2019	Iron, Total	0.59	0.02	0.008747	13822000	mg/L
EP-3	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-3	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
EP-3	4/30/2019	Molybdenum, Total	0.0092	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Selenium, Total	0.0056	0.005	0.00239	50000	mg/L
EP-3	4/30/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
EP-3	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	4/30/2019	Uranium, Total	0.002	0.0025	0.000424	30000	mg/L
EP-3	4/30/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Dissolved	0.09	0.02	0.002488	19913930	mg/L
EP-3	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Dissolved	0.007	0.005	0.000504	10000	mg/L
EP-3	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Dissolved	0.00034	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
EP-3	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-3	4/30/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
EP-3	4/30/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
EP-3	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-3	4/30/2019	Iron, Dissolved	0.31	0.02	0.008747	13821880	mg/L
EP-3	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	4/30/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
EP-3	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-3	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Dissolved	0.0096	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Potassium, Dissolved	230	5	0.811441	NA	mg/L
EP-3	4/30/2019	Selenium, Dissolved	0.008	0.005	0.000857	50000	mg/L
EP-3	4/30/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
EP-3	4/30/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
EP-3	4/30/2019	Thallium, Dissolved	0.00035	0.0025	0.000242	2000	mg/L
EP-3	4/30/2019	Uranium, Dissolved	0.0016	0.0025	0.000374	NA	mg/L
EP-3	4/30/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
EP-3	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-3	5/29/2012	Arsenic, Total	0.014	0.01	0.0011	10000	mg/L
EP-3	5/29/2012	Barium, Total	0.076	0.002	0.00031	2000000	mg/L
EP-3	5/29/2012	Calcium, Total	410	10	0.26	NA	mg/L
EP-3	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-3	5/29/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
EP-3	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-3	5/29/2012	Iron, Total	0.22	0.02	0.0019	13822000	mg/L
EP-3	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-3	5/29/2012	Potassium, Total	190	10	4.8	NA	mg/L
EP-3	5/29/2012	Magnesium, Total	140	10	0.13	NA	mg/L
EP-3	5/29/2012	Manganese, Total	0.1	0.002	0.00062	2017000	mg/L
EP-3	5/29/2012	Sodium, Total	4700	100	4.5	NA	mg/L
EP-3	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-3	5/29/2012	Selenium, Total	0.022	0.01	0.0033	50000	mg/L
EP-3	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-3	5/29/2012	Zinc, Total	0.033	0.01	0.00062	5960000	mg/L
EP-3	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-3	11/6/2012	Arsenic, Total	0.0095	0.0025	0.0014	10000	mg/L
EP-3	11/6/2012	Barium, Total	0.039	0.002	0.00039	2000000	mg/L
EP-3	11/6/2012	Calcium, Total	140	10	0.26	NA	mg/L
EP-3	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-3	11/6/2012	Chromium, Total	0.0076	0.006	0.001	50000	mg/L
EP-3	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-3	11/6/2012	Iron, Total	1.7	0.1	0.066	13822000	mg/L
EP-3	11/6/2012	Mercury, Total	0.00044	0.0002	0.000025	2000	mg/L
EP-3	11/6/2012	Potassium, Total	89	1	0.48	NA	mg/L
EP-3	11/6/2012	Magnesium, Total	46	1	0.013	NA	mg/L
EP-3	11/6/2012	Manganese, Total	0.48	0.002	0.00026	2017000	mg/L
EP-3	11/6/2012	Sodium, Total	1800	100	4.5	NA	mg/L
EP-3	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-3	11/6/2012	Selenium, Total	0.008	0.0025	0.0025	50000	mg/L
EP-3	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-3	11/6/2012	Zinc, Total	0.031	0.01	0.0011	5960000	mg/L
EP-3	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-3	5/28/2013	Arsenic, Total	0.011	0.01	0.0013	10000	mg/L
EP-3	5/28/2013	Barium, Total	0.088	0.01	0.0048	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-3	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-3	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-3	5/28/2013	Iron, Total	0.41	0.1	0.045	13822000	mg/L
EP-3	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-3	5/28/2013	Manganese, Total	0.26	0.01	0.00082	2017000	mg/L
EP-3	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-3	5/28/2013	Selenium, Total	0.013	0.01	0.0055	50000	mg/L
EP-3	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-3	5/28/2013	Zinc, Total	0.072	0.05	0.0038	5960000	mg/L
EP-3	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-3	10/15/2013	Arsenic, Total	0.01	0.01	0.00098	10000	mg/L
EP-3	10/15/2013	Barium, Total	0.085	0.002	0.00095	2000000	mg/L
EP-3	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-3	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-3	10/15/2013	Chromium, Total	0.0073	0.006	0.00084	50000	mg/L
EP-3	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-3	10/15/2013	Iron, Total	0.2	0.02	0.0089	13822000	mg/L
EP-3	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-3	10/15/2013	Potassium, Total	250	5	1.5	NA	mg/L
EP-3	10/15/2013	Magnesium, Total	130	5	0.26	NA	mg/L
EP-3	10/15/2013	Manganese, Total	0.15	0.002	0.00016	2017000	mg/L
EP-3	10/15/2013	Sodium, Total	3400	100	36	NA	mg/L
EP-3	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-3	10/15/2013	Selenium, Total	0.015	0.01	0.0029	50000	mg/L
EP-3	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-3	10/15/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
EP-3	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-3	3/5/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
EP-3	3/5/2014	Barium, Total	0.15	0.01	0.0029	2000000	mg/L
EP-3	3/5/2014	Calcium, Total	270	5	0.41	NA	mg/L
EP-3	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-3	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-3	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-3	3/5/2014	Iron, Total	1	0.1	0.036	13822000	mg/L
EP-3	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-3	3/5/2014	Potassium, Total	170	5	0.47	NA	mg/L
EP-3	3/5/2014	Magnesium, Total	73	1	0.018	NA	mg/L
EP-3	3/5/2014	Manganese, Total	0.41	0.01	0.0024	2017000	mg/L
EP-3	3/5/2014	Sodium, Total	2400	50	20	NA	mg/L
EP-3	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-3	3/5/2014	Selenium, Total	0.019	0.01	0.0051	50000	mg/L
EP-3	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-3	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-3	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-3	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-3	11/12/2014	Barium, Total	0.1	0.002	0.0005	2000000	mg/L
EP-3	11/12/2014	Calcium, Total	370	5	0.41	NA	mg/L
EP-3	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-3	11/12/2014	Chromium, Total	0.0098	0.006	0.0028	50000	mg/L
EP-3	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-3	11/12/2014	Iron, Total	1.9	0.1	0.036	13822000	mg/L
EP-3	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-3	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-3	11/12/2014	Magnesium, Total	92	1	0.018	NA	mg/L
EP-3	11/12/2014	Manganese, Total	0.23	0.002	0.00049	2017000	mg/L
EP-3	11/12/2014	Sodium, Total	2500	50	20	NA	mg/L
EP-3	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-3	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-3	11/12/2014	Uranium, Total	ND	0.02	0.00014	30000	mg/L
EP-3	11/12/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
EP-3	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-3	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-3	3/24/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-3	3/24/2015	Calcium, Total	440	5	0.28	NA	mg/L
EP-3	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-3	3/24/2015	Chromium, Total	0.01	0.006	0.0022	50000	mg/L
EP-3	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-3	3/24/2015	Iron, Total	1.2	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-3	3/24/2015	Potassium, Total	89	1	0.18	NA	mg/L
EP-3	3/24/2015	Magnesium, Total	110	5	0.2	NA	mg/L
EP-3	3/24/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
EP-3	3/24/2015	Sodium, Total	2700	50	3.6	NA	mg/L
EP-3	3/24/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-3	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-3	3/24/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-3	3/24/2015	Zinc, Total	0.021	0.01	0.0036	5960000	mg/L
EP-3	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-3	9/1/2015	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
EP-3	9/1/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
EP-3	9/1/2015	Calcium, Total	320	5	0.28	NA	mg/L
EP-3	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-3	9/1/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-3	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-3	9/1/2015	Iron, Total	0.42	0.02	0.0072	13822000	mg/L
EP-3	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-3	9/1/2015	Potassium, Total	110	5	0.89	NA	mg/L
EP-3	9/1/2015	Magnesium, Total	120	5	0.2	NA	mg/L
EP-3	9/1/2015	Manganese, Total	0.29	0.002	0.0015	2017000	mg/L
EP-3	9/1/2015	Sodium, Total	3100	50	3.6	NA	mg/L
EP-3	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-3	9/1/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
EP-3	9/1/2015	Uranium, Total	0.0027	0.0025	0.000025	30000	mg/L
EP-3	9/1/2015	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
EP-3	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-3	8/29/2016	Arsenic, Total	0.0089	0.05	0.0069	10000	mg/L
EP-3	8/29/2016	Barium, Total	0.14	0.002	0.00079	2000000	mg/L
EP-3	8/29/2016	Calcium, Total	530	10	5	NA	mg/L
EP-3	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	8/29/2016	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
EP-3	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-3	8/29/2016	Iron, Total	2.5	0.1	0.1	13822000	mg/L
EP-3	8/29/2016	Mercury, Total	0.000067	0.0002	0.000053	2000	mg/L
EP-3	8/29/2016	Potassium, Total	110	5	2.5	NA	mg/L
EP-3	8/29/2016	Magnesium, Total	140	5	2.5	NA	mg/L
EP-3	8/29/2016	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
EP-3	8/29/2016	Sodium, Total	3200	50	25	NA	mg/L
EP-3	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-3	8/29/2016	Selenium, Total	0.032	0.05	0.011	50000	mg/L
EP-3	8/29/2016	Uranium, Total	0.0016	0.0025	0.00026	30000	mg/L
EP-3	8/29/2016	Zinc, Total	0.033	0.01	0.0027	5960000	mg/L
EP-3	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-3	3/30/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
EP-3	3/30/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
EP-3	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	3/30/2017	Chromium, Total	0.0072	0.006	0.0027	50000	mg/L
EP-3	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-3	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-3	3/30/2017	Arsenic, Dissolved	0.016	0.005	0.00089	10000	mg/L
EP-3	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-3	3/30/2017	Calcium, Dissolved	370	10	5	NA	mg/L
EP-3	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	3/30/2017	Chromium, Dissolved	0.0095	0.006	0.001	100000	mg/L
EP-3	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	3/30/2017	Iron, Dissolved	0.5	0.02	0.02	13821880	mg/L
EP-3	3/30/2017	Potassium, Dissolved	330	10	5	NA	mg/L
EP-3	3/30/2017	Magnesium, Dissolved	100	10	5	NA	mg/L
EP-3	3/30/2017	Manganese, Dissolved	0.35	0.002	0.00038	2017400	mg/L
EP-3	3/30/2017	Sodium, Dissolved	3000	100	50	NA	mg/L
EP-3	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-3	3/30/2017	Selenium, Dissolved	0.028	0.005	0.0019	50000	mg/L
EP-3	3/30/2017	Uranium, Dissolved	0.0013	0.0025	0.00025	NA	mg/L
EP-3	3/30/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
EP-3	3/30/2017	Iron, Total	0.69	0.02	0.02	13822000	mg/L
EP-3	3/30/2017	Mercury, Total	0.000079	0.0002	0.000037	2000	mg/L
EP-3	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-3	3/30/2017	Lead, Total	0.00063	0.0025	0.00041	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/30/2017	Selenium, Total	0.03	0.005	0.00094	50000	mg/L
EP-3	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-3	3/30/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
EP-3	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-3	10/24/2017	Arsenic, Total	0.012	0.005	0.0021	10000	mg/L
EP-3	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-3	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	10/24/2017	Chromium, Total	0.0057	0.006	0.0018	50000	mg/L
EP-3	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-3	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-3	10/24/2017	Arsenic, Dissolved	0.011	0.005	0.0014	10000	mg/L
EP-3	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-3	10/24/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
EP-3	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	10/24/2017	Chromium, Dissolved	0.0053	0.006	0.0013	100000	mg/L
EP-3	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	10/24/2017	Iron, Dissolved	0.64	0.02	0.016	13821880	mg/L
EP-3	10/24/2017	Potassium, Dissolved	430	10	1.1	NA	mg/L
EP-3	10/24/2017	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-3	10/24/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
EP-3	10/24/2017	Sodium, Dissolved	3000	50	8.2	NA	mg/L
EP-3	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-3	10/24/2017	Selenium, Dissolved	0.011	0.005	0.0038	50000	mg/L
EP-3	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-3	10/24/2017	Zinc, Dissolved	0.024	0.01	0.0021	5960450	mg/L
EP-3	10/24/2017	Iron, Total	0.98	0.02	0.01	13822000	mg/L
EP-3	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-3	10/24/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
EP-3	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-3	10/24/2017	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
EP-3	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-3	10/24/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
EP-3	2/21/2018	Silver, Total	0.013	0.005	0.0012	50000	mg/L
EP-3	2/21/2018	Arsenic, Total	0.0077	0.005	0.0021	10000	mg/L
EP-3	2/21/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
EP-3	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	2/21/2018	Chromium, Total	0.0058	0.006	0.0018	50000	mg/L
EP-3	2/21/2018	Copper, Total	0.0086	0.006	0.0041	790000	mg/L
EP-3	2/21/2018	Silver, Dissolved	0.0054	0.005	0.0018	81200	mg/L
EP-3	2/21/2018	Arsenic, Dissolved	0.0068	0.005	0.0021	10000	mg/L
EP-3	2/21/2018	Barium, Dissolved	0.19	0.002	0.00099	2000000	mg/L
EP-3	2/21/2018	Calcium, Dissolved	410	5	0.39	NA	mg/L
EP-3	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-3	2/21/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
EP-3	2/21/2018	Iron, Dissolved	0.44	0.02	0.016	13821880	mg/L
EP-3	2/21/2018	Potassium, Dissolved	290	10	1.1	NA	mg/L
EP-3	2/21/2018	Magnesium, Dissolved	110	10	2.5	NA	mg/L
EP-3	2/21/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-3	2/21/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
EP-3	2/21/2018	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
EP-3	2/21/2018	Selenium, Dissolved	0.0081	0.005	0.0038	50000	mg/L
EP-3	2/21/2018	Uranium, Dissolved	0.00066	0.0005	0.000096	NA	mg/L
EP-3	2/21/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
EP-3	2/21/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
EP-3	2/21/2018	Mercury, Total	0.00013	0.0002	0.000037	2000	mg/L
EP-3	2/21/2018	Manganese, Total	0.28	0.002	0.0011	2017000	mg/L
EP-3	2/21/2018	Lead, Total	0.0023	0.0025	0.0011	15000	mg/L
EP-3	2/21/2018	Selenium, Total	0.0094	0.005	0.0049	50000	mg/L
EP-3	2/21/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-3	2/21/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
EP-3	9/6/2018	Silver, Total	0.0069	0.005	0.0012	50000	mg/L
EP-3	9/6/2018	Arsenic, Total	0.013	0.005	0.0021	10000	mg/L
EP-3	9/6/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
EP-3	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	9/6/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
EP-3	9/6/2018	Copper, Total	0.0075	0.006	0.0041	790000	mg/L
EP-3	9/6/2018	Silver, Dissolved	0.0071	0.005	0.0018	81200	mg/L
EP-3	9/6/2018	Arsenic, Dissolved	0.01	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/6/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-3	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-3	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	9/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-3	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	9/6/2018	Iron, Dissolved	0.083	0.02	0.016	13821880	mg/L
EP-3	9/6/2018	Potassium, Dissolved	300	10	1.1	NA	mg/L
EP-3	9/6/2018	Magnesium, Dissolved	91	1	0.25	NA	mg/L
EP-3	9/6/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-3	9/6/2018	Sodium, Dissolved	1400	20	3.3	NA	mg/L
EP-3	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-3	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-3	9/6/2018	Uranium, Dissolved	0.0011	0.0025	0.00048	NA	mg/L
EP-3	9/6/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
EP-3	9/6/2018	Iron, Total	0.18	0.02	0.01	13822000	mg/L
EP-3	9/6/2018	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
EP-3	9/6/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
EP-3	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-3	9/6/2018	Selenium, Total	0.006	0.005	0.0049	50000	mg/L
EP-3	9/6/2018	Uranium, Total	0.0013	0.0025	0.00034	30000	mg/L
EP-3	9/6/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
EP-4	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-4	9/17/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
EP-4	9/17/2020	Barium, Total	0.27	0.015	0.0082	2000000	mg/L
EP-4	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-4	9/17/2020	Boron, Total	1.2	0.2	0.037	3949	mg/L
EP-4	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-4	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-4	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-4	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-4	9/17/2020	Iron, Total	0.12	0.25	0.064	13822000	mg/L
EP-4	9/17/2020	Manganese, Total	1.3	0.01	0.0041	2017000	mg/L
EP-4	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-4	9/17/2020	Nickel, Total	0.05	0.05	0.016	372000	mg/L
EP-4	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-4	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-4	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-4	9/17/2020	Arsenic, Total	0.036	0.01	0.0026	10000	mg/L
EP-4	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-4	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-4	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-4	9/17/2020	Uranium, Total	0.0017	0.005	0.00065	30000	mg/L
EP-4	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-4	9/17/2020	Arsenic, Dissolved	0.03	0.05	0.01	10000	mg/L
EP-4	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-4	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-4	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-4	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-4	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-4	9/17/2020	Barium, Dissolved	0.25	0.002	0.0011	2000000	mg/L
EP-4	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-4	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-4	9/17/2020	Copper, Dissolved	0.0045	0.006	0.0035	790000	mg/L
EP-4	9/17/2020	Iron, Dissolved	0.074	0.02	0.01	13821880	mg/L
EP-4	9/17/2020	Nickel, Dissolved	0.048	0.01	0.0033	372000	mg/L
EP-4	9/17/2020	Silver, Dissolved	0.01	0.005	0.0013	81200	mg/L
EP-4	9/17/2020	Boron, Dissolved	1.2	0.2	0.033	3949110	mg/L
EP-4	9/17/2020	Magnesium, Dissolved	260	5	0.34	NA	mg/L
EP-4	9/17/2020	Manganese, Dissolved	1.3	0.01	0.0029	2017400	mg/L
EP-4	9/17/2020	Calcium, Dissolved	660	20	2.3	NA	mg/L
EP-4	9/17/2020	Potassium, Dissolved	680	20	3.2	NA	mg/L
EP-4	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-4	9/17/2020	Sodium, Dissolved	5500	100	14	NA	mg/L
EP-4	9/17/2020	Chromium, Dissolved	0.0063	0.006	0.002	100000	mg/L
EP-4	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-4	9/17/2020	Zinc, Dissolved	0.0065	0.01	0.006	5960450	mg/L
EP-4	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-4	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-4	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	12/21/2020	Barium, Dissolved	0.206	0.01	0.003	2000000	mg/L
EP-4	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-4	12/21/2020	Boron, Dissolved	1.02	0.1	0.022	3949110	mg/L
EP-4	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-4	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-4	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-4	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-4	12/21/2020	Iron, Dissolved	0.632	0.2	0.075	13821880	mg/L
EP-4	12/21/2020	Manganese, Dissolved	0.724	0.01	0.003	2017400	mg/L
EP-4	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-4	12/21/2020	Nickel, Dissolved	0.0996	0.006	0.003	372000	mg/L
EP-4	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-4	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-4	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-4	12/21/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
EP-4	12/21/2020	Boron, Total	1.03	0.1	0.022	3949	mg/L
EP-4	12/21/2020	Barium, Total	0.196	0.01	0.003	2000000	mg/L
EP-4	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-4	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-4	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-4	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-4	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-4	12/21/2020	Manganese, Total	0.739	0.01	0.003	2017000	mg/L
EP-4	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-4	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-4	12/21/2020	Iron, Total	0.797	0.2	0.075	13822000	mg/L
EP-4	12/21/2020	Nickel, Total	0.0915	0.006	0.003	372000	mg/L
EP-4	12/21/2020	Arsenic, Total Recoverable	**21.8**	1	0.286	10	ug/L
EP-4	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-4	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-4	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-4	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-4	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-4	12/21/2020	Arsenic, Dissolved	**20.7**	1	0.286	10	ug/L
EP-4	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-4	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-4	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-4	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-4	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-4	4/30/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
EP-4	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-4	4/30/2019	Arsenic, Total	0.0084	0.005	0.001561	10000	mg/L
EP-4	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-4	4/30/2019	Beryllium, Total	0.00051	0.002	0.000284	4000	mg/L
EP-4	4/30/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
EP-4	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-4	4/30/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
EP-4	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-4	4/30/2019	Copper, Total	0.0056	0.006	0.004072	790000	mg/L
EP-4	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-4	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-4	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
EP-4	4/30/2019	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
EP-4	4/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-4	4/30/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
EP-4	4/30/2019	Selenium, Total	0.0068	0.005	0.00239	50000	mg/L
EP-4	4/30/2019	Silver, Total	0.0056	0.005	0.001418	50000	mg/L
EP-4	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-4	4/30/2019	Uranium, Total	0.0021	0.0025	0.000424	30000	mg/L
EP-4	4/30/2019	Zinc, Total	0.0082	0.01	0.005772	5960000	mg/L
EP-4	4/30/2019	Aluminum, Dissolved	0.074	0.02	0.002488	19913930	mg/L
EP-4	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-4	4/30/2019	Arsenic, Dissolved	0.0064	0.005	0.000504	10000	mg/L
EP-4	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-4	4/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
EP-4	4/30/2019	Boron, Dissolved	0.45	0.04	0.004531	3949110	mg/L
EP-4	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-4	4/30/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
EP-4	4/30/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-4	4/30/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
EP-4	4/30/2019	Iron, Dissolved	0.31	0.02	0.008747	13821880	mg/L
EP-4	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-4	4/30/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
EP-4	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-4	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-4	4/30/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
EP-4	4/30/2019	Potassium, Dissolved	230	5	0.811441	NA	mg/L
EP-4	4/30/2019	Selenium, Dissolved	0.012	0.005	0.000857	50000	mg/L
EP-4	4/30/2019	Silver, Dissolved	0.0046	0.005	0.000942	81200	mg/L
EP-4	4/30/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
EP-4	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-4	4/30/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
EP-4	4/30/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
EP-4	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-4	5/29/2012	Arsenic, Total	0.017	0.005	0.00055	10000	mg/L
EP-4	5/29/2012	Barium, Total	0.06	0.002	0.00031	2000000	mg/L
EP-4	5/29/2012	Calcium, Total	230	10	0.26	NA	mg/L
EP-4	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-4	5/29/2012	Chromium, Total	0.0067	0.006	0.00056	50000	mg/L
EP-4	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-4	5/29/2012	Iron, Total	0.2	0.02	0.0019	13822000	mg/L
EP-4	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-4	5/29/2012	Potassium, Total	170	10	4.8	NA	mg/L
EP-4	5/29/2012	Magnesium, Total	110	10	0.13	NA	mg/L
EP-4	5/29/2012	Manganese, Total	0.061	0.002	0.00062	2017000	mg/L
EP-4	5/29/2012	Sodium, Total	3600	50	2.2	NA	mg/L
EP-4	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-4	5/29/2012	Selenium, Total	0.024	0.005	0.0016	50000	mg/L
EP-4	5/29/2012	Uranium, Total	ND	0.005	0.0003	30000	mg/L
EP-4	5/29/2012	Zinc, Total	0.036	0.01	0.00062	5960000	mg/L
EP-4	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-4	11/6/2012	Arsenic, Total	0.011	0.0025	0.0014	10000	mg/L
EP-4	11/6/2012	Barium, Total	0.061	0.002	0.00039	2000000	mg/L
EP-4	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-4	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-4	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-4	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-4	11/6/2012	Iron, Total	1.2	0.1	0.066	13822000	mg/L
EP-4	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-4	11/6/2012	Potassium, Total	220	10	4.8	NA	mg/L
EP-4	11/6/2012	Magnesium, Total	83	1	0.013	NA	mg/L
EP-4	11/6/2012	Manganese, Total	0.52	0.002	0.00026	2017000	mg/L
EP-4	11/6/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-4	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-4	11/6/2012	Selenium, Total	0.011	0.0025	0.0025	50000	mg/L
EP-4	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-4	11/6/2012	Zinc, Total	0.026	0.01	0.0011	5960000	mg/L
EP-4	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-4	5/28/2013	Arsenic, Total	0.013	0.01	0.0013	10000	mg/L
EP-4	5/28/2013	Barium, Total	0.085	0.01	0.0048	2000000	mg/L
EP-4	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-4	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-4	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-4	5/28/2013	Iron, Total	0.31	0.1	0.045	13822000	mg/L
EP-4	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-4	5/28/2013	Manganese, Total	0.19	0.01	0.00082	2017000	mg/L
EP-4	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-4	5/28/2013	Selenium, Total	0.019	0.01	0.0055	50000	mg/L
EP-4	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-4	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-4	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-4	10/15/2013	Arsenic, Total	0.012	0.01	0.00098	10000	mg/L
EP-4	10/15/2013	Barium, Total	0.084	0.002	0.00095	2000000	mg/L
EP-4	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-4	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-4	10/15/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
EP-4	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	Iron, Total	0.26	0.02	0.0089	13822000	mg/L
EP-4	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-4	10/15/2013	Potassium, Total	260	5	1.5	NA	mg/L
EP-4	10/15/2013	Magnesium, Total	140	5	0.26	NA	mg/L
EP-4	10/15/2013	Manganese, Total	0.15	0.002	0.00016	2017000	mg/L
EP-4	10/15/2013	Sodium, Total	3500	100	36	NA	mg/L
EP-4	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-4	10/15/2013	Selenium, Total	0.017	0.01	0.0029	50000	mg/L
EP-4	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-4	10/15/2013	Zinc, Total	0.013	0.01	0.00076	5960000	mg/L
EP-4	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-4	3/5/2014	Arsenic, Total	0.012	0.01	0.0036	10000	mg/L
EP-4	3/5/2014	Barium, Total	0.14	0.01	0.0029	2000000	mg/L
EP-4	3/5/2014	Calcium, Total	310	5	0.41	NA	mg/L
EP-4	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-4	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-4	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-4	3/5/2014	Iron, Total	0.99	0.1	0.036	13822000	mg/L
EP-4	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-4	3/5/2014	Potassium, Total	170	5	0.47	NA	mg/L
EP-4	3/5/2014	Magnesium, Total	84	1	0.018	NA	mg/L
EP-4	3/5/2014	Manganese, Total	0.43	0.01	0.0024	2017000	mg/L
EP-4	3/5/2014	Sodium, Total	2800	50	20	NA	mg/L
EP-4	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-4	3/5/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
EP-4	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-4	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-4	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-4	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-4	11/12/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
EP-4	11/12/2014	Calcium, Total	370	5	0.41	NA	mg/L
EP-4	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-4	11/12/2014	Chromium, Total	0.01	0.006	0.0028	50000	mg/L
EP-4	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-4	11/12/2014	Iron, Total	1.7	0.1	0.036	13822000	mg/L
EP-4	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-4	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-4	11/12/2014	Magnesium, Total	97	1	0.018	NA	mg/L
EP-4	11/12/2014	Manganese, Total	0.28	0.002	0.00049	2017000	mg/L
EP-4	11/12/2014	Sodium, Total	2600	50	20	NA	mg/L
EP-4	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-4	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-4	11/12/2014	Uranium, Total	ND	0.02	0.00014	30000	mg/L
EP-4	11/12/2014	Zinc, Total	0.023	0.01	0.0035	5960000	mg/L
EP-4	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-4	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-4	3/24/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-4	3/24/2015	Calcium, Total	400	5	0.28	NA	mg/L
EP-4	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-4	3/24/2015	Chromium, Total	0.009	0.006	0.0022	50000	mg/L
EP-4	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-4	3/24/2015	Iron, Total	0.81	0.02	0.0072	13822000	mg/L
EP-4	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-4	3/24/2015	Potassium, Total	190	5	0.89	NA	mg/L
EP-4	3/24/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-4	3/24/2015	Manganese, Total	0.44	0.002	0.0015	2017000	mg/L
EP-4	3/24/2015	Sodium, Total	5000	100	7.2	NA	mg/L
EP-4	3/24/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-4	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-4	3/24/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-4	3/24/2015	Zinc, Total	0.014	0.01	0.0036	5960000	mg/L
EP-4	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-4	9/1/2015	Arsenic, Total	0.016	0.005	0.0015	10000	mg/L
EP-4	9/1/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
EP-4	9/1/2015	Calcium, Total	320	5	0.28	NA	mg/L
EP-4	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-4	9/1/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-4	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-4	9/1/2015	Iron, Total	0.43	0.02	0.0072	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-4	9/1/2015	Potassium, Total	100	5	0.89	NA	mg/L
EP-4	9/1/2015	Magnesium, Total	120	5	0.2	NA	mg/L
EP-4	9/1/2015	Manganese, Total	0.29	0.002	0.0015	2017000	mg/L
EP-4	9/1/2015	Sodium, Total	3100	50	3.6	NA	mg/L
EP-4	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-4	9/1/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
EP-4	9/1/2015	Uranium, Total	0.0028	0.0025	0.000025	30000	mg/L
EP-4	9/1/2015	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
EP-4	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-4	8/29/2016	Arsenic, Total	0.011	0.05	0.0069	10000	mg/L
EP-4	8/29/2016	Barium, Total	0.15	0.002	0.00079	2000000	mg/L
EP-4	8/29/2016	Calcium, Total	560	10	5	NA	mg/L
EP-4	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-4	8/29/2016	Chromium, Total	0.0095	0.006	0.0027	50000	mg/L
EP-4	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-4	8/29/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
EP-4	8/29/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
EP-4	8/29/2016	Potassium, Total	130	5	2.5	NA	mg/L
EP-4	8/29/2016	Magnesium, Total	150	5	2.5	NA	mg/L
EP-4	8/29/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-4	8/29/2016	Sodium, Total	3600	50	25	NA	mg/L
EP-4	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-4	8/29/2016	Selenium, Total	0.035	0.05	0.011	50000	mg/L
EP-4	8/29/2016	Uranium, Total	0.0022	0.0025	0.00026	30000	mg/L
EP-4	8/29/2016	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
EP-4	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-4	3/30/2017	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L
EP-4	3/30/2017	Barium, Total	0.23	0.002	0.00079	2000000	mg/L
EP-4	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-4	3/30/2017	Chromium, Total	0.0063	0.006	0.0027	50000	mg/L
EP-4	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-4	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-4	3/30/2017	Arsenic, Dissolved	0.015	0.005	0.00089	10000	mg/L
EP-4	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-4	3/30/2017	Calcium, Dissolved	350	10	5	NA	mg/L
EP-4	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	3/30/2017	Chromium, Dissolved	0.009	0.006	0.001	100000	mg/L
EP-4	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	3/30/2017	Iron, Dissolved	0.61	0.02	0.02	13821880	mg/L
EP-4	3/30/2017	Potassium, Dissolved	310	10	5	NA	mg/L
EP-4	3/30/2017	Magnesium, Dissolved	99	10	5	NA	mg/L
EP-4	3/30/2017	Manganese, Dissolved	0.34	0.002	0.00038	2017400	mg/L
EP-4	3/30/2017	Sodium, Dissolved	2900	100	50	NA	mg/L
EP-4	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-4	3/30/2017	Selenium, Dissolved	0.029	0.005	0.0019	50000	mg/L
EP-4	3/30/2017	Uranium, Dissolved	0.0011	0.0025	0.00025	NA	mg/L
EP-4	3/30/2017	Zinc, Dissolved	0.035	0.01	0.0011	5960450	mg/L
EP-4	3/30/2017	Iron, Total	0.76	0.02	0.02	13822000	mg/L
EP-4	3/30/2017	Mercury, Total	0.000091	0.0002	0.000037	2000	mg/L
EP-4	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-4	3/30/2017	Lead, Total	0.00062	0.0025	0.00041	15000	mg/L
EP-4	3/30/2017	Selenium, Total	0.027	0.005	0.00094	50000	mg/L
EP-4	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-4	3/30/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
EP-4	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-4	10/24/2017	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
EP-4	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-4	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	10/24/2017	Chromium, Total	0.0055	0.006	0.0018	50000	mg/L
EP-4	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-4	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-4	10/24/2017	Arsenic, Dissolved	0.013	0.005	0.0014	10000	mg/L
EP-4	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-4	10/24/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
EP-4	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	10/24/2017	Chromium, Dissolved	0.006	0.006	0.0013	100000	mg/L
EP-4	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	10/24/2017	Iron, Dissolved	0.65	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/24/2017	Potassium, Dissolved	430	10	1.1	NA	mg/L
EP-4	10/24/2017	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-4	10/24/2017	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
EP-4	10/24/2017	Sodium, Dissolved	3000	50	8.2	NA	mg/L
EP-4	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-4	10/24/2017	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
EP-4	10/24/2017	Uranium, Dissolved	0.0005	0.0025	0.00048	NA	mg/L
EP-4	10/24/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
EP-4	10/24/2017	Iron, Total	0.96	0.02	0.01	13822000	mg/L
EP-4	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-4	10/24/2017	Manganese, Total	0.3	0.002	0.0011	2017000	mg/L
EP-4	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-4	10/24/2017	Selenium, Total	0.01	0.01	0.0098	50000	mg/L
EP-4	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-4	10/24/2017	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-4	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-4	2/21/2018	Arsenic, Total	0.0089	0.01	0.0041	10000	mg/L
EP-4	2/21/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
EP-4	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	2/21/2018	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
EP-4	2/21/2018	Copper, Total	0.007	0.006	0.0041	790000	mg/L
EP-4	2/21/2018	Silver, Dissolved	0.0072	0.005	0.0018	81200	mg/L
EP-4	2/21/2018	Arsenic, Dissolved	0.009	0.005	0.0021	10000	mg/L
EP-4	2/21/2018	Barium, Dissolved	0.22	0.002	0.00099	2000000	mg/L
EP-4	2/21/2018	Calcium, Dissolved	480	5	0.39	NA	mg/L
EP-4	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-4	2/21/2018	Copper, Dissolved	0.0032	0.006	0.0032	790000	mg/L
EP-4	2/21/2018	Iron, Dissolved	0.42	0.02	0.016	13821880	mg/L
EP-4	2/21/2018	Potassium, Dissolved	270	10	1.1	NA	mg/L
EP-4	2/21/2018	Magnesium, Dissolved	130	10	2.5	NA	mg/L
EP-4	2/21/2018	Manganese, Dissolved	0.27	0.002	0.00039	2017400	mg/L
EP-4	2/21/2018	Sodium, Dissolved	2900	50	8.2	NA	mg/L
EP-4	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-4	2/21/2018	Selenium, Dissolved	0.0093	0.005	0.0038	50000	mg/L
EP-4	2/21/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
EP-4	2/21/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
EP-4	2/21/2018	Iron, Total	0.99	0.02	0.01	13822000	mg/L
EP-4	2/21/2018	Mercury, Total	0.000087	0.0002	0.000037	2000	mg/L
EP-4	2/21/2018	Manganese, Total	0.29	0.002	0.0011	2017000	mg/L
EP-4	2/21/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-4	2/21/2018	Selenium, Total	0.01	0.01	0.0098	50000	mg/L
EP-4	2/21/2018	Uranium, Total	0.0011	0.005	0.00068	30000	mg/L
EP-4	2/21/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-4	9/6/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
EP-4	9/6/2018	Arsenic, Total	0.014	0.005	0.0021	10000	mg/L
EP-4	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-4	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	9/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
EP-4	9/6/2018	Copper, Total	0.0067	0.006	0.0041	790000	mg/L
EP-4	9/6/2018	Silver, Dissolved	0.0065	0.005	0.0018	81200	mg/L
EP-4	9/6/2018	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
EP-4	9/6/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-4	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-4	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	9/6/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
EP-4	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	9/6/2018	Iron, Dissolved	0.088	0.02	0.016	13821880	mg/L
EP-4	9/6/2018	Potassium, Dissolved	350	10	1.1	NA	mg/L
EP-4	9/6/2018	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-4	9/6/2018	Manganese, Dissolved	0.2	0.002	0.00039	2017400	mg/L
EP-4	9/6/2018	Sodium, Dissolved	1800	20	3.3	NA	mg/L
EP-4	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-4	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-4	9/6/2018	Uranium, Dissolved	0.00092	0.0025	0.00048	NA	mg/L
EP-4	9/6/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
EP-4	9/6/2018	Iron, Total	0.17	0.02	0.01	13822000	mg/L
EP-4	9/6/2018	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
EP-4	9/6/2018	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-4	9/6/2018	Selenium, Total	0.006	0.005	0.0049	50000	mg/L
EP-4	9/6/2018	Uranium, Total	0.0011	0.0025	0.00034	30000	mg/L
EP-4	9/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-5	4/30/2019	Aluminum, Total	0.71	0.02	0.002488	19914000	mg/L
EP-5	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-5	4/30/2019	Arsenic, Total	0.014	0.005	0.001561	10000	mg/L
EP-5	4/30/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
EP-5	4/30/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
EP-5	4/30/2019	Boron, Total	0.48	0.04	0.004531	3949	mg/L
EP-5	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-5	4/30/2019	Chromium, Total	0.0018	0.006	0.001533	50000	mg/L
EP-5	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-5	4/30/2019	Copper, Total	0.0044	0.006	0.004072	790000	mg/L
EP-5	4/30/2019	Iron, Total	0.38	0.02	0.008747	13822000	mg/L
EP-5	4/30/2019	Lead, Total	0.00049	0.0025	0.000274	15000	mg/L
EP-5	4/30/2019	Manganese, Total	0.48	0.002	0.00029	2017000	mg/L
EP-5	4/30/2019	Mercury, Total	0.000068	0.0002	0.000038	2000	mg/L
EP-5	4/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-5	4/30/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
EP-5	4/30/2019	Selenium, Total	0.0053	0.005	0.00239	50000	mg/L
EP-5	4/30/2019	Silver, Total	0.0069	0.005	0.001418	50000	mg/L
EP-5	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-5	4/30/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-5	4/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-5	4/30/2019	Aluminum, Dissolved	0.051	0.02	0.002488	19913930	mg/L
EP-5	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-5	4/30/2019	Arsenic, Dissolved	0.011	0.005	0.000504	10000	mg/L
EP-5	4/30/2019	Barium, Dissolved	0.19	0.002	0.000648	2000000	mg/L
EP-5	4/30/2019	Beryllium, Dissolved	0.00032	0.002	0.000284	4000	mg/L
EP-5	4/30/2019	Boron, Dissolved	0.47	0.04	0.004531	3949110	mg/L
EP-5	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-5	4/30/2019	Calcium, Dissolved	330	5	0.309446	NA	mg/L
EP-5	4/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-5	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-5	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-5	4/30/2019	Iron, Dissolved	0.093	0.02	0.008747	13821880	mg/L
EP-5	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-5	4/30/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
EP-5	4/30/2019	Manganese, Dissolved	0.45	0.002	0.00029	2017400	mg/L
EP-5	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-5	4/30/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
EP-5	4/30/2019	Potassium, Dissolved	300	5	0.811441	NA	mg/L
EP-5	4/30/2019	Selenium, Dissolved	0.0057	0.005	0.000857	50000	mg/L
EP-5	4/30/2019	Silver, Dissolved	0.0055	0.005	0.000942	81200	mg/L
EP-5	4/30/2019	Sodium, Dissolved	2300	50	20.808815	NA	mg/L
EP-5	4/30/2019	Thallium, Dissolved	0.00041	0.0025	0.000242	2000	mg/L
EP-5	4/30/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-5	4/30/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
EP-5	12/21/2020	Arsenic, Total Recoverable	**23.7**	1	0.286	10	ug/L
EP-5	12/21/2020	Lead, Total Recoverable	1.14	1	0.133	15	ug/L
EP-5	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-5	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-5	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-5	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-5	12/21/2020	Arsenic, Dissolved	**22.9**	1	0.286	10	ug/L
EP-5	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-5	12/21/2020	Antimony, Dissolved	2.17	2	0.352	6	ug/L
EP-5	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-5	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-5	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-5	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-5	12/21/2020	Barium, Dissolved	0.194	0.01	0.003	2000000	mg/L
EP-5	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-5	12/21/2020	Boron, Dissolved	1.03	0.1	0.022	3949110	mg/L
EP-5	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-5	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-5	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-5	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-5	12/21/2020	Manganese, Dissolved	0.98	0.01	0.003	2017400	mg/L
EP-5	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-5	12/21/2020	Nickel, Dissolved	0.0628	0.006	0.003	372000	mg/L
EP-5	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-5	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-5	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-5	12/21/2020	Aluminum, Total	0.386	0.2	0.051	19914000	mg/L
EP-5	12/21/2020	Boron, Total	0.975	0.1	0.022	3949	mg/L
EP-5	12/21/2020	Barium, Total	0.178	0.01	0.003	2000000	mg/L
EP-5	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-5	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-5	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-5	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-5	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-5	12/21/2020	Manganese, Total	0.959	0.01	0.003	2017000	mg/L
EP-5	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-5	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-5	12/21/2020	Iron, Total	0.37	0.2	0.075	13822000	mg/L
EP-5	12/21/2020	Nickel, Total	0.0605	0.006	0.003	372000	mg/L
EP-5	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-5	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-5	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-5	9/17/2020	Aluminum, Total	0.14	0.1	0.037	19914000	mg/L
EP-5	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-5	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-5	9/17/2020	Boron, Total	0.97	0.2	0.037	3949	mg/L
EP-5	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-5	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-5	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-5	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-5	9/17/2020	Iron, Total	0.27	0.25	0.064	13822000	mg/L
EP-5	9/17/2020	Manganese, Total	0.94	0.01	0.0041	2017000	mg/L
EP-5	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-5	9/17/2020	Nickel, Total	0.051	0.05	0.016	372000	mg/L
EP-5	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-5	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-5	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-5	9/17/2020	Arsenic, Total	0.024	0.01	0.0026	10000	mg/L
EP-5	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-5	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-5	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-5	9/17/2020	Uranium, Total	0.0024	0.005	0.00065	30000	mg/L
EP-5	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-5	9/17/2020	Arsenic, Dissolved	0.021	0.05	0.01	10000	mg/L
EP-5	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-5	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-5	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-5	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-5	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-5	9/17/2020	Barium, Dissolved	0.23	0.002	0.0011	2000000	mg/L
EP-5	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-5	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-5	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-5	9/17/2020	Iron, Dissolved	0.13	0.02	0.01	13821880	mg/L
EP-5	9/17/2020	Manganese, Dissolved	0.9	0.002	0.00058	2017400	mg/L
EP-5	9/17/2020	Nickel, Dissolved	0.046	0.01	0.0033	372000	mg/L
EP-5	9/17/2020	Silver, Dissolved	0.0084	0.005	0.0013	81200	mg/L
EP-5	9/17/2020	Boron, Dissolved	1	0.2	0.033	3949110	mg/L
EP-5	9/17/2020	Magnesium, Dissolved	210	5	0.34	NA	mg/L
EP-5	9/17/2020	Calcium, Dissolved	570	20	2.3	NA	mg/L
EP-5	9/17/2020	Potassium, Dissolved	560	20	3.2	NA	mg/L
EP-5	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-5	9/17/2020	Chromium, Dissolved	0.003	0.006	0.002	100000	mg/L
EP-5	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-5	9/17/2020	Zinc, Dissolved	0.0065	0.01	0.006	5960450	mg/L
EP-5	9/17/2020	Sodium, Dissolved	4400	50	6.9	NA	mg/L
EP-5	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-5	5/29/2012	Arsenic, Total	0.017	0.01	0.0011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	Barium, Total	0.059	0.002	0.00031	2000000	mg/L
EP-5	5/29/2012	Calcium, Total	240	10	0.26	NA	mg/L
EP-5	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-5	5/29/2012	Chromium, Total	0.0069	0.006	0.00056	50000	mg/L
EP-5	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-5	5/29/2012	Iron, Total	0.19	0.02	0.0019	13822000	mg/L
EP-5	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-5	5/29/2012	Potassium, Total	170	10	4.8	NA	mg/L
EP-5	5/29/2012	Magnesium, Total	120	10	0.13	NA	mg/L
EP-5	5/29/2012	Manganese, Total	0.065	0.002	0.00062	2017000	mg/L
EP-5	5/29/2012	Sodium, Total	3600	50	2.2	NA	mg/L
EP-5	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-5	5/29/2012	Selenium, Total	0.023	0.01	0.0033	50000	mg/L
EP-5	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-5	5/29/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L
EP-5	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-5	11/6/2012	Arsenic, Total	0.012	0.0025	0.0014	10000	mg/L
EP-5	11/6/2012	Barium, Total	0.062	0.002	0.00039	2000000	mg/L
EP-5	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-5	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-5	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-5	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-5	11/6/2012	Iron, Total	0.63	0.02	0.013	13822000	mg/L
EP-5	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-5	11/6/2012	Potassium, Total	290	10	4.8	NA	mg/L
EP-5	11/6/2012	Magnesium, Total	110	10	0.13	NA	mg/L
EP-5	11/6/2012	Manganese, Total	0.39	0.002	0.00026	2017000	mg/L
EP-5	11/6/2012	Sodium, Total	3700	50	2.2	NA	mg/L
EP-5	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-5	11/6/2012	Selenium, Total	0.012	0.0025	0.0025	50000	mg/L
EP-5	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-5	11/6/2012	Zinc, Total	0.023	0.01	0.0011	5960000	mg/L
EP-5	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-5	5/28/2013	Arsenic, Total	0.013	0.01	0.0013	10000	mg/L
EP-5	5/28/2013	Barium, Total	0.085	0.01	0.0048	2000000	mg/L
EP-5	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-5	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-5	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-5	5/28/2013	Iron, Total	0.28	0.1	0.045	13822000	mg/L
EP-5	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-5	5/28/2013	Manganese, Total	0.16	0.01	0.00082	2017000	mg/L
EP-5	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-5	5/28/2013	Selenium, Total	0.019	0.01	0.0055	50000	mg/L
EP-5	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-5	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-5	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-5	10/15/2013	Arsenic, Total	0.013	0.01	0.00098	10000	mg/L
EP-5	10/15/2013	Barium, Total	0.089	0.002	0.00095	2000000	mg/L
EP-5	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-5	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-5	10/15/2013	Chromium, Total	0.0079	0.006	0.00084	50000	mg/L
EP-5	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-5	10/15/2013	Iron, Total	0.27	0.02	0.0089	13822000	mg/L
EP-5	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-5	10/15/2013	Potassium, Total	250	5	1.5	NA	mg/L
EP-5	10/15/2013	Magnesium, Total	140	5	0.26	NA	mg/L
EP-5	10/15/2013	Manganese, Total	0.18	0.002	0.00016	2017000	mg/L
EP-5	10/15/2013	Sodium, Total	3600	100	36	NA	mg/L
EP-5	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-5	10/15/2013	Selenium, Total	0.018	0.01	0.0029	50000	mg/L
EP-5	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-5	10/15/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
EP-5	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-5	3/5/2014	Arsenic, Total	0.015	0.01	0.0036	10000	mg/L
EP-5	3/5/2014	Barium, Total	0.12	0.01	0.0029	2000000	mg/L
EP-5	3/5/2014	Calcium, Total	350	50	4.1	NA	mg/L
EP-5	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-5	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-5	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	Iron, Total	0.6	0.1	0.036	13822000	mg/L
EP-5	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-5	3/5/2014	Potassium, Total	180	5	0.47	NA	mg/L
EP-5	3/5/2014	Magnesium, Total	99	5	0.09	NA	mg/L
EP-5	3/5/2014	Manganese, Total	0.55	0.01	0.0024	2017000	mg/L
EP-5	3/5/2014	Sodium, Total	3300	50	20	NA	mg/L
EP-5	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-5	3/5/2014	Selenium, Total	0.016	0.01	0.0051	50000	mg/L
EP-5	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-5	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-5	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-5	11/12/2014	Arsenic, Total	0.032	0.02	0.0072	10000	mg/L
EP-5	11/12/2014	Barium, Total	0.13	0.002	0.0005	2000000	mg/L
EP-5	11/12/2014	Calcium, Total	520	10	0.82	NA	mg/L
EP-5	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-5	11/12/2014	Chromium, Total	0.0077	0.006	0.0028	50000	mg/L
EP-5	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-5	11/12/2014	Iron, Total	0.62	0.02	0.0072	13822000	mg/L
EP-5	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-5	11/12/2014	Potassium, Total	320	5	0.47	NA	mg/L
EP-5	11/12/2014	Magnesium, Total	250	5	0.09	NA	mg/L
EP-5	11/12/2014	Manganese, Total	0.48	0.002	0.00049	2017000	mg/L
EP-5	11/12/2014	Sodium, Total	7400	100	39	NA	mg/L
EP-5	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-5	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-5	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-5	11/12/2014	Zinc, Total	0.012	0.01	0.0035	5960000	mg/L
EP-5	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-5	3/24/2015	Arsenic, Total	0.022	0.01	0.0044	10000	mg/L
EP-5	3/24/2015	Barium, Total	0.14	0.002	0.00073	2000000	mg/L
EP-5	3/24/2015	Calcium, Total	410	5	0.28	NA	mg/L
EP-5	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-5	3/24/2015	Chromium, Total	0.01	0.006	0.0022	50000	mg/L
EP-5	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-5	3/24/2015	Iron, Total	0.89	0.02	0.0072	13822000	mg/L
EP-5	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-5	3/24/2015	Potassium, Total	200	5	0.89	NA	mg/L
EP-5	3/24/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-5	3/24/2015	Manganese, Total	0.48	0.002	0.0015	2017000	mg/L
EP-5	3/24/2015	Sodium, Total	4900	100	7.2	NA	mg/L
EP-5	3/24/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-5	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-5	3/24/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-5	3/24/2015	Zinc, Total	0.016	0.01	0.0036	5960000	mg/L
EP-5	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-5	9/1/2015	Arsenic, Total	0.026	0.005	0.0015	10000	mg/L
EP-5	9/1/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
EP-5	9/1/2015	Calcium, Total	380	5	0.28	NA	mg/L
EP-5	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-5	9/1/2015	Chromium, Total	0.016	0.006	0.0022	50000	mg/L
EP-5	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-5	9/1/2015	Iron, Total	0.16	0.02	0.0072	13822000	mg/L
EP-5	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-5	9/1/2015	Potassium, Total	210	5	0.89	NA	mg/L
EP-5	9/1/2015	Magnesium, Total	190	5	0.2	NA	mg/L
EP-5	9/1/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
EP-5	9/1/2015	Sodium, Total	5100	100	7.2	NA	mg/L
EP-5	9/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
EP-5	9/1/2015	Selenium, Total	0.034	0.005	0.00062	50000	mg/L
EP-5	9/1/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
EP-5	9/1/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
EP-5	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-5	8/29/2016	Arsenic, Total	0.024	0.05	0.0069	10000	mg/L
EP-5	8/29/2016	Barium, Total	0.17	0.002	0.00079	2000000	mg/L
EP-5	8/29/2016	Calcium, Total	570	10	5	NA	mg/L
EP-5	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-5	8/29/2016	Chromium, Total	0.0085	0.006	0.0027	50000	mg/L
EP-5	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-5	8/29/2016	Iron, Total	0.25	0.02	0.02	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	8/29/2016	Mercury, Total	0.000054	0.0002	0.000053	2000	mg/L
EP-5	8/29/2016	Potassium, Total	230	5	2.5	NA	mg/L
EP-5	8/29/2016	Magnesium, Total	230	5	2.5	NA	mg/L
EP-5	8/29/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-5	8/29/2016	Sodium, Total	6100	100	50	NA	mg/L
EP-5	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-5	8/29/2016	Selenium, Total	0.047	0.05	0.011	50000	mg/L
EP-5	8/29/2016	Uranium, Total	0.0036	0.0025	0.00026	30000	mg/L
EP-5	8/29/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
EP-5	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-5	3/30/2017	Arsenic, Total	0.032	0.005	0.0011	10000	mg/L
EP-5	3/30/2017	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
EP-5	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-5	3/30/2017	Chromium, Total	0.0094	0.006	0.0027	50000	mg/L
EP-5	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-5	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-5	3/30/2017	Arsenic, Dissolved	0.029	0.005	0.00089	10000	mg/L
EP-5	3/30/2017	Barium, Dissolved	0.17	0.002	0.00085	2000000	mg/L
EP-5	3/30/2017	Calcium, Dissolved	560	10	5	NA	mg/L
EP-5	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	3/30/2017	Chromium, Dissolved	0.01	0.006	0.001	100000	mg/L
EP-5	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	3/30/2017	Iron, Dissolved	0.15	0.02	0.02	13821880	mg/L
EP-5	3/30/2017	Potassium, Dissolved	260	10	5	NA	mg/L
EP-5	3/30/2017	Magnesium, Dissolved	210	10	5	NA	mg/L
EP-5	3/30/2017	Manganese, Dissolved	0.62	0.002	0.00038	2017400	mg/L
EP-5	3/30/2017	Sodium, Dissolved	5200	100	50	NA	mg/L
EP-5	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-5	3/30/2017	Selenium, Dissolved	0.051	0.005	0.0019	50000	mg/L
EP-5	3/30/2017	Uranium, Dissolved	0.0026	0.0025	0.00025	NA	mg/L
EP-5	3/30/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
EP-5	3/30/2017	Iron, Total	0.33	0.02	0.02	13822000	mg/L
EP-5	3/30/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
EP-5	3/30/2017	Manganese, Total	0.66	0.002	0.00027	2017000	mg/L
EP-5	3/30/2017	Lead, Total	0.0008	0.0025	0.00041	15000	mg/L
EP-5	3/30/2017	Selenium, Total	0.056	0.005	0.00094	50000	mg/L
EP-5	3/30/2017	Uranium, Total	0.0025	0.0025	0.00087	30000	mg/L
EP-5	3/30/2017	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
EP-5	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-5	10/24/2017	Arsenic, Total	0.017	0.01	0.0041	10000	mg/L
EP-5	10/24/2017	Barium, Total	0.24	0.002	0.001	2000000	mg/L
EP-5	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	10/24/2017	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-5	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-5	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-5	10/24/2017	Arsenic, Dissolved	0.019	0.005	0.0014	10000	mg/L
EP-5	10/24/2017	Barium, Dissolved	0.23	0.002	0.00099	2000000	mg/L
EP-5	10/24/2017	Calcium, Dissolved	610	10	0.78	NA	mg/L
EP-5	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	10/24/2017	Chromium, Dissolved	0.0079	0.006	0.0013	100000	mg/L
EP-5	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	10/24/2017	Iron, Dissolved	0.2	0.02	0.016	13821880	mg/L
EP-5	10/24/2017	Potassium, Dissolved	370	10	1.1	NA	mg/L
EP-5	10/24/2017	Magnesium, Dissolved	220	10	2.5	NA	mg/L
EP-5	10/24/2017	Manganese, Dissolved	0.45	0.002	0.00039	2017400	mg/L
EP-5	10/24/2017	Sodium, Dissolved	5600	100	16	NA	mg/L
EP-5	10/24/2017	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-5	10/24/2017	Selenium, Dissolved	0.018	0.005	0.0038	50000	mg/L
EP-5	10/24/2017	Uranium, Dissolved	ND	0.01	0.0019	NA	mg/L
EP-5	10/24/2017	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
EP-5	10/24/2017	Iron, Total	0.28	0.02	0.01	13822000	mg/L
EP-5	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-5	10/24/2017	Manganese, Total	0.47	0.002	0.0011	2017000	mg/L
EP-5	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-5	10/24/2017	Selenium, Total	0.016	0.01	0.0098	50000	mg/L
EP-5	10/24/2017	Uranium, Total	0.0028	0.005	0.0015	30000	mg/L
EP-5	10/24/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
EP-5	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-5	2/21/2018	Arsenic, Total	0.013	0.01	0.0041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	2/21/2018	Barium, Total	0.32	0.002	0.001	2000000	mg/L
EP-5	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	2/21/2018	Chromium, Total	0.008	0.006	0.0018	50000	mg/L
EP-5	2/21/2018	Copper, Total	0.0085	0.006	0.0041	790000	mg/L
EP-5	2/21/2018	Silver, Dissolved	0.0074	0.005	0.0018	81200	mg/L
EP-5	2/21/2018	Arsenic, Dissolved	0.013	0.005	0.0021	10000	mg/L
EP-5	2/21/2018	Barium, Dissolved	0.22	0.002	0.00099	2000000	mg/L
EP-5	2/21/2018	Calcium, Dissolved	490	5	0.39	NA	mg/L
EP-5	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	2/21/2018	Chromium, Dissolved	0.0032	0.006	0.0013	100000	mg/L
EP-5	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	2/21/2018	Iron, Dissolved	0.35	0.02	0.016	13821880	mg/L
EP-5	2/21/2018	Potassium, Dissolved	300	10	1.1	NA	mg/L
EP-5	2/21/2018	Magnesium, Dissolved	160	10	2.5	NA	mg/L
EP-5	2/21/2018	Manganese, Dissolved	0.42	0.002	0.00039	2017400	mg/L
EP-5	2/21/2018	Sodium, Dissolved	3900	50	8.2	NA	mg/L
EP-5	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-5	2/21/2018	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
EP-5	2/21/2018	Uranium, Dissolved	0.0013	0.005	0.00096	NA	mg/L
EP-5	2/21/2018	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
EP-5	2/21/2018	Iron, Total	3	0.1	0.051	13822000	mg/L
EP-5	2/21/2018	Mercury, Total	0.000075	0.0002	0.000037	2000	mg/L
EP-5	2/21/2018	Manganese, Total	0.51	0.002	0.0011	2017000	mg/L
EP-5	2/21/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-5	2/21/2018	Selenium, Total	0.013	0.01	0.0098	50000	mg/L
EP-5	2/21/2018	Uranium, Total	0.0016	0.005	0.00068	30000	mg/L
EP-5	2/21/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
EP-5	9/6/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
EP-5	9/6/2018	Arsenic, Total	0.021	0.005	0.0021	10000	mg/L
EP-5	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-5	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	9/6/2018	Chromium, Total	0.0044	0.006	0.0018	50000	mg/L
EP-5	9/6/2018	Copper, Total	0.0045	0.006	0.0041	790000	mg/L
EP-5	9/6/2018	Silver, Dissolved	0.0077	0.005	0.0018	81200	mg/L
EP-5	9/6/2018	Arsenic, Dissolved	0.019	0.005	0.0021	10000	mg/L
EP-5	9/6/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-5	9/6/2018	Calcium, Dissolved	330	10	0.78	NA	mg/L
EP-5	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	9/6/2018	Chromium, Dissolved	0.0028	0.006	0.0013	100000	mg/L
EP-5	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	9/6/2018	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
EP-5	9/6/2018	Potassium, Dissolved	470	10	1.1	NA	mg/L
EP-5	9/6/2018	Magnesium, Dissolved	160	10	2.5	NA	mg/L
EP-5	9/6/2018	Manganese, Dissolved	0.15	0.002	0.00039	2017400	mg/L
EP-5	9/6/2018	Sodium, Dissolved	3500	50	8.2	NA	mg/L
EP-5	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-5	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-5	9/6/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-5	9/6/2018	Zinc, Dissolved	0.0033	0.01	0.0021	5960450	mg/L
EP-5	9/6/2018	Iron, Total	0.094	0.02	0.01	13822000	mg/L
EP-5	9/6/2018	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
EP-5	9/6/2018	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
EP-5	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-5	9/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
EP-5	9/6/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-5	9/6/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
EP-6	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-6	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-6	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-6	12/21/2020	Barium, Dissolved	0.263	0.01	0.003	2000000	mg/L
EP-6	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-6	12/21/2020	Boron, Dissolved	1.09	0.1	0.022	3949110	mg/L
EP-6	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-6	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-6	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-6	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-6	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-6	12/21/2020	Manganese, Dissolved	1.02	0.01	0.003	2017400	mg/L
EP-6	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	Nickel, Dissolved	0.0559	0.006	0.003	372000	mg/L
EP-6	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-6	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-6	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-6	12/21/2020	Aluminum, Total	0.367	0.2	0.051	19914000	mg/L
EP-6	12/21/2020	Boron, Total	0.97	0.1	0.022	3949	mg/L
EP-6	12/21/2020	Barium, Total	0.246	0.01	0.003	2000000	mg/L
EP-6	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-6	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-6	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-6	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-6	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-6	12/21/2020	Manganese, Total	0.975	0.01	0.003	2017000	mg/L
EP-6	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-6	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-6	12/21/2020	Iron, Total	0.262	0.2	0.075	13822000	mg/L
EP-6	12/21/2020	Nickel, Total	0.0524	0.006	0.003	372000	mg/L
EP-6	12/21/2020	Arsenic, Total Recoverable	**30**	1	0.286	10	ug/L
EP-6	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-6	12/21/2020	Antimony, Total Recoverable	2.31	2	0.352	6	ug/L
EP-6	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-6	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-6	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-6	12/21/2020	Arsenic, Dissolved	**28.8**	1	0.286	10	ug/L
EP-6	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-6	12/21/2020	Antimony, Dissolved	2.15	2	0.352	6	ug/L
EP-6	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-6	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-6	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-6	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-6	9/17/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
EP-6	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-6	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-6	9/17/2020	Boron, Total	0.9	0.2	0.037	3949	mg/L
EP-6	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-6	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-6	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-6	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-6	9/17/2020	Iron, Total	0.086	0.25	0.064	13822000	mg/L
EP-6	9/17/2020	Manganese, Total	0.77	0.01	0.0041	2017000	mg/L
EP-6	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-6	9/17/2020	Nickel, Total	0.061	0.05	0.016	372000	mg/L
EP-6	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-6	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-6	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-6	9/17/2020	Arsenic, Total	0.024	0.01	0.0026	10000	mg/L
EP-6	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-6	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-6	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-6	9/17/2020	Uranium, Total	0.0028	0.005	0.00065	30000	mg/L
EP-6	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-6	9/17/2020	Arsenic, Dissolved	0.019	0.05	0.01	10000	mg/L
EP-6	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-6	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-6	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-6	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-6	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-6	9/17/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-6	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-6	9/17/2020	Boron, Dissolved	0.92	0.04	0.0067	3949110	mg/L
EP-6	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-6	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-6	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-6	9/17/2020	Iron, Dissolved	0.019	0.02	0.01	13821880	mg/L
EP-6	9/17/2020	Manganese, Dissolved	0.7	0.002	0.00058	2017400	mg/L
EP-6	9/17/2020	Nickel, Dissolved	0.041	0.01	0.0033	372000	mg/L
EP-6	9/17/2020	Silver, Dissolved	0.0085	0.005	0.0013	81200	mg/L
EP-6	9/17/2020	Magnesium, Dissolved	190	5	0.34	NA	mg/L
EP-6	9/17/2020	Potassium, Dissolved	490	5	0.8	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/17/2020	Calcium, Dissolved	510	50	5.7	NA	mg/L
EP-6	9/17/2020	Sodium, Dissolved	4300	50	6.9	NA	mg/L
EP-6	9/17/2020	Chromium, Dissolved	0.0046	0.006	0.002	100000	mg/L
EP-6	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-6	9/17/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
EP-6	4/29/2019	Aluminum, Total	0.5	0.02	0.002488	19914000	mg/L
EP-6	4/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-6	4/29/2019	Arsenic, Total	0.014	0.005	0.001561	10000	mg/L
EP-6	4/29/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
EP-6	4/29/2019	Beryllium, Total	0.00057	0.002	0.000284	4000	mg/L
EP-6	4/29/2019	Boron, Total	0.48	0.04	0.004531	3949	mg/L
EP-6	4/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-6	4/29/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
EP-6	4/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-6	4/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
EP-6	4/29/2019	Iron, Total	0.32	0.02	0.008747	13822000	mg/L
EP-6	4/29/2019	Lead, Total	0.00047	0.0025	0.000274	15000	mg/L
EP-6	4/29/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
EP-6	4/29/2019	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
EP-6	4/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-6	4/29/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
EP-6	4/29/2019	Selenium, Total	0.004	0.005	0.00239	50000	mg/L
EP-6	4/29/2019	Silver, Total	0.0071	0.005	0.001418	50000	mg/L
EP-6	4/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-6	4/29/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-6	4/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-6	4/29/2019	Aluminum, Dissolved	0.029	0.02	0.002488	19913930	mg/L
EP-6	4/29/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-6	4/29/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
EP-6	4/29/2019	Barium, Dissolved	0.2	0.002	0.000648	2000000	mg/L
EP-6	4/29/2019	Beryllium, Dissolved	0.00057	0.002	0.000284	4000	mg/L
EP-6	4/29/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
EP-6	4/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-6	4/29/2019	Calcium, Dissolved	370	5	0.309446	NA	mg/L
EP-6	4/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-6	4/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-6	4/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-6	4/29/2019	Iron, Dissolved	0.097	0.02	0.008747	13821880	mg/L
EP-6	4/29/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-6	4/29/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
EP-6	4/29/2019	Manganese, Dissolved	0.46	0.002	0.00029	2017400	mg/L
EP-6	4/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-6	4/29/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
EP-6	4/29/2019	Potassium, Dissolved	320	5	0.811441	NA	mg/L
EP-6	4/29/2019	Selenium, Dissolved	0.005	0.005	0.000857	50000	mg/L
EP-6	4/29/2019	Silver, Dissolved	0.0071	0.005	0.000942	81200	mg/L
EP-6	4/29/2019	Sodium, Dissolved	2300	100	41.61763	NA	mg/L
EP-6	4/29/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-6	4/29/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-6	4/29/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
EP-6	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-6	5/29/2012	Arsenic, Total	0.02	0.01	0.0011	10000	mg/L
EP-6	5/29/2012	Barium, Total	0.094	0.002	0.00031	2000000	mg/L
EP-6	5/29/2012	Calcium, Total	340	10	0.26	NA	mg/L
EP-6	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-6	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-6	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-6	5/29/2012	Iron, Total	0.11	0.02	0.0019	13822000	mg/L
EP-6	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-6	5/29/2012	Potassium, Total	270	10	4.8	NA	mg/L
EP-6	5/29/2012	Magnesium, Total	150	10	0.13	NA	mg/L
EP-6	5/29/2012	Manganese, Total	0.41	0.002	0.00062	2017000	mg/L
EP-6	5/29/2012	Sodium, Total	4400	100	4.5	NA	mg/L
EP-6	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-6	5/29/2012	Selenium, Total	0.017	0.01	0.0033	50000	mg/L
EP-6	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-6	5/29/2012	Zinc, Total	0.019	0.01	0.00062	5960000	mg/L
EP-6	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-6	11/6/2012	Arsenic, Total	0.023	0.0025	0.0014	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Barium, Total	0.092	0.002	0.00039	2000000	mg/L
EP-6	11/6/2012	Calcium, Total	410	10	0.26	NA	mg/L
EP-6	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-6	11/6/2012	Chromium, Total	0.0076	0.006	0.001	50000	mg/L
EP-6	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	11/6/2012	Iron, Total	0.14	0.02	0.013	13822000	mg/L
EP-6	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-6	11/6/2012	Potassium, Total	480	10	4.8	NA	mg/L
EP-6	11/6/2012	Magnesium, Total	230	10	0.13	NA	mg/L
EP-6	11/6/2012	Manganese, Total	0.086	0.002	0.00026	2017000	mg/L
EP-6	11/6/2012	Sodium, Total	6500	100	4.5	NA	mg/L
EP-6	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-6	11/6/2012	Selenium, Total	0.024	0.0025	0.0025	50000	mg/L
EP-6	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-6	11/6/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
EP-6	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-6	5/28/2013	Arsenic, Total	0.021	0.01	0.0013	10000	mg/L
EP-6	5/28/2013	Barium, Total	0.096	0.01	0.0048	2000000	mg/L
EP-6	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-6	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-6	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-6	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-6	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-6	5/28/2013	Manganese, Total	0.15	0.01	0.00082	2017000	mg/L
EP-6	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-6	5/28/2013	Selenium, Total	0.02	0.01	0.0055	50000	mg/L
EP-6	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-6	5/28/2013	Zinc, Total	0.069	0.05	0.0038	5960000	mg/L
EP-6	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-6	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-6	10/15/2013	Barium, Total	0.098	0.002	0.00095	2000000	mg/L
EP-6	10/15/2013	Calcium, Total	620	10	0.69	NA	mg/L
EP-6	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-6	10/15/2013	Chromium, Total	0.0086	0.006	0.00084	50000	mg/L
EP-6	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-6	10/15/2013	Iron, Total	0.077	0.02	0.0089	13822000	mg/L
EP-6	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-6	10/15/2013	Potassium, Total	280	20	6	NA	mg/L
EP-6	10/15/2013	Magnesium, Total	230	5	0.26	NA	mg/L
EP-6	10/15/2013	Manganese, Total	0.22	0.002	0.00016	2017000	mg/L
EP-6	10/15/2013	Sodium, Total	6700	200	71	NA	mg/L
EP-6	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-6	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-6	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-6	10/15/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
EP-6	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-6	3/5/2014	Arsenic, Total	0.015	0.01	0.0036	10000	mg/L
EP-6	3/5/2014	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
EP-6	3/5/2014	Calcium, Total	450	5	0.41	NA	mg/L
EP-6	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-6	3/5/2014	Chromium, Total	0.0089	0.006	0.0028	50000	mg/L
EP-6	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-6	3/5/2014	Iron, Total	0.67	0.02	0.0072	13822000	mg/L
EP-6	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-6	3/5/2014	Potassium, Total	240	5	0.47	NA	mg/L
EP-6	3/5/2014	Magnesium, Total	150	5	0.09	NA	mg/L
EP-6	3/5/2014	Manganese, Total	0.59	0.002	0.00049	2017000	mg/L
EP-6	3/5/2014	Sodium, Total	4800	100	39	NA	mg/L
EP-6	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-6	3/5/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
EP-6	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-6	3/5/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
EP-6	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-6	11/12/2014	Arsenic, Total	0.034	0.02	0.0072	10000	mg/L
EP-6	11/12/2014	Barium, Total	0.15	0.002	0.0005	2000000	mg/L
EP-6	11/12/2014	Calcium, Total	540	10	0.82	NA	mg/L
EP-6	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-6	11/12/2014	Chromium, Total	0.0082	0.006	0.0028	50000	mg/L
EP-6	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Iron, Total	1.6	0.1	0.036	13822000	mg/L
EP-6	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-6	11/12/2014	Potassium, Total	370	5	0.47	NA	mg/L
EP-6	11/12/2014	Magnesium, Total	290	5	0.09	NA	mg/L
EP-6	11/12/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
EP-6	11/12/2014	Sodium, Total	8400	100	39	NA	mg/L
EP-6	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-6	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-6	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-6	11/12/2014	Zinc, Total	ND	0.02	0.0071	5960000	mg/L
EP-6	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-6	3/25/2015	Arsenic, Total	0.023	0.01	0.0044	10000	mg/L
EP-6	3/25/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-6	3/25/2015	Calcium, Total	410	5	0.28	NA	mg/L
EP-6	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-6	3/25/2015	Chromium, Total	0.0092	0.006	0.0022	50000	mg/L
EP-6	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-6	3/25/2015	Iron, Total	0.78	0.02	0.0072	13822000	mg/L
EP-6	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-6	3/25/2015	Potassium, Total	210	5	0.89	NA	mg/L
EP-6	3/25/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-6	3/25/2015	Manganese, Total	0.43	0.002	0.0015	2017000	mg/L
EP-6	3/25/2015	Sodium, Total	4800	100	7.2	NA	mg/L
EP-6	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-6	3/25/2015	Selenium, Total	0.026	0.01	0.0012	50000	mg/L
EP-6	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-6	3/25/2015	Zinc, Total	0.018	0.01	0.0036	5960000	mg/L
EP-6	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-6	9/1/2015	Arsenic, Total	0.031	0.005	0.0015	10000	mg/L
EP-6	9/1/2015	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
EP-6	9/1/2015	Calcium, Total	450	5	0.28	NA	mg/L
EP-6	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-6	9/1/2015	Chromium, Total	0.019	0.006	0.0022	50000	mg/L
EP-6	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-6	9/1/2015	Iron, Total	0.085	0.02	0.0072	13822000	mg/L
EP-6	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-6	9/1/2015	Potassium, Total	260	5	0.89	NA	mg/L
EP-6	9/1/2015	Magnesium, Total	230	5	0.2	NA	mg/L
EP-6	9/1/2015	Manganese, Total	0.35	0.002	0.0015	2017000	mg/L
EP-6	9/1/2015	Sodium, Total	5700	100	7.2	NA	mg/L
EP-6	9/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
EP-6	9/1/2015	Selenium, Total	0.04	0.005	0.00062	50000	mg/L
EP-6	9/1/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
EP-6	9/1/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
EP-6	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-6	8/29/2016	Arsenic, Total	0.038	0.05	0.0069	10000	mg/L
EP-6	8/29/2016	Barium, Total	0.19	0.002	0.00079	2000000	mg/L
EP-6	8/29/2016	Calcium, Total	570	10	5	NA	mg/L
EP-6	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-6	8/29/2016	Chromium, Total	0.0083	0.006	0.0027	50000	mg/L
EP-6	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-6	8/29/2016	Iron, Total	0.15	0.02	0.02	13822000	mg/L
EP-6	8/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
EP-6	8/29/2016	Potassium, Total	250	5	2.5	NA	mg/L
EP-6	8/29/2016	Magnesium, Total	240	5	2.5	NA	mg/L
EP-6	8/29/2016	Manganese, Total	0.39	0.002	0.00027	2017000	mg/L
EP-6	8/29/2016	Sodium, Total	6100	100	50	NA	mg/L
EP-6	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-6	8/29/2016	Selenium, Total	0.046	0.05	0.011	50000	mg/L
EP-6	8/29/2016	Uranium, Total	0.0039	0.0025	0.00026	30000	mg/L
EP-6	8/29/2016	Zinc, Total	0.0073	0.01	0.0027	5960000	mg/L
EP-6	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-6	3/30/2017	Arsenic, Total	0.031	0.005	0.0011	10000	mg/L
EP-6	3/30/2017	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
EP-6	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-6	3/30/2017	Chromium, Total	0.0093	0.006	0.0027	50000	mg/L
EP-6	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-6	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-6	3/30/2017	Arsenic, Dissolved	0.031	0.005	0.00089	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/30/2017	Barium, Dissolved	0.19	0.02	0.0085	2000000	mg/L
EP-6	3/30/2017	Calcium, Dissolved	530	10	5	NA	mg/L
EP-6	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-6	3/30/2017	Chromium, Dissolved	ND	0.06	0.01	100000	mg/L
EP-6	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-6	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-6	3/30/2017	Potassium, Dissolved	240	10	5	NA	mg/L
EP-6	3/30/2017	Magnesium, Dissolved	200	10	5	NA	mg/L
EP-6	3/30/2017	Manganese, Dissolved	0.72	0.02	0.0038	2017400	mg/L
EP-6	3/30/2017	Sodium, Dissolved	5300	100	50	NA	mg/L
EP-6	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-6	3/30/2017	Selenium, Dissolved	0.054	0.005	0.0019	50000	mg/L
EP-6	3/30/2017	Uranium, Dissolved	0.0026	0.0025	0.00025	NA	mg/L
EP-6	3/30/2017	Zinc, Dissolved	0.042	0.1	0.011	5960450	mg/L
EP-6	3/30/2017	Iron, Total	0.38	0.02	0.02	13822000	mg/L
EP-6	3/30/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
EP-6	3/30/2017	Manganese, Total	0.66	0.002	0.00027	2017000	mg/L
EP-6	3/30/2017	Lead, Total	0.0007	0.0025	0.00041	15000	mg/L
EP-6	3/30/2017	Selenium, Total	0.058	0.02	0.0037	50000	mg/L
EP-6	3/30/2017	Uranium, Total	0.0026	0.0025	0.00087	30000	mg/L
EP-6	3/30/2017	Zinc, Total	0.0097	0.01	0.0027	5960000	mg/L
EP-6	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-6	10/24/2017	Arsenic, Total	0.018	0.01	0.0041	10000	mg/L
EP-6	10/24/2017	Barium, Total	0.25	0.002	0.001	2000000	mg/L
EP-6	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	10/24/2017	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-6	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-6	10/24/2017	Arsenic, Dissolved	0.021	0.005	0.0014	10000	mg/L
EP-6	10/24/2017	Barium, Dissolved	0.23	0.002	0.00099	2000000	mg/L
EP-6	10/24/2017	Calcium, Dissolved	590	10	0.78	NA	mg/L
EP-6	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	10/24/2017	Chromium, Dissolved	0.0091	0.006	0.0013	100000	mg/L
EP-6	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	10/24/2017	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
EP-6	10/24/2017	Potassium, Dissolved	330	10	1.1	NA	mg/L
EP-6	10/24/2017	Magnesium, Dissolved	210	10	2.5	NA	mg/L
EP-6	10/24/2017	Manganese, Dissolved	0.47	0.002	0.00039	2017400	mg/L
EP-6	10/24/2017	Sodium, Dissolved	6000	100	16	NA	mg/L
EP-6	10/24/2017	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-6	10/24/2017	Selenium, Dissolved	0.017	0.005	0.0038	50000	mg/L
EP-6	10/24/2017	Uranium, Dissolved	0.0024	0.01	0.0019	NA	mg/L
EP-6	10/24/2017	Zinc, Dissolved	0.069	0.01	0.0021	5960450	mg/L
EP-6	10/24/2017	Iron, Total	0.19	0.02	0.01	13822000	mg/L
EP-6	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-6	10/24/2017	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
EP-6	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-6	10/24/2017	Selenium, Total	0.018	0.01	0.0098	50000	mg/L
EP-6	10/24/2017	Uranium, Total	0.0029	0.005	0.0015	30000	mg/L
EP-6	10/24/2017	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
EP-6	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-6	2/21/2018	Arsenic, Total	0.021	0.01	0.0041	10000	mg/L
EP-6	2/21/2018	Barium, Total	0.32	0.002	0.001	2000000	mg/L
EP-6	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	2/21/2018	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-6	2/21/2018	Copper, Total	0.0094	0.006	0.0041	790000	mg/L
EP-6	2/21/2018	Silver, Dissolved	0.0074	0.005	0.0018	81200	mg/L
EP-6	2/21/2018	Arsenic, Dissolved	0.017	0.005	0.0021	10000	mg/L
EP-6	2/21/2018	Barium, Dissolved	0.21	0.002	0.00099	2000000	mg/L
EP-6	2/21/2018	Calcium, Dissolved	500	5	0.39	NA	mg/L
EP-6	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	2/21/2018	Chromium, Dissolved	0.005	0.006	0.0013	100000	mg/L
EP-6	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	2/21/2018	Iron, Dissolved	0.27	0.02	0.016	13821880	mg/L
EP-6	2/21/2018	Potassium, Dissolved	340	10	1.1	NA	mg/L
EP-6	2/21/2018	Magnesium, Dissolved	170	10	2.5	NA	mg/L
EP-6	2/21/2018	Manganese, Dissolved	0.52	0.002	0.00039	2017400	mg/L
EP-6	2/21/2018	Sodium, Dissolved	4900	100	16	NA	mg/L
EP-6	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	2/21/2018	Selenium, Dissolved	0.015	0.005	0.0038	50000	mg/L
EP-6	2/21/2018	Uranium, Dissolved	0.0018	0.005	0.00096	NA	mg/L
EP-6	2/21/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
EP-6	2/21/2018	Iron, Total	3.9	0.1	0.051	13822000	mg/L
EP-6	2/21/2018	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
EP-6	2/21/2018	Manganese, Total	0.64	0.002	0.0011	2017000	mg/L
EP-6	2/21/2018	Lead, Total	0.0026	0.005	0.0023	15000	mg/L
EP-6	2/21/2018	Selenium, Total	0.014	0.01	0.0098	50000	mg/L
EP-6	2/21/2018	Uranium, Total	0.0022	0.005	0.00068	30000	mg/L
EP-6	2/21/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-6	9/7/2018	Silver, Total	0.0087	0.005	0.0012	50000	mg/L
EP-6	9/7/2018	Arsenic, Total	0.023	0.005	0.0021	10000	mg/L
EP-6	9/7/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-6	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	9/7/2018	Chromium, Total	0.0037	0.006	0.0018	50000	mg/L
EP-6	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	9/7/2018	Silver, Dissolved	0.0076	0.005	0.0018	81200	mg/L
EP-6	9/7/2018	Arsenic, Dissolved	0.022	0.005	0.0021	10000	mg/L
EP-6	9/7/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-6	9/7/2018	Calcium, Dissolved	350	10	0.78	NA	mg/L
EP-6	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	9/7/2018	Chromium, Dissolved	0.0042	0.006	0.0013	100000	mg/L
EP-6	9/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	9/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
EP-6	9/7/2018	Potassium, Dissolved	490	10	1.1	NA	mg/L
EP-6	9/7/2018	Magnesium, Dissolved	180	10	2.5	NA	mg/L
EP-6	9/7/2018	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
EP-6	9/7/2018	Sodium, Dissolved	3800	100	16	NA	mg/L
EP-6	9/7/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-6	9/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-6	9/7/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-6	9/7/2018	Zinc, Dissolved	0.0036	0.01	0.0021	5960450	mg/L
EP-6	9/7/2018	Iron, Total	0.081	0.02	0.01	13822000	mg/L
EP-6	9/7/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
EP-6	9/7/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
EP-6	9/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-6	9/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
EP-6	9/7/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-6	9/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Aluminum, Dissolved	ND	0.2	0.024883	19913930	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Arsenic, Dissolved	0.017	0.005	0.000504	10000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Barium, Dissolved	0.24	0.02	0.006484	2000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Beryllium, Dissolved	ND	0.02	0.002838	4000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Boron, Dissolved	0.68	0.4	0.045305	3949110	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cadmium, Dissolved	ND	0.02	0.005523	5000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Calcium, Dissolved	390	10	0.618891	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chromium, Dissolved	ND	0.06	0.015332	100000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cobalt, Dissolved	ND	0.06	0.030913	5980	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Copper, Dissolved	0.014	0.06	0.012962	790000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Iron, Dissolved	0.45	0.2	0.087469	13821880	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Magnesium, Dissolved	130	10	0.502904	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Manganese, Dissolved	0.62	0.02	0.002899	2017400	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Molybdenum, Dissolved	ND	0.08	0.067349	98700	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nickel, Dissolved	ND	0.1	0.040087	372000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Potassium, Dissolved	390	10	1.622881	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Selenium, Dissolved	0.0032	0.005	0.000857	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Silver, Dissolved	ND	0.05	0.009424	81200	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Zinc, Dissolved	0.033	0.1	0.02252	5960450	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Aluminum, Total	0.58	0.02	0.002488	19914000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Arsenic, Total	0.016	0.02	0.006244	10000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Boron, Total	0.71	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6 (Pond 4 & 5)	11/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chromium, Total	0.0055	0.006	0.001533	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Copper, Total	0.0058	0.006	0.004072	790000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Iron, Total	0.74	0.02	0.008747	13822000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Silver, Total	0.008	0.005	0.001418	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
EP-7	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-7	11/20/2019	Antimony, Dissolved	ND	0.1	0.038942	6000	mg/L
EP-7	11/20/2019	Arsenic, Dissolved	0.34	0.1	0.010086	10000	mg/L
EP-7	11/20/2019	Barium, Dissolved	0.19	0.1	0.032419	2000000	mg/L
EP-7	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-7	11/20/2019	Boron, Dissolved	11	2	0.226525	3949110	mg/L
EP-7	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-7	11/20/2019	Calcium, Dissolved	520	50	3.094457	NA	mg/L
EP-7	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-7	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-7	11/20/2019	Copper, Dissolved	0.11	0.3	0.064808	790000	mg/L
EP-7	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-7	11/20/2019	Lead, Dissolved	ND	0.05	0.005488	NA	mg/L
EP-7	11/20/2019	Magnesium, Dissolved	3800	50	2.514522	NA	mg/L
EP-7	11/20/2019	Manganese, Dissolved	1.3	0.1	0.014497	2017400	mg/L
EP-7	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-7	11/20/2019	Nickel, Dissolved	0.25	0.5	0.200435	372000	mg/L
EP-7	11/20/2019	Potassium, Dissolved	4900	50	8.114407	NA	mg/L
EP-7	11/20/2019	Selenium, Dissolved	0.04	0.1	0.017135	50000	mg/L
EP-7	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-7	11/20/2019	Sodium, Dissolved	91000	2000	832.352597	NA	mg/L
EP-7	11/20/2019	Thallium, Dissolved	ND	0.05	0.004836	2000	mg/L
EP-7	11/20/2019	Uranium, Dissolved	0.0094	0.05	0.007474	NA	mg/L
EP-7	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-7	11/20/2019	Aluminum, Total	0.36	0.4	0.049765	19914000	mg/L
EP-7	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-7	11/20/2019	Arsenic, Total	0.31	0.5	0.156094	10000	mg/L
EP-7	11/20/2019	Barium, Total	0.17	0.04	0.012968	2000000	mg/L
EP-7	11/20/2019	Beryllium, Total	ND	0.04	0.005675	4000	mg/L
EP-7	11/20/2019	Boron, Total	11	0.8	0.09061	3949	mg/L
EP-7	11/20/2019	Cadmium, Total	ND	0.04	0.014702	5000	mg/L
EP-7	11/20/2019	Chromium, Total	ND	0.12	0.030663	50000	mg/L
EP-7	11/20/2019	Cobalt, Total	ND	0.12	0.061827	5980	mg/L
EP-7	11/20/2019	Copper, Total	0.089	0.12	0.081436	790000	mg/L
EP-7	11/20/2019	Iron, Total	0.28	0.4	0.174937	13822000	mg/L
EP-7	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-7	11/20/2019	Manganese, Total	1.9	0.04	0.005799	2017000	mg/L
EP-7	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-7	11/20/2019	Molybdenum, Total	ND	0.16	0.134697	98700	mg/L
EP-7	11/20/2019	Nickel, Total	0.35	0.2	0.080174	372000	mg/L
EP-7	11/20/2019	Selenium, Total	ND	0.5	0.238994	50000	mg/L
EP-7	11/20/2019	Silver, Total	ND	0.1	0.028366	50000	mg/L
EP-7	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-7	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-7	11/20/2019	Zinc, Total	ND	0.2	0.115437	5960000	mg/L
EP-7	4/29/2019	Aluminum, Total	0.21	0.1	0.012441	19914000	mg/L
EP-7	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-7	4/29/2019	Arsenic, Total	0.11	0.02	0.006244	10000	mg/L
EP-7	4/29/2019	Barium, Total	0.18	0.01	0.003242	2000000	mg/L
EP-7	4/29/2019	Beryllium, Total	0.0028	0.01	0.001419	4000	mg/L
EP-7	4/29/2019	Boron, Total	3.7	0.2	0.022653	3949	mg/L
EP-7	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-7	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-7	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
EP-7	4/29/2019	Iron, Total	0.094	0.1	0.043734	13822000	mg/L
EP-7	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-7	4/29/2019	Manganese, Total	0.59	0.01	0.00145	2017000	mg/L
EP-7	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-7	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-7	4/29/2019	Nickel, Total	0.12	0.05	0.020043	372000	mg/L
EP-7	4/29/2019	Selenium, Total	0.012	0.02	0.00956	50000	mg/L
EP-7	4/29/2019	Silver, Total	0.017	0.025	0.007092	50000	mg/L
EP-7	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-7	4/29/2019	Uranium, Total	0.0048	0.01	0.001697	30000	mg/L
EP-7	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-7	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-7	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-7	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-7	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-7	4/29/2019	Beryllium, Dissolved	0.0018	0.01	0.001419	4000	mg/L
EP-7	4/29/2019	Boron, Dissolved	3.9	0.2	0.022653	3949110	mg/L
EP-7	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-7	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-7	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-7	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-7	4/29/2019	Copper, Dissolved	0.012	0.03	0.006481	790000	mg/L
EP-7	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-7	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-7	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-7	4/29/2019	Manganese, Dissolved	0.46	0.01	0.00145	2017400	mg/L
EP-7	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-7	4/29/2019	Nickel, Dissolved	0.11	0.05	0.020043	372000	mg/L
EP-7	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-7	4/29/2019	Selenium, Dissolved	0.0089	0.05	0.008567	50000	mg/L
EP-7	4/29/2019	Silver, Dissolved	0.016	0.025	0.004712	81200	mg/L
EP-7	4/29/2019	Sodium, Dissolved	33000	500	208.088149	NA	mg/L
EP-7	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-7	4/29/2019	Uranium, Dissolved	0.0048	0.01	0.001495	NA	mg/L
EP-7	4/29/2019	Zinc, Dissolved	0.03	0.05	0.01126	5960450	mg/L
EP-7	12/21/2020	Arsenic, Total Recoverable	**464**	10	2.86	10	ug/L
EP-7	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-7	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-7	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
EP-7	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-7	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-7	12/21/2020	Arsenic, Dissolved	**443**	10	2.86	10	ug/L
EP-7	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-7	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-7	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-7	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-7	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-7	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-7	12/21/2020	Barium, Dissolved	0.25	0.01	0.003	2000000	mg/L
EP-7	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-7	12/21/2020	Copper, Dissolved	0.0821	0.02	0.008	790000	mg/L
EP-7	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-7	12/21/2020	Manganese, Dissolved	3.53	0.01	0.003	2017400	mg/L
EP-7	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-7	12/21/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-7	12/21/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-7	12/21/2020	Boron, Total	11.1	0.5	0.11	3949	mg/L
EP-7	12/21/2020	Barium, Total	0.217	0.05	0.015	2000000	mg/L
EP-7	12/21/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-7	12/21/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-7	12/21/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-7	12/21/2020	Chromium, Total	0.0558	0.05	0.025	50000	mg/L
EP-7	12/21/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-7	12/21/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-7	12/21/2020	Manganese, Total	3.52	0.05	0.015	2017000	mg/L
EP-7	12/21/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-7	12/21/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-7	12/21/2020	Boron, Dissolved	11.8	1	0.22	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-7	12/21/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L
EP-7	12/21/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-7	12/21/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-7	12/21/2020	Nickel, Dissolved	0.409	0.06	0.03	372000	mg/L
EP-7	12/21/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-7	12/21/2020	Nickel, Total	0.414	0.03	0.015	372000	mg/L
EP-7	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-7	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-7	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-7	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-7	3/25/2015	Barium, Total	0.16	0.01	0.0037	2000000	mg/L
EP-7	3/25/2015	Calcium, Total	850	50	2.8	NA	mg/L
EP-7	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-7	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-7	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-7	3/25/2015	Iron, Total	0.32	0.1	0.036	13822000	mg/L
EP-7	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-7	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-7	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-7	3/25/2015	Manganese, Total	0.77	0.01	0.0076	2017000	mg/L
EP-7	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-7	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-7	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-7	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-7	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-7	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-7	9/1/2015	Arsenic, Total	0.16	0.1	0.029	10000	mg/L
EP-7	9/1/2015	Barium, Total	0.18	0.01	0.0053	2000000	mg/L
EP-7	9/1/2015	Calcium, Total	1100	50	2.8	NA	mg/L
EP-7	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-7	9/1/2015	Chromium, Total	0.064	0.03	0.011	50000	mg/L
EP-7	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-7	9/1/2015	Iron, Total	0.12	0.1	0.036	13822000	mg/L
EP-7	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-7	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-7	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-7	9/1/2015	Manganese, Total	0.51	0.01	0.0076	2017000	mg/L
EP-7	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-7	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-7	9/1/2015	Selenium, Total	0.22	0.1	0.012	50000	mg/L
EP-7	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-7	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-7	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-7	8/30/2016	Arsenic, Total	0.16	0.1	0.014	10000	mg/L
EP-7	8/30/2016	Barium, Total	0.2	0.01	0.0066	2000000	mg/L
EP-7	8/30/2016	Calcium, Total	810	10	5	NA	mg/L
EP-7	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-7	8/30/2016	Chromium, Total	0.014	0.03	0.0088	50000	mg/L
EP-7	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-7	8/30/2016	Mercury, Total	0.000075	0.0002	0.000053	2000	mg/L
EP-7	8/30/2016	Potassium, Total	1800	50	25	NA	mg/L
EP-7	8/30/2016	Magnesium, Total	1400	50	25	NA	mg/L
EP-7	8/30/2016	Manganese, Total	1.3	0.01	0.0016	2017000	mg/L
EP-7	8/30/2016	Sodium, Total	34000	500	250	NA	mg/L
EP-7	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-7	8/30/2016	Selenium, Total	0.18	0.1	0.021	50000	mg/L
EP-7	8/30/2016	Uranium, Total	0.0088	0.05	0.0051	30000	mg/L
EP-7	8/30/2016	Zinc, Total	0.03	0.05	0.014	5960000	mg/L
EP-7	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-7	3/30/2017	Arsenic, Total	0.18	0.05	0.011	10000	mg/L
EP-7	3/30/2017	Barium, Total	0.16	0.01	0.004	2000000	mg/L
EP-7	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-7	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-7	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-7	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-7	3/30/2017	Arsenic, Dissolved	0.16	0.05	0.0089	10000	mg/L
EP-7	3/30/2017	Barium, Dissolved	0.18	0.02	0.0085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-7	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-7	3/30/2017	Chromium, Dissolved	0.015	0.06	0.01	100000	mg/L
EP-7	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-7	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-7	3/30/2017	Potassium, Dissolved	1800	100	50	NA	mg/L
EP-7	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-7	3/30/2017	Manganese, Dissolved	0.19	0.02	0.0038	2017400	mg/L
EP-7	3/30/2017	Sodium, Dissolved	50000	1000	500	NA	mg/L
EP-7	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-7	3/30/2017	Selenium, Dissolved	0.28	0.05	0.019	50000	mg/L
EP-7	3/30/2017	Uranium, Dissolved	0.0053	0.025	0.0025	NA	mg/L
EP-7	3/30/2017	Zinc, Dissolved	0.053	0.1	0.011	5960450	mg/L
EP-7	3/30/2017	Iron, Total	0.72	0.2	0.2	13822000	mg/L
EP-7	3/30/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
EP-7	3/30/2017	Manganese, Total	0.71	0.01	0.0014	2017000	mg/L
EP-7	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-7	3/30/2017	Selenium, Total	0.3	0.05	0.0094	50000	mg/L
EP-7	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-7	3/30/2017	Zinc, Total	0.018	0.05	0.013	5960000	mg/L
EP-7	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-7	10/24/2017	Arsenic, Total	0.11	0.05	0.021	10000	mg/L
EP-7	10/24/2017	Barium, Total	0.23	0.01	0.005	2000000	mg/L
EP-7	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-7	10/24/2017	Chromium, Total	0.026	0.03	0.0088	50000	mg/L
EP-7	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	10/24/2017	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-7	10/24/2017	Arsenic, Dissolved	0.13	0.05	0.014	10000	mg/L
EP-7	10/24/2017	Barium, Dissolved	0.26	0.01	0.0049	2000000	mg/L
EP-7	10/24/2017	Calcium, Dissolved	1300	50	3.9	NA	mg/L
EP-7	10/24/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-7	10/24/2017	Chromium, Dissolved	0.026	0.03	0.0064	100000	mg/L
EP-7	10/24/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-7	10/24/2017	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-7	10/24/2017	Potassium, Dissolved	2700	50	5.6	NA	mg/L
EP-7	10/24/2017	Magnesium, Dissolved	2100	50	12	NA	mg/L
EP-7	10/24/2017	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
EP-7	10/24/2017	Sodium, Dissolved	52000	1000	160	NA	mg/L
EP-7	10/24/2017	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	10/24/2017	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-7	10/24/2017	Uranium, Dissolved	0.0079	0.025	0.0048	NA	mg/L
EP-7	10/24/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	10/24/2017	Iron, Total	0.15	0.1	0.051	13822000	mg/L
EP-7	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-7	10/24/2017	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
EP-7	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-7	10/24/2017	Selenium, Total	0.14	0.05	0.049	50000	mg/L
EP-7	10/24/2017	Uranium, Total	0.0081	0.025	0.0077	30000	mg/L
EP-7	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-7	2/23/2018	Silver, Total	0.025	0.025	0.0061	50000	mg/L
EP-7	2/23/2018	Arsenic, Total	0.14	0.2	0.083	10000	mg/L
EP-7	2/23/2018	Barium, Total	0.24	0.01	0.005	2000000	mg/L
EP-7	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-7	2/23/2018	Chromium, Total	0.017	0.03	0.0088	50000	mg/L
EP-7	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	2/23/2018	Silver, Dissolved	0.033	0.05	0.018	81200	mg/L
EP-7	2/23/2018	Arsenic, Dissolved	0.11	0.05	0.021	10000	mg/L
EP-7	2/23/2018	Barium, Dissolved	0.22	0.02	0.0099	2000000	mg/L
EP-7	2/23/2018	Calcium, Dissolved	870	50	3.9	NA	mg/L
EP-7	2/23/2018	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-7	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-7	2/23/2018	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-7	2/23/2018	Iron, Dissolved	ND	0.2	0.16	13821880	mg/L
EP-7	2/23/2018	Potassium, Dissolved	1800	50	5.6	NA	mg/L
EP-7	2/23/2018	Magnesium, Dissolved	1400	50	12	NA	mg/L
EP-7	2/23/2018	Manganese, Dissolved	0.38	0.02	0.0039	2017400	mg/L
EP-7	2/23/2018	Sodium, Dissolved	36000	500	82	NA	mg/L
EP-7	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	2/23/2018	Selenium, Dissolved	0.12	0.05	0.038	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	2/23/2018	Uranium, Dissolved	0.0059	0.025	0.0048	NA	mg/L
EP-7	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	2/23/2018	Iron, Total	0.77	0.1	0.051	13822000	mg/L
EP-7	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-7	2/23/2018	Manganese, Total	0.66	0.01	0.0055	2017000	mg/L
EP-7	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L
EP-7	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-7	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-7	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-7	9/7/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-7	9/7/2018	Arsenic, Total	0.16	0.05	0.021	10000	mg/L
EP-7	9/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
EP-7	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-7	9/7/2018	Chromium, Total	0.017	0.03	0.0088	50000	mg/L
EP-7	9/7/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	9/7/2018	Silver, Dissolved	0.027	0.025	0.0092	81200	mg/L
EP-7	9/7/2018	Arsenic, Dissolved	0.17	0.05	0.021	10000	mg/L
EP-7	9/7/2018	Barium, Dissolved	0.24	0.01	0.0049	2000000	mg/L
EP-7	9/7/2018	Calcium, Dissolved	690	10	0.78	NA	mg/L
EP-7	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-7	9/7/2018	Chromium, Dissolved	0.02	0.03	0.0064	100000	mg/L
EP-7	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-7	9/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-7	9/7/2018	Potassium, Dissolved	2300	50	5.6	NA	mg/L
EP-7	9/7/2018	Magnesium, Dissolved	1700	20	5	NA	mg/L
EP-7	9/7/2018	Manganese, Dissolved	0.46	0.01	0.002	2017400	mg/L
EP-7	9/7/2018	Sodium, Dissolved	38000	1000	160	NA	mg/L
EP-7	9/7/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-7	9/7/2018	Uranium, Dissolved	0.0051	0.025	0.0048	NA	mg/L
EP-7	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	9/7/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
EP-7	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-7	9/7/2018	Manganese, Total	0.8	0.002	0.0011	2017000	mg/L
EP-7	9/7/2018	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-7	9/7/2018	Selenium, Total	ND	0.05	0.049	50000	mg/L
EP-7	9/7/2018	Uranium, Total	0.0051	0.025	0.0034	30000	mg/L
EP-7	9/7/2018	Zinc, Total	0.0048	0.01	0.0033	5960000	mg/L
EP-7	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-7	9/17/2020	Aluminum, Total	3.4	0.1	0.037	19914000	mg/L
EP-7	9/17/2020	Barium, Total	0.14	0.015	0.0082	2000000	mg/L
EP-7	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-7	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-7	9/17/2020	Chromium, Total	0.016	0.03	0.011	50000	mg/L
EP-7	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-7	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	9/17/2020	Iron, Total	1.1	0.25	0.064	13822000	mg/L
EP-7	9/17/2020	Manganese, Total	4.3	0.01	0.0041	2017000	mg/L
EP-7	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-7	9/17/2020	Nickel, Total	0.34	0.05	0.016	372000	mg/L
EP-7	9/17/2020	Silver, Total	0.019	0.025	0.0063	50000	mg/L
EP-7	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-7	9/17/2020	Boron, Total	12	4	0.74	3949	mg/L
EP-7	9/17/2020	Antimony, Total	ND	0.05	0.035	6000	mg/L
EP-7	9/17/2020	Arsenic, Total	0.37	0.05	0.013	10000	mg/L
EP-7	9/17/2020	Lead, Total	ND	0.025	0.0017	15000	mg/L
EP-7	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-7	9/17/2020	Thallium, Total	ND	0.012	0.012	2000	mg/L
EP-7	9/17/2020	Uranium, Total	0.0096	0.025	0.0033	30000	mg/L
EP-7	9/17/2020	Antimony, Dissolved	ND	0.5	0.35	6000	mg/L
EP-7	9/17/2020	Arsenic, Dissolved	0.33	0.5	0.1	10000	mg/L
EP-7	9/17/2020	Lead, Dissolved	ND	0.25	0.017	NA	mg/L
EP-7	9/17/2020	Selenium, Dissolved	ND	0.5	0.33	50000	mg/L
EP-7	9/17/2020	Thallium, Dissolved	ND	0.25	0.017	2000	mg/L
EP-7	9/17/2020	Uranium, Dissolved	ND	0.25	0.033	NA	mg/L
EP-7	9/17/2020	Aluminum, Dissolved	0.4	0.1	0.028	19913930	mg/L
EP-7	9/17/2020	Barium, Dissolved	0.16	0.01	0.0056	2000000	mg/L
EP-7	9/17/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
EP-7	9/17/2020	Calcium, Dissolved	430	5	0.57	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L
EP-7	9/17/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
EP-7	9/17/2020	Iron, Dissolved	0.18	0.1	0.052	13821880	mg/L
EP-7	9/17/2020	Manganese, Dissolved	4	0.01	0.0029	2017400	mg/L
EP-7	9/17/2020	Nickel, Dissolved	0.33	0.05	0.016	372000	mg/L
EP-7	9/17/2020	Silver, Dissolved	0.013	0.025	0.0063	81200	mg/L
EP-7	9/17/2020	Boron, Dissolved	11	0.8	0.13	3949110	mg/L
EP-7	9/17/2020	Magnesium, Dissolved	4100	100	6.7	NA	mg/L
EP-7	9/17/2020	Potassium, Dissolved	5800	100	16	NA	mg/L
EP-7	9/17/2020	Sodium, Dissolved	120000	5000	690	NA	mg/L
EP-7	9/17/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
EP-7	9/17/2020	Chromium, Dissolved	0.023	0.03	0.0098	100000	mg/L
EP-7	9/17/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
EP-7	9/17/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
EP-7	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-7	5/29/2012	Arsenic, Total	0.081	0.02	0.0022	10000	mg/L
EP-7	5/29/2012	Barium, Total	0.14	0.02	0.0031	2000000	mg/L
EP-7	5/29/2012	Calcium, Total	1100	20	0.52	NA	mg/L
EP-7	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-7	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-7	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-7	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-7	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-7	5/29/2012	Potassium, Total	1300	20	9.6	NA	mg/L
EP-7	5/29/2012	Magnesium, Total	980	10	0.13	NA	mg/L
EP-7	5/29/2012	Manganese, Total	0.74	0.02	0.0062	2017000	mg/L
EP-7	5/29/2012	Sodium, Total	28000	5000	220	NA	mg/L
EP-7	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-7	5/29/2012	Selenium, Total	0.086	0.02	0.0066	50000	mg/L
EP-7	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-7	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-7	11/6/2012	Silver, Total	ND	0.025	0.0032	50000	mg/L
EP-7	11/6/2012	Arsenic, Total	0.14	0.02	0.011	10000	mg/L
EP-7	11/6/2012	Barium, Total	0.081	0.01	0.0019	2000000	mg/L
EP-7	11/6/2012	Calcium, Total	910	10	0.26	NA	mg/L
EP-7	11/6/2012	Cadmium, Total	ND	0.01	0.0022	5000	mg/L
EP-7	11/6/2012	Chromium, Total	ND	0.03	0.0052	50000	mg/L
EP-7	11/6/2012	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	11/6/2012	Iron, Total	ND	0.1	0.066	13822000	mg/L
EP-7	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-7	11/6/2012	Potassium, Total	2300	50	24	NA	mg/L
EP-7	11/6/2012	Magnesium, Total	1400	20	0.26	NA	mg/L
EP-7	11/6/2012	Manganese, Total	0.32	0.01	0.0013	2017000	mg/L
EP-7	11/6/2012	Sodium, Total	43000	1000	45	NA	mg/L
EP-7	11/6/2012	Lead, Total	ND	0.025	0.0072	15000	mg/L
EP-7	11/6/2012	Selenium, Total	ND	0.25	0.043	50000	mg/L
EP-7	11/6/2012	Uranium, Total	ND	0.02	0.00024	30000	mg/L
EP-7	11/6/2012	Zinc, Total	ND	0.05	0.0057	5960000	mg/L
EP-7	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-7	5/28/2013	Arsenic, Total	0.11	0.1	0.013	10000	mg/L
EP-7	5/28/2013	Barium, Total	0.11	0.01	0.0048	2000000	mg/L
EP-7	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-7	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-7	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-7	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-7	5/28/2013	Manganese, Total	2.9	0.01	0.00082	2017000	mg/L
EP-7	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-7	5/28/2013	Selenium, Total	0.11	0.1	0.055	50000	mg/L
EP-7	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-7	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-7	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-7	10/15/2013	Arsenic, Total	0.13	0.05	0.0049	10000	mg/L
EP-7	10/15/2013	Barium, Total	0.096	0.01	0.0048	2000000	mg/L
EP-7	10/15/2013	Calcium, Total	770	20	1.4	NA	mg/L
EP-7	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-7	10/15/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-7	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-7	10/15/2013	Potassium, Total	1600	50	15	NA	mg/L
EP-7	10/15/2013	Magnesium, Total	1200	20	1	NA	mg/L
EP-7	10/15/2013	Manganese, Total	0.38	0.01	0.00082	2017000	mg/L
EP-7	10/15/2013	Sodium, Total	32000	500	180	NA	mg/L
EP-7	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-7	10/15/2013	Selenium, Total	0.19	0.05	0.015	50000	mg/L
EP-7	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-7	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-7	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-7	3/5/2014	Arsenic, Total	0.15	0.1	0.036	10000	mg/L
EP-7	3/5/2014	Barium, Total	0.11	0.01	0.0029	2000000	mg/L
EP-7	3/5/2014	Calcium, Total	760	50	4.1	NA	mg/L
EP-7	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-7	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-7	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-7	3/5/2014	Iron, Total	0.28	0.1	0.036	13822000	mg/L
EP-7	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-7	3/5/2014	Potassium, Total	1700	50	4.7	NA	mg/L
EP-7	3/5/2014	Magnesium, Total	1000	50	0.9	NA	mg/L
EP-7	3/5/2014	Manganese, Total	2	0.01	0.0024	2017000	mg/L
EP-7	3/5/2014	Sodium, Total	28000	500	200	NA	mg/L
EP-7	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-7	3/5/2014	Selenium, Total	0.12	0.1	0.051	50000	mg/L
EP-7	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-7	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-7	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-7	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-7	11/12/2014	Barium, Total	0.2	0.01	0.0025	2000000	mg/L
EP-7	11/12/2014	Calcium, Total	1100	20	1.6	NA	mg/L
EP-7	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-7	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-7	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-7	11/12/2014	Iron, Total	0.72	0.1	0.036	13822000	mg/L
EP-7	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-7	11/12/2014	Potassium, Total	1600	20	1.9	NA	mg/L
EP-7	11/12/2014	Magnesium, Total	1200	20	0.36	NA	mg/L
EP-7	11/12/2014	Manganese, Total	1.1	0.01	0.0024	2017000	mg/L
EP-7	11/12/2014	Sodium, Total	32000	500	200	NA	mg/L
EP-7	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-7	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-7	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-7	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-8	5/29/2012	Arsenic, Total	0.16	0.02	0.0022	10000	mg/L
EP-8	5/29/2012	Barium, Total	0.18	0.02	0.0031	2000000	mg/L
EP-8	5/29/2012	Calcium, Total	730	10	0.26	NA	mg/L
EP-8	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-8	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-8	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-8	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-8	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-8	5/29/2012	Potassium, Total	2200	100	48	NA	mg/L
EP-8	5/29/2012	Magnesium, Total	1500	20	0.26	NA	mg/L
EP-8	5/29/2012	Manganese, Total	7.3	0.02	0.0062	2017000	mg/L
EP-8	5/29/2012	Sodium, Total	35000	500	22	NA	mg/L
EP-8	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-8	5/29/2012	Selenium, Total	0.13	0.02	0.0066	50000	mg/L
EP-8	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-8	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-8	11/6/2012	Silver, Total	ND	0.1	0.013	50000	mg/L
EP-8	11/6/2012	Arsenic, Total	0.5	0.02	0.011	10000	mg/L
EP-8	11/6/2012	Barium, Total	0.23	0.04	0.0077	2000000	mg/L
EP-8	11/6/2012	Calcium, Total	550	20	0.52	NA	mg/L
EP-8	11/6/2012	Cadmium, Total	ND	0.04	0.0086	5000	mg/L
EP-8	11/6/2012	Chromium, Total	ND	0.12	0.021	50000	mg/L
EP-8	11/6/2012	Copper, Total	ND	0.12	0.082	790000	mg/L
EP-8	11/6/2012	Iron, Total	ND	0.2	0.13	13822000	mg/L
EP-8	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	Potassium, Total	7600	500	240	NA	mg/L
EP-8	11/6/2012	Magnesium, Total	5200	500	6.5	NA	mg/L
EP-8	11/6/2012	Manganese, Total	34	0.1	0.013	2017000	mg/L
EP-8	11/6/2012	Sodium, Total	99000	2000	89	NA	mg/L
EP-8	11/6/2012	Lead, Total	ND	0.1	0.029	15000	mg/L
EP-8	11/6/2012	Selenium, Total	ND	2.5	0.43	50000	mg/L
EP-8	11/6/2012	Uranium, Total	ND	0.05	0.0006	30000	mg/L
EP-8	11/6/2012	Zinc, Total	ND	0.2	0.023	5960000	mg/L
EP-8	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-8	5/28/2013	Arsenic, Total	0.11	0.1	0.013	10000	mg/L
EP-8	5/28/2013	Barium, Total	0.12	0.01	0.0048	2000000	mg/L
EP-8	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-8	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-8	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-8	5/28/2013	Mercury, Total	ND	0.001	0.00044	2000	mg/L
EP-8	5/28/2013	Manganese, Total	3	0.01	0.00082	2017000	mg/L
EP-8	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-8	5/28/2013	Selenium, Total	0.088	0.05	0.028	50000	mg/L
EP-8	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-8	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-8	10/15/2013	Silver, Total	ND	0.1	0.039	50000	mg/L
EP-8	10/15/2013	Arsenic, Total	0.37	0.05	0.0049	10000	mg/L
EP-8	10/15/2013	Barium, Total	0.22	0.01	0.0048	2000000	mg/L
EP-8	10/15/2013	Calcium, Total	850	10	0.69	NA	mg/L
EP-8	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-8	10/15/2013	Chromium, Total	0.039	0.03	0.0042	50000	mg/L
EP-8	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-8	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-8	10/15/2013	Potassium, Total	4300	1000	300	NA	mg/L
EP-8	10/15/2013	Magnesium, Total	3500	50	2.6	NA	mg/L
EP-8	10/15/2013	Manganese, Total	18	0.04	0.0033	2017000	mg/L
EP-8	10/15/2013	Sodium, Total	75000	1000	360	NA	mg/L
EP-8	10/15/2013	Lead, Total	ND	0.1	0.0018	15000	mg/L
EP-8	10/15/2013	Selenium, Total	0.47	0.05	0.015	50000	mg/L
EP-8	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-8	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-8	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-8	3/5/2014	Arsenic, Total	0.12	0.1	0.036	10000	mg/L
EP-8	3/5/2014	Barium, Total	0.12	0.01	0.0029	2000000	mg/L
EP-8	3/5/2014	Calcium, Total	780	50	4.1	NA	mg/L
EP-8	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-8	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-8	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-8	3/5/2014	Iron, Total	0.28	0.1	0.036	13822000	mg/L
EP-8	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-8	3/5/2014	Potassium, Total	1800	50	4.7	NA	mg/L
EP-8	3/5/2014	Magnesium, Total	1000	50	0.9	NA	mg/L
EP-8	3/5/2014	Manganese, Total	2.2	0.01	0.0024	2017000	mg/L
EP-8	3/5/2014	Sodium, Total	26000	500	200	NA	mg/L
EP-8	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-8	3/5/2014	Selenium, Total	ND	0.1	0.051	50000	mg/L
EP-8	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-8	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-8	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-8	11/12/2014	Barium, Total	0.2	0.01	0.0025	2000000	mg/L
EP-8	11/12/2014	Calcium, Total	1100	20	1.6	NA	mg/L
EP-8	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-8	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-8	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-8	11/12/2014	Iron, Total	0.57	0.1	0.036	13822000	mg/L
EP-8	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-8	11/12/2014	Potassium, Total	1700	20	1.9	NA	mg/L
EP-8	11/12/2014	Magnesium, Total	1200	20	0.36	NA	mg/L
EP-8	11/12/2014	Manganese, Total	1.2	0.01	0.0024	2017000	mg/L
EP-8	11/12/2014	Sodium, Total	32000	500	200	NA	mg/L
EP-8	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-8	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-8	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-8	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-8	3/25/2015	Barium, Total	0.16	0.01	0.0037	2000000	mg/L
EP-8	3/25/2015	Calcium, Total	840	50	2.8	NA	mg/L
EP-8	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-8	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-8	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-8	3/25/2015	Iron, Total	0.34	0.1	0.036	13822000	mg/L
EP-8	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-8	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-8	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-8	3/25/2015	Manganese, Total	0.78	0.01	0.0076	2017000	mg/L
EP-8	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-8	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-8	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-8	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-8	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-8	9/1/2015	Arsenic, Total	0.18	0.1	0.029	10000	mg/L
EP-8	9/1/2015	Barium, Total	0.18	0.01	0.0053	2000000	mg/L
EP-8	9/1/2015	Calcium, Total	1000	50	2.8	NA	mg/L
EP-8	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-8	9/1/2015	Chromium, Total	0.046	0.03	0.011	50000	mg/L
EP-8	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-8	9/1/2015	Iron, Total	ND	0.1	0.036	13822000	mg/L
EP-8	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-8	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-8	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-8	9/1/2015	Manganese, Total	0.52	0.01	0.0076	2017000	mg/L
EP-8	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-8	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-8	9/1/2015	Selenium, Total	0.22	0.1	0.012	50000	mg/L
EP-8	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-8	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-8	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-8	8/30/2016	Arsenic, Total	0.18	0.05	0.0069	10000	mg/L
EP-8	8/30/2016	Barium, Total	0.2	0.01	0.0066	2000000	mg/L
EP-8	8/30/2016	Calcium, Total	890	10	5	NA	mg/L
EP-8	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-8	8/30/2016	Chromium, Total	0.014	0.03	0.0088	50000	mg/L
EP-8	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-8	8/30/2016	Mercury, Total	0.000079	0.0002	0.000053	2000	mg/L
EP-8	8/30/2016	Potassium, Total	1900	50	25	NA	mg/L
EP-8	8/30/2016	Magnesium, Total	1400	50	25	NA	mg/L
EP-8	8/30/2016	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
EP-8	8/30/2016	Sodium, Total	31000	500	250	NA	mg/L
EP-8	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-8	8/30/2016	Selenium, Total	0.22	0.05	0.011	50000	mg/L
EP-8	8/30/2016	Uranium, Total	0.0096	0.025	0.0026	30000	mg/L
EP-8	8/30/2016	Zinc, Total	0.027	0.05	0.014	5960000	mg/L
EP-8	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-8	3/30/2017	Arsenic, Total	0.17	0.05	0.011	10000	mg/L
EP-8	3/30/2017	Barium, Total	0.17	0.01	0.004	2000000	mg/L
EP-8	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-8	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-8	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-8	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-8	3/30/2017	Arsenic, Dissolved	0.12	0.05	0.0089	10000	mg/L
EP-8	3/30/2017	Barium, Dissolved	0.2	0.02	0.0085	2000000	mg/L
EP-8	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-8	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-8	3/30/2017	Chromium, Dissolved	0.017	0.06	0.01	100000	mg/L
EP-8	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-8	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-8	3/30/2017	Potassium, Dissolved	1900	100	50	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-8	3/30/2017	Manganese, Dissolved	0.13	0.02	0.0038	2017400	mg/L
EP-8	3/30/2017	Sodium, Dissolved	54000	1000	500	NA	mg/L
EP-8	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-8	3/30/2017	Selenium, Dissolved	0.17	0.05	0.019	50000	mg/L
EP-8	3/30/2017	Uranium, Dissolved	0.0061	0.025	0.0025	NA	mg/L
EP-8	3/30/2017	Zinc, Dissolved	0.071	0.1	0.011	5960450	mg/L
EP-8	3/30/2017	Iron, Total	0.31	0.2	0.2	13822000	mg/L
EP-8	3/30/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
EP-8	3/30/2017	Manganese, Total	0.55	0.01	0.0014	2017000	mg/L
EP-8	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-8	3/30/2017	Selenium, Total	0.31	0.05	0.0094	50000	mg/L
EP-8	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-8	3/30/2017	Zinc, Total	0.016	0.05	0.013	5960000	mg/L
EP-8	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-8	10/24/2017	Arsenic, Total	0.12	0.05	0.021	10000	mg/L
EP-8	10/24/2017	Barium, Total	0.22	0.01	0.005	2000000	mg/L
EP-8	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-8	10/24/2017	Chromium, Total	0.026	0.03	0.0088	50000	mg/L
EP-8	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	10/24/2017	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-8	10/24/2017	Arsenic, Dissolved	0.11	0.05	0.014	10000	mg/L
EP-8	10/24/2017	Barium, Dissolved	0.26	0.01	0.0049	2000000	mg/L
EP-8	10/24/2017	Calcium, Dissolved	1300	50	3.9	NA	mg/L
EP-8	10/24/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	10/24/2017	Chromium, Dissolved	0.031	0.03	0.0064	100000	mg/L
EP-8	10/24/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	10/24/2017	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-8	10/24/2017	Potassium, Dissolved	2800	50	5.6	NA	mg/L
EP-8	10/24/2017	Magnesium, Dissolved	2200	50	12	NA	mg/L
EP-8	10/24/2017	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
EP-8	10/24/2017	Sodium, Dissolved	50000	1000	160	NA	mg/L
EP-8	10/24/2017	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-8	10/24/2017	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-8	10/24/2017	Uranium, Dissolved	0.0077	0.025	0.0048	NA	mg/L
EP-8	10/24/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	10/24/2017	Iron, Total	0.2	0.1	0.051	13822000	mg/L
EP-8	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-8	10/24/2017	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
EP-8	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-8	10/24/2017	Selenium, Total	0.19	0.1	0.098	50000	mg/L
EP-8	10/24/2017	Uranium, Total	0.0079	0.025	0.0077	30000	mg/L
EP-8	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-8	2/23/2018	Silver, Total	0.026	0.025	0.0061	50000	mg/L
EP-8	2/23/2018	Arsenic, Total	0.15	0.2	0.083	10000	mg/L
EP-8	2/23/2018	Barium, Total	0.25	0.01	0.005	2000000	mg/L
EP-8	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-8	2/23/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
EP-8	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	2/23/2018	Silver, Dissolved	ND	0.25	0.092	81200	mg/L
EP-8	2/23/2018	Arsenic, Dissolved	0.1	0.05	0.021	10000	mg/L
EP-8	2/23/2018	Barium, Dissolved	0.23	0.01	0.0049	2000000	mg/L
EP-8	2/23/2018	Calcium, Dissolved	870	50	3.9	NA	mg/L
EP-8	2/23/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	2/23/2018	Chromium, Dissolved	ND	0.3	0.064	100000	mg/L
EP-8	2/23/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	2/23/2018	Iron, Dissolved	0.15	0.1	0.082	13821880	mg/L
EP-8	2/23/2018	Potassium, Dissolved	1700	50	5.6	NA	mg/L
EP-8	2/23/2018	Magnesium, Dissolved	1300	50	12	NA	mg/L
EP-8	2/23/2018	Manganese, Dissolved	0.45	0.01	0.002	2017400	mg/L
EP-8	2/23/2018	Sodium, Dissolved	32000	500	82	NA	mg/L
EP-8	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-8	2/23/2018	Selenium, Dissolved	0.099	0.05	0.038	50000	mg/L
EP-8	2/23/2018	Uranium, Dissolved	0.0054	0.025	0.0048	NA	mg/L
EP-8	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	2/23/2018	Iron, Total	0.72	0.1	0.051	13822000	mg/L
EP-8	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-8	2/23/2018	Manganese, Total	0.65	0.01	0.0055	2017000	mg/L
EP-8	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-8	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-8	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-8	9/7/2018	Silver, Total	0.015	0.005	0.0012	50000	mg/L
EP-8	9/7/2018	Arsenic, Total	0.096	0.02	0.0083	10000	mg/L
EP-8	9/7/2018	Barium, Total	0.2	0.002	0.001	2000000	mg/L
EP-8	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-8	9/7/2018	Chromium, Total	0.009	0.006	0.0018	50000	mg/L
EP-8	9/7/2018	Copper, Total	0.029	0.006	0.0041	790000	mg/L
EP-8	9/7/2018	Silver, Dissolved	0.022	0.025	0.0092	81200	mg/L
EP-8	9/7/2018	Arsenic, Dissolved	0.093	0.05	0.021	10000	mg/L
EP-8	9/7/2018	Barium, Dissolved	0.24	0.01	0.0049	2000000	mg/L
EP-8	9/7/2018	Calcium, Dissolved	620	10	0.78	NA	mg/L
EP-8	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	9/7/2018	Chromium, Dissolved	0.011	0.03	0.0064	100000	mg/L
EP-8	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	9/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
EP-8	9/7/2018	Potassium, Dissolved	1300	20	2.3	NA	mg/L
EP-8	9/7/2018	Magnesium, Dissolved	970	10	2.5	NA	mg/L
EP-8	9/7/2018	Manganese, Dissolved	0.94	0.01	0.002	2017400	mg/L
EP-8	9/7/2018	Sodium, Dissolved	23000	500	82	NA	mg/L
EP-8	9/7/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-8	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-8	9/7/2018	Uranium, Dissolved	0.003	0.01	0.0019	NA	mg/L
EP-8	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	9/7/2018	Iron, Total	0.062	0.02	0.01	13822000	mg/L
EP-8	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	9/7/2018	Manganese, Total	1	0.01	0.0055	2017000	mg/L
EP-8	9/7/2018	Lead, Total	ND	0.01	0.0046	15000	mg/L
EP-8	9/7/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
EP-8	9/7/2018	Uranium, Total	0.0031	0.01	0.0014	30000	mg/L
EP-8	9/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-8	12/22/2020	Arsenic, Total Recoverable	**552**	10	2.86	10	ug/L
EP-8	12/22/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-8	12/22/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-8	12/22/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
EP-8	12/22/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-8	12/22/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-8	12/22/2020	Arsenic, Dissolved	**564**	10	2.86	10	ug/L
EP-8	12/22/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-8	12/22/2020	Antimony, Dissolved	**20.2**	20	3.52	6	ug/L
EP-8	12/22/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-8	12/22/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-8	12/22/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-8	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-8	12/22/2020	Copper, Dissolved	0.0517	0.02	0.008	790000	mg/L
EP-8	12/22/2020	Manganese, Dissolved	3.61	0.01	0.003	2017400	mg/L
EP-8	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-8	12/22/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-8	12/22/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-8	12/22/2020	Boron, Total	18.1	0.5	0.11	3949	mg/L
EP-8	12/22/2020	Barium, Total	ND	0.05	0.015	2000000	mg/L
EP-8	12/22/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-8	12/22/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-8	12/22/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-8	12/22/2020	Chromium, Total	0.0758	0.05	0.025	50000	mg/L
EP-8	12/22/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-8	12/22/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-8	12/22/2020	Manganese, Total	5.24	0.05	0.015	2017000	mg/L
EP-8	12/22/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-8	12/22/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-8	12/22/2020	Aluminum, Dissolved	ND	2	0.51	19913930	mg/L
EP-8	12/22/2020	Barium, Dissolved	ND	0.1	0.03	2000000	mg/L
EP-8	12/22/2020	Boron, Dissolved	16.1	1	0.22	3949110	mg/L
EP-8	12/22/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-8	12/22/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L
EP-8	12/22/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-8	12/22/2020	Iron, Dissolved	ND	2	0.75	13821880	mg/L
EP-8	12/22/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	12/22/2020	Nickel, Dissolved	0.631	0.06	0.03	372000	mg/L
EP-8	12/22/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-8	12/22/2020	Nickel, Total	0.633	0.03	0.015	372000	mg/L
EP-8	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-8	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-8	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-8	9/17/2020	Aluminum, Total	0.49	0.1	0.037	19914000	mg/L
EP-8	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-8	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-8	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-8	9/17/2020	Chromium, Total	0.017	0.03	0.011	50000	mg/L
EP-8	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-8	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
EP-8	9/17/2020	Manganese, Total	3.7	0.01	0.0041	2017000	mg/L
EP-8	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-8	9/17/2020	Nickel, Total	0.26	0.05	0.016	372000	mg/L
EP-8	9/17/2020	Silver, Total	0.0099	0.025	0.0063	50000	mg/L
EP-8	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-8	9/17/2020	Boron, Total	9.2	4	0.74	3949	mg/L
EP-8	9/17/2020	Arsenic, Total	0.32	0.05	0.013	10000	mg/L
EP-8	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-8	9/17/2020	Antimony, Total	ND	0.1	0.07	6000	mg/L
EP-8	9/17/2020	Lead, Total	ND	0.05	0.0034	15000	mg/L
EP-8	9/17/2020	Thallium, Total	ND	0.025	0.025	2000	mg/L
EP-8	9/17/2020	Uranium, Total	0.009	0.05	0.0065	30000	mg/L
EP-8	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-8	9/17/2020	Arsenic, Dissolved	0.31	0.05	0.01	10000	mg/L
EP-8	9/17/2020	Lead, Dissolved	0.0029	0.025	0.0017	NA	mg/L
EP-8	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-8	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-8	9/17/2020	Uranium, Dissolved	0.0063	0.025	0.0033	NA	mg/L
EP-8	9/17/2020	Aluminum, Dissolved	0.032	0.1	0.028	19913930	mg/L
EP-8	9/17/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
EP-8	9/17/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L
EP-8	9/17/2020	Manganese, Dissolved	3.2	0.01	0.0029	2017400	mg/L
EP-8	9/17/2020	Silver, Dissolved	0.016	0.025	0.0063	81200	mg/L
EP-8	9/17/2020	Boron, Dissolved	8.9	2	0.33	3949110	mg/L
EP-8	9/17/2020	Calcium, Dissolved	570	50	5.7	NA	mg/L
EP-8	9/17/2020	Magnesium, Dissolved	3100	50	3.4	NA	mg/L
EP-8	9/17/2020	Potassium, Dissolved	4200	50	8	NA	mg/L
EP-8	9/17/2020	Barium, Dissolved	0.23	0.01	0.0056	2000000	mg/L
EP-8	9/17/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
EP-8	9/17/2020	Iron, Dissolved	0.055	0.1	0.052	13821880	mg/L
EP-8	9/17/2020	Nickel, Dissolved	0.25	0.05	0.016	372000	mg/L
EP-8	9/17/2020	Sodium, Dissolved	85000	1000	140	NA	mg/L
EP-8	9/17/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
EP-8	9/17/2020	Chromium, Dissolved	0.016	0.03	0.0098	100000	mg/L
EP-8	9/17/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
EP-8	9/17/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
EP-8	4/29/2019	Aluminum, Total	0.2	0.1	0.012441	19914000	mg/L
EP-8	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-8	4/29/2019	Arsenic, Total	0.12	0.02	0.006244	10000	mg/L
EP-8	4/29/2019	Barium, Total	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Total	0.0031	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Total	3.7	0.2	0.022653	3949	mg/L
EP-8	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-8	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-8	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Total	0.022	0.03	0.020359	790000	mg/L
EP-8	4/29/2019	Iron, Total	0.13	0.1	0.043734	13822000	mg/L
EP-8	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-8	4/29/2019	Manganese, Total	0.61	0.01	0.00145	2017000	mg/L
EP-8	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Total	0.11	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Selenium, Total	0.01	0.02	0.00956	50000	mg/L
EP-8	4/29/2019	Silver, Total	0.017	0.025	0.007092	50000	mg/L
EP-8	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Uranium, Total	0.0046	0.01	0.001697	30000	mg/L
EP-8	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-8	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-8	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-8	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-8	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Dissolved	0.002	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Dissolved	3.8	0.2	0.022653	3949110	mg/L
EP-8	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-8	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-8	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-8	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Dissolved	0.014	0.03	0.006481	790000	mg/L
EP-8	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-8	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-8	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-8	4/29/2019	Manganese, Dissolved	0.45	0.01	0.00145	2017400	mg/L
EP-8	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Dissolved	0.12	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-8	4/29/2019	Selenium, Dissolved	0.014	0.05	0.008567	50000	mg/L
EP-8	4/29/2019	Silver, Dissolved	0.019	0.025	0.004712	81200	mg/L
EP-8	4/29/2019	Sodium, Dissolved	28000	500	208.088149	NA	mg/L
EP-8	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-8	4/29/2019	Uranium, Dissolved	0.005	0.01	0.001495	NA	mg/L
EP-8	4/29/2019	Zinc, Dissolved	0.019	0.05	0.01126	5960450	mg/L
EP-8	4/29/2019	Aluminum, Total	0.21	0.1	0.012441	19914000	mg/L
EP-8	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-8	4/29/2019	Arsenic, Total	0.11	0.02	0.006244	10000	mg/L
EP-8	4/29/2019	Barium, Total	0.18	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Total	0.0033	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Total	3.6	0.2	0.022653	3949	mg/L
EP-8	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-8	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-8	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
EP-8	4/29/2019	Iron, Total	0.088	0.1	0.043734	13822000	mg/L
EP-8	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-8	4/29/2019	Manganese, Total	0.59	0.01	0.00145	2017000	mg/L
EP-8	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Total	0.11	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Selenium, Total	0.0098	0.02	0.00956	50000	mg/L
EP-8	4/29/2019	Silver, Total	0.019	0.025	0.007092	50000	mg/L
EP-8	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-8	4/29/2019	Uranium, Total	0.0044	0.01	0.001697	30000	mg/L
EP-8	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-8	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-8	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-8	4/29/2019	Arsenic, Dissolved	0.12	0.02	0.002017	10000	mg/L
EP-8	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Dissolved	0.002	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Dissolved	3.8	0.2	0.022653	3949110	mg/L
EP-8	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-8	4/29/2019	Calcium, Dissolved	750	10	0.618891	NA	mg/L
EP-8	4/29/2019	Chromium, Dissolved	0.01	0.03	0.007666	100000	mg/L
EP-8	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Dissolved	0.013	0.03	0.006481	790000	mg/L
EP-8	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-8	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-8	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-8	4/29/2019	Manganese, Dissolved	0.45	0.01	0.00145	2017400	mg/L
EP-8	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Dissolved	0.1	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-8	4/29/2019	Selenium, Dissolved	0.0078	0.02	0.003427	50000	mg/L
EP-8	4/29/2019	Silver, Dissolved	0.018	0.025	0.004712	81200	mg/L
EP-8	4/29/2019	Sodium, Dissolved	29000	500	208.088149	NA	mg/L
EP-8	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Uranium, Dissolved	0.0046	0.01	0.001495	NA	mg/L
EP-8	4/29/2019	Zinc, Dissolved	0.022	0.05	0.01126	5960450	mg/L
EP-8	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-8	11/20/2019	Antimony, Dissolved	ND	0.1	0.038942	6000	mg/L
EP-8	11/20/2019	Arsenic, Dissolved	0.32	0.1	0.010086	10000	mg/L
EP-8	11/20/2019	Barium, Dissolved	0.22	0.1	0.032419	2000000	mg/L
EP-8	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-8	11/20/2019	Boron, Dissolved	9	2	0.226525	3949110	mg/L
EP-8	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-8	11/20/2019	Calcium, Dissolved	690	50	3.094457	NA	mg/L
EP-8	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-8	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-8	11/20/2019	Copper, Dissolved	0.15	0.3	0.064808	790000	mg/L
EP-8	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-8	11/20/2019	Lead, Dissolved	ND	0.05	0.005488	NA	mg/L
EP-8	11/20/2019	Magnesium, Dissolved	3200	50	2.514522	NA	mg/L
EP-8	11/20/2019	Manganese, Dissolved	4.3	0.1	0.014497	2017400	mg/L
EP-8	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-8	11/20/2019	Nickel, Dissolved	0.23	0.5	0.200435	372000	mg/L
EP-8	11/20/2019	Potassium, Dissolved	4000	50	8.114407	NA	mg/L
EP-8	11/20/2019	Selenium, Dissolved	0.054	0.1	0.017135	50000	mg/L
EP-8	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-8	11/20/2019	Sodium, Dissolved	80000	2000	832.352597	NA	mg/L
EP-8	11/20/2019	Thallium, Dissolved	ND	0.05	0.004836	2000	mg/L
EP-8	11/20/2019	Uranium, Dissolved	ND	0.05	0.007474	NA	mg/L
EP-8	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-8	11/20/2019	Aluminum, Total	0.22	0.4	0.049765	19914000	mg/L
EP-8	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-8	11/20/2019	Arsenic, Total	0.26	0.5	0.156094	10000	mg/L
EP-8	11/20/2019	Barium, Total	0.21	0.04	0.012968	2000000	mg/L
EP-8	11/20/2019	Beryllium, Total	ND	0.04	0.005675	4000	mg/L
EP-8	11/20/2019	Boron, Total	8.6	0.8	0.09061	3949	mg/L
EP-8	11/20/2019	Cadmium, Total	ND	0.04	0.014702	5000	mg/L
EP-8	11/20/2019	Chromium, Total	ND	0.12	0.030663	50000	mg/L
EP-8	11/20/2019	Cobalt, Total	ND	0.12	0.061827	5980	mg/L
EP-8	11/20/2019	Copper, Total	0.11	0.12	0.081436	790000	mg/L
EP-8	11/20/2019	Iron, Total	0.23	0.4	0.174937	13822000	mg/L
EP-8	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-8	11/20/2019	Manganese, Total	5.1	0.04	0.005799	2017000	mg/L
EP-8	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-8	11/20/2019	Molybdenum, Total	ND	0.16	0.134697	98700	mg/L
EP-8	11/20/2019	Nickel, Total	0.23	0.2	0.080174	372000	mg/L
EP-8	11/20/2019	Selenium, Total	ND	0.5	0.238994	50000	mg/L
EP-8	11/20/2019	Silver, Total	0.039	0.1	0.028366	50000	mg/L
EP-8	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-8	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-8	11/20/2019	Zinc, Total	ND	0.2	0.115437	5960000	mg/L
EP-9	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-9	11/20/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-9	11/20/2019	Arsenic, Dissolved	0.11	0.1	0.010086	10000	mg/L
EP-9	11/20/2019	Barium, Dissolved	0.16	0.1	0.032419	2000000	mg/L
EP-9	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-9	11/20/2019	Boron, Dissolved	3	2	0.226525	3949110	mg/L
EP-9	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-9	11/20/2019	Calcium, Dissolved	1200	50	3.094457	NA	mg/L
EP-9	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-9	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-9	11/20/2019	Copper, Dissolved	0.13	0.3	0.064808	790000	mg/L
EP-9	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-9	11/20/2019	Lead, Dissolved	ND	0.025	0.002744	NA	mg/L
EP-9	11/20/2019	Magnesium, Dissolved	1300	50	2.514522	NA	mg/L
EP-9	11/20/2019	Manganese, Dissolved	1.9	0.1	0.014497	2017400	mg/L
EP-9	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-9	11/20/2019	Nickel, Dissolved	ND	0.5	0.200435	372000	mg/L
EP-9	11/20/2019	Potassium, Dissolved	1500	50	8.114407	NA	mg/L
EP-9	11/20/2019	Selenium, Dissolved	0.042	0.1	0.017135	50000	mg/L
EP-9	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-9	11/20/2019	Sodium, Dissolved	33000	1000	416.176299	NA	mg/L
EP-9	11/20/2019	Thallium, Dissolved	ND	0.025	0.002418	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	Uranium, Dissolved	ND	0.05	0.007474	NA	mg/L
EP-9	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-9	11/20/2019	Aluminum, Total	0.14	0.2	0.024883	19914000	mg/L
EP-9	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-9	11/20/2019	Arsenic, Total	0.1	0.2	0.062438	10000	mg/L
EP-9	11/20/2019	Barium, Total	0.16	0.02	0.006484	2000000	mg/L
EP-9	11/20/2019	Beryllium, Total	ND	0.02	0.002838	4000	mg/L
EP-9	11/20/2019	Boron, Total	2.9	0.4	0.045305	3949	mg/L
EP-9	11/20/2019	Cadmium, Total	ND	0.02	0.007351	5000	mg/L
EP-9	11/20/2019	Chromium, Total	ND	0.06	0.015332	50000	mg/L
EP-9	11/20/2019	Cobalt, Total	ND	0.06	0.030913	5980	mg/L
EP-9	11/20/2019	Copper, Total	0.073	0.06	0.040718	790000	mg/L
EP-9	11/20/2019	Iron, Total	0.17	0.2	0.087469	13822000	mg/L
EP-9	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-9	11/20/2019	Manganese, Total	1.9	0.02	0.002899	2017000	mg/L
EP-9	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-9	11/20/2019	Molybdenum, Total	ND	0.08	0.067349	98700	mg/L
EP-9	11/20/2019	Nickel, Total	0.28	0.1	0.040087	372000	mg/L
EP-9	11/20/2019	Selenium, Total	ND	0.2	0.095598	50000	mg/L
EP-9	11/20/2019	Silver, Total	0.031	0.05	0.014183	50000	mg/L
EP-9	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-9	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-9	11/20/2019	Zinc, Total	0.091	0.1	0.057719	5960000	mg/L
EP-9	4/29/2019	Aluminum, Total	0.3	0.1	0.012441	19914000	mg/L
EP-9	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-9	4/29/2019	Arsenic, Total	0.082	0.005	0.001561	10000	mg/L
EP-9	4/29/2019	Barium, Total	0.17	0.01	0.003242	2000000	mg/L
EP-9	4/29/2019	Beryllium, Total	0.0029	0.01	0.001419	4000	mg/L
EP-9	4/29/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
EP-9	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-9	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-9	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-9	4/29/2019	Copper, Total	0.022	0.03	0.020359	790000	mg/L
EP-9	4/29/2019	Iron, Total	0.18	0.1	0.043734	13822000	mg/L
EP-9	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-9	4/29/2019	Manganese, Total	0.38	0.01	0.00145	2017000	mg/L
EP-9	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-9	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-9	4/29/2019	Nickel, Total	0.068	0.05	0.020043	372000	mg/L
EP-9	4/29/2019	Selenium, Total	0.011	0.005	0.00239	50000	mg/L
EP-9	4/29/2019	Silver, Total	0.016	0.025	0.007092	50000	mg/L
EP-9	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-9	4/29/2019	Uranium, Total	0.0055	0.01	0.001697	30000	mg/L
EP-9	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-9	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-9	4/29/2019	Antimony, Dissolved	ND	0.02	0.007788	6000	mg/L
EP-9	4/29/2019	Arsenic, Dissolved	0.079	0.02	0.002017	10000	mg/L
EP-9	4/29/2019	Barium, Dissolved	0.18	0.01	0.003242	2000000	mg/L
EP-9	4/29/2019	Beryllium, Dissolved	0.0019	0.01	0.001419	4000	mg/L
EP-9	4/29/2019	Boron, Dissolved	2.4	0.2	0.022653	3949110	mg/L
EP-9	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-9	4/29/2019	Calcium, Dissolved	710	10	0.618891	NA	mg/L
EP-9	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-9	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-9	4/29/2019	Copper, Dissolved	0.018	0.03	0.006481	790000	mg/L
EP-9	4/29/2019	Iron, Dissolved	0.076	0.1	0.043734	13821880	mg/L
EP-9	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-9	4/29/2019	Magnesium, Dissolved	890	10	0.502904	NA	mg/L
EP-9	4/29/2019	Manganese, Dissolved	0.34	0.01	0.00145	2017400	mg/L
EP-9	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-9	4/29/2019	Nickel, Dissolved	0.075	0.05	0.020043	372000	mg/L
EP-9	4/29/2019	Potassium, Dissolved	1200	20	3.245763	NA	mg/L
EP-9	4/29/2019	Selenium, Dissolved	0.0035	0.02	0.003427	50000	mg/L
EP-9	4/29/2019	Silver, Dissolved	0.017	0.025	0.004712	81200	mg/L
EP-9	4/29/2019	Sodium, Dissolved	19000	500	208.088149	NA	mg/L
EP-9	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-9	4/29/2019	Uranium, Dissolved	0.0053	0.01	0.001495	NA	mg/L
EP-9	4/29/2019	Zinc, Dissolved	0.041	0.05	0.01126	5960450	mg/L
EP-9	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/17/2020	Aluminum, Total	0.11	0.1	0.037	19914000	mg/L
EP-9	9/17/2020	Barium, Total	0.26	0.015	0.0082	2000000	mg/L
EP-9	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-9	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-9	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-9	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-9	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	9/17/2020	Iron, Total	0.12	0.25	0.064	13822000	mg/L
EP-9	9/17/2020	Manganese, Total	3.9	0.01	0.0041	2017000	mg/L
EP-9	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-9	9/17/2020	Nickel, Total	0.13	0.05	0.016	372000	mg/L
EP-9	9/17/2020	Silver, Total	0.019	0.025	0.0063	50000	mg/L
EP-9	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-9	9/17/2020	Boron, Total	7.1	4	0.74	3949	mg/L
EP-9	9/17/2020	Antimony, Total	ND	0.05	0.035	6000	mg/L
EP-9	9/17/2020	Arsenic, Total	0.24	0.05	0.013	10000	mg/L
EP-9	9/17/2020	Lead, Total	ND	0.025	0.0017	15000	mg/L
EP-9	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-9	9/17/2020	Thallium, Total	ND	0.012	0.012	2000	mg/L
EP-9	9/17/2020	Uranium, Total	0.0078	0.025	0.0033	30000	mg/L
EP-9	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-9	9/17/2020	Arsenic, Dissolved	0.03	0.05	0.01	10000	mg/L
EP-9	9/17/2020	Lead, Dissolved	0.0028	0.025	0.0017	NA	mg/L
EP-9	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-9	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-9	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-9	9/17/2020	Aluminum, Dissolved	ND	2	0.56	19913930	mg/L
EP-9	9/17/2020	Beryllium, Dissolved	ND	0.2	0.088	4000	mg/L
EP-9	9/17/2020	Boron, Dissolved	7.1	4	0.67	3949110	mg/L
EP-9	9/17/2020	Calcium, Dissolved	840	100	11	NA	mg/L
EP-9	9/17/2020	Copper, Dissolved	ND	0.6	0.35	790000	mg/L
EP-9	9/17/2020	Iron, Dissolved	ND	2	1	13821880	mg/L
EP-9	9/17/2020	Magnesium, Dissolved	3200	100	6.7	NA	mg/L
EP-9	9/17/2020	Manganese, Dissolved	3.6	0.2	0.058	2017400	mg/L
EP-9	9/17/2020	Potassium, Dissolved	3600	100	16	NA	mg/L
EP-9	9/17/2020	Silver, Dissolved	ND	0.5	0.13	81200	mg/L
EP-9	9/17/2020	Sodium, Dissolved	85000	1000	140	NA	mg/L
EP-9	9/17/2020	Barium, Dissolved	0.29	0.2	0.11	2000000	mg/L
EP-9	9/17/2020	Cadmium, Dissolved	ND	0.2	0.12	5000	mg/L
EP-9	9/17/2020	Cobalt, Dissolved	ND	0.6	0.24	5980	mg/L
EP-9	9/17/2020	Nickel, Dissolved	ND	1	0.33	372000	mg/L
EP-9	9/17/2020	Chromium, Dissolved	ND	0.6	0.2	100000	mg/L
EP-9	9/17/2020	Molybdenum, Dissolved	ND	0.8	0.56	98700	mg/L
EP-9	9/17/2020	Zinc, Dissolved	ND	1	0.6	5960450	mg/L
EP-9	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-9	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-9	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-9	12/21/2020	Barium, Dissolved	0.361	0.01	0.003	2000000	mg/L
EP-9	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-9	12/21/2020	Copper, Dissolved	0.0388	0.02	0.008	790000	mg/L
EP-9	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-9	12/21/2020	Manganese, Dissolved	3.57	0.01	0.003	2017400	mg/L
EP-9	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-9	12/21/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-9	12/21/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-9	12/21/2020	Boron, Total	8.68	0.5	0.11	3949	mg/L
EP-9	12/21/2020	Barium, Total	0.304	0.05	0.015	2000000	mg/L
EP-9	12/21/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-9	12/21/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-9	12/21/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-9	12/21/2020	Chromium, Total	0.0506	0.05	0.025	50000	mg/L
EP-9	12/21/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-9	12/21/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-9	12/21/2020	Manganese, Total	4.51	0.05	0.015	2017000	mg/L
EP-9	12/21/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-9	12/21/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-9	12/21/2020	Boron, Dissolved	9.3	1	0.22	3949110	mg/L
EP-9	12/21/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-9	12/21/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-9	12/21/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-9	12/21/2020	Nickel, Dissolved	0.243	0.06	0.03	372000	mg/L
EP-9	12/21/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-9	12/21/2020	Nickel, Total	0.236	0.03	0.015	372000	mg/L
EP-9	12/21/2020	Arsenic, Total Recoverable	**380**	10	2.86	10	ug/L
EP-9	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-9	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-9	12/21/2020	Selenium, Total Recoverable	**60**	50	14.3	50	ug/L
EP-9	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-9	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-9	12/21/2020	Arsenic, Dissolved	**364**	10	2.86	10	ug/L
EP-9	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-9	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-9	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-9	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-9	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-9	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-9	5/29/2012	Arsenic, Total	0.086	0.02	0.0022	10000	mg/L
EP-9	5/29/2012	Barium, Total	0.18	0.02	0.0031	2000000	mg/L
EP-9	5/29/2012	Calcium, Total	1100	20	0.52	NA	mg/L
EP-9	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-9	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-9	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-9	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-9	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-9	5/29/2012	Potassium, Total	1100	20	9.6	NA	mg/L
EP-9	5/29/2012	Magnesium, Total	930	10	0.13	NA	mg/L
EP-9	5/29/2012	Manganese, Total	4.8	0.02	0.0062	2017000	mg/L
EP-9	5/29/2012	Sodium, Total	30000	500	22	NA	mg/L
EP-9	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-9	5/29/2012	Selenium, Total	0.084	0.02	0.0066	50000	mg/L
EP-9	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-9	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-9	11/6/2012	Silver, Total	ND	0.025	0.0032	50000	mg/L
EP-9	11/6/2012	Arsenic, Total	0.055	0.01	0.0057	10000	mg/L
EP-9	11/6/2012	Barium, Total	0.15	0.01	0.0019	2000000	mg/L
EP-9	11/6/2012	Calcium, Total	960	10	0.26	NA	mg/L
EP-9	11/6/2012	Cadmium, Total	ND	0.01	0.0022	5000	mg/L
EP-9	11/6/2012	Chromium, Total	ND	0.03	0.0052	50000	mg/L
EP-9	11/6/2012	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	11/6/2012	Iron, Total	0.13	0.1	0.066	13822000	mg/L
EP-9	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-9	11/6/2012	Potassium, Total	1100	20	9.6	NA	mg/L
EP-9	11/6/2012	Magnesium, Total	750	10	0.13	NA	mg/L
EP-9	11/6/2012	Manganese, Total	0.94	0.01	0.0013	2017000	mg/L
EP-9	11/6/2012	Sodium, Total	25000	500	22	NA	mg/L
EP-9	11/6/2012	Lead, Total	ND	0.025	0.0072	15000	mg/L
EP-9	11/6/2012	Selenium, Total	ND	0.25	0.043	50000	mg/L
EP-9	11/6/2012	Uranium, Total	ND	0.01	0.00012	30000	mg/L
EP-9	11/6/2012	Zinc, Total	ND	0.05	0.0057	5960000	mg/L
EP-9	5/28/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-9	5/28/2013	Arsenic, Total	0.07	0.05	0.0065	10000	mg/L
EP-9	5/28/2013	Barium, Total	0.19	0.01	0.0048	2000000	mg/L
EP-9	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-9	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-9	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-9	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-9	5/28/2013	Manganese, Total	3	0.01	0.00082	2017000	mg/L
EP-9	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-9	5/28/2013	Selenium, Total	0.091	0.05	0.028	50000	mg/L
EP-9	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-9	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-9	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-9	10/15/2013	Arsenic, Total	0.1	0.05	0.0049	10000	mg/L
EP-9	10/15/2013	Barium, Total	0.19	0.01	0.0048	2000000	mg/L
EP-9	10/15/2013	Calcium, Total	1600	20	1.4	NA	mg/L
EP-9	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-9	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-9	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-9	10/15/2013	Potassium, Total	1200	50	15	NA	mg/L
EP-9	10/15/2013	Magnesium, Total	1200	20	1	NA	mg/L
EP-9	10/15/2013	Manganese, Total	3.3	0.01	0.00082	2017000	mg/L
EP-9	10/15/2013	Sodium, Total	33000	500	180	NA	mg/L
EP-9	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-9	10/15/2013	Selenium, Total	0.15	0.05	0.015	50000	mg/L
EP-9	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-9	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-9	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-9	3/5/2014	Arsenic, Total	0.12	0.1	0.036	10000	mg/L
EP-9	3/5/2014	Barium, Total	0.18	0.01	0.0029	2000000	mg/L
EP-9	3/5/2014	Calcium, Total	1400	50	4.1	NA	mg/L
EP-9	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-9	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-9	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-9	3/5/2014	Iron, Total	0.26	0.1	0.036	13822000	mg/L
EP-9	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-9	3/5/2014	Potassium, Total	1300	50	4.7	NA	mg/L
EP-9	3/5/2014	Magnesium, Total	1100	50	0.9	NA	mg/L
EP-9	3/5/2014	Manganese, Total	2.7	0.01	0.0024	2017000	mg/L
EP-9	3/5/2014	Sodium, Total	34000	500	200	NA	mg/L
EP-9	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-9	3/5/2014	Selenium, Total	0.15	0.1	0.051	50000	mg/L
EP-9	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-9	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-9	11/13/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-9	11/13/2014	Arsenic, Total	0.2	0.1	0.036	10000	mg/L
EP-9	11/13/2014	Barium, Total	0.25	0.01	0.0025	2000000	mg/L
EP-9	11/13/2014	Calcium, Total	1500	20	1.6	NA	mg/L
EP-9	11/13/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-9	11/13/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-9	11/13/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-9	11/13/2014	Iron, Total	0.19	0.1	0.036	13822000	mg/L
EP-9	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-9	11/13/2014	Potassium, Total	2400	50	4.7	NA	mg/L
EP-9	11/13/2014	Magnesium, Total	2000	20	0.36	NA	mg/L
EP-9	11/13/2014	Manganese, Total	0.25	0.01	0.0024	2017000	mg/L
EP-9	11/13/2014	Sodium, Total	64000	1000	390	NA	mg/L
EP-9	11/13/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-9	11/13/2014	Selenium, Total	ND	1	0.051	50000	mg/L
EP-9	11/13/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-9	11/13/2014	Zinc, Total	ND	0.1	0.035	5960000	mg/L
EP-9	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-9	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-9	3/25/2015	Barium, Total	0.11	0.01	0.0037	2000000	mg/L
EP-9	3/25/2015	Calcium, Total	690	50	2.8	NA	mg/L
EP-9	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-9	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-9	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-9	3/25/2015	Iron, Total	0.12	0.1	0.036	13822000	mg/L
EP-9	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-9	3/25/2015	Potassium, Total	730	50	8.9	NA	mg/L
EP-9	3/25/2015	Magnesium, Total	620	50	2	NA	mg/L
EP-9	3/25/2015	Manganese, Total	0.5	0.01	0.0076	2017000	mg/L
EP-9	3/25/2015	Sodium, Total	19000	500	36	NA	mg/L
EP-9	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-9	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-9	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-9	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-9	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-9	9/1/2015	Arsenic, Total	0.14	0.1	0.029	10000	mg/L
EP-9	9/1/2015	Barium, Total	0.22	0.01	0.0053	2000000	mg/L
EP-9	9/1/2015	Calcium, Total	980	50	2.8	NA	mg/L
EP-9	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-9	9/1/2015	Chromium, Total	0.033	0.03	0.011	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-9	9/1/2015	Iron, Total	ND	0.1	0.036	13822000	mg/L
EP-9	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-9	9/1/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-9	9/1/2015	Magnesium, Total	1000	50	2	NA	mg/L
EP-9	9/1/2015	Manganese, Total	0.4	0.01	0.0076	2017000	mg/L
EP-9	9/1/2015	Sodium, Total	32000	500	36	NA	mg/L
EP-9	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-9	9/1/2015	Selenium, Total	0.18	0.1	0.012	50000	mg/L
EP-9	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-9	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-9	8/30/2016	Silver, Total	ND	0.05	0.028	50000	mg/L
EP-9	8/30/2016	Arsenic, Total	0.27	0.1	0.014	10000	mg/L
EP-9	8/30/2016	Barium, Total	0.31	0.02	0.013	2000000	mg/L
EP-9	8/30/2016	Calcium, Total	810	10	5	NA	mg/L
EP-9	8/30/2016	Cadmium, Total	ND	0.02	0.0075	5000	mg/L
EP-9	8/30/2016	Chromium, Total	ND	0.06	0.018	50000	mg/L
EP-9	8/30/2016	Copper, Total	ND	0.06	0.04	790000	mg/L
EP-9	8/30/2016	Iron, Total	ND	0.2	0.2	13822000	mg/L
EP-9	8/30/2016	Mercury, Total	0.000092	0.0002	0.000053	2000	mg/L
EP-9	8/30/2016	Potassium, Total	2900	50	25	NA	mg/L
EP-9	8/30/2016	Magnesium, Total	2300	50	25	NA	mg/L
EP-9	8/30/2016	Manganese, Total	1.9	0.02	0.0032	2017000	mg/L
EP-9	8/30/2016	Sodium, Total	47000	1000	500	NA	mg/L
EP-9	8/30/2016	Lead, Total	ND	0.05	0.038	15000	mg/L
EP-9	8/30/2016	Selenium, Total	0.29	0.1	0.021	50000	mg/L
EP-9	8/30/2016	Uranium, Total	0.008	0.05	0.0051	30000	mg/L
EP-9	8/30/2016	Zinc, Total	0.048	0.1	0.028	5960000	mg/L
EP-9	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-9	3/30/2017	Arsenic, Total	0.13	0.05	0.011	10000	mg/L
EP-9	3/30/2017	Barium, Total	0.26	0.01	0.004	2000000	mg/L
EP-9	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-9	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-9	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-9	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-9	3/30/2017	Arsenic, Dissolved	0.1	0.05	0.0089	10000	mg/L
EP-9	3/30/2017	Barium, Dissolved	0.27	0.02	0.0085	2000000	mg/L
EP-9	3/30/2017	Calcium, Dissolved	850	10	5	NA	mg/L
EP-9	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-9	3/30/2017	Chromium, Dissolved	ND	0.06	0.01	100000	mg/L
EP-9	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-9	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-9	3/30/2017	Potassium, Dissolved	1500	100	50	NA	mg/L
EP-9	3/30/2017	Magnesium, Dissolved	1300	100	50	NA	mg/L
EP-9	3/30/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
EP-9	3/30/2017	Sodium, Dissolved	47000	1000	500	NA	mg/L
EP-9	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-9	3/30/2017	Selenium, Dissolved	0.12	0.05	0.019	50000	mg/L
EP-9	3/30/2017	Uranium, Dissolved	0.0025	0.025	0.0025	NA	mg/L
EP-9	3/30/2017	Zinc, Dissolved	0.081	0.1	0.011	5960450	mg/L
EP-9	3/30/2017	Iron, Total	1.8	0.2	0.2	13822000	mg/L
EP-9	3/30/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
EP-9	3/30/2017	Manganese, Total	1.4	0.02	0.0027	2017000	mg/L
EP-9	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-9	3/30/2017	Selenium, Total	0.23	0.05	0.0094	50000	mg/L
EP-9	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-9	3/30/2017	Zinc, Total	0.022	0.05	0.013	5960000	mg/L
EP-9	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-9	10/24/2017	Arsenic, Total	0.22	0.05	0.021	10000	mg/L
EP-9	10/24/2017	Barium, Total	0.26	0.01	0.005	2000000	mg/L
EP-9	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-9	10/24/2017	Chromium, Total	0.021	0.03	0.0088	50000	mg/L
EP-9	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	10/24/2017	Silver, Dissolved	ND	0.05	0.018	81200	mg/L
EP-9	10/24/2017	Arsenic, Dissolved	0.21	0.02	0.0058	10000	mg/L
EP-9	10/24/2017	Barium, Dissolved	0.26	0.02	0.0099	2000000	mg/L
EP-9	10/24/2017	Calcium, Dissolved	630	10	0.78	NA	mg/L
EP-9	10/24/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-9	10/24/2017	Chromium, Dissolved	0.026	0.06	0.013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-9	10/24/2017	Iron, Dissolved	ND	0.2	0.16	13821880	mg/L
EP-9	10/24/2017	Potassium, Dissolved	4700	50	5.6	NA	mg/L
EP-9	10/24/2017	Magnesium, Dissolved	4000	50	12	NA	mg/L
EP-9	10/24/2017	Manganese, Dissolved	4.5	0.02	0.0039	2017400	mg/L
EP-9	10/24/2017	Sodium, Dissolved	49000	1000	160	NA	mg/L
EP-9	10/24/2017	Lead, Dissolved	ND	0.05	0.017	NA	mg/L
EP-9	10/24/2017	Selenium, Dissolved	ND	1	0.76	50000	mg/L
EP-9	10/24/2017	Uranium, Dissolved	ND	0.05	0.0096	NA	mg/L
EP-9	10/24/2017	Zinc, Dissolved	0.043	0.1	0.021	5960450	mg/L
EP-9	10/24/2017	Iron, Total	0.1	0.1	0.051	13822000	mg/L
EP-9	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-9	10/24/2017	Manganese, Total	4.9	0.01	0.0055	2017000	mg/L
EP-9	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-9	10/24/2017	Selenium, Total	0.33	0.1	0.098	50000	mg/L
EP-9	10/24/2017	Uranium, Total	0.0087	0.025	0.0077	30000	mg/L
EP-9	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-9	2/23/2018	Silver, Total	0.015	0.025	0.0061	50000	mg/L
EP-9	2/23/2018	Arsenic, Total	0.067	0.1	0.041	10000	mg/L
EP-9	2/23/2018	Barium, Total	0.22	0.01	0.005	2000000	mg/L
EP-9	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-9	2/23/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
EP-9	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	2/23/2018	Silver, Dissolved	0.022	0.025	0.0092	81200	mg/L
EP-9	2/23/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
EP-9	2/23/2018	Barium, Dissolved	0.21	0.01	0.0049	2000000	mg/L
EP-9	2/23/2018	Calcium, Dissolved	540	50	3.9	NA	mg/L
EP-9	2/23/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-9	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-9	2/23/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-9	2/23/2018	Iron, Dissolved	0.13	0.1	0.082	13821880	mg/L
EP-9	2/23/2018	Potassium, Dissolved	990	50	5.6	NA	mg/L
EP-9	2/23/2018	Magnesium, Dissolved	650	50	12	NA	mg/L
EP-9	2/23/2018	Manganese, Dissolved	1.2	0.01	0.002	2017400	mg/L
EP-9	2/23/2018	Sodium, Dissolved	19000	500	82	NA	mg/L
EP-9	2/23/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-9	2/23/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-9	2/23/2018	Uranium, Dissolved	0.0033	0.005	0.00096	NA	mg/L
EP-9	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-9	2/23/2018	Iron, Total	0.76	0.1	0.051	13822000	mg/L
EP-9	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-9	2/23/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
EP-9	2/23/2018	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-9	2/23/2018	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-9	2/23/2018	Uranium, Total	ND	0.05	0.0068	30000	mg/L
EP-9	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-9	9/7/2018	Silver, Total	0.014	0.005	0.0012	50000	mg/L
EP-9	9/7/2018	Arsenic, Total	0.082	0.05	0.021	10000	mg/L
EP-9	9/7/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
EP-9	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-9	9/7/2018	Chromium, Total	0.0069	0.006	0.0018	50000	mg/L
EP-9	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-9	9/7/2018	Silver, Dissolved	0.021	0.025	0.0092	81200	mg/L
EP-9	9/7/2018	Arsenic, Dissolved	0.086	0.05	0.021	10000	mg/L
EP-9	9/7/2018	Barium, Dissolved	0.17	0.01	0.0049	2000000	mg/L
EP-9	9/7/2018	Calcium, Dissolved	560	10	0.78	NA	mg/L
EP-9	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-9	9/7/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-9	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-9	9/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-9	9/7/2018	Potassium, Dissolved	1300	50	5.6	NA	mg/L
EP-9	9/7/2018	Magnesium, Dissolved	900	10	2.5	NA	mg/L
EP-9	9/7/2018	Manganese, Dissolved	0.72	0.01	0.002	2017400	mg/L
EP-9	9/7/2018	Sodium, Dissolved	28000	500	82	NA	mg/L
EP-9	9/7/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-9	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-9	9/7/2018	Uranium, Dissolved	ND	0.025	0.0048	NA	mg/L
EP-9	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-9	9/7/2018	Iron, Total	0.07	0.02	0.01	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-9	9/7/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
EP-9	9/7/2018	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-9	9/7/2018	Selenium, Total	ND	0.05	0.049	50000	mg/L
EP-9	9/7/2018	Uranium, Total	ND	0.025	0.0034	30000	mg/L
EP-9	9/7/2018	Zinc, Total	0.0055	0.01	0.0033	5960000	mg/L
KA-3	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
KA-3	9/3/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
KA-3	9/3/2013	Barium, Total	0.15	0.002	0.00095	2000000	mg/L
KA-3	9/3/2013	Calcium, Total	75	1	0.069	NA	mg/L
KA-3	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
KA-3	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
KA-3	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	9/3/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
KA-3	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	9/3/2013	Potassium, Total	ND	1	0.24	NA	mg/L
KA-3	9/3/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	9/3/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
KA-3	9/3/2013	Sodium, Total	300	5	1.6	NA	mg/L
KA-3	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
KA-3	9/3/2013	Selenium, Total	0.0056	0.005	0.0015	50000	mg/L
KA-3	9/3/2013	Uranium, Total	0.011	0.01	0.000073	30000	mg/L
KA-3	9/3/2013	Zinc, Total	0.03	0.01	0.00076	5960000	mg/L
KA-3	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
KA-3	11/12/2013	Arsenic, Total	0.0036	0.001	0.000098	10000	mg/L
KA-3	11/12/2013	Barium, Total	0.18	0.002	0.00095	2000000	mg/L
KA-3	11/12/2013	Calcium, Total	81	1	0.069	NA	mg/L
KA-3	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
KA-3	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
KA-3	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	11/12/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
KA-3	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	11/12/2013	Potassium, Total	1.9	1	0.24	NA	mg/L
KA-3	11/12/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	11/12/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
KA-3	11/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
KA-3	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	11/12/2013	Selenium, Total	0.0091	0.001	0.00029	50000	mg/L
KA-3	11/12/2013	Uranium, Total	0.02	0.001	0.0000073	30000	mg/L
KA-3	11/12/2013	Zinc, Total	0.011	0.01	0.00076	5960000	mg/L
KA-3	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
KA-3	3/10/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
KA-3	3/10/2014	Barium, Total	0.093	0.002	0.0011	2000000	mg/L
KA-3	3/10/2014	Calcium, Total	68	1	0.082	NA	mg/L
KA-3	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
KA-3	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
KA-3	3/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
KA-3	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
KA-3	3/10/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
KA-3	3/10/2014	Magnesium, Total	11	1	0.018	NA	mg/L
KA-3	3/10/2014	Manganese, Total	0.38	0.002	0.00055	2017000	mg/L
KA-3	3/10/2014	Sodium, Total	330	10	3.9	NA	mg/L
KA-3	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	3/10/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
KA-3	3/10/2014	Uranium, Total	0.048	0.005	0.000036	30000	mg/L
KA-3	3/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
KA-3	6/5/2014	Calcium, Total	62	1	0.053	NA	mg/L
KA-3	6/5/2014	Potassium, Total	5.3	1	0.24	NA	mg/L
KA-3	6/5/2014	Magnesium, Total	15	1	0.024	NA	mg/L
KA-3	6/5/2014	Sodium, Total	390	5	1.3	NA	mg/L
KA-3	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
KA-3	9/11/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
KA-3	9/11/2014	Barium, Total	0.07	0.002	0.0005	2000000	mg/L
KA-3	9/11/2014	Calcium, Total	43	1	0.082	NA	mg/L
KA-3	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
KA-3	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
KA-3	9/11/2014	Copper, Total	0.0084	0.006	0.0046	790000	mg/L
KA-3	9/11/2014	Iron, Total	1	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
KA-3	9/11/2014	Potassium, Total	5.2	1	0.093	NA	mg/L
KA-3	9/11/2014	Magnesium, Total	6.9	1	0.018	NA	mg/L
KA-3	9/11/2014	Manganese, Total	0.035	0.002	0.00049	2017000	mg/L
KA-3	9/11/2014	Sodium, Total	910	20	7.8	NA	mg/L
KA-3	9/11/2014	Lead, Total	0.0015	0.001	0.00026	15000	mg/L
KA-3	9/11/2014	Selenium, Total	0.034	0.01	0.0051	50000	mg/L
KA-3	9/11/2014	Uranium, Total	0.047	0.001	0.0000072	30000	mg/L
KA-3	9/11/2014	Zinc, Total	0.018	0.01	0.0035	5960000	mg/L
KA-3	11/11/2014	Calcium, Total	67	1	0.082	NA	mg/L
KA-3	11/11/2014	Potassium, Total	ND	1	0.093	NA	mg/L
KA-3	11/11/2014	Magnesium, Total	11	1	0.018	NA	mg/L
KA-3	11/11/2014	Sodium, Total	310	5	2	NA	mg/L
KA-3	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	3/10/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
KA-3	3/10/2015	Barium, Total	0.27	0.002	0.00073	2000000	mg/L
KA-3	3/10/2015	Calcium, Total	64	1	0.057	NA	mg/L
KA-3	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
KA-3	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	3/10/2015	Iron, Total	0.35	0.02	0.0072	13822000	mg/L
KA-3	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	3/10/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
KA-3	3/10/2015	Magnesium, Total	10	1	0.039	NA	mg/L
KA-3	3/10/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
KA-3	3/10/2015	Sodium, Total	290	5	0.36	NA	mg/L
KA-3	3/10/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
KA-3	3/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
KA-3	3/10/2015	Uranium, Total	0.015	0.001	0.0000081	30000	mg/L
KA-3	3/10/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
KA-3	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
KA-3	6/2/2015	Barium, Total	0.35	0.002	0.0011	2000000	mg/L
KA-3	6/2/2015	Calcium, Total	69	1	0.057	NA	mg/L
KA-3	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	6/2/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
KA-3	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	6/2/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	6/2/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	6/2/2015	Manganese, Total	3	0.01	0.0076	2017000	mg/L
KA-3	6/2/2015	Sodium, Total	300	5	0.36	NA	mg/L
KA-3	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
KA-3	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
KA-3	6/2/2015	Uranium, Total	0.018	0.005	0.000049	30000	mg/L
KA-3	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	8/11/2015	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
KA-3	8/11/2015	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
KA-3	8/11/2015	Calcium, Total	61	1	0.057	NA	mg/L
KA-3	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	8/11/2015	Iron, Total	0.42	0.02	0.0072	13822000	mg/L
KA-3	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	8/11/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	8/11/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
KA-3	8/11/2015	Sodium, Total	320	5	0.36	NA	mg/L
KA-3	8/11/2015	Lead, Total	0.00077	0.0005	0.000047	15000	mg/L
KA-3	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
KA-3	8/11/2015	Uranium, Total	0.019	0.0005	0.0000049	30000	mg/L
KA-3	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	10/28/2015	Arsenic, Total	0.0035	0.001	0.00029	10000	mg/L
KA-3	10/28/2015	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
KA-3	10/28/2015	Calcium, Total	69	1	0.057	NA	mg/L
KA-3	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	10/28/2015	Iron, Total	0.11	0.02	0.0072	13822000	mg/L
KA-3	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	10/28/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	10/28/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	10/28/2015	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L
KA-3	10/28/2015	Sodium, Total	270	5	0.36	NA	mg/L
KA-3	10/28/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
KA-3	10/28/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
KA-3	10/28/2015	Uranium, Total	0.013	0.0005	0.0000049	30000	mg/L
KA-3	10/28/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	3/3/2016	Calcium, Total	67	1	0.26	NA	mg/L
KA-3	3/3/2016	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	3/3/2016	Magnesium, Total	12	1	0.013	NA	mg/L
KA-3	3/3/2016	Sodium, Total	270	5	0.48	NA	mg/L
KA-3	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	6/7/2016	Arsenic, Total	0.0047	0.001	0.00029	10000	mg/L
KA-3	6/7/2016	Barium, Total	0.77	0.002	0.0011	2000000	mg/L
KA-3	6/7/2016	Calcium, Total	87	1	0.26	NA	mg/L
KA-3	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	6/7/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	6/7/2016	Copper, Total	0.0092	0.006	0.0051	790000	mg/L
KA-3	6/7/2016	Iron, Total	0.53	0.02	0.0072	13822000	mg/L
KA-3	6/7/2016	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
KA-3	6/7/2016	Potassium, Total	0.57	1	0.18	NA	mg/L
KA-3	6/7/2016	Magnesium, Total	14	1	0.013	NA	mg/L
KA-3	6/7/2016	Manganese, Total	2	0.01	0.0076	2017000	mg/L
KA-3	6/7/2016	Sodium, Total	280	5	0.48	NA	mg/L
KA-3	6/7/2016	Lead, Total	0.00048	0.0005	0.000047	15000	mg/L
KA-3	6/7/2016	Selenium, Total	0.0045	0.01	0.0012	50000	mg/L
KA-3	6/7/2016	Uranium, Total	0.0099	0.0005	0.0000049	30000	mg/L
KA-3	6/7/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
KA-3	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
KA-3	9/1/2016	Arsenic, Total	0.005	0.02	0.0042	10000	mg/L
KA-3	9/1/2016	Barium, Total	0.95	0.002	0.00079	2000000	mg/L
KA-3	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	9/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	9/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
KA-3	9/1/2016	Arsenic, Dissolved	0.0029	0.001	0.00014	10000	mg/L
KA-3	9/1/2016	Barium, Dissolved	1	0.01	0.0066	2000000	mg/L
KA-3	9/1/2016	Calcium, Dissolved	86	1	0.5	NA	mg/L
KA-3	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
KA-3	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
KA-3	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
KA-3	9/1/2016	Iron, Dissolved	0.059	0.02	0.02	13821880	mg/L
KA-3	9/1/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
KA-3	9/1/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
KA-3	9/1/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
KA-3	9/1/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
KA-3	9/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	9/1/2016	Selenium, Dissolved	0.0049	0.005	0.0011	50000	mg/L
KA-3	9/1/2016	Uranium, Dissolved	0.0075	0.0025	0.00026	NA	mg/L
KA-3	9/1/2016	Zinc, Dissolved	0.041	0.01	0.0028	5960450	mg/L
KA-3	9/1/2016	Iron, Total	0.93	0.02	0.02	13822000	mg/L
KA-3	9/1/2016	Manganese, Total	2.7	0.01	0.0014	2017000	mg/L
KA-3	9/1/2016	Lead, Total	0.00044	0.0005	0.000081	15000	mg/L
KA-3	9/1/2016	Selenium, Total	ND	0.02	0.02	50000	mg/L
KA-3	9/1/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
KA-3	9/1/2016	Zinc, Total	0.0067	0.01	0.0027	5960000	mg/L
KA-3	11/14/2016	Silver, Total	0.003	0.005	0.0015	50000	mg/L
KA-3	11/14/2016	Arsenic, Total	0.0068	0.005	0.0011	10000	mg/L
KA-3	11/14/2016	Barium, Total	1.2	0.01	0.004	2000000	mg/L
KA-3	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	11/14/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	11/14/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
KA-3	11/14/2016	Arsenic, Dissolved	0.0036	0.005	0.00069	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/14/2016	Barium, Dissolved	1.2	0.01	0.0066	2000000	mg/L
KA-3	11/14/2016	Calcium, Dissolved	81	1	0.5	NA	mg/L
KA-3	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
KA-3	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
KA-3	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
KA-3	11/14/2016	Iron, Dissolved	0.12	0.02	0.02	13821880	mg/L
KA-3	11/14/2016	Potassium, Dissolved	0.91	1	0.5	NA	mg/L
KA-3	11/14/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
KA-3	11/14/2016	Manganese, Dissolved	1.3	0.01	0.0016	2017400	mg/L
KA-3	11/14/2016	Sodium, Dissolved	290	5	2.5	NA	mg/L
KA-3	11/14/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	11/14/2016	Selenium, Dissolved	0.0071	0.02	0.0042	50000	mg/L
KA-3	11/14/2016	Uranium, Dissolved	0.0099	0.0005	0.000051	NA	mg/L
KA-3	11/14/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
KA-3	11/14/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
KA-3	11/14/2016	Mercury, Total	0.000084	0.0002	0.000053	2000	mg/L
KA-3	11/14/2016	Manganese, Total	1.3	0.01	0.0014	2017000	mg/L
KA-3	11/14/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
KA-3	11/14/2016	Selenium, Total	0.0049	0.02	0.0037	50000	mg/L
KA-3	11/14/2016	Uranium, Total	0.0089	0.0025	0.00087	30000	mg/L
KA-3	11/14/2016	Zinc, Total	0.0042	0.01	0.0027	5960000	mg/L
KA-3	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
KA-3	2/21/2017	Arsenic, Total	0.0068	0.01	0.0021	10000	mg/L
KA-3	2/21/2017	Barium, Total	1.1	0.01	0.004	2000000	mg/L
KA-3	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	2/21/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	2/21/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
KA-3	2/21/2017	Arsenic, Dissolved	0.0019	0.01	0.0014	10000	mg/L
KA-3	2/21/2017	Barium, Dissolved	1.2	0.01	0.0043	2000000	mg/L
KA-3	2/21/2017	Calcium, Dissolved	79	1	0.5	NA	mg/L
KA-3	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
KA-3	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	2/21/2017	Iron, Dissolved	0.17	0.02	0.02	13821880	mg/L
KA-3	2/21/2017	Potassium, Dissolved	0.72	1	0.5	NA	mg/L
KA-3	2/21/2017	Magnesium, Dissolved	13	1	0.5	NA	mg/L
KA-3	2/21/2017	Manganese, Dissolved	1.1	0.01	0.0019	2017400	mg/L
KA-3	2/21/2017	Sodium, Dissolved	280	5	2.5	NA	mg/L
KA-3	2/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	2/21/2017	Selenium, Dissolved	0.0035	0.01	0.0021	50000	mg/L
KA-3	2/21/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
KA-3	2/21/2017	Iron, Total	1.8	0.1	0.1	13822000	mg/L
KA-3	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
KA-3	2/21/2017	Manganese, Total	1.1	0.01	0.0014	2017000	mg/L
KA-3	2/21/2017	Lead, Total	0.00035	0.0005	0.000081	15000	mg/L
KA-3	2/21/2017	Selenium, Total	0.0057	0.01	0.0019	50000	mg/L
KA-3	2/21/2017	Zinc, Total	0.0047	0.01	0.0027	5960000	mg/L
KA-3	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
KA-3	6/1/2017	Arsenic, Total	0.0035	0.005	0.0015	10000	mg/L
KA-3	6/1/2017	Barium, Total	0.77	0.002	0.00093	2000000	mg/L
KA-3	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	6/1/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
KA-3	6/1/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
KA-3	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
KA-3	6/1/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
KA-3	6/1/2017	Barium, Dissolved	0.75	0.002	0.00085	2000000	mg/L
KA-3	6/1/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
KA-3	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
KA-3	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	6/1/2017	Iron, Dissolved	0.056	0.02	0.016	13821880	mg/L
KA-3	6/1/2017	Potassium, Dissolved	0.34	1	0.11	NA	mg/L
KA-3	6/1/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
KA-3	6/1/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
KA-3	6/1/2017	Sodium, Dissolved	310	10	1.6	NA	mg/L
KA-3	6/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	6/1/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
KA-3	6/1/2017	Uranium, Dissolved	0.015	0.0025	0.00025	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/1/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
KA-3	6/1/2017	Iron, Total	0.55	0.02	0.01	13822000	mg/L
KA-3	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	6/1/2017	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
KA-3	6/1/2017	Lead, Total	0.00038	0.0005	0.000095	15000	mg/L
KA-3	6/1/2017	Selenium, Total	0.0036	0.005	0.0036	50000	mg/L
KA-3	6/1/2017	Uranium, Total	0.016	0.0025	0.00077	30000	mg/L
KA-3	6/1/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
KA-3	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
KA-3	9/5/2017	Arsenic, Total	0.0072	0.001	0.0003	10000	mg/L
KA-3	9/5/2017	Barium, Total	1.4	0.02	0.0093	2000000	mg/L
KA-3	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	9/5/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	9/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
KA-3	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	9/5/2017	Arsenic, Dissolved	0.0039	0.005	0.00089	10000	mg/L
KA-3	9/5/2017	Barium, Dissolved	1.3	0.02	0.0085	2000000	mg/L
KA-3	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	9/5/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	9/5/2017	Iron, Dissolved	0.088	0.02	0.016	13821880	mg/L
KA-3	9/5/2017	Manganese, Dissolved	1.3	0.02	0.0039	2017400	mg/L
KA-3	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	9/5/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
KA-3	9/5/2017	Uranium, Dissolved	0.01	0.0005	0.00005	NA	mg/L
KA-3	9/5/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
KA-3	9/5/2017	Iron, Total	1.5	0.2	0.1	13822000	mg/L
KA-3	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	9/5/2017	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
KA-3	9/5/2017	Lead, Total	0.00054	0.0005	0.000095	15000	mg/L
KA-3	9/5/2017	Selenium, Total	0.0082	0.001	0.00071	50000	mg/L
KA-3	9/5/2017	Uranium, Total	0.01	0.0005	0.00015	30000	mg/L
KA-3	9/5/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
KA-3	12/4/2017	Silver, Total	0.015	0.005	0.0012	50000	mg/L
KA-3	12/4/2017	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
KA-3	12/4/2017	Barium, Total	1.7	0.01	0.005	2000000	mg/L
KA-3	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	12/4/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
KA-3	12/4/2017	Barium, Dissolved	1.7	0.01	0.0049	2000000	mg/L
KA-3	12/4/2017	Calcium, Dissolved	98	1	0.078	NA	mg/L
KA-3	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	12/4/2017	Iron, Dissolved	0.045	0.02	0.016	13821880	mg/L
KA-3	12/4/2017	Potassium, Dissolved	0.44	1	0.11	NA	mg/L
KA-3	12/4/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
KA-3	12/4/2017	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
KA-3	12/4/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
KA-3	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	12/4/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
KA-3	12/4/2017	Uranium, Dissolved	0.0076	0.0005	0.000096	NA	mg/L
KA-3	12/4/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
KA-3	12/4/2017	Iron, Total	0.53	0.02	0.01	13822000	mg/L
KA-3	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	12/4/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
KA-3	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
KA-3	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
KA-3	12/4/2017	Uranium, Total	0.0074	0.005	0.0015	30000	mg/L
KA-3	12/4/2017	Zinc, Total	0.004	0.01	0.0033	5960000	mg/L
KA-3	2/9/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
KA-3	2/9/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
KA-3	2/9/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
KA-3	2/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	2/9/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
KA-3	2/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/9/2018	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
KA-3	2/9/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
KA-3	2/9/2018	Calcium, Dissolved	93	1	0.078	NA	mg/L
KA-3	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	2/9/2018	Copper, Dissolved	0.0044	0.006	0.0032	790000	mg/L
KA-3	2/9/2018	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
KA-3	2/9/2018	Potassium, Dissolved	0.37	1	0.11	NA	mg/L
KA-3	2/9/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
KA-3	2/9/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
KA-3	2/9/2018	Sodium, Dissolved	310	5	0.82	NA	mg/L
KA-3	2/9/2018	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
KA-3	2/9/2018	Selenium, Dissolved	0.0085	0.01	0.0076	50000	mg/L
KA-3	2/9/2018	Uranium, Dissolved	0.011	0.0005	0.000096	NA	mg/L
KA-3	2/9/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
KA-3	2/9/2018	Iron, Total	0.27	0.02	0.01	13822000	mg/L
KA-3	2/9/2018	Mercury, Total	0.000069	0.0002	0.000037	2000	mg/L
KA-3	2/9/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
KA-3	2/9/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
KA-3	2/9/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
KA-3	2/9/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
KA-3	2/9/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
KA-3	4/30/2018	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
KA-3	4/30/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
KA-3	4/30/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
KA-3	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	4/30/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
KA-3	4/30/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
KA-3	4/30/2018	Calcium, Dissolved	83	1	0.078	NA	mg/L
KA-3	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	4/30/2018	Iron, Dissolved	0.046	0.02	0.016	13821880	mg/L
KA-3	4/30/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
KA-3	4/30/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
KA-3	4/30/2018	Manganese, Dissolved	1.2	0.01	0.002	2017400	mg/L
KA-3	4/30/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
KA-3	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	4/30/2018	Selenium, Dissolved	0.0036	0.001	0.00076	50000	mg/L
KA-3	4/30/2018	Uranium, Dissolved	0.0086	0.0005	0.000096	NA	mg/L
KA-3	4/30/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
KA-3	4/30/2018	Iron, Total	0.23	0.02	0.01	13822000	mg/L
KA-3	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	4/30/2018	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
KA-3	4/30/2018	Lead, Total	0.00054	0.0005	0.00023	15000	mg/L
KA-3	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
KA-3	4/30/2018	Uranium, Total	0.0089	0.0005	0.000068	30000	mg/L
KA-3	4/30/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
KA-3	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
KA-3	3/20/2012	Arsenic, Total	0.0065	0.0025	0.0014	10000	mg/L
KA-3	3/20/2012	Barium, Total	0.99	0.002	0.0006	2000000	mg/L
KA-3	3/20/2012	Calcium, Total	93	1	0.026	NA	mg/L
KA-3	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
KA-3	3/20/2012	Chromium, Total	0.033	0.006	0.001	50000	mg/L
KA-3	3/20/2012	Copper, Total	0.017	0.006	0.00066	790000	mg/L
KA-3	3/20/2012	Iron, Total	24	1	0.66	13822000	mg/L
KA-3	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	3/20/2012	Potassium, Total	2.8	1	0.48	NA	mg/L
KA-3	3/20/2012	Magnesium, Total	16	1	0.013	NA	mg/L
KA-3	3/20/2012	Manganese, Total	1.8	0.01	0.0013	2017000	mg/L
KA-3	3/20/2012	Sodium, Total	550	10	0.45	NA	mg/L
KA-3	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	3/20/2012	Selenium, Total	0.0088	0.0025	0.0025	50000	mg/L
KA-3	3/20/2012	Uranium, Total	0.023	0.0025	0.00003	30000	mg/L
KA-3	3/20/2012	Zinc, Total	0.095	0.01	0.0011	5960000	mg/L
KA-3	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2012	Arsenic, Total	0.0057	0.0025	0.0014	10000	mg/L
KA-3	6/12/2012	Barium, Total	0.61	0.002	0.00039	2000000	mg/L
KA-3	6/12/2012	Calcium, Total	68	1	0.026	NA	mg/L
KA-3	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	6/12/2012	Chromium, Total	0.022	0.006	0.001	50000	mg/L
KA-3	6/12/2012	Copper, Total	0.0092	0.006	0.0041	790000	mg/L
KA-3	6/12/2012	Iron, Total	15	0.4	0.27	13822000	mg/L
KA-3	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
KA-3	6/12/2012	Potassium, Total	1.6	1	0.48	NA	mg/L
KA-3	6/12/2012	Magnesium, Total	12	1	0.013	NA	mg/L
KA-3	6/12/2012	Manganese, Total	0.93	0.002	0.00026	2017000	mg/L
KA-3	6/12/2012	Sodium, Total	450	5	0.22	NA	mg/L
KA-3	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	6/12/2012	Selenium, Total	0.012	0.0025	0.0025	50000	mg/L
KA-3	6/12/2012	Uranium, Total	0.027	0.0025	0.00003	30000	mg/L
KA-3	6/12/2012	Zinc, Total	0.055	0.01	0.0011	5960000	mg/L
KA-3	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	8/21/2012	Arsenic, Total	0.0028	0.0025	0.0014	10000	mg/L
KA-3	8/21/2012	Barium, Total	0.3	0.002	0.00039	2000000	mg/L
KA-3	8/21/2012	Calcium, Total	77	1	0.026	NA	mg/L
KA-3	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
KA-3	8/21/2012	Copper, Total	0.007	0.006	0.0041	790000	mg/L
KA-3	8/21/2012	Iron, Total	0.32	0.02	0.013	13822000	mg/L
KA-3	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	8/21/2012	Potassium, Total	1.8	1	0.48	NA	mg/L
KA-3	8/21/2012	Magnesium, Total	13	1	0.013	NA	mg/L
KA-3	8/21/2012	Manganese, Total	0.81	0.002	0.00026	2017000	mg/L
KA-3	8/21/2012	Sodium, Total	430	5	0.22	NA	mg/L
KA-3	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	8/21/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
KA-3	8/21/2012	Uranium, Total	0.0043	0.0025	0.00003	30000	mg/L
KA-3	8/21/2012	Zinc, Total	0.014	0.01	0.0011	5960000	mg/L
KA-3	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	11/28/2012	Arsenic, Total	0.006	0.0025	0.0014	10000	mg/L
KA-3	11/28/2012	Barium, Total	1.3	0.01	0.0019	2000000	mg/L
KA-3	11/28/2012	Calcium, Total	78	1	0.026	NA	mg/L
KA-3	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	11/28/2012	Chromium, Total	0.036	0.006	0.001	50000	mg/L
KA-3	11/28/2012	Copper, Total	0.013	0.006	0.0041	790000	mg/L
KA-3	11/28/2012	Iron, Total	30	1	0.66	13822000	mg/L
KA-3	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	11/28/2012	Potassium, Total	3	1	0.48	NA	mg/L
KA-3	11/28/2012	Magnesium, Total	16	1	0.013	NA	mg/L
KA-3	11/28/2012	Manganese, Total	1.7	0.01	0.0013	2017000	mg/L
KA-3	11/28/2012	Sodium, Total	590	10	0.45	NA	mg/L
KA-3	11/28/2012	Lead, Total	0.0046	0.001	0.00002	15000	mg/L
KA-3	11/28/2012	Selenium, Total	0.01	0.0025	0.0025	50000	mg/L
KA-3	11/28/2012	Uranium, Total	0.032	0.0025	0.00003	30000	mg/L
KA-3	11/28/2012	Zinc, Total	0.092	0.01	0.0011	5960000	mg/L
KA-3	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	3/18/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
KA-3	3/18/2013	Barium, Total	0.079	0.002	0.00039	2000000	mg/L
KA-3	3/18/2013	Calcium, Total	74	1	0.069	NA	mg/L
KA-3	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	3/18/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
KA-3	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	3/18/2013	Iron, Total	0.62	0.02	0.013	13822000	mg/L
KA-3	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	3/18/2013	Potassium, Total	2.5	1	0.39	NA	mg/L
KA-3	3/18/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	3/18/2013	Manganese, Total	0.58	0.002	0.00026	2017000	mg/L
KA-3	3/18/2013	Sodium, Total	260	5	1.1	NA	mg/L
KA-3	3/18/2013	Lead, Total	0.0058	0.005	0.0014	15000	mg/L
KA-3	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
KA-3	3/18/2013	Uranium, Total	0.02	0.0025	0.0012	30000	mg/L
KA-3	3/18/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
KA-3	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
KA-3	6/12/2013	Arsenic, Total	0.0019	0.001	0.00027	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2013	Barium, Total	0.16	0.002	0.00057	2000000	mg/L
KA-3	6/12/2013	Calcium, Total	83	1	0.069	NA	mg/L
KA-3	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
KA-3	6/12/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	6/12/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
KA-3	6/12/2013	Iron, Total	0.4	0.02	0.0052	13822000	mg/L
KA-3	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	6/12/2013	Potassium, Total	2.3	1	0.24	NA	mg/L
KA-3	6/12/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	6/12/2013	Manganese, Total	0.35	0.002	0.00052	2017000	mg/L
KA-3	6/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
KA-3	6/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	6/12/2013	Selenium, Total	0.003	0.001	0.00049	50000	mg/L
KA-3	6/12/2013	Uranium, Total	0.014	0.001	0.0005	30000	mg/L
KA-3	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
KA-3	9/22/2020	Arsenic, Dissolved	0.0029	0.001	0.00021	10000	mg/L
KA-3	9/22/2020	Lead, Dissolved	0.000056	0.0005	0.000034	NA	mg/L
KA-3	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
KA-3	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
KA-3	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
KA-3	9/22/2020	Uranium, Dissolved	0.0012	0.0005	0.000065	NA	mg/L
KA-3	9/22/2020	Barium, Dissolved	3.1	0.01	0.0056	2000000	mg/L
KA-3	9/22/2020	Calcium, Dissolved	110	5	0.57	NA	mg/L
KA-3	9/22/2020	Manganese, Dissolved	1.5	0.01	0.0029	2017400	mg/L
KA-3	9/22/2020	Sodium, Dissolved	360	5	0.69	NA	mg/L
KA-3	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
KA-3	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
KA-3	9/22/2020	Boron, Dissolved	0.7	0.04	0.0067	3949110	mg/L
KA-3	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
KA-3	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
KA-3	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
KA-3	9/22/2020	Iron, Dissolved	0.053	0.02	0.01	13821880	mg/L
KA-3	9/22/2020	Magnesium, Dissolved	18	1	0.067	NA	mg/L
KA-3	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
KA-3	9/22/2020	Nickel, Dissolved	0.016	0.01	0.0033	372000	mg/L
KA-3	9/22/2020	Potassium, Dissolved	0.41	1	0.16	NA	mg/L
KA-3	9/22/2020	Silver, Dissolved	0.0023	0.005	0.0013	81200	mg/L
KA-3	9/22/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
KA-3	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
KA-3	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
KA-3	9/22/2020	Arsenic, Total	0.0031	0.001	0.00026	10000	mg/L
KA-3	9/22/2020	Lead, Total	0.00087	0.0005	0.000034	15000	mg/L
KA-3	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
KA-3	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
KA-3	9/22/2020	Uranium, Total	0.0011	0.0005	0.000065	30000	mg/L
KA-3	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
KA-3	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
KA-3	9/22/2020	Boron, Total	0.67	0.04	0.0074	3949	mg/L
KA-3	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
KA-3	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
KA-3	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
KA-3	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	9/22/2020	Silver, Total	0.0016	0.005	0.0013	50000	mg/L
KA-3	9/22/2020	Aluminum, Total	1	0.1	0.037	19914000	mg/L
KA-3	9/22/2020	Barium, Total	3	0.015	0.0082	2000000	mg/L
KA-3	9/22/2020	Iron, Total	1.3	0.25	0.064	13822000	mg/L
KA-3	9/22/2020	Manganese, Total	1.4	0.01	0.0041	2017000	mg/L
KA-3	9/22/2020	Nickel, Total	0.021	0.01	0.0033	372000	mg/L
KA-3	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
KA-3	12/17/2020	Aluminum, Total	0.248	0.2	0.051	19914000	mg/L
KA-3	12/17/2020	Calcium, Total	24.5	0.5	0.084	NA	mg/L
KA-3	12/17/2020	Boron, Total	1.46	0.1	0.022	3949	mg/L
KA-3	12/17/2020	Barium, Total	0.137	0.01	0.003	2000000	mg/L
KA-3	12/17/2020	Potassium, Total	2.7	1	0.34	NA	mg/L
KA-3	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
KA-3	12/17/2020	Magnesium, Total	4.34	0.5	0.12	NA	mg/L
KA-3	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
KA-3	12/17/2020	Sodium, Total	455	2	0.92	NA	mg/L
KA-3	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
KA-3	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
KA-3	12/17/2020	Iron, Total	0.371	0.2	0.075	13822000	mg/L
KA-3	12/17/2020	Manganese, Total	0.302	0.01	0.003	2017000	mg/L
KA-3	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
KA-3	12/17/2020	Nickel, Total	0.0205	0.006	0.003	372000	mg/L
KA-3	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
KA-3	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
KA-3	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
KA-3	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
KA-3	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
KA-3	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
KA-3	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
KA-3	12/17/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
KA-3	12/17/2020	Manganese, Dissolved	0.288	0.01	0.003	2017400	mg/L
KA-3	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
KA-3	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
KA-3	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
KA-3	12/17/2020	Barium, Dissolved	0.129	0.01	0.003	2000000	mg/L
KA-3	12/17/2020	Boron, Dissolved	1.52	0.1	0.022	3949110	mg/L
KA-3	12/17/2020	Nickel, Dissolved	0.0231	0.006	0.003	372000	mg/L
KA-3	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
KA-3	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
KA-3	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
KA-3	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
KA-3	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
KA-3	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
KA-3	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
KA-3	12/17/2020	Uranium, Total Recoverable	21	5	1.12	30	ug/L
KA-3	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
KA-3	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
KA-3	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
KA-3	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
KA-3	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
KA-3	12/17/2020	Uranium, Dissolved	21.2	5	1.12	NA	ug/L
KA-3	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
KA-3	3/4/2020	Arsenic, Dissolved	0.0048	0.001	0.0001	10000	mg/L
KA-3	3/4/2020	Lead, Dissolved	0.00008	0.0005	0.000055	NA	mg/L
KA-3	3/4/2020	Selenium, Dissolved	0.00028	0.001	0.00017	50000	mg/L
KA-3	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	3/4/2020	Uranium, Dissolved	0.004	0.0005	0.000075	NA	mg/L
KA-3	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
KA-3	3/4/2020	Beryllium, Dissolved	0.00043	0.002	0.00028	4000	mg/L
KA-3	3/4/2020	Boron, Dissolved	0.57	0.04	0.0045	3949110	mg/L
KA-3	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
KA-3	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
KA-3	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
KA-3	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
KA-3	3/4/2020	Iron, Dissolved	0.35	0.02	0.0087	13821880	mg/L
KA-3	3/4/2020	Magnesium, Dissolved	19	1	0.05	NA	mg/L
KA-3	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
KA-3	3/4/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
KA-3	3/4/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
KA-3	3/4/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
KA-3	3/4/2020	Zinc, Dissolved	0.014	0.01	0.0023	5960450	mg/L
KA-3	3/4/2020	Barium, Dissolved	2	0.01	0.0032	2000000	mg/L
KA-3	3/4/2020	Calcium, Dissolved	110	5	0.31	NA	mg/L
KA-3	3/4/2020	Sodium, Dissolved	400	5	2.1	NA	mg/L
KA-3	3/4/2020	Manganese, Dissolved	1.6	0.01	0.0014	2017400	mg/L
KA-3	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
KA-3	3/4/2020	Arsenic, Total	0.0064	0.001	0.00031	10000	mg/L
KA-3	3/4/2020	Lead, Total	0.00072	0.0005	0.000055	15000	mg/L
KA-3	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
KA-3	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	3/4/2020	Uranium, Total	0.0037	0.0005	0.000085	30000	mg/L
KA-3	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
KA-3	3/4/2020	Beryllium, Total	0.00036	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
KA-3	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
KA-3	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
KA-3	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
KA-3	3/4/2020	Nickel, Total	0.024	0.01	0.004	372000	mg/L
KA-3	3/4/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
KA-3	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
KA-3	3/4/2020	Barium, Total	2	0.02	0.0065	2000000	mg/L
KA-3	3/4/2020	Iron, Total	1.2	0.2	0.087	13822000	mg/L
KA-3	3/4/2020	Manganese, Total	1.7	0.02	0.0029	2017000	mg/L
KA-3	3/4/2020	Aluminum, Total	1	0.1	0.012	19914000	mg/L
KA-3	3/4/2020	Boron, Total	0.63	0.2	0.023	3949	mg/L
KA-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
KA-3	4/9/2019	Arsenic, Dissolved	0.0033	0.001	0.000101	10000	mg/L
KA-3	4/9/2019	Barium, Dissolved	1.5	0.01	0.003242	2000000	mg/L
KA-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	4/9/2019	Boron, Dissolved	0.65	0.04	0.004531	3949110	mg/L
KA-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	4/9/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L
KA-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	4/9/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
KA-3	4/9/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
KA-3	4/9/2019	Lead, Dissolved	0.000094	0.0005	0.000055	NA	mg/L
KA-3	4/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
KA-3	4/9/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
KA-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	4/9/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
KA-3	4/9/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
KA-3	4/9/2019	Selenium, Dissolved	0.00029	0.001	0.000171	50000	mg/L
KA-3	4/9/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
KA-3	4/9/2019	Sodium, Dissolved	370	5	2.080881	NA	mg/L
KA-3	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	4/9/2019	Uranium, Dissolved	0.0093	0.0005	0.000075	NA	mg/L
KA-3	4/9/2019	Zinc, Dissolved	0.05	0.01	0.002252	5960450	mg/L
KA-3	4/9/2019	Aluminum, Total	0.1	0.02	0.001051	19914000	mg/L
KA-3	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
KA-3	4/9/2019	Arsenic, Total	0.0056	0.001	0.000312	10000	mg/L
KA-3	4/9/2019	Barium, Total	1.4	0.01	0.002442	2000000	mg/L
KA-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
KA-3	4/9/2019	Boron, Total	0.6	0.04	0.001821	3949	mg/L
KA-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
KA-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
KA-3	4/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	4/9/2019	Iron, Total	1.6	0.1	0.030263	13822000	mg/L
KA-3	4/9/2019	Lead, Total	0.0007	0.0005	0.000026	15000	mg/L
KA-3	4/9/2019	Manganese, Total	1.4	0.01	0.000299	2017000	mg/L
KA-3	4/9/2019	Molybdenum, Total	0.0034	0.008	0.002075	98700	mg/L
KA-3	4/9/2019	Nickel, Total	0.023	0.01	0.001491	372000	mg/L
KA-3	4/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
KA-3	4/9/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
KA-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	4/9/2019	Uranium, Total	0.0093	0.0005	0.000085	30000	mg/L
KA-3	4/9/2019	Zinc, Total	0.006	0.01	0.005772	5960000	mg/L
KA-3	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	5/28/2019	Antimony, Dissolved	0.00056	0.001	0.000389	6000	mg/L
KA-3	5/28/2019	Arsenic, Dissolved	0.0052	0.001	0.000101	10000	mg/L
KA-3	5/28/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
KA-3	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	5/28/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
KA-3	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	5/28/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
KA-3	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	5/28/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
KA-3	5/28/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
KA-3	5/28/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
KA-3	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	5/28/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
KA-3	5/28/2019	Potassium, Dissolved	0.34	1	0.162288	NA	mg/L
KA-3	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
KA-3	5/28/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
KA-3	5/28/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
KA-3	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	5/28/2019	Uranium, Dissolved	0.0073	0.0005	0.000075	NA	mg/L
KA-3	5/28/2019	Zinc, Dissolved	0.0094	0.01	0.002252	5960450	mg/L
KA-3	5/28/2019	Aluminum, Total	0.2	0.02	0.002488	19914000	mg/L
KA-3	5/28/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
KA-3	5/28/2019	Arsenic, Total	0.0092	0.001	0.000312	10000	mg/L
KA-3	5/28/2019	Barium, Total	1.3	0.01	0.003242	2000000	mg/L
KA-3	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	5/28/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
KA-3	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	5/28/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
KA-3	5/28/2019	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
KA-3	5/28/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
KA-3	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
KA-3	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	5/28/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
KA-3	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
KA-3	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
KA-3	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	5/28/2019	Uranium, Total	0.0077	0.0005	0.000085	30000	mg/L
KA-3	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
KA-3	10/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	10/21/2019	Antimony, Dissolved	0.00064	0.001	0.000389	6000	mg/L
KA-3	10/21/2019	Arsenic, Dissolved	0.008	0.001	0.000101	10000	mg/L
KA-3	10/21/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
KA-3	10/21/2019	Beryllium, Dissolved	0.00065	0.002	0.000284	4000	mg/L
KA-3	10/21/2019	Boron, Dissolved	0.79	0.04	0.004531	3949110	mg/L
KA-3	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	10/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
KA-3	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	10/21/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
KA-3	10/21/2019	Lead, Dissolved	0.00013	0.0005	0.000055	NA	mg/L
KA-3	10/21/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
KA-3	10/21/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
KA-3	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	10/21/2019	Nickel, Dissolved	0.027	0.01	0.004009	372000	mg/L
KA-3	10/21/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
KA-3	10/21/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
KA-3	10/21/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
KA-3	10/21/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
KA-3	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	10/21/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
KA-3	10/21/2019	Aluminum, Total	0.96	0.1	0.012441	19914000	mg/L
KA-3	10/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
KA-3	10/21/2019	Arsenic, Total	0.008	0.005	0.001561	10000	mg/L
KA-3	10/21/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
KA-3	10/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	10/21/2019	Boron, Total	0.81	0.2	0.022653	3949	mg/L
KA-3	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	10/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	10/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	10/21/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
KA-3	10/21/2019	Lead, Total	0.00056	0.0005	0.000055	15000	mg/L
KA-3	10/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/21/2019	Mercury, Total	0.000043	0.0002	0.000038	2000	mg/L
KA-3	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	10/21/2019	Nickel, Total	0.028	0.01	0.004009	372000	mg/L
KA-3	10/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
KA-3	10/21/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
KA-3	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	10/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
KA-3	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
KA-3	8/22/2019	Arsenic, Dissolved	0.006	0.001	0.000101	10000	mg/L
KA-3	8/22/2019	Barium, Dissolved	1.5	0.02	0.006484	2000000	mg/L
KA-3	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	8/22/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
KA-3	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	8/22/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
KA-3	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	8/22/2019	Iron, Dissolved	0.81	0.02	0.008747	13821880	mg/L
KA-3	8/22/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
KA-3	8/22/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
KA-3	8/22/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
KA-3	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	8/22/2019	Nickel, Dissolved	0.027	0.01	0.004009	372000	mg/L
KA-3	8/22/2019	Potassium, Dissolved	0.39	1	0.162288	NA	mg/L
KA-3	8/22/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
KA-3	8/22/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
KA-3	8/22/2019	Sodium, Dissolved	370	10	4.161763	NA	mg/L
KA-3	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	8/22/2019	Uranium, Dissolved	0.0051	0.0005	0.000075	NA	mg/L
KA-3	8/22/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
KA-3	8/22/2019	Aluminum, Total	1.1	0.1	0.012441	19914000	mg/L
KA-3	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
KA-3	8/22/2019	Arsenic, Total	0.0067	0.001	0.000312	10000	mg/L
KA-3	8/22/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
KA-3	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	8/22/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
KA-3	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	8/22/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
KA-3	8/22/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
KA-3	8/22/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
KA-3	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
KA-3	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	8/22/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
KA-3	8/22/2019	Selenium, Total	0.00057	0.001	0.000478	50000	mg/L
KA-3	8/22/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
KA-3	8/22/2019	Thallium, Total	0.000058	0.0005	0.000052	2000	mg/L
KA-3	8/22/2019	Uranium, Total	0.0048	0.0005	0.000085	30000	mg/L
KA-3	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
LDU - East	8/22/2019	Aluminum, Dissolved	0.32	0.02	0.002488	19913930	mg/L
LDU - East	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	8/22/2019	Arsenic, Dissolved	0.00027	0.001	0.000101	10000	mg/L
LDU - East	8/22/2019	Barium, Dissolved	0.061	0.002	0.000648	2000000	mg/L
LDU - East	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	8/22/2019	Boron, Dissolved	0.025	0.04	0.004531	3949110	mg/L
LDU - East	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	8/22/2019	Chromium, Dissolved	0.094	0.006	0.001533	100000	mg/L
LDU - East	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	8/22/2019	Iron, Dissolved	4.8	0.2	0.087469	13821880	mg/L
LDU - East	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	8/22/2019	Manganese, Dissolved	0.95	0.002	0.00029	2017400	mg/L
LDU - East	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	8/22/2019	Nickel, Dissolved	0.0064	0.01	0.004009	372000	mg/L
LDU - East	8/22/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	8/22/2019	Uranium, Dissolved	0.00011	0.0005	0.000075	NA	mg/L
LDU - East	8/22/2019	Zinc, Dissolved	0.0067	0.01	0.002252	5960450	mg/L
LDU - East	8/22/2019	Aluminum, Total	0.38	0.02	0.002488	19914000	mg/L
LDU - East	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	8/22/2019	Arsenic, Total	0.00046	0.001	0.000312	10000	mg/L
LDU - East	8/22/2019	Barium, Total	0.064	0.002	0.000648	2000000	mg/L
LDU - East	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
LDU - East	8/22/2019	Boron, Total	0.022	0.04	0.004531	3949	mg/L
LDU - East	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	8/22/2019	Chromium, Total	0.17	0.006	0.001533	50000	mg/L
LDU - East	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - East	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	8/22/2019	Iron, Total	5.1	0.2	0.087469	13822000	mg/L
LDU - East	8/22/2019	Lead, Total	0.00015	0.0005	0.000055	15000	mg/L
LDU - East	8/22/2019	Manganese, Total	0.87	0.002	0.00029	2017000	mg/L
LDU - East	8/22/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
LDU - East	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	8/22/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
LDU - East	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	8/22/2019	Uranium, Total	0.00012	0.0005	0.000085	30000	mg/L
LDU - East	8/22/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
LDU - East	5/28/2019	Aluminum, Dissolved	0.19	0.02	0.002488	19913930	mg/L
LDU - East	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	5/28/2019	Arsenic, Dissolved	ND	0.001	0.000101	10000	mg/L
LDU - East	5/28/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
LDU - East	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	5/28/2019	Boron, Dissolved	0.0099	0.04	0.004531	3949110	mg/L
LDU - East	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	5/28/2019	Chromium, Dissolved	0.067	0.006	0.001533	100000	mg/L
LDU - East	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	5/28/2019	Iron, Dissolved	1.3	0.1	0.043734	13821880	mg/L
LDU - East	5/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	5/28/2019	Manganese, Dissolved	0.83	0.002	0.00029	2017400	mg/L
LDU - East	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
LDU - East	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	5/28/2019	Silver, Dissolved	0.00098	0.005	0.000942	81200	mg/L
LDU - East	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	5/28/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	5/28/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
LDU - East	5/28/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
LDU - East	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	5/28/2019	Arsenic, Total	ND	0.001	0.000312	10000	mg/L
LDU - East	5/28/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
LDU - East	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
LDU - East	5/28/2019	Boron, Total	0.0096	0.04	0.004531	3949	mg/L
LDU - East	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	5/28/2019	Chromium, Total	0.094	0.006	0.001533	50000	mg/L
LDU - East	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - East	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	5/28/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
LDU - East	5/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
LDU - East	5/28/2019	Manganese, Total	0.79	0.002	0.00029	2017000	mg/L
LDU - East	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
LDU - East	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
LDU - East	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	5/28/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
LDU - East	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
LDU - East	11/19/2019	Aluminum, Total	0.42	0.02	0.002488	19914000	mg/L
LDU - East	11/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	11/19/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
LDU - East	11/19/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/19/2019	Beryllium, Total	0.00034	0.002	0.000284	4000	mg/L
LDU - East	11/19/2019	Boron, Total	0.038	0.04	0.004531	3949	mg/L
LDU - East	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	11/19/2019	Chromium, Total	0.48	0.006	0.001533	50000	mg/L
LDU - East	11/19/2019	Cobalt, Total	0.0035	0.006	0.003091	5980	mg/L
LDU - East	11/19/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
LDU - East	11/19/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
LDU - East	11/19/2019	Lead, Total	0.00051	0.0005	0.000055	15000	mg/L
LDU - East	11/19/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
LDU - East	11/19/2019	Mercury, Total	0.00015	0.0002	0.000121	2000	mg/L
LDU - East	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	11/19/2019	Nickel, Total	0.65	0.01	0.004009	372000	mg/L
LDU - East	11/19/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	11/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	11/19/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	11/19/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
LDU - East	11/19/2019	Zinc, Total	0.071	0.01	0.005772	5960000	mg/L
LDU - East	11/19/2019	Aluminum, Dissolved	0.16	0.02	0.002488	19913930	mg/L
LDU - East	11/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	11/19/2019	Arsenic, Dissolved	0.00063	0.001	0.000101	10000	mg/L
LDU - East	11/19/2019	Barium, Dissolved	0.054	0.002	0.000648	2000000	mg/L
LDU - East	11/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	11/19/2019	Boron, Dissolved	0.041	0.04	0.004531	3949110	mg/L
LDU - East	11/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	11/19/2019	Chromium, Dissolved	0.073	0.006	0.001533	100000	mg/L
LDU - East	11/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	11/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	11/19/2019	Iron, Dissolved	0.28	0.02	0.008747	13821880	mg/L
LDU - East	11/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	11/19/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
LDU - East	11/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	11/19/2019	Nickel, Dissolved	0.3	0.01	0.004009	372000	mg/L
LDU - East	11/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	11/19/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
LDU - East	11/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	11/19/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	11/19/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
LDU - East	3/10/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
LDU - East	3/10/2020	Arsenic, Dissolved	0.0015	0.001	0.0001	10000	mg/L
LDU - East	3/10/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	3/10/2020	Selenium, Dissolved	0.0043	0.001	0.00017	50000	mg/L
LDU - East	3/10/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	3/10/2020	Uranium, Dissolved	0.00012	0.0005	0.000075	NA	mg/L
LDU - East	3/10/2020	Aluminum, Dissolved	0.57	0.02	0.0025	19913930	mg/L
LDU - East	3/10/2020	Barium, Dissolved	0.053	0.002	0.00065	2000000	mg/L
LDU - East	3/10/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
LDU - East	3/10/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
LDU - East	3/10/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
LDU - East	3/10/2020	Chromium, Dissolved	0.17	0.006	0.0015	100000	mg/L
LDU - East	3/10/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
LDU - East	3/10/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
LDU - East	3/10/2020	Iron, Dissolved	0.099	0.02	0.0087	13821880	mg/L
LDU - East	3/10/2020	Manganese, Dissolved	0.48	0.002	0.00029	2017400	mg/L
LDU - East	3/10/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
LDU - East	3/10/2020	Nickel, Dissolved	0.34	0.01	0.004	372000	mg/L
LDU - East	3/10/2020	Silver, Dissolved	0.0019	0.005	0.00094	81200	mg/L
LDU - East	3/10/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
LDU - East	3/10/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
LDU - East	3/10/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
LDU - East	3/10/2020	Lead, Total	0.000086	0.0005	0.000055	15000	mg/L
LDU - East	3/10/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	3/10/2020	Uranium, Total	0.0001	0.0005	0.000085	30000	mg/L
LDU - East	3/10/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
LDU - East	3/10/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
LDU - East	3/10/2020	Aluminum, Total	0.65	0.02	0.0025	19914000	mg/L
LDU - East	3/10/2020	Barium, Total	0.059	0.002	0.00065	2000000	mg/L
LDU - East	3/10/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
LDU - East	3/10/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
LDU - East	3/10/2020	Chromium, Total	0.21	0.006	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/10/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
LDU - East	3/10/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/10/2020	Iron, Total	0.53	0.02	0.0087	13822000	mg/L
LDU - East	3/10/2020	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
LDU - East	3/10/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
LDU - East	3/10/2020	Nickel, Total	0.39	0.01	0.004	372000	mg/L
LDU - East	3/10/2020	Silver, Total	0.0022	0.005	0.0014	50000	mg/L
LDU - East	3/10/2020	Zinc, Total	0.017	0.01	0.0058	5960000	mg/L
LDU - East	3/10/2020	Boron, Total	0.22	0.04	0.0045	3949	mg/L
LDU - East	4/9/2019	Aluminum, Dissolved	0.056	0.02	0.002488	19913930	mg/L
LDU - East	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	4/9/2019	Arsenic, Dissolved	ND	0.001	0.000101	10000	mg/L
LDU - East	4/9/2019	Barium, Dissolved	0.11	0.002	0.000648	2000000	mg/L
LDU - East	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	4/9/2019	Boron, Dissolved	0.0091	0.04	0.004531	3949110	mg/L
LDU - East	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	4/9/2019	Chromium, Dissolved	0.028	0.006	0.001533	100000	mg/L
LDU - East	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	4/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	4/9/2019	Iron, Dissolved	0.039	0.02	0.008747	13821880	mg/L
LDU - East	4/9/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	4/9/2019	Manganese, Dissolved	0.28	0.002	0.00029	2017400	mg/L
LDU - East	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	4/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
LDU - East	4/9/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	4/9/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
LDU - East	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	4/9/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	4/9/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
LDU - East	4/9/2019	Aluminum, Total	0.25	0.02	0.001051	19914000	mg/L
LDU - East	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
LDU - East	4/9/2019	Arsenic, Total	0.00032	0.001	0.000312	10000	mg/L
LDU - East	4/9/2019	Barium, Total	0.11	0.002	0.000488	2000000	mg/L
LDU - East	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
LDU - East	4/9/2019	Boron, Total	0.0077	0.04	0.001821	3949	mg/L
LDU - East	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	4/9/2019	Chromium, Total	0.093	0.006	0.0012	50000	mg/L
LDU - East	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
LDU - East	4/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	4/9/2019	Iron, Total	0.12	0.02	0.006053	13822000	mg/L
LDU - East	4/9/2019	Lead, Total	0.00022	0.0005	0.000026	15000	mg/L
LDU - East	4/9/2019	Manganese, Total	0.25	0.002	0.00006	2017000	mg/L
LDU - East	4/9/2019	Molybdenum, Total	ND	0.008	0.002075	98700	mg/L
LDU - East	4/9/2019	Nickel, Total	0.01	0.01	0.001491	372000	mg/L
LDU - East	4/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	4/9/2019	Thallium, Total	0.000091	0.0005	0.000052	2000	mg/L
LDU - East	4/9/2019	Uranium, Total	0.00021	0.0005	0.000085	30000	mg/L
LDU - East	4/9/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
LDU - East	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
LDU - East	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
LDU - East	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
LDU - East	12/17/2020	Aluminum, Total	8.75	0.2	0.051	19914000	mg/L
LDU - East	12/17/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
LDU - East	12/17/2020	Barium, Total	0.0174	0.01	0.003	2000000	mg/L
LDU - East	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
LDU - East	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
LDU - East	12/17/2020	Cobalt, Total	0.0324	0.01	0.003	5980	mg/L
LDU - East	12/17/2020	Chromium, Total	2.36	0.01	0.005	50000	mg/L
LDU - East	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
LDU - East	12/17/2020	Iron, Total	26.5	0.2	0.075	13822000	mg/L
LDU - East	12/17/2020	Manganese, Total	3.18	0.01	0.003	2017000	mg/L
LDU - East	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
LDU - East	12/17/2020	Nickel, Total	4.13	0.006	0.003	372000	mg/L
LDU - East	12/17/2020	Zinc, Total	0.0648	0.02	0.008	5960000	mg/L
LDU - East	12/17/2020	Aluminum, Dissolved	8.44	0.2	0.051	19913930	mg/L
LDU - East	12/17/2020	Barium, Dissolved	0.0148	0.01	0.003	2000000	mg/L
LDU - East	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
LDU - East	12/17/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
LDU - East	12/17/2020	Chromium, Dissolved	2.3	0.01	0.005	100000	mg/L
LDU - East	12/17/2020	Cobalt, Dissolved	0.0328	0.01	0.003	5980	mg/L
LDU - East	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
LDU - East	12/17/2020	Iron, Dissolved	24.7	0.2	0.075	13821880	mg/L
LDU - East	12/17/2020	Manganese, Dissolved	3.15	0.01	0.003	2017400	mg/L
LDU - East	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
LDU - East	12/17/2020	Nickel, Dissolved	4.16	0.006	0.003	372000	mg/L
LDU - East	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
LDU - East	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
LDU - East	12/17/2020	Arsenic, Total Recoverable	2.98	1	0.286	10	ug/L
LDU - East	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
LDU - East	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
LDU - East	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
LDU - East	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
LDU - East	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
LDU - East	12/17/2020	Arsenic, Dissolved	2.85	1	0.286	10	ug/L
LDU - East	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
LDU - East	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
LDU - East	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
LDU - East	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
LDU - East	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
LDU - East	3/20/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	3/20/2012	Arsenic, Total	0.0032	0.0025	0.0014	10000	mg/L
LDU - East	3/20/2012	Barium, Total	0.44	0.002	0.00039	2000000	mg/L
LDU - East	3/20/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	3/20/2012	Chromium, Total	0.11	0.006	0.001	50000	mg/L
LDU - East	3/20/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/20/2012	Iron, Total	2.3	0.1	0.066	13822000	mg/L
LDU - East	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - East	3/20/2012	Manganese, Total	0.58	0.002	0.00026	2017000	mg/L
LDU - East	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	3/20/2012	Selenium, Total	0.0026	0.0025	0.0025	50000	mg/L
LDU - East	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - East	3/20/2012	Zinc, Total	0.064	0.01	0.0011	5960000	mg/L
LDU - East	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	6/12/2012	Arsenic, Total	0.0099	0.005	0.0028	10000	mg/L
LDU - East	6/12/2012	Barium, Total	0.6	0.002	0.00039	2000000	mg/L
LDU - East	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	6/12/2012	Chromium, Total	0.31	0.006	0.001	50000	mg/L
LDU - East	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	6/12/2012	Iron, Total	0.17	0.02	0.013	13822000	mg/L
LDU - East	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
LDU - East	6/12/2012	Manganese, Total	1.2	0.01	0.0013	2017000	mg/L
LDU - East	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	6/12/2012	Selenium, Total	0.0065	0.005	0.005	50000	mg/L
LDU - East	6/12/2012	Uranium, Total	ND	0.005	0.00006	30000	mg/L
LDU - East	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	8/21/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
LDU - East	8/21/2012	Arsenic, Total	0.0062	0.001	0.00011	10000	mg/L
LDU - East	8/21/2012	Barium, Total	0.62	0.002	0.00031	2000000	mg/L
LDU - East	8/21/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
LDU - East	8/21/2012	Chromium, Total	0.46	0.006	0.00056	50000	mg/L
LDU - East	8/21/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
LDU - East	8/21/2012	Iron, Total	0.044	0.02	0.0019	13822000	mg/L
LDU - East	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - East	8/21/2012	Manganese, Total	1.2	0.01	0.0031	2017000	mg/L
LDU - East	8/21/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
LDU - East	8/21/2012	Selenium, Total	ND	0.05	0.0074	50000	mg/L
LDU - East	8/21/2012	Uranium, Total	ND	0.001	0.00006	30000	mg/L
LDU - East	8/21/2012	Zinc, Total	ND	0.01	0.00062	5960000	mg/L
LDU - East	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	11/28/2012	Arsenic, Total	0.0095	0.0025	0.0014	10000	mg/L
LDU - East	11/28/2012	Barium, Total	0.53	0.002	0.00039	2000000	mg/L
LDU - East	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	11/28/2012	Chromium, Total	0.71	0.006	0.001	50000	mg/L
LDU - East	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	11/28/2012	Iron, Total	0.23	0.02	0.013	13822000	mg/L
LDU - East	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/28/2012	Manganese, Total	1.1	0.01	0.0013	2017000	mg/L
LDU - East	11/28/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	11/28/2012	Selenium, Total	0.0036	0.0025	0.0025	50000	mg/L
LDU - East	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - East	11/28/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	3/18/2013	Arsenic, Total	0.0059	0.0025	0.00042	10000	mg/L
LDU - East	3/18/2013	Barium, Total	0.48	0.002	0.00039	2000000	mg/L
LDU - East	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	3/18/2013	Chromium, Total	0.76	0.006	0.001	50000	mg/L
LDU - East	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/18/2013	Iron, Total	0.09	0.02	0.013	13822000	mg/L
LDU - East	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	3/18/2013	Manganese, Total	0.62	0.002	0.00026	2017000	mg/L
LDU - East	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	3/18/2013	Selenium, Total	0.0027	0.0025	0.00066	50000	mg/L
LDU - East	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
LDU - East	3/18/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	6/12/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	6/12/2013	Arsenic, Total	0.007	0.005	0.0014	10000	mg/L
LDU - East	6/12/2013	Barium, Total	0.56	0.002	0.00039	2000000	mg/L
LDU - East	6/12/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	6/12/2013	Chromium, Total	0.72	0.006	0.001	50000	mg/L
LDU - East	6/12/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	6/12/2013	Iron, Total	0.091	0.02	0.013	13822000	mg/L
LDU - East	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	6/12/2013	Manganese, Total	0.56	0.002	0.00026	2017000	mg/L
LDU - East	6/12/2013	Lead, Total	ND	0.005	0.00009	15000	mg/L
LDU - East	6/12/2013	Selenium, Total	0.0081	0.005	0.0024	50000	mg/L
LDU - East	6/12/2013	Uranium, Total	ND	0.005	0.0025	30000	mg/L
LDU - East	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
LDU - East	11/12/2013	Arsenic, Total	0.0097	0.005	0.00049	10000	mg/L
LDU - East	11/12/2013	Barium, Total	0.34	0.002	0.00095	2000000	mg/L
LDU - East	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - East	11/12/2013	Chromium, Total	0.44	0.006	0.00084	50000	mg/L
LDU - East	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - East	11/12/2013	Iron, Total	0.08	0.02	0.0089	13822000	mg/L
LDU - East	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	11/12/2013	Manganese, Total	0.25	0.002	0.00016	2017000	mg/L
LDU - East	11/12/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - East	11/12/2013	Selenium, Total	0.0078	0.005	0.0015	50000	mg/L
LDU - East	11/12/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - East	11/12/2013	Zinc, Total	0.019	0.01	0.00076	5960000	mg/L
LDU - East	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - East	3/10/2014	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
LDU - East	3/10/2014	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
LDU - East	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	3/10/2014	Chromium, Total	0.71	0.006	0.0021	50000	mg/L
LDU - East	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - East	3/10/2014	Iron, Total	2.9	0.1	0.031	13822000	mg/L
LDU - East	3/10/2014	Mercury, Total	0.00022	0.0002	0.000087	2000	mg/L
LDU - East	3/10/2014	Manganese, Total	3	0.01	0.0027	2017000	mg/L
LDU - East	3/10/2014	Lead, Total	ND	0.01	0.000075	15000	mg/L
LDU - East	3/10/2014	Selenium, Total	0.051	0.01	0.0029	50000	mg/L
LDU - East	3/10/2014	Uranium, Total	ND	0.01	0.000073	30000	mg/L
LDU - East	3/10/2014	Zinc, Total	0.11	0.01	0.0014	5960000	mg/L
LDU - East	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - East	6/3/2014	Arsenic, Total	0.021	0.005	0.00057	10000	mg/L
LDU - East	6/3/2014	Barium, Total	0.32	0.002	0.0011	2000000	mg/L
LDU - East	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	6/3/2014	Chromium, Total	0.52	0.006	0.0021	50000	mg/L
LDU - East	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - East	6/3/2014	Iron, Total	0.025	0.02	0.0062	13822000	mg/L
LDU - East	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - East	6/3/2014	Manganese, Total	1.5	0.01	0.0027	2017000	mg/L
LDU - East	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
LDU - East	6/3/2014	Selenium, Total	0.056	0.005	0.00074	50000	mg/L
LDU - East	6/3/2014	Uranium, Total	ND	0.005	0.00025	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	6/3/2014	Zinc, Total	0.021	0.01	0.0014	5960000	mg/L
LDU - East	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
LDU - East	11/11/2014	Arsenic, Total	0.0015	0.001	0.00036	10000	mg/L
LDU - East	11/11/2014	Barium, Total	0.12	0.002	0.0005	2000000	mg/L
LDU - East	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	11/11/2014	Chromium, Total	0.22	0.006	0.0028	50000	mg/L
LDU - East	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
LDU - East	11/11/2014	Iron, Total	19	0.4	0.14	13822000	mg/L
LDU - East	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - East	11/11/2014	Manganese, Total	5.4	0.04	0.0098	2017000	mg/L
LDU - East	11/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
LDU - East	11/11/2014	Selenium, Total	ND	0.001	0.00051	50000	mg/L
LDU - East	11/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
LDU - East	11/11/2014	Zinc, Total	0.18	0.01	0.0035	5960000	mg/L
LDU - East	3/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	3/10/2015	Arsenic, Total	0.0037	0.002	0.00023	10000	mg/L
LDU - East	3/10/2015	Barium, Total	0.14	0.002	0.00095	2000000	mg/L
LDU - East	3/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	3/10/2015	Chromium, Total	0.8	0.006	0.0018	50000	mg/L
LDU - East	3/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	3/10/2015	Iron, Total	0.5	0.02	0.0073	13822000	mg/L
LDU - East	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	3/10/2015	Manganese, Total	6.4	0.02	0.0027	2017000	mg/L
LDU - East	3/10/2015	Lead, Total	ND	0.002	0.00012	15000	mg/L
LDU - East	3/10/2015	Selenium, Total	0.003	0.002	0.0003	50000	mg/L
LDU - East	3/10/2015	Uranium, Total	ND	0.002	0.0001	30000	mg/L
LDU - East	3/10/2015	Zinc, Total	0.028	0.01	0.0028	5960000	mg/L
LDU - East	6/1/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	6/1/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
LDU - East	6/1/2015	Barium, Total	0.28	0.002	0.00095	2000000	mg/L
LDU - East	6/1/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	6/1/2015	Chromium, Total	0.86	0.006	0.0018	50000	mg/L
LDU - East	6/1/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	6/1/2015	Iron, Total	0.086	0.02	0.0073	13822000	mg/L
LDU - East	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	6/1/2015	Manganese, Total	2.6	0.01	0.0013	2017000	mg/L
LDU - East	6/1/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
LDU - East	6/1/2015	Selenium, Total	0.044	0.01	0.0019	50000	mg/L
LDU - East	6/1/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
LDU - East	6/1/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - East	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	8/11/2015	Arsenic, Total	ND	0.05	0.015	10000	mg/L
LDU - East	8/11/2015	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
LDU - East	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	8/11/2015	Chromium, Total	0.95	0.006	0.0022	50000	mg/L
LDU - East	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - East	8/11/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
LDU - East	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	8/11/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
LDU - East	8/11/2015	Lead, Total	ND	0.025	0.0024	15000	mg/L
LDU - East	8/11/2015	Selenium, Total	ND	0.05	0.0062	50000	mg/L
LDU - East	8/11/2015	Uranium, Total	ND	0.025	0.00025	30000	mg/L
LDU - East	8/11/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
LDU - East	10/29/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	10/29/2015	Arsenic, Total	0.0052	0.001	0.000065	10000	mg/L
LDU - East	10/29/2015	Barium, Total	0.21	0.002	0.00095	2000000	mg/L
LDU - East	10/29/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	10/29/2015	Chromium, Total	0.74	0.006	0.0018	50000	mg/L
LDU - East	10/29/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	10/29/2015	Iron, Total	0.051	0.02	0.0073	13822000	mg/L
LDU - East	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	10/29/2015	Manganese, Total	3.3	0.01	0.0013	2017000	mg/L
LDU - East	10/29/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
LDU - East	10/29/2015	Selenium, Total	0.0029	0.001	0.00019	50000	mg/L
LDU - East	10/29/2015	Uranium, Total	ND	0.005	0.000048	30000	mg/L
LDU - East	10/29/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - East	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	3/1/2016	Arsenic, Total	0.0046	0.001	0.00029	10000	mg/L
LDU - East	3/1/2016	Barium, Total	0.13	0.002	0.0011	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	3/1/2016	Chromium, Total	0.47	0.006	0.0022	50000	mg/L
LDU - East	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - East	3/1/2016	Iron, Total	1.5	0.1	0.036	13822000	mg/L
LDU - East	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
LDU - East	3/1/2016	Manganese, Total	8	0.02	0.015	2017000	mg/L
LDU - East	3/1/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
LDU - East	3/1/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
LDU - East	3/1/2016	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
LDU - East	3/1/2016	Zinc, Total	0.056	0.01	0.0039	5960000	mg/L
LDU - East	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	6/7/2016	Arsenic, Total	0.0053	0.001	0.00029	10000	mg/L
LDU - East	6/7/2016	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
LDU - East	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	6/7/2016	Chromium, Total	0.57	0.006	0.0022	50000	mg/L
LDU - East	6/7/2016	Copper, Total	0.015	0.006	0.0051	790000	mg/L
LDU - East	6/7/2016	Iron, Total	3.8	0.1	0.036	13822000	mg/L
LDU - East	6/7/2016	Mercury, Total	0.00016	0.0002	0.000053	2000	mg/L
LDU - East	6/7/2016	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
LDU - East	6/7/2016	Lead, Total	0.0011	0.0005	0.000047	15000	mg/L
LDU - East	6/7/2016	Selenium, Total	0.0017	0.005	0.00062	50000	mg/L
LDU - East	6/7/2016	Uranium, Total	0.00062	0.0005	0.0000049	30000	mg/L
LDU - East	6/7/2016	Zinc, Total	0.088	0.01	0.0039	5960000	mg/L
LDU - East	11/17/2016	Silver, Total	0.0064	0.005	0.0015	50000	mg/L
LDU - East	11/17/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
LDU - East	11/17/2016	Barium, Total	0.097	0.002	0.00079	2000000	mg/L
LDU - East	11/17/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - East	11/17/2016	Chromium, Total	0.53	0.006	0.0027	50000	mg/L
LDU - East	11/17/2016	Copper, Total	0.0097	0.006	0.003	790000	mg/L
LDU - East	11/17/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
LDU - East	11/17/2016	Arsenic, Dissolved	0.0025	0.001	0.00014	10000	mg/L
LDU - East	11/17/2016	Barium, Dissolved	0.085	0.002	0.0013	2000000	mg/L
LDU - East	11/17/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
LDU - East	11/17/2016	Chromium, Dissolved	0.44	0.006	0.0018	100000	mg/L
LDU - East	11/17/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
LDU - East	11/17/2016	Iron, Dissolved	47	1	1	13821880	mg/L
LDU - East	11/17/2016	Manganese, Dissolved	16	0.1	0.016	2017400	mg/L
LDU - East	11/17/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	11/17/2016	Selenium, Dissolved	0.0022	0.005	0.0011	50000	mg/L
LDU - East	11/17/2016	Uranium, Dissolved	0.0001	0.0005	0.000051	NA	mg/L
LDU - East	11/17/2016	Zinc, Dissolved	0.018	0.01	0.0028	5960450	mg/L
LDU - East	11/17/2016	Iron, Total	55	2	2	13822000	mg/L
LDU - East	11/17/2016	Mercury, Total	0.00028	0.0002	0.000053	2000	mg/L
LDU - East	11/17/2016	Manganese, Total	16	0.1	0.014	2017000	mg/L
LDU - East	11/17/2016	Lead, Total	0.0027	0.0025	0.00041	15000	mg/L
LDU - East	11/17/2016	Selenium, Total	0.0023	0.005	0.00094	50000	mg/L
LDU - East	11/17/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
LDU - East	11/17/2016	Zinc, Total	0.74	0.01	0.0027	5960000	mg/L
LDU - East	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - East	2/21/2017	Arsenic, Total	0.0049	0.005	0.0011	10000	mg/L
LDU - East	2/21/2017	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
LDU - East	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - East	2/21/2017	Chromium, Total	1.2	0.03	0.013	50000	mg/L
LDU - East	2/21/2017	Copper, Total	0.039	0.006	0.003	790000	mg/L
LDU - East	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - East	2/21/2017	Arsenic, Dissolved	0.0039	0.001	0.00014	10000	mg/L
LDU - East	2/21/2017	Barium, Dissolved	0.13	0.002	0.00085	2000000	mg/L
LDU - East	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	2/21/2017	Chromium, Dissolved	1.2	0.03	0.0051	100000	mg/L
LDU - East	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	2/21/2017	Iron, Dissolved	91	2	2	13821880	mg/L
LDU - East	2/21/2017	Manganese, Dissolved	15	0.04	0.0077	2017400	mg/L
LDU - East	2/21/2017	Lead, Dissolved	0.00069	0.0005	0.00017	NA	mg/L
LDU - East	2/21/2017	Selenium, Dissolved	0.0032	0.001	0.00021	50000	mg/L
LDU - East	2/21/2017	Zinc, Dissolved	0.057	0.01	0.0011	5960450	mg/L
LDU - East	2/21/2017	Iron, Total	84	2	2	13822000	mg/L
LDU - East	2/21/2017	Mercury, Total	0.00022	0.0002	0.000053	2000	mg/L
LDU - East	2/21/2017	Manganese, Total	14	0.1	0.014	2017000	mg/L
LDU - East	2/21/2017	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	2/21/2017	Selenium, Total	0.0025	0.005	0.00094	50000	mg/L
LDU - East	2/21/2017	Zinc, Total	0.063	0.01	0.0027	5960000	mg/L
LDU - East	6/2/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
LDU - East	6/2/2017	Arsenic, Total	0.00036	0.001	0.0003	10000	mg/L
LDU - East	6/2/2017	Barium, Total	0.23	0.002	0.00093	2000000	mg/L
LDU - East	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	6/2/2017	Chromium, Total	0.05	0.006	0.0011	50000	mg/L
LDU - East	6/2/2017	Copper, Total	0.0024	0.006	0.0017	790000	mg/L
LDU - East	6/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - East	6/2/2017	Arsenic, Dissolved	0.00037	0.001	0.00018	10000	mg/L
LDU - East	6/2/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
LDU - East	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	6/2/2017	Chromium, Dissolved	0.026	0.006	0.001	100000	mg/L
LDU - East	6/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	6/2/2017	Iron, Dissolved	0.23	0.02	0.016	13821880	mg/L
LDU - East	6/2/2017	Manganese, Dissolved	0.13	0.002	0.00038	2017400	mg/L
LDU - East	6/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	6/2/2017	Selenium, Dissolved	ND	0.001	0.00039	50000	mg/L
LDU - East	6/2/2017	Uranium, Dissolved	ND	0.0005	0.00005	NA	mg/L
LDU - East	6/2/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
LDU - East	6/2/2017	Iron, Total	0.32	0.02	0.01	13822000	mg/L
LDU - East	6/2/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	6/2/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
LDU - East	6/2/2017	Lead, Total	0.00027	0.0005	0.000095	15000	mg/L
LDU - East	6/2/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
LDU - East	6/2/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	6/2/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
LDU - East	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	9/5/2017	Arsenic, Total	0.00036	0.001	0.0003	10000	mg/L
LDU - East	9/5/2017	Barium, Total	0.32	0.002	0.00093	2000000	mg/L
LDU - East	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	9/5/2017	Chromium, Total	0.054	0.006	0.0018	50000	mg/L
LDU - East	9/5/2017	Copper, Total	0.0018	0.006	0.0017	790000	mg/L
LDU - East	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	9/5/2017	Arsenic, Dissolved	0.00034	0.001	0.00018	10000	mg/L
LDU - East	9/5/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
LDU - East	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	9/5/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
LDU - East	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	9/5/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
LDU - East	9/5/2017	Manganese, Dissolved	0.055	0.002	0.00039	2017400	mg/L
LDU - East	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	9/5/2017	Selenium, Dissolved	ND	0.001	0.00039	50000	mg/L
LDU - East	9/5/2017	Uranium, Dissolved	ND	0.0005	0.00005	NA	mg/L
LDU - East	9/5/2017	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
LDU - East	9/5/2017	Iron, Total	0.23	0.02	0.01	13822000	mg/L
LDU - East	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	9/5/2017	Manganese, Total	0.058	0.002	0.0011	2017000	mg/L
LDU - East	9/5/2017	Lead, Total	0.00021	0.0005	0.000095	15000	mg/L
LDU - East	9/5/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - East	9/5/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	9/5/2017	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
LDU - East	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	12/4/2017	Arsenic, Total	0.00099	0.001	0.00041	10000	mg/L
LDU - East	12/4/2017	Barium, Total	0.43	0.002	0.001	2000000	mg/L
LDU - East	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	12/4/2017	Chromium, Total	0.069	0.006	0.0018	50000	mg/L
LDU - East	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	12/4/2017	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	12/4/2017	Barium, Dissolved	0.41	0.002	0.00099	2000000	mg/L
LDU - East	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	12/4/2017	Chromium, Dissolved	0.019	0.006	0.0013	100000	mg/L
LDU - East	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	12/4/2017	Iron, Dissolved	0.039	0.02	0.016	13821880	mg/L
LDU - East	12/4/2017	Manganese, Dissolved	0.25	0.002	0.00039	2017400	mg/L
LDU - East	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	12/4/2017	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
LDU - East	12/4/2017	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/4/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
LDU - East	12/4/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
LDU - East	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	12/4/2017	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
LDU - East	12/4/2017	Lead, Total	0.00048	0.0005	0.00023	15000	mg/L
LDU - East	12/4/2017	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	12/4/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	12/4/2017	Zinc, Total	0.041	0.01	0.0033	5960000	mg/L
LDU - East	2/12/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
LDU - East	2/12/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
LDU - East	2/12/2018	Barium, Total	0.22	0.002	0.001	2000000	mg/L
LDU - East	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	2/12/2018	Chromium, Total	0.087	0.006	0.0018	50000	mg/L
LDU - East	2/12/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
LDU - East	2/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	2/12/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	2/12/2018	Barium, Dissolved	0.21	0.002	0.00099	2000000	mg/L
LDU - East	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	2/12/2018	Chromium, Dissolved	0.048	0.006	0.0013	100000	mg/L
LDU - East	2/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	2/12/2018	Iron, Dissolved	0.041	0.02	0.016	13821880	mg/L
LDU - East	2/12/2018	Manganese, Dissolved	0.53	0.002	0.00039	2017400	mg/L
LDU - East	2/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	2/12/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
LDU - East	2/12/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
LDU - East	2/12/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
LDU - East	2/12/2018	Iron, Total	0.97	0.02	0.01	13822000	mg/L
LDU - East	2/12/2018	Manganese, Total	0.54	0.002	0.0011	2017000	mg/L
LDU - East	2/12/2018	Lead, Total	0.00035	0.0005	0.00023	15000	mg/L
LDU - East	2/12/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	2/12/2018	Uranium, Total	ND	0.0005	0.000068	30000	mg/L
LDU - East	2/12/2018	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
LDU - East	4/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
LDU - East	4/30/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
LDU - East	4/30/2018	Barium, Total	0.38	0.002	0.001	2000000	mg/L
LDU - East	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	4/30/2018	Chromium, Total	0.05	0.006	0.0018	50000	mg/L
LDU - East	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	4/30/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	4/30/2018	Barium, Dissolved	0.38	0.002	0.00099	2000000	mg/L
LDU - East	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	4/30/2018	Chromium, Dissolved	0.02	0.006	0.0013	100000	mg/L
LDU - East	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	4/30/2018	Iron, Dissolved	0.08	0.02	0.016	13821880	mg/L
LDU - East	4/30/2018	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
LDU - East	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	4/30/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
LDU - East	4/30/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
LDU - East	4/30/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
LDU - East	4/30/2018	Iron, Total	0.2	0.02	0.01	13822000	mg/L
LDU - East	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	4/30/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
LDU - East	4/30/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
LDU - East	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	4/30/2018	Uranium, Total	ND	0.0005	0.000068	30000	mg/L
LDU - East	4/30/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
LDU - West	3/20/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	3/20/2012	Arsenic, Total	0.0028	0.0025	0.0014	10000	mg/L
LDU - West	3/20/2012	Barium, Total	0.21	0.002	0.00039	2000000	mg/L
LDU - West	3/20/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	3/20/2012	Chromium, Total	0.011	0.006	0.001	50000	mg/L
LDU - West	3/20/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/20/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
LDU - West	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	3/20/2012	Manganese, Total	0.22	0.002	0.00026	2017000	mg/L
LDU - West	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	3/20/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
LDU - West	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	3/20/2012	Zinc, Total	0.014	0.01	0.0011	5960000	mg/L
LDU - West	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	6/12/2012	Arsenic, Total	0.0038	0.0025	0.0014	10000	mg/L
LDU - West	6/12/2012	Barium, Total	0.36	0.002	0.00039	2000000	mg/L
LDU - West	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	6/12/2012	Chromium, Total	0.02	0.006	0.001	50000	mg/L
LDU - West	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	6/12/2012	Iron, Total	0.16	0.02	0.013	13822000	mg/L
LDU - West	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
LDU - West	6/12/2012	Manganese, Total	0.2	0.002	0.00026	2017000	mg/L
LDU - West	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	6/12/2012	Selenium, Total	0.0049	0.0025	0.0025	50000	mg/L
LDU - West	6/12/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - West	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - West	8/21/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
LDU - West	8/21/2012	Arsenic, Total	0.002	0.001	0.00011	10000	mg/L
LDU - West	8/21/2012	Barium, Total	0.38	0.002	0.00031	2000000	mg/L
LDU - West	8/21/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
LDU - West	8/21/2012	Chromium, Total	0.032	0.006	0.00056	50000	mg/L
LDU - West	8/21/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
LDU - West	8/21/2012	Iron, Total	0.15	0.02	0.0019	13822000	mg/L
LDU - West	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	8/21/2012	Manganese, Total	0.21	0.002	0.00062	2017000	mg/L
LDU - West	8/21/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
LDU - West	8/21/2012	Selenium, Total	ND	0.05	0.0074	50000	mg/L
LDU - West	8/21/2012	Uranium, Total	ND	0.001	0.00006	30000	mg/L
LDU - West	8/21/2012	Zinc, Total	0.014	0.01	0.00062	5960000	mg/L
LDU - West	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	11/28/2012	Arsenic, Total	0.0031	0.0025	0.0014	10000	mg/L
LDU - West	11/28/2012	Barium, Total	0.17	0.002	0.00039	2000000	mg/L
LDU - West	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	11/28/2012	Chromium, Total	0.079	0.006	0.001	50000	mg/L
LDU - West	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	11/28/2012	Iron, Total	0.72	0.02	0.013	13822000	mg/L
LDU - West	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	11/28/2012	Manganese, Total	0.57	0.002	0.00026	2017000	mg/L
LDU - West	11/28/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	11/28/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
LDU - West	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - West	11/28/2012	Zinc, Total	0.016	0.01	0.0011	5960000	mg/L
LDU - West	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	3/18/2013	Arsenic, Total	0.0036	0.0025	0.00042	10000	mg/L
LDU - West	3/18/2013	Barium, Total	0.15	0.002	0.00039	2000000	mg/L
LDU - West	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	3/18/2013	Chromium, Total	0.046	0.006	0.001	50000	mg/L
LDU - West	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/18/2013	Iron, Total	0.71	0.02	0.013	13822000	mg/L
LDU - West	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	3/18/2013	Manganese, Total	0.32	0.002	0.00026	2017000	mg/L
LDU - West	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
LDU - West	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
LDU - West	3/18/2013	Zinc, Total	0.026	0.01	0.0011	5960000	mg/L
LDU - West	6/12/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	6/12/2013	Arsenic, Total	0.0053	0.005	0.0014	10000	mg/L
LDU - West	6/12/2013	Barium, Total	0.22	0.002	0.00039	2000000	mg/L
LDU - West	6/12/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	6/12/2013	Chromium, Total	0.036	0.006	0.001	50000	mg/L
LDU - West	6/12/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	6/12/2013	Iron, Total	0.31	0.02	0.013	13822000	mg/L
LDU - West	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	6/12/2013	Manganese, Total	0.29	0.002	0.00026	2017000	mg/L
LDU - West	6/12/2013	Lead, Total	ND	0.005	0.00009	15000	mg/L
LDU - West	6/12/2013	Selenium, Total	0.0097	0.005	0.0024	50000	mg/L
LDU - West	6/12/2013	Uranium, Total	ND	0.005	0.0025	30000	mg/L
LDU - West	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - West	9/5/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
LDU - West	9/5/2013	Arsenic, Total	0.0086	0.005	0.00049	10000	mg/L
LDU - West	9/5/2013	Barium, Total	0.23	0.002	0.00095	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - West	9/5/2013	Chromium, Total	0.28	0.006	0.00084	50000	mg/L
LDU - West	9/5/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - West	9/5/2013	Iron, Total	29	1	0.45	13822000	mg/L
LDU - West	9/5/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	9/5/2013	Manganese, Total	2	0.01	0.00082	2017000	mg/L
LDU - West	9/5/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - West	9/5/2013	Selenium, Total	0.015	0.01	0.0029	50000	mg/L
LDU - West	9/5/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - West	9/5/2013	Zinc, Total	0.35	0.01	0.00076	5960000	mg/L
LDU - West	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
LDU - West	11/12/2013	Arsenic, Total	0.01	0.005	0.00049	10000	mg/L
LDU - West	11/12/2013	Barium, Total	0.17	0.002	0.00095	2000000	mg/L
LDU - West	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - West	11/12/2013	Chromium, Total	0.14	0.006	0.00084	50000	mg/L
LDU - West	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - West	11/12/2013	Iron, Total	0.093	0.02	0.0089	13822000	mg/L
LDU - West	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	11/12/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
LDU - West	11/12/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - West	11/12/2013	Selenium, Total	0.044	0.005	0.0015	50000	mg/L
LDU - West	11/12/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - West	11/12/2013	Zinc, Total	0.023	0.01	0.00076	5960000	mg/L
LDU - West	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - West	3/10/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
LDU - West	3/10/2014	Barium, Total	0.061	0.002	0.0011	2000000	mg/L
LDU - West	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	3/10/2014	Chromium, Total	0.11	0.006	0.0021	50000	mg/L
LDU - West	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - West	3/10/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L
LDU - West	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	3/10/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
LDU - West	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
LDU - West	3/10/2014	Selenium, Total	0.0023	0.001	0.00029	50000	mg/L
LDU - West	3/10/2014	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
LDU - West	3/10/2014	Zinc, Total	0.088	0.01	0.0014	5960000	mg/L
LDU - West	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - West	6/3/2014	Arsenic, Total	ND	0.002	0.00023	10000	mg/L
LDU - West	6/3/2014	Barium, Total	0.082	0.002	0.0011	2000000	mg/L
LDU - West	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	6/3/2014	Chromium, Total	0.043	0.006	0.0021	50000	mg/L
LDU - West	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - West	6/3/2014	Iron, Total	0.92	0.02	0.0062	13822000	mg/L
LDU - West	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	6/3/2014	Manganese, Total	1.9	0.01	0.0027	2017000	mg/L
LDU - West	6/3/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
LDU - West	6/3/2014	Selenium, Total	0.0027	0.002	0.0003	50000	mg/L
LDU - West	6/3/2014	Uranium, Total	0.0011	0.001	0.00005	30000	mg/L
LDU - West	6/3/2014	Zinc, Total	0.022	0.01	0.0014	5960000	mg/L
LDU - West	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
LDU - West	9/11/2014	Arsenic, Total	0.0031	0.001	0.00036	10000	mg/L
LDU - West	9/11/2014	Barium, Total	0.52	0.002	0.0005	2000000	mg/L
LDU - West	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	9/11/2014	Chromium, Total	0.28	0.006	0.0028	50000	mg/L
LDU - West	9/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
LDU - West	9/11/2014	Iron, Total	5.1	0.2	0.072	13822000	mg/L
LDU - West	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	9/11/2014	Manganese, Total	0.73	0.002	0.00049	2017000	mg/L
LDU - West	9/11/2014	Lead, Total	0.0013	0.001	0.00026	15000	mg/L
LDU - West	9/11/2014	Selenium, Total	0.0034	0.001	0.00051	50000	mg/L
LDU - West	9/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
LDU - West	9/11/2014	Zinc, Total	0.57	0.01	0.0035	5960000	mg/L
LDU - West	3/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	3/10/2015	Arsenic, Total	0.0033	0.002	0.00023	10000	mg/L
LDU - West	3/10/2015	Barium, Total	0.27	0.002	0.00095	2000000	mg/L
LDU - West	3/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - West	3/10/2015	Chromium, Total	0.66	0.006	0.0018	50000	mg/L
LDU - West	3/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - West	3/10/2015	Iron, Total	0.42	0.02	0.0073	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	3/10/2015	Manganese, Total	1.3	0.01	0.0013	2017000	mg/L
LDU - West	3/10/2015	Lead, Total	ND	0.005	0.00029	15000	mg/L
LDU - West	3/10/2015	Selenium, Total	0.0052	0.002	0.0003	50000	mg/L
LDU - West	3/10/2015	Uranium, Total	ND	0.005	0.00025	30000	mg/L
LDU - West	3/10/2015	Zinc, Total	0.033	0.01	0.0028	5960000	mg/L
LDU - West	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	8/11/2015	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
LDU - West	8/11/2015	Barium, Total	0.6	0.002	0.0011	2000000	mg/L
LDU - West	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	8/11/2015	Chromium, Total	1.4	0.03	0.011	50000	mg/L
LDU - West	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	8/11/2015	Iron, Total	1.9	0.1	0.036	13822000	mg/L
LDU - West	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	8/11/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
LDU - West	8/11/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
LDU - West	8/11/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
LDU - West	8/11/2015	Uranium, Total	ND	0.01	0.000099	30000	mg/L
LDU - West	8/11/2015	Zinc, Total	0.081	0.01	0.0039	5960000	mg/L
LDU - West	10/29/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	10/29/2015	Arsenic, Total	0.0056	0.001	0.000065	10000	mg/L
LDU - West	10/29/2015	Barium, Total	0.6	0.002	0.00095	2000000	mg/L
LDU - West	10/29/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - West	10/29/2015	Chromium, Total	1.2	0.03	0.0088	50000	mg/L
LDU - West	10/29/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - West	10/29/2015	Iron, Total	0.086	0.02	0.0073	13822000	mg/L
LDU - West	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	10/29/2015	Manganese, Total	0.79	0.002	0.00027	2017000	mg/L
LDU - West	10/29/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
LDU - West	10/29/2015	Selenium, Total	0.0082	0.001	0.00019	50000	mg/L
LDU - West	10/29/2015	Uranium, Total	ND	0.01	0.000096	30000	mg/L
LDU - West	10/29/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - West	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	3/1/2016	Arsenic, Total	0.0051	0.001	0.00029	10000	mg/L
LDU - West	3/1/2016	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
LDU - West	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	3/1/2016	Chromium, Total	1.5	0.03	0.011	50000	mg/L
LDU - West	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	3/1/2016	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
LDU - West	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
LDU - West	3/1/2016	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
LDU - West	3/1/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
LDU - West	3/1/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
LDU - West	3/1/2016	Uranium, Total	0.00066	0.0005	0.0000049	30000	mg/L
LDU - West	3/1/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
LDU - West	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	6/7/2016	Arsenic, Total	0.0051	0.001	0.00029	10000	mg/L
LDU - West	6/7/2016	Barium, Total	0.41	0.002	0.0011	2000000	mg/L
LDU - West	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	6/7/2016	Chromium, Total	1.2	0.03	0.011	50000	mg/L
LDU - West	6/7/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	6/7/2016	Iron, Total	0.49	0.02	0.0072	13822000	mg/L
LDU - West	6/7/2016	Mercury, Total	0.000095	0.0002	0.000053	2000	mg/L
LDU - West	6/7/2016	Manganese, Total	0.5	0.002	0.0015	2017000	mg/L
LDU - West	6/7/2016	Lead, Total	0.00043	0.0005	0.000047	15000	mg/L
LDU - West	6/7/2016	Selenium, Total	0.003	0.01	0.0012	50000	mg/L
LDU - West	6/7/2016	Uranium, Total	0.00034	0.0005	0.0000049	30000	mg/L
LDU - West	6/7/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
LDU - West	11/17/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - West	11/17/2016	Arsenic, Total	0.004	0.001	0.00021	10000	mg/L
LDU - West	11/17/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
LDU - West	11/17/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - West	11/17/2016	Chromium, Total	0.77	0.006	0.0027	50000	mg/L
LDU - West	11/17/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
LDU - West	11/17/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
LDU - West	11/17/2016	Arsenic, Dissolved	0.004	0.001	0.00014	10000	mg/L
LDU - West	11/17/2016	Barium, Dissolved	0.24	0.002	0.0013	2000000	mg/L
LDU - West	11/17/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
LDU - West	11/17/2016	Chromium, Dissolved	0.67	0.03	0.0088	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	11/17/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
LDU - West	11/17/2016	Iron, Dissolved	0.17	0.02	0.02	13821880	mg/L
LDU - West	11/17/2016	Manganese, Dissolved	0.51	0.002	0.00032	2017400	mg/L
LDU - West	11/17/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	11/17/2016	Selenium, Dissolved	0.0045	0.001	0.00021	50000	mg/L
LDU - West	11/17/2016	Uranium, Dissolved	0.00066	0.0005	0.000051	NA	mg/L
LDU - West	11/17/2016	Zinc, Dissolved	0.0045	0.01	0.0028	5960450	mg/L
LDU - West	11/17/2016	Iron, Total	3.3	0.2	0.2	13822000	mg/L
LDU - West	11/17/2016	Mercury, Total	0.00026	0.0002	0.000053	2000	mg/L
LDU - West	11/17/2016	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
LDU - West	11/17/2016	Lead, Total	0.00083	0.0025	0.00041	15000	mg/L
LDU - West	11/17/2016	Selenium, Total	0.0029	0.005	0.00094	50000	mg/L
LDU - West	11/17/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
LDU - West	11/17/2016	Zinc, Total	0.079	0.01	0.0027	5960000	mg/L
LDU - West	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - West	2/21/2017	Arsenic, Total	0.0072	0.005	0.0011	10000	mg/L
LDU - West	2/21/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
LDU - West	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - West	2/21/2017	Chromium, Total	2.1	0.03	0.013	50000	mg/L
LDU - West	2/21/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
LDU - West	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - West	2/21/2017	Arsenic, Dissolved	0.0068	0.005	0.00069	10000	mg/L
LDU - West	2/21/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
LDU - West	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	2/21/2017	Chromium, Dissolved	2.2	0.03	0.0051	100000	mg/L
LDU - West	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	2/21/2017	Iron, Dissolved	0.59	0.02	0.02	13821880	mg/L
LDU - West	2/21/2017	Manganese, Dissolved	2.7	0.01	0.0019	2017400	mg/L
LDU - West	2/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
LDU - West	2/21/2017	Selenium, Dissolved	0.0054	0.005	0.0011	50000	mg/L
LDU - West	2/21/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
LDU - West	2/21/2017	Iron, Total	1.4	0.1	0.1	13822000	mg/L
LDU - West	2/21/2017	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
LDU - West	2/21/2017	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
LDU - West	2/21/2017	Lead, Total	ND	0.0025	0.00041	15000	mg/L
LDU - West	2/21/2017	Selenium, Total	0.005	0.005	0.00094	50000	mg/L
LDU - West	2/21/2017	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
LDU - West	6/2/2017	Silver, Total	0.0016	0.005	0.00042	50000	mg/L
LDU - West	6/2/2017	Arsenic, Total	0.0028	0.005	0.0015	10000	mg/L
LDU - West	6/2/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
LDU - West	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	6/2/2017	Chromium, Total	0.35	0.006	0.0011	50000	mg/L
LDU - West	6/2/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
LDU - West	6/2/2017	Silver, Dissolved	0.0011	0.005	0.00088	81200	mg/L
LDU - West	6/2/2017	Arsenic, Dissolved	0.0022	0.001	0.00018	10000	mg/L
LDU - West	6/2/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
LDU - West	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	6/2/2017	Chromium, Dissolved	0.33	0.006	0.001	100000	mg/L
LDU - West	6/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	6/2/2017	Iron, Dissolved	44	1	0.82	13821880	mg/L
LDU - West	6/2/2017	Manganese, Dissolved	17	0.1	0.019	2017400	mg/L
LDU - West	6/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	6/2/2017	Selenium, Dissolved	0.0017	0.001	0.00039	50000	mg/L
LDU - West	6/2/2017	Uranium, Dissolved	0.0023	0.0005	0.00005	NA	mg/L
LDU - West	6/2/2017	Zinc, Dissolved	0.052	0.01	0.0011	5960450	mg/L
LDU - West	6/2/2017	Iron, Total	44	1	0.51	13822000	mg/L
LDU - West	6/2/2017	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
LDU - West	6/2/2017	Manganese, Total	16	0.1	0.055	2017000	mg/L
LDU - West	6/2/2017	Lead, Total	0.00055	0.0025	0.00048	15000	mg/L
LDU - West	6/2/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - West	6/2/2017	Uranium, Total	0.0021	0.0025	0.00077	30000	mg/L
LDU - West	6/2/2017	Zinc, Total	0.33	0.01	0.0028	5960000	mg/L
LDU - West	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	9/5/2017	Arsenic, Total	0.0038	0.005	0.0015	10000	mg/L
LDU - West	9/5/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
LDU - West	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	9/5/2017	Chromium, Total	1.3	0.06	0.018	50000	mg/L
LDU - West	9/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
LDU - West	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2017	Arsenic, Dissolved	0.0044	0.001	0.00018	10000	mg/L
LDU - West	9/5/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
LDU - West	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	9/5/2017	Chromium, Dissolved	1.3	0.06	0.013	100000	mg/L
LDU - West	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	9/5/2017	Iron, Dissolved	26	1	0.82	13821880	mg/L
LDU - West	9/5/2017	Manganese, Dissolved	9.3	0.02	0.0039	2017400	mg/L
LDU - West	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	9/5/2017	Selenium, Dissolved	0.0035	0.001	0.00039	50000	mg/L
LDU - West	9/5/2017	Uranium, Dissolved	0.00074	0.0005	0.00005	NA	mg/L
LDU - West	9/5/2017	Zinc, Dissolved	0.14	0.01	0.0021	5960450	mg/L
LDU - West	9/5/2017	Iron, Total	26	1	0.51	13822000	mg/L
LDU - West	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - West	9/5/2017	Manganese, Total	9.3	0.02	0.011	2017000	mg/L
LDU - West	9/5/2017	Lead, Total	0.00048	0.0025	0.00048	15000	mg/L
LDU - West	9/5/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - West	9/5/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
LDU - West	9/5/2017	Zinc, Total	0.056	0.01	0.0033	5960000	mg/L
LDU - West	2/12/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
LDU - West	2/12/2018	Arsenic, Total	0.0034	0.001	0.00041	10000	mg/L
LDU - West	2/12/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
LDU - West	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	2/12/2018	Chromium, Total	0.43	0.006	0.0018	50000	mg/L
LDU - West	2/12/2018	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
LDU - West	2/12/2018	Silver, Dissolved	0.012	0.005	0.0018	81200	mg/L
LDU - West	2/12/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
LDU - West	2/12/2018	Barium, Dissolved	0.086	0.002	0.00099	2000000	mg/L
LDU - West	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	2/12/2018	Chromium, Dissolved	0.37	0.006	0.0013	100000	mg/L
LDU - West	2/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	2/12/2018	Iron, Dissolved	0.19	0.02	0.016	13821880	mg/L
LDU - West	2/12/2018	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
LDU - West	2/12/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
LDU - West	2/12/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
LDU - West	2/12/2018	Uranium, Dissolved	0.00097	0.0025	0.00048	NA	mg/L
LDU - West	2/12/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
LDU - West	2/12/2018	Iron, Total	1.5	0.1	0.051	13822000	mg/L
LDU - West	2/12/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
LDU - West	2/12/2018	Lead, Total	0.00085	0.0005	0.00023	15000	mg/L
LDU - West	2/12/2018	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
LDU - West	2/12/2018	Uranium, Total	0.0013	0.0005	0.000068	30000	mg/L
LDU - West	2/12/2018	Zinc, Total	0.095	0.01	0.0033	5960000	mg/L
LDU - West	4/30/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
LDU - West	4/30/2018	Arsenic, Total	0.0051	0.005	0.0021	10000	mg/L
LDU - West	4/30/2018	Barium, Total	0.094	0.002	0.001	2000000	mg/L
LDU - West	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	4/30/2018	Chromium, Total	0.66	0.006	0.0018	50000	mg/L
LDU - West	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	4/30/2018	Silver, Dissolved	0.0047	0.005	0.0018	81200	mg/L
LDU - West	4/30/2018	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
LDU - West	4/30/2018	Barium, Dissolved	0.092	0.002	0.00099	2000000	mg/L
LDU - West	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	4/30/2018	Chromium, Dissolved	0.68	0.006	0.0013	100000	mg/L
LDU - West	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	4/30/2018	Iron, Dissolved	0.31	0.02	0.016	13821880	mg/L
LDU - West	4/30/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
LDU - West	4/30/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
LDU - West	4/30/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
LDU - West	4/30/2018	Uranium, Dissolved	0.00058	0.0025	0.00048	NA	mg/L
LDU - West	4/30/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
LDU - West	4/30/2018	Iron, Total	0.92	0.02	0.01	13822000	mg/L
LDU - West	4/30/2018	Mercury, Total	0.000097	0.0002	0.000037	2000	mg/L
LDU - West	4/30/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
LDU - West	4/30/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
LDU - West	4/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
LDU - West	4/30/2018	Uranium, Total	0.00069	0.0025	0.00034	30000	mg/L
LDU - West	4/30/2018	Zinc, Total	0.065	0.01	0.0033	5960000	mg/L
LDU - West	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
LDU - West	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
LDU - West	12/17/2020	Aluminum, Total	1.62	0.2	0.051	19914000	mg/L
LDU - West	12/17/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
LDU - West	12/17/2020	Barium, Total	0.167	0.01	0.003	2000000	mg/L
LDU - West	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
LDU - West	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
LDU - West	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
LDU - West	12/17/2020	Chromium, Total	0.205	0.01	0.005	50000	mg/L
LDU - West	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
LDU - West	12/17/2020	Iron, Total	1.64	0.2	0.075	13822000	mg/L
LDU - West	12/17/2020	Manganese, Total	0.851	0.01	0.003	2017000	mg/L
LDU - West	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
LDU - West	12/17/2020	Nickel, Total	0.119	0.006	0.003	372000	mg/L
LDU - West	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
LDU - West	12/17/2020	Aluminum, Dissolved	1.4	0.2	0.051	19913930	mg/L
LDU - West	12/17/2020	Barium, Dissolved	0.157	0.01	0.003	2000000	mg/L
LDU - West	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
LDU - West	12/17/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
LDU - West	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
LDU - West	12/17/2020	Chromium, Dissolved	0.0666	0.01	0.005	100000	mg/L
LDU - West	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
LDU - West	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
LDU - West	12/17/2020	Iron, Dissolved	0.747	0.2	0.075	13821880	mg/L
LDU - West	12/17/2020	Manganese, Dissolved	0.839	0.01	0.003	2017400	mg/L
LDU - West	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
LDU - West	12/17/2020	Nickel, Dissolved	0.0688	0.006	0.003	372000	mg/L
LDU - West	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
LDU - West	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
LDU - West	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
LDU - West	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
LDU - West	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
LDU - West	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
LDU - West	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
LDU - West	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
LDU - West	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
LDU - West	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
LDU - West	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
LDU - West	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
LDU - West	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
LDU - West	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
LDU - West	5/28/2019	Aluminum, Dissolved	4.6	0.1	0.012441	19913930	mg/L
LDU - West	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - West	5/28/2019	Arsenic, Dissolved	0.00025	0.001	0.000101	10000	mg/L
LDU - West	5/28/2019	Barium, Dissolved	0.076	0.002	0.000648	2000000	mg/L
LDU - West	5/28/2019	Beryllium, Dissolved	0.0036	0.002	0.000284	4000	mg/L
LDU - West	5/28/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
LDU - West	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	5/28/2019	Chromium, Dissolved	0.16	0.006	0.001533	100000	mg/L
LDU - West	5/28/2019	Cobalt, Dissolved	0.0081	0.006	0.003091	5980	mg/L
LDU - West	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	5/28/2019	Iron, Dissolved	750	20	8.746871	13821880	mg/L
LDU - West	5/28/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
LDU - West	5/28/2019	Manganese, Dissolved	76	0.2	0.028994	2017400	mg/L
LDU - West	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	5/28/2019	Nickel, Dissolved	0.52	0.01	0.004009	372000	mg/L
LDU - West	5/28/2019	Selenium, Dissolved	0.0004	0.001	0.000171	50000	mg/L
LDU - West	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
LDU - West	5/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
LDU - West	5/28/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
LDU - West	5/28/2019	Zinc, Dissolved	0.07	0.01	0.002252	5960450	mg/L
LDU - West	5/28/2019	Aluminum, Total	5.3	0.2	0.024883	19914000	mg/L
LDU - West	5/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	5/28/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
LDU - West	5/28/2019	Barium, Total	0.071	0.01	0.003242	2000000	mg/L
LDU - West	5/28/2019	Beryllium, Total	0.0039	0.01	0.001419	4000	mg/L
LDU - West	5/28/2019	Boron, Total	0.5	0.2	0.022653	3949	mg/L
LDU - West	5/28/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
LDU - West	5/28/2019	Chromium, Total	0.7	0.03	0.007666	50000	mg/L
LDU - West	5/28/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	5/28/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
LDU - West	5/28/2019	Iron, Total	770	20	8.746871	13822000	mg/L
LDU - West	5/28/2019	Lead, Total	0.0004	0.0025	0.000274	15000	mg/L
LDU - West	5/28/2019	Manganese, Total	76	0.2	0.028994	2017000	mg/L
LDU - West	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
LDU - West	5/28/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
LDU - West	5/28/2019	Nickel, Total	0.68	0.05	0.020043	372000	mg/L
LDU - West	5/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
LDU - West	5/28/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
LDU - West	5/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	5/28/2019	Uranium, Total	ND	0.0025	0.000424	30000	mg/L
LDU - West	5/28/2019	Zinc, Total	0.16	0.05	0.028859	5960000	mg/L
LDU - West	3/10/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
LDU - West	3/10/2020	Arsenic, Dissolved	0.0016	0.005	0.0005	10000	mg/L
LDU - West	3/10/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
LDU - West	3/10/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
LDU - West	3/10/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
LDU - West	3/10/2020	Uranium, Dissolved	0.001	0.0025	0.00037	NA	mg/L
LDU - West	3/10/2020	Barium, Dissolved	0.041	0.002	0.00065	2000000	mg/L
LDU - West	3/10/2020	Beryllium, Dissolved	0.0029	0.002	0.00028	4000	mg/L
LDU - West	3/10/2020	Boron, Dissolved	0.17	0.04	0.0045	3949110	mg/L
LDU - West	3/10/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
LDU - West	3/10/2020	Chromium, Dissolved	0.76	0.006	0.0015	100000	mg/L
LDU - West	3/10/2020	Cobalt, Dissolved	0.013	0.006	0.0031	5980	mg/L
LDU - West	3/10/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
LDU - West	3/10/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
LDU - West	3/10/2020	Nickel, Dissolved	0.69	0.01	0.004	372000	mg/L
LDU - West	3/10/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
LDU - West	3/10/2020	Zinc, Dissolved	0.052	0.01	0.0023	5960450	mg/L
LDU - West	3/10/2020	Aluminum, Dissolved	21	1	0.12	19913930	mg/L
LDU - West	3/10/2020	Manganese, Dissolved	38	0.1	0.014	2017400	mg/L
LDU - West	3/10/2020	Iron, Dissolved	510	20	8.7	13821880	mg/L
LDU - West	3/10/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
LDU - West	3/10/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
LDU - West	3/10/2020	Arsenic, Total	0.0016	0.005	0.0016	10000	mg/L
LDU - West	3/10/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
LDU - West	3/10/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
LDU - West	3/10/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
LDU - West	3/10/2020	Uranium, Total	ND	0.0025	0.00042	30000	mg/L
LDU - West	3/10/2020	Barium, Total	0.045	0.002	0.00065	2000000	mg/L
LDU - West	3/10/2020	Beryllium, Total	0.0021	0.002	0.00028	4000	mg/L
LDU - West	3/10/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
LDU - West	3/10/2020	Cobalt, Total	0.012	0.006	0.0031	5980	mg/L
LDU - West	3/10/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/10/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
LDU - West	3/10/2020	Nickel, Total	0.7	0.01	0.004	372000	mg/L
LDU - West	3/10/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
LDU - West	3/10/2020	Zinc, Total	0.077	0.01	0.0058	5960000	mg/L
LDU - West	3/10/2020	Chromium, Total	1.9	0.03	0.0077	50000	mg/L
LDU - West	3/10/2020	Aluminum, Total	24	1	0.12	19914000	mg/L
LDU - West	3/10/2020	Manganese, Total	41	0.1	0.014	2017000	mg/L
LDU - West	3/10/2020	Iron, Total	530	20	8.7	13822000	mg/L
LDU - West	3/10/2020	Boron, Total	0.14	0.04	0.0045	3949	mg/L
LDU - West	4/9/2019	Aluminum, Total	16	0.4	0.049765	19914000	mg/L
LDU - West	4/9/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	4/9/2019	Arsenic, Total	ND	0.005	0.000504	10000	mg/L
LDU - West	4/9/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
LDU - West	4/9/2019	Beryllium, Total	0.0063	0.002	0.000284	4000	mg/L
LDU - West	4/9/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
LDU - West	4/9/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
LDU - West	4/9/2019	Chromium, Total	0.66	0.006	0.001533	50000	mg/L
LDU - West	4/9/2019	Cobalt, Total	0.007	0.006	0.003091	5980	mg/L
LDU - West	4/9/2019	Copper, Total	ND	0.006	0.001296	790000	mg/L
LDU - West	4/9/2019	Iron, Total	1400	40	17.493741	13822000	mg/L
LDU - West	4/9/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
LDU - West	4/9/2019	Manganese, Total	81	0.2	0.028994	2017000	mg/L
LDU - West	4/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	4/9/2019	Nickel, Total	0.48	0.01	0.004009	372000	mg/L
LDU - West	4/9/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	4/9/2019	Silver, Total	ND	0.005	0.000942	50000	mg/L
LDU - West	4/9/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
LDU - West	4/9/2019	Uranium, Total	ND	0.0025	0.000374	30000	mg/L
LDU - West	4/9/2019	Zinc, Total	0.039	0.01	0.002252	5960000	mg/L
LDU - West	4/9/2019	Aluminum, Total	15	0.4	0.021015	19914000	mg/L
LDU - West	4/9/2019	Antimony, Total	ND	0.005	0.000784	6000	mg/L
LDU - West	4/9/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
LDU - West	4/9/2019	Barium, Total	0.092	0.01	0.002442	2000000	mg/L
LDU - West	4/9/2019	Beryllium, Total	0.0061	0.01	0.00112	4000	mg/L
LDU - West	4/9/2019	Boron, Total	0.4	0.2	0.009104	3949	mg/L
LDU - West	4/9/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
LDU - West	4/9/2019	Chromium, Total	0.74	0.03	0.005999	50000	mg/L
LDU - West	4/9/2019	Cobalt, Total	0.019	0.03	0.006208	5980	mg/L
LDU - West	4/9/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
LDU - West	4/9/2019	Iron, Total	1300	40	12.105137	13822000	mg/L
LDU - West	4/9/2019	Lead, Total	0.00016	0.0025	0.000131	15000	mg/L
LDU - West	4/9/2019	Manganese, Total	77	0.2	0.005982	2017000	mg/L
LDU - West	4/9/2019	Molybdenum, Total	ND	0.04	0.010377	98700	mg/L
LDU - West	4/9/2019	Nickel, Total	0.84	0.05	0.007455	372000	mg/L
LDU - West	4/9/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
LDU - West	4/9/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
LDU - West	4/9/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	4/9/2019	Uranium, Total	ND	0.0025	0.000424	30000	mg/L
LDU - West	4/9/2019	Zinc, Total	0.072	0.05	0.028859	5960000	mg/L
LDU - West	11/19/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
LDU - West	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	11/19/2019	Arsenic, Total	ND	0.02	0.006244	10000	mg/L
LDU - West	11/19/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L
LDU - West	11/19/2019	Beryllium, Total	0.00082	0.002	0.000284	4000	mg/L
LDU - West	11/19/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
LDU - West	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - West	11/19/2019	Chromium, Total	0.15	0.006	0.001533	50000	mg/L
LDU - West	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - West	11/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - West	11/19/2019	Iron, Total	51	2	0.874687	13822000	mg/L
LDU - West	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
LDU - West	11/19/2019	Manganese, Total	19	0.2	0.028994	2017000	mg/L
LDU - West	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
LDU - West	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	11/19/2019	Nickel, Total	0.045	0.01	0.004009	372000	mg/L
LDU - West	11/19/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L
LDU - West	11/19/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
LDU - West	11/19/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	11/19/2019	Uranium, Total	0.00082	0.0025	0.000424	30000	mg/L
LDU - West	11/19/2019	Zinc, Total	0.029	0.01	0.005772	5960000	mg/L
LDU - West	11/19/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
LDU - West	11/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - West	11/19/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
LDU - West	11/19/2019	Barium, Dissolved	0.063	0.002	0.000648	2000000	mg/L
LDU - West	11/19/2019	Beryllium, Dissolved	0.00048	0.002	0.000284	4000	mg/L
LDU - West	11/19/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
LDU - West	11/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	11/19/2019	Chromium, Dissolved	0.095	0.006	0.001533	100000	mg/L
LDU - West	11/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - West	11/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	11/19/2019	Iron, Dissolved	45	2	0.874687	13821880	mg/L
LDU - West	11/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - West	11/19/2019	Manganese, Dissolved	19	0.1	0.014497	2017400	mg/L
LDU - West	11/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	11/19/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
LDU - West	11/19/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
LDU - West	11/19/2019	Silver, Dissolved	0.0061	0.005	0.000942	81200	mg/L
LDU - West	11/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - West	11/19/2019	Uranium, Dissolved	0.00076	0.0005	0.000075	NA	mg/L
LDU - West	11/19/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
LDU - West	8/22/2019	Aluminum, Dissolved	0.15	0.02	0.002488	19913930	mg/L
LDU - West	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
LDU - West	8/22/2019	Arsenic, Dissolved	0.00061	0.005	0.000504	10000	mg/L
LDU - West	8/22/2019	Barium, Dissolved	0.066	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/22/2019	Beryllium, Dissolved	0.00064	0.002	0.000284	4000	mg/L
LDU - West	8/22/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
LDU - West	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	8/22/2019	Chromium, Dissolved	0.11	0.006	0.001533	100000	mg/L
LDU - West	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - West	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	8/22/2019	Iron, Dissolved	34	1	0.437344	13821880	mg/L
LDU - West	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
LDU - West	8/22/2019	Manganese, Dissolved	28	0.1	0.014497	2017400	mg/L
LDU - West	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	8/22/2019	Nickel, Dissolved	0.1	0.01	0.004009	372000	mg/L
LDU - West	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
LDU - West	8/22/2019	Silver, Dissolved	0.0054	0.005	0.000942	81200	mg/L
LDU - West	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
LDU - West	8/22/2019	Uranium, Dissolved	0.00062	0.0025	0.000374	NA	mg/L
LDU - West	8/22/2019	Zinc, Dissolved	0.0082	0.01	0.002252	5960450	mg/L
LDU - West	8/22/2019	Aluminum, Total	0.98	0.1	0.012441	19914000	mg/L
LDU - West	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - West	8/22/2019	Arsenic, Total	0.00046	0.001	0.000312	10000	mg/L
LDU - West	8/22/2019	Barium, Total	0.073	0.002	0.000648	2000000	mg/L
LDU - West	8/22/2019	Beryllium, Total	0.00063	0.002	0.000284	4000	mg/L
LDU - West	8/22/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
LDU - West	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - West	8/22/2019	Chromium, Total	0.24	0.006	0.001533	50000	mg/L
LDU - West	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - West	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - West	8/22/2019	Iron, Total	38	1	0.437344	13822000	mg/L
LDU - West	8/22/2019	Lead, Total	0.00047	0.0005	0.000055	15000	mg/L
LDU - West	8/22/2019	Manganese, Total	28	0.1	0.014497	2017000	mg/L
LDU - West	8/22/2019	Mercury, Total	0.00018	0.0002	0.000038	2000	mg/L
LDU - West	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	8/22/2019	Nickel, Total	0.11	0.01	0.004009	372000	mg/L
LDU - West	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - West	8/22/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
LDU - West	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - West	8/22/2019	Uranium, Total	0.00062	0.0005	0.000085	30000	mg/L
LDU - West	8/22/2019	Zinc, Total	0.029	0.01	0.005772	5960000	mg/L
MKTF-02	8/23/2019	Aluminum, Dissolved	0.41	0.02	0.002488	19913930	mg/L
MKTF-02	8/23/2019	Antimony, Dissolved	0.00047	0.001	0.000389	6000	mg/L
MKTF-02	8/23/2019	Arsenic, Dissolved	0.0038	0.001	0.000101	10000	mg/L
MKTF-02	8/23/2019	Barium, Dissolved	0.73	0.002	0.000648	2000000	mg/L
MKTF-02	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-02	8/23/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-02	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	8/23/2019	Calcium, Dissolved	230	5	0.309446	NA	mg/L
MKTF-02	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	8/23/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-02	8/23/2019	Iron, Dissolved	2.4	0.1	0.043734	13821880	mg/L
MKTF-02	8/23/2019	Lead, Dissolved	0.00039	0.0005	0.000055	NA	mg/L
MKTF-02	8/23/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-02	8/23/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-02	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	8/23/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	8/23/2019	Potassium, Dissolved	4	1	0.162288	NA	mg/L
MKTF-02	8/23/2019	Selenium, Dissolved	0.00066	0.001	0.000171	50000	mg/L
MKTF-02	8/23/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-02	8/23/2019	Sodium, Dissolved	1300	100	41.61763	NA	mg/L
MKTF-02	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	8/23/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
MKTF-02	8/23/2019	Zinc, Dissolved	0.0065	0.01	0.002252	5960450	mg/L
MKTF-02	8/23/2019	Aluminum, Total	18	2	0.248827	19914000	mg/L
MKTF-02	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-02	8/23/2019	Arsenic, Total	0.006	0.005	0.001561	10000	mg/L
MKTF-02	8/23/2019	Barium, Total	0.86	0.002	0.000648	2000000	mg/L
MKTF-02	8/23/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-02	8/23/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	8/23/2019	Chromium, Total	0.0055	0.006	0.001533	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/23/2019	Cobalt, Total	0.0037	0.006	0.003091	5980	mg/L
MKTF-02	8/23/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
MKTF-02	8/23/2019	Iron, Total	9.1	2	0.874687	13822000	mg/L
MKTF-02	8/23/2019	Lead, Total	0.009	0.0025	0.000274	15000	mg/L
MKTF-02	8/23/2019	Manganese, Total	2.3	0.01	0.00145	2017000	mg/L
MKTF-02	8/23/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-02	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	8/23/2019	Nickel, Total	0.024	0.01	0.004009	372000	mg/L
MKTF-02	8/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-02	8/23/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-02	8/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-02	8/23/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-02	8/23/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	14	0.4	0.049765	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0032	0.01	0.003122	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.34	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	0.0048	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	5.9	0.4	0.174937	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	0.0052	0.005	0.000549	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.8	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0061	0.005	0.001418	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.043	0.005	0.000849	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0026	0.005	0.000504	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0021	0.006	0.001296	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	0.38	0.02	0.008747	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.0087	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0061	0.005	0.000942	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.047	0.0025	0.000374	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.022	0.01	0.002252	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	ND	0.02	0.006244	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.33	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	0.0046	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0053	0.006	0.004072	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	5.7	0.4	0.174937	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	0.0054	0.005	0.000549	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.044	0.005	0.000849	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0026	0.005	0.000504	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.00032	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.002	0.006	0.001296	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	0.48	0.02	0.008747	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0062	0.005	0.000942	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.046	0.0025	0.000374	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.026	0.01	0.002252	5960000	mg/L
MKTF-02	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-02	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-02	3/28/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
MKTF-02	3/28/2019	Barium, Dissolved	0.99	0.002	0.000648	2000000	mg/L
MKTF-02	3/28/2019	Beryllium, Dissolved	0.00041	0.002	0.000284	4000	mg/L
MKTF-02	3/28/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
MKTF-02	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	3/28/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-02	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-02	3/28/2019	Iron, Dissolved	0.42	0.02	0.008747	13821880	mg/L
MKTF-02	3/28/2019	Lead, Dissolved	0.00007	0.0005	0.000055	NA	mg/L
MKTF-02	3/28/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-02	3/28/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
MKTF-02	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	3/28/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	3/28/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
MKTF-02	3/28/2019	Selenium, Dissolved	0.0005	0.001	0.000171	50000	mg/L
MKTF-02	3/28/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-02	3/28/2019	Sodium, Dissolved	890	10	4.161763	NA	mg/L
MKTF-02	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	3/28/2019	Uranium, Dissolved	0.023	0.0005	0.000075	NA	mg/L
MKTF-02	3/28/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-02	3/28/2019	Aluminum, Total	0.022	0.02	0.004564	19914000	mg/L
MKTF-02	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-02	3/28/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
MKTF-02	3/28/2019	Barium, Total	1	0.01	0.003242	2000000	mg/L
MKTF-02	3/28/2019	Beryllium, Total	0.00038	0.002	0.000284	4000	mg/L
MKTF-02	3/28/2019	Boron, Total	0.73	0.04	0.004531	3949	mg/L
MKTF-02	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-02	3/28/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
MKTF-02	3/28/2019	Lead, Total	0.00022	0.0005	0.000055	15000	mg/L
MKTF-02	3/28/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
MKTF-02	3/28/2019	Mercury, Total	0.000087	0.0002	0.000038	2000	mg/L
MKTF-02	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	3/28/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-02	3/28/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-02	3/28/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-02	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-02	3/28/2019	Uranium, Total	0.023	0.0025	0.000424	30000	mg/L
MKTF-02	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-02	11/19/2019	Calcium, Total	310	5	0.309446	NA	mg/L
MKTF-02	11/19/2019	Magnesium, Total	55	1	0.05029	NA	mg/L
MKTF-02	11/19/2019	Potassium, Total	4.3	1	0.162288	NA	mg/L
MKTF-02	11/19/2019	Sodium, Total	1300	20	8.323526	NA	mg/L
MKTF-02	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-02	11/19/2019	Calcium, Total	320	5	0.309446	NA	mg/L
MKTF-02	11/19/2019	Magnesium, Total	55	1	0.05029	NA	mg/L
MKTF-02	11/19/2019	Potassium, Total	4.4	1	0.162288	NA	mg/L
MKTF-02	11/19/2019	Sodium, Total	1300	20	8.323526	NA	mg/L
MKTF-02	5/6/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-02	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-02	5/6/2019	Arsenic, Dissolved	0.0033	0.005	0.000504	10000	mg/L
MKTF-02	5/6/2019	Barium, Dissolved	0.9	0.002	0.000648	2000000	mg/L
MKTF-02	5/6/2019	Beryllium, Dissolved	0.00075	0.002	0.000284	4000	mg/L
MKTF-02	5/6/2019	Boron, Dissolved	0.83	0.04	0.004531	3949110	mg/L
MKTF-02	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	5/6/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-02	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-02	5/6/2019	Iron, Dissolved	3	0.1	0.043734	13821880	mg/L
MKTF-02	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-02	5/6/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-02	5/6/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
MKTF-02	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	5/6/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	5/6/2019	Potassium, Dissolved	2.8	1	0.162288	NA	mg/L
MKTF-02	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-02	5/6/2019	Silver, Dissolved	0.0045	0.005	0.000942	81200	mg/L
MKTF-02	5/6/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-02	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-02	5/6/2019	Uranium, Dissolved	0.017	0.0025	0.000374	NA	mg/L
MKTF-02	5/6/2019	Zinc, Dissolved	0.057	0.01	0.002252	5960450	mg/L
MKTF-02	5/6/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	5/6/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L
MKTF-02	5/6/2019	Barium, Total	0.99	0.002	0.000648	2000000	mg/L
MKTF-02	5/6/2019	Beryllium, Total	0.00064	0.002	0.000284	4000	mg/L
MKTF-02	5/6/2019	Boron, Total	0.81	0.04	0.004531	3949	mg/L
MKTF-02	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-02	5/6/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-02	5/6/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	5/6/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-02	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-02	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	5/6/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-02	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-02	5/6/2019	Silver, Total	0.0043	0.005	0.001418	50000	mg/L
MKTF-02	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-02	5/6/2019	Uranium, Total	0.017	0.0025	0.000424	30000	mg/L
MKTF-02	5/6/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-02	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-02	2/25/2020	Arsenic, Dissolved	0.0011	0.001	0.0001	10000	mg/L
MKTF-02	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-02	2/25/2020	Selenium, Dissolved	0.00046	0.001	0.00017	50000	mg/L
MKTF-02	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	2/25/2020	Uranium, Dissolved	0.0059	0.0005	0.000075	NA	mg/L
MKTF-02	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-02	2/25/2020	Barium, Dissolved	0.083	0.002	0.00065	2000000	mg/L
MKTF-02	2/25/2020	Beryllium, Dissolved	0.00032	0.002	0.00028	4000	mg/L
MKTF-02	2/25/2020	Boron, Dissolved	0.51	0.04	0.0045	3949110	mg/L
MKTF-02	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-02	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-02	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-02	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/25/2020	Iron, Dissolved	0.34	0.02	0.0087	13821880	mg/L
MKTF-02	2/25/2020	Magnesium, Dissolved	48	1	0.05	NA	mg/L
MKTF-02	2/25/2020	Nickel, Dissolved	0.0049	0.01	0.004	372000	mg/L
MKTF-02	2/25/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-02	2/25/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-02	2/25/2020	Manganese, Dissolved	3	0.01	0.0014	2017400	mg/L
MKTF-02	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-02	2/25/2020	Silver, Dissolved	0.0057	0.005	0.00094	81200	mg/L
MKTF-02	2/25/2020	Calcium, Dissolved	300	5	0.31	NA	mg/L
MKTF-02	2/25/2020	Sodium, Dissolved	790	10	4.2	NA	mg/L
MKTF-02	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-02	2/25/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-02	2/25/2020	Lead, Total	0.00052	0.0025	0.00027	15000	mg/L
MKTF-02	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-02	2/25/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-02	2/25/2020	Aluminum, Total	0.34	0.02	0.0025	19914000	mg/L
MKTF-02	2/25/2020	Barium, Total	0.12	0.002	0.00065	2000000	mg/L
MKTF-02	2/25/2020	Beryllium, Total	0.00035	0.002	0.00028	4000	mg/L
MKTF-02	2/25/2020	Boron, Total	0.59	0.04	0.0045	3949	mg/L
MKTF-02	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-02	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-02	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	2/25/2020	Nickel, Total	0.0075	0.01	0.004	372000	mg/L
MKTF-02	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-02	2/25/2020	Iron, Total	2	0.1	0.044	13822000	mg/L
MKTF-02	2/25/2020	Manganese, Total	3	0.01	0.0014	2017000	mg/L
MKTF-02	2/25/2020	Uranium, Total	0.0059	0.0025	0.00042	30000	mg/L
MKTF-02	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-02	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-02	2/25/2020	Silver, Total	0.005	0.005	0.0014	50000	mg/L
MKTF-02	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-02	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-02	12/18/2020	Aluminum, Total	0.2	0.2	0.051	19914000	mg/L
MKTF-02	12/18/2020	Boron, Total	0.881	0.1	0.022	3949	mg/L
MKTF-02	12/18/2020	Barium, Total	0.788	0.01	0.003	2000000	mg/L
MKTF-02	12/18/2020	Potassium, Total	5.68	1	0.34	NA	mg/L
MKTF-02	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-02	12/18/2020	Magnesium, Total	109	0.5	0.12	NA	mg/L
MKTF-02	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-02	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-02	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-02	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-02	12/18/2020	Iron, Total	2.56	0.2	0.075	13822000	mg/L
MKTF-02	12/18/2020	Manganese, Total	6.14	0.01	0.003	2017000	mg/L
MKTF-02	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-02	12/18/2020	Nickel, Total	0.0165	0.006	0.003	372000	mg/L
MKTF-02	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-02	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-02	12/18/2020	Barium, Dissolved	0.765	0.01	0.003	2000000	mg/L
MKTF-02	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-02	12/18/2020	Boron, Dissolved	0.855	0.1	0.022	3949110	mg/L
MKTF-02	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-02	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-02	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-02	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-02	12/18/2020	Iron, Dissolved	1.03	0.2	0.075	13821880	mg/L
MKTF-02	12/18/2020	Manganese, Dissolved	6.46	0.01	0.003	2017400	mg/L
MKTF-02	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-02	12/18/2020	Nickel, Dissolved	0.0163	0.006	0.003	372000	mg/L
MKTF-02	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-02	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-02	12/18/2020	Calcium, Total	631	2.5	0.42	NA	mg/L
MKTF-02	12/18/2020	Sodium, Total	1150	10	4.6	NA	mg/L
MKTF-02	9/21/2020	Arsenic, Dissolved	0.0014	0.001	0.00021	10000	mg/L
MKTF-02	9/21/2020	Lead, Dissolved	0.00017	0.0005	0.000034	NA	mg/L
MKTF-02	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-02	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-02	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-02	9/21/2020	Uranium, Dissolved	0.01	0.0005	0.000065	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	Calcium, Dissolved	210	5	0.57	NA	mg/L
MKTF-02	9/21/2020	Manganese, Dissolved	1.9	0.01	0.0029	2017400	mg/L
MKTF-02	9/21/2020	Sodium, Dissolved	820	50	6.9	NA	mg/L
MKTF-02	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-02	9/21/2020	Barium, Dissolved	0.28	0.002	0.0011	2000000	mg/L
MKTF-02	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-02	9/21/2020	Boron, Dissolved	0.84	0.04	0.0067	3949110	mg/L
MKTF-02	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-02	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-02	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-02	9/21/2020	Iron, Dissolved	0.22	0.02	0.01	13821880	mg/L
MKTF-02	9/21/2020	Magnesium, Dissolved	36	1	0.067	NA	mg/L
MKTF-02	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-02	9/21/2020	Nickel, Dissolved	0.02	0.01	0.0033	372000	mg/L
MKTF-02	9/21/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
MKTF-02	9/21/2020	Silver, Dissolved	0.0035	0.005	0.0013	81200	mg/L
MKTF-02	9/21/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
MKTF-02	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-02	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-02	9/21/2020	Arsenic, Total	0.0015	0.001	0.00026	10000	mg/L
MKTF-02	9/21/2020	Lead, Total	0.0007	0.0005	0.000034	15000	mg/L
MKTF-02	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-02	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-02	9/21/2020	Uranium, Total	0.01	0.0005	0.000065	30000	mg/L
MKTF-02	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-02	9/21/2020	Aluminum, Total	0.87	0.02	0.0074	19914000	mg/L
MKTF-02	9/21/2020	Barium, Total	0.27	0.003	0.0016	2000000	mg/L
MKTF-02	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-02	9/21/2020	Boron, Total	0.81	0.04	0.0074	3949	mg/L
MKTF-02	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-02	9/21/2020	Iron, Total	0.99	0.05	0.013	13822000	mg/L
MKTF-02	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-02	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-02	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-02	9/21/2020	Nickel, Total	0.017	0.01	0.0033	372000	mg/L
MKTF-02	9/21/2020	Silver, Total	0.0033	0.005	0.0013	50000	mg/L
MKTF-02	9/21/2020	Manganese, Total	2	0.01	0.0041	2017000	mg/L
MKTF-02	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-02	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-02	12/18/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
MKTF-02	12/18/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
MKTF-02	12/18/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
MKTF-02	12/18/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
MKTF-02	12/18/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
MKTF-02	12/18/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
MKTF-02	12/18/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
MKTF-02	12/18/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
MKTF-02	12/18/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
MKTF-02	12/18/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
MKTF-02	12/18/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
MKTF-02	12/18/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
MKTF-02	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-02	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-02	6/6/2014	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
MKTF-02	6/6/2014	Calcium, Total	110	5	0.27	NA	mg/L
MKTF-02	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-02	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-02	6/6/2014	Iron, Total	0.34	0.02	0.0062	13822000	mg/L
MKTF-02	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	6/6/2014	Potassium, Total	9.2	1	0.24	NA	mg/L
MKTF-02	6/6/2014	Magnesium, Total	17	1	0.024	NA	mg/L
MKTF-02	6/6/2014	Manganese, Total	0.56	0.002	0.00055	2017000	mg/L
MKTF-02	6/6/2014	Sodium, Total	720	10	2.5	NA	mg/L
MKTF-02	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-02	6/6/2014	Selenium, Total	0.012	0.005	0.00074	50000	mg/L
MKTF-02	6/6/2014	Uranium, Total	0.056	0.01	0.0005	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Zinc, Total	0.01	0.01	0.0014	5960000	mg/L
MKTF-02	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-02	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-02	9/18/2014	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-02	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-02	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-02	9/18/2014	Iron, Total	0.029	0.02	0.0062	13822000	mg/L
MKTF-02	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	9/18/2014	Manganese, Total	0.59	0.002	0.00055	2017000	mg/L
MKTF-02	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-02	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-02	9/18/2014	Uranium, Total	0.012	0.001	0.00005	30000	mg/L
MKTF-02	9/18/2014	Zinc, Total	0.041	0.01	0.0014	5960000	mg/L
MKTF-02	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-02	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-02	11/14/2014	Barium, Total	0.13	0.002	0.00021	2000000	mg/L
MKTF-02	11/14/2014	Calcium, Total	100	5	0.41	NA	mg/L
MKTF-02	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-02	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-02	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-02	11/14/2014	Iron, Total	2.2	0.1	0.031	13822000	mg/L
MKTF-02	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	11/14/2014	Potassium, Total	4.2	1	0.093	NA	mg/L
MKTF-02	11/14/2014	Magnesium, Total	16	1	0.018	NA	mg/L
MKTF-02	11/14/2014	Manganese, Total	0.51	0.002	0.00055	2017000	mg/L
MKTF-02	11/14/2014	Sodium, Total	760	10	3.9	NA	mg/L
MKTF-02	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-02	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-02	11/14/2014	Uranium, Total	0.059	0.01	0.0005	30000	mg/L
MKTF-02	11/14/2014	Zinc, Total	0.027	0.01	0.0014	5960000	mg/L
MKTF-02	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	3/11/2015	Arsenic, Total	0.0047	0.001	0.00011	10000	mg/L
MKTF-02	3/11/2015	Barium, Total	0.13	0.002	0.00095	2000000	mg/L
MKTF-02	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-02	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-02	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-02	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	3/11/2015	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
MKTF-02	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-02	3/11/2015	Selenium, Total	0.0084	0.001	0.00015	50000	mg/L
MKTF-02	3/11/2015	Uranium, Total	0.049	0.001	0.00005	30000	mg/L
MKTF-02	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-02	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-02	6/9/2015	Barium, Total	0.12	0.002	0.00095	2000000	mg/L
MKTF-02	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-02	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-02	6/9/2015	Iron, Total	0.21	0.02	0.0073	13822000	mg/L
MKTF-02	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	6/9/2015	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
MKTF-02	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-02	6/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-02	6/9/2015	Uranium, Total	0.032	0.005	0.000024	30000	mg/L
MKTF-02	6/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-02	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	8/21/2015	Arsenic, Total	0.0044	0.001	0.00029	10000	mg/L
MKTF-02	8/21/2015	Barium, Total	0.28	0.002	0.0011	2000000	mg/L
MKTF-02	8/21/2015	Calcium, Total	65	1	0.057	NA	mg/L
MKTF-02	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	8/21/2015	Chromium, Total	0.0073	0.006	0.0022	50000	mg/L
MKTF-02	8/21/2015	Copper, Total	0.0089	0.006	0.0051	790000	mg/L
MKTF-02	8/21/2015	Iron, Total	8.6	0.4	0.14	13822000	mg/L
MKTF-02	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	8/21/2015	Potassium, Total	2.8	1	0.18	NA	mg/L
MKTF-02	8/21/2015	Magnesium, Total	10	1	0.039	NA	mg/L
MKTF-02	8/21/2015	Manganese, Total	0.81	0.002	0.0015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/21/2015	Sodium, Total	610	10	0.72	NA	mg/L
MKTF-02	8/21/2015	Lead, Total	0.0088	0.0005	0.000047	15000	mg/L
MKTF-02	8/21/2015	Selenium, Total	0.0026	0.001	0.00012	50000	mg/L
MKTF-02	8/21/2015	Uranium, Total	0.05	0.005	0.000049	30000	mg/L
MKTF-02	8/21/2015	Zinc, Total	0.033	0.01	0.0039	5960000	mg/L
MKTF-02	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	11/4/2015	Arsenic, Total	0.0043	0.001	0.00029	10000	mg/L
MKTF-02	11/4/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-02	11/4/2015	Calcium, Total	48	1	0.26	NA	mg/L
MKTF-02	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-02	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-02	11/4/2015	Iron, Total	2.2	0.1	0.036	13822000	mg/L
MKTF-02	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	11/4/2015	Potassium, Total	3	1	0.18	NA	mg/L
MKTF-02	11/4/2015	Magnesium, Total	7.5	1	0.013	NA	mg/L
MKTF-02	11/4/2015	Manganese, Total	0.45	0.002	0.0015	2017000	mg/L
MKTF-02	11/4/2015	Sodium, Total	480	10	0.96	NA	mg/L
MKTF-02	11/4/2015	Lead, Total	0.0038	0.0005	0.000047	15000	mg/L
MKTF-02	11/4/2015	Selenium, Total	ND	0.05	0.00062	50000	mg/L
MKTF-02	11/4/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-02	11/4/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-02	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	2/24/2016	Arsenic, Total	0.0045	0.001	0.00029	10000	mg/L
MKTF-02	2/24/2016	Barium, Total	0.73	0.002	0.0011	2000000	mg/L
MKTF-02	2/24/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-02	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	2/24/2016	Chromium, Total	0.0098	0.006	0.0022	50000	mg/L
MKTF-02	2/24/2016	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-02	2/24/2016	Iron, Total	14	0.4	0.14	13822000	mg/L
MKTF-02	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	2/24/2016	Potassium, Total	3.1	1	0.18	NA	mg/L
MKTF-02	2/24/2016	Magnesium, Total	10	1	0.013	NA	mg/L
MKTF-02	2/24/2016	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
MKTF-02	2/24/2016	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-02	2/24/2016	Lead, Total	0.023	0.0025	0.00024	15000	mg/L
MKTF-02	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-02	2/24/2016	Uranium, Total	0.063	0.0025	0.000025	30000	mg/L
MKTF-02	2/24/2016	Zinc, Total	0.057	0.01	0.0039	5960000	mg/L
MKTF-02	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-02	6/10/2016	Arsenic, Total	0.0028	0.001	0.00014	10000	mg/L
MKTF-02	6/10/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
MKTF-02	6/10/2016	Calcium, Total	55	1	0.26	NA	mg/L
MKTF-02	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-02	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-02	6/10/2016	Iron, Total	0.081	0.02	0.0091	13822000	mg/L
MKTF-02	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	6/10/2016	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-02	6/10/2016	Magnesium, Total	8.9	1	0.013	NA	mg/L
MKTF-02	6/10/2016	Manganese, Total	0.33	0.002	0.00032	2017000	mg/L
MKTF-02	6/10/2016	Sodium, Total	550	10	0.96	NA	mg/L
MKTF-02	6/10/2016	Lead, Total	0.00049	0.0005	0.00017	15000	mg/L
MKTF-02	6/10/2016	Selenium, Total	0.0061	0.001	0.00021	50000	mg/L
MKTF-02	6/10/2016	Uranium, Total	0.033	0.0025	0.00026	30000	mg/L
MKTF-02	6/10/2016	Zinc, Total	0.0033	0.01	0.0028	5960000	mg/L
MKTF-02	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	9/7/2016	Arsenic, Total	0.0041	0.001	0.00021	10000	mg/L
MKTF-02	9/7/2016	Barium, Total	0.32	0.002	0.00079	2000000	mg/L
MKTF-02	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	9/7/2016	Chromium, Total	0.0054	0.006	0.0027	50000	mg/L
MKTF-02	9/7/2016	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-02	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-02	9/7/2016	Arsenic, Dissolved	0.0029	0.005	0.00069	10000	mg/L
MKTF-02	9/7/2016	Barium, Dissolved	0.16	0.002	0.0013	2000000	mg/L
MKTF-02	9/7/2016	Calcium, Dissolved	61	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-02	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-02	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/7/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
MKTF-02	9/7/2016	Potassium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Magnesium, Dissolved	9.9	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
MKTF-02	9/7/2016	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-02	9/7/2016	Lead, Dissolved	0.0015	0.0005	0.00017	NA	mg/L
MKTF-02	9/7/2016	Selenium, Dissolved	0.0061	0.005	0.0011	50000	mg/L
MKTF-02	9/7/2016	Uranium, Dissolved	0.035	0.0025	0.00026	NA	mg/L
MKTF-02	9/7/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
MKTF-02	9/7/2016	Iron, Total	5.9	0.2	0.2	13822000	mg/L
MKTF-02	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	9/7/2016	Manganese, Total	0.65	0.002	0.00027	2017000	mg/L
MKTF-02	9/7/2016	Lead, Total	0.0089	0.0005	0.000081	15000	mg/L
MKTF-02	9/7/2016	Selenium, Total	0.0064	0.001	0.00019	50000	mg/L
MKTF-02	9/7/2016	Uranium, Total	0.038	0.0025	0.00087	30000	mg/L
MKTF-02	9/7/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-02	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	10/28/2016	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
MKTF-02	10/28/2016	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
MKTF-02	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-02	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-02	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-02	10/28/2016	Arsenic, Dissolved	0.003	0.001	0.00014	10000	mg/L
MKTF-02	10/28/2016	Barium, Dissolved	0.19	0.002	0.0013	2000000	mg/L
MKTF-02	10/28/2016	Calcium, Dissolved	67	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-02	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-02	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-02	10/28/2016	Iron, Dissolved	0.036	0.02	0.02	13821880	mg/L
MKTF-02	10/28/2016	Potassium, Dissolved	2.7	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Magnesium, Dissolved	11	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Manganese, Dissolved	0.47	0.002	0.00032	2017400	mg/L
MKTF-02	10/28/2016	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-02	10/28/2016	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
MKTF-02	10/28/2016	Selenium, Dissolved	0.0064	0.001	0.00021	50000	mg/L
MKTF-02	10/28/2016	Uranium, Dissolved	0.024	0.0025	0.00026	NA	mg/L
MKTF-02	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-02	10/28/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-02	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	10/28/2016	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
MKTF-02	10/28/2016	Lead, Total	0.0027	0.0005	0.000081	15000	mg/L
MKTF-02	10/28/2016	Selenium, Total	0.0048	0.005	0.00094	50000	mg/L
MKTF-02	10/28/2016	Uranium, Total	0.026	0.0025	0.00087	30000	mg/L
MKTF-02	10/28/2016	Zinc, Total	0.038	0.01	0.0027	5960000	mg/L
MKTF-02	3/16/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	3/16/2017	Arsenic, Total	0.004	0.005	0.0011	10000	mg/L
MKTF-02	3/16/2017	Barium, Total	0.35	0.002	0.00079	2000000	mg/L
MKTF-02	3/16/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	3/16/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-02	3/16/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-02	3/16/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-02	3/16/2017	Arsenic, Dissolved	0.0016	0.001	0.00018	10000	mg/L
MKTF-02	3/16/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
MKTF-02	3/16/2017	Calcium, Dissolved	68	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	3/16/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-02	3/16/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	3/16/2017	Iron, Dissolved	0.089	0.02	0.02	13821880	mg/L
MKTF-02	3/16/2017	Potassium, Dissolved	2.1	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Magnesium, Dissolved	12	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Manganese, Dissolved	0.67	0.002	0.00038	2017400	mg/L
MKTF-02	3/16/2017	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-02	3/16/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-02	3/16/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-02	3/16/2017	Uranium, Dissolved	0.024	0.0025	0.00025	NA	mg/L
MKTF-02	3/16/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-02	3/16/2017	Iron, Total	1.4	0.2	0.2	13822000	mg/L
MKTF-02	3/16/2017	Mercury, Total	ND	0.0002	0.00015	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Manganese, Total	0.74	0.002	0.00027	2017000	mg/L
MKTF-02	3/16/2017	Lead, Total	0.0017	0.0005	0.000081	15000	mg/L
MKTF-02	3/16/2017	Selenium, Total	0.0082	0.01	0.0019	50000	mg/L
MKTF-02	3/16/2017	Uranium, Total	0.024	0.0005	0.00017	30000	mg/L
MKTF-02	3/16/2017	Zinc, Total	0.0063	0.01	0.0027	5960000	mg/L
MKTF-02	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	10/3/2017	Arsenic, Total	0.0054	0.001	0.0003	10000	mg/L
MKTF-02	10/3/2017	Barium, Total	0.34	0.002	0.00093	2000000	mg/L
MKTF-02	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	10/3/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	10/3/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-02	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	10/3/2017	Arsenic, Dissolved	0.0058	0.005	0.00089	10000	mg/L
MKTF-02	10/3/2017	Barium, Dissolved	0.33	0.002	0.00085	2000000	mg/L
MKTF-02	10/3/2017	Calcium, Dissolved	56	1	0.078	NA	mg/L
MKTF-02	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	10/3/2017	Iron, Dissolved	1.5	0.2	0.16	13821880	mg/L
MKTF-02	10/3/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-02	10/3/2017	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-02	10/3/2017	Manganese, Dissolved	0.92	0.002	0.00039	2017400	mg/L
MKTF-02	10/3/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-02	10/3/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-02	10/3/2017	Selenium, Dissolved	0.0081	0.005	0.0019	50000	mg/L
MKTF-02	10/3/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-02	10/3/2017	Iron, Total	3	0.2	0.1	13822000	mg/L
MKTF-02	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	10/3/2017	Manganese, Total	0.91	0.002	0.0011	2017000	mg/L
MKTF-02	10/3/2017	Lead, Total	0.002	0.0005	0.000095	15000	mg/L
MKTF-02	10/3/2017	Selenium, Total	0.0056	0.001	0.00071	50000	mg/L
MKTF-02	10/3/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-02	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	11/20/2017	Arsenic, Total	0.0034	0.005	0.0021	10000	mg/L
MKTF-02	11/20/2017	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-02	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	11/20/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	11/20/2017	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L
MKTF-02	11/20/2017	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-02	11/20/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L
MKTF-02	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	11/20/2017	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-02	11/20/2017	Potassium, Dissolved	2.4	1	0.11	NA	mg/L
MKTF-02	11/20/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-02	11/20/2017	Manganese, Dissolved	0.56	0.002	0.00039	2017400	mg/L
MKTF-02	11/20/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-02	11/20/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-02	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	11/20/2017	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
MKTF-02	11/20/2017	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
MKTF-02	11/20/2017	Iron, Total	0.23	0.02	0.01	13822000	mg/L
MKTF-02	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	11/20/2017	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-02	11/20/2017	Lead, Total	0.00062	0.0005	0.00023	15000	mg/L
MKTF-02	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-02	11/20/2017	Uranium, Total	0.036	0.0025	0.00077	30000	mg/L
MKTF-02	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-02	2/6/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
MKTF-02	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-02	2/6/2018	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-02	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	2/6/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-02	2/6/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-02	2/6/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	2/6/2018	Manganese, Dissolved	0.55	0.002	0.00039	2017400	mg/L
MKTF-02	2/6/2018	Sodium, Dissolved	620	10	1.6	NA	mg/L
MKTF-02	2/6/2018	Lead, Dissolved	0.00052	0.0005	0.00017	NA	mg/L
MKTF-02	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	2/6/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-02	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-02	2/6/2018	Iron, Total	0.57	0.02	0.01	13822000	mg/L
MKTF-02	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	2/6/2018	Manganese, Total	0.61	0.002	0.0011	2017000	mg/L
MKTF-02	2/6/2018	Lead, Total	0.0009	0.0005	0.00023	15000	mg/L
MKTF-02	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-02	2/6/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-02	2/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	5/1/2018	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-02	5/1/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-02	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	5/1/2018	Arsenic, Dissolved	0.0021	0.005	0.0021	10000	mg/L
MKTF-02	5/1/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-02	5/1/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-02	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	5/1/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-02	5/1/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-02	5/1/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	5/1/2018	Manganese, Dissolved	0.57	0.002	0.00039	2017400	mg/L
MKTF-02	5/1/2018	Sodium, Dissolved	650	10	1.6	NA	mg/L
MKTF-02	5/1/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
MKTF-02	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	5/1/2018	Uranium, Dissolved	0.024	0.0005	0.000096	NA	mg/L
MKTF-02	5/1/2018	Zinc, Dissolved	0.0051	0.01	0.0021	5960450	mg/L
MKTF-02	5/1/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
MKTF-02	5/1/2018	Mercury, Total	0.000053	0.0002	0.000037	2000	mg/L
MKTF-02	5/1/2018	Manganese, Total	0.62	0.002	0.0011	2017000	mg/L
MKTF-02	5/1/2018	Lead, Total	0.00065	0.0005	0.00023	15000	mg/L
MKTF-02	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-02	5/1/2018	Uranium, Total	0.023	0.0005	0.000068	30000	mg/L
MKTF-02	5/1/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	8/20/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-02	8/20/2018	Arsenic, Total	0.003	0.001	0.00041	10000	mg/L
MKTF-02	8/20/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-02	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	8/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	8/20/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-02	8/20/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-02	8/20/2018	Barium, Dissolved	0.27	0.002	0.00099	2000000	mg/L
MKTF-02	8/20/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-02	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	8/20/2018	Iron, Dissolved	0.027	0.02	0.016	13821880	mg/L
MKTF-02	8/20/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-02	8/20/2018	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-02	8/20/2018	Manganese, Dissolved	0.51	0.002	0.00039	2017400	mg/L
MKTF-02	8/20/2018	Sodium, Dissolved	740	20	3.3	NA	mg/L
MKTF-02	8/20/2018	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-02	8/20/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-02	8/20/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-02	8/20/2018	Iron, Total	0.2	0.02	0.01	13822000	mg/L
MKTF-02	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-02	8/20/2018	Manganese, Total	0.52	0.002	0.0011	2017000	mg/L
MKTF-02	8/20/2018	Lead, Total	0.00051	0.0005	0.00023	15000	mg/L
MKTF-02	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-02	8/20/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-02	8/20/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-02	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-02	11/28/2018	Barium, Total	0.44	0.002	0.001	2000000	mg/L
MKTF-02	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	11/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-02	11/28/2018	Barium, Dissolved	0.43	0.002	0.00099	2000000	mg/L
MKTF-02	11/28/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-02	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	11/28/2018	Iron, Dissolved	0.078	0.02	0.016	13821880	mg/L
MKTF-02	11/28/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-02	11/28/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	11/28/2018	Manganese, Dissolved	0.75	0.002	0.00039	2017400	mg/L
MKTF-02	11/28/2018	Sodium, Dissolved	690	10	1.6	NA	mg/L
MKTF-02	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-02	11/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	11/28/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-02	11/28/2018	Iron, Total	0.24	0.02	0.01	13822000	mg/L
MKTF-02	11/28/2018	Manganese, Total	0.74	0.002	0.0011	2017000	mg/L
MKTF-02	11/28/2018	Lead, Total	0.00059	0.0005	0.00023	15000	mg/L
MKTF-02	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-02	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	6/4/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-04	6/4/2014	Arsenic, Total	0.0078	0.005	0.00057	10000	mg/L
MKTF-04	6/4/2014	Barium, Total	1.9	0.01	0.0056	2000000	mg/L
MKTF-04	6/4/2014	Calcium, Total	120	5	0.27	NA	mg/L
MKTF-04	6/4/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-04	6/4/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-04	6/4/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-04	6/4/2014	Iron, Total	2.5	0.1	0.031	13822000	mg/L
MKTF-04	6/4/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	6/4/2014	Potassium, Total	5	1	0.24	NA	mg/L
MKTF-04	6/4/2014	Magnesium, Total	31	1	0.024	NA	mg/L
MKTF-04	6/4/2014	Manganese, Total	1.4	0.01	0.0027	2017000	mg/L
MKTF-04	6/4/2014	Sodium, Total	340	5	1.3	NA	mg/L
MKTF-04	6/4/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-04	6/4/2014	Selenium, Total	0.022	0.005	0.00074	50000	mg/L
MKTF-04	6/4/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-04	6/4/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-04	9/15/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-04	9/15/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-04	9/15/2014	Barium, Total	0.78	0.002	0.0011	2000000	mg/L
MKTF-04	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-04	9/15/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-04	9/15/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-04	9/15/2014	Iron, Total	3.6	0.1	0.031	13822000	mg/L
MKTF-04	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	9/15/2014	Manganese, Total	1.7	0.01	0.0027	2017000	mg/L
MKTF-04	9/15/2014	Lead, Total	0.0013	0.001	0.000059	15000	mg/L
MKTF-04	9/15/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-04	9/15/2014	Uranium, Total	0.018	0.001	0.00005	30000	mg/L
MKTF-04	9/15/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-04	11/13/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-04	11/13/2014	Arsenic, Total	0.006	0.005	0.00057	10000	mg/L
MKTF-04	11/13/2014	Barium, Total	1.3	0.01	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	Calcium, Total	110	5	0.41	NA	mg/L
MKTF-04	11/13/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-04	11/13/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-04	11/13/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-04	11/13/2014	Iron, Total	4.7	0.1	0.031	13822000	mg/L
MKTF-04	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	11/13/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
MKTF-04	11/13/2014	Magnesium, Total	27	1	0.018	NA	mg/L
MKTF-04	11/13/2014	Manganese, Total	1.8	0.01	0.0027	2017000	mg/L
MKTF-04	11/13/2014	Sodium, Total	370	5	2	NA	mg/L
MKTF-04	11/13/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-04	11/13/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-04	11/13/2014	Uranium, Total	0.013	0.005	0.00025	30000	mg/L
MKTF-04	11/13/2014	Zinc, Total	0.01	0.01	0.0014	5960000	mg/L
MKTF-04	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-04	3/16/2015	Barium, Total	1.8	0.01	0.0037	2000000	mg/L
MKTF-04	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-04	3/16/2015	Chromium, Total	0.0092	0.006	0.0022	50000	mg/L
MKTF-04	3/16/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-04	3/16/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-04	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	3/16/2015	Manganese, Total	2.5	0.01	0.0076	2017000	mg/L
MKTF-04	3/16/2015	Lead, Total	0.022	0.001	0.000069	15000	mg/L
MKTF-04	3/16/2015	Selenium, Total	0.016	0.01	0.0012	50000	mg/L
MKTF-04	3/16/2015	Uranium, Total	0.017	0.001	0.0000081	30000	mg/L
MKTF-04	3/16/2015	Zinc, Total	0.03	0.01	0.0036	5960000	mg/L
MKTF-04	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-04	6/4/2015	Barium, Total	2.2	0.01	0.0048	2000000	mg/L
MKTF-04	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-04	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-04	6/4/2015	Iron, Total	8.6	0.4	0.15	13822000	mg/L
MKTF-04	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	6/4/2015	Manganese, Total	1.6	0.01	0.0013	2017000	mg/L
MKTF-04	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-04	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-04	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-04	6/4/2015	Zinc, Total	0.023	0.01	0.0028	5960000	mg/L
MKTF-04	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	8/18/2015	Arsenic, Total	0.0085	0.001	0.00029	10000	mg/L
MKTF-04	8/18/2015	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-04	8/18/2015	Calcium, Total	120	5	0.28	NA	mg/L
MKTF-04	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	8/18/2015	Copper, Total	0.0061	0.006	0.0051	790000	mg/L
MKTF-04	8/18/2015	Iron, Total	17	1	0.36	13822000	mg/L
MKTF-04	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	8/18/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-04	8/18/2015	Magnesium, Total	31	1	0.039	NA	mg/L
MKTF-04	8/18/2015	Manganese, Total	1.9	0.01	0.0076	2017000	mg/L
MKTF-04	8/18/2015	Sodium, Total	390	5	0.36	NA	mg/L
MKTF-04	8/18/2015	Lead, Total	0.017	0.0005	0.000047	15000	mg/L
MKTF-04	8/18/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-04	8/18/2015	Uranium, Total	0.0042	0.0005	0.0000049	30000	mg/L
MKTF-04	8/18/2015	Zinc, Total	0.025	0.01	0.0039	5960000	mg/L
MKTF-04	11/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	11/3/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-04	11/3/2015	Barium, Total	3.4	0.01	0.0053	2000000	mg/L
MKTF-04	11/3/2015	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-04	11/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	11/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	11/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	11/3/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-04	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-04	11/3/2015	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-04	11/3/2015	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/3/2015	Sodium, Total	390	5	0.48	NA	mg/L
MKTF-04	11/3/2015	Lead, Total	0.0063	0.0005	0.000047	15000	mg/L
MKTF-04	11/3/2015	Selenium, Total	0.016	0.005	0.00062	50000	mg/L
MKTF-04	11/3/2015	Uranium, Total	0.0019	0.0005	0.0000049	30000	mg/L
MKTF-04	11/3/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-04	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	2/29/2016	Arsenic, Total	0.0081	0.005	0.0015	10000	mg/L
MKTF-04	2/29/2016	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-04	2/29/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-04	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	2/29/2016	Iron, Total	9.7	1	0.36	13822000	mg/L
MKTF-04	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-04	2/29/2016	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-04	2/29/2016	Manganese, Total	1.5	0.01	0.0076	2017000	mg/L
MKTF-04	2/29/2016	Sodium, Total	360	5	0.48	NA	mg/L
MKTF-04	2/29/2016	Lead, Total	0.0036	0.0025	0.00024	15000	mg/L
MKTF-04	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-04	2/29/2016	Uranium, Total	0.0042	0.0025	0.000025	30000	mg/L
MKTF-04	2/29/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-04	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	6/9/2016	Arsenic, Total	0.0089	0.001	0.00029	10000	mg/L
MKTF-04	6/9/2016	Barium, Total	3.1	0.01	0.0053	2000000	mg/L
MKTF-04	6/9/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-04	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	6/9/2016	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-04	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	6/9/2016	Potassium, Total	0.86	1	0.18	NA	mg/L
MKTF-04	6/9/2016	Magnesium, Total	28	1	0.013	NA	mg/L
MKTF-04	6/9/2016	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L
MKTF-04	6/9/2016	Sodium, Total	330	5	0.48	NA	mg/L
MKTF-04	6/9/2016	Lead, Total	0.0019	0.0005	0.000047	15000	mg/L
MKTF-04	6/9/2016	Selenium, Total	0.0098	0.01	0.0012	50000	mg/L
MKTF-04	6/9/2016	Uranium, Total	0.0048	0.0005	0.0000049	30000	mg/L
MKTF-04	6/9/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-04	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-04	9/11/2016	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
MKTF-04	9/11/2016	Barium, Total	3.4	0.01	0.004	2000000	mg/L
MKTF-04	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-04	9/11/2016	Arsenic, Dissolved	0.011	0.001	0.00014	10000	mg/L
MKTF-04	9/11/2016	Barium, Dissolved	2.6	0.01	0.0066	2000000	mg/L
MKTF-04	9/11/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-04	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-04	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-04	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-04	9/11/2016	Iron, Dissolved	1.2	0.1	0.1	13821880	mg/L
MKTF-04	9/11/2016	Potassium, Dissolved	0.72	1	0.5	NA	mg/L
MKTF-04	9/11/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-04	9/11/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
MKTF-04	9/11/2016	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-04	9/11/2016	Lead, Dissolved	0.00033	0.0005	0.00017	NA	mg/L
MKTF-04	9/11/2016	Selenium, Dissolved	0.014	0.02	0.0042	50000	mg/L
MKTF-04	9/11/2016	Uranium, Dissolved	0.0037	0.0005	0.000051	NA	mg/L
MKTF-04	9/11/2016	Zinc, Dissolved	0.003	0.01	0.0028	5960450	mg/L
MKTF-04	9/11/2016	Iron, Total	6.7	0.2	0.2	13822000	mg/L
MKTF-04	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	9/11/2016	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-04	9/11/2016	Lead, Total	0.003	0.0005	0.000081	15000	mg/L
MKTF-04	9/11/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-04	9/11/2016	Uranium, Total	0.0028	0.0005	0.00017	30000	mg/L
MKTF-04	9/11/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
MKTF-04	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
MKTF-04	11/2/2016	Barium, Total	2.8	0.02	0.0079	2000000	mg/L
MKTF-04	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-04	11/2/2016	Arsenic, Dissolved	0.01	0.005	0.00069	10000	mg/L
MKTF-04	11/2/2016	Barium, Dissolved	2.7	0.01	0.0066	2000000	mg/L
MKTF-04	11/2/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-04	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-04	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-04	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-04	11/2/2016	Iron, Dissolved	1.7	0.1	0.1	13821880	mg/L
MKTF-04	11/2/2016	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
MKTF-04	11/2/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-04	11/2/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
MKTF-04	11/2/2016	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-04	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	11/2/2016	Selenium, Dissolved	0.011	0.02	0.0042	50000	mg/L
MKTF-04	11/2/2016	Uranium, Dissolved	0.0031	0.0005	0.000051	NA	mg/L
MKTF-04	11/2/2016	Zinc, Dissolved	0.0057	0.01	0.0028	5960450	mg/L
MKTF-04	11/2/2016	Iron, Total	4.6	0.2	0.2	13822000	mg/L
MKTF-04	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	11/2/2016	Manganese, Total	1.5	0.02	0.0027	2017000	mg/L
MKTF-04	11/2/2016	Lead, Total	0.00063	0.0005	0.000081	15000	mg/L
MKTF-04	11/2/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-04	11/2/2016	Uranium, Total	0.0041	0.0005	0.00017	30000	mg/L
MKTF-04	11/2/2016	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L
MKTF-04	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-04	3/2/2017	Arsenic, Total	0.012	0.005	0.0011	10000	mg/L
MKTF-04	3/2/2017	Barium, Total	3.2	0.01	0.004	2000000	mg/L
MKTF-04	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	3/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-04	3/2/2017	Arsenic, Dissolved	0.012	0.005	0.00069	10000	mg/L
MKTF-04	3/2/2017	Barium, Dissolved	3	0.01	0.0043	2000000	mg/L
MKTF-04	3/2/2017	Calcium, Dissolved	120	5	2.5	NA	mg/L
MKTF-04	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-04	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	3/2/2017	Iron, Dissolved	4.8	0.1	0.1	13821880	mg/L
MKTF-04	3/2/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-04	3/2/2017	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-04	3/2/2017	Manganese, Dissolved	1.4	0.01	0.0019	2017400	mg/L
MKTF-04	3/2/2017	Sodium, Dissolved	330	5	2.5	NA	mg/L
MKTF-04	3/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	3/2/2017	Selenium, Dissolved	0.01	0.02	0.0042	50000	mg/L
MKTF-04	3/2/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
MKTF-04	3/2/2017	Iron, Total	8.2	0.2	0.2	13822000	mg/L
MKTF-04	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-04	3/2/2017	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-04	3/2/2017	Lead, Total	0.0019	0.0025	0.00041	15000	mg/L
MKTF-04	3/2/2017	Selenium, Total	0.01	0.005	0.00094	50000	mg/L
MKTF-04	3/2/2017	Zinc, Total	0.0087	0.01	0.0027	5960000	mg/L
MKTF-04	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-04	6/8/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
MKTF-04	6/8/2017	Barium, Total	3	0.02	0.0093	2000000	mg/L
MKTF-04	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-04	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-04	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-04	6/8/2017	Arsenic, Dissolved	0.0097	0.005	0.00089	10000	mg/L
MKTF-04	6/8/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-04	6/8/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-04	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-04	6/8/2017	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
MKTF-04	6/8/2017	Iron, Dissolved	0.81	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/8/2017	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-04	6/8/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-04	6/8/2017	Manganese, Dissolved	1.4	0.02	0.0038	2017400	mg/L
MKTF-04	6/8/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
MKTF-04	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	6/8/2017	Selenium, Dissolved	0.0091	0.02	0.0077	50000	mg/L
MKTF-04	6/8/2017	Uranium, Dissolved	0.0034	0.0005	0.00005	NA	mg/L
MKTF-04	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-04	6/8/2017	Iron, Total	5	0.2	0.1	13822000	mg/L
MKTF-04	6/8/2017	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-04	6/8/2017	Manganese, Total	1.5	0.02	0.011	2017000	mg/L
MKTF-04	6/8/2017	Lead, Total	0.0012	0.0005	0.000095	15000	mg/L
MKTF-04	6/8/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
MKTF-04	6/8/2017	Uranium, Total	0.0035	0.0005	0.00015	30000	mg/L
MKTF-04	6/8/2017	Zinc, Total	0.005	0.01	0.0028	5960000	mg/L
MKTF-04	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	9/26/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-04	9/26/2017	Barium, Total	3.8	0.01	0.0047	2000000	mg/L
MKTF-04	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-04	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	9/26/2017	Arsenic, Dissolved	0.017	0.005	0.00089	10000	mg/L
MKTF-04	9/26/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-04	9/26/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-04	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	9/26/2017	Iron, Dissolved	7.6	0.2	0.16	13821880	mg/L
MKTF-04	9/26/2017	Potassium, Dissolved	0.41	1	0.11	NA	mg/L
MKTF-04	9/26/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-04	9/26/2017	Manganese, Dissolved	1.4	0.02	0.0039	2017400	mg/L
MKTF-04	9/26/2017	Sodium, Dissolved	360	10	1.6	NA	mg/L
MKTF-04	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	9/26/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-04	9/26/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-04	9/26/2017	Iron, Total	9.4	0.2	0.1	13822000	mg/L
MKTF-04	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	9/26/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
MKTF-04	9/26/2017	Lead, Total	0.0018	0.0005	0.000095	15000	mg/L
MKTF-04	9/26/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-04	9/26/2017	Zinc, Total	0.0045	0.01	0.0033	5960000	mg/L
MKTF-04	11/28/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-04	11/28/2017	Arsenic, Total	0.015	0.005	0.0021	10000	mg/L
MKTF-04	11/28/2017	Barium, Total	3.5	0.01	0.005	2000000	mg/L
MKTF-04	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	11/28/2017	Arsenic, Dissolved	0.0098	0.01	0.0042	10000	mg/L
MKTF-04	11/28/2017	Barium, Dissolved	3.1	0.01	0.0049	2000000	mg/L
MKTF-04	11/28/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-04	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	11/28/2017	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
MKTF-04	11/28/2017	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-04	11/28/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-04	11/28/2017	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
MKTF-04	11/28/2017	Sodium, Dissolved	340	5	0.82	NA	mg/L
MKTF-04	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-04	11/28/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-04	11/28/2017	Uranium, Dissolved	0.0017	0.0025	0.00048	NA	mg/L
MKTF-04	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-04	11/28/2017	Iron, Total	7	0.2	0.1	13822000	mg/L
MKTF-04	11/28/2017	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
MKTF-04	11/28/2017	Lead, Total	0.00041	0.0005	0.00023	15000	mg/L
MKTF-04	11/28/2017	Selenium, Total	0.0062	0.005	0.0049	50000	mg/L
MKTF-04	11/28/2017	Uranium, Total	0.0019	0.0025	0.00077	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	2/14/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-04	2/14/2018	Arsenic, Total	0.0069	0.005	0.0021	10000	mg/L
MKTF-04	2/14/2018	Barium, Total	2.8	0.01	0.005	2000000	mg/L
MKTF-04	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	2/14/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-04	2/14/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-04	2/14/2018	Barium, Dissolved	2.8	0.01	0.0049	2000000	mg/L
MKTF-04	2/14/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-04	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	2/14/2018	Iron, Dissolved	1.9	0.1	0.082	13821880	mg/L
MKTF-04	2/14/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-04	2/14/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-04	2/14/2018	Manganese, Dissolved	1.5	0.01	0.002	2017400	mg/L
MKTF-04	2/14/2018	Sodium, Dissolved	340	5	0.82	NA	mg/L
MKTF-04	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	2/14/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-04	2/14/2018	Uranium, Dissolved	0.0044	0.0005	0.000096	NA	mg/L
MKTF-04	2/14/2018	Zinc, Dissolved	0.0082	0.01	0.0021	5960450	mg/L
MKTF-04	2/14/2018	Iron, Total	5.2	0.2	0.1	13822000	mg/L
MKTF-04	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	2/14/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
MKTF-04	2/14/2018	Lead, Total	0.0007	0.0005	0.00023	15000	mg/L
MKTF-04	2/14/2018	Selenium, Total	0.0083	0.005	0.0049	50000	mg/L
MKTF-04	2/14/2018	Uranium, Total	0.0042	0.0005	0.000068	30000	mg/L
MKTF-04	2/14/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	5/2/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-04	5/2/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
MKTF-04	5/2/2018	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-04	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	5/2/2018	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
MKTF-04	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	5/2/2018	Arsenic, Dissolved	0.01	0.001	0.00042	10000	mg/L
MKTF-04	5/2/2018	Barium, Dissolved	2.6	0.01	0.0049	2000000	mg/L
MKTF-04	5/2/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-04	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	5/2/2018	Iron, Dissolved	2.4	0.1	0.082	13821880	mg/L
MKTF-04	5/2/2018	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
MKTF-04	5/2/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-04	5/2/2018	Manganese, Dissolved	1.5	0.01	0.002	2017400	mg/L
MKTF-04	5/2/2018	Sodium, Dissolved	370	5	0.82	NA	mg/L
MKTF-04	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	5/2/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-04	5/2/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
MKTF-04	5/2/2018	Iron, Total	5.3	0.2	0.1	13822000	mg/L
MKTF-04	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	5/2/2018	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-04	5/2/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
MKTF-04	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	5/2/2018	Uranium, Total	0.004	0.0005	0.000068	30000	mg/L
MKTF-04	5/2/2018	Zinc, Total	0.0062	0.01	0.0033	5960000	mg/L
MKTF-04	9/4/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-04	9/4/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-04	9/4/2018	Barium, Total	2.9	0.02	0.01	2000000	mg/L
MKTF-04	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	9/4/2018	Silver, Dissolved	0.0031	0.005	0.0018	81200	mg/L
MKTF-04	9/4/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-04	9/4/2018	Barium, Dissolved	3.1	0.02	0.0099	2000000	mg/L
MKTF-04	9/4/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	9/4/2018	Iron, Dissolved	3.2	0.2	0.16	13821880	mg/L
MKTF-04	9/4/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-04	9/4/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-04	9/4/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-04	9/4/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-04	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	9/4/2018	Uranium, Dissolved	0.0032	0.0005	0.000096	NA	mg/L
MKTF-04	9/4/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-04	9/4/2018	Iron, Total	5.7	0.2	0.1	13822000	mg/L
MKTF-04	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	9/4/2018	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-04	9/4/2018	Lead, Total	0.00055	0.0005	0.00023	15000	mg/L
MKTF-04	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	9/4/2018	Uranium, Total	0.0041	0.0025	0.00034	30000	mg/L
MKTF-04	9/4/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
MKTF-04	11/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	11/20/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-04	11/20/2018	Barium, Total	4.1	0.01	0.005	2000000	mg/L
MKTF-04	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	11/20/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-04	11/20/2018	Barium, Dissolved	2.6	0.02	0.0099	2000000	mg/L
MKTF-04	11/20/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-04	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	11/20/2018	Iron, Dissolved	1	0.2	0.16	13821880	mg/L
MKTF-04	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-04	11/20/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-04	11/20/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-04	11/20/2018	Sodium, Dissolved	350	10	1.6	NA	mg/L
MKTF-04	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	11/20/2018	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
MKTF-04	11/20/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-04	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	11/20/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-04	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-04	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Dissolved	0.0075	0.001	0.000101	10000	mg/L
MKTF-04	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Dissolved	0.56	0.04	0.004531	3949110	mg/L
MKTF-04	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	8/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-04	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-04	8/21/2019	Iron, Dissolved	1.4	0.1	0.043734	13821880	mg/L
MKTF-04	8/21/2019	Lead, Dissolved	0.000057	0.0005	0.000055	NA	mg/L
MKTF-04	8/21/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-04	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-04	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Dissolved	0.0094	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Potassium, Dissolved	0.96	1	0.162288	NA	mg/L
MKTF-04	8/21/2019	Selenium, Dissolved	0.00046	0.001	0.000171	50000	mg/L
MKTF-04	8/21/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-04	8/21/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	8/21/2019	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Zinc, Dissolved	0.0055	0.01	0.002252	5960450	mg/L
MKTF-04	8/21/2019	Aluminum, Total	6.4	0.4	0.049765	19914000	mg/L
MKTF-04	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-04	8/21/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Total	0.0004	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-04	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	8/21/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-04	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	8/21/2019	Iron, Total	4.1	0.1	0.043734	13822000	mg/L
MKTF-04	8/21/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-04	8/21/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-04	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Selenium, Total	0.00089	0.001	0.000478	50000	mg/L
MKTF-04	8/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-04	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	8/21/2019	Uranium, Total	0.0076	0.0005	0.000085	30000	mg/L
MKTF-04	8/21/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-04	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	8/21/2019	Antimony, Dissolved	0.00048	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Dissolved	0.0072	0.001	0.000101	10000	mg/L
MKTF-04	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-04	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	8/21/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-04	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-04	8/21/2019	Iron, Dissolved	1.5	0.1	0.043734	13821880	mg/L
MKTF-04	8/21/2019	Lead, Dissolved	0.000072	0.0005	0.000055	NA	mg/L
MKTF-04	8/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-04	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-04	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Dissolved	0.0062	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Potassium, Dissolved	0.97	1	0.162288	NA	mg/L
MKTF-04	8/21/2019	Selenium, Dissolved	0.0006	0.001	0.000171	50000	mg/L
MKTF-04	8/21/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-04	8/21/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	8/21/2019	Uranium, Dissolved	0.0075	0.0005	0.000075	NA	mg/L
MKTF-04	8/21/2019	Zinc, Dissolved	0.0046	0.01	0.002252	5960450	mg/L
MKTF-04	8/21/2019	Aluminum, Total	10	0.4	0.049765	19914000	mg/L
MKTF-04	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Total	0.0084	0.001	0.000312	10000	mg/L
MKTF-04	8/21/2019	Barium, Total	2	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-04	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	8/21/2019	Chromium, Total	0.0042	0.006	0.001533	50000	mg/L
MKTF-04	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Total	0.0055	0.006	0.004072	790000	mg/L
MKTF-04	8/21/2019	Iron, Total	5.9	0.4	0.174937	13822000	mg/L
MKTF-04	8/21/2019	Lead, Total	0.0064	0.0005	0.000055	15000	mg/L
MKTF-04	8/21/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-04	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-04	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-04	8/21/2019	Thallium, Total	0.000054	0.0005	0.000052	2000	mg/L
MKTF-04	8/21/2019	Uranium, Total	0.0084	0.0005	0.000085	30000	mg/L
MKTF-04	8/21/2019	Zinc, Total	0.0094	0.01	0.005772	5960000	mg/L
MKTF-04	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-04	3/3/2020	Arsenic, Dissolved	0.005	0.001	0.0001	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-04	3/3/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
MKTF-04	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	3/3/2020	Uranium, Dissolved	0.0056	0.0005	0.000075	NA	mg/L
MKTF-04	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-04	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-04	3/3/2020	Boron, Dissolved	0.41	0.04	0.0045	3949110	mg/L
MKTF-04	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-04	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-04	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-04	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-04	3/3/2020	Magnesium, Dissolved	28	1	0.05	NA	mg/L
MKTF-04	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-04	3/3/2020	Nickel, Dissolved	0.005	0.01	0.004	372000	mg/L
MKTF-04	3/3/2020	Potassium, Dissolved	0.65	1	0.16	NA	mg/L
MKTF-04	3/3/2020	Silver, Dissolved	0.0016	0.005	0.00094	81200	mg/L
MKTF-04	3/3/2020	Zinc, Dissolved	0.014	0.01	0.0023	5960450	mg/L
MKTF-04	3/3/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
MKTF-04	3/3/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
MKTF-04	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-04	3/3/2020	Sodium, Dissolved	370	5	2.1	NA	mg/L
MKTF-04	3/3/2020	Manganese, Dissolved	1.8	0.01	0.0014	2017400	mg/L
MKTF-04	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-04	3/3/2020	Boron, Total	0.49	0.04	0.0045	3949	mg/L
MKTF-04	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-04	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-04	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-04	3/3/2020	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-04	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-04	3/3/2020	Nickel, Total	0.007	0.01	0.004	372000	mg/L
MKTF-04	3/3/2020	Silver, Total	0.0026	0.005	0.0014	50000	mg/L
MKTF-04	3/3/2020	Zinc, Total	0.0079	0.01	0.0058	5960000	mg/L
MKTF-04	3/3/2020	Aluminum, Total	1.3	0.1	0.012	19914000	mg/L
MKTF-04	3/3/2020	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
MKTF-04	3/3/2020	Barium, Total	2.8	0.02	0.0065	2000000	mg/L
MKTF-04	3/3/2020	Iron, Total	6	0.2	0.087	13822000	mg/L
MKTF-04	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-04	3/3/2020	Arsenic, Total	0.0092	0.001	0.00031	10000	mg/L
MKTF-04	3/3/2020	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-04	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-04	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	3/3/2020	Uranium, Total	0.0081	0.0005	0.000085	30000	mg/L
MKTF-04	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-04	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Dissolved	0.0099	0.001	0.000101	10000	mg/L
MKTF-04	10/30/2019	Barium, Dissolved	3.2	0.01	0.003242	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Dissolved	0.56	0.04	0.004531	3949110	mg/L
MKTF-04	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	10/30/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-04	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-04	10/30/2019	Iron, Dissolved	4.9	0.1	0.043734	13821880	mg/L
MKTF-04	10/30/2019	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-04	10/30/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-04	10/30/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
MKTF-04	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
MKTF-04	10/30/2019	Selenium, Dissolved	0.00043	0.001	0.000171	50000	mg/L
MKTF-04	10/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-04	10/30/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	10/30/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-04	10/30/2019	Aluminum, Total	0.79	0.02	0.002488	19914000	mg/L
MKTF-04	10/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Total	0.01	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	Barium, Total	3.6	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Total	0.61	0.04	0.004531	3949	mg/L
MKTF-04	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	10/30/2019	Iron, Total	7.4	0.2	0.087469	13822000	mg/L
MKTF-04	10/30/2019	Lead, Total	0.0005	0.0005	0.000055	15000	mg/L
MKTF-04	10/30/2019	Manganese, Total	1.6	0.02	0.002899	2017000	mg/L
MKTF-04	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Total	0.008	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-04	10/30/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-04	10/30/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Dissolved	0.0098	0.001	0.000101	10000	mg/L
MKTF-04	10/30/2019	Barium, Dissolved	3.4	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
MKTF-04	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	10/30/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
MKTF-04	10/30/2019	Iron, Dissolved	5.4	0.2	0.087469	13821880	mg/L
MKTF-04	10/30/2019	Lead, Dissolved	0.000072	0.0005	0.000055	NA	mg/L
MKTF-04	10/30/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-04	10/30/2019	Manganese, Dissolved	1.5	0.02	0.002899	2017400	mg/L
MKTF-04	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Dissolved	0.007	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-04	10/30/2019	Selenium, Dissolved	0.00035	0.001	0.000171	50000	mg/L
MKTF-04	10/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-04	10/30/2019	Sodium, Dissolved	350	10	4.161763	NA	mg/L
MKTF-04	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	10/30/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
MKTF-04	10/30/2019	Aluminum, Total	1.3	0.1	0.012441	19914000	mg/L
MKTF-04	10/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Total	0.0097	0.005	0.001561	10000	mg/L
MKTF-04	10/30/2019	Barium, Total	3.6	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Total	0.57	0.2	0.022653	3949	mg/L
MKTF-04	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	10/30/2019	Iron, Total	7.6	0.2	0.087469	13822000	mg/L
MKTF-04	10/30/2019	Lead, Total	0.00052	0.0025	0.000274	15000	mg/L
MKTF-04	10/30/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Total	0.0077	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-04	10/30/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-04	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-04	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Dissolved	0.0081	0.005	0.000504	10000	mg/L
MKTF-04	5/13/2019	Barium, Dissolved	3.3	0.02	0.006484	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-04	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	5/13/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-04	5/13/2019	Iron, Dissolved	4.5	0.2	0.087469	13821880	mg/L
MKTF-04	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-04	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-04	5/13/2019	Manganese, Dissolved	1.6	0.02	0.002899	2017400	mg/L
MKTF-04	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Potassium, Dissolved	0.46	1	0.162288	NA	mg/L
MKTF-04	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-04	5/13/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-04	5/13/2019	Sodium, Dissolved	360	10	4.161763	NA	mg/L
MKTF-04	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-04	5/13/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
MKTF-04	5/13/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-04	5/13/2019	Aluminum, Total	1.2	0.04	0.004977	19914000	mg/L
MKTF-04	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Total	0.0086	0.001	0.000312	10000	mg/L
MKTF-04	5/13/2019	Barium, Total	3.4	0.01	0.003242	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-04	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	5/13/2019	Iron, Total	8	0.2	0.087469	13822000	mg/L
MKTF-04	5/13/2019	Lead, Total	0.0008	0.0005	0.000055	15000	mg/L
MKTF-04	5/13/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Total	0.008	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Selenium, Total	0.00073	0.001	0.000478	50000	mg/L
MKTF-04	5/13/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-04	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	5/13/2019	Uranium, Total	0.0017	0.0005	0.000085	30000	mg/L
MKTF-04	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Dissolved	0.0077	0.005	0.000504	10000	mg/L
MKTF-04	5/13/2019	Barium, Dissolved	3.2	0.02	0.006484	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-04	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	5/13/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Dissolved	0.003	0.006	0.001296	790000	mg/L
MKTF-04	5/13/2019	Iron, Dissolved	4.2	0.2	0.087469	13821880	mg/L
MKTF-04	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-04	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-04	5/13/2019	Manganese, Dissolved	1.6	0.02	0.002899	2017400	mg/L
MKTF-04	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Dissolved	0.0097	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Potassium, Dissolved	0.51	1	0.162288	NA	mg/L
MKTF-04	5/13/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-04	5/13/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-04	5/13/2019	Sodium, Dissolved	360	10	4.161763	NA	mg/L
MKTF-04	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-04	5/13/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
MKTF-04	5/13/2019	Zinc, Dissolved	0.038	0.01	0.002252	5960450	mg/L
MKTF-04	5/13/2019	Aluminum, Total	1.6	0.1	0.012441	19914000	mg/L
MKTF-04	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-04	5/13/2019	Barium, Total	3.3	0.01	0.003242	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
MKTF-04	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	5/13/2019	Iron, Total	7.3	0.2	0.087469	13822000	mg/L
MKTF-04	5/13/2019	Lead, Total	0.00065	0.0005	0.000055	15000	mg/L
MKTF-04	5/13/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Total	0.0079	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-04	5/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-04	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	5/13/2019	Uranium, Total	0.0016	0.0005	0.000085	30000	mg/L
MKTF-04	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	5/13/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
MKTF-09	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-09	5/13/2019	Arsenic, Dissolved	0.0025	0.005	0.000504	10000	mg/L
MKTF-09	5/13/2019	Barium, Dissolved	0.69	0.002	0.000648	2000000	mg/L
MKTF-09	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	5/13/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
MKTF-09	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	5/13/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-09	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	5/13/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
MKTF-09	5/13/2019	Iron, Dissolved	3.2	0.1	0.043734	13821880	mg/L
MKTF-09	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-09	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-09	5/13/2019	Manganese, Dissolved	4.6	0.01	0.00145	2017400	mg/L
MKTF-09	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-09	5/13/2019	Nickel, Dissolved	0.0099	0.01	0.004009	372000	mg/L
MKTF-09	5/13/2019	Potassium, Dissolved	0.49	1	0.162288	NA	mg/L
MKTF-09	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-09	5/13/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-09	5/13/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-09	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-09	5/13/2019	Uranium, Dissolved	0.0017	0.0025	0.000374	NA	mg/L
MKTF-09	5/13/2019	Zinc, Dissolved	0.059	0.01	0.002252	5960450	mg/L
MKTF-09	5/13/2019	Aluminum, Total	2.9	0.1	0.012441	19914000	mg/L
MKTF-09	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	5/13/2019	Arsenic, Total	0.0025	0.001	0.000312	10000	mg/L
MKTF-09	5/13/2019	Barium, Total	0.72	0.002	0.000648	2000000	mg/L
MKTF-09	5/13/2019	Beryllium, Total	0.00047	0.002	0.000284	4000	mg/L
MKTF-09	5/13/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-09	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	5/13/2019	Iron, Total	3.8	0.1	0.043734	13822000	mg/L
MKTF-09	5/13/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-09	5/13/2019	Manganese, Total	4.8	0.01	0.00145	2017000	mg/L
MKTF-09	5/13/2019	Mercury, Total	0.00004	0.0002	0.000038	2000	mg/L
MKTF-09	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	5/13/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-09	5/13/2019	Selenium, Total	0.00062	0.001	0.000478	50000	mg/L
MKTF-09	5/13/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-09	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	5/13/2019	Uranium, Total	0.0017	0.0005	0.000085	30000	mg/L
MKTF-09	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	11/18/2019	Aluminum, Dissolved	0.034	0.02	0.002488	19913930	mg/L
MKTF-09	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-09	11/18/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
MKTF-09	11/18/2019	Barium, Dissolved	0.67	0.002	0.000648	2000000	mg/L
MKTF-09	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	11/18/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-09	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	11/18/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
MKTF-09	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-09	11/18/2019	Iron, Dissolved	2.4	0.1	0.043734	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/18/2019	Lead, Dissolved	0.000064	0.0005	0.000055	NA	mg/L
MKTF-09	11/18/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-09	11/18/2019	Manganese, Dissolved	4.2	0.01	0.00145	2017400	mg/L
MKTF-09	11/18/2019	Molybdenum, Dissolved	0.0068	0.008	0.006735	98700	mg/L
MKTF-09	11/18/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-09	11/18/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-09	11/18/2019	Selenium, Dissolved	0.00028	0.001	0.000171	50000	mg/L
MKTF-09	11/18/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-09	11/18/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
MKTF-09	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	11/18/2019	Uranium, Dissolved	0.0063	0.0005	0.000075	NA	mg/L
MKTF-09	11/18/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
MKTF-09	11/18/2019	Aluminum, Total	1.1	0.2	0.024883	19914000	mg/L
MKTF-09	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	11/18/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
MKTF-09	11/18/2019	Barium, Total	0.69	0.002	0.000648	2000000	mg/L
MKTF-09	11/18/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
MKTF-09	11/18/2019	Boron, Total	0.41	0.04	0.004531	3949	mg/L
MKTF-09	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	11/18/2019	Iron, Total	3.4	0.2	0.087469	13822000	mg/L
MKTF-09	11/18/2019	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
MKTF-09	11/18/2019	Manganese, Total	4.3	0.02	0.002899	2017000	mg/L
MKTF-09	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-09	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	11/18/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-09	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-09	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
MKTF-09	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	11/18/2019	Uranium, Total	0.0063	0.0005	0.000085	30000	mg/L
MKTF-09	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	8/28/2019	Aluminum, Total	0.32	0.02	0.002488	19914000	mg/L
MKTF-09	8/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	8/28/2019	Arsenic, Total	0.00086	0.001	0.000312	10000	mg/L
MKTF-09	8/28/2019	Barium, Total	0.52	0.002	0.000648	2000000	mg/L
MKTF-09	8/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-09	8/28/2019	Boron, Total	0.37	0.04	0.004531	3949	mg/L
MKTF-09	8/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	8/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	8/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	8/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	8/28/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-09	8/28/2019	Lead, Total	0.00084	0.0005	0.000055	15000	mg/L
MKTF-09	8/28/2019	Manganese, Total	4.5	0.01	0.00145	2017000	mg/L
MKTF-09	8/28/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-09	8/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	8/28/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-09	8/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-09	8/28/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-09	8/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	8/28/2019	Uranium, Total	0.0012	0.0005	0.000085	30000	mg/L
MKTF-09	8/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	8/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-09	8/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-09	8/28/2019	Arsenic, Dissolved	0.0008	0.001	0.000101	10000	mg/L
MKTF-09	8/28/2019	Barium, Dissolved	0.51	0.002	0.000648	2000000	mg/L
MKTF-09	8/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	8/28/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
MKTF-09	8/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	8/28/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-09	8/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	8/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	8/28/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
MKTF-09	8/28/2019	Iron, Dissolved	3.8	0.1	0.043734	13821880	mg/L
MKTF-09	8/28/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
MKTF-09	8/28/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-09	8/28/2019	Manganese, Dissolved	4.4	0.01	0.00145	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-09	8/28/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
MKTF-09	8/28/2019	Potassium, Dissolved	0.24	1	0.162288	NA	mg/L
MKTF-09	8/28/2019	Selenium, Dissolved	0.00025	0.001	0.000171	50000	mg/L
MKTF-09	8/28/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-09	8/28/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-09	8/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	8/28/2019	Uranium, Dissolved	0.0013	0.0005	0.000075	NA	mg/L
MKTF-09	8/28/2019	Zinc, Dissolved	0.0085	0.01	0.002252	5960450	mg/L
MKTF-09	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Dissolved	0.0016	0.001	0.0001	10000	mg/L
MKTF-09	3/3/2020	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-09	3/3/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-09	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	3/3/2020	Uranium, Dissolved	0.0085	0.0005	0.000075	NA	mg/L
MKTF-09	3/3/2020	Manganese, Dissolved	3.9	0.01	0.0014	2017400	mg/L
MKTF-09	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-09	3/3/2020	Barium, Dissolved	0.52	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-09	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-09	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-09	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-09	3/3/2020	Magnesium, Dissolved	32	1	0.05	NA	mg/L
MKTF-09	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Dissolved	0.0099	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Potassium, Dissolved	0.48	1	0.16	NA	mg/L
MKTF-09	3/3/2020	Silver, Dissolved	0.0021	0.005	0.00094	81200	mg/L
MKTF-09	3/3/2020	Zinc, Dissolved	0.0067	0.01	0.0023	5960450	mg/L
MKTF-09	3/3/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-09	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-09	3/3/2020	Sodium, Dissolved	260	5	2.1	NA	mg/L
MKTF-09	3/3/2020	Aluminum, Total	0.77	0.02	0.0025	19914000	mg/L
MKTF-09	3/3/2020	Barium, Total	0.54	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Total	0.31	0.04	0.0045	3949	mg/L
MKTF-09	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-09	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-09	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	3/3/2020	Molybdenum, Total	0.0072	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Silver, Total	0.0025	0.005	0.0014	50000	mg/L
MKTF-09	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-09	3/3/2020	Iron, Total	2.7	0.1	0.044	13822000	mg/L
MKTF-09	3/3/2020	Manganese, Total	4	0.01	0.0014	2017000	mg/L
MKTF-09	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Total	0.0019	0.001	0.00031	10000	mg/L
MKTF-09	3/3/2020	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
MKTF-09	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-09	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	3/3/2020	Uranium, Total	0.0081	0.0005	0.000085	30000	mg/L
MKTF-09	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-09	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Dissolved	0.0016	0.001	0.0001	10000	mg/L
MKTF-09	3/3/2020	Lead, Dissolved	0.000061	0.0005	0.000055	NA	mg/L
MKTF-09	3/3/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
MKTF-09	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	3/3/2020	Uranium, Dissolved	0.0088	0.0005	0.000075	NA	mg/L
MKTF-09	3/3/2020	Manganese, Dissolved	4.1	0.01	0.0014	2017400	mg/L
MKTF-09	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-09	3/3/2020	Barium, Dissolved	0.52	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-09	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-09	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-09	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	Magnesium, Dissolved	31	1	0.05	NA	mg/L
MKTF-09	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Dissolved	0.01	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-09	3/3/2020	Silver, Dissolved	0.0022	0.005	0.00094	81200	mg/L
MKTF-09	3/3/2020	Zinc, Dissolved	0.0076	0.01	0.0023	5960450	mg/L
MKTF-09	3/3/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-09	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-09	3/3/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
MKTF-09	3/3/2020	Aluminum, Total	0.32	0.02	0.0025	19914000	mg/L
MKTF-09	3/3/2020	Barium, Total	0.58	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Total	0.33	0.04	0.0045	3949	mg/L
MKTF-09	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-09	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-09	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Total	0.012	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
MKTF-09	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-09	3/3/2020	Iron, Total	2.4	0.1	0.044	13822000	mg/L
MKTF-09	3/3/2020	Manganese, Total	4	0.01	0.0014	2017000	mg/L
MKTF-09	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Total	0.0019	0.001	0.00031	10000	mg/L
MKTF-09	3/3/2020	Lead, Total	0.00096	0.0005	0.000055	15000	mg/L
MKTF-09	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-09	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	3/3/2020	Uranium, Total	0.0097	0.0005	0.000085	30000	mg/L
MKTF-09	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-09	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-09	6/5/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-09	6/5/2014	Barium, Total	0.44	0.002	0.0011	2000000	mg/L
MKTF-09	6/5/2014	Calcium, Total	150	5	0.27	NA	mg/L
MKTF-09	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-09	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-09	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-09	6/5/2014	Iron, Total	3.4	0.1	0.031	13822000	mg/L
MKTF-09	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-09	6/5/2014	Potassium, Total	3.1	1	0.24	NA	mg/L
MKTF-09	6/5/2014	Magnesium, Total	33	1	0.024	NA	mg/L
MKTF-09	6/5/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
MKTF-09	6/5/2014	Sodium, Total	220	5	1.3	NA	mg/L
MKTF-09	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-09	6/5/2014	Selenium, Total	0.014	0.005	0.00074	50000	mg/L
MKTF-09	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-09	6/5/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-09	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-09	9/18/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-09	9/18/2014	Barium, Total	0.32	0.002	0.0011	2000000	mg/L
MKTF-09	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-09	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-09	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-09	9/18/2014	Iron, Total	2.2	0.1	0.031	13822000	mg/L
MKTF-09	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-09	9/18/2014	Manganese, Total	2.6	0.01	0.0027	2017000	mg/L
MKTF-09	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-09	9/18/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-09	9/18/2014	Uranium, Total	0.012	0.001	0.00005	30000	mg/L
MKTF-09	9/18/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-09	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-09	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-09	11/14/2014	Barium, Total	0.34	0.002	0.00021	2000000	mg/L
MKTF-09	11/14/2014	Calcium, Total	160	5	0.41	NA	mg/L
MKTF-09	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-09	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-09	11/14/2014	Copper, Total	ND	0.03	0.00069	790000	mg/L
MKTF-09	11/14/2014	Iron, Total	2.4	0.1	0.031	13822000	mg/L
MKTF-09	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-09	11/14/2014	Magnesium, Total	30	1	0.018	NA	mg/L
MKTF-09	11/14/2014	Manganese, Total	2.8	0.01	0.0027	2017000	mg/L
MKTF-09	11/14/2014	Sodium, Total	240	5	2	NA	mg/L
MKTF-09	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-09	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-09	11/14/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-09	11/14/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
MKTF-09	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	3/16/2015	Arsenic, Total	0.0029	0.001	0.00044	10000	mg/L
MKTF-09	3/16/2015	Barium, Total	0.22	0.002	0.00073	2000000	mg/L
MKTF-09	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-09	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	3/16/2015	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-09	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	3/16/2015	Manganese, Total	2.4	0.01	0.0076	2017000	mg/L
MKTF-09	3/16/2015	Lead, Total	0.0015	0.001	0.000069	15000	mg/L
MKTF-09	3/16/2015	Selenium, Total	0.0053	0.001	0.00012	50000	mg/L
MKTF-09	3/16/2015	Uranium, Total	0.014	0.001	0.0000081	30000	mg/L
MKTF-09	3/16/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
MKTF-09	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-09	6/4/2015	Barium, Total	0.31	0.002	0.00095	2000000	mg/L
MKTF-09	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-09	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-09	6/4/2015	Iron, Total	1.9	0.1	0.036	13822000	mg/L
MKTF-09	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	6/4/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-09	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-09	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-09	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-09	6/4/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-09	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	8/18/2015	Arsenic, Total	0.0042	0.001	0.00029	10000	mg/L
MKTF-09	8/18/2015	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-09	8/18/2015	Calcium, Total	160	5	0.28	NA	mg/L
MKTF-09	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	8/18/2015	Copper, Total	0.0089	0.006	0.0051	790000	mg/L
MKTF-09	8/18/2015	Iron, Total	7.7	0.2	0.072	13822000	mg/L
MKTF-09	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	8/18/2015	Magnesium, Total	31	1	0.039	NA	mg/L
MKTF-09	8/18/2015	Manganese, Total	3.7	0.02	0.015	2017000	mg/L
MKTF-09	8/18/2015	Sodium, Total	250	5	0.36	NA	mg/L
MKTF-09	8/18/2015	Lead, Total	0.015	0.0005	0.000047	15000	mg/L
MKTF-09	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-09	8/18/2015	Uranium, Total	0.0053	0.0005	0.0000049	30000	mg/L
MKTF-09	8/18/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-09	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-09	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-09	11/3/2015	Barium, Total	0.5	0.002	0.0013	2000000	mg/L
MKTF-09	11/3/2015	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-09	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-09	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-09	11/3/2015	Iron, Total	3.2	0.1	0.045	13822000	mg/L
MKTF-09	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	11/3/2015	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-09	11/3/2015	Manganese, Total	4.2	0.01	0.0016	2017000	mg/L
MKTF-09	11/3/2015	Sodium, Total	250	5	0.48	NA	mg/L
MKTF-09	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-09	11/3/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-09	11/3/2015	Uranium, Total	0.0036	0.0005	0.0000048	30000	mg/L
MKTF-09	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-09	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/29/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-09	2/29/2016	Barium, Total	0.64	0.002	0.0011	2000000	mg/L
MKTF-09	2/29/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-09	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	2/29/2016	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-09	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	2/29/2016	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-09	2/29/2016	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-09	2/29/2016	Sodium, Total	240	5	0.48	NA	mg/L
MKTF-09	2/29/2016	Lead, Total	0.004	0.0025	0.00024	15000	mg/L
MKTF-09	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-09	2/29/2016	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
MKTF-09	2/29/2016	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-09	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	6/9/2016	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
MKTF-09	6/9/2016	Barium, Total	0.49	0.002	0.0011	2000000	mg/L
MKTF-09	6/9/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-09	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	6/9/2016	Iron, Total	2.1	0.1	0.036	13822000	mg/L
MKTF-09	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	6/9/2016	Potassium, Total	0.49	1	0.18	NA	mg/L
MKTF-09	6/9/2016	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-09	6/9/2016	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
MKTF-09	6/9/2016	Sodium, Total	240	5	0.48	NA	mg/L
MKTF-09	6/9/2016	Lead, Total	0.0015	0.0005	0.000047	15000	mg/L
MKTF-09	6/9/2016	Selenium, Total	0.0047	0.005	0.00062	50000	mg/L
MKTF-09	6/9/2016	Uranium, Total	0.0069	0.0005	0.0000049	30000	mg/L
MKTF-09	6/9/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-09	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	9/11/2016	Arsenic, Total	0.0033	0.005	0.0011	10000	mg/L
MKTF-09	9/11/2016	Barium, Total	0.52	0.002	0.00079	2000000	mg/L
MKTF-09	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-09	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-09	9/11/2016	Arsenic, Dissolved	0.0032	0.005	0.00069	10000	mg/L
MKTF-09	9/11/2016	Barium, Dissolved	0.52	0.002	0.0013	2000000	mg/L
MKTF-09	9/11/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-09	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-09	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-09	9/11/2016	Iron, Dissolved	0.81	0.02	0.02	13821880	mg/L
MKTF-09	9/11/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-09	9/11/2016	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-09	9/11/2016	Manganese, Dissolved	3.7	0.01	0.0016	2017400	mg/L
MKTF-09	9/11/2016	Sodium, Dissolved	230	5	2.5	NA	mg/L
MKTF-09	9/11/2016	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-09	9/11/2016	Selenium, Dissolved	0.0075	0.01	0.0021	50000	mg/L
MKTF-09	9/11/2016	Uranium, Dissolved	0.005	0.0005	0.000051	NA	mg/L
MKTF-09	9/11/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-09	9/11/2016	Iron, Total	2.3	0.1	0.1	13822000	mg/L
MKTF-09	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	9/11/2016	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-09	9/11/2016	Lead, Total	0.0019	0.0005	0.000081	15000	mg/L
MKTF-09	9/11/2016	Selenium, Total	0.0068	0.01	0.0019	50000	mg/L
MKTF-09	9/11/2016	Uranium, Total	0.0064	0.0005	0.00017	30000	mg/L
MKTF-09	9/11/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MKTF-09	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	11/2/2016	Arsenic, Total	0.0028	0.005	0.0011	10000	mg/L
MKTF-09	11/2/2016	Barium, Total	0.47	0.002	0.00079	2000000	mg/L
MKTF-09	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-09	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/2/2016	Arsenic, Dissolved	0.0028	0.001	0.00014	10000	mg/L
MKTF-09	11/2/2016	Barium, Dissolved	0.4	0.002	0.0013	2000000	mg/L
MKTF-09	11/2/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-09	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-09	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-09	11/2/2016	Iron, Dissolved	0.92	0.02	0.02	13821880	mg/L
MKTF-09	11/2/2016	Potassium, Dissolved	0.56	1	0.5	NA	mg/L
MKTF-09	11/2/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-09	11/2/2016	Manganese, Dissolved	3.2	0.01	0.0016	2017400	mg/L
MKTF-09	11/2/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-09	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	11/2/2016	Selenium, Dissolved	0.0055	0.001	0.00021	50000	mg/L
MKTF-09	11/2/2016	Uranium, Dissolved	0.0065	0.0005	0.000051	NA	mg/L
MKTF-09	11/2/2016	Zinc, Dissolved	0.27	0.01	0.0028	5960450	mg/L
MKTF-09	11/2/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-09	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	11/2/2016	Manganese, Total	3.6	0.01	0.0014	2017000	mg/L
MKTF-09	11/2/2016	Lead, Total	0.0016	0.0005	0.000081	15000	mg/L
MKTF-09	11/2/2016	Selenium, Total	0.0058	0.02	0.0037	50000	mg/L
MKTF-09	11/2/2016	Uranium, Total	0.0066	0.0005	0.00017	30000	mg/L
MKTF-09	11/2/2016	Zinc, Total	0.003	0.01	0.0027	5960000	mg/L
MKTF-09	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	3/15/2017	Arsenic, Total	0.0052	0.005	0.0011	10000	mg/L
MKTF-09	3/15/2017	Barium, Total	0.59	0.002	0.00079	2000000	mg/L
MKTF-09	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	3/15/2017	Copper, Total	0.0065	0.006	0.003	790000	mg/L
MKTF-09	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-09	3/15/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-09	3/15/2017	Barium, Dissolved	0.57	0.002	0.00085	2000000	mg/L
MKTF-09	3/15/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-09	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	3/15/2017	Iron, Dissolved	2.1	0.1	0.1	13821880	mg/L
MKTF-09	3/15/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-09	3/15/2017	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-09	3/15/2017	Manganese, Dissolved	4.1	0.01	0.0019	2017400	mg/L
MKTF-09	3/15/2017	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-09	3/15/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	3/15/2017	Selenium, Dissolved	0.0023	0.005	0.0019	50000	mg/L
MKTF-09	3/15/2017	Uranium, Dissolved	0.0033	0.0005	0.00005	NA	mg/L
MKTF-09	3/15/2017	Zinc, Dissolved	0.051	0.01	0.0011	5960450	mg/L
MKTF-09	3/15/2017	Iron, Total	5.2	1	1	13822000	mg/L
MKTF-09	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	3/15/2017	Manganese, Total	4.4	0.01	0.0014	2017000	mg/L
MKTF-09	3/15/2017	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-09	3/15/2017	Selenium, Total	0.0072	0.005	0.00094	50000	mg/L
MKTF-09	3/15/2017	Uranium, Total	0.0036	0.0005	0.00017	30000	mg/L
MKTF-09	3/15/2017	Zinc, Total	0.0046	0.01	0.0027	5960000	mg/L
MKTF-09	6/12/2017	Silver, Total	0.00046	0.005	0.00042	50000	mg/L
MKTF-09	6/12/2017	Arsenic, Total	0.0025	0.005	0.0015	10000	mg/L
MKTF-09	6/12/2017	Barium, Total	0.6	0.002	0.00093	2000000	mg/L
MKTF-09	6/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	6/12/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-09	6/12/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-09	6/12/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-09	6/12/2017	Arsenic, Dissolved	0.0019	0.005	0.00089	10000	mg/L
MKTF-09	6/12/2017	Barium, Dissolved	0.6	0.002	0.00085	2000000	mg/L
MKTF-09	6/12/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-09	6/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	6/12/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-09	6/12/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	6/12/2017	Iron, Dissolved	2.3	0.2	0.16	13821880	mg/L
MKTF-09	6/12/2017	Potassium, Dissolved	0.55	1	0.11	NA	mg/L
MKTF-09	6/12/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-09	6/12/2017	Manganese, Dissolved	4.6	0.02	0.0038	2017400	mg/L
MKTF-09	6/12/2017	Sodium, Dissolved	250	10	1.6	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-09	6/12/2017	Selenium, Dissolved	0.0021	0.005	0.0019	50000	mg/L
MKTF-09	6/12/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-09	6/12/2017	Iron, Total	3.5	0.2	0.1	13822000	mg/L
MKTF-09	6/12/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	6/12/2017	Manganese, Total	4.5	0.02	0.011	2017000	mg/L
MKTF-09	6/12/2017	Lead, Total	0.0028	0.0005	0.000095	15000	mg/L
MKTF-09	6/12/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-09	6/12/2017	Zinc, Total	0.003	0.01	0.0028	5960000	mg/L
MKTF-09	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	9/28/2017	Arsenic, Total	0.004	0.005	0.0015	10000	mg/L
MKTF-09	9/28/2017	Barium, Total	0.61	0.002	0.00093	2000000	mg/L
MKTF-09	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	9/28/2017	Copper, Total	0.0064	0.006	0.0017	790000	mg/L
MKTF-09	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	9/28/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
MKTF-09	9/28/2017	Barium, Dissolved	0.54	0.002	0.00085	2000000	mg/L
MKTF-09	9/28/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-09	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	9/28/2017	Iron, Dissolved	3	0.2	0.16	13821880	mg/L
MKTF-09	9/28/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-09	9/28/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-09	9/28/2017	Manganese, Dissolved	4.5	0.02	0.0039	2017400	mg/L
MKTF-09	9/28/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-09	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	9/28/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-09	9/28/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-09	9/28/2017	Iron, Total	5.3	0.2	0.1	13822000	mg/L
MKTF-09	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	9/28/2017	Manganese, Total	4.8	0.02	0.011	2017000	mg/L
MKTF-09	9/28/2017	Lead, Total	0.0043	0.0005	0.000095	15000	mg/L
MKTF-09	9/28/2017	Selenium, Total	0.0085	0.005	0.0036	50000	mg/L
MKTF-09	9/28/2017	Zinc, Total	0.0072	0.01	0.0033	5960000	mg/L
MKTF-09	11/28/2017	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-09	11/28/2017	Arsenic, Total	0.0067	0.01	0.0041	10000	mg/L
MKTF-09	11/28/2017	Barium, Total	0.65	0.002	0.001	2000000	mg/L
MKTF-09	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	11/28/2017	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-09	11/28/2017	Barium, Dissolved	0.61	0.002	0.00099	2000000	mg/L
MKTF-09	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-09	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	11/28/2017	Iron, Dissolved	1.5	0.1	0.082	13821880	mg/L
MKTF-09	11/28/2017	Potassium, Dissolved	0.51	1	0.11	NA	mg/L
MKTF-09	11/28/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-09	11/28/2017	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
MKTF-09	11/28/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-09	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-09	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-09	11/28/2017	Uranium, Dissolved	0.0046	0.0025	0.00048	NA	mg/L
MKTF-09	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-09	11/28/2017	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-09	11/28/2017	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
MKTF-09	11/28/2017	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
MKTF-09	11/28/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-09	11/28/2017	Uranium, Total	0.005	0.005	0.0015	30000	mg/L
MKTF-09	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	2/14/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
MKTF-09	2/14/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-09	2/14/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
MKTF-09	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	2/14/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-09	2/14/2018	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-09	2/14/2018	Barium, Dissolved	0.52	0.002	0.00099	2000000	mg/L
MKTF-09	2/14/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-09	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	2/14/2018	Iron, Dissolved	1.3	0.1	0.082	13821880	mg/L
MKTF-09	2/14/2018	Potassium, Dissolved	0.45	1	0.11	NA	mg/L
MKTF-09	2/14/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-09	2/14/2018	Manganese, Dissolved	4	0.02	0.0039	2017400	mg/L
MKTF-09	2/14/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-09	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	2/14/2018	Selenium, Dissolved	0.0048	0.005	0.0038	50000	mg/L
MKTF-09	2/14/2018	Uranium, Dissolved	0.0054	0.0005	0.000096	NA	mg/L
MKTF-09	2/14/2018	Zinc, Dissolved	0.008	0.01	0.0021	5960450	mg/L
MKTF-09	2/14/2018	Iron, Total	2.3	0.1	0.051	13822000	mg/L
MKTF-09	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	2/14/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-09	2/14/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-09	2/14/2018	Selenium, Total	0.0041	0.001	0.00098	50000	mg/L
MKTF-09	2/14/2018	Uranium, Total	0.0053	0.0005	0.000068	30000	mg/L
MKTF-09	2/14/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	5/2/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-09	5/2/2018	Arsenic, Total	0.003	0.001	0.00041	10000	mg/L
MKTF-09	5/2/2018	Barium, Total	0.48	0.002	0.001	2000000	mg/L
MKTF-09	5/2/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
MKTF-09	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	5/2/2018	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-09	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	5/2/2018	Arsenic, Dissolved	0.0021	0.001	0.00042	10000	mg/L
MKTF-09	5/2/2018	Barium, Dissolved	0.46	0.002	0.00099	2000000	mg/L
MKTF-09	5/2/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-09	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	5/2/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-09	5/2/2018	Potassium, Dissolved	0.47	1	0.11	NA	mg/L
MKTF-09	5/2/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-09	5/2/2018	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
MKTF-09	5/2/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
MKTF-09	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	5/2/2018	Uranium, Dissolved	0.0042	0.0005	0.000096	NA	mg/L
MKTF-09	5/2/2018	Zinc, Dissolved	0.0085	0.01	0.0021	5960450	mg/L
MKTF-09	5/2/2018	Iron, Total	2.3	0.1	0.051	13822000	mg/L
MKTF-09	5/2/2018	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-09	5/2/2018	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-09	5/2/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-09	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	5/2/2018	Uranium, Total	0.0044	0.0005	0.000068	30000	mg/L
MKTF-09	5/2/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
MKTF-09	9/4/2018	Silver, Total	0.0035	0.005	0.0012	50000	mg/L
MKTF-09	9/4/2018	Arsenic, Total	0.0028	0.001	0.00041	10000	mg/L
MKTF-09	9/4/2018	Barium, Total	0.57	0.002	0.001	2000000	mg/L
MKTF-09	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	9/4/2018	Silver, Dissolved	0.0041	0.005	0.0018	81200	mg/L
MKTF-09	9/4/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
MKTF-09	9/4/2018	Barium, Dissolved	0.54	0.002	0.00099	2000000	mg/L
MKTF-09	9/4/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-09	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	9/4/2018	Iron, Dissolved	0.94	0.02	0.016	13821880	mg/L
MKTF-09	9/4/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MKTF-09	9/4/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/4/2018	Manganese, Dissolved	4.4	0.02	0.0039	2017400	mg/L
MKTF-09	9/4/2018	Sodium, Dissolved	240	10	1.6	NA	mg/L
MKTF-09	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	9/4/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-09	9/4/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-09	9/4/2018	Iron, Total	1.8	0.2	0.1	13822000	mg/L
MKTF-09	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-09	9/4/2018	Manganese, Total	4.2	0.02	0.011	2017000	mg/L
MKTF-09	9/4/2018	Lead, Total	0.00072	0.0005	0.00023	15000	mg/L
MKTF-09	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	9/4/2018	Uranium, Total	0.004	0.0005	0.000068	30000	mg/L
MKTF-09	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	11/28/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-09	11/28/2018	Barium, Total	0.52	0.002	0.001	2000000	mg/L
MKTF-09	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	11/28/2018	Arsenic, Dissolved	0.0016	0.001	0.00042	10000	mg/L
MKTF-09	11/28/2018	Barium, Dissolved	0.49	0.002	0.00099	2000000	mg/L
MKTF-09	11/28/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-09	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	11/28/2018	Iron, Dissolved	0.82	0.02	0.016	13821880	mg/L
MKTF-09	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-09	11/28/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-09	11/28/2018	Manganese, Dissolved	4.1	0.01	0.002	2017400	mg/L
MKTF-09	11/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-09	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	11/28/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
MKTF-09	11/28/2018	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-09	11/28/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-09	11/28/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-09	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-10	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-10	6/6/2014	Barium, Total	8.1	0.1	0.056	2000000	mg/L
MKTF-10	6/6/2014	Calcium, Total	410	5	0.27	NA	mg/L
MKTF-10	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-10	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-10	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-10	6/6/2014	Iron, Total	18	1	0.31	13822000	mg/L
MKTF-10	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-10	6/6/2014	Potassium, Total	4	1	0.24	NA	mg/L
MKTF-10	6/6/2014	Magnesium, Total	120	5	0.12	NA	mg/L
MKTF-10	6/6/2014	Manganese, Total	9.2	0.1	0.027	2017000	mg/L
MKTF-10	6/6/2014	Sodium, Total	490	20	5	NA	mg/L
MKTF-10	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-10	6/6/2014	Selenium, Total	0.011	0.005	0.00074	50000	mg/L
MKTF-10	6/6/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-10	6/6/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-10	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-10	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-10	9/18/2014	Barium, Total	11	0.04	0.022	2000000	mg/L
MKTF-10	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-10	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-10	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-10	9/18/2014	Iron, Total	33	2	0.62	13822000	mg/L
MKTF-10	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-10	9/18/2014	Manganese, Total	14	0.04	0.011	2017000	mg/L
MKTF-10	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-10	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-10	9/18/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
MKTF-10	9/18/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-10	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-10	11/14/2014	Barium, Total	17	0.2	0.021	2000000	mg/L
MKTF-10	11/14/2014	Calcium, Total	780	10	0.82	NA	mg/L
MKTF-10	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-10	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-10	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-10	11/14/2014	Iron, Total	67	2	0.62	13822000	mg/L
MKTF-10	11/14/2014	Mercury, Total	ND	0.0004	0.00017	2000	mg/L
MKTF-10	11/14/2014	Potassium, Total	2.5	1	0.093	NA	mg/L
MKTF-10	11/14/2014	Magnesium, Total	220	5	0.09	NA	mg/L
MKTF-10	11/14/2014	Manganese, Total	24	0.2	0.055	2017000	mg/L
MKTF-10	11/14/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-10	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-10	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-10	11/14/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-10	11/14/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-10	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	3/16/2015	Arsenic, Total	0.019	0.01	0.0044	10000	mg/L
MKTF-10	3/16/2015	Barium, Total	22	0.2	0.073	2000000	mg/L
MKTF-10	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-10	3/16/2015	Chromium, Total	0.036	0.006	0.0022	50000	mg/L
MKTF-10	3/16/2015	Copper, Total	0.095	0.006	0.0051	790000	mg/L
MKTF-10	3/16/2015	Iron, Total	100	4	1.4	13822000	mg/L
MKTF-10	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-10	3/16/2015	Manganese, Total	27	0.2	0.15	2017000	mg/L
MKTF-10	3/16/2015	Lead, Total	0.2	0.01	0.00069	15000	mg/L
MKTF-10	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-10	3/16/2015	Uranium, Total	0.019	0.01	0.000081	30000	mg/L
MKTF-10	3/16/2015	Zinc, Total	0.14	0.01	0.0036	5960000	mg/L
MKTF-10	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-10	6/4/2015	Barium, Total	12	0.04	0.019	2000000	mg/L
MKTF-10	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-10	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-10	6/4/2015	Iron, Total	53	2	0.73	13822000	mg/L
MKTF-10	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-10	6/4/2015	Manganese, Total	18	0.04	0.0054	2017000	mg/L
MKTF-10	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-10	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-10	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-10	6/4/2015	Zinc, Total	0.034	0.01	0.0028	5960000	mg/L
MKTF-10	8/18/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-10	8/18/2015	Arsenic, Total	0.038	0.01	0.0029	10000	mg/L
MKTF-10	8/18/2015	Barium, Total	45	0.1	0.053	2000000	mg/L
MKTF-10	8/18/2015	Calcium, Total	690	20	1.1	NA	mg/L
MKTF-10	8/18/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-10	8/18/2015	Chromium, Total	0.2	0.03	0.011	50000	mg/L
MKTF-10	8/18/2015	Copper, Total	0.26	0.03	0.026	790000	mg/L
MKTF-10	8/18/2015	Iron, Total	240	10	3.6	13822000	mg/L
MKTF-10	8/18/2015	Mercury, Total	0.0003	0.0002	0.000059	2000	mg/L
MKTF-10	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-10	8/18/2015	Magnesium, Total	180	5	0.2	NA	mg/L
MKTF-10	8/18/2015	Manganese, Total	50	1	0.76	2017000	mg/L
MKTF-10	8/18/2015	Sodium, Total	430	5	0.36	NA	mg/L
MKTF-10	8/18/2015	Lead, Total	0.58	0.025	0.0024	15000	mg/L
MKTF-10	8/18/2015	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-10	8/18/2015	Uranium, Total	0.063	0.005	0.000049	30000	mg/L
MKTF-10	8/18/2015	Zinc, Total	0.49	0.05	0.019	5960000	mg/L
MKTF-10	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-10	11/3/2015	Arsenic, Total	0.0056	0.001	0.000065	10000	mg/L
MKTF-10	11/3/2015	Barium, Total	13	0.04	0.026	2000000	mg/L
MKTF-10	11/3/2015	Calcium, Total	550	20	5.1	NA	mg/L
MKTF-10	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-10	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-10	11/3/2015	Iron, Total	50	2	0.91	13822000	mg/L
MKTF-10	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-10	11/3/2015	Magnesium, Total	120	5	0.065	NA	mg/L
MKTF-10	11/3/2015	Manganese, Total	18	0.04	0.0065	2017000	mg/L
MKTF-10	11/3/2015	Sodium, Total	420	5	0.48	NA	mg/L
MKTF-10	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-10	11/3/2015	Selenium, Total	0.0067	0.005	0.00097	50000	mg/L
MKTF-10	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-10	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-10	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	2/29/2016	Arsenic, Total	0.0086	0.005	0.0015	10000	mg/L
MKTF-10	2/29/2016	Barium, Total	16	0.2	0.11	2000000	mg/L
MKTF-10	2/29/2016	Calcium, Total	620	50	13	NA	mg/L
MKTF-10	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-10	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-10	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-10	2/29/2016	Iron, Total	57	2	0.72	13822000	mg/L
MKTF-10	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-10	2/29/2016	Magnesium, Total	140	5	0.065	NA	mg/L
MKTF-10	2/29/2016	Manganese, Total	21	0.2	0.15	2017000	mg/L
MKTF-10	2/29/2016	Sodium, Total	430	5	0.48	NA	mg/L
MKTF-10	2/29/2016	Lead, Total	0.0027	0.0025	0.00024	15000	mg/L
MKTF-10	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-10	2/29/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-10	2/29/2016	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-10	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	6/9/2016	Arsenic, Total	0.006	0.001	0.00029	10000	mg/L
MKTF-10	6/9/2016	Barium, Total	13	0.1	0.053	2000000	mg/L
MKTF-10	6/9/2016	Calcium, Total	450	5	1.3	NA	mg/L
MKTF-10	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-10	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-10	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-10	6/9/2016	Iron, Total	36	1	0.36	13822000	mg/L
MKTF-10	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	6/9/2016	Potassium, Total	0.88	1	0.18	NA	mg/L
MKTF-10	6/9/2016	Magnesium, Total	99	5	0.065	NA	mg/L
MKTF-10	6/9/2016	Manganese, Total	15	0.1	0.076	2017000	mg/L
MKTF-10	6/9/2016	Sodium, Total	330	5	0.48	NA	mg/L
MKTF-10	6/9/2016	Lead, Total	0.002	0.0005	0.000047	15000	mg/L
MKTF-10	6/9/2016	Selenium, Total	0.0033	0.005	0.00062	50000	mg/L
MKTF-10	6/9/2016	Uranium, Total	0.0008	0.0005	0.0000049	30000	mg/L
MKTF-10	6/9/2016	Zinc, Total	0.019	0.01	0.0039	5960000	mg/L
MKTF-10	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	9/11/2016	Arsenic, Total	0.0083	0.001	0.00021	10000	mg/L
MKTF-10	9/11/2016	Barium, Total	11	0.04	0.016	2000000	mg/L
MKTF-10	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-10	9/11/2016	Arsenic, Dissolved	0.0082	0.001	0.00014	10000	mg/L
MKTF-10	9/11/2016	Barium, Dissolved	11	0.1	0.066	2000000	mg/L
MKTF-10	9/11/2016	Calcium, Dissolved	390	5	2.5	NA	mg/L
MKTF-10	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-10	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-10	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-10	9/11/2016	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-10	9/11/2016	Potassium, Dissolved	0.82	1	0.5	NA	mg/L
MKTF-10	9/11/2016	Magnesium, Dissolved	95	1	0.5	NA	mg/L
MKTF-10	9/11/2016	Manganese, Dissolved	12	0.1	0.016	2017400	mg/L
MKTF-10	9/11/2016	Sodium, Dissolved	330	5	2.5	NA	mg/L
MKTF-10	9/11/2016	Lead, Dissolved	0.00086	0.0005	0.00017	NA	mg/L
MKTF-10	9/11/2016	Selenium, Dissolved	0.0066	0.001	0.00021	50000	mg/L
MKTF-10	9/11/2016	Uranium, Dissolved	0.00091	0.0005	0.000051	NA	mg/L
MKTF-10	9/11/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
MKTF-10	9/11/2016	Iron, Total	28	1	1	13822000	mg/L
MKTF-10	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	9/11/2016	Manganese, Total	12	0.04	0.0055	2017000	mg/L
MKTF-10	9/11/2016	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L
MKTF-10	9/11/2016	Selenium, Total	0.0058	0.01	0.0019	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Uranium, Total	0.0012	0.0005	0.00017	30000	mg/L
MKTF-10	9/11/2016	Zinc, Total	0.0027	0.01	0.0027	5960000	mg/L
MKTF-10	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	11/2/2016	Arsenic, Total	0.0096	0.005	0.0011	10000	mg/L
MKTF-10	11/2/2016	Barium, Total	6	0.02	0.0079	2000000	mg/L
MKTF-10	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-10	11/2/2016	Arsenic, Dissolved	0.008	0.001	0.00014	10000	mg/L
MKTF-10	11/2/2016	Barium, Dissolved	5.8	0.02	0.013	2000000	mg/L
MKTF-10	11/2/2016	Calcium, Dissolved	220	5	2.5	NA	mg/L
MKTF-10	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-10	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-10	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-10	11/2/2016	Iron, Dissolved	9.4	0.2	0.2	13821880	mg/L
MKTF-10	11/2/2016	Potassium, Dissolved	0.66	1	0.5	NA	mg/L
MKTF-10	11/2/2016	Magnesium, Dissolved	53	1	0.5	NA	mg/L
MKTF-10	11/2/2016	Manganese, Dissolved	5.2	0.02	0.0032	2017400	mg/L
MKTF-10	11/2/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-10	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	11/2/2016	Selenium, Dissolved	0.0046	0.001	0.00021	50000	mg/L
MKTF-10	11/2/2016	Uranium, Dissolved	0.00065	0.0005	0.000051	NA	mg/L
MKTF-10	11/2/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-10	11/2/2016	Iron, Total	10	1	1	13822000	mg/L
MKTF-10	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	11/2/2016	Manganese, Total	5.2	0.02	0.0027	2017000	mg/L
MKTF-10	11/2/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-10	11/2/2016	Selenium, Total	0.0049	0.005	0.00094	50000	mg/L
MKTF-10	11/2/2016	Uranium, Total	0.00086	0.0005	0.00017	30000	mg/L
MKTF-10	11/2/2016	Zinc, Total	0.0044	0.01	0.0027	5960000	mg/L
MKTF-10	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	3/2/2017	Arsenic, Total	0.014	0.001	0.00021	10000	mg/L
MKTF-10	3/2/2017	Barium, Total	4.7	0.01	0.004	2000000	mg/L
MKTF-10	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	3/2/2017	Silver, Dissolved	0.0009	0.005	0.00088	81200	mg/L
MKTF-10	3/2/2017	Arsenic, Dissolved	0.011	0.001	0.00014	10000	mg/L
MKTF-10	3/2/2017	Barium, Dissolved	4.8	0.01	0.0043	2000000	mg/L
MKTF-10	3/2/2017	Calcium, Dissolved	180	5	2.5	NA	mg/L
MKTF-10	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-10	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	3/2/2017	Iron, Dissolved	13	0.4	0.4	13821880	mg/L
MKTF-10	3/2/2017	Potassium, Dissolved	0.61	1	0.5	NA	mg/L
MKTF-10	3/2/2017	Magnesium, Dissolved	41	1	0.5	NA	mg/L
MKTF-10	3/2/2017	Manganese, Dissolved	3.4	0.01	0.0019	2017400	mg/L
MKTF-10	3/2/2017	Sodium, Dissolved	260	5	2.5	NA	mg/L
MKTF-10	3/2/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-10	3/2/2017	Selenium, Dissolved	0.0039	0.001	0.00021	50000	mg/L
MKTF-10	3/2/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-10	3/2/2017	Iron, Total	15	0.4	0.4	13822000	mg/L
MKTF-10	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-10	3/2/2017	Manganese, Total	3.5	0.01	0.0014	2017000	mg/L
MKTF-10	3/2/2017	Lead, Total	0.0051	0.0025	0.00041	15000	mg/L
MKTF-10	3/2/2017	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-10	3/2/2017	Zinc, Total	0.0091	0.01	0.0027	5960000	mg/L
MKTF-10	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-10	6/8/2017	Arsenic, Total	0.0082	0.001	0.0003	10000	mg/L
MKTF-10	6/8/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-10	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-10	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-10	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-10	6/8/2017	Arsenic, Dissolved	0.0082	0.001	0.00018	10000	mg/L
MKTF-10	6/8/2017	Barium, Dissolved	4	0.02	0.0085	2000000	mg/L
MKTF-10	6/8/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-10	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-10	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	6/8/2017	Iron, Dissolved	5.6	0.2	0.16	13821880	mg/L
MKTF-10	6/8/2017	Potassium, Dissolved	0.54	1	0.11	NA	mg/L
MKTF-10	6/8/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-10	6/8/2017	Manganese, Dissolved	3.1	0.02	0.0038	2017400	mg/L
MKTF-10	6/8/2017	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-10	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	6/8/2017	Selenium, Dissolved	0.0045	0.001	0.00039	50000	mg/L
MKTF-10	6/8/2017	Uranium, Dissolved	0.00051	0.0005	0.00005	NA	mg/L
MKTF-10	6/8/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
MKTF-10	6/8/2017	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-10	6/8/2017	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
MKTF-10	6/8/2017	Manganese, Total	3.2	0.02	0.011	2017000	mg/L
MKTF-10	6/8/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-10	6/8/2017	Selenium, Total	0.0039	0.001	0.00071	50000	mg/L
MKTF-10	6/8/2017	Uranium, Total	0.00055	0.0005	0.00015	30000	mg/L
MKTF-10	6/8/2017	Zinc, Total	0.0083	0.01	0.0028	5960000	mg/L
MKTF-10	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	9/28/2017	Arsenic, Total	0.007	0.001	0.0003	10000	mg/L
MKTF-10	9/28/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-10	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	9/28/2017	Copper, Total	0.0038	0.006	0.0017	790000	mg/L
MKTF-10	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	9/28/2017	Arsenic, Dissolved	0.0087	0.001	0.00018	10000	mg/L
MKTF-10	9/28/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-10	9/28/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-10	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	9/28/2017	Iron, Dissolved	7.5	0.2	0.16	13821880	mg/L
MKTF-10	9/28/2017	Potassium, Dissolved	0.58	1	0.11	NA	mg/L
MKTF-10	9/28/2017	Magnesium, Dissolved	32	1	0.25	NA	mg/L
MKTF-10	9/28/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-10	9/28/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-10	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	9/28/2017	Selenium, Dissolved	0.0074	0.001	0.00039	50000	mg/L
MKTF-10	9/28/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-10	9/28/2017	Iron, Total	9	0.2	0.1	13822000	mg/L
MKTF-10	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-10	9/28/2017	Manganese, Total	3	0.02	0.011	2017000	mg/L
MKTF-10	9/28/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-10	9/28/2017	Selenium, Total	0.004	0.001	0.00071	50000	mg/L
MKTF-10	9/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	11/28/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-10	11/28/2017	Arsenic, Total	0.0099	0.01	0.0041	10000	mg/L
MKTF-10	11/28/2017	Barium, Total	4.2	0.01	0.005	2000000	mg/L
MKTF-10	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	11/28/2017	Arsenic, Dissolved	0.0063	0.005	0.0021	10000	mg/L
MKTF-10	11/28/2017	Barium, Dissolved	3.9	0.01	0.0049	2000000	mg/L
MKTF-10	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	11/28/2017	Iron, Dissolved	8.2	0.2	0.16	13821880	mg/L
MKTF-10	11/28/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-10	11/28/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-10	11/28/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-10	11/28/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-10	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-10	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-10	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-10	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-10	11/28/2017	Iron, Total	9.8	0.4	0.2	13822000	mg/L
MKTF-10	11/28/2017	Manganese, Total	3	0.01	0.0055	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/28/2017	Lead, Total	0.00093	0.0005	0.00023	15000	mg/L
MKTF-10	11/28/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-10	11/28/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
MKTF-10	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	2/14/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-10	2/14/2018	Arsenic, Total	0.008	0.001	0.00041	10000	mg/L
MKTF-10	2/14/2018	Barium, Total	4.5	0.01	0.005	2000000	mg/L
MKTF-10	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	2/14/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
MKTF-10	2/14/2018	Arsenic, Dissolved	0.0083	0.001	0.00042	10000	mg/L
MKTF-10	2/14/2018	Barium, Dissolved	4.8	0.02	0.0099	2000000	mg/L
MKTF-10	2/14/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-10	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	2/14/2018	Iron, Dissolved	9.7	0.2	0.16	13821880	mg/L
MKTF-10	2/14/2018	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MKTF-10	2/14/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-10	2/14/2018	Manganese, Dissolved	3.7	0.02	0.0039	2017400	mg/L
MKTF-10	2/14/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-10	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	2/14/2018	Selenium, Dissolved	0.0072	0.001	0.00076	50000	mg/L
MKTF-10	2/14/2018	Uranium, Dissolved	0.0003	0.0005	0.000096	NA	mg/L
MKTF-10	2/14/2018	Zinc, Dissolved	0.0078	0.01	0.0021	5960450	mg/L
MKTF-10	2/14/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-10	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-10	2/14/2018	Manganese, Total	3.6	0.01	0.0055	2017000	mg/L
MKTF-10	2/14/2018	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MKTF-10	2/14/2018	Selenium, Total	0.0034	0.001	0.00098	50000	mg/L
MKTF-10	2/14/2018	Uranium, Total	0.00035	0.0005	0.000068	30000	mg/L
MKTF-10	2/14/2018	Zinc, Total	0.005	0.01	0.0033	5960000	mg/L
MKTF-10	5/2/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	5/2/2018	Arsenic, Total	0.0088	0.001	0.00041	10000	mg/L
MKTF-10	5/2/2018	Barium, Total	4.7	0.01	0.005	2000000	mg/L
MKTF-10	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	5/2/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	5/2/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-10	5/2/2018	Barium, Dissolved	4.2	0.01	0.0049	2000000	mg/L
MKTF-10	5/2/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	5/2/2018	Iron, Dissolved	9.2	0.2	0.16	13821880	mg/L
MKTF-10	5/2/2018	Potassium, Dissolved	0.43	1	0.11	NA	mg/L
MKTF-10	5/2/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-10	5/2/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-10	5/2/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-10	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	5/2/2018	Uranium, Dissolved	0.00014	0.0005	0.000096	NA	mg/L
MKTF-10	5/2/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-10	5/2/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-10	5/2/2018	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
MKTF-10	5/2/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-10	5/2/2018	Lead, Total	0.00034	0.0005	0.00023	15000	mg/L
MKTF-10	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	5/2/2018	Uranium, Total	0.00011	0.0005	0.000068	30000	mg/L
MKTF-10	5/2/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	9/4/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-10	9/4/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-10	9/4/2018	Barium, Total	4	0.02	0.01	2000000	mg/L
MKTF-10	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	9/4/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	Arsenic, Dissolved	0.009	0.001	0.00042	10000	mg/L
MKTF-10	9/4/2018	Barium, Dissolved	4.2	0.02	0.0099	2000000	mg/L
MKTF-10	9/4/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-10	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	9/4/2018	Iron, Dissolved	6.8	0.2	0.16	13821880	mg/L
MKTF-10	9/4/2018	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-10	9/4/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-10	9/4/2018	Manganese, Dissolved	2.9	0.02	0.0039	2017400	mg/L
MKTF-10	9/4/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-10	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	9/4/2018	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
MKTF-10	9/4/2018	Zinc, Dissolved	0.0092	0.01	0.0021	5960450	mg/L
MKTF-10	9/4/2018	Iron, Total	7.7	0.2	0.1	13822000	mg/L
MKTF-10	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	9/4/2018	Manganese, Total	2.8	0.02	0.011	2017000	mg/L
MKTF-10	9/4/2018	Lead, Total	0.00053	0.0005	0.00023	15000	mg/L
MKTF-10	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	9/4/2018	Uranium, Total	0.00021	0.0005	0.000068	30000	mg/L
MKTF-10	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	11/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	11/20/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-10	11/20/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
MKTF-10	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	11/20/2018	Arsenic, Dissolved	0.008	0.001	0.00042	10000	mg/L
MKTF-10	11/20/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
MKTF-10	11/20/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	11/20/2018	Iron, Dissolved	6.1	1	0.82	13821880	mg/L
MKTF-10	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-10	11/20/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-10	11/20/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-10	11/20/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-10	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	11/20/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-10	11/20/2018	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-10	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	11/20/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-10	11/20/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-10	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-10	3/3/2020	Arsenic, Dissolved	0.0056	0.001	0.0001	10000	mg/L
MKTF-10	3/3/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-10	3/3/2020	Selenium, Dissolved	0.00018	0.001	0.00017	50000	mg/L
MKTF-10	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	3/3/2020	Uranium, Dissolved	0.00059	0.0005	0.000075	NA	mg/L
MKTF-10	3/3/2020	Manganese, Dissolved	5.4	0.02	0.0029	2017400	mg/L
MKTF-10	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-10	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-10	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-10	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-10	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-10	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-10	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-10	3/3/2020	Magnesium, Dissolved	67	1	0.05	NA	mg/L
MKTF-10	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-10	3/3/2020	Nickel, Dissolved	0.011	0.01	0.004	372000	mg/L
MKTF-10	3/3/2020	Potassium, Dissolved	0.62	1	0.16	NA	mg/L
MKTF-10	3/3/2020	Silver, Dissolved	0.0038	0.005	0.00094	81200	mg/L
MKTF-10	3/3/2020	Zinc, Dissolved	0.0061	0.01	0.0023	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Calcium, Dissolved	280	5	0.31	NA	mg/L
MKTF-10	3/3/2020	Sodium, Dissolved	400	5	2.1	NA	mg/L
MKTF-10	3/3/2020	Barium, Dissolved	9.5	0.02	0.0065	2000000	mg/L
MKTF-10	3/3/2020	Iron, Dissolved	7.2	0.2	0.087	13821880	mg/L
MKTF-10	3/3/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
MKTF-10	3/3/2020	Boron, Total	0.38	0.04	0.0045	3949	mg/L
MKTF-10	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-10	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-10	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-10	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-10	3/3/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-10	3/3/2020	Silver, Total	0.0052	0.005	0.0014	50000	mg/L
MKTF-10	3/3/2020	Zinc, Total	0.0065	0.01	0.0058	5960000	mg/L
MKTF-10	3/3/2020	Aluminum, Total	5.3	0.2	0.025	19914000	mg/L
MKTF-10	3/3/2020	Iron, Total	12	0.4	0.17	13822000	mg/L
MKTF-10	3/3/2020	Manganese, Total	5.5	0.04	0.0058	2017000	mg/L
MKTF-10	3/3/2020	Barium, Total	10	0.04	0.013	2000000	mg/L
MKTF-10	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-10	3/3/2020	Arsenic, Total	0.0081	0.001	0.00031	10000	mg/L
MKTF-10	3/3/2020	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
MKTF-10	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-10	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	3/3/2020	Uranium, Total	0.00074	0.0005	0.000085	30000	mg/L
MKTF-10	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-10	12/18/2020	Arsenic, Total Recoverable	**11.8**	1	0.286	10	ug/L
MKTF-10	12/18/2020	Lead, Total Recoverable	1.01	1	0.133	15	ug/L
MKTF-10	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-10	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-10	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-10	12/18/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-10	12/18/2020	Arsenic, Dissolved	9.73	1	0.286	10	ug/L
MKTF-10	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-10	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-10	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-10	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-10	12/18/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-10	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-10	12/18/2020	Aluminum, Total	3.13	0.2	0.051	19914000	mg/L
MKTF-10	12/18/2020	Calcium, Total	277	0.5	0.084	NA	mg/L
MKTF-10	12/18/2020	Boron, Total	0.445	0.1	0.022	3949	mg/L
MKTF-10	12/18/2020	Barium, Total	9.4	0.01	0.003	2000000	mg/L
MKTF-10	12/18/2020	Potassium, Total	1.47	1	0.34	NA	mg/L
MKTF-10	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-10	12/18/2020	Magnesium, Total	70	0.5	0.12	NA	mg/L
MKTF-10	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-10	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-10	12/18/2020	Sodium, Total	321	2	0.92	NA	mg/L
MKTF-10	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-10	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-10	12/18/2020	Iron, Total	10.7	0.2	0.075	13822000	mg/L
MKTF-10	12/18/2020	Manganese, Total	5.07	0.01	0.003	2017000	mg/L
MKTF-10	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-10	12/18/2020	Nickel, Total	0.0164	0.006	0.003	372000	mg/L
MKTF-10	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-10	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-10	12/18/2020	Barium, Dissolved	9.09	0.01	0.003	2000000	mg/L
MKTF-10	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-10	12/18/2020	Boron, Dissolved	0.443	0.1	0.022	3949110	mg/L
MKTF-10	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-10	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-10	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-10	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-10	12/18/2020	Iron, Dissolved	7.25	0.2	0.075	13821880	mg/L
MKTF-10	12/18/2020	Manganese, Dissolved	4.81	0.01	0.003	2017400	mg/L
MKTF-10	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-10	12/18/2020	Nickel, Dissolved	0.0149	0.006	0.003	372000	mg/L
MKTF-10	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-10	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-10	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-10	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-10	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-10	10/30/2019	Arsenic, Dissolved	0.0092	0.001	0.000101	10000	mg/L
MKTF-10	10/30/2019	Barium, Dissolved	10	0.04	0.012968	2000000	mg/L
MKTF-10	10/30/2019	Beryllium, Dissolved	0.00047	0.002	0.000284	4000	mg/L
MKTF-10	10/30/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
MKTF-10	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	10/30/2019	Calcium, Dissolved	320	5	0.309446	NA	mg/L
MKTF-10	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-10	10/30/2019	Iron, Dissolved	14	0.4	0.174937	13821880	mg/L
MKTF-10	10/30/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-10	10/30/2019	Magnesium, Dissolved	76	1	0.05029	NA	mg/L
MKTF-10	10/30/2019	Manganese, Dissolved	6.2	0.04	0.005799	2017400	mg/L
MKTF-10	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	10/30/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
MKTF-10	10/30/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-10	10/30/2019	Selenium, Dissolved	0.00044	0.001	0.000171	50000	mg/L
MKTF-10	10/30/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
MKTF-10	10/30/2019	Sodium, Dissolved	430	5	2.080881	NA	mg/L
MKTF-10	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	10/30/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-10	10/30/2019	Aluminum, Total	1.8	0.1	0.012441	19914000	mg/L
MKTF-10	10/30/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-10	10/30/2019	Arsenic, Total	0.0093	0.005	0.001561	10000	mg/L
MKTF-10	10/30/2019	Barium, Total	11	0.04	0.012968	2000000	mg/L
MKTF-10	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-10	10/30/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
MKTF-10	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	10/30/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-10	10/30/2019	Lead, Total	0.00086	0.0025	0.000274	15000	mg/L
MKTF-10	10/30/2019	Manganese, Total	6.3	0.04	0.005799	2017000	mg/L
MKTF-10	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	10/30/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-10	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-10	10/30/2019	Silver, Total	0.0045	0.005	0.001418	50000	mg/L
MKTF-10	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-10	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-10	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-10	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-10	5/13/2019	Arsenic, Dissolved	0.0051	0.005	0.000504	10000	mg/L
MKTF-10	5/13/2019	Barium, Dissolved	4.6	0.01	0.003242	2000000	mg/L
MKTF-10	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-10	5/13/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-10	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	5/13/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
MKTF-10	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	5/13/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-10	5/13/2019	Iron, Dissolved	8.4	1	0.437344	13821880	mg/L
MKTF-10	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-10	5/13/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
MKTF-10	5/13/2019	Manganese, Dissolved	3.4	0.01	0.00145	2017400	mg/L
MKTF-10	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	5/13/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-10	5/13/2019	Potassium, Dissolved	0.46	1	0.162288	NA	mg/L
MKTF-10	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-10	5/13/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-10	5/13/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-10	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-10	5/13/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-10	5/13/2019	Zinc, Dissolved	0.13	0.01	0.002252	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/13/2019	Aluminum, Total	0.76	0.02	0.002488	19914000	mg/L
MKTF-10	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-10	5/13/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
MKTF-10	5/13/2019	Barium, Total	4.9	0.01	0.003242	2000000	mg/L
MKTF-10	5/13/2019	Beryllium, Total	0.00031	0.002	0.000284	4000	mg/L
MKTF-10	5/13/2019	Boron, Total	0.4	0.04	0.004531	3949	mg/L
MKTF-10	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	5/13/2019	Iron, Total	8.9	0.2	0.087469	13822000	mg/L
MKTF-10	5/13/2019	Lead, Total	0.00045	0.0005	0.000055	15000	mg/L
MKTF-10	5/13/2019	Manganese, Total	3.6	0.01	0.00145	2017000	mg/L
MKTF-10	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	5/13/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
MKTF-10	5/13/2019	Selenium, Total	0.00063	0.001	0.000478	50000	mg/L
MKTF-10	5/13/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-10	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	5/13/2019	Uranium, Total	0.00011	0.0005	0.000085	30000	mg/L
MKTF-10	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-10	8/22/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
MKTF-10	8/22/2019	Antimony, Dissolved	0.00046	0.001	0.000389	6000	mg/L
MKTF-10	8/22/2019	Arsenic, Dissolved	0.0059	0.001	0.000101	10000	mg/L
MKTF-10	8/22/2019	Barium, Dissolved	8.5	0.04	0.012968	2000000	mg/L
MKTF-10	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-10	8/22/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
MKTF-10	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	8/22/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-10	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	8/22/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
MKTF-10	8/22/2019	Iron, Dissolved	7.9	0.4	0.174937	13821880	mg/L
MKTF-10	8/22/2019	Lead, Dissolved	0.000083	0.0005	0.000055	NA	mg/L
MKTF-10	8/22/2019	Magnesium, Dissolved	60	1	0.05029	NA	mg/L
MKTF-10	8/22/2019	Manganese, Dissolved	5.4	0.04	0.005799	2017400	mg/L
MKTF-10	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	8/22/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-10	8/22/2019	Potassium, Dissolved	0.68	1	0.162288	NA	mg/L
MKTF-10	8/22/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-10	8/22/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
MKTF-10	8/22/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
MKTF-10	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	8/22/2019	Uranium, Dissolved	0.00063	0.0005	0.000075	NA	mg/L
MKTF-10	8/22/2019	Zinc, Dissolved	0.0057	0.01	0.002252	5960450	mg/L
MKTF-10	8/22/2019	Aluminum, Total	0.84	0.1	0.012441	19914000	mg/L
MKTF-10	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-10	8/22/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-10	8/22/2019	Barium, Total	8.8	0.04	0.012968	2000000	mg/L
MKTF-10	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-10	8/22/2019	Boron, Total	0.51	0.2	0.022653	3949	mg/L
MKTF-10	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	8/22/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-10	8/22/2019	Lead, Total	0.00058	0.0005	0.000055	15000	mg/L
MKTF-10	8/22/2019	Manganese, Total	5.6	0.04	0.005799	2017000	mg/L
MKTF-10	8/22/2019	Mercury, Total	0.000092	0.0002	0.000038	2000	mg/L
MKTF-10	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	8/22/2019	Nickel, Total	0.015	0.01	0.004009	372000	mg/L
MKTF-10	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-10	8/22/2019	Silver, Total	0.0032	0.005	0.001418	50000	mg/L
MKTF-10	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	8/22/2019	Uranium, Total	0.00061	0.0005	0.000085	30000	mg/L
MKTF-10	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-11	8/21/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-11	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-11	8/21/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-11	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	8/21/2019	Calcium, Dissolved	95	1	0.061889	NA	mg/L
MKTF-11	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	8/21/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
MKTF-11	8/21/2019	Iron, Dissolved	3.4	0.1	0.043734	13821880	mg/L
MKTF-11	8/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-11	8/21/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-11	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-11	8/21/2019	Molybdenum, Dissolved	0.0092	0.008	0.006735	98700	mg/L
MKTF-11	8/21/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
MKTF-11	8/21/2019	Potassium, Dissolved	0.65	1	0.162288	NA	mg/L
MKTF-11	8/21/2019	Selenium, Dissolved	0.00039	0.001	0.000171	50000	mg/L
MKTF-11	8/21/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-11	8/21/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-11	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-11	8/21/2019	Uranium, Dissolved	0.0042	0.0005	0.000075	NA	mg/L
MKTF-11	8/21/2019	Zinc, Dissolved	0.0077	0.01	0.002252	5960450	mg/L
MKTF-11	8/21/2019	Aluminum, Total	0.66	0.02	0.002488	19914000	mg/L
MKTF-11	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-11	8/21/2019	Arsenic, Total	0.02	0.001	0.000312	10000	mg/L
MKTF-11	8/21/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
MKTF-11	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-11	8/21/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
MKTF-11	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	8/21/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-11	8/21/2019	Lead, Total	0.00054	0.0005	0.000055	15000	mg/L
MKTF-11	8/21/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-11	8/21/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-11	8/21/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
MKTF-11	8/21/2019	Nickel, Total	0.039	0.01	0.004009	372000	mg/L
MKTF-11	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-11	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-11	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	8/21/2019	Uranium, Total	0.004	0.0005	0.000085	30000	mg/L
MKTF-11	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-11	5/13/2019	Arsenic, Dissolved	0.016	0.005	0.000504	10000	mg/L
MKTF-11	5/13/2019	Barium, Dissolved	2.1	0.02	0.006484	2000000	mg/L
MKTF-11	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-11	5/13/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-11	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	5/13/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
MKTF-11	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	5/13/2019	Copper, Dissolved	0.0043	0.006	0.001296	790000	mg/L
MKTF-11	5/13/2019	Iron, Dissolved	3.1	0.2	0.087469	13821880	mg/L
MKTF-11	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-11	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-11	5/13/2019	Manganese, Dissolved	2.4	0.02	0.002899	2017400	mg/L
MKTF-11	5/13/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
MKTF-11	5/13/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
MKTF-11	5/13/2019	Potassium, Dissolved	0.71	1	0.162288	NA	mg/L
MKTF-11	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-11	5/13/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-11	5/13/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L
MKTF-11	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-11	5/13/2019	Uranium, Dissolved	0.0045	0.0025	0.000374	NA	mg/L
MKTF-11	5/13/2019	Zinc, Dissolved	0.098	0.01	0.002252	5960450	mg/L
MKTF-11	5/13/2019	Aluminum, Total	0.88	0.02	0.002488	19914000	mg/L
MKTF-11	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-11	5/13/2019	Arsenic, Total	0.018	0.001	0.000312	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-11	5/13/2019	Beryllium, Total	0.00029	0.002	0.000284	4000	mg/L
MKTF-11	5/13/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-11	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	5/13/2019	Iron, Total	5	0.2	0.087469	13822000	mg/L
MKTF-11	5/13/2019	Lead, Total	0.00063	0.0005	0.000055	15000	mg/L
MKTF-11	5/13/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-11	5/13/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-11	5/13/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
MKTF-11	5/13/2019	Nickel, Total	0.047	0.01	0.004009	372000	mg/L
MKTF-11	5/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-11	5/13/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-11	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	5/13/2019	Uranium, Total	0.0045	0.0005	0.000085	30000	mg/L
MKTF-11	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-11	10/30/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L
MKTF-11	10/30/2019	Barium, Dissolved	2.2	0.02	0.006484	2000000	mg/L
MKTF-11	10/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-11	10/30/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-11	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	10/30/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-11	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-11	10/30/2019	Iron, Dissolved	3.6	0.2	0.087469	13821880	mg/L
MKTF-11	10/30/2019	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-11	10/30/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
MKTF-11	10/30/2019	Manganese, Dissolved	2.8	0.02	0.002899	2017400	mg/L
MKTF-11	10/30/2019	Molybdenum, Dissolved	0.014	0.008	0.006735	98700	mg/L
MKTF-11	10/30/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-11	10/30/2019	Potassium, Dissolved	0.9	1	0.162288	NA	mg/L
MKTF-11	10/30/2019	Selenium, Dissolved	0.00023	0.001	0.000171	50000	mg/L
MKTF-11	10/30/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-11	10/30/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-11	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-11	10/30/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-11	10/30/2019	Aluminum, Total	1	0.1	0.012441	19914000	mg/L
MKTF-11	10/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-11	10/30/2019	Arsenic, Total	0.022	0.005	0.001561	10000	mg/L
MKTF-11	10/30/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-11	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-11	10/30/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-11	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	10/30/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
MKTF-11	10/30/2019	Lead, Total	0.00066	0.0025	0.000274	15000	mg/L
MKTF-11	10/30/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-11	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	10/30/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
MKTF-11	10/30/2019	Nickel, Total	0.028	0.01	0.004009	372000	mg/L
MKTF-11	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-11	10/30/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-11	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-11	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-11	3/3/2020	Arsenic, Dissolved	0.0086	0.005	0.0005	10000	mg/L
MKTF-11	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-11	3/3/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-11	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-11	3/3/2020	Uranium, Dissolved	0.0092	0.0025	0.00037	NA	mg/L
MKTF-11	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-11	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-11	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-11	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-11	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-11	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-11	3/3/2020	Magnesium, Dissolved	60	1	0.05	NA	mg/L
MKTF-11	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-11	3/3/2020	Nickel, Dissolved	0.028	0.01	0.004	372000	mg/L
MKTF-11	3/3/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
MKTF-11	3/3/2020	Silver, Dissolved	0.0033	0.005	0.00094	81200	mg/L
MKTF-11	3/3/2020	Zinc, Dissolved	0.006	0.01	0.0023	5960450	mg/L
MKTF-11	3/3/2020	Barium, Dissolved	2.9	0.01	0.0032	2000000	mg/L
MKTF-11	3/3/2020	Calcium, Dissolved	220	5	0.31	NA	mg/L
MKTF-11	3/3/2020	Iron, Dissolved	5.2	0.2	0.087	13821880	mg/L
MKTF-11	3/3/2020	Sodium, Dissolved	890	10	4.2	NA	mg/L
MKTF-11	3/3/2020	Manganese, Dissolved	4.8	0.01	0.0014	2017400	mg/L
MKTF-11	3/3/2020	Aluminum, Total	0.85	0.02	0.0025	19914000	mg/L
MKTF-11	3/3/2020	Beryllium, Total	0.00042	0.002	0.00028	4000	mg/L
MKTF-11	3/3/2020	Boron, Total	0.59	0.04	0.0045	3949	mg/L
MKTF-11	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-11	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-11	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-11	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	3/3/2020	Molybdenum, Total	0.0074	0.008	0.0067	98700	mg/L
MKTF-11	3/3/2020	Nickel, Total	0.032	0.01	0.004	372000	mg/L
MKTF-11	3/3/2020	Silver, Total	0.0043	0.005	0.0014	50000	mg/L
MKTF-11	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-11	3/3/2020	Manganese, Total	4.6	0.01	0.0014	2017000	mg/L
MKTF-11	3/3/2020	Iron, Total	8.5	0.2	0.087	13822000	mg/L
MKTF-11	3/3/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-11	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-11	3/3/2020	Arsenic, Total	0.012	0.001	0.00031	10000	mg/L
MKTF-11	3/3/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-11	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-11	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	3/3/2020	Uranium, Total	0.0089	0.0005	0.000085	30000	mg/L
MKTF-11	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-11	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-11	6/5/2014	Arsenic, Total	0.0064	0.005	0.00057	10000	mg/L
MKTF-11	6/5/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
MKTF-11	6/5/2014	Calcium, Total	110	5	0.27	NA	mg/L
MKTF-11	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-11	6/5/2014	Chromium, Total	0.006	0.006	0.0021	50000	mg/L
MKTF-11	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-11	6/5/2014	Iron, Total	11	1	0.31	13822000	mg/L
MKTF-11	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	6/5/2014	Potassium, Total	4.7	1	0.24	NA	mg/L
MKTF-11	6/5/2014	Magnesium, Total	31	1	0.024	NA	mg/L
MKTF-11	6/5/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
MKTF-11	6/5/2014	Sodium, Total	530	10	2.5	NA	mg/L
MKTF-11	6/5/2014	Lead, Total	0.022	0.005	0.00029	15000	mg/L
MKTF-11	6/5/2014	Selenium, Total	0.01	0.005	0.00074	50000	mg/L
MKTF-11	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-11	6/5/2014	Zinc, Total	0.036	0.01	0.0014	5960000	mg/L
MKTF-11	9/15/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-11	9/15/2014	Arsenic, Total	0.0086	0.005	0.00057	10000	mg/L
MKTF-11	9/15/2014	Barium, Total	1.1	0.01	0.0056	2000000	mg/L
MKTF-11	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-11	9/15/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-11	9/15/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-11	9/15/2014	Iron, Total	2.7	0.1	0.031	13822000	mg/L
MKTF-11	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	9/15/2014	Manganese, Total	2.4	0.01	0.0027	2017000	mg/L
MKTF-11	9/15/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-11	9/15/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-11	9/15/2014	Uranium, Total	0.004	0.001	0.00005	30000	mg/L
MKTF-11	9/15/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-11	11/13/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-11	11/13/2014	Arsenic, Total	ND	0.01	0.00011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	Barium, Total	1.5	0.01	0.001	2000000	mg/L
MKTF-11	11/13/2014	Calcium, Total	120	5	0.41	NA	mg/L
MKTF-11	11/13/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-11	11/13/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-11	11/13/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-11	11/13/2014	Iron, Total	3.4	0.1	0.031	13822000	mg/L
MKTF-11	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	11/13/2014	Potassium, Total	1.3	1	0.093	NA	mg/L
MKTF-11	11/13/2014	Magnesium, Total	34	1	0.018	NA	mg/L
MKTF-11	11/13/2014	Manganese, Total	3.2	0.01	0.0027	2017000	mg/L
MKTF-11	11/13/2014	Sodium, Total	660	10	3.9	NA	mg/L
MKTF-11	11/13/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-11	11/13/2014	Selenium, Total	0.0051	0.001	0.00015	50000	mg/L
MKTF-11	11/13/2014	Uranium, Total	0.0033	0.001	0.00005	30000	mg/L
MKTF-11	11/13/2014	Zinc, Total	0.019	0.01	0.0014	5960000	mg/L
MKTF-11	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	3/16/2015	Arsenic, Total	0.0086	0.001	0.00044	10000	mg/L
MKTF-11	3/16/2015	Barium, Total	1.9	0.01	0.0037	2000000	mg/L
MKTF-11	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-11	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	3/16/2015	Iron, Total	10	0.4	0.14	13822000	mg/L
MKTF-11	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	3/16/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-11	3/16/2015	Lead, Total	0.0068	0.001	0.000069	15000	mg/L
MKTF-11	3/16/2015	Selenium, Total	0.006	0.001	0.00012	50000	mg/L
MKTF-11	3/16/2015	Uranium, Total	0.0021	0.001	0.0000081	30000	mg/L
MKTF-11	3/16/2015	Zinc, Total	0.024	0.01	0.0036	5960000	mg/L
MKTF-11	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-11	6/4/2015	Barium, Total	2.7	0.01	0.0048	2000000	mg/L
MKTF-11	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-11	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-11	6/4/2015	Iron, Total	9.9	0.4	0.15	13822000	mg/L
MKTF-11	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	6/4/2015	Manganese, Total	3	0.01	0.0013	2017000	mg/L
MKTF-11	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-11	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-11	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-11	6/4/2015	Zinc, Total	0.018	0.01	0.0028	5960000	mg/L
MKTF-11	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	8/18/2015	Arsenic, Total	0.0091	0.001	0.00029	10000	mg/L
MKTF-11	8/18/2015	Barium, Total	2.4	0.01	0.0053	2000000	mg/L
MKTF-11	8/18/2015	Calcium, Total	170	5	0.28	NA	mg/L
MKTF-11	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	8/18/2015	Iron, Total	14	1	0.36	13822000	mg/L
MKTF-11	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	8/18/2015	Magnesium, Total	48	1	0.039	NA	mg/L
MKTF-11	8/18/2015	Manganese, Total	4	0.01	0.0076	2017000	mg/L
MKTF-11	8/18/2015	Sodium, Total	810	10	0.72	NA	mg/L
MKTF-11	8/18/2015	Lead, Total	0.0071	0.0005	0.000047	15000	mg/L
MKTF-11	8/18/2015	Selenium, Total	0.003	0.001	0.00012	50000	mg/L
MKTF-11	8/18/2015	Uranium, Total	0.0026	0.0005	0.0000049	30000	mg/L
MKTF-11	8/18/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-11	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-11	11/3/2015	Arsenic, Total	0.0084	0.001	0.000065	10000	mg/L
MKTF-11	11/3/2015	Barium, Total	4	0.01	0.0066	2000000	mg/L
MKTF-11	11/3/2015	Calcium, Total	190	5	1.3	NA	mg/L
MKTF-11	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-11	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-11	11/3/2015	Iron, Total	12	0.4	0.18	13822000	mg/L
MKTF-11	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	11/3/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	11/3/2015	Magnesium, Total	49	1	0.013	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/3/2015	Manganese, Total	3.6	0.01	0.0016	2017000	mg/L
MKTF-11	11/3/2015	Sodium, Total	620	20	1.9	NA	mg/L
MKTF-11	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-11	11/3/2015	Selenium, Total	0.0064	0.001	0.00019	50000	mg/L
MKTF-11	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-11	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-11	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	2/29/2016	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-11	2/29/2016	Barium, Total	3.9	0.01	0.0053	2000000	mg/L
MKTF-11	2/29/2016	Calcium, Total	240	10	2.6	NA	mg/L
MKTF-11	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	2/29/2016	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-11	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	2/29/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	2/29/2016	Magnesium, Total	67	1	0.013	NA	mg/L
MKTF-11	2/29/2016	Manganese, Total	6.4	0.04	0.03	2017000	mg/L
MKTF-11	2/29/2016	Sodium, Total	880	10	0.96	NA	mg/L
MKTF-11	2/29/2016	Lead, Total	0.0027	0.0025	0.00024	15000	mg/L
MKTF-11	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-11	2/29/2016	Uranium, Total	0.0054	0.0025	0.000025	30000	mg/L
MKTF-11	2/29/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-11	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	6/9/2016	Arsenic, Total	0.012	0.001	0.00029	10000	mg/L
MKTF-11	6/9/2016	Barium, Total	3.4	0.01	0.0053	2000000	mg/L
MKTF-11	6/9/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-11	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	6/9/2016	Iron, Total	8.1	0.2	0.072	13822000	mg/L
MKTF-11	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	6/9/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-11	6/9/2016	Magnesium, Total	48	1	0.013	NA	mg/L
MKTF-11	6/9/2016	Manganese, Total	4	0.01	0.0076	2017000	mg/L
MKTF-11	6/9/2016	Sodium, Total	800	10	0.96	NA	mg/L
MKTF-11	6/9/2016	Lead, Total	0.0013	0.0005	0.000047	15000	mg/L
MKTF-11	6/9/2016	Selenium, Total	0.0031	0.005	0.00062	50000	mg/L
MKTF-11	6/9/2016	Uranium, Total	0.0091	0.0005	0.0000049	30000	mg/L
MKTF-11	6/9/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-11	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	9/11/2016	Arsenic, Total	0.013	0.001	0.00021	10000	mg/L
MKTF-11	9/11/2016	Barium, Total	2.9	0.01	0.004	2000000	mg/L
MKTF-11	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-11	9/11/2016	Arsenic, Dissolved	0.014	0.001	0.00014	10000	mg/L
MKTF-11	9/11/2016	Barium, Dissolved	2.5	0.02	0.013	2000000	mg/L
MKTF-11	9/11/2016	Calcium, Dissolved	160	10	5	NA	mg/L
MKTF-11	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-11	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-11	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-11	9/11/2016	Iron, Dissolved	4.6	0.2	0.2	13821880	mg/L
MKTF-11	9/11/2016	Potassium, Dissolved	0.99	1	0.5	NA	mg/L
MKTF-11	9/11/2016	Magnesium, Dissolved	44	1	0.5	NA	mg/L
MKTF-11	9/11/2016	Manganese, Dissolved	3.8	0.02	0.0032	2017400	mg/L
MKTF-11	9/11/2016	Sodium, Dissolved	740	10	5	NA	mg/L
MKTF-11	9/11/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/11/2016	Selenium, Dissolved	0.0062	0.01	0.0021	50000	mg/L
MKTF-11	9/11/2016	Uranium, Dissolved	0.0044	0.0005	0.000051	NA	mg/L
MKTF-11	9/11/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-11	9/11/2016	Iron, Total	7.1	0.2	0.2	13822000	mg/L
MKTF-11	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	9/11/2016	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-11	9/11/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-11	9/11/2016	Selenium, Total	0.0054	0.01	0.0019	50000	mg/L
MKTF-11	9/11/2016	Uranium, Total	0.0065	0.0005	0.00017	30000	mg/L
MKTF-11	9/11/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	11/2/2016	Arsenic, Total	0.014	0.001	0.00021	10000	mg/L
MKTF-11	11/2/2016	Barium, Total	2.7	0.02	0.0079	2000000	mg/L
MKTF-11	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-11	11/2/2016	Arsenic, Dissolved	0.013	0.001	0.00014	10000	mg/L
MKTF-11	11/2/2016	Barium, Dissolved	2.6	0.01	0.0066	2000000	mg/L
MKTF-11	11/2/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-11	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-11	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-11	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-11	11/2/2016	Iron, Dissolved	5.4	0.2	0.2	13821880	mg/L
MKTF-11	11/2/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-11	11/2/2016	Magnesium, Dissolved	48	1	0.5	NA	mg/L
MKTF-11	11/2/2016	Manganese, Dissolved	3.9	0.01	0.0016	2017400	mg/L
MKTF-11	11/2/2016	Sodium, Dissolved	790	10	5	NA	mg/L
MKTF-11	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/2/2016	Selenium, Dissolved	0.0046	0.001	0.00021	50000	mg/L
MKTF-11	11/2/2016	Uranium, Dissolved	0.0059	0.0005	0.000051	NA	mg/L
MKTF-11	11/2/2016	Zinc, Dissolved	0.0038	0.01	0.0028	5960450	mg/L
MKTF-11	11/2/2016	Iron, Total	8.4	0.2	0.2	13822000	mg/L
MKTF-11	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	11/2/2016	Manganese, Total	4	0.02	0.0027	2017000	mg/L
MKTF-11	11/2/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-11	11/2/2016	Selenium, Total	0.005	0.01	0.0019	50000	mg/L
MKTF-11	11/2/2016	Uranium, Total	0.0065	0.0005	0.00017	30000	mg/L
MKTF-11	11/2/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-11	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	3/2/2017	Arsenic, Total	0.019	0.005	0.0011	10000	mg/L
MKTF-11	3/2/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-11	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	3/2/2017	Silver, Dissolved	0.0014	0.005	0.00088	81200	mg/L
MKTF-11	3/2/2017	Arsenic, Dissolved	0.018	0.001	0.00014	10000	mg/L
MKTF-11	3/2/2017	Barium, Dissolved	2.2	0.02	0.0085	2000000	mg/L
MKTF-11	3/2/2017	Calcium, Dissolved	130	10	5	NA	mg/L
MKTF-11	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-11	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	3/2/2017	Iron, Dissolved	5.1	0.2	0.2	13821880	mg/L
MKTF-11	3/2/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
MKTF-11	3/2/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-11	3/2/2017	Manganese, Dissolved	3	0.02	0.0038	2017400	mg/L
MKTF-11	3/2/2017	Sodium, Dissolved	690	10	5	NA	mg/L
MKTF-11	3/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	3/2/2017	Selenium, Dissolved	0.0035	0.001	0.00021	50000	mg/L
MKTF-11	3/2/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
MKTF-11	3/2/2017	Iron, Total	6.7	0.2	0.2	13822000	mg/L
MKTF-11	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-11	3/2/2017	Manganese, Total	3.1	0.01	0.0014	2017000	mg/L
MKTF-11	3/2/2017	Lead, Total	0.00063	0.0025	0.00041	15000	mg/L
MKTF-11	3/2/2017	Selenium, Total	0.0037	0.005	0.00094	50000	mg/L
MKTF-11	3/2/2017	Zinc, Total	0.0038	0.01	0.0027	5960000	mg/L
MKTF-11	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-11	6/8/2017	Arsenic, Total	0.014	0.001	0.0003	10000	mg/L
MKTF-11	6/8/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-11	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-11	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-11	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-11	6/8/2017	Arsenic, Dissolved	0.014	0.001	0.00018	10000	mg/L
MKTF-11	6/8/2017	Barium, Dissolved	2.1	0.02	0.0085	2000000	mg/L
MKTF-11	6/8/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-11	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-11	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/8/2017	Iron, Dissolved	5.1	0.2	0.16	13821880	mg/L
MKTF-11	6/8/2017	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
MKTF-11	6/8/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-11	6/8/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-11	6/8/2017	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-11	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	6/8/2017	Selenium, Dissolved	0.0046	0.001	0.00039	50000	mg/L
MKTF-11	6/8/2017	Uranium, Dissolved	0.003	0.0005	0.00005	NA	mg/L
MKTF-11	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-11	6/8/2017	Iron, Total	6.1	0.2	0.1	13822000	mg/L
MKTF-11	6/8/2017	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
MKTF-11	6/8/2017	Manganese, Total	2.7	0.02	0.011	2017000	mg/L
MKTF-11	6/8/2017	Lead, Total	0.00084	0.0005	0.000095	15000	mg/L
MKTF-11	6/8/2017	Selenium, Total	0.0031	0.001	0.00071	50000	mg/L
MKTF-11	6/8/2017	Uranium, Total	0.003	0.0005	0.00015	30000	mg/L
MKTF-11	6/8/2017	Zinc, Total	0.0055	0.01	0.0028	5960000	mg/L
MKTF-11	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	9/26/2017	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-11	9/26/2017	Barium, Total	3.1	0.01	0.0047	2000000	mg/L
MKTF-11	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-11	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	9/26/2017	Arsenic, Dissolved	0.011	0.005	0.00089	10000	mg/L
MKTF-11	9/26/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-11	9/26/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-11	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	9/26/2017	Iron, Dissolved	6.8	0.2	0.16	13821880	mg/L
MKTF-11	9/26/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-11	9/26/2017	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-11	9/26/2017	Manganese, Dissolved	3.1	0.02	0.0039	2017400	mg/L
MKTF-11	9/26/2017	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-11	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/26/2017	Selenium, Dissolved	0.0042	0.005	0.0019	50000	mg/L
MKTF-11	9/26/2017	Zinc, Dissolved	0.03	0.01	0.0021	5960450	mg/L
MKTF-11	9/26/2017	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-11	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-11	9/26/2017	Manganese, Total	3.3	0.01	0.0055	2017000	mg/L
MKTF-11	9/26/2017	Lead, Total	0.0034	0.0005	0.000095	15000	mg/L
MKTF-11	9/26/2017	Selenium, Total	0.0063	0.005	0.0036	50000	mg/L
MKTF-11	9/26/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-11	11/28/2017	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
MKTF-11	11/28/2017	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	11/28/2017	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-11	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	11/28/2017	Arsenic, Dissolved	0.013	0.005	0.0021	10000	mg/L
MKTF-11	11/28/2017	Barium, Dissolved	2.8	0.01	0.0049	2000000	mg/L
MKTF-11	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-11	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	11/28/2017	Iron, Dissolved	5.8	0.2	0.16	13821880	mg/L
MKTF-11	11/28/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-11	11/28/2017	Magnesium, Dissolved	43	1	0.25	NA	mg/L
MKTF-11	11/28/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-11	11/28/2017	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-11	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-11	11/28/2017	Uranium, Dissolved	0.0056	0.0005	0.000096	NA	mg/L
MKTF-11	11/28/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-11	11/28/2017	Iron, Total	7.6	0.2	0.1	13822000	mg/L
MKTF-11	11/28/2017	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-11	11/28/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	11/28/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	Uranium, Total	0.0054	0.0025	0.00077	30000	mg/L
MKTF-11	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	2/8/2018	Silver, Total	0.003	0.005	0.0012	50000	mg/L
MKTF-11	2/8/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-11	2/8/2018	Barium, Total	2.6	0.01	0.005	2000000	mg/L
MKTF-11	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	2/8/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
MKTF-11	2/8/2018	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
MKTF-11	2/8/2018	Barium, Dissolved	2.4	0.01	0.0049	2000000	mg/L
MKTF-11	2/8/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-11	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	2/8/2018	Iron, Dissolved	6.1	0.2	0.16	13821880	mg/L
MKTF-11	2/8/2018	Potassium, Dissolved	0.92	1	0.11	NA	mg/L
MKTF-11	2/8/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-11	2/8/2018	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-11	2/8/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-11	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	2/8/2018	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
MKTF-11	2/8/2018	Uranium, Dissolved	0.0042	0.0005	0.000096	NA	mg/L
MKTF-11	2/8/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
MKTF-11	2/8/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-11	2/8/2018	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-11	2/8/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-11	2/8/2018	Lead, Total	0.00066	0.0005	0.00023	15000	mg/L
MKTF-11	2/8/2018	Selenium, Total	0.0039	0.001	0.00098	50000	mg/L
MKTF-11	2/8/2018	Uranium, Total	0.0047	0.0005	0.000068	30000	mg/L
MKTF-11	2/8/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-11	5/2/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	5/2/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	5/2/2018	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-11	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	5/2/2018	Copper, Total	0.0054	0.006	0.0041	790000	mg/L
MKTF-11	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	5/2/2018	Arsenic, Dissolved	0.015	0.005	0.0021	10000	mg/L
MKTF-11	5/2/2018	Barium, Dissolved	2.5	0.01	0.0049	2000000	mg/L
MKTF-11	5/2/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-11	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	5/2/2018	Iron, Dissolved	6.2	0.2	0.16	13821880	mg/L
MKTF-11	5/2/2018	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-11	5/2/2018	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-11	5/2/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-11	5/2/2018	Sodium, Dissolved	810	10	1.6	NA	mg/L
MKTF-11	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	5/2/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-11	5/2/2018	Uranium, Dissolved	0.0045	0.0005	0.000096	NA	mg/L
MKTF-11	5/2/2018	Zinc, Dissolved	0.0091	0.01	0.0021	5960450	mg/L
MKTF-11	5/2/2018	Iron, Total	7.8	0.2	0.1	13822000	mg/L
MKTF-11	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-11	5/2/2018	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
MKTF-11	5/2/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	5/2/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-11	5/2/2018	Uranium, Total	0.0042	0.0025	0.00034	30000	mg/L
MKTF-11	5/2/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	9/4/2018	Silver, Total	0.0041	0.005	0.0012	50000	mg/L
MKTF-11	9/4/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	9/4/2018	Barium, Total	2.9	0.02	0.01	2000000	mg/L
MKTF-11	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	9/4/2018	Silver, Dissolved	0.0044	0.005	0.0018	81200	mg/L
MKTF-11	9/4/2018	Arsenic, Dissolved	0.013	0.001	0.00042	10000	mg/L
MKTF-11	9/4/2018	Barium, Dissolved	3	0.02	0.0099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	Calcium, Dissolved	190	10	0.78	NA	mg/L
MKTF-11	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	9/4/2018	Iron, Dissolved	5.2	0.2	0.16	13821880	mg/L
MKTF-11	9/4/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-11	9/4/2018	Magnesium, Dissolved	52	1	0.25	NA	mg/L
MKTF-11	9/4/2018	Manganese, Dissolved	4.1	0.02	0.0039	2017400	mg/L
MKTF-11	9/4/2018	Sodium, Dissolved	830	10	1.6	NA	mg/L
MKTF-11	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-11	9/4/2018	Uranium, Dissolved	0.006	0.0005	0.000096	NA	mg/L
MKTF-11	9/4/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-11	9/4/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-11	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	9/4/2018	Manganese, Total	4	0.02	0.011	2017000	mg/L
MKTF-11	9/4/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	9/4/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-11	9/4/2018	Uranium, Total	0.0068	0.0025	0.00034	30000	mg/L
MKTF-11	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	11/20/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
MKTF-11	11/20/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
MKTF-11	11/20/2018	Barium, Total	3.3	0.01	0.005	2000000	mg/L
MKTF-11	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	11/20/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-11	11/20/2018	Arsenic, Dissolved	0.0098	0.001	0.00042	10000	mg/L
MKTF-11	11/20/2018	Barium, Dissolved	3.2	0.02	0.0099	2000000	mg/L
MKTF-11	11/20/2018	Calcium, Dissolved	200	10	0.78	NA	mg/L
MKTF-11	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	11/20/2018	Iron, Dissolved	3.8	0.2	0.16	13821880	mg/L
MKTF-11	11/20/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-11	11/20/2018	Magnesium, Dissolved	54	1	0.25	NA	mg/L
MKTF-11	11/20/2018	Manganese, Dissolved	4	0.02	0.0039	2017400	mg/L
MKTF-11	11/20/2018	Sodium, Dissolved	880	10	1.6	NA	mg/L
MKTF-11	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-11	11/20/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
MKTF-11	11/20/2018	Iron, Total	5.9	0.2	0.1	13822000	mg/L
MKTF-11	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	11/20/2018	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-11	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-11	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-11	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-13	3/15/2017	Arsenic, Total	0.0056	0.005	0.0011	10000	mg/L
MKTF-13	3/15/2017	Barium, Total	5	0.01	0.004	2000000	mg/L
MKTF-13	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-13	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-13	3/15/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-13	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-13	3/15/2017	Arsenic, Dissolved	0.0055	0.001	0.00018	10000	mg/L
MKTF-13	3/15/2017	Barium, Dissolved	4.7	0.01	0.0043	2000000	mg/L
MKTF-13	3/15/2017	Calcium, Dissolved	200	5	2.5	NA	mg/L
MKTF-13	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-13	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	3/15/2017	Iron, Dissolved	18	0.4	0.4	13821880	mg/L
MKTF-13	3/15/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-13	3/15/2017	Magnesium, Dissolved	38	1	0.5	NA	mg/L
MKTF-13	3/15/2017	Manganese, Dissolved	3.9	0.01	0.0019	2017400	mg/L
MKTF-13	3/15/2017	Sodium, Dissolved	160	5	2.5	NA	mg/L
MKTF-13	3/15/2017	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-13	3/15/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-13	3/15/2017	Uranium, Dissolved	0.00034	0.0005	0.00005	NA	mg/L
MKTF-13	3/15/2017	Zinc, Dissolved	0.034	0.01	0.0011	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/15/2017	Iron, Total	18	0.4	0.4	13822000	mg/L
MKTF-13	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-13	3/15/2017	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-13	3/15/2017	Lead, Total	0.0021	0.0005	0.000081	15000	mg/L
MKTF-13	3/15/2017	Selenium, Total	0.0075	0.01	0.0019	50000	mg/L
MKTF-13	3/15/2017	Uranium, Total	0.00073	0.0005	0.00017	30000	mg/L
MKTF-13	3/15/2017	Zinc, Total	0.0048	0.01	0.0027	5960000	mg/L
MKTF-13	5/10/2018	Silver, Total	0.0038	0.005	0.0012	50000	mg/L
MKTF-13	5/10/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-13	5/10/2018	Barium, Total	5.7	0.02	0.01	2000000	mg/L
MKTF-13	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-13	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	5/10/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-13	5/10/2018	Arsenic, Dissolved	0.0031	0.001	0.00042	10000	mg/L
MKTF-13	5/10/2018	Barium, Dissolved	5.7	0.02	0.0099	2000000	mg/L
MKTF-13	5/10/2018	Calcium, Dissolved	230	5	0.39	NA	mg/L
MKTF-13	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	5/10/2018	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-13	5/10/2018	Potassium, Dissolved	0.26	1	0.11	NA	mg/L
MKTF-13	5/10/2018	Magnesium, Dissolved	39	1	0.25	NA	mg/L
MKTF-13	5/10/2018	Manganese, Dissolved	4.6	0.01	0.002	2017400	mg/L
MKTF-13	5/10/2018	Sodium, Dissolved	170	10	1.6	NA	mg/L
MKTF-13	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-13	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-13	5/10/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
MKTF-13	5/10/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-13	5/10/2018	Iron, Total	17	1	0.51	13822000	mg/L
MKTF-13	5/10/2018	Mercury, Total	0.000046	0.0002	0.000037	2000	mg/L
MKTF-13	5/10/2018	Manganese, Total	4.6	0.02	0.011	2017000	mg/L
MKTF-13	5/10/2018	Lead, Total	0.00067	0.0005	0.00023	15000	mg/L
MKTF-13	5/10/2018	Selenium, Total	0.0031	0.001	0.00098	50000	mg/L
MKTF-13	5/10/2018	Uranium, Total	0.00043	0.0005	0.000068	30000	mg/L
MKTF-13	5/10/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	8/30/2018	Silver, Total	0.0042	0.005	0.0012	50000	mg/L
MKTF-13	8/30/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
MKTF-13	8/30/2018	Barium, Total	5.8	0.04	0.02	2000000	mg/L
MKTF-13	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-13	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	8/30/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-13	8/30/2018	Arsenic, Dissolved	0.0034	0.001	0.00042	10000	mg/L
MKTF-13	8/30/2018	Barium, Dissolved	5.8	0.02	0.0099	2000000	mg/L
MKTF-13	8/30/2018	Calcium, Dissolved	240	10	0.78	NA	mg/L
MKTF-13	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	8/30/2018	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-13	8/30/2018	Potassium, Dissolved	0.35	1	0.11	NA	mg/L
MKTF-13	8/30/2018	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-13	8/30/2018	Manganese, Dissolved	5.1	0.02	0.0039	2017400	mg/L
MKTF-13	8/30/2018	Sodium, Dissolved	160	5	0.82	NA	mg/L
MKTF-13	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-13	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-13	8/30/2018	Uranium, Dissolved	0.00031	0.0005	0.000096	NA	mg/L
MKTF-13	8/30/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-13	8/30/2018	Iron, Total	19	0.4	0.2	13822000	mg/L
MKTF-13	8/30/2018	Mercury, Total	0.000038	0.0002	0.000038	2000	mg/L
MKTF-13	8/30/2018	Manganese, Total	4.7	0.04	0.022	2017000	mg/L
MKTF-13	8/30/2018	Lead, Total	0.00063	0.0005	0.00023	15000	mg/L
MKTF-13	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-13	8/30/2018	Uranium, Total	0.00029	0.0005	0.000068	30000	mg/L
MKTF-13	8/30/2018	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
MKTF-13	11/28/2018	Silver, Total	0.006	0.005	0.0012	50000	mg/L
MKTF-13	11/28/2018	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
MKTF-13	11/28/2018	Barium, Total	5.9	0.04	0.02	2000000	mg/L
MKTF-13	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-13	11/28/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-13	11/28/2018	Barium, Dissolved	5.6	0.04	0.02	2000000	mg/L
MKTF-13	11/28/2018	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-13	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	11/28/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-13	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-13	11/28/2018	Magnesium, Dissolved	43	1	0.25	NA	mg/L
MKTF-13	11/28/2018	Manganese, Dissolved	4.4	0.01	0.002	2017400	mg/L
MKTF-13	11/28/2018	Sodium, Dissolved	180	5	0.82	NA	mg/L
MKTF-13	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-13	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-13	11/28/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
MKTF-13	11/28/2018	Iron, Total	16	0.4	0.2	13822000	mg/L
MKTF-13	11/28/2018	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-13	11/28/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-13	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-13	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-13	10/29/2019	Selenium, Total	0.00026	0.001	0.000171	50000	mg/L
MKTF-13	10/29/2019	Aluminum, Total	0.45	0.02	0.002488	19914000	mg/L
MKTF-13	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-13	10/29/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L
MKTF-13	10/29/2019	Barium, Total	6.8	0.04	0.012968	2000000	mg/L
MKTF-13	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-13	10/29/2019	Boron, Total	0.22	0.04	0.004531	3949	mg/L
MKTF-13	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-13	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-13	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-13	10/29/2019	Iron, Total	20	0.4	0.174937	13822000	mg/L
MKTF-13	10/29/2019	Lead, Total	0.00061	0.0005	0.000055	15000	mg/L
MKTF-13	10/29/2019	Manganese, Total	4.7	0.01	0.00145	2017000	mg/L
MKTF-13	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-13	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-13	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-13	10/29/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-13	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-13	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-13	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-13	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-13	10/29/2019	Arsenic, Dissolved	0.0034	0.001	0.000101	10000	mg/L
MKTF-13	10/29/2019	Barium, Dissolved	6	0.04	0.012968	2000000	mg/L
MKTF-13	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	10/29/2019	Boron, Dissolved	0.21	0.04	0.004531	3949110	mg/L
MKTF-13	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	10/29/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
MKTF-13	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	10/29/2019	Iron, Dissolved	15	0.4	0.174937	13821880	mg/L
MKTF-13	10/29/2019	Lead, Dissolved	0.00018	0.0005	0.000055	NA	mg/L
MKTF-13	10/29/2019	Magnesium, Dissolved	46	1	0.05029	NA	mg/L
MKTF-13	10/29/2019	Manganese, Dissolved	4.6	0.01	0.00145	2017400	mg/L
MKTF-13	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-13	10/29/2019	Potassium, Dissolved	0.26	1	0.162288	NA	mg/L
MKTF-13	10/29/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-13	10/29/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-13	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-13	10/29/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-13	3/26/2019	Aluminum, Dissolved	0.037	0.02	0.002488	19913930	mg/L
MKTF-13	3/26/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-13	3/26/2019	Arsenic, Dissolved	0.0034	0.001	0.000101	10000	mg/L
MKTF-13	3/26/2019	Barium, Dissolved	5.8	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	3/26/2019	Boron, Dissolved	0.2	0.04	0.004531	3949110	mg/L
MKTF-13	3/26/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	3/26/2019	Calcium, Dissolved	280	5	0.309446	NA	mg/L
MKTF-13	3/26/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	3/26/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	3/26/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	3/26/2019	Iron, Dissolved	24	1	0.437344	13821880	mg/L
MKTF-13	3/26/2019	Lead, Dissolved	0.00027	0.0005	0.000055	NA	mg/L
MKTF-13	3/26/2019	Magnesium, Dissolved	53	1	0.05029	NA	mg/L
MKTF-13	3/26/2019	Manganese, Dissolved	5.1	0.02	0.002899	2017400	mg/L
MKTF-13	3/26/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	3/26/2019	Nickel, Dissolved	0.0052	0.01	0.004009	372000	mg/L
MKTF-13	3/26/2019	Potassium, Dissolved	0.24	1	0.162288	NA	mg/L
MKTF-13	3/26/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
MKTF-13	3/26/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
MKTF-13	3/26/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L
MKTF-13	3/26/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-13	3/26/2019	Uranium, Dissolved	0.00057	0.0005	0.000075	NA	mg/L
MKTF-13	3/26/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-13	3/26/2019	Aluminum, Total	6.6	0.2	0.045644	19914000	mg/L
MKTF-13	3/26/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
MKTF-13	3/26/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
MKTF-13	3/26/2019	Barium, Total	5.8	0.02	0.004884	2000000	mg/L
MKTF-13	3/26/2019	Beryllium, Total	0.00084	0.002	0.000224	4000	mg/L
MKTF-13	3/26/2019	Boron, Total	0.2	0.04	0.001821	3949	mg/L
MKTF-13	3/26/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	3/26/2019	Calcium, Total	250	5	0.137145	NA	mg/L
MKTF-13	3/26/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
MKTF-13	3/26/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-13	3/26/2019	Iron, Total	25	1	0.302628	13822000	mg/L
MKTF-13	3/26/2019	Lead, Total	0.0067	0.0005	0.000026	15000	mg/L
MKTF-13	3/26/2019	Manganese, Total	4.7	0.01	0.000299	2017000	mg/L
MKTF-13	3/26/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
MKTF-13	3/26/2019	Molybdenum, Total	ND	0.008	0.002075	98700	mg/L
MKTF-13	3/26/2019	Nickel, Total	0.0088	0.01	0.001491	372000	mg/L
MKTF-13	3/26/2019	Selenium, Total	0.00049	0.001	0.000478	50000	mg/L
MKTF-13	3/26/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-13	3/26/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-13	3/26/2019	Uranium, Total	0.00075	0.0005	0.000085	30000	mg/L
MKTF-13	3/26/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-13	5/9/2019	Aluminum, Dissolved	0.051	0.02	0.002488	19913930	mg/L
MKTF-13	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-13	5/9/2019	Arsenic, Dissolved	0.0039	0.005	0.000504	10000	mg/L
MKTF-13	5/9/2019	Barium, Dissolved	5.5	0.04	0.012968	2000000	mg/L
MKTF-13	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	5/9/2019	Boron, Dissolved	0.17	0.04	0.004531	3949110	mg/L
MKTF-13	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	5/9/2019	Calcium, Dissolved	280	5	0.309446	NA	mg/L
MKTF-13	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	5/9/2019	Iron, Dissolved	25	1	0.437344	13821880	mg/L
MKTF-13	5/9/2019	Lead, Dissolved	0.0004	0.0025	0.000274	NA	mg/L
MKTF-13	5/9/2019	Magnesium, Dissolved	52	1	0.05029	NA	mg/L
MKTF-13	5/9/2019	Manganese, Dissolved	5.3	0.04	0.005799	2017400	mg/L
MKTF-13	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	5/9/2019	Nickel, Dissolved	0.004	0.01	0.004009	372000	mg/L
MKTF-13	5/9/2019	Potassium, Dissolved	0.21	1	0.162288	NA	mg/L
MKTF-13	5/9/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-13	5/9/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-13	5/9/2019	Sodium, Dissolved	210	5	2.080881	NA	mg/L
MKTF-13	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-13	5/9/2019	Uranium, Dissolved	0.00044	0.0025	0.000374	NA	mg/L
MKTF-13	5/9/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-13	5/9/2019	Aluminum, Total	20	1	0.124414	19914000	mg/L
MKTF-13	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-13	5/9/2019	Arsenic, Total	0.0057	0.001	0.000312	10000	mg/L
MKTF-13	5/9/2019	Barium, Total	6.4	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	Beryllium, Total	0.0018	0.002	0.000284	4000	mg/L
MKTF-13	5/9/2019	Boron, Total	0.18	0.04	0.004531	3949	mg/L
MKTF-13	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	5/9/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-13	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-13	5/9/2019	Copper, Total	0.0068	0.006	0.004072	790000	mg/L
MKTF-13	5/9/2019	Iron, Total	35	1	0.437344	13822000	mg/L
MKTF-13	5/9/2019	Lead, Total	0.016	0.0005	0.000055	15000	mg/L
MKTF-13	5/9/2019	Manganese, Total	6.1	0.02	0.002899	2017000	mg/L
MKTF-13	5/9/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-13	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-13	5/9/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-13	5/9/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-13	5/9/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-13	5/9/2019	Thallium, Total	0.0001	0.0005	0.000052	2000	mg/L
MKTF-13	5/9/2019	Uranium, Total	0.001	0.0005	0.000085	30000	mg/L
MKTF-13	5/9/2019	Zinc, Total	0.022	0.01	0.005772	5960000	mg/L
MKTF-15	5/13/2019	Aluminum, Dissolved	0.045	0.02	0.002488	19913930	mg/L
MKTF-15	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-15	5/13/2019	Arsenic, Dissolved	0.0059	0.005	0.000504	10000	mg/L
MKTF-15	5/13/2019	Barium, Dissolved	17	0.1	0.032419	2000000	mg/L
MKTF-15	5/13/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-15	5/13/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-15	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-15	5/13/2019	Calcium, Dissolved	670	50	3.094457	NA	mg/L
MKTF-15	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-15	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-15	5/13/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-15	5/13/2019	Iron, Dissolved	26	1	0.437344	13821880	mg/L
MKTF-15	5/13/2019	Lead, Dissolved	0.00041	0.0025	0.000274	NA	mg/L
MKTF-15	5/13/2019	Magnesium, Dissolved	180	5	0.251452	NA	mg/L
MKTF-15	5/13/2019	Manganese, Dissolved	8.2	0.1	0.014497	2017400	mg/L
MKTF-15	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-15	5/13/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-15	5/13/2019	Potassium, Dissolved	2.4	1	0.162288	NA	mg/L
MKTF-15	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-15	5/13/2019	Silver, Dissolved	0.009	0.005	0.000942	81200	mg/L
MKTF-15	5/13/2019	Sodium, Dissolved	1600	50	20.808815	NA	mg/L
MKTF-15	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-15	5/13/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-15	5/13/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
MKTF-15	5/13/2019	Aluminum, Total	1.6	0.04	0.004977	19914000	mg/L
MKTF-15	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-15	5/13/2019	Arsenic, Total	0.0081	0.001	0.000312	10000	mg/L
MKTF-15	5/13/2019	Barium, Total	19	0.1	0.032419	2000000	mg/L
MKTF-15	5/13/2019	Beryllium, Total	0.00089	0.002	0.000284	4000	mg/L
MKTF-15	5/13/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-15	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-15	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-15	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-15	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-15	5/13/2019	Iron, Total	31	1	0.437344	13822000	mg/L
MKTF-15	5/13/2019	Lead, Total	0.0058	0.0005	0.000055	15000	mg/L
MKTF-15	5/13/2019	Manganese, Total	8.4	0.02	0.002899	2017000	mg/L
MKTF-15	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-15	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-15	5/13/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
MKTF-15	5/13/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-15	5/13/2019	Silver, Total	0.0064	0.005	0.001418	50000	mg/L
MKTF-15	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-15	5/13/2019	Uranium, Total	0.00058	0.0005	0.000085	30000	mg/L
MKTF-15	5/13/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
MKTF-15	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-15	6/5/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-15	6/5/2014	Barium, Total	25	0.1	0.056	2000000	mg/L
MKTF-15	6/5/2014	Calcium, Total	880	10	0.53	NA	mg/L
MKTF-15	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-15	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-15	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/5/2014	Iron, Total	11	1	0.31	13822000	mg/L
MKTF-15	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-15	6/5/2014	Potassium, Total	14	1	0.24	NA	mg/L
MKTF-15	6/5/2014	Magnesium, Total	260	10	0.24	NA	mg/L
MKTF-15	6/5/2014	Manganese, Total	7.5	0.1	0.027	2017000	mg/L
MKTF-15	6/5/2014	Sodium, Total	2400	50	13	NA	mg/L
MKTF-15	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-15	6/5/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-15	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-15	6/5/2014	Zinc, Total	0.011	0.01	0.0014	5960000	mg/L
MKTF-15	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-15	9/17/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-15	9/17/2014	Barium, Total	27	0.2	0.11	2000000	mg/L
MKTF-15	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-15	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-15	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-15	9/17/2014	Iron, Total	13	2	0.62	13822000	mg/L
MKTF-15	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-15	9/17/2014	Manganese, Total	9	0.02	0.0055	2017000	mg/L
MKTF-15	9/17/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-15	9/17/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-15	9/17/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-15	9/17/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-15	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	9/11/2016	Arsenic, Total	0.0022	0.005	0.0011	10000	mg/L
MKTF-15	9/11/2016	Barium, Total	23	0.1	0.04	2000000	mg/L
MKTF-15	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-15	9/11/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-15	9/11/2016	Barium, Dissolved	23	0.1	0.066	2000000	mg/L
MKTF-15	9/11/2016	Calcium, Dissolved	660	50	25	NA	mg/L
MKTF-15	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-15	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-15	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-15	9/11/2016	Iron, Dissolved	32	1	1	13821880	mg/L
MKTF-15	9/11/2016	Potassium, Dissolved	3	1	0.5	NA	mg/L
MKTF-15	9/11/2016	Magnesium, Dissolved	190	5	2.5	NA	mg/L
MKTF-15	9/11/2016	Manganese, Dissolved	7.6	0.1	0.016	2017400	mg/L
MKTF-15	9/11/2016	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	9/11/2016	Lead, Dissolved	0.00048	0.0005	0.00017	NA	mg/L
MKTF-15	9/11/2016	Selenium, Dissolved	0.0091	0.02	0.0042	50000	mg/L
MKTF-15	9/11/2016	Uranium, Dissolved	0.00023	0.0005	0.000051	NA	mg/L
MKTF-15	9/11/2016	Zinc, Dissolved	0.04	0.01	0.0028	5960450	mg/L
MKTF-15	9/11/2016	Iron, Total	35	1	1	13822000	mg/L
MKTF-15	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-15	9/11/2016	Manganese, Total	7.7	0.1	0.014	2017000	mg/L
MKTF-15	9/11/2016	Lead, Total	0.0059	0.0025	0.00041	15000	mg/L
MKTF-15	9/11/2016	Selenium, Total	0.0054	0.01	0.0019	50000	mg/L
MKTF-15	9/11/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-15	9/11/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-15	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	11/2/2016	Arsenic, Total	0.0037	0.005	0.0011	10000	mg/L
MKTF-15	11/2/2016	Barium, Total	22	0.1	0.04	2000000	mg/L
MKTF-15	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-15	11/2/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-15	11/2/2016	Barium, Dissolved	20	0.1	0.066	2000000	mg/L
MKTF-15	11/2/2016	Calcium, Dissolved	590	10	5	NA	mg/L
MKTF-15	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-15	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-15	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-15	11/2/2016	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-15	11/2/2016	Potassium, Dissolved	3.4	1	0.5	NA	mg/L
MKTF-15	11/2/2016	Magnesium, Dissolved	180	5	2.5	NA	mg/L
MKTF-15	11/2/2016	Manganese, Dissolved	6.5	0.02	0.0032	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/2/2016	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	11/2/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	11/2/2016	Selenium, Dissolved	0.0069	0.01	0.0021	50000	mg/L
MKTF-15	11/2/2016	Uranium, Dissolved	ND	0.0025	0.00026	NA	mg/L
MKTF-15	11/2/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
MKTF-15	11/2/2016	Iron, Total	34	1	1	13822000	mg/L
MKTF-15	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-15	11/2/2016	Manganese, Total	6.8	0.02	0.0027	2017000	mg/L
MKTF-15	11/2/2016	Lead, Total	0.006	0.0025	0.00041	15000	mg/L
MKTF-15	11/2/2016	Selenium, Total	0.0069	0.005	0.00094	50000	mg/L
MKTF-15	11/2/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-15	11/2/2016	Zinc, Total	0.028	0.01	0.0027	5960000	mg/L
MKTF-15	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	3/2/2017	Arsenic, Total	0.0045	0.005	0.0011	10000	mg/L
MKTF-15	3/2/2017	Barium, Total	29	0.1	0.04	2000000	mg/L
MKTF-15	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	3/2/2017	Silver, Dissolved	0.0066	0.005	0.00088	81200	mg/L
MKTF-15	3/2/2017	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-15	3/2/2017	Barium, Dissolved	28	0.1	0.043	2000000	mg/L
MKTF-15	3/2/2017	Calcium, Dissolved	780	50	25	NA	mg/L
MKTF-15	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-15	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	3/2/2017	Iron, Dissolved	45	1	1	13821880	mg/L
MKTF-15	3/2/2017	Potassium, Dissolved	2.8	1	0.5	NA	mg/L
MKTF-15	3/2/2017	Magnesium, Dissolved	210	5	2.5	NA	mg/L
MKTF-15	3/2/2017	Manganese, Dissolved	9.5	0.1	0.019	2017400	mg/L
MKTF-15	3/2/2017	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	3/2/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	3/2/2017	Selenium, Dissolved	0.0086	0.01	0.0021	50000	mg/L
MKTF-15	3/2/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-15	3/2/2017	Iron, Total	49	1	1	13822000	mg/L
MKTF-15	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-15	3/2/2017	Manganese, Total	9.6	0.02	0.0027	2017000	mg/L
MKTF-15	3/2/2017	Lead, Total	0.0097	0.005	0.00081	15000	mg/L
MKTF-15	3/2/2017	Selenium, Total	0.0058	0.01	0.0019	50000	mg/L
MKTF-15	3/2/2017	Zinc, Total	0.027	0.01	0.0027	5960000	mg/L
MKTF-15	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-15	6/8/2017	Arsenic, Total	0.0072	0.005	0.0015	10000	mg/L
MKTF-15	6/8/2017	Barium, Total	33	0.1	0.047	2000000	mg/L
MKTF-15	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	6/8/2017	Chromium, Total	0.0011	0.006	0.0011	50000	mg/L
MKTF-15	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-15	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-15	6/8/2017	Arsenic, Dissolved	0.0057	0.01	0.0018	10000	mg/L
MKTF-15	6/8/2017	Barium, Dissolved	31	0.1	0.043	2000000	mg/L
MKTF-15	6/8/2017	Calcium, Dissolved	920	10	0.78	NA	mg/L
MKTF-15	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-15	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	6/8/2017	Iron, Dissolved	54	2	1.6	13821880	mg/L
MKTF-15	6/8/2017	Potassium, Dissolved	2.9	1	0.11	NA	mg/L
MKTF-15	6/8/2017	Magnesium, Dissolved	260	10	2.5	NA	mg/L
MKTF-15	6/8/2017	Manganese, Dissolved	13	0.04	0.0077	2017400	mg/L
MKTF-15	6/8/2017	Sodium, Dissolved	1700	20	3.3	NA	mg/L
MKTF-15	6/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	6/8/2017	Selenium, Dissolved	0.0062	0.01	0.0039	50000	mg/L
MKTF-15	6/8/2017	Uranium, Dissolved	0.00057	0.0025	0.00025	NA	mg/L
MKTF-15	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-15	6/8/2017	Iron, Total	65	2	1	13822000	mg/L
MKTF-15	6/8/2017	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-15	6/8/2017	Manganese, Total	14	0.1	0.055	2017000	mg/L
MKTF-15	6/8/2017	Lead, Total	0.0098	0.0025	0.00048	15000	mg/L
MKTF-15	6/8/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-15	6/8/2017	Uranium, Total	0.0015	0.0025	0.00077	30000	mg/L
MKTF-15	6/8/2017	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-15	11/28/2017	Silver, Total	0.012	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/28/2017	Arsenic, Total	0.024	0.05	0.021	10000	mg/L
MKTF-15	11/28/2017	Barium, Total	47	0.1	0.05	2000000	mg/L
MKTF-15	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-15	11/28/2017	Silver, Dissolved	ND	0.1	0.037	81200	mg/L
MKTF-15	11/28/2017	Arsenic, Dissolved	0.0072	0.01	0.0042	10000	mg/L
MKTF-15	11/28/2017	Barium, Dissolved	44	0.1	0.049	2000000	mg/L
MKTF-15	11/28/2017	Calcium, Dissolved	1600	20	1.6	NA	mg/L
MKTF-15	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	11/28/2017	Iron, Dissolved	75	2	1.6	13821880	mg/L
MKTF-15	11/28/2017	Potassium, Dissolved	4.3	1	0.11	NA	mg/L
MKTF-15	11/28/2017	Magnesium, Dissolved	470	20	5	NA	mg/L
MKTF-15	11/28/2017	Manganese, Dissolved	23	0.1	0.02	2017400	mg/L
MKTF-15	11/28/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-15	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-15	11/28/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-15	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-15	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-15	11/28/2017	Iron, Total	78	2	1	13822000	mg/L
MKTF-15	11/28/2017	Manganese, Total	25	0.1	0.055	2017000	mg/L
MKTF-15	11/28/2017	Lead, Total	0.0037	0.0025	0.0011	15000	mg/L
MKTF-15	11/28/2017	Selenium, Total	0.0079	0.005	0.0049	50000	mg/L
MKTF-15	11/28/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
MKTF-15	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-15	5/2/2018	Silver, Total	0.0077	0.005	0.0012	50000	mg/L
MKTF-15	5/2/2018	Arsenic, Total	0.016	0.01	0.0041	10000	mg/L
MKTF-15	5/2/2018	Barium, Total	33	0.1	0.05	2000000	mg/L
MKTF-15	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	5/2/2018	Copper, Total	0.0075	0.006	0.0041	790000	mg/L
MKTF-15	5/2/2018	Silver, Dissolved	0.008	0.005	0.0018	81200	mg/L
MKTF-15	5/2/2018	Arsenic, Dissolved	0.01	0.01	0.0042	10000	mg/L
MKTF-15	5/2/2018	Barium, Dissolved	31	0.1	0.049	2000000	mg/L
MKTF-15	5/2/2018	Calcium, Dissolved	1200	50	3.9	NA	mg/L
MKTF-15	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	5/2/2018	Iron, Dissolved	46	1	0.82	13821880	mg/L
MKTF-15	5/2/2018	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
MKTF-15	5/2/2018	Magnesium, Dissolved	370	5	1.2	NA	mg/L
MKTF-15	5/2/2018	Manganese, Dissolved	17	0.1	0.02	2017400	mg/L
MKTF-15	5/2/2018	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-15	5/2/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-15	5/2/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-15	5/2/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
MKTF-15	5/2/2018	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
MKTF-15	5/2/2018	Iron, Total	53	2	1	13822000	mg/L
MKTF-15	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-15	5/2/2018	Manganese, Total	18	0.1	0.055	2017000	mg/L
MKTF-15	5/2/2018	Lead, Total	0.0044	0.005	0.0023	15000	mg/L
MKTF-15	5/2/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-15	5/2/2018	Uranium, Total	ND	0.005	0.00068	30000	mg/L
MKTF-15	5/2/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-15	8/28/2018	Silver, Total	0.019	0.005	0.0012	50000	mg/L
MKTF-15	8/28/2018	Arsenic, Total	0.0035	0.005	0.0021	10000	mg/L
MKTF-15	8/28/2018	Barium, Total	26	0.1	0.05	2000000	mg/L
MKTF-15	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-15	8/28/2018	Silver, Dissolved	0.02	0.005	0.0018	81200	mg/L
MKTF-15	8/28/2018	Arsenic, Dissolved	0.0055	0.005	0.0021	10000	mg/L
MKTF-15	8/28/2018	Barium, Dissolved	26	0.1	0.049	2000000	mg/L
MKTF-15	8/28/2018	Calcium, Dissolved	1100	20	1.6	NA	mg/L
MKTF-15	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Iron, Dissolved	36	1	0.82	13821880	mg/L
MKTF-15	8/28/2018	Potassium, Dissolved	3.7	1	0.11	NA	mg/L
MKTF-15	8/28/2018	Magnesium, Dissolved	300	5	1.2	NA	mg/L
MKTF-15	8/28/2018	Manganese, Dissolved	14	0.04	0.0078	2017400	mg/L
MKTF-15	8/28/2018	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-15	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-15	8/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-15	8/28/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-15	8/28/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-15	8/28/2018	Iron, Total	36	1	0.51	13822000	mg/L
MKTF-15	8/28/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
MKTF-15	8/28/2018	Manganese, Total	13	0.1	0.055	2017000	mg/L
MKTF-15	8/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-15	8/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-15	8/28/2018	Uranium, Total	ND	0.0025	0.00034	30000	mg/L
MKTF-15	8/28/2018	Zinc, Total	0.0045	0.01	0.0033	5960000	mg/L
MKTF-16	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-16	6/5/2014	Arsenic, Total	0.013	0.005	0.00057	10000	mg/L
MKTF-16	6/5/2014	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-16	6/5/2014	Calcium, Total	68	1	0.053	NA	mg/L
MKTF-16	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-16	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-16	6/5/2014	Iron, Total	7.9	0.2	0.062	13822000	mg/L
MKTF-16	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	6/5/2014	Potassium, Total	5.2	1	0.24	NA	mg/L
MKTF-16	6/5/2014	Magnesium, Total	17	1	0.024	NA	mg/L
MKTF-16	6/5/2014	Manganese, Total	1.3	0.01	0.0027	2017000	mg/L
MKTF-16	6/5/2014	Sodium, Total	740	10	2.5	NA	mg/L
MKTF-16	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-16	6/5/2014	Selenium, Total	0.017	0.005	0.00074	50000	mg/L
MKTF-16	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-16	6/5/2014	Zinc, Total	0.022	0.01	0.0014	5960000	mg/L
MKTF-16	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-16	9/17/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
MKTF-16	9/17/2014	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-16	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-16	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-16	9/17/2014	Iron, Total	7.3	0.2	0.062	13822000	mg/L
MKTF-16	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	9/17/2014	Manganese, Total	1.1	0.02	0.0055	2017000	mg/L
MKTF-16	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-16	9/17/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-16	9/17/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
MKTF-16	9/17/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
MKTF-16	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-16	11/18/2014	Arsenic, Total	0.01	0.005	0.0018	10000	mg/L
MKTF-16	11/18/2014	Barium, Total	1.1	0.01	0.0025	2000000	mg/L
MKTF-16	11/18/2014	Calcium, Total	62	1	0.082	NA	mg/L
MKTF-16	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-16	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-16	11/18/2014	Iron, Total	10	0.4	0.14	13822000	mg/L
MKTF-16	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	11/18/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
MKTF-16	11/18/2014	Magnesium, Total	16	1	0.018	NA	mg/L
MKTF-16	11/18/2014	Manganese, Total	1.3	0.01	0.0024	2017000	mg/L
MKTF-16	11/18/2014	Sodium, Total	840	10	3.9	NA	mg/L
MKTF-16	11/18/2014	Lead, Total	0.0042	0.001	0.00026	15000	mg/L
MKTF-16	11/18/2014	Selenium, Total	ND	0.05	0.0025	50000	mg/L
MKTF-16	11/18/2014	Uranium, Total	0.0016	0.001	0.0000072	30000	mg/L
MKTF-16	11/18/2014	Zinc, Total	0.05	0.01	0.0035	5960000	mg/L
MKTF-16	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-16	3/16/2015	Barium, Total	1	0.02	0.0073	2000000	mg/L
MKTF-16	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-16	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	3/16/2015	Copper, Total	0.023	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/16/2015	Iron, Total	7.2	0.2	0.072	13822000	mg/L
MKTF-16	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	3/16/2015	Manganese, Total	1.3	0.02	0.015	2017000	mg/L
MKTF-16	3/16/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
MKTF-16	3/16/2015	Selenium, Total	ND	0.02	0.0024	50000	mg/L
MKTF-16	3/16/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
MKTF-16	3/16/2015	Zinc, Total	0.035	0.01	0.0036	5960000	mg/L
MKTF-16	6/8/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-16	6/8/2015	Arsenic, Total	0.0097	0.005	0.0015	10000	mg/L
MKTF-16	6/8/2015	Barium, Total	2.2	0.01	0.0053	2000000	mg/L
MKTF-16	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	6/8/2015	Copper, Total	0.0091	0.006	0.0051	790000	mg/L
MKTF-16	6/8/2015	Iron, Total	12	0.4	0.14	13822000	mg/L
MKTF-16	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	6/8/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-16	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-16	6/8/2015	Selenium, Total	0.0072	0.005	0.00062	50000	mg/L
MKTF-16	6/8/2015	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-16	6/8/2015	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-16	8/23/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	8/23/2015	Arsenic, Total	0.014	0.01	0.0029	10000	mg/L
MKTF-16	8/23/2015	Barium, Total	3.9	0.02	0.011	2000000	mg/L
MKTF-16	8/23/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-16	8/23/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	8/23/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	8/23/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	8/23/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-16	8/23/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	8/23/2015	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-16	8/23/2015	Magnesium, Total	41	1	0.039	NA	mg/L
MKTF-16	8/23/2015	Manganese, Total	5.5	0.02	0.015	2017000	mg/L
MKTF-16	8/23/2015	Sodium, Total	1100	50	3.6	NA	mg/L
MKTF-16	8/23/2015	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
MKTF-16	8/23/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-16	8/23/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
MKTF-16	8/23/2015	Zinc, Total	0.01	0.01	0.0039	5960000	mg/L
MKTF-16	11/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	11/3/2015	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-16	11/3/2015	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-16	11/3/2015	Calcium, Total	150	10	2.6	NA	mg/L
MKTF-16	11/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	11/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	11/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	11/3/2015	Iron, Total	13	0.4	0.14	13822000	mg/L
MKTF-16	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	11/3/2015	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-16	11/3/2015	Magnesium, Total	39	1	0.013	NA	mg/L
MKTF-16	11/3/2015	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-16	11/3/2015	Sodium, Total	780	10	0.96	NA	mg/L
MKTF-16	11/3/2015	Lead, Total	0.0027	0.0005	0.000047	15000	mg/L
MKTF-16	11/3/2015	Selenium, Total	0.021	0.005	0.00062	50000	mg/L
MKTF-16	11/3/2015	Uranium, Total	0.00053	0.0005	0.0000049	30000	mg/L
MKTF-16	11/3/2015	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-16	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	2/29/2016	Arsenic, Total	0.0092	0.005	0.0015	10000	mg/L
MKTF-16	2/29/2016	Barium, Total	1.3	0.02	0.011	2000000	mg/L
MKTF-16	2/29/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-16	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	2/29/2016	Iron, Total	6.5	0.2	0.072	13822000	mg/L
MKTF-16	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	2/29/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-16	2/29/2016	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-16	2/29/2016	Manganese, Total	1.8	0.02	0.015	2017000	mg/L
MKTF-16	2/29/2016	Sodium, Total	710	10	0.96	NA	mg/L
MKTF-16	2/29/2016	Lead, Total	0.0031	0.0025	0.00024	15000	mg/L
MKTF-16	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-16	2/29/2016	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-16	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	9/12/2016	Arsenic, Total	0.014	0.005	0.0011	10000	mg/L
MKTF-16	9/12/2016	Barium, Total	0.72	0.002	0.00079	2000000	mg/L
MKTF-16	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	9/12/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-16	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-16	9/12/2016	Arsenic, Dissolved	0.014	0.001	0.00014	10000	mg/L
MKTF-16	9/12/2016	Barium, Dissolved	0.67	0.002	0.0013	2000000	mg/L
MKTF-16	9/12/2016	Calcium, Dissolved	47	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-16	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-16	9/12/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-16	9/12/2016	Iron, Dissolved	2.4	0.2	0.2	13821880	mg/L
MKTF-16	9/12/2016	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Manganese, Dissolved	0.94	0.002	0.00032	2017400	mg/L
MKTF-16	9/12/2016	Sodium, Dissolved	660	10	5	NA	mg/L
MKTF-16	9/12/2016	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-16	9/12/2016	Selenium, Dissolved	0.013	0.005	0.0011	50000	mg/L
MKTF-16	9/12/2016	Uranium, Dissolved	0.004	0.0005	0.000051	NA	mg/L
MKTF-16	9/12/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-16	9/12/2016	Iron, Total	4.6	0.1	0.1	13822000	mg/L
MKTF-16	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	9/12/2016	Manganese, Total	0.96	0.002	0.00027	2017000	mg/L
MKTF-16	9/12/2016	Lead, Total	0.0029	0.0005	0.000081	15000	mg/L
MKTF-16	9/12/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-16	9/12/2016	Uranium, Total	0.0067	0.0005	0.00017	30000	mg/L
MKTF-16	9/12/2016	Zinc, Total	0.022	0.01	0.0027	5960000	mg/L
MKTF-16	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	11/3/2016	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L
MKTF-16	11/3/2016	Barium, Total	0.67	0.002	0.00079	2000000	mg/L
MKTF-16	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	11/3/2016	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-16	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-16	11/3/2016	Arsenic, Dissolved	0.015	0.005	0.00069	10000	mg/L
MKTF-16	11/3/2016	Barium, Dissolved	0.69	0.002	0.0013	2000000	mg/L
MKTF-16	11/3/2016	Calcium, Dissolved	46	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-16	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-16	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-16	11/3/2016	Iron, Dissolved	2.2	0.1	0.1	13821880	mg/L
MKTF-16	11/3/2016	Potassium, Dissolved	0.93	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Manganese, Dissolved	0.87	0.002	0.00032	2017400	mg/L
MKTF-16	11/3/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-16	11/3/2016	Lead, Dissolved	0.00042	0.0005	0.00017	NA	mg/L
MKTF-16	11/3/2016	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
MKTF-16	11/3/2016	Uranium, Dissolved	0.0053	0.0005	0.000051	NA	mg/L
MKTF-16	11/3/2016	Zinc, Dissolved	0.0041	0.01	0.0028	5960450	mg/L
MKTF-16	11/3/2016	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-16	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	11/3/2016	Manganese, Total	0.86	0.002	0.00027	2017000	mg/L
MKTF-16	11/3/2016	Lead, Total	0.0034	0.0005	0.000081	15000	mg/L
MKTF-16	11/3/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-16	11/3/2016	Uranium, Total	0.0077	0.0005	0.00017	30000	mg/L
MKTF-16	11/3/2016	Zinc, Total	0.02	0.01	0.0027	5960000	mg/L
MKTF-16	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	3/14/2017	Arsenic, Total	0.014	0.005	0.0011	10000	mg/L
MKTF-16	3/14/2017	Barium, Total	1.9	0.01	0.004	2000000	mg/L
MKTF-16	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	3/14/2017	Copper, Total	0.0054	0.006	0.003	790000	mg/L
MKTF-16	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-16	3/14/2017	Arsenic, Dissolved	0.01	0.005	0.00089	10000	mg/L
MKTF-16	3/14/2017	Barium, Dissolved	1.9	0.01	0.0043	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	Calcium, Dissolved	77	5	2.5	NA	mg/L
MKTF-16	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-16	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	3/14/2017	Iron, Dissolved	4.7	0.2	0.2	13821880	mg/L
MKTF-16	3/14/2017	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-16	3/14/2017	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-16	3/14/2017	Manganese, Dissolved	1.8	0.01	0.0019	2017400	mg/L
MKTF-16	3/14/2017	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-16	3/14/2017	Lead, Dissolved	0.00078	0.0005	0.00017	NA	mg/L
MKTF-16	3/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-16	3/14/2017	Uranium, Dissolved	0.0012	0.0005	0.00005	NA	mg/L
MKTF-16	3/14/2017	Zinc, Dissolved	0.027	0.01	0.0011	5960450	mg/L
MKTF-16	3/14/2017	Iron, Total	6.3	0.2	0.2	13822000	mg/L
MKTF-16	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-16	3/14/2017	Manganese, Total	1.7	0.01	0.0014	2017000	mg/L
MKTF-16	3/14/2017	Lead, Total	0.0058	0.0025	0.00041	15000	mg/L
MKTF-16	3/14/2017	Selenium, Total	0.0081	0.02	0.0037	50000	mg/L
MKTF-16	3/14/2017	Uranium, Total	0.0024	0.0025	0.00087	30000	mg/L
MKTF-16	3/14/2017	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
MKTF-16	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-16	6/8/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-16	6/8/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-16	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	6/8/2017	Chromium, Total	0.0018	0.006	0.0011	50000	mg/L
MKTF-16	6/8/2017	Copper, Total	0.0022	0.006	0.0017	790000	mg/L
MKTF-16	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-16	6/8/2017	Arsenic, Dissolved	0.018	0.005	0.00089	10000	mg/L
MKTF-16	6/8/2017	Barium, Dissolved	2.3	0.02	0.0085	2000000	mg/L
MKTF-16	6/8/2017	Calcium, Dissolved	86	1	0.078	NA	mg/L
MKTF-16	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-16	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	6/8/2017	Iron, Dissolved	1.4	0.2	0.16	13821880	mg/L
MKTF-16	6/8/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-16	6/8/2017	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-16	6/8/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
MKTF-16	6/8/2017	Sodium, Dissolved	770	10	1.6	NA	mg/L
MKTF-16	6/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-16	6/8/2017	Selenium, Dissolved	0.018	0.005	0.0019	50000	mg/L
MKTF-16	6/8/2017	Uranium, Dissolved	0.0087	0.0025	0.00025	NA	mg/L
MKTF-16	6/8/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-16	6/8/2017	Iron, Total	3.4	0.2	0.1	13822000	mg/L
MKTF-16	6/8/2017	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-16	6/8/2017	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
MKTF-16	6/8/2017	Lead, Total	0.0033	0.0005	0.000095	15000	mg/L
MKTF-16	6/8/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
MKTF-16	6/8/2017	Uranium, Total	0.015	0.0005	0.00015	30000	mg/L
MKTF-16	6/8/2017	Zinc, Total	0.016	0.01	0.0028	5960000	mg/L
MKTF-16	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-16	9/26/2017	Arsenic, Total	0.016	0.005	0.0015	10000	mg/L
MKTF-16	9/26/2017	Barium, Total	2.7	0.01	0.0047	2000000	mg/L
MKTF-16	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	9/26/2017	Copper, Total	0.0021	0.006	0.0017	790000	mg/L
MKTF-16	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	9/26/2017	Arsenic, Dissolved	0.013	0.01	0.0018	10000	mg/L
MKTF-16	9/26/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-16	9/26/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-16	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	9/26/2017	Iron, Dissolved	8.8	0.2	0.16	13821880	mg/L
MKTF-16	9/26/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-16	9/26/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-16	9/26/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-16	9/26/2017	Sodium, Dissolved	820	10	1.6	NA	mg/L
MKTF-16	9/26/2017	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
MKTF-16	9/26/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-16	9/26/2017	Iron, Total	8.6	0.2	0.1	13822000	mg/L
MKTF-16	9/26/2017	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-16	9/26/2017	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-16	9/26/2017	Lead, Total	0.002	0.0005	0.000095	15000	mg/L
MKTF-16	9/26/2017	Selenium, Total	0.019	0.005	0.0036	50000	mg/L
MKTF-16	9/26/2017	Zinc, Total	0.0096	0.01	0.0033	5960000	mg/L
MKTF-16	11/29/2017	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-16	11/29/2017	Arsenic, Total	0.019	0.01	0.0041	10000	mg/L
MKTF-16	11/29/2017	Barium, Total	2.9	0.01	0.005	2000000	mg/L
MKTF-16	11/29/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	11/29/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	11/29/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-16	11/29/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	11/29/2017	Arsenic, Dissolved	0.015	0.01	0.0042	10000	mg/L
MKTF-16	11/29/2017	Barium, Dissolved	2.7	0.01	0.0049	2000000	mg/L
MKTF-16	11/29/2017	Calcium, Dissolved	97	5	0.39	NA	mg/L
MKTF-16	11/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	11/29/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	11/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	11/29/2017	Iron, Dissolved	3.5	0.1	0.082	13821880	mg/L
MKTF-16	11/29/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-16	11/29/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-16	11/29/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
MKTF-16	11/29/2017	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-16	11/29/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	11/29/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-16	11/29/2017	Uranium, Dissolved	0.0046	0.0025	0.00048	NA	mg/L
MKTF-16	11/29/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-16	11/29/2017	Iron, Total	5.2	0.2	0.1	13822000	mg/L
MKTF-16	11/29/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-16	11/29/2017	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-16	11/29/2017	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
MKTF-16	11/29/2017	Uranium, Total	0.0066	0.0005	0.00015	30000	mg/L
MKTF-16	11/29/2017	Zinc, Total	0.0079	0.01	0.0033	5960000	mg/L
MKTF-16	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-16	2/15/2018	Arsenic, Total	0.0071	0.001	0.00041	10000	mg/L
MKTF-16	2/15/2018	Barium, Total	1.6	0.01	0.005	2000000	mg/L
MKTF-16	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	2/15/2018	Chromium, Total	0.023	0.006	0.0018	50000	mg/L
MKTF-16	2/15/2018	Copper, Total	0.078	0.006	0.0041	790000	mg/L
MKTF-16	2/15/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-16	2/15/2018	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
MKTF-16	2/15/2018	Barium, Dissolved	0.67	0.002	0.00099	2000000	mg/L
MKTF-16	2/15/2018	Calcium, Dissolved	64	1	0.078	NA	mg/L
MKTF-16	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	2/15/2018	Copper, Dissolved	0.019	0.006	0.0032	790000	mg/L
MKTF-16	2/15/2018	Iron, Dissolved	0.095	0.02	0.016	13821880	mg/L
MKTF-16	2/15/2018	Potassium, Dissolved	17	1	0.11	NA	mg/L
MKTF-16	2/15/2018	Magnesium, Dissolved	6.1	1	0.25	NA	mg/L
MKTF-16	2/15/2018	Manganese, Dissolved	0.37	0.002	0.00039	2017400	mg/L
MKTF-16	2/15/2018	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-16	2/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	2/15/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-16	2/15/2018	Uranium, Dissolved	0.002	0.0025	0.00048	NA	mg/L
MKTF-16	2/15/2018	Zinc, Dissolved	0.072	0.01	0.0021	5960450	mg/L
MKTF-16	2/15/2018	Iron, Total	18	1	0.51	13822000	mg/L
MKTF-16	2/15/2018	Mercury, Total	0.00044	0.0002	0.000037	2000	mg/L
MKTF-16	2/15/2018	Manganese, Total	0.8	0.01	0.0055	2017000	mg/L
MKTF-16	2/15/2018	Lead, Total	0.025	0.0025	0.0011	15000	mg/L
MKTF-16	2/15/2018	Selenium, Total	0.0025	0.001	0.00098	50000	mg/L
MKTF-16	2/15/2018	Uranium, Total	0.006	0.0005	0.000068	30000	mg/L
MKTF-16	2/15/2018	Zinc, Total	0.29	0.05	0.016	5960000	mg/L
MKTF-16	5/11/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-16	5/11/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-16	5/11/2018	Barium, Total	2.3	0.01	0.005	2000000	mg/L
MKTF-16	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	5/11/2018	Chromium, Total	0.0031	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	Copper, Total	0.0069	0.006	0.0041	790000	mg/L
MKTF-16	5/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	5/11/2018	Arsenic, Dissolved	0.01	0.005	0.0021	10000	mg/L
MKTF-16	5/11/2018	Barium, Dissolved	2.1	0.02	0.0099	2000000	mg/L
MKTF-16	5/11/2018	Calcium, Dissolved	88	5	0.39	NA	mg/L
MKTF-16	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	5/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	5/11/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
MKTF-16	5/11/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-16	5/11/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-16	5/11/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-16	5/11/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-16	5/11/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	5/11/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-16	5/11/2018	Uranium, Dissolved	0.0067	0.005	0.00096	NA	mg/L
MKTF-16	5/11/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-16	5/11/2018	Iron, Total	4.3	0.2	0.1	13822000	mg/L
MKTF-16	5/11/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-16	5/11/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-16	5/11/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-16	5/11/2018	Selenium, Total	0.0046	0.001	0.00098	50000	mg/L
MKTF-16	5/11/2018	Uranium, Total	0.0093	0.0005	0.000068	30000	mg/L
MKTF-16	5/11/2018	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
MKTF-16	8/31/2018	Silver, Total	0.0016	0.005	0.0012	50000	mg/L
MKTF-16	8/31/2018	Arsenic, Total	0.019	0.005	0.0021	10000	mg/L
MKTF-16	8/31/2018	Barium, Total	1.9	0.01	0.005	2000000	mg/L
MKTF-16	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	8/31/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-16	8/31/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	8/31/2018	Arsenic, Dissolved	0.018	0.001	0.00042	10000	mg/L
MKTF-16	8/31/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-16	8/31/2018	Calcium, Dissolved	85	1	0.078	NA	mg/L
MKTF-16	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	8/31/2018	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
MKTF-16	8/31/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-16	8/31/2018	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-16	8/31/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-16	8/31/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-16	8/31/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-16	8/31/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-16	8/31/2018	Uranium, Dissolved	0.0062	0.0005	0.000096	NA	mg/L
MKTF-16	8/31/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
MKTF-16	8/31/2018	Iron, Total	3.6	0.1	0.051	13822000	mg/L
MKTF-16	8/31/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	8/31/2018	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-16	8/31/2018	Lead, Total	0.0019	0.0025	0.0011	15000	mg/L
MKTF-16	8/31/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-16	8/31/2018	Uranium, Total	0.0074	0.0025	0.00034	30000	mg/L
MKTF-16	8/31/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-16	11/29/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
MKTF-16	11/29/2018	Arsenic, Total	0.018	0.001	0.00041	10000	mg/L
MKTF-16	11/29/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-16	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	11/29/2018	Copper, Total	0.0065	0.006	0.0041	790000	mg/L
MKTF-16	11/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	11/29/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-16	11/29/2018	Barium, Dissolved	1.4	0.02	0.0099	2000000	mg/L
MKTF-16	11/29/2018	Calcium, Dissolved	72	10	0.78	NA	mg/L
MKTF-16	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	11/29/2018	Iron, Dissolved	2.7	0.2	0.16	13821880	mg/L
MKTF-16	11/29/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-16	11/29/2018	Magnesium, Dissolved	19	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-16	11/29/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-16	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-16	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-16	11/29/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-16	11/29/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-16	11/29/2018	Mercury, Total	0.000065	0.0002	0.000038	2000	mg/L
MKTF-16	11/29/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
MKTF-16	11/29/2018	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-16	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-16	11/29/2018	Zinc, Total	0.023	0.01	0.0033	5960000	mg/L
MKTF-16	2/20/2019	Antimony, Dissolved	0.00026	0.001	0.000204	6000	mg/L
MKTF-16	2/20/2019	Arsenic, Dissolved	0.011	0.001	0.000068	10000	mg/L
MKTF-16	2/20/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
MKTF-16	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-16	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	2/20/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-16	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	2/20/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
MKTF-16	2/20/2019	Iron, Dissolved	2	0.1	0.043734	13821880	mg/L
MKTF-16	2/20/2019	Lead, Dissolved	0.00023	0.0005	0.000047	NA	mg/L
MKTF-16	2/20/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
MKTF-16	2/20/2019	Manganese, Dissolved	1.7	0.01	0.00145	2017400	mg/L
MKTF-16	2/20/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-16	2/20/2019	Selenium, Dissolved	0.00038	0.001	0.000203	50000	mg/L
MKTF-16	2/20/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-16	2/20/2019	Sodium, Dissolved	640	10	4.161763	NA	mg/L
MKTF-16	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-16	2/20/2019	Uranium, Dissolved	0.0016	0.0005	0.00003	NA	mg/L
MKTF-16	2/20/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-16	2/20/2019	Antimony, Total	0.00041	0.001	0.000389	6000	mg/L
MKTF-16	2/20/2019	Arsenic, Total	0.014	0.001	0.000312	10000	mg/L
MKTF-16	2/20/2019	Barium, Total	2.4	0.01	0.003242	2000000	mg/L
MKTF-16	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	2/20/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
MKTF-16	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	2/20/2019	Iron, Total	5.8	0.2	0.087469	13822000	mg/L
MKTF-16	2/20/2019	Lead, Total	0.005	0.0005	0.000055	15000	mg/L
MKTF-16	2/20/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
MKTF-16	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-16	2/20/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
MKTF-16	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-16	2/20/2019	Uranium, Total	0.0023	0.0005	0.000085	30000	mg/L
MKTF-16	2/20/2019	Zinc, Total	0.027	0.01	0.005772	5960000	mg/L
MKTF-16	5/14/2019	Aluminum, Dissolved	0.026	0.02	0.002488	19913930	mg/L
MKTF-16	5/14/2019	Antimony, Dissolved	0.0069	0.005	0.001947	6000	mg/L
MKTF-16	5/14/2019	Arsenic, Dissolved	0.0093	0.005	0.000504	10000	mg/L
MKTF-16	5/14/2019	Barium, Dissolved	2.5	0.02	0.006484	2000000	mg/L
MKTF-16	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-16	5/14/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-16	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	5/14/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
MKTF-16	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	5/14/2019	Iron, Dissolved	5.8	0.2	0.087469	13821880	mg/L
MKTF-16	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-16	5/14/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-16	5/14/2019	Manganese, Dissolved	2.6	0.02	0.002899	2017400	mg/L
MKTF-16	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	5/14/2019	Nickel, Dissolved	0.056	0.01	0.004009	372000	mg/L
MKTF-16	5/14/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-16	5/14/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-16	5/14/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-16	5/14/2019	Sodium, Dissolved	760	10	4.161763	NA	mg/L
MKTF-16	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-16	5/14/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/14/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-16	5/14/2019	Aluminum, Total	0.69	0.02	0.002488	19914000	mg/L
MKTF-16	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-16	5/14/2019	Arsenic, Total	0.012	0.001	0.000312	10000	mg/L
MKTF-16	5/14/2019	Barium, Total	3.5	0.01	0.003242	2000000	mg/L
MKTF-16	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	5/14/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-16	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	5/14/2019	Iron, Total	5.8	0.2	0.087469	13822000	mg/L
MKTF-16	5/14/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-16	5/14/2019	Manganese, Total	3	0.01	0.00145	2017000	mg/L
MKTF-16	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	5/14/2019	Nickel, Total	0.054	0.01	0.004009	372000	mg/L
MKTF-16	5/14/2019	Selenium, Total	0.00076	0.001	0.000478	50000	mg/L
MKTF-16	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-16	5/14/2019	Thallium, Total	0.000062	0.0005	0.000052	2000	mg/L
MKTF-16	5/14/2019	Uranium, Total	0.0028	0.0005	0.000085	30000	mg/L
MKTF-16	5/14/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-16	8/30/2019	Aluminum, Total	0.027	0.02	0.002488	19914000	mg/L
MKTF-16	8/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-16	8/30/2019	Arsenic, Total	0.021	0.001	0.000312	10000	mg/L
MKTF-16	8/30/2019	Barium, Total	6.7	0.02	0.006484	2000000	mg/L
MKTF-16	8/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	8/30/2019	Boron, Total	0.7	0.04	0.004531	3949	mg/L
MKTF-16	8/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	8/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	8/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	8/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	8/30/2019	Iron, Total	24	1	0.437344	13822000	mg/L
MKTF-16	8/30/2019	Lead, Total	0.00063	0.0025	0.000274	15000	mg/L
MKTF-16	8/30/2019	Manganese, Total	6.8	0.02	0.002899	2017000	mg/L
MKTF-16	8/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	8/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	8/30/2019	Nickel, Total	0.044	0.01	0.004009	372000	mg/L
MKTF-16	8/30/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-16	8/30/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-16	8/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-16	8/30/2019	Uranium, Total	0.0027	0.0025	0.000424	30000	mg/L
MKTF-16	8/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-16	8/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-16	8/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-16	8/30/2019	Arsenic, Dissolved	0.018	0.005	0.000504	10000	mg/L
MKTF-16	8/30/2019	Barium, Dissolved	6.9	0.1	0.032419	2000000	mg/L
MKTF-16	8/30/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-16	8/30/2019	Boron, Dissolved	0.7	0.04	0.004531	3949110	mg/L
MKTF-16	8/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	8/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	8/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	8/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	8/30/2019	Iron, Dissolved	21	1	0.437344	13821880	mg/L
MKTF-16	8/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-16	8/30/2019	Manganese, Dissolved	7.1	0.1	0.014497	2017400	mg/L
MKTF-16	8/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	8/30/2019	Nickel, Dissolved	0.046	0.01	0.004009	372000	mg/L
MKTF-16	8/30/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-16	8/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-16	8/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-16	8/30/2019	Uranium, Dissolved	0.0024	0.0025	0.000374	NA	mg/L
MKTF-16	8/30/2019	Zinc, Dissolved	0.0086	0.01	0.002252	5960450	mg/L
MKTF-16	10/30/2019	Aluminum, Dissolved	0.027	0.02	0.002488	19913930	mg/L
MKTF-16	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-16	10/30/2019	Arsenic, Dissolved	0.012	0.001	0.000101	10000	mg/L
MKTF-16	10/30/2019	Barium, Dissolved	4.3	0.01	0.003242	2000000	mg/L
MKTF-16	10/30/2019	Beryllium, Dissolved	0.00049	0.002	0.000284	4000	mg/L
MKTF-16	10/30/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	10/30/2019	Calcium, Dissolved	210	5	0.309446	NA	mg/L
MKTF-16	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	10/30/2019	Iron, Dissolved	15	0.4	0.174937	13821880	mg/L
MKTF-16	10/30/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
MKTF-16	10/30/2019	Magnesium, Dissolved	57	1	0.05029	NA	mg/L
MKTF-16	10/30/2019	Manganese, Dissolved	5.5	0.04	0.005799	2017400	mg/L
MKTF-16	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	10/30/2019	Nickel, Dissolved	0.047	0.01	0.004009	372000	mg/L
MKTF-16	10/30/2019	Potassium, Dissolved	1.9	1	0.162288	NA	mg/L
MKTF-16	10/30/2019	Selenium, Dissolved	0.00087	0.001	0.000171	50000	mg/L
MKTF-16	10/30/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-16	10/30/2019	Sodium, Dissolved	1100	20	8.323526	NA	mg/L
MKTF-16	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-16	10/30/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-16	10/30/2019	Aluminum, Total	2.3	0.1	0.012441	19914000	mg/L
MKTF-16	10/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-16	10/30/2019	Arsenic, Total	0.012	0.01	0.003122	10000	mg/L
MKTF-16	10/30/2019	Barium, Total	4.7	0.01	0.003242	2000000	mg/L
MKTF-16	10/30/2019	Beryllium, Total	0.00049	0.002	0.000284	4000	mg/L
MKTF-16	10/30/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-16	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	10/30/2019	Iron, Total	17	0.4	0.174937	13822000	mg/L
MKTF-16	10/30/2019	Lead, Total	0.0037	0.005	0.000549	15000	mg/L
MKTF-16	10/30/2019	Manganese, Total	4.9	0.01	0.00145	2017000	mg/L
MKTF-16	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	10/30/2019	Nickel, Total	0.043	0.01	0.004009	372000	mg/L
MKTF-16	10/30/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-16	10/30/2019	Silver, Total	0.0024	0.005	0.001418	50000	mg/L
MKTF-16	10/30/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-16	10/30/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-16	12/28/2020	Arsenic, Total Recoverable	**10.7**	1	0.286	10	ug/L
MKTF-16	12/28/2020	Lead, Total Recoverable	2.41	1	0.133	15	ug/L
MKTF-16	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-16	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-16	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-16	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-16	12/28/2020	Aluminum, Total	2.44	0.2	0.051	19914000	mg/L
MKTF-16	12/28/2020	Barium, Total	3.29	0.01	0.003	2000000	mg/L
MKTF-16	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-16	12/28/2020	Boron, Total	0.439	0.1	0.022	3949	mg/L
MKTF-16	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-16	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-16	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-16	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-16	12/28/2020	Iron, Total	12.4	0.2	0.075	13822000	mg/L
MKTF-16	12/28/2020	Manganese, Total	2.68	0.01	0.003	2017000	mg/L
MKTF-16	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-16	12/28/2020	Nickel, Total	0.0191	0.006	0.003	372000	mg/L
MKTF-16	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-16	12/28/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-16	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-16	12/23/2020	Aluminum, Total	2.59	0.2	0.051	19914000	mg/L
MKTF-16	12/23/2020	Barium, Total	2.72	0.01	0.003	2000000	mg/L
MKTF-16	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-16	12/23/2020	Boron, Total	0.407	0.1	0.022	3949	mg/L
MKTF-16	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-16	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-16	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-16	12/23/2020	Iron, Total	10.7	0.2	0.075	13822000	mg/L
MKTF-16	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-16	12/23/2020	Nickel, Total	0.0183	0.006	0.003	372000	mg/L
MKTF-16	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	12/23/2020	Zinc, Total	0.0238	0.02	0.008	5960000	mg/L
MKTF-16	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-16	12/23/2020	Manganese, Total	2.54	0.01	0.003	2017000	mg/L
MKTF-16	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-17	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	8/20/2019	Antimony, Dissolved	0.00053	0.001	0.000389	6000	mg/L
MKTF-17	8/20/2019	Arsenic, Dissolved	0.0047	0.001	0.000101	10000	mg/L
MKTF-17	8/20/2019	Barium, Dissolved	0.98	0.002	0.000648	2000000	mg/L
MKTF-17	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	8/20/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
MKTF-17	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	8/20/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-17	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	8/20/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
MKTF-17	8/20/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
MKTF-17	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-17	8/20/2019	Magnesium, Dissolved	25	1	0.05029	NA	mg/L
MKTF-17	8/20/2019	Manganese, Dissolved	2.8	0.01	0.00145	2017400	mg/L
MKTF-17	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	8/20/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-17	8/20/2019	Potassium, Dissolved	0.6	1	0.162288	NA	mg/L
MKTF-17	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-17	8/20/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
MKTF-17	8/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-17	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-17	8/20/2019	Uranium, Dissolved	0.0033	0.0005	0.000075	NA	mg/L
MKTF-17	8/20/2019	Zinc, Dissolved	0.0026	0.01	0.002252	5960450	mg/L
MKTF-17	8/20/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-17	8/20/2019	Antimony, Total	0.0007	0.001	0.000389	6000	mg/L
MKTF-17	8/20/2019	Arsenic, Total	0.007	0.001	0.000312	10000	mg/L
MKTF-17	8/20/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
MKTF-17	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-17	8/20/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-17	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-17	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-17	8/20/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
MKTF-17	8/20/2019	Lead, Total	0.0005	0.0005	0.000055	15000	mg/L
MKTF-17	8/20/2019	Manganese, Total	3	0.01	0.00145	2017000	mg/L
MKTF-17	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	8/20/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-17	8/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	8/20/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-17	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-17	8/20/2019	Uranium, Total	0.0036	0.0005	0.000085	30000	mg/L
MKTF-17	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-17	10/29/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	10/29/2019	Selenium, Total	0.00018	0.001	0.000171	50000	mg/L
MKTF-17	10/29/2019	Aluminum, Total	2.3	0.2	0.024883	19914000	mg/L
MKTF-17	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-17	10/29/2019	Arsenic, Total	0.0068	0.001	0.000312	10000	mg/L
MKTF-17	10/29/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
MKTF-17	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-17	10/29/2019	Boron, Total	0.44	0.04	0.004531	3949	mg/L
MKTF-17	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-17	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-17	10/29/2019	Iron, Total	4.8	0.2	0.087469	13822000	mg/L
MKTF-17	10/29/2019	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-17	10/29/2019	Manganese, Total	3.4	0.01	0.00145	2017000	mg/L
MKTF-17	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-17	10/29/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-17	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	Zinc, Total	0.0078	0.01	0.005772	5960000	mg/L
MKTF-17	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	10/29/2019	Antimony, Dissolved	0.0007	0.001	0.000389	6000	mg/L
MKTF-17	10/29/2019	Arsenic, Dissolved	0.0044	0.001	0.000101	10000	mg/L
MKTF-17	10/29/2019	Barium, Dissolved	1.6	0.01	0.003242	2000000	mg/L
MKTF-17	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	10/29/2019	Boron, Dissolved	0.42	0.04	0.004531	3949110	mg/L
MKTF-17	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-17	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-17	10/29/2019	Iron, Dissolved	0.45	0.02	0.008747	13821880	mg/L
MKTF-17	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-17	10/29/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-17	10/29/2019	Manganese, Dissolved	3.5	0.01	0.00145	2017400	mg/L
MKTF-17	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-17	10/29/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
MKTF-17	10/29/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-17	10/29/2019	Sodium, Dissolved	270	5	2.080881	NA	mg/L
MKTF-17	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-17	10/29/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-17	5/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-17	5/9/2019	Arsenic, Dissolved	0.0035	0.005	0.000504	10000	mg/L
MKTF-17	5/9/2019	Barium, Dissolved	0.96	0.002	0.000648	2000000	mg/L
MKTF-17	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	5/9/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-17	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	5/9/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
MKTF-17	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-17	5/9/2019	Iron, Dissolved	0.27	0.02	0.008747	13821880	mg/L
MKTF-17	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-17	5/9/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-17	5/9/2019	Manganese, Dissolved	3	0.01	0.00145	2017400	mg/L
MKTF-17	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-17	5/9/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-17	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-17	5/9/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L
MKTF-17	5/9/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-17	5/9/2019	Thallium, Dissolved	0.00026	0.0025	0.000242	2000	mg/L
MKTF-17	5/9/2019	Uranium, Dissolved	0.0037	0.0025	0.000374	NA	mg/L
MKTF-17	5/9/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MKTF-17	5/9/2019	Aluminum, Total	6.9	0.2	0.024883	19914000	mg/L
MKTF-17	5/9/2019	Antimony, Total	0.0084	0.001	0.000389	6000	mg/L
MKTF-17	5/9/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-17	5/9/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
MKTF-17	5/9/2019	Beryllium, Total	0.00036	0.002	0.000284	4000	mg/L
MKTF-17	5/9/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-17	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	5/9/2019	Chromium, Total	0.0018	0.006	0.001533	50000	mg/L
MKTF-17	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	5/9/2019	Copper, Total	0.0067	0.006	0.004072	790000	mg/L
MKTF-17	5/9/2019	Iron, Total	5.4	0.2	0.087469	13822000	mg/L
MKTF-17	5/9/2019	Lead, Total	0.0031	0.0005	0.000055	15000	mg/L
MKTF-17	5/9/2019	Manganese, Total	3.1	0.01	0.00145	2017000	mg/L
MKTF-17	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	5/9/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-17	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	5/9/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-17	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-17	5/9/2019	Uranium, Total	0.0044	0.0005	0.000085	30000	mg/L
MKTF-17	5/9/2019	Zinc, Total	0.032	0.01	0.005772	5960000	mg/L
MKTF-17	6/16/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/16/2014	Arsenic, Total	0.0054	0.005	0.00057	10000	mg/L
MKTF-17	6/16/2014	Barium, Total	0.24	0.002	0.00021	2000000	mg/L
MKTF-17	6/16/2014	Calcium, Total	89	1	0.082	NA	mg/L
MKTF-17	6/16/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-17	6/16/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-17	6/16/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-17	6/16/2014	Iron, Total	0.94	0.02	0.0062	13822000	mg/L
MKTF-17	6/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	6/16/2014	Potassium, Total	2.6	1	0.093	NA	mg/L
MKTF-17	6/16/2014	Magnesium, Total	17	1	0.018	NA	mg/L
MKTF-17	6/16/2014	Manganese, Total	3.3	0.01	0.0027	2017000	mg/L
MKTF-17	6/16/2014	Sodium, Total	240	5	2	NA	mg/L
MKTF-17	6/16/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-17	6/16/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-17	6/16/2014	Uranium, Total	0.022	0.005	0.00025	30000	mg/L
MKTF-17	6/16/2014	Zinc, Total	0.14	0.01	0.0014	5960000	mg/L
MKTF-17	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-17	9/18/2014	Arsenic, Total	0.0053	0.005	0.00057	10000	mg/L
MKTF-17	9/18/2014	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-17	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-17	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-17	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-17	9/18/2014	Iron, Total	0.27	0.02	0.0062	13822000	mg/L
MKTF-17	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	9/18/2014	Manganese, Total	3.1	0.01	0.0027	2017000	mg/L
MKTF-17	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-17	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-17	9/18/2014	Uranium, Total	0.022	0.001	0.00005	30000	mg/L
MKTF-17	9/18/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-17	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-17	11/18/2014	Arsenic, Total	0.0051	0.001	0.00036	10000	mg/L
MKTF-17	11/18/2014	Barium, Total	0.21	0.002	0.0005	2000000	mg/L
MKTF-17	11/18/2014	Calcium, Total	92	1	0.082	NA	mg/L
MKTF-17	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-17	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-17	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-17	11/18/2014	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-17	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-17	11/18/2014	Magnesium, Total	17	1	0.018	NA	mg/L
MKTF-17	11/18/2014	Manganese, Total	3	0.01	0.0024	2017000	mg/L
MKTF-17	11/18/2014	Sodium, Total	280	5	2	NA	mg/L
MKTF-17	11/18/2014	Lead, Total	0.0031	0.001	0.00026	15000	mg/L
MKTF-17	11/18/2014	Selenium, Total	ND	0.01	0.00051	50000	mg/L
MKTF-17	11/18/2014	Uranium, Total	0.025	0.001	0.0000072	30000	mg/L
MKTF-17	11/18/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
MKTF-17	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	3/12/2015	Arsenic, Total	0.0057	0.001	0.00044	10000	mg/L
MKTF-17	3/12/2015	Barium, Total	0.17	0.002	0.00073	2000000	mg/L
MKTF-17	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-17	3/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	3/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	3/12/2015	Iron, Total	1.8	0.1	0.036	13822000	mg/L
MKTF-17	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	3/12/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-17	3/12/2015	Lead, Total	0.0017	0.001	0.000069	15000	mg/L
MKTF-17	3/12/2015	Selenium, Total	0.0023	0.001	0.00012	50000	mg/L
MKTF-17	3/12/2015	Uranium, Total	0.022	0.001	0.0000081	30000	mg/L
MKTF-17	3/12/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
MKTF-17	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-17	6/8/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-17	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	6/8/2015	Iron, Total	2.6	0.1	0.036	13822000	mg/L
MKTF-17	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	6/8/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-17	6/8/2015	Lead, Total	0.0032	0.0025	0.00024	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	6/8/2015	Uranium, Total	0.02	0.0025	0.000025	30000	mg/L
MKTF-17	6/8/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-17	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	8/18/2015	Arsenic, Total	0.0052	0.001	0.00029	10000	mg/L
MKTF-17	8/18/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
MKTF-17	8/18/2015	Calcium, Total	94	1	0.057	NA	mg/L
MKTF-17	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	8/18/2015	Copper, Total	0.0097	0.006	0.0051	790000	mg/L
MKTF-17	8/18/2015	Iron, Total	1.7	0.1	0.036	13822000	mg/L
MKTF-17	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-17	8/18/2015	Magnesium, Total	19	1	0.039	NA	mg/L
MKTF-17	8/18/2015	Manganese, Total	2.9	0.01	0.0076	2017000	mg/L
MKTF-17	8/18/2015	Sodium, Total	260	5	0.36	NA	mg/L
MKTF-17	8/18/2015	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
MKTF-17	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	8/18/2015	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
MKTF-17	8/18/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-17	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-17	11/3/2015	Arsenic, Total	0.01	0.001	0.000065	10000	mg/L
MKTF-17	11/3/2015	Barium, Total	0.19	0.002	0.0013	2000000	mg/L
MKTF-17	11/3/2015	Calcium, Total	98	1	0.26	NA	mg/L
MKTF-17	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-17	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-17	11/3/2015	Iron, Total	0.65	0.02	0.0091	13822000	mg/L
MKTF-17	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-17	11/3/2015	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-17	11/3/2015	Manganese, Total	3.5	0.01	0.0016	2017000	mg/L
MKTF-17	11/3/2015	Sodium, Total	250	5	0.48	NA	mg/L
MKTF-17	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-17	11/3/2015	Selenium, Total	0.0045	0.001	0.00019	50000	mg/L
MKTF-17	11/3/2015	Uranium, Total	0.013	0.0005	0.0000048	30000	mg/L
MKTF-17	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-17	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	2/26/2016	Arsenic, Total	0.0046	0.001	0.00029	10000	mg/L
MKTF-17	2/26/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-17	2/26/2016	Calcium, Total	96	1	0.26	NA	mg/L
MKTF-17	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	2/26/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	2/26/2016	Iron, Total	0.98	0.02	0.0072	13822000	mg/L
MKTF-17	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-17	2/26/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-17	2/26/2016	Magnesium, Total	18	1	0.013	NA	mg/L
MKTF-17	2/26/2016	Manganese, Total	2.6	0.01	0.0076	2017000	mg/L
MKTF-17	2/26/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-17	2/26/2016	Lead, Total	0.00095	0.0005	0.000047	15000	mg/L
MKTF-17	2/26/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	2/26/2016	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
MKTF-17	2/26/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-17	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	9/13/2016	Arsenic, Total	0.007	0.001	0.00021	10000	mg/L
MKTF-17	9/13/2016	Barium, Total	0.58	0.01	0.004	2000000	mg/L
MKTF-17	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-17	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-17	9/13/2016	Arsenic, Dissolved	0.0062	0.001	0.00014	10000	mg/L
MKTF-17	9/13/2016	Barium, Dissolved	0.65	0.002	0.0013	2000000	mg/L
MKTF-17	9/13/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-17	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-17	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-17	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-17	9/13/2016	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
MKTF-17	9/13/2016	Potassium, Dissolved	0.65	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	Magnesium, Dissolved	22	1	0.5	NA	mg/L
MKTF-17	9/13/2016	Manganese, Dissolved	3	0.01	0.0016	2017400	mg/L
MKTF-17	9/13/2016	Sodium, Dissolved	250	5	2.5	NA	mg/L
MKTF-17	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	9/13/2016	Selenium, Dissolved	0.0046	0.005	0.0011	50000	mg/L
MKTF-17	9/13/2016	Uranium, Dissolved	0.008	0.0005	0.000051	NA	mg/L
MKTF-17	9/13/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-17	9/13/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-17	9/13/2016	Mercury, Total	0.000071	0.0002	0.000053	2000	mg/L
MKTF-17	9/13/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	9/13/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-17	9/13/2016	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-17	9/13/2016	Uranium, Total	0.011	0.0005	0.00017	30000	mg/L
MKTF-17	9/13/2016	Zinc, Total	0.0061	0.01	0.0027	5960000	mg/L
MKTF-17	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	11/8/2016	Arsenic, Total	0.0064	0.001	0.00021	10000	mg/L
MKTF-17	11/8/2016	Barium, Total	0.6	0.01	0.004	2000000	mg/L
MKTF-17	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-17	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-17	11/8/2016	Arsenic, Dissolved	0.0046	0.001	0.00014	10000	mg/L
MKTF-17	11/8/2016	Barium, Dissolved	0.52	0.002	0.0013	2000000	mg/L
MKTF-17	11/8/2016	Calcium, Dissolved	100	5	2.5	NA	mg/L
MKTF-17	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-17	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-17	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-17	11/8/2016	Iron, Dissolved	0.21	0.02	0.02	13821880	mg/L
MKTF-17	11/8/2016	Potassium, Dissolved	0.85	1	0.5	NA	mg/L
MKTF-17	11/8/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-17	11/8/2016	Manganese, Dissolved	2.7	0.01	0.0016	2017400	mg/L
MKTF-17	11/8/2016	Sodium, Dissolved	250	10	5	NA	mg/L
MKTF-17	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	11/8/2016	Selenium, Dissolved	0.003	0.001	0.00021	50000	mg/L
MKTF-17	11/8/2016	Uranium, Dissolved	0.0069	0.0005	0.000051	NA	mg/L
MKTF-17	11/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-17	11/8/2016	Iron, Total	1.9	0.1	0.1	13822000	mg/L
MKTF-17	11/8/2016	Mercury, Total	ND	0.001	0.00027	2000	mg/L
MKTF-17	11/8/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	11/8/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
MKTF-17	11/8/2016	Selenium, Total	0.0034	0.005	0.00094	50000	mg/L
MKTF-17	11/8/2016	Uranium, Total	0.0077	0.0005	0.00017	30000	mg/L
MKTF-17	11/8/2016	Zinc, Total	0.0068	0.01	0.0027	5960000	mg/L
MKTF-17	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	3/15/2017	Arsenic, Total	0.0078	0.001	0.00021	10000	mg/L
MKTF-17	3/15/2017	Barium, Total	0.76	0.002	0.00079	2000000	mg/L
MKTF-17	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	3/15/2017	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-17	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-17	3/15/2017	Arsenic, Dissolved	0.005	0.001	0.00018	10000	mg/L
MKTF-17	3/15/2017	Barium, Dissolved	0.76	0.002	0.00085	2000000	mg/L
MKTF-17	3/15/2017	Calcium, Dissolved	97	5	2.5	NA	mg/L
MKTF-17	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-17	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	3/15/2017	Iron, Dissolved	1.3	0.1	0.1	13821880	mg/L
MKTF-17	3/15/2017	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-17	3/15/2017	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-17	3/15/2017	Manganese, Dissolved	2.6	0.01	0.0019	2017400	mg/L
MKTF-17	3/15/2017	Sodium, Dissolved	220	5	2.5	NA	mg/L
MKTF-17	3/15/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	3/15/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
MKTF-17	3/15/2017	Uranium, Dissolved	0.0054	0.0005	0.00005	NA	mg/L
MKTF-17	3/15/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-17	3/15/2017	Iron, Total	6.5	1	1	13822000	mg/L
MKTF-17	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	3/15/2017	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	3/15/2017	Lead, Total	0.0026	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/15/2017	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-17	3/15/2017	Uranium, Total	0.0057	0.0005	0.00017	30000	mg/L
MKTF-17	3/15/2017	Zinc, Total	0.0059	0.01	0.0027	5960000	mg/L
MKTF-17	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-17	6/14/2017	Arsenic, Total	0.008	0.001	0.0003	10000	mg/L
MKTF-17	6/14/2017	Barium, Total	0.56	0.002	0.00093	2000000	mg/L
MKTF-17	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	6/14/2017	Chromium, Total	0.0022	0.006	0.0011	50000	mg/L
MKTF-17	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-17	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-17	6/14/2017	Arsenic, Dissolved	0.0079	0.001	0.00018	10000	mg/L
MKTF-17	6/14/2017	Barium, Dissolved	0.74	0.002	0.00085	2000000	mg/L
MKTF-17	6/14/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-17	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-17	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	6/14/2017	Iron, Dissolved	2.9	0.2	0.16	13821880	mg/L
MKTF-17	6/14/2017	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-17	6/14/2017	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-17	6/14/2017	Manganese, Dissolved	2.7	0.02	0.0038	2017400	mg/L
MKTF-17	6/14/2017	Sodium, Dissolved	220	10	1.6	NA	mg/L
MKTF-17	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	6/14/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
MKTF-17	6/14/2017	Zinc, Dissolved	0.0095	0.01	0.0011	5960450	mg/L
MKTF-17	6/14/2017	Iron, Total	3.8	0.2	0.1	13822000	mg/L
MKTF-17	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	6/14/2017	Manganese, Total	2.5	0.02	0.011	2017000	mg/L
MKTF-17	6/14/2017	Lead, Total	0.0032	0.0005	0.000095	15000	mg/L
MKTF-17	6/14/2017	Selenium, Total	0.0029	0.001	0.00071	50000	mg/L
MKTF-17	6/14/2017	Zinc, Total	0.03	0.01	0.0028	5960000	mg/L
MKTF-17	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-17	9/26/2017	Arsenic, Total	0.008	0.005	0.0015	10000	mg/L
MKTF-17	9/26/2017	Barium, Total	0.77	0.002	0.00093	2000000	mg/L
MKTF-17	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-17	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	9/26/2017	Arsenic, Dissolved	0.0065	0.01	0.0018	10000	mg/L
MKTF-17	9/26/2017	Barium, Dissolved	0.73	0.002	0.00085	2000000	mg/L
MKTF-17	9/26/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-17	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	9/26/2017	Iron, Dissolved	3.2	0.2	0.16	13821880	mg/L
MKTF-17	9/26/2017	Potassium, Dissolved	0.53	1	0.11	NA	mg/L
MKTF-17	9/26/2017	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-17	9/26/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-17	9/26/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
MKTF-17	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	9/26/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-17	9/26/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-17	9/26/2017	Iron, Total	4.2	0.2	0.1	13822000	mg/L
MKTF-17	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	9/26/2017	Manganese, Total	2.9	0.02	0.011	2017000	mg/L
MKTF-17	9/26/2017	Lead, Total	0.0014	0.0005	0.000095	15000	mg/L
MKTF-17	9/26/2017	Selenium, Total	0.0056	0.005	0.0036	50000	mg/L
MKTF-17	9/26/2017	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-17	12/1/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-17	12/1/2017	Arsenic, Total	0.0041	0.001	0.00041	10000	mg/L
MKTF-17	12/1/2017	Barium, Total	0.62	0.002	0.001	2000000	mg/L
MKTF-17	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	12/1/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	12/1/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-17	12/1/2017	Barium, Dissolved	0.42	0.002	0.00099	2000000	mg/L
MKTF-17	12/1/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
MKTF-17	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	12/1/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
MKTF-17	12/1/2017	Potassium, Dissolved	0.7	1	0.11	NA	mg/L
MKTF-17	12/1/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-17	12/1/2017	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-17	12/1/2017	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-17	12/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-17	12/1/2017	Uranium, Dissolved	0.0062	0.0005	0.000096	NA	mg/L
MKTF-17	12/1/2017	Zinc, Dissolved	0.0032	0.01	0.0021	5960450	mg/L
MKTF-17	12/1/2017	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-17	12/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	12/1/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-17	12/1/2017	Lead, Total	0.00065	0.0005	0.00023	15000	mg/L
MKTF-17	12/1/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-17	12/1/2017	Uranium, Total	0.0046	0.005	0.0015	30000	mg/L
MKTF-17	12/1/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-17	2/16/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
MKTF-17	2/16/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-17	2/16/2018	Barium, Total	0.44	0.002	0.001	2000000	mg/L
MKTF-17	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	2/16/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-17	2/16/2018	Arsenic, Dissolved	0.0067	0.005	0.0021	10000	mg/L
MKTF-17	2/16/2018	Barium, Dissolved	0.44	0.002	0.00099	2000000	mg/L
MKTF-17	2/16/2018	Calcium, Dissolved	98	1	0.078	NA	mg/L
MKTF-17	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	2/16/2018	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
MKTF-17	2/16/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
MKTF-17	2/16/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	2/16/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-17	2/16/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	2/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-17	2/16/2018	Uranium, Dissolved	0.0055	0.0005	0.000096	NA	mg/L
MKTF-17	2/16/2018	Zinc, Dissolved	0.0048	0.01	0.0021	5960450	mg/L
MKTF-17	2/16/2018	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-17	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	2/16/2018	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-17	2/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-17	2/16/2018	Selenium, Total	0.0085	0.005	0.0049	50000	mg/L
MKTF-17	2/16/2018	Uranium, Total	0.0055	0.0005	0.000068	30000	mg/L
MKTF-17	2/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-17	5/4/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-17	5/4/2018	Arsenic, Total	0.0071	0.001	0.00041	10000	mg/L
MKTF-17	5/4/2018	Barium, Total	0.45	0.002	0.001	2000000	mg/L
MKTF-17	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	5/4/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-17	5/4/2018	Arsenic, Dissolved	0.0049	0.001	0.00042	10000	mg/L
MKTF-17	5/4/2018	Barium, Dissolved	0.51	0.002	0.00099	2000000	mg/L
MKTF-17	5/4/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-17	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	5/4/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
MKTF-17	5/4/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-17	5/4/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-17	5/4/2018	Manganese, Dissolved	2.7	0.01	0.002	2017400	mg/L
MKTF-17	5/4/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	5/4/2018	Uranium, Dissolved	0.0045	0.0005	0.000096	NA	mg/L
MKTF-17	5/4/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
MKTF-17	5/4/2018	Iron, Total	1.8	0.1	0.051	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	5/4/2018	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
MKTF-17	5/4/2018	Lead, Total	0.00026	0.0005	0.00023	15000	mg/L
MKTF-17	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	5/4/2018	Uranium, Total	0.005	0.0005	0.000068	30000	mg/L
MKTF-17	5/4/2018	Zinc, Total	0.004	0.01	0.0033	5960000	mg/L
MKTF-17	8/24/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-17	8/24/2018	Arsenic, Total	0.007	0.001	0.00041	10000	mg/L
MKTF-17	8/24/2018	Barium, Total	0.42	0.002	0.001	2000000	mg/L
MKTF-17	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	8/24/2018	Copper, Total	0.0049	0.006	0.0041	790000	mg/L
MKTF-17	8/24/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-17	8/24/2018	Arsenic, Dissolved	0.0048	0.001	0.00042	10000	mg/L
MKTF-17	8/24/2018	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
MKTF-17	8/24/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-17	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	8/24/2018	Iron, Dissolved	0.39	0.02	0.016	13821880	mg/L
MKTF-17	8/24/2018	Potassium, Dissolved	0.71	1	0.11	NA	mg/L
MKTF-17	8/24/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	8/24/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-17	8/24/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	8/24/2018	Uranium, Dissolved	0.0061	0.0005	0.000096	NA	mg/L
MKTF-17	8/24/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
MKTF-17	8/24/2018	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-17	8/24/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
MKTF-17	8/24/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-17	8/24/2018	Lead, Total	0.00036	0.0005	0.00023	15000	mg/L
MKTF-17	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	8/24/2018	Uranium, Total	0.0061	0.0005	0.000068	30000	mg/L
MKTF-17	8/24/2018	Zinc, Total	0.0042	0.01	0.0033	5960000	mg/L
MKTF-17	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-17	11/28/2018	Arsenic, Total	0.0066	0.001	0.00041	10000	mg/L
MKTF-17	11/28/2018	Barium, Total	0.46	0.002	0.001	2000000	mg/L
MKTF-17	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	11/28/2018	Arsenic, Dissolved	0.0085	0.001	0.00042	10000	mg/L
MKTF-17	11/28/2018	Barium, Dissolved	0.43	0.002	0.00099	2000000	mg/L
MKTF-17	11/28/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-17	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	11/28/2018	Iron, Dissolved	0.27	0.02	0.016	13821880	mg/L
MKTF-17	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-17	11/28/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	11/28/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-17	11/28/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-17	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	11/28/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
MKTF-17	11/28/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-17	11/28/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-17	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-17	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-18	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-18	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-18	6/6/2014	Barium, Total	2.4	0.01	0.0056	2000000	mg/L
MKTF-18	6/6/2014	Calcium, Total	890	20	1.1	NA	mg/L
MKTF-18	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-18	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-18	6/6/2014	Iron, Total	4.5	0.1	0.031	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	6/6/2014	Potassium, Total	11	5	1.2	NA	mg/L
MKTF-18	6/6/2014	Magnesium, Total	100	5	0.12	NA	mg/L
MKTF-18	6/6/2014	Manganese, Total	2	0.01	0.0027	2017000	mg/L
MKTF-18	6/6/2014	Sodium, Total	250	5	1.3	NA	mg/L
MKTF-18	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-18	6/6/2014	Selenium, Total	0.0086	0.005	0.00074	50000	mg/L
MKTF-18	6/6/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-18	6/6/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-18	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-18	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-18	9/18/2014	Barium, Total	2.3	0.01	0.0056	2000000	mg/L
MKTF-18	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-18	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-18	9/18/2014	Iron, Total	0.3	0.02	0.0062	13822000	mg/L
MKTF-18	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	9/18/2014	Manganese, Total	1.7	0.01	0.0027	2017000	mg/L
MKTF-18	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-18	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-18	9/18/2014	Uranium, Total	0.0012	0.001	0.00005	30000	mg/L
MKTF-18	9/18/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
MKTF-18	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-18	11/18/2014	Arsenic, Total	0.0019	0.001	0.00036	10000	mg/L
MKTF-18	11/18/2014	Barium, Total	2.5	0.01	0.0025	2000000	mg/L
MKTF-18	11/18/2014	Calcium, Total	77	1	0.082	NA	mg/L
MKTF-18	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-18	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-18	11/18/2014	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-18	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-18	11/18/2014	Magnesium, Total	21	1	0.018	NA	mg/L
MKTF-18	11/18/2014	Manganese, Total	1.8	0.01	0.0024	2017000	mg/L
MKTF-18	11/18/2014	Sodium, Total	280	5	2	NA	mg/L
MKTF-18	11/18/2014	Lead, Total	0.0016	0.001	0.00026	15000	mg/L
MKTF-18	11/18/2014	Selenium, Total	ND	0.01	0.00051	50000	mg/L
MKTF-18	11/18/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
MKTF-18	11/18/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
MKTF-18	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	3/17/2015	Arsenic, Total	0.0031	0.001	0.00044	10000	mg/L
MKTF-18	3/17/2015	Barium, Total	3.5	0.02	0.0073	2000000	mg/L
MKTF-18	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-18	3/17/2015	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-18	3/17/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-18	3/17/2015	Iron, Total	14	1	0.36	13822000	mg/L
MKTF-18	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-18	3/17/2015	Manganese, Total	2.7	0.02	0.015	2017000	mg/L
MKTF-18	3/17/2015	Lead, Total	0.021	0.001	0.000069	15000	mg/L
MKTF-18	3/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-18	3/17/2015	Uranium, Total	0.0026	0.001	0.0000081	30000	mg/L
MKTF-18	3/17/2015	Zinc, Total	0.051	0.01	0.0036	5960000	mg/L
MKTF-18	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-18	6/8/2015	Barium, Total	2.5	0.01	0.0053	2000000	mg/L
MKTF-18	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-18	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-18	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-18	6/8/2015	Iron, Total	5	0.1	0.036	13822000	mg/L
MKTF-18	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-18	6/8/2015	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
MKTF-18	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-18	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-18	6/8/2015	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-18	6/8/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-18	8/18/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-18	8/18/2015	Arsenic, Total	0.018	0.01	0.0029	10000	mg/L
MKTF-18	8/18/2015	Barium, Total	24	0.1	0.053	2000000	mg/L
MKTF-18	8/18/2015	Calcium, Total	74	1	0.057	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/18/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-18	8/18/2015	Chromium, Total	0.26	0.03	0.011	50000	mg/L
MKTF-18	8/18/2015	Copper, Total	0.21	0.03	0.026	790000	mg/L
MKTF-18	8/18/2015	Iron, Total	110	10	3.6	13822000	mg/L
MKTF-18	8/18/2015	Mercury, Total	0.00025	0.0002	0.000059	2000	mg/L
MKTF-18	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-18	8/18/2015	Magnesium, Total	20	1	0.039	NA	mg/L
MKTF-18	8/18/2015	Manganese, Total	22	0.1	0.076	2017000	mg/L
MKTF-18	8/18/2015	Sodium, Total	290	5	0.36	NA	mg/L
MKTF-18	8/18/2015	Lead, Total	0.37	0.01	0.00094	15000	mg/L
MKTF-18	8/18/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-18	8/18/2015	Uranium, Total	0.037	0.005	0.000049	30000	mg/L
MKTF-18	8/18/2015	Zinc, Total	0.54	0.05	0.019	5960000	mg/L
MKTF-18	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-18	11/3/2015	Arsenic, Total	0.0031	0.001	0.000065	10000	mg/L
MKTF-18	11/3/2015	Barium, Total	2.5	0.01	0.0066	2000000	mg/L
MKTF-18	11/3/2015	Calcium, Total	78	1	0.26	NA	mg/L
MKTF-18	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-18	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-18	11/3/2015	Iron, Total	4.8	0.1	0.045	13822000	mg/L
MKTF-18	11/3/2015	Mercury, Total	ND	0.001	0.00029	2000	mg/L
MKTF-18	11/3/2015	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-18	11/3/2015	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-18	11/3/2015	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-18	11/3/2015	Sodium, Total	260	5	0.48	NA	mg/L
MKTF-18	11/3/2015	Lead, Total	0.0053	0.0005	0.000026	15000	mg/L
MKTF-18	11/3/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-18	11/3/2015	Uranium, Total	0.0012	0.0005	0.0000048	30000	mg/L
MKTF-18	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-18	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	2/26/2016	Arsenic, Total	0.0022	0.001	0.00029	10000	mg/L
MKTF-18	2/26/2016	Barium, Total	2.3	0.02	0.011	2000000	mg/L
MKTF-18	2/26/2016	Calcium, Total	81	1	0.26	NA	mg/L
MKTF-18	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-18	2/26/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-18	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-18	2/26/2016	Iron, Total	6.4	0.2	0.072	13822000	mg/L
MKTF-18	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	2/26/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-18	2/26/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-18	2/26/2016	Manganese, Total	2.1	0.02	0.015	2017000	mg/L
MKTF-18	2/26/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-18	2/26/2016	Lead, Total	0.0064	0.0005	0.000047	15000	mg/L
MKTF-18	2/26/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-18	2/26/2016	Uranium, Total	0.0016	0.0005	0.0000049	30000	mg/L
MKTF-18	2/26/2016	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-18	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-18	6/10/2016	Arsenic, Total	0.0026	0.001	0.00014	10000	mg/L
MKTF-18	6/10/2016	Barium, Total	1.9	0.01	0.0066	2000000	mg/L
MKTF-18	6/10/2016	Calcium, Total	80	1	0.26	NA	mg/L
MKTF-18	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-18	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-18	6/10/2016	Iron, Total	1.5	0.1	0.045	13822000	mg/L
MKTF-18	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	6/10/2016	Potassium, Total	0.64	1	0.18	NA	mg/L
MKTF-18	6/10/2016	Magnesium, Total	21	1	0.013	NA	mg/L
MKTF-18	6/10/2016	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-18	6/10/2016	Sodium, Total	280	5	0.48	NA	mg/L
MKTF-18	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-18	6/10/2016	Selenium, Total	0.0054	0.001	0.00021	50000	mg/L
MKTF-18	6/10/2016	Uranium, Total	0.0011	0.0005	0.000051	30000	mg/L
MKTF-18	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-18	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	9/13/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
MKTF-18	9/13/2016	Barium, Total	1.8	0.01	0.004	2000000	mg/L
MKTF-18	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-18	9/13/2016	Arsenic, Dissolved	0.0026	0.001	0.00014	10000	mg/L
MKTF-18	9/13/2016	Barium, Dissolved	1.8	0.01	0.0066	2000000	mg/L
MKTF-18	9/13/2016	Calcium, Dissolved	78	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-18	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-18	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-18	9/13/2016	Iron, Dissolved	0.89	0.02	0.02	13821880	mg/L
MKTF-18	9/13/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Manganese, Dissolved	2	0.01	0.0016	2017400	mg/L
MKTF-18	9/13/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
MKTF-18	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	9/13/2016	Selenium, Dissolved	0.0072	0.01	0.0021	50000	mg/L
MKTF-18	9/13/2016	Uranium, Dissolved	0.0012	0.0005	0.000051	NA	mg/L
MKTF-18	9/13/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-18	9/13/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-18	9/13/2016	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
MKTF-18	9/13/2016	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-18	9/13/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
MKTF-18	9/13/2016	Selenium, Total	0.0049	0.01	0.0019	50000	mg/L
MKTF-18	9/13/2016	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
MKTF-18	9/13/2016	Zinc, Total	0.0037	0.01	0.0027	5960000	mg/L
MKTF-18	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	11/8/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
MKTF-18	11/8/2016	Barium, Total	1.7	0.01	0.004	2000000	mg/L
MKTF-18	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-18	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-18	11/8/2016	Arsenic, Dissolved	0.0025	0.001	0.00014	10000	mg/L
MKTF-18	11/8/2016	Barium, Dissolved	1.7	0.01	0.0066	2000000	mg/L
MKTF-18	11/8/2016	Calcium, Dissolved	79	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-18	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-18	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-18	11/8/2016	Iron, Dissolved	0.81	0.02	0.02	13821880	mg/L
MKTF-18	11/8/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-18	11/8/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
MKTF-18	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	11/8/2016	Selenium, Dissolved	0.0053	0.001	0.00021	50000	mg/L
MKTF-18	11/8/2016	Uranium, Dissolved	0.001	0.0005	0.000051	NA	mg/L
MKTF-18	11/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-18	11/8/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-18	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	11/8/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-18	11/8/2016	Lead, Total	0.00041	0.0005	0.000081	15000	mg/L
MKTF-18	11/8/2016	Selenium, Total	0.0059	0.01	0.0019	50000	mg/L
MKTF-18	11/8/2016	Uranium, Total	0.0011	0.0005	0.00017	30000	mg/L
MKTF-18	11/8/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MKTF-18	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	3/1/2017	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
MKTF-18	3/1/2017	Barium, Total	2.2	0.01	0.004	2000000	mg/L
MKTF-18	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-18	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-18	3/1/2017	Arsenic, Dissolved	0.0023	0.001	0.00014	10000	mg/L
MKTF-18	3/1/2017	Barium, Dissolved	2	0.01	0.0043	2000000	mg/L
MKTF-18	3/1/2017	Calcium, Dissolved	81	1	0.5	NA	mg/L
MKTF-18	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-18	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	3/1/2017	Iron, Dissolved	1.4	0.1	0.1	13821880	mg/L
MKTF-18	3/1/2017	Potassium, Dissolved	0.52	1	0.5	NA	mg/L
MKTF-18	3/1/2017	Magnesium, Dissolved	20	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	Manganese, Dissolved	1.9	0.01	0.0019	2017400	mg/L
MKTF-18	3/1/2017	Sodium, Dissolved	260	5	2.5	NA	mg/L
MKTF-18	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	3/1/2017	Selenium, Dissolved	0.0043	0.001	0.00021	50000	mg/L
MKTF-18	3/1/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
MKTF-18	3/1/2017	Iron, Total	4.9	0.2	0.2	13822000	mg/L
MKTF-18	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-18	3/1/2017	Manganese, Total	2.1	0.01	0.0014	2017000	mg/L
MKTF-18	3/1/2017	Lead, Total	0.0047	0.0005	0.000081	15000	mg/L
MKTF-18	3/1/2017	Selenium, Total	0.0039	0.001	0.00019	50000	mg/L
MKTF-18	3/1/2017	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-18	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-18	6/14/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-18	6/14/2017	Barium, Total	2.4	0.02	0.0093	2000000	mg/L
MKTF-18	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	6/14/2017	Chromium, Total	0.0048	0.006	0.0011	50000	mg/L
MKTF-18	6/14/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-18	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-18	6/14/2017	Arsenic, Dissolved	0.0029	0.001	0.00018	10000	mg/L
MKTF-18	6/14/2017	Barium, Dissolved	1.9	0.02	0.0085	2000000	mg/L
MKTF-18	6/14/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
MKTF-18	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-18	6/14/2017	Copper, Dissolved	0.0063	0.006	0.0032	790000	mg/L
MKTF-18	6/14/2017	Iron, Dissolved	2.6	0.2	0.16	13821880	mg/L
MKTF-18	6/14/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MKTF-18	6/14/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-18	6/14/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
MKTF-18	6/14/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-18	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	6/14/2017	Selenium, Dissolved	0.0025	0.005	0.0019	50000	mg/L
MKTF-18	6/14/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-18	6/14/2017	Iron, Total	7	0.2	0.1	13822000	mg/L
MKTF-18	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	6/14/2017	Manganese, Total	2.3	0.02	0.011	2017000	mg/L
MKTF-18	6/14/2017	Lead, Total	0.0088	0.0005	0.000095	15000	mg/L
MKTF-18	6/14/2017	Selenium, Total	0.0041	0.005	0.0036	50000	mg/L
MKTF-18	6/14/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-18	2/16/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-18	2/16/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-18	2/16/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
MKTF-18	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-18	2/16/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-18	2/16/2018	Barium, Dissolved	2.2	0.01	0.0049	2000000	mg/L
MKTF-18	2/16/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-18	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	2/16/2018	Iron, Dissolved	0.42	0.02	0.016	13821880	mg/L
MKTF-18	2/16/2018	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-18	2/16/2018	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-18	2/16/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	2/16/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	2/16/2018	Selenium, Dissolved	0.0046	0.005	0.0038	50000	mg/L
MKTF-18	2/16/2018	Uranium, Dissolved	0.0008	0.0005	0.000096	NA	mg/L
MKTF-18	2/16/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-18	2/16/2018	Iron, Total	3.3	0.1	0.051	13822000	mg/L
MKTF-18	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	2/16/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-18	2/16/2018	Lead, Total	0.0028	0.0005	0.00023	15000	mg/L
MKTF-18	2/16/2018	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
MKTF-18	2/16/2018	Uranium, Total	0.001	0.0005	0.000068	30000	mg/L
MKTF-18	2/16/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-18	5/4/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
MKTF-18	5/4/2018	Arsenic, Total	0.0021	0.001	0.00041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
MKTF-18	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	5/4/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
MKTF-18	5/4/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-18	5/4/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-18	5/4/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
MKTF-18	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	5/4/2018	Iron, Dissolved	0.41	0.02	0.016	13821880	mg/L
MKTF-18	5/4/2018	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-18	5/4/2018	Magnesium, Dissolved	24	1	0.25	NA	mg/L
MKTF-18	5/4/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	5/4/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-18	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	5/4/2018	Uranium, Dissolved	0.00064	0.0005	0.000096	NA	mg/L
MKTF-18	5/4/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
MKTF-18	5/4/2018	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-18	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	5/4/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-18	5/4/2018	Lead, Total	0.00051	0.0005	0.00023	15000	mg/L
MKTF-18	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	5/4/2018	Uranium, Total	0.00074	0.0005	0.000068	30000	mg/L
MKTF-18	5/4/2018	Zinc, Total	0.0051	0.01	0.0033	5960000	mg/L
MKTF-18	8/24/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-18	8/24/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-18	8/24/2018	Barium, Total	2	0.01	0.005	2000000	mg/L
MKTF-18	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	8/24/2018	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-18	8/24/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L
MKTF-18	8/24/2018	Arsenic, Dissolved	0.0016	0.001	0.00042	10000	mg/L
MKTF-18	8/24/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-18	8/24/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
MKTF-18	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	8/24/2018	Iron, Dissolved	0.68	0.02	0.016	13821880	mg/L
MKTF-18	8/24/2018	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-18	8/24/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-18	8/24/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	8/24/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	8/24/2018	Uranium, Dissolved	0.0006	0.0005	0.000096	NA	mg/L
MKTF-18	8/24/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
MKTF-18	8/24/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-18	8/24/2018	Mercury, Total	0.000082	0.0002	0.000038	2000	mg/L
MKTF-18	8/24/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-18	8/24/2018	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
MKTF-18	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	8/24/2018	Uranium, Total	0.00064	0.0005	0.000068	30000	mg/L
MKTF-18	8/24/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-18	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-18	11/28/2018	Arsenic, Total	0.0018	0.001	0.00041	10000	mg/L
MKTF-18	11/28/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-18	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-18	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-18	11/28/2018	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-18	11/28/2018	Calcium, Dissolved	89	1	0.078	NA	mg/L
MKTF-18	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/28/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
MKTF-18	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-18	11/28/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-18	11/28/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
MKTF-18	11/28/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	11/28/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-18	11/28/2018	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-18	11/28/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-18	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-18	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-18	5/16/2019	Aluminum, Dissolved	0.048	0.02	0.002488	19913930	mg/L
MKTF-18	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-18	5/16/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
MKTF-18	5/16/2019	Barium, Dissolved	2	0.01	0.003242	2000000	mg/L
MKTF-18	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-18	5/16/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
MKTF-18	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-18	5/16/2019	Calcium, Dissolved	87	1	0.061889	NA	mg/L
MKTF-18	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-18	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-18	5/16/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
MKTF-18	5/16/2019	Iron, Dissolved	2	0.1	0.043734	13821880	mg/L
MKTF-18	5/16/2019	Lead, Dissolved	0.00007	0.0005	0.000055	NA	mg/L
MKTF-18	5/16/2019	Magnesium, Dissolved	23	1	0.05029	NA	mg/L
MKTF-18	5/16/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-18	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-18	5/16/2019	Nickel, Dissolved	0.0042	0.01	0.004009	372000	mg/L
MKTF-18	5/16/2019	Potassium, Dissolved	0.42	1	0.162288	NA	mg/L
MKTF-18	5/16/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
MKTF-18	5/16/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-18	5/16/2019	Sodium, Dissolved	270	5	2.080881	NA	mg/L
MKTF-18	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	5/16/2019	Uranium, Dissolved	0.00065	0.0005	0.000075	NA	mg/L
MKTF-18	5/16/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-18	5/16/2019	Aluminum, Total	1.1	0.1	0.012441	19914000	mg/L
MKTF-18	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-18	5/16/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
MKTF-18	5/16/2019	Barium, Total	2.2	0.01	0.003242	2000000	mg/L
MKTF-18	5/16/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-18	5/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-18	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-18	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-18	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-18	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-18	5/16/2019	Iron, Total	3.8	0.1	0.043734	13822000	mg/L
MKTF-18	5/16/2019	Lead, Total	0.0032	0.0005	0.000055	15000	mg/L
MKTF-18	5/16/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-18	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-18	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-18	5/16/2019	Nickel, Total	0.0042	0.01	0.004009	372000	mg/L
MKTF-18	5/16/2019	Selenium, Total	0.00056	0.001	0.000478	50000	mg/L
MKTF-18	5/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-18	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-18	5/16/2019	Uranium, Total	0.00096	0.0005	0.000085	30000	mg/L
MKTF-18	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-18	10/29/2019	Aluminum, Total	1	0.02	0.002488	19914000	mg/L
MKTF-18	10/29/2019	Antimony, Total	0.00081	0.001	0.000389	6000	mg/L
MKTF-18	10/29/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-18	10/29/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-18	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-18	10/29/2019	Boron, Total	0.42	0.04	0.004531	3949	mg/L
MKTF-18	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-18	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-18	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-18	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-18	10/29/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	10/29/2019	Lead, Total	0.00045	0.0005	0.000055	15000	mg/L
MKTF-18	10/29/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-18	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-18	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-18	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-18	10/29/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-18	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-18	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-18	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-18	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-18	10/29/2019	Arsenic, Dissolved	0.0012	0.001	0.000101	10000	mg/L
MKTF-18	10/29/2019	Barium, Dissolved	2	0.01	0.003242	2000000	mg/L
MKTF-18	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-18	10/29/2019	Boron, Dissolved	0.39	0.04	0.004531	3949110	mg/L
MKTF-18	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-18	10/29/2019	Calcium, Dissolved	86	1	0.061889	NA	mg/L
MKTF-18	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-18	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-18	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-18	10/29/2019	Iron, Dissolved	0.65	0.02	0.008747	13821880	mg/L
MKTF-18	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-18	10/29/2019	Magnesium, Dissolved	24	1	0.05029	NA	mg/L
MKTF-18	10/29/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-18	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-18	10/29/2019	Nickel, Dissolved	0.0058	0.01	0.004009	372000	mg/L
MKTF-18	10/29/2019	Potassium, Dissolved	0.4	1	0.162288	NA	mg/L
MKTF-18	10/29/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-18	10/29/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-18	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	10/29/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-18	10/29/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-18	10/29/2019	Selenium, Total	ND	0.001	0.000171	50000	mg/L
MKTF-18	12/16/2020	Arsenic, Total Recoverable	1.7	1	0.286	10	ug/L
MKTF-18	12/16/2020	Lead, Total Recoverable	1.01	1	0.133	15	ug/L
MKTF-18	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-18	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-18	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-18	12/16/2020	Arsenic, Dissolved	1.72	1	0.286	10	ug/L
MKTF-18	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-18	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-18	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-18	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-18	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-18	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-18	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-18	12/16/2020	Aluminum, Total	2.91	0.2	0.051	19914000	mg/L
MKTF-18	12/16/2020	Calcium, Total	102	0.5	0.084	NA	mg/L
MKTF-18	12/16/2020	Boron, Total	0.381	0.1	0.022	3949	mg/L
MKTF-18	12/16/2020	Barium, Total	2.25	0.01	0.003	2000000	mg/L
MKTF-18	12/16/2020	Potassium, Total	1.11	1	0.34	NA	mg/L
MKTF-18	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-18	12/16/2020	Magnesium, Total	26.1	0.5	0.12	NA	mg/L
MKTF-18	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-18	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-18	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-18	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-18	12/16/2020	Iron, Total	4.01	0.2	0.075	13822000	mg/L
MKTF-18	12/16/2020	Manganese, Total	2.35	0.01	0.003	2017000	mg/L
MKTF-18	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-18	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-18	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-18	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-18	12/16/2020	Barium, Dissolved	2.18	0.01	0.003	2000000	mg/L
MKTF-18	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-18	12/16/2020	Boron, Dissolved	0.404	0.1	0.022	3949110	mg/L
MKTF-18	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-18	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-18	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-18	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	Iron, Dissolved	0.239	0.2	0.075	13821880	mg/L
MKTF-18	12/16/2020	Manganese, Dissolved	2.2	0.01	0.003	2017400	mg/L
MKTF-18	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-18	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-18	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-18	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-18	12/16/2020	Sodium, Total	251	2	0.92	NA	mg/L
MKTF-18	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-18	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-18	2/6/2020	Aluminum, Dissolved	0.03	0.02	0.0025	19913930	mg/L
MKTF-18	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-18	2/6/2020	Boron, Dissolved	0.23	0.04	0.0045	3949110	mg/L
MKTF-18	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-18	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-18	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-18	2/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-18	2/6/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-18	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-18	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-18	2/6/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-18	2/6/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L
MKTF-18	2/6/2020	Zinc, Dissolved	0.008	0.01	0.0023	5960450	mg/L
MKTF-18	2/6/2020	Barium, Dissolved	1.6	0.01	0.0032	2000000	mg/L
MKTF-18	2/6/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-18	2/6/2020	Iron, Dissolved	2.7	0.1	0.044	13821880	mg/L
MKTF-18	2/6/2020	Manganese, Dissolved	2.9	0.01	0.0014	2017400	mg/L
MKTF-18	2/6/2020	Sodium, Dissolved	190	5	2.1	NA	mg/L
MKTF-18	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-18	2/6/2020	Arsenic, Dissolved	ND	0.001	0.0001	10000	mg/L
MKTF-18	2/6/2020	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
MKTF-18	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-18	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	2/6/2020	Uranium, Dissolved	0.0012	0.0005	0.000075	NA	mg/L
MKTF-18	2/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-18	2/6/2020	Lead, Total	0.0091	0.0005	0.000055	15000	mg/L
MKTF-18	2/6/2020	Thallium, Total	0.000099	0.0005	0.000052	2000	mg/L
MKTF-18	2/6/2020	Uranium, Total	0.0025	0.0005	0.000085	30000	mg/L
MKTF-18	2/6/2020	Arsenic, Total	0.0025	0.005	0.0016	10000	mg/L
MKTF-18	2/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-18	2/6/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-18	2/6/2020	Boron, Total	0.24	0.04	0.0045	3949	mg/L
MKTF-18	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-18	2/6/2020	Chromium, Total	0.0084	0.006	0.0015	50000	mg/L
MKTF-18	2/6/2020	Cobalt, Total	0.004	0.006	0.0031	5980	mg/L
MKTF-18	2/6/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-18	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-18	2/6/2020	Nickel, Total	0.01	0.01	0.004	372000	mg/L
MKTF-18	2/6/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-18	2/6/2020	Zinc, Total	0.015	0.01	0.0058	5960000	mg/L
MKTF-18	2/6/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-18	2/6/2020	Aluminum, Total	18	0.4	0.05	19914000	mg/L
MKTF-18	2/6/2020	Iron, Total	9.8	0.4	0.17	13822000	mg/L
MKTF-18	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-18	2/6/2020	Manganese, Total	3.7	0.01	0.0014	2017000	mg/L
MKTF-19	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-19	10/29/2019	Selenium, Total	0.00052	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-19	8/19/2019	Antimony, Dissolved	0.001	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	8/19/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-19	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	8/19/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-19	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Dissolved	0.0013	0.006	0.001296	790000	mg/L
MKTF-19	8/19/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	8/19/2019	Lead, Dissolved	0.0018	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-19	8/19/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-19	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Dissolved	0.0047	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Potassium, Dissolved	0.68	1	0.162288	NA	mg/L
MKTF-19	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-19	8/19/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-19	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	8/19/2019	Uranium, Dissolved	0.00016	0.0005	0.000075	NA	mg/L
MKTF-19	8/19/2019	Zinc, Dissolved	0.0037	0.01	0.002252	5960450	mg/L
MKTF-19	8/19/2019	Aluminum, Total	27	1	0.124414	19914000	mg/L
MKTF-19	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Total	0.015	0.001	0.000312	10000	mg/L
MKTF-19	8/19/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Total	0.0024	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	8/19/2019	Chromium, Total	0.009	0.006	0.001533	50000	mg/L
MKTF-19	8/19/2019	Cobalt, Total	0.0054	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Total	0.0099	0.006	0.004072	790000	mg/L
MKTF-19	8/19/2019	Iron, Total	21	1	0.437344	13822000	mg/L
MKTF-19	8/19/2019	Lead, Total	0.028	0.0025	0.000274	15000	mg/L
MKTF-19	8/19/2019	Manganese, Total	2.8	0.01	0.00145	2017000	mg/L
MKTF-19	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Selenium, Total	0.0023	0.001	0.000478	50000	mg/L
MKTF-19	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-19	8/19/2019	Thallium, Total	0.00013	0.0005	0.000052	2000	mg/L
MKTF-19	8/19/2019	Uranium, Total	0.0034	0.0005	0.000085	30000	mg/L
MKTF-19	8/19/2019	Zinc, Total	0.038	0.01	0.005772	5960000	mg/L
MKTF-19	8/19/2019	Aluminum, Dissolved	0.043	0.02	0.002488	19913930	mg/L
MKTF-19	8/19/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	8/19/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-19	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	8/19/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-19	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	8/19/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	8/19/2019	Lead, Dissolved	0.002	0.0005	0.000055	NA	mg/L
MKTF-19	8/19/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-19	8/19/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-19	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Dissolved	0.0046	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Potassium, Dissolved	0.71	1	0.162288	NA	mg/L
MKTF-19	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-19	8/19/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-19	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	8/19/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
MKTF-19	8/19/2019	Zinc, Dissolved	0.0084	0.01	0.002252	5960450	mg/L
MKTF-19	8/19/2019	Aluminum, Total	23	1	0.124414	19914000	mg/L
MKTF-19	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Total	0.014	0.001	0.000312	10000	mg/L
MKTF-19	8/19/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Total	0.002	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	8/19/2019	Chromium, Total	0.007	0.006	0.001533	50000	mg/L
MKTF-19	8/19/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Total	0.007	0.006	0.004072	790000	mg/L
MKTF-19	8/19/2019	Iron, Total	19	1	0.437344	13822000	mg/L
MKTF-19	8/19/2019	Lead, Total	0.022	0.0005	0.000055	15000	mg/L
MKTF-19	8/19/2019	Manganese, Total	2.7	0.01	0.00145	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-19	8/19/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-19	8/19/2019	Thallium, Total	0.00013	0.0005	0.000052	2000	mg/L
MKTF-19	8/19/2019	Uranium, Total	0.0028	0.0005	0.000085	30000	mg/L
MKTF-19	8/19/2019	Zinc, Total	0.035	0.01	0.005772	5960000	mg/L
MKTF-19	10/29/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-19	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	10/29/2019	Arsenic, Total	0.013	0.005	0.001561	10000	mg/L
MKTF-19	10/29/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-19	10/29/2019	Beryllium, Total	0.00065	0.002	0.000284	4000	mg/L
MKTF-19	10/29/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-19	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-19	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-19	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-19	10/29/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-19	10/29/2019	Lead, Total	0.009	0.0005	0.000055	15000	mg/L
MKTF-19	10/29/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
MKTF-19	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	10/29/2019	Nickel, Total	0.0052	0.01	0.004009	372000	mg/L
MKTF-19	10/29/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-19	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-19	10/29/2019	Zinc, Total	0.03	0.01	0.005772	5960000	mg/L
MKTF-19	10/29/2019	Aluminum, Dissolved	0.0093	0.02	0.002488	19913930	mg/L
MKTF-19	10/29/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
MKTF-19	10/29/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	10/29/2019	Barium, Dissolved	1.9	0.01	0.003242	2000000	mg/L
MKTF-19	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	10/29/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
MKTF-19	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-19	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	10/29/2019	Iron, Dissolved	10	0.4	0.174937	13821880	mg/L
MKTF-19	10/29/2019	Lead, Dissolved	0.0017	0.0005	0.000055	NA	mg/L
MKTF-19	10/29/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-19	10/29/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-19	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	10/29/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-19	10/29/2019	Potassium, Dissolved	0.84	1	0.162288	NA	mg/L
MKTF-19	10/29/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-19	10/29/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-19	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	10/29/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-19	5/9/2019	Aluminum, Dissolved	0.03	0.02	0.002488	19913930	mg/L
MKTF-19	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-19	5/9/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
MKTF-19	5/9/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	5/9/2019	Boron, Dissolved	0.3	0.04	0.004531	3949110	mg/L
MKTF-19	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	5/9/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-19	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	5/9/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	5/9/2019	Lead, Dissolved	0.0017	0.0025	0.000274	NA	mg/L
MKTF-19	5/9/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
MKTF-19	5/9/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-19	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-19	5/9/2019	Potassium, Dissolved	0.63	1	0.162288	NA	mg/L
MKTF-19	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-19	5/9/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-19	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-19	5/9/2019	Uranium, Dissolved	0.001	0.0025	0.000374	NA	mg/L
MKTF-19	5/9/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-19	5/9/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-19	5/9/2019	Antimony, Total	0.00051	0.001	0.000389	6000	mg/L
MKTF-19	5/9/2019	Arsenic, Total	0.012	0.001	0.000312	10000	mg/L
MKTF-19	5/9/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-19	5/9/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-19	5/9/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	5/9/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
MKTF-19	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-19	5/9/2019	Copper, Total	0.0054	0.006	0.004072	790000	mg/L
MKTF-19	5/9/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-19	5/9/2019	Lead, Total	0.013	0.0025	0.000274	15000	mg/L
MKTF-19	5/9/2019	Manganese, Total	2.7	0.01	0.00145	2017000	mg/L
MKTF-19	5/9/2019	Mercury, Total	0.000051	0.0002	0.000038	2000	mg/L
MKTF-19	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	5/9/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-19	5/9/2019	Selenium, Total	0.00091	0.001	0.000478	50000	mg/L
MKTF-19	5/9/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
MKTF-19	5/9/2019	Thallium, Total	0.00014	0.0005	0.000052	2000	mg/L
MKTF-19	5/9/2019	Uranium, Total	0.001	0.0005	0.000085	30000	mg/L
MKTF-19	5/9/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-19	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-19	11/18/2014	Arsenic, Total	0.022	0.01	0.0036	10000	mg/L
MKTF-19	11/18/2014	Barium, Total	3.6	0.02	0.005	2000000	mg/L
MKTF-19	11/18/2014	Calcium, Total	140	5	0.41	NA	mg/L
MKTF-19	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-19	11/18/2014	Chromium, Total	0.035	0.006	0.0028	50000	mg/L
MKTF-19	11/18/2014	Copper, Total	0.043	0.006	0.0046	790000	mg/L
MKTF-19	11/18/2014	Iron, Total	47	2	0.72	13822000	mg/L
MKTF-19	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-19	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-19	11/18/2014	Magnesium, Total	28	1	0.018	NA	mg/L
MKTF-19	11/18/2014	Manganese, Total	5.6	0.02	0.0049	2017000	mg/L
MKTF-19	11/18/2014	Sodium, Total	270	5	2	NA	mg/L
MKTF-19	11/18/2014	Lead, Total	0.079	0.01	0.0026	15000	mg/L
MKTF-19	11/18/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
MKTF-19	11/18/2014	Uranium, Total	0.014	0.001	0.0000072	30000	mg/L
MKTF-19	11/18/2014	Zinc, Total	0.11	0.01	0.0035	5960000	mg/L
MKTF-19	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	3/12/2015	Arsenic, Total	0.017	0.001	0.00044	10000	mg/L
MKTF-19	3/12/2015	Barium, Total	2.7	0.01	0.0037	2000000	mg/L
MKTF-19	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-19	3/12/2015	Chromium, Total	0.022	0.006	0.0022	50000	mg/L
MKTF-19	3/12/2015	Copper, Total	0.026	0.006	0.0051	790000	mg/L
MKTF-19	3/12/2015	Iron, Total	33	1	0.36	13822000	mg/L
MKTF-19	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	3/12/2015	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-19	3/12/2015	Lead, Total	0.052	0.01	0.00069	15000	mg/L
MKTF-19	3/12/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-19	3/12/2015	Uranium, Total	0.0065	0.001	0.0000081	30000	mg/L
MKTF-19	3/12/2015	Zinc, Total	0.078	0.01	0.0036	5960000	mg/L
MKTF-19	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	6/8/2015	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-19	6/8/2015	Barium, Total	2.5	0.01	0.0053	2000000	mg/L
MKTF-19	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	6/8/2015	Chromium, Total	0.024	0.006	0.0022	50000	mg/L
MKTF-19	6/8/2015	Copper, Total	0.017	0.006	0.0051	790000	mg/L
MKTF-19	6/8/2015	Iron, Total	28	1	0.36	13822000	mg/L
MKTF-19	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	6/8/2015	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-19	6/8/2015	Lead, Total	0.035	0.0025	0.00024	15000	mg/L
MKTF-19	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-19	6/8/2015	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
MKTF-19	6/8/2015	Zinc, Total	0.082	0.01	0.0039	5960000	mg/L
MKTF-19	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/18/2015	Arsenic, Total	0.018	0.001	0.00029	10000	mg/L
MKTF-19	8/18/2015	Barium, Total	4.4	0.02	0.011	2000000	mg/L
MKTF-19	8/18/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-19	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	8/18/2015	Chromium, Total	0.044	0.006	0.0022	50000	mg/L
MKTF-19	8/18/2015	Copper, Total	0.06	0.006	0.0051	790000	mg/L
MKTF-19	8/18/2015	Iron, Total	64	2	0.72	13822000	mg/L
MKTF-19	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	8/18/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-19	8/18/2015	Magnesium, Total	32	1	0.039	NA	mg/L
MKTF-19	8/18/2015	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
MKTF-19	8/18/2015	Sodium, Total	290	5	0.36	NA	mg/L
MKTF-19	8/18/2015	Lead, Total	0.14	0.005	0.00047	15000	mg/L
MKTF-19	8/18/2015	Selenium, Total	0.0062	0.005	0.00062	50000	mg/L
MKTF-19	8/18/2015	Uranium, Total	0.024	0.0005	0.0000049	30000	mg/L
MKTF-19	8/18/2015	Zinc, Total	0.22	0.01	0.0039	5960000	mg/L
MKTF-19	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-19	11/3/2015	Arsenic, Total	0.018	0.005	0.00032	10000	mg/L
MKTF-19	11/3/2015	Barium, Total	1.7	0.01	0.0066	2000000	mg/L
MKTF-19	11/3/2015	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-19	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-19	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-19	11/3/2015	Iron, Total	13	0.4	0.18	13822000	mg/L
MKTF-19	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-19	11/3/2015	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-19	11/3/2015	Manganese, Total	3.4	0.01	0.0016	2017000	mg/L
MKTF-19	11/3/2015	Sodium, Total	260	5	0.48	NA	mg/L
MKTF-19	11/3/2015	Lead, Total	0.0016	0.0005	0.000026	15000	mg/L
MKTF-19	11/3/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-19	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-19	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-19	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	2/25/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
MKTF-19	2/25/2016	Barium, Total	2.8	0.01	0.0053	2000000	mg/L
MKTF-19	2/25/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-19	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	2/25/2016	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-19	2/25/2016	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-19	2/25/2016	Iron, Total	23	1	0.36	13822000	mg/L
MKTF-19	2/25/2016	Mercury, Total	ND	0.001	0.00027	2000	mg/L
MKTF-19	2/25/2016	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-19	2/25/2016	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-19	2/25/2016	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-19	2/25/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-19	2/25/2016	Lead, Total	0.069	0.0025	0.00024	15000	mg/L
MKTF-19	2/25/2016	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-19	2/25/2016	Uranium, Total	0.025	0.0025	0.000025	30000	mg/L
MKTF-19	2/25/2016	Zinc, Total	0.08	0.01	0.0039	5960000	mg/L
MKTF-19	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-19	6/10/2016	Arsenic, Total	0.015	0.005	0.00069	10000	mg/L
MKTF-19	6/10/2016	Barium, Total	1.6	0.01	0.0066	2000000	mg/L
MKTF-19	6/10/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-19	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-19	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-19	6/10/2016	Iron, Total	9.7	0.2	0.091	13822000	mg/L
MKTF-19	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-19	6/10/2016	Potassium, Total	0.95	1	0.18	NA	mg/L
MKTF-19	6/10/2016	Magnesium, Total	32	1	0.013	NA	mg/L
MKTF-19	6/10/2016	Manganese, Total	2.7	0.01	0.0016	2017000	mg/L
MKTF-19	6/10/2016	Sodium, Total	300	5	0.48	NA	mg/L
MKTF-19	6/10/2016	Lead, Total	0.0022	0.0025	0.00084	15000	mg/L
MKTF-19	6/10/2016	Selenium, Total	0.013	0.02	0.0042	50000	mg/L
MKTF-19	6/10/2016	Uranium, Total	0.00045	0.0025	0.00026	30000	mg/L
MKTF-19	6/10/2016	Zinc, Total	0.0062	0.01	0.0028	5960000	mg/L
MKTF-19	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	9/13/2016	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	Barium, Total	2.1	0.01	0.004	2000000	mg/L
MKTF-19	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	9/13/2016	Chromium, Total	0.0057	0.006	0.0027	50000	mg/L
MKTF-19	9/13/2016	Copper, Total	0.0083	0.006	0.003	790000	mg/L
MKTF-19	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-19	9/13/2016	Arsenic, Dissolved	0.017	0.001	0.00014	10000	mg/L
MKTF-19	9/13/2016	Barium, Dissolved	1.7	0.01	0.0066	2000000	mg/L
MKTF-19	9/13/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-19	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-19	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-19	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-19	9/13/2016	Iron, Dissolved	10	0.4	0.4	13821880	mg/L
MKTF-19	9/13/2016	Potassium, Dissolved	0.93	1	0.5	NA	mg/L
MKTF-19	9/13/2016	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-19	9/13/2016	Manganese, Dissolved	2.4	0.01	0.0016	2017400	mg/L
MKTF-19	9/13/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-19	9/13/2016	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-19	9/13/2016	Selenium, Dissolved	0.0082	0.02	0.0042	50000	mg/L
MKTF-19	9/13/2016	Uranium, Dissolved	0.00064	0.0005	0.000051	NA	mg/L
MKTF-19	9/13/2016	Zinc, Dissolved	0.0044	0.01	0.0028	5960450	mg/L
MKTF-19	9/13/2016	Iron, Total	17	1	1	13822000	mg/L
MKTF-19	9/13/2016	Mercury, Total	0.000073	0.0002	0.000053	2000	mg/L
MKTF-19	9/13/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-19	9/13/2016	Lead, Total	0.023	0.0005	0.000081	15000	mg/L
MKTF-19	9/13/2016	Selenium, Total	0.0079	0.01	0.0019	50000	mg/L
MKTF-19	9/13/2016	Uranium, Total	0.0043	0.0005	0.00017	30000	mg/L
MKTF-19	9/13/2016	Zinc, Total	0.065	0.01	0.0027	5960000	mg/L
MKTF-19	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	11/8/2016	Arsenic, Total	0.013	0.005	0.0011	10000	mg/L
MKTF-19	11/8/2016	Barium, Total	2.2	0.01	0.004	2000000	mg/L
MKTF-19	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	11/8/2016	Chromium, Total	0.0088	0.006	0.0027	50000	mg/L
MKTF-19	11/8/2016	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-19	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-19	11/8/2016	Arsenic, Dissolved	0.011	0.005	0.00069	10000	mg/L
MKTF-19	11/8/2016	Barium, Dissolved	1.6	0.02	0.013	2000000	mg/L
MKTF-19	11/8/2016	Calcium, Dissolved	150	10	5	NA	mg/L
MKTF-19	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-19	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-19	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-19	11/8/2016	Iron, Dissolved	8.5	0.2	0.2	13821880	mg/L
MKTF-19	11/8/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-19	11/8/2016	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-19	11/8/2016	Manganese, Dissolved	2.2	0.02	0.0032	2017400	mg/L
MKTF-19	11/8/2016	Sodium, Dissolved	290	10	5	NA	mg/L
MKTF-19	11/8/2016	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-19	11/8/2016	Selenium, Dissolved	0.0075	0.02	0.0042	50000	mg/L
MKTF-19	11/8/2016	Uranium, Dissolved	0.0016	0.0005	0.000051	NA	mg/L
MKTF-19	11/8/2016	Zinc, Dissolved	0.0091	0.01	0.0028	5960450	mg/L
MKTF-19	11/8/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-19	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-19	11/8/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-19	11/8/2016	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-19	11/8/2016	Selenium, Total	0.0087	0.02	0.0037	50000	mg/L
MKTF-19	11/8/2016	Uranium, Total	0.0059	0.0005	0.00017	30000	mg/L
MKTF-19	11/8/2016	Zinc, Total	0.07	0.01	0.0027	5960000	mg/L
MKTF-19	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	3/15/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
MKTF-19	3/15/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-19	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	3/15/2017	Chromium, Total	0.0075	0.006	0.0027	50000	mg/L
MKTF-19	3/15/2017	Copper, Total	0.018	0.006	0.003	790000	mg/L
MKTF-19	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-19	3/15/2017	Arsenic, Dissolved	0.015	0.01	0.0018	10000	mg/L
MKTF-19	3/15/2017	Barium, Dissolved	1.7	0.01	0.0043	2000000	mg/L
MKTF-19	3/15/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-19	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-19	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Iron, Dissolved	9	0.2	0.2	13821880	mg/L
MKTF-19	3/15/2017	Potassium, Dissolved	0.87	1	0.5	NA	mg/L
MKTF-19	3/15/2017	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-19	3/15/2017	Manganese, Dissolved	2.4	0.01	0.0019	2017400	mg/L
MKTF-19	3/15/2017	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-19	3/15/2017	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-19	3/15/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-19	3/15/2017	Uranium, Dissolved	0.0021	0.0005	0.00005	NA	mg/L
MKTF-19	3/15/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
MKTF-19	3/15/2017	Iron, Total	20	1	1	13822000	mg/L
MKTF-19	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	3/15/2017	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-19	3/15/2017	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-19	3/15/2017	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
MKTF-19	3/15/2017	Uranium, Total	0.0071	0.0005	0.00017	30000	mg/L
MKTF-19	3/15/2017	Zinc, Total	0.1	0.01	0.0027	5960000	mg/L
MKTF-19	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-19	6/14/2017	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-19	6/14/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-19	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	6/14/2017	Chromium, Total	0.0059	0.006	0.0011	50000	mg/L
MKTF-19	6/14/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
MKTF-19	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-19	6/14/2017	Arsenic, Dissolved	0.014	0.005	0.00089	10000	mg/L
MKTF-19	6/14/2017	Barium, Dissolved	1.7	0.02	0.0085	2000000	mg/L
MKTF-19	6/14/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-19	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-19	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	6/14/2017	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	6/14/2017	Potassium, Dissolved	0.76	1	0.11	NA	mg/L
MKTF-19	6/14/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-19	6/14/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-19	6/14/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-19	6/14/2017	Lead, Dissolved	0.0019	0.0005	0.00017	NA	mg/L
MKTF-19	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-19	6/14/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-19	6/14/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-19	6/14/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-19	6/14/2017	Manganese, Total	3.3	0.02	0.011	2017000	mg/L
MKTF-19	6/14/2017	Lead, Total	0.022	0.0005	0.000095	15000	mg/L
MKTF-19	6/14/2017	Selenium, Total	ND	0.01	0.0071	50000	mg/L
MKTF-19	6/14/2017	Zinc, Total	0.1	0.01	0.0028	5960000	mg/L
MKTF-19	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	9/26/2017	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
MKTF-19	9/26/2017	Barium, Total	2.4	0.01	0.0047	2000000	mg/L
MKTF-19	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	9/26/2017	Chromium, Total	0.012	0.006	0.0018	50000	mg/L
MKTF-19	9/26/2017	Copper, Total	0.015	0.006	0.0017	790000	mg/L
MKTF-19	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	9/26/2017	Arsenic, Dissolved	0.014	0.01	0.0018	10000	mg/L
MKTF-19	9/26/2017	Barium, Dissolved	1.6	0.02	0.0085	2000000	mg/L
MKTF-19	9/26/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-19	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	9/26/2017	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-19	9/26/2017	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-19	9/26/2017	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-19	9/26/2017	Manganese, Dissolved	3.1	0.02	0.0039	2017400	mg/L
MKTF-19	9/26/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-19	9/26/2017	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-19	9/26/2017	Selenium, Dissolved	0.0048	0.01	0.0039	50000	mg/L
MKTF-19	9/26/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-19	9/26/2017	Iron, Total	20	1	0.51	13822000	mg/L
MKTF-19	9/26/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
MKTF-19	9/26/2017	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-19	9/26/2017	Lead, Total	0.026	0.0025	0.00048	15000	mg/L
MKTF-19	9/26/2017	Selenium, Total	0.0077	0.005	0.0036	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	Zinc, Total	0.062	0.01	0.0033	5960000	mg/L
MKTF-19	12/1/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	12/1/2017	Arsenic, Total	0.0077	0.001	0.00041	10000	mg/L
MKTF-19	12/1/2017	Barium, Total	2	0.01	0.005	2000000	mg/L
MKTF-19	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	12/1/2017	Copper, Total	0.0056	0.006	0.0041	790000	mg/L
MKTF-19	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	12/1/2017	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
MKTF-19	12/1/2017	Barium, Dissolved	1.5	0.01	0.0049	2000000	mg/L
MKTF-19	12/1/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-19	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	12/1/2017	Iron, Dissolved	9.2	0.2	0.16	13821880	mg/L
MKTF-19	12/1/2017	Potassium, Dissolved	0.83	1	0.11	NA	mg/L
MKTF-19	12/1/2017	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-19	12/1/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
MKTF-19	12/1/2017	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-19	12/1/2017	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-19	12/1/2017	Uranium, Dissolved	0.00089	0.0005	0.000096	NA	mg/L
MKTF-19	12/1/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-19	12/1/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
MKTF-19	12/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	12/1/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-19	12/1/2017	Lead, Total	0.01	0.0005	0.00023	15000	mg/L
MKTF-19	12/1/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-19	12/1/2017	Uranium, Total	0.0016	0.005	0.0015	30000	mg/L
MKTF-19	12/1/2017	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-19	2/16/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-19	2/16/2018	Arsenic, Total	0.01	0.001	0.00041	10000	mg/L
MKTF-19	2/16/2018	Barium, Total	1.7	0.01	0.005	2000000	mg/L
MKTF-19	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	2/16/2018	Arsenic, Dissolved	0.0096	0.005	0.0021	10000	mg/L
MKTF-19	2/16/2018	Barium, Dissolved	1.7	0.01	0.0049	2000000	mg/L
MKTF-19	2/16/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-19	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	2/16/2018	Iron, Dissolved	9.6	0.2	0.16	13821880	mg/L
MKTF-19	2/16/2018	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-19	2/16/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-19	2/16/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-19	2/16/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-19	2/16/2018	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-19	2/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-19	2/16/2018	Uranium, Dissolved	0.00049	0.0005	0.000096	NA	mg/L
MKTF-19	2/16/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-19	2/16/2018	Iron, Total	10	0.4	0.2	13822000	mg/L
MKTF-19	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	2/16/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-19	2/16/2018	Lead, Total	0.0058	0.0005	0.00023	15000	mg/L
MKTF-19	2/16/2018	Selenium, Total	0.0029	0.001	0.00098	50000	mg/L
MKTF-19	2/16/2018	Uranium, Total	0.0012	0.0005	0.000068	30000	mg/L
MKTF-19	2/16/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-19	5/4/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-19	5/4/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-19	5/4/2018	Barium, Total	1.8	0.01	0.005	2000000	mg/L
MKTF-19	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	5/4/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	5/4/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-19	5/4/2018	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
MKTF-19	5/4/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	5/4/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	5/4/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
MKTF-19	5/4/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-19	5/4/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-19	5/4/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-19	5/4/2018	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	5/4/2018	Uranium, Dissolved	0.0003	0.0005	0.000096	NA	mg/L
MKTF-19	5/4/2018	Zinc, Dissolved	0.0042	0.01	0.0021	5960450	mg/L
MKTF-19	5/4/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-19	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	5/4/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	5/4/2018	Lead, Total	0.0047	0.0005	0.00023	15000	mg/L
MKTF-19	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	5/4/2018	Uranium, Total	0.00073	0.0005	0.000068	30000	mg/L
MKTF-19	5/4/2018	Zinc, Total	0.0063	0.01	0.0033	5960000	mg/L
MKTF-19	8/24/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-19	8/24/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-19	8/24/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
MKTF-19	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	8/24/2018	Chromium, Total	0.0019	0.006	0.0018	50000	mg/L
MKTF-19	8/24/2018	Copper, Total	0.0055	0.006	0.0041	790000	mg/L
MKTF-19	8/24/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-19	8/24/2018	Arsenic, Dissolved	0.014	0.001	0.00042	10000	mg/L
MKTF-19	8/24/2018	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
MKTF-19	8/24/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-19	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	8/24/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	8/24/2018	Potassium, Dissolved	0.86	1	0.11	NA	mg/L
MKTF-19	8/24/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-19	8/24/2018	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-19	8/24/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-19	8/24/2018	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-19	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	8/24/2018	Uranium, Dissolved	0.00075	0.0005	0.000096	NA	mg/L
MKTF-19	8/24/2018	Zinc, Dissolved	0.0097	0.01	0.0021	5960450	mg/L
MKTF-19	8/24/2018	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-19	8/24/2018	Mercury, Total	0.000088	0.0002	0.000038	2000	mg/L
MKTF-19	8/24/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	8/24/2018	Lead, Total	0.016	0.0005	0.00023	15000	mg/L
MKTF-19	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	8/24/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-19	8/24/2018	Zinc, Total	0.033	0.01	0.0033	5960000	mg/L
MKTF-19	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	11/28/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-19	11/28/2018	Barium, Total	1.9	0.01	0.005	2000000	mg/L
MKTF-19	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	11/28/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-19	11/28/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
MKTF-19	11/28/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-19	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	11/28/2018	Iron, Dissolved	8.3	0.4	0.33	13821880	mg/L
MKTF-19	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-19	11/28/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-19	11/28/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-19	11/28/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-19	11/28/2018	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	11/28/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/28/2018	Iron, Total	7.5	0.4	0.2	13822000	mg/L
MKTF-19	11/28/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	11/28/2018	Lead, Total	0.0051	0.0005	0.00023	15000	mg/L
MKTF-19	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	11/28/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-20	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-20	11/18/2014	Arsenic, Total	0.017	0.005	0.0018	10000	mg/L
MKTF-20	11/18/2014	Barium, Total	4.5	0.02	0.005	2000000	mg/L
MKTF-20	11/18/2014	Calcium, Total	110	5	0.41	NA	mg/L
MKTF-20	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-20	11/18/2014	Chromium, Total	0.022	0.006	0.0028	50000	mg/L
MKTF-20	11/18/2014	Copper, Total	0.12	0.006	0.0046	790000	mg/L
MKTF-20	11/18/2014	Iron, Total	45	2	0.72	13822000	mg/L
MKTF-20	11/18/2014	Mercury, Total	0.00028	0.0002	0.000087	2000	mg/L
MKTF-20	11/18/2014	Potassium, Total	22	1	0.093	NA	mg/L
MKTF-20	11/18/2014	Magnesium, Total	20	1	0.018	NA	mg/L
MKTF-20	11/18/2014	Manganese, Total	4.9	0.02	0.0049	2017000	mg/L
MKTF-20	11/18/2014	Sodium, Total	100	5	2	NA	mg/L
MKTF-20	11/18/2014	Lead, Total	0.048	0.001	0.00026	15000	mg/L
MKTF-20	11/18/2014	Selenium, Total	ND	0.005	0.0025	50000	mg/L
MKTF-20	11/18/2014	Uranium, Total	0.0066	0.001	0.0000072	30000	mg/L
MKTF-20	11/18/2014	Zinc, Total	0.19	0.01	0.0035	5960000	mg/L
MKTF-20	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	3/16/2015	Arsenic, Total	0.025	0.001	0.00044	10000	mg/L
MKTF-20	3/16/2015	Barium, Total	2	0.01	0.0037	2000000	mg/L
MKTF-20	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-20	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-20	3/16/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-20	3/16/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-20	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-20	3/16/2015	Manganese, Total	3.2	0.01	0.0076	2017000	mg/L
MKTF-20	3/16/2015	Lead, Total	0.0066	0.001	0.000069	15000	mg/L
MKTF-20	3/16/2015	Selenium, Total	0.0046	0.001	0.00012	50000	mg/L
MKTF-20	3/16/2015	Uranium, Total	0.011	0.001	0.0000081	30000	mg/L
MKTF-20	3/16/2015	Zinc, Total	0.03	0.01	0.0036	5960000	mg/L
MKTF-20	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	6/8/2015	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-20	6/8/2015	Barium, Total	2.1	0.01	0.0053	2000000	mg/L
MKTF-20	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-20	6/8/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
MKTF-20	6/8/2015	Copper, Total	0.078	0.006	0.0051	790000	mg/L
MKTF-20	6/8/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-20	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-20	6/8/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-20	6/8/2015	Lead, Total	0.018	0.0025	0.00024	15000	mg/L
MKTF-20	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-20	6/8/2015	Uranium, Total	0.0078	0.0025	0.000025	30000	mg/L
MKTF-20	6/8/2015	Zinc, Total	0.26	0.01	0.0039	5960000	mg/L
MKTF-20	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	6/9/2016	Arsenic, Total	0.038	0.01	0.0029	10000	mg/L
MKTF-20	6/9/2016	Barium, Total	4.6	0.01	0.0053	2000000	mg/L
MKTF-20	6/9/2016	Calcium, Total	220	5	1.3	NA	mg/L
MKTF-20	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-20	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-20	6/9/2016	Copper, Total	0.09	0.006	0.0051	790000	mg/L
MKTF-20	6/9/2016	Iron, Total	17	1	0.36	13822000	mg/L
MKTF-20	6/9/2016	Mercury, Total	0.000077	0.0002	0.000053	2000	mg/L
MKTF-20	6/9/2016	Potassium, Total	20	1	0.18	NA	mg/L
MKTF-20	6/9/2016	Magnesium, Total	40	1	0.013	NA	mg/L
MKTF-20	6/9/2016	Manganese, Total	5	0.01	0.0076	2017000	mg/L
MKTF-20	6/9/2016	Sodium, Total	230	5	0.48	NA	mg/L
MKTF-20	6/9/2016	Lead, Total	0.019	0.0005	0.000047	15000	mg/L
MKTF-20	6/9/2016	Selenium, Total	0.0093	0.01	0.0012	50000	mg/L
MKTF-20	6/9/2016	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-20	6/9/2016	Zinc, Total	0.085	0.01	0.0039	5960000	mg/L
MKTF-20	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	9/12/2016	Arsenic, Total	0.025	0.005	0.0011	10000	mg/L
MKTF-20	9/12/2016	Barium, Total	5.2	0.02	0.0079	2000000	mg/L
MKTF-20	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	9/12/2016	Copper, Total	0.022	0.006	0.003	790000	mg/L
MKTF-20	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-20	9/12/2016	Arsenic, Dissolved	0.027	0.001	0.00014	10000	mg/L
MKTF-20	9/12/2016	Barium, Dissolved	4.7	0.01	0.0066	2000000	mg/L
MKTF-20	9/12/2016	Calcium, Dissolved	220	5	2.5	NA	mg/L
MKTF-20	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-20	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-20	9/12/2016	Copper, Dissolved	0.0046	0.006	0.004	790000	mg/L
MKTF-20	9/12/2016	Iron, Dissolved	14	0.4	0.4	13821880	mg/L
MKTF-20	9/12/2016	Potassium, Dissolved	13	1	0.5	NA	mg/L
MKTF-20	9/12/2016	Magnesium, Dissolved	45	1	0.5	NA	mg/L
MKTF-20	9/12/2016	Manganese, Dissolved	3.8	0.01	0.0016	2017400	mg/L
MKTF-20	9/12/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-20	9/12/2016	Lead, Dissolved	0.004	0.0005	0.00017	NA	mg/L
MKTF-20	9/12/2016	Selenium, Dissolved	0.0079	0.005	0.0011	50000	mg/L
MKTF-20	9/12/2016	Uranium, Dissolved	0.0033	0.0005	0.000051	NA	mg/L
MKTF-20	9/12/2016	Zinc, Dissolved	0.012	0.01	0.0028	5960450	mg/L
MKTF-20	9/12/2016	Iron, Total	17	1	1	13822000	mg/L
MKTF-20	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-20	9/12/2016	Manganese, Total	4.4	0.01	0.0014	2017000	mg/L
MKTF-20	9/12/2016	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-20	9/12/2016	Selenium, Total	0.0092	0.005	0.00094	50000	mg/L
MKTF-20	9/12/2016	Uranium, Total	0.0044	0.0005	0.00017	30000	mg/L
MKTF-20	9/12/2016	Zinc, Total	0.033	0.01	0.0027	5960000	mg/L
MKTF-20	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	11/3/2016	Arsenic, Total	0.029	0.005	0.0011	10000	mg/L
MKTF-20	11/3/2016	Barium, Total	9.3	0.02	0.0079	2000000	mg/L
MKTF-20	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-20	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	11/3/2016	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-20	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-20	11/3/2016	Arsenic, Dissolved	0.026	0.005	0.00069	10000	mg/L
MKTF-20	11/3/2016	Barium, Dissolved	8.6	0.02	0.013	2000000	mg/L
MKTF-20	11/3/2016	Calcium, Dissolved	480	10	5	NA	mg/L
MKTF-20	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-20	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-20	11/3/2016	Copper, Dissolved	0.0073	0.006	0.004	790000	mg/L
MKTF-20	11/3/2016	Iron, Dissolved	20	1	1	13821880	mg/L
MKTF-20	11/3/2016	Potassium, Dissolved	22	1	0.5	NA	mg/L
MKTF-20	11/3/2016	Magnesium, Dissolved	92	1	0.5	NA	mg/L
MKTF-20	11/3/2016	Manganese, Dissolved	8	0.02	0.0032	2017400	mg/L
MKTF-20	11/3/2016	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-20	11/3/2016	Lead, Dissolved	0.0053	0.0025	0.00084	NA	mg/L
MKTF-20	11/3/2016	Selenium, Dissolved	0.011	0.005	0.0011	50000	mg/L
MKTF-20	11/3/2016	Uranium, Dissolved	0.0052	0.0025	0.00026	NA	mg/L
MKTF-20	11/3/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
MKTF-20	11/3/2016	Iron, Total	22	1	1	13822000	mg/L
MKTF-20	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-20	11/3/2016	Manganese, Total	8.9	0.02	0.0027	2017000	mg/L
MKTF-20	11/3/2016	Lead, Total	0.009	0.0025	0.00041	15000	mg/L
MKTF-20	11/3/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-20	11/3/2016	Uranium, Total	0.0052	0.0025	0.00087	30000	mg/L
MKTF-20	11/3/2016	Zinc, Total	0.024	0.01	0.0027	5960000	mg/L
MKTF-20	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	3/14/2017	Arsenic, Total	0.025	0.01	0.0021	10000	mg/L
MKTF-20	3/14/2017	Barium, Total	11	0.1	0.04	2000000	mg/L
MKTF-20	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-20	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	3/14/2017	Copper, Total	0.036	0.006	0.003	790000	mg/L
MKTF-20	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-20	3/14/2017	Arsenic, Dissolved	0.019	0.01	0.0018	10000	mg/L
MKTF-20	3/14/2017	Barium, Dissolved	12	0.04	0.017	2000000	mg/L
MKTF-20	3/14/2017	Calcium, Dissolved	400	20	10	NA	mg/L
MKTF-20	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-20	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	3/14/2017	Iron, Dissolved	23	1	1	13821880	mg/L
MKTF-20	3/14/2017	Potassium, Dissolved	6.2	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/14/2017	Magnesium, Dissolved	87	1	0.5	NA	mg/L
MKTF-20	3/14/2017	Manganese, Dissolved	7.2	0.04	0.0077	2017400	mg/L
MKTF-20	3/14/2017	Sodium, Dissolved	520	50	25	NA	mg/L
MKTF-20	3/14/2017	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-20	3/14/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-20	3/14/2017	Uranium, Dissolved	0.00053	0.0005	0.00005	NA	mg/L
MKTF-20	3/14/2017	Zinc, Dissolved	0.041	0.01	0.0011	5960450	mg/L
MKTF-20	3/14/2017	Iron, Total	22	1	1	13822000	mg/L
MKTF-20	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	3/14/2017	Manganese, Total	6.3	0.02	0.0027	2017000	mg/L
MKTF-20	3/14/2017	Lead, Total	0.013	0.0005	0.000081	15000	mg/L
MKTF-20	3/14/2017	Selenium, Total	0.018	0.05	0.0094	50000	mg/L
MKTF-20	3/14/2017	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
MKTF-20	3/14/2017	Zinc, Total	0.097	0.01	0.0027	5960000	mg/L
MKTF-20	6/12/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-20	6/12/2017	Arsenic, Total	0.022	0.005	0.0015	10000	mg/L
MKTF-20	6/12/2017	Barium, Total	7.5	0.02	0.0093	2000000	mg/L
MKTF-20	6/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	6/12/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-20	6/12/2017	Copper, Total	0.02	0.006	0.0017	790000	mg/L
MKTF-20	6/12/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-20	6/12/2017	Arsenic, Dissolved	0.021	0.01	0.0018	10000	mg/L
MKTF-20	6/12/2017	Barium, Dissolved	7.6	0.02	0.0085	2000000	mg/L
MKTF-20	6/12/2017	Calcium, Dissolved	230	10	0.78	NA	mg/L
MKTF-20	6/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	6/12/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-20	6/12/2017	Copper, Dissolved	0.0037	0.006	0.0032	790000	mg/L
MKTF-20	6/12/2017	Iron, Dissolved	17	0.4	0.33	13821880	mg/L
MKTF-20	6/12/2017	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-20	6/12/2017	Magnesium, Dissolved	56	1	0.25	NA	mg/L
MKTF-20	6/12/2017	Manganese, Dissolved	4.1	0.02	0.0038	2017400	mg/L
MKTF-20	6/12/2017	Sodium, Dissolved	340	10	1.6	NA	mg/L
MKTF-20	6/12/2017	Lead, Dissolved	0.0042	0.0005	0.00017	NA	mg/L
MKTF-20	6/12/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-20	6/12/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-20	6/12/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-20	6/12/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	6/12/2017	Manganese, Total	4.1	0.02	0.011	2017000	mg/L
MKTF-20	6/12/2017	Lead, Total	0.012	0.0005	0.000095	15000	mg/L
MKTF-20	6/12/2017	Selenium, Total	0.035	0.01	0.0071	50000	mg/L
MKTF-20	6/12/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-20	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-20	9/26/2017	Arsenic, Total	0.026	0.01	0.003	10000	mg/L
MKTF-20	9/26/2017	Barium, Total	7.6	0.02	0.0093	2000000	mg/L
MKTF-20	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	9/26/2017	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-20	9/26/2017	Copper, Total	0.11	0.006	0.0017	790000	mg/L
MKTF-20	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-20	9/26/2017	Arsenic, Dissolved	0.02	0.01	0.0018	10000	mg/L
MKTF-20	9/26/2017	Barium, Dissolved	8.5	0.02	0.0085	2000000	mg/L
MKTF-20	9/26/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
MKTF-20	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	9/26/2017	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-20	9/26/2017	Potassium, Dissolved	2.6	1	0.11	NA	mg/L
MKTF-20	9/26/2017	Magnesium, Dissolved	55	1	0.25	NA	mg/L
MKTF-20	9/26/2017	Manganese, Dissolved	3.8	0.02	0.0039	2017400	mg/L
MKTF-20	9/26/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-20	9/26/2017	Lead, Dissolved	0.00097	0.0005	0.00017	NA	mg/L
MKTF-20	9/26/2017	Selenium, Dissolved	ND	0.1	0.039	50000	mg/L
MKTF-20	9/26/2017	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-20	9/26/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
MKTF-20	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	9/26/2017	Manganese, Total	3.9	0.02	0.011	2017000	mg/L
MKTF-20	9/26/2017	Lead, Total	0.0083	0.0005	0.000095	15000	mg/L
MKTF-20	9/26/2017	Selenium, Total	0.033	0.01	0.0071	50000	mg/L
MKTF-20	9/26/2017	Zinc, Total	0.35	0.01	0.0033	5960000	mg/L
MKTF-20	11/29/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2017	Arsenic, Total	0.025	0.005	0.0021	10000	mg/L
MKTF-20	11/29/2017	Barium, Total	9.3	0.04	0.02	2000000	mg/L
MKTF-20	11/29/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	11/29/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	11/29/2017	Copper, Total	0.045	0.006	0.0041	790000	mg/L
MKTF-20	11/29/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-20	11/29/2017	Arsenic, Dissolved	0.017	0.005	0.0021	10000	mg/L
MKTF-20	11/29/2017	Barium, Dissolved	8.6	0.02	0.0099	2000000	mg/L
MKTF-20	11/29/2017	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-20	11/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	11/29/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	11/29/2017	Copper, Dissolved	0.014	0.006	0.0032	790000	mg/L
MKTF-20	11/29/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-20	11/29/2017	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
MKTF-20	11/29/2017	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-20	11/29/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-20	11/29/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-20	11/29/2017	Lead, Dissolved	0.0033	0.0005	0.00017	NA	mg/L
MKTF-20	11/29/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-20	11/29/2017	Uranium, Dissolved	0.0023	0.0005	0.000096	NA	mg/L
MKTF-20	11/29/2017	Zinc, Dissolved	0.0086	0.01	0.0021	5960450	mg/L
MKTF-20	11/29/2017	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-20	11/29/2017	Manganese, Total	2.9	0.01	0.0055	2017000	mg/L
MKTF-20	11/29/2017	Lead, Total	0.0086	0.0005	0.00023	15000	mg/L
MKTF-20	11/29/2017	Selenium, Total	0.0096	0.005	0.0049	50000	mg/L
MKTF-20	11/29/2017	Uranium, Total	0.0025	0.0005	0.00015	30000	mg/L
MKTF-20	11/29/2017	Zinc, Total	0.06	0.01	0.0033	5960000	mg/L
MKTF-20	2/15/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-20	2/15/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-20	2/15/2018	Barium, Total	32	0.1	0.05	2000000	mg/L
MKTF-20	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	2/15/2018	Copper, Total	0.029	0.006	0.0041	790000	mg/L
MKTF-20	2/15/2018	Silver, Dissolved	0.011	0.005	0.0018	81200	mg/L
MKTF-20	2/15/2018	Arsenic, Dissolved	0.0096	0.005	0.0021	10000	mg/L
MKTF-20	2/15/2018	Barium, Dissolved	33	0.1	0.049	2000000	mg/L
MKTF-20	2/15/2018	Calcium, Dissolved	950	10	0.78	NA	mg/L
MKTF-20	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	2/15/2018	Iron, Dissolved	53	2	1.6	13821880	mg/L
MKTF-20	2/15/2018	Potassium, Dissolved	6.9	1	0.11	NA	mg/L
MKTF-20	2/15/2018	Magnesium, Dissolved	250	5	1.2	NA	mg/L
MKTF-20	2/15/2018	Manganese, Dissolved	17	0.1	0.02	2017400	mg/L
MKTF-20	2/15/2018	Sodium, Dissolved	1100	50	8.2	NA	mg/L
MKTF-20	2/15/2018	Lead, Dissolved	0.0015	0.0025	0.00087	NA	mg/L
MKTF-20	2/15/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
MKTF-20	2/15/2018	Uranium, Dissolved	0.0017	0.0025	0.00048	NA	mg/L
MKTF-20	2/15/2018	Zinc, Dissolved	0.0093	0.01	0.0021	5960450	mg/L
MKTF-20	2/15/2018	Iron, Total	52	2	1	13822000	mg/L
MKTF-20	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	2/15/2018	Manganese, Total	16	0.04	0.022	2017000	mg/L
MKTF-20	2/15/2018	Lead, Total	0.0073	0.0025	0.0011	15000	mg/L
MKTF-20	2/15/2018	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
MKTF-20	2/15/2018	Uranium, Total	0.0031	0.0025	0.00034	30000	mg/L
MKTF-20	2/15/2018	Zinc, Total	0.029	0.01	0.0033	5960000	mg/L
MKTF-20	5/11/2018	Silver, Total	0.0057	0.005	0.0012	50000	mg/L
MKTF-20	5/11/2018	Arsenic, Total	0.028	0.005	0.0021	10000	mg/L
MKTF-20	5/11/2018	Barium, Total	9	0.02	0.01	2000000	mg/L
MKTF-20	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	5/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	5/11/2018	Copper, Total	0.027	0.006	0.0041	790000	mg/L
MKTF-20	5/11/2018	Silver, Dissolved	0.0038	0.005	0.0018	81200	mg/L
MKTF-20	5/11/2018	Arsenic, Dissolved	0.023	0.001	0.00042	10000	mg/L
MKTF-20	5/11/2018	Barium, Dissolved	8.8	0.02	0.0099	2000000	mg/L
MKTF-20	5/11/2018	Calcium, Dissolved	320	10	0.78	NA	mg/L
MKTF-20	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	5/11/2018	Copper, Dissolved	0.014	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/11/2018	Iron, Dissolved	17	0.4	0.33	13821880	mg/L
MKTF-20	5/11/2018	Potassium, Dissolved	7.5	1	0.11	NA	mg/L
MKTF-20	5/11/2018	Magnesium, Dissolved	79	1	0.25	NA	mg/L
MKTF-20	5/11/2018	Manganese, Dissolved	5.4	0.02	0.0039	2017400	mg/L
MKTF-20	5/11/2018	Sodium, Dissolved	740	10	1.6	NA	mg/L
MKTF-20	5/11/2018	Lead, Dissolved	0.0043	0.0005	0.00017	NA	mg/L
MKTF-20	5/11/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
MKTF-20	5/11/2018	Uranium, Dissolved	0.0037	0.005	0.00096	NA	mg/L
MKTF-20	5/11/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
MKTF-20	5/11/2018	Iron, Total	16	1	0.51	13822000	mg/L
MKTF-20	5/11/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	5/11/2018	Manganese, Total	5.5	0.02	0.011	2017000	mg/L
MKTF-20	5/11/2018	Lead, Total	0.0088	0.0025	0.0011	15000	mg/L
MKTF-20	5/11/2018	Selenium, Total	0.012	0.005	0.0049	50000	mg/L
MKTF-20	5/11/2018	Uranium, Total	0.0052	0.0025	0.00034	30000	mg/L
MKTF-20	5/11/2018	Zinc, Total	0.023	0.01	0.0033	5960000	mg/L
MKTF-20	8/31/2018	Silver, Total	0.0041	0.005	0.0012	50000	mg/L
MKTF-20	8/31/2018	Arsenic, Total	0.028	0.001	0.00041	10000	mg/L
MKTF-20	8/31/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
MKTF-20	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	8/31/2018	Copper, Total	0.021	0.006	0.0041	790000	mg/L
MKTF-20	8/31/2018	Silver, Dissolved	0.0036	0.005	0.0018	81200	mg/L
MKTF-20	8/31/2018	Arsenic, Dissolved	0.026	0.005	0.0021	10000	mg/L
MKTF-20	8/31/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
MKTF-20	8/31/2018	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-20	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	8/31/2018	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
MKTF-20	8/31/2018	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
MKTF-20	8/31/2018	Potassium, Dissolved	17	1	0.11	NA	mg/L
MKTF-20	8/31/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-20	8/31/2018	Manganese, Dissolved	2.8	0.01	0.002	2017400	mg/L
MKTF-20	8/31/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
MKTF-20	8/31/2018	Lead, Dissolved	0.0039	0.0025	0.00087	NA	mg/L
MKTF-20	8/31/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-20	8/31/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
MKTF-20	8/31/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-20	8/31/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
MKTF-20	8/31/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	8/31/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-20	8/31/2018	Lead, Total	0.0054	0.0005	0.00023	15000	mg/L
MKTF-20	8/31/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-20	8/31/2018	Uranium, Total	0.0017	0.0005	0.000068	30000	mg/L
MKTF-20	8/31/2018	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
MKTF-20	11/29/2018	Silver, Total	0.0045	0.005	0.0012	50000	mg/L
MKTF-20	11/29/2018	Arsenic, Total	0.025	0.001	0.00041	10000	mg/L
MKTF-20	11/29/2018	Barium, Total	5.5	0.02	0.01	2000000	mg/L
MKTF-20	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	11/29/2018	Copper, Total	0.095	0.006	0.0041	790000	mg/L
MKTF-20	11/29/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
MKTF-20	11/29/2018	Arsenic, Dissolved	0.019	0.001	0.00042	10000	mg/L
MKTF-20	11/29/2018	Barium, Dissolved	4.9	0.01	0.0049	2000000	mg/L
MKTF-20	11/29/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-20	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	11/29/2018	Copper, Dissolved	0.0059	0.006	0.0032	790000	mg/L
MKTF-20	11/29/2018	Iron, Dissolved	2.5	0.1	0.082	13821880	mg/L
MKTF-20	11/29/2018	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-20	11/29/2018	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-20	11/29/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-20	11/29/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
MKTF-20	11/29/2018	Lead, Dissolved	0.00078	0.0005	0.00017	NA	mg/L
MKTF-20	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-20	11/29/2018	Zinc, Dissolved	0.061	0.01	0.0021	5960450	mg/L
MKTF-20	11/29/2018	Iron, Total	8	0.2	0.1	13822000	mg/L
MKTF-20	11/29/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-20	11/29/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	Lead, Total	0.0047	0.0005	0.00023	15000	mg/L
MKTF-20	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-20	11/29/2018	Zinc, Total	0.26	0.01	0.0033	5960000	mg/L
MKTF-20	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-20	8/21/2019	Antimony, Dissolved	0.00049	0.001	0.000389	6000	mg/L
MKTF-20	8/21/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L
MKTF-20	8/21/2019	Barium, Dissolved	22	0.1	0.032419	2000000	mg/L
MKTF-20	8/21/2019	Beryllium, Dissolved	0.00043	0.002	0.000284	4000	mg/L
MKTF-20	8/21/2019	Boron, Dissolved	1	0.2	0.022653	3949110	mg/L
MKTF-20	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	8/21/2019	Calcium, Dissolved	610	50	3.094457	NA	mg/L
MKTF-20	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-20	8/21/2019	Copper, Dissolved	0.014	0.006	0.001296	790000	mg/L
MKTF-20	8/21/2019	Iron, Dissolved	20	1	0.437344	13821880	mg/L
MKTF-20	8/21/2019	Lead, Dissolved	0.003	0.0025	0.000274	NA	mg/L
MKTF-20	8/21/2019	Magnesium, Dissolved	170	5	0.251452	NA	mg/L
MKTF-20	8/21/2019	Manganese, Dissolved	8.1	0.1	0.014497	2017400	mg/L
MKTF-20	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	8/21/2019	Nickel, Dissolved	0.09	0.01	0.004009	372000	mg/L
MKTF-20	8/21/2019	Potassium, Dissolved	6.4	1	0.162288	NA	mg/L
MKTF-20	8/21/2019	Selenium, Dissolved	0.0013	0.001	0.000171	50000	mg/L
MKTF-20	8/21/2019	Silver, Dissolved	0.0068	0.005	0.000942	81200	mg/L
MKTF-20	8/21/2019	Sodium, Dissolved	1400	50	20.808815	NA	mg/L
MKTF-20	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-20	8/21/2019	Uranium, Dissolved	0.0027	0.0025	0.000374	NA	mg/L
MKTF-20	8/21/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-20	8/21/2019	Aluminum, Total	0.027	0.02	0.002488	19914000	mg/L
MKTF-20	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-20	8/21/2019	Arsenic, Total	0.02	0.001	0.000312	10000	mg/L
MKTF-20	8/21/2019	Barium, Total	21	0.1	0.032419	2000000	mg/L
MKTF-20	8/21/2019	Beryllium, Total	0.00061	0.002	0.000284	4000	mg/L
MKTF-20	8/21/2019	Boron, Total	0.99	0.2	0.022653	3949	mg/L
MKTF-20	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	8/21/2019	Copper, Total	0.016	0.006	0.004072	790000	mg/L
MKTF-20	8/21/2019	Iron, Total	19	1	0.437344	13822000	mg/L
MKTF-20	8/21/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-20	8/21/2019	Manganese, Total	7.5	0.1	0.014497	2017000	mg/L
MKTF-20	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	8/21/2019	Nickel, Total	0.089	0.01	0.004009	372000	mg/L
MKTF-20	8/21/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
MKTF-20	8/21/2019	Silver, Total	0.007	0.005	0.001418	50000	mg/L
MKTF-20	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-20	8/21/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
MKTF-20	8/21/2019	Zinc, Total	0.02	0.01	0.005772	5960000	mg/L
MKTF-20	2/20/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-20	2/20/2019	Arsenic, Dissolved	0.036	0.005	0.00034	10000	mg/L
MKTF-20	2/20/2019	Barium, Dissolved	3.6	0.01	0.003242	2000000	mg/L
MKTF-20	2/20/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
MKTF-20	2/20/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
MKTF-20	2/20/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-20	2/20/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
MKTF-20	2/20/2019	Copper, Dissolved	0.0094	0.03	0.006481	790000	mg/L
MKTF-20	2/20/2019	Iron, Dissolved	47	1	0.437344	13821880	mg/L
MKTF-20	2/20/2019	Lead, Dissolved	0.0035	0.0025	0.000235	NA	mg/L
MKTF-20	2/20/2019	Magnesium, Dissolved	39	5	0.251452	NA	mg/L
MKTF-20	2/20/2019	Manganese, Dissolved	5.5	0.1	0.014497	2017400	mg/L
MKTF-20	2/20/2019	Potassium, Dissolved	15	5	0.811441	NA	mg/L
MKTF-20	2/20/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-20	2/20/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
MKTF-20	2/20/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-20	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000158	2000	mg/L
MKTF-20	2/20/2019	Uranium, Dissolved	0.0012	0.0025	0.000152	NA	mg/L
MKTF-20	2/20/2019	Zinc, Dissolved	0.16	0.05	0.01126	5960450	mg/L
MKTF-20	2/20/2019	Antimony, Total	0.00078	0.001	0.000389	6000	mg/L
MKTF-20	2/20/2019	Arsenic, Total	0.045	0.001	0.000312	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/20/2019	Barium, Total	3.9	0.01	0.003242	2000000	mg/L
MKTF-20	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-20	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	2/20/2019	Copper, Total	0.045	0.006	0.004072	790000	mg/L
MKTF-20	2/20/2019	Iron, Total	58	2	0.874687	13822000	mg/L
MKTF-20	2/20/2019	Lead, Total	0.01	0.0005	0.000055	15000	mg/L
MKTF-20	2/20/2019	Manganese, Total	5.5	0.02	0.002899	2017000	mg/L
MKTF-20	2/20/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
MKTF-20	2/20/2019	Selenium, Total	0.00065	0.001	0.000478	50000	mg/L
MKTF-20	2/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-20	2/20/2019	Thallium, Total	0.000061	0.0005	0.000052	2000	mg/L
MKTF-20	2/20/2019	Uranium, Total	0.0018	0.0005	0.000085	30000	mg/L
MKTF-20	2/20/2019	Zinc, Total	0.52	0.01	0.005772	5960000	mg/L
MKTF-20	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-20	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-20	5/14/2019	Arsenic, Dissolved	0.027	0.005	0.000504	10000	mg/L
MKTF-20	5/14/2019	Barium, Dissolved	5	0.01	0.003242	2000000	mg/L
MKTF-20	5/14/2019	Beryllium, Dissolved	0.00061	0.002	0.000284	4000	mg/L
MKTF-20	5/14/2019	Boron, Dissolved	0.88	0.04	0.004531	3949110	mg/L
MKTF-20	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	5/14/2019	Calcium, Dissolved	650	50	3.094457	NA	mg/L
MKTF-20	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-20	5/14/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-20	5/14/2019	Iron, Dissolved	22	1	0.437344	13821880	mg/L
MKTF-20	5/14/2019	Lead, Dissolved	0.002	0.0025	0.000274	NA	mg/L
MKTF-20	5/14/2019	Magnesium, Dissolved	200	5	0.251452	NA	mg/L
MKTF-20	5/14/2019	Manganese, Dissolved	9	0.1	0.014497	2017400	mg/L
MKTF-20	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	5/14/2019	Nickel, Dissolved	0.078	0.01	0.004009	372000	mg/L
MKTF-20	5/14/2019	Potassium, Dissolved	2.7	1	0.162288	NA	mg/L
MKTF-20	5/14/2019	Selenium, Dissolved	0.0015	0.005	0.000857	50000	mg/L
MKTF-20	5/14/2019	Silver, Dissolved	0.0079	0.005	0.000942	81200	mg/L
MKTF-20	5/14/2019	Sodium, Dissolved	1500	50	20.808815	NA	mg/L
MKTF-20	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-20	5/14/2019	Uranium, Dissolved	0.0027	0.0025	0.000374	NA	mg/L
MKTF-20	5/14/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-20	5/14/2019	Aluminum, Total	0.068	0.02	0.002488	19914000	mg/L
MKTF-20	5/14/2019	Antimony, Total	0.00056	0.001	0.000389	6000	mg/L
MKTF-20	5/14/2019	Arsenic, Total	0.034	0.001	0.000312	10000	mg/L
MKTF-20	5/14/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
MKTF-20	5/14/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-20	5/14/2019	Boron, Total	0.87	0.04	0.004531	3949	mg/L
MKTF-20	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	5/14/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
MKTF-20	5/14/2019	Iron, Total	25	1	0.437344	13822000	mg/L
MKTF-20	5/14/2019	Lead, Total	0.005	0.0005	0.000055	15000	mg/L
MKTF-20	5/14/2019	Manganese, Total	8.5	0.04	0.005799	2017000	mg/L
MKTF-20	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	5/14/2019	Nickel, Total	0.078	0.01	0.004009	372000	mg/L
MKTF-20	5/14/2019	Selenium, Total	0.00079	0.001	0.000478	50000	mg/L
MKTF-20	5/14/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-20	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-20	5/14/2019	Uranium, Total	0.0037	0.0005	0.000085	30000	mg/L
MKTF-20	5/14/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-20	11/5/2019	Aluminum, Dissolved	0.035	0.02	0.002488	19913930	mg/L
MKTF-20	11/5/2019	Antimony, Dissolved	0.00041	0.001	0.000389	6000	mg/L
MKTF-20	11/5/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
MKTF-20	11/5/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
MKTF-20	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-20	11/5/2019	Boron, Dissolved	0.12	0.04	0.004531	3949110	mg/L
MKTF-20	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	11/5/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-20	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/5/2019	Copper, Dissolved	0.0058	0.006	0.001296	790000	mg/L
MKTF-20	11/5/2019	Iron, Dissolved	2.2	0.1	0.043734	13821880	mg/L
MKTF-20	11/5/2019	Lead, Dissolved	0.00026	0.0005	0.000055	NA	mg/L
MKTF-20	11/5/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-20	11/5/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-20	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	11/5/2019	Nickel, Dissolved	0.0051	0.01	0.004009	372000	mg/L
MKTF-20	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-20	11/5/2019	Selenium, Dissolved	0.00067	0.001	0.000171	50000	mg/L
MKTF-20	11/5/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-20	11/5/2019	Sodium, Dissolved	130	5	2.080881	NA	mg/L
MKTF-20	11/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-20	11/5/2019	Uranium, Dissolved	0.00022	0.0005	0.000075	NA	mg/L
MKTF-20	11/5/2019	Zinc, Dissolved	0.083	0.01	0.002252	5960450	mg/L
MKTF-20	11/5/2019	Aluminum, Total	0.25	0.02	0.002488	19914000	mg/L
MKTF-20	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-20	11/5/2019	Arsenic, Total	0.016	0.001	0.000312	10000	mg/L
MKTF-20	11/5/2019	Barium, Total	2	0.02	0.006484	2000000	mg/L
MKTF-20	11/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-20	11/5/2019	Boron, Total	0.12	0.04	0.004531	3949	mg/L
MKTF-20	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	11/5/2019	Copper, Total	0.075	0.006	0.004072	790000	mg/L
MKTF-20	11/5/2019	Iron, Total	4.3	0.2	0.087469	13822000	mg/L
MKTF-20	11/5/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-20	11/5/2019	Manganese, Total	2	0.02	0.002899	2017000	mg/L
MKTF-20	11/5/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-20	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	11/5/2019	Nickel, Total	0.0073	0.01	0.004009	372000	mg/L
MKTF-20	11/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-20	11/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-20	11/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-20	11/5/2019	Uranium, Total	0.00052	0.0005	0.000085	30000	mg/L
MKTF-20	11/5/2019	Zinc, Total	0.44	0.01	0.005772	5960000	mg/L
MKTF-21	5/14/2019	Aluminum, Dissolved	0.038	0.02	0.002488	19913930	mg/L
MKTF-21	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-21	5/14/2019	Arsenic, Dissolved	0.016	0.005	0.000504	10000	mg/L
MKTF-21	5/14/2019	Barium, Dissolved	5	0.01	0.003242	2000000	mg/L
MKTF-21	5/14/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-21	5/14/2019	Boron, Dissolved	0.12	0.04	0.004531	3949110	mg/L
MKTF-21	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	5/14/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
MKTF-21	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	5/14/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-21	5/14/2019	Iron, Dissolved	33	1	0.437344	13821880	mg/L
MKTF-21	5/14/2019	Lead, Dissolved	0.0011	0.0025	0.000274	NA	mg/L
MKTF-21	5/14/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-21	5/14/2019	Manganese, Dissolved	5.6	0.1	0.014497	2017400	mg/L
MKTF-21	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-21	5/14/2019	Nickel, Dissolved	0.0094	0.01	0.004009	372000	mg/L
MKTF-21	5/14/2019	Potassium, Dissolved	15	1	0.162288	NA	mg/L
MKTF-21	5/14/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-21	5/14/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-21	5/14/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
MKTF-21	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-21	5/14/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
MKTF-21	5/14/2019	Zinc, Dissolved	0.065	0.01	0.002252	5960450	mg/L
MKTF-21	5/14/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MKTF-21	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	5/14/2019	Arsenic, Total	0.022	0.001	0.000312	10000	mg/L
MKTF-21	5/14/2019	Barium, Total	5.2	0.02	0.006484	2000000	mg/L
MKTF-21	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	5/14/2019	Boron, Total	0.12	0.04	0.004531	3949	mg/L
MKTF-21	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	5/14/2019	Copper, Total	0.02	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	Iron, Total	42	1	0.437344	13822000	mg/L
MKTF-21	5/14/2019	Lead, Total	0.0032	0.0005	0.000055	15000	mg/L
MKTF-21	5/14/2019	Manganese, Total	5.7	0.02	0.002899	2017000	mg/L
MKTF-21	5/14/2019	Mercury, Total	0.000043	0.0002	0.000038	2000	mg/L
MKTF-21	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-21	5/14/2019	Nickel, Total	0.0086	0.01	0.004009	372000	mg/L
MKTF-21	5/14/2019	Selenium, Total	0.00084	0.001	0.000478	50000	mg/L
MKTF-21	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-21	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-21	5/14/2019	Uranium, Total	0.0027	0.0005	0.000085	30000	mg/L
MKTF-21	5/14/2019	Zinc, Total	0.14	0.01	0.005772	5960000	mg/L
MKTF-21	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-21	8/22/2019	Antimony, Dissolved	0.001	0.001	0.000389	6000	mg/L
MKTF-21	8/22/2019	Arsenic, Dissolved	0.014	0.001	0.000101	10000	mg/L
MKTF-21	8/22/2019	Barium, Dissolved	3.4	0.01	0.003242	2000000	mg/L
MKTF-21	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-21	8/22/2019	Boron, Dissolved	0.16	0.04	0.004531	3949110	mg/L
MKTF-21	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	8/22/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-21	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-21	8/22/2019	Iron, Dissolved	16	1	0.437344	13821880	mg/L
MKTF-21	8/22/2019	Lead, Dissolved	0.00029	0.0005	0.000055	NA	mg/L
MKTF-21	8/22/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-21	8/22/2019	Manganese, Dissolved	3.4	0.01	0.00145	2017400	mg/L
MKTF-21	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-21	8/22/2019	Nickel, Dissolved	0.0085	0.01	0.004009	372000	mg/L
MKTF-21	8/22/2019	Potassium, Dissolved	15	1	0.162288	NA	mg/L
MKTF-21	8/22/2019	Selenium, Dissolved	0.00082	0.001	0.000171	50000	mg/L
MKTF-21	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-21	8/22/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-21	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-21	8/22/2019	Uranium, Dissolved	0.00047	0.0005	0.000075	NA	mg/L
MKTF-21	8/22/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-21	8/22/2019	Aluminum, Total	0.1	0.02	0.002488	19914000	mg/L
MKTF-21	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	8/22/2019	Arsenic, Total	0.017	0.001	0.000312	10000	mg/L
MKTF-21	8/22/2019	Barium, Total	3.4	0.02	0.006484	2000000	mg/L
MKTF-21	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	8/22/2019	Boron, Total	0.16	0.04	0.004531	3949	mg/L
MKTF-21	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	8/22/2019	Copper, Total	0.0098	0.006	0.004072	790000	mg/L
MKTF-21	8/22/2019	Iron, Total	21	1	0.437344	13822000	mg/L
MKTF-21	8/22/2019	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-21	8/22/2019	Manganese, Total	3.3	0.02	0.002899	2017000	mg/L
MKTF-21	8/22/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-21	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-21	8/22/2019	Nickel, Total	0.009	0.01	0.004009	372000	mg/L
MKTF-21	8/22/2019	Selenium, Total	0.00073	0.001	0.000478	50000	mg/L
MKTF-21	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-21	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-21	8/22/2019	Uranium, Total	0.00074	0.0005	0.000085	30000	mg/L
MKTF-21	8/22/2019	Zinc, Total	0.068	0.01	0.005772	5960000	mg/L
MKTF-21	2/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-21	2/20/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
MKTF-21	2/20/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
MKTF-21	2/20/2019	Beryllium, Dissolved	0.00034	0.002	0.000284	4000	mg/L
MKTF-21	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	2/20/2019	Calcium, Dissolved	990	10	0.618891	NA	mg/L
MKTF-21	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	2/20/2019	Copper, Dissolved	0.0036	0.006	0.001296	790000	mg/L
MKTF-21	2/20/2019	Iron, Dissolved	57	2	0.874687	13821880	mg/L
MKTF-21	2/20/2019	Lead, Dissolved	0.0014	0.0025	0.000542	NA	mg/L
MKTF-21	2/20/2019	Magnesium, Dissolved	280	10	0.502904	NA	mg/L
MKTF-21	2/20/2019	Manganese, Dissolved	14	0.04	0.005799	2017400	mg/L
MKTF-21	2/20/2019	Potassium, Dissolved	4.4	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
MKTF-21	2/20/2019	Silver, Dissolved	0.0091	0.005	0.000942	81200	mg/L
MKTF-21	2/20/2019	Sodium, Dissolved	1800	50	20.808815	NA	mg/L
MKTF-21	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000658	2000	mg/L
MKTF-21	2/20/2019	Uranium, Dissolved	0.0029	0.0025	0.000374	NA	mg/L
MKTF-21	2/20/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
MKTF-21	2/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-21	2/20/2019	Arsenic, Total	0.017	0.005	0.001561	10000	mg/L
MKTF-21	2/20/2019	Barium, Total	0.67	0.002	0.000648	2000000	mg/L
MKTF-21	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	2/20/2019	Copper, Total	0.0054	0.006	0.004072	790000	mg/L
MKTF-21	2/20/2019	Iron, Total	63	2	0.874687	13822000	mg/L
MKTF-21	2/20/2019	Lead, Total	0.0029	0.0025	0.000274	15000	mg/L
MKTF-21	2/20/2019	Manganese, Total	15	0.04	0.005799	2017000	mg/L
MKTF-21	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-21	2/20/2019	Silver, Total	0.011	0.005	0.001418	50000	mg/L
MKTF-21	2/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-21	2/20/2019	Uranium, Total	0.0028	0.0025	0.000424	30000	mg/L
MKTF-21	2/20/2019	Zinc, Total	0.041	0.01	0.005772	5960000	mg/L
MKTF-21	11/5/2019	Aluminum, Dissolved	0.024	0.02	0.002488	19913930	mg/L
MKTF-21	11/5/2019	Antimony, Dissolved	0.00052	0.001	0.000389	6000	mg/L
MKTF-21	11/5/2019	Arsenic, Dissolved	0.019	0.001	0.000101	10000	mg/L
MKTF-21	11/5/2019	Barium, Dissolved	14	0.04	0.012968	2000000	mg/L
MKTF-21	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-21	11/5/2019	Boron, Dissolved	0.84	0.04	0.004531	3949110	mg/L
MKTF-21	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	11/5/2019	Calcium, Dissolved	470	5	0.309446	NA	mg/L
MKTF-21	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	11/5/2019	Copper, Dissolved	0.0061	0.006	0.001296	790000	mg/L
MKTF-21	11/5/2019	Iron, Dissolved	8.3	0.4	0.174937	13821880	mg/L
MKTF-21	11/5/2019	Lead, Dissolved	0.0011	0.0025	0.000274	NA	mg/L
MKTF-21	11/5/2019	Magnesium, Dissolved	140	5	0.251452	NA	mg/L
MKTF-21	11/5/2019	Manganese, Dissolved	6.2	0.04	0.005799	2017400	mg/L
MKTF-21	11/5/2019	Molybdenum, Dissolved	0.0071	0.008	0.006735	98700	mg/L
MKTF-21	11/5/2019	Nickel, Dissolved	0.059	0.01	0.004009	372000	mg/L
MKTF-21	11/5/2019	Potassium, Dissolved	7.3	1	0.162288	NA	mg/L
MKTF-21	11/5/2019	Selenium, Dissolved	0.0011	0.001	0.000171	50000	mg/L
MKTF-21	11/5/2019	Silver, Dissolved	0.0096	0.005	0.000942	81200	mg/L
MKTF-21	11/5/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-21	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-21	11/5/2019	Uranium, Dissolved	0.0031	0.0025	0.000374	NA	mg/L
MKTF-21	11/5/2019	Zinc, Dissolved	0.063	0.01	0.002252	5960450	mg/L
MKTF-21	11/5/2019	Aluminum, Total	0.067	0.02	0.002488	19914000	mg/L
MKTF-21	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	11/5/2019	Arsenic, Total	0.022	0.001	0.000312	10000	mg/L
MKTF-21	11/5/2019	Barium, Total	14	0.04	0.012968	2000000	mg/L
MKTF-21	11/5/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
MKTF-21	11/5/2019	Boron, Total	0.81	0.04	0.004531	3949	mg/L
MKTF-21	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	11/5/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
MKTF-21	11/5/2019	Iron, Total	9	0.4	0.174937	13822000	mg/L
MKTF-21	11/5/2019	Lead, Total	0.0022	0.0025	0.000274	15000	mg/L
MKTF-21	11/5/2019	Manganese, Total	5.8	0.04	0.005799	2017000	mg/L
MKTF-21	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	11/5/2019	Molybdenum, Total	0.014	0.008	0.006735	98700	mg/L
MKTF-21	11/5/2019	Nickel, Total	0.055	0.01	0.004009	372000	mg/L
MKTF-21	11/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-21	11/5/2019	Silver, Total	0.0069	0.005	0.001418	50000	mg/L
MKTF-21	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-21	11/5/2019	Uranium, Total	0.0027	0.0025	0.000424	30000	mg/L
MKTF-21	11/5/2019	Zinc, Total	0.096	0.01	0.005772	5960000	mg/L
MKTF-21	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-21	3/16/2015	Arsenic, Total	0.02	0.01	0.0044	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	Barium, Total	4.9	0.02	0.0073	2000000	mg/L
MKTF-21	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-21	3/16/2015	Chromium, Total	0.029	0.006	0.0022	50000	mg/L
MKTF-21	3/16/2015	Copper, Total	0.1	0.006	0.0051	790000	mg/L
MKTF-21	3/16/2015	Iron, Total	55	2	0.72	13822000	mg/L
MKTF-21	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-21	3/16/2015	Manganese, Total	6.4	0.02	0.015	2017000	mg/L
MKTF-21	3/16/2015	Lead, Total	0.079	0.01	0.00069	15000	mg/L
MKTF-21	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-21	3/16/2015	Uranium, Total	0.0066	0.001	0.0000081	30000	mg/L
MKTF-21	3/16/2015	Zinc, Total	0.44	0.01	0.0036	5960000	mg/L
MKTF-21	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	9/12/2016	Arsenic, Total	0.019	0.005	0.0011	10000	mg/L
MKTF-21	9/12/2016	Barium, Total	2.7	0.01	0.004	2000000	mg/L
MKTF-21	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	9/12/2016	Copper, Total	0.0064	0.006	0.003	790000	mg/L
MKTF-21	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-21	9/12/2016	Arsenic, Dissolved	0.02	0.001	0.00014	10000	mg/L
MKTF-21	9/12/2016	Barium, Dissolved	2.5	0.01	0.0066	2000000	mg/L
MKTF-21	9/12/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-21	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-21	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-21	9/12/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-21	9/12/2016	Iron, Dissolved	22	1	1	13821880	mg/L
MKTF-21	9/12/2016	Potassium, Dissolved	23	1	0.5	NA	mg/L
MKTF-21	9/12/2016	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-21	9/12/2016	Manganese, Dissolved	3.7	0.01	0.0016	2017400	mg/L
MKTF-21	9/12/2016	Sodium, Dissolved	110	5	2.5	NA	mg/L
MKTF-21	9/12/2016	Lead, Dissolved	0.0018	0.0005	0.00017	NA	mg/L
MKTF-21	9/12/2016	Selenium, Dissolved	0.0094	0.02	0.0042	50000	mg/L
MKTF-21	9/12/2016	Uranium, Dissolved	0.00071	0.0005	0.000051	NA	mg/L
MKTF-21	9/12/2016	Zinc, Dissolved	0.023	0.01	0.0028	5960450	mg/L
MKTF-21	9/12/2016	Iron, Total	24	1	1	13822000	mg/L
MKTF-21	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-21	9/12/2016	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-21	9/12/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-21	9/12/2016	Selenium, Total	0.0085	0.02	0.0037	50000	mg/L
MKTF-21	9/12/2016	Uranium, Total	0.001	0.0005	0.00017	30000	mg/L
MKTF-21	9/12/2016	Zinc, Total	0.048	0.01	0.0027	5960000	mg/L
MKTF-21	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	11/3/2016	Arsenic, Total	0.021	0.005	0.0011	10000	mg/L
MKTF-21	11/3/2016	Barium, Total	4.3	0.02	0.0079	2000000	mg/L
MKTF-21	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	11/3/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-21	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-21	11/3/2016	Arsenic, Dissolved	0.019	0.005	0.00069	10000	mg/L
MKTF-21	11/3/2016	Barium, Dissolved	4.3	0.01	0.0066	2000000	mg/L
MKTF-21	11/3/2016	Calcium, Dissolved	190	5	2.5	NA	mg/L
MKTF-21	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-21	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-21	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-21	11/3/2016	Iron, Dissolved	30	1	1	13821880	mg/L
MKTF-21	11/3/2016	Potassium, Dissolved	21	1	0.5	NA	mg/L
MKTF-21	11/3/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-21	11/3/2016	Manganese, Dissolved	5	0.01	0.0016	2017400	mg/L
MKTF-21	11/3/2016	Sodium, Dissolved	110	5	2.5	NA	mg/L
MKTF-21	11/3/2016	Lead, Dissolved	0.00098	0.0005	0.00017	NA	mg/L
MKTF-21	11/3/2016	Selenium, Dissolved	0.012	0.05	0.011	50000	mg/L
MKTF-21	11/3/2016	Uranium, Dissolved	0.002	0.0005	0.000051	NA	mg/L
MKTF-21	11/3/2016	Zinc, Dissolved	0.017	0.01	0.0028	5960450	mg/L
MKTF-21	11/3/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-21	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-21	11/3/2016	Manganese, Total	5.1	0.02	0.0027	2017000	mg/L
MKTF-21	11/3/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-21	11/3/2016	Selenium, Total	0.0086	0.02	0.0037	50000	mg/L
MKTF-21	11/3/2016	Uranium, Total	0.0022	0.0005	0.00017	30000	mg/L
MKTF-21	11/3/2016	Zinc, Total	0.057	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	3/14/2017	Arsenic, Total	0.016	0.005	0.0011	10000	mg/L
MKTF-21	3/14/2017	Barium, Total	3.6	0.02	0.0079	2000000	mg/L
MKTF-21	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	3/14/2017	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-21	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-21	3/14/2017	Arsenic, Dissolved	0.011	0.01	0.0018	10000	mg/L
MKTF-21	3/14/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-21	3/14/2017	Calcium, Dissolved	270	10	5	NA	mg/L
MKTF-21	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-21	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	3/14/2017	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-21	3/14/2017	Potassium, Dissolved	22	1	0.5	NA	mg/L
MKTF-21	3/14/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-21	3/14/2017	Manganese, Dissolved	5.7	0.02	0.0038	2017400	mg/L
MKTF-21	3/14/2017	Sodium, Dissolved	240	10	5	NA	mg/L
MKTF-21	3/14/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-21	3/14/2017	Selenium, Dissolved	0.0039	0.01	0.0039	50000	mg/L
MKTF-21	3/14/2017	Uranium, Dissolved	0.00052	0.0005	0.00005	NA	mg/L
MKTF-21	3/14/2017	Zinc, Dissolved	0.045	0.01	0.0011	5960450	mg/L
MKTF-21	3/14/2017	Iron, Total	29	1	1	13822000	mg/L
MKTF-21	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	3/14/2017	Manganese, Total	5.6	0.02	0.0027	2017000	mg/L
MKTF-21	3/14/2017	Lead, Total	0.0035	0.0005	0.000081	15000	mg/L
MKTF-21	3/14/2017	Selenium, Total	0.0064	0.02	0.0037	50000	mg/L
MKTF-21	3/14/2017	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
MKTF-21	3/14/2017	Zinc, Total	0.045	0.01	0.0027	5960000	mg/L
MKTF-21	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-21	6/21/2017	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-21	6/21/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-21	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	6/21/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-21	6/21/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
MKTF-21	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-21	6/21/2017	Arsenic, Dissolved	0.014	0.01	0.0018	10000	mg/L
MKTF-21	6/21/2017	Barium, Dissolved	3.9	0.02	0.0085	2000000	mg/L
MKTF-21	6/21/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
MKTF-21	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-21	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	6/21/2017	Iron, Dissolved	39	1	0.82	13821880	mg/L
MKTF-21	6/21/2017	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-21	6/21/2017	Magnesium, Dissolved	44	1	0.25	NA	mg/L
MKTF-21	6/21/2017	Manganese, Dissolved	6.7	0.02	0.0038	2017400	mg/L
MKTF-21	6/21/2017	Sodium, Dissolved	150	10	1.6	NA	mg/L
MKTF-21	6/21/2017	Lead, Dissolved	0.00086	0.0005	0.00017	NA	mg/L
MKTF-21	6/21/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-21	6/21/2017	Uranium, Dissolved	0.00052	0.0005	0.00005	NA	mg/L
MKTF-21	6/21/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-21	6/21/2017	Iron, Total	43	1	0.51	13822000	mg/L
MKTF-21	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	6/21/2017	Manganese, Total	6.9	0.02	0.011	2017000	mg/L
MKTF-21	6/21/2017	Lead, Total	0.0065	0.0025	0.00048	15000	mg/L
MKTF-21	6/21/2017	Selenium, Total	0.023	0.005	0.0036	50000	mg/L
MKTF-21	6/21/2017	Uranium, Total	0.0011	0.0025	0.00077	30000	mg/L
MKTF-21	6/21/2017	Zinc, Total	0.069	0.01	0.0028	5960000	mg/L
MKTF-21	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	9/26/2017	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
MKTF-21	9/26/2017	Barium, Total	2.8	0.01	0.0047	2000000	mg/L
MKTF-21	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	9/26/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-21	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	9/26/2017	Arsenic, Dissolved	0.0077	0.005	0.00089	10000	mg/L
MKTF-21	9/26/2017	Barium, Dissolved	2.7	0.02	0.0085	2000000	mg/L
MKTF-21	9/26/2017	Calcium, Dissolved	170	10	0.78	NA	mg/L
MKTF-21	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	9/26/2017	Iron, Dissolved	5.6	0.2	0.16	13821880	mg/L
MKTF-21	9/26/2017	Potassium, Dissolved	22	1	0.11	NA	mg/L
MKTF-21	9/26/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-21	9/26/2017	Manganese, Dissolved	3.9	0.02	0.0039	2017400	mg/L
MKTF-21	9/26/2017	Sodium, Dissolved	170	10	1.6	NA	mg/L
MKTF-21	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-21	9/26/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-21	9/26/2017	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
MKTF-21	9/26/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
MKTF-21	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	9/26/2017	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-21	9/26/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-21	9/26/2017	Selenium, Total	0.0098	0.005	0.0036	50000	mg/L
MKTF-21	9/26/2017	Zinc, Total	0.091	0.01	0.0033	5960000	mg/L
MKTF-21	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	11/28/2017	Arsenic, Total	0.023	0.01	0.0041	10000	mg/L
MKTF-21	11/28/2017	Barium, Total	4.4	0.02	0.01	2000000	mg/L
MKTF-21	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	11/28/2017	Copper, Total	0.0061	0.006	0.0041	790000	mg/L
MKTF-21	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	11/28/2017	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
MKTF-21	11/28/2017	Barium, Dissolved	3.7	0.01	0.0049	2000000	mg/L
MKTF-21	11/28/2017	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-21	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	11/28/2017	Iron, Dissolved	15	0.4	0.33	13821880	mg/L
MKTF-21	11/28/2017	Potassium, Dissolved	20	1	0.11	NA	mg/L
MKTF-21	11/28/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-21	11/28/2017	Manganese, Dissolved	4.4	0.01	0.002	2017400	mg/L
MKTF-21	11/28/2017	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-21	11/28/2017	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
MKTF-21	11/28/2017	Selenium, Dissolved	0.0084	0.01	0.0076	50000	mg/L
MKTF-21	11/28/2017	Uranium, Dissolved	0.0022	0.0005	0.000096	NA	mg/L
MKTF-21	11/28/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-21	11/28/2017	Iron, Total	21	1	0.51	13822000	mg/L
MKTF-21	11/28/2017	Manganese, Total	4.9	0.02	0.011	2017000	mg/L
MKTF-21	11/28/2017	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MKTF-21	11/28/2017	Selenium, Total	0.0056	0.005	0.0049	50000	mg/L
MKTF-21	11/28/2017	Uranium, Total	0.0047	0.0005	0.00015	30000	mg/L
MKTF-21	11/28/2017	Zinc, Total	0.07	0.01	0.0033	5960000	mg/L
MKTF-21	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	2/15/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-21	2/15/2018	Barium, Total	2.9	0.01	0.005	2000000	mg/L
MKTF-21	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	2/15/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-21	2/15/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-21	2/15/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
MKTF-21	2/15/2018	Barium, Dissolved	2.5	0.01	0.0049	2000000	mg/L
MKTF-21	2/15/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-21	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	2/15/2018	Iron, Dissolved	9.2	0.4	0.33	13821880	mg/L
MKTF-21	2/15/2018	Potassium, Dissolved	15	1	0.11	NA	mg/L
MKTF-21	2/15/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-21	2/15/2018	Manganese, Dissolved	5.2	0.02	0.0039	2017400	mg/L
MKTF-21	2/15/2018	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-21	2/15/2018	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
MKTF-21	2/15/2018	Selenium, Dissolved	0.0074	0.005	0.0038	50000	mg/L
MKTF-21	2/15/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-21	2/15/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-21	2/15/2018	Iron, Total	20	0.4	0.2	13822000	mg/L
MKTF-21	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	2/15/2018	Manganese, Total	5	0.04	0.022	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/15/2018	Lead, Total	0.0018	0.0005	0.00023	15000	mg/L
MKTF-21	2/15/2018	Selenium, Total	0.0087	0.005	0.0049	50000	mg/L
MKTF-21	2/15/2018	Uranium, Total	0.0055	0.0005	0.000068	30000	mg/L
MKTF-21	2/15/2018	Zinc, Total	0.12	0.01	0.0033	5960000	mg/L
MKTF-21	5/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	5/11/2018	Arsenic, Total	0.022	0.001	0.00041	10000	mg/L
MKTF-21	5/11/2018	Barium, Total	4	0.02	0.01	2000000	mg/L
MKTF-21	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	5/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	5/11/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-21	5/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	5/11/2018	Arsenic, Dissolved	0.022	0.005	0.0021	10000	mg/L
MKTF-21	5/11/2018	Barium, Dissolved	3.8	0.02	0.0099	2000000	mg/L
MKTF-21	5/11/2018	Calcium, Dissolved	220	10	0.78	NA	mg/L
MKTF-21	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	5/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	5/11/2018	Iron, Dissolved	31	1	0.82	13821880	mg/L
MKTF-21	5/11/2018	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-21	5/11/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-21	5/11/2018	Manganese, Dissolved	5.8	0.02	0.0039	2017400	mg/L
MKTF-21	5/11/2018	Sodium, Dissolved	150	10	1.6	NA	mg/L
MKTF-21	5/11/2018	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-21	5/11/2018	Selenium, Dissolved	0.0071	0.005	0.0038	50000	mg/L
MKTF-21	5/11/2018	Uranium, Dissolved	0.0026	0.005	0.00096	NA	mg/L
MKTF-21	5/11/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-21	5/11/2018	Iron, Total	43	2	1	13822000	mg/L
MKTF-21	5/11/2018	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-21	5/11/2018	Manganese, Total	5.9	0.02	0.011	2017000	mg/L
MKTF-21	5/11/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-21	5/11/2018	Selenium, Total	0.0057	0.001	0.00098	50000	mg/L
MKTF-21	5/11/2018	Uranium, Total	0.0038	0.0005	0.000068	30000	mg/L
MKTF-21	5/11/2018	Zinc, Total	0.11	0.01	0.0033	5960000	mg/L
MKTF-21	8/31/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
MKTF-21	8/31/2018	Arsenic, Total	0.023	0.001	0.00041	10000	mg/L
MKTF-21	8/31/2018	Barium, Total	4.1	0.01	0.005	2000000	mg/L
MKTF-21	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	8/31/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-21	8/31/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-21	8/31/2018	Arsenic, Dissolved	0.02	0.005	0.0021	10000	mg/L
MKTF-21	8/31/2018	Barium, Dissolved	4.1	0.01	0.0049	2000000	mg/L
MKTF-21	8/31/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-21	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	8/31/2018	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-21	8/31/2018	Potassium, Dissolved	21	1	0.11	NA	mg/L
MKTF-21	8/31/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-21	8/31/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
MKTF-21	8/31/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-21	8/31/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-21	8/31/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-21	8/31/2018	Uranium, Dissolved	0.0011	0.0025	0.00048	NA	mg/L
MKTF-21	8/31/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-21	8/31/2018	Iron, Total	18	0.4	0.2	13822000	mg/L
MKTF-21	8/31/2018	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-21	8/31/2018	Manganese, Total	3.7	0.01	0.0055	2017000	mg/L
MKTF-21	8/31/2018	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
MKTF-21	8/31/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-21	8/31/2018	Uranium, Total	0.002	0.0005	0.000068	30000	mg/L
MKTF-21	8/31/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-21	11/29/2018	Silver, Total	0.0037	0.005	0.0012	50000	mg/L
MKTF-21	11/29/2018	Arsenic, Total	0.02	0.001	0.00041	10000	mg/L
MKTF-21	11/29/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
MKTF-21	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	11/29/2018	Copper, Total	0.022	0.006	0.0041	790000	mg/L
MKTF-21	11/29/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/29/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-21	11/29/2018	Barium, Dissolved	3.4	0.01	0.0049	2000000	mg/L
MKTF-21	11/29/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-21	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	11/29/2018	Iron, Dissolved	9.3	1	0.82	13821880	mg/L
MKTF-21	11/29/2018	Potassium, Dissolved	20	1	0.11	NA	mg/L
MKTF-21	11/29/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-21	11/29/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
MKTF-21	11/29/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-21	11/29/2018	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
MKTF-21	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-21	11/29/2018	Zinc, Dissolved	0.053	0.01	0.0021	5960450	mg/L
MKTF-21	11/29/2018	Iron, Total	29	1	0.51	13822000	mg/L
MKTF-21	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	11/29/2018	Manganese, Total	4.1	0.01	0.0055	2017000	mg/L
MKTF-21	11/29/2018	Lead, Total	0.003	0.0005	0.00023	15000	mg/L
MKTF-21	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-21	11/29/2018	Zinc, Total	0.27	0.01	0.0033	5960000	mg/L
MKTF-22	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-22	11/17/2014	Arsenic, Total	0.0028	0.001	0.00036	10000	mg/L
MKTF-22	11/17/2014	Barium, Total	1.1	0.01	0.0025	2000000	mg/L
MKTF-22	11/17/2014	Calcium, Total	110	10	0.82	NA	mg/L
MKTF-22	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-22	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-22	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-22	11/17/2014	Iron, Total	15	1	0.36	13822000	mg/L
MKTF-22	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-22	11/17/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
MKTF-22	11/17/2014	Magnesium, Total	23	1	0.018	NA	mg/L
MKTF-22	11/17/2014	Manganese, Total	3	0.01	0.0024	2017000	mg/L
MKTF-22	11/17/2014	Sodium, Total	260	10	3.9	NA	mg/L
MKTF-22	11/17/2014	Lead, Total	0.014	0.001	0.00026	15000	mg/L
MKTF-22	11/17/2014	Selenium, Total	0.004	0.001	0.00051	50000	mg/L
MKTF-22	11/17/2014	Uranium, Total	0.0041	0.001	0.0000072	30000	mg/L
MKTF-22	11/17/2014	Zinc, Total	0.025	0.01	0.0035	5960000	mg/L
MKTF-22	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	3/12/2015	Arsenic, Total	0.0031	0.001	0.00011	10000	mg/L
MKTF-22	3/12/2015	Barium, Total	1.3	0.02	0.0095	2000000	mg/L
MKTF-22	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-22	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-22	3/12/2015	Iron, Total	7.5	0.2	0.073	13822000	mg/L
MKTF-22	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	3/12/2015	Manganese, Total	2.3	0.02	0.0027	2017000	mg/L
MKTF-22	3/12/2015	Lead, Total	0.0016	0.001	0.000059	15000	mg/L
MKTF-22	3/12/2015	Selenium, Total	0.0067	0.001	0.00015	50000	mg/L
MKTF-22	3/12/2015	Uranium, Total	0.0032	0.001	0.00005	30000	mg/L
MKTF-22	3/12/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-22	6/9/2015	Barium, Total	2.2	0.01	0.0053	2000000	mg/L
MKTF-22	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	6/9/2015	Chromium, Total	0.018	0.006	0.0022	50000	mg/L
MKTF-22	6/9/2015	Copper, Total	0.026	0.006	0.0051	790000	mg/L
MKTF-22	6/9/2015	Iron, Total	27	1	0.36	13822000	mg/L
MKTF-22	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	6/9/2015	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
MKTF-22	6/9/2015	Lead, Total	0.048	0.0025	0.00024	15000	mg/L
MKTF-22	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-22	6/9/2015	Uranium, Total	0.0053	0.0025	0.000025	30000	mg/L
MKTF-22	6/9/2015	Zinc, Total	0.057	0.01	0.0039	5960000	mg/L
MKTF-22	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	8/20/2015	Arsenic, Total	0.0076	0.005	0.0015	10000	mg/L
MKTF-22	8/20/2015	Barium, Total	5.6	0.02	0.011	2000000	mg/L
MKTF-22	8/20/2015	Calcium, Total	100	1	0.057	NA	mg/L
MKTF-22	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	8/20/2015	Chromium, Total	0.1	0.006	0.0022	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2015	Copper, Total	0.15	0.006	0.0051	790000	mg/L
MKTF-22	8/20/2015	Iron, Total	87	2	0.72	13822000	mg/L
MKTF-22	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	8/20/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-22	8/20/2015	Magnesium, Total	23	1	0.039	NA	mg/L
MKTF-22	8/20/2015	Manganese, Total	9.1	0.02	0.015	2017000	mg/L
MKTF-22	8/20/2015	Sodium, Total	310	10	0.72	NA	mg/L
MKTF-22	8/20/2015	Lead, Total	0.24	0.01	0.00094	15000	mg/L
MKTF-22	8/20/2015	Selenium, Total	0.0074	0.005	0.00062	50000	mg/L
MKTF-22	8/20/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-22	8/20/2015	Zinc, Total	0.21	0.01	0.0039	5960000	mg/L
MKTF-22	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-22	11/9/2015	Arsenic, Total	0.0033	0.001	0.000065	10000	mg/L
MKTF-22	11/9/2015	Barium, Total	0.92	0.002	0.0013	2000000	mg/L
MKTF-22	11/9/2015	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-22	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-22	11/9/2015	Iron, Total	5.9	0.2	0.091	13822000	mg/L
MKTF-22	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	11/9/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-22	11/9/2015	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-22	11/9/2015	Manganese, Total	2.4	0.02	0.0032	2017000	mg/L
MKTF-22	11/9/2015	Sodium, Total	230	10	0.96	NA	mg/L
MKTF-22	11/9/2015	Lead, Total	0.0083	0.0025	0.00013	15000	mg/L
MKTF-22	11/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-22	11/9/2015	Uranium, Total	0.0048	0.0025	0.000024	30000	mg/L
MKTF-22	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	2/25/2016	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
MKTF-22	2/25/2016	Barium, Total	2	0.01	0.0053	2000000	mg/L
MKTF-22	2/25/2016	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	2/25/2016	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-22	2/25/2016	Copper, Total	0.013	0.006	0.0051	790000	mg/L
MKTF-22	2/25/2016	Iron, Total	20	1	0.36	13822000	mg/L
MKTF-22	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	2/25/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-22	2/25/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-22	2/25/2016	Manganese, Total	3.4	0.01	0.0076	2017000	mg/L
MKTF-22	2/25/2016	Sodium, Total	250	10	0.96	NA	mg/L
MKTF-22	2/25/2016	Lead, Total	0.035	0.0025	0.00024	15000	mg/L
MKTF-22	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-22	2/25/2016	Uranium, Total	0.0039	0.0005	0.0000049	30000	mg/L
MKTF-22	2/25/2016	Zinc, Total	0.039	0.01	0.0039	5960000	mg/L
MKTF-22	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-22	6/10/2016	Arsenic, Total	0.0025	0.005	0.00069	10000	mg/L
MKTF-22	6/10/2016	Barium, Total	1.1	0.02	0.013	2000000	mg/L
MKTF-22	6/10/2016	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-22	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-22	6/10/2016	Iron, Total	2.9	0.2	0.091	13822000	mg/L
MKTF-22	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	6/10/2016	Potassium, Total	0.82	1	0.18	NA	mg/L
MKTF-22	6/10/2016	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-22	6/10/2016	Manganese, Total	2.2	0.02	0.0032	2017000	mg/L
MKTF-22	6/10/2016	Sodium, Total	250	10	0.96	NA	mg/L
MKTF-22	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-22	6/10/2016	Selenium, Total	0.0046	0.001	0.00021	50000	mg/L
MKTF-22	6/10/2016	Uranium, Total	0.0028	0.0005	0.000051	30000	mg/L
MKTF-22	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	9/10/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	9/10/2016	Arsenic, Total	0.0032	0.005	0.0011	10000	mg/L
MKTF-22	9/10/2016	Barium, Total	1.3	0.01	0.004	2000000	mg/L
MKTF-22	9/10/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	9/10/2016	Chromium, Total	0.0051	0.006	0.0027	50000	mg/L
MKTF-22	9/10/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-22	9/10/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	9/10/2016	Arsenic, Dissolved	0.0024	0.001	0.00014	10000	mg/L
MKTF-22	9/10/2016	Barium, Dissolved	1.1	0.02	0.013	2000000	mg/L
MKTF-22	9/10/2016	Calcium, Dissolved	120	10	5	NA	mg/L
MKTF-22	9/10/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-22	9/10/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-22	9/10/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-22	9/10/2016	Iron, Dissolved	2.7	0.2	0.2	13821880	mg/L
MKTF-22	9/10/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MKTF-22	9/10/2016	Magnesium, Dissolved	24	1	0.5	NA	mg/L
MKTF-22	9/10/2016	Manganese, Dissolved	2.3	0.02	0.0032	2017400	mg/L
MKTF-22	9/10/2016	Sodium, Dissolved	250	10	5	NA	mg/L
MKTF-22	9/10/2016	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-22	9/10/2016	Selenium, Dissolved	0.0053	0.01	0.0021	50000	mg/L
MKTF-22	9/10/2016	Uranium, Dissolved	0.0028	0.0005	0.000051	NA	mg/L
MKTF-22	9/10/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-22	9/10/2016	Iron, Total	8.8	0.2	0.2	13822000	mg/L
MKTF-22	9/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	9/10/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-22	9/10/2016	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-22	9/10/2016	Selenium, Total	0.0045	0.005	0.00094	50000	mg/L
MKTF-22	9/10/2016	Uranium, Total	0.004	0.0005	0.00017	30000	mg/L
MKTF-22	9/10/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-22	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	11/1/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-22	11/1/2016	Barium, Total	1.7	0.01	0.004	2000000	mg/L
MKTF-22	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	11/1/2016	Chromium, Total	0.0062	0.006	0.0027	50000	mg/L
MKTF-22	11/1/2016	Copper, Total	0.0096	0.006	0.003	790000	mg/L
MKTF-22	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-22	11/1/2016	Arsenic, Dissolved	0.0021	0.001	0.00014	10000	mg/L
MKTF-22	11/1/2016	Barium, Dissolved	1.2	0.01	0.0066	2000000	mg/L
MKTF-22	11/1/2016	Calcium, Dissolved	130	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-22	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-22	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-22	11/1/2016	Iron, Dissolved	3	0.1	0.1	13821880	mg/L
MKTF-22	11/1/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Magnesium, Dissolved	25	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Manganese, Dissolved	2.5	0.01	0.0016	2017400	mg/L
MKTF-22	11/1/2016	Sodium, Dissolved	270	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/1/2016	Selenium, Dissolved	0.0038	0.001	0.00021	50000	mg/L
MKTF-22	11/1/2016	Uranium, Dissolved	0.0024	0.0005	0.000051	NA	mg/L
MKTF-22	11/1/2016	Zinc, Dissolved	0.0099	0.01	0.0028	5960450	mg/L
MKTF-22	11/1/2016	Iron, Total	12	0.4	0.4	13822000	mg/L
MKTF-22	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	11/1/2016	Manganese, Total	3.1	0.01	0.0014	2017000	mg/L
MKTF-22	11/1/2016	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-22	11/1/2016	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-22	11/1/2016	Uranium, Total	0.0041	0.0005	0.00017	30000	mg/L
MKTF-22	11/1/2016	Zinc, Total	0.02	0.01	0.0027	5960000	mg/L
MKTF-22	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	3/8/2017	Arsenic, Total	0.0041	0.005	0.0011	10000	mg/L
MKTF-22	3/8/2017	Barium, Total	2	0.01	0.004	2000000	mg/L
MKTF-22	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	3/8/2017	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
MKTF-22	3/8/2017	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-22	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-22	3/8/2017	Arsenic, Dissolved	0.0022	0.001	0.00014	10000	mg/L
MKTF-22	3/8/2017	Barium, Dissolved	1.4	0.01	0.0043	2000000	mg/L
MKTF-22	3/8/2017	Calcium, Dissolved	120	5	2.5	NA	mg/L
MKTF-22	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	3/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-22	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	3/8/2017	Iron, Dissolved	4.2	0.1	0.1	13821880	mg/L
MKTF-22	3/8/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-22	3/8/2017	Magnesium, Dissolved	25	1	0.5	NA	mg/L
MKTF-22	3/8/2017	Manganese, Dissolved	2.3	0.01	0.0019	2017400	mg/L
MKTF-22	3/8/2017	Sodium, Dissolved	250	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	3/8/2017	Selenium, Dissolved	0.0042	0.001	0.00021	50000	mg/L
MKTF-22	3/8/2017	Zinc, Dissolved	0.025	0.01	0.0011	5960450	mg/L
MKTF-22	3/8/2017	Iron, Total	17	0.4	0.4	13822000	mg/L
MKTF-22	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-22	3/8/2017	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-22	3/8/2017	Lead, Total	0.029	0.0025	0.00041	15000	mg/L
MKTF-22	3/8/2017	Selenium, Total	0.0067	0.005	0.00094	50000	mg/L
MKTF-22	3/8/2017	Zinc, Total	0.032	0.01	0.0027	5960000	mg/L
MKTF-22	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-22	6/8/2017	Arsenic, Total	0.0016	0.001	0.0003	10000	mg/L
MKTF-22	6/8/2017	Barium, Total	1.3	0.02	0.0093	2000000	mg/L
MKTF-22	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	6/8/2017	Chromium, Total	0.0075	0.006	0.0011	50000	mg/L
MKTF-22	6/8/2017	Copper, Total	0.0061	0.006	0.0017	790000	mg/L
MKTF-22	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-22	6/8/2017	Arsenic, Dissolved	0.0022	0.001	0.00018	10000	mg/L
MKTF-22	6/8/2017	Barium, Dissolved	1	0.02	0.0085	2000000	mg/L
MKTF-22	6/8/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-22	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-22	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	6/8/2017	Iron, Dissolved	0.98	0.02	0.016	13821880	mg/L
MKTF-22	6/8/2017	Potassium, Dissolved	0.88	1	0.11	NA	mg/L
MKTF-22	6/8/2017	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-22	6/8/2017	Manganese, Dissolved	2.1	0.02	0.0038	2017400	mg/L
MKTF-22	6/8/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-22	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	6/8/2017	Selenium, Dissolved	0.0035	0.001	0.00039	50000	mg/L
MKTF-22	6/8/2017	Uranium, Dissolved	0.003	0.0005	0.00005	NA	mg/L
MKTF-22	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-22	6/8/2017	Iron, Total	10	0.2	0.1	13822000	mg/L
MKTF-22	6/8/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
MKTF-22	6/8/2017	Manganese, Total	2.4	0.02	0.011	2017000	mg/L
MKTF-22	6/8/2017	Lead, Total	0.01	0.0005	0.000095	15000	mg/L
MKTF-22	6/8/2017	Selenium, Total	0.0019	0.001	0.00071	50000	mg/L
MKTF-22	6/8/2017	Uranium, Total	0.0033	0.0005	0.00015	30000	mg/L
MKTF-22	6/8/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-22	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	10/3/2017	Arsenic, Total	0.0024	0.001	0.0003	10000	mg/L
MKTF-22	10/3/2017	Barium, Total	1.8	0.02	0.0093	2000000	mg/L
MKTF-22	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	10/3/2017	Chromium, Total	0.017	0.006	0.0018	50000	mg/L
MKTF-22	10/3/2017	Copper, Total	0.017	0.006	0.0017	790000	mg/L
MKTF-22	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	10/3/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-22	10/3/2017	Barium, Dissolved	1.6	0.02	0.0085	2000000	mg/L
MKTF-22	10/3/2017	Calcium, Dissolved	140	10	0.78	NA	mg/L
MKTF-22	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	10/3/2017	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
MKTF-22	10/3/2017	Potassium, Dissolved	0.58	1	0.11	NA	mg/L
MKTF-22	10/3/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-22	10/3/2017	Manganese, Dissolved	2.6	0.02	0.0039	2017400	mg/L
MKTF-22	10/3/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
MKTF-22	10/3/2017	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-22	10/3/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-22	10/3/2017	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
MKTF-22	10/3/2017	Iron, Total	25	1	0.51	13822000	mg/L
MKTF-22	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-22	10/3/2017	Manganese, Total	3	0.02	0.011	2017000	mg/L
MKTF-22	10/3/2017	Lead, Total	0.027	0.0025	0.00048	15000	mg/L
MKTF-22	10/3/2017	Selenium, Total	0.0022	0.001	0.00071	50000	mg/L
MKTF-22	10/3/2017	Zinc, Total	0.034	0.01	0.0033	5960000	mg/L
MKTF-22	11/28/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-22	11/28/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
MKTF-22	11/28/2017	Barium, Total	1.5	0.02	0.01	2000000	mg/L
MKTF-22	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/28/2017	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-22	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	11/28/2017	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-22	11/28/2017	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-22	11/28/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	11/28/2017	Iron, Dissolved	1.6	0.1	0.082	13821880	mg/L
MKTF-22	11/28/2017	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-22	11/28/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-22	11/28/2017	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-22	11/28/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-22	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	11/28/2017	Uranium, Dissolved	0.0023	0.0005	0.000096	NA	mg/L
MKTF-22	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-22	11/28/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
MKTF-22	11/28/2017	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-22	11/28/2017	Lead, Total	0.0048	0.0005	0.00023	15000	mg/L
MKTF-22	11/28/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-22	11/28/2017	Uranium, Total	0.0026	0.0005	0.00015	30000	mg/L
MKTF-22	11/28/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
MKTF-22	2/8/2018	Silver, Total	0.0026	0.005	0.0012	50000	mg/L
MKTF-22	2/8/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
MKTF-22	2/8/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-22	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	2/8/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-22	2/8/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-22	2/8/2018	Barium, Dissolved	1	0.01	0.0049	2000000	mg/L
MKTF-22	2/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-22	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	2/8/2018	Iron, Dissolved	1	0.1	0.082	13821880	mg/L
MKTF-22	2/8/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-22	2/8/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-22	2/8/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-22	2/8/2018	Sodium, Dissolved	220	5	0.82	NA	mg/L
MKTF-22	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	2/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	2/8/2018	Uranium, Dissolved	0.0025	0.0005	0.000096	NA	mg/L
MKTF-22	2/8/2018	Zinc, Dissolved	0.0055	0.01	0.0021	5960450	mg/L
MKTF-22	2/8/2018	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-22	2/8/2018	Mercury, Total	0.000093	0.0002	0.000037	2000	mg/L
MKTF-22	2/8/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	2/8/2018	Lead, Total	0.0039	0.0005	0.00023	15000	mg/L
MKTF-22	2/8/2018	Selenium, Total	0.0021	0.001	0.00098	50000	mg/L
MKTF-22	2/8/2018	Uranium, Total	0.0026	0.0005	0.000068	30000	mg/L
MKTF-22	2/8/2018	Zinc, Total	0.0078	0.01	0.0033	5960000	mg/L
MKTF-22	5/10/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-22	5/10/2018	Arsenic, Total	0.00091	0.001	0.00041	10000	mg/L
MKTF-22	5/10/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
MKTF-22	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	5/10/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-22	5/10/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-22	5/10/2018	Barium, Dissolved	1.2	0.02	0.0099	2000000	mg/L
MKTF-22	5/10/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	5/10/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-22	5/10/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-22	5/10/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/10/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-22	5/10/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-22	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-22	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	5/10/2018	Uranium, Dissolved	0.0019	0.005	0.00096	NA	mg/L
MKTF-22	5/10/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-22	5/10/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-22	5/10/2018	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
MKTF-22	5/10/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	5/10/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
MKTF-22	5/10/2018	Selenium, Total	0.0013	0.001	0.00098	50000	mg/L
MKTF-22	5/10/2018	Uranium, Total	0.0023	0.0005	0.000068	30000	mg/L
MKTF-22	5/10/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-22	8/30/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
MKTF-22	8/30/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-22	8/30/2018	Barium, Total	1.3	0.02	0.01	2000000	mg/L
MKTF-22	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	8/30/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-22	8/30/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-22	8/30/2018	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-22	8/30/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	8/30/2018	Iron, Dissolved	3	0.1	0.082	13821880	mg/L
MKTF-22	8/30/2018	Potassium, Dissolved	0.88	1	0.11	NA	mg/L
MKTF-22	8/30/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-22	8/30/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-22	8/30/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-22	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-22	8/30/2018	Uranium, Dissolved	0.002	0.0005	0.000096	NA	mg/L
MKTF-22	8/30/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-22	8/30/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-22	8/30/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-22	8/30/2018	Manganese, Total	2.5	0.02	0.011	2017000	mg/L
MKTF-22	8/30/2018	Lead, Total	0.002	0.0005	0.00023	15000	mg/L
MKTF-22	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-22	8/30/2018	Uranium, Total	0.0024	0.0005	0.000068	30000	mg/L
MKTF-22	8/30/2018	Zinc, Total	0.0059	0.01	0.0033	5960000	mg/L
MKTF-22	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-22	11/28/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-22	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	11/28/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-22	11/28/2018	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
MKTF-22	11/28/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-22	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	11/28/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-22	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-22	11/28/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-22	11/28/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-22	11/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-22	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-22	11/28/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-22	11/28/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-22	11/28/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	11/28/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-22	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-22	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-22	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Antimony, Dissolved	0.00055	0.001	0.000389	6000	mg/L
MKTF-22	8/20/2019	Arsenic, Dissolved	0.0013	0.001	0.000101	10000	mg/L
MKTF-22	8/20/2019	Barium, Dissolved	1.2	0.01	0.003242	2000000	mg/L
MKTF-22	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-22	8/20/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-22	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	8/20/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-22	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	8/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-22	8/20/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
MKTF-22	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-22	8/20/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-22	8/20/2019	Manganese, Dissolved	2.6	0.01	0.00145	2017400	mg/L
MKTF-22	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-22	8/20/2019	Potassium, Dissolved	0.77	1	0.162288	NA	mg/L
MKTF-22	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-22	8/20/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-22	8/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-22	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-22	8/20/2019	Uranium, Dissolved	0.0021	0.0005	0.000075	NA	mg/L
MKTF-22	8/20/2019	Zinc, Dissolved	0.004	0.01	0.002252	5960450	mg/L
MKTF-22	8/20/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
MKTF-22	8/20/2019	Antimony, Total	0.00041	0.001	0.000389	6000	mg/L
MKTF-22	8/20/2019	Arsenic, Total	0.0016	0.001	0.000312	10000	mg/L
MKTF-22	8/20/2019	Barium, Total	1.4	0.01	0.003242	2000000	mg/L
MKTF-22	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-22	8/20/2019	Boron, Total	0.39	0.04	0.004531	3949	mg/L
MKTF-22	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-22	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	8/20/2019	Iron, Total	8.5	0.4	0.174937	13822000	mg/L
MKTF-22	8/20/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
MKTF-22	8/20/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-22	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-22	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	8/20/2019	Nickel, Total	0.0049	0.01	0.004009	372000	mg/L
MKTF-22	8/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-22	8/20/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-22	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-22	8/20/2019	Uranium, Total	0.0023	0.0005	0.000085	30000	mg/L
MKTF-22	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-22	10/24/2019	Aluminum, Total	13	0.4	0.049765	19914000	mg/L
MKTF-22	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-22	10/24/2019	Arsenic, Total	0.002	0.005	0.001561	10000	mg/L
MKTF-22	10/24/2019	Barium, Total	1.7	0.01	0.003242	2000000	mg/L
MKTF-22	10/24/2019	Beryllium, Total	0.00036	0.002	0.000284	4000	mg/L
MKTF-22	10/24/2019	Boron, Total	0.42	0.04	0.004531	3949	mg/L
MKTF-22	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	10/24/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
MKTF-22	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	10/24/2019	Iron, Total	12	0.4	0.174937	13822000	mg/L
MKTF-22	10/24/2019	Lead, Total	0.0054	0.0005	0.000055	15000	mg/L
MKTF-22	10/24/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-22	10/24/2019	Mercury, Total	0.000097	0.0002	0.000038	2000	mg/L
MKTF-22	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	10/24/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-22	10/24/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-22	10/24/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-22	10/24/2019	Thallium, Total	0.000052	0.0005	0.000052	2000	mg/L
MKTF-22	10/24/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-22	10/24/2019	Aluminum, Dissolved	0.023	0.02	0.002488	19913930	mg/L
MKTF-22	10/24/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-22	10/24/2019	Arsenic, Dissolved	0.0017	0.005	0.000504	10000	mg/L
MKTF-22	10/24/2019	Barium, Dissolved	1.4	0.02	0.006484	2000000	mg/L
MKTF-22	10/24/2019	Beryllium, Dissolved	0.00043	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	Boron, Dissolved	0.41	0.04	0.004531	3949110	mg/L
MKTF-22	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	10/24/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
MKTF-22	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	10/24/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-22	10/24/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
MKTF-22	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-22	10/24/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-22	10/24/2019	Manganese, Dissolved	2.9	0.02	0.002899	2017400	mg/L
MKTF-22	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	10/24/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L
MKTF-22	10/24/2019	Potassium, Dissolved	0.86	1	0.162288	NA	mg/L
MKTF-22	10/24/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-22	10/24/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-22	10/24/2019	Sodium, Dissolved	280	10	4.161763	NA	mg/L
MKTF-22	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-22	10/24/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-22	5/9/2019	Aluminum, Dissolved	0.031	0.02	0.002488	19913930	mg/L
MKTF-22	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-22	5/9/2019	Arsenic, Dissolved	0.0015	0.005	0.000504	10000	mg/L
MKTF-22	5/9/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
MKTF-22	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-22	5/9/2019	Boron, Dissolved	0.43	0.04	0.004531	3949110	mg/L
MKTF-22	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	5/9/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-22	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-22	5/9/2019	Iron, Dissolved	7.3	0.2	0.087469	13821880	mg/L
MKTF-22	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-22	5/9/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-22	5/9/2019	Manganese, Dissolved	2.6	0.01	0.00145	2017400	mg/L
MKTF-22	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-22	5/9/2019	Potassium, Dissolved	0.88	1	0.162288	NA	mg/L
MKTF-22	5/9/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
MKTF-22	5/9/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
MKTF-22	5/9/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-22	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-22	5/9/2019	Uranium, Dissolved	0.0024	0.0025	0.000374	NA	mg/L
MKTF-22	5/9/2019	Zinc, Dissolved	0.0081	0.01	0.002252	5960450	mg/L
MKTF-22	5/9/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-22	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-22	5/9/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-22	5/9/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-22	5/9/2019	Beryllium, Total	0.00086	0.002	0.000284	4000	mg/L
MKTF-22	5/9/2019	Boron, Total	0.43	0.04	0.004531	3949	mg/L
MKTF-22	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	5/9/2019	Chromium, Total	0.0026	0.006	0.001533	50000	mg/L
MKTF-22	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	5/9/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-22	5/9/2019	Lead, Total	0.0066	0.0005	0.000055	15000	mg/L
MKTF-22	5/9/2019	Manganese, Total	3.1	0.01	0.00145	2017000	mg/L
MKTF-22	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-22	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	5/9/2019	Nickel, Total	0.0075	0.01	0.004009	372000	mg/L
MKTF-22	5/9/2019	Selenium, Total	0.00099	0.001	0.000478	50000	mg/L
MKTF-22	5/9/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-22	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-22	5/9/2019	Uranium, Total	0.0022	0.0005	0.000085	30000	mg/L
MKTF-22	5/9/2019	Zinc, Total	0.024	0.01	0.005772	5960000	mg/L
MKTF-23	10/29/2019	Aluminum, Total	0.78	0.02	0.002488	19914000	mg/L
MKTF-23	10/29/2019	Antimony, Total	0.00052	0.001	0.000389	6000	mg/L
MKTF-23	10/29/2019	Arsenic, Total	0.009	0.005	0.001561	10000	mg/L
MKTF-23	10/29/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-23	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-23	10/29/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-23	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-23	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-23	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-23	10/29/2019	Iron, Total	0.51	0.02	0.008747	13822000	mg/L
MKTF-23	10/29/2019	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-23	10/29/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-23	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-23	10/29/2019	Molybdenum, Total	0.0091	0.008	0.006735	98700	mg/L
MKTF-23	10/29/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
MKTF-23	10/29/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-23	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-23	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-23	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-23	10/29/2019	Antimony, Dissolved	0.00091	0.001	0.000389	6000	mg/L
MKTF-23	10/29/2019	Arsenic, Dissolved	0.0084	0.001	0.000101	10000	mg/L
MKTF-23	10/29/2019	Barium, Dissolved	1.7	0.02	0.006484	2000000	mg/L
MKTF-23	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-23	10/29/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
MKTF-23	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-23	10/29/2019	Calcium, Dissolved	84	1	0.061889	NA	mg/L
MKTF-23	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-23	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-23	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-23	10/29/2019	Iron, Dissolved	0.16	0.02	0.008747	13821880	mg/L
MKTF-23	10/29/2019	Lead, Dissolved	0.00072	0.0005	0.000055	NA	mg/L
MKTF-23	10/29/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-23	10/29/2019	Manganese, Dissolved	2	0.02	0.002899	2017400	mg/L
MKTF-23	10/29/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
MKTF-23	10/29/2019	Nickel, Dissolved	0.022	0.01	0.004009	372000	mg/L
MKTF-23	10/29/2019	Potassium, Dissolved	0.93	1	0.162288	NA	mg/L
MKTF-23	10/29/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-23	10/29/2019	Sodium, Dissolved	540	10	4.161763	NA	mg/L
MKTF-23	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-23	10/29/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-23	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-23	10/29/2019	Selenium, Total	0.00032	0.001	0.000171	50000	mg/L
MKTF-23	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-23	11/17/2014	Arsenic, Total	0.011	0.001	0.00036	10000	mg/L
MKTF-23	11/17/2014	Barium, Total	0.49	0.002	0.0005	2000000	mg/L
MKTF-23	11/17/2014	Calcium, Total	77	1	0.082	NA	mg/L
MKTF-23	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-23	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-23	11/17/2014	Copper, Total	ND	0.06	0.046	790000	mg/L
MKTF-23	11/17/2014	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-23	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-23	11/17/2014	Potassium, Total	2.1	1	0.093	NA	mg/L
MKTF-23	11/17/2014	Magnesium, Total	13	1	0.018	NA	mg/L
MKTF-23	11/17/2014	Manganese, Total	1.6	0.02	0.0049	2017000	mg/L
MKTF-23	11/17/2014	Sodium, Total	530	10	3.9	NA	mg/L
MKTF-23	11/17/2014	Lead, Total	0.005	0.001	0.00026	15000	mg/L
MKTF-23	11/17/2014	Selenium, Total	0.0067	0.001	0.00051	50000	mg/L
MKTF-23	11/17/2014	Uranium, Total	0.016	0.001	0.0000072	30000	mg/L
MKTF-23	11/17/2014	Zinc, Total	0.035	0.01	0.0035	5960000	mg/L
MKTF-23	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-23	3/12/2015	Arsenic, Total	0.013	0.01	0.0011	10000	mg/L
MKTF-23	3/12/2015	Barium, Total	0.61	0.002	0.00095	2000000	mg/L
MKTF-23	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-23	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-23	3/12/2015	Iron, Total	4.4	0.1	0.036	13822000	mg/L
MKTF-23	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	3/12/2015	Manganese, Total	1.9	0.01	0.0013	2017000	mg/L
MKTF-23	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-23	3/12/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-23	3/12/2015	Uranium, Total	0.0045	0.001	0.00005	30000	mg/L
MKTF-23	3/12/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-23	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	6/9/2015	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	Barium, Total	0.83	0.002	0.0011	2000000	mg/L
MKTF-23	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	6/9/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-23	6/9/2015	Iron, Total	5.4	0.2	0.072	13822000	mg/L
MKTF-23	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	6/9/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-23	6/9/2015	Lead, Total	0.0093	0.0025	0.00024	15000	mg/L
MKTF-23	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	6/9/2015	Uranium, Total	0.011	0.0025	0.000025	30000	mg/L
MKTF-23	6/9/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-23	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	8/21/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-23	8/21/2015	Barium, Total	0.9	0.002	0.0011	2000000	mg/L
MKTF-23	8/21/2015	Calcium, Total	76	1	0.057	NA	mg/L
MKTF-23	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	8/21/2015	Chromium, Total	0.0062	0.006	0.0022	50000	mg/L
MKTF-23	8/21/2015	Copper, Total	0.008	0.006	0.0051	790000	mg/L
MKTF-23	8/21/2015	Iron, Total	5.4	0.2	0.072	13822000	mg/L
MKTF-23	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	8/21/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-23	8/21/2015	Magnesium, Total	13	1	0.039	NA	mg/L
MKTF-23	8/21/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
MKTF-23	8/21/2015	Sodium, Total	500	5	0.36	NA	mg/L
MKTF-23	8/21/2015	Lead, Total	0.0088	0.0025	0.00024	15000	mg/L
MKTF-23	8/21/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	8/21/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-23	8/21/2015	Zinc, Total	0.022	0.01	0.0039	5960000	mg/L
MKTF-23	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-23	11/9/2015	Arsenic, Total	0.015	0.001	0.000065	10000	mg/L
MKTF-23	11/9/2015	Barium, Total	0.71	0.002	0.0013	2000000	mg/L
MKTF-23	11/9/2015	Calcium, Total	70	1	0.26	NA	mg/L
MKTF-23	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-23	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-23	11/9/2015	Iron, Total	0.99	0.02	0.0091	13822000	mg/L
MKTF-23	11/9/2015	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-23	11/9/2015	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	11/9/2015	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
MKTF-23	11/9/2015	Sodium, Total	450	5	0.48	NA	mg/L
MKTF-23	11/9/2015	Lead, Total	ND	0.0025	0.00013	15000	mg/L
MKTF-23	11/9/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-23	11/9/2015	Uranium, Total	0.024	0.0025	0.000024	30000	mg/L
MKTF-23	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-23	11/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	11/10/2015	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-23	11/10/2015	Barium, Total	0.66	0.002	0.0011	2000000	mg/L
MKTF-23	11/10/2015	Calcium, Total	66	1	0.084	NA	mg/L
MKTF-23	11/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	11/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	11/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-23	11/10/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
MKTF-23	11/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	11/10/2015	Potassium, Total	2.6	1	0.22	NA	mg/L
MKTF-23	11/10/2015	Magnesium, Total	12	1	0.075	NA	mg/L
MKTF-23	11/10/2015	Manganese, Total	1.4	0.01	0.0076	2017000	mg/L
MKTF-23	11/10/2015	Sodium, Total	510	10	1	NA	mg/L
MKTF-23	11/10/2015	Lead, Total	0.0009	0.0005	0.000047	15000	mg/L
MKTF-23	11/10/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-23	11/10/2015	Uranium, Total	0.037	0.0025	0.000025	30000	mg/L
MKTF-23	11/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-23	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	2/25/2016	Arsenic, Total	0.0094	0.001	0.00029	10000	mg/L
MKTF-23	2/25/2016	Barium, Total	0.67	0.002	0.0011	2000000	mg/L
MKTF-23	2/25/2016	Calcium, Total	70	1	0.26	NA	mg/L
MKTF-23	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-23	2/25/2016	Iron, Total	3.8	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-23	2/25/2016	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-23	2/25/2016	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	2/25/2016	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-23	2/25/2016	Sodium, Total	470	5	0.48	NA	mg/L
MKTF-23	2/25/2016	Lead, Total	0.0025	0.0005	0.000047	15000	mg/L
MKTF-23	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	2/25/2016	Uranium, Total	0.0027	0.0005	0.0000049	30000	mg/L
MKTF-23	2/25/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-23	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-23	6/10/2016	Arsenic, Total	0.01	0.001	0.00014	10000	mg/L
MKTF-23	6/10/2016	Barium, Total	0.66	0.002	0.0013	2000000	mg/L
MKTF-23	6/10/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-23	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-23	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-23	6/10/2016	Iron, Total	2.6	0.1	0.045	13822000	mg/L
MKTF-23	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-23	6/10/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-23	6/10/2016	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	6/10/2016	Manganese, Total	1.8	0.01	0.0016	2017000	mg/L
MKTF-23	6/10/2016	Sodium, Total	460	5	0.48	NA	mg/L
MKTF-23	6/10/2016	Lead, Total	0.00065	0.0005	0.00017	15000	mg/L
MKTF-23	6/10/2016	Selenium, Total	0.009	0.005	0.0011	50000	mg/L
MKTF-23	6/10/2016	Uranium, Total	0.0022	0.0005	0.000051	30000	mg/L
MKTF-23	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-24	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-24	11/14/2014	Barium, Total	0.29	0.002	0.00021	2000000	mg/L
MKTF-24	11/14/2014	Calcium, Total	120	5	0.41	NA	mg/L
MKTF-24	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-24	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-24	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-24	11/14/2014	Iron, Total	4.4	0.1	0.031	13822000	mg/L
MKTF-24	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-24	11/14/2014	Potassium, Total	5.4	1	0.093	NA	mg/L
MKTF-24	11/14/2014	Magnesium, Total	22	1	0.018	NA	mg/L
MKTF-24	11/14/2014	Manganese, Total	1.6	0.01	0.0027	2017000	mg/L
MKTF-24	11/14/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-24	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-24	11/14/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-24	11/14/2014	Uranium, Total	0.038	0.005	0.00025	30000	mg/L
MKTF-24	11/14/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-24	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	3/11/2015	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-24	3/11/2015	Barium, Total	0.26	0.002	0.00095	2000000	mg/L
MKTF-24	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-24	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-24	3/11/2015	Iron, Total	0.34	0.02	0.0073	13822000	mg/L
MKTF-24	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	3/11/2015	Manganese, Total	1.2	0.01	0.0013	2017000	mg/L
MKTF-24	3/11/2015	Lead, Total	0.0015	0.001	0.000059	15000	mg/L
MKTF-24	3/11/2015	Selenium, Total	0.011	0.005	0.00074	50000	mg/L
MKTF-24	3/11/2015	Uranium, Total	0.043	0.005	0.00025	30000	mg/L
MKTF-24	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-24	6/10/2015	Barium, Total	0.29	0.002	0.00095	2000000	mg/L
MKTF-24	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-24	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-24	6/10/2015	Iron, Total	0.69	0.02	0.0073	13822000	mg/L
MKTF-24	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	6/10/2015	Manganese, Total	1.4	0.01	0.0013	2017000	mg/L
MKTF-24	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-24	6/10/2015	Selenium, Total	0.0058	0.005	0.00097	50000	mg/L
MKTF-24	6/10/2015	Uranium, Total	0.037	0.005	0.000024	30000	mg/L
MKTF-24	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	8/20/2015	Arsenic, Total	0.0057	0.001	0.00029	10000	mg/L
MKTF-24	8/20/2015	Barium, Total	1.3	0.01	0.0053	2000000	mg/L
MKTF-24	8/20/2015	Calcium, Total	160	5	0.28	NA	mg/L
MKTF-24	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	8/20/2015	Chromium, Total	0.025	0.006	0.0022	50000	mg/L
MKTF-24	8/20/2015	Copper, Total	0.037	0.006	0.0051	790000	mg/L
MKTF-24	8/20/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-24	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	8/20/2015	Potassium, Total	4.8	1	0.18	NA	mg/L
MKTF-24	8/20/2015	Magnesium, Total	26	1	0.039	NA	mg/L
MKTF-24	8/20/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-24	8/20/2015	Sodium, Total	610	10	0.72	NA	mg/L
MKTF-24	8/20/2015	Lead, Total	0.04	0.0025	0.00024	15000	mg/L
MKTF-24	8/20/2015	Selenium, Total	0.0067	0.001	0.00012	50000	mg/L
MKTF-24	8/20/2015	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
MKTF-24	8/20/2015	Zinc, Total	0.06	0.01	0.0039	5960000	mg/L
MKTF-24	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	11/4/2015	Arsenic, Total	0.0059	0.001	0.00029	10000	mg/L
MKTF-24	11/4/2015	Barium, Total	0.87	0.002	0.0011	2000000	mg/L
MKTF-24	11/4/2015	Calcium, Total	160	10	2.6	NA	mg/L
MKTF-24	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	11/4/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
MKTF-24	11/4/2015	Copper, Total	0.023	0.006	0.0051	790000	mg/L
MKTF-24	11/4/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-24	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	11/4/2015	Potassium, Total	4.3	1	0.18	NA	mg/L
MKTF-24	11/4/2015	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-24	11/4/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-24	11/4/2015	Sodium, Total	590	10	0.96	NA	mg/L
MKTF-24	11/4/2015	Lead, Total	0.025	0.0025	0.00024	15000	mg/L
MKTF-24	11/4/2015	Selenium, Total	ND	0.05	0.00062	50000	mg/L
MKTF-24	11/4/2015	Uranium, Total	0.034	0.0025	0.000025	30000	mg/L
MKTF-24	11/4/2015	Zinc, Total	0.04	0.01	0.0039	5960000	mg/L
MKTF-24	2/22/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	2/22/2016	Arsenic, Total	0.0028	0.001	0.00029	10000	mg/L
MKTF-24	2/22/2016	Barium, Total	0.51	0.002	0.0011	2000000	mg/L
MKTF-24	2/22/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-24	2/22/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	2/22/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-24	2/22/2016	Copper, Total	0.0086	0.006	0.0051	790000	mg/L
MKTF-24	2/22/2016	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-24	2/22/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	2/22/2016	Potassium, Total	2.6	1	0.18	NA	mg/L
MKTF-24	2/22/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-24	2/22/2016	Manganese, Total	2.3	0.01	0.0076	2017000	mg/L
MKTF-24	2/22/2016	Sodium, Total	500	5	0.48	NA	mg/L
MKTF-24	2/22/2016	Lead, Total	0.013	0.0005	0.000047	15000	mg/L
MKTF-24	2/22/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-24	2/22/2016	Uranium, Total	0.024	0.0025	0.000025	30000	mg/L
MKTF-24	2/22/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-24	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-24	6/8/2016	Arsenic, Total	0.0045	0.005	0.00069	10000	mg/L
MKTF-24	6/8/2016	Barium, Total	0.27	0.002	0.0013	2000000	mg/L
MKTF-24	6/8/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-24	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-24	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-24	6/8/2016	Iron, Total	0.65	0.02	0.0091	13822000	mg/L
MKTF-24	6/8/2016	Mercury, Total	0.0006	0.0002	0.000053	2000	mg/L
MKTF-24	6/8/2016	Potassium, Total	3.7	1	0.18	NA	mg/L
MKTF-24	6/8/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-24	6/8/2016	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-24	6/8/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-24	6/8/2016	Lead, Total	0.0019	0.0005	0.00017	15000	mg/L
MKTF-24	6/8/2016	Selenium, Total	0.0084	0.005	0.0011	50000	mg/L
MKTF-24	6/8/2016	Uranium, Total	0.027	0.0025	0.00026	30000	mg/L
MKTF-24	6/8/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	Arsenic, Total	0.0048	0.01	0.0021	10000	mg/L
MKTF-24	9/7/2016	Barium, Total	0.34	0.002	0.00079	2000000	mg/L
MKTF-24	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-24	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-24	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-24	9/7/2016	Arsenic, Dissolved	0.0035	0.005	0.00069	10000	mg/L
MKTF-24	9/7/2016	Barium, Dissolved	0.24	0.002	0.0013	2000000	mg/L
MKTF-24	9/7/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-24	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-24	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-24	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-24	9/7/2016	Iron, Dissolved	0.19	0.02	0.02	13821880	mg/L
MKTF-24	9/7/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
MKTF-24	9/7/2016	Magnesium, Dissolved	19	1	0.5	NA	mg/L
MKTF-24	9/7/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-24	9/7/2016	Sodium, Dissolved	550	10	5	NA	mg/L
MKTF-24	9/7/2016	Lead, Dissolved	0.0015	0.0005	0.00017	NA	mg/L
MKTF-24	9/7/2016	Selenium, Dissolved	0.0063	0.001	0.00021	50000	mg/L
MKTF-24	9/7/2016	Uranium, Dissolved	0.02	0.0005	0.000051	NA	mg/L
MKTF-24	9/7/2016	Zinc, Dissolved	0.0071	0.01	0.0028	5960450	mg/L
MKTF-24	9/7/2016	Iron, Total	3.9	0.1	0.1	13822000	mg/L
MKTF-24	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	9/7/2016	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-24	9/7/2016	Lead, Total	0.0089	0.0005	0.000081	15000	mg/L
MKTF-24	9/7/2016	Selenium, Total	0.0075	0.01	0.0019	50000	mg/L
MKTF-24	9/7/2016	Uranium, Total	0.023	0.0005	0.00017	30000	mg/L
MKTF-24	9/7/2016	Zinc, Total	0.0085	0.01	0.0027	5960000	mg/L
MKTF-24	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-24	10/28/2016	Arsenic, Total	0.0025	0.01	0.0021	10000	mg/L
MKTF-24	10/28/2016	Barium, Total	0.28	0.002	0.00079	2000000	mg/L
MKTF-24	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-24	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-24	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-24	10/28/2016	Arsenic, Dissolved	0.0033	0.001	0.00014	10000	mg/L
MKTF-24	10/28/2016	Barium, Dissolved	0.23	0.002	0.0013	2000000	mg/L
MKTF-24	10/28/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-24	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-24	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-24	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-24	10/28/2016	Iron, Dissolved	0.069	0.02	0.02	13821880	mg/L
MKTF-24	10/28/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
MKTF-24	10/28/2016	Magnesium, Dissolved	19	1	0.5	NA	mg/L
MKTF-24	10/28/2016	Manganese, Dissolved	2	0.01	0.0016	2017400	mg/L
MKTF-24	10/28/2016	Sodium, Dissolved	520	10	5	NA	mg/L
MKTF-24	10/28/2016	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	10/28/2016	Selenium, Dissolved	0.0064	0.001	0.00021	50000	mg/L
MKTF-24	10/28/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
MKTF-24	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-24	10/28/2016	Iron, Total	1.3	0.1	0.1	13822000	mg/L
MKTF-24	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	10/28/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-24	10/28/2016	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-24	10/28/2016	Selenium, Total	0.0055	0.01	0.0019	50000	mg/L
MKTF-24	10/28/2016	Uranium, Total	0.02	0.0005	0.00017	30000	mg/L
MKTF-24	10/28/2016	Zinc, Total	0.0065	0.01	0.0027	5960000	mg/L
MKTF-24	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-24	3/29/2017	Arsenic, Total	0.006	0.001	0.00021	10000	mg/L
MKTF-24	3/29/2017	Barium, Total	1.4	0.02	0.0079	2000000	mg/L
MKTF-24	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	3/29/2017	Chromium, Total	0.028	0.006	0.0027	50000	mg/L
MKTF-24	3/29/2017	Copper, Total	0.037	0.006	0.003	790000	mg/L
MKTF-24	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-24	3/29/2017	Arsenic, Dissolved	0.0031	0.005	0.00089	10000	mg/L
MKTF-24	3/29/2017	Barium, Dissolved	0.29	0.002	0.00085	2000000	mg/L
MKTF-24	3/29/2017	Calcium, Dissolved	180	10	5	NA	mg/L
MKTF-24	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	3/29/2017	Iron, Dissolved	0.55	0.02	0.02	13821880	mg/L
MKTF-24	3/29/2017	Potassium, Dissolved	3.5	1	0.5	NA	mg/L
MKTF-24	3/29/2017	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-24	3/29/2017	Manganese, Dissolved	1.6	0.02	0.0038	2017400	mg/L
MKTF-24	3/29/2017	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-24	3/29/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	3/29/2017	Selenium, Dissolved	0.0057	0.005	0.0019	50000	mg/L
MKTF-24	3/29/2017	Uranium, Dissolved	0.033	0.0025	0.00025	NA	mg/L
MKTF-24	3/29/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-24	3/29/2017	Iron, Total	24	1	1	13822000	mg/L
MKTF-24	3/29/2017	Mercury, Total	0.00013	0.0002	0.000037	2000	mg/L
MKTF-24	3/29/2017	Manganese, Total	3.9	0.02	0.0027	2017000	mg/L
MKTF-24	3/29/2017	Lead, Total	0.043	0.0025	0.00041	15000	mg/L
MKTF-24	3/29/2017	Selenium, Total	0.01	0.005	0.00094	50000	mg/L
MKTF-24	3/29/2017	Uranium, Total	0.03	0.0025	0.00087	30000	mg/L
MKTF-24	3/29/2017	Zinc, Total	0.061	0.01	0.0027	5960000	mg/L
MKTF-24	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-24	6/5/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
MKTF-24	6/5/2017	Barium, Total	0.27	0.002	0.00093	2000000	mg/L
MKTF-24	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	6/5/2017	Chromium, Total	0.0021	0.006	0.0011	50000	mg/L
MKTF-24	6/5/2017	Copper, Total	0.0035	0.006	0.0017	790000	mg/L
MKTF-24	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-24	6/5/2017	Arsenic, Dissolved	0.0029	0.005	0.00089	10000	mg/L
MKTF-24	6/5/2017	Barium, Dissolved	0.25	0.002	0.00085	2000000	mg/L
MKTF-24	6/5/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-24	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-24	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	6/5/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-24	6/5/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-24	6/5/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-24	6/5/2017	Manganese, Dissolved	2.1	0.02	0.0038	2017400	mg/L
MKTF-24	6/5/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-24	6/5/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	6/5/2017	Selenium, Dissolved	0.0052	0.005	0.0019	50000	mg/L
MKTF-24	6/5/2017	Uranium, Dissolved	0.017	0.0005	0.00005	NA	mg/L
MKTF-24	6/5/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-24	6/5/2017	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-24	6/5/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-24	6/5/2017	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	6/5/2017	Lead, Total	0.0037	0.0025	0.00048	15000	mg/L
MKTF-24	6/5/2017	Selenium, Total	0.0053	0.005	0.0036	50000	mg/L
MKTF-24	6/5/2017	Uranium, Total	0.017	0.0025	0.00077	30000	mg/L
MKTF-24	6/5/2017	Zinc, Total	0.0055	0.01	0.0028	5960000	mg/L
MKTF-24	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	10/3/2017	Arsenic, Total	0.0039	0.001	0.0003	10000	mg/L
MKTF-24	10/3/2017	Barium, Total	0.42	0.002	0.00093	2000000	mg/L
MKTF-24	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	10/3/2017	Chromium, Total	0.009	0.006	0.0018	50000	mg/L
MKTF-24	10/3/2017	Copper, Total	0.0084	0.006	0.0017	790000	mg/L
MKTF-24	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	10/3/2017	Arsenic, Dissolved	0.0047	0.005	0.00089	10000	mg/L
MKTF-24	10/3/2017	Barium, Dissolved	0.23	0.002	0.00085	2000000	mg/L
MKTF-24	10/3/2017	Calcium, Dissolved	180	10	0.78	NA	mg/L
MKTF-24	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	10/3/2017	Iron, Dissolved	0.85	0.02	0.016	13821880	mg/L
MKTF-24	10/3/2017	Potassium, Dissolved	3	1	0.11	NA	mg/L
MKTF-24	10/3/2017	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-24	10/3/2017	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
MKTF-24	10/3/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-24	10/3/2017	Lead, Dissolved	0.0006	0.0005	0.00017	NA	mg/L
MKTF-24	10/3/2017	Selenium, Dissolved	0.0094	0.005	0.0019	50000	mg/L
MKTF-24	10/3/2017	Zinc, Dissolved	0.058	0.01	0.0021	5960450	mg/L
MKTF-24	10/3/2017	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-24	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/3/2017	Manganese, Total	1.8	0.02	0.011	2017000	mg/L
MKTF-24	10/3/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
MKTF-24	10/3/2017	Selenium, Total	0.0052	0.001	0.00071	50000	mg/L
MKTF-24	10/3/2017	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
MKTF-24	11/20/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-24	11/20/2017	Arsenic, Total	0.0028	0.005	0.0021	10000	mg/L
MKTF-24	11/20/2017	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-24	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	11/20/2017	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-24	11/20/2017	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-24	11/20/2017	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-24	11/20/2017	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-24	11/20/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-24	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	11/20/2017	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
MKTF-24	11/20/2017	Potassium, Dissolved	1.9	1	0.11	NA	mg/L
MKTF-24	11/20/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	11/20/2017	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
MKTF-24	11/20/2017	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-24	11/20/2017	Lead, Dissolved	0.0013	0.0005	0.00017	NA	mg/L
MKTF-24	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	11/20/2017	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	11/20/2017	Zinc, Dissolved	0.0035	0.01	0.0021	5960450	mg/L
MKTF-24	11/20/2017	Iron, Total	1.4	0.1	0.051	13822000	mg/L
MKTF-24	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-24	11/20/2017	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	11/20/2017	Lead, Total	0.0031	0.0005	0.00023	15000	mg/L
MKTF-24	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-24	11/20/2017	Uranium, Total	0.014	0.0005	0.00015	30000	mg/L
MKTF-24	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-24	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-24	2/6/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-24	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-24	2/6/2018	Barium, Dissolved	0.27	0.002	0.00099	2000000	mg/L
MKTF-24	2/6/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	2/6/2018	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
MKTF-24	2/6/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-24	2/6/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	2/6/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-24	2/6/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
MKTF-24	2/6/2018	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-24	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	2/6/2018	Uranium, Dissolved	0.014	0.0005	0.000096	NA	mg/L
MKTF-24	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-24	2/6/2018	Iron, Total	0.78	0.1	0.051	13822000	mg/L
MKTF-24	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-24	2/6/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-24	2/6/2018	Lead, Total	0.0027	0.0005	0.00023	15000	mg/L
MKTF-24	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-24	2/6/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
MKTF-24	2/6/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-24	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	5/1/2018	Arsenic, Total	0.003	0.005	0.0021	10000	mg/L
MKTF-24	5/1/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-24	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/1/2018	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-24	5/1/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-24	5/1/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-24	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	5/1/2018	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
MKTF-24	5/1/2018	Potassium, Dissolved	1.9	1	0.11	NA	mg/L
MKTF-24	5/1/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	5/1/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-24	5/1/2018	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-24	5/1/2018	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
MKTF-24	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	5/1/2018	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	5/1/2018	Zinc, Dissolved	0.0047	0.01	0.0021	5960450	mg/L
MKTF-24	5/1/2018	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-24	5/1/2018	Mercury, Total	0.000061	0.0002	0.000037	2000	mg/L
MKTF-24	5/1/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	5/1/2018	Lead, Total	0.0026	0.0005	0.00023	15000	mg/L
MKTF-24	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-24	5/1/2018	Uranium, Total	0.015	0.0005	0.000068	30000	mg/L
MKTF-24	5/1/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
MKTF-24	8/20/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-24	8/20/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-24	8/20/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-24	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	8/20/2018	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-24	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	8/20/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
MKTF-24	8/20/2018	Arsenic, Dissolved	0.0021	0.001	0.00042	10000	mg/L
MKTF-24	8/20/2018	Barium, Dissolved	0.25	0.002	0.00099	2000000	mg/L
MKTF-24	8/20/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	8/20/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
MKTF-24	8/20/2018	Potassium, Dissolved	2.1	1	0.11	NA	mg/L
MKTF-24	8/20/2018	Magnesium, Dissolved	19	1	0.25	NA	mg/L
MKTF-24	8/20/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-24	8/20/2018	Sodium, Dissolved	620	10	1.6	NA	mg/L
MKTF-24	8/20/2018	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-24	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-24	8/20/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
MKTF-24	8/20/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-24	8/20/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-24	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-24	8/20/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-24	8/20/2018	Lead, Total	0.0032	0.0005	0.00023	15000	mg/L
MKTF-24	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-24	8/20/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
MKTF-24	8/20/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-24	10/10/2018	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-24	10/10/2018	Potassium, Dissolved	2.6	1	0.11	NA	mg/L
MKTF-24	10/10/2018	Magnesium, Dissolved	24	1	0.25	NA	mg/L
MKTF-24	10/10/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-24	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	11/15/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-24	11/15/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
MKTF-24	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	11/15/2018	Arsenic, Dissolved	0.0013	0.001	0.00042	10000	mg/L
MKTF-24	11/15/2018	Barium, Dissolved	0.25	0.002	0.00099	2000000	mg/L
MKTF-24	11/15/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	11/15/2018	Iron, Dissolved	0.1	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-24	11/15/2018	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-24	11/15/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-24	11/15/2018	Sodium, Dissolved	610	20	3.3	NA	mg/L
MKTF-24	11/15/2018	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-24	11/15/2018	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	11/15/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-24	11/15/2018	Iron, Total	0.7	0.02	0.01	13822000	mg/L
MKTF-24	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-24	11/15/2018	Manganese, Total	2	0.01	0.0055	2017000	mg/L
MKTF-24	11/15/2018	Lead, Total	0.0018	0.0005	0.00023	15000	mg/L
MKTF-24	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-24	11/15/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
MKTF-24	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-24	8/23/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
MKTF-24	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-24	8/23/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
MKTF-24	8/23/2019	Barium, Dissolved	0.34	0.002	0.000648	2000000	mg/L
MKTF-24	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-24	8/23/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-24	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	8/23/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-24	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	8/23/2019	Cobalt, Dissolved	0.0044	0.006	0.003091	5980	mg/L
MKTF-24	8/23/2019	Copper, Dissolved	0.0018	0.006	0.001296	790000	mg/L
MKTF-24	8/23/2019	Iron, Dissolved	1.6	0.1	0.043734	13821880	mg/L
MKTF-24	8/23/2019	Lead, Dissolved	0.0009	0.0005	0.000055	NA	mg/L
MKTF-24	8/23/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-24	8/23/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
MKTF-24	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	8/23/2019	Nickel, Dissolved	0.031	0.01	0.004009	372000	mg/L
MKTF-24	8/23/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
MKTF-24	8/23/2019	Selenium, Dissolved	0.00051	0.001	0.000171	50000	mg/L
MKTF-24	8/23/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-24	8/23/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-24	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	8/23/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
MKTF-24	8/23/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
MKTF-24	8/23/2019	Aluminum, Total	8.4	1	0.124414	19914000	mg/L
MKTF-24	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-24	8/23/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
MKTF-24	8/23/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
MKTF-24	8/23/2019	Beryllium, Total	0.00086	0.002	0.000284	4000	mg/L
MKTF-24	8/23/2019	Boron, Total	0.7	0.04	0.004531	3949	mg/L
MKTF-24	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	8/23/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
MKTF-24	8/23/2019	Cobalt, Total	0.0056	0.006	0.003091	5980	mg/L
MKTF-24	8/23/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
MKTF-24	8/23/2019	Iron, Total	5.3	1	0.437344	13822000	mg/L
MKTF-24	8/23/2019	Lead, Total	0.0058	0.0005	0.000055	15000	mg/L
MKTF-24	8/23/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
MKTF-24	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-24	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	8/23/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
MKTF-24	8/23/2019	Selenium, Total	0.0006	0.001	0.000478	50000	mg/L
MKTF-24	8/23/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-24	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-24	8/23/2019	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-24	8/23/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-24	10/23/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-24	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-24	10/23/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-24	10/23/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
MKTF-24	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-24	10/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-24	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-24	10/23/2019	Cobalt, Total	0.0051	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-24	10/23/2019	Iron, Total	0.9	0.02	0.008747	13822000	mg/L
MKTF-24	10/23/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
MKTF-24	10/23/2019	Manganese, Total	2.3	0.01	0.00145	2017000	mg/L
MKTF-24	10/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-24	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	10/23/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
MKTF-24	10/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-24	10/23/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-24	10/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-24	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-24	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-24	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-24	10/23/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
MKTF-24	10/23/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
MKTF-24	10/23/2019	Beryllium, Dissolved	0.00096	0.002	0.000284	4000	mg/L
MKTF-24	10/23/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-24	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	10/23/2019	Calcium, Dissolved	140	10	0.618891	NA	mg/L
MKTF-24	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	10/23/2019	Cobalt, Dissolved	0.0046	0.006	0.003091	5980	mg/L
MKTF-24	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-24	10/23/2019	Iron, Dissolved	0.59	0.02	0.008747	13821880	mg/L
MKTF-24	10/23/2019	Lead, Dissolved	0.00098	0.0005	0.000055	NA	mg/L
MKTF-24	10/23/2019	Magnesium, Dissolved	24	1	0.05029	NA	mg/L
MKTF-24	10/23/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-24	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	10/23/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-24	10/23/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
MKTF-24	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-24	10/23/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-24	10/23/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-24	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	10/23/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-24	5/6/2019	Aluminum, Dissolved	0.01	0.02	0.002488	19913930	mg/L
MKTF-24	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-24	5/6/2019	Arsenic, Dissolved	0.0033	0.005	0.000504	10000	mg/L
MKTF-24	5/6/2019	Barium, Dissolved	0.32	0.002	0.000648	2000000	mg/L
MKTF-24	5/6/2019	Beryllium, Dissolved	0.00066	0.002	0.000284	4000	mg/L
MKTF-24	5/6/2019	Boron, Dissolved	0.77	0.04	0.004531	3949110	mg/L
MKTF-24	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	5/6/2019	Calcium, Dissolved	200	10	0.618891	NA	mg/L
MKTF-24	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-24	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-24	5/6/2019	Iron, Dissolved	5.7	0.2	0.087469	13821880	mg/L
MKTF-24	5/6/2019	Lead, Dissolved	0.00036	0.0025	0.000274	NA	mg/L
MKTF-24	5/6/2019	Magnesium, Dissolved	34	1	0.05029	NA	mg/L
MKTF-24	5/6/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-24	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	5/6/2019	Nickel, Dissolved	0.026	0.01	0.004009	372000	mg/L
MKTF-24	5/6/2019	Potassium, Dissolved	2.9	1	0.162288	NA	mg/L
MKTF-24	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-24	5/6/2019	Silver, Dissolved	0.004	0.005	0.000942	81200	mg/L
MKTF-24	5/6/2019	Sodium, Dissolved	680	10	4.161763	NA	mg/L
MKTF-24	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-24	5/6/2019	Uranium, Dissolved	0.011	0.0025	0.000374	NA	mg/L
MKTF-24	5/6/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
MKTF-24	5/6/2019	Aluminum, Total	9.8	0.4	0.049765	19914000	mg/L
MKTF-24	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-24	5/6/2019	Arsenic, Total	0.0038	0.005	0.001561	10000	mg/L
MKTF-24	5/6/2019	Barium, Total	0.46	0.002	0.000648	2000000	mg/L
MKTF-24	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-24	5/6/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-24	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	5/6/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
MKTF-24	5/6/2019	Cobalt, Total	0.0064	0.006	0.003091	5980	mg/L
MKTF-24	5/6/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
MKTF-24	5/6/2019	Iron, Total	8.3	0.2	0.087469	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/6/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
MKTF-24	5/6/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-24	5/6/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-24	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	5/6/2019	Nickel, Total	0.035	0.01	0.004009	372000	mg/L
MKTF-24	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-24	5/6/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
MKTF-24	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-24	5/6/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
MKTF-24	5/6/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-24	2/25/2020	Antimony, Dissolved	0.00083	0.001	0.00039	6000	mg/L
MKTF-24	2/25/2020	Arsenic, Dissolved	0.0013	0.001	0.0001	10000	mg/L
MKTF-24	2/25/2020	Lead, Dissolved	0.0015	0.0005	0.000055	NA	mg/L
MKTF-24	2/25/2020	Selenium, Dissolved	0.00044	0.001	0.00017	50000	mg/L
MKTF-24	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	2/25/2020	Uranium, Dissolved	0.02	0.0005	0.000075	NA	mg/L
MKTF-24	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-24	2/25/2020	Barium, Dissolved	0.27	0.002	0.00065	2000000	mg/L
MKTF-24	2/25/2020	Beryllium, Dissolved	0.00032	0.002	0.00028	4000	mg/L
MKTF-24	2/25/2020	Boron, Dissolved	0.56	0.04	0.0045	3949110	mg/L
MKTF-24	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-24	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-24	2/25/2020	Cobalt, Dissolved	0.0044	0.006	0.0031	5980	mg/L
MKTF-24	2/25/2020	Copper, Dissolved	0.0037	0.006	0.0013	790000	mg/L
MKTF-24	2/25/2020	Iron, Dissolved	0.08	0.02	0.0087	13821880	mg/L
MKTF-24	2/25/2020	Magnesium, Dissolved	27	1	0.05	NA	mg/L
MKTF-24	2/25/2020	Nickel, Dissolved	0.025	0.01	0.004	372000	mg/L
MKTF-24	2/25/2020	Potassium, Dissolved	2.2	1	0.16	NA	mg/L
MKTF-24	2/25/2020	Zinc, Dissolved	0.04	0.01	0.0023	5960450	mg/L
MKTF-24	2/25/2020	Manganese, Dissolved	1.9	0.01	0.0014	2017400	mg/L
MKTF-24	2/25/2020	Silver, Dissolved	0.0032	0.005	0.00094	81200	mg/L
MKTF-24	2/25/2020	Calcium, Dissolved	160	10	0.62	NA	mg/L
MKTF-24	2/25/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-24	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-24	2/25/2020	Antimony, Total	0.00063	0.001	0.00039	6000	mg/L
MKTF-24	2/25/2020	Lead, Total	0.0041	0.0005	0.000055	15000	mg/L
MKTF-24	2/25/2020	Thallium, Total	0.000071	0.0005	0.000052	2000	mg/L
MKTF-24	2/25/2020	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-24	2/25/2020	Arsenic, Total	0.0016	0.005	0.0016	10000	mg/L
MKTF-24	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-24	2/25/2020	Barium, Total	0.43	0.002	0.00065	2000000	mg/L
MKTF-24	2/25/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-24	2/25/2020	Boron, Total	0.66	0.04	0.0045	3949	mg/L
MKTF-24	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-24	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-24	2/25/2020	Cobalt, Total	0.005	0.006	0.0031	5980	mg/L
MKTF-24	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-24	2/25/2020	Nickel, Total	0.037	0.01	0.004	372000	mg/L
MKTF-24	2/25/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
MKTF-24	2/25/2020	Zinc, Total	0.007	0.01	0.0058	5960000	mg/L
MKTF-24	2/25/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-24	2/25/2020	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
MKTF-24	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-24	2/25/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-24	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-24	9/19/2020	Arsenic, Total	0.0065	0.001	0.00026	10000	mg/L
MKTF-24	9/19/2020	Selenium, Total	0.0059	0.001	0.00066	50000	mg/L
MKTF-24	9/19/2020	Lead, Total	0.032	0.0025	0.00017	15000	mg/L
MKTF-24	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-24	9/19/2020	Uranium, Total	0.014	0.0025	0.00033	30000	mg/L
MKTF-24	9/19/2020	Beryllium, Total	0.005	0.002	0.00088	4000	mg/L
MKTF-24	9/19/2020	Boron, Total	0.69	0.04	0.0074	3949	mg/L
MKTF-24	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	9/19/2020	Chromium, Total	0.026	0.006	0.0021	50000	mg/L
MKTF-24	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-24	9/19/2020	Copper, Total	0.015	0.006	0.0047	790000	mg/L
MKTF-24	9/19/2020	Nickel, Total	0.062	0.01	0.0033	372000	mg/L
MKTF-24	9/19/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	Barium, Total	1.2	0.015	0.0082	2000000	mg/L
MKTF-24	9/19/2020	Manganese, Total	4.4	0.01	0.0041	2017000	mg/L
MKTF-24	9/19/2020	Iron, Total	32	2.5	0.64	13822000	mg/L
MKTF-24	9/19/2020	Aluminum, Total	71	2	0.74	19914000	mg/L
MKTF-24	9/19/2020	Cobalt, Total	0.02	0.006	0.0024	5980	mg/L
MKTF-24	9/19/2020	Zinc, Total	0.039	0.01	0.0064	5960000	mg/L
MKTF-24	9/19/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-24	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-24	9/19/2020	Arsenic, Dissolved	0.0015	0.005	0.001	10000	mg/L
MKTF-24	9/19/2020	Lead, Dissolved	0.0015	0.0025	0.00017	NA	mg/L
MKTF-24	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-24	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-24	9/19/2020	Uranium, Dissolved	0.027	0.0025	0.00033	NA	mg/L
MKTF-24	9/19/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
MKTF-24	9/19/2020	Manganese, Dissolved	1.9	0.01	0.0029	2017400	mg/L
MKTF-24	9/19/2020	Sodium, Dissolved	610	50	6.9	NA	mg/L
MKTF-24	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-24	9/19/2020	Barium, Dissolved	0.42	0.002	0.0011	2000000	mg/L
MKTF-24	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-24	9/19/2020	Boron, Dissolved	0.62	0.04	0.0067	3949110	mg/L
MKTF-24	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-24	9/19/2020	Cobalt, Dissolved	0.0067	0.006	0.0024	5980	mg/L
MKTF-24	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-24	9/19/2020	Iron, Dissolved	0.26	0.02	0.01	13821880	mg/L
MKTF-24	9/19/2020	Magnesium, Dissolved	31	1	0.067	NA	mg/L
MKTF-24	9/19/2020	Nickel, Dissolved	0.032	0.01	0.0033	372000	mg/L
MKTF-24	9/19/2020	Potassium, Dissolved	2.6	1	0.16	NA	mg/L
MKTF-24	9/19/2020	Silver, Dissolved	0.0021	0.005	0.0013	81200	mg/L
MKTF-24	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-24	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-24	9/19/2020	Zinc, Dissolved	0.0095	0.01	0.006	5960450	mg/L
MKTF-24	12/18/2020	Arsenic, Total Recoverable	3.63	1	0.286	10	ug/L
MKTF-24	12/18/2020	Lead, Total Recoverable	**19.8**	1	0.133	15	ug/L
MKTF-24	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-24	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-24	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-24	12/18/2020	Uranium, Total Recoverable	16.1	5	1.12	30	ug/L
MKTF-24	12/18/2020	Arsenic, Dissolved	2.14	1	0.286	10	ug/L
MKTF-24	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-24	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-24	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-24	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-24	12/18/2020	Uranium, Dissolved	18.5	5	1.12	NA	ug/L
MKTF-24	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-24	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-24	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-24	12/18/2020	Aluminum, Total	12.5	0.2	0.051	19914000	mg/L
MKTF-24	12/18/2020	Calcium, Total	182	0.5	0.084	NA	mg/L
MKTF-24	12/18/2020	Boron, Total	0.687	0.1	0.022	3949	mg/L
MKTF-24	12/18/2020	Barium, Total	0.628	0.01	0.003	2000000	mg/L
MKTF-24	12/18/2020	Potassium, Total	5.15	1	0.34	NA	mg/L
MKTF-24	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-24	12/18/2020	Magnesium, Total	34.9	0.5	0.12	NA	mg/L
MKTF-24	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-24	12/18/2020	Cobalt, Total	0.0105	0.01	0.003	5980	mg/L
MKTF-24	12/18/2020	Sodium, Total	438	2	0.92	NA	mg/L
MKTF-24	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-24	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-24	12/18/2020	Iron, Total	7.25	0.2	0.075	13822000	mg/L
MKTF-24	12/18/2020	Manganese, Total	2.84	0.01	0.003	2017000	mg/L
MKTF-24	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-24	12/18/2020	Nickel, Total	0.0442	0.006	0.003	372000	mg/L
MKTF-24	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-24	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-24	12/18/2020	Barium, Dissolved	0.457	0.01	0.003	2000000	mg/L
MKTF-24	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-24	12/18/2020	Boron, Dissolved	0.686	0.1	0.022	3949110	mg/L
MKTF-24	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-24	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-24	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-24	12/18/2020	Iron, Dissolved	0.248	0.2	0.075	13821880	mg/L
MKTF-24	12/18/2020	Manganese, Dissolved	2.39	0.01	0.003	2017400	mg/L
MKTF-24	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-24	12/18/2020	Nickel, Dissolved	0.0376	0.006	0.003	372000	mg/L
MKTF-24	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-24	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-25	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-25	12/18/2020	Aluminum, Total	4.98	0.2	0.051	19914000	mg/L
MKTF-25	12/18/2020	Calcium, Total	166	0.5	0.084	NA	mg/L
MKTF-25	12/18/2020	Boron, Total	0.71	0.1	0.022	3949	mg/L
MKTF-25	12/18/2020	Barium, Total	0.341	0.01	0.003	2000000	mg/L
MKTF-25	12/18/2020	Potassium, Total	3.11	1	0.34	NA	mg/L
MKTF-25	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-25	12/18/2020	Magnesium, Total	32.8	0.5	0.12	NA	mg/L
MKTF-25	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-25	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-25	12/18/2020	Sodium, Total	447	2	0.92	NA	mg/L
MKTF-25	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-25	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-25	12/18/2020	Iron, Total	4.07	0.2	0.075	13822000	mg/L
MKTF-25	12/18/2020	Manganese, Total	3.2	0.01	0.003	2017000	mg/L
MKTF-25	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-25	12/18/2020	Nickel, Total	0.027	0.006	0.003	372000	mg/L
MKTF-25	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-25	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-25	12/18/2020	Barium, Dissolved	0.293	0.01	0.003	2000000	mg/L
MKTF-25	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-25	12/18/2020	Boron, Dissolved	0.726	0.1	0.022	3949110	mg/L
MKTF-25	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-25	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-25	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-25	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-25	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-25	12/18/2020	Manganese, Dissolved	2.98	0.01	0.003	2017400	mg/L
MKTF-25	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-25	12/18/2020	Nickel, Dissolved	0.0245	0.006	0.003	372000	mg/L
MKTF-25	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-25	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-25	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-25	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-25	12/18/2020	Arsenic, Total Recoverable	3.67	1	0.286	10	ug/L
MKTF-25	12/18/2020	Lead, Total Recoverable	2.23	1	0.133	15	ug/L
MKTF-25	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-25	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-25	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-25	12/18/2020	Uranium, Total Recoverable	**46.2**	5	1.12	30	ug/L
MKTF-25	12/18/2020	Arsenic, Dissolved	1.46	1	0.286	10	ug/L
MKTF-25	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-25	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-25	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-25	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-25	12/18/2020	Uranium, Dissolved	51.3	5	1.12	NA	ug/L
MKTF-25	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-25	2/27/2020	Arsenic, Dissolved	0.0015	0.001	0.0001	10000	mg/L
MKTF-25	2/27/2020	Lead, Dissolved	0.00017	0.0005	0.000055	NA	mg/L
MKTF-25	2/27/2020	Selenium, Dissolved	0.00036	0.001	0.00017	50000	mg/L
MKTF-25	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-25	2/27/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L
MKTF-25	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-25	2/27/2020	Barium, Dissolved	0.22	0.002	0.00065	2000000	mg/L
MKTF-25	2/27/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-25	2/27/2020	Boron, Dissolved	0.41	0.04	0.0045	3949110	mg/L
MKTF-25	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-25	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-25	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-25	2/27/2020	Copper, Dissolved	0.0018	0.006	0.0013	790000	mg/L
MKTF-25	2/27/2020	Iron, Dissolved	0.13	0.02	0.0087	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/27/2020	Magnesium, Dissolved	36	1	0.05	NA	mg/L
MKTF-25	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-25	2/27/2020	Nickel, Dissolved	0.019	0.01	0.004	372000	mg/L
MKTF-25	2/27/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-25	2/27/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L
MKTF-25	2/27/2020	Zinc, Dissolved	0.0094	0.01	0.0023	5960450	mg/L
MKTF-25	2/27/2020	Calcium, Dissolved	200	5	0.31	NA	mg/L
MKTF-25	2/27/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
MKTF-25	2/27/2020	Manganese, Dissolved	3.2	0.01	0.0014	2017400	mg/L
MKTF-25	2/27/2020	Barium, Total	0.47	0.002	0.00065	2000000	mg/L
MKTF-25	2/27/2020	Beryllium, Total	0.00081	0.002	0.00028	4000	mg/L
MKTF-25	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-25	2/27/2020	Chromium, Total	0.0044	0.006	0.0015	50000	mg/L
MKTF-25	2/27/2020	Cobalt, Total	0.0036	0.006	0.0031	5980	mg/L
MKTF-25	2/27/2020	Copper, Total	0.0099	0.006	0.0041	790000	mg/L
MKTF-25	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-25	2/27/2020	Nickel, Total	0.028	0.01	0.004	372000	mg/L
MKTF-25	2/27/2020	Silver, Total	0.0037	0.005	0.0014	50000	mg/L
MKTF-25	2/27/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-25	2/27/2020	Boron, Total	0.58	0.2	0.023	3949	mg/L
MKTF-25	2/27/2020	Manganese, Total	3.4	0.01	0.0014	2017000	mg/L
MKTF-25	2/27/2020	Iron, Total	5.6	0.2	0.087	13822000	mg/L
MKTF-25	2/27/2020	Aluminum, Total	14	0.4	0.05	19914000	mg/L
MKTF-25	2/27/2020	Uranium, Total	0.034	0.0025	0.00042	30000	mg/L
MKTF-25	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-25	2/27/2020	Arsenic, Total	0.0038	0.001	0.00031	10000	mg/L
MKTF-25	2/27/2020	Lead, Total	0.0069	0.0005	0.000055	15000	mg/L
MKTF-25	2/27/2020	Selenium, Total	0.0012	0.001	0.00048	50000	mg/L
MKTF-25	2/27/2020	Thallium, Total	0.000061	0.0005	0.000052	2000	mg/L
MKTF-25	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-25	5/6/2019	Aluminum, Dissolved	0.0042	0.02	0.002488	19913930	mg/L
MKTF-25	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	5/6/2019	Arsenic, Dissolved	0.0019	0.005	0.000504	10000	mg/L
MKTF-25	5/6/2019	Barium, Dissolved	0.43	0.002	0.000648	2000000	mg/L
MKTF-25	5/6/2019	Beryllium, Dissolved	0.00072	0.002	0.000284	4000	mg/L
MKTF-25	5/6/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-25	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	5/6/2019	Calcium, Dissolved	160	10	0.618891	NA	mg/L
MKTF-25	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	5/6/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
MKTF-25	5/6/2019	Iron, Dissolved	0.21	0.02	0.008747	13821880	mg/L
MKTF-25	5/6/2019	Lead, Dissolved	0.00055	0.0025	0.000274	NA	mg/L
MKTF-25	5/6/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
MKTF-25	5/6/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
MKTF-25	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	5/6/2019	Nickel, Dissolved	0.029	0.01	0.004009	372000	mg/L
MKTF-25	5/6/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-25	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	5/6/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
MKTF-25	5/6/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-25	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	5/6/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-25	5/6/2019	Zinc, Dissolved	0.035	0.01	0.002252	5960450	mg/L
MKTF-25	5/6/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-25	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-25	5/6/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-25	5/6/2019	Barium, Total	0.61	0.002	0.000648	2000000	mg/L
MKTF-25	5/6/2019	Beryllium, Total	0.0016	0.002	0.000284	4000	mg/L
MKTF-25	5/6/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-25	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	5/6/2019	Chromium, Total	0.0035	0.006	0.001533	50000	mg/L
MKTF-25	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-25	5/6/2019	Copper, Total	0.021	0.006	0.004072	790000	mg/L
MKTF-25	5/6/2019	Iron, Total	4.7	0.1	0.043734	13822000	mg/L
MKTF-25	5/6/2019	Lead, Total	0.007	0.0025	0.000274	15000	mg/L
MKTF-25	5/6/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-25	5/6/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
MKTF-25	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
MKTF-25	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-25	5/6/2019	Silver, Total	0.0041	0.005	0.001418	50000	mg/L
MKTF-25	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-25	5/6/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-25	5/6/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-25	10/23/2019	Aluminum, Total	25	1	0.124414	19914000	mg/L
MKTF-25	10/23/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-25	10/23/2019	Arsenic, Total	0.0064	0.005	0.001561	10000	mg/L
MKTF-25	10/23/2019	Barium, Total	0.94	0.002	0.000648	2000000	mg/L
MKTF-25	10/23/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-25	10/23/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-25	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	10/23/2019	Chromium, Total	0.0086	0.006	0.001533	50000	mg/L
MKTF-25	10/23/2019	Cobalt, Total	0.0062	0.006	0.003091	5980	mg/L
MKTF-25	10/23/2019	Copper, Total	0.011	0.006	0.004072	790000	mg/L
MKTF-25	10/23/2019	Iron, Total	10	1	0.437344	13822000	mg/L
MKTF-25	10/23/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
MKTF-25	10/23/2019	Manganese, Total	5.8	0.02	0.002899	2017000	mg/L
MKTF-25	10/23/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-25	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-25	10/23/2019	Nickel, Total	0.035	0.01	0.004009	372000	mg/L
MKTF-25	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-25	10/23/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-25	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-25	10/23/2019	Zinc, Total	0.021	0.01	0.005772	5960000	mg/L
MKTF-25	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-25	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	10/23/2019	Arsenic, Dissolved	0.0037	0.005	0.000504	10000	mg/L
MKTF-25	10/23/2019	Barium, Dissolved	0.53	0.002	0.000648	2000000	mg/L
MKTF-25	10/23/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
MKTF-25	10/23/2019	Boron, Dissolved	0.77	0.04	0.004531	3949110	mg/L
MKTF-25	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	10/23/2019	Calcium, Dissolved	260	10	0.618891	NA	mg/L
MKTF-25	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	10/23/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-25	10/23/2019	Iron, Dissolved	0.28	0.02	0.008747	13821880	mg/L
MKTF-25	10/23/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-25	10/23/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-25	10/23/2019	Manganese, Dissolved	5.4	0.02	0.002899	2017400	mg/L
MKTF-25	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	10/23/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
MKTF-25	10/23/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-25	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	10/23/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
MKTF-25	10/23/2019	Sodium, Dissolved	810	10	4.161763	NA	mg/L
MKTF-25	10/23/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	10/23/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-25	8/27/2019	Aluminum, Total	4.6	0.4	0.049765	19914000	mg/L
MKTF-25	8/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-25	8/27/2019	Arsenic, Total	0.0027	0.001	0.000312	10000	mg/L
MKTF-25	8/27/2019	Barium, Total	0.39	0.002	0.000648	2000000	mg/L
MKTF-25	8/27/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-25	8/27/2019	Boron, Total	0.65	0.2	0.022653	3949	mg/L
MKTF-25	8/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	8/27/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-25	8/27/2019	Cobalt, Total	0.0044	0.006	0.003091	5980	mg/L
MKTF-25	8/27/2019	Copper, Total	0.017	0.006	0.004072	790000	mg/L
MKTF-25	8/27/2019	Iron, Total	1.8	0.4	0.174937	13822000	mg/L
MKTF-25	8/27/2019	Lead, Total	0.0077	0.0005	0.000055	15000	mg/L
MKTF-25	8/27/2019	Manganese, Total	3.9	0.01	0.00145	2017000	mg/L
MKTF-25	8/27/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MKTF-25	8/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-25	8/27/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
MKTF-25	8/27/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-25	8/27/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-25	8/27/2019	Thallium, Total	0.000067	0.0005	0.000052	2000	mg/L
MKTF-25	8/27/2019	Uranium, Total	0.036	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-25	8/27/2019	Aluminum, Dissolved	0.21	0.02	0.002488	19913930	mg/L
MKTF-25	8/27/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	8/27/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
MKTF-25	8/27/2019	Barium, Dissolved	0.39	0.002	0.000648	2000000	mg/L
MKTF-25	8/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-25	8/27/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-25	8/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	8/27/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
MKTF-25	8/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	8/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	8/27/2019	Copper, Dissolved	0.0055	0.006	0.001296	790000	mg/L
MKTF-25	8/27/2019	Iron, Dissolved	0.25	0.02	0.008747	13821880	mg/L
MKTF-25	8/27/2019	Lead, Dissolved	0.00052	0.0025	0.000274	NA	mg/L
MKTF-25	8/27/2019	Magnesium, Dissolved	35	1	0.05029	NA	mg/L
MKTF-25	8/27/2019	Manganese, Dissolved	3.6	0.01	0.00145	2017400	mg/L
MKTF-25	8/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	8/27/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
MKTF-25	8/27/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-25	8/27/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	8/27/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-25	8/27/2019	Sodium, Dissolved	810	20	8.323526	NA	mg/L
MKTF-25	8/27/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	8/27/2019	Uranium, Dissolved	0.037	0.0025	0.000374	NA	mg/L
MKTF-25	8/27/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MKTF-25	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-25	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-25	11/14/2014	Barium, Total	0.28	0.002	0.00021	2000000	mg/L
MKTF-25	11/14/2014	Calcium, Total	150	5	0.41	NA	mg/L
MKTF-25	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-25	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-25	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-25	11/14/2014	Iron, Total	0.21	0.02	0.0062	13822000	mg/L
MKTF-25	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-25	11/14/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
MKTF-25	11/14/2014	Magnesium, Total	27	1	0.018	NA	mg/L
MKTF-25	11/14/2014	Manganese, Total	3.1	0.01	0.0027	2017000	mg/L
MKTF-25	11/14/2014	Sodium, Total	640	10	3.9	NA	mg/L
MKTF-25	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-25	11/14/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-25	11/14/2014	Uranium, Total	0.03	0.005	0.00025	30000	mg/L
MKTF-25	11/14/2014	Zinc, Total	0.1	0.01	0.0014	5960000	mg/L
MKTF-25	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-25	3/11/2015	Barium, Total	0.26	0.002	0.00095	2000000	mg/L
MKTF-25	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-25	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-25	3/11/2015	Iron, Total	0.2	0.02	0.0073	13822000	mg/L
MKTF-25	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	3/11/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-25	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-25	3/11/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-25	3/11/2015	Uranium, Total	0.038	0.001	0.00005	30000	mg/L
MKTF-25	3/11/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-25	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-25	6/10/2015	Barium, Total	0.32	0.002	0.00095	2000000	mg/L
MKTF-25	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-25	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-25	6/10/2015	Iron, Total	0.64	0.02	0.0073	13822000	mg/L
MKTF-25	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	6/10/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-25	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-25	6/10/2015	Selenium, Total	0.005	0.005	0.00097	50000	mg/L
MKTF-25	6/10/2015	Uranium, Total	0.033	0.005	0.000024	30000	mg/L
MKTF-25	6/10/2015	Zinc, Total	0.016	0.01	0.0028	5960000	mg/L
MKTF-25	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/21/2015	Arsenic, Total	0.0039	0.001	0.00029	10000	mg/L
MKTF-25	8/21/2015	Barium, Total	0.49	0.002	0.0011	2000000	mg/L
MKTF-25	8/21/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-25	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	8/21/2015	Chromium, Total	0.0065	0.006	0.0022	50000	mg/L
MKTF-25	8/21/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-25	8/21/2015	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-25	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	8/21/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-25	8/21/2015	Magnesium, Total	26	1	0.039	NA	mg/L
MKTF-25	8/21/2015	Manganese, Total	3.7	0.02	0.015	2017000	mg/L
MKTF-25	8/21/2015	Sodium, Total	650	10	0.72	NA	mg/L
MKTF-25	8/21/2015	Lead, Total	0.0084	0.0005	0.000047	15000	mg/L
MKTF-25	8/21/2015	Selenium, Total	0.0038	0.001	0.00012	50000	mg/L
MKTF-25	8/21/2015	Uranium, Total	0.033	0.005	0.000049	30000	mg/L
MKTF-25	8/21/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-25	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-25	11/5/2015	Arsenic, Total	0.0049	0.001	0.00029	10000	mg/L
MKTF-25	11/5/2015	Barium, Total	0.81	0.01	0.0053	2000000	mg/L
MKTF-25	11/5/2015	Calcium, Total	140	10	2.6	NA	mg/L
MKTF-25	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	11/5/2015	Chromium, Total	0.0075	0.006	0.0022	50000	mg/L
MKTF-25	11/5/2015	Copper, Total	0.019	0.006	0.0051	790000	mg/L
MKTF-25	11/5/2015	Iron, Total	7.9	0.2	0.072	13822000	mg/L
MKTF-25	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	11/5/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-25	11/5/2015	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-25	11/5/2015	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-25	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-25	11/5/2015	Lead, Total	0.019	0.0005	0.000047	15000	mg/L
MKTF-25	11/5/2015	Selenium, Total	0.0076	0.005	0.00062	50000	mg/L
MKTF-25	11/5/2015	Uranium, Total	0.033	0.0025	0.000025	30000	mg/L
MKTF-25	11/5/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-25	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-25	2/23/2016	Arsenic, Total	0.0028	0.001	0.00029	10000	mg/L
MKTF-25	2/23/2016	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
MKTF-25	2/23/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-25	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-25	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-25	2/23/2016	Iron, Total	1.4	0.1	0.036	13822000	mg/L
MKTF-25	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-25	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-25	2/23/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-25	2/23/2016	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-25	2/23/2016	Sodium, Total	640	10	0.96	NA	mg/L
MKTF-25	2/23/2016	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-25	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-25	2/23/2016	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-25	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-25	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-25	6/9/2016	Arsenic, Total	0.0049	0.001	0.00014	10000	mg/L
MKTF-25	6/9/2016	Barium, Total	0.32	0.002	0.0013	2000000	mg/L
MKTF-25	6/9/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-25	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-25	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-25	6/9/2016	Iron, Total	0.47	0.02	0.0091	13822000	mg/L
MKTF-25	6/9/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
MKTF-25	6/9/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-25	6/9/2016	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-25	6/9/2016	Manganese, Total	2.9	0.01	0.0016	2017000	mg/L
MKTF-25	6/9/2016	Sodium, Total	590	10	0.96	NA	mg/L
MKTF-25	6/9/2016	Lead, Total	0.001	0.0005	0.00017	15000	mg/L
MKTF-25	6/9/2016	Selenium, Total	0.0096	0.001	0.00021	50000	mg/L
MKTF-25	6/9/2016	Uranium, Total	0.03	0.0025	0.00026	30000	mg/L
MKTF-25	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-25	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	9/9/2016	Arsenic, Total	0.0044	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/9/2016	Barium, Total	0.45	0.002	0.00079	2000000	mg/L
MKTF-25	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-25	9/9/2016	Copper, Total	0.006	0.006	0.003	790000	mg/L
MKTF-25	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-25	9/9/2016	Arsenic, Dissolved	0.0058	0.001	0.00014	10000	mg/L
MKTF-25	9/9/2016	Barium, Dissolved	0.31	0.002	0.0013	2000000	mg/L
MKTF-25	9/9/2016	Calcium, Dissolved	100	10	5	NA	mg/L
MKTF-25	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-25	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-25	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-25	9/9/2016	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-25	9/9/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-25	9/9/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-25	9/9/2016	Manganese, Dissolved	2.7	0.02	0.0032	2017400	mg/L
MKTF-25	9/9/2016	Sodium, Dissolved	570	10	5	NA	mg/L
MKTF-25	9/9/2016	Lead, Dissolved	0.0066	0.0005	0.00017	NA	mg/L
MKTF-25	9/9/2016	Selenium, Dissolved	0.0074	0.001	0.00021	50000	mg/L
MKTF-25	9/9/2016	Uranium, Dissolved	0.032	0.0025	0.00026	NA	mg/L
MKTF-25	9/9/2016	Zinc, Dissolved	0.0089	0.01	0.0028	5960450	mg/L
MKTF-25	9/9/2016	Iron, Total	4.3	0.1	0.1	13822000	mg/L
MKTF-25	9/9/2016	Mercury, Total	0.000054	0.0002	0.000053	2000	mg/L
MKTF-25	9/9/2016	Manganese, Total	3.4	0.01	0.0014	2017000	mg/L
MKTF-25	9/9/2016	Lead, Total	0.0063	0.0005	0.000081	15000	mg/L
MKTF-25	9/9/2016	Selenium, Total	0.0059	0.01	0.0019	50000	mg/L
MKTF-25	9/9/2016	Uranium, Total	0.027	0.0025	0.00087	30000	mg/L
MKTF-25	9/9/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-25	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	11/1/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-25	11/1/2016	Barium, Total	0.39	0.002	0.00079	2000000	mg/L
MKTF-25	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-25	11/1/2016	Copper, Total	0.021	0.006	0.003	790000	mg/L
MKTF-25	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-25	11/1/2016	Arsenic, Dissolved	0.0047	0.001	0.00014	10000	mg/L
MKTF-25	11/1/2016	Barium, Dissolved	0.28	0.002	0.0013	2000000	mg/L
MKTF-25	11/1/2016	Calcium, Dissolved	110	10	5	NA	mg/L
MKTF-25	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-25	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-25	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-25	11/1/2016	Iron, Dissolved	0.35	0.02	0.02	13821880	mg/L
MKTF-25	11/1/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-25	11/1/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-25	11/1/2016	Manganese, Dissolved	2.5	0.01	0.0016	2017400	mg/L
MKTF-25	11/1/2016	Sodium, Dissolved	590	10	5	NA	mg/L
MKTF-25	11/1/2016	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-25	11/1/2016	Selenium, Dissolved	0.0067	0.001	0.00021	50000	mg/L
MKTF-25	11/1/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-25	11/1/2016	Zinc, Dissolved	0.035	0.01	0.0028	5960450	mg/L
MKTF-25	11/1/2016	Iron, Total	3.2	0.1	0.1	13822000	mg/L
MKTF-25	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-25	11/1/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-25	11/1/2016	Lead, Total	0.005	0.0005	0.000081	15000	mg/L
MKTF-25	11/1/2016	Selenium, Total	0.0062	0.01	0.0019	50000	mg/L
MKTF-25	11/1/2016	Uranium, Total	0.032	0.0025	0.00087	30000	mg/L
MKTF-25	11/1/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
MKTF-25	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	3/29/2017	Arsenic, Total	0.0059	0.001	0.00021	10000	mg/L
MKTF-25	3/29/2017	Barium, Total	0.58	0.002	0.00079	2000000	mg/L
MKTF-25	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	3/29/2017	Chromium, Total	0.0091	0.006	0.0027	50000	mg/L
MKTF-25	3/29/2017	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-25	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-25	3/29/2017	Arsenic, Dissolved	0.0054	0.001	0.00018	10000	mg/L
MKTF-25	3/29/2017	Barium, Dissolved	0.27	0.002	0.00085	2000000	mg/L
MKTF-25	3/29/2017	Calcium, Dissolved	120	10	5	NA	mg/L
MKTF-25	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-25	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/29/2017	Iron, Dissolved	0.56	0.02	0.02	13821880	mg/L
MKTF-25	3/29/2017	Potassium, Dissolved	0.96	1	0.5	NA	mg/L
MKTF-25	3/29/2017	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-25	3/29/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-25	3/29/2017	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-25	3/29/2017	Lead, Dissolved	0.00082	0.0005	0.00017	NA	mg/L
MKTF-25	3/29/2017	Selenium, Dissolved	0.0076	0.001	0.00039	50000	mg/L
MKTF-25	3/29/2017	Uranium, Dissolved	0.029	0.0025	0.00025	NA	mg/L
MKTF-25	3/29/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-25	3/29/2017	Iron, Total	8.7	0.2	0.2	13822000	mg/L
MKTF-25	3/29/2017	Mercury, Total	0.00007	0.0002	0.000037	2000	mg/L
MKTF-25	3/29/2017	Manganese, Total	3.7	0.02	0.0027	2017000	mg/L
MKTF-25	3/29/2017	Lead, Total	0.02	0.0005	0.000081	15000	mg/L
MKTF-25	3/29/2017	Selenium, Total	0.005	0.001	0.00019	50000	mg/L
MKTF-25	3/29/2017	Uranium, Total	0.028	0.0025	0.00087	30000	mg/L
MKTF-25	3/29/2017	Zinc, Total	0.021	0.01	0.0027	5960000	mg/L
MKTF-25	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-25	6/5/2017	Arsenic, Total	0.0047	0.001	0.0003	10000	mg/L
MKTF-25	6/5/2017	Barium, Total	0.28	0.002	0.00093	2000000	mg/L
MKTF-25	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	6/5/2017	Chromium, Total	0.0052	0.006	0.0011	50000	mg/L
MKTF-25	6/5/2017	Copper, Total	0.008	0.006	0.0017	790000	mg/L
MKTF-25	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-25	6/5/2017	Arsenic, Dissolved	0.0047	0.001	0.00018	10000	mg/L
MKTF-25	6/5/2017	Barium, Dissolved	0.18	0.002	0.00085	2000000	mg/L
MKTF-25	6/5/2017	Calcium, Dissolved	99	10	0.78	NA	mg/L
MKTF-25	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-25	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	6/5/2017	Iron, Dissolved	0.57	0.02	0.016	13821880	mg/L
MKTF-25	6/5/2017	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
MKTF-25	6/5/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	6/5/2017	Manganese, Dissolved	2.3	0.02	0.0038	2017400	mg/L
MKTF-25	6/5/2017	Sodium, Dissolved	510	10	1.6	NA	mg/L
MKTF-25	6/5/2017	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-25	6/5/2017	Selenium, Dissolved	0.0044	0.001	0.00039	50000	mg/L
MKTF-25	6/5/2017	Uranium, Dissolved	0.027	0.0025	0.00025	NA	mg/L
MKTF-25	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-25	6/5/2017	Iron, Total	4.8	0.1	0.051	13822000	mg/L
MKTF-25	6/5/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
MKTF-25	6/5/2017	Manganese, Total	2.9	0.01	0.0055	2017000	mg/L
MKTF-25	6/5/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-25	6/5/2017	Selenium, Total	0.0034	0.001	0.00071	50000	mg/L
MKTF-25	6/5/2017	Uranium, Total	0.032	0.0025	0.00077	30000	mg/L
MKTF-25	6/5/2017	Zinc, Total	0.0084	0.01	0.0028	5960000	mg/L
MKTF-25	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	9/25/2017	Arsenic, Total	0.0052	0.005	0.0015	10000	mg/L
MKTF-25	9/25/2017	Barium, Total	0.38	0.002	0.00093	2000000	mg/L
MKTF-25	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	9/25/2017	Chromium, Total	0.0048	0.006	0.0018	50000	mg/L
MKTF-25	9/25/2017	Copper, Total	0.0098	0.006	0.0017	790000	mg/L
MKTF-25	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	9/25/2017	Arsenic, Dissolved	0.0044	0.005	0.00089	10000	mg/L
MKTF-25	9/25/2017	Barium, Dissolved	0.24	0.002	0.00085	2000000	mg/L
MKTF-25	9/25/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-25	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	9/25/2017	Iron, Dissolved	0.57	0.02	0.016	13821880	mg/L
MKTF-25	9/25/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-25	9/25/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	9/25/2017	Manganese, Dissolved	2.4	0.02	0.0039	2017400	mg/L
MKTF-25	9/25/2017	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-25	9/25/2017	Lead, Dissolved	0.00039	0.0005	0.00017	NA	mg/L
MKTF-25	9/25/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
MKTF-25	9/25/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-25	9/25/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-25	9/25/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MKTF-25	9/25/2017	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/25/2017	Lead, Total	0.0057	0.0005	0.000095	15000	mg/L
MKTF-25	9/25/2017	Selenium, Total	0.0061	0.005	0.0036	50000	mg/L
MKTF-25	9/25/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-25	11/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	11/21/2017	Arsenic, Total	0.004	0.005	0.0021	10000	mg/L
MKTF-25	11/21/2017	Barium, Total	0.34	0.002	0.001	2000000	mg/L
MKTF-25	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	11/21/2017	Chromium, Total	0.0032	0.006	0.0018	50000	mg/L
MKTF-25	11/21/2017	Copper, Total	0.016	0.006	0.0041	790000	mg/L
MKTF-25	11/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	11/21/2017	Arsenic, Dissolved	0.0042	0.001	0.00042	10000	mg/L
MKTF-25	11/21/2017	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-25	11/21/2017	Calcium, Dissolved	97	1	0.078	NA	mg/L
MKTF-25	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	11/21/2017	Iron, Dissolved	0.8	0.02	0.016	13821880	mg/L
MKTF-25	11/21/2017	Potassium, Dissolved	0.94	1	0.11	NA	mg/L
MKTF-25	11/21/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	11/21/2017	Manganese, Dissolved	2.4	0.02	0.0039	2017400	mg/L
MKTF-25	11/21/2017	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-25	11/21/2017	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
MKTF-25	11/21/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-25	11/21/2017	Uranium, Dissolved	0.024	0.0005	0.000096	NA	mg/L
MKTF-25	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-25	11/21/2017	Iron, Total	4.5	0.1	0.051	13822000	mg/L
MKTF-25	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-25	11/21/2017	Manganese, Total	2.7	0.01	0.0055	2017000	mg/L
MKTF-25	11/21/2017	Lead, Total	0.0053	0.0025	0.0011	15000	mg/L
MKTF-25	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-25	11/21/2017	Uranium, Total	0.026	0.0025	0.00077	30000	mg/L
MKTF-25	11/21/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-25	2/5/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-25	2/5/2018	Barium, Total	0.42	0.002	0.001	2000000	mg/L
MKTF-25	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	2/5/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-25	2/5/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	2/5/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-25	2/5/2018	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-25	2/5/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-25	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	2/5/2018	Iron, Dissolved	0.7	0.02	0.016	13821880	mg/L
MKTF-25	2/5/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-25	2/5/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	2/5/2018	Manganese, Dissolved	2.6	0.01	0.002	2017400	mg/L
MKTF-25	2/5/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-25	2/5/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-25	2/5/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-25	2/5/2018	Uranium, Dissolved	0.023	0.0025	0.00048	NA	mg/L
MKTF-25	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-25	2/5/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
MKTF-25	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-25	2/5/2018	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-25	2/5/2018	Lead, Total	0.0062	0.0025	0.0011	15000	mg/L
MKTF-25	2/5/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-25	2/5/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-25	2/5/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-25	5/6/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-25	5/6/2018	Arsenic, Total	0.0053	0.001	0.00041	10000	mg/L
MKTF-25	5/6/2018	Barium, Total	0.33	0.002	0.001	2000000	mg/L
MKTF-25	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	5/6/2018	Copper, Total	0.0056	0.006	0.0041	790000	mg/L
MKTF-25	5/6/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
MKTF-25	5/6/2018	Arsenic, Dissolved	0.0041	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-25	5/6/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-25	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	5/6/2018	Copper, Dissolved	0.0073	0.006	0.0032	790000	mg/L
MKTF-25	5/6/2018	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
MKTF-25	5/6/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-25	5/6/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-25	5/6/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-25	5/6/2018	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-25	5/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-25	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	5/6/2018	Uranium, Dissolved	0.023	0.0005	0.000096	NA	mg/L
MKTF-25	5/6/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-25	5/6/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
MKTF-25	5/6/2018	Mercury, Total	0.000062	0.0002	0.000037	2000	mg/L
MKTF-25	5/6/2018	Manganese, Total	2.7	0.01	0.0055	2017000	mg/L
MKTF-25	5/6/2018	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-25	5/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-25	5/6/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-25	5/6/2018	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
MKTF-25	8/17/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
MKTF-25	8/17/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
MKTF-25	8/17/2018	Barium, Total	0.48	0.002	0.001	2000000	mg/L
MKTF-25	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	8/17/2018	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
MKTF-25	8/17/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-25	8/17/2018	Silver, Dissolved	0.0033	0.005	0.0018	81200	mg/L
MKTF-25	8/17/2018	Arsenic, Dissolved	0.0052	0.001	0.00042	10000	mg/L
MKTF-25	8/17/2018	Barium, Dissolved	0.33	0.002	0.00099	2000000	mg/L
MKTF-25	8/17/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-25	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	8/17/2018	Copper, Dissolved	0.0051	0.006	0.0032	790000	mg/L
MKTF-25	8/17/2018	Iron, Dissolved	0.97	0.1	0.082	13821880	mg/L
MKTF-25	8/17/2018	Potassium, Dissolved	1	1	0.11	NA	mg/L
MKTF-25	8/17/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	8/17/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-25	8/17/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
MKTF-25	8/17/2018	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-25	8/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	8/17/2018	Uranium, Dissolved	0.027	0.0025	0.00048	NA	mg/L
MKTF-25	8/17/2018	Zinc, Dissolved	0.0075	0.01	0.0021	5960450	mg/L
MKTF-25	8/17/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-25	8/17/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-25	8/17/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-25	8/17/2018	Lead, Total	0.0063	0.0025	0.0011	15000	mg/L
MKTF-25	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-25	8/17/2018	Uranium, Total	0.029	0.0025	0.00034	30000	mg/L
MKTF-25	8/17/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-25	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	11/15/2018	Arsenic, Total	0.0058	0.001	0.00041	10000	mg/L
MKTF-25	11/15/2018	Barium, Total	0.46	0.002	0.001	2000000	mg/L
MKTF-25	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	11/15/2018	Chromium, Total	0.1	0.006	0.0018	50000	mg/L
MKTF-25	11/15/2018	Copper, Total	0.017	0.006	0.0041	790000	mg/L
MKTF-25	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	11/15/2018	Arsenic, Dissolved	0.0043	0.001	0.00042	10000	mg/L
MKTF-25	11/15/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-25	11/15/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-25	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	11/15/2018	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
MKTF-25	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-25	11/15/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	11/15/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-25	11/15/2018	Sodium, Dissolved	620	20	3.3	NA	mg/L
MKTF-25	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	11/15/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
MKTF-25	11/15/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-25	11/15/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-25	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-25	11/15/2018	Manganese, Total	3.1	0.01	0.0055	2017000	mg/L
MKTF-25	11/15/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-25	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-25	11/15/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-25	11/15/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-27	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-27	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-27	11/14/2014	Barium, Total	0.094	0.002	0.00021	2000000	mg/L
MKTF-27	11/14/2014	Calcium, Total	160	5	0.41	NA	mg/L
MKTF-27	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-27	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-27	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-27	11/14/2014	Iron, Total	0.55	0.02	0.0062	13822000	mg/L
MKTF-27	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-27	11/14/2014	Potassium, Total	12	1	0.093	NA	mg/L
MKTF-27	11/14/2014	Magnesium, Total	26	1	0.018	NA	mg/L
MKTF-27	11/14/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
MKTF-27	11/14/2014	Sodium, Total	1800	50	20	NA	mg/L
MKTF-27	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-27	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-27	11/14/2014	Uranium, Total	0.075	0.01	0.0005	30000	mg/L
MKTF-27	11/14/2014	Zinc, Total	0.03	0.01	0.0014	5960000	mg/L
MKTF-27	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-27	3/11/2015	Barium, Total	0.086	0.002	0.00095	2000000	mg/L
MKTF-27	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-27	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-27	3/11/2015	Iron, Total	0.15	0.02	0.0073	13822000	mg/L
MKTF-27	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	3/11/2015	Manganese, Total	0.1	0.002	0.00027	2017000	mg/L
MKTF-27	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-27	3/11/2015	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
MKTF-27	3/11/2015	Uranium, Total	0.075	0.01	0.0005	30000	mg/L
MKTF-27	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-27	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-27	6/9/2015	Barium, Total	0.083	0.002	0.00095	2000000	mg/L
MKTF-27	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-27	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-27	6/9/2015	Iron, Total	0.56	0.02	0.0073	13822000	mg/L
MKTF-27	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	6/9/2015	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
MKTF-27	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-27	6/9/2015	Selenium, Total	0.0075	0.005	0.00097	50000	mg/L
MKTF-27	6/9/2015	Uranium, Total	0.067	0.005	0.000024	30000	mg/L
MKTF-27	6/9/2015	Zinc, Total	0.01	0.01	0.0028	5960000	mg/L
MKTF-27	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	8/20/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	8/20/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-27	8/20/2015	Calcium, Total	170	5	0.28	NA	mg/L
MKTF-27	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	8/20/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	8/20/2015	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-27	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	8/20/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-27	8/20/2015	Magnesium, Total	27	1	0.039	NA	mg/L
MKTF-27	8/20/2015	Manganese, Total	0.7	0.002	0.0015	2017000	mg/L
MKTF-27	8/20/2015	Sodium, Total	1900	50	3.6	NA	mg/L
MKTF-27	8/20/2015	Lead, Total	0.0064	0.0025	0.00024	15000	mg/L
MKTF-27	8/20/2015	Selenium, Total	0.0056	0.005	0.00062	50000	mg/L
MKTF-27	8/20/2015	Uranium, Total	0.071	0.0025	0.000025	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-27	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	11/4/2015	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-27	11/4/2015	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-27	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	11/4/2015	Iron, Total	7.4	0.2	0.072	13822000	mg/L
MKTF-27	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	11/4/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-27	11/4/2015	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-27	11/4/2015	Manganese, Total	0.93	0.002	0.0015	2017000	mg/L
MKTF-27	11/4/2015	Sodium, Total	1800	20	1.9	NA	mg/L
MKTF-27	11/4/2015	Lead, Total	0.0073	0.0025	0.00024	15000	mg/L
MKTF-27	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-27	11/4/2015	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
MKTF-27	11/4/2015	Zinc, Total	0.029	0.01	0.0039	5960000	mg/L
MKTF-27	2/22/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	2/22/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	2/22/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-27	2/22/2016	Calcium, Total	180	5	1.3	NA	mg/L
MKTF-27	2/22/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	2/22/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	2/22/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	2/22/2016	Iron, Total	3.6	0.1	0.036	13822000	mg/L
MKTF-27	2/22/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-27	2/22/2016	Potassium, Total	9.6	1	0.18	NA	mg/L
MKTF-27	2/22/2016	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-27	2/22/2016	Manganese, Total	0.43	0.002	0.0015	2017000	mg/L
MKTF-27	2/22/2016	Sodium, Total	1800	20	1.9	NA	mg/L
MKTF-27	2/22/2016	Lead, Total	0.0044	0.0025	0.00024	15000	mg/L
MKTF-27	2/22/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-27	2/22/2016	Uranium, Total	0.063	0.0025	0.000025	30000	mg/L
MKTF-27	2/22/2016	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-27	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-27	6/8/2016	Arsenic, Total	0.0036	0.005	0.00069	10000	mg/L
MKTF-27	6/8/2016	Barium, Total	0.074	0.002	0.0013	2000000	mg/L
MKTF-27	6/8/2016	Calcium, Total	170	5	1.3	NA	mg/L
MKTF-27	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-27	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-27	6/8/2016	Iron, Total	0.4	0.02	0.0091	13822000	mg/L
MKTF-27	6/8/2016	Mercury, Total	0.000086	0.0002	0.000053	2000	mg/L
MKTF-27	6/8/2016	Potassium, Total	9.9	1	0.18	NA	mg/L
MKTF-27	6/8/2016	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-27	6/8/2016	Manganese, Total	0.52	0.002	0.00032	2017000	mg/L
MKTF-27	6/8/2016	Sodium, Total	1900	20	1.9	NA	mg/L
MKTF-27	6/8/2016	Lead, Total	0.0025	0.0025	0.00084	15000	mg/L
MKTF-27	6/8/2016	Selenium, Total	0.014	0.05	0.011	50000	mg/L
MKTF-27	6/8/2016	Uranium, Total	0.056	0.0025	0.00026	30000	mg/L
MKTF-27	6/8/2016	Zinc, Total	0.007	0.01	0.0028	5960000	mg/L
MKTF-27	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	9/7/2016	Arsenic, Total	0.0035	0.005	0.0011	10000	mg/L
MKTF-27	9/7/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-27	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	9/7/2016	Chromium, Total	0.0035	0.006	0.0027	50000	mg/L
MKTF-27	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-27	9/7/2016	Arsenic, Dissolved	0.003	0.005	0.00069	10000	mg/L
MKTF-27	9/7/2016	Barium, Dissolved	0.067	0.002	0.0013	2000000	mg/L
MKTF-27	9/7/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-27	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-27	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-27	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-27	9/7/2016	Iron, Dissolved	0.083	0.02	0.02	13821880	mg/L
MKTF-27	9/7/2016	Potassium, Dissolved	11	1	0.5	NA	mg/L
MKTF-27	9/7/2016	Magnesium, Dissolved	27	1	0.5	NA	mg/L
MKTF-27	9/7/2016	Manganese, Dissolved	0.29	0.002	0.00032	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	Sodium, Dissolved	1900	50	25	NA	mg/L
MKTF-27	9/7/2016	Lead, Dissolved	0.00063	0.0005	0.00017	NA	mg/L
MKTF-27	9/7/2016	Selenium, Dissolved	0.0092	0.01	0.0021	50000	mg/L
MKTF-27	9/7/2016	Uranium, Dissolved	0.055	0.0025	0.00026	NA	mg/L
MKTF-27	9/7/2016	Zinc, Dissolved	0.0034	0.01	0.0028	5960450	mg/L
MKTF-27	9/7/2016	Iron, Total	3.7	0.1	0.1	13822000	mg/L
MKTF-27	9/7/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
MKTF-27	9/7/2016	Manganese, Total	0.58	0.002	0.00027	2017000	mg/L
MKTF-27	9/7/2016	Lead, Total	0.0051	0.0005	0.000081	15000	mg/L
MKTF-27	9/7/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-27	9/7/2016	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
MKTF-27	9/7/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
MKTF-27	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	10/28/2016	Arsenic, Total	0.0028	0.005	0.0011	10000	mg/L
MKTF-27	10/28/2016	Barium, Total	0.089	0.002	0.00079	2000000	mg/L
MKTF-27	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-27	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-27	10/28/2016	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-27	10/28/2016	Barium, Dissolved	0.065	0.002	0.0013	2000000	mg/L
MKTF-27	10/28/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-27	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-27	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-27	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-27	10/28/2016	Iron, Dissolved	0.039	0.02	0.02	13821880	mg/L
MKTF-27	10/28/2016	Potassium, Dissolved	11	1	0.5	NA	mg/L
MKTF-27	10/28/2016	Magnesium, Dissolved	27	1	0.5	NA	mg/L
MKTF-27	10/28/2016	Manganese, Dissolved	0.085	0.002	0.00032	2017400	mg/L
MKTF-27	10/28/2016	Sodium, Dissolved	1900	50	25	NA	mg/L
MKTF-27	10/28/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	10/28/2016	Selenium, Dissolved	0.0095	0.01	0.0021	50000	mg/L
MKTF-27	10/28/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-27	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-27	10/28/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-27	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-27	10/28/2016	Manganese, Total	0.24	0.002	0.00027	2017000	mg/L
MKTF-27	10/28/2016	Lead, Total	0.0022	0.0025	0.00041	15000	mg/L
MKTF-27	10/28/2016	Selenium, Total	0.0088	0.005	0.00094	50000	mg/L
MKTF-27	10/28/2016	Uranium, Total	0.063	0.0025	0.00087	30000	mg/L
MKTF-27	10/28/2016	Zinc, Total	0.0095	0.01	0.0027	5960000	mg/L
MKTF-27	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	3/29/2017	Arsenic, Total	0.015	0.02	0.0042	10000	mg/L
MKTF-27	3/29/2017	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-27	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	3/29/2017	Chromium, Total	0.0054	0.006	0.0027	50000	mg/L
MKTF-27	3/29/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-27	3/29/2017	Arsenic, Dissolved	0.004	0.005	0.00089	10000	mg/L
MKTF-27	3/29/2017	Barium, Dissolved	0.097	0.002	0.00085	2000000	mg/L
MKTF-27	3/29/2017	Calcium, Dissolved	500	10	5	NA	mg/L
MKTF-27	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-27	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	3/29/2017	Iron, Dissolved	0.034	0.02	0.02	13821880	mg/L
MKTF-27	3/29/2017	Potassium, Dissolved	15	1	0.5	NA	mg/L
MKTF-27	3/29/2017	Magnesium, Dissolved	87	1	0.5	NA	mg/L
MKTF-27	3/29/2017	Manganese, Dissolved	0.49	0.002	0.00038	2017400	mg/L
MKTF-27	3/29/2017	Sodium, Dissolved	3300	50	25	NA	mg/L
MKTF-27	3/29/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	3/29/2017	Selenium, Dissolved	0.015	0.005	0.0019	50000	mg/L
MKTF-27	3/29/2017	Uranium, Dissolved	0.077	0.025	0.0025	NA	mg/L
MKTF-27	3/29/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-27	3/29/2017	Iron, Total	9.8	0.2	0.2	13822000	mg/L
MKTF-27	3/29/2017	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-27	3/29/2017	Manganese, Total	1.5	0.02	0.0027	2017000	mg/L
MKTF-27	3/29/2017	Lead, Total	0.0096	0.0025	0.00041	15000	mg/L
MKTF-27	3/29/2017	Selenium, Total	0.022	0.005	0.00094	50000	mg/L
MKTF-27	3/29/2017	Uranium, Total	0.097	0.0025	0.00087	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	Zinc, Total	0.032	0.01	0.0027	5960000	mg/L
MKTF-27	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-27	6/5/2017	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
MKTF-27	6/5/2017	Barium, Total	0.15	0.002	0.00093	2000000	mg/L
MKTF-27	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	6/5/2017	Chromium, Total	0.004	0.006	0.0011	50000	mg/L
MKTF-27	6/5/2017	Copper, Total	0.0029	0.006	0.0017	790000	mg/L
MKTF-27	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-27	6/5/2017	Arsenic, Dissolved	0.0033	0.005	0.00089	10000	mg/L
MKTF-27	6/5/2017	Barium, Dissolved	0.071	0.002	0.00085	2000000	mg/L
MKTF-27	6/5/2017	Calcium, Dissolved	330	10	0.78	NA	mg/L
MKTF-27	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-27	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	6/5/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
MKTF-27	6/5/2017	Potassium, Dissolved	13	1	0.11	NA	mg/L
MKTF-27	6/5/2017	Magnesium, Dissolved	60	1	0.25	NA	mg/L
MKTF-27	6/5/2017	Manganese, Dissolved	0.064	0.002	0.00038	2017400	mg/L
MKTF-27	6/5/2017	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-27	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	6/5/2017	Selenium, Dissolved	0.011	0.005	0.0019	50000	mg/L
MKTF-27	6/5/2017	Uranium, Dissolved	0.058	0.01	0.001	NA	mg/L
MKTF-27	6/5/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-27	6/5/2017	Iron, Total	4.8	0.1	0.051	13822000	mg/L
MKTF-27	6/5/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
MKTF-27	6/5/2017	Manganese, Total	0.63	0.002	0.0011	2017000	mg/L
MKTF-27	6/5/2017	Lead, Total	0.0053	0.0025	0.00048	15000	mg/L
MKTF-27	6/5/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-27	6/5/2017	Uranium, Total	0.07	0.0025	0.00077	30000	mg/L
MKTF-27	6/5/2017	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-27	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	10/3/2017	Arsenic, Total	0.0048	0.005	0.0015	10000	mg/L
MKTF-27	10/3/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-27	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	10/3/2017	Chromium, Total	0.0019	0.006	0.0018	50000	mg/L
MKTF-27	10/3/2017	Copper, Total	0.0038	0.006	0.0017	790000	mg/L
MKTF-27	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-27	10/3/2017	Arsenic, Dissolved	0.0037	0.005	0.00089	10000	mg/L
MKTF-27	10/3/2017	Barium, Dissolved	0.067	0.002	0.00085	2000000	mg/L
MKTF-27	10/3/2017	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-27	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	10/3/2017	Iron, Dissolved	0.018	0.02	0.016	13821880	mg/L
MKTF-27	10/3/2017	Potassium, Dissolved	12	1	0.11	NA	mg/L
MKTF-27	10/3/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-27	10/3/2017	Manganese, Dissolved	0.17	0.002	0.00039	2017400	mg/L
MKTF-27	10/3/2017	Sodium, Dissolved	2000	20	3.3	NA	mg/L
MKTF-27	10/3/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	10/3/2017	Selenium, Dissolved	0.012	0.005	0.0019	50000	mg/L
MKTF-27	10/3/2017	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
MKTF-27	10/3/2017	Iron, Total	2.1	0.2	0.1	13822000	mg/L
MKTF-27	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	10/3/2017	Manganese, Total	0.4	0.002	0.0011	2017000	mg/L
MKTF-27	10/3/2017	Lead, Total	0.0024	0.0025	0.00048	15000	mg/L
MKTF-27	10/3/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
MKTF-27	10/3/2017	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-27	11/20/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-27	11/20/2017	Arsenic, Total	0.003	0.005	0.0021	10000	mg/L
MKTF-27	11/20/2017	Barium, Total	0.19	0.002	0.001	2000000	mg/L
MKTF-27	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	11/20/2017	Chromium, Total	0.003	0.006	0.0018	50000	mg/L
MKTF-27	11/20/2017	Copper, Total	0.0084	0.006	0.0041	790000	mg/L
MKTF-27	11/20/2017	Silver, Dissolved	0.0033	0.005	0.0018	81200	mg/L
MKTF-27	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-27	11/20/2017	Barium, Dissolved	0.069	0.002	0.00099	2000000	mg/L
MKTF-27	11/20/2017	Calcium, Dissolved	200	5	0.39	NA	mg/L
MKTF-27	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Copper, Dissolved	0.0047	0.006	0.0032	790000	mg/L
MKTF-27	11/20/2017	Iron, Dissolved	0.1	0.02	0.016	13821880	mg/L
MKTF-27	11/20/2017	Potassium, Dissolved	11	1	0.11	NA	mg/L
MKTF-27	11/20/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-27	11/20/2017	Manganese, Dissolved	0.24	0.002	0.00039	2017400	mg/L
MKTF-27	11/20/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-27	11/20/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-27	11/20/2017	Uranium, Dissolved	0.046	0.0025	0.00048	NA	mg/L
MKTF-27	11/20/2017	Zinc, Dissolved	0.0044	0.01	0.0021	5960450	mg/L
MKTF-27	11/20/2017	Iron, Total	6.1	0.2	0.1	13822000	mg/L
MKTF-27	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	11/20/2017	Manganese, Total	0.92	0.002	0.0011	2017000	mg/L
MKTF-27	11/20/2017	Lead, Total	0.0057	0.0025	0.0011	15000	mg/L
MKTF-27	11/20/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	11/20/2017	Uranium, Total	0.052	0.0025	0.00077	30000	mg/L
MKTF-27	11/20/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-27	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-27	2/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-27	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	2/6/2018	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
MKTF-27	2/6/2018	Silver, Dissolved	0.0059	0.005	0.0018	81200	mg/L
MKTF-27	2/6/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-27	2/6/2018	Barium, Dissolved	0.061	0.002	0.00099	2000000	mg/L
MKTF-27	2/6/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
MKTF-27	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	2/6/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-27	2/6/2018	Potassium, Dissolved	8.5	1	0.11	NA	mg/L
MKTF-27	2/6/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-27	2/6/2018	Manganese, Dissolved	0.032	0.002	0.00039	2017400	mg/L
MKTF-27	2/6/2018	Sodium, Dissolved	1700	50	8.2	NA	mg/L
MKTF-27	2/6/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
MKTF-27	2/6/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-27	2/6/2018	Uranium, Dissolved	0.033	0.01	0.0019	NA	mg/L
MKTF-27	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-27	2/6/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-27	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	2/6/2018	Manganese, Total	0.52	0.002	0.0011	2017000	mg/L
MKTF-27	2/6/2018	Lead, Total	0.0041	0.0025	0.0011	15000	mg/L
MKTF-27	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	2/6/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-27	2/6/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
MKTF-27	5/1/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
MKTF-27	5/1/2018	Arsenic, Total	0.008	0.01	0.0041	10000	mg/L
MKTF-27	5/1/2018	Barium, Total	0.14	0.002	0.001	2000000	mg/L
MKTF-27	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	5/1/2018	Copper, Total	0.0092	0.006	0.0041	790000	mg/L
MKTF-27	5/1/2018	Silver, Dissolved	0.0058	0.005	0.0018	81200	mg/L
MKTF-27	5/1/2018	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
MKTF-27	5/1/2018	Barium, Dissolved	0.091	0.002	0.00099	2000000	mg/L
MKTF-27	5/1/2018	Calcium, Dissolved	450	10	0.78	NA	mg/L
MKTF-27	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	5/1/2018	Copper, Dissolved	0.0084	0.006	0.0032	790000	mg/L
MKTF-27	5/1/2018	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-27	5/1/2018	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-27	5/1/2018	Magnesium, Dissolved	98	1	0.25	NA	mg/L
MKTF-27	5/1/2018	Manganese, Dissolved	0.033	0.002	0.00039	2017400	mg/L
MKTF-27	5/1/2018	Sodium, Dissolved	2800	50	8.2	NA	mg/L
MKTF-27	5/1/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-27	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-27	5/1/2018	Uranium, Dissolved	0.034	0.005	0.00096	NA	mg/L
MKTF-27	5/1/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
MKTF-27	5/1/2018	Iron, Total	3.4	0.1	0.051	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/1/2018	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-27	5/1/2018	Manganese, Total	0.69	0.002	0.0011	2017000	mg/L
MKTF-27	5/1/2018	Lead, Total	0.0029	0.005	0.0023	15000	mg/L
MKTF-27	5/1/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	5/1/2018	Uranium, Total	0.037	0.005	0.00068	30000	mg/L
MKTF-27	5/1/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-27	8/20/2018	Silver, Total	0.0058	0.005	0.0012	50000	mg/L
MKTF-27	8/20/2018	Arsenic, Total	0.004	0.005	0.0021	10000	mg/L
MKTF-27	8/20/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-27	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	8/20/2018	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L
MKTF-27	8/20/2018	Copper, Total	0.0082	0.006	0.0041	790000	mg/L
MKTF-27	8/20/2018	Silver, Dissolved	0.0064	0.005	0.0018	81200	mg/L
MKTF-27	8/20/2018	Arsenic, Dissolved	0.0024	0.001	0.00042	10000	mg/L
MKTF-27	8/20/2018	Barium, Dissolved	0.068	0.002	0.00099	2000000	mg/L
MKTF-27	8/20/2018	Calcium, Dissolved	280	5	0.39	NA	mg/L
MKTF-27	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	8/20/2018	Copper, Dissolved	0.0052	0.006	0.0032	790000	mg/L
MKTF-27	8/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-27	8/20/2018	Potassium, Dissolved	12	1	0.11	NA	mg/L
MKTF-27	8/20/2018	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-27	8/20/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
MKTF-27	8/20/2018	Sodium, Dissolved	2400	50	8.2	NA	mg/L
MKTF-27	8/20/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-27	8/20/2018	Uranium, Dissolved	0.033	0.0025	0.00048	NA	mg/L
MKTF-27	8/20/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-27	8/20/2018	Iron, Total	6.7	0.4	0.2	13822000	mg/L
MKTF-27	8/20/2018	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
MKTF-27	8/20/2018	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
MKTF-27	8/20/2018	Lead, Total	0.0065	0.0025	0.0011	15000	mg/L
MKTF-27	8/20/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-27	8/20/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
MKTF-27	8/20/2018	Zinc, Total	0.025	0.01	0.0033	5960000	mg/L
MKTF-27	11/15/2018	Silver, Total	0.0067	0.005	0.0012	50000	mg/L
MKTF-27	11/15/2018	Arsenic, Total	0.0039	0.001	0.00041	10000	mg/L
MKTF-27	11/15/2018	Barium, Total	0.076	0.002	0.001	2000000	mg/L
MKTF-27	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-27	11/15/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-27	11/15/2018	Arsenic, Dissolved	0.0017	0.001	0.00042	10000	mg/L
MKTF-27	11/15/2018	Barium, Dissolved	0.063	0.002	0.00099	2000000	mg/L
MKTF-27	11/15/2018	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-27	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	11/15/2018	Iron, Dissolved	0.16	0.02	0.016	13821880	mg/L
MKTF-27	11/15/2018	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-27	11/15/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-27	11/15/2018	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-27	11/15/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-27	11/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-27	11/15/2018	Uranium, Dissolved	0.031	0.0025	0.00048	NA	mg/L
MKTF-27	11/15/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-27	11/15/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-27	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-27	11/15/2018	Manganese, Total	0.42	0.002	0.0011	2017000	mg/L
MKTF-27	11/15/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
MKTF-27	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-27	11/15/2018	Uranium, Total	0.036	0.0025	0.00034	30000	mg/L
MKTF-27	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-27	10/23/2019	Aluminum, Total	0.32	0.02	0.002488	19914000	mg/L
MKTF-27	10/23/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	10/23/2019	Barium, Total	0.044	0.002	0.000648	2000000	mg/L
MKTF-27	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
MKTF-27	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	10/23/2019	Copper, Total	0.0045	0.006	0.004072	790000	mg/L
MKTF-27	10/23/2019	Iron, Total	0.19	0.02	0.008747	13822000	mg/L
MKTF-27	10/23/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-27	10/23/2019	Manganese, Total	0.13	0.002	0.00029	2017000	mg/L
MKTF-27	10/23/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
MKTF-27	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	10/23/2019	Nickel, Total	0.031	0.01	0.004009	372000	mg/L
MKTF-27	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-27	10/23/2019	Silver, Total	0.0053	0.005	0.001418	50000	mg/L
MKTF-27	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	10/23/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-27	10/23/2019	Barium, Dissolved	0.041	0.002	0.000648	2000000	mg/L
MKTF-27	10/23/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-27	10/23/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-27	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	10/23/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
MKTF-27	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	10/23/2019	Copper, Dissolved	0.0068	0.006	0.001296	790000	mg/L
MKTF-27	10/23/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
MKTF-27	10/23/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	10/23/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-27	10/23/2019	Manganese, Dissolved	0.048	0.002	0.00029	2017400	mg/L
MKTF-27	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	10/23/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
MKTF-27	10/23/2019	Potassium, Dissolved	11	1	0.162288	NA	mg/L
MKTF-27	10/23/2019	Selenium, Dissolved	0.0019	0.005	0.000857	50000	mg/L
MKTF-27	10/23/2019	Silver, Dissolved	0.0057	0.005	0.000942	81200	mg/L
MKTF-27	10/23/2019	Sodium, Dissolved	1900	50	20.808815	NA	mg/L
MKTF-27	10/23/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	10/23/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-27	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	8/21/2019	Antimony, Dissolved	0.00059	0.001	0.000389	6000	mg/L
MKTF-27	8/21/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-27	8/21/2019	Barium, Dissolved	0.041	0.002	0.000648	2000000	mg/L
MKTF-27	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-27	8/21/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
MKTF-27	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	8/21/2019	Calcium, Dissolved	290	5	0.309446	NA	mg/L
MKTF-27	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	8/21/2019	Copper, Dissolved	0.017	0.006	0.001296	790000	mg/L
MKTF-27	8/21/2019	Iron, Dissolved	0.0089	0.02	0.008747	13821880	mg/L
MKTF-27	8/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	8/21/2019	Magnesium, Dissolved	50	1	0.05029	NA	mg/L
MKTF-27	8/21/2019	Manganese, Dissolved	0.32	0.002	0.00029	2017400	mg/L
MKTF-27	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	8/21/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-27	8/21/2019	Potassium, Dissolved	11	1	0.162288	NA	mg/L
MKTF-27	8/21/2019	Selenium, Dissolved	0.0028	0.001	0.000171	50000	mg/L
MKTF-27	8/21/2019	Silver, Dissolved	0.0048	0.005	0.000942	81200	mg/L
MKTF-27	8/21/2019	Sodium, Dissolved	2300	50	20.808815	NA	mg/L
MKTF-27	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	8/21/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
MKTF-27	8/21/2019	Zinc, Dissolved	0.008	0.01	0.002252	5960450	mg/L
MKTF-27	8/21/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
MKTF-27	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	8/21/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-27	8/21/2019	Barium, Total	0.061	0.002	0.000648	2000000	mg/L
MKTF-27	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-27	8/21/2019	Boron, Total	0.57	0.04	0.004531	3949	mg/L
MKTF-27	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	8/21/2019	Copper, Total	0.015	0.006	0.004072	790000	mg/L
MKTF-27	8/21/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-27	8/21/2019	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-27	8/21/2019	Manganese, Total	0.58	0.002	0.00029	2017000	mg/L
MKTF-27	8/21/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-27	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	8/21/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
MKTF-27	8/21/2019	Selenium, Total	0.0022	0.001	0.000478	50000	mg/L
MKTF-27	8/21/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-27	8/21/2019	Thallium, Total	0.000058	0.0005	0.000052	2000	mg/L
MKTF-27	8/21/2019	Uranium, Total	0.028	0.0025	0.000424	30000	mg/L
MKTF-27	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	5/6/2019	Aluminum, Dissolved	0.0062	0.02	0.002488	19913930	mg/L
MKTF-27	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	5/6/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-27	5/6/2019	Barium, Dissolved	0.04	0.002	0.000648	2000000	mg/L
MKTF-27	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-27	5/6/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-27	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	5/6/2019	Calcium, Dissolved	400	5	0.309446	NA	mg/L
MKTF-27	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	5/6/2019	Copper, Dissolved	0.0095	0.006	0.001296	790000	mg/L
MKTF-27	5/6/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-27	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	5/6/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
MKTF-27	5/6/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
MKTF-27	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	5/6/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
MKTF-27	5/6/2019	Potassium, Dissolved	12	1	0.162288	NA	mg/L
MKTF-27	5/6/2019	Selenium, Dissolved	0.0044	0.005	0.000857	50000	mg/L
MKTF-27	5/6/2019	Silver, Dissolved	0.0093	0.005	0.000942	81200	mg/L
MKTF-27	5/6/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
MKTF-27	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	5/6/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
MKTF-27	5/6/2019	Zinc, Dissolved	0.043	0.01	0.002252	5960450	mg/L
MKTF-27	5/6/2019	Aluminum, Total	4.2	0.1	0.012441	19914000	mg/L
MKTF-27	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	5/6/2019	Barium, Total	0.086	0.002	0.000648	2000000	mg/L
MKTF-27	5/6/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-27	5/6/2019	Boron, Total	0.4	0.04	0.004531	3949	mg/L
MKTF-27	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	5/6/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
MKTF-27	5/6/2019	Iron, Total	2.2	0.1	0.043734	13822000	mg/L
MKTF-27	5/6/2019	Lead, Total	0.0019	0.0025	0.000274	15000	mg/L
MKTF-27	5/6/2019	Manganese, Total	0.7	0.002	0.00029	2017000	mg/L
MKTF-27	5/6/2019	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
MKTF-27	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	5/6/2019	Nickel, Total	0.031	0.01	0.004009	372000	mg/L
MKTF-27	5/6/2019	Selenium, Total	0.0041	0.005	0.00239	50000	mg/L
MKTF-27	5/6/2019	Silver, Total	0.0092	0.005	0.001418	50000	mg/L
MKTF-27	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	5/6/2019	Uranium, Total	0.03	0.0025	0.000424	30000	mg/L
MKTF-27	5/6/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-27	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	3/28/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	3/28/2019	Arsenic, Dissolved	0.0017	0.005	0.000504	10000	mg/L
MKTF-27	3/28/2019	Barium, Dissolved	0.039	0.002	0.000648	2000000	mg/L
MKTF-27	3/28/2019	Beryllium, Dissolved	0.00049	0.002	0.000284	4000	mg/L
MKTF-27	3/28/2019	Boron, Dissolved	0.22	0.04	0.004531	3949110	mg/L
MKTF-27	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	3/28/2019	Calcium, Dissolved	400	5	0.309446	NA	mg/L
MKTF-27	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	Copper, Dissolved	0.011	0.006	0.001296	790000	mg/L
MKTF-27	3/28/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
MKTF-27	3/28/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	3/28/2019	Magnesium, Dissolved	71	1	0.05029	NA	mg/L
MKTF-27	3/28/2019	Manganese, Dissolved	0.011	0.002	0.00029	2017400	mg/L
MKTF-27	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	3/28/2019	Nickel, Dissolved	0.026	0.01	0.004009	372000	mg/L
MKTF-27	3/28/2019	Potassium, Dissolved	7.9	1	0.162288	NA	mg/L
MKTF-27	3/28/2019	Selenium, Dissolved	0.0049	0.005	0.000857	50000	mg/L
MKTF-27	3/28/2019	Silver, Dissolved	0.0064	0.005	0.000942	81200	mg/L
MKTF-27	3/28/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
MKTF-27	3/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	3/28/2019	Uranium, Dissolved	0.025	0.0025	0.000374	NA	mg/L
MKTF-27	3/28/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-27	3/28/2019	Aluminum, Total	0.97	0.1	0.022822	19914000	mg/L
MKTF-27	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	3/28/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	3/28/2019	Barium, Total	0.055	0.002	0.000648	2000000	mg/L
MKTF-27	3/28/2019	Beryllium, Total	0.00058	0.002	0.000284	4000	mg/L
MKTF-27	3/28/2019	Boron, Total	0.26	0.04	0.004531	3949	mg/L
MKTF-27	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	3/28/2019	Copper, Total	0.0093	0.006	0.004072	790000	mg/L
MKTF-27	3/28/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-27	3/28/2019	Lead, Total	0.00089	0.0025	0.000274	15000	mg/L
MKTF-27	3/28/2019	Manganese, Total	0.077	0.002	0.00029	2017000	mg/L
MKTF-27	3/28/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-27	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	3/28/2019	Nickel, Total	0.023	0.01	0.004009	372000	mg/L
MKTF-27	3/28/2019	Selenium, Total	0.0055	0.005	0.00239	50000	mg/L
MKTF-27	3/28/2019	Silver, Total	0.0066	0.005	0.001418	50000	mg/L
MKTF-27	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	3/28/2019	Uranium, Total	0.028	0.0025	0.000424	30000	mg/L
MKTF-27	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	2/25/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-27	2/25/2020	Arsenic, Dissolved	0.0017	0.005	0.0005	10000	mg/L
MKTF-27	2/25/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-27	2/25/2020	Selenium, Dissolved	0.0065	0.005	0.00086	50000	mg/L
MKTF-27	2/25/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-27	2/25/2020	Uranium, Dissolved	0.034	0.0025	0.00037	NA	mg/L
MKTF-27	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-27	2/25/2020	Barium, Dissolved	0.067	0.002	0.00065	2000000	mg/L
MKTF-27	2/25/2020	Beryllium, Dissolved	0.00055	0.002	0.00028	4000	mg/L
MKTF-27	2/25/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
MKTF-27	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-27	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-27	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-27	2/25/2020	Copper, Dissolved	0.0085	0.006	0.0013	790000	mg/L
MKTF-27	2/25/2020	Iron, Dissolved	0.029	0.02	0.0087	13821880	mg/L
MKTF-27	2/25/2020	Manganese, Dissolved	0.065	0.002	0.00029	2017400	mg/L
MKTF-27	2/25/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
MKTF-27	2/25/2020	Potassium, Dissolved	13	1	0.16	NA	mg/L
MKTF-27	2/25/2020	Zinc, Dissolved	0.029	0.01	0.0023	5960450	mg/L
MKTF-27	2/25/2020	Magnesium, Dissolved	140	5	0.25	NA	mg/L
MKTF-27	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-27	2/25/2020	Silver, Dissolved	0.0096	0.005	0.00094	81200	mg/L
MKTF-27	2/25/2020	Calcium, Dissolved	820	10	0.62	NA	mg/L
MKTF-27	2/25/2020	Sodium, Dissolved	3300	50	21	NA	mg/L
MKTF-27	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-27	2/25/2020	Arsenic, Total	ND	0.01	0.0031	10000	mg/L
MKTF-27	2/25/2020	Lead, Total	0.001	0.005	0.00055	15000	mg/L
MKTF-27	2/25/2020	Selenium, Total	0.0071	0.01	0.0048	50000	mg/L
MKTF-27	2/25/2020	Thallium, Total	ND	0.005	0.00052	2000	mg/L
MKTF-27	2/25/2020	Barium, Total	0.091	0.002	0.00065	2000000	mg/L
MKTF-27	2/25/2020	Beryllium, Total	0.00046	0.002	0.00028	4000	mg/L
MKTF-27	2/25/2020	Boron, Total	0.3	0.04	0.0045	3949	mg/L
MKTF-27	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-27	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-27	2/25/2020	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-27	2/25/2020	Nickel, Total	0.028	0.01	0.004	372000	mg/L
MKTF-27	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-27	2/25/2020	Aluminum, Total	1.2	0.1	0.012	19914000	mg/L
MKTF-27	2/25/2020	Iron, Total	1.3	0.1	0.044	13822000	mg/L
MKTF-27	2/25/2020	Uranium, Total	0.034	0.005	0.00085	30000	mg/L
MKTF-27	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-27	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-27	2/25/2020	Silver, Total	0.014	0.005	0.0014	50000	mg/L
MKTF-27	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-27	9/20/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-27	9/20/2020	Arsenic, Total	ND	0.005	0.0013	10000	mg/L
MKTF-27	9/20/2020	Lead, Total	ND	0.0025	0.00017	15000	mg/L
MKTF-27	9/20/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-27	9/20/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-27	9/20/2020	Uranium, Total	0.03	0.0025	0.00033	30000	mg/L
MKTF-27	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-27	9/20/2020	Barium, Total	0.046	0.003	0.0016	2000000	mg/L
MKTF-27	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-27	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-27	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-27	9/20/2020	Iron, Total	0.21	0.05	0.013	13822000	mg/L
MKTF-27	9/20/2020	Manganese, Total	0.45	0.002	0.00081	2017000	mg/L
MKTF-27	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-27	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-27	9/20/2020	Nickel, Total	0.03	0.01	0.0033	372000	mg/L
MKTF-27	9/20/2020	Silver, Total	0.0045	0.005	0.0013	50000	mg/L
MKTF-27	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-27	9/20/2020	Aluminum, Total	0.18	0.02	0.0074	19914000	mg/L
MKTF-27	9/20/2020	Boron, Total	0.62	0.04	0.0074	3949	mg/L
MKTF-27	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-27	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-27	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-27	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-27	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-27	9/20/2020	Uranium, Dissolved	0.037	0.0025	0.00033	NA	mg/L
MKTF-27	9/20/2020	Calcium, Dissolved	270	5	0.57	NA	mg/L
MKTF-27	9/20/2020	Nickel, Dissolved	0.039	0.05	0.016	372000	mg/L
MKTF-27	9/20/2020	Silver, Dissolved	0.0073	0.025	0.0063	81200	mg/L
MKTF-27	9/20/2020	Sodium, Dissolved	2100	50	6.9	NA	mg/L
MKTF-27	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-27	9/20/2020	Barium, Dissolved	0.048	0.002	0.0011	2000000	mg/L
MKTF-27	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-27	9/20/2020	Boron, Dissolved	0.57	0.04	0.0067	3949110	mg/L
MKTF-27	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-27	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-27	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-27	9/20/2020	Copper, Dissolved	0.0054	0.006	0.0035	790000	mg/L
MKTF-27	9/20/2020	Iron, Dissolved	0.015	0.02	0.01	13821880	mg/L
MKTF-27	9/20/2020	Magnesium, Dissolved	48	1	0.067	NA	mg/L
MKTF-27	9/20/2020	Manganese, Dissolved	0.23	0.002	0.00058	2017400	mg/L
MKTF-27	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-27	9/20/2020	Potassium, Dissolved	11	1	0.16	NA	mg/L
MKTF-27	9/20/2020	Zinc, Dissolved	0.022	0.01	0.006	5960450	mg/L
MKTF-27	12/18/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
MKTF-27	12/18/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
MKTF-27	12/18/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
MKTF-27	12/18/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
MKTF-27	12/18/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
MKTF-27	12/18/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
MKTF-27	12/18/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
MKTF-27	12/18/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
MKTF-27	12/18/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
MKTF-27	12/18/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
MKTF-27	12/18/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
MKTF-27	12/18/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
MKTF-27	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-27	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-27	12/18/2020	Aluminum, Total	0.93	0.2	0.051	19914000	mg/L
MKTF-27	12/18/2020	Calcium, Total	248	0.5	0.084	NA	mg/L
MKTF-27	12/18/2020	Boron, Total	0.531	0.1	0.022	3949	mg/L
MKTF-27	12/18/2020	Barium, Total	0.0602	0.01	0.003	2000000	mg/L
MKTF-27	12/18/2020	Potassium, Total	14.7	1	0.34	NA	mg/L
MKTF-27	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-27	12/18/2020	Magnesium, Total	46.7	0.5	0.12	NA	mg/L
MKTF-27	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-27	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-27	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-27	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-27	12/18/2020	Iron, Total	0.779	0.2	0.075	13822000	mg/L
MKTF-27	12/18/2020	Manganese, Total	0.295	0.01	0.003	2017000	mg/L
MKTF-27	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-27	12/18/2020	Nickel, Total	0.0344	0.006	0.003	372000	mg/L
MKTF-27	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-27	12/18/2020	Aluminum, Dissolved	0.296	0.2	0.051	19913930	mg/L
MKTF-27	12/18/2020	Barium, Dissolved	0.0448	0.01	0.003	2000000	mg/L
MKTF-27	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-27	12/18/2020	Boron, Dissolved	0.54	0.1	0.022	3949110	mg/L
MKTF-27	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-27	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-27	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-27	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-27	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-27	12/18/2020	Manganese, Dissolved	0.254	0.01	0.003	2017400	mg/L
MKTF-27	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-27	12/18/2020	Nickel, Dissolved	0.0335	0.006	0.003	372000	mg/L
MKTF-27	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-27	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-27	12/18/2020	Sodium, Total	1810	10	4.6	NA	mg/L
MKTF-28	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-28	12/18/2020	Aluminum, Total	1.07	0.2	0.051	19914000	mg/L
MKTF-28	12/18/2020	Calcium, Total	59.9	0.5	0.084	NA	mg/L
MKTF-28	12/18/2020	Boron, Total	1.62	0.1	0.022	3949	mg/L
MKTF-28	12/18/2020	Barium, Total	0.0854	0.01	0.003	2000000	mg/L
MKTF-28	12/18/2020	Potassium, Total	2.93	1	0.34	NA	mg/L
MKTF-28	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-28	12/18/2020	Magnesium, Total	13.3	0.5	0.12	NA	mg/L
MKTF-28	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-28	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-28	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-28	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-28	12/18/2020	Iron, Total	0.952	0.2	0.075	13822000	mg/L
MKTF-28	12/18/2020	Manganese, Total	0.059	0.01	0.003	2017000	mg/L
MKTF-28	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-28	12/18/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-28	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-28	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-28	12/18/2020	Barium, Dissolved	0.0729	0.01	0.003	2000000	mg/L
MKTF-28	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-28	12/18/2020	Boron, Dissolved	1.7	0.1	0.022	3949110	mg/L
MKTF-28	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-28	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-28	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-28	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-28	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-28	12/18/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-28	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-28	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-28	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-28	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-28	12/18/2020	Sodium, Total	568	10	4.6	NA	mg/L
MKTF-28	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-28	12/18/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-28	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-28	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-28	12/18/2020	Uranium, Total Recoverable	**125**	5	1.12	30	ug/L
MKTF-28	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-28	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-28	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-28	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-28	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-28	12/18/2020	Uranium, Dissolved	119	5	1.12	NA	ug/L
MKTF-28	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-28	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-28	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-28	9/20/2020	Arsenic, Total	0.0013	0.001	0.00026	10000	mg/L
MKTF-28	9/20/2020	Lead, Total	0.00056	0.0005	0.000034	15000	mg/L
MKTF-28	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-28	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-28	9/20/2020	Uranium, Total	0.11	0.005	0.00065	30000	mg/L
MKTF-28	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-28	9/20/2020	Barium, Total	0.066	0.003	0.0016	2000000	mg/L
MKTF-28	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-28	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-28	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-28	9/20/2020	Iron, Total	0.51	0.05	0.013	13822000	mg/L
MKTF-28	9/20/2020	Manganese, Total	0.088	0.002	0.00081	2017000	mg/L
MKTF-28	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-28	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-28	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-28	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-28	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-28	9/20/2020	Aluminum, Total	0.91	0.02	0.0074	19914000	mg/L
MKTF-28	9/20/2020	Boron, Total	2	0.2	0.037	3949	mg/L
MKTF-28	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-28	9/20/2020	Arsenic, Dissolved	0.00097	0.001	0.00021	10000	mg/L
MKTF-28	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MKTF-28	9/20/2020	Selenium, Dissolved	0.00083	0.001	0.00066	50000	mg/L
MKTF-28	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-28	9/20/2020	Uranium, Dissolved	0.15	0.005	0.00065	NA	mg/L
MKTF-28	9/20/2020	Boron, Dissolved	1.9	0.2	0.033	3949110	mg/L
MKTF-28	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-28	9/20/2020	Sodium, Dissolved	650	50	6.9	NA	mg/L
MKTF-28	9/20/2020	Aluminum, Dissolved	0.02	0.02	0.0056	19913930	mg/L
MKTF-28	9/20/2020	Barium, Dissolved	0.074	0.002	0.0011	2000000	mg/L
MKTF-28	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-28	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-28	9/20/2020	Calcium, Dissolved	58	1	0.11	NA	mg/L
MKTF-28	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-28	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-28	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-28	9/20/2020	Iron, Dissolved	0.012	0.02	0.01	13821880	mg/L
MKTF-28	9/20/2020	Magnesium, Dissolved	12	1	0.067	NA	mg/L
MKTF-28	9/20/2020	Manganese, Dissolved	0.015	0.002	0.00058	2017400	mg/L
MKTF-28	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-28	9/20/2020	Nickel, Dissolved	0.0039	0.01	0.0033	372000	mg/L
MKTF-28	9/20/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
MKTF-28	9/20/2020	Zinc, Dissolved	0.014	0.01	0.006	5960450	mg/L
MKTF-28	2/25/2020	Antimony, Dissolved	0.00046	0.001	0.00039	6000	mg/L
MKTF-28	2/25/2020	Arsenic, Dissolved	0.001	0.001	0.0001	10000	mg/L
MKTF-28	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	2/25/2020	Selenium, Dissolved	0.00046	0.001	0.00017	50000	mg/L
MKTF-28	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	2/25/2020	Uranium, Dissolved	0.13	0.005	0.00075	NA	mg/L
MKTF-28	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-28	2/25/2020	Barium, Dissolved	0.051	0.002	0.00065	2000000	mg/L
MKTF-28	2/25/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-28	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-28	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-28	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-28	2/25/2020	Copper, Dissolved	0.0013	0.006	0.0013	790000	mg/L
MKTF-28	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/25/2020	Magnesium, Dissolved	11	1	0.05	NA	mg/L
MKTF-28	2/25/2020	Manganese, Dissolved	0.00042	0.002	0.00029	2017400	mg/L
MKTF-28	2/25/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-28	2/25/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
MKTF-28	2/25/2020	Zinc, Dissolved	0.054	0.01	0.0023	5960450	mg/L
MKTF-28	2/25/2020	Boron, Dissolved	1.4	0.2	0.023	3949110	mg/L
MKTF-28	2/25/2020	Calcium, Dissolved	54	1	0.062	NA	mg/L
MKTF-28	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-28	2/25/2020	Silver, Dissolved	0.0011	0.005	0.00094	81200	mg/L
MKTF-28	2/25/2020	Sodium, Dissolved	540	10	4.2	NA	mg/L
MKTF-28	2/25/2020	Uranium, Total	0.12	0.005	0.00085	30000	mg/L
MKTF-28	2/25/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-28	2/25/2020	Arsenic, Total	0.0015	0.001	0.00031	10000	mg/L
MKTF-28	2/25/2020	Lead, Total	0.0022	0.0005	0.000055	15000	mg/L
MKTF-28	2/25/2020	Selenium, Total	0.001	0.001	0.00048	50000	mg/L
MKTF-28	2/25/2020	Thallium, Total	0.000092	0.0005	0.000052	2000	mg/L
MKTF-28	2/25/2020	Barium, Total	0.089	0.002	0.00065	2000000	mg/L
MKTF-28	2/25/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-28	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-28	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-28	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-28	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	2/25/2020	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-28	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-28	2/25/2020	Nickel, Total	0.005	0.01	0.004	372000	mg/L
MKTF-28	2/25/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-28	2/25/2020	Zinc, Total	0.007	0.01	0.0058	5960000	mg/L
MKTF-28	2/25/2020	Aluminum, Total	2.6	0.1	0.012	19914000	mg/L
MKTF-28	2/25/2020	Boron, Total	1.5	0.2	0.023	3949	mg/L
MKTF-28	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-28	2/25/2020	Iron, Total	2	0.1	0.044	13822000	mg/L
MKTF-28	3/28/2019	Aluminum, Dissolved	0.03	0.02	0.002488	19913930	mg/L
MKTF-28	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-28	3/28/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-28	3/28/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-28	3/28/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-28	3/28/2019	Boron, Dissolved	1.4	0.2	0.022653	3949110	mg/L
MKTF-28	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	3/28/2019	Calcium, Dissolved	44	1	0.061889	NA	mg/L
MKTF-28	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	3/28/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L
MKTF-28	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	3/28/2019	Magnesium, Dissolved	8.7	1	0.05029	NA	mg/L
MKTF-28	3/28/2019	Manganese, Dissolved	0.0036	0.002	0.00029	2017400	mg/L
MKTF-28	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	3/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	3/28/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-28	3/28/2019	Selenium, Dissolved	0.00044	0.001	0.000171	50000	mg/L
MKTF-28	3/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-28	3/28/2019	Sodium, Dissolved	520	10	4.161763	NA	mg/L
MKTF-28	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	3/28/2019	Uranium, Dissolved	0.13	0.005	0.000747	NA	mg/L
MKTF-28	3/28/2019	Zinc, Dissolved	0.052	0.01	0.002252	5960450	mg/L
MKTF-28	3/28/2019	Aluminum, Total	1.9	0.1	0.022822	19914000	mg/L
MKTF-28	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	3/28/2019	Arsenic, Total	0.0014	0.001	0.000312	10000	mg/L
MKTF-28	3/28/2019	Barium, Total	0.071	0.002	0.000648	2000000	mg/L
MKTF-28	3/28/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
MKTF-28	3/28/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
MKTF-28	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-28	3/28/2019	Iron, Total	1.4	0.1	0.043734	13822000	mg/L
MKTF-28	3/28/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-28	3/28/2019	Manganese, Total	0.094	0.002	0.00029	2017000	mg/L
MKTF-28	3/28/2019	Mercury, Total	0.000086	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	3/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-28	3/28/2019	Selenium, Total	0.00064	0.001	0.000478	50000	mg/L
MKTF-28	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	3/28/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
MKTF-28	3/28/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-28	5/6/2019	Aluminum, Dissolved	0.049	0.02	0.002488	19913930	mg/L
MKTF-28	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	5/6/2019	Arsenic, Dissolved	0.0013	0.005	0.000504	10000	mg/L
MKTF-28	5/6/2019	Barium, Dissolved	0.043	0.002	0.000648	2000000	mg/L
MKTF-28	5/6/2019	Beryllium, Dissolved	0.00062	0.002	0.000284	4000	mg/L
MKTF-28	5/6/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
MKTF-28	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	5/6/2019	Calcium, Dissolved	43	1	0.061889	NA	mg/L
MKTF-28	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	5/6/2019	Iron, Dissolved	0.029	0.02	0.008747	13821880	mg/L
MKTF-28	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	5/6/2019	Magnesium, Dissolved	8.4	1	0.05029	NA	mg/L
MKTF-28	5/6/2019	Manganese, Dissolved	0.004	0.002	0.00029	2017400	mg/L
MKTF-28	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	5/6/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	5/6/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-28	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	5/6/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-28	5/6/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-28	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	5/6/2019	Uranium, Dissolved	0.14	0.005	0.000747	NA	mg/L
MKTF-28	5/6/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-28	5/6/2019	Aluminum, Total	4.7	0.2	0.024883	19914000	mg/L
MKTF-28	5/6/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-28	5/6/2019	Arsenic, Total	ND	0.01	0.003122	10000	mg/L
MKTF-28	5/6/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-28	5/6/2019	Beryllium, Total	0.00096	0.002	0.000284	4000	mg/L
MKTF-28	5/6/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
MKTF-28	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	5/6/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-28	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	5/6/2019	Copper, Total	0.006	0.006	0.004072	790000	mg/L
MKTF-28	5/6/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-28	5/6/2019	Lead, Total	0.0043	0.0005	0.000055	15000	mg/L
MKTF-28	5/6/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
MKTF-28	5/6/2019	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-28	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	5/6/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-28	5/6/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-28	5/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	5/6/2019	Thallium, Total	0.000074	0.0005	0.000052	2000	mg/L
MKTF-28	5/6/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
MKTF-28	5/6/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-28	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-28	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-28	8/21/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-28	8/21/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-28	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-28	8/21/2019	Boron, Dissolved	1.9	0.2	0.022653	3949110	mg/L
MKTF-28	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	8/21/2019	Calcium, Dissolved	43	1	0.061889	NA	mg/L
MKTF-28	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	8/21/2019	Copper, Dissolved	0.0045	0.006	0.001296	790000	mg/L
MKTF-28	8/21/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-28	8/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	8/21/2019	Magnesium, Dissolved	8.1	1	0.05029	NA	mg/L
MKTF-28	8/21/2019	Manganese, Dissolved	0.023	0.002	0.00029	2017400	mg/L
MKTF-28	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	8/21/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Potassium, Dissolved	1.8	1	0.162288	NA	mg/L
MKTF-28	8/21/2019	Selenium, Dissolved	0.001	0.001	0.000171	50000	mg/L
MKTF-28	8/21/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
MKTF-28	8/21/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
MKTF-28	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	8/21/2019	Uranium, Dissolved	0.12	0.005	0.000747	NA	mg/L
MKTF-28	8/21/2019	Zinc, Dissolved	0.0051	0.01	0.002252	5960450	mg/L
MKTF-28	8/21/2019	Aluminum, Total	1.2	0.1	0.012441	19914000	mg/L
MKTF-28	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	8/21/2019	Arsenic, Total	0.0014	0.001	0.000312	10000	mg/L
MKTF-28	8/21/2019	Barium, Total	0.065	0.002	0.000648	2000000	mg/L
MKTF-28	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-28	8/21/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-28	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-28	8/21/2019	Iron, Total	0.79	0.02	0.008747	13822000	mg/L
MKTF-28	8/21/2019	Lead, Total	0.00099	0.0005	0.000055	15000	mg/L
MKTF-28	8/21/2019	Manganese, Total	0.074	0.002	0.00029	2017000	mg/L
MKTF-28	8/21/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-28	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	8/21/2019	Nickel, Total	0.0046	0.01	0.004009	372000	mg/L
MKTF-28	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-28	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	8/21/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
MKTF-28	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-28	10/22/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-28	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Dissolved	0.0013	0.005	0.000504	10000	mg/L
MKTF-28	10/22/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Dissolved	0.00054	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Dissolved	1.8	0.2	0.022653	3949110	mg/L
MKTF-28	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/22/2019	Calcium, Dissolved	44	1	0.061889	NA	mg/L
MKTF-28	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/22/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-28	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	10/22/2019	Magnesium, Dissolved	8.9	1	0.05029	NA	mg/L
MKTF-28	10/22/2019	Manganese, Dissolved	0.037	0.002	0.00029	2017400	mg/L
MKTF-28	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-28	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	10/22/2019	Silver, Dissolved	0.0013	0.005	0.000942	81200	mg/L
MKTF-28	10/22/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-28	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/22/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-28	10/22/2019	Aluminum, Total	2.3	0.1	0.012441	19914000	mg/L
MKTF-28	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-28	10/22/2019	Barium, Total	0.081	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Total	0.00033	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Total	2	0.2	0.022653	3949	mg/L
MKTF-28	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
MKTF-28	10/22/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
MKTF-28	10/22/2019	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-28	10/22/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-28	10/22/2019	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
MKTF-28	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Total	0.0045	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-28	10/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	10/22/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-28	10/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-28	10/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/21/2019	Arsenic, Dissolved	0.01	0.005	0.000504	10000	mg/L
MKTF-28	10/21/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
MKTF-28	10/21/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-28	10/21/2019	Boron, Dissolved	1.5	0.2	0.022653	3949110	mg/L
MKTF-28	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/21/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-28	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/21/2019	Iron, Dissolved	1.2	0.1	0.043734	13821880	mg/L
MKTF-28	10/21/2019	Lead, Dissolved	0.00051	0.0025	0.000274	NA	mg/L
MKTF-28	10/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-28	10/21/2019	Manganese, Dissolved	1.3	0.01	0.00145	2017400	mg/L
MKTF-28	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/21/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
MKTF-28	10/21/2019	Potassium, Dissolved	4	1	0.162288	NA	mg/L
MKTF-28	10/21/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-28	10/21/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-28	10/21/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
MKTF-28	10/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/21/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-28	10/21/2019	Aluminum, Total	7.8	0.2	0.024883	19914000	mg/L
MKTF-28	10/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/21/2019	Arsenic, Total	0.013	0.005	0.001561	10000	mg/L
MKTF-28	10/21/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
MKTF-28	10/21/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-28	10/21/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
MKTF-28	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/21/2019	Chromium, Total	0.0059	0.006	0.001533	50000	mg/L
MKTF-28	10/21/2019	Cobalt, Total	0.0065	0.006	0.003091	5980	mg/L
MKTF-28	10/21/2019	Copper, Total	0.015	0.006	0.004072	790000	mg/L
MKTF-28	10/21/2019	Iron, Total	5.5	0.2	0.087469	13822000	mg/L
MKTF-28	10/21/2019	Lead, Total	0.0076	0.0025	0.000274	15000	mg/L
MKTF-28	10/21/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
MKTF-28	10/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	10/21/2019	Molybdenum, Total	0.0077	0.008	0.006735	98700	mg/L
MKTF-28	10/21/2019	Nickel, Total	0.19	0.01	0.004009	372000	mg/L
MKTF-28	10/21/2019	Selenium, Total	0.0033	0.005	0.00239	50000	mg/L
MKTF-28	10/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-28	10/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-28	10/21/2019	Zinc, Total	0.031	0.01	0.005772	5960000	mg/L
MKTF-28	10/22/2019	Aluminum, Dissolved	0.068	0.02	0.002488	19913930	mg/L
MKTF-28	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
MKTF-28	10/22/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Dissolved	0.00062	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Dissolved	2	0.2	0.022653	3949110	mg/L
MKTF-28	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/22/2019	Calcium, Dissolved	50	1	0.061889	NA	mg/L
MKTF-28	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/22/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
MKTF-28	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	10/22/2019	Magnesium, Dissolved	9.7	1	0.05029	NA	mg/L
MKTF-28	10/22/2019	Manganese, Dissolved	0.078	0.002	0.00029	2017400	mg/L
MKTF-28	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Potassium, Dissolved	1.9	1	0.162288	NA	mg/L
MKTF-28	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	10/22/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-28	10/22/2019	Sodium, Dissolved	660	10	4.161763	NA	mg/L
MKTF-28	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/22/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-28	10/22/2019	Aluminum, Total	9	0.2	0.024883	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Total	0.0041	0.005	0.001561	10000	mg/L
MKTF-28	10/22/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
MKTF-28	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/22/2019	Chromium, Total	0.0038	0.006	0.001533	50000	mg/L
MKTF-28	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Total	0.0066	0.006	0.004072	790000	mg/L
MKTF-28	10/22/2019	Iron, Total	7.4	0.2	0.087469	13822000	mg/L
MKTF-28	10/22/2019	Lead, Total	0.0074	0.0005	0.000055	15000	mg/L
MKTF-28	10/22/2019	Manganese, Total	0.44	0.002	0.00029	2017000	mg/L
MKTF-28	10/22/2019	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
MKTF-28	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Total	0.0069	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Selenium, Total	0.003	0.005	0.00239	50000	mg/L
MKTF-28	10/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	10/22/2019	Thallium, Total	0.00017	0.0005	0.000052	2000	mg/L
MKTF-28	10/22/2019	Zinc, Total	0.034	0.01	0.005772	5960000	mg/L
MKTF-28	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-28	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-28	11/14/2014	Barium, Total	0.099	0.002	0.00021	2000000	mg/L
MKTF-28	11/14/2014	Calcium, Total	50	1	0.082	NA	mg/L
MKTF-28	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-28	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-28	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-28	11/14/2014	Iron, Total	0.63	0.02	0.0062	13822000	mg/L
MKTF-28	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-28	11/14/2014	Potassium, Total	3.2	1	0.093	NA	mg/L
MKTF-28	11/14/2014	Magnesium, Total	9.2	1	0.018	NA	mg/L
MKTF-28	11/14/2014	Manganese, Total	0.32	0.002	0.00055	2017000	mg/L
MKTF-28	11/14/2014	Sodium, Total	640	10	3.9	NA	mg/L
MKTF-28	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-28	11/14/2014	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-28	11/14/2014	Uranium, Total	0.12	0.005	0.00025	30000	mg/L
MKTF-28	11/14/2014	Zinc, Total	0.038	0.01	0.0014	5960000	mg/L
MKTF-28	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-28	3/11/2015	Barium, Total	0.09	0.002	0.00095	2000000	mg/L
MKTF-28	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-28	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-28	3/11/2015	Iron, Total	0.075	0.02	0.0073	13822000	mg/L
MKTF-28	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	3/11/2015	Manganese, Total	0.0057	0.002	0.00027	2017000	mg/L
MKTF-28	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-28	3/11/2015	Selenium, Total	ND	0.05	0.0074	50000	mg/L
MKTF-28	3/11/2015	Uranium, Total	0.17	0.01	0.0005	30000	mg/L
MKTF-28	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-28	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-28	6/9/2015	Barium, Total	0.087	0.002	0.00095	2000000	mg/L
MKTF-28	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-28	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-28	6/9/2015	Iron, Total	0.062	0.02	0.0073	13822000	mg/L
MKTF-28	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	6/9/2015	Manganese, Total	0.0054	0.002	0.00027	2017000	mg/L
MKTF-28	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-28	6/9/2015	Selenium, Total	0.012	0.005	0.00097	50000	mg/L
MKTF-28	6/9/2015	Uranium, Total	0.16	0.01	0.000048	30000	mg/L
MKTF-28	6/9/2015	Zinc, Total	0.031	0.01	0.0028	5960000	mg/L
MKTF-28	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	8/20/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-28	8/20/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-28	8/20/2015	Calcium, Total	48	1	0.057	NA	mg/L
MKTF-28	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	8/20/2015	Copper, Total	0.0077	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2015	Iron, Total	4.8	0.2	0.072	13822000	mg/L
MKTF-28	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	8/20/2015	Potassium, Total	3.2	1	0.18	NA	mg/L
MKTF-28	8/20/2015	Magnesium, Total	9.2	1	0.039	NA	mg/L
MKTF-28	8/20/2015	Manganese, Total	0.2	0.002	0.0015	2017000	mg/L
MKTF-28	8/20/2015	Sodium, Total	620	10	0.72	NA	mg/L
MKTF-28	8/20/2015	Lead, Total	0.005	0.0005	0.000047	15000	mg/L
MKTF-28	8/20/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-28	8/20/2015	Uranium, Total	0.17	0.005	0.000049	30000	mg/L
MKTF-28	8/20/2015	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-28	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	11/4/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-28	11/4/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-28	11/4/2015	Calcium, Total	51	1	0.26	NA	mg/L
MKTF-28	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-28	11/4/2015	Iron, Total	7.4	0.2	0.072	13822000	mg/L
MKTF-28	11/4/2015	Mercury, Total	ND	0.001	0.00029	2000	mg/L
MKTF-28	11/4/2015	Potassium, Total	3	1	0.18	NA	mg/L
MKTF-28	11/4/2015	Magnesium, Total	9.5	1	0.013	NA	mg/L
MKTF-28	11/4/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
MKTF-28	11/4/2015	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-28	11/4/2015	Lead, Total	0.0072	0.0005	0.000047	15000	mg/L
MKTF-28	11/4/2015	Selenium, Total	0.02	0.005	0.00062	50000	mg/L
MKTF-28	11/4/2015	Uranium, Total	0.14	0.005	0.000049	30000	mg/L
MKTF-28	11/4/2015	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
MKTF-28	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	2/23/2016	Arsenic, Total	0.0032	0.001	0.00029	10000	mg/L
MKTF-28	2/23/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-28	2/23/2016	Calcium, Total	49	1	0.26	NA	mg/L
MKTF-28	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-28	2/23/2016	Iron, Total	3.7	0.1	0.036	13822000	mg/L
MKTF-28	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	2/23/2016	Potassium, Total	2.2	1	0.18	NA	mg/L
MKTF-28	2/23/2016	Magnesium, Total	9.8	1	0.013	NA	mg/L
MKTF-28	2/23/2016	Manganese, Total	0.18	0.002	0.0015	2017000	mg/L
MKTF-28	2/23/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-28	2/23/2016	Lead, Total	0.0047	0.0005	0.000047	15000	mg/L
MKTF-28	2/23/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-28	2/23/2016	Uranium, Total	0.16	0.005	0.000049	30000	mg/L
MKTF-28	2/23/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-28	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-28	6/8/2016	Arsenic, Total	0.0054	0.01	0.0014	10000	mg/L
MKTF-28	6/8/2016	Barium, Total	0.074	0.002	0.0013	2000000	mg/L
MKTF-28	6/8/2016	Calcium, Total	51	1	0.26	NA	mg/L
MKTF-28	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-28	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-28	6/8/2016	Iron, Total	0.14	0.02	0.0091	13822000	mg/L
MKTF-28	6/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	6/8/2016	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-28	6/8/2016	Magnesium, Total	9.9	1	0.013	NA	mg/L
MKTF-28	6/8/2016	Manganese, Total	0.022	0.002	0.00032	2017000	mg/L
MKTF-28	6/8/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-28	6/8/2016	Lead, Total	0.00076	0.0005	0.00017	15000	mg/L
MKTF-28	6/8/2016	Selenium, Total	0.015	0.01	0.0021	50000	mg/L
MKTF-28	6/8/2016	Uranium, Total	0.15	0.005	0.00051	30000	mg/L
MKTF-28	6/8/2016	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-28	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	9/8/2016	Arsenic, Total	0.0056	0.01	0.0021	10000	mg/L
MKTF-28	9/8/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-28	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	9/8/2016	Chromium, Total	0.0067	0.006	0.0027	50000	mg/L
MKTF-28	9/8/2016	Copper, Total	0.0094	0.006	0.003	790000	mg/L
MKTF-28	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-28	9/8/2016	Arsenic, Dissolved	0.0039	0.01	0.0014	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	Barium, Dissolved	0.061	0.002	0.0013	2000000	mg/L
MKTF-28	9/8/2016	Calcium, Dissolved	46	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-28	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-28	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-28	9/8/2016	Iron, Dissolved	0.12	0.02	0.02	13821880	mg/L
MKTF-28	9/8/2016	Potassium, Dissolved	2.7	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Magnesium, Dissolved	8.9	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Manganese, Dissolved	0.031	0.002	0.00032	2017400	mg/L
MKTF-28	9/8/2016	Sodium, Dissolved	620	20	10	NA	mg/L
MKTF-28	9/8/2016	Lead, Dissolved	0.00087	0.0005	0.00017	NA	mg/L
MKTF-28	9/8/2016	Selenium, Dissolved	0.012	0.05	0.011	50000	mg/L
MKTF-28	9/8/2016	Uranium, Dissolved	0.14	0.005	0.00051	NA	mg/L
MKTF-28	9/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-28	9/8/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-28	9/8/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
MKTF-28	9/8/2016	Manganese, Total	0.44	0.002	0.00027	2017000	mg/L
MKTF-28	9/8/2016	Lead, Total	0.014	0.0005	0.000081	15000	mg/L
MKTF-28	9/8/2016	Selenium, Total	0.013	0.05	0.0094	50000	mg/L
MKTF-28	9/8/2016	Uranium, Total	0.14	0.005	0.0017	30000	mg/L
MKTF-28	9/8/2016	Zinc, Total	0.049	0.01	0.0027	5960000	mg/L
MKTF-28	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	10/28/2016	Arsenic, Total	0.0044	0.02	0.0042	10000	mg/L
MKTF-28	10/28/2016	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-28	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-28	10/28/2016	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-28	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-28	10/28/2016	Arsenic, Dissolved	0.0047	0.005	0.00069	10000	mg/L
MKTF-28	10/28/2016	Barium, Dissolved	0.061	0.002	0.0013	2000000	mg/L
MKTF-28	10/28/2016	Calcium, Dissolved	39	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-28	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-28	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-28	10/28/2016	Iron, Dissolved	0.049	0.02	0.02	13821880	mg/L
MKTF-28	10/28/2016	Potassium, Dissolved	2.5	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Magnesium, Dissolved	7.3	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
MKTF-28	10/28/2016	Sodium, Dissolved	570	10	5	NA	mg/L
MKTF-28	10/28/2016	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
MKTF-28	10/28/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
MKTF-28	10/28/2016	Uranium, Dissolved	0.16	0.005	0.00051	NA	mg/L
MKTF-28	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-28	10/28/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-28	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	10/28/2016	Manganese, Total	0.18	0.002	0.00027	2017000	mg/L
MKTF-28	10/28/2016	Lead, Total	0.0056	0.0005	0.000081	15000	mg/L
MKTF-28	10/28/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-28	10/28/2016	Uranium, Total	0.15	0.01	0.0035	30000	mg/L
MKTF-28	10/28/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
MKTF-28	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	3/29/2017	Arsenic, Total	0.0089	0.005	0.0011	10000	mg/L
MKTF-28	3/29/2017	Barium, Total	0.36	0.002	0.00079	2000000	mg/L
MKTF-28	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	3/29/2017	Chromium, Total	0.0093	0.006	0.0027	50000	mg/L
MKTF-28	3/29/2017	Copper, Total	0.013	0.006	0.003	790000	mg/L
MKTF-28	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-28	3/29/2017	Arsenic, Dissolved	0.0029	0.005	0.00089	10000	mg/L
MKTF-28	3/29/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-28	3/29/2017	Calcium, Dissolved	43	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-28	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	3/29/2017	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-28	3/29/2017	Potassium, Dissolved	1.9	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Magnesium, Dissolved	8.5	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Manganese, Dissolved	0.011	0.002	0.00038	2017400	mg/L
MKTF-28	3/29/2017	Sodium, Dissolved	550	10	5	NA	mg/L
MKTF-28	3/29/2017	Lead, Dissolved	0.00042	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Selenium, Dissolved	0.0081	0.01	0.0039	50000	mg/L
MKTF-28	3/29/2017	Uranium, Dissolved	0.16	0.005	0.0005	NA	mg/L
MKTF-28	3/29/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
MKTF-28	3/29/2017	Iron, Total	21	1	1	13822000	mg/L
MKTF-28	3/29/2017	Mercury, Total	0.000088	0.0002	0.000037	2000	mg/L
MKTF-28	3/29/2017	Manganese, Total	0.89	0.002	0.00027	2017000	mg/L
MKTF-28	3/29/2017	Lead, Total	0.025	0.0025	0.00041	15000	mg/L
MKTF-28	3/29/2017	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-28	3/29/2017	Uranium, Total	0.16	0.005	0.0017	30000	mg/L
MKTF-28	3/29/2017	Zinc, Total	0.079	0.01	0.0027	5960000	mg/L
MKTF-28	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-28	6/5/2017	Arsenic, Total	0.0048	0.01	0.003	10000	mg/L
MKTF-28	6/5/2017	Barium, Total	0.076	0.002	0.00093	2000000	mg/L
MKTF-28	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	6/5/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-28	6/5/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-28	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-28	6/5/2017	Arsenic, Dissolved	0.004	0.005	0.00089	10000	mg/L
MKTF-28	6/5/2017	Barium, Dissolved	0.046	0.002	0.00085	2000000	mg/L
MKTF-28	6/5/2017	Calcium, Dissolved	43	1	0.078	NA	mg/L
MKTF-28	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-28	6/5/2017	Copper, Dissolved	0.01	0.006	0.0032	790000	mg/L
MKTF-28	6/5/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
MKTF-28	6/5/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	6/5/2017	Magnesium, Dissolved	8.9	1	0.25	NA	mg/L
MKTF-28	6/5/2017	Manganese, Dissolved	0.0023	0.002	0.00038	2017400	mg/L
MKTF-28	6/5/2017	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-28	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	6/5/2017	Selenium, Dissolved	0.0086	0.02	0.0077	50000	mg/L
MKTF-28	6/5/2017	Uranium, Dissolved	0.13	0.01	0.001	NA	mg/L
MKTF-28	6/5/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-28	6/5/2017	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-28	6/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	6/5/2017	Manganese, Total	0.078	0.002	0.0011	2017000	mg/L
MKTF-28	6/5/2017	Lead, Total	0.0016	0.0005	0.000095	15000	mg/L
MKTF-28	6/5/2017	Selenium, Total	0.012	0.01	0.0071	50000	mg/L
MKTF-28	6/5/2017	Uranium, Total	0.16	0.005	0.0015	30000	mg/L
MKTF-28	6/5/2017	Zinc, Total	0.0057	0.01	0.0028	5960000	mg/L
MKTF-28	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	10/3/2017	Arsenic, Total	0.0051	0.005	0.0015	10000	mg/L
MKTF-28	10/3/2017	Barium, Total	0.07	0.002	0.00093	2000000	mg/L
MKTF-28	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	10/3/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	10/3/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-28	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	10/3/2017	Arsenic, Dissolved	0.0042	0.005	0.00089	10000	mg/L
MKTF-28	10/3/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-28	10/3/2017	Calcium, Dissolved	36	1	0.078	NA	mg/L
MKTF-28	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	10/3/2017	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
MKTF-28	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	10/3/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-28	10/3/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	10/3/2017	Magnesium, Dissolved	7	1	0.25	NA	mg/L
MKTF-28	10/3/2017	Manganese, Dissolved	0.0017	0.002	0.00039	2017400	mg/L
MKTF-28	10/3/2017	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-28	10/3/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	10/3/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
MKTF-28	10/3/2017	Zinc, Dissolved	0.049	0.01	0.0021	5960450	mg/L
MKTF-28	10/3/2017	Iron, Total	1.4	0.2	0.1	13822000	mg/L
MKTF-28	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	10/3/2017	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-28	10/3/2017	Lead, Total	0.0015	0.0005	0.000095	15000	mg/L
MKTF-28	10/3/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-28	10/3/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
MKTF-28	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	11/20/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-28	11/20/2017	Barium, Total	0.087	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	11/20/2017	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
MKTF-28	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	11/20/2017	Arsenic, Dissolved	ND	0.01	0.0042	10000	mg/L
MKTF-28	11/20/2017	Barium, Dissolved	0.054	0.002	0.00099	2000000	mg/L
MKTF-28	11/20/2017	Calcium, Dissolved	45	1	0.078	NA	mg/L
MKTF-28	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	11/20/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
MKTF-28	11/20/2017	Potassium, Dissolved	2.1	1	0.11	NA	mg/L
MKTF-28	11/20/2017	Magnesium, Dissolved	8.6	1	0.25	NA	mg/L
MKTF-28	11/20/2017	Manganese, Dissolved	0.091	0.002	0.00039	2017400	mg/L
MKTF-28	11/20/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-28	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	11/20/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-28	11/20/2017	Uranium, Dissolved	0.13	0.005	0.00096	NA	mg/L
MKTF-28	11/20/2017	Zinc, Dissolved	0.0045	0.01	0.0021	5960450	mg/L
MKTF-28	11/20/2017	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-28	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	11/20/2017	Manganese, Total	0.18	0.002	0.0011	2017000	mg/L
MKTF-28	11/20/2017	Lead, Total	0.0029	0.0005	0.00023	15000	mg/L
MKTF-28	11/20/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-28	11/20/2017	Uranium, Total	0.15	0.005	0.0015	30000	mg/L
MKTF-28	11/20/2017	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
MKTF-28	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-28	2/6/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-28	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-28	2/6/2018	Barium, Dissolved	0.051	0.002	0.00099	2000000	mg/L
MKTF-28	2/6/2018	Calcium, Dissolved	44	1	0.078	NA	mg/L
MKTF-28	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	2/6/2018	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-28	2/6/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	2/6/2018	Magnesium, Dissolved	8.7	1	0.25	NA	mg/L
MKTF-28	2/6/2018	Manganese, Dissolved	0.0032	0.002	0.00039	2017400	mg/L
MKTF-28	2/6/2018	Sodium, Dissolved	530	10	1.6	NA	mg/L
MKTF-28	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-28	2/6/2018	Uranium, Dissolved	0.13	0.025	0.0048	NA	mg/L
MKTF-28	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-28	2/6/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-28	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	2/6/2018	Manganese, Total	0.093	0.002	0.0011	2017000	mg/L
MKTF-28	2/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-28	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-28	2/6/2018	Uranium, Total	0.15	0.005	0.00068	30000	mg/L
MKTF-28	2/6/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-28	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	5/1/2018	Arsenic, Total	0.0024	0.005	0.0021	10000	mg/L
MKTF-28	5/1/2018	Barium, Total	0.082	0.002	0.001	2000000	mg/L
MKTF-28	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	5/1/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-28	5/1/2018	Barium, Dissolved	0.046	0.002	0.00099	2000000	mg/L
MKTF-28	5/1/2018	Calcium, Dissolved	43	1	0.078	NA	mg/L
MKTF-28	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	5/1/2018	Iron, Dissolved	0.027	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/1/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	5/1/2018	Magnesium, Dissolved	8.6	1	0.25	NA	mg/L
MKTF-28	5/1/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MKTF-28	5/1/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-28	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	5/1/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	5/1/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-28	5/1/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-28	5/1/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
MKTF-28	5/1/2018	Mercury, Total	0.000075	0.0002	0.000037	2000	mg/L
MKTF-28	5/1/2018	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
MKTF-28	5/1/2018	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
MKTF-28	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-28	5/1/2018	Uranium, Total	0.15	0.005	0.00068	30000	mg/L
MKTF-28	5/1/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-28	8/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	8/20/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-28	8/20/2018	Barium, Total	0.077	0.002	0.001	2000000	mg/L
MKTF-28	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	8/20/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
MKTF-28	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	8/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	8/20/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-28	8/20/2018	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
MKTF-28	8/20/2018	Calcium, Dissolved	38	1	0.078	NA	mg/L
MKTF-28	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	8/20/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-28	8/20/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	8/20/2018	Magnesium, Dissolved	6.9	1	0.25	NA	mg/L
MKTF-28	8/20/2018	Manganese, Dissolved	0.0046	0.002	0.00039	2017400	mg/L
MKTF-28	8/20/2018	Sodium, Dissolved	600	20	3.3	NA	mg/L
MKTF-28	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	8/20/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
MKTF-28	8/20/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-28	8/20/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-28	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	8/20/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-28	8/20/2018	Lead, Total	0.0029	0.0005	0.00023	15000	mg/L
MKTF-28	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-28	8/20/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-28	8/20/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-28	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	11/15/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
MKTF-28	11/15/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-28	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	11/15/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-28	11/15/2018	Barium, Dissolved	0.048	0.002	0.00099	2000000	mg/L
MKTF-28	11/15/2018	Calcium, Dissolved	42	1	0.078	NA	mg/L
MKTF-28	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-28	11/15/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	11/15/2018	Magnesium, Dissolved	8.4	1	0.25	NA	mg/L
MKTF-28	11/15/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-28	11/15/2018	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-28	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	11/15/2018	Uranium, Dissolved	0.13	0.005	0.00096	NA	mg/L
MKTF-28	11/15/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
MKTF-28	11/15/2018	Iron, Total	1	0.1	0.051	13822000	mg/L
MKTF-28	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	11/15/2018	Manganese, Total	0.069	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/15/2018	Lead, Total	0.00095	0.0005	0.00023	15000	mg/L
MKTF-28	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-28	11/15/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-28	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-29	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	3/11/2015	Arsenic, Total	0.0024	0.001	0.00011	10000	mg/L
MKTF-29	3/11/2015	Barium, Total	0.031	0.002	0.00095	2000000	mg/L
MKTF-29	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-29	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-29	3/11/2015	Iron, Total	ND	0.02	0.0073	13822000	mg/L
MKTF-29	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	3/11/2015	Manganese, Total	0.34	0.002	0.00027	2017000	mg/L
MKTF-29	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-29	3/11/2015	Selenium, Total	0.0045	0.001	0.00015	50000	mg/L
MKTF-29	3/11/2015	Uranium, Total	0.023	0.001	0.00005	30000	mg/L
MKTF-29	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-29	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-29	6/10/2015	Barium, Total	0.035	0.002	0.00095	2000000	mg/L
MKTF-29	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-29	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-29	6/10/2015	Iron, Total	0.049	0.02	0.0073	13822000	mg/L
MKTF-29	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	6/10/2015	Manganese, Total	0.36	0.002	0.00027	2017000	mg/L
MKTF-29	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-29	6/10/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-29	6/10/2015	Uranium, Total	0.019	0.005	0.000024	30000	mg/L
MKTF-29	6/10/2015	Zinc, Total	0.025	0.01	0.0028	5960000	mg/L
MKTF-29	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	8/20/2015	Arsenic, Total	0.0021	0.001	0.00029	10000	mg/L
MKTF-29	8/20/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-29	8/20/2015	Calcium, Total	65	1	0.057	NA	mg/L
MKTF-29	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-29	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	8/20/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-29	8/20/2015	Iron, Total	3.9	0.2	0.072	13822000	mg/L
MKTF-29	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	8/20/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	8/20/2015	Magnesium, Total	9.1	1	0.039	NA	mg/L
MKTF-29	8/20/2015	Manganese, Total	0.6	0.002	0.0015	2017000	mg/L
MKTF-29	8/20/2015	Sodium, Total	530	10	0.72	NA	mg/L
MKTF-29	8/20/2015	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-29	8/20/2015	Selenium, Total	0.0022	0.001	0.00012	50000	mg/L
MKTF-29	8/20/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-29	8/20/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-29	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	11/4/2015	Arsenic, Total	0.002	0.001	0.00029	10000	mg/L
MKTF-29	11/4/2015	Barium, Total	0.089	0.002	0.0011	2000000	mg/L
MKTF-29	11/4/2015	Calcium, Total	78	1	0.26	NA	mg/L
MKTF-29	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-29	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-29	11/4/2015	Iron, Total	1.3	0.1	0.036	13822000	mg/L
MKTF-29	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	11/4/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	11/4/2015	Magnesium, Total	10	1	0.013	NA	mg/L
MKTF-29	11/4/2015	Manganese, Total	0.61	0.002	0.0015	2017000	mg/L
MKTF-29	11/4/2015	Sodium, Total	520	10	0.96	NA	mg/L
MKTF-29	11/4/2015	Lead, Total	0.0011	0.0005	0.000047	15000	mg/L
MKTF-29	11/4/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-29	11/4/2015	Uranium, Total	0.017	0.0005	0.0000049	30000	mg/L
MKTF-29	11/4/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-29	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	2/23/2016	Arsenic, Total	0.0013	0.001	0.00029	10000	mg/L
MKTF-29	2/23/2016	Barium, Total	0.062	0.002	0.0011	2000000	mg/L
MKTF-29	2/23/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-29	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-29	2/23/2016	Iron, Total	0.9	0.02	0.0072	13822000	mg/L
MKTF-29	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-29	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	2/23/2016	Magnesium, Total	9.8	1	0.013	NA	mg/L
MKTF-29	2/23/2016	Manganese, Total	0.51	0.002	0.0015	2017000	mg/L
MKTF-29	2/23/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-29	2/23/2016	Lead, Total	0.0007	0.0005	0.000047	15000	mg/L
MKTF-29	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-29	2/23/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-29	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-29	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-29	6/9/2016	Arsenic, Total	0.0021	0.001	0.00014	10000	mg/L
MKTF-29	6/9/2016	Barium, Total	0.028	0.002	0.0013	2000000	mg/L
MKTF-29	6/9/2016	Calcium, Total	66	1	0.26	NA	mg/L
MKTF-29	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-29	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-29	6/9/2016	Iron, Total	0.022	0.02	0.0091	13822000	mg/L
MKTF-29	6/9/2016	Mercury, Total	0.000076	0.0002	0.000053	2000	mg/L
MKTF-29	6/9/2016	Potassium, Total	0.49	1	0.18	NA	mg/L
MKTF-29	6/9/2016	Magnesium, Total	9.5	1	0.013	NA	mg/L
MKTF-29	6/9/2016	Manganese, Total	0.39	0.002	0.00032	2017000	mg/L
MKTF-29	6/9/2016	Sodium, Total	530	10	0.96	NA	mg/L
MKTF-29	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-29	6/9/2016	Selenium, Total	0.0039	0.001	0.00021	50000	mg/L
MKTF-29	6/9/2016	Uranium, Total	0.013	0.0005	0.000051	30000	mg/L
MKTF-29	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-29	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	9/7/2016	Arsenic, Total	0.0018	0.001	0.00021	10000	mg/L
MKTF-29	9/7/2016	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-29	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-29	9/7/2016	Copper, Total	0.0044	0.006	0.003	790000	mg/L
MKTF-29	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-29	9/7/2016	Arsenic, Dissolved	0.0018	0.001	0.00014	10000	mg/L
MKTF-29	9/7/2016	Barium, Dissolved	0.037	0.002	0.0013	2000000	mg/L
MKTF-29	9/7/2016	Calcium, Dissolved	66	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-29	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-29	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-29	9/7/2016	Iron, Dissolved	0.073	0.02	0.02	13821880	mg/L
MKTF-29	9/7/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Magnesium, Dissolved	8.8	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Manganese, Dissolved	0.62	0.002	0.00032	2017400	mg/L
MKTF-29	9/7/2016	Sodium, Dissolved	490	5	2.5	NA	mg/L
MKTF-29	9/7/2016	Lead, Dissolved	0.0021	0.0005	0.00017	NA	mg/L
MKTF-29	9/7/2016	Selenium, Dissolved	0.0023	0.001	0.00021	50000	mg/L
MKTF-29	9/7/2016	Uranium, Dissolved	0.012	0.0005	0.000051	NA	mg/L
MKTF-29	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-29	9/7/2016	Iron, Total	2.6	0.1	0.1	13822000	mg/L
MKTF-29	9/7/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
MKTF-29	9/7/2016	Manganese, Total	0.52	0.002	0.00027	2017000	mg/L
MKTF-29	9/7/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
MKTF-29	9/7/2016	Selenium, Total	0.0022	0.005	0.00094	50000	mg/L
MKTF-29	9/7/2016	Uranium, Total	0.011	0.0005	0.00017	30000	mg/L
MKTF-29	9/7/2016	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
MKTF-29	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	10/28/2016	Arsenic, Total	0.0018	0.001	0.00021	10000	mg/L
MKTF-29	10/28/2016	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-29	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-29	10/28/2016	Copper, Total	0.0039	0.006	0.003	790000	mg/L
MKTF-29	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-29	10/28/2016	Arsenic, Dissolved	0.0016	0.001	0.00014	10000	mg/L
MKTF-29	10/28/2016	Barium, Dissolved	0.027	0.002	0.0013	2000000	mg/L
MKTF-29	10/28/2016	Calcium, Dissolved	63	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-29	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-29	10/28/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-29	10/28/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Magnesium, Dissolved	8.7	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
MKTF-29	10/28/2016	Sodium, Dissolved	510	10	5	NA	mg/L
MKTF-29	10/28/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	10/28/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
MKTF-29	10/28/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
MKTF-29	10/28/2016	Zinc, Dissolved	0.013	0.01	0.0028	5960450	mg/L
MKTF-29	10/28/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
MKTF-29	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-29	10/28/2016	Manganese, Total	0.47	0.002	0.00027	2017000	mg/L
MKTF-29	10/28/2016	Lead, Total	0.002	0.0005	0.000081	15000	mg/L
MKTF-29	10/28/2016	Selenium, Total	0.002	0.005	0.00094	50000	mg/L
MKTF-29	10/28/2016	Uranium, Total	0.013	0.0005	0.00017	30000	mg/L
MKTF-29	10/28/2016	Zinc, Total	0.005	0.01	0.0027	5960000	mg/L
MKTF-29	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	3/29/2017	Arsenic, Total	0.0019	0.001	0.00021	10000	mg/L
MKTF-29	3/29/2017	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-29	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	3/29/2017	Chromium, Total	0.004	0.006	0.0027	50000	mg/L
MKTF-29	3/29/2017	Copper, Total	0.0034	0.006	0.003	790000	mg/L
MKTF-29	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-29	3/29/2017	Arsenic, Dissolved	0.0019	0.001	0.00018	10000	mg/L
MKTF-29	3/29/2017	Barium, Dissolved	0.032	0.002	0.00085	2000000	mg/L
MKTF-29	3/29/2017	Calcium, Dissolved	72	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-29	3/29/2017	Copper, Dissolved	0.0053	0.006	0.0032	790000	mg/L
MKTF-29	3/29/2017	Iron, Dissolved	0.034	0.02	0.02	13821880	mg/L
MKTF-29	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Magnesium, Dissolved	10	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Manganese, Dissolved	0.35	0.002	0.00038	2017400	mg/L
MKTF-29	3/29/2017	Sodium, Dissolved	510	10	5	NA	mg/L
MKTF-29	3/29/2017	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
MKTF-29	3/29/2017	Selenium, Dissolved	0.0038	0.001	0.00039	50000	mg/L
MKTF-29	3/29/2017	Uranium, Dissolved	0.012	0.0005	0.00005	NA	mg/L
MKTF-29	3/29/2017	Zinc, Dissolved	0.021	0.01	0.0011	5960450	mg/L
MKTF-29	3/29/2017	Iron, Total	2.8	0.2	0.2	13822000	mg/L
MKTF-29	3/29/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	3/29/2017	Manganese, Total	0.47	0.002	0.00027	2017000	mg/L
MKTF-29	3/29/2017	Lead, Total	0.0016	0.0005	0.000081	15000	mg/L
MKTF-29	3/29/2017	Selenium, Total	0.0022	0.001	0.00019	50000	mg/L
MKTF-29	3/29/2017	Uranium, Total	0.012	0.0005	0.00017	30000	mg/L
MKTF-29	3/29/2017	Zinc, Total	0.0059	0.01	0.0027	5960000	mg/L
MKTF-29	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-29	6/5/2017	Arsenic, Total	0.0022	0.001	0.0003	10000	mg/L
MKTF-29	6/5/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-29	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	6/5/2017	Chromium, Total	0.0073	0.006	0.0011	50000	mg/L
MKTF-29	6/5/2017	Copper, Total	0.0075	0.006	0.0017	790000	mg/L
MKTF-29	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-29	6/5/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-29	6/5/2017	Barium, Dissolved	0.031	0.002	0.00085	2000000	mg/L
MKTF-29	6/5/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-29	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-29	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	6/5/2017	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-29	6/5/2017	Potassium, Dissolved	0.42	1	0.11	NA	mg/L
MKTF-29	6/5/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	6/5/2017	Manganese, Dissolved	0.53	0.002	0.00038	2017400	mg/L
MKTF-29	6/5/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-29	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	6/5/2017	Selenium, Dissolved	0.003	0.001	0.00039	50000	mg/L
MKTF-29	6/5/2017	Uranium, Dissolved	0.011	0.0005	0.00005	NA	mg/L
MKTF-29	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/5/2017	Iron, Total	5.5	0.2	0.1	13822000	mg/L
MKTF-29	6/5/2017	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-29	6/5/2017	Manganese, Total	0.74	0.002	0.0011	2017000	mg/L
MKTF-29	6/5/2017	Lead, Total	0.0038	0.0005	0.000095	15000	mg/L
MKTF-29	6/5/2017	Selenium, Total	0.0033	0.001	0.00071	50000	mg/L
MKTF-29	6/5/2017	Uranium, Total	0.012	0.0005	0.00015	30000	mg/L
MKTF-29	6/5/2017	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-29	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	10/3/2017	Arsenic, Total	0.002	0.001	0.0003	10000	mg/L
MKTF-29	10/3/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
MKTF-29	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	10/3/2017	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
MKTF-29	10/3/2017	Copper, Total	0.0048	0.006	0.0017	790000	mg/L
MKTF-29	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	10/3/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-29	10/3/2017	Barium, Dissolved	0.031	0.002	0.00085	2000000	mg/L
MKTF-29	10/3/2017	Calcium, Dissolved	84	1	0.078	NA	mg/L
MKTF-29	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	10/3/2017	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-29	10/3/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-29	10/3/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	10/3/2017	Manganese, Dissolved	0.62	0.002	0.00039	2017400	mg/L
MKTF-29	10/3/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-29	10/3/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	10/3/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-29	10/3/2017	Zinc, Dissolved	0.064	0.01	0.0021	5960450	mg/L
MKTF-29	10/3/2017	Iron, Total	2.9	0.2	0.1	13822000	mg/L
MKTF-29	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	10/3/2017	Manganese, Total	0.73	0.002	0.0011	2017000	mg/L
MKTF-29	10/3/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-29	10/3/2017	Selenium, Total	0.0027	0.001	0.00071	50000	mg/L
MKTF-29	10/3/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-29	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	11/20/2017	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-29	11/20/2017	Barium, Total	0.32	0.002	0.001	2000000	mg/L
MKTF-29	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	11/20/2017	Chromium, Total	0.0077	0.006	0.0018	50000	mg/L
MKTF-29	11/20/2017	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-29	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-29	11/20/2017	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
MKTF-29	11/20/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
MKTF-29	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	11/20/2017	Iron, Dissolved	0.036	0.02	0.016	13821880	mg/L
MKTF-29	11/20/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-29	11/20/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	11/20/2017	Manganese, Dissolved	0.71	0.002	0.00039	2017400	mg/L
MKTF-29	11/20/2017	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-29	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-29	11/20/2017	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-29	11/20/2017	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
MKTF-29	11/20/2017	Iron, Total	8	0.2	0.1	13822000	mg/L
MKTF-29	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	11/20/2017	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
MKTF-29	11/20/2017	Lead, Total	0.006	0.0005	0.00023	15000	mg/L
MKTF-29	11/20/2017	Selenium, Total	0.0023	0.001	0.00098	50000	mg/L
MKTF-29	11/20/2017	Uranium, Total	0.0094	0.0005	0.00015	30000	mg/L
MKTF-29	11/20/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-29	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	2/6/2018	Arsenic, Total	0.0014	0.001	0.00041	10000	mg/L
MKTF-29	2/6/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-29	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	2/6/2018	Copper, Total	0.0072	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-29	2/6/2018	Barium, Dissolved	0.024	0.002	0.00099	2000000	mg/L
MKTF-29	2/6/2018	Calcium, Dissolved	70	1	0.078	NA	mg/L
MKTF-29	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	2/6/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-29	2/6/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-29	2/6/2018	Magnesium, Dissolved	10	1	0.25	NA	mg/L
MKTF-29	2/6/2018	Manganese, Dissolved	0.49	0.002	0.00039	2017400	mg/L
MKTF-29	2/6/2018	Sodium, Dissolved	470	5	0.82	NA	mg/L
MKTF-29	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-29	2/6/2018	Uranium, Dissolved	0.0094	0.0005	0.000096	NA	mg/L
MKTF-29	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-29	2/6/2018	Iron, Total	3.9	0.2	0.1	13822000	mg/L
MKTF-29	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	2/6/2018	Manganese, Total	0.65	0.002	0.0011	2017000	mg/L
MKTF-29	2/6/2018	Lead, Total	0.0025	0.0005	0.00023	15000	mg/L
MKTF-29	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-29	2/6/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
MKTF-29	2/6/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-29	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	5/1/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-29	5/1/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-29	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	5/1/2018	Chromium, Total	0.0031	0.006	0.0018	50000	mg/L
MKTF-29	5/1/2018	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-29	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	5/1/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-29	5/1/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
MKTF-29	5/1/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-29	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	5/1/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-29	5/1/2018	Potassium, Dissolved	0.25	1	0.11	NA	mg/L
MKTF-29	5/1/2018	Magnesium, Dissolved	8.8	1	0.25	NA	mg/L
MKTF-29	5/1/2018	Manganese, Dissolved	0.38	0.002	0.00039	2017400	mg/L
MKTF-29	5/1/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
MKTF-29	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	5/1/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	5/1/2018	Uranium, Dissolved	0.0079	0.0005	0.000096	NA	mg/L
MKTF-29	5/1/2018	Zinc, Dissolved	0.0048	0.01	0.0021	5960450	mg/L
MKTF-29	5/1/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
MKTF-29	5/1/2018	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
MKTF-29	5/1/2018	Manganese, Total	0.55	0.002	0.0011	2017000	mg/L
MKTF-29	5/1/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
MKTF-29	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-29	5/1/2018	Uranium, Total	0.0084	0.0005	0.000068	30000	mg/L
MKTF-29	5/1/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-29	8/20/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-29	8/20/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-29	8/20/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-29	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	8/20/2018	Chromium, Total	0.004	0.006	0.0018	50000	mg/L
MKTF-29	8/20/2018	Copper, Total	0.0078	0.006	0.0041	790000	mg/L
MKTF-29	8/20/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-29	8/20/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-29	8/20/2018	Barium, Dissolved	0.026	0.002	0.00099	2000000	mg/L
MKTF-29	8/20/2018	Calcium, Dissolved	72	1	0.078	NA	mg/L
MKTF-29	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	8/20/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
MKTF-29	8/20/2018	Iron, Dissolved	0.053	0.02	0.016	13821880	mg/L
MKTF-29	8/20/2018	Potassium, Dissolved	0.29	1	0.11	NA	mg/L
MKTF-29	8/20/2018	Magnesium, Dissolved	9.5	1	0.25	NA	mg/L
MKTF-29	8/20/2018	Manganese, Dissolved	0.48	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-29	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	8/20/2018	Uranium, Dissolved	0.0082	0.0005	0.000096	NA	mg/L
MKTF-29	8/20/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-29	8/20/2018	Iron, Total	4.5	0.1	0.051	13822000	mg/L
MKTF-29	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	8/20/2018	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-29	8/20/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-29	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-29	8/20/2018	Uranium, Total	0.0085	0.0005	0.000068	30000	mg/L
MKTF-29	8/20/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-29	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	11/15/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-29	11/15/2018	Barium, Total	0.037	0.002	0.001	2000000	mg/L
MKTF-29	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-29	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	11/15/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-29	11/15/2018	Barium, Dissolved	0.028	0.002	0.00099	2000000	mg/L
MKTF-29	11/15/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-29	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-29	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-29	11/15/2018	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-29	11/15/2018	Manganese, Dissolved	0.48	0.002	0.00039	2017400	mg/L
MKTF-29	11/15/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-29	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	11/15/2018	Uranium, Dissolved	0.0077	0.0005	0.000096	NA	mg/L
MKTF-29	11/15/2018	Zinc, Dissolved	0.03	0.01	0.0021	5960450	mg/L
MKTF-29	11/15/2018	Iron, Total	0.24	0.02	0.01	13822000	mg/L
MKTF-29	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	11/15/2018	Manganese, Total	0.47	0.002	0.0011	2017000	mg/L
MKTF-29	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-29	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-29	11/15/2018	Uranium, Total	0.0081	0.0005	0.000068	30000	mg/L
MKTF-29	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-29	8/23/2019	Nickel, Total	0.0084	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	8/23/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-29	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	8/23/2019	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-29	8/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-29	8/23/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-29	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	8/23/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
MKTF-29	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L
MKTF-29	8/23/2019	Iron, Dissolved	0.0092	0.02	0.008747	13821880	mg/L
MKTF-29	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	8/23/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-29	8/23/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
MKTF-29	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Dissolved	0.0092	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
MKTF-29	8/23/2019	Selenium, Dissolved	0.00026	0.001	0.000171	50000	mg/L
MKTF-29	8/23/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-29	8/23/2019	Sodium, Dissolved	690	10	4.161763	NA	mg/L
MKTF-29	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Uranium, Dissolved	0.0063	0.0005	0.000075	NA	mg/L
MKTF-29	8/23/2019	Zinc, Dissolved	0.0081	0.01	0.002252	5960450	mg/L
MKTF-29	8/23/2019	Aluminum, Total	0.9	0.02	0.002488	19914000	mg/L
MKTF-29	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Total	0.00093	0.001	0.000312	10000	mg/L
MKTF-29	8/23/2019	Barium, Total	0.046	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-29	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	8/23/2019	Iron, Total	0.27	0.02	0.008747	13822000	mg/L
MKTF-29	8/23/2019	Lead, Total	0.00025	0.0005	0.000055	15000	mg/L
MKTF-29	8/23/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
MKTF-29	8/23/2019	Mercury, Total	0.000081	0.0002	0.000038	2000	mg/L
MKTF-29	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	8/23/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-29	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	8/23/2019	Uranium, Total	0.0079	0.0005	0.000085	30000	mg/L
MKTF-29	8/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Dissolved	0.00094	0.001	0.000101	10000	mg/L
MKTF-29	8/23/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-29	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	8/23/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
MKTF-29	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-29	8/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-29	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	8/23/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-29	8/23/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
MKTF-29	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Dissolved	0.0056	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Potassium, Dissolved	0.27	1	0.162288	NA	mg/L
MKTF-29	8/23/2019	Selenium, Dissolved	0.00057	0.001	0.000171	50000	mg/L
MKTF-29	8/23/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
MKTF-29	8/23/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-29	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	8/23/2019	Uranium, Dissolved	0.0064	0.0005	0.000075	NA	mg/L
MKTF-29	8/23/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
MKTF-29	8/23/2019	Aluminum, Total	1.5	0.2	0.024883	19914000	mg/L
MKTF-29	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-29	8/23/2019	Barium, Total	0.058	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-29	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	8/23/2019	Iron, Total	0.52	0.02	0.008747	13822000	mg/L
MKTF-29	8/23/2019	Lead, Total	0.00044	0.0005	0.000055	15000	mg/L
MKTF-29	8/23/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
MKTF-29	8/23/2019	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
MKTF-29	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	10/22/2019	Antimony, Dissolved	0.0032	0.005	0.001947	6000	mg/L
MKTF-29	10/22/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-29	10/22/2019	Barium, Dissolved	0.062	0.002	0.000648	2000000	mg/L
MKTF-29	10/22/2019	Beryllium, Dissolved	0.00073	0.002	0.000284	4000	mg/L
MKTF-29	10/22/2019	Boron, Dissolved	0.7	0.04	0.004531	3949110	mg/L
MKTF-29	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/22/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
MKTF-29	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	10/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-29	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-29	10/22/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-29	10/22/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-29	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-29	10/22/2019	Potassium, Dissolved	0.39	1	0.162288	NA	mg/L
MKTF-29	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-29	10/22/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
MKTF-29	10/22/2019	Sodium, Dissolved	770	10	4.161763	NA	mg/L
MKTF-29	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-29	10/22/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-29	10/22/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
MKTF-29	10/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-29	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-29	10/22/2019	Barium, Total	0.092	0.002	0.000648	2000000	mg/L
MKTF-29	10/22/2019	Beryllium, Total	0.00045	0.002	0.000284	4000	mg/L
MKTF-29	10/22/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-29	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	10/22/2019	Copper, Total	0.0057	0.006	0.004072	790000	mg/L
MKTF-29	10/22/2019	Iron, Total	0.66	0.02	0.008747	13822000	mg/L
MKTF-29	10/22/2019	Lead, Total	0.00064	0.0025	0.000274	15000	mg/L
MKTF-29	10/22/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
MKTF-29	10/22/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-29	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Nickel, Total	0.0098	0.01	0.004009	372000	mg/L
MKTF-29	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-29	10/22/2019	Silver, Total	0.0034	0.005	0.001418	50000	mg/L
MKTF-29	10/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-29	10/22/2019	Zinc, Total	0.0069	0.01	0.005772	5960000	mg/L
MKTF-29	5/6/2019	Aluminum, Dissolved	0.0091	0.02	0.002488	19913930	mg/L
MKTF-29	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-29	5/6/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-29	5/6/2019	Barium, Dissolved	0.025	0.002	0.000648	2000000	mg/L
MKTF-29	5/6/2019	Beryllium, Dissolved	0.00089	0.002	0.000284	4000	mg/L
MKTF-29	5/6/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
MKTF-29	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	5/6/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-29	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	5/6/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
MKTF-29	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-29	5/6/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	5/6/2019	Manganese, Dissolved	0.66	0.002	0.00029	2017400	mg/L
MKTF-29	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	5/6/2019	Nickel, Dissolved	0.0078	0.01	0.004009	372000	mg/L
MKTF-29	5/6/2019	Potassium, Dissolved	0.26	1	0.162288	NA	mg/L
MKTF-29	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-29	5/6/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
MKTF-29	5/6/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
MKTF-29	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-29	5/6/2019	Uranium, Dissolved	0.0085	0.0025	0.000374	NA	mg/L
MKTF-29	5/6/2019	Zinc, Dissolved	0.039	0.01	0.002252	5960450	mg/L
MKTF-29	5/6/2019	Aluminum, Total	3.2	0.1	0.012441	19914000	mg/L
MKTF-29	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-29	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-29	5/6/2019	Barium, Total	0.073	0.002	0.000648	2000000	mg/L
MKTF-29	5/6/2019	Beryllium, Total	0.00097	0.002	0.000284	4000	mg/L
MKTF-29	5/6/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
MKTF-29	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	5/6/2019	Iron, Total	1.2	0.1	0.043734	13822000	mg/L
MKTF-29	5/6/2019	Lead, Total	0.00082	0.0005	0.000055	15000	mg/L
MKTF-29	5/6/2019	Manganese, Total	0.71	0.002	0.00029	2017000	mg/L
MKTF-29	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	5/6/2019	Nickel, Total	0.0076	0.01	0.004009	372000	mg/L
MKTF-29	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-29	5/6/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-29	5/6/2019	Thallium, Total	0.000053	0.0005	0.000052	2000	mg/L
MKTF-29	5/6/2019	Uranium, Total	0.0091	0.0005	0.000085	30000	mg/L
MKTF-29	5/6/2019	Zinc, Total	0.0086	0.01	0.005772	5960000	mg/L
MKTF-29	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-29	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Dissolved	0.00032	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-29	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	3/28/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-29	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	3/28/2019	Iron, Dissolved	0.02	0.02	0.008747	13821880	mg/L
MKTF-29	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	3/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	3/28/2019	Manganese, Dissolved	0.59	0.002	0.00029	2017400	mg/L
MKTF-29	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
MKTF-29	3/28/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
MKTF-29	3/28/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-29	3/28/2019	Sodium, Dissolved	480	5	2.080881	NA	mg/L
MKTF-29	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	3/28/2019	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
MKTF-29	3/28/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
MKTF-29	3/28/2019	Aluminum, Total	1.6	0.1	0.022822	19914000	mg/L
MKTF-29	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Total	0.001	0.001	0.000312	10000	mg/L
MKTF-29	3/28/2019	Barium, Total	0.051	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
MKTF-29	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	3/28/2019	Iron, Total	0.57	0.02	0.008747	13822000	mg/L
MKTF-29	3/28/2019	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
MKTF-29	3/28/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
MKTF-29	3/28/2019	Mercury, Total	0.000085	0.0002	0.000038	2000	mg/L
MKTF-29	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Total	0.0067	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-29	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	3/28/2019	Uranium, Total	0.0088	0.0005	0.000085	30000	mg/L
MKTF-29	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Dissolved	0.00097	0.001	0.000101	10000	mg/L
MKTF-29	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
MKTF-29	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	3/28/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
MKTF-29	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	3/28/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	3/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	3/28/2019	Manganese, Dissolved	0.59	0.002	0.00029	2017400	mg/L
MKTF-29	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Dissolved	0.0078	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
MKTF-29	3/28/2019	Selenium, Dissolved	0.00021	0.001	0.000171	50000	mg/L
MKTF-29	3/28/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-29	3/28/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
MKTF-29	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	3/28/2019	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
MKTF-29	3/28/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
MKTF-29	3/28/2019	Aluminum, Total	1.3	0.1	0.022822	19914000	mg/L
MKTF-29	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Total	0.00091	0.001	0.000312	10000	mg/L
MKTF-29	3/28/2019	Barium, Total	0.047	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-29	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	3/28/2019	Iron, Total	0.5	0.02	0.008747	13822000	mg/L
MKTF-29	3/28/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
MKTF-29	3/28/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
MKTF-29	3/28/2019	Mercury, Total	0.000079	0.0002	0.000038	2000	mg/L
MKTF-29	3/28/2019	Molybdenum, Total	0.0077	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-29	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	3/28/2019	Uranium, Total	0.0087	0.0005	0.000085	30000	mg/L
MKTF-29	3/28/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
MKTF-29	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-29	2/25/2020	Arsenic, Dissolved	0.00091	0.001	0.0001	10000	mg/L
MKTF-29	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	2/25/2020	Selenium, Dissolved	0.00054	0.001	0.00017	50000	mg/L
MKTF-29	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	2/25/2020	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
MKTF-29	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-29	2/25/2020	Barium, Dissolved	0.056	0.002	0.00065	2000000	mg/L
MKTF-29	2/25/2020	Beryllium, Dissolved	0.0005	0.002	0.00028	4000	mg/L
MKTF-29	2/25/2020	Boron, Dissolved	0.47	0.04	0.0045	3949110	mg/L
MKTF-29	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-29	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-29	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-29	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-29	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-29	2/25/2020	Magnesium, Dissolved	38	1	0.05	NA	mg/L
MKTF-29	2/25/2020	Nickel, Dissolved	0.0082	0.01	0.004	372000	mg/L
MKTF-29	2/25/2020	Potassium, Dissolved	0.52	1	0.16	NA	mg/L
MKTF-29	2/25/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
MKTF-29	2/25/2020	Manganese, Dissolved	2.5	0.01	0.0014	2017400	mg/L
MKTF-29	2/25/2020	Silver, Dissolved	0.0056	0.005	0.00094	81200	mg/L
MKTF-29	2/25/2020	Calcium, Dissolved	280	10	0.62	NA	mg/L
MKTF-29	2/25/2020	Sodium, Dissolved	830	10	4.2	NA	mg/L
MKTF-29	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-29	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-29	2/25/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-29	2/25/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
MKTF-29	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-29	2/25/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-29	2/25/2020	Aluminum, Total	0.064	0.02	0.0025	19914000	mg/L
MKTF-29	2/25/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-29	2/25/2020	Boron, Total	0.57	0.04	0.0045	3949	mg/L
MKTF-29	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-29	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-29	2/25/2020	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-29	2/25/2020	Iron, Total	0.04	0.02	0.0087	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
MKTF-29	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-29	2/25/2020	Manganese, Total	2.4	0.01	0.0014	2017000	mg/L
MKTF-29	2/25/2020	Uranium, Total	0.013	0.0025	0.00042	30000	mg/L
MKTF-29	2/25/2020	Barium, Total	0.079	0.002	0.00065	2000000	mg/L
MKTF-29	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-29	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-29	2/25/2020	Silver, Total	0.005	0.005	0.0014	50000	mg/L
MKTF-29	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-29	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-29	9/20/2020	Arsenic, Total	0.00094	0.001	0.00026	10000	mg/L
MKTF-29	9/20/2020	Lead, Total	0.00014	0.0005	0.000034	15000	mg/L
MKTF-29	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-29	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-29	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-29	9/20/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
MKTF-29	9/20/2020	Barium, Total	0.13	0.003	0.0016	2000000	mg/L
MKTF-29	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-29	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-29	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-29	9/20/2020	Iron, Total	0.033	0.05	0.013	13822000	mg/L
MKTF-29	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-29	9/20/2020	Uranium, Total	0.016	0.0025	0.00033	30000	mg/L
MKTF-29	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-29	9/20/2020	Nickel, Total	0.015	0.01	0.0033	372000	mg/L
MKTF-29	9/20/2020	Silver, Total	0.0062	0.005	0.0013	50000	mg/L
MKTF-29	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-29	9/20/2020	Manganese, Total	4.5	0.01	0.0041	2017000	mg/L
MKTF-29	9/20/2020	Boron, Total	0.76	0.04	0.0074	3949	mg/L
MKTF-29	9/20/2020	Antimony, Dissolved	0.00072	0.001	0.0007	6000	mg/L
MKTF-29	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-29	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-29	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-29	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-29	9/20/2020	Uranium, Dissolved	0.016	0.0005	0.000065	NA	mg/L
MKTF-29	9/20/2020	Calcium, Dissolved	380	5	0.57	NA	mg/L
MKTF-29	9/20/2020	Manganese, Dissolved	4.2	0.01	0.0029	2017400	mg/L
MKTF-29	9/20/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-29	9/20/2020	Silver, Dissolved	0.0093	0.025	0.0063	81200	mg/L
MKTF-29	9/20/2020	Sodium, Dissolved	870	50	6.9	NA	mg/L
MKTF-29	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-29	9/20/2020	Barium, Dissolved	0.13	0.002	0.0011	2000000	mg/L
MKTF-29	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-29	9/20/2020	Boron, Dissolved	0.72	0.04	0.0067	3949110	mg/L
MKTF-29	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-29	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-29	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-29	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-29	9/20/2020	Iron, Dissolved	0.012	0.02	0.01	13821880	mg/L
MKTF-29	9/20/2020	Magnesium, Dissolved	56	1	0.067	NA	mg/L
MKTF-29	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-29	9/20/2020	Potassium, Dissolved	0.35	1	0.16	NA	mg/L
MKTF-29	9/20/2020	Zinc, Dissolved	0.29	0.01	0.006	5960450	mg/L
MKTF-29	12/15/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-29	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-29	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-29	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-29	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-29	12/15/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-29	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-29	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-29	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-29	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-29	12/15/2020	Uranium, Total Recoverable	18.5	5	1.12	30	ug/L
MKTF-29	12/15/2020	Uranium, Dissolved	18	5	1.12	NA	ug/L
MKTF-29	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-29	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-29	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	12/15/2020	Aluminum, Total	0.206	0.2	0.051	19914000	mg/L
MKTF-29	12/15/2020	Calcium, Total	377	0.5	0.084	NA	mg/L
MKTF-29	12/15/2020	Boron, Total	0.696	0.1	0.022	3949	mg/L
MKTF-29	12/15/2020	Barium, Total	0.155	0.01	0.003	2000000	mg/L
MKTF-29	12/15/2020	Potassium, Total	1.02	1	0.34	NA	mg/L
MKTF-29	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-29	12/15/2020	Magnesium, Total	58	0.5	0.12	NA	mg/L
MKTF-29	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-29	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-29	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-29	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-29	12/15/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-29	12/15/2020	Manganese, Total	4.77	0.01	0.003	2017000	mg/L
MKTF-29	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-29	12/15/2020	Nickel, Total	0.0197	0.006	0.003	372000	mg/L
MKTF-29	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-29	12/15/2020	Sodium, Total	814	20	9.2	NA	mg/L
MKTF-29	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-29	12/15/2020	Barium, Dissolved	0.16	0.01	0.003	2000000	mg/L
MKTF-29	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-29	12/15/2020	Boron, Dissolved	0.694	0.1	0.022	3949110	mg/L
MKTF-29	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-29	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-29	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-29	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-29	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-29	12/15/2020	Manganese, Dissolved	5.14	0.01	0.003	2017400	mg/L
MKTF-29	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-29	12/15/2020	Nickel, Dissolved	0.0213	0.006	0.003	372000	mg/L
MKTF-29	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-29	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-30	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-30	12/15/2020	Aluminum, Total	0.961	0.2	0.051	19914000	mg/L
MKTF-30	12/15/2020	Calcium, Total	77.3	0.5	0.084	NA	mg/L
MKTF-30	12/15/2020	Boron, Total	0.693	0.1	0.022	3949	mg/L
MKTF-30	12/15/2020	Barium, Total	0.0426	0.01	0.003	2000000	mg/L
MKTF-30	12/15/2020	Potassium, Total	ND	1	0.34	NA	mg/L
MKTF-30	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-30	12/15/2020	Magnesium, Total	14.8	0.5	0.12	NA	mg/L
MKTF-30	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-30	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-30	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-30	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-30	12/15/2020	Iron, Total	0.498	0.2	0.075	13822000	mg/L
MKTF-30	12/15/2020	Manganese, Total	0.0603	0.01	0.003	2017000	mg/L
MKTF-30	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-30	12/15/2020	Nickel, Total	0.0156	0.006	0.003	372000	mg/L
MKTF-30	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-30	12/15/2020	Aluminum, Dissolved	12.2	0.2	0.051	19913930	mg/L
MKTF-30	12/15/2020	Barium, Dissolved	0.123	0.01	0.003	2000000	mg/L
MKTF-30	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-30	12/15/2020	Boron, Dissolved	0.76	0.1	0.022	3949110	mg/L
MKTF-30	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-30	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-30	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-30	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-30	12/15/2020	Iron, Dissolved	5.62	0.2	0.075	13821880	mg/L
MKTF-30	12/15/2020	Manganese, Dissolved	0.302	0.01	0.003	2017400	mg/L
MKTF-30	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-30	12/15/2020	Nickel, Dissolved	0.0221	0.006	0.003	372000	mg/L
MKTF-30	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-30	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-30	12/15/2020	Sodium, Total	711	20	9.2	NA	mg/L
MKTF-30	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-30	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-30	12/15/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-30	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-30	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-30	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-30	12/15/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-30	12/15/2020	Lead, Dissolved	2.48	1	0.133	NA	ug/L
MKTF-30	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-30	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-30	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-30	12/15/2020	Uranium, Total Recoverable	**32.2**	5	1.12	30	ug/L
MKTF-30	12/15/2020	Uranium, Dissolved	33.5	5	1.12	NA	ug/L
MKTF-30	9/20/2020	Uranium, Total	0.034	0.0025	0.00033	30000	mg/L
MKTF-30	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-30	9/20/2020	Arsenic, Total	0.0012	0.001	0.00026	10000	mg/L
MKTF-30	9/20/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
MKTF-30	9/20/2020	Selenium, Total	0.0016	0.001	0.00066	50000	mg/L
MKTF-30	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-30	9/20/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-30	9/20/2020	Barium, Total	0.11	0.003	0.0016	2000000	mg/L
MKTF-30	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-30	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-30	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-30	9/20/2020	Manganese, Total	0.44	0.002	0.00081	2017000	mg/L
MKTF-30	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-30	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-30	9/20/2020	Nickel, Total	0.019	0.01	0.0033	372000	mg/L
MKTF-30	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-30	9/20/2020	Zinc, Total	0.0078	0.01	0.0064	5960000	mg/L
MKTF-30	9/20/2020	Aluminum, Total	7.7	0.2	0.074	19914000	mg/L
MKTF-30	9/20/2020	Iron, Total	3.3	0.5	0.13	13822000	mg/L
MKTF-30	9/20/2020	Boron, Total	0.7	0.04	0.0074	3949	mg/L
MKTF-30	9/20/2020	Uranium, Dissolved	0.036	0.0025	0.00033	NA	mg/L
MKTF-30	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-30	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-30	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-30	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-30	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-30	9/20/2020	Nickel, Dissolved	0.019	0.05	0.016	372000	mg/L
MKTF-30	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-30	9/20/2020	Sodium, Dissolved	820	50	6.9	NA	mg/L
MKTF-30	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-30	9/20/2020	Barium, Dissolved	0.033	0.002	0.0011	2000000	mg/L
MKTF-30	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-30	9/20/2020	Boron, Dissolved	0.65	0.04	0.0067	3949110	mg/L
MKTF-30	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-30	9/20/2020	Calcium, Dissolved	80	1	0.11	NA	mg/L
MKTF-30	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-30	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-30	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-30	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-30	9/20/2020	Magnesium, Dissolved	15	1	0.067	NA	mg/L
MKTF-30	9/20/2020	Manganese, Dissolved	0.0016	0.002	0.00058	2017400	mg/L
MKTF-30	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-30	9/20/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-30	9/20/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-30	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-30	2/27/2020	Arsenic, Dissolved	0.00054	0.001	0.0001	10000	mg/L
MKTF-30	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	2/27/2020	Selenium, Dissolved	0.00033	0.001	0.00017	50000	mg/L
MKTF-30	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	2/27/2020	Uranium, Dissolved	0.029	0.0025	0.00037	NA	mg/L
MKTF-30	2/27/2020	Aluminum, Dissolved	0.055	0.02	0.0025	19913930	mg/L
MKTF-30	2/27/2020	Barium, Dissolved	0.026	0.002	0.00065	2000000	mg/L
MKTF-30	2/27/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
MKTF-30	2/27/2020	Boron, Dissolved	0.54	0.04	0.0045	3949110	mg/L
MKTF-30	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-30	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-30	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-30	2/27/2020	Copper, Dissolved	0.0041	0.006	0.0013	790000	mg/L
MKTF-30	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-30	2/27/2020	Magnesium, Dissolved	13	1	0.05	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	Manganese, Dissolved	0.0011	0.002	0.00029	2017400	mg/L
MKTF-30	2/27/2020	Nickel, Dissolved	0.013	0.01	0.004	372000	mg/L
MKTF-30	2/27/2020	Potassium, Dissolved	0.32	1	0.16	NA	mg/L
MKTF-30	2/27/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
MKTF-30	2/27/2020	Calcium, Dissolved	73	1	0.062	NA	mg/L
MKTF-30	2/27/2020	Silver, Dissolved	0.0021	0.005	0.00094	81200	mg/L
MKTF-30	2/27/2020	Sodium, Dissolved	750	10	4.2	NA	mg/L
MKTF-30	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-30	2/27/2020	Antimony, Total	0.00041	0.001	0.00039	6000	mg/L
MKTF-30	2/27/2020	Arsenic, Total	0.00093	0.001	0.00031	10000	mg/L
MKTF-30	2/27/2020	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-30	2/27/2020	Selenium, Total	0.00051	0.001	0.00048	50000	mg/L
MKTF-30	2/27/2020	Thallium, Total	0.000097	0.0005	0.000052	2000	mg/L
MKTF-30	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-30	2/27/2020	Uranium, Total	0.029	0.0025	0.00042	30000	mg/L
MKTF-30	2/27/2020	Barium, Total	0.067	0.002	0.00065	2000000	mg/L
MKTF-30	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-30	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-30	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-30	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-30	2/27/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-30	2/27/2020	Manganese, Total	0.27	0.002	0.00029	2017000	mg/L
MKTF-30	2/27/2020	Nickel, Total	0.017	0.01	0.004	372000	mg/L
MKTF-30	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-30	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-30	2/27/2020	Aluminum, Total	4.4	0.1	0.012	19914000	mg/L
MKTF-30	2/27/2020	Boron, Total	0.56	0.2	0.023	3949	mg/L
MKTF-30	2/27/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-30	2/27/2020	Molybdenum, Total	ND	0.04	0.034	98700	mg/L
MKTF-30	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-30	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-30	5/6/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-30	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-30	5/6/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-30	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	5/6/2019	Chromium, Total	0.0046	0.006	0.001533	50000	mg/L
MKTF-30	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	5/6/2019	Iron, Total	5.3	0.4	0.174937	13822000	mg/L
MKTF-30	5/6/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
MKTF-30	5/6/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
MKTF-30	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-30	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	5/6/2019	Nickel, Total	0.022	0.01	0.004009	372000	mg/L
MKTF-30	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	5/6/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-30	5/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-30	5/6/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-30	5/6/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-30	3/28/2019	Aluminum, Dissolved	0.093	0.02	0.002488	19913930	mg/L
MKTF-30	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-30	3/28/2019	Arsenic, Dissolved	0.00065	0.001	0.000101	10000	mg/L
MKTF-30	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-30	3/28/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-30	3/28/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-30	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	3/28/2019	Calcium, Dissolved	65	1	0.061889	NA	mg/L
MKTF-30	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	3/28/2019	Iron, Dissolved	0.043	0.02	0.008747	13821880	mg/L
MKTF-30	3/28/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-30	3/28/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
MKTF-30	3/28/2019	Manganese, Dissolved	0.0065	0.002	0.00029	2017400	mg/L
MKTF-30	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	3/28/2019	Nickel, Dissolved	0.015	0.01	0.004009	372000	mg/L
MKTF-30	3/28/2019	Potassium, Dissolved	0.19	1	0.162288	NA	mg/L
MKTF-30	3/28/2019	Selenium, Dissolved	0.0004	0.001	0.000171	50000	mg/L
MKTF-30	3/28/2019	Silver, Dissolved	0.00098	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/28/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-30	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	3/28/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-30	3/28/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-30	3/28/2019	Aluminum, Total	20	1	0.228221	19914000	mg/L
MKTF-30	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-30	3/28/2019	Arsenic, Total	0.0021	0.005	0.001561	10000	mg/L
MKTF-30	3/28/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-30	3/28/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-30	3/28/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
MKTF-30	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	3/28/2019	Chromium, Total	0.0068	0.006	0.001533	50000	mg/L
MKTF-30	3/28/2019	Cobalt, Total	0.0044	0.006	0.003091	5980	mg/L
MKTF-30	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	3/28/2019	Iron, Total	9.5	0.2	0.087469	13822000	mg/L
MKTF-30	3/28/2019	Lead, Total	0.0084	0.0025	0.000274	15000	mg/L
MKTF-30	3/28/2019	Manganese, Total	0.41	0.002	0.00029	2017000	mg/L
MKTF-30	3/28/2019	Mercury, Total	0.000084	0.0002	0.000038	2000	mg/L
MKTF-30	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	3/28/2019	Nickel, Total	0.024	0.01	0.004009	372000	mg/L
MKTF-30	3/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-30	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-30	3/28/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
MKTF-30	3/28/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-30	5/6/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-30	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	5/6/2019	Arsenic, Dissolved	0.00056	0.005	0.000504	10000	mg/L
MKTF-30	5/6/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
MKTF-30	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-30	5/6/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-30	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	5/6/2019	Calcium, Dissolved	64	1	0.061889	NA	mg/L
MKTF-30	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	5/6/2019	Iron, Dissolved	0.012	0.02	0.008747	13821880	mg/L
MKTF-30	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-30	5/6/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
MKTF-30	5/6/2019	Manganese, Dissolved	0.0099	0.002	0.00029	2017400	mg/L
MKTF-30	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	5/6/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-30	5/6/2019	Potassium, Dissolved	0.16	1	0.162288	NA	mg/L
MKTF-30	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	5/6/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-30	5/6/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-30	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-30	5/6/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
MKTF-30	5/6/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-30	5/6/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-30	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-30	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-30	8/23/2019	Arsenic, Dissolved	0.00056	0.001	0.000101	10000	mg/L
MKTF-30	8/23/2019	Barium, Dissolved	0.033	0.002	0.000648	2000000	mg/L
MKTF-30	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-30	8/23/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-30	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	8/23/2019	Calcium, Dissolved	72	1	0.061889	NA	mg/L
MKTF-30	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	8/23/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-30	8/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-30	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	8/23/2019	Magnesium, Dissolved	14	1	0.05029	NA	mg/L
MKTF-30	8/23/2019	Manganese, Dissolved	0.0014	0.002	0.00029	2017400	mg/L
MKTF-30	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	8/23/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-30	8/23/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
MKTF-30	8/23/2019	Selenium, Dissolved	0.00057	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-30	8/23/2019	Sodium, Dissolved	830	50	20.808815	NA	mg/L
MKTF-30	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	8/23/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-30	8/23/2019	Zinc, Dissolved	0.0046	0.01	0.002252	5960450	mg/L
MKTF-30	8/23/2019	Aluminum, Total	17	1	0.124414	19914000	mg/L
MKTF-30	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	8/23/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
MKTF-30	8/23/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
MKTF-30	8/23/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-30	8/23/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
MKTF-30	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	8/23/2019	Chromium, Total	0.0061	0.006	0.001533	50000	mg/L
MKTF-30	8/23/2019	Cobalt, Total	0.0046	0.006	0.003091	5980	mg/L
MKTF-30	8/23/2019	Copper, Total	0.0075	0.006	0.004072	790000	mg/L
MKTF-30	8/23/2019	Iron, Total	7	1	0.437344	13822000	mg/L
MKTF-30	8/23/2019	Lead, Total	0.0073	0.0005	0.000055	15000	mg/L
MKTF-30	8/23/2019	Manganese, Total	0.95	0.002	0.00029	2017000	mg/L
MKTF-30	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-30	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	8/23/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
MKTF-30	8/23/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
MKTF-30	8/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-30	8/23/2019	Thallium, Total	0.0001	0.0005	0.000052	2000	mg/L
MKTF-30	8/23/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-30	8/23/2019	Zinc, Total	0.02	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-30	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-30	10/23/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Total	0.00035	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-30	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	10/23/2019	Chromium, Total	0.0033	0.006	0.001533	50000	mg/L
MKTF-30	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	10/23/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
MKTF-30	10/23/2019	Lead, Total	0.0034	0.0005	0.000055	15000	mg/L
MKTF-30	10/23/2019	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
MKTF-30	10/23/2019	Mercury, Total	0.00022	0.0002	0.000038	2000	mg/L
MKTF-30	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	10/23/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
MKTF-30	10/23/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
MKTF-30	10/23/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Dissolved	0.0061	0.02	0.002488	19913930	mg/L
MKTF-30	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Dissolved	0.00079	0.005	0.000504	10000	mg/L
MKTF-30	10/23/2019	Barium, Dissolved	0.032	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Dissolved	0.00082	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-30	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	10/23/2019	Calcium, Dissolved	70	1	0.061889	NA	mg/L
MKTF-30	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	10/23/2019	Iron, Dissolved	0.013	0.02	0.008747	13821880	mg/L
MKTF-30	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	10/23/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
MKTF-30	10/23/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
MKTF-30	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Dissolved	0.016	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
MKTF-30	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	10/23/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-30	10/23/2019	Sodium, Dissolved	750	10	4.161763	NA	mg/L
MKTF-30	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	10/23/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Aluminum, Total	7.5	0.4	0.049765	19914000	mg/L
MKTF-30	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-30	10/23/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-30	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	10/23/2019	Chromium, Total	0.0022	0.006	0.001533	50000	mg/L
MKTF-30	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	10/23/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
MKTF-30	10/23/2019	Lead, Total	0.0022	0.0005	0.000055	15000	mg/L
MKTF-30	10/23/2019	Manganese, Total	0.27	0.002	0.00029	2017000	mg/L
MKTF-30	10/23/2019	Mercury, Total	0.0002	0.0002	0.000038	2000	mg/L
MKTF-30	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	10/23/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-30	10/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-30	10/23/2019	Zinc, Total	0.0088	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Dissolved	0.012	0.02	0.002488	19913930	mg/L
MKTF-30	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Dissolved	0.00091	0.005	0.000504	10000	mg/L
MKTF-30	10/23/2019	Barium, Dissolved	0.031	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Dissolved	0.00071	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Dissolved	0.65	0.04	0.004531	3949110	mg/L
MKTF-30	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	10/23/2019	Calcium, Dissolved	71	1	0.061889	NA	mg/L
MKTF-30	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	10/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-30	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	10/23/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
MKTF-30	10/23/2019	Manganese, Dissolved	0.0012	0.002	0.00029	2017400	mg/L
MKTF-30	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Potassium, Dissolved	0.36	1	0.162288	NA	mg/L
MKTF-30	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	10/23/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-30	10/23/2019	Sodium, Dissolved	740	10	4.161763	NA	mg/L
MKTF-30	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	10/23/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
MKTF-30	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-30	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-30	11/17/2014	Barium, Total	0.26	0.002	0.0005	2000000	mg/L
MKTF-30	11/17/2014	Calcium, Total	180	10	0.82	NA	mg/L
MKTF-30	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-30	11/17/2014	Chromium, Total	0.007	0.006	0.0028	50000	mg/L
MKTF-30	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-30	11/17/2014	Iron, Total	8	0.2	0.072	13822000	mg/L
MKTF-30	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-30	11/17/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-30	11/17/2014	Magnesium, Total	32	1	0.018	NA	mg/L
MKTF-30	11/17/2014	Manganese, Total	0.72	0.002	0.00049	2017000	mg/L
MKTF-30	11/17/2014	Sodium, Total	1200	20	7.8	NA	mg/L
MKTF-30	11/17/2014	Lead, Total	0.009	0.001	0.00026	15000	mg/L
MKTF-30	11/17/2014	Selenium, Total	0.01	0.005	0.0025	50000	mg/L
MKTF-30	11/17/2014	Uranium, Total	0.039	0.001	0.0000072	30000	mg/L
MKTF-30	11/17/2014	Zinc, Total	0.029	0.01	0.0035	5960000	mg/L
MKTF-30	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-30	3/11/2015	Barium, Total	0.036	0.002	0.00095	2000000	mg/L
MKTF-30	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-30	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-30	3/11/2015	Iron, Total	0.19	0.02	0.0073	13822000	mg/L
MKTF-30	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	3/11/2015	Manganese, Total	0.018	0.002	0.00027	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-30	3/11/2015	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
MKTF-30	3/11/2015	Uranium, Total	0.041	0.01	0.0005	30000	mg/L
MKTF-30	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-30	6/10/2015	Barium, Total	0.05	0.002	0.00095	2000000	mg/L
MKTF-30	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-30	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-30	6/10/2015	Iron, Total	0.58	0.02	0.0073	13822000	mg/L
MKTF-30	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	6/10/2015	Manganese, Total	0.089	0.002	0.00027	2017000	mg/L
MKTF-30	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-30	6/10/2015	Selenium, Total	0.0065	0.005	0.00097	50000	mg/L
MKTF-30	6/10/2015	Uranium, Total	0.033	0.005	0.000024	30000	mg/L
MKTF-30	6/10/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	8/20/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-30	8/20/2015	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
MKTF-30	8/20/2015	Calcium, Total	130	5	0.28	NA	mg/L
MKTF-30	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	8/20/2015	Chromium, Total	0.011	0.006	0.0022	50000	mg/L
MKTF-30	8/20/2015	Copper, Total	0.0084	0.006	0.0051	790000	mg/L
MKTF-30	8/20/2015	Iron, Total	8.4	0.4	0.14	13822000	mg/L
MKTF-30	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	8/20/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
MKTF-30	8/20/2015	Magnesium, Total	25	1	0.039	NA	mg/L
MKTF-30	8/20/2015	Manganese, Total	0.55	0.002	0.0015	2017000	mg/L
MKTF-30	8/20/2015	Sodium, Total	1100	50	3.6	NA	mg/L
MKTF-30	8/20/2015	Lead, Total	0.0094	0.0005	0.000047	15000	mg/L
MKTF-30	8/20/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-30	8/20/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-30	8/20/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-30	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-30	11/4/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-30	11/4/2015	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-30	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-30	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-30	11/4/2015	Iron, Total	7.1	0.2	0.072	13822000	mg/L
MKTF-30	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	11/4/2015	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-30	11/4/2015	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-30	11/4/2015	Manganese, Total	0.54	0.002	0.0015	2017000	mg/L
MKTF-30	11/4/2015	Sodium, Total	950	20	1.9	NA	mg/L
MKTF-30	11/4/2015	Lead, Total	0.0097	0.0005	0.000047	15000	mg/L
MKTF-30	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-30	11/4/2015	Uranium, Total	0.026	0.0025	0.000025	30000	mg/L
MKTF-30	11/4/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-30	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	2/23/2016	Arsenic, Total	0.0017	0.001	0.00029	10000	mg/L
MKTF-30	2/23/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-30	2/23/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-30	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-30	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-30	2/23/2016	Iron, Total	3.3	0.1	0.036	13822000	mg/L
MKTF-30	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-30	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-30	2/23/2016	Magnesium, Total	21	1	0.013	NA	mg/L
MKTF-30	2/23/2016	Manganese, Total	0.18	0.002	0.0015	2017000	mg/L
MKTF-30	2/23/2016	Sodium, Total	1100	20	1.9	NA	mg/L
MKTF-30	2/23/2016	Lead, Total	0.0041	0.0005	0.000047	15000	mg/L
MKTF-30	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-30	2/23/2016	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-30	2/23/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-30	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Arsenic, Total	0.0041	0.005	0.00069	10000	mg/L
MKTF-30	6/9/2016	Barium, Total	0.04	0.002	0.0013	2000000	mg/L
MKTF-30	6/9/2016	Calcium, Total	88	1	0.26	NA	mg/L
MKTF-30	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-30	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-30	6/9/2016	Iron, Total	0.016	0.02	0.0091	13822000	mg/L
MKTF-30	6/9/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
MKTF-30	6/9/2016	Potassium, Total	0.68	1	0.18	NA	mg/L
MKTF-30	6/9/2016	Magnesium, Total	17	1	0.013	NA	mg/L
MKTF-30	6/9/2016	Manganese, Total	0.0075	0.002	0.00032	2017000	mg/L
MKTF-30	6/9/2016	Sodium, Total	910	10	0.96	NA	mg/L
MKTF-30	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-30	6/9/2016	Selenium, Total	0.013	0.005	0.0011	50000	mg/L
MKTF-30	6/9/2016	Uranium, Total	0.034	0.0025	0.00026	30000	mg/L
MKTF-30	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	9/7/2016	Arsenic, Total	0.0024	0.005	0.0011	10000	mg/L
MKTF-30	9/7/2016	Barium, Total	0.074	0.002	0.00079	2000000	mg/L
MKTF-30	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-30	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-30	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-30	9/7/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-30	9/7/2016	Barium, Dissolved	0.046	0.002	0.0013	2000000	mg/L
MKTF-30	9/7/2016	Calcium, Dissolved	87	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-30	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-30	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-30	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-30	9/7/2016	Potassium, Dissolved	0.63	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Magnesium, Dissolved	17	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Manganese, Dissolved	0.053	0.002	0.00032	2017400	mg/L
MKTF-30	9/7/2016	Sodium, Dissolved	930	10	5	NA	mg/L
MKTF-30	9/7/2016	Lead, Dissolved	0.022	0.0005	0.00017	NA	mg/L
MKTF-30	9/7/2016	Selenium, Dissolved	0.0076	0.005	0.0011	50000	mg/L
MKTF-30	9/7/2016	Uranium, Dissolved	0.026	0.0025	0.00026	NA	mg/L
MKTF-30	9/7/2016	Zinc, Dissolved	0.0048	0.01	0.0028	5960450	mg/L
MKTF-30	9/7/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-30	9/7/2016	Mercury, Total	0.000068	0.0002	0.000053	2000	mg/L
MKTF-30	9/7/2016	Manganese, Total	0.18	0.002	0.00027	2017000	mg/L
MKTF-30	9/7/2016	Lead, Total	0.0039	0.0005	0.000081	15000	mg/L
MKTF-30	9/7/2016	Selenium, Total	0.0081	0.01	0.0019	50000	mg/L
MKTF-30	9/7/2016	Uranium, Total	0.027	0.0025	0.00087	30000	mg/L
MKTF-30	9/7/2016	Zinc, Total	0.0063	0.01	0.0027	5960000	mg/L
MKTF-30	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	10/28/2016	Arsenic, Total	0.0022	0.005	0.0011	10000	mg/L
MKTF-30	10/28/2016	Barium, Total	0.16	0.002	0.00079	2000000	mg/L
MKTF-30	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	10/28/2016	Chromium, Total	0.0031	0.006	0.0027	50000	mg/L
MKTF-30	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-30	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-30	10/28/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-30	10/28/2016	Barium, Dissolved	0.046	0.002	0.0013	2000000	mg/L
MKTF-30	10/28/2016	Calcium, Dissolved	93	5	2.5	NA	mg/L
MKTF-30	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-30	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-30	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-30	10/28/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-30	10/28/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-30	10/28/2016	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-30	10/28/2016	Manganese, Dissolved	0.0031	0.002	0.00032	2017400	mg/L
MKTF-30	10/28/2016	Sodium, Dissolved	910	20	10	NA	mg/L
MKTF-30	10/28/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	10/28/2016	Selenium, Dissolved	0.0077	0.001	0.00021	50000	mg/L
MKTF-30	10/28/2016	Uranium, Dissolved	0.029	0.0025	0.00026	NA	mg/L
MKTF-30	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-30	10/28/2016	Iron, Total	3	0.1	0.1	13822000	mg/L
MKTF-30	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/28/2016	Manganese, Total	0.32	0.002	0.00027	2017000	mg/L
MKTF-30	10/28/2016	Lead, Total	0.0045	0.0005	0.000081	15000	mg/L
MKTF-30	10/28/2016	Selenium, Total	0.0065	0.01	0.0019	50000	mg/L
MKTF-30	10/28/2016	Uranium, Total	0.03	0.0025	0.00087	30000	mg/L
MKTF-30	10/28/2016	Zinc, Total	0.0088	0.01	0.0027	5960000	mg/L
MKTF-30	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	3/29/2017	Arsenic, Total	0.0035	0.001	0.00021	10000	mg/L
MKTF-30	3/29/2017	Barium, Total	0.33	0.002	0.00079	2000000	mg/L
MKTF-30	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	3/29/2017	Chromium, Total	0.0078	0.006	0.0027	50000	mg/L
MKTF-30	3/29/2017	Copper, Total	0.0043	0.006	0.003	790000	mg/L
MKTF-30	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-30	3/29/2017	Arsenic, Dissolved	0.0013	0.005	0.00089	10000	mg/L
MKTF-30	3/29/2017	Barium, Dissolved	0.039	0.002	0.00085	2000000	mg/L
MKTF-30	3/29/2017	Calcium, Dissolved	88	5	2.5	NA	mg/L
MKTF-30	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-30	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	3/29/2017	Iron, Dissolved	0.087	0.02	0.02	13821880	mg/L
MKTF-30	3/29/2017	Potassium, Dissolved	0.53	1	0.5	NA	mg/L
MKTF-30	3/29/2017	Magnesium, Dissolved	17	1	0.5	NA	mg/L
MKTF-30	3/29/2017	Manganese, Dissolved	0.044	0.002	0.00038	2017400	mg/L
MKTF-30	3/29/2017	Sodium, Dissolved	860	10	5	NA	mg/L
MKTF-30	3/29/2017	Lead, Dissolved	0.00037	0.0005	0.00017	NA	mg/L
MKTF-30	3/29/2017	Selenium, Dissolved	0.0055	0.005	0.0019	50000	mg/L
MKTF-30	3/29/2017	Uranium, Dissolved	0.033	0.0025	0.00025	NA	mg/L
MKTF-30	3/29/2017	Zinc, Dissolved	0.021	0.01	0.0011	5960450	mg/L
MKTF-30	3/29/2017	Iron, Total	7.9	0.2	0.2	13822000	mg/L
MKTF-30	3/29/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
MKTF-30	3/29/2017	Manganese, Total	0.5	0.002	0.00027	2017000	mg/L
MKTF-30	3/29/2017	Lead, Total	0.0093	0.0025	0.00041	15000	mg/L
MKTF-30	3/29/2017	Selenium, Total	0.0073	0.001	0.00019	50000	mg/L
MKTF-30	3/29/2017	Uranium, Total	0.033	0.0025	0.00087	30000	mg/L
MKTF-30	3/29/2017	Zinc, Total	0.021	0.01	0.0027	5960000	mg/L
MKTF-30	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-30	6/5/2017	Arsenic, Total	0.0024	0.001	0.0003	10000	mg/L
MKTF-30	6/5/2017	Barium, Total	0.26	0.002	0.00093	2000000	mg/L
MKTF-30	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	6/5/2017	Chromium, Total	0.0077	0.006	0.0011	50000	mg/L
MKTF-30	6/5/2017	Copper, Total	0.006	0.006	0.0017	790000	mg/L
MKTF-30	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-30	6/5/2017	Arsenic, Dissolved	0.0015	0.005	0.00089	10000	mg/L
MKTF-30	6/5/2017	Barium, Dissolved	0.026	0.002	0.00085	2000000	mg/L
MKTF-30	6/5/2017	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-30	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-30	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	6/5/2017	Iron, Dissolved	0.024	0.02	0.016	13821880	mg/L
MKTF-30	6/5/2017	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
MKTF-30	6/5/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-30	6/5/2017	Manganese, Dissolved	0.017	0.002	0.00038	2017400	mg/L
MKTF-30	6/5/2017	Sodium, Dissolved	760	10	1.6	NA	mg/L
MKTF-30	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	6/5/2017	Selenium, Dissolved	0.0044	0.001	0.00039	50000	mg/L
MKTF-30	6/5/2017	Uranium, Dissolved	0.039	0.0025	0.00025	NA	mg/L
MKTF-30	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-30	6/5/2017	Iron, Total	8.5	0.2	0.1	13822000	mg/L
MKTF-30	6/5/2017	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
MKTF-30	6/5/2017	Manganese, Total	0.38	0.002	0.0011	2017000	mg/L
MKTF-30	6/5/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-30	6/5/2017	Selenium, Total	0.0035	0.001	0.00071	50000	mg/L
MKTF-30	6/5/2017	Uranium, Total	0.044	0.0025	0.00077	30000	mg/L
MKTF-30	6/5/2017	Zinc, Total	0.018	0.01	0.0028	5960000	mg/L
MKTF-30	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	10/3/2017	Arsenic, Total	0.0023	0.001	0.0003	10000	mg/L
MKTF-30	10/3/2017	Barium, Total	0.18	0.002	0.00093	2000000	mg/L
MKTF-30	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	10/3/2017	Chromium, Total	0.0075	0.006	0.0018	50000	mg/L
MKTF-30	10/3/2017	Copper, Total	0.0068	0.006	0.0017	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	10/3/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-30	10/3/2017	Barium, Dissolved	0.033	0.002	0.00085	2000000	mg/L
MKTF-30	10/3/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-30	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	10/3/2017	Iron, Dissolved	0.051	0.02	0.016	13821880	mg/L
MKTF-30	10/3/2017	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
MKTF-30	10/3/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-30	10/3/2017	Manganese, Dissolved	0.017	0.002	0.00039	2017400	mg/L
MKTF-30	10/3/2017	Sodium, Dissolved	760	10	1.6	NA	mg/L
MKTF-30	10/3/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-30	10/3/2017	Selenium, Dissolved	0.0042	0.001	0.00039	50000	mg/L
MKTF-30	10/3/2017	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
MKTF-30	10/3/2017	Iron, Total	7.1	0.2	0.1	13822000	mg/L
MKTF-30	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	10/3/2017	Manganese, Total	0.66	0.002	0.0011	2017000	mg/L
MKTF-30	10/3/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-30	10/3/2017	Selenium, Total	0.0036	0.001	0.00071	50000	mg/L
MKTF-30	10/3/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-30	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	11/20/2017	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-30	11/20/2017	Barium, Total	0.081	0.002	0.001	2000000	mg/L
MKTF-30	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	11/20/2017	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-30	11/20/2017	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-30	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	11/20/2017	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-30	11/20/2017	Calcium, Dissolved	66	1	0.078	NA	mg/L
MKTF-30	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	11/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	11/20/2017	Potassium, Dissolved	0.16	1	0.11	NA	mg/L
MKTF-30	11/20/2017	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-30	11/20/2017	Manganese, Dissolved	0.0081	0.002	0.00039	2017400	mg/L
MKTF-30	11/20/2017	Sodium, Dissolved	770	10	1.6	NA	mg/L
MKTF-30	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	11/20/2017	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
MKTF-30	11/20/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-30	11/20/2017	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-30	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	11/20/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
MKTF-30	11/20/2017	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-30	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	11/20/2017	Uranium, Total	0.031	0.0025	0.00077	30000	mg/L
MKTF-30	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-30	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	2/6/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
MKTF-30	2/6/2018	Barium, Total	0.087	0.002	0.001	2000000	mg/L
MKTF-30	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	2/6/2018	Barium, Dissolved	0.027	0.002	0.00099	2000000	mg/L
MKTF-30	2/6/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-30	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	2/6/2018	Iron, Dissolved	0.047	0.02	0.016	13821880	mg/L
MKTF-30	2/6/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-30	2/6/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-30	2/6/2018	Manganese, Dissolved	0.013	0.002	0.00039	2017400	mg/L
MKTF-30	2/6/2018	Sodium, Dissolved	730	10	1.6	NA	mg/L
MKTF-30	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	2/6/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-30	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-30	2/6/2018	Iron, Total	2.8	0.1	0.051	13822000	mg/L
MKTF-30	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	2/6/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
MKTF-30	2/6/2018	Lead, Total	0.0025	0.0005	0.00023	15000	mg/L
MKTF-30	2/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	2/6/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
MKTF-30	2/6/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-30	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	5/1/2018	Arsenic, Total	0.0023	0.005	0.0021	10000	mg/L
MKTF-30	5/1/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-30	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	5/1/2018	Chromium, Total	0.0041	0.006	0.0018	50000	mg/L
MKTF-30	5/1/2018	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
MKTF-30	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	5/1/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	5/1/2018	Barium, Dissolved	0.016	0.002	0.00099	2000000	mg/L
MKTF-30	5/1/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-30	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	5/1/2018	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
MKTF-30	5/1/2018	Potassium, Dissolved	0.16	1	0.11	NA	mg/L
MKTF-30	5/1/2018	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-30	5/1/2018	Manganese, Dissolved	0.005	0.002	0.00039	2017400	mg/L
MKTF-30	5/1/2018	Sodium, Dissolved	750	5	0.82	NA	mg/L
MKTF-30	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	5/1/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-30	5/1/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
MKTF-30	5/1/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-30	5/1/2018	Mercury, Total	0.000083	0.0002	0.000037	2000	mg/L
MKTF-30	5/1/2018	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-30	5/1/2018	Lead, Total	0.0029	0.0025	0.0011	15000	mg/L
MKTF-30	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	5/1/2018	Uranium, Total	0.039	0.0025	0.00034	30000	mg/L
MKTF-30	5/1/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-30	8/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	8/20/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-30	8/20/2018	Barium, Total	0.057	0.002	0.001	2000000	mg/L
MKTF-30	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	8/20/2018	Chromium, Total	0.0021	0.006	0.0018	50000	mg/L
MKTF-30	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	8/20/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
MKTF-30	8/20/2018	Arsenic, Dissolved	0.00073	0.001	0.00042	10000	mg/L
MKTF-30	8/20/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-30	8/20/2018	Calcium, Dissolved	74	1	0.078	NA	mg/L
MKTF-30	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	8/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	8/20/2018	Potassium, Dissolved	0.18	1	0.11	NA	mg/L
MKTF-30	8/20/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-30	8/20/2018	Manganese, Dissolved	0.015	0.002	0.00039	2017400	mg/L
MKTF-30	8/20/2018	Sodium, Dissolved	810	20	3.3	NA	mg/L
MKTF-30	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-30	8/20/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-30	8/20/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
MKTF-30	8/20/2018	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-30	8/20/2018	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
MKTF-30	8/20/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-30	8/20/2018	Lead, Total	0.0011	0.0005	0.00023	15000	mg/L
MKTF-30	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-30	8/20/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
MKTF-30	8/20/2018	Zinc, Total	0.0069	0.01	0.0033	5960000	mg/L
MKTF-30	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-30	11/15/2018	Barium, Total	0.048	0.002	0.001	2000000	mg/L
MKTF-30	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	11/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-30	11/15/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
MKTF-30	11/15/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-30	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-30	11/15/2018	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-30	11/15/2018	Manganese, Dissolved	0.013	0.002	0.00039	2017400	mg/L
MKTF-30	11/15/2018	Sodium, Dissolved	760	20	3.3	NA	mg/L
MKTF-30	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-30	11/15/2018	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
MKTF-30	11/15/2018	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
MKTF-30	11/15/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-30	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-30	11/15/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
MKTF-30	11/15/2018	Lead, Total	0.00076	0.0005	0.00023	15000	mg/L
MKTF-30	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-30	11/15/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-30	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-31	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-31	11/17/2014	Barium, Total	0.22	0.002	0.0005	2000000	mg/L
MKTF-31	11/17/2014	Calcium, Total	210	10	0.82	NA	mg/L
MKTF-31	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-31	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-31	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-31	11/17/2014	Iron, Total	2.9	0.1	0.036	13822000	mg/L
MKTF-31	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-31	11/17/2014	Potassium, Total	1.7	1	0.093	NA	mg/L
MKTF-31	11/17/2014	Magnesium, Total	40	1	0.018	NA	mg/L
MKTF-31	11/17/2014	Manganese, Total	0.24	0.002	0.00049	2017000	mg/L
MKTF-31	11/17/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-31	11/17/2014	Lead, Total	0.0041	0.001	0.00026	15000	mg/L
MKTF-31	11/17/2014	Selenium, Total	0.008	0.005	0.0025	50000	mg/L
MKTF-31	11/17/2014	Uranium, Total	0.05	0.001	0.0000072	30000	mg/L
MKTF-31	11/17/2014	Zinc, Total	0.017	0.01	0.0035	5960000	mg/L
MKTF-31	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-31	3/11/2015	Barium, Total	0.17	0.002	0.00095	2000000	mg/L
MKTF-31	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-31	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-31	3/11/2015	Iron, Total	0.026	0.02	0.0073	13822000	mg/L
MKTF-31	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	3/11/2015	Manganese, Total	0.032	0.002	0.00027	2017000	mg/L
MKTF-31	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-31	3/11/2015	Selenium, Total	0.013	0.01	0.0015	50000	mg/L
MKTF-31	3/11/2015	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
MKTF-31	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-31	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-31	6/10/2015	Barium, Total	0.13	0.002	0.00095	2000000	mg/L
MKTF-31	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-31	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-31	6/10/2015	Iron, Total	0.021	0.02	0.0073	13822000	mg/L
MKTF-31	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	6/10/2015	Manganese, Total	0.026	0.002	0.00027	2017000	mg/L
MKTF-31	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-31	6/10/2015	Selenium, Total	0.0058	0.005	0.00097	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	Uranium, Total	0.048	0.005	0.000024	30000	mg/L
MKTF-31	6/10/2015	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-31	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-31	8/21/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-31	8/21/2015	Calcium, Total	160	10	0.57	NA	mg/L
MKTF-31	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	8/21/2015	Iron, Total	3.1	0.2	0.072	13822000	mg/L
MKTF-31	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	8/21/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
MKTF-31	8/21/2015	Magnesium, Total	33	1	0.039	NA	mg/L
MKTF-31	8/21/2015	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-31	8/21/2015	Sodium, Total	540	10	0.72	NA	mg/L
MKTF-31	8/21/2015	Lead, Total	0.0032	0.0005	0.000047	15000	mg/L
MKTF-31	8/21/2015	Selenium, Total	0.0046	0.001	0.00012	50000	mg/L
MKTF-31	8/21/2015	Uranium, Total	0.049	0.005	0.000049	30000	mg/L
MKTF-31	8/21/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-31	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-31	11/4/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-31	11/4/2015	Calcium, Total	160	10	2.6	NA	mg/L
MKTF-31	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	11/4/2015	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-31	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	11/4/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-31	11/4/2015	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-31	11/4/2015	Manganese, Total	0.25	0.002	0.0015	2017000	mg/L
MKTF-31	11/4/2015	Sodium, Total	520	10	0.96	NA	mg/L
MKTF-31	11/4/2015	Lead, Total	0.0064	0.0005	0.000047	15000	mg/L
MKTF-31	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-31	11/4/2015	Uranium, Total	0.041	0.0025	0.000025	30000	mg/L
MKTF-31	11/4/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-31	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	2/23/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-31	2/23/2016	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-31	2/23/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-31	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	2/23/2016	Iron, Total	2.5	0.1	0.036	13822000	mg/L
MKTF-31	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-31	2/23/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-31	2/23/2016	Magnesium, Total	35	1	0.013	NA	mg/L
MKTF-31	2/23/2016	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-31	2/23/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-31	2/23/2016	Lead, Total	0.0036	0.0005	0.000047	15000	mg/L
MKTF-31	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-31	2/23/2016	Uranium, Total	0.045	0.0025	0.000025	30000	mg/L
MKTF-31	2/23/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-31	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-31	6/9/2016	Arsenic, Total	0.0043	0.005	0.00069	10000	mg/L
MKTF-31	6/9/2016	Barium, Total	0.14	0.002	0.0013	2000000	mg/L
MKTF-31	6/9/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-31	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-31	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-31	6/9/2016	Iron, Total	0.013	0.02	0.0091	13822000	mg/L
MKTF-31	6/9/2016	Mercury, Total	0.000082	0.0002	0.000053	2000	mg/L
MKTF-31	6/9/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-31	6/9/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-31	6/9/2016	Manganese, Total	0.018	0.002	0.00032	2017000	mg/L
MKTF-31	6/9/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-31	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-31	6/9/2016	Selenium, Total	0.014	0.005	0.0011	50000	mg/L
MKTF-31	6/9/2016	Uranium, Total	0.046	0.0025	0.00026	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-31	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	9/8/2016	Arsenic, Total	0.0029	0.005	0.0011	10000	mg/L
MKTF-31	9/8/2016	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
MKTF-31	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	9/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-31	9/8/2016	Copper, Total	0.0065	0.006	0.003	790000	mg/L
MKTF-31	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-31	9/8/2016	Arsenic, Dissolved	0.0021	0.005	0.00069	10000	mg/L
MKTF-31	9/8/2016	Barium, Dissolved	0.14	0.002	0.0013	2000000	mg/L
MKTF-31	9/8/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-31	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-31	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-31	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-31	9/8/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-31	9/8/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-31	9/8/2016	Magnesium, Dissolved	34	1	0.5	NA	mg/L
MKTF-31	9/8/2016	Manganese, Dissolved	0.035	0.002	0.00032	2017400	mg/L
MKTF-31	9/8/2016	Sodium, Dissolved	570	20	10	NA	mg/L
MKTF-31	9/8/2016	Lead, Dissolved	0.00084	0.0005	0.00017	NA	mg/L
MKTF-31	9/8/2016	Selenium, Dissolved	0.0068	0.005	0.0011	50000	mg/L
MKTF-31	9/8/2016	Uranium, Dissolved	0.04	0.0025	0.00026	NA	mg/L
MKTF-31	9/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-31	9/8/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-31	9/8/2016	Mercury, Total	0.00009	0.0002	0.000053	2000	mg/L
MKTF-31	9/8/2016	Manganese, Total	0.17	0.002	0.00027	2017000	mg/L
MKTF-31	9/8/2016	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-31	9/8/2016	Selenium, Total	ND	0.05	0.0094	50000	mg/L
MKTF-31	9/8/2016	Uranium, Total	0.044	0.0025	0.00087	30000	mg/L
MKTF-31	9/8/2016	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-31	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	10/31/2016	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
MKTF-31	10/31/2016	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
MKTF-31	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-31	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-31	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-31	10/31/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-31	10/31/2016	Barium, Dissolved	0.13	0.002	0.0013	2000000	mg/L
MKTF-31	10/31/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-31	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-31	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-31	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-31	10/31/2016	Iron, Dissolved	0.02	0.02	0.02	13821880	mg/L
MKTF-31	10/31/2016	Potassium, Dissolved	1.4	1	0.5	NA	mg/L
MKTF-31	10/31/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-31	10/31/2016	Manganese, Dissolved	0.018	0.002	0.00032	2017400	mg/L
MKTF-31	10/31/2016	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-31	10/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	10/31/2016	Selenium, Dissolved	0.01	0.005	0.0011	50000	mg/L
MKTF-31	10/31/2016	Uranium, Dissolved	0.043	0.0025	0.00026	NA	mg/L
MKTF-31	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-31	10/31/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-31	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-31	10/31/2016	Manganese, Total	0.11	0.002	0.00027	2017000	mg/L
MKTF-31	10/31/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-31	10/31/2016	Selenium, Total	0.0064	0.02	0.0037	50000	mg/L
MKTF-31	10/31/2016	Uranium, Total	0.041	0.0025	0.00087	30000	mg/L
MKTF-31	10/31/2016	Zinc, Total	0.0098	0.01	0.0027	5960000	mg/L
MKTF-31	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	3/7/2017	Arsenic, Total	0.0049	0.005	0.0011	10000	mg/L
MKTF-31	3/7/2017	Barium, Total	0.25	0.002	0.00079	2000000	mg/L
MKTF-31	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	3/7/2017	Chromium, Total	0.0027	0.006	0.0027	50000	mg/L
MKTF-31	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-31	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-31	3/7/2017	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-31	3/7/2017	Barium, Dissolved	0.17	0.002	0.00085	2000000	mg/L
MKTF-31	3/7/2017	Calcium, Dissolved	230	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-31	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-31	3/7/2017	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-31	3/7/2017	Magnesium, Dissolved	46	1	0.5	NA	mg/L
MKTF-31	3/7/2017	Manganese, Dissolved	0.022	0.002	0.00038	2017400	mg/L
MKTF-31	3/7/2017	Sodium, Dissolved	610	10	5	NA	mg/L
MKTF-31	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	3/7/2017	Selenium, Dissolved	0.0078	0.005	0.0011	50000	mg/L
MKTF-31	3/7/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-31	3/7/2017	Iron, Total	3.8	0.2	0.2	13822000	mg/L
MKTF-31	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-31	3/7/2017	Manganese, Total	0.19	0.002	0.00027	2017000	mg/L
MKTF-31	3/7/2017	Lead, Total	0.005	0.0025	0.00041	15000	mg/L
MKTF-31	3/7/2017	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-31	3/7/2017	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-31	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-31	6/5/2017	Arsenic, Total	0.0026	0.005	0.0015	10000	mg/L
MKTF-31	6/5/2017	Barium, Total	0.16	0.002	0.00093	2000000	mg/L
MKTF-31	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	6/5/2017	Chromium, Total	0.0019	0.006	0.0011	50000	mg/L
MKTF-31	6/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-31	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-31	6/5/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-31	6/5/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
MKTF-31	6/5/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
MKTF-31	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-31	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	6/5/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	6/5/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	6/5/2017	Magnesium, Dissolved	45	1	0.25	NA	mg/L
MKTF-31	6/5/2017	Manganese, Dissolved	0.013	0.002	0.00038	2017400	mg/L
MKTF-31	6/5/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-31	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	6/5/2017	Selenium, Dissolved	0.0072	0.005	0.0019	50000	mg/L
MKTF-31	6/5/2017	Uranium, Dissolved	0.046	0.0025	0.00025	NA	mg/L
MKTF-31	6/5/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-31	6/5/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-31	6/5/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
MKTF-31	6/5/2017	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
MKTF-31	6/5/2017	Lead, Total	0.0014	0.0025	0.00048	15000	mg/L
MKTF-31	6/5/2017	Selenium, Total	0.0069	0.005	0.0036	50000	mg/L
MKTF-31	6/5/2017	Uranium, Total	0.051	0.0025	0.00077	30000	mg/L
MKTF-31	6/5/2017	Zinc, Total	0.0052	0.01	0.0028	5960000	mg/L
MKTF-31	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	9/25/2017	Arsenic, Total	0.0025	0.005	0.0015	10000	mg/L
MKTF-31	9/25/2017	Barium, Total	0.17	0.002	0.00093	2000000	mg/L
MKTF-31	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	9/25/2017	Chromium, Total	0.0023	0.006	0.0018	50000	mg/L
MKTF-31	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-31	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	9/25/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-31	9/25/2017	Barium, Dissolved	0.12	0.002	0.00085	2000000	mg/L
MKTF-31	9/25/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-31	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	9/25/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-31	9/25/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-31	9/25/2017	Manganese, Dissolved	0.029	0.002	0.00039	2017400	mg/L
MKTF-31	9/25/2017	Sodium, Dissolved	530	10	1.6	NA	mg/L
MKTF-31	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	9/25/2017	Selenium, Dissolved	0.0062	0.005	0.0019	50000	mg/L
MKTF-31	9/25/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-31	9/25/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-31	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-31	9/25/2017	Lead, Total	0.0023	0.0005	0.000095	15000	mg/L
MKTF-31	9/25/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-31	9/25/2017	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-31	11/21/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-31	11/21/2017	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-31	11/21/2017	Barium, Total	0.14	0.002	0.001	2000000	mg/L
MKTF-31	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	11/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	11/21/2017	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-31	11/21/2017	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-31	11/21/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-31	11/21/2017	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
MKTF-31	11/21/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-31	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	11/21/2017	Iron, Dissolved	0.026	0.02	0.016	13821880	mg/L
MKTF-31	11/21/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	11/21/2017	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-31	11/21/2017	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
MKTF-31	11/21/2017	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-31	11/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	11/21/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-31	11/21/2017	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
MKTF-31	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-31	11/21/2017	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-31	11/21/2017	Manganese, Total	0.083	0.002	0.0011	2017000	mg/L
MKTF-31	11/21/2017	Lead, Total	0.0018	0.0025	0.0011	15000	mg/L
MKTF-31	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	11/21/2017	Uranium, Total	0.039	0.0025	0.00077	30000	mg/L
MKTF-31	11/21/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	2/5/2018	Silver, Total	0.0052	0.005	0.0012	50000	mg/L
MKTF-31	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-31	2/5/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-31	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	2/5/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	2/5/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	2/5/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-31	2/5/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
MKTF-31	2/5/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-31	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	2/5/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	2/5/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-31	2/5/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-31	2/5/2018	Manganese, Dissolved	0.028	0.002	0.00039	2017400	mg/L
MKTF-31	2/5/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
MKTF-31	2/5/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	2/5/2018	Selenium, Dissolved	0.0056	0.005	0.0038	50000	mg/L
MKTF-31	2/5/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-31	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-31	2/5/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-31	2/5/2018	Manganese, Total	0.097	0.002	0.0011	2017000	mg/L
MKTF-31	2/5/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-31	2/5/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	2/5/2018	Uranium, Total	0.044	0.0025	0.00034	30000	mg/L
MKTF-31	2/5/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	5/6/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-31	5/6/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-31	5/6/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-31	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	5/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	5/6/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-31	5/6/2018	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
MKTF-31	5/6/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-31	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	5/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	5/6/2018	Iron, Dissolved	0.036	0.02	0.016	13821880	mg/L
MKTF-31	5/6/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-31	5/6/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-31	5/6/2018	Manganese, Dissolved	0.03	0.002	0.00039	2017400	mg/L
MKTF-31	5/6/2018	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-31	5/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	5/6/2018	Uranium, Dissolved	0.038	0.0025	0.00048	NA	mg/L
MKTF-31	5/6/2018	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
MKTF-31	5/6/2018	Iron, Total	0.77	0.02	0.01	13822000	mg/L
MKTF-31	5/6/2018	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-31	5/6/2018	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
MKTF-31	5/6/2018	Lead, Total	0.00061	0.0005	0.00023	15000	mg/L
MKTF-31	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	5/6/2018	Uranium, Total	0.044	0.0025	0.00034	30000	mg/L
MKTF-31	5/6/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-31	8/17/2018	Silver, Total	0.0033	0.005	0.0012	50000	mg/L
MKTF-31	8/17/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-31	8/17/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-31	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	8/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	8/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	8/17/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-31	8/17/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-31	8/17/2018	Barium, Dissolved	0.13	0.002	0.00099	2000000	mg/L
MKTF-31	8/17/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-31	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	8/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	8/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	8/17/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	8/17/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-31	8/17/2018	Manganese, Dissolved	0.065	0.002	0.00039	2017400	mg/L
MKTF-31	8/17/2018	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-31	8/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	8/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	8/17/2018	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
MKTF-31	8/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-31	8/17/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	8/17/2018	Mercury, Total	0.000067	0.0002	0.000038	2000	mg/L
MKTF-31	8/17/2018	Manganese, Total	0.098	0.002	0.0011	2017000	mg/L
MKTF-31	8/17/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-31	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	8/17/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-31	8/17/2018	Zinc, Total	0.0048	0.01	0.0033	5960000	mg/L
MKTF-31	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	11/15/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-31	11/15/2018	Barium, Total	0.21	0.002	0.001	2000000	mg/L
MKTF-31	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	11/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-31	11/15/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
MKTF-31	11/15/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-31	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	11/15/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-31	11/15/2018	Manganese, Dissolved	0.051	0.002	0.00039	2017400	mg/L
MKTF-31	11/15/2018	Sodium, Dissolved	530	10	1.6	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	11/15/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-31	11/15/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
MKTF-31	11/15/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-31	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	11/15/2018	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
MKTF-31	11/15/2018	Lead, Total	0.0046	0.0005	0.00023	15000	mg/L
MKTF-31	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-31	11/15/2018	Uranium, Total	0.042	0.0025	0.00034	30000	mg/L
MKTF-31	11/15/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-31	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Dissolved	0.0006	0.001	0.000068	10000	mg/L
MKTF-31	2/20/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	2/20/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
MKTF-31	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	2/20/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-31	2/20/2019	Iron, Dissolved	0.012	0.02	0.008747	13821880	mg/L
MKTF-31	2/20/2019	Lead, Dissolved	0.0001	0.0005	0.000047	NA	mg/L
MKTF-31	2/20/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	2/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
MKTF-31	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-31	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
MKTF-31	2/20/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-31	2/20/2019	Sodium, Dissolved	510	10	4.161763	NA	mg/L
MKTF-31	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-31	2/20/2019	Uranium, Dissolved	0.04	0.0025	0.000374	NA	mg/L
MKTF-31	2/20/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-31	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	2/20/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	2/20/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
MKTF-31	2/20/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-31	2/20/2019	Manganese, Total	0.043	0.002	0.00029	2017000	mg/L
MKTF-31	2/20/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-31	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	2/20/2019	Silver, Total	0.0034	0.005	0.001418	50000	mg/L
MKTF-31	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/20/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
MKTF-31	2/20/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
MKTF-31	10/22/2019	Aluminum, Total	9.8	0.4	0.049765	19914000	mg/L
MKTF-31	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	10/22/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-31	10/22/2019	Beryllium, Total	0.00042	0.002	0.000284	4000	mg/L
MKTF-31	10/22/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-31	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	10/22/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
MKTF-31	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	10/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	10/22/2019	Iron, Total	3.8	0.4	0.174937	13822000	mg/L
MKTF-31	10/22/2019	Lead, Total	0.0035	0.0005	0.000055	15000	mg/L
MKTF-31	10/22/2019	Manganese, Total	0.17	0.002	0.00029	2017000	mg/L
MKTF-31	10/22/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	10/22/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-31	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	10/22/2019	Silver, Total	0.0029	0.005	0.001418	50000	mg/L
MKTF-31	10/22/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
MKTF-31	10/22/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-31	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-31	10/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-31	10/22/2019	Arsenic, Dissolved	0.00066	0.005	0.000504	10000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
MKTF-31	10/22/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-31	10/22/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
MKTF-31	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	10/22/2019	Calcium, Dissolved	140	10	0.618891	NA	mg/L
MKTF-31	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	10/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	10/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-31	10/22/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	10/22/2019	Manganese, Dissolved	0.015	0.002	0.00029	2017400	mg/L
MKTF-31	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	10/22/2019	Nickel, Dissolved	0.0044	0.01	0.004009	372000	mg/L
MKTF-31	10/22/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
MKTF-31	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	10/22/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-31	10/22/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
MKTF-31	10/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	10/22/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Dissolved	0.0037	0.02	0.002488	19913930	mg/L
MKTF-31	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Dissolved	0.00095	0.005	0.000504	10000	mg/L
MKTF-31	5/6/2019	Barium, Dissolved	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Dissolved	0.00063	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
MKTF-31	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	5/6/2019	Calcium, Dissolved	240	10	0.618891	NA	mg/L
MKTF-31	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	5/6/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-31	5/6/2019	Magnesium, Dissolved	53	1	0.05029	NA	mg/L
MKTF-31	5/6/2019	Manganese, Dissolved	0.011	0.002	0.00029	2017400	mg/L
MKTF-31	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	5/6/2019	Silver, Dissolved	0.0056	0.005	0.000942	81200	mg/L
MKTF-31	5/6/2019	Sodium, Dissolved	640	10	4.161763	NA	mg/L
MKTF-31	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-31	5/6/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
MKTF-31	5/6/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Total	3.9	0.2	0.024883	19914000	mg/L
MKTF-31	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	5/6/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-31	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	5/6/2019	Iron, Total	2.1	0.1	0.043734	13822000	mg/L
MKTF-31	5/6/2019	Lead, Total	0.0016	0.0025	0.000274	15000	mg/L
MKTF-31	5/6/2019	Manganese, Total	0.052	0.002	0.00029	2017000	mg/L
MKTF-31	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Total	0.0066	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	5/6/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
MKTF-31	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-31	5/6/2019	Uranium, Total	0.046	0.0025	0.000424	30000	mg/L
MKTF-31	5/6/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
MKTF-31	8/23/2019	Aluminum, Dissolved	0.05	0.02	0.002488	19913930	mg/L
MKTF-31	8/23/2019	Antimony, Dissolved	0.00055	0.001	0.000389	6000	mg/L
MKTF-31	8/23/2019	Arsenic, Dissolved	0.00064	0.001	0.000101	10000	mg/L
MKTF-31	8/23/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/23/2019	Beryllium, Dissolved	0.00035	0.002	0.000284	4000	mg/L
MKTF-31	8/23/2019	Boron, Dissolved	0.73	0.04	0.004531	3949110	mg/L
MKTF-31	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	8/23/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
MKTF-31	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	8/23/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
MKTF-31	8/23/2019	Iron, Dissolved	0.027	0.02	0.008747	13821880	mg/L
MKTF-31	8/23/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-31	8/23/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-31	8/23/2019	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
MKTF-31	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	8/23/2019	Nickel, Dissolved	0.005	0.01	0.004009	372000	mg/L
MKTF-31	8/23/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	8/23/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
MKTF-31	8/23/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-31	8/23/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-31	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	8/23/2019	Uranium, Dissolved	0.042	0.0025	0.000374	NA	mg/L
MKTF-31	8/23/2019	Zinc, Dissolved	0.0042	0.01	0.002252	5960450	mg/L
MKTF-31	8/23/2019	Aluminum, Total	5.2	0.4	0.049765	19914000	mg/L
MKTF-31	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	8/23/2019	Arsenic, Total	0.00098	0.001	0.000312	10000	mg/L
MKTF-31	8/23/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-31	8/23/2019	Beryllium, Total	0.00049	0.002	0.000284	4000	mg/L
MKTF-31	8/23/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
MKTF-31	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	8/23/2019	Iron, Total	2	0.1	0.043734	13822000	mg/L
MKTF-31	8/23/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-31	8/23/2019	Manganese, Total	0.074	0.002	0.00029	2017000	mg/L
MKTF-31	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-31	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	8/23/2019	Nickel, Total	0.0057	0.01	0.004009	372000	mg/L
MKTF-31	8/23/2019	Selenium, Total	0.00091	0.001	0.000478	50000	mg/L
MKTF-31	8/23/2019	Silver, Total	0.0023	0.005	0.001418	50000	mg/L
MKTF-31	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	8/23/2019	Uranium, Total	0.039	0.0025	0.000424	30000	mg/L
MKTF-31	8/23/2019	Zinc, Total	0.0091	0.01	0.005772	5960000	mg/L
MKTF-31	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Dissolved	0.00059	0.001	0.000068	10000	mg/L
MKTF-31	2/20/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	2/20/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-31	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	2/20/2019	Copper, Dissolved	0.0075	0.006	0.001296	790000	mg/L
MKTF-31	2/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	2/20/2019	Lead, Dissolved	0.000076	0.0005	0.000047	NA	mg/L
MKTF-31	2/20/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	2/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
MKTF-31	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-31	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
MKTF-31	2/20/2019	Silver, Dissolved	0.0031	0.005	0.000942	81200	mg/L
MKTF-31	2/20/2019	Sodium, Dissolved	500	10	4.161763	NA	mg/L
MKTF-31	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-31	2/20/2019	Uranium, Dissolved	0.041	0.0025	0.000374	NA	mg/L
MKTF-31	2/20/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-31	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	2/20/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	2/20/2019	Iron, Total	1.7	0.1	0.043734	13822000	mg/L
MKTF-31	2/20/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Manganese, Total	0.06	0.002	0.00029	2017000	mg/L
MKTF-31	2/20/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MKTF-31	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	2/20/2019	Silver, Total	0.0033	0.005	0.001418	50000	mg/L
MKTF-31	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/20/2019	Uranium, Total	0.039	0.0025	0.000424	30000	mg/L
MKTF-31	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-31	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-31	2/25/2020	Arsenic, Dissolved	0.00044	0.001	0.0001	10000	mg/L
MKTF-31	2/25/2020	Lead, Dissolved	0.000074	0.0005	0.000055	NA	mg/L
MKTF-31	2/25/2020	Selenium, Dissolved	0.00026	0.001	0.00017	50000	mg/L
MKTF-31	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	2/25/2020	Uranium, Dissolved	0.042	0.0025	0.00037	NA	mg/L
MKTF-31	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-31	2/25/2020	Barium, Dissolved	0.09	0.002	0.00065	2000000	mg/L
MKTF-31	2/25/2020	Beryllium, Dissolved	0.00035	0.002	0.00028	4000	mg/L
MKTF-31	2/25/2020	Boron, Dissolved	0.39	0.04	0.0045	3949110	mg/L
MKTF-31	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-31	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-31	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-31	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-31	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-31	2/25/2020	Magnesium, Dissolved	26	1	0.05	NA	mg/L
MKTF-31	2/25/2020	Manganese, Dissolved	0.016	0.002	0.00029	2017400	mg/L
MKTF-31	2/25/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-31	2/25/2020	Potassium, Dissolved	1	1	0.16	NA	mg/L
MKTF-31	2/25/2020	Zinc, Dissolved	0.03	0.01	0.0023	5960450	mg/L
MKTF-31	2/25/2020	Sodium, Dissolved	490	5	2.1	NA	mg/L
MKTF-31	2/25/2020	Silver, Dissolved	0.0029	0.005	0.00094	81200	mg/L
MKTF-31	2/25/2020	Calcium, Dissolved	130	5	0.31	NA	mg/L
MKTF-31	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-31	2/25/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-31	2/25/2020	Arsenic, Total	0.00064	0.001	0.00031	10000	mg/L
MKTF-31	2/25/2020	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-31	2/25/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-31	2/25/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/25/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-31	2/25/2020	Boron, Total	0.45	0.04	0.0045	3949	mg/L
MKTF-31	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-31	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-31	2/25/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-31	2/25/2020	Manganese, Total	0.059	0.002	0.00029	2017000	mg/L
MKTF-31	2/25/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-31	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-31	2/25/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-31	2/25/2020	Iron, Total	1	0.1	0.044	13822000	mg/L
MKTF-31	2/25/2020	Uranium, Total	0.043	0.0025	0.00042	30000	mg/L
MKTF-31	2/25/2020	Barium, Total	0.15	0.002	0.00065	2000000	mg/L
MKTF-31	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-31	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-31	2/25/2020	Silver, Total	0.002	0.005	0.0014	50000	mg/L
MKTF-31	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-31	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-31	9/19/2020	Arsenic, Total	0.0011	0.001	0.00026	10000	mg/L
MKTF-31	9/19/2020	Lead, Total	0.0025	0.0005	0.000034	15000	mg/L
MKTF-31	9/19/2020	Selenium, Total	0.001	0.001	0.00066	50000	mg/L
MKTF-31	9/19/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-31	9/19/2020	Uranium, Total	0.037	0.0025	0.00033	30000	mg/L
MKTF-31	9/19/2020	Barium, Total	0.17	0.003	0.0016	2000000	mg/L
MKTF-31	9/19/2020	Beryllium, Total	0.0009	0.002	0.00088	4000	mg/L
MKTF-31	9/19/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MKTF-31	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	9/19/2020	Chromium, Total	0.0023	0.006	0.0021	50000	mg/L
MKTF-31	9/19/2020	Manganese, Total	0.14	0.002	0.00081	2017000	mg/L
MKTF-31	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-31	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-31	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-31	9/19/2020	Nickel, Total	0.0073	0.01	0.0033	372000	mg/L
MKTF-31	9/19/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/19/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-31	9/19/2020	Aluminum, Total	7.7	0.2	0.074	19914000	mg/L
MKTF-31	9/19/2020	Iron, Total	3.3	0.5	0.13	13822000	mg/L
MKTF-31	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-31	9/19/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-31	9/19/2020	Arsenic, Dissolved	0.0007	0.001	0.00021	10000	mg/L
MKTF-31	9/19/2020	Lead, Dissolved	0.00009	0.0005	0.000034	NA	mg/L
MKTF-31	9/19/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-31	9/19/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-31	9/19/2020	Uranium, Dissolved	0.042	0.0025	0.00033	NA	mg/L
MKTF-31	9/19/2020	Calcium, Dissolved	100	5	0.57	NA	mg/L
MKTF-31	9/19/2020	Sodium, Dissolved	440	5	0.69	NA	mg/L
MKTF-31	9/19/2020	Aluminum, Dissolved	0.095	0.02	0.0056	19913930	mg/L
MKTF-31	9/19/2020	Barium, Dissolved	0.12	0.002	0.0011	2000000	mg/L
MKTF-31	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-31	9/19/2020	Boron, Dissolved	0.72	0.04	0.0067	3949110	mg/L
MKTF-31	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-31	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-31	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-31	9/19/2020	Iron, Dissolved	0.05	0.02	0.01	13821880	mg/L
MKTF-31	9/19/2020	Magnesium, Dissolved	22	1	0.067	NA	mg/L
MKTF-31	9/19/2020	Manganese, Dissolved	0.061	0.002	0.00058	2017400	mg/L
MKTF-31	9/19/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-31	9/19/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-31	9/19/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-31	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-31	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-31	9/19/2020	Zinc, Dissolved	0.01	0.01	0.006	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Dissolved	0.0085	0.02	0.002488	19913930	mg/L
MKTF-31	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Dissolved	0.00052	0.005	0.000504	10000	mg/L
MKTF-31	5/6/2019	Barium, Dissolved	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Dissolved	0.00069	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-31	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	5/6/2019	Calcium, Dissolved	250	10	0.618891	NA	mg/L
MKTF-31	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	5/6/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-31	5/6/2019	Magnesium, Dissolved	54	1	0.05029	NA	mg/L
MKTF-31	5/6/2019	Manganese, Dissolved	0.0086	0.002	0.00029	2017400	mg/L
MKTF-31	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Dissolved	0.0049	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	5/6/2019	Silver, Dissolved	0.006	0.005	0.000942	81200	mg/L
MKTF-31	5/6/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-31	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-31	5/6/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
MKTF-31	5/6/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
MKTF-31	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-31	12/18/2020	Aluminum, Total	4.84	0.2	0.051	19914000	mg/L
MKTF-31	12/18/2020	Calcium, Total	111	0.5	0.084	NA	mg/L
MKTF-31	12/18/2020	Boron, Total	0.626	0.1	0.022	3949	mg/L
MKTF-31	12/18/2020	Barium, Total	0.163	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Potassium, Total	2.49	1	0.34	NA	mg/L
MKTF-31	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Magnesium, Total	24.4	0.5	0.12	NA	mg/L
MKTF-31	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Sodium, Total	319	2	0.92	NA	mg/L
MKTF-31	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-31	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Total	2.76	0.2	0.075	13822000	mg/L
MKTF-31	12/18/2020	Manganese, Total	0.0866	0.01	0.003	2017000	mg/L
MKTF-31	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Total	0.00652	0.006	0.003	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-31	12/18/2020	Aluminum, Dissolved	1.81	0.2	0.051	19913930	mg/L
MKTF-31	12/18/2020	Barium, Dissolved	0.133	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Boron, Dissolved	0.617	0.1	0.022	3949110	mg/L
MKTF-31	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-31	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Dissolved	0.851	0.2	0.075	13821880	mg/L
MKTF-31	12/18/2020	Manganese, Dissolved	0.0457	0.01	0.003	2017400	mg/L
MKTF-31	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-31	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-31	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-31	12/18/2020	Aluminum, Total	2.62	0.2	0.051	19914000	mg/L
MKTF-31	12/18/2020	Calcium, Total	109	0.5	0.084	NA	mg/L
MKTF-31	12/18/2020	Boron, Total	0.625	0.1	0.022	3949	mg/L
MKTF-31	12/18/2020	Barium, Total	0.151	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Potassium, Total	2.02	1	0.34	NA	mg/L
MKTF-31	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Magnesium, Total	23.7	0.5	0.12	NA	mg/L
MKTF-31	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Sodium, Total	354	2	0.92	NA	mg/L
MKTF-31	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-31	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Total	1.5	0.2	0.075	13822000	mg/L
MKTF-31	12/18/2020	Manganese, Total	0.0616	0.01	0.003	2017000	mg/L
MKTF-31	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Total	0.00662	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-31	12/18/2020	Aluminum, Dissolved	0.205	0.2	0.051	19913930	mg/L
MKTF-31	12/18/2020	Barium, Dissolved	0.127	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Boron, Dissolved	0.613	0.1	0.022	3949110	mg/L
MKTF-31	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-31	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-31	12/18/2020	Manganese, Dissolved	0.0365	0.01	0.003	2017400	mg/L
MKTF-31	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-31	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
MKTF-31	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	5/6/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-31	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	5/6/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-31	5/6/2019	Lead, Total	0.00095	0.0025	0.000274	15000	mg/L
MKTF-31	5/6/2019	Manganese, Total	0.035	0.002	0.00029	2017000	mg/L
MKTF-31	5/6/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-31	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Total	0.0045	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	5/6/2019	Silver, Total	0.0062	0.005	0.001418	50000	mg/L
MKTF-31	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-31	5/6/2019	Uranium, Total	0.047	0.0025	0.000424	30000	mg/L
MKTF-31	5/6/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-31	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-31	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Total Recoverable	**41.6**	5	1.12	30	ug/L
MKTF-31	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-31	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Dissolved	40.4	5	1.12	NA	ug/L
MKTF-31	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Total Recoverable	1.11	1	0.133	15	ug/L
MKTF-31	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Total Recoverable	**42.1**	5	1.12	30	ug/L
MKTF-31	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-31	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Dissolved	41.3	5	1.12	NA	ug/L
MKTF-31	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-31	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-31	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-31	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-32	12/15/2020	Arsenic, Total Recoverable	2.78	1	0.286	10	ug/L
MKTF-32	12/15/2020	Lead, Total Recoverable	1.68	1	0.133	15	ug/L
MKTF-32	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-32	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-32	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-32	12/15/2020	Arsenic, Dissolved	2.33	1	0.286	10	ug/L
MKTF-32	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-32	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-32	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-32	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-32	12/15/2020	Uranium, Total Recoverable	**52.7**	5	1.12	30	ug/L
MKTF-32	12/15/2020	Uranium, Dissolved	52.4	5	1.12	NA	ug/L
MKTF-32	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-32	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-32	9/21/2020	Arsenic, Dissolved	0.0022	0.001	0.00021	10000	mg/L
MKTF-32	9/21/2020	Lead, Dissolved	0.0001	0.0005	0.000034	NA	mg/L
MKTF-32	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-32	9/21/2020	Uranium, Dissolved	0.054	0.0025	0.00033	NA	mg/L
MKTF-32	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-32	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-32	9/21/2020	Boron, Dissolved	1.1	0.2	0.033	3949110	mg/L
MKTF-32	9/21/2020	Sodium, Dissolved	560	50	6.9	NA	mg/L
MKTF-32	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-32	9/21/2020	Barium, Dissolved	0.05	0.002	0.0011	2000000	mg/L
MKTF-32	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-32	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-32	9/21/2020	Calcium, Dissolved	23	1	0.11	NA	mg/L
MKTF-32	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-32	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-32	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-32	9/21/2020	Magnesium, Dissolved	4.7	1	0.067	NA	mg/L
MKTF-32	9/21/2020	Manganese, Dissolved	0.16	0.002	0.00058	2017400	mg/L
MKTF-32	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-32	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-32	9/21/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
MKTF-32	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-32	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-32	9/21/2020	Zinc, Dissolved	0.0096	0.01	0.006	5960450	mg/L
MKTF-32	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-32	9/21/2020	Arsenic, Total	0.0026	0.001	0.00026	10000	mg/L
MKTF-32	9/21/2020	Lead, Total	0.0001	0.0005	0.000034	15000	mg/L
MKTF-32	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-32	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-32	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
MKTF-32	9/21/2020	Barium, Total	0.043	0.003	0.0016	2000000	mg/L
MKTF-32	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-32	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-32	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-32	9/21/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
MKTF-32	9/21/2020	Manganese, Total	0.065	0.002	0.00081	2017000	mg/L
MKTF-32	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-32	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-32	9/21/2020	Uranium, Total	0.054	0.0025	0.00033	30000	mg/L
MKTF-32	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-32	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-32	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-32	9/21/2020	Boron, Total	1.2	0.2	0.037	3949	mg/L
MKTF-32	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-32	12/15/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
MKTF-32	12/15/2020	Calcium, Total	21.7	0.5	0.084	NA	mg/L
MKTF-32	12/15/2020	Boron, Total	1.13	0.1	0.022	3949	mg/L
MKTF-32	12/15/2020	Barium, Total	0.0432	0.01	0.003	2000000	mg/L
MKTF-32	12/15/2020	Potassium, Total	ND	1	0.34	NA	mg/L
MKTF-32	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-32	12/15/2020	Magnesium, Total	4.29	0.5	0.12	NA	mg/L
MKTF-32	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-32	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-32	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-32	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-32	12/15/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-32	12/15/2020	Manganese, Total	0.0637	0.01	0.003	2017000	mg/L
MKTF-32	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-32	12/15/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-32	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-32	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-32	12/15/2020	Barium, Dissolved	0.0509	0.01	0.003	2000000	mg/L
MKTF-32	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-32	12/15/2020	Boron, Dissolved	1.19	0.1	0.022	3949110	mg/L
MKTF-32	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-32	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-32	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-32	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-32	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-32	12/15/2020	Manganese, Dissolved	0.0378	0.01	0.003	2017400	mg/L
MKTF-32	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-32	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-32	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-32	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-32	12/15/2020	Sodium, Total	523	20	9.2	NA	mg/L
MKTF-32	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-32	2/27/2020	Arsenic, Dissolved	0.0023	0.001	0.0001	10000	mg/L
MKTF-32	2/27/2020	Lead, Dissolved	0.000085	0.0005	0.000055	NA	mg/L
MKTF-32	2/27/2020	Selenium, Dissolved	0.00039	0.001	0.00017	50000	mg/L
MKTF-32	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	2/27/2020	Uranium, Dissolved	0.052	0.0025	0.00037	NA	mg/L
MKTF-32	2/27/2020	Barium, Dissolved	0.038	0.002	0.00065	2000000	mg/L
MKTF-32	2/27/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
MKTF-32	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-32	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-32	2/27/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-32	2/27/2020	Manganese, Dissolved	0.074	0.002	0.00029	2017400	mg/L
MKTF-32	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-32	2/27/2020	Zinc, Dissolved	0.023	0.01	0.0023	5960450	mg/L
MKTF-32	2/27/2020	Boron, Dissolved	1	0.2	0.023	3949110	mg/L
MKTF-32	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-32	2/27/2020	Calcium, Dissolved	26	1	0.062	NA	mg/L
MKTF-32	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-32	2/27/2020	Magnesium, Dissolved	4.9	1	0.05	NA	mg/L
MKTF-32	2/27/2020	Potassium, Dissolved	0.59	1	0.16	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/27/2020	Sodium, Dissolved	550	10	4.2	NA	mg/L
MKTF-32	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-32	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-32	2/27/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-32	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-32	2/27/2020	Arsenic, Total	0.0024	0.001	0.00031	10000	mg/L
MKTF-32	2/27/2020	Lead, Total	0.00054	0.0005	0.000055	15000	mg/L
MKTF-32	2/27/2020	Selenium, Total	0.00091	0.001	0.00048	50000	mg/L
MKTF-32	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-32	2/27/2020	Uranium, Total	0.051	0.0025	0.00042	30000	mg/L
MKTF-32	2/27/2020	Aluminum, Total	0.86	0.02	0.0025	19914000	mg/L
MKTF-32	2/27/2020	Barium, Total	0.056	0.002	0.00065	2000000	mg/L
MKTF-32	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-32	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-32	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-32	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-32	2/27/2020	Iron, Total	0.44	0.02	0.0087	13822000	mg/L
MKTF-32	2/27/2020	Manganese, Total	0.1	0.002	0.00029	2017000	mg/L
MKTF-32	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-32	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-32	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-32	2/27/2020	Boron, Total	1	0.2	0.023	3949	mg/L
MKTF-32	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-32	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-32	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-32	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-32	8/20/2019	Arsenic, Dissolved	0.002	0.001	0.000101	10000	mg/L
MKTF-32	8/20/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-32	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	8/20/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-32	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	8/20/2019	Calcium, Dissolved	28	1	0.061889	NA	mg/L
MKTF-32	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	8/20/2019	Copper, Dissolved	0.0052	0.006	0.001296	790000	mg/L
MKTF-32	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-32	8/20/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-32	8/20/2019	Magnesium, Dissolved	5.3	1	0.05029	NA	mg/L
MKTF-32	8/20/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-32	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-32	8/20/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-32	8/20/2019	Selenium, Dissolved	0.00025	0.001	0.000171	50000	mg/L
MKTF-32	8/20/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	8/20/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
MKTF-32	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	8/20/2019	Uranium, Dissolved	0.056	0.0025	0.000374	NA	mg/L
MKTF-32	8/20/2019	Zinc, Dissolved	0.0045	0.01	0.002252	5960450	mg/L
MKTF-32	8/20/2019	Aluminum, Total	2.6	0.1	0.012441	19914000	mg/L
MKTF-32	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	8/20/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	8/20/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
MKTF-32	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-32	8/20/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	8/20/2019	Copper, Total	0.005	0.006	0.004072	790000	mg/L
MKTF-32	8/20/2019	Iron, Total	1.2	0.1	0.043734	13822000	mg/L
MKTF-32	8/20/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-32	8/20/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-32	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-32	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	8/20/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-32	8/20/2019	Selenium, Total	0.00077	0.001	0.000478	50000	mg/L
MKTF-32	8/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	8/20/2019	Uranium, Total	0.056	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-32	10/23/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-32	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	10/23/2019	Arsenic, Total	0.0034	0.005	0.001561	10000	mg/L
MKTF-32	10/23/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-32	10/23/2019	Beryllium, Total	0.00035	0.002	0.000284	4000	mg/L
MKTF-32	10/23/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	10/23/2019	Chromium, Total	0.003	0.006	0.001533	50000	mg/L
MKTF-32	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	10/23/2019	Copper, Total	0.0046	0.006	0.004072	790000	mg/L
MKTF-32	10/23/2019	Iron, Total	5.5	0.4	0.174937	13822000	mg/L
MKTF-32	10/23/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
MKTF-32	10/23/2019	Manganese, Total	0.16	0.002	0.00029	2017000	mg/L
MKTF-32	10/23/2019	Mercury, Total	0.00019	0.0002	0.000038	2000	mg/L
MKTF-32	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	10/23/2019	Nickel, Total	0.0055	0.01	0.004009	372000	mg/L
MKTF-32	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-32	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	10/23/2019	Thallium, Total	0.000081	0.0005	0.000052	2000	mg/L
MKTF-32	10/23/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
MKTF-32	10/23/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
MKTF-32	10/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-32	10/23/2019	Arsenic, Dissolved	0.003	0.005	0.000504	10000	mg/L
MKTF-32	10/23/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-32	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	10/23/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-32	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	10/23/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
MKTF-32	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	10/23/2019	Copper, Dissolved	0.0043	0.006	0.001296	790000	mg/L
MKTF-32	10/23/2019	Iron, Dissolved	0.059	0.02	0.008747	13821880	mg/L
MKTF-32	10/23/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
MKTF-32	10/23/2019	Magnesium, Dissolved	5.1	1	0.05029	NA	mg/L
MKTF-32	10/23/2019	Manganese, Dissolved	0.043	0.002	0.00029	2017400	mg/L
MKTF-32	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-32	10/23/2019	Potassium, Dissolved	0.7	1	0.162288	NA	mg/L
MKTF-32	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-32	10/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	10/23/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-32	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	10/23/2019	Zinc, Dissolved	0.0072	0.01	0.002252	5960450	mg/L
MKTF-32	5/7/2019	Aluminum, Dissolved	0.043	0.02	0.002488	19913930	mg/L
MKTF-32	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-32	5/7/2019	Arsenic, Dissolved	0.002	0.005	0.000504	10000	mg/L
MKTF-32	5/7/2019	Barium, Dissolved	0.045	0.002	0.000648	2000000	mg/L
MKTF-32	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	5/7/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-32	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	5/7/2019	Calcium, Dissolved	29	1	0.061889	NA	mg/L
MKTF-32	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	5/7/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-32	5/7/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-32	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-32	5/7/2019	Magnesium, Dissolved	5.1	1	0.05029	NA	mg/L
MKTF-32	5/7/2019	Manganese, Dissolved	0.071	0.002	0.00029	2017400	mg/L
MKTF-32	5/7/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	5/7/2019	Nickel, Dissolved	0.0083	0.01	0.004009	372000	mg/L
MKTF-32	5/7/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
MKTF-32	5/7/2019	Selenium, Dissolved	0.0027	0.005	0.000857	50000	mg/L
MKTF-32	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	5/7/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-32	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-32	5/7/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
MKTF-32	5/7/2019	Zinc, Dissolved	0.041	0.01	0.002252	5960450	mg/L
MKTF-32	5/7/2019	Aluminum, Total	3.5	0.1	0.012441	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/7/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	5/7/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	5/7/2019	Barium, Total	0.084	0.002	0.000648	2000000	mg/L
MKTF-32	5/7/2019	Beryllium, Total	0.0005	0.002	0.000284	4000	mg/L
MKTF-32	5/7/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-32	5/7/2019	Iron, Total	1.5	0.1	0.043734	13822000	mg/L
MKTF-32	5/7/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-32	5/7/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-32	5/7/2019	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
MKTF-32	5/7/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	5/7/2019	Nickel, Total	0.0059	0.01	0.004009	372000	mg/L
MKTF-32	5/7/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-32	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	5/7/2019	Uranium, Total	0.057	0.0025	0.000424	30000	mg/L
MKTF-32	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-32	2/13/2019	Antimony, Total	0.00032	0.001	0.000204	6000	mg/L
MKTF-32	2/13/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	2/13/2019	Barium, Total	0.056	0.002	0.000648	2000000	mg/L
MKTF-32	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-32	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-32	2/13/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
MKTF-32	2/13/2019	Lead, Total	0.00031	0.0005	0.000047	15000	mg/L
MKTF-32	2/13/2019	Manganese, Total	0.079	0.002	0.00029	2017000	mg/L
MKTF-32	2/13/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-32	2/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-32	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	2/13/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-32	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-32	2/13/2019	Antimony, Dissolved	0.00034	0.001	0.000204	6000	mg/L
MKTF-32	2/13/2019	Arsenic, Dissolved	0.0021	0.001	0.000068	10000	mg/L
MKTF-32	2/13/2019	Barium, Dissolved	0.047	0.002	0.000648	2000000	mg/L
MKTF-32	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	2/13/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
MKTF-32	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	2/13/2019	Copper, Dissolved	0.0045	0.006	0.001296	790000	mg/L
MKTF-32	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-32	2/13/2019	Lead, Dissolved	0.00011	0.0005	0.000047	NA	mg/L
MKTF-32	2/13/2019	Magnesium, Dissolved	5	1	0.05029	NA	mg/L
MKTF-32	2/13/2019	Manganese, Dissolved	0.059	0.002	0.00029	2017400	mg/L
MKTF-32	2/13/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
MKTF-32	2/13/2019	Selenium, Dissolved	0.00043	0.001	0.000203	50000	mg/L
MKTF-32	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	2/13/2019	Sodium, Dissolved	570	20	8.323526	NA	mg/L
MKTF-32	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-32	2/13/2019	Uranium, Dissolved	0.058	0.0025	0.000152	NA	mg/L
MKTF-32	2/13/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
MKTF-32	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-32	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-32	11/17/2014	Barium, Total	0.091	0.002	0.0005	2000000	mg/L
MKTF-32	11/17/2014	Calcium, Total	37	1	0.082	NA	mg/L
MKTF-32	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-32	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-32	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-32	11/17/2014	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-32	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-32	11/17/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-32	11/17/2014	Magnesium, Total	7	1	0.018	NA	mg/L
MKTF-32	11/17/2014	Manganese, Total	0.23	0.002	0.00049	2017000	mg/L
MKTF-32	11/17/2014	Sodium, Total	680	10	3.9	NA	mg/L
MKTF-32	11/17/2014	Lead, Total	0.0027	0.001	0.00026	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
MKTF-32	11/17/2014	Uranium, Total	0.067	0.005	0.000036	30000	mg/L
MKTF-32	11/17/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
MKTF-32	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-32	3/12/2015	Barium, Total	0.057	0.002	0.00095	2000000	mg/L
MKTF-32	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-32	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-32	3/12/2015	Iron, Total	0.18	0.02	0.0073	13822000	mg/L
MKTF-32	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	3/12/2015	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-32	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-32	3/12/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-32	3/12/2015	Uranium, Total	0.068	0.01	0.0005	30000	mg/L
MKTF-32	3/12/2015	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-32	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-32	6/9/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-32	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-32	6/9/2015	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-32	6/9/2015	Iron, Total	5.7	0.2	0.072	13822000	mg/L
MKTF-32	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	6/9/2015	Manganese, Total	0.31	0.002	0.0015	2017000	mg/L
MKTF-32	6/9/2015	Lead, Total	0.0063	0.0025	0.00024	15000	mg/L
MKTF-32	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-32	6/9/2015	Uranium, Total	0.066	0.0025	0.000025	30000	mg/L
MKTF-32	6/9/2015	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-32	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	8/21/2015	Arsenic, Total	0.0037	0.001	0.00029	10000	mg/L
MKTF-32	8/21/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-32	8/21/2015	Calcium, Total	36	1	0.057	NA	mg/L
MKTF-32	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	8/21/2015	Chromium, Total	0.0072	0.006	0.0022	50000	mg/L
MKTF-32	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	8/21/2015	Iron, Total	6.1	0.2	0.072	13822000	mg/L
MKTF-32	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	8/21/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-32	8/21/2015	Magnesium, Total	6.8	1	0.039	NA	mg/L
MKTF-32	8/21/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
MKTF-32	8/21/2015	Sodium, Total	660	10	0.72	NA	mg/L
MKTF-32	8/21/2015	Lead, Total	0.0072	0.0005	0.000047	15000	mg/L
MKTF-32	8/21/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-32	8/21/2015	Uranium, Total	0.073	0.005	0.000049	30000	mg/L
MKTF-32	8/21/2015	Zinc, Total	0.029	0.01	0.0039	5960000	mg/L
MKTF-32	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	11/5/2015	Arsenic, Total	0.0052	0.001	0.00029	10000	mg/L
MKTF-32	11/5/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-32	11/5/2015	Calcium, Total	31	1	0.26	NA	mg/L
MKTF-32	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-32	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	11/5/2015	Iron, Total	3.2	0.1	0.036	13822000	mg/L
MKTF-32	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	11/5/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-32	11/5/2015	Magnesium, Total	6.2	1	0.013	NA	mg/L
MKTF-32	11/5/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
MKTF-32	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-32	11/5/2015	Lead, Total	0.0046	0.0005	0.000047	15000	mg/L
MKTF-32	11/5/2015	Selenium, Total	0.0083	0.005	0.00062	50000	mg/L
MKTF-32	11/5/2015	Uranium, Total	0.061	0.0025	0.000025	30000	mg/L
MKTF-32	11/5/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-32	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	2/24/2016	Arsenic, Total	0.0034	0.001	0.00029	10000	mg/L
MKTF-32	2/24/2016	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
MKTF-32	2/24/2016	Calcium, Total	30	1	0.26	NA	mg/L
MKTF-32	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	2/24/2016	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-32	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	2/24/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-32	2/24/2016	Magnesium, Total	5.6	1	0.013	NA	mg/L
MKTF-32	2/24/2016	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-32	2/24/2016	Sodium, Total	580	10	0.96	NA	mg/L
MKTF-32	2/24/2016	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-32	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-32	2/24/2016	Uranium, Total	0.062	0.0025	0.000025	30000	mg/L
MKTF-32	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-32	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-32	6/9/2016	Arsenic, Total	0.0057	0.001	0.00014	10000	mg/L
MKTF-32	6/9/2016	Barium, Total	0.064	0.002	0.0013	2000000	mg/L
MKTF-32	6/9/2016	Calcium, Total	32	1	0.26	NA	mg/L
MKTF-32	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-32	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-32	6/9/2016	Iron, Total	0.099	0.02	0.0091	13822000	mg/L
MKTF-32	6/9/2016	Mercury, Total	0.00012	0.0002	0.000053	2000	mg/L
MKTF-32	6/9/2016	Potassium, Total	0.91	1	0.18	NA	mg/L
MKTF-32	6/9/2016	Magnesium, Total	6.5	1	0.013	NA	mg/L
MKTF-32	6/9/2016	Manganese, Total	0.082	0.002	0.00032	2017000	mg/L
MKTF-32	6/9/2016	Sodium, Total	670	10	0.96	NA	mg/L
MKTF-32	6/9/2016	Lead, Total	0.00057	0.0005	0.00017	15000	mg/L
MKTF-32	6/9/2016	Selenium, Total	0.012	0.005	0.0011	50000	mg/L
MKTF-32	6/9/2016	Uranium, Total	0.064	0.0025	0.00026	30000	mg/L
MKTF-32	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-32	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	9/9/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-32	9/9/2016	Barium, Total	0.086	0.002	0.00079	2000000	mg/L
MKTF-32	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-32	9/9/2016	Copper, Total	0.013	0.006	0.003	790000	mg/L
MKTF-32	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-32	9/9/2016	Arsenic, Dissolved	0.0038	0.005	0.00069	10000	mg/L
MKTF-32	9/9/2016	Barium, Dissolved	0.05	0.002	0.0013	2000000	mg/L
MKTF-32	9/9/2016	Calcium, Dissolved	29	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-32	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-32	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-32	9/9/2016	Iron, Dissolved	0.027	0.02	0.02	13821880	mg/L
MKTF-32	9/9/2016	Potassium, Dissolved	0.64	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Magnesium, Dissolved	5.9	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Manganese, Dissolved	0.074	0.002	0.00032	2017400	mg/L
MKTF-32	9/9/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-32	9/9/2016	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-32	9/9/2016	Selenium, Dissolved	0.0072	0.005	0.0011	50000	mg/L
MKTF-32	9/9/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-32	9/9/2016	Zinc, Dissolved	0.0095	0.01	0.0028	5960450	mg/L
MKTF-32	9/9/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-32	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
MKTF-32	9/9/2016	Lead, Total	0.0023	0.0005	0.000081	15000	mg/L
MKTF-32	9/9/2016	Selenium, Total	0.0069	0.005	0.00094	50000	mg/L
MKTF-32	9/9/2016	Uranium, Total	0.058	0.0025	0.00087	30000	mg/L
MKTF-32	9/9/2016	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
MKTF-32	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	10/31/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-32	10/31/2016	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-32	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	10/31/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
MKTF-32	10/31/2016	Copper, Total	0.0042	0.006	0.003	790000	mg/L
MKTF-32	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-32	10/31/2016	Arsenic, Dissolved	0.004	0.005	0.00069	10000	mg/L
MKTF-32	10/31/2016	Barium, Dissolved	0.051	0.002	0.0013	2000000	mg/L
MKTF-32	10/31/2016	Calcium, Dissolved	28	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-32	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-32	10/31/2016	Iron, Dissolved	0.05	0.02	0.02	13821880	mg/L
MKTF-32	10/31/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Magnesium, Dissolved	5.8	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Manganese, Dissolved	0.056	0.002	0.00032	2017400	mg/L
MKTF-32	10/31/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-32	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-32	10/31/2016	Selenium, Dissolved	0.0069	0.005	0.0011	50000	mg/L
MKTF-32	10/31/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-32	10/31/2016	Zinc, Dissolved	0.0096	0.01	0.0028	5960450	mg/L
MKTF-32	10/31/2016	Iron, Total	3	0.1	0.1	13822000	mg/L
MKTF-32	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	10/31/2016	Manganese, Total	0.13	0.002	0.00027	2017000	mg/L
MKTF-32	10/31/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-32	10/31/2016	Selenium, Total	0.006	0.02	0.0037	50000	mg/L
MKTF-32	10/31/2016	Uranium, Total	0.059	0.0025	0.00087	30000	mg/L
MKTF-32	10/31/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-32	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	3/7/2017	Arsenic, Total	0.0046	0.01	0.0021	10000	mg/L
MKTF-32	3/7/2017	Barium, Total	0.055	0.002	0.00079	2000000	mg/L
MKTF-32	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-32	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-32	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-32	3/7/2017	Arsenic, Dissolved	0.0039	0.001	0.00014	10000	mg/L
MKTF-32	3/7/2017	Barium, Dissolved	0.043	0.002	0.00085	2000000	mg/L
MKTF-32	3/7/2017	Calcium, Dissolved	27	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-32	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-32	3/7/2017	Potassium, Dissolved	0.52	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Magnesium, Dissolved	5.5	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Manganese, Dissolved	0.065	0.002	0.00038	2017400	mg/L
MKTF-32	3/7/2017	Sodium, Dissolved	580	10	5	NA	mg/L
MKTF-32	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	3/7/2017	Selenium, Dissolved	0.0059	0.001	0.00021	50000	mg/L
MKTF-32	3/7/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-32	3/7/2017	Iron, Total	0.51	0.02	0.02	13822000	mg/L
MKTF-32	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-32	3/7/2017	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-32	3/7/2017	Lead, Total	0.00083	0.0025	0.00041	15000	mg/L
MKTF-32	3/7/2017	Selenium, Total	0.0091	0.005	0.00094	50000	mg/L
MKTF-32	3/7/2017	Zinc, Total	0.003	0.01	0.0027	5960000	mg/L
MKTF-32	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-32	6/6/2017	Arsenic, Total	0.0046	0.005	0.0015	10000	mg/L
MKTF-32	6/6/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-32	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	6/6/2017	Chromium, Total	0.0064	0.006	0.0011	50000	mg/L
MKTF-32	6/6/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
MKTF-32	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-32	6/6/2017	Arsenic, Dissolved	0.0041	0.005	0.00089	10000	mg/L
MKTF-32	6/6/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-32	6/6/2017	Calcium, Dissolved	30	1	0.078	NA	mg/L
MKTF-32	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-32	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	6/6/2017	Iron, Dissolved	0.086	0.02	0.016	13821880	mg/L
MKTF-32	6/6/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MKTF-32	6/6/2017	Magnesium, Dissolved	6	1	0.25	NA	mg/L
MKTF-32	6/6/2017	Manganese, Dissolved	0.05	0.002	0.00038	2017400	mg/L
MKTF-32	6/6/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-32	6/6/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-32	6/6/2017	Selenium, Dissolved	0.005	0.005	0.0019	50000	mg/L
MKTF-32	6/6/2017	Uranium, Dissolved	0.059	0.0025	0.00025	NA	mg/L
MKTF-32	6/6/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-32	6/6/2017	Iron, Total	6.4	0.2	0.1	13822000	mg/L
MKTF-32	6/6/2017	Mercury, Total	0.000068	0.0002	0.000037	2000	mg/L
MKTF-32	6/6/2017	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Lead, Total	0.0055	0.0025	0.00048	15000	mg/L
MKTF-32	6/6/2017	Selenium, Total	0.0063	0.005	0.0036	50000	mg/L
MKTF-32	6/6/2017	Uranium, Total	0.065	0.0025	0.00077	30000	mg/L
MKTF-32	6/6/2017	Zinc, Total	0.024	0.01	0.0028	5960000	mg/L
MKTF-32	9/25/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-32	9/25/2017	Arsenic, Total	0.0035	0.001	0.0003	10000	mg/L
MKTF-32	9/25/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-32	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	9/25/2017	Chromium, Total	0.0035	0.006	0.0018	50000	mg/L
MKTF-32	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-32	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	9/25/2017	Arsenic, Dissolved	0.0036	0.01	0.0018	10000	mg/L
MKTF-32	9/25/2017	Barium, Dissolved	0.045	0.002	0.00085	2000000	mg/L
MKTF-32	9/25/2017	Calcium, Dissolved	29	1	0.078	NA	mg/L
MKTF-32	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	9/25/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
MKTF-32	9/25/2017	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-32	9/25/2017	Magnesium, Dissolved	5.6	1	0.25	NA	mg/L
MKTF-32	9/25/2017	Manganese, Dissolved	0.075	0.002	0.00039	2017400	mg/L
MKTF-32	9/25/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	9/25/2017	Selenium, Dissolved	0.005	0.01	0.0039	50000	mg/L
MKTF-32	9/25/2017	Zinc, Dissolved	0.0087	0.01	0.0021	5960450	mg/L
MKTF-32	9/25/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-32	9/25/2017	Mercury, Total	0.000069	0.0002	0.000037	2000	mg/L
MKTF-32	9/25/2017	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-32	9/25/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-32	9/25/2017	Selenium, Total	0.0045	0.001	0.00071	50000	mg/L
MKTF-32	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-32	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	11/27/2017	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-32	11/27/2017	Barium, Total	0.067	0.002	0.001	2000000	mg/L
MKTF-32	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	11/27/2017	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
MKTF-32	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	11/27/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-32	11/27/2017	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-32	11/27/2017	Calcium, Dissolved	27	1	0.078	NA	mg/L
MKTF-32	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	11/27/2017	Iron, Dissolved	0.043	0.02	0.016	13821880	mg/L
MKTF-32	11/27/2017	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
MKTF-32	11/27/2017	Magnesium, Dissolved	5.4	1	0.25	NA	mg/L
MKTF-32	11/27/2017	Manganese, Dissolved	0.078	0.002	0.00039	2017400	mg/L
MKTF-32	11/27/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-32	11/27/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	11/27/2017	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
MKTF-32	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-32	11/27/2017	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-32	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-32	11/27/2017	Manganese, Total	0.079	0.002	0.0011	2017000	mg/L
MKTF-32	11/27/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-32	11/27/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-32	11/27/2017	Uranium, Total	0.058	0.0025	0.00077	30000	mg/L
MKTF-32	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-32	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	2/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-32	2/7/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-32	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	2/7/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
MKTF-32	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	2/7/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-32	2/7/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/7/2018	Calcium, Dissolved	29	1	0.078	NA	mg/L
MKTF-32	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	2/7/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-32	2/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-32	2/7/2018	Magnesium, Dissolved	5.6	1	0.25	NA	mg/L
MKTF-32	2/7/2018	Manganese, Dissolved	0.062	0.002	0.00039	2017400	mg/L
MKTF-32	2/7/2018	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-32	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	2/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	2/7/2018	Uranium, Dissolved	0.06	0.0025	0.00048	NA	mg/L
MKTF-32	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-32	2/7/2018	Iron, Total	2.1	0.1	0.051	13822000	mg/L
MKTF-32	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-32	2/7/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-32	2/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-32	2/7/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-32	2/7/2018	Uranium, Total	0.06	0.0025	0.00034	30000	mg/L
MKTF-32	2/7/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-32	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	5/9/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-32	5/9/2018	Barium, Total	0.055	0.002	0.001	2000000	mg/L
MKTF-32	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	5/9/2018	Copper, Total	0.0049	0.006	0.0041	790000	mg/L
MKTF-32	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	5/9/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
MKTF-32	5/9/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-32	5/9/2018	Calcium, Dissolved	28	1	0.078	NA	mg/L
MKTF-32	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	5/9/2018	Copper, Dissolved	0.0039	0.006	0.0032	790000	mg/L
MKTF-32	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-32	5/9/2018	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
MKTF-32	5/9/2018	Magnesium, Dissolved	5.5	1	0.25	NA	mg/L
MKTF-32	5/9/2018	Manganese, Dissolved	0.049	0.002	0.00039	2017400	mg/L
MKTF-32	5/9/2018	Sodium, Dissolved	590	10	1.6	NA	mg/L
MKTF-32	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-32	5/9/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	5/9/2018	Uranium, Dissolved	0.05	0.005	0.00096	NA	mg/L
MKTF-32	5/9/2018	Zinc, Dissolved	0.0092	0.01	0.0021	5960450	mg/L
MKTF-32	5/9/2018	Iron, Total	0.51	0.02	0.01	13822000	mg/L
MKTF-32	5/9/2018	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-32	5/9/2018	Manganese, Total	0.06	0.002	0.0011	2017000	mg/L
MKTF-32	5/9/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
MKTF-32	5/9/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	5/9/2018	Uranium, Total	0.058	0.0025	0.00034	30000	mg/L
MKTF-32	5/9/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-32	8/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	8/28/2018	Arsenic, Total	0.0032	0.001	0.00041	10000	mg/L
MKTF-32	8/28/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-32	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	8/28/2018	Copper, Total	0.0083	0.006	0.0041	790000	mg/L
MKTF-32	8/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	8/28/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-32	8/28/2018	Barium, Dissolved	0.051	0.002	0.00099	2000000	mg/L
MKTF-32	8/28/2018	Calcium, Dissolved	28	1	0.078	NA	mg/L
MKTF-32	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	8/28/2018	Copper, Dissolved	0.0045	0.006	0.0032	790000	mg/L
MKTF-32	8/28/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-32	8/28/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-32	8/28/2018	Magnesium, Dissolved	5.3	1	0.25	NA	mg/L
MKTF-32	8/28/2018	Manganese, Dissolved	0.037	0.002	0.00039	2017400	mg/L
MKTF-32	8/28/2018	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/28/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
MKTF-32	8/28/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-32	8/28/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-32	8/28/2018	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
MKTF-32	8/28/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-32	8/28/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-32	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	8/28/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-32	8/28/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-32	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	11/15/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-32	11/15/2018	Barium, Total	0.07	0.002	0.001	2000000	mg/L
MKTF-32	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-32	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	11/15/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
MKTF-32	11/15/2018	Barium, Dissolved	0.043	0.002	0.00099	2000000	mg/L
MKTF-32	11/15/2018	Calcium, Dissolved	26	1	0.078	NA	mg/L
MKTF-32	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-32	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-32	11/15/2018	Magnesium, Dissolved	4.9	1	0.25	NA	mg/L
MKTF-32	11/15/2018	Manganese, Dissolved	0.045	0.002	0.00039	2017400	mg/L
MKTF-32	11/15/2018	Sodium, Dissolved	610	20	3.3	NA	mg/L
MKTF-32	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-32	11/15/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
MKTF-32	11/15/2018	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
MKTF-32	11/15/2018	Iron, Total	0.81	0.02	0.01	13822000	mg/L
MKTF-32	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-32	11/15/2018	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
MKTF-32	11/15/2018	Lead, Total	0.00099	0.0005	0.00023	15000	mg/L
MKTF-32	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	11/15/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-32	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-33	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-33	11/17/2014	Arsenic, Total	0.0016	0.001	0.00036	10000	mg/L
MKTF-33	11/17/2014	Barium, Total	0.18	0.002	0.0005	2000000	mg/L
MKTF-33	11/17/2014	Calcium, Total	89	1	0.082	NA	mg/L
MKTF-33	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-33	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-33	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-33	11/17/2014	Iron, Total	3.3	0.1	0.036	13822000	mg/L
MKTF-33	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-33	11/17/2014	Potassium, Total	1.3	1	0.093	NA	mg/L
MKTF-33	11/17/2014	Magnesium, Total	19	1	0.018	NA	mg/L
MKTF-33	11/17/2014	Manganese, Total	0.92	0.002	0.00049	2017000	mg/L
MKTF-33	11/17/2014	Sodium, Total	310	10	3.9	NA	mg/L
MKTF-33	11/17/2014	Lead, Total	0.005	0.001	0.00026	15000	mg/L
MKTF-33	11/17/2014	Selenium, Total	0.0031	0.001	0.00051	50000	mg/L
MKTF-33	11/17/2014	Uranium, Total	0.043	0.001	0.0000072	30000	mg/L
MKTF-33	11/17/2014	Zinc, Total	0.018	0.01	0.0035	5960000	mg/L
MKTF-33	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-33	3/12/2015	Barium, Total	0.061	0.002	0.00095	2000000	mg/L
MKTF-33	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-33	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-33	3/12/2015	Iron, Total	0.026	0.02	0.0073	13822000	mg/L
MKTF-33	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	3/12/2015	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
MKTF-33	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-33	3/12/2015	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-33	3/12/2015	Uranium, Total	0.045	0.001	0.00005	30000	mg/L
MKTF-33	3/12/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-33	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-33	6/9/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-33	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-33	6/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-33	6/9/2015	Iron, Total	4.1	0.1	0.036	13822000	mg/L
MKTF-33	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	6/9/2015	Manganese, Total	0.7	0.002	0.0015	2017000	mg/L
MKTF-33	6/9/2015	Lead, Total	0.0058	0.0025	0.00024	15000	mg/L
MKTF-33	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-33	6/9/2015	Uranium, Total	0.044	0.0025	0.000025	30000	mg/L
MKTF-33	6/9/2015	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-33	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-33	8/21/2015	Arsenic, Total	0.002	0.001	0.00029	10000	mg/L
MKTF-33	8/21/2015	Barium, Total	0.74	0.002	0.0011	2000000	mg/L
MKTF-33	8/21/2015	Calcium, Total	87	1	0.057	NA	mg/L
MKTF-33	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	8/21/2015	Chromium, Total	0.015	0.006	0.0022	50000	mg/L
MKTF-33	8/21/2015	Copper, Total	0.01	0.006	0.0051	790000	mg/L
MKTF-33	8/21/2015	Iron, Total	14	0.4	0.14	13822000	mg/L
MKTF-33	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	8/21/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-33	8/21/2015	Magnesium, Total	18	1	0.039	NA	mg/L
MKTF-33	8/21/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-33	8/21/2015	Sodium, Total	310	5	0.36	NA	mg/L
MKTF-33	8/21/2015	Lead, Total	0.022	0.0005	0.000047	15000	mg/L
MKTF-33	8/21/2015	Selenium, Total	0.0019	0.001	0.00012	50000	mg/L
MKTF-33	8/21/2015	Uranium, Total	0.049	0.0025	0.000025	30000	mg/L
MKTF-33	8/21/2015	Zinc, Total	0.048	0.01	0.0039	5960000	mg/L
MKTF-33	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-33	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-33	11/9/2015	Barium, Total	0.062	0.002	0.0013	2000000	mg/L
MKTF-33	11/9/2015	Calcium, Total	82	1	0.26	NA	mg/L
MKTF-33	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-33	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-33	11/9/2015	Iron, Total	0.071	0.02	0.0091	13822000	mg/L
MKTF-33	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	11/9/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-33	11/9/2015	Magnesium, Total	18	1	0.013	NA	mg/L
MKTF-33	11/9/2015	Manganese, Total	0.24	0.002	0.00032	2017000	mg/L
MKTF-33	11/9/2015	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-33	11/9/2015	Lead, Total	0.00059	0.0005	0.000026	15000	mg/L
MKTF-33	11/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-33	11/9/2015	Uranium, Total	0.04	0.0025	0.000024	30000	mg/L
MKTF-33	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-33	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-33	2/25/2016	Arsenic, Total	0.0012	0.001	0.00029	10000	mg/L
MKTF-33	2/25/2016	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-33	2/25/2016	Calcium, Total	92	1	0.26	NA	mg/L
MKTF-33	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-33	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-33	2/25/2016	Iron, Total	4.9	0.1	0.036	13822000	mg/L
MKTF-33	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	2/25/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-33	2/25/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-33	2/25/2016	Manganese, Total	0.55	0.002	0.0015	2017000	mg/L
MKTF-33	2/25/2016	Sodium, Total	310	5	0.48	NA	mg/L
MKTF-33	2/25/2016	Lead, Total	0.0067	0.0005	0.000047	15000	mg/L
MKTF-33	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-33	2/25/2016	Uranium, Total	0.04	0.0025	0.000025	30000	mg/L
MKTF-33	2/25/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-33	6/10/2016	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-33	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-33	6/10/2016	Arsenic, Total	0.0017	0.005	0.00069	10000	mg/L
MKTF-33	6/10/2016	Barium, Total	0.04	0.002	0.0013	2000000	mg/L
MKTF-33	6/10/2016	Calcium, Total	88	1	0.26	NA	mg/L
MKTF-33	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-33	6/10/2016	Iron, Total	0.014	0.02	0.0091	13822000	mg/L
MKTF-33	6/10/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MKTF-33	6/10/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-33	6/10/2016	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-33	6/10/2016	Manganese, Total	0.031	0.002	0.00032	2017000	mg/L
MKTF-33	6/10/2016	Sodium, Total	310	5	0.48	NA	mg/L
MKTF-33	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-33	6/10/2016	Selenium, Total	0.004	0.001	0.00021	50000	mg/L
MKTF-33	6/10/2016	Uranium, Total	0.038	0.0025	0.00026	30000	mg/L
MKTF-33	9/10/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	9/10/2016	Arsenic, Total	ND	0.005	0.0011	10000	mg/L
MKTF-33	9/10/2016	Barium, Total	0.091	0.002	0.00079	2000000	mg/L
MKTF-33	9/10/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	9/10/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	9/10/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	9/10/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-33	9/10/2016	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
MKTF-33	9/10/2016	Barium, Dissolved	0.043	0.002	0.0013	2000000	mg/L
MKTF-33	9/10/2016	Calcium, Dissolved	90	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-33	9/10/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-33	9/10/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-33	9/10/2016	Iron, Dissolved	0.02	0.02	0.02	13821880	mg/L
MKTF-33	9/10/2016	Potassium, Dissolved	0.74	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Manganese, Dissolved	0.13	0.002	0.00032	2017400	mg/L
MKTF-33	9/10/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-33	9/10/2016	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-33	9/10/2016	Selenium, Dissolved	0.0035	0.001	0.00021	50000	mg/L
MKTF-33	9/10/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-33	9/10/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-33	9/10/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
MKTF-33	9/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	9/10/2016	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
MKTF-33	9/10/2016	Lead, Total	0.0027	0.0005	0.000081	15000	mg/L
MKTF-33	9/10/2016	Selenium, Total	0.0031	0.005	0.00094	50000	mg/L
MKTF-33	9/10/2016	Uranium, Total	0.036	0.0025	0.00087	30000	mg/L
MKTF-33	9/10/2016	Zinc, Total	0.0075	0.01	0.0027	5960000	mg/L
MKTF-33	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	11/1/2016	Arsenic, Total	0.0021	0.005	0.0011	10000	mg/L
MKTF-33	11/1/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-33	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-33	11/1/2016	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
MKTF-33	11/1/2016	Barium, Dissolved	0.041	0.002	0.0013	2000000	mg/L
MKTF-33	11/1/2016	Calcium, Dissolved	91	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-33	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-33	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-33	11/1/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-33	11/1/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Manganese, Dissolved	0.13	0.002	0.00032	2017400	mg/L
MKTF-33	11/1/2016	Sodium, Dissolved	310	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/1/2016	Selenium, Dissolved	0.0028	0.001	0.00021	50000	mg/L
MKTF-33	11/1/2016	Uranium, Dissolved	0.038	0.0025	0.00026	NA	mg/L
MKTF-33	11/1/2016	Zinc, Dissolved	0.017	0.01	0.0028	5960450	mg/L
MKTF-33	11/1/2016	Iron, Total	3.1	0.1	0.1	13822000	mg/L
MKTF-33	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	11/1/2016	Manganese, Total	0.25	0.002	0.00027	2017000	mg/L
MKTF-33	11/1/2016	Lead, Total	0.0025	0.0005	0.000081	15000	mg/L
MKTF-33	11/1/2016	Selenium, Total	0.0024	0.005	0.00094	50000	mg/L
MKTF-33	11/1/2016	Uranium, Total	0.034	0.0025	0.00087	30000	mg/L
MKTF-33	11/1/2016	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	3/8/2017	Arsenic, Total	0.0024	0.005	0.0011	10000	mg/L
MKTF-33	3/8/2017	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-33	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	3/8/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	3/8/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-33	3/8/2017	Arsenic, Dissolved	0.0014	0.005	0.00069	10000	mg/L
MKTF-33	3/8/2017	Barium, Dissolved	0.04	0.002	0.00085	2000000	mg/L
MKTF-33	3/8/2017	Calcium, Dissolved	82	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	3/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-33	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	3/8/2017	Iron, Dissolved	0.032	0.02	0.02	13821880	mg/L
MKTF-33	3/8/2017	Potassium, Dissolved	0.89	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Manganese, Dissolved	0.2	0.002	0.00038	2017400	mg/L
MKTF-33	3/8/2017	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-33	3/8/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-33	3/8/2017	Selenium, Dissolved	0.0028	0.001	0.00021	50000	mg/L
MKTF-33	3/8/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-33	3/8/2017	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-33	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-33	3/8/2017	Manganese, Total	0.41	0.002	0.00027	2017000	mg/L
MKTF-33	3/8/2017	Lead, Total	0.0027	0.0025	0.00041	15000	mg/L
MKTF-33	3/8/2017	Selenium, Total	0.0054	0.005	0.00094	50000	mg/L
MKTF-33	3/8/2017	Zinc, Total	0.0067	0.01	0.0027	5960000	mg/L
MKTF-33	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-33	6/8/2017	Arsenic, Total	0.002	0.001	0.0003	10000	mg/L
MKTF-33	6/8/2017	Barium, Total	0.49	0.002	0.00093	2000000	mg/L
MKTF-33	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	6/8/2017	Chromium, Total	0.01	0.006	0.0011	50000	mg/L
MKTF-33	6/8/2017	Copper, Total	0.0062	0.006	0.0017	790000	mg/L
MKTF-33	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-33	6/8/2017	Arsenic, Dissolved	0.0011	0.005	0.00089	10000	mg/L
MKTF-33	6/8/2017	Barium, Dissolved	0.04	0.002	0.00085	2000000	mg/L
MKTF-33	6/8/2017	Calcium, Dissolved	90	1	0.078	NA	mg/L
MKTF-33	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-33	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	6/8/2017	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-33	6/8/2017	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
MKTF-33	6/8/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-33	6/8/2017	Manganese, Dissolved	0.042	0.002	0.00038	2017400	mg/L
MKTF-33	6/8/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
MKTF-33	6/8/2017	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
MKTF-33	6/8/2017	Selenium, Dissolved	0.0023	0.001	0.00039	50000	mg/L
MKTF-33	6/8/2017	Uranium, Dissolved	0.035	0.0025	0.00025	NA	mg/L
MKTF-33	6/8/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-33	6/8/2017	Iron, Total	9.8	0.2	0.1	13822000	mg/L
MKTF-33	6/8/2017	Mercury, Total	0.000081	0.0002	0.000037	2000	mg/L
MKTF-33	6/8/2017	Manganese, Total	0.83	0.002	0.0011	2017000	mg/L
MKTF-33	6/8/2017	Lead, Total	0.013	0.0005	0.000095	15000	mg/L
MKTF-33	6/8/2017	Selenium, Total	0.003	0.001	0.00071	50000	mg/L
MKTF-33	6/8/2017	Uranium, Total	0.037	0.0025	0.00077	30000	mg/L
MKTF-33	6/8/2017	Zinc, Total	0.028	0.01	0.0028	5960000	mg/L
MKTF-33	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	9/25/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-33	9/25/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-33	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	9/25/2017	Chromium, Total	0.0058	0.006	0.0018	50000	mg/L
MKTF-33	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-33	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	9/25/2017	Arsenic, Dissolved	ND	0.005	0.00089	10000	mg/L
MKTF-33	9/25/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
MKTF-33	9/25/2017	Calcium, Dissolved	82	1	0.078	NA	mg/L
MKTF-33	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	9/25/2017	Potassium, Dissolved	0.98	1	0.11	NA	mg/L
MKTF-33	9/25/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-33	9/25/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
MKTF-33	9/25/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
MKTF-33	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	9/25/2017	Selenium, Dissolved	0.002	0.005	0.0019	50000	mg/L
MKTF-33	9/25/2017	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-33	9/25/2017	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-33	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-33	9/25/2017	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-33	9/25/2017	Lead, Total	0.0046	0.0005	0.000095	15000	mg/L
MKTF-33	9/25/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
MKTF-33	9/25/2017	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-33	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	11/28/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
MKTF-33	11/28/2017	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-33	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/28/2017	Copper, Total	0.0045	0.006	0.0041	790000	mg/L
MKTF-33	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	11/28/2017	Arsenic, Dissolved	0.00071	0.001	0.00042	10000	mg/L
MKTF-33	11/28/2017	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-33	11/28/2017	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-33	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	11/28/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	11/28/2017	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-33	11/28/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	5/9/2019	Aluminum, Dissolved	0.0079	0.02	0.002488	19913930	mg/L
MKTF-33	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Dissolved	0.00055	0.005	0.000504	10000	mg/L
MKTF-33	5/9/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-33	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	5/9/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
MKTF-33	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-33	5/9/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
MKTF-33	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-33	5/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
MKTF-33	5/9/2019	Manganese, Dissolved	0.081	0.002	0.00029	2017400	mg/L
MKTF-33	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
MKTF-33	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-33	5/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-33	5/9/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-33	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-33	5/9/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
MKTF-33	5/9/2019	Zinc, Dissolved	0.031	0.01	0.002252	5960450	mg/L
MKTF-33	5/9/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-33	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	5/9/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
MKTF-33	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	5/9/2019	Chromium, Total	0.0033	0.006	0.001533	50000	mg/L
MKTF-33	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
MKTF-33	5/9/2019	Iron, Total	4.4	0.2	0.087469	13822000	mg/L
MKTF-33	5/9/2019	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
MKTF-33	5/9/2019	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-33	5/9/2019	Mercury, Total	0.00008	0.0002	0.000038	2000	mg/L
MKTF-33	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	Nickel, Total	0.0076	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-33	5/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-33	5/9/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-33	5/9/2019	Uranium, Total	0.033	0.0025	0.000424	30000	mg/L
MKTF-33	5/9/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-33	5/9/2019	Aluminum, Dissolved	0.0041	0.02	0.002488	19913930	mg/L
MKTF-33	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-33	5/9/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-33	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	5/9/2019	Calcium, Dissolved	77	1	0.061889	NA	mg/L
MKTF-33	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-33	5/9/2019	Iron, Dissolved	0.01	0.02	0.008747	13821880	mg/L
MKTF-33	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-33	5/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
MKTF-33	5/9/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-33	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Dissolved	0.0048	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-33	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-33	5/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-33	5/9/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-33	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-33	5/9/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-33	5/9/2019	Zinc, Dissolved	0.0092	0.01	0.002252	5960450	mg/L
MKTF-33	5/9/2019	Aluminum, Total	8.8	0.2	0.024883	19914000	mg/L
MKTF-33	5/9/2019	Antimony, Total	0.0004	0.001	0.000389	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	5/9/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Total	0.00051	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
MKTF-33	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	5/9/2019	Chromium, Total	0.0029	0.006	0.001533	50000	mg/L
MKTF-33	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	5/9/2019	Iron, Total	3.6	0.2	0.087469	13822000	mg/L
MKTF-33	5/9/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-33	5/9/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
MKTF-33	5/9/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-33	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Total	0.0077	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-33	5/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-33	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-33	5/9/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-33	5/9/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-33	10/24/2019	Aluminum, Total	7.6	0.4	0.049765	19914000	mg/L
MKTF-33	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	10/24/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	10/24/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-33	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-33	10/24/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-33	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	10/24/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
MKTF-33	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	10/24/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-33	10/24/2019	Lead, Total	0.0031	0.0005	0.000055	15000	mg/L
MKTF-33	10/24/2019	Manganese, Total	0.48	0.002	0.00029	2017000	mg/L
MKTF-33	10/24/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-33	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	10/24/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-33	10/24/2019	Selenium, Total	0.00055	0.001	0.000478	50000	mg/L
MKTF-33	10/24/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	10/24/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-33	10/24/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-33	10/24/2019	Aluminum, Dissolved	0.0076	0.02	0.002488	19913930	mg/L
MKTF-33	10/24/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-33	10/24/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
MKTF-33	10/24/2019	Barium, Dissolved	0.076	0.002	0.000648	2000000	mg/L
MKTF-33	10/24/2019	Beryllium, Dissolved	0.00044	0.002	0.000284	4000	mg/L
MKTF-33	10/24/2019	Boron, Dissolved	0.51	0.2	0.022653	3949110	mg/L
MKTF-33	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	10/24/2019	Calcium, Dissolved	84	5	0.309446	NA	mg/L
MKTF-33	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	10/24/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
MKTF-33	10/24/2019	Iron, Dissolved	0.052	0.02	0.008747	13821880	mg/L
MKTF-33	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-33	10/24/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-33	10/24/2019	Manganese, Dissolved	0.38	0.002	0.00029	2017400	mg/L
MKTF-33	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	10/24/2019	Nickel, Dissolved	0.0054	0.01	0.004009	372000	mg/L
MKTF-33	10/24/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-33	10/24/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
MKTF-33	10/24/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
MKTF-33	10/24/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-33	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	10/24/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-33	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-33	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-33	8/20/2019	Arsenic, Dissolved	0.00042	0.001	0.000101	10000	mg/L
MKTF-33	8/20/2019	Barium, Dissolved	0.069	0.002	0.000648	2000000	mg/L
MKTF-33	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	8/20/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
MKTF-33	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	8/20/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-33	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	8/20/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
MKTF-33	8/20/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
MKTF-33	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-33	8/20/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-33	8/20/2019	Manganese, Dissolved	0.44	0.002	0.00029	2017400	mg/L
MKTF-33	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	8/20/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-33	8/20/2019	Potassium, Dissolved	0.75	1	0.162288	NA	mg/L
MKTF-33	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-33	8/20/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-33	8/20/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-33	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	8/20/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-33	8/20/2019	Zinc, Dissolved	0.004	0.01	0.002252	5960450	mg/L
MKTF-33	8/20/2019	Aluminum, Total	6.3	0.2	0.024883	19914000	mg/L
MKTF-33	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	8/20/2019	Arsenic, Total	0.001	0.001	0.000312	10000	mg/L
MKTF-33	8/20/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-33	8/20/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
MKTF-33	8/20/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
MKTF-33	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-33	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	8/20/2019	Iron, Total	2.6	0.2	0.087469	13822000	mg/L
MKTF-33	8/20/2019	Lead, Total	0.0029	0.0005	0.000055	15000	mg/L
MKTF-33	8/20/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
MKTF-33	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-33	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	8/20/2019	Nickel, Total	0.0064	0.01	0.004009	372000	mg/L
MKTF-33	8/20/2019	Selenium, Total	0.00095	0.001	0.000478	50000	mg/L
MKTF-33	8/20/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-33	8/20/2019	Thallium, Total	0.000052	0.0005	0.000052	2000	mg/L
MKTF-33	8/20/2019	Uranium, Total	0.035	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-33	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-33	2/28/2020	Arsenic, Dissolved	0.00054	0.001	0.0001	10000	mg/L
MKTF-33	2/28/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-33	2/28/2020	Selenium, Dissolved	0.0002	0.001	0.00017	50000	mg/L
MKTF-33	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	2/28/2020	Uranium, Dissolved	0.032	0.0025	0.00037	NA	mg/L
MKTF-33	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-33	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-33	2/28/2020	Boron, Dissolved	0.48	0.04	0.0045	3949110	mg/L
MKTF-33	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-33	2/28/2020	Manganese, Dissolved	0.31	0.002	0.00029	2017400	mg/L
MKTF-33	2/28/2020	Silver, Dissolved	0.0018	0.005	0.00094	81200	mg/L
MKTF-33	2/28/2020	Barium, Dissolved	0.082	0.002	0.00065	2000000	mg/L
MKTF-33	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-33	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-33	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-33	2/28/2020	Iron, Dissolved	0.032	0.02	0.0087	13821880	mg/L
MKTF-33	2/28/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
MKTF-33	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-33	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-33	2/28/2020	Potassium, Dissolved	0.99	1	0.16	NA	mg/L
MKTF-33	2/28/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-33	2/28/2020	Calcium, Dissolved	76	5	0.31	NA	mg/L
MKTF-33	2/28/2020	Sodium, Dissolved	300	10	4.2	NA	mg/L
MKTF-33	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-33	2/28/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
MKTF-33	2/28/2020	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-33	2/28/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-33	2/28/2020	Thallium, Total	0.000054	0.0005	0.000052	2000	mg/L
MKTF-33	2/28/2020	Uranium, Total	0.03	0.0025	0.00042	30000	mg/L
MKTF-33	2/28/2020	Barium, Total	0.12	0.002	0.00065	2000000	mg/L
MKTF-33	2/28/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-33	2/28/2020	Boron, Total	0.51	0.04	0.0045	3949	mg/L
MKTF-33	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-33	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-33	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	2/28/2020	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
MKTF-33	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-33	2/28/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-33	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-33	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-33	2/28/2020	Iron, Total	0.93	0.02	0.0087	13822000	mg/L
MKTF-33	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-33	2/28/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-33	2/28/2020	Aluminum, Total	2.4	0.1	0.012	19914000	mg/L
MKTF-33	11/28/2017	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
MKTF-33	11/28/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-33	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	11/28/2017	Uranium, Dissolved	0.032	0.0025	0.00048	NA	mg/L
MKTF-33	11/28/2017	Zinc, Dissolved	0.0051	0.01	0.0021	5960450	mg/L
MKTF-33	11/28/2017	Iron, Total	3	0.1	0.051	13822000	mg/L
MKTF-33	11/28/2017	Manganese, Total	0.39	0.002	0.0011	2017000	mg/L
MKTF-33	11/28/2017	Lead, Total	0.0036	0.0005	0.00023	15000	mg/L
MKTF-33	11/28/2017	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
MKTF-33	11/28/2017	Uranium, Total	0.033	0.005	0.0015	30000	mg/L
MKTF-33	11/28/2017	Zinc, Total	0.0095	0.01	0.0033	5960000	mg/L
MKTF-33	2/8/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-33	2/8/2018	Arsenic, Total	0.0018	0.001	0.00041	10000	mg/L
MKTF-33	2/8/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-33	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	2/8/2018	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-33	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	2/8/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-33	2/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-33	2/8/2018	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-33	2/8/2018	Calcium, Dissolved	74	1	0.078	NA	mg/L
MKTF-33	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	2/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	2/8/2018	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
MKTF-33	2/8/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	2/8/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
MKTF-33	2/8/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-33	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	2/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	2/8/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-33	2/8/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
MKTF-33	2/8/2018	Iron, Total	4	0.1	0.051	13822000	mg/L
MKTF-33	2/8/2018	Mercury, Total	0.000098	0.0002	0.000037	2000	mg/L
MKTF-33	2/8/2018	Manganese, Total	0.41	0.002	0.0011	2017000	mg/L
MKTF-33	2/8/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-33	2/8/2018	Selenium, Total	0.0015	0.001	0.00098	50000	mg/L
MKTF-33	2/8/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
MKTF-33	2/8/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-33	5/10/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-33	5/10/2018	Arsenic, Total	0.00059	0.001	0.00041	10000	mg/L
MKTF-33	5/10/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-33	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	5/10/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	5/10/2018	Arsenic, Dissolved	0.00076	0.001	0.00042	10000	mg/L
MKTF-33	5/10/2018	Barium, Dissolved	0.042	0.002	0.00099	2000000	mg/L
MKTF-33	5/10/2018	Calcium, Dissolved	75	1	0.078	NA	mg/L
MKTF-33	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	5/10/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	5/10/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-33	5/10/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	5/10/2018	Manganese, Dissolved	0.15	0.002	0.00039	2017400	mg/L
MKTF-33	5/10/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-33	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-33	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	5/10/2018	Uranium, Dissolved	0.032	0.005	0.00096	NA	mg/L
MKTF-33	5/10/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
MKTF-33	5/10/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-33	5/10/2018	Mercury, Total	0.000064	0.0002	0.000037	2000	mg/L
MKTF-33	5/10/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-33	5/10/2018	Lead, Total	0.0016	0.0005	0.00023	15000	mg/L
MKTF-33	5/10/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	5/10/2018	Uranium, Total	0.034	0.0025	0.00034	30000	mg/L
MKTF-33	5/10/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-33	8/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-33	8/30/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-33	8/30/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-33	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	8/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	8/30/2018	Arsenic, Dissolved	0.00075	0.001	0.00042	10000	mg/L
MKTF-33	8/30/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-33	8/30/2018	Calcium, Dissolved	72	1	0.078	NA	mg/L
MKTF-33	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	8/30/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-33	8/30/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	8/30/2018	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
MKTF-33	8/30/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-33	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-33	8/30/2018	Uranium, Dissolved	0.031	0.0025	0.00048	NA	mg/L
MKTF-33	8/30/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
MKTF-33	8/30/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-33	8/30/2018	Manganese, Total	0.42	0.002	0.0011	2017000	mg/L
MKTF-33	8/30/2018	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-33	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	8/30/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-33	8/30/2018	Zinc, Total	0.0091	0.01	0.0033	5960000	mg/L
MKTF-33	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	11/28/2018	Arsenic, Total	0.001	0.001	0.00041	10000	mg/L
MKTF-33	11/28/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-33	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-33	11/28/2018	Barium, Dissolved	0.055	0.002	0.00099	2000000	mg/L
MKTF-33	11/28/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-33	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	11/28/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-33	11/28/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-33	11/28/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
MKTF-33	11/28/2018	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
MKTF-33	11/28/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-33	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-33	11/28/2018	Zinc, Dissolved	0.032	0.01	0.0021	5960450	mg/L
MKTF-33	11/28/2018	Iron, Total	2.7	0.1	0.051	13822000	mg/L
MKTF-33	11/28/2018	Manganese, Total	0.45	0.002	0.0011	2017000	mg/L
MKTF-33	11/28/2018	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-33	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-34	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Dissolved	0.00047	0.001	0.0001	10000	mg/L
MKTF-34	2/28/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/28/2020	Uranium, Dissolved	0.017	0.0005	0.000075	NA	mg/L
MKTF-34	2/28/2020	Selenium, Dissolved	0.00085	0.001	0.00017	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-34	2/28/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/28/2020	Magnesium, Dissolved	47	1	0.05	NA	mg/L
MKTF-34	2/28/2020	Manganese, Dissolved	0.00038	0.002	0.00029	2017400	mg/L
MKTF-34	2/28/2020	Potassium, Dissolved	0.85	1	0.16	NA	mg/L
MKTF-34	2/28/2020	Silver, Dissolved	0.0041	0.005	0.00094	81200	mg/L
MKTF-34	2/28/2020	Calcium, Dissolved	210	5	0.31	NA	mg/L
MKTF-34	2/28/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
MKTF-34	2/28/2020	Barium, Dissolved	0.18	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Boron, Dissolved	0.19	0.04	0.0045	3949110	mg/L
MKTF-34	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Zinc, Dissolved	0.018	0.01	0.0023	5960450	mg/L
MKTF-34	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Total	0.00086	0.001	0.00031	10000	mg/L
MKTF-34	2/28/2020	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
MKTF-34	2/28/2020	Thallium, Total	0.000056	0.0005	0.000052	2000	mg/L
MKTF-34	2/28/2020	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-34	2/28/2020	Selenium, Total	0.0013	0.001	0.00048	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Total	1.6	0.1	0.012	19914000	mg/L
MKTF-34	2/28/2020	Iron, Total	1.1	0.1	0.044	13822000	mg/L
MKTF-34	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	2/28/2020	Barium, Total	0.2	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Beryllium, Total	0.00051	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Boron, Total	0.19	0.04	0.0045	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/28/2020	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
MKTF-34	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Silver, Total	0.004	0.005	0.0014	50000	mg/L
MKTF-34	2/28/2020	Zinc, Total	0.012	0.01	0.0058	5960000	mg/L
MKTF-34	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Dissolved	0.00046	0.001	0.0001	10000	mg/L
MKTF-34	2/28/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/28/2020	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
MKTF-34	2/28/2020	Selenium, Dissolved	0.0011	0.001	0.00017	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/28/2020	Beryllium, Dissolved	0.00038	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-34	2/28/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/28/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-34	2/28/2020	Manganese, Dissolved	0.00059	0.002	0.00029	2017400	mg/L
MKTF-34	2/28/2020	Potassium, Dissolved	0.95	1	0.16	NA	mg/L
MKTF-34	2/28/2020	Silver, Dissolved	0.0038	0.005	0.00094	81200	mg/L
MKTF-34	2/28/2020	Calcium, Dissolved	190	5	0.31	NA	mg/L
MKTF-34	2/28/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
MKTF-34	2/28/2020	Barium, Dissolved	0.15	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Boron, Dissolved	0.19	0.04	0.0045	3949110	mg/L
MKTF-34	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-34	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
MKTF-34	2/28/2020	Lead, Total	0.00086	0.0005	0.000055	15000	mg/L
MKTF-34	2/28/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	2/28/2020	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-34	2/28/2020	Selenium, Total	0.0014	0.001	0.00048	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Total	1.2	0.1	0.012	19914000	mg/L
MKTF-34	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	2/28/2020	Barium, Total	0.17	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Beryllium, Total	0.00055	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Boron, Total	0.23	0.04	0.0045	3949	mg/L
MKTF-34	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/28/2020	Iron, Total	0.79	0.02	0.0087	13822000	mg/L
MKTF-34	2/28/2020	Manganese, Total	0.025	0.002	0.00029	2017000	mg/L
MKTF-34	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
MKTF-34	2/28/2020	Zinc, Total	0.0092	0.01	0.0058	5960000	mg/L
MKTF-34	2/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/5/2020	Barium, Dissolved	0.16	0.002	0.00065	2000000	mg/L
MKTF-34	2/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-34	2/5/2020	Boron, Dissolved	0.26	0.04	0.0045	3949110	mg/L
MKTF-34	2/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/5/2020	Copper, Dissolved	0.002	0.006	0.0013	790000	mg/L
MKTF-34	2/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/5/2020	Magnesium, Dissolved	40	1	0.05	NA	mg/L
MKTF-34	2/5/2020	Manganese, Dissolved	0.001	0.002	0.00029	2017400	mg/L
MKTF-34	2/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/5/2020	Potassium, Dissolved	0.89	1	0.16	NA	mg/L
MKTF-34	2/5/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	Zinc, Dissolved	0.06	0.01	0.0023	5960450	mg/L
MKTF-34	2/5/2020	Calcium, Dissolved	180	5	0.31	NA	mg/L
MKTF-34	2/5/2020	Sodium, Dissolved	280	5	2.1	NA	mg/L
MKTF-34	2/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/5/2020	Arsenic, Dissolved	0.00039	0.001	0.0001	10000	mg/L
MKTF-34	2/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/5/2020	Selenium, Dissolved	0.0015	0.001	0.00017	50000	mg/L
MKTF-34	2/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/5/2020	Uranium, Dissolved	0.017	0.0005	0.000075	NA	mg/L
MKTF-34	2/5/2020	Antimony, Total	0.00093	0.001	0.00039	6000	mg/L
MKTF-34	2/5/2020	Lead, Total	0.0009	0.0005	0.000055	15000	mg/L
MKTF-34	2/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	2/5/2020	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-34	2/5/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-34	2/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-34	2/5/2020	Barium, Total	0.18	0.002	0.00065	2000000	mg/L
MKTF-34	2/5/2020	Beryllium, Total	0.0003	0.002	0.00028	4000	mg/L
MKTF-34	2/5/2020	Boron, Total	0.25	0.04	0.0045	3949	mg/L
MKTF-34	2/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/5/2020	Iron, Total	0.92	0.02	0.0087	13822000	mg/L
MKTF-34	2/5/2020	Manganese, Total	0.03	0.002	0.00029	2017000	mg/L
MKTF-34	2/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/5/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/5/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
MKTF-34	2/5/2020	Zinc, Total	0.01	0.01	0.0058	5960000	mg/L
MKTF-34	2/5/2020	Aluminum, Total	1.4	0.1	0.012	19914000	mg/L
MKTF-34	2/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	9/16/2020	Mercury, Total	0.0013	0.0002	0.00012	2000	mg/L
MKTF-34	9/16/2020	Barium, Total	0.52	0.015	0.0082	2000000	mg/L
MKTF-34	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-34	9/16/2020	Boron, Total	0.5	0.2	0.037	3949	mg/L
MKTF-34	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-34	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-34	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-34	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-34	9/16/2020	Manganese, Total	0.41	0.01	0.0041	2017000	mg/L
MKTF-34	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-34	9/16/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
MKTF-34	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-34	9/16/2020	Zinc, Total	0.15	0.05	0.032	5960000	mg/L
MKTF-34	9/16/2020	Aluminum, Total	19	2	0.74	19914000	mg/L
MKTF-34	9/16/2020	Iron, Total	21	5	1.3	13822000	mg/L
MKTF-34	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-34	9/16/2020	Arsenic, Total	0.0068	0.001	0.00026	10000	mg/L
MKTF-34	9/16/2020	Lead, Total	0.018	0.0005	0.000034	15000	mg/L
MKTF-34	9/16/2020	Selenium, Total	0.0082	0.001	0.00066	50000	mg/L
MKTF-34	9/16/2020	Thallium, Total	0.00041	0.00025	0.00025	2000	mg/L
MKTF-34	9/16/2020	Uranium, Total	0.027	0.0025	0.00033	30000	mg/L
MKTF-34	9/16/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
MKTF-34	9/16/2020	Arsenic, Dissolved	ND	0.01	0.0021	10000	mg/L
MKTF-34	9/16/2020	Lead, Dissolved	0.0025	0.005	0.00034	NA	mg/L
MKTF-34	9/16/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
MKTF-34	9/16/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
MKTF-34	9/16/2020	Uranium, Dissolved	0.021	0.005	0.00065	NA	mg/L
MKTF-34	9/16/2020	Iron, Dissolved	1.9	0.1	0.052	13821880	mg/L
MKTF-34	9/16/2020	Barium, Dissolved	0.18	0.002	0.0011	2000000	mg/L
MKTF-34	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-34	9/16/2020	Boron, Dissolved	0.46	0.04	0.0067	3949110	mg/L
MKTF-34	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-34	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-34	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-34	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-34	9/16/2020	Magnesium, Dissolved	22	1	0.067	NA	mg/L
MKTF-34	9/16/2020	Manganese, Dissolved	0.078	0.002	0.00058	2017400	mg/L
MKTF-34	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-34	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-34	9/16/2020	Silver, Dissolved	0.0014	0.005	0.0013	81200	mg/L
MKTF-34	9/16/2020	Zinc, Dissolved	0.031	0.01	0.006	5960450	mg/L
MKTF-34	9/16/2020	Aluminum, Dissolved	1.4	0.1	0.028	19913930	mg/L
MKTF-34	9/16/2020	Calcium, Dissolved	100	5	0.57	NA	mg/L
MKTF-34	9/16/2020	Sodium, Dissolved	380	50	6.9	NA	mg/L
MKTF-34	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-34	8/19/2019	Antimony, Dissolved	0.0009	0.001	0.000389	6000	mg/L
MKTF-34	8/19/2019	Arsenic, Dissolved	0.00044	0.001	0.000101	10000	mg/L
MKTF-34	8/19/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-34	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	8/19/2019	Boron, Dissolved	0.41	0.04	0.004531	3949110	mg/L
MKTF-34	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	8/19/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-34	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	8/19/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-34	8/19/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-34	8/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	8/19/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-34	8/19/2019	Manganese, Dissolved	ND	0.002	0.00029	2017400	mg/L
MKTF-34	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	8/19/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	8/19/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	8/19/2019	Selenium, Dissolved	0.0014	0.001	0.000171	50000	mg/L
MKTF-34	8/19/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-34	8/19/2019	Sodium, Dissolved	450	5	2.080881	NA	mg/L
MKTF-34	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	8/19/2019	Uranium, Dissolved	0.019	0.0005	0.000075	NA	mg/L
MKTF-34	8/19/2019	Zinc, Dissolved	0.0085	0.01	0.002252	5960450	mg/L
MKTF-34	8/19/2019	Aluminum, Total	4.1	0.1	0.012441	19914000	mg/L
MKTF-34	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-34	8/19/2019	Arsenic, Total	0.00095	0.001	0.000312	10000	mg/L
MKTF-34	8/19/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-34	8/19/2019	Beryllium, Total	0.00031	0.002	0.000284	4000	mg/L
MKTF-34	8/19/2019	Boron, Total	0.43	0.04	0.004531	3949	mg/L
MKTF-34	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	8/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	8/19/2019	Iron, Total	2	0.1	0.043734	13822000	mg/L
MKTF-34	8/19/2019	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
MKTF-34	8/19/2019	Manganese, Total	0.045	0.002	0.00029	2017000	mg/L
MKTF-34	8/19/2019	Mercury, Total	0.000099	0.0002	0.000038	2000	mg/L
MKTF-34	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	8/19/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-34	8/19/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-34	8/19/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-34	8/19/2019	Thallium, Total	0.000089	0.0005	0.000052	2000	mg/L
MKTF-34	8/19/2019	Uranium, Total	0.02	0.0005	0.000085	30000	mg/L
MKTF-34	8/19/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-34	10/29/2019	Selenium, Total	0.0044	0.005	0.00239	50000	mg/L
MKTF-34	10/29/2019	Selenium, Total	0.0029	0.001	0.000171	50000	mg/L
MKTF-34	10/29/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-34	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-34	10/29/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-34	10/29/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-34	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-34	10/29/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-34	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	10/29/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
MKTF-34	10/29/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
MKTF-34	10/29/2019	Manganese, Total	0.033	0.002	0.00029	2017000	mg/L
MKTF-34	10/29/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-34	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	10/29/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-34	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	10/29/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-34	10/29/2019	Aluminum, Dissolved	0.0045	0.02	0.002488	19913930	mg/L
MKTF-34	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-34	10/29/2019	Arsenic, Dissolved	0.00053	0.001	0.000101	10000	mg/L
MKTF-34	10/29/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
MKTF-34	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	10/29/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
MKTF-34	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	10/29/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-34	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-34	10/29/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-34	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	10/29/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-34	10/29/2019	Manganese, Dissolved	0.00044	0.002	0.00029	2017400	mg/L
MKTF-34	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	10/29/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	10/29/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-34	10/29/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
MKTF-34	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	10/29/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
MKTF-34	5/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-34	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-34	5/9/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-34	5/9/2019	Barium, Dissolved	0.23	0.002	0.000648	2000000	mg/L
MKTF-34	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	5/9/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-34	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	5/9/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-34	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-34	5/9/2019	Iron, Dissolved	0.021	0.02	0.008747	13821880	mg/L
MKTF-34	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-34	5/9/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-34	5/9/2019	Manganese, Dissolved	0.00082	0.002	0.00029	2017400	mg/L
MKTF-34	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	5/9/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-34	5/9/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-34	5/9/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
MKTF-34	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-34	5/9/2019	Uranium, Dissolved	0.015	0.0025	0.000374	NA	mg/L
MKTF-34	5/9/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-34	5/9/2019	Aluminum, Total	0.97	0.02	0.002488	19914000	mg/L
MKTF-34	5/9/2019	Antimony, Total	0.00063	0.001	0.000389	6000	mg/L
MKTF-34	5/9/2019	Arsenic, Total	0.00065	0.001	0.000312	10000	mg/L
MKTF-34	5/9/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-34	5/9/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-34	5/9/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-34	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	5/9/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	5/9/2019	Iron, Total	0.94	0.1	0.043734	13822000	mg/L
MKTF-34	5/9/2019	Lead, Total	0.00089	0.0005	0.000055	15000	mg/L
MKTF-34	5/9/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
MKTF-34	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-34	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	5/9/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-34	5/9/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-34	5/9/2019	Silver, Total	0.0036	0.005	0.001418	50000	mg/L
MKTF-34	5/9/2019	Thallium, Total	0.00011	0.0005	0.000052	2000	mg/L
MKTF-34	5/9/2019	Uranium, Total	0.015	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-34	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-34	11/17/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
MKTF-34	11/17/2014	Barium, Total	0.17	0.002	0.0005	2000000	mg/L
MKTF-34	11/17/2014	Calcium, Total	63	1	0.082	NA	mg/L
MKTF-34	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-34	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-34	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-34	11/17/2014	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-34	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-34	11/17/2014	Potassium, Total	1.8	1	0.093	NA	mg/L
MKTF-34	11/17/2014	Magnesium, Total	14	1	0.018	NA	mg/L
MKTF-34	11/17/2014	Manganese, Total	0.075	0.002	0.00049	2017000	mg/L
MKTF-34	11/17/2014	Sodium, Total	360	10	3.9	NA	mg/L
MKTF-34	11/17/2014	Lead, Total	0.0014	0.001	0.00026	15000	mg/L
MKTF-34	11/17/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
MKTF-34	11/17/2014	Uranium, Total	0.026	0.001	0.0000072	30000	mg/L
MKTF-34	11/17/2014	Zinc, Total	0.037	0.01	0.0035	5960000	mg/L
MKTF-34	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	3/12/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-34	3/12/2015	Barium, Total	0.25	0.002	0.00073	2000000	mg/L
MKTF-34	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-34	3/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	3/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	3/12/2015	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-34	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	3/12/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
MKTF-34	3/12/2015	Lead, Total	0.0045	0.001	0.000069	15000	mg/L
MKTF-34	3/12/2015	Selenium, Total	0.013	0.01	0.0012	50000	mg/L
MKTF-34	3/12/2015	Uranium, Total	0.028	0.001	0.0000081	30000	mg/L
MKTF-34	3/12/2015	Zinc, Total	0.059	0.01	0.0036	5960000	mg/L
MKTF-34	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	6/8/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
MKTF-34	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	6/8/2015	Iron, Total	2.3	0.1	0.036	13822000	mg/L
MKTF-34	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	6/8/2015	Manganese, Total	0.066	0.002	0.0015	2017000	mg/L
MKTF-34	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-34	6/8/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-34	6/8/2015	Uranium, Total	0.028	0.0025	0.000025	30000	mg/L
MKTF-34	6/8/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-34	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	8/18/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	8/18/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-34	8/18/2015	Calcium, Total	60	1	0.057	NA	mg/L
MKTF-34	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	8/18/2015	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-34	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-34	8/18/2015	Magnesium, Total	14	1	0.039	NA	mg/L
MKTF-34	8/18/2015	Manganese, Total	0.074	0.002	0.0015	2017000	mg/L
MKTF-34	8/18/2015	Sodium, Total	380	5	0.36	NA	mg/L
MKTF-34	8/18/2015	Lead, Total	0.0027	0.0005	0.000047	15000	mg/L
MKTF-34	8/18/2015	Selenium, Total	0.0086	0.005	0.00062	50000	mg/L
MKTF-34	8/18/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-34	8/18/2015	Zinc, Total	0.03	0.01	0.0039	5960000	mg/L
MKTF-34	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-34	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-34	11/3/2015	Barium, Total	0.12	0.002	0.0013	2000000	mg/L
MKTF-34	11/3/2015	Calcium, Total	57	1	0.26	NA	mg/L
MKTF-34	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-34	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-34	11/3/2015	Iron, Total	ND	0.02	0.0091	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	11/3/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-34	11/3/2015	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	11/3/2015	Manganese, Total	ND	0.002	0.00032	2017000	mg/L
MKTF-34	11/3/2015	Sodium, Total	350	5	0.48	NA	mg/L
MKTF-34	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-34	11/3/2015	Selenium, Total	ND	0.02	0.0039	50000	mg/L
MKTF-34	11/3/2015	Uranium, Total	0.027	0.01	0.000096	30000	mg/L
MKTF-34	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-34	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	2/25/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	2/25/2016	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-34	2/25/2016	Calcium, Total	63	1	0.26	NA	mg/L
MKTF-34	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	2/25/2016	Iron, Total	1.6	0.1	0.036	13822000	mg/L
MKTF-34	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-34	2/25/2016	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-34	2/25/2016	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	2/25/2016	Manganese, Total	0.044	0.002	0.0015	2017000	mg/L
MKTF-34	2/25/2016	Sodium, Total	340	5	0.48	NA	mg/L
MKTF-34	2/25/2016	Lead, Total	0.0016	0.0005	0.000047	15000	mg/L
MKTF-34	2/25/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-34	2/25/2016	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-34	2/25/2016	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-34	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-34	6/10/2016	Arsenic, Total	0.0046	0.005	0.00069	10000	mg/L
MKTF-34	6/10/2016	Barium, Total	0.1	0.002	0.0013	2000000	mg/L
MKTF-34	6/10/2016	Calcium, Total	61	1	0.26	NA	mg/L
MKTF-34	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-34	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-34	6/10/2016	Iron, Total	0.041	0.02	0.0091	13822000	mg/L
MKTF-34	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-34	6/10/2016	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-34	6/10/2016	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	6/10/2016	Manganese, Total	0.0017	0.002	0.00032	2017000	mg/L
MKTF-34	6/10/2016	Sodium, Total	370	5	0.48	NA	mg/L
MKTF-34	6/10/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
MKTF-34	6/10/2016	Selenium, Total	0.018	0.02	0.0042	50000	mg/L
MKTF-34	6/10/2016	Uranium, Total	0.03	0.0025	0.00026	30000	mg/L
MKTF-34	6/10/2016	Zinc, Total	0.0037	0.01	0.0028	5960000	mg/L
MKTF-34	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	9/13/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-34	9/13/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-34	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-34	9/13/2016	Arsenic, Dissolved	0.0042	0.005	0.00069	10000	mg/L
MKTF-34	9/13/2016	Barium, Dissolved	0.11	0.002	0.0013	2000000	mg/L
MKTF-34	9/13/2016	Calcium, Dissolved	62	5	2.5	NA	mg/L
MKTF-34	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-34	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-34	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-34	9/13/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	9/13/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-34	9/13/2016	Magnesium, Dissolved	15	1	0.5	NA	mg/L
MKTF-34	9/13/2016	Manganese, Dissolved	0.00053	0.002	0.00032	2017400	mg/L
MKTF-34	9/13/2016	Sodium, Dissolved	380	5	2.5	NA	mg/L
MKTF-34	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	9/13/2016	Selenium, Dissolved	0.016	0.02	0.0042	50000	mg/L
MKTF-34	9/13/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-34	9/13/2016	Zinc, Dissolved	0.0032	0.01	0.0028	5960450	mg/L
MKTF-34	9/13/2016	Iron, Total	0.62	0.02	0.02	13822000	mg/L
MKTF-34	9/13/2016	Mercury, Total	0.00015	0.0002	0.000053	2000	mg/L
MKTF-34	9/13/2016	Manganese, Total	0.014	0.002	0.00027	2017000	mg/L
MKTF-34	9/13/2016	Lead, Total	0.0008	0.0005	0.000081	15000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-34	9/13/2016	Uranium, Total	0.034	0.0025	0.00087	30000	mg/L
MKTF-34	9/13/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
MKTF-34	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	11/8/2016	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
MKTF-34	11/8/2016	Barium, Total	0.085	0.002	0.00079	2000000	mg/L
MKTF-34	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-34	11/8/2016	Arsenic, Dissolved	0.003	0.005	0.00069	10000	mg/L
MKTF-34	11/8/2016	Barium, Dissolved	0.057	0.002	0.0013	2000000	mg/L
MKTF-34	11/8/2016	Calcium, Dissolved	53	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-34	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-34	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-34	11/8/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	11/8/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Manganese, Dissolved	0.00035	0.002	0.00032	2017400	mg/L
MKTF-34	11/8/2016	Sodium, Dissolved	390	5	2.5	NA	mg/L
MKTF-34	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	11/8/2016	Selenium, Dissolved	0.0077	0.02	0.0042	50000	mg/L
MKTF-34	11/8/2016	Uranium, Dissolved	0.036	0.0025	0.00026	NA	mg/L
MKTF-34	11/8/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-34	11/8/2016	Iron, Total	0.66	0.02	0.02	13822000	mg/L
MKTF-34	11/8/2016	Mercury, Total	0.00024	0.0002	0.000053	2000	mg/L
MKTF-34	11/8/2016	Manganese, Total	0.017	0.002	0.00027	2017000	mg/L
MKTF-34	11/8/2016	Lead, Total	0.00087	0.0005	0.000081	15000	mg/L
MKTF-34	11/8/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
MKTF-34	11/8/2016	Uranium, Total	0.038	0.0025	0.00087	30000	mg/L
MKTF-34	11/8/2016	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
MKTF-34	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	3/1/2017	Arsenic, Total	0.0034	0.005	0.0011	10000	mg/L
MKTF-34	3/1/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-34	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-34	3/1/2017	Arsenic, Dissolved	0.0025	0.005	0.00069	10000	mg/L
MKTF-34	3/1/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-34	3/1/2017	Calcium, Dissolved	69	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-34	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	3/1/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	3/1/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Magnesium, Dissolved	16	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Manganese, Dissolved	0.00076	0.002	0.00038	2017400	mg/L
MKTF-34	3/1/2017	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-34	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	3/1/2017	Selenium, Dissolved	0.0045	0.02	0.0042	50000	mg/L
MKTF-34	3/1/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
MKTF-34	3/1/2017	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-34	3/1/2017	Mercury, Total	0.00018	0.0002	0.000037	2000	mg/L
MKTF-34	3/1/2017	Manganese, Total	0.049	0.002	0.00027	2017000	mg/L
MKTF-34	3/1/2017	Lead, Total	0.002	0.0005	0.000081	15000	mg/L
MKTF-34	3/1/2017	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-34	3/1/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-34	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-34	6/14/2017	Arsenic, Total	0.0019	0.005	0.0015	10000	mg/L
MKTF-34	6/14/2017	Barium, Total	0.099	0.002	0.00093	2000000	mg/L
MKTF-34	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	6/14/2017	Chromium, Total	0.0016	0.006	0.0011	50000	mg/L
MKTF-34	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-34	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-34	6/14/2017	Arsenic, Dissolved	0.0015	0.005	0.00089	10000	mg/L
MKTF-34	6/14/2017	Barium, Dissolved	0.072	0.002	0.00085	2000000	mg/L
MKTF-34	6/14/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-34	6/14/2017	Copper, Dissolved	0.019	0.006	0.0032	790000	mg/L
MKTF-34	6/14/2017	Iron, Dissolved	0.033	0.02	0.016	13821880	mg/L
MKTF-34	6/14/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-34	6/14/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
MKTF-34	6/14/2017	Manganese, Dissolved	0.00099	0.002	0.00038	2017400	mg/L
MKTF-34	6/14/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
MKTF-34	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-34	6/14/2017	Zinc, Dissolved	0.01	0.01	0.0011	5960450	mg/L
MKTF-34	6/14/2017	Iron, Total	1.6	0.2	0.1	13822000	mg/L
MKTF-34	6/14/2017	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
MKTF-34	6/14/2017	Manganese, Total	0.037	0.002	0.0011	2017000	mg/L
MKTF-34	6/14/2017	Lead, Total	0.0017	0.0005	0.000095	15000	mg/L
MKTF-34	6/14/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-34	6/14/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-34	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	9/26/2017	Arsenic, Total	0.004	0.005	0.0015	10000	mg/L
MKTF-34	9/26/2017	Barium, Total	0.12	0.002	0.00093	2000000	mg/L
MKTF-34	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	9/26/2017	Chromium, Total	0.0032	0.006	0.0018	50000	mg/L
MKTF-34	9/26/2017	Copper, Total	0.0033	0.006	0.0017	790000	mg/L
MKTF-34	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	9/26/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-34	9/26/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
MKTF-34	9/26/2017	Calcium, Dissolved	66	1	0.078	NA	mg/L
MKTF-34	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	9/26/2017	Chromium, Dissolved	0.0015	0.006	0.0013	100000	mg/L
MKTF-34	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	9/26/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	9/26/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-34	9/26/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-34	9/26/2017	Manganese, Dissolved	0.00062	0.002	0.00039	2017400	mg/L
MKTF-34	9/26/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
MKTF-34	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	9/26/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-34	9/26/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-34	9/26/2017	Iron, Total	3.8	0.1	0.051	13822000	mg/L
MKTF-34	9/26/2017	Mercury, Total	0.00012	0.0002	0.000037	2000	mg/L
MKTF-34	9/26/2017	Manganese, Total	0.086	0.002	0.0011	2017000	mg/L
MKTF-34	9/26/2017	Lead, Total	0.0018	0.0005	0.000095	15000	mg/L
MKTF-34	9/26/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
MKTF-34	9/26/2017	Zinc, Total	0.032	0.01	0.0033	5960000	mg/L
MKTF-34	12/1/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	12/1/2017	Arsenic, Total	0.0016	0.001	0.00041	10000	mg/L
MKTF-34	12/1/2017	Barium, Total	0.093	0.002	0.001	2000000	mg/L
MKTF-34	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	12/1/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	12/1/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-34	12/1/2017	Barium, Dissolved	0.063	0.002	0.00099	2000000	mg/L
MKTF-34	12/1/2017	Calcium, Dissolved	61	1	0.078	NA	mg/L
MKTF-34	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	12/1/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	12/1/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-34	12/1/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-34	12/1/2017	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	12/1/2017	Sodium, Dissolved	390	5	0.82	NA	mg/L
MKTF-34	12/1/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-34	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-34	12/1/2017	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	12/1/2017	Zinc, Dissolved	0.0082	0.01	0.0021	5960450	mg/L
MKTF-34	12/1/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-34	12/1/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-34	12/1/2017	Manganese, Total	0.039	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	12/1/2017	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
MKTF-34	12/1/2017	Selenium, Total	0.0063	0.005	0.0049	50000	mg/L
MKTF-34	12/1/2017	Uranium, Total	0.038	0.0025	0.00077	30000	mg/L
MKTF-34	12/1/2017	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-34	2/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	2/16/2018	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
MKTF-34	2/16/2018	Barium, Total	0.083	0.002	0.001	2000000	mg/L
MKTF-34	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	2/16/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
MKTF-34	2/16/2018	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-34	2/16/2018	Calcium, Dissolved	51	1	0.078	NA	mg/L
MKTF-34	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	2/16/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	2/16/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-34	2/16/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-34	2/16/2018	Manganese, Dissolved	0.0025	0.002	0.00039	2017400	mg/L
MKTF-34	2/16/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	2/16/2018	Selenium, Dissolved	0.0067	0.005	0.0038	50000	mg/L
MKTF-34	2/16/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-34	2/16/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-34	2/16/2018	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-34	2/16/2018	Mercury, Total	0.00021	0.0002	0.000037	2000	mg/L
MKTF-34	2/16/2018	Manganese, Total	0.045	0.002	0.0011	2017000	mg/L
MKTF-34	2/16/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-34	2/16/2018	Selenium, Total	0.0053	0.001	0.00098	50000	mg/L
MKTF-34	2/16/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-34	2/16/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-34	5/4/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	5/4/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-34	5/4/2018	Barium, Total	0.049	0.002	0.001	2000000	mg/L
MKTF-34	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	5/4/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	5/4/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-34	5/4/2018	Barium, Dissolved	0.05	0.002	0.00099	2000000	mg/L
MKTF-34	5/4/2018	Calcium, Dissolved	64	1	0.078	NA	mg/L
MKTF-34	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	5/4/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	5/4/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-34	5/4/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-34	5/4/2018	Manganese, Dissolved	0.00041	0.002	0.00039	2017400	mg/L
MKTF-34	5/4/2018	Sodium, Dissolved	390	5	0.82	NA	mg/L
MKTF-34	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	5/4/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
MKTF-34	5/4/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	5/4/2018	Zinc, Dissolved	0.0061	0.01	0.0021	5960450	mg/L
MKTF-34	5/4/2018	Iron, Total	0.34	0.02	0.01	13822000	mg/L
MKTF-34	5/4/2018	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-34	5/4/2018	Manganese, Total	0.0078	0.002	0.0011	2017000	mg/L
MKTF-34	5/4/2018	Lead, Total	0.00033	0.0005	0.00023	15000	mg/L
MKTF-34	5/4/2018	Selenium, Total	0.0027	0.001	0.00098	50000	mg/L
MKTF-34	5/4/2018	Uranium, Total	0.037	0.0025	0.00034	30000	mg/L
MKTF-34	5/4/2018	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
MKTF-34	8/24/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-34	8/24/2018	Arsenic, Total	0.0016	0.001	0.00041	10000	mg/L
MKTF-34	8/24/2018	Barium, Total	0.06	0.002	0.001	2000000	mg/L
MKTF-34	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	8/24/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	8/24/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-34	8/24/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-34	8/24/2018	Calcium, Dissolved	59	1	0.078	NA	mg/L
MKTF-34	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	8/24/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	8/24/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-34	8/24/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-34	8/24/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	8/24/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	8/24/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
MKTF-34	8/24/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	8/24/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
MKTF-34	8/24/2018	Iron, Total	0.83	0.02	0.01	13822000	mg/L
MKTF-34	8/24/2018	Mercury, Total	0.0004	0.0002	0.000038	2000	mg/L
MKTF-34	8/24/2018	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
MKTF-34	8/24/2018	Lead, Total	0.00073	0.0005	0.00023	15000	mg/L
MKTF-34	8/24/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
MKTF-34	8/24/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
MKTF-34	8/24/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-34	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	11/28/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-34	11/28/2018	Barium, Total	0.053	0.002	0.001	2000000	mg/L
MKTF-34	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-34	11/28/2018	Barium, Dissolved	0.035	0.002	0.00099	2000000	mg/L
MKTF-34	11/28/2018	Calcium, Dissolved	58	1	0.078	NA	mg/L
MKTF-34	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	11/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	11/28/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-34	11/28/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-34	11/28/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	11/28/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	11/28/2018	Selenium, Dissolved	0.0022	0.001	0.00076	50000	mg/L
MKTF-34	11/28/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-34	11/28/2018	Iron, Total	0.63	0.02	0.01	13822000	mg/L
MKTF-34	11/28/2018	Manganese, Total	0.013	0.002	0.0011	2017000	mg/L
MKTF-34	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-34	11/28/2018	Selenium, Total	0.0022	0.001	0.00098	50000	mg/L
MKTF-34	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-35	5/16/2019	Aluminum, Dissolved	0.077	0.02	0.002488	19913930	mg/L
MKTF-35	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Dissolved	0.0004	0.001	0.000101	10000	mg/L
MKTF-35	5/16/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Dissolved	0.24	0.04	0.004531	3949110	mg/L
MKTF-35	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	5/16/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-35	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
MKTF-35	5/16/2019	Iron, Dissolved	3.6	0.1	0.043734	13821880	mg/L
MKTF-35	5/16/2019	Lead, Dissolved	0.00031	0.0005	0.000055	NA	mg/L
MKTF-35	5/16/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
MKTF-35	5/16/2019	Manganese, Dissolved	3.3	0.01	0.00145	2017400	mg/L
MKTF-35	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Dissolved	0.0067	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Potassium, Dissolved	0.35	1	0.162288	NA	mg/L
MKTF-35	5/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	5/16/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-35	5/16/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	5/16/2019	Uranium, Dissolved	0.0032	0.0005	0.000075	NA	mg/L
MKTF-35	5/16/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Total	1.5	0.1	0.012441	19914000	mg/L
MKTF-35	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-35	5/16/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Total	0.00043	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Total	0.23	0.04	0.004531	3949	mg/L
MKTF-35	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-35	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	5/16/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-35	5/16/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-35	5/16/2019	Manganese, Total	3.7	0.01	0.00145	2017000	mg/L
MKTF-35	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Selenium, Total	0.00064	0.001	0.000478	50000	mg/L
MKTF-35	5/16/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-35	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	5/16/2019	Uranium, Total	0.0038	0.0005	0.000085	30000	mg/L
MKTF-35	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-35	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Total	0.0022	0.005	0.001561	10000	mg/L
MKTF-35	10/29/2019	Barium, Total	2.7	0.01	0.003242	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-35	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	10/29/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-35	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	10/29/2019	Iron, Total	8.3	0.4	0.174937	13822000	mg/L
MKTF-35	10/29/2019	Lead, Total	0.0062	0.0005	0.000055	15000	mg/L
MKTF-35	10/29/2019	Manganese, Total	3.5	0.01	0.00145	2017000	mg/L
MKTF-35	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Total	0.0087	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-35	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	10/29/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Dissolved	0.028	0.02	0.002488	19913930	mg/L
MKTF-35	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Dissolved	0.00043	0.001	0.000101	10000	mg/L
MKTF-35	10/29/2019	Barium, Dissolved	0.48	0.002	0.000648	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-35	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-35	10/29/2019	Iron, Dissolved	3.4	0.1	0.043734	13821880	mg/L
MKTF-35	10/29/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
MKTF-35	10/29/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-35	10/29/2019	Manganese, Dissolved	2.9	0.01	0.00145	2017400	mg/L
MKTF-35	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Dissolved	0.0056	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-35	10/29/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-35	10/29/2019	Sodium, Dissolved	200	5	2.080881	NA	mg/L
MKTF-35	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	10/29/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Dissolved	0.034	0.02	0.002488	19913930	mg/L
MKTF-35	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Dissolved	0.0004	0.001	0.000101	10000	mg/L
MKTF-35	5/16/2019	Barium, Dissolved	0.42	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Dissolved	0.24	0.04	0.004531	3949110	mg/L
MKTF-35	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	5/16/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-35	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Dissolved	0.0072	0.006	0.001296	790000	mg/L
MKTF-35	5/16/2019	Iron, Dissolved	3.6	0.1	0.043734	13821880	mg/L
MKTF-35	5/16/2019	Lead, Dissolved	0.00025	0.0005	0.000055	NA	mg/L
MKTF-35	5/16/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
MKTF-35	5/16/2019	Manganese, Dissolved	3.3	0.01	0.00145	2017400	mg/L
MKTF-35	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Potassium, Dissolved	0.41	1	0.162288	NA	mg/L
MKTF-35	5/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	5/16/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-35	5/16/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L
MKTF-35	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	5/16/2019	Uranium, Dissolved	0.0031	0.0005	0.000075	NA	mg/L
MKTF-35	5/16/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Total	1.8	0.1	0.012441	19914000	mg/L
MKTF-35	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-35	5/16/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Total	0.00053	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Total	0.23	0.04	0.004531	3949	mg/L
MKTF-35	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-35	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	5/16/2019	Iron, Total	4.8	0.1	0.043734	13822000	mg/L
MKTF-35	5/16/2019	Lead, Total	0.0051	0.0005	0.000055	15000	mg/L
MKTF-35	5/16/2019	Manganese, Total	4	0.01	0.00145	2017000	mg/L
MKTF-35	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Total	0.0093	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Selenium, Total	0.00088	0.001	0.000478	50000	mg/L
MKTF-35	5/16/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
MKTF-35	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	5/16/2019	Uranium, Total	0.0042	0.0005	0.000085	30000	mg/L
MKTF-35	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Total	18	0.4	0.049765	19914000	mg/L
MKTF-35	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-35	10/29/2019	Barium, Total	4	0.01	0.003242	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Total	0.00076	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-35	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	10/29/2019	Chromium, Total	0.0047	0.006	0.001533	50000	mg/L
MKTF-35	10/29/2019	Cobalt, Total	0.0055	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Total	0.005	0.006	0.004072	790000	mg/L
MKTF-35	10/29/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-35	10/29/2019	Lead, Total	0.0095	0.0005	0.000055	15000	mg/L
MKTF-35	10/29/2019	Manganese, Total	3.8	0.01	0.00145	2017000	mg/L
MKTF-35	10/29/2019	Mercury, Total	0.000063	0.0002	0.000038	2000	mg/L
MKTF-35	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-35	10/29/2019	Thallium, Total	0.000069	0.0005	0.000052	2000	mg/L
MKTF-35	10/29/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Dissolved	0.07	0.02	0.002488	19913930	mg/L
MKTF-35	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Dissolved	0.00045	0.001	0.000101	10000	mg/L
MKTF-35	10/29/2019	Barium, Dissolved	0.52	0.002	0.000648	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-35	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-35	10/29/2019	Iron, Dissolved	3.3	0.1	0.043734	13821880	mg/L
MKTF-35	10/29/2019	Lead, Dissolved	0.00024	0.0005	0.000055	NA	mg/L
MKTF-35	10/29/2019	Magnesium, Dissolved	43	1	0.05029	NA	mg/L
MKTF-35	10/29/2019	Manganese, Dissolved	2.9	0.01	0.00145	2017400	mg/L
MKTF-35	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-35	10/29/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
MKTF-35	10/29/2019	Sodium, Dissolved	200	5	2.080881	NA	mg/L
MKTF-35	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	10/29/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-35	10/29/2019	Selenium, Total	0.00018	0.001	0.000171	50000	mg/L
MKTF-35	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-35	8/19/2019	Antimony, Dissolved	0.00045	0.001	0.000389	6000	mg/L
MKTF-35	8/19/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
MKTF-35	8/19/2019	Barium, Dissolved	0.51	0.002	0.000648	2000000	mg/L
MKTF-35	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-35	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	8/19/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	8/19/2019	Copper, Dissolved	0.0014	0.006	0.001296	790000	mg/L
MKTF-35	8/19/2019	Iron, Dissolved	3.1	0.1	0.043734	13821880	mg/L
MKTF-35	8/19/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-35	8/19/2019	Magnesium, Dissolved	39	1	0.05029	NA	mg/L
MKTF-35	8/19/2019	Manganese, Dissolved	2.8	0.01	0.00145	2017400	mg/L
MKTF-35	8/19/2019	Molybdenum, Dissolved	0.008	0.008	0.006735	98700	mg/L
MKTF-35	8/19/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-35	8/19/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
MKTF-35	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	8/19/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-35	8/19/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-35	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	8/19/2019	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L
MKTF-35	8/19/2019	Zinc, Dissolved	0.0091	0.01	0.002252	5960450	mg/L
MKTF-35	8/19/2019	Aluminum, Total	16	0.4	0.049765	19914000	mg/L
MKTF-35	8/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-35	8/19/2019	Arsenic, Total	0.004	0.001	0.000312	10000	mg/L
MKTF-35	8/19/2019	Barium, Total	3.3	0.01	0.003242	2000000	mg/L
MKTF-35	8/19/2019	Beryllium, Total	0.00093	0.002	0.000284	4000	mg/L
MKTF-35	8/19/2019	Boron, Total	0.31	0.04	0.004531	3949	mg/L
MKTF-35	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	8/19/2019	Chromium, Total	0.0052	0.006	0.001533	50000	mg/L
MKTF-35	8/19/2019	Cobalt, Total	0.0049	0.006	0.003091	5980	mg/L
MKTF-35	8/19/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
MKTF-35	8/19/2019	Iron, Total	9.8	0.4	0.174937	13822000	mg/L
MKTF-35	8/19/2019	Lead, Total	0.011	0.0005	0.000055	15000	mg/L
MKTF-35	8/19/2019	Manganese, Total	4	0.01	0.00145	2017000	mg/L
MKTF-35	8/19/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-35	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	8/19/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-35	8/19/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-35	8/19/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-35	8/19/2019	Thallium, Total	0.00015	0.0005	0.000052	2000	mg/L
MKTF-35	8/19/2019	Uranium, Total	0.0089	0.0005	0.000085	30000	mg/L
MKTF-35	8/19/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-35	9/16/2020	Mercury, Total	0.0002	0.0002	0.00012	2000	mg/L
MKTF-35	9/16/2020	Barium, Total	4.3	0.015	0.0082	2000000	mg/L
MKTF-35	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-35	9/16/2020	Boron, Total	0.35	0.2	0.037	3949	mg/L
MKTF-35	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-35	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-35	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-35	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-35	9/16/2020	Manganese, Total	5	0.01	0.0041	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-35	9/16/2020	Nickel, Total	0.019	0.05	0.016	372000	mg/L
MKTF-35	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-35	9/16/2020	Zinc, Total	0.037	0.05	0.032	5960000	mg/L
MKTF-35	9/16/2020	Aluminum, Total	22	2	0.74	19914000	mg/L
MKTF-35	9/16/2020	Iron, Total	13	5	1.3	13822000	mg/L
MKTF-35	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Total	0.0038	0.001	0.00026	10000	mg/L
MKTF-35	9/16/2020	Lead, Total	0.015	0.0005	0.000034	15000	mg/L
MKTF-35	9/16/2020	Selenium, Total	0.003	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-35	9/16/2020	Uranium, Total	0.0041	0.0005	0.000065	30000	mg/L
MKTF-35	9/16/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Dissolved	ND	0.01	0.0021	10000	mg/L
MKTF-35	9/16/2020	Lead, Dissolved	0.00059	0.005	0.00034	NA	mg/L
MKTF-35	9/16/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
MKTF-35	9/16/2020	Uranium, Dissolved	0.00087	0.005	0.00065	NA	mg/L
MKTF-35	9/16/2020	Aluminum, Dissolved	0.18	0.02	0.0056	19913930	mg/L
MKTF-35	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-35	9/16/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
MKTF-35	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-35	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-35	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-35	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-35	9/16/2020	Magnesium, Dissolved	48	1	0.067	NA	mg/L
MKTF-35	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-35	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-35	9/16/2020	Potassium, Dissolved	0.5	1	0.16	NA	mg/L
MKTF-35	9/16/2020	Silver, Dissolved	0.0027	0.005	0.0013	81200	mg/L
MKTF-35	9/16/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
MKTF-35	9/16/2020	Calcium, Dissolved	180	5	0.57	NA	mg/L
MKTF-35	9/16/2020	Sodium, Dissolved	200	5	0.69	NA	mg/L
MKTF-35	9/16/2020	Barium, Dissolved	2.6	0.1	0.056	2000000	mg/L
MKTF-35	9/16/2020	Iron, Dissolved	4.2	1	0.52	13821880	mg/L
MKTF-35	9/16/2020	Manganese, Dissolved	3.1	0.1	0.029	2017400	mg/L
MKTF-35	9/16/2020	Mercury, Total	0.00019	0.0002	0.00012	2000	mg/L
MKTF-35	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-35	9/16/2020	Boron, Total	0.38	0.2	0.037	3949	mg/L
MKTF-35	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-35	9/16/2020	Chromium, Total	0.017	0.03	0.011	50000	mg/L
MKTF-35	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-35	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-35	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-35	9/16/2020	Nickel, Total	0.017	0.05	0.016	372000	mg/L
MKTF-35	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-35	9/16/2020	Zinc, Total	0.041	0.05	0.032	5960000	mg/L
MKTF-35	9/16/2020	Aluminum, Total	43	2	0.74	19914000	mg/L
MKTF-35	9/16/2020	Barium, Total	5.9	0.3	0.16	2000000	mg/L
MKTF-35	9/16/2020	Iron, Total	22	5	1.3	13822000	mg/L
MKTF-35	9/16/2020	Manganese, Total	5.7	0.2	0.081	2017000	mg/L
MKTF-35	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Total	0.0064	0.001	0.00026	10000	mg/L
MKTF-35	9/16/2020	Lead, Total	0.022	0.0005	0.000034	15000	mg/L
MKTF-35	9/16/2020	Selenium, Total	0.0045	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-35	9/16/2020	Uranium, Total	0.0049	0.0005	0.000065	30000	mg/L
MKTF-35	9/16/2020	Antimony, Dissolved	0.0017	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Dissolved	0.00064	0.001	0.00021	10000	mg/L
MKTF-35	9/16/2020	Lead, Dissolved	0.00033	0.0005	0.000034	NA	mg/L
MKTF-35	9/16/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-35	9/16/2020	Uranium, Dissolved	0.001	0.0005	0.000065	NA	mg/L
MKTF-35	9/16/2020	Aluminum, Dissolved	0.088	0.02	0.0056	19913930	mg/L
MKTF-35	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-35	9/16/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
MKTF-35	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-35	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-35	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-35	9/16/2020	Magnesium, Dissolved	49	1	0.067	NA	mg/L
MKTF-35	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-35	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-35	9/16/2020	Potassium, Dissolved	0.57	1	0.16	NA	mg/L
MKTF-35	9/16/2020	Silver, Dissolved	0.0025	0.005	0.0013	81200	mg/L
MKTF-35	9/16/2020	Zinc, Dissolved	0.1	0.01	0.006	5960450	mg/L
MKTF-35	9/16/2020	Barium, Dissolved	2.8	0.01	0.0056	2000000	mg/L
MKTF-35	9/16/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
MKTF-35	9/16/2020	Iron, Dissolved	4	0.1	0.052	13821880	mg/L
MKTF-35	9/16/2020	Manganese, Dissolved	3	0.01	0.0029	2017400	mg/L
MKTF-35	9/16/2020	Sodium, Dissolved	200	5	0.69	NA	mg/L
MKTF-35	2/6/2020	Aluminum, Dissolved	0.048	0.02	0.0025	19913930	mg/L
MKTF-35	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Dissolved	0.38	0.04	0.0045	3949110	mg/L
MKTF-35	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-35	2/6/2020	Calcium, Dissolved	88	1	0.062	NA	mg/L
MKTF-35	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-35	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Dissolved	0.004	0.006	0.0013	790000	mg/L
MKTF-35	2/6/2020	Iron, Dissolved	0.065	0.02	0.0087	13821880	mg/L
MKTF-35	2/6/2020	Magnesium, Dissolved	23	1	0.05	NA	mg/L
MKTF-35	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Potassium, Dissolved	0.59	1	0.16	NA	mg/L
MKTF-35	2/6/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
MKTF-35	2/6/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-35	2/6/2020	Barium, Dissolved	2.1	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Manganese, Dissolved	2	0.01	0.0014	2017400	mg/L
MKTF-35	2/6/2020	Sodium, Dissolved	280	5	2.1	NA	mg/L
MKTF-35	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Dissolved	0.00073	0.001	0.0001	10000	mg/L
MKTF-35	2/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-35	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-35	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	2/6/2020	Uranium, Dissolved	0.00066	0.0005	0.000075	NA	mg/L
MKTF-35	2/6/2020	Antimony, Total	0.0017	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Total	0.0013	0.001	0.00031	10000	mg/L
MKTF-35	2/6/2020	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
MKTF-35	2/6/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-35	2/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	2/6/2020	Uranium, Total	0.00072	0.0005	0.000085	30000	mg/L
MKTF-35	2/6/2020	Aluminum, Total	0.66	0.02	0.0025	19914000	mg/L
MKTF-35	2/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Total	0.38	0.04	0.0045	3949	mg/L
MKTF-35	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-35	2/6/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-35	2/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Silver, Total	0.0015	0.005	0.0014	50000	mg/L
MKTF-35	2/6/2020	Zinc, Total	0.006	0.01	0.0058	5960000	mg/L
MKTF-35	2/6/2020	Barium, Total	2.1	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Iron, Total	2.1	0.1	0.044	13822000	mg/L
MKTF-35	2/6/2020	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-35	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-35	2/6/2020	Aluminum, Dissolved	0.032	0.02	0.0025	19913930	mg/L
MKTF-35	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Dissolved	0.23	0.04	0.0045	3949110	mg/L
MKTF-35	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-35	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-35	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-35	2/6/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-35	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Potassium, Dissolved	0.48	1	0.16	NA	mg/L
MKTF-35	2/6/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
MKTF-35	2/6/2020	Barium, Dissolved	1.6	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-35	2/6/2020	Iron, Dissolved	2.8	0.1	0.044	13821880	mg/L
MKTF-35	2/6/2020	Manganese, Dissolved	2.8	0.01	0.0014	2017400	mg/L
MKTF-35	2/6/2020	Sodium, Dissolved	190	5	2.1	NA	mg/L
MKTF-35	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Dissolved	ND	0.001	0.0001	10000	mg/L
MKTF-35	2/6/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-35	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-35	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	2/6/2020	Uranium, Dissolved	0.0012	0.0005	0.000075	NA	mg/L
MKTF-35	2/6/2020	Lead, Total	0.0088	0.0005	0.000055	15000	mg/L
MKTF-35	2/6/2020	Thallium, Total	0.000098	0.0005	0.000052	2000	mg/L
MKTF-35	2/6/2020	Uranium, Total	0.0026	0.0005	0.000085	30000	mg/L
MKTF-35	2/6/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Total	0.0022	0.005	0.0016	10000	mg/L
MKTF-35	2/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-35	2/6/2020	Beryllium, Total	0.00098	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Total	0.24	0.04	0.0045	3949	mg/L
MKTF-35	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-35	2/6/2020	Chromium, Total	0.0079	0.006	0.0015	50000	mg/L
MKTF-35	2/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-35	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Total	0.0096	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Silver, Total	0.0017	0.005	0.0014	50000	mg/L
MKTF-35	2/6/2020	Zinc, Total	0.014	0.01	0.0058	5960000	mg/L
MKTF-35	2/6/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-35	2/6/2020	Iron, Total	9.9	0.2	0.087	13822000	mg/L
MKTF-35	2/6/2020	Aluminum, Total	18	0.4	0.05	19914000	mg/L
MKTF-35	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.001	0.000171	50000	mg/L
MKTF-35	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	3/17/2015	Arsenic, Total	0.004	0.001	0.00044	10000	mg/L
MKTF-35	3/17/2015	Barium, Total	8.2	0.02	0.0073	2000000	mg/L
MKTF-35	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-35	3/17/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
MKTF-35	3/17/2015	Copper, Total	0.025	0.006	0.0051	790000	mg/L
MKTF-35	3/17/2015	Iron, Total	15	1	0.36	13822000	mg/L
MKTF-35	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	3/17/2015	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
MKTF-35	3/17/2015	Lead, Total	0.034	0.001	0.000069	15000	mg/L
MKTF-35	3/17/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
MKTF-35	3/17/2015	Uranium, Total	0.0053	0.001	0.0000081	30000	mg/L
MKTF-35	3/17/2015	Zinc, Total	0.062	0.01	0.0036	5960000	mg/L
MKTF-35	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	6/4/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-35	6/4/2015	Barium, Total	0.36	0.002	0.00095	2000000	mg/L
MKTF-35	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-35	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-35	6/4/2015	Iron, Total	2.6	0.1	0.036	13822000	mg/L
MKTF-35	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	6/4/2015	Manganese, Total	3.1	0.01	0.0013	2017000	mg/L
MKTF-35	6/4/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-35	6/4/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-35	6/4/2015	Uranium, Total	ND	0.005	0.000024	30000	mg/L
MKTF-35	6/4/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-35	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	8/18/2015	Arsenic, Total	0.0038	0.001	0.00029	10000	mg/L
MKTF-35	8/18/2015	Barium, Total	8.7	0.02	0.011	2000000	mg/L
MKTF-35	8/18/2015	Calcium, Total	130	5	0.28	NA	mg/L
MKTF-35	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-35	8/18/2015	Chromium, Total	0.016	0.006	0.0022	50000	mg/L
MKTF-35	8/18/2015	Copper, Total	0.02	0.006	0.0051	790000	mg/L
MKTF-35	8/18/2015	Iron, Total	17	1	0.36	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	8/18/2015	Magnesium, Total	37	1	0.039	NA	mg/L
MKTF-35	8/18/2015	Manganese, Total	6.5	0.02	0.015	2017000	mg/L
MKTF-35	8/18/2015	Sodium, Total	190	5	0.36	NA	mg/L
MKTF-35	8/18/2015	Lead, Total	0.034	0.0005	0.000047	15000	mg/L
MKTF-35	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-35	8/18/2015	Uranium, Total	0.0054	0.0005	0.0000049	30000	mg/L
MKTF-35	8/18/2015	Zinc, Total	0.051	0.01	0.0039	5960000	mg/L
MKTF-35	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-35	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-35	11/3/2015	Barium, Total	0.57	0.002	0.0013	2000000	mg/L
MKTF-35	11/3/2015	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-35	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-35	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-35	11/3/2015	Iron, Total	2.6	0.1	0.045	13822000	mg/L
MKTF-35	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	11/3/2015	Magnesium, Total	36	1	0.013	NA	mg/L
MKTF-35	11/3/2015	Manganese, Total	3	0.01	0.0016	2017000	mg/L
MKTF-35	11/3/2015	Sodium, Total	180	5	0.48	NA	mg/L
MKTF-35	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-35	11/3/2015	Selenium, Total	0.0035	0.001	0.00019	50000	mg/L
MKTF-35	11/3/2015	Uranium, Total	0.0019	0.0005	0.0000048	30000	mg/L
MKTF-35	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-35	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	2/26/2016	Arsenic, Total	0.0018	0.001	0.00029	10000	mg/L
MKTF-35	2/26/2016	Barium, Total	3.3	0.02	0.011	2000000	mg/L
MKTF-35	2/26/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-35	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-35	2/26/2016	Chromium, Total	0.0087	0.006	0.0022	50000	mg/L
MKTF-35	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-35	2/26/2016	Iron, Total	9.1	0.4	0.14	13822000	mg/L
MKTF-35	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-35	2/26/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	2/26/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-35	2/26/2016	Manganese, Total	4.1	0.02	0.015	2017000	mg/L
MKTF-35	2/26/2016	Sodium, Total	150	5	0.48	NA	mg/L
MKTF-35	2/26/2016	Lead, Total	0.013	0.0005	0.000047	15000	mg/L
MKTF-35	2/26/2016	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MKTF-35	2/26/2016	Uranium, Total	0.0029	0.0005	0.0000049	30000	mg/L
MKTF-35	2/26/2016	Zinc, Total	0.026	0.01	0.0039	5960000	mg/L
MKTF-35	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-35	6/10/2016	Arsenic, Total	0.00061	0.001	0.00014	10000	mg/L
MKTF-35	6/10/2016	Barium, Total	0.37	0.002	0.0013	2000000	mg/L
MKTF-35	6/10/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-35	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-35	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-35	6/10/2016	Iron, Total	2.5	0.1	0.045	13822000	mg/L
MKTF-35	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-35	6/10/2016	Potassium, Total	0.47	1	0.18	NA	mg/L
MKTF-35	6/10/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-35	6/10/2016	Manganese, Total	2.7	0.01	0.0016	2017000	mg/L
MKTF-35	6/10/2016	Sodium, Total	150	5	0.48	NA	mg/L
MKTF-35	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-35	6/10/2016	Selenium, Total	0.0023	0.005	0.0011	50000	mg/L
MKTF-35	6/10/2016	Uranium, Total	0.0011	0.0005	0.000051	30000	mg/L
MKTF-35	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-35	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	9/13/2016	Arsenic, Total	0.0024	0.001	0.00021	10000	mg/L
MKTF-35	9/13/2016	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-35	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	9/13/2016	Chromium, Total	0.0045	0.006	0.0027	50000	mg/L
MKTF-35	9/13/2016	Copper, Total	0.0044	0.006	0.003	790000	mg/L
MKTF-35	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-35	9/13/2016	Arsenic, Dissolved	0.00089	0.001	0.00014	10000	mg/L
MKTF-35	9/13/2016	Barium, Dissolved	0.17	0.002	0.0013	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-35	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-35	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-35	9/13/2016	Iron, Dissolved	2.7	0.1	0.1	13821880	mg/L
MKTF-35	9/13/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	9/13/2016	Magnesium, Dissolved	35	1	0.5	NA	mg/L
MKTF-35	9/13/2016	Manganese, Dissolved	3.1	0.01	0.0016	2017400	mg/L
MKTF-35	9/13/2016	Sodium, Dissolved	140	5	2.5	NA	mg/L
MKTF-35	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	9/13/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
MKTF-35	9/13/2016	Uranium, Dissolved	0.001	0.0005	0.000051	NA	mg/L
MKTF-35	9/13/2016	Zinc, Dissolved	0.0032	0.01	0.0028	5960450	mg/L
MKTF-35	9/13/2016	Iron, Total	8.6	0.2	0.2	13822000	mg/L
MKTF-35	9/13/2016	Mercury, Total	0.000091	0.0002	0.000053	2000	mg/L
MKTF-35	9/13/2016	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-35	9/13/2016	Lead, Total	0.012	0.0005	0.000081	15000	mg/L
MKTF-35	9/13/2016	Selenium, Total	0.002	0.005	0.00094	50000	mg/L
MKTF-35	9/13/2016	Uranium, Total	0.0021	0.0005	0.00017	30000	mg/L
MKTF-35	9/13/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
MKTF-35	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	11/3/2016	Arsenic, Total	0.0035	0.001	0.00021	10000	mg/L
MKTF-35	11/3/2016	Barium, Total	1.2	0.02	0.0079	2000000	mg/L
MKTF-35	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	11/3/2016	Chromium, Total	0.011	0.006	0.0027	50000	mg/L
MKTF-35	11/3/2016	Copper, Total	0.012	0.006	0.003	790000	mg/L
MKTF-35	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-35	11/3/2016	Arsenic, Dissolved	0.00081	0.001	0.00014	10000	mg/L
MKTF-35	11/3/2016	Barium, Dissolved	0.23	0.002	0.0013	2000000	mg/L
MKTF-35	11/3/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-35	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-35	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-35	11/3/2016	Iron, Dissolved	3	0.1	0.1	13821880	mg/L
MKTF-35	11/3/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	11/3/2016	Magnesium, Dissolved	37	1	0.5	NA	mg/L
MKTF-35	11/3/2016	Manganese, Dissolved	2.9	0.01	0.0016	2017400	mg/L
MKTF-35	11/3/2016	Sodium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	11/3/2016	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-35	11/3/2016	Selenium, Dissolved	0.0014	0.005	0.0011	50000	mg/L
MKTF-35	11/3/2016	Uranium, Dissolved	0.00075	0.0005	0.000051	NA	mg/L
MKTF-35	11/3/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-35	11/3/2016	Iron, Total	22	1	1	13822000	mg/L
MKTF-35	11/3/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
MKTF-35	11/3/2016	Manganese, Total	5.5	0.02	0.0027	2017000	mg/L
MKTF-35	11/3/2016	Lead, Total	0.019	0.0005	0.000081	15000	mg/L
MKTF-35	11/3/2016	Selenium, Total	0.0024	0.005	0.00094	50000	mg/L
MKTF-35	11/3/2016	Uranium, Total	0.0039	0.0005	0.00017	30000	mg/L
MKTF-35	11/3/2016	Zinc, Total	0.039	0.01	0.0027	5960000	mg/L
MKTF-35	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	3/1/2017	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
MKTF-35	3/1/2017	Barium, Total	1.9	0.02	0.0079	2000000	mg/L
MKTF-35	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	3/1/2017	Chromium, Total	0.0055	0.006	0.0027	50000	mg/L
MKTF-35	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-35	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-35	3/1/2017	Arsenic, Dissolved	0.00072	0.005	0.00069	10000	mg/L
MKTF-35	3/1/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
MKTF-35	3/1/2017	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-35	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-35	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	3/1/2017	Iron, Dissolved	3.1	0.1	0.1	13821880	mg/L
MKTF-35	3/1/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	3/1/2017	Magnesium, Dissolved	41	1	0.5	NA	mg/L
MKTF-35	3/1/2017	Manganese, Dissolved	3.3	0.01	0.0019	2017400	mg/L
MKTF-35	3/1/2017	Sodium, Dissolved	120	5	2.5	NA	mg/L
MKTF-35	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	3/1/2017	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-35	3/1/2017	Iron, Total	8.6	0.2	0.2	13822000	mg/L
MKTF-35	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-35	3/1/2017	Manganese, Total	4.3	0.02	0.0027	2017000	mg/L
MKTF-35	3/1/2017	Lead, Total	0.0087	0.0005	0.000081	15000	mg/L
MKTF-35	3/1/2017	Selenium, Total	0.0029	0.001	0.00019	50000	mg/L
MKTF-35	3/1/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
MKTF-35	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-35	6/14/2017	Arsenic, Total	0.0023	0.005	0.0015	10000	mg/L
MKTF-35	6/14/2017	Barium, Total	3.9	0.01	0.0047	2000000	mg/L
MKTF-35	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	6/14/2017	Chromium, Total	0.0088	0.006	0.0011	50000	mg/L
MKTF-35	6/14/2017	Copper, Total	0.0097	0.006	0.0017	790000	mg/L
MKTF-35	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-35	6/14/2017	Arsenic, Dissolved	0.003	0.005	0.00089	10000	mg/L
MKTF-35	6/14/2017	Barium, Dissolved	0.13	0.002	0.00085	2000000	mg/L
MKTF-35	6/14/2017	Calcium, Dissolved	140	10	0.78	NA	mg/L
MKTF-35	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-35	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	6/14/2017	Iron, Dissolved	3.1	0.2	0.16	13821880	mg/L
MKTF-35	6/14/2017	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-35	6/14/2017	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	6/14/2017	Manganese, Dissolved	3.1	0.02	0.0038	2017400	mg/L
MKTF-35	6/14/2017	Sodium, Dissolved	140	10	1.6	NA	mg/L
MKTF-35	6/14/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
MKTF-35	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-35	6/14/2017	Zinc, Dissolved	0.0095	0.01	0.0011	5960450	mg/L
MKTF-35	6/14/2017	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-35	6/14/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-35	6/14/2017	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-35	6/14/2017	Lead, Total	0.013	0.0005	0.000095	15000	mg/L
MKTF-35	6/14/2017	Selenium, Total	0.0075	0.005	0.0036	50000	mg/L
MKTF-35	6/14/2017	Zinc, Total	0.022	0.01	0.0028	5960000	mg/L
MKTF-35	9/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	9/27/2017	Arsenic, Total	0.0035	0.005	0.0015	10000	mg/L
MKTF-35	9/27/2017	Barium, Total	5.2	0.02	0.0093	2000000	mg/L
MKTF-35	9/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	9/27/2017	Chromium, Total	0.014	0.006	0.0018	50000	mg/L
MKTF-35	9/27/2017	Copper, Total	0.013	0.006	0.0017	790000	mg/L
MKTF-35	9/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	9/27/2017	Arsenic, Dissolved	0.002	0.005	0.00089	10000	mg/L
MKTF-35	9/27/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
MKTF-35	9/27/2017	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-35	9/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	9/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	9/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	9/27/2017	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
MKTF-35	9/27/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-35	9/27/2017	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	9/27/2017	Manganese, Dissolved	3.4	0.01	0.002	2017400	mg/L
MKTF-35	9/27/2017	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-35	9/27/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
MKTF-35	9/27/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-35	9/27/2017	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
MKTF-35	9/27/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
MKTF-35	9/27/2017	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-35	9/27/2017	Manganese, Total	5	0.02	0.011	2017000	mg/L
MKTF-35	9/27/2017	Lead, Total	0.017	0.0005	0.000095	15000	mg/L
MKTF-35	9/27/2017	Selenium, Total	0.0057	0.005	0.0036	50000	mg/L
MKTF-35	9/27/2017	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
MKTF-35	11/30/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-35	11/30/2017	Arsenic, Total	0.00075	0.001	0.00041	10000	mg/L
MKTF-35	11/30/2017	Barium, Total	1.6	0.02	0.01	2000000	mg/L
MKTF-35	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	11/30/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/30/2017	Barium, Dissolved	0.29	0.002	0.00099	2000000	mg/L
MKTF-35	11/30/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-35	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	11/30/2017	Iron, Dissolved	2.9	0.1	0.082	13821880	mg/L
MKTF-35	11/30/2017	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MKTF-35	11/30/2017	Magnesium, Dissolved	40	1	0.25	NA	mg/L
MKTF-35	11/30/2017	Manganese, Dissolved	3.1	0.01	0.002	2017400	mg/L
MKTF-35	11/30/2017	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	11/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-35	11/30/2017	Uranium, Dissolved	0.0024	0.0005	0.000096	NA	mg/L
MKTF-35	11/30/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-35	11/30/2017	Iron, Total	6.9	0.2	0.1	13822000	mg/L
MKTF-35	11/30/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MKTF-35	11/30/2017	Manganese, Total	3.6	0.02	0.011	2017000	mg/L
MKTF-35	11/30/2017	Lead, Total	0.005	0.0005	0.00023	15000	mg/L
MKTF-35	11/30/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-35	11/30/2017	Uranium, Total	0.0028	0.0025	0.00077	30000	mg/L
MKTF-35	11/30/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-35	2/15/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
MKTF-35	2/15/2018	Arsenic, Total	0.0034	0.001	0.00041	10000	mg/L
MKTF-35	2/15/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
MKTF-35	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	2/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	2/15/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-35	2/15/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-35	2/15/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-35	2/15/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	2/15/2018	Iron, Dissolved	3.2	0.1	0.082	13821880	mg/L
MKTF-35	2/15/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
MKTF-35	2/15/2018	Magnesium, Dissolved	39	1	0.25	NA	mg/L
MKTF-35	2/15/2018	Manganese, Dissolved	3.4	0.01	0.002	2017400	mg/L
MKTF-35	2/15/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	2/15/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
MKTF-35	2/15/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-35	2/15/2018	Uranium, Dissolved	0.0028	0.0005	0.000096	NA	mg/L
MKTF-35	2/15/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-35	2/15/2018	Iron, Total	6.2	0.2	0.1	13822000	mg/L
MKTF-35	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-35	2/15/2018	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-35	2/15/2018	Lead, Total	0.0045	0.0005	0.00023	15000	mg/L
MKTF-35	2/15/2018	Selenium, Total	0.0041	0.001	0.00098	50000	mg/L
MKTF-35	2/15/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-35	2/15/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-35	5/3/2018	Silver, Total	0.0016	0.005	0.0012	50000	mg/L
MKTF-35	5/3/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
MKTF-35	5/3/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
MKTF-35	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	5/3/2018	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
MKTF-35	5/3/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
MKTF-35	5/3/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-35	5/3/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-35	5/3/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-35	5/3/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	5/3/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
MKTF-35	5/3/2018	Potassium, Dissolved	0.43	1	0.11	NA	mg/L
MKTF-35	5/3/2018	Magnesium, Dissolved	40	1	0.25	NA	mg/L
MKTF-35	5/3/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-35	5/3/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	5/3/2018	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	5/3/2018	Uranium, Dissolved	0.0028	0.0005	0.000096	NA	mg/L
MKTF-35	5/3/2018	Zinc, Dissolved	0.0061	0.01	0.0021	5960450	mg/L
MKTF-35	5/3/2018	Iron, Total	8.5	0.2	0.1	13822000	mg/L
MKTF-35	5/3/2018	Mercury, Total	0.000055	0.0002	0.000037	2000	mg/L
MKTF-35	5/3/2018	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-35	5/3/2018	Lead, Total	0.0073	0.0005	0.00023	15000	mg/L
MKTF-35	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	5/3/2018	Uranium, Total	0.0038	0.0005	0.000068	30000	mg/L
MKTF-35	5/3/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-35	8/23/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
MKTF-35	8/23/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-35	8/23/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
MKTF-35	8/23/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	8/23/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	8/23/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	8/23/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-35	8/23/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-35	8/23/2018	Barium, Dissolved	0.37	0.002	0.00099	2000000	mg/L
MKTF-35	8/23/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	8/23/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	8/23/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	8/23/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	8/23/2018	Iron, Dissolved	2.9	0.1	0.082	13821880	mg/L
MKTF-35	8/23/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MKTF-35	8/23/2018	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	8/23/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-35	8/23/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	8/23/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
MKTF-35	8/23/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	8/23/2018	Uranium, Dissolved	0.0029	0.0005	0.000096	NA	mg/L
MKTF-35	8/23/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-35	8/23/2018	Iron, Total	5.6	0.2	0.1	13822000	mg/L
MKTF-35	8/23/2018	Mercury, Total	0.000099	0.0002	0.000038	2000	mg/L
MKTF-35	8/23/2018	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-35	8/23/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-35	8/23/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	8/23/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-35	8/23/2018	Zinc, Total	0.0084	0.01	0.0033	5960000	mg/L
MKTF-35	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-35	11/28/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
MKTF-35	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-35	11/28/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-35	11/28/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-35	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	11/28/2018	Iron, Dissolved	3.2	0.1	0.082	13821880	mg/L
MKTF-35	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-35	11/28/2018	Magnesium, Dissolved	42	1	0.25	NA	mg/L
MKTF-35	11/28/2018	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-35	11/28/2018	Sodium, Dissolved	180	5	0.82	NA	mg/L
MKTF-35	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	11/28/2018	Zinc, Dissolved	0.044	0.01	0.0021	5960450	mg/L
MKTF-35	11/28/2018	Iron, Total	6.7	0.2	0.1	13822000	mg/L
MKTF-35	11/28/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-35	11/28/2018	Lead, Total	0.0031	0.0005	0.00023	15000	mg/L
MKTF-35	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-36	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-36	9/18/2020	Arsenic, Dissolved	0.016	0.001	0.00021	10000	mg/L
MKTF-36	9/18/2020	Lead, Dissolved	0.0016	0.0005	0.000034	NA	mg/L
MKTF-36	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-36	9/18/2020	Uranium, Dissolved	0.00034	0.0005	0.000065	NA	mg/L
MKTF-36	9/18/2020	Calcium, Dissolved	140	5	0.57	NA	mg/L
MKTF-36	9/18/2020	Manganese, Dissolved	1.6	0.01	0.0029	2017400	mg/L
MKTF-36	9/18/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-36	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-36	9/18/2020	Sodium, Dissolved	220	5	0.69	NA	mg/L
MKTF-36	9/18/2020	Barium, Dissolved	7.7	0.1	0.056	2000000	mg/L
MKTF-36	9/18/2020	Iron, Dissolved	11	1	0.52	13821880	mg/L
MKTF-36	9/18/2020	Aluminum, Dissolved	0.042	0.02	0.0056	19913930	mg/L
MKTF-36	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-36	9/18/2020	Boron, Dissolved	0.35	0.04	0.0067	3949110	mg/L
MKTF-36	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-36	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-36	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-36	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-36	9/18/2020	Magnesium, Dissolved	37	1	0.067	NA	mg/L
MKTF-36	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-36	9/18/2020	Potassium, Dissolved	0.94	1	0.16	NA	mg/L
MKTF-36	9/18/2020	Zinc, Dissolved	0.21	0.01	0.006	5960450	mg/L
MKTF-36	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-36	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-36	9/18/2020	Arsenic, Total	0.018	0.001	0.00026	10000	mg/L
MKTF-36	9/18/2020	Lead, Total	0.0049	0.0005	0.000034	15000	mg/L
MKTF-36	9/18/2020	Selenium, Total	0.00076	0.001	0.00066	50000	mg/L
MKTF-36	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-36	9/18/2020	Uranium, Total	0.0004	0.0005	0.000065	30000	mg/L
MKTF-36	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-36	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-36	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-36	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-36	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-36	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-36	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-36	9/18/2020	Zinc, Total	0.016	0.01	0.0064	5960000	mg/L
MKTF-36	9/18/2020	Aluminum, Total	1.7	0.1	0.037	19914000	mg/L
MKTF-36	9/18/2020	Manganese, Total	1.8	0.01	0.0041	2017000	mg/L
MKTF-36	9/18/2020	Barium, Total	7.5	0.06	0.033	2000000	mg/L
MKTF-36	9/18/2020	Iron, Total	12	1	0.26	13822000	mg/L
MKTF-36	9/18/2020	Boron, Total	0.37	0.04	0.0074	3949	mg/L
MKTF-36	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-36	3/17/2015	Arsenic, Total	0.016	0.001	0.00044	10000	mg/L
MKTF-36	3/17/2015	Barium, Total	7	0.02	0.0073	2000000	mg/L
MKTF-36	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-36	3/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-36	3/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-36	3/17/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-36	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	3/17/2015	Manganese, Total	2.8	0.02	0.015	2017000	mg/L
MKTF-36	3/17/2015	Lead, Total	0.015	0.001	0.000069	15000	mg/L
MKTF-36	3/17/2015	Selenium, Total	0.0057	0.001	0.00012	50000	mg/L
MKTF-36	3/17/2015	Uranium, Total	0.0016	0.001	0.0000081	30000	mg/L
MKTF-36	3/17/2015	Zinc, Total	0.028	0.01	0.0036	5960000	mg/L
MKTF-36	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	6/4/2015	Arsenic, Total	0.016	0.005	0.00032	10000	mg/L
MKTF-36	6/4/2015	Barium, Total	6.6	0.04	0.019	2000000	mg/L
MKTF-36	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-36	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-36	6/4/2015	Iron, Total	18	1	0.36	13822000	mg/L
MKTF-36	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	6/4/2015	Manganese, Total	2.4	0.01	0.0013	2017000	mg/L
MKTF-36	6/4/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-36	6/4/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-36	6/4/2015	Uranium, Total	ND	0.005	0.000024	30000	mg/L
MKTF-36	6/4/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-36	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-36	8/18/2015	Arsenic, Total	0.016	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Barium, Total	5.7	0.02	0.011	2000000	mg/L
MKTF-36	8/18/2015	Calcium, Total	140	5	0.28	NA	mg/L
MKTF-36	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-36	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-36	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-36	8/18/2015	Iron, Total	21	1	0.36	13822000	mg/L
MKTF-36	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-36	8/18/2015	Magnesium, Total	43	1	0.039	NA	mg/L
MKTF-36	8/18/2015	Manganese, Total	2.7	0.02	0.015	2017000	mg/L
MKTF-36	8/18/2015	Sodium, Total	220	5	0.36	NA	mg/L
MKTF-36	8/18/2015	Lead, Total	0.017	0.0005	0.000047	15000	mg/L
MKTF-36	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-36	8/18/2015	Uranium, Total	0.0011	0.0005	0.0000049	30000	mg/L
MKTF-36	8/18/2015	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-36	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-36	11/8/2016	Arsenic, Total	0.018	0.001	0.00021	10000	mg/L
MKTF-36	11/8/2016	Barium, Total	6.6	0.02	0.0079	2000000	mg/L
MKTF-36	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-36	11/8/2016	Copper, Total	0.0068	0.006	0.003	790000	mg/L
MKTF-36	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-36	11/8/2016	Arsenic, Dissolved	0.015	0.001	0.00014	10000	mg/L
MKTF-36	11/8/2016	Barium, Dissolved	6	0.1	0.066	2000000	mg/L
MKTF-36	11/8/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-36	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-36	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-36	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-36	11/8/2016	Iron, Dissolved	13	1	1	13821880	mg/L
MKTF-36	11/8/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
MKTF-36	11/8/2016	Magnesium, Dissolved	38	1	0.5	NA	mg/L
MKTF-36	11/8/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-36	11/8/2016	Sodium, Dissolved	210	5	2.5	NA	mg/L
MKTF-36	11/8/2016	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-36	11/8/2016	Selenium, Dissolved	0.0042	0.001	0.00021	50000	mg/L
MKTF-36	11/8/2016	Uranium, Dissolved	0.00021	0.0005	0.000051	NA	mg/L
MKTF-36	11/8/2016	Zinc, Dissolved	0.0055	0.01	0.0028	5960450	mg/L
MKTF-36	11/8/2016	Iron, Total	18	1	1	13822000	mg/L
MKTF-36	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-36	11/8/2016	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
MKTF-36	11/8/2016	Lead, Total	0.01	0.0005	0.000081	15000	mg/L
MKTF-36	11/8/2016	Selenium, Total	0.0045	0.01	0.0019	50000	mg/L
MKTF-36	11/8/2016	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
MKTF-36	11/8/2016	Zinc, Total	0.16	0.01	0.0027	5960000	mg/L
MKTF-36	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-36	3/1/2017	Arsenic, Total	0.013	0.001	0.00021	10000	mg/L
MKTF-36	3/1/2017	Barium, Total	5.8	0.02	0.0079	2000000	mg/L
MKTF-36	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-36	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-36	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-36	3/1/2017	Arsenic, Dissolved	0.012	0.001	0.00014	10000	mg/L
MKTF-36	3/1/2017	Barium, Dissolved	5.4	0.02	0.0085	2000000	mg/L
MKTF-36	3/1/2017	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-36	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-36	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	3/1/2017	Iron, Dissolved	17	0.4	0.4	13821880	mg/L
MKTF-36	3/1/2017	Potassium, Dissolved	0.57	1	0.5	NA	mg/L
MKTF-36	3/1/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-36	3/1/2017	Manganese, Dissolved	2.1	0.01	0.0019	2017400	mg/L
MKTF-36	3/1/2017	Sodium, Dissolved	200	5	2.5	NA	mg/L
MKTF-36	3/1/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	3/1/2017	Selenium, Dissolved	0.0036	0.001	0.00021	50000	mg/L
MKTF-36	3/1/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-36	3/1/2017	Iron, Total	17	1	1	13822000	mg/L
MKTF-36	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-36	3/1/2017	Manganese, Total	2.1	0.02	0.0027	2017000	mg/L
MKTF-36	3/1/2017	Lead, Total	0.0092	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/1/2017	Selenium, Total	0.0032	0.001	0.00019	50000	mg/L
MKTF-36	3/1/2017	Zinc, Total	0.066	0.01	0.0027	5960000	mg/L
MKTF-36	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-36	6/14/2017	Arsenic, Total	0.012	0.001	0.0003	10000	mg/L
MKTF-36	6/14/2017	Barium, Total	4.7	0.02	0.0093	2000000	mg/L
MKTF-36	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	6/14/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-36	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-36	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-36	6/14/2017	Arsenic, Dissolved	0.013	0.001	0.00018	10000	mg/L
MKTF-36	6/14/2017	Barium, Dissolved	4.7	0.02	0.0085	2000000	mg/L
MKTF-36	6/14/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-36	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-36	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	6/14/2017	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-36	6/14/2017	Potassium, Dissolved	0.79	1	0.11	NA	mg/L
MKTF-36	6/14/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-36	6/14/2017	Manganese, Dissolved	1.8	0.02	0.0038	2017400	mg/L
MKTF-36	6/14/2017	Sodium, Dissolved	210	10	1.6	NA	mg/L
MKTF-36	6/14/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	6/14/2017	Selenium, Dissolved	0.0026	0.005	0.0019	50000	mg/L
MKTF-36	6/14/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-36	6/14/2017	Iron, Total	16	0.4	0.2	13822000	mg/L
MKTF-36	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	6/14/2017	Manganese, Total	1.9	0.02	0.011	2017000	mg/L
MKTF-36	6/14/2017	Lead, Total	0.0084	0.0005	0.000095	15000	mg/L
MKTF-36	6/14/2017	Selenium, Total	0.0044	0.005	0.0036	50000	mg/L
MKTF-36	6/14/2017	Zinc, Total	0.076	0.01	0.0028	5960000	mg/L
MKTF-36	9/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	9/27/2017	Arsenic, Total	0.018	0.001	0.0003	10000	mg/L
MKTF-36	9/27/2017	Barium, Total	5.3	0.02	0.0093	2000000	mg/L
MKTF-36	9/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	9/27/2017	Chromium, Total	0.0053	0.006	0.0018	50000	mg/L
MKTF-36	9/27/2017	Copper, Total	0.012	0.006	0.0017	790000	mg/L
MKTF-36	9/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	9/27/2017	Arsenic, Dissolved	0.016	0.005	0.00089	10000	mg/L
MKTF-36	9/27/2017	Barium, Dissolved	4.7	0.04	0.017	2000000	mg/L
MKTF-36	9/27/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-36	9/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	9/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	9/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	9/27/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	9/27/2017	Potassium, Dissolved	0.8	1	0.11	NA	mg/L
MKTF-36	9/27/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-36	9/27/2017	Manganese, Dissolved	1.7	0.02	0.0039	2017400	mg/L
MKTF-36	9/27/2017	Sodium, Dissolved	190	5	0.82	NA	mg/L
MKTF-36	9/27/2017	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-36	9/27/2017	Selenium, Dissolved	0.0036	0.005	0.0019	50000	mg/L
MKTF-36	9/27/2017	Zinc, Dissolved	0.043	0.01	0.0021	5960450	mg/L
MKTF-36	9/27/2017	Iron, Total	20	0.4	0.2	13822000	mg/L
MKTF-36	9/27/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
MKTF-36	9/27/2017	Manganese, Total	2	0.02	0.011	2017000	mg/L
MKTF-36	9/27/2017	Lead, Total	0.018	0.0005	0.000095	15000	mg/L
MKTF-36	9/27/2017	Selenium, Total	0.0035	0.001	0.00071	50000	mg/L
MKTF-36	9/27/2017	Zinc, Total	0.15	0.01	0.0033	5960000	mg/L
MKTF-36	11/30/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	11/30/2017	Arsenic, Total	0.0097	0.001	0.00041	10000	mg/L
MKTF-36	11/30/2017	Barium, Total	6.6	0.04	0.02	2000000	mg/L
MKTF-36	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	11/30/2017	Arsenic, Dissolved	0.011	0.005	0.0021	10000	mg/L
MKTF-36	11/30/2017	Barium, Dissolved	5.7	0.02	0.0099	2000000	mg/L
MKTF-36	11/30/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-36	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/30/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	11/30/2017	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-36	11/30/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-36	11/30/2017	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
MKTF-36	11/30/2017	Sodium, Dissolved	200	5	0.82	NA	mg/L
MKTF-36	11/30/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-36	11/30/2017	Uranium, Dissolved	0.00047	0.0005	0.000096	NA	mg/L
MKTF-36	11/30/2017	Zinc, Dissolved	0.0063	0.01	0.0021	5960450	mg/L
MKTF-36	11/30/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-36	11/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	11/30/2017	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-36	11/30/2017	Lead, Total	0.0055	0.0005	0.00023	15000	mg/L
MKTF-36	11/30/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-36	11/30/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
MKTF-36	11/30/2017	Zinc, Total	0.052	0.01	0.0033	5960000	mg/L
MKTF-36	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	2/15/2018	Arsenic, Total	0.0087	0.001	0.00041	10000	mg/L
MKTF-36	2/15/2018	Barium, Total	6.4	0.04	0.02	2000000	mg/L
MKTF-36	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	2/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	2/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	2/15/2018	Arsenic, Dissolved	0.0085	0.001	0.00042	10000	mg/L
MKTF-36	2/15/2018	Barium, Dissolved	5.8	0.04	0.02	2000000	mg/L
MKTF-36	2/15/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-36	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	2/15/2018	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-36	2/15/2018	Potassium, Dissolved	0.61	1	0.11	NA	mg/L
MKTF-36	2/15/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
MKTF-36	2/15/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-36	2/15/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-36	2/15/2018	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	2/15/2018	Selenium, Dissolved	0.0037	0.001	0.00076	50000	mg/L
MKTF-36	2/15/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-36	2/15/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-36	2/15/2018	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-36	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	2/15/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-36	2/15/2018	Lead, Total	0.0053	0.0005	0.00023	15000	mg/L
MKTF-36	2/15/2018	Selenium, Total	0.0028	0.001	0.00098	50000	mg/L
MKTF-36	2/15/2018	Uranium, Total	0.00016	0.0005	0.000068	30000	mg/L
MKTF-36	2/15/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-36	5/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	5/3/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-36	5/3/2018	Barium, Total	5.9	0.04	0.02	2000000	mg/L
MKTF-36	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	5/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	5/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	5/3/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-36	5/3/2018	Barium, Dissolved	5.7	0.04	0.02	2000000	mg/L
MKTF-36	5/3/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-36	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	5/3/2018	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-36	5/3/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MKTF-36	5/3/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-36	5/3/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-36	5/3/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-36	5/3/2018	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-36	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-36	5/3/2018	Uranium, Dissolved	0.00011	0.0005	0.000096	NA	mg/L
MKTF-36	5/3/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-36	5/3/2018	Iron, Total	13	0.4	0.2	13822000	mg/L
MKTF-36	5/3/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	5/3/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-36	5/3/2018	Lead, Total	0.0051	0.0005	0.00023	15000	mg/L
MKTF-36	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-36	5/3/2018	Uranium, Total	0.00019	0.0005	0.000068	30000	mg/L
MKTF-36	5/3/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-36	9/5/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-36	9/5/2018	Arsenic, Total	0.016	0.001	0.00041	10000	mg/L
MKTF-36	9/5/2018	Barium, Total	5.8	0.02	0.01	2000000	mg/L
MKTF-36	9/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	9/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	9/5/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	9/5/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-36	9/5/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-36	9/5/2018	Barium, Dissolved	5.9	0.02	0.0099	2000000	mg/L
MKTF-36	9/5/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-36	9/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	9/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	9/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	9/5/2018	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	9/5/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-36	9/5/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-36	9/5/2018	Manganese, Dissolved	1.7	0.02	0.0039	2017400	mg/L
MKTF-36	9/5/2018	Sodium, Dissolved	200	10	1.6	NA	mg/L
MKTF-36	9/5/2018	Lead, Dissolved	0.0018	0.0005	0.00017	NA	mg/L
MKTF-36	9/5/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-36	9/5/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-36	9/5/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-36	9/5/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-36	9/5/2018	Mercury, Total	0.000038	0.0002	0.000038	2000	mg/L
MKTF-36	9/5/2018	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
MKTF-36	9/5/2018	Lead, Total	0.0064	0.0005	0.00023	15000	mg/L
MKTF-36	9/5/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-36	9/5/2018	Uranium, Total	0.00035	0.0005	0.000068	30000	mg/L
MKTF-36	9/5/2018	Zinc, Total	0.031	0.01	0.0033	5960000	mg/L
MKTF-37	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-37	9/17/2020	Arsenic, Dissolved	0.0026	0.001	0.00021	10000	mg/L
MKTF-37	9/17/2020	Lead, Dissolved	0.00076	0.0005	0.000034	NA	mg/L
MKTF-37	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-37	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-37	9/17/2020	Uranium, Dissolved	0.0021	0.0005	0.000065	NA	mg/L
MKTF-37	9/17/2020	Barium, Dissolved	1.7	0.01	0.0056	2000000	mg/L
MKTF-37	9/17/2020	Manganese, Dissolved	1.2	0.01	0.0029	2017400	mg/L
MKTF-37	9/17/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-37	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-37	9/17/2020	Sodium, Dissolved	280	5	0.69	NA	mg/L
MKTF-37	9/17/2020	Iron, Dissolved	11	1	0.52	13821880	mg/L
MKTF-37	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-37	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-37	9/17/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
MKTF-37	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-37	9/17/2020	Calcium, Dissolved	72	1	0.11	NA	mg/L
MKTF-37	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-37	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-37	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-37	9/17/2020	Magnesium, Dissolved	16	1	0.067	NA	mg/L
MKTF-37	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-37	9/17/2020	Potassium, Dissolved	1.9	1	0.16	NA	mg/L
MKTF-37	9/17/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-37	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-37	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-37	9/17/2020	Arsenic, Total	0.0059	0.001	0.00026	10000	mg/L
MKTF-37	9/17/2020	Lead, Total	0.023	0.0005	0.000034	15000	mg/L
MKTF-37	9/17/2020	Selenium, Total	0.0021	0.001	0.00066	50000	mg/L
MKTF-37	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-37	9/17/2020	Uranium, Total	0.0089	0.0005	0.000065	30000	mg/L
MKTF-37	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-37	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	9/17/2020	Chromium, Total	0.0073	0.006	0.0021	50000	mg/L
MKTF-37	9/17/2020	Cobalt, Total	0.0035	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	Molybdenum, Total	0.011	0.008	0.0065	98700	mg/L
MKTF-37	9/17/2020	Copper, Total	0.012	0.006	0.0047	790000	mg/L
MKTF-37	9/17/2020	Nickel, Total	0.0095	0.01	0.0033	372000	mg/L
MKTF-37	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-37	9/17/2020	Zinc, Total	0.066	0.01	0.0064	5960000	mg/L
MKTF-37	9/17/2020	Barium, Total	2	0.015	0.0082	2000000	mg/L
MKTF-37	9/17/2020	Manganese, Total	1.6	0.01	0.0041	2017000	mg/L
MKTF-37	9/17/2020	Aluminum, Total	7.1	1	0.37	19914000	mg/L
MKTF-37	9/17/2020	Iron, Total	24	2.5	0.64	13822000	mg/L
MKTF-37	9/17/2020	Boron, Total	0.55	0.04	0.0074	3949	mg/L
MKTF-37	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-37	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-37	5/14/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-37	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-37	5/14/2019	Calcium, Dissolved	170	10	0.618891	NA	mg/L
MKTF-37	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-37	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-37	5/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-37	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-37	5/14/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-37	5/14/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
MKTF-37	5/14/2019	Molybdenum, Dissolved	0.0095	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Dissolved	0.0047	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-37	5/14/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
MKTF-37	5/14/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-37	5/14/2019	Sodium, Dissolved	310	10	4.161763	NA	mg/L
MKTF-37	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-37	5/14/2019	Uranium, Dissolved	0.021	0.0025	0.000374	NA	mg/L
MKTF-37	5/14/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
MKTF-37	5/14/2019	Aluminum, Total	6.6	0.2	0.024883	19914000	mg/L
MKTF-37	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Total	0.00097	0.001	0.000312	10000	mg/L
MKTF-37	5/14/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Total	0.00037	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Total	0.49	0.04	0.004531	3949	mg/L
MKTF-37	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-37	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-37	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-37	5/14/2019	Iron, Total	2.6	0.1	0.043734	13822000	mg/L
MKTF-37	5/14/2019	Lead, Total	0.0028	0.0005	0.000055	15000	mg/L
MKTF-37	5/14/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-37	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-37	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Total	0.0092	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-37	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-37	5/14/2019	Thallium, Total	0.000062	0.0005	0.000052	2000	mg/L
MKTF-37	5/14/2019	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
MKTF-37	5/14/2019	Zinc, Total	0.008	0.01	0.005772	5960000	mg/L
MKTF-37	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-37	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-37	5/14/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
MKTF-37	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-37	5/14/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-37	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-37	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-37	5/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-37	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-37	5/14/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
MKTF-37	5/14/2019	Molybdenum, Dissolved	0.0074	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Dissolved	0.0062	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-37	5/14/2019	Selenium, Dissolved	0.00098	0.005	0.000857	50000	mg/L
MKTF-37	5/14/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-37	5/14/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-37	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-37	5/14/2019	Uranium, Dissolved	0.021	0.0025	0.000374	NA	mg/L
MKTF-37	5/14/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-37	5/14/2019	Aluminum, Total	4.8	0.1	0.012441	19914000	mg/L
MKTF-37	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Total	0.00072	0.001	0.000312	10000	mg/L
MKTF-37	5/14/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-37	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-37	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-37	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-37	5/14/2019	Iron, Total	1.6	0.04	0.017494	13822000	mg/L
MKTF-37	5/14/2019	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-37	5/14/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-37	5/14/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
MKTF-37	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-37	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-37	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-37	5/14/2019	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-37	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-37	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-37	3/17/2015	Arsenic, Total	0.0032	0.001	0.00044	10000	mg/L
MKTF-37	3/17/2015	Barium, Total	0.23	0.002	0.00073	2000000	mg/L
MKTF-37	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-37	3/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-37	3/17/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-37	3/17/2015	Iron, Total	5.1	0.2	0.072	13822000	mg/L
MKTF-37	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	3/17/2015	Manganese, Total	2.9	0.02	0.015	2017000	mg/L
MKTF-37	3/17/2015	Lead, Total	0.03	0.001	0.000069	15000	mg/L
MKTF-37	3/17/2015	Selenium, Total	0.0036	0.001	0.00012	50000	mg/L
MKTF-37	3/17/2015	Uranium, Total	0.026	0.001	0.0000081	30000	mg/L
MKTF-37	3/17/2015	Zinc, Total	0.14	0.01	0.0036	5960000	mg/L
MKTF-37	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-37	6/4/2015	Barium, Total	0.19	0.002	0.00095	2000000	mg/L
MKTF-37	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-37	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-37	6/4/2015	Iron, Total	1.8	0.1	0.036	13822000	mg/L
MKTF-37	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	6/4/2015	Manganese, Total	2.3	0.01	0.0013	2017000	mg/L
MKTF-37	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-37	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-37	6/4/2015	Uranium, Total	0.023	0.01	0.000048	30000	mg/L
MKTF-37	6/4/2015	Zinc, Total	0.039	0.01	0.0028	5960000	mg/L
MKTF-37	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-37	8/18/2015	Arsenic, Total	0.0031	0.001	0.00029	10000	mg/L
MKTF-37	8/18/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-37	8/18/2015	Calcium, Total	37	1	0.057	NA	mg/L
MKTF-37	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-37	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-37	8/18/2015	Copper, Total	0.0092	0.006	0.0051	790000	mg/L
MKTF-37	8/18/2015	Iron, Total	5.7	0.2	0.072	13822000	mg/L
MKTF-37	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	8/18/2015	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-37	8/18/2015	Magnesium, Total	8.2	1	0.039	NA	mg/L
MKTF-37	8/18/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/18/2015	Sodium, Total	250	5	0.36	NA	mg/L
MKTF-37	8/18/2015	Lead, Total	0.024	0.0005	0.000047	15000	mg/L
MKTF-37	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-37	8/18/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-37	8/18/2015	Zinc, Total	0.074	0.01	0.0039	5960000	mg/L
MKTF-37	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-37	11/3/2016	Arsenic, Total	0.0034	0.001	0.00021	10000	mg/L
MKTF-37	11/3/2016	Barium, Total	0.69	0.002	0.00079	2000000	mg/L
MKTF-37	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-37	11/3/2016	Copper, Total	0.005	0.006	0.003	790000	mg/L
MKTF-37	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-37	11/3/2016	Arsenic, Dissolved	0.0035	0.001	0.00014	10000	mg/L
MKTF-37	11/3/2016	Barium, Dissolved	0.58	0.002	0.0013	2000000	mg/L
MKTF-37	11/3/2016	Calcium, Dissolved	29	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-37	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-37	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-37	11/3/2016	Iron, Dissolved	0.25	0.02	0.02	13821880	mg/L
MKTF-37	11/3/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Magnesium, Dissolved	6.4	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Manganese, Dissolved	0.46	0.002	0.00032	2017400	mg/L
MKTF-37	11/3/2016	Sodium, Dissolved	200	5	2.5	NA	mg/L
MKTF-37	11/3/2016	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-37	11/3/2016	Selenium, Dissolved	0.003	0.001	0.00021	50000	mg/L
MKTF-37	11/3/2016	Uranium, Dissolved	0.036	0.0025	0.00026	NA	mg/L
MKTF-37	11/3/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-37	11/3/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-37	11/3/2016	Mercury, Total	0.000081	0.0002	0.000053	2000	mg/L
MKTF-37	11/3/2016	Manganese, Total	0.55	0.002	0.00027	2017000	mg/L
MKTF-37	11/3/2016	Lead, Total	0.0046	0.0005	0.000081	15000	mg/L
MKTF-37	11/3/2016	Selenium, Total	0.0036	0.005	0.00094	50000	mg/L
MKTF-37	11/3/2016	Uranium, Total	0.025	0.0025	0.00087	30000	mg/L
MKTF-37	11/3/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
MKTF-37	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-37	3/1/2017	Arsenic, Total	0.004	0.001	0.00021	10000	mg/L
MKTF-37	3/1/2017	Barium, Total	1.3	0.01	0.004	2000000	mg/L
MKTF-37	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-37	3/1/2017	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-37	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-37	3/1/2017	Arsenic, Dissolved	0.0036	0.001	0.00014	10000	mg/L
MKTF-37	3/1/2017	Barium, Dissolved	1.2	0.02	0.0085	2000000	mg/L
MKTF-37	3/1/2017	Calcium, Dissolved	56	5	2.5	NA	mg/L
MKTF-37	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-37	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	3/1/2017	Iron, Dissolved	2.4	0.1	0.1	13821880	mg/L
MKTF-37	3/1/2017	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-37	3/1/2017	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-37	3/1/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
MKTF-37	3/1/2017	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-37	3/1/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-37	3/1/2017	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L
MKTF-37	3/1/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
MKTF-37	3/1/2017	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-37	3/1/2017	Mercury, Total	0.00019	0.0002	0.000037	2000	mg/L
MKTF-37	3/1/2017	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-37	3/1/2017	Lead, Total	0.027	0.0025	0.00041	15000	mg/L
MKTF-37	3/1/2017	Selenium, Total	0.0034	0.001	0.00019	50000	mg/L
MKTF-37	3/1/2017	Zinc, Total	0.027	0.01	0.0027	5960000	mg/L
MKTF-37	5/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	5/3/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-37	5/3/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
MKTF-37	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-37	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	5/3/2018	Copper, Total	0.014	0.006	0.0041	790000	mg/L
MKTF-37	5/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-37	5/3/2018	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
MKTF-37	5/3/2018	Calcium, Dissolved	41	1	0.078	NA	mg/L
MKTF-37	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-37	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	5/3/2018	Iron, Dissolved	1.9	0.1	0.082	13821880	mg/L
MKTF-37	5/3/2018	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-37	5/3/2018	Magnesium, Dissolved	8.4	1	0.25	NA	mg/L
MKTF-37	5/3/2018	Manganese, Dissolved	0.67	0.002	0.00039	2017400	mg/L
MKTF-37	5/3/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-37	5/3/2018	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
MKTF-37	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-37	5/3/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
MKTF-37	5/3/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
MKTF-37	5/3/2018	Iron, Total	3.4	0.1	0.051	13822000	mg/L
MKTF-37	5/3/2018	Mercury, Total	0.000094	0.0002	0.000037	2000	mg/L
MKTF-37	5/3/2018	Manganese, Total	0.72	0.002	0.0011	2017000	mg/L
MKTF-37	5/3/2018	Lead, Total	0.0046	0.0005	0.00023	15000	mg/L
MKTF-37	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-37	5/3/2018	Uranium, Total	0.013	0.0005	0.000068	30000	mg/L
MKTF-37	5/3/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
MKTF-37	8/23/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	8/23/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-37	8/23/2018	Barium, Total	0.84	0.01	0.005	2000000	mg/L
MKTF-37	8/23/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-37	8/23/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	8/23/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-37	8/23/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-37	8/23/2018	Arsenic, Dissolved	0.0024	0.001	0.00042	10000	mg/L
MKTF-37	8/23/2018	Barium, Dissolved	0.96	0.002	0.00099	2000000	mg/L
MKTF-37	8/23/2018	Calcium, Dissolved	34	1	0.078	NA	mg/L
MKTF-37	8/23/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	8/23/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-37	8/23/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	8/23/2018	Iron, Dissolved	0.99	0.02	0.016	13821880	mg/L
MKTF-37	8/23/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-37	8/23/2018	Magnesium, Dissolved	7.2	1	0.25	NA	mg/L
MKTF-37	8/23/2018	Manganese, Dissolved	0.55	0.002	0.00039	2017400	mg/L
MKTF-37	8/23/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-37	8/23/2018	Lead, Dissolved	0.00088	0.0005	0.00017	NA	mg/L
MKTF-37	8/23/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-37	8/23/2018	Uranium, Dissolved	0.019	0.0025	0.00048	NA	mg/L
MKTF-37	8/23/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
MKTF-37	8/23/2018	Iron, Total	4.8	0.2	0.1	13822000	mg/L
MKTF-37	8/23/2018	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-37	8/23/2018	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
MKTF-37	8/23/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
MKTF-37	8/23/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-37	8/23/2018	Uranium, Total	0.019	0.0005	0.000068	30000	mg/L
MKTF-37	8/23/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-38	6/27/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-38	6/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-38	6/27/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
MKTF-38	6/27/2019	Barium, Total	0.29	0.002	0.000648	2000000	mg/L
MKTF-38	6/27/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-38	6/27/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-38	6/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-38	6/27/2019	Chromium, Total	0.0024	0.006	0.001533	50000	mg/L
MKTF-38	6/27/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-38	6/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-38	6/27/2019	Iron, Total	4.1	0.1	0.043734	13822000	mg/L
MKTF-38	6/27/2019	Lead, Total	0.0047	0.0005	0.000055	15000	mg/L
MKTF-38	6/27/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-38	6/27/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	6/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-38	6/27/2019	Nickel, Total	0.0099	0.01	0.004009	372000	mg/L
MKTF-38	6/27/2019	Selenium, Total	0.0026	0.001	0.000478	50000	mg/L
MKTF-38	6/27/2019	Silver, Total	0.0072	0.005	0.001418	50000	mg/L
MKTF-38	6/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-38	6/27/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
MKTF-38	6/27/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-38	6/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-38	6/27/2019	Arsenic, Dissolved	0.0005	0.001	0.000101	10000	mg/L
MKTF-38	6/27/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
MKTF-38	6/27/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-38	6/27/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
MKTF-38	6/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-38	6/27/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-38	6/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-38	6/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-38	6/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-38	6/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-38	6/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	6/27/2019	Magnesium, Dissolved	35	1	0.05029	NA	mg/L
MKTF-38	6/27/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-38	6/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-38	6/27/2019	Nickel, Dissolved	0.0063	0.01	0.004009	372000	mg/L
MKTF-38	6/27/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-38	6/27/2019	Selenium, Dissolved	0.0022	0.001	0.000171	50000	mg/L
MKTF-38	6/27/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-38	6/27/2019	Sodium, Dissolved	340	5	2.080881	NA	mg/L
MKTF-38	6/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-38	6/27/2019	Uranium, Dissolved	0.02	0.0005	0.000075	NA	mg/L
MKTF-38	6/27/2019	Zinc, Dissolved	0.079	0.01	0.002252	5960450	mg/L
MKTF-38	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-38	9/19/2020	Arsenic, Total	0.0016	0.001	0.00026	10000	mg/L
MKTF-38	9/19/2020	Lead, Total	0.0044	0.0005	0.000034	15000	mg/L
MKTF-38	9/19/2020	Selenium, Total	0.0095	0.001	0.00066	50000	mg/L
MKTF-38	9/19/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-38	9/19/2020	Uranium, Total	0.024	0.0025	0.00033	30000	mg/L
MKTF-38	9/19/2020	Barium, Total	0.18	0.003	0.0016	2000000	mg/L
MKTF-38	9/19/2020	Beryllium, Total	0.00093	0.002	0.00088	4000	mg/L
MKTF-38	9/19/2020	Boron, Total	0.47	0.04	0.0074	3949	mg/L
MKTF-38	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	9/19/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-38	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-38	9/19/2020	Cobalt, Total	0.0028	0.006	0.0024	5980	mg/L
MKTF-38	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-38	9/19/2020	Nickel, Total	0.0059	0.01	0.0033	372000	mg/L
MKTF-38	9/19/2020	Silver, Total	0.0029	0.005	0.0013	50000	mg/L
MKTF-38	9/19/2020	Zinc, Total	0.034	0.01	0.0064	5960000	mg/L
MKTF-38	9/19/2020	Iron, Total	4.4	0.25	0.064	13822000	mg/L
MKTF-38	9/19/2020	Manganese, Total	1.3	0.01	0.0041	2017000	mg/L
MKTF-38	9/19/2020	Aluminum, Total	10	0.4	0.15	19914000	mg/L
MKTF-38	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-38	9/19/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-38	9/19/2020	Arsenic, Dissolved	0.00076	0.001	0.00021	10000	mg/L
MKTF-38	9/19/2020	Lead, Dissolved	0.00017	0.0025	0.00017	NA	mg/L
MKTF-38	9/19/2020	Selenium, Dissolved	0.0073	0.005	0.0033	50000	mg/L
MKTF-38	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-38	9/19/2020	Uranium, Dissolved	0.025	0.0025	0.00033	NA	mg/L
MKTF-38	9/19/2020	Calcium, Dissolved	230	5	0.57	NA	mg/L
MKTF-38	9/19/2020	Sodium, Dissolved	390	5	0.69	NA	mg/L
MKTF-38	9/19/2020	Aluminum, Dissolved	0.44	0.02	0.0056	19913930	mg/L
MKTF-38	9/19/2020	Barium, Dissolved	0.036	0.002	0.0011	2000000	mg/L
MKTF-38	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-38	9/19/2020	Boron, Dissolved	0.44	0.04	0.0067	3949110	mg/L
MKTF-38	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-38	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-38	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-38	9/19/2020	Iron, Dissolved	0.17	0.02	0.01	13821880	mg/L
MKTF-38	9/19/2020	Magnesium, Dissolved	44	1	0.067	NA	mg/L
MKTF-38	9/19/2020	Manganese, Dissolved	0.32	0.002	0.00058	2017400	mg/L
MKTF-38	9/19/2020	Nickel, Dissolved	0.0046	0.01	0.0033	372000	mg/L
MKTF-38	9/19/2020	Potassium, Dissolved	0.89	1	0.16	NA	mg/L
MKTF-38	9/19/2020	Silver, Dissolved	0.0028	0.005	0.0013	81200	mg/L
MKTF-38	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-38	9/19/2020	Zinc, Dissolved	0.0098	0.01	0.006	5960450	mg/L
MKTF-38	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-38	3/5/2020	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-38	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-38	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-38	3/5/2020	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
MKTF-38	3/5/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-38	3/5/2020	Selenium, Total	0.0061	0.005	0.0024	50000	mg/L
MKTF-38	3/5/2020	Barium, Total	0.24	0.002	0.00065	2000000	mg/L
MKTF-38	3/5/2020	Beryllium, Total	0.00079	0.002	0.00028	4000	mg/L
MKTF-38	3/5/2020	Boron, Total	0.47	0.04	0.0045	3949	mg/L
MKTF-38	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-38	3/5/2020	Chromium, Total	0.0049	0.006	0.0015	50000	mg/L
MKTF-38	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-38	3/5/2020	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-38	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-38	3/5/2020	Nickel, Total	0.0086	0.01	0.004	372000	mg/L
MKTF-38	3/5/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
MKTF-38	3/5/2020	Zinc, Total	0.014	0.01	0.0058	5960000	mg/L
MKTF-38	3/5/2020	Iron, Total	3.8	0.1	0.044	13822000	mg/L
MKTF-38	3/5/2020	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
MKTF-38	3/5/2020	Aluminum, Total	11	0.4	0.05	19914000	mg/L
MKTF-38	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-38	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-38	3/5/2020	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
MKTF-38	3/5/2020	Arsenic, Dissolved	0.00046	0.001	0.0001	10000	mg/L
MKTF-38	3/5/2020	Selenium, Dissolved	0.0074	0.001	0.00017	50000	mg/L
MKTF-38	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-38	3/5/2020	Barium, Dissolved	0.014	0.002	0.00065	2000000	mg/L
MKTF-38	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-38	3/5/2020	Boron, Dissolved	0.36	0.04	0.0045	3949110	mg/L
MKTF-38	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-38	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-38	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-38	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-38	3/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-38	3/5/2020	Magnesium, Dissolved	27	1	0.05	NA	mg/L
MKTF-38	3/5/2020	Manganese, Dissolved	0.72	0.002	0.00029	2017400	mg/L
MKTF-38	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-38	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-38	3/5/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
MKTF-38	3/5/2020	Silver, Dissolved	0.0022	0.005	0.00094	81200	mg/L
MKTF-38	3/5/2020	Zinc, Dissolved	0.0047	0.01	0.0023	5960450	mg/L
MKTF-38	3/5/2020	Calcium, Dissolved	140	5	0.31	NA	mg/L
MKTF-38	3/5/2020	Sodium, Dissolved	300	5	2.1	NA	mg/L
MKTF-38	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-38	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-38	8/20/2019	Arsenic, Dissolved	0.00044	0.001	0.000101	10000	mg/L
MKTF-38	8/20/2019	Barium, Dissolved	0.027	0.002	0.000648	2000000	mg/L
MKTF-38	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-38	8/20/2019	Boron, Dissolved	0.53	0.2	0.022653	3949110	mg/L
MKTF-38	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-38	8/20/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-38	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-38	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-38	8/20/2019	Copper, Dissolved	0.0048	0.006	0.001296	790000	mg/L
MKTF-38	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-38	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	8/20/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-38	8/20/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-38	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-38	8/20/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-38	8/20/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-38	8/20/2019	Selenium, Dissolved	0.0029	0.001	0.000171	50000	mg/L
MKTF-38	8/20/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
MKTF-38	8/20/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-38	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/20/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
MKTF-38	8/20/2019	Zinc, Dissolved	0.0044	0.01	0.002252	5960450	mg/L
MKTF-38	8/20/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
MKTF-38	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-38	8/20/2019	Arsenic, Total	0.00068	0.001	0.000312	10000	mg/L
MKTF-38	8/20/2019	Barium, Total	0.069	0.002	0.000648	2000000	mg/L
MKTF-38	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-38	8/20/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-38	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-38	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-38	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-38	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-38	8/20/2019	Iron, Total	0.83	0.02	0.008747	13822000	mg/L
MKTF-38	8/20/2019	Lead, Total	0.00083	0.0005	0.000055	15000	mg/L
MKTF-38	8/20/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-38	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	8/20/2019	Molybdenum, Total	0.0068	0.008	0.006735	98700	mg/L
MKTF-38	8/20/2019	Nickel, Total	0.0059	0.01	0.004009	372000	mg/L
MKTF-38	8/20/2019	Selenium, Total	0.0028	0.001	0.000478	50000	mg/L
MKTF-38	8/20/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-38	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-38	8/20/2019	Uranium, Total	0.02	0.0025	0.000424	30000	mg/L
MKTF-38	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-38	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	3/16/2015	Arsenic, Total	0.0031	0.001	0.00044	10000	mg/L
MKTF-38	3/16/2015	Barium, Total	0.34	0.002	0.00073	2000000	mg/L
MKTF-38	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-38	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	3/16/2015	Iron, Total	3.5	0.2	0.072	13822000	mg/L
MKTF-38	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	3/16/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-38	3/16/2015	Lead, Total	0.006	0.001	0.000069	15000	mg/L
MKTF-38	3/16/2015	Selenium, Total	0.0058	0.001	0.00012	50000	mg/L
MKTF-38	3/16/2015	Uranium, Total	0.029	0.001	0.0000081	30000	mg/L
MKTF-38	3/16/2015	Zinc, Total	0.014	0.01	0.0036	5960000	mg/L
MKTF-38	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-38	6/10/2015	Barium, Total	0.074	0.002	0.00095	2000000	mg/L
MKTF-38	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-38	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-38	6/10/2015	Iron, Total	0.31	0.02	0.0073	13822000	mg/L
MKTF-38	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	6/10/2015	Manganese, Total	3.1	0.01	0.0013	2017000	mg/L
MKTF-38	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-38	6/10/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-38	6/10/2015	Uranium, Total	0.021	0.005	0.000024	30000	mg/L
MKTF-38	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L
MKTF-38	8/24/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	8/24/2015	Arsenic, Total	0.0019	0.001	0.000065	10000	mg/L
MKTF-38	8/24/2015	Barium, Total	0.066	0.002	0.00095	2000000	mg/L
MKTF-38	8/24/2015	Calcium, Total	140	5	0.28	NA	mg/L
MKTF-38	8/24/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-38	8/24/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	8/24/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-38	8/24/2015	Iron, Total	0.094	0.02	0.0073	13822000	mg/L
MKTF-38	8/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	8/24/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-38	8/24/2015	Magnesium, Total	28	1	0.039	NA	mg/L
MKTF-38	8/24/2015	Manganese, Total	3	0.01	0.0013	2017000	mg/L
MKTF-38	8/24/2015	Sodium, Total	270	5	0.36	NA	mg/L
MKTF-38	8/24/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-38	8/24/2015	Selenium, Total	0.0033	0.001	0.00019	50000	mg/L
MKTF-38	8/24/2015	Uranium, Total	0.023	0.0005	0.0000048	30000	mg/L
MKTF-38	8/24/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-38	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-38	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-38	11/9/2015	Barium, Total	0.066	0.002	0.0013	2000000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/9/2015	Calcium, Total	170	5	1.3	NA	mg/L
MKTF-38	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-38	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-38	11/9/2015	Iron, Total	0.22	0.02	0.0091	13822000	mg/L
MKTF-38	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	11/9/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-38	11/9/2015	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-38	11/9/2015	Manganese, Total	3.4	0.01	0.0016	2017000	mg/L
MKTF-38	11/9/2015	Sodium, Total	230	5	0.48	NA	mg/L
MKTF-38	11/9/2015	Lead, Total	0.001	0.0005	0.000026	15000	mg/L
MKTF-38	11/9/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-38	11/9/2015	Uranium, Total	0.019	0.0005	0.0000048	30000	mg/L
MKTF-38	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-38	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	2/29/2016	Arsenic, Total	0.0017	0.001	0.00029	10000	mg/L
MKTF-38	2/29/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-38	2/29/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-38	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-38	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	2/29/2016	Iron, Total	2.3	0.1	0.036	13822000	mg/L
MKTF-38	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-38	2/29/2016	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-38	2/29/2016	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-38	2/29/2016	Sodium, Total	210	5	0.48	NA	mg/L
MKTF-38	2/29/2016	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
MKTF-38	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-38	2/29/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-38	2/29/2016	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-38	6/8/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	6/8/2016	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
MKTF-38	6/8/2016	Barium, Total	0.23	0.002	0.0011	2000000	mg/L
MKTF-38	6/8/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-38	6/8/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-38	6/8/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	6/8/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	6/8/2016	Iron, Total	3	0.1	0.036	13822000	mg/L
MKTF-38	6/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	6/8/2016	Potassium, Total	0.54	1	0.18	NA	mg/L
MKTF-38	6/8/2016	Magnesium, Total	33	1	0.013	NA	mg/L
MKTF-38	6/8/2016	Manganese, Total	3.8	0.01	0.0076	2017000	mg/L
MKTF-38	6/8/2016	Sodium, Total	220	5	0.48	NA	mg/L
MKTF-38	6/8/2016	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
MKTF-38	6/8/2016	Selenium, Total	0.0051	0.005	0.00062	50000	mg/L
MKTF-38	6/8/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-38	6/8/2016	Zinc, Total	0.025	0.01	0.0039	5960000	mg/L
MKTF-38	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	9/13/2016	Arsenic, Total	0.0025	0.005	0.0011	10000	mg/L
MKTF-38	9/13/2016	Barium, Total	0.075	0.002	0.00079	2000000	mg/L
MKTF-38	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-38	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-38	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-38	9/13/2016	Arsenic, Dissolved	0.0018	0.005	0.00069	10000	mg/L
MKTF-38	9/13/2016	Barium, Dissolved	0.039	0.002	0.0013	2000000	mg/L
MKTF-38	9/13/2016	Calcium, Dissolved	160	5	2.5	NA	mg/L
MKTF-38	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-38	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-38	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-38	9/13/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-38	9/13/2016	Potassium, Dissolved	0.54	1	0.5	NA	mg/L
MKTF-38	9/13/2016	Magnesium, Dissolved	32	1	0.5	NA	mg/L
MKTF-38	9/13/2016	Manganese, Dissolved	3.1	0.01	0.0016	2017400	mg/L
MKTF-38	9/13/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-38	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	9/13/2016	Selenium, Dissolved	0.0053	0.001	0.00021	50000	mg/L
MKTF-38	9/13/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/13/2016	Zinc, Dissolved	0.004	0.01	0.0028	5960450	mg/L
MKTF-38	9/13/2016	Iron, Total	0.61	0.02	0.02	13822000	mg/L
MKTF-38	9/13/2016	Mercury, Total	0.000065	0.0002	0.000053	2000	mg/L
MKTF-38	9/13/2016	Manganese, Total	3	0.01	0.0014	2017000	mg/L
MKTF-38	9/13/2016	Lead, Total	0.001	0.0005	0.000081	15000	mg/L
MKTF-38	9/13/2016	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-38	9/13/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
MKTF-38	9/13/2016	Zinc, Total	0.0057	0.01	0.0027	5960000	mg/L
MKTF-38	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	11/1/2016	Arsenic, Total	0.0022	0.001	0.00021	10000	mg/L
MKTF-38	11/1/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-38	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-38	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-38	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-38	11/1/2016	Arsenic, Dissolved	0.0014	0.005	0.00069	10000	mg/L
MKTF-38	11/1/2016	Barium, Dissolved	0.044	0.002	0.0013	2000000	mg/L
MKTF-38	11/1/2016	Calcium, Dissolved	160	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-38	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-38	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-38	11/1/2016	Iron, Dissolved	0.038	0.02	0.02	13821880	mg/L
MKTF-38	11/1/2016	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Manganese, Dissolved	3.3	0.01	0.0016	2017400	mg/L
MKTF-38	11/1/2016	Sodium, Dissolved	230	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	11/1/2016	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L
MKTF-38	11/1/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
MKTF-38	11/1/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-38	11/1/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-38	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	11/1/2016	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-38	11/1/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-38	11/1/2016	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-38	11/1/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
MKTF-38	11/1/2016	Zinc, Total	0.0069	0.01	0.0027	5960000	mg/L
MKTF-38	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	3/14/2017	Arsenic, Total	0.0022	0.001	0.00021	10000	mg/L
MKTF-38	3/14/2017	Barium, Total	0.31	0.002	0.00079	2000000	mg/L
MKTF-38	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	3/14/2017	Chromium, Total	0.0051	0.006	0.0027	50000	mg/L
MKTF-38	3/14/2017	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-38	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-38	3/14/2017	Arsenic, Dissolved	0.0011	0.005	0.00089	10000	mg/L
MKTF-38	3/14/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
MKTF-38	3/14/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-38	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-38	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	3/14/2017	Iron, Dissolved	0.098	0.02	0.02	13821880	mg/L
MKTF-38	3/14/2017	Potassium, Dissolved	0.58	1	0.5	NA	mg/L
MKTF-38	3/14/2017	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-38	3/14/2017	Manganese, Dissolved	2.6	0.01	0.0019	2017400	mg/L
MKTF-38	3/14/2017	Sodium, Dissolved	210	5	2.5	NA	mg/L
MKTF-38	3/14/2017	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-38	3/14/2017	Selenium, Dissolved	0.003	0.005	0.0019	50000	mg/L
MKTF-38	3/14/2017	Uranium, Dissolved	0.015	0.0005	0.00005	NA	mg/L
MKTF-38	3/14/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-38	3/14/2017	Iron, Total	5.8	0.2	0.2	13822000	mg/L
MKTF-38	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	3/14/2017	Manganese, Total	2.9	0.02	0.0027	2017000	mg/L
MKTF-38	3/14/2017	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-38	3/14/2017	Selenium, Total	0.0041	0.001	0.00019	50000	mg/L
MKTF-38	3/14/2017	Uranium, Total	0.017	0.0005	0.00017	30000	mg/L
MKTF-38	3/14/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-38	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-38	6/21/2017	Arsenic, Total	0.0023	0.001	0.0003	10000	mg/L
MKTF-38	6/21/2017	Barium, Total	0.36	0.002	0.00093	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	6/21/2017	Chromium, Total	0.0056	0.006	0.0011	50000	mg/L
MKTF-38	6/21/2017	Copper, Total	0.0067	0.006	0.0017	790000	mg/L
MKTF-38	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-38	6/21/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-38	6/21/2017	Barium, Dissolved	0.041	0.002	0.00085	2000000	mg/L
MKTF-38	6/21/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-38	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-38	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	6/21/2017	Iron, Dissolved	0.076	0.02	0.016	13821880	mg/L
MKTF-38	6/21/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-38	6/21/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-38	6/21/2017	Manganese, Dissolved	2.5	0.02	0.0038	2017400	mg/L
MKTF-38	6/21/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-38	6/21/2017	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-38	6/21/2017	Selenium, Dissolved	0.0043	0.001	0.00039	50000	mg/L
MKTF-38	6/21/2017	Uranium, Dissolved	0.024	0.0025	0.00025	NA	mg/L
MKTF-38	6/21/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-38	6/21/2017	Iron, Total	6.6	0.2	0.1	13822000	mg/L
MKTF-38	6/21/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-38	6/21/2017	Manganese, Total	2.7	0.02	0.011	2017000	mg/L
MKTF-38	6/21/2017	Lead, Total	0.0077	0.0025	0.00048	15000	mg/L
MKTF-38	6/21/2017	Selenium, Total	0.0032	0.001	0.00071	50000	mg/L
MKTF-38	6/21/2017	Uranium, Total	0.026	0.0025	0.00077	30000	mg/L
MKTF-38	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
MKTF-38	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	9/28/2017	Arsenic, Total	0.0025	0.001	0.0003	10000	mg/L
MKTF-38	9/28/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
MKTF-38	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	9/28/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
MKTF-38	9/28/2017	Copper, Total	0.0064	0.006	0.0017	790000	mg/L
MKTF-38	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	9/28/2017	Arsenic, Dissolved	0.0017	0.005	0.00089	10000	mg/L
MKTF-38	9/28/2017	Barium, Dissolved	0.03	0.002	0.00085	2000000	mg/L
MKTF-38	9/28/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-38	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	9/28/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	9/28/2017	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MKTF-38	9/28/2017	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-38	9/28/2017	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
MKTF-38	9/28/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-38	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	9/28/2017	Selenium, Dissolved	0.0041	0.005	0.0019	50000	mg/L
MKTF-38	9/28/2017	Zinc, Dissolved	0.044	0.01	0.0021	5960450	mg/L
MKTF-38	9/28/2017	Iron, Total	3.5	0.2	0.1	13822000	mg/L
MKTF-38	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	9/28/2017	Manganese, Total	2.3	0.02	0.011	2017000	mg/L
MKTF-38	9/28/2017	Lead, Total	0.0039	0.0005	0.000095	15000	mg/L
MKTF-38	9/28/2017	Selenium, Total	0.0047	0.001	0.00071	50000	mg/L
MKTF-38	9/28/2017	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-38	11/30/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-38	11/30/2017	Arsenic, Total	0.00069	0.001	0.00041	10000	mg/L
MKTF-38	11/30/2017	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-38	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	11/30/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-38	11/30/2017	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
MKTF-38	11/30/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-38	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	11/30/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	11/30/2017	Potassium, Dissolved	0.51	1	0.11	NA	mg/L
MKTF-38	11/30/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/30/2017	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-38	11/30/2017	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-38	11/30/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-38	11/30/2017	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
MKTF-38	11/30/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-38	11/30/2017	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-38	11/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	11/30/2017	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-38	11/30/2017	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-38	11/30/2017	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
MKTF-38	11/30/2017	Uranium, Total	0.027	0.005	0.0015	30000	mg/L
MKTF-38	11/30/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-38	2/12/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-38	2/12/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
MKTF-38	2/12/2018	Barium, Total	0.21	0.002	0.001	2000000	mg/L
MKTF-38	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	2/12/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	2/12/2018	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
MKTF-38	2/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	2/12/2018	Arsenic, Dissolved	0.0039	0.005	0.0021	10000	mg/L
MKTF-38	2/12/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-38	2/12/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-38	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	2/12/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	2/12/2018	Copper, Dissolved	0.0034	0.006	0.0032	790000	mg/L
MKTF-38	2/12/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	2/12/2018	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-38	2/12/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-38	2/12/2018	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
MKTF-38	2/12/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-38	2/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	2/12/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
MKTF-38	2/12/2018	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
MKTF-38	2/12/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-38	2/12/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-38	2/12/2018	Mercury, Total	0.00017	0.0002	0.000037	2000	mg/L
MKTF-38	2/12/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-38	2/12/2018	Lead, Total	0.0036	0.0005	0.00023	15000	mg/L
MKTF-38	2/12/2018	Selenium, Total	0.0058	0.005	0.0049	50000	mg/L
MKTF-38	2/12/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
MKTF-38	2/12/2018	Zinc, Total	0.0089	0.01	0.0033	5960000	mg/L
MKTF-38	5/3/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-38	5/3/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
MKTF-38	5/3/2018	Barium, Total	0.082	0.002	0.001	2000000	mg/L
MKTF-38	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	5/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	5/3/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
MKTF-38	5/3/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-38	5/3/2018	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
MKTF-38	5/3/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-38	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	5/3/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	5/3/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-38	5/3/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-38	5/3/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-38	5/3/2018	Sodium, Dissolved	310	5	0.82	NA	mg/L
MKTF-38	5/3/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	5/3/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-38	5/3/2018	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
MKTF-38	5/3/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-38	5/3/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-38	5/3/2018	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-38	5/3/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-38	5/3/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
MKTF-38	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Uranium, Total	0.027	0.0025	0.00034	30000	mg/L
MKTF-38	5/3/2018	Zinc, Total	0.0058	0.01	0.0033	5960000	mg/L
MKTF-38	8/21/2018	Silver, Total	0.005	0.005	0.0012	50000	mg/L
MKTF-38	8/21/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-38	8/21/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-38	8/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	8/21/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
MKTF-38	8/21/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	8/21/2018	Silver, Dissolved	0.004	0.005	0.0018	81200	mg/L
MKTF-38	8/21/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-38	8/21/2018	Barium, Dissolved	0.043	0.002	0.00099	2000000	mg/L
MKTF-38	8/21/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-38	8/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	8/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	8/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	8/21/2018	Iron, Dissolved	0.037	0.02	0.016	13821880	mg/L
MKTF-38	8/21/2018	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-38	8/21/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
MKTF-38	8/21/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-38	8/21/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
MKTF-38	8/21/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	8/21/2018	Selenium, Dissolved	0.00076	0.001	0.00076	50000	mg/L
MKTF-38	8/21/2018	Uranium, Dissolved	0.027	0.0025	0.00048	NA	mg/L
MKTF-38	8/21/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-38	8/21/2018	Iron, Total	2.8	0.1	0.051	13822000	mg/L
MKTF-38	8/21/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
MKTF-38	8/21/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-38	8/21/2018	Lead, Total	0.0026	0.0005	0.00023	15000	mg/L
MKTF-38	8/21/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-38	8/21/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-38	8/21/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-38	11/20/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
MKTF-38	11/20/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-38	11/20/2018	Barium, Total	0.063	0.002	0.001	2000000	mg/L
MKTF-38	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	11/20/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-38	11/20/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
MKTF-38	11/20/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-38	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	11/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-38	11/20/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-38	11/20/2018	Manganese, Dissolved	2.7	0.02	0.0039	2017400	mg/L
MKTF-38	11/20/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-38	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	11/20/2018	Selenium, Dissolved	0.0017	0.001	0.00076	50000	mg/L
MKTF-38	11/20/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-38	11/20/2018	Iron, Total	0.23	0.02	0.01	13822000	mg/L
MKTF-38	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	11/20/2018	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
MKTF-38	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-38	11/20/2018	Selenium, Total	0.0019	0.001	0.00098	50000	mg/L
MKTF-38	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-39	8/20/2019	Aluminum, Dissolved	0.05	0.02	0.002488	19913930	mg/L
MKTF-39	8/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	8/20/2019	Barium, Dissolved	43	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	8/20/2019	Calcium, Dissolved	1100	50	3.094457	NA	mg/L
MKTF-39	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Dissolved	0.0052	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Iron, Dissolved	25	1	0.437344	13821880	mg/L
MKTF-39	8/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	8/20/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	8/20/2019	Manganese, Dissolved	9.6	0.1	0.014497	2017400	mg/L
MKTF-39	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Dissolved	0.0091	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	8/20/2019	Selenium, Dissolved	0.0013	0.005	0.000857	50000	mg/L
MKTF-39	8/20/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-39	8/20/2019	Sodium, Dissolved	4600	50	20.808815	NA	mg/L
MKTF-39	8/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	8/20/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-39	8/20/2019	Zinc, Dissolved	ND	0.01	0.002252	5960450	mg/L
MKTF-39	8/20/2019	Aluminum, Total	7.9	1	0.124414	19914000	mg/L
MKTF-39	8/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	8/20/2019	Barium, Total	48	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Total	0.56	0.2	0.022653	3949	mg/L
MKTF-39	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Total	0.0052	0.006	0.004072	790000	mg/L
MKTF-39	8/20/2019	Iron, Total	28	1	0.437344	13822000	mg/L
MKTF-39	8/20/2019	Lead, Total	0.0061	0.0025	0.000274	15000	mg/L
MKTF-39	8/20/2019	Manganese, Total	9.5	0.1	0.014497	2017000	mg/L
MKTF-39	8/20/2019	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
MKTF-39	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Selenium, Total	0.0029	0.005	0.00239	50000	mg/L
MKTF-39	8/20/2019	Silver, Total	0.012	0.005	0.001418	50000	mg/L
MKTF-39	8/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	8/20/2019	Uranium, Total	0.00091	0.0025	0.000424	30000	mg/L
MKTF-39	8/20/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
MKTF-39	8/20/2019	Aluminum, Dissolved	0.22	0.02	0.002488	19913930	mg/L
MKTF-39	8/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	8/20/2019	Barium, Dissolved	40	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	8/20/2019	Calcium, Dissolved	1000	50	3.094457	NA	mg/L
MKTF-39	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Dissolved	0.0072	0.006	0.001296	790000	mg/L
MKTF-39	8/20/2019	Iron, Dissolved	24	1	0.437344	13821880	mg/L
MKTF-39	8/20/2019	Lead, Dissolved	0.0005	0.0025	0.000274	NA	mg/L
MKTF-39	8/20/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	8/20/2019	Manganese, Dissolved	9.2	0.1	0.014497	2017400	mg/L
MKTF-39	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	8/20/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-39	8/20/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-39	8/20/2019	Sodium, Dissolved	4400	50	20.808815	NA	mg/L
MKTF-39	8/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	8/20/2019	Uranium, Dissolved	0.00041	0.0025	0.000374	NA	mg/L
MKTF-39	8/20/2019	Zinc, Dissolved	0.0028	0.01	0.002252	5960450	mg/L
MKTF-39	8/20/2019	Aluminum, Total	3.3	0.1	0.012441	19914000	mg/L
MKTF-39	8/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	8/20/2019	Barium, Total	40	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-39	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-39	8/20/2019	Iron, Total	25	1	0.437344	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Lead, Total	0.0025	0.0025	0.000274	15000	mg/L
MKTF-39	8/20/2019	Manganese, Total	9.3	0.02	0.002899	2017000	mg/L
MKTF-39	8/20/2019	Mercury, Total	ND	0.001	0.000187	2000	mg/L
MKTF-39	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Total	0.0086	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	8/20/2019	Silver, Total	0.013	0.005	0.001418	50000	mg/L
MKTF-39	8/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	8/20/2019	Uranium, Total	0.00063	0.0025	0.000424	30000	mg/L
MKTF-39	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-39	2/5/2020	Aluminum, Dissolved	0.024	0.02	0.0025	19913930	mg/L
MKTF-39	2/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-39	2/5/2020	Boron, Dissolved	0.46	0.04	0.0045	3949110	mg/L
MKTF-39	2/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-39	2/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-39	2/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-39	2/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-39	2/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-39	2/5/2020	Nickel, Dissolved	0.008	0.01	0.004	372000	mg/L
MKTF-39	2/5/2020	Potassium, Dissolved	12	1	0.16	NA	mg/L
MKTF-39	2/5/2020	Silver, Dissolved	0.012	0.005	0.00094	81200	mg/L
MKTF-39	2/5/2020	Zinc, Dissolved	0.008	0.01	0.0023	5960450	mg/L
MKTF-39	2/5/2020	Magnesium, Dissolved	220	5	0.25	NA	mg/L
MKTF-39	2/5/2020	Calcium, Dissolved	740	10	0.62	NA	mg/L
MKTF-39	2/5/2020	Manganese, Dissolved	6	0.02	0.0029	2017400	mg/L
MKTF-39	2/5/2020	Barium, Dissolved	43	0.1	0.032	2000000	mg/L
MKTF-39	2/5/2020	Iron, Dissolved	23	1	0.44	13821880	mg/L
MKTF-39	2/5/2020	Sodium, Dissolved	4200	50	21	NA	mg/L
MKTF-39	2/5/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-39	2/5/2020	Arsenic, Dissolved	0.00089	0.005	0.0005	10000	mg/L
MKTF-39	2/5/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-39	2/5/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-39	2/5/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-39	2/5/2020	Uranium, Dissolved	0.0049	0.0025	0.00037	NA	mg/L
MKTF-39	2/5/2020	Lead, Total	0.012	0.0025	0.00027	15000	mg/L
MKTF-39	2/5/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-39	2/5/2020	Uranium, Total	0.0066	0.0025	0.00042	30000	mg/L
MKTF-39	2/5/2020	Antimony, Total	ND	0.02	0.0078	6000	mg/L
MKTF-39	2/5/2020	Arsenic, Total	ND	0.02	0.0062	10000	mg/L
MKTF-39	2/5/2020	Selenium, Total	ND	0.02	0.0096	50000	mg/L
MKTF-39	2/5/2020	Beryllium, Total	0.0016	0.002	0.00028	4000	mg/L
MKTF-39	2/5/2020	Boron, Total	0.46	0.04	0.0045	3949	mg/L
MKTF-39	2/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-39	2/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-39	2/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-39	2/5/2020	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-39	2/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-39	2/5/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-39	2/5/2020	Silver, Total	0.011	0.005	0.0014	50000	mg/L
MKTF-39	2/5/2020	Zinc, Total	0.022	0.01	0.0058	5960000	mg/L
MKTF-39	2/5/2020	Manganese, Total	6.7	0.02	0.0029	2017000	mg/L
MKTF-39	2/5/2020	Aluminum, Total	18	1	0.12	19914000	mg/L
MKTF-39	2/5/2020	Iron, Total	33	1	0.44	13822000	mg/L
MKTF-39	2/5/2020	Barium, Total	55	0.2	0.065	2000000	mg/L
MKTF-39	2/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-39	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-39	9/19/2020	Arsenic, Total	ND	0.005	0.0013	10000	mg/L
MKTF-39	9/19/2020	Lead, Total	0.0025	0.0025	0.00017	15000	mg/L
MKTF-39	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-39	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-39	9/19/2020	Uranium, Total	0.004	0.0025	0.00033	30000	mg/L
MKTF-39	9/19/2020	Beryllium, Total	0.0013	0.002	0.00088	4000	mg/L
MKTF-39	9/19/2020	Boron, Total	0.58	0.04	0.0074	3949	mg/L
MKTF-39	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	9/19/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-39	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-39	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-39	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-39	9/19/2020	Nickel, Total	0.011	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/19/2020	Silver, Total	0.0058	0.005	0.0013	50000	mg/L
MKTF-39	9/19/2020	Zinc, Total	0.01	0.01	0.0064	5960000	mg/L
MKTF-39	9/19/2020	Aluminum, Total	4.8	0.2	0.074	19914000	mg/L
MKTF-39	9/19/2020	Manganese, Total	4.5	0.02	0.0081	2017000	mg/L
MKTF-39	9/19/2020	Barium, Total	38	0.15	0.082	2000000	mg/L
MKTF-39	9/19/2020	Iron, Total	29	2.5	0.64	13822000	mg/L
MKTF-39	9/19/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-39	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-39	9/19/2020	Arsenic, Dissolved	0.0016	0.005	0.001	10000	mg/L
MKTF-39	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-39	9/19/2020	Lead, Dissolved	0.00024	0.0025	0.00017	NA	mg/L
MKTF-39	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-39	9/19/2020	Uranium, Dissolved	0.0047	0.0025	0.00033	NA	mg/L
MKTF-39	9/19/2020	Magnesium, Dissolved	160	5	0.34	NA	mg/L
MKTF-39	9/19/2020	Manganese, Dissolved	4.1	0.01	0.0029	2017400	mg/L
MKTF-39	9/19/2020	Barium, Dissolved	38	0.1	0.056	2000000	mg/L
MKTF-39	9/19/2020	Calcium, Dissolved	530	50	5.7	NA	mg/L
MKTF-39	9/19/2020	Iron, Dissolved	25	1	0.52	13821880	mg/L
MKTF-39	9/19/2020	Sodium, Dissolved	3200	50	6.9	NA	mg/L
MKTF-39	9/19/2020	Aluminum, Dissolved	0.065	0.02	0.0056	19913930	mg/L
MKTF-39	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-39	9/19/2020	Boron, Dissolved	0.56	0.04	0.0067	3949110	mg/L
MKTF-39	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-39	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-39	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-39	9/19/2020	Nickel, Dissolved	0.0082	0.01	0.0033	372000	mg/L
MKTF-39	9/19/2020	Potassium, Dissolved	13	1	0.16	NA	mg/L
MKTF-39	9/19/2020	Silver, Dissolved	0.0051	0.005	0.0013	81200	mg/L
MKTF-39	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-39	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-39	9/19/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
MKTF-39	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-39	12/16/2020	Aluminum, Total	13.5	0.2	0.051	19914000	mg/L
MKTF-39	12/16/2020	Boron, Total	0.467	0.1	0.022	3949	mg/L
MKTF-39	12/16/2020	Barium, Total	30.4	0.01	0.003	2000000	mg/L
MKTF-39	12/16/2020	Potassium, Total	18.2	1	0.34	NA	mg/L
MKTF-39	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-39	12/16/2020	Magnesium, Total	162	0.5	0.12	NA	mg/L
MKTF-39	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-39	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-39	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-39	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-39	12/16/2020	Iron, Total	28.5	0.2	0.075	13822000	mg/L
MKTF-39	12/16/2020	Manganese, Total	5.51	0.01	0.003	2017000	mg/L
MKTF-39	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-39	12/16/2020	Nickel, Total	0.0154	0.006	0.003	372000	mg/L
MKTF-39	12/16/2020	Zinc, Total	0.0215	0.02	0.008	5960000	mg/L
MKTF-39	12/16/2020	Aluminum, Dissolved	19	0.2	0.051	19913930	mg/L
MKTF-39	12/16/2020	Barium, Dissolved	36.1	0.01	0.003	2000000	mg/L
MKTF-39	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-39	12/16/2020	Boron, Dissolved	0.491	0.1	0.022	3949110	mg/L
MKTF-39	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-39	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-39	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-39	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-39	12/16/2020	Iron, Dissolved	32.9	0.2	0.075	13821880	mg/L
MKTF-39	12/16/2020	Manganese, Dissolved	4.74	0.01	0.003	2017400	mg/L
MKTF-39	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-39	12/16/2020	Nickel, Dissolved	0.0166	0.006	0.003	372000	mg/L
MKTF-39	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-39	12/16/2020	Zinc, Dissolved	0.0265	0.02	0.008	5960450	mg/L
MKTF-39	12/16/2020	Calcium, Total	601	5	0.84	NA	mg/L
MKTF-39	12/16/2020	Sodium, Total	2740	20	9.2	NA	mg/L
MKTF-39	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-39	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-39	12/16/2020	Arsenic, Total Recoverable	1.92	1	0.286	10	ug/L
MKTF-39	12/16/2020	Lead, Total Recoverable	11.4	1	0.133	15	ug/L
MKTF-39	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-39	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-39	12/16/2020	Lead, Dissolved	1.64	1	0.133	NA	ug/L
MKTF-39	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-39	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-39	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-39	12/16/2020	Selenium, Total Recoverable	ND	10	2.86	50	ug/L
MKTF-39	12/16/2020	Arsenic, Dissolved	ND	2	0.572	10	ug/L
MKTF-39	12/16/2020	Selenium, Dissolved	ND	10	2.86	50	ug/L
MKTF-39	6/5/2019	Aluminum, Total	4.9	0.4	0.049765	19914000	mg/L
MKTF-39	6/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	6/5/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	6/5/2019	Barium, Total	11	0.04	0.012968	2000000	mg/L
MKTF-39	6/5/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	6/5/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-39	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	6/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-39	6/5/2019	Iron, Total	27	1	0.437344	13822000	mg/L
MKTF-39	6/5/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-39	6/5/2019	Manganese, Total	10	0.04	0.005799	2017000	mg/L
MKTF-39	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	6/5/2019	Nickel, Total	0.007	0.01	0.004009	372000	mg/L
MKTF-39	6/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	6/5/2019	Silver, Total	0.0097	0.005	0.001418	50000	mg/L
MKTF-39	6/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	6/5/2019	Uranium, Total	0.00084	0.0025	0.000424	30000	mg/L
MKTF-39	6/5/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-39	6/5/2019	Aluminum, Dissolved	0.061	0.02	0.002488	19913930	mg/L
MKTF-39	6/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	6/5/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	6/5/2019	Barium, Dissolved	1.6	0.01	0.003242	2000000	mg/L
MKTF-39	6/5/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-39	6/5/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-39	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	6/5/2019	Calcium, Dissolved	1000	20	1.237783	NA	mg/L
MKTF-39	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	6/5/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-39	6/5/2019	Iron, Dissolved	27	1	0.437344	13821880	mg/L
MKTF-39	6/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	6/5/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	6/5/2019	Manganese, Dissolved	10	0.04	0.005799	2017400	mg/L
MKTF-39	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	6/5/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-39	6/5/2019	Potassium, Dissolved	13	1	0.162288	NA	mg/L
MKTF-39	6/5/2019	Selenium, Dissolved	0.0012	0.005	0.000857	50000	mg/L
MKTF-39	6/5/2019	Silver, Dissolved	0.01	0.005	0.000942	81200	mg/L
MKTF-39	6/5/2019	Sodium, Dissolved	4300	50	20.808815	NA	mg/L
MKTF-39	6/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	6/5/2019	Uranium, Dissolved	0.00048	0.0025	0.000374	NA	mg/L
MKTF-39	6/5/2019	Zinc, Dissolved	0.0067	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Dissolved	0.048	0.02	0.002488	19913930	mg/L
MKTF-39	11/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
MKTF-39	11/5/2019	Barium, Dissolved	55	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	11/5/2019	Calcium, Dissolved	830	10	0.618891	NA	mg/L
MKTF-39	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-39	11/5/2019	Iron, Dissolved	29	2	0.874687	13821880	mg/L
MKTF-39	11/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	11/5/2019	Magnesium, Dissolved	260	10	0.502904	NA	mg/L
MKTF-39	11/5/2019	Manganese, Dissolved	6.8	0.02	0.002899	2017400	mg/L
MKTF-39	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	11/5/2019	Selenium, Dissolved	0.0027	0.005	0.000857	50000	mg/L
MKTF-39	11/5/2019	Silver, Dissolved	0.014	0.005	0.000942	81200	mg/L
MKTF-39	11/5/2019	Sodium, Dissolved	4400	100	41.61763	NA	mg/L
MKTF-39	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	11/5/2019	Uranium, Dissolved	0.0046	0.0025	0.000374	NA	mg/L
MKTF-39	11/5/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Total	20	2	0.248827	19914000	mg/L
MKTF-39	11/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Total	0.0021	0.005	0.001561	10000	mg/L
MKTF-39	11/5/2019	Barium, Total	52	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Total	0.57	0.2	0.022653	3949	mg/L
MKTF-39	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
MKTF-39	11/5/2019	Iron, Total	32	2	0.874687	13822000	mg/L
MKTF-39	11/5/2019	Lead, Total	0.013	0.0025	0.000274	15000	mg/L
MKTF-39	11/5/2019	Manganese, Total	6.7	0.02	0.002899	2017000	mg/L
MKTF-39	11/5/2019	Mercury, Total	0.000085	0.0002	0.000038	2000	mg/L
MKTF-39	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Total	0.018	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Selenium, Total	0.0041	0.005	0.00239	50000	mg/L
MKTF-39	11/5/2019	Silver, Total	0.01	0.005	0.001418	50000	mg/L
MKTF-39	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	11/5/2019	Uranium, Total	0.0043	0.0025	0.000424	30000	mg/L
MKTF-39	11/5/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-39	11/5/2019	Aluminum, Dissolved	0.085	0.02	0.002488	19913930	mg/L
MKTF-39	11/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Dissolved	0.0016	0.005	0.000504	10000	mg/L
MKTF-39	11/5/2019	Barium, Dissolved	55	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	11/5/2019	Calcium, Dissolved	820	10	0.618891	NA	mg/L
MKTF-39	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-39	11/5/2019	Iron, Dissolved	28	2	0.874687	13821880	mg/L
MKTF-39	11/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	11/5/2019	Magnesium, Dissolved	260	10	0.502904	NA	mg/L
MKTF-39	11/5/2019	Manganese, Dissolved	6.9	0.02	0.002899	2017400	mg/L
MKTF-39	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	11/5/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-39	11/5/2019	Silver, Dissolved	0.015	0.005	0.000942	81200	mg/L
MKTF-39	11/5/2019	Sodium, Dissolved	4500	100	41.61763	NA	mg/L
MKTF-39	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	11/5/2019	Uranium, Dissolved	0.0047	0.0025	0.000374	NA	mg/L
MKTF-39	11/5/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Total	15	2	0.248827	19914000	mg/L
MKTF-39	11/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Total	0.0018	0.005	0.001561	10000	mg/L
MKTF-39	11/5/2019	Barium, Total	52	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Total	0.56	0.2	0.022653	3949	mg/L
MKTF-39	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Total	0.0095	0.006	0.004072	790000	mg/L
MKTF-39	11/5/2019	Iron, Total	30	2	0.874687	13822000	mg/L
MKTF-39	11/5/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
MKTF-39	11/5/2019	Manganese, Total	6.5	0.02	0.002899	2017000	mg/L
MKTF-39	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	11/5/2019	Silver, Total	0.0094	0.005	0.001418	50000	mg/L
MKTF-39	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	11/5/2019	Uranium, Total	0.0041	0.0025	0.000424	30000	mg/L
MKTF-39	11/5/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-39	3/16/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-39	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-39	3/16/2015	Barium, Total	35	0.2	0.073	2000000	mg/L
MKTF-39	3/16/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
MKTF-39	3/16/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-39	3/16/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-39	3/16/2015	Iron, Total	50	2	0.72	13822000	mg/L
MKTF-39	3/16/2015	Mercury, Total	0.00021	0.0002	0.000059	2000	mg/L
MKTF-39	3/16/2015	Manganese, Total	8.6	0.02	0.015	2017000	mg/L
MKTF-39	3/16/2015	Lead, Total	0.034	0.01	0.00069	15000	mg/L
MKTF-39	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	3/16/2015	Uranium, Total	0.012	0.01	0.000081	30000	mg/L
MKTF-39	3/16/2015	Zinc, Total	0.059	0.05	0.018	5960000	mg/L
MKTF-39	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	6/10/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-39	6/10/2015	Barium, Total	67	0.2	0.095	2000000	mg/L
MKTF-39	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-39	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-39	6/10/2015	Iron, Total	60	2	0.73	13822000	mg/L
MKTF-39	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-39	6/10/2015	Manganese, Total	8.8	0.02	0.0027	2017000	mg/L
MKTF-39	6/10/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-39	6/10/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-39	6/10/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-39	6/10/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-39	8/23/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	8/23/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-39	8/23/2015	Barium, Total	49	0.2	0.11	2000000	mg/L
MKTF-39	8/23/2015	Calcium, Total	680	10	0.57	NA	mg/L
MKTF-39	8/23/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	8/23/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	8/23/2015	Copper, Total	0.019	0.006	0.0051	790000	mg/L
MKTF-39	8/23/2015	Iron, Total	57	2	0.72	13822000	mg/L
MKTF-39	8/23/2015	Mercury, Total	0.00027	0.0002	0.000059	2000	mg/L
MKTF-39	8/23/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-39	8/23/2015	Magnesium, Total	220	5	0.2	NA	mg/L
MKTF-39	8/23/2015	Manganese, Total	6.8	0.02	0.015	2017000	mg/L
MKTF-39	8/23/2015	Sodium, Total	4600	100	7.2	NA	mg/L
MKTF-39	8/23/2015	Lead, Total	0.034	0.0025	0.00024	15000	mg/L
MKTF-39	8/23/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	8/23/2015	Uranium, Total	0.0035	0.0025	0.000025	30000	mg/L
MKTF-39	8/23/2015	Zinc, Total	0.062	0.01	0.0039	5960000	mg/L
MKTF-39	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-39	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-39	11/9/2015	Barium, Total	30	0.1	0.066	2000000	mg/L
MKTF-39	11/9/2015	Calcium, Total	470	5	1.3	NA	mg/L
MKTF-39	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-39	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-39	11/9/2015	Iron, Total	29	1	0.45	13822000	mg/L
MKTF-39	11/9/2015	Mercury, Total	0.00028	0.0002	0.000059	2000	mg/L
MKTF-39	11/9/2015	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-39	11/9/2015	Magnesium, Total	130	5	0.065	NA	mg/L
MKTF-39	11/9/2015	Manganese, Total	3.9	0.01	0.0016	2017000	mg/L
MKTF-39	11/9/2015	Sodium, Total	3400	50	4.8	NA	mg/L
MKTF-39	11/9/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
MKTF-39	11/9/2015	Selenium, Total	ND	0.02	0.0039	50000	mg/L
MKTF-39	11/9/2015	Uranium, Total	ND	0.005	0.000048	30000	mg/L
MKTF-39	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-39	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	3/3/2016	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-39	3/3/2016	Barium, Total	11	0.04	0.021	2000000	mg/L
MKTF-39	3/3/2016	Calcium, Total	160	5	1.3	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-39	3/3/2016	Iron, Total	13	0.4	0.14	13822000	mg/L
MKTF-39	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-39	3/3/2016	Potassium, Total	7.2	1	0.18	NA	mg/L
MKTF-39	3/3/2016	Magnesium, Total	54	1	0.013	NA	mg/L
MKTF-39	3/3/2016	Manganese, Total	1.9	0.04	0.03	2017000	mg/L
MKTF-39	3/3/2016	Sodium, Total	2100	50	4.8	NA	mg/L
MKTF-39	3/3/2016	Lead, Total	0.01	0.0025	0.00024	15000	mg/L
MKTF-39	3/3/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	3/3/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-39	3/3/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-39	6/8/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	6/8/2016	Arsenic, Total	0.0024	0.001	0.00029	10000	mg/L
MKTF-39	6/8/2016	Barium, Total	8.5	0.04	0.021	2000000	mg/L
MKTF-39	6/8/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-39	6/8/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	6/8/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	6/8/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-39	6/8/2016	Iron, Total	12	0.4	0.14	13822000	mg/L
MKTF-39	6/8/2016	Mercury, Total	0.000061	0.0002	0.000053	2000	mg/L
MKTF-39	6/8/2016	Potassium, Total	6.1	1	0.18	NA	mg/L
MKTF-39	6/8/2016	Magnesium, Total	37	1	0.013	NA	mg/L
MKTF-39	6/8/2016	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
MKTF-39	6/8/2016	Sodium, Total	1500	20	1.9	NA	mg/L
MKTF-39	6/8/2016	Lead, Total	0.012	0.0005	0.000047	15000	mg/L
MKTF-39	6/8/2016	Selenium, Total	0.0069	0.01	0.0012	50000	mg/L
MKTF-39	6/8/2016	Uranium, Total	0.00092	0.0005	0.0000049	30000	mg/L
MKTF-39	6/8/2016	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
MKTF-39	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	9/13/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-39	9/13/2016	Barium, Total	9.7	0.04	0.016	2000000	mg/L
MKTF-39	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-39	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-39	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-39	9/13/2016	Arsenic, Dissolved	0.0047	0.005	0.00069	10000	mg/L
MKTF-39	9/13/2016	Barium, Dissolved	8.9	0.04	0.026	2000000	mg/L
MKTF-39	9/13/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-39	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-39	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-39	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-39	9/13/2016	Iron, Dissolved	9.6	0.4	0.4	13821880	mg/L
MKTF-39	9/13/2016	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-39	9/13/2016	Magnesium, Dissolved	46	1	0.5	NA	mg/L
MKTF-39	9/13/2016	Manganese, Dissolved	1.7	0.01	0.0016	2017400	mg/L
MKTF-39	9/13/2016	Sodium, Dissolved	1300	20	10	NA	mg/L
MKTF-39	9/13/2016	Lead, Dissolved	0.00038	0.0005	0.00017	NA	mg/L
MKTF-39	9/13/2016	Selenium, Dissolved	0.016	0.005	0.0011	50000	mg/L
MKTF-39	9/13/2016	Uranium, Dissolved	0.000071	0.0005	0.000051	NA	mg/L
MKTF-39	9/13/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-39	9/13/2016	Iron, Total	12	0.4	0.4	13822000	mg/L
MKTF-39	9/13/2016	Mercury, Total	0.000074	0.0002	0.000053	2000	mg/L
MKTF-39	9/13/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-39	9/13/2016	Lead, Total	0.0074	0.0005	0.000081	15000	mg/L
MKTF-39	9/13/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
MKTF-39	9/13/2016	Uranium, Total	0.00048	0.0005	0.00017	30000	mg/L
MKTF-39	9/13/2016	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
MKTF-39	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	11/1/2016	Arsenic, Total	0.0037	0.005	0.0011	10000	mg/L
MKTF-39	11/1/2016	Barium, Total	6.1	0.02	0.0079	2000000	mg/L
MKTF-39	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-39	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-39	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-39	11/1/2016	Arsenic, Dissolved	0.0036	0.005	0.00069	10000	mg/L
MKTF-39	11/1/2016	Barium, Dissolved	6	0.002	0.0013	2000000	mg/L
MKTF-39	11/1/2016	Calcium, Dissolved	91	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-39	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-39	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-39	11/1/2016	Iron, Dissolved	6.9	0.02	0.02	13821880	mg/L
MKTF-39	11/1/2016	Potassium, Dissolved	5.6	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Manganese, Dissolved	1.2	0.01	0.0016	2017400	mg/L
MKTF-39	11/1/2016	Sodium, Dissolved	1100	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Lead, Dissolved	0.00045	0.0005	0.00017	NA	mg/L
MKTF-39	11/1/2016	Selenium, Dissolved	0.01	0.005	0.0011	50000	mg/L
MKTF-39	11/1/2016	Uranium, Dissolved	0.000078	0.0005	0.000051	NA	mg/L
MKTF-39	11/1/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-39	11/1/2016	Iron, Total	8.7	0.2	0.2	13822000	mg/L
MKTF-39	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-39	11/1/2016	Manganese, Total	1.3	0.02	0.0027	2017000	mg/L
MKTF-39	11/1/2016	Lead, Total	0.0046	0.0025	0.00041	15000	mg/L
MKTF-39	11/1/2016	Selenium, Total	0.0084	0.01	0.0019	50000	mg/L
MKTF-39	11/1/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-39	11/1/2016	Zinc, Total	0.0093	0.01	0.0027	5960000	mg/L
MKTF-39	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	3/14/2017	Arsenic, Total	0.0058	0.01	0.0021	10000	mg/L
MKTF-39	3/14/2017	Barium, Total	6.4	0.04	0.016	2000000	mg/L
MKTF-39	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	3/14/2017	Chromium, Total	0.004	0.006	0.0027	50000	mg/L
MKTF-39	3/14/2017	Copper, Total	0.0089	0.006	0.003	790000	mg/L
MKTF-39	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-39	3/14/2017	Arsenic, Dissolved	0.0032	0.005	0.00089	10000	mg/L
MKTF-39	3/14/2017	Barium, Dissolved	5.6	0.02	0.0085	2000000	mg/L
MKTF-39	3/14/2017	Calcium, Dissolved	89	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-39	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	3/14/2017	Iron, Dissolved	6.3	0.2	0.2	13821880	mg/L
MKTF-39	3/14/2017	Potassium, Dissolved	4.7	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Manganese, Dissolved	1.2	0.004	0.00077	2017400	mg/L
MKTF-39	3/14/2017	Sodium, Dissolved	780	10	5	NA	mg/L
MKTF-39	3/14/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-39	3/14/2017	Selenium, Dissolved	0.0088	0.005	0.0019	50000	mg/L
MKTF-39	3/14/2017	Uranium, Dissolved	0.000079	0.0005	0.00005	NA	mg/L
MKTF-39	3/14/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-39	3/14/2017	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-39	3/14/2017	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-39	3/14/2017	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
MKTF-39	3/14/2017	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
MKTF-39	3/14/2017	Selenium, Total	ND	0.05	0.0094	50000	mg/L
MKTF-39	3/14/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
MKTF-39	3/14/2017	Zinc, Total	0.022	0.01	0.0027	5960000	mg/L
MKTF-39	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-39	6/8/2017	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
MKTF-39	6/8/2017	Barium, Total	6.7	0.02	0.0093	2000000	mg/L
MKTF-39	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	6/8/2017	Chromium, Total	0.0043	0.006	0.0011	50000	mg/L
MKTF-39	6/8/2017	Copper, Total	0.0085	0.006	0.0017	790000	mg/L
MKTF-39	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-39	6/8/2017	Arsenic, Dissolved	0.0051	0.02	0.0035	10000	mg/L
MKTF-39	6/8/2017	Barium, Dissolved	6.7	0.02	0.0085	2000000	mg/L
MKTF-39	6/8/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-39	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-39	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	6/8/2017	Iron, Dissolved	7.3	0.2	0.16	13821880	mg/L
MKTF-39	6/8/2017	Potassium, Dissolved	5.1	1	0.11	NA	mg/L
MKTF-39	6/8/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-39	6/8/2017	Manganese, Dissolved	1.3	0.02	0.0038	2017400	mg/L
MKTF-39	6/8/2017	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-39	6/8/2017	Lead, Dissolved	0.00087	0.0005	0.00017	NA	mg/L
MKTF-39	6/8/2017	Selenium, Dissolved	0.016	0.005	0.0019	50000	mg/L
MKTF-39	6/8/2017	Uranium, Dissolved	0.00013	0.0005	0.00005	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Zinc, Dissolved	0.084	0.01	0.0011	5960450	mg/L
MKTF-39	6/8/2017	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	6/8/2017	Mercury, Total	0.0001	0.0002	0.000037	2000	mg/L
MKTF-39	6/8/2017	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-39	6/8/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
MKTF-39	6/8/2017	Selenium, Total	0.0098	0.005	0.0036	50000	mg/L
MKTF-39	6/8/2017	Uranium, Total	0.00067	0.0005	0.00015	30000	mg/L
MKTF-39	6/8/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-39	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	9/28/2017	Arsenic, Total	0.0046	0.005	0.0015	10000	mg/L
MKTF-39	9/28/2017	Barium, Total	35	0.1	0.047	2000000	mg/L
MKTF-39	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	9/28/2017	Copper, Total	0.0021	0.006	0.0017	790000	mg/L
MKTF-39	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-39	9/28/2017	Arsenic, Dissolved	0.0042	0.005	0.00089	10000	mg/L
MKTF-39	9/28/2017	Barium, Dissolved	34	0.1	0.043	2000000	mg/L
MKTF-39	9/28/2017	Calcium, Dissolved	450	10	0.78	NA	mg/L
MKTF-39	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	9/28/2017	Iron, Dissolved	31	1	0.82	13821880	mg/L
MKTF-39	9/28/2017	Potassium, Dissolved	11	1	0.11	NA	mg/L
MKTF-39	9/28/2017	Magnesium, Dissolved	180	10	2.5	NA	mg/L
MKTF-39	9/28/2017	Manganese, Dissolved	5.2	0.02	0.0039	2017400	mg/L
MKTF-39	9/28/2017	Sodium, Dissolved	1800	50	8.2	NA	mg/L
MKTF-39	9/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-39	9/28/2017	Selenium, Dissolved	0.013	0.005	0.0019	50000	mg/L
MKTF-39	9/28/2017	Zinc, Dissolved	0.034	0.1	0.021	5960450	mg/L
MKTF-39	9/28/2017	Iron, Total	34	1	0.51	13822000	mg/L
MKTF-39	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-39	9/28/2017	Manganese, Total	5.5	0.02	0.011	2017000	mg/L
MKTF-39	9/28/2017	Lead, Total	0.0026	0.0025	0.00048	15000	mg/L
MKTF-39	9/28/2017	Selenium, Total	0.016	0.005	0.0036	50000	mg/L
MKTF-39	9/28/2017	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
MKTF-39	11/28/2017	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
MKTF-39	11/28/2017	Arsenic, Total	0.0072	0.01	0.0041	10000	mg/L
MKTF-39	11/28/2017	Barium, Total	13	0.1	0.05	2000000	mg/L
MKTF-39	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/28/2017	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
MKTF-39	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-39	11/28/2017	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
MKTF-39	11/28/2017	Barium, Dissolved	12	0.04	0.02	2000000	mg/L
MKTF-39	11/28/2017	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-39	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	11/28/2017	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-39	11/28/2017	Potassium, Dissolved	6	1	0.11	NA	mg/L
MKTF-39	11/28/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-39	11/28/2017	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
MKTF-39	11/28/2017	Sodium, Dissolved	1200	20	3.3	NA	mg/L
MKTF-39	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-39	11/28/2017	Selenium, Dissolved	0.0099	0.01	0.0076	50000	mg/L
MKTF-39	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-39	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-39	11/28/2017	Iron, Total	13	1	0.51	13822000	mg/L
MKTF-39	11/28/2017	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-39	11/28/2017	Lead, Total	0.0039	0.0025	0.0011	15000	mg/L
MKTF-39	11/28/2017	Selenium, Total	0.0061	0.005	0.0049	50000	mg/L
MKTF-39	11/28/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
MKTF-39	11/28/2017	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
MKTF-39	2/8/2018	Silver, Total	0.0066	0.005	0.0012	50000	mg/L
MKTF-39	2/8/2018	Arsenic, Total	0.0027	0.005	0.0021	10000	mg/L
MKTF-39	2/8/2018	Barium, Total	26	0.1	0.05	2000000	mg/L
MKTF-39	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/8/2018	Silver, Dissolved	0.0083	0.005	0.0018	81200	mg/L
MKTF-39	2/8/2018	Arsenic, Dissolved	0.0061	0.01	0.0042	10000	mg/L
MKTF-39	2/8/2018	Barium, Dissolved	25	0.1	0.049	2000000	mg/L
MKTF-39	2/8/2018	Calcium, Dissolved	360	5	0.39	NA	mg/L
MKTF-39	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	2/8/2018	Iron, Dissolved	22	1	0.82	13821880	mg/L
MKTF-39	2/8/2018	Potassium, Dissolved	6.8	1	0.11	NA	mg/L
MKTF-39	2/8/2018	Magnesium, Dissolved	120	5	1.2	NA	mg/L
MKTF-39	2/8/2018	Manganese, Dissolved	4.2	0.01	0.002	2017400	mg/L
MKTF-39	2/8/2018	Sodium, Dissolved	1500	50	8.2	NA	mg/L
MKTF-39	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-39	2/8/2018	Selenium, Dissolved	0.0094	0.01	0.0076	50000	mg/L
MKTF-39	2/8/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-39	2/8/2018	Zinc, Dissolved	0.0055	0.01	0.0021	5960450	mg/L
MKTF-39	2/8/2018	Iron, Total	24	1	0.51	13822000	mg/L
MKTF-39	2/8/2018	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-39	2/8/2018	Manganese, Total	4.2	0.01	0.0055	2017000	mg/L
MKTF-39	2/8/2018	Lead, Total	0.0047	0.0025	0.0011	15000	mg/L
MKTF-39	2/8/2018	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
MKTF-39	2/8/2018	Uranium, Total	0.00035	0.0025	0.00034	30000	mg/L
MKTF-39	2/8/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-39	5/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	5/6/2018	Arsenic, Total	0.0022	0.005	0.0021	10000	mg/L
MKTF-39	5/6/2018	Barium, Total	6.6	0.02	0.01	2000000	mg/L
MKTF-39	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	5/6/2018	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-39	5/6/2018	Silver, Dissolved	0.0044	0.005	0.0018	81200	mg/L
MKTF-39	5/6/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-39	5/6/2018	Barium, Dissolved	5.6	0.02	0.0099	2000000	mg/L
MKTF-39	5/6/2018	Calcium, Dissolved	88	1	0.078	NA	mg/L
MKTF-39	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	5/6/2018	Copper, Dissolved	0.0049	0.006	0.0032	790000	mg/L
MKTF-39	5/6/2018	Iron, Dissolved	4.9	0.1	0.082	13821880	mg/L
MKTF-39	5/6/2018	Potassium, Dissolved	3.4	1	0.11	NA	mg/L
MKTF-39	5/6/2018	Magnesium, Dissolved	32	1	0.25	NA	mg/L
MKTF-39	5/6/2018	Manganese, Dissolved	0.96	0.002	0.00039	2017400	mg/L
MKTF-39	5/6/2018	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-39	5/6/2018	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-39	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-39	5/6/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-39	5/6/2018	Zinc, Dissolved	0.0043	0.01	0.0021	5960450	mg/L
MKTF-39	5/6/2018	Iron, Total	8.1	0.2	0.1	13822000	mg/L
MKTF-39	5/6/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
MKTF-39	5/6/2018	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-39	5/6/2018	Lead, Total	0.004	0.0025	0.0011	15000	mg/L
MKTF-39	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-39	5/6/2018	Uranium, Total	ND	0.0025	0.00034	30000	mg/L
MKTF-39	5/6/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-39	8/21/2018	Silver, Total	0.0043	0.005	0.0012	50000	mg/L
MKTF-39	8/21/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
MKTF-39	8/21/2018	Barium, Total	11	0.04	0.02	2000000	mg/L
MKTF-39	8/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	8/21/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	8/21/2018	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-39	8/21/2018	Silver, Dissolved	0.003	0.005	0.0018	81200	mg/L
MKTF-39	8/21/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-39	8/21/2018	Barium, Dissolved	11	0.04	0.02	2000000	mg/L
MKTF-39	8/21/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
MKTF-39	8/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	8/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	8/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	8/21/2018	Iron, Dissolved	11	0.4	0.33	13821880	mg/L
MKTF-39	8/21/2018	Potassium, Dissolved	5.2	1	0.11	NA	mg/L
MKTF-39	8/21/2018	Magnesium, Dissolved	55	1	0.25	NA	mg/L
MKTF-39	8/21/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	Sodium, Dissolved	1300	20	3.3	NA	mg/L
MKTF-39	8/21/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-39	8/21/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-39	8/21/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-39	8/21/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-39	8/21/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	8/21/2018	Mercury, Total	0.000067	0.0002	0.000038	2000	mg/L
MKTF-39	8/21/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-39	8/21/2018	Lead, Total	0.0033	0.0025	0.0011	15000	mg/L
MKTF-39	8/21/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-39	8/21/2018	Uranium, Total	0.00055	0.0025	0.00034	30000	mg/L
MKTF-39	8/21/2018	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
MKTF-39	11/20/2018	Silver, Total	0.0052	0.005	0.0012	50000	mg/L
MKTF-39	11/20/2018	Arsenic, Total	0.0021	0.001	0.00041	10000	mg/L
MKTF-39	11/20/2018	Barium, Total	13	0.04	0.02	2000000	mg/L
MKTF-39	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-39	11/20/2018	Silver, Dissolved	0.0077	0.005	0.0018	81200	mg/L
MKTF-39	11/20/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-39	11/20/2018	Barium, Dissolved	13	0.1	0.049	2000000	mg/L
MKTF-39	11/20/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-39	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	11/20/2018	Iron, Dissolved	10	1	0.82	13821880	mg/L
MKTF-39	11/20/2018	Potassium, Dissolved	4.9	1	0.11	NA	mg/L
MKTF-39	11/20/2018	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-39	11/20/2018	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-39	11/20/2018	Sodium, Dissolved	1100	50	8.2	NA	mg/L
MKTF-39	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-39	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-39	11/20/2018	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-39	11/20/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	11/20/2018	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-39	11/20/2018	Lead, Total	0.0044	0.0005	0.00023	15000	mg/L
MKTF-39	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-39	11/20/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-40	2/20/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-40	2/20/2019	Arsenic, Dissolved	ND	0.005	0.001322	10000	mg/L
MKTF-40	2/20/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-40	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-40	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	2/20/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-40	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	2/20/2019	Copper, Dissolved	0.0058	0.006	0.001296	790000	mg/L
MKTF-40	2/20/2019	Iron, Dissolved	0.035	0.02	0.008747	13821880	mg/L
MKTF-40	2/20/2019	Lead, Dissolved	ND	0.0025	0.000542	NA	mg/L
MKTF-40	2/20/2019	Magnesium, Dissolved	51	1	0.05029	NA	mg/L
MKTF-40	2/20/2019	Manganese, Dissolved	0.0029	0.002	0.00029	2017400	mg/L
MKTF-40	2/20/2019	Potassium, Dissolved	5.3	1	0.162288	NA	mg/L
MKTF-40	2/20/2019	Selenium, Dissolved	ND	0.005	0.002844	50000	mg/L
MKTF-40	2/20/2019	Silver, Dissolved	0.0057	0.005	0.000942	81200	mg/L
MKTF-40	2/20/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000658	2000	mg/L
MKTF-40	2/20/2019	Uranium, Dissolved	0.042	0.0025	0.000374	NA	mg/L
MKTF-40	2/20/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
MKTF-40	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-40	2/20/2019	Arsenic, Total	0.0024	0.005	0.001561	10000	mg/L
MKTF-40	2/20/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-40	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-40	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	2/20/2019	Iron, Total	2.7	0.1	0.043734	13822000	mg/L
MKTF-40	2/20/2019	Lead, Total	0.0028	0.0005	0.000055	15000	mg/L
MKTF-40	2/20/2019	Manganese, Total	0.053	0.002	0.00029	2017000	mg/L
MKTF-40	2/20/2019	Mercury, Total	0.000056	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	2/20/2019	Silver, Total	0.0064	0.005	0.001418	50000	mg/L
MKTF-40	2/20/2019	Thallium, Total	0.000072	0.0005	0.000052	2000	mg/L
MKTF-40	2/20/2019	Uranium, Total	0.042	0.0025	0.000424	30000	mg/L
MKTF-40	2/20/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-40	10/22/2019	Aluminum, Total	3.1	0.1	0.012441	19914000	mg/L
MKTF-40	10/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-40	10/22/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-40	10/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-40	10/22/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
MKTF-40	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	10/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	10/22/2019	Iron, Total	2.3	0.1	0.043734	13822000	mg/L
MKTF-40	10/22/2019	Lead, Total	0.0023	0.0025	0.000274	15000	mg/L
MKTF-40	10/22/2019	Manganese, Total	0.056	0.002	0.00029	2017000	mg/L
MKTF-40	10/22/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	10/22/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-40	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	10/22/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
MKTF-40	10/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	10/22/2019	Zinc, Total	0.0098	0.01	0.005772	5960000	mg/L
MKTF-40	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-40	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	10/22/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-40	10/22/2019	Barium, Dissolved	0.062	0.002	0.000648	2000000	mg/L
MKTF-40	10/22/2019	Beryllium, Dissolved	0.0013	0.002	0.000284	4000	mg/L
MKTF-40	10/22/2019	Boron, Dissolved	2.2	0.2	0.022653	3949110	mg/L
MKTF-40	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	10/22/2019	Calcium, Dissolved	250	5	0.309446	NA	mg/L
MKTF-40	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-40	10/22/2019	Iron, Dissolved	0.032	0.02	0.008747	13821880	mg/L
MKTF-40	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	10/22/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-40	10/22/2019	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
MKTF-40	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	10/22/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-40	10/22/2019	Potassium, Dissolved	5.3	1	0.162288	NA	mg/L
MKTF-40	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	10/22/2019	Silver, Dissolved	0.0046	0.005	0.000942	81200	mg/L
MKTF-40	10/22/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	10/22/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-40	8/22/2019	Aluminum, Dissolved	0.092	0.02	0.002488	19913930	mg/L
MKTF-40	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	8/22/2019	Arsenic, Dissolved	0.00074	0.005	0.000504	10000	mg/L
MKTF-40	8/22/2019	Barium, Dissolved	0.064	0.002	0.000648	2000000	mg/L
MKTF-40	8/22/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-40	8/22/2019	Boron, Dissolved	2.3	0.2	0.022653	3949110	mg/L
MKTF-40	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	8/22/2019	Calcium, Dissolved	300	5	0.309446	NA	mg/L
MKTF-40	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	8/22/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-40	8/22/2019	Iron, Dissolved	0.098	0.02	0.008747	13821880	mg/L
MKTF-40	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	8/22/2019	Magnesium, Dissolved	55	1	0.05029	NA	mg/L
MKTF-40	8/22/2019	Manganese, Dissolved	0.0068	0.002	0.00029	2017400	mg/L
MKTF-40	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	8/22/2019	Nickel, Dissolved	0.0095	0.01	0.004009	372000	mg/L
MKTF-40	8/22/2019	Potassium, Dissolved	5.6	1	0.162288	NA	mg/L
MKTF-40	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	8/22/2019	Silver, Dissolved	0.0047	0.005	0.000942	81200	mg/L
MKTF-40	8/22/2019	Sodium, Dissolved	2600	50	20.808815	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	8/22/2019	Uranium, Dissolved	0.05	0.0025	0.000374	NA	mg/L
MKTF-40	8/22/2019	Zinc, Dissolved	0.0031	0.01	0.002252	5960450	mg/L
MKTF-40	8/22/2019	Aluminum, Total	9.3	1	0.124414	19914000	mg/L
MKTF-40	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	8/22/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-40	8/22/2019	Barium, Total	0.23	0.002	0.000648	2000000	mg/L
MKTF-40	8/22/2019	Beryllium, Total	0.00089	0.002	0.000284	4000	mg/L
MKTF-40	8/22/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
MKTF-40	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	8/22/2019	Chromium, Total	0.0022	0.006	0.001533	50000	mg/L
MKTF-40	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	8/22/2019	Copper, Total	0.0076	0.006	0.004072	790000	mg/L
MKTF-40	8/22/2019	Iron, Total	6.9	1	0.437344	13822000	mg/L
MKTF-40	8/22/2019	Lead, Total	0.0094	0.0025	0.000274	15000	mg/L
MKTF-40	8/22/2019	Manganese, Total	0.25	0.002	0.00029	2017000	mg/L
MKTF-40	8/22/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-40	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	8/22/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-40	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	8/22/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
MKTF-40	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	8/22/2019	Uranium, Total	0.042	0.0025	0.000424	30000	mg/L
MKTF-40	8/22/2019	Zinc, Total	0.024	0.01	0.005772	5960000	mg/L
MKTF-40	5/6/2019	Aluminum, Dissolved	0.018	0.02	0.002488	19913930	mg/L
MKTF-40	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	5/6/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-40	5/6/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-40	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-40	5/6/2019	Boron, Dissolved	2.1	0.2	0.022653	3949110	mg/L
MKTF-40	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	5/6/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-40	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-40	5/6/2019	Iron, Dissolved	0.034	0.02	0.008747	13821880	mg/L
MKTF-40	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	5/6/2019	Magnesium, Dissolved	54	1	0.05029	NA	mg/L
MKTF-40	5/6/2019	Manganese, Dissolved	0.0019	0.002	0.00029	2017400	mg/L
MKTF-40	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	5/6/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
MKTF-40	5/6/2019	Potassium, Dissolved	5.2	1	0.162288	NA	mg/L
MKTF-40	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	5/6/2019	Silver, Dissolved	0.0071	0.005	0.000942	81200	mg/L
MKTF-40	5/6/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	5/6/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
MKTF-40	5/6/2019	Zinc, Dissolved	0.037	0.01	0.002252	5960450	mg/L
MKTF-40	5/6/2019	Aluminum, Total	3.7	0.2	0.024883	19914000	mg/L
MKTF-40	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-40	5/6/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-40	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-40	5/6/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
MKTF-40	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	5/6/2019	Iron, Total	3.7	0.1	0.043734	13822000	mg/L
MKTF-40	5/6/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-40	5/6/2019	Manganese, Total	0.063	0.002	0.00029	2017000	mg/L
MKTF-40	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	5/6/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-40	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	5/6/2019	Silver, Total	0.0068	0.005	0.001418	50000	mg/L
MKTF-40	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	5/6/2019	Uranium, Total	0.046	0.0025	0.000424	30000	mg/L
MKTF-40	5/6/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-40	12/17/2020	Aluminum, Total	3.65	0.2	0.051	19914000	mg/L
MKTF-40	12/17/2020	Calcium, Total	242	0.5	0.084	NA	mg/L
MKTF-40	12/17/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
MKTF-40	12/17/2020	Barium, Total	0.116	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Potassium, Total	8.84	1	0.34	NA	mg/L
MKTF-40	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Magnesium, Total	45.6	0.5	0.12	NA	mg/L
MKTF-40	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-40	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Total	1.98	0.2	0.075	13822000	mg/L
MKTF-40	12/17/2020	Manganese, Total	0.087	0.01	0.003	2017000	mg/L
MKTF-40	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Total	0.0125	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-40	12/17/2020	Aluminum, Dissolved	0.522	0.2	0.051	19913930	mg/L
MKTF-40	12/17/2020	Barium, Dissolved	0.0654	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Boron, Dissolved	2.08	0.1	0.022	3949110	mg/L
MKTF-40	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-40	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Dissolved	0.281	0.2	0.075	13821880	mg/L
MKTF-40	12/17/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-40	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Dissolved	0.0116	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-40	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-40	12/17/2020	Sodium, Total	1880	20	9.2	NA	mg/L
MKTF-40	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-40	12/17/2020	Aluminum, Total	1.5	0.2	0.051	19914000	mg/L
MKTF-40	12/17/2020	Calcium, Total	236	0.5	0.084	NA	mg/L
MKTF-40	12/17/2020	Boron, Total	2.13	0.1	0.022	3949	mg/L
MKTF-40	12/17/2020	Barium, Total	0.0843	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Potassium, Total	9.13	1	0.34	NA	mg/L
MKTF-40	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Magnesium, Total	45.1	0.5	0.12	NA	mg/L
MKTF-40	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-40	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Total	0.957	0.2	0.075	13822000	mg/L
MKTF-40	12/17/2020	Manganese, Total	0.0309	0.01	0.003	2017000	mg/L
MKTF-40	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Total	0.0128	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-40	12/17/2020	Aluminum, Dissolved	2.3	0.2	0.051	19913930	mg/L
MKTF-40	12/17/2020	Barium, Dissolved	0.0853	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Boron, Dissolved	2.1	0.1	0.022	3949110	mg/L
MKTF-40	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-40	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Dissolved	1.23	0.2	0.075	13821880	mg/L
MKTF-40	12/17/2020	Manganese, Dissolved	0.0334	0.01	0.003	2017400	mg/L
MKTF-40	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Dissolved	0.012	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-40	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-40	12/17/2020	Sodium, Total	1710	10	4.6	NA	mg/L
MKTF-40	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-40	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-40	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-40	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-40	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	Lead, Dissolved	1.44	1	0.133	NA	ug/L
MKTF-40	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Total Recoverable	1.35	1	0.133	15	ug/L
MKTF-40	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-40	12/17/2020	Uranium, Dissolved	42.1	5	1.12	NA	ug/L
MKTF-40	12/17/2020	Arsenic, Total Recoverable	1.48	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Total Recoverable	3.38	1	0.133	15	ug/L
MKTF-40	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-40	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Uranium, Dissolved	40.1	5	1.12	NA	ug/L
MKTF-40	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-40	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-40	9/19/2020	Arsenic, Total	0.0015	0.005	0.0013	10000	mg/L
MKTF-40	9/19/2020	Lead, Total	0.0075	0.0025	0.00017	15000	mg/L
MKTF-40	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-40	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-40	9/19/2020	Uranium, Total	0.038	0.0025	0.00033	30000	mg/L
MKTF-40	9/19/2020	Barium, Total	0.25	0.003	0.0016	2000000	mg/L
MKTF-40	9/19/2020	Beryllium, Total	0.0014	0.002	0.00088	4000	mg/L
MKTF-40	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	9/19/2020	Chromium, Total	0.0035	0.006	0.0021	50000	mg/L
MKTF-40	9/19/2020	Manganese, Total	0.33	0.002	0.00081	2017000	mg/L
MKTF-40	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-40	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-40	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-40	9/19/2020	Nickel, Total	0.014	0.01	0.0033	372000	mg/L
MKTF-40	9/19/2020	Silver, Total	0.0034	0.005	0.0013	50000	mg/L
MKTF-40	9/19/2020	Boron, Total	2.3	0.2	0.037	3949	mg/L
MKTF-40	9/19/2020	Iron, Total	7.2	0.5	0.13	13822000	mg/L
MKTF-40	9/19/2020	Aluminum, Total	14	0.4	0.15	19914000	mg/L
MKTF-40	9/19/2020	Zinc, Total	0.017	0.01	0.0064	5960000	mg/L
MKTF-40	9/19/2020	Mercury, Total	0.00017	0.0002	0.00012	2000	mg/L
MKTF-40	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-40	9/19/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-40	9/19/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-40	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-40	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-40	9/19/2020	Uranium, Dissolved	0.016	0.0025	0.00033	NA	mg/L
MKTF-40	9/19/2020	Boron, Dissolved	2.1	0.2	0.033	3949110	mg/L
MKTF-40	9/19/2020	Calcium, Dissolved	250	5	0.57	NA	mg/L
MKTF-40	9/19/2020	Sodium, Dissolved	2300	50	6.9	NA	mg/L
MKTF-40	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-40	9/19/2020	Barium, Dissolved	0.067	0.002	0.0011	2000000	mg/L
MKTF-40	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-40	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-40	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-40	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-40	9/19/2020	Iron, Dissolved	0.013	0.02	0.01	13821880	mg/L
MKTF-40	9/19/2020	Magnesium, Dissolved	49	1	0.067	NA	mg/L
MKTF-40	9/19/2020	Manganese, Dissolved	0.00091	0.002	0.00058	2017400	mg/L
MKTF-40	9/19/2020	Nickel, Dissolved	0.0071	0.01	0.0033	372000	mg/L
MKTF-40	9/19/2020	Potassium, Dissolved	5.4	1	0.16	NA	mg/L
MKTF-40	9/19/2020	Silver, Dissolved	0.0034	0.005	0.0013	81200	mg/L
MKTF-40	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-40	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-40	9/19/2020	Zinc, Dissolved	0.62	0.01	0.006	5960450	mg/L
MKTF-40	2/28/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-40	2/28/2020	Arsenic, Dissolved	0.0008	0.005	0.0005	10000	mg/L
MKTF-40	2/28/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-40	2/28/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-40	2/28/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-40	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-40	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-40	2/28/2020	Copper, Dissolved	0.0013	0.006	0.0013	790000	mg/L
MKTF-40	2/28/2020	Manganese, Dissolved	0.00047	0.002	0.00029	2017400	mg/L
MKTF-40	2/28/2020	Silver, Dissolved	0.0044	0.005	0.00094	81200	mg/L
MKTF-40	2/28/2020	Calcium, Dissolved	200	5	0.31	NA	mg/L
MKTF-40	2/28/2020	Barium, Dissolved	0.034	0.002	0.00065	2000000	mg/L
MKTF-40	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-40	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-40	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-40	2/28/2020	Iron, Dissolved	0.01	0.02	0.0087	13821880	mg/L
MKTF-40	2/28/2020	Magnesium, Dissolved	37	1	0.05	NA	mg/L
MKTF-40	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-40	2/28/2020	Nickel, Dissolved	0.007	0.01	0.004	372000	mg/L
MKTF-40	2/28/2020	Potassium, Dissolved	4.4	1	0.16	NA	mg/L
MKTF-40	2/28/2020	Zinc, Dissolved	0.0053	0.01	0.0023	5960450	mg/L
MKTF-40	2/28/2020	Boron, Dissolved	1.7	0.2	0.023	3949110	mg/L
MKTF-40	2/28/2020	Sodium, Dissolved	1800	20	8.3	NA	mg/L
MKTF-40	2/28/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-40	2/28/2020	Arsenic, Total	0.003	0.005	0.0016	10000	mg/L
MKTF-40	2/28/2020	Lead, Total	0.012	0.0025	0.00027	15000	mg/L
MKTF-40	2/28/2020	Selenium, Total	0.0032	0.005	0.0024	50000	mg/L
MKTF-40	2/28/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-40	2/28/2020	Uranium, Total	0.045	0.0025	0.00042	30000	mg/L
MKTF-40	2/28/2020	Barium, Total	0.29	0.002	0.00065	2000000	mg/L
MKTF-40	2/28/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-40	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-40	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-40	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-40	2/28/2020	Manganese, Total	0.38	0.002	0.00029	2017000	mg/L
MKTF-40	2/28/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-40	2/28/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
MKTF-40	2/28/2020	Boron, Total	1.8	0.2	0.023	3949	mg/L
MKTF-40	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-40	2/28/2020	Chromium, Total	0.0032	0.006	0.0015	50000	mg/L
MKTF-40	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-40	2/28/2020	Zinc, Total	0.021	0.01	0.0058	5960000	mg/L
MKTF-40	2/28/2020	Iron, Total	7.7	0.2	0.087	13822000	mg/L
MKTF-40	2/28/2020	Aluminum, Total	11	0.4	0.05	19914000	mg/L
MKTF-40	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-40	3/11/2015	Barium, Total	0.19	0.002	0.00095	2000000	mg/L
MKTF-40	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-40	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-40	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-40	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	3/11/2015	Manganese, Total	0.2	0.002	0.00027	2017000	mg/L
MKTF-40	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-40	3/11/2015	Selenium, Total	0.02	0.01	0.0015	50000	mg/L
MKTF-40	3/11/2015	Uranium, Total	0.07	0.01	0.0005	30000	mg/L
MKTF-40	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-40	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-40	6/10/2015	Barium, Total	0.16	0.002	0.00095	2000000	mg/L
MKTF-40	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-40	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-40	6/10/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-40	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	6/10/2015	Manganese, Total	0.15	0.002	0.00027	2017000	mg/L
MKTF-40	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-40	6/10/2015	Selenium, Total	0.0096	0.005	0.00097	50000	mg/L
MKTF-40	6/10/2015	Uranium, Total	0.069	0.005	0.000024	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/10/2015	Zinc, Total	0.022	0.01	0.0028	5960000	mg/L
MKTF-40	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-40	8/21/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-40	8/21/2015	Calcium, Total	400	10	0.57	NA	mg/L
MKTF-40	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	8/21/2015	Iron, Total	3.4	0.2	0.072	13822000	mg/L
MKTF-40	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	8/21/2015	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-40	8/21/2015	Magnesium, Total	78	1	0.039	NA	mg/L
MKTF-40	8/21/2015	Manganese, Total	0.24	0.002	0.0015	2017000	mg/L
MKTF-40	8/21/2015	Sodium, Total	2500	50	3.6	NA	mg/L
MKTF-40	8/21/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
MKTF-40	8/21/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-40	8/21/2015	Uranium, Total	0.081	0.005	0.000049	30000	mg/L
MKTF-40	8/21/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-40	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-40	11/4/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-40	11/4/2015	Calcium, Total	450	10	2.6	NA	mg/L
MKTF-40	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	11/4/2015	Iron, Total	5.5	0.2	0.072	13822000	mg/L
MKTF-40	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	11/4/2015	Potassium, Total	10	1	0.18	NA	mg/L
MKTF-40	11/4/2015	Magnesium, Total	85	1	0.013	NA	mg/L
MKTF-40	11/4/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
MKTF-40	11/4/2015	Sodium, Total	2700	50	4.8	NA	mg/L
MKTF-40	11/4/2015	Lead, Total	0.0066	0.0025	0.00024	15000	mg/L
MKTF-40	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-40	11/4/2015	Uranium, Total	0.06	0.0025	0.000025	30000	mg/L
MKTF-40	11/4/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-40	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	2/23/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-40	2/23/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-40	2/23/2016	Calcium, Total	350	5	1.3	NA	mg/L
MKTF-40	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	2/23/2016	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-40	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-40	2/23/2016	Potassium, Total	8.1	1	0.18	NA	mg/L
MKTF-40	2/23/2016	Magnesium, Total	68	1	0.013	NA	mg/L
MKTF-40	2/23/2016	Manganese, Total	0.17	0.002	0.0015	2017000	mg/L
MKTF-40	2/23/2016	Sodium, Total	2500	50	4.8	NA	mg/L
MKTF-40	2/23/2016	Lead, Total	0.0026	0.0025	0.00024	15000	mg/L
MKTF-40	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-40	2/23/2016	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
MKTF-40	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-40	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-40	6/9/2016	Arsenic, Total	ND	0.05	0.0069	10000	mg/L
MKTF-40	6/9/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
MKTF-40	6/9/2016	Calcium, Total	440	5	1.3	NA	mg/L
MKTF-40	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-40	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-40	6/9/2016	Iron, Total	0.089	0.02	0.0091	13822000	mg/L
MKTF-40	6/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L
MKTF-40	6/9/2016	Potassium, Total	9	1	0.18	NA	mg/L
MKTF-40	6/9/2016	Magnesium, Total	84	1	0.013	NA	mg/L
MKTF-40	6/9/2016	Manganese, Total	0.18	0.002	0.00032	2017000	mg/L
MKTF-40	6/9/2016	Sodium, Total	3000	50	4.8	NA	mg/L
MKTF-40	6/9/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
MKTF-40	6/9/2016	Selenium, Total	0.019	0.05	0.011	50000	mg/L
MKTF-40	6/9/2016	Uranium, Total	0.058	0.0025	0.00026	30000	mg/L
MKTF-40	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	9/8/2016	Arsenic, Total	0.0045	0.005	0.0011	10000	mg/L
MKTF-40	9/8/2016	Barium, Total	0.31	0.002	0.00079	2000000	mg/L
MKTF-40	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	9/8/2016	Chromium, Total	0.0053	0.006	0.0027	50000	mg/L
MKTF-40	9/8/2016	Copper, Total	0.0057	0.006	0.003	790000	mg/L
MKTF-40	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-40	9/8/2016	Arsenic, Dissolved	0.0023	0.005	0.00069	10000	mg/L
MKTF-40	9/8/2016	Barium, Dissolved	0.11	0.002	0.0013	2000000	mg/L
MKTF-40	9/8/2016	Calcium, Dissolved	400	5	2.5	NA	mg/L
MKTF-40	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-40	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-40	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-40	9/8/2016	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-40	9/8/2016	Potassium, Dissolved	9	1	0.5	NA	mg/L
MKTF-40	9/8/2016	Magnesium, Dissolved	76	1	0.5	NA	mg/L
MKTF-40	9/8/2016	Manganese, Dissolved	0.052	0.002	0.00032	2017400	mg/L
MKTF-40	9/8/2016	Sodium, Dissolved	2800	50	25	NA	mg/L
MKTF-40	9/8/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	9/8/2016	Selenium, Dissolved	0.0096	0.02	0.0042	50000	mg/L
MKTF-40	9/8/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-40	9/8/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-40	9/8/2016	Iron, Total	10	0.4	0.4	13822000	mg/L
MKTF-40	9/8/2016	Mercury, Total	0.00012	0.0002	0.000053	2000	mg/L
MKTF-40	9/8/2016	Manganese, Total	0.49	0.002	0.00027	2017000	mg/L
MKTF-40	9/8/2016	Lead, Total	0.029	0.0025	0.00041	15000	mg/L
MKTF-40	9/8/2016	Selenium, Total	0.013	0.05	0.0094	50000	mg/L
MKTF-40	9/8/2016	Uranium, Total	0.059	0.0025	0.00087	30000	mg/L
MKTF-40	9/8/2016	Zinc, Total	0.043	0.01	0.0027	5960000	mg/L
MKTF-40	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	10/31/2016	Arsenic, Total	0.0041	0.005	0.0011	10000	mg/L
MKTF-40	10/31/2016	Barium, Total	0.21	0.002	0.00079	2000000	mg/L
MKTF-40	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	10/31/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
MKTF-40	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-40	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-40	10/31/2016	Arsenic, Dissolved	0.0039	0.005	0.00069	10000	mg/L
MKTF-40	10/31/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
MKTF-40	10/31/2016	Calcium, Dissolved	380	5	2.5	NA	mg/L
MKTF-40	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-40	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-40	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-40	10/31/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
MKTF-40	10/31/2016	Potassium, Dissolved	8	1	0.5	NA	mg/L
MKTF-40	10/31/2016	Magnesium, Dissolved	71	1	0.5	NA	mg/L
MKTF-40	10/31/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
MKTF-40	10/31/2016	Sodium, Dissolved	2800	50	25	NA	mg/L
MKTF-40	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	10/31/2016	Selenium, Dissolved	0.012	0.01	0.0021	50000	mg/L
MKTF-40	10/31/2016	Uranium, Dissolved	0.06	0.0025	0.00026	NA	mg/L
MKTF-40	10/31/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
MKTF-40	10/31/2016	Iron, Total	5.3	0.2	0.2	13822000	mg/L
MKTF-40	10/31/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
MKTF-40	10/31/2016	Manganese, Total	0.26	0.002	0.00027	2017000	mg/L
MKTF-40	10/31/2016	Lead, Total	0.0084	0.0025	0.00041	15000	mg/L
MKTF-40	10/31/2016	Selenium, Total	0.0082	0.02	0.0037	50000	mg/L
MKTF-40	10/31/2016	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
MKTF-40	10/31/2016	Zinc, Total	0.019	0.01	0.0027	5960000	mg/L
MKTF-40	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	3/7/2017	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-40	3/7/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
MKTF-40	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-40	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-40	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-40	3/7/2017	Arsenic, Dissolved	0.0029	0.01	0.0014	10000	mg/L
MKTF-40	3/7/2017	Barium, Dissolved	0.097	0.002	0.00085	2000000	mg/L
MKTF-40	3/7/2017	Calcium, Dissolved	370	5	2.5	NA	mg/L
MKTF-40	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-40	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-40	3/7/2017	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-40	3/7/2017	Magnesium, Dissolved	69	1	0.5	NA	mg/L
MKTF-40	3/7/2017	Manganese, Dissolved	0.04	0.002	0.00038	2017400	mg/L
MKTF-40	3/7/2017	Sodium, Dissolved	2600	50	25	NA	mg/L
MKTF-40	3/7/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	3/7/2017	Selenium, Dissolved	0.01	0.02	0.0042	50000	mg/L
MKTF-40	3/7/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-40	3/7/2017	Iron, Total	5.3	0.2	0.2	13822000	mg/L
MKTF-40	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-40	3/7/2017	Manganese, Total	0.2	0.002	0.00027	2017000	mg/L
MKTF-40	3/7/2017	Lead, Total	0.0081	0.0025	0.00041	15000	mg/L
MKTF-40	3/7/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
MKTF-40	3/7/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-40	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-40	6/5/2017	Arsenic, Total	0.0038	0.005	0.0015	10000	mg/L
MKTF-40	6/5/2017	Barium, Total	0.15	0.002	0.00093	2000000	mg/L
MKTF-40	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	6/5/2017	Chromium, Total	0.0018	0.006	0.0011	50000	mg/L
MKTF-40	6/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-40	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-40	6/5/2017	Arsenic, Dissolved	0.0023	0.005	0.00089	10000	mg/L
MKTF-40	6/5/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-40	6/5/2017	Calcium, Dissolved	330	10	0.78	NA	mg/L
MKTF-40	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-40	6/5/2017	Copper, Dissolved	0.0081	0.006	0.0032	790000	mg/L
MKTF-40	6/5/2017	Iron, Dissolved	0.053	0.02	0.016	13821880	mg/L
MKTF-40	6/5/2017	Potassium, Dissolved	6.3	1	0.11	NA	mg/L
MKTF-40	6/5/2017	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	6/5/2017	Manganese, Dissolved	0.09	0.002	0.00038	2017400	mg/L
MKTF-40	6/5/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-40	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	6/5/2017	Selenium, Dissolved	0.0075	0.01	0.0039	50000	mg/L
MKTF-40	6/5/2017	Uranium, Dissolved	0.058	0.0025	0.00025	NA	mg/L
MKTF-40	6/5/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-40	6/5/2017	Iron, Total	3.7	0.1	0.051	13822000	mg/L
MKTF-40	6/5/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
MKTF-40	6/5/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
MKTF-40	6/5/2017	Lead, Total	0.0052	0.0025	0.00048	15000	mg/L
MKTF-40	6/5/2017	Selenium, Total	0.0089	0.005	0.0036	50000	mg/L
MKTF-40	6/5/2017	Uranium, Total	0.063	0.0025	0.00077	30000	mg/L
MKTF-40	6/5/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
MKTF-40	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	9/25/2017	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
MKTF-40	9/25/2017	Barium, Total	0.14	0.002	0.00093	2000000	mg/L
MKTF-40	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-40	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-40	9/25/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-40	9/25/2017	Barium, Dissolved	0.072	0.002	0.00085	2000000	mg/L
MKTF-40	9/25/2017	Calcium, Dissolved	320	10	0.78	NA	mg/L
MKTF-40	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	9/25/2017	Iron, Dissolved	0.094	0.02	0.016	13821880	mg/L
MKTF-40	9/25/2017	Potassium, Dissolved	6.4	1	0.11	NA	mg/L
MKTF-40	9/25/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-40	9/25/2017	Manganese, Dissolved	0.052	0.002	0.00039	2017400	mg/L
MKTF-40	9/25/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-40	9/25/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	9/25/2017	Selenium, Dissolved	0.0082	0.005	0.0019	50000	mg/L
MKTF-40	9/25/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-40	9/25/2017	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-40	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	9/25/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/25/2017	Lead, Total	0.0028	0.0025	0.00048	15000	mg/L
MKTF-40	9/25/2017	Selenium, Total	0.0071	0.005	0.0036	50000	mg/L
MKTF-40	9/25/2017	Zinc, Total	0.0081	0.01	0.0033	5960000	mg/L
MKTF-40	11/21/2017	Silver, Total	0.0047	0.005	0.0012	50000	mg/L
MKTF-40	11/21/2017	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-40	11/21/2017	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-40	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	11/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	11/21/2017	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
MKTF-40	11/21/2017	Silver, Dissolved	0.0056	0.005	0.0018	81200	mg/L
MKTF-40	11/21/2017	Arsenic, Dissolved	0.0046	0.01	0.0042	10000	mg/L
MKTF-40	11/21/2017	Barium, Dissolved	0.076	0.002	0.00099	2000000	mg/L
MKTF-40	11/21/2017	Calcium, Dissolved	320	5	0.39	NA	mg/L
MKTF-40	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	11/21/2017	Iron, Dissolved	0.072	0.02	0.016	13821880	mg/L
MKTF-40	11/21/2017	Potassium, Dissolved	6.3	1	0.11	NA	mg/L
MKTF-40	11/21/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-40	11/21/2017	Manganese, Dissolved	0.021	0.002	0.00039	2017400	mg/L
MKTF-40	11/21/2017	Sodium, Dissolved	2400	50	8.2	NA	mg/L
MKTF-40	11/21/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	11/21/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-40	11/21/2017	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
MKTF-40	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	11/21/2017	Iron, Total	4	0.1	0.051	13822000	mg/L
MKTF-40	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	11/21/2017	Manganese, Total	0.18	0.002	0.0011	2017000	mg/L
MKTF-40	11/21/2017	Lead, Total	0.0042	0.0025	0.0011	15000	mg/L
MKTF-40	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	11/21/2017	Uranium, Total	0.053	0.0025	0.00077	30000	mg/L
MKTF-40	11/21/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-40	2/5/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-40	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-40	2/5/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-40	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	2/5/2018	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-40	2/5/2018	Silver, Dissolved	0.0082	0.005	0.0018	81200	mg/L
MKTF-40	2/5/2018	Arsenic, Dissolved	ND	0.05	0.021	10000	mg/L
MKTF-40	2/5/2018	Barium, Dissolved	0.08	0.002	0.00099	2000000	mg/L
MKTF-40	2/5/2018	Calcium, Dissolved	360	5	0.39	NA	mg/L
MKTF-40	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	2/5/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	2/5/2018	Potassium, Dissolved	6.2	1	0.11	NA	mg/L
MKTF-40	2/5/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	2/5/2018	Manganese, Dissolved	0.06	0.002	0.00039	2017400	mg/L
MKTF-40	2/5/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-40	2/5/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
MKTF-40	2/5/2018	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
MKTF-40	2/5/2018	Uranium, Dissolved	0.044	0.025	0.0048	NA	mg/L
MKTF-40	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	2/5/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
MKTF-40	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	2/5/2018	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
MKTF-40	2/5/2018	Lead, Total	0.0062	0.0025	0.0011	15000	mg/L
MKTF-40	2/5/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-40	2/5/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
MKTF-40	2/5/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-40	5/6/2018	Silver, Total	0.0044	0.005	0.0012	50000	mg/L
MKTF-40	5/6/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
MKTF-40	5/6/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-40	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	5/6/2018	Chromium, Total	0.0026	0.006	0.0018	50000	mg/L
MKTF-40	5/6/2018	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-40	5/6/2018	Silver, Dissolved	0.03	0.025	0.0092	81200	mg/L
MKTF-40	5/6/2018	Arsenic, Dissolved	0.0029	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	Barium, Dissolved	0.059	0.002	0.00099	2000000	mg/L
MKTF-40	5/6/2018	Calcium, Dissolved	260	5	0.39	NA	mg/L
MKTF-40	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	5/6/2018	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
MKTF-40	5/6/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-40	5/6/2018	Potassium, Dissolved	5	5	0.56	NA	mg/L
MKTF-40	5/6/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	5/6/2018	Manganese, Dissolved	0.036	0.002	0.00039	2017400	mg/L
MKTF-40	5/6/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-40	5/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	5/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-40	5/6/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
MKTF-40	5/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	5/6/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-40	5/6/2018	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-40	5/6/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
MKTF-40	5/6/2018	Lead, Total	0.0059	0.0025	0.0011	15000	mg/L
MKTF-40	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	5/6/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
MKTF-40	5/6/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-40	8/17/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
MKTF-40	8/17/2018	Arsenic, Total	0.0034	0.005	0.0021	10000	mg/L
MKTF-40	8/17/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-40	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	8/17/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-40	8/17/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
MKTF-40	8/17/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-40	8/17/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-40	8/17/2018	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-40	8/17/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-40	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	8/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	8/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	8/17/2018	Potassium, Dissolved	4.6	1	0.11	NA	mg/L
MKTF-40	8/17/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-40	8/17/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-40	8/17/2018	Sodium, Dissolved	2100	50	8.2	NA	mg/L
MKTF-40	8/17/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	8/17/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-40	8/17/2018	Uranium, Dissolved	0.053	0.0025	0.00048	NA	mg/L
MKTF-40	8/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-40	8/17/2018	Iron, Total	3.5	0.1	0.051	13822000	mg/L
MKTF-40	8/17/2018	Mercury, Total	0.000079	0.0002	0.000038	2000	mg/L
MKTF-40	8/17/2018	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
MKTF-40	8/17/2018	Lead, Total	0.0031	0.0025	0.0011	15000	mg/L
MKTF-40	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	8/17/2018	Uranium, Total	0.051	0.0025	0.00034	30000	mg/L
MKTF-40	8/17/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-40	11/15/2018	Silver, Total	0.0067	0.005	0.0012	50000	mg/L
MKTF-40	11/15/2018	Arsenic, Total	0.0037	0.001	0.00041	10000	mg/L
MKTF-40	11/15/2018	Barium, Total	0.072	0.002	0.001	2000000	mg/L
MKTF-40	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-40	11/15/2018	Silver, Dissolved	0.0054	0.005	0.0018	81200	mg/L
MKTF-40	11/15/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-40	11/15/2018	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-40	11/15/2018	Calcium, Dissolved	230	5	0.39	NA	mg/L
MKTF-40	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	11/15/2018	Potassium, Dissolved	4.9	1	0.11	NA	mg/L
MKTF-40	11/15/2018	Magnesium, Dissolved	42	1	0.25	NA	mg/L
MKTF-40	11/15/2018	Manganese, Dissolved	0.0031	0.002	0.00039	2017400	mg/L
MKTF-40	11/15/2018	Sodium, Dissolved	1900	50	8.2	NA	mg/L
MKTF-40	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-40	11/15/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-40	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-40	11/15/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-40	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	11/15/2018	Manganese, Total	0.025	0.002	0.0011	2017000	mg/L
MKTF-40	11/15/2018	Lead, Total	0.0016	0.0005	0.00023	15000	mg/L
MKTF-40	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-40	11/15/2018	Uranium, Total	0.046	0.0025	0.00034	30000	mg/L
MKTF-40	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-41	2/27/2020	Antimony, Dissolved	0.00048	0.001	0.00039	6000	mg/L
MKTF-41	2/27/2020	Arsenic, Dissolved	0.0022	0.001	0.0001	10000	mg/L
MKTF-41	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	2/27/2020	Selenium, Dissolved	0.038	0.001	0.00017	50000	mg/L
MKTF-41	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	2/27/2020	Uranium, Dissolved	0.01	0.0005	0.000075	NA	mg/L
MKTF-41	2/27/2020	Barium, Dissolved	0.052	0.002	0.00065	2000000	mg/L
MKTF-41	2/27/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-41	2/27/2020	Boron, Dissolved	0.73	0.04	0.0045	3949110	mg/L
MKTF-41	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-41	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-41	2/27/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-41	2/27/2020	Manganese, Dissolved	0.0051	0.002	0.00029	2017400	mg/L
MKTF-41	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-41	2/27/2020	Zinc, Dissolved	0.024	0.01	0.0023	5960450	mg/L
MKTF-41	2/27/2020	Aluminum, Dissolved	0.0065	0.02	0.0025	19913930	mg/L
MKTF-41	2/27/2020	Calcium, Dissolved	14	1	0.062	NA	mg/L
MKTF-41	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-41	2/27/2020	Magnesium, Dissolved	1.7	1	0.05	NA	mg/L
MKTF-41	2/27/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-41	2/27/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-41	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-41	2/27/2020	Molybdenum, Dissolved	0.012	0.008	0.0067	98700	mg/L
MKTF-41	2/27/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-41	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-41	2/27/2020	Arsenic, Total	0.0022	0.001	0.00031	10000	mg/L
MKTF-41	2/27/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MKTF-41	2/27/2020	Selenium, Total	0.041	0.001	0.00048	50000	mg/L
MKTF-41	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	2/27/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
MKTF-41	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-41	2/27/2020	Aluminum, Total	0.094	0.02	0.0025	19914000	mg/L
MKTF-41	2/27/2020	Barium, Total	0.063	0.002	0.00065	2000000	mg/L
MKTF-41	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-41	2/27/2020	Boron, Total	0.76	0.04	0.0045	3949	mg/L
MKTF-41	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-41	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-41	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	2/27/2020	Iron, Total	0.039	0.02	0.0087	13822000	mg/L
MKTF-41	2/27/2020	Manganese, Total	0.008	0.002	0.00029	2017000	mg/L
MKTF-41	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-41	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-41	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-41	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-41	2/27/2020	Molybdenum, Total	0.01	0.008	0.0067	98700	mg/L
MKTF-41	12/15/2020	Arsenic, Total Recoverable	1.95	1	0.286	10	ug/L
MKTF-41	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-41	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-41	12/15/2020	Selenium, Total Recoverable	36	5	1.43	50	ug/L
MKTF-41	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-41	12/15/2020	Arsenic, Dissolved	1.95	1	0.286	10	ug/L
MKTF-41	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-41	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-41	12/15/2020	Selenium, Dissolved	35.5	5	1.43	50	ug/L
MKTF-41	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-41	12/15/2020	Uranium, Total Recoverable	13.3	5	1.12	30	ug/L
MKTF-41	12/15/2020	Uranium, Dissolved	13.1	5	1.12	NA	ug/L
MKTF-41	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-41	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-41	12/15/2020	Aluminum, Total	1.43	0.2	0.051	19914000	mg/L
MKTF-41	12/15/2020	Calcium, Total	14.4	0.5	0.084	NA	mg/L
MKTF-41	12/15/2020	Boron, Total	0.765	0.1	0.022	3949	mg/L
MKTF-41	12/15/2020	Barium, Total	0.0773	0.01	0.003	2000000	mg/L
MKTF-41	12/15/2020	Potassium, Total	2.07	1	0.34	NA	mg/L
MKTF-41	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-41	12/15/2020	Magnesium, Total	1.87	0.5	0.12	NA	mg/L
MKTF-41	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-41	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-41	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-41	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-41	12/15/2020	Iron, Total	0.764	0.2	0.075	13822000	mg/L
MKTF-41	12/15/2020	Manganese, Total	0.0491	0.01	0.003	2017000	mg/L
MKTF-41	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-41	12/15/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-41	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-41	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-41	12/15/2020	Barium, Dissolved	0.062	0.01	0.003	2000000	mg/L
MKTF-41	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-41	12/15/2020	Boron, Dissolved	0.796	0.1	0.022	3949110	mg/L
MKTF-41	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-41	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-41	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-41	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-41	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-41	12/15/2020	Manganese, Dissolved	0.0113	0.01	0.003	2017400	mg/L
MKTF-41	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-41	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-41	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-41	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-41	12/15/2020	Sodium, Total	575	20	9.2	NA	mg/L
MKTF-41	9/21/2020	Arsenic, Dissolved	0.0021	0.005	0.001	10000	mg/L
MKTF-41	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-41	9/21/2020	Selenium, Dissolved	0.036	0.005	0.0033	50000	mg/L
MKTF-41	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-41	9/21/2020	Uranium, Dissolved	0.013	0.0025	0.00033	NA	mg/L
MKTF-41	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-41	9/21/2020	Sodium, Dissolved	630	50	6.9	NA	mg/L
MKTF-41	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-41	9/21/2020	Barium, Dissolved	0.058	0.002	0.0011	2000000	mg/L
MKTF-41	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-41	9/21/2020	Boron, Dissolved	0.76	0.04	0.0067	3949110	mg/L
MKTF-41	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-41	9/21/2020	Calcium, Dissolved	13	1	0.11	NA	mg/L
MKTF-41	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-41	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-41	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-41	9/21/2020	Magnesium, Dissolved	1.6	1	0.067	NA	mg/L
MKTF-41	9/21/2020	Manganese, Dissolved	0.006	0.002	0.00058	2017400	mg/L
MKTF-41	9/21/2020	Molybdenum, Dissolved	0.012	0.008	0.0056	98700	mg/L
MKTF-41	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-41	9/21/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-41	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-41	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-41	9/21/2020	Zinc, Dissolved	0.061	0.01	0.006	5960450	mg/L
MKTF-41	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-41	9/21/2020	Arsenic, Total	0.002	0.001	0.00026	10000	mg/L
MKTF-41	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
MKTF-41	9/21/2020	Selenium, Total	0.036	0.001	0.00066	50000	mg/L
MKTF-41	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-41	9/21/2020	Uranium, Total	0.012	0.0005	0.000065	30000	mg/L
MKTF-41	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-41	9/21/2020	Aluminum, Total	0.015	0.02	0.0074	19914000	mg/L
MKTF-41	9/21/2020	Barium, Total	0.06	0.003	0.0016	2000000	mg/L
MKTF-41	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-41	9/21/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MKTF-41	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-41	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-41	9/21/2020	Iron, Total	0.02	0.05	0.013	13822000	mg/L
MKTF-41	9/21/2020	Manganese, Total	0.0064	0.002	0.00081	2017000	mg/L
MKTF-41	9/21/2020	Molybdenum, Total	0.013	0.008	0.0065	98700	mg/L
MKTF-41	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-41	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-41	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-41	5/7/2019	Aluminum, Dissolved	0.015	0.02	0.002488	19913930	mg/L
MKTF-41	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Dissolved	0.0016	0.005	0.000504	10000	mg/L
MKTF-41	5/7/2019	Barium, Dissolved	0.068	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Dissolved	0.86	0.04	0.004531	3949110	mg/L
MKTF-41	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	5/7/2019	Calcium, Dissolved	16	1	0.061889	NA	mg/L
MKTF-41	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-41	5/7/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-41	5/7/2019	Magnesium, Dissolved	1.8	1	0.05029	NA	mg/L
MKTF-41	5/7/2019	Manganese, Dissolved	0.0032	0.002	0.00029	2017400	mg/L
MKTF-41	5/7/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-41	5/7/2019	Selenium, Dissolved	0.031	0.005	0.000857	50000	mg/L
MKTF-41	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	5/7/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-41	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-41	5/7/2019	Uranium, Dissolved	0.012	0.0025	0.000374	NA	mg/L
MKTF-41	5/7/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-41	5/7/2019	Aluminum, Total	0.88	0.1	0.012441	19914000	mg/L
MKTF-41	5/7/2019	Antimony, Total	0.00044	0.001	0.000389	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-41	5/7/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Total	0.00078	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Total	0.92	0.04	0.004531	3949	mg/L
MKTF-41	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	5/7/2019	Iron, Total	0.61	0.02	0.008747	13822000	mg/L
MKTF-41	5/7/2019	Lead, Total	0.00065	0.0005	0.000055	15000	mg/L
MKTF-41	5/7/2019	Manganese, Total	0.029	0.002	0.00029	2017000	mg/L
MKTF-41	5/7/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
MKTF-41	5/7/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Selenium, Total	0.032	0.001	0.000478	50000	mg/L
MKTF-41	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	5/7/2019	Uranium, Total	0.014	0.0005	0.000085	30000	mg/L
MKTF-41	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	5/7/2019	Aluminum, Dissolved	0.0061	0.02	0.002488	19913930	mg/L
MKTF-41	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-41	5/7/2019	Barium, Dissolved	0.075	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Dissolved	0.92	0.04	0.004531	3949110	mg/L
MKTF-41	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	5/7/2019	Calcium, Dissolved	18	1	0.061889	NA	mg/L
MKTF-41	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
MKTF-41	5/7/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-41	5/7/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	5/7/2019	Manganese, Dissolved	0.0023	0.002	0.00029	2017400	mg/L
MKTF-41	5/7/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-41	5/7/2019	Selenium, Dissolved	0.036	0.005	0.000857	50000	mg/L
MKTF-41	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	5/7/2019	Sodium, Dissolved	660	10	4.161763	NA	mg/L
MKTF-41	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-41	5/7/2019	Uranium, Dissolved	0.013	0.0025	0.000374	NA	mg/L
MKTF-41	5/7/2019	Zinc, Dissolved	0.042	0.01	0.002252	5960450	mg/L
MKTF-41	5/7/2019	Aluminum, Total	0.96	0.1	0.012441	19914000	mg/L
MKTF-41	5/7/2019	Antimony, Total	0.0011	0.001	0.000389	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Total	0.0016	0.001	0.000312	10000	mg/L
MKTF-41	5/7/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Total	0.0009	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Total	0.93	0.04	0.004531	3949	mg/L
MKTF-41	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	5/7/2019	Iron, Total	0.73	0.02	0.008747	13822000	mg/L
MKTF-41	5/7/2019	Lead, Total	0.00076	0.0005	0.000055	15000	mg/L
MKTF-41	5/7/2019	Manganese, Total	0.028	0.002	0.00029	2017000	mg/L
MKTF-41	5/7/2019	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
MKTF-41	5/7/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Selenium, Total	0.031	0.001	0.000478	50000	mg/L
MKTF-41	5/7/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-41	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	5/7/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
MKTF-41	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	8/22/2019	Aluminum, Dissolved	0.039	0.02	0.002488	19913930	mg/L
MKTF-41	8/22/2019	Antimony, Dissolved	0.00064	0.001	0.000389	6000	mg/L
MKTF-41	8/22/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
MKTF-41	8/22/2019	Barium, Dissolved	0.073	0.002	0.000648	2000000	mg/L
MKTF-41	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	8/22/2019	Boron, Dissolved	0.9	0.04	0.004531	3949110	mg/L
MKTF-41	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	8/22/2019	Calcium, Dissolved	15	1	0.061889	NA	mg/L
MKTF-41	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	8/22/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
MKTF-41	8/22/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L
MKTF-41	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	8/22/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	8/22/2019	Manganese, Dissolved	0.0024	0.002	0.00029	2017400	mg/L
MKTF-41	8/22/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
MKTF-41	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	8/22/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
MKTF-41	8/22/2019	Selenium, Dissolved	0.034	0.001	0.000171	50000	mg/L
MKTF-41	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	8/22/2019	Sodium, Dissolved	730	100	41.61763	NA	mg/L
MKTF-41	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	8/22/2019	Uranium, Dissolved	0.014	0.0005	0.000075	NA	mg/L
MKTF-41	8/22/2019	Zinc, Dissolved	0.0058	0.01	0.002252	5960450	mg/L
MKTF-41	8/22/2019	Aluminum, Total	14	2	0.248827	19914000	mg/L
MKTF-41	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-41	8/22/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
MKTF-41	8/22/2019	Barium, Total	0.31	0.002	0.000648	2000000	mg/L
MKTF-41	8/22/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-41	8/22/2019	Boron, Total	0.86	0.04	0.004531	3949	mg/L
MKTF-41	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	8/22/2019	Chromium, Total	0.0061	0.006	0.001533	50000	mg/L
MKTF-41	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	8/22/2019	Copper, Total	0.007	0.006	0.004072	790000	mg/L
MKTF-41	8/22/2019	Iron, Total	7.3	2	0.874687	13822000	mg/L
MKTF-41	8/22/2019	Lead, Total	0.0081	0.0005	0.000055	15000	mg/L
MKTF-41	8/22/2019	Manganese, Total	0.45	0.002	0.00029	2017000	mg/L
MKTF-41	8/22/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-41	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-41	8/22/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/22/2019	Selenium, Total	0.034	0.001	0.000478	50000	mg/L
MKTF-41	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	8/22/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-41	8/22/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
MKTF-41	8/22/2019	Zinc, Total	0.034	0.01	0.005772	5960000	mg/L
MKTF-41	2/13/2019	Antimony, Total	ND	0.001	0.000204	6000	mg/L
MKTF-41	2/13/2019	Arsenic, Total	0.0021	0.001	0.000312	10000	mg/L
MKTF-41	2/13/2019	Barium, Total	0.068	0.002	0.000648	2000000	mg/L
MKTF-41	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-41	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	2/13/2019	Iron, Total	0.16	0.02	0.008747	13822000	mg/L
MKTF-41	2/13/2019	Lead, Total	0.0002	0.0005	0.000047	15000	mg/L
MKTF-41	2/13/2019	Manganese, Total	0.014	0.002	0.00029	2017000	mg/L
MKTF-41	2/13/2019	Mercury, Total	0.00008	0.0002	0.000038	2000	mg/L
MKTF-41	2/13/2019	Selenium, Total	0.036	0.001	0.000478	50000	mg/L
MKTF-41	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	2/13/2019	Uranium, Total	0.011	0.0005	0.000085	30000	mg/L
MKTF-41	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	2/13/2019	Antimony, Dissolved	0.00025	0.001	0.000204	6000	mg/L
MKTF-41	2/13/2019	Arsenic, Dissolved	0.0019	0.001	0.000068	10000	mg/L
MKTF-41	2/13/2019	Barium, Dissolved	0.06	0.002	0.000648	2000000	mg/L
MKTF-41	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	2/13/2019	Calcium, Dissolved	14	1	0.061889	NA	mg/L
MKTF-41	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	2/13/2019	Copper, Dissolved	0.0028	0.006	0.001296	790000	mg/L
MKTF-41	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-41	2/13/2019	Magnesium, Dissolved	1.6	1	0.05029	NA	mg/L
MKTF-41	2/13/2019	Manganese, Dissolved	0.0085	0.002	0.00029	2017400	mg/L
MKTF-41	2/13/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-41	2/13/2019	Selenium, Dissolved	0.033	0.001	0.000203	50000	mg/L
MKTF-41	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	2/13/2019	Sodium, Dissolved	650	20	8.323526	NA	mg/L
MKTF-41	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-41	2/13/2019	Uranium, Dissolved	0.012	0.0005	0.00003	NA	mg/L
MKTF-41	2/13/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-41	10/23/2019	Aluminum, Total	4.3	0.1	0.012441	19914000	mg/L
MKTF-41	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-41	10/23/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-41	10/23/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-41	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-41	10/23/2019	Boron, Total	0.86	0.04	0.004531	3949	mg/L
MKTF-41	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	10/23/2019	Iron, Total	2.2	0.1	0.043734	13822000	mg/L
MKTF-41	10/23/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-41	10/23/2019	Manganese, Total	0.067	0.002	0.00029	2017000	mg/L
MKTF-41	10/23/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-41	10/23/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
MKTF-41	10/23/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	10/23/2019	Selenium, Total	0.033	0.005	0.00239	50000	mg/L
MKTF-41	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	10/23/2019	Thallium, Total	0.000053	0.0005	0.000052	2000	mg/L
MKTF-41	10/23/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-41	10/23/2019	Aluminum, Dissolved	0.018	0.02	0.002488	19913930	mg/L
MKTF-41	10/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-41	10/23/2019	Arsenic, Dissolved	0.0022	0.005	0.000504	10000	mg/L
MKTF-41	10/23/2019	Barium, Dissolved	0.073	0.002	0.000648	2000000	mg/L
MKTF-41	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	10/23/2019	Boron, Dissolved	0.89	0.04	0.004531	3949110	mg/L
MKTF-41	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	10/23/2019	Calcium, Dissolved	16	1	0.061889	NA	mg/L
MKTF-41	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	10/23/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-41	10/23/2019	Iron, Dissolved	0.0091	0.02	0.008747	13821880	mg/L
MKTF-41	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	10/23/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	10/23/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
MKTF-41	10/23/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
MKTF-41	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	10/23/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-41	10/23/2019	Selenium, Dissolved	0.039	0.005	0.000857	50000	mg/L
MKTF-41	10/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	10/23/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-41	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	10/23/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
MKTF-41	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-41	3/12/2015	Barium, Total	0.081	0.002	0.00095	2000000	mg/L
MKTF-41	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-41	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-41	3/12/2015	Iron, Total	0.2	0.02	0.0073	13822000	mg/L
MKTF-41	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	3/12/2015	Manganese, Total	0.024	0.002	0.00027	2017000	mg/L
MKTF-41	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-41	3/12/2015	Selenium, Total	0.059	0.01	0.0015	50000	mg/L
MKTF-41	3/12/2015	Uranium, Total	0.034	0.001	0.00005	30000	mg/L
MKTF-41	3/12/2015	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
MKTF-41	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-41	6/9/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-41	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	6/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	6/9/2015	Iron, Total	4.1	0.1	0.036	13822000	mg/L
MKTF-41	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	6/9/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
MKTF-41	6/9/2015	Lead, Total	0.006	0.0025	0.00024	15000	mg/L
MKTF-41	6/9/2015	Selenium, Total	0.047	0.005	0.00062	50000	mg/L
MKTF-41	6/9/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-41	6/9/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-41	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-41	8/21/2015	Barium, Total	0.27	0.002	0.0011	2000000	mg/L
MKTF-41	8/21/2015	Calcium, Total	16	1	0.057	NA	mg/L
MKTF-41	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	8/21/2015	Chromium, Total	0.0063	0.006	0.0022	50000	mg/L
MKTF-41	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	8/21/2015	Iron, Total	9	0.4	0.14	13822000	mg/L
MKTF-41	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	8/21/2015	Potassium, Total	3.5	1	0.18	NA	mg/L
MKTF-41	8/21/2015	Magnesium, Total	2.3	1	0.039	NA	mg/L
MKTF-41	8/21/2015	Manganese, Total	0.35	0.002	0.0015	2017000	mg/L
MKTF-41	8/21/2015	Sodium, Total	650	10	0.72	NA	mg/L
MKTF-41	8/21/2015	Lead, Total	0.012	0.0005	0.000047	15000	mg/L
MKTF-41	8/21/2015	Selenium, Total	0.044	0.005	0.00062	50000	mg/L
MKTF-41	8/21/2015	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-41	8/21/2015	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-41	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	11/5/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-41	11/5/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-41	11/5/2015	Calcium, Total	16	1	0.26	NA	mg/L
MKTF-41	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	11/5/2015	Iron, Total	4.3	0.1	0.036	13822000	mg/L
MKTF-41	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	11/5/2015	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-41	11/5/2015	Magnesium, Total	2.4	1	0.013	NA	mg/L
MKTF-41	11/5/2015	Manganese, Total	0.17	0.002	0.0015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-41	11/5/2015	Lead, Total	0.0056	0.0005	0.000047	15000	mg/L
MKTF-41	11/5/2015	Selenium, Total	0.052	0.005	0.00062	50000	mg/L
MKTF-41	11/5/2015	Uranium, Total	0.025	0.0005	0.0000049	30000	mg/L
MKTF-41	11/5/2015	Zinc, Total	0.019	0.01	0.0039	5960000	mg/L
MKTF-41	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	2/24/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-41	2/24/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-41	2/24/2016	Calcium, Total	16	1	0.26	NA	mg/L
MKTF-41	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	2/24/2016	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-41	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	2/24/2016	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-41	2/24/2016	Magnesium, Total	2	1	0.013	NA	mg/L
MKTF-41	2/24/2016	Manganese, Total	0.12	0.002	0.0015	2017000	mg/L
MKTF-41	2/24/2016	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-41	2/24/2016	Lead, Total	0.0035	0.0025	0.00024	15000	mg/L
MKTF-41	2/24/2016	Selenium, Total	0.044	0.005	0.00062	50000	mg/L
MKTF-41	2/24/2016	Uranium, Total	0.022	0.0025	0.000025	30000	mg/L
MKTF-41	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-41	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-41	6/9/2016	Arsenic, Total	0.0075	0.02	0.0028	10000	mg/L
MKTF-41	6/9/2016	Barium, Total	0.071	0.002	0.0013	2000000	mg/L
MKTF-41	6/9/2016	Calcium, Total	14	1	0.26	NA	mg/L
MKTF-41	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-41	6/9/2016	Chromium, Total	0.0027	0.006	0.0018	50000	mg/L
MKTF-41	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-41	6/9/2016	Iron, Total	0.19	0.02	0.0091	13822000	mg/L
MKTF-41	6/9/2016	Mercury, Total	0.000094	0.0002	0.000053	2000	mg/L
MKTF-41	6/9/2016	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-41	6/9/2016	Magnesium, Total	2	1	0.013	NA	mg/L
MKTF-41	6/9/2016	Manganese, Total	0.019	0.002	0.00032	2017000	mg/L
MKTF-41	6/9/2016	Sodium, Total	640	10	0.96	NA	mg/L
MKTF-41	6/9/2016	Lead, Total	0.00091	0.0005	0.00017	15000	mg/L
MKTF-41	6/9/2016	Selenium, Total	0.06	0.01	0.0021	50000	mg/L
MKTF-41	6/9/2016	Uranium, Total	0.023	0.0005	0.000051	30000	mg/L
MKTF-41	6/9/2016	Zinc, Total	0.0029	0.01	0.0028	5960000	mg/L
MKTF-41	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-41	9/9/2016	Arsenic, Total	0.0061	0.01	0.0021	10000	mg/L
MKTF-41	9/9/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-41	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	9/9/2016	Chromium, Total	0.003	0.006	0.0027	50000	mg/L
MKTF-41	9/9/2016	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-41	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-41	9/9/2016	Arsenic, Dissolved	ND	0.05	0.0069	10000	mg/L
MKTF-41	9/9/2016	Barium, Dissolved	0.059	0.002	0.0013	2000000	mg/L
MKTF-41	9/9/2016	Calcium, Dissolved	13	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-41	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-41	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-41	9/9/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-41	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Magnesium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Manganese, Dissolved	0.0012	0.002	0.00032	2017400	mg/L
MKTF-41	9/9/2016	Sodium, Dissolved	640	10	5	NA	mg/L
MKTF-41	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	9/9/2016	Selenium, Dissolved	0.048	0.005	0.0011	50000	mg/L
MKTF-41	9/9/2016	Uranium, Dissolved	0.014	0.0005	0.000051	NA	mg/L
MKTF-41	9/9/2016	Zinc, Dissolved	0.0098	0.01	0.0028	5960450	mg/L
MKTF-41	9/9/2016	Iron, Total	2.5	0.1	0.1	13822000	mg/L
MKTF-41	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
MKTF-41	9/9/2016	Lead, Total	0.0037	0.0005	0.000081	15000	mg/L
MKTF-41	9/9/2016	Selenium, Total	0.045	0.05	0.0094	50000	mg/L
MKTF-41	9/9/2016	Uranium, Total	0.015	0.0005	0.00017	30000	mg/L
MKTF-41	9/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-41	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	Arsenic, Total	0.0064	0.02	0.0042	10000	mg/L
MKTF-41	10/31/2016	Barium, Total	0.094	0.002	0.00079	2000000	mg/L
MKTF-41	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-41	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-41	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-41	10/31/2016	Arsenic, Dissolved	0.0054	0.02	0.0028	10000	mg/L
MKTF-41	10/31/2016	Barium, Dissolved	0.058	0.002	0.0013	2000000	mg/L
MKTF-41	10/31/2016	Calcium, Dissolved	12	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-41	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-41	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-41	10/31/2016	Iron, Dissolved	0.052	0.02	0.02	13821880	mg/L
MKTF-41	10/31/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Magnesium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Manganese, Dissolved	0.0043	0.002	0.00032	2017400	mg/L
MKTF-41	10/31/2016	Sodium, Dissolved	650	10	5	NA	mg/L
MKTF-41	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-41	10/31/2016	Selenium, Dissolved	0.05	0.005	0.0011	50000	mg/L
MKTF-41	10/31/2016	Uranium, Dissolved	0.013	0.0025	0.00026	NA	mg/L
MKTF-41	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-41	10/31/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-41	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	10/31/2016	Manganese, Total	0.088	0.002	0.00027	2017000	mg/L
MKTF-41	10/31/2016	Lead, Total	0.0029	0.0005	0.000081	15000	mg/L
MKTF-41	10/31/2016	Selenium, Total	0.045	0.005	0.00094	50000	mg/L
MKTF-41	10/31/2016	Uranium, Total	0.017	0.0005	0.00017	30000	mg/L
MKTF-41	10/31/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-41	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-41	3/7/2017	Arsenic, Total	0.0081	0.01	0.0021	10000	mg/L
MKTF-41	3/7/2017	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-41	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-41	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-41	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-41	3/7/2017	Arsenic, Dissolved	0.0055	0.01	0.0014	10000	mg/L
MKTF-41	3/7/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
MKTF-41	3/7/2017	Calcium, Dissolved	13	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	3/7/2017	Chromium, Dissolved	0.002	0.006	0.001	100000	mg/L
MKTF-41	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-41	3/7/2017	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Magnesium, Dissolved	1.8	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Manganese, Dissolved	0.0016	0.002	0.00038	2017400	mg/L
MKTF-41	3/7/2017	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-41	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	3/7/2017	Selenium, Dissolved	0.049	0.01	0.0021	50000	mg/L
MKTF-41	3/7/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-41	3/7/2017	Iron, Total	2.1	0.1	0.1	13822000	mg/L
MKTF-41	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-41	3/7/2017	Manganese, Total	0.1	0.002	0.00027	2017000	mg/L
MKTF-41	3/7/2017	Lead, Total	0.0032	0.0025	0.00041	15000	mg/L
MKTF-41	3/7/2017	Selenium, Total	0.047	0.005	0.00094	50000	mg/L
MKTF-41	3/7/2017	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
MKTF-41	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-41	6/6/2017	Arsenic, Total	0.0063	0.005	0.0015	10000	mg/L
MKTF-41	6/6/2017	Barium, Total	0.14	0.002	0.00093	2000000	mg/L
MKTF-41	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	6/6/2017	Chromium, Total	0.0038	0.006	0.0011	50000	mg/L
MKTF-41	6/6/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-41	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-41	6/6/2017	Arsenic, Dissolved	0.0064	0.01	0.0018	10000	mg/L
MKTF-41	6/6/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
MKTF-41	6/6/2017	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	6/6/2017	Chromium, Dissolved	0.0017	0.006	0.001	100000	mg/L
MKTF-41	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	6/6/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-41	6/6/2017	Magnesium, Dissolved	2	1	0.25	NA	mg/L
MKTF-41	6/6/2017	Manganese, Dissolved	0.014	0.002	0.00038	2017400	mg/L
MKTF-41	6/6/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-41	6/6/2017	Lead, Dissolved	0.00055	0.0005	0.00017	NA	mg/L
MKTF-41	6/6/2017	Selenium, Dissolved	0.044	0.005	0.0019	50000	mg/L
MKTF-41	6/6/2017	Uranium, Dissolved	0.02	0.0005	0.00005	NA	mg/L
MKTF-41	6/6/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-41	6/6/2017	Iron, Total	4.6	0.1	0.051	13822000	mg/L
MKTF-41	6/6/2017	Mercury, Total	0.000049	0.0002	0.000037	2000	mg/L
MKTF-41	6/6/2017	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
MKTF-41	6/6/2017	Lead, Total	0.0048	0.0025	0.00048	15000	mg/L
MKTF-41	6/6/2017	Selenium, Total	0.044	0.005	0.0036	50000	mg/L
MKTF-41	6/6/2017	Uranium, Total	0.02	0.0025	0.00077	30000	mg/L
MKTF-41	6/6/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-41	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	9/25/2017	Arsenic, Total	0.0053	0.005	0.0015	10000	mg/L
MKTF-41	9/25/2017	Barium, Total	0.092	0.002	0.00093	2000000	mg/L
MKTF-41	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	9/25/2017	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-41	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-41	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	9/25/2017	Arsenic, Dissolved	0.0063	0.01	0.0018	10000	mg/L
MKTF-41	9/25/2017	Barium, Dissolved	0.063	0.002	0.00085	2000000	mg/L
MKTF-41	9/25/2017	Calcium, Dissolved	15	1	0.078	NA	mg/L
MKTF-41	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	9/25/2017	Chromium, Dissolved	0.0021	0.006	0.0013	100000	mg/L
MKTF-41	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	9/25/2017	Iron, Dissolved	0.018	0.02	0.016	13821880	mg/L
MKTF-41	9/25/2017	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-41	9/25/2017	Magnesium, Dissolved	2	1	0.25	NA	mg/L
MKTF-41	9/25/2017	Manganese, Dissolved	0.0014	0.002	0.00039	2017400	mg/L
MKTF-41	9/25/2017	Sodium, Dissolved	650	10	1.6	NA	mg/L
MKTF-41	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	9/25/2017	Selenium, Dissolved	0.045	0.01	0.0039	50000	mg/L
MKTF-41	9/25/2017	Zinc, Dissolved	0.065	0.01	0.0021	5960450	mg/L
MKTF-41	9/25/2017	Iron, Total	0.99	0.02	0.01	13822000	mg/L
MKTF-41	9/25/2017	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-41	9/25/2017	Manganese, Total	0.031	0.002	0.0011	2017000	mg/L
MKTF-41	9/25/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-41	9/25/2017	Selenium, Total	0.044	0.005	0.0036	50000	mg/L
MKTF-41	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-41	11/27/2017	Selenium, Total	0.037	0.005	0.0049	50000	mg/L
MKTF-41	11/27/2017	Uranium, Total	0.015	0.0025	0.00077	30000	mg/L
MKTF-41	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-41	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	11/27/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-41	11/27/2017	Barium, Total	0.088	0.002	0.001	2000000	mg/L
MKTF-41	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	11/27/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	11/27/2017	Arsenic, Dissolved	ND	0.05	0.021	10000	mg/L
MKTF-41	11/27/2017	Barium, Dissolved	0.061	0.002	0.00099	2000000	mg/L
MKTF-41	11/27/2017	Calcium, Dissolved	13	1	0.078	NA	mg/L
MKTF-41	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	11/27/2017	Iron, Dissolved	0.02	0.02	0.016	13821880	mg/L
MKTF-41	11/27/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	11/27/2017	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	11/27/2017	Manganese, Dissolved	0.0016	0.002	0.00039	2017400	mg/L
MKTF-41	11/27/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-41	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	11/27/2017	Selenium, Dissolved	0.037	0.005	0.0038	50000	mg/L
MKTF-41	11/27/2017	Uranium, Dissolved	0.013	0.0025	0.00048	NA	mg/L
MKTF-41	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-41	11/27/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-41	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	Manganese, Total	0.05	0.002	0.0011	2017000	mg/L
MKTF-41	11/27/2017	Lead, Total	0.0016	0.0025	0.0011	15000	mg/L
MKTF-41	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	2/7/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-41	2/7/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-41	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	2/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	2/7/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-41	2/7/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-41	2/7/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	2/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	2/7/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-41	2/7/2018	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	2/7/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-41	2/7/2018	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-41	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	2/7/2018	Selenium, Dissolved	0.038	0.005	0.0038	50000	mg/L
MKTF-41	2/7/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
MKTF-41	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-41	2/7/2018	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-41	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-41	2/7/2018	Manganese, Total	0.084	0.002	0.0011	2017000	mg/L
MKTF-41	2/7/2018	Lead, Total	0.0026	0.0025	0.0011	15000	mg/L
MKTF-41	2/7/2018	Selenium, Total	0.038	0.005	0.0049	50000	mg/L
MKTF-41	2/7/2018	Uranium, Total	0.016	0.0025	0.00034	30000	mg/L
MKTF-41	2/7/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-41	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	5/9/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-41	5/9/2018	Barium, Total	0.085	0.002	0.001	2000000	mg/L
MKTF-41	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	5/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	5/9/2018	Arsenic, Dissolved	0.0024	0.005	0.0021	10000	mg/L
MKTF-41	5/9/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
MKTF-41	5/9/2018	Calcium, Dissolved	13	1	0.078	NA	mg/L
MKTF-41	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	5/9/2018	Chromium, Dissolved	0.0013	0.006	0.0013	100000	mg/L
MKTF-41	5/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	5/9/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	5/9/2018	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	5/9/2018	Manganese, Dissolved	0.0014	0.002	0.00039	2017400	mg/L
MKTF-41	5/9/2018	Sodium, Dissolved	670	10	1.6	NA	mg/L
MKTF-41	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	5/9/2018	Selenium, Dissolved	0.04	0.005	0.0038	50000	mg/L
MKTF-41	5/9/2018	Uranium, Dissolved	0.011	0.005	0.00096	NA	mg/L
MKTF-41	5/9/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
MKTF-41	5/9/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
MKTF-41	5/9/2018	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-41	5/9/2018	Manganese, Total	0.048	0.002	0.0011	2017000	mg/L
MKTF-41	5/9/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
MKTF-41	5/9/2018	Selenium, Total	0.039	0.001	0.00098	50000	mg/L
MKTF-41	5/9/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
MKTF-41	5/9/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-41	8/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	8/29/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-41	8/29/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-41	8/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	8/29/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
MKTF-41	8/29/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
MKTF-41	8/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	8/29/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-41	8/29/2018	Barium, Dissolved	0.056	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	Calcium, Dissolved	15	1	0.078	NA	mg/L
MKTF-41	8/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	8/29/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
MKTF-41	8/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	8/29/2018	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-41	8/29/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	8/29/2018	Magnesium, Dissolved	1.8	1	0.25	NA	mg/L
MKTF-41	8/29/2018	Manganese, Dissolved	0.0028	0.002	0.00039	2017400	mg/L
MKTF-41	8/29/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-41	8/29/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	8/29/2018	Selenium, Dissolved	0.035	0.005	0.0038	50000	mg/L
MKTF-41	8/29/2018	Uranium, Dissolved	0.013	0.0025	0.00048	NA	mg/L
MKTF-41	8/29/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-41	8/29/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
MKTF-41	8/29/2018	Mercury, Total	0.000076	0.0002	0.000038	2000	mg/L
MKTF-41	8/29/2018	Manganese, Total	0.078	0.002	0.0011	2017000	mg/L
MKTF-41	8/29/2018	Lead, Total	0.002	0.0005	0.00023	15000	mg/L
MKTF-41	8/29/2018	Selenium, Total	0.035	0.001	0.00098	50000	mg/L
MKTF-41	8/29/2018	Uranium, Total	0.014	0.0025	0.00034	30000	mg/L
MKTF-41	8/29/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-41	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	11/15/2018	Arsenic, Total	0.0022	0.001	0.00041	10000	mg/L
MKTF-41	11/15/2018	Barium, Total	0.062	0.002	0.001	2000000	mg/L
MKTF-41	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	11/15/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L
MKTF-41	11/15/2018	Barium, Dissolved	0.059	0.002	0.00099	2000000	mg/L
MKTF-41	11/15/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	11/15/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	11/15/2018	Magnesium, Dissolved	1.6	1	0.25	NA	mg/L
MKTF-41	11/15/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MKTF-41	11/15/2018	Sodium, Dissolved	690	20	3.3	NA	mg/L
MKTF-41	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	11/15/2018	Selenium, Dissolved	0.033	0.001	0.00076	50000	mg/L
MKTF-41	11/15/2018	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-41	11/15/2018	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
MKTF-41	11/15/2018	Iron, Total	0.055	0.02	0.01	13822000	mg/L
MKTF-41	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-41	11/15/2018	Manganese, Total	0.0049	0.002	0.0011	2017000	mg/L
MKTF-41	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-41	11/15/2018	Selenium, Total	0.035	0.001	0.00098	50000	mg/L
MKTF-41	11/15/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
MKTF-41	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	10/23/2019	Aluminum, Total	0.32	0.1	0.012441	19914000	mg/L
MKTF-42	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-42	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-42	10/23/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L
MKTF-42	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	10/23/2019	Boron, Total	0.76	0.2	0.022653	3949	mg/L
MKTF-42	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	10/23/2019	Iron, Total	0.19	0.02	0.008747	13822000	mg/L
MKTF-42	10/23/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-42	10/23/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-42	10/23/2019	Mercury, Total	0.0002	0.0002	0.000038	2000	mg/L
MKTF-42	10/23/2019	Molybdenum, Total	0.039	0.008	0.006735	98700	mg/L
MKTF-42	10/23/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-42	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-42	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Aluminum, Dissolved	0.0044	0.02	0.002488	19913930	mg/L
MKTF-42	10/23/2019	Antimony, Dissolved	ND	0.01	0.003894	6000	mg/L
MKTF-42	10/23/2019	Arsenic, Dissolved	0.004	0.01	0.001009	10000	mg/L
MKTF-42	10/23/2019	Barium, Dissolved	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	10/23/2019	Boron, Dissolved	0.8	0.04	0.004531	3949110	mg/L
MKTF-42	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	10/23/2019	Calcium, Dissolved	22	1	0.061889	NA	mg/L
MKTF-42	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	10/23/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
MKTF-42	10/23/2019	Iron, Dissolved	0.03	0.02	0.008747	13821880	mg/L
MKTF-42	10/23/2019	Lead, Dissolved	ND	0.005	0.000549	NA	mg/L
MKTF-42	10/23/2019	Magnesium, Dissolved	2.7	1	0.05029	NA	mg/L
MKTF-42	10/23/2019	Manganese, Dissolved	0.1	0.002	0.00029	2017400	mg/L
MKTF-42	10/23/2019	Molybdenum, Dissolved	0.038	0.008	0.006735	98700	mg/L
MKTF-42	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	10/23/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-42	10/23/2019	Selenium, Dissolved	ND	0.01	0.001713	50000	mg/L
MKTF-42	10/23/2019	Silver, Dissolved	0.00094	0.005	0.000942	81200	mg/L
MKTF-42	10/23/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-42	10/23/2019	Thallium, Dissolved	ND	0.005	0.000484	2000	mg/L
MKTF-42	10/23/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-42	2/13/2019	Antimony, Total	0.00022	0.001	0.000204	6000	mg/L
MKTF-42	2/13/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-42	2/13/2019	Barium, Total	0.067	0.002	0.000648	2000000	mg/L
MKTF-42	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	2/13/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
MKTF-42	2/13/2019	Lead, Total	0.00037	0.0005	0.000047	15000	mg/L
MKTF-42	2/13/2019	Manganese, Total	0.055	0.002	0.00029	2017000	mg/L
MKTF-42	2/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-42	2/13/2019	Selenium, Total	0.0011	0.001	0.000478	50000	mg/L
MKTF-42	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	2/13/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
MKTF-42	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	2/13/2019	Antimony, Dissolved	0.00028	0.001	0.000204	6000	mg/L
MKTF-42	2/13/2019	Arsenic, Dissolved	0.0014	0.001	0.000068	10000	mg/L
MKTF-42	2/13/2019	Barium, Dissolved	0.057	0.002	0.000648	2000000	mg/L
MKTF-42	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	2/13/2019	Calcium, Dissolved	24	1	0.061889	NA	mg/L
MKTF-42	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	2/13/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-42	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-42	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-42	2/13/2019	Magnesium, Dissolved	2.9	1	0.05029	NA	mg/L
MKTF-42	2/13/2019	Manganese, Dissolved	0.044	0.002	0.00029	2017400	mg/L
MKTF-42	2/13/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-42	2/13/2019	Selenium, Dissolved	0.0012	0.001	0.000203	50000	mg/L
MKTF-42	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	2/13/2019	Sodium, Dissolved	740	20	8.323526	NA	mg/L
MKTF-42	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-42	2/13/2019	Uranium, Dissolved	0.016	0.0005	0.00003	NA	mg/L
MKTF-42	2/13/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-42	8/22/2019	Aluminum, Dissolved	0.0052	0.02	0.002488	19913930	mg/L
MKTF-42	8/22/2019	Antimony, Dissolved	0.00044	0.001	0.000389	6000	mg/L
MKTF-42	8/22/2019	Arsenic, Dissolved	0.0016	0.001	0.000101	10000	mg/L
MKTF-42	8/22/2019	Barium, Dissolved	0.058	0.002	0.000648	2000000	mg/L
MKTF-42	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	8/22/2019	Boron, Dissolved	0.8	0.04	0.004531	3949110	mg/L
MKTF-42	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	8/22/2019	Calcium, Dissolved	21	1	0.061889	NA	mg/L
MKTF-42	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	8/22/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
MKTF-42	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-42	8/22/2019	Magnesium, Dissolved	2.7	1	0.05029	NA	mg/L
MKTF-42	8/22/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-42	8/22/2019	Molybdenum, Dissolved	0.042	0.008	0.006735	98700	mg/L
MKTF-42	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	8/22/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-42	8/22/2019	Selenium, Dissolved	0.00058	0.001	0.000171	50000	mg/L
MKTF-42	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	8/22/2019	Sodium, Dissolved	790	20	8.323526	NA	mg/L
MKTF-42	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-42	8/22/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
MKTF-42	8/22/2019	Zinc, Dissolved	0.0091	0.01	0.002252	5960450	mg/L
MKTF-42	8/22/2019	Aluminum, Total	0.23	0.02	0.002488	19914000	mg/L
MKTF-42	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-42	8/22/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-42	8/22/2019	Barium, Total	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	8/22/2019	Boron, Total	0.78	0.04	0.004531	3949	mg/L
MKTF-42	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	8/22/2019	Iron, Total	0.16	0.02	0.008747	13822000	mg/L
MKTF-42	8/22/2019	Lead, Total	0.00028	0.0005	0.000055	15000	mg/L
MKTF-42	8/22/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-42	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-42	8/22/2019	Molybdenum, Total	0.04	0.008	0.006735	98700	mg/L
MKTF-42	8/22/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	8/22/2019	Selenium, Total	0.00087	0.001	0.000478	50000	mg/L
MKTF-42	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	8/22/2019	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
MKTF-42	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	5/7/2019	Aluminum, Dissolved	0.0062	0.02	0.002488	19913930	mg/L
MKTF-42	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-42	5/7/2019	Arsenic, Dissolved	0.0012	0.005	0.000504	10000	mg/L
MKTF-42	5/7/2019	Barium, Dissolved	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	5/7/2019	Boron, Dissolved	0.81	0.04	0.004531	3949110	mg/L
MKTF-42	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	5/7/2019	Calcium, Dissolved	23	1	0.061889	NA	mg/L
MKTF-42	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	5/7/2019	Copper, Dissolved	0.0024	0.006	0.001296	790000	mg/L
MKTF-42	5/7/2019	Iron, Dissolved	0.037	0.02	0.008747	13821880	mg/L
MKTF-42	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-42	5/7/2019	Magnesium, Dissolved	2.6	1	0.05029	NA	mg/L
MKTF-42	5/7/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-42	5/7/2019	Molybdenum, Dissolved	0.045	0.008	0.006735	98700	mg/L
MKTF-42	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	5/7/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-42	5/7/2019	Selenium, Dissolved	0.0015	0.005	0.000857	50000	mg/L
MKTF-42	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	5/7/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-42	5/7/2019	Thallium, Dissolved	0.00069	0.0025	0.000242	2000	mg/L
MKTF-42	5/7/2019	Uranium, Dissolved	0.012	0.0025	0.000374	NA	mg/L
MKTF-42	5/7/2019	Zinc, Dissolved	0.0078	0.01	0.002252	5960450	mg/L
MKTF-42	5/7/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MKTF-42	5/7/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-42	5/7/2019	Arsenic, Total	0.0017	0.005	0.001561	10000	mg/L
MKTF-42	5/7/2019	Barium, Total	0.065	0.002	0.000648	2000000	mg/L
MKTF-42	5/7/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	5/7/2019	Boron, Total	0.82	0.04	0.004531	3949	mg/L
MKTF-42	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	5/7/2019	Iron, Total	0.15	0.02	0.008747	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/7/2019	Lead, Total	0.00037	0.0025	0.000274	15000	mg/L
MKTF-42	5/7/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-42	5/7/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-42	5/7/2019	Molybdenum, Total	0.046	0.008	0.006735	98700	mg/L
MKTF-42	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	5/7/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-42	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	5/7/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-42	5/7/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
MKTF-42	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	9/21/2020	Arsenic, Dissolved	0.0021	0.005	0.001	10000	mg/L
MKTF-42	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-42	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-42	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-42	9/21/2020	Uranium, Dissolved	0.015	0.0025	0.00033	NA	mg/L
MKTF-42	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-42	9/21/2020	Sodium, Dissolved	730	50	6.9	NA	mg/L
MKTF-42	9/21/2020	Aluminum, Dissolved	0.008	0.02	0.0056	19913930	mg/L
MKTF-42	9/21/2020	Barium, Dissolved	0.052	0.002	0.0011	2000000	mg/L
MKTF-42	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-42	9/21/2020	Boron, Dissolved	0.75	0.04	0.0067	3949110	mg/L
MKTF-42	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-42	9/21/2020	Calcium, Dissolved	21	1	0.11	NA	mg/L
MKTF-42	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-42	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-42	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-42	9/21/2020	Magnesium, Dissolved	3.1	1	0.067	NA	mg/L
MKTF-42	9/21/2020	Manganese, Dissolved	0.041	0.002	0.00058	2017400	mg/L
MKTF-42	9/21/2020	Molybdenum, Dissolved	0.018	0.008	0.0056	98700	mg/L
MKTF-42	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-42	9/21/2020	Potassium, Dissolved	1.4	1	0.16	NA	mg/L
MKTF-42	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-42	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-42	9/21/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
MKTF-42	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-42	9/21/2020	Arsenic, Total	0.0019	0.001	0.00026	10000	mg/L
MKTF-42	9/21/2020	Lead, Total	0.00013	0.0005	0.000034	15000	mg/L
MKTF-42	9/21/2020	Selenium, Total	0.0013	0.001	0.00066	50000	mg/L
MKTF-42	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-42	9/21/2020	Uranium, Total	0.019	0.0005	0.000065	30000	mg/L
MKTF-42	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-42	9/21/2020	Aluminum, Total	0.045	0.02	0.0074	19914000	mg/L
MKTF-42	9/21/2020	Barium, Total	0.052	0.003	0.0016	2000000	mg/L
MKTF-42	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-42	9/21/2020	Boron, Total	0.71	0.04	0.0074	3949	mg/L
MKTF-42	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-42	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-42	9/21/2020	Iron, Total	0.031	0.05	0.013	13822000	mg/L
MKTF-42	9/21/2020	Manganese, Total	0.042	0.002	0.00081	2017000	mg/L
MKTF-42	9/21/2020	Molybdenum, Total	0.025	0.008	0.0065	98700	mg/L
MKTF-42	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-42	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-42	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-42	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-42	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-42	12/16/2020	Aluminum, Total	0.28	0.2	0.051	19914000	mg/L
MKTF-42	12/16/2020	Calcium, Total	18.4	0.5	0.084	NA	mg/L
MKTF-42	12/16/2020	Boron, Total	0.722	0.1	0.022	3949	mg/L
MKTF-42	12/16/2020	Barium, Total	0.0515	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Potassium, Total	1.76	1	0.34	NA	mg/L
MKTF-42	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Magnesium, Total	2.64	0.5	0.12	NA	mg/L
MKTF-42	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-42	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-42	12/16/2020	Manganese, Total	0.0612	0.01	0.003	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-42	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-42	12/16/2020	Barium, Dissolved	0.0503	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Boron, Dissolved	0.76	0.1	0.022	3949110	mg/L
MKTF-42	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-42	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-42	12/16/2020	Manganese, Dissolved	0.0566	0.01	0.003	2017400	mg/L
MKTF-42	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-42	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-42	12/16/2020	Sodium, Total	639	20	9.2	NA	mg/L
MKTF-42	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-42	12/16/2020	Aluminum, Total	0.27	0.2	0.051	19914000	mg/L
MKTF-42	12/16/2020	Calcium, Total	18.1	0.5	0.084	NA	mg/L
MKTF-42	12/16/2020	Boron, Total	0.722	0.1	0.022	3949	mg/L
MKTF-42	12/16/2020	Barium, Total	0.0536	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Potassium, Total	1.73	1	0.34	NA	mg/L
MKTF-42	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Magnesium, Total	2.63	0.5	0.12	NA	mg/L
MKTF-42	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-42	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-42	12/16/2020	Manganese, Total	0.0413	0.01	0.003	2017000	mg/L
MKTF-42	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-42	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-42	12/16/2020	Barium, Dissolved	0.0502	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Boron, Dissolved	0.77	0.1	0.022	3949110	mg/L
MKTF-42	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-42	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-42	12/16/2020	Manganese, Dissolved	0.0628	0.01	0.003	2017400	mg/L
MKTF-42	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Dissolved	0.0166	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-42	12/16/2020	Zinc, Dissolved	0.0904	0.02	0.008	5960450	mg/L
MKTF-42	12/16/2020	Sodium, Total	609	10	4.6	NA	mg/L
MKTF-42	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-42	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-42	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-42	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-42	12/16/2020	Arsenic, Total Recoverable	2.31	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-42	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Arsenic, Dissolved	2.1	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-42	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Uranium, Total Recoverable	13.5	5	1.12	30	ug/L
MKTF-42	12/16/2020	Uranium, Dissolved	14.9	5	1.12	NA	ug/L
MKTF-42	12/16/2020	Arsenic, Total Recoverable	2.15	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-42	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Arsenic, Dissolved	2.22	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-42	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-42	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-42	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-42	2/27/2020	Arsenic, Dissolved	0.0022	0.001	0.0001	10000	mg/L
MKTF-42	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-42	2/27/2020	Selenium, Dissolved	0.0016	0.001	0.00017	50000	mg/L
MKTF-42	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-42	2/27/2020	Uranium, Dissolved	0.013	0.0005	0.000075	NA	mg/L
MKTF-42	2/27/2020	Barium, Dissolved	0.047	0.01	0.0032	2000000	mg/L
MKTF-42	2/27/2020	Beryllium, Dissolved	0.0019	0.01	0.0014	4000	mg/L
MKTF-42	2/27/2020	Boron, Dissolved	0.62	0.2	0.023	3949110	mg/L
MKTF-42	2/27/2020	Cadmium, Dissolved	ND	0.01	0.0028	5000	mg/L
MKTF-42	2/27/2020	Cobalt, Dissolved	ND	0.03	0.015	5980	mg/L
MKTF-42	2/27/2020	Copper, Dissolved	ND	0.03	0.0065	790000	mg/L
MKTF-42	2/27/2020	Manganese, Dissolved	0.05	0.01	0.0014	2017400	mg/L
MKTF-42	2/27/2020	Nickel, Dissolved	ND	0.05	0.02	372000	mg/L
MKTF-42	2/27/2020	Zinc, Dissolved	0.025	0.05	0.011	5960450	mg/L
MKTF-42	2/27/2020	Aluminum, Dissolved	0.015	0.1	0.012	19913930	mg/L
MKTF-42	2/27/2020	Calcium, Dissolved	23	5	0.31	NA	mg/L
MKTF-42	2/27/2020	Iron, Dissolved	ND	0.1	0.044	13821880	mg/L
MKTF-42	2/27/2020	Magnesium, Dissolved	3.2	5	0.25	NA	mg/L
MKTF-42	2/27/2020	Potassium, Dissolved	1.4	5	0.81	NA	mg/L
MKTF-42	2/27/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
MKTF-42	2/27/2020	Chromium, Dissolved	ND	0.03	0.0077	100000	mg/L
MKTF-42	2/27/2020	Molybdenum, Dissolved	ND	0.04	0.034	98700	mg/L
MKTF-42	2/27/2020	Silver, Dissolved	ND	0.025	0.0047	81200	mg/L
MKTF-42	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-42	2/27/2020	Arsenic, Total	0.0023	0.001	0.00031	10000	mg/L
MKTF-42	2/27/2020	Lead, Total	0.00016	0.0005	0.000055	15000	mg/L
MKTF-42	2/27/2020	Selenium, Total	0.0011	0.001	0.00048	50000	mg/L
MKTF-42	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	2/27/2020	Uranium, Total	0.014	0.0005	0.000085	30000	mg/L
MKTF-42	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-42	2/27/2020	Aluminum, Total	0.14	0.02	0.0025	19914000	mg/L
MKTF-42	2/27/2020	Barium, Total	0.052	0.002	0.00065	2000000	mg/L
MKTF-42	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-42	2/27/2020	Boron, Total	0.65	0.04	0.0045	3949	mg/L
MKTF-42	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-42	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-42	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	2/27/2020	Iron, Total	0.069	0.02	0.0087	13822000	mg/L
MKTF-42	2/27/2020	Manganese, Total	0.051	0.002	0.00029	2017000	mg/L
MKTF-42	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-42	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-42	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-42	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-42	2/27/2020	Molybdenum, Total	0.017	0.008	0.0067	98700	mg/L
MKTF-42	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-42	3/11/2015	Barium, Total	0.094	0.002	0.00095	2000000	mg/L
MKTF-42	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-42	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-42	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-42	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	3/11/2015	Manganese, Total	0.54	0.002	0.00027	2017000	mg/L
MKTF-42	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-42	3/11/2015	Selenium, Total	0.015	0.01	0.0015	50000	mg/L
MKTF-42	3/11/2015	Uranium, Total	0.04	0.001	0.00005	30000	mg/L
MKTF-42	3/11/2015	Zinc, Total	0.036	0.01	0.0028	5960000	mg/L
MKTF-42	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
MKTF-42	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	6/9/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-42	6/9/2015	Iron, Total	1.6	0.1	0.036	13822000	mg/L
MKTF-42	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	6/9/2015	Manganese, Total	0.6	0.002	0.0015	2017000	mg/L
MKTF-42	6/9/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-42	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-42	6/9/2015	Uranium, Total	0.036	0.0025	0.000025	30000	mg/L
MKTF-42	6/9/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-42	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	8/21/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-42	8/21/2015	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
MKTF-42	8/21/2015	Calcium, Total	21	1	0.057	NA	mg/L
MKTF-42	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-42	8/21/2015	Iron, Total	0.75	0.02	0.0072	13822000	mg/L
MKTF-42	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	8/21/2015	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-42	8/21/2015	Magnesium, Total	2.7	1	0.039	NA	mg/L
MKTF-42	8/21/2015	Manganese, Total	0.36	0.002	0.0015	2017000	mg/L
MKTF-42	8/21/2015	Sodium, Total	690	10	0.72	NA	mg/L
MKTF-42	8/21/2015	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
MKTF-42	8/21/2015	Selenium, Total	0.0045	0.001	0.00012	50000	mg/L
MKTF-42	8/21/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-42	8/21/2015	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-42	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	11/5/2015	Arsenic, Total	ND	0.01	0.00029	10000	mg/L
MKTF-42	11/5/2015	Barium, Total	0.076	0.002	0.0011	2000000	mg/L
MKTF-42	11/5/2015	Calcium, Total	19	1	0.26	NA	mg/L
MKTF-42	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-42	11/5/2015	Iron, Total	0.49	0.02	0.0072	13822000	mg/L
MKTF-42	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	11/5/2015	Potassium, Total	2	1	0.18	NA	mg/L
MKTF-42	11/5/2015	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	11/5/2015	Manganese, Total	0.39	0.002	0.0015	2017000	mg/L
MKTF-42	11/5/2015	Sodium, Total	660	10	0.96	NA	mg/L
MKTF-42	11/5/2015	Lead, Total	0.00077	0.0005	0.000047	15000	mg/L
MKTF-42	11/5/2015	Selenium, Total	0.011	0.005	0.00062	50000	mg/L
MKTF-42	11/5/2015	Uranium, Total	0.027	0.0025	0.000025	30000	mg/L
MKTF-42	11/5/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-42	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	2/24/2016	Arsenic, Total	0.0026	0.001	0.00029	10000	mg/L
MKTF-42	2/24/2016	Barium, Total	0.092	0.002	0.0011	2000000	mg/L
MKTF-42	2/24/2016	Calcium, Total	20	1	0.26	NA	mg/L
MKTF-42	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	2/24/2016	Copper, Total	0.01	0.006	0.0051	790000	mg/L
MKTF-42	2/24/2016	Iron, Total	0.89	0.02	0.0072	13822000	mg/L
MKTF-42	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	2/24/2016	Potassium, Total	2.3	1	0.18	NA	mg/L
MKTF-42	2/24/2016	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	2/24/2016	Manganese, Total	0.41	0.002	0.0015	2017000	mg/L
MKTF-42	2/24/2016	Sodium, Total	680	10	0.96	NA	mg/L
MKTF-42	2/24/2016	Lead, Total	0.0015	0.0005	0.000047	15000	mg/L
MKTF-42	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-42	2/24/2016	Uranium, Total	0.023	0.0025	0.000025	30000	mg/L
MKTF-42	2/24/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-42	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-42	6/9/2016	Arsenic, Total	0.006	0.01	0.0014	10000	mg/L
MKTF-42	6/9/2016	Barium, Total	0.079	0.002	0.0013	2000000	mg/L
MKTF-42	6/9/2016	Calcium, Total	19	1	0.26	NA	mg/L
MKTF-42	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-42	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2016	Iron, Total	0.077	0.02	0.0091	13822000	mg/L
MKTF-42	6/9/2016	Mercury, Total	0.000097	0.0002	0.000053	2000	mg/L
MKTF-42	6/9/2016	Potassium, Total	1.7	1	0.18	NA	mg/L
MKTF-42	6/9/2016	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	6/9/2016	Manganese, Total	0.37	0.002	0.00032	2017000	mg/L
MKTF-42	6/9/2016	Sodium, Total	690	10	0.96	NA	mg/L
MKTF-42	6/9/2016	Lead, Total	0.00031	0.0005	0.00017	15000	mg/L
MKTF-42	6/9/2016	Selenium, Total	0.016	0.01	0.0021	50000	mg/L
MKTF-42	6/9/2016	Uranium, Total	0.021	0.0005	0.000051	30000	mg/L
MKTF-42	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-42	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-42	9/9/2016	Arsenic, Total	0.0042	0.005	0.0011	10000	mg/L
MKTF-42	9/9/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	9/9/2016	Copper, Total	0.0054	0.006	0.003	790000	mg/L
MKTF-42	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-42	9/9/2016	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-42	9/9/2016	Barium, Dissolved	0.078	0.002	0.0013	2000000	mg/L
MKTF-42	9/9/2016	Calcium, Dissolved	20	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-42	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-42	9/9/2016	Copper, Dissolved	0.0052	0.006	0.004	790000	mg/L
MKTF-42	9/9/2016	Iron, Dissolved	0.081	0.02	0.02	13821880	mg/L
MKTF-42	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Manganese, Dissolved	0.29	0.002	0.00032	2017400	mg/L
MKTF-42	9/9/2016	Sodium, Dissolved	690	10	5	NA	mg/L
MKTF-42	9/9/2016	Lead, Dissolved	0.00067	0.0005	0.00017	NA	mg/L
MKTF-42	9/9/2016	Selenium, Dissolved	0.0095	0.005	0.0011	50000	mg/L
MKTF-42	9/9/2016	Uranium, Dissolved	0.019	0.0005	0.000051	NA	mg/L
MKTF-42	9/9/2016	Zinc, Dissolved	0.0078	0.01	0.0028	5960450	mg/L
MKTF-42	9/9/2016	Iron, Total	0.8	0.02	0.02	13822000	mg/L
MKTF-42	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	9/9/2016	Manganese, Total	0.32	0.002	0.00027	2017000	mg/L
MKTF-42	9/9/2016	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L
MKTF-42	9/9/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
MKTF-42	9/9/2016	Uranium, Total	0.017	0.0025	0.00087	30000	mg/L
MKTF-42	9/9/2016	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
MKTF-42	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-42	10/31/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-42	10/31/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	10/31/2016	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-42	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-42	10/31/2016	Arsenic, Dissolved	0.0044	0.01	0.0014	10000	mg/L
MKTF-42	10/31/2016	Barium, Dissolved	0.075	0.002	0.0013	2000000	mg/L
MKTF-42	10/31/2016	Calcium, Dissolved	20	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-42	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-42	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-42	10/31/2016	Iron, Dissolved	0.18	0.02	0.02	13821880	mg/L
MKTF-42	10/31/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Manganese, Dissolved	0.3	0.002	0.00032	2017400	mg/L
MKTF-42	10/31/2016	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-42	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-42	10/31/2016	Selenium, Dissolved	0.012	0.005	0.0011	50000	mg/L
MKTF-42	10/31/2016	Uranium, Dissolved	0.013	0.0025	0.00026	NA	mg/L
MKTF-42	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-42	10/31/2016	Iron, Total	1.3	0.1	0.1	13822000	mg/L
MKTF-42	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	10/31/2016	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
MKTF-42	10/31/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
MKTF-42	10/31/2016	Selenium, Total	0.0095	0.02	0.0037	50000	mg/L
MKTF-42	10/31/2016	Uranium, Total	0.014	0.0025	0.00087	30000	mg/L
MKTF-42	10/31/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
MKTF-42	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Arsenic, Total	0.0089	0.02	0.0042	10000	mg/L
MKTF-42	3/7/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	3/7/2017	Copper, Total	0.005	0.006	0.003	790000	mg/L
MKTF-42	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-42	3/7/2017	Arsenic, Dissolved	0.0033	0.02	0.0028	10000	mg/L
MKTF-42	3/7/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-42	3/7/2017	Calcium, Dissolved	19	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-42	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	3/7/2017	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
MKTF-42	3/7/2017	Potassium, Dissolved	1.4	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Manganese, Dissolved	0.23	0.002	0.00038	2017400	mg/L
MKTF-42	3/7/2017	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-42	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	3/7/2017	Selenium, Dissolved	0.0086	0.02	0.0042	50000	mg/L
MKTF-42	3/7/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-42	3/7/2017	Iron, Total	1.2	0.1	0.1	13822000	mg/L
MKTF-42	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-42	3/7/2017	Manganese, Total	0.26	0.002	0.00027	2017000	mg/L
MKTF-42	3/7/2017	Lead, Total	0.0023	0.0025	0.00041	15000	mg/L
MKTF-42	3/7/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
MKTF-42	3/7/2017	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L
MKTF-42	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-42	6/6/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
MKTF-42	6/6/2017	Barium, Total	0.082	0.002	0.00093	2000000	mg/L
MKTF-42	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	6/6/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-42	6/6/2017	Copper, Total	0.0044	0.006	0.0017	790000	mg/L
MKTF-42	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-42	6/6/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-42	6/6/2017	Barium, Dissolved	0.065	0.002	0.00085	2000000	mg/L
MKTF-42	6/6/2017	Calcium, Dissolved	20	1	0.078	NA	mg/L
MKTF-42	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-42	6/6/2017	Copper, Dissolved	0.0084	0.006	0.0032	790000	mg/L
MKTF-42	6/6/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-42	6/6/2017	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-42	6/6/2017	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	6/6/2017	Manganese, Dissolved	0.24	0.002	0.00038	2017400	mg/L
MKTF-42	6/6/2017	Sodium, Dissolved	680	10	1.6	NA	mg/L
MKTF-42	6/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	6/6/2017	Selenium, Dissolved	0.0079	0.005	0.0019	50000	mg/L
MKTF-42	6/6/2017	Uranium, Dissolved	0.013	0.0005	0.00005	NA	mg/L
MKTF-42	6/6/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
MKTF-42	6/6/2017	Iron, Total	0.92	0.02	0.01	13822000	mg/L
MKTF-42	6/6/2017	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-42	6/6/2017	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
MKTF-42	6/6/2017	Lead, Total	0.0014	0.0025	0.00048	15000	mg/L
MKTF-42	6/6/2017	Selenium, Total	0.0054	0.005	0.0036	50000	mg/L
MKTF-42	6/6/2017	Uranium, Total	0.012	0.0025	0.00077	30000	mg/L
MKTF-42	6/6/2017	Zinc, Total	0.0029	0.01	0.0028	5960000	mg/L
MKTF-42	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	9/25/2017	Arsenic, Total	0.0032	0.005	0.0015	10000	mg/L
MKTF-42	9/25/2017	Barium, Total	0.061	0.002	0.00093	2000000	mg/L
MKTF-42	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-42	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	9/25/2017	Arsenic, Dissolved	0.0036	0.005	0.00089	10000	mg/L
MKTF-42	9/25/2017	Barium, Dissolved	0.059	0.002	0.00085	2000000	mg/L
MKTF-42	9/25/2017	Calcium, Dissolved	22	1	0.078	NA	mg/L
MKTF-42	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	9/25/2017	Iron, Dissolved	0.056	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	9/25/2017	Magnesium, Dissolved	2.9	1	0.25	NA	mg/L
MKTF-42	9/25/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
MKTF-42	9/25/2017	Sodium, Dissolved	710	10	1.6	NA	mg/L
MKTF-42	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	9/25/2017	Selenium, Dissolved	0.0086	0.005	0.0019	50000	mg/L
MKTF-42	9/25/2017	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-42	9/25/2017	Iron, Total	0.22	0.02	0.01	13822000	mg/L
MKTF-42	9/25/2017	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
MKTF-42	9/25/2017	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
MKTF-42	9/25/2017	Lead, Total	0.00023	0.0005	0.000095	15000	mg/L
MKTF-42	9/25/2017	Selenium, Total	0.0068	0.005	0.0036	50000	mg/L
MKTF-42	9/25/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	11/27/2017	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-42	11/27/2017	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-42	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	11/27/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	11/27/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-42	11/27/2017	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
MKTF-42	11/27/2017	Calcium, Dissolved	20	1	0.078	NA	mg/L
MKTF-42	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	11/27/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-42	11/27/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	11/27/2017	Magnesium, Dissolved	2.6	1	0.25	NA	mg/L
MKTF-42	11/27/2017	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-42	11/27/2017	Sodium, Dissolved	730	10	1.6	NA	mg/L
MKTF-42	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	11/27/2017	Selenium, Dissolved	0.0044	0.005	0.0038	50000	mg/L
MKTF-42	11/27/2017	Uranium, Dissolved	0.0093	0.0025	0.00048	NA	mg/L
MKTF-42	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-42	11/27/2017	Iron, Total	0.44	0.02	0.01	13822000	mg/L
MKTF-42	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-42	11/27/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
MKTF-42	11/27/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-42	11/27/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-42	11/27/2017	Uranium, Total	0.011	0.0025	0.00077	30000	mg/L
MKTF-42	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	2/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-42	2/7/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-42	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	2/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	2/7/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	2/7/2018	Barium, Dissolved	0.068	0.002	0.00099	2000000	mg/L
MKTF-42	2/7/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-42	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	2/7/2018	Iron, Dissolved	0.28	0.02	0.016	13821880	mg/L
MKTF-42	2/7/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-42	2/7/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	2/7/2018	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-42	2/7/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-42	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	2/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	2/7/2018	Uranium, Dissolved	0.0083	0.0005	0.000096	NA	mg/L
MKTF-42	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-42	2/7/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-42	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-42	2/7/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-42	2/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-42	2/7/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Uranium, Total	0.0095	0.0025	0.00034	30000	mg/L
MKTF-42	2/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	5/9/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-42	5/9/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-42	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	5/9/2018	Copper, Total	0.0067	0.006	0.0041	790000	mg/L
MKTF-42	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	5/9/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	5/9/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-42	5/9/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-42	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	5/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	5/9/2018	Iron, Dissolved	0.096	0.02	0.016	13821880	mg/L
MKTF-42	5/9/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-42	5/9/2018	Magnesium, Dissolved	2.8	1	0.25	NA	mg/L
MKTF-42	5/9/2018	Manganese, Dissolved	0.17	0.002	0.00039	2017400	mg/L
MKTF-42	5/9/2018	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-42	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	5/9/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	5/9/2018	Uranium, Dissolved	0.0077	0.005	0.00096	NA	mg/L
MKTF-42	5/9/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-42	5/9/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-42	5/9/2018	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-42	5/9/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-42	5/9/2018	Lead, Total	0.0011	0.0005	0.00023	15000	mg/L
MKTF-42	5/9/2018	Selenium, Total	0.0012	0.001	0.00098	50000	mg/L
MKTF-42	5/9/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
MKTF-42	5/9/2018	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-42	8/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	8/29/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-42	8/29/2018	Barium, Total	0.074	0.002	0.001	2000000	mg/L
MKTF-42	8/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	8/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	8/29/2018	Copper, Total	0.0041	0.006	0.0041	790000	mg/L
MKTF-42	8/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	8/29/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	8/29/2018	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
MKTF-42	8/29/2018	Calcium, Dissolved	23	1	0.078	NA	mg/L
MKTF-42	8/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	8/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	8/29/2018	Copper, Dissolved	0.0051	0.006	0.0032	790000	mg/L
MKTF-42	8/29/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
MKTF-42	8/29/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-42	8/29/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	8/29/2018	Manganese, Dissolved	0.14	0.002	0.00039	2017400	mg/L
MKTF-42	8/29/2018	Sodium, Dissolved	750	10	1.6	NA	mg/L
MKTF-42	8/29/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	8/29/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	8/29/2018	Uranium, Dissolved	0.011	0.0025	0.00048	NA	mg/L
MKTF-42	8/29/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-42	8/29/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
MKTF-42	8/29/2018	Mercury, Total	0.000072	0.0002	0.000038	2000	mg/L
MKTF-42	8/29/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-42	8/29/2018	Lead, Total	0.00057	0.0005	0.00023	15000	mg/L
MKTF-42	8/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-42	8/29/2018	Uranium, Total	0.01	0.0025	0.00034	30000	mg/L
MKTF-42	8/29/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
MKTF-42	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	11/15/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-42	11/15/2018	Barium, Total	0.035	0.002	0.001	2000000	mg/L
MKTF-42	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	11/15/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
MKTF-42	11/15/2018	Barium, Dissolved	0.037	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/15/2018	Calcium, Dissolved	23	1	0.078	NA	mg/L
MKTF-42	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-42	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	11/15/2018	Magnesium, Dissolved	3.1	1	0.25	NA	mg/L
MKTF-42	11/15/2018	Manganese, Dissolved	0.055	0.002	0.00039	2017400	mg/L
MKTF-42	11/15/2018	Sodium, Dissolved	770	20	3.3	NA	mg/L
MKTF-42	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	11/15/2018	Selenium, Dissolved	0.0012	0.001	0.00076	50000	mg/L
MKTF-42	11/15/2018	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-42	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-42	11/15/2018	Iron, Total	0.039	0.02	0.01	13822000	mg/L
MKTF-42	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-42	11/15/2018	Manganese, Total	0.051	0.002	0.0011	2017000	mg/L
MKTF-42	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-42	11/15/2018	Selenium, Total	0.0015	0.001	0.00098	50000	mg/L
MKTF-42	11/15/2018	Uranium, Total	0.0092	0.0005	0.000068	30000	mg/L
MKTF-42	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-43	2/27/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Dissolved	0.00091	0.005	0.0005	10000	mg/L
MKTF-43	2/27/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-43	2/27/2020	Selenium, Dissolved	0.0014	0.005	0.00086	50000	mg/L
MKTF-43	2/27/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-43	2/27/2020	Uranium, Dissolved	0.061	0.0025	0.00037	NA	mg/L
MKTF-43	2/27/2020	Barium, Dissolved	0.051	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Dissolved	0.00076	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-43	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Dissolved	0.0023	0.006	0.0013	790000	mg/L
MKTF-43	2/27/2020	Manganese, Dissolved	0.013	0.002	0.00029	2017400	mg/L
MKTF-43	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-43	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-43	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-43	2/27/2020	Potassium, Dissolved	6	1	0.16	NA	mg/L
MKTF-43	2/27/2020	Calcium, Dissolved	880	10	0.62	NA	mg/L
MKTF-43	2/27/2020	Magnesium, Dissolved	130	10	0.5	NA	mg/L
MKTF-43	2/27/2020	Sodium, Dissolved	2200	50	21	NA	mg/L
MKTF-43	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-43	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Silver, Dissolved	0.017	0.005	0.00094	81200	mg/L
MKTF-43	2/27/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-43	2/27/2020	Lead, Total	0.0018	0.0025	0.00027	15000	mg/L
MKTF-43	2/27/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-43	2/27/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-43	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-43	2/27/2020	Uranium, Total	0.062	0.0025	0.00042	30000	mg/L
MKTF-43	2/27/2020	Barium, Total	0.092	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Total	0.68	0.04	0.0045	3949	mg/L
MKTF-43	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	2/27/2020	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
MKTF-43	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Silver, Total	0.015	0.005	0.0014	50000	mg/L
MKTF-43	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-43	2/27/2020	Aluminum, Total	3.2	0.1	0.012	19914000	mg/L
MKTF-43	2/27/2020	Iron, Total	1.7	0.1	0.044	13822000	mg/L
MKTF-43	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-43	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Dissolved	0.00088	0.005	0.0005	10000	mg/L
MKTF-43	2/27/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-43	2/27/2020	Selenium, Dissolved	0.001	0.005	0.00086	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-43	2/27/2020	Uranium, Dissolved	0.06	0.0025	0.00037	NA	mg/L
MKTF-43	2/27/2020	Barium, Dissolved	0.053	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Dissolved	0.00082	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-43	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Dissolved	0.0046	0.006	0.0013	790000	mg/L
MKTF-43	2/27/2020	Manganese, Dissolved	0.0079	0.002	0.00029	2017400	mg/L
MKTF-43	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Zinc, Dissolved	0.01	0.01	0.0023	5960450	mg/L
MKTF-43	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-43	2/27/2020	Iron, Dissolved	0.0097	0.02	0.0087	13821880	mg/L
MKTF-43	2/27/2020	Potassium, Dissolved	6.3	1	0.16	NA	mg/L
MKTF-43	2/27/2020	Silver, Dissolved	0.016	0.005	0.00094	81200	mg/L
MKTF-43	2/27/2020	Calcium, Dissolved	900	10	0.62	NA	mg/L
MKTF-43	2/27/2020	Magnesium, Dissolved	140	10	0.5	NA	mg/L
MKTF-43	2/27/2020	Sodium, Dissolved	2200	50	21	NA	mg/L
MKTF-43	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-43	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-43	2/27/2020	Lead, Total	0.0017	0.0025	0.00027	15000	mg/L
MKTF-43	2/27/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-43	2/27/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-43	2/27/2020	Mercury, Total	0.00012	0.0002	0.00012	2000	mg/L
MKTF-43	2/27/2020	Uranium, Total	0.063	0.0025	0.00042	30000	mg/L
MKTF-43	2/27/2020	Barium, Total	0.097	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Total	0.64	0.04	0.0045	3949	mg/L
MKTF-43	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-43	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-43	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-43	2/27/2020	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
MKTF-43	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Silver, Total	0.016	0.005	0.0014	50000	mg/L
MKTF-43	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-43	2/27/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-43	2/27/2020	Iron, Total	1.7	0.1	0.044	13822000	mg/L
MKTF-43	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-43	12/15/2020	Arsenic, Total Recoverable	2	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Total Recoverable	3.02	1	0.133	15	ug/L
MKTF-43	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Arsenic, Dissolved	1.39	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-43	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Uranium, Total Recoverable	**117**	5	1.12	30	ug/L
MKTF-43	12/15/2020	Uranium, Dissolved	113	5	1.12	NA	ug/L
MKTF-43	12/15/2020	Arsenic, Total Recoverable	2.65	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Total Recoverable	5.68	1	0.133	15	ug/L
MKTF-43	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Arsenic, Dissolved	1.52	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-43	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Uranium, Total Recoverable	**118**	5	1.12	30	ug/L
MKTF-43	12/15/2020	Uranium, Dissolved	116	5	1.12	NA	ug/L
MKTF-43	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-43	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-43	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-43	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-43	12/15/2020	Aluminum, Total	6.53	0.2	0.051	19914000	mg/L
MKTF-43	12/15/2020	Boron, Total	1.28	0.1	0.022	3949	mg/L
MKTF-43	12/15/2020	Barium, Total	0.147	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Potassium, Total	10.4	1	0.34	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Magnesium, Total	175	0.5	0.12	NA	mg/L
MKTF-43	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-43	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Total	5.33	0.2	0.075	13822000	mg/L
MKTF-43	12/15/2020	Manganese, Total	1.85	0.01	0.003	2017000	mg/L
MKTF-43	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Total	0.00679	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-43	12/15/2020	Calcium, Total	1220	10	1.68	NA	mg/L
MKTF-43	12/15/2020	Sodium, Total	3000	40	18.4	NA	mg/L
MKTF-43	12/15/2020	Aluminum, Dissolved	0.316	0.2	0.051	19913930	mg/L
MKTF-43	12/15/2020	Barium, Dissolved	0.0845	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Boron, Dissolved	1.43	0.1	0.022	3949110	mg/L
MKTF-43	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-43	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-43	12/15/2020	Manganese, Dissolved	0.283	0.01	0.003	2017400	mg/L
MKTF-43	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-43	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-43	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-43	12/15/2020	Aluminum, Total	7.77	0.2	0.051	19914000	mg/L
MKTF-43	12/15/2020	Boron, Total	1.33	0.1	0.022	3949	mg/L
MKTF-43	12/15/2020	Barium, Total	0.159	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Potassium, Total	17.3	1	0.34	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Magnesium, Total	188	0.5	0.12	NA	mg/L
MKTF-43	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-43	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Total	6.21	0.2	0.075	13822000	mg/L
MKTF-43	12/15/2020	Manganese, Total	2.13	0.01	0.003	2017000	mg/L
MKTF-43	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Total	0.00782	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-43	12/15/2020	Calcium, Total	1270	5	0.84	NA	mg/L
MKTF-43	12/15/2020	Sodium, Total	2870	20	9.2	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-43	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Manganese, Dissolved	2.12	0.01	0.003	2017400	mg/L
MKTF-43	12/15/2020	Zinc, Dissolved	0.0292	0.02	0.008	5960450	mg/L
MKTF-43	12/15/2020	Aluminum, Dissolved	8.08	0.2	0.051	19913930	mg/L
MKTF-43	12/15/2020	Barium, Dissolved	0.167	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Boron, Dissolved	1.39	0.1	0.022	3949110	mg/L
MKTF-43	12/15/2020	Iron, Dissolved	6.12	0.2	0.075	13821880	mg/L
MKTF-43	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Dissolved	0.0107	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-43	9/21/2020	Arsenic, Dissolved	0.0014	0.005	0.001	10000	mg/L
MKTF-43	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-43	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-43	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-43	9/21/2020	Uranium, Dissolved	0.12	0.0025	0.00033	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-43	9/21/2020	Boron, Dissolved	1.2	0.2	0.033	3949110	mg/L
MKTF-43	9/21/2020	Magnesium, Dissolved	250	5	0.34	NA	mg/L
MKTF-43	9/21/2020	Manganese, Dissolved	1.7	0.01	0.0029	2017400	mg/L
MKTF-43	9/21/2020	Calcium, Dissolved	1500	50	5.7	NA	mg/L
MKTF-43	9/21/2020	Sodium, Dissolved	3300	50	6.9	NA	mg/L
MKTF-43	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-43	9/21/2020	Barium, Dissolved	0.086	0.002	0.0011	2000000	mg/L
MKTF-43	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-43	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-43	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-43	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-43	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-43	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-43	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-43	9/21/2020	Potassium, Dissolved	9.1	1	0.16	NA	mg/L
MKTF-43	9/21/2020	Silver, Dissolved	0.019	0.005	0.0013	81200	mg/L
MKTF-43	9/21/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
MKTF-43	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-43	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-43	9/21/2020	Aluminum, Total	0.42	0.02	0.0074	19914000	mg/L
MKTF-43	9/21/2020	Barium, Total	0.098	0.003	0.0016	2000000	mg/L
MKTF-43	9/21/2020	Beryllium, Total	0.0012	0.002	0.00088	4000	mg/L
MKTF-43	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-43	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-43	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-43	9/21/2020	Iron, Total	0.3	0.05	0.013	13822000	mg/L
MKTF-43	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-43	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-43	9/21/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
MKTF-43	9/21/2020	Lead, Total	0.00038	0.005	0.00034	15000	mg/L
MKTF-43	9/21/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
MKTF-43	9/21/2020	Uranium, Total	0.11	0.005	0.00065	30000	mg/L
MKTF-43	9/21/2020	Arsenic, Total	ND	0.02	0.0053	10000	mg/L
MKTF-43	9/21/2020	Selenium, Total	ND	0.02	0.013	50000	mg/L
MKTF-43	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-43	9/21/2020	Nickel, Total	0.0046	0.01	0.0033	372000	mg/L
MKTF-43	9/21/2020	Silver, Total	0.02	0.005	0.0013	50000	mg/L
MKTF-43	9/21/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
MKTF-43	9/21/2020	Manganese, Total	1.4	0.01	0.0041	2017000	mg/L
MKTF-43	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-43	8/22/2019	Barium, Dissolved	0.079	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-43	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	8/22/2019	Calcium, Dissolved	680	10	0.618891	NA	mg/L
MKTF-43	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Dissolved	0.0081	0.006	0.001296	790000	mg/L
MKTF-43	8/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	8/22/2019	Magnesium, Dissolved	110	10	0.502904	NA	mg/L
MKTF-43	8/22/2019	Manganese, Dissolved	0.73	0.002	0.00029	2017400	mg/L
MKTF-43	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Potassium, Dissolved	4.7	1	0.162288	NA	mg/L
MKTF-43	8/22/2019	Selenium, Dissolved	0.0015	0.001	0.000171	50000	mg/L
MKTF-43	8/22/2019	Silver, Dissolved	0.0086	0.005	0.000942	81200	mg/L
MKTF-43	8/22/2019	Sodium, Dissolved	2800	50	20.808815	NA	mg/L
MKTF-43	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	8/22/2019	Uranium, Dissolved	0.058	0.0025	0.000374	NA	mg/L
MKTF-43	8/22/2019	Zinc, Dissolved	0.0051	0.01	0.002252	5960450	mg/L
MKTF-43	8/22/2019	Aluminum, Total	5	0.2	0.024883	19914000	mg/L
MKTF-43	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Total	0.0018	0.005	0.001561	10000	mg/L
MKTF-43	8/22/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Total	0.0007	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Total	0.0081	0.006	0.004072	790000	mg/L
MKTF-43	8/22/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L
MKTF-43	8/22/2019	Lead, Total	0.0035	0.0025	0.000274	15000	mg/L
MKTF-43	8/22/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-43	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	8/22/2019	Silver, Total	0.0088	0.005	0.001418	50000	mg/L
MKTF-43	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	8/22/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-43	8/22/2019	Zinc, Total	0.0083	0.01	0.005772	5960000	mg/L
MKTF-43	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-43	8/22/2019	Barium, Dissolved	0.085	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-43	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	8/22/2019	Calcium, Dissolved	690	10	0.618891	NA	mg/L
MKTF-43	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Dissolved	0.009	0.006	0.001296	790000	mg/L
MKTF-43	8/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	8/22/2019	Magnesium, Dissolved	110	10	0.502904	NA	mg/L
MKTF-43	8/22/2019	Manganese, Dissolved	0.77	0.002	0.00029	2017400	mg/L
MKTF-43	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Dissolved	0.0041	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Potassium, Dissolved	4.6	1	0.162288	NA	mg/L
MKTF-43	8/22/2019	Selenium, Dissolved	0.00092	0.005	0.000857	50000	mg/L
MKTF-43	8/22/2019	Silver, Dissolved	0.0096	0.005	0.000942	81200	mg/L
MKTF-43	8/22/2019	Sodium, Dissolved	2700	50	20.808815	NA	mg/L
MKTF-43	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	8/22/2019	Uranium, Dissolved	0.058	0.0025	0.000374	NA	mg/L
MKTF-43	8/22/2019	Zinc, Dissolved	0.0052	0.01	0.002252	5960450	mg/L
MKTF-43	8/22/2019	Aluminum, Total	5	0.2	0.024883	19914000	mg/L
MKTF-43	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-43	8/22/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Total	0.00057	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Total	0.0079	0.006	0.004072	790000	mg/L
MKTF-43	8/22/2019	Iron, Total	3.3	0.1	0.043734	13822000	mg/L
MKTF-43	8/22/2019	Lead, Total	0.0032	0.0025	0.000274	15000	mg/L
MKTF-43	8/22/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	8/22/2019	Mercury, Total	0.000078	0.0002	0.000038	2000	mg/L
MKTF-43	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Total	0.0054	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	8/22/2019	Silver, Total	0.0089	0.005	0.001418	50000	mg/L
MKTF-43	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	8/22/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-43	8/22/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-43	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	5/8/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-43	5/8/2019	Barium, Dissolved	0.1	0.002	0.000648	2000000	mg/L
MKTF-43	5/8/2019	Beryllium, Dissolved	0.00056	0.002	0.000284	4000	mg/L
MKTF-43	5/8/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
MKTF-43	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	5/8/2019	Calcium, Dissolved	580	20	1.237783	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	5/8/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	5/8/2019	Copper, Dissolved	0.0042	0.006	0.001296	790000	mg/L
MKTF-43	5/8/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	5/8/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	5/8/2019	Magnesium, Dissolved	92	1	0.05029	NA	mg/L
MKTF-43	5/8/2019	Manganese, Dissolved	0.53	0.002	0.00029	2017400	mg/L
MKTF-43	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	5/8/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-43	5/8/2019	Potassium, Dissolved	5.2	1	0.162288	NA	mg/L
MKTF-43	5/8/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-43	5/8/2019	Silver, Dissolved	0.011	0.005	0.000942	81200	mg/L
MKTF-43	5/8/2019	Sodium, Dissolved	1800	20	8.323526	NA	mg/L
MKTF-43	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	5/8/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-43	5/8/2019	Zinc, Dissolved	0.0086	0.01	0.002252	5960450	mg/L
MKTF-43	5/8/2019	Aluminum, Total	1.5	0.1	0.012441	19914000	mg/L
MKTF-43	5/8/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	5/8/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
MKTF-43	5/8/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	5/8/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-43	5/8/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-43	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	5/8/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	5/8/2019	Copper, Total	0.0046	0.006	0.004072	790000	mg/L
MKTF-43	5/8/2019	Iron, Total	1.4	0.1	0.043734	13822000	mg/L
MKTF-43	5/8/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-43	5/8/2019	Manganese, Total	0.71	0.002	0.00029	2017000	mg/L
MKTF-43	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-43	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	5/8/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-43	5/8/2019	Selenium, Total	0.00098	0.001	0.000478	50000	mg/L
MKTF-43	5/8/2019	Silver, Total	0.01	0.005	0.001418	50000	mg/L
MKTF-43	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-43	5/8/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-43	5/8/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Total	0.0036	0.005	0.001561	10000	mg/L
MKTF-43	2/13/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	2/13/2019	Iron, Total	2.9	0.1	0.043734	13822000	mg/L
MKTF-43	2/13/2019	Lead, Total	0.003	0.0025	0.000235	15000	mg/L
MKTF-43	2/13/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	2/13/2019	Mercury, Total	0.000075	0.0002	0.000038	2000	mg/L
MKTF-43	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	2/13/2019	Silver, Total	0.015	0.005	0.001418	50000	mg/L
MKTF-43	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	2/13/2019	Uranium, Total	0.047	0.0025	0.000424	30000	mg/L
MKTF-43	2/13/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Dissolved	0.0017	0.005	0.00034	10000	mg/L
MKTF-43	2/13/2019	Barium, Dissolved	0.082	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Dissolved	0.00045	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	2/13/2019	Calcium, Dissolved	680	20	1.237783	NA	mg/L
MKTF-43	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	2/13/2019	Copper, Dissolved	0.0057	0.006	0.001296	790000	mg/L
MKTF-43	2/13/2019	Iron, Dissolved	0.059	0.02	0.008747	13821880	mg/L
MKTF-43	2/13/2019	Lead, Dissolved	0.00014	0.0005	0.000047	NA	mg/L
MKTF-43	2/13/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
MKTF-43	2/13/2019	Manganese, Dissolved	0.46	0.002	0.00029	2017400	mg/L
MKTF-43	2/13/2019	Potassium, Dissolved	4.1	1	0.162288	NA	mg/L
MKTF-43	2/13/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-43	2/13/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-43	2/13/2019	Sodium, Dissolved	2200	50	20.808815	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-43	2/13/2019	Uranium, Dissolved	0.05	0.0025	0.000152	NA	mg/L
MKTF-43	2/13/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-43	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Total	0.0039	0.005	0.001561	10000	mg/L
MKTF-43	2/13/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	2/13/2019	Iron, Total	1.7	0.1	0.043734	13822000	mg/L
MKTF-43	2/13/2019	Lead, Total	0.0017	0.0025	0.000235	15000	mg/L
MKTF-43	2/13/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	2/13/2019	Mercury, Total	0.000091	0.0002	0.000038	2000	mg/L
MKTF-43	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	2/13/2019	Silver, Total	0.016	0.005	0.001418	50000	mg/L
MKTF-43	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	2/13/2019	Uranium, Total	0.057	0.0025	0.000424	30000	mg/L
MKTF-43	2/13/2019	Zinc, Total	0.0077	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Dissolved	0.0015	0.005	0.00034	10000	mg/L
MKTF-43	2/13/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Dissolved	0.00038	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	2/13/2019	Calcium, Dissolved	660	20	1.237783	NA	mg/L
MKTF-43	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	2/13/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
MKTF-43	2/13/2019	Iron, Dissolved	0.011	0.02	0.008747	13821880	mg/L
MKTF-43	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-43	2/13/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
MKTF-43	2/13/2019	Manganese, Dissolved	0.3	0.002	0.00029	2017400	mg/L
MKTF-43	2/13/2019	Potassium, Dissolved	4.4	1	0.162288	NA	mg/L
MKTF-43	2/13/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-43	2/13/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-43	2/13/2019	Sodium, Dissolved	1900	20	8.323526	NA	mg/L
MKTF-43	2/13/2019	Thallium, Dissolved	0.000037	0.0005	0.000032	2000	mg/L
MKTF-43	2/13/2019	Uranium, Dissolved	0.046	0.0025	0.000152	NA	mg/L
MKTF-43	2/13/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
MKTF-43	10/24/2019	Aluminum, Total	4.5	0.1	0.012441	19914000	mg/L
MKTF-43	10/24/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Total	0.0023	0.005	0.001561	10000	mg/L
MKTF-43	10/24/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	10/24/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	10/24/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
MKTF-43	10/24/2019	Lead, Total	0.0028	0.0025	0.000274	15000	mg/L
MKTF-43	10/24/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	10/24/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-43	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Total	0.0041	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Selenium, Total	0.0025	0.005	0.00239	50000	mg/L
MKTF-43	10/24/2019	Silver, Total	0.014	0.005	0.001418	50000	mg/L
MKTF-43	10/24/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	10/24/2019	Zinc, Total	0.0088	0.01	0.005772	5960000	mg/L
MKTF-43	10/24/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-43	10/24/2019	Barium, Dissolved	0.095	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Dissolved	0.0007	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-43	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	10/24/2019	Calcium, Dissolved	780	10	0.618891	NA	mg/L
MKTF-43	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Dissolved	0.012	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	Iron, Dissolved	0.014	0.02	0.008747	13821880	mg/L
MKTF-43	10/24/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	10/24/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
MKTF-43	10/24/2019	Manganese, Dissolved	0.45	0.002	0.00029	2017400	mg/L
MKTF-43	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Dissolved	0.0065	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Potassium, Dissolved	6.1	1	0.162288	NA	mg/L
MKTF-43	10/24/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-43	10/24/2019	Silver, Dissolved	0.014	0.005	0.000942	81200	mg/L
MKTF-43	10/24/2019	Sodium, Dissolved	2600	50	20.808815	NA	mg/L
MKTF-43	10/24/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	10/24/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-43	10/24/2019	Aluminum, Total	4.8	0.2	0.024883	19914000	mg/L
MKTF-43	10/24/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-43	10/24/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	10/24/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	10/24/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L
MKTF-43	10/24/2019	Lead, Total	0.0033	0.0025	0.000274	15000	mg/L
MKTF-43	10/24/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	10/24/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-43	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	10/24/2019	Silver, Total	0.014	0.005	0.001418	50000	mg/L
MKTF-43	10/24/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	10/24/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
MKTF-43	10/24/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Dissolved	0.0012	0.005	0.000504	10000	mg/L
MKTF-43	10/24/2019	Barium, Dissolved	0.098	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-43	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	10/24/2019	Calcium, Dissolved	770	10	0.618891	NA	mg/L
MKTF-43	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Dissolved	0.009	0.006	0.001296	790000	mg/L
MKTF-43	10/24/2019	Iron, Dissolved	0.019	0.02	0.008747	13821880	mg/L
MKTF-43	10/24/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	10/24/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
MKTF-43	10/24/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
MKTF-43	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Dissolved	0.005	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Potassium, Dissolved	5.8	1	0.162288	NA	mg/L
MKTF-43	10/24/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-43	10/24/2019	Silver, Dissolved	0.015	0.005	0.000942	81200	mg/L
MKTF-43	10/24/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
MKTF-43	10/24/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	10/24/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-43	3/11/2015	Silver, Total	ND	0.025	0.0061	50000	mg/L
MKTF-43	3/11/2015	Arsenic, Total	ND	0.05	0.0057	10000	mg/L
MKTF-43	3/11/2015	Barium, Total	0.17	0.01	0.0048	2000000	mg/L
MKTF-43	3/11/2015	Cadmium, Total	ND	0.01	0.0048	5000	mg/L
MKTF-43	3/11/2015	Chromium, Total	0.048	0.03	0.0088	50000	mg/L
MKTF-43	3/11/2015	Copper, Total	ND	0.03	0.012	790000	mg/L
MKTF-43	3/11/2015	Iron, Total	0.49	0.1	0.036	13822000	mg/L
MKTF-43	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	3/11/2015	Manganese, Total	3.7	0.01	0.0013	2017000	mg/L
MKTF-43	3/11/2015	Lead, Total	ND	0.05	0.0029	15000	mg/L
MKTF-43	3/11/2015	Selenium, Total	0.11	0.05	0.0074	50000	mg/L
MKTF-43	3/11/2015	Uranium, Total	0.15	0.05	0.0025	30000	mg/L
MKTF-43	3/11/2015	Zinc, Total	ND	0.05	0.014	5960000	mg/L
MKTF-43	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	Arsenic, Total	ND	0.05	0.0032	10000	mg/L
MKTF-43	6/10/2015	Barium, Total	0.12	0.002	0.00095	2000000	mg/L
MKTF-43	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-43	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-43	6/10/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
MKTF-43	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	6/10/2015	Manganese, Total	15	0.04	0.0054	2017000	mg/L
MKTF-43	6/10/2015	Lead, Total	ND	0.05	0.0013	15000	mg/L
MKTF-43	6/10/2015	Selenium, Total	ND	0.1	0.019	50000	mg/L
MKTF-43	6/10/2015	Uranium, Total	0.23	0.05	0.00024	30000	mg/L
MKTF-43	6/10/2015	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-43	8/21/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-43	8/21/2015	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
MKTF-43	8/21/2015	Barium, Total	0.31	0.01	0.0053	2000000	mg/L
MKTF-43	8/21/2015	Calcium, Total	3100	100	5.7	NA	mg/L
MKTF-43	8/21/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-43	8/21/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-43	8/21/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-43	8/21/2015	Iron, Total	6.6	0.2	0.072	13822000	mg/L
MKTF-43	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	8/21/2015	Potassium, Total	14	1	0.18	NA	mg/L
MKTF-43	8/21/2015	Magnesium, Total	480	10	0.39	NA	mg/L
MKTF-43	8/21/2015	Manganese, Total	23	0.1	0.076	2017000	mg/L
MKTF-43	8/21/2015	Sodium, Total	6500	100	7.2	NA	mg/L
MKTF-43	8/21/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
MKTF-43	8/21/2015	Selenium, Total	0.06	0.02	0.0025	50000	mg/L
MKTF-43	8/21/2015	Uranium, Total	0.28	0.01	0.000099	30000	mg/L
MKTF-43	8/21/2015	Zinc, Total	0.056	0.05	0.019	5960000	mg/L
MKTF-43	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-43	11/5/2015	Arsenic, Total	ND	0.05	0.05	10000	mg/L
MKTF-43	11/5/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-43	11/5/2015	Calcium, Total	2700	50	13	NA	mg/L
MKTF-43	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-43	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-43	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-43	11/5/2015	Iron, Total	4.8	0.1	0.036	13822000	mg/L
MKTF-43	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	11/5/2015	Potassium, Total	13	1	0.18	NA	mg/L
MKTF-43	11/5/2015	Magnesium, Total	430	5	0.065	NA	mg/L
MKTF-43	11/5/2015	Manganese, Total	16	0.04	0.03	2017000	mg/L
MKTF-43	11/5/2015	Sodium, Total	6000	500	48	NA	mg/L
MKTF-43	11/5/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
MKTF-43	11/5/2015	Selenium, Total	ND	0.5	0.5	50000	mg/L
MKTF-43	11/5/2015	Uranium, Total	0.25	0.01	0.000099	30000	mg/L
MKTF-43	11/5/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-43	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-43	2/24/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
MKTF-43	2/24/2016	Barium, Total	0.13	0.01	0.0053	2000000	mg/L
MKTF-43	2/24/2016	Calcium, Total	2500	100	26	NA	mg/L
MKTF-43	2/24/2016	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-43	2/24/2016	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-43	2/24/2016	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-43	2/24/2016	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-43	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	2/24/2016	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-43	2/24/2016	Magnesium, Total	410	5	0.065	NA	mg/L
MKTF-43	2/24/2016	Manganese, Total	12	0.04	0.03	2017000	mg/L
MKTF-43	2/24/2016	Sodium, Total	6000	100	9.6	NA	mg/L
MKTF-43	2/24/2016	Lead, Total	ND	0.025	0.0024	15000	mg/L
MKTF-43	2/24/2016	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-43	2/24/2016	Uranium, Total	0.22	0.025	0.00025	30000	mg/L
MKTF-43	2/24/2016	Zinc, Total	ND	0.05	0.019	5960000	mg/L
MKTF-43	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-43	6/9/2016	Arsenic, Total	0.027	0.05	0.0069	10000	mg/L
MKTF-43	6/9/2016	Barium, Total	0.065	0.002	0.0013	2000000	mg/L
MKTF-43	6/9/2016	Calcium, Total	3100	100	26	NA	mg/L
MKTF-43	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-43	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-43	6/9/2016	Iron, Total	0.11	0.02	0.0091	13822000	mg/L
MKTF-43	6/9/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
MKTF-43	6/9/2016	Potassium, Total	9.8	1	0.18	NA	mg/L
MKTF-43	6/9/2016	Magnesium, Total	480	5	0.065	NA	mg/L
MKTF-43	6/9/2016	Manganese, Total	20	0.2	0.032	2017000	mg/L
MKTF-43	6/9/2016	Sodium, Total	6400	100	9.6	NA	mg/L
MKTF-43	6/9/2016	Lead, Total	ND	0.005	0.0017	15000	mg/L
MKTF-43	6/9/2016	Selenium, Total	0.091	0.05	0.011	50000	mg/L
MKTF-43	6/9/2016	Uranium, Total	0.27	0.01	0.001	30000	mg/L
MKTF-43	6/9/2016	Zinc, Total	0.0073	0.01	0.0028	5960000	mg/L
MKTF-43	9/9/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-43	9/9/2016	Arsenic, Total	0.022	0.05	0.011	10000	mg/L
MKTF-43	9/9/2016	Barium, Total	0.17	0.01	0.004	2000000	mg/L
MKTF-43	9/9/2016	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-43	9/9/2016	Chromium, Total	ND	0.03	0.013	50000	mg/L
MKTF-43	9/9/2016	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-43	9/9/2016	Arsenic, Dissolved	0.018	0.05	0.0069	10000	mg/L
MKTF-43	9/9/2016	Barium, Dissolved	0.086	0.002	0.0013	2000000	mg/L
MKTF-43	9/9/2016	Calcium, Dissolved	2900	100	50	NA	mg/L
MKTF-43	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-43	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-43	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-43	9/9/2016	Iron, Dissolved	0.073	0.02	0.02	13821880	mg/L
MKTF-43	9/9/2016	Potassium, Dissolved	9.5	1	0.5	NA	mg/L
MKTF-43	9/9/2016	Magnesium, Dissolved	460	5	2.5	NA	mg/L
MKTF-43	9/9/2016	Manganese, Dissolved	23	0.2	0.032	2017400	mg/L
MKTF-43	9/9/2016	Sodium, Dissolved	6500	100	50	NA	mg/L
MKTF-43	9/9/2016	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	9/9/2016	Selenium, Dissolved	0.067	0.05	0.011	50000	mg/L
MKTF-43	9/9/2016	Uranium, Dissolved	0.25	0.01	0.001	NA	mg/L
MKTF-43	9/9/2016	Zinc, Dissolved	0.013	0.01	0.0028	5960450	mg/L
MKTF-43	9/9/2016	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-43	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	9/9/2016	Manganese, Total	21	0.1	0.014	2017000	mg/L
MKTF-43	9/9/2016	Lead, Total	0.0041	0.0025	0.00041	15000	mg/L
MKTF-43	9/9/2016	Selenium, Total	0.065	0.1	0.019	50000	mg/L
MKTF-43	9/9/2016	Uranium, Total	0.21	0.025	0.0087	30000	mg/L
MKTF-43	9/9/2016	Zinc, Total	0.032	0.05	0.013	5960000	mg/L
MKTF-43	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-43	10/31/2016	Arsenic, Total	0.03	0.05	0.011	10000	mg/L
MKTF-43	10/31/2016	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
MKTF-43	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-43	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-43	10/31/2016	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	10/31/2016	Silver, Dissolved	ND	0.025	0.014	81200	mg/L
MKTF-43	10/31/2016	Arsenic, Dissolved	ND	0.05	0.05	10000	mg/L
MKTF-43	10/31/2016	Barium, Dissolved	0.13	0.01	0.0066	2000000	mg/L
MKTF-43	10/31/2016	Calcium, Dissolved	4700	100	50	NA	mg/L
MKTF-43	10/31/2016	Cadmium, Dissolved	ND	0.01	0.0037	5000	mg/L
MKTF-43	10/31/2016	Chromium, Dissolved	ND	0.03	0.0088	100000	mg/L
MKTF-43	10/31/2016	Copper, Dissolved	ND	0.03	0.02	790000	mg/L
MKTF-43	10/31/2016	Iron, Dissolved	0.48	0.02	0.02	13821880	mg/L
MKTF-43	10/31/2016	Potassium, Dissolved	19	1	0.5	NA	mg/L
MKTF-43	10/31/2016	Magnesium, Dissolved	680	10	5	NA	mg/L
MKTF-43	10/31/2016	Manganese, Dissolved	19	0.2	0.032	2017400	mg/L
MKTF-43	10/31/2016	Sodium, Dissolved	8800	100	50	NA	mg/L
MKTF-43	10/31/2016	Lead, Dissolved	ND	0.01	0.0034	NA	mg/L
MKTF-43	10/31/2016	Selenium, Dissolved	ND	0.5	0.5	50000	mg/L
MKTF-43	10/31/2016	Uranium, Dissolved	0.19	0.025	0.0026	NA	mg/L
MKTF-43	10/31/2016	Zinc, Dissolved	0.016	0.05	0.014	5960450	mg/L
MKTF-43	10/31/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-43	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	10/31/2016	Manganese, Total	18	0.1	0.014	2017000	mg/L
MKTF-43	10/31/2016	Lead, Total	ND	0.025	0.0041	15000	mg/L
MKTF-43	10/31/2016	Selenium, Total	0.084	0.05	0.0094	50000	mg/L
MKTF-43	10/31/2016	Uranium, Total	0.19	0.025	0.0087	30000	mg/L
MKTF-43	10/31/2016	Zinc, Total	0.032	0.05	0.013	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-43	3/8/2017	Arsenic, Total	0.033	0.05	0.011	10000	mg/L
MKTF-43	3/8/2017	Barium, Total	0.12	0.01	0.004	2000000	mg/L
MKTF-43	3/8/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-43	3/8/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
MKTF-43	3/8/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	3/8/2017	Silver, Dissolved	ND	0.025	0.0044	81200	mg/L
MKTF-43	3/8/2017	Arsenic, Dissolved	0.017	0.1	0.014	10000	mg/L
MKTF-43	3/8/2017	Barium, Dissolved	0.068	0.01	0.0043	2000000	mg/L
MKTF-43	3/8/2017	Calcium, Dissolved	3000	50	25	NA	mg/L
MKTF-43	3/8/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
MKTF-43	3/8/2017	Chromium, Dissolved	ND	0.03	0.0051	100000	mg/L
MKTF-43	3/8/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
MKTF-43	3/8/2017	Iron, Dissolved	ND	0.1	0.1	13821880	mg/L
MKTF-43	3/8/2017	Potassium, Dissolved	7.8	5	2.5	NA	mg/L
MKTF-43	3/8/2017	Magnesium, Dissolved	490	5	2.5	NA	mg/L
MKTF-43	3/8/2017	Manganese, Dissolved	11	0.1	0.019	2017400	mg/L
MKTF-43	3/8/2017	Sodium, Dissolved	6200	100	50	NA	mg/L
MKTF-43	3/8/2017	Lead, Dissolved	ND	0.01	0.0034	NA	mg/L
MKTF-43	3/8/2017	Selenium, Dissolved	0.059	0.1	0.021	50000	mg/L
MKTF-43	3/8/2017	Zinc, Dissolved	0.037	0.05	0.0057	5960450	mg/L
MKTF-43	3/8/2017	Iron, Total	2.6	0.1	0.1	13822000	mg/L
MKTF-43	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-43	3/8/2017	Manganese, Total	11	0.04	0.0055	2017000	mg/L
MKTF-43	3/8/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
MKTF-43	3/8/2017	Selenium, Total	0.082	0.05	0.0094	50000	mg/L
MKTF-43	3/8/2017	Zinc, Total	0.016	0.05	0.013	5960000	mg/L
MKTF-43	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-43	6/6/2017	Arsenic, Total	0.013	0.01	0.003	10000	mg/L
MKTF-43	6/6/2017	Barium, Total	0.16	0.002	0.00093	2000000	mg/L
MKTF-43	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	6/6/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-43	6/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-43	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-43	6/6/2017	Arsenic, Dissolved	ND	0.1	0.018	10000	mg/L
MKTF-43	6/6/2017	Barium, Dissolved	0.083	0.002	0.00085	2000000	mg/L
MKTF-43	6/6/2017	Calcium, Dissolved	2100	100	7.8	NA	mg/L
MKTF-43	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-43	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	6/6/2017	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
MKTF-43	6/6/2017	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-43	6/6/2017	Magnesium, Dissolved	430	5	1.2	NA	mg/L
MKTF-43	6/6/2017	Manganese, Dissolved	6.6	0.2	0.038	2017400	mg/L
MKTF-43	6/6/2017	Sodium, Dissolved	4600	100	16	NA	mg/L
MKTF-43	6/6/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	6/6/2017	Selenium, Dissolved	0.045	0.1	0.039	50000	mg/L
MKTF-43	6/6/2017	Uranium, Dissolved	0.18	0.005	0.0005	NA	mg/L
MKTF-43	6/6/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
MKTF-43	6/6/2017	Iron, Total	4.1	0.2	0.1	13822000	mg/L
MKTF-43	6/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	6/6/2017	Manganese, Total	7.1	0.02	0.011	2017000	mg/L
MKTF-43	6/6/2017	Lead, Total	0.0048	0.005	0.00095	15000	mg/L
MKTF-43	6/6/2017	Selenium, Total	0.043	0.01	0.0071	50000	mg/L
MKTF-43	6/6/2017	Uranium, Total	0.16	0.005	0.0015	30000	mg/L
MKTF-43	6/6/2017	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-43	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-43	9/25/2017	Arsenic, Total	0.016	0.05	0.015	10000	mg/L
MKTF-43	9/25/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-43	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-43	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-43	9/25/2017	Arsenic, Dissolved	ND	0.1	0.018	10000	mg/L
MKTF-43	9/25/2017	Barium, Dissolved	0.071	0.002	0.00085	2000000	mg/L
MKTF-43	9/25/2017	Calcium, Dissolved	2200	50	3.9	NA	mg/L
MKTF-43	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-43	9/25/2017	Potassium, Dissolved	7.8	1	0.11	NA	mg/L
MKTF-43	9/25/2017	Magnesium, Dissolved	340	10	2.5	NA	mg/L
MKTF-43	9/25/2017	Manganese, Dissolved	9.7	0.02	0.0039	2017400	mg/L
MKTF-43	9/25/2017	Sodium, Dissolved	5000	50	8.2	NA	mg/L
MKTF-43	9/25/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	9/25/2017	Selenium, Dissolved	0.044	0.01	0.0039	50000	mg/L
MKTF-43	9/25/2017	Zinc, Dissolved	ND	0.02	0.0042	5960450	mg/L
MKTF-43	9/25/2017	Iron, Total	1.4	0.2	0.1	13822000	mg/L
MKTF-43	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	9/25/2017	Manganese, Total	8.4	0.02	0.011	2017000	mg/L
MKTF-43	9/25/2017	Lead, Total	0.0015	0.0025	0.00048	15000	mg/L
MKTF-43	9/25/2017	Selenium, Total	0.045	0.01	0.0071	50000	mg/L
MKTF-43	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-43	11/27/2017	Silver, Total	0.022	0.005	0.0012	50000	mg/L
MKTF-43	11/27/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-43	11/27/2017	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-43	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	11/27/2017	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-43	11/27/2017	Silver, Dissolved	ND	0.05	0.05	81200	mg/L
MKTF-43	11/27/2017	Arsenic, Dissolved	0.0049	0.01	0.0042	10000	mg/L
MKTF-43	11/27/2017	Barium, Dissolved	0.081	0.002	0.00099	2000000	mg/L
MKTF-43	11/27/2017	Calcium, Dissolved	2100	100	7.8	NA	mg/L
MKTF-43	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	11/27/2017	Copper, Dissolved	0.0076	0.006	0.0032	790000	mg/L
MKTF-43	11/27/2017	Iron, Dissolved	0.072	0.02	0.016	13821880	mg/L
MKTF-43	11/27/2017	Potassium, Dissolved	7.8	1	0.11	NA	mg/L
MKTF-43	11/27/2017	Magnesium, Dissolved	330	10	2.5	NA	mg/L
MKTF-43	11/27/2017	Manganese, Dissolved	6.6	0.02	0.0039	2017400	mg/L
MKTF-43	11/27/2017	Sodium, Dissolved	5200	100	16	NA	mg/L
MKTF-43	11/27/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	11/27/2017	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
MKTF-43	11/27/2017	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-43	11/27/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-43	11/27/2017	Iron, Total	2.4	0.2	0.1	13822000	mg/L
MKTF-43	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	11/27/2017	Manganese, Total	6.8	0.02	0.011	2017000	mg/L
MKTF-43	11/27/2017	Lead, Total	0.0026	0.005	0.0023	15000	mg/L
MKTF-43	11/27/2017	Selenium, Total	ND	0.05	0.049	50000	mg/L
MKTF-43	11/27/2017	Uranium, Total	0.13	0.005	0.0015	30000	mg/L
MKTF-43	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-43	2/7/2018	Silver, Total	0.029	0.005	0.0012	50000	mg/L
MKTF-43	2/7/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-43	2/7/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-43	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	2/7/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-43	2/7/2018	Silver, Dissolved	0.0096	0.005	0.0018	81200	mg/L
MKTF-43	2/7/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-43	2/7/2018	Barium, Dissolved	0.075	0.01	0.0049	2000000	mg/L
MKTF-43	2/7/2018	Calcium, Dissolved	2000	50	3.9	NA	mg/L
MKTF-43	2/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
MKTF-43	2/7/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
MKTF-43	2/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
MKTF-43	2/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
MKTF-43	2/7/2018	Potassium, Dissolved	7.1	5	0.56	NA	mg/L
MKTF-43	2/7/2018	Magnesium, Dissolved	310	5	1.2	NA	mg/L
MKTF-43	2/7/2018	Manganese, Dissolved	5.5	0.1	0.02	2017400	mg/L
MKTF-43	2/7/2018	Sodium, Dissolved	4700	50	8.2	NA	mg/L
MKTF-43	2/7/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	2/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
MKTF-43	2/7/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-43	2/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-43	2/7/2018	Iron, Total	4.7	0.2	0.1	13822000	mg/L
MKTF-43	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	2/7/2018	Manganese, Total	4.9	0.02	0.011	2017000	mg/L
MKTF-43	2/7/2018	Lead, Total	0.005	0.005	0.0023	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/7/2018	Selenium, Total	0.023	0.02	0.02	50000	mg/L
MKTF-43	2/7/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-43	2/7/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-43	5/9/2018	Silver, Total	0.02	0.005	0.0012	50000	mg/L
MKTF-43	5/9/2018	Arsenic, Total	0.0057	0.01	0.0041	10000	mg/L
MKTF-43	5/9/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
MKTF-43	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	5/9/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-43	5/9/2018	Silver, Dissolved	0.017	0.005	0.0018	81200	mg/L
MKTF-43	5/9/2018	Arsenic, Dissolved	0.01	0.01	0.0042	10000	mg/L
MKTF-43	5/9/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-43	5/9/2018	Calcium, Dissolved	1300	50	3.9	NA	mg/L
MKTF-43	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	5/9/2018	Copper, Dissolved	0.0057	0.006	0.0032	790000	mg/L
MKTF-43	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	5/9/2018	Potassium, Dissolved	5.3	1	0.11	NA	mg/L
MKTF-43	5/9/2018	Magnesium, Dissolved	170	5	1.2	NA	mg/L
MKTF-43	5/9/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
MKTF-43	5/9/2018	Sodium, Dissolved	3400	50	8.2	NA	mg/L
MKTF-43	5/9/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	5/9/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-43	5/9/2018	Uranium, Dissolved	0.086	0.005	0.00096	NA	mg/L
MKTF-43	5/9/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
MKTF-43	5/9/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
MKTF-43	5/9/2018	Mercury, Total	0.000061	0.0002	0.000037	2000	mg/L
MKTF-43	5/9/2018	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-43	5/9/2018	Lead, Total	0.0091	0.0025	0.0011	15000	mg/L
MKTF-43	5/9/2018	Selenium, Total	0.034	0.005	0.0049	50000	mg/L
MKTF-43	5/9/2018	Uranium, Total	0.12	0.005	0.00068	30000	mg/L
MKTF-43	5/9/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-43	8/30/2018	Silver, Total	0.012	0.005	0.0012	50000	mg/L
MKTF-43	8/30/2018	Arsenic, Total	0.0058	0.005	0.0021	10000	mg/L
MKTF-43	8/30/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-43	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	8/30/2018	Silver, Dissolved	0.013	0.005	0.0018	81200	mg/L
MKTF-43	8/30/2018	Arsenic, Dissolved	0.0036	0.005	0.0021	10000	mg/L
MKTF-43	8/30/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
MKTF-43	8/30/2018	Calcium, Dissolved	510	20	1.6	NA	mg/L
MKTF-43	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	8/30/2018	Potassium, Dissolved	18	1	0.11	NA	mg/L
MKTF-43	8/30/2018	Magnesium, Dissolved	84	1	0.25	NA	mg/L
MKTF-43	8/30/2018	Manganese, Dissolved	0.38	0.002	0.00039	2017400	mg/L
MKTF-43	8/30/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
MKTF-43	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-43	8/30/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-43	8/30/2018	Uranium, Dissolved	0.019	0.0005	0.000096	NA	mg/L
MKTF-43	8/30/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-43	8/30/2018	Iron, Total	0.25	0.02	0.01	13822000	mg/L
MKTF-43	8/30/2018	Mercury, Total	0.000051	0.0002	0.000038	2000	mg/L
MKTF-43	8/30/2018	Manganese, Total	0.43	0.002	0.0011	2017000	mg/L
MKTF-43	8/30/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-43	8/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-43	8/30/2018	Uranium, Total	0.021	0.0025	0.00034	30000	mg/L
MKTF-43	8/30/2018	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
MKTF-43	11/15/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-43	11/15/2018	Arsenic, Total	0.005	0.001	0.00041	10000	mg/L
MKTF-43	11/15/2018	Barium, Total	0.091	0.002	0.001	2000000	mg/L
MKTF-43	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	11/15/2018	Silver, Dissolved	0.0088	0.005	0.0018	81200	mg/L
MKTF-43	11/15/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	Barium, Dissolved	0.071	0.002	0.00099	2000000	mg/L
MKTF-43	11/15/2018	Calcium, Dissolved	440	5	0.39	NA	mg/L
MKTF-43	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	11/15/2018	Potassium, Dissolved	4.6	1	0.11	NA	mg/L
MKTF-43	11/15/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-43	11/15/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
MKTF-43	11/15/2018	Sodium, Dissolved	1400	20	3.3	NA	mg/L
MKTF-43	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-43	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-43	11/15/2018	Uranium, Dissolved	0.028	0.0025	0.00048	NA	mg/L
MKTF-43	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-43	11/15/2018	Iron, Total	0.95	0.02	0.01	13822000	mg/L
MKTF-43	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-43	11/15/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-43	11/15/2018	Lead, Total	0.00094	0.0005	0.00023	15000	mg/L
MKTF-43	11/15/2018	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
MKTF-43	11/15/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-43	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-44	8/22/2019	Aluminum, Total	0.078	0.02	0.002488	19914000	mg/L
MKTF-44	8/22/2019	Antimony, Total	0.00099	0.001	0.000389	6000	mg/L
MKTF-44	8/22/2019	Arsenic, Total	0.0036	0.001	0.000101	10000	mg/L
MKTF-44	8/22/2019	Barium, Total	0.22	0.002	0.000648	2000000	mg/L
MKTF-44	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	8/22/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	8/22/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-44	8/22/2019	Chromium, Total	0.01	0.006	0.001533	50000	mg/L
MKTF-44	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	8/22/2019	Copper, Total	0.0056	0.006	0.001296	790000	mg/L
MKTF-44	8/22/2019	Iron, Total	0.082	0.02	0.008747	13822000	mg/L
MKTF-44	8/22/2019	Lead, Total	0.00018	0.0005	0.000055	15000	mg/L
MKTF-44	8/22/2019	Manganese, Total	0.0031	0.002	0.00029	2017000	mg/L
MKTF-44	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	8/22/2019	Nickel, Total	0.004	0.01	0.004009	372000	mg/L
MKTF-44	8/22/2019	Selenium, Total	0.01	0.001	0.000171	50000	mg/L
MKTF-44	8/22/2019	Silver, Total	0.001	0.005	0.000942	50000	mg/L
MKTF-44	8/22/2019	Thallium, Total	ND	0.0005	0.000048	2000	mg/L
MKTF-44	8/22/2019	Uranium, Total	0.12	0.0025	0.000374	30000	mg/L
MKTF-44	8/22/2019	Zinc, Total	0.0054	0.01	0.002252	5960000	mg/L
MKTF-44	8/22/2019	Aluminum, Total	3.6	0.1	0.012441	19914000	mg/L
MKTF-44	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-44	8/22/2019	Arsenic, Total	0.005	0.001	0.000312	10000	mg/L
MKTF-44	8/22/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
MKTF-44	8/22/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
MKTF-44	8/22/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	8/22/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
MKTF-44	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	8/22/2019	Copper, Total	0.0048	0.006	0.004072	790000	mg/L
MKTF-44	8/22/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-44	8/22/2019	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
MKTF-44	8/22/2019	Manganese, Total	0.083	0.002	0.00029	2017000	mg/L
MKTF-44	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	8/22/2019	Nickel, Total	0.0042	0.01	0.004009	372000	mg/L
MKTF-44	8/22/2019	Selenium, Total	0.0095	0.001	0.000478	50000	mg/L
MKTF-44	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-44	8/22/2019	Thallium, Total	0.000098	0.0005	0.000052	2000	mg/L
MKTF-44	8/22/2019	Uranium, Total	0.12	0.0025	0.000424	30000	mg/L
MKTF-44	8/22/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-44	10/24/2019	Aluminum, Total	4.6	0.1	0.012441	19914000	mg/L
MKTF-44	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-44	10/24/2019	Arsenic, Total	0.0059	0.005	0.001561	10000	mg/L
MKTF-44	10/24/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-44	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	10/24/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	10/24/2019	Chromium, Total	0.0069	0.006	0.001533	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-44	10/24/2019	Iron, Total	4	0.1	0.043734	13822000	mg/L
MKTF-44	10/24/2019	Lead, Total	0.0038	0.0005	0.000055	15000	mg/L
MKTF-44	10/24/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-44	10/24/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-44	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	10/24/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-44	10/24/2019	Selenium, Total	0.011	0.005	0.00239	50000	mg/L
MKTF-44	10/24/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-44	10/24/2019	Thallium, Total	0.000095	0.0005	0.000052	2000	mg/L
MKTF-44	10/24/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-44	10/24/2019	Aluminum, Dissolved	0.031	0.02	0.002488	19913930	mg/L
MKTF-44	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-44	10/24/2019	Arsenic, Dissolved	0.0051	0.005	0.000504	10000	mg/L
MKTF-44	10/24/2019	Barium, Dissolved	0.11	0.002	0.000648	2000000	mg/L
MKTF-44	10/24/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	10/24/2019	Boron, Dissolved	1.9	0.4	0.045305	3949110	mg/L
MKTF-44	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	10/24/2019	Calcium, Dissolved	20	1	0.061889	NA	mg/L
MKTF-44	10/24/2019	Chromium, Dissolved	0.0063	0.006	0.001533	100000	mg/L
MKTF-44	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-44	10/24/2019	Copper, Dissolved	0.0048	0.006	0.001296	790000	mg/L
MKTF-44	10/24/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
MKTF-44	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-44	10/24/2019	Magnesium, Dissolved	1.8	1	0.05029	NA	mg/L
MKTF-44	10/24/2019	Manganese, Dissolved	0.0015	0.002	0.00029	2017400	mg/L
MKTF-44	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-44	10/24/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-44	10/24/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-44	10/24/2019	Selenium, Dissolved	0.012	0.005	0.000857	50000	mg/L
MKTF-44	10/24/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-44	10/24/2019	Sodium, Dissolved	800	10	4.161763	NA	mg/L
MKTF-44	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-44	10/24/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-44	2/13/2019	Antimony, Total	0.00039	0.001	0.000204	6000	mg/L
MKTF-44	2/13/2019	Arsenic, Total	0.005	0.001	0.000312	10000	mg/L
MKTF-44	2/13/2019	Barium, Total	0.3	0.002	0.000648	2000000	mg/L
MKTF-44	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	2/13/2019	Chromium, Total	0.018	0.006	0.001533	50000	mg/L
MKTF-44	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-44	2/13/2019	Iron, Total	6.7	0.2	0.087469	13822000	mg/L
MKTF-44	2/13/2019	Lead, Total	0.0074	0.0005	0.000047	15000	mg/L
MKTF-44	2/13/2019	Manganese, Total	0.14	0.002	0.00029	2017000	mg/L
MKTF-44	2/13/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
MKTF-44	2/13/2019	Selenium, Total	0.009	0.001	0.000478	50000	mg/L
MKTF-44	2/13/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-44	2/13/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-44	2/13/2019	Uranium, Total	0.12	0.005	0.000849	30000	mg/L
MKTF-44	2/13/2019	Zinc, Total	0.026	0.01	0.005772	5960000	mg/L
MKTF-44	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-44	2/13/2019	Arsenic, Dissolved	0.0022	0.001	0.000068	10000	mg/L
MKTF-44	2/13/2019	Barium, Dissolved	0.23	0.002	0.000648	2000000	mg/L
MKTF-44	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	2/13/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-44	2/13/2019	Chromium, Dissolved	0.008	0.006	0.001533	100000	mg/L
MKTF-44	2/13/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-44	2/13/2019	Iron, Dissolved	0.025	0.02	0.008747	13821880	mg/L
MKTF-44	2/13/2019	Lead, Dissolved	0.000097	0.0005	0.000047	NA	mg/L
MKTF-44	2/13/2019	Magnesium, Dissolved	2.5	1	0.05029	NA	mg/L
MKTF-44	2/13/2019	Manganese, Dissolved	0.0027	0.002	0.00029	2017400	mg/L
MKTF-44	2/13/2019	Potassium, Dissolved	2.8	1	0.162288	NA	mg/L
MKTF-44	2/13/2019	Selenium, Dissolved	0.0081	0.001	0.000203	50000	mg/L
MKTF-44	2/13/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-44	2/13/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-44	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-44	2/13/2019	Uranium, Dissolved	0.13	0.005	0.000305	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-44	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-44	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-44	5/8/2019	Arsenic, Dissolved	0.0021	0.005	0.000504	10000	mg/L
MKTF-44	5/8/2019	Barium, Dissolved	0.47	0.002	0.000648	2000000	mg/L
MKTF-44	5/8/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	5/8/2019	Boron, Dissolved	2.1	0.2	0.022653	3949110	mg/L
MKTF-44	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	5/8/2019	Calcium, Dissolved	98	1	0.061889	NA	mg/L
MKTF-44	5/8/2019	Chromium, Dissolved	0.015	0.006	0.001533	100000	mg/L
MKTF-44	5/8/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-44	5/8/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
MKTF-44	5/8/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-44	5/8/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-44	5/8/2019	Magnesium, Dissolved	7.3	1	0.05029	NA	mg/L
MKTF-44	5/8/2019	Manganese, Dissolved	0.00049	0.002	0.00029	2017400	mg/L
MKTF-44	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-44	5/8/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-44	5/8/2019	Potassium, Dissolved	3.4	1	0.162288	NA	mg/L
MKTF-44	5/8/2019	Selenium, Dissolved	0.0085	0.005	0.000857	50000	mg/L
MKTF-44	5/8/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-44	5/8/2019	Sodium, Dissolved	1600	20	8.323526	NA	mg/L
MKTF-44	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-44	5/8/2019	Uranium, Dissolved	0.11	0.0025	0.000374	NA	mg/L
MKTF-44	5/8/2019	Zinc, Dissolved	0.008	0.01	0.002252	5960450	mg/L
MKTF-44	5/8/2019	Aluminum, Total	0.99	0.02	0.002488	19914000	mg/L
MKTF-44	5/8/2019	Antimony, Total	0.00083	0.001	0.000389	6000	mg/L
MKTF-44	5/8/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
MKTF-44	5/8/2019	Barium, Total	0.5	0.002	0.000648	2000000	mg/L
MKTF-44	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	5/8/2019	Boron, Total	2.1	0.2	0.022653	3949	mg/L
MKTF-44	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	5/8/2019	Chromium, Total	0.016	0.006	0.001533	50000	mg/L
MKTF-44	5/8/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	5/8/2019	Copper, Total	0.0049	0.006	0.004072	790000	mg/L
MKTF-44	5/8/2019	Iron, Total	0.82	0.1	0.043734	13822000	mg/L
MKTF-44	5/8/2019	Lead, Total	0.00097	0.0005	0.000055	15000	mg/L
MKTF-44	5/8/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
MKTF-44	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-44	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	5/8/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-44	5/8/2019	Selenium, Total	0.0089	0.001	0.000478	50000	mg/L
MKTF-44	5/8/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-44	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-44	5/8/2019	Uranium, Total	0.11	0.005	0.000849	30000	mg/L
MKTF-44	5/8/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-44	8/22/2019	Calcium, Total	39	1	0.061889	NA	mg/L
MKTF-44	8/22/2019	Magnesium, Total	3.5	1	0.05029	NA	mg/L
MKTF-44	8/22/2019	Potassium, Total	2.4	1	0.162288	NA	mg/L
MKTF-44	8/22/2019	Sodium, Total	1100	20	8.323526	NA	mg/L
MKTF-44	8/22/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
MKTF-44	9/21/2020	Arsenic, Dissolved	0.0056	0.001	0.00021	10000	mg/L
MKTF-44	9/21/2020	Lead, Dissolved	0.0037	0.0005	0.000034	NA	mg/L
MKTF-44	9/21/2020	Selenium, Dissolved	0.013	0.001	0.00066	50000	mg/L
MKTF-44	9/21/2020	Thallium, Dissolved	0.000036	0.0005	0.000035	2000	mg/L
MKTF-44	9/21/2020	Uranium, Dissolved	0.15	0.005	0.00065	NA	mg/L
MKTF-44	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-44	9/21/2020	Aluminum, Dissolved	2.1	0.1	0.028	19913930	mg/L
MKTF-44	9/21/2020	Boron, Dissolved	1.8	0.2	0.033	3949110	mg/L
MKTF-44	9/21/2020	Iron, Dissolved	1.8	0.1	0.052	13821880	mg/L
MKTF-44	9/21/2020	Sodium, Dissolved	810	50	6.9	NA	mg/L
MKTF-44	9/21/2020	Barium, Dissolved	0.16	0.002	0.0011	2000000	mg/L
MKTF-44	9/21/2020	Beryllium, Dissolved	0.00097	0.002	0.00088	4000	mg/L
MKTF-44	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-44	9/21/2020	Calcium, Dissolved	34	1	0.11	NA	mg/L
MKTF-44	9/21/2020	Chromium, Dissolved	0.014	0.006	0.002	100000	mg/L
MKTF-44	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-44	9/21/2020	Magnesium, Dissolved	1.9	1	0.067	NA	mg/L
MKTF-44	9/21/2020	Manganese, Dissolved	0.08	0.002	0.00058	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-44	9/21/2020	Nickel, Dissolved	0.0035	0.01	0.0033	372000	mg/L
MKTF-44	9/21/2020	Potassium, Dissolved	4.9	1	0.16	NA	mg/L
MKTF-44	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-44	9/21/2020	Zinc, Dissolved	0.022	0.01	0.006	5960450	mg/L
MKTF-44	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-44	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-44	9/21/2020	Arsenic, Total	0.011	0.001	0.00026	10000	mg/L
MKTF-44	9/21/2020	Lead, Total	0.019	0.0005	0.000034	15000	mg/L
MKTF-44	9/21/2020	Selenium, Total	0.014	0.001	0.00066	50000	mg/L
MKTF-44	9/21/2020	Thallium, Total	0.00036	0.00025	0.00025	2000	mg/L
MKTF-44	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-44	9/21/2020	Barium, Total	0.27	0.003	0.0016	2000000	mg/L
MKTF-44	9/21/2020	Beryllium, Total	0.0018	0.002	0.00088	4000	mg/L
MKTF-44	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	9/21/2020	Chromium, Total	0.023	0.006	0.0021	50000	mg/L
MKTF-44	9/21/2020	Cobalt, Total	0.0053	0.006	0.0024	5980	mg/L
MKTF-44	9/21/2020	Manganese, Total	0.32	0.002	0.00081	2017000	mg/L
MKTF-44	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-44	9/21/2020	Zinc, Total	0.061	0.01	0.0064	5960000	mg/L
MKTF-44	9/21/2020	Uranium, Total	0.15	0.005	0.00065	30000	mg/L
MKTF-44	9/21/2020	Copper, Total	0.0087	0.006	0.0047	790000	mg/L
MKTF-44	9/21/2020	Nickel, Total	0.0057	0.01	0.0033	372000	mg/L
MKTF-44	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-44	9/21/2020	Boron, Total	1.8	0.2	0.037	3949	mg/L
MKTF-44	9/21/2020	Aluminum, Total	18	0.4	0.15	19914000	mg/L
MKTF-44	9/21/2020	Iron, Total	17	1	0.26	13822000	mg/L
MKTF-44	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-44	12/23/2020	Barium, Dissolved	0.0404	0.01	0.003	2000000	mg/L
MKTF-44	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-44	12/23/2020	Boron, Dissolved	1.74	0.1	0.022	3949110	mg/L
MKTF-44	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-44	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-44	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-44	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-44	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-44	12/23/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-44	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-44	12/23/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-44	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-44	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-44	12/23/2020	Aluminum, Total	3.18	0.2	0.051	19914000	mg/L
MKTF-44	12/23/2020	Barium, Total	0.0829	0.01	0.003	2000000	mg/L
MKTF-44	12/23/2020	Calcium, Total	16.6	0.5	0.084	NA	mg/L
MKTF-44	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-44	12/23/2020	Boron, Total	1.76	0.1	0.022	3949	mg/L
MKTF-44	12/23/2020	Potassium, Total	3.11	1	0.34	NA	mg/L
MKTF-44	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-44	12/23/2020	Magnesium, Total	1	0.5	0.12	NA	mg/L
MKTF-44	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-44	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-44	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-44	12/23/2020	Iron, Total	2.8	0.2	0.075	13822000	mg/L
MKTF-44	12/23/2020	Manganese, Total	0.06	0.01	0.003	2017000	mg/L
MKTF-44	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-44	12/23/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-44	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-44	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-44	12/23/2020	Sodium, Total	545	20	9.2	NA	mg/L
MKTF-44	12/23/2020	Arsenic, Total Recoverable	9.85	1	0.286	10	ug/L
MKTF-44	12/23/2020	Lead, Total Recoverable	1.93	1	0.133	15	ug/L
MKTF-44	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-44	12/23/2020	Selenium, Total Recoverable	12.1	5	1.43	50	ug/L
MKTF-44	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-44	12/23/2020	Uranium, Total Recoverable	**166**	5	1.12	30	ug/L
MKTF-44	12/23/2020	Arsenic, Dissolved	9.54	1	0.286	10	ug/L
MKTF-44	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-44	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-44	12/23/2020	Selenium, Dissolved	11.9	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-44	12/23/2020	Uranium, Dissolved	162	5	1.12	NA	ug/L
MKTF-44	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-44	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-44	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-44	3/5/2020	Lead, Total	0.015	0.0005	0.000055	15000	mg/L
MKTF-44	3/5/2020	Thallium, Total	0.00029	0.0005	0.000052	2000	mg/L
MKTF-44	3/5/2020	Arsenic, Total	0.0091	0.005	0.0016	10000	mg/L
MKTF-44	3/5/2020	Selenium, Total	0.016	0.005	0.0024	50000	mg/L
MKTF-44	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-44	3/5/2020	Uranium, Total	0.16	0.005	0.00085	30000	mg/L
MKTF-44	3/5/2020	Barium, Total	0.29	0.002	0.00065	2000000	mg/L
MKTF-44	3/5/2020	Beryllium, Total	0.0017	0.002	0.00028	4000	mg/L
MKTF-44	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-44	3/5/2020	Chromium, Total	0.018	0.006	0.0015	50000	mg/L
MKTF-44	3/5/2020	Cobalt, Total	0.0037	0.006	0.0031	5980	mg/L
MKTF-44	3/5/2020	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-44	3/5/2020	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-44	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-44	3/5/2020	Nickel, Total	0.0062	0.01	0.004	372000	mg/L
MKTF-44	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-44	3/5/2020	Zinc, Total	0.052	0.01	0.0058	5960000	mg/L
MKTF-44	3/5/2020	Boron, Total	1.9	0.2	0.023	3949	mg/L
MKTF-44	3/5/2020	Aluminum, Total	12	0.4	0.05	19914000	mg/L
MKTF-44	3/5/2020	Iron, Total	14	0.4	0.17	13822000	mg/L
MKTF-44	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-44	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-44	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-44	3/5/2020	Arsenic, Dissolved	0.0045	0.005	0.0005	10000	mg/L
MKTF-44	3/5/2020	Selenium, Dissolved	0.01	0.005	0.00086	50000	mg/L
MKTF-44	3/5/2020	Uranium, Dissolved	0.16	0.005	0.00075	NA	mg/L
MKTF-44	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-44	3/5/2020	Barium, Dissolved	0.12	0.002	0.00065	2000000	mg/L
MKTF-44	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-44	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-44	3/5/2020	Calcium, Dissolved	37	1	0.062	NA	mg/L
MKTF-44	3/5/2020	Chromium, Dissolved	0.0061	0.006	0.0015	100000	mg/L
MKTF-44	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-44	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-44	3/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-44	3/5/2020	Magnesium, Dissolved	1.8	1	0.05	NA	mg/L
MKTF-44	3/5/2020	Manganese, Dissolved	0.00032	0.002	0.00029	2017400	mg/L
MKTF-44	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-44	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-44	3/5/2020	Potassium, Dissolved	2	1	0.16	NA	mg/L
MKTF-44	3/5/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-44	3/5/2020	Zinc, Dissolved	0.0079	0.01	0.0023	5960450	mg/L
MKTF-44	3/5/2020	Boron, Dissolved	1.8	0.2	0.023	3949110	mg/L
MKTF-44	3/5/2020	Sodium, Dissolved	760	10	4.2	NA	mg/L
MKTF-44	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-44	3/12/2015	Barium, Total	0.07	0.002	0.00095	2000000	mg/L
MKTF-44	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-44	3/12/2015	Chromium, Total	0.0072	0.006	0.0018	50000	mg/L
MKTF-44	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-44	3/12/2015	Iron, Total	0.85	0.02	0.0073	13822000	mg/L
MKTF-44	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	3/12/2015	Manganese, Total	0.079	0.002	0.00027	2017000	mg/L
MKTF-44	3/12/2015	Lead, Total	0.0031	0.001	0.000059	15000	mg/L
MKTF-44	3/12/2015	Selenium, Total	0.017	0.001	0.00015	50000	mg/L
MKTF-44	3/12/2015	Uranium, Total	0.22	0.01	0.0005	30000	mg/L
MKTF-44	3/12/2015	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-44	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-44	6/10/2015	Barium, Total	0.05	0.002	0.00095	2000000	mg/L
MKTF-44	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-44	6/10/2015	Chromium, Total	0.0099	0.006	0.0018	50000	mg/L
MKTF-44	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-44	6/10/2015	Iron, Total	0.91	0.02	0.0073	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	6/10/2015	Manganese, Total	0.042	0.002	0.00027	2017000	mg/L
MKTF-44	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-44	6/10/2015	Selenium, Total	0.015	0.005	0.00097	50000	mg/L
MKTF-44	6/10/2015	Uranium, Total	0.21	0.01	0.000048	30000	mg/L
MKTF-44	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L
MKTF-44	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-44	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-44	8/17/2015	Barium, Total	0.43	0.002	0.0011	2000000	mg/L
MKTF-44	8/17/2015	Calcium, Total	8.9	1	0.057	NA	mg/L
MKTF-44	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-44	8/17/2015	Chromium, Total	0.031	0.006	0.0022	50000	mg/L
MKTF-44	8/17/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-44	8/17/2015	Iron, Total	26	1	0.36	13822000	mg/L
MKTF-44	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	8/17/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-44	8/17/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
MKTF-44	8/17/2015	Manganese, Total	0.92	0.002	0.0015	2017000	mg/L
MKTF-44	8/17/2015	Sodium, Total	480	5	0.36	NA	mg/L
MKTF-44	8/17/2015	Lead, Total	0.034	0.005	0.00047	15000	mg/L
MKTF-44	8/17/2015	Selenium, Total	0.015	0.01	0.0012	50000	mg/L
MKTF-44	8/17/2015	Uranium, Total	0.24	0.005	0.000049	30000	mg/L
MKTF-44	8/17/2015	Zinc, Total	0.1	0.01	0.0039	5960000	mg/L
MKTF-44	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-44	11/9/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-44	11/9/2015	Barium, Total	0.053	0.002	0.0013	2000000	mg/L
MKTF-44	11/9/2015	Calcium, Total	5.7	1	0.26	NA	mg/L
MKTF-44	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-44	11/9/2015	Chromium, Total	0.0062	0.006	0.0018	50000	mg/L
MKTF-44	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-44	11/9/2015	Iron, Total	0.87	0.02	0.0091	13822000	mg/L
MKTF-44	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	11/9/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-44	11/9/2015	Magnesium, Total	ND	1	0.013	NA	mg/L
MKTF-44	11/9/2015	Manganese, Total	0.081	0.002	0.00032	2017000	mg/L
MKTF-44	11/9/2015	Sodium, Total	400	5	0.48	NA	mg/L
MKTF-44	11/9/2015	Lead, Total	0.0053	0.005	0.00026	15000	mg/L
MKTF-44	11/9/2015	Selenium, Total	0.014	0.001	0.00019	50000	mg/L
MKTF-44	11/9/2015	Uranium, Total	0.21	0.005	0.000048	30000	mg/L
MKTF-44	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-44	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-44	2/24/2016	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
MKTF-44	2/24/2016	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
MKTF-44	2/24/2016	Calcium, Total	24	1	0.26	NA	mg/L
MKTF-44	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-44	2/24/2016	Chromium, Total	0.0098	0.006	0.0022	50000	mg/L
MKTF-44	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-44	2/24/2016	Iron, Total	2.9	0.1	0.036	13822000	mg/L
MKTF-44	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-44	2/24/2016	Potassium, Total	2.3	1	0.18	NA	mg/L
MKTF-44	2/24/2016	Magnesium, Total	1.1	1	0.013	NA	mg/L
MKTF-44	2/24/2016	Manganese, Total	0.056	0.002	0.0015	2017000	mg/L
MKTF-44	2/24/2016	Sodium, Total	530	10	0.96	NA	mg/L
MKTF-44	2/24/2016	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
MKTF-44	2/24/2016	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-44	2/24/2016	Uranium, Total	0.18	0.01	0.000099	30000	mg/L
MKTF-44	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-44	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-44	6/9/2016	Arsenic, Total	0.0049	0.01	0.0014	10000	mg/L
MKTF-44	6/9/2016	Barium, Total	0.11	0.002	0.0013	2000000	mg/L
MKTF-44	6/9/2016	Calcium, Total	35	1	0.26	NA	mg/L
MKTF-44	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-44	6/9/2016	Chromium, Total	0.011	0.006	0.0018	50000	mg/L
MKTF-44	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-44	6/9/2016	Iron, Total	0.045	0.02	0.0091	13822000	mg/L
MKTF-44	6/9/2016	Mercury, Total	0.000089	0.0002	0.000053	2000	mg/L
MKTF-44	6/9/2016	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-44	6/9/2016	Magnesium, Total	1.3	1	0.013	NA	mg/L
MKTF-44	6/9/2016	Manganese, Total	0.0031	0.002	0.00032	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/9/2016	Sodium, Total	660	10	0.96	NA	mg/L
MKTF-44	6/9/2016	Lead, Total	0.00019	0.0005	0.00017	15000	mg/L
MKTF-44	6/9/2016	Selenium, Total	0.016	0.001	0.00021	50000	mg/L
MKTF-44	6/9/2016	Uranium, Total	0.17	0.005	0.00051	30000	mg/L
MKTF-44	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-44	9/9/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-44	9/9/2016	Arsenic, Total	0.0086	0.001	0.00021	10000	mg/L
MKTF-44	9/9/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-44	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	9/9/2016	Chromium, Total	0.031	0.006	0.0027	50000	mg/L
MKTF-44	9/9/2016	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-44	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-44	9/9/2016	Arsenic, Dissolved	0.0088	0.001	0.00014	10000	mg/L
MKTF-44	9/9/2016	Barium, Dissolved	0.058	0.002	0.0013	2000000	mg/L
MKTF-44	9/9/2016	Calcium, Dissolved	11	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-44	9/9/2016	Chromium, Dissolved	0.0077	0.006	0.0018	100000	mg/L
MKTF-44	9/9/2016	Copper, Dissolved	0.0041	0.006	0.004	790000	mg/L
MKTF-44	9/9/2016	Iron, Dissolved	0.97	0.02	0.02	13821880	mg/L
MKTF-44	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Magnesium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Manganese, Dissolved	0.042	0.002	0.00032	2017400	mg/L
MKTF-44	9/9/2016	Sodium, Dissolved	530	10	5	NA	mg/L
MKTF-44	9/9/2016	Lead, Dissolved	0.005	0.0005	0.00017	NA	mg/L
MKTF-44	9/9/2016	Selenium, Dissolved	0.015	0.001	0.00021	50000	mg/L
MKTF-44	9/9/2016	Uranium, Dissolved	0.17	0.005	0.00051	NA	mg/L
MKTF-44	9/9/2016	Zinc, Dissolved	0.0078	0.01	0.0028	5960450	mg/L
MKTF-44	9/9/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-44	9/9/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
MKTF-44	9/9/2016	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
MKTF-44	9/9/2016	Lead, Total	0.031	0.0025	0.00041	15000	mg/L
MKTF-44	9/9/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-44	9/9/2016	Uranium, Total	0.17	0.01	0.0035	30000	mg/L
MKTF-44	9/9/2016	Zinc, Total	0.089	0.01	0.0027	5960000	mg/L
MKTF-44	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-44	11/1/2016	Arsenic, Total	0.011	0.001	0.00021	10000	mg/L
MKTF-44	11/1/2016	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
MKTF-44	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	11/1/2016	Chromium, Total	0.022	0.006	0.0027	50000	mg/L
MKTF-44	11/1/2016	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-44	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-44	11/1/2016	Arsenic, Dissolved	0.0095	0.005	0.00069	10000	mg/L
MKTF-44	11/1/2016	Barium, Dissolved	0.037	0.002	0.0013	2000000	mg/L
MKTF-44	11/1/2016	Calcium, Dissolved	5.7	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-44	11/1/2016	Chromium, Dissolved	0.0043	0.006	0.0018	100000	mg/L
MKTF-44	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-44	11/1/2016	Iron, Dissolved	0.37	0.02	0.02	13821880	mg/L
MKTF-44	11/1/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Manganese, Dissolved	0.011	0.002	0.00032	2017400	mg/L
MKTF-44	11/1/2016	Sodium, Dissolved	440	5	2.5	NA	mg/L
MKTF-44	11/1/2016	Lead, Dissolved	0.0012	0.0025	0.00084	NA	mg/L
MKTF-44	11/1/2016	Selenium, Dissolved	0.014	0.005	0.0011	50000	mg/L
MKTF-44	11/1/2016	Uranium, Dissolved	0.17	0.01	0.001	NA	mg/L
MKTF-44	11/1/2016	Zinc, Dissolved	0.0061	0.01	0.0028	5960450	mg/L
MKTF-44	11/1/2016	Iron, Total	18	1	1	13822000	mg/L
MKTF-44	11/1/2016	Mercury, Total	0.000083	0.0002	0.000053	2000	mg/L
MKTF-44	11/1/2016	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
MKTF-44	11/1/2016	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
MKTF-44	11/1/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-44	11/1/2016	Uranium, Total	0.18	0.005	0.0017	30000	mg/L
MKTF-44	11/1/2016	Zinc, Total	0.074	0.01	0.0027	5960000	mg/L
MKTF-44	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-44	3/8/2017	Arsenic, Total	0.012	0.02	0.0042	10000	mg/L
MKTF-44	3/8/2017	Barium, Total	0.97	0.002	0.00079	2000000	mg/L
MKTF-44	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	3/8/2017	Chromium, Total	0.038	0.006	0.0027	50000	mg/L
MKTF-44	3/8/2017	Copper, Total	ND	0.006	0.003	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-44	3/8/2017	Arsenic, Dissolved	0.0043	0.005	0.00069	10000	mg/L
MKTF-44	3/8/2017	Barium, Dissolved	0.96	0.002	0.00085	2000000	mg/L
MKTF-44	3/8/2017	Calcium, Dissolved	370	5	2.5	NA	mg/L
MKTF-44	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	3/8/2017	Chromium, Dissolved	0.032	0.006	0.001	100000	mg/L
MKTF-44	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	3/8/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-44	3/8/2017	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-44	3/8/2017	Magnesium, Dissolved	11	1	0.5	NA	mg/L
MKTF-44	3/8/2017	Manganese, Dissolved	0.0082	0.002	0.00038	2017400	mg/L
MKTF-44	3/8/2017	Sodium, Dissolved	2200	50	25	NA	mg/L
MKTF-44	3/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-44	3/8/2017	Selenium, Dissolved	0.017	0.005	0.0011	50000	mg/L
MKTF-44	3/8/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-44	3/8/2017	Iron, Total	3.1	0.2	0.2	13822000	mg/L
MKTF-44	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-44	3/8/2017	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-44	3/8/2017	Lead, Total	0.0042	0.01	0.0016	15000	mg/L
MKTF-44	3/8/2017	Selenium, Total	0.025	0.02	0.0037	50000	mg/L
MKTF-44	3/8/2017	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-44	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-44	6/5/2017	Arsenic, Total	0.0039	0.001	0.0003	10000	mg/L
MKTF-44	6/5/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
MKTF-44	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	6/5/2017	Chromium, Total	0.016	0.006	0.0011	50000	mg/L
MKTF-44	6/5/2017	Copper, Total	0.0031	0.006	0.0017	790000	mg/L
MKTF-44	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-44	6/5/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-44	6/5/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
MKTF-44	6/5/2017	Calcium, Dissolved	33	1	0.078	NA	mg/L
MKTF-44	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	6/5/2017	Chromium, Dissolved	0.011	0.006	0.001	100000	mg/L
MKTF-44	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	6/5/2017	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
MKTF-44	6/5/2017	Potassium, Dissolved	2.4	1	0.11	NA	mg/L
MKTF-44	6/5/2017	Magnesium, Dissolved	2.9	1	0.25	NA	mg/L
MKTF-44	6/5/2017	Manganese, Dissolved	0.0029	0.002	0.00038	2017400	mg/L
MKTF-44	6/5/2017	Sodium, Dissolved	1000	20	3.3	NA	mg/L
MKTF-44	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-44	6/5/2017	Selenium, Dissolved	0.012	0.001	0.00039	50000	mg/L
MKTF-44	6/5/2017	Uranium, Dissolved	0.13	0.01	0.001	NA	mg/L
MKTF-44	6/5/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-44	6/5/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-44	6/5/2017	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-44	6/5/2017	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-44	6/5/2017	Lead, Total	0.0052	0.0005	0.000095	15000	mg/L
MKTF-44	6/5/2017	Selenium, Total	0.011	0.001	0.00071	50000	mg/L
MKTF-44	6/5/2017	Uranium, Total	0.13	0.005	0.0015	30000	mg/L
MKTF-44	6/5/2017	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-44	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	9/25/2017	Arsenic, Total	0.0036	0.001	0.0003	10000	mg/L
MKTF-44	9/25/2017	Barium, Total	0.19	0.002	0.00093	2000000	mg/L
MKTF-44	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	9/25/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
MKTF-44	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-44	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	9/25/2017	Arsenic, Dissolved	0.0033	0.01	0.0018	10000	mg/L
MKTF-44	9/25/2017	Barium, Dissolved	0.16	0.002	0.00085	2000000	mg/L
MKTF-44	9/25/2017	Calcium, Dissolved	45	1	0.078	NA	mg/L
MKTF-44	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	9/25/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
MKTF-44	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	9/25/2017	Potassium, Dissolved	2.5	1	0.11	NA	mg/L
MKTF-44	9/25/2017	Magnesium, Dissolved	2.3	1	0.25	NA	mg/L
MKTF-44	9/25/2017	Manganese, Dissolved	0.00064	0.002	0.00039	2017400	mg/L
MKTF-44	9/25/2017	Sodium, Dissolved	940	20	3.3	NA	mg/L
MKTF-44	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/25/2017	Selenium, Dissolved	0.012	0.01	0.0039	50000	mg/L
MKTF-44	9/25/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-44	9/25/2017	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-44	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-44	9/25/2017	Manganese, Total	0.047	0.002	0.0011	2017000	mg/L
MKTF-44	9/25/2017	Lead, Total	0.0019	0.0005	0.000095	15000	mg/L
MKTF-44	9/25/2017	Selenium, Total	0.011	0.001	0.00071	50000	mg/L
MKTF-44	9/25/2017	Zinc, Total	0.0072	0.01	0.0033	5960000	mg/L
MKTF-44	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	11/28/2017	Arsenic, Total	ND	0.05	0.021	10000	mg/L
MKTF-44	11/28/2017	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-44	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	11/28/2017	Chromium, Total	0.0098	0.006	0.0018	50000	mg/L
MKTF-44	11/28/2017	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-44	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	11/28/2017	Arsenic, Dissolved	0.0054	0.001	0.00042	10000	mg/L
MKTF-44	11/28/2017	Barium, Dissolved	0.076	0.002	0.00099	2000000	mg/L
MKTF-44	11/28/2017	Calcium, Dissolved	17	1	0.078	NA	mg/L
MKTF-44	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	11/28/2017	Chromium, Dissolved	0.0065	0.006	0.0013	100000	mg/L
MKTF-44	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	11/28/2017	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-44	11/28/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-44	11/28/2017	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
MKTF-44	11/28/2017	Manganese, Dissolved	0.0012	0.002	0.00039	2017400	mg/L
MKTF-44	11/28/2017	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-44	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	11/28/2017	Selenium, Dissolved	0.0097	0.001	0.00076	50000	mg/L
MKTF-44	11/28/2017	Uranium, Dissolved	0.14	0.01	0.0019	NA	mg/L
MKTF-44	11/28/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-44	11/28/2017	Iron, Total	6.5	0.2	0.1	13822000	mg/L
MKTF-44	11/28/2017	Manganese, Total	0.092	0.002	0.0011	2017000	mg/L
MKTF-44	11/28/2017	Lead, Total	0.0054	0.0005	0.00023	15000	mg/L
MKTF-44	11/28/2017	Selenium, Total	0.0089	0.001	0.00098	50000	mg/L
MKTF-44	11/28/2017	Uranium, Total	0.15	0.01	0.0031	30000	mg/L
MKTF-44	11/28/2017	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-44	2/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	2/8/2018	Arsenic, Total	0.0095	0.001	0.00041	10000	mg/L
MKTF-44	2/8/2018	Barium, Total	0.096	0.002	0.001	2000000	mg/L
MKTF-44	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	2/8/2018	Chromium, Total	0.0088	0.006	0.0018	50000	mg/L
MKTF-44	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	2/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	2/8/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-44	2/8/2018	Barium, Dissolved	0.039	0.002	0.00099	2000000	mg/L
MKTF-44	2/8/2018	Calcium, Dissolved	8.9	1	0.078	NA	mg/L
MKTF-44	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	2/8/2018	Chromium, Dissolved	0.0033	0.006	0.0013	100000	mg/L
MKTF-44	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	2/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	2/8/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-44	2/8/2018	Magnesium, Dissolved	0.73	1	0.25	NA	mg/L
MKTF-44	2/8/2018	Manganese, Dissolved	0.00056	0.002	0.00039	2017400	mg/L
MKTF-44	2/8/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-44	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	2/8/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-44	2/8/2018	Uranium, Dissolved	0.17	0.01	0.0019	NA	mg/L
MKTF-44	2/8/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-44	2/8/2018	Iron, Total	4.7	0.1	0.051	13822000	mg/L
MKTF-44	2/8/2018	Mercury, Total	0.000079	0.0002	0.000037	2000	mg/L
MKTF-44	2/8/2018	Manganese, Total	0.092	0.002	0.0011	2017000	mg/L
MKTF-44	2/8/2018	Lead, Total	0.0056	0.0005	0.00023	15000	mg/L
MKTF-44	2/8/2018	Selenium, Total	0.011	0.001	0.00098	50000	mg/L
MKTF-44	2/8/2018	Uranium, Total	0.18	0.01	0.0014	30000	mg/L
MKTF-44	2/8/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-44	5/10/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	5/10/2018	Arsenic, Total	0.0083	0.001	0.00041	10000	mg/L
MKTF-44	5/10/2018	Barium, Total	0.084	0.002	0.001	2000000	mg/L
MKTF-44	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	Chromium, Total	0.0064	0.006	0.0018	50000	mg/L
MKTF-44	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	5/10/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	5/10/2018	Arsenic, Dissolved	0.0084	0.001	0.00042	10000	mg/L
MKTF-44	5/10/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
MKTF-44	5/10/2018	Calcium, Dissolved	6.9	1	0.078	NA	mg/L
MKTF-44	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	5/10/2018	Chromium, Dissolved	0.0044	0.006	0.0013	100000	mg/L
MKTF-44	5/10/2018	Copper, Dissolved	0.0036	0.006	0.0032	790000	mg/L
MKTF-44	5/10/2018	Iron, Dissolved	0.087	0.02	0.016	13821880	mg/L
MKTF-44	5/10/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-44	5/10/2018	Magnesium, Dissolved	0.66	1	0.25	NA	mg/L
MKTF-44	5/10/2018	Manganese, Dissolved	0.0034	0.002	0.00039	2017400	mg/L
MKTF-44	5/10/2018	Sodium, Dissolved	490	10	1.6	NA	mg/L
MKTF-44	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-44	5/10/2018	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
MKTF-44	5/10/2018	Uranium, Dissolved	0.17	0.005	0.00096	NA	mg/L
MKTF-44	5/10/2018	Zinc, Dissolved	0.0089	0.01	0.0021	5960450	mg/L
MKTF-44	5/10/2018	Iron, Total	5.5	0.2	0.1	13822000	mg/L
MKTF-44	5/10/2018	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-44	5/10/2018	Manganese, Total	0.062	0.002	0.0011	2017000	mg/L
MKTF-44	5/10/2018	Lead, Total	0.0041	0.0005	0.00023	15000	mg/L
MKTF-44	5/10/2018	Selenium, Total	0.012	0.001	0.00098	50000	mg/L
MKTF-44	5/10/2018	Uranium, Total	0.19	0.01	0.0014	30000	mg/L
MKTF-44	5/10/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-44	8/30/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	8/30/2018	Arsenic, Total	0.0048	0.001	0.00041	10000	mg/L
MKTF-44	8/30/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-44	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	8/30/2018	Chromium, Total	0.0046	0.006	0.0018	50000	mg/L
MKTF-44	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	8/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	8/30/2018	Arsenic, Dissolved	0.005	0.001	0.00042	10000	mg/L
MKTF-44	8/30/2018	Barium, Dissolved	0.062	0.002	0.00099	2000000	mg/L
MKTF-44	8/30/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-44	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	8/30/2018	Chromium, Dissolved	0.004	0.006	0.0013	100000	mg/L
MKTF-44	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	8/30/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-44	8/30/2018	Magnesium, Dissolved	1	1	0.25	NA	mg/L
MKTF-44	8/30/2018	Manganese, Dissolved	0.0013	0.002	0.00039	2017400	mg/L
MKTF-44	8/30/2018	Sodium, Dissolved	630	10	1.6	NA	mg/L
MKTF-44	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	8/30/2018	Selenium, Dissolved	0.011	0.001	0.00076	50000	mg/L
MKTF-44	8/30/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
MKTF-44	8/30/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-44	8/30/2018	Iron, Total	0.89	0.02	0.01	13822000	mg/L
MKTF-44	8/30/2018	Mercury, Total	0.000039	0.0002	0.000038	2000	mg/L
MKTF-44	8/30/2018	Manganese, Total	0.016	0.002	0.0011	2017000	mg/L
MKTF-44	8/30/2018	Lead, Total	0.00081	0.0005	0.00023	15000	mg/L
MKTF-44	8/30/2018	Selenium, Total	0.01	0.001	0.00098	50000	mg/L
MKTF-44	8/30/2018	Uranium, Total	0.16	0.005	0.00068	30000	mg/L
MKTF-44	8/30/2018	Zinc, Total	0.0052	0.01	0.0033	5960000	mg/L
MKTF-44	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	11/15/2018	Arsenic, Total	0.0077	0.001	0.00041	10000	mg/L
MKTF-44	11/15/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-44	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	11/15/2018	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
MKTF-44	11/15/2018	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
MKTF-44	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	11/15/2018	Arsenic, Dissolved	0.0069	0.001	0.00042	10000	mg/L
MKTF-44	11/15/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-44	11/15/2018	Calcium, Dissolved	9.8	1	0.078	NA	mg/L
MKTF-44	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-44	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	11/15/2018	Iron, Dissolved	0.16	0.02	0.016	13821880	mg/L
MKTF-44	11/15/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MKTF-44	11/15/2018	Manganese, Dissolved	0.0049	0.002	0.00039	2017400	mg/L
MKTF-44	11/15/2018	Sodium, Dissolved	530	20	3.3	NA	mg/L
MKTF-44	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	11/15/2018	Selenium, Dissolved	0.009	0.001	0.00076	50000	mg/L
MKTF-44	11/15/2018	Uranium, Dissolved	0.18	0.01	0.0019	NA	mg/L
MKTF-44	11/15/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
MKTF-44	11/15/2018	Iron, Total	7.8	0.2	0.1	13822000	mg/L
MKTF-44	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-44	11/15/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
MKTF-44	11/15/2018	Lead, Total	0.0075	0.0005	0.00023	15000	mg/L
MKTF-44	11/15/2018	Selenium, Total	0.0096	0.001	0.00098	50000	mg/L
MKTF-44	11/15/2018	Uranium, Total	0.18	0.005	0.00068	30000	mg/L
MKTF-44	11/15/2018	Zinc, Total	0.036	0.01	0.0033	5960000	mg/L
MKTF-46	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-46	9/17/2020	Arsenic, Dissolved	0.00035	0.001	0.00021	10000	mg/L
MKTF-46	9/17/2020	Lead, Dissolved	0.000034	0.0005	0.000034	NA	mg/L
MKTF-46	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-46	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-46	9/17/2020	Uranium, Dissolved	0.0067	0.0005	0.000065	NA	mg/L
MKTF-46	9/17/2020	Calcium, Dissolved	240	5	0.57	NA	mg/L
MKTF-46	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-46	9/17/2020	Sodium, Dissolved	210	5	0.69	NA	mg/L
MKTF-46	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-46	9/17/2020	Barium, Dissolved	0.061	0.002	0.0011	2000000	mg/L
MKTF-46	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-46	9/17/2020	Boron, Dissolved	0.2	0.04	0.0067	3949110	mg/L
MKTF-46	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-46	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-46	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-46	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-46	9/17/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
MKTF-46	9/17/2020	Magnesium, Dissolved	51	1	0.067	NA	mg/L
MKTF-46	9/17/2020	Manganese, Dissolved	0.19	0.002	0.00058	2017400	mg/L
MKTF-46	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-46	9/17/2020	Nickel, Dissolved	0.0038	0.01	0.0033	372000	mg/L
MKTF-46	9/17/2020	Potassium, Dissolved	2.6	1	0.16	NA	mg/L
MKTF-46	9/17/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
MKTF-46	9/17/2020	Mercury, Total	0.0002	0.0002	0.00012	2000	mg/L
MKTF-46	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-46	9/17/2020	Arsenic, Total	0.0039	0.001	0.00026	10000	mg/L
MKTF-46	9/17/2020	Lead, Total	0.015	0.0005	0.000034	15000	mg/L
MKTF-46	9/17/2020	Selenium, Total	0.0028	0.001	0.00066	50000	mg/L
MKTF-46	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-46	9/17/2020	Uranium, Total	0.0097	0.0005	0.000065	30000	mg/L
MKTF-46	9/17/2020	Barium, Total	0.59	0.003	0.0016	2000000	mg/L
MKTF-46	9/17/2020	Beryllium, Total	0.002	0.002	0.00088	4000	mg/L
MKTF-46	9/17/2020	Cadmium, Total	0.0017	0.002	0.0015	5000	mg/L
MKTF-46	9/17/2020	Chromium, Total	0.037	0.006	0.0021	50000	mg/L
MKTF-46	9/17/2020	Cobalt, Total	0.0076	0.006	0.0024	5980	mg/L
MKTF-46	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-46	9/17/2020	Copper, Total	0.012	0.006	0.0047	790000	mg/L
MKTF-46	9/17/2020	Nickel, Total	0.013	0.01	0.0033	372000	mg/L
MKTF-46	9/17/2020	Silver, Total	0.0054	0.005	0.0013	50000	mg/L
MKTF-46	9/17/2020	Zinc, Total	0.048	0.01	0.0064	5960000	mg/L
MKTF-46	9/17/2020	Manganese, Total	3.4	0.01	0.0041	2017000	mg/L
MKTF-46	9/17/2020	Aluminum, Total	22	1	0.37	19914000	mg/L
MKTF-46	9/17/2020	Iron, Total	17	2.5	0.64	13822000	mg/L
MKTF-46	9/17/2020	Boron, Total	0.22	0.04	0.0074	3949	mg/L
MKTF-46	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-46	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-46	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-46	3/6/2020	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-46	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-46	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-46	3/6/2020	Barium, Total	0.1	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Total	0.17	0.04	0.0045	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-46	3/6/2020	Chromium, Total	0.0032	0.006	0.0015	50000	mg/L
MKTF-46	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-46	3/6/2020	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
MKTF-46	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Total	0.0048	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Silver, Total	0.0063	0.005	0.0014	50000	mg/L
MKTF-46	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-46	3/6/2020	Aluminum, Total	4.6	0.1	0.012	19914000	mg/L
MKTF-46	3/6/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-46	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Arsenic, Dissolved	0.00048	0.001	0.0001	10000	mg/L
MKTF-46	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-46	3/6/2020	Selenium, Dissolved	0.0012	0.001	0.00017	50000	mg/L
MKTF-46	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-46	3/6/2020	Uranium, Dissolved	0.0075	0.0005	0.000075	NA	mg/L
MKTF-46	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-46	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Dissolved	0.13	0.04	0.0045	3949110	mg/L
MKTF-46	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-46	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-46	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-46	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-46	3/6/2020	Magnesium, Dissolved	53	1	0.05	NA	mg/L
MKTF-46	3/6/2020	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
MKTF-46	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Potassium, Dissolved	3.6	1	0.16	NA	mg/L
MKTF-46	3/6/2020	Silver, Dissolved	0.0043	0.005	0.00094	81200	mg/L
MKTF-46	3/6/2020	Zinc, Dissolved	0.019	0.01	0.0023	5960450	mg/L
MKTF-46	3/6/2020	Calcium, Dissolved	240	5	0.31	NA	mg/L
MKTF-46	3/6/2020	Sodium, Dissolved	240	5	2.1	NA	mg/L
MKTF-46	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-46	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-46	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-46	3/6/2020	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-46	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-46	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-46	3/6/2020	Barium, Total	0.11	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Total	0.17	0.04	0.0045	3949	mg/L
MKTF-46	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-46	3/6/2020	Chromium, Total	0.0038	0.006	0.0015	50000	mg/L
MKTF-46	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-46	3/6/2020	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
MKTF-46	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-46	3/6/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-46	3/6/2020	Aluminum, Total	4.3	1	0.12	19914000	mg/L
MKTF-46	3/6/2020	Silver, Total	0.0056	0.005	0.0014	50000	mg/L
MKTF-46	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Arsenic, Dissolved	0.00052	0.001	0.0001	10000	mg/L
MKTF-46	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-46	3/6/2020	Selenium, Dissolved	0.00071	0.001	0.00017	50000	mg/L
MKTF-46	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-46	3/6/2020	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L
MKTF-46	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-46	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Dissolved	0.14	0.04	0.0045	3949110	mg/L
MKTF-46	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-46	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-46	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-46	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-46	3/6/2020	Magnesium, Dissolved	53	1	0.05	NA	mg/L
MKTF-46	3/6/2020	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
MKTF-46	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Potassium, Dissolved	3.5	1	0.16	NA	mg/L
MKTF-46	3/6/2020	Silver, Dissolved	0.0042	0.005	0.00094	81200	mg/L
MKTF-46	3/6/2020	Zinc, Dissolved	0.0084	0.01	0.0023	5960450	mg/L
MKTF-46	3/6/2020	Calcium, Dissolved	240	5	0.31	NA	mg/L
MKTF-46	3/6/2020	Sodium, Dissolved	230	5	2.1	NA	mg/L
MKTF-46	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-46	12/16/2020	Aluminum, Total	0.203	0.2	0.051	19914000	mg/L
MKTF-46	12/16/2020	Calcium, Total	240	0.5	0.084	NA	mg/L
MKTF-46	12/16/2020	Boron, Total	0.181	0.1	0.022	3949	mg/L
MKTF-46	12/16/2020	Barium, Total	0.0455	0.01	0.003	2000000	mg/L
MKTF-46	12/16/2020	Potassium, Total	2.89	1	0.34	NA	mg/L
MKTF-46	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-46	12/16/2020	Magnesium, Total	47.4	0.5	0.12	NA	mg/L
MKTF-46	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-46	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-46	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-46	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-46	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-46	12/16/2020	Manganese, Total	0.406	0.01	0.003	2017000	mg/L
MKTF-46	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-46	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-46	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-46	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-46	12/16/2020	Barium, Dissolved	0.0468	0.01	0.003	2000000	mg/L
MKTF-46	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-46	12/16/2020	Boron, Dissolved	0.196	0.1	0.022	3949110	mg/L
MKTF-46	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-46	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-46	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-46	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-46	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-46	12/16/2020	Manganese, Dissolved	0.238	0.01	0.003	2017400	mg/L
MKTF-46	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-46	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-46	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-46	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-46	12/16/2020	Sodium, Total	215	2	0.92	NA	mg/L
MKTF-46	12/16/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-46	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-46	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-46	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-46	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-46	12/16/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-46	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-46	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-46	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-46	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-46	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-46	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-46	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-46	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-47	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-47	3/6/2020	Lead, Total	0.00073	0.0005	0.000055	15000	mg/L
MKTF-47	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-47	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-47	3/6/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
MKTF-47	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-47	3/6/2020	Selenium, Total	0.0051	0.005	0.0024	50000	mg/L
MKTF-47	3/6/2020	Barium, Total	0.1	0.002	0.00065	2000000	mg/L
MKTF-47	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-47	3/6/2020	Boron, Total	0.25	0.04	0.0045	3949	mg/L
MKTF-47	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-47	3/6/2020	Chromium, Total	0.011	0.006	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-47	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-47	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-47	3/6/2020	Manganese, Total	0.075	0.002	0.00029	2017000	mg/L
MKTF-47	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-47	3/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-47	3/6/2020	Silver, Total	0.0024	0.005	0.0014	50000	mg/L
MKTF-47	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-47	3/6/2020	Aluminum, Total	3.2	0.1	0.012	19914000	mg/L
MKTF-47	3/6/2020	Iron, Total	1.6	0.1	0.044	13822000	mg/L
MKTF-47	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-47	3/6/2020	Arsenic, Dissolved	0.00056	0.001	0.0001	10000	mg/L
MKTF-47	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-47	3/6/2020	Selenium, Dissolved	0.0047	0.001	0.00017	50000	mg/L
MKTF-47	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-47	3/6/2020	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
MKTF-47	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-47	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-47	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-47	3/6/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
MKTF-47	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-47	3/6/2020	Chromium, Dissolved	0.0053	0.006	0.0015	100000	mg/L
MKTF-47	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-47	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-47	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-47	3/6/2020	Magnesium, Dissolved	26	1	0.05	NA	mg/L
MKTF-47	3/6/2020	Manganese, Dissolved	0.00059	0.002	0.00029	2017400	mg/L
MKTF-47	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-47	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-47	3/6/2020	Potassium, Dissolved	5.3	1	0.16	NA	mg/L
MKTF-47	3/6/2020	Silver, Dissolved	0.0018	0.005	0.00094	81200	mg/L
MKTF-47	3/6/2020	Zinc, Dissolved	0.0062	0.01	0.0023	5960450	mg/L
MKTF-47	3/6/2020	Calcium, Dissolved	110	5	0.31	NA	mg/L
MKTF-47	3/6/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
MKTF-49	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-49	3/5/2020	Arsenic, Total	0.0025	0.001	0.00031	10000	mg/L
MKTF-49	3/5/2020	Selenium, Total	0.0028	0.001	0.00048	50000	mg/L
MKTF-49	3/5/2020	Thallium, Total	0.00009	0.0005	0.000052	2000	mg/L
MKTF-49	3/5/2020	Uranium, Total	0.0059	0.0005	0.000085	30000	mg/L
MKTF-49	3/5/2020	Lead, Total	0.031	0.0025	0.00027	15000	mg/L
MKTF-49	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-49	3/5/2020	Beryllium, Total	0.0021	0.002	0.00028	4000	mg/L
MKTF-49	3/5/2020	Boron, Total	0.72	0.04	0.0045	3949	mg/L
MKTF-49	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-49	3/5/2020	Chromium, Total	0.0068	0.006	0.0015	50000	mg/L
MKTF-49	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-49	3/5/2020	Copper, Total	0.0096	0.006	0.0041	790000	mg/L
MKTF-49	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-49	3/5/2020	Nickel, Total	0.02	0.01	0.004	372000	mg/L
MKTF-49	3/5/2020	Silver, Total	0.0047	0.005	0.0014	50000	mg/L
MKTF-49	3/5/2020	Zinc, Total	0.018	0.01	0.0058	5960000	mg/L
MKTF-49	3/5/2020	Barium, Total	5.7	0.02	0.0065	2000000	mg/L
MKTF-49	3/5/2020	Manganese, Total	6.8	0.02	0.0029	2017000	mg/L
MKTF-49	3/5/2020	Aluminum, Total	24	1	0.12	19914000	mg/L
MKTF-49	3/5/2020	Iron, Total	18	1	0.44	13822000	mg/L
MKTF-49	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-49	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-49	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-49	3/5/2020	Uranium, Dissolved	0.0038	0.0005	0.000075	NA	mg/L
MKTF-49	3/5/2020	Arsenic, Dissolved	0.0015	0.005	0.0005	10000	mg/L
MKTF-49	3/5/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-49	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-49	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-49	3/5/2020	Boron, Dissolved	0.57	0.04	0.0045	3949110	mg/L
MKTF-49	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-49	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-49	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-49	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-49	3/5/2020	Magnesium, Dissolved	61	1	0.05	NA	mg/L
MKTF-49	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	3/5/2020	Nickel, Dissolved	0.0076	0.01	0.004	372000	mg/L
MKTF-49	3/5/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-49	3/5/2020	Silver, Dissolved	0.0034	0.005	0.00094	81200	mg/L
MKTF-49	3/5/2020	Zinc, Dissolved	0.0077	0.01	0.0023	5960450	mg/L
MKTF-49	3/5/2020	Barium, Dissolved	5	0.01	0.0032	2000000	mg/L
MKTF-49	3/5/2020	Calcium, Dissolved	230	5	0.31	NA	mg/L
MKTF-49	3/5/2020	Iron, Dissolved	5	0.2	0.087	13821880	mg/L
MKTF-49	3/5/2020	Manganese, Dissolved	5.3	0.02	0.0029	2017400	mg/L
MKTF-49	3/5/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-49	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-49	9/20/2020	Arsenic, Total	0.0012	0.001	0.00026	10000	mg/L
MKTF-49	9/20/2020	Lead, Total	0.0024	0.0005	0.000034	15000	mg/L
MKTF-49	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-49	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-49	9/20/2020	Uranium, Total	0.0021	0.0005	0.000065	30000	mg/L
MKTF-49	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-49	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-49	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-49	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-49	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-49	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-49	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-49	9/20/2020	Nickel, Total	0.0059	0.01	0.0033	372000	mg/L
MKTF-49	9/20/2020	Silver, Total	0.0027	0.005	0.0013	50000	mg/L
MKTF-49	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-49	9/20/2020	Aluminum, Total	5.8	0.2	0.074	19914000	mg/L
MKTF-49	9/20/2020	Barium, Total	6.1	0.03	0.016	2000000	mg/L
MKTF-49	9/20/2020	Manganese, Total	6.1	0.02	0.0081	2017000	mg/L
MKTF-49	9/20/2020	Iron, Total	16	1	0.26	13822000	mg/L
MKTF-49	9/20/2020	Boron, Total	0.65	0.2	0.037	3949	mg/L
MKTF-49	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-49	9/20/2020	Arsenic, Dissolved	0.0011	0.005	0.001	10000	mg/L
MKTF-49	9/20/2020	Lead, Dissolved	0.0002	0.0025	0.00017	NA	mg/L
MKTF-49	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-49	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-49	9/20/2020	Uranium, Dissolved	0.0048	0.0005	0.000065	NA	mg/L
MKTF-49	9/20/2020	Calcium, Dissolved	260	5	0.57	NA	mg/L
MKTF-49	9/20/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-49	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-49	9/20/2020	Barium, Dissolved	6.1	0.1	0.056	2000000	mg/L
MKTF-49	9/20/2020	Iron, Dissolved	9	1	0.52	13821880	mg/L
MKTF-49	9/20/2020	Manganese, Dissolved	6	0.1	0.029	2017400	mg/L
MKTF-49	9/20/2020	Sodium, Dissolved	690	50	6.9	NA	mg/L
MKTF-49	9/20/2020	Aluminum, Dissolved	0.06	0.02	0.0056	19913930	mg/L
MKTF-49	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-49	9/20/2020	Boron, Dissolved	0.59	0.04	0.0067	3949110	mg/L
MKTF-49	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-49	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-49	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-49	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-49	9/20/2020	Magnesium, Dissolved	65	1	0.067	NA	mg/L
MKTF-49	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-49	9/20/2020	Potassium, Dissolved	1.4	1	0.16	NA	mg/L
MKTF-49	9/20/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-49	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-49	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-49	12/23/2020	Arsenic, Total Recoverable	2.02	1	0.286	10	ug/L
MKTF-49	12/23/2020	Lead, Total Recoverable	13.5	1	0.133	15	ug/L
MKTF-49	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-49	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-49	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-49	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-49	12/23/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-49	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-49	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-49	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-49	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-49	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-49	12/23/2020	Aluminum, Dissolved	0.28	0.2	0.051	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	Barium, Dissolved	7.12	0.01	0.003	2000000	mg/L
MKTF-49	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-49	12/23/2020	Boron, Dissolved	0.677	0.1	0.022	3949110	mg/L
MKTF-49	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-49	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-49	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-49	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-49	12/23/2020	Manganese, Dissolved	6.71	0.01	0.003	2017400	mg/L
MKTF-49	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-49	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-49	12/23/2020	Aluminum, Total	68.1	0.2	0.051	19914000	mg/L
MKTF-49	12/23/2020	Barium, Total	7.56	0.01	0.003	2000000	mg/L
MKTF-49	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-49	12/23/2020	Boron, Total	0.582	0.1	0.022	3949	mg/L
MKTF-49	12/23/2020	Potassium, Total	10.9	1	0.34	NA	mg/L
MKTF-49	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-49	12/23/2020	Magnesium, Total	84.5	0.5	0.12	NA	mg/L
MKTF-49	12/23/2020	Chromium, Total	0.0334	0.01	0.005	50000	mg/L
MKTF-49	12/23/2020	Copper, Total	0.025	0.02	0.008	790000	mg/L
MKTF-49	12/23/2020	Iron, Total	48	0.2	0.075	13822000	mg/L
MKTF-49	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-49	12/23/2020	Nickel, Total	0.0308	0.006	0.003	372000	mg/L
MKTF-49	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-49	12/23/2020	Zinc, Total	0.0456	0.02	0.008	5960000	mg/L
MKTF-49	12/23/2020	Cobalt, Total	0.0147	0.01	0.003	5980	mg/L
MKTF-49	12/23/2020	Manganese, Total	7.89	0.01	0.003	2017000	mg/L
MKTF-49	12/23/2020	Calcium, Total	351	2.5	0.42	NA	mg/L
MKTF-49	12/23/2020	Sodium, Total	803	10	4.6	NA	mg/L
MKTF-49	12/23/2020	Iron, Dissolved	12	0.2	0.075	13821880	mg/L
MKTF-49	12/23/2020	Nickel, Dissolved	0.00718	0.006	0.003	372000	mg/L
MKTF-49	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-50	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-50	12/16/2020	Aluminum, Total	6.33	0.2	0.051	19914000	mg/L
MKTF-50	12/16/2020	Calcium, Total	117	0.5	0.084	NA	mg/L
MKTF-50	12/16/2020	Boron, Total	0.887	0.1	0.022	3949	mg/L
MKTF-50	12/16/2020	Barium, Total	4.13	0.01	0.003	2000000	mg/L
MKTF-50	12/16/2020	Potassium, Total	4.76	1	0.34	NA	mg/L
MKTF-50	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-50	12/16/2020	Magnesium, Total	30.9	0.5	0.12	NA	mg/L
MKTF-50	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-50	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-50	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-50	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-50	12/16/2020	Iron, Total	6.79	0.2	0.075	13822000	mg/L
MKTF-50	12/16/2020	Manganese, Total	2.09	0.01	0.003	2017000	mg/L
MKTF-50	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-50	12/16/2020	Nickel, Total	0.0102	0.006	0.003	372000	mg/L
MKTF-50	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-50	12/16/2020	Aluminum, Dissolved	1.85	0.2	0.051	19913930	mg/L
MKTF-50	12/16/2020	Barium, Dissolved	4.2	0.01	0.003	2000000	mg/L
MKTF-50	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-50	12/16/2020	Boron, Dissolved	0.988	0.1	0.022	3949110	mg/L
MKTF-50	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-50	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-50	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-50	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-50	12/16/2020	Iron, Dissolved	4.32	0.2	0.075	13821880	mg/L
MKTF-50	12/16/2020	Manganese, Dissolved	2.1	0.01	0.003	2017400	mg/L
MKTF-50	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-50	12/16/2020	Nickel, Dissolved	0.00806	0.006	0.003	372000	mg/L
MKTF-50	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-50	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-50	12/16/2020	Sodium, Total	460	2	0.92	NA	mg/L
MKTF-50	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-50	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-50	12/16/2020	Arsenic, Total Recoverable	2.09	1	0.286	10	ug/L
MKTF-50	12/16/2020	Lead, Total Recoverable	1.34	1	0.133	15	ug/L
MKTF-50	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-50	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-50	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-50	12/16/2020	Arsenic, Dissolved	3.37	1	0.286	10	ug/L
MKTF-50	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-50	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-50	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-50	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-50	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-50	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Total	0.003	0.0005	0.000055	15000	mg/L
MKTF-50	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-50	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-50	3/5/2020	Arsenic, Total	0.0079	0.001	0.00031	10000	mg/L
MKTF-50	3/5/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-50	3/5/2020	Uranium, Total	0.00068	0.0005	0.000085	30000	mg/L
MKTF-50	3/5/2020	Beryllium, Total	0.00055	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Total	0.97	0.04	0.0045	3949	mg/L
MKTF-50	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-50	3/5/2020	Chromium, Total	0.002	0.006	0.0015	50000	mg/L
MKTF-50	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-50	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Total	0.0047	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-50	3/5/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-50	3/5/2020	Aluminum, Total	6.9	0.2	0.025	19914000	mg/L
MKTF-50	3/5/2020	Barium, Total	2.5	0.02	0.0065	2000000	mg/L
MKTF-50	3/5/2020	Iron, Total	5.3	0.2	0.087	13822000	mg/L
MKTF-50	3/5/2020	Manganese, Total	1.5	0.02	0.0029	2017000	mg/L
MKTF-50	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-50	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-50	3/5/2020	Uranium, Dissolved	0.00046	0.0005	0.000075	NA	mg/L
MKTF-50	3/5/2020	Arsenic, Dissolved	0.0066	0.001	0.0001	10000	mg/L
MKTF-50	3/5/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-50	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-50	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Dissolved	0.88	0.04	0.0045	3949110	mg/L
MKTF-50	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-50	3/5/2020	Calcium, Dissolved	55	1	0.062	NA	mg/L
MKTF-50	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-50	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-50	3/5/2020	Magnesium, Dissolved	15	1	0.05	NA	mg/L
MKTF-50	3/5/2020	Molybdenum, Dissolved	0.0083	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Potassium, Dissolved	1.8	1	0.16	NA	mg/L
MKTF-50	3/5/2020	Silver, Dissolved	0.0011	0.005	0.00094	81200	mg/L
MKTF-50	3/5/2020	Zinc, Dissolved	0.0088	0.01	0.0023	5960450	mg/L
MKTF-50	3/5/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
MKTF-50	3/5/2020	Iron, Dissolved	1.6	0.1	0.044	13821880	mg/L
MKTF-50	3/5/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
MKTF-50	3/5/2020	Sodium, Dissolved	420	5	2.1	NA	mg/L
MKTF-50	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
MKTF-50	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-50	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-50	3/5/2020	Uranium, Total	0.00067	0.0005	0.000085	30000	mg/L
MKTF-50	3/5/2020	Arsenic, Total	0.0078	0.005	0.0016	10000	mg/L
MKTF-50	3/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-50	3/5/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Total	0.97	0.04	0.0045	3949	mg/L
MKTF-50	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-50	3/5/2020	Chromium, Total	0.0023	0.006	0.0015	50000	mg/L
MKTF-50	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-50	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Total	0.004	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-50	3/5/2020	Aluminum, Total	5.5	0.2	0.025	19914000	mg/L
MKTF-50	3/5/2020	Barium, Total	2.6	0.02	0.0065	2000000	mg/L
MKTF-50	3/5/2020	Iron, Total	4.8	0.2	0.087	13822000	mg/L
MKTF-50	3/5/2020	Manganese, Total	1.5	0.02	0.0029	2017000	mg/L
MKTF-50	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-50	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-50	3/5/2020	Uranium, Dissolved	0.00045	0.0005	0.000075	NA	mg/L
MKTF-50	3/5/2020	Arsenic, Dissolved	0.0068	0.001	0.0001	10000	mg/L
MKTF-50	3/5/2020	Selenium, Dissolved	0.00021	0.001	0.00017	50000	mg/L
MKTF-50	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-50	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Dissolved	0.88	0.04	0.0045	3949110	mg/L
MKTF-50	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-50	3/5/2020	Calcium, Dissolved	54	1	0.062	NA	mg/L
MKTF-50	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-50	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-50	3/5/2020	Magnesium, Dissolved	15	1	0.05	NA	mg/L
MKTF-50	3/5/2020	Molybdenum, Dissolved	0.0083	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
MKTF-50	3/5/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
MKTF-50	3/5/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-50	3/5/2020	Barium, Dissolved	2.4	0.01	0.0032	2000000	mg/L
MKTF-50	3/5/2020	Iron, Dissolved	2.1	0.1	0.044	13821880	mg/L
MKTF-50	3/5/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
MKTF-50	3/5/2020	Sodium, Dissolved	430	5	2.1	NA	mg/L
MW-1	8/12/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MW-1	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-1	8/12/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
MW-1	9/22/2020	Arsenic, Dissolved	0.0015	0.001	0.00021	10000	mg/L
MW-1	9/22/2020	Lead, Dissolved	0.000082	0.0005	0.000034	NA	mg/L
MW-1	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-1	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-1	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-1	9/22/2020	Uranium, Dissolved	0.0097	0.0005	0.000065	NA	mg/L
MW-1	9/22/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
MW-1	9/22/2020	Aluminum, Dissolved	0.011	0.02	0.0056	19913930	mg/L
MW-1	9/22/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
MW-1	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-1	9/22/2020	Boron, Dissolved	0.74	0.04	0.0067	3949110	mg/L
MW-1	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-1	9/22/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-1	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-1	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-1	9/22/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-1	9/22/2020	Magnesium, Dissolved	0.17	1	0.067	NA	mg/L
MW-1	9/22/2020	Manganese, Dissolved	0.002	0.002	0.00058	2017400	mg/L
MW-1	9/22/2020	Molybdenum, Dissolved	0.0071	0.008	0.0056	98700	mg/L
MW-1	9/22/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-1	9/22/2020	Potassium, Dissolved	0.55	1	0.16	NA	mg/L
MW-1	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-1	9/22/2020	Zinc, Dissolved	0.0081	0.01	0.006	5960450	mg/L
MW-1	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-1	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-1	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-1	9/22/2020	Arsenic, Total	0.0014	0.001	0.00026	10000	mg/L
MW-1	9/22/2020	Lead, Total	0.00042	0.0005	0.000034	15000	mg/L
MW-1	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-1	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-1	9/22/2020	Uranium, Total	0.0094	0.0005	0.000065	30000	mg/L
MW-1	9/22/2020	Aluminum, Total	0.081	0.02	0.0074	19914000	mg/L
MW-1	9/22/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
MW-1	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-1	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-1	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-1	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-1	9/22/2020	Iron, Total	0.037	0.05	0.013	13822000	mg/L
MW-1	9/22/2020	Manganese, Total	0.0047	0.002	0.00081	2017000	mg/L
MW-1	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-1	9/22/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-1	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-1	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-1	9/22/2020	Boron, Total	0.76	0.2	0.037	3949	mg/L
MW-1	8/12/2019	Barium, Total	0.014	0.002	0.000648	2000000	mg/L
MW-1	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-1	8/12/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
MW-1	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-1	8/12/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MW-1	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-1	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-1	8/12/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
MW-1	8/12/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
MW-1	8/12/2019	Manganese, Total	0.0046	0.002	0.00029	2017000	mg/L
MW-1	8/12/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MW-1	8/12/2019	Molybdenum, Total	0.0095	0.008	0.006735	98700	mg/L
MW-1	8/12/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-1	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-1	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-1	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-1	8/12/2019	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
MW-1	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-1	8/12/2019	Aluminum, Dissolved	0.01	0.02	0.002488	19913930	mg/L
MW-1	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-1	8/12/2019	Arsenic, Dissolved	0.0012	0.001	0.000101	10000	mg/L
MW-1	8/12/2019	Barium, Dissolved	0.012	0.002	0.000648	2000000	mg/L
MW-1	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-1	8/12/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L
MW-1	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-1	8/12/2019	Calcium, Dissolved	1.8	1	0.061889	NA	mg/L
MW-1	8/12/2019	Chromium, Dissolved	0.0021	0.006	0.001533	100000	mg/L
MW-1	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-1	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-1	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-1	8/12/2019	Lead, Dissolved	0.000099	0.0005	0.000055	NA	mg/L
MW-1	8/12/2019	Magnesium, Dissolved	0.19	1	0.05029	NA	mg/L
MW-1	8/12/2019	Manganese, Dissolved	0.0017	0.002	0.00029	2017400	mg/L
MW-1	8/12/2019	Molybdenum, Dissolved	0.0076	0.008	0.006735	98700	mg/L
MW-1	8/12/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-1	8/12/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
MW-1	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-1	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-1	8/12/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MW-1	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-1	8/12/2019	Uranium, Dissolved	0.01	0.0005	0.000075	NA	mg/L
MW-1	8/12/2019	Zinc, Dissolved	0.0059	0.01	0.002252	5960450	mg/L
MW-1	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-1	8/24/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-1	8/24/2012	Barium, Total	0.014	0.002	0.00039	2000000	mg/L
MW-1	8/24/2012	Calcium, Total	1.6	1	0.026	NA	mg/L
MW-1	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-1	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-1	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-1	8/24/2012	Iron, Total	0.078	0.02	0.013	13822000	mg/L
MW-1	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-1	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-1	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-1	8/24/2012	Manganese, Total	0.0071	0.002	0.00026	2017000	mg/L
MW-1	8/24/2012	Sodium, Total	260	5	0.22	NA	mg/L
MW-1	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-1	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-1	8/24/2012	Uranium, Total	0.011	0.0025	0.00003	30000	mg/L
MW-1	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-1	9/9/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-1	9/9/2013	Arsenic, Total	0.0016	0.001	0.000098	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	Barium, Total	0.012	0.002	0.00095	2000000	mg/L
MW-1	9/9/2013	Calcium, Total	1.9	1	0.069	NA	mg/L
MW-1	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-1	9/9/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-1	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-1	9/9/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-1	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-1	9/9/2013	Potassium, Total	ND	1	0.24	NA	mg/L
MW-1	9/9/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-1	9/9/2013	Manganese, Total	ND	0.002	0.00016	2017000	mg/L
MW-1	9/9/2013	Sodium, Total	260	5	1.6	NA	mg/L
MW-1	9/9/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-1	9/9/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-1	9/9/2013	Uranium, Total	0.012	0.001	0.0000073	30000	mg/L
MW-1	9/9/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
MW-1	9/16/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-1	9/16/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-1	9/16/2014	Barium, Total	0.0095	0.002	0.0011	2000000	mg/L
MW-1	9/16/2014	Calcium, Total	1.6	1	0.082	NA	mg/L
MW-1	9/16/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-1	9/16/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-1	9/16/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-1	9/16/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-1	9/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-1	9/16/2014	Potassium, Total	1.5	1	0.093	NA	mg/L
MW-1	9/16/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-1	9/16/2014	Manganese, Total	0.0027	0.002	0.00055	2017000	mg/L
MW-1	9/16/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-1	9/16/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-1	9/16/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-1	9/16/2014	Uranium, Total	0.011	0.001	0.00005	30000	mg/L
MW-1	9/16/2014	Zinc, Total	0.014	0.01	0.0014	5960000	mg/L
MW-1	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-1	8/14/2015	Arsenic, Total	0.0013	0.001	0.00029	10000	mg/L
MW-1	8/14/2015	Barium, Total	0.013	0.002	0.0011	2000000	mg/L
MW-1	8/14/2015	Calcium, Total	1.6	1	0.057	NA	mg/L
MW-1	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-1	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-1	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-1	8/14/2015	Iron, Total	0.048	0.02	0.0072	13822000	mg/L
MW-1	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-1	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-1	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-1	8/14/2015	Manganese, Total	0.0033	0.002	0.0015	2017000	mg/L
MW-1	8/14/2015	Sodium, Total	260	5	0.36	NA	mg/L
MW-1	8/14/2015	Lead, Total	0.00051	0.0005	0.000047	15000	mg/L
MW-1	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-1	8/14/2015	Uranium, Total	0.011	0.0005	0.0000049	30000	mg/L
MW-1	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-1	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-1	9/7/2016	Arsenic, Total	0.0015	0.001	0.00021	10000	mg/L
MW-1	9/7/2016	Barium, Total	0.012	0.002	0.00079	2000000	mg/L
MW-1	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-1	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-1	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-1	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-1	9/7/2016	Arsenic, Dissolved	0.0013	0.001	0.00014	10000	mg/L
MW-1	9/7/2016	Barium, Dissolved	0.011	0.002	0.0013	2000000	mg/L
MW-1	9/7/2016	Calcium, Dissolved	1.6	1	0.5	NA	mg/L
MW-1	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-1	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-1	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-1	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-1	9/7/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MW-1	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-1	9/7/2016	Manganese, Dissolved	0.0031	0.002	0.00032	2017400	mg/L
MW-1	9/7/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
MW-1	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/7/2016	Selenium, Dissolved	0.00054	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Uranium, Dissolved	0.011	0.0005	0.000051	NA	mg/L
MW-1	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-1	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-1	9/7/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MW-1	9/7/2016	Manganese, Total	0.0032	0.002	0.00027	2017000	mg/L
MW-1	9/7/2016	Lead, Total	0.00014	0.0005	0.000081	15000	mg/L
MW-1	9/7/2016	Selenium, Total	0.00053	0.001	0.00019	50000	mg/L
MW-1	9/7/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
MW-1	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-1	9/20/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-1	9/20/2017	Arsenic, Total	0.00097	0.001	0.0003	10000	mg/L
MW-1	9/20/2017	Barium, Total	0.015	0.002	0.00093	2000000	mg/L
MW-1	9/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-1	9/20/2017	Chromium, Total	0.0074	0.006	0.0018	50000	mg/L
MW-1	9/20/2017	Copper, Total	0.0018	0.006	0.0017	790000	mg/L
MW-1	9/20/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-1	9/20/2017	Arsenic, Dissolved	0.0013	0.001	0.00018	10000	mg/L
MW-1	9/20/2017	Barium, Dissolved	0.013	0.002	0.00085	2000000	mg/L
MW-1	9/20/2017	Calcium, Dissolved	1.7	1	0.078	NA	mg/L
MW-1	9/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-1	9/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-1	9/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-1	9/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-1	9/20/2017	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MW-1	9/20/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-1	9/20/2017	Manganese, Dissolved	0.0018	0.002	0.00039	2017400	mg/L
MW-1	9/20/2017	Sodium, Dissolved	260	5	0.82	NA	mg/L
MW-1	9/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/20/2017	Selenium, Dissolved	0.00088	0.001	0.00039	50000	mg/L
MW-1	9/20/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-1	9/20/2017	Iron, Total	0.26	0.02	0.01	13822000	mg/L
MW-1	9/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-1	9/20/2017	Manganese, Total	0.014	0.002	0.0011	2017000	mg/L
MW-1	9/20/2017	Lead, Total	0.0016	0.0005	0.000095	15000	mg/L
MW-1	9/20/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-1	9/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-1	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-1	9/13/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
MW-1	9/13/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
MW-1	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-1	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-1	9/13/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
MW-1	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-1	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-1	9/13/2018	Arsenic, Dissolved	0.0013	0.001	0.00042	10000	mg/L
MW-1	9/13/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
MW-1	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-1	9/13/2018	Calcium, Dissolved	1.7	1	0.078	NA	mg/L
MW-1	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-1	9/13/2018	Chromium, Dissolved	0.0024	0.006	0.0013	100000	mg/L
MW-1	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-1	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-1	9/13/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MW-1	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-1	9/13/2018	Manganese, Dissolved	0.002	0.002	0.00039	2017400	mg/L
MW-1	9/13/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-1	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-1	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-1	9/13/2018	Uranium, Dissolved	0.0095	0.0005	0.000096	NA	mg/L
MW-1	9/13/2018	Vanadium, Dissolved	0.0022	0.05	0.0019	63100	mg/L
MW-1	9/13/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
MW-1	9/13/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
MW-1	9/13/2018	Mercury, Total	0.00017	0.0002	0.000038	2000	mg/L
MW-1	9/13/2018	Manganese, Total	0.01	0.002	0.0011	2017000	mg/L
MW-1	9/13/2018	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MW-1	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-1	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-1	9/13/2018	Uranium, Total	0.0094	0.0005	0.000068	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	Vanadium, Total	0.0023	0.05	0.00076	63100	mg/L
MW-1	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-1	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-1	12/6/2018	Arsenic, Total	0.0011	0.001	0.0005	10000	mg/L
MW-1	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-1	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-1	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-1	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-1	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-1	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-1	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-1	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-1	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-1	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-1	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-1	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-2	8/13/2019	Aluminum, Total	0.015	0.02	0.002488	19914000	mg/L
MW-2	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-2	8/13/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
MW-2	8/13/2019	Barium, Total	0.018	0.002	0.000648	2000000	mg/L
MW-2	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-2	8/13/2019	Boron, Total	0.75	0.04	0.004531	3949	mg/L
MW-2	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-2	8/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-2	8/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-2	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-2	8/13/2019	Iron, Total	0.069	0.02	0.008747	13822000	mg/L
MW-2	8/13/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-2	8/13/2019	Manganese, Total	0.0027	0.002	0.00029	2017000	mg/L
MW-2	8/13/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MW-2	8/13/2019	Molybdenum, Total	0.0085	0.008	0.006735	98700	mg/L
MW-2	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-2	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-2	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-2	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-2	8/13/2019	Uranium, Total	0.0086	0.0005	0.000085	30000	mg/L
MW-2	8/13/2019	Zinc, Total	0.0075	0.01	0.005772	5960000	mg/L
MW-2	8/13/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
MW-2	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-2	8/13/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MW-2	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
MW-2	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-2	8/13/2019	Boron, Dissolved	0.78	0.04	0.004531	3949110	mg/L
MW-2	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-2	8/13/2019	Calcium, Dissolved	1.5	1	0.061889	NA	mg/L
MW-2	8/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-2	8/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-2	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-2	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-2	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-2	8/13/2019	Magnesium, Dissolved	0.15	1	0.05029	NA	mg/L
MW-2	8/13/2019	Manganese, Dissolved	0.0018	0.002	0.00029	2017400	mg/L
MW-2	8/13/2019	Molybdenum, Dissolved	0.0091	0.008	0.006735	98700	mg/L
MW-2	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-2	8/13/2019	Potassium, Dissolved	0.61	1	0.162288	NA	mg/L
MW-2	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-2	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-2	8/13/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MW-2	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-2	8/13/2019	Uranium, Dissolved	0.0084	0.0005	0.000075	NA	mg/L
MW-2	8/13/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MW-2	9/18/2020	Barium, Total	0.021	0.003	0.0016	2000000	mg/L
MW-2	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-2	9/18/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MW-2	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-2	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-2	9/18/2020	Manganese, Total	0.021	0.002	0.00081	2017000	mg/L
MW-2	9/18/2020	Molybdenum, Total	0.0086	0.008	0.0065	98700	mg/L
MW-2	9/18/2020	Aluminum, Total	0.069	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-2	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-2	9/18/2020	Iron, Total	0.036	0.05	0.013	13822000	mg/L
MW-2	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-2	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-2	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-2	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-2	9/18/2020	Arsenic, Total	0.001	0.001	0.00026	10000	mg/L
MW-2	9/18/2020	Lead, Total	0.00039	0.0005	0.000034	15000	mg/L
MW-2	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-2	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-2	9/18/2020	Uranium, Total	0.0094	0.0005	0.000065	30000	mg/L
MW-2	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-2	9/18/2020	Arsenic, Dissolved	0.001	0.001	0.00021	10000	mg/L
MW-2	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-2	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-2	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-2	9/18/2020	Uranium, Dissolved	0.0077	0.0005	0.000065	NA	mg/L
MW-2	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-2	9/18/2020	Sodium, Dissolved	250	5	0.69	NA	mg/L
MW-2	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MW-2	9/18/2020	Barium, Dissolved	0.017	0.002	0.0011	2000000	mg/L
MW-2	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-2	9/18/2020	Boron, Dissolved	0.73	0.04	0.0067	3949110	mg/L
MW-2	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-2	9/18/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-2	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-2	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-2	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-2	9/18/2020	Magnesium, Dissolved	0.15	1	0.067	NA	mg/L
MW-2	9/18/2020	Manganese, Dissolved	0.0033	0.002	0.00058	2017400	mg/L
MW-2	9/18/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-2	9/18/2020	Potassium, Dissolved	0.69	1	0.16	NA	mg/L
MW-2	9/18/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-2	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-2	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MW-2	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
MW-2	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-2	8/24/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-2	8/24/2012	Barium, Total	0.021	0.002	0.00039	2000000	mg/L
MW-2	8/24/2012	Calcium, Total	1.4	1	0.026	NA	mg/L
MW-2	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-2	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-2	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-2	8/24/2012	Iron, Total	0.022	0.02	0.013	13822000	mg/L
MW-2	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-2	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-2	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-2	8/24/2012	Manganese, Total	0.0072	0.002	0.00026	2017000	mg/L
MW-2	8/24/2012	Sodium, Total	270	5	0.22	NA	mg/L
MW-2	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-2	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-2	8/24/2012	Uranium, Total	0.0097	0.0025	0.00003	30000	mg/L
MW-2	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-2	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-2	9/10/2013	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
MW-2	9/10/2013	Barium, Total	0.02	0.002	0.00095	2000000	mg/L
MW-2	9/10/2013	Calcium, Total	1.8	1	0.069	NA	mg/L
MW-2	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-2	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-2	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-2	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-2	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-2	9/10/2013	Potassium, Total	1	1	0.24	NA	mg/L
MW-2	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-2	9/10/2013	Manganese, Total	0.0051	0.002	0.00016	2017000	mg/L
MW-2	9/10/2013	Sodium, Total	250	5	1.6	NA	mg/L
MW-2	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-2	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/10/2013	Uranium, Total	0.0095	0.001	0.0000073	30000	mg/L
MW-2	9/10/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
MW-2	9/16/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-2	9/16/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-2	9/16/2014	Barium, Total	0.017	0.002	0.0011	2000000	mg/L
MW-2	9/16/2014	Calcium, Total	1.5	1	0.082	NA	mg/L
MW-2	9/16/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-2	9/16/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-2	9/16/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-2	9/16/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-2	9/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-2	9/16/2014	Potassium, Total	1.5	1	0.093	NA	mg/L
MW-2	9/16/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-2	9/16/2014	Manganese, Total	0.0026	0.002	0.00055	2017000	mg/L
MW-2	9/16/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-2	9/16/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-2	9/16/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-2	9/16/2014	Uranium, Total	0.0093	0.001	0.00005	30000	mg/L
MW-2	9/16/2014	Zinc, Total	0.026	0.01	0.0014	5960000	mg/L
MW-2	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-2	8/14/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-2	8/14/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
MW-2	8/14/2015	Calcium, Total	1.5	1	0.057	NA	mg/L
MW-2	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-2	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-2	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-2	8/14/2015	Iron, Total	0.023	0.02	0.0072	13822000	mg/L
MW-2	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-2	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-2	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-2	8/14/2015	Manganese, Total	0.0035	0.002	0.0015	2017000	mg/L
MW-2	8/14/2015	Sodium, Total	270	5	0.36	NA	mg/L
MW-2	8/14/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-2	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-2	8/14/2015	Uranium, Total	0.0094	0.0005	0.0000049	30000	mg/L
MW-2	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-2	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-2	9/7/2016	Arsenic, Total	0.0013	0.001	0.00021	10000	mg/L
MW-2	9/7/2016	Barium, Total	0.02	0.002	0.00079	2000000	mg/L
MW-2	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-2	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-2	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-2	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-2	9/7/2016	Arsenic, Dissolved	0.0011	0.001	0.00014	10000	mg/L
MW-2	9/7/2016	Barium, Dissolved	0.018	0.002	0.0013	2000000	mg/L
MW-2	9/7/2016	Calcium, Dissolved	1.5	1	0.5	NA	mg/L
MW-2	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-2	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-2	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-2	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-2	9/7/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MW-2	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-2	9/7/2016	Manganese, Dissolved	0.0024	0.002	0.00032	2017400	mg/L
MW-2	9/7/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MW-2	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/7/2016	Selenium, Dissolved	0.0006	0.001	0.00021	50000	mg/L
MW-2	9/7/2016	Uranium, Dissolved	0.0095	0.0005	0.000051	NA	mg/L
MW-2	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-2	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-2	9/7/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MW-2	9/7/2016	Manganese, Total	0.0031	0.002	0.00027	2017000	mg/L
MW-2	9/7/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
MW-2	9/7/2016	Selenium, Total	0.00058	0.001	0.00019	50000	mg/L
MW-2	9/7/2016	Uranium, Total	0.0088	0.0005	0.00017	30000	mg/L
MW-2	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-2	9/20/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-2	9/20/2017	Arsenic, Total	0.00073	0.001	0.0003	10000	mg/L
MW-2	9/20/2017	Barium, Total	0.022	0.002	0.00093	2000000	mg/L
MW-2	9/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-2	9/20/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MW-2	9/20/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-2	9/20/2017	Arsenic, Dissolved	0.0011	0.001	0.00018	10000	mg/L
MW-2	9/20/2017	Barium, Dissolved	0.018	0.002	0.00085	2000000	mg/L
MW-2	9/20/2017	Calcium, Dissolved	1.5	1	0.078	NA	mg/L
MW-2	9/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-2	9/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-2	9/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-2	9/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-2	9/20/2017	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
MW-2	9/20/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-2	9/20/2017	Manganese, Dissolved	0.0028	0.002	0.00039	2017400	mg/L
MW-2	9/20/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-2	9/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/20/2017	Selenium, Dissolved	0.00081	0.001	0.00039	50000	mg/L
MW-2	9/20/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MW-2	9/20/2017	Iron, Total	0.097	0.02	0.01	13822000	mg/L
MW-2	9/20/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MW-2	9/20/2017	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
MW-2	9/20/2017	Lead, Total	0.00055	0.0005	0.000095	15000	mg/L
MW-2	9/20/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-2	9/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-2	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-2	9/13/2018	Arsenic, Total	0.00099	0.001	0.00041	10000	mg/L
MW-2	9/13/2018	Barium, Total	0.017	0.002	0.001	2000000	mg/L
MW-2	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-2	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-2	9/13/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-2	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-2	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-2	9/13/2018	Arsenic, Dissolved	0.00098	0.001	0.00042	10000	mg/L
MW-2	9/13/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
MW-2	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-2	9/13/2018	Calcium, Dissolved	1.6	1	0.078	NA	mg/L
MW-2	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-2	9/13/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-2	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-2	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-2	9/13/2018	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MW-2	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-2	9/13/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MW-2	9/13/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-2	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-2	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-2	9/13/2018	Uranium, Dissolved	0.008	0.0005	0.000096	NA	mg/L
MW-2	9/13/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-2	9/13/2018	Zinc, Dissolved	0.0079	0.01	0.0021	5960450	mg/L
MW-2	9/13/2018	Iron, Total	0.01	0.02	0.01	13822000	mg/L
MW-2	9/13/2018	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
MW-2	9/13/2018	Manganese, Total	0.0026	0.002	0.0011	2017000	mg/L
MW-2	9/13/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-2	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-2	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-2	9/13/2018	Uranium, Total	0.008	0.0005	0.000068	30000	mg/L
MW-2	9/13/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
MW-2	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-2	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-2	12/6/2018	Arsenic, Total	0.0011	0.001	0.0005	10000	mg/L
MW-2	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-2	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-2	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-2	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-2	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-2	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-2	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-2	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-2	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-2	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-2	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-4	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-4	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Arsenic, Total	0.00078	0.001	0.00026	10000	mg/L
MW-4	9/18/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
MW-4	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-4	9/18/2020	Aluminum, Total	0.3	0.02	0.0074	19914000	mg/L
MW-4	9/18/2020	Barium, Total	0.029	0.003	0.0016	2000000	mg/L
MW-4	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/18/2020	Chromium, Total	0.0037	0.006	0.0021	50000	mg/L
MW-4	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Iron, Total	0.13	0.05	0.013	13822000	mg/L
MW-4	9/18/2020	Manganese, Total	0.12	0.002	0.00081	2017000	mg/L
MW-4	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-4	9/18/2020	Uranium, Total	0.016	0.0025	0.00033	30000	mg/L
MW-4	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-4	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-4	9/18/2020	Boron, Total	0.38	0.04	0.0074	3949	mg/L
MW-4	9/18/2020	Arsenic, Dissolved	0.00075	0.001	0.00021	10000	mg/L
MW-4	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-4	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-4	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Uranium, Dissolved	0.02	0.0025	0.00033	NA	mg/L
MW-4	9/18/2020	Aluminum, Dissolved	0.0073	0.02	0.0056	19913930	mg/L
MW-4	9/18/2020	Barium, Dissolved	0.019	0.002	0.0011	2000000	mg/L
MW-4	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Boron, Dissolved	0.36	0.04	0.0067	3949110	mg/L
MW-4	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-4	9/18/2020	Calcium, Dissolved	1.9	1	0.11	NA	mg/L
MW-4	9/18/2020	Chromium, Dissolved	0.0022	0.006	0.002	100000	mg/L
MW-4	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-4	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-4	9/18/2020	Magnesium, Dissolved	0.2	1	0.067	NA	mg/L
MW-4	9/18/2020	Manganese, Dissolved	0.004	0.002	0.00058	2017400	mg/L
MW-4	9/18/2020	Molybdenum, Dissolved	0.0066	0.008	0.0056	98700	mg/L
MW-4	9/18/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Potassium, Dissolved	0.72	1	0.16	NA	mg/L
MW-4	9/18/2020	Zinc, Dissolved	0.0069	0.01	0.006	5960450	mg/L
MW-4	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MW-4	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-4	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Arsenic, Total	0.00077	0.001	0.00026	10000	mg/L
MW-4	9/18/2020	Lead, Total	0.0028	0.0005	0.000034	15000	mg/L
MW-4	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-4	9/18/2020	Uranium, Total	0.015	0.0005	0.000065	30000	mg/L
MW-4	9/18/2020	Aluminum, Total	0.31	0.02	0.0074	19914000	mg/L
MW-4	9/18/2020	Barium, Total	0.031	0.003	0.0016	2000000	mg/L
MW-4	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-4	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Iron, Total	0.14	0.05	0.013	13822000	mg/L
MW-4	9/18/2020	Manganese, Total	0.13	0.002	0.00081	2017000	mg/L
MW-4	9/18/2020	Molybdenum, Total	0.0085	0.008	0.0065	98700	mg/L
MW-4	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-4	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-4	9/18/2020	Boron, Total	0.38	0.04	0.0074	3949	mg/L
MW-4	9/18/2020	Arsenic, Dissolved	0.00077	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-4	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-4	9/18/2020	Uranium, Dissolved	0.014	0.0005	0.000065	NA	mg/L
MW-4	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MW-4	9/18/2020	Sodium, Dissolved	270	5	0.69	NA	mg/L
MW-4	9/18/2020	Aluminum, Dissolved	0.006	0.02	0.0056	19913930	mg/L
MW-4	9/18/2020	Barium, Dissolved	0.02	0.002	0.0011	2000000	mg/L
MW-4	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Boron, Dissolved	0.36	0.04	0.0067	3949110	mg/L
MW-4	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-4	9/18/2020	Calcium, Dissolved	1.9	1	0.11	NA	mg/L
MW-4	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-4	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-4	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-4	9/18/2020	Magnesium, Dissolved	0.2	1	0.067	NA	mg/L
MW-4	9/18/2020	Manganese, Dissolved	0.0045	0.002	0.00058	2017400	mg/L
MW-4	9/18/2020	Molybdenum, Dissolved	0.0078	0.008	0.0056	98700	mg/L
MW-4	9/18/2020	Nickel, Dissolved	0.0045	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Potassium, Dissolved	0.69	1	0.16	NA	mg/L
MW-4	9/18/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
MW-4	8/13/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
MW-4	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-4	8/13/2019	Arsenic, Total	0.00071	0.001	0.000312	10000	mg/L
MW-4	8/13/2019	Barium, Total	0.021	0.002	0.000648	2000000	mg/L
MW-4	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-4	8/13/2019	Boron, Total	0.38	0.04	0.004531	3949	mg/L
MW-4	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-4	8/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-4	8/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-4	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-4	8/13/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
MW-4	8/13/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-4	8/13/2019	Manganese, Total	0.0056	0.002	0.00029	2017000	mg/L
MW-4	8/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-4	8/13/2019	Molybdenum, Total	0.0081	0.008	0.006735	98700	mg/L
MW-4	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-4	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-4	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-4	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-4	8/13/2019	Uranium, Total	0.013	0.0005	0.000085	30000	mg/L
MW-4	8/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-4	8/13/2019	Aluminum, Dissolved	0.0056	0.02	0.002488	19913930	mg/L
MW-4	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-4	8/13/2019	Arsenic, Dissolved	0.00078	0.001	0.000101	10000	mg/L
MW-4	8/13/2019	Barium, Dissolved	0.021	0.002	0.000648	2000000	mg/L
MW-4	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-4	8/13/2019	Boron, Dissolved	0.38	0.04	0.004531	3949110	mg/L
MW-4	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-4	8/13/2019	Calcium, Dissolved	1.8	1	0.061889	NA	mg/L
MW-4	8/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-4	8/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-4	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-4	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-4	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-4	8/13/2019	Magnesium, Dissolved	0.2	1	0.05029	NA	mg/L
MW-4	8/13/2019	Manganese, Dissolved	0.0052	0.002	0.00029	2017400	mg/L
MW-4	8/13/2019	Molybdenum, Dissolved	0.0097	0.008	0.006735	98700	mg/L
MW-4	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-4	8/13/2019	Potassium, Dissolved	0.75	1	0.162288	NA	mg/L
MW-4	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-4	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-4	8/13/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
MW-4	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-4	8/13/2019	Uranium, Dissolved	0.014	0.0005	0.000075	NA	mg/L
MW-4	8/13/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
MW-4	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-4	8/21/2012	Barium, Total	0.02	0.002	0.00039	2000000	mg/L
MW-4	8/21/2012	Calcium, Total	1.8	1	0.026	NA	mg/L
MW-4	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-4	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-4	8/21/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-4	8/21/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
MW-4	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-4	8/21/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-4	8/21/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-4	8/21/2012	Manganese, Total	0.0034	0.002	0.00026	2017000	mg/L
MW-4	8/21/2012	Sodium, Total	290	5	0.22	NA	mg/L
MW-4	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-4	8/21/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-4	8/21/2012	Uranium, Total	0.018	0.0025	0.00003	30000	mg/L
MW-4	8/21/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-4	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-4	9/10/2013	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
MW-4	9/10/2013	Barium, Total	0.022	0.002	0.00095	2000000	mg/L
MW-4	9/10/2013	Calcium, Total	6.3	1	0.069	NA	mg/L
MW-4	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-4	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-4	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-4	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-4	9/10/2013	Potassium, Total	1.1	1	0.24	NA	mg/L
MW-4	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-4	9/10/2013	Manganese, Total	0.0057	0.002	0.00016	2017000	mg/L
MW-4	9/10/2013	Sodium, Total	280	5	1.6	NA	mg/L
MW-4	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-4	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-4	9/10/2013	Uranium, Total	0.018	0.001	0.0000073	30000	mg/L
MW-4	9/10/2013	Zinc, Total	0.017	0.01	0.00076	5960000	mg/L
MW-4	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-4	9/17/2014	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
MW-4	9/17/2014	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
MW-4	9/17/2014	Calcium, Total	1.9	1	0.082	NA	mg/L
MW-4	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-4	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-4	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-4	9/17/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-4	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-4	9/17/2014	Potassium, Total	1.7	1	0.093	NA	mg/L
MW-4	9/17/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-4	9/17/2014	Manganese, Total	0.0057	0.002	0.00055	2017000	mg/L
MW-4	9/17/2014	Sodium, Total	280	5	2	NA	mg/L
MW-4	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-4	9/17/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-4	9/17/2014	Uranium, Total	0.017	0.001	0.00005	30000	mg/L
MW-4	9/17/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MW-4	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-4	8/17/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-4	8/17/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
MW-4	8/17/2015	Calcium, Total	1.7	1	0.057	NA	mg/L
MW-4	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-4	8/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-4	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-4	8/17/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
MW-4	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-4	8/17/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-4	8/17/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-4	8/17/2015	Manganese, Total	0.0052	0.002	0.0015	2017000	mg/L
MW-4	8/17/2015	Sodium, Total	300	5	0.36	NA	mg/L
MW-4	8/17/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-4	8/17/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-4	8/17/2015	Uranium, Total	0.016	0.0005	0.0000049	30000	mg/L
MW-4	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-4	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-4	9/7/2016	Arsenic, Total	0.00098	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/7/2016	Barium, Total	0.022	0.002	0.00079	2000000	mg/L
MW-4	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-4	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-4	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-4	9/7/2016	Arsenic, Dissolved	0.00089	0.001	0.00014	10000	mg/L
MW-4	9/7/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
MW-4	9/7/2016	Calcium, Dissolved	1.8	1	0.5	NA	mg/L
MW-4	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-4	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-4	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-4	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-4	9/7/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MW-4	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-4	9/7/2016	Manganese, Dissolved	0.0046	0.002	0.00032	2017400	mg/L
MW-4	9/7/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MW-4	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/7/2016	Selenium, Dissolved	0.00072	0.001	0.00021	50000	mg/L
MW-4	9/7/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
MW-4	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-4	9/7/2016	Iron, Total	0.028	0.02	0.02	13822000	mg/L
MW-4	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MW-4	9/7/2016	Manganese, Total	0.0064	0.002	0.00027	2017000	mg/L
MW-4	9/7/2016	Lead, Total	0.00017	0.0005	0.000081	15000	mg/L
MW-4	9/7/2016	Selenium, Total	0.00065	0.001	0.00019	50000	mg/L
MW-4	9/7/2016	Uranium, Total	0.016	0.0005	0.00017	30000	mg/L
MW-4	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-4	9/21/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-4	9/21/2017	Arsenic, Total	0.00084	0.001	0.0003	10000	mg/L
MW-4	9/21/2017	Barium, Total	0.02	0.002	0.00093	2000000	mg/L
MW-4	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-4	9/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-4	9/21/2017	Copper, Total	0.0019	0.006	0.0017	790000	mg/L
MW-4	9/21/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-4	9/21/2017	Arsenic, Dissolved	0.00087	0.001	0.00018	10000	mg/L
MW-4	9/21/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
MW-4	9/21/2017	Calcium, Dissolved	1.9	1	0.078	NA	mg/L
MW-4	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-4	9/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-4	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-4	9/21/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-4	9/21/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MW-4	9/21/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-4	9/21/2017	Manganese, Dissolved	0.0052	0.002	0.00039	2017400	mg/L
MW-4	9/21/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
MW-4	9/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/21/2017	Selenium, Dissolved	0.00088	0.001	0.00039	50000	mg/L
MW-4	9/21/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-4	9/21/2017	Iron, Total	0.021	0.02	0.01	13822000	mg/L
MW-4	9/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-4	9/21/2017	Manganese, Total	0.0069	0.002	0.0011	2017000	mg/L
MW-4	9/21/2017	Lead, Total	0.00017	0.0005	0.000095	15000	mg/L
MW-4	9/21/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-4	9/21/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-4	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-4	9/13/2018	Arsenic, Total	0.00076	0.001	0.00041	10000	mg/L
MW-4	9/13/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
MW-4	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-4	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-4	9/13/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-4	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-4	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-4	9/13/2018	Arsenic, Dissolved	0.00072	0.001	0.00042	10000	mg/L
MW-4	9/13/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
MW-4	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-4	9/13/2018	Calcium, Dissolved	1.9	1	0.078	NA	mg/L
MW-4	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-4	9/13/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-4	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-4	9/13/2018	Potassium, Dissolved	0.59	1	0.11	NA	mg/L
MW-4	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-4	9/13/2018	Manganese, Dissolved	0.0064	0.002	0.00039	2017400	mg/L
MW-4	9/13/2018	Sodium, Dissolved	300	10	1.6	NA	mg/L
MW-4	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-4	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-4	9/13/2018	Uranium, Dissolved	0.014	0.0005	0.000096	NA	mg/L
MW-4	9/13/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-4	9/13/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-4	9/13/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-4	9/13/2018	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MW-4	9/13/2018	Manganese, Total	0.0059	0.002	0.0011	2017000	mg/L
MW-4	9/13/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-4	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-4	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-4	9/13/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
MW-4	9/13/2018	Vanadium, Total	0.00091	0.05	0.00076	63100	mg/L
MW-4	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-4	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-4	12/6/2018	Arsenic, Total	ND	0.001	0.0005	10000	mg/L
MW-4	12/6/2018	Barium, Total	0.021	0.02	0.02	2000000	mg/L
MW-4	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-4	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-4	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-4	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-4	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-4	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-4	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-4	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-4	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-4	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-4	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-5	8/14/2019	Aluminum, Total	0.0098	0.02	0.002488	19914000	mg/L
MW-5	8/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-5	8/14/2019	Arsenic, Total	0.00099	0.001	0.000312	10000	mg/L
MW-5	8/14/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
MW-5	8/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-5	8/14/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MW-5	8/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-5	8/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-5	8/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-5	8/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-5	8/14/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
MW-5	8/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-5	8/14/2019	Manganese, Total	0.0059	0.002	0.00029	2017000	mg/L
MW-5	8/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-5	8/14/2019	Molybdenum, Total	0.008	0.008	0.006735	98700	mg/L
MW-5	8/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-5	8/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-5	8/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-5	8/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-5	8/14/2019	Uranium, Total	0.009	0.0025	0.000424	30000	mg/L
MW-5	8/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-5	8/14/2019	Aluminum, Dissolved	0.0033	0.02	0.002488	19913930	mg/L
MW-5	8/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-5	8/14/2019	Arsenic, Dissolved	0.00098	0.001	0.000101	10000	mg/L
MW-5	8/14/2019	Barium, Dissolved	0.016	0.002	0.000648	2000000	mg/L
MW-5	8/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-5	8/14/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L
MW-5	8/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-5	8/14/2019	Calcium, Dissolved	1.4	1	0.061889	NA	mg/L
MW-5	8/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-5	8/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-5	8/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-5	8/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-5	8/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-5	8/14/2019	Magnesium, Dissolved	0.14	1	0.05029	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/14/2019	Manganese, Dissolved	0.0037	0.002	0.00029	2017400	mg/L
MW-5	8/14/2019	Molybdenum, Dissolved	0.0083	0.008	0.006735	98700	mg/L
MW-5	8/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-5	8/14/2019	Potassium, Dissolved	0.61	1	0.162288	NA	mg/L
MW-5	8/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-5	8/14/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-5	8/14/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MW-5	8/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-5	8/14/2019	Uranium, Dissolved	0.0078	0.0005	0.000075	NA	mg/L
MW-5	8/14/2019	Zinc, Dissolved	0.006	0.01	0.002252	5960450	mg/L
MW-5	9/21/2020	Arsenic, Dissolved	0.00091	0.001	0.00021	10000	mg/L
MW-5	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-5	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-5	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-5	9/21/2020	Uranium, Dissolved	0.0077	0.0005	0.000065	NA	mg/L
MW-5	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-5	9/21/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
MW-5	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MW-5	9/21/2020	Barium, Dissolved	0.017	0.002	0.0011	2000000	mg/L
MW-5	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-5	9/21/2020	Boron, Dissolved	0.73	0.04	0.0067	3949110	mg/L
MW-5	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-5	9/21/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-5	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-5	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-5	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-5	9/21/2020	Magnesium, Dissolved	0.15	1	0.067	NA	mg/L
MW-5	9/21/2020	Manganese, Dissolved	0.0035	0.002	0.00058	2017400	mg/L
MW-5	9/21/2020	Molybdenum, Dissolved	0.0081	0.008	0.0056	98700	mg/L
MW-5	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-5	9/21/2020	Potassium, Dissolved	0.51	1	0.16	NA	mg/L
MW-5	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-5	9/21/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
MW-5	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-5	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-5	9/21/2020	Arsenic, Total	0.00093	0.001	0.00026	10000	mg/L
MW-5	9/21/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
MW-5	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-5	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-5	9/21/2020	Uranium, Total	0.009	0.0005	0.000065	30000	mg/L
MW-5	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-5	9/21/2020	Aluminum, Total	0.14	0.02	0.0074	19914000	mg/L
MW-5	9/21/2020	Barium, Total	0.049	0.003	0.0016	2000000	mg/L
MW-5	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-5	9/21/2020	Boron, Total	0.76	0.04	0.0074	3949	mg/L
MW-5	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-5	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-5	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-5	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-5	9/21/2020	Iron, Total	0.053	0.05	0.013	13822000	mg/L
MW-5	9/21/2020	Manganese, Total	0.013	0.002	0.00081	2017000	mg/L
MW-5	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-5	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-5	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-5	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-5	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-5	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-5	8/23/2012	Barium, Total	0.026	0.002	0.00039	2000000	mg/L
MW-5	8/23/2012	Calcium, Total	1.4	1	0.026	NA	mg/L
MW-5	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-5	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-5	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-5	8/23/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
MW-5	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-5	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-5	8/23/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-5	8/23/2012	Manganese, Total	0.012	0.002	0.00026	2017000	mg/L
MW-5	8/23/2012	Sodium, Total	270	5	0.22	NA	mg/L
MW-5	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-5	8/23/2012	Uranium, Total	0.0095	0.0025	0.00003	30000	mg/L
MW-5	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-5	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-5	9/10/2013	Arsenic, Total	0.001	0.001	0.000098	10000	mg/L
MW-5	9/10/2013	Barium, Total	0.018	0.002	0.00095	2000000	mg/L
MW-5	9/10/2013	Calcium, Total	1.6	1	0.069	NA	mg/L
MW-5	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-5	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-5	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-5	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-5	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-5	9/10/2013	Potassium, Total	ND	1	0.24	NA	mg/L
MW-5	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-5	9/10/2013	Manganese, Total	0.0034	0.002	0.00016	2017000	mg/L
MW-5	9/10/2013	Sodium, Total	260	5	1.6	NA	mg/L
MW-5	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-5	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-5	9/10/2013	Uranium, Total	0.01	0.001	0.0000073	30000	mg/L
MW-5	9/10/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
MW-5	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-5	9/17/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-5	9/17/2014	Barium, Total	0.015	0.002	0.0011	2000000	mg/L
MW-5	9/17/2014	Calcium, Total	1.6	1	0.082	NA	mg/L
MW-5	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-5	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-5	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-5	9/17/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-5	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-5	9/17/2014	Potassium, Total	1.6	1	0.093	NA	mg/L
MW-5	9/17/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-5	9/17/2014	Manganese, Total	0.0045	0.002	0.00055	2017000	mg/L
MW-5	9/17/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-5	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-5	9/17/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-5	9/17/2014	Uranium, Total	0.0094	0.001	0.00005	30000	mg/L
MW-5	9/17/2014	Zinc, Total	0.025	0.01	0.0014	5960000	mg/L
MW-5	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-5	8/14/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-5	8/14/2015	Barium, Total	0.09	0.002	0.0011	2000000	mg/L
MW-5	8/14/2015	Calcium, Total	1.5	1	0.057	NA	mg/L
MW-5	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-5	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-5	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-5	8/14/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
MW-5	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-5	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-5	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-5	8/14/2015	Manganese, Total	0.0031	0.002	0.0015	2017000	mg/L
MW-5	8/14/2015	Sodium, Total	260	5	0.36	NA	mg/L
MW-5	8/14/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-5	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-5	8/14/2015	Uranium, Total	0.0093	0.0005	0.0000049	30000	mg/L
MW-5	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-5	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-5	9/7/2016	Arsenic, Total	0.0012	0.001	0.00021	10000	mg/L
MW-5	9/7/2016	Barium, Total	0.041	0.002	0.00079	2000000	mg/L
MW-5	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-5	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-5	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-5	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-5	9/7/2016	Arsenic, Dissolved	0.001	0.001	0.00014	10000	mg/L
MW-5	9/7/2016	Barium, Dissolved	0.017	0.002	0.0013	2000000	mg/L
MW-5	9/7/2016	Calcium, Dissolved	1.4	1	0.5	NA	mg/L
MW-5	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-5	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-5	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-5	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-5	9/7/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-5	9/7/2016	Manganese, Dissolved	0.0035	0.002	0.00032	2017400	mg/L
MW-5	9/7/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MW-5	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/7/2016	Selenium, Dissolved	0.0005	0.001	0.00021	50000	mg/L
MW-5	9/7/2016	Uranium, Dissolved	0.0094	0.0005	0.000051	NA	mg/L
MW-5	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-5	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-5	9/7/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
MW-5	9/7/2016	Manganese, Total	0.0046	0.002	0.00027	2017000	mg/L
MW-5	9/7/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
MW-5	9/7/2016	Selenium, Total	0.00038	0.001	0.00019	50000	mg/L
MW-5	9/7/2016	Uranium, Total	0.0092	0.0005	0.00017	30000	mg/L
MW-5	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-5	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-5	9/11/2017	Arsenic, Total	0.001	0.001	0.0003	10000	mg/L
MW-5	9/11/2017	Barium, Total	0.02	0.002	0.00093	2000000	mg/L
MW-5	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-5	9/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-5	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MW-5	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-5	9/11/2017	Arsenic, Dissolved	0.0012	0.001	0.00018	10000	mg/L
MW-5	9/11/2017	Barium, Dissolved	0.017	0.002	0.00085	2000000	mg/L
MW-5	9/11/2017	Calcium, Dissolved	1.5	1	0.078	NA	mg/L
MW-5	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-5	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-5	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-5	9/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-5	9/11/2017	Potassium, Dissolved	0.54	1	0.11	NA	mg/L
MW-5	9/11/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-5	9/11/2017	Manganese, Dissolved	0.0042	0.002	0.00039	2017400	mg/L
MW-5	9/11/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MW-5	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/11/2017	Selenium, Dissolved	0.0012	0.001	0.00039	50000	mg/L
MW-5	9/11/2017	Uranium, Dissolved	0.0095	0.0005	0.00005	NA	mg/L
MW-5	9/11/2017	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
MW-5	9/11/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-5	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-5	9/11/2017	Manganese, Total	0.0043	0.002	0.0011	2017000	mg/L
MW-5	9/11/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
MW-5	9/11/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-5	9/11/2017	Uranium, Total	0.0099	0.0005	0.00015	30000	mg/L
MW-5	9/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-5	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-5	9/17/2018	Arsenic, Total	0.0011	0.001	0.00041	10000	mg/L
MW-5	9/17/2018	Barium, Total	0.021	0.002	0.001	2000000	mg/L
MW-5	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-5	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-5	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-5	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-5	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-5	9/17/2018	Arsenic, Dissolved	0.00093	0.001	0.00042	10000	mg/L
MW-5	9/17/2018	Barium, Dissolved	0.017	0.002	0.00099	2000000	mg/L
MW-5	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-5	9/17/2018	Calcium, Dissolved	1.4	1	0.078	NA	mg/L
MW-5	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-5	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-5	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-5	9/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-5	9/17/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MW-5	9/17/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-5	9/17/2018	Manganese, Dissolved	0.0039	0.002	0.00039	2017400	mg/L
MW-5	9/17/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
MW-5	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-5	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-5	9/17/2018	Uranium, Dissolved	0.0075	0.0005	0.000096	NA	mg/L
MW-5	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-5	9/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-5	9/17/2018	Mercury, Total	0.000096	0.0002	0.000038	2000	mg/L
MW-5	9/17/2018	Manganese, Total	0.0045	0.002	0.0011	2017000	mg/L
MW-5	9/17/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-5	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-5	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-5	9/17/2018	Uranium, Total	0.0082	0.0005	0.000068	30000	mg/L
MW-5	9/17/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
MW-5	9/17/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-5	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-5	12/6/2018	Arsenic, Total	0.001	0.001	0.0005	10000	mg/L
MW-5	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-5	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-5	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-5	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-5	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-5	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-5	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-5	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-5	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-5	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-5	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-5	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
NAPIS-2	9/22/2020	Arsenic, Dissolved	0.0031	0.001	0.00021	10000	mg/L
NAPIS-2	9/22/2020	Lead, Dissolved	0.00012	0.0005	0.000034	NA	mg/L
NAPIS-2	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
NAPIS-2	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
NAPIS-2	9/22/2020	Uranium, Dissolved	0.00043	0.0005	0.000065	NA	mg/L
NAPIS-2	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
NAPIS-2	9/22/2020	Barium, Dissolved	1.8	0.01	0.0056	2000000	mg/L
NAPIS-2	9/22/2020	Iron, Dissolved	1	0.1	0.052	13821880	mg/L
NAPIS-2	9/22/2020	Sodium, Dissolved	270	5	0.69	NA	mg/L
NAPIS-2	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
NAPIS-2	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
NAPIS-2	9/22/2020	Boron, Dissolved	0.6	0.04	0.0067	3949110	mg/L
NAPIS-2	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
NAPIS-2	9/22/2020	Calcium, Dissolved	54	1	0.11	NA	mg/L
NAPIS-2	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
NAPIS-2	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
NAPIS-2	9/22/2020	Magnesium, Dissolved	10	1	0.067	NA	mg/L
NAPIS-2	9/22/2020	Manganese, Dissolved	0.71	0.002	0.00058	2017400	mg/L
NAPIS-2	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
NAPIS-2	9/22/2020	Nickel, Dissolved	0.0088	0.01	0.0033	372000	mg/L
NAPIS-2	9/22/2020	Potassium, Dissolved	0.22	1	0.16	NA	mg/L
NAPIS-2	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
NAPIS-2	9/22/2020	Zinc, Dissolved	0.0091	0.01	0.006	5960450	mg/L
NAPIS-2	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
NAPIS-2	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
NAPIS-2	9/22/2020	Arsenic, Total	0.002	0.001	0.00026	10000	mg/L
NAPIS-2	9/22/2020	Lead, Total	0.00037	0.0005	0.000034	15000	mg/L
NAPIS-2	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
NAPIS-2	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
NAPIS-2	9/22/2020	Uranium, Total	0.00007	0.0005	0.000065	30000	mg/L
NAPIS-2	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-2	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
NAPIS-2	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
NAPIS-2	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
NAPIS-2	9/22/2020	Nickel, Total	0.01	0.01	0.0033	372000	mg/L
NAPIS-2	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
NAPIS-2	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
NAPIS-2	9/22/2020	Barium, Total	1.8	0.015	0.0082	2000000	mg/L
NAPIS-2	9/22/2020	Boron, Total	0.61	0.2	0.037	3949	mg/L
NAPIS-2	9/22/2020	Manganese, Total	0.73	0.01	0.0041	2017000	mg/L
NAPIS-2	9/22/2020	Iron, Total	2	0.25	0.064	13822000	mg/L
NAPIS-2	9/22/2020	Aluminum, Total	0.66	0.1	0.037	19914000	mg/L
NAPIS-2	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/17/2020	Aluminum, Total	3.09	0.2	0.051	19914000	mg/L
NAPIS-2	12/17/2020	Calcium, Total	60.6	0.5	0.084	NA	mg/L
NAPIS-2	12/17/2020	Boron, Total	0.529	0.1	0.022	3949	mg/L
NAPIS-2	12/17/2020	Barium, Total	2.82	0.01	0.003	2000000	mg/L
NAPIS-2	12/17/2020	Potassium, Total	1.09	1	0.34	NA	mg/L
NAPIS-2	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
NAPIS-2	12/17/2020	Magnesium, Total	12.2	0.5	0.12	NA	mg/L
NAPIS-2	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
NAPIS-2	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
NAPIS-2	12/17/2020	Sodium, Total	237	2	0.92	NA	mg/L
NAPIS-2	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
NAPIS-2	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
NAPIS-2	12/17/2020	Iron, Total	2.43	0.2	0.075	13822000	mg/L
NAPIS-2	12/17/2020	Manganese, Total	0.736	0.01	0.003	2017000	mg/L
NAPIS-2	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
NAPIS-2	12/17/2020	Nickel, Total	0.0119	0.006	0.003	372000	mg/L
NAPIS-2	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
NAPIS-2	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
NAPIS-2	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
NAPIS-2	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
NAPIS-2	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
NAPIS-2	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
NAPIS-2	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
NAPIS-2	12/17/2020	Manganese, Dissolved	0.716	0.01	0.003	2017400	mg/L
NAPIS-2	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
NAPIS-2	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
NAPIS-2	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
NAPIS-2	12/17/2020	Barium, Dissolved	2.51	0.01	0.003	2000000	mg/L
NAPIS-2	12/17/2020	Boron, Dissolved	0.554	0.1	0.022	3949110	mg/L
NAPIS-2	12/17/2020	Iron, Dissolved	0.298	0.2	0.075	13821880	mg/L
NAPIS-2	12/17/2020	Nickel, Dissolved	0.0115	0.006	0.003	372000	mg/L
NAPIS-2	12/17/2020	Arsenic, Total Recoverable	3.53	1	0.286	10	ug/L
NAPIS-2	12/17/2020	Lead, Total Recoverable	1.62	1	0.133	15	ug/L
NAPIS-2	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
NAPIS-2	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
NAPIS-2	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
NAPIS-2	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
NAPIS-2	12/17/2020	Arsenic, Dissolved	3.1	1	0.286	10	ug/L
NAPIS-2	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
NAPIS-2	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
NAPIS-2	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
NAPIS-2	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
NAPIS-2	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
NAPIS-2	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
NAPIS-2	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
NAPIS-2	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
NAPIS-2	3/4/2020	Arsenic, Dissolved	0.0028	0.001	0.0001	10000	mg/L
NAPIS-2	3/4/2020	Lead, Dissolved	0.000058	0.0005	0.000055	NA	mg/L
NAPIS-2	3/4/2020	Selenium, Dissolved	0.0003	0.001	0.00017	50000	mg/L
NAPIS-2	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	3/4/2020	Uranium, Dissolved	0.00032	0.0005	0.000075	NA	mg/L
NAPIS-2	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
NAPIS-2	3/4/2020	Beryllium, Dissolved	0.00031	0.002	0.00028	4000	mg/L
NAPIS-2	3/4/2020	Boron, Dissolved	0.52	0.04	0.0045	3949110	mg/L
NAPIS-2	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
NAPIS-2	3/4/2020	Calcium, Dissolved	55	1	0.062	NA	mg/L
NAPIS-2	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
NAPIS-2	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
NAPIS-2	3/4/2020	Magnesium, Dissolved	11	1	0.05	NA	mg/L
NAPIS-2	3/4/2020	Nickel, Dissolved	0.0092	0.01	0.004	372000	mg/L
NAPIS-2	3/4/2020	Potassium, Dissolved	0.21	1	0.16	NA	mg/L
NAPIS-2	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
NAPIS-2	3/4/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
NAPIS-2	3/4/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
NAPIS-2	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
NAPIS-2	3/4/2020	Iron, Dissolved	0.84	0.02	0.0087	13821880	mg/L
NAPIS-2	3/4/2020	Manganese, Dissolved	0.65	0.002	0.00029	2017400	mg/L
NAPIS-2	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
NAPIS-2	3/4/2020	Zinc, Dissolved	0.0075	0.01	0.0023	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
NAPIS-2	3/4/2020	Arsenic, Total	0.0032	0.001	0.00031	10000	mg/L
NAPIS-2	3/4/2020	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
NAPIS-2	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
NAPIS-2	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	3/4/2020	Uranium, Total	0.00028	0.0005	0.000085	30000	mg/L
NAPIS-2	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-2	3/4/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
NAPIS-2	3/4/2020	Boron, Total	0.57	0.04	0.0045	3949	mg/L
NAPIS-2	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
NAPIS-2	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
NAPIS-2	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
NAPIS-2	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	3/4/2020	Manganese, Total	0.69	0.002	0.00029	2017000	mg/L
NAPIS-2	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
NAPIS-2	3/4/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
NAPIS-2	3/4/2020	Silver, Total	0.0014	0.005	0.0014	50000	mg/L
NAPIS-2	3/4/2020	Zinc, Total	0.0071	0.01	0.0058	5960000	mg/L
NAPIS-2	3/4/2020	Aluminum, Total	2.1	0.1	0.012	19914000	mg/L
NAPIS-2	3/4/2020	Barium, Total	2.4	0.01	0.0032	2000000	mg/L
NAPIS-2	3/4/2020	Iron, Total	2.3	0.1	0.044	13822000	mg/L
NAPIS-2	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-2	5/28/2019	Iron, Total	3.2	0.1	0.043734	13822000	mg/L
NAPIS-2	5/28/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
NAPIS-2	5/28/2019	Manganese, Total	0.75	0.002	0.00029	2017000	mg/L
NAPIS-2	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
NAPIS-2	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	5/28/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
NAPIS-2	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	5/28/2019	Uranium, Total	0.00022	0.0005	0.000085	30000	mg/L
NAPIS-2	5/28/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
NAPIS-2	5/28/2019	Aluminum, Dissolved	0.013	0.02	0.002488	19913930	mg/L
NAPIS-2	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	5/28/2019	Arsenic, Dissolved	0.0025	0.001	0.000101	10000	mg/L
NAPIS-2	5/28/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	5/28/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
NAPIS-2	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	5/28/2019	Calcium, Dissolved	59	1	0.061889	NA	mg/L
NAPIS-2	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	5/28/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
NAPIS-2	5/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	5/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	5/28/2019	Manganese, Dissolved	0.78	0.002	0.00029	2017400	mg/L
NAPIS-2	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	5/28/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	5/28/2019	Potassium, Dissolved	0.25	1	0.162288	NA	mg/L
NAPIS-2	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
NAPIS-2	5/28/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
NAPIS-2	5/28/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
NAPIS-2	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	5/28/2019	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
NAPIS-2	5/28/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
NAPIS-2	5/28/2019	Aluminum, Total	4	0.1	0.012441	19914000	mg/L
NAPIS-2	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	5/28/2019	Arsenic, Total	0.0043	0.001	0.000312	10000	mg/L
NAPIS-2	5/28/2019	Barium, Total	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	5/28/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
NAPIS-2	5/28/2019	Boron, Total	0.64	0.04	0.004531	3949	mg/L
NAPIS-2	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	5/28/2019	Chromium, Total	0.0015	0.006	0.001533	50000	mg/L
NAPIS-2	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-2	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	4/9/2019	Arsenic, Dissolved	0.003	0.001	0.000101	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	4/9/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
NAPIS-2	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	4/9/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
NAPIS-2	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	4/9/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
NAPIS-2	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	4/9/2019	Copper, Dissolved	0.0014	0.006	0.001296	790000	mg/L
NAPIS-2	4/9/2019	Iron, Dissolved	0.26	0.02	0.008747	13821880	mg/L
NAPIS-2	4/9/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
NAPIS-2	4/9/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	4/9/2019	Manganese, Dissolved	0.68	0.002	0.00029	2017400	mg/L
NAPIS-2	4/9/2019	Molybdenum, Dissolved	0.0087	0.008	0.006735	98700	mg/L
NAPIS-2	4/9/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
NAPIS-2	4/9/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
NAPIS-2	4/9/2019	Selenium, Dissolved	0.00024	0.001	0.000171	50000	mg/L
NAPIS-2	4/9/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
NAPIS-2	4/9/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
NAPIS-2	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	4/9/2019	Uranium, Dissolved	0.00081	0.0005	0.000075	NA	mg/L
NAPIS-2	4/9/2019	Zinc, Dissolved	0.043	0.01	0.002252	5960450	mg/L
NAPIS-2	4/9/2019	Aluminum, Total	5.5	0.2	0.010508	19914000	mg/L
NAPIS-2	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
NAPIS-2	4/9/2019	Arsenic, Total	0.0046	0.001	0.000312	10000	mg/L
NAPIS-2	4/9/2019	Barium, Total	2.1	0.02	0.004884	2000000	mg/L
NAPIS-2	4/9/2019	Beryllium, Total	0.00024	0.002	0.000224	4000	mg/L
NAPIS-2	4/9/2019	Boron, Total	0.56	0.4	0.018207	3949	mg/L
NAPIS-2	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	4/9/2019	Chromium, Total	0.0017	0.006	0.0012	50000	mg/L
NAPIS-2	4/9/2019	Cobalt, Total	0.0014	0.006	0.001242	5980	mg/L
NAPIS-2	4/9/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-2	4/9/2019	Iron, Total	4	0.2	0.060526	13822000	mg/L
NAPIS-2	4/9/2019	Lead, Total	0.0033	0.0005	0.000026	15000	mg/L
NAPIS-2	4/9/2019	Manganese, Total	0.65	0.02	0.000598	2017000	mg/L
NAPIS-2	4/9/2019	Molybdenum, Total	0.0051	0.008	0.002075	98700	mg/L
NAPIS-2	4/9/2019	Nickel, Total	0.015	0.01	0.001491	372000	mg/L
NAPIS-2	4/9/2019	Selenium, Total	0.00049	0.001	0.000478	50000	mg/L
NAPIS-2	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	4/9/2019	Thallium, Total	0.000096	0.0005	0.000052	2000	mg/L
NAPIS-2	4/9/2019	Uranium, Total	0.00091	0.0005	0.000085	30000	mg/L
NAPIS-2	4/9/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
NAPIS-2	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-2	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	8/22/2019	Arsenic, Dissolved	0.003	0.001	0.000101	10000	mg/L
NAPIS-2	8/22/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	8/22/2019	Boron, Dissolved	0.74	0.04	0.004531	3949110	mg/L
NAPIS-2	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	8/22/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
NAPIS-2	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	8/22/2019	Iron, Dissolved	1.4	0.1	0.043734	13821880	mg/L
NAPIS-2	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	8/22/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	8/22/2019	Manganese, Dissolved	0.82	0.002	0.00029	2017400	mg/L
NAPIS-2	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	8/22/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
NAPIS-2	8/22/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
NAPIS-2	8/22/2019	Selenium, Dissolved	0.00027	0.001	0.000171	50000	mg/L
NAPIS-2	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-2	8/22/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
NAPIS-2	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	8/22/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
NAPIS-2	8/22/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
NAPIS-2	8/22/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
NAPIS-2	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	8/22/2019	Arsenic, Total	0.0044	0.001	0.000312	10000	mg/L
NAPIS-2	8/22/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-2	8/22/2019	Boron, Total	0.75	0.04	0.004531	3949	mg/L
NAPIS-2	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
NAPIS-2	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	8/22/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-2	8/22/2019	Iron, Total	3.2	0.1	0.043734	13822000	mg/L
NAPIS-2	8/22/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
NAPIS-2	8/22/2019	Manganese, Total	0.89	0.002	0.00029	2017000	mg/L
NAPIS-2	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
NAPIS-2	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	8/22/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
NAPIS-2	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
NAPIS-2	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	8/22/2019	Uranium, Total	0.00021	0.0005	0.000085	30000	mg/L
NAPIS-2	8/22/2019	Zinc, Total	0.0064	0.01	0.005772	5960000	mg/L
NAPIS-2	10/21/2019	Aluminum, Dissolved	0.0028	0.02	0.002488	19913930	mg/L
NAPIS-2	10/21/2019	Antimony, Dissolved	0.00061	0.001	0.000389	6000	mg/L
NAPIS-2	10/21/2019	Arsenic, Dissolved	0.0036	0.001	0.000101	10000	mg/L
NAPIS-2	10/21/2019	Barium, Dissolved	1.9	0.01	0.003242	2000000	mg/L
NAPIS-2	10/21/2019	Beryllium, Dissolved	0.00068	0.002	0.000284	4000	mg/L
NAPIS-2	10/21/2019	Boron, Dissolved	0.76	0.04	0.004531	3949110	mg/L
NAPIS-2	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	10/21/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
NAPIS-2	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	10/21/2019	Iron, Dissolved	1.2	0.1	0.043734	13821880	mg/L
NAPIS-2	10/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	10/21/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
NAPIS-2	10/21/2019	Manganese, Dissolved	0.79	0.002	0.00029	2017400	mg/L
NAPIS-2	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	10/21/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	10/21/2019	Potassium, Dissolved	0.35	1	0.162288	NA	mg/L
NAPIS-2	10/21/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
NAPIS-2	10/21/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
NAPIS-2	10/21/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
NAPIS-2	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	10/21/2019	Zinc, Dissolved	0.0065	0.01	0.002252	5960450	mg/L
NAPIS-2	10/21/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
NAPIS-2	10/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	10/21/2019	Arsenic, Total	0.0042	0.001	0.000312	10000	mg/L
NAPIS-2	10/21/2019	Barium, Total	2	0.01	0.003242	2000000	mg/L
NAPIS-2	10/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-2	10/21/2019	Boron, Total	0.81	0.2	0.022653	3949	mg/L
NAPIS-2	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	10/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
NAPIS-2	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	10/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-2	10/21/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
NAPIS-2	10/21/2019	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
NAPIS-2	10/21/2019	Manganese, Total	0.92	0.01	0.00145	2017000	mg/L
NAPIS-2	10/21/2019	Mercury, Total	0.000055	0.0002	0.000038	2000	mg/L
NAPIS-2	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	10/21/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
NAPIS-2	10/21/2019	Selenium, Total	0.00057	0.001	0.000478	50000	mg/L
NAPIS-2	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	10/21/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
NAPIS-2	1/30/2012	Calcium, Total	110	5	0.085	NA	mg/L
NAPIS-2	1/30/2012	Potassium, Total	ND	5	0.37	NA	mg/L
NAPIS-2	1/30/2012	Magnesium, Total	23	5	0.013	NA	mg/L
NAPIS-2	1/30/2012	Sodium, Total	370	5	0.21	NA	mg/L
NAPIS-2	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
NAPIS-2	3/20/2012	Arsenic, Total	0.011	0.0025	0.0014	10000	mg/L
NAPIS-2	3/20/2012	Barium, Total	2.1	0.02	0.0039	2000000	mg/L
NAPIS-2	3/20/2012	Calcium, Total	94	1	0.026	NA	mg/L
NAPIS-2	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/20/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	3/20/2012	Copper, Total	0.0071	0.006	0.00066	790000	mg/L
NAPIS-2	3/20/2012	Iron, Total	5	0.2	0.13	13822000	mg/L
NAPIS-2	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	3/20/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	3/20/2012	Magnesium, Total	18	1	0.013	NA	mg/L
NAPIS-2	3/20/2012	Manganese, Total	1.6	0.02	0.0026	2017000	mg/L
NAPIS-2	3/20/2012	Sodium, Total	350	5	0.22	NA	mg/L
NAPIS-2	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	3/20/2012	Selenium, Total	0.0036	0.0025	0.0025	50000	mg/L
NAPIS-2	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	3/20/2012	Zinc, Total	0.015	0.01	0.0011	5960000	mg/L
NAPIS-2	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	6/12/2012	Arsenic, Total	0.01	0.0025	0.0014	10000	mg/L
NAPIS-2	6/12/2012	Barium, Total	1.9	0.01	0.0019	2000000	mg/L
NAPIS-2	6/12/2012	Calcium, Total	93	1	0.026	NA	mg/L
NAPIS-2	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	6/12/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	6/12/2012	Copper, Total	ND	0.06	0.041	790000	mg/L
NAPIS-2	6/12/2012	Iron, Total	3.8	0.1	0.066	13822000	mg/L
NAPIS-2	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
NAPIS-2	6/12/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	6/12/2012	Magnesium, Total	19	1	0.013	NA	mg/L
NAPIS-2	6/12/2012	Manganese, Total	1.9	0.01	0.0013	2017000	mg/L
NAPIS-2	6/12/2012	Sodium, Total	350	5	0.22	NA	mg/L
NAPIS-2	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	6/12/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
NAPIS-2	6/12/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	8/21/2012	Arsenic, Total	0.0097	0.0025	0.0014	10000	mg/L
NAPIS-2	8/21/2012	Barium, Total	1.7	0.01	0.0019	2000000	mg/L
NAPIS-2	8/21/2012	Calcium, Total	110	5	0.13	NA	mg/L
NAPIS-2	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	8/21/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	8/21/2012	Iron, Total	3.1	0.1	0.066	13822000	mg/L
NAPIS-2	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	8/21/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	8/21/2012	Magnesium, Total	21	1	0.013	NA	mg/L
NAPIS-2	8/21/2012	Manganese, Total	1.7	0.01	0.0013	2017000	mg/L
NAPIS-2	8/21/2012	Sodium, Total	380	5	0.22	NA	mg/L
NAPIS-2	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	8/21/2012	Selenium, Total	0.0031	0.0025	0.0025	50000	mg/L
NAPIS-2	8/21/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	8/21/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	11/28/2012	Arsenic, Total	0.0069	0.0025	0.0014	10000	mg/L
NAPIS-2	11/28/2012	Barium, Total	1.7	0.01	0.0019	2000000	mg/L
NAPIS-2	11/28/2012	Calcium, Total	100	5	0.13	NA	mg/L
NAPIS-2	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	11/28/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	11/28/2012	Iron, Total	3.3	0.1	0.066	13822000	mg/L
NAPIS-2	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	11/28/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	11/28/2012	Magnesium, Total	22	1	0.013	NA	mg/L
NAPIS-2	11/28/2012	Manganese, Total	1.6	0.01	0.0013	2017000	mg/L
NAPIS-2	11/28/2012	Sodium, Total	330	5	0.22	NA	mg/L
NAPIS-2	11/28/2012	Lead, Total	ND	0.001	0.00002	15000	mg/L
NAPIS-2	11/28/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
NAPIS-2	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	11/28/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	3/18/2013	Arsenic, Total	0.0073	0.0025	0.00042	10000	mg/L
NAPIS-2	3/18/2013	Barium, Total	1.6	0.01	0.0019	2000000	mg/L
NAPIS-2	3/18/2013	Calcium, Total	77	1	0.069	NA	mg/L
NAPIS-2	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	3/18/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	3/18/2013	Iron, Total	2.9	0.1	0.066	13822000	mg/L
NAPIS-2	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	3/18/2013	Potassium, Total	ND	1	0.39	NA	mg/L
NAPIS-2	3/18/2013	Magnesium, Total	15	1	0.028	NA	mg/L
NAPIS-2	3/18/2013	Manganese, Total	1.3	0.01	0.0013	2017000	mg/L
NAPIS-2	3/18/2013	Sodium, Total	280	5	1.1	NA	mg/L
NAPIS-2	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
NAPIS-2	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
NAPIS-2	3/18/2013	Zinc, Total	0.015	0.01	0.0011	5960000	mg/L
NAPIS-2	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
NAPIS-2	6/12/2013	Arsenic, Total	0.007	0.001	0.00027	10000	mg/L
NAPIS-2	6/12/2013	Barium, Total	2	0.01	0.0029	2000000	mg/L
NAPIS-2	6/12/2013	Calcium, Total	92	1	0.069	NA	mg/L
NAPIS-2	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
NAPIS-2	6/12/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	6/12/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
NAPIS-2	6/12/2013	Iron, Total	3.2	0.1	0.026	13822000	mg/L
NAPIS-2	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	6/12/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
NAPIS-2	6/12/2013	Magnesium, Total	16	1	0.028	NA	mg/L
NAPIS-2	6/12/2013	Manganese, Total	1.5	0.01	0.0026	2017000	mg/L
NAPIS-2	6/12/2013	Sodium, Total	360	5	1.6	NA	mg/L
NAPIS-2	6/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	6/12/2013	Selenium, Total	0.0051	0.001	0.00049	50000	mg/L
NAPIS-2	6/12/2013	Uranium, Total	ND	0.001	0.0005	30000	mg/L
NAPIS-2	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-2	9/3/2013	Arsenic, Total	0.0069	0.005	0.00049	10000	mg/L
NAPIS-2	9/3/2013	Barium, Total	1.7	0.01	0.0048	2000000	mg/L
NAPIS-2	9/3/2013	Calcium, Total	90	1	0.069	NA	mg/L
NAPIS-2	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-2	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-2	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	9/3/2013	Iron, Total	2.6	0.1	0.045	13822000	mg/L
NAPIS-2	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	9/3/2013	Potassium, Total	ND	1	0.24	NA	mg/L
NAPIS-2	9/3/2013	Magnesium, Total	17	1	0.028	NA	mg/L
NAPIS-2	9/3/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
NAPIS-2	9/3/2013	Sodium, Total	350	5	1.6	NA	mg/L
NAPIS-2	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
NAPIS-2	9/3/2013	Selenium, Total	0.006	0.005	0.0015	50000	mg/L
NAPIS-2	9/3/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
NAPIS-2	9/3/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
NAPIS-2	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-2	11/12/2013	Arsenic, Total	0.0077	0.001	0.000098	10000	mg/L
NAPIS-2	11/12/2013	Barium, Total	1.5	0.01	0.0048	2000000	mg/L
NAPIS-2	11/12/2013	Calcium, Total	79	1	0.069	NA	mg/L
NAPIS-2	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-2	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-2	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	11/12/2013	Iron, Total	1.8	0.1	0.045	13822000	mg/L
NAPIS-2	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	11/12/2013	Potassium, Total	ND	1	0.24	NA	mg/L
NAPIS-2	11/12/2013	Magnesium, Total	16	1	0.028	NA	mg/L
NAPIS-2	11/12/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
NAPIS-2	11/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
NAPIS-2	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	11/12/2013	Selenium, Total	0.008	0.001	0.00029	50000	mg/L
NAPIS-2	11/12/2013	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
NAPIS-2	11/12/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
NAPIS-2	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-2	3/10/2014	Arsenic, Total	0.0053	0.005	0.00049	10000	mg/L
NAPIS-2	3/10/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
NAPIS-2	3/10/2014	Calcium, Total	88	1	0.082	NA	mg/L
NAPIS-2	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2014	Iron, Total	1.8	0.1	0.031	13822000	mg/L
NAPIS-2	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	3/10/2014	Potassium, Total	ND	1	0.093	NA	mg/L
NAPIS-2	3/10/2014	Magnesium, Total	17	1	0.018	NA	mg/L
NAPIS-2	3/10/2014	Manganese, Total	1.2	0.01	0.0027	2017000	mg/L
NAPIS-2	3/10/2014	Sodium, Total	350	5	2	NA	mg/L
NAPIS-2	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	3/10/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	3/10/2014	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
NAPIS-2	3/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
NAPIS-2	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-2	6/5/2014	Arsenic, Total	0.0064	0.005	0.00057	10000	mg/L
NAPIS-2	6/5/2014	Barium, Total	1.6	0.01	0.0056	2000000	mg/L
NAPIS-2	6/5/2014	Calcium, Total	100	5	0.27	NA	mg/L
NAPIS-2	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-2	6/5/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L
NAPIS-2	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	6/5/2014	Potassium, Total	3.4	1	0.24	NA	mg/L
NAPIS-2	6/5/2014	Magnesium, Total	19	1	0.024	NA	mg/L
NAPIS-2	6/5/2014	Manganese, Total	1.4	0.01	0.0027	2017000	mg/L
NAPIS-2	6/5/2014	Sodium, Total	400	5	1.3	NA	mg/L
NAPIS-2	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
NAPIS-2	6/5/2014	Selenium, Total	0.01	0.005	0.00074	50000	mg/L
NAPIS-2	6/5/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
NAPIS-2	6/5/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
NAPIS-2	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-2	9/11/2014	Arsenic, Total	0.01	0.01	0.0036	10000	mg/L
NAPIS-2	9/11/2014	Barium, Total	2.1	0.01	0.0025	2000000	mg/L
NAPIS-2	9/11/2014	Calcium, Total	98	1	0.082	NA	mg/L
NAPIS-2	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-2	9/11/2014	Copper, Total	0.012	0.006	0.0046	790000	mg/L
NAPIS-2	9/11/2014	Iron, Total	3.5	0.1	0.036	13822000	mg/L
NAPIS-2	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	9/11/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
NAPIS-2	9/11/2014	Magnesium, Total	18	1	0.018	NA	mg/L
NAPIS-2	9/11/2014	Manganese, Total	1.3	0.01	0.0024	2017000	mg/L
NAPIS-2	9/11/2014	Sodium, Total	410	10	3.9	NA	mg/L
NAPIS-2	9/11/2014	Lead, Total	0.003	0.001	0.00026	15000	mg/L
NAPIS-2	9/11/2014	Selenium, Total	0.011	0.01	0.0051	50000	mg/L
NAPIS-2	9/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
NAPIS-2	9/11/2014	Zinc, Total	0.017	0.01	0.0035	5960000	mg/L
NAPIS-2	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-2	11/11/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
NAPIS-2	11/11/2014	Barium, Total	1.7	0.01	0.0025	2000000	mg/L
NAPIS-2	11/11/2014	Calcium, Total	99	1	0.082	NA	mg/L
NAPIS-2	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	11/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-2	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-2	11/11/2014	Iron, Total	2.9	0.1	0.036	13822000	mg/L
NAPIS-2	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	11/11/2014	Potassium, Total	ND	1	0.093	NA	mg/L
NAPIS-2	11/11/2014	Magnesium, Total	18	1	0.018	NA	mg/L
NAPIS-2	11/11/2014	Manganese, Total	1.4	0.01	0.0024	2017000	mg/L
NAPIS-2	11/11/2014	Sodium, Total	410	5	2	NA	mg/L
NAPIS-2	11/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
NAPIS-2	11/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
NAPIS-2	11/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
NAPIS-2	11/11/2014	Zinc, Total	0.013	0.01	0.0035	5960000	mg/L
NAPIS-2	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	3/10/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
NAPIS-2	3/10/2015	Barium, Total	1.9	0.01	0.0037	2000000	mg/L
NAPIS-2	3/10/2015	Calcium, Total	85	5	0.28	NA	mg/L
NAPIS-2	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
NAPIS-2	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	3/10/2015	Iron, Total	3	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	3/10/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
NAPIS-2	3/10/2015	Magnesium, Total	16	1	0.039	NA	mg/L
NAPIS-2	3/10/2015	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
NAPIS-2	3/10/2015	Sodium, Total	370	5	0.36	NA	mg/L
NAPIS-2	3/10/2015	Lead, Total	0.0013	0.001	0.000069	15000	mg/L
NAPIS-2	3/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	3/10/2015	Uranium, Total	ND	0.001	0.0000081	30000	mg/L
NAPIS-2	3/10/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
NAPIS-2	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-2	6/2/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	6/2/2015	Calcium, Total	75	1	0.057	NA	mg/L
NAPIS-2	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	6/2/2015	Iron, Total	2.9	0.1	0.036	13822000	mg/L
NAPIS-2	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	6/2/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	6/2/2015	Magnesium, Total	14	1	0.039	NA	mg/L
NAPIS-2	6/2/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	6/2/2015	Sodium, Total	370	5	0.36	NA	mg/L
NAPIS-2	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
NAPIS-2	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	6/2/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
NAPIS-2	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
NAPIS-2	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	8/11/2015	Arsenic, Total	0.008	0.001	0.00029	10000	mg/L
NAPIS-2	8/11/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	8/11/2015	Calcium, Total	75	1	0.057	NA	mg/L
NAPIS-2	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	8/11/2015	Copper, Total	0.0099	0.006	0.0051	790000	mg/L
NAPIS-2	8/11/2015	Iron, Total	3.3	0.1	0.036	13822000	mg/L
NAPIS-2	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	8/11/2015	Magnesium, Total	15	1	0.039	NA	mg/L
NAPIS-2	8/11/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	8/11/2015	Sodium, Total	400	5	0.36	NA	mg/L
NAPIS-2	8/11/2015	Lead, Total	0.0023	0.0005	0.000047	15000	mg/L
NAPIS-2	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
NAPIS-2	8/11/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
NAPIS-2	8/11/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
NAPIS-2	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	10/28/2015	Arsenic, Total	0.008	0.001	0.00029	10000	mg/L
NAPIS-2	10/28/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	10/28/2015	Calcium, Total	95	1	0.057	NA	mg/L
NAPIS-2	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	10/28/2015	Iron, Total	3.3	0.1	0.036	13822000	mg/L
NAPIS-2	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	10/28/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	10/28/2015	Magnesium, Total	17	1	0.039	NA	mg/L
NAPIS-2	10/28/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	10/28/2015	Sodium, Total	360	5	0.36	NA	mg/L
NAPIS-2	10/28/2015	Lead, Total	0.0018	0.0005	0.000047	15000	mg/L
NAPIS-2	10/28/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	10/28/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
NAPIS-2	10/28/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
NAPIS-2	3/1/2016	Calcium, Total	89	1	0.26	NA	mg/L
NAPIS-2	3/1/2016	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	3/1/2016	Magnesium, Total	17	1	0.013	NA	mg/L
NAPIS-2	3/1/2016	Sodium, Total	390	5	0.48	NA	mg/L
NAPIS-2	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	6/7/2016	Arsenic, Total	0.0082	0.001	0.00029	10000	mg/L
NAPIS-2	6/7/2016	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	6/7/2016	Calcium, Total	89	1	0.26	NA	mg/L
NAPIS-2	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/7/2016	Chromium, Total	0.0034	0.006	0.0022	50000	mg/L
NAPIS-2	6/7/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	6/7/2016	Iron, Total	5.6	0.2	0.072	13822000	mg/L
NAPIS-2	6/7/2016	Mercury, Total	0.00008	0.0002	0.000053	2000	mg/L
NAPIS-2	6/7/2016	Potassium, Total	0.7	1	0.18	NA	mg/L
NAPIS-2	6/7/2016	Magnesium, Total	17	1	0.013	NA	mg/L
NAPIS-2	6/7/2016	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	6/7/2016	Sodium, Total	430	5	0.48	NA	mg/L
NAPIS-2	6/7/2016	Lead, Total	0.0053	0.0005	0.000047	15000	mg/L
NAPIS-2	6/7/2016	Selenium, Total	0.0059	0.02	0.0025	50000	mg/L
NAPIS-2	6/7/2016	Uranium, Total	0.0015	0.0005	0.0000049	30000	mg/L
NAPIS-2	6/7/2016	Zinc, Total	0.022	0.01	0.0039	5960000	mg/L
NAPIS-2	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	9/1/2016	Arsenic, Total	0.0087	0.01	0.0021	10000	mg/L
NAPIS-2	9/1/2016	Barium, Total	2	0.01	0.004	2000000	mg/L
NAPIS-2	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	9/1/2016	Chromium, Total	0.011	0.006	0.0027	50000	mg/L
NAPIS-2	9/1/2016	Copper, Total	0.01	0.006	0.003	790000	mg/L
NAPIS-2	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-2	9/1/2016	Arsenic, Dissolved	0.0075	0.001	0.00014	10000	mg/L
NAPIS-2	9/1/2016	Barium, Dissolved	1.4	0.01	0.0066	2000000	mg/L
NAPIS-2	9/1/2016	Calcium, Dissolved	82	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-2	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-2	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-2	9/1/2016	Iron, Dissolved	1.6	0.1	0.1	13821880	mg/L
NAPIS-2	9/1/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Magnesium, Dissolved	15	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Manganese, Dissolved	1.1	0.01	0.0016	2017400	mg/L
NAPIS-2	9/1/2016	Sodium, Dissolved	370	5	2.5	NA	mg/L
NAPIS-2	9/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	9/1/2016	Selenium, Dissolved	0.0066	0.02	0.0042	50000	mg/L
NAPIS-2	9/1/2016	Uranium, Dissolved	0.00031	0.0025	0.00026	NA	mg/L
NAPIS-2	9/1/2016	Zinc, Dissolved	0.17	0.01	0.0028	5960450	mg/L
NAPIS-2	9/1/2016	Iron, Total	7.8	0.2	0.2	13822000	mg/L
NAPIS-2	9/1/2016	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
NAPIS-2	9/1/2016	Lead, Total	0.0081	0.0005	0.000081	15000	mg/L
NAPIS-2	9/1/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
NAPIS-2	9/1/2016	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
NAPIS-2	9/1/2016	Zinc, Total	0.057	0.01	0.0027	5960000	mg/L
NAPIS-2	11/14/2016	Silver, Total	0.0017	0.005	0.0015	50000	mg/L
NAPIS-2	11/14/2016	Arsenic, Total	0.0084	0.005	0.0011	10000	mg/L
NAPIS-2	11/14/2016	Barium, Total	1.9	0.02	0.0079	2000000	mg/L
NAPIS-2	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	11/14/2016	Chromium, Total	0.0069	0.006	0.0027	50000	mg/L
NAPIS-2	11/14/2016	Copper, Total	0.0071	0.006	0.003	790000	mg/L
NAPIS-2	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-2	11/14/2016	Arsenic, Dissolved	0.0085	0.005	0.00069	10000	mg/L
NAPIS-2	11/14/2016	Barium, Dissolved	1.5	0.01	0.0066	2000000	mg/L
NAPIS-2	11/14/2016	Calcium, Dissolved	77	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-2	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-2	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-2	11/14/2016	Iron, Dissolved	1.5	0.1	0.1	13821880	mg/L
NAPIS-2	11/14/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Magnesium, Dissolved	16	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Manganese, Dissolved	1.1	0.01	0.0016	2017400	mg/L
NAPIS-2	11/14/2016	Sodium, Dissolved	380	5	2.5	NA	mg/L
NAPIS-2	11/14/2016	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
NAPIS-2	11/14/2016	Selenium, Dissolved	0.0078	0.02	0.0042	50000	mg/L
NAPIS-2	11/14/2016	Uranium, Dissolved	0.00051	0.0005	0.000051	NA	mg/L
NAPIS-2	11/14/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
NAPIS-2	11/14/2016	Iron, Total	5.5	0.2	0.2	13822000	mg/L
NAPIS-2	11/14/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
NAPIS-2	11/14/2016	Manganese, Total	1.3	0.02	0.0027	2017000	mg/L
NAPIS-2	11/14/2016	Lead, Total	0.007	0.0005	0.000081	15000	mg/L
NAPIS-2	11/14/2016	Selenium, Total	0.005	0.02	0.0037	50000	mg/L
NAPIS-2	11/14/2016	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
NAPIS-2	11/14/2016	Zinc, Total	0.03	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	2/21/2017	Arsenic, Total	0.008	0.02	0.0042	10000	mg/L
NAPIS-2	2/21/2017	Barium, Total	1.8	0.01	0.004	2000000	mg/L
NAPIS-2	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	2/21/2017	Chromium, Total	0.0062	0.006	0.0027	50000	mg/L
NAPIS-2	2/21/2017	Copper, Total	0.0043	0.006	0.003	790000	mg/L
NAPIS-2	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-2	2/21/2017	Arsenic, Dissolved	0.0053	0.01	0.0014	10000	mg/L
NAPIS-2	2/21/2017	Barium, Dissolved	1.4	0.01	0.0043	2000000	mg/L
NAPIS-2	2/21/2017	Calcium, Dissolved	76	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-2	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	2/21/2017	Iron, Dissolved	0.88	0.02	0.02	13821880	mg/L
NAPIS-2	2/21/2017	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Magnesium, Dissolved	15	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Manganese, Dissolved	0.97	0.002	0.00038	2017400	mg/L
NAPIS-2	2/21/2017	Sodium, Dissolved	360	5	2.5	NA	mg/L
NAPIS-2	2/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	2/21/2017	Selenium, Dissolved	0.0047	0.01	0.0021	50000	mg/L
NAPIS-2	2/21/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
NAPIS-2	2/21/2017	Iron, Total	4	0.1	0.1	13822000	mg/L
NAPIS-2	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
NAPIS-2	2/21/2017	Manganese, Total	0.96	0.01	0.0014	2017000	mg/L
NAPIS-2	2/21/2017	Lead, Total	0.0038	0.0005	0.000081	15000	mg/L
NAPIS-2	2/21/2017	Selenium, Total	0.0067	0.02	0.0037	50000	mg/L
NAPIS-2	2/21/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
NAPIS-2	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
NAPIS-2	6/1/2017	Arsenic, Total	0.005	0.001	0.0003	10000	mg/L
NAPIS-2	6/1/2017	Barium, Total	2.1	0.02	0.0093	2000000	mg/L
NAPIS-2	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	6/1/2017	Chromium, Total	0.0032	0.006	0.0011	50000	mg/L
NAPIS-2	6/1/2017	Copper, Total	0.0079	0.006	0.0017	790000	mg/L
NAPIS-2	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-2	6/1/2017	Arsenic, Dissolved	0.0035	0.001	0.00018	10000	mg/L
NAPIS-2	6/1/2017	Barium, Dissolved	1.9	0.02	0.0085	2000000	mg/L
NAPIS-2	6/1/2017	Calcium, Dissolved	76	20	1.6	NA	mg/L
NAPIS-2	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-2	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	6/1/2017	Iron, Dissolved	0.52	0.1	0.082	13821880	mg/L
NAPIS-2	6/1/2017	Potassium, Dissolved	0.57	5	0.56	NA	mg/L
NAPIS-2	6/1/2017	Magnesium, Dissolved	15	5	1.2	NA	mg/L
NAPIS-2	6/1/2017	Manganese, Dissolved	0.86	0.002	0.00038	2017400	mg/L
NAPIS-2	6/1/2017	Sodium, Dissolved	370	20	3.3	NA	mg/L
NAPIS-2	6/1/2017	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
NAPIS-2	6/1/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
NAPIS-2	6/1/2017	Uranium, Dissolved	0.0007	0.0005	0.00005	NA	mg/L
NAPIS-2	6/1/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
NAPIS-2	6/1/2017	Iron, Total	4.8	0.2	0.1	13822000	mg/L
NAPIS-2	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	6/1/2017	Manganese, Total	0.98	0.002	0.0011	2017000	mg/L
NAPIS-2	6/1/2017	Lead, Total	0.0029	0.0005	0.000095	15000	mg/L
NAPIS-2	6/1/2017	Selenium, Total	0.0024	0.001	0.00071	50000	mg/L
NAPIS-2	6/1/2017	Uranium, Total	0.00066	0.0005	0.00015	30000	mg/L
NAPIS-2	6/1/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
NAPIS-2	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-2	9/5/2017	Arsenic, Total	0.0068	0.001	0.0003	10000	mg/L
NAPIS-2	9/5/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
NAPIS-2	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	9/5/2017	Chromium, Total	0.0029	0.006	0.0018	50000	mg/L
NAPIS-2	9/5/2017	Copper, Total	0.0051	0.006	0.0017	790000	mg/L
NAPIS-2	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	9/5/2017	Arsenic, Dissolved	0.0054	0.005	0.00089	10000	mg/L
NAPIS-2	9/5/2017	Barium, Dissolved	2.4	0.02	0.0085	2000000	mg/L
NAPIS-2	9/5/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
NAPIS-2	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	9/5/2017	Chromium, Dissolved	0.0017	0.006	0.0013	100000	mg/L
NAPIS-2	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Iron, Dissolved	0.56	0.02	0.016	13821880	mg/L
NAPIS-2	9/5/2017	Potassium, Dissolved	0.53	1	0.11	NA	mg/L
NAPIS-2	9/5/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
NAPIS-2	9/5/2017	Manganese, Dissolved	0.89	0.002	0.00039	2017400	mg/L
NAPIS-2	9/5/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
NAPIS-2	9/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
NAPIS-2	9/5/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
NAPIS-2	9/5/2017	Uranium, Dissolved	0.00054	0.0025	0.00025	NA	mg/L
NAPIS-2	9/5/2017	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
NAPIS-2	9/5/2017	Iron, Total	5.7	0.2	0.1	13822000	mg/L
NAPIS-2	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	9/5/2017	Manganese, Total	1.1	0.02	0.011	2017000	mg/L
NAPIS-2	9/5/2017	Lead, Total	0.0044	0.0005	0.000095	15000	mg/L
NAPIS-2	9/5/2017	Selenium, Total	0.0056	0.001	0.00071	50000	mg/L
NAPIS-2	9/5/2017	Uranium, Total	0.00056	0.0005	0.00015	30000	mg/L
NAPIS-2	9/5/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
NAPIS-2	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-2	12/4/2017	Arsenic, Total	0.0055	0.001	0.00041	10000	mg/L
NAPIS-2	12/4/2017	Barium, Total	1.9	0.01	0.005	2000000	mg/L
NAPIS-2	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	12/4/2017	Arsenic, Dissolved	0.0049	0.005	0.0021	10000	mg/L
NAPIS-2	12/4/2017	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
NAPIS-2	12/4/2017	Calcium, Dissolved	78	1	0.078	NA	mg/L
NAPIS-2	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	12/4/2017	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
NAPIS-2	12/4/2017	Potassium, Dissolved	0.34	1	0.11	NA	mg/L
NAPIS-2	12/4/2017	Magnesium, Dissolved	14	1	0.25	NA	mg/L
NAPIS-2	12/4/2017	Manganese, Dissolved	0.94	0.01	0.002	2017400	mg/L
NAPIS-2	12/4/2017	Sodium, Dissolved	340	5	0.82	NA	mg/L
NAPIS-2	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	12/4/2017	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
NAPIS-2	12/4/2017	Uranium, Dissolved	0.00017	0.0005	0.000096	NA	mg/L
NAPIS-2	12/4/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
NAPIS-2	12/4/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
NAPIS-2	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	12/4/2017	Manganese, Total	1	0.01	0.0055	2017000	mg/L
NAPIS-2	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
NAPIS-2	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
NAPIS-2	12/4/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
NAPIS-2	12/4/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
NAPIS-2	2/9/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
NAPIS-2	2/9/2018	Arsenic, Total	0.0056	0.001	0.00041	10000	mg/L
NAPIS-2	2/9/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
NAPIS-2	2/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	2/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	2/9/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
NAPIS-2	2/9/2018	Arsenic, Dissolved	0.0047	0.005	0.0021	10000	mg/L
NAPIS-2	2/9/2018	Barium, Dissolved	2	0.01	0.0049	2000000	mg/L
NAPIS-2	2/9/2018	Calcium, Dissolved	76	1	0.078	NA	mg/L
NAPIS-2	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	2/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	2/9/2018	Iron, Dissolved	1.6	0.1	0.082	13821880	mg/L
NAPIS-2	2/9/2018	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
NAPIS-2	2/9/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
NAPIS-2	2/9/2018	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
NAPIS-2	2/9/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
NAPIS-2	2/9/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	2/9/2018	Selenium, Dissolved	0.004	0.005	0.0038	50000	mg/L
NAPIS-2	2/9/2018	Uranium, Dissolved	0.00029	0.0005	0.000096	NA	mg/L
NAPIS-2	2/9/2018	Zinc, Dissolved	0.0049	0.01	0.0021	5960450	mg/L
NAPIS-2	2/9/2018	Iron, Total	4.9	0.1	0.051	13822000	mg/L
NAPIS-2	2/9/2018	Mercury, Total	0.000073	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/9/2018	Manganese, Total	0.99	0.002	0.0011	2017000	mg/L
NAPIS-2	2/9/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
NAPIS-2	2/9/2018	Selenium, Total	0.0044	0.001	0.00098	50000	mg/L
NAPIS-2	2/9/2018	Uranium, Total	0.0004	0.0005	0.000068	30000	mg/L
NAPIS-2	2/9/2018	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
NAPIS-2	4/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
NAPIS-2	4/30/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
NAPIS-2	4/30/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
NAPIS-2	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	4/30/2018	Arsenic, Dissolved	0.0045	0.001	0.00042	10000	mg/L
NAPIS-2	4/30/2018	Barium, Dissolved	1.6	0.01	0.0049	2000000	mg/L
NAPIS-2	4/30/2018	Calcium, Dissolved	66	1	0.078	NA	mg/L
NAPIS-2	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	4/30/2018	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
NAPIS-2	4/30/2018	Potassium, Dissolved	0.27	1	0.11	NA	mg/L
NAPIS-2	4/30/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
NAPIS-2	4/30/2018	Manganese, Dissolved	0.91	0.002	0.00039	2017400	mg/L
NAPIS-2	4/30/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
NAPIS-2	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	4/30/2018	Selenium, Dissolved	0.0049	0.001	0.00076	50000	mg/L
NAPIS-2	4/30/2018	Uranium, Dissolved	0.00016	0.0005	0.000096	NA	mg/L
NAPIS-2	4/30/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
NAPIS-2	4/30/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
NAPIS-2	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	4/30/2018	Manganese, Total	0.94	0.002	0.0011	2017000	mg/L
NAPIS-2	4/30/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
NAPIS-2	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
NAPIS-2	4/30/2018	Uranium, Total	0.00029	0.0005	0.000068	30000	mg/L
NAPIS-2	4/30/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
NAPIS-3	10/21/2019	Aluminum, Dissolved	0.033	0.02	0.002488	19913930	mg/L
NAPIS-3	10/21/2019	Antimony, Dissolved	0.00066	0.001	0.000389	6000	mg/L
NAPIS-3	10/21/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
NAPIS-3	10/21/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
NAPIS-3	10/21/2019	Beryllium, Dissolved	0.00054	0.002	0.000284	4000	mg/L
NAPIS-3	10/21/2019	Boron, Dissolved	2	0.2	0.022653	3949110	mg/L
NAPIS-3	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	10/21/2019	Calcium, Dissolved	19	1	0.061889	NA	mg/L
NAPIS-3	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-3	10/21/2019	Iron, Dissolved	0.02	0.02	0.008747	13821880	mg/L
NAPIS-3	10/21/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
NAPIS-3	10/21/2019	Magnesium, Dissolved	3.3	1	0.05029	NA	mg/L
NAPIS-3	10/21/2019	Manganese, Dissolved	0.061	0.002	0.00029	2017400	mg/L
NAPIS-3	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	10/21/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
NAPIS-3	10/21/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
NAPIS-3	10/21/2019	Selenium, Dissolved	0.0048	0.001	0.000171	50000	mg/L
NAPIS-3	10/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	10/21/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
NAPIS-3	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	10/21/2019	Zinc, Dissolved	0.035	0.01	0.002252	5960450	mg/L
NAPIS-3	10/21/2019	Aluminum, Total	2.9	0.1	0.012441	19914000	mg/L
NAPIS-3	10/21/2019	Antimony, Total	0.001	0.001	0.000389	6000	mg/L
NAPIS-3	10/21/2019	Arsenic, Total	0.002	0.005	0.001561	10000	mg/L
NAPIS-3	10/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
NAPIS-3	10/21/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
NAPIS-3	10/21/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
NAPIS-3	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	10/21/2019	Chromium, Total	0.0041	0.006	0.001533	50000	mg/L
NAPIS-3	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-3	10/21/2019	Copper, Total	0.008	0.006	0.004072	790000	mg/L
NAPIS-3	10/21/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
NAPIS-3	10/21/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/21/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
NAPIS-3	10/21/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
NAPIS-3	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-3	10/21/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
NAPIS-3	10/21/2019	Selenium, Total	0.006	0.005	0.00239	50000	mg/L
NAPIS-3	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	10/21/2019	Zinc, Total	0.036	0.01	0.005772	5960000	mg/L
NAPIS-3	8/22/2019	Aluminum, Dissolved	0.082	0.02	0.002488	19913930	mg/L
NAPIS-3	8/22/2019	Antimony, Dissolved	0.00087	0.001	0.000389	6000	mg/L
NAPIS-3	8/22/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
NAPIS-3	8/22/2019	Barium, Dissolved	0.084	0.002	0.000648	2000000	mg/L
NAPIS-3	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	8/22/2019	Boron, Dissolved	2.3	0.2	0.022653	3949110	mg/L
NAPIS-3	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	8/22/2019	Calcium, Dissolved	18	1	0.061889	NA	mg/L
NAPIS-3	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	8/22/2019	Copper, Dissolved	0.0065	0.006	0.001296	790000	mg/L
NAPIS-3	8/22/2019	Iron, Dissolved	0.039	0.02	0.008747	13821880	mg/L
NAPIS-3	8/22/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
NAPIS-3	8/22/2019	Magnesium, Dissolved	3	1	0.05029	NA	mg/L
NAPIS-3	8/22/2019	Manganese, Dissolved	0.063	0.002	0.00029	2017400	mg/L
NAPIS-3	8/22/2019	Molybdenum, Dissolved	0.007	0.008	0.006735	98700	mg/L
NAPIS-3	8/22/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
NAPIS-3	8/22/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	8/22/2019	Selenium, Dissolved	0.0025	0.001	0.000171	50000	mg/L
NAPIS-3	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	8/22/2019	Sodium, Dissolved	670	20	8.323526	NA	mg/L
NAPIS-3	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	8/22/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
NAPIS-3	8/22/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
NAPIS-3	8/22/2019	Aluminum, Total	6.4	0.2	0.024883	19914000	mg/L
NAPIS-3	8/22/2019	Antimony, Total	0.00068	0.001	0.000389	6000	mg/L
NAPIS-3	8/22/2019	Arsenic, Total	0.0021	0.001	0.000312	10000	mg/L
NAPIS-3	8/22/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
NAPIS-3	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-3	8/22/2019	Boron, Total	2.4	0.2	0.022653	3949	mg/L
NAPIS-3	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	8/22/2019	Chromium, Total	0.0073	0.006	0.001533	50000	mg/L
NAPIS-3	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-3	8/22/2019	Copper, Total	0.0093	0.006	0.004072	790000	mg/L
NAPIS-3	8/22/2019	Iron, Total	3.3	0.4	0.174937	13822000	mg/L
NAPIS-3	8/22/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
NAPIS-3	8/22/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
NAPIS-3	8/22/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
NAPIS-3	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-3	8/22/2019	Nickel, Total	0.02	0.01	0.004009	372000	mg/L
NAPIS-3	8/22/2019	Selenium, Total	0.0037	0.001	0.000478	50000	mg/L
NAPIS-3	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	8/22/2019	Thallium, Total	0.000063	0.0005	0.000052	2000	mg/L
NAPIS-3	8/22/2019	Uranium, Total	0.041	0.0025	0.000424	30000	mg/L
NAPIS-3	8/22/2019	Zinc, Total	0.073	0.01	0.005772	5960000	mg/L
NAPIS-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
NAPIS-3	4/9/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	4/9/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
NAPIS-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	4/9/2019	Calcium, Dissolved	24	1	0.061889	NA	mg/L
NAPIS-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	4/9/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
NAPIS-3	4/9/2019	Iron, Dissolved	0.015	0.02	0.008747	13821880	mg/L
NAPIS-3	4/9/2019	Lead, Dissolved	0.00021	0.0005	0.000055	NA	mg/L
NAPIS-3	4/9/2019	Magnesium, Dissolved	4.2	1	0.05029	NA	mg/L
NAPIS-3	4/9/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
NAPIS-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
NAPIS-3	4/9/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	4/9/2019	Selenium, Dissolved	0.0033	0.001	0.000171	50000	mg/L
NAPIS-3	4/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	4/9/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
NAPIS-3	4/9/2019	Thallium, Dissolved	0.00005	0.0005	0.000048	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	4/9/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
NAPIS-3	4/9/2019	Aluminum, Total	0.26	0.02	0.001051	19914000	mg/L
NAPIS-3	4/9/2019	Antimony, Total	0.00016	0.001	0.000157	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
NAPIS-3	4/9/2019	Barium, Total	0.12	0.002	0.000488	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
NAPIS-3	4/9/2019	Boron, Total	1.6	0.2	0.009104	3949	mg/L
NAPIS-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
NAPIS-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
NAPIS-3	4/9/2019	Copper, Total	0.0047	0.006	0.004072	790000	mg/L
NAPIS-3	4/9/2019	Iron, Total	0.19	0.02	0.006053	13822000	mg/L
NAPIS-3	4/9/2019	Lead, Total	0.00045	0.0005	0.000026	15000	mg/L
NAPIS-3	4/9/2019	Manganese, Total	0.21	0.002	0.00006	2017000	mg/L
NAPIS-3	4/9/2019	Molybdenum, Total	0.004	0.008	0.002075	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Total	0.018	0.01	0.001491	372000	mg/L
NAPIS-3	4/9/2019	Selenium, Total	0.0045	0.001	0.000478	50000	mg/L
NAPIS-3	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Total	0.023	0.0005	0.000085	30000	mg/L
NAPIS-3	4/9/2019	Zinc, Total	0.0098	0.01	0.005772	5960000	mg/L
NAPIS-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
NAPIS-3	4/9/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	4/9/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
NAPIS-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	4/9/2019	Calcium, Dissolved	25	1	0.061889	NA	mg/L
NAPIS-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	4/9/2019	Copper, Dissolved	0.0073	0.006	0.001296	790000	mg/L
NAPIS-3	4/9/2019	Iron, Dissolved	0.013	0.02	0.008747	13821880	mg/L
NAPIS-3	4/9/2019	Lead, Dissolved	0.00019	0.0005	0.000055	NA	mg/L
NAPIS-3	4/9/2019	Magnesium, Dissolved	4.4	1	0.05029	NA	mg/L
NAPIS-3	4/9/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
NAPIS-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
NAPIS-3	4/9/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
NAPIS-3	4/9/2019	Selenium, Dissolved	0.0037	0.001	0.000171	50000	mg/L
NAPIS-3	4/9/2019	Silver, Dissolved	0.0013	0.005	0.000942	81200	mg/L
NAPIS-3	4/9/2019	Sodium, Dissolved	620	10	4.161763	NA	mg/L
NAPIS-3	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	4/9/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
NAPIS-3	4/9/2019	Aluminum, Total	0.14	0.02	0.001051	19914000	mg/L
NAPIS-3	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
NAPIS-3	4/9/2019	Barium, Total	0.11	0.002	0.000488	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
NAPIS-3	4/9/2019	Boron, Total	1.6	0.2	0.009104	3949	mg/L
NAPIS-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
NAPIS-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
NAPIS-3	4/9/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-3	4/9/2019	Iron, Total	0.096	0.02	0.006053	13822000	mg/L
NAPIS-3	4/9/2019	Lead, Total	0.00032	0.0005	0.000026	15000	mg/L
NAPIS-3	4/9/2019	Manganese, Total	0.19	0.002	0.00006	2017000	mg/L
NAPIS-3	4/9/2019	Molybdenum, Total	0.0036	0.008	0.002075	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Total	0.016	0.01	0.001491	372000	mg/L
NAPIS-3	4/9/2019	Selenium, Total	0.004	0.001	0.000478	50000	mg/L
NAPIS-3	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Total	0.023	0.0005	0.000085	30000	mg/L
NAPIS-3	4/9/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
NAPIS-3	5/28/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
NAPIS-3	5/28/2019	Antimony, Dissolved	0.00078	0.001	0.000389	6000	mg/L
NAPIS-3	5/28/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
NAPIS-3	5/28/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
NAPIS-3	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	5/28/2019	Boron, Dissolved	1.9	0.2	0.022653	3949110	mg/L
NAPIS-3	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	5/28/2019	Calcium, Dissolved	21	1	0.061889	NA	mg/L
NAPIS-3	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	5/28/2019	Copper, Dissolved	0.0022	0.006	0.001296	790000	mg/L
NAPIS-3	5/28/2019	Iron, Dissolved	0.069	0.02	0.008747	13821880	mg/L
NAPIS-3	5/28/2019	Lead, Dissolved	0.00033	0.0005	0.000055	NA	mg/L
NAPIS-3	5/28/2019	Magnesium, Dissolved	3.5	1	0.05029	NA	mg/L
NAPIS-3	5/28/2019	Manganese, Dissolved	0.054	0.002	0.00029	2017400	mg/L
NAPIS-3	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	5/28/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
NAPIS-3	5/28/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	5/28/2019	Selenium, Dissolved	0.0032	0.001	0.000171	50000	mg/L
NAPIS-3	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	5/28/2019	Sodium, Dissolved	620	10	4.161763	NA	mg/L
NAPIS-3	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	5/28/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
NAPIS-3	5/28/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
NAPIS-3	5/28/2019	Aluminum, Total	9	0.4	0.049765	19914000	mg/L
NAPIS-3	5/28/2019	Antimony, Total	0.00075	0.001	0.000389	6000	mg/L
NAPIS-3	5/28/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
NAPIS-3	5/28/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
NAPIS-3	5/28/2019	Beryllium, Total	0.00064	0.002	0.000284	4000	mg/L
NAPIS-3	5/28/2019	Boron, Total	2.1	0.2	0.022653	3949	mg/L
NAPIS-3	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	5/28/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
NAPIS-3	5/28/2019	Cobalt, Total	0.0031	0.006	0.003091	5980	mg/L
NAPIS-3	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-3	5/28/2019	Iron, Total	4.4	0.1	0.043734	13822000	mg/L
NAPIS-3	5/28/2019	Lead, Total	0.0052	0.0005	0.000055	15000	mg/L
NAPIS-3	5/28/2019	Manganese, Total	0.23	0.002	0.00029	2017000	mg/L
NAPIS-3	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
NAPIS-3	5/28/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
NAPIS-3	5/28/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
NAPIS-3	5/28/2019	Selenium, Total	0.0027	0.001	0.000478	50000	mg/L
NAPIS-3	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	5/28/2019	Uranium, Total	0.037	0.0025	0.000424	30000	mg/L
NAPIS-3	5/28/2019	Zinc, Total	0.087	0.01	0.005772	5960000	mg/L
NAPIS-3	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
NAPIS-3	3/4/2020	Lead, Dissolved	0.00023	0.0005	0.000055	NA	mg/L
NAPIS-3	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	3/4/2020	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	3/4/2020	Arsenic, Dissolved	0.0012	0.005	0.0005	10000	mg/L
NAPIS-3	3/4/2020	Selenium, Dissolved	0.0036	0.005	0.00086	50000	mg/L
NAPIS-3	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
NAPIS-3	3/4/2020	Barium, Dissolved	0.092	0.002	0.00065	2000000	mg/L
NAPIS-3	3/4/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
NAPIS-3	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
NAPIS-3	3/4/2020	Calcium, Dissolved	25	1	0.062	NA	mg/L
NAPIS-3	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
NAPIS-3	3/4/2020	Copper, Dissolved	0.0032	0.006	0.0013	790000	mg/L
NAPIS-3	3/4/2020	Magnesium, Dissolved	4.6	1	0.05	NA	mg/L
NAPIS-3	3/4/2020	Nickel, Dissolved	0.014	0.01	0.004	372000	mg/L
NAPIS-3	3/4/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
NAPIS-3	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
NAPIS-3	3/4/2020	Boron, Dissolved	1.5	0.2	0.023	3949110	mg/L
NAPIS-3	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
NAPIS-3	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
NAPIS-3	3/4/2020	Manganese, Dissolved	0.19	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
NAPIS-3	3/4/2020	Zinc, Dissolved	0.019	0.01	0.0023	5960450	mg/L
NAPIS-3	3/4/2020	Sodium, Dissolved	610	10	4.2	NA	mg/L
NAPIS-3	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
NAPIS-3	3/4/2020	Arsenic, Total	0.0012	0.001	0.00031	10000	mg/L
NAPIS-3	3/4/2020	Lead, Total	0.00029	0.0005	0.000055	15000	mg/L
NAPIS-3	3/4/2020	Selenium, Total	0.0028	0.001	0.00048	50000	mg/L
NAPIS-3	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	3/4/2020	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
NAPIS-3	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-3	3/4/2020	Barium, Total	0.11	0.002	0.00065	2000000	mg/L
NAPIS-3	3/4/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
NAPIS-3	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
NAPIS-3	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
NAPIS-3	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
NAPIS-3	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	3/4/2020	Iron, Total	0.037	0.02	0.0087	13822000	mg/L
NAPIS-3	3/4/2020	Manganese, Total	0.22	0.002	0.00029	2017000	mg/L
NAPIS-3	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
NAPIS-3	3/4/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
NAPIS-3	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
NAPIS-3	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
NAPIS-3	3/4/2020	Boron, Total	1.7	0.4	0.045	3949	mg/L
NAPIS-3	3/4/2020	Aluminum, Total	0.028	0.02	0.0025	19914000	mg/L
NAPIS-3	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
NAPIS-3	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
NAPIS-3	12/17/2020	Arsenic, Total Recoverable	4.22	1	0.286	10	ug/L
NAPIS-3	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
NAPIS-3	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
NAPIS-3	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
NAPIS-3	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
NAPIS-3	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
NAPIS-3	12/17/2020	Arsenic, Dissolved	3.07	1	0.286	10	ug/L
NAPIS-3	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
NAPIS-3	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
NAPIS-3	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
NAPIS-3	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
NAPIS-3	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
NAPIS-3	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
NAPIS-3	12/17/2020	Aluminum, Total	0.364	0.2	0.051	19914000	mg/L
NAPIS-3	12/17/2020	Calcium, Total	108	0.5	0.084	NA	mg/L
NAPIS-3	12/17/2020	Boron, Total	0.676	0.1	0.022	3949	mg/L
NAPIS-3	12/17/2020	Barium, Total	2.23	0.01	0.003	2000000	mg/L
NAPIS-3	12/17/2020	Potassium, Total	ND	1	0.34	NA	mg/L
NAPIS-3	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
NAPIS-3	12/17/2020	Magnesium, Total	19.1	0.5	0.12	NA	mg/L
NAPIS-3	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
NAPIS-3	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
NAPIS-3	12/17/2020	Sodium, Total	339	2	0.92	NA	mg/L
NAPIS-3	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
NAPIS-3	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
NAPIS-3	12/17/2020	Iron, Total	2.05	0.2	0.075	13822000	mg/L
NAPIS-3	12/17/2020	Manganese, Total	1.61	0.01	0.003	2017000	mg/L
NAPIS-3	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
NAPIS-3	12/17/2020	Nickel, Total	0.0226	0.006	0.003	372000	mg/L
NAPIS-3	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
NAPIS-3	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
NAPIS-3	12/17/2020	Barium, Dissolved	2.17	0.01	0.003	2000000	mg/L
NAPIS-3	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
NAPIS-3	12/17/2020	Boron, Dissolved	0.688	0.1	0.022	3949110	mg/L
NAPIS-3	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
NAPIS-3	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
NAPIS-3	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
NAPIS-3	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
NAPIS-3	12/17/2020	Iron, Dissolved	0.329	0.2	0.075	13821880	mg/L
NAPIS-3	12/17/2020	Manganese, Dissolved	1.55	0.01	0.003	2017400	mg/L
NAPIS-3	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
NAPIS-3	12/17/2020	Nickel, Dissolved	0.0362	0.006	0.003	372000	mg/L
NAPIS-3	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/17/2020	Zinc, Dissolved	0.0641	0.02	0.008	5960450	mg/L
NAPIS-3	9/22/2020	Arsenic, Dissolved	0.0009	0.001	0.00021	10000	mg/L
NAPIS-3	9/22/2020	Lead, Dissolved	0.00019	0.0005	0.000034	NA	mg/L
NAPIS-3	9/22/2020	Selenium, Dissolved	0.0013	0.001	0.00066	50000	mg/L
NAPIS-3	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
NAPIS-3	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
NAPIS-3	9/22/2020	Uranium, Dissolved	0.022	0.0025	0.00033	NA	mg/L
NAPIS-3	9/22/2020	Boron, Dissolved	1.3	0.2	0.033	3949110	mg/L
NAPIS-3	9/22/2020	Sodium, Dissolved	540	50	6.9	NA	mg/L
NAPIS-3	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
NAPIS-3	9/22/2020	Barium, Dissolved	0.094	0.002	0.0011	2000000	mg/L
NAPIS-3	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
NAPIS-3	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
NAPIS-3	9/22/2020	Calcium, Dissolved	22	1	0.11	NA	mg/L
NAPIS-3	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
NAPIS-3	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
NAPIS-3	9/22/2020	Iron, Dissolved	0.03	0.02	0.01	13821880	mg/L
NAPIS-3	9/22/2020	Magnesium, Dissolved	4	1	0.067	NA	mg/L
NAPIS-3	9/22/2020	Manganese, Dissolved	0.26	0.002	0.00058	2017400	mg/L
NAPIS-3	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
NAPIS-3	9/22/2020	Nickel, Dissolved	0.019	0.01	0.0033	372000	mg/L
NAPIS-3	9/22/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
NAPIS-3	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
NAPIS-3	9/22/2020	Zinc, Dissolved	0.0092	0.01	0.006	5960450	mg/L
NAPIS-3	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
NAPIS-3	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
NAPIS-3	9/22/2020	Arsenic, Total	0.00063	0.001	0.00026	10000	mg/L
NAPIS-3	9/22/2020	Lead, Total	0.00043	0.0005	0.000034	15000	mg/L
NAPIS-3	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
NAPIS-3	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-3	9/22/2020	Aluminum, Total	0.19	0.02	0.0074	19914000	mg/L
NAPIS-3	9/22/2020	Barium, Total	0.1	0.003	0.0016	2000000	mg/L
NAPIS-3	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
NAPIS-3	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-3	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
NAPIS-3	9/22/2020	Iron, Total	0.32	0.05	0.013	13822000	mg/L
NAPIS-3	9/22/2020	Manganese, Total	0.25	0.002	0.00081	2017000	mg/L
NAPIS-3	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
NAPIS-3	9/22/2020	Zinc, Total	0.008	0.01	0.0064	5960000	mg/L
NAPIS-3	9/22/2020	Copper, Total	0.0048	0.006	0.0047	790000	mg/L
NAPIS-3	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
NAPIS-3	9/22/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
NAPIS-3	9/22/2020	Nickel, Total	0.02	0.01	0.0033	372000	mg/L
NAPIS-3	9/22/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
NAPIS-3	9/22/2020	Uranium, Total	0.02	0.0025	0.00033	30000	mg/L
NAPIS-3	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
NAPIS-3	3/20/2012	Arsenic, Total	0.006	0.0025	0.0014	10000	mg/L
NAPIS-3	3/20/2012	Barium, Total	0.16	0.002	0.0006	2000000	mg/L
NAPIS-3	3/20/2012	Calcium, Total	40	1	0.026	NA	mg/L
NAPIS-3	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
NAPIS-3	3/20/2012	Chromium, Total	0.017	0.006	0.001	50000	mg/L
NAPIS-3	3/20/2012	Copper, Total	0.0083	0.006	0.00066	790000	mg/L
NAPIS-3	3/20/2012	Iron, Total	5.5	0.2	0.13	13822000	mg/L
NAPIS-3	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	3/20/2012	Potassium, Total	3.9	1	0.48	NA	mg/L
NAPIS-3	3/20/2012	Magnesium, Total	6.4	1	0.013	NA	mg/L
NAPIS-3	3/20/2012	Manganese, Total	0.12	0.002	0.00012	2017000	mg/L
NAPIS-3	3/20/2012	Sodium, Total	920	10	0.45	NA	mg/L
NAPIS-3	3/20/2012	Lead, Total	0.0082	0.005	0.0014	15000	mg/L
NAPIS-3	3/20/2012	Selenium, Total	0.017	0.0025	0.0025	50000	mg/L
NAPIS-3	3/20/2012	Uranium, Total	0.038	0.0025	0.00003	30000	mg/L
NAPIS-3	3/20/2012	Zinc, Total	0.22	0.01	0.0011	5960000	mg/L
NAPIS-3	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	6/12/2012	Arsenic, Total	0.0051	0.0025	0.0014	10000	mg/L
NAPIS-3	6/12/2012	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
NAPIS-3	6/12/2012	Calcium, Total	37	1	0.026	NA	mg/L
NAPIS-3	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	6/12/2012	Chromium, Total	0.0075	0.006	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	6/12/2012	Iron, Total	2.4	0.1	0.066	13822000	mg/L
NAPIS-3	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
NAPIS-3	6/12/2012	Potassium, Total	3.7	1	0.48	NA	mg/L
NAPIS-3	6/12/2012	Magnesium, Total	6.2	1	0.013	NA	mg/L
NAPIS-3	6/12/2012	Manganese, Total	0.082	0.002	0.00026	2017000	mg/L
NAPIS-3	6/12/2012	Sodium, Total	870	10	0.45	NA	mg/L
NAPIS-3	6/12/2012	Lead, Total	0.0052	0.005	0.0014	15000	mg/L
NAPIS-3	6/12/2012	Selenium, Total	0.017	0.0025	0.0025	50000	mg/L
NAPIS-3	6/12/2012	Uranium, Total	0.041	0.0025	0.00003	30000	mg/L
NAPIS-3	6/12/2012	Zinc, Total	0.057	0.01	0.0011	5960000	mg/L
NAPIS-3	10/2/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
NAPIS-3	10/2/2012	Arsenic, Total	0.004	0.001	0.00011	10000	mg/L
NAPIS-3	10/2/2012	Barium, Total	0.11	0.002	0.00031	2000000	mg/L
NAPIS-3	10/2/2012	Calcium, Total	51	1	0.026	NA	mg/L
NAPIS-3	10/2/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
NAPIS-3	10/2/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
NAPIS-3	10/2/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
NAPIS-3	10/2/2012	Iron, Total	3.2	0.1	0.0096	13822000	mg/L
NAPIS-3	10/2/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	10/2/2012	Potassium, Total	4	1	0.48	NA	mg/L
NAPIS-3	10/2/2012	Magnesium, Total	7.5	1	0.013	NA	mg/L
NAPIS-3	10/2/2012	Manganese, Total	0.14	0.002	0.00062	2017000	mg/L
NAPIS-3	10/2/2012	Sodium, Total	890	10	0.45	NA	mg/L
NAPIS-3	10/2/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
NAPIS-3	10/2/2012	Selenium, Total	0.013	0.001	0.00033	50000	mg/L
NAPIS-3	10/2/2012	Uranium, Total	0.038	0.001	0.00006	30000	mg/L
NAPIS-3	10/2/2012	Zinc, Total	0.035	0.01	0.00062	5960000	mg/L
NAPIS-3	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	11/28/2012	Arsenic, Total	0.0048	0.0025	0.0014	10000	mg/L
NAPIS-3	11/28/2012	Barium, Total	0.57	0.002	0.00039	2000000	mg/L
NAPIS-3	11/28/2012	Calcium, Total	84	1	0.026	NA	mg/L
NAPIS-3	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	11/28/2012	Chromium, Total	0.018	0.006	0.001	50000	mg/L
NAPIS-3	11/28/2012	Copper, Total	0.018	0.006	0.0041	790000	mg/L
NAPIS-3	11/28/2012	Iron, Total	9.9	0.2	0.13	13822000	mg/L
NAPIS-3	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	11/28/2012	Potassium, Total	4.9	1	0.48	NA	mg/L
NAPIS-3	11/28/2012	Magnesium, Total	11	1	0.013	NA	mg/L
NAPIS-3	11/28/2012	Manganese, Total	0.46	0.002	0.00026	2017000	mg/L
NAPIS-3	11/28/2012	Sodium, Total	930	20	0.89	NA	mg/L
NAPIS-3	11/28/2012	Lead, Total	0.01	0.001	0.00002	15000	mg/L
NAPIS-3	11/28/2012	Selenium, Total	0.0097	0.0025	0.0025	50000	mg/L
NAPIS-3	11/28/2012	Uranium, Total	0.04	0.0025	0.00003	30000	mg/L
NAPIS-3	11/28/2012	Zinc, Total	0.12	0.01	0.0011	5960000	mg/L
NAPIS-3	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	3/18/2013	Arsenic, Total	0.016	0.0025	0.00042	10000	mg/L
NAPIS-3	3/18/2013	Barium, Total	3.8	0.02	0.0039	2000000	mg/L
NAPIS-3	3/18/2013	Calcium, Total	48	1	0.069	NA	mg/L
NAPIS-3	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	3/18/2013	Chromium, Total	0.13	0.006	0.001	50000	mg/L
NAPIS-3	3/18/2013	Copper, Total	0.16	0.006	0.0041	790000	mg/L
NAPIS-3	3/18/2013	Iron, Total	62	2	1.3	13822000	mg/L
NAPIS-3	3/18/2013	Mercury, Total	0.0016	0.0002	0.000089	2000	mg/L
NAPIS-3	3/18/2013	Potassium, Total	5.4	1	0.39	NA	mg/L
NAPIS-3	3/18/2013	Magnesium, Total	7.8	1	0.028	NA	mg/L
NAPIS-3	3/18/2013	Manganese, Total	3.8	0.01	0.0013	2017000	mg/L
NAPIS-3	3/18/2013	Sodium, Total	810	10	2.2	NA	mg/L
NAPIS-3	3/18/2013	Lead, Total	0.097	0.025	0.0072	15000	mg/L
NAPIS-3	3/18/2013	Selenium, Total	0.0089	0.0025	0.00066	50000	mg/L
NAPIS-3	3/18/2013	Uranium, Total	0.052	0.0025	0.0012	30000	mg/L
NAPIS-3	3/18/2013	Zinc, Total	1.1	0.05	0.0057	5960000	mg/L
NAPIS-3	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
NAPIS-3	6/12/2013	Arsenic, Total	0.0064	0.001	0.00027	10000	mg/L
NAPIS-3	6/12/2013	Barium, Total	0.85	0.002	0.00057	2000000	mg/L
NAPIS-3	6/12/2013	Calcium, Total	48	1	0.069	NA	mg/L
NAPIS-3	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
NAPIS-3	6/12/2013	Chromium, Total	0.036	0.006	0.0021	50000	mg/L
NAPIS-3	6/12/2013	Copper, Total	0.03	0.006	0.005	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2013	Iron, Total	15	0.4	0.1	13822000	mg/L
NAPIS-3	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	6/12/2013	Potassium, Total	5.4	1	0.24	NA	mg/L
NAPIS-3	6/12/2013	Magnesium, Total	6.7	1	0.028	NA	mg/L
NAPIS-3	6/12/2013	Manganese, Total	0.57	0.002	0.00052	2017000	mg/L
NAPIS-3	6/12/2013	Sodium, Total	900	20	6.5	NA	mg/L
NAPIS-3	6/12/2013	Lead, Total	0.0014	0.001	0.0000075	15000	mg/L
NAPIS-3	6/12/2013	Selenium, Total	0.016	0.001	0.00049	50000	mg/L
NAPIS-3	6/12/2013	Uranium, Total	0.039	0.001	0.0005	30000	mg/L
NAPIS-3	6/12/2013	Zinc, Total	0.26	0.01	0.0011	5960000	mg/L
NAPIS-3	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-3	9/3/2013	Arsenic, Total	0.0063	0.001	0.000098	10000	mg/L
NAPIS-3	9/3/2013	Barium, Total	0.058	0.002	0.00095	2000000	mg/L
NAPIS-3	9/3/2013	Calcium, Total	43	1	0.069	NA	mg/L
NAPIS-3	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-3	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-3	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-3	9/3/2013	Iron, Total	0.17	0.02	0.0089	13822000	mg/L
NAPIS-3	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	9/3/2013	Potassium, Total	2.9	1	0.24	NA	mg/L
NAPIS-3	9/3/2013	Magnesium, Total	6.8	1	0.028	NA	mg/L
NAPIS-3	9/3/2013	Manganese, Total	0.0075	0.002	0.00016	2017000	mg/L
NAPIS-3	9/3/2013	Sodium, Total	950	20	6.5	NA	mg/L
NAPIS-3	9/3/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	9/3/2013	Selenium, Total	0.023	0.01	0.0029	50000	mg/L
NAPIS-3	9/3/2013	Uranium, Total	0.041	0.001	0.0000073	30000	mg/L
NAPIS-3	9/3/2013	Zinc, Total	0.028	0.01	0.00076	5960000	mg/L
NAPIS-3	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-3	11/12/2013	Arsenic, Total	0.0076	0.001	0.000098	10000	mg/L
NAPIS-3	11/12/2013	Barium, Total	0.055	0.002	0.00095	2000000	mg/L
NAPIS-3	11/12/2013	Calcium, Total	37	1	0.069	NA	mg/L
NAPIS-3	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-3	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-3	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-3	11/12/2013	Iron, Total	0.15	0.02	0.0089	13822000	mg/L
NAPIS-3	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	11/12/2013	Potassium, Total	4.5	1	0.24	NA	mg/L
NAPIS-3	11/12/2013	Magnesium, Total	5.8	1	0.028	NA	mg/L
NAPIS-3	11/12/2013	Manganese, Total	0.0047	0.002	0.00016	2017000	mg/L
NAPIS-3	11/12/2013	Sodium, Total	820	10	3.3	NA	mg/L
NAPIS-3	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	11/12/2013	Selenium, Total	0.029	0.001	0.00029	50000	mg/L
NAPIS-3	11/12/2013	Uranium, Total	0.036	0.001	0.0000073	30000	mg/L
NAPIS-3	11/12/2013	Zinc, Total	0.024	0.01	0.00076	5960000	mg/L
NAPIS-3	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-3	3/10/2014	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
NAPIS-3	3/10/2014	Barium, Total	0.053	0.002	0.0011	2000000	mg/L
NAPIS-3	3/10/2014	Calcium, Total	40	1	0.082	NA	mg/L
NAPIS-3	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-3	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-3	3/10/2014	Iron, Total	0.24	0.02	0.0062	13822000	mg/L
NAPIS-3	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	3/10/2014	Potassium, Total	3.5	1	0.093	NA	mg/L
NAPIS-3	3/10/2014	Magnesium, Total	6.5	1	0.018	NA	mg/L
NAPIS-3	3/10/2014	Manganese, Total	0.0073	0.002	0.00055	2017000	mg/L
NAPIS-3	3/10/2014	Sodium, Total	890	10	3.9	NA	mg/L
NAPIS-3	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	3/10/2014	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
NAPIS-3	3/10/2014	Uranium, Total	0.039	0.001	0.0000073	30000	mg/L
NAPIS-3	3/10/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
NAPIS-3	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-3	6/5/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
NAPIS-3	6/5/2014	Barium, Total	0.094	0.002	0.0011	2000000	mg/L
NAPIS-3	6/5/2014	Calcium, Total	55	1	0.053	NA	mg/L
NAPIS-3	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	6/5/2014	Chromium, Total	0.0073	0.006	0.0021	50000	mg/L
NAPIS-3	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-3	6/5/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	6/5/2014	Potassium, Total	9.8	1	0.24	NA	mg/L
NAPIS-3	6/5/2014	Magnesium, Total	9	1	0.024	NA	mg/L
NAPIS-3	6/5/2014	Manganese, Total	0.058	0.002	0.00055	2017000	mg/L
NAPIS-3	6/5/2014	Sodium, Total	920	10	2.5	NA	mg/L
NAPIS-3	6/5/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
NAPIS-3	6/5/2014	Selenium, Total	0.045	0.01	0.0015	50000	mg/L
NAPIS-3	6/5/2014	Uranium, Total	0.034	0.01	0.0005	30000	mg/L
NAPIS-3	6/5/2014	Zinc, Total	0.07	0.01	0.0014	5960000	mg/L
NAPIS-3	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	11/13/2014	Potassium, Total	3	1	0.093	NA	mg/L
NAPIS-3	11/13/2014	Magnesium, Total	6.1	1	0.018	NA	mg/L
NAPIS-3	11/13/2014	Manganese, Total	0.07	0.002	0.00049	2017000	mg/L
NAPIS-3	11/13/2014	Sodium, Total	880	20	7.8	NA	mg/L
NAPIS-3	11/13/2014	Lead, Total	0.0034	0.001	0.00026	15000	mg/L
NAPIS-3	11/13/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
NAPIS-3	11/13/2014	Uranium, Total	0.039	0.001	0.0000072	30000	mg/L
NAPIS-3	11/13/2014	Zinc, Total	0.063	0.01	0.0035	5960000	mg/L
NAPIS-3	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-3	9/11/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
NAPIS-3	9/11/2014	Barium, Total	0.22	0.002	0.0005	2000000	mg/L
NAPIS-3	9/11/2014	Calcium, Total	63	1	0.082	NA	mg/L
NAPIS-3	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-3	9/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-3	9/11/2014	Iron, Total	0.14	0.02	0.0072	13822000	mg/L
NAPIS-3	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	9/11/2014	Potassium, Total	1.6	1	0.093	NA	mg/L
NAPIS-3	9/11/2014	Magnesium, Total	10	1	0.018	NA	mg/L
NAPIS-3	9/11/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
NAPIS-3	9/11/2014	Sodium, Total	300	10	3.9	NA	mg/L
NAPIS-3	9/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
NAPIS-3	9/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
NAPIS-3	9/11/2014	Uranium, Total	0.019	0.001	0.0000072	30000	mg/L
NAPIS-3	9/11/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
NAPIS-3	11/13/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-3	11/13/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
NAPIS-3	11/13/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
NAPIS-3	11/13/2014	Calcium, Total	37	1	0.082	NA	mg/L
NAPIS-3	11/13/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	11/13/2014	Chromium, Total	0.01	0.006	0.0028	50000	mg/L
NAPIS-3	11/13/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-3	11/13/2014	Iron, Total	2.1	0.1	0.036	13822000	mg/L
NAPIS-3	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	3/10/2015	Arsenic, Total	ND	0.02	0.0088	10000	mg/L
NAPIS-3	3/10/2015	Barium, Total	0.1	0.002	0.00073	2000000	mg/L
NAPIS-3	3/10/2015	Calcium, Total	42	1	0.057	NA	mg/L
NAPIS-3	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
NAPIS-3	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-3	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	3/10/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
NAPIS-3	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	3/10/2015	Potassium, Total	4.6	1	0.18	NA	mg/L
NAPIS-3	3/10/2015	Magnesium, Total	6.5	1	0.039	NA	mg/L
NAPIS-3	3/10/2015	Manganese, Total	0.26	0.002	0.0015	2017000	mg/L
NAPIS-3	3/10/2015	Sodium, Total	910	20	1.4	NA	mg/L
NAPIS-3	3/10/2015	Lead, Total	0.0015	0.001	0.000069	15000	mg/L
NAPIS-3	3/10/2015	Selenium, Total	ND	0.05	0.0061	50000	mg/L
NAPIS-3	3/10/2015	Uranium, Total	0.042	0.001	0.0000081	30000	mg/L
NAPIS-3	3/10/2015	Zinc, Total	0.018	0.01	0.0036	5960000	mg/L
NAPIS-3	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	6/2/2015	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
NAPIS-3	6/2/2015	Calcium, Total	36	1	0.057	NA	mg/L
NAPIS-3	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	6/2/2015	Chromium, Total	0.0066	0.006	0.0022	50000	mg/L
NAPIS-3	6/2/2015	Copper, Total	0.0075	0.006	0.0051	790000	mg/L
NAPIS-3	6/2/2015	Iron, Total	1.4	0.1	0.036	13822000	mg/L
NAPIS-3	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/2/2015	Potassium, Total	7.7	1	0.18	NA	mg/L
NAPIS-3	6/2/2015	Magnesium, Total	6.3	1	0.039	NA	mg/L
NAPIS-3	6/2/2015	Manganese, Total	0.08	0.002	0.0015	2017000	mg/L
NAPIS-3	6/2/2015	Sodium, Total	880	20	1.4	NA	mg/L
NAPIS-3	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
NAPIS-3	6/2/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
NAPIS-3	6/2/2015	Uranium, Total	0.038	0.005	0.000049	30000	mg/L
NAPIS-3	6/2/2015	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
NAPIS-3	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	8/11/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	8/11/2015	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
NAPIS-3	8/11/2015	Calcium, Total	33	1	0.057	NA	mg/L
NAPIS-3	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	8/11/2015	Chromium, Total	0.0095	0.006	0.0022	50000	mg/L
NAPIS-3	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	8/11/2015	Iron, Total	2.2	0.1	0.036	13822000	mg/L
NAPIS-3	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	8/11/2015	Potassium, Total	3	1	0.18	NA	mg/L
NAPIS-3	8/11/2015	Magnesium, Total	5.5	1	0.039	NA	mg/L
NAPIS-3	8/11/2015	Manganese, Total	0.081	0.002	0.0015	2017000	mg/L
NAPIS-3	8/11/2015	Sodium, Total	940	10	0.72	NA	mg/L
NAPIS-3	8/11/2015	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
NAPIS-3	8/11/2015	Selenium, Total	0.019	0.01	0.0012	50000	mg/L
NAPIS-3	8/11/2015	Uranium, Total	0.038	0.005	0.000049	30000	mg/L
NAPIS-3	8/11/2015	Zinc, Total	0.07	0.01	0.0039	5960000	mg/L
NAPIS-3	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	10/28/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	10/28/2015	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
NAPIS-3	10/28/2015	Calcium, Total	41	1	0.057	NA	mg/L
NAPIS-3	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-3	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	10/28/2015	Iron, Total	1.6	0.1	0.036	13822000	mg/L
NAPIS-3	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	10/28/2015	Potassium, Total	3.9	1	0.18	NA	mg/L
NAPIS-3	10/28/2015	Magnesium, Total	6.6	1	0.039	NA	mg/L
NAPIS-3	10/28/2015	Manganese, Total	0.093	0.002	0.0015	2017000	mg/L
NAPIS-3	10/28/2015	Sodium, Total	730	10	0.72	NA	mg/L
NAPIS-3	10/28/2015	Lead, Total	0.0019	0.0005	0.000047	15000	mg/L
NAPIS-3	10/28/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
NAPIS-3	10/28/2015	Uranium, Total	0.039	0.0025	0.000025	30000	mg/L
NAPIS-3	10/28/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
NAPIS-3	3/1/2016	Calcium, Total	35	1	0.26	NA	mg/L
NAPIS-3	3/1/2016	Potassium, Total	3.4	1	0.18	NA	mg/L
NAPIS-3	3/1/2016	Magnesium, Total	5.3	1	0.013	NA	mg/L
NAPIS-3	3/1/2016	Sodium, Total	850	10	0.96	NA	mg/L
NAPIS-3	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	6/7/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
NAPIS-3	6/7/2016	Barium, Total	0.27	0.002	0.0011	2000000	mg/L
NAPIS-3	6/7/2016	Calcium, Total	32	1	0.26	NA	mg/L
NAPIS-3	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	6/7/2016	Chromium, Total	0.019	0.006	0.0022	50000	mg/L
NAPIS-3	6/7/2016	Copper, Total	0.011	0.006	0.0051	790000	mg/L
NAPIS-3	6/7/2016	Iron, Total	6.8	0.2	0.072	13822000	mg/L
NAPIS-3	6/7/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
NAPIS-3	6/7/2016	Potassium, Total	3.2	1	0.18	NA	mg/L
NAPIS-3	6/7/2016	Magnesium, Total	4.7	1	0.013	NA	mg/L
NAPIS-3	6/7/2016	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
NAPIS-3	6/7/2016	Sodium, Total	780	10	0.96	NA	mg/L
NAPIS-3	6/7/2016	Lead, Total	0.011	0.0005	0.000047	15000	mg/L
NAPIS-3	6/7/2016	Selenium, Total	0.017	0.05	0.0062	50000	mg/L
NAPIS-3	6/7/2016	Uranium, Total	0.039	0.0025	0.000025	30000	mg/L
NAPIS-3	6/7/2016	Zinc, Total	0.2	0.01	0.0039	5960000	mg/L
NAPIS-3	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	9/1/2016	Arsenic, Total	0.0048	0.01	0.0021	10000	mg/L
NAPIS-3	9/1/2016	Barium, Total	0.98	0.002	0.00079	2000000	mg/L
NAPIS-3	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	9/1/2016	Chromium, Total	0.025	0.006	0.0027	50000	mg/L
NAPIS-3	9/1/2016	Copper, Total	0.03	0.006	0.003	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-3	9/1/2016	Arsenic, Dissolved	0.0039	0.02	0.0028	10000	mg/L
NAPIS-3	9/1/2016	Barium, Dissolved	0.13	0.002	0.0013	2000000	mg/L
NAPIS-3	9/1/2016	Calcium, Dissolved	23	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-3	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-3	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-3	9/1/2016	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
NAPIS-3	9/1/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Magnesium, Dissolved	3	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
NAPIS-3	9/1/2016	Sodium, Dissolved	440	5	2.5	NA	mg/L
NAPIS-3	9/1/2016	Lead, Dissolved	0.001	0.0025	0.00084	NA	mg/L
NAPIS-3	9/1/2016	Selenium, Dissolved	0.0096	0.02	0.0042	50000	mg/L
NAPIS-3	9/1/2016	Uranium, Dissolved	0.023	0.0025	0.00026	NA	mg/L
NAPIS-3	9/1/2016	Zinc, Dissolved	0.047	0.01	0.0028	5960450	mg/L
NAPIS-3	9/1/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
NAPIS-3	9/1/2016	Manganese, Total	0.96	0.002	0.00027	2017000	mg/L
NAPIS-3	9/1/2016	Lead, Total	0.025	0.0005	0.000081	15000	mg/L
NAPIS-3	9/1/2016	Selenium, Total	0.0086	0.01	0.0019	50000	mg/L
NAPIS-3	9/1/2016	Uranium, Total	0.029	0.0025	0.00087	30000	mg/L
NAPIS-3	9/1/2016	Zinc, Total	0.15	0.01	0.0027	5960000	mg/L
NAPIS-3	11/14/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	11/14/2016	Arsenic, Total	0.011	0.005	0.0011	10000	mg/L
NAPIS-3	11/14/2016	Barium, Total	3	0.01	0.004	2000000	mg/L
NAPIS-3	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	11/14/2016	Chromium, Total	0.078	0.006	0.0027	50000	mg/L
NAPIS-3	11/14/2016	Copper, Total	0.11	0.006	0.003	790000	mg/L
NAPIS-3	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-3	11/14/2016	Arsenic, Dissolved	0.007	0.02	0.0028	10000	mg/L
NAPIS-3	11/14/2016	Barium, Dissolved	0.16	0.002	0.0013	2000000	mg/L
NAPIS-3	11/14/2016	Calcium, Dissolved	45	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-3	11/14/2016	Chromium, Dissolved	0.0031	0.006	0.0018	100000	mg/L
NAPIS-3	11/14/2016	Copper, Dissolved	0.008	0.006	0.004	790000	mg/L
NAPIS-3	11/14/2016	Iron, Dissolved	1.4	0.1	0.1	13821880	mg/L
NAPIS-3	11/14/2016	Potassium, Dissolved	3.1	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Magnesium, Dissolved	4.5	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Manganese, Dissolved	0.36	0.002	0.00032	2017400	mg/L
NAPIS-3	11/14/2016	Sodium, Dissolved	570	10	5	NA	mg/L
NAPIS-3	11/14/2016	Lead, Dissolved	0.0063	0.0005	0.00017	NA	mg/L
NAPIS-3	11/14/2016	Selenium, Dissolved	0.016	0.005	0.0011	50000	mg/L
NAPIS-3	11/14/2016	Uranium, Dissolved	0.034	0.0025	0.00026	NA	mg/L
NAPIS-3	11/14/2016	Zinc, Dissolved	0.047	0.01	0.0028	5960450	mg/L
NAPIS-3	11/14/2016	Iron, Total	29	1	1	13822000	mg/L
NAPIS-3	11/14/2016	Mercury, Total	0.00077	0.0002	0.000053	2000	mg/L
NAPIS-3	11/14/2016	Manganese, Total	2.9	0.01	0.0014	2017000	mg/L
NAPIS-3	11/14/2016	Lead, Total	0.079	0.0025	0.00041	15000	mg/L
NAPIS-3	11/14/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
NAPIS-3	11/14/2016	Uranium, Total	0.041	0.0025	0.00087	30000	mg/L
NAPIS-3	11/14/2016	Zinc, Total	0.56	0.01	0.0027	5960000	mg/L
NAPIS-3	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	2/21/2017	Arsenic, Total	0.0052	0.01	0.0021	10000	mg/L
NAPIS-3	2/21/2017	Barium, Total	0.6	0.002	0.00079	2000000	mg/L
NAPIS-3	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	2/21/2017	Chromium, Total	0.025	0.006	0.0027	50000	mg/L
NAPIS-3	2/21/2017	Copper, Total	0.026	0.006	0.003	790000	mg/L
NAPIS-3	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-3	2/21/2017	Arsenic, Dissolved	0.0039	0.005	0.00069	10000	mg/L
NAPIS-3	2/21/2017	Barium, Dissolved	0.089	0.002	0.00085	2000000	mg/L
NAPIS-3	2/21/2017	Calcium, Dissolved	19	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	2/21/2017	Chromium, Dissolved	0.0015	0.006	0.001	100000	mg/L
NAPIS-3	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	2/21/2017	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
NAPIS-3	2/21/2017	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Magnesium, Dissolved	2.5	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
NAPIS-3	2/21/2017	Sodium, Dissolved	490	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
NAPIS-3	2/21/2017	Selenium, Dissolved	0.0083	0.01	0.0021	50000	mg/L
NAPIS-3	2/21/2017	Zinc, Dissolved	0.027	0.01	0.0011	5960450	mg/L
NAPIS-3	2/21/2017	Iron, Total	7.2	0.4	0.4	13822000	mg/L
NAPIS-3	2/21/2017	Mercury, Total	0.00015	0.0002	0.000053	2000	mg/L
NAPIS-3	2/21/2017	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
NAPIS-3	2/21/2017	Lead, Total	0.014	0.0005	0.000081	15000	mg/L
NAPIS-3	2/21/2017	Selenium, Total	0.0088	0.01	0.0019	50000	mg/L
NAPIS-3	2/21/2017	Zinc, Total	0.14	0.01	0.0027	5960000	mg/L
NAPIS-3	6/2/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
NAPIS-3	6/2/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
NAPIS-3	6/2/2017	Barium, Total	0.093	0.002	0.00093	2000000	mg/L
NAPIS-3	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	6/2/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
NAPIS-3	6/2/2017	Copper, Total	0.0043	0.006	0.0017	790000	mg/L
NAPIS-3	6/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-3	6/2/2017	Arsenic, Dissolved	0.0021	0.005	0.00089	10000	mg/L
NAPIS-3	6/2/2017	Barium, Dissolved	0.089	0.002	0.00085	2000000	mg/L
NAPIS-3	6/2/2017	Calcium, Dissolved	16	1	0.078	NA	mg/L
NAPIS-3	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	6/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-3	6/2/2017	Copper, Dissolved	0.0041	0.006	0.0032	790000	mg/L
NAPIS-3	6/2/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	6/2/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
NAPIS-3	6/2/2017	Magnesium, Dissolved	2.8	1	0.25	NA	mg/L
NAPIS-3	6/2/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
NAPIS-3	6/2/2017	Sodium, Dissolved	420	10	1.6	NA	mg/L
NAPIS-3	6/2/2017	Lead, Dissolved	0.00053	0.0005	0.00017	NA	mg/L
NAPIS-3	6/2/2017	Selenium, Dissolved	0.006	0.01	0.0039	50000	mg/L
NAPIS-3	6/2/2017	Uranium, Dissolved	0.029	0.0025	0.00025	NA	mg/L
NAPIS-3	6/2/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
NAPIS-3	6/2/2017	Iron, Total	0.075	0.02	0.01	13822000	mg/L
NAPIS-3	6/2/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	6/2/2017	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
NAPIS-3	6/2/2017	Lead, Total	0.00043	0.0005	0.000095	15000	mg/L
NAPIS-3	6/2/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
NAPIS-3	6/2/2017	Uranium, Total	0.03	0.0025	0.00077	30000	mg/L
NAPIS-3	6/2/2017	Zinc, Total	0.0049	0.01	0.0028	5960000	mg/L
NAPIS-3	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	9/5/2017	Arsenic, Total	0.0062	0.01	0.003	10000	mg/L
NAPIS-3	9/5/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
NAPIS-3	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	9/5/2017	Chromium, Total	0.0085	0.006	0.0018	50000	mg/L
NAPIS-3	9/5/2017	Copper, Total	0.0084	0.006	0.0017	790000	mg/L
NAPIS-3	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	9/5/2017	Arsenic, Dissolved	0.0041	0.02	0.0035	10000	mg/L
NAPIS-3	9/5/2017	Barium, Dissolved	0.082	0.002	0.00085	2000000	mg/L
NAPIS-3	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	9/5/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	9/5/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
NAPIS-3	9/5/2017	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
NAPIS-3	9/5/2017	Lead, Dissolved	0.00058	0.0005	0.00017	NA	mg/L
NAPIS-3	9/5/2017	Selenium, Dissolved	0.0093	0.02	0.0077	50000	mg/L
NAPIS-3	9/5/2017	Uranium, Dissolved	0.043	0.0025	0.00025	NA	mg/L
NAPIS-3	9/5/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
NAPIS-3	9/5/2017	Iron, Total	4.3	0.2	0.1	13822000	mg/L
NAPIS-3	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	9/5/2017	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
NAPIS-3	9/5/2017	Lead, Total	0.005	0.0005	0.000095	15000	mg/L
NAPIS-3	9/5/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
NAPIS-3	9/5/2017	Uranium, Total	0.041	0.0025	0.00077	30000	mg/L
NAPIS-3	9/5/2017	Zinc, Total	0.064	0.01	0.0033	5960000	mg/L
NAPIS-3	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	12/4/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
NAPIS-3	12/4/2017	Barium, Total	0.099	0.002	0.001	2000000	mg/L
NAPIS-3	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	12/4/2017	Copper, Total	0.0054	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	12/4/2017	Arsenic, Dissolved	ND	0.01	0.0042	10000	mg/L
NAPIS-3	12/4/2017	Barium, Dissolved	0.1	0.002	0.00099	2000000	mg/L
NAPIS-3	12/4/2017	Calcium, Dissolved	18	1	0.078	NA	mg/L
NAPIS-3	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	12/4/2017	Copper, Dissolved	0.0048	0.006	0.0032	790000	mg/L
NAPIS-3	12/4/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	12/4/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
NAPIS-3	12/4/2017	Magnesium, Dissolved	3.1	1	0.25	NA	mg/L
NAPIS-3	12/4/2017	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
NAPIS-3	12/4/2017	Sodium, Dissolved	500	5	0.82	NA	mg/L
NAPIS-3	12/4/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
NAPIS-3	12/4/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
NAPIS-3	12/4/2017	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
NAPIS-3	12/4/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
NAPIS-3	12/4/2017	Iron, Total	0.04	0.02	0.01	13822000	mg/L
NAPIS-3	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	12/4/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
NAPIS-3	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
NAPIS-3	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
NAPIS-3	12/4/2017	Uranium, Total	0.025	0.005	0.0015	30000	mg/L
NAPIS-3	12/4/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
NAPIS-3	2/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	2/9/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
NAPIS-3	2/9/2018	Barium, Total	0.095	0.002	0.001	2000000	mg/L
NAPIS-3	2/9/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
NAPIS-3	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	2/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	2/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	2/9/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
NAPIS-3	2/9/2018	Barium, Dissolved	0.097	0.002	0.00099	2000000	mg/L
NAPIS-3	2/9/2018	Calcium, Dissolved	16	1	0.078	NA	mg/L
NAPIS-3	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	2/9/2018	Copper, Dissolved	0.0049	0.006	0.0032	790000	mg/L
NAPIS-3	2/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	2/9/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
NAPIS-3	2/9/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
NAPIS-3	2/9/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
NAPIS-3	2/9/2018	Sodium, Dissolved	470	5	0.82	NA	mg/L
NAPIS-3	2/9/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
NAPIS-3	2/9/2018	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
NAPIS-3	2/9/2018	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
NAPIS-3	2/9/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
NAPIS-3	2/9/2018	Iron, Total	0.046	0.02	0.01	13822000	mg/L
NAPIS-3	2/9/2018	Mercury, Total	0.000064	0.0002	0.000037	2000	mg/L
NAPIS-3	2/9/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
NAPIS-3	2/9/2018	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
NAPIS-3	2/9/2018	Selenium, Total	0.0054	0.001	0.00098	50000	mg/L
NAPIS-3	2/9/2018	Uranium, Total	0.024	0.0025	0.00034	30000	mg/L
NAPIS-3	2/9/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
NAPIS-3	4/30/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	4/30/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
NAPIS-3	4/30/2018	Barium, Total	0.09	0.002	0.001	2000000	mg/L
NAPIS-3	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	4/30/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
NAPIS-3	4/30/2018	Barium, Dissolved	0.093	0.002	0.00099	2000000	mg/L
NAPIS-3	4/30/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
NAPIS-3	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	4/30/2018	Iron, Dissolved	0.04	0.02	0.016	13821880	mg/L
NAPIS-3	4/30/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
NAPIS-3	4/30/2018	Magnesium, Dissolved	2.6	1	0.25	NA	mg/L
NAPIS-3	4/30/2018	Manganese, Dissolved	0.14	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/30/2018	Sodium, Dissolved	500	5	0.82	NA	mg/L
NAPIS-3	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-3	4/30/2018	Selenium, Dissolved	0.0029	0.001	0.00076	50000	mg/L
NAPIS-3	4/30/2018	Uranium, Dissolved	0.022	0.0005	0.000096	NA	mg/L
NAPIS-3	4/30/2018	Zinc, Dissolved	0.0077	0.01	0.0021	5960450	mg/L
NAPIS-3	4/30/2018	Iron, Total	0.074	0.02	0.01	13822000	mg/L
NAPIS-3	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	4/30/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
NAPIS-3	4/30/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
NAPIS-3	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
NAPIS-3	4/30/2018	Uranium, Total	0.023	0.0005	0.000068	30000	mg/L
NAPIS-3	4/30/2018	Zinc, Total	0.0053	0.01	0.0033	5960000	mg/L
OAPIS-1	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OAPIS-1	12/17/2020	Aluminum, Total	0.497	0.2	0.051	19914000	mg/L
OAPIS-1	12/17/2020	Calcium, Total	134	0.5	0.084	NA	mg/L
OAPIS-1	12/17/2020	Boron, Total	1.69	0.1	0.022	3949	mg/L
OAPIS-1	12/17/2020	Barium, Total	1.01	0.01	0.003	2000000	mg/L
OAPIS-1	12/17/2020	Potassium, Total	5.53	1	0.34	NA	mg/L
OAPIS-1	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OAPIS-1	12/17/2020	Magnesium, Total	26.5	0.5	0.12	NA	mg/L
OAPIS-1	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OAPIS-1	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OAPIS-1	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OAPIS-1	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OAPIS-1	12/17/2020	Iron, Total	2.5	0.2	0.075	13822000	mg/L
OAPIS-1	12/17/2020	Manganese, Total	1.23	0.01	0.003	2017000	mg/L
OAPIS-1	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OAPIS-1	12/17/2020	Nickel, Total	0.216	0.006	0.003	372000	mg/L
OAPIS-1	12/17/2020	Zinc, Total	0.0205	0.02	0.008	5960000	mg/L
OAPIS-1	12/17/2020	Sodium, Total	1130	10	4.6	NA	mg/L
OAPIS-1	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OAPIS-1	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OAPIS-1	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OAPIS-1	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OAPIS-1	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OAPIS-1	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OAPIS-1	12/17/2020	Manganese, Dissolved	0.884	0.01	0.003	2017400	mg/L
OAPIS-1	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OAPIS-1	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OAPIS-1	12/17/2020	Zinc, Dissolved	0.0216	0.02	0.008	5960450	mg/L
OAPIS-1	12/17/2020	Barium, Dissolved	0.922	0.01	0.003	2000000	mg/L
OAPIS-1	12/17/2020	Boron, Dissolved	1.57	0.1	0.022	3949110	mg/L
OAPIS-1	12/17/2020	Iron, Dissolved	0.809	0.2	0.075	13821880	mg/L
OAPIS-1	12/17/2020	Nickel, Dissolved	0.209	0.006	0.003	372000	mg/L
OAPIS-1	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OAPIS-1	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OAPIS-1	12/17/2020	Arsenic, Total Recoverable	6.82	1	0.286	10	ug/L
OAPIS-1	12/17/2020	Lead, Total Recoverable	7.75	1	0.133	15	ug/L
OAPIS-1	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OAPIS-1	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OAPIS-1	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OAPIS-1	12/17/2020	Uranium, Total Recoverable	**45**	5	1.12	30	ug/L
OAPIS-1	12/17/2020	Arsenic, Dissolved	5.15	1	0.286	10	ug/L
OAPIS-1	12/17/2020	Lead, Dissolved	5.06	1	0.133	NA	ug/L
OAPIS-1	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OAPIS-1	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OAPIS-1	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OAPIS-1	12/17/2020	Uranium, Dissolved	51.7	5	1.12	NA	ug/L
OAPIS-1	9/22/2020	Arsenic, Dissolved	0.0058	0.005	0.001	10000	mg/L
OAPIS-1	9/22/2020	Lead, Dissolved	0.0034	0.0025	0.00017	NA	mg/L
OAPIS-1	9/22/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
OAPIS-1	9/22/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
OAPIS-1	9/22/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
OAPIS-1	9/22/2020	Uranium, Dissolved	0.069	0.0025	0.00033	NA	mg/L
OAPIS-1	9/22/2020	Boron, Dissolved	1.4	0.2	0.033	3949110	mg/L
OAPIS-1	9/22/2020	Calcium, Dissolved	150	5	0.57	NA	mg/L
OAPIS-1	9/22/2020	Sodium, Dissolved	1300	50	6.9	NA	mg/L
OAPIS-1	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OAPIS-1	9/22/2020	Barium, Dissolved	0.93	0.002	0.0011	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OAPIS-1	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OAPIS-1	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OAPIS-1	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OAPIS-1	9/22/2020	Iron, Dissolved	0.81	0.02	0.01	13821880	mg/L
OAPIS-1	9/22/2020	Magnesium, Dissolved	29	1	0.067	NA	mg/L
OAPIS-1	9/22/2020	Manganese, Dissolved	0.86	0.002	0.00058	2017400	mg/L
OAPIS-1	9/22/2020	Molybdenum, Dissolved	0.0092	0.008	0.0056	98700	mg/L
OAPIS-1	9/22/2020	Nickel, Dissolved	0.17	0.01	0.0033	372000	mg/L
OAPIS-1	9/22/2020	Potassium, Dissolved	3.9	1	0.16	NA	mg/L
OAPIS-1	9/22/2020	Silver, Dissolved	0.0023	0.005	0.0013	81200	mg/L
OAPIS-1	9/22/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OAPIS-1	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OAPIS-1	9/22/2020	Antimony, Total	0.00089	0.001	0.0007	6000	mg/L
OAPIS-1	9/22/2020	Arsenic, Total	0.0084	0.001	0.00026	10000	mg/L
OAPIS-1	9/22/2020	Lead, Total	0.0088	0.0005	0.000034	15000	mg/L
OAPIS-1	9/22/2020	Selenium, Total	0.0011	0.001	0.00066	50000	mg/L
OAPIS-1	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OAPIS-1	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OAPIS-1	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OAPIS-1	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OAPIS-1	9/22/2020	Cobalt, Total	0.0029	0.006	0.0024	5980	mg/L
OAPIS-1	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OAPIS-1	9/22/2020	Zinc, Total	0.023	0.01	0.0064	5960000	mg/L
OAPIS-1	9/22/2020	Uranium, Total	0.049	0.0025	0.00033	30000	mg/L
OAPIS-1	9/22/2020	Barium, Total	0.97	0.003	0.0016	2000000	mg/L
OAPIS-1	9/22/2020	Copper, Total	0.006	0.006	0.0047	790000	mg/L
OAPIS-1	9/22/2020	Nickel, Total	0.17	0.01	0.0033	372000	mg/L
OAPIS-1	9/22/2020	Silver, Total	0.0021	0.005	0.0013	50000	mg/L
OAPIS-1	9/22/2020	Aluminum, Total	3.9	0.1	0.037	19914000	mg/L
OAPIS-1	9/22/2020	Boron, Total	1.5	0.2	0.037	3949	mg/L
OAPIS-1	9/22/2020	Iron, Total	4.3	0.25	0.064	13822000	mg/L
OAPIS-1	9/22/2020	Manganese, Total	1.2	0.01	0.0041	2017000	mg/L
OAPIS-1	3/4/2020	Uranium, Dissolved	0.071	0.0025	0.00037	NA	mg/L
OAPIS-1	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OAPIS-1	3/4/2020	Barium, Dissolved	0.97	0.002	0.00065	2000000	mg/L
OAPIS-1	3/4/2020	Beryllium, Dissolved	0.00039	0.002	0.00028	4000	mg/L
OAPIS-1	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OAPIS-1	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OAPIS-1	3/4/2020	Copper, Dissolved	0.0018	0.006	0.0013	790000	mg/L
OAPIS-1	3/4/2020	Magnesium, Dissolved	31	1	0.05	NA	mg/L
OAPIS-1	3/4/2020	Nickel, Dissolved	0.12	0.01	0.004	372000	mg/L
OAPIS-1	3/4/2020	Potassium, Dissolved	3.7	1	0.16	NA	mg/L
OAPIS-1	3/4/2020	Silver, Dissolved	0.0027	0.005	0.00094	81200	mg/L
OAPIS-1	3/4/2020	Boron, Dissolved	1	0.2	0.023	3949110	mg/L
OAPIS-1	3/4/2020	Calcium, Dissolved	160	5	0.31	NA	mg/L
OAPIS-1	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OAPIS-1	3/4/2020	Iron, Dissolved	0.72	0.02	0.0087	13821880	mg/L
OAPIS-1	3/4/2020	Manganese, Dissolved	0.79	0.002	0.00029	2017400	mg/L
OAPIS-1	3/4/2020	Molybdenum, Dissolved	0.012	0.008	0.0067	98700	mg/L
OAPIS-1	3/4/2020	Zinc, Dissolved	0.018	0.01	0.0023	5960450	mg/L
OAPIS-1	3/4/2020	Sodium, Dissolved	1200	20	8.3	NA	mg/L
OAPIS-1	3/4/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OAPIS-1	3/4/2020	Arsenic, Dissolved	0.0053	0.005	0.0005	10000	mg/L
OAPIS-1	3/4/2020	Lead, Dissolved	0.0026	0.0025	0.00027	NA	mg/L
OAPIS-1	3/4/2020	Selenium, Dissolved	0.0016	0.005	0.00086	50000	mg/L
OAPIS-1	3/4/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OAPIS-1	3/4/2020	Uranium, Total	0.07	0.0025	0.00042	30000	mg/L
OAPIS-1	3/4/2020	Antimony, Total	0.0011	0.001	0.00039	6000	mg/L
OAPIS-1	3/4/2020	Arsenic, Total	0.0062	0.001	0.00031	10000	mg/L
OAPIS-1	3/4/2020	Lead, Total	0.0043	0.0005	0.000055	15000	mg/L
OAPIS-1	3/4/2020	Selenium, Total	0.0016	0.001	0.00048	50000	mg/L
OAPIS-1	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OAPIS-1	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OAPIS-1	3/4/2020	Aluminum, Total	0.44	0.02	0.0025	19914000	mg/L
OAPIS-1	3/4/2020	Beryllium, Total	0.00035	0.002	0.00028	4000	mg/L
OAPIS-1	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OAPIS-1	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OAPIS-1	3/4/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
OAPIS-1	3/4/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OAPIS-1	3/4/2020	Nickel, Total	0.18	0.01	0.004	372000	mg/L
OAPIS-1	3/4/2020	Silver, Total	0.0036	0.005	0.0014	50000	mg/L
OAPIS-1	3/4/2020	Zinc, Total	0.018	0.01	0.0058	5960000	mg/L
OAPIS-1	3/4/2020	Barium, Total	1.3	0.01	0.0032	2000000	mg/L
OAPIS-1	3/4/2020	Boron, Total	1.3	0.2	0.023	3949	mg/L
OAPIS-1	3/4/2020	Iron, Total	1.5	0.1	0.044	13822000	mg/L
OAPIS-1	3/4/2020	Manganese, Total	1.1	0.01	0.0014	2017000	mg/L
OAPIS-1	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	3/28/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
OAPIS-1	3/28/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
OAPIS-1	3/28/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
OAPIS-1	3/28/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	3/28/2019	Arsenic, Dissolved	0.0067	0.005	0.000504	10000	mg/L
OAPIS-1	3/28/2019	Barium, Dissolved	1.1	0.02	0.006484	2000000	mg/L
OAPIS-1	3/28/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
OAPIS-1	3/28/2019	Boron, Dissolved	1.6	0.4	0.045305	3949110	mg/L
OAPIS-1	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	3/28/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
OAPIS-1	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	3/28/2019	Cobalt, Dissolved	0.0054	0.006	0.003091	5980	mg/L
OAPIS-1	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	3/28/2019	Iron, Dissolved	4.2	0.2	0.087469	13821880	mg/L
OAPIS-1	3/28/2019	Lead, Dissolved	0.00044	0.0025	0.000274	NA	mg/L
OAPIS-1	3/28/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
OAPIS-1	3/28/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
OAPIS-1	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	3/28/2019	Nickel, Dissolved	0.19	0.01	0.004009	372000	mg/L
OAPIS-1	3/28/2019	Potassium, Dissolved	3.3	1	0.162288	NA	mg/L
OAPIS-1	3/28/2019	Selenium, Dissolved	0.0013	0.005	0.000857	50000	mg/L
OAPIS-1	3/28/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OAPIS-1	3/28/2019	Sodium, Dissolved	1200	50	20.808815	NA	mg/L
OAPIS-1	3/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	3/28/2019	Uranium, Dissolved	0.011	0.0025	0.000374	NA	mg/L
OAPIS-1	3/28/2019	Zinc, Dissolved	0.045	0.01	0.002252	5960450	mg/L
OAPIS-1	3/28/2019	Aluminum, Total	2.5	0.1	0.022822	19914000	mg/L
OAPIS-1	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	3/28/2019	Arsenic, Total	0.0071	0.005	0.001561	10000	mg/L
OAPIS-1	3/28/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	3/28/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
OAPIS-1	3/28/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
OAPIS-1	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	3/28/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
OAPIS-1	3/28/2019	Cobalt, Total	0.0056	0.006	0.003091	5980	mg/L
OAPIS-1	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	3/28/2019	Iron, Total	5.6	0.2	0.087469	13822000	mg/L
OAPIS-1	3/28/2019	Lead, Total	0.0061	0.0025	0.000274	15000	mg/L
OAPIS-1	3/28/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	3/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	3/28/2019	Nickel, Total	0.2	0.01	0.004009	372000	mg/L
OAPIS-1	3/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	3/28/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
OAPIS-1	8/22/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OAPIS-1	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Dissolved	0.0076	0.001	0.000101	10000	mg/L
OAPIS-1	8/22/2019	Barium, Dissolved	1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	8/22/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
OAPIS-1	8/22/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
OAPIS-1	8/22/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
OAPIS-1	8/22/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Dissolved	0.0068	0.03	0.006481	790000	mg/L
OAPIS-1	8/22/2019	Iron, Dissolved	6	1	0.437344	13821880	mg/L
OAPIS-1	8/22/2019	Lead, Dissolved	0.00041	0.0005	0.000055	NA	mg/L
OAPIS-1	8/22/2019	Magnesium, Dissolved	28	5	0.251452	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
OAPIS-1	8/22/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Dissolved	0.17	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Potassium, Dissolved	2.9	5	0.811441	NA	mg/L
OAPIS-1	8/22/2019	Selenium, Dissolved	0.0012	0.001	0.000171	50000	mg/L
OAPIS-1	8/22/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
OAPIS-1	8/22/2019	Sodium, Dissolved	1300	50	20.808815	NA	mg/L
OAPIS-1	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Dissolved	0.0051	0.0005	0.000075	NA	mg/L
OAPIS-1	8/22/2019	Zinc, Dissolved	ND	0.05	0.01126	5960450	mg/L
OAPIS-1	8/22/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
OAPIS-1	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Total	0.0089	0.005	0.001561	10000	mg/L
OAPIS-1	8/22/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
OAPIS-1	8/22/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
OAPIS-1	8/22/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
OAPIS-1	8/22/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
OAPIS-1	8/22/2019	Iron, Total	7.9	1	0.437344	13822000	mg/L
OAPIS-1	8/22/2019	Lead, Total	0.0065	0.0025	0.000274	15000	mg/L
OAPIS-1	8/22/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
OAPIS-1	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OAPIS-1	8/22/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Total	0.18	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	8/22/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
OAPIS-1	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Total	0.0051	0.0025	0.000424	30000	mg/L
OAPIS-1	8/22/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OAPIS-1	8/22/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OAPIS-1	8/22/2019	Antimony, Dissolved	0.00048	0.001	0.000389	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Dissolved	0.0071	0.001	0.000101	10000	mg/L
OAPIS-1	8/22/2019	Barium, Dissolved	1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	8/22/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
OAPIS-1	8/22/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OAPIS-1	8/22/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
OAPIS-1	8/22/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
OAPIS-1	8/22/2019	Iron, Dissolved	5.8	1	0.437344	13821880	mg/L
OAPIS-1	8/22/2019	Lead, Dissolved	0.00048	0.0005	0.000055	NA	mg/L
OAPIS-1	8/22/2019	Magnesium, Dissolved	28	5	0.251452	NA	mg/L
OAPIS-1	8/22/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
OAPIS-1	8/22/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Dissolved	0.18	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Potassium, Dissolved	2.9	5	0.811441	NA	mg/L
OAPIS-1	8/22/2019	Selenium, Dissolved	0.00091	0.001	0.000171	50000	mg/L
OAPIS-1	8/22/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
OAPIS-1	8/22/2019	Sodium, Dissolved	1300	50	20.808815	NA	mg/L
OAPIS-1	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Dissolved	0.0062	0.0005	0.000075	NA	mg/L
OAPIS-1	8/22/2019	Zinc, Dissolved	0.024	0.05	0.01126	5960450	mg/L
OAPIS-1	8/22/2019	Aluminum, Total	0.51	0.1	0.012441	19914000	mg/L
OAPIS-1	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Total	0.0078	0.005	0.001561	10000	mg/L
OAPIS-1	8/22/2019	Barium, Total	0.99	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
OAPIS-1	8/22/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
OAPIS-1	8/22/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
OAPIS-1	8/22/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
OAPIS-1	8/22/2019	Iron, Total	7.3	1	0.437344	13822000	mg/L
OAPIS-1	8/22/2019	Lead, Total	0.0027	0.0025	0.000274	15000	mg/L
OAPIS-1	8/22/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Total	0.19	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	8/22/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
OAPIS-1	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Total	0.0047	0.0025	0.000424	30000	mg/L
OAPIS-1	8/22/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OAPIS-1	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OAPIS-1	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Dissolved	0.0073	0.005	0.000504	10000	mg/L
OAPIS-1	5/8/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Dissolved	0.00052	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Dissolved	1.5	0.2	0.022653	3949110	mg/L
OAPIS-1	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	5/8/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
OAPIS-1	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	5/8/2019	Cobalt, Dissolved	0.0036	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	5/8/2019	Iron, Dissolved	5.3	0.2	0.087469	13821880	mg/L
OAPIS-1	5/8/2019	Lead, Dissolved	0.0012	0.0025	0.000274	NA	mg/L
OAPIS-1	5/8/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
OAPIS-1	5/8/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
OAPIS-1	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Potassium, Dissolved	3.1	1	0.162288	NA	mg/L
OAPIS-1	5/8/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
OAPIS-1	5/8/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
OAPIS-1	5/8/2019	Sodium, Dissolved	1200	20	8.323526	NA	mg/L
OAPIS-1	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Dissolved	0.015	0.0025	0.000374	NA	mg/L
OAPIS-1	5/8/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
OAPIS-1	5/8/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
OAPIS-1	5/8/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Total	0.0078	0.001	0.000312	10000	mg/L
OAPIS-1	5/8/2019	Barium, Total	1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Total	1.4	0.2	0.022653	3949	mg/L
OAPIS-1	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OAPIS-1	5/8/2019	Cobalt, Total	0.004	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	5/8/2019	Iron, Total	4.8	0.1	0.043734	13822000	mg/L
OAPIS-1	5/8/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OAPIS-1	5/8/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Total	0.18	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
OAPIS-1	5/8/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
OAPIS-1	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OAPIS-1	5/8/2019	Zinc, Total	0.0072	0.01	0.005772	5960000	mg/L
OAPIS-1	10/21/2019	Aluminum, Dissolved	0.063	0.02	0.002488	19913930	mg/L
OAPIS-1	10/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	10/21/2019	Arsenic, Dissolved	0.009	0.005	0.000504	10000	mg/L
OAPIS-1	10/21/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
OAPIS-1	10/21/2019	Beryllium, Dissolved	0.00086	0.002	0.000284	4000	mg/L
OAPIS-1	10/21/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	10/21/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OAPIS-1	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OAPIS-1	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	10/21/2019	Iron, Dissolved	3.2	0.1	0.043734	13821880	mg/L
OAPIS-1	10/21/2019	Lead, Dissolved	0.00045	0.0025	0.000274	NA	mg/L
OAPIS-1	10/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OAPIS-1	10/21/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OAPIS-1	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	10/21/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Potassium, Dissolved	3.7	1	0.162288	NA	mg/L
OAPIS-1	10/21/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OAPIS-1	10/21/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
OAPIS-1	10/21/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
OAPIS-1	10/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	10/21/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
OAPIS-1	10/21/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
OAPIS-1	10/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	10/21/2019	Arsenic, Total	0.011	0.005	0.001561	10000	mg/L
OAPIS-1	10/21/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
OAPIS-1	10/21/2019	Beryllium, Total	0.00068	0.002	0.000284	4000	mg/L
OAPIS-1	10/21/2019	Boron, Total	1.7	0.2	0.022653	3949	mg/L
OAPIS-1	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	10/21/2019	Chromium, Total	0.0078	0.006	0.001533	50000	mg/L
OAPIS-1	10/21/2019	Cobalt, Total	0.0082	0.006	0.003091	5980	mg/L
OAPIS-1	10/21/2019	Copper, Total	0.019	0.006	0.004072	790000	mg/L
OAPIS-1	10/21/2019	Iron, Total	8.8	0.2	0.087469	13822000	mg/L
OAPIS-1	10/21/2019	Lead, Total	0.01	0.0025	0.000274	15000	mg/L
OAPIS-1	10/21/2019	Manganese, Total	1.8	0.01	0.00145	2017000	mg/L
OAPIS-1	10/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	10/21/2019	Nickel, Total	0.19	0.01	0.004009	372000	mg/L
OAPIS-1	10/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OAPIS-1	10/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	10/21/2019	Zinc, Total	0.037	0.01	0.005772	5960000	mg/L
OAPIS-1	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OAPIS-1	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Dissolved	0.0068	0.005	0.000504	10000	mg/L
OAPIS-1	5/8/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Dissolved	1.4	0.2	0.022653	3949110	mg/L
OAPIS-1	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	5/8/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
OAPIS-1	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	5/8/2019	Cobalt, Dissolved	0.0042	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	5/8/2019	Iron, Dissolved	5.2	0.2	0.087469	13821880	mg/L
OAPIS-1	5/8/2019	Lead, Dissolved	0.0014	0.0025	0.000274	NA	mg/L
OAPIS-1	5/8/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
OAPIS-1	5/8/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
OAPIS-1	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Potassium, Dissolved	3.1	1	0.162288	NA	mg/L
OAPIS-1	5/8/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OAPIS-1	5/8/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
OAPIS-1	5/8/2019	Sodium, Dissolved	1200	20	8.323526	NA	mg/L
OAPIS-1	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Dissolved	0.016	0.0025	0.000374	NA	mg/L
OAPIS-1	5/8/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
OAPIS-1	5/8/2019	Aluminum, Total	0.23	0.02	0.002488	19914000	mg/L
OAPIS-1	5/8/2019	Antimony, Total	0.00058	0.001	0.000389	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Total	0.008	0.001	0.000312	10000	mg/L
OAPIS-1	5/8/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
OAPIS-1	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OAPIS-1	5/8/2019	Cobalt, Total	0.0031	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	5/8/2019	Iron, Total	4.6	0.2	0.087469	13822000	mg/L
OAPIS-1	5/8/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OAPIS-1	5/8/2019	Manganese, Total	1.8	0.01	0.00145	2017000	mg/L
OAPIS-1	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Total	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Selenium, Total	0.0019	0.001	0.000478	50000	mg/L
OAPIS-1	5/8/2019	Silver, Total	0.0029	0.005	0.001418	50000	mg/L
OAPIS-1	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OAPIS-1	5/8/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
OAPIS-1	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OAPIS-1	3/18/2013	Arsenic, Total	0.0082	0.0025	0.00042	10000	mg/L
OAPIS-1	3/18/2013	Barium, Total	0.61	0.002	0.00039	2000000	mg/L
OAPIS-1	3/18/2013	Calcium, Total	120	5	0.34	NA	mg/L
OAPIS-1	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OAPIS-1	3/18/2013	Chromium, Total	0.01	0.006	0.001	50000	mg/L
OAPIS-1	3/18/2013	Copper, Total	0.026	0.006	0.0041	790000	mg/L
OAPIS-1	3/18/2013	Iron, Total	7.9	0.2	0.13	13822000	mg/L
OAPIS-1	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	3/18/2013	Potassium, Total	6.9	1	0.39	NA	mg/L
OAPIS-1	3/18/2013	Magnesium, Total	24	1	0.028	NA	mg/L
OAPIS-1	3/18/2013	Manganese, Total	2.1	0.01	0.0013	2017000	mg/L
OAPIS-1	3/18/2013	Sodium, Total	1100	50	11	NA	mg/L
OAPIS-1	3/18/2013	Lead, Total	0.0085	0.005	0.0014	15000	mg/L
OAPIS-1	3/18/2013	Selenium, Total	0.0075	0.0025	0.00066	50000	mg/L
OAPIS-1	3/18/2013	Uranium, Total	0.065	0.0025	0.0012	30000	mg/L
OAPIS-1	3/18/2013	Zinc, Total	0.062	0.01	0.0011	5960000	mg/L
OAPIS-1	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
OAPIS-1	6/12/2013	Arsenic, Total	0.012	0.01	0.0027	10000	mg/L
OAPIS-1	6/12/2013	Barium, Total	0.75	0.002	0.00057	2000000	mg/L
OAPIS-1	6/12/2013	Calcium, Total	160	5	0.34	NA	mg/L
OAPIS-1	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OAPIS-1	6/12/2013	Chromium, Total	0.011	0.006	0.0021	50000	mg/L
OAPIS-1	6/12/2013	Copper, Total	0.024	0.006	0.005	790000	mg/L
OAPIS-1	6/12/2013	Iron, Total	10	0.4	0.1	13822000	mg/L
OAPIS-1	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	6/12/2013	Potassium, Total	7.5	1	0.24	NA	mg/L
OAPIS-1	6/12/2013	Magnesium, Total	28	1	0.028	NA	mg/L
OAPIS-1	6/12/2013	Manganese, Total	2.4	0.01	0.0026	2017000	mg/L
OAPIS-1	6/12/2013	Sodium, Total	1200	20	6.5	NA	mg/L
OAPIS-1	6/12/2013	Lead, Total	0.0018	0.001	0.0000075	15000	mg/L
OAPIS-1	6/12/2013	Selenium, Total	0.022	0.01	0.0049	50000	mg/L
OAPIS-1	6/12/2013	Uranium, Total	0.049	0.01	0.005	30000	mg/L
OAPIS-1	6/12/2013	Zinc, Total	0.058	0.01	0.0011	5960000	mg/L
OAPIS-1	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OAPIS-1	9/3/2013	Arsenic, Total	0.012	0.005	0.00049	10000	mg/L
OAPIS-1	9/3/2013	Barium, Total	0.55	0.002	0.00095	2000000	mg/L
OAPIS-1	9/3/2013	Calcium, Total	160	5	0.34	NA	mg/L
OAPIS-1	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OAPIS-1	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OAPIS-1	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OAPIS-1	9/3/2013	Iron, Total	5.2	0.4	0.18	13822000	mg/L
OAPIS-1	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	9/3/2013	Potassium, Total	3.9	1	0.24	NA	mg/L
OAPIS-1	9/3/2013	Magnesium, Total	29	1	0.028	NA	mg/L
OAPIS-1	9/3/2013	Manganese, Total	2	0.01	0.00082	2017000	mg/L
OAPIS-1	9/3/2013	Sodium, Total	1300	20	6.5	NA	mg/L
OAPIS-1	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OAPIS-1	9/3/2013	Selenium, Total	0.023	0.005	0.0015	50000	mg/L
OAPIS-1	9/3/2013	Uranium, Total	0.047	0.01	0.000073	30000	mg/L
OAPIS-1	9/3/2013	Zinc, Total	0.05	0.01	0.00076	5960000	mg/L
OAPIS-1	11/11/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OAPIS-1	11/11/2013	Arsenic, Total	0.013	0.001	0.000098	10000	mg/L
OAPIS-1	11/11/2013	Barium, Total	0.59	0.002	0.00095	2000000	mg/L
OAPIS-1	11/11/2013	Calcium, Total	140	5	0.34	NA	mg/L
OAPIS-1	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OAPIS-1	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OAPIS-1	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OAPIS-1	11/11/2013	Iron, Total	6.4	0.4	0.18	13822000	mg/L
OAPIS-1	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	11/11/2013	Potassium, Total	4.8	1	0.24	NA	mg/L
OAPIS-1	11/11/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OAPIS-1	11/11/2013	Manganese, Total	2.1	0.01	0.00082	2017000	mg/L
OAPIS-1	11/11/2013	Sodium, Total	1300	20	6.5	NA	mg/L
OAPIS-1	11/11/2013	Lead, Total	0.0014	0.001	0.0000075	15000	mg/L
OAPIS-1	11/11/2013	Selenium, Total	0.026	0.001	0.00029	50000	mg/L
OAPIS-1	11/11/2013	Uranium, Total	0.042	0.001	0.0000073	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/11/2013	Zinc, Total	0.056	0.01	0.00076	5960000	mg/L
OAPIS-1	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OAPIS-1	3/10/2014	Arsenic, Total	0.0083	0.005	0.00049	10000	mg/L
OAPIS-1	3/10/2014	Barium, Total	0.61	0.002	0.0011	2000000	mg/L
OAPIS-1	3/10/2014	Calcium, Total	160	5	0.41	NA	mg/L
OAPIS-1	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OAPIS-1	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OAPIS-1	3/10/2014	Iron, Total	5.4	0.4	0.12	13822000	mg/L
OAPIS-1	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	3/10/2014	Potassium, Total	4.5	1	0.093	NA	mg/L
OAPIS-1	3/10/2014	Magnesium, Total	28	1	0.018	NA	mg/L
OAPIS-1	3/10/2014	Manganese, Total	2	0.01	0.0027	2017000	mg/L
OAPIS-1	3/10/2014	Sodium, Total	1300	20	7.8	NA	mg/L
OAPIS-1	3/10/2014	Lead, Total	0.0079	0.005	0.000038	15000	mg/L
OAPIS-1	3/10/2014	Selenium, Total	0.0084	0.005	0.0015	50000	mg/L
OAPIS-1	3/10/2014	Uranium, Total	0.039	0.005	0.000036	30000	mg/L
OAPIS-1	3/10/2014	Zinc, Total	0.046	0.01	0.0014	5960000	mg/L
OAPIS-1	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OAPIS-1	6/5/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
OAPIS-1	6/5/2014	Barium, Total	0.8	0.002	0.0011	2000000	mg/L
OAPIS-1	6/5/2014	Calcium, Total	180	5	0.27	NA	mg/L
OAPIS-1	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	6/5/2014	Chromium, Total	0.0082	0.006	0.0021	50000	mg/L
OAPIS-1	6/5/2014	Copper, Total	0.025	0.006	0.0028	790000	mg/L
OAPIS-1	6/5/2014	Iron, Total	10	0.4	0.12	13822000	mg/L
OAPIS-1	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	6/5/2014	Potassium, Total	11	1	0.24	NA	mg/L
OAPIS-1	6/5/2014	Magnesium, Total	33	1	0.024	NA	mg/L
OAPIS-1	6/5/2014	Manganese, Total	2.2	0.01	0.0027	2017000	mg/L
OAPIS-1	6/5/2014	Sodium, Total	1300	50	13	NA	mg/L
OAPIS-1	6/5/2014	Lead, Total	0.02	0.005	0.00029	15000	mg/L
OAPIS-1	6/5/2014	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
OAPIS-1	6/5/2014	Uranium, Total	0.039	0.01	0.0005	30000	mg/L
OAPIS-1	6/5/2014	Zinc, Total	0.1	0.01	0.0014	5960000	mg/L
OAPIS-1	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OAPIS-1	9/12/2014	Arsenic, Total	0.018	0.01	0.0036	10000	mg/L
OAPIS-1	9/12/2014	Barium, Total	0.72	0.002	0.0005	2000000	mg/L
OAPIS-1	9/12/2014	Calcium, Total	170	10	0.82	NA	mg/L
OAPIS-1	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OAPIS-1	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OAPIS-1	9/12/2014	Iron, Total	7.9	0.2	0.072	13822000	mg/L
OAPIS-1	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	9/12/2014	Potassium, Total	6	1	0.093	NA	mg/L
OAPIS-1	9/12/2014	Magnesium, Total	33	1	0.018	NA	mg/L
OAPIS-1	9/12/2014	Manganese, Total	1.9	0.02	0.0049	2017000	mg/L
OAPIS-1	9/12/2014	Sodium, Total	1400	100	39	NA	mg/L
OAPIS-1	9/12/2014	Lead, Total	0.0051	0.001	0.00026	15000	mg/L
OAPIS-1	9/12/2014	Selenium, Total	0.035	0.01	0.0051	50000	mg/L
OAPIS-1	9/12/2014	Uranium, Total	0.031	0.001	0.0000072	30000	mg/L
OAPIS-1	9/12/2014	Zinc, Total	0.021	0.01	0.0035	5960000	mg/L
OAPIS-1	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OAPIS-1	11/11/2014	Arsenic, Total	0.016	0.01	0.0036	10000	mg/L
OAPIS-1	11/11/2014	Barium, Total	0.75	0.002	0.0005	2000000	mg/L
OAPIS-1	11/11/2014	Calcium, Total	170	5	0.41	NA	mg/L
OAPIS-1	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	11/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OAPIS-1	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OAPIS-1	11/11/2014	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	11/11/2014	Potassium, Total	4.8	1	0.093	NA	mg/L
OAPIS-1	11/11/2014	Magnesium, Total	31	1	0.018	NA	mg/L
OAPIS-1	11/11/2014	Manganese, Total	1.9	0.01	0.0024	2017000	mg/L
OAPIS-1	11/11/2014	Sodium, Total	1300	20	7.8	NA	mg/L
OAPIS-1	11/11/2014	Lead, Total	0.0073	0.001	0.00026	15000	mg/L
OAPIS-1	11/11/2014	Selenium, Total	0.03	0.01	0.0051	50000	mg/L
OAPIS-1	11/11/2014	Uranium, Total	0.03	0.001	0.0000072	30000	mg/L
OAPIS-1	11/11/2014	Zinc, Total	0.031	0.01	0.0035	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	3/10/2015	Arsenic, Total	ND	0.05	0.022	10000	mg/L
OAPIS-1	3/10/2015	Barium, Total	0.66	0.002	0.00073	2000000	mg/L
OAPIS-1	3/10/2015	Calcium, Total	170	5	0.28	NA	mg/L
OAPIS-1	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OAPIS-1	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	3/10/2015	Iron, Total	6.9	0.2	0.072	13822000	mg/L
OAPIS-1	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	3/10/2015	Potassium, Total	5.9	1	0.18	NA	mg/L
OAPIS-1	3/10/2015	Magnesium, Total	30	1	0.039	NA	mg/L
OAPIS-1	3/10/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
OAPIS-1	3/10/2015	Sodium, Total	1300	50	3.6	NA	mg/L
OAPIS-1	3/10/2015	Lead, Total	0.0059	0.001	0.000069	15000	mg/L
OAPIS-1	3/10/2015	Selenium, Total	ND	0.05	0.0061	50000	mg/L
OAPIS-1	3/10/2015	Uranium, Total	0.023	0.001	0.0000081	30000	mg/L
OAPIS-1	3/10/2015	Zinc, Total	0.02	0.01	0.0036	5960000	mg/L
OAPIS-1	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	6/2/2015	Arsenic, Total	0.012	0.01	0.0029	10000	mg/L
OAPIS-1	6/2/2015	Barium, Total	0.71	0.002	0.0011	2000000	mg/L
OAPIS-1	6/2/2015	Calcium, Total	160	5	0.28	NA	mg/L
OAPIS-1	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	6/2/2015	Chromium, Total	0.0086	0.006	0.0022	50000	mg/L
OAPIS-1	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	6/2/2015	Iron, Total	7.5	0.2	0.072	13822000	mg/L
OAPIS-1	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	6/2/2015	Potassium, Total	4.6	1	0.18	NA	mg/L
OAPIS-1	6/2/2015	Magnesium, Total	29	1	0.039	NA	mg/L
OAPIS-1	6/2/2015	Manganese, Total	1.9	0.02	0.015	2017000	mg/L
OAPIS-1	6/2/2015	Sodium, Total	1300	50	3.6	NA	mg/L
OAPIS-1	6/2/2015	Lead, Total	0.0071	0.005	0.00047	15000	mg/L
OAPIS-1	6/2/2015	Selenium, Total	0.018	0.01	0.0012	50000	mg/L
OAPIS-1	6/2/2015	Uranium, Total	0.022	0.005	0.000049	30000	mg/L
OAPIS-1	6/2/2015	Zinc, Total	0.031	0.01	0.0039	5960000	mg/L
OAPIS-1	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	8/11/2015	Arsenic, Total	0.012	0.01	0.0029	10000	mg/L
OAPIS-1	8/11/2015	Barium, Total	0.72	0.002	0.0011	2000000	mg/L
OAPIS-1	8/11/2015	Calcium, Total	160	5	0.28	NA	mg/L
OAPIS-1	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	8/11/2015	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	8/11/2015	Potassium, Total	3.7	1	0.18	NA	mg/L
OAPIS-1	8/11/2015	Magnesium, Total	31	1	0.039	NA	mg/L
OAPIS-1	8/11/2015	Manganese, Total	1.8	0.02	0.015	2017000	mg/L
OAPIS-1	8/11/2015	Sodium, Total	1400	20	1.4	NA	mg/L
OAPIS-1	8/11/2015	Lead, Total	0.0077	0.0005	0.000047	15000	mg/L
OAPIS-1	8/11/2015	Selenium, Total	0.018	0.01	0.0012	50000	mg/L
OAPIS-1	8/11/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
OAPIS-1	8/11/2015	Zinc, Total	0.035	0.01	0.0039	5960000	mg/L
OAPIS-1	10/29/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	10/29/2015	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
OAPIS-1	10/29/2015	Barium, Total	0.78	0.01	0.0053	2000000	mg/L
OAPIS-1	10/29/2015	Calcium, Total	170	5	0.28	NA	mg/L
OAPIS-1	10/29/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	10/29/2015	Chromium, Total	0.0079	0.006	0.0022	50000	mg/L
OAPIS-1	10/29/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	10/29/2015	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	10/29/2015	Potassium, Total	5.1	1	0.18	NA	mg/L
OAPIS-1	10/29/2015	Magnesium, Total	32	1	0.039	NA	mg/L
OAPIS-1	10/29/2015	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
OAPIS-1	10/29/2015	Sodium, Total	1300	20	1.4	NA	mg/L
OAPIS-1	10/29/2015	Lead, Total	0.015	0.0025	0.00024	15000	mg/L
OAPIS-1	10/29/2015	Selenium, Total	0.022	0.005	0.00062	50000	mg/L
OAPIS-1	10/29/2015	Uranium, Total	0.017	0.0025	0.000025	30000	mg/L
OAPIS-1	10/29/2015	Zinc, Total	0.055	0.01	0.0039	5960000	mg/L
OAPIS-1	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Arsenic, Total	0.0097	0.005	0.0015	10000	mg/L
OAPIS-1	3/1/2016	Barium, Total	0.72	0.002	0.0011	2000000	mg/L
OAPIS-1	3/1/2016	Calcium, Total	150	5	1.3	NA	mg/L
OAPIS-1	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	3/1/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	3/1/2016	Iron, Total	5.7	0.2	0.072	13822000	mg/L
OAPIS-1	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OAPIS-1	3/1/2016	Potassium, Total	3.9	1	0.18	NA	mg/L
OAPIS-1	3/1/2016	Magnesium, Total	30	1	0.013	NA	mg/L
OAPIS-1	3/1/2016	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
OAPIS-1	3/1/2016	Sodium, Total	1400	20	1.9	NA	mg/L
OAPIS-1	3/1/2016	Lead, Total	0.0034	0.0025	0.00024	15000	mg/L
OAPIS-1	3/1/2016	Selenium, Total	0.011	0.01	0.0012	50000	mg/L
OAPIS-1	3/1/2016	Uranium, Total	0.016	0.0025	0.000025	30000	mg/L
OAPIS-1	3/1/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
OAPIS-1	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	6/7/2016	Arsenic, Total	0.017	0.005	0.0015	10000	mg/L
OAPIS-1	6/7/2016	Barium, Total	0.77	0.002	0.0011	2000000	mg/L
OAPIS-1	6/7/2016	Calcium, Total	180	5	1.3	NA	mg/L
OAPIS-1	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	6/7/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	6/7/2016	Copper, Total	0.011	0.006	0.0051	790000	mg/L
OAPIS-1	6/7/2016	Iron, Total	9.2	0.4	0.14	13822000	mg/L
OAPIS-1	6/7/2016	Mercury, Total	0.000072	0.0002	0.000053	2000	mg/L
OAPIS-1	6/7/2016	Potassium, Total	4.5	1	0.18	NA	mg/L
OAPIS-1	6/7/2016	Magnesium, Total	35	1	0.013	NA	mg/L
OAPIS-1	6/7/2016	Manganese, Total	1.9	0.01	0.0076	2017000	mg/L
OAPIS-1	6/7/2016	Sodium, Total	1200	20	1.9	NA	mg/L
OAPIS-1	6/7/2016	Lead, Total	0.0055	0.0025	0.00024	15000	mg/L
OAPIS-1	6/7/2016	Selenium, Total	0.024	0.05	0.0062	50000	mg/L
OAPIS-1	6/7/2016	Uranium, Total	0.014	0.0025	0.000025	30000	mg/L
OAPIS-1	6/7/2016	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
OAPIS-1	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OAPIS-1	9/1/2016	Arsenic, Total	0.018	0.02	0.0042	10000	mg/L
OAPIS-1	9/1/2016	Barium, Total	0.89	0.002	0.00079	2000000	mg/L
OAPIS-1	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	9/1/2016	Chromium, Total	0.0053	0.006	0.0027	50000	mg/L
OAPIS-1	9/1/2016	Copper, Total	0.014	0.006	0.003	790000	mg/L
OAPIS-1	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OAPIS-1	9/1/2016	Arsenic, Dissolved	0.016	0.005	0.00069	10000	mg/L
OAPIS-1	9/1/2016	Barium, Dissolved	0.85	0.002	0.0013	2000000	mg/L
OAPIS-1	9/1/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OAPIS-1	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OAPIS-1	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OAPIS-1	9/1/2016	Iron, Dissolved	7.5	0.4	0.4	13821880	mg/L
OAPIS-1	9/1/2016	Potassium, Dissolved	3.8	1	0.5	NA	mg/L
OAPIS-1	9/1/2016	Magnesium, Dissolved	33	1	0.5	NA	mg/L
OAPIS-1	9/1/2016	Manganese, Dissolved	1.8	0.01	0.0016	2017400	mg/L
OAPIS-1	9/1/2016	Sodium, Dissolved	1400	20	10	NA	mg/L
OAPIS-1	9/1/2016	Lead, Dissolved	0.00099	0.0025	0.00084	NA	mg/L
OAPIS-1	9/1/2016	Selenium, Dissolved	0.025	0.005	0.0011	50000	mg/L
OAPIS-1	9/1/2016	Uranium, Dissolved	0.015	0.0025	0.00026	NA	mg/L
OAPIS-1	9/1/2016	Zinc, Dissolved	0.0059	0.01	0.0028	5960450	mg/L
OAPIS-1	9/1/2016	Iron, Total	9.1	0.2	0.2	13822000	mg/L
OAPIS-1	9/1/2016	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
OAPIS-1	9/1/2016	Lead, Total	0.015	0.0005	0.000081	15000	mg/L
OAPIS-1	9/1/2016	Selenium, Total	ND	0.05	0.05	50000	mg/L
OAPIS-1	9/1/2016	Uranium, Total	0.02	0.0005	0.00017	30000	mg/L
OAPIS-1	9/1/2016	Zinc, Total	0.064	0.01	0.0027	5960000	mg/L
OAPIS-1	11/14/2016	Silver, Total	0.011	0.005	0.0015	50000	mg/L
OAPIS-1	11/14/2016	Arsenic, Total	0.014	0.05	0.011	10000	mg/L
OAPIS-1	11/14/2016	Barium, Total	0.96	0.002	0.00079	2000000	mg/L
OAPIS-1	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	11/14/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
OAPIS-1	11/14/2016	Copper, Total	0.0035	0.006	0.003	790000	mg/L
OAPIS-1	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OAPIS-1	11/14/2016	Arsenic, Dissolved	0.017	0.005	0.00069	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/14/2016	Barium, Dissolved	0.87	0.002	0.0013	2000000	mg/L
OAPIS-1	11/14/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OAPIS-1	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OAPIS-1	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OAPIS-1	11/14/2016	Iron, Dissolved	7.4	1	1	13821880	mg/L
OAPIS-1	11/14/2016	Potassium, Dissolved	4.2	1	0.5	NA	mg/L
OAPIS-1	11/14/2016	Magnesium, Dissolved	33	1	0.5	NA	mg/L
OAPIS-1	11/14/2016	Manganese, Dissolved	1.8	0.01	0.0016	2017400	mg/L
OAPIS-1	11/14/2016	Sodium, Dissolved	1400	50	25	NA	mg/L
OAPIS-1	11/14/2016	Lead, Dissolved	0.00081	0.0005	0.00017	NA	mg/L
OAPIS-1	11/14/2016	Selenium, Dissolved	0.033	0.005	0.0011	50000	mg/L
OAPIS-1	11/14/2016	Uranium, Dissolved	0.014	0.0005	0.000051	NA	mg/L
OAPIS-1	11/14/2016	Zinc, Dissolved	0.0071	0.01	0.0028	5960450	mg/L
OAPIS-1	11/14/2016	Iron, Total	8.3	0.2	0.2	13822000	mg/L
OAPIS-1	11/14/2016	Mercury, Total	0.000089	0.0002	0.000053	2000	mg/L
OAPIS-1	11/14/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
OAPIS-1	11/14/2016	Lead, Total	0.011	0.0025	0.00041	15000	mg/L
OAPIS-1	11/14/2016	Selenium, Total	0.02	0.05	0.0094	50000	mg/L
OAPIS-1	11/14/2016	Uranium, Total	0.012	0.0025	0.00087	30000	mg/L
OAPIS-1	11/14/2016	Zinc, Total	0.028	0.01	0.0027	5960000	mg/L
OAPIS-1	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OAPIS-1	2/21/2017	Arsenic, Total	0.021	0.05	0.011	10000	mg/L
OAPIS-1	2/21/2017	Barium, Total	0.98	0.002	0.00079	2000000	mg/L
OAPIS-1	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	2/21/2017	Chromium, Total	0.0056	0.006	0.0027	50000	mg/L
OAPIS-1	2/21/2017	Copper, Total	0.0093	0.006	0.003	790000	mg/L
OAPIS-1	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OAPIS-1	2/21/2017	Arsenic, Dissolved	0.013	0.005	0.00069	10000	mg/L
OAPIS-1	2/21/2017	Barium, Dissolved	0.95	0.002	0.00085	2000000	mg/L
OAPIS-1	2/21/2017	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OAPIS-1	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	2/21/2017	Iron, Dissolved	4.8	0.1	0.1	13821880	mg/L
OAPIS-1	2/21/2017	Potassium, Dissolved	4	1	0.5	NA	mg/L
OAPIS-1	2/21/2017	Magnesium, Dissolved	32	1	0.5	NA	mg/L
OAPIS-1	2/21/2017	Manganese, Dissolved	1.7	0.01	0.0019	2017400	mg/L
OAPIS-1	2/21/2017	Sodium, Dissolved	1400	50	25	NA	mg/L
OAPIS-1	2/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	2/21/2017	Selenium, Dissolved	0.022	0.005	0.0011	50000	mg/L
OAPIS-1	2/21/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
OAPIS-1	2/21/2017	Iron, Total	5.8	0.2	0.2	13822000	mg/L
OAPIS-1	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OAPIS-1	2/21/2017	Manganese, Total	1.6	0.02	0.0027	2017000	mg/L
OAPIS-1	2/21/2017	Lead, Total	0.014	0.0025	0.00041	15000	mg/L
OAPIS-1	2/21/2017	Selenium, Total	0.025	0.01	0.0019	50000	mg/L
OAPIS-1	2/21/2017	Zinc, Total	0.03	0.01	0.0027	5960000	mg/L
OAPIS-1	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OAPIS-1	6/1/2017	Arsenic, Total	0.012	0.005	0.0015	10000	mg/L
OAPIS-1	6/1/2017	Barium, Total	0.99	0.002	0.00093	2000000	mg/L
OAPIS-1	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	6/1/2017	Chromium, Total	0.0057	0.006	0.0011	50000	mg/L
OAPIS-1	6/1/2017	Copper, Total	0.013	0.006	0.0017	790000	mg/L
OAPIS-1	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OAPIS-1	6/1/2017	Arsenic, Dissolved	0.011	0.02	0.0035	10000	mg/L
OAPIS-1	6/1/2017	Barium, Dissolved	0.92	0.002	0.00085	2000000	mg/L
OAPIS-1	6/1/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OAPIS-1	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	6/1/2017	Iron, Dissolved	6.4	0.4	0.33	13821880	mg/L
OAPIS-1	6/1/2017	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
OAPIS-1	6/1/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OAPIS-1	6/1/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
OAPIS-1	6/1/2017	Sodium, Dissolved	1300	20	3.3	NA	mg/L
OAPIS-1	6/1/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	6/1/2017	Selenium, Dissolved	0.016	0.02	0.0077	50000	mg/L
OAPIS-1	6/1/2017	Uranium, Dissolved	0.013	0.0025	0.00025	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OAPIS-1	6/1/2017	Iron, Total	8.8	0.2	0.1	13822000	mg/L
OAPIS-1	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	6/1/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OAPIS-1	6/1/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
OAPIS-1	6/1/2017	Selenium, Total	0.015	0.005	0.0036	50000	mg/L
OAPIS-1	6/1/2017	Uranium, Total	0.014	0.0025	0.00077	30000	mg/L
OAPIS-1	6/1/2017	Zinc, Total	0.039	0.01	0.0028	5960000	mg/L
OAPIS-1	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OAPIS-1	9/5/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
OAPIS-1	9/5/2017	Barium, Total	0.91	0.002	0.00093	2000000	mg/L
OAPIS-1	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	9/5/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
OAPIS-1	9/5/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
OAPIS-1	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OAPIS-1	9/5/2017	Arsenic, Dissolved	0.014	0.05	0.0089	10000	mg/L
OAPIS-1	9/5/2017	Barium, Dissolved	0.89	0.002	0.00085	2000000	mg/L
OAPIS-1	9/5/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	9/5/2017	Chromium, Dissolved	0.0031	0.006	0.0013	100000	mg/L
OAPIS-1	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	9/5/2017	Iron, Dissolved	6	0.2	0.16	13821880	mg/L
OAPIS-1	9/5/2017	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
OAPIS-1	9/5/2017	Magnesium, Dissolved	32	1	0.25	NA	mg/L
OAPIS-1	9/5/2017	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
OAPIS-1	9/5/2017	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	9/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	9/5/2017	Selenium, Dissolved	0.028	0.05	0.019	50000	mg/L
OAPIS-1	9/5/2017	Uranium, Dissolved	0.0096	0.0025	0.00025	NA	mg/L
OAPIS-1	9/5/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OAPIS-1	9/5/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
OAPIS-1	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	9/5/2017	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
OAPIS-1	9/5/2017	Lead, Total	0.011	0.0025	0.00048	15000	mg/L
OAPIS-1	9/5/2017	Selenium, Total	0.037	0.005	0.0036	50000	mg/L
OAPIS-1	9/5/2017	Uranium, Total	0.0097	0.0025	0.00077	30000	mg/L
OAPIS-1	9/5/2017	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
OAPIS-1	12/4/2017	Silver, Total	0.027	0.005	0.0012	50000	mg/L
OAPIS-1	12/4/2017	Arsenic, Total	0.018	0.005	0.0021	10000	mg/L
OAPIS-1	12/4/2017	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OAPIS-1	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	12/4/2017	Chromium, Total	0.0026	0.006	0.0018	50000	mg/L
OAPIS-1	12/4/2017	Copper, Total	0.0099	0.006	0.0041	790000	mg/L
OAPIS-1	12/4/2017	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
OAPIS-1	12/4/2017	Arsenic, Dissolved	0.015	0.01	0.0042	10000	mg/L
OAPIS-1	12/4/2017	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
OAPIS-1	12/4/2017	Calcium, Dissolved	160	5	0.39	NA	mg/L
OAPIS-1	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	12/4/2017	Iron, Dissolved	3	0.1	0.082	13821880	mg/L
OAPIS-1	12/4/2017	Potassium, Dissolved	3.8	1	0.11	NA	mg/L
OAPIS-1	12/4/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
OAPIS-1	12/4/2017	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
OAPIS-1	12/4/2017	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	12/4/2017	Lead, Dissolved	0.00068	0.0005	0.00017	NA	mg/L
OAPIS-1	12/4/2017	Selenium, Dissolved	0.02	0.01	0.0076	50000	mg/L
OAPIS-1	12/4/2017	Uranium, Dissolved	0.021	0.0005	0.000096	NA	mg/L
OAPIS-1	12/4/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OAPIS-1	12/4/2017	Iron, Total	2	0.1	0.051	13822000	mg/L
OAPIS-1	12/4/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
OAPIS-1	12/4/2017	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OAPIS-1	12/4/2017	Lead, Total	0.0065	0.005	0.0023	15000	mg/L
OAPIS-1	12/4/2017	Selenium, Total	ND	0.05	0.049	50000	mg/L
OAPIS-1	12/4/2017	Uranium, Total	0.05	0.005	0.0015	30000	mg/L
OAPIS-1	12/4/2017	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
OAPIS-1	2/9/2018	Silver, Total	0.0038	0.005	0.0012	50000	mg/L
OAPIS-1	2/9/2018	Arsenic, Total	0.02	0.005	0.0021	10000	mg/L
OAPIS-1	2/9/2018	Barium, Total	1.2	0.02	0.01	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
OAPIS-1	2/9/2018	Chromium, Total	0.0045	0.006	0.0018	50000	mg/L
OAPIS-1	2/9/2018	Copper, Total	0.031	0.006	0.0041	790000	mg/L
OAPIS-1	2/9/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OAPIS-1	2/9/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
OAPIS-1	2/9/2018	Barium, Dissolved	0.98	0.002	0.00099	2000000	mg/L
OAPIS-1	2/9/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	2/9/2018	Copper, Dissolved	0.0036	0.006	0.0032	790000	mg/L
OAPIS-1	2/9/2018	Iron, Dissolved	1.3	0.1	0.082	13821880	mg/L
OAPIS-1	2/9/2018	Potassium, Dissolved	3.5	1	0.11	NA	mg/L
OAPIS-1	2/9/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
OAPIS-1	2/9/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OAPIS-1	2/9/2018	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	2/9/2018	Lead, Dissolved	0.0029	0.0005	0.00017	NA	mg/L
OAPIS-1	2/9/2018	Selenium, Dissolved	0.019	0.005	0.0038	50000	mg/L
OAPIS-1	2/9/2018	Uranium, Dissolved	0.038	0.0025	0.00048	NA	mg/L
OAPIS-1	2/9/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
OAPIS-1	2/9/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OAPIS-1	2/9/2018	Mercury, Total	0.000085	0.0002	0.000037	2000	mg/L
OAPIS-1	2/9/2018	Manganese, Total	1.3	0.02	0.011	2017000	mg/L
OAPIS-1	2/9/2018	Lead, Total	0.016	0.0025	0.0011	15000	mg/L
OAPIS-1	2/9/2018	Selenium, Total	0.022	0.005	0.0049	50000	mg/L
OAPIS-1	2/9/2018	Uranium, Total	0.074	0.0025	0.00034	30000	mg/L
OAPIS-1	2/9/2018	Zinc, Total	0.059	0.05	0.016	5960000	mg/L
OAPIS-1	4/30/2018	Silver, Total	0.0026	0.005	0.0012	50000	mg/L
OAPIS-1	4/30/2018	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
OAPIS-1	4/30/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
OAPIS-1	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	4/30/2018	Chromium, Total	0.0086	0.006	0.0018	50000	mg/L
OAPIS-1	4/30/2018	Copper, Total	0.034	0.006	0.0041	790000	mg/L
OAPIS-1	4/30/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
OAPIS-1	4/30/2018	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
OAPIS-1	4/30/2018	Barium, Dissolved	0.93	0.002	0.00099	2000000	mg/L
OAPIS-1	4/30/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	4/30/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
OAPIS-1	4/30/2018	Iron, Dissolved	0.98	0.1	0.082	13821880	mg/L
OAPIS-1	4/30/2018	Potassium, Dissolved	3.7	1	0.11	NA	mg/L
OAPIS-1	4/30/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
OAPIS-1	4/30/2018	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
OAPIS-1	4/30/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	4/30/2018	Lead, Dissolved	0.0043	0.0025	0.00087	NA	mg/L
OAPIS-1	4/30/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OAPIS-1	4/30/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OAPIS-1	4/30/2018	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
OAPIS-1	4/30/2018	Iron, Total	7.5	0.2	0.1	13822000	mg/L
OAPIS-1	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	4/30/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OAPIS-1	4/30/2018	Lead, Total	0.013	0.0025	0.0011	15000	mg/L
OAPIS-1	4/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OAPIS-1	4/30/2018	Uranium, Total	0.046	0.0025	0.00034	30000	mg/L
OAPIS-1	4/30/2018	Zinc, Total	0.053	0.01	0.0033	5960000	mg/L
OAPIS-1	9/6/2018	Silver, Total	0.0043	0.005	0.0012	50000	mg/L
OAPIS-1	9/6/2018	Arsenic, Total	0.0091	0.005	0.0021	10000	mg/L
OAPIS-1	9/6/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
OAPIS-1	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	9/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OAPIS-1	9/6/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
OAPIS-1	9/6/2018	Silver, Dissolved	0.0042	0.005	0.0018	81200	mg/L
OAPIS-1	9/6/2018	Arsenic, Dissolved	0.008	0.005	0.0021	10000	mg/L
OAPIS-1	9/6/2018	Barium, Dissolved	1.1	0.02	0.0099	2000000	mg/L
OAPIS-1	9/6/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	9/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	9/6/2018	Iron, Dissolved	0.88	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	Potassium, Dissolved	4	1	0.11	NA	mg/L
OAPIS-1	9/6/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OAPIS-1	9/6/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OAPIS-1	9/6/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	9/6/2018	Lead, Dissolved	0.0038	0.0025	0.00087	NA	mg/L
OAPIS-1	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OAPIS-1	9/6/2018	Uranium, Dissolved	0.041	0.0025	0.00048	NA	mg/L
OAPIS-1	9/6/2018	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OAPIS-1	9/6/2018	Iron, Total	1.8	0.1	0.051	13822000	mg/L
OAPIS-1	9/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	9/6/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
OAPIS-1	9/6/2018	Lead, Total	0.0091	0.0025	0.0011	15000	mg/L
OAPIS-1	9/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OAPIS-1	9/6/2018	Uranium, Total	0.029	0.0025	0.00034	30000	mg/L
OAPIS-1	9/6/2018	Zinc, Total	0.041	0.01	0.0033	5960000	mg/L
OAPIS-1	11/19/2018	Silver, Total	ND	0.025	0.0061	50000	mg/L
OAPIS-1	11/19/2018	Arsenic, Total	0.0096	0.001	0.00041	10000	mg/L
OAPIS-1	11/19/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OAPIS-1	11/19/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
OAPIS-1	11/19/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OAPIS-1	11/19/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
OAPIS-1	11/19/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OAPIS-1	11/19/2018	Arsenic, Dissolved	0.0083	0.001	0.00042	10000	mg/L
OAPIS-1	11/19/2018	Barium, Dissolved	0.99	0.01	0.0049	2000000	mg/L
OAPIS-1	11/19/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	11/19/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OAPIS-1	11/19/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
OAPIS-1	11/19/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OAPIS-1	11/19/2018	Iron, Dissolved	6.2	1	0.82	13821880	mg/L
OAPIS-1	11/19/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OAPIS-1	11/19/2018	Magnesium, Dissolved	28	5	1.2	NA	mg/L
OAPIS-1	11/19/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
OAPIS-1	11/19/2018	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	11/19/2018	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
OAPIS-1	11/19/2018	Selenium, Dissolved	0.001	0.001	0.00076	50000	mg/L
OAPIS-1	11/19/2018	Uranium, Dissolved	0.0058	0.0005	0.000096	NA	mg/L
OAPIS-1	11/19/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
OAPIS-1	11/19/2018	Iron, Total	6.9	1	0.51	13822000	mg/L
OAPIS-1	11/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	11/19/2018	Manganese, Total	1.6	0.01	0.0055	2017000	mg/L
OAPIS-1	11/19/2018	Lead, Total	0.0064	0.0005	0.00023	15000	mg/L
OAPIS-1	11/19/2018	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
OAPIS-1	11/19/2018	Uranium, Total	0.0099	0.0005	0.000068	30000	mg/L
OAPIS-1	11/19/2018	Zinc, Total	0.09	0.05	0.016	5960000	mg/L
OW-01	10/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-01	10/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	10/16/2019	Arsenic, Dissolved	0.0009	0.001	0.000101	10000	mg/L
OW-01	10/16/2019	Barium, Dissolved	0.037	0.002	0.000648	2000000	mg/L
OW-01	10/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	10/16/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
OW-01	10/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	10/16/2019	Calcium, Dissolved	2.3	1	0.061889	NA	mg/L
OW-01	10/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	10/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	10/16/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	10/16/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	10/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	10/16/2019	Magnesium, Dissolved	0.27	1	0.05029	NA	mg/L
OW-01	10/16/2019	Manganese, Dissolved	0.0007	0.002	0.00029	2017400	mg/L
OW-01	10/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	10/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	10/16/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-01	10/16/2019	Selenium, Dissolved	0.0025	0.001	0.000171	50000	mg/L
OW-01	10/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	10/16/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
OW-01	10/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	10/16/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	10/16/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
OW-01	10/16/2019	Aluminum, Total	0.12	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	10/16/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-01	10/16/2019	Barium, Total	0.036	0.002	0.000648	2000000	mg/L
OW-01	10/16/2019	Beryllium, Total	0.0016	0.002	0.000284	4000	mg/L
OW-01	10/16/2019	Boron, Total	0.3	0.04	0.004531	3949	mg/L
OW-01	10/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	10/16/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
OW-01	10/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-01	10/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	10/16/2019	Iron, Total	0.034	0.02	0.008747	13822000	mg/L
OW-01	10/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-01	10/16/2019	Manganese, Total	0.00078	0.002	0.00029	2017000	mg/L
OW-01	10/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	10/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	10/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-01	10/16/2019	Selenium, Total	0.0025	0.005	0.00239	50000	mg/L
OW-01	10/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	10/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	10/16/2019	Uranium, Total	0.04	0.0025	0.000424	30000	mg/L
OW-01	10/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	3/27/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OW-01	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	3/27/2019	Arsenic, Dissolved	0.0007	0.001	0.000101	10000	mg/L
OW-01	3/27/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
OW-01	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	3/27/2019	Boron, Dissolved	0.38	0.04	0.004531	3949110	mg/L
OW-01	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	3/27/2019	Calcium, Dissolved	2.6	1	0.061889	NA	mg/L
OW-01	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	3/27/2019	Magnesium, Dissolved	0.26	1	0.05029	NA	mg/L
OW-01	3/27/2019	Manganese, Dissolved	0.0029	0.002	0.00029	2017400	mg/L
OW-01	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	3/27/2019	Potassium, Dissolved	0.72	1	0.162288	NA	mg/L
OW-01	3/27/2019	Selenium, Dissolved	0.0023	0.001	0.000171	50000	mg/L
OW-01	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	3/27/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
OW-01	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	3/27/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	3/27/2019	Zinc, Dissolved	0.051	0.01	0.002252	5960450	mg/L
OW-01	3/27/2019	Aluminum, Total	0.32	0.02	0.004564	19914000	mg/L
OW-01	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-01	3/27/2019	Arsenic, Total	0.00073	0.001	0.000312	10000	mg/L
OW-01	3/27/2019	Barium, Total	0.036	0.002	0.000488	2000000	mg/L
OW-01	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-01	3/27/2019	Boron, Total	0.34	0.04	0.001821	3949	mg/L
OW-01	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	3/27/2019	Chromium, Total	0.0013	0.006	0.0012	50000	mg/L
OW-01	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-01	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	3/27/2019	Iron, Total	0.17	0.02	0.006053	13822000	mg/L
OW-01	3/27/2019	Lead, Total	0.00021	0.0005	0.000026	15000	mg/L
OW-01	3/27/2019	Manganese, Total	0.011	0.002	0.00006	2017000	mg/L
OW-01	3/27/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-01	3/27/2019	Molybdenum, Total	0.0026	0.008	0.002075	98700	mg/L
OW-01	3/27/2019	Nickel, Total	0.0027	0.01	0.001491	372000	mg/L
OW-01	3/27/2019	Selenium, Total	0.0025	0.001	0.000478	50000	mg/L
OW-01	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	3/27/2019	Uranium, Total	0.037	0.0025	0.000424	30000	mg/L
OW-01	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	8/15/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
OW-01	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	8/15/2019	Arsenic, Total	0.003	0.001	0.000312	10000	mg/L
OW-01	8/15/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/15/2019	Beryllium, Total	0.00067	0.002	0.000284	4000	mg/L
OW-01	8/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-01	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	8/15/2019	Chromium, Total	0.057	0.006	0.001533	50000	mg/L
OW-01	8/15/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-01	8/15/2019	Copper, Total	0.0064	0.006	0.004072	790000	mg/L
OW-01	8/15/2019	Iron, Total	7.7	0.2	0.087469	13822000	mg/L
OW-01	8/15/2019	Lead, Total	0.012	0.0005	0.000055	15000	mg/L
OW-01	8/15/2019	Manganese, Total	0.33	0.002	0.00029	2017000	mg/L
OW-01	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	8/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	8/15/2019	Nickel, Total	0.048	0.01	0.004009	372000	mg/L
OW-01	8/15/2019	Selenium, Total	0.0046	0.001	0.000478	50000	mg/L
OW-01	8/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	8/15/2019	Thallium, Total	0.000074	0.0005	0.000052	2000	mg/L
OW-01	8/15/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
OW-01	8/15/2019	Zinc, Total	0.083	0.01	0.005772	5960000	mg/L
OW-01	8/15/2019	Aluminum, Dissolved	0.31	0.02	0.002488	19913930	mg/L
OW-01	8/15/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
OW-01	8/15/2019	Arsenic, Dissolved	0.00083	0.001	0.000101	10000	mg/L
OW-01	8/15/2019	Barium, Dissolved	0.032	0.002	0.000648	2000000	mg/L
OW-01	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	8/15/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-01	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	8/15/2019	Calcium, Dissolved	2.6	1	0.061889	NA	mg/L
OW-01	8/15/2019	Chromium, Dissolved	0.0048	0.006	0.001533	100000	mg/L
OW-01	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	8/15/2019	Copper, Dissolved	0.0027	0.006	0.001296	790000	mg/L
OW-01	8/15/2019	Iron, Dissolved	0.19	0.02	0.008747	13821880	mg/L
OW-01	8/15/2019	Lead, Dissolved	0.00046	0.0005	0.000055	NA	mg/L
OW-01	8/15/2019	Magnesium, Dissolved	0.34	1	0.05029	NA	mg/L
OW-01	8/15/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-01	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	8/15/2019	Nickel, Dissolved	0.0049	0.01	0.004009	372000	mg/L
OW-01	8/15/2019	Potassium, Dissolved	0.7	1	0.162288	NA	mg/L
OW-01	8/15/2019	Selenium, Dissolved	0.0028	0.001	0.000171	50000	mg/L
OW-01	8/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	8/15/2019	Sodium, Dissolved	360	5	2.080881	NA	mg/L
OW-01	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	8/15/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	8/15/2019	Zinc, Dissolved	0.0078	0.01	0.002252	5960450	mg/L
OW-01	5/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	5/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	5/21/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	5/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	5/21/2019	Magnesium, Dissolved	0.25	1	0.05029	NA	mg/L
OW-01	5/21/2019	Manganese, Dissolved	0.0015	0.002	0.00029	2017400	mg/L
OW-01	5/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	5/21/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	5/21/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
OW-01	5/21/2019	Selenium, Dissolved	0.0023	0.001	0.000171	50000	mg/L
OW-01	5/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	5/21/2019	Sodium, Dissolved	330	5	2.080881	NA	mg/L
OW-01	5/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	5/21/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
OW-01	5/21/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
OW-01	5/21/2019	Aluminum, Total	0.028	0.02	0.002488	19914000	mg/L
OW-01	5/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	5/21/2019	Arsenic, Total	0.00067	0.001	0.000312	10000	mg/L
OW-01	5/21/2019	Barium, Total	0.037	0.002	0.000648	2000000	mg/L
OW-01	5/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-01	5/21/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-01	5/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	5/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-01	5/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-01	5/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	5/21/2019	Iron, Total	0.023	0.02	0.008747	13822000	mg/L
OW-01	5/21/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-01	5/21/2019	Manganese, Total	0.0026	0.002	0.00029	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	5/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	5/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-01	5/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	5/21/2019	Arsenic, Dissolved	0.00074	0.001	0.000101	10000	mg/L
OW-01	5/21/2019	Barium, Dissolved	0.036	0.002	0.000648	2000000	mg/L
OW-01	5/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	5/21/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-01	5/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	5/21/2019	Calcium, Dissolved	2.3	1	0.061889	NA	mg/L
OW-01	5/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	5/21/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-01	5/21/2019	Selenium, Total	0.0024	0.001	0.000478	50000	mg/L
OW-01	5/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	5/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	5/21/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
OW-01	5/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	3/9/2020	Antimony, Dissolved	0.00043	0.001	0.00039	6000	mg/L
OW-01	3/9/2020	Arsenic, Dissolved	0.00087	0.001	0.0001	10000	mg/L
OW-01	3/9/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	3/9/2020	Selenium, Dissolved	0.0023	0.001	0.00017	50000	mg/L
OW-01	3/9/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	3/9/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L
OW-01	3/9/2020	Aluminum, Dissolved	0.11	0.02	0.0025	19913930	mg/L
OW-01	3/9/2020	Barium, Dissolved	0.026	0.002	0.00065	2000000	mg/L
OW-01	3/9/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-01	3/9/2020	Boron, Dissolved	0.32	0.04	0.0045	3949110	mg/L
OW-01	3/9/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-01	3/9/2020	Calcium, Dissolved	2.5	1	0.062	NA	mg/L
OW-01	3/9/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-01	3/9/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-01	3/9/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-01	3/9/2020	Iron, Dissolved	0.051	0.02	0.0087	13821880	mg/L
OW-01	3/9/2020	Magnesium, Dissolved	0.31	1	0.05	NA	mg/L
OW-01	3/9/2020	Manganese, Dissolved	0.0052	0.002	0.00029	2017400	mg/L
OW-01	3/9/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-01	3/9/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-01	3/9/2020	Potassium, Dissolved	0.68	1	0.16	NA	mg/L
OW-01	3/9/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-01	3/9/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
OW-01	3/9/2020	Sodium, Dissolved	330	5	2.1	NA	mg/L
OW-01	3/9/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-01	3/9/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-01	3/9/2020	Arsenic, Total	0.0011	0.001	0.00031	10000	mg/L
OW-01	3/9/2020	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
OW-01	3/9/2020	Selenium, Total	0.0023	0.001	0.00048	50000	mg/L
OW-01	3/9/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	3/9/2020	Uranium, Total	0.038	0.0025	0.00042	30000	mg/L
OW-01	3/9/2020	Barium, Total	0.059	0.002	0.00065	2000000	mg/L
OW-01	3/9/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-01	3/9/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-01	3/9/2020	Chromium, Total	0.019	0.006	0.0015	50000	mg/L
OW-01	3/9/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-01	3/9/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	3/9/2020	Manganese, Total	0.053	0.002	0.00029	2017000	mg/L
OW-01	3/9/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-01	3/9/2020	Nickel, Total	0.012	0.01	0.004	372000	mg/L
OW-01	3/9/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-01	3/9/2020	Zinc, Total	0.0088	0.01	0.0058	5960000	mg/L
OW-01	3/9/2020	Iron, Total	3.1	0.1	0.044	13822000	mg/L
OW-01	3/9/2020	Aluminum, Total	7.3	1	0.12	19914000	mg/L
OW-01	3/9/2020	Boron, Total	0.35	0.04	0.0045	3949	mg/L
OW-01	9/20/2020	Mercury, Total	0.00016	0.0002	0.00012	2000	mg/L
OW-01	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-01	9/20/2020	Arsenic, Total	0.0023	0.001	0.00026	10000	mg/L
OW-01	9/20/2020	Lead, Total	0.01	0.0005	0.000034	15000	mg/L
OW-01	9/20/2020	Selenium, Total	0.0035	0.001	0.00066	50000	mg/L
OW-01	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-01	9/20/2020	Uranium, Total	0.035	0.0025	0.00033	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/20/2020	Barium, Total	0.16	0.003	0.0016	2000000	mg/L
OW-01	9/20/2020	Beryllium, Total	0.001	0.002	0.00088	4000	mg/L
OW-01	9/20/2020	Boron, Total	0.35	0.04	0.0074	3949	mg/L
OW-01	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	9/20/2020	Chromium, Total	0.046	0.006	0.0021	50000	mg/L
OW-01	9/20/2020	Manganese, Total	0.36	0.002	0.00081	2017000	mg/L
OW-01	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-01	9/20/2020	Cobalt, Total	0.0032	0.006	0.0024	5980	mg/L
OW-01	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	9/20/2020	Nickel, Total	0.04	0.01	0.0033	372000	mg/L
OW-01	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-01	9/20/2020	Zinc, Total	0.057	0.01	0.0064	5960000	mg/L
OW-01	9/20/2020	Aluminum, Total	12	0.4	0.15	19914000	mg/L
OW-01	9/20/2020	Iron, Total	8.5	1	0.26	13822000	mg/L
OW-01	9/20/2020	Arsenic, Dissolved	0.00061	0.001	0.00021	10000	mg/L
OW-01	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-01	9/20/2020	Selenium, Dissolved	0.0019	0.001	0.00066	50000	mg/L
OW-01	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-01	9/20/2020	Uranium, Dissolved	0.03	0.0025	0.00033	NA	mg/L
OW-01	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-01	9/20/2020	Sodium, Dissolved	320	5	0.69	NA	mg/L
OW-01	9/20/2020	Aluminum, Dissolved	0.025	0.02	0.0056	19913930	mg/L
OW-01	9/20/2020	Barium, Dissolved	0.035	0.002	0.0011	2000000	mg/L
OW-01	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-01	9/20/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
OW-01	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-01	9/20/2020	Calcium, Dissolved	2.4	1	0.11	NA	mg/L
OW-01	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-01	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-01	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-01	9/20/2020	Iron, Dissolved	0.015	0.02	0.01	13821880	mg/L
OW-01	9/20/2020	Magnesium, Dissolved	0.28	1	0.067	NA	mg/L
OW-01	9/20/2020	Manganese, Dissolved	0.0059	0.002	0.00058	2017400	mg/L
OW-01	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-01	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-01	9/20/2020	Potassium, Dissolved	0.7	1	0.16	NA	mg/L
OW-01	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-01	9/20/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OW-01	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-01	12/11/2020	Aluminum, Total	0.29	0.2	0.051	19914000	mg/L
OW-01	12/11/2020	Calcium, Total	2.56	0.5	0.084	NA	mg/L
OW-01	12/11/2020	Boron, Total	0.349	0.1	0.022	3949	mg/L
OW-01	12/11/2020	Barium, Total	0.0429	0.01	0.003	2000000	mg/L
OW-01	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-01	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-01	12/11/2020	Magnesium, Total	ND	0.5	0.12	NA	mg/L
OW-01	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-01	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-01	12/11/2020	Sodium, Total	317	2	0.92	NA	mg/L
OW-01	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-01	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-01	12/11/2020	Manganese, Total	0.0134	0.01	0.003	2017000	mg/L
OW-01	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-01	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-01	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-01	12/11/2020	Iron, Total	0.423	0.2	0.075	13822000	mg/L
OW-01	12/11/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-01	12/11/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-01	12/11/2020	Boron, Dissolved	0.376	0.2	0.0527	3949110	mg/L
OW-01	12/11/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-01	12/11/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-01	12/11/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-01	12/11/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-01	12/11/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-01	12/11/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-01	12/11/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-01	12/11/2020	Manganese, Dissolved	ND	0.015	0.00141	2017400	mg/L
OW-01	12/11/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-01	12/11/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/11/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-01	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-01	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-01	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-01	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-01	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-01	12/11/2020	Uranium, Total Recoverable	**33.9**	5	1.12	30	ug/L
OW-01	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-01	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-01	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-01	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-01	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-01	12/11/2020	Uranium, Dissolved	33.7	5	1.12	NA	ug/L
OW-01	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-01	12/11/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-01	3/22/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
OW-01	3/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	3/22/2012	Barium, Total	0.045	0.002	0.0006	2000000	mg/L
OW-01	3/22/2012	Calcium, Total	2.2	1	0.026	NA	mg/L
OW-01	3/22/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
OW-01	3/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	3/22/2012	Copper, Total	ND	0.006	0.00066	790000	mg/L
OW-01	3/22/2012	Iron, Total	0.23	0.02	0.0089	13822000	mg/L
OW-01	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-01	3/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	3/22/2012	Manganese, Total	0.058	0.002	0.00012	2017000	mg/L
OW-01	3/22/2012	Sodium, Total	330	5	0.22	NA	mg/L
OW-01	3/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	3/22/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
OW-01	3/22/2012	Uranium, Total	0.041	0.0025	0.00003	30000	mg/L
OW-01	3/22/2012	Zinc, Total	0.01	0.01	0.0011	5960000	mg/L
OW-01	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-01	6/13/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-01	6/13/2012	Barium, Total	0.036	0.002	0.00031	2000000	mg/L
OW-01	6/13/2012	Calcium, Total	2.1	1	0.026	NA	mg/L
OW-01	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-01	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-01	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-01	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-01	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	6/13/2012	Potassium, Total	1.1	1	0.48	NA	mg/L
OW-01	6/13/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	6/13/2012	Manganese, Total	0.0067	0.002	0.00062	2017000	mg/L
OW-01	6/13/2012	Sodium, Total	320	5	0.22	NA	mg/L
OW-01	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-01	6/13/2012	Selenium, Total	0.0037	0.001	0.00033	50000	mg/L
OW-01	6/13/2012	Uranium, Total	0.043	0.001	0.00006	30000	mg/L
OW-01	6/13/2012	Zinc, Total	0.015	0.01	0.00062	5960000	mg/L
OW-01	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	8/22/2012	Barium, Total	0.039	0.002	0.00039	2000000	mg/L
OW-01	8/22/2012	Calcium, Total	2.4	1	0.026	NA	mg/L
OW-01	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	8/22/2012	Copper, Total	0.008	0.006	0.0041	790000	mg/L
OW-01	8/22/2012	Iron, Total	0.19	0.02	0.013	13822000	mg/L
OW-01	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	8/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-01	8/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	8/22/2012	Manganese, Total	0.027	0.002	0.00026	2017000	mg/L
OW-01	8/22/2012	Sodium, Total	330	5	0.22	NA	mg/L
OW-01	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	8/22/2012	Selenium, Total	0.0041	0.0025	0.0025	50000	mg/L
OW-01	8/22/2012	Uranium, Total	0.04	0.0025	0.00003	30000	mg/L
OW-01	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	11/27/2012	Barium, Total	0.035	0.002	0.00039	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/27/2012	Calcium, Total	ND	5	0.13	NA	mg/L
OW-01	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	11/27/2012	Iron, Total	0.18	0.02	0.013	13822000	mg/L
OW-01	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	11/27/2012	Potassium, Total	ND	5	2.4	NA	mg/L
OW-01	11/27/2012	Magnesium, Total	ND	5	0.065	NA	mg/L
OW-01	11/27/2012	Manganese, Total	0.013	0.002	0.00026	2017000	mg/L
OW-01	11/27/2012	Sodium, Total	280	5	0.22	NA	mg/L
OW-01	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	11/27/2012	Selenium, Total	0.0026	0.0025	0.0025	50000	mg/L
OW-01	11/27/2012	Uranium, Total	0.045	0.0025	0.00003	30000	mg/L
OW-01	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-01	3/19/2013	Barium, Total	0.035	0.002	0.00039	2000000	mg/L
OW-01	3/19/2013	Calcium, Total	2	1	0.069	NA	mg/L
OW-01	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	3/19/2013	Iron, Total	0.088	0.02	0.013	13822000	mg/L
OW-01	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	3/19/2013	Potassium, Total	ND	1	0.39	NA	mg/L
OW-01	3/19/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	3/19/2013	Manganese, Total	0.0074	0.002	0.00026	2017000	mg/L
OW-01	3/19/2013	Sodium, Total	290	5	1.1	NA	mg/L
OW-01	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	3/19/2013	Selenium, Total	0.0032	0.0025	0.00066	50000	mg/L
OW-01	3/19/2013	Uranium, Total	0.044	0.0025	0.0012	30000	mg/L
OW-01	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-01	6/13/2013	Arsenic, Total	0.0061	0.001	0.00027	10000	mg/L
OW-01	6/13/2013	Barium, Total	0.26	0.002	0.00057	2000000	mg/L
OW-01	6/13/2013	Calcium, Total	2.4	1	0.069	NA	mg/L
OW-01	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-01	6/13/2013	Chromium, Total	0.028	0.006	0.0021	50000	mg/L
OW-01	6/13/2013	Copper, Total	0.0061	0.006	0.005	790000	mg/L
OW-01	6/13/2013	Iron, Total	19	1	0.26	13822000	mg/L
OW-01	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	6/13/2013	Potassium, Total	ND	1	0.24	NA	mg/L
OW-01	6/13/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	6/13/2013	Manganese, Total	0.82	0.002	0.00052	2017000	mg/L
OW-01	6/13/2013	Sodium, Total	290	5	1.6	NA	mg/L
OW-01	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	6/13/2013	Selenium, Total	0.0042	0.001	0.00049	50000	mg/L
OW-01	6/13/2013	Uranium, Total	0.052	0.005	0.0025	30000	mg/L
OW-01	6/13/2013	Zinc, Total	0.07	0.01	0.0011	5960000	mg/L
OW-01	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-01	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-01	9/4/2013	Barium, Total	0.033	0.002	0.00095	2000000	mg/L
OW-01	9/4/2013	Calcium, Total	2.1	1	0.069	NA	mg/L
OW-01	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-01	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-01	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	9/4/2013	Iron, Total	0.037	0.02	0.0089	13822000	mg/L
OW-01	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	9/4/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
OW-01	9/4/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	9/4/2013	Manganese, Total	0.0062	0.002	0.00016	2017000	mg/L
OW-01	9/4/2013	Sodium, Total	310	5	1.6	NA	mg/L
OW-01	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-01	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-01	9/4/2013	Uranium, Total	0.045	0.01	0.000073	30000	mg/L
OW-01	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-01	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-01	11/11/2013	Arsenic, Total	0.0012	0.001	0.000098	10000	mg/L
OW-01	11/11/2013	Barium, Total	0.038	0.002	0.00095	2000000	mg/L
OW-01	11/11/2013	Calcium, Total	1.9	1	0.069	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-01	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-01	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-01	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	11/11/2013	Potassium, Total	1	1	0.24	NA	mg/L
OW-01	11/11/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	11/11/2013	Manganese, Total	0.0075	0.002	0.00016	2017000	mg/L
OW-01	11/11/2013	Sodium, Total	270	5	1.6	NA	mg/L
OW-01	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	11/11/2013	Selenium, Total	0.0046	0.001	0.00029	50000	mg/L
OW-01	11/11/2013	Uranium, Total	0.041	0.001	0.0000073	30000	mg/L
OW-01	11/11/2013	Zinc, Total	0.029	0.01	0.00076	5960000	mg/L
OW-01	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	3/7/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
OW-01	3/7/2014	Barium, Total	0.035	0.002	0.0011	2000000	mg/L
OW-01	3/7/2014	Calcium, Total	2	1	0.082	NA	mg/L
OW-01	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-01	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	3/7/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-01	3/7/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-01	3/7/2014	Manganese, Total	0.0063	0.002	0.00055	2017000	mg/L
OW-01	3/7/2014	Sodium, Total	320	5	2	NA	mg/L
OW-01	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	3/7/2014	Selenium, Total	0.0039	0.001	0.00029	50000	mg/L
OW-01	3/7/2014	Uranium, Total	0.043	0.001	0.0000073	30000	mg/L
OW-01	3/7/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
OW-01	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	6/3/2014	Arsenic, Total	0.0016	0.001	0.00011	10000	mg/L
OW-01	6/3/2014	Barium, Total	0.039	0.002	0.0011	2000000	mg/L
OW-01	6/3/2014	Calcium, Total	3.5	1	0.053	NA	mg/L
OW-01	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	6/3/2014	Iron, Total	0.64	0.02	0.0062	13822000	mg/L
OW-01	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	6/3/2014	Potassium, Total	1.7	1	0.24	NA	mg/L
OW-01	6/3/2014	Magnesium, Total	ND	1	0.024	NA	mg/L
OW-01	6/3/2014	Manganese, Total	0.025	0.002	0.00055	2017000	mg/L
OW-01	6/3/2014	Sodium, Total	310	5	1.3	NA	mg/L
OW-01	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-01	6/3/2014	Selenium, Total	0.0066	0.001	0.00015	50000	mg/L
OW-01	6/3/2014	Uranium, Total	0.044	0.005	0.00025	30000	mg/L
OW-01	6/3/2014	Zinc, Total	0.013	0.01	0.0014	5960000	mg/L
OW-01	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-01	9/11/2014	Arsenic, Total	0.013	0.01	0.0036	10000	mg/L
OW-01	9/11/2014	Barium, Total	0.56	0.002	0.0005	2000000	mg/L
OW-01	9/11/2014	Calcium, Total	17	1	0.082	NA	mg/L
OW-01	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	9/11/2014	Chromium, Total	0.12	0.006	0.0028	50000	mg/L
OW-01	9/11/2014	Copper, Total	0.025	0.006	0.0046	790000	mg/L
OW-01	9/11/2014	Iron, Total	41	2	0.72	13822000	mg/L
OW-01	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	9/11/2014	Potassium, Total	2	1	0.093	NA	mg/L
OW-01	9/11/2014	Magnesium, Total	1.7	1	0.018	NA	mg/L
OW-01	9/11/2014	Manganese, Total	1.7	0.02	0.0049	2017000	mg/L
OW-01	9/11/2014	Sodium, Total	330	10	3.9	NA	mg/L
OW-01	9/11/2014	Lead, Total	0.078	0.01	0.0026	15000	mg/L
OW-01	9/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
OW-01	9/11/2014	Uranium, Total	0.066	0.01	0.000072	30000	mg/L
OW-01	9/11/2014	Zinc, Total	0.19	0.01	0.0035	5960000	mg/L
OW-01	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	11/10/2014	Arsenic, Total	0.0013	0.001	0.00011	10000	mg/L
OW-01	11/10/2014	Barium, Total	0.033	0.002	0.0011	2000000	mg/L
OW-01	11/10/2014	Calcium, Total	2.1	1	0.082	NA	mg/L
OW-01	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	11/10/2014	Iron, Total	0.048	0.02	0.0062	13822000	mg/L
OW-01	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	11/10/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-01	11/10/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-01	11/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
OW-01	11/10/2014	Sodium, Total	310	5	2	NA	mg/L
OW-01	11/10/2014	Lead, Total	ND	0.02	0.0012	15000	mg/L
OW-01	11/10/2014	Selenium, Total	0.0037	0.001	0.00015	50000	mg/L
OW-01	11/10/2014	Uranium, Total	0.038	0.02	0.001	30000	mg/L
OW-01	11/10/2014	Zinc, Total	0.031	0.01	0.0014	5960000	mg/L
OW-01	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-01	3/9/2015	Barium, Total	0.04	0.002	0.00073	2000000	mg/L
OW-01	3/9/2015	Calcium, Total	2.2	1	0.057	NA	mg/L
OW-01	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-01	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	3/9/2015	Iron, Total	0.54	0.02	0.0072	13822000	mg/L
OW-01	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	3/9/2015	Potassium, Total	1.7	1	0.18	NA	mg/L
OW-01	3/9/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-01	3/9/2015	Manganese, Total	0.024	0.002	0.0015	2017000	mg/L
OW-01	3/9/2015	Sodium, Total	310	5	0.36	NA	mg/L
OW-01	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-01	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-01	3/9/2015	Uranium, Total	0.042	0.001	0.0000081	30000	mg/L
OW-01	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-01	6/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	6/3/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-01	6/3/2015	Barium, Total	0.047	0.002	0.0011	2000000	mg/L
OW-01	6/3/2015	Calcium, Total	2	1	0.057	NA	mg/L
OW-01	6/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	6/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	6/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	6/3/2015	Iron, Total	1	0.1	0.036	13822000	mg/L
OW-01	6/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	6/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-01	6/3/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-01	6/3/2015	Manganese, Total	0.05	0.002	0.0015	2017000	mg/L
OW-01	6/3/2015	Sodium, Total	300	5	0.36	NA	mg/L
OW-01	6/3/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-01	6/3/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-01	6/3/2015	Uranium, Total	0.042	0.005	0.000049	30000	mg/L
OW-01	6/3/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-01	8/12/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
OW-01	8/12/2015	Arsenic, Total	0.036	0.01	0.0029	10000	mg/L
OW-01	8/12/2015	Barium, Total	2.1	0.01	0.0053	2000000	mg/L
OW-01	8/12/2015	Calcium, Total	7.7	1	0.057	NA	mg/L
OW-01	8/12/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
OW-01	8/12/2015	Chromium, Total	0.51	0.03	0.011	50000	mg/L
OW-01	8/12/2015	Copper, Total	0.048	0.03	0.026	790000	mg/L
OW-01	8/12/2015	Iron, Total	140	4	1.4	13822000	mg/L
OW-01	8/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	8/12/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
OW-01	8/12/2015	Magnesium, Total	1.7	1	0.039	NA	mg/L
OW-01	8/12/2015	Manganese, Total	6.7	0.02	0.015	2017000	mg/L
OW-01	8/12/2015	Sodium, Total	320	5	0.36	NA	mg/L
OW-01	8/12/2015	Lead, Total	0.25	0.005	0.00047	15000	mg/L
OW-01	8/12/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-01	8/12/2015	Uranium, Total	0.098	0.005	0.000049	30000	mg/L
OW-01	8/12/2015	Zinc, Total	0.65	0.05	0.019	5960000	mg/L
OW-01	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	10/28/2015	Arsenic, Total	0.0038	0.001	0.00029	10000	mg/L
OW-01	10/28/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
OW-01	10/28/2015	Calcium, Total	7.6	1	0.057	NA	mg/L
OW-01	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	10/28/2015	Chromium, Total	0.056	0.006	0.0022	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	10/28/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
OW-01	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	10/28/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-01	10/28/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
OW-01	10/28/2015	Manganese, Total	0.42	0.002	0.0015	2017000	mg/L
OW-01	10/28/2015	Sodium, Total	290	5	0.36	NA	mg/L
OW-01	10/28/2015	Lead, Total	0.015	0.0005	0.000047	15000	mg/L
OW-01	10/28/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-01	10/28/2015	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
OW-01	10/28/2015	Zinc, Total	0.06	0.01	0.0039	5960000	mg/L
OW-01	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	3/3/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-01	3/3/2016	Barium, Total	0.044	0.002	0.0011	2000000	mg/L
OW-01	3/3/2016	Calcium, Total	2	1	0.26	NA	mg/L
OW-01	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	3/3/2016	Iron, Total	0.71	0.02	0.0072	13822000	mg/L
OW-01	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-01	3/3/2016	Potassium, Total	ND	1	0.18	NA	mg/L
OW-01	3/3/2016	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	3/3/2016	Manganese, Total	0.034	0.002	0.0015	2017000	mg/L
OW-01	3/3/2016	Sodium, Total	330	5	0.48	NA	mg/L
OW-01	3/3/2016	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
OW-01	3/3/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-01	3/3/2016	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
OW-01	3/3/2016	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
OW-01	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	6/6/2016	Arsenic, Total	0.0022	0.001	0.00029	10000	mg/L
OW-01	6/6/2016	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
OW-01	6/6/2016	Calcium, Total	6.7	1	0.26	NA	mg/L
OW-01	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	6/6/2016	Chromium, Total	0.014	0.006	0.0022	50000	mg/L
OW-01	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	6/6/2016	Iron, Total	4.8	0.2	0.072	13822000	mg/L
OW-01	6/6/2016	Mercury, Total	0.000083	0.0002	0.000053	2000	mg/L
OW-01	6/6/2016	Potassium, Total	0.88	1	0.18	NA	mg/L
OW-01	6/6/2016	Magnesium, Total	0.6	1	0.013	NA	mg/L
OW-01	6/6/2016	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
OW-01	6/6/2016	Sodium, Total	330	5	0.48	NA	mg/L
OW-01	6/6/2016	Lead, Total	0.011	0.0005	0.000047	15000	mg/L
OW-01	6/6/2016	Selenium, Total	0.0047	0.005	0.00062	50000	mg/L
OW-01	6/6/2016	Uranium, Total	0.041	0.0025	0.000025	30000	mg/L
OW-01	6/6/2016	Zinc, Total	0.042	0.01	0.0039	5960000	mg/L
OW-01	9/6/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-01	9/6/2016	Arsenic, Total	0.0031	0.001	0.00021	10000	mg/L
OW-01	9/6/2016	Barium, Total	0.17	0.002	0.00079	2000000	mg/L
OW-01	9/6/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	9/6/2016	Chromium, Total	0.043	0.006	0.0027	50000	mg/L
OW-01	9/6/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-01	9/6/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-01	9/6/2016	Arsenic, Dissolved	0.0015	0.005	0.00069	10000	mg/L
OW-01	9/6/2016	Barium, Dissolved	0.039	0.002	0.0013	2000000	mg/L
OW-01	9/6/2016	Calcium, Dissolved	3.1	1	0.5	NA	mg/L
OW-01	9/6/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-01	9/6/2016	Chromium, Dissolved	0.0023	0.006	0.0018	100000	mg/L
OW-01	9/6/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-01	9/6/2016	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
OW-01	9/6/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
OW-01	9/6/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	9/6/2016	Manganese, Dissolved	0.026	0.002	0.00032	2017400	mg/L
OW-01	9/6/2016	Sodium, Dissolved	310	5	2.5	NA	mg/L
OW-01	9/6/2016	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
OW-01	9/6/2016	Selenium, Dissolved	0.0041	0.001	0.00021	50000	mg/L
OW-01	9/6/2016	Uranium, Dissolved	0.04	0.0025	0.00026	NA	mg/L
OW-01	9/6/2016	Zinc, Dissolved	0.096	0.01	0.0028	5960450	mg/L
OW-01	9/6/2016	Iron, Total	9.2	0.2	0.2	13822000	mg/L
OW-01	9/6/2016	Mercury, Total	0.000087	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/6/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
OW-01	9/6/2016	Lead, Total	0.015	0.0025	0.00041	15000	mg/L
OW-01	9/6/2016	Selenium, Total	0.0041	0.005	0.00094	50000	mg/L
OW-01	9/6/2016	Uranium, Total	0.045	0.0025	0.00087	30000	mg/L
OW-01	9/6/2016	Zinc, Total	0.069	0.01	0.0027	5960000	mg/L
OW-01	11/15/2016	Silver, Total	0.0016	0.005	0.0015	50000	mg/L
OW-01	11/15/2016	Arsenic, Total	ND	0.005	0.0011	10000	mg/L
OW-01	11/15/2016	Barium, Total	0.036	0.002	0.00079	2000000	mg/L
OW-01	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-01	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-01	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-01	11/15/2016	Arsenic, Dissolved	0.0012	0.005	0.00069	10000	mg/L
OW-01	11/15/2016	Barium, Dissolved	0.034	0.002	0.0013	2000000	mg/L
OW-01	11/15/2016	Calcium, Dissolved	2.1	1	0.5	NA	mg/L
OW-01	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-01	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-01	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-01	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-01	11/15/2016	Potassium, Dissolved	0.85	1	0.5	NA	mg/L
OW-01	11/15/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	11/15/2016	Manganese, Dissolved	0.0029	0.002	0.00032	2017400	mg/L
OW-01	11/15/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
OW-01	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	11/15/2016	Selenium, Dissolved	0.0047	0.001	0.00021	50000	mg/L
OW-01	11/15/2016	Uranium, Dissolved	0.039	0.0025	0.00026	NA	mg/L
OW-01	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-01	11/15/2016	Iron, Total	0.24	0.02	0.02	13822000	mg/L
OW-01	11/15/2016	Mercury, Total	0.000078	0.0002	0.000053	2000	mg/L
OW-01	11/15/2016	Manganese, Total	0.0088	0.002	0.00027	2017000	mg/L
OW-01	11/15/2016	Lead, Total	0.00013	0.0005	0.000081	15000	mg/L
OW-01	11/15/2016	Selenium, Total	0.0042	0.005	0.00094	50000	mg/L
OW-01	11/15/2016	Uranium, Total	0.039	0.0025	0.00087	30000	mg/L
OW-01	11/15/2016	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
OW-01	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-01	2/27/2017	Arsenic, Total	0.0029	0.001	0.00021	10000	mg/L
OW-01	2/27/2017	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
OW-01	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	2/27/2017	Chromium, Total	0.099	0.006	0.0027	50000	mg/L
OW-01	2/27/2017	Copper, Total	0.0087	0.006	0.003	790000	mg/L
OW-01	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-01	2/27/2017	Arsenic, Dissolved	0.0012	0.005	0.00069	10000	mg/L
OW-01	2/27/2017	Barium, Dissolved	0.03	0.002	0.00085	2000000	mg/L
OW-01	2/27/2017	Calcium, Dissolved	2.5	1	0.5	NA	mg/L
OW-01	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	2/27/2017	Chromium, Dissolved	0.0071	0.006	0.001	100000	mg/L
OW-01	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	2/27/2017	Iron, Dissolved	0.16	0.02	0.02	13821880	mg/L
OW-01	2/27/2017	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
OW-01	2/27/2017	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	2/27/2017	Manganese, Dissolved	0.014	0.002	0.00038	2017400	mg/L
OW-01	2/27/2017	Sodium, Dissolved	330	5	2.5	NA	mg/L
OW-01	2/27/2017	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
OW-01	2/27/2017	Selenium, Dissolved	0.0037	0.001	0.00021	50000	mg/L
OW-01	2/27/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
OW-01	2/27/2017	Iron, Total	9.8	0.2	0.2	13822000	mg/L
OW-01	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-01	2/27/2017	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
OW-01	2/27/2017	Lead, Total	0.017	0.0005	0.000081	15000	mg/L
OW-01	2/27/2017	Selenium, Total	0.0033	0.001	0.00019	50000	mg/L
OW-01	2/27/2017	Zinc, Total	0.073	0.01	0.0027	5960000	mg/L
OW-01	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-01	5/31/2017	Arsenic, Total	0.00076	0.001	0.0003	10000	mg/L
OW-01	5/31/2017	Barium, Total	0.036	0.002	0.00093	2000000	mg/L
OW-01	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-01	5/31/2017	Copper, Total	0.0027	0.006	0.0017	790000	mg/L
OW-01	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-01	5/31/2017	Arsenic, Dissolved	0.00098	0.001	0.00018	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/31/2017	Barium, Dissolved	0.034	0.002	0.00085	2000000	mg/L
OW-01	5/31/2017	Calcium, Dissolved	2.2	1	0.078	NA	mg/L
OW-01	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-01	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	5/31/2017	Potassium, Dissolved	0.66	1	0.11	NA	mg/L
OW-01	5/31/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	5/31/2017	Manganese, Dissolved	0.0011	0.002	0.00038	2017400	mg/L
OW-01	5/31/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
OW-01	5/31/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	5/31/2017	Selenium, Dissolved	0.0033	0.001	0.00039	50000	mg/L
OW-01	5/31/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
OW-01	5/31/2017	Iron, Total	0.061	0.02	0.01	13822000	mg/L
OW-01	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	5/31/2017	Manganese, Total	0.004	0.002	0.0011	2017000	mg/L
OW-01	5/31/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-01	5/31/2017	Selenium, Total	0.0028	0.001	0.00071	50000	mg/L
OW-01	5/31/2017	Zinc, Total	0.0028	0.01	0.0028	5960000	mg/L
OW-01	9/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	9/7/2017	Arsenic, Total	0.00085	0.001	0.0003	10000	mg/L
OW-01	9/7/2017	Barium, Total	0.041	0.002	0.00093	2000000	mg/L
OW-01	9/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	9/7/2017	Chromium, Total	0.0037	0.006	0.0018	50000	mg/L
OW-01	9/7/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-01	9/7/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	9/7/2017	Arsenic, Dissolved	0.00099	0.005	0.00089	10000	mg/L
OW-01	9/7/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
OW-01	9/7/2017	Calcium, Dissolved	2.3	1	0.078	NA	mg/L
OW-01	9/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	9/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	9/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	9/7/2017	Iron, Dissolved	0.035	0.02	0.016	13821880	mg/L
OW-01	9/7/2017	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
OW-01	9/7/2017	Magnesium, Dissolved	0.27	1	0.25	NA	mg/L
OW-01	9/7/2017	Manganese, Dissolved	0.006	0.002	0.00039	2017400	mg/L
OW-01	9/7/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-01	9/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	9/7/2017	Selenium, Dissolved	0.004	0.005	0.0019	50000	mg/L
OW-01	9/7/2017	Uranium, Dissolved	0.035	0.0025	0.00025	NA	mg/L
OW-01	9/7/2017	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
OW-01	9/7/2017	Iron, Total	0.42	0.02	0.01	13822000	mg/L
OW-01	9/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	9/7/2017	Manganese, Total	0.012	0.002	0.0011	2017000	mg/L
OW-01	9/7/2017	Lead, Total	0.00041	0.0005	0.000095	15000	mg/L
OW-01	9/7/2017	Selenium, Total	0.0031	0.001	0.00071	50000	mg/L
OW-01	9/7/2017	Uranium, Total	0.037	0.0025	0.00077	30000	mg/L
OW-01	9/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-01	12/8/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	12/8/2017	Arsenic, Total	0.00089	0.001	0.00041	10000	mg/L
OW-01	12/8/2017	Barium, Total	0.033	0.002	0.001	2000000	mg/L
OW-01	12/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	12/8/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	12/8/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	12/8/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	12/8/2017	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-01	12/8/2017	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
OW-01	12/8/2017	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	12/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	12/8/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	12/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	12/8/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	12/8/2017	Potassium, Dissolved	0.75	1	0.11	NA	mg/L
OW-01	12/8/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	12/8/2017	Manganese, Dissolved	0.0031	0.002	0.00039	2017400	mg/L
OW-01	12/8/2017	Sodium, Dissolved	330	5	0.82	NA	mg/L
OW-01	12/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	12/8/2017	Selenium, Dissolved	0.004	0.005	0.0038	50000	mg/L
OW-01	12/8/2017	Uranium, Dissolved	0.037	0.0025	0.00048	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/8/2017	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
OW-01	12/8/2017	Iron, Total	0.034	0.02	0.01	13822000	mg/L
OW-01	12/8/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	12/8/2017	Manganese, Total	0.0051	0.002	0.0011	2017000	mg/L
OW-01	12/8/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-01	12/8/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-01	12/8/2017	Uranium, Total	0.035	0.0025	0.00077	30000	mg/L
OW-01	12/8/2017	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
OW-01	2/27/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	2/27/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-01	2/27/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-01	2/27/2018	Cadmium, Total	0.00091	0.002	0.00058	5000	mg/L
OW-01	2/27/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
OW-01	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	2/27/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-01	2/27/2018	Barium, Dissolved	0.033	0.002	0.00099	2000000	mg/L
OW-01	2/27/2018	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	2/27/2018	Chromium, Dissolved	0.0019	0.006	0.0013	100000	mg/L
OW-01	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	2/27/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
OW-01	2/27/2018	Potassium, Dissolved	0.79	1	0.11	NA	mg/L
OW-01	2/27/2018	Magnesium, Dissolved	0.25	1	0.25	NA	mg/L
OW-01	2/27/2018	Manganese, Dissolved	0.003	0.002	0.00039	2017400	mg/L
OW-01	2/27/2018	Sodium, Dissolved	340	5	0.82	NA	mg/L
OW-01	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	2/27/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-01	2/27/2018	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
OW-01	2/27/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
OW-01	2/27/2018	Iron, Total	0.11	0.02	0.01	13822000	mg/L
OW-01	2/27/2018	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
OW-01	2/27/2018	Manganese, Total	0.0077	0.002	0.0011	2017000	mg/L
OW-01	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	2/27/2018	Selenium, Total	0.0025	0.001	0.00098	50000	mg/L
OW-01	2/27/2018	Uranium, Total	0.037	0.0025	0.00034	30000	mg/L
OW-01	2/27/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
OW-01	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	5/15/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-01	5/15/2018	Barium, Total	0.04	0.002	0.001	2000000	mg/L
OW-01	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	5/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-01	5/15/2018	Barium, Dissolved	0.033	0.002	0.00099	2000000	mg/L
OW-01	5/15/2018	Calcium, Dissolved	2.2	1	0.078	NA	mg/L
OW-01	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	5/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-01	5/15/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	5/15/2018	Manganese, Dissolved	0.0045	0.002	0.00039	2017400	mg/L
OW-01	5/15/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-01	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	5/15/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
OW-01	5/15/2018	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
OW-01	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-01	5/15/2018	Iron, Total	0.27	0.1	0.051	13822000	mg/L
OW-01	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	5/15/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-01	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	5/15/2018	Selenium, Total	0.0023	0.001	0.00098	50000	mg/L
OW-01	5/15/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
OW-01	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-01	9/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	9/11/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-01	9/11/2018	Barium, Total	0.072	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	9/11/2018	Chromium, Total	0.024	0.006	0.0018	50000	mg/L
OW-01	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	9/11/2018	Arsenic, Dissolved	0.0007	0.001	0.00042	10000	mg/L
OW-01	9/11/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
OW-01	9/11/2018	Calcium, Dissolved	2.3	1	0.078	NA	mg/L
OW-01	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	9/11/2018	Iron, Dissolved	0.017	0.02	0.016	13821880	mg/L
OW-01	9/11/2018	Potassium, Dissolved	0.76	1	0.11	NA	mg/L
OW-01	9/11/2018	Magnesium, Dissolved	0.26	1	0.25	NA	mg/L
OW-01	9/11/2018	Manganese, Dissolved	0.0068	0.002	0.00039	2017400	mg/L
OW-01	9/11/2018	Sodium, Dissolved	370	5	0.82	NA	mg/L
OW-01	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	9/11/2018	Selenium, Dissolved	0.0023	0.001	0.00076	50000	mg/L
OW-01	9/11/2018	Uranium, Dissolved	0.033	0.0025	0.00048	NA	mg/L
OW-01	9/11/2018	Zinc, Dissolved	0.0072	0.01	0.0021	5960450	mg/L
OW-01	9/11/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
OW-01	9/11/2018	Mercury, Total	0.000081	0.0002	0.000038	2000	mg/L
OW-01	9/11/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
OW-01	9/11/2018	Lead, Total	0.0033	0.0025	0.0011	15000	mg/L
OW-01	9/11/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-01	9/11/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
OW-01	9/11/2018	Zinc, Total	0.022	0.01	0.0033	5960000	mg/L
OW-01	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	11/8/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-01	11/8/2018	Barium, Total	0.043	0.002	0.001	2000000	mg/L
OW-01	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	11/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	11/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-01	11/8/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
OW-01	11/8/2018	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	11/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	11/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-01	11/8/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	11/8/2018	Manganese, Dissolved	0.0048	0.002	0.00039	2017400	mg/L
OW-01	11/8/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
OW-01	11/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	11/8/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
OW-01	11/8/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
OW-01	11/8/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-01	11/8/2018	Iron, Total	0.31	0.02	0.01	13822000	mg/L
OW-01	11/8/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	11/8/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-01	11/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	11/8/2018	Selenium, Total	0.0028	0.001	0.00098	50000	mg/L
OW-01	11/8/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
OW-01	11/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-10	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-10	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-10	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-10	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-10	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Total Recoverable	9.91	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Total Recoverable	**45.1**	5	1.12	30	ug/L
OW-10	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-10	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Dissolved	9.81	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Dissolved	44.4	5	1.12	NA	ug/L
OW-10	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-10	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Total Recoverable	9.73	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Total Recoverable	**44.8**	5	1.12	30	ug/L
OW-10	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-10	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Dissolved	9.52	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Dissolved	44.7	5	1.12	NA	ug/L
OW-10	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-10	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-10	12/11/2020	Calcium, Total	59.5	0.5	0.084	NA	mg/L
OW-10	12/11/2020	Boron, Total	0.527	0.1	0.022	3949	mg/L
OW-10	12/11/2020	Barium, Total	0.0535	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Potassium, Total	1.04	1	0.34	NA	mg/L
OW-10	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Magnesium, Total	7.67	0.5	0.12	NA	mg/L
OW-10	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Sodium, Total	406	2	0.92	NA	mg/L
OW-10	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-10	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-10	12/11/2020	Manganese, Total	0.0213	0.01	0.003	2017000	mg/L
OW-10	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-10	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-10	12/11/2020	Barium, Dissolved	0.0517	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Boron, Dissolved	0.519	0.1	0.022	3949110	mg/L
OW-10	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-10	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-10	12/11/2020	Manganese, Dissolved	0.0186	0.01	0.003	2017400	mg/L
OW-10	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-10	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-10	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-10	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-10	12/11/2020	Calcium, Total	58.2	0.5	0.084	NA	mg/L
OW-10	12/11/2020	Boron, Total	0.524	0.1	0.022	3949	mg/L
OW-10	12/11/2020	Barium, Total	0.0532	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-10	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Magnesium, Total	7.49	0.5	0.12	NA	mg/L
OW-10	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Sodium, Total	397	2	0.92	NA	mg/L
OW-10	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-10	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-10	12/11/2020	Manganese, Total	0.0197	0.01	0.003	2017000	mg/L
OW-10	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-10	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-10	12/11/2020	Barium, Dissolved	0.0582	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Boron, Dissolved	0.55	0.1	0.022	3949110	mg/L
OW-10	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-10	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-10	12/11/2020	Manganese, Dissolved	0.0199	0.01	0.003	2017400	mg/L
OW-10	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-10	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-10	9/20/2020	Arsenic, Dissolved	0.00063	0.001	0.00021	10000	mg/L
OW-10	9/20/2020	Lead, Dissolved	0.0001	0.0005	0.000034	NA	mg/L
OW-10	9/20/2020	Selenium, Dissolved	0.011	0.001	0.00066	50000	mg/L
OW-10	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-10	9/20/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-10	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-10	9/20/2020	Sodium, Dissolved	590	50	6.9	NA	mg/L
OW-10	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-10	9/20/2020	Barium, Dissolved	0.053	0.002	0.0011	2000000	mg/L
OW-10	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-10	9/20/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
OW-10	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-10	9/20/2020	Calcium, Dissolved	75	1	0.11	NA	mg/L
OW-10	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-10	9/20/2020	Copper, Dissolved	0.0036	0.006	0.0035	790000	mg/L
OW-10	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-10	9/20/2020	Magnesium, Dissolved	13	1	0.067	NA	mg/L
OW-10	9/20/2020	Manganese, Dissolved	0.093	0.002	0.00058	2017400	mg/L
OW-10	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-10	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-10	9/20/2020	Potassium, Dissolved	1.1	1	0.16	NA	mg/L
OW-10	9/20/2020	Silver, Dissolved	0.0017	0.005	0.0013	81200	mg/L
OW-10	9/20/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
OW-10	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-10	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-10	9/20/2020	Arsenic, Total	0.00072	0.001	0.00026	10000	mg/L
OW-10	9/20/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
OW-10	9/20/2020	Selenium, Total	0.011	0.001	0.00066	50000	mg/L
OW-10	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-10	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	9/20/2020	Aluminum, Total	0.012	0.02	0.0074	19914000	mg/L
OW-10	9/20/2020	Barium, Total	0.056	0.003	0.0016	2000000	mg/L
OW-10	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-10	9/20/2020	Boron, Total	0.52	0.04	0.0074	3949	mg/L
OW-10	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-10	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	9/20/2020	Iron, Total	0.038	0.05	0.013	13822000	mg/L
OW-10	9/20/2020	Manganese, Total	0.095	0.002	0.00081	2017000	mg/L
OW-10	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-10	9/20/2020	Silver, Total	0.0084	0.005	0.0013	50000	mg/L
OW-10	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-10	9/20/2020	Uranium, Total	0.048	0.0025	0.00033	30000	mg/L
OW-10	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
OW-10	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
OW-10	3/4/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
OW-10	3/4/2020	Selenium, Total	0.0078	0.005	0.0024	50000	mg/L
OW-10	3/4/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-10	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	3/4/2020	Uranium, Total	0.05	0.0025	0.00042	30000	mg/L
OW-10	3/4/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-10	3/4/2020	Barium, Total	0.061	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Total	0.00052	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-10	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-10	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-10	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Iron, Total	0.022	0.02	0.0087	13822000	mg/L
OW-10	3/4/2020	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-10	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
OW-10	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-10	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/4/2020	Arsenic, Dissolved	0.00066	0.005	0.0005	10000	mg/L
OW-10	3/4/2020	Selenium, Dissolved	0.0095	0.005	0.00086	50000	mg/L
OW-10	3/4/2020	Uranium, Dissolved	0.049	0.0025	0.00037	NA	mg/L
OW-10	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-10	3/4/2020	Barium, Dissolved	0.044	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Dissolved	0.43	0.04	0.0045	3949110	mg/L
OW-10	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-10	3/4/2020	Calcium, Dissolved	91	1	0.062	NA	mg/L
OW-10	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-10	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-10	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-10	3/4/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-10	3/4/2020	Manganese, Dissolved	0.13	0.002	0.00029	2017400	mg/L
OW-10	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-10	3/4/2020	Silver, Dissolved	0.0017	0.005	0.00094	81200	mg/L
OW-10	3/4/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-10	3/4/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
OW-10	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
OW-10	3/4/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
OW-10	3/4/2020	Selenium, Total	0.012	0.005	0.0024	50000	mg/L
OW-10	3/4/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-10	3/4/2020	Uranium, Total	0.049	0.0025	0.00042	30000	mg/L
OW-10	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	3/4/2020	Aluminum, Total	0.012	0.02	0.0025	19914000	mg/L
OW-10	3/4/2020	Barium, Total	0.064	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Total	0.00045	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Total	0.56	0.04	0.0045	3949	mg/L
OW-10	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-10	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-10	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
OW-10	3/4/2020	Iron, Total	0.014	0.02	0.0087	13822000	mg/L
OW-10	3/4/2020	Manganese, Total	0.3	0.002	0.00029	2017000	mg/L
OW-10	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
OW-10	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-10	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/4/2020	Arsenic, Dissolved	0.00069	0.005	0.0005	10000	mg/L
OW-10	3/4/2020	Selenium, Dissolved	0.0088	0.005	0.00086	50000	mg/L
OW-10	3/4/2020	Uranium, Dissolved	0.049	0.0025	0.00037	NA	mg/L
OW-10	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-10	3/4/2020	Barium, Dissolved	0.052	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Dissolved	0.51	0.04	0.0045	3949110	mg/L
OW-10	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-10	3/4/2020	Calcium, Dissolved	96	1	0.062	NA	mg/L
OW-10	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-10	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-10	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-10	3/4/2020	Magnesium, Dissolved	18	1	0.05	NA	mg/L
OW-10	3/4/2020	Manganese, Dissolved	0.16	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-10	3/4/2020	Silver, Dissolved	0.0024	0.005	0.00094	81200	mg/L
OW-10	3/4/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
OW-10	3/4/2020	Sodium, Dissolved	720	10	4.2	NA	mg/L
OW-10	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Dissolved	0.0006	0.001	0.000101	10000	mg/L
OW-10	5/28/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-10	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	5/28/2019	Calcium, Dissolved	63	1	0.061889	NA	mg/L
OW-10	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	5/28/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	5/28/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
OW-10	5/28/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	5/28/2019	Manganese, Dissolved	0.039	0.002	0.00029	2017400	mg/L
OW-10	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	5/28/2019	Selenium, Dissolved	0.0085	0.001	0.000171	50000	mg/L
OW-10	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-10	5/28/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
OW-10	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	5/28/2019	Uranium, Dissolved	0.045	0.0025	0.000374	NA	mg/L
OW-10	5/28/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Aluminum, Total	0.0094	0.02	0.002488	19914000	mg/L
OW-10	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Total	0.00063	0.001	0.000312	10000	mg/L
OW-10	5/28/2019	Barium, Total	0.048	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
OW-10	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	5/28/2019	Iron, Total	0.013	0.02	0.008747	13822000	mg/L
OW-10	5/28/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-10	5/28/2019	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
OW-10	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Selenium, Total	0.01	0.001	0.000478	50000	mg/L
OW-10	5/28/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
OW-10	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	5/28/2019	Uranium, Total	0.044	0.0025	0.000424	30000	mg/L
OW-10	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Total	0.0057	0.02	0.002488	19914000	mg/L
OW-10	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Total	0.00077	0.001	0.000312	10000	mg/L
OW-10	8/15/2019	Barium, Total	0.054	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-10	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	8/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	8/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	8/15/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-10	8/15/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-10	8/15/2019	Manganese, Total	0.088	0.002	0.00029	2017000	mg/L
OW-10	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	8/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Selenium, Total	0.0096	0.001	0.000478	50000	mg/L
OW-10	8/15/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	8/15/2019	Uranium, Total	0.05	0.0025	0.000424	30000	mg/L
OW-10	8/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	8/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Dissolved	0.0006	0.001	0.000101	10000	mg/L
OW-10	8/15/2019	Barium, Dissolved	0.056	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	8/15/2019	Calcium, Dissolved	93	1	0.061889	NA	mg/L
OW-10	8/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-10	8/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	8/15/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	8/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-10	8/15/2019	Manganese, Dissolved	0.093	0.002	0.00029	2017400	mg/L
OW-10	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-10	8/15/2019	Selenium, Dissolved	0.0079	0.001	0.000171	50000	mg/L
OW-10	8/15/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
OW-10	8/15/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
OW-10	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	8/15/2019	Uranium, Dissolved	0.048	0.0025	0.000374	NA	mg/L
OW-10	8/15/2019	Zinc, Dissolved	0.0063	0.01	0.002252	5960450	mg/L
OW-10	8/15/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-10	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Total	0.00056	0.001	0.000312	10000	mg/L
OW-10	8/15/2019	Barium, Total	0.055	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
OW-10	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	8/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	8/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	8/15/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-10	8/15/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-10	8/15/2019	Manganese, Total	0.092	0.002	0.00029	2017000	mg/L
OW-10	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	8/15/2019	Molybdenum, Total	0.0067	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Selenium, Total	0.0068	0.005	0.00239	50000	mg/L
OW-10	8/15/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
OW-10	8/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	8/15/2019	Uranium, Total	0.048	0.0025	0.000424	30000	mg/L
OW-10	8/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	8/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-10	8/15/2019	Barium, Dissolved	0.058	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	8/15/2019	Calcium, Dissolved	93	1	0.061889	NA	mg/L
OW-10	8/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Dissolved	0.0042	0.006	0.001296	790000	mg/L
OW-10	8/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	8/15/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	8/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-10	8/15/2019	Manganese, Dissolved	0.094	0.002	0.00029	2017400	mg/L
OW-10	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-10	8/15/2019	Selenium, Dissolved	0.008	0.001	0.000171	50000	mg/L
OW-10	8/15/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-10	8/15/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	8/15/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-10	8/15/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
OW-10	5/28/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Aluminum, Total	0.014	0.02	0.002488	19914000	mg/L
OW-10	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Total	0.00075	0.001	0.000312	10000	mg/L
OW-10	5/28/2019	Barium, Total	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-10	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	5/28/2019	Iron, Total	0.01	0.02	0.008747	13822000	mg/L
OW-10	5/28/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-10	5/28/2019	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
OW-10	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Selenium, Total	0.01	0.001	0.000478	50000	mg/L
OW-10	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	5/28/2019	Uranium, Total	0.044	0.0025	0.000424	30000	mg/L
OW-10	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Dissolved	0.00047	0.001	0.000101	10000	mg/L
OW-10	5/28/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-10	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	5/28/2019	Calcium, Dissolved	63	1	0.061889	NA	mg/L
OW-10	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	5/28/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	5/28/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
OW-10	5/28/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	5/28/2019	Manganese, Dissolved	0.039	0.002	0.00029	2017400	mg/L
OW-10	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Potassium, Dissolved	1	1	0.162288	NA	mg/L
OW-10	5/28/2019	Selenium, Dissolved	0.0075	0.001	0.000171	50000	mg/L
OW-10	5/28/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-10	5/28/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
OW-10	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	3/27/2019	Arsenic, Dissolved	0.00053	0.001	0.000101	10000	mg/L
OW-10	3/27/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	3/27/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-10	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	3/27/2019	Calcium, Dissolved	62	5	0.309446	NA	mg/L
OW-10	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	3/27/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	3/27/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	3/27/2019	Manganese, Dissolved	0.042	0.002	0.00029	2017400	mg/L
OW-10	3/27/2019	Molybdenum, Dissolved	0.0069	0.008	0.006735	98700	mg/L
OW-10	3/27/2019	Nickel, Dissolved	0.0044	0.01	0.004009	372000	mg/L
OW-10	3/27/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	3/27/2019	Selenium, Dissolved	0.0083	0.001	0.000171	50000	mg/L
OW-10	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-10	3/27/2019	Sodium, Dissolved	500	5	2.080881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-10	3/27/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-10	3/27/2019	Aluminum, Total	0.0047	0.02	0.004564	19914000	mg/L
OW-10	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-10	3/27/2019	Arsenic, Total	0.00052	0.001	0.000312	10000	mg/L
OW-10	3/27/2019	Barium, Total	0.043	0.002	0.000488	2000000	mg/L
OW-10	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-10	3/27/2019	Boron, Total	0.52	0.04	0.001821	3949	mg/L
OW-10	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	3/27/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-10	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-10	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	3/27/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-10	3/27/2019	Lead, Total	0.00014	0.0005	0.000026	15000	mg/L
OW-10	3/27/2019	Manganese, Total	0.035	0.002	0.00006	2017000	mg/L
OW-10	3/27/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-10	3/27/2019	Molybdenum, Total	0.0044	0.008	0.002075	98700	mg/L
OW-10	3/27/2019	Nickel, Total	0.003	0.01	0.001491	372000	mg/L
OW-10	3/27/2019	Selenium, Total	0.0088	0.001	0.000478	50000	mg/L
OW-10	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	3/27/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-10	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	3/27/2019	Arsenic, Dissolved	0.00046	0.001	0.000101	10000	mg/L
OW-10	3/27/2019	Barium, Dissolved	0.046	0.002	0.000648	2000000	mg/L
OW-10	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	3/27/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	3/27/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-10	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	3/27/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	3/27/2019	Magnesium, Dissolved	9.1	1	0.05029	NA	mg/L
OW-10	3/27/2019	Manganese, Dissolved	0.038	0.002	0.00029	2017400	mg/L
OW-10	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	3/27/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	3/27/2019	Selenium, Dissolved	0.0093	0.001	0.000171	50000	mg/L
OW-10	3/27/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
OW-10	3/27/2019	Sodium, Dissolved	490	5	2.080881	NA	mg/L
OW-10	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
OW-10	3/27/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-10	3/27/2019	Aluminum, Total	0.02	0.02	0.004564	19914000	mg/L
OW-10	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-10	3/27/2019	Arsenic, Total	0.0006	0.001	0.000312	10000	mg/L
OW-10	3/27/2019	Barium, Total	0.045	0.002	0.000488	2000000	mg/L
OW-10	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-10	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	3/27/2019	Calcium, Total	62	1	0.027429	NA	mg/L
OW-10	3/27/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-10	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-10	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	3/27/2019	Iron, Total	0.0094	0.02	0.006053	13822000	mg/L
OW-10	3/27/2019	Lead, Total	0.00015	0.0005	0.000026	15000	mg/L
OW-10	3/27/2019	Manganese, Total	0.042	0.002	0.00006	2017000	mg/L
OW-10	3/27/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OW-10	3/27/2019	Molybdenum, Total	0.0058	0.008	0.002075	98700	mg/L
OW-10	3/27/2019	Nickel, Total	0.0032	0.01	0.001491	372000	mg/L
OW-10	3/27/2019	Selenium, Total	0.0079	0.001	0.000478	50000	mg/L
OW-10	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	3/27/2019	Uranium, Total	0.048	0.0025	0.000424	30000	mg/L
OW-10	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	10/17/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	10/17/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-10	10/17/2019	Arsenic, Dissolved	0.00098	0.005	0.000504	10000	mg/L
OW-10	10/17/2019	Barium, Dissolved	0.066	0.002	0.000648	2000000	mg/L
OW-10	10/17/2019	Beryllium, Dissolved	0.00039	0.002	0.000284	4000	mg/L
OW-10	10/17/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
OW-10	10/17/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	10/17/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-10	10/17/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	10/17/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	10/17/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	10/17/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	10/17/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-10	10/17/2019	Magnesium, Dissolved	22	1	0.05029	NA	mg/L
OW-10	10/17/2019	Manganese, Dissolved	0.16	0.002	0.00029	2017400	mg/L
OW-10	10/17/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	10/17/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	10/17/2019	Potassium, Dissolved	2.9	1	0.162288	NA	mg/L
OW-10	10/17/2019	Selenium, Dissolved	0.009	0.005	0.000857	50000	mg/L
OW-10	10/17/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
OW-10	10/17/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
OW-10	10/17/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-10	10/17/2019	Uranium, Dissolved	0.057	0.0025	0.000374	NA	mg/L
OW-10	10/17/2019	Zinc, Dissolved	0.0076	0.01	0.002252	5960450	mg/L
OW-10	10/17/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-10	10/17/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-10	10/17/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-10	10/17/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-10	10/17/2019	Beryllium, Total	0.0017	0.002	0.000284	4000	mg/L
OW-10	10/17/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
OW-10	10/17/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	10/17/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	10/17/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	10/17/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	10/17/2019	Iron, Total	0.0099	0.02	0.008747	13822000	mg/L
OW-10	10/17/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
OW-10	10/17/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
OW-10	10/17/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	10/17/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	10/17/2019	Nickel, Total	0.0067	0.01	0.004009	372000	mg/L
OW-10	10/17/2019	Selenium, Total	0.0089	0.005	0.00239	50000	mg/L
OW-10	10/17/2019	Silver, Total	0.0039	0.005	0.001418	50000	mg/L
OW-10	10/17/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-10	10/17/2019	Uranium, Total	0.055	0.0025	0.000424	30000	mg/L
OW-10	10/17/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	3/22/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
OW-10	3/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	3/22/2012	Barium, Total	0.033	0.002	0.0006	2000000	mg/L
OW-10	3/22/2012	Calcium, Total	32	1	0.026	NA	mg/L
OW-10	3/22/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
OW-10	3/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	3/22/2012	Copper, Total	ND	0.006	0.00066	790000	mg/L
OW-10	3/22/2012	Iron, Total	0.029	0.02	0.0089	13822000	mg/L
OW-10	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-10	3/22/2012	Magnesium, Total	4.6	1	0.013	NA	mg/L
OW-10	3/22/2012	Manganese, Total	ND	0.002	0.00012	2017000	mg/L
OW-10	3/22/2012	Sodium, Total	400	5	0.22	NA	mg/L
OW-10	3/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	3/22/2012	Selenium, Total	0.0076	0.0025	0.0025	50000	mg/L
OW-10	3/22/2012	Uranium, Total	0.051	0.0025	0.00003	30000	mg/L
OW-10	3/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-10	6/13/2012	Arsenic, Total	ND	0.002	0.00022	10000	mg/L
OW-10	6/13/2012	Barium, Total	0.08	0.002	0.00031	2000000	mg/L
OW-10	6/13/2012	Calcium, Total	160	10	0.26	NA	mg/L
OW-10	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-10	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-10	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-10	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	6/13/2012	Potassium, Total	1.9	1	0.48	NA	mg/L
OW-10	6/13/2012	Magnesium, Total	21	1	0.013	NA	mg/L
OW-10	6/13/2012	Manganese, Total	0.053	0.002	0.00062	2017000	mg/L
OW-10	6/13/2012	Sodium, Total	740	10	0.45	NA	mg/L
OW-10	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-10	6/13/2012	Selenium, Total	0.014	0.002	0.00066	50000	mg/L
OW-10	6/13/2012	Uranium, Total	0.067	0.002	0.00012	30000	mg/L
OW-10	6/13/2012	Zinc, Total	0.026	0.01	0.00062	5960000	mg/L
OW-10	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	8/22/2012	Barium, Total	0.037	0.002	0.00039	2000000	mg/L
OW-10	8/22/2012	Calcium, Total	29	1	0.026	NA	mg/L
OW-10	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	8/22/2012	Iron, Total	0.03	0.02	0.013	13822000	mg/L
OW-10	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	8/22/2012	Potassium, Total	1	1	0.48	NA	mg/L
OW-10	8/22/2012	Magnesium, Total	5.4	1	0.013	NA	mg/L
OW-10	8/22/2012	Manganese, Total	0.0034	0.002	0.00026	2017000	mg/L
OW-10	8/22/2012	Sodium, Total	410	5	0.22	NA	mg/L
OW-10	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	8/22/2012	Selenium, Total	0.0084	0.0025	0.0025	50000	mg/L
OW-10	8/22/2012	Uranium, Total	0.049	0.0025	0.00003	30000	mg/L
OW-10	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	11/27/2012	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
OW-10	11/27/2012	Calcium, Total	310	5	0.13	NA	mg/L
OW-10	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	11/27/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-10	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	11/27/2012	Potassium, Total	ND	5	2.4	NA	mg/L
OW-10	11/27/2012	Magnesium, Total	54	5	0.065	NA	mg/L
OW-10	11/27/2012	Manganese, Total	0.13	0.002	0.00026	2017000	mg/L
OW-10	11/27/2012	Sodium, Total	1200	20	0.89	NA	mg/L
OW-10	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	11/27/2012	Selenium, Total	0.013	0.0025	0.0025	50000	mg/L
OW-10	11/27/2012	Uranium, Total	0.087	0.0025	0.00003	30000	mg/L
OW-10	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-10	3/19/2013	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
OW-10	3/19/2013	Calcium, Total	220	5	0.34	NA	mg/L
OW-10	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	3/19/2013	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-10	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	3/19/2013	Potassium, Total	2.3	1	0.39	NA	mg/L
OW-10	3/19/2013	Magnesium, Total	35	1	0.028	NA	mg/L
OW-10	3/19/2013	Manganese, Total	0.16	0.002	0.00026	2017000	mg/L
OW-10	3/19/2013	Sodium, Total	900	20	4.3	NA	mg/L
OW-10	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	3/19/2013	Selenium, Total	0.0098	0.0025	0.00066	50000	mg/L
OW-10	3/19/2013	Uranium, Total	0.077	0.005	0.0025	30000	mg/L
OW-10	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	6/13/2013	Silver, Total	0.015	0.005	0.00079	50000	mg/L
OW-10	6/13/2013	Arsenic, Total	ND	0.005	0.0014	10000	mg/L
OW-10	6/13/2013	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
OW-10	6/13/2013	Calcium, Total	250	5	0.34	NA	mg/L
OW-10	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-10	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-10	6/13/2013	Iron, Total	ND	0.02	0.0052	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	6/13/2013	Potassium, Total	2.6	1	0.24	NA	mg/L
OW-10	6/13/2013	Magnesium, Total	37	1	0.028	NA	mg/L
OW-10	6/13/2013	Manganese, Total	0.14	0.002	0.00052	2017000	mg/L
OW-10	6/13/2013	Sodium, Total	1000	20	6.5	NA	mg/L
OW-10	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	6/13/2013	Selenium, Total	0.017	0.005	0.0024	50000	mg/L
OW-10	6/13/2013	Uranium, Total	0.076	0.005	0.0025	30000	mg/L
OW-10	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	9/4/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-10	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-10	9/4/2013	Barium, Total	0.082	0.002	0.00095	2000000	mg/L
OW-10	9/4/2013	Calcium, Total	170	5	0.34	NA	mg/L
OW-10	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-10	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-10	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-10	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	9/4/2013	Potassium, Total	3.5	1	0.24	NA	mg/L
OW-10	9/4/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OW-10	9/4/2013	Manganese, Total	0.12	0.002	0.00016	2017000	mg/L
OW-10	9/4/2013	Sodium, Total	810	10	3.3	NA	mg/L
OW-10	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-10	9/4/2013	Selenium, Total	0.011	0.005	0.0015	50000	mg/L
OW-10	9/4/2013	Uranium, Total	0.066	0.01	0.000073	30000	mg/L
OW-10	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-10	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-10	11/11/2013	Arsenic, Total	0.0021	0.001	0.000098	10000	mg/L
OW-10	11/11/2013	Barium, Total	0.063	0.002	0.00095	2000000	mg/L
OW-10	11/11/2013	Calcium, Total	110	5	0.34	NA	mg/L
OW-10	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-10	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-10	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-10	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	11/11/2013	Potassium, Total	2.8	1	0.24	NA	mg/L
OW-10	11/11/2013	Magnesium, Total	18	1	0.028	NA	mg/L
OW-10	11/11/2013	Manganese, Total	0.066	0.002	0.00016	2017000	mg/L
OW-10	11/11/2013	Sodium, Total	710	50	16	NA	mg/L
OW-10	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	11/11/2013	Selenium, Total	0.013	0.001	0.00029	50000	mg/L
OW-10	11/11/2013	Uranium, Total	0.054	0.005	0.000036	30000	mg/L
OW-10	11/11/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-10	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-10	3/7/2014	Barium, Total	0.071	0.002	0.0011	2000000	mg/L
OW-10	3/7/2014	Calcium, Total	180	5	0.41	NA	mg/L
OW-10	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	3/7/2014	Potassium, Total	2.1	1	0.093	NA	mg/L
OW-10	3/7/2014	Magnesium, Total	30	1	0.018	NA	mg/L
OW-10	3/7/2014	Manganese, Total	0.098	0.002	0.00055	2017000	mg/L
OW-10	3/7/2014	Sodium, Total	910	10	3.9	NA	mg/L
OW-10	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	3/7/2014	Selenium, Total	0.0095	0.005	0.0015	50000	mg/L
OW-10	3/7/2014	Uranium, Total	0.057	0.005	0.000036	30000	mg/L
OW-10	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-10	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	6/3/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-10	6/3/2014	Barium, Total	0.094	0.002	0.0011	2000000	mg/L
OW-10	6/3/2014	Calcium, Total	250	5	0.27	NA	mg/L
OW-10	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	6/3/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2014	Potassium, Total	4.4	1	0.24	NA	mg/L
OW-10	6/3/2014	Magnesium, Total	40	1	0.024	NA	mg/L
OW-10	6/3/2014	Manganese, Total	0.13	0.002	0.00055	2017000	mg/L
OW-10	6/3/2014	Sodium, Total	1100	20	5	NA	mg/L
OW-10	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-10	6/3/2014	Selenium, Total	0.017	0.005	0.00074	50000	mg/L
OW-10	6/3/2014	Uranium, Total	0.062	0.005	0.00025	30000	mg/L
OW-10	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-10	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-10	9/12/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
OW-10	9/12/2014	Barium, Total	0.086	0.002	0.0005	2000000	mg/L
OW-10	9/12/2014	Calcium, Total	220	10	0.82	NA	mg/L
OW-10	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-10	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-10	9/12/2014	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	9/12/2014	Potassium, Total	4.1	1	0.093	NA	mg/L
OW-10	9/12/2014	Magnesium, Total	36	1	0.018	NA	mg/L
OW-10	9/12/2014	Manganese, Total	0.18	0.002	0.00049	2017000	mg/L
OW-10	9/12/2014	Sodium, Total	1100	100	39	NA	mg/L
OW-10	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-10	9/12/2014	Selenium, Total	0.017	0.01	0.0051	50000	mg/L
OW-10	9/12/2014	Uranium, Total	0.065	0.01	0.000072	30000	mg/L
OW-10	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-10	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	11/10/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-10	11/10/2014	Barium, Total	0.039	0.002	0.0011	2000000	mg/L
OW-10	11/10/2014	Calcium, Total	39	1	0.082	NA	mg/L
OW-10	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	11/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	11/10/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
OW-10	11/10/2014	Magnesium, Total	5.3	1	0.018	NA	mg/L
OW-10	11/10/2014	Manganese, Total	0.0099	0.002	0.00055	2017000	mg/L
OW-10	11/10/2014	Sodium, Total	430	5	2	NA	mg/L
OW-10	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-10	11/10/2014	Selenium, Total	0.013	0.01	0.0015	50000	mg/L
OW-10	11/10/2014	Uranium, Total	0.057	0.01	0.0005	30000	mg/L
OW-10	11/10/2014	Zinc, Total	0.038	0.01	0.0014	5960000	mg/L
OW-10	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-10	3/9/2015	Barium, Total	0.067	0.002	0.00073	2000000	mg/L
OW-10	3/9/2015	Calcium, Total	130	10	0.57	NA	mg/L
OW-10	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-10	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	3/9/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	3/9/2015	Potassium, Total	3.2	1	0.18	NA	mg/L
OW-10	3/9/2015	Magnesium, Total	20	1	0.039	NA	mg/L
OW-10	3/9/2015	Manganese, Total	0.087	0.002	0.0015	2017000	mg/L
OW-10	3/9/2015	Sodium, Total	730	10	0.72	NA	mg/L
OW-10	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-10	3/9/2015	Selenium, Total	0.012	0.005	0.00061	50000	mg/L
OW-10	3/9/2015	Uranium, Total	0.061	0.005	0.00004	30000	mg/L
OW-10	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-10	6/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	6/3/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-10	6/3/2015	Barium, Total	0.095	0.002	0.0011	2000000	mg/L
OW-10	6/3/2015	Calcium, Total	100	5	0.28	NA	mg/L
OW-10	6/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	6/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	6/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	6/3/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	6/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	6/3/2015	Potassium, Total	1.4	1	0.18	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2015	Magnesium, Total	18	1	0.039	NA	mg/L
OW-10	6/3/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
OW-10	6/3/2015	Sodium, Total	660	10	0.72	NA	mg/L
OW-10	6/3/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-10	6/3/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-10	6/3/2015	Uranium, Total	0.063	0.005	0.000049	30000	mg/L
OW-10	6/3/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	8/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	8/12/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	8/12/2015	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
OW-10	8/12/2015	Calcium, Total	110	5	0.28	NA	mg/L
OW-10	8/12/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	8/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	8/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	8/12/2015	Iron, Total	0.038	0.02	0.0072	13822000	mg/L
OW-10	8/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	8/12/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
OW-10	8/12/2015	Magnesium, Total	18	1	0.039	NA	mg/L
OW-10	8/12/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
OW-10	8/12/2015	Sodium, Total	720	10	0.72	NA	mg/L
OW-10	8/12/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-10	8/12/2015	Selenium, Total	0.011	0.005	0.00062	50000	mg/L
OW-10	8/12/2015	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
OW-10	8/12/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
OW-10	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	10/28/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	10/28/2015	Barium, Total	0.095	0.002	0.0011	2000000	mg/L
OW-10	10/28/2015	Calcium, Total	180	5	0.28	NA	mg/L
OW-10	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	10/28/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	10/28/2015	Potassium, Total	2.4	1	0.18	NA	mg/L
OW-10	10/28/2015	Magnesium, Total	32	1	0.039	NA	mg/L
OW-10	10/28/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
OW-10	10/28/2015	Sodium, Total	880	10	0.72	NA	mg/L
OW-10	10/28/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-10	10/28/2015	Selenium, Total	0.013	0.005	0.00062	50000	mg/L
OW-10	10/28/2015	Uranium, Total	0.061	0.0025	0.000025	30000	mg/L
OW-10	10/28/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	3/3/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	3/3/2016	Barium, Total	0.068	0.002	0.0011	2000000	mg/L
OW-10	3/3/2016	Calcium, Total	110	5	1.3	NA	mg/L
OW-10	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	3/3/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-10	3/3/2016	Potassium, Total	2.2	1	0.18	NA	mg/L
OW-10	3/3/2016	Magnesium, Total	22	1	0.013	NA	mg/L
OW-10	3/3/2016	Manganese, Total	0.11	0.002	0.0015	2017000	mg/L
OW-10	3/3/2016	Sodium, Total	840	10	0.96	NA	mg/L
OW-10	3/3/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-10	3/3/2016	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-10	3/3/2016	Uranium, Total	0.06	0.0025	0.000025	30000	mg/L
OW-10	3/3/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	6/6/2016	Arsenic, Total	0.0023	0.005	0.0015	10000	mg/L
OW-10	6/6/2016	Barium, Total	0.064	0.002	0.0011	2000000	mg/L
OW-10	6/6/2016	Calcium, Total	120	5	1.3	NA	mg/L
OW-10	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	6/6/2016	Iron, Total	0.01	0.02	0.0072	13822000	mg/L
OW-10	6/6/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
OW-10	6/6/2016	Potassium, Total	2	1	0.18	NA	mg/L
OW-10	6/6/2016	Magnesium, Total	22	1	0.013	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/6/2016	Manganese, Total	0.11	0.002	0.0015	2017000	mg/L
OW-10	6/6/2016	Sodium, Total	720	10	0.96	NA	mg/L
OW-10	6/6/2016	Lead, Total	0.00024	0.0005	0.000047	15000	mg/L
OW-10	6/6/2016	Selenium, Total	0.015	0.005	0.00062	50000	mg/L
OW-10	6/6/2016	Uranium, Total	0.057	0.0025	0.000025	30000	mg/L
OW-10	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	9/6/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-10	9/6/2016	Arsenic, Total	0.0035	0.005	0.0011	10000	mg/L
OW-10	9/6/2016	Barium, Total	0.061	0.002	0.00079	2000000	mg/L
OW-10	9/6/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	9/6/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-10	9/6/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	9/6/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-10	9/6/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
OW-10	9/6/2016	Barium, Dissolved	0.064	0.002	0.0013	2000000	mg/L
OW-10	9/6/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
OW-10	9/6/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-10	9/6/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-10	9/6/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-10	9/6/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	9/6/2016	Potassium, Dissolved	1.8	1	0.5	NA	mg/L
OW-10	9/6/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
OW-10	9/6/2016	Manganese, Dissolved	0.12	0.002	0.00032	2017400	mg/L
OW-10	9/6/2016	Sodium, Dissolved	790	10	5	NA	mg/L
OW-10	9/6/2016	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
OW-10	9/6/2016	Selenium, Dissolved	0.015	0.005	0.0011	50000	mg/L
OW-10	9/6/2016	Uranium, Dissolved	0.056	0.0025	0.00026	NA	mg/L
OW-10	9/6/2016	Zinc, Dissolved	0.062	0.01	0.0028	5960450	mg/L
OW-10	9/6/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	9/6/2016	Mercury, Total	0.000058	0.0002	0.000053	2000	mg/L
OW-10	9/6/2016	Manganese, Total	0.11	0.002	0.00027	2017000	mg/L
OW-10	9/6/2016	Lead, Total	0.00019	0.0005	0.000081	15000	mg/L
OW-10	9/6/2016	Selenium, Total	0.013	0.001	0.00019	50000	mg/L
OW-10	9/6/2016	Uranium, Total	0.056	0.0025	0.00087	30000	mg/L
OW-10	9/6/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	11/15/2016	Silver, Total	0.0027	0.005	0.0015	50000	mg/L
OW-10	11/15/2016	Arsenic, Total	0.0021	0.005	0.0011	10000	mg/L
OW-10	11/15/2016	Barium, Total	0.047	0.002	0.00079	2000000	mg/L
OW-10	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-10	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-10	11/15/2016	Arsenic, Dissolved	0.0024	0.005	0.00069	10000	mg/L
OW-10	11/15/2016	Barium, Dissolved	0.051	0.002	0.0013	2000000	mg/L
OW-10	11/15/2016	Calcium, Dissolved	80	1	0.5	NA	mg/L
OW-10	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-10	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-10	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-10	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	11/15/2016	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
OW-10	11/15/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
OW-10	11/15/2016	Manganese, Dissolved	0.076	0.002	0.00032	2017400	mg/L
OW-10	11/15/2016	Sodium, Dissolved	630	10	5	NA	mg/L
OW-10	11/15/2016	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
OW-10	11/15/2016	Selenium, Dissolved	0.016	0.001	0.00021	50000	mg/L
OW-10	11/15/2016	Uranium, Dissolved	0.056	0.0025	0.00026	NA	mg/L
OW-10	11/15/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
OW-10	11/15/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	11/15/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-10	11/15/2016	Manganese, Total	0.047	0.002	0.00027	2017000	mg/L
OW-10	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-10	11/15/2016	Selenium, Total	0.016	0.005	0.00094	50000	mg/L
OW-10	11/15/2016	Uranium, Total	0.055	0.0025	0.00087	30000	mg/L
OW-10	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-10	2/27/2017	Arsenic, Total	0.002	0.005	0.0011	10000	mg/L
OW-10	2/27/2017	Barium, Total	0.042	0.002	0.00079	2000000	mg/L
OW-10	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-10	2/27/2017	Arsenic, Dissolved	0.0019	0.005	0.00069	10000	mg/L
OW-10	2/27/2017	Barium, Dissolved	0.045	0.002	0.00085	2000000	mg/L
OW-10	2/27/2017	Calcium, Dissolved	55	1	0.5	NA	mg/L
OW-10	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-10	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	2/27/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	2/27/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
OW-10	2/27/2017	Magnesium, Dissolved	8.7	1	0.5	NA	mg/L
OW-10	2/27/2017	Manganese, Dissolved	0.042	0.002	0.00038	2017400	mg/L
OW-10	2/27/2017	Sodium, Dissolved	510	10	5	NA	mg/L
OW-10	2/27/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
OW-10	2/27/2017	Selenium, Dissolved	0.013	0.001	0.00021	50000	mg/L
OW-10	2/27/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
OW-10	2/27/2017	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-10	2/27/2017	Manganese, Total	0.04	0.002	0.00027	2017000	mg/L
OW-10	2/27/2017	Lead, Total	0.0002	0.0005	0.000081	15000	mg/L
OW-10	2/27/2017	Selenium, Total	0.011	0.001	0.00019	50000	mg/L
OW-10	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-10	5/31/2017	Arsenic, Total	0.0018	0.005	0.0015	10000	mg/L
OW-10	5/31/2017	Barium, Total	0.057	0.002	0.00093	2000000	mg/L
OW-10	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-10	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-10	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-10	5/31/2017	Arsenic, Dissolved	0.0018	0.005	0.00089	10000	mg/L
OW-10	5/31/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
OW-10	5/31/2017	Calcium, Dissolved	95	1	0.078	NA	mg/L
OW-10	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-10	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	5/31/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	5/31/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-10	5/31/2017	Manganese, Dissolved	0.074	0.002	0.00038	2017400	mg/L
OW-10	5/31/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
OW-10	5/31/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
OW-10	5/31/2017	Selenium, Dissolved	0.012	0.005	0.0019	50000	mg/L
OW-10	5/31/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-10	5/31/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	5/31/2017	Manganese, Total	0.075	0.002	0.0011	2017000	mg/L
OW-10	5/31/2017	Lead, Total	0.00023	0.0005	0.000095	15000	mg/L
OW-10	5/31/2017	Selenium, Total	0.0096	0.001	0.00071	50000	mg/L
OW-10	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-10	9/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	9/7/2017	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
OW-10	9/7/2017	Barium, Total	0.059	0.002	0.00093	2000000	mg/L
OW-10	9/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	9/7/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	9/7/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-10	9/7/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	9/7/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
OW-10	9/7/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
OW-10	9/7/2017	Calcium, Dissolved	88	1	0.078	NA	mg/L
OW-10	9/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	9/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	9/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	9/7/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	9/7/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-10	9/7/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-10	9/7/2017	Manganese, Dissolved	0.066	0.002	0.00039	2017400	mg/L
OW-10	9/7/2017	Sodium, Dissolved	650	10	1.6	NA	mg/L
OW-10	9/7/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
OW-10	9/7/2017	Selenium, Dissolved	0.018	0.005	0.0019	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/7/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-10	9/7/2017	Zinc, Dissolved	0.069	0.01	0.0021	5960450	mg/L
OW-10	9/7/2017	Iron, Total	0.018	0.02	0.01	13822000	mg/L
OW-10	9/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	9/7/2017	Manganese, Total	0.063	0.002	0.0011	2017000	mg/L
OW-10	9/7/2017	Lead, Total	0.00026	0.0005	0.000095	15000	mg/L
OW-10	9/7/2017	Selenium, Total	0.016	0.001	0.00071	50000	mg/L
OW-10	9/7/2017	Uranium, Total	0.057	0.0025	0.00077	30000	mg/L
OW-10	9/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	12/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	12/7/2017	Arsenic, Total	0.0023	0.005	0.0021	10000	mg/L
OW-10	12/7/2017	Barium, Total	0.049	0.002	0.001	2000000	mg/L
OW-10	12/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	12/7/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	12/7/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	12/7/2017	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
OW-10	12/7/2017	Arsenic, Dissolved	0.0046	0.005	0.0021	10000	mg/L
OW-10	12/7/2017	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	12/7/2017	Calcium, Dissolved	74	1	0.078	NA	mg/L
OW-10	12/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	12/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	12/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	12/7/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	12/7/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	12/7/2017	Magnesium, Dissolved	13	1	0.25	NA	mg/L
OW-10	12/7/2017	Manganese, Dissolved	0.069	0.002	0.00039	2017400	mg/L
OW-10	12/7/2017	Sodium, Dissolved	630	10	1.6	NA	mg/L
OW-10	12/7/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-10	12/7/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
OW-10	12/7/2017	Uranium, Dissolved	0.051	0.0025	0.00048	NA	mg/L
OW-10	12/7/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-10	12/7/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	12/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	12/7/2017	Manganese, Total	0.069	0.002	0.0011	2017000	mg/L
OW-10	12/7/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-10	12/7/2017	Selenium, Total	0.014	0.005	0.0049	50000	mg/L
OW-10	12/7/2017	Uranium, Total	0.052	0.0025	0.00077	30000	mg/L
OW-10	12/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	2/27/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-10	2/27/2018	Arsenic, Total	0.0041	0.005	0.0021	10000	mg/L
OW-10	2/27/2018	Barium, Total	0.047	0.002	0.001	2000000	mg/L
OW-10	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	2/27/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
OW-10	2/27/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-10	2/27/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
OW-10	2/27/2018	Calcium, Dissolved	96	1	0.078	NA	mg/L
OW-10	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	2/27/2018	Iron, Dissolved	0.043	0.02	0.016	13821880	mg/L
OW-10	2/27/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-10	2/27/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-10	2/27/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
OW-10	2/27/2018	Sodium, Dissolved	770	10	1.6	NA	mg/L
OW-10	2/27/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
OW-10	2/27/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
OW-10	2/27/2018	Uranium, Dissolved	0.054	0.0025	0.00048	NA	mg/L
OW-10	2/27/2018	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
OW-10	2/27/2018	Iron, Total	0.075	0.02	0.01	13822000	mg/L
OW-10	2/27/2018	Mercury, Total	0.000092	0.0002	0.000037	2000	mg/L
OW-10	2/27/2018	Manganese, Total	0.015	0.002	0.0011	2017000	mg/L
OW-10	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	2/27/2018	Selenium, Total	0.0096	0.001	0.00098	50000	mg/L
OW-10	2/27/2018	Uranium, Total	0.05	0.0025	0.00034	30000	mg/L
OW-10	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	5/15/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/15/2018	Barium, Total	0.054	0.002	0.001	2000000	mg/L
OW-10	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	5/15/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-10	5/15/2018	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	5/15/2018	Calcium, Dissolved	88	1	0.078	NA	mg/L
OW-10	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	5/15/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	5/15/2018	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-10	5/15/2018	Manganese, Dissolved	0.075	0.002	0.00039	2017400	mg/L
OW-10	5/15/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
OW-10	5/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-10	5/15/2018	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
OW-10	5/15/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
OW-10	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-10	5/15/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	5/15/2018	Manganese, Total	0.075	0.002	0.0011	2017000	mg/L
OW-10	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	5/15/2018	Selenium, Total	0.012	0.001	0.00098	50000	mg/L
OW-10	5/15/2018	Uranium, Total	0.056	0.0025	0.00034	30000	mg/L
OW-10	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	9/11/2018	Silver, Total	0.0036	0.005	0.0012	50000	mg/L
OW-10	9/11/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-10	9/11/2018	Barium, Total	0.055	0.002	0.001	2000000	mg/L
OW-10	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	9/11/2018	Silver, Dissolved	0.0041	0.005	0.0018	81200	mg/L
OW-10	9/11/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
OW-10	9/11/2018	Barium, Dissolved	0.06	0.002	0.00099	2000000	mg/L
OW-10	9/11/2018	Calcium, Dissolved	92	1	0.078	NA	mg/L
OW-10	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	9/11/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	9/11/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-10	9/11/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-10	9/11/2018	Manganese, Dissolved	0.089	0.002	0.00039	2017400	mg/L
OW-10	9/11/2018	Sodium, Dissolved	720	10	1.6	NA	mg/L
OW-10	9/11/2018	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
OW-10	9/11/2018	Selenium, Dissolved	0.011	0.001	0.00076	50000	mg/L
OW-10	9/11/2018	Uranium, Dissolved	0.05	0.0025	0.00048	NA	mg/L
OW-10	9/11/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
OW-10	9/11/2018	Iron, Total	0.013	0.02	0.01	13822000	mg/L
OW-10	9/11/2018	Mercury, Total	0.000094	0.0002	0.000038	2000	mg/L
OW-10	9/11/2018	Manganese, Total	0.084	0.002	0.0011	2017000	mg/L
OW-10	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	9/11/2018	Selenium, Total	0.01	0.001	0.00098	50000	mg/L
OW-10	9/11/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-10	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	11/8/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
OW-10	11/8/2018	Barium, Total	0.053	0.002	0.001	2000000	mg/L
OW-10	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	11/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	11/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-10	11/8/2018	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	11/8/2018	Calcium, Dissolved	77	1	0.078	NA	mg/L
OW-10	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	11/8/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
OW-10	11/8/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
OW-10	11/8/2018	Manganese, Dissolved	0.061	0.002	0.00039	2017400	mg/L
OW-10	11/8/2018	Sodium, Dissolved	670	10	1.6	NA	mg/L
OW-10	11/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-10	11/8/2018	Selenium, Dissolved	0.01	0.001	0.00076	50000	mg/L
OW-10	11/8/2018	Uranium, Dissolved	0.053	0.0025	0.00048	NA	mg/L
OW-10	11/8/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-10	11/8/2018	Iron, Total	0.028	0.02	0.01	13822000	mg/L
OW-10	11/8/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	11/8/2018	Manganese, Total	0.064	0.002	0.0011	2017000	mg/L
OW-10	11/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	11/8/2018	Selenium, Total	0.011	0.001	0.00098	50000	mg/L
OW-10	11/8/2018	Uranium, Total	0.048	0.0025	0.00034	30000	mg/L
OW-10	11/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-11	8/20/2019	Aluminum, Dissolved	0.0073	0.02	0.002488	19913930	mg/L
OW-11	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-11	8/20/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-11	8/20/2019	Barium, Dissolved	0.0068	0.002	0.000648	2000000	mg/L
OW-11	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-11	8/20/2019	Boron, Dissolved	1.3	0.2	0.022653	3949110	mg/L
OW-11	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-11	8/20/2019	Calcium, Dissolved	10	1	0.061889	NA	mg/L
OW-11	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-11	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-11	8/20/2019	Copper, Dissolved	0.004	0.006	0.001296	790000	mg/L
OW-11	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-11	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-11	8/20/2019	Magnesium, Dissolved	1.2	1	0.05029	NA	mg/L
OW-11	8/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
OW-11	8/20/2019	Molybdenum, Dissolved	0.17	0.008	0.006735	98700	mg/L
OW-11	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-11	8/20/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
OW-11	8/20/2019	Selenium, Dissolved	0.0047	0.001	0.000171	50000	mg/L
OW-11	8/20/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-11	8/20/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
OW-11	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-11	8/20/2019	Uranium, Dissolved	0.2	0.005	0.000747	NA	mg/L
OW-11	8/20/2019	Zinc, Dissolved	0.0039	0.01	0.002252	5960450	mg/L
OW-11	8/20/2019	Aluminum, Total	0.0045	0.02	0.002488	19914000	mg/L
OW-11	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-11	8/20/2019	Arsenic, Total	0.002	0.001	0.000312	10000	mg/L
OW-11	8/20/2019	Barium, Total	0.0073	0.002	0.000648	2000000	mg/L
OW-11	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-11	8/20/2019	Boron, Total	1.3	0.2	0.022653	3949	mg/L
OW-11	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-11	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-11	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-11	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-11	8/20/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-11	8/20/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-11	8/20/2019	Manganese, Total	0.018	0.002	0.00029	2017000	mg/L
OW-11	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-11	8/20/2019	Molybdenum, Total	0.18	0.008	0.006735	98700	mg/L
OW-11	8/20/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-11	8/20/2019	Selenium, Total	0.0044	0.001	0.000478	50000	mg/L
OW-11	8/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-11	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-11	8/20/2019	Uranium, Total	0.19	0.005	0.000849	30000	mg/L
OW-11	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-11	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-11	9/20/2020	Arsenic, Dissolved	0.002	0.001	0.00021	10000	mg/L
OW-11	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-11	9/20/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-11	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-11	9/20/2020	Uranium, Dissolved	0.2	0.005	0.00065	NA	mg/L
OW-11	9/20/2020	Boron, Dissolved	1.4	0.2	0.033	3949110	mg/L
OW-11	9/20/2020	Sodium, Dissolved	630	50	6.9	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/20/2020	Aluminum, Dissolved	0.0072	0.02	0.0056	19913930	mg/L
OW-11	9/20/2020	Barium, Dissolved	0.0085	0.002	0.0011	2000000	mg/L
OW-11	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-11	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-11	9/20/2020	Calcium, Dissolved	12	1	0.11	NA	mg/L
OW-11	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-11	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-11	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-11	9/20/2020	Magnesium, Dissolved	1.4	1	0.067	NA	mg/L
OW-11	9/20/2020	Manganese, Dissolved	0.018	0.002	0.00058	2017400	mg/L
OW-11	9/20/2020	Molybdenum, Dissolved	0.2	0.008	0.0056	98700	mg/L
OW-11	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-11	9/20/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
OW-11	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-11	9/20/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
OW-11	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-11	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-11	9/20/2020	Arsenic, Total	0.0017	0.001	0.00026	10000	mg/L
OW-11	9/20/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
OW-11	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-11	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-11	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-11	9/20/2020	Aluminum, Total	0.013	0.02	0.0074	19914000	mg/L
OW-11	9/20/2020	Barium, Total	0.0078	0.003	0.0016	2000000	mg/L
OW-11	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-11	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-11	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-11	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-11	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-11	9/20/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
OW-11	9/20/2020	Manganese, Total	0.017	0.002	0.00081	2017000	mg/L
OW-11	9/20/2020	Molybdenum, Total	0.21	0.008	0.0065	98700	mg/L
OW-11	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-11	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-11	9/20/2020	Uranium, Total	0.2	0.005	0.00065	30000	mg/L
OW-11	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
OW-11	9/20/2020	Boron, Total	1.5	0.2	0.037	3949	mg/L
OW-11	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-11	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-11	8/22/2012	Barium, Total	0.0086	0.002	0.00039	2000000	mg/L
OW-11	8/22/2012	Calcium, Total	11	1	0.026	NA	mg/L
OW-11	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-11	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-11	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-11	8/22/2012	Iron, Total	0.041	0.02	0.013	13822000	mg/L
OW-11	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-11	8/22/2012	Potassium, Total	2	1	0.48	NA	mg/L
OW-11	8/22/2012	Magnesium, Total	1.3	1	0.013	NA	mg/L
OW-11	8/22/2012	Manganese, Total	0.095	0.002	0.00026	2017000	mg/L
OW-11	8/22/2012	Sodium, Total	640	10	0.45	NA	mg/L
OW-11	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-11	8/22/2012	Selenium, Total	0.0032	0.0025	0.0025	50000	mg/L
OW-11	8/22/2012	Uranium, Total	0.22	0.005	0.00006	30000	mg/L
OW-11	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-11	9/16/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-11	9/16/2013	Arsenic, Total	0.0024	0.001	0.000098	10000	mg/L
OW-11	9/16/2013	Barium, Total	0.0084	0.002	0.00095	2000000	mg/L
OW-11	9/16/2013	Calcium, Total	12	1	0.069	NA	mg/L
OW-11	9/16/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-11	9/16/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-11	9/16/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-11	9/16/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-11	9/16/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-11	9/16/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-11	9/16/2013	Magnesium, Total	1.3	1	0.028	NA	mg/L
OW-11	9/16/2013	Manganese, Total	0.019	0.002	0.00016	2017000	mg/L
OW-11	9/16/2013	Sodium, Total	630	10	3.3	NA	mg/L
OW-11	9/16/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-11	9/16/2013	Selenium, Total	0.0024	0.001	0.00029	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	Uranium, Total	0.23	0.01	0.000073	30000	mg/L
OW-11	9/16/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
OW-11	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-11	9/12/2014	Arsenic, Total	0.0027	0.001	0.00036	10000	mg/L
OW-11	9/12/2014	Barium, Total	0.0083	0.002	0.0005	2000000	mg/L
OW-11	9/12/2014	Calcium, Total	12	1	0.082	NA	mg/L
OW-11	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-11	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-11	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-11	9/12/2014	Iron, Total	0.047	0.02	0.0072	13822000	mg/L
OW-11	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-11	9/12/2014	Potassium, Total	3.1	1	0.093	NA	mg/L
OW-11	9/12/2014	Magnesium, Total	1.4	1	0.018	NA	mg/L
OW-11	9/12/2014	Manganese, Total	0.021	0.002	0.00049	2017000	mg/L
OW-11	9/12/2014	Sodium, Total	660	10	3.9	NA	mg/L
OW-11	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-11	9/12/2014	Selenium, Total	0.0023	0.001	0.00051	50000	mg/L
OW-11	9/12/2014	Uranium, Total	0.25	0.01	0.000072	30000	mg/L
OW-11	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-11	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-11	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-11	8/17/2015	Barium, Total	0.0076	0.002	0.0011	2000000	mg/L
OW-11	8/17/2015	Calcium, Total	9.2	1	0.057	NA	mg/L
OW-11	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-11	8/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-11	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-11	8/17/2015	Iron, Total	0.025	0.02	0.0072	13822000	mg/L
OW-11	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-11	8/17/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
OW-11	8/17/2015	Magnesium, Total	1.2	1	0.039	NA	mg/L
OW-11	8/17/2015	Manganese, Total	0.015	0.002	0.0015	2017000	mg/L
OW-11	8/17/2015	Sodium, Total	610	10	0.72	NA	mg/L
OW-11	8/17/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-11	8/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-11	8/17/2015	Uranium, Total	0.23	0.005	0.000049	30000	mg/L
OW-11	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-11	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-11	9/9/2016	Arsenic, Total	0.0023	0.005	0.0011	10000	mg/L
OW-11	9/9/2016	Barium, Total	0.008	0.002	0.00079	2000000	mg/L
OW-11	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-11	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-11	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-11	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-11	9/9/2016	Arsenic, Dissolved	0.0021	0.005	0.00069	10000	mg/L
OW-11	9/9/2016	Barium, Dissolved	0.0087	0.002	0.0013	2000000	mg/L
OW-11	9/9/2016	Calcium, Dissolved	9.8	1	0.5	NA	mg/L
OW-11	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-11	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-11	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-11	9/9/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-11	9/9/2016	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
OW-11	9/9/2016	Magnesium, Dissolved	1.2	1	0.5	NA	mg/L
OW-11	9/9/2016	Manganese, Dissolved	0.015	0.002	0.00032	2017400	mg/L
OW-11	9/9/2016	Sodium, Dissolved	620	10	5	NA	mg/L
OW-11	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/9/2016	Selenium, Dissolved	0.0081	0.001	0.00021	50000	mg/L
OW-11	9/9/2016	Uranium, Dissolved	0.18	0.01	0.001	NA	mg/L
OW-11	9/9/2016	Zinc, Dissolved	0.0091	0.01	0.0028	5960450	mg/L
OW-11	9/9/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-11	9/9/2016	Mercury, Total	0.000095	0.0002	0.000053	2000	mg/L
OW-11	9/9/2016	Manganese, Total	0.016	0.002	0.00027	2017000	mg/L
OW-11	9/9/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-11	9/9/2016	Selenium, Total	0.0074	0.005	0.00094	50000	mg/L
OW-11	9/9/2016	Uranium, Total	0.18	0.01	0.0035	30000	mg/L
OW-11	9/9/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-11	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-11	9/18/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
OW-11	9/18/2017	Barium, Total	0.0077	0.002	0.00093	2000000	mg/L
OW-11	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-11	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-11	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-11	9/18/2017	Arsenic, Dissolved	0.0026	0.001	0.00018	10000	mg/L
OW-11	9/18/2017	Barium, Dissolved	0.0078	0.002	0.00085	2000000	mg/L
OW-11	9/18/2017	Calcium, Dissolved	12	1	0.078	NA	mg/L
OW-11	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-11	9/18/2017	Chromium, Dissolved	0.002	0.006	0.0013	100000	mg/L
OW-11	9/18/2017	Copper, Dissolved	0.0044	0.006	0.0032	790000	mg/L
OW-11	9/18/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-11	9/18/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
OW-11	9/18/2017	Magnesium, Dissolved	1.3	1	0.25	NA	mg/L
OW-11	9/18/2017	Manganese, Dissolved	0.019	0.002	0.00039	2017400	mg/L
OW-11	9/18/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
OW-11	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/18/2017	Selenium, Dissolved	0.0042	0.001	0.00039	50000	mg/L
OW-11	9/18/2017	Zinc, Dissolved	0.087	0.01	0.0021	5960450	mg/L
OW-11	9/18/2017	Iron, Total	0.011	0.02	0.01	13822000	mg/L
OW-11	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-11	9/18/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-11	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-11	9/18/2017	Selenium, Total	0.005	0.001	0.00071	50000	mg/L
OW-11	9/18/2017	Uranium, Total	0.21	0.005	0.0015	30000	mg/L
OW-11	9/18/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-11	9/18/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-11	9/18/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
OW-11	9/18/2018	Barium, Total	0.008	0.002	0.001	2000000	mg/L
OW-11	9/18/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-11	9/18/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-11	9/18/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-11	9/18/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-11	9/18/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-11	9/18/2018	Barium, Dissolved	0.0075	0.002	0.00099	2000000	mg/L
OW-11	9/18/2018	Calcium, Dissolved	11	1	0.078	NA	mg/L
OW-11	9/18/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-11	9/18/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-11	9/18/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-11	9/18/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-11	9/18/2018	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
OW-11	9/18/2018	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
OW-11	9/18/2018	Manganese, Dissolved	0.018	0.002	0.00039	2017400	mg/L
OW-11	9/18/2018	Sodium, Dissolved	630	10	1.6	NA	mg/L
OW-11	9/18/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/18/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
OW-11	9/18/2018	Uranium, Dissolved	0.21	0.01	0.0019	NA	mg/L
OW-11	9/18/2018	Zinc, Dissolved	0.0098	0.01	0.0021	5960450	mg/L
OW-11	9/18/2018	Iron, Total	0.012	0.02	0.01	13822000	mg/L
OW-11	9/18/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-11	9/18/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-11	9/18/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-11	9/18/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
OW-11	9/18/2018	Uranium, Total	0.18	0.005	0.00068	30000	mg/L
OW-11	9/18/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-12	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-12	9/17/2020	Arsenic, Dissolved	0.0015	0.001	0.00021	10000	mg/L
OW-12	9/17/2020	Lead, Dissolved	0.000069	0.0005	0.000034	NA	mg/L
OW-12	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-12	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-12	9/17/2020	Uranium, Dissolved	0.011	0.0005	0.000065	NA	mg/L
OW-12	9/17/2020	Aluminum, Dissolved	0.027	0.02	0.0056	19913930	mg/L
OW-12	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-12	9/17/2020	Boron, Dissolved	0.38	0.04	0.0067	3949110	mg/L
OW-12	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-12	9/17/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
OW-12	9/17/2020	Manganese, Dissolved	0.0023	0.002	0.00058	2017400	mg/L
OW-12	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-12	9/17/2020	Barium, Dissolved	0.018	0.002	0.0011	2000000	mg/L
OW-12	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-12	9/17/2020	Chromium, Dissolved	0.0024	0.006	0.002	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-12	9/17/2020	Molybdenum, Dissolved	0.0084	0.008	0.0056	98700	mg/L
OW-12	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-12	9/17/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
OW-12	9/17/2020	Mercury, Total	0.00015	0.0002	0.00012	2000	mg/L
OW-12	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-12	9/17/2020	Arsenic, Total	0.0017	0.001	0.00026	10000	mg/L
OW-12	9/17/2020	Lead, Total	0.00051	0.0005	0.000034	15000	mg/L
OW-12	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-12	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-12	9/17/2020	Uranium, Total	0.014	0.0005	0.000065	30000	mg/L
OW-12	9/17/2020	Aluminum, Total	0.23	0.1	0.037	19914000	mg/L
OW-12	9/17/2020	Barium, Total	0.026	0.015	0.0082	2000000	mg/L
OW-12	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-12	9/17/2020	Boron, Total	0.4	0.2	0.037	3949	mg/L
OW-12	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-12	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-12	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-12	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-12	9/17/2020	Iron, Total	0.18	0.25	0.064	13822000	mg/L
OW-12	9/17/2020	Manganese, Total	0.0095	0.01	0.0041	2017000	mg/L
OW-12	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-12	9/17/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
OW-12	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-12	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-12	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-12	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-12	8/22/2012	Barium, Total	0.028	0.002	0.00039	2000000	mg/L
OW-12	8/22/2012	Calcium, Total	1.8	1	0.026	NA	mg/L
OW-12	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-12	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-12	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-12	8/22/2012	Iron, Total	0.29	0.02	0.013	13822000	mg/L
OW-12	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-12	8/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-12	8/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-12	8/22/2012	Manganese, Total	0.013	0.002	0.00026	2017000	mg/L
OW-12	8/22/2012	Sodium, Total	270	5	0.22	NA	mg/L
OW-12	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-12	8/22/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-12	8/22/2012	Uranium, Total	0.012	0.0025	0.00003	30000	mg/L
OW-12	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-12	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-12	9/10/2013	Arsenic, Total	0.002	0.001	0.000098	10000	mg/L
OW-12	9/10/2013	Barium, Total	0.022	0.002	0.00095	2000000	mg/L
OW-12	9/10/2013	Calcium, Total	2	1	0.069	NA	mg/L
OW-12	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-12	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-12	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-12	9/10/2013	Iron, Total	0.048	0.02	0.0089	13822000	mg/L
OW-12	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-12	9/10/2013	Potassium, Total	1.3	1	0.24	NA	mg/L
OW-12	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-12	9/10/2013	Manganese, Total	0.0021	0.002	0.00016	2017000	mg/L
OW-12	9/10/2013	Sodium, Total	240	5	1.6	NA	mg/L
OW-12	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-12	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
OW-12	9/10/2013	Uranium, Total	0.013	0.001	0.0000073	30000	mg/L
OW-12	9/10/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
OW-12	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-12	9/12/2014	Arsenic, Total	0.0021	0.001	0.00036	10000	mg/L
OW-12	9/12/2014	Barium, Total	0.024	0.002	0.0005	2000000	mg/L
OW-12	9/12/2014	Calcium, Total	1.7	1	0.082	NA	mg/L
OW-12	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-12	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-12	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-12	9/12/2014	Iron, Total	0.12	0.02	0.0072	13822000	mg/L
OW-12	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-12	9/12/2014	Potassium, Total	1.7	1	0.093	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/12/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-12	9/12/2014	Manganese, Total	0.0054	0.002	0.00049	2017000	mg/L
OW-12	9/12/2014	Sodium, Total	260	10	3.9	NA	mg/L
OW-12	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-12	9/12/2014	Selenium, Total	0.0011	0.001	0.00051	50000	mg/L
OW-12	9/12/2014	Uranium, Total	0.014	0.001	0.0000072	30000	mg/L
OW-12	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-12	8/13/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-12	8/13/2015	Arsenic, Total	0.0016	0.001	0.00029	10000	mg/L
OW-12	8/13/2015	Barium, Total	0.023	0.002	0.0011	2000000	mg/L
OW-12	8/13/2015	Calcium, Total	1.9	1	0.057	NA	mg/L
OW-12	8/13/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-12	8/13/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-12	8/13/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-12	8/13/2015	Iron, Total	0.078	0.02	0.0072	13822000	mg/L
OW-12	8/13/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-12	8/13/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-12	8/13/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-12	8/13/2015	Manganese, Total	0.0038	0.002	0.0015	2017000	mg/L
OW-12	8/13/2015	Sodium, Total	260	5	0.36	NA	mg/L
OW-12	8/13/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-12	8/13/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-12	8/13/2015	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
OW-12	8/13/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-12	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-12	9/8/2016	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
OW-12	9/8/2016	Barium, Total	0.025	0.002	0.00079	2000000	mg/L
OW-12	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-12	9/8/2016	Chromium, Total	0.0055	0.006	0.0027	50000	mg/L
OW-12	9/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-12	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-12	9/8/2016	Arsenic, Dissolved	0.002	0.001	0.00014	10000	mg/L
OW-12	9/8/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-12	9/8/2016	Calcium, Dissolved	1.7	1	0.5	NA	mg/L
OW-12	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-12	9/8/2016	Chromium, Dissolved	0.0036	0.006	0.0018	100000	mg/L
OW-12	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-12	9/8/2016	Iron, Dissolved	0.047	0.02	0.02	13821880	mg/L
OW-12	9/8/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
OW-12	9/8/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-12	9/8/2016	Manganese, Dissolved	0.0027	0.002	0.00032	2017400	mg/L
OW-12	9/8/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
OW-12	9/8/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
OW-12	9/8/2016	Selenium, Dissolved	0.00094	0.001	0.00021	50000	mg/L
OW-12	9/8/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
OW-12	9/8/2016	Zinc, Dissolved	0.004	0.01	0.0028	5960450	mg/L
OW-12	9/8/2016	Iron, Total	0.11	0.02	0.02	13822000	mg/L
OW-12	9/8/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
OW-12	9/8/2016	Manganese, Total	0.0063	0.002	0.00027	2017000	mg/L
OW-12	9/8/2016	Lead, Total	0.00028	0.0005	0.000081	15000	mg/L
OW-12	9/8/2016	Selenium, Total	0.0008	0.001	0.00019	50000	mg/L
OW-12	9/8/2016	Uranium, Total	0.012	0.0005	0.00017	30000	mg/L
OW-12	9/8/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-12	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-12	9/19/2017	Arsenic, Total	0.0019	0.001	0.0003	10000	mg/L
OW-12	9/19/2017	Barium, Total	0.023	0.002	0.00093	2000000	mg/L
OW-12	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-12	9/19/2017	Chromium, Total	0.0041	0.006	0.0018	50000	mg/L
OW-12	9/19/2017	Copper, Total	0.0019	0.006	0.0017	790000	mg/L
OW-12	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-12	9/19/2017	Arsenic, Dissolved	0.002	0.001	0.00018	10000	mg/L
OW-12	9/19/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-12	9/19/2017	Calcium, Dissolved	1.6	1	0.078	NA	mg/L
OW-12	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-12	9/19/2017	Chromium, Dissolved	0.0041	0.006	0.0013	100000	mg/L
OW-12	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-12	9/19/2017	Iron, Dissolved	0.049	0.02	0.016	13821880	mg/L
OW-12	9/19/2017	Potassium, Dissolved	0.85	1	0.11	NA	mg/L
OW-12	9/19/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	Manganese, Dissolved	0.0026	0.002	0.00039	2017400	mg/L
OW-12	9/19/2017	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-12	9/19/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-12	9/19/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-12	9/19/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OW-12	9/19/2017	Iron, Total	0.11	0.02	0.01	13822000	mg/L
OW-12	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-12	9/19/2017	Manganese, Total	0.0058	0.002	0.0011	2017000	mg/L
OW-12	9/19/2017	Lead, Total	0.00032	0.0005	0.000095	15000	mg/L
OW-12	9/19/2017	Selenium, Total	0.00089	0.001	0.00071	50000	mg/L
OW-12	9/19/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
OW-12	9/19/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-12	9/19/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
OW-12	9/19/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-12	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-12	9/19/2018	Chromium, Total	0.0046	0.006	0.0018	50000	mg/L
OW-12	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-12	9/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-12	9/19/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L
OW-12	9/19/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
OW-12	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-12	9/19/2018	Chromium, Dissolved	0.0025	0.006	0.0013	100000	mg/L
OW-12	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-12	9/19/2018	Iron, Dissolved	0.069	0.02	0.016	13821880	mg/L
OW-12	9/19/2018	Manganese, Dissolved	0.004	0.002	0.00039	2017400	mg/L
OW-12	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-12	9/19/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-12	9/19/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-12	9/19/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
OW-12	9/19/2018	Iron, Total	0.43	0.02	0.01	13822000	mg/L
OW-12	9/19/2018	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
OW-12	9/19/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-12	9/19/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
OW-12	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-12	9/19/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-12	9/19/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
OW-13	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-13	9/17/2020	Arsenic, Dissolved	0.00071	0.001	0.00021	10000	mg/L
OW-13	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-13	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-13	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-13	9/17/2020	Uranium, Dissolved	0.015	0.0005	0.000065	NA	mg/L
OW-13	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-13	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-13	9/17/2020	Boron, Dissolved	0.31	0.04	0.0067	3949110	mg/L
OW-13	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-13	9/17/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-13	9/17/2020	Manganese, Dissolved	0.018	0.002	0.00058	2017400	mg/L
OW-13	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-13	9/17/2020	Barium, Dissolved	0.019	0.002	0.0011	2000000	mg/L
OW-13	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-13	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-13	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-13	9/17/2020	Molybdenum, Dissolved	0.01	0.008	0.0056	98700	mg/L
OW-13	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-13	9/17/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OW-13	9/17/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
OW-13	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-13	9/17/2020	Arsenic, Total	0.00077	0.001	0.00026	10000	mg/L
OW-13	9/17/2020	Lead, Total	0.000074	0.0005	0.000034	15000	mg/L
OW-13	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-13	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-13	9/17/2020	Uranium, Total	0.017	0.0005	0.000065	30000	mg/L
OW-13	9/17/2020	Aluminum, Total	0.051	0.1	0.037	19914000	mg/L
OW-13	9/17/2020	Barium, Total	0.022	0.015	0.0082	2000000	mg/L
OW-13	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-13	9/17/2020	Boron, Total	0.31	0.2	0.037	3949	mg/L
OW-13	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-13	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-13	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-13	9/17/2020	Iron, Total	ND	0.25	0.064	13822000	mg/L
OW-13	9/17/2020	Manganese, Total	0.023	0.01	0.0041	2017000	mg/L
OW-13	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-13	9/17/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
OW-13	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-13	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-13	5/1/2019	Aluminum, Dissolved	0.0065	0.02	0.002488	19913930	mg/L
OW-13	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	5/1/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-13	5/1/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	5/1/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
OW-13	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	5/1/2019	Calcium, Dissolved	8.8	1	0.061889	NA	mg/L
OW-13	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	5/1/2019	Copper, Dissolved	0.0017	0.006	0.001296	790000	mg/L
OW-13	5/1/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	5/1/2019	Magnesium, Dissolved	1.3	1	0.05029	NA	mg/L
OW-13	5/1/2019	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	5/1/2019	Molybdenum, Dissolved	0.0087	0.008	0.006735	98700	mg/L
OW-13	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	5/1/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-13	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	5/1/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
OW-13	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Dissolved	0.00079	0.001	0.0001	10000	mg/L
OW-13	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-13	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-13	3/2/2020	Barium, Dissolved	0.019	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Dissolved	0.31	0.04	0.0045	3949110	mg/L
OW-13	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-13	3/2/2020	Calcium, Dissolved	8.6	1	0.062	NA	mg/L
OW-13	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-13	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-13	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-13	3/2/2020	Magnesium, Dissolved	1.3	1	0.05	NA	mg/L
OW-13	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-13	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-13	3/2/2020	Sodium, Dissolved	300	5	2.1	NA	mg/L
OW-13	3/2/2020	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
OW-13	3/2/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
OW-13	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Total	0.00078	0.001	0.00031	10000	mg/L
OW-13	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-13	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	3/2/2020	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OW-13	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-13	3/2/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-13	3/2/2020	Barium, Total	0.019	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Total	0.34	0.04	0.0045	3949	mg/L
OW-13	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-13	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-13	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	Iron, Total	0.012	0.02	0.0087	13822000	mg/L
OW-13	3/2/2020	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	3/2/2020	Molybdenum, Total	0.009	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-13	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-13	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Dissolved	0.00075	0.001	0.0001	10000	mg/L
OW-13	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-13	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	3/2/2020	Aluminum, Dissolved	0.0033	0.02	0.0025	19913930	mg/L
OW-13	3/2/2020	Barium, Dissolved	0.017	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Dissolved	0.29	0.04	0.0045	3949110	mg/L
OW-13	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-13	3/2/2020	Calcium, Dissolved	8.6	1	0.062	NA	mg/L
OW-13	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-13	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-13	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-13	3/2/2020	Magnesium, Dissolved	1.3	1	0.05	NA	mg/L
OW-13	3/2/2020	Molybdenum, Dissolved	0.0076	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-13	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-13	3/2/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-13	3/2/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
OW-13	3/2/2020	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
OW-13	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-13	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	3/2/2020	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-13	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-13	3/2/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-13	3/2/2020	Barium, Total	0.018	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Total	0.33	0.04	0.0045	3949	mg/L
OW-13	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-13	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-13	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	3/2/2020	Iron, Total	ND	0.02	0.0087	13822000	mg/L
OW-13	3/2/2020	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	3/2/2020	Molybdenum, Total	0.0097	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-13	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-13	5/1/2019	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	5/1/2019	Zinc, Dissolved	0.12	0.01	0.002252	5960450	mg/L
OW-13	5/1/2019	Aluminum, Total	0.0026	0.02	0.002488	19914000	mg/L
OW-13	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	5/1/2019	Arsenic, Total	0.0007	0.001	0.000312	10000	mg/L
OW-13	5/1/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	5/1/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-13	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	5/1/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	5/1/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	5/1/2019	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	5/1/2019	Molybdenum, Total	0.0078	0.008	0.006735	98700	mg/L
OW-13	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	5/1/2019	Uranium, Total	0.016	0.0025	0.000424	30000	mg/L
OW-13	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-13	12/9/2020	Barium, Total	0.0196	0.01	0.003	2000000	mg/L
OW-13	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-13	12/9/2020	Boron, Total	0.326	0.1	0.022	3949	mg/L
OW-13	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-13	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-13	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-13	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-13	12/9/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-13	12/9/2020	Manganese, Total	0.0269	0.01	0.003	2017000	mg/L
OW-13	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-13	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-13	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-13	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-13	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-13	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-13	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-13	12/9/2020	Boron, Dissolved	0.372	0.2	0.0527	3949110	mg/L
OW-13	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-13	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-13	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-13	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-13	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-13	12/9/2020	Manganese, Dissolved	0.0261	0.015	0.00141	2017400	mg/L
OW-13	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-13	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-13	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-13	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-13	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-13	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-13	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-13	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-13	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-13	12/9/2020	Uranium, Dissolved	15.2	5	1.12	NA	ug/L
OW-13	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-13	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-13	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-13	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-13	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-13	12/9/2020	Uranium, Total Recoverable	16	5	1.12	30	ug/L
OW-13	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-13	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-13	8/12/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-13	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Total	0.00079	0.001	0.000312	10000	mg/L
OW-13	8/12/2019	Barium, Total	0.018	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-13	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/12/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	8/12/2019	Manganese, Total	0.017	0.002	0.00029	2017000	mg/L
OW-13	8/12/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	8/12/2019	Molybdenum, Total	0.0081	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	8/12/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OW-13	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Dissolved	0.00076	0.001	0.000101	10000	mg/L
OW-13	8/12/2019	Barium, Dissolved	0.018	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-13	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/12/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
OW-13	8/12/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/12/2019	Thallium, Dissolved	0.00005	0.0005	0.000048	2000	mg/L
OW-13	8/12/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-13	8/12/2019	Zinc, Dissolved	0.0068	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-13	2/5/2019	Arsenic, Dissolved	0.00072	0.001	0.000068	10000	mg/L
OW-13	2/5/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
OW-13	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	2/5/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-13	2/5/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-13	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-13	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-13	2/5/2019	Uranium, Dissolved	0.015	0.0005	0.00003	NA	mg/L
OW-13	2/5/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-13	2/5/2019	Arsenic, Total	0.00079	0.001	0.000022	10000	mg/L
OW-13	2/5/2019	Barium, Total	0.019	0.002	0.000488	2000000	mg/L
OW-13	2/5/2019	Beryllium, Total	0.00031	0.002	0.000224	4000	mg/L
OW-13	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-13	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	2/5/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-13	2/5/2019	Lead, Total	ND	0.0005	0.000063	15000	mg/L
OW-13	2/5/2019	Manganese, Total	0.018	0.002	0.00006	2017000	mg/L
OW-13	2/5/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-13	2/5/2019	Selenium, Total	0.00014	0.001	0.000118	50000	mg/L
OW-13	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-13	2/5/2019	Uranium, Total	0.015	0.0005	0.00005	30000	mg/L
OW-13	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-13	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Total	0.00088	0.001	0.000312	10000	mg/L
OW-13	8/12/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-13	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/12/2019	Iron, Total	0.0089	0.02	0.008747	13822000	mg/L
OW-13	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	8/12/2019	Manganese, Total	0.018	0.002	0.00029	2017000	mg/L
OW-13	8/12/2019	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
OW-13	8/12/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/12/2019	Silver, Total	0.0054	0.005	0.001418	50000	mg/L
OW-13	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-13	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-13	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Dissolved	0.00079	0.001	0.000101	10000	mg/L
OW-13	8/12/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-13	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/12/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-13	8/12/2019	Molybdenum, Dissolved	0.01	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Dissolved	0.0087	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	8/12/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-13	8/12/2019	Zinc, Dissolved	0.0074	0.01	0.002252	5960450	mg/L
OW-13	8/13/2019	Aluminum, Total	0.95	0.02	0.002488	19914000	mg/L
OW-13	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/13/2019	Arsenic, Total	0.0036	0.001	0.000312	10000	mg/L
OW-13	8/13/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
OW-13	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/13/2019	Boron, Total	1.7	0.2	0.022653	3949	mg/L
OW-13	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/13/2019	Chromium, Total	0.0039	0.006	0.001533	50000	mg/L
OW-13	8/13/2019	Cobalt, Total	0.0093	0.006	0.003091	5980	mg/L
OW-13	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/13/2019	Iron, Total	0.4	0.02	0.008747	13822000	mg/L
OW-13	8/13/2019	Lead, Total	0.00035	0.0005	0.000055	15000	mg/L
OW-13	8/13/2019	Manganese, Total	0.0085	0.002	0.00029	2017000	mg/L
OW-13	8/13/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-13	8/13/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
OW-13	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	8/13/2019	Uranium, Total	0.029	0.0025	0.000424	30000	mg/L
OW-13	8/13/2019	Zinc, Total	0.0064	0.01	0.005772	5960000	mg/L
OW-13	8/13/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
OW-13	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/13/2019	Arsenic, Dissolved	0.0031	0.001	0.000101	10000	mg/L
OW-13	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
OW-13	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/13/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
OW-13	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/13/2019	Calcium, Dissolved	3.5	1	0.061889	NA	mg/L
OW-13	8/13/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
OW-13	8/13/2019	Cobalt, Dissolved	0.0065	0.006	0.003091	5980	mg/L
OW-13	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/13/2019	Iron, Dissolved	0.009	0.02	0.008747	13821880	mg/L
OW-13	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/13/2019	Magnesium, Dissolved	0.81	1	0.05029	NA	mg/L
OW-13	8/13/2019	Manganese, Dissolved	0.00056	0.002	0.00029	2017400	mg/L
OW-13	8/13/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
OW-13	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	8/13/2019	Potassium, Dissolved	0.54	1	0.162288	NA	mg/L
OW-13	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/13/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
OW-13	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	8/13/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
OW-13	8/13/2019	Zinc, Dissolved	0.0054	0.01	0.002252	5960450	mg/L
OW-13	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-13	10/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	10/14/2019	Arsenic, Dissolved	0.00079	0.001	0.000101	10000	mg/L
OW-13	10/14/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	10/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	10/14/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
OW-13	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	10/14/2019	Calcium, Dissolved	9.3	1	0.061889	NA	mg/L
OW-13	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	10/14/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
OW-13	10/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	10/14/2019	Magnesium, Dissolved	1.3	1	0.05029	NA	mg/L
OW-13	10/14/2019	Manganese, Dissolved	0.019	0.002	0.00029	2017400	mg/L
OW-13	10/14/2019	Molybdenum, Dissolved	0.0084	0.008	0.006735	98700	mg/L
OW-13	10/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	10/14/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-13	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	10/14/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	10/14/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
OW-13	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	10/14/2019	Zinc, Dissolved	0.0087	0.01	0.002252	5960450	mg/L
OW-13	10/14/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
OW-13	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	10/14/2019	Arsenic, Total	0.00095	0.001	0.000312	10000	mg/L
OW-13	10/14/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	10/14/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-13	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	10/14/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	10/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	10/14/2019	Manganese, Total	0.02	0.002	0.00029	2017000	mg/L
OW-13	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-13	10/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	10/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-13	2/5/2019	Arsenic, Dissolved	0.00069	0.001	0.000068	10000	mg/L
OW-13	2/5/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
OW-13	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	2/5/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-13	2/5/2019	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-13	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-13	2/5/2019	Uranium, Dissolved	0.015	0.0005	0.00003	NA	mg/L
OW-13	2/5/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-13	2/5/2019	Arsenic, Total	0.00079	0.001	0.000022	10000	mg/L
OW-13	2/5/2019	Barium, Total	0.02	0.002	0.000488	2000000	mg/L
OW-13	2/5/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-13	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-13	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	2/5/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-13	2/5/2019	Lead, Total	ND	0.0005	0.000063	15000	mg/L
OW-13	2/5/2019	Manganese, Total	0.019	0.002	0.00006	2017000	mg/L
OW-13	2/5/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-13	2/5/2019	Selenium, Total	0.00026	0.001	0.000118	50000	mg/L
OW-13	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-13	2/5/2019	Uranium, Total	0.015	0.0005	0.00005	30000	mg/L
OW-13	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-13	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-13	8/23/2012	Barium, Total	0.024	0.002	0.00039	2000000	mg/L
OW-13	8/23/2012	Calcium, Total	8.5	1	0.026	NA	mg/L
OW-13	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-13	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-13	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	8/23/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-13	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-13	8/23/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-13	8/23/2012	Magnesium, Total	1.3	1	0.013	NA	mg/L
OW-13	8/23/2012	Manganese, Total	0.01	0.002	0.00026	2017000	mg/L
OW-13	8/23/2012	Sodium, Total	300	5	0.22	NA	mg/L
OW-13	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-13	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-13	8/23/2012	Uranium, Total	0.017	0.0025	0.00003	30000	mg/L
OW-13	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-13	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-13	3/19/2013	Barium, Total	0.018	0.002	0.00039	2000000	mg/L
OW-13	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-13	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-13	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	3/19/2013	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-13	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	3/19/2013	Manganese, Total	0.021	0.002	0.00026	2017000	mg/L
OW-13	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-13	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-13	3/19/2013	Uranium, Total	0.018	0.0025	0.0012	30000	mg/L
OW-13	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-13	6/13/2013	Arsenic, Total	ND	0.001	0.00027	10000	mg/L
OW-13	6/13/2013	Barium, Total	0.019	0.002	0.00057	2000000	mg/L
OW-13	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-13	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-13	6/13/2013	Iron, Total	ND	0.02	0.0052	13822000	mg/L
OW-13	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	6/13/2013	Manganese, Total	0.02	0.002	0.00052	2017000	mg/L
OW-13	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	6/13/2013	Selenium, Total	ND	0.001	0.00049	50000	mg/L
OW-13	6/13/2013	Uranium, Total	0.017	0.001	0.0005	30000	mg/L
OW-13	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-13	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-13	9/4/2013	Barium, Total	0.019	0.002	0.00095	2000000	mg/L
OW-13	9/4/2013	Calcium, Total	8.8	1	0.069	NA	mg/L
OW-13	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-13	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-13	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-13	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-13	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	9/4/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-13	9/4/2013	Magnesium, Total	1.3	1	0.028	NA	mg/L
OW-13	9/4/2013	Manganese, Total	0.024	0.002	0.00016	2017000	mg/L
OW-13	9/4/2013	Sodium, Total	280	5	1.6	NA	mg/L
OW-13	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-13	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-13	9/4/2013	Uranium, Total	0.017	0.01	0.000073	30000	mg/L
OW-13	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-13	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-13	11/11/2013	Arsenic, Total	0.0012	0.001	0.000098	10000	mg/L
OW-13	11/11/2013	Barium, Total	0.02	0.002	0.00095	2000000	mg/L
OW-13	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-13	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-13	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-13	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	11/11/2013	Manganese, Total	0.021	0.002	0.00016	2017000	mg/L
OW-13	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	11/11/2013	Selenium, Total	0.002	0.001	0.00029	50000	mg/L
OW-13	11/11/2013	Uranium, Total	0.016	0.001	0.0000073	30000	mg/L
OW-13	11/11/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
OW-13	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	3/7/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
OW-13	3/7/2014	Barium, Total	0.019	0.002	0.0011	2000000	mg/L
OW-13	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	3/7/2014	Manganese, Total	0.02	0.002	0.00055	2017000	mg/L
OW-13	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	3/7/2014	Selenium, Total	ND	0.001	0.00029	50000	mg/L
OW-13	3/7/2014	Uranium, Total	0.018	0.001	0.0000073	30000	mg/L
OW-13	3/7/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
OW-13	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	6/3/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
OW-13	6/3/2014	Barium, Total	0.017	0.002	0.0011	2000000	mg/L
OW-13	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	6/3/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	6/3/2014	Manganese, Total	0.017	0.002	0.00055	2017000	mg/L
OW-13	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-13	6/3/2014	Selenium, Total	0.0022	0.001	0.00015	50000	mg/L
OW-13	6/3/2014	Uranium, Total	0.015	0.005	0.00025	30000	mg/L
OW-13	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-13	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-13	9/15/2014	Arsenic, Total	0.0011	0.001	0.00036	10000	mg/L
OW-13	9/15/2014	Barium, Total	0.018	0.002	0.0005	2000000	mg/L
OW-13	9/15/2014	Calcium, Total	8.8	1	0.082	NA	mg/L
OW-13	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-13	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-13	9/15/2014	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	9/15/2014	Potassium, Total	1.9	1	0.093	NA	mg/L
OW-13	9/15/2014	Magnesium, Total	1.3	1	0.018	NA	mg/L
OW-13	9/15/2014	Manganese, Total	0.017	0.002	0.00049	2017000	mg/L
OW-13	9/15/2014	Sodium, Total	300	10	3.9	NA	mg/L
OW-13	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-13	9/15/2014	Selenium, Total	0.0018	0.001	0.00051	50000	mg/L
OW-13	9/15/2014	Uranium, Total	0.018	0.001	0.0000072	30000	mg/L
OW-13	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-13	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	11/10/2014	Arsenic, Total	0.0011	0.001	0.00011	10000	mg/L
OW-13	11/10/2014	Barium, Total	0.019	0.002	0.0011	2000000	mg/L
OW-13	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	11/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	11/10/2014	Manganese, Total	0.022	0.002	0.00055	2017000	mg/L
OW-13	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-13	11/10/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
OW-13	11/10/2014	Uranium, Total	0.016	0.01	0.0005	30000	mg/L
OW-13	11/10/2014	Zinc, Total	0.063	0.01	0.0014	5960000	mg/L
OW-13	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-13	3/9/2015	Barium, Total	0.02	0.002	0.00073	2000000	mg/L
OW-13	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-13	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/9/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	3/9/2015	Manganese, Total	0.021	0.002	0.0015	2017000	mg/L
OW-13	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-13	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-13	3/9/2015	Uranium, Total	0.017	0.001	0.0000081	30000	mg/L
OW-13	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-13	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-13	6/1/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	6/1/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	6/1/2015	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-13	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-13	6/1/2015	Uranium, Total	0.017	0.005	0.000049	30000	mg/L
OW-13	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	8/11/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
OW-13	8/11/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	8/11/2015	Calcium, Total	8.1	1	0.057	NA	mg/L
OW-13	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	8/11/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	8/11/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-13	8/11/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
OW-13	8/11/2015	Manganese, Total	0.019	0.002	0.0015	2017000	mg/L
OW-13	8/11/2015	Sodium, Total	280	5	0.36	NA	mg/L
OW-13	8/11/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	8/11/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-13	8/11/2015	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
OW-13	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	10/27/2015	Arsenic, Total	0.0012	0.001	0.00029	10000	mg/L
OW-13	10/27/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	10/27/2015	Calcium, Total	9.7	1	0.057	NA	mg/L
OW-13	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	10/27/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	10/27/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
OW-13	10/27/2015	Magnesium, Total	1.4	1	0.039	NA	mg/L
OW-13	10/27/2015	Manganese, Total	0.021	0.002	0.0015	2017000	mg/L
OW-13	10/27/2015	Sodium, Total	270	5	0.36	NA	mg/L
OW-13	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-13	10/27/2015	Uranium, Total	0.017	0.0005	0.0000049	30000	mg/L
OW-13	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	3/4/2016	Arsenic, Total	0.001	0.001	0.00029	10000	mg/L
OW-13	3/4/2016	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
OW-13	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	3/4/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-13	3/4/2016	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-13	3/4/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-13	3/4/2016	Uranium, Total	0.016	0.0025	0.000025	30000	mg/L
OW-13	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	6/6/2016	Arsenic, Total	0.0019	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/6/2016	Barium, Total	0.021	0.002	0.0011	2000000	mg/L
OW-13	6/6/2016	Calcium, Total	9.4	1	0.26	NA	mg/L
OW-13	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	6/6/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	6/6/2016	Mercury, Total	0.00006	0.0002	0.000053	2000	mg/L
OW-13	6/6/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-13	6/6/2016	Magnesium, Total	1.4	1	0.013	NA	mg/L
OW-13	6/6/2016	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	6/6/2016	Sodium, Total	310	5	0.48	NA	mg/L
OW-13	6/6/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	6/6/2016	Selenium, Total	0.0025	0.005	0.00062	50000	mg/L
OW-13	6/6/2016	Uranium, Total	0.019	0.0005	0.0000049	30000	mg/L
OW-13	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	8/31/2016	Arsenic, Total	0.0015	0.001	0.00021	10000	mg/L
OW-13	8/31/2016	Barium, Total	0.019	0.002	0.00079	2000000	mg/L
OW-13	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-13	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-13	8/31/2016	Arsenic, Dissolved	0.0015	0.005	0.00069	10000	mg/L
OW-13	8/31/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-13	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-13	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-13	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-13	8/31/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	8/31/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
OW-13	8/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-13	8/31/2016	Selenium, Dissolved	0.002	0.005	0.0011	50000	mg/L
OW-13	8/31/2016	Uranium, Dissolved	0.017	0.0025	0.00026	NA	mg/L
OW-13	8/31/2016	Zinc, Dissolved	0.042	0.01	0.0028	5960450	mg/L
OW-13	8/31/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	8/31/2016	Manganese, Total	0.02	0.002	0.00027	2017000	mg/L
OW-13	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	8/31/2016	Selenium, Total	0.0021	0.001	0.00019	50000	mg/L
OW-13	8/31/2016	Uranium, Total	0.018	0.0025	0.00087	30000	mg/L
OW-13	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	11/15/2016	Arsenic, Total	0.0016	0.001	0.00021	10000	mg/L
OW-13	11/15/2016	Barium, Total	0.02	0.002	0.00079	2000000	mg/L
OW-13	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-13	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-13	11/15/2016	Arsenic, Dissolved	0.0013	0.005	0.00069	10000	mg/L
OW-13	11/15/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-13	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-13	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-13	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-13	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	11/15/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
OW-13	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	11/15/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
OW-13	11/15/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
OW-13	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-13	11/15/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	11/15/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-13	11/15/2016	Manganese, Total	0.021	0.002	0.00027	2017000	mg/L
OW-13	11/15/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	11/15/2016	Selenium, Total	0.0033	0.005	0.00094	50000	mg/L
OW-13	11/15/2016	Uranium, Total	0.017	0.0025	0.00087	30000	mg/L
OW-13	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	2/27/2017	Arsenic, Total	0.0012	0.001	0.00021	10000	mg/L
OW-13	2/27/2017	Barium, Total	0.019	0.002	0.00079	2000000	mg/L
OW-13	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-13	2/27/2017	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
OW-13	2/27/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-13	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-13	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	2/27/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	2/27/2017	Manganese, Dissolved	0.02	0.002	0.00038	2017400	mg/L
OW-13	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	2/27/2017	Selenium, Dissolved	0.0036	0.005	0.0011	50000	mg/L
OW-13	2/27/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
OW-13	2/27/2017	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-13	2/27/2017	Manganese, Total	0.019	0.002	0.00027	2017000	mg/L
OW-13	2/27/2017	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	2/27/2017	Selenium, Total	0.0014	0.001	0.00019	50000	mg/L
OW-13	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-13	5/31/2017	Arsenic, Total	0.00073	0.001	0.0003	10000	mg/L
OW-13	5/31/2017	Barium, Total	0.019	0.002	0.00093	2000000	mg/L
OW-13	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-13	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-13	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-13	5/31/2017	Arsenic, Dissolved	0.00099	0.001	0.00018	10000	mg/L
OW-13	5/31/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-13	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-13	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	5/31/2017	Manganese, Dissolved	0.019	0.002	0.00038	2017400	mg/L
OW-13	5/31/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	5/31/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-13	5/31/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OW-13	5/31/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	5/31/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-13	5/31/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-13	5/31/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
OW-13	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-13	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	9/6/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-13	9/6/2017	Barium, Total	0.019	0.002	0.00093	2000000	mg/L
OW-13	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	9/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-13	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	9/6/2017	Arsenic, Dissolved	0.0012	0.005	0.00089	10000	mg/L
OW-13	9/6/2017	Barium, Dissolved	0.019	0.002	0.00085	2000000	mg/L
OW-13	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	9/6/2017	Chromium, Dissolved	0.0057	0.006	0.0013	100000	mg/L
OW-13	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	9/6/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
OW-13	9/6/2017	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	9/6/2017	Selenium, Dissolved	0.0023	0.005	0.0019	50000	mg/L
OW-13	9/6/2017	Uranium, Dissolved	0.017	0.0005	0.00005	NA	mg/L
OW-13	9/6/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
OW-13	9/6/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	9/6/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-13	9/6/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-13	9/6/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-13	9/6/2017	Uranium, Total	0.018	0.0005	0.00015	30000	mg/L
OW-13	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	12/11/2017	Arsenic, Total	0.00084	0.001	0.00041	10000	mg/L
OW-13	12/11/2017	Barium, Total	0.019	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/11/2017	Cadmium, Total	0.00064	0.002	0.00058	5000	mg/L
OW-13	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	12/11/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-13	12/11/2017	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	12/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	12/11/2017	Manganese, Dissolved	0.023	0.002	0.00039	2017400	mg/L
OW-13	12/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	12/11/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-13	12/11/2017	Uranium, Dissolved	0.015	0.0025	0.00048	NA	mg/L
OW-13	12/11/2017	Zinc, Dissolved	0.0095	0.01	0.0021	5960450	mg/L
OW-13	12/11/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	12/11/2017	Mercury, Total	0.000097	0.0002	0.000037	2000	mg/L
OW-13	12/11/2017	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
OW-13	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	12/11/2017	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	12/11/2017	Uranium, Total	0.016	0.0005	0.00015	30000	mg/L
OW-13	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	2/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	2/28/2018	Arsenic, Total	0.0009	0.001	0.00041	10000	mg/L
OW-13	2/28/2018	Barium, Total	0.021	0.002	0.001	2000000	mg/L
OW-13	2/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	2/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	2/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	2/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	2/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-13	2/28/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
OW-13	2/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	2/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	2/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	2/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	2/28/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	2/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	2/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-13	2/28/2018	Uranium, Dissolved	0.014	0.0025	0.00048	NA	mg/L
OW-13	2/28/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
OW-13	2/28/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	2/28/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	2/28/2018	Manganese, Total	0.021	0.002	0.0011	2017000	mg/L
OW-13	2/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	2/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	2/28/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
OW-13	2/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	5/15/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-13	5/15/2018	Barium, Total	0.019	0.002	0.001	2000000	mg/L
OW-13	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	5/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-13	5/15/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
OW-13	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	5/15/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	5/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	5/15/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-13	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-13	5/15/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	5/15/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	5/15/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
OW-13	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	9/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	9/11/2018	Arsenic, Total	0.00078	0.001	0.00041	10000	mg/L
OW-13	9/11/2018	Barium, Total	0.018	0.002	0.001	2000000	mg/L
OW-13	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	9/11/2018	Arsenic, Dissolved	0.00078	0.001	0.00042	10000	mg/L
OW-13	9/11/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	9/11/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	9/11/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	9/11/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
OW-13	9/11/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
OW-13	9/11/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	9/11/2018	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
OW-13	9/11/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	9/11/2018	Uranium, Total	0.015	0.0005	0.000068	30000	mg/L
OW-13	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	11/6/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-13	11/6/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
OW-13	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	11/6/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-13	11/6/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	11/6/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	11/6/2018	Manganese, Dissolved	0.021	0.002	0.00039	2017400	mg/L
OW-13	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	11/6/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-13	11/6/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-13	11/6/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	11/6/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	11/6/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
OW-13	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	2/5/2019	Antimony, Dissolved	0.00024	0.001	0.000204	6000	mg/L
OW-14	2/5/2019	Arsenic, Dissolved	0.0052	0.001	0.000068	10000	mg/L
OW-14	2/5/2019	Barium, Dissolved	2.2	0.01	0.003242	2000000	mg/L
OW-14	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-14	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-14	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-14	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-14	2/5/2019	Iron, Dissolved	4.6	0.1	0.043734	13821880	mg/L
OW-14	2/5/2019	Lead, Dissolved	0.000055	0.0005	0.000047	NA	mg/L
OW-14	2/5/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-14	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-14	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-14	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-14	2/5/2019	Uranium, Dissolved	0.0028	0.0005	0.00003	NA	mg/L
OW-14	2/5/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-14	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/5/2019	Arsenic, Total	0.0058	0.001	0.000022	10000	mg/L
OW-14	2/5/2019	Barium, Total	2.4	0.01	0.002442	2000000	mg/L
OW-14	2/5/2019	Beryllium, Total	0.00028	0.002	0.000224	4000	mg/L
OW-14	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-14	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-14	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-14	2/5/2019	Iron, Total	5	0.1	0.030263	13822000	mg/L
OW-14	2/5/2019	Lead, Total	0.00018	0.0005	0.000063	15000	mg/L
OW-14	2/5/2019	Manganese, Total	2.1	0.01	0.000299	2017000	mg/L
OW-14	2/5/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-14	2/5/2019	Selenium, Total	0.00032	0.001	0.000118	50000	mg/L
OW-14	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-14	2/5/2019	Thallium, Total	0.000057	0.0005	0.00005	2000	mg/L
OW-14	2/5/2019	Uranium, Total	0.0028	0.0005	0.00005	30000	mg/L
OW-14	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-14	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-14	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-14	5/1/2019	Arsenic, Dissolved	0.0049	0.001	0.000101	10000	mg/L
OW-14	5/1/2019	Barium, Dissolved	2.2	0.01	0.003242	2000000	mg/L
OW-14	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-14	5/1/2019	Boron, Dissolved	0.47	0.04	0.004531	3949110	mg/L
OW-14	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-14	5/1/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
OW-14	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-14	5/1/2019	Cobalt, Dissolved	0.015	0.006	0.003091	5980	mg/L
OW-14	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-14	5/1/2019	Iron, Dissolved	4.7	0.1	0.043734	13821880	mg/L
OW-14	5/1/2019	Lead, Dissolved	0.000057	0.0005	0.000055	NA	mg/L
OW-14	5/1/2019	Magnesium, Dissolved	22	1	0.05029	NA	mg/L
OW-14	5/1/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-14	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-14	5/1/2019	Nickel, Dissolved	0.19	0.01	0.004009	372000	mg/L
OW-14	5/1/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
OW-14	5/1/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
OW-14	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-14	5/1/2019	Sodium, Dissolved	330	5	2.080881	NA	mg/L
OW-14	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-14	5/1/2019	Uranium, Dissolved	0.0026	0.0005	0.000075	NA	mg/L
OW-14	5/1/2019	Zinc, Dissolved	0.095	0.01	0.002252	5960450	mg/L
OW-14	5/1/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-14	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-14	5/1/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
OW-14	5/1/2019	Barium, Total	2.4	0.01	0.003242	2000000	mg/L
OW-14	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-14	5/1/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-14	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-14	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-14	5/1/2019	Cobalt, Total	0.015	0.006	0.003091	5980	mg/L
OW-14	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-14	5/1/2019	Iron, Total	4.7	0.2	0.087469	13822000	mg/L
OW-14	5/1/2019	Lead, Total	0.000081	0.0005	0.000055	15000	mg/L
OW-14	5/1/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-14	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-14	5/1/2019	Molybdenum, Total	0.0086	0.008	0.006735	98700	mg/L
OW-14	5/1/2019	Nickel, Total	0.2	0.01	0.004009	372000	mg/L
OW-14	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-14	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-14	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-14	5/1/2019	Uranium, Total	0.0026	0.0005	0.000085	30000	mg/L
OW-14	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-14	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-14	8/23/2012	Arsenic, Total	0.012	0.0025	0.0014	10000	mg/L
OW-14	8/23/2012	Barium, Total	1.2	0.01	0.0019	2000000	mg/L
OW-14	8/23/2012	Calcium, Total	98	1	0.026	NA	mg/L
OW-14	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-14	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-14	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	8/23/2012	Iron, Total	4.2	0.1	0.066	13822000	mg/L
OW-14	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-14	8/23/2012	Magnesium, Total	28	1	0.013	NA	mg/L
OW-14	8/23/2012	Manganese, Total	2.3	0.01	0.0013	2017000	mg/L
OW-14	8/23/2012	Sodium, Total	430	5	0.22	NA	mg/L
OW-14	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-14	8/23/2012	Selenium, Total	0.0066	0.0025	0.0025	50000	mg/L
OW-14	8/23/2012	Uranium, Total	0.0095	0.0025	0.00003	30000	mg/L
OW-14	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-14	3/19/2013	Arsenic, Total	0.01	0.0025	0.00042	10000	mg/L
OW-14	3/19/2013	Barium, Total	1.3	0.01	0.0019	2000000	mg/L
OW-14	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-14	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-14	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	3/19/2013	Iron, Total	4.4	0.1	0.066	13822000	mg/L
OW-14	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	3/19/2013	Manganese, Total	2.1	0.01	0.0013	2017000	mg/L
OW-14	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-14	3/19/2013	Selenium, Total	0.0038	0.0025	0.00066	50000	mg/L
OW-14	3/19/2013	Uranium, Total	0.009	0.0025	0.0012	30000	mg/L
OW-14	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-14	6/13/2013	Arsenic, Total	0.011	0.001	0.00027	10000	mg/L
OW-14	6/13/2013	Barium, Total	1.5	0.01	0.0029	2000000	mg/L
OW-14	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-14	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-14	6/13/2013	Iron, Total	4.5	0.1	0.026	13822000	mg/L
OW-14	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	6/13/2013	Manganese, Total	2.4	0.01	0.0026	2017000	mg/L
OW-14	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	6/13/2013	Selenium, Total	0.014	0.005	0.0024	50000	mg/L
OW-14	6/13/2013	Uranium, Total	0.011	0.001	0.0005	30000	mg/L
OW-14	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	9/4/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-14	9/4/2013	Arsenic, Total	0.01	0.005	0.00049	10000	mg/L
OW-14	9/4/2013	Barium, Total	1.5	0.01	0.0048	2000000	mg/L
OW-14	9/4/2013	Calcium, Total	94	1	0.069	NA	mg/L
OW-14	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-14	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-14	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-14	9/4/2013	Iron, Total	4.5	0.1	0.045	13822000	mg/L
OW-14	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	9/4/2013	Potassium, Total	1.9	1	0.24	NA	mg/L
OW-14	9/4/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OW-14	9/4/2013	Manganese, Total	2.2	0.01	0.00082	2017000	mg/L
OW-14	9/4/2013	Sodium, Total	390	10	3.3	NA	mg/L
OW-14	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-14	9/4/2013	Selenium, Total	0.012	0.005	0.0015	50000	mg/L
OW-14	9/4/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
OW-14	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-14	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-14	11/11/2013	Arsenic, Total	0.012	0.001	0.000098	10000	mg/L
OW-14	11/11/2013	Barium, Total	1.6	0.01	0.0048	2000000	mg/L
OW-14	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-14	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-14	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-14	11/11/2013	Iron, Total	4.6	0.1	0.045	13822000	mg/L
OW-14	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	11/11/2013	Manganese, Total	2.3	0.01	0.00082	2017000	mg/L
OW-14	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	11/11/2013	Selenium, Total	0.015	0.001	0.00029	50000	mg/L
OW-14	11/11/2013	Uranium, Total	0.0093	0.001	0.0000073	30000	mg/L
OW-14	11/11/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
OW-14	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	3/7/2014	Arsenic, Total	0.0084	0.005	0.00049	10000	mg/L
OW-14	3/7/2014	Barium, Total	1.6	0.01	0.0056	2000000	mg/L
OW-14	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-14	3/7/2014	Iron, Total	4.2	0.1	0.031	13822000	mg/L
OW-14	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	3/7/2014	Manganese, Total	2.1	0.01	0.0027	2017000	mg/L
OW-14	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-14	3/7/2014	Uranium, Total	0.0097	0.001	0.0000073	30000	mg/L
OW-14	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-14	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	11/6/2018	Arsenic, Total	0.0058	0.001	0.00041	10000	mg/L
OW-14	11/6/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
OW-14	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	11/6/2018	Arsenic, Dissolved	0.0047	0.001	0.00042	10000	mg/L
OW-14	11/6/2018	Barium, Dissolved	2.2	0.02	0.0099	2000000	mg/L
OW-14	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	11/6/2018	Iron, Dissolved	4.4	0.2	0.16	13821880	mg/L
OW-14	11/6/2018	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
OW-14	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	11/6/2018	Uranium, Dissolved	0.0029	0.0025	0.00048	NA	mg/L
OW-14	11/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-14	11/6/2018	Iron, Total	4.6	0.1	0.051	13822000	mg/L
OW-14	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-14	11/6/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	11/6/2018	Uranium, Total	0.0025	0.0005	0.000068	30000	mg/L
OW-14	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	6/3/2014	Arsenic, Total	0.011	0.005	0.00057	10000	mg/L
OW-14	6/3/2014	Barium, Total	1.7	0.01	0.0056	2000000	mg/L
OW-14	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-14	6/3/2014	Iron, Total	4.6	0.1	0.031	13822000	mg/L
OW-14	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	6/3/2014	Manganese, Total	2.3	0.01	0.0027	2017000	mg/L
OW-14	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-14	6/3/2014	Selenium, Total	0.018	0.005	0.00074	50000	mg/L
OW-14	6/3/2014	Uranium, Total	0.0083	0.005	0.00025	30000	mg/L
OW-14	6/3/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
OW-14	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-14	9/15/2014	Arsenic, Total	0.014	0.01	0.0036	10000	mg/L
OW-14	9/15/2014	Barium, Total	1.9	0.02	0.005	2000000	mg/L
OW-14	9/15/2014	Calcium, Total	94	1	0.082	NA	mg/L
OW-14	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-14	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-14	9/15/2014	Iron, Total	4.7	0.2	0.072	13822000	mg/L
OW-14	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	9/15/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-14	9/15/2014	Magnesium, Total	25	1	0.018	NA	mg/L
OW-14	9/15/2014	Manganese, Total	2.3	0.02	0.0049	2017000	mg/L
OW-14	9/15/2014	Sodium, Total	400	10	3.9	NA	mg/L
OW-14	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-14	9/15/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
OW-14	9/15/2014	Uranium, Total	0.0079	0.001	0.0000072	30000	mg/L
OW-14	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-14	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	11/10/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-14	11/10/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
OW-14	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/10/2014	Iron, Total	4.5	0.1	0.031	13822000	mg/L
OW-14	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	11/10/2014	Manganese, Total	2.2	0.01	0.0027	2017000	mg/L
OW-14	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-14	11/10/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-14	11/10/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
OW-14	11/10/2014	Zinc, Total	0.036	0.01	0.0014	5960000	mg/L
OW-14	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	3/9/2015	Arsenic, Total	ND	0.02	0.0088	10000	mg/L
OW-14	3/9/2015	Barium, Total	1.8	0.01	0.0037	2000000	mg/L
OW-14	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-14	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	3/9/2015	Iron, Total	4.5	0.1	0.036	13822000	mg/L
OW-14	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	3/9/2015	Manganese, Total	2.1	0.01	0.0076	2017000	mg/L
OW-14	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-14	3/9/2015	Selenium, Total	ND	0.02	0.0024	50000	mg/L
OW-14	3/9/2015	Uranium, Total	0.0065	0.001	0.0000081	30000	mg/L
OW-14	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-14	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-14	6/1/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	6/1/2015	Iron, Total	4.8	0.1	0.036	13822000	mg/L
OW-14	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	6/1/2015	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-14	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-14	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	6/1/2015	Uranium, Total	0.0067	0.005	0.000049	30000	mg/L
OW-14	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	8/10/2015	Arsenic, Total	0.0088	0.001	0.00029	10000	mg/L
OW-14	8/10/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	8/10/2015	Calcium, Total	84	1	0.057	NA	mg/L
OW-14	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	8/10/2015	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-14	8/10/2015	Magnesium, Total	25	1	0.039	NA	mg/L
OW-14	8/10/2015	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-14	8/10/2015	Sodium, Total	360	5	0.36	NA	mg/L
OW-14	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-14	8/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	8/10/2015	Uranium, Total	0.0068	0.0005	0.0000049	30000	mg/L
OW-14	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	10/27/2015	Arsenic, Total	0.0094	0.005	0.0015	10000	mg/L
OW-14	10/27/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	10/27/2015	Calcium, Total	99	1	0.057	NA	mg/L
OW-14	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	10/27/2015	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-14	10/27/2015	Magnesium, Total	26	1	0.039	NA	mg/L
OW-14	10/27/2015	Manganese, Total	2.1	0.01	0.0076	2017000	mg/L
OW-14	10/27/2015	Sodium, Total	380	5	0.36	NA	mg/L
OW-14	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-14	10/27/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-14	10/27/2015	Uranium, Total	0.0067	0.0005	0.0000049	30000	mg/L
OW-14	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	3/4/2016	Arsenic, Total	0.0078	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/4/2016	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	3/4/2016	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	3/4/2016	Manganese, Total	2	0.01	0.0076	2017000	mg/L
OW-14	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-14	3/4/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	3/4/2016	Uranium, Total	0.006	0.0025	0.000025	30000	mg/L
OW-14	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	6/6/2016	Arsenic, Total	0.016	0.02	0.0058	10000	mg/L
OW-14	6/6/2016	Barium, Total	2.2	0.02	0.011	2000000	mg/L
OW-14	6/6/2016	Calcium, Total	93	1	0.26	NA	mg/L
OW-14	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	6/6/2016	Iron, Total	5.1	0.2	0.072	13822000	mg/L
OW-14	6/6/2016	Mercury, Total	0.000068	0.0002	0.000053	2000	mg/L
OW-14	6/6/2016	Potassium, Total	0.3	1	0.18	NA	mg/L
OW-14	6/6/2016	Magnesium, Total	26	1	0.013	NA	mg/L
OW-14	6/6/2016	Manganese, Total	2.4	0.02	0.015	2017000	mg/L
OW-14	6/6/2016	Sodium, Total	390	5	0.48	NA	mg/L
OW-14	6/6/2016	Lead, Total	0.0002	0.0005	0.000047	15000	mg/L
OW-14	6/6/2016	Selenium, Total	0.017	0.02	0.0025	50000	mg/L
OW-14	6/6/2016	Uranium, Total	0.0074	0.0005	0.0000049	30000	mg/L
OW-14	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	8/31/2016	Arsenic, Total	0.0076	0.01	0.0021	10000	mg/L
OW-14	8/31/2016	Barium, Total	2.1	0.01	0.004	2000000	mg/L
OW-14	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-14	8/31/2016	Arsenic, Dissolved	0.0086	0.001	0.00014	10000	mg/L
OW-14	8/31/2016	Barium, Dissolved	2.2	0.01	0.0066	2000000	mg/L
OW-14	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-14	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-14	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-14	8/31/2016	Iron, Dissolved	4.9	0.1	0.1	13821880	mg/L
OW-14	8/31/2016	Manganese, Dissolved	2.2	0.01	0.0016	2017400	mg/L
OW-14	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	8/31/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
OW-14	8/31/2016	Uranium, Dissolved	0.0054	0.0025	0.00026	NA	mg/L
OW-14	8/31/2016	Zinc, Dissolved	0.028	0.01	0.0028	5960450	mg/L
OW-14	8/31/2016	Iron, Total	4.9	0.1	0.1	13822000	mg/L
OW-14	8/31/2016	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
OW-14	8/31/2016	Lead, Total	0.00014	0.0005	0.000081	15000	mg/L
OW-14	8/31/2016	Selenium, Total	0.014	0.01	0.0019	50000	mg/L
OW-14	8/31/2016	Uranium, Total	0.0059	0.0005	0.00017	30000	mg/L
OW-14	8/31/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
OW-14	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	11/15/2016	Arsenic, Total	0.011	0.005	0.0011	10000	mg/L
OW-14	11/15/2016	Barium, Total	2.3	0.02	0.0079	2000000	mg/L
OW-14	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-14	11/15/2016	Arsenic, Dissolved	0.0099	0.005	0.00069	10000	mg/L
OW-14	11/15/2016	Barium, Dissolved	2.2	0.02	0.013	2000000	mg/L
OW-14	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-14	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-14	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-14	11/15/2016	Iron, Dissolved	4.7	0.2	0.2	13821880	mg/L
OW-14	11/15/2016	Manganese, Dissolved	2.1	0.02	0.0032	2017400	mg/L
OW-14	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	11/15/2016	Selenium, Dissolved	0.015	0.02	0.0042	50000	mg/L
OW-14	11/15/2016	Uranium, Dissolved	0.0048	0.0005	0.000051	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-14	11/15/2016	Iron, Total	5.1	0.2	0.2	13822000	mg/L
OW-14	11/15/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	11/15/2016	Manganese, Total	2.3	0.02	0.0027	2017000	mg/L
OW-14	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-14	11/15/2016	Selenium, Total	0.018	0.05	0.0094	50000	mg/L
OW-14	11/15/2016	Uranium, Total	0.0041	0.0025	0.00087	30000	mg/L
OW-14	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-14	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	2/27/2017	Arsenic, Total	0.0096	0.005	0.0011	10000	mg/L
OW-14	2/27/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
OW-14	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-14	2/27/2017	Arsenic, Dissolved	0.0083	0.005	0.00069	10000	mg/L
OW-14	2/27/2017	Barium, Dissolved	2.3	0.01	0.0043	2000000	mg/L
OW-14	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-14	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	2/27/2017	Iron, Dissolved	5.1	0.2	0.2	13821880	mg/L
OW-14	2/27/2017	Manganese, Dissolved	2.2	0.01	0.0019	2017400	mg/L
OW-14	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	2/27/2017	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
OW-14	2/27/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
OW-14	2/27/2017	Iron, Total	4.9	0.1	0.1	13822000	mg/L
OW-14	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	2/27/2017	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
OW-14	2/27/2017	Lead, Total	0.00017	0.0005	0.000081	15000	mg/L
OW-14	2/27/2017	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
OW-14	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-14	5/30/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-14	5/30/2017	Arsenic, Total	0.0074	0.005	0.0015	10000	mg/L
OW-14	5/30/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
OW-14	5/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	5/30/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-14	5/30/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-14	5/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-14	5/30/2017	Arsenic, Dissolved	0.0076	0.01	0.0018	10000	mg/L
OW-14	5/30/2017	Barium, Dissolved	2.2	0.01	0.0043	2000000	mg/L
OW-14	5/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	5/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-14	5/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	5/30/2017	Iron, Dissolved	4.5	0.2	0.16	13821880	mg/L
OW-14	5/30/2017	Manganese, Dissolved	2.1	0.01	0.0019	2017400	mg/L
OW-14	5/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	5/30/2017	Selenium, Dissolved	0.0069	0.01	0.0039	50000	mg/L
OW-14	5/30/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
OW-14	5/30/2017	Iron, Total	4.6	0.2	0.1	13822000	mg/L
OW-14	5/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	5/30/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-14	5/30/2017	Lead, Total	0.00014	0.0005	0.000095	15000	mg/L
OW-14	5/30/2017	Selenium, Total	0.0061	0.005	0.0036	50000	mg/L
OW-14	5/30/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-14	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	9/6/2017	Arsenic, Total	0.0097	0.01	0.003	10000	mg/L
OW-14	9/6/2017	Barium, Total	2.3	0.02	0.0093	2000000	mg/L
OW-14	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	9/6/2017	Copper, Total	0.0022	0.006	0.0017	790000	mg/L
OW-14	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	9/6/2017	Arsenic, Dissolved	0.009	0.005	0.00089	10000	mg/L
OW-14	9/6/2017	Barium, Dissolved	2.2	0.01	0.0043	2000000	mg/L
OW-14	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	9/6/2017	Iron, Dissolved	4.6	0.1	0.082	13821880	mg/L
OW-14	9/6/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-14	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/6/2017	Selenium, Dissolved	0.013	0.02	0.0077	50000	mg/L
OW-14	9/6/2017	Uranium, Dissolved	0.0042	0.0005	0.00005	NA	mg/L
OW-14	9/6/2017	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
OW-14	9/6/2017	Iron, Total	5.1	0.2	0.1	13822000	mg/L
OW-14	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	9/6/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
OW-14	9/6/2017	Lead, Total	0.00011	0.0005	0.000095	15000	mg/L
OW-14	9/6/2017	Selenium, Total	0.013	0.01	0.0071	50000	mg/L
OW-14	9/6/2017	Uranium, Total	0.0043	0.0005	0.00015	30000	mg/L
OW-14	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	12/11/2017	Arsenic, Total	0.0057	0.01	0.0041	10000	mg/L
OW-14	12/11/2017	Barium, Total	2.3	0.01	0.005	2000000	mg/L
OW-14	12/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	12/11/2017	Arsenic, Dissolved	0.0083	0.005	0.0021	10000	mg/L
OW-14	12/11/2017	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
OW-14	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	12/11/2017	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	12/11/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-14	12/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	12/11/2017	Selenium, Dissolved	0.011	0.005	0.0038	50000	mg/L
OW-14	12/11/2017	Uranium, Dissolved	0.0033	0.0005	0.000096	NA	mg/L
OW-14	12/11/2017	Zinc, Dissolved	0.0085	0.01	0.0021	5960450	mg/L
OW-14	12/11/2017	Iron, Total	4.9	0.1	0.051	13822000	mg/L
OW-14	12/11/2017	Mercury, Total	0.00011	0.0002	0.000037	2000	mg/L
OW-14	12/11/2017	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
OW-14	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	12/11/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-14	12/11/2017	Uranium, Total	0.0031	0.0005	0.00015	30000	mg/L
OW-14	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	2/27/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	2/27/2018	Arsenic, Total	0.0079	0.01	0.0041	10000	mg/L
OW-14	2/27/2018	Barium, Total	2.3	0.01	0.005	2000000	mg/L
OW-14	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	2/27/2018	Arsenic, Dissolved	0.0064	0.01	0.0042	10000	mg/L
OW-14	2/27/2018	Barium, Dissolved	2.1	0.02	0.0099	2000000	mg/L
OW-14	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	2/27/2018	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	2/27/2018	Manganese, Dissolved	1.9	0.02	0.0039	2017400	mg/L
OW-14	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	2/27/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-14	2/27/2018	Uranium, Dissolved	0.0034	0.0005	0.000096	NA	mg/L
OW-14	2/27/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
OW-14	2/27/2018	Iron, Total	4.8	0.1	0.051	13822000	mg/L
OW-14	2/27/2018	Mercury, Total	0.000077	0.0002	0.000037	2000	mg/L
OW-14	2/27/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	2/27/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-14	2/27/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-14	2/27/2018	Uranium, Total	0.0031	0.0025	0.00034	30000	mg/L
OW-14	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	5/15/2018	Arsenic, Total	0.0065	0.001	0.00041	10000	mg/L
OW-14	5/15/2018	Barium, Total	2.4	0.01	0.005	2000000	mg/L
OW-14	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	5/15/2018	Arsenic, Dissolved	0.006	0.001	0.00042	10000	mg/L
OW-14	5/15/2018	Barium, Dissolved	2.2	0.01	0.0049	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	5/15/2018	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	5/15/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
OW-14	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	5/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	5/15/2018	Uranium, Dissolved	0.0033	0.0005	0.000096	NA	mg/L
OW-14	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-14	5/15/2018	Iron, Total	4.7	0.2	0.1	13822000	mg/L
OW-14	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	5/15/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
OW-14	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	5/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	5/15/2018	Uranium, Total	0.0031	0.0005	0.000068	30000	mg/L
OW-14	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	9/11/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
OW-14	9/11/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-14	9/11/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
OW-14	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	9/11/2018	Arsenic, Dissolved	0.0056	0.001	0.00042	10000	mg/L
OW-14	9/11/2018	Barium, Dissolved	2.3	0.01	0.0049	2000000	mg/L
OW-14	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	9/11/2018	Iron, Dissolved	4.7	0.2	0.16	13821880	mg/L
OW-14	9/11/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-14	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	9/11/2018	Uranium, Dissolved	0.0029	0.0005	0.000096	NA	mg/L
OW-14	9/11/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
OW-14	9/11/2018	Iron, Total	5	0.1	0.051	13822000	mg/L
OW-14	9/11/2018	Mercury, Total	0.000059	0.0002	0.000038	2000	mg/L
OW-14	9/11/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	9/11/2018	Uranium, Total	0.0028	0.0005	0.000068	30000	mg/L
OW-14	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Dissolved	0.00061	0.001	0.000101	10000	mg/L
OW-29	5/1/2019	Barium, Dissolved	0.072	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-29	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	5/1/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-29	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	5/1/2019	Iron, Dissolved	0.27	0.02	0.008747	13821880	mg/L
OW-29	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	5/1/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	5/1/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-29	5/1/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-29	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	5/1/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-29	5/1/2019	Zinc, Dissolved	0.064	0.01	0.002252	5960450	mg/L
OW-29	5/1/2019	Aluminum, Total	0.17	0.02	0.002488	19914000	mg/L
OW-29	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Total	0.00071	0.001	0.000312	10000	mg/L
OW-29	5/1/2019	Barium, Total	0.077	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Total	0.57	0.04	0.004531	3949	mg/L
OW-29	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	5/1/2019	Iron, Total	0.36	0.02	0.008747	13822000	mg/L
OW-29	5/1/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-29	5/1/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
OW-29	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	5/1/2019	Thallium, Total	0.000057	0.0005	0.000052	2000	mg/L
OW-29	5/1/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Dissolved	0.00061	0.001	0.000101	10000	mg/L
OW-29	5/1/2019	Barium, Dissolved	0.071	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
OW-29	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	5/1/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-29	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
OW-29	5/1/2019	Iron, Dissolved	0.22	0.02	0.008747	13821880	mg/L
OW-29	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	5/1/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	5/1/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	5/1/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-29	5/1/2019	Sodium, Dissolved	400	5	2.080881	NA	mg/L
OW-29	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	5/1/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-29	5/1/2019	Zinc, Dissolved	0.072	0.01	0.002252	5960450	mg/L
OW-29	5/1/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
OW-29	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Total	0.00074	0.001	0.000312	10000	mg/L
OW-29	5/1/2019	Barium, Total	0.077	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
OW-29	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	5/1/2019	Iron, Total	0.35	0.02	0.008747	13822000	mg/L
OW-29	5/1/2019	Lead, Total	0.000074	0.0005	0.000055	15000	mg/L
OW-29	5/1/2019	Manganese, Total	0.35	0.002	0.00029	2017000	mg/L
OW-29	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	5/1/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	2/24/2020	Zinc, Dissolved	0.016	0.01	0.0023	5960450	mg/L
OW-29	2/24/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-29	2/24/2020	Arsenic, Total	0.00088	0.001	0.00031	10000	mg/L
OW-29	2/24/2020	Lead, Total	0.00021	0.0005	0.000055	15000	mg/L
OW-29	2/24/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-29	2/24/2020	Thallium, Total	0.000073	0.0005	0.000052	2000	mg/L
OW-29	2/24/2020	Uranium, Total	0.056	0.0025	0.00042	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/24/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	2/24/2020	Aluminum, Total	0.56	0.02	0.0025	19914000	mg/L
OW-29	2/24/2020	Barium, Total	0.078	0.002	0.00065	2000000	mg/L
OW-29	2/24/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-29	2/24/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-29	2/24/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-29	2/24/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	2/24/2020	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
OW-29	2/24/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-29	2/24/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-29	2/24/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-29	2/24/2020	Iron, Total	0.47	0.02	0.0087	13822000	mg/L
OW-29	2/24/2020	Nickel, Total	0.021	0.01	0.004	372000	mg/L
OW-29	2/24/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-29	2/24/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-29	2/24/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-29	2/24/2020	Arsenic, Dissolved	0.00088	0.001	0.0001	10000	mg/L
OW-29	2/24/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	2/24/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-29	2/24/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	2/24/2020	Uranium, Dissolved	0.048	0.0025	0.00037	NA	mg/L
OW-29	2/24/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-29	2/24/2020	Barium, Dissolved	0.073	0.002	0.00065	2000000	mg/L
OW-29	2/24/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-29	2/24/2020	Boron, Dissolved	0.52	0.04	0.0045	3949110	mg/L
OW-29	2/24/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-29	2/24/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-29	2/24/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-29	2/24/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-29	2/24/2020	Iron, Dissolved	0.25	0.02	0.0087	13821880	mg/L
OW-29	2/24/2020	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	2/24/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-29	2/24/2020	Nickel, Dissolved	0.023	0.01	0.004	372000	mg/L
OW-29	2/24/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-29	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Dissolved	0.00059	0.001	0.00021	10000	mg/L
OW-29	9/17/2020	Lead, Dissolved	0.000036	0.0005	0.000034	NA	mg/L
OW-29	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-29	9/17/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-29	9/17/2020	Aluminum, Dissolved	0.0088	0.02	0.0056	19913930	mg/L
OW-29	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-29	9/17/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
OW-29	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-29	9/17/2020	Iron, Dissolved	0.21	0.02	0.01	13821880	mg/L
OW-29	9/17/2020	Manganese, Dissolved	0.31	0.002	0.00058	2017400	mg/L
OW-29	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-29	9/17/2020	Barium, Dissolved	0.073	0.002	0.0011	2000000	mg/L
OW-29	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-29	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-29	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-29	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-29	9/17/2020	Nickel, Dissolved	0.022	0.01	0.0033	372000	mg/L
OW-29	9/17/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
OW-29	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Total	0.00063	0.001	0.00026	10000	mg/L
OW-29	9/17/2020	Lead, Total	0.000052	0.0005	0.000034	15000	mg/L
OW-29	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-29	9/17/2020	Uranium, Total	0.049	0.0025	0.00033	30000	mg/L
OW-29	9/17/2020	Aluminum, Total	0.11	0.1	0.037	19914000	mg/L
OW-29	9/17/2020	Barium, Total	0.075	0.015	0.0082	2000000	mg/L
OW-29	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-29	9/17/2020	Boron, Total	0.51	0.2	0.037	3949	mg/L
OW-29	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-29	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-29	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-29	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
OW-29	9/17/2020	Manganese, Total	0.33	0.01	0.0041	2017000	mg/L
OW-29	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-29	9/17/2020	Nickel, Total	0.023	0.05	0.016	372000	mg/L
OW-29	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-29	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-29	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Dissolved	0.00058	0.001	0.00021	10000	mg/L
OW-29	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-29	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-29	9/17/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-29	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-29	9/17/2020	Barium, Dissolved	0.07	0.002	0.0011	2000000	mg/L
OW-29	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-29	9/17/2020	Boron, Dissolved	0.52	0.04	0.0067	3949110	mg/L
OW-29	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-29	9/17/2020	Iron, Dissolved	0.18	0.02	0.01	13821880	mg/L
OW-29	9/17/2020	Manganese, Dissolved	0.31	0.002	0.00058	2017400	mg/L
OW-29	9/17/2020	Nickel, Dissolved	0.023	0.01	0.0033	372000	mg/L
OW-29	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-29	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-29	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-29	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-29	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-29	9/17/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
OW-29	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Total	0.00061	0.001	0.00026	10000	mg/L
OW-29	9/17/2020	Lead, Total	0.000079	0.0005	0.000034	15000	mg/L
OW-29	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-29	9/17/2020	Uranium, Total	0.05	0.0025	0.00033	30000	mg/L
OW-29	9/17/2020	Aluminum, Total	0.12	0.1	0.037	19914000	mg/L
OW-29	9/17/2020	Barium, Total	0.074	0.015	0.0082	2000000	mg/L
OW-29	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-29	9/17/2020	Boron, Total	0.5	0.2	0.037	3949	mg/L
OW-29	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-29	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-29	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-29	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-29	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
OW-29	9/17/2020	Manganese, Total	0.32	0.01	0.0041	2017000	mg/L
OW-29	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-29	9/17/2020	Nickel, Total	0.022	0.05	0.016	372000	mg/L
OW-29	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-29	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-29	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-29	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-29	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-29	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-29	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-29	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-29	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-29	12/9/2020	Uranium, Dissolved	47.8	5	1.12	NA	ug/L
OW-29	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-29	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-29	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-29	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-29	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-29	12/9/2020	Uranium, Total Recoverable	**51.1**	5	1.12	30	ug/L
OW-29	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-29	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-29	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-29	12/9/2020	Boron, Dissolved	0.584	0.2	0.0527	3949110	mg/L
OW-29	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-29	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-29	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-29	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/9/2020	Iron, Dissolved	0.259	0.1	0.0248	13821880	mg/L
OW-29	12/9/2020	Manganese, Dissolved	0.342	0.015	0.00141	2017400	mg/L
OW-29	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-29	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-29	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-29	12/9/2020	Zinc, Dissolved	0.0432	0.02	0.00589	5960450	mg/L
OW-29	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-29	12/9/2020	Barium, Total	0.0792	0.01	0.003	2000000	mg/L
OW-29	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-29	12/9/2020	Boron, Total	0.528	0.1	0.022	3949	mg/L
OW-29	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-29	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-29	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-29	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-29	12/9/2020	Iron, Total	0.338	0.2	0.075	13822000	mg/L
OW-29	12/9/2020	Manganese, Total	0.349	0.01	0.003	2017000	mg/L
OW-29	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-29	12/9/2020	Nickel, Total	0.0262	0.006	0.003	372000	mg/L
OW-29	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-29	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-29	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-29	2/5/2019	Arsenic, Dissolved	0.00065	0.001	0.000068	10000	mg/L
OW-29	2/5/2019	Barium, Dissolved	0.072	0.002	0.000648	2000000	mg/L
OW-29	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	2/5/2019	Iron, Dissolved	0.22	0.02	0.008747	13821880	mg/L
OW-29	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-29	2/5/2019	Manganese, Dissolved	0.31	0.002	0.00029	2017400	mg/L
OW-29	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-29	2/5/2019	Silver, Dissolved	0.001	0.005	0.000942	81200	mg/L
OW-29	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-29	2/5/2019	Uranium, Dissolved	0.048	0.0025	0.000152	NA	mg/L
OW-29	2/5/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-29	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-29	2/5/2019	Arsenic, Total	0.0012	0.001	0.000022	10000	mg/L
OW-29	2/5/2019	Barium, Total	0.078	0.002	0.000488	2000000	mg/L
OW-29	2/5/2019	Beryllium, Total	0.00036	0.002	0.000224	4000	mg/L
OW-29	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-29	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	2/5/2019	Iron, Total	0.43	0.02	0.006053	13822000	mg/L
OW-29	2/5/2019	Lead, Total	0.00022	0.0005	0.000063	15000	mg/L
OW-29	2/5/2019	Manganese, Total	0.33	0.002	0.00006	2017000	mg/L
OW-29	2/5/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OW-29	2/5/2019	Selenium, Total	0.00024	0.001	0.000118	50000	mg/L
OW-29	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-29	2/5/2019	Uranium, Total	0.048	0.0025	0.00025	30000	mg/L
OW-29	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	10/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-29	10/14/2019	Barium, Dissolved	0.075	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Dissolved	0.00035	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
OW-29	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/14/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
OW-29	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Dissolved	0.0028	0.006	0.001296	790000	mg/L
OW-29	10/14/2019	Iron, Dissolved	0.17	0.02	0.008747	13821880	mg/L
OW-29	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/14/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	10/14/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	10/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Potassium, Dissolved	0.38	1	0.162288	NA	mg/L
OW-29	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
OW-29	10/14/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
OW-29	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/14/2019	Zinc, Dissolved	0.063	0.01	0.002252	5960450	mg/L
OW-29	10/14/2019	Aluminum, Total	0.63	0.02	0.002488	19914000	mg/L
OW-29	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Total	0.00099	0.001	0.000312	10000	mg/L
OW-29	10/14/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
OW-29	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/14/2019	Iron, Total	0.45	0.02	0.008747	13822000	mg/L
OW-29	10/14/2019	Lead, Total	0.00011	0.0005	0.000055	15000	mg/L
OW-29	10/14/2019	Manganese, Total	0.31	0.002	0.00029	2017000	mg/L
OW-29	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Total	0.02	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/15/2019	Aluminum, Dissolved	0.006	0.02	0.002488	19913930	mg/L
OW-29	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	10/15/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-29	10/15/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-29	10/15/2019	Beryllium, Dissolved	0.0004	0.002	0.000284	4000	mg/L
OW-29	10/15/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-29	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/15/2019	Calcium, Dissolved	5	1	0.061889	NA	mg/L
OW-29	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/15/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	10/15/2019	Iron, Dissolved	0.046	0.02	0.008747	13821880	mg/L
OW-29	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/15/2019	Magnesium, Dissolved	0.61	1	0.05029	NA	mg/L
OW-29	10/15/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-29	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-29	10/15/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-29	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-29	10/15/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-29	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/15/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
OW-29	10/15/2019	Aluminum, Total	0.28	0.02	0.002488	19914000	mg/L
OW-29	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/15/2019	Arsenic, Total	0.00078	0.001	0.000312	10000	mg/L
OW-29	10/15/2019	Barium, Total	0.028	0.002	0.000648	2000000	mg/L
OW-29	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-29	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/15/2019	Iron, Total	0.11	0.02	0.008747	13822000	mg/L
OW-29	10/15/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-29	10/15/2019	Manganese, Total	0.025	0.002	0.00029	2017000	mg/L
OW-29	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-29	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	10/14/2019	Antimony, Dissolved	0.00077	0.001	0.000389	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-29	10/14/2019	Barium, Dissolved	0.074	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
OW-29	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/14/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
OW-29	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
OW-29	10/14/2019	Iron, Dissolved	0.2	0.02	0.008747	13821880	mg/L
OW-29	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/14/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	10/14/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	10/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Dissolved	0.022	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	10/14/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
OW-29	10/14/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-29	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/14/2019	Zinc, Dissolved	0.078	0.01	0.002252	5960450	mg/L
OW-29	10/14/2019	Aluminum, Total	0.42	0.02	0.002488	19914000	mg/L
OW-29	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-29	10/14/2019	Barium, Total	0.074	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
OW-29	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/14/2019	Iron, Total	0.32	0.02	0.008747	13822000	mg/L
OW-29	10/14/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-29	10/14/2019	Manganese, Total	0.3	0.002	0.00029	2017000	mg/L
OW-29	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Total	0.023	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-29	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	8/12/2019	Aluminum, Total	0.067	0.02	0.002488	19914000	mg/L
OW-29	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	8/12/2019	Arsenic, Total	0.00087	0.001	0.000312	10000	mg/L
OW-29	8/12/2019	Barium, Total	0.071	0.002	0.000648	2000000	mg/L
OW-29	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	8/12/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
OW-29	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	8/12/2019	Iron, Total	0.22	0.02	0.008747	13822000	mg/L
OW-29	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-29	8/12/2019	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-29	8/12/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	8/12/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	8/12/2019	Nickel, Total	0.022	0.01	0.004009	372000	mg/L
OW-29	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	8/12/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	8/12/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
OW-29	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	8/12/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-29	8/12/2019	Barium, Dissolved	0.071	0.002	0.000648	2000000	mg/L
OW-29	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	8/12/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-29	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	8/12/2019	Iron, Dissolved	0.18	0.02	0.008747	13821880	mg/L
OW-29	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	8/12/2019	Manganese, Dissolved	0.29	0.002	0.00029	2017400	mg/L
OW-29	8/12/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	8/12/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-29	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	8/12/2019	Silver, Dissolved	0.00097	0.005	0.000942	81200	mg/L
OW-29	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	8/12/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
OW-29	8/12/2019	Zinc, Dissolved	0.0036	0.01	0.002252	5960450	mg/L
OW-29	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-29	11/15/2016	Iron, Dissolved	0.32	0.02	0.02	13821880	mg/L
OW-29	11/15/2016	Manganese, Dissolved	0.34	0.002	0.00032	2017400	mg/L
OW-29	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	11/15/2016	Selenium, Dissolved	0.0076	0.01	0.0021	50000	mg/L
OW-29	11/15/2016	Uranium, Dissolved	0.053	0.0025	0.00026	NA	mg/L
OW-29	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-29	11/15/2016	Iron, Total	0.34	0.02	0.02	13822000	mg/L
OW-29	11/15/2016	Mercury, Total	0.00006	0.0002	0.000053	2000	mg/L
OW-29	11/15/2016	Manganese, Total	0.34	0.002	0.00027	2017000	mg/L
OW-29	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-29	11/15/2016	Selenium, Total	0.0088	0.02	0.0037	50000	mg/L
OW-29	11/15/2016	Uranium, Total	0.055	0.0025	0.00087	30000	mg/L
OW-29	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	2/27/2017	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
OW-29	2/27/2017	Barium, Total	0.07	0.002	0.00079	2000000	mg/L
OW-29	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-29	2/27/2017	Arsenic, Dissolved	0.002	0.005	0.00069	10000	mg/L
OW-29	2/27/2017	Barium, Dissolved	0.07	0.002	0.00085	2000000	mg/L
OW-29	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-29	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	2/27/2017	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
OW-29	2/27/2017	Manganese, Dissolved	0.32	0.002	0.00038	2017400	mg/L
OW-29	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	2/27/2017	Selenium, Dissolved	0.0064	0.005	0.0011	50000	mg/L
OW-29	2/27/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
OW-29	2/27/2017	Iron, Total	0.36	0.02	0.02	13822000	mg/L
OW-29	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-29	2/27/2017	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
OW-29	2/27/2017	Lead, Total	0.000098	0.0005	0.000081	15000	mg/L
OW-29	2/27/2017	Selenium, Total	0.006	0.01	0.0019	50000	mg/L
OW-29	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	5/30/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-29	5/30/2017	Arsenic, Total	0.0017	0.005	0.0015	10000	mg/L
OW-29	5/30/2017	Barium, Total	0.07	0.002	0.00093	2000000	mg/L
OW-29	5/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	5/30/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-29	5/30/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-29	5/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-29	5/30/2017	Arsenic, Dissolved	0.0018	0.005	0.00089	10000	mg/L
OW-29	5/30/2017	Barium, Dissolved	0.069	0.002	0.00085	2000000	mg/L
OW-29	5/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	5/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-29	5/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	5/30/2017	Iron, Dissolved	0.28	0.02	0.016	13821880	mg/L
OW-29	5/30/2017	Manganese, Dissolved	0.31	0.002	0.00038	2017400	mg/L
OW-29	5/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	5/30/2017	Selenium, Dissolved	0.0038	0.005	0.0019	50000	mg/L
OW-29	5/30/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
OW-29	5/30/2017	Iron, Total	0.38	0.02	0.01	13822000	mg/L
OW-29	5/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/30/2017	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
OW-29	5/30/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-29	5/30/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-29	5/30/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-29	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	9/6/2017	Arsenic, Total	0.0031	0.005	0.0015	10000	mg/L
OW-29	9/6/2017	Barium, Total	0.066	0.002	0.00093	2000000	mg/L
OW-29	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	9/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-29	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	9/6/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
OW-29	9/6/2017	Barium, Dissolved	0.067	0.002	0.00085	2000000	mg/L
OW-29	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	9/6/2017	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
OW-29	9/6/2017	Manganese, Dissolved	0.29	0.002	0.00039	2017400	mg/L
OW-29	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	9/6/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-29	9/6/2017	Uranium, Dissolved	0.052	0.0025	0.00025	NA	mg/L
OW-29	9/6/2017	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
OW-29	9/6/2017	Iron, Total	0.27	0.02	0.01	13822000	mg/L
OW-29	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	9/6/2017	Manganese, Total	0.29	0.002	0.0011	2017000	mg/L
OW-29	9/6/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-29	9/6/2017	Selenium, Total	ND	0.01	0.0071	50000	mg/L
OW-29	9/6/2017	Uranium, Total	0.053	0.0025	0.00077	30000	mg/L
OW-29	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	12/11/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-29	12/11/2017	Barium, Total	0.059	0.002	0.001	2000000	mg/L
OW-29	12/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	12/11/2017	Arsenic, Dissolved	0.0028	0.005	0.0021	10000	mg/L
OW-29	12/11/2017	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-29	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	12/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-29	12/11/2017	Manganese, Dissolved	0.022	0.002	0.00039	2017400	mg/L
OW-29	12/11/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-29	12/11/2017	Selenium, Dissolved	0.006	0.005	0.0038	50000	mg/L
OW-29	12/11/2017	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	12/11/2017	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
OW-29	12/11/2017	Iron, Total	0.3	0.02	0.01	13822000	mg/L
OW-29	12/11/2017	Mercury, Total	0.0001	0.0002	0.000037	2000	mg/L
OW-29	12/11/2017	Manganese, Total	0.33	0.002	0.0011	2017000	mg/L
OW-29	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	12/11/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-29	12/11/2017	Uranium, Total	0.054	0.005	0.0015	30000	mg/L
OW-29	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	2/27/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
OW-29	2/27/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-29	2/27/2018	Barium, Total	0.074	0.002	0.001	2000000	mg/L
OW-29	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	2/27/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-29	2/27/2018	Barium, Dissolved	0.067	0.002	0.00099	2000000	mg/L
OW-29	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	2/27/2018	Iron, Dissolved	0.25	0.02	0.016	13821880	mg/L
OW-29	2/27/2018	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
OW-29	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-29	2/27/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	2/27/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
OW-29	2/27/2018	Iron, Total	0.54	0.02	0.01	13822000	mg/L
OW-29	2/27/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	2/27/2018	Manganese, Total	0.35	0.002	0.0011	2017000	mg/L
OW-29	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	2/27/2018	Selenium, Total	0.0021	0.001	0.00098	50000	mg/L
OW-29	2/27/2018	Uranium, Total	0.049	0.0025	0.00034	30000	mg/L
OW-29	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	5/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	5/16/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-29	5/16/2018	Barium, Total	0.07	0.002	0.001	2000000	mg/L
OW-29	5/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	5/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	5/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	5/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	5/16/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-29	5/16/2018	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
OW-29	5/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	5/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	5/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	5/16/2018	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
OW-29	5/16/2018	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
OW-29	5/16/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-29	5/16/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-29	5/16/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OW-29	5/16/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-29	5/16/2018	Iron, Total	0.56	0.02	0.01	13822000	mg/L
OW-29	5/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	5/16/2018	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
OW-29	5/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	5/16/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
OW-29	5/16/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-29	5/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	9/11/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
OW-29	9/11/2018	Arsenic, Total	0.001	0.001	0.00041	10000	mg/L
OW-29	9/11/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
OW-29	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	9/11/2018	Arsenic, Dissolved	0.00086	0.001	0.00042	10000	mg/L
OW-29	9/11/2018	Barium, Dissolved	0.073	0.002	0.00099	2000000	mg/L
OW-29	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	9/11/2018	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
OW-29	9/11/2018	Manganese, Dissolved	0.33	0.002	0.00039	2017400	mg/L
OW-29	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-29	9/11/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	9/11/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
OW-29	9/11/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
OW-29	9/11/2018	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
OW-29	9/11/2018	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
OW-29	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-29	9/11/2018	Uranium, Total	0.051	0.0025	0.00034	30000	mg/L
OW-29	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	11/6/2018	Arsenic, Total	0.0014	0.001	0.00041	10000	mg/L
OW-29	11/6/2018	Barium, Total	0.073	0.002	0.001	2000000	mg/L
OW-29	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	11/6/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-29	11/6/2018	Barium, Dissolved	0.071	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	11/6/2018	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
OW-29	11/6/2018	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
OW-29	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-29	11/6/2018	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
OW-29	11/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-29	11/6/2018	Iron, Total	0.38	0.02	0.01	13822000	mg/L
OW-29	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	11/6/2018	Manganese, Total	0.3	0.002	0.0011	2017000	mg/L
OW-29	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-29	11/6/2018	Uranium, Total	0.048	0.0025	0.00034	30000	mg/L
OW-29	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-29	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-29	8/23/2012	Barium, Total	0.058	0.002	0.00039	2000000	mg/L
OW-29	8/23/2012	Calcium, Total	50	1	0.026	NA	mg/L
OW-29	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-29	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-29	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	8/23/2012	Iron, Total	0.16	0.02	0.013	13822000	mg/L
OW-29	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-29	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-29	8/23/2012	Magnesium, Total	12	1	0.013	NA	mg/L
OW-29	8/23/2012	Manganese, Total	0.25	0.002	0.00026	2017000	mg/L
OW-29	8/23/2012	Sodium, Total	360	5	0.22	NA	mg/L
OW-29	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-29	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-29	8/23/2012	Uranium, Total	0.055	0.0025	0.00003	30000	mg/L
OW-29	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-29	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-29	3/19/2013	Barium, Total	0.059	0.002	0.00039	2000000	mg/L
OW-29	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-29	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-29	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	3/19/2013	Iron, Total	0.47	0.02	0.013	13822000	mg/L
OW-29	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	3/19/2013	Manganese, Total	0.29	0.002	0.00026	2017000	mg/L
OW-29	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-29	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-29	3/19/2013	Uranium, Total	0.057	0.0025	0.0012	30000	mg/L
OW-29	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-29	6/13/2013	Arsenic, Total	0.0013	0.001	0.00027	10000	mg/L
OW-29	6/13/2013	Barium, Total	0.065	0.002	0.00057	2000000	mg/L
OW-29	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-29	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-29	6/13/2013	Iron, Total	0.52	0.02	0.0052	13822000	mg/L
OW-29	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	6/13/2013	Manganese, Total	0.32	0.002	0.00052	2017000	mg/L
OW-29	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	6/13/2013	Selenium, Total	0.0033	0.001	0.00049	50000	mg/L
OW-29	6/13/2013	Uranium, Total	0.056	0.005	0.0025	30000	mg/L
OW-29	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-29	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-29	9/4/2013	Barium, Total	0.062	0.002	0.00095	2000000	mg/L
OW-29	9/4/2013	Calcium, Total	53	1	0.069	NA	mg/L
OW-29	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-29	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-29	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-29	9/4/2013	Iron, Total	0.31	0.02	0.0089	13822000	mg/L
OW-29	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	9/4/2013	Potassium, Total	1.9	1	0.24	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/4/2013	Magnesium, Total	11	1	0.028	NA	mg/L
OW-29	9/4/2013	Manganese, Total	0.28	0.002	0.00016	2017000	mg/L
OW-29	9/4/2013	Sodium, Total	350	5	1.6	NA	mg/L
OW-29	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-29	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-29	9/4/2013	Uranium, Total	0.06	0.01	0.000073	30000	mg/L
OW-29	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-29	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-29	11/11/2013	Arsenic, Total	0.0019	0.001	0.000098	10000	mg/L
OW-29	11/11/2013	Barium, Total	0.063	0.002	0.00095	2000000	mg/L
OW-29	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-29	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-29	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-29	11/11/2013	Iron, Total	0.33	0.02	0.0089	13822000	mg/L
OW-29	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	11/11/2013	Manganese, Total	0.3	0.002	0.00016	2017000	mg/L
OW-29	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	11/11/2013	Selenium, Total	0.0052	0.001	0.00029	50000	mg/L
OW-29	11/11/2013	Uranium, Total	0.053	0.005	0.000036	30000	mg/L
OW-29	11/11/2013	Zinc, Total	0.028	0.01	0.00076	5960000	mg/L
OW-29	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-29	3/7/2014	Barium, Total	0.059	0.002	0.0011	2000000	mg/L
OW-29	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-29	3/7/2014	Iron, Total	0.28	0.02	0.0062	13822000	mg/L
OW-29	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	3/7/2014	Manganese, Total	0.29	0.002	0.00055	2017000	mg/L
OW-29	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-29	3/7/2014	Uranium, Total	0.053	0.005	0.000036	30000	mg/L
OW-29	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-29	6/2/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	6/2/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-29	6/2/2014	Barium, Total	0.057	0.002	0.0011	2000000	mg/L
OW-29	6/2/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	6/2/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	6/2/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-29	6/2/2014	Iron, Total	0.2	0.02	0.0062	13822000	mg/L
OW-29	6/2/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	6/2/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
OW-29	6/2/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-29	6/2/2014	Selenium, Total	0.0064	0.005	0.00074	50000	mg/L
OW-29	6/2/2014	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
OW-29	6/2/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-29	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-29	9/15/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
OW-29	9/15/2014	Barium, Total	0.058	0.002	0.0005	2000000	mg/L
OW-29	9/15/2014	Calcium, Total	57	1	0.082	NA	mg/L
OW-29	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-29	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-29	9/15/2014	Iron, Total	0.2	0.02	0.0072	13822000	mg/L
OW-29	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	9/15/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
OW-29	9/15/2014	Magnesium, Total	12	1	0.018	NA	mg/L
OW-29	9/15/2014	Manganese, Total	0.26	0.002	0.00049	2017000	mg/L
OW-29	9/15/2014	Sodium, Total	380	10	3.9	NA	mg/L
OW-29	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-29	9/15/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
OW-29	9/15/2014	Uranium, Total	0.053	0.01	0.000072	30000	mg/L
OW-29	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-29	11/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	11/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-29	11/11/2014	Barium, Total	0.061	0.002	0.0011	2000000	mg/L
OW-29	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	11/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	11/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2014	Iron, Total	0.23	0.02	0.0062	13822000	mg/L
OW-29	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	11/11/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
OW-29	11/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-29	11/11/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-29	11/11/2014	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
OW-29	11/11/2014	Zinc, Total	0.029	0.01	0.0014	5960000	mg/L
OW-29	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-29	3/9/2015	Barium, Total	0.063	0.002	0.00073	2000000	mg/L
OW-29	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-29	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	3/9/2015	Iron, Total	0.41	0.02	0.0072	13822000	mg/L
OW-29	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	3/9/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
OW-29	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-29	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-29	3/9/2015	Uranium, Total	0.061	0.005	0.00004	30000	mg/L
OW-29	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-29	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-29	6/1/2015	Barium, Total	0.06	0.002	0.0011	2000000	mg/L
OW-29	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	6/1/2015	Iron, Total	0.35	0.02	0.0072	13822000	mg/L
OW-29	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	6/1/2015	Manganese, Total	0.25	0.002	0.0015	2017000	mg/L
OW-29	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-29	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-29	6/1/2015	Uranium, Total	0.054	0.005	0.000049	30000	mg/L
OW-29	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	8/11/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-29	8/11/2015	Barium, Total	0.063	0.002	0.0011	2000000	mg/L
OW-29	8/11/2015	Calcium, Total	52	1	0.057	NA	mg/L
OW-29	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	8/11/2015	Iron, Total	0.25	0.02	0.0072	13822000	mg/L
OW-29	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-29	8/11/2015	Magnesium, Total	12	1	0.039	NA	mg/L
OW-29	8/11/2015	Manganese, Total	0.28	0.002	0.0015	2017000	mg/L
OW-29	8/11/2015	Sodium, Total	400	5	0.36	NA	mg/L
OW-29	8/11/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	8/11/2015	Uranium, Total	0.054	0.0025	0.000025	30000	mg/L
OW-29	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	10/27/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-29	10/27/2015	Barium, Total	0.066	0.002	0.0011	2000000	mg/L
OW-29	10/27/2015	Calcium, Total	62	1	0.057	NA	mg/L
OW-29	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	10/27/2015	Iron, Total	0.33	0.02	0.0072	13822000	mg/L
OW-29	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-29	10/27/2015	Magnesium, Total	13	1	0.039	NA	mg/L
OW-29	10/27/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
OW-29	10/27/2015	Sodium, Total	370	5	0.36	NA	mg/L
OW-29	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	10/27/2015	Uranium, Total	0.051	0.0025	0.000025	30000	mg/L
OW-29	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	3/4/2016	Arsenic, Total	0.0015	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/4/2016	Barium, Total	0.064	0.002	0.0011	2000000	mg/L
OW-29	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	3/4/2016	Iron, Total	0.38	0.02	0.0072	13822000	mg/L
OW-29	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-29	3/4/2016	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
OW-29	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-29	3/4/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	3/4/2016	Uranium, Total	0.053	0.0025	0.000025	30000	mg/L
OW-29	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	6/6/2016	Arsenic, Total	0.0039	0.005	0.0015	10000	mg/L
OW-29	6/6/2016	Barium, Total	0.072	0.002	0.0011	2000000	mg/L
OW-29	6/6/2016	Calcium, Total	60	1	0.26	NA	mg/L
OW-29	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	6/6/2016	Iron, Total	0.36	0.02	0.0072	13822000	mg/L
OW-29	6/6/2016	Mercury, Total	0.000061	0.0002	0.000053	2000	mg/L
OW-29	6/6/2016	Potassium, Total	0.55	1	0.18	NA	mg/L
OW-29	6/6/2016	Magnesium, Total	14	1	0.013	NA	mg/L
OW-29	6/6/2016	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
OW-29	6/6/2016	Sodium, Total	390	5	0.48	NA	mg/L
OW-29	6/6/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	6/6/2016	Selenium, Total	0.0068	0.005	0.00062	50000	mg/L
OW-29	6/6/2016	Uranium, Total	0.053	0.0025	0.000025	30000	mg/L
OW-29	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	8/31/2016	Arsenic, Total	ND	0.01	0.0021	10000	mg/L
OW-29	8/31/2016	Barium, Total	0.065	0.002	0.00079	2000000	mg/L
OW-29	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-29	8/31/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
OW-29	8/31/2016	Barium, Dissolved	0.068	0.002	0.0013	2000000	mg/L
OW-29	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-29	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-29	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-29	8/31/2016	Iron, Dissolved	0.27	0.02	0.02	13821880	mg/L
OW-29	8/31/2016	Manganese, Dissolved	0.3	0.002	0.00032	2017400	mg/L
OW-29	8/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-29	8/31/2016	Selenium, Dissolved	0.0065	0.01	0.0021	50000	mg/L
OW-29	8/31/2016	Uranium, Dissolved	0.054	0.0025	0.00026	NA	mg/L
OW-29	8/31/2016	Zinc, Dissolved	0.028	0.01	0.0028	5960450	mg/L
OW-29	8/31/2016	Iron, Total	0.33	0.02	0.02	13822000	mg/L
OW-29	8/31/2016	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
OW-29	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-29	8/31/2016	Selenium, Total	0.0062	0.01	0.0019	50000	mg/L
OW-29	8/31/2016	Uranium, Total	0.053	0.0025	0.00087	30000	mg/L
OW-29	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	11/15/2016	Arsenic, Total	0.0023	0.005	0.0011	10000	mg/L
OW-29	11/15/2016	Barium, Total	0.071	0.002	0.00079	2000000	mg/L
OW-29	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-29	11/15/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
OW-29	11/15/2016	Barium, Dissolved	0.07	0.002	0.0013	2000000	mg/L
OW-29	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-29	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	6/5/2019	Aluminum, Total	0.14	0.02	0.002488	19914000	mg/L
OW-30	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Total	0.0008	0.001	0.000312	10000	mg/L
OW-30	6/5/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Total	0.006	0.006	0.004072	790000	mg/L
OW-30	6/5/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
OW-30	6/5/2019	Lead, Total	0.00051	0.0005	0.000055	15000	mg/L
OW-30	6/5/2019	Manganese, Total	0.073	0.002	0.00029	2017000	mg/L
OW-30	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Total	0.043	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	6/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	6/5/2019	Uranium, Total	0.033	0.0025	0.000424	30000	mg/L
OW-30	6/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Dissolved	0.00075	0.001	0.000101	10000	mg/L
OW-30	6/5/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-30	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Dissolved	0.0063	0.006	0.001296	790000	mg/L
OW-30	6/5/2019	Iron, Dissolved	0.06	0.02	0.008747	13821880	mg/L
OW-30	6/5/2019	Lead, Dissolved	0.00056	0.0005	0.000055	NA	mg/L
OW-30	6/5/2019	Manganese, Dissolved	0.067	0.002	0.00029	2017400	mg/L
OW-30	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Dissolved	0.041	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	6/5/2019	Silver, Dissolved	0.001	0.005	0.000942	81200	mg/L
OW-30	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	6/5/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
OW-30	6/5/2019	Zinc, Dissolved	0.19	0.01	0.002252	5960450	mg/L
OW-30	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	3/27/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-30	3/27/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
OW-30	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	3/27/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
OW-30	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	3/27/2019	Calcium, Dissolved	72	1	0.061889	NA	mg/L
OW-30	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-30	3/27/2019	Iron, Dissolved	0.055	0.02	0.008747	13821880	mg/L
OW-30	3/27/2019	Lead, Dissolved	0.00041	0.0005	0.000055	NA	mg/L
OW-30	3/27/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-30	3/27/2019	Manganese, Dissolved	0.068	0.002	0.00029	2017400	mg/L
OW-30	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	3/27/2019	Nickel, Dissolved	0.039	0.01	0.004009	372000	mg/L
OW-30	3/27/2019	Potassium, Dissolved	0.27	1	0.162288	NA	mg/L
OW-30	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	3/27/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
OW-30	3/27/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
OW-30	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	3/27/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-30	3/27/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
OW-30	3/27/2019	Aluminum, Total	0.29	0.02	0.004564	19914000	mg/L
OW-30	3/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	3/27/2019	Arsenic, Total	0.0008	0.001	0.000312	10000	mg/L
OW-30	3/27/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
OW-30	3/27/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	3/27/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
OW-30	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	3/27/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	3/27/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/27/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
OW-30	3/27/2019	Lead, Total	0.00059	0.0005	0.000055	15000	mg/L
OW-30	3/27/2019	Manganese, Total	0.073	0.002	0.00029	2017000	mg/L
OW-30	3/27/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	3/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	3/27/2019	Nickel, Total	0.04	0.01	0.004009	372000	mg/L
OW-30	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	3/27/2019	Uranium, Total	0.04	0.0025	0.000424	30000	mg/L
OW-30	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Total	0.13	0.02	0.002488	19914000	mg/L
OW-30	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Total	0.00083	0.001	0.000312	10000	mg/L
OW-30	6/5/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
OW-30	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Total	0.0058	0.006	0.004072	790000	mg/L
OW-30	6/5/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
OW-30	6/5/2019	Lead, Total	0.00052	0.0005	0.000055	15000	mg/L
OW-30	6/5/2019	Manganese, Total	0.075	0.002	0.00029	2017000	mg/L
OW-30	6/5/2019	Mercury, Total	ND	0.001	0.000187	2000	mg/L
OW-30	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Total	0.045	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	6/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	6/5/2019	Uranium, Total	0.035	0.0025	0.000424	30000	mg/L
OW-30	6/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-30	6/5/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
OW-30	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
OW-30	6/5/2019	Iron, Dissolved	0.057	0.02	0.008747	13821880	mg/L
OW-30	6/5/2019	Lead, Dissolved	0.00055	0.0005	0.000055	NA	mg/L
OW-30	6/5/2019	Manganese, Dissolved	0.067	0.002	0.00029	2017400	mg/L
OW-30	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	6/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-30	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	6/5/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
OW-30	6/5/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
OW-30	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-30	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-30	8/23/2012	Barium, Total	0.078	0.002	0.00039	2000000	mg/L
OW-30	8/23/2012	Calcium, Total	61	1	0.026	NA	mg/L
OW-30	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-30	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-30	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	8/23/2012	Iron, Total	0.058	0.02	0.013	13822000	mg/L
OW-30	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-30	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-30	8/23/2012	Magnesium, Total	14	1	0.013	NA	mg/L
OW-30	8/23/2012	Manganese, Total	0.018	0.002	0.00026	2017000	mg/L
OW-30	8/23/2012	Sodium, Total	370	5	0.22	NA	mg/L
OW-30	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-30	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-30	8/23/2012	Uranium, Total	0.056	0.0025	0.00003	30000	mg/L
OW-30	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-30	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-30	3/19/2013	Barium, Total	0.078	0.002	0.00039	2000000	mg/L
OW-30	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-30	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-30	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	3/19/2013	Iron, Total	0.052	0.02	0.013	13822000	mg/L
OW-30	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	3/19/2013	Manganese, Total	0.02	0.002	0.00026	2017000	mg/L
OW-30	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-30	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-30	3/19/2013	Uranium, Total	0.057	0.0025	0.0012	30000	mg/L
OW-30	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-30	6/17/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	6/17/2013	Arsenic, Total	0.0019	0.001	0.000098	10000	mg/L
OW-30	6/17/2013	Barium, Total	0.078	0.002	0.00095	2000000	mg/L
OW-30	6/17/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	6/17/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	6/17/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	6/17/2013	Iron, Total	0.048	0.02	0.0089	13822000	mg/L
OW-30	6/17/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	6/17/2013	Manganese, Total	0.025	0.002	0.00016	2017000	mg/L
OW-30	6/17/2013	Lead, Total	ND	0.005	0.0042	15000	mg/L
OW-30	6/17/2013	Selenium, Total	0.0055	0.001	0.00029	50000	mg/L
OW-30	6/17/2013	Uranium, Total	0.054	0.005	0.000036	30000	mg/L
OW-30	6/17/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-30	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-30	9/4/2013	Barium, Total	0.08	0.002	0.00095	2000000	mg/L
OW-30	9/4/2013	Calcium, Total	56	5	0.34	NA	mg/L
OW-30	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	9/4/2013	Iron, Total	0.04	0.02	0.0089	13822000	mg/L
OW-30	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	9/4/2013	Potassium, Total	ND	1	0.24	NA	mg/L
OW-30	9/4/2013	Magnesium, Total	15	1	0.028	NA	mg/L
OW-30	9/4/2013	Manganese, Total	0.028	0.002	0.00016	2017000	mg/L
OW-30	9/4/2013	Sodium, Total	360	5	1.6	NA	mg/L
OW-30	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-30	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-30	9/4/2013	Uranium, Total	0.059	0.01	0.000073	30000	mg/L
OW-30	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-30	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	11/11/2013	Arsenic, Total	0.0017	0.001	0.000098	10000	mg/L
OW-30	11/11/2013	Barium, Total	0.084	0.002	0.00095	2000000	mg/L
OW-30	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	11/11/2013	Iron, Total	0.06	0.02	0.0089	13822000	mg/L
OW-30	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	11/11/2013	Manganese, Total	0.031	0.002	0.00016	2017000	mg/L
OW-30	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-30	11/11/2013	Selenium, Total	0.0046	0.001	0.00029	50000	mg/L
OW-30	11/11/2013	Uranium, Total	0.05	0.005	0.000036	30000	mg/L
OW-30	11/11/2013	Zinc, Total	0.022	0.01	0.00076	5960000	mg/L
OW-30	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-30	3/7/2014	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
OW-30	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	3/7/2014	Chromium, Total	0.014	0.006	0.0021	50000	mg/L
OW-30	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	3/7/2014	Iron, Total	7.2	0.2	0.062	13822000	mg/L
OW-30	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	3/7/2014	Manganese, Total	0.18	0.002	0.00055	2017000	mg/L
OW-30	3/7/2014	Lead, Total	0.0023	0.001	0.0000075	15000	mg/L
OW-30	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-30	3/7/2014	Uranium, Total	0.05	0.005	0.000036	30000	mg/L
OW-30	3/7/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	6/3/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-30	6/3/2014	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
OW-30	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	6/3/2014	Iron, Total	2.3	0.1	0.031	13822000	mg/L
OW-30	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	6/3/2014	Manganese, Total	0.082	0.002	0.00055	2017000	mg/L
OW-30	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-30	6/3/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-30	6/3/2014	Uranium, Total	0.051	0.01	0.0005	30000	mg/L
OW-30	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-30	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	9/17/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-30	9/17/2014	Barium, Total	0.086	0.002	0.0011	2000000	mg/L
OW-30	9/17/2014	Calcium, Total	68	1	0.082	NA	mg/L
OW-30	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	9/17/2014	Iron, Total	0.067	0.02	0.0062	13822000	mg/L
OW-30	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	9/17/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
OW-30	9/17/2014	Magnesium, Total	15	1	0.018	NA	mg/L
OW-30	9/17/2014	Manganese, Total	0.033	0.002	0.00055	2017000	mg/L
OW-30	9/17/2014	Sodium, Total	390	10	3.9	NA	mg/L
OW-30	9/17/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-30	9/17/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
OW-30	9/17/2014	Uranium, Total	0.049	0.005	0.00025	30000	mg/L
OW-30	9/17/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
OW-30	11/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	11/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-30	11/11/2014	Barium, Total	0.086	0.002	0.0011	2000000	mg/L
OW-30	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	11/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	11/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	11/11/2014	Iron, Total	0.051	0.02	0.0062	13822000	mg/L
OW-30	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	11/11/2014	Manganese, Total	0.034	0.002	0.00055	2017000	mg/L
OW-30	11/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-30	11/11/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-30	11/11/2014	Uranium, Total	0.05	0.01	0.0005	30000	mg/L
OW-30	11/11/2014	Zinc, Total	0.029	0.01	0.0014	5960000	mg/L
OW-30	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	3/9/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
OW-30	3/9/2015	Barium, Total	0.09	0.002	0.00073	2000000	mg/L
OW-30	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-30	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	3/9/2015	Iron, Total	0.089	0.02	0.0072	13822000	mg/L
OW-30	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	3/9/2015	Manganese, Total	0.037	0.002	0.0015	2017000	mg/L
OW-30	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-30	3/9/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-30	3/9/2015	Uranium, Total	0.056	0.005	0.00004	30000	mg/L
OW-30	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-30	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-30	6/2/2015	Barium, Total	0.088	0.002	0.0011	2000000	mg/L
OW-30	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	6/2/2015	Iron, Total	0.065	0.02	0.0072	13822000	mg/L
OW-30	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	6/2/2015	Manganese, Total	0.036	0.002	0.0015	2017000	mg/L
OW-30	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-30	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-30	6/2/2015	Uranium, Total	0.05	0.005	0.000049	30000	mg/L
OW-30	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	8/10/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-30	8/10/2015	Barium, Total	0.091	0.002	0.0011	2000000	mg/L
OW-30	8/10/2015	Calcium, Total	67	1	0.057	NA	mg/L
OW-30	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	8/10/2015	Iron, Total	0.073	0.02	0.0072	13822000	mg/L
OW-30	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-30	8/10/2015	Magnesium, Total	16	1	0.039	NA	mg/L
OW-30	8/10/2015	Manganese, Total	0.037	0.002	0.0015	2017000	mg/L
OW-30	8/10/2015	Sodium, Total	350	5	0.36	NA	mg/L
OW-30	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-30	8/10/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-30	8/10/2015	Uranium, Total	0.048	0.0025	0.000025	30000	mg/L
OW-30	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	10/27/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-30	10/27/2015	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
OW-30	10/27/2015	Calcium, Total	77	1	0.057	NA	mg/L
OW-30	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	10/27/2015	Iron, Total	0.12	0.02	0.0072	13822000	mg/L
OW-30	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-30	10/27/2015	Magnesium, Total	17	1	0.039	NA	mg/L
OW-30	10/27/2015	Manganese, Total	0.041	0.002	0.0015	2017000	mg/L
OW-30	10/27/2015	Sodium, Total	390	5	0.36	NA	mg/L
OW-30	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-30	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-30	10/27/2015	Uranium, Total	0.047	0.0025	0.000025	30000	mg/L
OW-30	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	3/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-30	3/8/2016	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
OW-30	3/8/2016	Barium, Total	0.091	0.002	0.0013	2000000	mg/L
OW-30	3/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-30	3/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	3/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
OW-30	3/8/2016	Iron, Total	0.061	0.02	0.0091	13822000	mg/L
OW-30	3/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-30	3/8/2016	Manganese, Total	0.037	0.002	0.00032	2017000	mg/L
OW-30	3/8/2016	Lead, Total	ND	0.0005	0.000026	15000	mg/L
OW-30	3/8/2016	Selenium, Total	ND	0.005	0.00097	50000	mg/L
OW-30	3/8/2016	Uranium, Total	0.049	0.0025	0.000024	30000	mg/L
OW-30	3/8/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-30	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	6/6/2016	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
OW-30	6/6/2016	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
OW-30	6/6/2016	Calcium, Total	74	1	0.26	NA	mg/L
OW-30	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	6/6/2016	Iron, Total	0.11	0.02	0.0072	13822000	mg/L
OW-30	6/6/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-30	6/6/2016	Potassium, Total	0.46	1	0.18	NA	mg/L
OW-30	6/6/2016	Magnesium, Total	17	1	0.013	NA	mg/L
OW-30	6/6/2016	Manganese, Total	0.045	0.002	0.0015	2017000	mg/L
OW-30	6/6/2016	Sodium, Total	370	5	0.48	NA	mg/L
OW-30	6/6/2016	Lead, Total	0.0003	0.0005	0.000047	15000	mg/L
OW-30	6/6/2016	Selenium, Total	0.009	0.005	0.00062	50000	mg/L
OW-30	6/6/2016	Uranium, Total	0.046	0.0025	0.000025	30000	mg/L
OW-30	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	8/31/2016	Arsenic, Total	ND	0.01	0.0021	10000	mg/L
OW-30	8/31/2016	Barium, Total	0.096	0.002	0.00079	2000000	mg/L
OW-30	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-30	8/31/2016	Arsenic, Dissolved	0.0031	0.005	0.00069	10000	mg/L
OW-30	8/31/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
OW-30	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-30	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-30	8/31/2016	Iron, Dissolved	0.071	0.02	0.02	13821880	mg/L
OW-30	8/31/2016	Manganese, Dissolved	0.038	0.002	0.00032	2017400	mg/L
OW-30	8/31/2016	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-30	8/31/2016	Selenium, Dissolved	0.0075	0.02	0.0042	50000	mg/L
OW-30	8/31/2016	Uranium, Dissolved	0.046	0.0025	0.00026	NA	mg/L
OW-30	8/31/2016	Zinc, Dissolved	0.044	0.01	0.0028	5960450	mg/L
OW-30	8/31/2016	Iron, Total	0.071	0.02	0.02	13822000	mg/L
OW-30	8/31/2016	Manganese, Total	0.035	0.002	0.00027	2017000	mg/L
OW-30	8/31/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
OW-30	8/31/2016	Selenium, Total	0.0067	0.01	0.0019	50000	mg/L
OW-30	8/31/2016	Uranium, Total	0.048	0.0025	0.00087	30000	mg/L
OW-30	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	11/14/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	11/14/2016	Arsenic, Total	0.0038	0.005	0.0011	10000	mg/L
OW-30	11/14/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
OW-30	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	11/14/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-30	11/14/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-30	11/14/2016	Arsenic, Dissolved	0.0032	0.005	0.00069	10000	mg/L
OW-30	11/14/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
OW-30	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-30	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-30	11/14/2016	Iron, Dissolved	0.087	0.02	0.02	13821880	mg/L
OW-30	11/14/2016	Manganese, Dissolved	0.031	0.002	0.00032	2017400	mg/L
OW-30	11/14/2016	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
OW-30	11/14/2016	Selenium, Dissolved	0.0094	0.02	0.0042	50000	mg/L
OW-30	11/14/2016	Uranium, Dissolved	0.044	0.0025	0.00026	NA	mg/L
OW-30	11/14/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-30	11/14/2016	Iron, Total	0.095	0.02	0.02	13822000	mg/L
OW-30	11/14/2016	Mercury, Total	0.000088	0.0002	0.000053	2000	mg/L
OW-30	11/14/2016	Manganese, Total	0.038	0.002	0.00027	2017000	mg/L
OW-30	11/14/2016	Lead, Total	0.00028	0.0005	0.000081	15000	mg/L
OW-30	11/14/2016	Selenium, Total	0.0061	0.02	0.0037	50000	mg/L
OW-30	11/14/2016	Uranium, Total	0.046	0.0025	0.00087	30000	mg/L
OW-30	11/14/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	2/27/2017	Arsenic, Total	0.0025	0.005	0.0011	10000	mg/L
OW-30	2/27/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
OW-30	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-30	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-30	2/27/2017	Arsenic, Dissolved	0.0018	0.01	0.0014	10000	mg/L
OW-30	2/27/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-30	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	2/27/2017	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
OW-30	2/27/2017	Manganese, Dissolved	0.044	0.002	0.00038	2017400	mg/L
OW-30	2/27/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-30	2/27/2017	Selenium, Dissolved	0.0072	0.01	0.0021	50000	mg/L
OW-30	2/27/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-30	2/27/2017	Iron, Total	0.098	0.02	0.02	13822000	mg/L
OW-30	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-30	2/27/2017	Manganese, Total	0.045	0.002	0.00027	2017000	mg/L
OW-30	2/27/2017	Lead, Total	0.00082	0.0005	0.000081	15000	mg/L
OW-30	2/27/2017	Selenium, Total	0.007	0.005	0.00094	50000	mg/L
OW-30	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-30	5/31/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/31/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-30	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-30	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-30	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-30	5/31/2017	Arsenic, Dissolved	0.0019	0.005	0.00089	10000	mg/L
OW-30	5/31/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-30	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	5/31/2017	Iron, Dissolved	0.068	0.02	0.016	13821880	mg/L
OW-30	5/31/2017	Manganese, Dissolved	0.045	0.002	0.00038	2017400	mg/L
OW-30	5/31/2017	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
OW-30	5/31/2017	Selenium, Dissolved	0.0041	0.005	0.0019	50000	mg/L
OW-30	5/31/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-30	5/31/2017	Iron, Total	0.088	0.02	0.01	13822000	mg/L
OW-30	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	5/31/2017	Manganese, Total	0.047	0.002	0.0011	2017000	mg/L
OW-30	5/31/2017	Lead, Total	0.00031	0.0005	0.000095	15000	mg/L
OW-30	5/31/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-30	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-30	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	9/6/2017	Arsenic, Total	0.0036	0.005	0.0015	10000	mg/L
OW-30	9/6/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-30	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	9/6/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
OW-30	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	9/6/2017	Arsenic, Dissolved	0.003	0.005	0.00089	10000	mg/L
OW-30	9/6/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	9/6/2017	Iron, Dissolved	0.067	0.02	0.016	13821880	mg/L
OW-30	9/6/2017	Manganese, Dissolved	0.044	0.002	0.00039	2017400	mg/L
OW-30	9/6/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
OW-30	9/6/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-30	9/6/2017	Uranium, Dissolved	0.042	0.0025	0.00025	NA	mg/L
OW-30	9/6/2017	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
OW-30	9/6/2017	Iron, Total	0.072	0.02	0.01	13822000	mg/L
OW-30	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	9/6/2017	Manganese, Total	0.045	0.002	0.0011	2017000	mg/L
OW-30	9/6/2017	Lead, Total	0.00036	0.0005	0.000095	15000	mg/L
OW-30	9/6/2017	Selenium, Total	0.0089	0.005	0.0036	50000	mg/L
OW-30	9/6/2017	Uranium, Total	0.043	0.0025	0.00077	30000	mg/L
OW-30	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	12/12/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
OW-30	12/12/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-30	12/12/2017	Barium, Total	0.11	0.002	0.001	2000000	mg/L
OW-30	12/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	12/12/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	12/12/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	12/12/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	12/12/2017	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
OW-30	12/12/2017	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
OW-30	12/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	12/12/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	12/12/2017	Copper, Dissolved	0.0037	0.006	0.0032	790000	mg/L
OW-30	12/12/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
OW-30	12/12/2017	Manganese, Dissolved	0.035	0.002	0.00039	2017400	mg/L
OW-30	12/12/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-30	12/12/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
OW-30	12/12/2017	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
OW-30	12/12/2017	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
OW-30	12/12/2017	Iron, Total	0.063	0.02	0.01	13822000	mg/L
OW-30	12/12/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
OW-30	12/12/2017	Manganese, Total	0.036	0.002	0.0011	2017000	mg/L
OW-30	12/12/2017	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
OW-30	12/12/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/12/2017	Uranium, Total	0.041	0.005	0.0015	30000	mg/L
OW-30	12/12/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	2/28/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
OW-30	2/28/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
OW-30	2/28/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-30	2/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	2/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	2/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	2/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	2/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-30	2/28/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	2/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	2/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	2/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	2/28/2018	Iron, Dissolved	0.064	0.02	0.016	13821880	mg/L
OW-30	2/28/2018	Manganese, Dissolved	0.04	0.002	0.00039	2017400	mg/L
OW-30	2/28/2018	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-30	2/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-30	2/28/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
OW-30	2/28/2018	Zinc, Dissolved	0.0066	0.01	0.0021	5960450	mg/L
OW-30	2/28/2018	Iron, Total	0.071	0.02	0.01	13822000	mg/L
OW-30	2/28/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	2/28/2018	Manganese, Total	0.042	0.002	0.0011	2017000	mg/L
OW-30	2/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-30	2/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-30	2/28/2018	Uranium, Total	0.04	0.0025	0.00034	30000	mg/L
OW-30	2/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	5/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	5/16/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
OW-30	5/16/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
OW-30	5/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	5/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	5/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	5/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	5/16/2018	Arsenic, Dissolved	0.0046	0.001	0.00042	10000	mg/L
OW-30	5/16/2018	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
OW-30	5/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	5/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	5/16/2018	Copper, Dissolved	0.0064	0.006	0.0032	790000	mg/L
OW-30	5/16/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
OW-30	5/16/2018	Manganese, Dissolved	0.052	0.002	0.00039	2017400	mg/L
OW-30	5/16/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-30	5/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-30	5/16/2018	Uranium, Dissolved	0.037	0.0025	0.00048	NA	mg/L
OW-30	5/16/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-30	5/16/2018	Iron, Total	0.071	0.02	0.01	13822000	mg/L
OW-30	5/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	5/16/2018	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
OW-30	5/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-30	5/16/2018	Selenium, Total	0.0033	0.001	0.00098	50000	mg/L
OW-30	5/16/2018	Uranium, Total	0.042	0.0025	0.00034	30000	mg/L
OW-30	5/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	9/19/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
OW-30	9/19/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-30	9/19/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-30	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	9/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	9/19/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
OW-30	9/19/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	9/19/2018	Copper, Dissolved	0.0067	0.006	0.0032	790000	mg/L
OW-30	9/19/2018	Iron, Dissolved	0.06	0.02	0.016	13821880	mg/L
OW-30	9/19/2018	Manganese, Dissolved	0.051	0.002	0.00039	2017400	mg/L
OW-30	9/19/2018	Lead, Dissolved	0.00044	0.0005	0.00017	NA	mg/L
OW-30	9/19/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-30	9/19/2018	Uranium, Dissolved	0.041	0.0025	0.00048	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/19/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
OW-30	9/19/2018	Iron, Total	0.067	0.02	0.01	13822000	mg/L
OW-30	9/19/2018	Mercury, Total	0.000058	0.0002	0.000038	2000	mg/L
OW-30	9/19/2018	Manganese, Total	0.054	0.002	0.0011	2017000	mg/L
OW-30	9/19/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
OW-30	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-30	9/19/2018	Uranium, Total	0.034	0.0025	0.00034	30000	mg/L
OW-30	9/19/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	12/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	12/3/2018	Arsenic, Total	0.0011	0.001	0.00041	10000	mg/L
OW-30	12/3/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
OW-30	12/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	12/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	12/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	12/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	12/3/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-30	12/3/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	12/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	12/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	12/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	12/3/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
OW-30	12/3/2018	Manganese, Dissolved	0.053	0.002	0.00039	2017400	mg/L
OW-30	12/3/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-30	12/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-30	12/3/2018	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
OW-30	12/3/2018	Iron, Total	0.1	0.02	0.01	13822000	mg/L
OW-30	12/3/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	12/3/2018	Manganese, Total	0.057	0.002	0.0011	2017000	mg/L
OW-30	12/3/2018	Lead, Total	0.0005	0.0005	0.00023	15000	mg/L
OW-30	12/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-30	12/3/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-50	10/15/2019	Aluminum, Dissolved	0.0057	0.02	0.002488	19913930	mg/L
OW-50	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	10/15/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-50	10/15/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
OW-50	10/15/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
OW-50	10/15/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	10/15/2019	Calcium, Dissolved	29	1	0.061889	NA	mg/L
OW-50	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	10/15/2019	Copper, Dissolved	0.0013	0.006	0.001296	790000	mg/L
OW-50	10/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-50	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	10/15/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	10/15/2019	Manganese, Dissolved	0.12	0.002	0.00029	2017400	mg/L
OW-50	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	10/15/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
OW-50	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	10/15/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-50	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	10/15/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
OW-50	10/15/2019	Aluminum, Total	0.15	0.02	0.002488	19914000	mg/L
OW-50	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	10/15/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
OW-50	10/15/2019	Barium, Total	0.054	0.002	0.000648	2000000	mg/L
OW-50	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	10/15/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-50	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	10/15/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-50	10/15/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-50	10/15/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	3/27/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
OW-50	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	3/27/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-50	3/27/2019	Barium, Dissolved	0.054	0.002	0.000648	2000000	mg/L
OW-50	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	3/27/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	3/27/2019	Calcium, Dissolved	28	1	0.061889	NA	mg/L
OW-50	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-50	3/27/2019	Iron, Dissolved	0.0089	0.02	0.008747	13821880	mg/L
OW-50	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	3/27/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	3/27/2019	Manganese, Dissolved	0.12	0.002	0.00029	2017400	mg/L
OW-50	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	3/27/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
OW-50	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	3/27/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-50	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	3/27/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-50	3/27/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-50	3/27/2019	Aluminum, Total	1.4	0.1	0.022822	19914000	mg/L
OW-50	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-50	3/27/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
OW-50	3/27/2019	Barium, Total	0.064	0.002	0.000488	2000000	mg/L
OW-50	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-50	3/27/2019	Boron, Total	0.35	0.04	0.001821	3949	mg/L
OW-50	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	3/27/2019	Chromium, Total	0.0022	0.006	0.0012	50000	mg/L
OW-50	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-50	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	3/27/2019	Iron, Total	0.48	0.02	0.006053	13822000	mg/L
OW-50	3/27/2019	Lead, Total	0.00031	0.0005	0.000026	15000	mg/L
OW-50	3/27/2019	Manganese, Total	0.12	0.002	0.00006	2017000	mg/L
OW-50	3/27/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-50	3/27/2019	Molybdenum, Total	0.0055	0.008	0.002075	98700	mg/L
OW-50	3/27/2019	Nickel, Total	ND	0.01	0.001491	372000	mg/L
OW-50	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	3/27/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
OW-50	3/27/2019	Uranium, Total	0.011	0.0005	0.000085	30000	mg/L
OW-50	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	8/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-50	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	8/16/2019	Arsenic, Dissolved	0.0021	0.001	0.000101	10000	mg/L
OW-50	8/16/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
OW-50	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-50	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	8/16/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
OW-50	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	8/16/2019	Copper, Dissolved	0.0017	0.006	0.001296	790000	mg/L
OW-50	8/16/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-50	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	8/16/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	8/16/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	8/16/2019	Potassium, Dissolved	0.41	1	0.162288	NA	mg/L
OW-50	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	8/16/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-50	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	8/16/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	8/16/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
OW-50	8/16/2019	Aluminum, Total	0.13	0.02	0.002488	19914000	mg/L
OW-50	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	8/16/2019	Arsenic, Total	0.0023	0.001	0.000312	10000	mg/L
OW-50	8/16/2019	Barium, Total	0.051	0.002	0.000648	2000000	mg/L
OW-50	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-50	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	8/16/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-50	8/16/2019	Lead, Total	0.000062	0.0005	0.000055	15000	mg/L
OW-50	8/16/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	8/16/2019	Mercury, Total	0.000083	0.0002	0.000038	2000	mg/L
OW-50	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-50	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	8/16/2019	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	8/16/2019	Zinc, Total	0.0061	0.01	0.005772	5960000	mg/L
OW-50	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-50	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-50	12/9/2020	Arsenic, Dissolved	1.8	1	0.286	10	ug/L
OW-50	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-50	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-50	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-50	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-50	12/9/2020	Uranium, Dissolved	12.1	5	1.12	NA	ug/L
OW-50	12/9/2020	Arsenic, Total Recoverable	1.78	1	0.286	10	ug/L
OW-50	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-50	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-50	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-50	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-50	12/9/2020	Uranium, Total Recoverable	13	5	1.12	30	ug/L
OW-50	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-50	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-50	12/9/2020	Boron, Dissolved	0.392	0.2	0.0527	3949110	mg/L
OW-50	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-50	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-50	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-50	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-50	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-50	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-50	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-50	12/9/2020	Manganese, Dissolved	0.12	0.015	0.00141	2017400	mg/L
OW-50	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-50	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-50	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-50	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-50	12/9/2020	Aluminum, Total	1.25	0.2	0.051	19914000	mg/L
OW-50	12/9/2020	Boron, Total	0.353	0.1	0.022	3949	mg/L
OW-50	12/9/2020	Barium, Total	0.0914	0.01	0.003	2000000	mg/L
OW-50	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-50	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-50	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-50	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-50	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-50	12/9/2020	Iron, Total	0.502	0.2	0.075	13822000	mg/L
OW-50	12/9/2020	Manganese, Total	0.134	0.01	0.003	2017000	mg/L
OW-50	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-50	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-50	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-50	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2020	Arsenic, Dissolved	0.0019	0.001	0.00021	10000	mg/L
OW-50	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-50	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-50	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-50	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-50	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-50	9/17/2020	Boron, Dissolved	0.35	0.04	0.0067	3949110	mg/L
OW-50	9/17/2020	Calcium, Dissolved	27	1	0.11	NA	mg/L
OW-50	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-50	9/17/2020	Iron, Dissolved	0.014	0.02	0.01	13821880	mg/L
OW-50	9/17/2020	Magnesium, Dissolved	4.6	1	0.067	NA	mg/L
OW-50	9/17/2020	Manganese, Dissolved	0.11	0.002	0.00058	2017400	mg/L
OW-50	9/17/2020	Potassium, Dissolved	0.52	1	0.16	NA	mg/L
OW-50	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-50	9/17/2020	Sodium, Dissolved	230	10	1.4	NA	mg/L
OW-50	9/17/2020	Barium, Dissolved	0.049	0.002	0.0011	2000000	mg/L
OW-50	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-50	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-50	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-50	9/17/2020	Molybdenum, Dissolved	0.0062	0.008	0.0056	98700	mg/L
OW-50	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-50	9/17/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
OW-50	9/17/2020	Mercury, Total	0.00015	0.0002	0.00012	2000	mg/L
OW-50	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-50	9/17/2020	Arsenic, Total	0.0027	0.001	0.00026	10000	mg/L
OW-50	9/17/2020	Lead, Total	0.00092	0.0005	0.000034	15000	mg/L
OW-50	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-50	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-50	9/17/2020	Uranium, Total	0.017	0.0005	0.000065	30000	mg/L
OW-50	9/17/2020	Aluminum, Total	2.1	0.1	0.037	19914000	mg/L
OW-50	9/17/2020	Barium, Total	0.13	0.015	0.0082	2000000	mg/L
OW-50	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-50	9/17/2020	Boron, Total	0.35	0.2	0.037	3949	mg/L
OW-50	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-50	9/17/2020	Chromium, Total	0.028	0.03	0.011	50000	mg/L
OW-50	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-50	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-50	9/17/2020	Iron, Total	0.82	0.25	0.064	13822000	mg/L
OW-50	9/17/2020	Manganese, Total	0.17	0.01	0.0041	2017000	mg/L
OW-50	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-50	9/17/2020	Nickel, Total	0.028	0.05	0.016	372000	mg/L
OW-50	9/17/2020	Silver, Total	0.024	0.025	0.0063	50000	mg/L
OW-50	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-50	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-50	3/2/2020	Arsenic, Dissolved	0.0019	0.001	0.0001	10000	mg/L
OW-50	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-50	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	3/2/2020	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-50	3/2/2020	Barium, Dissolved	0.046	0.002	0.00065	2000000	mg/L
OW-50	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-50	3/2/2020	Boron, Dissolved	0.3	0.04	0.0045	3949110	mg/L
OW-50	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-50	3/2/2020	Calcium, Dissolved	26	1	0.062	NA	mg/L
OW-50	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-50	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-50	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-50	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-50	3/2/2020	Magnesium, Dissolved	4.6	1	0.05	NA	mg/L
OW-50	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-50	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-50	3/2/2020	Potassium, Dissolved	0.46	1	0.16	NA	mg/L
OW-50	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-50	3/2/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-50	3/2/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
OW-50	3/2/2020	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-50	3/2/2020	Arsenic, Total	0.002	0.001	0.00031	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/2/2020	Lead, Total	0.000096	0.0005	0.000055	15000	mg/L
OW-50	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-50	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	3/2/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-50	3/2/2020	Aluminum, Total	0.18	0.02	0.0025	19914000	mg/L
OW-50	3/2/2020	Barium, Total	0.055	0.002	0.00065	2000000	mg/L
OW-50	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-50	3/2/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-50	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-50	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-50	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-50	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	3/2/2020	Iron, Total	0.06	0.02	0.0087	13822000	mg/L
OW-50	3/2/2020	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-50	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-50	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-50	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-50	5/1/2019	Aluminum, Dissolved	0.024	0.02	0.002488	19913930	mg/L
OW-50	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	5/1/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
OW-50	5/1/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
OW-50	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	5/1/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	5/1/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
OW-50	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-50	5/1/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
OW-50	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	5/1/2019	Magnesium, Dissolved	4.5	1	0.05029	NA	mg/L
OW-50	5/1/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	5/1/2019	Potassium, Dissolved	0.52	1	0.162288	NA	mg/L
OW-50	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	5/1/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-50	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	5/1/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	5/1/2019	Zinc, Dissolved	0.056	0.01	0.002252	5960450	mg/L
OW-50	5/1/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
OW-50	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	5/1/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
OW-50	5/1/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-50	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	5/1/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-50	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	5/1/2019	Iron, Total	0.64	0.02	0.008747	13822000	mg/L
OW-50	5/1/2019	Lead, Total	0.00055	0.0005	0.000055	15000	mg/L
OW-50	5/1/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
OW-50	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-50	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	5/1/2019	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	3/22/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-50	3/22/2012	Arsenic, Total	0.0019	0.001	0.00011	10000	mg/L
OW-50	3/22/2012	Barium, Total	0.041	0.002	0.00031	2000000	mg/L
OW-50	3/22/2012	Calcium, Total	22	1	0.026	NA	mg/L
OW-50	3/22/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-50	3/22/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-50	3/22/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-50	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	3/22/2012	Magnesium, Total	3.8	1	0.013	NA	mg/L
OW-50	3/22/2012	Manganese, Total	0.082	0.002	0.00062	2017000	mg/L
OW-50	3/22/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-50	3/22/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-50	3/22/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-50	3/22/2012	Uranium, Total	0.0076	0.001	0.00006	30000	mg/L
OW-50	3/22/2012	Zinc, Total	0.039	0.01	0.00062	5960000	mg/L
OW-50	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-50	6/13/2012	Arsenic, Total	0.0019	0.001	0.00011	10000	mg/L
OW-50	6/13/2012	Barium, Total	0.041	0.002	0.00031	2000000	mg/L
OW-50	6/13/2012	Calcium, Total	21	1	0.026	NA	mg/L
OW-50	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-50	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-50	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-50	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-50	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	6/13/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	6/13/2012	Magnesium, Total	3.6	1	0.013	NA	mg/L
OW-50	6/13/2012	Manganese, Total	0.081	0.002	0.00062	2017000	mg/L
OW-50	6/13/2012	Sodium, Total	240	5	0.22	NA	mg/L
OW-50	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-50	6/13/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-50	6/13/2012	Uranium, Total	0.0085	0.001	0.00006	30000	mg/L
OW-50	6/13/2012	Zinc, Total	0.012	0.01	0.00062	5960000	mg/L
OW-50	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-50	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-50	8/23/2012	Barium, Total	0.043	0.002	0.00039	2000000	mg/L
OW-50	8/23/2012	Calcium, Total	22	1	0.026	NA	mg/L
OW-50	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-50	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-50	8/23/2012	Copper, Total	0.0086	0.006	0.0041	790000	mg/L
OW-50	8/23/2012	Iron, Total	0.071	0.02	0.013	13822000	mg/L
OW-50	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	8/23/2012	Magnesium, Total	3.7	1	0.013	NA	mg/L
OW-50	8/23/2012	Manganese, Total	0.058	0.002	0.00026	2017000	mg/L
OW-50	8/23/2012	Sodium, Total	230	5	0.22	NA	mg/L
OW-50	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-50	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-50	8/23/2012	Uranium, Total	0.008	0.0025	0.00003	30000	mg/L
OW-50	8/23/2012	Zinc, Total	0.011	0.01	0.0011	5960000	mg/L
OW-50	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-50	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-50	11/27/2012	Barium, Total	0.12	0.002	0.00039	2000000	mg/L
OW-50	11/27/2012	Calcium, Total	21	1	0.026	NA	mg/L
OW-50	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-50	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-50	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	11/27/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
OW-50	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	11/27/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	11/27/2012	Magnesium, Total	3.9	1	0.013	NA	mg/L
OW-50	11/27/2012	Manganese, Total	0.12	0.002	0.00026	2017000	mg/L
OW-50	11/27/2012	Sodium, Total	220	5	0.22	NA	mg/L
OW-50	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-50	11/27/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-50	11/27/2012	Uranium, Total	0.0096	0.0025	0.00003	30000	mg/L
OW-50	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-50	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-50	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-50	9/4/2013	Barium, Total	0.042	0.002	0.00095	2000000	mg/L
OW-50	9/4/2013	Calcium, Total	22	1	0.069	NA	mg/L
OW-50	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-50	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-50	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-50	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-50	9/4/2013	Potassium, Total	1.4	1	0.24	NA	mg/L
OW-50	9/4/2013	Magnesium, Total	3.5	1	0.028	NA	mg/L
OW-50	9/4/2013	Manganese, Total	0.1	0.002	0.00016	2017000	mg/L
OW-50	9/4/2013	Sodium, Total	220	5	1.6	NA	mg/L
OW-50	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-50	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-50	9/4/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
OW-50	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-50	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-50	9/15/2014	Arsenic, Total	0.0019	0.001	0.00036	10000	mg/L
OW-50	9/15/2014	Barium, Total	0.075	0.002	0.0005	2000000	mg/L
OW-50	9/15/2014	Calcium, Total	24	1	0.082	NA	mg/L
OW-50	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-50	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-50	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-50	9/15/2014	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
OW-50	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-50	9/15/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
OW-50	9/15/2014	Magnesium, Total	3.9	1	0.018	NA	mg/L
OW-50	9/15/2014	Manganese, Total	0.11	0.002	0.00049	2017000	mg/L
OW-50	9/15/2014	Sodium, Total	240	10	3.9	NA	mg/L
OW-50	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-50	9/15/2014	Selenium, Total	0.001	0.001	0.00051	50000	mg/L
OW-50	9/15/2014	Uranium, Total	0.01	0.001	0.0000072	30000	mg/L
OW-50	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-50	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-50	8/10/2015	Arsenic, Total	0.0019	0.001	0.00029	10000	mg/L
OW-50	8/10/2015	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
OW-50	8/10/2015	Calcium, Total	24	1	0.057	NA	mg/L
OW-50	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-50	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-50	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-50	8/10/2015	Iron, Total	0.68	0.02	0.0072	13822000	mg/L
OW-50	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-50	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-50	8/10/2015	Magnesium, Total	4.2	1	0.039	NA	mg/L
OW-50	8/10/2015	Manganese, Total	0.14	0.002	0.0015	2017000	mg/L
OW-50	8/10/2015	Sodium, Total	210	5	0.36	NA	mg/L
OW-50	8/10/2015	Lead, Total	0.0024	0.0005	0.000047	15000	mg/L
OW-50	8/10/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-50	8/10/2015	Uranium, Total	0.011	0.0005	0.0000049	30000	mg/L
OW-50	8/10/2015	Zinc, Total	0.017	0.01	0.0039	5960000	mg/L
OW-50	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-50	9/9/2016	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
OW-50	9/9/2016	Barium, Total	0.087	0.002	0.00079	2000000	mg/L
OW-50	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-50	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-50	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-50	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-50	9/9/2016	Arsenic, Dissolved	0.0023	0.001	0.00014	10000	mg/L
OW-50	9/9/2016	Barium, Dissolved	0.055	0.002	0.0013	2000000	mg/L
OW-50	9/9/2016	Calcium, Dissolved	27	1	0.5	NA	mg/L
OW-50	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-50	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-50	9/9/2016	Copper, Dissolved	0.016	0.006	0.004	790000	mg/L
OW-50	9/9/2016	Iron, Dissolved	0.059	0.02	0.02	13821880	mg/L
OW-50	9/9/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
OW-50	9/9/2016	Magnesium, Dissolved	4.5	1	0.5	NA	mg/L
OW-50	9/9/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
OW-50	9/9/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
OW-50	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/9/2016	Selenium, Dissolved	0.0014	0.005	0.0011	50000	mg/L
OW-50	9/9/2016	Uranium, Dissolved	0.012	0.0005	0.000051	NA	mg/L
OW-50	9/9/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-50	9/9/2016	Iron, Total	0.68	0.02	0.02	13822000	mg/L
OW-50	9/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
OW-50	9/9/2016	Lead, Total	0.00087	0.0005	0.000081	15000	mg/L
OW-50	9/9/2016	Selenium, Total	0.0015	0.005	0.00094	50000	mg/L
OW-50	9/9/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
OW-50	9/9/2016	Zinc, Total	0.0027	0.01	0.0027	5960000	mg/L
OW-50	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	9/11/2017	Arsenic, Total	0.0021	0.001	0.0003	10000	mg/L
OW-50	9/11/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-50	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-50	9/11/2017	Chromium, Total	0.0029	0.006	0.0018	50000	mg/L
OW-50	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-50	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	9/11/2017	Arsenic, Dissolved	0.0024	0.001	0.00018	10000	mg/L
OW-50	9/11/2017	Barium, Dissolved	0.053	0.002	0.00085	2000000	mg/L
OW-50	9/11/2017	Calcium, Dissolved	27	1	0.078	NA	mg/L
OW-50	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	9/11/2017	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
OW-50	9/11/2017	Potassium, Dissolved	0.4	1	0.11	NA	mg/L
OW-50	9/11/2017	Magnesium, Dissolved	4.6	1	0.25	NA	mg/L
OW-50	9/11/2017	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
OW-50	9/11/2017	Sodium, Dissolved	240	10	1.6	NA	mg/L
OW-50	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/11/2017	Selenium, Dissolved	0.0026	0.005	0.0019	50000	mg/L
OW-50	9/11/2017	Uranium, Dissolved	0.012	0.0005	0.00005	NA	mg/L
OW-50	9/11/2017	Zinc, Dissolved	0.079	0.01	0.0021	5960450	mg/L
OW-50	9/11/2017	Iron, Total	1.7	0.2	0.1	13822000	mg/L
OW-50	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-50	9/11/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-50	9/11/2017	Lead, Total	0.0015	0.0005	0.000095	15000	mg/L
OW-50	9/11/2017	Selenium, Total	0.0014	0.001	0.00071	50000	mg/L
OW-50	9/11/2017	Uranium, Total	0.012	0.0005	0.00015	30000	mg/L
OW-50	9/11/2017	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
OW-50	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	9/17/2018	Arsenic, Total	0.0022	0.001	0.00041	10000	mg/L
OW-50	9/17/2018	Barium, Total	0.069	0.002	0.001	2000000	mg/L
OW-50	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
OW-50	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-50	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-50	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	9/17/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
OW-50	9/17/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
OW-50	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
OW-50	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	9/17/2018	Iron, Dissolved	0.037	0.02	0.016	13821880	mg/L
OW-50	9/17/2018	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
OW-50	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
OW-50	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-50	9/17/2018	Uranium, Dissolved	0.01	0.0005	0.000096	NA	mg/L
OW-50	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
OW-50	9/17/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-50	9/17/2018	Iron, Total	0.46	0.02	0.01	13822000	mg/L
OW-50	9/17/2018	Mercury, Total	0.00009	0.0002	0.000038	2000	mg/L
OW-50	9/17/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-50	9/17/2018	Lead, Total	0.00079	0.0005	0.00023	15000	mg/L
OW-50	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
OW-50	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-50	9/17/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-50	9/17/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
OW-50	9/17/2018	Zinc, Total	0.0055	0.01	0.0033	5960000	mg/L
OW-50	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	11/7/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
OW-50	11/7/2018	Barium, Total	0.069	0.002	0.001	2000000	mg/L
OW-50	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-50	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	11/7/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-50	11/7/2018	Barium, Dissolved	0.05	0.002	0.00099	2000000	mg/L
OW-50	11/7/2018	Calcium, Dissolved	26	1	0.078	NA	mg/L
OW-50	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	11/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-50	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-50	11/7/2018	Magnesium, Dissolved	4.6	1	0.25	NA	mg/L
OW-50	11/7/2018	Manganese, Dissolved	0.1	0.002	0.00039	2017400	mg/L
OW-50	11/7/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
OW-50	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-50	11/7/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-50	11/7/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-50	11/7/2018	Iron, Total	0.68	0.02	0.01	13822000	mg/L
OW-50	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	11/7/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-50	11/7/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-50	11/7/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-50	11/7/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-50	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	5/1/2019	Aluminum, Dissolved	0.022	0.02	0.002488	19913930	mg/L
OW-52	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	5/1/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-52	5/1/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-52	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	5/1/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-52	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	5/1/2019	Calcium, Dissolved	4.7	1	0.061889	NA	mg/L
OW-52	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	5/1/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
OW-52	5/1/2019	Iron, Dissolved	0.06	0.02	0.008747	13821880	mg/L
OW-52	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	5/1/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	5/1/2019	Manganese, Dissolved	0.026	0.002	0.00029	2017400	mg/L
OW-52	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	5/1/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-52	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	5/1/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-52	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	5/1/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-52	5/1/2019	Zinc, Dissolved	0.052	0.01	0.002252	5960450	mg/L
OW-52	5/1/2019	Aluminum, Total	0.44	0.02	0.002488	19914000	mg/L
OW-52	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	5/1/2019	Arsenic, Total	0.00057	0.001	0.000312	10000	mg/L
OW-52	5/1/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
OW-52	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	5/1/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-52	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	5/1/2019	Chromium, Total	0.0054	0.006	0.001533	50000	mg/L
OW-52	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	5/1/2019	Iron, Total	0.29	0.02	0.008747	13822000	mg/L
OW-52	5/1/2019	Lead, Total	0.00011	0.0005	0.000055	15000	mg/L
OW-52	5/1/2019	Manganese, Total	0.028	0.002	0.00029	2017000	mg/L
OW-52	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	5/1/2019	Uranium, Total	0.0099	0.0005	0.000085	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-52	3/2/2020	Arsenic, Dissolved	0.00053	0.001	0.0001	10000	mg/L
OW-52	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-52	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	3/2/2020	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-52	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-52	3/2/2020	Barium, Dissolved	0.027	0.002	0.00065	2000000	mg/L
OW-52	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-52	3/2/2020	Boron, Dissolved	0.31	0.04	0.0045	3949110	mg/L
OW-52	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-52	3/2/2020	Calcium, Dissolved	4.5	1	0.062	NA	mg/L
OW-52	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-52	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-52	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-52	3/2/2020	Iron, Dissolved	0.058	0.02	0.0087	13821880	mg/L
OW-52	3/2/2020	Magnesium, Dissolved	0.61	1	0.05	NA	mg/L
OW-52	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-52	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-52	3/2/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-52	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-52	3/2/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
OW-52	3/2/2020	Sodium, Dissolved	250	5	2.1	NA	mg/L
OW-52	3/2/2020	Manganese, Dissolved	0.023	0.002	0.00029	2017400	mg/L
OW-52	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-52	3/2/2020	Arsenic, Total	0.0007	0.001	0.00031	10000	mg/L
OW-52	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-52	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	3/2/2020	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
OW-52	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-52	3/2/2020	Aluminum, Total	0.13	0.02	0.0025	19914000	mg/L
OW-52	3/2/2020	Barium, Total	0.03	0.002	0.00065	2000000	mg/L
OW-52	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-52	3/2/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-52	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-52	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-52	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-52	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	3/2/2020	Iron, Total	0.091	0.02	0.0087	13822000	mg/L
OW-52	3/2/2020	Manganese, Total	0.026	0.002	0.00029	2017000	mg/L
OW-52	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-52	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-52	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-52	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-52	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-52	9/17/2020	Arsenic, Dissolved	0.00059	0.001	0.00021	10000	mg/L
OW-52	9/17/2020	Lead, Dissolved	0.00018	0.0005	0.000034	NA	mg/L
OW-52	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-52	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-52	9/17/2020	Uranium, Dissolved	0.0089	0.0005	0.000065	NA	mg/L
OW-52	9/17/2020	Aluminum, Dissolved	0.57	0.02	0.0056	19913930	mg/L
OW-52	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-52	9/17/2020	Boron, Dissolved	0.32	0.04	0.0067	3949110	mg/L
OW-52	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-52	9/17/2020	Manganese, Dissolved	0.045	0.002	0.00058	2017400	mg/L
OW-52	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-52	9/17/2020	Barium, Dissolved	0.035	0.002	0.0011	2000000	mg/L
OW-52	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-52	9/17/2020	Calcium, Dissolved	5	1	0.11	NA	mg/L
OW-52	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-52	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-52	9/17/2020	Iron, Dissolved	0.17	0.02	0.01	13821880	mg/L
OW-52	9/17/2020	Magnesium, Dissolved	0.63	1	0.067	NA	mg/L
OW-52	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-52	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-52	9/17/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-52	9/17/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2020	Sodium, Dissolved	220	5	0.69	NA	mg/L
OW-52	9/17/2020	Mercury, Total	0.00018	0.0002	0.00012	2000	mg/L
OW-52	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-52	9/17/2020	Arsenic, Total	0.0031	0.001	0.00026	10000	mg/L
OW-52	9/17/2020	Lead, Total	0.013	0.0005	0.000034	15000	mg/L
OW-52	9/17/2020	Selenium, Total	0.0042	0.001	0.00066	50000	mg/L
OW-52	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-52	9/17/2020	Uranium, Total	0.013	0.0005	0.000065	30000	mg/L
OW-52	9/17/2020	Barium, Total	0.35	0.015	0.0082	2000000	mg/L
OW-52	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-52	9/17/2020	Boron, Total	0.36	0.2	0.037	3949	mg/L
OW-52	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-52	9/17/2020	Chromium, Total	0.061	0.03	0.011	50000	mg/L
OW-52	9/17/2020	Cobalt, Total	0.014	0.03	0.012	5980	mg/L
OW-52	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-52	9/17/2020	Manganese, Total	0.64	0.01	0.0041	2017000	mg/L
OW-52	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-52	9/17/2020	Nickel, Total	0.028	0.05	0.016	372000	mg/L
OW-52	9/17/2020	Silver, Total	0.0081	0.025	0.0063	50000	mg/L
OW-52	9/17/2020	Zinc, Total	0.064	0.05	0.032	5960000	mg/L
OW-52	9/17/2020	Aluminum, Total	51	2	0.74	19914000	mg/L
OW-52	9/17/2020	Iron, Total	17	5	1.3	13822000	mg/L
OW-52	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-52	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-52	12/9/2020	Boron, Total	0.322	0.1	0.022	3949	mg/L
OW-52	12/9/2020	Barium, Total	0.0293	0.01	0.003	2000000	mg/L
OW-52	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-52	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-52	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-52	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-52	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-52	12/9/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-52	12/9/2020	Manganese, Total	0.0341	0.01	0.003	2017000	mg/L
OW-52	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-52	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-52	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-52	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-52	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-52	12/9/2020	Boron, Dissolved	0.362	0.2	0.0527	3949110	mg/L
OW-52	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-52	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-52	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-52	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-52	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-52	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-52	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-52	12/9/2020	Manganese, Dissolved	0.0299	0.015	0.00141	2017400	mg/L
OW-52	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-52	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-52	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-52	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-52	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-52	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-52	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-52	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-52	12/9/2020	Uranium, Dissolved	10.6	5	1.12	NA	ug/L
OW-52	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-52	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-52	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-52	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-52	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-52	12/9/2020	Uranium, Total Recoverable	10.6	5	1.12	30	ug/L
OW-52	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-52	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-52	8/16/2019	Aluminum, Dissolved	0.0041	0.02	0.002488	19913930	mg/L
OW-52	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-52	8/16/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	8/16/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
OW-52	8/16/2019	Iron, Dissolved	0.044	0.02	0.008747	13821880	mg/L
OW-52	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	8/16/2019	Magnesium, Dissolved	0.63	1	0.05029	NA	mg/L
OW-52	8/16/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	8/16/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-52	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	8/16/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
OW-52	8/16/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-52	8/16/2019	Aluminum, Total	0.0097	0.02	0.002488	19914000	mg/L
OW-52	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Total	0.00062	0.001	0.000312	10000	mg/L
OW-52	8/16/2019	Barium, Total	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	8/16/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-52	8/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	8/16/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
OW-52	8/16/2019	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
OW-52	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	8/16/2019	Uranium, Total	0.01	0.0025	0.000424	30000	mg/L
OW-52	8/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	8/16/2019	Aluminum, Dissolved	0.012	0.02	0.002488	19913930	mg/L
OW-52	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Dissolved	0.00066	0.001	0.000101	10000	mg/L
OW-52	8/16/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	8/16/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
OW-52	8/16/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
OW-52	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	8/16/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	8/16/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	8/16/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-52	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	8/16/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
OW-52	8/16/2019	Zinc, Dissolved	0.0098	0.01	0.002252	5960450	mg/L
OW-52	8/16/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
OW-52	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Total	0.00061	0.001	0.000312	10000	mg/L
OW-52	8/16/2019	Barium, Total	0.029	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	8/16/2019	Iron, Total	0.053	0.02	0.008747	13822000	mg/L
OW-52	8/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	8/16/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
OW-52	8/16/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-52	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	8/16/2019	Uranium, Total	0.01	0.0025	0.000424	30000	mg/L
OW-52	8/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/27/2019	Aluminum, Dissolved	0.0058	0.02	0.002488	19913930	mg/L
OW-52	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	3/27/2019	Arsenic, Dissolved	0.00057	0.001	0.000101	10000	mg/L
OW-52	3/27/2019	Barium, Dissolved	0.03	0.002	0.000648	2000000	mg/L
OW-52	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	3/27/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	3/27/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-52	3/27/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
OW-52	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	3/27/2019	Magnesium, Dissolved	0.63	1	0.05029	NA	mg/L
OW-52	3/27/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	3/27/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-52	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	3/27/2019	Sodium, Dissolved	230	5	2.080881	NA	mg/L
OW-52	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	3/27/2019	Uranium, Dissolved	0.0094	0.0005	0.000075	NA	mg/L
OW-52	3/27/2019	Zinc, Dissolved	0.032	0.01	0.002252	5960450	mg/L
OW-52	3/27/2019	Aluminum, Total	0.48	0.02	0.004564	19914000	mg/L
OW-52	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-52	3/27/2019	Arsenic, Total	0.00061	0.001	0.000312	10000	mg/L
OW-52	3/27/2019	Barium, Total	0.031	0.002	0.000488	2000000	mg/L
OW-52	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-52	3/27/2019	Boron, Total	0.36	0.04	0.001821	3949	mg/L
OW-52	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	3/27/2019	Chromium, Total	0.0012	0.006	0.0012	50000	mg/L
OW-52	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-52	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	3/27/2019	Iron, Total	0.21	0.02	0.006053	13822000	mg/L
OW-52	3/27/2019	Lead, Total	0.00008	0.0005	0.000026	15000	mg/L
OW-52	3/27/2019	Manganese, Total	0.027	0.002	0.00006	2017000	mg/L
OW-52	3/27/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
OW-52	3/27/2019	Molybdenum, Total	0.0055	0.008	0.002075	98700	mg/L
OW-52	3/27/2019	Nickel, Total	0.0025	0.01	0.001491	372000	mg/L
OW-52	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	3/27/2019	Uranium, Total	0.0096	0.0005	0.000085	30000	mg/L
OW-52	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	10/15/2019	Aluminum, Dissolved	0.0046	0.02	0.002488	19913930	mg/L
OW-52	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	10/15/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-52	10/15/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-52	10/15/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
OW-52	10/15/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	10/15/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	10/15/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
OW-52	10/15/2019	Iron, Dissolved	0.044	0.02	0.008747	13821880	mg/L
OW-52	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	10/15/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	10/15/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	10/15/2019	Molybdenum, Dissolved	0.0069	0.008	0.006735	98700	mg/L
OW-52	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	10/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	10/15/2019	Sodium, Dissolved	230	5	2.080881	NA	mg/L
OW-52	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	10/15/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
OW-52	10/15/2019	Aluminum, Total	0.45	0.02	0.002488	19914000	mg/L
OW-52	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	10/15/2019	Arsenic, Total	0.00083	0.001	0.000312	10000	mg/L
OW-52	10/15/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
OW-52	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	10/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	10/15/2019	Iron, Total	0.2	0.02	0.008747	13822000	mg/L
OW-52	10/15/2019	Lead, Total	0.000057	0.0005	0.000055	15000	mg/L
OW-52	10/15/2019	Manganese, Total	0.026	0.002	0.00029	2017000	mg/L
OW-52	10/15/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
OW-52	10/15/2019	Molybdenum, Total	0.0071	0.008	0.006735	98700	mg/L
OW-52	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/22/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-52	3/22/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-52	3/22/2012	Barium, Total	0.025	0.002	0.00031	2000000	mg/L
OW-52	3/22/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	3/22/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-52	3/22/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-52	3/22/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-52	3/22/2012	Iron, Total	0.071	0.02	0.0019	13822000	mg/L
OW-52	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	3/22/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-52	3/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	3/22/2012	Manganese, Total	0.03	0.002	0.00062	2017000	mg/L
OW-52	3/22/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-52	3/22/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-52	3/22/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-52	3/22/2012	Uranium, Total	0.01	0.001	0.00006	30000	mg/L
OW-52	3/22/2012	Zinc, Total	0.084	0.01	0.00062	5960000	mg/L
OW-52	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-52	6/13/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-52	6/13/2012	Barium, Total	0.026	0.002	0.00031	2000000	mg/L
OW-52	6/13/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-52	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-52	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-52	6/13/2012	Iron, Total	0.076	0.02	0.0019	13822000	mg/L
OW-52	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	6/13/2012	Potassium, Total	1.4	1	0.48	NA	mg/L
OW-52	6/13/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	6/13/2012	Manganese, Total	0.023	0.002	0.00062	2017000	mg/L
OW-52	6/13/2012	Sodium, Total	230	5	0.22	NA	mg/L
OW-52	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-52	6/13/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-52	6/13/2012	Uranium, Total	0.011	0.001	0.00006	30000	mg/L
OW-52	6/13/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-52	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-52	8/23/2012	Barium, Total	0.029	0.002	0.00039	2000000	mg/L
OW-52	8/23/2012	Calcium, Total	4.4	1	0.026	NA	mg/L
OW-52	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-52	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-52	8/23/2012	Copper, Total	0.014	0.006	0.0041	790000	mg/L
OW-52	8/23/2012	Iron, Total	0.3	0.02	0.013	13822000	mg/L
OW-52	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	8/23/2012	Potassium, Total	1.5	1	0.48	NA	mg/L
OW-52	8/23/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	8/23/2012	Manganese, Total	0.026	0.002	0.00026	2017000	mg/L
OW-52	8/23/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-52	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-52	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-52	8/23/2012	Uranium, Total	0.0076	0.0025	0.00003	30000	mg/L
OW-52	8/23/2012	Zinc, Total	0.012	0.01	0.0011	5960000	mg/L
OW-52	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-52	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-52	11/27/2012	Barium, Total	0.029	0.002	0.00039	2000000	mg/L
OW-52	11/27/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-52	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-52	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	11/27/2012	Iron, Total	0.15	0.02	0.013	13822000	mg/L
OW-52	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	11/27/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-52	11/27/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	11/27/2012	Manganese, Total	0.029	0.002	0.00026	2017000	mg/L
OW-52	11/27/2012	Sodium, Total	220	5	0.22	NA	mg/L
OW-52	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-52	11/27/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-52	11/27/2012	Uranium, Total	0.011	0.0025	0.00003	30000	mg/L
OW-52	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-52	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-52	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-52	9/4/2013	Barium, Total	0.026	0.002	0.00095	2000000	mg/L
OW-52	9/4/2013	Calcium, Total	4.4	1	0.069	NA	mg/L
OW-52	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-52	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-52	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-52	9/4/2013	Iron, Total	0.063	0.02	0.0089	13822000	mg/L
OW-52	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-52	9/4/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-52	9/4/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-52	9/4/2013	Manganese, Total	0.038	0.002	0.00016	2017000	mg/L
OW-52	9/4/2013	Sodium, Total	230	5	1.6	NA	mg/L
OW-52	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-52	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-52	9/4/2013	Uranium, Total	0.011	0.01	0.000073	30000	mg/L
OW-52	9/4/2013	Zinc, Total	0.016	0.01	0.00076	5960000	mg/L
OW-52	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-52	9/15/2014	Arsenic, Total	ND	0.001	0.00036	10000	mg/L
OW-52	9/15/2014	Barium, Total	0.032	0.002	0.0005	2000000	mg/L
OW-52	9/15/2014	Calcium, Total	7.5	1	0.082	NA	mg/L
OW-52	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-52	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-52	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-52	9/15/2014	Iron, Total	0.31	0.02	0.0072	13822000	mg/L
OW-52	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-52	9/15/2014	Potassium, Total	2	1	0.093	NA	mg/L
OW-52	9/15/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-52	9/15/2014	Manganese, Total	0.036	0.002	0.00049	2017000	mg/L
OW-52	9/15/2014	Sodium, Total	240	10	3.9	NA	mg/L
OW-52	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-52	9/15/2014	Selenium, Total	ND	0.001	0.00051	50000	mg/L
OW-52	9/15/2014	Uranium, Total	0.011	0.001	0.0000072	30000	mg/L
OW-52	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-52	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
OW-52	8/10/2015	Barium, Total	0.031	0.002	0.0011	2000000	mg/L
OW-52	8/10/2015	Calcium, Total	4.6	1	0.057	NA	mg/L
OW-52	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-52	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-52	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-52	8/10/2015	Iron, Total	0.17	0.02	0.0072	13822000	mg/L
OW-52	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-52	8/10/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
OW-52	8/10/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-52	8/10/2015	Manganese, Total	0.033	0.002	0.0015	2017000	mg/L
OW-52	8/10/2015	Sodium, Total	220	5	0.36	NA	mg/L
OW-52	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-52	8/10/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-52	8/10/2015	Uranium, Total	0.012	0.0005	0.0000049	30000	mg/L
OW-52	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-52	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-52	9/9/2016	Arsenic, Total	0.00096	0.001	0.00021	10000	mg/L
OW-52	9/9/2016	Barium, Total	0.032	0.002	0.00079	2000000	mg/L
OW-52	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-52	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-52	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-52	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-52	9/9/2016	Arsenic, Dissolved	0.00086	0.001	0.00014	10000	mg/L
OW-52	9/9/2016	Barium, Dissolved	0.028	0.002	0.0013	2000000	mg/L
OW-52	9/9/2016	Calcium, Dissolved	4.7	1	0.5	NA	mg/L
OW-52	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-52	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-52	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-52	9/9/2016	Iron, Dissolved	0.05	0.02	0.02	13821880	mg/L
OW-52	9/9/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
OW-52	9/9/2016	Magnesium, Dissolved	0.63	1	0.5	NA	mg/L
OW-52	9/9/2016	Manganese, Dissolved	0.026	0.002	0.00032	2017400	mg/L
OW-52	9/9/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
OW-52	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/9/2016	Selenium, Dissolved	ND	0.005	0.0011	50000	mg/L
OW-52	9/9/2016	Uranium, Dissolved	0.011	0.0005	0.000051	NA	mg/L
OW-52	9/9/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-52	9/9/2016	Iron, Total	0.15	0.02	0.02	13822000	mg/L
OW-52	9/9/2016	Mercury, Total	0.000094	0.0002	0.000053	2000	mg/L
OW-52	9/9/2016	Manganese, Total	0.03	0.002	0.00027	2017000	mg/L
OW-52	9/9/2016	Lead, Total	0.000086	0.0005	0.000081	15000	mg/L
OW-52	9/9/2016	Selenium, Total	0.00084	0.001	0.00019	50000	mg/L
OW-52	9/9/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
OW-52	9/9/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-52	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	9/11/2017	Arsenic, Total	0.00051	0.001	0.0003	10000	mg/L
OW-52	9/11/2017	Barium, Total	0.029	0.002	0.00093	2000000	mg/L
OW-52	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	9/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-52	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	9/11/2017	Arsenic, Dissolved	ND	0.005	0.00089	10000	mg/L
OW-52	9/11/2017	Barium, Dissolved	0.029	0.002	0.00085	2000000	mg/L
OW-52	9/11/2017	Calcium, Dissolved	4.9	1	0.078	NA	mg/L
OW-52	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	9/11/2017	Iron, Dissolved	0.05	0.02	0.016	13821880	mg/L
OW-52	9/11/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-52	9/11/2017	Magnesium, Dissolved	0.63	1	0.25	NA	mg/L
OW-52	9/11/2017	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
OW-52	9/11/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
OW-52	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/11/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-52	9/11/2017	Uranium, Dissolved	0.011	0.0005	0.00005	NA	mg/L
OW-52	9/11/2017	Zinc, Dissolved	0.063	0.01	0.0021	5960450	mg/L
OW-52	9/11/2017	Iron, Total	0.091	0.02	0.01	13822000	mg/L
OW-52	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/11/2017	Manganese, Total	0.026	0.002	0.0011	2017000	mg/L
OW-52	9/11/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-52	9/11/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
OW-52	9/11/2017	Uranium, Total	0.011	0.0005	0.00015	30000	mg/L
OW-52	9/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	9/17/2018	Arsenic, Total	0.00073	0.001	0.00041	10000	mg/L
OW-52	9/17/2018	Barium, Total	0.033	0.002	0.001	2000000	mg/L
OW-52	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
OW-52	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	9/17/2018	Arsenic, Dissolved	0.00062	0.001	0.00042	10000	mg/L
OW-52	9/17/2018	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
OW-52	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
OW-52	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	9/17/2018	Iron, Dissolved	0.08	0.02	0.016	13821880	mg/L
OW-52	9/17/2018	Manganese, Dissolved	0.026	0.002	0.00039	2017400	mg/L
OW-52	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
OW-52	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-52	9/17/2018	Uranium, Dissolved	0.0086	0.0005	0.000096	NA	mg/L
OW-52	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
OW-52	9/17/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
OW-52	9/17/2018	Iron, Total	0.32	0.02	0.01	13822000	mg/L
OW-52	9/17/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	9/17/2018	Manganese, Total	0.03	0.002	0.0011	2017000	mg/L
OW-52	9/17/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-52	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
OW-52	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-52	9/17/2018	Uranium, Total	0.0093	0.0005	0.000068	30000	mg/L
OW-52	9/17/2018	Vanadium, Total	0.00091	0.05	0.00076	63100	mg/L
OW-52	9/17/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	11/7/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-52	11/7/2018	Barium, Total	0.037	0.002	0.001	2000000	mg/L
OW-52	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	11/7/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-52	11/7/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-52	11/7/2018	Calcium, Dissolved	4.5	1	0.078	NA	mg/L
OW-52	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	11/7/2018	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
OW-52	11/7/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-52	11/7/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-52	11/7/2018	Manganese, Dissolved	0.024	0.002	0.00039	2017400	mg/L
OW-52	11/7/2018	Sodium, Dissolved	230	5	0.82	NA	mg/L
OW-52	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-52	11/7/2018	Uranium, Dissolved	0.01	0.0005	0.000096	NA	mg/L
OW-52	11/7/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
OW-52	11/7/2018	Iron, Total	0.6	0.02	0.01	13822000	mg/L
OW-52	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	11/7/2018	Manganese, Total	0.034	0.002	0.0011	2017000	mg/L
OW-52	11/7/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-52	11/7/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-52	11/7/2018	Uranium, Total	0.0092	0.0005	0.000068	30000	mg/L
OW-52	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	2/6/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-54	2/6/2019	Arsenic, Dissolved	0.0027	0.001	0.000068	10000	mg/L
OW-54	2/6/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
OW-54	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	2/6/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-54	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	2/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-54	2/6/2019	Iron, Dissolved	0.51	0.02	0.008747	13821880	mg/L
OW-54	2/6/2019	Lead, Dissolved	0.0065	0.0005	0.000047	NA	mg/L
OW-54	2/6/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	2/6/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	2/6/2019	Selenium, Dissolved	0.0003	0.001	0.000203	50000	mg/L
OW-54	2/6/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-54	2/6/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-54	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-54	2/6/2019	Uranium, Dissolved	0.056	0.0025	0.000152	NA	mg/L
OW-54	2/6/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
OW-54	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-54	2/6/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-54	2/6/2019	Barium, Total	0.26	0.002	0.000488	2000000	mg/L
OW-54	2/6/2019	Beryllium, Total	0.00023	0.002	0.000224	4000	mg/L
OW-54	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	2/6/2019	Chromium, Total	0.0027	0.006	0.0012	50000	mg/L
OW-54	2/6/2019	Copper, Total	0.026	0.006	0.004072	790000	mg/L
OW-54	2/6/2019	Iron, Total	2.5	0.1	0.030263	13822000	mg/L
OW-54	2/6/2019	Lead, Total	0.011	0.0005	0.000026	15000	mg/L
OW-54	2/6/2019	Manganese, Total	1.5	0.01	0.000299	2017000	mg/L
OW-54	2/6/2019	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
OW-54	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	2/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	2/6/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	2/6/2019	Zinc, Total	0.0067	0.01	0.005772	5960000	mg/L
OW-54	2/6/2019	Antimony, Dissolved	0.00022	0.001	0.000204	6000	mg/L
OW-54	2/6/2019	Arsenic, Dissolved	0.0039	0.001	0.000068	10000	mg/L
OW-54	2/6/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
OW-54	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	2/6/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-54	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	2/6/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-54	2/6/2019	Iron, Dissolved	0.47	0.02	0.008747	13821880	mg/L
OW-54	2/6/2019	Lead, Dissolved	0.0082	0.0005	0.000047	NA	mg/L
OW-54	2/6/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	2/6/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	2/6/2019	Selenium, Dissolved	0.00025	0.001	0.000203	50000	mg/L
OW-54	2/6/2019	Silver, Dissolved	0.00096	0.005	0.000942	81200	mg/L
OW-54	2/6/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-54	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-54	2/6/2019	Uranium, Dissolved	0.058	0.0025	0.000152	NA	mg/L
OW-54	2/6/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
OW-54	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-54	2/6/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-54	2/6/2019	Barium, Total	0.28	0.002	0.000488	2000000	mg/L
OW-54	2/6/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-54	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	2/6/2019	Chromium, Total	0.0026	0.006	0.0012	50000	mg/L
OW-54	2/6/2019	Copper, Total	0.031	0.006	0.004072	790000	mg/L
OW-54	2/6/2019	Iron, Total	2.7	0.1	0.030263	13822000	mg/L
OW-54	2/6/2019	Lead, Total	0.013	0.0005	0.000026	15000	mg/L
OW-54	2/6/2019	Manganese, Total	1.5	0.01	0.000299	2017000	mg/L
OW-54	2/6/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-54	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	2/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	2/6/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-54	2/6/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
OW-54	5/2/2019	Aluminum, Dissolved	0.073	0.02	0.002488	19913930	mg/L
OW-54	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Dissolved	0.0027	0.005	0.000504	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-54	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	5/2/2019	Calcium, Dissolved	59	1	0.061889	NA	mg/L
OW-54	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	5/2/2019	Cobalt, Dissolved	0.091	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Dissolved	0.0049	0.006	0.001296	790000	mg/L
OW-54	5/2/2019	Iron, Dissolved	0.64	0.02	0.008747	13821880	mg/L
OW-54	5/2/2019	Lead, Dissolved	0.0052	0.0025	0.000274	NA	mg/L
OW-54	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	5/2/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OW-54	5/2/2019	Molybdenum, Dissolved	0.007	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Potassium, Dissolved	0.19	1	0.162288	NA	mg/L
OW-54	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-54	5/2/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	5/2/2019	Sodium, Dissolved	420	5	2.080881	NA	mg/L
OW-54	5/2/2019	Thallium, Dissolved	0.00046	0.0025	0.000242	2000	mg/L
OW-54	5/2/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
OW-54	5/2/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
OW-54	5/2/2019	Aluminum, Total	6	0.2	0.024883	19914000	mg/L
OW-54	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Total	0.0035	0.005	0.001561	10000	mg/L
OW-54	5/2/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Total	0.6	0.04	0.004531	3949	mg/L
OW-54	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	5/2/2019	Chromium, Total	0.0024	0.006	0.001533	50000	mg/L
OW-54	5/2/2019	Cobalt, Total	0.087	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Total	0.025	0.006	0.004072	790000	mg/L
OW-54	5/2/2019	Iron, Total	2.5	0.1	0.043734	13822000	mg/L
OW-54	5/2/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
OW-54	5/2/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
OW-54	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-54	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-54	5/2/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	5/2/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
OW-54	5/2/2019	Aluminum, Dissolved	0.066	0.02	0.002488	19913930	mg/L
OW-54	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
OW-54	5/2/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
OW-54	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	5/2/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-54	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	5/2/2019	Cobalt, Dissolved	0.088	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
OW-54	5/2/2019	Iron, Dissolved	0.67	0.02	0.008747	13821880	mg/L
OW-54	5/2/2019	Lead, Dissolved	0.0054	0.0025	0.000274	NA	mg/L
OW-54	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	5/2/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OW-54	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-54	5/2/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	5/2/2019	Sodium, Dissolved	410	5	2.080881	NA	mg/L
OW-54	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-54	5/2/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-54	5/2/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
OW-54	5/2/2019	Aluminum, Total	6.5	0.2	0.024883	19914000	mg/L
OW-54	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
OW-54	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	5/2/2019	Chromium, Total	0.0027	0.006	0.001533	50000	mg/L
OW-54	5/2/2019	Cobalt, Total	0.087	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Total	0.021	0.006	0.004072	790000	mg/L
OW-54	5/2/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
OW-54	5/2/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
OW-54	5/2/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
OW-54	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Total	0.34	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-54	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-54	5/2/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	5/2/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
OW-54	8/21/2019	Aluminum, Dissolved	0.027	0.02	0.002488	19913930	mg/L
OW-54	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-54	8/21/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-54	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	8/21/2019	Calcium, Dissolved	57	1	0.061889	NA	mg/L
OW-54	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	8/21/2019	Cobalt, Dissolved	0.088	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-54	8/21/2019	Iron, Dissolved	0.46	0.02	0.008747	13821880	mg/L
OW-54	8/21/2019	Lead, Dissolved	0.0058	0.0005	0.000055	NA	mg/L
OW-54	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	8/21/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	8/21/2019	Molybdenum, Dissolved	0.0072	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Dissolved	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	8/21/2019	Selenium, Dissolved	0.00024	0.001	0.000171	50000	mg/L
OW-54	8/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	8/21/2019	Sodium, Dissolved	430	5	2.080881	NA	mg/L
OW-54	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-54	8/21/2019	Uranium, Dissolved	0.055	0.0025	0.000374	NA	mg/L
OW-54	8/21/2019	Zinc, Dissolved	0.0094	0.01	0.002252	5960450	mg/L
OW-54	8/21/2019	Aluminum, Total	6.1	0.4	0.049765	19914000	mg/L
OW-54	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Total	0.0038	0.001	0.000312	10000	mg/L
OW-54	8/21/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Total	0.59	0.04	0.004531	3949	mg/L
OW-54	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	8/21/2019	Chromium, Total	0.0023	0.006	0.001533	50000	mg/L
OW-54	8/21/2019	Cobalt, Total	0.1	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Total	0.026	0.006	0.004072	790000	mg/L
OW-54	8/21/2019	Iron, Total	2.7	0.1	0.043734	13822000	mg/L
OW-54	8/21/2019	Lead, Total	0.014	0.0005	0.000055	15000	mg/L
OW-54	8/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OW-54	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	8/21/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-54	8/21/2019	Zinc, Total	0.0074	0.01	0.005772	5960000	mg/L
OW-54	8/21/2019	Aluminum, Dissolved	0.028	0.02	0.002488	19913930	mg/L
OW-54	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
OW-54	8/21/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	8/21/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-54	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	8/21/2019	Cobalt, Dissolved	0.09	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
OW-54	8/21/2019	Iron, Dissolved	0.48	0.02	0.008747	13821880	mg/L
OW-54	8/21/2019	Lead, Dissolved	0.0058	0.0005	0.000055	NA	mg/L
OW-54	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	8/21/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	8/21/2019	Molybdenum, Dissolved	0.009	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Dissolved	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	8/21/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-54	8/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	8/21/2019	Sodium, Dissolved	420	5	2.080881	NA	mg/L
OW-54	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-54	8/21/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-54	8/21/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-54	8/21/2019	Aluminum, Total	6.5	0.4	0.049765	19914000	mg/L
OW-54	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-54	8/21/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Total	0.00033	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Total	0.6	0.04	0.004531	3949	mg/L
OW-54	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	8/21/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
OW-54	8/21/2019	Cobalt, Total	0.098	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Total	0.025	0.006	0.004072	790000	mg/L
OW-54	8/21/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
OW-54	8/21/2019	Lead, Total	0.013	0.0005	0.000055	15000	mg/L
OW-54	8/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OW-54	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
OW-54	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	8/21/2019	Uranium, Total	0.051	0.0025	0.000424	30000	mg/L
OW-54	8/21/2019	Zinc, Total	0.0072	0.01	0.005772	5960000	mg/L
OW-54	6/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-54	6/1/2016	Arsenic, Total	0.0093	0.005	0.0015	10000	mg/L
OW-54	6/1/2016	Barium, Total	1.4	0.01	0.0066	2000000	mg/L
OW-54	6/1/2016	Beryllium, Total	0.0032	0.002	0.00031	4000	mg/L
OW-54	6/1/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-54	6/1/2016	Cobalt, Total	0.11	0.006	0.00085	5980	mg/L
OW-54	6/1/2016	Chromium, Total	0.015	0.006	0.0022	50000	mg/L
OW-54	6/1/2016	Iron, Total	14	0.4	0.18	13822000	mg/L
OW-54	6/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-54	6/1/2016	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-54	6/1/2016	Nickel, Total	0.36	0.01	0.0024	372000	mg/L
OW-54	6/1/2016	Lead, Total	0.032	0.0025	0.00084	15000	mg/L
OW-54	6/1/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-54	6/1/2016	Selenium, Total	0.017	0.02	0.0042	50000	mg/L
OW-54	6/1/2016	Vanadium, Total	0.036	0.05	0.0015	63100	mg/L
OW-54	6/1/2016	Zinc, Total	0.062	0.01	0.0039	5960000	mg/L
OW-54	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-54	9/16/2016	Arsenic, Total	0.0057	0.01	0.0021	10000	mg/L
OW-54	9/16/2016	Barium, Total	1.1	0.01	0.004	2000000	mg/L
OW-54	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	9/16/2016	Chromium, Total	0.013	0.006	0.0027	50000	mg/L
OW-54	9/16/2016	Copper, Total	0.032	0.006	0.003	790000	mg/L
OW-54	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-54	9/16/2016	Arsenic, Dissolved	0.0049	0.005	0.00069	10000	mg/L
OW-54	9/16/2016	Barium, Dissolved	0.14	0.002	0.0013	2000000	mg/L
OW-54	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-54	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-54	9/16/2016	Copper, Dissolved	0.0088	0.006	0.004	790000	mg/L
OW-54	9/16/2016	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
OW-54	9/16/2016	Manganese, Dissolved	1.3	0.01	0.0016	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/16/2016	Lead, Dissolved	0.0052	0.0005	0.00017	NA	mg/L
OW-54	9/16/2016	Selenium, Dissolved	0.0068	0.02	0.0042	50000	mg/L
OW-54	9/16/2016	Uranium, Dissolved	0.062	0.0025	0.00026	NA	mg/L
OW-54	9/16/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
OW-54	9/16/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
OW-54	9/16/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
OW-54	9/16/2016	Manganese, Total	2.3	0.01	0.0014	2017000	mg/L
OW-54	9/16/2016	Lead, Total	0.032	0.0025	0.00041	15000	mg/L
OW-54	9/16/2016	Selenium, Total	0.0063	0.01	0.0019	50000	mg/L
OW-54	9/16/2016	Uranium, Total	0.065	0.0025	0.00087	30000	mg/L
OW-54	9/16/2016	Zinc, Total	0.036	0.01	0.0027	5960000	mg/L
OW-54	11/9/2016	Silver, Total	0.0044	0.005	0.0015	50000	mg/L
OW-54	11/9/2016	Arsenic, Total	0.0061	0.02	0.0042	10000	mg/L
OW-54	11/9/2016	Barium, Total	0.46	0.002	0.00079	2000000	mg/L
OW-54	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	11/9/2016	Chromium, Total	0.0061	0.006	0.0027	50000	mg/L
OW-54	11/9/2016	Copper, Total	0.024	0.006	0.003	790000	mg/L
OW-54	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-54	11/9/2016	Arsenic, Dissolved	0.006	0.02	0.0028	10000	mg/L
OW-54	11/9/2016	Barium, Dissolved	0.15	0.002	0.0013	2000000	mg/L
OW-54	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-54	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-54	11/9/2016	Copper, Dissolved	0.0067	0.006	0.004	790000	mg/L
OW-54	11/9/2016	Iron, Dissolved	0.24	0.02	0.02	13821880	mg/L
OW-54	11/9/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
OW-54	11/9/2016	Lead, Dissolved	0.0064	0.0005	0.00017	NA	mg/L
OW-54	11/9/2016	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
OW-54	11/9/2016	Uranium, Dissolved	0.057	0.0025	0.00026	NA	mg/L
OW-54	11/9/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-54	11/9/2016	Iron, Total	4.4	0.1	0.1	13822000	mg/L
OW-54	11/9/2016	Mercury, Total	0.000057	0.0002	0.000053	2000	mg/L
OW-54	11/9/2016	Manganese, Total	1.7	0.01	0.0014	2017000	mg/L
OW-54	11/9/2016	Lead, Total	0.019	0.0025	0.00041	15000	mg/L
OW-54	11/9/2016	Selenium, Total	0.015	0.02	0.0037	50000	mg/L
OW-54	11/9/2016	Uranium, Total	0.062	0.0025	0.00087	30000	mg/L
OW-54	11/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
OW-54	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-54	3/29/2017	Arsenic, Total	0.0092	0.005	0.0011	10000	mg/L
OW-54	3/29/2017	Barium, Total	1.7	0.02	0.0079	2000000	mg/L
OW-54	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	3/29/2017	Chromium, Total	0.021	0.006	0.0027	50000	mg/L
OW-54	3/29/2017	Copper, Total	0.12	0.006	0.003	790000	mg/L
OW-54	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-54	3/29/2017	Arsenic, Dissolved	0.0041	0.005	0.00089	10000	mg/L
OW-54	3/29/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
OW-54	3/29/2017	Calcium, Dissolved	72	1	0.5	NA	mg/L
OW-54	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-54	3/29/2017	Copper, Dissolved	0.012	0.006	0.0032	790000	mg/L
OW-54	3/29/2017	Iron, Dissolved	0.72	0.02	0.02	13821880	mg/L
OW-54	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-54	3/29/2017	Magnesium, Dissolved	19	1	0.5	NA	mg/L
OW-54	3/29/2017	Manganese, Dissolved	1.5	0.02	0.0038	2017400	mg/L
OW-54	3/29/2017	Sodium, Dissolved	430	10	5	NA	mg/L
OW-54	3/29/2017	Lead, Dissolved	0.0081	0.0005	0.00017	NA	mg/L
OW-54	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-54	3/29/2017	Uranium, Dissolved	0.059	0.0025	0.00025	NA	mg/L
OW-54	3/29/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
OW-54	3/29/2017	Iron, Total	21	1	1	13822000	mg/L
OW-54	3/29/2017	Mercury, Total	0.00011	0.0002	0.000037	2000	mg/L
OW-54	3/29/2017	Manganese, Total	2.4	0.02	0.0027	2017000	mg/L
OW-54	3/29/2017	Lead, Total	0.043	0.0025	0.00041	15000	mg/L
OW-54	3/29/2017	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
OW-54	3/29/2017	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
OW-54	3/29/2017	Zinc, Total	0.039	0.01	0.0027	5960000	mg/L
OW-54	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-54	6/21/2017	Arsenic, Total	0.0083	0.005	0.0015	10000	mg/L
OW-54	6/21/2017	Barium, Total	0.62	0.002	0.00093	2000000	mg/L
OW-54	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/21/2017	Chromium, Total	0.012	0.006	0.0011	50000	mg/L
OW-54	6/21/2017	Copper, Total	0.063	0.006	0.0017	790000	mg/L
OW-54	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-54	6/21/2017	Arsenic, Dissolved	0.0078	0.02	0.0035	10000	mg/L
OW-54	6/21/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
OW-54	6/21/2017	Calcium, Dissolved	63	1	0.078	NA	mg/L
OW-54	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-54	6/21/2017	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
OW-54	6/21/2017	Iron, Dissolved	0.63	0.02	0.016	13821880	mg/L
OW-54	6/21/2017	Potassium, Dissolved	0.19	1	0.11	NA	mg/L
OW-54	6/21/2017	Magnesium, Dissolved	19	1	0.25	NA	mg/L
OW-54	6/21/2017	Manganese, Dissolved	1.2	0.02	0.0038	2017400	mg/L
OW-54	6/21/2017	Sodium, Dissolved	400	10	1.6	NA	mg/L
OW-54	6/21/2017	Lead, Dissolved	0.0049	0.0005	0.00017	NA	mg/L
OW-54	6/21/2017	Selenium, Dissolved	0.014	0.02	0.0077	50000	mg/L
OW-54	6/21/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-54	6/21/2017	Zinc, Dissolved	0.0062	0.01	0.0011	5960450	mg/L
OW-54	6/21/2017	Iron, Total	9.5	0.2	0.1	13822000	mg/L
OW-54	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-54	6/21/2017	Manganese, Total	1.7	0.02	0.011	2017000	mg/L
OW-54	6/21/2017	Lead, Total	0.025	0.0025	0.00048	15000	mg/L
OW-54	6/21/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-54	6/21/2017	Uranium, Total	0.063	0.0025	0.00077	30000	mg/L
OW-54	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
OW-54	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	9/11/2017	Arsenic, Total	0.008	0.005	0.0015	10000	mg/L
OW-54	9/11/2017	Barium, Total	1.2	0.02	0.0093	2000000	mg/L
OW-54	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	9/11/2017	Chromium, Total	0.02	0.006	0.0018	50000	mg/L
OW-54	9/11/2017	Copper, Total	0.047	0.006	0.0017	790000	mg/L
OW-54	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	9/11/2017	Arsenic, Dissolved	0.0074	0.02	0.0035	10000	mg/L
OW-54	9/11/2017	Barium, Dissolved	0.2	0.002	0.00085	2000000	mg/L
OW-54	9/11/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L
OW-54	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-54	9/11/2017	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
OW-54	9/11/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	9/11/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-54	9/11/2017	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OW-54	9/11/2017	Sodium, Dissolved	420	10	1.6	NA	mg/L
OW-54	9/11/2017	Lead, Dissolved	0.0068	0.0005	0.00017	NA	mg/L
OW-54	9/11/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-54	9/11/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-54	9/11/2017	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
OW-54	9/11/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
OW-54	9/11/2017	Mercury, Total	0.000037	0.0002	0.000037	2000	mg/L
OW-54	9/11/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-54	9/11/2017	Lead, Total	0.033	0.0025	0.00048	15000	mg/L
OW-54	9/11/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
OW-54	9/11/2017	Uranium, Total	0.06	0.0025	0.00077	30000	mg/L
OW-54	9/11/2017	Zinc, Total	0.04	0.01	0.0033	5960000	mg/L
OW-54	12/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	12/6/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-54	12/6/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
OW-54	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	12/6/2017	Copper, Total	0.014	0.006	0.0041	790000	mg/L
OW-54	12/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	12/6/2017	Arsenic, Dissolved	0.0057	0.01	0.0042	10000	mg/L
OW-54	12/6/2017	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	12/6/2017	Calcium, Dissolved	61	1	0.078	NA	mg/L
OW-54	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	12/6/2017	Copper, Dissolved	0.0077	0.006	0.0032	790000	mg/L
OW-54	12/6/2017	Iron, Dissolved	0.31	0.02	0.016	13821880	mg/L
OW-54	12/6/2017	Potassium, Dissolved	0.17	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	12/6/2017	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OW-54	12/6/2017	Sodium, Dissolved	410	5	0.82	NA	mg/L
OW-54	12/6/2017	Lead, Dissolved	0.0083	0.0005	0.00017	NA	mg/L
OW-54	12/6/2017	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
OW-54	12/6/2017	Uranium, Dissolved	0.061	0.0025	0.00048	NA	mg/L
OW-54	12/6/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-54	12/6/2017	Iron, Total	0.63	0.02	0.01	13822000	mg/L
OW-54	12/6/2017	Mercury, Total	0.000072	0.0002	0.000037	2000	mg/L
OW-54	12/6/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	12/6/2017	Lead, Total	0.0092	0.0025	0.0011	15000	mg/L
OW-54	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-54	12/6/2017	Uranium, Total	0.057	0.0025	0.00077	30000	mg/L
OW-54	12/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	2/22/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-54	2/22/2018	Barium, Total	0.22	0.002	0.001	2000000	mg/L
OW-54	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-54	2/22/2018	Copper, Total	0.076	0.006	0.0041	790000	mg/L
OW-54	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-54	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-54	2/22/2018	Barium, Dissolved	0.14	0.01	0.0049	2000000	mg/L
OW-54	2/22/2018	Calcium, Dissolved	57	5	0.39	NA	mg/L
OW-54	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-54	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	2/22/2018	Copper, Dissolved	0.022	0.03	0.016	790000	mg/L
OW-54	2/22/2018	Iron, Dissolved	0.24	0.1	0.082	13821880	mg/L
OW-54	2/22/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OW-54	2/22/2018	Magnesium, Dissolved	18	5	1.2	NA	mg/L
OW-54	2/22/2018	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
OW-54	2/22/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
OW-54	2/22/2018	Lead, Dissolved	0.016	0.005	0.0017	NA	mg/L
OW-54	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-54	2/22/2018	Uranium, Dissolved	0.053	0.005	0.00096	NA	mg/L
OW-54	2/22/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
OW-54	2/22/2018	Iron, Total	3.6	0.1	0.051	13822000	mg/L
OW-54	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-54	2/22/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	2/22/2018	Lead, Total	0.015	0.0005	0.00023	15000	mg/L
OW-54	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-54	2/22/2018	Uranium, Total	0.059	0.0025	0.00034	30000	mg/L
OW-54	2/22/2018	Zinc, Total	0.022	0.05	0.016	5960000	mg/L
OW-54	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	5/8/2018	Arsenic, Total	0.0032	0.001	0.00041	10000	mg/L
OW-54	5/8/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
OW-54	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	5/8/2018	Copper, Total	0.02	0.006	0.0041	790000	mg/L
OW-54	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	5/8/2018	Arsenic, Dissolved	0.0024	0.005	0.0021	10000	mg/L
OW-54	5/8/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	5/8/2018	Calcium, Dissolved	66	1	0.078	NA	mg/L
OW-54	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	5/8/2018	Copper, Dissolved	0.0075	0.006	0.0032	790000	mg/L
OW-54	5/8/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
OW-54	5/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	5/8/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OW-54	5/8/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
OW-54	5/8/2018	Lead, Dissolved	0.0065	0.0025	0.00087	NA	mg/L
OW-54	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-54	5/8/2018	Uranium, Dissolved	0.057	0.0025	0.00048	NA	mg/L
OW-54	5/8/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
OW-54	5/8/2018	Iron, Total	0.69	0.02	0.01	13822000	mg/L
OW-54	5/8/2018	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
OW-54	5/8/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
OW-54	5/8/2018	Lead, Total	0.0069	0.0005	0.00023	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-54	5/8/2018	Uranium, Total	0.058	0.0025	0.00034	30000	mg/L
OW-54	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	8/28/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-54	8/28/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
OW-54	8/28/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
OW-54	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	8/28/2018	Copper, Total	0.024	0.006	0.0041	790000	mg/L
OW-54	8/28/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
OW-54	8/28/2018	Arsenic, Dissolved	0.0045	0.001	0.00042	10000	mg/L
OW-54	8/28/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	8/28/2018	Calcium, Dissolved	62	1	0.078	NA	mg/L
OW-54	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	8/28/2018	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
OW-54	8/28/2018	Iron, Dissolved	0.3	0.02	0.016	13821880	mg/L
OW-54	8/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	8/28/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	8/28/2018	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
OW-54	8/28/2018	Sodium, Dissolved	410	5	0.82	NA	mg/L
OW-54	8/28/2018	Lead, Dissolved	0.0097	0.0005	0.00017	NA	mg/L
OW-54	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-54	8/28/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
OW-54	8/28/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
OW-54	8/28/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
OW-54	8/28/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-54	8/28/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	8/28/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
OW-54	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-54	8/28/2018	Uranium, Total	0.06	0.0025	0.00034	30000	mg/L
OW-54	8/28/2018	Zinc, Total	0.007	0.01	0.0033	5960000	mg/L
OW-54	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-54	11/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
OW-54	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	11/7/2018	Copper, Total	0.015	0.006	0.0041	790000	mg/L
OW-54	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	11/7/2018	Arsenic, Dissolved	0.0026	0.001	0.00042	10000	mg/L
OW-54	11/7/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	11/7/2018	Calcium, Dissolved	59	1	0.078	NA	mg/L
OW-54	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-54	11/7/2018	Iron, Dissolved	0.32	0.02	0.016	13821880	mg/L
OW-54	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	11/7/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	11/7/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OW-54	11/7/2018	Sodium, Dissolved	430	10	1.6	NA	mg/L
OW-54	11/7/2018	Lead, Dissolved	0.01	0.0005	0.00017	NA	mg/L
OW-54	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-54	11/7/2018	Uranium, Dissolved	0.059	0.0025	0.00048	NA	mg/L
OW-54	11/7/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
OW-54	11/7/2018	Iron, Total	0.94	0.02	0.01	13822000	mg/L
OW-54	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	11/7/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OW-54	11/7/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
OW-54	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-54	11/7/2018	Uranium, Total	0.062	0.0025	0.00034	30000	mg/L
OW-54	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	5/2/2019	Aluminum, Dissolved	0.23	0.02	0.002488	19913930	mg/L
OW-55	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-55	5/2/2019	Arsenic, Dissolved	0.0047	0.005	0.000504	10000	mg/L
OW-55	5/2/2019	Barium, Dissolved	0.57	0.002	0.000648	2000000	mg/L
OW-55	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-55	5/2/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
OW-55	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-55	5/2/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-55	5/2/2019	Cobalt, Dissolved	0.014	0.006	0.003091	5980	mg/L
OW-55	5/2/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-55	5/2/2019	Iron, Dissolved	4.4	0.1	0.043734	13821880	mg/L
OW-55	5/2/2019	Lead, Dissolved	0.00049	0.0025	0.000274	NA	mg/L
OW-55	5/2/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OW-55	5/2/2019	Manganese, Dissolved	3.8	0.01	0.00145	2017400	mg/L
OW-55	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-55	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-55	5/2/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-55	5/2/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
OW-55	5/2/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-55	5/2/2019	Sodium, Dissolved	370	5	2.080881	NA	mg/L
OW-55	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-55	5/2/2019	Uranium, Dissolved	0.0038	0.0025	0.000374	NA	mg/L
OW-55	5/2/2019	Zinc, Dissolved	0.033	0.01	0.002252	5960450	mg/L
OW-55	5/2/2019	Aluminum, Total	6.8	0.2	0.024883	19914000	mg/L
OW-55	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-55	5/2/2019	Arsenic, Total	0.0064	0.005	0.001561	10000	mg/L
OW-55	5/2/2019	Barium, Total	0.63	0.002	0.000648	2000000	mg/L
OW-55	5/2/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
OW-55	5/2/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
OW-55	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-55	5/2/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-55	5/2/2019	Cobalt, Total	0.022	0.006	0.003091	5980	mg/L
OW-55	5/2/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-55	5/2/2019	Iron, Total	7.8	0.2	0.087469	13822000	mg/L
OW-55	5/2/2019	Lead, Total	0.0046	0.0025	0.000274	15000	mg/L
OW-55	5/2/2019	Manganese, Total	3.6	0.01	0.00145	2017000	mg/L
OW-55	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-55	5/2/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-55	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-55	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-55	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-55	5/2/2019	Uranium, Total	0.0046	0.0025	0.000424	30000	mg/L
OW-55	5/2/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
OW-55	2/6/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-55	2/6/2019	Arsenic, Dissolved	0.0053	0.001	0.000068	10000	mg/L
OW-55	2/6/2019	Barium, Dissolved	0.54	0.002	0.000648	2000000	mg/L
OW-55	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-55	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-55	2/6/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L
OW-55	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-55	2/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-55	2/6/2019	Iron, Dissolved	4	0.1	0.043734	13821880	mg/L
OW-55	2/6/2019	Lead, Dissolved	0.00014	0.0005	0.000047	NA	mg/L
OW-55	2/6/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OW-55	2/6/2019	Manganese, Dissolved	3.7	0.01	0.00145	2017400	mg/L
OW-55	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-55	2/6/2019	Selenium, Dissolved	0.00025	0.001	0.000203	50000	mg/L
OW-55	2/6/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-55	2/6/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
OW-55	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-55	2/6/2019	Uranium, Dissolved	0.0071	0.0005	0.00003	NA	mg/L
OW-55	2/6/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
OW-55	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-55	2/6/2019	Arsenic, Total	0.0055	0.001	0.000312	10000	mg/L
OW-55	2/6/2019	Barium, Total	0.58	0.002	0.000488	2000000	mg/L
OW-55	2/6/2019	Beryllium, Total	0.00027	0.002	0.000224	4000	mg/L
OW-55	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-55	2/6/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-55	2/6/2019	Copper, Total	0.0045	0.006	0.004072	790000	mg/L
OW-55	2/6/2019	Iron, Total	5.5	0.2	0.060526	13822000	mg/L
OW-55	2/6/2019	Lead, Total	0.0021	0.0005	0.000026	15000	mg/L
OW-55	2/6/2019	Manganese, Total	3.8	0.01	0.000299	2017000	mg/L
OW-55	2/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-55	2/6/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-55	2/6/2019	Uranium, Total	0.007	0.0005	0.000085	30000	mg/L
OW-55	2/6/2019	Zinc, Total	0.0075	0.01	0.005772	5960000	mg/L
OW-55	6/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-55	6/1/2016	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
OW-55	6/1/2016	Barium, Total	3.2	0.01	0.0066	2000000	mg/L
OW-55	6/1/2016	Beryllium, Total	0.008	0.002	0.00031	4000	mg/L
OW-55	6/1/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-55	6/1/2016	Cobalt, Total	0.046	0.006	0.00085	5980	mg/L
OW-55	6/1/2016	Chromium, Total	0.031	0.006	0.0022	50000	mg/L
OW-55	6/1/2016	Iron, Total	39	1	0.45	13822000	mg/L
OW-55	6/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-55	6/1/2016	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
OW-55	6/1/2016	Nickel, Total	0.46	0.01	0.0024	372000	mg/L
OW-55	6/1/2016	Lead, Total	0.083	0.0025	0.00084	15000	mg/L
OW-55	6/1/2016	Antimony, Total	ND	0.005	0.0024	6000	mg/L
OW-55	6/1/2016	Selenium, Total	0.009	0.005	0.0011	50000	mg/L
OW-55	6/1/2016	Vanadium, Total	0.061	0.05	0.0015	63100	mg/L
OW-55	6/1/2016	Zinc, Total	0.1	0.01	0.0039	5960000	mg/L
OW-55	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-55	9/16/2016	Arsenic, Total	0.0078	0.005	0.0011	10000	mg/L
OW-55	9/16/2016	Barium, Total	1.2	0.01	0.004	2000000	mg/L
OW-55	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	9/16/2016	Chromium, Total	0.009	0.006	0.0027	50000	mg/L
OW-55	9/16/2016	Copper, Total	0.0094	0.006	0.003	790000	mg/L
OW-55	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-55	9/16/2016	Arsenic, Dissolved	0.0074	0.001	0.00014	10000	mg/L
OW-55	9/16/2016	Barium, Dissolved	0.6	0.002	0.0013	2000000	mg/L
OW-55	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-55	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-55	9/16/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-55	9/16/2016	Iron, Dissolved	3.8	0.1	0.1	13821880	mg/L
OW-55	9/16/2016	Manganese, Dissolved	4.1	0.01	0.0016	2017400	mg/L
OW-55	9/16/2016	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
OW-55	9/16/2016	Selenium, Dissolved	0.0082	0.001	0.00021	50000	mg/L
OW-55	9/16/2016	Uranium, Dissolved	0.0074	0.0005	0.000051	NA	mg/L
OW-55	9/16/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
OW-55	9/16/2016	Iron, Total	13	0.4	0.4	13822000	mg/L
OW-55	9/16/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
OW-55	9/16/2016	Manganese, Total	5.2	0.04	0.0055	2017000	mg/L
OW-55	9/16/2016	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
OW-55	9/16/2016	Selenium, Total	0.0038	0.005	0.00094	50000	mg/L
OW-55	9/16/2016	Uranium, Total	0.0094	0.0005	0.00017	30000	mg/L
OW-55	9/16/2016	Zinc, Total	0.066	0.01	0.0027	5960000	mg/L
OW-55	11/9/2016	Silver, Total	0.0062	0.005	0.0015	50000	mg/L
OW-55	11/9/2016	Arsenic, Total	0.0077	0.001	0.00021	10000	mg/L
OW-55	11/9/2016	Barium, Total	0.85	0.002	0.00079	2000000	mg/L
OW-55	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	11/9/2016	Chromium, Total	0.0057	0.006	0.0027	50000	mg/L
OW-55	11/9/2016	Copper, Total	0.0032	0.006	0.003	790000	mg/L
OW-55	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-55	11/9/2016	Arsenic, Dissolved	0.0075	0.001	0.00014	10000	mg/L
OW-55	11/9/2016	Barium, Dissolved	0.62	0.002	0.0013	2000000	mg/L
OW-55	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-55	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-55	11/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-55	11/9/2016	Iron, Dissolved	3.8	0.2	0.2	13821880	mg/L
OW-55	11/9/2016	Manganese, Dissolved	4.4	0.02	0.0032	2017400	mg/L
OW-55	11/9/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
OW-55	11/9/2016	Selenium, Dissolved	0.0081	0.001	0.00021	50000	mg/L
OW-55	11/9/2016	Uranium, Dissolved	0.0074	0.0005	0.000051	NA	mg/L
OW-55	11/9/2016	Zinc, Dissolved	0.0094	0.01	0.0028	5960450	mg/L
OW-55	11/9/2016	Iron, Total	8.7	0.2	0.2	13822000	mg/L
OW-55	11/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-55	11/9/2016	Manganese, Total	4.5	0.02	0.0027	2017000	mg/L
OW-55	11/9/2016	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
OW-55	11/9/2016	Selenium, Total	0.0076	0.02	0.0037	50000	mg/L
OW-55	11/9/2016	Uranium, Total	0.007	0.0025	0.00087	30000	mg/L
OW-55	11/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-55	3/29/2017	Arsenic, Total	0.0079	0.001	0.00021	10000	mg/L
OW-55	3/29/2017	Barium, Total	0.81	0.002	0.00079	2000000	mg/L
OW-55	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	3/29/2017	Chromium, Total	0.012	0.006	0.0027	50000	mg/L
OW-55	3/29/2017	Copper, Total	0.01	0.006	0.003	790000	mg/L
OW-55	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-55	3/29/2017	Arsenic, Dissolved	0.0058	0.005	0.00089	10000	mg/L
OW-55	3/29/2017	Barium, Dissolved	0.63	0.002	0.00085	2000000	mg/L
OW-55	3/29/2017	Calcium, Dissolved	130	10	5	NA	mg/L
OW-55	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-55	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	3/29/2017	Iron, Dissolved	5	0.2	0.2	13821880	mg/L
OW-55	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-55	3/29/2017	Magnesium, Dissolved	35	1	0.5	NA	mg/L
OW-55	3/29/2017	Manganese, Dissolved	4.2	0.02	0.0038	2017400	mg/L
OW-55	3/29/2017	Sodium, Dissolved	410	10	5	NA	mg/L
OW-55	3/29/2017	Lead, Dissolved	0.00091	0.0005	0.00017	NA	mg/L
OW-55	3/29/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
OW-55	3/29/2017	Uranium, Dissolved	0.0047	0.0005	0.00005	NA	mg/L
OW-55	3/29/2017	Zinc, Dissolved	0.0083	0.01	0.0011	5960450	mg/L
OW-55	3/29/2017	Iron, Total	15	1	1	13822000	mg/L
OW-55	3/29/2017	Mercury, Total	0.000037	0.0002	0.000037	2000	mg/L
OW-55	3/29/2017	Manganese, Total	4.6	0.02	0.0027	2017000	mg/L
OW-55	3/29/2017	Lead, Total	0.018	0.0005	0.000081	15000	mg/L
OW-55	3/29/2017	Selenium, Total	0.0075	0.001	0.00019	50000	mg/L
OW-55	3/29/2017	Uranium, Total	0.0056	0.0005	0.00017	30000	mg/L
OW-55	3/29/2017	Zinc, Total	0.026	0.01	0.0027	5960000	mg/L
OW-55	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-55	6/21/2017	Arsenic, Total	0.0071	0.001	0.0003	10000	mg/L
OW-55	6/21/2017	Barium, Total	0.69	0.002	0.00093	2000000	mg/L
OW-55	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	6/21/2017	Chromium, Total	0.011	0.006	0.0011	50000	mg/L
OW-55	6/21/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
OW-55	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-55	6/21/2017	Arsenic, Dissolved	0.006	0.001	0.00018	10000	mg/L
OW-55	6/21/2017	Barium, Dissolved	0.56	0.002	0.00085	2000000	mg/L
OW-55	6/21/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
OW-55	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-55	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	6/21/2017	Iron, Dissolved	4.2	0.2	0.16	13821880	mg/L
OW-55	6/21/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	6/21/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-55	6/21/2017	Manganese, Dissolved	3.7	0.02	0.0038	2017400	mg/L
OW-55	6/21/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
OW-55	6/21/2017	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
OW-55	6/21/2017	Selenium, Dissolved	0.0056	0.001	0.00039	50000	mg/L
OW-55	6/21/2017	Uranium, Dissolved	0.004	0.0005	0.00005	NA	mg/L
OW-55	6/21/2017	Zinc, Dissolved	0.0082	0.01	0.0011	5960450	mg/L
OW-55	6/21/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
OW-55	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	6/21/2017	Manganese, Total	4.3	0.02	0.011	2017000	mg/L
OW-55	6/21/2017	Lead, Total	0.014	0.0025	0.00048	15000	mg/L
OW-55	6/21/2017	Selenium, Total	0.0041	0.001	0.00071	50000	mg/L
OW-55	6/21/2017	Uranium, Total	0.0063	0.0025	0.00077	30000	mg/L
OW-55	6/21/2017	Zinc, Total	0.023	0.01	0.0028	5960000	mg/L
OW-55	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	9/11/2017	Arsenic, Total	0.0082	0.001	0.0003	10000	mg/L
OW-55	9/11/2017	Barium, Total	1.1	0.02	0.0093	2000000	mg/L
OW-55	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	9/11/2017	Chromium, Total	0.019	0.006	0.0018	50000	mg/L
OW-55	9/11/2017	Copper, Total	0.017	0.006	0.0017	790000	mg/L
OW-55	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	9/11/2017	Arsenic, Dissolved	0.0075	0.001	0.00018	10000	mg/L
OW-55	9/11/2017	Barium, Dissolved	0.67	0.002	0.00085	2000000	mg/L
OW-55	9/11/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-55	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	9/11/2017	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
OW-55	9/11/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	9/11/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
OW-55	9/11/2017	Manganese, Dissolved	3.9	0.02	0.0039	2017400	mg/L
OW-55	9/11/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
OW-55	9/11/2017	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
OW-55	9/11/2017	Selenium, Dissolved	0.0086	0.001	0.00039	50000	mg/L
OW-55	9/11/2017	Uranium, Dissolved	0.0042	0.0005	0.00005	NA	mg/L
OW-55	9/11/2017	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
OW-55	9/11/2017	Iron, Total	23	1	0.51	13822000	mg/L
OW-55	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	9/11/2017	Manganese, Total	4.8	0.02	0.011	2017000	mg/L
OW-55	9/11/2017	Lead, Total	0.024	0.0025	0.00048	15000	mg/L
OW-55	9/11/2017	Selenium, Total	0.007	0.001	0.00071	50000	mg/L
OW-55	9/11/2017	Uranium, Total	0.0061	0.0005	0.00015	30000	mg/L
OW-55	9/11/2017	Zinc, Total	0.042	0.01	0.0033	5960000	mg/L
OW-55	12/6/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
OW-55	12/6/2017	Arsenic, Total	0.0053	0.001	0.00041	10000	mg/L
OW-55	12/6/2017	Barium, Total	0.51	0.002	0.001	2000000	mg/L
OW-55	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	12/6/2017	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-55	12/6/2017	Arsenic, Dissolved	0.0051	0.001	0.00042	10000	mg/L
OW-55	12/6/2017	Barium, Dissolved	0.48	0.002	0.00099	2000000	mg/L
OW-55	12/6/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-55	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	12/6/2017	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
OW-55	12/6/2017	Potassium, Dissolved	0.13	1	0.11	NA	mg/L
OW-55	12/6/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OW-55	12/6/2017	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
OW-55	12/6/2017	Sodium, Dissolved	380	5	0.82	NA	mg/L
OW-55	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	12/6/2017	Selenium, Dissolved	0.0047	0.005	0.0038	50000	mg/L
OW-55	12/6/2017	Uranium, Dissolved	0.0041	0.0005	0.000096	NA	mg/L
OW-55	12/6/2017	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-55	12/6/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
OW-55	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	12/6/2017	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
OW-55	12/6/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-55	12/6/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-55	12/6/2017	Uranium, Total	0.0043	0.0025	0.00077	30000	mg/L
OW-55	12/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	2/22/2018	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
OW-55	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-55	2/22/2018	Barium, Total	0.51	0.002	0.001	2000000	mg/L
OW-55	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-55	2/22/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-55	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-55	2/22/2018	Barium, Dissolved	0.46	0.01	0.0049	2000000	mg/L
OW-55	2/22/2018	Calcium, Dissolved	99	5	0.39	NA	mg/L
OW-55	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-55	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-55	2/22/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
OW-55	2/22/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OW-55	2/22/2018	Magnesium, Dissolved	31	5	1.2	NA	mg/L
OW-55	2/22/2018	Manganese, Dissolved	3.7	0.01	0.002	2017400	mg/L
OW-55	2/22/2018	Sodium, Dissolved	380	5	0.82	NA	mg/L
OW-55	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-55	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-55	2/22/2018	Uranium, Dissolved	0.0036	0.0025	0.00048	NA	mg/L
OW-55	2/22/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/22/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
OW-55	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	2/22/2018	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
OW-55	2/22/2018	Lead, Total	0.0006	0.0005	0.00023	15000	mg/L
OW-55	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-55	2/22/2018	Uranium, Total	0.0043	0.0005	0.000068	30000	mg/L
OW-55	2/22/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
OW-55	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	5/8/2018	Arsenic, Total	0.006	0.001	0.00041	10000	mg/L
OW-55	5/8/2018	Barium, Total	0.49	0.002	0.001	2000000	mg/L
OW-55	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	5/8/2018	Arsenic, Dissolved	0.0043	0.005	0.0021	10000	mg/L
OW-55	5/8/2018	Barium, Dissolved	0.52	0.002	0.00099	2000000	mg/L
OW-55	5/8/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-55	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	5/8/2018	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
OW-55	5/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	5/8/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	5/8/2018	Manganese, Dissolved	4	0.01	0.002	2017400	mg/L
OW-55	5/8/2018	Sodium, Dissolved	390	5	0.82	NA	mg/L
OW-55	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-55	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-55	5/8/2018	Uranium, Dissolved	0.0036	0.0025	0.00048	NA	mg/L
OW-55	5/8/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
OW-55	5/8/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
OW-55	5/8/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	5/8/2018	Manganese, Total	4.1	0.01	0.0055	2017000	mg/L
OW-55	5/8/2018	Lead, Total	0.00069	0.0005	0.00023	15000	mg/L
OW-55	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-55	5/8/2018	Uranium, Total	0.0046	0.0005	0.000068	30000	mg/L
OW-55	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	8/28/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
OW-55	8/28/2018	Arsenic, Total	0.007	0.001	0.00041	10000	mg/L
OW-55	8/28/2018	Barium, Total	0.55	0.002	0.001	2000000	mg/L
OW-55	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	8/28/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
OW-55	8/28/2018	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
OW-55	8/28/2018	Silver, Dissolved	0.003	0.005	0.0018	81200	mg/L
OW-55	8/28/2018	Arsenic, Dissolved	0.0044	0.001	0.00042	10000	mg/L
OW-55	8/28/2018	Barium, Dissolved	0.51	0.002	0.00099	2000000	mg/L
OW-55	8/28/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
OW-55	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	8/28/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
OW-55	8/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	8/28/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	8/28/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
OW-55	8/28/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
OW-55	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-55	8/28/2018	Uranium, Dissolved	0.0037	0.0005	0.000096	NA	mg/L
OW-55	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-55	8/28/2018	Iron, Total	6.8	0.2	0.1	13822000	mg/L
OW-55	8/28/2018	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
OW-55	8/28/2018	Manganese, Total	3.8	0.02	0.011	2017000	mg/L
OW-55	8/28/2018	Lead, Total	0.0039	0.0005	0.00023	15000	mg/L
OW-55	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-55	8/28/2018	Uranium, Total	0.0064	0.0025	0.00034	30000	mg/L
OW-55	8/28/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
OW-55	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	11/7/2018	Arsenic, Total	0.0063	0.005	0.0021	10000	mg/L
OW-55	11/7/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
OW-55	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	11/7/2018	Arsenic, Dissolved	0.0044	0.001	0.00042	10000	mg/L
OW-55	11/7/2018	Barium, Dissolved	0.5	0.002	0.00099	2000000	mg/L
OW-55	11/7/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
OW-55	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	11/7/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
OW-55	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	11/7/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	11/7/2018	Manganese, Dissolved	3.5	0.01	0.002	2017400	mg/L
OW-55	11/7/2018	Sodium, Dissolved	350	5	0.82	NA	mg/L
OW-55	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-55	11/7/2018	Uranium, Dissolved	0.0051	0.0005	0.000096	NA	mg/L
OW-55	11/7/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-55	11/7/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
OW-55	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	11/7/2018	Manganese, Total	3.6	0.01	0.0055	2017000	mg/L
OW-55	11/7/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
OW-55	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-55	11/7/2018	Uranium, Total	0.0056	0.0005	0.000068	30000	mg/L
OW-55	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-56	2/6/2019	Antimony, Dissolved	0.0003	0.001	0.000204	6000	mg/L
OW-56	2/6/2019	Arsenic, Dissolved	0.0021	0.001	0.000068	10000	mg/L
OW-56	2/6/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
OW-56	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	2/6/2019	Calcium, Dissolved	92	1	0.061889	NA	mg/L
OW-56	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	2/6/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
OW-56	2/6/2019	Iron, Dissolved	0.032	0.02	0.008747	13821880	mg/L
OW-56	2/6/2019	Lead, Dissolved	0.00019	0.0005	0.000047	NA	mg/L
OW-56	2/6/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	2/6/2019	Manganese, Dissolved	0.082	0.002	0.00029	2017400	mg/L
OW-56	2/6/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	2/6/2019	Selenium, Dissolved	0.00035	0.001	0.000203	50000	mg/L
OW-56	2/6/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-56	2/6/2019	Sodium, Dissolved	450	5	2.080881	NA	mg/L
OW-56	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-56	2/6/2019	Uranium, Dissolved	0.016	0.0005	0.00003	NA	mg/L
OW-56	2/6/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
OW-56	2/6/2019	Antimony, Total	0.00048	0.001	0.000157	6000	mg/L
OW-56	2/6/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
OW-56	2/6/2019	Barium, Total	0.42	0.002	0.000488	2000000	mg/L
OW-56	2/6/2019	Beryllium, Total	0.00067	0.002	0.000224	4000	mg/L
OW-56	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	2/6/2019	Chromium, Total	0.0038	0.006	0.0012	50000	mg/L
OW-56	2/6/2019	Copper, Total	0.0094	0.006	0.004072	790000	mg/L
OW-56	2/6/2019	Iron, Total	1.9	0.1	0.030263	13822000	mg/L
OW-56	2/6/2019	Lead, Total	0.0021	0.0005	0.000026	15000	mg/L
OW-56	2/6/2019	Manganese, Total	0.19	0.002	0.00006	2017000	mg/L
OW-56	2/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-56	2/6/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-56	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	2/6/2019	Uranium, Total	0.017	0.0005	0.000085	30000	mg/L
OW-56	2/6/2019	Zinc, Total	0.0086	0.01	0.005772	5960000	mg/L
OW-56	10/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-56	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-56	10/15/2019	Arsenic, Dissolved	0.0023	0.001	0.000101	10000	mg/L
OW-56	10/15/2019	Barium, Dissolved	0.32	0.002	0.000648	2000000	mg/L
OW-56	10/15/2019	Beryllium, Dissolved	0.00058	0.002	0.000284	4000	mg/L
OW-56	10/15/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
OW-56	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	10/15/2019	Calcium, Dissolved	88	1	0.061889	NA	mg/L
OW-56	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	10/15/2019	Copper, Dissolved	0.0086	0.006	0.001296	790000	mg/L
OW-56	10/15/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
OW-56	10/15/2019	Lead, Dissolved	0.000098	0.0005	0.000055	NA	mg/L
OW-56	10/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-56	10/15/2019	Manganese, Dissolved	0.081	0.002	0.00029	2017400	mg/L
OW-56	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	10/15/2019	Nickel, Dissolved	0.084	0.01	0.004009	372000	mg/L
OW-56	10/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-56	10/15/2019	Selenium, Dissolved	0.00034	0.001	0.000171	50000	mg/L
OW-56	10/15/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
OW-56	10/15/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
OW-56	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	10/15/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
OW-56	10/15/2019	Aluminum, Total	4.3	0.1	0.012441	19914000	mg/L
OW-56	10/15/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-56	10/15/2019	Arsenic, Total	0.0042	0.005	0.001561	10000	mg/L
OW-56	10/15/2019	Barium, Total	0.47	0.002	0.000648	2000000	mg/L
OW-56	10/15/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
OW-56	10/15/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
OW-56	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	10/15/2019	Chromium, Total	0.0034	0.006	0.001533	50000	mg/L
OW-56	10/15/2019	Cobalt, Total	0.0037	0.006	0.003091	5980	mg/L
OW-56	10/15/2019	Copper, Total	0.0047	0.006	0.004072	790000	mg/L
OW-56	10/15/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
OW-56	10/15/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
OW-56	10/15/2019	Manganese, Total	0.24	0.002	0.00029	2017000	mg/L
OW-56	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	10/15/2019	Nickel, Total	0.066	0.01	0.004009	372000	mg/L
OW-56	10/15/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-56	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-56	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	10/15/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
OW-56	5/2/2019	Aluminum, Dissolved	0.041	0.02	0.002488	19913930	mg/L
OW-56	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-56	5/2/2019	Arsenic, Dissolved	0.0015	0.005	0.000504	10000	mg/L
OW-56	5/2/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
OW-56	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	5/2/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-56	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	5/2/2019	Calcium, Dissolved	95	1	0.061889	NA	mg/L
OW-56	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	5/2/2019	Copper, Dissolved	0.0065	0.006	0.001296	790000	mg/L
OW-56	5/2/2019	Iron, Dissolved	0.041	0.02	0.008747	13821880	mg/L
OW-56	5/2/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-56	5/2/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	5/2/2019	Manganese, Dissolved	0.064	0.002	0.00029	2017400	mg/L
OW-56	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	5/2/2019	Nickel, Dissolved	0.077	0.01	0.004009	372000	mg/L
OW-56	5/2/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-56	5/2/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
OW-56	5/2/2019	Sodium, Dissolved	510	10	4.161763	NA	mg/L
OW-56	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-56	5/2/2019	Uranium, Dissolved	0.016	0.0025	0.000374	NA	mg/L
OW-56	5/2/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
OW-56	5/2/2019	Aluminum, Total	6.2	0.2	0.024883	19914000	mg/L
OW-56	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-56	5/2/2019	Arsenic, Total	0.0038	0.005	0.001561	10000	mg/L
OW-56	5/2/2019	Barium, Total	0.49	0.002	0.000648	2000000	mg/L
OW-56	5/2/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
OW-56	5/2/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-56	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	5/2/2019	Chromium, Total	0.0049	0.006	0.001533	50000	mg/L
OW-56	5/2/2019	Cobalt, Total	0.0045	0.006	0.003091	5980	mg/L
OW-56	5/2/2019	Copper, Total	0.0076	0.006	0.004072	790000	mg/L
OW-56	5/2/2019	Iron, Total	4	0.1	0.043734	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/2/2019	Lead, Total	0.0044	0.0025	0.000274	15000	mg/L
OW-56	5/2/2019	Manganese, Total	0.25	0.002	0.00029	2017000	mg/L
OW-56	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	5/2/2019	Nickel, Total	0.081	0.01	0.004009	372000	mg/L
OW-56	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-56	5/2/2019	Silver, Total	0.0014	0.005	0.001418	50000	mg/L
OW-56	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-56	5/2/2019	Uranium, Total	0.019	0.0025	0.000424	30000	mg/L
OW-56	5/2/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-56	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-56	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-56	8/21/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-56	8/21/2019	Barium, Dissolved	0.36	0.002	0.000648	2000000	mg/L
OW-56	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	8/21/2019	Boron, Dissolved	0.57	0.04	0.004531	3949110	mg/L
OW-56	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	8/21/2019	Calcium, Dissolved	91	1	0.061889	NA	mg/L
OW-56	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	8/21/2019	Copper, Dissolved	0.0082	0.006	0.001296	790000	mg/L
OW-56	8/21/2019	Iron, Dissolved	0.011	0.02	0.008747	13821880	mg/L
OW-56	8/21/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-56	8/21/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	8/21/2019	Manganese, Dissolved	0.068	0.002	0.00029	2017400	mg/L
OW-56	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	8/21/2019	Nickel, Dissolved	0.078	0.01	0.004009	372000	mg/L
OW-56	8/21/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	8/21/2019	Selenium, Dissolved	0.00037	0.001	0.000171	50000	mg/L
OW-56	8/21/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-56	8/21/2019	Sodium, Dissolved	520	10	4.161763	NA	mg/L
OW-56	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	8/21/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-56	8/21/2019	Zinc, Dissolved	0.0098	0.01	0.002252	5960450	mg/L
OW-56	8/21/2019	Aluminum, Total	3.9	0.2	0.024883	19914000	mg/L
OW-56	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-56	8/21/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-56	8/21/2019	Barium, Total	0.52	0.002	0.000648	2000000	mg/L
OW-56	8/21/2019	Beryllium, Total	0.00072	0.002	0.000284	4000	mg/L
OW-56	8/21/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
OW-56	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	8/21/2019	Chromium, Total	0.0032	0.006	0.001533	50000	mg/L
OW-56	8/21/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-56	8/21/2019	Copper, Total	0.0086	0.006	0.004072	790000	mg/L
OW-56	8/21/2019	Iron, Total	3	0.2	0.087469	13822000	mg/L
OW-56	8/21/2019	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
OW-56	8/21/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
OW-56	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	8/21/2019	Nickel, Total	0.08	0.01	0.004009	372000	mg/L
OW-56	8/21/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
OW-56	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-56	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	8/21/2019	Uranium, Total	0.017	0.0005	0.000085	30000	mg/L
OW-56	8/21/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
OW-56	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-56	3/2/2020	Arsenic, Dissolved	0.0023	0.001	0.0001	10000	mg/L
OW-56	3/2/2020	Lead, Dissolved	0.000091	0.0005	0.000055	NA	mg/L
OW-56	3/2/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
OW-56	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-56	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-56	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-56	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-56	3/2/2020	Iron, Dissolved	0.021	0.02	0.0087	13821880	mg/L
OW-56	3/2/2020	Magnesium, Dissolved	16	1	0.05	NA	mg/L
OW-56	3/2/2020	Potassium, Dissolved	0.92	1	0.16	NA	mg/L
OW-56	3/2/2020	Barium, Dissolved	0.3	0.01	0.0032	2000000	mg/L
OW-56	3/2/2020	Boron, Dissolved	0.49	0.2	0.023	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/2/2020	Cadmium, Dissolved	ND	0.01	0.0028	5000	mg/L
OW-56	3/2/2020	Calcium, Dissolved	82	5	0.31	NA	mg/L
OW-56	3/2/2020	Chromium, Dissolved	ND	0.03	0.0077	100000	mg/L
OW-56	3/2/2020	Cobalt, Dissolved	ND	0.03	0.015	5980	mg/L
OW-56	3/2/2020	Molybdenum, Dissolved	ND	0.04	0.034	98700	mg/L
OW-56	3/2/2020	Nickel, Dissolved	0.081	0.05	0.02	372000	mg/L
OW-56	3/2/2020	Silver, Dissolved	ND	0.025	0.0047	81200	mg/L
OW-56	3/2/2020	Sodium, Dissolved	480	5	2.1	NA	mg/L
OW-56	3/2/2020	Zinc, Dissolved	0.012	0.05	0.011	5960450	mg/L
OW-56	3/2/2020	Manganese, Dissolved	0.07	0.002	0.00029	2017400	mg/L
OW-56	3/2/2020	Uranium, Total	0.017	0.0025	0.00042	30000	mg/L
OW-56	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-56	3/2/2020	Arsenic, Total	0.0032	0.001	0.00031	10000	mg/L
OW-56	3/2/2020	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OW-56	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-56	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-56	3/2/2020	Barium, Total	0.47	0.002	0.00065	2000000	mg/L
OW-56	3/2/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
OW-56	3/2/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-56	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-56	3/2/2020	Chromium, Total	0.0029	0.006	0.0015	50000	mg/L
OW-56	3/2/2020	Cobalt, Total	0.0037	0.006	0.0031	5980	mg/L
OW-56	3/2/2020	Copper, Total	0.0055	0.006	0.0041	790000	mg/L
OW-56	3/2/2020	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
OW-56	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-56	3/2/2020	Nickel, Total	0.069	0.01	0.004	372000	mg/L
OW-56	3/2/2020	Silver, Total	0.0022	0.005	0.0014	50000	mg/L
OW-56	3/2/2020	Zinc, Total	0.0094	0.01	0.0058	5960000	mg/L
OW-56	3/2/2020	Aluminum, Total	2.3	0.1	0.012	19914000	mg/L
OW-56	3/2/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
OW-56	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-56	12/23/2020	Barium, Dissolved	0.476	0.01	0.003	2000000	mg/L
OW-56	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-56	12/23/2020	Boron, Dissolved	0.666	0.1	0.022	3949110	mg/L
OW-56	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-56	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-56	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-56	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-56	12/23/2020	Manganese, Dissolved	0.431	0.01	0.003	2017400	mg/L
OW-56	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-56	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-56	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-56	12/23/2020	Aluminum, Total	4.57	0.2	0.051	19914000	mg/L
OW-56	12/23/2020	Barium, Total	0.572	0.01	0.003	2000000	mg/L
OW-56	12/23/2020	Calcium, Total	66.8	0.5	0.084	NA	mg/L
OW-56	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-56	12/23/2020	Boron, Total	0.553	0.1	0.022	3949	mg/L
OW-56	12/23/2020	Potassium, Total	2.16	1	0.34	NA	mg/L
OW-56	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-56	12/23/2020	Magnesium, Total	13.5	0.5	0.12	NA	mg/L
OW-56	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-56	12/23/2020	Sodium, Total	340	2	0.92	NA	mg/L
OW-56	12/23/2020	Copper, Total	0.0298	0.02	0.008	790000	mg/L
OW-56	12/23/2020	Iron, Total	4.44	0.2	0.075	13822000	mg/L
OW-56	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-56	12/23/2020	Nickel, Total	0.0791	0.006	0.003	372000	mg/L
OW-56	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-56	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-56	12/23/2020	Iron, Dissolved	0.272	0.2	0.075	13821880	mg/L
OW-56	12/23/2020	Nickel, Dissolved	0.0861	0.006	0.003	372000	mg/L
OW-56	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-56	12/23/2020	Manganese, Total	0.846	0.01	0.003	2017000	mg/L
OW-56	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-56	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-56	12/23/2020	Arsenic, Total Recoverable	2.54	1	0.286	10	ug/L
OW-56	12/23/2020	Lead, Total Recoverable	1.19	1	0.133	15	ug/L
OW-56	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-56	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-56	12/23/2020	Uranium, Total Recoverable	14	5	1.12	30	ug/L
OW-56	12/23/2020	Arsenic, Dissolved	2.52	1	0.286	10	ug/L
OW-56	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-56	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-56	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-56	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-56	12/23/2020	Uranium, Dissolved	14.2	5	1.12	NA	ug/L
OW-56	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	9/11/2017	Chromium, Total	0.0096	0.006	0.0018	50000	mg/L
OW-56	9/11/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
OW-56	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	9/11/2017	Arsenic, Dissolved	0.0066	0.02	0.0035	10000	mg/L
OW-56	9/11/2017	Barium, Dissolved	0.36	0.002	0.00085	2000000	mg/L
OW-56	9/11/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
OW-56	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	9/11/2017	Chromium, Dissolved	0.0017	0.006	0.0013	100000	mg/L
OW-56	9/11/2017	Copper, Dissolved	0.0057	0.006	0.0032	790000	mg/L
OW-56	9/11/2017	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
OW-56	9/11/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	9/11/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	9/11/2017	Manganese, Dissolved	0.09	0.002	0.00039	2017400	mg/L
OW-56	9/11/2017	Sodium, Dissolved	490	10	1.6	NA	mg/L
OW-56	9/11/2017	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
OW-56	9/11/2017	Selenium, Dissolved	0.013	0.005	0.0019	50000	mg/L
OW-56	9/11/2017	Uranium, Dissolved	0.018	0.0025	0.00025	NA	mg/L
OW-56	9/11/2017	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
OW-56	9/11/2017	Iron, Total	7.4	0.2	0.1	13822000	mg/L
OW-56	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	9/11/2017	Manganese, Total	0.35	0.002	0.0011	2017000	mg/L
OW-56	9/11/2017	Lead, Total	0.0055	0.0005	0.000095	15000	mg/L
OW-56	9/11/2017	Selenium, Total	0.01	0.005	0.0036	50000	mg/L
OW-56	9/11/2017	Uranium, Total	0.024	0.0005	0.00015	30000	mg/L
OW-56	9/11/2017	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
OW-56	12/6/2017	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-56	12/6/2017	Arsenic, Total	0.0049	0.001	0.00041	10000	mg/L
OW-56	12/6/2017	Barium, Total	0.41	0.002	0.001	2000000	mg/L
OW-56	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	12/6/2017	Copper, Total	0.0094	0.006	0.0041	790000	mg/L
OW-56	12/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	12/6/2017	Arsenic, Dissolved	0.0046	0.005	0.0021	10000	mg/L
OW-56	12/6/2017	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
OW-56	12/6/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
OW-56	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	12/6/2017	Copper, Dissolved	0.009	0.006	0.0032	790000	mg/L
OW-56	12/6/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-56	12/6/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-56	12/6/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-56	12/6/2017	Manganese, Dissolved	0.048	0.002	0.00039	2017400	mg/L
OW-56	12/6/2017	Sodium, Dissolved	450	5	0.82	NA	mg/L
OW-56	12/6/2017	Lead, Dissolved	0.00038	0.0005	0.00017	NA	mg/L
OW-56	12/6/2017	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
OW-56	12/6/2017	Uranium, Dissolved	0.021	0.0005	0.000096	NA	mg/L
OW-56	12/6/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-56	12/6/2017	Iron, Total	1.1	0.1	0.051	13822000	mg/L
OW-56	12/6/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
OW-56	12/6/2017	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
OW-56	12/6/2017	Lead, Total	0.0012	0.0025	0.0011	15000	mg/L
OW-56	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-56	12/6/2017	Uranium, Total	0.021	0.0025	0.00077	30000	mg/L
OW-56	12/6/2017	Zinc, Total	0.0062	0.01	0.0033	5960000	mg/L
OW-56	2/22/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
OW-56	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-56	2/22/2018	Barium, Total	0.38	0.002	0.001	2000000	mg/L
OW-56	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-56	2/22/2018	Copper, Total	0.0098	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-56	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-56	2/22/2018	Barium, Dissolved	0.31	0.01	0.0049	2000000	mg/L
OW-56	2/22/2018	Calcium, Dissolved	81	5	0.39	NA	mg/L
OW-56	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-56	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-56	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-56	2/22/2018	Potassium, Dissolved	1.2	5	0.56	NA	mg/L
OW-56	2/22/2018	Magnesium, Dissolved	17	5	1.2	NA	mg/L
OW-56	2/22/2018	Manganese, Dissolved	0.032	0.01	0.002	2017400	mg/L
OW-56	2/22/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
OW-56	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-56	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-56	2/22/2018	Uranium, Dissolved	0.016	0.0025	0.00048	NA	mg/L
OW-56	2/22/2018	Zinc, Dissolved	0.0053	0.01	0.0021	5960450	mg/L
OW-56	2/22/2018	Iron, Total	1	0.1	0.051	13822000	mg/L
OW-56	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	2/22/2018	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-56	2/22/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
OW-56	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-56	2/22/2018	Uranium, Total	0.019	0.0005	0.000068	30000	mg/L
OW-56	2/22/2018	Zinc, Total	0.017	0.05	0.016	5960000	mg/L
OW-56	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	5/8/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-56	5/8/2018	Barium, Total	0.3	0.002	0.001	2000000	mg/L
OW-56	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	5/8/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
OW-56	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	5/8/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
OW-56	5/8/2018	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
OW-56	5/8/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
OW-56	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	5/8/2018	Copper, Dissolved	0.0083	0.006	0.0032	790000	mg/L
OW-56	5/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-56	5/8/2018	Potassium, Dissolved	1	1	0.11	NA	mg/L
OW-56	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	5/8/2018	Manganese, Dissolved	0.031	0.002	0.00039	2017400	mg/L
OW-56	5/8/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
OW-56	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-56	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-56	5/8/2018	Uranium, Dissolved	0.017	0.0025	0.00048	NA	mg/L
OW-56	5/8/2018	Zinc, Dissolved	0.0075	0.01	0.0021	5960450	mg/L
OW-56	5/8/2018	Iron, Total	0.48	0.02	0.01	13822000	mg/L
OW-56	5/8/2018	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
OW-56	5/8/2018	Manganese, Total	0.049	0.002	0.0011	2017000	mg/L
OW-56	5/8/2018	Lead, Total	0.00054	0.0005	0.00023	15000	mg/L
OW-56	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-56	5/8/2018	Uranium, Total	0.018	0.0005	0.000068	30000	mg/L
OW-56	5/8/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
OW-56	8/28/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-56	8/28/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
OW-56	8/28/2018	Barium, Total	0.57	0.002	0.001	2000000	mg/L
OW-56	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	8/28/2018	Chromium, Total	0.006	0.006	0.0018	50000	mg/L
OW-56	8/28/2018	Copper, Total	0.017	0.006	0.0041	790000	mg/L
OW-56	8/28/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L
OW-56	8/28/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
OW-56	8/28/2018	Barium, Dissolved	0.39	0.002	0.00099	2000000	mg/L
OW-56	8/28/2018	Calcium, Dissolved	85	1	0.078	NA	mg/L
OW-56	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	8/28/2018	Copper, Dissolved	0.0061	0.006	0.0032	790000	mg/L
OW-56	8/28/2018	Iron, Dissolved	0.6	0.02	0.016	13821880	mg/L
OW-56	8/28/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-56	8/28/2018	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-56	8/28/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Sodium, Dissolved	480	5	0.82	NA	mg/L
OW-56	8/28/2018	Lead, Dissolved	0.00058	0.0005	0.00017	NA	mg/L
OW-56	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-56	8/28/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-56	8/28/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-56	8/28/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
OW-56	8/28/2018	Mercury, Total	0.000063	0.0002	0.000038	2000	mg/L
OW-56	8/28/2018	Manganese, Total	0.44	0.002	0.0011	2017000	mg/L
OW-56	8/28/2018	Lead, Total	0.007	0.0005	0.00023	15000	mg/L
OW-56	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-56	8/28/2018	Uranium, Total	0.02	0.0025	0.00034	30000	mg/L
OW-56	8/28/2018	Zinc, Total	0.031	0.01	0.0033	5960000	mg/L
OW-56	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-56	11/7/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
OW-56	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	11/7/2018	Copper, Total	0.0071	0.006	0.0041	790000	mg/L
OW-56	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	11/7/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
OW-56	11/7/2018	Barium, Dissolved	0.45	0.002	0.00099	2000000	mg/L
OW-56	11/7/2018	Calcium, Dissolved	89	1	0.078	NA	mg/L
OW-56	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-56	11/7/2018	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
OW-56	11/7/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	11/7/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	11/7/2018	Manganese, Dissolved	0.18	0.002	0.00039	2017400	mg/L
OW-56	11/7/2018	Sodium, Dissolved	490	10	1.6	NA	mg/L
OW-56	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-56	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-56	11/7/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
OW-56	11/7/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
OW-56	11/7/2018	Iron, Total	2.7	0.1	0.051	13822000	mg/L
OW-56	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	11/7/2018	Manganese, Total	0.34	0.002	0.0011	2017000	mg/L
OW-56	11/7/2018	Lead, Total	0.0032	0.0005	0.00023	15000	mg/L
OW-56	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-56	11/7/2018	Uranium, Total	0.017	0.0025	0.00034	30000	mg/L
OW-56	11/7/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
OW-56	9/21/2020	Arsenic, Dissolved	0.0041	0.001	0.00021	10000	mg/L
OW-56	9/21/2020	Lead, Dissolved	0.000083	0.0005	0.000034	NA	mg/L
OW-56	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-56	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-56	9/21/2020	Uranium, Dissolved	0.015	0.0005	0.000065	NA	mg/L
OW-56	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-56	9/21/2020	Manganese, Dissolved	2.7	0.01	0.0029	2017400	mg/L
OW-56	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-56	9/21/2020	Barium, Dissolved	0.53	0.002	0.0011	2000000	mg/L
OW-56	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-56	9/21/2020	Boron, Dissolved	0.6	0.04	0.0067	3949110	mg/L
OW-56	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-56	9/21/2020	Cobalt, Dissolved	0.0057	0.006	0.0024	5980	mg/L
OW-56	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-56	9/21/2020	Iron, Dissolved	0.39	0.02	0.01	13821880	mg/L
OW-56	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-56	9/21/2020	Nickel, Dissolved	0.081	0.01	0.0033	372000	mg/L
OW-56	9/21/2020	Silver, Dissolved	0.0018	0.005	0.0013	81200	mg/L
OW-56	9/21/2020	Zinc, Dissolved	0.0082	0.01	0.006	5960450	mg/L
OW-56	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-56	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-56	9/21/2020	Arsenic, Total	0.0056	0.001	0.00026	10000	mg/L
OW-56	9/21/2020	Lead, Total	0.00084	0.0005	0.000034	15000	mg/L
OW-56	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-56	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-56	9/21/2020	Uranium, Total	0.02	0.0005	0.000065	30000	mg/L
OW-56	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-56	9/21/2020	Aluminum, Total	0.8	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/21/2020	Barium, Total	0.59	0.003	0.0016	2000000	mg/L
OW-56	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-56	9/21/2020	Boron, Total	0.62	0.04	0.0074	3949	mg/L
OW-56	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-56	9/21/2020	Cobalt, Total	0.0068	0.006	0.0024	5980	mg/L
OW-56	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-56	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-56	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-56	9/21/2020	Zinc, Total	0.014	0.01	0.0064	5960000	mg/L
OW-56	9/21/2020	Nickel, Total	0.086	0.01	0.0033	372000	mg/L
OW-56	9/21/2020	Iron, Total	1.3	0.25	0.064	13822000	mg/L
OW-56	9/21/2020	Manganese, Total	3.2	0.01	0.0041	2017000	mg/L
OW-56	9/16/2016	Selenium, Dissolved	0.0046	0.02	0.0042	50000	mg/L
OW-56	9/16/2016	Uranium, Dissolved	0.023	0.0005	0.000051	NA	mg/L
OW-56	9/16/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-56	9/16/2016	Iron, Total	0.33	0.02	0.02	13822000	mg/L
OW-56	9/16/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
OW-56	9/16/2016	Manganese, Total	0.42	0.002	0.00027	2017000	mg/L
OW-56	9/16/2016	Lead, Total	0.001	0.0005	0.000081	15000	mg/L
OW-56	9/16/2016	Selenium, Total	0.0046	0.01	0.0019	50000	mg/L
OW-56	9/16/2016	Uranium, Total	0.024	0.0025	0.00087	30000	mg/L
OW-56	9/16/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
OW-56	11/9/2016	Silver, Total	0.0044	0.005	0.0015	50000	mg/L
OW-56	11/9/2016	Arsenic, Total	0.0097	0.02	0.0042	10000	mg/L
OW-56	11/9/2016	Barium, Total	0.38	0.002	0.00079	2000000	mg/L
OW-56	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	11/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-56	11/9/2016	Copper, Total	0.0089	0.006	0.003	790000	mg/L
OW-56	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-56	11/9/2016	Arsenic, Dissolved	0.0045	0.02	0.0028	10000	mg/L
OW-56	11/9/2016	Barium, Dissolved	0.36	0.002	0.0013	2000000	mg/L
OW-56	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-56	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-56	11/9/2016	Copper, Dissolved	0.0058	0.006	0.004	790000	mg/L
OW-56	11/9/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
OW-56	11/9/2016	Manganese, Dissolved	0.26	0.002	0.00032	2017400	mg/L
OW-56	11/9/2016	Lead, Dissolved	0.00051	0.0005	0.00017	NA	mg/L
OW-56	11/9/2016	Selenium, Dissolved	0.011	0.005	0.0011	50000	mg/L
OW-56	11/9/2016	Uranium, Dissolved	0.021	0.0005	0.000051	NA	mg/L
OW-56	11/9/2016	Zinc, Dissolved	0.0077	0.01	0.0028	5960450	mg/L
OW-56	11/9/2016	Iron, Total	1.1	0.1	0.1	13822000	mg/L
OW-56	11/9/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
OW-56	11/9/2016	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
OW-56	11/9/2016	Lead, Total	0.002	0.0025	0.00041	15000	mg/L
OW-56	11/9/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
OW-56	11/9/2016	Uranium, Total	0.022	0.0025	0.00087	30000	mg/L
OW-56	11/9/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
OW-56	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-56	3/29/2017	Arsenic, Total	0.0074	0.005	0.0011	10000	mg/L
OW-56	3/29/2017	Barium, Total	0.46	0.002	0.00079	2000000	mg/L
OW-56	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	3/29/2017	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
OW-56	3/29/2017	Copper, Total	0.01	0.006	0.003	790000	mg/L
OW-56	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-56	3/29/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
OW-56	3/29/2017	Barium, Dissolved	0.3	0.002	0.00085	2000000	mg/L
OW-56	3/29/2017	Calcium, Dissolved	95	1	0.5	NA	mg/L
OW-56	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-56	3/29/2017	Copper, Dissolved	0.0066	0.006	0.0032	790000	mg/L
OW-56	3/29/2017	Iron, Dissolved	0.085	0.02	0.02	13821880	mg/L
OW-56	3/29/2017	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
OW-56	3/29/2017	Magnesium, Dissolved	18	1	0.5	NA	mg/L
OW-56	3/29/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
OW-56	3/29/2017	Sodium, Dissolved	490	10	5	NA	mg/L
OW-56	3/29/2017	Lead, Dissolved	0.00041	0.0005	0.00017	NA	mg/L
OW-56	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-56	3/29/2017	Uranium, Dissolved	0.022	0.0005	0.00005	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	Zinc, Dissolved	0.039	0.01	0.0011	5960450	mg/L
OW-56	3/29/2017	Iron, Total	6.4	0.2	0.2	13822000	mg/L
OW-56	3/29/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
OW-56	3/29/2017	Manganese, Total	0.33	0.002	0.00027	2017000	mg/L
OW-56	3/29/2017	Lead, Total	0.0069	0.0005	0.000081	15000	mg/L
OW-56	3/29/2017	Selenium, Total	0.013	0.005	0.00094	50000	mg/L
OW-56	3/29/2017	Uranium, Total	0.022	0.0025	0.00087	30000	mg/L
OW-56	3/29/2017	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
OW-56	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-56	6/21/2017	Arsenic, Total	0.0073	0.005	0.0015	10000	mg/L
OW-56	6/21/2017	Barium, Total	0.39	0.002	0.00093	2000000	mg/L
OW-56	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	6/21/2017	Chromium, Total	0.0072	0.006	0.0011	50000	mg/L
OW-56	6/21/2017	Copper, Total	0.016	0.006	0.0017	790000	mg/L
OW-56	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-56	6/21/2017	Arsenic, Dissolved	0.0054	0.01	0.0018	10000	mg/L
OW-56	6/21/2017	Barium, Dissolved	0.26	0.002	0.00085	2000000	mg/L
OW-56	6/21/2017	Calcium, Dissolved	89	1	0.078	NA	mg/L
OW-56	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	6/21/2017	Chromium, Dissolved	0.0014	0.006	0.001	100000	mg/L
OW-56	6/21/2017	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
OW-56	6/21/2017	Iron, Dissolved	0.026	0.02	0.016	13821880	mg/L
OW-56	6/21/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	6/21/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	6/21/2017	Manganese, Dissolved	0.073	0.002	0.00038	2017400	mg/L
OW-56	6/21/2017	Sodium, Dissolved	500	10	1.6	NA	mg/L
OW-56	6/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-56	6/21/2017	Selenium, Dissolved	0.014	0.02	0.0077	50000	mg/L
OW-56	6/21/2017	Uranium, Dissolved	0.021	0.0005	0.00005	NA	mg/L
OW-56	6/21/2017	Zinc, Dissolved	0.063	0.01	0.0011	5960450	mg/L
OW-56	6/21/2017	Iron, Total	5.2	0.2	0.1	13822000	mg/L
OW-56	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	6/21/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
OW-56	6/21/2017	Lead, Total	0.005	0.0025	0.00048	15000	mg/L
OW-56	6/21/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
OW-56	6/21/2017	Uranium, Total	0.023	0.0025	0.00077	30000	mg/L
OW-56	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
OW-56	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	9/11/2017	Arsenic, Total	0.0074	0.005	0.0015	10000	mg/L
OW-56	9/11/2017	Barium, Total	0.62	0.01	0.0047	2000000	mg/L
OW-56	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-56	9/16/2016	Arsenic, Total	0.0046	0.01	0.0021	10000	mg/L
OW-56	9/16/2016	Barium, Total	0.37	0.002	0.00079	2000000	mg/L
OW-56	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	9/16/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-56	9/16/2016	Copper, Total	0.0049	0.006	0.003	790000	mg/L
OW-56	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-56	9/16/2016	Arsenic, Dissolved	0.0049	0.005	0.00069	10000	mg/L
OW-56	9/16/2016	Barium, Dissolved	0.36	0.002	0.0013	2000000	mg/L
OW-56	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-56	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-56	9/16/2016	Copper, Dissolved	0.0047	0.006	0.004	790000	mg/L
OW-56	9/16/2016	Iron, Dissolved	0.078	0.02	0.02	13821880	mg/L
OW-56	9/16/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
OW-56	9/16/2016	Lead, Dissolved	0.00046	0.0005	0.00017	NA	mg/L
OW-57	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-57	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-57	9/18/2020	Arsenic, Total	0.0041	0.001	0.00026	10000	mg/L
OW-57	9/18/2020	Lead, Total	0.0023	0.0005	0.000034	15000	mg/L
OW-57	9/18/2020	Selenium, Total	0.00089	0.001	0.00066	50000	mg/L
OW-57	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-57	9/18/2020	Uranium, Total	0.00048	0.0005	0.000065	30000	mg/L
OW-57	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-57	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-57	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-57	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-57	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-57	9/18/2020	Nickel, Total	0.071	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/18/2020	Silver, Total	0.0013	0.005	0.0013	50000	mg/L
OW-57	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-57	9/18/2020	Aluminum, Total	5.4	0.2	0.074	19914000	mg/L
OW-57	9/18/2020	Barium, Total	4	0.03	0.016	2000000	mg/L
OW-57	9/18/2020	Iron, Total	6.3	0.5	0.13	13822000	mg/L
OW-57	9/18/2020	Manganese, Total	2.5	0.02	0.0081	2017000	mg/L
OW-57	9/18/2020	Boron, Total	0.27	0.04	0.0074	3949	mg/L
OW-57	9/18/2020	Arsenic, Dissolved	0.0031	0.001	0.00021	10000	mg/L
OW-57	9/18/2020	Lead, Dissolved	0.000043	0.0005	0.000034	NA	mg/L
OW-57	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-57	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-57	9/18/2020	Uranium, Dissolved	0.0003	0.0005	0.000065	NA	mg/L
OW-57	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-57	9/18/2020	Barium, Dissolved	3.8	0.01	0.0056	2000000	mg/L
OW-57	9/18/2020	Iron, Dissolved	2.9	0.1	0.052	13821880	mg/L
OW-57	9/18/2020	Manganese, Dissolved	2	0.01	0.0029	2017400	mg/L
OW-57	9/18/2020	Nickel, Dissolved	0.073	0.05	0.016	372000	mg/L
OW-57	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-57	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-57	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-57	9/18/2020	Boron, Dissolved	0.26	0.04	0.0067	3949110	mg/L
OW-57	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-57	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-57	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-57	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-57	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-57	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
OW-57	10/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-57	10/1/2016	Arsenic, Total	0.0087	0.02	0.0042	10000	mg/L
OW-57	10/1/2016	Barium, Total	3	0.01	0.0066	2000000	mg/L
OW-57	10/1/2016	Beryllium, Total	0.00051	0.002	0.00036	4000	mg/L
OW-57	10/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	10/1/2016	Cobalt, Total	0.012	0.006	0.0017	5980	mg/L
OW-57	10/1/2016	Chromium, Total	0.0045	0.006	0.0027	50000	mg/L
OW-57	10/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-57	10/1/2016	Arsenic, Dissolved	0.0041	0.005	0.00069	10000	mg/L
OW-57	10/1/2016	Barium, Dissolved	2.1	0.01	0.0066	2000000	mg/L
OW-57	10/1/2016	Beryllium, Dissolved	ND	0.002	0.00031	4000	mg/L
OW-57	10/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-57	10/1/2016	Cobalt, Dissolved	0.0083	0.006	0.00074	5980	mg/L
OW-57	10/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-57	10/1/2016	Iron, Dissolved	0.74	0.02	0.02	13821880	mg/L
OW-57	10/1/2016	Manganese, Dissolved	2.1	0.01	0.0016	2017400	mg/L
OW-57	10/1/2016	Nickel, Dissolved	0.08	0.01	0.0024	372000	mg/L
OW-57	10/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	10/1/2016	Antimony, Dissolved	ND	0.001	0.00047	6000	mg/L
OW-57	10/1/2016	Selenium, Dissolved	0.0082	0.02	0.0042	50000	mg/L
OW-57	10/1/2016	Vanadium, Dissolved	0.0049	0.05	0.0013	63100	mg/L
OW-57	10/1/2016	Zinc, Dissolved	0.0053	0.01	0.0028	5960450	mg/L
OW-57	10/1/2016	Iron, Total	9.1	0.2	0.2	13822000	mg/L
OW-57	10/1/2016	Mercury, Total	0.00014	0.0002	0.000053	2000	mg/L
OW-57	10/1/2016	Manganese, Total	3.5	0.01	0.0016	2017000	mg/L
OW-57	10/1/2016	Nickel, Total	0.084	0.01	0.0031	372000	mg/L
OW-57	10/1/2016	Lead, Total	0.0093	0.0005	0.00017	15000	mg/L
OW-57	10/1/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-57	10/1/2016	Selenium, Total	0.013	0.005	0.0011	50000	mg/L
OW-57	10/1/2016	Vanadium, Total	0.017	0.05	0.0013	63100	mg/L
OW-57	10/1/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
OW-57	11/8/2016	Silver, Total	0.004	0.005	0.0015	50000	mg/L
OW-57	11/8/2016	Arsenic, Total	0.0046	0.02	0.0042	10000	mg/L
OW-57	11/8/2016	Barium, Total	2.4	0.01	0.004	2000000	mg/L
OW-57	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-57	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-57	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-57	11/8/2016	Arsenic, Dissolved	0.0051	0.02	0.0028	10000	mg/L
OW-57	11/8/2016	Barium, Dissolved	2.4	0.01	0.0066	2000000	mg/L
OW-57	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-57	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-57	11/8/2016	Iron, Dissolved	1.6	0.1	0.1	13821880	mg/L
OW-57	11/8/2016	Manganese, Dissolved	2.3	0.01	0.0016	2017400	mg/L
OW-57	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	11/8/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
OW-57	11/8/2016	Uranium, Dissolved	0.0047	0.0005	0.000051	NA	mg/L
OW-57	11/8/2016	Zinc, Dissolved	0.0037	0.01	0.0028	5960450	mg/L
OW-57	11/8/2016	Iron, Total	4.6	0.1	0.1	13822000	mg/L
OW-57	11/8/2016	Mercury, Total	0.000057	0.0002	0.000053	2000	mg/L
OW-57	11/8/2016	Manganese, Total	2.5	0.01	0.0014	2017000	mg/L
OW-57	11/8/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
OW-57	11/8/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
OW-57	11/8/2016	Uranium, Total	0.0053	0.0005	0.00017	30000	mg/L
OW-57	11/8/2016	Zinc, Total	0.0089	0.01	0.0027	5960000	mg/L
OW-57	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-57	3/30/2017	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
OW-57	3/30/2017	Barium, Total	2.4	0.02	0.0079	2000000	mg/L
OW-57	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	3/30/2017	Chromium, Total	0.0061	0.006	0.0027	50000	mg/L
OW-57	3/30/2017	Copper, Total	0.0069	0.006	0.003	790000	mg/L
OW-57	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-57	3/30/2017	Arsenic, Dissolved	0.0084	0.005	0.00089	10000	mg/L
OW-57	3/30/2017	Barium, Dissolved	1.4	0.02	0.0085	2000000	mg/L
OW-57	3/30/2017	Calcium, Dissolved	39	1	0.5	NA	mg/L
OW-57	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	3/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-57	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	3/30/2017	Iron, Dissolved	0.5	0.02	0.02	13821880	mg/L
OW-57	3/30/2017	Potassium, Dissolved	4.8	1	0.5	NA	mg/L
OW-57	3/30/2017	Magnesium, Dissolved	6.2	1	0.5	NA	mg/L
OW-57	3/30/2017	Manganese, Dissolved	0.69	0.002	0.00038	2017400	mg/L
OW-57	3/30/2017	Sodium, Dissolved	260	10	5	NA	mg/L
OW-57	3/30/2017	Lead, Dissolved	0.00053	0.0005	0.00017	NA	mg/L
OW-57	3/30/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-57	3/30/2017	Uranium, Dissolved	0.0028	0.0005	0.00005	NA	mg/L
OW-57	3/30/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
OW-57	3/30/2017	Iron, Total	6.3	0.2	0.2	13822000	mg/L
OW-57	3/30/2017	Mercury, Total	0.000062	0.0002	0.000037	2000	mg/L
OW-57	3/30/2017	Manganese, Total	2.5	0.02	0.0027	2017000	mg/L
OW-57	3/30/2017	Lead, Total	0.0092	0.0005	0.000081	15000	mg/L
OW-57	3/30/2017	Selenium, Total	0.013	0.005	0.00094	50000	mg/L
OW-57	3/30/2017	Uranium, Total	0.0042	0.0005	0.00017	30000	mg/L
OW-57	3/30/2017	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
OW-57	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-57	6/21/2017	Arsenic, Total	0.0083	0.005	0.0015	10000	mg/L
OW-57	6/21/2017	Barium, Total	3.3	0.01	0.0047	2000000	mg/L
OW-57	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	6/21/2017	Chromium, Total	0.0017	0.006	0.0011	50000	mg/L
OW-57	6/21/2017	Copper, Total	0.0053	0.006	0.0017	790000	mg/L
OW-57	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-57	6/21/2017	Arsenic, Dissolved	0.0067	0.01	0.0018	10000	mg/L
OW-57	6/21/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
OW-57	6/21/2017	Calcium, Dissolved	98	1	0.078	NA	mg/L
OW-57	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-57	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	6/21/2017	Iron, Dissolved	1.3	0.2	0.16	13821880	mg/L
OW-57	6/21/2017	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
OW-57	6/21/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-57	6/21/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
OW-57	6/21/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-57	6/21/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
OW-57	6/21/2017	Selenium, Dissolved	0.013	0.02	0.0077	50000	mg/L
OW-57	6/21/2017	Uranium, Dissolved	0.0025	0.0005	0.00005	NA	mg/L
OW-57	6/21/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OW-57	6/21/2017	Iron, Total	4.5	0.2	0.1	13822000	mg/L
OW-57	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	6/21/2017	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
OW-57	6/21/2017	Lead, Total	0.0039	0.0025	0.00048	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-57	6/21/2017	Uranium, Total	0.0026	0.0025	0.00077	30000	mg/L
OW-57	6/21/2017	Zinc, Total	0.0082	0.01	0.0028	5960000	mg/L
OW-57	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-57	9/19/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
OW-57	9/19/2017	Barium, Total	3.9	0.02	0.0093	2000000	mg/L
OW-57	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	9/19/2017	Chromium, Total	0.0038	0.006	0.0018	50000	mg/L
OW-57	9/19/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
OW-57	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-57	9/19/2017	Arsenic, Dissolved	0.0077	0.005	0.00089	10000	mg/L
OW-57	9/19/2017	Barium, Dissolved	3.4	0.02	0.0085	2000000	mg/L
OW-57	9/19/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	9/19/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	9/19/2017	Iron, Dissolved	6.4	0.2	0.16	13821880	mg/L
OW-57	9/19/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
OW-57	9/19/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	9/19/2017	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-57	9/19/2017	Sodium, Dissolved	310	10	1.6	NA	mg/L
OW-57	9/19/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	9/19/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-57	9/19/2017	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
OW-57	9/19/2017	Iron, Total	8.6	0.2	0.1	13822000	mg/L
OW-57	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	9/19/2017	Manganese, Total	2.9	0.02	0.011	2017000	mg/L
OW-57	9/19/2017	Lead, Total	0.0046	0.0005	0.000095	15000	mg/L
OW-57	9/19/2017	Selenium, Total	0.019	0.005	0.0036	50000	mg/L
OW-57	9/19/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
OW-57	12/6/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-57	12/6/2017	Arsenic, Total	0.006	0.001	0.00041	10000	mg/L
OW-57	12/6/2017	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-57	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	12/6/2017	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-57	12/6/2017	Arsenic, Dissolved	0.0062	0.01	0.0042	10000	mg/L
OW-57	12/6/2017	Barium, Dissolved	3.2	0.01	0.0049	2000000	mg/L
OW-57	12/6/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	12/6/2017	Iron, Dissolved	2	0.1	0.082	13821880	mg/L
OW-57	12/6/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-57	12/6/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	12/6/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	12/6/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
OW-57	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	12/6/2017	Selenium, Dissolved	0.0077	0.01	0.0076	50000	mg/L
OW-57	12/6/2017	Uranium, Dissolved	0.00089	0.0005	0.000096	NA	mg/L
OW-57	12/6/2017	Zinc, Dissolved	0.0091	0.01	0.0021	5960450	mg/L
OW-57	12/6/2017	Iron, Total	4.2	0.1	0.051	13822000	mg/L
OW-57	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	12/6/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-57	12/6/2017	Lead, Total	0.0012	0.0025	0.0011	15000	mg/L
OW-57	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-57	12/6/2017	Uranium, Total	0.00089	0.0025	0.00077	30000	mg/L
OW-57	12/6/2017	Zinc, Total	0.0042	0.01	0.0033	5960000	mg/L
OW-57	2/20/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-57	2/20/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-57	2/20/2018	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-57	2/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	2/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	2/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	2/20/2018	Silver, Dissolved	0.0031	0.005	0.0018	81200	mg/L
OW-57	2/20/2018	Arsenic, Dissolved	0.0045	0.005	0.0021	10000	mg/L
OW-57	2/20/2018	Barium, Dissolved	3.5	0.01	0.0049	2000000	mg/L
OW-57	2/20/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	2/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	2/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	2/20/2018	Iron, Dissolved	2.6	0.1	0.082	13821880	mg/L
OW-57	2/20/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
OW-57	2/20/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	2/20/2018	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	2/20/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
OW-57	2/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	2/20/2018	Selenium, Dissolved	0.0047	0.005	0.0038	50000	mg/L
OW-57	2/20/2018	Uranium, Dissolved	0.00062	0.0005	0.000096	NA	mg/L
OW-57	2/20/2018	Zinc, Dissolved	0.0063	0.01	0.0021	5960450	mg/L
OW-57	2/20/2018	Iron, Total	5.3	0.2	0.1	13822000	mg/L
OW-57	2/20/2018	Mercury, Total	0.000081	0.0002	0.000037	2000	mg/L
OW-57	2/20/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
OW-57	2/20/2018	Lead, Total	0.0016	0.0025	0.0011	15000	mg/L
OW-57	2/20/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-57	2/20/2018	Uranium, Total	0.00069	0.0025	0.00034	30000	mg/L
OW-57	2/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-57	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-57	5/8/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-57	5/8/2018	Barium, Total	4.2	0.02	0.01	2000000	mg/L
OW-57	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	5/8/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-57	5/8/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-57	5/8/2018	Barium, Dissolved	3.8	0.02	0.0099	2000000	mg/L
OW-57	5/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-57	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	5/8/2018	Iron, Dissolved	2.8	0.2	0.16	13821880	mg/L
OW-57	5/8/2018	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
OW-57	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	5/8/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-57	5/8/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-57	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-57	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-57	5/8/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
OW-57	5/8/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
OW-57	5/8/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
OW-57	5/8/2018	Mercury, Total	0.000044	0.0002	0.000037	2000	mg/L
OW-57	5/8/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L
OW-57	5/8/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
OW-57	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	5/8/2018	Uranium, Total	0.00065	0.0005	0.000068	30000	mg/L
OW-57	5/8/2018	Zinc, Total	0.0046	0.01	0.0033	5960000	mg/L
OW-57	8/28/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
OW-57	8/28/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-57	8/28/2018	Barium, Total	3.9	0.01	0.005	2000000	mg/L
OW-57	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	8/28/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
OW-57	8/28/2018	Arsenic, Dissolved	0.004	0.001	0.00042	10000	mg/L
OW-57	8/28/2018	Barium, Dissolved	3.6	0.01	0.0049	2000000	mg/L
OW-57	8/28/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	8/28/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
OW-57	8/28/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
OW-57	8/28/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	8/28/2018	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	8/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-57	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-57	8/28/2018	Uranium, Dissolved	0.00042	0.0005	0.000096	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-57	8/28/2018	Iron, Total	6.9	0.2	0.1	13822000	mg/L
OW-57	8/28/2018	Mercury, Total	0.00007	0.0002	0.000038	2000	mg/L
OW-57	8/28/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
OW-57	8/28/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-57	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	8/28/2018	Uranium, Total	0.00056	0.0005	0.000068	30000	mg/L
OW-57	8/28/2018	Zinc, Total	0.0073	0.01	0.0033	5960000	mg/L
OW-57	11/29/2018	Silver, Total	0.0035	0.005	0.0012	50000	mg/L
OW-57	11/29/2018	Arsenic, Total	0.0051	0.001	0.00041	10000	mg/L
OW-57	11/29/2018	Barium, Total	4.7	0.02	0.01	2000000	mg/L
OW-57	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	11/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	11/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-57	11/29/2018	Arsenic, Dissolved	0.004	0.001	0.00042	10000	mg/L
OW-57	11/29/2018	Barium, Dissolved	4	0.02	0.0099	2000000	mg/L
OW-57	11/29/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-57	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	11/29/2018	Iron, Dissolved	3.4	0.2	0.16	13821880	mg/L
OW-57	11/29/2018	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
OW-57	11/29/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	11/29/2018	Manganese, Dissolved	2.3	0.02	0.0039	2017400	mg/L
OW-57	11/29/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-57	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-57	11/29/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-57	11/29/2018	Iron, Total	6.9	0.2	0.1	13822000	mg/L
OW-57	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	11/29/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L
OW-57	11/29/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
OW-57	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	11/29/2018	Zinc, Total	0.0033	0.01	0.0033	5960000	mg/L
OW-57	12/23/2020	Arsenic, Total Recoverable	3.01	1	0.286	10	ug/L
OW-57	12/23/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-57	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-57	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-57	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-57	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-57	12/23/2020	Arsenic, Dissolved	2.79	1	0.286	10	ug/L
OW-57	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-57	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-57	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-57	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-57	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-57	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-57	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-57	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-57	12/23/2020	Barium, Dissolved	3.69	0.01	0.003	2000000	mg/L
OW-57	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-57	12/23/2020	Boron, Dissolved	0.302	0.1	0.022	3949110	mg/L
OW-57	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-57	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-57	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-57	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-57	12/23/2020	Manganese, Dissolved	2.08	0.01	0.003	2017400	mg/L
OW-57	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-57	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-57	12/23/2020	Zinc, Dissolved	0.0351	0.02	0.008	5960450	mg/L
OW-57	12/23/2020	Aluminum, Total	24.5	0.2	0.051	19914000	mg/L
OW-57	12/23/2020	Barium, Total	4.74	0.01	0.003	2000000	mg/L
OW-57	12/23/2020	Calcium, Total	146	0.5	0.084	NA	mg/L
OW-57	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-57	12/23/2020	Boron, Total	0.262	0.1	0.022	3949	mg/L
OW-57	12/23/2020	Potassium, Total	3.49	1	0.34	NA	mg/L
OW-57	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-57	12/23/2020	Magnesium, Total	20.6	0.5	0.12	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/23/2020	Chromium, Total	0.0128	0.01	0.005	50000	mg/L
OW-57	12/23/2020	Sodium, Total	237	2	0.92	NA	mg/L
OW-57	12/23/2020	Copper, Total	0.0211	0.02	0.008	790000	mg/L
OW-57	12/23/2020	Iron, Total	17.4	0.2	0.075	13822000	mg/L
OW-57	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-57	12/23/2020	Nickel, Total	0.0788	0.006	0.003	372000	mg/L
OW-57	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-57	12/23/2020	Zinc, Total	0.0227	0.02	0.008	5960000	mg/L
OW-57	12/23/2020	Iron, Dissolved	2.77	0.2	0.075	13821880	mg/L
OW-57	12/23/2020	Nickel, Dissolved	0.0806	0.006	0.003	372000	mg/L
OW-57	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-57	12/23/2020	Manganese, Total	3.99	0.01	0.003	2017000	mg/L
OW-57	8/21/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
OW-57	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	8/21/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
OW-57	8/21/2019	Barium, Dissolved	3.8	0.01	0.003242	2000000	mg/L
OW-57	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	8/21/2019	Boron, Dissolved	0.29	0.04	0.004531	3949110	mg/L
OW-57	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	8/21/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	8/21/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
OW-57	8/21/2019	Iron, Dissolved	4.1	0.1	0.043734	13821880	mg/L
OW-57	8/21/2019	Lead, Dissolved	0.000071	0.0005	0.000055	NA	mg/L
OW-57	8/21/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-57	8/21/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
OW-57	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	8/21/2019	Nickel, Dissolved	0.082	0.01	0.004009	372000	mg/L
OW-57	8/21/2019	Potassium, Dissolved	0.94	1	0.162288	NA	mg/L
OW-57	8/21/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-57	8/21/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
OW-57	8/21/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-57	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	8/21/2019	Uranium, Dissolved	0.00026	0.0005	0.000075	NA	mg/L
OW-57	8/21/2019	Zinc, Dissolved	0.0068	0.01	0.002252	5960450	mg/L
OW-57	8/21/2019	Aluminum, Total	13	1	0.124414	19914000	mg/L
OW-57	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	8/21/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
OW-57	8/21/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
OW-57	8/21/2019	Beryllium, Total	0.00077	0.002	0.000284	4000	mg/L
OW-57	8/21/2019	Boron, Total	0.28	0.04	0.004531	3949	mg/L
OW-57	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	8/21/2019	Chromium, Total	0.005	0.006	0.001533	50000	mg/L
OW-57	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	8/21/2019	Copper, Total	0.0082	0.006	0.004072	790000	mg/L
OW-57	8/21/2019	Iron, Total	10	1	0.437344	13822000	mg/L
OW-57	8/21/2019	Lead, Total	0.007	0.0005	0.000055	15000	mg/L
OW-57	8/21/2019	Manganese, Total	3.8	0.01	0.00145	2017000	mg/L
OW-57	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	8/21/2019	Nickel, Total	0.09	0.05	0.020043	372000	mg/L
OW-57	8/21/2019	Selenium, Total	0.003	0.001	0.000478	50000	mg/L
OW-57	8/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-57	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	8/21/2019	Uranium, Total	0.00092	0.0005	0.000085	30000	mg/L
OW-57	8/21/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OW-57	11/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-57	11/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	11/5/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-57	11/5/2019	Barium, Dissolved	4	0.01	0.003242	2000000	mg/L
OW-57	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	11/5/2019	Boron, Dissolved	0.29	0.04	0.004531	3949110	mg/L
OW-57	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	11/5/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-57	11/5/2019	Iron, Dissolved	3.3	0.1	0.043734	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	11/5/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
OW-57	11/5/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
OW-57	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	11/5/2019	Nickel, Dissolved	0.079	0.01	0.004009	372000	mg/L
OW-57	11/5/2019	Potassium, Dissolved	0.58	1	0.162288	NA	mg/L
OW-57	11/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-57	11/5/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OW-57	11/5/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-57	11/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	11/5/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
OW-57	11/5/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
OW-57	11/5/2019	Aluminum, Total	14	0.4	0.049765	19914000	mg/L
OW-57	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	11/5/2019	Arsenic, Total	0.0047	0.001	0.000312	10000	mg/L
OW-57	11/5/2019	Barium, Total	4.7	0.04	0.012968	2000000	mg/L
OW-57	11/5/2019	Beryllium, Total	0.00085	0.002	0.000284	4000	mg/L
OW-57	11/5/2019	Boron, Total	0.28	0.04	0.004531	3949	mg/L
OW-57	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	11/5/2019	Chromium, Total	0.0028	0.006	0.001533	50000	mg/L
OW-57	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	11/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	11/5/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
OW-57	11/5/2019	Lead, Total	0.008	0.0005	0.000055	15000	mg/L
OW-57	11/5/2019	Manganese, Total	4.1	0.04	0.005799	2017000	mg/L
OW-57	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	11/5/2019	Nickel, Total	0.084	0.01	0.004009	372000	mg/L
OW-57	11/5/2019	Selenium, Total	0.002	0.001	0.000478	50000	mg/L
OW-57	11/5/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
OW-57	11/5/2019	Thallium, Total	0.000057	0.0005	0.000052	2000	mg/L
OW-57	11/5/2019	Uranium, Total	0.00086	0.0005	0.000085	30000	mg/L
OW-57	11/5/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
OW-57	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-57	3/5/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-57	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	3/5/2020	Uranium, Total	0.00045	0.0005	0.000085	30000	mg/L
OW-57	3/5/2020	Arsenic, Total	0.0043	0.005	0.0016	10000	mg/L
OW-57	3/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-57	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-57	3/5/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
OW-57	3/5/2020	Boron, Total	0.3	0.04	0.0045	3949	mg/L
OW-57	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-57	3/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-57	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-57	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-57	3/5/2020	Nickel, Total	0.085	0.01	0.004	372000	mg/L
OW-57	3/5/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
OW-57	3/5/2020	Zinc, Total	0.0083	0.01	0.0058	5960000	mg/L
OW-57	3/5/2020	Aluminum, Total	2.8	0.2	0.025	19914000	mg/L
OW-57	3/5/2020	Barium, Total	4.2	0.02	0.0065	2000000	mg/L
OW-57	3/5/2020	Iron, Total	6.3	0.2	0.087	13822000	mg/L
OW-57	3/5/2020	Manganese, Total	2.5	0.02	0.0029	2017000	mg/L
OW-57	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-57	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	3/5/2020	Uranium, Dissolved	0.00031	0.0005	0.000075	NA	mg/L
OW-57	3/5/2020	Arsenic, Dissolved	0.0033	0.001	0.0001	10000	mg/L
OW-57	3/5/2020	Selenium, Dissolved	0.00045	0.001	0.00017	50000	mg/L
OW-57	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-57	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-57	3/5/2020	Boron, Dissolved	0.21	0.04	0.0045	3949110	mg/L
OW-57	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-57	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-57	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-57	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-57	3/5/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-57	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	Nickel, Dissolved	0.056	0.01	0.004	372000	mg/L
OW-57	3/5/2020	Potassium, Dissolved	0.51	1	0.16	NA	mg/L
OW-57	3/5/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
OW-57	3/5/2020	Zinc, Dissolved	0.0082	0.01	0.0023	5960450	mg/L
OW-57	3/5/2020	Barium, Dissolved	4	0.01	0.0032	2000000	mg/L
OW-57	3/5/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
OW-57	3/5/2020	Iron, Dissolved	3	0.1	0.044	13821880	mg/L
OW-57	3/5/2020	Manganese, Dissolved	2.2	0.01	0.0014	2017400	mg/L
OW-57	3/5/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
OW-57	2/20/2019	Antimony, Dissolved	0.00029	0.001	0.000204	6000	mg/L
OW-57	2/20/2019	Arsenic, Dissolved	0.0032	0.001	0.000068	10000	mg/L
OW-57	2/20/2019	Barium, Dissolved	3.7	0.01	0.003242	2000000	mg/L
OW-57	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	2/20/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	2/20/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
OW-57	2/20/2019	Iron, Dissolved	2.3	0.1	0.043734	13821880	mg/L
OW-57	2/20/2019	Lead, Dissolved	0.000069	0.0005	0.000047	NA	mg/L
OW-57	2/20/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-57	2/20/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
OW-57	2/20/2019	Potassium, Dissolved	0.79	1	0.162288	NA	mg/L
OW-57	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-57	2/20/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
OW-57	2/20/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-57	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-57	2/20/2019	Uranium, Dissolved	0.00042	0.0005	0.00003	NA	mg/L
OW-57	2/20/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
OW-57	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	2/20/2019	Arsenic, Total	0.0045	0.001	0.000312	10000	mg/L
OW-57	2/20/2019	Barium, Total	4.1	0.01	0.003242	2000000	mg/L
OW-57	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-57	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-57	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	2/20/2019	Iron, Total	5.3	0.2	0.087469	13822000	mg/L
OW-57	2/20/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-57	2/20/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
OW-57	2/20/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
OW-57	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-57	2/20/2019	Silver, Total	0.0024	0.005	0.001418	50000	mg/L
OW-57	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	2/20/2019	Uranium, Total	0.00044	0.0005	0.000085	30000	mg/L
OW-57	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-57	5/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-57	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	5/16/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-57	5/16/2019	Barium, Dissolved	3.6	0.02	0.006484	2000000	mg/L
OW-57	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	5/16/2019	Boron, Dissolved	0.27	0.04	0.004531	3949110	mg/L
OW-57	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	5/16/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
OW-57	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	5/16/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
OW-57	5/16/2019	Iron, Dissolved	2.5	0.2	0.087469	13821880	mg/L
OW-57	5/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	5/16/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-57	5/16/2019	Manganese, Dissolved	2.1	0.02	0.002899	2017400	mg/L
OW-57	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	5/16/2019	Nickel, Dissolved	0.075	0.01	0.004009	372000	mg/L
OW-57	5/16/2019	Potassium, Dissolved	0.77	1	0.162288	NA	mg/L
OW-57	5/16/2019	Selenium, Dissolved	0.00022	0.001	0.000171	50000	mg/L
OW-57	5/16/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OW-57	5/16/2019	Sodium, Dissolved	270	10	4.161763	NA	mg/L
OW-57	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	5/16/2019	Uranium, Dissolved	0.00033	0.0005	0.000075	NA	mg/L
OW-57	5/16/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-57	5/16/2019	Aluminum, Total	0.84	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	5/16/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-57	5/16/2019	Barium, Total	3.9	0.01	0.003242	2000000	mg/L
OW-57	5/16/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
OW-57	5/16/2019	Boron, Total	0.26	0.04	0.004531	3949	mg/L
OW-57	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-57	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	5/16/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
OW-57	5/16/2019	Lead, Total	0.0025	0.0005	0.000055	15000	mg/L
OW-57	5/16/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
OW-57	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	5/16/2019	Nickel, Total	0.078	0.01	0.004009	372000	mg/L
OW-57	5/16/2019	Selenium, Total	0.00061	0.001	0.000478	50000	mg/L
OW-57	5/16/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-57	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	5/16/2019	Uranium, Total	0.00051	0.0005	0.000085	30000	mg/L
OW-57	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	8/22/2019	Aluminum, Dissolved	0.078	0.02	0.002488	19913930	mg/L
OW-58	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	8/22/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
OW-58	8/22/2019	Barium, Dissolved	4.2	0.01	0.003242	2000000	mg/L
OW-58	8/22/2019	Beryllium, Dissolved	0.00039	0.002	0.000284	4000	mg/L
OW-58	8/22/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-58	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	8/22/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-58	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	8/22/2019	Iron, Dissolved	8.4	0.2	0.087469	13821880	mg/L
OW-58	8/22/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
OW-58	8/22/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
OW-58	8/22/2019	Manganese, Dissolved	1.9	0.01	0.00145	2017400	mg/L
OW-58	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	8/22/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	8/22/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
OW-58	8/22/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
OW-58	8/22/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
OW-58	8/22/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-58	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	8/22/2019	Uranium, Dissolved	0.00025	0.0005	0.000075	NA	mg/L
OW-58	8/22/2019	Zinc, Dissolved	0.0029	0.01	0.002252	5960450	mg/L
OW-58	8/22/2019	Aluminum, Total	5.9	1	0.124414	19914000	mg/L
OW-58	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	8/22/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-58	8/22/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
OW-58	8/22/2019	Beryllium, Total	0.00055	0.002	0.000284	4000	mg/L
OW-58	8/22/2019	Boron, Total	0.38	0.04	0.004531	3949	mg/L
OW-58	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	8/22/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-58	8/22/2019	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
OW-58	8/22/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-58	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	8/22/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
OW-58	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	8/22/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
OW-58	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	8/22/2019	Uranium, Total	0.00042	0.0005	0.000085	30000	mg/L
OW-58	8/22/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-58	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	11/18/2019	Arsenic, Dissolved	0.0026	0.001	0.000101	10000	mg/L
OW-58	11/18/2019	Barium, Dissolved	4.5	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-58	11/18/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-58	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	11/18/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
OW-58	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	11/18/2019	Iron, Dissolved	8.7	0.2	0.087469	13821880	mg/L
OW-58	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	11/18/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
OW-58	11/18/2019	Manganese, Dissolved	2	0.02	0.002899	2017400	mg/L
OW-58	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	11/18/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	11/18/2019	Potassium, Dissolved	0.4	1	0.162288	NA	mg/L
OW-58	11/18/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
OW-58	11/18/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
OW-58	11/18/2019	Sodium, Dissolved	240	10	4.161763	NA	mg/L
OW-58	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	11/18/2019	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
OW-58	11/18/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
OW-58	11/18/2019	Aluminum, Total	3.2	0.1	0.012441	19914000	mg/L
OW-58	11/18/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
OW-58	11/18/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
OW-58	11/18/2019	Barium, Total	4.5	0.01	0.003242	2000000	mg/L
OW-58	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-58	11/18/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-58	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	11/18/2019	Iron, Total	9.9	0.4	0.174937	13822000	mg/L
OW-58	11/18/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
OW-58	11/18/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-58	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	11/18/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
OW-58	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-58	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	11/18/2019	Uranium, Total	0.00037	0.0005	0.000085	30000	mg/L
OW-58	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	6/5/2019	Aluminum, Total	3.4	0.1	0.012441	19914000	mg/L
OW-58	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	6/5/2019	Arsenic, Total	0.0028	0.001	0.000312	10000	mg/L
OW-58	6/5/2019	Barium, Total	4.3	0.01	0.003242	2000000	mg/L
OW-58	6/5/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
OW-58	6/5/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-58	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	6/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	6/5/2019	Iron, Total	9.8	0.4	0.174937	13822000	mg/L
OW-58	6/5/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-58	6/5/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-58	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	6/5/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
OW-58	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	6/5/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-58	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	6/5/2019	Uranium, Total	0.0003	0.0005	0.000085	30000	mg/L
OW-58	6/5/2019	Zinc, Total	0.0062	0.01	0.005772	5960000	mg/L
OW-58	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	6/5/2019	Arsenic, Dissolved	0.0024	0.001	0.000101	10000	mg/L
OW-58	6/5/2019	Barium, Dissolved	4.2	0.01	0.003242	2000000	mg/L
OW-58	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-58	6/5/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-58	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-58	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	6/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	6/5/2019	Iron, Dissolved	7.9	0.2	0.087469	13821880	mg/L
OW-58	6/5/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	6/5/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
OW-58	6/5/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-58	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	6/5/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	6/5/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
OW-58	6/5/2019	Selenium, Dissolved	0.00027	0.001	0.000171	50000	mg/L
OW-58	6/5/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-58	6/5/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-58	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	6/5/2019	Uranium, Dissolved	0.00015	0.0005	0.000075	NA	mg/L
OW-58	6/5/2019	Zinc, Dissolved	0.0029	0.01	0.002252	5960450	mg/L
OW-58	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	3/28/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-58	3/28/2019	Barium, Dissolved	4	0.02	0.006484	2000000	mg/L
OW-58	3/28/2019	Beryllium, Dissolved	0.0003	0.002	0.000284	4000	mg/L
OW-58	3/28/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-58	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	3/28/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
OW-58	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	3/28/2019	Iron, Dissolved	7.8	0.2	0.087469	13821880	mg/L
OW-58	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	3/28/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
OW-58	3/28/2019	Manganese, Dissolved	1.9	0.02	0.002899	2017400	mg/L
OW-58	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	3/28/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	3/28/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
OW-58	3/28/2019	Selenium, Dissolved	0.00022	0.001	0.000171	50000	mg/L
OW-58	3/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-58	3/28/2019	Sodium, Dissolved	230	10	4.161763	NA	mg/L
OW-58	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	3/28/2019	Uranium, Dissolved	0.00016	0.0005	0.000075	NA	mg/L
OW-58	3/28/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
OW-58	3/28/2019	Aluminum, Total	0.025	0.02	0.004564	19914000	mg/L
OW-58	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	3/28/2019	Arsenic, Total	0.003	0.001	0.000312	10000	mg/L
OW-58	3/28/2019	Barium, Total	4.3	0.01	0.003242	2000000	mg/L
OW-58	3/28/2019	Beryllium, Total	0.00034	0.002	0.000284	4000	mg/L
OW-58	3/28/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-58	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	3/28/2019	Iron, Total	8.8	0.2	0.087469	13822000	mg/L
OW-58	3/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-58	3/28/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
OW-58	3/28/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-58	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	3/28/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-58	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-58	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	3/28/2019	Uranium, Total	0.00017	0.0005	0.000085	30000	mg/L
OW-58	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-58	9/17/2020	Arsenic, Total	0.0032	0.001	0.00026	10000	mg/L
OW-58	9/17/2020	Lead, Total	0.002	0.0005	0.000034	15000	mg/L
OW-58	9/17/2020	Selenium, Total	0.00075	0.001	0.00066	50000	mg/L
OW-58	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-58	9/17/2020	Uranium, Total	0.00041	0.0005	0.000065	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-58	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	9/17/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-58	9/17/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-58	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-58	9/17/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-58	9/17/2020	Nickel, Total	0.026	0.01	0.0033	372000	mg/L
OW-58	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-58	9/17/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-58	9/17/2020	Barium, Total	4.5	0.015	0.0082	2000000	mg/L
OW-58	9/17/2020	Manganese, Total	2	0.01	0.0041	2017000	mg/L
OW-58	9/17/2020	Aluminum, Total	4.9	0.4	0.15	19914000	mg/L
OW-58	9/17/2020	Iron, Total	11	1	0.26	13822000	mg/L
OW-58	9/17/2020	Boron, Total	0.33	0.04	0.0074	3949	mg/L
OW-58	9/17/2020	Arsenic, Dissolved	0.0026	0.001	0.00021	10000	mg/L
OW-58	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-58	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-58	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-58	9/17/2020	Uranium, Dissolved	0.00016	0.0005	0.000065	NA	mg/L
OW-58	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-58	9/17/2020	Barium, Dissolved	4.4	0.01	0.0056	2000000	mg/L
OW-58	9/17/2020	Manganese, Dissolved	1.8	0.01	0.0029	2017400	mg/L
OW-58	9/17/2020	Nickel, Dissolved	0.024	0.05	0.016	372000	mg/L
OW-58	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-58	9/17/2020	Iron, Dissolved	8.3	1	0.52	13821880	mg/L
OW-58	9/17/2020	Boron, Dissolved	0.32	0.04	0.0067	3949110	mg/L
OW-58	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-58	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-58	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-58	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-58	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-58	9/17/2020	Zinc, Dissolved	0.024	0.01	0.006	5960450	mg/L
OW-58	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-58	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-58	9/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-58	9/30/2016	Arsenic, Total	0.0094	0.005	0.0011	10000	mg/L
OW-58	9/30/2016	Barium, Total	5.2	0.02	0.013	2000000	mg/L
OW-58	9/30/2016	Beryllium, Total	0.0037	0.002	0.00036	4000	mg/L
OW-58	9/30/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	9/30/2016	Cobalt, Total	0.013	0.006	0.0017	5980	mg/L
OW-58	9/30/2016	Chromium, Total	0.017	0.006	0.0027	50000	mg/L
OW-58	9/30/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-58	9/30/2016	Arsenic, Dissolved	0.0041	0.005	0.00069	10000	mg/L
OW-58	9/30/2016	Barium, Dissolved	3	0.01	0.0066	2000000	mg/L
OW-58	9/30/2016	Beryllium, Dissolved	ND	0.002	0.00031	4000	mg/L
OW-58	9/30/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-58	9/30/2016	Cobalt, Dissolved	0.0022	0.006	0.00074	5980	mg/L
OW-58	9/30/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-58	9/30/2016	Iron, Dissolved	6.6	0.2	0.2	13821880	mg/L
OW-58	9/30/2016	Manganese, Dissolved	2.1	0.01	0.0016	2017400	mg/L
OW-58	9/30/2016	Nickel, Dissolved	0.015	0.01	0.0024	372000	mg/L
OW-58	9/30/2016	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
OW-58	9/30/2016	Antimony, Dissolved	ND	0.001	0.00047	6000	mg/L
OW-58	9/30/2016	Selenium, Dissolved	0.0064	0.02	0.0042	50000	mg/L
OW-58	9/30/2016	Vanadium, Dissolved	0.0046	0.05	0.0013	63100	mg/L
OW-58	9/30/2016	Zinc, Dissolved	0.003	0.01	0.0028	5960450	mg/L
OW-58	9/30/2016	Iron, Total	27	1	1	13822000	mg/L
OW-58	9/30/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
OW-58	9/30/2016	Manganese, Total	4.1	0.02	0.0032	2017000	mg/L
OW-58	9/30/2016	Nickel, Total	0.035	0.01	0.0031	372000	mg/L
OW-58	9/30/2016	Lead, Total	0.036	0.0025	0.00084	15000	mg/L
OW-58	9/30/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-58	9/30/2016	Selenium, Total	0.012	0.005	0.0011	50000	mg/L
OW-58	9/30/2016	Vanadium, Total	0.043	0.05	0.0013	63100	mg/L
OW-58	9/30/2016	Zinc, Total	0.048	0.01	0.0027	5960000	mg/L
OW-58	11/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-58	11/7/2016	Arsenic, Total	0.006	0.005	0.0011	10000	mg/L
OW-58	11/7/2016	Barium, Total	4.8	0.02	0.0079	2000000	mg/L
OW-58	11/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	Chromium, Total	0.0044	0.006	0.0027	50000	mg/L
OW-58	11/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-58	11/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-58	11/7/2016	Arsenic, Dissolved	0.0056	0.02	0.0028	10000	mg/L
OW-58	11/7/2016	Barium, Dissolved	4	0.02	0.013	2000000	mg/L
OW-58	11/7/2016	Calcium, Dissolved	130	10	5	NA	mg/L
OW-58	11/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-58	11/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-58	11/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-58	11/7/2016	Iron, Dissolved	7.9	0.2	0.2	13821880	mg/L
OW-58	11/7/2016	Potassium, Dissolved	0.6	1	0.5	NA	mg/L
OW-58	11/7/2016	Magnesium, Dissolved	38	1	0.5	NA	mg/L
OW-58	11/7/2016	Manganese, Dissolved	2.2	0.02	0.0032	2017400	mg/L
OW-58	11/7/2016	Sodium, Dissolved	270	10	5	NA	mg/L
OW-58	11/7/2016	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-58	11/7/2016	Selenium, Dissolved	0.011	0.02	0.0042	50000	mg/L
OW-58	11/7/2016	Uranium, Dissolved	0.00065	0.0005	0.000051	NA	mg/L
OW-58	11/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-58	11/7/2016	Iron, Total	15	1	1	13822000	mg/L
OW-58	11/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-58	11/7/2016	Manganese, Total	3	0.02	0.0027	2017000	mg/L
OW-58	11/7/2016	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
OW-58	11/7/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
OW-58	11/7/2016	Uranium, Total	0.0012	0.0025	0.00087	30000	mg/L
OW-58	11/7/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
OW-58	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-58	3/29/2017	Arsenic, Total	0.0087	0.005	0.0011	10000	mg/L
OW-58	3/29/2017	Barium, Total	5.7	0.02	0.0079	2000000	mg/L
OW-58	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	3/29/2017	Chromium, Total	0.015	0.006	0.0027	50000	mg/L
OW-58	3/29/2017	Copper, Total	0.0066	0.006	0.003	790000	mg/L
OW-58	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-58	3/29/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
OW-58	3/29/2017	Barium, Dissolved	4.1	0.02	0.0085	2000000	mg/L
OW-58	3/29/2017	Calcium, Dissolved	120	10	5	NA	mg/L
OW-58	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-58	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	3/29/2017	Iron, Dissolved	7.7	0.2	0.2	13821880	mg/L
OW-58	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-58	3/29/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
OW-58	3/29/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
OW-58	3/29/2017	Sodium, Dissolved	280	10	5	NA	mg/L
OW-58	3/29/2017	Lead, Dissolved	0.00043	0.0005	0.00017	NA	mg/L
OW-58	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-58	3/29/2017	Uranium, Dissolved	0.00082	0.0005	0.00005	NA	mg/L
OW-58	3/29/2017	Zinc, Dissolved	0.034	0.01	0.0011	5960450	mg/L
OW-58	3/29/2017	Iron, Total	24	1	1	13822000	mg/L
OW-58	3/29/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
OW-58	3/29/2017	Manganese, Total	3.4	0.02	0.0027	2017000	mg/L
OW-58	3/29/2017	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
OW-58	3/29/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
OW-58	3/29/2017	Uranium, Total	0.0027	0.0005	0.00017	30000	mg/L
OW-58	3/29/2017	Zinc, Total	0.037	0.01	0.0027	5960000	mg/L
OW-58	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-58	6/21/2017	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
OW-58	6/21/2017	Barium, Total	5.9	0.02	0.0093	2000000	mg/L
OW-58	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	6/21/2017	Chromium, Total	0.02	0.006	0.0011	50000	mg/L
OW-58	6/21/2017	Copper, Total	0.019	0.006	0.0017	790000	mg/L
OW-58	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-58	6/21/2017	Arsenic, Dissolved	0.0059	0.01	0.0018	10000	mg/L
OW-58	6/21/2017	Barium, Dissolved	3.5	0.02	0.0085	2000000	mg/L
OW-58	6/21/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
OW-58	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-58	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	6/21/2017	Iron, Dissolved	6.9	0.2	0.16	13821880	mg/L
OW-58	6/21/2017	Potassium, Dissolved	0.27	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	6/21/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
OW-58	6/21/2017	Sodium, Dissolved	240	10	1.6	NA	mg/L
OW-58	6/21/2017	Lead, Dissolved	0.00033	0.0005	0.00017	NA	mg/L
OW-58	6/21/2017	Selenium, Dissolved	0.01	0.01	0.0039	50000	mg/L
OW-58	6/21/2017	Uranium, Dissolved	0.0004	0.0005	0.00005	NA	mg/L
OW-58	6/21/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
OW-58	6/21/2017	Iron, Total	29	1	0.51	13822000	mg/L
OW-58	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	6/21/2017	Manganese, Total	3.8	0.02	0.011	2017000	mg/L
OW-58	6/21/2017	Lead, Total	0.034	0.0025	0.00048	15000	mg/L
OW-58	6/21/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
OW-58	6/21/2017	Uranium, Total	0.0035	0.0025	0.00077	30000	mg/L
OW-58	6/21/2017	Zinc, Total	0.049	0.01	0.0028	5960000	mg/L
OW-58	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	9/19/2017	Arsenic, Total	0.0096	0.005	0.0015	10000	mg/L
OW-58	9/19/2017	Barium, Total	5	0.02	0.0093	2000000	mg/L
OW-58	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	9/19/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
OW-58	9/19/2017	Copper, Total	0.0092	0.006	0.0017	790000	mg/L
OW-58	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-58	9/19/2017	Arsenic, Dissolved	0.007	0.02	0.0035	10000	mg/L
OW-58	9/19/2017	Barium, Dissolved	4	0.01	0.0043	2000000	mg/L
OW-58	9/19/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	9/19/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	9/19/2017	Iron, Dissolved	7.5	0.2	0.16	13821880	mg/L
OW-58	9/19/2017	Potassium, Dissolved	0.38	1	0.11	NA	mg/L
OW-58	9/19/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-58	9/19/2017	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	9/19/2017	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-58	9/19/2017	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
OW-58	9/19/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-58	9/19/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-58	9/19/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
OW-58	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	9/19/2017	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
OW-58	9/19/2017	Lead, Total	0.015	0.0005	0.000095	15000	mg/L
OW-58	9/19/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-58	9/19/2017	Zinc, Total	0.035	0.01	0.0033	5960000	mg/L
OW-58	12/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	12/6/2017	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-58	12/6/2017	Barium, Total	4.7	0.01	0.005	2000000	mg/L
OW-58	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	12/6/2017	Chromium, Total	0.0061	0.006	0.0018	50000	mg/L
OW-58	12/6/2017	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
OW-58	12/6/2017	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
OW-58	12/6/2017	Arsenic, Dissolved	0.0045	0.005	0.0021	10000	mg/L
OW-58	12/6/2017	Barium, Dissolved	3.8	0.01	0.0049	2000000	mg/L
OW-58	12/6/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	12/6/2017	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
OW-58	12/6/2017	Potassium, Dissolved	0.41	1	0.11	NA	mg/L
OW-58	12/6/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-58	12/6/2017	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	12/6/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
OW-58	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	12/6/2017	Selenium, Dissolved	0.0069	0.005	0.0038	50000	mg/L
OW-58	12/6/2017	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
OW-58	12/6/2017	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
OW-58	12/6/2017	Iron, Total	15	0.4	0.2	13822000	mg/L
OW-58	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	12/6/2017	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
OW-58	12/6/2017	Lead, Total	0.0095	0.0025	0.0011	15000	mg/L
OW-58	12/6/2017	Selenium, Total	0.0058	0.005	0.0049	50000	mg/L
OW-58	12/6/2017	Uranium, Total	0.001	0.0025	0.00077	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
OW-58	2/20/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-58	2/20/2018	Arsenic, Total	0.0043	0.01	0.0041	10000	mg/L
OW-58	2/20/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
OW-58	2/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	2/20/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
OW-58	2/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	2/20/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
OW-58	2/20/2018	Arsenic, Dissolved	0.0036	0.005	0.0021	10000	mg/L
OW-58	2/20/2018	Barium, Dissolved	3.9	0.01	0.0049	2000000	mg/L
OW-58	2/20/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-58	2/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	2/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	2/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	2/20/2018	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
OW-58	2/20/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
OW-58	2/20/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	2/20/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	2/20/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
OW-58	2/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	2/20/2018	Selenium, Dissolved	0.0049	0.005	0.0038	50000	mg/L
OW-58	2/20/2018	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
OW-58	2/20/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
OW-58	2/20/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
OW-58	2/20/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	2/20/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-58	2/20/2018	Lead, Total	0.0042	0.0025	0.0011	15000	mg/L
OW-58	2/20/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-58	2/20/2018	Uranium, Total	0.00061	0.0025	0.00034	30000	mg/L
OW-58	2/20/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
OW-58	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	5/8/2018	Arsenic, Total	0.0038	0.005	0.0021	10000	mg/L
OW-58	5/8/2018	Barium, Total	4.3	0.02	0.01	2000000	mg/L
OW-58	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	5/8/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-58	5/8/2018	Arsenic, Dissolved	0.0028	0.005	0.0021	10000	mg/L
OW-58	5/8/2018	Barium, Dissolved	4.2	0.02	0.0099	2000000	mg/L
OW-58	5/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	5/8/2018	Iron, Dissolved	7	0.2	0.16	13821880	mg/L
OW-58	5/8/2018	Potassium, Dissolved	0.4	1	0.11	NA	mg/L
OW-58	5/8/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	5/8/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
OW-58	5/8/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
OW-58	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-58	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-58	5/8/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
OW-58	5/8/2018	Zinc, Dissolved	0.0095	0.01	0.0021	5960450	mg/L
OW-58	5/8/2018	Iron, Total	8.1	0.2	0.1	13822000	mg/L
OW-58	5/8/2018	Mercury, Total	0.000043	0.0002	0.000037	2000	mg/L
OW-58	5/8/2018	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-58	5/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-58	5/8/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-58	5/8/2018	Uranium, Total	0.00021	0.0005	0.000068	30000	mg/L
OW-58	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-58	8/28/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
OW-58	8/28/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-58	8/28/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
OW-58	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	8/28/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
OW-58	8/28/2018	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L
OW-58	8/28/2018	Barium, Dissolved	3.8	0.01	0.0049	2000000	mg/L
OW-58	8/28/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	8/28/2018	Iron, Dissolved	7.4	0.2	0.16	13821880	mg/L
OW-58	8/28/2018	Potassium, Dissolved	0.28	1	0.11	NA	mg/L
OW-58	8/28/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
OW-58	8/28/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	8/28/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
OW-58	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-58	8/28/2018	Uranium, Dissolved	0.00017	0.0005	0.000096	NA	mg/L
OW-58	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-58	8/28/2018	Iron, Total	8	0.2	0.1	13822000	mg/L
OW-58	8/28/2018	Mercury, Total	0.000057	0.0002	0.000038	2000	mg/L
OW-58	8/28/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
OW-58	8/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-58	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-58	8/28/2018	Uranium, Total	0.00017	0.0005	0.000068	30000	mg/L
OW-58	8/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-58	11/29/2018	Silver, Total	0.004	0.005	0.0012	50000	mg/L
OW-58	11/29/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-58	11/29/2018	Barium, Total	4.8	0.04	0.02	2000000	mg/L
OW-58	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	11/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	11/29/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
OW-58	11/29/2018	Arsenic, Dissolved	0.003	0.001	0.00042	10000	mg/L
OW-58	11/29/2018	Barium, Dissolved	4	0.02	0.0099	2000000	mg/L
OW-58	11/29/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L
OW-58	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	11/29/2018	Iron, Dissolved	7	0.2	0.16	13821880	mg/L
OW-58	11/29/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-58	11/29/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
OW-58	11/29/2018	Manganese, Dissolved	2	0.02	0.0039	2017400	mg/L
OW-58	11/29/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
OW-58	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-58	11/29/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-58	11/29/2018	Iron, Total	10	0.4	0.2	13822000	mg/L
OW-58	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-58	11/29/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-58	11/29/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-58	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-58	11/29/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
OW-58	12/22/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Dissolved	2	0.01	0.003	2017400	mg/L
OW-58	12/22/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-58	12/22/2020	Barium, Dissolved	4.56	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Boron, Dissolved	0.351	0.1	0.022	3949110	mg/L
OW-58	12/22/2020	Iron, Dissolved	7.08	0.2	0.075	13821880	mg/L
OW-58	12/22/2020	Nickel, Dissolved	0.0361	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58	12/22/2020	Calcium, Total	131	0.5	0.084	NA	mg/L
OW-58	12/22/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58	12/22/2020	Magnesium, Total	35.8	0.5	0.12	NA	mg/L
OW-58	12/22/2020	Iron, Total	8.65	0.2	0.075	13822000	mg/L
OW-58	12/22/2020	Nickel, Total	0.0257	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Aluminum, Total	1.68	0.2	0.051	19914000	mg/L
OW-58	12/22/2020	Boron, Total	0.337	0.1	0.022	3949	mg/L
OW-58	12/22/2020	Barium, Total	5	0.01	0.003	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Sodium, Total	274	2	0.92	NA	mg/L
OW-58	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Total	2.05	0.01	0.003	2017000	mg/L
OW-58	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-58	12/22/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Dissolved	1.98	0.01	0.003	2017400	mg/L
OW-58	12/22/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-58	12/22/2020	Barium, Dissolved	4.59	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Boron, Dissolved	0.354	0.1	0.022	3949110	mg/L
OW-58	12/22/2020	Iron, Dissolved	9.19	0.2	0.075	13821880	mg/L
OW-58	12/22/2020	Nickel, Dissolved	0.0308	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Aluminum, Total	0.319	0.2	0.051	19914000	mg/L
OW-58	12/22/2020	Boron, Total	0.353	0.1	0.022	3949	mg/L
OW-58	12/22/2020	Barium, Total	4.62	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Sodium, Total	267	2	0.92	NA	mg/L
OW-58	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Total	2.03	0.01	0.003	2017000	mg/L
OW-58	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-58	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58	12/22/2020	Calcium, Total	142	0.5	0.084	NA	mg/L
OW-58	12/22/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58	12/22/2020	Magnesium, Total	38.7	0.5	0.12	NA	mg/L
OW-58	12/22/2020	Iron, Total	10.1	0.2	0.075	13822000	mg/L
OW-58	12/22/2020	Nickel, Total	0.0284	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58	12/22/2020	Arsenic, Total Recoverable	2.84	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-58	12/22/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58	12/22/2020	Arsenic, Dissolved	3.13	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-58	12/22/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-58	12/22/2020	Arsenic, Total Recoverable	3.54	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-58	12/22/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58	12/22/2020	Arsenic, Dissolved	2.86	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-58	12/22/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58A	9/18/2020	Arsenic, Total	0.0053	0.001	0.00026	10000	mg/L
OW-58A	9/18/2020	Lead, Total	0.0016	0.0005	0.000034	15000	mg/L
OW-58A	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-58A	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-58A	9/18/2020	Uranium, Total	0.00051	0.0005	0.000065	30000	mg/L
OW-58A	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-58A	9/18/2020	Aluminum, Total	0.67	0.02	0.0074	19914000	mg/L
OW-58A	9/18/2020	Barium, Total	0.73	0.003	0.0016	2000000	mg/L
OW-58A	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-58A	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58A	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-58A	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-58A	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-58A	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-58A	9/18/2020	Nickel, Total	0.029	0.01	0.0033	372000	mg/L
OW-58A	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-58A	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-58A	9/18/2020	Iron, Total	5.4	0.5	0.13	13822000	mg/L
OW-58A	9/18/2020	Manganese, Total	1.4	0.02	0.0081	2017000	mg/L
OW-58A	9/18/2020	Boron, Total	0.46	0.04	0.0074	3949	mg/L
OW-58A	9/18/2020	Arsenic, Dissolved	0.0053	0.001	0.00021	10000	mg/L
OW-58A	9/18/2020	Lead, Dissolved	0.00081	0.0005	0.000034	NA	mg/L
OW-58A	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-58A	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-58A	9/18/2020	Uranium, Dissolved	0.00048	0.0005	0.000065	NA	mg/L
OW-58A	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-58A	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-58A	9/18/2020	Barium, Dissolved	0.73	0.002	0.0011	2000000	mg/L
OW-58A	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-58A	9/18/2020	Boron, Dissolved	0.43	0.04	0.0067	3949110	mg/L
OW-58A	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-58A	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-58A	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-58A	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-58A	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-58A	9/18/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L
OW-58A	9/18/2020	Iron, Dissolved	4.7	0.1	0.052	13821880	mg/L
OW-58A	9/18/2020	Manganese, Dissolved	1.4	0.01	0.0029	2017400	mg/L
OW-58A	9/18/2020	Nickel, Dissolved	0.03	0.05	0.016	372000	mg/L
OW-58A	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-58A	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58A	12/23/2020	Barium, Dissolved	0.74	0.01	0.003	2000000	mg/L
OW-58A	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58A	12/23/2020	Boron, Dissolved	0.504	0.1	0.022	3949110	mg/L
OW-58A	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58A	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58A	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58A	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58A	12/23/2020	Manganese, Dissolved	1.37	0.01	0.003	2017400	mg/L
OW-58A	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58A	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58A	12/23/2020	Zinc, Dissolved	0.0247	0.02	0.008	5960450	mg/L
OW-58A	12/23/2020	Aluminum, Total	0.409	0.2	0.051	19914000	mg/L
OW-58A	12/23/2020	Barium, Total	0.711	0.01	0.003	2000000	mg/L
OW-58A	12/23/2020	Calcium, Total	67.7	0.5	0.084	NA	mg/L
OW-58A	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58A	12/23/2020	Boron, Total	0.426	0.1	0.022	3949	mg/L
OW-58A	12/23/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58A	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58A	12/23/2020	Magnesium, Total	21.1	0.5	0.12	NA	mg/L
OW-58A	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58A	12/23/2020	Sodium, Total	395	2	0.92	NA	mg/L
OW-58A	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58A	12/23/2020	Iron, Total	4.4	0.2	0.075	13822000	mg/L
OW-58A	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58A	12/23/2020	Nickel, Total	0.0307	0.006	0.003	372000	mg/L
OW-58A	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58A	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Iron, Dissolved	4.54	0.2	0.075	13821880	mg/L
OW-58A	12/23/2020	Nickel, Dissolved	0.0378	0.006	0.003	372000	mg/L
OW-58A	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58A	12/23/2020	Manganese, Total	1.36	0.01	0.003	2017000	mg/L
OW-58A	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58A	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58A	12/23/2020	Arsenic, Total Recoverable	4.41	1	0.286	10	ug/L
OW-58A	12/23/2020	Lead, Total Recoverable	1.73	1	0.133	15	ug/L
OW-58A	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58A	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58A	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58A	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58A	12/23/2020	Arsenic, Dissolved	4.13	1	0.286	10	ug/L
OW-58A	12/23/2020	Lead, Dissolved	1.24	1	0.133	NA	ug/L
OW-58A	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58A	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58A	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58A	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-58A	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-58A	3/6/2020	Lead, Total	0.0064	0.0005	0.000055	15000	mg/L
OW-58A	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58A	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58A	3/6/2020	Uranium, Total	0.00093	0.0005	0.000085	30000	mg/L
OW-58A	3/6/2020	Arsenic, Total	0.0049	0.005	0.0016	10000	mg/L
OW-58A	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-58A	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-58A	3/6/2020	Boron, Total	0.47	0.04	0.0045	3949	mg/L
OW-58A	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-58A	3/6/2020	Chromium, Total	0.0041	0.006	0.0015	50000	mg/L
OW-58A	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-58A	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58A	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-58A	3/6/2020	Nickel, Total	0.037	0.01	0.004	372000	mg/L
OW-58A	3/6/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-58A	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-58A	3/6/2020	Aluminum, Total	3.7	0.1	0.012	19914000	mg/L
OW-58A	3/6/2020	Barium, Total	0.73	0.01	0.0032	2000000	mg/L
OW-58A	3/6/2020	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
OW-58A	3/6/2020	Iron, Total	6.7	1	0.44	13822000	mg/L
OW-58A	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-58A	3/6/2020	Arsenic, Dissolved	0.0033	0.001	0.0001	10000	mg/L
OW-58A	3/6/2020	Lead, Dissolved	0.0019	0.0005	0.000055	NA	mg/L
OW-58A	3/6/2020	Selenium, Dissolved	0.00037	0.001	0.00017	50000	mg/L
OW-58A	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58A	3/6/2020	Uranium, Dissolved	0.00059	0.0005	0.000075	NA	mg/L
OW-58A	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-58A	3/6/2020	Barium, Dissolved	0.62	0.002	0.00065	2000000	mg/L
OW-58A	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-58A	3/6/2020	Boron, Dissolved	0.46	0.04	0.0045	3949110	mg/L
OW-58A	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-58A	3/6/2020	Calcium, Dissolved	73	1	0.062	NA	mg/L
OW-58A	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-58A	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-58A	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-58A	3/6/2020	Magnesium, Dissolved	24	1	0.05	NA	mg/L
OW-58A	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-58A	3/6/2020	Nickel, Dissolved	0.034	0.01	0.004	372000	mg/L
OW-58A	3/6/2020	Potassium, Dissolved	0.4	1	0.16	NA	mg/L
OW-58A	3/6/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
OW-58A	3/6/2020	Zinc, Dissolved	0.0088	0.01	0.0023	5960450	mg/L
OW-58A	3/6/2020	Iron, Dissolved	3.4	0.1	0.044	13821880	mg/L
OW-58A	3/6/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
OW-58A	3/6/2020	Sodium, Dissolved	470	5	2.1	NA	mg/L
OW-59	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-59	9/19/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
OW-59	9/19/2020	Arsenic, Total	0.023	0.01	0.0026	10000	mg/L
OW-59	9/19/2020	Lead, Total	0.03	0.005	0.00034	15000	mg/L
OW-59	9/19/2020	Selenium, Total	0.0086	0.01	0.0066	50000	mg/L
OW-59	9/19/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/19/2020	Uranium, Total	0.14	0.005	0.00065	30000	mg/L
OW-59	9/19/2020	Barium, Total	0.98	0.003	0.0016	2000000	mg/L
OW-59	9/19/2020	Beryllium, Total	0.0052	0.002	0.00088	4000	mg/L
OW-59	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-59	9/19/2020	Chromium, Total	0.047	0.006	0.0021	50000	mg/L
OW-59	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-59	9/19/2020	Cobalt, Total	0.015	0.006	0.0024	5980	mg/L
OW-59	9/19/2020	Copper, Total	0.028	0.006	0.0047	790000	mg/L
OW-59	9/19/2020	Nickel, Total	0.066	0.01	0.0033	372000	mg/L
OW-59	9/19/2020	Silver, Total	0.0015	0.005	0.0013	50000	mg/L
OW-59	9/19/2020	Zinc, Total	0.13	0.01	0.0064	5960000	mg/L
OW-59	9/19/2020	Boron, Total	2.4	0.2	0.037	3949	mg/L
OW-59	9/19/2020	Manganese, Total	1.5	0.01	0.0041	2017000	mg/L
OW-59	9/19/2020	Iron, Total	48	2.5	0.64	13822000	mg/L
OW-59	9/19/2020	Aluminum, Total	99	2	0.74	19914000	mg/L
OW-59	9/19/2020	Arsenic, Dissolved	0.0047	0.01	0.0021	10000	mg/L
OW-59	9/19/2020	Lead, Dissolved	0.00075	0.005	0.00034	NA	mg/L
OW-59	9/19/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
OW-59	9/19/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
OW-59	9/19/2020	Uranium, Dissolved	0.12	0.005	0.00065	NA	mg/L
OW-59	9/19/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
OW-59	9/19/2020	Aluminum, Dissolved	1.4	0.1	0.028	19913930	mg/L
OW-59	9/19/2020	Boron, Dissolved	2.4	0.2	0.033	3949110	mg/L
OW-59	9/19/2020	Calcium, Dissolved	210	5	0.57	NA	mg/L
OW-59	9/19/2020	Sodium, Dissolved	2100	50	6.9	NA	mg/L
OW-59	9/19/2020	Barium, Dissolved	0.02	0.002	0.0011	2000000	mg/L
OW-59	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-59	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-59	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-59	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-59	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-59	9/19/2020	Iron, Dissolved	0.61	0.02	0.01	13821880	mg/L
OW-59	9/19/2020	Magnesium, Dissolved	60	1	0.067	NA	mg/L
OW-59	9/19/2020	Manganese, Dissolved	0.22	0.002	0.00058	2017400	mg/L
OW-59	9/19/2020	Molybdenum, Dissolved	0.018	0.008	0.0056	98700	mg/L
OW-59	9/19/2020	Potassium, Dissolved	0.7	1	0.16	NA	mg/L
OW-59	9/19/2020	Zinc, Dissolved	0.02	0.01	0.006	5960450	mg/L
OW-59	9/19/2020	Silver, Dissolved	0.0043	0.005	0.0013	81200	mg/L
OW-59	9/19/2020	Nickel, Dissolved	0.034	0.01	0.0033	372000	mg/L
OW-59	5/2/2019	Arsenic, Dissolved	0.004	0.005	0.000504	10000	mg/L
OW-59	5/2/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
OW-59	5/2/2019	Beryllium, Dissolved	0.00041	0.002	0.000284	4000	mg/L
OW-59	5/2/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-59	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	5/2/2019	Calcium, Dissolved	230	5	0.309446	NA	mg/L
OW-59	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	5/2/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
OW-59	5/2/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
OW-59	5/2/2019	Lead, Dissolved	0.00036	0.0025	0.000274	NA	mg/L
OW-59	5/2/2019	Magnesium, Dissolved	64	1	0.05029	NA	mg/L
OW-59	8/21/2019	Aluminum, Dissolved	0.0047	0.02	0.002488	19913930	mg/L
OW-59	8/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	8/21/2019	Arsenic, Dissolved	0.0045	0.005	0.000504	10000	mg/L
OW-59	8/21/2019	Barium, Dissolved	0.011	0.002	0.000648	2000000	mg/L
OW-59	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-59	8/21/2019	Boron, Dissolved	2.5	0.4	0.045305	3949110	mg/L
OW-59	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	8/21/2019	Calcium, Dissolved	220	10	0.618891	NA	mg/L
OW-59	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	8/21/2019	Copper, Dissolved	0.0067	0.006	0.001296	790000	mg/L
OW-59	8/21/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
OW-59	8/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-59	8/21/2019	Magnesium, Dissolved	62	1	0.05029	NA	mg/L
OW-59	8/21/2019	Manganese, Dissolved	0.13	0.002	0.00029	2017400	mg/L
OW-59	8/21/2019	Molybdenum, Dissolved	0.019	0.008	0.006735	98700	mg/L
OW-59	8/21/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
OW-59	8/21/2019	Potassium, Dissolved	0.56	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/21/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OW-59	8/21/2019	Silver, Dissolved	0.0031	0.005	0.000942	81200	mg/L
OW-59	8/21/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	8/21/2019	Uranium, Dissolved	0.12	0.0025	0.000374	NA	mg/L
OW-59	8/21/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
OW-59	8/21/2019	Aluminum, Total	4.9	0.2	0.024883	19914000	mg/L
OW-59	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-59	8/21/2019	Arsenic, Total	0.0055	0.005	0.001561	10000	mg/L
OW-59	8/21/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
OW-59	8/21/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
OW-59	8/21/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	8/21/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
OW-59	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-59	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-59	8/21/2019	Iron, Total	2.1	0.2	0.087469	13822000	mg/L
OW-59	8/21/2019	Lead, Total	0.0014	0.0025	0.000274	15000	mg/L
OW-59	8/21/2019	Manganese, Total	0.22	0.01	0.00145	2017000	mg/L
OW-59	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	8/21/2019	Molybdenum, Total	0.022	0.008	0.006735	98700	mg/L
OW-59	8/21/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-59	8/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-59	8/21/2019	Silver, Total	0.0038	0.005	0.001418	50000	mg/L
OW-59	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	8/21/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
OW-59	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-59	5/2/2019	Aluminum, Dissolved	0.21	0.02	0.002488	19913930	mg/L
OW-59	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	5/2/2019	Manganese, Dissolved	0.053	0.002	0.00029	2017400	mg/L
OW-59	5/2/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
OW-59	5/2/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-59	5/2/2019	Potassium, Dissolved	0.66	1	0.162288	NA	mg/L
OW-59	5/2/2019	Selenium, Dissolved	0.0022	0.005	0.000857	50000	mg/L
OW-59	5/2/2019	Silver, Dissolved	0.0042	0.005	0.000942	81200	mg/L
OW-59	5/2/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	5/2/2019	Uranium, Dissolved	0.14	0.005	0.000747	NA	mg/L
OW-59	5/2/2019	Zinc, Dissolved	0.05	0.01	0.002252	5960450	mg/L
OW-59	5/2/2019	Aluminum, Total	27	1	0.124414	19914000	mg/L
OW-59	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-59	5/2/2019	Arsenic, Total	0.0095	0.005	0.001561	10000	mg/L
OW-59	5/2/2019	Barium, Total	0.41	0.002	0.000648	2000000	mg/L
OW-59	5/2/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
OW-59	5/2/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	5/2/2019	Chromium, Total	0.014	0.006	0.001533	50000	mg/L
OW-59	5/2/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-59	5/2/2019	Copper, Total	0.01	0.006	0.004072	790000	mg/L
OW-59	5/2/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-59	5/2/2019	Lead, Total	0.0095	0.0025	0.000274	15000	mg/L
OW-59	5/2/2019	Manganese, Total	0.54	0.002	0.00029	2017000	mg/L
OW-59	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	5/2/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
OW-59	5/2/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
OW-59	5/2/2019	Selenium, Total	0.0038	0.005	0.00239	50000	mg/L
OW-59	5/2/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
OW-59	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	5/2/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
OW-59	5/2/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
OW-59	3/3/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OW-59	3/3/2020	Arsenic, Dissolved	0.0048	0.005	0.0005	10000	mg/L
OW-59	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
OW-59	3/3/2020	Selenium, Dissolved	0.0011	0.005	0.00086	50000	mg/L
OW-59	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OW-59	3/3/2020	Uranium, Dissolved	0.14	0.005	0.00075	NA	mg/L
OW-59	3/3/2020	Aluminum, Dissolved	0.0054	0.02	0.0025	19913930	mg/L
OW-59	3/3/2020	Barium, Dissolved	0.0062	0.002	0.00065	2000000	mg/L
OW-59	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-59	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-59	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-59	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-59	3/3/2020	Iron, Dissolved	0.021	0.02	0.0087	13821880	mg/L
OW-59	3/3/2020	Magnesium, Dissolved	63	1	0.05	NA	mg/L
OW-59	3/3/2020	Molybdenum, Dissolved	0.0086	0.008	0.0067	98700	mg/L
OW-59	3/3/2020	Nickel, Dissolved	0.014	0.01	0.004	372000	mg/L
OW-59	3/3/2020	Potassium, Dissolved	0.63	1	0.16	NA	mg/L
OW-59	3/3/2020	Silver, Dissolved	0.0029	0.005	0.00094	81200	mg/L
OW-59	3/3/2020	Zinc, Dissolved	0.0048	0.01	0.0023	5960450	mg/L
OW-59	3/3/2020	Boron, Dissolved	2.3	0.2	0.023	3949110	mg/L
OW-59	3/3/2020	Calcium, Dissolved	220	5	0.31	NA	mg/L
OW-59	3/3/2020	Manganese, Dissolved	0.084	0.002	0.00029	2017400	mg/L
OW-59	3/3/2020	Sodium, Dissolved	2400	50	21	NA	mg/L
OW-59	3/3/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-59	3/3/2020	Arsenic, Total	0.0067	0.005	0.0016	10000	mg/L
OW-59	3/3/2020	Lead, Total	0.0035	0.0025	0.00027	15000	mg/L
OW-59	3/3/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-59	3/3/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-59	3/3/2020	Uranium, Total	0.13	0.005	0.00085	30000	mg/L
OW-59	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-59	3/3/2020	Barium, Total	0.14	0.002	0.00065	2000000	mg/L
OW-59	3/3/2020	Beryllium, Total	0.00071	0.002	0.00028	4000	mg/L
OW-59	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-59	3/3/2020	Chromium, Total	0.0054	0.006	0.0015	50000	mg/L
OW-59	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-59	3/3/2020	Copper, Total	0.0062	0.006	0.0041	790000	mg/L
OW-59	3/3/2020	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-59	3/3/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OW-59	3/3/2020	Nickel, Total	0.023	0.01	0.004	372000	mg/L
OW-59	3/3/2020	Silver, Total	0.0047	0.005	0.0014	50000	mg/L
OW-59	3/3/2020	Zinc, Total	0.0093	0.01	0.0058	5960000	mg/L
OW-59	3/3/2020	Boron, Total	2.5	0.2	0.023	3949	mg/L
OW-59	3/3/2020	Aluminum, Total	12	0.4	0.05	19914000	mg/L
OW-59	3/3/2020	Iron, Total	5.1	0.4	0.17	13822000	mg/L
OW-59	12/23/2020	Arsenic, Total Recoverable	4.7	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Total Recoverable	1.37	1	0.133	15	ug/L
OW-59	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Total Recoverable	**138**	5	1.12	30	ug/L
OW-59	12/23/2020	Arsenic, Dissolved	3.75	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-59	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Dissolved	136	5	1.12	NA	ug/L
OW-59	12/23/2020	Arsenic, Total Recoverable	4.79	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Total Recoverable	1.22	1	0.133	15	ug/L
OW-59	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Total Recoverable	**139**	5	1.12	30	ug/L
OW-59	12/23/2020	Arsenic, Dissolved	4.06	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-59	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Dissolved	133	5	1.12	NA	ug/L
OW-59	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-59	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-59	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-59	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-59	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-59	12/23/2020	Barium, Dissolved	0.0127	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Dissolved	2.44	0.1	0.022	3949110	mg/L
OW-59	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-59	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-59	12/23/2020	Manganese, Dissolved	0.0699	0.01	0.003	2017400	mg/L
OW-59	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-59	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-59	12/23/2020	Aluminum, Total	5.81	0.2	0.051	19914000	mg/L
OW-59	12/23/2020	Barium, Total	0.0819	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Calcium, Total	187	0.5	0.084	NA	mg/L
OW-59	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
OW-59	12/23/2020	Potassium, Total	5.77	1	0.34	NA	mg/L
OW-59	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Magnesium, Total	54	0.5	0.12	NA	mg/L
OW-59	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-59	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Total	3.28	0.2	0.075	13822000	mg/L
OW-59	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Nickel, Total	0.0315	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-59	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-59	12/23/2020	Nickel, Dissolved	0.0319	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Manganese, Total	0.212	0.01	0.003	2017000	mg/L
OW-59	12/23/2020	Sodium, Total	2740	20	9.2	NA	mg/L
OW-59	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-59	12/23/2020	Barium, Dissolved	0.0137	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Dissolved	2.42	0.1	0.022	3949110	mg/L
OW-59	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-59	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-59	12/23/2020	Manganese, Dissolved	0.0733	0.01	0.003	2017400	mg/L
OW-59	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-59	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-59	12/23/2020	Aluminum, Total	1.66	0.2	0.051	19914000	mg/L
OW-59	12/23/2020	Barium, Total	0.0285	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Calcium, Total	191	0.5	0.084	NA	mg/L
OW-59	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
OW-59	12/23/2020	Potassium, Total	5.94	1	0.34	NA	mg/L
OW-59	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Magnesium, Total	54.2	0.5	0.12	NA	mg/L
OW-59	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-59	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Total	0.963	0.2	0.075	13822000	mg/L
OW-59	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Nickel, Total	0.0304	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-59	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-59	12/23/2020	Nickel, Dissolved	0.0317	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Manganese, Total	0.145	0.01	0.003	2017000	mg/L
OW-59	12/23/2020	Sodium, Total	2650	20	9.2	NA	mg/L
OW-59	6/28/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-59	6/28/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
OW-59	6/28/2017	Barium, Total	0.35	0.002	0.00093	2000000	mg/L
OW-59	6/28/2017	Beryllium, Total	0.0015	0.002	0.00026	4000	mg/L
OW-59	6/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	6/28/2017	Cobalt, Total	0.008	0.006	0.00076	5980	mg/L
OW-59	6/28/2017	Chromium, Total	0.014	0.006	0.0011	50000	mg/L
OW-59	6/28/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-59	6/28/2017	Arsenic, Dissolved	0.0094	0.01	0.0018	10000	mg/L
OW-59	6/28/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	6/28/2017	Beryllium, Dissolved	0.00039	0.002	0.00029	4000	mg/L
OW-59	6/28/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
OW-59	6/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	6/28/2017	Cobalt, Dissolved	0.0035	0.006	0.0016	5980	mg/L
OW-59	6/28/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-59	6/28/2017	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
OW-59	6/28/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
OW-59	6/28/2017	Magnesium, Dissolved	65	1	0.25	NA	mg/L
OW-59	6/28/2017	Manganese, Dissolved	0.67	0.002	0.00038	2017400	mg/L
OW-59	6/28/2017	Sodium, Dissolved	2400	50	8.2	NA	mg/L
OW-59	6/28/2017	Nickel, Dissolved	0.01	0.01	0.0011	372000	mg/L
OW-59	6/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-59	6/28/2017	Antimony, Dissolved	0.001	0.005	0.00084	6000	mg/L
OW-59	6/28/2017	Selenium, Dissolved	0.023	0.005	0.0019	50000	mg/L
OW-59	6/28/2017	Vanadium, Dissolved	0.0042	0.05	0.0019	63100	mg/L
OW-59	6/28/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
OW-59	6/28/2017	Iron, Total	9.7	0.4	0.2	13822000	mg/L
OW-59	6/28/2017	Mercury, Total	0.000082	0.0002	0.000037	2000	mg/L
OW-59	6/28/2017	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
OW-59	6/28/2017	Nickel, Total	0.02	0.01	0.0036	372000	mg/L
OW-59	6/28/2017	Lead, Total	0.0094	0.005	0.00095	15000	mg/L
OW-59	6/28/2017	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-59	6/28/2017	Selenium, Total	0.015	0.005	0.0036	50000	mg/L
OW-59	6/28/2017	Vanadium, Total	0.026	0.05	0.00076	63100	mg/L
OW-59	6/28/2017	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
OW-59	10/15/2019	Aluminum, Dissolved	0.27	0.02	0.002488	19913930	mg/L
OW-59	10/15/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	10/15/2019	Arsenic, Dissolved	0.0061	0.01	0.001009	10000	mg/L
OW-59	10/15/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
OW-59	10/15/2019	Beryllium, Dissolved	0.00071	0.002	0.000284	4000	mg/L
OW-59	10/15/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-59	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	10/15/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
OW-59	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	10/15/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
OW-59	10/15/2019	Iron, Dissolved	0.13	0.02	0.008747	13821880	mg/L
OW-59	10/15/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-59	10/15/2019	Magnesium, Dissolved	64	1	0.05029	NA	mg/L
OW-59	10/15/2019	Manganese, Dissolved	0.03	0.002	0.00029	2017400	mg/L
OW-59	10/15/2019	Molybdenum, Dissolved	0.021	0.008	0.006735	98700	mg/L
OW-59	10/15/2019	Nickel, Dissolved	0.023	0.01	0.004009	372000	mg/L
OW-59	10/15/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
OW-59	10/15/2019	Selenium, Dissolved	0.003	0.01	0.001713	50000	mg/L
OW-59	10/15/2019	Silver, Dissolved	0.0056	0.005	0.000942	81200	mg/L
OW-59	10/15/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
OW-59	10/15/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	10/15/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
OW-59	10/15/2019	Aluminum, Total	22	1	0.124414	19914000	mg/L
OW-59	10/15/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
OW-59	10/15/2019	Arsenic, Total	0.0096	0.01	0.003122	10000	mg/L
OW-59	10/15/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
OW-59	10/15/2019	Beryllium, Total	0.00079	0.002	0.000284	4000	mg/L
OW-59	10/15/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	10/15/2019	Chromium, Total	0.01	0.006	0.001533	50000	mg/L
OW-59	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-59	10/15/2019	Copper, Total	0.0065	0.006	0.004072	790000	mg/L
OW-59	10/15/2019	Iron, Total	8.6	0.2	0.087469	13822000	mg/L
OW-59	10/15/2019	Lead, Total	0.0054	0.0025	0.000274	15000	mg/L
OW-59	10/15/2019	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
OW-59	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	10/15/2019	Molybdenum, Total	0.017	0.008	0.006735	98700	mg/L
OW-59	10/15/2019	Nickel, Total	0.029	0.01	0.004009	372000	mg/L
OW-59	10/15/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
OW-59	10/15/2019	Silver, Total	0.003	0.005	0.001418	50000	mg/L
OW-59	10/15/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	10/15/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
OW-59	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	Arsenic, Total	0.0055	0.005	0.001561	10000	mg/L
OW-59	2/13/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-59	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-59	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-59	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-59	2/13/2019	Iron, Total	1.8	0.1	0.043734	13822000	mg/L
OW-59	2/13/2019	Lead, Total	0.0017	0.0025	0.000235	15000	mg/L
OW-59	2/13/2019	Manganese, Total	0.13	0.002	0.00029	2017000	mg/L
OW-59	2/13/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-59	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-59	2/13/2019	Silver, Total	0.0052	0.005	0.001418	50000	mg/L
OW-59	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	2/13/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
OW-59	2/13/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-59	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
OW-59	2/13/2019	Arsenic, Dissolved	0.0043	0.001	0.000068	10000	mg/L
OW-59	2/13/2019	Barium, Dissolved	0.011	0.002	0.000648	2000000	mg/L
OW-59	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-59	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	2/13/2019	Calcium, Dissolved	220	5	0.309446	NA	mg/L
OW-59	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	2/13/2019	Copper, Dissolved	0.0046	0.006	0.001296	790000	mg/L
OW-59	2/13/2019	Iron, Dissolved	0.031	0.02	0.008747	13821880	mg/L
OW-59	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-59	2/13/2019	Magnesium, Dissolved	61	1	0.05029	NA	mg/L
OW-59	2/13/2019	Manganese, Dissolved	0.054	0.002	0.00029	2017400	mg/L
OW-59	2/13/2019	Potassium, Dissolved	0.65	1	0.162288	NA	mg/L
OW-59	2/13/2019	Selenium, Dissolved	0.001	0.001	0.000203	50000	mg/L
OW-59	2/13/2019	Silver, Dissolved	0.0043	0.005	0.000942	81200	mg/L
OW-59	2/13/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-59	2/13/2019	Uranium, Dissolved	0.15	0.005	0.000305	NA	mg/L
OW-59	2/13/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-59	9/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-59	9/21/2017	Arsenic, Total	0.017	0.01	0.003	10000	mg/L
OW-59	9/21/2017	Barium, Total	0.64	0.002	0.00093	2000000	mg/L
OW-59	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	9/21/2017	Chromium, Total	0.028	0.006	0.0018	50000	mg/L
OW-59	9/21/2017	Copper, Total	0.018	0.006	0.0017	790000	mg/L
OW-59	9/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-59	9/21/2017	Arsenic, Dissolved	ND	0.05	0.0089	10000	mg/L
OW-59	9/21/2017	Barium, Dissolved	0.015	0.002	0.00085	2000000	mg/L
OW-59	9/21/2017	Calcium, Dissolved	260	10	0.78	NA	mg/L
OW-59	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	9/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	9/21/2017	Iron, Dissolved	0.18	0.02	0.016	13821880	mg/L
OW-59	9/21/2017	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
OW-59	9/21/2017	Magnesium, Dissolved	79	1	0.25	NA	mg/L
OW-59	9/21/2017	Manganese, Dissolved	0.34	0.002	0.00039	2017400	mg/L
OW-59	9/21/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	9/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-59	9/21/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
OW-59	9/21/2017	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
OW-59	9/21/2017	Iron, Total	20	1	0.51	13822000	mg/L
OW-59	9/21/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
OW-59	9/21/2017	Manganese, Total	1.3	0.02	0.011	2017000	mg/L
OW-59	9/21/2017	Lead, Total	0.017	0.0025	0.00048	15000	mg/L
OW-59	9/21/2017	Selenium, Total	0.021	0.01	0.0071	50000	mg/L
OW-59	9/21/2017	Zinc, Total	0.042	0.01	0.0033	5960000	mg/L
OW-59	12/6/2017	Silver, Total	0.0037	0.005	0.0012	50000	mg/L
OW-59	12/6/2017	Arsenic, Total	0.0095	0.005	0.0021	10000	mg/L
OW-59	12/6/2017	Barium, Total	0.064	0.002	0.001	2000000	mg/L
OW-59	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	12/6/2017	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
OW-59	12/6/2017	Silver, Dissolved	0.0047	0.005	0.0018	81200	mg/L
OW-59	12/6/2017	Arsenic, Dissolved	0.012	0.01	0.0042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	Barium, Dissolved	0.013	0.002	0.00099	2000000	mg/L
OW-59	12/6/2017	Calcium, Dissolved	220	5	0.39	NA	mg/L
OW-59	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	12/6/2017	Iron, Dissolved	0.024	0.02	0.016	13821880	mg/L
OW-59	12/6/2017	Potassium, Dissolved	1	1	0.11	NA	mg/L
OW-59	12/6/2017	Magnesium, Dissolved	68	1	0.25	NA	mg/L
OW-59	12/6/2017	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
OW-59	12/6/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	12/6/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	12/6/2017	Selenium, Dissolved	0.023	0.01	0.0076	50000	mg/L
OW-59	12/6/2017	Uranium, Dissolved	0.14	0.025	0.0048	NA	mg/L
OW-59	12/6/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-59	12/6/2017	Iron, Total	2.1	0.1	0.051	13822000	mg/L
OW-59	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-59	12/6/2017	Manganese, Total	0.17	0.002	0.0011	2017000	mg/L
OW-59	12/6/2017	Lead, Total	0.0014	0.0025	0.0011	15000	mg/L
OW-59	12/6/2017	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-59	12/6/2017	Uranium, Total	0.17	0.01	0.0031	30000	mg/L
OW-59	12/6/2017	Zinc, Total	0.0041	0.01	0.0033	5960000	mg/L
OW-59	2/22/2018	Silver, Total	ND	0.025	0.0061	50000	mg/L
OW-59	2/22/2018	Arsenic, Total	0.012	0.02	0.0083	10000	mg/L
OW-59	2/22/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
OW-59	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-59	2/22/2018	Copper, Total	0.0073	0.006	0.0041	790000	mg/L
OW-59	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-59	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-59	2/22/2018	Barium, Dissolved	0.0084	0.01	0.0049	2000000	mg/L
OW-59	2/22/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
OW-59	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-59	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-59	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-59	2/22/2018	Potassium, Dissolved	0.96	5	0.56	NA	mg/L
OW-59	2/22/2018	Magnesium, Dissolved	66	5	1.2	NA	mg/L
OW-59	2/22/2018	Manganese, Dissolved	0.048	0.01	0.002	2017400	mg/L
OW-59	2/22/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-59	2/22/2018	Uranium, Dissolved	0.16	0.1	0.019	NA	mg/L
OW-59	2/22/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-59	2/22/2018	Iron, Total	4.9	0.1	0.051	13822000	mg/L
OW-59	2/22/2018	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
OW-59	2/22/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
OW-59	2/22/2018	Lead, Total	0.0039	0.005	0.0023	15000	mg/L
OW-59	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-59	2/22/2018	Uranium, Total	0.16	0.005	0.00068	30000	mg/L
OW-59	2/22/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
OW-59	5/8/2018	Silver, Total	0.003	0.005	0.0012	50000	mg/L
OW-59	5/8/2018	Arsenic, Total	0.0076	0.01	0.0041	10000	mg/L
OW-59	5/8/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
OW-59	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	5/8/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
OW-59	5/8/2018	Silver, Dissolved	0.0042	0.005	0.0018	81200	mg/L
OW-59	5/8/2018	Arsenic, Dissolved	0.0061	0.01	0.0042	10000	mg/L
OW-59	5/8/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	5/8/2018	Calcium, Dissolved	220	5	0.39	NA	mg/L
OW-59	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	5/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	5/8/2018	Potassium, Dissolved	0.78	1	0.11	NA	mg/L
OW-59	5/8/2018	Magnesium, Dissolved	62	1	0.25	NA	mg/L
OW-59	5/8/2018	Manganese, Dissolved	0.026	0.002	0.00039	2017400	mg/L
OW-59	5/8/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	5/8/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/8/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-59	5/8/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
OW-59	5/8/2018	Zinc, Dissolved	0.0046	0.01	0.0021	5960450	mg/L
OW-59	5/8/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
OW-59	5/8/2018	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
OW-59	5/8/2018	Manganese, Total	0.041	0.002	0.0011	2017000	mg/L
OW-59	5/8/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
OW-59	5/8/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-59	5/8/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-59	8/28/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
OW-59	8/28/2018	Arsenic, Total	0.0068	0.005	0.0021	10000	mg/L
OW-59	8/28/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-59	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	8/28/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
OW-59	8/28/2018	Silver, Dissolved	0.0057	0.005	0.0018	81200	mg/L
OW-59	8/28/2018	Arsenic, Dissolved	0.0053	0.005	0.0021	10000	mg/L
OW-59	8/28/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	8/28/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
OW-59	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	8/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	8/28/2018	Potassium, Dissolved	0.73	1	0.11	NA	mg/L
OW-59	8/28/2018	Magnesium, Dissolved	61	1	0.25	NA	mg/L
OW-59	8/28/2018	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
OW-59	8/28/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	8/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-59	8/28/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
OW-59	8/28/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-59	8/28/2018	Iron, Total	0.97	0.02	0.01	13822000	mg/L
OW-59	8/28/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
OW-59	8/28/2018	Manganese, Total	0.064	0.002	0.0011	2017000	mg/L
OW-59	8/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-59	8/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-59	8/28/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	8/28/2018	Zinc, Total	0.0049	0.01	0.0033	5960000	mg/L
OW-59	11/7/2018	Silver, Total	0.0068	0.005	0.0012	50000	mg/L
OW-59	11/7/2018	Arsenic, Total	0.0074	0.005	0.0021	10000	mg/L
OW-59	11/7/2018	Barium, Total	0.058	0.002	0.001	2000000	mg/L
OW-59	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-59	11/7/2018	Silver, Dissolved	0.0051	0.005	0.0018	81200	mg/L
OW-59	11/7/2018	Arsenic, Dissolved	0.0049	0.001	0.00042	10000	mg/L
OW-59	11/7/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	11/7/2018	Calcium, Dissolved	210	10	0.78	NA	mg/L
OW-59	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	11/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-59	11/7/2018	Magnesium, Dissolved	62	1	0.25	NA	mg/L
OW-59	11/7/2018	Manganese, Dissolved	0.038	0.002	0.00039	2017400	mg/L
OW-59	11/7/2018	Sodium, Dissolved	2400	100	16	NA	mg/L
OW-59	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-59	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-59	11/7/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
OW-59	11/7/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-59	11/7/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
OW-59	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	11/7/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-59	11/7/2018	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
OW-59	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-59	11/7/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-60	6/28/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Arsenic, Total	0.0081	0.005	0.0015	10000	mg/L
OW-60	6/28/2017	Barium, Total	1.6	0.02	0.0093	2000000	mg/L
OW-60	6/28/2017	Beryllium, Total	0.0046	0.002	0.00026	4000	mg/L
OW-60	6/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	6/28/2017	Cobalt, Total	0.021	0.006	0.00076	5980	mg/L
OW-60	6/28/2017	Chromium, Total	0.048	0.006	0.0011	50000	mg/L
OW-60	6/28/2017	Silver, Dissolved	ND	0.005	0.00042	81200	mg/L
OW-60	6/28/2017	Arsenic, Dissolved	0.0044	0.005	0.00089	10000	mg/L
OW-60	6/28/2017	Barium, Dissolved	0.044	0.002	0.00093	2000000	mg/L
OW-60	6/28/2017	Beryllium, Dissolved	0.00045	0.002	0.00026	4000	mg/L
OW-60	6/28/2017	Calcium, Dissolved	170	10	0.45	NA	mg/L
OW-60	6/28/2017	Cadmium, Dissolved	ND	0.002	0.00058	5000	mg/L
OW-60	6/28/2017	Cobalt, Dissolved	0.0019	0.006	0.00076	5980	mg/L
OW-60	6/28/2017	Chromium, Dissolved	ND	0.006	0.0011	100000	mg/L
OW-60	6/28/2017	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-60	6/28/2017	Potassium, Dissolved	5	1	0.071	NA	mg/L
OW-60	6/28/2017	Magnesium, Dissolved	33	1	0.12	NA	mg/L
OW-60	6/28/2017	Manganese, Dissolved	0.55	0.002	0.0011	2017400	mg/L
OW-60	6/28/2017	Sodium, Dissolved	1100	20	3.2	NA	mg/L
OW-60	6/28/2017	Nickel, Dissolved	0.0061	0.01	0.0036	372000	mg/L
OW-60	6/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-60	6/28/2017	Antimony, Dissolved	0.00028	0.001	0.00017	6000	mg/L
OW-60	6/28/2017	Selenium, Dissolved	0.014	0.005	0.0019	50000	mg/L
OW-60	6/28/2017	Vanadium, Dissolved	0.0066	0.05	0.00076	63100	mg/L
OW-60	6/28/2017	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-60	6/28/2017	Iron, Total	28	1	0.51	13822000	mg/L
OW-60	6/28/2017	Mercury, Total	0.000099	0.0002	0.000037	2000	mg/L
OW-60	6/28/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
OW-60	6/28/2017	Nickel, Total	0.047	0.01	0.0036	372000	mg/L
OW-60	6/28/2017	Lead, Total	0.031	0.0025	0.00048	15000	mg/L
OW-60	6/28/2017	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-60	6/28/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
OW-60	6/28/2017	Vanadium, Total	0.07	0.05	0.00076	63100	mg/L
OW-60	6/28/2017	Zinc, Total	0.071	0.01	0.0028	5960000	mg/L
OW-60	9/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-60	9/21/2017	Arsenic, Total	0.0081	0.01	0.003	10000	mg/L
OW-60	9/21/2017	Barium, Total	0.59	0.002	0.00093	2000000	mg/L
OW-60	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	9/21/2017	Chromium, Total	0.024	0.006	0.0018	50000	mg/L
OW-60	9/21/2017	Copper, Total	0.0058	0.006	0.0017	790000	mg/L
OW-60	9/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-60	9/21/2017	Arsenic, Dissolved	ND	0.05	0.0089	10000	mg/L
OW-60	9/21/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
OW-60	9/21/2017	Calcium, Dissolved	200	5	0.39	NA	mg/L
OW-60	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	9/21/2017	Chromium, Dissolved	0.0024	0.006	0.0013	100000	mg/L
OW-60	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	9/21/2017	Iron, Dissolved	0.32	0.02	0.016	13821880	mg/L
OW-60	9/21/2017	Potassium, Dissolved	5.3	1	0.11	NA	mg/L
OW-60	9/21/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
OW-60	9/21/2017	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
OW-60	9/21/2017	Sodium, Dissolved	1400	50	8.2	NA	mg/L
OW-60	9/21/2017	Lead, Dissolved	0.0013	0.0025	0.00084	NA	mg/L
OW-60	9/21/2017	Selenium, Dissolved	0.031	0.005	0.0019	50000	mg/L
OW-60	9/21/2017	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-60	9/21/2017	Iron, Total	13	0.4	0.2	13822000	mg/L
OW-60	9/21/2017	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
OW-60	9/21/2017	Manganese, Total	0.86	0.002	0.0011	2017000	mg/L
OW-60	9/21/2017	Lead, Total	0.011	0.0025	0.00048	15000	mg/L
OW-60	9/21/2017	Selenium, Total	0.036	0.005	0.0036	50000	mg/L
OW-60	9/21/2017	Zinc, Total	0.033	0.01	0.0033	5960000	mg/L
OW-60	12/6/2017	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
OW-60	12/6/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-60	12/6/2017	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-60	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	12/6/2017	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
OW-60	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-60	12/6/2017	Silver, Dissolved	0.0029	0.005	0.0018	81200	mg/L
OW-60	12/6/2017	Arsenic, Dissolved	0.013	0.02	0.0084	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/6/2017	Barium, Dissolved	0.029	0.002	0.00099	2000000	mg/L
OW-60	12/6/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
OW-60	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-60	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	12/6/2017	Iron, Dissolved	0.02	0.02	0.016	13821880	mg/L
OW-60	12/6/2017	Potassium, Dissolved	4	1	0.11	NA	mg/L
OW-60	12/6/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
OW-60	12/6/2017	Manganese, Dissolved	0.042	0.002	0.00039	2017400	mg/L
OW-60	12/6/2017	Sodium, Dissolved	1400	20	3.3	NA	mg/L
OW-60	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-60	12/6/2017	Selenium, Dissolved	0.031	0.02	0.015	50000	mg/L
OW-60	12/6/2017	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OW-60	12/6/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
OW-60	12/6/2017	Iron, Total	3.1	0.1	0.051	13822000	mg/L
OW-60	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-60	12/6/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-60	12/6/2017	Lead, Total	0.002	0.0025	0.0011	15000	mg/L
OW-60	12/6/2017	Selenium, Total	0.021	0.02	0.02	50000	mg/L
OW-60	12/6/2017	Uranium, Total	0.048	0.0025	0.00077	30000	mg/L
OW-60	12/6/2017	Zinc, Total	0.0097	0.01	0.0033	5960000	mg/L
OW-60	2/22/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-60	2/22/2018	Arsenic, Total	0.011	0.02	0.0083	10000	mg/L
OW-60	2/22/2018	Barium, Total	0.23	0.002	0.001	2000000	mg/L
OW-60	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	2/22/2018	Chromium, Total	0.02	0.03	0.0088	50000	mg/L
OW-60	2/22/2018	Copper, Total	0.0063	0.006	0.0041	790000	mg/L
OW-60	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-60	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-60	2/22/2018	Barium, Dissolved	0.024	0.01	0.0049	2000000	mg/L
OW-60	2/22/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-60	2/22/2018	Chromium, Dissolved	0.0057	0.006	0.0013	100000	mg/L
OW-60	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-60	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-60	2/22/2018	Potassium, Dissolved	4.4	5	0.56	NA	mg/L
OW-60	2/22/2018	Magnesium, Dissolved	19	5	1.2	NA	mg/L
OW-60	2/22/2018	Manganese, Dissolved	ND	0.01	0.002	2017400	mg/L
OW-60	2/22/2018	Sodium, Dissolved	1500	50	8.2	NA	mg/L
OW-60	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-60	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-60	2/22/2018	Uranium, Dissolved	0.046	0.0025	0.00048	NA	mg/L
OW-60	2/22/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-60	2/22/2018	Iron, Total	6.7	0.2	0.1	13822000	mg/L
OW-60	2/22/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
OW-60	2/22/2018	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
OW-60	2/22/2018	Lead, Total	0.0051	0.0025	0.0011	15000	mg/L
OW-60	2/22/2018	Selenium, Total	0.032	0.02	0.02	50000	mg/L
OW-60	2/22/2018	Uranium, Total	0.053	0.0025	0.00034	30000	mg/L
OW-60	2/22/2018	Zinc, Total	0.019	0.05	0.016	5960000	mg/L
OW-60	5/8/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
OW-60	5/8/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
OW-60	5/8/2018	Barium, Total	0.36	0.002	0.001	2000000	mg/L
OW-60	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	5/8/2018	Chromium, Total	0.019	0.006	0.0018	50000	mg/L
OW-60	5/8/2018	Copper, Total	0.009	0.006	0.0041	790000	mg/L
OW-60	5/8/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
OW-60	5/8/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-60	5/8/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-60	5/8/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	5/8/2018	Chromium, Dissolved	0.0091	0.006	0.0013	100000	mg/L
OW-60	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	5/8/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
OW-60	5/8/2018	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
OW-60	5/8/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-60	5/8/2018	Manganese, Dissolved	0.0084	0.002	0.00039	2017400	mg/L
OW-60	5/8/2018	Sodium, Dissolved	1500	20	3.3	NA	mg/L
OW-60	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/8/2018	Selenium, Dissolved	0.023	0.005	0.0038	50000	mg/L
OW-60	5/8/2018	Uranium, Dissolved	0.05	0.0025	0.00048	NA	mg/L
OW-60	5/8/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-60	5/8/2018	Iron, Total	8.4	0.2	0.1	13822000	mg/L
OW-60	5/8/2018	Mercury, Total	0.000049	0.0002	0.000037	2000	mg/L
OW-60	5/8/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OW-60	5/8/2018	Lead, Total	0.0077	0.0025	0.0011	15000	mg/L
OW-60	5/8/2018	Selenium, Total	0.022	0.005	0.0049	50000	mg/L
OW-60	5/8/2018	Uranium, Total	0.052	0.0025	0.00034	30000	mg/L
OW-60	5/8/2018	Zinc, Total	0.021	0.01	0.0033	5960000	mg/L
OW-60	8/28/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
OW-60	8/28/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
OW-60	8/28/2018	Barium, Total	0.096	0.002	0.001	2000000	mg/L
OW-60	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	8/28/2018	Chromium, Total	0.0063	0.006	0.0018	50000	mg/L
OW-60	8/28/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
OW-60	8/28/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
OW-60	8/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-60	8/28/2018	Barium, Dissolved	0.028	0.002	0.00099	2000000	mg/L
OW-60	8/28/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	8/28/2018	Chromium, Dissolved	0.0032	0.006	0.0013	100000	mg/L
OW-60	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	8/28/2018	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
OW-60	8/28/2018	Potassium, Dissolved	3.2	1	0.11	NA	mg/L
OW-60	8/28/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-60	8/28/2018	Manganese, Dissolved	0.017	0.002	0.00039	2017400	mg/L
OW-60	8/28/2018	Sodium, Dissolved	1500	20	3.3	NA	mg/L
OW-60	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-60	8/28/2018	Selenium, Dissolved	0.019	0.005	0.0038	50000	mg/L
OW-60	8/28/2018	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
OW-60	8/28/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-60	8/28/2018	Iron, Total	2.5	0.1	0.051	13822000	mg/L
OW-60	8/28/2018	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
OW-60	8/28/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
OW-60	8/28/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-60	8/28/2018	Selenium, Total	0.016	0.005	0.0049	50000	mg/L
OW-60	8/28/2018	Uranium, Total	0.053	0.0025	0.00034	30000	mg/L
OW-60	8/28/2018	Zinc, Total	0.0081	0.01	0.0033	5960000	mg/L
OW-60	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-60	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-60	11/7/2018	Barium, Total	0.2	0.002	0.001	2000000	mg/L
OW-60	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	11/7/2018	Chromium, Total	0.014	0.006	0.0018	50000	mg/L
OW-60	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-60	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-60	11/7/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-60	11/7/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-60	11/7/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-60	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	11/7/2018	Iron, Dissolved	0.042	0.02	0.016	13821880	mg/L
OW-60	11/7/2018	Potassium, Dissolved	3.8	1	0.11	NA	mg/L
OW-60	11/7/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-60	11/7/2018	Manganese, Dissolved	0.022	0.002	0.00039	2017400	mg/L
OW-60	11/7/2018	Sodium, Dissolved	1400	50	8.2	NA	mg/L
OW-60	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-60	11/7/2018	Selenium, Dissolved	0.016	0.001	0.00076	50000	mg/L
OW-60	11/7/2018	Uranium, Dissolved	0.056	0.0025	0.00048	NA	mg/L
OW-60	11/7/2018	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
OW-60	11/7/2018	Iron, Total	5	0.2	0.1	13822000	mg/L
OW-60	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	11/7/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
OW-60	11/7/2018	Lead, Total	0.0038	0.0005	0.00023	15000	mg/L
OW-60	11/7/2018	Selenium, Total	0.018	0.005	0.0049	50000	mg/L
OW-60	11/7/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-60	11/7/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
OW-60	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Arsenic, Total	0.0029	0.001	0.000312	10000	mg/L
OW-60	2/13/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
OW-60	2/13/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
OW-60	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	2/13/2019	Chromium, Total	0.011	0.006	0.001533	50000	mg/L
OW-60	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-60	2/13/2019	Iron, Total	4.8	0.2	0.087469	13822000	mg/L
OW-60	2/13/2019	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
OW-60	2/13/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
OW-60	2/13/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-60	2/13/2019	Selenium, Total	0.016	0.001	0.000478	50000	mg/L
OW-60	2/13/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
OW-60	2/13/2019	Thallium, Total	0.000077	0.0005	0.000052	2000	mg/L
OW-60	2/13/2019	Uranium, Total	0.051	0.0025	0.000424	30000	mg/L
OW-60	2/13/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-60	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
OW-60	2/13/2019	Arsenic, Dissolved	0.0015	0.001	0.000068	10000	mg/L
OW-60	2/13/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
OW-60	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-60	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	2/13/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
OW-60	2/13/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
OW-60	2/13/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
OW-60	2/13/2019	Iron, Dissolved	0.0097	0.02	0.008747	13821880	mg/L
OW-60	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-60	2/13/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	2/13/2019	Manganese, Dissolved	0.0031	0.002	0.00029	2017400	mg/L
OW-60	2/13/2019	Potassium, Dissolved	3	1	0.162288	NA	mg/L
OW-60	2/13/2019	Selenium, Dissolved	0.016	0.001	0.000203	50000	mg/L
OW-60	2/13/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
OW-60	2/13/2019	Sodium, Dissolved	1400	20	8.323526	NA	mg/L
OW-60	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-60	2/13/2019	Uranium, Dissolved	0.06	0.0025	0.000152	NA	mg/L
OW-60	2/13/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
OW-60	8/21/2019	Aluminum, Dissolved	1.6	0.1	0.012441	19913930	mg/L
OW-60	8/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	8/21/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
OW-60	8/21/2019	Barium, Dissolved	0.056	0.002	0.000648	2000000	mg/L
OW-60	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-60	8/21/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	8/21/2019	Calcium, Dissolved	100	1	0.061889	NA	mg/L
OW-60	8/21/2019	Chromium, Dissolved	0.0031	0.006	0.001533	100000	mg/L
OW-60	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	8/21/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
OW-60	8/21/2019	Iron, Dissolved	0.38	0.02	0.008747	13821880	mg/L
OW-60	8/21/2019	Lead, Dissolved	0.00063	0.0025	0.000274	NA	mg/L
OW-60	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	8/21/2019	Manganese, Dissolved	0.062	0.002	0.00029	2017400	mg/L
OW-60	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	8/21/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
OW-60	8/21/2019	Potassium, Dissolved	3.5	1	0.162288	NA	mg/L
OW-60	8/21/2019	Selenium, Dissolved	0.015	0.005	0.000857	50000	mg/L
OW-60	8/21/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-60	8/21/2019	Sodium, Dissolved	1600	100	41.61763	NA	mg/L
OW-60	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	8/21/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-60	8/21/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-60	8/21/2019	Aluminum, Total	39	2	0.248827	19914000	mg/L
OW-60	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	8/21/2019	Arsenic, Total	0.0048	0.005	0.001561	10000	mg/L
OW-60	8/21/2019	Barium, Total	0.49	0.002	0.000648	2000000	mg/L
OW-60	8/21/2019	Beryllium, Total	0.002	0.002	0.000284	4000	mg/L
OW-60	8/21/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-60	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	8/21/2019	Chromium, Total	0.038	0.006	0.001533	50000	mg/L
OW-60	8/21/2019	Cobalt, Total	0.0071	0.006	0.003091	5980	mg/L
OW-60	8/21/2019	Copper, Total	0.0088	0.006	0.004072	790000	mg/L
OW-60	8/21/2019	Iron, Total	15	2	0.874687	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
OW-60	8/21/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
OW-60	8/21/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-60	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	8/21/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
OW-60	8/21/2019	Selenium, Total	0.022	0.005	0.00239	50000	mg/L
OW-60	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	8/21/2019	Uranium, Total	0.054	0.0025	0.000424	30000	mg/L
OW-60	8/21/2019	Zinc, Total	0.041	0.01	0.005772	5960000	mg/L
OW-60	10/15/2019	Aluminum, Dissolved	0.39	0.02	0.002488	19913930	mg/L
OW-60	10/15/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	10/15/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
OW-60	10/15/2019	Barium, Dissolved	0.031	0.002	0.000648	2000000	mg/L
OW-60	10/15/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
OW-60	10/15/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	10/15/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OW-60	10/15/2019	Chromium, Dissolved	0.0052	0.006	0.001533	100000	mg/L
OW-60	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	10/15/2019	Copper, Dissolved	0.0071	0.006	0.001296	790000	mg/L
OW-60	10/15/2019	Iron, Dissolved	0.14	0.02	0.008747	13821880	mg/L
OW-60	10/15/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-60	10/15/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
OW-60	10/15/2019	Manganese, Dissolved	0.03	0.002	0.00029	2017400	mg/L
OW-60	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	10/15/2019	Nickel, Dissolved	0.04	0.01	0.004009	372000	mg/L
OW-60	10/15/2019	Potassium, Dissolved	2.2	1	0.162288	NA	mg/L
OW-60	10/15/2019	Selenium, Dissolved	0.021	0.005	0.000857	50000	mg/L
OW-60	10/15/2019	Silver, Dissolved	0.0038	0.005	0.000942	81200	mg/L
OW-60	10/15/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
OW-60	10/15/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	10/15/2019	Zinc, Dissolved	0.037	0.01	0.002252	5960450	mg/L
OW-60	10/15/2019	Aluminum, Total	30	1	0.124414	19914000	mg/L
OW-60	10/15/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	10/15/2019	Arsenic, Total	0.0052	0.005	0.001561	10000	mg/L
OW-60	10/15/2019	Barium, Total	0.43	0.002	0.000648	2000000	mg/L
OW-60	10/15/2019	Beryllium, Total	0.00096	0.002	0.000284	4000	mg/L
OW-60	10/15/2019	Boron, Total	2.5	0.4	0.045305	3949	mg/L
OW-60	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	10/15/2019	Chromium, Total	0.078	0.006	0.001533	50000	mg/L
OW-60	10/15/2019	Cobalt, Total	0.0059	0.006	0.003091	5980	mg/L
OW-60	10/15/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
OW-60	10/15/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-60	10/15/2019	Lead, Total	0.0059	0.0025	0.000274	15000	mg/L
OW-60	10/15/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
OW-60	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	10/15/2019	Nickel, Total	0.053	0.01	0.004009	372000	mg/L
OW-60	10/15/2019	Selenium, Total	0.018	0.005	0.00239	50000	mg/L
OW-60	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	10/15/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	10/15/2019	Zinc, Total	0.058	0.01	0.005772	5960000	mg/L
OW-60	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-60	12/11/2020	Aluminum, Total	9.48	0.2	0.051	19914000	mg/L
OW-60	12/11/2020	Calcium, Total	97.6	0.5	0.084	NA	mg/L
OW-60	12/11/2020	Boron, Total	2.31	0.1	0.022	3949	mg/L
OW-60	12/11/2020	Barium, Total	0.102	0.01	0.003	2000000	mg/L
OW-60	12/11/2020	Potassium, Total	5.03	1	0.34	NA	mg/L
OW-60	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-60	12/11/2020	Magnesium, Total	16.6	0.5	0.12	NA	mg/L
OW-60	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-60	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-60	12/11/2020	Chromium, Total	0.0379	0.01	0.005	50000	mg/L
OW-60	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-60	12/11/2020	Iron, Total	4.18	0.2	0.075	13822000	mg/L
OW-60	12/11/2020	Manganese, Total	0.144	0.01	0.003	2017000	mg/L
OW-60	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-60	12/11/2020	Nickel, Total	0.0902	0.006	0.003	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-60	12/11/2020	Sodium, Total	1400	20	9.2	NA	mg/L
OW-60	12/11/2020	Aluminum, Dissolved	2.46	0.2	0.051	19913930	mg/L
OW-60	12/11/2020	Barium, Dissolved	0.0477	0.01	0.003	2000000	mg/L
OW-60	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-60	12/11/2020	Boron, Dissolved	2.43	0.1	0.022	3949110	mg/L
OW-60	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-60	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-60	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-60	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-60	12/11/2020	Iron, Dissolved	1.11	0.2	0.075	13821880	mg/L
OW-60	12/11/2020	Manganese, Dissolved	0.056	0.01	0.003	2017400	mg/L
OW-60	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-60	12/11/2020	Nickel, Dissolved	0.0688	0.006	0.003	372000	mg/L
OW-60	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-60	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-60	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-60	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-60	12/11/2020	Arsenic, Total Recoverable	1.57	1	0.286	10	ug/L
OW-60	12/11/2020	Lead, Total Recoverable	1.5	1	0.133	15	ug/L
OW-60	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-60	12/11/2020	Selenium, Total Recoverable	15.2	5	1.43	50	ug/L
OW-60	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-60	12/11/2020	Uranium, Total Recoverable	**53.2**	5	1.12	30	ug/L
OW-60	12/11/2020	Arsenic, Dissolved	1.14	1	0.286	10	ug/L
OW-60	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-60	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-60	12/11/2020	Selenium, Dissolved	15.6	5	1.43	50	ug/L
OW-60	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-60	12/11/2020	Uranium, Dissolved	52.7	5	1.12	NA	ug/L
OW-60	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-60	9/21/2020	Arsenic, Total	0.0022	0.001	0.00026	10000	mg/L
OW-60	9/21/2020	Lead, Total	0.0038	0.0005	0.000034	15000	mg/L
OW-60	9/21/2020	Selenium, Total	0.014	0.001	0.00066	50000	mg/L
OW-60	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-60	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-60	9/21/2020	Barium, Total	0.21	0.003	0.0016	2000000	mg/L
OW-60	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-60	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-60	9/21/2020	Chromium, Total	0.059	0.006	0.0021	50000	mg/L
OW-60	9/21/2020	Cobalt, Total	0.0058	0.006	0.0024	5980	mg/L
OW-60	9/21/2020	Manganese, Total	0.29	0.002	0.00081	2017000	mg/L
OW-60	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-60	9/21/2020	Zinc, Total	0.021	0.01	0.0064	5960000	mg/L
OW-60	9/21/2020	Aluminum, Total	20	1	0.37	19914000	mg/L
OW-60	9/21/2020	Uranium, Total	0.054	0.0025	0.00033	30000	mg/L
OW-60	9/21/2020	Copper, Total	0.0085	0.006	0.0047	790000	mg/L
OW-60	9/21/2020	Nickel, Total	0.068	0.01	0.0033	372000	mg/L
OW-60	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-60	9/21/2020	Boron, Total	2.4	0.4	0.074	3949	mg/L
OW-60	9/21/2020	Iron, Total	7.9	0.5	0.13	13822000	mg/L
OW-60	9/21/2020	Arsenic, Dissolved	0.0014	0.005	0.001	10000	mg/L
OW-60	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
OW-60	9/21/2020	Selenium, Dissolved	0.014	0.005	0.0033	50000	mg/L
OW-60	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
OW-60	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
OW-60	9/21/2020	Uranium, Dissolved	0.053	0.0025	0.00033	NA	mg/L
OW-60	9/21/2020	Aluminum, Dissolved	0.3	0.1	0.028	19913930	mg/L
OW-60	9/21/2020	Boron, Dissolved	2.3	0.2	0.033	3949110	mg/L
OW-60	9/21/2020	Barium, Dissolved	0.033	0.002	0.0011	2000000	mg/L
OW-60	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-60	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-60	9/21/2020	Calcium, Dissolved	95	1	0.11	NA	mg/L
OW-60	9/21/2020	Chromium, Dissolved	0.0045	0.006	0.002	100000	mg/L
OW-60	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-60	9/21/2020	Iron, Dissolved	0.52	0.02	0.01	13821880	mg/L
OW-60	9/21/2020	Magnesium, Dissolved	16	1	0.067	NA	mg/L
OW-60	9/21/2020	Manganese, Dissolved	0.055	0.002	0.00058	2017400	mg/L
OW-60	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	Nickel, Dissolved	0.057	0.01	0.0033	372000	mg/L
OW-60	9/21/2020	Potassium, Dissolved	3	1	0.16	NA	mg/L
OW-60	9/21/2020	Silver, Dissolved	0.0018	0.005	0.0013	81200	mg/L
OW-60	9/21/2020	Zinc, Dissolved	0.034	0.01	0.006	5960450	mg/L
OW-60	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-60	9/21/2020	Sodium, Dissolved	1300	20	2.7	NA	mg/L
OW-60	3/3/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OW-60	3/3/2020	Arsenic, Dissolved	0.0013	0.005	0.0005	10000	mg/L
OW-60	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
OW-60	3/3/2020	Selenium, Dissolved	0.017	0.005	0.00086	50000	mg/L
OW-60	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OW-60	3/3/2020	Uranium, Dissolved	0.059	0.0025	0.00037	NA	mg/L
OW-60	3/3/2020	Aluminum, Dissolved	0.051	0.02	0.0025	19913930	mg/L
OW-60	3/3/2020	Barium, Dissolved	0.013	0.002	0.00065	2000000	mg/L
OW-60	3/3/2020	Beryllium, Dissolved	0.0003	0.002	0.00028	4000	mg/L
OW-60	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-60	3/3/2020	Chromium, Dissolved	0.0031	0.006	0.0015	100000	mg/L
OW-60	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-60	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-60	3/3/2020	Iron, Dissolved	0.056	0.02	0.0087	13821880	mg/L
OW-60	3/3/2020	Magnesium, Dissolved	18	1	0.05	NA	mg/L
OW-60	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-60	3/3/2020	Nickel, Dissolved	0.0096	0.01	0.004	372000	mg/L
OW-60	3/3/2020	Potassium, Dissolved	2.2	1	0.16	NA	mg/L
OW-60	3/3/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
OW-60	3/3/2020	Zinc, Dissolved	0.0036	0.01	0.0023	5960450	mg/L
OW-60	3/3/2020	Boron, Dissolved	2.2	0.2	0.023	3949110	mg/L
OW-60	3/3/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
OW-60	3/3/2020	Manganese, Dissolved	0.0067	0.002	0.00029	2017400	mg/L
OW-60	3/3/2020	Sodium, Dissolved	1500	20	8.3	NA	mg/L
OW-60	3/3/2020	Uranium, Total	0.053	0.0025	0.00042	30000	mg/L
OW-60	3/3/2020	Antimony, Total	0.00043	0.001	0.00039	6000	mg/L
OW-60	3/3/2020	Arsenic, Total	0.0036	0.001	0.00031	10000	mg/L
OW-60	3/3/2020	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
OW-60	3/3/2020	Selenium, Total	0.016	0.001	0.00048	50000	mg/L
OW-60	3/3/2020	Thallium, Total	0.000077	0.0005	0.000052	2000	mg/L
OW-60	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-60	3/3/2020	Barium, Total	0.24	0.002	0.00065	2000000	mg/L
OW-60	3/3/2020	Beryllium, Total	0.00072	0.002	0.00028	4000	mg/L
OW-60	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-60	3/3/2020	Chromium, Total	0.54	0.006	0.0015	50000	mg/L
OW-60	3/3/2020	Cobalt, Total	0.0078	0.006	0.0031	5980	mg/L
OW-60	3/3/2020	Copper, Total	0.024	0.006	0.0041	790000	mg/L
OW-60	3/3/2020	Manganese, Total	0.28	0.002	0.00029	2017000	mg/L
OW-60	3/3/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OW-60	3/3/2020	Nickel, Total	0.17	0.01	0.004	372000	mg/L
OW-60	3/3/2020	Silver, Total	0.0015	0.005	0.0014	50000	mg/L
OW-60	3/3/2020	Zinc, Total	0.082	0.01	0.0058	5960000	mg/L
OW-60	3/3/2020	Boron, Total	2.4	0.2	0.023	3949	mg/L
OW-60	3/3/2020	Aluminum, Total	21	1	0.12	19914000	mg/L
OW-60	3/3/2020	Iron, Total	11	0.4	0.17	13822000	mg/L
OW-60	5/2/2019	Aluminum, Dissolved	0.6	0.02	0.002488	19913930	mg/L
OW-60	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	5/2/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
OW-60	5/2/2019	Barium, Dissolved	0.042	0.002	0.000648	2000000	mg/L
OW-60	5/2/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
OW-60	5/2/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	5/2/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
OW-60	5/2/2019	Chromium, Dissolved	0.003	0.006	0.001533	100000	mg/L
OW-60	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	5/2/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
OW-60	5/2/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
OW-60	5/2/2019	Lead, Dissolved	0.00047	0.0025	0.000274	NA	mg/L
OW-60	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	5/2/2019	Manganese, Dissolved	0.04	0.002	0.00029	2017400	mg/L
OW-60	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	5/2/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-60	5/2/2019	Potassium, Dissolved	3.5	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Selenium, Dissolved	0.018	0.005	0.000857	50000	mg/L
OW-60	5/2/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
OW-60	5/2/2019	Sodium, Dissolved	1500	20	8.323526	NA	mg/L
OW-60	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	5/2/2019	Uranium, Dissolved	0.054	0.0025	0.000374	NA	mg/L
OW-60	5/2/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-60	5/2/2019	Aluminum, Total	60	2	0.248827	19914000	mg/L
OW-60	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	5/2/2019	Arsenic, Total	0.0047	0.005	0.001561	10000	mg/L
OW-60	5/2/2019	Barium, Total	0.82	0.002	0.000648	2000000	mg/L
OW-60	5/2/2019	Beryllium, Total	0.0026	0.002	0.000284	4000	mg/L
OW-60	5/2/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
OW-60	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	5/2/2019	Chromium, Total	0.031	0.006	0.001533	50000	mg/L
OW-60	5/2/2019	Cobalt, Total	0.0092	0.006	0.003091	5980	mg/L
OW-60	5/2/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
OW-60	5/2/2019	Iron, Total	16	1	0.437344	13822000	mg/L
OW-60	5/2/2019	Lead, Total	0.014	0.0025	0.000274	15000	mg/L
OW-60	5/2/2019	Manganese, Total	0.86	0.002	0.00029	2017000	mg/L
OW-60	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	5/2/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
OW-60	5/2/2019	Selenium, Total	0.017	0.005	0.00239	50000	mg/L
OW-60	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	5/2/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-60	5/2/2019	Zinc, Total	0.04	0.01	0.005772	5960000	mg/L
OW-63	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-63	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-63	9/16/2020	Arsenic, Total	0.0082	0.001	0.00026	10000	mg/L
OW-63	9/16/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
OW-63	9/16/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-63	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-63	9/16/2020	Uranium, Total	ND	0.0005	0.000065	30000	mg/L
OW-63	9/16/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
OW-63	9/16/2020	Barium, Total	4	0.015	0.0082	2000000	mg/L
OW-63	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-63	9/16/2020	Boron, Total	0.3	0.2	0.037	3949	mg/L
OW-63	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-63	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-63	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-63	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-63	9/16/2020	Manganese, Total	0.98	0.01	0.0041	2017000	mg/L
OW-63	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-63	9/16/2020	Nickel, Total	0.039	0.05	0.016	372000	mg/L
OW-63	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-63	9/16/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-63	9/16/2020	Iron, Total	5.8	5	1.3	13822000	mg/L
OW-63	9/16/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-63	9/16/2020	Arsenic, Dissolved	0.0046	0.001	0.00021	10000	mg/L
OW-63	9/16/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-63	9/16/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-63	9/16/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-63	9/16/2020	Aluminum, Dissolved	ND	0.1	0.028	19913930	mg/L
OW-63	9/16/2020	Barium, Dissolved	3.7	0.01	0.0056	2000000	mg/L
OW-63	9/16/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
OW-63	9/16/2020	Boron, Dissolved	0.31	0.2	0.033	3949110	mg/L
OW-63	9/16/2020	Calcium, Dissolved	83	5	0.57	NA	mg/L
OW-63	9/16/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
OW-63	9/16/2020	Iron, Dissolved	0.21	0.1	0.052	13821880	mg/L
OW-63	9/16/2020	Magnesium, Dissolved	15	5	0.34	NA	mg/L
OW-63	9/16/2020	Manganese, Dissolved	0.99	0.01	0.0029	2017400	mg/L
OW-63	9/16/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
OW-63	9/16/2020	Potassium, Dissolved	ND	5	0.8	NA	mg/L
OW-63	9/16/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-63	9/16/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
OW-63	9/16/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
OW-63	9/16/2020	Chromium, Dissolved	ND	0.03	0.0098	100000	mg/L
OW-63	9/16/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
OW-63	9/16/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
OW-63	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-63	3/4/2020	Arsenic, Total	0.009	0.001	0.00031	10000	mg/L
OW-63	3/4/2020	Lead, Total	0.00036	0.0005	0.000055	15000	mg/L
OW-63	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-63	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	3/4/2020	Uranium, Total	0.00014	0.0005	0.000085	30000	mg/L
OW-63	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-63	3/4/2020	Beryllium, Total	0.00028	0.002	0.00028	4000	mg/L
OW-63	3/4/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-63	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-63	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-63	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-63	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-63	3/4/2020	Nickel, Total	0.029	0.01	0.004	372000	mg/L
OW-63	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-63	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-63	3/4/2020	Manganese, Total	1.2	0.01	0.0014	2017000	mg/L
OW-63	3/4/2020	Barium, Total	4.4	0.02	0.0065	2000000	mg/L
OW-63	3/4/2020	Iron, Total	6.8	0.2	0.087	13822000	mg/L
OW-63	3/4/2020	Aluminum, Total	0.28	0.02	0.0025	19914000	mg/L
OW-63	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-63	3/4/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	3/4/2020	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
OW-63	3/4/2020	Arsenic, Dissolved	0.0089	0.001	0.0001	10000	mg/L
OW-63	3/4/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-63	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-63	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-63	3/4/2020	Boron, Dissolved	0.25	0.04	0.0045	3949110	mg/L
OW-63	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-63	3/4/2020	Calcium, Dissolved	86	1	0.062	NA	mg/L
OW-63	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-63	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-63	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-63	3/4/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-63	3/4/2020	Manganese, Dissolved	0.88	0.002	0.00029	2017400	mg/L
OW-63	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-63	3/4/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
OW-63	3/4/2020	Potassium, Dissolved	0.57	1	0.16	NA	mg/L
OW-63	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-63	3/4/2020	Zinc, Dissolved	0.0091	0.01	0.0023	5960450	mg/L
OW-63	3/4/2020	Barium, Dissolved	4.4	0.01	0.0032	2000000	mg/L
OW-63	3/4/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
OW-63	3/4/2020	Iron, Dissolved	6.5	0.2	0.087	13821880	mg/L
OW-63	12/11/2020	Arsenic, Total Recoverable	8.59	1	0.286	10	ug/L
OW-63	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-63	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-63	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-63	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-63	12/11/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-63	12/11/2020	Arsenic, Dissolved	8.3	1	0.286	10	ug/L
OW-63	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-63	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-63	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-63	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-63	12/11/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-63	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-63	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-63	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-63	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-63	12/11/2020	Calcium, Total	80.9	0.5	0.084	NA	mg/L
OW-63	12/11/2020	Boron, Total	0.328	0.1	0.022	3949	mg/L
OW-63	12/11/2020	Barium, Total	4.37	0.01	0.003	2000000	mg/L
OW-63	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-63	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-63	12/11/2020	Magnesium, Total	15.3	0.5	0.12	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-63	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-63	12/11/2020	Sodium, Total	262	2	0.92	NA	mg/L
OW-63	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-63	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-63	12/11/2020	Iron, Total	6.44	0.2	0.075	13822000	mg/L
OW-63	12/11/2020	Manganese, Total	1.05	0.01	0.003	2017000	mg/L
OW-63	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-63	12/11/2020	Nickel, Total	0.0225	0.006	0.003	372000	mg/L
OW-63	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-63	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-63	12/11/2020	Barium, Dissolved	4.16	0.01	0.003	2000000	mg/L
OW-63	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-63	12/11/2020	Boron, Dissolved	0.327	0.1	0.022	3949110	mg/L
OW-63	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-63	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-63	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-63	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-63	12/11/2020	Iron, Dissolved	6.06	0.2	0.075	13821880	mg/L
OW-63	12/11/2020	Manganese, Dissolved	0.985	0.01	0.003	2017400	mg/L
OW-63	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-63	12/11/2020	Nickel, Dissolved	0.0203	0.006	0.003	372000	mg/L
OW-63	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-63	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-63	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-63	2/20/2019	Arsenic, Dissolved	0.011	0.001	0.000068	10000	mg/L
OW-63	2/20/2019	Barium, Dissolved	3.8	0.01	0.003242	2000000	mg/L
OW-63	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	2/20/2019	Calcium, Dissolved	82	1	0.061889	NA	mg/L
OW-63	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	2/20/2019	Iron, Dissolved	5.2	0.2	0.087469	13821880	mg/L
OW-63	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-63	2/20/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	2/20/2019	Manganese, Dissolved	1.1	0.01	0.00145	2017400	mg/L
OW-63	2/20/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
OW-63	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-63	2/20/2019	Silver, Dissolved	0.00095	0.005	0.000942	81200	mg/L
OW-63	2/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-63	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-63	2/20/2019	Uranium, Dissolved	0.0004	0.0005	0.00003	NA	mg/L
OW-63	2/20/2019	Zinc, Dissolved	0.036	0.01	0.002252	5960450	mg/L
OW-63	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	2/20/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	2/20/2019	Barium, Total	4	0.01	0.003242	2000000	mg/L
OW-63	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	2/20/2019	Iron, Total	5.7	0.2	0.087469	13822000	mg/L
OW-63	2/20/2019	Lead, Total	0.00018	0.0005	0.000055	15000	mg/L
OW-63	2/20/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
OW-63	2/20/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
OW-63	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	2/20/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-63	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	2/20/2019	Uranium, Total	0.00044	0.0005	0.000085	30000	mg/L
OW-63	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Dissolved	0.0097	0.001	0.000101	10000	mg/L
OW-63	11/18/2019	Barium, Dissolved	4.5	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-63	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	11/18/2019	Calcium, Dissolved	84	1	0.061889	NA	mg/L
OW-63	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	11/18/2019	Iron, Dissolved	5.7	0.2	0.087469	13821880	mg/L
OW-63	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	11/18/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-63	11/18/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
OW-63	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Potassium, Dissolved	0.63	1	0.162288	NA	mg/L
OW-63	11/18/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	11/18/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-63	11/18/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	11/18/2019	Uranium, Dissolved	0.00025	0.0005	0.000075	NA	mg/L
OW-63	11/18/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
OW-63	11/18/2019	Aluminum, Total	0.062	0.02	0.002488	19914000	mg/L
OW-63	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	11/18/2019	Barium, Total	4.4	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-63	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	11/18/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	11/18/2019	Lead, Total	0.00024	0.0005	0.000055	15000	mg/L
OW-63	11/18/2019	Manganese, Total	1	0.02	0.002899	2017000	mg/L
OW-63	11/18/2019	Mercury, Total	ND	0.0008	0.000484	2000	mg/L
OW-63	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-63	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	11/18/2019	Uranium, Total	0.00013	0.0005	0.000085	30000	mg/L
OW-63	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Dissolved	0.0093	0.001	0.000101	10000	mg/L
OW-63	11/18/2019	Barium, Dissolved	4.4	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-63	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	11/18/2019	Calcium, Dissolved	83	1	0.061889	NA	mg/L
OW-63	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	11/18/2019	Iron, Dissolved	5.4	0.2	0.087469	13821880	mg/L
OW-63	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	11/18/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-63	11/18/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
OW-63	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
OW-63	11/18/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	11/18/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-63	11/18/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	11/18/2019	Uranium, Dissolved	0.00018	0.0005	0.000075	NA	mg/L
OW-63	11/18/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-63	11/18/2019	Aluminum, Total	0.064	0.02	0.002488	19914000	mg/L
OW-63	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Total	0.01	0.001	0.000312	10000	mg/L
OW-63	11/18/2019	Barium, Total	4.5	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-63	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	11/18/2019	Lead, Total	0.00023	0.0005	0.000055	15000	mg/L
OW-63	11/18/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
OW-63	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-63	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-63	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	11/18/2019	Uranium, Total	0.00018	0.0005	0.000085	30000	mg/L
OW-63	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	8/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	8/19/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
OW-63	8/19/2019	Barium, Dissolved	4.1	0.01	0.003242	2000000	mg/L
OW-63	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	8/19/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-63	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	8/19/2019	Calcium, Dissolved	80	1	0.061889	NA	mg/L
OW-63	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	8/19/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
OW-63	8/19/2019	Iron, Dissolved	6.1	0.2	0.087469	13821880	mg/L
OW-63	8/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	8/19/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	8/19/2019	Manganese, Dissolved	1	0.002	0.00029	2017400	mg/L
OW-63	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	8/19/2019	Nickel, Dissolved	0.029	0.01	0.004009	372000	mg/L
OW-63	8/19/2019	Potassium, Dissolved	0.51	1	0.162288	NA	mg/L
OW-63	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	8/19/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-63	8/19/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
OW-63	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	8/19/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
OW-63	8/19/2019	Zinc, Dissolved	0.0055	0.01	0.002252	5960450	mg/L
OW-63	8/19/2019	Aluminum, Total	0.022	0.02	0.002488	19914000	mg/L
OW-63	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	8/19/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	8/19/2019	Barium, Total	4.1	0.02	0.006484	2000000	mg/L
OW-63	8/19/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-63	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	8/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	8/19/2019	Iron, Total	6.1	0.2	0.087469	13822000	mg/L
OW-63	8/19/2019	Lead, Total	0.00027	0.0005	0.000055	15000	mg/L
OW-63	8/19/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
OW-63	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-63	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	8/19/2019	Nickel, Total	0.029	0.01	0.004009	372000	mg/L
OW-63	8/19/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-63	8/19/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	8/19/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
OW-63	8/19/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	5/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	5/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	5/15/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
OW-63	5/15/2019	Barium, Dissolved	3.9	0.02	0.006484	2000000	mg/L
OW-63	5/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	5/15/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
OW-63	5/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	5/15/2019	Calcium, Dissolved	80	1	0.061889	NA	mg/L
OW-63	5/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	5/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	5/15/2019	Copper, Dissolved	0.0051	0.006	0.001296	790000	mg/L
OW-63	5/15/2019	Iron, Dissolved	5.9	0.2	0.087469	13821880	mg/L
OW-63	5/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	5/15/2019	Manganese, Dissolved	1	0.002	0.00029	2017400	mg/L
OW-63	5/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	5/15/2019	Nickel, Dissolved	0.033	0.01	0.004009	372000	mg/L
OW-63	5/15/2019	Potassium, Dissolved	0.54	1	0.162288	NA	mg/L
OW-63	5/15/2019	Selenium, Dissolved	0.0002	0.001	0.000171	50000	mg/L
OW-63	5/15/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-63	5/15/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	5/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	5/15/2019	Uranium, Dissolved	0.00013	0.0005	0.000075	NA	mg/L
OW-63	5/15/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
OW-63	5/15/2019	Aluminum, Total	0.37	0.02	0.002488	19914000	mg/L
OW-63	5/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	5/15/2019	Arsenic, Total	0.01	0.001	0.000312	10000	mg/L
OW-63	5/15/2019	Barium, Total	4.1	0.01	0.003242	2000000	mg/L
OW-63	5/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	5/15/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-63	5/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	5/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	5/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	5/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	5/15/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	5/15/2019	Lead, Total	0.00077	0.0005	0.000055	15000	mg/L
OW-63	5/15/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
OW-63	5/15/2019	Mercury, Total	0.000041	0.0002	0.000038	2000	mg/L
OW-63	5/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	5/15/2019	Nickel, Total	0.033	0.01	0.004009	372000	mg/L
OW-63	5/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	5/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-63	5/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	5/15/2019	Uranium, Total	0.0001	0.0005	0.000085	30000	mg/L
OW-63	5/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	4/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-63	4/29/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
OW-63	4/29/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
OW-63	4/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	4/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	4/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	4/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-63	4/29/2018	Arsenic, Dissolved	0.012	0.001	0.00042	10000	mg/L
OW-63	4/29/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
OW-63	4/29/2018	Calcium, Dissolved	82	1	0.078	NA	mg/L
OW-63	4/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	4/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	4/29/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
OW-63	4/29/2018	Iron, Dissolved	5.5	0.2	0.16	13821880	mg/L
OW-63	4/29/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
OW-63	4/29/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	4/29/2018	Manganese, Dissolved	0.92	0.002	0.00039	2017400	mg/L
OW-63	4/29/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
OW-63	4/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	4/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	4/29/2018	Uranium, Dissolved	0.00013	0.0005	0.000096	NA	mg/L
OW-63	4/29/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-63	4/29/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OW-63	4/29/2018	Manganese, Total	1	0.01	0.0055	2017000	mg/L
OW-63	4/29/2018	Lead, Total	0.00045	0.0005	0.00023	15000	mg/L
OW-63	4/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	4/29/2018	Uranium, Total	0.00027	0.0005	0.000068	30000	mg/L
OW-63	4/29/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-63	8/22/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-63	8/22/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
OW-63	8/22/2018	Barium, Total	3.8	0.02	0.01	2000000	mg/L
OW-63	8/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	8/22/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	8/22/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	8/22/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
OW-63	8/22/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
OW-63	8/22/2018	Barium, Dissolved	3.9	0.02	0.0099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/22/2018	Calcium, Dissolved	87	1	0.078	NA	mg/L
OW-63	8/22/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	8/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	8/22/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-63	8/22/2018	Iron, Dissolved	5.8	0.2	0.16	13821880	mg/L
OW-63	8/22/2018	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
OW-63	8/22/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	8/22/2018	Manganese, Dissolved	1.2	0.02	0.0039	2017400	mg/L
OW-63	8/22/2018	Sodium, Dissolved	310	10	1.6	NA	mg/L
OW-63	8/22/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	8/22/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	8/22/2018	Uranium, Dissolved	0.0002	0.0005	0.000096	NA	mg/L
OW-63	8/22/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-63	8/22/2018	Iron, Total	5.9	0.2	0.1	13822000	mg/L
OW-63	8/22/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-63	8/22/2018	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
OW-63	8/22/2018	Lead, Total	0.00078	0.0005	0.00023	15000	mg/L
OW-63	8/22/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	8/22/2018	Uranium, Total	0.00037	0.0005	0.000068	30000	mg/L
OW-63	8/22/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
OW-63	12/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-63	12/3/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
OW-63	12/3/2018	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-63	12/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	12/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	12/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	12/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-63	12/3/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
OW-63	12/3/2018	Barium, Dissolved	3.7	0.02	0.0099	2000000	mg/L
OW-63	12/3/2018	Calcium, Dissolved	70	1	0.078	NA	mg/L
OW-63	12/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	12/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	12/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-63	12/3/2018	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
OW-63	12/3/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-63	12/3/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	12/3/2018	Manganese, Dissolved	0.93	0.002	0.00039	2017400	mg/L
OW-63	12/3/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-63	12/3/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	12/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	12/3/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
OW-63	12/3/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OW-63	12/3/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-63	12/3/2018	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
OW-63	12/3/2018	Lead, Total	0.00053	0.0005	0.00023	15000	mg/L
OW-63	12/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	12/3/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-64	4/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-64	4/29/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
OW-64	4/29/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OW-64	4/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-64	4/29/2018	Chromium, Total	0.02	0.006	0.0018	50000	mg/L
OW-64	4/29/2018	Copper, Total	0.032	0.006	0.0041	790000	mg/L
OW-64	4/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-64	4/29/2018	Arsenic, Dissolved	0.0089	0.001	0.00042	10000	mg/L
OW-64	4/29/2018	Barium, Dissolved	0.35	0.002	0.00099	2000000	mg/L
OW-64	4/29/2018	Calcium, Dissolved	18	1	0.078	NA	mg/L
OW-64	4/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-64	4/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-64	4/29/2018	Copper, Dissolved	0.009	0.006	0.0032	790000	mg/L
OW-64	4/29/2018	Iron, Dissolved	0.93	0.1	0.082	13821880	mg/L
OW-64	4/29/2018	Potassium, Dissolved	3	1	0.11	NA	mg/L
OW-64	4/29/2018	Magnesium, Dissolved	5.1	1	0.25	NA	mg/L
OW-64	4/29/2018	Manganese, Dissolved	0.44	0.002	0.00039	2017400	mg/L
OW-64	4/29/2018	Sodium, Dissolved	460	5	0.82	NA	mg/L
OW-64	4/29/2018	Lead, Dissolved	0.0034	0.0005	0.00017	NA	mg/L
OW-64	4/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-64	4/29/2018	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
OW-64	4/29/2018	Zinc, Dissolved	0.0039	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	Iron, Total	13	0.4	0.2	13822000	mg/L
OW-64	4/29/2018	Manganese, Total	1	0.002	0.0011	2017000	mg/L
OW-64	4/29/2018	Lead, Total	0.015	0.0005	0.00023	15000	mg/L
OW-64	4/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-64	4/29/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
OW-64	4/29/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
OW-64	8/22/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-64	8/22/2018	Arsenic, Total	0.0067	0.001	0.00041	10000	mg/L
OW-64	8/22/2018	Barium, Total	0.47	0.002	0.001	2000000	mg/L
OW-64	8/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-64	8/22/2018	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
OW-64	8/22/2018	Copper, Total	0.018	0.006	0.0041	790000	mg/L
OW-64	8/22/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-64	8/22/2018	Arsenic, Dissolved	0.0068	0.001	0.00042	10000	mg/L
OW-64	8/22/2018	Barium, Dissolved	0.33	0.002	0.00099	2000000	mg/L
OW-64	8/22/2018	Calcium, Dissolved	11	1	0.078	NA	mg/L
OW-64	8/22/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-64	8/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-64	8/22/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-64	8/22/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
OW-64	8/22/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-64	8/22/2018	Magnesium, Dissolved	3	1	0.25	NA	mg/L
OW-64	8/22/2018	Manganese, Dissolved	0.34	0.002	0.00039	2017400	mg/L
OW-64	8/22/2018	Sodium, Dissolved	470	10	1.6	NA	mg/L
OW-64	8/22/2018	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-64	8/22/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-64	8/22/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-64	8/22/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-64	8/22/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
OW-64	8/22/2018	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
OW-64	8/22/2018	Manganese, Total	0.46	0.002	0.0011	2017000	mg/L
OW-64	8/22/2018	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
OW-64	8/22/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-64	8/22/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
OW-64	8/22/2018	Zinc, Total	0.0089	0.01	0.0033	5960000	mg/L
OW-64	5/15/2019	Aluminum, Dissolved	0.17	0.02	0.002488	19913930	mg/L
OW-64	5/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	5/15/2019	Arsenic, Dissolved	0.0041	0.001	0.000101	10000	mg/L
OW-64	5/15/2019	Barium, Dissolved	0.34	0.002	0.000648	2000000	mg/L
OW-64	5/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	5/15/2019	Boron, Dissolved	1.4	0.4	0.045305	3949110	mg/L
OW-64	5/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	5/15/2019	Calcium, Dissolved	17	1	0.061889	NA	mg/L
OW-64	5/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	5/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	5/15/2019	Copper, Dissolved	0.0054	0.006	0.001296	790000	mg/L
OW-64	5/15/2019	Iron, Dissolved	0.11	0.02	0.008747	13821880	mg/L
OW-64	5/15/2019	Lead, Dissolved	0.00026	0.0005	0.000055	NA	mg/L
OW-64	5/15/2019	Magnesium, Dissolved	4.5	1	0.05029	NA	mg/L
OW-64	5/15/2019	Manganese, Dissolved	0.48	0.002	0.00029	2017400	mg/L
OW-64	5/15/2019	Molybdenum, Dissolved	0.03	0.008	0.006735	98700	mg/L
OW-64	5/15/2019	Nickel, Dissolved	0.0048	0.01	0.004009	372000	mg/L
OW-64	5/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-64	5/15/2019	Selenium, Dissolved	0.00035	0.001	0.000171	50000	mg/L
OW-64	5/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	5/15/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	5/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	5/15/2019	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-64	5/15/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
OW-64	5/15/2019	Aluminum, Total	0.97	0.1	0.012441	19914000	mg/L
OW-64	5/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	5/15/2019	Arsenic, Total	0.004	0.001	0.000312	10000	mg/L
OW-64	5/15/2019	Barium, Total	0.35	0.002	0.000648	2000000	mg/L
OW-64	5/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	5/15/2019	Boron, Total	1.4	0.2	0.022653	3949	mg/L
OW-64	5/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	5/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-64	5/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	5/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	5/15/2019	Iron, Total	0.44	0.02	0.008747	13822000	mg/L
OW-64	5/15/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
OW-64	5/15/2019	Manganese, Total	0.53	0.002	0.00029	2017000	mg/L
OW-64	5/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-64	5/15/2019	Molybdenum, Total	0.034	0.008	0.006735	98700	mg/L
OW-64	5/15/2019	Nickel, Total	0.004	0.01	0.004009	372000	mg/L
OW-64	5/15/2019	Selenium, Total	0.00078	0.001	0.000478	50000	mg/L
OW-64	5/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-64	5/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	5/15/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-64	5/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-64	8/19/2019	Aluminum, Dissolved	0.18	0.02	0.002488	19913930	mg/L
OW-64	8/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	8/19/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
OW-64	8/19/2019	Barium, Dissolved	0.27	0.002	0.000648	2000000	mg/L
OW-64	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	8/19/2019	Boron, Dissolved	2.2	0.2	0.022653	3949110	mg/L
OW-64	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	8/19/2019	Calcium, Dissolved	12	1	0.061889	NA	mg/L
OW-64	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	8/19/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-64	8/19/2019	Iron, Dissolved	0.076	0.02	0.008747	13821880	mg/L
OW-64	8/19/2019	Lead, Dissolved	0.000082	0.0005	0.000055	NA	mg/L
OW-64	8/19/2019	Magnesium, Dissolved	3.4	1	0.05029	NA	mg/L
OW-64	8/19/2019	Manganese, Dissolved	0.35	0.002	0.00029	2017400	mg/L
OW-64	8/19/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
OW-64	8/19/2019	Nickel, Dissolved	0.0057	0.01	0.004009	372000	mg/L
OW-64	8/19/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-64	8/19/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
OW-64	8/19/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	8/19/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	8/19/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-64	8/19/2019	Zinc, Dissolved	0.0073	0.01	0.002252	5960450	mg/L
OW-64	8/19/2019	Aluminum, Total	8.3	0.2	0.024883	19914000	mg/L
OW-64	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	8/19/2019	Arsenic, Total	0.0046	0.001	0.000312	10000	mg/L
OW-64	8/19/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
OW-64	8/19/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	8/19/2019	Boron, Total	2.1	0.4	0.045305	3949	mg/L
OW-64	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	8/19/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
OW-64	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-64	8/19/2019	Iron, Total	3.1	0.2	0.087469	13822000	mg/L
OW-64	8/19/2019	Lead, Total	0.0029	0.0005	0.000055	15000	mg/L
OW-64	8/19/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
OW-64	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-64	8/19/2019	Molybdenum, Total	0.023	0.008	0.006735	98700	mg/L
OW-64	8/19/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
OW-64	8/19/2019	Selenium, Total	0.00053	0.001	0.000478	50000	mg/L
OW-64	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-64	8/19/2019	Thallium, Total	0.000068	0.0005	0.000052	2000	mg/L
OW-64	8/19/2019	Uranium, Total	0.013	0.0005	0.000085	30000	mg/L
OW-64	8/19/2019	Zinc, Total	0.009	0.01	0.005772	5960000	mg/L
OW-64	11/18/2019	Aluminum, Dissolved	0.13	0.02	0.002488	19913930	mg/L
OW-64	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	11/18/2019	Arsenic, Dissolved	0.0033	0.001	0.000101	10000	mg/L
OW-64	11/18/2019	Barium, Dissolved	0.28	0.002	0.000648	2000000	mg/L
OW-64	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	11/18/2019	Boron, Dissolved	2.4	0.4	0.045305	3949110	mg/L
OW-64	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	11/18/2019	Calcium, Dissolved	12	1	0.061889	NA	mg/L
OW-64	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-64	11/18/2019	Iron, Dissolved	0.067	0.02	0.008747	13821880	mg/L
OW-64	11/18/2019	Lead, Dissolved	0.000092	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	Magnesium, Dissolved	3.3	1	0.05029	NA	mg/L
OW-64	11/18/2019	Manganese, Dissolved	0.35	0.002	0.00029	2017400	mg/L
OW-64	11/18/2019	Molybdenum, Dissolved	0.042	0.008	0.006735	98700	mg/L
OW-64	11/18/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-64	11/18/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-64	11/18/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
OW-64	11/18/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	11/18/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	11/18/2019	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
OW-64	11/18/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-64	11/18/2019	Aluminum, Total	3.5	0.1	0.012441	19914000	mg/L
OW-64	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	11/18/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
OW-64	11/18/2019	Barium, Total	0.29	0.002	0.000648	2000000	mg/L
OW-64	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	11/18/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
OW-64	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	11/18/2019	Chromium, Total	0.0031	0.006	0.001533	50000	mg/L
OW-64	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-64	11/18/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
OW-64	11/18/2019	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
OW-64	11/18/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
OW-64	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-64	11/18/2019	Molybdenum, Total	0.04	0.008	0.006735	98700	mg/L
OW-64	11/18/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-64	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-64	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-64	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	11/18/2019	Uranium, Total	0.019	0.0005	0.000085	30000	mg/L
OW-64	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-64	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-64	12/11/2020	Aluminum, Total	1.06	0.2	0.051	19914000	mg/L
OW-64	12/11/2020	Calcium, Total	12.1	0.5	0.084	NA	mg/L
OW-64	12/11/2020	Boron, Total	1.72	0.1	0.022	3949	mg/L
OW-64	12/11/2020	Barium, Total	0.323	0.01	0.003	2000000	mg/L
OW-64	12/11/2020	Potassium, Total	1.4	1	0.34	NA	mg/L
OW-64	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-64	12/11/2020	Magnesium, Total	3.45	0.5	0.12	NA	mg/L
OW-64	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-64	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-64	12/11/2020	Sodium, Total	400	2	0.92	NA	mg/L
OW-64	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-64	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-64	12/11/2020	Manganese, Total	0.331	0.01	0.003	2017000	mg/L
OW-64	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-64	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-64	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-64	12/11/2020	Aluminum, Dissolved	0.537	0.2	0.051	19913930	mg/L
OW-64	12/11/2020	Barium, Dissolved	0.324	0.01	0.003	2000000	mg/L
OW-64	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-64	12/11/2020	Boron, Dissolved	1.79	0.1	0.022	3949110	mg/L
OW-64	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-64	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-64	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-64	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-64	12/11/2020	Iron, Dissolved	0.234	0.2	0.075	13821880	mg/L
OW-64	12/11/2020	Manganese, Dissolved	0.328	0.01	0.003	2017400	mg/L
OW-64	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-64	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-64	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-64	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-64	12/11/2020	Iron, Total	0.603	0.2	0.075	13822000	mg/L
OW-64	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-64	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-64	12/11/2020	Arsenic, Total Recoverable	2.51	1	0.286	10	ug/L
OW-64	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-64	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-64	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-64	12/11/2020	Uranium, Total Recoverable	14	5	1.12	30	ug/L
OW-64	12/11/2020	Arsenic, Dissolved	2.47	1	0.286	10	ug/L
OW-64	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-64	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-64	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-64	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-64	12/11/2020	Uranium, Dissolved	13.1	5	1.12	NA	ug/L
OW-64	9/22/2020	Arsenic, Dissolved	0.0036	0.001	0.00021	10000	mg/L
OW-64	9/22/2020	Lead, Dissolved	0.000038	0.0005	0.000034	NA	mg/L
OW-64	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-64	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-64	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-64	9/22/2020	Uranium, Dissolved	0.014	0.0005	0.000065	NA	mg/L
OW-64	9/22/2020	Boron, Dissolved	2.3	0.2	0.033	3949110	mg/L
OW-64	9/22/2020	Sodium, Dissolved	530	50	6.9	NA	mg/L
OW-64	9/22/2020	Aluminum, Dissolved	0.019	0.02	0.0056	19913930	mg/L
OW-64	9/22/2020	Barium, Dissolved	0.34	0.002	0.0011	2000000	mg/L
OW-64	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-64	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-64	9/22/2020	Calcium, Dissolved	16	1	0.11	NA	mg/L
OW-64	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-64	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-64	9/22/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
OW-64	9/22/2020	Magnesium, Dissolved	4.2	1	0.067	NA	mg/L
OW-64	9/22/2020	Manganese, Dissolved	0.4	0.002	0.00058	2017400	mg/L
OW-64	9/22/2020	Molybdenum, Dissolved	0.022	0.008	0.0056	98700	mg/L
OW-64	9/22/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-64	9/22/2020	Potassium, Dissolved	1.1	1	0.16	NA	mg/L
OW-64	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-64	9/22/2020	Zinc, Dissolved	0.033	0.01	0.006	5960450	mg/L
OW-64	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-64	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-64	9/22/2020	Arsenic, Total	0.0035	0.001	0.00026	10000	mg/L
OW-64	9/22/2020	Lead, Total	0.00057	0.0005	0.000034	15000	mg/L
OW-64	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-64	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-64	9/22/2020	Uranium, Total	0.015	0.0005	0.000065	30000	mg/L
OW-64	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-64	9/22/2020	Barium, Total	0.36	0.003	0.0016	2000000	mg/L
OW-64	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-64	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-64	9/22/2020	Chromium, Total	0.0023	0.006	0.0021	50000	mg/L
OW-64	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-64	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-64	9/22/2020	Iron, Total	0.96	0.05	0.013	13822000	mg/L
OW-64	9/22/2020	Manganese, Total	0.41	0.002	0.00081	2017000	mg/L
OW-64	9/22/2020	Molybdenum, Total	0.024	0.008	0.0065	98700	mg/L
OW-64	9/22/2020	Nickel, Total	0.0048	0.01	0.0033	372000	mg/L
OW-64	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-64	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-64	9/22/2020	Aluminum, Total	2.3	0.1	0.037	19914000	mg/L
OW-64	9/22/2020	Boron, Total	2.4	0.2	0.037	3949	mg/L
OW-64	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-64	3/4/2020	Arsenic, Total	0.004	0.001	0.00031	10000	mg/L
OW-64	3/4/2020	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
OW-64	3/4/2020	Selenium, Total	0.00048	0.001	0.00048	50000	mg/L
OW-64	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	3/4/2020	Uranium, Total	0.0095	0.0005	0.000085	30000	mg/L
OW-64	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-64	3/4/2020	Barium, Total	0.41	0.002	0.00065	2000000	mg/L
OW-64	3/4/2020	Beryllium, Total	0.0004	0.002	0.00028	4000	mg/L
OW-64	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-64	3/4/2020	Chromium, Total	0.0083	0.006	0.0015	50000	mg/L
OW-64	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-64	3/4/2020	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
OW-64	3/4/2020	Manganese, Total	0.45	0.002	0.00029	2017000	mg/L
OW-64	3/4/2020	Molybdenum, Total	0.017	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	3/4/2020	Nickel, Total	0.009	0.01	0.004	372000	mg/L
OW-64	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-64	3/4/2020	Zinc, Total	0.0062	0.01	0.0058	5960000	mg/L
OW-64	3/4/2020	Boron, Total	1.5	0.2	0.023	3949	mg/L
OW-64	3/4/2020	Aluminum, Total	6.5	0.2	0.025	19914000	mg/L
OW-64	3/4/2020	Iron, Total	2.2	0.1	0.044	13822000	mg/L
OW-64	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-64	3/4/2020	Lead, Dissolved	0.000092	0.0005	0.000055	NA	mg/L
OW-64	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	3/4/2020	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
OW-64	3/4/2020	Arsenic, Dissolved	0.0037	0.001	0.0001	10000	mg/L
OW-64	3/4/2020	Selenium, Dissolved	0.00038	0.001	0.00017	50000	mg/L
OW-64	3/4/2020	Aluminum, Dissolved	0.16	0.02	0.0025	19913930	mg/L
OW-64	3/4/2020	Barium, Dissolved	0.32	0.002	0.00065	2000000	mg/L
OW-64	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-64	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-64	3/4/2020	Calcium, Dissolved	13	1	0.062	NA	mg/L
OW-64	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-64	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-64	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-64	3/4/2020	Iron, Dissolved	0.075	0.02	0.0087	13821880	mg/L
OW-64	3/4/2020	Magnesium, Dissolved	3.7	1	0.05	NA	mg/L
OW-64	3/4/2020	Manganese, Dissolved	0.36	0.002	0.00029	2017400	mg/L
OW-64	3/4/2020	Molybdenum, Dissolved	0.018	0.008	0.0067	98700	mg/L
OW-64	3/4/2020	Nickel, Dissolved	0.0086	0.01	0.004	372000	mg/L
OW-64	3/4/2020	Potassium, Dissolved	0.91	1	0.16	NA	mg/L
OW-64	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-64	3/4/2020	Zinc, Dissolved	0.0043	0.01	0.0023	5960450	mg/L
OW-64	3/4/2020	Boron, Dissolved	1.5	0.2	0.023	3949110	mg/L
OW-64	3/4/2020	Sodium, Dissolved	480	5	2.1	NA	mg/L
PW-2	9/21/2020	Uranium, Total	0.0014	0.0005	0.000065	30000	mg/L
PW-2	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-2	9/21/2020	Arsenic, Total	0.0034	0.001	0.00026	10000	mg/L
PW-2	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
PW-2	9/21/2020	Selenium, Total	0.00099	0.001	0.00066	50000	mg/L
PW-2	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-2	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-2	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
PW-2	9/21/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
PW-2	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-2	9/21/2020	Boron, Total	0.051	0.04	0.0074	3949	mg/L
PW-2	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-2	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-2	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-2	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-2	9/21/2020	Iron, Total	0.027	0.05	0.013	13822000	mg/L
PW-2	9/21/2020	Manganese, Total	0.002	0.002	0.00081	2017000	mg/L
PW-2	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-2	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
PW-2	9/21/2020	Silver, Total	0.0019	0.005	0.0013	50000	mg/L
PW-2	9/21/2020	Zinc, Total	0.028	0.01	0.0064	5960000	mg/L
PW-2	9/21/2020	Arsenic, Dissolved	0.0037	0.001	0.00021	10000	mg/L
PW-2	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
PW-2	9/21/2020	Selenium, Dissolved	0.0011	0.001	0.00066	50000	mg/L
PW-2	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
PW-2	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
PW-2	9/21/2020	Uranium, Dissolved	0.0016	0.0005	0.000065	NA	mg/L
PW-2	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-2	9/21/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
PW-2	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-2	9/21/2020	Boron, Dissolved	0.055	0.04	0.0067	3949110	mg/L
PW-2	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-2	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-2	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-2	9/21/2020	Iron, Dissolved	0.026	0.02	0.01	13821880	mg/L
PW-2	9/21/2020	Manganese, Dissolved	0.0023	0.002	0.00058	2017400	mg/L
PW-2	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-2	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-2	9/21/2020	Silver, Dissolved	0.0031	0.005	0.0013	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/21/2020	Zinc, Dissolved	0.067	0.01	0.006	5960450	mg/L
PW-2	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-2	12/28/2020	Arsenic, Total Recoverable	3.52	1	0.286	10	ug/L
PW-2	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-2	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-2	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-2	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-2	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-2	12/28/2020	Arsenic, Dissolved	2.28	1	0.286	10	ug/L
PW-2	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-2	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-2	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-2	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-2	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-2	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-2	12/28/2020	Barium, Total	0.0154	0.01	0.003	2000000	mg/L
PW-2	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-2	12/28/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
PW-2	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-2	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-2	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-2	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-2	12/28/2020	Iron, Total	0.353	0.2	0.075	13822000	mg/L
PW-2	12/28/2020	Manganese, Total	0.0109	0.01	0.003	2017000	mg/L
PW-2	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-2	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-2	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-2	12/28/2020	Zinc, Total	0.106	0.02	0.008	5960000	mg/L
PW-2	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-2	12/28/2020	Barium, Dissolved	0.0151	0.01	0.003	2000000	mg/L
PW-2	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-2	12/28/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
PW-2	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-2	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-2	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-2	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-2	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-2	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-2	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-2	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-2	12/28/2020	Zinc, Dissolved	0.0938	0.02	0.008	5960450	mg/L
PW-2	12/28/2020	Manganese, Dissolved	0.0106	0.01	0.003	2017400	mg/L
PW-2	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-2	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-2	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
PW-2	9/10/2014	Arsenic, Total	0.0031	0.001	0.00011	10000	mg/L
PW-2	9/10/2014	Barium, Total	0.012	0.002	0.0011	2000000	mg/L
PW-2	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
PW-2	9/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-2	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
PW-2	9/10/2014	Iron, Total	0.042	0.02	0.0062	13822000	mg/L
PW-2	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
PW-2	9/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
PW-2	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
PW-2	9/10/2014	Selenium, Total	0.0014	0.001	0.00015	50000	mg/L
PW-2	9/10/2014	Uranium, Total	0.0024	0.001	0.00005	30000	mg/L
PW-2	9/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
PW-2	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-2	9/18/2017	Arsenic, Total	0.0031	0.001	0.0003	10000	mg/L
PW-2	9/18/2017	Barium, Total	0.013	0.002	0.00093	2000000	mg/L
PW-2	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-2	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-2	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-2	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-2	9/18/2017	Arsenic, Dissolved	0.0031	0.001	0.00018	10000	mg/L
PW-2	9/18/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L
PW-2	9/18/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
PW-2	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-2	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-2	9/18/2017	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
PW-2	9/18/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
PW-2	9/18/2017	Magnesium, Dissolved	37	1	0.25	NA	mg/L
PW-2	9/18/2017	Manganese, Dissolved	0.0012	0.002	0.00039	2017400	mg/L
PW-2	9/18/2017	Sodium, Dissolved	18	1	0.16	NA	mg/L
PW-2	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-2	9/18/2017	Selenium, Dissolved	0.0017	0.001	0.00039	50000	mg/L
PW-2	9/18/2017	Zinc, Dissolved	0.041	0.01	0.0021	5960450	mg/L
PW-2	9/18/2017	Iron, Total	0.042	0.02	0.01	13822000	mg/L
PW-2	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-2	9/18/2017	Manganese, Total	0.0033	0.002	0.0011	2017000	mg/L
PW-2	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-2	9/18/2017	Selenium, Total	0.0011	0.001	0.00071	50000	mg/L
PW-2	9/18/2017	Uranium, Total	0.0023	0.0005	0.00015	30000	mg/L
PW-2	9/18/2017	Zinc, Total	0.0071	0.01	0.0033	5960000	mg/L
PW-3	8/24/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
PW-3	8/24/2012	Arsenic, Total	0.0034	0.001	0.00011	10000	mg/L
PW-3	8/24/2012	Barium, Total	0.011	0.002	0.00031	2000000	mg/L
PW-3	8/24/2012	Calcium, Total	240	5	0.13	NA	mg/L
PW-3	8/24/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
PW-3	8/24/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
PW-3	8/24/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
PW-3	8/24/2012	Iron, Total	0.042	0.02	0.0019	13822000	mg/L
PW-3	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
PW-3	8/24/2012	Potassium, Total	1.3	1	0.48	NA	mg/L
PW-3	8/24/2012	Magnesium, Total	50	1	0.013	NA	mg/L
PW-3	8/24/2012	Manganese, Total	ND	0.002	0.00062	2017000	mg/L
PW-3	8/24/2012	Sodium, Total	59	1	0.045	NA	mg/L
PW-3	8/24/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
PW-3	8/24/2012	Selenium, Total	0.0012	0.001	0.00033	50000	mg/L
PW-3	8/24/2012	Uranium, Total	0.0015	0.001	0.00006	30000	mg/L
PW-3	8/24/2012	Zinc, Total	0.03	0.01	0.00062	5960000	mg/L
PW-3	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
PW-3	9/10/2013	Arsenic, Total	0.0037	0.001	0.000098	10000	mg/L
PW-3	9/10/2013	Barium, Total	0.011	0.002	0.00095	2000000	mg/L
PW-3	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
PW-3	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
PW-3	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-3	9/10/2013	Iron, Total	0.28	0.02	0.0089	13822000	mg/L
PW-3	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
PW-3	9/10/2013	Manganese, Total	0.0036	0.002	0.00016	2017000	mg/L
PW-3	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
PW-3	9/10/2013	Selenium, Total	0.0014	0.001	0.00029	50000	mg/L
PW-3	9/10/2013	Uranium, Total	0.0016	0.001	0.0000073	30000	mg/L
PW-3	9/10/2013	Zinc, Total	0.029	0.01	0.00076	5960000	mg/L
PW-3	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
PW-3	9/10/2014	Arsenic, Total	0.0039	0.001	0.00011	10000	mg/L
PW-3	9/10/2014	Barium, Total	0.011	0.002	0.0011	2000000	mg/L
PW-3	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
PW-3	9/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-3	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
PW-3	9/10/2014	Iron, Total	0.13	0.02	0.0062	13822000	mg/L
PW-3	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
PW-3	9/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
PW-3	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
PW-3	9/10/2014	Selenium, Total	0.002	0.001	0.00015	50000	mg/L
PW-3	9/10/2014	Uranium, Total	0.0016	0.001	0.00005	30000	mg/L
PW-3	9/10/2014	Zinc, Total	0.011	0.01	0.0014	5960000	mg/L
PW-3	8/23/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-3	8/23/2015	Arsenic, Total	0.0034	0.001	0.000065	10000	mg/L
PW-3	8/23/2015	Barium, Total	0.011	0.002	0.00095	2000000	mg/L
PW-3	8/23/2015	Calcium, Total	250	5	0.28	NA	mg/L
PW-3	8/23/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
PW-3	8/23/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	8/23/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
PW-3	8/23/2015	Iron, Total	0.034	0.02	0.0073	13822000	mg/L
PW-3	8/23/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
PW-3	8/23/2015	Potassium, Total	1.6	1	0.18	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	Magnesium, Total	50	1	0.039	NA	mg/L
PW-3	8/23/2015	Manganese, Total	ND	0.002	0.00027	2017000	mg/L
PW-3	8/23/2015	Sodium, Total	62	1	0.072	NA	mg/L
PW-3	8/23/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
PW-3	8/23/2015	Selenium, Total	0.0014	0.001	0.00019	50000	mg/L
PW-3	8/23/2015	Uranium, Total	0.0016	0.0005	0.0000048	30000	mg/L
PW-3	8/23/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
PW-3	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-3	8/31/2016	Arsenic, Total	0.0041	0.001	0.00021	10000	mg/L
PW-3	8/31/2016	Barium, Total	0.011	0.002	0.00079	2000000	mg/L
PW-3	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-3	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-3	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-3	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
PW-3	8/31/2016	Arsenic, Dissolved	0.0035	0.001	0.00014	10000	mg/L
PW-3	8/31/2016	Barium, Dissolved	0.011	0.002	0.0013	2000000	mg/L
PW-3	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
PW-3	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
PW-3	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
PW-3	8/31/2016	Iron, Dissolved	0.092	0.02	0.02	13821880	mg/L
PW-3	8/31/2016	Manganese, Dissolved	0.0014	0.002	0.00032	2017400	mg/L
PW-3	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	8/31/2016	Selenium, Dissolved	0.0018	0.005	0.0011	50000	mg/L
PW-3	8/31/2016	Uranium, Dissolved	0.0015	0.0025	0.00026	NA	mg/L
PW-3	8/31/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
PW-3	8/31/2016	Iron, Total	0.24	0.02	0.02	13822000	mg/L
PW-3	8/31/2016	Manganese, Total	0.0016	0.002	0.00027	2017000	mg/L
PW-3	8/31/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
PW-3	8/31/2016	Selenium, Total	0.0017	0.001	0.00019	50000	mg/L
PW-3	8/31/2016	Uranium, Total	0.0017	0.0005	0.00017	30000	mg/L
PW-3	8/31/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
PW-3	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-3	9/18/2017	Arsenic, Total	0.0036	0.001	0.0003	10000	mg/L
PW-3	9/18/2017	Barium, Total	0.01	0.002	0.00093	2000000	mg/L
PW-3	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-3	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-3	9/18/2017	Arsenic, Dissolved	0.0038	0.001	0.00018	10000	mg/L
PW-3	9/18/2017	Barium, Dissolved	0.011	0.002	0.00085	2000000	mg/L
PW-3	9/18/2017	Calcium, Dissolved	250	10	0.78	NA	mg/L
PW-3	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	9/18/2017	Iron, Dissolved	0.055	0.02	0.016	13821880	mg/L
PW-3	9/18/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	9/18/2017	Magnesium, Dissolved	49	1	0.25	NA	mg/L
PW-3	9/18/2017	Manganese, Dissolved	0.002	0.002	0.00039	2017400	mg/L
PW-3	9/18/2017	Sodium, Dissolved	62	1	0.16	NA	mg/L
PW-3	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	9/18/2017	Selenium, Dissolved	0.0022	0.001	0.00039	50000	mg/L
PW-3	9/18/2017	Zinc, Dissolved	0.038	0.01	0.0021	5960450	mg/L
PW-3	9/18/2017	Iron, Total	0.12	0.02	0.01	13822000	mg/L
PW-3	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-3	9/18/2017	Manganese, Total	0.0021	0.002	0.0011	2017000	mg/L
PW-3	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-3	9/18/2017	Selenium, Total	0.0014	0.001	0.00071	50000	mg/L
PW-3	9/18/2017	Uranium, Total	0.0016	0.0005	0.00015	30000	mg/L
PW-3	9/18/2017	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
PW-3	9/19/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
PW-3	9/19/2018	Arsenic, Total	0.0057	0.001	0.00041	10000	mg/L
PW-3	9/19/2018	Barium, Total	0.011	0.002	0.001	2000000	mg/L
PW-3	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-3	9/19/2018	Silver, Dissolved	0.006	0.005	0.0018	81200	mg/L
PW-3	9/19/2018	Arsenic, Dissolved	0.0046	0.001	0.00042	10000	mg/L
PW-3	9/19/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
PW-3	9/19/2018	Calcium, Dissolved	240	10	0.78	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	9/19/2018	Iron, Dissolved	0.039	0.02	0.016	13821880	mg/L
PW-3	9/19/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	9/19/2018	Magnesium, Dissolved	47	1	0.25	NA	mg/L
PW-3	9/19/2018	Manganese, Dissolved	0.00095	0.002	0.00039	2017400	mg/L
PW-3	9/19/2018	Sodium, Dissolved	62	1	0.16	NA	mg/L
PW-3	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	9/19/2018	Selenium, Dissolved	0.00084	0.001	0.00076	50000	mg/L
PW-3	9/19/2018	Uranium, Dissolved	0.0016	0.0005	0.000096	NA	mg/L
PW-3	9/19/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
PW-3	9/19/2018	Iron, Total	0.05	0.02	0.01	13822000	mg/L
PW-3	9/19/2018	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
PW-3	9/19/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-3	9/19/2018	Lead, Total	0.00055	0.0005	0.00023	15000	mg/L
PW-3	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-3	9/19/2018	Uranium, Total	0.0014	0.0005	0.000068	30000	mg/L
PW-3	9/19/2018	Zinc, Total	0.0057	0.01	0.0033	5960000	mg/L
PW-3	11/20/2018	Silver, Total	0.0088	0.005	0.0012	50000	mg/L
PW-3	11/20/2018	Arsenic, Total	0.0049	0.001	0.00041	10000	mg/L
PW-3	11/20/2018	Barium, Total	0.011	0.002	0.001	2000000	mg/L
PW-3	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-3	11/20/2018	Silver, Dissolved	0.005	0.005	0.0018	81200	mg/L
PW-3	11/20/2018	Arsenic, Dissolved	0.0037	0.001	0.00042	10000	mg/L
PW-3	11/20/2018	Barium, Dissolved	0.01	0.002	0.00099	2000000	mg/L
PW-3	11/20/2018	Calcium, Dissolved	250	10	0.78	NA	mg/L
PW-3	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	11/20/2018	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
PW-3	11/20/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	11/20/2018	Magnesium, Dissolved	49	1	0.25	NA	mg/L
PW-3	11/20/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
PW-3	11/20/2018	Sodium, Dissolved	65	1	0.16	NA	mg/L
PW-3	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
PW-3	11/20/2018	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
PW-3	11/20/2018	Iron, Total	0.031	0.02	0.01	13822000	mg/L
PW-3	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	11/20/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-3	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-3	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-3	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-3	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-3	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-3	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-3	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-3	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-3	12/28/2020	Barium, Total	0.0118	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Total	0.155	0.1	0.022	3949	mg/L
PW-3	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-3	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Total	0.0438	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
PW-3	12/28/2020	Manganese, Total	0.0151	0.01	0.003	2017000	mg/L
PW-3	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-3	12/28/2020	Zinc, Total	0.0456	0.02	0.008	5960000	mg/L
PW-3	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-3	12/28/2020	Barium, Dissolved	0.0112	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Dissolved	0.152	0.1	0.022	3949110	mg/L
PW-3	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-3	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-3	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-3	12/28/2020	Zinc, Dissolved	0.0246	0.02	0.008	5960450	mg/L
PW-3	12/28/2020	Manganese, Dissolved	0.0126	0.01	0.003	2017400	mg/L
PW-3	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-3	12/28/2020	Barium, Total	0.0137	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Total	0.183	0.1	0.022	3949	mg/L
PW-3	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-3	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Total	0.213	0.2	0.075	13822000	mg/L
PW-3	12/28/2020	Manganese, Total	0.0193	0.01	0.003	2017000	mg/L
PW-3	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-3	12/28/2020	Zinc, Total	0.0464	0.02	0.008	5960000	mg/L
PW-3	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-3	12/28/2020	Barium, Dissolved	0.0117	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Dissolved	0.177	0.1	0.022	3949110	mg/L
PW-3	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-3	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-3	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-3	12/28/2020	Zinc, Dissolved	0.0386	0.02	0.008	5960450	mg/L
PW-3	12/28/2020	Manganese, Dissolved	0.0179	0.01	0.003	2017400	mg/L
PW-3	12/28/2020	Arsenic, Total Recoverable	5.34	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Total Recoverable	4.2	1	0.133	15	ug/L
PW-3	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-3	12/28/2020	Arsenic, Dissolved	3.23	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-3	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-3	12/28/2020	Arsenic, Total Recoverable	2.84	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-3	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-3	12/28/2020	Arsenic, Dissolved	2.49	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-3	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-3	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-3	9/21/2020	Arsenic, Total	0.0037	0.001	0.00026	10000	mg/L
PW-3	9/21/2020	Lead, Total	0.00031	0.0005	0.000034	15000	mg/L
PW-3	9/21/2020	Selenium, Total	0.00094	0.001	0.00066	50000	mg/L
PW-3	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-3	9/21/2020	Uranium, Total	0.0012	0.0005	0.000065	30000	mg/L
PW-3	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-3	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	Barium, Total	0.0095	0.003	0.0016	2000000	mg/L
PW-3	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-3	9/21/2020	Boron, Total	0.13	0.04	0.0074	3949	mg/L
PW-3	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-3	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-3	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-3	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-3	9/21/2020	Iron, Total	0.17	0.05	0.013	13822000	mg/L
PW-3	9/21/2020	Manganese, Total	0.0048	0.002	0.00081	2017000	mg/L
PW-3	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-3	9/21/2020	Nickel, Total	0.004	0.01	0.0033	372000	mg/L
PW-3	9/21/2020	Silver, Total	0.0034	0.005	0.0013	50000	mg/L
PW-3	9/21/2020	Zinc, Total	0.02	0.01	0.0064	5960000	mg/L
PW-3	9/21/2020	Arsenic, Dissolved	0.0035	0.005	0.001	10000	mg/L
PW-3	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
PW-3	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
PW-3	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
PW-3	9/21/2020	Uranium, Dissolved	0.0016	0.0025	0.00033	NA	mg/L
PW-3	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
PW-3	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-3	9/21/2020	Barium, Dissolved	0.0091	0.002	0.0011	2000000	mg/L
PW-3	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-3	9/21/2020	Boron, Dissolved	0.13	0.04	0.0067	3949110	mg/L
PW-3	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-3	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-3	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-3	9/21/2020	Iron, Dissolved	0.095	0.02	0.01	13821880	mg/L
PW-3	9/21/2020	Manganese, Dissolved	0.0046	0.002	0.00058	2017400	mg/L
PW-3	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-3	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-3	9/21/2020	Silver, Dissolved	0.0036	0.005	0.0013	81200	mg/L
PW-3	9/21/2020	Zinc, Dissolved	0.027	0.01	0.006	5960450	mg/L
PW-3	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-3	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
PW-3	2/20/2019	Arsenic, Dissolved	0.0037	0.001	0.000068	10000	mg/L
PW-3	2/20/2019	Barium, Dissolved	0.0099	0.002	0.000648	2000000	mg/L
PW-3	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	2/20/2019	Calcium, Dissolved	250	5	0.309446	NA	mg/L
PW-3	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	2/20/2019	Iron, Dissolved	0.033	0.02	0.008747	13821880	mg/L
PW-3	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
PW-3	2/20/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
PW-3	2/20/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
PW-3	2/20/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
PW-3	2/20/2019	Selenium, Dissolved	0.00089	0.001	0.000203	50000	mg/L
PW-3	2/20/2019	Silver, Dissolved	0.004	0.005	0.000942	81200	mg/L
PW-3	2/20/2019	Sodium, Dissolved	62	1	0.416176	NA	mg/L
PW-3	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
PW-3	2/20/2019	Uranium, Dissolved	0.0014	0.0005	0.00003	NA	mg/L
PW-3	2/20/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
PW-3	2/20/2019	Antimony, Total	ND	0.001	0.000204	6000	mg/L
PW-3	2/20/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
PW-3	2/20/2019	Barium, Total	0.011	0.002	0.000648	2000000	mg/L
PW-3	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-3	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	2/20/2019	Iron, Total	0.035	0.02	0.008747	13822000	mg/L
PW-3	2/20/2019	Lead, Total	ND	0.0005	0.000047	15000	mg/L
PW-3	2/20/2019	Manganese, Total	0.0012	0.002	0.00029	2017000	mg/L
PW-3	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	2/20/2019	Selenium, Total	0.00079	0.001	0.000478	50000	mg/L
PW-3	2/20/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
PW-3	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	2/20/2019	Uranium, Total	0.0014	0.0005	0.000085	30000	mg/L
PW-3	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-3	8/28/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-3	8/28/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
PW-3	8/28/2019	Barium, Total	0.01	0.002	0.000648	2000000	mg/L
PW-3	8/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-3	8/28/2019	Boron, Total	0.15	0.04	0.004531	3949	mg/L
PW-3	8/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	8/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	8/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-3	8/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	8/28/2019	Iron, Total	0.032	0.02	0.008747	13822000	mg/L
PW-3	8/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-3	8/28/2019	Manganese, Total	0.001	0.002	0.00029	2017000	mg/L
PW-3	8/28/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
PW-3	8/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
PW-3	8/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-3	8/28/2019	Selenium, Total	0.0011	0.001	0.000478	50000	mg/L
PW-3	8/28/2019	Silver, Total	0.0041	0.005	0.001418	50000	mg/L
PW-3	8/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	8/28/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-3	8/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-3	8/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-3	8/28/2019	Antimony, Dissolved	0.00087	0.001	0.000389	6000	mg/L
PW-3	8/28/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
PW-3	8/28/2019	Barium, Dissolved	0.0096	0.002	0.000648	2000000	mg/L
PW-3	8/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	8/28/2019	Boron, Dissolved	0.14	0.04	0.004531	3949110	mg/L
PW-3	8/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	8/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	8/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-3	8/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	8/28/2019	Iron, Dissolved	0.028	0.02	0.008747	13821880	mg/L
PW-3	8/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
PW-3	8/28/2019	Manganese, Dissolved	0.001	0.002	0.00029	2017400	mg/L
PW-3	8/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-3	8/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-3	8/28/2019	Selenium, Dissolved	0.0011	0.001	0.000171	50000	mg/L
PW-3	8/28/2019	Silver, Dissolved	0.0038	0.005	0.000942	81200	mg/L
PW-3	8/28/2019	Thallium, Dissolved	0.000054	0.0005	0.000048	2000	mg/L
PW-3	8/28/2019	Uranium, Dissolved	0.0013	0.0005	0.000075	NA	mg/L
PW-3	8/28/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
PW-3	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-3	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
PW-3	5/14/2019	Arsenic, Dissolved	0.0038	0.005	0.000504	10000	mg/L
PW-3	5/14/2019	Barium, Dissolved	0.0099	0.002	0.000648	2000000	mg/L
PW-3	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	5/14/2019	Boron, Dissolved	0.13	0.04	0.004531	3949110	mg/L
PW-3	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	5/14/2019	Calcium, Dissolved	240	10	0.618891	NA	mg/L
PW-3	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-3	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	5/14/2019	Iron, Dissolved	0.019	0.02	0.008747	13821880	mg/L
PW-3	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
PW-3	5/14/2019	Magnesium, Dissolved	50	1	0.05029	NA	mg/L
PW-3	5/14/2019	Manganese, Dissolved	0.00066	0.002	0.00029	2017400	mg/L
PW-3	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-3	5/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-3	5/14/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
PW-3	5/14/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
PW-3	5/14/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
PW-3	5/14/2019	Sodium, Dissolved	72	1	0.416176	NA	mg/L
PW-3	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
PW-3	5/14/2019	Uranium, Dissolved	0.0014	0.0025	0.000374	NA	mg/L
PW-3	5/14/2019	Zinc, Dissolved	0.065	0.01	0.002252	5960450	mg/L
PW-3	5/14/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
PW-3	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-3	5/14/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
PW-3	5/14/2019	Barium, Total	0.01	0.002	0.000648	2000000	mg/L
PW-3	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	Boron, Total	0.13	0.04	0.004531	3949	mg/L
PW-3	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-3	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	5/14/2019	Iron, Total	0.023	0.02	0.008747	13822000	mg/L
PW-3	5/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-3	5/14/2019	Manganese, Total	0.00053	0.002	0.00029	2017000	mg/L
PW-3	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	5/14/2019	Molybdenum, Total	0.0076	0.008	0.006735	98700	mg/L
PW-3	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-3	5/14/2019	Selenium, Total	0.00077	0.001	0.000478	50000	mg/L
PW-3	5/14/2019	Silver, Total	0.003	0.005	0.001418	50000	mg/L
PW-3	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	5/14/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-3	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-4	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
PW-4	5/14/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
PW-4	5/14/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
PW-4	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-4	5/14/2019	Boron, Dissolved	0.05	0.04	0.004531	3949110	mg/L
PW-4	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-4	5/14/2019	Calcium, Dissolved	170	10	0.618891	NA	mg/L
PW-4	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-4	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-4	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-4	5/14/2019	Iron, Dissolved	0.033	0.02	0.008747	13821880	mg/L
PW-4	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
PW-4	5/14/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
PW-4	5/14/2019	Manganese, Dissolved	0.00049	0.002	0.00029	2017400	mg/L
PW-4	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-4	5/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-4	5/14/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
PW-4	5/14/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
PW-4	5/14/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
PW-4	5/14/2019	Sodium, Dissolved	18	1	0.416176	NA	mg/L
PW-4	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
PW-4	5/14/2019	Uranium, Dissolved	0.0015	0.0025	0.000374	NA	mg/L
PW-4	5/14/2019	Zinc, Dissolved	0.038	0.01	0.002252	5960450	mg/L
PW-4	5/14/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
PW-4	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-4	5/14/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
PW-4	5/14/2019	Barium, Total	0.013	0.002	0.000648	2000000	mg/L
PW-4	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-4	5/14/2019	Boron, Total	0.05	0.04	0.004531	3949	mg/L
PW-4	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-4	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-4	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-4	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-4	5/14/2019	Iron, Total	0.068	0.02	0.008747	13822000	mg/L
PW-4	5/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-4	5/14/2019	Manganese, Total	ND	0.002	0.00029	2017000	mg/L
PW-4	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
PW-4	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-4	5/14/2019	Selenium, Total	0.00089	0.001	0.000478	50000	mg/L
PW-4	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
PW-4	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-4	5/14/2019	Uranium, Total	0.0014	0.0005	0.000085	30000	mg/L
PW-4	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
PW-4	2/20/2019	Arsenic, Dissolved	0.0031	0.001	0.000068	10000	mg/L
PW-4	2/20/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
PW-4	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-4	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-4	2/20/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
PW-4	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-4	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Iron, Dissolved	0.031	0.02	0.008747	13821880	mg/L
PW-4	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
PW-4	2/20/2019	Magnesium, Dissolved	38	1	0.05029	NA	mg/L
PW-4	2/20/2019	Manganese, Dissolved	0.00034	0.002	0.00029	2017400	mg/L
PW-4	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
PW-4	2/20/2019	Selenium, Dissolved	0.00096	0.001	0.000203	50000	mg/L
PW-4	2/20/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
PW-4	2/20/2019	Sodium, Dissolved	16	1	0.416176	NA	mg/L
PW-4	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
PW-4	2/20/2019	Uranium, Dissolved	0.0015	0.0005	0.00003	NA	mg/L
PW-4	2/20/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
PW-4	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-4	2/20/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
PW-4	2/20/2019	Barium, Total	0.014	0.002	0.000648	2000000	mg/L
PW-4	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-4	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-4	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-4	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-4	2/20/2019	Iron, Total	0.18	0.02	0.008747	13822000	mg/L
PW-4	2/20/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-4	2/20/2019	Manganese, Total	0.00072	0.002	0.00029	2017000	mg/L
PW-4	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	2/20/2019	Selenium, Total	0.001	0.001	0.000478	50000	mg/L
PW-4	2/20/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
PW-4	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-4	2/20/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-4	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-4	9/21/2020	Arsenic, Total	0.0029	0.001	0.00026	10000	mg/L
PW-4	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
PW-4	9/21/2020	Selenium, Total	0.0011	0.001	0.00066	50000	mg/L
PW-4	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-4	9/21/2020	Uranium, Total	0.0013	0.0005	0.000065	30000	mg/L
PW-4	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-4	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
PW-4	9/21/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
PW-4	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-4	9/21/2020	Boron, Total	0.053	0.04	0.0074	3949	mg/L
PW-4	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-4	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-4	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-4	9/21/2020	Iron, Total	0.08	0.05	0.013	13822000	mg/L
PW-4	9/21/2020	Manganese, Total	0.0012	0.002	0.00081	2017000	mg/L
PW-4	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-4	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
PW-4	9/21/2020	Silver, Total	0.0027	0.005	0.0013	50000	mg/L
PW-4	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
PW-4	9/21/2020	Arsenic, Dissolved	0.0032	0.001	0.00021	10000	mg/L
PW-4	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
PW-4	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
PW-4	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
PW-4	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
PW-4	9/21/2020	Uranium, Dissolved	0.0011	0.0005	0.000065	NA	mg/L
PW-4	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-4	9/21/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
PW-4	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-4	9/21/2020	Boron, Dissolved	0.056	0.04	0.0067	3949110	mg/L
PW-4	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-4	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-4	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-4	9/21/2020	Iron, Dissolved	0.07	0.02	0.01	13821880	mg/L
PW-4	9/21/2020	Manganese, Dissolved	0.0018	0.002	0.00058	2017400	mg/L
PW-4	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-4	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-4	9/21/2020	Silver, Dissolved	0.0029	0.005	0.0013	81200	mg/L
PW-4	9/21/2020	Zinc, Dissolved	0.38	0.01	0.006	5960450	mg/L
PW-4	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-4	12/28/2020	Arsenic, Total Recoverable	1.71	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-4	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-4	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-4	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-4	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-4	12/28/2020	Arsenic, Dissolved	2.22	1	0.286	10	ug/L
PW-4	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-4	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-4	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-4	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-4	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-4	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-4	12/28/2020	Barium, Total	0.0156	0.01	0.003	2000000	mg/L
PW-4	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-4	12/28/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
PW-4	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-4	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-4	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-4	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-4	12/28/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
PW-4	12/28/2020	Manganese, Total	ND	0.01	0.003	2017000	mg/L
PW-4	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-4	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-4	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-4	12/28/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
PW-4	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-4	12/28/2020	Barium, Dissolved	0.0147	0.01	0.003	2000000	mg/L
PW-4	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-4	12/28/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
PW-4	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-4	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-4	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-4	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-4	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-4	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-4	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-4	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-4	12/28/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
PW-4	12/28/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
PW-4	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-4	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-4	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
PW-4	9/10/2013	Arsenic, Total	0.003	0.001	0.000098	10000	mg/L
PW-4	9/10/2013	Barium, Total	0.014	0.002	0.00095	2000000	mg/L
PW-4	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
PW-4	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
PW-4	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-4	9/10/2013	Iron, Total	0.12	0.02	0.0089	13822000	mg/L
PW-4	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
PW-4	9/10/2013	Manganese, Total	0.007	0.002	0.00016	2017000	mg/L
PW-4	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
PW-4	9/10/2013	Selenium, Total	0.0012	0.001	0.00029	50000	mg/L
PW-4	9/10/2013	Uranium, Total	0.0016	0.001	0.0000073	30000	mg/L
PW-4	9/10/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
PW-4	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
PW-4	6/10/2016	Arsenic, Total	0.003	0.001	0.00014	10000	mg/L
PW-4	6/10/2016	Barium, Total	0.014	0.002	0.0013	2000000	mg/L
PW-4	6/10/2016	Calcium, Total	190	5	1.3	NA	mg/L
PW-4	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
PW-4	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
PW-4	6/10/2016	Iron, Total	0.11	0.02	0.0091	13822000	mg/L
PW-4	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
PW-4	6/10/2016	Potassium, Total	1.1	1	0.18	NA	mg/L
PW-4	6/10/2016	Magnesium, Total	40	1	0.013	NA	mg/L
PW-4	6/10/2016	Manganese, Total	0.0012	0.002	0.00032	2017000	mg/L
PW-4	6/10/2016	Sodium, Total	16	1	0.096	NA	mg/L
PW-4	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
PW-4	6/10/2016	Selenium, Total	0.0017	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	6/10/2016	Uranium, Total	0.0016	0.0005	0.000051	30000	mg/L
PW-4	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
PW-4	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-4	8/31/2016	Arsenic, Total	0.0037	0.001	0.00021	10000	mg/L
PW-4	8/31/2016	Barium, Total	0.014	0.002	0.00079	2000000	mg/L
PW-4	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-4	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-4	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
PW-4	8/31/2016	Arsenic, Dissolved	0.0029	0.001	0.00014	10000	mg/L
PW-4	8/31/2016	Barium, Dissolved	0.014	0.002	0.0013	2000000	mg/L
PW-4	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
PW-4	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
PW-4	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
PW-4	8/31/2016	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
PW-4	8/31/2016	Manganese, Dissolved	0.00098	0.002	0.00032	2017400	mg/L
PW-4	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	8/31/2016	Selenium, Dissolved	0.0018	0.005	0.0011	50000	mg/L
PW-4	8/31/2016	Uranium, Dissolved	0.0015	0.0025	0.00026	NA	mg/L
PW-4	8/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
PW-4	8/31/2016	Iron, Total	0.14	0.02	0.02	13822000	mg/L
PW-4	8/31/2016	Manganese, Total	0.0012	0.002	0.00027	2017000	mg/L
PW-4	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
PW-4	8/31/2016	Selenium, Total	0.0016	0.001	0.00019	50000	mg/L
PW-4	8/31/2016	Uranium, Total	0.0018	0.0005	0.00017	30000	mg/L
PW-4	8/31/2016	Zinc, Total	0.0036	0.01	0.0027	5960000	mg/L
PW-4	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-4	3/30/2017	Arsenic, Total	0.0032	0.001	0.00021	10000	mg/L
PW-4	3/30/2017	Barium, Total	0.012	0.002	0.00079	2000000	mg/L
PW-4	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	3/30/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-4	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-4	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
PW-4	3/30/2017	Arsenic, Dissolved	0.003	0.001	0.00018	10000	mg/L
PW-4	3/30/2017	Barium, Dissolved	0.013	0.002	0.00085	2000000	mg/L
PW-4	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	3/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
PW-4	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	3/30/2017	Iron, Dissolved	0.074	0.02	0.02	13821880	mg/L
PW-4	3/30/2017	Manganese, Dissolved	0.00088	0.002	0.00038	2017400	mg/L
PW-4	3/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	3/30/2017	Selenium, Dissolved	0.0018	0.001	0.00039	50000	mg/L
PW-4	3/30/2017	Uranium, Dissolved	0.0015	0.0005	0.00005	NA	mg/L
PW-4	3/30/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
PW-4	3/30/2017	Iron, Total	0.15	0.02	0.02	13822000	mg/L
PW-4	3/30/2017	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
PW-4	3/30/2017	Manganese, Total	0.00087	0.002	0.00027	2017000	mg/L
PW-4	3/30/2017	Lead, Total	ND	0.0005	0.000081	15000	mg/L
PW-4	3/30/2017	Selenium, Total	0.0013	0.005	0.00094	50000	mg/L
PW-4	3/30/2017	Uranium, Total	0.0015	0.0005	0.00017	30000	mg/L
PW-4	3/30/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
PW-4	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-4	9/18/2017	Arsenic, Total	0.0029	0.001	0.0003	10000	mg/L
PW-4	9/18/2017	Barium, Total	0.013	0.002	0.00093	2000000	mg/L
PW-4	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-4	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-4	9/18/2017	Arsenic, Dissolved	0.0031	0.001	0.00018	10000	mg/L
PW-4	9/18/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L
PW-4	9/18/2017	Calcium, Dissolved	180	10	0.78	NA	mg/L
PW-4	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	9/18/2017	Iron, Dissolved	0.04	0.02	0.016	13821880	mg/L
PW-4	9/18/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	9/18/2017	Magnesium, Dissolved	39	1	0.25	NA	mg/L
PW-4	9/18/2017	Manganese, Dissolved	0.00074	0.002	0.00039	2017400	mg/L
PW-4	9/18/2017	Sodium, Dissolved	16	1	0.16	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	9/18/2017	Selenium, Dissolved	0.0016	0.001	0.00039	50000	mg/L
PW-4	9/18/2017	Zinc, Dissolved	0.053	0.01	0.0021	5960450	mg/L
PW-4	9/18/2017	Iron, Total	0.087	0.02	0.01	13822000	mg/L
PW-4	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-4	9/18/2017	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-4	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-4	9/18/2017	Selenium, Total	0.0012	0.001	0.00071	50000	mg/L
PW-4	9/18/2017	Uranium, Total	0.0016	0.0005	0.00015	30000	mg/L
PW-4	9/18/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-4	3/1/2018	Silver, Total	0.0048	0.005	0.0012	50000	mg/L
PW-4	3/1/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
PW-4	3/1/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
PW-4	3/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	3/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	3/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	3/1/2018	Silver, Dissolved	0.004	0.005	0.0018	81200	mg/L
PW-4	3/1/2018	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
PW-4	3/1/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
PW-4	3/1/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
PW-4	3/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	3/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	3/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	3/1/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
PW-4	3/1/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
PW-4	3/1/2018	Magnesium, Dissolved	40	1	0.25	NA	mg/L
PW-4	3/1/2018	Manganese, Dissolved	0.0094	0.002	0.00039	2017400	mg/L
PW-4	3/1/2018	Sodium, Dissolved	18	1	0.16	NA	mg/L
PW-4	3/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	3/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
PW-4	3/1/2018	Uranium, Dissolved	0.0013	0.0025	0.00048	NA	mg/L
PW-4	3/1/2018	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
PW-4	3/1/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
PW-4	3/1/2018	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
PW-4	3/1/2018	Manganese, Total	0.01	0.002	0.0011	2017000	mg/L
PW-4	3/1/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	3/1/2018	Selenium, Total	0.0012	0.001	0.00098	50000	mg/L
PW-4	3/1/2018	Uranium, Total	0.0015	0.0005	0.000068	30000	mg/L
PW-4	3/1/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-4	9/19/2018	Silver, Total	0.0036	0.005	0.0012	50000	mg/L
PW-4	9/19/2018	Arsenic, Total	0.0045	0.001	0.00041	10000	mg/L
PW-4	9/19/2018	Barium, Total	0.014	0.002	0.001	2000000	mg/L
PW-4	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	9/19/2018	Silver, Dissolved	0.0039	0.005	0.0018	81200	mg/L
PW-4	9/19/2018	Arsenic, Dissolved	0.0038	0.001	0.00042	10000	mg/L
PW-4	9/19/2018	Barium, Dissolved	0.014	0.002	0.00099	2000000	mg/L
PW-4	9/19/2018	Calcium, Dissolved	170	10	0.78	NA	mg/L
PW-4	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	9/19/2018	Iron, Dissolved	0.085	0.02	0.016	13821880	mg/L
PW-4	9/19/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	9/19/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
PW-4	9/19/2018	Manganese, Dissolved	0.00084	0.002	0.00039	2017400	mg/L
PW-4	9/19/2018	Sodium, Dissolved	16	1	0.16	NA	mg/L
PW-4	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	9/19/2018	Selenium, Dissolved	0.00099	0.001	0.00076	50000	mg/L
PW-4	9/19/2018	Uranium, Dissolved	0.0016	0.0005	0.000096	NA	mg/L
PW-4	9/19/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
PW-4	9/19/2018	Iron, Total	0.11	0.02	0.01	13822000	mg/L
PW-4	9/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	9/19/2018	Manganese, Total	0.0015	0.002	0.0011	2017000	mg/L
PW-4	9/19/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-4	9/19/2018	Uranium, Total	0.0014	0.0005	0.000068	30000	mg/L
PW-4	9/19/2018	Zinc, Total	0.0047	0.01	0.0033	5960000	mg/L
PW-4	11/19/2018	Silver, Total	0.0065	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	11/19/2018	Arsenic, Total	0.0038	0.001	0.00041	10000	mg/L
PW-4	11/19/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
PW-4	11/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	11/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	11/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	11/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-4	11/19/2018	Arsenic, Dissolved	0.0033	0.001	0.00042	10000	mg/L
PW-4	11/19/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
PW-4	11/19/2018	Calcium, Dissolved	190	10	0.78	NA	mg/L
PW-4	11/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	11/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	11/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	11/19/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
PW-4	11/19/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	11/19/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
PW-4	11/19/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
PW-4	11/19/2018	Sodium, Dissolved	17	1	0.16	NA	mg/L
PW-4	11/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	11/19/2018	Selenium, Dissolved	0.001	0.001	0.00076	50000	mg/L
PW-4	11/19/2018	Uranium, Dissolved	0.0015	0.0005	0.000096	NA	mg/L
PW-4	11/19/2018	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
PW-4	11/19/2018	Iron, Total	0.089	0.02	0.01	13822000	mg/L
PW-4	11/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	11/19/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-4	11/19/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	11/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-4	11/19/2018	Uranium, Total	0.0013	0.0005	0.000068	30000	mg/L
PW-4	11/19/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
SMW-2	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
SMW-2	8/23/2012	Arsenic, Total	0.005	0.0025	0.0014	10000	mg/L
SMW-2	8/23/2012	Barium, Total	0.038	0.002	0.00039	2000000	mg/L
SMW-2	8/23/2012	Calcium, Total	260	5	0.13	NA	mg/L
SMW-2	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
SMW-2	8/23/2012	Chromium, Total	0.17	0.006	0.001	50000	mg/L
SMW-2	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-2	8/23/2012	Iron, Total	1.5	0.1	0.066	13822000	mg/L
SMW-2	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
SMW-2	8/23/2012	Potassium, Total	1.9	1	0.48	NA	mg/L
SMW-2	8/23/2012	Magnesium, Total	84	1	0.013	NA	mg/L
SMW-2	8/23/2012	Manganese, Total	0.25	0.002	0.00026	2017000	mg/L
SMW-2	8/23/2012	Sodium, Total	2100	50	2.2	NA	mg/L
SMW-2	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
SMW-2	8/23/2012	Selenium, Total	0.0072	0.0025	0.0025	50000	mg/L
SMW-2	8/23/2012	Uranium, Total	0.11	0.0025	0.00003	30000	mg/L
SMW-2	8/23/2012	Zinc, Total	0.021	0.01	0.0011	5960000	mg/L
SMW-2	9/9/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
SMW-2	9/9/2013	Arsenic, Total	0.0055	0.001	0.000098	10000	mg/L
SMW-2	9/9/2013	Barium, Total	0.016	0.002	0.00095	2000000	mg/L
SMW-2	9/9/2013	Calcium, Total	270	5	0.34	NA	mg/L
SMW-2	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
SMW-2	9/9/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
SMW-2	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-2	9/9/2013	Iron, Total	0.028	0.02	0.0089	13822000	mg/L
SMW-2	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
SMW-2	9/9/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
SMW-2	9/9/2013	Magnesium, Total	75	1	0.028	NA	mg/L
SMW-2	9/9/2013	Manganese, Total	0.17	0.002	0.00016	2017000	mg/L
SMW-2	9/9/2013	Sodium, Total	2200	50	16	NA	mg/L
SMW-2	9/9/2013	Lead, Total	ND	0.01	0.000075	15000	mg/L
SMW-2	9/9/2013	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
SMW-2	9/9/2013	Uranium, Total	0.1	0.01	0.000073	30000	mg/L
SMW-2	9/9/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
SMW-2	9/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
SMW-2	9/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
SMW-2	9/11/2014	Barium, Total	0.015	0.002	0.0011	2000000	mg/L
SMW-2	9/11/2014	Calcium, Total	280	10	0.82	NA	mg/L
SMW-2	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
SMW-2	9/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
SMW-2	9/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2014	Iron, Total	0.049	0.02	0.0062	13822000	mg/L
SMW-2	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
SMW-2	9/11/2014	Potassium, Total	3.7	1	0.093	NA	mg/L
SMW-2	9/11/2014	Magnesium, Total	84	1	0.018	NA	mg/L
SMW-2	9/11/2014	Manganese, Total	0.27	0.002	0.00055	2017000	mg/L
SMW-2	9/11/2014	Sodium, Total	2100	100	39	NA	mg/L
SMW-2	9/11/2014	Lead, Total	ND	0.02	0.0012	15000	mg/L
SMW-2	9/11/2014	Selenium, Total	0.021	0.01	0.0015	50000	mg/L
SMW-2	9/11/2014	Uranium, Total	0.11	0.02	0.001	30000	mg/L
SMW-2	9/11/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
SMW-2	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
SMW-2	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
SMW-2	8/17/2015	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
SMW-2	8/17/2015	Calcium, Total	270	5	0.28	NA	mg/L
SMW-2	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
SMW-2	8/17/2015	Chromium, Total	0.0071	0.006	0.0022	50000	mg/L
SMW-2	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
SMW-2	8/17/2015	Iron, Total	0.26	0.02	0.0072	13822000	mg/L
SMW-2	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
SMW-2	8/17/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
SMW-2	8/17/2015	Magnesium, Total	88	1	0.039	NA	mg/L
SMW-2	8/17/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
SMW-2	8/17/2015	Sodium, Total	2100	50	3.6	NA	mg/L
SMW-2	8/17/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
SMW-2	8/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
SMW-2	8/17/2015	Uranium, Total	0.12	0.005	0.000049	30000	mg/L
SMW-2	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
SMW-2	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
SMW-2	9/9/2016	Arsenic, Total	0.011	0.05	0.011	10000	mg/L
SMW-2	9/9/2016	Barium, Total	0.042	0.002	0.00079	2000000	mg/L
SMW-2	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-2	9/9/2016	Chromium, Total	0.13	0.006	0.0027	50000	mg/L
SMW-2	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
SMW-2	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
SMW-2	9/9/2016	Arsenic, Dissolved	0.0066	0.01	0.0014	10000	mg/L
SMW-2	9/9/2016	Barium, Dissolved	0.018	0.002	0.0013	2000000	mg/L
SMW-2	9/9/2016	Calcium, Dissolved	320	5	2.5	NA	mg/L
SMW-2	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
SMW-2	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
SMW-2	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
SMW-2	9/9/2016	Iron, Dissolved	0.032	0.02	0.02	13821880	mg/L
SMW-2	9/9/2016	Potassium, Dissolved	1.9	1	0.5	NA	mg/L
SMW-2	9/9/2016	Magnesium, Dissolved	96	1	0.5	NA	mg/L
SMW-2	9/9/2016	Manganese, Dissolved	0.24	0.002	0.00032	2017400	mg/L
SMW-2	9/9/2016	Sodium, Dissolved	2300	50	25	NA	mg/L
SMW-2	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
SMW-2	9/9/2016	Selenium, Dissolved	0.015	0.05	0.011	50000	mg/L
SMW-2	9/9/2016	Uranium, Dissolved	0.11	0.005	0.00051	NA	mg/L
SMW-2	9/9/2016	Zinc, Dissolved	0.005	0.01	0.0028	5960450	mg/L
SMW-2	9/9/2016	Iron, Total	1.4	0.1	0.1	13822000	mg/L
SMW-2	9/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L
SMW-2	9/9/2016	Manganese, Total	0.3	0.002	0.00027	2017000	mg/L
SMW-2	9/9/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
SMW-2	9/9/2016	Selenium, Total	0.016	0.05	0.0094	50000	mg/L
SMW-2	9/9/2016	Uranium, Total	0.11	0.0025	0.00087	30000	mg/L
SMW-2	9/9/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
SMW-2	6/28/2017	Calcium, Dissolved	300	20	1.6	NA	mg/L
SMW-2	6/28/2017	Potassium, Dissolved	0.75	1	0.11	NA	mg/L
SMW-2	6/28/2017	Magnesium, Dissolved	90	1	0.25	NA	mg/L
SMW-2	6/28/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
SMW-2	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-2	9/11/2017	Arsenic, Total	0.0092	0.01	0.003	10000	mg/L
SMW-2	9/11/2017	Barium, Total	0.082	0.002	0.00093	2000000	mg/L
SMW-2	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-2	9/11/2017	Chromium, Total	0.39	0.006	0.0018	50000	mg/L
SMW-2	9/11/2017	Copper, Total	0.0042	0.006	0.0017	790000	mg/L
SMW-2	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-2	9/11/2017	Arsenic, Dissolved	0.0098	0.01	0.0018	10000	mg/L
SMW-2	9/11/2017	Barium, Dissolved	0.016	0.002	0.00085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	Calcium, Dissolved	340	10	0.78	NA	mg/L
SMW-2	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-2	9/11/2017	Chromium, Dissolved	0.0014	0.006	0.0013	100000	mg/L
SMW-2	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-2	9/11/2017	Iron, Dissolved	0.054	0.02	0.016	13821880	mg/L
SMW-2	9/11/2017	Potassium, Dissolved	0.98	1	0.11	NA	mg/L
SMW-2	9/11/2017	Magnesium, Dissolved	96	1	0.25	NA	mg/L
SMW-2	9/11/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
SMW-2	9/11/2017	Sodium, Dissolved	2200	50	8.2	NA	mg/L
SMW-2	9/11/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
SMW-2	9/11/2017	Selenium, Dissolved	0.024	0.005	0.0019	50000	mg/L
SMW-2	9/11/2017	Uranium, Dissolved	0.12	0.0025	0.00025	NA	mg/L
SMW-2	9/11/2017	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
SMW-2	9/11/2017	Iron, Total	4	0.2	0.1	13822000	mg/L
SMW-2	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
SMW-2	9/11/2017	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
SMW-2	9/11/2017	Lead, Total	0.0027	0.0025	0.00048	15000	mg/L
SMW-2	9/11/2017	Selenium, Total	0.024	0.005	0.0036	50000	mg/L
SMW-2	9/11/2017	Uranium, Total	0.12	0.0025	0.00077	30000	mg/L
SMW-2	9/11/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
SMW-2	9/18/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
SMW-2	9/18/2018	Arsenic, Total	0.0056	0.005	0.0021	10000	mg/L
SMW-2	9/18/2018	Barium, Total	0.03	0.002	0.001	2000000	mg/L
SMW-2	9/18/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-2	9/18/2018	Chromium, Total	0.026	0.006	0.0018	50000	mg/L
SMW-2	9/18/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-2	9/18/2018	Silver, Dissolved	0.0079	0.005	0.0018	81200	mg/L
SMW-2	9/18/2018	Arsenic, Dissolved	0.0041	0.005	0.0021	10000	mg/L
SMW-2	9/18/2018	Barium, Dissolved	0.014	0.002	0.00099	2000000	mg/L
SMW-2	9/18/2018	Calcium, Dissolved	320	10	0.78	NA	mg/L
SMW-2	9/18/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-2	9/18/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
SMW-2	9/18/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-2	9/18/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
SMW-2	9/18/2018	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
SMW-2	9/18/2018	Magnesium, Dissolved	96	1	0.25	NA	mg/L
SMW-2	9/18/2018	Manganese, Dissolved	0.33	0.002	0.00039	2017400	mg/L
SMW-2	9/18/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
SMW-2	9/18/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
SMW-2	9/18/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
SMW-2	9/18/2018	Uranium, Dissolved	0.099	0.0025	0.00048	NA	mg/L
SMW-2	9/18/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
SMW-2	9/18/2018	Iron, Total	0.76	0.02	0.01	13822000	mg/L
SMW-2	9/18/2018	Mercury, Total	0.00006	0.0002	0.000038	2000	mg/L
SMW-2	9/18/2018	Manganese, Total	0.34	0.002	0.0011	2017000	mg/L
SMW-2	9/18/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
SMW-2	9/18/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
SMW-2	9/18/2018	Uranium, Total	0.091	0.0025	0.00034	30000	mg/L
SMW-2	9/18/2018	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
SMW-2	9/19/2020	Barium, Total	0.021	0.003	0.0016	2000000	mg/L
SMW-2	9/19/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
SMW-2	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-2	9/19/2020	Chromium, Total	0.02	0.006	0.0021	50000	mg/L
SMW-2	9/19/2020	Manganese, Total	0.34	0.002	0.00081	2017000	mg/L
SMW-2	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
SMW-2	9/19/2020	Aluminum, Total	0.7	0.02	0.0074	19914000	mg/L
SMW-2	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
SMW-2	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-2	9/19/2020	Iron, Total	0.39	0.05	0.013	13822000	mg/L
SMW-2	9/19/2020	Nickel, Total	0.041	0.01	0.0033	372000	mg/L
SMW-2	9/19/2020	Silver, Total	0.0053	0.005	0.0013	50000	mg/L
SMW-2	9/19/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
SMW-2	9/19/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
SMW-2	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
SMW-2	9/19/2020	Arsenic, Total	0.0023	0.005	0.0013	10000	mg/L
SMW-2	9/19/2020	Lead, Total	0.00027	0.0025	0.00017	15000	mg/L
SMW-2	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
SMW-2	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
SMW-2	9/19/2020	Uranium, Total	0.085	0.0025	0.00033	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
SMW-2	9/19/2020	Arsenic, Dissolved	0.0024	0.005	0.001	10000	mg/L
SMW-2	9/19/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
SMW-2	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
SMW-2	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
SMW-2	9/19/2020	Uranium, Dissolved	0.088	0.0025	0.00033	NA	mg/L
SMW-2	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
SMW-2	9/19/2020	Boron, Dissolved	1.3	0.2	0.033	3949110	mg/L
SMW-2	9/19/2020	Calcium, Dissolved	300	5	0.57	NA	mg/L
SMW-2	9/19/2020	Magnesium, Dissolved	100	5	0.34	NA	mg/L
SMW-2	9/19/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
SMW-2	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
SMW-2	9/19/2020	Barium, Dissolved	0.015	0.002	0.0011	2000000	mg/L
SMW-2	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
SMW-2	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
SMW-2	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
SMW-2	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
SMW-2	9/19/2020	Iron, Dissolved	0.02	0.02	0.01	13821880	mg/L
SMW-2	9/19/2020	Manganese, Dissolved	0.4	0.002	0.00058	2017400	mg/L
SMW-2	9/19/2020	Nickel, Dissolved	0.042	0.01	0.0033	372000	mg/L
SMW-2	9/19/2020	Potassium, Dissolved	0.81	1	0.16	NA	mg/L
SMW-2	9/19/2020	Silver, Dissolved	0.0041	0.005	0.0013	81200	mg/L
SMW-2	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
SMW-2	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
SMW-2	9/19/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L
SMW-2	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
SMW-2	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
SMW-2	8/22/2019	Arsenic, Dissolved	0.0026	0.005	0.000504	10000	mg/L
SMW-2	8/22/2019	Barium, Dissolved	0.014	0.002	0.000648	2000000	mg/L
SMW-2	8/22/2019	Beryllium, Dissolved	0.00042	0.002	0.000284	4000	mg/L
SMW-2	8/22/2019	Boron, Dissolved	1.4	0.4	0.045305	3949110	mg/L
SMW-2	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
SMW-2	8/22/2019	Calcium, Dissolved	320	10	0.618891	NA	mg/L
SMW-2	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
SMW-2	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
SMW-2	8/22/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
SMW-2	8/22/2019	Iron, Dissolved	0.026	0.02	0.008747	13821880	mg/L
SMW-2	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
SMW-2	8/22/2019	Magnesium, Dissolved	100	10	0.502904	NA	mg/L
SMW-2	8/22/2019	Manganese, Dissolved	0.36	0.002	0.00029	2017400	mg/L
SMW-2	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
SMW-2	8/22/2019	Nickel, Dissolved	0.039	0.01	0.004009	372000	mg/L
SMW-2	8/22/2019	Potassium, Dissolved	0.72	1	0.162288	NA	mg/L
SMW-2	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
SMW-2	8/22/2019	Silver, Dissolved	0.0048	0.005	0.000942	81200	mg/L
SMW-2	8/22/2019	Sodium, Dissolved	2400	100	41.61763	NA	mg/L
SMW-2	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
SMW-2	8/22/2019	Uranium, Dissolved	0.11	0.0025	0.000374	NA	mg/L
SMW-2	8/22/2019	Zinc, Dissolved	ND	0.01	0.002252	5960450	mg/L
SMW-2	8/22/2019	Aluminum, Total	0.85	0.02	0.002488	19914000	mg/L
SMW-2	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
SMW-2	8/22/2019	Arsenic, Total	0.0026	0.005	0.001561	10000	mg/L
SMW-2	8/22/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
SMW-2	8/22/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
SMW-2	8/22/2019	Boron, Total	1.3	0.4	0.045305	3949	mg/L
SMW-2	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
SMW-2	8/22/2019	Chromium, Total	0.047	0.006	0.001533	50000	mg/L
SMW-2	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
SMW-2	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
SMW-2	8/22/2019	Iron, Total	0.52	0.02	0.008747	13822000	mg/L
SMW-2	8/22/2019	Lead, Total	0.00059	0.0025	0.000274	15000	mg/L
SMW-2	8/22/2019	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
SMW-2	8/22/2019	Mercury, Total	0.000094	0.0002	0.000038	2000	mg/L
SMW-2	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
SMW-2	8/22/2019	Nickel, Total	0.047	0.01	0.004009	372000	mg/L
SMW-2	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
SMW-2	8/22/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
SMW-2	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
SMW-2	8/22/2019	Uranium, Total	0.092	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
SMW-4	8/13/2019	Aluminum, Total	0.9	0.02	0.002488	19914000	mg/L
SMW-4	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
SMW-4	8/13/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
SMW-4	8/13/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
SMW-4	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
SMW-4	8/13/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
SMW-4	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
SMW-4	8/13/2019	Chromium, Total	0.0034	0.006	0.001533	50000	mg/L
SMW-4	8/13/2019	Cobalt, Total	0.0092	0.006	0.003091	5980	mg/L
SMW-4	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
SMW-4	8/13/2019	Iron, Total	0.41	0.02	0.008747	13822000	mg/L
SMW-4	8/13/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
SMW-4	8/13/2019	Manganese, Total	0.0086	0.002	0.00029	2017000	mg/L
SMW-4	8/13/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
SMW-4	8/13/2019	Molybdenum, Total	0.01	0.008	0.006735	98700	mg/L
SMW-4	8/13/2019	Nickel, Total	0.0041	0.01	0.004009	372000	mg/L
SMW-4	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
SMW-4	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
SMW-4	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
SMW-4	8/13/2019	Uranium, Total	0.03	0.0025	0.000424	30000	mg/L
SMW-4	8/13/2019	Zinc, Total	0.0058	0.01	0.005772	5960000	mg/L
SMW-4	8/13/2019	Aluminum, Dissolved	0.011	0.02	0.002488	19913930	mg/L
SMW-4	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
SMW-4	8/13/2019	Arsenic, Dissolved	0.0031	0.001	0.000101	10000	mg/L
SMW-4	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
SMW-4	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
SMW-4	8/13/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
SMW-4	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
SMW-4	8/13/2019	Calcium, Dissolved	3.5	1	0.061889	NA	mg/L
SMW-4	8/13/2019	Chromium, Dissolved	0.0026	0.006	0.001533	100000	mg/L
SMW-4	8/13/2019	Cobalt, Dissolved	0.0066	0.006	0.003091	5980	mg/L
SMW-4	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
SMW-4	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
SMW-4	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
SMW-4	8/13/2019	Magnesium, Dissolved	0.81	1	0.05029	NA	mg/L
SMW-4	8/13/2019	Manganese, Dissolved	0.00056	0.002	0.00029	2017400	mg/L
SMW-4	8/13/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
SMW-4	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
SMW-4	8/13/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
SMW-4	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
SMW-4	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
SMW-4	8/13/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
SMW-4	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
SMW-4	8/13/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
SMW-4	8/13/2019	Zinc, Dissolved	0.0075	0.01	0.002252	5960450	mg/L
SMW-4	9/20/2020	Arsenic, Dissolved	0.0029	0.001	0.00021	10000	mg/L
SMW-4	9/20/2020	Lead, Dissolved	0.000038	0.0005	0.000034	NA	mg/L
SMW-4	9/20/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
SMW-4	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
SMW-4	9/20/2020	Uranium, Dissolved	0.026	0.0025	0.00033	NA	mg/L
SMW-4	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
SMW-4	9/20/2020	Boron, Dissolved	1.7	0.2	0.033	3949110	mg/L
SMW-4	9/20/2020	Sodium, Dissolved	280	5	0.69	NA	mg/L
SMW-4	9/20/2020	Aluminum, Dissolved	0.043	0.02	0.0056	19913930	mg/L
SMW-4	9/20/2020	Barium, Dissolved	0.014	0.002	0.0011	2000000	mg/L
SMW-4	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
SMW-4	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
SMW-4	9/20/2020	Calcium, Dissolved	3.1	1	0.11	NA	mg/L
SMW-4	9/20/2020	Cobalt, Dissolved	0.077	0.006	0.0024	5980	mg/L
SMW-4	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
SMW-4	9/20/2020	Iron, Dissolved	0.017	0.02	0.01	13821880	mg/L
SMW-4	9/20/2020	Magnesium, Dissolved	0.67	1	0.067	NA	mg/L
SMW-4	9/20/2020	Manganese, Dissolved	0.0014	0.002	0.00058	2017400	mg/L
SMW-4	9/20/2020	Molybdenum, Dissolved	0.0093	0.008	0.0056	98700	mg/L
SMW-4	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
SMW-4	9/20/2020	Potassium, Dissolved	0.5	1	0.16	NA	mg/L
SMW-4	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
SMW-4	9/20/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
SMW-4	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
SMW-4	9/20/2020	Arsenic, Total	0.0026	0.001	0.00026	10000	mg/L
SMW-4	9/20/2020	Lead, Total	0.0019	0.0005	0.000034	15000	mg/L
SMW-4	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
SMW-4	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
SMW-4	9/20/2020	Uranium, Total	0.024	0.0005	0.000065	30000	mg/L
SMW-4	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
SMW-4	9/20/2020	Barium, Total	0.049	0.003	0.0016	2000000	mg/L
SMW-4	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
SMW-4	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-4	9/20/2020	Chromium, Total	0.015	0.006	0.0021	50000	mg/L
SMW-4	9/20/2020	Cobalt, Total	0.0087	0.006	0.0024	5980	mg/L
SMW-4	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-4	9/20/2020	Manganese, Total	0.042	0.002	0.00081	2017000	mg/L
SMW-4	9/20/2020	Molybdenum, Total	0.0091	0.008	0.0065	98700	mg/L
SMW-4	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
SMW-4	9/20/2020	Zinc, Total	0.0088	0.01	0.0064	5960000	mg/L
SMW-4	9/20/2020	Nickel, Total	0.019	0.01	0.0033	372000	mg/L
SMW-4	9/20/2020	Aluminum, Total	3.7	0.1	0.037	19914000	mg/L
SMW-4	9/20/2020	Boron, Total	1.7	0.2	0.037	3949	mg/L
SMW-4	9/20/2020	Iron, Total	1.7	0.25	0.064	13822000	mg/L
SMW-4	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
SMW-4	8/24/2012	Arsenic, Total	0.0033	0.0025	0.0014	10000	mg/L
SMW-4	8/24/2012	Barium, Total	0.019	0.002	0.00039	2000000	mg/L
SMW-4	8/24/2012	Calcium, Total	3	1	0.026	NA	mg/L
SMW-4	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
SMW-4	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
SMW-4	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-4	8/24/2012	Iron, Total	0.13	0.02	0.013	13822000	mg/L
SMW-4	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
SMW-4	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
SMW-4	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
SMW-4	8/24/2012	Manganese, Total	0.0046	0.002	0.00026	2017000	mg/L
SMW-4	8/24/2012	Sodium, Total	290	5	0.22	NA	mg/L
SMW-4	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
SMW-4	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
SMW-4	8/24/2012	Uranium, Total	0.033	0.0025	0.00003	30000	mg/L
SMW-4	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
SMW-4	9/9/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
SMW-4	9/9/2013	Arsenic, Total	0.0026	0.001	0.000098	10000	mg/L
SMW-4	9/9/2013	Barium, Total	0.021	0.002	0.00095	2000000	mg/L
SMW-4	9/9/2013	Calcium, Total	4.5	1	0.069	NA	mg/L
SMW-4	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
SMW-4	9/9/2013	Chromium, Total	0.012	0.006	0.00084	50000	mg/L
SMW-4	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-4	9/9/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
SMW-4	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
SMW-4	9/9/2013	Potassium, Total	ND	1	0.24	NA	mg/L
SMW-4	9/9/2013	Magnesium, Total	1.1	1	0.028	NA	mg/L
SMW-4	9/9/2013	Manganese, Total	ND	0.002	0.00016	2017000	mg/L
SMW-4	9/9/2013	Sodium, Total	290	5	1.6	NA	mg/L
SMW-4	9/9/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
SMW-4	9/9/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
SMW-4	9/9/2013	Uranium, Total	0.031	0.005	0.000036	30000	mg/L
SMW-4	9/9/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
SMW-4	9/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
SMW-4	9/11/2014	Arsenic, Total	0.0033	0.001	0.00011	10000	mg/L
SMW-4	9/11/2014	Barium, Total	0.021	0.002	0.0011	2000000	mg/L
SMW-4	9/11/2014	Calcium, Total	4.5	1	0.082	NA	mg/L
SMW-4	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
SMW-4	9/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
SMW-4	9/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
SMW-4	9/11/2014	Iron, Total	0.041	0.02	0.0062	13822000	mg/L
SMW-4	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
SMW-4	9/11/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
SMW-4	9/11/2014	Magnesium, Total	1.2	1	0.018	NA	mg/L
SMW-4	9/11/2014	Manganese, Total	0.0033	0.002	0.00055	2017000	mg/L
SMW-4	9/11/2014	Sodium, Total	300	10	3.9	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
SMW-4	9/11/2014	Selenium, Total	0.0013	0.001	0.00015	50000	mg/L
SMW-4	9/11/2014	Uranium, Total	0.033	0.01	0.0005	30000	mg/L
SMW-4	9/11/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
SMW-4	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
SMW-4	8/14/2015	Arsenic, Total	0.003	0.001	0.00029	10000	mg/L
SMW-4	8/14/2015	Barium, Total	0.028	0.002	0.0011	2000000	mg/L
SMW-4	8/14/2015	Calcium, Total	5	1	0.057	NA	mg/L
SMW-4	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
SMW-4	8/14/2015	Chromium, Total	0.0078	0.006	0.0022	50000	mg/L
SMW-4	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
SMW-4	8/14/2015	Iron, Total	0.32	0.02	0.0072	13822000	mg/L
SMW-4	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
SMW-4	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
SMW-4	8/14/2015	Magnesium, Total	1.5	1	0.039	NA	mg/L
SMW-4	8/14/2015	Manganese, Total	0.01	0.002	0.0015	2017000	mg/L
SMW-4	8/14/2015	Sodium, Total	310	5	0.36	NA	mg/L
SMW-4	8/14/2015	Lead, Total	0.00053	0.0005	0.000047	15000	mg/L
SMW-4	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
SMW-4	8/14/2015	Uranium, Total	0.036	0.005	0.000049	30000	mg/L
SMW-4	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
SMW-4	9/7/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
SMW-4	9/7/2016	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
SMW-4	9/7/2016	Barium, Total	0.043	0.002	0.00079	2000000	mg/L
SMW-4	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-4	9/7/2016	Chromium, Total	0.036	0.006	0.0027	50000	mg/L
SMW-4	9/7/2016	Copper, Total	0.0099	0.006	0.003	790000	mg/L
SMW-4	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
SMW-4	9/7/2016	Arsenic, Dissolved	0.003	0.001	0.00014	10000	mg/L
SMW-4	9/7/2016	Barium, Dissolved	0.019	0.002	0.0013	2000000	mg/L
SMW-4	9/7/2016	Calcium, Dissolved	3.5	1	0.5	NA	mg/L
SMW-4	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
SMW-4	9/7/2016	Chromium, Dissolved	0.0028	0.006	0.0018	100000	mg/L
SMW-4	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
SMW-4	9/7/2016	Iron, Dissolved	0.078	0.02	0.02	13821880	mg/L
SMW-4	9/7/2016	Potassium, Dissolved	0.57	1	0.5	NA	mg/L
SMW-4	9/7/2016	Magnesium, Dissolved	0.87	1	0.5	NA	mg/L
SMW-4	9/7/2016	Manganese, Dissolved	0.0064	0.002	0.00032	2017400	mg/L
SMW-4	9/7/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
SMW-4	9/7/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
SMW-4	9/7/2016	Selenium, Dissolved	0.0011	0.001	0.00021	50000	mg/L
SMW-4	9/7/2016	Uranium, Dissolved	0.032	0.0025	0.00026	NA	mg/L
SMW-4	9/7/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
SMW-4	9/7/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
SMW-4	9/7/2016	Mercury, Total	0.000058	0.0002	0.000053	2000	mg/L
SMW-4	9/7/2016	Manganese, Total	0.035	0.002	0.00027	2017000	mg/L
SMW-4	9/7/2016	Lead, Total	0.0017	0.0005	0.000081	15000	mg/L
SMW-4	9/7/2016	Selenium, Total	0.00096	0.001	0.00019	50000	mg/L
SMW-4	9/7/2016	Uranium, Total	0.031	0.0025	0.00087	30000	mg/L
SMW-4	9/7/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
SMW-4	6/28/2017	Calcium, Dissolved	4.5	1	0.078	NA	mg/L
SMW-4	6/28/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
SMW-4	6/28/2017	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
SMW-4	6/28/2017	Sodium, Dissolved	310	20	3.3	NA	mg/L
SMW-4	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-4	9/11/2017	Arsenic, Total	0.0032	0.001	0.0003	10000	mg/L
SMW-4	9/11/2017	Barium, Total	0.065	0.002	0.00093	2000000	mg/L
SMW-4	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-4	9/11/2017	Chromium, Total	0.06	0.006	0.0018	50000	mg/L
SMW-4	9/11/2017	Copper, Total	0.0035	0.006	0.0017	790000	mg/L
SMW-4	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-4	9/11/2017	Arsenic, Dissolved	0.0032	0.001	0.00018	10000	mg/L
SMW-4	9/11/2017	Barium, Dissolved	0.023	0.002	0.00085	2000000	mg/L
SMW-4	9/11/2017	Calcium, Dissolved	4.4	1	0.078	NA	mg/L
SMW-4	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-4	9/11/2017	Chromium, Dissolved	0.0043	0.006	0.0013	100000	mg/L
SMW-4	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-4	9/11/2017	Iron, Dissolved	0.12	0.02	0.016	13821880	mg/L
SMW-4	9/11/2017	Potassium, Dissolved	0.5	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	Magnesium, Dissolved	1.1	1	0.25	NA	mg/L
SMW-4	9/11/2017	Manganese, Dissolved	0.01	0.002	0.00039	2017400	mg/L
SMW-4	9/11/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
SMW-4	9/11/2017	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
SMW-4	9/11/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
SMW-4	9/11/2017	Uranium, Dissolved	0.031	0.0025	0.00025	NA	mg/L
SMW-4	9/11/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
SMW-4	9/11/2017	Iron, Total	3.1	0.1	0.051	13822000	mg/L
SMW-4	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
SMW-4	9/11/2017	Manganese, Total	0.068	0.002	0.0011	2017000	mg/L
SMW-4	9/11/2017	Lead, Total	0.0032	0.0005	0.000095	15000	mg/L
SMW-4	9/11/2017	Selenium, Total	0.00097	0.001	0.00071	50000	mg/L
SMW-4	9/11/2017	Uranium, Total	0.033	0.0025	0.00077	30000	mg/L
SMW-4	9/11/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
SMW-4	9/12/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-4	9/12/2018	Arsenic, Total	0.0031	0.001	0.00041	10000	mg/L
SMW-4	9/12/2018	Barium, Total	0.027	0.002	0.001	2000000	mg/L
SMW-4	9/12/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
SMW-4	9/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-4	9/12/2018	Chromium, Total	0.017	0.006	0.0018	50000	mg/L
SMW-4	9/12/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-4	9/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-4	9/12/2018	Arsenic, Dissolved	0.0029	0.001	0.00042	10000	mg/L
SMW-4	9/12/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
SMW-4	9/12/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
SMW-4	9/12/2018	Calcium, Dissolved	3.7	1	0.078	NA	mg/L
SMW-4	9/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-4	9/12/2018	Chromium, Dissolved	0.0042	0.006	0.0013	100000	mg/L
SMW-4	9/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-4	9/12/2018	Iron, Dissolved	0.079	0.02	0.016	13821880	mg/L
SMW-4	9/12/2018	Potassium, Dissolved	0.62	1	0.11	NA	mg/L
SMW-4	9/12/2018	Magnesium, Dissolved	0.99	1	0.25	NA	mg/L
SMW-4	9/12/2018	Manganese, Dissolved	0.0042	0.002	0.00039	2017400	mg/L
SMW-4	9/12/2018	Sodium, Dissolved	300	10	1.6	NA	mg/L
SMW-4	9/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
SMW-4	9/12/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
SMW-4	9/12/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
SMW-4	9/12/2018	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
SMW-4	9/12/2018	Vanadium, Dissolved	0.045	0.05	0.0019	63100	mg/L
SMW-4	9/12/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
SMW-4	9/12/2018	Iron, Total	0.71	0.02	0.01	13822000	mg/L
SMW-4	9/12/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
SMW-4	9/12/2018	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
SMW-4	9/12/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
SMW-4	9/12/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
SMW-4	9/12/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
SMW-4	9/12/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
SMW-4	9/12/2018	Vanadium, Total	0.049	0.05	0.00076	63100	mg/L
SMW-4	9/12/2018	Zinc, Total	0.0058	0.01	0.0033	5960000	mg/L
SMW-4	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
SMW-4	12/6/2018	Arsenic, Total	0.0029	0.001	0.0005	10000	mg/L
SMW-4	12/6/2018	Barium, Total	0.032	0.02	0.02	2000000	mg/L
SMW-4	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
SMW-4	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
SMW-4	12/6/2018	Cobalt, Total	0.019	0.006	0.00098	5980	mg/L
SMW-4	12/6/2018	Chromium, Total	0.011	0.006	0.0011	50000	mg/L
SMW-4	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
SMW-4	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
SMW-4	12/6/2018	Lead, Total	0.001	0.001	0.0005	15000	mg/L
SMW-4	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
SMW-4	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
SMW-4	12/6/2018	Vanadium, Total	0.05	0.05	0.0023	63100	mg/L
SMW-4	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
STP-1 to EP-2	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
STP-1 to EP-2	3/5/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
STP-1 to EP-2	3/5/2014	Barium, Total	0.18	0.002	0.00057	2000000	mg/L
STP-1 to EP-2	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	3/5/2014	Chromium, Total	0.014	0.006	0.0028	50000	mg/L
STP-1 to EP-2	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	3/5/2014	Iron, Total	0.94	0.02	0.0072	13822000	mg/L
STP-1 to EP-2	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	3/5/2014	Manganese, Total	0.36	0.002	0.00049	2017000	mg/L
STP-1 to EP-2	3/5/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
STP-1 to EP-2	3/5/2014	Selenium, Total	0.027	0.01	0.0051	50000	mg/L
STP-1 to EP-2	3/5/2014	Uranium, Total	0.004	0.001	0.00018	30000	mg/L
STP-1 to EP-2	3/5/2014	Zinc, Total	0.044	0.01	0.0035	5960000	mg/L
STP-1 to EP-2	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
STP-1 to EP-2	9/10/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
STP-1 to EP-2	9/10/2014	Barium, Total	0.087	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	9/10/2014	Calcium, Total	67	1	0.082	NA	mg/L
STP-1 to EP-2	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	9/10/2014	Chromium, Total	0.018	0.006	0.0021	50000	mg/L
STP-1 to EP-2	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
STP-1 to EP-2	9/10/2014	Iron, Total	3.5	0.1	0.031	13822000	mg/L
STP-1 to EP-2	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	9/10/2014	Potassium, Total	53	1	0.093	NA	mg/L
STP-1 to EP-2	9/10/2014	Magnesium, Total	17	1	0.018	NA	mg/L
STP-1 to EP-2	9/10/2014	Manganese, Total	0.18	0.002	0.00055	2017000	mg/L
STP-1 to EP-2	9/10/2014	Sodium, Total	600	10	3.9	NA	mg/L
STP-1 to EP-2	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
STP-1 to EP-2	9/10/2014	Selenium, Total	0.022	0.01	0.0015	50000	mg/L
STP-1 to EP-2	9/10/2014	Uranium, Total	0.0028	0.001	0.00005	30000	mg/L
STP-1 to EP-2	9/10/2014	Zinc, Total	0.087	0.01	0.0014	5960000	mg/L
STP-1 to EP-2	11/12/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
STP-1 to EP-2	11/12/2014	Arsenic, Total	0.01	0.001	0.00011	10000	mg/L
STP-1 to EP-2	11/12/2014	Barium, Total	0.068	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	11/12/2014	Chromium, Total	0.014	0.006	0.0021	50000	mg/L
STP-1 to EP-2	11/12/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
STP-1 to EP-2	11/12/2014	Iron, Total	1.4	0.1	0.031	13822000	mg/L
STP-1 to EP-2	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	11/12/2014	Manganese, Total	0.17	0.002	0.00055	2017000	mg/L
STP-1 to EP-2	11/12/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
STP-1 to EP-2	11/12/2014	Selenium, Total	ND	0.025	0.00015	50000	mg/L
STP-1 to EP-2	11/12/2014	Uranium, Total	0.0013	0.001	0.00005	30000	mg/L
STP-1 to EP-2	11/12/2014	Zinc, Total	0.072	0.01	0.0014	5960000	mg/L
STP-1 to EP-2	8/31/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
STP-1 to EP-2	8/31/2018	Arsenic, Total	0.0087	0.005	0.0021	10000	mg/L
STP-1 to EP-2	8/31/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
STP-1 to EP-2	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
STP-1 to EP-2	8/31/2018	Chromium, Total	0.0025	0.006	0.0018	50000	mg/L
STP-1 to EP-2	8/31/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
STP-1 to EP-2	8/31/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
STP-1 to EP-2	8/31/2018	Arsenic, Dissolved	0.0075	0.005	0.0021	10000	mg/L
STP-1 to EP-2	8/31/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
STP-1 to EP-2	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
STP-1 to EP-2	8/31/2018	Chromium, Dissolved	0.0023	0.006	0.0013	100000	mg/L
STP-1 to EP-2	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
STP-1 to EP-2	8/31/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
STP-1 to EP-2	8/31/2018	Manganese, Dissolved	0.36	0.002	0.00039	2017400	mg/L
STP-1 to EP-2	8/31/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
STP-1 to EP-2	8/31/2018	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
STP-1 to EP-2	8/31/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
STP-1 to EP-2	8/31/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
STP-1 to EP-2	8/31/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
STP-1 to EP-2	8/31/2018	Mercury, Total	0.000095	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	8/31/2018	Manganese, Total	0.4	0.002	0.0011	2017000	mg/L
STP-1 to EP-2	8/31/2018	Lead, Total	0.0003	0.0005	0.00023	15000	mg/L
STP-1 to EP-2	8/31/2018	Selenium, Total	0.0084	0.005	0.0049	50000	mg/L
STP-1 to EP-2	8/31/2018	Uranium, Total	0.0003	0.0005	0.000068	30000	mg/L
STP-1 to EP-2	8/31/2018	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
STP-1 to EP-2	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
STP-1 to EP-2	11/8/2018	Arsenic, Total	0.015	0.001	0.00041	10000	mg/L
STP-1 to EP-2	11/8/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
STP-1 to EP-2	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
STP-1 to EP-2	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
STP-1 to EP-2	11/8/2018	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
STP-1 to EP-2	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/8/2018	Arsenic, Dissolved	0.012	0.001	0.00042	10000	mg/L
STP-1 to EP-2	11/8/2018	Barium, Dissolved	0.13	0.002	0.00099	2000000	mg/L
STP-1 to EP-2	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
STP-1 to EP-2	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
STP-1 to EP-2	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
STP-1 to EP-2	11/8/2018	Iron, Dissolved	0.49	0.02	0.016	13821880	mg/L
STP-1 to EP-2	11/8/2018	Manganese, Dissolved	0.2	0.002	0.00039	2017400	mg/L
STP-1 to EP-2	11/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
STP-1 to EP-2	11/8/2018	Selenium, Dissolved	0.013	0.001	0.00076	50000	mg/L
STP-1 to EP-2	11/8/2018	Uranium, Dissolved	0.004	0.0025	0.00048	NA	mg/L
STP-1 to EP-2	11/8/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
STP-1 to EP-2	11/8/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
STP-1 to EP-2	11/8/2018	Mercury, Total	0.00049	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	11/8/2018	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
STP-1 to EP-2	11/8/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
STP-1 to EP-2	11/8/2018	Selenium, Total	0.0097	0.001	0.00098	50000	mg/L
STP-1 to EP-2	11/8/2018	Uranium, Total	0.0056	0.0005	0.000068	30000	mg/L
STP-1 to EP-2	11/8/2018	Zinc, Total	0.051	0.01	0.0033	5960000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Dissolved	0.276	0.01	0.003	2017400	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Dissolved	0.0634	0.02	0.008	5960450	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Dissolved	0.623	0.2	0.051	19913930	mg/L
STP-1 to EP-2	12/21/2020	Barium, Dissolved	0.0881	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Dissolved	0.239	0.1	0.022	3949110	mg/L
STP-1 to EP-2	12/21/2020	Iron, Dissolved	1.24	0.2	0.075	13821880	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Dissolved	0.0123	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Total	0.901	0.2	0.051	19914000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Total	0.238	0.1	0.022	3949	mg/L
STP-1 to EP-2	12/21/2020	Barium, Total	0.0876	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
STP-1 to EP-2	12/21/2020	Copper, Total	0.0363	0.02	0.008	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Total	0.283	0.01	0.003	2017000	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Total	0.00881	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Total	0.0643	0.02	0.008	5960000	mg/L
STP-1 to EP-2	12/21/2020	Iron, Total	1.84	0.2	0.075	13822000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Dissolved	ND	0.006	0.002	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Dissolved	ND	0.01	0.002	5000	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Dissolved	ND	0.02	0.01	100000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Dissolved	ND	0.02	0.006	5980	mg/L
STP-1 to EP-2	12/21/2020	Copper, Dissolved	ND	0.04	0.016	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Dissolved	0.267	0.02	0.006	2017400	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Dissolved	ND	0.012	0.006	372000	mg/L
STP-1 to EP-2	12/21/2020	Silver, Dissolved	ND	0.01	0.002	81200	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Dissolved	0.0493	0.04	0.016	5960450	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Dissolved	0.637	0.4	0.102	19913930	mg/L
STP-1 to EP-2	12/21/2020	Barium, Dissolved	0.0835	0.02	0.006	2000000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Dissolved	0.236	0.2	0.044	3949110	mg/L
STP-1 to EP-2	12/21/2020	Iron, Dissolved	1.08	0.4	0.15	13821880	mg/L
STP-1 to EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Total	0.779	0.2	0.051	19914000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Total	0.211	0.1	0.022	3949	mg/L
STP-1 to EP-2	12/21/2020	Barium, Total	0.0767	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
STP-1 to EP-2	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	Manganese, Total	0.242	0.01	0.003	2017000	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Total	0.00771	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Total	0.0577	0.02	0.008	5960000	mg/L
STP-1 to EP-2	12/21/2020	Iron, Total	1.51	0.2	0.075	13822000	mg/L
STP-1 to EP-2	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Dissolved	ND	0.8	0.28	NA	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
STP-1 to EP-2	9/16/2020	Antimony, Dissolved	0.0042	0.001	0.0007	6000	mg/L
STP-1 to EP-2	9/16/2020	Arsenic, Dissolved	0.0035	0.005	0.001	10000	mg/L
STP-1 to EP-2	9/16/2020	Lead, Dissolved	0.00043	0.0025	0.00017	NA	mg/L
STP-1 to EP-2	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
STP-1 to EP-2	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
STP-1 to EP-2	9/16/2020	Uranium, Dissolved	ND	0.0025	0.00033	NA	mg/L
STP-1 to EP-2	9/16/2020	Barium, Dissolved	0.045	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	9/16/2020	Beryllium, Dissolved	0.0014	0.002	0.00088	4000	mg/L
STP-1 to EP-2	9/16/2020	Boron, Dissolved	0.4	0.04	0.0067	3949110	mg/L
STP-1 to EP-2	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
STP-1 to EP-2	9/16/2020	Chromium, Dissolved	0.012	0.006	0.002	100000	mg/L
STP-1 to EP-2	9/16/2020	Cobalt, Dissolved	0.0062	0.006	0.0024	5980	mg/L
STP-1 to EP-2	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
STP-1 to EP-2	9/16/2020	Manganese, Dissolved	0.72	0.002	0.00058	2017400	mg/L
STP-1 to EP-2	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
STP-1 to EP-2	9/16/2020	Nickel, Dissolved	0.55	0.01	0.0033	372000	mg/L
STP-1 to EP-2	9/16/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
STP-1 to EP-2	9/16/2020	Zinc, Dissolved	0.1	0.01	0.006	5960450	mg/L
STP-1 to EP-2	9/16/2020	Aluminum, Dissolved	0.97	0.1	0.028	19913930	mg/L
STP-1 to EP-2	9/16/2020	Iron, Dissolved	30	1	0.52	13821880	mg/L
STP-1 to EP-2	9/16/2020	Arsenic, Total	0.0036	0.001	0.00026	10000	mg/L
STP-1 to EP-2	9/16/2020	Lead, Total	0.00043	0.0005	0.000034	15000	mg/L
STP-1 to EP-2	9/16/2020	Selenium, Total	0.0031	0.001	0.00066	50000	mg/L
STP-1 to EP-2	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
STP-1 to EP-2	9/16/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
STP-1 to EP-2	9/16/2020	Mercury, Total	0.00017	0.0002	0.00012	2000	mg/L
STP-1 to EP-2	9/16/2020	Barium, Total	0.074	0.003	0.0016	2000000	mg/L
STP-1 to EP-2	9/16/2020	Beryllium, Total	0.0014	0.002	0.00088	4000	mg/L
STP-1 to EP-2	9/16/2020	Boron, Total	0.41	0.04	0.0074	3949	mg/L
STP-1 to EP-2	9/16/2020	Copper, Total	0.0099	0.006	0.0047	790000	mg/L
STP-1 to EP-2	9/16/2020	Manganese, Total	0.76	0.002	0.00081	2017000	mg/L
STP-1 to EP-2	9/16/2020	Nickel, Total	0.59	0.01	0.0033	372000	mg/L
STP-1 to EP-2	9/16/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
STP-1 to EP-2	9/16/2020	Aluminum, Total	1.4	0.1	0.037	19914000	mg/L
STP-1 to EP-2	9/16/2020	Uranium, Total	0.00048	0.0005	0.000065	30000	mg/L
STP-1 to EP-2	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/16/2020	Chromium, Total	0.026	0.006	0.0021	50000	mg/L
STP-1 to EP-2	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
STP-1 to EP-2	9/16/2020	Zinc, Total	0.15	0.01	0.0064	5960000	mg/L
STP-1 to EP-2	9/16/2020	Iron, Total	34	2.5	0.64	13822000	mg/L
STP-1 to EP-2	9/16/2020	Cobalt, Total	0.0062	0.006	0.0024	5980	mg/L
STP-1 to EP-2	5/29/2019	Aluminum, Dissolved	0.32	0.1	0.012441	19913930	mg/L
STP-1 to EP-2	5/29/2019	Antimony, Dissolved	0.00081	0.001	0.000389	6000	mg/L
STP-1 to EP-2	5/29/2019	Arsenic, Dissolved	0.0069	0.001	0.000101	10000	mg/L
STP-1 to EP-2	5/29/2019	Barium, Dissolved	0.25	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	5/29/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	5/29/2019	Boron, Dissolved	0.41	0.2	0.022653	3949110	mg/L
STP-1 to EP-2	5/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
STP-1 to EP-2	5/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
STP-1 to EP-2	5/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
STP-1 to EP-2	5/29/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
STP-1 to EP-2	5/29/2019	Iron, Dissolved	1.8	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	5/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
STP-1 to EP-2	5/29/2019	Manganese, Dissolved	0.22	0.01	0.00145	2017400	mg/L
STP-1 to EP-2	5/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
STP-1 to EP-2	5/29/2019	Nickel, Dissolved	ND	0.05	0.020043	372000	mg/L
STP-1 to EP-2	5/29/2019	Selenium, Dissolved	0.0084	0.001	0.000171	50000	mg/L
STP-1 to EP-2	5/29/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
STP-1 to EP-2	5/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
STP-1 to EP-2	5/29/2019	Uranium, Dissolved	0.00042	0.0005	0.000075	NA	mg/L
STP-1 to EP-2	5/29/2019	Zinc, Dissolved	0.033	0.05	0.01126	5960450	mg/L
STP-1 to EP-2	5/29/2019	Aluminum, Total	0.43	0.1	0.012441	19914000	mg/L
STP-1 to EP-2	5/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	5/29/2019	Arsenic, Total	0.0082	0.005	0.001561	10000	mg/L
STP-1 to EP-2	5/29/2019	Barium, Total	0.26	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	5/29/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	5/29/2019	Boron, Total	0.43	0.2	0.022653	3949	mg/L
STP-1 to EP-2	5/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
STP-1 to EP-2	5/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
STP-1 to EP-2	5/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
STP-1 to EP-2	5/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
STP-1 to EP-2	5/29/2019	Iron, Total	1.9	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	5/29/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	5/29/2019	Manganese, Total	0.23	0.01	0.00145	2017000	mg/L
STP-1 to EP-2	5/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	5/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
STP-1 to EP-2	5/29/2019	Nickel, Total	ND	0.05	0.020043	372000	mg/L
STP-1 to EP-2	5/29/2019	Selenium, Total	0.0055	0.005	0.00239	50000	mg/L
STP-1 to EP-2	5/29/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
STP-1 to EP-2	5/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	5/29/2019	Uranium, Total	0.00065	0.0025	0.000424	30000	mg/L
STP-1 to EP-2	5/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
STP-1 to EP-2	10/9/2019	Aluminum, Dissolved	0.23	0.02	0.002488	19913930	mg/L
STP-1 to EP-2	10/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	10/9/2019	Arsenic, Dissolved	0.0032	0.005	0.000504	10000	mg/L
STP-1 to EP-2	10/9/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	10/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	10/9/2019	Boron, Dissolved	0.25	0.04	0.004531	3949110	mg/L
STP-1 to EP-2	10/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
STP-1 to EP-2	10/9/2019	Chromium, Dissolved	0.0049	0.006	0.001533	100000	mg/L
STP-1 to EP-2	10/9/2019	Cobalt, Dissolved	0.0051	0.006	0.003091	5980	mg/L
STP-1 to EP-2	10/9/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
STP-1 to EP-2	10/9/2019	Iron, Dissolved	7.5	0.2	0.087469	13821880	mg/L
STP-1 to EP-2	10/9/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
STP-1 to EP-2	10/9/2019	Manganese, Dissolved	0.25	0.002	0.00029	2017400	mg/L
STP-1 to EP-2	10/9/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
STP-1 to EP-2	10/9/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
STP-1 to EP-2	10/9/2019	Selenium, Dissolved	0.002	0.005	0.000857	50000	mg/L
STP-1 to EP-2	10/9/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L
STP-1 to EP-2	10/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
STP-1 to EP-2	10/9/2019	Uranium, Dissolved	0.0015	0.0005	0.000075	NA	mg/L
STP-1 to EP-2	10/9/2019	Zinc, Dissolved	0.04	0.01	0.002252	5960450	mg/L
STP-1 to EP-2	10/9/2019	Aluminum, Total	0.27	0.02	0.002488	19914000	mg/L
STP-1 to EP-2	10/9/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	10/9/2019	Arsenic, Total	0.0053	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	10/9/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	10/9/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	10/9/2019	Boron, Total	0.24	0.04	0.004531	3949	mg/L
STP-1 to EP-2	10/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	10/9/2019	Chromium, Total	0.0053	0.006	0.001533	50000	mg/L
STP-1 to EP-2	10/9/2019	Cobalt, Total	0.0048	0.006	0.003091	5980	mg/L
STP-1 to EP-2	10/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
STP-1 to EP-2	10/9/2019	Iron, Total	7.7	0.2	0.087469	13822000	mg/L
STP-1 to EP-2	10/9/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	10/9/2019	Manganese, Total	0.24	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	10/9/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	10/9/2019	Molybdenum, Total	0.023	0.008	0.006735	98700	mg/L
STP-1 to EP-2	10/9/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
STP-1 to EP-2	10/9/2019	Selenium, Total	0.0028	0.005	0.00239	50000	mg/L
STP-1 to EP-2	10/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
STP-1 to EP-2	10/9/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	10/9/2019	Uranium, Total	0.0017	0.0025	0.000424	30000	mg/L
STP-1 to EP-2	10/9/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	2/7/2019	Antimony, Total	ND	0.01	0.002038	6000	mg/L
STP-1 to EP-2	2/7/2019	Arsenic, Total	0.0055	0.01	0.003122	10000	mg/L
STP-1 to EP-2	2/7/2019	Barium, Total	0.28	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	2/7/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	2/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	2/7/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
STP-1 to EP-2	2/7/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
STP-1 to EP-2	2/7/2019	Iron, Total	0.76	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	2/7/2019	Lead, Total	ND	0.005	0.000471	15000	mg/L
STP-1 to EP-2	2/7/2019	Manganese, Total	0.23	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	2/7/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	2/7/2019	Selenium, Total	0.0095	0.01	0.00478	50000	mg/L
STP-1 to EP-2	2/7/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
STP-1 to EP-2	2/7/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
STP-1 to EP-2	2/7/2019	Uranium, Total	0.0057	0.005	0.000849	30000	mg/L
STP-1 to EP-2	2/7/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	2/7/2019	Antimony, Dissolved	0.0014	0.005	0.001019	6000	mg/L
STP-1 to EP-2	2/7/2019	Arsenic, Dissolved	0.0074	0.001	0.000068	10000	mg/L
STP-1 to EP-2	2/7/2019	Barium, Dissolved	0.26	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	2/7/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	2/7/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
STP-1 to EP-2	2/7/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
STP-1 to EP-2	2/7/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
STP-1 to EP-2	2/7/2019	Iron, Dissolved	0.59	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	2/7/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
STP-1 to EP-2	2/7/2019	Manganese, Dissolved	0.22	0.01	0.00145	2017400	mg/L
STP-1 to EP-2	2/7/2019	Selenium, Dissolved	0.011	0.001	0.000203	50000	mg/L
STP-1 to EP-2	2/7/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
STP-1 to EP-2	2/7/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
STP-1 to EP-2	2/7/2019	Uranium, Dissolved	0.0055	0.0005	0.00003	NA	mg/L
STP-1 to EP-2	2/7/2019	Zinc, Dissolved	0.025	0.05	0.01126	5960450	mg/L
STP-1 to EP-2	11/21/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
STP-1 to EP-2	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	11/21/2019	Arsenic, Total	0.009	0.005	0.001561	10000	mg/L
STP-1 to EP-2	11/21/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	11/21/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
STP-1 to EP-2	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	11/21/2019	Chromium, Total	0.0097	0.006	0.001533	50000	mg/L
STP-1 to EP-2	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
STP-1 to EP-2	11/21/2019	Copper, Total	0.011	0.006	0.004072	790000	mg/L
STP-1 to EP-2	11/21/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	11/21/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
STP-1 to EP-2	11/21/2019	Molybdenum, Total	0.071	0.008	0.006735	98700	mg/L
STP-1 to EP-2	11/21/2019	Nickel, Total	0.018	0.01	0.004009	372000	mg/L
STP-1 to EP-2	11/21/2019	Selenium, Total	0.003	0.005	0.00239	50000	mg/L
STP-1 to EP-2	11/21/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
STP-1 to EP-2	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	11/21/2019	Uranium, Total	0.0017	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/21/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	11/21/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
STP-1 to EP-2	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	11/21/2019	Arsenic, Dissolved	0.007	0.005	0.000504	10000	mg/L
STP-1 to EP-2	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	11/21/2019	Beryllium, Dissolved	0.00045	0.002	0.000284	4000	mg/L
STP-1 to EP-2	11/21/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
STP-1 to EP-2	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
STP-1 to EP-2	11/21/2019	Chromium, Dissolved	0.0084	0.006	0.001533	100000	mg/L
STP-1 to EP-2	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
STP-1 to EP-2	11/21/2019	Copper, Dissolved	0.0047	0.006	0.001296	790000	mg/L
STP-1 to EP-2	11/21/2019	Iron, Dissolved	2.8	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
STP-1 to EP-2	11/21/2019	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
STP-1 to EP-2	11/21/2019	Molybdenum, Dissolved	0.06	0.008	0.006735	98700	mg/L
STP-1 to EP-2	11/21/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
STP-1 to EP-2	11/21/2019	Selenium, Dissolved	0.0051	0.005	0.000857	50000	mg/L
STP-1 to EP-2	11/21/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
STP-1 to EP-2	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
STP-1 to EP-2	11/21/2019	Uranium, Dissolved	0.00069	0.0025	0.000374	NA	mg/L
STP-1 to EP-2	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

mg/L - milligrams per liter

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Bromide	5.1	0.5	0.37	NA	mg/L
EP-11	5/29/2012	Chloride	8200	500	51	250000000	mg/L
EP-11	5/29/2012	Fluoride, Total	22	2	0.76	1600000	mg/L
EP-11	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-11	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-11	5/29/2012	Sulfate	3700	50	12	600000000	mg/L
EP-11	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-11	5/30/2012	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-11	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-11	11/6/2012	Chloride	3500	500	51	250000000	mg/L
EP-11	11/6/2012	Fluoride, Total	40	2	0.76	1600000	mg/L
EP-11	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-11	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-11	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-11	11/6/2012	Sulfate	1300	500	120	600000000	mg/L
EP-11	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-11	11/7/2012	Biochemical Oxygen Demand	130	2	2	NA	mg/L
EP-11	11/7/2012	Chemical Oxygen Demand	620	20	20	NA	mg/L
EP-11	5/28/2013	Bromide	5.7	1	0.26	NA	mg/L
EP-11	5/28/2013	Chloride	8900	500	150	250000000	mg/L
EP-11	5/28/2013	Fluoride, Total	23	10	3.3	1600000	mg/L
EP-11	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-11	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-11	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-11	5/28/2013	Sulfate	4000	50	12	600000000	mg/L
EP-11	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-11	5/29/2013	Biochemical Oxygen Demand	30	5	2	NA	mg/L
EP-11	5/29/2013	Chemical Oxygen Demand	610	10	10	NA	mg/L
EP-11	10/15/2013	Bromide	5.9	1	0.79	NA	mg/L
EP-11	10/15/2013	Chloride	11000	500	76	250000000	mg/L
EP-11	10/15/2013	Fluoride, Total	22	1	0.35	1600000	mg/L
EP-11	10/15/2013	Ortho-Phosphate	ND	10	4.2	NA	mg/L
EP-11	10/15/2013	Nitrate & Nitrite	ND	10	3.8	NA	mg/L
EP-11	10/15/2013	Sulfate	4500	500	160	600000000	mg/L
EP-11	10/16/2013	E-Coli	20	10	10	NA	CFU/100ml
EP-11	10/16/2013	Biochemical Oxygen Demand	190	2	2	NA	mg/L
EP-11	10/16/2013	Chemical Oxygen Demand	530	10	10	NA	mg/L
EP-11	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-11	3/5/2014	Biochemical Oxygen Demand	48	2	2	NA	mg/L
EP-11	3/5/2014	Bromide	6.3	1	0.79	NA	mg/L
EP-11	3/5/2014	Chloride	10000	500	390	250000000	mg/L
EP-11	3/5/2014	Chemical Oxygen Demand	570	100	100	NA	mg/L
EP-11	3/5/2014	Fluoride, Total	22	1	0.35	1600000	mg/L
EP-11	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-11	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-11	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-11	3/5/2014	Sulfate	4300	50	16	600000000	mg/L
EP-11	10/21/2014	TPH DRO	1.2	1	0.83	16700	mg/L
EP-11	10/21/2014	TPH ORO	ND	5	5	85800	mg/L
EP-11	10/21/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
EP-11	11/12/2014	Biochemical Oxygen Demand	89	2	2	NA	mg/L
EP-11	11/12/2014	Bromide	32	10	2.6	NA	mg/L
EP-11	11/12/2014	Chloride	63000	2500	110	250000000	mg/L
EP-11	11/12/2014	Chemical Oxygen Demand	4700	100	100	NA	mg/L
EP-11	11/12/2014	Fluoride, Total	32	10	1.5	1600000	mg/L
EP-11	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-11	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-11	11/12/2014	Sulfate	17000	250	41	600000000	mg/L
EP-11	11/13/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-11	3/25/2015	Bromide	25	10	7.7	NA	mg/L
EP-11	3/25/2015	Chloride	38000	2500	670	250000000	mg/L
EP-11	3/25/2015	Chemical Oxygen Demand	690	100	100	NA	mg/L
EP-11	3/25/2015	Fluoride, Total	34	10	2.9	1600000	mg/L
EP-11	3/25/2015	Ortho-Phosphate	ND	50	18	NA	mg/L
EP-11	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-11	3/25/2015	Sulfate	8200	2500	570	600000000	mg/L
EP-11	3/26/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-11	3/26/2015	Biochemical Oxygen Demand	16	2	2	NA	mg/L
EP-11	9/1/2015	Bromide	26	10	6.8	NA	mg/L
EP-11	9/1/2015	Chloride	66000	2500	1700	250000000	mg/L
EP-11	9/1/2015	Fluoride, Total	25	10	3.2	1600000	mg/L
EP-11	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-11	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-11	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-11	9/1/2015	Sulfate	13000	2500	1600	600000000	mg/L
EP-11	9/2/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-11	9/2/2015	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-11	9/2/2015	Chemical Oxygen Demand	1100	1000	1000	NA	mg/L
EP-11	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	8/30/2016	Biochemical Oxygen Demand	4	2	2	NA	mg/L
EP-11	8/30/2016	Bromide	33	5	2.2	NA	mg/L
EP-11	8/30/2016	Chloride	93000	5000	510	250000000	mg/L
EP-11	8/30/2016	Chemical Oxygen Demand	2300	1000	300	NA	mg/L
EP-11	8/30/2016	Fluoride, Total	16	5	2.5	1600000	mg/L
EP-11	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-11	8/30/2016	Nitrate & Nitrite	ND	40	18	NA	mg/L
EP-11	8/30/2016	Sulfate	13000	1000	280	600000000	mg/L
EP-11	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-11	3/30/2017	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-11	3/30/2017	Bromide	34	2	0.61	NA	mg/L
EP-11	3/30/2017	Chloride	49000	2500	1200	250000000	mg/L
EP-11	3/30/2017	Chemical Oxygen Demand	4120	200	200	NA	mg/L
EP-11	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-11	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-11	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-11	3/30/2017	Sulfate	10000	2500	480	600000000	mg/L
EP-11	10/24/2017	Bromide	91	10	1.5	NA	mg/L
EP-11	10/24/2017	Chloride	210000	10000	5000	250000000	mg/L
EP-11	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-11	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-11	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-11	10/24/2017	Sulfate	36000	10000	1900	600000000	mg/L
EP-11	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-11	10/24/2017	Biochemical Oxygen Demand	24	2	2	NA	mg/L
EP-11	10/24/2017	Chemical Oxygen Demand	6100	400	400	NA	mg/L
EP-11	2/23/2018	Bromide	40	5	0.73	NA	mg/L
EP-11	2/23/2018	Chloride	66000	5000	2500	250000000	mg/L
EP-11	2/23/2018	Fluoride, Total	16	5	2.2	1600000	mg/L
EP-11	2/23/2018	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-11	2/23/2018	Nitrate & Nitrite	21	100	13	NA	mg/L
EP-11	2/23/2018	Sulfate	13000	5000	960	600000000	mg/L
EP-11	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-11	3/1/2018	Biochemical Oxygen Demand	44	2	2	NA	mg/L
EP-11	3/1/2018	Chemical Oxygen Demand	3290	200	200	NA	mg/L
EP-11	9/7/2018	Bromide	280	10	2.7	NA	mg/L
EP-11	9/7/2018	Chloride	170000	10000	3600	250000000	mg/L
EP-11	9/7/2018	Fluoride, Total	41	10	3.1	1600000	mg/L
EP-11	9/7/2018	Ortho-Phosphate	8.6	50	3	NA	mg/L
EP-11	9/7/2018	Nitrate & Nitrite	ND	200	55	NA	mg/L
EP-11	9/7/2018	Sulfate	57000	10000	4100	600000000	mg/L
EP-11	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-11	9/14/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-11	9/14/2018	Chemical Oxygen Demand	14000	1000	1000	NA	mg/L
EP-11	4/29/2019	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-11	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-11	4/29/2019	Bromide	24	20	2.9	NA	mg/L
EP-11	4/29/2019	Chloride	76000	2500	2500	250000000	mg/L
EP-11	4/29/2019	Fluoride, Total	24	2	1	1600000	mg/L
EP-11	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-11	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-11	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-11	4/29/2019	Sulfate	12000	2500	267.5	600000000	mg/L
EP-11	4/29/2019	Chemical Oxygen Demand	2160	100	100	NA	mg/L
EP-11	12/22/2020	Nitrogen, Nitrate & Nitrite	0.097	0.05	0.018	10000000	mg/L
EP-11	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-11	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-11	12/22/2020	Nitrogen, Nitrate	0.097	0.05	0.018	10000000	mg/L
EP-11	12/22/2020	Solids, Total Suspended	1010	10	0	NA	mg/L
EP-11	12/22/2020	Biochemical Oxygen Demand	45.3	2	2	NA	mg/L
EP-11	12/22/2020	Chemical Oxygen Demand	3430	250	160	NA	mg/L
EP-11	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-11	12/22/2020	Chloride	16800	500	60	250000000	mg/L
EP-11	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-11	12/22/2020	Sulfate	6130	500	185	600000000	mg/L
EP-11	12/22/2020	Solids, Total Suspended	1010	10	0	NA	mg/L
EP-12A	5/29/2012	Bromide	5	0.5	0.37	NA	mg/L
EP-12A	5/29/2012	Chloride	7600	250	26	250000000	mg/L
EP-12A	5/29/2012	Fluoride, Total	23	2	0.76	1600000	mg/L
EP-12A	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-12A	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-12A	5/29/2012	Sulfate	2300	50	12	600000000	mg/L
EP-12A	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	5/30/2012	Biochemical Oxygen Demand	22	2	2	NA	mg/L
EP-12A	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-12A	11/6/2012	Chloride	4000	250	26	250000000	mg/L
EP-12A	11/6/2012	Fluoride, Total	35	2	0.76	1600000	mg/L
EP-12A	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-12A	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-12A	11/6/2012	Sulfate	1400	250	59	600000000	mg/L
EP-12A	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	11/7/2012	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-12A	11/7/2012	Chemical Oxygen Demand	650	20	20	NA	mg/L
EP-12A	5/28/2013	Bromide	3	1	0.26	NA	mg/L
EP-12A	5/28/2013	Chloride	3800	250	74	250000000	mg/L
EP-12A	5/28/2013	Fluoride, Total	29	1	0.33	1600000	mg/L
EP-12A	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12A	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-12A	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-12A	5/28/2013	Sulfate	1700	50	12	600000000	mg/L
EP-12A	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	5/29/2013	Biochemical Oxygen Demand	100	5	2	NA	mg/L
EP-12A	5/29/2013	Chemical Oxygen Demand	1400	10	10	NA	mg/L
EP-12A	10/15/2013	Bromide	2.2	1	0.79	NA	mg/L
EP-12A	10/15/2013	Chloride	1900	50	7.6	250000000	mg/L
EP-12A	10/15/2013	Fluoride, Total	43	10	3.5	1600000	mg/L
EP-12A	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12A	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-12A	10/15/2013	Sulfate	1300	50	16	600000000	mg/L
EP-12A	10/16/2013	E-Coli	41	10	10	NA	CFU/100ml
EP-12A	10/16/2013	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12A	10/16/2013	Chemical Oxygen Demand	930	10	10	NA	mg/L
EP-12A	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	3/5/2014	Biochemical Oxygen Demand	210	2	2	NA	mg/L
EP-12A	3/5/2014	Bromide	2.3	1	0.79	NA	mg/L
EP-12A	3/5/2014	Chloride	1800	50	39	250000000	mg/L
EP-12A	3/5/2014	Chemical Oxygen Demand	560	10	10	NA	mg/L
EP-12A	3/5/2014	Fluoride, Total	34	10	3.5	1600000	mg/L
EP-12A	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12A	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-12A	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-12A	3/5/2014	Sulfate	1100	50	16	600000000	mg/L
EP-12A	10/20/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-12A	10/20/2014	TPH ORO	ND	5	5	85800	mg/L
EP-12A	10/20/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-12A	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12A	11/12/2014	Bromide	2.1	1	0.26	NA	mg/L
EP-12A	11/12/2014	Chloride	3000	100	4.3	250000000	mg/L
EP-12A	11/12/2014	Chemical Oxygen Demand	450	10	10	NA	mg/L
EP-12A	11/12/2014	Fluoride, Total	43	10	1.5	1600000	mg/L
EP-12A	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-12A	11/12/2014	Nitrate & Nitrite	2.5	2	0.17	NA	mg/L
EP-12A	11/12/2014	Sulfate	1600	50	8.2	600000000	mg/L
EP-12A	11/13/2014	E-Coli	131	10	10	NA	CFU/100ml
EP-12A	3/25/2015	Bromide	3.8	1	0.77	NA	mg/L
EP-12A	3/25/2015	Chloride	2500	100	27	250000000	mg/L
EP-12A	3/25/2015	Chemical Oxygen Demand	400	10	10	NA	mg/L
EP-12A	3/25/2015	Fluoride, Total	20	1	0.29	1600000	mg/L
EP-12A	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-12A	3/25/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
EP-12A	3/25/2015	Sulfate	1000	50	11	600000000	mg/L
EP-12A	3/26/2015	E-Coli	12033	10	10	NA	CFU/100ml
EP-12A	3/26/2015	Biochemical Oxygen Demand	170	2	2	NA	mg/L
EP-12A	9/1/2015	Bromide	ND	10	6.8	NA	mg/L
EP-12A	9/1/2015	Chloride	4900	250	170	250000000	mg/L
EP-12A	9/1/2015	Fluoride, Total	31	10	3.2	1600000	mg/L
EP-12A	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-12A	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-12A	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-12A	9/1/2015	Sulfate	1700	50	32	600000000	mg/L
EP-12A	9/2/2015	E-Coli	8164	10	10	NA	CFU/100ml
EP-12A	9/2/2015	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-12A	9/2/2015	Chemical Oxygen Demand	760	10	10	NA	mg/L
EP-12A	8/30/2016	E-Coli	2723	10	10	NA	CFU/100ml
EP-12A	8/30/2016	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12A	8/30/2016	Bromide	4.7	0.5	0.22	NA	mg/L
EP-12A	8/30/2016	Chloride	5800	2500	250	250000000	mg/L
EP-12A	8/30/2016	Chemical Oxygen Demand	620	10	3	NA	mg/L
EP-12A	8/30/2016	Fluoride, Total	18	2	1	1600000	mg/L
EP-12A	8/30/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-12A	8/30/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12A	8/30/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-12A	8/30/2016	Sulfate	3100	2500	710	600000000	mg/L
EP-12A	3/30/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-12A	3/30/2017	Biochemical Oxygen Demand	59	2	2	NA	mg/L
EP-12A	3/30/2017	Bromide	4.6	0.5	0.15	NA	mg/L
EP-12A	3/30/2017	Chloride	4900	250	120	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/30/2017	Chemical Oxygen Demand	721	10	10	NA	mg/L
EP-12A	3/30/2017	Fluoride, Total	21	2	1	1600000	mg/L
EP-12A	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12A	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-12A	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-12A	3/30/2017	Sulfate	1600	250	48	600000000	mg/L
EP-12A	10/24/2017	Bromide	6.7	1	0.15	NA	mg/L
EP-12A	10/24/2017	Chloride	1500	100	50	250000000	mg/L
EP-12A	10/24/2017	Fluoride, Total	27	10	4.4	1600000	mg/L
EP-12A	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12A	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-12A	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-12A	10/24/2017	Sulfate	520	100	19	600000000	mg/L
EP-12A	10/24/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-12A	10/24/2017	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12A	10/24/2017	Chemical Oxygen Demand	1100	50	50	NA	mg/L
EP-12A	9/7/2018	Bromide	14	2	0.54	NA	mg/L
EP-12A	9/7/2018	Chloride	30000	1000	360	250000000	mg/L
EP-12A	9/7/2018	Fluoride, Total	27	2	0.59	1600000	mg/L
EP-12A	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-12A	9/7/2018	Nitrate & Nitrite	ND	20	5.5	NA	mg/L
EP-12A	9/7/2018	Sulfate	7600	1000	410	600000000	mg/L
EP-12A	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-12A	11/21/2019	Chloride	1700	100	50	250000000	mg/L
EP-12A	11/21/2019	Fluoride, Total	32	2	0.579636	1600000	mg/L
EP-12A	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-12A	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-12A	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-12A	11/21/2019	Sulfate	2000	100	50	600000000	mg/L
EP-12A	11/21/2019	E-Coli	15530	10	10	NA	MPN/100ml
EP-12A	11/21/2019	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-12A	11/21/2019	Chemical Oxygen Demand	237	50	50	NA	mg/L
EP-12A	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-12A	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-12A	12/22/2020	Sulfate	15300	500	185	600000000	mg/L
EP-12A	12/22/2020	Chloride	198000	10000	1200	250000000	mg/L
EP-12A	12/22/2020	Chemical Oxygen Demand	528	80	51.2	NA	mg/L
EP-12A	12/22/2020	Biochemical Oxygen Demand	49	2	2	NA	mg/L
EP-12A	12/22/2020	Solids, Total Suspended	1280	50	0	NA	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrate	35.6	0.05	0.018	10000000	mg/L
EP-12A	12/22/2020	Phosphorus, Ortho	0.105	0.05	0.015	NA	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrate & Nitrite	35.6	1	0.36	10000000	mg/L
EP-12A	12/22/2020	Solids, Total Suspended	1280	50	0	NA	mg/L
EP-12B	5/29/2012	Bromide	3.6	0.5	0.37	NA	mg/L
EP-12B	5/29/2012	Chloride	7000	250	26	250000000	mg/L
EP-12B	5/29/2012	Fluoride, Total	19	2	0.76	1600000	mg/L
EP-12B	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-12B	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-12B	5/29/2012	Sulfate	1500	25	5.9	600000000	mg/L
EP-12B	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	5/30/2012	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-12B	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-12B	11/6/2012	Chloride	1900	250	26	250000000	mg/L
EP-12B	11/6/2012	Fluoride, Total	71	2	0.76	1600000	mg/L
EP-12B	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-12B	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12B	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-12B	11/6/2012	Sulfate	1100	250	59	600000000	mg/L
EP-12B	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	11/7/2012	Biochemical Oxygen Demand	310	2	2	NA	mg/L
EP-12B	11/7/2012	Chemical Oxygen Demand	850	20	20	NA	mg/L
EP-12B	5/28/2013	Bromide	3.1	1	0.26	NA	mg/L
EP-12B	5/28/2013	Chloride	3100	100	30	250000000	mg/L
EP-12B	5/28/2013	Fluoride, Total	32	1	0.33	1600000	mg/L
EP-12B	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12B	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-12B	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-12B	5/28/2013	Sulfate	1500	50	12	600000000	mg/L
EP-12B	5/29/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-12B	5/29/2013	Biochemical Oxygen Demand	260	5	2	NA	mg/L
EP-12B	5/29/2013	Chemical Oxygen Demand	770	10	10	NA	mg/L
EP-12B	10/15/2013	Bromide	1.5	1	0.79	NA	mg/L
EP-12B	10/15/2013	Chloride	1300	50	7.6	250000000	mg/L
EP-12B	10/15/2013	Fluoride, Total	14	10	3.5	1600000	mg/L
EP-12B	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12B	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-12B	10/15/2013	Sulfate	770	50	16	600000000	mg/L
EP-12B	10/16/2013	E-Coli	231	10	10	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/16/2013	Biochemical Oxygen Demand	460	2	2	NA	mg/L
EP-12B	10/16/2013	Chemical Oxygen Demand	940	10	10	NA	mg/L
EP-12B	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	3/5/2014	Biochemical Oxygen Demand	430	2	2	NA	mg/L
EP-12B	3/5/2014	Bromide	2.7	1	0.79	NA	mg/L
EP-12B	3/5/2014	Chloride	1800	50	39	250000000	mg/L
EP-12B	3/5/2014	Chemical Oxygen Demand	810	10	10	NA	mg/L
EP-12B	3/5/2014	Fluoride, Total	38	10	3.5	1600000	mg/L
EP-12B	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12B	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-12B	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-12B	3/5/2014	Sulfate	710	50	16	600000000	mg/L
EP-12B	10/20/2014	TPH DRO	4.3	1	0.83	16700	mg/L
EP-12B	10/20/2014	TPH ORO	ND	5	5	85800	mg/L
EP-12B	10/20/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-12B	11/12/2014	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-12B	11/12/2014	Bromide	1.3	1	0.26	NA	mg/L
EP-12B	11/12/2014	Chloride	1900	50	2.2	250000000	mg/L
EP-12B	11/12/2014	Chemical Oxygen Demand	410	10	10	NA	mg/L
EP-12B	11/12/2014	Fluoride, Total	38	10	1.5	1600000	mg/L
EP-12B	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-12B	11/12/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
EP-12B	11/12/2014	Sulfate	1200	50	8.2	600000000	mg/L
EP-12B	11/13/2014	E-Coli	1012	10	10	NA	CFU/100ml
EP-12B	3/25/2015	Bromide	5.5	1	0.77	NA	mg/L
EP-12B	3/25/2015	Chloride	2800	100	27	250000000	mg/L
EP-12B	3/25/2015	Chemical Oxygen Demand	650	10	10	NA	mg/L
EP-12B	3/25/2015	Fluoride, Total	11	1	0.29	1600000	mg/L
EP-12B	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-12B	3/25/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
EP-12B	3/25/2015	Sulfate	980	50	11	600000000	mg/L
EP-12B	3/26/2015	E-Coli	17329	10	10	NA	CFU/100ml
EP-12B	3/26/2015	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12B	9/1/2015	Bromide	ND	10	6.8	NA	mg/L
EP-12B	9/1/2015	Chloride	3200	100	68	250000000	mg/L
EP-12B	9/1/2015	Fluoride, Total	51	10	3.2	1600000	mg/L
EP-12B	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-12B	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-12B	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-12B	9/1/2015	Sulfate	900	50	32	600000000	mg/L
EP-12B	9/2/2015	E-Coli	3873	10	10	NA	CFU/100ml
EP-12B	9/2/2015	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-12B	9/2/2015	Chemical Oxygen Demand	660	10	10	NA	mg/L
EP-12B	8/30/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	8/30/2016	Biochemical Oxygen Demand	240	2	2	NA	mg/L
EP-12B	8/30/2016	Bromide	5	0.5	0.22	NA	mg/L
EP-12B	8/30/2016	Chloride	2600	1000	100	250000000	mg/L
EP-12B	8/30/2016	Chemical Oxygen Demand	770	100	30	NA	mg/L
EP-12B	8/30/2016	Fluoride, Total	21	2	1	1600000	mg/L
EP-12B	8/30/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-12B	8/30/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12B	8/30/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-12B	8/30/2016	Sulfate	1600	1000	280	600000000	mg/L
EP-12B	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-12B	3/30/2017	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-12B	3/30/2017	Bromide	2.7	0.5	0.15	NA	mg/L
EP-12B	3/30/2017	Chloride	4300	250	120	250000000	mg/L
EP-12B	3/30/2017	Chemical Oxygen Demand	694	10	10	NA	mg/L
EP-12B	3/30/2017	Fluoride, Total	20	2	1	1600000	mg/L
EP-12B	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12B	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-12B	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-12B	3/30/2017	Sulfate	1400	250	48	600000000	mg/L
EP-12B	10/24/2017	Bromide	ND	1	0.15	NA	mg/L
EP-12B	10/24/2017	Chloride	4000	250	120	250000000	mg/L
EP-12B	10/24/2017	Fluoride, Total	34	1	0.44	1600000	mg/L
EP-12B	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12B	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-12B	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-12B	10/24/2017	Sulfate	1200	50	9.6	600000000	mg/L
EP-12B	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-12B	10/24/2017	Biochemical Oxygen Demand	370	2	2	NA	mg/L
EP-12B	10/24/2017	Chemical Oxygen Demand	780	50	50	NA	mg/L
EP-12B	2/22/2018	Bromide	0.98	0.5	0.073	NA	mg/L
EP-12B	2/22/2018	Chloride	2700	100	50	250000000	mg/L
EP-12B	2/22/2018	Fluoride, Total	20	2	0.87	1600000	mg/L
EP-12B	2/22/2018	Ortho-Phosphate	1.9	2.5	1.2	NA	mg/L
EP-12B	2/22/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-12B	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	2/22/2018	Sulfate	900	10	1.9	600000000	mg/L
EP-12B	3/1/2018	E-Coli	12997	10	10	NA	MPN/100mL
EP-12B	3/1/2018	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-12B	3/1/2018	Chemical Oxygen Demand	678	100	100	NA	mg/L
EP-12B	9/7/2018	Bromide	2.2	0.5	0.13	NA	mg/L
EP-12B	9/7/2018	Chloride	3800	250	91	250000000	mg/L
EP-12B	9/7/2018	Fluoride, Total	36	2	0.59	1600000	mg/L
EP-12B	9/7/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-12B	9/7/2018	Nitrate & Nitrite	ND	20	5.5	NA	mg/L
EP-12B	9/7/2018	Sulfate	1400	250	100	600000000	mg/L
EP-12B	9/14/2018	E-Coli	120	10	10	NA	MPN/100mL
EP-12B	9/14/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12B	9/14/2018	Chemical Oxygen Demand	600	10	10	NA	mg/L
EP-12B	4/29/2019	Biochemical Oxygen Demand	38	2	2	NA	mg/L
EP-12B	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-12B	4/29/2019	Bromide	3.3	2	0.29	NA	mg/L
EP-12B	4/29/2019	Chloride	7200	500	500	250000000	mg/L
EP-12B	4/29/2019	Fluoride, Total	28	2	1	1600000	mg/L
EP-12B	4/29/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-12B	4/29/2019	Nitrogen, Nitrite	5.5	5	0.19	1000000	mg/L
EP-12B	4/29/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-12B	4/29/2019	Sulfate	2800	500	53.5	600000000	mg/L
EP-12B	4/29/2019	Chemical Oxygen Demand	839	10	10	NA	mg/L
EP-12B	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-12B	11/21/2019	Chloride	980	25	12.5	250000000	mg/L
EP-12B	11/21/2019	Fluoride, Total	31	2	0.579636	1600000	mg/L
EP-12B	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-12B	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-12B	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-12B	11/21/2019	Sulfate	1700	25	12.5	600000000	mg/L
EP-12B	11/21/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-12B	11/21/2019	Biochemical Oxygen Demand	290	2	2	NA	mg/L
EP-12B	11/21/2019	Chemical Oxygen Demand	448	50	50	NA	mg/L
EP-12B	9/18/2020	Biochemical Oxygen Demand	71	2	2	NA	mg/L
EP-12B	9/18/2020	Solids, Total Suspended	140	8	8	NA	mg/L
EP-12B	9/18/2020	Bromide	3.2	0.5	0.25	NA	mg/L
EP-12B	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12B	9/18/2020	Fluoride, Total	15	2	0.87	1600000	mg/L
EP-12B	9/18/2020	Chloride	8400	500	250	250000000	mg/L
EP-12B	9/18/2020	Sulfate	4800	500	250	600000000	mg/L
EP-12B	9/18/2020	Nitrate & Nitrite	ND	10	0.61	NA	mg/L
EP-12B	9/18/2020	Chemical Oxygen Demand	445	125	32.5	NA	mg/L
EP-12B	9/18/2020	Coliform, E-Coli	471	10	10	NA	MPN/100ml
EP-12B	12/22/2020	Nitrogen, Nitrate & Nitrite	0.215	0.05	0.018	10000000	mg/L
EP-12B	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-12B	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-12B	12/22/2020	Nitrogen, Nitrate	0.215	0.05	0.018	10000000	mg/L
EP-12B	12/22/2020	Solids, Total Suspended	270	16.7	0	NA	mg/L
EP-12B	12/22/2020	Biochemical Oxygen Demand	46.4	2	2	NA	mg/L
EP-12B	12/22/2020	Chemical Oxygen Demand	484	80	51.2	NA	mg/L
EP-12B	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-12B	12/22/2020	Chloride	10700	500	60	250000000	mg/L
EP-12B	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-12B	12/22/2020	Sulfate	4140	500	185	600000000	mg/L
EP-12B	12/22/2020	Solids, Total Suspended	270	16.7	0	NA	mg/L
EP-12B	9/18/2020	Solids, Total Suspended	140	8	8	NA	mg/L
EP-2	5/29/2012	Bromide	2.6	0.5	0.37	NA	mg/L
EP-2	5/29/2012	Chloride	6600	250	26	250000000	mg/L
EP-2	5/29/2012	Fluoride, Total	55	2	0.76	1600000	mg/L
EP-2	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-2	5/29/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	5/29/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
EP-2	5/29/2012	Sulfate	1300	25	5.9	600000000	mg/L
EP-2	5/30/2012	E-Coli	4106	10	10	NA	CFU/100ml
EP-2	5/30/2012	Biochemical Oxygen Demand	100	2	2	NA	mg/L
EP-2	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-2	11/6/2012	Chloride	290	10	1	250000000	mg/L
EP-2	11/6/2012	Fluoride, Total	84	5	1.9	1600000	mg/L
EP-2	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-2	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-2	11/6/2012	Sulfate	820	10	2.4	600000000	mg/L
EP-2	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-2	11/7/2012	Biochemical Oxygen Demand	750	2	2	NA	mg/L
EP-2	11/7/2012	Chemical Oxygen Demand	1300	20	20	NA	mg/L
EP-2	5/28/2013	Bromide	6.1	1	0.26	NA	mg/L
EP-2	5/28/2013	Chloride	310	50	15	250000000	mg/L
EP-2	5/28/2013	Fluoride, Total	42	10	3.3	1600000	mg/L
EP-2	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-2	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-2	5/28/2013	Sulfate	1700	50	12	600000000	mg/L
EP-2	5/29/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-2	5/29/2013	Biochemical Oxygen Demand	210	5	2	NA	mg/L
EP-2	5/29/2013	Chemical Oxygen Demand	700	10	10	NA	mg/L
EP-2	10/15/2013	Bromide	1.4	1	0.79	NA	mg/L
EP-2	10/15/2013	Chloride	1100	50	7.6	250000000	mg/L
EP-2	10/15/2013	Fluoride, Total	70	10	3.5	1600000	mg/L
EP-2	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-2	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-2	10/15/2013	Sulfate	680	50	16	600000000	mg/L
EP-2	10/16/2013	E-Coli	3282	10	10	NA	CFU/100ml
EP-2	10/16/2013	Biochemical Oxygen Demand	420	2	2	NA	mg/L
EP-2	10/16/2013	Chemical Oxygen Demand	1100	50	50	NA	mg/L
EP-2	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-2	3/5/2014	Biochemical Oxygen Demand	450	2	2	NA	mg/L
EP-2	3/5/2014	Bromide	3.4	1	0.79	NA	mg/L
EP-2	3/5/2014	Chloride	1900	50	39	250000000	mg/L
EP-2	3/5/2014	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-2	3/5/2014	Fluoride, Total	37	10	3.5	1600000	mg/L
EP-2	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-2	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-2	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-2	3/5/2014	Sulfate	680	50	16	600000000	mg/L
EP-2	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-2	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-2	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-2	11/12/2014	Biochemical Oxygen Demand	170	2	2	NA	mg/L
EP-2	11/12/2014	Bromide	ND	1	0.26	NA	mg/L
EP-2	11/12/2014	Chloride	2400	100	4.3	250000000	mg/L
EP-2	11/12/2014	Chemical Oxygen Demand	580	10	10	NA	mg/L
EP-2	11/12/2014	Fluoride, Total	40	10	1.5	1600000	mg/L
EP-2	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-2	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-2	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-2	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-2	11/13/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-2	3/24/2015	Bromide	7.1	1	0.77	NA	mg/L
EP-2	3/24/2015	Chloride	1700	50	13	250000000	mg/L
EP-2	3/24/2015	Chemical Oxygen Demand	610	50	250	NA	mg/L
EP-2	3/24/2015	Fluoride, Total	35	1	0.29	1600000	mg/L
EP-2	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-2	3/24/2015	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-2	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-2	3/24/2015	Sulfate	1200	50	11	600000000	mg/L
EP-2	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-2	3/26/2015	Biochemical Oxygen Demand	330	2	2	NA	mg/L
EP-2	9/1/2015	Bromide	1.3	1	0.68	NA	mg/L
EP-2	9/1/2015	Chloride	2900	100	68	250000000	mg/L
EP-2	9/1/2015	Fluoride, Total	ND	1	0.32	1600000	mg/L
EP-2	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-2	9/1/2015	Nitrogen, Nitrite	ND	1	0.28	1000000	mg/L
EP-2	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-2	9/1/2015	Sulfate	960	50	32	600000000	mg/L
EP-2	9/2/2015	E-Coli	5475	10	10	NA	CFU/100ml
EP-2	9/2/2015	Biochemical Oxygen Demand	460	2	2	NA	mg/L
EP-2	9/2/2015	Chemical Oxygen Demand	780	10	10	NA	mg/L
EP-2	8/29/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-2	8/29/2016	Biochemical Oxygen Demand	220	2	2	NA	mg/L
EP-2	8/29/2016	Bromide	4.5	0.5	0.22	NA	mg/L
EP-2	8/29/2016	Chloride	3000	100	10	250000000	mg/L
EP-2	8/29/2016	Chemical Oxygen Demand	690	10	3	NA	mg/L
EP-2	8/29/2016	Fluoride, Total	22	2	1	1600000	mg/L
EP-2	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-2	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-2	8/29/2016	Sulfate	1600	50	14	600000000	mg/L
EP-2	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-2	3/30/2017	Biochemical Oxygen Demand	410	2	2	NA	mg/L
EP-2	3/30/2017	Bromide	1.5	2	0.61	NA	mg/L
EP-2	3/30/2017	Chloride	3500	250	120	250000000	mg/L
EP-2	3/30/2017	Chemical Oxygen Demand	1030	20	20	NA	mg/L
EP-2	3/30/2017	Fluoride, Total	35	2	1	1600000	mg/L
EP-2	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	3/30/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-2	3/30/2017	Sulfate	1200	250	48	600000000	mg/L
EP-2	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-2	10/24/2017	Biochemical Oxygen Demand	410	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	Bromide	1.2	1	0.15	NA	mg/L
EP-2	10/24/2017	Chloride	3900	250	120	250000000	mg/L
EP-2	10/24/2017	Chemical Oxygen Demand	770	10	10	NA	mg/L
EP-2	10/24/2017	Fluoride, Total	36	1	0.44	1600000	mg/L
EP-2	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-2	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-2	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-2	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-2	2/21/2018	Bromide	0.86	0.5	0.073	NA	mg/L
EP-2	2/21/2018	Chloride	2600	100	50	250000000	mg/L
EP-2	2/21/2018	Fluoride, Total	11	2	0.87	1600000	mg/L
EP-2	2/21/2018	Ortho-Phosphate	1.5	2.5	1.2	NA	mg/L
EP-2	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-2	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-2	2/21/2018	Sulfate	910	10	1.9	600000000	mg/L
EP-2	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-2	3/1/2018	Biochemical Oxygen Demand	450	2	2	NA	mg/L
EP-2	3/1/2018	Chemical Oxygen Demand	787	100	100	NA	mg/L
EP-2	9/6/2018	Bromide	1.2	0.5	0.13	NA	mg/L
EP-2	9/6/2018	Chloride	1700	100	36	250000000	mg/L
EP-2	9/6/2018	Fluoride, Total	25	2	0.59	1600000	mg/L
EP-2	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-2	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-2	9/6/2018	Sulfate	800	100	41	600000000	mg/L
EP-2	9/14/2018	E-Coli	12997	10	10	NA	MPN/100mL
EP-2	9/14/2018	Biochemical Oxygen Demand	180	2	2	NA	mg/L
EP-2	9/14/2018	Chemical Oxygen Demand	370	10	10	NA	mg/L
EP-2	4/30/2019	Bromide	0.55	0.5	0.0725	NA	mg/L
EP-2	4/30/2019	Chloride	1700	50	6.25	250000000	mg/L
EP-2	4/30/2019	Fluoride, Total	38	2	1	1600000	mg/L
EP-2	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-2	4/30/2019	Nitrogen, Nitrite	ND	0.5	0.019	1000000	mg/L
EP-2	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-2	4/30/2019	Sulfate	1200	50	5.35	600000000	mg/L
EP-2	4/30/2019	Biochemical Oxygen Demand	520	2	2	NA	mg/L
EP-2	4/30/2019	Chemical Oxygen Demand	738	50	50	NA	mg/L
EP-2	4/30/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-2	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-2	11/21/2019	Chloride	510	25	12.5	250000000	mg/L
EP-2	11/21/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
EP-2	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-2	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-2	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-2	11/21/2019	Sulfate	1700	25	12.5	600000000	mg/L
EP-2	11/21/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-2	11/21/2019	Biochemical Oxygen Demand	1600	2	2	NA	mg/L
EP-2	11/21/2019	Chemical Oxygen Demand	2290	625	625	NA	mg/L
EP-2	9/16/2020	Coliform, E-Coli	10462	10	10	NA	MPN/100ml
EP-2	9/16/2020	Biochemical Oxygen Demand	240	2	2	NA	mg/L
EP-2	9/16/2020	Bromide	1.9	0.5	0.25	NA	mg/L
EP-2	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-2	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	9/16/2020	Chloride	3400	250	120	250000000	mg/L
EP-2	9/16/2020	Fluoride, Total	51	2	0.87	1600000	mg/L
EP-2	9/16/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-2	9/16/2020	Sulfate	350	10	5	600000000	mg/L
EP-2	9/16/2020	Chemical Oxygen Demand	379	125	32.5	NA	mg/L
EP-2	9/17/2020	Bromide	ND	0.5	0.25	NA	mg/L
EP-2	9/17/2020	Chloride	1.4	2.5	1.2	250000000	mg/L
EP-2	9/17/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
EP-2	9/17/2020	Nitrogen, Nitrate	0.34	0.5	0.1	10000000	mg/L
EP-2	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
EP-2	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	9/17/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
EP-2	12/21/2020	Chemical Oxygen Demand	644	80	51.2	NA	mg/L
EP-2	12/21/2020	Bromide	ND	100	11	NA	mg/L
EP-2	12/21/2020	Chloride	3250	100	12	250000000	mg/L
EP-2	12/21/2020	Fluoride, Total	ND	100	30	1600000	mg/L
EP-2	12/21/2020	Sulfate	656	100	37	600000000	mg/L
EP-2	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-2	12/21/2020	Phosphorus, Ortho	0.103	0.05	0.015	NA	mg/L
EP-2	12/21/2020	Nitrogen, Nitrate	0.28	0.05	0.018	10000000	mg/L
EP-2	12/21/2020	Solids, Total Suspended	327	33.3	0	NA	mg/L
EP-2	12/21/2020	Biochemical Oxygen Demand	39.8	2	2	NA	mg/L
EP-2	12/21/2020	Nitrogen, Nitrate & Nitrite	0.28	0.05	0.018	10000000	mg/L
EP-2	12/21/2020	Solids, Total Suspended	327	33.3	0	NA	mg/L
EP-3	5/29/2012	Bromide	2.4	0.5	0.37	NA	mg/L
EP-3	5/29/2012	Chloride	9500	250	26	250000000	mg/L
EP-3	5/29/2012	Fluoride, Total	22	2	0.76	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-3	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-3	5/29/2012	Sulfate	1400	25	5.9	600000000	mg/L
EP-3	5/30/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-3	5/30/2012	Biochemical Oxygen Demand	69	2	2	NA	mg/L
EP-3	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-3	11/6/2012	Chloride	2000	250	26	250000000	mg/L
EP-3	11/6/2012	Fluoride, Total	77	2	0.76	1600000	mg/L
EP-3	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-3	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-3	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-3	11/6/2012	Sulfate	1200	250	59	600000000	mg/L
EP-3	11/7/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-3	11/7/2012	Biochemical Oxygen Demand	390	2	2	NA	mg/L
EP-3	11/7/2012	Chemical Oxygen Demand	900	10	10	NA	mg/L
EP-3	5/28/2013	Bromide	2.7	1	0.26	NA	mg/L
EP-3	5/28/2013	Chloride	6500	500	150	250000000	mg/L
EP-3	5/28/2013	Fluoride, Total	21	10	3.3	1600000	mg/L
EP-3	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-3	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-3	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-3	5/28/2013	Sulfate	1400	50	12	600000000	mg/L
EP-3	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-3	5/29/2013	Biochemical Oxygen Demand	120	5	2	NA	mg/L
EP-3	5/29/2013	Chemical Oxygen Demand	1600	10	10	NA	mg/L
EP-3	10/15/2013	Bromide	1.3	1	0.79	NA	mg/L
EP-3	10/15/2013	Chloride	5200	250	38	250000000	mg/L
EP-3	10/15/2013	Fluoride, Total	39	10	3.5	1600000	mg/L
EP-3	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-3	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-3	10/15/2013	Sulfate	730	50	16	600000000	mg/L
EP-3	10/16/2013	E-Coli	121	10	10	NA	CFU/100ml
EP-3	10/16/2013	Biochemical Oxygen Demand	320	2	2	NA	mg/L
EP-3	10/16/2013	Chemical Oxygen Demand	870	100	100	NA	mg/L
EP-3	3/5/2014	E-Coli	122	10	10	NA	CFU/100ml
EP-3	3/5/2014	Biochemical Oxygen Demand	440	2	2	NA	mg/L
EP-3	3/5/2014	Bromide	3.2	1	0.79	NA	mg/L
EP-3	3/5/2014	Chloride	3700	250	190	250000000	mg/L
EP-3	3/5/2014	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-3	3/5/2014	Fluoride, Total	23	1	0.35	1600000	mg/L
EP-3	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-3	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-3	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-3	3/5/2014	Sulfate	670	50	16	600000000	mg/L
EP-3	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-3	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-3	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-3	11/12/2014	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	11/12/2014	Bromide	1	1	0.26	NA	mg/L
EP-3	11/12/2014	Chloride	4000	250	11	250000000	mg/L
EP-3	11/12/2014	Chemical Oxygen Demand	590	10	10	NA	mg/L
EP-3	11/12/2014	Fluoride, Total	34	1	0.15	1600000	mg/L
EP-3	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-3	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-3	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-3	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-3	11/13/2014	E-Coli	408	10	10	NA	CFU/100ml
EP-3	3/24/2015	Bromide	5.4	1	0.77	NA	mg/L
EP-3	3/24/2015	Chloride	4000	250	67	250000000	mg/L
EP-3	3/24/2015	Chemical Oxygen Demand	980	10	10	NA	mg/L
EP-3	3/24/2015	Fluoride, Total	17	1	0.29	1600000	mg/L
EP-3	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-3	3/24/2015	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-3	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-3	3/24/2015	Sulfate	900	50	11	600000000	mg/L
EP-3	3/26/2015	E-Coli	24196	10	10	NA	CFU/100ml
EP-3	3/26/2015	Biochemical Oxygen Demand	230	2	2	NA	mg/L
EP-3	9/1/2015	Bromide	1.9	1	0.68	NA	mg/L
EP-3	9/1/2015	Chloride	5300	250	170	250000000	mg/L
EP-3	9/1/2015	Fluoride, Total	23	10	3.2	1600000	mg/L
EP-3	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-3	9/1/2015	Nitrogen, Nitrite	ND	1	0.28	1000000	mg/L
EP-3	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-3	9/1/2015	Sulfate	650	50	32	600000000	mg/L
EP-3	9/2/2015	E-Coli	1076	10	10	NA	CFU/100ml
EP-3	9/2/2015	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	9/2/2015	Chemical Oxygen Demand	720	10	10	NA	mg/L
EP-3	8/29/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-3	8/29/2016	Biochemical Oxygen Demand	110	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	8/29/2016	Bromide	3.7	0.5	0.22	NA	mg/L
EP-3	8/29/2016	Chloride	5100	250	25	250000000	mg/L
EP-3	8/29/2016	Chemical Oxygen Demand	750	10	3	NA	mg/L
EP-3	8/29/2016	Fluoride, Total	18	2	1	1600000	mg/L
EP-3	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-3	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-3	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-3	8/29/2016	Sulfate	1600	100	28	600000000	mg/L
EP-3	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-3	3/30/2017	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-3	3/30/2017	Bromide	2.5	0.5	0.15	NA	mg/L
EP-3	3/30/2017	Chloride	5000	2500	1200	250000000	mg/L
EP-3	3/30/2017	Chemical Oxygen Demand	717	10	10	NA	mg/L
EP-3	3/30/2017	Fluoride, Total	10	2	1	1600000	mg/L
EP-3	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-3	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-3	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-3	3/30/2017	Sulfate	1200	1000	190	600000000	mg/L
EP-3	10/24/2017	Bromide	1.5	1	0.15	NA	mg/L
EP-3	10/24/2017	Chloride	4800	250	120	250000000	mg/L
EP-3	10/24/2017	Fluoride, Total	31	1	0.44	1600000	mg/L
EP-3	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-3	10/24/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-3	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-3	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-3	10/24/2017	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-3	10/24/2017	Chemical Oxygen Demand	800	10	10	NA	mg/L
EP-3	2/21/2018	Bromide	0.86	0.5	0.073	NA	mg/L
EP-3	2/21/2018	Chloride	3700	250	120	250000000	mg/L
EP-3	2/21/2018	Fluoride, Total	10	2	0.87	1600000	mg/L
EP-3	2/21/2018	Ortho-Phosphate	2	2.5	1.2	NA	mg/L
EP-3	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-3	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-3	2/21/2018	Sulfate	830	10	1.9	600000000	mg/L
EP-3	3/1/2018	E-Coli	2987	10	10	NA	MPN/100mL
EP-3	3/1/2018	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-3	3/1/2018	Chemical Oxygen Demand	611	100	100	NA	mg/L
EP-3	9/6/2018	Bromide	1	0.5	0.13	NA	mg/L
EP-3	9/6/2018	Chloride	1900	100	36	250000000	mg/L
EP-3	9/6/2018	Fluoride, Total	31	2	0.59	1600000	mg/L
EP-3	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-3	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-3	9/6/2018	Sulfate	890	100	41	600000000	mg/L
EP-3	9/14/2018	E-Coli	1354	10	10	NA	MPN/100mL
EP-3	9/14/2018	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	9/14/2018	Chemical Oxygen Demand	340	10	10	NA	mg/L
EP-3	4/30/2019	Bromide	0.58	0.5	0.0725	NA	mg/L
EP-3	4/30/2019	Chloride	2000	100	12.5	250000000	mg/L
EP-3	4/30/2019	Fluoride, Total	33	2	1	1600000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-3	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-3	4/30/2019	Sulfate	1400	100	10.7	600000000	mg/L
EP-3	4/30/2019	Biochemical Oxygen Demand	180	2	2	NA	mg/L
EP-3	4/30/2019	Chemical Oxygen Demand	698	10	10	NA	mg/L
EP-3	4/30/2019	E-Coli	17330	10	10	NA	MPN/100ml
EP-3	4/30/2019	Bromide	0.54	0.5	0.0725	NA	mg/L
EP-3	4/30/2019	Chloride	2200	100	12.5	250000000	mg/L
EP-3	4/30/2019	Fluoride, Total	34	2	1	1600000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-3	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-3	4/30/2019	Sulfate	1500	100	10.7	600000000	mg/L
EP-3	4/30/2019	Biochemical Oxygen Demand	160	2	2	NA	mg/L
EP-3	4/30/2019	Chemical Oxygen Demand	683	10	10	NA	mg/L
EP-3	4/30/2019	E-Coli	19860	10	10	NA	MPN/100ml
EP-3	11/20/2019	Bromide	2.3	2	1	NA	mg/L
EP-3	11/20/2019	Chloride	770	100	50	250000000	mg/L
EP-3	11/20/2019	Fluoride, Total	37	2	0.579636	1600000	mg/L
EP-3	11/20/2019	Nitrogen, Nitrate	0.22	2	0.12155	10000000	mg/L
EP-3	11/20/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
EP-3	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-3	11/20/2019	Sulfate	1500	100	50	600000000	mg/L
EP-3	11/20/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-3	11/20/2019	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-3	11/20/2019	Chemical Oxygen Demand	731	50	50	NA	mg/L
EP-3	9/16/2020	Coliform, E-Coli	5794	10	10	NA	MPN/100ml
EP-3	9/16/2020	Biochemical Oxygen Demand	191	2	2	NA	mg/L
EP-3	9/16/2020	Chloride	3500	250	120	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Bromide	1.5	0.5	0.25	NA	mg/L
EP-3	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-3	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-3	9/16/2020	Fluoride, Total	41	2	0.87	1600000	mg/L
EP-3	9/16/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-3	9/16/2020	Sulfate	460	10	5	600000000	mg/L
EP-3	9/16/2020	Chemical Oxygen Demand	417	15	3.9	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrate & Nitrite	0.098	0.05	0.018	10000000	mg/L
EP-3	12/21/2020	Biochemical Oxygen Demand	47.1	2	2	NA	mg/L
EP-3	12/21/2020	Solids, Total Suspended	353	33.3	0	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrate	0.098	0.05	0.018	10000000	mg/L
EP-3	12/21/2020	Phosphorus, Ortho	0.097	0.05	0.015	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-3	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-3	12/21/2020	Chloride	7190	500	60	250000000	mg/L
EP-3	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-3	12/21/2020	Sulfate	1740	500	185	600000000	mg/L
EP-3	12/21/2020	Chemical Oxygen Demand	376	40	25.6	NA	mg/L
EP-3	12/21/2020	Solids, Total Suspended	353	33.3	0	NA	mg/L
EP-4	5/29/2012	Bromide	3.3	0.5	0.37	NA	mg/L
EP-4	5/29/2012	Chloride	6500	250	26	250000000	mg/L
EP-4	5/29/2012	Fluoride, Total	20	2	0.76	1600000	mg/L
EP-4	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-4	5/29/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-4	5/29/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
EP-4	5/29/2012	Sulfate	1400	25	5.9	600000000	mg/L
EP-4	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-4	5/30/2012	Biochemical Oxygen Demand	59	2	2	NA	mg/L
EP-4	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-4	11/6/2012	Chloride	4000	250	26	250000000	mg/L
EP-4	11/6/2012	Fluoride, Total	46	2	0.76	1600000	mg/L
EP-4	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-4	11/6/2012	Nitrate & Nitrite	ND	10	5	NA	mg/L
EP-4	11/6/2012	Sulfate	980	10	2.4	600000000	mg/L
EP-4	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-4	11/7/2012	Biochemical Oxygen Demand	230	2	2	NA	mg/L
EP-4	11/7/2012	Chemical Oxygen Demand	880	10	10	NA	mg/L
EP-4	5/28/2013	Bromide	2.6	1	0.26	NA	mg/L
EP-4	5/28/2013	Chloride	7700	500	150	250000000	mg/L
EP-4	5/28/2013	Fluoride, Total	19	10	3.3	1600000	mg/L
EP-4	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-4	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-4	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-4	5/28/2013	Sulfate	1500	50	12	600000000	mg/L
EP-4	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-4	5/29/2013	Biochemical Oxygen Demand	96	5	2	NA	mg/L
EP-4	5/29/2013	Chemical Oxygen Demand	700	10	10	NA	mg/L
EP-4	10/15/2013	Bromide	1.4	1	0.79	NA	mg/L
EP-4	10/15/2013	Chloride	6000	250	38	250000000	mg/L
EP-4	10/15/2013	Fluoride, Total	33	1	0.35	1600000	mg/L
EP-4	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-4	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-4	10/15/2013	Sulfate	830	50	16	600000000	mg/L
EP-4	10/16/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-4	10/16/2013	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-4	10/16/2013	Chemical Oxygen Demand	840	100	100	NA	mg/L
EP-4	3/5/2014	E-Coli	1	1	1	NA	CFU/100ml
EP-4	3/5/2014	Biochemical Oxygen Demand	500	2	2	NA	mg/L
EP-4	3/5/2014	Bromide	3.1	1	0.79	NA	mg/L
EP-4	3/5/2014	Chloride	4300	250	190	250000000	mg/L
EP-4	3/5/2014	Chemical Oxygen Demand	1000	10	10	NA	mg/L
EP-4	3/5/2014	Fluoride, Total	18	1	0.35	1600000	mg/L
EP-4	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-4	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-4	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-4	3/5/2014	Sulfate	650	50	16	600000000	mg/L
EP-4	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-4	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-4	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-4	11/12/2014	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-4	11/12/2014	Bromide	1.1	1	0.26	NA	mg/L
EP-4	11/12/2014	Chloride	4200	250	11	250000000	mg/L
EP-4	11/12/2014	Chemical Oxygen Demand	670	10	10	NA	mg/L
EP-4	11/12/2014	Fluoride, Total	33	1	0.15	1600000	mg/L
EP-4	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-4	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-4	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-4	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-4	11/13/2014	E-Coli	63	10	10	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Bromide	4.3	1	0.77	NA	mg/L
EP-4	3/24/2015	Chloride	7200	500	130	250000000	mg/L
EP-4	3/24/2015	Chemical Oxygen Demand	730	10	10	NA	mg/L
EP-4	3/24/2015	Fluoride, Total	20	10	2.9	1600000	mg/L
EP-4	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-4	3/24/2015	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-4	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-4	3/24/2015	Sulfate	1700	50	11	600000000	mg/L
EP-4	3/26/2015	E-Coli	5475	10	10	NA	CFU/100ml
EP-4	3/26/2015	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-4	9/1/2015	Bromide	1.8	1	0.68	NA	mg/L
EP-4	9/1/2015	Chloride	5300	250	170	250000000	mg/L
EP-4	9/1/2015	Fluoride, Total	24	10	3.2	1600000	mg/L
EP-4	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-4	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-4	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-4	9/1/2015	Sulfate	690	50	32	600000000	mg/L
EP-4	9/2/2015	E-Coli	880	10	10	NA	CFU/100ml
EP-4	9/2/2015	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-4	9/2/2015	Chemical Oxygen Demand	910	10	10	NA	mg/L
EP-4	8/29/2016	E-Coli	6131	10	10	NA	CFU/100ml
EP-4	8/29/2016	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-4	8/29/2016	Bromide	3.9	0.5	0.22	NA	mg/L
EP-4	8/29/2016	Chloride	5600	250	25	250000000	mg/L
EP-4	8/29/2016	Chemical Oxygen Demand	870	10	3	NA	mg/L
EP-4	8/29/2016	Fluoride, Total	17	2	1	1600000	mg/L
EP-4	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-4	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-4	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-4	8/29/2016	Sulfate	1900	100	28	600000000	mg/L
EP-4	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-4	3/30/2017	Biochemical Oxygen Demand	390	2	2	NA	mg/L
EP-4	3/30/2017	Bromide	10	2	0.61	NA	mg/L
EP-4	3/30/2017	Chloride	4300	250	120	250000000	mg/L
EP-4	3/30/2017	Chemical Oxygen Demand	802	10	10	NA	mg/L
EP-4	3/30/2017	Fluoride, Total	37	2	1	1600000	mg/L
EP-4	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-4	3/30/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-4	3/30/2017	Sulfate	1100	250	48	600000000	mg/L
EP-4	10/24/2017	Bromide	1.5	1	0.15	NA	mg/L
EP-4	10/24/2017	Chloride	4900	250	120	250000000	mg/L
EP-4	10/24/2017	Fluoride, Total	31	1	0.44	1600000	mg/L
EP-4	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-4	10/24/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-4	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-4	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-4	10/24/2017	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-4	10/24/2017	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-4	2/21/2018	Bromide	1	0.5	0.073	NA	mg/L
EP-4	2/21/2018	Chloride	4500	250	120	250000000	mg/L
EP-4	2/21/2018	Fluoride, Total	10	2	0.87	1600000	mg/L
EP-4	2/21/2018	Ortho-Phosphate	2.5	2.5	1.2	NA	mg/L
EP-4	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-4	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-4	2/21/2018	Sulfate	840	10	1.9	600000000	mg/L
EP-4	3/1/2018	E-Coli	402	10	10	NA	MPN/100mL
EP-4	3/1/2018	Biochemical Oxygen Demand	160	2	2	NA	mg/L
EP-4	3/1/2018	Chemical Oxygen Demand	106	20	20	NA	mg/L
EP-4	9/6/2018	Bromide	1.3	0.5	0.13	NA	mg/L
EP-4	9/6/2018	Chloride	2700	100	36	250000000	mg/L
EP-4	9/6/2018	Fluoride, Total	28	2	0.59	1600000	mg/L
EP-4	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-4	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-4	9/6/2018	Sulfate	1000	100	41	600000000	mg/L
EP-4	9/14/2018	E-Coli	71	10	10	NA	MPN/100mL
EP-4	9/14/2018	Biochemical Oxygen Demand	85	2	2	NA	mg/L
EP-4	9/14/2018	Chemical Oxygen Demand	320	10	10	NA	mg/L
EP-4	4/30/2019	Bromide	0.77	0.5	0.0725	NA	mg/L
EP-4	4/30/2019	Chloride	3100	100	12.5	250000000	mg/L
EP-4	4/30/2019	Fluoride, Total	32	2	1	1600000	mg/L
EP-4	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-4	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-4	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-4	4/30/2019	Sulfate	1500	100	10.7	600000000	mg/L
EP-4	4/30/2019	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-4	4/30/2019	Chemical Oxygen Demand	800	10	10	NA	mg/L
EP-4	4/30/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-4	9/17/2020	Bromide	6.1	0.5	0.25	NA	mg/L
EP-4	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-4	9/17/2020	Fluoride, Total	18	2	0.87	1600000	mg/L
EP-4	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-4	9/17/2020	Solids, Total Suspended	36	4	4	NA	mg/L
EP-4	9/17/2020	Chloride	8800	500	250	250000000	mg/L
EP-4	9/17/2020	Sulfate	4000	500	250	600000000	mg/L
EP-4	9/17/2020	Chemical Oxygen Demand	298	15	3.9	NA	mg/L
EP-4	9/18/2020	Coliform, E-Coli	1607	10	10	NA	MPN/100ml
EP-4	9/29/2020	Biochemical Oxygen Demand	93	2	2	NA	mg/L
EP-4	12/21/2020	Chemical Oxygen Demand	336	80	51.2	NA	mg/L
EP-4	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-4	12/21/2020	Chloride	9130	500	60	250000000	mg/L
EP-4	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-4	12/21/2020	Sulfate	2890	500	185	600000000	mg/L
EP-4	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-4	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-4	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-4	12/21/2020	Solids, Total Suspended	183	14.3	0	NA	mg/L
EP-4	12/21/2020	Biochemical Oxygen Demand	40	2	2	NA	mg/L
EP-4	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-4	9/17/2020	Solids, Total Suspended	36	4	4	NA	mg/L
EP-4	12/21/2020	Solids, Total Suspended	183	14.3	0	NA	mg/L
EP-5	5/29/2012	Bromide	3.2	0.5	0.37	NA	mg/L
EP-5	5/29/2012	Chloride	6100	250	26	250000000	mg/L
EP-5	5/29/2012	Fluoride, Total	21	2	0.76	1600000	mg/L
EP-5	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-5	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-5	5/29/2012	Sulfate	1300	25	5.9	600000000	mg/L
EP-5	5/30/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-5	5/30/2012	Biochemical Oxygen Demand	35	2	2	NA	mg/L
EP-5	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-5	11/6/2012	Chloride	5600	250	26	250000000	mg/L
EP-5	11/6/2012	Fluoride, Total	16	5	1.9	1600000	mg/L
EP-5	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-5	11/6/2012	Nitrogen, Nitrite	ND	50	25	1000000	mg/L
EP-5	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-5	11/6/2012	Sulfate	870	10	2.4	600000000	mg/L
EP-5	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-5	11/7/2012	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-5	11/7/2012	Chemical Oxygen Demand	1000	10	10	NA	mg/L
EP-5	5/28/2013	Bromide	2.9	1	0.26	NA	mg/L
EP-5	5/28/2013	Chloride	8400	500	150	250000000	mg/L
EP-5	5/28/2013	Fluoride, Total	17	10	3.3	1600000	mg/L
EP-5	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-5	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-5	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-5	5/28/2013	Sulfate	1400	50	12	600000000	mg/L
EP-5	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-5	5/29/2013	Biochemical Oxygen Demand	66	5	2	NA	mg/L
EP-5	5/29/2013	Chemical Oxygen Demand	600	10	10	NA	mg/L
EP-5	10/15/2013	Bromide	1.6	1	0.79	NA	mg/L
EP-5	10/15/2013	Chloride	6500	250	38	250000000	mg/L
EP-5	10/15/2013	Fluoride, Total	29	1	0.35	1600000	mg/L
EP-5	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-5	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-5	10/15/2013	Sulfate	950	50	16	600000000	mg/L
EP-5	10/16/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-5	10/16/2013	Biochemical Oxygen Demand	220	2	2	NA	mg/L
EP-5	10/16/2013	Chemical Oxygen Demand	720	10	10	NA	mg/L
EP-5	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-5	3/5/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	3/5/2014	Bromide	2.8	1	0.79	NA	mg/L
EP-5	3/5/2014	Chloride	5200	250	190	250000000	mg/L
EP-5	3/5/2014	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-5	3/5/2014	Fluoride, Total	12	1	0.35	1600000	mg/L
EP-5	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-5	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-5	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-5	3/5/2014	Sulfate	740	50	16	600000000	mg/L
EP-5	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-5	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-5	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-5	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	11/12/2014	Bromide	3.5	1	0.26	NA	mg/L
EP-5	11/12/2014	Chloride	13000	500	22	250000000	mg/L
EP-5	11/12/2014	Chemical Oxygen Demand	660	50	50	NA	mg/L
EP-5	11/12/2014	Fluoride, Total	27	10	1.5	1600000	mg/L
EP-5	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-5	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-5	11/12/2014	Sulfate	2100	50	8.2	600000000	mg/L
EP-5	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-5	3/24/2015	Bromide	4.1	1	0.77	NA	mg/L
EP-5	3/24/2015	Chloride	7500	500	130	250000000	mg/L
EP-5	3/24/2015	Chemical Oxygen Demand	860	10	10	NA	mg/L
EP-5	3/24/2015	Fluoride, Total	17	1	0.29	1600000	mg/L
EP-5	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-5	3/24/2015	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-5	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-5	3/24/2015	Sulfate	1600	50	11	600000000	mg/L
EP-5	3/26/2015	E-Coli	135	10	10	NA	CFU/100ml
EP-5	3/26/2015	Biochemical Oxygen Demand	47	2	2	NA	mg/L
EP-5	9/1/2015	Bromide	3.7	1	0.68	NA	mg/L
EP-5	9/1/2015	Chloride	8500	500	340	250000000	mg/L
EP-5	9/1/2015	Fluoride, Total	20	10	3.2	1600000	mg/L
EP-5	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-5	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-5	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-5	9/1/2015	Sulfate	1600	50	32	600000000	mg/L
EP-5	9/2/2015	E-Coli	1515	10	10	NA	CFU/100ml
EP-5	9/2/2015	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-5	9/2/2015	Chemical Oxygen Demand	980	50	50	NA	mg/L
EP-5	8/29/2016	E-Coli	31	10	10	NA	CFU/100ml
EP-5	8/29/2016	Biochemical Oxygen Demand	19	2	2	NA	mg/L
EP-5	8/29/2016	Bromide	5.9	0.5	0.22	NA	mg/L
EP-5	8/29/2016	Chloride	11000	500	51	250000000	mg/L
EP-5	8/29/2016	Chemical Oxygen Demand	860	10	3	NA	mg/L
EP-5	8/29/2016	Fluoride, Total	20	2	1	1600000	mg/L
EP-5	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-5	8/29/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
EP-5	8/29/2016	Sulfate	2900	500	140	600000000	mg/L
EP-5	3/30/2017	E-Coli	52	10	10	NA	MPN/100mL
EP-5	3/30/2017	Biochemical Oxygen Demand	32	2	2	NA	mg/L
EP-5	3/30/2017	Bromide	5.4	0.5	0.15	NA	mg/L
EP-5	3/30/2017	Chloride	7700	500	250	250000000	mg/L
EP-5	3/30/2017	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-5	3/30/2017	Fluoride, Total	20	2	1	1600000	mg/L
EP-5	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-5	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-5	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-5	3/30/2017	Sulfate	1900	500	96	600000000	mg/L
EP-5	10/24/2017	Bromide	4.5	1	0.15	NA	mg/L
EP-5	10/24/2017	Chloride	10000	500	250	250000000	mg/L
EP-5	10/24/2017	Fluoride, Total	30	10	4.4	1600000	mg/L
EP-5	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-5	10/24/2017	Nitrate & Nitrite	ND	10	1.3	NA	mg/L
EP-5	10/24/2017	Sulfate	2200	50	9.6	600000000	mg/L
EP-5	10/24/2017	E-Coli	52	10	10	NA	MPN/100mL
EP-5	10/24/2017	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	10/24/2017	Chemical Oxygen Demand	820	50	50	NA	mg/L
EP-5	2/21/2018	Bromide	1.3	0.5	0.073	NA	mg/L
EP-5	2/21/2018	Chloride	6300	250	120	250000000	mg/L
EP-5	2/21/2018	Fluoride, Total	14	2	0.87	1600000	mg/L
EP-5	2/21/2018	Ortho-Phosphate	2.6	2.5	1.2	NA	mg/L
EP-5	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-5	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-5	2/21/2018	Sulfate	1200	250	48	600000000	mg/L
EP-5	3/1/2018	E-Coli	109	10	10	NA	MPN/100mL
EP-5	3/1/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	3/1/2018	Chemical Oxygen Demand	849	20	20	NA	mg/L
EP-5	9/6/2018	Bromide	2.8	0.5	0.13	NA	mg/L
EP-5	9/6/2018	Chloride	5800	250	91	250000000	mg/L
EP-5	9/6/2018	Fluoride, Total	30	2	0.59	1600000	mg/L
EP-5	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-5	9/6/2018	Nitrate & Nitrite	ND	4	1.1	NA	mg/L
EP-5	9/6/2018	Sulfate	1500	250	100	600000000	mg/L
EP-5	9/14/2018	E-Coli	10	10	10	NA	MPN/100mL
EP-5	9/14/2018	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-5	9/14/2018	Chemical Oxygen Demand	930	10	10	NA	mg/L
EP-5	4/30/2019	Bromide	1	0.5	0.0725	NA	mg/L
EP-5	4/30/2019	Chloride	3900	250	31.25	250000000	mg/L
EP-5	4/30/2019	Fluoride, Total	31	2	1	1600000	mg/L
EP-5	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-5	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-5	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-5	4/30/2019	Sulfate	1500	250	26.75	600000000	mg/L
EP-5	4/30/2019	Biochemical Oxygen Demand	97	2	2	NA	mg/L
EP-5	4/30/2019	Chemical Oxygen Demand	618	10	10	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	4/30/2019	E-Coli	109	10	10	NA	MPN/100ml
EP-5	9/17/2020	Bromide	4.8	0.5	0.25	NA	mg/L
EP-5	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-5	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-5	9/17/2020	Fluoride, Total	62	2	0.87	1600000	mg/L
EP-5	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-5	9/17/2020	Solids, Total Suspended	150	8	8	NA	mg/L
EP-5	9/17/2020	Chloride	6900	500	250	250000000	mg/L
EP-5	9/17/2020	Sulfate	3400	500	250	600000000	mg/L
EP-5	9/17/2020	Chemical Oxygen Demand	310	15	3.9	NA	mg/L
EP-5	9/18/2020	Coliform, E-Coli	74	10	10	NA	MPN/100ml
EP-5	9/29/2020	Biochemical Oxygen Demand	38	2	2	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-5	12/21/2020	Biochemical Oxygen Demand	12.4	2	2	NA	mg/L
EP-5	12/21/2020	Solids, Total Suspended	97.1	14.3	0	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-5	12/21/2020	Phosphorus, Ortho	0.253	0.05	0.015	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-5	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-5	12/21/2020	Chloride	8970	500	60	250000000	mg/L
EP-5	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-5	12/21/2020	Sulfate	3570	500	185	600000000	mg/L
EP-5	12/21/2020	Chemical Oxygen Demand	217	80	51.2	NA	mg/L
EP-5	12/21/2020	Solids, Total Suspended	97.1	14.3	0	NA	mg/L
EP-5	9/17/2020	Solids, Total Suspended	150	8	8	NA	mg/L
EP-6	5/29/2012	Bromide	3.3	0.5	0.37	NA	mg/L
EP-6	5/29/2012	Chloride	8800	250	26	250000000	mg/L
EP-6	5/29/2012	Fluoride, Total	20	2	0.76	1600000	mg/L
EP-6	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-6	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-6	5/29/2012	Sulfate	2100	250	59	600000000	mg/L
EP-6	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-6	5/30/2012	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-6	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-6	11/6/2012	Chloride	11000	500	51	250000000	mg/L
EP-6	11/6/2012	Fluoride, Total	21	2	0.76	1600000	mg/L
EP-6	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-6	11/6/2012	Nitrogen, Nitrite	ND	50	25	1000000	mg/L
EP-6	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-6	11/6/2012	Sulfate	2500	250	59	600000000	mg/L
EP-6	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-6	11/7/2012	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-6	11/7/2012	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-6	5/28/2013	Bromide	4.4	1	0.26	NA	mg/L
EP-6	5/28/2013	Chloride	11000	500	150	250000000	mg/L
EP-6	5/28/2013	Fluoride, Total	15	10	3.3	1600000	mg/L
EP-6	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-6	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-6	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-6	5/28/2013	Sulfate	1900	50	12	600000000	mg/L
EP-6	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-6	5/29/2013	Biochemical Oxygen Demand	46	5	2	NA	mg/L
EP-6	5/29/2013	Chemical Oxygen Demand	710	10	10	NA	mg/L
EP-6	10/15/2013	Bromide	3.1	1	0.79	NA	mg/L
EP-6	10/15/2013	Chloride	11000	500	76	250000000	mg/L
EP-6	10/15/2013	Fluoride, Total	17	1	0.35	1600000	mg/L
EP-6	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-6	10/15/2013	Nitrate & Nitrite	ND	10	3.8	NA	mg/L
EP-6	10/15/2013	Sulfate	2200	50	16	600000000	mg/L
EP-6	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-6	10/16/2013	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	10/16/2013	Chemical Oxygen Demand	940	10	10	NA	mg/L
EP-6	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-6	3/5/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	3/5/2014	Bromide	2.3	1	0.79	NA	mg/L
EP-6	3/5/2014	Chloride	6900	500	390	250000000	mg/L
EP-6	3/5/2014	Chemical Oxygen Demand	600	50	50	NA	mg/L
EP-6	3/5/2014	Fluoride, Total	18	1	0.35	1600000	mg/L
EP-6	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-6	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-6	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-6	3/5/2014	Sulfate	1500	50	16	600000000	mg/L
EP-6	10/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-6	10/23/2014	TPH ORO	ND	5	5	85800	mg/L
EP-6	10/23/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-6	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	11/12/2014	Bromide	4.3	1	0.26	NA	mg/L
EP-6	11/12/2014	Chloride	15000	500	22	250000000	mg/L
EP-6	11/12/2014	Chemical Oxygen Demand	810	50	50	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Fluoride, Total	26	10	1.5	1600000	mg/L
EP-6	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-6	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-6	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-6	11/12/2014	Sulfate	2200	50	8.2	600000000	mg/L
EP-6	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-6	3/25/2015	Bromide	3.4	1	0.77	NA	mg/L
EP-6	3/25/2015	Chloride	7900	500	130	250000000	mg/L
EP-6	3/25/2015	Chemical Oxygen Demand	980	10	10	NA	mg/L
EP-6	3/25/2015	Fluoride, Total	15	1	0.29	1600000	mg/L
EP-6	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-6	3/25/2015	Nitrate & Nitrite	ND	10	2.2	NA	mg/L
EP-6	3/25/2015	Sulfate	1700	50	11	600000000	mg/L
EP-6	3/26/2015	E-Coli	63	10	10	NA	CFU/100ml
EP-6	3/26/2015	Biochemical Oxygen Demand	47	2	2	NA	mg/L
EP-6	9/1/2015	Bromide	4.6	1	0.68	NA	mg/L
EP-6	9/1/2015	Chloride	11000	500	340	250000000	mg/L
EP-6	9/1/2015	Fluoride, Total	21	10	3.2	1600000	mg/L
EP-6	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-6	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-6	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-6	9/1/2015	Sulfate	2000	50	32	600000000	mg/L
EP-6	9/2/2015	E-Coli	341	10	10	NA	CFU/100ml
EP-6	9/2/2015	Biochemical Oxygen Demand	8	2	2	NA	mg/L
EP-6	9/2/2015	Chemical Oxygen Demand	1700	50	50	NA	mg/L
EP-6	8/29/2016	E-Coli	10	10	10	NA	CFU/100ml
EP-6	8/29/2016	Biochemical Oxygen Demand	14	2	2	NA	mg/L
EP-6	8/29/2016	Bromide	6	0.5	0.22	NA	mg/L
EP-6	8/29/2016	Chloride	10000	500	51	250000000	mg/L
EP-6	8/29/2016	Chemical Oxygen Demand	750	10	3	NA	mg/L
EP-6	8/29/2016	Fluoride, Total	20	2	1	1600000	mg/L
EP-6	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-6	8/29/2016	Nitrogen, Nitrite	ND	5	2.6	1000000	mg/L
EP-6	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-6	8/29/2016	Sulfate	2600	500	140	600000000	mg/L
EP-6	3/30/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-6	3/30/2017	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-6	3/30/2017	Bromide	5.5	0.5	0.15	NA	mg/L
EP-6	3/30/2017	Chloride	7200	500	250	250000000	mg/L
EP-6	3/30/2017	Chemical Oxygen Demand	981	10	10	NA	mg/L
EP-6	3/30/2017	Fluoride, Total	22	2	1	1600000	mg/L
EP-6	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-6	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-6	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-6	3/30/2017	Sulfate	1800	500	96	600000000	mg/L
EP-6	10/24/2017	Bromide	4.7	1	0.15	NA	mg/L
EP-6	10/24/2017	Chloride	10000	500	250	250000000	mg/L
EP-6	10/24/2017	Fluoride, Total	31	10	4.4	1600000	mg/L
EP-6	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-6	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-6	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-6	10/24/2017	Sulfate	2300	50	9.6	600000000	mg/L
EP-6	10/24/2017	E-Coli	63	10	10	NA	MPN/100mL
EP-6	10/24/2017	Biochemical Oxygen Demand	100	2	2	NA	mg/L
EP-6	10/24/2017	Chemical Oxygen Demand	640	50	50	NA	mg/L
EP-6	2/21/2018	Bromide	2	0.5	0.073	NA	mg/L
EP-6	2/21/2018	Chloride	7500	500	250	250000000	mg/L
EP-6	2/21/2018	Fluoride, Total	39	2	0.87	1600000	mg/L
EP-6	2/21/2018	Ortho-Phosphate	3	2.5	1.2	NA	mg/L
EP-6	2/21/2018	Nitrate & Nitrite	2.6	10	1.3	NA	mg/L
EP-6	2/21/2018	Sulfate	1900	500	96	600000000	mg/L
EP-6	3/1/2018	E-Coli	109	10	10	NA	MPN/100mL
EP-6	3/1/2018	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-6	3/1/2018	Chemical Oxygen Demand	591	50	50	NA	mg/L
EP-6	9/7/2018	Bromide	3.3	0.5	0.13	NA	mg/L
EP-6	9/7/2018	Chloride	6300	500	180	250000000	mg/L
EP-6	9/7/2018	Fluoride, Total	33	2	0.59	1600000	mg/L
EP-6	9/7/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-6	9/7/2018	Nitrate & Nitrite	ND	10	2.7	NA	mg/L
EP-6	9/7/2018	Sulfate	1600	500	210	600000000	mg/L
EP-6	9/14/2018	E-Coli	10	10	10	NA	MPN/100mL
EP-6	9/14/2018	Biochemical Oxygen Demand	14	2	2	NA	mg/L
EP-6	9/14/2018	Chemical Oxygen Demand	550	10	10	NA	mg/L
EP-6	4/29/2019	Biochemical Oxygen Demand	54	2	2	NA	mg/L
EP-6	4/29/2019	E-Coli	20	10	10	NA	MPN/100ml
EP-6	4/29/2019	Bromide	1.5	0.5	0.0725	NA	mg/L
EP-6	4/29/2019	Chloride	4100	250	250	250000000	mg/L
EP-6	4/29/2019	Fluoride, Total	33	2	1	1600000	mg/L
EP-6	4/29/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Nitrogen, Nitrite	2.6	2	0.076	1000000	mg/L
EP-6	4/29/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-6	4/29/2019	Sulfate	1400	250	26.75	600000000	mg/L
EP-6	4/29/2019	Chemical Oxygen Demand	393	10	10	NA	mg/L
EP-6	9/17/2020	Bromide	4.4	0.5	0.25	NA	mg/L
EP-6	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-6	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-6	9/17/2020	Fluoride, Total	57	2	0.87	1600000	mg/L
EP-6	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-6	9/17/2020	Solids, Total Suspended	130	8	8	NA	mg/L
EP-6	9/17/2020	Chloride	6600	500	250	250000000	mg/L
EP-6	9/17/2020	Sulfate	3200	500	250	600000000	mg/L
EP-6	9/17/2020	Chemical Oxygen Demand	440	15	3.9	NA	mg/L
EP-6	9/18/2020	Coliform, E-Coli	171	10	10	NA	MPN/100ml
EP-6	9/29/2020	Biochemical Oxygen Demand	39	2	2	NA	mg/L
EP-6	12/21/2020	Chemical Oxygen Demand	222	80	51.2	NA	mg/L
EP-6	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-6	12/21/2020	Chloride	10400	500	60	250000000	mg/L
EP-6	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-6	12/21/2020	Sulfate	3960	500	185	600000000	mg/L
EP-6	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-6	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-6	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-6	12/21/2020	Solids, Total Suspended	57	5	0	NA	mg/L
EP-6	12/21/2020	Biochemical Oxygen Demand	2.35	2	2	NA	mg/L
EP-6	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-6	9/17/2020	Solids, Total Suspended	130	8	8	NA	mg/L
EP-6	12/21/2020	Solids, Total Suspended	57	5	0	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromide	1.9	2	1	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloride	4200	250	125	250000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluoride, Total	48	2	0.579636	1600000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrogen, Nitrate	ND	2	0.12155	10000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Sulfate	2000	100	50	600000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	E-Coli	183	10	10	NA	MPN/100ml
EP-6 (Pond 4 & 5)	11/20/2019	Biochemical Oxygen Demand	12	2	2	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chemical Oxygen Demand	214	7.5	7.5	NA	mg/L
EP-7	5/29/2012	Bromide	25	5	3.7	NA	mg/L
EP-7	5/29/2012	Chloride	50000	2500	260	250000000	mg/L
EP-7	5/29/2012	Fluoride, Total	24	5	1.9	1600000	mg/L
EP-7	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-7	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-7	5/29/2012	Sulfate	9500	500	120	600000000	mg/L
EP-7	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-7	5/30/2012	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	11/6/2012	Bromide	ND	500	380	NA	mg/L
EP-7	11/6/2012	Chloride	81000	2500	260	250000000	mg/L
EP-7	11/6/2012	Fluoride, Total	37	10	3.8	1600000	mg/L
EP-7	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-7	11/6/2012	Nitrogen, Nitrite	ND	500	250	1000000	mg/L
EP-7	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-7	11/6/2012	Sulfate	15000	2500	590	600000000	mg/L
EP-7	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-7	11/7/2012	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-7	11/7/2012	Chemical Oxygen Demand	2300	200	200	NA	mg/L
EP-7	5/28/2013	Bromide	30	10	2.6	NA	mg/L
EP-7	5/28/2013	Chloride	55000	2500	740	250000000	mg/L
EP-7	5/28/2013	Fluoride, Total	28	10	3.3	1600000	mg/L
EP-7	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-7	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-7	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-7	5/28/2013	Sulfate	11000	250	62	600000000	mg/L
EP-7	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-7	5/29/2013	Biochemical Oxygen Demand	19	5	2	NA	mg/L
EP-7	5/29/2013	Chemical Oxygen Demand	6000	10	10	NA	mg/L
EP-7	10/15/2013	Bromide	26	10	7.9	NA	mg/L
EP-7	10/15/2013	Chloride	52000	2500	380	250000000	mg/L
EP-7	10/15/2013	Fluoride, Total	24	10	3.5	1600000	mg/L
EP-7	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-7	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-7	10/15/2013	Sulfate	11000	2500	800	600000000	mg/L
EP-7	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-7	10/16/2013	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-7	10/16/2013	Chemical Oxygen Demand	3200	50	50	NA	mg/L
EP-7	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-7	3/5/2014	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-7	3/5/2014	Bromide	19	1	0.79	NA	mg/L
EP-7	3/5/2014	Chloride	41000	2500	1900	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	Chemical Oxygen Demand	3900	1000	1000	NA	mg/L
EP-7	3/5/2014	Fluoride, Total	28	10	3.5	1600000	mg/L
EP-7	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-7	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-7	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-7	3/5/2014	Sulfate	8500	2500	800	600000000	mg/L
EP-7	11/12/2014	Biochemical Oxygen Demand	28	2	2	NA	mg/L
EP-7	11/12/2014	Bromide	33	10	2.6	NA	mg/L
EP-7	11/12/2014	Chloride	61000	2500	110	250000000	mg/L
EP-7	11/12/2014	Chemical Oxygen Demand	4400	100	100	NA	mg/L
EP-7	11/12/2014	Fluoride, Total	44	10	1.5	1600000	mg/L
EP-7	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-7	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-7	11/12/2014	Sulfate	12000	250	41	600000000	mg/L
EP-7	11/13/2014	E-Coli	20	10	10	NA	CFU/100ml
EP-7	3/25/2015	Bromide	27	10	7.7	NA	mg/L
EP-7	3/25/2015	Chloride	50000	2500	670	250000000	mg/L
EP-7	3/25/2015	Chemical Oxygen Demand	670	100	100	NA	mg/L
EP-7	3/25/2015	Fluoride, Total	25	10	2.9	1600000	mg/L
EP-7	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-7	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-7	3/25/2015	Sulfate	11000	2500	570	600000000	mg/L
EP-7	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-7	3/26/2015	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-7	9/1/2015	Bromide	26	10	6.8	NA	mg/L
EP-7	9/1/2015	Chloride	59000	2500	1700	250000000	mg/L
EP-7	9/1/2015	Fluoride, Total	27	10	3.2	1600000	mg/L
EP-7	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-7	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-7	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-7	9/1/2015	Sulfate	12000	2500	1600	600000000	mg/L
EP-7	9/2/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-7	9/2/2015	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-7	9/2/2015	Chemical Oxygen Demand	2000	500	500	NA	mg/L
EP-7	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-7	8/30/2016	Biochemical Oxygen Demand	4	2	2	NA	mg/L
EP-7	8/30/2016	Bromide	34	5	2.2	NA	mg/L
EP-7	8/30/2016	Chloride	66000	2500	250	250000000	mg/L
EP-7	8/30/2016	Chemical Oxygen Demand	3100	1000	300	NA	mg/L
EP-7	8/30/2016	Fluoride, Total	17	5	2.5	1600000	mg/L
EP-7	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-7	8/30/2016	Nitrate & Nitrite	ND	100	46	NA	mg/L
EP-7	8/30/2016	Sulfate	15000	1000	280	600000000	mg/L
EP-7	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-7	3/30/2017	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-7	3/30/2017	Bromide	33	2	0.61	NA	mg/L
EP-7	3/30/2017	Chloride	49000	2500	1200	250000000	mg/L
EP-7	3/30/2017	Chemical Oxygen Demand	3150	200	200	NA	mg/L
EP-7	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-7	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-7	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-7	3/30/2017	Sulfate	9100	2500	480	600000000	mg/L
EP-7	10/24/2017	Bromide	38	10	1.5	NA	mg/L
EP-7	10/24/2017	Chloride	95000	5000	2500	250000000	mg/L
EP-7	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-7	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-7	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-7	10/24/2017	Sulfate	18000	5000	960	600000000	mg/L
EP-7	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-7	10/24/2017	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-7	10/24/2017	Chemical Oxygen Demand	2700	200	200	NA	mg/L
EP-7	2/23/2018	Bromide	35	5	0.73	NA	mg/L
EP-7	2/23/2018	Chloride	56000	2500	1200	250000000	mg/L
EP-7	2/23/2018	Fluoride, Total	16	5	2.2	1600000	mg/L
EP-7	2/23/2018	Ortho-Phosphate	12	10	5	NA	mg/L
EP-7	2/23/2018	Nitrate & Nitrite	19	40	5.2	NA	mg/L
EP-7	2/23/2018	Sulfate	9900	2500	480	600000000	mg/L
EP-7	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-7	3/1/2018	Biochemical Oxygen Demand	27	2	2	NA	mg/L
EP-7	3/1/2018	Chemical Oxygen Demand	3530	200	200	NA	mg/L
EP-7	9/7/2018	Bromide	43	2	0.54	NA	mg/L
EP-7	9/7/2018	Chloride	70000	5000	1800	250000000	mg/L
EP-7	9/7/2018	Fluoride, Total	45	5	1.6	1600000	mg/L
EP-7	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-7	9/7/2018	Nitrate & Nitrite	ND	100	27	NA	mg/L
EP-7	9/7/2018	Sulfate	12000	5000	2100	600000000	mg/L
EP-7	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-7	9/14/2018	Biochemical Oxygen Demand	46	2	2	NA	mg/L
EP-7	9/14/2018	Chemical Oxygen Demand	4700	1000	1000	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-7	4/29/2019	Bromide	25	20	2.9	NA	mg/L
EP-7	4/29/2019	Chloride	88000	2500	2500	250000000	mg/L
EP-7	4/29/2019	Fluoride, Total	25	2	1	1600000	mg/L
EP-7	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-7	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-7	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-7	4/29/2019	Sulfate	14000	2500	267.5	600000000	mg/L
EP-7	4/29/2019	Chemical Oxygen Demand	2370	100	100	NA	mg/L
EP-7	11/20/2019	Bromide	71	20	10	NA	mg/L
EP-7	11/20/2019	Chloride	210000	10000	5000	250000000	mg/L
EP-7	11/20/2019	Fluoride, Total	81	20	5.79636	1600000	mg/L
EP-7	11/20/2019	Nitrogen, Nitrate & Nitrite	ND	400	19.4	10000000	mg/L
EP-7	11/20/2019	Phosphorus, Ortho	ND	100	50	NA	mg/L
EP-7	11/20/2019	Sulfate	21000	1000	500	600000000	mg/L
EP-7	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-7	11/20/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	11/20/2019	Chemical Oxygen Demand	5040	375	375	NA	mg/L
EP-7	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-7	9/17/2020	Solids, Total Suspended	200	4	4	NA	mg/L
EP-7	9/17/2020	Chloride	160000	10000	5000	250000000	mg/L
EP-7	9/17/2020	Sulfate	25000	10000	5000	600000000	mg/L
EP-7	9/17/2020	Bromide	98	10	5	NA	mg/L
EP-7	9/17/2020	Fluoride, Total	93	10	4.3	1600000	mg/L
EP-7	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-7	9/17/2020	Chemical Oxygen Demand	356	15	3.9	NA	mg/L
EP-7	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-7	9/29/2020	Biochemical Oxygen Demand	31	2	2	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-7	12/21/2020	Biochemical Oxygen Demand	14.7	2	2	NA	mg/L
EP-7	12/21/2020	Solids, Total Suspended	3270	33.3	0	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-7	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-7	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-7	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-7	12/21/2020	Sulfate	14000	500	185	600000000	mg/L
EP-7	12/21/2020	Chloride	171000	5000	600	250000000	mg/L
EP-7	12/21/2020	Chemical Oxygen Demand	2410	250	160	NA	mg/L
EP-7	12/21/2020	Solids, Total Suspended	3270	33.3	0	NA	mg/L
EP-7	9/17/2020	Solids, Total Suspended	200	4	4	NA	mg/L
EP-8	5/29/2012	Bromide	39	5	3.7	NA	mg/L
EP-8	5/29/2012	Chloride	67000	2500	260	250000000	mg/L
EP-8	5/29/2012	Fluoride, Total	33	5	1.9	1600000	mg/L
EP-8	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-8	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-8	5/29/2012	Sulfate	9700	250	59	600000000	mg/L
EP-8	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-8	5/30/2012	Biochemical Oxygen Demand	4.5	2	2	NA	mg/L
EP-8	11/6/2012	Bromide	ND	500	380	NA	mg/L
EP-8	11/6/2012	Chloride	250000	10000	1000	250000000	mg/L
EP-8	11/6/2012	Fluoride, Total	71	20	7.6	1600000	mg/L
EP-8	11/6/2012	Ortho-Phosphate	ND	2500	1500	NA	mg/L
EP-8	11/6/2012	Nitrogen, Nitrite	ND	500	250	1000000	mg/L
EP-8	11/6/2012	Nitrogen, Nitrate	ND	500	250	10000000	mg/L
EP-8	11/6/2012	Sulfate	31000	2500	590	600000000	mg/L
EP-8	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-8	11/7/2012	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-8	11/7/2012	Chemical Oxygen Demand	13000	200	200	NA	mg/L
EP-8	5/28/2013	Bromide	19	1	0.26	NA	mg/L
EP-8	5/28/2013	Chloride	47000	2500	740	250000000	mg/L
EP-8	5/28/2013	Fluoride, Total	29	10	3.3	1600000	mg/L
EP-8	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-8	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-8	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-8	5/28/2013	Sulfate	8600	250	62	600000000	mg/L
EP-8	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-8	5/29/2013	Biochemical Oxygen Demand	22	5	2	NA	mg/L
EP-8	5/29/2013	Chemical Oxygen Demand	4600	10	10	NA	mg/L
EP-8	10/15/2013	Bromide	58	10	7.9	NA	mg/L
EP-8	10/15/2013	Chloride	110000	5000	760	250000000	mg/L
EP-8	10/15/2013	Fluoride, Total	33	10	3.5	1600000	mg/L
EP-8	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-8	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-8	10/15/2013	Sulfate	18000	5000	1600	600000000	mg/L
EP-8	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-8	10/16/2013	Biochemical Oxygen Demand	6.8	2	2	NA	mg/L
EP-8	10/16/2013	Chemical Oxygen Demand	9800	100	100	NA	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-8	3/5/2014	Biochemical Oxygen Demand	13	2	2	NA	mg/L
EP-8	3/5/2014	Bromide	20	1	0.79	NA	mg/L
EP-8	3/5/2014	Chloride	39000	2500	1900	250000000	mg/L
EP-8	3/5/2014	Chemical Oxygen Demand	2900	50	50	NA	mg/L
EP-8	3/5/2014	Fluoride, Total	27	10	3.5	1600000	mg/L
EP-8	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-8	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-8	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-8	3/5/2014	Sulfate	7900	2500	800	600000000	mg/L
EP-8	11/12/2014	Biochemical Oxygen Demand	27	2	2	NA	mg/L
EP-8	11/12/2014	Bromide	29	10	2.6	NA	mg/L
EP-8	11/12/2014	Chloride	61000	2500	110	250000000	mg/L
EP-8	11/12/2014	Chemical Oxygen Demand	4100	100	100	NA	mg/L
EP-8	11/12/2014	Fluoride, Total	41	10	1.5	1600000	mg/L
EP-8	11/12/2014	Ortho-Phosphate	ND	50	7.5	NA	mg/L
EP-8	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-8	11/12/2014	Sulfate	11000	250	41	600000000	mg/L
EP-8	11/13/2014	E-Coli	10	10	10	NA	CFU/100ml
EP-8	3/25/2015	Bromide	29	10	7.7	NA	mg/L
EP-8	3/25/2015	Chloride	65000	2500	670	250000000	mg/L
EP-8	3/25/2015	Chemical Oxygen Demand	600	100	100	NA	mg/L
EP-8	3/25/2015	Fluoride, Total	27	10	2.9	1600000	mg/L
EP-8	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-8	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-8	3/25/2015	Sulfate	14000	2500	570	600000000	mg/L
EP-8	3/26/2015	E-Coli	--	1	1	NA	CFU/100ml
EP-8	3/26/2015	Biochemical Oxygen Demand	12	2	2	NA	mg/L
EP-8	9/1/2015	Bromide	24	10	6.8	NA	mg/L
EP-8	9/1/2015	Chloride	64000	2500	1700	250000000	mg/L
EP-8	9/1/2015	Fluoride, Total	27	10	3.2	1600000	mg/L
EP-8	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-8	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-8	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-8	9/1/2015	Sulfate	13000	2500	1600	600000000	mg/L
EP-8	9/2/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-8	9/2/2015	Biochemical Oxygen Demand	32	2	2	NA	mg/L
EP-8	9/2/2015	Chemical Oxygen Demand	880	500	500	NA	mg/L
EP-8	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-8	8/30/2016	Biochemical Oxygen Demand	6	2	2	NA	mg/L
EP-8	8/30/2016	Bromide	35	5	2.2	NA	mg/L
EP-8	8/30/2016	Chloride	81000	2500	250	250000000	mg/L
EP-8	8/30/2016	Chemical Oxygen Demand	3200	500	150	NA	mg/L
EP-8	8/30/2016	Fluoride, Total	17	5	2.5	1600000	mg/L
EP-8	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-8	8/30/2016	Nitrate & Nitrite	ND	40	18	NA	mg/L
EP-8	8/30/2016	Sulfate	13000	1000	280	600000000	mg/L
EP-8	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-8	3/30/2017	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-8	3/30/2017	Bromide	38	2	0.61	NA	mg/L
EP-8	3/30/2017	Chloride	64000	2500	1200	250000000	mg/L
EP-8	3/30/2017	Chemical Oxygen Demand	5430	200	200	NA	mg/L
EP-8	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-8	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-8	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-8	3/30/2017	Sulfate	12000	2500	480	600000000	mg/L
EP-8	10/24/2017	Bromide	35	10	1.5	NA	mg/L
EP-8	10/24/2017	Chloride	94000	5000	2500	250000000	mg/L
EP-8	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-8	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-8	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-8	10/24/2017	Sulfate	16000	5000	960	600000000	mg/L
EP-8	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-8	10/24/2017	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-8	10/24/2017	Chemical Oxygen Demand	2100	200	200	NA	mg/L
EP-8	2/23/2018	Bromide	31	5	0.73	NA	mg/L
EP-8	2/23/2018	Chloride	71000	2500	1200	250000000	mg/L
EP-8	2/23/2018	Fluoride, Total	17	5	2.2	1600000	mg/L
EP-8	2/23/2018	Ortho-Phosphate	11	10	5	NA	mg/L
EP-8	2/23/2018	Nitrate & Nitrite	17	40	5.2	NA	mg/L
EP-8	2/23/2018	Sulfate	12000	2500	480	600000000	mg/L
EP-8	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-8	3/1/2018	Biochemical Oxygen Demand	29	2	2	NA	mg/L
EP-8	3/1/2018	Chemical Oxygen Demand	4040	100	100	NA	mg/L
EP-8	9/7/2018	Bromide	23	2	0.54	NA	mg/L
EP-8	9/7/2018	Chloride	37000	2500	910	250000000	mg/L
EP-8	9/7/2018	Fluoride, Total	36	2	0.59	1600000	mg/L
EP-8	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-8	9/7/2018	Nitrate & Nitrite	ND	40	11	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/7/2018	Sulfate	6600	2500	1000	600000000	mg/L
EP-8	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-8	9/14/2018	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-8	9/14/2018	Chemical Oxygen Demand	2300	1000	1000	NA	mg/L
EP-8	4/29/2019	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-8	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	4/29/2019	Bromide	26	20	2.9	NA	mg/L
EP-8	4/29/2019	Chloride	62000	2500	2500	250000000	mg/L
EP-8	4/29/2019	Fluoride, Total	26	2	1	1600000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrite	53	20	0.76	1000000	mg/L
EP-8	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-8	4/29/2019	Sulfate	10000	2500	267.5	600000000	mg/L
EP-8	4/29/2019	Chemical Oxygen Demand	1850	100	100	NA	mg/L
EP-8	4/29/2019	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-8	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	4/29/2019	Bromide	27	20	2.9	NA	mg/L
EP-8	4/29/2019	Chloride	75000	2500	2500	250000000	mg/L
EP-8	4/29/2019	Fluoride, Total	27	2	1	1600000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-8	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-8	4/29/2019	Sulfate	12000	2500	267.5	600000000	mg/L
EP-8	4/29/2019	Chemical Oxygen Demand	2410	100	100	NA	mg/L
EP-8	11/20/2019	Bromide	60	20	10	NA	mg/L
EP-8	11/20/2019	Chloride	160000	25000	12500	250000000	mg/L
EP-8	11/20/2019	Fluoride, Total	65	20	5.79636	1600000	mg/L
EP-8	11/20/2019	Nitrogen, Nitrate & Nitrite	ND	400	19.4	10000000	mg/L
EP-8	11/20/2019	Phosphorus, Ortho	ND	100	50	NA	mg/L
EP-8	11/20/2019	Sulfate	14000	1000	500	600000000	mg/L
EP-8	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	11/20/2019	Biochemical Oxygen Demand	28	2	2	NA	mg/L
EP-8	11/20/2019	Chemical Oxygen Demand	5170	250	250	NA	mg/L
EP-8	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-8	9/17/2020	Solids, Total Suspended	130	4	4	NA	mg/L
EP-8	9/17/2020	Chloride	130000	10000	5000	250000000	mg/L
EP-8	9/17/2020	Sulfate	21000	10000	5000	600000000	mg/L
EP-8	9/17/2020	Bromide	82	10	5	NA	mg/L
EP-8	9/17/2020	Fluoride, Total	89	10	4.3	1600000	mg/L
EP-8	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-8	9/17/2020	Chemical Oxygen Demand	415	15	3.9	NA	mg/L
EP-8	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-8	9/29/2020	Biochemical Oxygen Demand	25	2	2	NA	mg/L
EP-8	12/22/2020	Nitrogen, Nitrate & Nitrite	0.068	0.05	0.018	10000000	mg/L
EP-8	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-8	12/22/2020	Nitrogen, Nitrate	0.068	0.05	0.018	10000000	mg/L
EP-8	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-8	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-8	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-8	12/22/2020	Sulfate	12400	500	185	600000000	mg/L
EP-8	12/22/2020	Chloride	201000	5000	600	250000000	mg/L
EP-8	12/22/2020	Chemical Oxygen Demand	3060	250	160	NA	mg/L
EP-8	12/22/2020	Biochemical Oxygen Demand	23.8	2	2	NA	mg/L
EP-8	12/22/2020	Solids, Total Suspended	4180	50	0	NA	mg/L
EP-8	9/17/2020	Solids, Total Suspended	130	4	4	NA	mg/L
EP-8	12/22/2020	Solids, Total Suspended	4180	50	0	NA	mg/L
EP-9	5/29/2012	Bromide	24	5	3.7	NA	mg/L
EP-9	5/29/2012	Chloride	63000	2500	260	250000000	mg/L
EP-9	5/29/2012	Fluoride, Total	21	5	1.9	1600000	mg/L
EP-9	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-9	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-9	5/29/2012	Sulfate	7500	250	59	600000000	mg/L
EP-9	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-9	5/30/2012	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-9	11/6/2012	Bromide	380	20	15	NA	mg/L
EP-9	11/6/2012	Chloride	46000	2500	260	250000000	mg/L
EP-9	11/6/2012	Fluoride, Total	13	2	0.76	1600000	mg/L
EP-9	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-9	11/6/2012	Nitrate & Nitrite	ND	40	20	NA	mg/L
EP-9	11/6/2012	Sulfate	6400	2500	590	600000000	mg/L
EP-9	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-9	11/7/2012	Biochemical Oxygen Demand	7.9	2	2	NA	mg/L
EP-9	11/7/2012	Chemical Oxygen Demand	1400	50	50	NA	mg/L
EP-9	5/28/2013	Bromide	24	10	2.6	NA	mg/L
EP-9	5/28/2013	Chloride	62000	2500	740	250000000	mg/L
EP-9	5/28/2013	Fluoride, Total	19	10	3.3	1600000	mg/L
EP-9	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-9	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-9	5/28/2013	Nitrogen, Nitrate	3	1	0.16	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	Sulfate	8400	250	62	600000000	mg/L
EP-9	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-9	5/29/2013	Biochemical Oxygen Demand	19	5	2	NA	mg/L
EP-9	5/29/2013	Chemical Oxygen Demand	7400	10	10	NA	mg/L
EP-9	10/15/2013	Bromide	21	10	7.9	NA	mg/L
EP-9	10/15/2013	Chloride	55000	5000	760	250000000	mg/L
EP-9	10/15/2013	Fluoride, Total	15	10	3.5	1600000	mg/L
EP-9	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-9	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-9	10/15/2013	Sulfate	8100	5000	1600	600000000	mg/L
EP-9	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-9	10/16/2013	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-9	10/16/2013	Chemical Oxygen Demand	4700	50	50	NA	mg/L
EP-9	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-9	3/5/2014	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	3/5/2014	Bromide	20	10	7.9	NA	mg/L
EP-9	3/5/2014	Chloride	56000	2500	1900	250000000	mg/L
EP-9	3/5/2014	Chemical Oxygen Demand	3700	1000	1000	NA	mg/L
EP-9	3/5/2014	Fluoride, Total	18	10	3.5	1600000	mg/L
EP-9	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-9	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-9	3/5/2014	Nitrogen, Nitrate	8.1	1	0.65	10000000	mg/L
EP-9	3/5/2014	Sulfate	7800	100	32	600000000	mg/L
EP-9	10/21/2014	TPH DRO	3.6	1	0.83	16700	mg/L
EP-9	10/21/2014	TPH ORO	ND	5	5	85800	mg/L
EP-9	10/21/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-9	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-9	11/13/2014	Biochemical Oxygen Demand	4.2	2	2	NA	mg/L
EP-9	11/13/2014	Bromide	34	10	2.6	NA	mg/L
EP-9	11/13/2014	Chloride	98000	5000	220	250000000	mg/L
EP-9	11/13/2014	Chemical Oxygen Demand	3900	1000	1000	NA	mg/L
EP-9	11/13/2014	Fluoride, Total	22	10	1.5	1600000	mg/L
EP-9	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-9	11/13/2014	Nitrate & Nitrite	ND	100	8.3	NA	mg/L
EP-9	11/13/2014	Sulfate	12000	500	82	600000000	mg/L
EP-9	3/25/2015	Bromide	12	1	0.77	NA	mg/L
EP-9	3/25/2015	Chloride	30000	2500	670	250000000	mg/L
EP-9	3/25/2015	Chemical Oxygen Demand	510	100	100	NA	mg/L
EP-9	3/25/2015	Fluoride, Total	22	10	2.9	1600000	mg/L
EP-9	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-9	3/25/2015	Nitrate & Nitrite	ND	20	4.5	NA	mg/L
EP-9	3/25/2015	Sulfate	4500	50	11	600000000	mg/L
EP-9	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-9	3/26/2015	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-9	9/1/2015	Bromide	31	10	6.8	NA	mg/L
EP-9	9/1/2015	Chloride	59000	2500	1700	250000000	mg/L
EP-9	9/1/2015	Fluoride, Total	20	10	3.2	1600000	mg/L
EP-9	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-9	9/1/2015	Nitrogen, Nitrite	ND	20	5.6	1000000	mg/L
EP-9	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-9	9/1/2015	Sulfate	7200	100	64	600000000	mg/L
EP-9	9/2/2015	E-Coli	74	10	10	NA	CFU/100ml
EP-9	9/2/2015	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-9	9/2/2015	Chemical Oxygen Demand	1500	500	500	NA	mg/L
EP-9	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-9	8/30/2016	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-9	8/30/2016	Bromide	47	5	2.2	NA	mg/L
EP-9	8/30/2016	Chloride	160000	10000	1000	250000000	mg/L
EP-9	8/30/2016	Chemical Oxygen Demand	5400	500	150	NA	mg/L
EP-9	8/30/2016	Fluoride, Total	ND	10	5	1600000	mg/L
EP-9	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-9	8/30/2016	Nitrate & Nitrite	ND	400	180	NA	mg/L
EP-9	8/30/2016	Sulfate	12000	2500	710	600000000	mg/L
EP-9	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-9	3/30/2017	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-9	3/30/2017	Bromide	23	2	0.61	NA	mg/L
EP-9	3/30/2017	Chloride	58000	2500	1200	250000000	mg/L
EP-9	3/30/2017	Chemical Oxygen Demand	5590	200	200	NA	mg/L
EP-9	3/30/2017	Fluoride, Total	13	5	2.5	1600000	mg/L
EP-9	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-9	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-9	3/30/2017	Sulfate	5600	2500	480	600000000	mg/L
EP-9	10/24/2017	Bromide	84	10	1.5	NA	mg/L
EP-9	10/24/2017	Chloride	200000	10000	5000	250000000	mg/L
EP-9	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-9	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-9	10/24/2017	Nitrate & Nitrite	ND	200	26	NA	mg/L
EP-9	10/24/2017	Sulfate	16000	10000	1900	600000000	mg/L
EP-9	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-9	10/24/2017	Chemical Oxygen Demand	5000	400	400	NA	mg/L
EP-9	2/23/2018	Bromide	8.1	2	0.29	NA	mg/L
EP-9	2/23/2018	Chloride	28000	2500	1200	250000000	mg/L
EP-9	2/23/2018	Fluoride, Total	27	2	0.87	1600000	mg/L
EP-9	2/23/2018	Ortho-Phosphate	8.4	10	5	NA	mg/L
EP-9	2/23/2018	Nitrate & Nitrite	5.2	20	2.6	NA	mg/L
EP-9	2/23/2018	Sulfate	3900	2500	480	600000000	mg/L
EP-9	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-9	3/1/2018	Biochemical Oxygen Demand	26	2	2	NA	mg/L
EP-9	3/1/2018	Chemical Oxygen Demand	1510	100	100	NA	mg/L
EP-9	9/7/2018	Bromide	20	2	0.54	NA	mg/L
EP-9	9/7/2018	Chloride	42000	2500	910	250000000	mg/L
EP-9	9/7/2018	Fluoride, Total	42	2	0.59	1600000	mg/L
EP-9	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-9	9/7/2018	Nitrate & Nitrite	ND	40	11	NA	mg/L
EP-9	9/7/2018	Sulfate	4600	2500	1000	600000000	mg/L
EP-9	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-9	9/14/2018	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-9	9/14/2018	Chemical Oxygen Demand	2200	1000	1000	NA	mg/L
EP-9	4/29/2019	Biochemical Oxygen Demand	90	2	2	NA	mg/L
EP-9	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-9	4/29/2019	Bromide	12	10	1.7753	NA	mg/L
EP-9	4/29/2019	Chloride	55000	2500	2500	250000000	mg/L
EP-9	4/29/2019	Fluoride, Total	25	2	1	1600000	mg/L
EP-9	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-9	4/29/2019	Nitrogen, Nitrite	39	20	0.76	1000000	mg/L
EP-9	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-9	4/29/2019	Sulfate	6100	2500	267.5	600000000	mg/L
EP-9	4/29/2019	Chemical Oxygen Demand	1630	100	100	NA	mg/L
EP-9	11/20/2019	Bromide	17	20	10	NA	mg/L
EP-9	11/20/2019	Chloride	57000	2500	1250	250000000	mg/L
EP-9	11/20/2019	Fluoride, Total	24	20	5.79636	1600000	mg/L
EP-9	11/20/2019	Nitrogen, Nitrate	ND	2	0.12155	10000000	mg/L
EP-9	11/20/2019	Nitrogen, Nitrite	ND	20	1.08	1000000	mg/L
EP-9	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-9	11/20/2019	Sulfate	6400	100	50	600000000	mg/L
EP-9	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-9	11/20/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	11/20/2019	Chemical Oxygen Demand	2230	250	250	NA	mg/L
EP-9	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-9	9/17/2020	Solids, Total Suspended	69	4	4	NA	mg/L
EP-9	9/17/2020	Chloride	150000	10000	5000	250000000	mg/L
EP-9	9/17/2020	Sulfate	12000	10000	5000	600000000	mg/L
EP-9	9/17/2020	Bromide	71	10	5	NA	mg/L
EP-9	9/17/2020	Fluoride, Total	41	10	4.3	1600000	mg/L
EP-9	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-9	9/17/2020	Chemical Oxygen Demand	428	15	3.9	NA	mg/L
EP-9	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-9	9/29/2020	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	12/21/2020	Chemical Oxygen Demand	2220	250	160	NA	mg/L
EP-9	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-9	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-9	12/21/2020	Sulfate	13100	500	185	600000000	mg/L
EP-9	12/21/2020	Chloride	183000	5000	600	250000000	mg/L
EP-9	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-9	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-9	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-9	12/21/2020	Solids, Total Suspended	1760	25	0	NA	mg/L
EP-9	12/21/2020	Biochemical Oxygen Demand	11.4	2	2	NA	mg/L
EP-9	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-9	12/21/2020	Solids, Total Suspended	1760	25	0	NA	mg/L
EP-9	9/17/2020	Solids, Total Suspended	69	4	4	NA	mg/L
KA-3	3/20/2012	Bromide	1.9	0.5	0.42	NA	mg/L
KA-3	3/20/2012	Chloride	440	25	10	250000000	mg/L
KA-3	3/20/2012	Fluoride, Total	2	0.5	0.1	1600000	mg/L
KA-3	3/20/2012	Ortho-Phosphate	ND	2.5	0.23	NA	mg/L
KA-3	3/20/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
KA-3	3/20/2012	Nitrogen, Nitrate	15	0.5	0.25	10000000	mg/L
KA-3	3/20/2012	Sulfate	220	2.5	1.1	600000000	mg/L
KA-3	3/20/2012	TPH DRO	1.8	1	0.57	16700	mg/L
KA-3	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/20/2012	TPH GRO	0.16	0.1	0.028	10100	mg/L
KA-3	6/12/2012	Bromide	3.9	0.5	0.37	NA	mg/L
KA-3	6/12/2012	Chloride	710	25	2.6	250000000	mg/L
KA-3	6/12/2012	Fluoride, Total	1.3	0.5	0.19	1600000	mg/L
KA-3	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
KA-3	6/12/2012	Nitrogen, Nitrite	2.1	0.5	0.25	1000000	mg/L
KA-3	6/12/2012	Nitrogen, Nitrate	11	0.5	0.25	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2012	Sulfate	220	10	2.4	600000000	mg/L
KA-3	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/12/2012	TPH GRO	0.14	0.05	0.014	10100	mg/L
KA-3	8/21/2012	Bromide	1.2	0.1	0.074	NA	mg/L
KA-3	8/21/2012	Chloride	250	10	1	250000000	mg/L
KA-3	8/21/2012	Fluoride, Total	ND	2	0.76	1600000	mg/L
KA-3	8/21/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
KA-3	8/21/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
KA-3	8/21/2012	Nitrogen, Nitrate	0.31	0.1	0.05	10000000	mg/L
KA-3	8/21/2012	Sulfate	43	10	2.4	600000000	mg/L
KA-3	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/21/2012	TPH GRO	0.1	0.05	0.014	10100	mg/L
KA-3	11/28/2012	Bromide	4	0.5	0.38	NA	mg/L
KA-3	11/28/2012	Chloride	870	25	2.6	250000000	mg/L
KA-3	11/28/2012	Fluoride, Total	0.98	0.5	0.19	1600000	mg/L
KA-3	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
KA-3	11/28/2012	Nitrogen, Nitrite	2.8	0.5	0.25	1000000	mg/L
KA-3	11/28/2012	Nitrogen, Nitrate	9.9	0.5	0.25	10000000	mg/L
KA-3	11/28/2012	Sulfate	270	10	2.4	600000000	mg/L
KA-3	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	11/28/2012	TPH GRO	ND	0.1	0.028	10100	mg/L
KA-3	3/18/2013	Bromide	1.2	0.5	0.38	NA	mg/L
KA-3	3/18/2013	Chloride	180	10	1.3	250000000	mg/L
KA-3	3/18/2013	Fluoride, Total	1.8	0.5	0.1	1600000	mg/L
KA-3	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
KA-3	3/18/2013	Nitrate & Nitrite	2.4	1	0.19	NA	mg/L
KA-3	3/18/2013	Sulfate	81	2.5	1.2	600000000	mg/L
KA-3	3/18/2013	TPH DRO	ND	1	0.4	16700	mg/L
KA-3	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/18/2013	TPH GRO	0.063	0.05	0.02	10100	mg/L
KA-3	6/12/2013	Bromide	1.1	1	0.26	NA	mg/L
KA-3	6/12/2013	Chloride	190	5	1.5	250000000	mg/L
KA-3	6/12/2013	Fluoride, Total	1.4	1	0.33	1600000	mg/L
KA-3	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
KA-3	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
KA-3	6/12/2013	Sulfate	33	5	1.2	600000000	mg/L
KA-3	6/12/2013	TPH DRO	ND	1	0.4	16700	mg/L
KA-3	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/12/2013	TPH GRO	0.072	0.05	0.02	10100	mg/L
KA-3	9/3/2013	Bromide	1	0.1	0.026	NA	mg/L
KA-3	9/3/2013	Chloride	170	10	3	250000000	mg/L
KA-3	9/3/2013	Fluoride, Total	1.1	0.1	0.033	1600000	mg/L
KA-3	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	9/3/2013	Nitrate & Nitrite	20	1	0.18	NA	mg/L
KA-3	9/3/2013	Sulfate	39	0.5	0.12	600000000	mg/L
KA-3	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/3/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
KA-3	11/12/2013	Bromide	1.4	0.1	0.079	NA	mg/L
KA-3	11/12/2013	Chloride	110	10	7.8	250000000	mg/L
KA-3	11/12/2013	Fluoride, Total	1.3	0.1	0.035	1600000	mg/L
KA-3	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
KA-3	11/12/2013	Nitrogen, Nitrite	0.2	0.1	0.015	1000000	mg/L
KA-3	11/12/2013	Nitrogen, Nitrate	9.3	2	1.3	10000000	mg/L
KA-3	11/12/2013	Sulfate	54	10	3.2	600000000	mg/L
KA-3	11/12/2013	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	11/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
KA-3	3/10/2014	Bromide	1.8	0.5	0.39	NA	mg/L
KA-3	3/10/2014	Chloride	140	10	7.8	250000000	mg/L
KA-3	3/10/2014	Fluoride, Total	1.1	0.5	0.17	1600000	mg/L
KA-3	3/10/2014	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
KA-3	3/10/2014	Nitrogen, Nitrite	ND	0.5	0.075	1000000	mg/L
KA-3	3/10/2014	Nitrogen, Nitrate	13	0.5	0.33	10000000	mg/L
KA-3	3/10/2014	Sulfate	72	2.5	0.8	600000000	mg/L
KA-3	3/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	6/5/2014	Bromide	1.6	0.1	0.022	NA	mg/L
KA-3	6/5/2014	Chloride	180	10	5	250000000	mg/L
KA-3	6/5/2014	Fluoride, Total	1	0.1	0.018	1600000	mg/L
KA-3	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
KA-3	6/5/2014	Nitrate & Nitrite	7.7	1	0.076	NA	mg/L
KA-3	6/5/2014	Sulfate	95	10	1.4	600000000	mg/L
KA-3	6/5/2014	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/5/2014	TPH GRO	ND	0.05	0.019	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	Bromide	4.4	0.1	0.022	NA	mg/L
KA-3	9/11/2014	Chloride	760	50	25	250000000	mg/L
KA-3	9/11/2014	Fluoride, Total	0.45	0.1	0.018	1600000	mg/L
KA-3	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
KA-3	9/11/2014	Nitrate & Nitrite	19	1	0.076	NA	mg/L
KA-3	9/11/2014	Sulfate	420	10	1.6	600000000	mg/L
KA-3	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
KA-3	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	11/11/2014	Bromide	1.2	0.1	0.026	NA	mg/L
KA-3	11/11/2014	Chloride	160	10	0.43	250000000	mg/L
KA-3	11/11/2014	Fluoride, Total	1.1	0.1	0.015	1600000	mg/L
KA-3	11/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
KA-3	11/11/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
KA-3	11/11/2014	Sulfate	54	10	1.6	600000000	mg/L
KA-3	11/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
KA-3	11/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	3/10/2015	Bromide	1	0.1	0.077	NA	mg/L
KA-3	3/10/2015	Chloride	120	10	2.7	250000000	mg/L
KA-3	3/10/2015	Fluoride, Total	1.1	0.1	0.029	1600000	mg/L
KA-3	3/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
KA-3	3/10/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
KA-3	3/10/2015	Nitrogen, Nitrate	0.53	0.1	0.032	10000000	mg/L
KA-3	3/10/2015	Sulfate	43	10	2.3	600000000	mg/L
KA-3	3/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
KA-3	6/2/2015	Bromide	1.3	1	0.77	NA	mg/L
KA-3	6/2/2015	Chloride	150	5	1.3	250000000	mg/L
KA-3	6/2/2015	Fluoride, Total	1.5	1	0.29	1600000	mg/L
KA-3	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
KA-3	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
KA-3	6/2/2015	Sulfate	42	5	1.1	600000000	mg/L
KA-3	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/11/2015	Bromide	1.1	0.1	0.077	NA	mg/L
KA-3	8/11/2015	Chloride	130	10	2.7	250000000	mg/L
KA-3	8/11/2015	Fluoride, Total	1	0.1	0.029	1600000	mg/L
KA-3	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
KA-3	8/11/2015	Nitrate & Nitrite	2.8	1	0.22	NA	mg/L
KA-3	8/11/2015	Sulfate	52	10	2.3	600000000	mg/L
KA-3	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
KA-3	10/28/2015	Bromide	1.3	0.1	0.068	NA	mg/L
KA-3	10/28/2015	Chloride	120	10	6.8	250000000	mg/L
KA-3	10/28/2015	Fluoride, Total	1.1	0.1	0.032	1600000	mg/L
KA-3	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
KA-3	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
KA-3	10/28/2015	Sulfate	57	10	6.4	600000000	mg/L
KA-3	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
KA-3	3/3/2016	Bromide	0.92	0.1	0.032	NA	mg/L
KA-3	3/3/2016	Chloride	110	10	0.55	250000000	mg/L
KA-3	3/3/2016	Fluoride, Total	0.96	0.1	0.023	1600000	mg/L
KA-3	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
KA-3	3/3/2016	Nitrogen, Nitrite	ND	0.1	0.042	1000000	mg/L
KA-3	3/3/2016	Nitrogen, Nitrate	0.71	0.1	0.042	10000000	mg/L
KA-3	3/3/2016	Sulfate	34	0.5	0.064	600000000	mg/L
KA-3	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/3/2016	TPH GRO	0.063	0.05	0.025	10100	mg/L
KA-3	6/7/2016	Bromide	1	0.1	0.032	NA	mg/L
KA-3	6/7/2016	Chloride	190	10	0.55	250000000	mg/L
KA-3	6/7/2016	Fluoride, Total	1	0.1	0.023	1600000	mg/L
KA-3	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
KA-3	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
KA-3	6/7/2016	Sulfate	25	0.5	0.064	600000000	mg/L
KA-3	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/7/2016	TPH GRO	0.11	0.05	0.025	10100	mg/L
KA-3	9/1/2016	Bromide	1.2	0.1	0.044	NA	mg/L
KA-3	9/1/2016	Chloride	210	10	1	250000000	mg/L
KA-3	9/1/2016	Fluoride, Total	0.86	0.1	0.05	1600000	mg/L
KA-3	9/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
KA-3	9/1/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
KA-3	9/1/2016	Nitrogen, Nitrate	0.25	0.1	0.041	10000000	mg/L
KA-3	9/1/2016	Sulfate	36	0.5	0.14	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/1/2016	TPH GRO	0.18	0.05	0.025	10100	mg/L
KA-3	11/14/2016	Bromide	0.6	0.1	0.044	NA	mg/L
KA-3	11/14/2016	Chloride	190	10	1	250000000	mg/L
KA-3	11/14/2016	Fluoride, Total	0.93	0.1	0.05	1600000	mg/L
KA-3	11/14/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
KA-3	11/14/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
KA-3	11/14/2016	Sulfate	35	0.5	0.14	600000000	mg/L
KA-3	11/14/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	11/14/2016	TPH GRO	0.13	0.05	0.025	10100	mg/L
KA-3	2/21/2017	Bromide	1.1	0.1	0.031	NA	mg/L
KA-3	2/21/2017	Chloride	160	10	5	250000000	mg/L
KA-3	2/21/2017	Fluoride, Total	1	0.1	0.05	1600000	mg/L
KA-3	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	2/21/2017	Sulfate	26	0.5	0.096	600000000	mg/L
KA-3	2/21/2017	TPH DRO	1	1	0.48	16700	mg/L
KA-3	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	2/21/2017	TPH GRO	0.2	0.05	0.025	10100	mg/L
KA-3	6/1/2017	Bromide	1.3	0.1	0.014	NA	mg/L
KA-3	6/1/2017	Chloride	220	10	5	250000000	mg/L
KA-3	6/1/2017	Fluoride, Total	0.66	0.1	0.044	1600000	mg/L
KA-3	6/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	6/1/2017	Nitrate & Nitrite	0.34	1	0.13	NA	mg/L
KA-3	6/1/2017	Sulfate	41	0.5	0.096	600000000	mg/L
KA-3	6/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
KA-3	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/1/2017	TPH GRO	0.068	0.05	0.025	10100	mg/L
KA-3	9/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
KA-3	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/5/2017	TPH GRO	0.12	0.05	0.025	10100	mg/L
KA-3	12/4/2017	Bromide	1.3	0.5	0.073	NA	mg/L
KA-3	12/4/2017	Chloride	200	10	5	250000000	mg/L
KA-3	12/4/2017	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
KA-3	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	12/4/2017	Sulfate	27	2.5	0.48	600000000	mg/L
KA-3	12/4/2017	TPH DRO	0.66	1	0.36	16700	mg/L
KA-3	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	12/4/2017	TPH GRO	0.15	0.05	0.0097	10100	mg/L
KA-3	2/9/2018	Bromide	1.5	0.5	0.073	NA	mg/L
KA-3	2/9/2018	Chloride	190	10	5	250000000	mg/L
KA-3	2/9/2018	Fluoride, Total	0.8	0.5	0.22	1600000	mg/L
KA-3	2/9/2018	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
KA-3	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	2/9/2018	Sulfate	30	2.5	0.48	600000000	mg/L
KA-3	2/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
KA-3	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
KA-3	2/9/2018	TPH GRO	0.12	0.05	0.0097	10100	mg/L
KA-3	4/30/2018	Bromide	1.4	0.5	0.13	NA	mg/L
KA-3	4/30/2018	Chloride	170	10	0.59	250000000	mg/L
KA-3	4/30/2018	Fluoride, Total	0.79	0.5	0.15	1600000	mg/L
KA-3	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
KA-3	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
KA-3	4/30/2018	Sulfate	18	2.5	1	600000000	mg/L
KA-3	4/30/2018	TPH DRO	0.65	1	0.63	16700	mg/L
KA-3	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
KA-3	4/30/2018	TPH GRO	2.9	0.05	0.021	10100	mg/L
KA-3	4/9/2019	TPH GRO	0.65	0.05	0.0211	10100	mg/L
KA-3	4/9/2019	TPH DRO	0.53	1	0.35	16700	mg/L
KA-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	4/9/2019	Bromide	1.6	0.5	0.0675	NA	mg/L
KA-3	4/9/2019	Chloride	210	10	10	250000000	mg/L
KA-3	4/9/2019	Fluoride, Total	0.88	0.5	0.25	1600000	mg/L
KA-3	4/9/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
KA-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
KA-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
KA-3	4/9/2019	Sulfate	15	2.5	0.32	600000000	mg/L
KA-3	5/28/2019	TPH GRO	0.48	0.25	0.1055	10100	mg/L
KA-3	5/28/2019	TPH DRO	0.64	1	0.35	16700	mg/L
KA-3	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	5/28/2019	Bromide	1.7	0.5	0.088765	NA	mg/L
KA-3	5/28/2019	Chloride	230	10	10	250000000	mg/L
KA-3	5/28/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
KA-3	5/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
KA-3	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Sulfate	12	2.5	0.3345	600000000	mg/L
KA-3	8/22/2019	TPH GRO	0.99	0.05	0.0211	10100	mg/L
KA-3	8/22/2019	TPH DRO	1.2	1	0.35	16700	mg/L
KA-3	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	8/22/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
KA-3	8/22/2019	Chloride	240	10	10	250000000	mg/L
KA-3	8/22/2019	Fluoride, Total	0.98	0.5	0.073	1600000	mg/L
KA-3	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
KA-3	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
KA-3	8/22/2019	Sulfate	9	2.5	0.3345	600000000	mg/L
KA-3	10/21/2019	TPH GRO	0.2	0.05	0.0211	10100	mg/L
KA-3	10/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
KA-3	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
KA-3	10/21/2019	Bromide	1.9	0.5	0.077	NA	mg/L
KA-3	10/21/2019	Chloride	240	10	10	250000000	mg/L
KA-3	10/21/2019	Fluoride, Total	0.96	0.5	0.144909	1600000	mg/L
KA-3	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
KA-3	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
KA-3	10/21/2019	Sulfate	12	2.5	0.3345	600000000	mg/L
KA-3	3/4/2020	TPH GRO	0.35	0.05	0.0068	10100	mg/L
KA-3	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
KA-3	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
KA-3	3/4/2020	Bromide	1.8	0.5	0.25	NA	mg/L
KA-3	3/4/2020	Fluoride, Total	0.29	0.5	0.11	1600000	mg/L
KA-3	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
KA-3	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
KA-3	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	3/4/2020	Sulfate	8.9	2.5	1.2	600000000	mg/L
KA-3	3/4/2020	Chloride	280	10	5	250000000	mg/L
KA-3	9/22/2020	TPH GRO	0.85	0.05	0.008	10100	mg/L
KA-3	9/22/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
KA-3	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
KA-3	9/22/2020	Bromide	1.5	0.5	0.25	NA	mg/L
KA-3	9/22/2020	Fluoride, Total	0.76	0.5	0.22	1600000	mg/L
KA-3	9/22/2020	Nitrogen, Nitrate	0.18	0.5	0.1	10000000	mg/L
KA-3	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
KA-3	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	9/22/2020	Sulfate	4.1	2.5	1.2	600000000	mg/L
KA-3	9/22/2020	Chloride	240	10	5	250000000	mg/L
KA-3	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
KA-3	12/17/2020	Nitrogen, Nitrate	1.09	0.1	0.033	10000000	mg/L
KA-3	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
KA-3	12/17/2020	Chloride	342	10	1.2	250000000	mg/L
KA-3	12/17/2020	Sulfate	74.5	10	3.7	600000000	mg/L
KA-3	12/17/2020	Bicarbonate	820	1	0.5	NA	mg/L
KA-3	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
KA-3	12/17/2020	TPH (C6-C10)	107	100	47	NA	ug/L
KA-3	12/17/2020	TPH DRO	1140	139	111	16700	ug/L
KA-3	12/17/2020	C28-C40	ND	139	111	NA	ug/L
LDU - East	3/20/2012	TPH DRO	30	1	0.57	16700	mg/L
LDU - East	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/20/2012	TPH GRO	31	10	2.8	10100	mg/L
LDU - East	6/12/2012	TPH DRO	27	1	0.57	16700	mg/L
LDU - East	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/12/2012	TPH GRO	24	5	1.4	10100	mg/L
LDU - East	8/21/2012	TPH DRO	10	1	0.57	16700	mg/L
LDU - East	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	8/21/2012	TPH GRO	17	5	1.4	10100	mg/L
LDU - East	11/28/2012	TPH DRO	19	1	0.57	16700	mg/L
LDU - East	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	11/28/2012	TPH GRO	27	5	1.4	10100	mg/L
LDU - East	3/18/2013	TPH DRO	28	1	0.4	16700	mg/L
LDU - East	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/18/2013	TPH GRO	50	10	3.9	10100	mg/L
LDU - East	6/12/2013	TPH DRO	18	1	0.4	16700	mg/L
LDU - East	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/12/2013	TPH GRO	38	10	3.9	10100	mg/L
LDU - East	11/12/2013	TPH DRO	410	10	5.7	16700	mg/L
LDU - East	11/12/2013	TPH GRO	32	10	3.9	10100	mg/L
LDU - East	3/10/2014	TPH DRO	310	10	5.7	16700	mg/L
LDU - East	3/10/2014	TPH ORO	ND	50	50	85800	mg/L
LDU - East	3/10/2014	TPH GRO	200	10	3.8	10100	mg/L
LDU - East	5/14/2014	TPH DRO	90	10	5.7	16700	mg/L
LDU - East	5/14/2014	TPH GRO	56	5	1.9	10100	mg/L
LDU - East	6/3/2014	TPH DRO	29	1	0.57	16700	mg/L
LDU - East	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/3/2014	TPH GRO	130	10	3.8	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	10/16/2014	Hexane Extractable Materia	15	5.7	3.9	NA	mg/L
LDU - East	11/11/2014	TPH DRO	17	1	0.83	16700	mg/L
LDU - East	11/11/2014	TPH GRO	38	10	3.8	10100	mg/L
LDU - East	3/10/2015	TPH DRO	26	1	0.91	16700	mg/L
LDU - East	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/10/2015	TPH GRO	9.4	1	0.24	10100	mg/L
LDU - East	6/1/2015	TPH DRO	17	1	0.91	16700	mg/L
LDU - East	6/1/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/1/2015	TPH GRO	0.54	0.05	0.012	10100	mg/L
LDU - East	8/11/2015	TPH DRO	19	1	0.91	16700	mg/L
LDU - East	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	8/11/2015	TPH GRO	15	1	0.8	10100	mg/L
LDU - East	10/29/2015	TPH DRO	24	1	0.91	16700	mg/L
LDU - East	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	10/29/2015	TPH GRO	5.5	2.5	0.6	10100	mg/L
LDU - East	3/1/2016	TPH DRO	21	1	0.69	16700	mg/L
LDU - East	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/1/2016	TPH GRO	5.6	0.5	0.25	10100	mg/L
LDU - East	6/7/2016	TPH DRO	16	1	0.69	16700	mg/L
LDU - East	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/7/2016	TPH GRO	4.9	0.05	0.025	10100	mg/L
LDU - East	7/7/2016	Hexane Extractable Materia	22	5.7	2.7	NA	mg/L
LDU - East	11/17/2016	TPH DRO	16	1	0.69	16700	mg/L
LDU - East	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	11/17/2016	TPH GRO	1.6	0.5	0.25	10100	mg/L
LDU - East	2/21/2017	TPH DRO	27	1	0.48	16700	mg/L
LDU - East	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	2/21/2017	TPH GRO	4.4	0.5	0.25	10100	mg/L
LDU - East	6/2/2017	TPH DRO	7.1	1	0.36	16700	mg/L
LDU - East	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/2/2017	TPH GRO	2	0.5	0.25	10100	mg/L
LDU - East	9/5/2017	TPH DRO	6.9	1	0.36	16700	mg/L
LDU - East	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	9/5/2017	TPH GRO	5.5	0.25	0.12	10100	mg/L
LDU - East	12/4/2017	TPH DRO	4.4	1	0.36	16700	mg/L
LDU - East	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	12/4/2017	TPH GRO	7.6	0.5	0.097	10100	mg/L
LDU - East	2/12/2018	TPH DRO	4.5	1	0.63	16700	mg/L
LDU - East	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - East	2/12/2018	TPH GRO	7.9	0.5	0.097	10100	mg/L
LDU - East	4/30/2018	TPH DRO	4.2	1	0.63	16700	mg/L
LDU - East	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - East	4/30/2018	TPH GRO	5.1	1	0.42	10100	mg/L
LDU - East	4/9/2019	TPH GRO	3.5	0.25	0.1055	10100	mg/L
LDU - East	4/9/2019	TPH DRO	3	1	0.35	16700	mg/L
LDU - East	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	5/28/2019	TPH GRO	2.4	0.25	0.1055	10100	mg/L
LDU - East	5/28/2019	TPH DRO	2.4	1	0.35	16700	mg/L
LDU - East	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	8/22/2019	TPH GRO	2.2	0.25	0.1055	10100	mg/L
LDU - East	8/22/2019	TPH DRO	2.8	1	0.35	16700	mg/L
LDU - East	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	11/19/2019	TPH GRO	5.2	0.5	0.211	10100	mg/L
LDU - East	11/19/2019	TPH DRO	1.1	0.4	0.132	16700	mg/L
LDU - East	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
LDU - East	3/10/2020	TPH GRO	2.3	0.25	0.034	10100	mg/L
LDU - East	3/10/2020	TPH DRO	1.9	0.4	0.2	16700	mg/L
LDU - East	3/10/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
LDU - East	12/17/2020	TPH (C6-C10)	1490	100	47	NA	ug/L
LDU - East	12/17/2020	TPH DRO	5240	148	119	16700	ug/L
LDU - East	12/17/2020	C28-C40	ND	148	119	NA	ug/L
LDU - West	3/20/2012	TPH DRO	6.9	1	0.57	16700	mg/L
LDU - West	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/20/2012	TPH GRO	42	2.5	0.7	10100	mg/L
LDU - West	6/12/2012	TPH DRO	9	1	0.57	16700	mg/L
LDU - West	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/12/2012	TPH GRO	27	5	1.4	10100	mg/L
LDU - West	8/21/2012	TPH DRO	4	1	0.57	16700	mg/L
LDU - West	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	8/21/2012	TPH GRO	18	5	1.4	10100	mg/L
LDU - West	11/28/2012	TPH DRO	5.7	1	0.57	16700	mg/L
LDU - West	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	11/28/2012	TPH GRO	25	5	1.4	10100	mg/L
LDU - West	3/18/2013	TPH DRO	2.6	1	0.4	16700	mg/L
LDU - West	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/18/2013	TPH GRO	20	5	2	10100	mg/L
LDU - West	6/12/2013	TPH DRO	4.7	1	0.4	16700	mg/L
LDU - West	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/12/2013	TPH GRO	31	5	2	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2013	TPH DRO	110	10	5.7	16700	mg/L
LDU - West	9/5/2013	TPH ORO	ND	50	50	85800	mg/L
LDU - West	9/5/2013	TPH GRO	47	5	2	10100	mg/L
LDU - West	11/12/2013	TPH DRO	17	10	5.7	16700	mg/L
LDU - West	11/12/2013	TPH GRO	30	5	2	10100	mg/L
LDU - West	3/10/2014	TPH DRO	14	1	0.57	16700	mg/L
LDU - West	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/10/2014	TPH GRO	13	5	1.9	10100	mg/L
LDU - West	5/14/2014	TPH DRO	14	1	0.57	16700	mg/L
LDU - West	5/14/2014	TPH GRO	14	1	0.38	10100	mg/L
LDU - West	6/3/2014	TPH DRO	8	1	0.57	16700	mg/L
LDU - West	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/3/2014	TPH GRO	12	1	0.38	10100	mg/L
LDU - West	9/11/2014	TPH DRO	6.6	1	0.83	16700	mg/L
LDU - West	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	9/11/2014	TPH GRO	6.7	2.5	0.96	10100	mg/L
LDU - West	3/10/2015	TPH DRO	12	1	0.91	16700	mg/L
LDU - West	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/10/2015	TPH GRO	2.7	0.25	0.06	10100	mg/L
LDU - West	8/11/2015	TPH DRO	9.9	1	0.91	16700	mg/L
LDU - West	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	8/11/2015	TPH GRO	11	1	0.8	10100	mg/L
LDU - West	10/29/2015	TPH DRO	12	1	0.91	16700	mg/L
LDU - West	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	10/29/2015	TPH GRO	3	1	0.24	10100	mg/L
LDU - West	3/1/2016	TPH DRO	7.2	1	0.69	16700	mg/L
LDU - West	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/1/2016	TPH GRO	1.9	0.25	0.13	10100	mg/L
LDU - West	6/7/2016	TPH DRO	7.3	1	0.69	16700	mg/L
LDU - West	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/7/2016	TPH GRO	3.6	0.05	0.025	10100	mg/L
LDU - West	7/7/2016	Hexane Extractable Materia	29	6.3	3	NA	mg/L
LDU - West	11/17/2016	TPH DRO	8.6	1	0.69	16700	mg/L
LDU - West	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	11/17/2016	TPH GRO	2.2	0.25	0.13	10100	mg/L
LDU - West	2/21/2017	TPH DRO	14	1	0.48	16700	mg/L
LDU - West	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	2/21/2017	TPH GRO	2.6	0.5	0.25	10100	mg/L
LDU - West	6/2/2017	TPH DRO	8.5	1	0.36	16700	mg/L
LDU - West	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/2/2017	TPH GRO	1.1	0.5	0.25	10100	mg/L
LDU - West	9/5/2017	TPH DRO	9.8	1	0.36	16700	mg/L
LDU - West	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	9/5/2017	TPH GRO	0.76	0.25	0.12	10100	mg/L
LDU - West	12/4/2017	TPH DRO	7.7	1	0.36	16700	mg/L
LDU - West	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	12/4/2017	TPH GRO	1.2	0.5	0.097	10100	mg/L
LDU - West	2/12/2018	TPH DRO	7.6	1	0.63	16700	mg/L
LDU - West	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - West	2/12/2018	TPH GRO	5	0.5	0.097	10100	mg/L
LDU - West	4/30/2018	TPH DRO	9.4	1	0.63	16700	mg/L
LDU - West	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - West	4/30/2018	TPH GRO	5.8	1	0.42	10100	mg/L
LDU - West	4/9/2019	TPH GRO	0.57	0.05	0.0211	10100	mg/L
LDU - West	4/9/2019	TPH DRO	7.4	1	0.35	16700	mg/L
LDU - West	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	5/28/2019	TPH GRO	0.32	0.05	0.0211	10100	mg/L
LDU - West	5/28/2019	TPH DRO	7.8	1	0.35	16700	mg/L
LDU - West	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	8/22/2019	TPH GRO	0.32	0.05	0.0211	10100	mg/L
LDU - West	8/22/2019	TPH DRO	6.7	1	0.35	16700	mg/L
LDU - West	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	11/19/2019	TPH GRO	0.13	0.05	0.0211	10100	mg/L
LDU - West	11/19/2019	TPH DRO	2.3	0.4	0.132	16700	mg/L
LDU - West	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
LDU - West	3/10/2020	TPH GRO	0.91	0.25	0.034	10100	mg/L
LDU - West	3/10/2020	TPH DRO	3	0.4	0.2	16700	mg/L
LDU - West	3/10/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
LDU - West	12/17/2020	TPH (C6-C10)	444	100	47	NA	ug/L
LDU - West	12/17/2020	TPH DRO	2860	140	112	16700	ug/L
LDU - West	12/17/2020	C28-C40	ND	140	112	NA	ug/L
MKTF-02	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-02	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	4/8/2014	TPH GRO	0.67	0.05	0.0092	10100	mg/L
MKTF-02	6/6/2014	Bromide	0.46	0.1	0.022	NA	mg/L
MKTF-02	6/6/2014	Chloride	750	50	25	250000000	mg/L
MKTF-02	6/6/2014	Fluoride, Total	0.76	0.1	0.018	1600000	mg/L
MKTF-02	6/6/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-02	6/6/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Sulfate	200	10	1.4	600000000	mg/L
MKTF-02	6/6/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-02	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/6/2014	TPH GRO	1.5	0.05	0.0071	10100	mg/L
MKTF-02	9/18/2014	TPH DRO	1.7	1	0.83	16700	mg/L
MKTF-02	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	9/18/2014	TPH GRO	6.8	0.05	0.019	10100	mg/L
MKTF-02	11/14/2014	Bromide	1.2	1	0.26	NA	mg/L
MKTF-02	11/14/2014	Chloride	830	50	2.2	250000000	mg/L
MKTF-02	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-02	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-02	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-02	11/14/2014	Sulfate	230	5	0.82	600000000	mg/L
MKTF-02	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-02	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/14/2014	TPH GRO	0.61	0.05	0.019	10100	mg/L
MKTF-02	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	3/11/2015	TPH GRO	1.3	0.05	0.012	10100	mg/L
MKTF-02	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/9/2015	TPH GRO	3.5	0.05	0.012	10100	mg/L
MKTF-02	8/21/2015	Bromide	1.1	0.5	0.34	NA	mg/L
MKTF-02	8/21/2015	Chloride	550	25	17	250000000	mg/L
MKTF-02	8/21/2015	Fluoride, Total	1.2	0.5	0.16	1600000	mg/L
MKTF-02	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-02	8/21/2015	Nitrate & Nitrite	6.2	1	0.22	NA	mg/L
MKTF-02	8/21/2015	Sulfate	130	2.5	1.6	600000000	mg/L
MKTF-02	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	8/21/2015	TPH GRO	2	0.05	0.04	10100	mg/L
MKTF-02	11/4/2015	Bromide	0.48	0.1	0.068	NA	mg/L
MKTF-02	11/4/2015	Chloride	360	10	6.8	250000000	mg/L
MKTF-02	11/4/2015	Fluoride, Total	2.5	2	0.64	1600000	mg/L
MKTF-02	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-02	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-02	11/4/2015	Sulfate	49	0.5	0.32	600000000	mg/L
MKTF-02	11/4/2015	TPH DRO	1	1	0.91	16700	mg/L
MKTF-02	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/4/2015	TPH GRO	2.5	0.25	0.06	10100	mg/L
MKTF-02	2/24/2016	Bromide	1.7	0.5	0.16	NA	mg/L
MKTF-02	2/24/2016	Chloride	520	25	1.4	250000000	mg/L
MKTF-02	2/24/2016	Fluoride, Total	1.8	0.5	0.11	1600000	mg/L
MKTF-02	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-02	2/24/2016	Nitrate & Nitrite	8.8	1	0.42	NA	mg/L
MKTF-02	2/24/2016	Sulfate	160	2.5	0.32	600000000	mg/L
MKTF-02	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-02	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	2/24/2016	TPH GRO	1.2	0.25	0.13	10100	mg/L
MKTF-02	6/10/2016	Bromide	0.16	0.1	0.032	NA	mg/L
MKTF-02	6/10/2016	Chloride	390	25	1.4	250000000	mg/L
MKTF-02	6/10/2016	Fluoride, Total	2.7	0.1	0.023	1600000	mg/L
MKTF-02	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-02	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-02	6/10/2016	Sulfate	50	0.5	0.064	600000000	mg/L
MKTF-02	6/10/2016	TPH DRO	1.2	1	0.69	16700	mg/L
MKTF-02	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/10/2016	TPH GRO	5.2	0.25	0.13	10100	mg/L
MKTF-02	9/7/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-02	9/7/2016	Chloride	410	25	2.5	250000000	mg/L
MKTF-02	9/7/2016	Fluoride, Total	2.3	0.1	0.05	1600000	mg/L
MKTF-02	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-02	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-02	9/7/2016	Sulfate	48	0.5	0.14	600000000	mg/L
MKTF-02	9/7/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-02	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	9/7/2016	TPH GRO	6.2	0.5	0.15	10100	mg/L
MKTF-02	10/28/2016	Bromide	0.32	0.1	0.044	NA	mg/L
MKTF-02	10/28/2016	Chloride	380	25	2.5	250000000	mg/L
MKTF-02	10/28/2016	Fluoride, Total	2.7	0.1	0.05	1600000	mg/L
MKTF-02	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-02	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-02	10/28/2016	Sulfate	40	0.5	0.14	600000000	mg/L
MKTF-02	10/28/2016	TPH DRO	1.4	1	0.69	16700	mg/L
MKTF-02	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	10/28/2016	TPH GRO	6.1	0.5	0.25	10100	mg/L
MKTF-02	3/16/2017	Bromide	4.1	0.5	0.15	NA	mg/L
MKTF-02	3/16/2017	Chloride	400	25	12	250000000	mg/L
MKTF-02	3/16/2017	Fluoride, Total	2.7	0.5	0.25	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	3/16/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-02	3/16/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	3/16/2017	Sulfate	16	2.5	0.48	600000000	mg/L
MKTF-02	3/16/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-02	3/16/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	3/16/2017	TPH GRO	14	0.25	0.048	10100	mg/L
MKTF-02	10/3/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-02	10/3/2017	Chloride	460	25	12	250000000	mg/L
MKTF-02	10/3/2017	Fluoride, Total	1.8	0.5	0.22	1600000	mg/L
MKTF-02	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-02	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-02	10/3/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	10/3/2017	Sulfate	20	2.5	0.48	600000000	mg/L
MKTF-02	10/3/2017	TPH DRO	1.5	1	0.36	16700	mg/L
MKTF-02	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	10/3/2017	TPH GRO	9.3	0.25	0.048	10100	mg/L
MKTF-02	11/20/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-02	11/20/2017	Chloride	540	25	12	250000000	mg/L
MKTF-02	11/20/2017	Fluoride, Total	2.4	0.5	0.22	1600000	mg/L
MKTF-02	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-02	11/20/2017	Sulfate	18	2.5	0.48	600000000	mg/L
MKTF-02	11/20/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-02	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/20/2017	TPH GRO	12	0.5	0.25	10100	mg/L
MKTF-02	2/6/2018	Bromide	1	0.5	0.073	NA	mg/L
MKTF-02	2/6/2018	Chloride	520	25	12	250000000	mg/L
MKTF-02	2/6/2018	Fluoride, Total	2.3	0.5	0.22	1600000	mg/L
MKTF-02	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-02	2/6/2018	Sulfate	20	2.5	0.48	600000000	mg/L
MKTF-02	2/6/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-02	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	2/6/2018	TPH GRO	7.7	0.5	0.097	10100	mg/L
MKTF-02	5/1/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-02	5/1/2018	Chloride	520	25	1.5	250000000	mg/L
MKTF-02	5/1/2018	Fluoride, Total	2.3	0.5	0.15	1600000	mg/L
MKTF-02	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-02	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-02	5/1/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-02	5/1/2018	Sulfate	15	2.5	1	600000000	mg/L
MKTF-02	5/1/2018	TPH DRO	3.2	1	0.63	16700	mg/L
MKTF-02	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	5/1/2018	TPH GRO	9.1	1	0.42	10100	mg/L
MKTF-02	8/20/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-02	8/20/2018	Chloride	510	25	1.5	250000000	mg/L
MKTF-02	8/20/2018	Fluoride, Total	2.1	0.5	0.15	1600000	mg/L
MKTF-02	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-02	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-02	8/20/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-02	8/20/2018	Sulfate	11	2.5	1	600000000	mg/L
MKTF-02	8/20/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-02	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	8/20/2018	TPH GRO	7.8	0.5	0.097	10100	mg/L
MKTF-02	11/28/2018	Bromide	0.97	0.5	0.1	NA	mg/L
MKTF-02	11/28/2018	Chloride	570	25	25	250000000	mg/L
MKTF-02	11/28/2018	Fluoride, Total	2.3	0.5	0.5	1600000	mg/L
MKTF-02	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-02	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-02	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-02	11/28/2018	Sulfate	5.6	2.5	0.63	600000000	mg/L
MKTF-02	11/28/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-02	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/28/2018	TPH GRO	18	0.5	0.24	10100	mg/L
MKTF-02	3/28/2019	TPH GRO	4.1	1	0.614	10100	mg/L
MKTF-02	3/28/2019	Bromide	0.76	0.5	0.0675	NA	mg/L
MKTF-02	3/28/2019	Chloride	1400	50	50	250000000	mg/L
MKTF-02	3/28/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-02	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-02	3/28/2019	Phosphorus, Ortho	0.29	2.5	0.1305	NA	mg/L
MKTF-02	3/28/2019	Sulfate	52	2.5	0.32	600000000	mg/L
MKTF-02	3/28/2019	TPH DRO	3.8	1	0.35	16700	mg/L
MKTF-02	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	5/6/2019	TPH GRO	5.3	1	0.614	10100	mg/L
MKTF-02	5/6/2019	TPH DRO	3.5	1	0.35	16700	mg/L
MKTF-02	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	5/6/2019	Bromide	0.72	0.5	0.088765	NA	mg/L
MKTF-02	5/6/2019	Chloride	1600	50	6.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
MKTF-02	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-02	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-02	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-02	5/6/2019	Sulfate	61	2.5	0.2675	600000000	mg/L
MKTF-02	8/23/2019	TPH GRO	3.9	1	0.614	10100	mg/L
MKTF-02	8/23/2019	TPH DRO	3.1	1	0.35	16700	mg/L
MKTF-02	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	8/23/2019	Bromide	0.86	0.5	0.088765	NA	mg/L
MKTF-02	8/23/2019	Chloride	2000	100	100	250000000	mg/L
MKTF-02	8/23/2019	Fluoride, Total	0.95	0.5	0.073	1600000	mg/L
MKTF-02	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-02	8/23/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-02	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-02	8/23/2019	Sulfate	150	2.5	0.3345	600000000	mg/L
MKTF-02	11/19/2019	TPH GRO	2.4	0.5	0.211	10100	mg/L
MKTF-02	11/19/2019	TPH DRO	0.65	0.4	0.132	16700	mg/L
MKTF-02	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-02	11/19/2019	Bromide, dissolved	0.92	0.5	0.077	NA	mg/L
MKTF-02	11/19/2019	Chloride, Dissolved	1900	100	50	NA	mg/L
MKTF-02	11/19/2019	Fluoride, Dissolved	0.98	0.5	0.144909	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrate, Dissolved	ND	0.5	0.030387	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrite, Dissolved	ND	2	0.108	NA	mg/L
MKTF-02	11/19/2019	Orthophosphate as P, Dissolved	ND	2.5	1.25	NA	mg/L
MKTF-02	11/19/2019	Sulfate, Dissolved	330	10	1.338	NA	mg/L
MKTF-02	11/19/2019	TPH GRO	2.4	0.5	0.211	10100	mg/L
MKTF-02	11/19/2019	TPH DRO	0.41	0.4	0.132	16700	mg/L
MKTF-02	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-02	11/19/2019	Bromide, dissolved	0.85	0.5	0.077	NA	mg/L
MKTF-02	11/19/2019	Chloride, Dissolved	2000	100	50	NA	mg/L
MKTF-02	11/19/2019	Fluoride, Dissolved	0.89	0.5	0.144909	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrate, Dissolved	ND	0.5	0.030387	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrite, Dissolved	ND	2	0.108	NA	mg/L
MKTF-02	11/19/2019	Orthophosphate as P, Dissolved	ND	2.5	1.25	NA	mg/L
MKTF-02	11/19/2019	Sulfate, Dissolved	390	10	1.338	NA	mg/L
MKTF-02	2/25/2020	TPH GRO	7.9	0.25	0.034	10100	mg/L
MKTF-02	2/25/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
MKTF-02	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-02	2/25/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-02	2/25/2020	Fluoride, Total	0.61	0.5	0.11	1600000	mg/L
MKTF-02	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-02	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	2/25/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-02	2/25/2020	Chloride	1300	50	25	250000000	mg/L
MKTF-02	9/21/2020	TPH GRO	9.8	0.25	0.04	10100	mg/L
MKTF-02	9/21/2020	TPH DRO	2.1	0.07	0.067	16700	mg/L
MKTF-02	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-02	9/21/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-02	9/21/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-02	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-02	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	9/21/2020	Sulfate	64	2.5	1.2	600000000	mg/L
MKTF-02	9/21/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-02	9/21/2020	Chloride	1000	50	25	250000000	mg/L
MKTF-02	9/21/2020	Solids, Total Suspended	20	4	4	NA	mg/L
MKTF-02	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-02	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-02	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-02	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-02	12/18/2020	Chloride	3020	100	12	250000000	mg/L
MKTF-02	12/18/2020	Sulfate	185	100	37	600000000	mg/L
MKTF-02	12/18/2020	Bicarbonate	219	1	0.5	NA	mg/L
MKTF-02	12/18/2020	TPH DRO	4550	142	114	16700	ug/L
MKTF-02	12/18/2020	C28-C40	ND	142	114	NA	ug/L
MKTF-02	12/18/2020	TPH (C6-C10)	3150	500	235	NA	ug/L
MKTF-02	9/21/2020	Solids, Total Suspended	20	4	4	NA	mg/L
MKTF-04	4/11/2014	TPH DRO	4.5	1	0.57	16700	mg/L
MKTF-04	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	4/11/2014	TPH GRO	9.4	0.5	0.19	10100	mg/L
MKTF-04	6/4/2014	Bromide	1.8	0.1	0.022	NA	mg/L
MKTF-04	6/4/2014	Chloride	190	10	5	250000000	mg/L
MKTF-04	6/4/2014	Fluoride, Total	0.7	0.1	0.018	1600000	mg/L
MKTF-04	6/4/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-04	6/4/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-04	6/4/2014	Sulfate	6.8	0.5	0.068	600000000	mg/L
MKTF-04	6/4/2014	TPH DRO	2.9	1	0.57	16700	mg/L
MKTF-04	6/4/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/4/2014	TPH GRO	8.2	0.5	0.071	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/15/2014	TPH DRO	1.5	1	0.83	16700	mg/L
MKTF-04	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/15/2014	TPH GRO	3.4	0.5	0.19	10100	mg/L
MKTF-04	11/13/2014	Bromide	2.1	1	0.26	NA	mg/L
MKTF-04	11/13/2014	Chloride	250	50	2.2	250000000	mg/L
MKTF-04	11/13/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-04	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-04	11/13/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-04	11/13/2014	Sulfate	26	5	0.82	600000000	mg/L
MKTF-04	11/13/2014	TPH DRO	2	1	0.83	16700	mg/L
MKTF-04	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/13/2014	TPH GRO	4.2	0.5	0.19	10100	mg/L
MKTF-04	3/16/2015	TPH DRO	1.9	1	0.91	16700	mg/L
MKTF-04	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	3/16/2015	TPH GRO	4.8	0.5	0.12	10100	mg/L
MKTF-04	6/4/2015	TPH DRO	2.3	1	0.91	16700	mg/L
MKTF-04	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/4/2015	TPH GRO	6.2	0.5	0.12	10100	mg/L
MKTF-04	8/18/2015	Bromide	0.33	0.1	0.077	NA	mg/L
MKTF-04	8/18/2015	Chloride	300	10	2.7	250000000	mg/L
MKTF-04	8/18/2015	Fluoride, Total	0.86	0.1	0.029	1600000	mg/L
MKTF-04	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-04	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-04	8/18/2015	Nitrogen, Nitrate	0.32	0.1	0.032	10000000	mg/L
MKTF-04	8/18/2015	Sulfate	4.2	0.5	0.11	600000000	mg/L
MKTF-04	8/18/2015	TPH DRO	3.7	1	0.91	16700	mg/L
MKTF-04	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	8/18/2015	TPH GRO	6.8	1	0.24	10100	mg/L
MKTF-04	11/3/2015	Bromide	2.4	0.5	0.34	NA	mg/L
MKTF-04	11/3/2015	Chloride	300	10	6.8	250000000	mg/L
MKTF-04	11/3/2015	Fluoride, Total	0.96	0.5	0.16	1600000	mg/L
MKTF-04	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-04	11/3/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-04	11/3/2015	Sulfate	3	2.5	1.6	600000000	mg/L
MKTF-04	11/3/2015	TPH DRO	3	1	0.91	16700	mg/L
MKTF-04	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/3/2015	TPH GRO	8.6	0.5	0.12	10100	mg/L
MKTF-04	2/29/2016	Bromide	2.8	0.5	0.16	NA	mg/L
MKTF-04	2/29/2016	Chloride	250	10	0.55	250000000	mg/L
MKTF-04	2/29/2016	Fluoride, Total	0.97	0.5	0.11	1600000	mg/L
MKTF-04	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-04	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-04	2/29/2016	Sulfate	3.2	2.5	0.32	600000000	mg/L
MKTF-04	2/29/2016	TPH DRO	3.6	1	0.69	16700	mg/L
MKTF-04	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	2/29/2016	TPH GRO	9.2	0.5	0.25	10100	mg/L
MKTF-04	6/9/2016	Bromide	3.2	2	0.65	NA	mg/L
MKTF-04	6/9/2016	Chloride	250	10	0.55	250000000	mg/L
MKTF-04	6/9/2016	Fluoride, Total	0.79	0.1	0.023	1600000	mg/L
MKTF-04	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-04	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-04	6/9/2016	Sulfate	7	0.5	0.064	600000000	mg/L
MKTF-04	6/9/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-04	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/9/2016	TPH GRO	9	0.5	0.25	10100	mg/L
MKTF-04	9/11/2016	Bromide	2.2	0.1	0.044	NA	mg/L
MKTF-04	9/11/2016	Chloride	220	10	1	250000000	mg/L
MKTF-04	9/11/2016	Fluoride, Total	0.74	0.1	0.05	1600000	mg/L
MKTF-04	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-04	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-04	9/11/2016	Sulfate	4.1	0.5	0.14	600000000	mg/L
MKTF-04	9/11/2016	TPH DRO	5.3	1	0.69	16700	mg/L
MKTF-04	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/11/2016	TPH GRO	10	0.25	0.075	10100	mg/L
MKTF-04	11/2/2016	Bromide	2.1	0.5	0.22	NA	mg/L
MKTF-04	11/2/2016	Chloride	180	10	1	250000000	mg/L
MKTF-04	11/2/2016	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-04	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-04	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-04	11/2/2016	Sulfate	6.1	2.5	0.71	600000000	mg/L
MKTF-04	11/2/2016	TPH DRO	4.1	1	0.69	16700	mg/L
MKTF-04	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/2/2016	TPH GRO	9.8	1	0.51	10100	mg/L
MKTF-04	3/2/2017	Bromide	2.1	0.1	0.031	NA	mg/L
MKTF-04	3/2/2017	Chloride	220	10	5	250000000	mg/L
MKTF-04	3/2/2017	Fluoride, Total	0.99	0.1	0.05	1600000	mg/L
MKTF-04	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-04	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	Sulfate	2.8	0.5	0.096	600000000	mg/L
MKTF-04	3/2/2017	TPH DRO	5.7	1	0.36	16700	mg/L
MKTF-04	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	3/2/2017	TPH GRO	12	1	0.5	10100	mg/L
MKTF-04	6/8/2017	Bromide	2.1	0.1	0.014	NA	mg/L
MKTF-04	6/8/2017	Chloride	210	10	5	250000000	mg/L
MKTF-04	6/8/2017	Fluoride, Total	0.67	0.1	0.044	1600000	mg/L
MKTF-04	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-04	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	6/8/2017	Sulfate	5.3	0.5	0.096	600000000	mg/L
MKTF-04	6/8/2017	TPH DRO	5.7	1	0.36	16700	mg/L
MKTF-04	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/8/2017	TPH GRO	10	1	0.5	10100	mg/L
MKTF-04	9/26/2017	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-04	9/26/2017	Chloride	200	10	5	250000000	mg/L
MKTF-04	9/26/2017	Fluoride, Total	0.87	0.5	0.22	1600000	mg/L
MKTF-04	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	9/26/2017	Sulfate	0.7	2.5	0.48	600000000	mg/L
MKTF-04	9/26/2017	TPH DRO	6.6	1	0.36	16700	mg/L
MKTF-04	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/26/2017	TPH GRO	13	1	0.5	10100	mg/L
MKTF-04	11/28/2017	Bromide	2.6	0.5	0.073	NA	mg/L
MKTF-04	11/28/2017	Chloride	210	10	5	250000000	mg/L
MKTF-04	11/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-04	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	11/28/2017	Sulfate	2.3	2.5	0.48	600000000	mg/L
MKTF-04	11/28/2017	TPH DRO	5.6	1	0.36	16700	mg/L
MKTF-04	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/28/2017	TPH GRO	16	1	0.19	10100	mg/L
MKTF-04	2/14/2018	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-04	2/14/2018	Chloride	220	10	5	250000000	mg/L
MKTF-04	2/14/2018	Fluoride, Total	0.93	0.5	0.22	1600000	mg/L
MKTF-04	2/14/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
MKTF-04	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-04	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-04	2/14/2018	Sulfate	8.6	2.5	0.48	600000000	mg/L
MKTF-04	2/14/2018	TPH DRO	5	1	0.63	16700	mg/L
MKTF-04	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	2/14/2018	TPH GRO	9.6	1	0.19	10100	mg/L
MKTF-04	5/2/2018	Bromide	2.2	0.5	0.13	NA	mg/L
MKTF-04	5/2/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-04	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-04	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-04	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-04	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-04	5/2/2018	Sulfate	9.8	2.5	1	600000000	mg/L
MKTF-04	5/2/2018	TPH DRO	4.9	1	0.63	16700	mg/L
MKTF-04	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	5/2/2018	TPH GRO	12	1	0.19	10100	mg/L
MKTF-04	9/4/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-04	9/4/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-04	9/4/2018	Fluoride, Total	1	0.5	0.15	1600000	mg/L
MKTF-04	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-04	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-04	9/4/2018	Nitrogen, Nitrate	0.083	0.5	0.033	10000000	mg/L
MKTF-04	9/4/2018	Sulfate	5.5	2.5	1	600000000	mg/L
MKTF-04	9/4/2018	TPH DRO	4.7	1	0.63	16700	mg/L
MKTF-04	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/4/2018	TPH GRO	12	1	0.49	10100	mg/L
MKTF-04	11/20/2018	Bromide	2.2	0.5	0.1	NA	mg/L
MKTF-04	11/20/2018	Chloride	210	10	10	250000000	mg/L
MKTF-04	11/20/2018	Fluoride, Total	1.1	0.5	0.5	1600000	mg/L
MKTF-04	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-04	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-04	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-04	11/20/2018	Sulfate	9.6	2.5	0.63	600000000	mg/L
MKTF-04	11/20/2018	TPH DRO	4.5	1	0.63	16700	mg/L
MKTF-04	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/20/2018	TPH GRO	7.6	1	0.49	10100	mg/L
MKTF-04	5/13/2019	TPH GRO	9.8	0.25	0.1535	10100	mg/L
MKTF-04	5/13/2019	TPH DRO	5.6	1	0.35	16700	mg/L
MKTF-04	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	5/13/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
MKTF-04	5/13/2019	Chloride	240	10	1.25	250000000	mg/L
MKTF-04	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-04	5/13/2019	Sulfate	5.3	2.5	0.2675	600000000	mg/L
MKTF-04	5/13/2019	TPH GRO	9.6	0.25	0.1535	10100	mg/L
MKTF-04	5/13/2019	TPH DRO	5.4	1	0.35	16700	mg/L
MKTF-04	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	5/13/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
MKTF-04	5/13/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-04	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-04	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-04	5/13/2019	Sulfate	5.6	2.5	0.2675	600000000	mg/L
MKTF-04	8/21/2019	TPH GRO	10	0.25	0.1535	10100	mg/L
MKTF-04	8/21/2019	TPH DRO	5.9	1	0.35	16700	mg/L
MKTF-04	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	8/21/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-04	8/21/2019	Chloride	230	10	10	250000000	mg/L
MKTF-04	8/21/2019	Fluoride, Total	0.83	0.5	0.073	1600000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrate	0.34	0.5	0.025	10000000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	8/21/2019	Sulfate	15	2.5	0.3345	600000000	mg/L
MKTF-04	8/21/2019	TPH GRO	6.4	0.05	0.0307	10100	mg/L
MKTF-04	8/21/2019	TPH DRO	4.3	1	0.35	16700	mg/L
MKTF-04	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	8/21/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-04	8/21/2019	Chloride	220	10	10	250000000	mg/L
MKTF-04	8/21/2019	Fluoride, Total	0.81	0.5	0.073	1600000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrate	0.12	0.5	0.025	10000000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	8/21/2019	Sulfate	16	2.5	0.3345	600000000	mg/L
MKTF-04	10/30/2019	TPH GRO	8.7	0.25	0.0965	10100	mg/L
MKTF-04	10/30/2019	TPH DRO	0.77	0.4	0.132	16700	mg/L
MKTF-04	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-04	10/30/2019	Bromide	2.4	0.5	0.077	NA	mg/L
MKTF-04	10/30/2019	Chloride	210	10	10	250000000	mg/L
MKTF-04	10/30/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	10/30/2019	Sulfate	3.4	2.5	0.3345	600000000	mg/L
MKTF-04	10/30/2019	TPH GRO	10	0.25	0.0965	10100	mg/L
MKTF-04	10/30/2019	TPH DRO	0.73	0.4	0.132	16700	mg/L
MKTF-04	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-04	10/30/2019	Bromide	2.5	0.5	0.077	NA	mg/L
MKTF-04	10/30/2019	Chloride	210	10	10	250000000	mg/L
MKTF-04	10/30/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	10/30/2019	Sulfate	2.9	2.5	0.3345	600000000	mg/L
MKTF-04	3/3/2020	TPH GRO	8.2	0.25	0.034	10100	mg/L
MKTF-04	3/3/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
MKTF-04	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-04	3/3/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-04	3/3/2020	Fluoride, Total	0.56	0.5	0.11	1600000	mg/L
MKTF-04	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-04	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-04	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	3/3/2020	Sulfate	9.3	2.5	1.2	600000000	mg/L
MKTF-04	3/3/2020	Chloride	220	10	5	250000000	mg/L
MKTF-09	4/14/2014	TPH DRO	3.6	1	0.57	16700	mg/L
MKTF-09	4/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	4/14/2014	TPH GRO	5.7	1	0.38	10100	mg/L
MKTF-09	6/5/2014	Bromide	1.1	0.1	0.022	NA	mg/L
MKTF-09	6/5/2014	Chloride	180	10	5	250000000	mg/L
MKTF-09	6/5/2014	Fluoride, Total	0.43	0.1	0.018	1600000	mg/L
MKTF-09	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-09	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-09	6/5/2014	Sulfate	78	10	1.4	600000000	mg/L
MKTF-09	6/5/2014	TPH DRO	2.7	1	0.57	16700	mg/L
MKTF-09	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/5/2014	TPH GRO	6.2	0.5	0.071	10100	mg/L
MKTF-09	9/18/2014	TPH DRO	1.4	1	0.83	16700	mg/L
MKTF-09	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/18/2014	TPH GRO	5.6	1	0.38	10100	mg/L
MKTF-09	11/14/2014	Bromide	1.2	1	0.26	NA	mg/L
MKTF-09	11/14/2014	Chloride	180	50	2.2	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-09	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-09	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-09	11/14/2014	Sulfate	140	5	0.82	600000000	mg/L
MKTF-09	11/14/2014	TPH DRO	2.1	1	0.83	16700	mg/L
MKTF-09	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/14/2014	TPH GRO	4.4	0.5	0.19	10100	mg/L
MKTF-09	3/16/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-09	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	3/16/2015	TPH GRO	3.3	0.5	0.12	10100	mg/L
MKTF-09	6/4/2015	TPH DRO	1.8	1	0.91	16700	mg/L
MKTF-09	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/4/2015	TPH GRO	4.1	0.25	0.06	10100	mg/L
MKTF-09	8/18/2015	Bromide	0.26	0.1	0.077	NA	mg/L
MKTF-09	8/18/2015	Chloride	170	10	2.7	250000000	mg/L
MKTF-09	8/18/2015	Fluoride, Total	0.43	0.1	0.029	1600000	mg/L
MKTF-09	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-09	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-09	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-09	8/18/2015	Sulfate	130	10	2.3	600000000	mg/L
MKTF-09	8/18/2015	TPH DRO	4.7	1	0.91	16700	mg/L
MKTF-09	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	8/18/2015	TPH GRO	7.1	0.5	0.12	10100	mg/L
MKTF-09	11/3/2015	Bromide	1	0.1	0.068	NA	mg/L
MKTF-09	11/3/2015	Chloride	170	10	6.8	250000000	mg/L
MKTF-09	11/3/2015	Fluoride, Total	0.46	0.1	0.032	1600000	mg/L
MKTF-09	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-09	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-09	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-09	11/3/2015	Sulfate	110	10	6.4	600000000	mg/L
MKTF-09	11/3/2015	TPH DRO	5.3	1	0.91	16700	mg/L
MKTF-09	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/3/2015	TPH GRO	9.8	0.5	0.12	10100	mg/L
MKTF-09	2/29/2016	Bromide	0.94	0.1	0.032	NA	mg/L
MKTF-09	2/29/2016	Chloride	170	10	0.55	250000000	mg/L
MKTF-09	2/29/2016	Fluoride, Total	0.47	0.1	0.023	1600000	mg/L
MKTF-09	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-09	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-09	2/29/2016	Sulfate	70	10	1.3	600000000	mg/L
MKTF-09	2/29/2016	TPH DRO	2.5	1	0.69	16700	mg/L
MKTF-09	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	2/29/2016	TPH GRO	7.4	1	0.51	10100	mg/L
MKTF-09	6/9/2016	Bromide	1.1	0.1	0.032	NA	mg/L
MKTF-09	6/9/2016	Chloride	170	10	0.55	250000000	mg/L
MKTF-09	6/9/2016	Fluoride, Total	0.35	0.1	0.023	1600000	mg/L
MKTF-09	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-09	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-09	6/9/2016	Sulfate	81	10	1.3	600000000	mg/L
MKTF-09	6/9/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-09	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/9/2016	TPH GRO	7.8	0.5	0.25	10100	mg/L
MKTF-09	9/11/2016	Bromide	1.2	0.1	0.044	NA	mg/L
MKTF-09	9/11/2016	Chloride	160	10	1	250000000	mg/L
MKTF-09	9/11/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-09	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-09	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-09	9/11/2016	Sulfate	57	10	2.8	600000000	mg/L
MKTF-09	9/11/2016	TPH DRO	2.3	1	0.69	16700	mg/L
MKTF-09	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/11/2016	TPH GRO	6.7	0.5	0.15	10100	mg/L
MKTF-09	11/2/2016	Bromide	1.1	0.5	0.22	NA	mg/L
MKTF-09	11/2/2016	Chloride	150	10	1	250000000	mg/L
MKTF-09	11/2/2016	Fluoride, Total	0.46	0.5	0.25	1600000	mg/L
MKTF-09	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-09	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-09	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-09	11/2/2016	Sulfate	71	2.5	0.71	600000000	mg/L
MKTF-09	11/2/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-09	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/2/2016	TPH GRO	7.8	1	0.51	10100	mg/L
MKTF-09	3/15/2017	Bromide	2.4	2	0.61	NA	mg/L
MKTF-09	3/15/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	3/15/2017	Fluoride, Total	0.33	0.1	0.05	1600000	mg/L
MKTF-09	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-09	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-09	3/15/2017	Nitrogen, Nitrate	0.04	0.1	0.022	10000000	mg/L
MKTF-09	3/15/2017	Sulfate	28	0.5	0.096	600000000	mg/L
MKTF-09	3/15/2017	TPH DRO	3.9	1	0.36	16700	mg/L
MKTF-09	3/15/2017	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	TPH GRO	12	0.5	0.25	10100	mg/L
MKTF-09	6/12/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-09	6/12/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	6/12/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-09	6/12/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	6/12/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-09	6/12/2017	Sulfate	14	2.5	0.48	600000000	mg/L
MKTF-09	6/12/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-09	6/12/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/12/2017	TPH GRO	11	1	0.5	10100	mg/L
MKTF-09	9/28/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-09	9/28/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	9/28/2017	Fluoride, Total	0.35	0.5	0.22	1600000	mg/L
MKTF-09	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-09	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	9/28/2017	Sulfate	14	2.5	0.48	600000000	mg/L
MKTF-09	9/28/2017	TPH DRO	4.2	1	0.36	16700	mg/L
MKTF-09	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/28/2017	TPH GRO	13	1	0.5	10100	mg/L
MKTF-09	11/28/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-09	11/28/2017	Chloride	220	10	5	250000000	mg/L
MKTF-09	11/28/2017	Fluoride, Total	0.45	0.5	0.22	1600000	mg/L
MKTF-09	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-09	11/28/2017	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-09	11/28/2017	TPH DRO	2.6	1	0.36	16700	mg/L
MKTF-09	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/28/2017	TPH GRO	11	1	0.19	10100	mg/L
MKTF-09	2/14/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-09	2/14/2018	Chloride	220	10	5	250000000	mg/L
MKTF-09	2/14/2018	Fluoride, Total	0.4	0.5	0.22	1600000	mg/L
MKTF-09	2/14/2018	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
MKTF-09	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-09	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	2/14/2018	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-09	2/14/2018	TPH DRO	2.2	1	0.63	16700	mg/L
MKTF-09	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	2/14/2018	TPH GRO	8.7	1	0.19	10100	mg/L
MKTF-09	5/2/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-09	5/2/2018	Chloride	250	10	0.59	250000000	mg/L
MKTF-09	5/2/2018	Fluoride, Total	0.34	0.5	0.15	1600000	mg/L
MKTF-09	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-09	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-09	5/2/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-09	5/2/2018	Sulfate	22	2.5	1	600000000	mg/L
MKTF-09	5/2/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-09	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	5/2/2018	TPH GRO	8.2	1	0.19	10100	mg/L
MKTF-09	9/4/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-09	9/4/2018	Chloride	260	10	0.59	250000000	mg/L
MKTF-09	9/4/2018	Fluoride, Total	0.52	0.5	0.15	1600000	mg/L
MKTF-09	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-09	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-09	9/4/2018	Nitrogen, Nitrate	0.066	0.5	0.033	10000000	mg/L
MKTF-09	9/4/2018	Sulfate	17	2.5	1	600000000	mg/L
MKTF-09	9/4/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-09	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/4/2018	TPH GRO	11	1	0.49	10100	mg/L
MKTF-09	11/28/2018	Bromide	1.1	0.5	0.1	NA	mg/L
MKTF-09	11/28/2018	Chloride	260	10	10	250000000	mg/L
MKTF-09	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-09	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-09	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-09	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-09	11/28/2018	Sulfate	24	2.5	0.63	600000000	mg/L
MKTF-09	11/28/2018	TPH DRO	1.8	1	0.63	16700	mg/L
MKTF-09	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/28/2018	TPH GRO	9.1	1	0.49	10100	mg/L
MKTF-09	5/13/2019	TPH GRO	8.4	0.5	0.307	10100	mg/L
MKTF-09	5/13/2019	TPH DRO	3.1	1	0.35	16700	mg/L
MKTF-09	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-09	5/13/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-09	5/13/2019	Chloride	250	10	1.25	250000000	mg/L
MKTF-09	5/13/2019	Fluoride, Total	0.47	0.5	0.25	1600000	mg/L
MKTF-09	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-09	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-09	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-09	5/13/2019	Sulfate	8.1	2.5	0.2675	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	TPH GRO	12	0.5	0.211	10100	mg/L
MKTF-09	8/28/2019	TPH DRO	3.9	1	0.35	16700	mg/L
MKTF-09	8/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-09	8/28/2019	Bromide	1.3	0.5	0.25	NA	mg/L
MKTF-09	8/28/2019	Chloride	230	10	5	250000000	mg/L
MKTF-09	8/28/2019	Fluoride, Total	0.51	0.5	0.073	1600000	mg/L
MKTF-09	8/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-09	8/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-09	8/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-09	8/28/2019	Sulfate	12	2.5	1.25	600000000	mg/L
MKTF-09	11/18/2019	TPH GRO	10	0.5	0.211	10100	mg/L
MKTF-09	11/18/2019	TPH DRO	1	0.4	0.132	16700	mg/L
MKTF-09	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-09	11/18/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-09	11/18/2019	Chloride	220	10	10	250000000	mg/L
MKTF-09	11/18/2019	Fluoride, Total	0.3	0.5	0.144909	1600000	mg/L
MKTF-09	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-09	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-09	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-09	11/18/2019	Sulfate	25	2.5	0.3345	600000000	mg/L
MKTF-09	3/3/2020	TPH GRO	6.3	0.05	0.0068	10100	mg/L
MKTF-09	3/3/2020	TPH DRO	1	0.4	0.2	16700	mg/L
MKTF-09	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-09	3/3/2020	Bromide	1.1	0.5	0.25	NA	mg/L
MKTF-09	3/3/2020	Fluoride, Total	0.44	0.5	0.11	1600000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-09	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	3/3/2020	Sulfate	46	2.5	1.2	600000000	mg/L
MKTF-09	3/3/2020	Chloride	290	10	5	250000000	mg/L
MKTF-09	3/3/2020	TPH GRO	7.9	1	0.14	10100	mg/L
MKTF-09	3/3/2020	TPH DRO	0.96	0.4	0.2	16700	mg/L
MKTF-09	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-09	3/3/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-09	3/3/2020	Fluoride, Total	0.43	0.5	0.11	1600000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-09	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	3/3/2020	Sulfate	43	2.5	1.2	600000000	mg/L
MKTF-09	3/3/2020	Chloride	290	10	5	250000000	mg/L
MKTF-10	4/11/2014	TPH DRO	5.9	1	0.57	16700	mg/L
MKTF-10	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	4/11/2014	TPH GRO	88	10	3.8	10100	mg/L
MKTF-10	6/6/2014	TPH DRO	5.5	1	0.57	16700	mg/L
MKTF-10	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/6/2014	TPH GRO	64	10	1.4	10100	mg/L
MKTF-10	9/18/2014	TPH DRO	7.7	1	0.83	16700	mg/L
MKTF-10	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/18/2014	TPH GRO	88	1	0.38	10100	mg/L
MKTF-10	11/14/2014	Bromide	ND	1	0.26	NA	mg/L
MKTF-10	11/14/2014	Chloride	260	50	2.2	250000000	mg/L
MKTF-10	11/14/2014	Fluoride, Total	270	10	1.5	1600000	mg/L
MKTF-10	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-10	11/14/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
MKTF-10	11/14/2014	Sulfate	ND	5	0.82	600000000	mg/L
MKTF-10	11/14/2014	TPH DRO	74	10	8.3	16700	mg/L
MKTF-10	11/14/2014	TPH ORO	ND	50	50	85800	mg/L
MKTF-10	11/14/2014	TPH GRO	84	2.5	0.96	10100	mg/L
MKTF-10	3/16/2015	TPH DRO	32	1	0.91	16700	mg/L
MKTF-10	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	3/16/2015	TPH GRO	80	10	2.4	10100	mg/L
MKTF-10	6/4/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-10	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/4/2015	TPH GRO	79	2.5	0.6	10100	mg/L
MKTF-10	8/18/2015	Bromide	0.74	0.5	0.39	NA	mg/L
MKTF-10	8/18/2015	Chloride	390	10	2.7	250000000	mg/L
MKTF-10	8/18/2015	Fluoride, Total	ND	5	1.5	1600000	mg/L
MKTF-10	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-10	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-10	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-10	8/18/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-10	8/18/2015	TPH DRO	55	1	0.91	16700	mg/L
MKTF-10	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	8/18/2015	TPH GRO	130	5	1.2	10100	mg/L
MKTF-10	11/3/2015	Bromide	0.76	0.5	0.34	NA	mg/L
MKTF-10	11/3/2015	Chloride	380	10	6.8	250000000	mg/L
MKTF-10	11/3/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-10	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-10	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-10	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-10	11/3/2015	TPH DRO	8	1	0.91	16700	mg/L
MKTF-10	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/3/2015	TPH GRO	100	5	1.2	10100	mg/L
MKTF-10	2/29/2016	Bromide	0.88	0.5	0.16	NA	mg/L
MKTF-10	2/29/2016	Chloride	280	10	0.55	250000000	mg/L
MKTF-10	2/29/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-10	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-10	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-10	2/29/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-10	2/29/2016	TPH DRO	14	1	0.69	16700	mg/L
MKTF-10	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	2/29/2016	TPH GRO	110	5	2.5	10100	mg/L
MKTF-10	6/9/2016	Bromide	0.91	0.5	0.16	NA	mg/L
MKTF-10	6/9/2016	Chloride	260	10	0.55	250000000	mg/L
MKTF-10	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-10	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-10	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-10	6/9/2016	Sulfate	0.4	2.5	0.32	600000000	mg/L
MKTF-10	6/9/2016	TPH DRO	8	1	0.69	16700	mg/L
MKTF-10	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/9/2016	TPH GRO	110	2.5	1.3	10100	mg/L
MKTF-10	9/11/2016	Bromide	0.79	0.5	0.22	NA	mg/L
MKTF-10	9/11/2016	Chloride	240	10	1	250000000	mg/L
MKTF-10	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-10	9/11/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-10	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-10	9/11/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-10	9/11/2016	TPH DRO	6	1	0.69	16700	mg/L
MKTF-10	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/11/2016	TPH GRO	110	5	1.5	10100	mg/L
MKTF-10	11/2/2016	Bromide	0.92	0.5	0.22	NA	mg/L
MKTF-10	11/2/2016	Chloride	230	10	1	250000000	mg/L
MKTF-10	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-10	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-10	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-10	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-10	11/2/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-10	11/2/2016	TPH DRO	3.8	1	0.69	16700	mg/L
MKTF-10	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/2/2016	TPH GRO	100	10	5.1	10100	mg/L
MKTF-10	3/2/2017	Bromide	1.3	0.1	0.031	NA	mg/L
MKTF-10	3/2/2017	Chloride	350	10	5	250000000	mg/L
MKTF-10	3/2/2017	Fluoride, Total	0.35	0.1	0.05	1600000	mg/L
MKTF-10	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-10	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	3/2/2017	Sulfate	0.3	0.5	0.096	600000000	mg/L
MKTF-10	3/2/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-10	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	3/2/2017	TPH GRO	110	10	5	10100	mg/L
MKTF-10	6/8/2017	Bromide	0.86	0.1	0.014	NA	mg/L
MKTF-10	6/8/2017	Chloride	310	10	5	250000000	mg/L
MKTF-10	6/8/2017	Fluoride, Total	0.49	0.1	0.044	1600000	mg/L
MKTF-10	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-10	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	6/8/2017	Sulfate	0.25	0.5	0.096	600000000	mg/L
MKTF-10	6/8/2017	TPH DRO	3.5	1	0.36	16700	mg/L
MKTF-10	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/8/2017	TPH GRO	100	10	5	10100	mg/L
MKTF-10	9/28/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-10	9/28/2017	Chloride	330	10	5	250000000	mg/L
MKTF-10	9/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-10	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-10	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-10	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	9/28/2017	Sulfate	0.55	2.5	0.48	600000000	mg/L
MKTF-10	9/28/2017	TPH DRO	3.6	1	0.36	16700	mg/L
MKTF-10	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/28/2017	TPH GRO	74	10	5	10100	mg/L
MKTF-10	11/28/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-10	11/28/2017	Chloride	370	25	12	250000000	mg/L
MKTF-10	11/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-10	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-10	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	11/28/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-10	11/28/2017	TPH DRO	3.5	1	0.36	16700	mg/L
MKTF-10	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/28/2017	TPH GRO	83	10	1.9	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-10	2/14/2018	Chloride	390	25	12	250000000	mg/L
MKTF-10	2/14/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-10	2/14/2018	Ortho-Phosphate	3.3	2.5	1.2	NA	mg/L
MKTF-10	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-10	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	2/14/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-10	2/14/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-10	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	2/14/2018	TPH GRO	74	5	0.97	10100	mg/L
MKTF-10	5/2/2018	Bromide	0.93	0.5	0.13	NA	mg/L
MKTF-10	5/2/2018	Chloride	380	25	1.5	250000000	mg/L
MKTF-10	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-10	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-10	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-10	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-10	5/2/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-10	5/2/2018	TPH DRO	3.7	1	0.63	16700	mg/L
MKTF-10	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	5/2/2018	TPH GRO	100	5	0.97	10100	mg/L
MKTF-10	9/4/2018	Bromide	0.9	0.5	0.13	NA	mg/L
MKTF-10	9/4/2018	Chloride	340	10	0.59	250000000	mg/L
MKTF-10	9/4/2018	Fluoride, Total	0.85	0.5	0.15	1600000	mg/L
MKTF-10	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-10	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-10	9/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-10	9/4/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-10	9/4/2018	TPH DRO	2.5	1	0.63	16700	mg/L
MKTF-10	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/4/2018	TPH GRO	57	5	2.4	10100	mg/L
MKTF-10	11/20/2018	Bromide	0.66	0.5	0.1	NA	mg/L
MKTF-10	11/20/2018	Chloride	320	10	10	250000000	mg/L
MKTF-10	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-10	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-10	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-10	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-10	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-10	11/20/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-10	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/20/2018	TPH GRO	53	5	2.4	10100	mg/L
MKTF-10	5/13/2019	TPH GRO	48	2.5	1.535	10100	mg/L
MKTF-10	5/13/2019	TPH DRO	3.5	1	0.35	16700	mg/L
MKTF-10	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-10	5/13/2019	Bromide	0.56	0.5	0.088765	NA	mg/L
MKTF-10	5/13/2019	Chloride	460	25	3.125	250000000	mg/L
MKTF-10	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-10	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-10	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-10	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-10	5/13/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
MKTF-10	8/22/2019	TPH GRO	35	2.5	1.055	10100	mg/L
MKTF-10	8/22/2019	TPH DRO	3	1	0.35	16700	mg/L
MKTF-10	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-10	8/22/2019	Bromide	0.64	0.5	0.088765	NA	mg/L
MKTF-10	8/22/2019	Chloride	960	50	50	250000000	mg/L
MKTF-10	8/22/2019	Fluoride, Total	0.91	0.5	0.073	1600000	mg/L
MKTF-10	8/22/2019	Nitrogen, Nitrate	0.1	0.5	0.025	10000000	mg/L
MKTF-10	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-10	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-10	8/22/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-10	10/30/2019	TPH GRO	40	0.5	0.193	10100	mg/L
MKTF-10	10/30/2019	TPH DRO	0.35	0.4	0.132	16700	mg/L
MKTF-10	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-10	10/30/2019	Bromide	0.59	0.5	0.077	NA	mg/L
MKTF-10	10/30/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-10	10/30/2019	Fluoride, Total	0.76	0.5	0.144909	1600000	mg/L
MKTF-10	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-10	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-10	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-10	10/30/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-10	3/3/2020	TPH GRO	40	0.5	0.068	10100	mg/L
MKTF-10	3/3/2020	TPH DRO	1.3	0.4	0.2	16700	mg/L
MKTF-10	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-10	3/3/2020	Chloride	970	50	25	250000000	mg/L
MKTF-10	3/3/2020	Bromide	0.7	0.5	0.25	NA	mg/L
MKTF-10	3/3/2020	Fluoride, Total	0.72	0.5	0.11	1600000	mg/L
MKTF-10	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-10	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-10	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-10	12/18/2020	Bicarbonate	265	1	0.5	NA	mg/L
MKTF-10	12/18/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-10	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-10	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-10	12/18/2020	Chloride	937	50	6	250000000	mg/L
MKTF-10	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-10	12/18/2020	TPH DRO	5540	129	103	16700	ug/L
MKTF-10	12/18/2020	C28-C40	ND	129	103	NA	ug/L
MKTF-10	12/18/2020	TPH (C6-C10)	31800	1000	470	NA	ug/L
MKTF-11	4/11/2014	TPH DRO	2.7	1	0.57	16700	mg/L
MKTF-11	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	4/11/2014	TPH GRO	53	5	1.9	10100	mg/L
MKTF-11	6/5/2014	Bromide	0.67	0.1	0.022	NA	mg/L
MKTF-11	6/5/2014	Chloride	480	25	12	250000000	mg/L
MKTF-11	6/5/2014	Fluoride, Total	7	2	0.36	1600000	mg/L
MKTF-11	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-11	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-11	6/5/2014	Sulfate	11	0.5	0.068	600000000	mg/L
MKTF-11	6/5/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-11	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/5/2014	TPH GRO	48	10	1.4	10100	mg/L
MKTF-11	9/15/2014	TPH DRO	1.8	1	0.83	16700	mg/L
MKTF-11	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/15/2014	TPH GRO	57	1	0.38	10100	mg/L
MKTF-11	11/13/2014	Bromide	ND	1	0.26	NA	mg/L
MKTF-11	11/13/2014	Chloride	780	50	2.2	250000000	mg/L
MKTF-11	11/13/2014	Fluoride, Total	6.5	1	0.15	1600000	mg/L
MKTF-11	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-11	11/13/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-11	11/13/2014	Sulfate	ND	5	0.82	600000000	mg/L
MKTF-11	11/13/2014	TPH DRO	1.8	1	0.83	16700	mg/L
MKTF-11	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/13/2014	TPH GRO	35	2.5	0.96	10100	mg/L
MKTF-11	3/16/2015	TPH DRO	2.6	1	0.91	16700	mg/L
MKTF-11	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	3/16/2015	TPH GRO	55	10	2.4	10100	mg/L
MKTF-11	6/4/2015	TPH DRO	2.8	1	0.91	16700	mg/L
MKTF-11	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/4/2015	TPH GRO	71	1	0.24	10100	mg/L
MKTF-11	8/18/2015	Bromide	0.26	0.1	0.077	NA	mg/L
MKTF-11	8/18/2015	Chloride	1200	50	13	250000000	mg/L
MKTF-11	8/18/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
MKTF-11	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-11	8/18/2015	Nitrogen, Nitrite	ND	2	0.4	1000000	mg/L
MKTF-11	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-11	8/18/2015	Sulfate	1.2	0.5	0.11	600000000	mg/L
MKTF-11	8/18/2015	TPH DRO	1.6	1	0.91	16700	mg/L
MKTF-11	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	8/18/2015	TPH GRO	36	5	1.2	10100	mg/L
MKTF-11	11/3/2015	Bromide	0.89	0.5	0.34	NA	mg/L
MKTF-11	11/3/2015	Chloride	740	25	17	250000000	mg/L
MKTF-11	11/3/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-11	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-11	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-11	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-11	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-11	11/3/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-11	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/3/2015	TPH GRO	71	2.5	0.6	10100	mg/L
MKTF-11	2/29/2016	Bromide	3.4	0.5	0.16	NA	mg/L
MKTF-11	2/29/2016	Chloride	1600	50	2.7	250000000	mg/L
MKTF-11	2/29/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-11	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-11	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-11	2/29/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-11	2/29/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-11	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	2/29/2016	TPH GRO	42	2.5	1.3	10100	mg/L
MKTF-11	6/9/2016	Bromide	0.11	0.1	0.032	NA	mg/L
MKTF-11	6/9/2016	Chloride	1000	50	2.8	250000000	mg/L
MKTF-11	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-11	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-11	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-11	6/9/2016	Sulfate	2.2	0.5	0.064	600000000	mg/L
MKTF-11	6/9/2016	TPH DRO	1.4	1	0.69	16700	mg/L
MKTF-11	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/9/2016	TPH GRO	39	2.5	1.3	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/11/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-11	9/11/2016	Chloride	880	50	5.1	250000000	mg/L
MKTF-11	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-11	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-11	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-11	9/11/2016	Sulfate	2.2	0.5	0.14	600000000	mg/L
MKTF-11	9/11/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-11	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/11/2016	TPH GRO	29	2.5	0.75	10100	mg/L
MKTF-11	11/2/2016	Bromide	0.77	0.5	0.22	NA	mg/L
MKTF-11	11/2/2016	Chloride	900	50	5.1	250000000	mg/L
MKTF-11	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-11	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-11	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-11	11/2/2016	Sulfate	2.2	2.5	0.71	600000000	mg/L
MKTF-11	11/2/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-11	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/2/2016	TPH GRO	27	2.5	1.3	10100	mg/L
MKTF-11	3/2/2017	Bromide	2.7	2	0.61	NA	mg/L
MKTF-11	3/2/2017	Chloride	650	25	12	250000000	mg/L
MKTF-11	3/2/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-11	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	3/2/2017	Sulfate	3.4	0.5	0.096	600000000	mg/L
MKTF-11	3/2/2017	TPH DRO	1.7	1	0.36	16700	mg/L
MKTF-11	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	3/2/2017	TPH GRO	27	2.5	1.2	10100	mg/L
MKTF-11	6/8/2017	Bromide	0.8	0.1	0.014	NA	mg/L
MKTF-11	6/8/2017	Chloride	630	25	12	250000000	mg/L
MKTF-11	6/8/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-11	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-11	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	6/8/2017	Sulfate	4.3	0.5	0.096	600000000	mg/L
MKTF-11	6/8/2017	TPH DRO	1.8	1	0.36	16700	mg/L
MKTF-11	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/8/2017	TPH GRO	30	2.5	1.2	10100	mg/L
MKTF-11	9/26/2017	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-11	9/26/2017	Chloride	820	25	12	250000000	mg/L
MKTF-11	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	9/26/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-11	9/26/2017	TPH DRO	2.8	1	0.36	16700	mg/L
MKTF-11	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/26/2017	TPH GRO	63	2.5	1.2	10100	mg/L
MKTF-11	11/28/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-11	11/28/2017	Chloride	860	25	12	250000000	mg/L
MKTF-11	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	11/28/2017	Nitrate & Nitrite	0.27	1	0.13	NA	mg/L
MKTF-11	11/28/2017	Sulfate	1.2	2.5	0.48	600000000	mg/L
MKTF-11	11/28/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-11	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/28/2017	TPH GRO	59	2.5	0.48	10100	mg/L
MKTF-11	2/8/2018	Bromide	1	0.5	0.073	NA	mg/L
MKTF-11	2/8/2018	Chloride	740	25	12	250000000	mg/L
MKTF-11	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	2/8/2018	Ortho-Phosphate	3.4	2.5	1.2	NA	mg/L
MKTF-11	2/8/2018	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
MKTF-11	2/8/2018	Sulfate	1.5	2.5	0.48	600000000	mg/L
MKTF-11	2/8/2018	TPH DRO	2.2	1	0.63	16700	mg/L
MKTF-11	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	2/8/2018	TPH GRO	69	2.5	0.48	10100	mg/L
MKTF-11	5/2/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-11	5/2/2018	Chloride	850	50	2.9	250000000	mg/L
MKTF-11	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-11	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-11	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-11	5/2/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-11	5/2/2018	Sulfate	1.4	2.5	1	600000000	mg/L
MKTF-11	5/2/2018	TPH DRO	2.5	1	0.63	16700	mg/L
MKTF-11	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	5/2/2018	TPH GRO	72	2.5	0.48	10100	mg/L
MKTF-11	9/4/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-11	9/4/2018	Chloride	1200	50	18	250000000	mg/L
MKTF-11	9/4/2018	Fluoride, Total	0.75	0.5	0.15	1600000	mg/L
MKTF-11	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-11	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-11	9/4/2018	Sulfate	2	2.5	1	600000000	mg/L
MKTF-11	9/4/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-11	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/4/2018	TPH GRO	53	5	2.4	10100	mg/L
MKTF-11	11/20/2018	Bromide	0.9	0.5	0.1	NA	mg/L
MKTF-11	11/20/2018	Chloride	1200	50	50	250000000	mg/L
MKTF-11	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-11	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-11	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-11	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-11	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-11	11/20/2018	TPH DRO	1.7	1	0.63	16700	mg/L
MKTF-11	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/20/2018	TPH GRO	41	5	2.4	10100	mg/L
MKTF-11	5/13/2019	TPH GRO	28	2.5	1.535	10100	mg/L
MKTF-11	5/13/2019	TPH DRO	1.5	1	0.35	16700	mg/L
MKTF-11	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-11	5/13/2019	Bromide	0.79	0.5	0.088765	NA	mg/L
MKTF-11	5/13/2019	Chloride	760	25	3.125	250000000	mg/L
MKTF-11	5/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-11	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-11	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-11	5/13/2019	Sulfate	6.3	2.5	0.2675	600000000	mg/L
MKTF-11	8/21/2019	TPH GRO	35	2.5	1.055	10100	mg/L
MKTF-11	8/21/2019	TPH DRO	1.4	1	0.35	16700	mg/L
MKTF-11	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-11	8/21/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-11	8/21/2019	Chloride	620	25	25	250000000	mg/L
MKTF-11	8/21/2019	Fluoride, Total	1.3	0.5	0.073	1600000	mg/L
MKTF-11	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-11	8/21/2019	Nitrogen, Nitrite	0.57	0.5	0.027	1000000	mg/L
MKTF-11	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-11	8/21/2019	Sulfate	1.8	2.5	0.3345	600000000	mg/L
MKTF-11	10/30/2019	TPH GRO	32	1	0.386	10100	mg/L
MKTF-11	10/30/2019	TPH DRO	0.18	0.4	0.132	16700	mg/L
MKTF-11	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-11	10/30/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-11	10/30/2019	Chloride	750	50	50	250000000	mg/L
MKTF-11	10/30/2019	Fluoride, Total	1.4	0.5	0.144909	1600000	mg/L
MKTF-11	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-11	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-11	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-11	10/30/2019	Sulfate	4.4	2.5	0.3345	600000000	mg/L
MKTF-11	3/3/2020	TPH GRO	18	1	0.14	10100	mg/L
MKTF-11	3/3/2020	TPH DRO	0.5	0.4	0.2	16700	mg/L
MKTF-11	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-11	3/3/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-11	3/3/2020	Fluoride, Total	0.89	0.5	0.11	1600000	mg/L
MKTF-11	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-11	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-11	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	3/3/2020	Sulfate	19	2.5	1.2	600000000	mg/L
MKTF-11	3/3/2020	Chloride	1500	100	50	250000000	mg/L
MKTF-13	3/15/2017	Bromide	1.6	0.5	0.15	NA	mg/L
MKTF-13	3/15/2017	Chloride	120	10	5	250000000	mg/L
MKTF-13	3/15/2017	Fluoride, Total	0.27	0.1	0.05	1600000	mg/L
MKTF-13	3/15/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-13	3/15/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-13	3/15/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-13	3/15/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-13	3/15/2017	TPH DRO	48	1	0.36	16700	mg/L
MKTF-13	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	3/15/2017	TPH GRO	28	2.5	1.2	10100	mg/L
MKTF-13	5/10/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-13	5/10/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-13	5/10/2018	Fluoride, Total	0.29	0.5	0.15	1600000	mg/L
MKTF-13	5/10/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-13	5/10/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-13	5/10/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-13	5/10/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-13	5/10/2018	TPH DRO	30	1	0.63	16700	mg/L
MKTF-13	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	5/10/2018	TPH GRO	28	0.25	0.048	10100	mg/L
MKTF-13	8/30/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-13	8/30/2018	Chloride	210	10	0.59	250000000	mg/L
MKTF-13	8/30/2018	Fluoride, Total	0.28	0.5	0.15	1600000	mg/L
MKTF-13	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-13	8/30/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
MKTF-13	8/30/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-13	8/30/2018	TPH DRO	5.5	1	0.63	16700	mg/L
MKTF-13	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	8/30/2018	TPH GRO	26	1	0.19	10100	mg/L
MKTF-13	11/28/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-13	11/28/2018	Chloride	220	10	10	250000000	mg/L
MKTF-13	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-13	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-13	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-13	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-13	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-13	11/28/2018	TPH DRO	4.5	1	0.63	16700	mg/L
MKTF-13	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	11/28/2018	TPH GRO	24	0.5	0.24	10100	mg/L
MKTF-13	3/26/2019	TPH GRO	27	1	0.614	10100	mg/L
MKTF-13	3/26/2019	TPH DRO	8.1	1	0.35	16700	mg/L
MKTF-13	3/26/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-13	3/26/2019	Bromide	0.68	0.5	0.0675	NA	mg/L
MKTF-13	3/26/2019	Chloride	390	10	10	250000000	mg/L
MKTF-13	3/26/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-13	3/26/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-13	3/26/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-13	3/26/2019	Sulfate	0.75	2.5	0.32	600000000	mg/L
MKTF-13	5/9/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-13	5/9/2019	TPH DRO	63	1	0.35	16700	mg/L
MKTF-13	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-13	5/9/2019	Bromide	0.53	0.5	0.088765	NA	mg/L
MKTF-13	5/9/2019	Chloride	400	10	1.25	250000000	mg/L
MKTF-13	5/9/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-13	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-13	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-13	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-13	5/9/2019	Sulfate	1.1	2.5	0.2675	600000000	mg/L
MKTF-13	10/29/2019	TPH GRO	23	1	0.386	10100	mg/L
MKTF-13	10/29/2019	TPH DRO	7.3	0.4	0.132	16700	mg/L
MKTF-13	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-13	10/29/2019	Bromide	0.74	0.5	0.077	NA	mg/L
MKTF-13	10/29/2019	Chloride	290	10	10	250000000	mg/L
MKTF-13	10/29/2019	Fluoride, Total	0.38	0.5	0.144909	1600000	mg/L
MKTF-13	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-13	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-13	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-13	10/29/2019	Sulfate	0.59	2.5	0.3345	600000000	mg/L
MKTF-15	4/10/2014	TPH DRO	4.1	1	0.57	16700	mg/L
MKTF-15	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	4/10/2014	TPH GRO	71	5	1.9	10100	mg/L
MKTF-15	6/5/2014	Bromide	ND	2	0.43	NA	mg/L
MKTF-15	6/5/2014	Chloride	5200	500	250	250000000	mg/L
MKTF-15	6/5/2014	Fluoride, Total	ND	2	0.36	1600000	mg/L
MKTF-15	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-15	6/5/2014	Nitrate & Nitrite	ND	4	0.3	NA	mg/L
MKTF-15	6/5/2014	Sulfate	1.2	0.5	0.068	600000000	mg/L
MKTF-15	6/5/2014	TPH DRO	10	1	0.57	16700	mg/L
MKTF-15	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	6/5/2014	TPH GRO	57	10	1.4	10100	mg/L
MKTF-15	9/17/2014	TPH DRO	17	1	0.83	16700	mg/L
MKTF-15	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	9/17/2014	TPH GRO	88	1	0.38	10100	mg/L
MKTF-15	9/11/2016	Bromide	0.84	0.5	0.22	NA	mg/L
MKTF-15	9/11/2016	Chloride	3100	250	25	250000000	mg/L
MKTF-15	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-15	9/11/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-15	9/11/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-15	9/11/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-15	9/11/2016	TPH DRO	17	1	0.69	16700	mg/L
MKTF-15	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	9/11/2016	TPH GRO	110	2.5	0.75	10100	mg/L
MKTF-15	11/2/2016	Bromide	0.89	0.5	0.22	NA	mg/L
MKTF-15	11/2/2016	Chloride	2800	250	25	250000000	mg/L
MKTF-15	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-15	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-15	11/2/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
MKTF-15	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-15	11/2/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-15	11/2/2016	TPH DRO	6.2	1	0.69	16700	mg/L
MKTF-15	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	11/2/2016	TPH GRO	110	10	5.1	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Bromide	6.4	2	0.61	NA	mg/L
MKTF-15	3/2/2017	Chloride	3400	250	120	250000000	mg/L
MKTF-15	3/2/2017	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-15	3/2/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	3/2/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
MKTF-15	3/2/2017	Sulfate	1	2.5	0.48	600000000	mg/L
MKTF-15	3/2/2017	TPH DRO	8.8	1	0.36	16700	mg/L
MKTF-15	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	3/2/2017	TPH GRO	140	10	5	10100	mg/L
MKTF-15	6/8/2017	Bromide	0.73	0.5	0.073	NA	mg/L
MKTF-15	6/8/2017	Chloride	4300	250	120	250000000	mg/L
MKTF-15	6/8/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-15	6/8/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	6/8/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-15	6/8/2017	Sulfate	0.74	2.5	0.48	600000000	mg/L
MKTF-15	6/8/2017	TPH DRO	5.9	1	0.36	16700	mg/L
MKTF-15	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	6/8/2017	TPH GRO	150	10	5	10100	mg/L
MKTF-15	11/28/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-15	11/28/2017	Chloride	6000	500	250	250000000	mg/L
MKTF-15	11/28/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-15	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	11/28/2017	Nitrate & Nitrite	1.8	10	1.3	NA	mg/L
MKTF-15	11/28/2017	Sulfate	0.56	2.5	0.48	600000000	mg/L
MKTF-15	11/28/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-15	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	11/28/2017	TPH GRO	130	10	1.9	10100	mg/L
MKTF-15	5/2/2018	Bromide	0.52	0.5	0.13	NA	mg/L
MKTF-15	5/2/2018	Chloride	7200	250	15	250000000	mg/L
MKTF-15	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-15	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-15	5/2/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-15	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-15	5/2/2018	Sulfate	1.3	2.5	1	600000000	mg/L
MKTF-15	5/2/2018	TPH DRO	4	1	0.63	16700	mg/L
MKTF-15	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	5/2/2018	TPH GRO	97	10	1.9	10100	mg/L
MKTF-15	8/28/2018	Bromide	0.97	0.5	0.13	NA	mg/L
MKTF-15	8/28/2018	Chloride	6400	500	180	250000000	mg/L
MKTF-15	8/28/2018	Fluoride, Total	ND	2	0.59	1600000	mg/L
MKTF-15	8/28/2018	Ortho-Phosphate	8.4	10	1.9	NA	mg/L
MKTF-15	8/28/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-15	8/28/2018	Nitrogen, Nitrate	ND	2	0.13	10000000	mg/L
MKTF-15	8/28/2018	Sulfate	1.5	2.5	1	600000000	mg/L
MKTF-15	8/28/2018	TPH DRO	2.7	1	0.63	16700	mg/L
MKTF-15	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	8/28/2018	TPH GRO	78	2.5	1.2	10100	mg/L
MKTF-15	5/13/2019	TPH GRO	72	2.5	1.535	10100	mg/L
MKTF-15	5/13/2019	TPH DRO	9.7	1	0.35	16700	mg/L
MKTF-15	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-15	5/13/2019	Bromide	ND	2	0.35506	NA	mg/L
MKTF-15	5/13/2019	Chloride	3900	250	31.25	250000000	mg/L
MKTF-15	5/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-15	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-15	5/13/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-15	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-15	5/13/2019	Sulfate	0.44	2.5	0.2675	600000000	mg/L
MKTF-16	4/10/2014	TPH DRO	3.5	1	0.57	16700	mg/L
MKTF-16	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	4/10/2014	TPH GRO	67	5	1.9	10100	mg/L
MKTF-16	6/5/2014	Bromide	1.7	0.5	0.11	NA	mg/L
MKTF-16	6/5/2014	Chloride	540	25	12	250000000	mg/L
MKTF-16	6/5/2014	Fluoride, Total	1.1	0.5	0.089	1600000	mg/L
MKTF-16	6/5/2014	Ortho-Phosphate	ND	2.5	0.74	NA	mg/L
MKTF-16	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-16	6/5/2014	Sulfate	ND	2.5	0.34	600000000	mg/L
MKTF-16	6/5/2014	TPH DRO	5.7	1	0.57	16700	mg/L
MKTF-16	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/5/2014	TPH GRO	71	2.5	0.36	10100	mg/L
MKTF-16	9/17/2014	TPH DRO	4.6	1	0.83	16700	mg/L
MKTF-16	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/17/2014	TPH GRO	66	5	1.9	10100	mg/L
MKTF-16	11/18/2014	Bromide	1.8	0.5	0.13	NA	mg/L
MKTF-16	11/18/2014	Chloride	700	25	1.1	250000000	mg/L
MKTF-16	11/18/2014	Fluoride, Total	1.5	0.5	0.074	1600000	mg/L
MKTF-16	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-16	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-16	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-16	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	TPH DRO	2.7	1	0.83	16700	mg/L
MKTF-16	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/18/2014	TPH GRO	53	2.5	0.96	10100	mg/L
MKTF-16	3/16/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-16	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	3/16/2015	TPH GRO	61	10	2.4	10100	mg/L
MKTF-16	6/8/2015	TPH DRO	4.3	1	0.91	16700	mg/L
MKTF-16	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/8/2015	TPH GRO	69	2.5	0.6	10100	mg/L
MKTF-16	8/23/2015	Bromide	2.3	0.5	0.39	NA	mg/L
MKTF-16	8/23/2015	Chloride	1700	50	34	250000000	mg/L
MKTF-16	8/23/2015	Fluoride, Total	0.66	0.5	0.15	1600000	mg/L
MKTF-16	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-16	8/23/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-16	8/23/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-16	8/23/2015	TPH DRO	3.7	1	0.91	16700	mg/L
MKTF-16	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	8/23/2015	TPH GRO	83	5	4	10100	mg/L
MKTF-16	11/3/2015	Bromide	2.8	0.5	0.34	NA	mg/L
MKTF-16	11/3/2015	Chloride	1000	50	34	250000000	mg/L
MKTF-16	11/3/2015	Fluoride, Total	0.88	0.5	0.16	1600000	mg/L
MKTF-16	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-16	11/3/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-16	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-16	11/3/2015	TPH DRO	3.1	1	0.91	16700	mg/L
MKTF-16	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/3/2015	TPH GRO	91	5	1.2	10100	mg/L
MKTF-16	2/29/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-16	2/29/2016	Chloride	710	25	1.4	250000000	mg/L
MKTF-16	2/29/2016	Fluoride, Total	1	0.1	0.023	1600000	mg/L
MKTF-16	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-16	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-16	2/29/2016	Sulfate	ND	0.5	0.064	600000000	mg/L
MKTF-16	2/29/2016	TPH DRO	2.6	1	0.69	16700	mg/L
MKTF-16	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	2/29/2016	TPH GRO	73	5	2.5	10100	mg/L
MKTF-16	6/9/2016	TPH DRO	3	1	0.69	16700	mg/L
MKTF-16	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/9/2016	TPH GRO	69	5	2.5	10100	mg/L
MKTF-16	9/12/2016	Bromide	0.8	0.1	0.044	NA	mg/L
MKTF-16	9/12/2016	Chloride	390	25	2.5	250000000	mg/L
MKTF-16	9/12/2016	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
MKTF-16	9/12/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-16	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-16	9/12/2016	Sulfate	0.36	0.5	0.14	600000000	mg/L
MKTF-16	9/12/2016	TPH DRO	3.5	1	0.69	16700	mg/L
MKTF-16	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/12/2016	TPH GRO	62	5	1.5	10100	mg/L
MKTF-16	11/3/2016	Bromide	2.3	0.5	0.22	NA	mg/L
MKTF-16	11/3/2016	Chloride	380	10	1	250000000	mg/L
MKTF-16	11/3/2016	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-16	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-16	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-16	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-16	11/3/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-16	11/3/2016	TPH DRO	3.3	1	0.69	16700	mg/L
MKTF-16	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/3/2016	TPH GRO	70	10	5.1	10100	mg/L
MKTF-16	3/14/2017	Bromide	0.64	0.1	0.031	NA	mg/L
MKTF-16	3/14/2017	Chloride	580	25	12	250000000	mg/L
MKTF-16	3/14/2017	Fluoride, Total	0.95	0.1	0.05	1600000	mg/L
MKTF-16	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-16	3/14/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
MKTF-16	3/14/2017	Nitrogen, Nitrate	0.35	0.1	0.022	10000000	mg/L
MKTF-16	3/14/2017	Sulfate	0.14	0.5	0.096	600000000	mg/L
MKTF-16	3/14/2017	TPH DRO	5.9	1	0.36	16700	mg/L
MKTF-16	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	3/14/2017	TPH GRO	85	5	2.5	10100	mg/L
MKTF-16	6/8/2017	Bromide	2.7	0.1	0.014	NA	mg/L
MKTF-16	6/8/2017	Chloride	800	25	12	250000000	mg/L
MKTF-16	6/8/2017	Fluoride, Total	1.4	0.1	0.044	1600000	mg/L
MKTF-16	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-16	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	6/8/2017	Sulfate	0.68	0.5	0.096	600000000	mg/L
MKTF-16	6/8/2017	TPH DRO	4.3	1	0.36	16700	mg/L
MKTF-16	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/8/2017	TPH GRO	60	5	2.5	10100	mg/L
MKTF-16	9/26/2017	Bromide	3.8	0.5	0.073	NA	mg/L
MKTF-16	9/26/2017	Chloride	810	50	25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	Fluoride, Total	0.48	0.5	0.22	1600000	mg/L
MKTF-16	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	9/26/2017	Sulfate	0.64	2.5	0.48	600000000	mg/L
MKTF-16	9/26/2017	TPH DRO	4.7	1	0.36	16700	mg/L
MKTF-16	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/26/2017	TPH GRO	78	5	2.5	10100	mg/L
MKTF-16	11/29/2017	Bromide	3.7	0.5	0.073	NA	mg/L
MKTF-16	11/29/2017	Chloride	700	50	25	250000000	mg/L
MKTF-16	11/29/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MKTF-16	11/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	11/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	11/29/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-16	11/29/2017	TPH DRO	4	1	0.36	16700	mg/L
MKTF-16	11/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/29/2017	TPH GRO	70	5	0.97	10100	mg/L
MKTF-16	2/15/2018	Bromide	ND	0.5	0.073	NA	mg/L
MKTF-16	2/15/2018	Chloride	760	50	25	250000000	mg/L
MKTF-16	2/15/2018	Fluoride, Total	4.5	0.5	0.22	1600000	mg/L
MKTF-16	2/15/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-16	2/15/2018	Nitrogen, Nitrate	0.13	0.5	0.11	10000000	mg/L
MKTF-16	2/15/2018	Sulfate	57	2.5	0.48	600000000	mg/L
MKTF-16	2/15/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-16	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	2/15/2018	TPH GRO	8.4	1	0.19	10100	mg/L
MKTF-16	5/11/2018	Bromide	2.1	0.5	0.13	NA	mg/L
MKTF-16	5/11/2018	Chloride	840	25	1.5	250000000	mg/L
MKTF-16	5/11/2018	Fluoride, Total	0.25	0.5	0.15	1600000	mg/L
MKTF-16	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-16	5/11/2018	Nitrogen, Nitrite	0.33	0.5	0.24	1000000	mg/L
MKTF-16	5/11/2018	Nitrogen, Nitrate	0.099	0.5	0.033	10000000	mg/L
MKTF-16	5/11/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-16	5/11/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-16	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	5/11/2018	TPH GRO	47	1	0.19	10100	mg/L
MKTF-16	8/31/2018	Bromide	2.3	0.5	0.13	NA	mg/L
MKTF-16	8/31/2018	Chloride	650	25	9.1	250000000	mg/L
MKTF-16	8/31/2018	Fluoride, Total	1.5	0.5	0.16	1600000	mg/L
MKTF-16	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-16	8/31/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-16	8/31/2018	Sulfate	1.4	2.5	1	600000000	mg/L
MKTF-16	8/31/2018	TPH DRO	3.3	1	0.63	16700	mg/L
MKTF-16	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	8/31/2018	TPH GRO	50	5	0.97	10100	mg/L
MKTF-16	11/29/2018	Bromide	2.1	0.5	0.1	NA	mg/L
MKTF-16	11/29/2018	Chloride	620	25	25	250000000	mg/L
MKTF-16	11/29/2018	Fluoride, Total	1.4	0.5	0.5	1600000	mg/L
MKTF-16	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-16	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-16	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-16	11/29/2018	Sulfate	0.64	2.5	0.63	600000000	mg/L
MKTF-16	11/29/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-16	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/29/2018	TPH GRO	34	2.5	1.2	10100	mg/L
MKTF-16	2/20/2019	TPH GRO	48	2.5	1.055	10100	mg/L
MKTF-16	2/20/2019	TPH DRO	2.2	1	0.35	16700	mg/L
MKTF-16	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-16	2/20/2019	Bromide	1.9	0.5	0.0675	NA	mg/L
MKTF-16	2/20/2019	Chloride	590	25	25	250000000	mg/L
MKTF-16	2/20/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
MKTF-16	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-16	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-16	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-16	2/20/2019	Sulfate	0.41	2.5	0.32	600000000	mg/L
MKTF-16	5/14/2019	TPH GRO	30	5	3.07	10100	mg/L
MKTF-16	5/14/2019	TPH DRO	3.4	1	0.35	16700	mg/L
MKTF-16	5/14/2019	Motor Oil	16	5	5	85800	mg/L
MKTF-16	5/14/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-16	5/14/2019	Chloride	960	50	6.25	250000000	mg/L
MKTF-16	5/14/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-16	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-16	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-16	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-16	5/14/2019	Sulfate	0.68	2.5	0.2675	600000000	mg/L
MKTF-16	8/22/2019	TPH GRO	20	5	3.07	10100	mg/L
MKTF-16	8/22/2019	TPH DRO	3.6	1	0.35	16700	mg/L
MKTF-16	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-16	8/30/2019	Bromide	1.9	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/30/2019	Chloride	1800	100	50	250000000	mg/L
MKTF-16	8/30/2019	Fluoride, Total	0.67	0.5	0.073	1600000	mg/L
MKTF-16	8/30/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-16	8/30/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-16	8/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-16	8/30/2019	Sulfate	ND	2.5	1.25	600000000	mg/L
MKTF-16	10/30/2019	TPH GRO	33	5	1.93	10100	mg/L
MKTF-16	10/30/2019	TPH DRO	0.24	0.4	0.132	16700	mg/L
MKTF-16	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-16	10/30/2019	Bromide	1.8	0.5	0.077	NA	mg/L
MKTF-16	10/30/2019	Chloride	1700	100	100	250000000	mg/L
MKTF-16	10/30/2019	Fluoride, Total	0.81	0.1	0.028982	1600000	mg/L
MKTF-16	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-16	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-16	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-16	10/30/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-16	12/23/2020	Ammonia	1.13	0.05	0.024	NA	mg/L
MKTF-16	12/23/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-16	12/23/2020	TPH (C6-C10)	32000	2000	940	NA	ug/L
MKTF-17	4/9/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-17	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	4/9/2014	TPH GRO	8.6	2.5	0.46	10100	mg/L
MKTF-17	6/6/2014	TPH DRO	4.2	1	0.57	16700	mg/L
MKTF-17	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/6/2014	TPH GRO	8.3	0.5	0.071	10100	mg/L
MKTF-17	6/16/2014	Bromide	0.26	0.1	0.022	NA	mg/L
MKTF-17	6/16/2014	Chloride	98	10	5	250000000	mg/L
MKTF-17	6/16/2014	Fluoride, Total	0.61	0.1	0.018	1600000	mg/L
MKTF-17	6/16/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-17	6/16/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
MKTF-17	6/16/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
MKTF-17	6/16/2014	Sulfate	60	10	1.4	600000000	mg/L
MKTF-17	9/18/2014	TPH DRO	1.5	1	0.83	16700	mg/L
MKTF-17	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/18/2014	TPH GRO	3.3	1	0.38	10100	mg/L
MKTF-17	11/18/2014	Bromide	0.44	0.1	0.026	NA	mg/L
MKTF-17	11/18/2014	Chloride	84	10	0.43	250000000	mg/L
MKTF-17	11/18/2014	Fluoride, Total	0.66	0.1	0.015	1600000	mg/L
MKTF-17	11/18/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-17	11/18/2014	Nitrogen, Nitrite	ND	0.1	0.01	1000000	mg/L
MKTF-17	11/18/2014	Nitrogen, Nitrate	ND	0.1	0.0064	10000000	mg/L
MKTF-17	11/18/2014	Sulfate	200	10	1.6	600000000	mg/L
MKTF-17	11/18/2014	TPH DRO	1.4	1	0.83	16700	mg/L
MKTF-17	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/18/2014	TPH GRO	1.2	1	0.38	10100	mg/L
MKTF-17	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-17	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	3/12/2015	TPH GRO	0.8	0.05	0.012	10100	mg/L
MKTF-17	6/8/2015	TPH DRO	1.3	1	0.91	16700	mg/L
MKTF-17	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/8/2015	TPH GRO	0.77	0.05	0.012	10100	mg/L
MKTF-17	8/18/2015	Bromide	0.47	0.1	0.077	NA	mg/L
MKTF-17	8/18/2015	Chloride	74	10	2.7	250000000	mg/L
MKTF-17	8/18/2015	Fluoride, Total	0.5	0.1	0.029	1600000	mg/L
MKTF-17	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-17	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-17	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-17	8/18/2015	Sulfate	160	10	2.3	600000000	mg/L
MKTF-17	8/18/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-17	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	8/18/2015	TPH GRO	1.7	0.05	0.012	10100	mg/L
MKTF-17	11/3/2015	Bromide	0.64	0.1	0.068	NA	mg/L
MKTF-17	11/3/2015	Chloride	78	10	6.8	250000000	mg/L
MKTF-17	11/3/2015	Fluoride, Total	0.61	0.1	0.032	1600000	mg/L
MKTF-17	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-17	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-17	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-17	11/3/2015	Sulfate	120	10	6.4	600000000	mg/L
MKTF-17	11/3/2015	TPH DRO	1.5	1	0.91	16700	mg/L
MKTF-17	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/3/2015	TPH GRO	2.5	0.25	0.06	10100	mg/L
MKTF-17	2/26/2016	Bromide	0.66	0.1	0.032	NA	mg/L
MKTF-17	2/26/2016	Chloride	76	10	0.55	250000000	mg/L
MKTF-17	2/26/2016	Fluoride, Total	0.54	0.1	0.023	1600000	mg/L
MKTF-17	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-17	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-17	2/26/2016	Sulfate	180	10	1.3	600000000	mg/L
MKTF-17	2/26/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-17	2/26/2016	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/26/2016	TPH GRO	1.6	0.25	0.13	10100	mg/L
MKTF-17	6/10/2016	TPH DRO	2.1	1	0.69	16700	mg/L
MKTF-17	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/10/2016	TPH GRO	9.2	0.5	0.25	10100	mg/L
MKTF-17	9/13/2016	Bromide	0.29	0.1	0.044	NA	mg/L
MKTF-17	9/13/2016	Chloride	70	10	1	250000000	mg/L
MKTF-17	9/13/2016	Fluoride, Total	0.83	0.1	0.05	1600000	mg/L
MKTF-17	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-17	9/13/2016	Nitrate & Nitrite	0.58	1	0.46	NA	mg/L
MKTF-17	9/13/2016	Sulfate	45	10	2.8	600000000	mg/L
MKTF-17	9/13/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-17	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/13/2016	TPH GRO	7.5	0.5	0.15	10100	mg/L
MKTF-17	11/8/2016	Bromide	0.49	0.1	0.044	NA	mg/L
MKTF-17	11/8/2016	Chloride	64	10	1	250000000	mg/L
MKTF-17	11/8/2016	Fluoride, Total	0.77	0.1	0.05	1600000	mg/L
MKTF-17	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-17	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-17	11/8/2016	Sulfate	45	10	2.8	600000000	mg/L
MKTF-17	11/8/2016	TPH DRO	1.3	1	0.69	16700	mg/L
MKTF-17	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/8/2016	TPH GRO	4.5	1	0.51	10100	mg/L
MKTF-17	3/15/2017	Bromide	0.46	0.1	0.031	NA	mg/L
MKTF-17	3/15/2017	Chloride	61	10	5	250000000	mg/L
MKTF-17	3/15/2017	Fluoride, Total	0.73	0.1	0.05	1600000	mg/L
MKTF-17	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-17	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-17	3/15/2017	Nitrogen, Nitrate	ND	0.1	0.022	10000000	mg/L
MKTF-17	3/15/2017	Sulfate	43	10	1.9	600000000	mg/L
MKTF-17	3/15/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-17	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	3/15/2017	TPH GRO	3.5	0.5	0.25	10100	mg/L
MKTF-17	6/14/2017	Bromide	0.68	0.5	0.073	NA	mg/L
MKTF-17	6/14/2017	Chloride	70	2.5	1.2	250000000	mg/L
MKTF-17	6/14/2017	Fluoride, Total	0.81	0.5	0.22	1600000	mg/L
MKTF-17	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	6/14/2017	Sulfate	66	2.5	0.48	600000000	mg/L
MKTF-17	6/14/2017	TPH DRO	2.2	1	0.36	16700	mg/L
MKTF-17	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/14/2017	TPH GRO	4	0.5	0.25	10100	mg/L
MKTF-17	9/26/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-17	9/26/2017	Chloride	83	2.5	1.2	250000000	mg/L
MKTF-17	9/26/2017	Fluoride, Total	0.76	0.5	0.22	1600000	mg/L
MKTF-17	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	9/26/2017	Sulfate	22	2.5	0.48	600000000	mg/L
MKTF-17	9/26/2017	TPH DRO	2	1	0.36	16700	mg/L
MKTF-17	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/26/2017	TPH GRO	4.3	0.5	0.25	10100	mg/L
MKTF-17	12/1/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-17	12/1/2017	Chloride	92	2.5	1.2	250000000	mg/L
MKTF-17	12/1/2017	Fluoride, Total	0.91	0.5	0.22	1600000	mg/L
MKTF-17	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	12/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	12/1/2017	Sulfate	97	2.5	0.48	600000000	mg/L
MKTF-17	12/1/2017	TPH DRO	1.1	1	0.36	16700	mg/L
MKTF-17	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	12/1/2017	TPH GRO	2.5	0.5	0.097	10100	mg/L
MKTF-17	2/16/2018	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-17	2/16/2018	Chloride	100	10	5	250000000	mg/L
MKTF-17	2/16/2018	Fluoride, Total	0.74	0.5	0.22	1600000	mg/L
MKTF-17	2/16/2018	Ortho-Phosphate	1.9	2.5	1.2	NA	mg/L
MKTF-17	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-17	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-17	2/16/2018	Sulfate	52	2.5	0.48	600000000	mg/L
MKTF-17	2/16/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-17	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	2/16/2018	TPH GRO	3.7	0.5	0.097	10100	mg/L
MKTF-17	5/4/2018	Bromide	1.9	0.1	0.027	NA	mg/L
MKTF-17	5/4/2018	Chloride	130	10	0.59	250000000	mg/L
MKTF-17	5/4/2018	Fluoride, Total	0.26	0.1	0.03	1600000	mg/L
MKTF-17	5/4/2018	Ortho-Phosphate	1.2	0.5	0.093	NA	mg/L
MKTF-17	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-17	5/4/2018	Nitrogen, Nitrate	0.054	0.1	0.0066	10000000	mg/L
MKTF-17	5/4/2018	Sulfate	68	10	4.1	600000000	mg/L
MKTF-17	5/4/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-17	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	5/4/2018	TPH GRO	7.1	0.5	0.097	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-17	8/24/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-17	8/24/2018	Fluoride, Total	0.55	0.5	0.15	1600000	mg/L
MKTF-17	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-17	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-17	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-17	8/24/2018	Sulfate	160	2.5	1	600000000	mg/L
MKTF-17	8/24/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-17	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	8/24/2018	TPH GRO	4.7	0.05	0.024	10100	mg/L
MKTF-17	11/28/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-17	11/28/2018	Chloride	110	10	10	250000000	mg/L
MKTF-17	11/28/2018	Fluoride, Total	0.9	0.5	0.5	1600000	mg/L
MKTF-17	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-17	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-17	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-17	11/28/2018	Sulfate	120	2.5	0.63	600000000	mg/L
MKTF-17	11/28/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-17	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/28/2018	TPH GRO	3	0.05	0.024	10100	mg/L
MKTF-17	5/9/2019	TPH GRO	9.1	0.25	0.1535	10100	mg/L
MKTF-17	5/9/2019	TPH DRO	7.6	1	0.35	16700	mg/L
MKTF-17	5/9/2019	Motor Oil	5	5	5	85800	mg/L
MKTF-17	5/9/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-17	5/9/2019	Chloride	100	10	1.25	250000000	mg/L
MKTF-17	5/9/2019	Fluoride, Total	0.71	0.5	0.25	1600000	mg/L
MKTF-17	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-17	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-17	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-17	5/9/2019	Sulfate	15	2.5	0.2675	600000000	mg/L
MKTF-17	8/20/2019	TPH GRO	7.6	0.5	0.307	10100	mg/L
MKTF-17	8/20/2019	TPH DRO	3.3	1	0.35	16700	mg/L
MKTF-17	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-17	8/20/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-17	8/20/2019	Chloride	140	10	10	250000000	mg/L
MKTF-17	8/20/2019	Fluoride, Total	0.74	0.5	0.073	1600000	mg/L
MKTF-17	8/20/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-17	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-17	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-17	8/20/2019	Sulfate	14	2.5	0.3345	600000000	mg/L
MKTF-17	10/29/2019	TPH GRO	78	5	1.93	10100	mg/L
MKTF-17	10/29/2019	TPH DRO	0.7	0.4	0.132	16700	mg/L
MKTF-17	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-17	10/29/2019	Bromide	1.3	0.5	0.077	NA	mg/L
MKTF-17	10/29/2019	Chloride	240	10	10	250000000	mg/L
MKTF-17	10/29/2019	Fluoride, Total	0.82	0.5	0.144909	1600000	mg/L
MKTF-17	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-17	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-17	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-17	10/29/2019	Sulfate	6.2	2.5	0.3345	600000000	mg/L
MKTF-18	4/14/2014	TPH DRO	4.4	1	0.57	16700	mg/L
MKTF-18	4/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	4/14/2014	TPH GRO	2.2	0.25	0.096	10100	mg/L
MKTF-18	6/6/2014	Bromide	0.81	0.1	0.022	NA	mg/L
MKTF-18	6/6/2014	Chloride	170	10	5	250000000	mg/L
MKTF-18	6/6/2014	Fluoride, Total	0.65	0.1	0.018	1600000	mg/L
MKTF-18	6/6/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-18	6/6/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-18	6/6/2014	Sulfate	0.95	0.5	0.068	600000000	mg/L
MKTF-18	6/6/2014	TPH DRO	7.8	1	0.57	16700	mg/L
MKTF-18	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/6/2014	TPH GRO	2.2	0.25	0.036	10100	mg/L
MKTF-18	9/18/2014	TPH DRO	3.1	1	0.83	16700	mg/L
MKTF-18	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	9/18/2014	TPH GRO	1.4	0.5	0.19	10100	mg/L
MKTF-18	11/18/2014	Bromide	0.81	0.5	0.13	NA	mg/L
MKTF-18	11/18/2014	Chloride	160	10	0.43	250000000	mg/L
MKTF-18	11/18/2014	Fluoride, Total	0.68	0.5	0.074	1600000	mg/L
MKTF-18	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-18	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-18	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-18	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L
MKTF-18	11/18/2014	TPH DRO	2.3	1	0.83	16700	mg/L
MKTF-18	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/18/2014	TPH GRO	1.4	0.25	0.096	10100	mg/L
MKTF-18	3/17/2015	TPH DRO	5.4	1	0.91	16700	mg/L
MKTF-18	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	3/17/2015	TPH GRO	1.8	0.25	0.06	10100	mg/L
MKTF-18	6/8/2015	TPH DRO	3.3	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/8/2015	TPH GRO	1.4	0.25	0.06	10100	mg/L
MKTF-18	8/18/2015	Bromide	0.52	0.1	0.077	NA	mg/L
MKTF-18	8/18/2015	Chloride	170	10	2.7	250000000	mg/L
MKTF-18	8/18/2015	Fluoride, Total	0.55	0.1	0.029	1600000	mg/L
MKTF-18	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-18	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-18	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-18	8/18/2015	Sulfate	ND	0.5	0.11	600000000	mg/L
MKTF-18	8/18/2015	TPH DRO	34	1	0.91	16700	mg/L
MKTF-18	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	8/18/2015	TPH GRO	1.3	0.25	0.06	10100	mg/L
MKTF-18	11/3/2015	Bromide	0.64	0.1	0.068	NA	mg/L
MKTF-18	11/3/2015	Chloride	160	10	6.8	250000000	mg/L
MKTF-18	11/3/2015	Fluoride, Total	0.61	0.1	0.032	1600000	mg/L
MKTF-18	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-18	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-18	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-18	11/3/2015	Sulfate	ND	0.5	0.32	600000000	mg/L
MKTF-18	11/3/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-18	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/3/2015	TPH GRO	1.3	0.25	0.06	10100	mg/L
MKTF-18	2/26/2016	Bromide	0.8	0.1	0.032	NA	mg/L
MKTF-18	2/26/2016	Chloride	160	10	0.55	250000000	mg/L
MKTF-18	2/26/2016	Fluoride, Total	0.64	0.1	0.023	1600000	mg/L
MKTF-18	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-18	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-18	2/26/2016	Sulfate	ND	0.5	0.064	600000000	mg/L
MKTF-18	2/26/2016	TPH DRO	3	1	0.69	16700	mg/L
MKTF-18	2/26/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	2/26/2016	TPH GRO	0.79	0.25	0.13	10100	mg/L
MKTF-18	6/10/2016	Bromide	0.13	0.1	0.032	NA	mg/L
MKTF-18	6/10/2016	Chloride	180	10	0.55	250000000	mg/L
MKTF-18	6/10/2016	Fluoride, Total	0.63	0.1	0.023	1600000	mg/L
MKTF-18	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-18	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-18	6/10/2016	Sulfate	0.21	0.5	0.064	600000000	mg/L
MKTF-18	6/10/2016	TPH DRO	1.9	1	0.69	16700	mg/L
MKTF-18	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/10/2016	TPH GRO	0.71	0.05	0.025	10100	mg/L
MKTF-18	9/13/2016	Bromide	0.83	0.1	0.044	NA	mg/L
MKTF-18	9/13/2016	Chloride	170	10	1	250000000	mg/L
MKTF-18	9/13/2016	Fluoride, Total	0.67	0.1	0.05	1600000	mg/L
MKTF-18	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-18	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-18	9/13/2016	Sulfate	0.34	0.5	0.14	600000000	mg/L
MKTF-18	9/13/2016	TPH DRO	2.2	1	0.69	16700	mg/L
MKTF-18	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	9/13/2016	TPH GRO	0.56	0.05	0.015	10100	mg/L
MKTF-18	11/8/2016	Bromide	0.85	0.1	0.044	NA	mg/L
MKTF-18	11/8/2016	Chloride	160	10	1	250000000	mg/L
MKTF-18	11/8/2016	Fluoride, Total	0.62	0.1	0.05	1600000	mg/L
MKTF-18	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-18	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-18	11/8/2016	Sulfate	0.23	0.5	0.14	600000000	mg/L
MKTF-18	11/8/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-18	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/8/2016	TPH GRO	0.6	0.05	0.025	10100	mg/L
MKTF-18	3/1/2017	Bromide	1.1	0.1	0.031	NA	mg/L
MKTF-18	3/1/2017	Chloride	180	10	5	250000000	mg/L
MKTF-18	3/1/2017	Fluoride, Total	0.62	0.1	0.05	1600000	mg/L
MKTF-18	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-18	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-18	3/1/2017	Sulfate	0.22	0.5	0.096	600000000	mg/L
MKTF-18	3/1/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-18	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	3/1/2017	TPH GRO	0.81	0.05	0.025	10100	mg/L
MKTF-18	6/14/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-18	6/14/2017	Chloride	190	10	5	250000000	mg/L
MKTF-18	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-18	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-18	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-18	6/14/2017	Sulfate	0.53	2.5	0.48	600000000	mg/L
MKTF-18	6/14/2017	TPH DRO	7.1	1	0.36	16700	mg/L
MKTF-18	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/14/2017	TPH GRO	0.83	0.05	0.025	10100	mg/L
MKTF-18	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-18	2/16/2018	Chloride	220	10	5	250000000	mg/L
MKTF-18	2/16/2018	Fluoride, Total	0.61	0.5	0.22	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/16/2018	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
MKTF-18	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-18	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-18	2/16/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-18	2/16/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-18	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	2/16/2018	TPH GRO	0.85	0.05	0.0097	10100	mg/L
MKTF-18	5/4/2018	Bromide	1.1	0.1	0.027	NA	mg/L
MKTF-18	5/4/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-18	5/4/2018	Fluoride, Total	0.49	0.1	0.03	1600000	mg/L
MKTF-18	5/4/2018	Ortho-Phosphate	1.4	0.5	0.093	NA	mg/L
MKTF-18	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-18	5/4/2018	Nitrogen, Nitrate	0.051	0.1	0.0066	10000000	mg/L
MKTF-18	5/4/2018	Sulfate	0.41	0.5	0.21	600000000	mg/L
MKTF-18	5/4/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-18	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	5/4/2018	TPH GRO	0.8	0.05	0.0097	10100	mg/L
MKTF-18	8/24/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-18	8/24/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-18	8/24/2018	Fluoride, Total	0.51	0.5	0.15	1600000	mg/L
MKTF-18	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-18	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-18	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-18	8/24/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-18	8/24/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-18	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	8/24/2018	TPH GRO	0.97	0.05	0.024	10100	mg/L
MKTF-18	11/28/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-18	11/28/2018	Chloride	220	10	10	250000000	mg/L
MKTF-18	11/28/2018	Fluoride, Total	0.73	0.5	0.5	1600000	mg/L
MKTF-18	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-18	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-18	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-18	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-18	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-18	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/28/2018	TPH GRO	0.12	0.05	0.024	10100	mg/L
MKTF-18	5/16/2019	TPH GRO	0.69	0.1	0.0614	10100	mg/L
MKTF-18	5/16/2019	TPH DRO	3.3	1	0.35	16700	mg/L
MKTF-18	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-18	5/16/2019	Bromide	0.99	0.5	0.088765	NA	mg/L
MKTF-18	5/16/2019	Chloride	190	10	1.25	250000000	mg/L
MKTF-18	5/16/2019	Fluoride, Total	0.59	0.5	0.25	1600000	mg/L
MKTF-18	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-18	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-18	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-18	5/16/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
MKTF-18	10/29/2019	TPH GRO	0.73	0.05	0.0193	10100	mg/L
MKTF-18	10/29/2019	TPH DRO	0.2	0.4	0.132	16700	mg/L
MKTF-18	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-18	10/29/2019	Bromide	0.99	0.5	0.077	NA	mg/L
MKTF-18	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-18	10/29/2019	Fluoride, Total	0.76	0.5	0.144909	1600000	mg/L
MKTF-18	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-18	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-18	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-18	10/29/2019	Sulfate	0.57	2.5	0.3345	600000000	mg/L
MKTF-18	2/6/2020	TPH GRO	0.82	0.05	0.021	10100	mg/L
MKTF-18	2/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-18	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-18	2/6/2020	Bromide	0.68	0.5	0.25	NA	mg/L
MKTF-18	2/6/2020	Fluoride, Total	0.77	0.5	0.11	1600000	mg/L
MKTF-18	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-18	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-18	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-18	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-18	2/6/2020	Chloride	200	10	5	250000000	mg/L
MKTF-18	12/16/2020	Phosphorus, Total	0.187	0.1	0.032	NA	mg/L
MKTF-18	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-18	12/16/2020	Bicarbonate	618	1	0.5	NA	mg/L
MKTF-18	12/16/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-18	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-18	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-18	12/16/2020	Chloride	279	10	1.2	250000000	mg/L
MKTF-18	12/16/2020	TPH DRO	2930	148	119	16700	ug/L
MKTF-18	12/16/2020	C28-C40	ND	148	119	NA	ug/L
MKTF-18	12/16/2020	TPH (C6-C10)	1250	500	235	NA	ug/L
MKTF-19	4/9/2014	TPH DRO	17	1	0.57	16700	mg/L
MKTF-19	4/9/2014	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	4/9/2014	TPH GRO	18	2.5	0.46	10100	mg/L
MKTF-19	9/24/2014	TPH DRO	61	1	0.83	16700	mg/L
MKTF-19	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/24/2014	TPH GRO	16	2.5	0.96	10100	mg/L
MKTF-19	11/18/2014	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-19	11/18/2014	Chloride	110	10	0.43	250000000	mg/L
MKTF-19	11/18/2014	Fluoride, Total	ND	0.5	0.074	1600000	mg/L
MKTF-19	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-19	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-19	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-19	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L
MKTF-19	11/18/2014	TPH DRO	13	1	0.83	16700	mg/L
MKTF-19	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/18/2014	TPH GRO	20	2.5	0.96	10100	mg/L
MKTF-19	3/12/2015	TPH DRO	9.3	1	0.91	16700	mg/L
MKTF-19	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	3/12/2015	TPH GRO	14	1	0.24	10100	mg/L
MKTF-19	6/8/2015	TPH DRO	9.9	1	0.91	16700	mg/L
MKTF-19	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/8/2015	TPH GRO	19	0.5	0.12	10100	mg/L
MKTF-19	8/18/2015	Bromide	0.47	0.1	0.077	NA	mg/L
MKTF-19	8/18/2015	Chloride	140	10	2.7	250000000	mg/L
MKTF-19	8/18/2015	Fluoride, Total	0.18	0.1	0.029	1600000	mg/L
MKTF-19	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-19	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-19	8/18/2015	Nitrogen, Nitrate	0.17	0.1	0.032	10000000	mg/L
MKTF-19	8/18/2015	Sulfate	ND	0.5	0.11	600000000	mg/L
MKTF-19	8/18/2015	TPH DRO	27	1	0.91	16700	mg/L
MKTF-19	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	8/18/2015	TPH GRO	20	1	0.24	10100	mg/L
MKTF-19	11/3/2015	Bromide	1.5	0.5	0.34	NA	mg/L
MKTF-19	11/3/2015	Chloride	130	10	6.8	250000000	mg/L
MKTF-19	11/3/2015	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-19	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-19	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-19	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-19	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-19	11/3/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-19	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/3/2015	TPH GRO	34	0.5	0.12	10100	mg/L
MKTF-19	2/25/2016	Bromide	1.6	0.5	0.16	NA	mg/L
MKTF-19	2/25/2016	Chloride	150	10	0.55	250000000	mg/L
MKTF-19	2/25/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-19	2/25/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-19	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-19	2/25/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-19	2/25/2016	TPH DRO	7.8	1	0.69	16700	mg/L
MKTF-19	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	2/25/2016	TPH GRO	22	1	0.51	10100	mg/L
MKTF-19	6/10/2016	Bromide	0.3	0.1	0.032	NA	mg/L
MKTF-19	6/10/2016	Chloride	150	10	0.55	250000000	mg/L
MKTF-19	6/10/2016	Fluoride, Total	0.17	0.1	0.023	1600000	mg/L
MKTF-19	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-19	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-19	6/10/2016	Sulfate	0.28	0.5	0.064	600000000	mg/L
MKTF-19	6/10/2016	TPH DRO	7.2	1	0.69	16700	mg/L
MKTF-19	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/10/2016	TPH GRO	21	1	0.51	10100	mg/L
MKTF-19	9/13/2016	Bromide	0.66	0.1	0.044	NA	mg/L
MKTF-19	9/13/2016	Chloride	130	10	1	250000000	mg/L
MKTF-19	9/13/2016	Fluoride, Total	0.34	0.1	0.05	1600000	mg/L
MKTF-19	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-19	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-19	9/13/2016	Sulfate	0.57	0.5	0.14	600000000	mg/L
MKTF-19	9/13/2016	TPH DRO	7.6	1	0.69	16700	mg/L
MKTF-19	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/13/2016	TPH GRO	25	1	0.3	10100	mg/L
MKTF-19	11/8/2016	Bromide	0.55	0.1	0.044	NA	mg/L
MKTF-19	11/8/2016	Chloride	110	10	1	250000000	mg/L
MKTF-19	11/8/2016	Fluoride, Total	0.28	0.1	0.05	1600000	mg/L
MKTF-19	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-19	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-19	11/8/2016	Sulfate	0.89	0.5	0.14	600000000	mg/L
MKTF-19	11/8/2016	TPH DRO	6.7	1	0.69	16700	mg/L
MKTF-19	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/8/2016	TPH GRO	26	2.5	1.3	10100	mg/L
MKTF-19	3/15/2017	Bromide	ND	0.1	0.031	NA	mg/L
MKTF-19	3/15/2017	Chloride	130	10	5	250000000	mg/L
MKTF-19	3/15/2017	Fluoride, Total	0.098	0.1	0.05	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-19	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-19	3/15/2017	Nitrogen, Nitrate	ND	0.1	0.022	10000000	mg/L
MKTF-19	3/15/2017	Sulfate	0.52	0.5	0.096	600000000	mg/L
MKTF-19	3/15/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-19	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	3/15/2017	TPH GRO	25	2.5	1.2	10100	mg/L
MKTF-19	6/14/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-19	6/14/2017	Chloride	130	10	5	250000000	mg/L
MKTF-19	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-19	6/14/2017	Sulfate	0.73	2.5	0.48	600000000	mg/L
MKTF-19	6/14/2017	TPH DRO	11	1	0.36	16700	mg/L
MKTF-19	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/14/2017	TPH GRO	23	2.5	1.2	10100	mg/L
MKTF-19	9/26/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-19	9/26/2017	Chloride	120	10	5	250000000	mg/L
MKTF-19	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-19	9/26/2017	Sulfate	0.77	2.5	0.48	600000000	mg/L
MKTF-19	9/26/2017	TPH DRO	11	1	0.36	16700	mg/L
MKTF-19	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/26/2017	TPH GRO	29	2.5	1.2	10100	mg/L
MKTF-19	12/1/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-19	12/1/2017	Chloride	120	10	5	250000000	mg/L
MKTF-19	12/1/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	12/1/2017	Nitrate & Nitrite	0.14	1	0.13	NA	mg/L
MKTF-19	12/1/2017	Sulfate	0.67	2.5	0.48	600000000	mg/L
MKTF-19	12/1/2017	TPH DRO	13	1	0.36	16700	mg/L
MKTF-19	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	12/1/2017	TPH GRO	24	2.5	0.48	10100	mg/L
MKTF-19	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-19	2/16/2018	Chloride	120	10	5	250000000	mg/L
MKTF-19	2/16/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	2/16/2018	Ortho-Phosphate	3.3	2.5	1.2	NA	mg/L
MKTF-19	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-19	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-19	2/16/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-19	2/16/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-19	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	2/16/2018	TPH GRO	16	1	0.19	10100	mg/L
MKTF-19	5/4/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-19	5/4/2018	Chloride	130	10	0.59	250000000	mg/L
MKTF-19	5/4/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-19	5/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-19	5/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-19	5/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-19	5/4/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-19	5/4/2018	TPH DRO	9.3	1	0.63	16700	mg/L
MKTF-19	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	5/4/2018	TPH GRO	23	1	0.19	10100	mg/L
MKTF-19	8/24/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-19	8/24/2018	Chloride	120	10	0.59	250000000	mg/L
MKTF-19	8/24/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-19	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-19	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-19	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-19	8/24/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-19	8/24/2018	TPH DRO	7.9	1	0.63	16700	mg/L
MKTF-19	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	8/24/2018	TPH GRO	22	1	0.49	10100	mg/L
MKTF-19	11/28/2018	Bromide	1.4	0.5	0.1	NA	mg/L
MKTF-19	11/28/2018	Chloride	140	10	10	250000000	mg/L
MKTF-19	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-19	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-19	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-19	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-19	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-19	11/28/2018	TPH DRO	7.8	1	0.63	16700	mg/L
MKTF-19	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/28/2018	TPH GRO	15	1	0.49	10100	mg/L
MKTF-19	5/9/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-19	5/9/2019	TPH DRO	11	1	0.35	16700	mg/L
MKTF-19	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	5/9/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	5/9/2019	Chloride	140	10	1.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-19	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-19	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-19	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-19	5/9/2019	Sulfate	0.31	2.5	0.2675	600000000	mg/L
MKTF-19	8/19/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-19	8/19/2019	TPH DRO	11	1	0.35	16700	mg/L
MKTF-19	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	8/19/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	8/19/2019	Chloride	140	10	10	250000000	mg/L
MKTF-19	8/19/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-19	8/19/2019	TPH GRO	18	2.5	1.535	10100	mg/L
MKTF-19	8/19/2019	TPH DRO	13	1	0.35	16700	mg/L
MKTF-19	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	8/19/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	8/19/2019	Chloride	140	10	10	250000000	mg/L
MKTF-19	8/19/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-19	10/29/2019	TPH GRO	17	1	0.386	10100	mg/L
MKTF-19	10/29/2019	TPH DRO	1	0.4	0.132	16700	mg/L
MKTF-19	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-19	10/29/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-19	10/29/2019	Chloride	130	10	10	250000000	mg/L
MKTF-19	10/29/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-19	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-19	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	10/29/2019	Sulfate	0.5	2.5	0.3345	600000000	mg/L
MKTF-20	4/11/2014	TPH DRO	16	1	0.57	16700	mg/L
MKTF-20	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	4/11/2014	TPH GRO	120	5	1.9	10100	mg/L
MKTF-20	11/18/2014	Bromide	ND	0.5	0.13	NA	mg/L
MKTF-20	11/18/2014	Chloride	82	2.5	0.11	250000000	mg/L
MKTF-20	11/18/2014	Fluoride, Total	0.87	0.5	0.074	1600000	mg/L
MKTF-20	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-20	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-20	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-20	11/18/2014	Sulfate	16	2.5	0.41	600000000	mg/L
MKTF-20	11/18/2014	TPH DRO	24	1	0.83	16700	mg/L
MKTF-20	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/18/2014	TPH GRO	45	5	1.9	10100	mg/L
MKTF-20	3/16/2015	TPH DRO	4.5	1	0.91	16700	mg/L
MKTF-20	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/16/2015	TPH GRO	37	2.5	0.6	10100	mg/L
MKTF-20	6/8/2015	TPH DRO	9.9	1	0.91	16700	mg/L
MKTF-20	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/8/2015	TPH GRO	30	2.5	0.6	10100	mg/L
MKTF-20	3/1/2016	TPH DRO	6.9	1	0.69	16700	mg/L
MKTF-20	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/1/2016	TPH GRO	73	2.5	1.3	10100	mg/L
MKTF-20	6/9/2016	Bromide	1.8	0.5	0.16	NA	mg/L
MKTF-20	6/9/2016	Chloride	450	25	1.4	250000000	mg/L
MKTF-20	6/9/2016	Fluoride, Total	3.1	0.5	0.11	1600000	mg/L
MKTF-20	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-20	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-20	6/9/2016	Sulfate	10	2.5	0.32	600000000	mg/L
MKTF-20	6/9/2016	TPH DRO	9	1	0.69	16700	mg/L
MKTF-20	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/9/2016	TPH GRO	63	2.5	1.3	10100	mg/L
MKTF-20	9/12/2016	Bromide	0.99	0.5	0.22	NA	mg/L
MKTF-20	9/12/2016	Chloride	370	25	2.5	250000000	mg/L
MKTF-20	9/12/2016	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
MKTF-20	9/12/2016	Ortho-Phosphate	3.1	2.5	0.38	NA	mg/L
MKTF-20	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-20	9/12/2016	Sulfate	1.2	2.5	0.71	600000000	mg/L
MKTF-20	9/12/2016	TPH DRO	8.7	1	0.69	16700	mg/L
MKTF-20	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	9/12/2016	TPH GRO	72	5	1.5	10100	mg/L
MKTF-20	11/3/2016	Bromide	1.6	0.5	0.22	NA	mg/L
MKTF-20	11/3/2016	Chloride	1500	50	5.1	250000000	mg/L
MKTF-20	11/3/2016	Fluoride, Total	2.6	0.5	0.25	1600000	mg/L
MKTF-20	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-20	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-20	11/3/2016	Sulfate	13	2.5	0.71	600000000	mg/L
MKTF-20	11/3/2016	TPH DRO	9.4	1	0.69	16700	mg/L
MKTF-20	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/3/2016	TPH GRO	65	10	5.1	10100	mg/L
MKTF-20	3/14/2017	Bromide	20	0.5	0.15	NA	mg/L
MKTF-20	3/14/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-20	3/14/2017	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-20	3/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	3/14/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-20	3/14/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-20	3/14/2017	Sulfate	5	2.5	0.48	600000000	mg/L
MKTF-20	3/14/2017	TPH DRO	16	1	0.36	16700	mg/L
MKTF-20	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/14/2017	TPH GRO	90	5	2.5	10100	mg/L
MKTF-20	6/12/2017	Bromide	8.7	0.5	0.073	NA	mg/L
MKTF-20	6/12/2017	Chloride	580	25	12	250000000	mg/L
MKTF-20	6/12/2017	Fluoride, Total	2	0.5	0.22	1600000	mg/L
MKTF-20	6/12/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	6/12/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	6/12/2017	Sulfate	0.64	2.5	0.48	600000000	mg/L
MKTF-20	6/12/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-20	6/12/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/12/2017	TPH GRO	95	5	2.5	10100	mg/L
MKTF-20	9/26/2017	Bromide	6.6	0.5	0.073	NA	mg/L
MKTF-20	9/26/2017	Chloride	590	25	12	250000000	mg/L
MKTF-20	9/26/2017	Fluoride, Total	2.2	0.5	0.22	1600000	mg/L
MKTF-20	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	9/26/2017	Sulfate	73	2.5	0.48	600000000	mg/L
MKTF-20	9/26/2017	TPH DRO	3.9	1	0.36	16700	mg/L
MKTF-20	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	9/26/2017	TPH GRO	78	5	2.5	10100	mg/L
MKTF-20	11/29/2017	Bromide	3.5	0.5	0.073	NA	mg/L
MKTF-20	11/29/2017	Chloride	420	25	12	250000000	mg/L
MKTF-20	11/29/2017	Fluoride, Total	2.1	0.5	0.22	1600000	mg/L
MKTF-20	11/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	11/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	11/29/2017	Sulfate	1	2.5	0.48	600000000	mg/L
MKTF-20	11/29/2017	TPH DRO	22	1	0.36	16700	mg/L
MKTF-20	11/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/29/2017	TPH GRO	91	5	0.97	10100	mg/L
MKTF-20	2/15/2018	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-20	2/15/2018	Chloride	3100	250	120	250000000	mg/L
MKTF-20	2/15/2018	Fluoride, Total	0.55	0.5	0.22	1600000	mg/L
MKTF-20	2/15/2018	Ortho-Phosphate	3.4	2.5	1.2	NA	mg/L
MKTF-20	2/15/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-20	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-20	2/15/2018	Sulfate	15	2.5	0.48	600000000	mg/L
MKTF-20	2/15/2018	TPH DRO	5.1	1	0.63	16700	mg/L
MKTF-20	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	2/15/2018	TPH GRO	79	5	0.97	10100	mg/L
MKTF-20	5/11/2018	Bromide	3.7	0.5	0.13	NA	mg/L
MKTF-20	5/11/2018	Chloride	1600	50	2.9	250000000	mg/L
MKTF-20	5/11/2018	Fluoride, Total	2.4	0.5	0.15	1600000	mg/L
MKTF-20	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-20	5/11/2018	Nitrogen, Nitrite	0.63	0.5	0.24	1000000	mg/L
MKTF-20	5/11/2018	Nitrogen, Nitrate	0.097	0.5	0.033	10000000	mg/L
MKTF-20	5/11/2018	Sulfate	18	2.5	1	600000000	mg/L
MKTF-20	5/11/2018	TPH DRO	9.7	1	0.63	16700	mg/L
MKTF-20	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	5/11/2018	TPH GRO	76	5	0.97	10100	mg/L
MKTF-20	8/31/2018	Bromide	1.9	0.5	0.13	NA	mg/L
MKTF-20	8/31/2018	Chloride	560	25	9.1	250000000	mg/L
MKTF-20	8/31/2018	Fluoride, Total	3.3	0.5	0.16	1600000	mg/L
MKTF-20	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-20	8/31/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-20	8/31/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-20	8/31/2018	Sulfate	8.4	2.5	1	600000000	mg/L
MKTF-20	8/31/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-20	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	8/31/2018	TPH GRO	70	5	0.97	10100	mg/L
MKTF-20	11/29/2018	Bromide	1.6	0.5	0.1	NA	mg/L
MKTF-20	11/29/2018	Chloride	460	25	25	250000000	mg/L
MKTF-20	11/29/2018	Fluoride, Total	4.2	0.5	0.5	1600000	mg/L
MKTF-20	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-20	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-20	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	Sulfate	4.3	2.5	0.63	600000000	mg/L
MKTF-20	11/29/2018	TPH DRO	6.9	1	0.63	16700	mg/L
MKTF-20	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/29/2018	TPH GRO	17	0.25	0.12	10100	mg/L
MKTF-20	2/20/2019	TPH GRO	7.3	1	0.422	10100	mg/L
MKTF-20	2/20/2019	TPH DRO	9.8	1	0.35	16700	mg/L
MKTF-20	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	2/20/2019	Bromide	0.95	0.5	0.0675	NA	mg/L
MKTF-20	2/20/2019	Chloride	760	25	25	250000000	mg/L
MKTF-20	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-20	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-20	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-20	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-20	2/20/2019	Sulfate	11	2.5	0.32	600000000	mg/L
MKTF-20	5/14/2019	TPH GRO	25	0.5	0.307	10100	mg/L
MKTF-20	5/14/2019	TPH DRO	5.4	1	0.35	16700	mg/L
MKTF-20	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	5/14/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
MKTF-20	5/14/2019	Chloride	3400	250	31.25	250000000	mg/L
MKTF-20	5/14/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-20	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-20	5/14/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-20	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-20	5/14/2019	Sulfate	36	2.5	0.2675	600000000	mg/L
MKTF-20	8/21/2019	TPH GRO	28	2.5	1.055	10100	mg/L
MKTF-20	8/21/2019	TPH DRO	5.1	1	0.35	16700	mg/L
MKTF-20	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	8/21/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
MKTF-20	8/21/2019	Chloride	3300	100	100	250000000	mg/L
MKTF-20	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-20	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-20	8/21/2019	Nitrogen, Nitrite	3.3	2	0.108	1000000	mg/L
MKTF-20	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-20	8/21/2019	Sulfate	2.8	2.5	0.3345	600000000	mg/L
MKTF-20	11/5/2019	TPH GRO	7	2.5	1.055	10100	mg/L
MKTF-20	11/5/2019	TPH DRO	1.5	0.4	0.132	16700	mg/L
MKTF-20	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-20	11/5/2019	Bromide	0.61	0.5	0.077	NA	mg/L
MKTF-20	11/5/2019	Chloride	140	10	10	250000000	mg/L
MKTF-20	11/5/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-20	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-20	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-20	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-20	11/5/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
MKTF-20	2/5/2020	TPH GRO	4.6	1	0.42	10100	mg/L
MKTF-20	2/5/2020	TPH DRO	1	0.4	0.2	16700	mg/L
MKTF-20	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-21	4/11/2014	TPH DRO	27	1	0.57	16700	mg/L
MKTF-21	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	4/11/2014	TPH GRO	78	5	1.9	10100	mg/L
MKTF-21	3/16/2015	TPH DRO	3.8	1	0.91	16700	mg/L
MKTF-21	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/16/2015	TPH GRO	16	1	0.24	10100	mg/L
MKTF-21	3/1/2016	TPH DRO	3.6	1	0.69	16700	mg/L
MKTF-21	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/1/2016	TPH GRO	24	0.5	0.25	10100	mg/L
MKTF-21	6/9/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-21	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	6/9/2016	TPH GRO	32	5	2.5	10100	mg/L
MKTF-21	9/12/2016	Bromide	1.4	0.5	0.22	NA	mg/L
MKTF-21	9/12/2016	Chloride	81	2.5	0.25	250000000	mg/L
MKTF-21	9/12/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	9/12/2016	Ortho-Phosphate	2.6	2.5	0.38	NA	mg/L
MKTF-21	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-21	9/12/2016	Sulfate	19	2.5	0.71	600000000	mg/L
MKTF-21	9/12/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-21	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	9/12/2016	TPH GRO	28	2.5	0.75	10100	mg/L
MKTF-21	11/3/2016	Bromide	2.3	0.5	0.22	NA	mg/L
MKTF-21	11/3/2016	Chloride	110	10	1	250000000	mg/L
MKTF-21	11/3/2016	Fluoride, Total	0.91	0.5	0.25	1600000	mg/L
MKTF-21	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-21	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-21	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-21	11/3/2016	Sulfate	3.9	2.5	0.71	600000000	mg/L
MKTF-21	11/3/2016	TPH DRO	3.4	1	0.69	16700	mg/L
MKTF-21	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/3/2016	TPH GRO	34	5	2.5	10100	mg/L
MKTF-21	3/14/2017	Bromide	6	0.5	0.15	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Chloride	440	25	12	250000000	mg/L
MKTF-21	3/14/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	3/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	3/14/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-21	3/14/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-21	3/14/2017	Sulfate	3.4	2.5	0.48	600000000	mg/L
MKTF-21	3/14/2017	TPH DRO	4	1	0.36	16700	mg/L
MKTF-21	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/14/2017	TPH GRO	37	2.5	1.2	10100	mg/L
MKTF-21	6/21/2017	Bromide	3.4	0.5	0.073	NA	mg/L
MKTF-21	6/21/2017	Chloride	310	10	5	250000000	mg/L
MKTF-21	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	6/21/2017	Ortho-Phosphate	2	2.5	1.2	NA	mg/L
MKTF-21	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	6/21/2017	Sulfate	1.1	2.5	0.48	600000000	mg/L
MKTF-21	6/21/2017	TPH DRO	6.2	1	0.36	16700	mg/L
MKTF-21	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	6/21/2017	TPH GRO	30	5	2.5	10100	mg/L
MKTF-21	9/26/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-21	9/26/2017	Chloride	230	10	5	250000000	mg/L
MKTF-21	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	9/26/2017	Sulfate	2	2.5	0.48	600000000	mg/L
MKTF-21	9/26/2017	TPH DRO	2	1	0.36	16700	mg/L
MKTF-21	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	9/26/2017	TPH GRO	24	5	2.5	10100	mg/L
MKTF-21	11/28/2017	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-21	11/28/2017	Chloride	210	10	5	250000000	mg/L
MKTF-21	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	11/28/2017	Sulfate	7	2.5	0.48	600000000	mg/L
MKTF-21	11/28/2017	TPH DRO	2.6	1	0.36	16700	mg/L
MKTF-21	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/28/2017	TPH GRO	25	5	0.97	10100	mg/L
MKTF-21	2/15/2018	Bromide	2	0.5	0.073	NA	mg/L
MKTF-21	2/15/2018	Chloride	210	10	5	250000000	mg/L
MKTF-21	2/15/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	2/15/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
MKTF-21	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-21	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-21	2/15/2018	Sulfate	23	2.5	0.48	600000000	mg/L
MKTF-21	2/15/2018	TPH DRO	3.2	1	0.63	16700	mg/L
MKTF-21	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	2/15/2018	TPH GRO	12	2.5	0.48	10100	mg/L
MKTF-21	5/11/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-21	5/11/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-21	5/11/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-21	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-21	5/11/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-21	5/11/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
MKTF-21	5/11/2018	Sulfate	4.3	2.5	1	600000000	mg/L
MKTF-21	5/11/2018	TPH DRO	3.6	1	0.63	16700	mg/L
MKTF-21	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	5/11/2018	TPH GRO	17	2.5	0.48	10100	mg/L
MKTF-21	8/31/2018	Bromide	2	0.5	0.13	NA	mg/L
MKTF-21	8/31/2018	Chloride	330	10	0.59	250000000	mg/L
MKTF-21	8/31/2018	Fluoride, Total	0.43	0.5	0.16	1600000	mg/L
MKTF-21	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-21	8/31/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-21	8/31/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-21	8/31/2018	Sulfate	7.1	2.5	1	600000000	mg/L
MKTF-21	8/31/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-21	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	8/31/2018	TPH GRO	22	1	0.19	10100	mg/L
MKTF-21	11/29/2018	Bromide	1.9	0.5	0.1	NA	mg/L
MKTF-21	11/29/2018	Chloride	340	10	10	250000000	mg/L
MKTF-21	11/29/2018	Fluoride, Total	0.89	0.5	0.5	1600000	mg/L
MKTF-21	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-21	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-21	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-21	11/29/2018	Sulfate	8.6	2.5	0.63	600000000	mg/L
MKTF-21	11/29/2018	TPH DRO	3.8	1	0.63	16700	mg/L
MKTF-21	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/29/2018	TPH GRO	7.2	0.5	0.24	10100	mg/L
MKTF-21	2/20/2019	TPH GRO	40	0.5	0.211	10100	mg/L
MKTF-21	2/20/2019	TPH DRO	20	1	0.35	16700	mg/L
MKTF-21	2/20/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	Bromide	1.7	0.5	0.0675	NA	mg/L
MKTF-21	2/20/2019	Chloride	4600	250	250	250000000	mg/L
MKTF-21	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-21	2/20/2019	Nitrogen, Nitrite	1.6	2	1.39	1000000	mg/L
MKTF-21	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-21	2/20/2019	Sulfate	880	250	32	600000000	mg/L
MKTF-21	5/14/2019	TPH GRO	8.5	1	0.614	10100	mg/L
MKTF-21	5/14/2019	TPH DRO	9.4	1	0.35	16700	mg/L
MKTF-21	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-21	5/14/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-21	5/14/2019	Chloride	540	25	3.125	250000000	mg/L
MKTF-21	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-21	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-21	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-21	5/14/2019	Sulfate	6.9	2.5	0.2675	600000000	mg/L
MKTF-21	8/22/2019	TPH GRO	17	1	0.614	10100	mg/L
MKTF-21	8/22/2019	TPH DRO	7.4	1	0.35	16700	mg/L
MKTF-21	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-21	8/22/2019	Bromide	0.89	0.5	0.088765	NA	mg/L
MKTF-21	8/22/2019	Chloride	230	10	10	250000000	mg/L
MKTF-21	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-21	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-21	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-21	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-21	8/22/2019	Sulfate	6.2	2.5	0.3345	600000000	mg/L
MKTF-21	11/5/2019	TPH GRO	27	1	0.422	10100	mg/L
MKTF-21	11/5/2019	TPH DRO	2.7	0.4	0.132	16700	mg/L
MKTF-21	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-21	11/5/2019	Bromide	1.9	0.5	0.077	NA	mg/L
MKTF-21	11/5/2019	Chloride	2300	100	100	250000000	mg/L
MKTF-21	11/5/2019	Fluoride, Total	2.4	0.5	0.144909	1600000	mg/L
MKTF-21	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-21	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-21	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-21	11/5/2019	Sulfate	19	2.5	0.3345	600000000	mg/L
MKTF-21	2/5/2020	TPH GRO	0.74	0.25	0.11	10100	mg/L
MKTF-21	2/5/2020	TPH DRO	0.31	0.4	0.2	16700	mg/L
MKTF-21	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-22	4/10/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-22	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	4/10/2014	TPH GRO	10	0.5	0.19	10100	mg/L
MKTF-22	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-22	11/17/2014	Chloride	96	10	0.43	250000000	mg/L
MKTF-22	11/17/2014	Fluoride, Total	0.38	0.1	0.015	1600000	mg/L
MKTF-22	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-22	11/17/2014	Nitrate & Nitrite	7.1	1	0.083	NA	mg/L
MKTF-22	11/17/2014	Sulfate	19	0.5	0.082	600000000	mg/L
MKTF-22	11/17/2014	TPH DRO	1.6	1	0.83	16700	mg/L
MKTF-22	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/17/2014	TPH GRO	6.8	0.5	0.19	10100	mg/L
MKTF-22	3/12/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-22	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	3/12/2015	TPH GRO	13	0.5	0.12	10100	mg/L
MKTF-22	6/9/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-22	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/9/2015	TPH GRO	15	1	0.24	10100	mg/L
MKTF-22	8/20/2015	Bromide	0.84	0.5	0.39	NA	mg/L
MKTF-22	8/20/2015	Chloride	120	10	2.7	250000000	mg/L
MKTF-22	8/20/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-22	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-22	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-22	8/20/2015	Sulfate	48	2.5	0.57	600000000	mg/L
MKTF-22	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-22	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	8/20/2015	TPH GRO	9.3	1	0.8	10100	mg/L
MKTF-22	11/9/2015	Bromide	0.84	0.1	0.068	NA	mg/L
MKTF-22	11/9/2015	Chloride	100	10	6.8	250000000	mg/L
MKTF-22	11/9/2015	Fluoride, Total	0.41	0.1	0.032	1600000	mg/L
MKTF-22	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-22	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-22	11/9/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-22	11/9/2015	Sulfate	17	0.5	0.32	600000000	mg/L
MKTF-22	11/9/2015	TPH DRO	1.6	1	0.91	16700	mg/L
MKTF-22	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/9/2015	TPH GRO	14	1	0.24	10100	mg/L
MKTF-22	2/25/2016	Bromide	0.75	0.1	0.032	NA	mg/L
MKTF-22	2/25/2016	Chloride	95	10	0.55	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/25/2016	Fluoride, Total	0.37	0.1	0.023	1600000	mg/L
MKTF-22	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-22	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-22	2/25/2016	Sulfate	4.7	0.5	0.064	600000000	mg/L
MKTF-22	2/25/2016	TPH DRO	2.7	1	0.69	16700	mg/L
MKTF-22	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	2/25/2016	TPH GRO	24	1	0.51	10100	mg/L
MKTF-22	6/10/2016	Bromide	0.096	0.1	0.032	NA	mg/L
MKTF-22	6/10/2016	Chloride	99	10	0.55	250000000	mg/L
MKTF-22	6/10/2016	Fluoride, Total	0.37	0.1	0.023	1600000	mg/L
MKTF-22	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-22	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-22	6/10/2016	Sulfate	4.2	0.5	0.064	600000000	mg/L
MKTF-22	6/10/2016	TPH DRO	2.5	1	0.69	16700	mg/L
MKTF-22	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/10/2016	TPH GRO	27	2.5	1.3	10100	mg/L
MKTF-22	9/10/2016	Bromide	0.71	0.1	0.044	NA	mg/L
MKTF-22	9/10/2016	Chloride	98	10	1	250000000	mg/L
MKTF-22	9/10/2016	Fluoride, Total	0.23	0.1	0.05	1600000	mg/L
MKTF-22	9/10/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-22	9/10/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-22	9/10/2016	Sulfate	4.1	0.5	0.14	600000000	mg/L
MKTF-22	9/10/2016	TPH DRO	2.7	1	0.69	16700	mg/L
MKTF-22	9/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	9/10/2016	TPH GRO	17	1	0.3	10100	mg/L
MKTF-22	11/1/2016	Bromide	0.44	0.1	0.044	NA	mg/L
MKTF-22	11/1/2016	Chloride	100	10	1	250000000	mg/L
MKTF-22	11/1/2016	Fluoride, Total	0.41	0.1	0.05	1600000	mg/L
MKTF-22	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-22	11/1/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
MKTF-22	11/1/2016	Nitrogen, Nitrate	ND	0.1	0.041	10000000	mg/L
MKTF-22	11/1/2016	Sulfate	3.3	0.5	0.14	600000000	mg/L
MKTF-22	11/1/2016	TPH DRO	2.1	1	0.69	16700	mg/L
MKTF-22	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/1/2016	TPH GRO	26	2.5	1.3	10100	mg/L
MKTF-22	3/8/2017	Bromide	0.76	0.1	0.031	NA	mg/L
MKTF-22	3/8/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	3/8/2017	Fluoride, Total	0.33	0.1	0.05	1600000	mg/L
MKTF-22	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-22	3/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	3/8/2017	Sulfate	2	0.5	0.096	600000000	mg/L
MKTF-22	3/8/2017	TPH DRO	3	1	0.36	16700	mg/L
MKTF-22	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	3/8/2017	TPH GRO	23	0.5	0.25	10100	mg/L
MKTF-22	6/8/2017	Bromide	0.72	0.1	0.014	NA	mg/L
MKTF-22	6/8/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	6/8/2017	Fluoride, Total	0.25	0.1	0.044	1600000	mg/L
MKTF-22	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-22	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	6/8/2017	Sulfate	6	0.5	0.096	600000000	mg/L
MKTF-22	6/8/2017	TPH DRO	3	1	0.36	16700	mg/L
MKTF-22	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/8/2017	TPH GRO	14	2.5	1.2	10100	mg/L
MKTF-22	10/3/2017	Bromide	0.76	0.5	0.073	NA	mg/L
MKTF-22	10/3/2017	Chloride	110	10	5	250000000	mg/L
MKTF-22	10/3/2017	Fluoride, Total	0.28	0.5	0.22	1600000	mg/L
MKTF-22	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-22	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-22	10/3/2017	Nitrogen, Nitrate	ND	2	0.43	10000000	mg/L
MKTF-22	10/3/2017	Sulfate	7.6	2.5	0.48	600000000	mg/L
MKTF-22	10/3/2017	TPH DRO	2.5	1	0.36	16700	mg/L
MKTF-22	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	10/3/2017	TPH GRO	13	0.5	0.097	10100	mg/L
MKTF-22	11/28/2017	Bromide	0.92	0.5	0.073	NA	mg/L
MKTF-22	11/28/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	11/28/2017	Fluoride, Total	0.34	0.5	0.22	1600000	mg/L
MKTF-22	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-22	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	11/28/2017	Sulfate	3.3	2.5	0.48	600000000	mg/L
MKTF-22	11/28/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-22	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/28/2017	TPH GRO	13	0.5	0.097	10100	mg/L
MKTF-22	2/8/2018	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-22	2/8/2018	Chloride	110	10	5	250000000	mg/L
MKTF-22	2/8/2018	Fluoride, Total	0.24	0.5	0.22	1600000	mg/L
MKTF-22	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-22	2/8/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	2/8/2018	Sulfate	5.2	2.5	0.48	600000000	mg/L
MKTF-22	2/8/2018	TPH DRO	2.9	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	2/8/2018	TPH GRO	10	0.5	0.097	10100	mg/L
MKTF-22	5/10/2018	Bromide	0.034	0.1	0.027	NA	mg/L
MKTF-22	5/10/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-22	5/10/2018	Fluoride, Total	0.27	0.1	0.03	1600000	mg/L
MKTF-22	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-22	5/10/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-22	5/10/2018	Nitrogen, Nitrate	0.15	0.1	0.0066	10000000	mg/L
MKTF-22	5/10/2018	Sulfate	5.8	0.5	0.21	600000000	mg/L
MKTF-22	5/10/2018	TPH DRO	3.5	1	0.63	16700	mg/L
MKTF-22	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	5/10/2018	TPH GRO	11	0.5	0.097	10100	mg/L
MKTF-22	8/30/2018	Bromide	0.8	0.5	0.13	NA	mg/L
MKTF-22	8/30/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-22	8/30/2018	Fluoride, Total	0.35	0.5	0.15	1600000	mg/L
MKTF-22	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-22	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-22	8/30/2018	Nitrogen, Nitrate	1.7	0.5	0.033	10000000	mg/L
MKTF-22	8/30/2018	Sulfate	3.8	2.5	1	600000000	mg/L
MKTF-22	8/30/2018	TPH DRO	3.1	1	0.63	16700	mg/L
MKTF-22	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	8/30/2018	TPH GRO	11	1	0.19	10100	mg/L
MKTF-22	11/28/2018	Bromide	0.89	0.5	0.1	NA	mg/L
MKTF-22	11/28/2018	Chloride	130	10	10	250000000	mg/L
MKTF-22	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-22	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-22	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-22	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-22	11/28/2018	Sulfate	5.8	2.5	0.63	600000000	mg/L
MKTF-22	11/28/2018	TPH DRO	2	1	0.63	16700	mg/L
MKTF-22	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/28/2018	TPH GRO	11	1	0.49	10100	mg/L
MKTF-22	5/9/2019	TPH GRO	11	1	0.614	10100	mg/L
MKTF-22	5/9/2019	TPH DRO	2.6	1	0.35	16700	mg/L
MKTF-22	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-22	5/9/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-22	5/9/2019	Chloride	170	10	1.25	250000000	mg/L
MKTF-22	5/9/2019	Fluoride, Total	0.39	0.5	0.25	1600000	mg/L
MKTF-22	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-22	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-22	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-22	5/9/2019	Sulfate	13	2.5	0.2675	600000000	mg/L
MKTF-22	8/20/2019	TPH GRO	8.2	1	0.614	10100	mg/L
MKTF-22	8/20/2019	TPH DRO	2.4	1	0.35	16700	mg/L
MKTF-22	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-22	8/20/2019	Bromide	1.2	0.5	0.088765	NA	mg/L
MKTF-22	8/20/2019	Chloride	200	10	10	250000000	mg/L
MKTF-22	8/20/2019	Fluoride, Total	0.4	0.5	0.073	1600000	mg/L
MKTF-22	8/20/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-22	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-22	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-22	8/20/2019	Sulfate	4.7	2.5	0.3345	600000000	mg/L
MKTF-22	10/24/2019	TPH GRO	9	1	0.386	10100	mg/L
MKTF-22	10/24/2019	TPH DRO	0.28	0.4	0.132	16700	mg/L
MKTF-22	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-22	10/24/2019	Bromide	1.2	0.5	0.077	NA	mg/L
MKTF-22	10/24/2019	Chloride	190	10	10	250000000	mg/L
MKTF-22	10/24/2019	Fluoride, Total	0.41	0.5	0.144909	1600000	mg/L
MKTF-22	10/24/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-22	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-22	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-22	10/24/2019	Sulfate	2.9	2.5	0.3345	600000000	mg/L
MKTF-23	9/23/2014	TPH DRO	14	1	0.83	16700	mg/L
MKTF-23	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	9/23/2014	TPH GRO	23	5	1.9	10100	mg/L
MKTF-23	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-23	11/17/2014	Chloride	390	10	0.43	250000000	mg/L
MKTF-23	11/17/2014	Fluoride, Total	0.43	0.1	0.015	1600000	mg/L
MKTF-23	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-23	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-23	11/17/2014	Sulfate	5.9	0.5	0.082	600000000	mg/L
MKTF-23	11/17/2014	TPH DRO	7.7	1	0.83	16700	mg/L
MKTF-23	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	11/17/2014	TPH GRO	26	1	0.38	10100	mg/L
MKTF-23	3/12/2015	TPH DRO	14	1	0.91	16700	mg/L
MKTF-23	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	3/12/2015	TPH GRO	35	1	0.24	10100	mg/L
MKTF-23	6/9/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-23	6/9/2015	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	TPH GRO	32	0.5	0.12	10100	mg/L
MKTF-23	8/21/2015	Bromide	1.6	0.5	0.34	NA	mg/L
MKTF-23	8/21/2015	Chloride	300	10	6.8	250000000	mg/L
MKTF-23	8/21/2015	Fluoride, Total	0.57	0.5	0.16	1600000	mg/L
MKTF-23	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-23	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-23	8/21/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-23	8/21/2015	TPH DRO	35	1	0.91	16700	mg/L
MKTF-23	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	8/21/2015	TPH GRO	29	1	0.8	10100	mg/L
MKTF-23	11/9/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-23	11/9/2015	TPH DRO	71	1	0.91	16700	mg/L
MKTF-23	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	11/9/2015	TPH GRO	34	2.5	0.6	10100	mg/L
MKTF-23	11/10/2015	Bromide	2.2	0.1	0.068	NA	mg/L
MKTF-23	11/10/2015	Chloride	250	10	6.8	250000000	mg/L
MKTF-23	11/10/2015	Fluoride, Total	1	0.1	0.032	1600000	mg/L
MKTF-23	11/10/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-23	11/10/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-23	11/10/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-23	11/10/2015	Sulfate	14	0.5	0.32	600000000	mg/L
MKTF-23	2/25/2016	Bromide	1.9	0.5	0.16	NA	mg/L
MKTF-23	2/25/2016	Chloride	240	10	0.55	250000000	mg/L
MKTF-23	2/25/2016	Fluoride, Total	0.69	0.5	0.11	1600000	mg/L
MKTF-23	2/25/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-23	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-23	2/25/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-23	2/25/2016	TPH DRO	56	1	0.69	16700	mg/L
MKTF-23	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	2/25/2016	TPH GRO	32	2.5	1.3	10100	mg/L
MKTF-23	6/10/2016	Bromide	1.4	0.5	0.16	NA	mg/L
MKTF-23	6/10/2016	Chloride	240	10	0.55	250000000	mg/L
MKTF-23	6/10/2016	Fluoride, Total	0.75	0.5	0.11	1600000	mg/L
MKTF-23	6/10/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-23	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-23	6/10/2016	Sulfate	0.36	2.5	0.32	600000000	mg/L
MKTF-23	6/10/2016	TPH DRO	710	10	6.9	16700	mg/L
MKTF-23	6/10/2016	TPH ORO	ND	50	50	85800	mg/L
MKTF-23	6/10/2016	TPH GRO	38	2.5	1.3	10100	mg/L
MKTF-23	10/29/2019	TPH GRO	55	5	1.93	10100	mg/L
MKTF-23	10/29/2019	TPH DRO	2200	20	6.6	16700	mg/L
MKTF-23	10/29/2019	Motor Oil	ND	125	125	85800	mg/L
MKTF-23	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-23	10/29/2019	Chloride	440	25	25	250000000	mg/L
MKTF-23	10/29/2019	Fluoride, Total	0.75	0.5	0.144909	1600000	mg/L
MKTF-23	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-23	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-23	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-23	10/29/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
MKTF-24	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-24	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	4/8/2014	TPH GRO	4.2	0.5	0.092	10100	mg/L
MKTF-24	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-24	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	9/24/2014	TPH GRO	6.3	0.5	0.19	10100	mg/L
MKTF-24	11/14/2014	Bromide	1.4	1	0.26	NA	mg/L
MKTF-24	11/14/2014	Chloride	630	50	2.2	250000000	mg/L
MKTF-24	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-24	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-24	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-24	11/14/2014	Sulfate	72	5	0.82	600000000	mg/L
MKTF-24	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-24	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/14/2014	TPH GRO	5.7	0.5	0.19	10100	mg/L
MKTF-24	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	3/11/2015	TPH GRO	9.2	0.5	0.12	10100	mg/L
MKTF-24	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/10/2015	TPH GRO	9.8	0.5	0.12	10100	mg/L
MKTF-24	8/20/2015	Bromide	1.6	0.5	0.39	NA	mg/L
MKTF-24	8/20/2015	Chloride	850	25	17	250000000	mg/L
MKTF-24	8/20/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-24	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-24	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-24	8/20/2015	Sulfate	72	2.5	0.57	600000000	mg/L
MKTF-24	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	8/20/2015	TPH GRO	9.5	1	0.8	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-24	11/4/2015	Chloride	850	25	17	250000000	mg/L
MKTF-24	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-24	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-24	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-24	11/4/2015	Sulfate	68	10	6.4	600000000	mg/L
MKTF-24	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/4/2015	TPH GRO	10	1	0.24	10100	mg/L
MKTF-24	2/22/2016	Bromide	1	0.1	0.032	NA	mg/L
MKTF-24	2/22/2016	Chloride	650	25	1.4	250000000	mg/L
MKTF-24	2/22/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-24	2/22/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-24	2/22/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-24	2/22/2016	Sulfate	50	10	1.3	600000000	mg/L
MKTF-24	2/22/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-24	2/22/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	2/22/2016	TPH GRO	29	0.5	0.25	10100	mg/L
MKTF-24	6/8/2016	Bromide	0.47	0.1	0.032	NA	mg/L
MKTF-24	6/8/2016	Chloride	700	25	1.4	250000000	mg/L
MKTF-24	6/8/2016	Fluoride, Total	0.097	0.1	0.023	1600000	mg/L
MKTF-24	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-24	6/8/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-24	6/8/2016	Sulfate	60	10	1.3	600000000	mg/L
MKTF-24	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-24	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/8/2016	TPH GRO	14	2.5	1.3	10100	mg/L
MKTF-24	9/7/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-24	9/7/2016	Chloride	630	25	2.5	250000000	mg/L
MKTF-24	9/7/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-24	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-24	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-24	9/7/2016	Sulfate	51	10	2.8	600000000	mg/L
MKTF-24	9/7/2016	TPH DRO	1.2	1	0.69	16700	mg/L
MKTF-24	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	9/7/2016	TPH GRO	19	1	0.3	10100	mg/L
MKTF-24	10/28/2016	Bromide	0.36	0.1	0.044	NA	mg/L
MKTF-24	10/28/2016	Chloride	440	25	2.5	250000000	mg/L
MKTF-24	10/28/2016	Fluoride, Total	0.078	0.1	0.05	1600000	mg/L
MKTF-24	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-24	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-24	10/28/2016	Sulfate	46	0.5	0.14	600000000	mg/L
MKTF-24	10/28/2016	TPH DRO	1.1	1	0.69	16700	mg/L
MKTF-24	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	10/28/2016	TPH GRO	30	2.5	1.3	10100	mg/L
MKTF-24	3/29/2017	Bromide	0.78	0.1	0.031	NA	mg/L
MKTF-24	3/29/2017	Chloride	800	50	25	250000000	mg/L
MKTF-24	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-24	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-24	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	3/29/2017	Sulfate	59	10	1.9	600000000	mg/L
MKTF-24	3/29/2017	TPH DRO	0.74	1	0.36	16700	mg/L
MKTF-24	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	3/29/2017	TPH GRO	8.2	1	0.19	10100	mg/L
MKTF-24	6/5/2017	Bromide	0.42	0.1	0.014	NA	mg/L
MKTF-24	6/5/2017	Chloride	620	25	12	250000000	mg/L
MKTF-24	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-24	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-24	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	6/5/2017	Sulfate	43	0.5	0.096	600000000	mg/L
MKTF-24	6/5/2017	TPH DRO	1.8	1	0.36	16700	mg/L
MKTF-24	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/5/2017	TPH GRO	23	1	0.5	10100	mg/L
MKTF-24	10/3/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-24	10/3/2017	Chloride	800	50	25	250000000	mg/L
MKTF-24	10/3/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-24	10/3/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	10/3/2017	Sulfate	64	2.5	0.48	600000000	mg/L
MKTF-24	10/3/2017	TPH DRO	0.56	1	0.36	16700	mg/L
MKTF-24	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	10/3/2017	TPH GRO	10	1	0.19	10100	mg/L
MKTF-24	11/20/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-24	11/20/2017	Chloride	560	25	12	250000000	mg/L
MKTF-24	11/20/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	11/20/2017	Sulfate	34	2.5	0.48	600000000	mg/L
MKTF-24	11/20/2017	TPH DRO	1	1	0.36	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/20/2017	TPH GRO	28	2.5	1.2	10100	mg/L
MKTF-24	2/6/2018	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-24	2/6/2018	Chloride	430	25	12	250000000	mg/L
MKTF-24	2/6/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	2/6/2018	Sulfate	30	2.5	0.48	600000000	mg/L
MKTF-24	2/6/2018	TPH DRO	1.1	1	0.63	16700	mg/L
MKTF-24	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	2/6/2018	TPH GRO	21	2.5	0.48	10100	mg/L
MKTF-24	5/1/2018	Bromide	0.2	0.1	0.027	NA	mg/L
MKTF-24	5/1/2018	Chloride	500	25	1.5	250000000	mg/L
MKTF-24	5/1/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-24	5/1/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-24	5/1/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-24	5/1/2018	Nitrogen, Nitrate	0.17	0.1	0.0066	10000000	mg/L
MKTF-24	5/1/2018	Sulfate	29	25	10	600000000	mg/L
MKTF-24	5/1/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-24	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	5/1/2018	TPH GRO	23	2.5	1.1	10100	mg/L
MKTF-24	8/20/2018	Bromide	0.96	0.5	0.13	NA	mg/L
MKTF-24	8/20/2018	Chloride	560	25	1.5	250000000	mg/L
MKTF-24	8/20/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-24	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-24	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-24	8/20/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-24	8/20/2018	Sulfate	30	2.5	1	600000000	mg/L
MKTF-24	8/20/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-24	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	8/20/2018	TPH GRO	23	10	1.9	10100	mg/L
MKTF-24	10/10/2018	Bromide	1.5	0.5	0.13	NA	mg/L
MKTF-24	10/10/2018	Chloride	810	25	9.1	250000000	mg/L
MKTF-24	10/10/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-24	10/10/2018	Ortho-Phosphate	ND	2.5	0.15	NA	mg/L
MKTF-24	10/10/2018	Nitrogen, Nitrite	ND	0.5	0.049	1000000	mg/L
MKTF-24	10/10/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
MKTF-24	10/10/2018	Sulfate	52	2.5	0.63	600000000	mg/L
MKTF-24	11/15/2018	Bromide	1.1	0.5	0.1	NA	mg/L
MKTF-24	11/15/2018	Chloride	520	25	25	250000000	mg/L
MKTF-24	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-24	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-24	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-24	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-24	11/15/2018	Sulfate	27	2.5	0.63	600000000	mg/L
MKTF-24	11/15/2018	TPH DRO	1.5	1	0.63	16700	mg/L
MKTF-24	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/15/2018	TPH GRO	16	1	0.49	10100	mg/L
MKTF-24	5/6/2019	TPH GRO	8.6	1	0.614	10100	mg/L
MKTF-24	5/6/2019	TPH DRO	0.65	1	0.35	16700	mg/L
MKTF-24	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-24	5/6/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-24	5/6/2019	Chloride	1000	50	6.25	250000000	mg/L
MKTF-24	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-24	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-24	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-24	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-24	5/6/2019	Sulfate	42	2.5	0.2675	600000000	mg/L
MKTF-24	8/23/2019	TPH GRO	15	0.5	0.211	10100	mg/L
MKTF-24	8/23/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-24	8/23/2019	Chloride	800	25	25	250000000	mg/L
MKTF-24	8/23/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-24	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-24	8/23/2019	Nitrogen, Nitrite	0.8	0.5	0.027	1000000	mg/L
MKTF-24	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-24	8/23/2019	Sulfate	34	2.5	0.3345	600000000	mg/L
MKTF-24	8/23/2019	TPH DRO	0.94	1	0.35	16700	mg/L
MKTF-24	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-24	10/23/2019	TPH GRO	17	0.5	0.211	10100	mg/L
MKTF-24	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-24	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-24	10/23/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-24	10/23/2019	Chloride	660	25	25	250000000	mg/L
MKTF-24	10/23/2019	Fluoride, Total	0.15	0.5	0.144909	1600000	mg/L
MKTF-24	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-24	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-24	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-24	10/23/2019	Sulfate	20	2.5	0.3345	600000000	mg/L
MKTF-24	11/19/2019	Biochemical Oxygen Demand	13	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-24	11/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-24	11/19/2019	Chemical Oxygen Demand	60.8	10	3	NA	mg/L
MKTF-24	2/25/2020	TPH GRO	7.2	1	0.14	10100	mg/L
MKTF-24	2/25/2020	TPH DRO	0.71	0.4	0.2	16700	mg/L
MKTF-24	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-24	2/25/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-24	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-24	2/25/2020	Chloride	940	25	12	250000000	mg/L
MKTF-24	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-24	2/25/2020	Nitrogen, Nitrate	0.12	0.5	0.11	10000000	mg/L
MKTF-24	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	2/25/2020	Sulfate	27	2.5	1.2	600000000	mg/L
MKTF-24	9/19/2020	TPH GRO	15	1	0.16	10100	mg/L
MKTF-24	9/19/2020	TPH DRO	0.38	0.07	0.067	16700	mg/L
MKTF-24	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-24	9/19/2020	Chloride	950	50	25	250000000	mg/L
MKTF-24	9/19/2020	Bromide	1.8	0.5	0.25	NA	mg/L
MKTF-24	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	9/19/2020	Sulfate	35	2.5	1.2	600000000	mg/L
MKTF-24	9/19/2020	Nitrate & Nitrite	ND	1	0.061	NA	mg/L
MKTF-24	12/18/2020	Sulfate	21.8	1	0.37	600000000	mg/L
MKTF-24	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-24	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-24	12/18/2020	Chloride	893	50	6	250000000	mg/L
MKTF-24	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-24	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-24	12/18/2020	Bicarbonate	410	1	0.5	NA	mg/L
MKTF-24	12/18/2020	TPH (C6-C10)	14300	1000	470	NA	ug/L
MKTF-24	12/18/2020	TPH DRO	2470	126	101	16700	ug/L
MKTF-24	12/18/2020	C28-C40	ND	126	101	NA	ug/L
MKTF-25	4/8/2014	TPH DRO	1.2	1	0.57	16700	mg/L
MKTF-25	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	4/8/2014	TPH GRO	6.9	1	0.18	10100	mg/L
MKTF-25	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-25	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/23/2014	TPH GRO	5.8	1	0.38	10100	mg/L
MKTF-25	11/14/2014	Bromide	1.4	1	0.26	NA	mg/L
MKTF-25	11/14/2014	Chloride	880	50	2.2	250000000	mg/L
MKTF-25	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-25	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-25	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-25	11/14/2014	Sulfate	35	5	0.82	600000000	mg/L
MKTF-25	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-25	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/14/2014	TPH GRO	4.8	0.5	0.19	10100	mg/L
MKTF-25	3/11/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-25	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	3/11/2015	TPH GRO	10	0.5	0.12	10100	mg/L
MKTF-25	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-25	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/10/2015	TPH GRO	11	0.5	0.12	10100	mg/L
MKTF-25	8/21/2015	Bromide	1.8	0.5	0.34	NA	mg/L
MKTF-25	8/21/2015	Chloride	870	25	17	250000000	mg/L
MKTF-25	8/21/2015	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-25	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-25	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-25	8/21/2015	Sulfate	31	2.5	1.6	600000000	mg/L
MKTF-25	8/21/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-25	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	8/21/2015	TPH GRO	8.7	0.25	0.2	10100	mg/L
MKTF-25	11/5/2015	Bromide	1	0.1	0.068	NA	mg/L
MKTF-25	11/5/2015	Chloride	750	25	17	250000000	mg/L
MKTF-25	11/5/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-25	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-25	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-25	11/5/2015	Sulfate	35	0.5	0.32	600000000	mg/L
MKTF-25	11/5/2015	TPH DRO	1.2	1	0.91	16700	mg/L
MKTF-25	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/5/2015	TPH GRO	12	1	0.24	10100	mg/L
MKTF-25	2/23/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-25	2/23/2016	Chloride	670	25	1.4	250000000	mg/L
MKTF-25	2/23/2016	Fluoride, Total	0.12	0.1	0.023	1600000	mg/L
MKTF-25	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-25	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-25	2/23/2016	Sulfate	31	10	1.3	600000000	mg/L
MKTF-25	2/23/2016	TPH DRO	1.1	1	0.69	16700	mg/L
MKTF-25	2/23/2016	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	TPH GRO	14	1	0.51	10100	mg/L
MKTF-25	6/9/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-25	6/9/2016	Chloride	680	25	1.4	250000000	mg/L
MKTF-25	6/9/2016	Fluoride, Total	0.18	0.1	0.023	1600000	mg/L
MKTF-25	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-25	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-25	6/9/2016	Sulfate	35	0.5	0.064	600000000	mg/L
MKTF-25	6/9/2016	TPH DRO	0.89	1	0.69	16700	mg/L
MKTF-25	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/9/2016	TPH GRO	13	1	0.51	10100	mg/L
MKTF-25	9/9/2016	Bromide	0.89	0.1	0.044	NA	mg/L
MKTF-25	9/9/2016	Chloride	560	25	2.5	250000000	mg/L
MKTF-25	9/9/2016	Fluoride, Total	0.073	0.1	0.05	1600000	mg/L
MKTF-25	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-25	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-25	9/9/2016	Sulfate	34	0.5	0.14	600000000	mg/L
MKTF-25	9/9/2016	TPH DRO	0.94	1	0.69	16700	mg/L
MKTF-25	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/9/2016	TPH GRO	7.1	0.5	0.15	10100	mg/L
MKTF-25	11/1/2016	Bromide	3.9	2	0.87	NA	mg/L
MKTF-25	11/1/2016	Chloride	530	25	2.5	250000000	mg/L
MKTF-25	11/1/2016	Fluoride, Total	0.052	0.1	0.05	1600000	mg/L
MKTF-25	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-25	11/1/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-25	11/1/2016	Sulfate	36	0.5	0.14	600000000	mg/L
MKTF-25	11/1/2016	TPH DRO	0.88	1	0.69	16700	mg/L
MKTF-25	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/1/2016	TPH GRO	10	1	0.51	10100	mg/L
MKTF-25	3/29/2017	Bromide	0.56	0.1	0.031	NA	mg/L
MKTF-25	3/29/2017	Chloride	380	25	12	250000000	mg/L
MKTF-25	3/29/2017	Fluoride, Total	0.095	0.1	0.05	1600000	mg/L
MKTF-25	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-25	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	3/29/2017	Sulfate	100	10	1.9	600000000	mg/L
MKTF-25	3/29/2017	TPH DRO	0.95	1	0.36	16700	mg/L
MKTF-25	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	3/29/2017	TPH GRO	7.8	0.25	0.048	10100	mg/L
MKTF-25	6/5/2017	Bromide	0.26	0.1	0.014	NA	mg/L
MKTF-25	6/5/2017	Chloride	420	25	12	250000000	mg/L
MKTF-25	6/5/2017	Fluoride, Total	0.054	0.1	0.044	1600000	mg/L
MKTF-25	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-25	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	6/5/2017	Sulfate	130	10	1.9	600000000	mg/L
MKTF-25	6/5/2017	TPH DRO	1.2	1	0.36	16700	mg/L
MKTF-25	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/5/2017	TPH GRO	8.4	0.25	0.12	10100	mg/L
MKTF-25	9/25/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-25	9/25/2017	Chloride	500	25	12	250000000	mg/L
MKTF-25	9/25/2017	Fluoride, Total	0.25	0.5	0.22	1600000	mg/L
MKTF-25	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	9/25/2017	Sulfate	31	2.5	0.48	600000000	mg/L
MKTF-25	9/25/2017	TPH DRO	1	1	0.36	16700	mg/L
MKTF-25	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/25/2017	TPH GRO	16	0.25	0.12	10100	mg/L
MKTF-25	11/21/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-25	11/21/2017	Chloride	550	25	12	250000000	mg/L
MKTF-25	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-25	11/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	11/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-25	11/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-25	11/21/2017	Sulfate	29	2.5	0.48	600000000	mg/L
MKTF-25	11/21/2017	TPH DRO	0.78	1	0.36	16700	mg/L
MKTF-25	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/21/2017	TPH GRO	17	0.5	0.25	10100	mg/L
MKTF-25	2/5/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-25	2/5/2018	Chloride	520	25	12	250000000	mg/L
MKTF-25	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-25	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	2/5/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	2/5/2018	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-25	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-25	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	2/5/2018	TPH GRO	16	1	0.5	10100	mg/L
MKTF-25	5/6/2018	Bromide	0.23	0.1	0.027	NA	mg/L
MKTF-25	5/6/2018	Chloride	500	25	1.5	250000000	mg/L
MKTF-25	5/6/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-25	5/6/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-25	5/6/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	Sulfate	28	0.5	0.21	600000000	mg/L
MKTF-25	5/6/2018	TPH DRO	1.1	1	0.63	16700	mg/L
MKTF-25	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	5/6/2018	TPH GRO	12	1	0.19	10100	mg/L
MKTF-25	8/17/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-25	8/17/2018	Chloride	540	25	1.5	250000000	mg/L
MKTF-25	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-25	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-25	8/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-25	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-25	8/17/2018	Sulfate	23	2.5	1	600000000	mg/L
MKTF-25	8/17/2018	TPH DRO	1	1	0.63	16700	mg/L
MKTF-25	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	8/17/2018	TPH GRO	17	0.5	0.097	10100	mg/L
MKTF-25	11/15/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-25	11/15/2018	Chloride	630	25	25	250000000	mg/L
MKTF-25	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-25	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-25	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-25	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-25	11/15/2018	Sulfate	50	2.5	0.63	600000000	mg/L
MKTF-25	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-25	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/15/2018	TPH GRO	5	1	0.49	10100	mg/L
MKTF-25	5/6/2019	TPH GRO	3.6	0.5	0.307	10100	mg/L
MKTF-25	5/6/2019	TPH DRO	0.4	1	0.35	16700	mg/L
MKTF-25	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-25	5/6/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-25	5/6/2019	Chloride	860	50	6.25	250000000	mg/L
MKTF-25	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-25	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-25	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-25	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-25	5/6/2019	Sulfate	52	2.5	0.2675	600000000	mg/L
MKTF-25	8/27/2019	TPH GRO	1.7	0.05	0.0211	10100	mg/L
MKTF-25	8/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-25	8/27/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-25	8/27/2019	Bromide	1.4	0.5	0.25	NA	mg/L
MKTF-25	8/27/2019	Chloride	1100	50	25	250000000	mg/L
MKTF-25	8/27/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-25	8/27/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-25	8/27/2019	Nitrogen, Nitrite	0.88	0.5	0.027	1000000	mg/L
MKTF-25	8/27/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-25	8/27/2019	Sulfate	68	2.5	1.25	600000000	mg/L
MKTF-25	10/23/2019	TPH GRO	3	0.05	0.0211	10100	mg/L
MKTF-25	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-25	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-25	10/23/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-25	10/23/2019	Chloride	1400	50	50	250000000	mg/L
MKTF-25	10/23/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-25	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-25	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-25	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-25	10/23/2019	Sulfate	73	2.5	0.3345	600000000	mg/L
MKTF-25	11/18/2019	Biochemical Oxygen Demand	6	2	2	NA	mg/L
MKTF-25	11/18/2019	Nitrogen, Nitrate	0.014	0.1	0.006078	10000000	mg/L
MKTF-25	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-25	11/18/2019	Chemical Oxygen Demand	70.9	10	3	NA	mg/L
MKTF-25	2/27/2020	TPH GRO	2.5	0.25	0.034	10100	mg/L
MKTF-25	2/27/2020	TPH DRO	0.32	0.4	0.2	16700	mg/L
MKTF-25	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-25	2/27/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-25	2/27/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-25	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	2/27/2020	Sulfate	76	2.5	1.2	600000000	mg/L
MKTF-25	2/27/2020	Nitrate & Nitrite	ND	2	0.24	NA	mg/L
MKTF-25	2/27/2020	Chloride	980	50	25	250000000	mg/L
MKTF-25	12/18/2020	Bicarbonate	384	1	0.5	NA	mg/L
MKTF-25	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-25	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-25	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-25	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-25	12/18/2020	Chloride	844	50	6	250000000	mg/L
MKTF-25	12/18/2020	Sulfate	68	50	18.5	600000000	mg/L
MKTF-25	12/18/2020	TPH DRO	1860	142	114	16700	ug/L
MKTF-25	12/18/2020	C28-C40	ND	142	114	NA	ug/L
MKTF-25	12/18/2020	TPH (C6-C10)	3650	500	235	NA	ug/L
MKTF-27	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-27	4/8/2014	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	4/8/2014	TPH GRO	ND	0.1	0.018	10100	mg/L
MKTF-27	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-27	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-27	11/14/2014	Bromide	1.8	1	0.26	NA	mg/L
MKTF-27	11/14/2014	Chloride	2500	100	4.3	250000000	mg/L
MKTF-27	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-27	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-27	11/14/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
MKTF-27	11/14/2014	Sulfate	470	50	8.2	600000000	mg/L
MKTF-27	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-27	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/14/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-27	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	8/20/2015	Bromide	1.9	0.5	0.39	NA	mg/L
MKTF-27	8/20/2015	Chloride	2700	100	68	250000000	mg/L
MKTF-27	8/20/2015	Fluoride, Total	0.81	0.5	0.15	1600000	mg/L
MKTF-27	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-27	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-27	8/20/2015	Sulfate	330	10	2.3	600000000	mg/L
MKTF-27	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	8/20/2015	TPH GRO	0.064	0.05	0.04	10100	mg/L
MKTF-27	11/4/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-27	11/4/2015	Chloride	2700	100	68	250000000	mg/L
MKTF-27	11/4/2015	Fluoride, Total	0.8	0.1	0.032	1600000	mg/L
MKTF-27	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-27	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-27	11/4/2015	Sulfate	450	10	6.4	600000000	mg/L
MKTF-27	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	2/22/2016	Bromide	4.3	2	0.65	NA	mg/L
MKTF-27	2/22/2016	Chloride	2400	100	5.5	250000000	mg/L
MKTF-27	2/22/2016	Fluoride, Total	0.8	0.1	0.023	1600000	mg/L
MKTF-27	2/22/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-27	2/22/2016	Nitrate & Nitrite	ND	2	0.84	NA	mg/L
MKTF-27	2/22/2016	Sulfate	360	10	1.3	600000000	mg/L
MKTF-27	2/22/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	2/22/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	2/22/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-27	6/8/2016	Bromide	1.5	0.5	0.22	NA	mg/L
MKTF-27	6/8/2016	Chloride	2800	100	5.5	250000000	mg/L
MKTF-27	6/8/2016	Fluoride, Total	1.2	0.5	0.14	1600000	mg/L
MKTF-27	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-27	6/8/2016	Nitrate & Nitrite	1.1	2	0.92	NA	mg/L
MKTF-27	6/8/2016	Sulfate	350	10	1.3	600000000	mg/L
MKTF-27	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/8/2016	TPH GRO	0.084	0.05	0.025	10100	mg/L
MKTF-27	9/7/2016	Bromide	1.4	2	0.87	NA	mg/L
MKTF-27	9/7/2016	Chloride	2600	100	10	250000000	mg/L
MKTF-27	9/7/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-27	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-27	9/7/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-27	9/7/2016	Sulfate	400	10	2.8	600000000	mg/L
MKTF-27	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	9/7/2016	TPH GRO	0.068	0.05	0.015	10100	mg/L
MKTF-27	10/28/2016	Bromide	0.76	0.1	0.044	NA	mg/L
MKTF-27	10/28/2016	Chloride	2200	100	10	250000000	mg/L
MKTF-27	10/28/2016	Fluoride, Total	0.94	0.1	0.05	1600000	mg/L
MKTF-27	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-27	10/28/2016	Nitrate & Nitrite	1.4	2	0.92	NA	mg/L
MKTF-27	10/28/2016	Sulfate	410	10	2.8	600000000	mg/L
MKTF-27	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	10/28/2016	TPH GRO	0.034	0.05	0.025	10100	mg/L
MKTF-27	3/29/2017	Bromide	2.3	1	0.31	NA	mg/L
MKTF-27	3/29/2017	Chloride	5000	250	120	250000000	mg/L
MKTF-27	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-27	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-27	3/29/2017	Nitrate & Nitrite	3.7	4	0.52	NA	mg/L
MKTF-27	3/29/2017	Sulfate	600	10	1.9	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	3/29/2017	TPH GRO	0.022	0.05	0.0097	10100	mg/L
MKTF-27	6/5/2017	Bromide	3.3	2	0.29	NA	mg/L
MKTF-27	6/5/2017	Chloride	3800	250	120	250000000	mg/L
MKTF-27	6/5/2017	Fluoride, Total	0.27	0.5	0.22	1600000	mg/L
MKTF-27	6/5/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-27	6/5/2017	Nitrate & Nitrite	2.5	4	0.52	NA	mg/L
MKTF-27	6/5/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-27	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/5/2017	TPH GRO	0.03	0.05	0.025	10100	mg/L
MKTF-27	10/3/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-27	10/3/2017	Chloride	2900	250	120	250000000	mg/L
MKTF-27	10/3/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-27	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-27	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-27	10/3/2017	Nitrogen, Nitrate	0.53	0.5	0.11	10000000	mg/L
MKTF-27	10/3/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-27	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	10/3/2017	TPH GRO	0.013	0.05	0.0097	10100	mg/L
MKTF-27	11/20/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-27	11/20/2017	Chloride	3200	250	120	250000000	mg/L
MKTF-27	11/20/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-27	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	11/20/2017	Nitrate & Nitrite	0.51	2	0.26	NA	mg/L
MKTF-27	11/20/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-27	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/20/2017	TPH GRO	0.036	0.05	0.025	10100	mg/L
MKTF-27	2/6/2018	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-27	2/6/2018	Chloride	2300	100	50	250000000	mg/L
MKTF-27	2/6/2018	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
MKTF-27	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	2/6/2018	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
MKTF-27	2/6/2018	Sulfate	200	2.5	0.48	600000000	mg/L
MKTF-27	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-27	5/1/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-27	5/1/2018	Chloride	4800	250	15	250000000	mg/L
MKTF-27	5/1/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-27	5/1/2018	Ortho-Phosphate	0.75	2.5	0.46	NA	mg/L
MKTF-27	5/1/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-27	5/1/2018	Nitrogen, Nitrate	2.3	0.5	0.033	10000000	mg/L
MKTF-27	5/1/2018	Sulfate	450	250	100	600000000	mg/L
MKTF-27	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	5/1/2018	TPH GRO	0.028	0.05	0.021	10100	mg/L
MKTF-27	8/20/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-27	8/20/2018	Chloride	4000	250	15	250000000	mg/L
MKTF-27	8/20/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-27	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-27	8/20/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-27	8/20/2018	Nitrogen, Nitrate	0.61	0.5	0.033	10000000	mg/L
MKTF-27	8/20/2018	Sulfate	300	10	4.1	600000000	mg/L
MKTF-27	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	8/20/2018	TPH GRO	0.033	0.05	0.0097	10100	mg/L
MKTF-27	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-27	11/15/2018	Chloride	3100	250	250	250000000	mg/L
MKTF-27	11/15/2018	Fluoride, Total	0.83	0.5	0.5	1600000	mg/L
MKTF-27	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-27	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-27	11/15/2018	Nitrogen, Nitrate	0.64	0.5	0.25	10000000	mg/L
MKTF-27	11/15/2018	Sulfate	270	10	2.5	600000000	mg/L
MKTF-27	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-27	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-27	3/28/2019	Bromide	0.86	2	0.27	NA	mg/L
MKTF-27	3/28/2019	Chloride	3500	250	250	250000000	mg/L
MKTF-27	3/28/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-27	3/28/2019	Nitrogen, Nitrate & Nitrite	8.1	4	1.962	10000000	mg/L
MKTF-27	3/28/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-27	3/28/2019	Sulfate	1200	250	32	600000000	mg/L
MKTF-27	3/28/2019	TPH DRO	0.48	1	0.35	16700	mg/L
MKTF-27	3/28/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-27	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-27	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-27	5/6/2019	Bromide	0.85	0.5	0.088765	NA	mg/L
MKTF-27	5/6/2019	Chloride	4000	250	31.25	250000000	mg/L
MKTF-27	5/6/2019	Fluoride, Total	0.63	0.5	0.25	1600000	mg/L
MKTF-27	5/6/2019	Nitrogen, Nitrate	5.5	0.5	0.027	10000000	mg/L
MKTF-27	5/6/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-27	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-27	5/6/2019	Sulfate	980	10	1.07	600000000	mg/L
MKTF-27	8/21/2019	TPH GRO	0.035	0.05	0.0211	10100	mg/L
MKTF-27	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-27	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-27	8/21/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-27	8/21/2019	Chloride	3400	250	250	250000000	mg/L
MKTF-27	8/21/2019	Fluoride, Total	0.7	0.5	0.073	1600000	mg/L
MKTF-27	8/21/2019	Nitrogen, Nitrate	2.8	0.5	0.025	10000000	mg/L
MKTF-27	8/21/2019	Nitrogen, Nitrite	3.2	2	0.108	1000000	mg/L
MKTF-27	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-27	8/21/2019	Sulfate	770	10	1.338	600000000	mg/L
MKTF-27	10/23/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-27	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-27	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-27	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-27	10/23/2019	Chloride	2900	100	100	250000000	mg/L
MKTF-27	10/23/2019	Fluoride, Total	1.4	0.5	0.144909	1600000	mg/L
MKTF-27	10/23/2019	Nitrogen, Nitrate	1.2	0.5	0.030387	10000000	mg/L
MKTF-27	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-27	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-27	10/23/2019	Sulfate	570	10	1.338	600000000	mg/L
MKTF-27	2/25/2020	TPH GRO	0.0068	0.05	0.0068	10100	mg/L
MKTF-27	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-27	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-27	2/25/2020	Bromide	3	0.5	0.25	NA	mg/L
MKTF-27	2/25/2020	Chloride	7000	250	120	250000000	mg/L
MKTF-27	2/25/2020	Sulfate	1100	250	120	600000000	mg/L
MKTF-27	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-27	2/25/2020	Nitrogen, Nitrate	5.7	0.5	0.11	10000000	mg/L
MKTF-27	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	2/25/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-27	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-27	9/20/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
MKTF-27	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-27	9/20/2020	Bromide	1.9	0.5	0.25	NA	mg/L
MKTF-27	9/20/2020	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
MKTF-27	9/20/2020	Nitrogen, Nitrate	0.56	0.5	0.1	10000000	mg/L
MKTF-27	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-27	9/20/2020	Sulfate	520	10	5	600000000	mg/L
MKTF-27	9/20/2020	Solids, Total Suspended	11	4	4	NA	mg/L
MKTF-27	9/20/2020	Chloride	2700	250	120	250000000	mg/L
MKTF-27	12/18/2020	Fluoride, Total	1.92	1	0.3	1600000	mg/L
MKTF-27	12/18/2020	Nitrogen, Nitrate	0.767	0.1	0.033	10000000	mg/L
MKTF-27	12/18/2020	Chloride	3400	100	12	250000000	mg/L
MKTF-27	12/18/2020	Sulfate	430	100	37	600000000	mg/L
MKTF-27	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-27	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-27	12/18/2020	Bicarbonate	592	1	0.5	NA	mg/L
MKTF-27	12/18/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-27	12/18/2020	TPH DRO	1340	140	112	16700	ug/L
MKTF-27	12/18/2020	C28-C40	444	140	112	NA	ug/L
MKTF-27	9/20/2020	Solids, Total Suspended	11	4	4	NA	mg/L
MKTF-28	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-28	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-28	11/14/2014	Bromide	2.7	1	0.26	NA	mg/L
MKTF-28	11/14/2014	Chloride	540	50	2.2	250000000	mg/L
MKTF-28	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-28	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-28	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-28	11/14/2014	Sulfate	260	5	0.82	600000000	mg/L
MKTF-28	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-28	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/14/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-28	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	6/9/2015	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	8/20/2015	Bromide	2.5	0.5	0.39	NA	mg/L
MKTF-28	8/20/2015	Chloride	520	25	17	250000000	mg/L
MKTF-28	8/20/2015	Fluoride, Total	0.86	0.5	0.15	1600000	mg/L
MKTF-28	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-28	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-28	8/20/2015	Sulfate	150	2.5	0.57	600000000	mg/L
MKTF-28	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	8/20/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-28	11/4/2015	Bromide	2.4	0.1	0.068	NA	mg/L
MKTF-28	11/4/2015	Chloride	510	25	17	250000000	mg/L
MKTF-28	11/4/2015	Fluoride, Total	0.86	0.1	0.032	1600000	mg/L
MKTF-28	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-28	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-28	11/4/2015	Sulfate	160	10	6.4	600000000	mg/L
MKTF-28	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	2/23/2016	Bromide	3.1	2	0.65	NA	mg/L
MKTF-28	2/23/2016	Chloride	500	25	1.4	250000000	mg/L
MKTF-28	2/23/2016	Fluoride, Total	0.93	0.1	0.023	1600000	mg/L
MKTF-28	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-28	2/23/2016	Nitrate & Nitrite	4.9	1	0.42	NA	mg/L
MKTF-28	2/23/2016	Sulfate	160	10	1.3	600000000	mg/L
MKTF-28	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	6/8/2016	Bromide	2.3	0.1	0.032	NA	mg/L
MKTF-28	6/8/2016	Chloride	490	25	1.4	250000000	mg/L
MKTF-28	6/8/2016	Fluoride, Total	0.93	0.1	0.023	1600000	mg/L
MKTF-28	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-28	6/8/2016	Nitrate & Nitrite	0.84	1	0.42	NA	mg/L
MKTF-28	6/8/2016	Sulfate	160	10	1.3	600000000	mg/L
MKTF-28	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	6/8/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	9/8/2016	Bromide	2.5	0.1	0.044	NA	mg/L
MKTF-28	9/8/2016	Chloride	470	25	2.5	250000000	mg/L
MKTF-28	9/8/2016	Fluoride, Total	0.66	0.1	0.05	1600000	mg/L
MKTF-28	9/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-28	9/8/2016	Nitrate & Nitrite	0.73	1	0.46	NA	mg/L
MKTF-28	9/8/2016	Sulfate	190	10	2.8	600000000	mg/L
MKTF-28	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	9/8/2016	TPH GRO	0.023	0.05	0.015	10100	mg/L
MKTF-28	10/28/2016	Bromide	2.2	0.1	0.044	NA	mg/L
MKTF-28	10/28/2016	Chloride	370	25	2.5	250000000	mg/L
MKTF-28	10/28/2016	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
MKTF-28	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-28	10/28/2016	Nitrate & Nitrite	1.1	1	0.46	NA	mg/L
MKTF-28	10/28/2016	Sulfate	130	10	2.8	600000000	mg/L
MKTF-28	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	10/28/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	3/29/2017	Bromide	2.2	0.1	0.031	NA	mg/L
MKTF-28	3/29/2017	Chloride	410	25	12	250000000	mg/L
MKTF-28	3/29/2017	Fluoride, Total	0.87	0.1	0.05	1600000	mg/L
MKTF-28	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-28	3/29/2017	Nitrate & Nitrite	1	1	0.13	NA	mg/L
MKTF-28	3/29/2017	Sulfate	160	10	1.9	600000000	mg/L
MKTF-28	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	3/29/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	6/5/2017	Bromide	2.2	0.1	0.014	NA	mg/L
MKTF-28	6/5/2017	Chloride	420	25	12	250000000	mg/L
MKTF-28	6/5/2017	Fluoride, Total	0.85	0.1	0.044	1600000	mg/L
MKTF-28	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-28	6/5/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
MKTF-28	6/5/2017	Sulfate	160	10	1.9	600000000	mg/L
MKTF-28	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	10/3/2017	Bromide	2	0.5	0.073	NA	mg/L
MKTF-28	10/3/2017	Chloride	390	25	12	250000000	mg/L
MKTF-28	10/3/2017	Fluoride, Total	0.95	0.5	0.22	1600000	mg/L
MKTF-28	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	10/3/2017	Nitrate & Nitrite	1.6	1	0.13	NA	mg/L
MKTF-28	10/3/2017	Sulfate	150	2.5	0.48	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	10/3/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	11/20/2017	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-28	11/20/2017	Chloride	410	25	12	250000000	mg/L
MKTF-28	11/20/2017	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-28	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	11/20/2017	Nitrate & Nitrite	1.9	1	0.13	NA	mg/L
MKTF-28	11/20/2017	Sulfate	180	2.5	0.48	600000000	mg/L
MKTF-28	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/20/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	2/6/2018	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-28	2/6/2018	Chloride	380	25	12	250000000	mg/L
MKTF-28	2/6/2018	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-28	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	2/6/2018	Nitrate & Nitrite	2.7	1	0.13	NA	mg/L
MKTF-28	2/6/2018	Sulfate	180	2.5	0.48	600000000	mg/L
MKTF-28	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	5/1/2018	Bromide	2	0.5	0.13	NA	mg/L
MKTF-28	5/1/2018	Chloride	400	25	1.5	250000000	mg/L
MKTF-28	5/1/2018	Fluoride, Total	0.83	0.5	0.15	1600000	mg/L
MKTF-28	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-28	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-28	5/1/2018	Nitrogen, Nitrate	2.7	0.5	0.033	10000000	mg/L
MKTF-28	5/1/2018	Sulfate	150	25	10	600000000	mg/L
MKTF-28	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	5/1/2018	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-28	8/20/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-28	8/20/2018	Chloride	540	25	1.5	250000000	mg/L
MKTF-28	8/20/2018	Fluoride, Total	0.48	0.5	0.15	1600000	mg/L
MKTF-28	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-28	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-28	8/20/2018	Nitrogen, Nitrate	1.3	0.5	0.033	10000000	mg/L
MKTF-28	8/20/2018	Sulfate	240	10	4.1	600000000	mg/L
MKTF-28	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	8/20/2018	TPH GRO	0.024	0.05	0.0097	10100	mg/L
MKTF-28	11/15/2018	Bromide	2.1	0.5	0.1	NA	mg/L
MKTF-28	11/15/2018	Chloride	400	25	25	250000000	mg/L
MKTF-28	11/15/2018	Fluoride, Total	1.4	0.5	0.5	1600000	mg/L
MKTF-28	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-28	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-28	11/15/2018	Nitrogen, Nitrate	1.7	0.5	0.25	10000000	mg/L
MKTF-28	11/15/2018	Sulfate	180	2.5	0.63	600000000	mg/L
MKTF-28	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-28	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-28	3/28/2019	Bromide	2	0.5	0.0675	NA	mg/L
MKTF-28	3/28/2019	Chloride	420	25	25	250000000	mg/L
MKTF-28	3/28/2019	Fluoride, Total	0.97	0.5	0.25	1600000	mg/L
MKTF-28	3/28/2019	Nitrogen, Nitrate & Nitrite	1.2	1	0.4905	10000000	mg/L
MKTF-28	3/28/2019	Phosphorus, Ortho	0.51	2.5	0.1305	NA	mg/L
MKTF-28	3/28/2019	Sulfate	180	2.5	0.32	600000000	mg/L
MKTF-28	3/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-28	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	5/6/2019	Bromide	2	0.5	0.088765	NA	mg/L
MKTF-28	5/6/2019	Chloride	470	25	3.125	250000000	mg/L
MKTF-28	5/6/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-28	5/6/2019	Nitrogen, Nitrate	1.1	0.5	0.027	10000000	mg/L
MKTF-28	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-28	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-28	5/6/2019	Sulfate	200	2.5	0.2675	600000000	mg/L
MKTF-28	8/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-28	8/21/2019	Chloride	470	25	25	250000000	mg/L
MKTF-28	8/21/2019	Fluoride, Total	1.2	0.5	0.073	1600000	mg/L
MKTF-28	8/21/2019	Nitrogen, Nitrate	0.91	0.5	0.025	10000000	mg/L
MKTF-28	8/21/2019	Nitrogen, Nitrite	0.49	0.5	0.027	1000000	mg/L
MKTF-28	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Sulfate	180	2.5	0.3345	600000000	mg/L
MKTF-28	10/21/2019	TPH GRO	0.69	0.05	0.0211	10100	mg/L
MKTF-28	10/21/2019	TPH DRO	1.2	0.4	0.132	16700	mg/L
MKTF-28	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/21/2019	Cyanide, Total	0.0723	0.01	0.01	1460	mg/L
MKTF-28	10/21/2019	Bromide	3.6	0.5	0.077	NA	mg/L
MKTF-28	10/21/2019	Chloride	1500	50	50	250000000	mg/L
MKTF-28	10/21/2019	Fluoride, Total	1.9	0.5	0.144909	1600000	mg/L
MKTF-28	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-28	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/21/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
MKTF-28	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-28	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/22/2019	Bromide	2.4	0.5	0.077	NA	mg/L
MKTF-28	10/22/2019	Chloride	530	25	25	250000000	mg/L
MKTF-28	10/22/2019	Fluoride, Total	1	0.5	0.144909	1600000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrate	0.32	0.5	0.030387	10000000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/22/2019	Sulfate	220	10	1.338	600000000	mg/L
MKTF-28	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-28	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/22/2019	Bromide	2.1	0.5	0.077	NA	mg/L
MKTF-28	10/22/2019	Chloride	460	25	25	250000000	mg/L
MKTF-28	10/22/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrate	0.56	0.5	0.030387	10000000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/22/2019	Sulfate	190	2.5	0.3345	600000000	mg/L
MKTF-28	2/25/2020	TPH GRO	0.011	0.05	0.0068	10100	mg/L
MKTF-28	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-28	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-28	2/25/2020	Bromide	2.2	0.5	0.25	NA	mg/L
MKTF-28	2/25/2020	Chloride	570	25	12	250000000	mg/L
MKTF-28	2/25/2020	Fluoride, Total	1.1	0.5	0.11	1600000	mg/L
MKTF-28	2/25/2020	Nitrogen, Nitrate	0.26	0.5	0.11	10000000	mg/L
MKTF-28	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-28	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	2/25/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-28	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-28	9/20/2020	TPH DRO	0.11	0.07	0.067	16700	mg/L
MKTF-28	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-28	9/20/2020	Bromide	2.2	0.5	0.25	NA	mg/L
MKTF-28	9/20/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-28	9/20/2020	Nitrogen, Nitrate	0.25	0.5	0.1	10000000	mg/L
MKTF-28	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-28	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	9/20/2020	Sulfate	130	2.5	1.2	600000000	mg/L
MKTF-28	9/20/2020	Solids, Total Suspended	24	4	4	NA	mg/L
MKTF-28	9/20/2020	Chloride	630	25	12	250000000	mg/L
MKTF-28	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-28	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-28	12/18/2020	Fluoride, Total	1.24	1	0.3	1600000	mg/L
MKTF-28	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-28	12/18/2020	Chloride	676	20	2.4	250000000	mg/L
MKTF-28	12/18/2020	Sulfate	133	20	7.4	600000000	mg/L
MKTF-28	12/18/2020	Bicarbonate	380	1	0.5	NA	mg/L
MKTF-28	12/18/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-28	12/18/2020	TPH DRO	336	134	107	16700	ug/L
MKTF-28	12/18/2020	C28-C40	ND	134	107	NA	ug/L
MKTF-28	9/20/2020	Solids, Total Suspended	24	4	4	NA	mg/L
MKTF-29	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-29	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-29	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-29	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-29	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	8/20/2015	Bromide	ND	0.5	0.39	NA	mg/L
MKTF-29	8/20/2015	Chloride	95	10	2.7	250000000	mg/L
MKTF-29	8/20/2015	Fluoride, Total	0.83	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-29	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-29	8/20/2015	Sulfate	440	10	2.3	600000000	mg/L
MKTF-29	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	8/20/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-29	11/4/2015	Bromide	0.33	0.1	0.068	NA	mg/L
MKTF-29	11/4/2015	Chloride	90	10	6.8	250000000	mg/L
MKTF-29	11/4/2015	Fluoride, Total	0.92	0.1	0.032	1600000	mg/L
MKTF-29	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-29	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-29	11/4/2015	Sulfate	650	10	6.4	600000000	mg/L
MKTF-29	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	2/23/2016	Bromide	0.46	0.1	0.032	NA	mg/L
MKTF-29	2/23/2016	Chloride	91	10	0.55	250000000	mg/L
MKTF-29	2/23/2016	Fluoride, Total	0.96	0.1	0.023	1600000	mg/L
MKTF-29	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-29	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-29	2/23/2016	Sulfate	640	10	1.3	600000000	mg/L
MKTF-29	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	6/9/2016	Bromide	0.4	0.1	0.032	NA	mg/L
MKTF-29	6/9/2016	Chloride	82	10	0.55	250000000	mg/L
MKTF-29	6/9/2016	Fluoride, Total	1.1	0.1	0.023	1600000	mg/L
MKTF-29	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-29	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-29	6/9/2016	Sulfate	650	10	1.3	600000000	mg/L
MKTF-29	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	9/7/2016	Bromide	0.34	0.1	0.044	NA	mg/L
MKTF-29	9/7/2016	Chloride	81	10	1	250000000	mg/L
MKTF-29	9/7/2016	Fluoride, Total	0.85	0.1	0.05	1600000	mg/L
MKTF-29	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-29	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-29	9/7/2016	Sulfate	590	10	2.8	600000000	mg/L
MKTF-29	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	9/7/2016	TPH GRO	0.029	0.05	0.015	10100	mg/L
MKTF-29	10/28/2016	Bromide	0.36	0.1	0.044	NA	mg/L
MKTF-29	10/28/2016	Chloride	80	10	1	250000000	mg/L
MKTF-29	10/28/2016	Fluoride, Total	1.1	0.1	0.05	1600000	mg/L
MKTF-29	10/28/2016	Ortho-Phosphate	0.16	0.5	0.076	NA	mg/L
MKTF-29	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-29	10/28/2016	Sulfate	560	10	2.8	600000000	mg/L
MKTF-29	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	10/28/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	3/29/2017	Bromide	0.4	0.1	0.031	NA	mg/L
MKTF-29	3/29/2017	Chloride	100	10	5	250000000	mg/L
MKTF-29	3/29/2017	Fluoride, Total	0.75	0.1	0.05	1600000	mg/L
MKTF-29	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-29	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	3/29/2017	Sulfate	640	10	1.9	600000000	mg/L
MKTF-29	3/29/2017	TPH DRO	0.43	1	0.36	16700	mg/L
MKTF-29	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	3/29/2017	TPH GRO	0.012	0.05	0.0097	10100	mg/L
MKTF-29	6/5/2017	Bromide	0.55	0.1	0.014	NA	mg/L
MKTF-29	6/5/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	6/5/2017	Fluoride, Total	0.68	0.1	0.044	1600000	mg/L
MKTF-29	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-29	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	6/5/2017	Sulfate	670	10	1.9	600000000	mg/L
MKTF-29	6/5/2017	TPH DRO	1	1	0.36	16700	mg/L
MKTF-29	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	10/3/2017	Bromide	0.65	0.5	0.073	NA	mg/L
MKTF-29	10/3/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	10/3/2017	Fluoride, Total	0.6	0.5	0.22	1600000	mg/L
MKTF-29	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	10/3/2017	Nitrate & Nitrite	0.14	1	0.13	NA	mg/L
MKTF-29	10/3/2017	Sulfate	880	10	1.9	600000000	mg/L
MKTF-29	10/3/2017	TPH DRO	0.37	1	0.36	16700	mg/L
MKTF-29	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	10/3/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-29	11/20/2017	Bromide	0.81	0.5	0.073	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	11/20/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MKTF-29	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	11/20/2017	Sulfate	780	10	1.9	600000000	mg/L
MKTF-29	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-29	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/20/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	2/6/2018	Bromide	0.83	0.5	0.073	NA	mg/L
MKTF-29	2/6/2018	Chloride	160	10	5	250000000	mg/L
MKTF-29	2/6/2018	Fluoride, Total	0.81	0.5	0.22	1600000	mg/L
MKTF-29	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	2/6/2018	Sulfate	560	10	1.9	600000000	mg/L
MKTF-29	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-29	5/1/2018	Bromide	0.9	0.5	0.13	NA	mg/L
MKTF-29	5/1/2018	Chloride	160	10	0.59	250000000	mg/L
MKTF-29	5/1/2018	Fluoride, Total	0.68	0.5	0.15	1600000	mg/L
MKTF-29	5/1/2018	Ortho-Phosphate	0.78	2.5	0.46	NA	mg/L
MKTF-29	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-29	5/1/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-29	5/1/2018	Sulfate	460	10	4.1	600000000	mg/L
MKTF-29	5/1/2018	TPH DRO	0.66	1	0.63	16700	mg/L
MKTF-29	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	5/1/2018	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-29	8/20/2018	Bromide	0.79	0.5	0.13	NA	mg/L
MKTF-29	8/20/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-29	8/20/2018	Fluoride, Total	0.57	0.5	0.15	1600000	mg/L
MKTF-29	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-29	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-29	8/20/2018	Nitrogen, Nitrate	0.31	0.5	0.033	10000000	mg/L
MKTF-29	8/20/2018	Sulfate	520	10	4.1	600000000	mg/L
MKTF-29	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	8/20/2018	TPH GRO	0.021	0.05	0.0097	10100	mg/L
MKTF-29	11/15/2018	Bromide	0.85	0.5	0.1	NA	mg/L
MKTF-29	11/15/2018	Chloride	210	10	10	250000000	mg/L
MKTF-29	11/15/2018	Fluoride, Total	0.8	0.5	0.5	1600000	mg/L
MKTF-29	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-29	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-29	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-29	11/15/2018	Sulfate	630	10	2.5	600000000	mg/L
MKTF-29	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-29	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	3/28/2019	Bromide	0.77	0.5	0.0675	NA	mg/L
MKTF-29	3/28/2019	Chloride	190	10	10	250000000	mg/L
MKTF-29	3/28/2019	Fluoride, Total	0.54	0.5	0.25	1600000	mg/L
MKTF-29	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-29	3/28/2019	Phosphorus, Ortho	0.14	2.5	0.1305	NA	mg/L
MKTF-29	3/28/2019	Sulfate	540	10	1.28	600000000	mg/L
MKTF-29	3/28/2019	TPH DRO	0.51	1	0.35	16700	mg/L
MKTF-29	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	3/28/2019	Bromide	0.77	0.5	0.0675	NA	mg/L
MKTF-29	3/28/2019	Chloride	190	10	10	250000000	mg/L
MKTF-29	3/28/2019	Fluoride, Total	0.53	0.5	0.25	1600000	mg/L
MKTF-29	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-29	3/28/2019	Phosphorus, Ortho	0.16	2.5	0.1305	NA	mg/L
MKTF-29	3/28/2019	Sulfate	530	10	1.28	600000000	mg/L
MKTF-29	3/28/2019	TPH DRO	0.49	1	0.35	16700	mg/L
MKTF-29	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	5/6/2019	TPH DRO	0.36	1	0.35	16700	mg/L
MKTF-29	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	5/6/2019	Bromide	0.75	0.5	0.088765	NA	mg/L
MKTF-29	5/6/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-29	5/6/2019	Fluoride, Total	0.76	0.5	0.25	1600000	mg/L
MKTF-29	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-29	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-29	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-29	5/6/2019	Sulfate	540	10	1.07	600000000	mg/L
MKTF-29	8/23/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	8/23/2019	TPH DRO	0.59	1	0.35	16700	mg/L
MKTF-29	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	8/23/2019	Bromide	0.97	0.5	0.088765	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Chloride	620	25	25	250000000	mg/L
MKTF-29	8/23/2019	Fluoride, Total	0.61	0.5	0.073	1600000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-29	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	8/23/2019	Sulfate	430	10	1.338	600000000	mg/L
MKTF-29	8/23/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	8/23/2019	TPH DRO	0.39	1	0.35	16700	mg/L
MKTF-29	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	8/23/2019	Bromide	1	0.5	0.088765	NA	mg/L
MKTF-29	8/23/2019	Chloride	610	25	25	250000000	mg/L
MKTF-29	8/23/2019	Fluoride, Total	0.71	0.5	0.073	1600000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrate	0.097	0.5	0.025	10000000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrite	0.46	0.5	0.027	1000000	mg/L
MKTF-29	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	8/23/2019	Sulfate	440	10	1.338	600000000	mg/L
MKTF-29	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-29	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-29	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-29	10/22/2019	Bromide	1.5	0.5	0.077	NA	mg/L
MKTF-29	10/22/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-29	10/22/2019	Fluoride, Total	0.42	0.5	0.144909	1600000	mg/L
MKTF-29	10/22/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-29	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-29	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	10/22/2019	Sulfate	320	10	1.338	600000000	mg/L
MKTF-29	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrate	0.091	0.1	0.006078	10000000	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-29	11/18/2019	Chemical Oxygen Demand	66.7	10	3	NA	mg/L
MKTF-29	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrate	0.072	0.1	0.006078	10000000	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-29	11/18/2019	Chemical Oxygen Demand	56.5	10	3	NA	mg/L
MKTF-29	2/25/2020	TPH GRO	0.013	0.05	0.0068	10100	mg/L
MKTF-29	2/25/2020	TPH DRO	0.21	0.4	0.2	16700	mg/L
MKTF-29	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-29	2/25/2020	Bromide	2.7	0.5	0.25	NA	mg/L
MKTF-29	2/25/2020	Chloride	1500	50	25	250000000	mg/L
MKTF-29	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-29	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-29	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-29	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	2/25/2020	Sulfate	230	10	5	600000000	mg/L
MKTF-29	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-29	9/20/2020	TPH DRO	0.26	0.07	0.067	16700	mg/L
MKTF-29	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-29	9/20/2020	Bromide	2.7	0.5	0.25	NA	mg/L
MKTF-29	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-29	9/20/2020	Nitrogen, Nitrate	0.14	0.5	0.1	10000000	mg/L
MKTF-29	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	9/20/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-29	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-29	9/20/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-29	9/20/2020	Chloride	18000	1000	500	250000000	mg/L
MKTF-29	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-29	12/15/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-29	12/15/2020	Bicarbonate	676	1	0.5	NA	mg/L
MKTF-29	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-29	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-29	12/15/2020	Sulfate	106	20	7.4	600000000	mg/L
MKTF-29	12/15/2020	Chloride	1670	200	24	250000000	mg/L
MKTF-29	12/15/2020	TPH DRO	847	131	105	16700	ug/L
MKTF-29	12/15/2020	C28-C40	ND	131	105	NA	ug/L
MKTF-29	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-29	9/20/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-30	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-30	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-30	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-30	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-30	11/17/2014	Bromide	1.3	0.1	0.026	NA	mg/L
MKTF-30	11/17/2014	Chloride	1400	50	2.2	250000000	mg/L
MKTF-30	11/17/2014	Fluoride, Total	0.56	0.1	0.015	1600000	mg/L
MKTF-30	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-30	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-30	11/17/2014	Sulfate	730	10	1.6	600000000	mg/L
MKTF-30	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/17/2014	TPH GRO	0.054	0.05	0.019	10100	mg/L
MKTF-30	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	3/11/2015	TPH GRO	0.053	0.05	0.012	10100	mg/L
MKTF-30	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	6/10/2015	TPH GRO	0.071	0.05	0.012	10100	mg/L
MKTF-30	8/20/2015	Bromide	1.6	0.5	0.39	NA	mg/L
MKTF-30	8/20/2015	Chloride	1300	50	34	250000000	mg/L
MKTF-30	8/20/2015	Fluoride, Total	0.79	0.5	0.15	1600000	mg/L
MKTF-30	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-30	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-30	8/20/2015	Sulfate	450	10	2.3	600000000	mg/L
MKTF-30	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	8/20/2015	TPH GRO	0.17	0.05	0.04	10100	mg/L
MKTF-30	11/4/2015	Bromide	0.65	0.1	0.068	NA	mg/L
MKTF-30	11/4/2015	Chloride	1300	50	34	250000000	mg/L
MKTF-30	11/4/2015	Fluoride, Total	0.99	0.1	0.032	1600000	mg/L
MKTF-30	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-30	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-30	11/4/2015	Sulfate	380	10	6.4	600000000	mg/L
MKTF-30	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/4/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-30	2/23/2016	Bromide	3.2	2	0.65	NA	mg/L
MKTF-30	2/23/2016	Chloride	1100	250	14	250000000	mg/L
MKTF-30	2/23/2016	Fluoride, Total	1.1	0.1	0.023	1600000	mg/L
MKTF-30	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-30	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-30	2/23/2016	Sulfate	320	10	1.3	600000000	mg/L
MKTF-30	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	2/23/2016	TPH GRO	0.13	0.05	0.025	10100	mg/L
MKTF-30	6/9/2016	Bromide	1.3	0.1	0.032	NA	mg/L
MKTF-30	6/9/2016	Chloride	890	50	2.8	250000000	mg/L
MKTF-30	6/9/2016	Fluoride, Total	1.3	0.1	0.023	1600000	mg/L
MKTF-30	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-30	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-30	6/9/2016	Sulfate	330	10	1.3	600000000	mg/L
MKTF-30	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	6/9/2016	TPH GRO	0.095	0.05	0.025	10100	mg/L
MKTF-30	9/7/2016	Bromide	1	0.1	0.044	NA	mg/L
MKTF-30	9/7/2016	Chloride	970	50	5.1	250000000	mg/L
MKTF-30	9/7/2016	Fluoride, Total	0.79	0.1	0.05	1600000	mg/L
MKTF-30	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-30	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-30	9/7/2016	Sulfate	330	10	2.8	600000000	mg/L
MKTF-30	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	9/7/2016	TPH GRO	0.23	0.05	0.015	10100	mg/L
MKTF-30	10/28/2016	Bromide	1.1	0.1	0.044	NA	mg/L
MKTF-30	10/28/2016	Chloride	810	50	5.1	250000000	mg/L
MKTF-30	10/28/2016	Fluoride, Total	1.1	0.1	0.05	1600000	mg/L
MKTF-30	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-30	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-30	10/28/2016	Sulfate	400	10	2.8	600000000	mg/L
MKTF-30	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	10/28/2016	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-30	3/29/2017	Bromide	0.37	0.1	0.031	NA	mg/L
MKTF-30	3/29/2017	Chloride	740	50	25	250000000	mg/L
MKTF-30	3/29/2017	Fluoride, Total	0.8	0.1	0.05	1600000	mg/L
MKTF-30	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-30	3/29/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-30	3/29/2017	Sulfate	360	50	9.6	600000000	mg/L
MKTF-30	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	3/29/2017	TPH GRO	0.14	0.05	0.0097	10100	mg/L
MKTF-30	6/5/2017	Bromide	0.78	0.1	0.014	NA	mg/L
MKTF-30	6/5/2017	Chloride	620	25	12	250000000	mg/L
MKTF-30	6/5/2017	Fluoride, Total	1	0.1	0.044	1600000	mg/L
MKTF-30	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-30	6/5/2017	Nitrate & Nitrite	0.3	1	0.13	NA	mg/L
MKTF-30	6/5/2017	Sulfate	560	10	1.9	600000000	mg/L
MKTF-30	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	6/5/2017	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	TPH GRO	0.048	0.05	0.025	10100	mg/L
MKTF-30	10/3/2017	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-30	10/3/2017	Chloride	630	25	12	250000000	mg/L
MKTF-30	10/3/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-30	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-30	10/3/2017	Nitrogen, Nitrate	0.33	0.5	0.11	10000000	mg/L
MKTF-30	10/3/2017	Sulfate	510	10	1.9	600000000	mg/L
MKTF-30	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	10/3/2017	TPH GRO	0.1	0.05	0.0097	10100	mg/L
MKTF-30	11/20/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-30	11/20/2017	Chloride	620	25	12	250000000	mg/L
MKTF-30	11/20/2017	Fluoride, Total	0.88	0.5	0.22	1600000	mg/L
MKTF-30	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	11/20/2017	Nitrate & Nitrite	0.44	1	0.13	NA	mg/L
MKTF-30	11/20/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-30	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/20/2017	TPH GRO	0.075	0.05	0.025	10100	mg/L
MKTF-30	2/6/2018	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-30	2/6/2018	Chloride	550	25	12	250000000	mg/L
MKTF-30	2/6/2018	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
MKTF-30	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-30	2/6/2018	Sulfate	390	10	1.9	600000000	mg/L
MKTF-30	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	2/6/2018	TPH GRO	0.1	0.05	0.0097	10100	mg/L
MKTF-30	5/1/2018	Bromide	0.91	0.5	0.13	NA	mg/L
MKTF-30	5/1/2018	Chloride	400	25	1.5	250000000	mg/L
MKTF-30	5/1/2018	Fluoride, Total	1.3	0.5	0.15	1600000	mg/L
MKTF-30	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-30	5/1/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-30	5/1/2018	Sulfate	480	10	4.1	600000000	mg/L
MKTF-30	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	5/1/2018	TPH GRO	0.023	0.05	0.021	10100	mg/L
MKTF-30	8/20/2018	Bromide	0.93	0.5	0.13	NA	mg/L
MKTF-30	8/20/2018	Chloride	510	25	1.5	250000000	mg/L
MKTF-30	8/20/2018	Fluoride, Total	0.54	0.1	0.03	1600000	mg/L
MKTF-30	8/20/2018	Ortho-Phosphate	1.5	2.5	0.46	NA	mg/L
MKTF-30	8/20/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-30	8/20/2018	Sulfate	430	10	4.1	600000000	mg/L
MKTF-30	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	8/20/2018	TPH GRO	0.12	0.05	0.0097	10100	mg/L
MKTF-30	11/15/2018	Bromide	0.94	0.5	0.1	NA	mg/L
MKTF-30	11/15/2018	Chloride	460	25	25	250000000	mg/L
MKTF-30	11/15/2018	Fluoride, Total	1.2	0.5	0.5	1600000	mg/L
MKTF-30	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-30	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-30	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-30	11/15/2018	Sulfate	490	10	2.5	600000000	mg/L
MKTF-30	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-30	3/28/2019	TPH GRO	0.036	0.05	0.0307	10100	mg/L
MKTF-30	3/28/2019	Bromide	0.82	0.5	0.0675	NA	mg/L
MKTF-30	3/28/2019	Chloride	410	25	25	250000000	mg/L
MKTF-30	3/28/2019	Fluoride, Total	0.93	0.5	0.25	1600000	mg/L
MKTF-30	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-30	3/28/2019	Phosphorus, Ortho	0.27	2.5	0.1305	NA	mg/L
MKTF-30	3/28/2019	Sulfate	510	10	1.28	600000000	mg/L
MKTF-30	3/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-30	5/6/2019	TPH GRO	0.043	0.05	0.0307	10100	mg/L
MKTF-30	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-30	5/6/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
MKTF-30	5/6/2019	Chloride	410	25	3.125	250000000	mg/L
MKTF-30	5/6/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-30	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-30	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-30	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-30	5/6/2019	Sulfate	540	10	1.07	600000000	mg/L
MKTF-30	8/23/2019	TPH GRO	0.047	0.05	0.0307	10100	mg/L
MKTF-30	8/23/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	8/23/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	Bromide	0.89	0.5	0.088765	NA	mg/L
MKTF-30	8/23/2019	Chloride	480	25	25	250000000	mg/L
MKTF-30	8/23/2019	Fluoride, Total	1.3	0.5	0.073	1600000	mg/L
MKTF-30	8/23/2019	Nitrogen, Nitrate	0.22	0.5	0.025	10000000	mg/L
MKTF-30	8/23/2019	Nitrogen, Nitrite	0.37	0.5	0.027	1000000	mg/L
MKTF-30	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	8/23/2019	Sulfate	570	10	1.338	600000000	mg/L
MKTF-30	10/23/2019	TPH GRO	0.031	0.05	0.0211	10100	mg/L
MKTF-30	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-30	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-30	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-30	10/23/2019	Chloride	480	25	25	250000000	mg/L
MKTF-30	10/23/2019	Fluoride, Total	1.1	0.5	0.144909	1600000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-30	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	10/23/2019	Sulfate	480	10	1.338	600000000	mg/L
MKTF-30	10/23/2019	TPH GRO	0.038	0.05	0.0211	10100	mg/L
MKTF-30	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-30	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-30	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-30	10/23/2019	Chloride	490	25	25	250000000	mg/L
MKTF-30	10/23/2019	Fluoride, Total	1.1	0.5	0.144909	1600000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-30	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	10/23/2019	Sulfate	490	10	1.338	600000000	mg/L
MKTF-30	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-30	11/18/2019	Nitrogen, Nitrate	0.16	0.1	0.006078	10000000	mg/L
MKTF-30	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-30	11/18/2019	Chemical Oxygen Demand	23.5	10	3	NA	mg/L
MKTF-30	2/27/2020	TPH GRO	0.051	0.05	0.0068	10100	mg/L
MKTF-30	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-30	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-30	2/27/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-30	2/27/2020	Fluoride, Total	1.1	0.5	0.11	1600000	mg/L
MKTF-30	2/27/2020	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L
MKTF-30	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-30	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	2/27/2020	Sulfate	530	10	5	600000000	mg/L
MKTF-30	2/27/2020	Chloride	520	25	12	250000000	mg/L
MKTF-30	9/20/2020	TPH GRO	0.03	0.05	0.008	10100	mg/L
MKTF-30	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-30	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-30	9/20/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-30	9/20/2020	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-30	9/20/2020	Nitrogen, Nitrate	0.11	0.5	0.1	10000000	mg/L
MKTF-30	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-30	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	9/20/2020	Sulfate	520	10	5	600000000	mg/L
MKTF-30	9/20/2020	Solids, Total Suspended	320	8	8	NA	mg/L
MKTF-30	9/20/2020	Chloride	510	25	12	250000000	mg/L
MKTF-30	12/15/2020	Fluoride, Total	1.12	1	0.3	1600000	mg/L
MKTF-30	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-30	12/15/2020	Chloride	583	20	2.4	250000000	mg/L
MKTF-30	12/15/2020	Sulfate	529	20	7.4	600000000	mg/L
MKTF-30	12/15/2020	Phosphorus, Total	0.232	0.1	0.032	NA	mg/L
MKTF-30	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-30	12/15/2020	Bicarbonate	694	1	0.5	NA	mg/L
MKTF-30	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-30	12/15/2020	TPH DRO	368	138	111	16700	ug/L
MKTF-30	12/15/2020	C28-C40	ND	138	111	NA	ug/L
MKTF-30	9/20/2020	Solids, Total Suspended	320	8	8	NA	mg/L
MKTF-31	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-31	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	4/8/2014	TPH GRO	0.11	0.05	0.0092	10100	mg/L
MKTF-31	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-31	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/23/2014	TPH GRO	0.061	0.05	0.019	10100	mg/L
MKTF-31	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-31	11/17/2014	Chloride	920	50	2.2	250000000	mg/L
MKTF-31	11/17/2014	Fluoride, Total	ND	0.1	0.015	1600000	mg/L
MKTF-31	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-31	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-31	11/17/2014	Sulfate	82	10	1.6	600000000	mg/L
MKTF-31	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-31	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/17/2014	TPH GRO	0.068	0.05	0.019	10100	mg/L
MKTF-31	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	3/11/2015	TPH GRO	0.077	0.05	0.012	10100	mg/L
MKTF-31	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-31	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/10/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-31	8/21/2015	Bromide	1.5	0.5	0.39	NA	mg/L
MKTF-31	8/21/2015	Chloride	890	25	17	250000000	mg/L
MKTF-31	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-31	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-31	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-31	8/21/2015	Sulfate	71	2.5	0.57	600000000	mg/L
MKTF-31	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-31	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	8/21/2015	TPH GRO	0.1	0.05	0.04	10100	mg/L
MKTF-31	11/4/2015	Bromide	0.85	0.1	0.068	NA	mg/L
MKTF-31	11/4/2015	Chloride	850	25	17	250000000	mg/L
MKTF-31	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-31	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-31	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-31	11/4/2015	Sulfate	69	10	6.4	600000000	mg/L
MKTF-31	11/4/2015	TPH DRO	1.3	1	0.91	16700	mg/L
MKTF-31	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/4/2015	TPH GRO	0.086	0.05	0.012	10100	mg/L
MKTF-31	2/23/2016	Bromide	3	2	0.65	NA	mg/L
MKTF-31	2/23/2016	Chloride	830	50	2.7	250000000	mg/L
MKTF-31	2/23/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-31	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-31	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-31	2/23/2016	Sulfate	68	10	1.3	600000000	mg/L
MKTF-31	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	2/23/2016	TPH GRO	0.1	0.05	0.025	10100	mg/L
MKTF-31	6/9/2016	Bromide	1.5	0.1	0.032	NA	mg/L
MKTF-31	6/9/2016	Chloride	770	50	2.8	250000000	mg/L
MKTF-31	6/9/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-31	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-31	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-31	6/9/2016	Sulfate	69	10	1.3	600000000	mg/L
MKTF-31	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/9/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-31	9/8/2016	Bromide	1.3	0.1	0.044	NA	mg/L
MKTF-31	9/8/2016	Chloride	940	50	5.1	250000000	mg/L
MKTF-31	9/8/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	9/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-31	9/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-31	9/8/2016	Sulfate	70	10	2.8	600000000	mg/L
MKTF-31	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/8/2016	TPH GRO	0.23	0.05	0.015	10100	mg/L
MKTF-31	10/31/2016	Bromide	4.6	2	0.87	NA	mg/L
MKTF-31	10/31/2016	Chloride	720	50	5.1	250000000	mg/L
MKTF-31	10/31/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-31	10/31/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-31	10/31/2016	Sulfate	70	10	2.8	600000000	mg/L
MKTF-31	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	10/31/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-31	3/7/2017	Bromide	1.4	0.1	0.031	NA	mg/L
MKTF-31	3/7/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-31	3/7/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-31	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	3/7/2017	Sulfate	87	10	1.9	600000000	mg/L
MKTF-31	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	3/7/2017	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-31	6/5/2017	Bromide	1.4	0.1	0.014	NA	mg/L
MKTF-31	6/5/2017	Chloride	1200	50	25	250000000	mg/L
MKTF-31	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-31	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-31	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	6/5/2017	Sulfate	98	10	1.9	600000000	mg/L
MKTF-31	6/5/2017	TPH DRO	0.47	1	0.36	16700	mg/L
MKTF-31	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/5/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
MKTF-31	9/25/2017	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-31	9/25/2017	Chloride	770	25	12	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	9/25/2017	Sulfate	76	2.5	0.48	600000000	mg/L
MKTF-31	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/25/2017	TPH GRO	0.2	0.05	0.025	10100	mg/L
MKTF-31	11/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-31	11/21/2017	Chloride	890	25	12	250000000	mg/L
MKTF-31	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	11/21/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-31	11/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-31	11/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-31	11/21/2017	Sulfate	76	2.5	0.48	600000000	mg/L
MKTF-31	11/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/21/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
MKTF-31	2/5/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-31	2/5/2018	Chloride	750	25	12	250000000	mg/L
MKTF-31	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	2/5/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	2/5/2018	Sulfate	63	2.5	0.48	600000000	mg/L
MKTF-31	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	2/5/2018	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-31	5/6/2018	Bromide	0.34	0.1	0.027	NA	mg/L
MKTF-31	5/6/2018	Chloride	750	25	1.5	250000000	mg/L
MKTF-31	5/6/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-31	5/6/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-31	5/6/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-31	5/6/2018	Sulfate	63	10	4.1	600000000	mg/L
MKTF-31	5/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	5/6/2018	TPH GRO	0.32	0.05	0.0097	10100	mg/L
MKTF-31	8/17/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-31	8/17/2018	Chloride	840	25	1.5	250000000	mg/L
MKTF-31	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-31	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-31	8/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-31	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-31	8/17/2018	Sulfate	64	2.5	1	600000000	mg/L
MKTF-31	8/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	8/17/2018	TPH GRO	0.22	0.05	0.0097	10100	mg/L
MKTF-31	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-31	11/15/2018	Chloride	810	25	25	250000000	mg/L
MKTF-31	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-31	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-31	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-31	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-31	11/15/2018	Sulfate	67	2.5	0.63	600000000	mg/L
MKTF-31	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/15/2018	TPH GRO	0.12	0.05	0.024	10100	mg/L
MKTF-31	2/20/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	2/20/2019	Bromide	1.3	0.5	0.0675	NA	mg/L
MKTF-31	2/20/2019	Chloride	760	25	25	250000000	mg/L
MKTF-31	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-31	2/20/2019	Phosphorus, Ortho	1.3	2.5	0.1305	NA	mg/L
MKTF-31	2/20/2019	Sulfate	65	2.5	0.32	600000000	mg/L
MKTF-31	2/20/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	2/20/2019	Bromide	1.3	0.5	0.0675	NA	mg/L
MKTF-31	2/20/2019	Chloride	770	25	25	250000000	mg/L
MKTF-31	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-31	2/20/2019	Phosphorus, Ortho	1.2	2.5	0.1305	NA	mg/L
MKTF-31	2/20/2019	Sulfate	67	2.5	0.32	600000000	mg/L
MKTF-31	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	5/6/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-31	5/6/2019	Chloride	1200	50	6.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrate	0.27	0.5	0.027	10000000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-31	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-31	5/6/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
MKTF-31	5/6/2019	TPH GRO	0.13	0.05	0.0307	10100	mg/L
MKTF-31	5/6/2019	TPH GRO	0.13	0.05	0.0307	10100	mg/L
MKTF-31	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	5/6/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-31	5/6/2019	Chloride	1200	50	6.25	250000000	mg/L
MKTF-31	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrate	0.25	0.5	0.027	10000000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-31	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-31	5/6/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
MKTF-31	8/23/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	8/23/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-31	8/23/2019	Chloride	820	50	50	250000000	mg/L
MKTF-31	8/23/2019	Fluoride, Total	0.12	0.5	0.073	1600000	mg/L
MKTF-31	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-31	8/23/2019	Nitrogen, Nitrite	0.91	0.5	0.027	1000000	mg/L
MKTF-31	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-31	8/23/2019	Sulfate	82	2.5	0.3345	600000000	mg/L
MKTF-31	8/23/2019	TPH DRO	0.84	1	0.35	16700	mg/L
MKTF-31	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	10/22/2019	TPH GRO	0.096	0.05	0.0211	10100	mg/L
MKTF-31	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-31	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-31	10/22/2019	Bromide	1.6	0.5	0.077	NA	mg/L
MKTF-31	10/22/2019	Chloride	770	25	25	250000000	mg/L
MKTF-31	10/22/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-31	10/22/2019	Nitrogen, Nitrate	0.095	0.5	0.030387	10000000	mg/L
MKTF-31	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-31	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-31	10/22/2019	Sulfate	72	2.5	0.3345	600000000	mg/L
MKTF-31	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-31	11/18/2019	Nitrogen, Nitrate	0.052	0.1	0.006078	10000000	mg/L
MKTF-31	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-31	11/18/2019	Chemical Oxygen Demand	26.3	10	3	NA	mg/L
MKTF-31	2/25/2020	TPH GRO	0.22	0.05	0.0068	10100	mg/L
MKTF-31	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-31	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-31	2/25/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-31	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-31	2/25/2020	Chloride	820	25	12	250000000	mg/L
MKTF-31	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-31	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-31	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	2/25/2020	Sulfate	68	2.5	1.2	600000000	mg/L
MKTF-31	9/19/2020	TPH GRO	0.074	0.05	0.008	10100	mg/L
MKTF-31	9/19/2020	TPH DRO	0.2	0.07	0.067	16700	mg/L
MKTF-31	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-31	9/19/2020	Chloride	550	25	12	250000000	mg/L
MKTF-31	9/19/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-31	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	9/19/2020	Sulfate	59	2.5	1.2	600000000	mg/L
MKTF-31	9/19/2020	Nitrate & Nitrite	0.076	1	0.061	NA	mg/L
MKTF-31	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-31	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-31	12/18/2020	Chloride	610	20	2.4	250000000	mg/L
MKTF-31	12/18/2020	Sulfate	60.4	20	7.4	600000000	mg/L
MKTF-31	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-31	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-31	12/18/2020	Chloride	604	20	2.4	250000000	mg/L
MKTF-31	12/18/2020	Sulfate	58.7	20	7.4	600000000	mg/L
MKTF-31	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-31	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-31	12/18/2020	Bicarbonate	300	1	0.5	NA	mg/L
MKTF-31	12/18/2020	Bicarbonate	317	1	0.5	NA	mg/L
MKTF-31	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-31	12/18/2020	Phosphorus, Total	0.404	0.1	0.032	NA	mg/L
MKTF-31	12/18/2020	TPH (C6-C10)	257	100	47	NA	ug/L
MKTF-31	12/18/2020	TPH (C6-C10)	276	100	47	NA	ug/L
MKTF-31	12/18/2020	TPH DRO	728	143	115	16700	ug/L
MKTF-31	12/18/2020	C28-C40	ND	143	115	NA	ug/L
MKTF-31	12/18/2020	TPH DRO	800	141	113	16700	ug/L
MKTF-31	12/18/2020	C28-C40	ND	141	113	NA	ug/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-32	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	4/9/2014	TPH GRO	0.22	0.05	0.0092	10100	mg/L
MKTF-32	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-32	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/23/2014	TPH GRO	0.23	0.05	0.019	10100	mg/L
MKTF-32	11/17/2014	Bromide	1.3	0.1	0.026	NA	mg/L
MKTF-32	11/17/2014	Chloride	610	25	1.1	250000000	mg/L
MKTF-32	11/17/2014	Fluoride, Total	0.27	0.1	0.015	1600000	mg/L
MKTF-32	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-32	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-32	11/17/2014	Sulfate	100	10	1.6	600000000	mg/L
MKTF-32	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-32	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/17/2014	TPH GRO	0.28	0.25	0.096	10100	mg/L
MKTF-32	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	3/12/2015	TPH GRO	0.46	0.05	0.012	10100	mg/L
MKTF-32	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/9/2015	TPH GRO	0.58	0.05	0.012	10100	mg/L
MKTF-32	8/21/2015	Bromide	1.4	0.5	0.39	NA	mg/L
MKTF-32	8/21/2015	Chloride	580	25	17	250000000	mg/L
MKTF-32	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-32	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-32	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-32	8/21/2015	Sulfate	110	2.5	0.57	600000000	mg/L
MKTF-32	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	8/21/2015	TPH GRO	0.42	0.1	0.08	10100	mg/L
MKTF-32	11/5/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-32	11/5/2015	Chloride	510	25	17	250000000	mg/L
MKTF-32	11/5/2015	Fluoride, Total	0.19	0.1	0.032	1600000	mg/L
MKTF-32	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-32	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-32	11/5/2015	Sulfate	100	10	6.4	600000000	mg/L
MKTF-32	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/5/2015	TPH GRO	0.57	0.05	0.012	10100	mg/L
MKTF-32	2/24/2016	Bromide	1.6	0.1	0.032	NA	mg/L
MKTF-32	2/24/2016	Chloride	450	25	1.4	250000000	mg/L
MKTF-32	2/24/2016	Fluoride, Total	0.28	0.1	0.023	1600000	mg/L
MKTF-32	2/24/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-32	2/24/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-32	2/24/2016	Sulfate	91	25	3.2	600000000	mg/L
MKTF-32	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	2/24/2016	TPH GRO	0.88	0.05	0.025	10100	mg/L
MKTF-32	6/9/2016	Bromide	1.4	0.1	0.032	NA	mg/L
MKTF-32	6/9/2016	Chloride	520	25	1.4	250000000	mg/L
MKTF-32	6/9/2016	Fluoride, Total	0.28	0.1	0.023	1600000	mg/L
MKTF-32	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-32	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-32	6/9/2016	Sulfate	100	10	1.3	600000000	mg/L
MKTF-32	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/9/2016	TPH GRO	0.81	0.05	0.025	10100	mg/L
MKTF-32	9/9/2016	Bromide	1.2	0.1	0.044	NA	mg/L
MKTF-32	9/9/2016	Chloride	460	25	2.5	250000000	mg/L
MKTF-32	9/9/2016	Fluoride, Total	0.18	0.1	0.05	1600000	mg/L
MKTF-32	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-32	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-32	9/9/2016	Sulfate	91	10	2.8	600000000	mg/L
MKTF-32	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/9/2016	TPH GRO	0.79	0.1	0.03	10100	mg/L
MKTF-32	10/31/2016	Bromide	3.1	2	0.87	NA	mg/L
MKTF-32	10/31/2016	Chloride	420	25	2.5	250000000	mg/L
MKTF-32	10/31/2016	Fluoride, Total	0.16	0.1	0.05	1600000	mg/L
MKTF-32	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-32	10/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-32	10/31/2016	Sulfate	95	10	2.8	600000000	mg/L
MKTF-32	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	10/31/2016	TPH GRO	0.92	0.05	0.025	10100	mg/L
MKTF-32	3/7/2017	Bromide	1.1	0.1	0.031	NA	mg/L
MKTF-32	3/7/2017	Chloride	400	25	12	250000000	mg/L
MKTF-32	3/7/2017	Fluoride, Total	0.17	0.1	0.05	1600000	mg/L
MKTF-32	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	3/7/2017	Sulfate	91	10	1.9	600000000	mg/L
MKTF-32	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	3/7/2017	TPH GRO	0.92	0.05	0.025	10100	mg/L
MKTF-32	6/6/2017	Bromide	1.2	0.1	0.014	NA	mg/L
MKTF-32	6/6/2017	Chloride	480	25	12	250000000	mg/L
MKTF-32	6/6/2017	Fluoride, Total	0.31	0.1	0.044	1600000	mg/L
MKTF-32	6/6/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-32	6/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	6/6/2017	Sulfate	92	10	1.9	600000000	mg/L
MKTF-32	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/6/2017	TPH GRO	0.71	0.05	0.025	10100	mg/L
MKTF-32	9/25/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-32	9/25/2017	Chloride	420	25	12	250000000	mg/L
MKTF-32	9/25/2017	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
MKTF-32	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	9/25/2017	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-32	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/25/2017	TPH GRO	0.73	0.05	0.025	10100	mg/L
MKTF-32	11/27/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-32	11/27/2017	Chloride	420	25	12	250000000	mg/L
MKTF-32	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-32	11/27/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-32	11/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	11/27/2017	Sulfate	99	2.5	0.48	600000000	mg/L
MKTF-32	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/27/2017	TPH GRO	0.86	0.05	0.025	10100	mg/L
MKTF-32	2/7/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-32	2/7/2018	Chloride	420	25	12	250000000	mg/L
MKTF-32	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-32	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	2/7/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	2/7/2018	Sulfate	93	2.5	0.48	600000000	mg/L
MKTF-32	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	2/7/2018	TPH GRO	0.65	0.05	0.0097	10100	mg/L
MKTF-32	5/9/2018	Bromide	1	0.1	0.027	NA	mg/L
MKTF-32	5/9/2018	Chloride	430	25	1.5	250000000	mg/L
MKTF-32	5/9/2018	Fluoride, Total	0.049	0.1	0.03	1600000	mg/L
MKTF-32	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-32	5/9/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-32	5/9/2018	Sulfate	83	10	4.1	600000000	mg/L
MKTF-32	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	5/9/2018	TPH GRO	0.64	0.05	0.0097	10100	mg/L
MKTF-32	8/28/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-32	8/28/2018	Chloride	440	25	9.1	250000000	mg/L
MKTF-32	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-32	8/28/2018	Ortho-Phosphate	1.9	2.5	0.46	NA	mg/L
MKTF-32	8/28/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-32	8/28/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-32	8/28/2018	Sulfate	94	2.5	1	600000000	mg/L
MKTF-32	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	8/28/2018	TPH GRO	0.7	0.05	0.024	10100	mg/L
MKTF-32	11/15/2018	Bromide	1.2	0.5	0.1	NA	mg/L
MKTF-32	11/15/2018	Chloride	370	25	25	250000000	mg/L
MKTF-32	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-32	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-32	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-32	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-32	11/15/2018	Sulfate	89	2.5	0.63	600000000	mg/L
MKTF-32	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/15/2018	TPH GRO	0.56	0.05	0.024	10100	mg/L
MKTF-32	2/13/2019	TPH GRO	0.43	0.05	0.0211	10100	mg/L
MKTF-32	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	2/13/2019	Bromide	1.1	0.5	0.0675	NA	mg/L
MKTF-32	2/13/2019	Chloride	420	25	25	250000000	mg/L
MKTF-32	2/13/2019	Fluoride, Total	0.29	0.5	0.25	1600000	mg/L
MKTF-32	2/13/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-32	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-32	2/13/2019	Phosphorus, Ortho	0.99	2.5	0.1305	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/13/2019	Sulfate	89	2.5	0.32	600000000	mg/L
MKTF-32	5/7/2019	TPH GRO	0.47	0.1	0.0614	10100	mg/L
MKTF-32	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	5/7/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-32	5/7/2019	Chloride	450	25	3.125	250000000	mg/L
MKTF-32	5/7/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-32	5/7/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-32	5/7/2019	Nitrogen, Nitrite	0.3	0.5	0.02246	1000000	mg/L
MKTF-32	5/7/2019	Phosphorus, Ortho	0.72	2.5	0.2	NA	mg/L
MKTF-32	5/7/2019	Sulfate	93	2.5	0.2675	600000000	mg/L
MKTF-32	8/20/2019	TPH GRO	0.5	0.05	0.0307	10100	mg/L
MKTF-32	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	8/20/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-32	8/20/2019	Chloride	400	25	25	250000000	mg/L
MKTF-32	8/20/2019	Fluoride, Total	0.28	0.5	0.073	1600000	mg/L
MKTF-32	8/20/2019	Nitrogen, Nitrate	0.41	0.5	0.025	10000000	mg/L
MKTF-32	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-32	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-32	8/20/2019	Sulfate	92	2.5	0.3345	600000000	mg/L
MKTF-32	10/23/2019	Sulfate	90	2.5	0.3345	600000000	mg/L
MKTF-32	10/23/2019	TPH GRO	0.28	0.05	0.0211	10100	mg/L
MKTF-32	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-32	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-32	10/23/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-32	10/23/2019	Chloride	400	25	25	250000000	mg/L
MKTF-32	10/23/2019	Fluoride, Total	0.37	0.5	0.144909	1600000	mg/L
MKTF-32	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-32	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-32	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-32	2/27/2020	TPH GRO	0.6	0.1	0.014	10100	mg/L
MKTF-32	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-32	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-32	2/27/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-32	2/27/2020	Fluoride, Total	0.3	0.5	0.11	1600000	mg/L
MKTF-32	2/27/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-32	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-32	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	2/27/2020	Sulfate	91	2.5	1.2	600000000	mg/L
MKTF-32	2/27/2020	Chloride	400	25	12	250000000	mg/L
MKTF-32	9/21/2020	TPH GRO	0.028	0.1	0.016	10100	mg/L
MKTF-32	9/21/2020	TPH DRO	0.22	0.07	0.067	16700	mg/L
MKTF-32	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-32	9/21/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-32	9/21/2020	Fluoride, Total	0.36	0.5	0.22	1600000	mg/L
MKTF-32	9/21/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-32	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-32	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	9/21/2020	Sulfate	84	2.5	1.2	600000000	mg/L
MKTF-32	9/21/2020	Chloride	370	10	5	250000000	mg/L
MKTF-32	9/21/2020	Solids, Total Suspended	16	4	4	NA	mg/L
MKTF-32	12/15/2020	Bicarbonate	683	1	0.5	NA	mg/L
MKTF-32	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-32	12/15/2020	Phosphorus, Total	0.136	0.1	0.032	NA	mg/L
MKTF-32	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-32	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-32	12/15/2020	Chloride	324	20	2.4	250000000	mg/L
MKTF-32	12/15/2020	Sulfate	65.5	20	7.4	600000000	mg/L
MKTF-32	12/15/2020	TPH (C6-C10)	856	100	47	NA	ug/L
MKTF-32	12/15/2020	TPH DRO	631	140	112	16700	ug/L
MKTF-32	12/15/2020	C28-C40	ND	140	112	NA	ug/L
MKTF-32	9/21/2020	Solids, Total Suspended	16	4	4	NA	mg/L
MKTF-33	4/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-33	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	4/10/2014	TPH GRO	0.21	0.05	0.019	10100	mg/L
MKTF-33	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-33	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/23/2014	TPH GRO	0.25	0.05	0.019	10100	mg/L
MKTF-33	11/17/2014	Bromide	0.61	0.1	0.026	NA	mg/L
MKTF-33	11/17/2014	Chloride	98	10	0.43	250000000	mg/L
MKTF-33	11/17/2014	Fluoride, Total	0.31	0.1	0.015	1600000	mg/L
MKTF-33	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-33	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-33	11/17/2014	Sulfate	360	10	1.6	600000000	mg/L
MKTF-33	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-33	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/17/2014	TPH GRO	0.36	0.25	0.096	10100	mg/L
MKTF-33	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	3/12/2015	TPH GRO	0.35	0.05	0.012	10100	mg/L
MKTF-33	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/9/2015	TPH GRO	0.42	0.05	0.012	10100	mg/L
MKTF-33	8/21/2015	Bromide	0.61	0.5	0.39	NA	mg/L
MKTF-33	8/21/2015	Chloride	95	10	2.7	250000000	mg/L
MKTF-33	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-33	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-33	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-33	8/21/2015	Sulfate	260	10	2.3	600000000	mg/L
MKTF-33	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	8/21/2015	TPH GRO	0.47	0.05	0.04	10100	mg/L
MKTF-33	11/9/2015	Bromide	0.66	0.1	0.068	NA	mg/L
MKTF-33	11/9/2015	Chloride	99	10	6.8	250000000	mg/L
MKTF-33	11/9/2015	Fluoride, Total	0.34	0.1	0.032	1600000	mg/L
MKTF-33	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-33	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-33	11/9/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-33	11/9/2015	Sulfate	290	10	6.4	600000000	mg/L
MKTF-33	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/9/2015	TPH GRO	0.53	0.05	0.012	10100	mg/L
MKTF-33	2/25/2016	Bromide	0.81	0.1	0.032	NA	mg/L
MKTF-33	2/25/2016	Chloride	100	10	0.55	250000000	mg/L
MKTF-33	2/25/2016	Fluoride, Total	0.25	0.1	0.023	1600000	mg/L
MKTF-33	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-33	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-33	2/25/2016	Sulfate	310	10	1.3	600000000	mg/L
MKTF-33	2/25/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	2/25/2016	TPH GRO	0.35	0.05	0.025	10100	mg/L
MKTF-33	6/10/2016	Bromide	0.54	0.1	0.032	NA	mg/L
MKTF-33	6/10/2016	Chloride	100	10	0.55	250000000	mg/L
MKTF-33	6/10/2016	Fluoride, Total	0.3	0.1	0.023	1600000	mg/L
MKTF-33	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-33	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-33	6/10/2016	Sulfate	340	10	2.8	600000000	mg/L
MKTF-33	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/10/2016	TPH GRO	0.69	0.05	0.025	10100	mg/L
MKTF-33	9/10/2016	Bromide	0.49	0.1	0.044	NA	mg/L
MKTF-33	9/10/2016	Chloride	94	10	1	250000000	mg/L
MKTF-33	9/10/2016	Fluoride, Total	0.13	0.1	0.05	1600000	mg/L
MKTF-33	9/10/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-33	9/10/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-33	9/10/2016	Sulfate	340	10	2.8	600000000	mg/L
MKTF-33	9/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	9/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/10/2016	TPH GRO	5.2	1	0.3	10100	mg/L
MKTF-33	11/1/2016	Bromide	0.46	0.1	0.044	NA	mg/L
MKTF-33	11/1/2016	Chloride	87	10	1	250000000	mg/L
MKTF-33	11/1/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-33	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-33	11/1/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-33	11/1/2016	Sulfate	320	10	2.8	600000000	mg/L
MKTF-33	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/1/2016	TPH GRO	0.31	0.25	0.13	10100	mg/L
MKTF-33	3/8/2017	Bromide	0.47	0.1	0.031	NA	mg/L
MKTF-33	3/8/2017	Chloride	96	10	5	250000000	mg/L
MKTF-33	3/8/2017	Fluoride, Total	0.22	0.1	0.05	1600000	mg/L
MKTF-33	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-33	3/8/2017	Nitrate & Nitrite	0.19	1	0.13	NA	mg/L
MKTF-33	3/8/2017	Sulfate	330	10	1.9	600000000	mg/L
MKTF-33	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	3/8/2017	TPH GRO	0.3	0.05	0.025	10100	mg/L
MKTF-33	6/8/2017	Bromide	0.46	0.1	0.014	NA	mg/L
MKTF-33	6/8/2017	Chloride	92	10	5	250000000	mg/L
MKTF-33	6/8/2017	Fluoride, Total	0.17	0.1	0.044	1600000	mg/L
MKTF-33	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-33	6/8/2017	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
MKTF-33	6/8/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-33	6/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/8/2017	TPH GRO	0.25	0.05	0.025	10100	mg/L
MKTF-33	9/25/2017	Bromide	0.68	0.5	0.073	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Chloride	93	10	5	250000000	mg/L
MKTF-33	9/25/2017	Fluoride, Total	0.33	0.5	0.22	1600000	mg/L
MKTF-33	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	9/25/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-33	9/25/2017	Sulfate	270	10	1.9	600000000	mg/L
MKTF-33	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/25/2017	TPH GRO	0.26	0.05	0.025	10100	mg/L
MKTF-33	11/28/2017	Bromide	0.63	0.5	0.073	NA	mg/L
MKTF-33	11/28/2017	Chloride	96	10	5	250000000	mg/L
MKTF-33	11/28/2017	Fluoride, Total	0.23	0.5	0.22	1600000	mg/L
MKTF-33	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	11/28/2017	Nitrate & Nitrite	0.32	1	0.13	NA	mg/L
MKTF-33	11/28/2017	Sulfate	250	10	1.9	600000000	mg/L
MKTF-33	11/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/28/2017	TPH GRO	0.35	0.05	0.0097	10100	mg/L
MKTF-33	2/8/2018	Bromide	0.56	0.5	0.073	NA	mg/L
MKTF-33	2/8/2018	Chloride	100	10	5	250000000	mg/L
MKTF-33	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-33	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	2/8/2018	Nitrate & Nitrite	0.18	1	0.13	NA	mg/L
MKTF-33	2/8/2018	Sulfate	280	10	1.9	600000000	mg/L
MKTF-33	2/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-33	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	2/8/2018	TPH GRO	0.22	0.05	0.0097	10100	mg/L
MKTF-33	5/10/2018	Bromide	0.55	0.1	0.027	NA	mg/L
MKTF-33	5/10/2018	Chloride	100	10	0.59	250000000	mg/L
MKTF-33	5/10/2018	Fluoride, Total	0.15	0.1	0.03	1600000	mg/L
MKTF-33	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-33	5/10/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-33	5/10/2018	Nitrogen, Nitrate	0.15	0.1	0.0066	10000000	mg/L
MKTF-33	5/10/2018	Sulfate	210	10	4.1	600000000	mg/L
MKTF-33	5/10/2018	TPH DRO	1.5	1	0.63	16700	mg/L
MKTF-33	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	5/10/2018	TPH GRO	0.5	0.05	0.0097	10100	mg/L
MKTF-33	8/30/2018	Bromide	0.6	0.5	0.13	NA	mg/L
MKTF-33	8/30/2018	Chloride	93	10	0.59	250000000	mg/L
MKTF-33	8/30/2018	Fluoride, Total	0.22	0.5	0.15	1600000	mg/L
MKTF-33	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-33	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-33	8/30/2018	Nitrogen, Nitrate	0.23	0.5	0.033	10000000	mg/L
MKTF-33	8/30/2018	Sulfate	230	2.5	1	600000000	mg/L
MKTF-33	8/30/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-33	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	8/30/2018	TPH GRO	0.49	0.1	0.019	10100	mg/L
MKTF-33	11/28/2018	Bromide	0.64	0.5	0.1	NA	mg/L
MKTF-33	11/28/2018	Chloride	97	10	10	250000000	mg/L
MKTF-33	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-33	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-33	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-33	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-33	11/28/2018	Sulfate	220	10	2.5	600000000	mg/L
MKTF-33	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-33	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/28/2018	TPH GRO	0.24	0.05	0.024	10100	mg/L
MKTF-33	5/9/2019	TPH GRO	0.21	0.05	0.0307	10100	mg/L
MKTF-33	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-33	5/9/2019	Bromide	0.68	0.5	0.088765	NA	mg/L
MKTF-33	5/9/2019	Chloride	110	10	1.25	250000000	mg/L
MKTF-33	5/9/2019	Fluoride, Total	0.33	0.5	0.25	1600000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrate	0.16	0.5	0.027	10000000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-33	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-33	5/9/2019	Sulfate	240	2.5	0.2675	600000000	mg/L
MKTF-33	5/9/2019	TPH GRO	0.31	0.05	0.0307	10100	mg/L
MKTF-33	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-33	5/9/2019	Bromide	0.7	0.5	0.088765	NA	mg/L
MKTF-33	5/9/2019	Chloride	110	10	1.25	250000000	mg/L
MKTF-33	5/9/2019	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrate	0.15	0.5	0.027	10000000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-33	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-33	5/9/2019	Sulfate	220	2.5	0.2675	600000000	mg/L
MKTF-33	8/20/2019	TPH GRO	0.53	0.05	0.0307	10100	mg/L
MKTF-33	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	8/20/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
MKTF-33	8/20/2019	Chloride	110	10	10	250000000	mg/L
MKTF-33	8/20/2019	Fluoride, Total	0.29	0.5	0.073	1600000	mg/L
MKTF-33	8/20/2019	Nitrogen, Nitrate	0.14	0.5	0.025	10000000	mg/L
MKTF-33	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-33	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-33	8/20/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MKTF-33	10/24/2019	TPH GRO	0.49	0.1	0.0386	10100	mg/L
MKTF-33	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-33	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-33	10/24/2019	Bromide	0.83	0.5	0.077	NA	mg/L
MKTF-33	10/24/2019	Chloride	110	10	10	250000000	mg/L
MKTF-33	10/24/2019	Fluoride, Total	0.38	0.5	0.144909	1600000	mg/L
MKTF-33	10/24/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-33	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-33	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-33	10/24/2019	Sulfate	190	2.5	0.3345	600000000	mg/L
MKTF-33	2/28/2020	TPH GRO	0.73	0.1	0.014	10100	mg/L
MKTF-33	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-33	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-33	2/28/2020	Bromide	0.83	0.5	0.25	NA	mg/L
MKTF-33	2/28/2020	Fluoride, Total	0.27	0.5	0.11	1600000	mg/L
MKTF-33	2/28/2020	Nitrogen, Nitrate	0.31	0.5	0.11	10000000	mg/L
MKTF-33	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-33	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	2/28/2020	Sulfate	170	2.5	1.2	600000000	mg/L
MKTF-33	2/28/2020	Chloride	130	10	5	250000000	mg/L
MKTF-34	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-34	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-34	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-34	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-34	11/17/2014	Bromide	2.2	0.1	0.026	NA	mg/L
MKTF-34	11/17/2014	Chloride	400	25	1.1	250000000	mg/L
MKTF-34	11/17/2014	Fluoride, Total	0.54	0.1	0.015	1600000	mg/L
MKTF-34	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-34	11/17/2014	Nitrate & Nitrite	6.6	1	0.083	NA	mg/L
MKTF-34	11/17/2014	Sulfate	73	10	1.6	600000000	mg/L
MKTF-34	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-34	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-34	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	6/8/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/8/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	8/18/2015	Bromide	2.3	0.1	0.077	NA	mg/L
MKTF-34	8/18/2015	Chloride	350	25	6.7	250000000	mg/L
MKTF-34	8/18/2015	Fluoride, Total	0.44	0.1	0.029	1600000	mg/L
MKTF-34	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-34	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-34	8/18/2015	Nitrogen, Nitrate	8.6	2	0.64	10000000	mg/L
MKTF-34	8/18/2015	Sulfate	100	10	2.3	600000000	mg/L
MKTF-34	8/18/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	8/18/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	11/3/2015	Bromide	1.9	0.1	0.068	NA	mg/L
MKTF-34	11/3/2015	Chloride	370	10	6.8	250000000	mg/L
MKTF-34	11/3/2015	Fluoride, Total	0.46	0.1	0.032	1600000	mg/L
MKTF-34	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-34	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-34	11/3/2015	Nitrogen, Nitrate	8.6	2	1.2	10000000	mg/L
MKTF-34	11/3/2015	Sulfate	100	10	6.4	600000000	mg/L
MKTF-34	11/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/3/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	2/25/2016	Bromide	2	0.1	0.032	NA	mg/L
MKTF-34	2/25/2016	Chloride	380	10	0.55	250000000	mg/L
MKTF-34	2/25/2016	Fluoride, Total	0.53	0.1	0.023	1600000	mg/L
MKTF-34	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-34	2/25/2016	Nitrate & Nitrite	18	1	0.42	NA	mg/L
MKTF-34	2/25/2016	Sulfate	110	10	1.3	600000000	mg/L
MKTF-34	2/25/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	2/25/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	6/10/2016	Bromide	2	0.1	0.032	NA	mg/L
MKTF-34	6/10/2016	Chloride	370	10	0.55	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	Fluoride, Total	0.52	0.1	0.023	1600000	mg/L
MKTF-34	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-34	6/10/2016	Nitrate & Nitrite	7.7	1	0.46	NA	mg/L
MKTF-34	6/10/2016	Sulfate	130	10	1.3	600000000	mg/L
MKTF-34	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/10/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	9/13/2016	Bromide	1.6	0.1	0.044	NA	mg/L
MKTF-34	9/13/2016	Chloride	300	10	1	250000000	mg/L
MKTF-34	9/13/2016	Fluoride, Total	0.42	0.1	0.05	1600000	mg/L
MKTF-34	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-34	9/13/2016	Nitrate & Nitrite	9.1	1	0.46	NA	mg/L
MKTF-34	9/13/2016	Sulfate	200	10	2.8	600000000	mg/L
MKTF-34	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/13/2016	TPH GRO	0.033	0.05	0.015	10100	mg/L
MKTF-34	11/8/2016	Bromide	1.5	0.1	0.044	NA	mg/L
MKTF-34	11/8/2016	Chloride	240	10	1	250000000	mg/L
MKTF-34	11/8/2016	Fluoride, Total	0.46	0.1	0.05	1600000	mg/L
MKTF-34	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-34	11/8/2016	Nitrate & Nitrite	8.3	1	0.46	NA	mg/L
MKTF-34	11/8/2016	Sulfate	180	10	2.8	600000000	mg/L
MKTF-34	11/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/8/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	3/1/2017	Bromide	2.3	0.1	0.031	NA	mg/L
MKTF-34	3/1/2017	Chloride	310	10	5	250000000	mg/L
MKTF-34	3/1/2017	Fluoride, Total	0.45	0.1	0.05	1600000	mg/L
MKTF-34	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-34	3/1/2017	Nitrate & Nitrite	9	1	0.13	NA	mg/L
MKTF-34	3/1/2017	Sulfate	220	10	1.9	600000000	mg/L
MKTF-34	3/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	3/1/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	6/14/2017	Bromide	1.8	0.5	0.073	NA	mg/L
MKTF-34	6/14/2017	Chloride	280	10	5	250000000	mg/L
MKTF-34	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-34	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	6/14/2017	Nitrate & Nitrite	8.4	1	0.13	NA	mg/L
MKTF-34	6/14/2017	Sulfate	210	10	1.9	600000000	mg/L
MKTF-34	6/14/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/14/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	9/26/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-34	9/26/2017	Chloride	280	10	5	250000000	mg/L
MKTF-34	9/26/2017	Fluoride, Total	0.29	0.5	0.22	1600000	mg/L
MKTF-34	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	9/26/2017	Nitrate & Nitrite	7.6	1	0.13	NA	mg/L
MKTF-34	9/26/2017	Sulfate	220	10	1.9	600000000	mg/L
MKTF-34	9/26/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/26/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	12/1/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-34	12/1/2017	Chloride	270	10	5	250000000	mg/L
MKTF-34	12/1/2017	Fluoride, Total	0.54	0.5	0.22	1600000	mg/L
MKTF-34	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	12/1/2017	Nitrate & Nitrite	8	1	0.13	NA	mg/L
MKTF-34	12/1/2017	Sulfate	230	10	1.9	600000000	mg/L
MKTF-34	12/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	12/1/2017	TPH GRO	0.027	0.05	0.0097	10100	mg/L
MKTF-34	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-34	2/16/2018	Chloride	230	10	5	250000000	mg/L
MKTF-34	2/16/2018	Fluoride, Total	0.45	0.5	0.22	1600000	mg/L
MKTF-34	2/16/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-34	2/16/2018	Nitrogen, Nitrate	8.4	0.5	0.11	10000000	mg/L
MKTF-34	2/16/2018	Sulfate	230	10	1.9	600000000	mg/L
MKTF-34	2/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	2/16/2018	TPH GRO	0.012	0.05	0.0097	10100	mg/L
MKTF-34	5/4/2018	Bromide	1.2	0.1	0.027	NA	mg/L
MKTF-34	5/4/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-34	5/4/2018	Fluoride, Total	0.31	0.1	0.03	1600000	mg/L
MKTF-34	5/4/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-34	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-34	5/4/2018	Nitrogen, Nitrate	8.1	2	0.13	10000000	mg/L
MKTF-34	5/4/2018	Sulfate	250	10	4.1	600000000	mg/L
MKTF-34	5/4/2018	TPH DRO	ND	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	5/4/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-34	8/24/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-34	8/24/2018	Chloride	220	10	0.59	250000000	mg/L
MKTF-34	8/24/2018	Fluoride, Total	0.32	0.5	0.15	1600000	mg/L
MKTF-34	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-34	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-34	8/24/2018	Nitrogen, Nitrate	8.1	0.5	0.033	10000000	mg/L
MKTF-34	8/24/2018	Sulfate	230	10	4.1	600000000	mg/L
MKTF-34	8/24/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	8/24/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-34	11/28/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-34	11/28/2018	Chloride	210	10	10	250000000	mg/L
MKTF-34	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-34	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-34	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-34	11/28/2018	Nitrogen, Nitrate	8.4	0.5	0.25	10000000	mg/L
MKTF-34	11/28/2018	Sulfate	280	10	2.5	600000000	mg/L
MKTF-34	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/28/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-34	5/9/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-34	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-34	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-34	5/9/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MKTF-34	5/9/2019	Chloride	890	50	6.25	250000000	mg/L
MKTF-34	5/9/2019	Fluoride, Total	0.35	0.5	0.25	1600000	mg/L
MKTF-34	5/9/2019	Nitrogen, Nitrate	9.7	0.5	0.027	10000000	mg/L
MKTF-34	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-34	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-34	5/9/2019	Sulfate	60	2.5	0.2675	600000000	mg/L
MKTF-34	8/19/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-34	8/19/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-34	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-34	8/19/2019	Bromide	0.56	0.5	0.088765	NA	mg/L
MKTF-34	8/19/2019	Chloride	740	25	25	250000000	mg/L
MKTF-34	8/19/2019	Fluoride, Total	0.25	0.5	0.073	1600000	mg/L
MKTF-34	8/19/2019	Nitrogen, Nitrate	9.7	0.5	0.025	10000000	mg/L
MKTF-34	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-34	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-34	8/19/2019	Sulfate	110	2.5	0.3345	600000000	mg/L
MKTF-34	10/29/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-34	10/29/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-34	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-34	10/29/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-34	10/29/2019	Chloride	450	25	25	250000000	mg/L
MKTF-34	10/29/2019	Fluoride, Total	0.5	0.5	0.144909	1600000	mg/L
MKTF-34	10/29/2019	Nitrogen, Nitrate	14	0.5	0.030387	10000000	mg/L
MKTF-34	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-34	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-34	10/29/2019	Sulfate	200	2.5	0.3345	600000000	mg/L
MKTF-34	2/5/2020	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-34	2/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/5/2020	Bromide	ND	0.5	0.25	NA	mg/L
MKTF-34	2/5/2020	Fluoride, Total	0.56	0.5	0.11	1600000	mg/L
MKTF-34	2/5/2020	Nitrogen, Nitrate	16	0.5	0.11	10000000	mg/L
MKTF-34	2/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-34	2/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/5/2020	Sulfate	82	2.5	1.2	600000000	mg/L
MKTF-34	2/5/2020	Chloride	560	25	12	250000000	mg/L
MKTF-34	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-34	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/28/2020	Bromide	0.29	0.5	0.25	NA	mg/L
MKTF-34	2/28/2020	Fluoride, Total	0.62	0.5	0.11	1600000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-34	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/28/2020	Sulfate	52	2.5	1.2	600000000	mg/L
MKTF-34	2/28/2020	Chloride	860	25	12	250000000	mg/L
MKTF-34	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-34	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/28/2020	Bromide	0.31	0.5	0.25	NA	mg/L
MKTF-34	2/28/2020	Fluoride, Total	0.58	0.5	0.11	1600000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/28/2020	Sulfate	57	2.5	1.2	600000000	mg/L
MKTF-34	2/28/2020	Chloride	840	25	12	250000000	mg/L
MKTF-34	9/16/2020	TPH GRO	0.04	0.05	0.008	10100	mg/L
MKTF-34	9/16/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-34	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-34	9/16/2020	Bromide	0.92	0.5	0.25	NA	mg/L
MKTF-34	9/16/2020	Fluoride, Total	0.56	0.5	0.22	1600000	mg/L
MKTF-34	9/16/2020	Nitrogen, Nitrate	8.4	0.5	0.1	10000000	mg/L
MKTF-34	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-34	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	9/16/2020	Sulfate	120	2.5	1.2	600000000	mg/L
MKTF-34	9/16/2020	Chloride	490	25	12	250000000	mg/L
MKTF-35	11/21/2014	TPH DRO	3.3	1	0.83	16700	mg/L
MKTF-35	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/21/2014	TPH GRO	1.6	0.25	0.096	10100	mg/L
MKTF-35	3/17/2015	TPH DRO	6	1	0.91	16700	mg/L
MKTF-35	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	3/17/2015	TPH GRO	3.7	0.25	0.06	10100	mg/L
MKTF-35	6/4/2015	TPH DRO	2.3	1	0.91	16700	mg/L
MKTF-35	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/4/2015	TPH GRO	2.9	0.05	0.012	10100	mg/L
MKTF-35	8/18/2015	Bromide	0.33	0.1	0.077	NA	mg/L
MKTF-35	8/18/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-35	8/18/2015	Fluoride, Total	0.73	0.1	0.029	1600000	mg/L
MKTF-35	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-35	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-35	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-35	8/18/2015	Sulfate	20	0.5	0.11	600000000	mg/L
MKTF-35	8/18/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-35	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	8/18/2015	TPH GRO	4.7	0.25	0.06	10100	mg/L
MKTF-35	11/3/2015	Bromide	0.49	0.1	0.068	NA	mg/L
MKTF-35	11/3/2015	Chloride	100	10	6.8	250000000	mg/L
MKTF-35	11/3/2015	Fluoride, Total	0.79	0.1	0.032	1600000	mg/L
MKTF-35	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-35	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-35	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-35	11/3/2015	Sulfate	16	0.5	0.32	600000000	mg/L
MKTF-35	11/3/2015	TPH DRO	2.8	1	0.91	16700	mg/L
MKTF-35	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/3/2015	TPH GRO	1.5	0.5	0.12	10100	mg/L
MKTF-35	2/26/2016	Bromide	0.38	0.1	0.032	NA	mg/L
MKTF-35	2/26/2016	Chloride	65	10	0.55	250000000	mg/L
MKTF-35	2/26/2016	Fluoride, Total	0.45	0.1	0.023	1600000	mg/L
MKTF-35	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-35	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-35	2/26/2016	Sulfate	99	10	1.3	600000000	mg/L
MKTF-35	2/26/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	2/26/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	2/26/2016	TPH GRO	0.87	0.25	0.13	10100	mg/L
MKTF-35	6/10/2016	Bromide	0.22	0.1	0.032	NA	mg/L
MKTF-35	6/10/2016	Chloride	51	10	0.55	250000000	mg/L
MKTF-35	6/10/2016	Fluoride, Total	0.79	0.1	0.023	1600000	mg/L
MKTF-35	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-35	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-35	6/10/2016	Sulfate	210	10	1.3	600000000	mg/L
MKTF-35	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/10/2016	TPH GRO	1.4	0.05	0.025	10100	mg/L
MKTF-35	9/13/2016	Bromide	0.29	0.1	0.044	NA	mg/L
MKTF-35	9/13/2016	Chloride	62	10	1	250000000	mg/L
MKTF-35	9/13/2016	Fluoride, Total	0.77	0.1	0.05	1600000	mg/L
MKTF-35	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-35	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-35	9/13/2016	Sulfate	270	10	2.8	600000000	mg/L
MKTF-35	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	9/13/2016	TPH GRO	2	0.05	0.015	10100	mg/L
MKTF-35	11/3/2016	Bromide	0.28	0.1	0.044	NA	mg/L
MKTF-35	11/3/2016	Chloride	54	10	1	250000000	mg/L
MKTF-35	11/3/2016	Fluoride, Total	0.82	0.1	0.05	1600000	mg/L
MKTF-35	11/3/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-35	11/3/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-35	11/3/2016	Sulfate	310	10	2.8	600000000	mg/L
MKTF-35	11/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/3/2016	TPH GRO	1.7	0.5	0.25	10100	mg/L
MKTF-35	3/1/2017	Bromide	0.97	0.1	0.031	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	Chloride	71	10	5	250000000	mg/L
MKTF-35	3/1/2017	Fluoride, Total	0.94	0.1	0.05	1600000	mg/L
MKTF-35	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-35	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	3/1/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-35	3/1/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-35	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	3/1/2017	TPH GRO	0.73	0.05	0.025	10100	mg/L
MKTF-35	6/14/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-35	6/14/2017	Chloride	150	10	5	250000000	mg/L
MKTF-35	6/14/2017	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
MKTF-35	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	6/14/2017	Sulfate	99	2.5	0.48	600000000	mg/L
MKTF-35	6/14/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-35	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/14/2017	TPH GRO	0.6	0.05	0.025	10100	mg/L
MKTF-35	9/27/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-35	9/27/2017	Chloride	190	10	5	250000000	mg/L
MKTF-35	9/27/2017	Fluoride, Total	0.8	0.5	0.22	1600000	mg/L
MKTF-35	9/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	9/27/2017	Sulfate	38	2.5	0.48	600000000	mg/L
MKTF-35	9/27/2017	TPH DRO	1.7	1	0.36	16700	mg/L
MKTF-35	9/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	9/27/2017	TPH GRO	0.57	0.05	0.025	10100	mg/L
MKTF-35	11/30/2017	Bromide	2.6	0.5	0.073	NA	mg/L
MKTF-35	11/30/2017	Chloride	190	10	5	250000000	mg/L
MKTF-35	11/30/2017	Fluoride, Total	0.9	0.5	0.22	1600000	mg/L
MKTF-35	11/30/2017	Ortho-Phosphate	1.4	2.5	1.2	NA	mg/L
MKTF-35	11/30/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	11/30/2017	Sulfate	34	2.5	0.48	600000000	mg/L
MKTF-35	11/30/2017	TPH DRO	0.92	1	0.36	16700	mg/L
MKTF-35	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/30/2017	TPH GRO	0.47	0.05	0.0097	10100	mg/L
MKTF-35	2/15/2018	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-35	2/15/2018	Chloride	180	10	5	250000000	mg/L
MKTF-35	2/15/2018	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
MKTF-35	2/15/2018	Ortho-Phosphate	1.8	2.5	1.2	NA	mg/L
MKTF-35	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-35	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/15/2018	Sulfate	37	2.5	0.48	600000000	mg/L
MKTF-35	2/15/2018	TPH DRO	0.94	1	0.63	16700	mg/L
MKTF-35	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	2/15/2018	TPH GRO	0.37	0.05	0.0097	10100	mg/L
MKTF-35	5/3/2018	Bromide	1.3	0.1	0.027	NA	mg/L
MKTF-35	5/3/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-35	5/3/2018	Fluoride, Total	0.58	0.1	0.03	1600000	mg/L
MKTF-35	5/3/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-35	5/3/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-35	5/3/2018	Nitrogen, Nitrate	0.032	0.1	0.0066	10000000	mg/L
MKTF-35	5/3/2018	Sulfate	48	0.5	0.21	600000000	mg/L
MKTF-35	5/3/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-35	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	5/3/2018	TPH GRO	0.44	0.05	0.0097	10100	mg/L
MKTF-35	8/23/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-35	8/23/2018	Chloride	170	10	0.59	250000000	mg/L
MKTF-35	8/23/2018	Fluoride, Total	0.67	0.5	0.15	1600000	mg/L
MKTF-35	8/23/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-35	8/23/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-35	8/23/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-35	8/23/2018	Sulfate	38	2.5	1	600000000	mg/L
MKTF-35	8/23/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-35	8/23/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	8/23/2018	TPH GRO	0.49	0.05	0.024	10100	mg/L
MKTF-35	11/28/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-35	11/28/2018	Chloride	170	10	10	250000000	mg/L
MKTF-35	11/28/2018	Fluoride, Total	0.85	0.5	0.5	1600000	mg/L
MKTF-35	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-35	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-35	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-35	11/28/2018	Sulfate	39	2.5	0.63	600000000	mg/L
MKTF-35	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-35	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/28/2018	TPH GRO	0.72	0.05	0.024	10100	mg/L
MKTF-35	5/16/2019	TPH GRO	0.59	0.05	0.0307	10100	mg/L
MKTF-35	5/16/2019	TPH DRO	0.83	1	0.35	16700	mg/L
MKTF-35	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	5/16/2019	Bromide	0.94	0.5	0.088765	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-35	5/16/2019	Fluoride, Total	0.63	0.5	0.25	1600000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-35	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-35	5/16/2019	Sulfate	84	2.5	0.2675	600000000	mg/L
MKTF-35	5/16/2019	TPH GRO	0.57	0.05	0.0307	10100	mg/L
MKTF-35	5/16/2019	TPH DRO	1.6	1	0.35	16700	mg/L
MKTF-35	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	5/16/2019	Bromide	0.95	0.5	0.088765	NA	mg/L
MKTF-35	5/16/2019	Chloride	250	10	1.25	250000000	mg/L
MKTF-35	5/16/2019	Fluoride, Total	0.64	0.5	0.25	1600000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-35	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-35	5/16/2019	Sulfate	80	2.5	0.2675	600000000	mg/L
MKTF-35	8/19/2019	TPH GRO	0.56	0.05	0.0307	10100	mg/L
MKTF-35	8/19/2019	TPH DRO	0.72	1	0.35	16700	mg/L
MKTF-35	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	8/19/2019	Bromide	0.69	0.5	0.088765	NA	mg/L
MKTF-35	8/19/2019	Chloride	190	10	10	250000000	mg/L
MKTF-35	8/19/2019	Fluoride, Total	0.77	0.5	0.073	1600000	mg/L
MKTF-35	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-35	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	8/19/2019	Sulfate	79	2.5	0.3345	600000000	mg/L
MKTF-35	10/29/2019	TPH GRO	0.73	0.05	0.0193	10100	mg/L
MKTF-35	10/29/2019	TPH DRO	0.48	0.4	0.132	16700	mg/L
MKTF-35	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-35	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-35	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-35	10/29/2019	Fluoride, Total	0.87	0.5	0.144909	1600000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	10/29/2019	Sulfate	36	2.5	0.3345	600000000	mg/L
MKTF-35	10/29/2019	TPH GRO	0.67	0.05	0.0193	10100	mg/L
MKTF-35	10/29/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-35	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-35	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-35	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-35	10/29/2019	Fluoride, Total	0.86	0.5	0.144909	1600000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	10/29/2019	Sulfate	36	2.5	0.3345	600000000	mg/L
MKTF-35	2/6/2020	TPH GRO	33	5	2.1	10100	mg/L
MKTF-35	2/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-35	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-35	2/6/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-35	2/6/2020	Fluoride, Total	0.75	0.5	0.11	1600000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-35	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	2/6/2020	Chloride	240	10	5	250000000	mg/L
MKTF-35	2/6/2020	TPH GRO	33	5	2.1	10100	mg/L
MKTF-35	2/6/2020	TPH DRO	0.42	0.4	0.2	16700	mg/L
MKTF-35	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-35	2/6/2020	Bromide	0.69	0.5	0.25	NA	mg/L
MKTF-35	2/6/2020	Fluoride, Total	0.78	0.5	0.11	1600000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-35	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	2/6/2020	Chloride	210	10	5	250000000	mg/L
MKTF-35	9/16/2020	TPH GRO	13	0.5	0.08	10100	mg/L
MKTF-35	9/16/2020	TPH DRO	1.1	0.07	0.067	16700	mg/L
MKTF-35	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-35	9/16/2020	Bromide	0.75	0.5	0.25	NA	mg/L
MKTF-35	9/16/2020	Fluoride, Total	0.99	0.5	0.22	1600000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-35	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	9/16/2020	Chloride	360	10	5	250000000	mg/L
MKTF-35	9/16/2020	TPH GRO	14	0.5	0.08	10100	mg/L
MKTF-35	9/16/2020	TPH DRO	1.1	0.07	0.067	16700	mg/L
MKTF-35	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Bromide	0.77	0.5	0.25	NA	mg/L
MKTF-35	9/16/2020	Fluoride, Total	0.95	0.5	0.22	1600000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-35	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	9/16/2020	Chloride	360	10	5	250000000	mg/L
MKTF-36	11/21/2014	TPH DRO	6.8	1	0.83	16700	mg/L
MKTF-36	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/21/2014	TPH GRO	25	5	1.9	10100	mg/L
MKTF-36	3/17/2015	TPH DRO	10	1	0.91	16700	mg/L
MKTF-36	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	3/17/2015	TPH GRO	38	5	1.2	10100	mg/L
MKTF-36	6/4/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-36	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	6/4/2015	TPH GRO	30	5	1.2	10100	mg/L
MKTF-36	8/18/2015	Bromide	0.77	0.5	0.39	NA	mg/L
MKTF-36	8/18/2015	Chloride	140	10	2.7	250000000	mg/L
MKTF-36	8/18/2015	Fluoride, Total	0.6	0.5	0.15	1600000	mg/L
MKTF-36	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-36	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-36	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-36	8/18/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-36	8/18/2015	TPH DRO	14	1	0.91	16700	mg/L
MKTF-36	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	8/18/2015	TPH GRO	39	5	1.2	10100	mg/L
MKTF-36	11/8/2016	Bromide	0.66	0.5	0.22	NA	mg/L
MKTF-36	11/8/2016	Chloride	130	10	1	250000000	mg/L
MKTF-36	11/8/2016	Fluoride, Total	0.67	0.5	0.25	1600000	mg/L
MKTF-36	11/8/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-36	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-36	11/8/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-36	11/8/2016	TPH DRO	11	1	0.69	16700	mg/L
MKTF-36	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/8/2016	TPH GRO	40	2.5	1.3	10100	mg/L
MKTF-36	3/1/2017	Bromide	1.2	0.5	0.15	NA	mg/L
MKTF-36	3/1/2017	Chloride	140	10	5	250000000	mg/L
MKTF-36	3/1/2017	Fluoride, Total	0.6	0.5	0.25	1600000	mg/L
MKTF-36	3/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	3/1/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	3/1/2017	TPH DRO	13	1	0.36	16700	mg/L
MKTF-36	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	3/1/2017	TPH GRO	35	2.5	1.2	10100	mg/L
MKTF-36	6/14/2017	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-36	6/14/2017	Chloride	140	10	5	250000000	mg/L
MKTF-36	6/14/2017	Fluoride, Total	0.56	0.5	0.22	1600000	mg/L
MKTF-36	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	6/14/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	6/14/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-36	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	6/14/2017	TPH GRO	34	2.5	1.2	10100	mg/L
MKTF-36	9/27/2017	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-36	9/27/2017	Chloride	160	10	5	250000000	mg/L
MKTF-36	9/27/2017	Fluoride, Total	0.66	0.5	0.22	1600000	mg/L
MKTF-36	9/27/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-36	9/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	9/27/2017	Sulfate	0.7	2.5	0.48	600000000	mg/L
MKTF-36	9/27/2017	TPH DRO	24	10	3.6	16700	mg/L
MKTF-36	9/27/2017	TPH ORO	ND	50	50	85800	mg/L
MKTF-36	9/27/2017	TPH GRO	31	2.5	1.2	10100	mg/L
MKTF-36	11/30/2017	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-36	11/30/2017	Chloride	170	10	5	250000000	mg/L
MKTF-36	11/30/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-36	11/30/2017	Ortho-Phosphate	1.6	2.5	1.2	NA	mg/L
MKTF-36	11/30/2017	Nitrate & Nitrite	0.29	1	0.13	NA	mg/L
MKTF-36	11/30/2017	Sulfate	0.51	2.5	0.48	600000000	mg/L
MKTF-36	11/30/2017	TPH DRO	12	1	0.36	16700	mg/L
MKTF-36	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/30/2017	TPH GRO	31	2.5	0.48	10100	mg/L
MKTF-36	2/15/2018	Bromide	0.99	0.5	0.073	NA	mg/L
MKTF-36	2/15/2018	Chloride	180	10	5	250000000	mg/L
MKTF-36	2/15/2018	Fluoride, Total	0.62	0.5	0.22	1600000	mg/L
MKTF-36	2/15/2018	Ortho-Phosphate	2.7	2.5	1.2	NA	mg/L
MKTF-36	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-36	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-36	2/15/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	2/15/2018	TPH DRO	10	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	2/15/2018	TPH GRO	27	5	0.97	10100	mg/L
MKTF-36	5/3/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-36	5/3/2018	Chloride	180	10	0.59	250000000	mg/L
MKTF-36	5/3/2018	Fluoride, Total	0.78	0.5	0.15	1600000	mg/L
MKTF-36	5/3/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-36	5/3/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-36	5/3/2018	Nitrogen, Nitrate	0.085	0.5	0.033	10000000	mg/L
MKTF-36	5/3/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-36	5/3/2018	TPH DRO	10	1	0.63	16700	mg/L
MKTF-36	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	5/3/2018	TPH GRO	26	2.5	0.48	10100	mg/L
MKTF-36	9/5/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-36	9/5/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-36	9/5/2018	Fluoride, Total	0.82	0.5	0.15	1600000	mg/L
MKTF-36	9/5/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-36	9/5/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-36	9/5/2018	Nitrogen, Nitrate	0.07	0.5	0.033	10000000	mg/L
MKTF-36	9/5/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-36	9/5/2018	TPH DRO	5.6	1	0.63	16700	mg/L
MKTF-36	9/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	9/5/2018	TPH GRO	25	2.5	1.2	10100	mg/L
MKTF-36	9/18/2020	TPH GRO	100	1	0.16	10100	mg/L
MKTF-36	9/18/2020	TPH DRO	15	0.7	0.67	16700	mg/L
MKTF-36	9/18/2020	TPH ORO	ND	6	6	85800	mg/L
MKTF-36	9/18/2020	Solids, Total Suspended	74	4	4	NA	mg/L
MKTF-36	9/18/2020	Bromide	0.73	0.5	0.25	NA	mg/L
MKTF-36	9/18/2020	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-36	9/18/2020	Nitrogen, Nitrate	0.11	0.5	0.1	10000000	mg/L
MKTF-36	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-36	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	9/18/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-36	9/18/2020	Chloride	240	10	5	250000000	mg/L
MKTF-36	9/18/2020	Solids, Total Suspended	74	4	4	NA	mg/L
MKTF-37	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-37	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	11/21/2014	TPH GRO	8.7	0.5	0.19	10100	mg/L
MKTF-37	3/17/2015	TPH DRO	4.5	1	0.91	16700	mg/L
MKTF-37	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	3/17/2015	TPH GRO	11	0.25	0.06	10100	mg/L
MKTF-37	6/4/2015	TPH DRO	5.7	1	0.91	16700	mg/L
MKTF-37	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	6/4/2015	TPH GRO	12	0.5	0.12	10100	mg/L
MKTF-37	8/18/2015	Bromide	0.8	0.5	0.39	NA	mg/L
MKTF-37	8/18/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-37	8/18/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-37	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-37	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-37	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-37	8/18/2015	Sulfate	49	2.5	0.57	600000000	mg/L
MKTF-37	8/18/2015	TPH DRO	39	1	0.91	16700	mg/L
MKTF-37	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	8/18/2015	TPH GRO	11	1	0.24	10100	mg/L
MKTF-37	11/3/2016	Bromide	0.6	0.1	0.044	NA	mg/L
MKTF-37	11/3/2016	Chloride	120	10	1	250000000	mg/L
MKTF-37	11/3/2016	Fluoride, Total	0.46	0.1	0.05	1600000	mg/L
MKTF-37	11/3/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-37	11/3/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-37	11/3/2016	Sulfate	56	10	2.8	600000000	mg/L
MKTF-37	11/3/2016	TPH DRO	9.3	1	0.69	16700	mg/L
MKTF-37	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	11/3/2016	TPH GRO	13	1	0.51	10100	mg/L
MKTF-37	3/1/2017	Bromide	1	0.1	0.031	NA	mg/L
MKTF-37	3/1/2017	Chloride	180	10	5	250000000	mg/L
MKTF-37	3/1/2017	Fluoride, Total	0.16	0.1	0.05	1600000	mg/L
MKTF-37	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-37	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-37	3/1/2017	Sulfate	12	0.5	0.096	600000000	mg/L
MKTF-37	3/1/2017	TPH DRO	6.2	1	0.36	16700	mg/L
MKTF-37	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	3/1/2017	TPH GRO	15	1	0.5	10100	mg/L
MKTF-37	5/3/2018	Bromide	0.63	0.5	0.13	NA	mg/L
MKTF-37	5/3/2018	Chloride	240	10	0.59	250000000	mg/L
MKTF-37	5/3/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-37	5/3/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-37	5/3/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-37	5/3/2018	Nitrogen, Nitrate	0.084	0.5	0.033	10000000	mg/L
MKTF-37	5/3/2018	Sulfate	23	2.5	1	600000000	mg/L
MKTF-37	5/3/2018	TPH DRO	6.1	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	5/3/2018	TPH GRO	16	2.5	0.48	10100	mg/L
MKTF-37	8/23/2018	Bromide	0.57	0.5	0.13	NA	mg/L
MKTF-37	8/23/2018	Chloride	140	10	0.59	250000000	mg/L
MKTF-37	8/23/2018	Fluoride, Total	0.47	0.5	0.15	1600000	mg/L
MKTF-37	8/23/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-37	8/23/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-37	8/23/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-37	8/23/2018	Sulfate	20	2.5	1	600000000	mg/L
MKTF-37	8/23/2018	TPH DRO	3	1	0.63	16700	mg/L
MKTF-37	8/23/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	8/23/2018	TPH GRO	17	1	0.49	10100	mg/L
MKTF-37	5/14/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-37	5/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-37	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-37	5/14/2019	Bromide	0.46	0.5	0.088765	NA	mg/L
MKTF-37	5/14/2019	Chloride	230	10	1.25	250000000	mg/L
MKTF-37	5/14/2019	Fluoride, Total	0.93	0.5	0.25	1600000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrate	3.5	0.5	0.027	10000000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-37	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-37	5/14/2019	Sulfate	570	10	1.07	600000000	mg/L
MKTF-37	5/14/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-37	5/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-37	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-37	5/14/2019	Bromide	0.48	0.5	0.088765	NA	mg/L
MKTF-37	5/14/2019	Chloride	240	10	1.25	250000000	mg/L
MKTF-37	5/14/2019	Fluoride, Total	0.92	0.5	0.25	1600000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrate	3.7	0.5	0.027	10000000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-37	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-37	5/14/2019	Sulfate	600	10	1.07	600000000	mg/L
MKTF-37	9/17/2020	TPH GRO	16	0.25	0.04	10100	mg/L
MKTF-37	9/17/2020	TPH DRO	3.5	0.07	0.067	16700	mg/L
MKTF-37	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-37	9/17/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-37	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-37	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-37	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-37	9/17/2020	Sulfate	2.1	2.5	1.2	600000000	mg/L
MKTF-37	9/17/2020	Bromide	0.57	0.5	0.25	NA	mg/L
MKTF-37	9/17/2020	Chloride	190	10	5	250000000	mg/L
MKTF-37	9/17/2020	Solids, Total Suspended	120	8	8	NA	mg/L
MKTF-37	9/17/2020	Solids, Total Suspended	120	8	8	NA	mg/L
MKTF-38	11/21/2014	TPH DRO	3.8	1	0.83	16700	mg/L
MKTF-38	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/21/2014	TPH GRO	0.12	0.05	0.019	10100	mg/L
MKTF-38	3/16/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	3/16/2015	TPH GRO	0.33	0.05	0.012	10100	mg/L
MKTF-38	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/10/2015	TPH GRO	0.2	0.05	0.012	10100	mg/L
MKTF-38	8/24/2015	Bromide	0.81	0.1	0.077	NA	mg/L
MKTF-38	8/24/2015	Chloride	210	10	2.7	250000000	mg/L
MKTF-38	8/24/2015	Fluoride, Total	0.69	0.1	0.029	1600000	mg/L
MKTF-38	8/24/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-38	8/24/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-38	8/24/2015	Nitrogen, Nitrate	3.2	0.1	0.032	10000000	mg/L
MKTF-38	8/24/2015	Sulfate	390	10	2.3	600000000	mg/L
MKTF-38	8/24/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	8/24/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	8/24/2015	TPH GRO	0.099	0.05	0.04	10100	mg/L
MKTF-38	11/9/2015	Bromide	1.1	0.1	0.068	NA	mg/L
MKTF-38	11/9/2015	Chloride	210	10	6.8	250000000	mg/L
MKTF-38	11/9/2015	Fluoride, Total	0.91	0.1	0.032	1600000	mg/L
MKTF-38	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-38	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-38	11/9/2015	Nitrogen, Nitrate	2.5	0.1	0.058	10000000	mg/L
MKTF-38	11/9/2015	Sulfate	400	10	6.4	600000000	mg/L
MKTF-38	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/9/2015	TPH GRO	0.12	0.05	0.012	10100	mg/L
MKTF-38	2/29/2016	Bromide	0.75	0.1	0.032	NA	mg/L
MKTF-38	2/29/2016	Chloride	110	10	0.55	250000000	mg/L
MKTF-38	2/29/2016	Fluoride, Total	0.75	0.1	0.023	1600000	mg/L
MKTF-38	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-38	2/29/2016	Nitrate & Nitrite	7.2	1	0.42	NA	mg/L
MKTF-38	2/29/2016	Sulfate	450	10	1.3	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	2/29/2016	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-38	6/8/2016	Bromide	0.88	0.1	0.032	NA	mg/L
MKTF-38	6/8/2016	Chloride	270	10	0.55	250000000	mg/L
MKTF-38	6/8/2016	Fluoride, Total	0.7	0.1	0.023	1600000	mg/L
MKTF-38	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-38	6/8/2016	Nitrate & Nitrite	9.9	1	0.42	NA	mg/L
MKTF-38	6/8/2016	Sulfate	360	10	1.3	600000000	mg/L
MKTF-38	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/8/2016	TPH GRO	0.06	0.05	0.025	10100	mg/L
MKTF-38	9/13/2016	Bromide	0.6	0.1	0.044	NA	mg/L
MKTF-38	9/13/2016	Chloride	260	10	1	250000000	mg/L
MKTF-38	9/13/2016	Fluoride, Total	0.73	0.1	0.05	1600000	mg/L
MKTF-38	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-38	9/13/2016	Nitrate & Nitrite	5	1	0.46	NA	mg/L
MKTF-38	9/13/2016	Sulfate	330	10	2.8	600000000	mg/L
MKTF-38	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	9/13/2016	TPH GRO	0.09	0.05	0.015	10100	mg/L
MKTF-38	11/1/2016	Bromide	0.52	0.1	0.044	NA	mg/L
MKTF-38	11/1/2016	Chloride	200	10	1	250000000	mg/L
MKTF-38	11/1/2016	Fluoride, Total	0.82	0.1	0.05	1600000	mg/L
MKTF-38	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-38	11/1/2016	Nitrogen, Nitrite	0.14	0.1	0.052	1000000	mg/L
MKTF-38	11/1/2016	Nitrogen, Nitrate	8.8	0.1	0.041	10000000	mg/L
MKTF-38	11/1/2016	Sulfate	320	10	2.8	600000000	mg/L
MKTF-38	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/1/2016	TPH GRO	0.065	0.05	0.025	10100	mg/L
MKTF-38	3/14/2017	Bromide	1	0.1	0.031	NA	mg/L
MKTF-38	3/14/2017	Chloride	130	10	5	250000000	mg/L
MKTF-38	3/14/2017	Fluoride, Total	0.74	0.1	0.05	1600000	mg/L
MKTF-38	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-38	3/14/2017	Nitrogen, Nitrite	0.26	0.1	0.019	1000000	mg/L
MKTF-38	3/14/2017	Nitrogen, Nitrate	7.5	0.1	0.022	10000000	mg/L
MKTF-38	3/14/2017	Sulfate	380	10	1.9	600000000	mg/L
MKTF-38	3/14/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	3/14/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-38	6/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-38	6/21/2017	Chloride	280	10	5	250000000	mg/L
MKTF-38	6/21/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-38	6/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	6/21/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-38	6/21/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-38	6/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-38	9/28/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-38	9/28/2017	Chloride	230	10	5	250000000	mg/L
MKTF-38	9/28/2017	Fluoride, Total	0.69	0.5	0.22	1600000	mg/L
MKTF-38	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-38	9/28/2017	Nitrogen, Nitrate	0.35	0.5	0.11	10000000	mg/L
MKTF-38	9/28/2017	Sulfate	260	10	1.9	600000000	mg/L
MKTF-38	9/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	9/28/2017	TPH GRO	0.03	0.05	0.025	10100	mg/L
MKTF-38	11/30/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-38	11/30/2017	Chloride	210	10	5	250000000	mg/L
MKTF-38	11/30/2017	Fluoride, Total	0.9	0.5	0.22	1600000	mg/L
MKTF-38	11/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	11/30/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
MKTF-38	11/30/2017	Sulfate	250	10	1.9	600000000	mg/L
MKTF-38	11/30/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/30/2017	TPH GRO	0.026	0.05	0.0097	10100	mg/L
MKTF-38	2/12/2018	Bromide	1.2	0.1	0.014	NA	mg/L
MKTF-38	2/12/2018	Chloride	210	10	5	250000000	mg/L
MKTF-38	2/12/2018	Fluoride, Total	0.71	0.5	0.22	1600000	mg/L
MKTF-38	2/12/2018	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-38	2/12/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-38	2/12/2018	Nitrogen, Nitrate	2.8	0.5	0.11	10000000	mg/L
MKTF-38	2/12/2018	Sulfate	220	10	1.9	600000000	mg/L
MKTF-38	2/12/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	2/12/2018	TPH GRO	0.015	0.05	0.0097	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Bromide	0.97	0.1	0.027	NA	mg/L
MKTF-38	5/3/2018	Chloride	290	10	0.59	250000000	mg/L
MKTF-38	5/3/2018	Fluoride, Total	0.65	0.1	0.03	1600000	mg/L
MKTF-38	5/3/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-38	5/3/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-38	5/3/2018	Nitrogen, Nitrate	0.4	0.1	0.0066	10000000	mg/L
MKTF-38	5/3/2018	Sulfate	320	10	4.1	600000000	mg/L
MKTF-38	5/3/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	5/3/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-38	8/21/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-38	8/21/2018	Chloride	370	10	0.59	250000000	mg/L
MKTF-38	8/21/2018	Fluoride, Total	0.8	0.5	0.15	1600000	mg/L
MKTF-38	8/21/2018	Ortho-Phosphate	1.6	2.5	0.46	NA	mg/L
MKTF-38	8/21/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-38	8/21/2018	Nitrogen, Nitrate	1.9	0.5	0.033	10000000	mg/L
MKTF-38	8/21/2018	Sulfate	300	10	4.1	600000000	mg/L
MKTF-38	8/21/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	8/21/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	8/21/2018	TPH GRO	0.025	0.05	0.0097	10100	mg/L
MKTF-38	11/20/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-38	11/20/2018	Chloride	240	10	10	250000000	mg/L
MKTF-38	11/20/2018	Fluoride, Total	0.81	0.5	0.5	1600000	mg/L
MKTF-38	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-38	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-38	11/20/2018	Nitrogen, Nitrate	5.9	0.5	0.25	10000000	mg/L
MKTF-38	11/20/2018	Sulfate	400	10	2.5	600000000	mg/L
MKTF-38	11/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/20/2018	TPH GRO	0.13	0.05	0.024	10100	mg/L
MKTF-38	6/27/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-38	6/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-38	6/27/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-38	6/27/2019	Bromide	0.57	0.5	0.088765	NA	mg/L
MKTF-38	6/27/2019	Chloride	330	10	10	250000000	mg/L
MKTF-38	6/27/2019	Fluoride, Total	0.8	0.5	0.073	1600000	mg/L
MKTF-38	6/27/2019	Nitrogen, Nitrate	4.8	0.5	0.025	10000000	mg/L
MKTF-38	6/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-38	6/27/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-38	6/27/2019	Sulfate	600	10	1.338	600000000	mg/L
MKTF-38	8/20/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-38	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-38	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-38	8/20/2019	Bromide	0.52	0.5	0.088765	NA	mg/L
MKTF-38	8/20/2019	Chloride	360	10	10	250000000	mg/L
MKTF-38	8/20/2019	Fluoride, Total	0.93	0.5	0.073	1600000	mg/L
MKTF-38	8/20/2019	Nitrogen, Nitrate	5.5	0.5	0.025	10000000	mg/L
MKTF-38	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-38	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-38	8/20/2019	Sulfate	560	10	1.338	600000000	mg/L
MKTF-38	3/5/2020	TPH GRO	1.7	0.05	0.0068	10100	mg/L
MKTF-38	3/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-38	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-38	3/5/2020	Bromide	0.69	0.5	0.25	NA	mg/L
MKTF-38	3/5/2020	Fluoride, Total	0.87	0.5	0.11	1600000	mg/L
MKTF-38	3/5/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-38	3/5/2020	Nitrogen, Nitrite	0.15	0.5	0.056	1000000	mg/L
MKTF-38	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	3/5/2020	Chloride	290	10	5	250000000	mg/L
MKTF-38	3/5/2020	Sulfate	420	10	5	600000000	mg/L
MKTF-38	9/19/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-38	9/19/2020	TPH DRO	0.12	0.07	0.067	16700	mg/L
MKTF-38	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-38	9/19/2020	Chloride	630	25	12	250000000	mg/L
MKTF-38	9/19/2020	Bromide	0.81	0.5	0.25	NA	mg/L
MKTF-38	9/19/2020	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-38	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	9/19/2020	Sulfate	450	10	5	600000000	mg/L
MKTF-38	9/19/2020	Nitrate & Nitrite	11	1	0.061	NA	mg/L
MKTF-39	11/18/2014	TPH DRO	15	1	0.83	16700	mg/L
MKTF-39	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/18/2014	TPH GRO	0.39	0.25	0.096	10100	mg/L
MKTF-39	3/16/2015	TPH DRO	6.2	1	0.91	16700	mg/L
MKTF-39	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/16/2015	TPH GRO	0.21	0.05	0.012	10100	mg/L
MKTF-39	6/10/2015	TPH DRO	44	1	0.91	16700	mg/L
MKTF-39	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/10/2015	TPH GRO	0.44	0.05	0.012	10100	mg/L
MKTF-39	8/23/2015	Bromide	ND	0.5	0.39	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	Chloride	9100	500	340	250000000	mg/L
MKTF-39	8/23/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-39	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-39	8/23/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
MKTF-39	8/23/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-39	8/23/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-39	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	8/23/2015	TPH GRO	0.93	0.05	0.04	10100	mg/L
MKTF-39	11/9/2015	Bromide	ND	2	1.4	NA	mg/L
MKTF-39	11/9/2015	Chloride	6400	500	340	250000000	mg/L
MKTF-39	11/9/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-39	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-39	11/9/2015	Nitrogen, Nitrite	ND	2	0.56	1000000	mg/L
MKTF-39	11/9/2015	Nitrogen, Nitrate	1	0.1	0.058	10000000	mg/L
MKTF-39	11/9/2015	Sulfate	ND	0.5	0.32	600000000	mg/L
MKTF-39	11/9/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-39	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/9/2015	TPH GRO	0.44	0.05	0.012	10100	mg/L
MKTF-39	3/3/2016	Bromide	1	0.5	0.16	NA	mg/L
MKTF-39	3/3/2016	Chloride	2900	250	14	250000000	mg/L
MKTF-39	3/3/2016	Fluoride, Total	0.71	0.5	0.11	1600000	mg/L
MKTF-39	3/3/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-39	3/3/2016	Nitrate & Nitrite	ND	4	1.7	NA	mg/L
MKTF-39	3/3/2016	Sulfate	4.2	2.5	0.32	600000000	mg/L
MKTF-39	3/3/2016	TPH DRO	13	1	0.69	16700	mg/L
MKTF-39	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/3/2016	TPH GRO	0.46	0.05	0.025	10100	mg/L
MKTF-39	6/8/2016	Bromide	0.38	0.1	0.032	NA	mg/L
MKTF-39	6/8/2016	Chloride	2300	100	5.5	250000000	mg/L
MKTF-39	6/8/2016	Fluoride, Total	0.54	0.1	0.023	1600000	mg/L
MKTF-39	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-39	6/8/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-39	6/8/2016	Sulfate	0.21	0.5	0.064	600000000	mg/L
MKTF-39	6/8/2016	TPH DRO	19	1	0.69	16700	mg/L
MKTF-39	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/8/2016	TPH GRO	0.67	0.25	0.13	10100	mg/L
MKTF-39	9/13/2016	Bromide	2	2	0.87	NA	mg/L
MKTF-39	9/13/2016	Chloride	1900	100	10	250000000	mg/L
MKTF-39	9/13/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-39	9/13/2016	Ortho-Phosphate	5.8	10	1.5	NA	mg/L
MKTF-39	9/13/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-39	9/13/2016	Sulfate	ND	10	2.8	600000000	mg/L
MKTF-39	9/13/2016	TPH DRO	10	1	0.69	16700	mg/L
MKTF-39	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	9/13/2016	TPH GRO	1.1	0.25	0.075	10100	mg/L
MKTF-39	11/1/2016	Bromide	1.7	0.5	0.22	NA	mg/L
MKTF-39	11/1/2016	Chloride	1300	50	5.1	250000000	mg/L
MKTF-39	11/1/2016	Fluoride, Total	0.97	0.5	0.25	1600000	mg/L
MKTF-39	11/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-39	11/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-39	11/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-39	11/1/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-39	11/1/2016	TPH DRO	17	1	0.69	16700	mg/L
MKTF-39	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/1/2016	TPH GRO	0.36	0.1	0.051	10100	mg/L
MKTF-39	3/14/2017	Bromide	1.6	0.1	0.031	NA	mg/L
MKTF-39	3/14/2017	Chloride	1000	50	25	250000000	mg/L
MKTF-39	3/14/2017	Fluoride, Total	0.44	0.1	0.05	1600000	mg/L
MKTF-39	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-39	3/14/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
MKTF-39	3/14/2017	Nitrogen, Nitrate	0.43	0.1	0.022	10000000	mg/L
MKTF-39	3/14/2017	Sulfate	0.23	0.5	0.096	600000000	mg/L
MKTF-39	3/14/2017	TPH DRO	28	1	0.36	16700	mg/L
MKTF-39	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/14/2017	TPH GRO	1.5	0.25	0.12	10100	mg/L
MKTF-39	6/8/2017	Bromide	3	2	0.29	NA	mg/L
MKTF-39	6/8/2017	Chloride	790	50	25	250000000	mg/L
MKTF-39	6/8/2017	Fluoride, Total	0.87	0.1	0.044	1600000	mg/L
MKTF-39	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-39	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-39	6/8/2017	Sulfate	0.16	0.5	0.096	600000000	mg/L
MKTF-39	6/8/2017	TPH DRO	56	1	0.36	16700	mg/L
MKTF-39	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/8/2017	TPH GRO	0.73	0.25	0.12	10100	mg/L
MKTF-39	9/28/2017	Bromide	2.9	0.5	0.073	NA	mg/L
MKTF-39	9/28/2017	Chloride	3400	250	120	250000000	mg/L
MKTF-39	9/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-39	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-39	9/28/2017	Sulfate	0.49	2.5	0.48	600000000	mg/L
MKTF-39	9/28/2017	TPH DRO	28	1	0.36	16700	mg/L
MKTF-39	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	9/28/2017	TPH GRO	0.37	0.05	0.025	10100	mg/L
MKTF-39	11/28/2017	Bromide	3.1	0.5	0.073	NA	mg/L
MKTF-39	11/28/2017	Chloride	1900	100	50	250000000	mg/L
MKTF-39	11/28/2017	Fluoride, Total	0.46	0.5	0.22	1600000	mg/L
MKTF-39	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	11/28/2017	Nitrate & Nitrite	0.36	2	0.26	NA	mg/L
MKTF-39	11/28/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-39	11/28/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-39	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/28/2017	TPH GRO	0.9	0.5	0.097	10100	mg/L
MKTF-39	2/8/2018	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-39	2/8/2018	Chloride	3200	100	50	250000000	mg/L
MKTF-39	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-39	2/8/2018	Ortho-Phosphate	4.3	2.5	1.2	NA	mg/L
MKTF-39	2/8/2018	Nitrate & Nitrite	1	2	0.26	NA	mg/L
MKTF-39	2/8/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-39	2/8/2018	TPH DRO	17	1	0.63	16700	mg/L
MKTF-39	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	2/8/2018	TPH GRO	0.7	0.1	0.019	10100	mg/L
MKTF-39	5/6/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-39	5/6/2018	Chloride	960	50	2.9	250000000	mg/L
MKTF-39	5/6/2018	Fluoride, Total	0.86	0.5	0.15	1600000	mg/L
MKTF-39	5/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-39	5/6/2018	Nitrogen, Nitrite	0.64	0.5	0.24	1000000	mg/L
MKTF-39	5/6/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-39	5/6/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-39	5/6/2018	TPH DRO	17	1	0.63	16700	mg/L
MKTF-39	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	5/6/2018	TPH GRO	0.7	0.1	0.019	10100	mg/L
MKTF-39	8/21/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-39	8/21/2018	Chloride	1600	100	5.9	250000000	mg/L
MKTF-39	8/21/2018	Fluoride, Total	0.28	0.5	0.15	1600000	mg/L
MKTF-39	8/21/2018	Ortho-Phosphate	3.1	2.5	0.46	NA	mg/L
MKTF-39	8/21/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-39	8/21/2018	Nitrogen, Nitrate	0.2	0.5	0.033	10000000	mg/L
MKTF-39	8/21/2018	Sulfate	1.1	2.5	1	600000000	mg/L
MKTF-39	8/21/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-39	8/21/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	8/21/2018	TPH GRO	0.91	0.05	0.0097	10100	mg/L
MKTF-39	11/20/2018	Bromide	0.78	0.5	0.1	NA	mg/L
MKTF-39	11/20/2018	Chloride	1900	100	100	250000000	mg/L
MKTF-39	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-39	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-39	11/20/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-39	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-39	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-39	11/20/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-39	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/20/2018	TPH GRO	0.25	0.05	0.024	10100	mg/L
MKTF-39	6/5/2019	TPH GRO	0.34	0.05	0.0211	10100	mg/L
MKTF-39	6/5/2019	TPH DRO	46	1	0.35	16700	mg/L
MKTF-39	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	6/5/2019	Bromide	0.46	0.5	0.088765	NA	mg/L
MKTF-39	6/5/2019	Chloride	9000	500	500	250000000	mg/L
MKTF-39	6/5/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-39	6/5/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-39	6/5/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-39	6/5/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-39	6/5/2019	Sulfate	140	2.5	0.2675	600000000	mg/L
MKTF-39	8/20/2019	TPH GRO	0.65	0.25	0.1535	10100	mg/L
MKTF-39	8/20/2019	TPH DRO	17	1	0.35	16700	mg/L
MKTF-39	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	8/20/2019	Bromide	0.45	0.5	0.088765	NA	mg/L
MKTF-39	8/20/2019	Chloride	8900	500	500	250000000	mg/L
MKTF-39	8/20/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-39	8/20/2019	Nitrogen, Nitrate & Nitrite	8.1	10	0.485	10000000	mg/L
MKTF-39	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	8/20/2019	Sulfate	4.5	2.5	0.3345	600000000	mg/L
MKTF-39	8/20/2019	TPH GRO	1.2	0.25	0.1535	10100	mg/L
MKTF-39	8/20/2019	TPH DRO	12	1	0.35	16700	mg/L
MKTF-39	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	8/20/2019	Bromide	0.4	0.5	0.088765	NA	mg/L
MKTF-39	8/20/2019	Chloride	8700	500	500	250000000	mg/L
MKTF-39	8/20/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-39	8/20/2019	Nitrogen, Nitrate & Nitrite	8	10	0.485	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	8/20/2019	Sulfate	8.1	2.5	0.3345	600000000	mg/L
MKTF-39	11/5/2019	TPH GRO	0.48	0.05	0.0211	10100	mg/L
MKTF-39	11/5/2019	TPH DRO	16	0.4	0.132	16700	mg/L
MKTF-39	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-39	11/5/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-39	11/5/2019	Chloride	7500	500	500	250000000	mg/L
MKTF-39	11/5/2019	Fluoride, Total	ND	2	0.579636	1600000	mg/L
MKTF-39	11/5/2019	Nitrogen, Nitrate & Nitrite	ND	10	0.485	10000000	mg/L
MKTF-39	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	11/5/2019	Sulfate	1.2	2.5	0.3345	600000000	mg/L
MKTF-39	11/5/2019	TPH GRO	0.35	0.05	0.0211	10100	mg/L
MKTF-39	11/5/2019	TPH DRO	3.3	0.4	0.132	16700	mg/L
MKTF-39	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-39	11/5/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-39	11/5/2019	Chloride	7500	500	500	250000000	mg/L
MKTF-39	11/5/2019	Fluoride, Total	ND	2	0.579636	1600000	mg/L
MKTF-39	11/5/2019	Nitrogen, Nitrate & Nitrite	ND	10	0.485	10000000	mg/L
MKTF-39	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	11/5/2019	Sulfate	1.2	2.5	0.3345	600000000	mg/L
MKTF-39	2/5/2020	TPH GRO	0.57	0.05	0.021	10100	mg/L
MKTF-39	2/5/2020	TPH DRO	1.4	0.4	0.2	16700	mg/L
MKTF-39	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-39	2/5/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-39	2/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	2/5/2020	Sulfate	1.3	2.5	1.2	600000000	mg/L
MKTF-39	2/5/2020	Bromide	ND	2	1	NA	mg/L
MKTF-39	2/5/2020	Chloride	7500	500	250	250000000	mg/L
MKTF-39	2/5/2020	Nitrate & Nitrite	ND	10	1.2	NA	mg/L
MKTF-39	9/19/2020	TPH GRO	0.66	0.1	0.016	10100	mg/L
MKTF-39	9/19/2020	TPH DRO	11	0.07	0.067	16700	mg/L
MKTF-39	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-39	9/19/2020	Chloride	6200	500	250	250000000	mg/L
MKTF-39	9/19/2020	Nitrate & Nitrite	1.3	10	0.61	NA	mg/L
MKTF-39	9/19/2020	Bromide	1.7	0.5	0.25	NA	mg/L
MKTF-39	9/19/2020	Fluoride, Total	0.41	0.5	0.22	1600000	mg/L
MKTF-39	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	9/19/2020	Sulfate	2.6	2.5	1.2	600000000	mg/L
MKTF-39	12/16/2020	Bicarbonate	716	1	0.5	NA	mg/L
MKTF-39	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-39	12/16/2020	Phosphorus, Total	0.422	0.1	0.032	NA	mg/L
MKTF-39	12/16/2020	Sulfate	32.6	1	0.37	600000000	mg/L
MKTF-39	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-39	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-39	12/16/2020	Chloride	6020	500	60	250000000	mg/L
MKTF-39	12/16/2020	TPH (C6-C10)	252	100	47	NA	ug/L
MKTF-39	12/16/2020	TPH DRO	6820	146	117	16700	ug/L
MKTF-39	12/16/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-40	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/21/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-40	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	8/21/2015	Bromide	1.7	0.5	0.39	NA	mg/L
MKTF-40	8/21/2015	Chloride	3400	250	170	250000000	mg/L
MKTF-40	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-40	8/21/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
MKTF-40	8/21/2015	Sulfate	890	10	2.3	600000000	mg/L
MKTF-40	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-40	11/4/2015	Bromide	ND	2	1.4	NA	mg/L
MKTF-40	11/4/2015	Chloride	4600	250	170	250000000	mg/L
MKTF-40	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-40	11/4/2015	Ortho-Phosphate	ND	10	1.8	NA	mg/L
MKTF-40	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-40	11/4/2015	Sulfate	540	10	6.4	600000000	mg/L
MKTF-40	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	2/23/2016	Bromide	6.6	2	0.65	NA	mg/L
MKTF-40	2/23/2016	Chloride	4900	250	14	250000000	mg/L
MKTF-40	2/23/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-40	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/23/2016	Nitrate & Nitrite	ND	10	4.2	NA	mg/L
MKTF-40	2/23/2016	Sulfate	520	10	1.3	600000000	mg/L
MKTF-40	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	6/9/2016	Bromide	3.4	2	0.65	NA	mg/L
MKTF-40	6/9/2016	Chloride	5300	250	14	250000000	mg/L
MKTF-40	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-40	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-40	6/9/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	6/9/2016	Sulfate	390	10	1.3	600000000	mg/L
MKTF-40	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	9/8/2016	Bromide	1.6	2	0.87	NA	mg/L
MKTF-40	9/8/2016	Chloride	5300	250	25	250000000	mg/L
MKTF-40	9/8/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-40	9/8/2016	Ortho-Phosphate	3.6	10	1.5	NA	mg/L
MKTF-40	9/8/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	9/8/2016	Sulfate	460	10	2.8	600000000	mg/L
MKTF-40	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	9/8/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
MKTF-40	10/31/2016	Bromide	ND	2	0.87	NA	mg/L
MKTF-40	10/31/2016	Chloride	3700	250	25	250000000	mg/L
MKTF-40	10/31/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-40	10/31/2016	Ortho-Phosphate	1.9	10	1.5	NA	mg/L
MKTF-40	10/31/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	10/31/2016	Sulfate	500	10	2.8	600000000	mg/L
MKTF-40	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	3/7/2017	Bromide	0.28	0.1	0.031	NA	mg/L
MKTF-40	3/7/2017	Chloride	4200	250	120	250000000	mg/L
MKTF-40	3/7/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-40	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-40	3/7/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	3/7/2017	Sulfate	500	10	1.9	600000000	mg/L
MKTF-40	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	3/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	6/5/2017	Bromide	2.8	2	0.29	NA	mg/L
MKTF-40	6/5/2017	Chloride	4400	250	120	250000000	mg/L
MKTF-40	6/5/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-40	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-40	6/5/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	6/5/2017	Sulfate	580	10	1.9	600000000	mg/L
MKTF-40	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	9/25/2017	Bromide	3	0.5	0.073	NA	mg/L
MKTF-40	9/25/2017	Chloride	3600	250	120	250000000	mg/L
MKTF-40	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	9/25/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	9/25/2017	Sulfate	590	10	1.9	600000000	mg/L
MKTF-40	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	11/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-40	11/21/2017	Chloride	4100	250	120	250000000	mg/L
MKTF-40	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	11/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	11/21/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-40	11/21/2017	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L
MKTF-40	11/21/2017	Sulfate	590	250	48	600000000	mg/L
MKTF-40	11/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	2/5/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-40	2/5/2018	Chloride	4000	250	120	250000000	mg/L
MKTF-40	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	2/5/2018	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	2/5/2018	Sulfate	480	10	1.9	600000000	mg/L
MKTF-40	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	2/5/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	5/6/2018	Bromide	1.4	0.5	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	Chloride	4800	10	0.59	250000000	mg/L
MKTF-40	5/6/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	5/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-40	5/6/2018	Nitrogen, Nitrite	2.4	2	0.96	1000000	mg/L
MKTF-40	5/6/2018	Nitrogen, Nitrate	0.1	0.5	0.033	10000000	mg/L
MKTF-40	5/6/2018	Sulfate	560	10	4.1	600000000	mg/L
MKTF-40	5/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	5/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-40	8/17/2018	Bromide	ND	0.5	0.13	NA	mg/L
MKTF-40	8/17/2018	Chloride	3100	100	5.9	250000000	mg/L
MKTF-40	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-40	8/17/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-40	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-40	8/17/2018	Sulfate	550	10	4.1	600000000	mg/L
MKTF-40	8/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	8/17/2018	TPH GRO	0.019	0.05	0.0097	10100	mg/L
MKTF-40	11/15/2018	Bromide	14	0.5	0.1	NA	mg/L
MKTF-40	11/15/2018	Chloride	2700	250	250	250000000	mg/L
MKTF-40	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-40	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-40	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-40	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-40	11/15/2018	Sulfate	610	10	2.5	600000000	mg/L
MKTF-40	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-40	2/20/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-40	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	2/20/2019	Bromide	0.91	0.5	0.0675	NA	mg/L
MKTF-40	2/20/2019	Chloride	3100	250	250	250000000	mg/L
MKTF-40	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-40	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-40	2/20/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-40	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-40	2/20/2019	Sulfate	550	10	1.28	600000000	mg/L
MKTF-40	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-40	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	5/6/2019	Bromide	0.93	0.5	0.088765	NA	mg/L
MKTF-40	5/6/2019	Chloride	3200	250	31.25	250000000	mg/L
MKTF-40	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-40	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-40	5/6/2019	Nitrogen, Nitrite	3.3	2	0.08984	1000000	mg/L
MKTF-40	5/6/2019	Phosphorus, Ortho	0.34	2.5	0.2	NA	mg/L
MKTF-40	5/6/2019	Sulfate	560	10	1.07	600000000	mg/L
MKTF-40	8/22/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-40	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	8/22/2019	Bromide	0.98	0.5	0.088765	NA	mg/L
MKTF-40	8/22/2019	Chloride	3500	250	250	250000000	mg/L
MKTF-40	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-40	8/22/2019	Nitrogen, Nitrate	0.081	0.5	0.025	10000000	mg/L
MKTF-40	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-40	8/22/2019	Sulfate	500	10	1.338	600000000	mg/L
MKTF-40	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-40	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-40	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-40	10/22/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-40	10/22/2019	Chloride	2800	250	250	250000000	mg/L
MKTF-40	10/22/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-40	10/22/2019	Nitrogen, Nitrate	0.17	0.5	0.030387	10000000	mg/L
MKTF-40	10/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-40	10/22/2019	Sulfate	540	10	1.338	600000000	mg/L
MKTF-40	11/19/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-40	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-40	11/19/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	11/19/2019	Chemical Oxygen Demand	117	10	3	NA	mg/L
MKTF-40	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-40	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-40	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-40	2/28/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-40	2/28/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-40	2/28/2020	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	2/28/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-40	2/28/2020	Sulfate	530	10	5	600000000	mg/L
MKTF-40	2/28/2020	Chloride	2900	100	50	250000000	mg/L
MKTF-40	9/19/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-40	9/19/2020	TPH DRO	0.18	0.07	0.067	16700	mg/L
MKTF-40	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-40	9/19/2020	Chloride	3000	250	120	250000000	mg/L
MKTF-40	9/19/2020	Nitrate & Nitrite	ND	4	0.25	NA	mg/L
MKTF-40	9/19/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-40	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	9/19/2020	Sulfate	450	10	5	600000000	mg/L
MKTF-40	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-40	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-40	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-40	12/17/2020	Phosphorus, Total	0.142	0.1	0.032	NA	mg/L
MKTF-40	12/17/2020	Bicarbonate	472	1	0.5	NA	mg/L
MKTF-40	12/17/2020	Bicarbonate	438	1	0.5	NA	mg/L
MKTF-40	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-40	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-40	12/17/2020	Chloride	3160	100	12	250000000	mg/L
MKTF-40	12/17/2020	Sulfate	428	100	37	600000000	mg/L
MKTF-40	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-40	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-40	12/17/2020	Chloride	3140	100	12	250000000	mg/L
MKTF-40	12/17/2020	Sulfate	402	100	37	600000000	mg/L
MKTF-40	12/17/2020	TPH DRO	223	146	117	16700	ug/L
MKTF-40	12/17/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	12/17/2020	TPH DRO	259	146	117	16700	ug/L
MKTF-40	12/17/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	12/17/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-40	12/17/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-41	11/18/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-41	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/18/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-41	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	8/21/2015	Bromide	2.2	0.5	0.39	NA	mg/L
MKTF-41	8/21/2015	Chloride	900	25	17	250000000	mg/L
MKTF-41	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-41	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-41	8/21/2015	Nitrate & Nitrite	5.6	1	0.22	NA	mg/L
MKTF-41	8/21/2015	Sulfate	79	2.5	0.57	600000000	mg/L
MKTF-41	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-41	11/5/2015	Bromide	2.1	0.1	0.068	NA	mg/L
MKTF-41	11/5/2015	Chloride	830	25	17	250000000	mg/L
MKTF-41	11/5/2015	Fluoride, Total	0.35	0.1	0.032	1600000	mg/L
MKTF-41	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-41	11/5/2015	Nitrate & Nitrite	4.2	1	0.3	NA	mg/L
MKTF-41	11/5/2015	Sulfate	68	10	6.4	600000000	mg/L
MKTF-41	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/5/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	2/24/2016	Bromide	4.5	2	0.65	NA	mg/L
MKTF-41	2/24/2016	Chloride	790	50	2.7	250000000	mg/L
MKTF-41	2/24/2016	Fluoride, Total	0.47	0.1	0.023	1600000	mg/L
MKTF-41	2/24/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-41	2/24/2016	Nitrate & Nitrite	4.7	1	0.42	NA	mg/L
MKTF-41	2/24/2016	Sulfate	74	10	1.3	600000000	mg/L
MKTF-41	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	6/9/2016	Bromide	2.4	0.1	0.032	NA	mg/L
MKTF-41	6/9/2016	Chloride	750	50	2.8	250000000	mg/L
MKTF-41	6/9/2016	Fluoride, Total	0.51	0.1	0.023	1600000	mg/L
MKTF-41	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-41	6/9/2016	Nitrate & Nitrite	5.6	1	0.42	NA	mg/L
MKTF-41	6/9/2016	Sulfate	71	10	1.3	600000000	mg/L
MKTF-41	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	9/9/2016	Bromide	2.3	0.1	0.044	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	Chloride	910	25	2.5	250000000	mg/L
MKTF-41	9/9/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-41	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-41	9/9/2016	Nitrate & Nitrite	5.7	1	0.46	NA	mg/L
MKTF-41	9/9/2016	Sulfate	60	10	2.8	600000000	mg/L
MKTF-41	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
MKTF-41	10/31/2016	Bromide	5.4	2	0.87	NA	mg/L
MKTF-41	10/31/2016	Chloride	730	50	5.1	250000000	mg/L
MKTF-41	10/31/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-41	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-41	10/31/2016	Nitrate & Nitrite	5.4	1	0.46	NA	mg/L
MKTF-41	10/31/2016	Sulfate	64	10	2.8	600000000	mg/L
MKTF-41	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	3/7/2017	Bromide	2.2	0.1	0.031	NA	mg/L
MKTF-41	3/7/2017	Chloride	800	50	25	250000000	mg/L
MKTF-41	3/7/2017	Fluoride, Total	0.32	0.1	0.05	1600000	mg/L
MKTF-41	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-41	3/7/2017	Nitrate & Nitrite	3.9	1	0.13	NA	mg/L
MKTF-41	3/7/2017	Sulfate	64	10	1.9	600000000	mg/L
MKTF-41	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	3/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	6/6/2017	Bromide	2.2	0.1	0.014	NA	mg/L
MKTF-41	6/6/2017	Chloride	910	50	25	250000000	mg/L
MKTF-41	6/6/2017	Fluoride, Total	0.24	0.1	0.044	1600000	mg/L
MKTF-41	6/6/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-41	6/6/2017	Nitrate & Nitrite	5.4	1	0.13	NA	mg/L
MKTF-41	6/6/2017	Sulfate	66	10	1.9	600000000	mg/L
MKTF-41	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/6/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	9/25/2017	Bromide	2.8	0.5	0.073	NA	mg/L
MKTF-41	9/25/2017	Chloride	810	25	12	250000000	mg/L
MKTF-41	9/25/2017	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
MKTF-41	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	9/25/2017	Nitrate & Nitrite	5.3	1	0.13	NA	mg/L
MKTF-41	9/25/2017	Sulfate	65	2.5	0.48	600000000	mg/L
MKTF-41	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	9/25/2017	TPH GRO	0.029	0.05	0.025	10100	mg/L
MKTF-41	11/27/2017	Sulfate	65	2.5	0.48	600000000	mg/L
MKTF-41	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	11/27/2017	Bromide	2.4	0.5	0.073	NA	mg/L
MKTF-41	11/27/2017	Chloride	860	50	25	250000000	mg/L
MKTF-41	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-41	11/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	11/27/2017	Nitrate & Nitrite	5.6	1	0.13	NA	mg/L
MKTF-41	2/7/2018	Bromide	2.1	0.5	0.073	NA	mg/L
MKTF-41	2/7/2018	Chloride	790	25	12	250000000	mg/L
MKTF-41	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-41	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	2/7/2018	Nitrate & Nitrite	5.3	1	0.13	NA	mg/L
MKTF-41	2/7/2018	Sulfate	61	2.5	0.48	600000000	mg/L
MKTF-41	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	2/7/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-41	5/9/2018	Bromide	2.1	0.1	0.027	NA	mg/L
MKTF-41	5/9/2018	Chloride	840	50	2.9	250000000	mg/L
MKTF-41	5/9/2018	Fluoride, Total	0.11	0.1	0.03	1600000	mg/L
MKTF-41	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-41	5/9/2018	Nitrate & Nitrite	4.9	1	0.27	NA	mg/L
MKTF-41	5/9/2018	Sulfate	56	10	4.1	600000000	mg/L
MKTF-41	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	5/9/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-41	8/29/2018	Bromide	2.3	0.5	0.13	NA	mg/L
MKTF-41	8/29/2018	Chloride	850	50	18	250000000	mg/L
MKTF-41	8/29/2018	Fluoride, Total	0.57	0.5	0.15	1600000	mg/L
MKTF-41	8/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-41	8/29/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-41	8/29/2018	Nitrogen, Nitrate	5.5	0.5	0.033	10000000	mg/L
MKTF-41	8/29/2018	Sulfate	64	2.5	1	600000000	mg/L
MKTF-41	8/29/2018	TPH DRO	ND	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	8/29/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-41	11/15/2018	Bromide	2.3	0.5	0.1	NA	mg/L
MKTF-41	11/15/2018	Chloride	840	50	50	250000000	mg/L
MKTF-41	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-41	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-41	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-41	11/15/2018	Nitrogen, Nitrate	5.7	0.5	0.25	10000000	mg/L
MKTF-41	11/15/2018	Sulfate	61	2.5	0.63	600000000	mg/L
MKTF-41	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-41	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-41	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	2/13/2019	Bromide	2.2	0.5	0.0675	NA	mg/L
MKTF-41	2/13/2019	Chloride	840	50	50	250000000	mg/L
MKTF-41	2/13/2019	Fluoride, Total	0.33	0.5	0.25	1600000	mg/L
MKTF-41	2/13/2019	Nitrogen, Nitrate	5.6	0.5	0.143	10000000	mg/L
MKTF-41	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-41	2/13/2019	Phosphorus, Ortho	0.29	2.5	0.1305	NA	mg/L
MKTF-41	2/13/2019	Sulfate	61	2.5	0.32	600000000	mg/L
MKTF-41	5/7/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	5/7/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	5/7/2019	Chloride	930	50	6.25	250000000	mg/L
MKTF-41	5/7/2019	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrate	5	0.5	0.027	10000000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrite	0.78	0.5	0.02246	1000000	mg/L
MKTF-41	5/7/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-41	5/7/2019	Sulfate	61	2.5	0.2675	600000000	mg/L
MKTF-41	5/7/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	5/7/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	5/7/2019	Chloride	910	50	6.25	250000000	mg/L
MKTF-41	5/7/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrate	4.8	0.5	0.027	10000000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrite	0.78	0.5	0.02246	1000000	mg/L
MKTF-41	5/7/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-41	5/7/2019	Sulfate	62	2.5	0.2675	600000000	mg/L
MKTF-41	8/22/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	8/22/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	8/22/2019	Chloride	840	50	50	250000000	mg/L
MKTF-41	8/22/2019	Fluoride, Total	0.4	0.5	0.073	1600000	mg/L
MKTF-41	8/22/2019	Nitrogen, Nitrate	4.8	0.5	0.025	10000000	mg/L
MKTF-41	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-41	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-41	8/22/2019	Sulfate	59	2.5	0.3345	600000000	mg/L
MKTF-41	10/23/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-41	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-41	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-41	10/23/2019	Bromide	2.1	0.5	0.077	NA	mg/L
MKTF-41	10/23/2019	Chloride	800	50	50	250000000	mg/L
MKTF-41	10/23/2019	Fluoride, Total	0.44	0.5	0.144909	1600000	mg/L
MKTF-41	10/23/2019	Nitrogen, Nitrate	4.8	0.5	0.030387	10000000	mg/L
MKTF-41	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-41	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-41	10/23/2019	Sulfate	58	2.5	0.3345	600000000	mg/L
MKTF-41	2/27/2020	TPH GRO	0.028	0.05	0.0068	10100	mg/L
MKTF-41	2/27/2020	TPH DRO	0.35	0.4	0.2	16700	mg/L
MKTF-41	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-41	2/27/2020	Bromide	2.3	0.5	0.25	NA	mg/L
MKTF-41	2/27/2020	Fluoride, Total	0.37	0.5	0.11	1600000	mg/L
MKTF-41	2/27/2020	Nitrogen, Nitrate	5.3	0.5	0.11	10000000	mg/L
MKTF-41	2/27/2020	Nitrogen, Nitrite	0.19	0.5	0.056	1000000	mg/L
MKTF-41	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	2/27/2020	Sulfate	61	2.5	1.2	600000000	mg/L
MKTF-41	2/27/2020	Chloride	880	50	25	250000000	mg/L
MKTF-41	9/21/2020	TPH GRO	0.022	0.05	0.008	10100	mg/L
MKTF-41	9/21/2020	TPH DRO	0.52	0.07	0.067	16700	mg/L
MKTF-41	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-41	9/21/2020	Bromide	2.3	0.5	0.25	NA	mg/L
MKTF-41	9/21/2020	Fluoride, Total	0.36	0.5	0.22	1600000	mg/L
MKTF-41	9/21/2020	Nitrogen, Nitrate	5.4	0.5	0.1	10000000	mg/L
MKTF-41	9/21/2020	Nitrogen, Nitrite	0.25	0.5	0.07	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	9/21/2020	Sulfate	60	2.5	1.2	600000000	mg/L
MKTF-41	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-41	9/21/2020	Chloride	770	50	25	250000000	mg/L
MKTF-41	12/15/2020	Bicarbonate	230	1	0.5	NA	mg/L
MKTF-41	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-41	12/15/2020	Nitrogen, Nitrate	5.45	0.1	0.033	10000000	mg/L
MKTF-41	12/15/2020	Chloride	839	20	2.4	250000000	mg/L
MKTF-41	12/15/2020	Sulfate	59.5	20	7.4	600000000	mg/L
MKTF-41	12/15/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-41	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-41	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-41	12/15/2020	TPH DRO	3400	129	103	16700	ug/L
MKTF-41	12/15/2020	C28-C40	ND	129	103	NA	ug/L
MKTF-41	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-42	11/18/2014	TPH DRO	44	1	0.83	16700	mg/L
MKTF-42	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/18/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
MKTF-42	3/11/2015	TPH DRO	27	1	0.91	16700	mg/L
MKTF-42	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	3/11/2015	TPH GRO	ND	0.5	0.12	10100	mg/L
MKTF-42	6/9/2015	TPH DRO	60	1	0.91	16700	mg/L
MKTF-42	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/9/2015	TPH GRO	0.1	0.05	0.012	10100	mg/L
MKTF-42	8/21/2015	Bromide	2	0.5	0.39	NA	mg/L
MKTF-42	8/21/2015	Chloride	930	50	34	250000000	mg/L
MKTF-42	8/21/2015	Fluoride, Total	0.62	0.5	0.15	1600000	mg/L
MKTF-42	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-42	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-42	8/21/2015	Sulfate	130	2.5	0.57	600000000	mg/L
MKTF-42	8/21/2015	TPH DRO	52	1	0.91	16700	mg/L
MKTF-42	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	8/21/2015	TPH GRO	0.21	0.05	0.04	10100	mg/L
MKTF-42	11/5/2015	Bromide	1.7	0.5	0.34	NA	mg/L
MKTF-42	11/5/2015	Chloride	870	25	17	250000000	mg/L
MKTF-42	11/5/2015	Fluoride, Total	0.6	0.5	0.16	1600000	mg/L
MKTF-42	11/5/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-42	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-42	11/5/2015	Sulfate	120	2.5	1.6	600000000	mg/L
MKTF-42	11/5/2015	TPH DRO	45	1	0.91	16700	mg/L
MKTF-42	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/5/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-42	2/24/2016	Bromide	2	0.5	0.16	NA	mg/L
MKTF-42	2/24/2016	Chloride	860	50	2.7	250000000	mg/L
MKTF-42	2/24/2016	Fluoride, Total	0.69	0.5	0.11	1600000	mg/L
MKTF-42	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-42	2/24/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-42	2/24/2016	Sulfate	120	2.5	0.32	600000000	mg/L
MKTF-42	2/24/2016	TPH DRO	52	1	0.69	16700	mg/L
MKTF-42	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	2/24/2016	TPH GRO	0.12	0.05	0.025	10100	mg/L
MKTF-42	6/9/2016	Bromide	3	0.5	0.16	NA	mg/L
MKTF-42	6/9/2016	Chloride	890	50	2.8	250000000	mg/L
MKTF-42	6/9/2016	Fluoride, Total	0.68	0.5	0.11	1600000	mg/L
MKTF-42	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-42	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-42	6/9/2016	Sulfate	130	2.5	0.32	600000000	mg/L
MKTF-42	6/9/2016	TPH DRO	60	1	0.69	16700	mg/L
MKTF-42	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/9/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-42	9/9/2016	Bromide	1.7	0.5	0.22	NA	mg/L
MKTF-42	9/9/2016	Chloride	880	50	5.1	250000000	mg/L
MKTF-42	9/9/2016	Fluoride, Total	0.43	0.5	0.25	1600000	mg/L
MKTF-42	9/9/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-42	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-42	9/9/2016	Sulfate	110	2.5	0.71	600000000	mg/L
MKTF-42	9/9/2016	TPH DRO	62	10	6.9	16700	mg/L
MKTF-42	9/9/2016	TPH ORO	ND	50	50	85800	mg/L
MKTF-42	9/9/2016	TPH GRO	0.7	0.05	0.015	10100	mg/L
MKTF-42	10/31/2016	Bromide	3.9	0.5	0.22	NA	mg/L
MKTF-42	10/31/2016	Chloride	900	25	2.5	250000000	mg/L
MKTF-42	10/31/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-42	10/31/2016	Ortho-Phosphate	0.43	2.5	0.38	NA	mg/L
MKTF-42	10/31/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-42	10/31/2016	Sulfate	110	2.5	0.71	600000000	mg/L
MKTF-42	10/31/2016	TPH DRO	62	1	0.69	16700	mg/L
MKTF-42	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	10/31/2016	TPH GRO	0.11	0.05	0.025	10100	mg/L
MKTF-42	3/7/2017	Bromide	1.5	0.5	0.15	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Chloride	820	50	25	250000000	mg/L
MKTF-42	3/7/2017	Fluoride, Total	0.68	0.5	0.25	1600000	mg/L
MKTF-42	3/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	3/7/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	3/7/2017	TPH DRO	79	1	0.36	16700	mg/L
MKTF-42	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	3/7/2017	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-42	6/6/2017	Bromide	2.7	0.5	0.073	NA	mg/L
MKTF-42	6/6/2017	Chloride	880	50	25	250000000	mg/L
MKTF-42	6/6/2017	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
MKTF-42	6/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	6/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	6/6/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	6/6/2017	TPH DRO	72	1	0.36	16700	mg/L
MKTF-42	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/6/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
MKTF-42	9/25/2017	Bromide	2	0.5	0.073	NA	mg/L
MKTF-42	9/25/2017	Chloride	820	50	25	250000000	mg/L
MKTF-42	9/25/2017	Fluoride, Total	0.6	0.5	0.22	1600000	mg/L
MKTF-42	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	9/25/2017	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-42	9/25/2017	TPH DRO	72	10	3.6	16700	mg/L
MKTF-42	9/25/2017	TPH ORO	ND	50	50	85800	mg/L
MKTF-42	9/25/2017	TPH GRO	0.21	0.05	0.025	10100	mg/L
MKTF-42	11/27/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-42	11/27/2017	Chloride	850	50	25	250000000	mg/L
MKTF-42	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-42	11/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	11/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	11/27/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	11/27/2017	TPH DRO	77	1	0.36	16700	mg/L
MKTF-42	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/27/2017	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-42	2/7/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-42	2/7/2018	Chloride	810	50	25	250000000	mg/L
MKTF-42	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-42	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	2/7/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	2/7/2018	Sulfate	92	2.5	0.48	600000000	mg/L
MKTF-42	2/7/2018	TPH DRO	79	1	0.63	16700	mg/L
MKTF-42	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	2/7/2018	TPH GRO	0.46	0.05	0.0097	10100	mg/L
MKTF-42	5/9/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-42	5/9/2018	Chloride	920	50	2.9	250000000	mg/L
MKTF-42	5/9/2018	Fluoride, Total	0.47	0.5	0.15	1600000	mg/L
MKTF-42	5/9/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-42	5/9/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-42	5/9/2018	Sulfate	95	2.5	1	600000000	mg/L
MKTF-42	5/9/2018	TPH DRO	72	1	0.63	16700	mg/L
MKTF-42	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	5/9/2018	TPH GRO	0.4	0.05	0.0097	10100	mg/L
MKTF-42	8/29/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-42	8/29/2018	Chloride	1000	50	2.9	250000000	mg/L
MKTF-42	8/29/2018	Fluoride, Total	0.94	0.5	0.15	1600000	mg/L
MKTF-42	8/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-42	8/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-42	8/29/2018	Sulfate	98	2.5	1	600000000	mg/L
MKTF-42	8/29/2018	TPH DRO	64	1	0.63	16700	mg/L
MKTF-42	8/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	8/29/2018	TPH GRO	0.21	0.05	0.024	10100	mg/L
MKTF-42	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-42	11/15/2018	Chloride	1100	50	50	250000000	mg/L
MKTF-42	11/15/2018	Fluoride, Total	0.89	0.5	0.5	1600000	mg/L
MKTF-42	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-42	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-42	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-42	11/15/2018	Sulfate	87	2.5	0.63	600000000	mg/L
MKTF-42	11/15/2018	TPH DRO	63	1	0.63	16700	mg/L
MKTF-42	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/15/2018	TPH GRO	0.56	0.05	0.024	10100	mg/L
MKTF-42	2/13/2019	TPH GRO	0.34	0.05	0.0211	10100	mg/L
MKTF-42	2/13/2019	TPH DRO	67	1	0.35	16700	mg/L
MKTF-42	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	2/13/2019	Bromide	1.4	0.5	0.0675	NA	mg/L
MKTF-42	2/13/2019	Chloride	1100	50	50	250000000	mg/L
MKTF-42	2/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-42	2/13/2019	Nitrogen, Nitrate	0.15	0.5	0.143	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-42	2/13/2019	Phosphorus, Ortho	0.22	2.5	0.1305	NA	mg/L
MKTF-42	2/13/2019	Sulfate	87	2.5	0.32	600000000	mg/L
MKTF-42	5/7/2019	TPH GRO	0.16	0.1	0.0614	10100	mg/L
MKTF-42	5/7/2019	TPH DRO	59	1	0.35	16700	mg/L
MKTF-42	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	5/7/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-42	5/7/2019	Chloride	1100	50	6.25	250000000	mg/L
MKTF-42	5/7/2019	Fluoride, Total	0.88	0.5	0.25	1600000	mg/L
MKTF-42	5/7/2019	Nitrogen, Nitrate	0.07	0.5	0.027	10000000	mg/L
MKTF-42	5/7/2019	Nitrogen, Nitrite	0.91	0.5	0.02246	1000000	mg/L
MKTF-42	5/7/2019	Phosphorus, Ortho	0.37	2.5	0.2	NA	mg/L
MKTF-42	5/7/2019	Sulfate	89	2.5	0.2675	600000000	mg/L
MKTF-42	8/22/2019	TPH GRO	0.22	0.1	0.0614	10100	mg/L
MKTF-42	8/22/2019	TPH DRO	57	1	0.35	16700	mg/L
MKTF-42	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	8/22/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-42	8/22/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-42	8/22/2019	Fluoride, Total	0.82	0.5	0.073	1600000	mg/L
MKTF-42	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-42	8/22/2019	Nitrogen, Nitrite	0.85	0.5	0.027	1000000	mg/L
MKTF-42	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-42	8/22/2019	Sulfate	89	2.5	0.3345	600000000	mg/L
MKTF-42	10/23/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-42	10/23/2019	TPH DRO	8.6	0.4	0.132	16700	mg/L
MKTF-42	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-42	10/23/2019	Bromide	1.2	0.5	0.077	NA	mg/L
MKTF-42	10/23/2019	Chloride	940	50	50	250000000	mg/L
MKTF-42	10/23/2019	Fluoride, Total	0.78	0.5	0.144909	1600000	mg/L
MKTF-42	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-42	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-42	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-42	10/23/2019	Sulfate	83	2.5	0.3345	600000000	mg/L
MKTF-42	2/27/2020	TPH GRO	0.7	0.05	0.0068	10100	mg/L
MKTF-42	2/27/2020	TPH DRO	35	0.4	0.2	16700	mg/L
MKTF-42	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-42	2/27/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-42	2/27/2020	Fluoride, Total	0.97	0.5	0.11	1600000	mg/L
MKTF-42	2/27/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-42	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-42	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	2/27/2020	Sulfate	84	2.5	1.2	600000000	mg/L
MKTF-42	2/27/2020	Chloride	1100	50	25	250000000	mg/L
MKTF-42	9/21/2020	TPH GRO	0.41	0.05	0.008	10100	mg/L
MKTF-42	9/21/2020	TPH DRO	26	0.7	0.67	16700	mg/L
MKTF-42	9/21/2020	TPH ORO	ND	6	6	85800	mg/L
MKTF-42	9/21/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-42	9/21/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-42	9/21/2020	Nitrogen, Nitrate	0.12	0.5	0.1	10000000	mg/L
MKTF-42	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-42	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	9/21/2020	Sulfate	100	2.5	1.2	600000000	mg/L
MKTF-42	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-42	9/21/2020	Chloride	880	50	25	250000000	mg/L
MKTF-42	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-42	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-42	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-42	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-42	12/16/2020	Bicarbonate	163	1	0.5	NA	mg/L
MKTF-42	12/16/2020	Bicarbonate	147	1	0.5	NA	mg/L
MKTF-42	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-42	12/16/2020	Fluoride, Total	1.21	1	0.3	1600000	mg/L
MKTF-42	12/16/2020	Chloride	913	50	6	250000000	mg/L
MKTF-42	12/16/2020	Sulfate	114	50	18.5	600000000	mg/L
MKTF-42	12/16/2020	Fluoride, Total	1.31	1	0.3	1600000	mg/L
MKTF-42	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-42	12/16/2020	Chloride	909	50	6	250000000	mg/L
MKTF-42	12/16/2020	Sulfate	114	50	18.5	600000000	mg/L
MKTF-42	12/16/2020	TPH DRO	**42900**	578	463	16700	ug/L
MKTF-42	12/16/2020	C28-C40	829	578	463	NA	ug/L
MKTF-42	12/16/2020	TPH DRO	**42500**	139	111	16700	ug/L
MKTF-42	12/16/2020	C28-C40	2240	139	111	NA	ug/L
MKTF-42	12/16/2020	TPH (C6-C10)	166	100	47	NA	ug/L
MKTF-42	12/16/2020	TPH (C6-C10)	181	100	47	NA	ug/L
MKTF-42	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-43	11/18/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-43	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/18/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-43	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	8/21/2015	Bromide	15	2	1.5	NA	mg/L
MKTF-43	8/21/2015	Chloride	17000	1000	680	250000000	mg/L
MKTF-43	8/21/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
MKTF-43	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-43	8/21/2015	Nitrate & Nitrite	ND	10	3	NA	mg/L
MKTF-43	8/21/2015	Sulfate	1700	1000	640	600000000	mg/L
MKTF-43	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-43	11/5/2015	Bromide	11	2	1.4	NA	mg/L
MKTF-43	11/5/2015	Chloride	16000	1000	680	250000000	mg/L
MKTF-43	11/5/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-43	11/5/2015	Ortho-Phosphate	ND	10	1.8	NA	mg/L
MKTF-43	11/5/2015	Nitrate & Nitrite	ND	10	3	NA	mg/L
MKTF-43	11/5/2015	Sulfate	1600	25	16	600000000	mg/L
MKTF-43	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/5/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	2/24/2016	Bromide	12	2	0.65	NA	mg/L
MKTF-43	2/24/2016	Chloride	15000	500	27	250000000	mg/L
MKTF-43	2/24/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-43	2/24/2016	Ortho-Phosphate	ND	10	4.4	NA	mg/L
MKTF-43	2/24/2016	Nitrate & Nitrite	ND	10	4.2	NA	mg/L
MKTF-43	2/24/2016	Sulfate	1200	250	32	600000000	mg/L
MKTF-43	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	6/9/2016	Bromide	20	2	0.65	NA	mg/L
MKTF-43	6/9/2016	Chloride	15000	1000	55	250000000	mg/L
MKTF-43	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-43	6/9/2016	Ortho-Phosphate	ND	10	4.4	NA	mg/L
MKTF-43	6/9/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
MKTF-43	6/9/2016	Sulfate	1300	1000	280	600000000	mg/L
MKTF-43	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	9/9/2016	Bromide	13	2	0.87	NA	mg/L
MKTF-43	9/9/2016	Chloride	16000	1000	100	250000000	mg/L
MKTF-43	9/9/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	9/9/2016	Ortho-Phosphate	6.6	10	1.5	NA	mg/L
MKTF-43	9/9/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
MKTF-43	9/9/2016	Sulfate	1800	25	7.1	600000000	mg/L
MKTF-43	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	9/9/2016	TPH GRO	0.026	0.05	0.015	10100	mg/L
MKTF-43	10/31/2016	Bromide	13	10	4.4	NA	mg/L
MKTF-43	10/31/2016	Chloride	19000	1000	100	250000000	mg/L
MKTF-43	10/31/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	10/31/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
MKTF-43	10/31/2016	Nitrate & Nitrite	62	20	9.2	NA	mg/L
MKTF-43	10/31/2016	Sulfate	1300	1000	280	600000000	mg/L
MKTF-43	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	3/8/2017	Bromide	10	2	0.61	NA	mg/L
MKTF-43	3/8/2017	Chloride	13000	1000	500	250000000	mg/L
MKTF-43	3/8/2017	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	3/8/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	3/8/2017	Nitrate & Nitrite	25	10	1.3	NA	mg/L
MKTF-43	3/8/2017	Sulfate	1000	1000	190	600000000	mg/L
MKTF-43	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	3/8/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	6/6/2017	Bromide	8.6	2	0.29	NA	mg/L
MKTF-43	6/6/2017	Chloride	12000	500	250	250000000	mg/L
MKTF-43	6/6/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-43	6/6/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	6/6/2017	Nitrate & Nitrite	23	10	1.3	NA	mg/L
MKTF-43	6/6/2017	Sulfate	980	500	96	600000000	mg/L
MKTF-43	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/6/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	9/25/2017	Bromide	8	0.5	0.073	NA	mg/L
MKTF-43	9/25/2017	Chloride	9500	500	250	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	9/25/2017	Nitrate & Nitrite	13	10	1.3	NA	mg/L
MKTF-43	9/25/2017	Sulfate	1100	500	96	600000000	mg/L
MKTF-43	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	11/27/2017	Bromide	8.5	0.5	0.073	NA	mg/L
MKTF-43	11/27/2017	Chloride	12000	500	250	250000000	mg/L
MKTF-43	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	11/27/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	11/27/2017	Nitrate & Nitrite	14	10	1.3	NA	mg/L
MKTF-43	11/27/2017	Sulfate	1200	25	4.8	600000000	mg/L
MKTF-43	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	2/7/2018	Bromide	4.9	0.5	0.073	NA	mg/L
MKTF-43	2/7/2018	Chloride	8500	500	250	250000000	mg/L
MKTF-43	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	2/7/2018	Ortho-Phosphate	3.8	2.5	1.2	NA	mg/L
MKTF-43	2/7/2018	Nitrate & Nitrite	13	10	1.3	NA	mg/L
MKTF-43	2/7/2018	Sulfate	950	500	96	600000000	mg/L
MKTF-43	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	2/7/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	5/9/2018	Bromide	4.8	2	0.54	NA	mg/L
MKTF-43	5/9/2018	Chloride	7600	500	29	250000000	mg/L
MKTF-43	5/9/2018	Fluoride, Total	ND	2	0.59	1600000	mg/L
MKTF-43	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-43	5/9/2018	Nitrate & Nitrite	6.5	4	1.1	NA	mg/L
MKTF-43	5/9/2018	Sulfate	810	10	4.1	600000000	mg/L
MKTF-43	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	5/9/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	8/30/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-43	8/30/2018	Chloride	3200	250	15	250000000	mg/L
MKTF-43	8/30/2018	Fluoride, Total	0.38	0.5	0.15	1600000	mg/L
MKTF-43	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-43	8/30/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-43	8/30/2018	Nitrogen, Nitrate	8.5	0.5	0.033	10000000	mg/L
MKTF-43	8/30/2018	Sulfate	260	10	4.1	600000000	mg/L
MKTF-43	8/30/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	8/30/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	11/15/2018	Bromide	1.4	0.5	0.1	NA	mg/L
MKTF-43	11/15/2018	Chloride	2600	250	250	250000000	mg/L
MKTF-43	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-43	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-43	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-43	11/15/2018	Nitrogen, Nitrate	15	0.5	0.25	10000000	mg/L
MKTF-43	11/15/2018	Sulfate	290	10	2.5	600000000	mg/L
MKTF-43	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-43	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	2/13/2019	Bromide	2.5	2	0.27	NA	mg/L
MKTF-43	2/13/2019	Chloride	4800	250	250	250000000	mg/L
MKTF-43	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrate	18	2	0.572	10000000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-43	2/13/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-43	2/13/2019	Sulfate	470	10	1.28	600000000	mg/L
MKTF-43	2/13/2019	Bromide	2	0.5	0.0675	NA	mg/L
MKTF-43	2/13/2019	Chloride	4300	250	250	250000000	mg/L
MKTF-43	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrate	22	0.5	0.143	10000000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-43	2/13/2019	Phosphorus, Ortho	0.84	2.5	0.1305	NA	mg/L
MKTF-43	2/13/2019	Sulfate	410	10	1.28	600000000	mg/L
MKTF-43	5/8/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-43	5/8/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	5/8/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-43	5/8/2019	Chloride	3600	250	31.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
MKTF-43	5/8/2019	Nitrogen, Nitrate	19	0.5	0.027	10000000	mg/L
MKTF-43	5/8/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-43	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-43	5/8/2019	Sulfate	340	10	1.07	600000000	mg/L
MKTF-43	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	8/22/2019	Bromide	2.2	0.5	0.088765	NA	mg/L
MKTF-43	8/22/2019	Chloride	4800	250	250	250000000	mg/L
MKTF-43	8/22/2019	Fluoride, Total	0.086	0.5	0.073	1600000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrate	19	0.5	0.025	10000000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	8/22/2019	Sulfate	550	10	1.338	600000000	mg/L
MKTF-43	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	8/22/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-43	8/22/2019	Chloride	5100	250	250	250000000	mg/L
MKTF-43	8/22/2019	Fluoride, Total	0.074	0.5	0.073	1600000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrate	18	0.5	0.025	10000000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	8/22/2019	Sulfate	560	10	1.338	600000000	mg/L
MKTF-43	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-43	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-43	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-43	10/24/2019	Bromide	2.4	2	0.308	NA	mg/L
MKTF-43	10/24/2019	Chloride	4900	250	250	250000000	mg/L
MKTF-43	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrate	12	0.5	0.030387	10000000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	10/24/2019	Sulfate	530	10	1.338	600000000	mg/L
MKTF-43	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-43	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-43	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-43	10/24/2019	Bromide	2.5	2	0.308	NA	mg/L
MKTF-43	10/24/2019	Chloride	5100	250	250	250000000	mg/L
MKTF-43	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrate	12	0.5	0.030387	10000000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	10/24/2019	Sulfate	540	10	1.338	600000000	mg/L
MKTF-43	2/27/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-43	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-43	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-43	2/27/2020	Bromide	3.3	0.5	0.25	NA	mg/L
MKTF-43	2/27/2020	Fluoride, Total	0.3	0.5	0.11	1600000	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-43	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-43	2/27/2020	Sulfate	620	10	5	600000000	mg/L
MKTF-43	2/27/2020	Chloride	5400	250	120	250000000	mg/L
MKTF-43	2/27/2020	TPH GRO	0.01	0.05	0.0068	10100	mg/L
MKTF-43	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-43	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-43	2/27/2020	Bromide	3.5	0.5	0.25	NA	mg/L
MKTF-43	2/27/2020	Fluoride, Total	0.29	0.5	0.11	1600000	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-43	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-43	2/27/2020	Sulfate	640	10	5	600000000	mg/L
MKTF-43	2/27/2020	Chloride	5600	250	120	250000000	mg/L
MKTF-43	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-43	9/21/2020	TPH DRO	0.072	0.07	0.067	16700	mg/L
MKTF-43	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-43	9/21/2020	Bromide	6.2	0.5	0.25	NA	mg/L
MKTF-43	9/21/2020	Nitrogen, Nitrate	3.5	0.5	0.1	10000000	mg/L
MKTF-43	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	9/21/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-43	9/21/2020	Solids, Total Suspended	9	4	4	NA	mg/L
MKTF-43	9/21/2020	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
MKTF-43	9/21/2020	Chloride	6900	500	250	250000000	mg/L
MKTF-43	9/21/2020	Sulfate	790	500	250	600000000	mg/L
MKTF-43	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-43	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-43	12/15/2020	Phosphorus, Total	0.171	0.1	0.032	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	Phosphorus, Total	0.219	0.1	0.032	NA	mg/L
MKTF-43	12/15/2020	Bicarbonate	210	1	0.5	NA	mg/L
MKTF-43	12/15/2020	Bicarbonate	217	1	0.5	NA	mg/L
MKTF-43	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-43	12/15/2020	Nitrogen, Nitrate	2.76	0.1	0.033	10000000	mg/L
MKTF-43	12/15/2020	Sulfate	782	100	37	600000000	mg/L
MKTF-43	12/15/2020	Chloride	8080	500	60	250000000	mg/L
MKTF-43	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-43	12/15/2020	Nitrogen, Nitrate	2.79	0.1	0.033	10000000	mg/L
MKTF-43	12/15/2020	Sulfate	790	100	37	600000000	mg/L
MKTF-43	12/15/2020	Chloride	7610	500	60	250000000	mg/L
MKTF-43	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-43	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-43	12/15/2020	TPH DRO	276	157	125	16700	ug/L
MKTF-43	12/15/2020	C28-C40	ND	157	125	NA	ug/L
MKTF-43	12/15/2020	TPH DRO	269	156	125	16700	ug/L
MKTF-43	12/15/2020	C28-C40	ND	156	125	NA	ug/L
MKTF-43	9/21/2020	Solids, Total Suspended	9	4	4	NA	mg/L
MKTF-44	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-44	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/21/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-44	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	8/17/2015	Bromide	0.58	0.5	0.39	NA	mg/L
MKTF-44	8/17/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-44	8/17/2015	Fluoride, Total	0.58	0.5	0.15	1600000	mg/L
MKTF-44	8/17/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-44	8/17/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-44	8/17/2015	Sulfate	120	2.5	0.57	600000000	mg/L
MKTF-44	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	8/17/2015	TPH GRO	ND	0.1	0.024	10100	mg/L
MKTF-44	11/9/2015	Bromide	0.63	0.5	0.34	NA	mg/L
MKTF-44	11/9/2015	Chloride	91	10	6.8	250000000	mg/L
MKTF-44	11/9/2015	Fluoride, Total	0.56	0.5	0.16	1600000	mg/L
MKTF-44	11/9/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-44	11/9/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-44	11/9/2015	Nitrogen, Nitrate	0.75	0.5	0.29	10000000	mg/L
MKTF-44	11/9/2015	Sulfate	110	2.5	1.6	600000000	mg/L
MKTF-44	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	2/24/2016	Bromide	1.1	0.5	0.16	NA	mg/L
MKTF-44	2/24/2016	Chloride	270	10	0.55	250000000	mg/L
MKTF-44	2/24/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-44	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-44	2/24/2016	Nitrate & Nitrite	1.1	1	0.42	NA	mg/L
MKTF-44	2/24/2016	Sulfate	100	2.5	0.32	600000000	mg/L
MKTF-44	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	6/9/2016	Bromide	0.64	0.1	0.032	NA	mg/L
MKTF-44	6/9/2016	Chloride	610	25	1.4	250000000	mg/L
MKTF-44	6/9/2016	Fluoride, Total	0.29	0.1	0.023	1600000	mg/L
MKTF-44	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-44	6/9/2016	Nitrate & Nitrite	3.6	1	0.42	NA	mg/L
MKTF-44	6/9/2016	Sulfate	96	10	1.3	600000000	mg/L
MKTF-44	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	9/9/2016	Bromide	0.51	0.5	0.22	NA	mg/L
MKTF-44	9/9/2016	Chloride	310	10	1	250000000	mg/L
MKTF-44	9/9/2016	Fluoride, Total	0.36	0.5	0.25	1600000	mg/L
MKTF-44	9/9/2016	Ortho-Phosphate	1.7	2.5	0.38	NA	mg/L
MKTF-44	9/9/2016	Nitrate & Nitrite	1.8	1	0.46	NA	mg/L
MKTF-44	9/9/2016	Sulfate	97	2.5	0.71	600000000	mg/L
MKTF-44	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	9/9/2016	TPH GRO	0.023	0.05	0.015	10100	mg/L
MKTF-44	11/1/2016	Bromide	1.1	0.5	0.22	NA	mg/L
MKTF-44	11/1/2016	Chloride	150	10	1	250000000	mg/L
MKTF-44	11/1/2016	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-44	11/1/2016	Ortho-Phosphate	1.2	2.5	0.38	NA	mg/L
MKTF-44	11/1/2016	Nitrate & Nitrite	0.81	1	0.46	NA	mg/L
MKTF-44	11/1/2016	Sulfate	100	2.5	0.71	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	3/8/2017	Bromide	ND	2	0.61	NA	mg/L
MKTF-44	3/8/2017	Chloride	3500	250	120	250000000	mg/L
MKTF-44	3/8/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-44	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-44	3/8/2017	Nitrate & Nitrite	26	4	0.52	NA	mg/L
MKTF-44	3/8/2017	Sulfate	59	10	1.9	600000000	mg/L
MKTF-44	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	3/8/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	6/5/2017	Bromide	0.4	0.1	0.014	NA	mg/L
MKTF-44	6/5/2017	Chloride	1300	50	25	250000000	mg/L
MKTF-44	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-44	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-44	6/5/2017	Nitrate & Nitrite	7.6	1	0.13	NA	mg/L
MKTF-44	6/5/2017	Sulfate	80	10	1.9	600000000	mg/L
MKTF-44	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	9/25/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-44	9/25/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-44	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	9/25/2017	Nitrate & Nitrite	7	1	0.13	NA	mg/L
MKTF-44	9/25/2017	Sulfate	85	2.5	0.48	600000000	mg/L
MKTF-44	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	11/28/2017	Bromide	0.7	0.5	0.073	NA	mg/L
MKTF-44	11/28/2017	Chloride	730	25	12	250000000	mg/L
MKTF-44	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	11/28/2017	Nitrate & Nitrite	4.2	1	0.13	NA	mg/L
MKTF-44	11/28/2017	Sulfate	91	2.5	0.48	600000000	mg/L
MKTF-44	11/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/28/2017	TPH GRO	0.017	0.05	0.0097	10100	mg/L
MKTF-44	2/8/2018	Bromide	0.6	0.5	0.073	NA	mg/L
MKTF-44	2/8/2018	Chloride	390	10	5	250000000	mg/L
MKTF-44	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	2/8/2018	Nitrate & Nitrite	2.1	1	0.13	NA	mg/L
MKTF-44	2/8/2018	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-44	2/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	2/8/2018	TPH GRO	0.01	0.05	0.0097	10100	mg/L
MKTF-44	5/10/2018	Bromide	0.37	0.1	0.027	NA	mg/L
MKTF-44	5/10/2018	Chloride	240	10	0.59	250000000	mg/L
MKTF-44	5/10/2018	Fluoride, Total	0.16	0.1	0.03	1600000	mg/L
MKTF-44	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-44	5/10/2018	Nitrogen, Nitrite	0.066	0.1	0.048	1000000	mg/L
MKTF-44	5/10/2018	Nitrogen, Nitrate	1.1	0.1	0.0066	10000000	mg/L
MKTF-44	5/10/2018	Sulfate	95	10	4.1	600000000	mg/L
MKTF-44	5/10/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	5/10/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-44	8/30/2018	Bromide	0.53	0.5	0.13	NA	mg/L
MKTF-44	8/30/2018	Chloride	530	25	9.1	250000000	mg/L
MKTF-44	8/30/2018	Fluoride, Total	0.17	0.5	0.15	1600000	mg/L
MKTF-44	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-44	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-44	8/30/2018	Nitrogen, Nitrate	2.5	0.5	0.033	10000000	mg/L
MKTF-44	8/30/2018	Sulfate	96	2.5	1	600000000	mg/L
MKTF-44	8/30/2018	TPH DRO	1.7	1	0.63	16700	mg/L
MKTF-44	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	8/30/2018	TPH GRO	0.015	0.05	0.0097	10100	mg/L
MKTF-44	11/15/2018	Bromide	ND	0.5	0.1	NA	mg/L
MKTF-44	11/15/2018	Chloride	230	10	10	250000000	mg/L
MKTF-44	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-44	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-44	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-44	11/15/2018	Nitrogen, Nitrate	0.57	0.5	0.25	10000000	mg/L
MKTF-44	11/15/2018	Sulfate	100	2.5	0.63	600000000	mg/L
MKTF-44	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-44	2/13/2019	TPH GRO	0.022	0.05	0.0211	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	2/13/2019	Bromide	0.84	0.5	0.0675	NA	mg/L
MKTF-44	2/13/2019	Chloride	1500	100	100	250000000	mg/L
MKTF-44	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-44	2/13/2019	Nitrogen, Nitrate	9.9	0.5	0.143	10000000	mg/L
MKTF-44	2/13/2019	Nitrogen, Nitrite	0.35	0.5	0.3475	1000000	mg/L
MKTF-44	2/13/2019	Phosphorus, Ortho	0.86	2.5	0.1305	NA	mg/L
MKTF-44	2/13/2019	Sulfate	89	2.5	0.32	600000000	mg/L
MKTF-44	5/8/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-44	5/8/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	5/8/2019	Bromide	0.87	0.5	0.088765	NA	mg/L
MKTF-44	5/8/2019	Chloride	2400	100	12.5	250000000	mg/L
MKTF-44	5/8/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-44	5/8/2019	Nitrogen, Nitrate	14	0.5	0.027	10000000	mg/L
MKTF-44	5/8/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-44	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-44	5/8/2019	Sulfate	72	2.5	0.2675	600000000	mg/L
MKTF-44	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-44	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	8/22/2019	Bromide	0.67	0.5	0.088765	NA	mg/L
MKTF-44	8/22/2019	Chloride	1500	50	50	250000000	mg/L
MKTF-44	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-44	8/22/2019	Nitrogen, Nitrate	9	0.5	0.025	10000000	mg/L
MKTF-44	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-44	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-44	8/22/2019	Sulfate	84	2.5	0.3345	600000000	mg/L
MKTF-44	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-44	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-44	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-44	10/24/2019	Bromide	0.6	0.5	0.077	NA	mg/L
MKTF-44	10/24/2019	Chloride	810	25	25	250000000	mg/L
MKTF-44	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-44	10/24/2019	Nitrogen, Nitrate	4.9	0.5	0.030387	10000000	mg/L
MKTF-44	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-44	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-44	10/24/2019	Sulfate	91	2.5	0.3345	600000000	mg/L
MKTF-44	3/5/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-44	3/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-44	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-44	3/5/2020	Bromide	0.73	0.5	0.25	NA	mg/L
MKTF-44	3/5/2020	Fluoride, Total	0.2	0.5	0.11	1600000	mg/L
MKTF-44	3/5/2020	Nitrogen, Nitrate	4.6	0.5	0.11	10000000	mg/L
MKTF-44	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-44	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	3/5/2020	Sulfate	100	2.5	1.2	600000000	mg/L
MKTF-44	3/5/2020	Chloride	830	25	12	250000000	mg/L
MKTF-44	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-44	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-44	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-44	9/21/2020	Bromide	0.78	0.5	0.25	NA	mg/L
MKTF-44	9/21/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	9/21/2020	Nitrogen, Nitrate	5.5	0.5	0.1	10000000	mg/L
MKTF-44	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-44	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	9/21/2020	Sulfate	96	10	5	600000000	mg/L
MKTF-44	9/21/2020	Chloride	780	25	12	250000000	mg/L
MKTF-44	9/21/2020	Solids, Total Suspended	89	4	4	NA	mg/L
MKTF-44	12/23/2020	Bicarbonate	612	1	0.5	NA	mg/L
MKTF-44	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-44	12/23/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-44	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-44	12/23/2020	Nitrogen, Nitrate	1.85	0.1	0.033	10000000	mg/L
MKTF-44	12/23/2020	Chloride	302	10	1.2	250000000	mg/L
MKTF-44	12/23/2020	Sulfate	104	10	3.7	600000000	mg/L
MKTF-44	12/23/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-44	12/23/2020	TPH DRO	171	156	125	16700	ug/L
MKTF-44	12/23/2020	C28-C40	ND	156	125	NA	ug/L
MKTF-44	9/21/2020	Solids, Total Suspended	89	4	4	NA	mg/L
MKTF-46	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-46	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-46	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-46	3/6/2020	Bromide	0.42	0.5	0.25	NA	mg/L
MKTF-46	3/6/2020	Fluoride, Total	0.38	0.5	0.11	1600000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrate	9.3	0.5	0.11	10000000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-46	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Sulfate	240	10	5	600000000	mg/L
MKTF-46	3/6/2020	Chloride	570	25	12	250000000	mg/L
MKTF-46	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-46	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-46	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-46	3/6/2020	Bromide	0.41	0.5	0.25	NA	mg/L
MKTF-46	3/6/2020	Fluoride, Total	0.37	0.5	0.11	1600000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrate	9.4	0.5	0.11	10000000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-46	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-46	3/6/2020	Sulfate	250	10	5	600000000	mg/L
MKTF-46	3/6/2020	Chloride	560	25	12	250000000	mg/L
MKTF-46	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-46	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-46	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-46	9/17/2020	Bromide	0.37	0.5	0.25	NA	mg/L
MKTF-46	9/17/2020	Fluoride, Total	0.5	0.5	0.22	1600000	mg/L
MKTF-46	9/17/2020	Nitrogen, Nitrate	7.7	0.5	0.1	10000000	mg/L
MKTF-46	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-46	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-46	9/17/2020	Sulfate	250	2.5	1.2	600000000	mg/L
MKTF-46	9/17/2020	Chloride	610	25	12	250000000	mg/L
MKTF-46	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-46	12/16/2020	Nitrogen, Nitrate	7.48	0.1	0.033	10000000	mg/L
MKTF-46	12/16/2020	Chloride	575	20	2.4	250000000	mg/L
MKTF-46	12/16/2020	Sulfate	292	20	7.4	600000000	mg/L
MKTF-46	12/16/2020	Bicarbonate	274	1	0.5	NA	mg/L
MKTF-46	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-46	12/16/2020	Ammonia	0.589	0.05	0.024	NA	mg/L
MKTF-46	12/16/2020	TPH DRO	ND	152	122	16700	ug/L
MKTF-46	12/16/2020	C28-C40	ND	152	122	NA	ug/L
MKTF-46	12/16/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-47	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-47	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-47	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-47	3/6/2020	Bromide	0.48	0.5	0.25	NA	mg/L
MKTF-47	3/6/2020	Fluoride, Total	0.76	0.5	0.11	1600000	mg/L
MKTF-47	3/6/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-47	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-47	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-47	3/6/2020	Chloride	380	10	5	250000000	mg/L
MKTF-47	3/6/2020	Sulfate	320	10	5	600000000	mg/L
MKTF-49	3/5/2020	TPH GRO	77	5	0.68	10100	mg/L
MKTF-49	3/5/2020	TPH DRO	1.1	0.4	0.2	16700	mg/L
MKTF-49	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-49	3/5/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-49	3/5/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-49	3/5/2020	Nitrogen, Nitrate	0.13	0.5	0.11	10000000	mg/L
MKTF-49	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-49	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-49	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-49	3/5/2020	Chloride	1000	50	25	250000000	mg/L
MKTF-49	9/20/2020	TPH GRO	97	2.5	0.4	10100	mg/L
MKTF-49	9/20/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
MKTF-49	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-49	9/20/2020	Bromide	1.3	0.5	0.25	NA	mg/L
MKTF-49	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-49	9/20/2020	Nitrogen, Nitrate	0.13	0.5	0.1	10000000	mg/L
MKTF-49	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-49	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-49	9/20/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-49	9/20/2020	Solids, Total Suspended	540	8	8	NA	mg/L
MKTF-49	9/20/2020	Chloride	1100	50	25	250000000	mg/L
MKTF-49	12/23/2020	Bicarbonate	734	1	0.5	NA	mg/L
MKTF-49	12/23/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-49	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-49	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-49	12/23/2020	Chloride	1560	100	12	250000000	mg/L
MKTF-49	12/23/2020	Phosphorus, Total	0.433	0.1	0.032	NA	mg/L
MKTF-49	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-49	12/23/2020	TPH (C6-C10)	84600	5000	2350	NA	ug/L
MKTF-49	12/23/2020	TPH DRO	5750	147	118	16700	ug/L
MKTF-49	12/23/2020	C28-C40	ND	147	118	NA	ug/L
MKTF-49	9/20/2020	Solids, Total Suspended	540	8	8	NA	mg/L
MKTF-50	3/5/2020	TPH GRO	22	0.25	0.034	10100	mg/L
MKTF-50	3/5/2020	TPH DRO	2.9	0.4	0.2	16700	mg/L
MKTF-50	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-50	3/5/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-50	3/5/2020	Fluoride, Total	1.5	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-50	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-50	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-50	3/5/2020	Chloride	360	10	5	250000000	mg/L
MKTF-50	3/5/2020	TPH GRO	23	0.25	0.034	10100	mg/L
MKTF-50	3/5/2020	TPH DRO	4.3	0.4	0.2	16700	mg/L
MKTF-50	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-50	3/5/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-50	3/5/2020	Fluoride, Total	1.5	0.5	0.11	1600000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-50	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-50	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-50	3/5/2020	Chloride	350	10	5	250000000	mg/L
MKTF-50	12/16/2020	Phosphorus, Total	0.17	0.1	0.032	NA	mg/L
MKTF-50	12/16/2020	Ammonia	0.642	0.05	0.024	NA	mg/L
MKTF-50	12/16/2020	Sulfate	11.5	1	0.37	600000000	mg/L
MKTF-50	12/16/2020	Fluoride, Total	3.3	1	0.3	1600000	mg/L
MKTF-50	12/16/2020	Nitrogen, Nitrate	4.31	0.1	0.033	10000000	mg/L
MKTF-50	12/16/2020	Chloride	665	20	2.4	250000000	mg/L
MKTF-50	12/16/2020	Bicarbonate	818	1	0.5	NA	mg/L
MKTF-50	12/16/2020	TPH (C6-C10)	17000	500	235	NA	ug/L
MKTF-50	12/16/2020	TPH DRO	7410	147	117	16700	ug/L
MKTF-50	12/16/2020	C28-C40	327	147	117	NA	ug/L
MW-1	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-1	8/24/2012	Chloride	47	10	1	250000000	mg/L
MW-1	8/24/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-1	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-1	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-1	8/24/2012	Sulfate	140	10	2.4	600000000	mg/L
MW-1	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-1	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
MW-1	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-1	9/9/2013	Bromide	ND	0.1	0.026	NA	mg/L
MW-1	9/9/2013	Chloride	44	10	3	250000000	mg/L
MW-1	9/9/2013	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
MW-1	9/9/2013	Fluoride, Total	0.61	0.1	0.033	1600000	mg/L
MW-1	9/9/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-1	9/9/2013	Nitrate & Nitrite	4.1	1	0.18	NA	mg/L
MW-1	9/9/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-1	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-1	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/9/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-1	9/16/2014	Bromide	0.11	0.1	0.022	NA	mg/L
MW-1	9/16/2014	Chloride	44	10	5	250000000	mg/L
MW-1	9/16/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	9/16/2014	Fluoride, Total	0.69	0.1	0.018	1600000	mg/L
MW-1	9/16/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-1	9/16/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MW-1	9/16/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-1	9/16/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-1	9/16/2014	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/16/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-1	8/14/2015	Bromide	ND	0.1	0.077	NA	mg/L
MW-1	8/14/2015	Chloride	23	10	2.7	250000000	mg/L
MW-1	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	8/14/2015	Fluoride, Total	0.39	0.1	0.029	1600000	mg/L
MW-1	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-1	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-1	8/14/2015	Sulfate	73	10	2.3	600000000	mg/L
MW-1	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-1	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-1	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-1	9/7/2016	Bromide	0.1	0.1	0.044	NA	mg/L
MW-1	9/7/2016	Chloride	44	10	1	250000000	mg/L
MW-1	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	9/7/2016	Fluoride, Total	0.63	0.1	0.05	1600000	mg/L
MW-1	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-1	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-1	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
MW-1	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-1	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/7/2016	TPH GRO	0.025	0.05	0.015	10100	mg/L
MW-1	9/20/2017	Bromide	0.29	0.5	0.073	NA	mg/L
MW-1	9/20/2017	Chloride	48	2.5	1.2	250000000	mg/L
MW-1	9/20/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/20/2017	Fluoride, Total	0.61	0.5	0.22	1600000	mg/L
MW-1	9/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-1	9/20/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-1	9/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-1	9/20/2017	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/20/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-1	9/13/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-1	9/13/2018	Chloride	48	2.5	0.91	250000000	mg/L
MW-1	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/13/2018	Fluoride, Total	0.8	0.5	0.16	1600000	mg/L
MW-1	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-1	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-1	9/13/2018	Nitrogen, Nitrate	0.049	0.5	0.033	10000000	mg/L
MW-1	9/13/2018	Sulfate	160	2.5	1	600000000	mg/L
MW-1	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-1	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-1	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-1	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-1	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-1	8/12/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-1	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-1	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
MW-1	8/12/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-1	8/12/2019	Chloride	47	2.5	2.5	250000000	mg/L
MW-1	8/12/2019	Fluoride, Total	0.73	0.5	0.073	1600000	mg/L
MW-1	8/12/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-1	8/12/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-1	8/12/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-1	8/12/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MW-1	8/12/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/22/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-1	9/22/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-1	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-1	9/22/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-1	9/22/2020	Chloride	48	2.5	1.2	250000000	mg/L
MW-1	9/22/2020	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MW-1	9/22/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MW-1	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-1	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-1	9/22/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-1	9/22/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-2	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-2	8/24/2012	Chloride	49	10	1	250000000	mg/L
MW-2	8/24/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-2	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-2	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-2	8/24/2012	Sulfate	150	10	2.4	600000000	mg/L
MW-2	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-2	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
MW-2	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-2	9/10/2013	Bromide	0.1	0.1	0.026	NA	mg/L
MW-2	9/10/2013	Chloride	50	10	3	250000000	mg/L
MW-2	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-2	9/10/2013	Fluoride, Total	0.77	0.1	0.033	1600000	mg/L
MW-2	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-2	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-2	9/10/2013	Nitrogen, Nitrate	0.11	0.1	0.016	10000000	mg/L
MW-2	9/10/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-2	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-2	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-2	9/16/2014	Bromide	0.11	0.1	0.022	NA	mg/L
MW-2	9/16/2014	Chloride	51	10	5	250000000	mg/L
MW-2	9/16/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	9/16/2014	Fluoride, Total	0.73	0.1	0.018	1600000	mg/L
MW-2	9/16/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-2	9/16/2014	Nitrate & Nitrite	21	1	0.076	NA	mg/L
MW-2	9/16/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-2	9/16/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-2	9/16/2014	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/16/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-2	8/14/2015	Bromide	ND	0.1	0.077	NA	mg/L
MW-2	8/14/2015	Chloride	35	10	2.7	250000000	mg/L
MW-2	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	8/14/2015	Fluoride, Total	0.54	0.1	0.029	1600000	mg/L
MW-2	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-2	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-2	8/14/2015	Sulfate	100	10	2.3	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-2	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-2	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-2	9/7/2016	Bromide	0.095	0.1	0.044	NA	mg/L
MW-2	9/7/2016	Chloride	50	10	1	250000000	mg/L
MW-2	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	9/7/2016	Fluoride, Total	0.66	0.1	0.05	1600000	mg/L
MW-2	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-2	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-2	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
MW-2	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-2	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/7/2016	TPH GRO	0.021	0.05	0.015	10100	mg/L
MW-2	9/20/2017	Bromide	0.28	0.5	0.073	NA	mg/L
MW-2	9/20/2017	Chloride	56	2.5	1.2	250000000	mg/L
MW-2	9/20/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/20/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MW-2	9/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-2	9/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-2	9/20/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-2	9/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-2	9/20/2017	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/20/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-2	9/13/2018	Bromide	0.15	0.5	0.13	NA	mg/L
MW-2	9/13/2018	Chloride	56	2.5	0.91	250000000	mg/L
MW-2	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/13/2018	Fluoride, Total	0.87	0.5	0.16	1600000	mg/L
MW-2	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-2	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-2	9/13/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-2	9/13/2018	Sulfate	170	2.5	1	600000000	mg/L
MW-2	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-2	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-2	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-2	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-2	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-2	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-2	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-2	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
MW-2	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-2	8/13/2019	Chloride	54	2.5	2.5	250000000	mg/L
MW-2	8/13/2019	Fluoride, Total	0.74	0.5	0.073	1600000	mg/L
MW-2	8/13/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-2	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-2	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-2	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MW-2	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-2	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-2	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-2	9/18/2020	Nitrate & Nitrite	ND	1	0.061	NA	mg/L
MW-2	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-2	9/18/2020	Chloride	55	2.5	1.2	250000000	mg/L
MW-2	9/18/2020	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
MW-2	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-2	9/18/2020	Sulfate	170	2.5	1.2	600000000	mg/L
MW-2	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-4	8/21/2012	Bromide	0.11	0.1	0.074	NA	mg/L
MW-4	8/21/2012	Chloride	16	10	1	250000000	mg/L
MW-4	8/21/2012	Fluoride, Total	0.29	0.1	0.038	1600000	mg/L
MW-4	8/21/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-4	8/21/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-4	8/21/2012	Sulfate	140	10	2.4	600000000	mg/L
MW-4	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-4	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
MW-4	8/21/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-4	9/10/2013	Bromide	0.13	0.1	0.026	NA	mg/L
MW-4	9/10/2013	Chloride	18	0.5	0.15	250000000	mg/L
MW-4	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-4	9/10/2013	Fluoride, Total	0.32	0.1	0.033	1600000	mg/L
MW-4	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-4	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-4	9/10/2013	Nitrogen, Nitrate	0.14	0.1	0.016	10000000	mg/L
MW-4	9/10/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-4	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-4	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/17/2014	Bromide	0.14	0.1	0.022	NA	mg/L
MW-4	9/17/2014	Chloride	18	0.5	0.25	250000000	mg/L
MW-4	9/17/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	9/17/2014	Fluoride, Total	0.31	0.1	0.018	1600000	mg/L
MW-4	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-4	9/17/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MW-4	9/17/2014	Sulfate	140	10	1.6	600000000	mg/L
MW-4	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-4	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-4	8/17/2015	Bromide	0.13	0.1	0.077	NA	mg/L
MW-4	8/17/2015	Chloride	18	0.5	0.13	250000000	mg/L
MW-4	8/17/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	8/17/2015	Fluoride, Total	0.29	0.1	0.029	1600000	mg/L
MW-4	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-4	8/17/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-4	8/17/2015	Sulfate	140	10	2.3	600000000	mg/L
MW-4	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-4	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
MW-4	8/17/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-4	9/7/2016	Bromide	0.13	0.1	0.044	NA	mg/L
MW-4	9/7/2016	Chloride	18	0.5	0.051	250000000	mg/L
MW-4	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	9/7/2016	Fluoride, Total	0.21	0.1	0.05	1600000	mg/L
MW-4	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-4	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-4	9/7/2016	Sulfate	140	10	2.8	600000000	mg/L
MW-4	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-4	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/7/2016	TPH GRO	0.02	0.05	0.015	10100	mg/L
MW-4	9/21/2017	Bromide	0.25	0.5	0.073	NA	mg/L
MW-4	9/21/2017	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/21/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MW-4	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-4	9/21/2017	Sulfate	160	2.5	0.48	600000000	mg/L
MW-4	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-4	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/21/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-4	9/13/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-4	9/13/2018	Chloride	16	2.5	0.91	250000000	mg/L
MW-4	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/13/2018	Fluoride, Total	0.42	0.5	0.16	1600000	mg/L
MW-4	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-4	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-4	9/13/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-4	9/13/2018	Sulfate	150	2.5	1	600000000	mg/L
MW-4	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-4	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-4	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-4	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-4	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-4	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-4	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-4	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
MW-4	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-4	8/13/2019	Chloride	16	2.5	2.5	250000000	mg/L
MW-4	8/13/2019	Fluoride, Total	0.34	0.5	0.073	1600000	mg/L
MW-4	8/13/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
MW-4	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-4	8/13/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
MW-4	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-4	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-4	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-4	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-4	9/18/2020	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/18/2020	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-4	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/18/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-4	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-4	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-4	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-4	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-4	9/18/2020	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/18/2020	Fluoride, Total	0.31	0.5	0.22	1600000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-4	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/18/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-4	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-5	8/23/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-5	8/23/2012	Chloride	55	10	1	250000000	mg/L
MW-5	8/23/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-5	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-5	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-5	8/23/2012	Sulfate	160	10	2.4	600000000	mg/L
MW-5	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-5	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
MW-5	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-5	9/10/2013	Bromide	0.11	0.1	0.026	NA	mg/L
MW-5	9/10/2013	Chloride	57	10	3	250000000	mg/L
MW-5	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-5	9/10/2013	Fluoride, Total	0.76	0.1	0.033	1600000	mg/L
MW-5	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-5	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-5	9/10/2013	Nitrogen, Nitrate	0.8	0.1	0.016	10000000	mg/L
MW-5	9/10/2013	Sulfate	160	10	2.5	600000000	mg/L
MW-5	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-5	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-5	9/17/2014	Bromide	0.12	0.1	0.022	NA	mg/L
MW-5	9/17/2014	Chloride	56	10	5	250000000	mg/L
MW-5	9/17/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/17/2014	Fluoride, Total	0.73	0.1	0.018	1600000	mg/L
MW-5	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-5	9/17/2014	Nitrate & Nitrite	1.1	1	0.076	NA	mg/L
MW-5	9/17/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-5	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-5	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-5	8/14/2015	Bromide	0.11	0.1	0.077	NA	mg/L
MW-5	8/14/2015	Chloride	58	10	2.7	250000000	mg/L
MW-5	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	8/14/2015	Fluoride, Total	0.72	0.1	0.029	1600000	mg/L
MW-5	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-5	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-5	8/14/2015	Sulfate	160	10	2.3	600000000	mg/L
MW-5	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-5	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-5	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-5	9/7/2016	Bromide	0.095	0.1	0.044	NA	mg/L
MW-5	9/7/2016	Chloride	56	10	1	250000000	mg/L
MW-5	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/7/2016	Fluoride, Total	0.65	0.1	0.05	1600000	mg/L
MW-5	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-5	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-5	9/7/2016	Sulfate	160	10	2.8	600000000	mg/L
MW-5	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-5	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/7/2016	TPH GRO	0.027	0.05	0.015	10100	mg/L
MW-5	9/11/2017	Bromide	0.21	0.5	0.073	NA	mg/L
MW-5	9/11/2017	Chloride	60	2.5	1.2	250000000	mg/L
MW-5	9/11/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-5	9/11/2017	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
MW-5	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-5	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-5	9/11/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-5	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-5	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MW-5	9/17/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-5	9/17/2018	Chloride	63	2.5	0.91	250000000	mg/L
MW-5	9/17/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/17/2018	Fluoride, Total	0.7	0.5	0.16	1600000	mg/L
MW-5	9/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-5	9/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-5	9/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-5	9/17/2018	Sulfate	170	2.5	1	600000000	mg/L
MW-5	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-5	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-5	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-5	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-5	8/14/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-5	8/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-5	8/14/2019	Motor Oil	ND	5	5	85800	mg/L
MW-5	8/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-5	8/14/2019	Chloride	60	2.5	2.5	250000000	mg/L
MW-5	8/14/2019	Fluoride, Total	0.77	0.5	0.073	1600000	mg/L
MW-5	8/14/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-5	8/14/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-5	8/14/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-5	8/14/2019	Sulfate	180	2.5	0.3345	600000000	mg/L
MW-5	8/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-5	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-5	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-5	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-5	9/21/2020	Bromide	0.086	0.1	0.05	NA	mg/L
MW-5	9/21/2020	Fluoride, Total	0.6	0.1	0.043	1600000	mg/L
MW-5	9/21/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
MW-5	9/21/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
MW-5	9/21/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-5	9/21/2020	Chloride	54	10	5	250000000	mg/L
MW-5	9/21/2020	Sulfate	150	10	5	600000000	mg/L
MW-5	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
NAPIS-2	1/30/2012	Bromide	1.4	0.5	0.42	NA	mg/L
NAPIS-2	1/30/2012	Chloride	420	25	10	250000000	mg/L
NAPIS-2	1/30/2012	Fluoride, Total	1.1	0.5	0.15	1600000	mg/L
NAPIS-2	1/30/2012	Ortho-Phosphate	ND	2.5	0.81	NA	mg/L
NAPIS-2	1/30/2012	Nitrate & Nitrite	ND	1	0.48	NA	mg/L
NAPIS-2	1/30/2012	Sulfate	ND	2.5	1.1	600000000	mg/L
NAPIS-2	3/20/2012	Bromide	0.94	0.1	0.085	NA	mg/L
NAPIS-2	3/20/2012	Chloride	330	10	4	250000000	mg/L
NAPIS-2	3/20/2012	Fluoride, Total	0.49	0.1	0.02	1600000	mg/L
NAPIS-2	3/20/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
NAPIS-2	3/20/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
NAPIS-2	3/20/2012	Sulfate	5.3	0.5	0.23	600000000	mg/L
NAPIS-2	3/20/2012	TPH DRO	4.7	1	0.57	16700	mg/L
NAPIS-2	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/20/2012	TPH GRO	1.4	0.5	0.14	10100	mg/L
NAPIS-2	6/12/2012	Bromide	1.5	0.5	0.37	NA	mg/L
NAPIS-2	6/12/2012	Chloride	350	10	1	250000000	mg/L
NAPIS-2	6/12/2012	Fluoride, Total	1.7	0.5	0.19	1600000	mg/L
NAPIS-2	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	6/12/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	6/12/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	6/12/2012	Sulfate	7.9	2.5	0.59	600000000	mg/L
NAPIS-2	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/12/2012	TPH GRO	1.3	0.5	0.14	10100	mg/L
NAPIS-2	8/21/2012	Bromide	1.4	0.5	0.37	NA	mg/L
NAPIS-2	8/21/2012	Chloride	370	10	1	250000000	mg/L
NAPIS-2	8/21/2012	Fluoride, Total	1.6	0.5	0.19	1600000	mg/L
NAPIS-2	8/21/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	8/21/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	8/21/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	8/21/2012	Sulfate	11	2.5	0.59	600000000	mg/L
NAPIS-2	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/21/2012	TPH GRO	1.4	0.5	0.14	10100	mg/L
NAPIS-2	11/28/2012	Bromide	1.7	0.5	0.38	NA	mg/L
NAPIS-2	11/28/2012	Chloride	370	10	1	250000000	mg/L
NAPIS-2	11/28/2012	Fluoride, Total	1.7	0.5	0.19	1600000	mg/L
NAPIS-2	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	11/28/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	11/28/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	11/28/2012	Sulfate	11	2.5	0.59	600000000	mg/L
NAPIS-2	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/28/2012	TPH GRO	0.52	0.1	0.028	10100	mg/L
NAPIS-2	3/18/2013	Bromide	1.2	0.5	0.38	NA	mg/L
NAPIS-2	3/18/2013	Chloride	270	10	1.3	250000000	mg/L
NAPIS-2	3/18/2013	Fluoride, Total	1.6	0.5	0.1	1600000	mg/L
NAPIS-2	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-2	3/18/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
NAPIS-2	3/18/2013	Sulfate	4.9	2.5	1.2	600000000	mg/L
NAPIS-2	3/18/2013	TPH DRO	2.9	1	0.4	16700	mg/L
NAPIS-2	3/18/2013	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/18/2013	TPH GRO	0.65	0.05	0.02	10100	mg/L
NAPIS-2	6/12/2013	Bromide	1.2	1	0.26	NA	mg/L
NAPIS-2	6/12/2013	Chloride	230	50	15	250000000	mg/L
NAPIS-2	6/12/2013	Fluoride, Total	1.6	1	0.33	1600000	mg/L
NAPIS-2	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
NAPIS-2	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
NAPIS-2	6/12/2013	Sulfate	7.8	5	1.2	600000000	mg/L
NAPIS-2	6/12/2013	TPH DRO	1.9	1	0.4	16700	mg/L
NAPIS-2	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/12/2013	TPH GRO	0.74	0.05	0.02	10100	mg/L
NAPIS-2	9/3/2013	Bromide	0.37	0.1	0.026	NA	mg/L
NAPIS-2	9/3/2013	Chloride	290	10	3	250000000	mg/L
NAPIS-2	9/3/2013	Fluoride, Total	1.8	0.1	0.033	1600000	mg/L
NAPIS-2	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	9/3/2013	Nitrate & Nitrite	5.2	1	0.18	NA	mg/L
NAPIS-2	9/3/2013	Sulfate	7.8	0.5	0.12	600000000	mg/L
NAPIS-2	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/3/2013	TPH GRO	0.47	0.05	0.02	10100	mg/L
NAPIS-2	11/12/2013	Bromide	1.4	0.1	0.079	NA	mg/L
NAPIS-2	11/12/2013	Chloride	260	10	7.8	250000000	mg/L
NAPIS-2	11/12/2013	Fluoride, Total	1.7	0.1	0.035	1600000	mg/L
NAPIS-2	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
NAPIS-2	11/12/2013	Nitrogen, Nitrite	ND	0.1	0.015	1000000	mg/L
NAPIS-2	11/12/2013	Nitrogen, Nitrate	ND	0.1	0.065	10000000	mg/L
NAPIS-2	11/12/2013	Sulfate	23	0.5	0.16	600000000	mg/L
NAPIS-2	11/12/2013	TPH DRO	1.4	1	0.57	16700	mg/L
NAPIS-2	11/12/2013	TPH GRO	0.41	0.05	0.02	10100	mg/L
NAPIS-2	3/10/2014	Bromide	1.6	1	0.79	NA	mg/L
NAPIS-2	3/10/2014	Chloride	220	50	39	250000000	mg/L
NAPIS-2	3/10/2014	Fluoride, Total	1.5	1	0.35	1600000	mg/L
NAPIS-2	3/10/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
NAPIS-2	3/10/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
NAPIS-2	3/10/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
NAPIS-2	3/10/2014	Sulfate	10	5	1.6	600000000	mg/L
NAPIS-2	3/10/2014	TPH DRO	1.8	1	0.57	16700	mg/L
NAPIS-2	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/10/2014	TPH GRO	0.64	0.1	0.038	10100	mg/L
NAPIS-2	6/5/2014	Bromide	0.94	0.1	0.022	NA	mg/L
NAPIS-2	6/5/2014	Chloride	330	10	5	250000000	mg/L
NAPIS-2	6/5/2014	Fluoride, Total	1.3	0.1	0.018	1600000	mg/L
NAPIS-2	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
NAPIS-2	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
NAPIS-2	6/5/2014	Sulfate	4.8	0.5	0.068	600000000	mg/L
NAPIS-2	6/5/2014	TPH DRO	1.5	1	0.57	16700	mg/L
NAPIS-2	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/5/2014	TPH GRO	0.62	0.05	0.019	10100	mg/L
NAPIS-2	9/11/2014	Bromide	1.1	0.1	0.022	NA	mg/L
NAPIS-2	9/11/2014	Chloride	360	10	5	250000000	mg/L
NAPIS-2	9/11/2014	Fluoride, Total	1.6	0.1	0.018	1600000	mg/L
NAPIS-2	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-2	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
NAPIS-2	9/11/2014	Sulfate	11	0.5	0.082	600000000	mg/L
NAPIS-2	9/11/2014	TPH DRO	1.3	1	0.83	16700	mg/L
NAPIS-2	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/11/2014	TPH GRO	0.41	0.05	0.019	10100	mg/L
NAPIS-2	11/11/2014	Bromide	1.4	0.5	0.13	NA	mg/L
NAPIS-2	11/11/2014	Chloride	330	10	0.43	250000000	mg/L
NAPIS-2	11/11/2014	Fluoride, Total	1.6	0.5	0.074	1600000	mg/L
NAPIS-2	11/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
NAPIS-2	11/11/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
NAPIS-2	11/11/2014	Sulfate	11	2.5	0.41	600000000	mg/L
NAPIS-2	11/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-2	11/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/11/2014	TPH GRO	0.6	0.05	0.019	10100	mg/L
NAPIS-2	3/10/2015	Bromide	1.3	0.5	0.39	NA	mg/L
NAPIS-2	3/10/2015	Chloride	300	10	2.7	250000000	mg/L
NAPIS-2	3/10/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
NAPIS-2	3/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
NAPIS-2	3/10/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
NAPIS-2	3/10/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
NAPIS-2	3/10/2015	Sulfate	7.8	2.5	0.57	600000000	mg/L
NAPIS-2	3/10/2015	TPH DRO	1.2	1	0.91	16700	mg/L
NAPIS-2	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/10/2015	TPH GRO	0.49	0.05	0.012	10100	mg/L
NAPIS-2	6/2/2015	Bromide	1.3	1	0.77	NA	mg/L
NAPIS-2	6/2/2015	Chloride	290	50	13	250000000	mg/L
NAPIS-2	6/2/2015	Fluoride, Total	2.1	1	0.29	1600000	mg/L
NAPIS-2	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
NAPIS-2	6/2/2015	Sulfate	9.9	5	1.1	600000000	mg/L
NAPIS-2	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-2	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/11/2015	Bromide	0.62	0.1	0.077	NA	mg/L
NAPIS-2	8/11/2015	Chloride	310	10	2.7	250000000	mg/L
NAPIS-2	8/11/2015	Fluoride, Total	1.6	0.1	0.029	1600000	mg/L
NAPIS-2	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-2	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
NAPIS-2	8/11/2015	Sulfate	11	0.5	0.11	600000000	mg/L
NAPIS-2	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-2	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/11/2015	TPH GRO	0.51	0.05	0.04	10100	mg/L
NAPIS-2	10/28/2015	Bromide	1.2	0.1	0.068	NA	mg/L
NAPIS-2	10/28/2015	Chloride	320	10	6.8	250000000	mg/L
NAPIS-2	10/28/2015	Fluoride, Total	1.7	0.1	0.032	1600000	mg/L
NAPIS-2	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
NAPIS-2	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
NAPIS-2	10/28/2015	Sulfate	13	0.5	0.32	600000000	mg/L
NAPIS-2	10/28/2015	TPH DRO	1.1	1	0.91	16700	mg/L
NAPIS-2	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	10/28/2015	TPH GRO	0.37	0.05	0.012	10100	mg/L
NAPIS-2	3/1/2016	Bromide	2.2	0.5	0.16	NA	mg/L
NAPIS-2	3/1/2016	Chloride	330	10	0.55	250000000	mg/L
NAPIS-2	3/1/2016	Fluoride, Total	1.6	0.5	0.11	1600000	mg/L
NAPIS-2	3/1/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
NAPIS-2	3/1/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
NAPIS-2	3/1/2016	Sulfate	18	2.5	0.32	600000000	mg/L
NAPIS-2	3/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-2	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/1/2016	TPH GRO	0.38	0.05	0.025	10100	mg/L
NAPIS-2	6/7/2016	Bromide	0.43	0.1	0.032	NA	mg/L
NAPIS-2	6/7/2016	Chloride	340	10	0.55	250000000	mg/L
NAPIS-2	6/7/2016	Fluoride, Total	1.7	0.1	0.023	1600000	mg/L
NAPIS-2	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-2	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
NAPIS-2	6/7/2016	Sulfate	19	0.5	0.064	600000000	mg/L
NAPIS-2	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-2	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/7/2016	TPH GRO	0.44	0.05	0.025	10100	mg/L
NAPIS-2	9/1/2016	Bromide	1.3	0.5	0.22	NA	mg/L
NAPIS-2	9/1/2016	Chloride	300	10	1	250000000	mg/L
NAPIS-2	9/1/2016	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
NAPIS-2	9/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
NAPIS-2	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-2	9/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
NAPIS-2	9/1/2016	Sulfate	7.8	2.5	0.71	600000000	mg/L
NAPIS-2	9/1/2016	TPH DRO	1.1	1	0.69	16700	mg/L
NAPIS-2	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/1/2016	TPH GRO	0.75	0.05	0.025	10100	mg/L
NAPIS-2	11/14/2016	Bromide	0.97	0.1	0.044	NA	mg/L
NAPIS-2	11/14/2016	Chloride	310	10	1	250000000	mg/L
NAPIS-2	11/14/2016	Fluoride, Total	1.7	0.1	0.05	1600000	mg/L
NAPIS-2	11/14/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
NAPIS-2	11/14/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
NAPIS-2	11/14/2016	Sulfate	11	0.5	0.14	600000000	mg/L
NAPIS-2	11/14/2016	TPH DRO	1	1	0.69	16700	mg/L
NAPIS-2	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/14/2016	TPH GRO	0.56	0.1	0.051	10100	mg/L
NAPIS-2	2/21/2017	Bromide	1.1	0.1	0.031	NA	mg/L
NAPIS-2	2/21/2017	Chloride	250	10	5	250000000	mg/L
NAPIS-2	2/21/2017	Fluoride, Total	1.8	0.1	0.05	1600000	mg/L
NAPIS-2	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	2/21/2017	Sulfate	8.7	0.5	0.096	600000000	mg/L
NAPIS-2	2/21/2017	TPH DRO	2.4	1	0.48	16700	mg/L
NAPIS-2	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	2/21/2017	TPH GRO	0.6	0.05	0.025	10100	mg/L
NAPIS-2	6/1/2017	Bromide	1	0.1	0.014	NA	mg/L
NAPIS-2	6/1/2017	Chloride	260	10	5	250000000	mg/L
NAPIS-2	6/1/2017	Fluoride, Total	1.5	0.1	0.044	1600000	mg/L
NAPIS-2	6/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	6/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	6/1/2017	Sulfate	6.5	0.5	0.096	600000000	mg/L
NAPIS-2	6/1/2017	TPH DRO	1.2	1	0.36	16700	mg/L
NAPIS-2	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/1/2017	TPH GRO	0.53	0.05	0.025	10100	mg/L
NAPIS-2	9/5/2017	Bromide	1.1	0.5	0.073	NA	mg/L
NAPIS-2	9/5/2017	Chloride	280	10	5	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	9/5/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	9/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	9/5/2017	Sulfate	6.5	2.5	0.48	600000000	mg/L
NAPIS-2	9/5/2017	TPH DRO	1.7	1	0.36	16700	mg/L
NAPIS-2	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/5/2017	TPH GRO	0.63	0.05	0.025	10100	mg/L
NAPIS-2	12/4/2017	Bromide	1.1	0.5	0.073	NA	mg/L
NAPIS-2	12/4/2017	Chloride	270	10	5	250000000	mg/L
NAPIS-2	12/4/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	12/4/2017	Sulfate	6.1	2.5	0.48	600000000	mg/L
NAPIS-2	12/4/2017	TPH DRO	2.1	1	0.36	16700	mg/L
NAPIS-2	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	12/4/2017	TPH GRO	0.88	0.05	0.0097	10100	mg/L
NAPIS-2	2/9/2018	Bromide	1.2	0.5	0.073	NA	mg/L
NAPIS-2	2/9/2018	Chloride	250	10	5	250000000	mg/L
NAPIS-2	2/9/2018	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	2/9/2018	Ortho-Phosphate	1.8	2.5	1.2	NA	mg/L
NAPIS-2	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	2/9/2018	Sulfate	6	2.5	0.48	600000000	mg/L
NAPIS-2	2/9/2018	TPH DRO	1.3	1	0.63	16700	mg/L
NAPIS-2	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	2/9/2018	TPH GRO	0.81	0.05	0.0097	10100	mg/L
NAPIS-2	4/30/2018	Bromide	1	0.5	0.13	NA	mg/L
NAPIS-2	4/30/2018	Chloride	220	10	0.59	250000000	mg/L
NAPIS-2	4/30/2018	Fluoride, Total	1.6	0.5	0.15	1600000	mg/L
NAPIS-2	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-2	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
NAPIS-2	4/30/2018	Sulfate	3.6	2.5	1	600000000	mg/L
NAPIS-2	4/30/2018	TPH DRO	1.9	1	0.63	16700	mg/L
NAPIS-2	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	4/30/2018	TPH GRO	0.59	0.05	0.021	10100	mg/L
NAPIS-2	4/9/2019	TPH GRO	1.3	0.05	0.0211	10100	mg/L
NAPIS-2	4/9/2019	TPH DRO	1.5	1	0.35	16700	mg/L
NAPIS-2	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	4/9/2019	Bromide	0.74	0.5	0.0675	NA	mg/L
NAPIS-2	4/9/2019	Chloride	140	10	10	250000000	mg/L
NAPIS-2	4/9/2019	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
NAPIS-2	4/9/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
NAPIS-2	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-2	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-2	4/9/2019	Sulfate	4	2.5	0.32	600000000	mg/L
NAPIS-2	5/28/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
NAPIS-2	5/28/2019	Chloride	150	10	10	250000000	mg/L
NAPIS-2	5/28/2019	Fluoride, Total	2.2	0.5	0.073	1600000	mg/L
NAPIS-2	5/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
NAPIS-2	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	5/28/2019	Sulfate	2	2.5	0.3345	600000000	mg/L
NAPIS-2	5/28/2019	TPH GRO	0.96	0.25	0.1055	10100	mg/L
NAPIS-2	5/28/2019	TPH DRO	1.9	1	0.35	16700	mg/L
NAPIS-2	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	8/22/2019	TPH GRO	1	0.05	0.0211	10100	mg/L
NAPIS-2	8/22/2019	TPH DRO	2	1	0.35	16700	mg/L
NAPIS-2	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	8/22/2019	Bromide	0.87	0.5	0.088765	NA	mg/L
NAPIS-2	8/22/2019	Chloride	180	10	10	250000000	mg/L
NAPIS-2	8/22/2019	Fluoride, Total	2.1	0.5	0.073	1600000	mg/L
NAPIS-2	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
NAPIS-2	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	8/22/2019	Sulfate	0.97	2.5	0.3345	600000000	mg/L
NAPIS-2	10/21/2019	TPH GRO	0.99	0.05	0.0211	10100	mg/L
NAPIS-2	10/21/2019	TPH DRO	0.18	0.4	0.132	16700	mg/L
NAPIS-2	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
NAPIS-2	10/21/2019	Bromide	0.94	0.5	0.077	NA	mg/L
NAPIS-2	10/21/2019	Chloride	180	10	10	250000000	mg/L
NAPIS-2	10/21/2019	Fluoride, Total	2.2	0.5	0.144909	1600000	mg/L
NAPIS-2	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
NAPIS-2	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	10/21/2019	Sulfate	1.4	2.5	0.3345	600000000	mg/L
NAPIS-2	3/4/2020	TPH GRO	1.1	0.05	0.0068	10100	mg/L
NAPIS-2	3/4/2020	TPH DRO	0.56	0.4	0.2	16700	mg/L
NAPIS-2	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
NAPIS-2	3/4/2020	Bromide	0.79	0.5	0.25	NA	mg/L
NAPIS-2	3/4/2020	Fluoride, Total	1.9	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Nitrogen, Nitrate	1.9	0.5	0.11	10000000	mg/L
NAPIS-2	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
NAPIS-2	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	3/4/2020	Sulfate	2.4	2.5	1.2	600000000	mg/L
NAPIS-2	3/4/2020	Chloride	150	10	5	250000000	mg/L
NAPIS-2	9/22/2020	TPH GRO	1.4	0.05	0.008	10100	mg/L
NAPIS-2	9/22/2020	TPH DRO	1.7	0.07	0.067	16700	mg/L
NAPIS-2	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
NAPIS-2	9/22/2020	Bromide	0.68	0.5	0.25	NA	mg/L
NAPIS-2	9/22/2020	Fluoride, Total	2.2	0.5	0.22	1600000	mg/L
NAPIS-2	9/22/2020	Nitrogen, Nitrate	0.2	0.5	0.1	10000000	mg/L
NAPIS-2	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
NAPIS-2	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	9/22/2020	Sulfate	16	2.5	1.2	600000000	mg/L
NAPIS-2	9/22/2020	Chloride	130	10	5	250000000	mg/L
NAPIS-2	12/17/2020	Bicarbonate	586	1	0.5	NA	mg/L
NAPIS-2	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
NAPIS-2	12/17/2020	Fluoride, Total	2.04	1	0.3	1600000	mg/L
NAPIS-2	12/17/2020	Chloride	173	10	1.2	250000000	mg/L
NAPIS-2	12/17/2020	Sulfate	3.97	1	0.37	600000000	mg/L
NAPIS-2	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
NAPIS-2	12/17/2020	Ammonia	0.067	0.05	0.024	NA	mg/L
NAPIS-2	12/17/2020	TPH (C6-C10)	712	100	47	NA	ug/L
NAPIS-2	12/17/2020	TPH DRO	3130	149	120	16700	ug/L
NAPIS-2	12/17/2020	C28-C40	408	149	120	NA	ug/L
NAPIS-3	3/20/2012	Bromide	4.4	0.5	0.42	NA	mg/L
NAPIS-3	3/20/2012	Chloride	970	50	20	250000000	mg/L
NAPIS-3	3/20/2012	Fluoride, Total	0.59	0.5	0.1	1600000	mg/L
NAPIS-3	3/20/2012	Ortho-Phosphate	ND	2.5	0.23	NA	mg/L
NAPIS-3	3/20/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	3/20/2012	Nitrogen, Nitrate	19	0.5	0.25	10000000	mg/L
NAPIS-3	3/20/2012	Sulfate	390	25	11	600000000	mg/L
NAPIS-3	3/20/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/20/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	6/12/2012	Bromide	5.3	0.5	0.37	NA	mg/L
NAPIS-3	6/12/2012	Chloride	1000	50	5.1	250000000	mg/L
NAPIS-3	6/12/2012	Fluoride, Total	0.55	0.5	0.19	1600000	mg/L
NAPIS-3	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	6/12/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	6/12/2012	Nitrogen, Nitrate	19	0.5	0.25	10000000	mg/L
NAPIS-3	6/12/2012	Sulfate	450	10	2.4	600000000	mg/L
NAPIS-3	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/12/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	10/2/2012	Bromide	4.9	0.5	0.38	NA	mg/L
NAPIS-3	10/2/2012	Chloride	990	50	5.1	250000000	mg/L
NAPIS-3	10/2/2012	Fluoride, Total	0.84	0.5	0.19	1600000	mg/L
NAPIS-3	10/2/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	10/2/2012	Nitrate & Nitrite	20	1	0.5	NA	mg/L
NAPIS-3	10/2/2012	Sulfate	400	10	2.4	600000000	mg/L
NAPIS-3	10/2/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	10/2/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	10/2/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	11/28/2012	Bromide	3.5	0.5	0.38	NA	mg/L
NAPIS-3	11/28/2012	Chloride	880	25	2.6	250000000	mg/L
NAPIS-3	11/28/2012	Fluoride, Total	0.68	0.5	0.19	1600000	mg/L
NAPIS-3	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	11/28/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	11/28/2012	Nitrogen, Nitrate	14	0.5	0.25	10000000	mg/L
NAPIS-3	11/28/2012	Sulfate	280	10	2.4	600000000	mg/L
NAPIS-3	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/28/2012	TPH GRO	ND	0.1	0.028	10100	mg/L
NAPIS-3	3/18/2013	Bromide	4.8	0.5	0.38	NA	mg/L
NAPIS-3	3/18/2013	Chloride	940	50	6.6	250000000	mg/L
NAPIS-3	3/18/2013	Fluoride, Total	1.3	0.5	0.1	1600000	mg/L
NAPIS-3	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-3	3/18/2013	Nitrate & Nitrite	17	2	0.37	NA	mg/L
NAPIS-3	3/18/2013	Sulfate	380	10	4.7	600000000	mg/L
NAPIS-3	3/18/2013	TPH DRO	ND	1	0.4	16700	mg/L
NAPIS-3	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/18/2013	TPH GRO	ND	0.1	0.039	10100	mg/L
NAPIS-3	6/12/2013	Bromide	4.8	1	0.26	NA	mg/L
NAPIS-3	6/12/2013	Chloride	940	50	15	250000000	mg/L
NAPIS-3	6/12/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
NAPIS-3	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
NAPIS-3	6/12/2013	Nitrate & Nitrite	17	1	0.18	NA	mg/L
NAPIS-3	6/12/2013	Sulfate	400	5	1.2	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2013	TPH DRO	ND	1	0.4	16700	mg/L
NAPIS-3	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	9/3/2013	Bromide	5	0.1	0.026	NA	mg/L
NAPIS-3	9/3/2013	Chloride	980	100	30	250000000	mg/L
NAPIS-3	9/3/2013	Fluoride, Total	0.27	0.1	0.033	1600000	mg/L
NAPIS-3	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	9/3/2013	Nitrate & Nitrite	20	1	0.18	NA	mg/L
NAPIS-3	9/3/2013	Sulfate	410	10	2.5	600000000	mg/L
NAPIS-3	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/3/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	11/12/2013	Bromide	5	0.1	0.079	NA	mg/L
NAPIS-3	11/12/2013	Chloride	990	50	39	250000000	mg/L
NAPIS-3	11/12/2013	Fluoride, Total	0.36	0.1	0.035	1600000	mg/L
NAPIS-3	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
NAPIS-3	11/12/2013	Nitrogen, Nitrite	ND	2	0.3	1000000	mg/L
NAPIS-3	11/12/2013	Nitrogen, Nitrate	20	2	1.3	10000000	mg/L
NAPIS-3	11/12/2013	Sulfate	380	25	8	600000000	mg/L
NAPIS-3	11/12/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	11/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	3/10/2014	Bromide	4.9	0.5	0.39	NA	mg/L
NAPIS-3	3/10/2014	Chloride	920	50	39	250000000	mg/L
NAPIS-3	3/10/2014	Fluoride, Total	ND	0.5	0.17	1600000	mg/L
NAPIS-3	3/10/2014	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
NAPIS-3	3/10/2014	Nitrogen, Nitrite	ND	0.5	0.075	1000000	mg/L
NAPIS-3	3/10/2014	Nitrogen, Nitrate	20	0.5	0.33	10000000	mg/L
NAPIS-3	3/10/2014	Sulfate	430	10	3.2	600000000	mg/L
NAPIS-3	3/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	6/5/2014	Bromide	5.3	0.1	0.022	NA	mg/L
NAPIS-3	6/5/2014	Chloride	910	50	25	250000000	mg/L
NAPIS-3	6/5/2014	Fluoride, Total	0.3	0.1	0.018	1600000	mg/L
NAPIS-3	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
NAPIS-3	6/5/2014	Nitrate & Nitrite	19	1	0.076	NA	mg/L
NAPIS-3	6/5/2014	Sulfate	400	10	1.4	600000000	mg/L
NAPIS-3	6/5/2014	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/5/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	9/11/2014	Bromide	1.2	0.1	0.022	NA	mg/L
NAPIS-3	9/11/2014	Chloride	160	10	5	250000000	mg/L
NAPIS-3	9/11/2014	Fluoride, Total	1.1	0.1	0.018	1600000	mg/L
NAPIS-3	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-3	9/11/2014	Nitrate & Nitrite	1.1	1	0.076	NA	mg/L
NAPIS-3	9/11/2014	Sulfate	61	10	1.6	600000000	mg/L
NAPIS-3	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-3	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	11/13/2014	Fluoride, Total	0.35	0.1	0.015	1600000	mg/L
NAPIS-3	11/13/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-3	11/13/2014	Nitrate & Nitrite	19	1	0.083	NA	mg/L
NAPIS-3	11/13/2014	Sulfate	400	10	1.6	600000000	mg/L
NAPIS-3	11/13/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-3	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/13/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	11/13/2014	Bromide	5.3	0.1	0.026	NA	mg/L
NAPIS-3	11/13/2014	Chloride	890	50	2.2	250000000	mg/L
NAPIS-3	3/10/2015	Bromide	5.1	0.1	0.077	NA	mg/L
NAPIS-3	3/10/2015	Chloride	940	50	13	250000000	mg/L
NAPIS-3	3/10/2015	Fluoride, Total	0.42	0.1	0.029	1600000	mg/L
NAPIS-3	3/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-3	3/10/2015	Nitrogen, Nitrite	ND	2	0.4	1000000	mg/L
NAPIS-3	3/10/2015	Nitrogen, Nitrate	20	2	0.64	10000000	mg/L
NAPIS-3	3/10/2015	Sulfate	430	10	2.3	600000000	mg/L
NAPIS-3	3/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
NAPIS-3	6/2/2015	Bromide	4.9	1	0.77	NA	mg/L
NAPIS-3	6/2/2015	Chloride	790	50	13	250000000	mg/L
NAPIS-3	6/2/2015	Fluoride, Total	ND	1	0.29	1600000	mg/L
NAPIS-3	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
NAPIS-3	6/2/2015	Nitrate & Nitrite	15	2	0.45	NA	mg/L
NAPIS-3	6/2/2015	Sulfate	440	5	1.1	600000000	mg/L
NAPIS-3	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	8/11/2015	Bromide	5.1	0.1	0.077	NA	mg/L
NAPIS-3	8/11/2015	Chloride	920	50	13	250000000	mg/L
NAPIS-3	8/11/2015	Fluoride, Total	0.28	0.1	0.029	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-3	8/11/2015	Nitrate & Nitrite	24	1	0.22	NA	mg/L
NAPIS-3	8/11/2015	Sulfate	380	10	2.3	600000000	mg/L
NAPIS-3	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
NAPIS-3	10/28/2015	Bromide	4.9	0.1	0.068	NA	mg/L
NAPIS-3	10/28/2015	Chloride	880	25	17	250000000	mg/L
NAPIS-3	10/28/2015	Fluoride, Total	0.6	0.1	0.032	1600000	mg/L
NAPIS-3	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
NAPIS-3	10/28/2015	Nitrate & Nitrite	15	1	0.3	NA	mg/L
NAPIS-3	10/28/2015	Sulfate	420	10	6.4	600000000	mg/L
NAPIS-3	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
NAPIS-3	3/1/2016	Bromide	6.4	0.1	0.032	NA	mg/L
NAPIS-3	3/1/2016	Chloride	850	50	2.7	250000000	mg/L
NAPIS-3	3/1/2016	Fluoride, Total	0.53	0.1	0.023	1600000	mg/L
NAPIS-3	3/1/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-3	3/1/2016	Nitrate & Nitrite	14	1	0.42	NA	mg/L
NAPIS-3	3/1/2016	Sulfate	350	10	1.3	600000000	mg/L
NAPIS-3	3/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	6/7/2016	Bromide	4.1	0.1	0.032	NA	mg/L
NAPIS-3	6/7/2016	Chloride	870	25	1.4	250000000	mg/L
NAPIS-3	6/7/2016	Fluoride, Total	0.56	0.1	0.023	1600000	mg/L
NAPIS-3	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-3	6/7/2016	Nitrate & Nitrite	14	1	0.42	NA	mg/L
NAPIS-3	6/7/2016	Sulfate	320	10	1.3	600000000	mg/L
NAPIS-3	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/7/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	9/1/2016	Bromide	1.7	0.5	0.22	NA	mg/L
NAPIS-3	9/1/2016	Chloride	310	10	1	250000000	mg/L
NAPIS-3	9/1/2016	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
NAPIS-3	9/1/2016	Ortho-Phosphate	1.1	2.5	0.38	NA	mg/L
NAPIS-3	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-3	9/1/2016	Nitrogen, Nitrate	5	0.5	0.2	10000000	mg/L
NAPIS-3	9/1/2016	Sulfate	210	2.5	0.71	600000000	mg/L
NAPIS-3	9/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	11/14/2016	Bromide	4.1	0.5	0.22	NA	mg/L
NAPIS-3	11/14/2016	Chloride	320	25	2.5	250000000	mg/L
NAPIS-3	11/14/2016	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
NAPIS-3	11/14/2016	Ortho-Phosphate	0.9	2.5	0.38	NA	mg/L
NAPIS-3	11/14/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-3	11/14/2016	Nitrogen, Nitrate	3.5	0.5	0.2	10000000	mg/L
NAPIS-3	11/14/2016	Sulfate	230	2.5	0.71	600000000	mg/L
NAPIS-3	11/14/2016	TPH DRO	0.89	1	0.69	16700	mg/L
NAPIS-3	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/14/2016	TPH GRO	ND	0.1	0.051	10100	mg/L
NAPIS-3	2/21/2017	Bromide	2.3	0.1	0.031	NA	mg/L
NAPIS-3	2/21/2017	Chloride	350	25	12	250000000	mg/L
NAPIS-3	2/21/2017	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
NAPIS-3	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	2/21/2017	Nitrate & Nitrite	1.9	1	0.13	NA	mg/L
NAPIS-3	2/21/2017	Sulfate	150	10	1.9	600000000	mg/L
NAPIS-3	2/21/2017	TPH DRO	1.5	1	0.48	16700	mg/L
NAPIS-3	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	2/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	6/2/2017	Bromide	1.4	0.1	0.014	NA	mg/L
NAPIS-3	6/2/2017	Chloride	240	10	5	250000000	mg/L
NAPIS-3	6/2/2017	Fluoride, Total	0.72	0.1	0.044	1600000	mg/L
NAPIS-3	6/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	6/2/2017	Nitrate & Nitrite	0.56	1	0.13	NA	mg/L
NAPIS-3	6/2/2017	Sulfate	88	10	1.9	600000000	mg/L
NAPIS-3	6/2/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/2/2017	TPH GRO	0.063	0.05	0.025	10100	mg/L
NAPIS-3	9/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/5/2017	TPH GRO	0.055	0.05	0.025	10100	mg/L
NAPIS-3	12/4/2017	Bromide	1.6	0.5	0.073	NA	mg/L
NAPIS-3	12/4/2017	Chloride	260	10	5	250000000	mg/L
NAPIS-3	12/4/2017	Fluoride, Total	0.62	0.5	0.22	1600000	mg/L
NAPIS-3	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	12/4/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Sulfate	89	2.5	0.48	600000000	mg/L
NAPIS-3	12/4/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	12/4/2017	TPH GRO	0.09	0.05	0.0097	10100	mg/L
NAPIS-3	2/9/2018	Bromide	1.5	0.5	0.073	NA	mg/L
NAPIS-3	2/9/2018	Chloride	220	10	5	250000000	mg/L
NAPIS-3	2/9/2018	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
NAPIS-3	2/9/2018	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
NAPIS-3	2/9/2018	Nitrate & Nitrite	0.31	1	0.13	NA	mg/L
NAPIS-3	2/9/2018	Sulfate	61	2.5	0.48	600000000	mg/L
NAPIS-3	2/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
NAPIS-3	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	2/9/2018	TPH GRO	0.088	0.05	0.0097	10100	mg/L
NAPIS-3	4/30/2018	Bromide	1.4	0.5	0.13	NA	mg/L
NAPIS-3	4/30/2018	Chloride	190	10	0.59	250000000	mg/L
NAPIS-3	4/30/2018	Fluoride, Total	0.62	0.5	0.15	1600000	mg/L
NAPIS-3	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-3	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
NAPIS-3	4/30/2018	Sulfate	47	2.5	1	600000000	mg/L
NAPIS-3	4/30/2018	TPH DRO	ND	1	0.63	16700	mg/L
NAPIS-3	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	4/30/2018	TPH GRO	0.8	0.05	0.021	10100	mg/L
NAPIS-3	4/9/2019	TPH GRO	0.067	0.05	0.0211	10100	mg/L
NAPIS-3	4/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	4/9/2019	Bromide	2.4	0.5	0.0675	NA	mg/L
NAPIS-3	4/9/2019	Chloride	390	10	10	250000000	mg/L
NAPIS-3	4/9/2019	Fluoride, Total	0.65	0.5	0.25	1600000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrate	5.8	0.5	0.143	10000000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-3	4/9/2019	Sulfate	170	2.5	0.32	600000000	mg/L
NAPIS-3	4/9/2019	TPH GRO	0.067	0.05	0.0211	10100	mg/L
NAPIS-3	4/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	4/9/2019	Bromide	2.4	0.5	0.0675	NA	mg/L
NAPIS-3	4/9/2019	Chloride	390	10	10	250000000	mg/L
NAPIS-3	4/9/2019	Fluoride, Total	0.74	0.5	0.25	1600000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrate	5.7	0.5	0.143	10000000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-3	4/9/2019	Sulfate	170	2.5	0.32	600000000	mg/L
NAPIS-3	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	5/28/2019	TPH GRO	0.022	0.05	0.0211	10100	mg/L
NAPIS-3	5/28/2019	Bromide	2.5	0.5	0.088765	NA	mg/L
NAPIS-3	5/28/2019	Chloride	420	25	25	250000000	mg/L
NAPIS-3	5/28/2019	Fluoride, Total	0.69	0.5	0.073	1600000	mg/L
NAPIS-3	5/28/2019	Nitrogen, Nitrate	4.2	0.5	0.025	10000000	mg/L
NAPIS-3	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-3	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	5/28/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
NAPIS-3	8/22/2019	TPH GRO	0.026	0.05	0.0211	10100	mg/L
NAPIS-3	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	8/22/2019	Bromide	2.5	0.5	0.088765	NA	mg/L
NAPIS-3	8/22/2019	Chloride	420	25	25	250000000	mg/L
NAPIS-3	8/22/2019	Fluoride, Total	0.63	0.5	0.073	1600000	mg/L
NAPIS-3	8/22/2019	Nitrogen, Nitrate	0.63	0.5	0.025	10000000	mg/L
NAPIS-3	8/22/2019	Nitrogen, Nitrite	0.17	0.5	0.027	1000000	mg/L
NAPIS-3	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	8/22/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
NAPIS-3	10/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
NAPIS-3	10/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
NAPIS-3	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
NAPIS-3	10/21/2019	Bromide	2.8	0.5	0.077	NA	mg/L
NAPIS-3	10/21/2019	Chloride	440	25	25	250000000	mg/L
NAPIS-3	10/21/2019	Fluoride, Total	0.67	0.5	0.144909	1600000	mg/L
NAPIS-3	10/21/2019	Nitrogen, Nitrate	4.9	0.5	0.030387	10000000	mg/L
NAPIS-3	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-3	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	10/21/2019	Sulfate	200	2.5	0.3345	600000000	mg/L
NAPIS-3	3/4/2020	TPH GRO	0.11	0.05	0.0068	10100	mg/L
NAPIS-3	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
NAPIS-3	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
NAPIS-3	3/4/2020	Bromide	2.4	0.5	0.25	NA	mg/L
NAPIS-3	3/4/2020	Fluoride, Total	0.62	0.5	0.11	1600000	mg/L
NAPIS-3	3/4/2020	Nitrogen, Nitrate	3.9	0.5	0.11	10000000	mg/L
NAPIS-3	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	3/4/2020	Sulfate	150	2.5	1.2	600000000	mg/L
NAPIS-3	3/4/2020	Chloride	360	25	12	250000000	mg/L
NAPIS-3	9/22/2020	TPH GRO	0.11	0.05	0.008	10100	mg/L
NAPIS-3	9/22/2020	TPH DRO	0.38	0.07	0.067	16700	mg/L
NAPIS-3	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
NAPIS-3	9/22/2020	Bromide	1.7	0.5	0.25	NA	mg/L
NAPIS-3	9/22/2020	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
NAPIS-3	9/22/2020	Nitrogen, Nitrate	0.85	0.5	0.1	10000000	mg/L
NAPIS-3	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
NAPIS-3	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	9/22/2020	Sulfate	63	2.5	1.2	600000000	mg/L
NAPIS-3	9/22/2020	Chloride	290	10	5	250000000	mg/L
NAPIS-3	12/17/2020	Ammonia	0.07	0.05	0.024	NA	mg/L
NAPIS-3	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
NAPIS-3	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
NAPIS-3	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
NAPIS-3	12/17/2020	Chloride	266	10	1.2	250000000	mg/L
NAPIS-3	12/17/2020	Sulfate	7.48	1	0.37	600000000	mg/L
NAPIS-3	12/17/2020	Bicarbonate	867	1	0.5	NA	mg/L
NAPIS-3	12/17/2020	TPH DRO	1560	137	110	16700	ug/L
NAPIS-3	12/17/2020	C28-C40	154	137	110	NA	ug/L
NAPIS-3	12/17/2020	TPH (C6-C10)	221	100	47	NA	ug/L
OAPIS-1	3/18/2013	Bromide	4.6	0.5	0.38	NA	mg/L
OAPIS-1	3/18/2013	Chloride	1600	100	13	250000000	mg/L
OAPIS-1	3/18/2013	Fluoride, Total	1.8	0.5	0.1	1600000	mg/L
OAPIS-1	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	3/18/2013	Nitrate & Nitrite	ND	2	0.37	NA	mg/L
OAPIS-1	3/18/2013	Sulfate	65	2.5	1.2	600000000	mg/L
OAPIS-1	3/18/2013	TPH DRO	6	1	0.4	16700	mg/L
OAPIS-1	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/18/2013	TPH GRO	0.48	0.25	0.098	10100	mg/L
OAPIS-1	6/12/2013	Bromide	4.6	1	0.26	NA	mg/L
OAPIS-1	6/12/2013	Chloride	1800	50	15	250000000	mg/L
OAPIS-1	6/12/2013	Cyanide, Total	0.069	0.01	0.01	1460	mg/L
OAPIS-1	6/12/2013	Fluoride, Total	1.6	1	0.33	1600000	mg/L
OAPIS-1	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OAPIS-1	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
OAPIS-1	6/12/2013	Sulfate	41	5	1.2	600000000	mg/L
OAPIS-1	6/12/2013	TPH DRO	7.1	1	0.4	16700	mg/L
OAPIS-1	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/12/2013	TPH GRO	0.94	0.25	0.098	10100	mg/L
OAPIS-1	9/3/2013	Bromide	4.2	0.5	0.13	NA	mg/L
OAPIS-1	9/3/2013	Chloride	1800	100	30	250000000	mg/L
OAPIS-1	9/3/2013	Cyanide, Total	0.087	0.01	0.005	1460	mg/L
OAPIS-1	9/3/2013	Fluoride, Total	1.6	0.5	0.17	1600000	mg/L
OAPIS-1	9/3/2013	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/3/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
OAPIS-1	9/3/2013	Sulfate	38	2.5	0.62	600000000	mg/L
OAPIS-1	9/3/2013	TPH DRO	10	1	0.57	16700	mg/L
OAPIS-1	9/3/2013	TPH ORO	7.5	5	5	85800	mg/L
OAPIS-1	9/3/2013	TPH GRO	0.73	0.05	0.02	10100	mg/L
OAPIS-1	11/11/2013	Bromide	4.3	0.5	0.39	NA	mg/L
OAPIS-1	11/11/2013	Chloride	1600	100	78	250000000	mg/L
OAPIS-1	11/11/2013	Cyanide, Total	0.076	0.01	0.005	1460	mg/L
OAPIS-1	11/11/2013	Fluoride, Total	2	0.5	0.17	1600000	mg/L
OAPIS-1	11/11/2013	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
OAPIS-1	11/11/2013	Nitrate & Nitrite	5.4	2	0.77	NA	mg/L
OAPIS-1	11/11/2013	Sulfate	38	2.5	0.8	600000000	mg/L
OAPIS-1	11/11/2013	TPH DRO	23	1	0.57	16700	mg/L
OAPIS-1	11/11/2013	TPH GRO	0.81	0.05	0.02	10100	mg/L
OAPIS-1	3/10/2014	Bromide	4.8	1	0.79	NA	mg/L
OAPIS-1	3/10/2014	Chloride	1700	100	78	250000000	mg/L
OAPIS-1	3/10/2014	Cyanide, Total	0.0846	0.01	0.01	1460	mg/L
OAPIS-1	3/10/2014	Fluoride, Total	1.7	1	0.35	1600000	mg/L
OAPIS-1	3/10/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
OAPIS-1	3/10/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
OAPIS-1	3/10/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
OAPIS-1	3/10/2014	Sulfate	37	5	1.6	600000000	mg/L
OAPIS-1	3/10/2014	TPH DRO	6.4	1	0.57	16700	mg/L
OAPIS-1	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/10/2014	TPH GRO	0.71	0.05	0.019	10100	mg/L
OAPIS-1	6/5/2014	Bromide	6.1	0.5	0.11	NA	mg/L
OAPIS-1	6/5/2014	Chloride	1400	250	120	250000000	mg/L
OAPIS-1	6/5/2014	Cyanide, Total	0.0753	0.01	0.01	1460	mg/L
OAPIS-1	6/5/2014	Fluoride, Total	1.3	0.5	0.089	1600000	mg/L
OAPIS-1	6/5/2014	Ortho-Phosphate	ND	2.5	0.74	NA	mg/L
OAPIS-1	6/5/2014	Nitrate & Nitrite	ND	2	0.15	NA	mg/L
OAPIS-1	6/5/2014	Sulfate	22	2.5	0.34	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	TPH DRO	11	1	0.57	16700	mg/L
OAPIS-1	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/5/2014	TPH GRO	0.7	0.05	0.019	10100	mg/L
OAPIS-1	9/12/2014	Bromide	4.8	0.5	0.11	NA	mg/L
OAPIS-1	9/12/2014	Chloride	1700	100	50	250000000	mg/L
OAPIS-1	9/12/2014	Cyanide, Total	0.0908	0.01	0.01	1460	mg/L
OAPIS-1	9/12/2014	Fluoride, Total	1.2	0.5	0.089	1600000	mg/L
OAPIS-1	9/12/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OAPIS-1	9/12/2014	Sulfate	22	2.5	0.41	600000000	mg/L
OAPIS-1	9/12/2014	TPH DRO	6.8	1	0.83	16700	mg/L
OAPIS-1	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/12/2014	TPH GRO	0.75	0.05	0.019	10100	mg/L
OAPIS-1	11/11/2014	Bromide	4.8	0.5	0.13	NA	mg/L
OAPIS-1	11/11/2014	Chloride	1700	100	4.3	250000000	mg/L
OAPIS-1	11/11/2014	Cyanide, Total	0.0587	0.01	0.01	1460	mg/L
OAPIS-1	11/11/2014	Fluoride, Total	1.9	0.5	0.074	1600000	mg/L
OAPIS-1	11/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	11/11/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
OAPIS-1	11/11/2014	Sulfate	23	2.5	0.41	600000000	mg/L
OAPIS-1	11/11/2014	TPH DRO	9.2	1	0.83	16700	mg/L
OAPIS-1	11/11/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/11/2014	TPH GRO	0.79	0.25	0.096	10100	mg/L
OAPIS-1	3/10/2015	Bromide	5.3	0.5	0.39	NA	mg/L
OAPIS-1	3/10/2015	Chloride	1800	100	27	250000000	mg/L
OAPIS-1	3/10/2015	Cyanide, Total	0.0804	0.01	0.01	1460	mg/L
OAPIS-1	3/10/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
OAPIS-1	3/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OAPIS-1	3/10/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
OAPIS-1	3/10/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
OAPIS-1	3/10/2015	Sulfate	30	2.5	0.57	600000000	mg/L
OAPIS-1	3/10/2015	TPH DRO	6.5	1	0.91	16700	mg/L
OAPIS-1	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/10/2015	TPH GRO	0.56	0.25	0.06	10100	mg/L
OAPIS-1	6/2/2015	Bromide	5.4	1	0.77	NA	mg/L
OAPIS-1	6/2/2015	Chloride	1800	100	27	250000000	mg/L
OAPIS-1	6/2/2015	Cyanide, Total	0.0887	0.01	0.01	1460	mg/L
OAPIS-1	6/2/2015	Fluoride, Total	1.9	1	0.29	1600000	mg/L
OAPIS-1	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
OAPIS-1	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
OAPIS-1	6/2/2015	Sulfate	26	5	1.1	600000000	mg/L
OAPIS-1	6/2/2015	TPH DRO	4.4	1	0.91	16700	mg/L
OAPIS-1	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	8/11/2015	Bromide	5.7	0.5	0.39	NA	mg/L
OAPIS-1	8/11/2015	Chloride	2000	100	27	250000000	mg/L
OAPIS-1	8/11/2015	Cyanide, Total	0.0796	0.01	0.01	1460	mg/L
OAPIS-1	8/11/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
OAPIS-1	8/11/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OAPIS-1	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OAPIS-1	8/11/2015	Sulfate	20	2.5	0.57	600000000	mg/L
OAPIS-1	8/11/2015	TPH DRO	3.7	1	0.91	16700	mg/L
OAPIS-1	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	8/11/2015	TPH GRO	0.86	0.25	0.2	10100	mg/L
OAPIS-1	10/29/2015	Bromide	4.7	0.5	0.341	NA	mg/L
OAPIS-1	10/29/2015	Chloride	1800	100	68	250000000	mg/L
OAPIS-1	10/29/2015	Cyanide, Total	0.0684	0.01	0.01	1460	mg/L
OAPIS-1	10/29/2015	Fluoride, Total	1.6	0.5	0.16	1600000	mg/L
OAPIS-1	10/29/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
OAPIS-1	10/29/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OAPIS-1	10/29/2015	Sulfate	18	2.5	1.6	600000000	mg/L
OAPIS-1	10/29/2015	TPH DRO	7.1	1	0.91	16700	mg/L
OAPIS-1	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	10/29/2015	TPH GRO	0.8	0.25	0.06	10100	mg/L
OAPIS-1	3/1/2016	Bromide	9.1	1	0.32	NA	mg/L
OAPIS-1	3/1/2016	Chloride	1700	100	5.5	250000000	mg/L
OAPIS-1	3/1/2016	Cyanide, Total	0.0867	0.01	0.01	1460	mg/L
OAPIS-1	3/1/2016	Fluoride, Total	2	1	0.23	1600000	mg/L
OAPIS-1	3/1/2016	Ortho-Phosphate	ND	5	2.2	NA	mg/L
OAPIS-1	3/1/2016	Nitrate & Nitrite	ND	2	0.84	NA	mg/L
OAPIS-1	3/1/2016	Sulfate	23	5	0.64	600000000	mg/L
OAPIS-1	3/1/2016	TPH DRO	6.1	1	0.69	16700	mg/L
OAPIS-1	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/1/2016	TPH GRO	0.86	0.05	0.025	10100	mg/L
OAPIS-1	6/7/2016	Bromide	2.3	0.1	0.032	NA	mg/L
OAPIS-1	6/7/2016	Chloride	1800	100	5.5	250000000	mg/L
OAPIS-1	6/7/2016	Cyanide, Total	0.093	0.01	0.01	1460	mg/L
OAPIS-1	6/7/2016	Fluoride, Total	1.6	0.5	0.11	1600000	mg/L
OAPIS-1	6/7/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
OAPIS-1	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/7/2016	Sulfate	19	10	1.3	600000000	mg/L
OAPIS-1	6/7/2016	TPH DRO	5.2	1	0.69	16700	mg/L
OAPIS-1	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/7/2016	TPH GRO	1.2	0.05	0.025	10100	mg/L
OAPIS-1	9/1/2016	Bromide	4.7	0.5	0.22	NA	mg/L
OAPIS-1	9/1/2016	Chloride	1900	100	10	250000000	mg/L
OAPIS-1	9/1/2016	Cyanide, Total	0.106	0.01	0.01	1460	mg/L
OAPIS-1	9/1/2016	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
OAPIS-1	9/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
OAPIS-1	9/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
OAPIS-1	9/1/2016	Sulfate	14	2.5	0.71	600000000	mg/L
OAPIS-1	9/1/2016	TPH DRO	9.5	1	0.69	16700	mg/L
OAPIS-1	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/1/2016	TPH GRO	1.7	0.25	0.13	10100	mg/L
OAPIS-1	11/14/2016	Bromide	11	0.5	0.22	NA	mg/L
OAPIS-1	11/14/2016	Chloride	1600	100	10	250000000	mg/L
OAPIS-1	11/14/2016	Cyanide, Total	0.0837	0.01	0.01	1460	mg/L
OAPIS-1	11/14/2016	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
OAPIS-1	11/14/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	11/14/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
OAPIS-1	11/14/2016	Sulfate	13	2.5	0.71	600000000	mg/L
OAPIS-1	11/14/2016	TPH DRO	8.6	1	0.69	16700	mg/L
OAPIS-1	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/14/2016	TPH GRO	1.4	0.25	0.13	10100	mg/L
OAPIS-1	2/21/2017	Bromide	4.8	0.5	0.15	NA	mg/L
OAPIS-1	2/21/2017	Chloride	1400	100	50	250000000	mg/L
OAPIS-1	2/21/2017	Cyanide, Total	0.0745	0.01	0.0058	1460	mg/L
OAPIS-1	2/21/2017	Fluoride, Total	1.9	0.5	0.25	1600000	mg/L
OAPIS-1	2/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	2/21/2017	Sulfate	14	2.5	0.48	600000000	mg/L
OAPIS-1	2/21/2017	TPH DRO	12	1	0.48	16700	mg/L
OAPIS-1	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	2/21/2017	TPH GRO	0.92	0.25	0.12	10100	mg/L
OAPIS-1	6/1/2017	Bromide	4.6	0.5	0.073	NA	mg/L
OAPIS-1	6/1/2017	Chloride	1500	100	50	250000000	mg/L
OAPIS-1	6/1/2017	Cyanide, Total	0.111	0.005	0.005	1460	mg/L
OAPIS-1	6/1/2017	Fluoride, Total	1.3	0.5	0.22	1600000	mg/L
OAPIS-1	6/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	6/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	6/1/2017	Sulfate	9.4	2.5	0.48	600000000	mg/L
OAPIS-1	6/1/2017	TPH DRO	9.3	1	0.36	16700	mg/L
OAPIS-1	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/1/2017	TPH GRO	1.3	0.25	0.12	10100	mg/L
OAPIS-1	9/5/2017	Bromide	4	0.5	0.073	NA	mg/L
OAPIS-1	9/5/2017	Chloride	1600	100	50	250000000	mg/L
OAPIS-1	9/5/2017	Cyanide, Total	0.0844	0.005	0.005	1460	mg/L
OAPIS-1	9/5/2017	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
OAPIS-1	9/5/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	9/5/2017	Sulfate	8.7	2.5	0.48	600000000	mg/L
OAPIS-1	9/5/2017	TPH DRO	10	1	0.36	16700	mg/L
OAPIS-1	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/5/2017	TPH GRO	1.4	0.5	0.25	10100	mg/L
OAPIS-1	12/4/2017	Bromide	4	0.5	0.073	NA	mg/L
OAPIS-1	12/4/2017	Chloride	1800	50	25	250000000	mg/L
OAPIS-1	12/4/2017	Cyanide, Total	0.0746	0.005	0.005	1460	mg/L
OAPIS-1	12/4/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
OAPIS-1	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	12/4/2017	Sulfate	9.2	2.5	0.48	600000000	mg/L
OAPIS-1	12/4/2017	TPH DRO	10	1	0.36	16700	mg/L
OAPIS-1	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	12/4/2017	TPH GRO	1	0.25	0.048	10100	mg/L
OAPIS-1	2/9/2018	Bromide	4.4	0.5	0.073	NA	mg/L
OAPIS-1	2/9/2018	Chloride	1700	100	50	250000000	mg/L
OAPIS-1	2/9/2018	Cyanide, Total	0.0451	0.005	0.005	1460	mg/L
OAPIS-1	2/9/2018	Fluoride, Total	1.6	0.5	0.22	1600000	mg/L
OAPIS-1	2/9/2018	Ortho-Phosphate	2.7	2.5	1.2	NA	mg/L
OAPIS-1	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	2/9/2018	Sulfate	10	2.5	0.48	600000000	mg/L
OAPIS-1	2/9/2018	TPH DRO	6.9	1	0.63	16700	mg/L
OAPIS-1	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	2/9/2018	TPH GRO	0.62	0.05	0.0097	10100	mg/L
OAPIS-1	4/30/2018	Bromide	4.2	0.5	0.13	NA	mg/L
OAPIS-1	4/30/2018	Chloride	1500	100	5.9	250000000	mg/L
OAPIS-1	4/30/2018	Cyanide, Total	0.0848	0.005	0.005	1460	mg/L
OAPIS-1	4/30/2018	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OAPIS-1	4/30/2018	Sulfate	12	2.5	1	600000000	mg/L
OAPIS-1	4/30/2018	TPH DRO	8.9	1	0.63	16700	mg/L
OAPIS-1	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	4/30/2018	TPH GRO	0.46	0.05	0.021	10100	mg/L
OAPIS-1	9/6/2018	Bromide	4.4	0.5	0.13	NA	mg/L
OAPIS-1	9/6/2018	Chloride	1400	100	36	250000000	mg/L
OAPIS-1	9/6/2018	Cyanide, Total	0.052	0.005	0.005	1460	mg/L
OAPIS-1	9/6/2018	Fluoride, Total	1.9	0.5	0.15	1600000	mg/L
OAPIS-1	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
OAPIS-1	9/6/2018	Sulfate	4.8	2.5	1	600000000	mg/L
OAPIS-1	9/6/2018	TPH DRO	9.8	1	0.63	16700	mg/L
OAPIS-1	9/6/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/6/2018	TPH GRO	0.71	0.05	0.024	10100	mg/L
OAPIS-1	11/19/2018	Bromide	4.1	0.5	0.1	NA	mg/L
OAPIS-1	11/19/2018	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	11/19/2018	Cyanide, Total	0.0888	0.005	0.005	1460	mg/L
OAPIS-1	11/19/2018	Fluoride, Total	1.7	0.5	0.5	1600000	mg/L
OAPIS-1	11/19/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OAPIS-1	11/19/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OAPIS-1	11/19/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OAPIS-1	11/19/2018	Sulfate	5.1	2.5	0.63	600000000	mg/L
OAPIS-1	11/19/2018	TPH DRO	9.9	1	0.63	16700	mg/L
OAPIS-1	11/19/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/19/2018	TPH GRO	0.65	0.05	0.024	10100	mg/L
OAPIS-1	3/28/2019	Cyanide, Total	0.0818	0.005	0.005	1460	mg/L
OAPIS-1	3/28/2019	TPH DRO	11	1	0.35	16700	mg/L
OAPIS-1	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	3/28/2019	TPH GRO	0.68	0.1	0.0614	10100	mg/L
OAPIS-1	3/28/2019	Bromide	3.9	0.5	0.0675	NA	mg/L
OAPIS-1	3/28/2019	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	3/28/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
OAPIS-1	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
OAPIS-1	3/28/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OAPIS-1	3/28/2019	Sulfate	8.1	2.5	0.32	600000000	mg/L
OAPIS-1	5/8/2019	TPH GRO	0.76	0.1	0.0614	10100	mg/L
OAPIS-1	5/8/2019	TPH DRO	11	1	0.35	16700	mg/L
OAPIS-1	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	5/8/2019	Bromide	3.8	0.5	0.088765	NA	mg/L
OAPIS-1	5/8/2019	Chloride	1600	50	6.25	250000000	mg/L
OAPIS-1	5/8/2019	Fluoride, Total	1.6	0.5	0.25	1600000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OAPIS-1	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OAPIS-1	5/8/2019	Sulfate	8.5	2.5	0.2675	600000000	mg/L
OAPIS-1	5/8/2019	Cyanide, Total	0.0794	0.005	0.005	1460	mg/L
OAPIS-1	5/8/2019	TPH GRO	0.69	0.1	0.0614	10100	mg/L
OAPIS-1	5/8/2019	TPH DRO	13	1	0.35	16700	mg/L
OAPIS-1	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	5/8/2019	Bromide	3.8	0.5	0.088765	NA	mg/L
OAPIS-1	5/8/2019	Chloride	1600	50	6.25	250000000	mg/L
OAPIS-1	5/8/2019	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OAPIS-1	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OAPIS-1	5/8/2019	Sulfate	8.2	2.5	0.2675	600000000	mg/L
OAPIS-1	5/8/2019	Cyanide, Total	0.0811	0.005	0.005	1460	mg/L
OAPIS-1	8/22/2019	TPH GRO	0.97	0.05	0.0211	10100	mg/L
OAPIS-1	8/22/2019	TPH DRO	12	1	0.35	16700	mg/L
OAPIS-1	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	8/22/2019	Bromide	3.7	0.5	0.088765	NA	mg/L
OAPIS-1	8/22/2019	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	8/22/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OAPIS-1	8/22/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
OAPIS-1	8/22/2019	Cyanide, Total	0.0658	0.005	0.005	1460	mg/L
OAPIS-1	8/22/2019	TPH GRO	0.95	0.05	0.0211	10100	mg/L
OAPIS-1	8/22/2019	TPH DRO	12	1	0.35	16700	mg/L
OAPIS-1	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	8/22/2019	Bromide	3.7	0.5	0.088765	NA	mg/L
OAPIS-1	8/22/2019	Chloride	1600	50	50	250000000	mg/L
OAPIS-1	8/22/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
OAPIS-1	8/22/2019	Cyanide, Total	0.0612	0.005	0.005	1460	mg/L
OAPIS-1	10/21/2019	TPH GRO	0.85	0.05	0.0211	10100	mg/L
OAPIS-1	10/21/2019	TPH DRO	1.4	0.4	0.132	16700	mg/L
OAPIS-1	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OAPIS-1	10/21/2019	Cyanide, Total	0.0719	0.01	0.01	1460	mg/L
OAPIS-1	10/21/2019	Bromide	3.7	0.5	0.077	NA	mg/L
OAPIS-1	10/21/2019	Chloride	1400	50	50	250000000	mg/L
OAPIS-1	10/21/2019	Fluoride, Total	1.6	0.5	0.144909	1600000	mg/L
OAPIS-1	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OAPIS-1	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OAPIS-1	10/21/2019	Sulfate	4.4	2.5	0.3345	600000000	mg/L
OAPIS-1	11/19/2019	Biochemical Oxygen Demand	5.7	2	2	NA	mg/L
OAPIS-1	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OAPIS-1	11/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	11/19/2019	Chemical Oxygen Demand	482	10	3	NA	mg/L
OAPIS-1	3/4/2020	Bromide	4.2	0.5	0.25	NA	mg/L
OAPIS-1	3/4/2020	Fluoride, Total	1.7	0.5	0.11	1600000	mg/L
OAPIS-1	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OAPIS-1	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OAPIS-1	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	3/4/2020	Sulfate	12	2.5	1.2	600000000	mg/L
OAPIS-1	3/4/2020	Chloride	1700	50	25	250000000	mg/L
OAPIS-1	3/4/2020	Cyanide, Total	0.0892	0.01	0.003	1460	mg/L
OAPIS-1	9/22/2020	TPH GRO	0.4	0.05	0.008	10100	mg/L
OAPIS-1	9/22/2020	TPH DRO	5.8	0.07	0.067	16700	mg/L
OAPIS-1	9/22/2020	TPH ORO	1.5	0.6	0.6	85800	mg/L
OAPIS-1	9/22/2020	Bromide	4.3	0.5	0.25	NA	mg/L
OAPIS-1	9/22/2020	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
OAPIS-1	9/22/2020	Nitrogen, Nitrate	0.21	0.5	0.1	10000000	mg/L
OAPIS-1	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OAPIS-1	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/22/2020	Sulfate	9.8	2.5	1.2	600000000	mg/L
OAPIS-1	9/22/2020	Chloride	1400	50	25	250000000	mg/L
OAPIS-1	9/22/2020	Cyanide, Total	0.0708	0.01	0.0039	1460	mg/L
OAPIS-1	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OAPIS-1	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OAPIS-1	12/17/2020	Cyanide, Total	0.067	0.005	0.0035	1460	mg/L
OAPIS-1	12/17/2020	Bicarbonate	1200	1	0.5	NA	mg/L
OAPIS-1	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OAPIS-1	12/17/2020	Fluoride, Total	1.97	1	0.3	1600000	mg/L
OAPIS-1	12/17/2020	Sulfate	10.7	10	3.7	600000000	mg/L
OAPIS-1	12/17/2020	Chloride	1420	50	6	250000000	mg/L
OAPIS-1	12/17/2020	TPH DRO	**24700**	143	115	16700	ug/L
OAPIS-1	12/17/2020	C28-C40	6410	143	115	NA	ug/L
OAPIS-1	12/17/2020	TPH (C6-C10)	460	100	47	NA	ug/L
OW-01	3/22/2012	Bromide	0.27	0.1	0.085	NA	mg/L
OW-01	3/22/2012	Chloride	62	10	4	250000000	mg/L
OW-01	3/22/2012	Fluoride, Total	0.34	0.1	0.02	1600000	mg/L
OW-01	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-01	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-01	3/22/2012	Nitrogen, Nitrate	0.33	0.1	0.05	10000000	mg/L
OW-01	3/22/2012	Sulfate	170	10	4.6	600000000	mg/L
OW-01	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	6/13/2012	Bromide	0.26	0.1	0.074	NA	mg/L
OW-01	6/13/2012	Chloride	61	10	1	250000000	mg/L
OW-01	6/13/2012	Fluoride, Total	0.34	0.1	0.038	1600000	mg/L
OW-01	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-01	6/13/2012	Sulfate	180	10	2.4	600000000	mg/L
OW-01	6/13/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-01	8/22/2012	Bromide	0.26	0.1	0.074	NA	mg/L
OW-01	8/22/2012	Chloride	62	10	1	250000000	mg/L
OW-01	8/22/2012	Fluoride, Total	0.24	0.1	0.038	1600000	mg/L
OW-01	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-01	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-01	8/22/2012	Sulfate	170	10	2.4	600000000	mg/L
OW-01	8/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	8/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	8/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	11/27/2012	Bromide	0.75	0.5	0.38	NA	mg/L
OW-01	11/27/2012	Chloride	72	2.5	0.26	250000000	mg/L
OW-01	11/27/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-01	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-01	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/27/2012	Sulfate	180	2.5	0.59	600000000	mg/L
OW-01	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	3/19/2013	Bromide	ND	0.5	0.38	NA	mg/L
OW-01	3/19/2013	Chloride	70	2.5	0.33	250000000	mg/L
OW-01	3/19/2013	Fluoride, Total	ND	0.5	0.1	1600000	mg/L
OW-01	3/19/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-01	3/19/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
OW-01	3/19/2013	Sulfate	200	2.5	1.2	600000000	mg/L
OW-01	3/19/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-01	3/19/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/19/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	6/13/2013	Bromide	ND	1	0.26	NA	mg/L
OW-01	6/13/2013	Chloride	61	5	1.5	250000000	mg/L
OW-01	6/13/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
OW-01	6/13/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OW-01	6/13/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
OW-01	6/13/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
OW-01	6/13/2013	Sulfate	180	5	1.2	600000000	mg/L
OW-01	6/13/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-01	6/13/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/13/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	9/4/2013	Bromide	0.22	0.1	0.026	NA	mg/L
OW-01	9/4/2013	Chloride	66	10	3	250000000	mg/L
OW-01	9/4/2013	Fluoride, Total	0.3	0.1	0.033	1600000	mg/L
OW-01	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	9/4/2013	Nitrate & Nitrite	29	1	0.18	NA	mg/L
OW-01	9/4/2013	Sulfate	180	10	2.5	600000000	mg/L
OW-01	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	11/11/2013	Bromide	0.26	0.1	0.079	NA	mg/L
OW-01	11/11/2013	Chloride	65	10	7.8	250000000	mg/L
OW-01	11/11/2013	Fluoride, Total	0.28	0.1	0.035	1600000	mg/L
OW-01	11/11/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-01	11/11/2013	Nitrate & Nitrite	4.7	1	0.38	NA	mg/L
OW-01	11/11/2013	Sulfate	170	10	3.2	600000000	mg/L
OW-01	11/11/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	11/11/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	3/7/2014	Bromide	0.27	0.1	0.079	NA	mg/L
OW-01	3/7/2014	Chloride	65	10	7.8	250000000	mg/L
OW-01	3/7/2014	Fluoride, Total	0.3	0.1	0.035	1600000	mg/L
OW-01	3/7/2014	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-01	3/7/2014	Nitrate & Nitrite	ND	1	0.38	NA	mg/L
OW-01	3/7/2014	Sulfate	170	10	3.2	600000000	mg/L
OW-01	3/7/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	3/7/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/7/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	6/3/2014	Bromide	0.27	0.1	0.022	NA	mg/L
OW-01	6/3/2014	Chloride	66	10	5	250000000	mg/L
OW-01	6/3/2014	Fluoride, Total	0.26	0.1	0.018	1600000	mg/L
OW-01	6/3/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
OW-01	6/3/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-01	6/3/2014	Sulfate	160	10	1.4	600000000	mg/L
OW-01	6/3/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/3/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	9/11/2014	Bromide	ND	0.5	0.11	NA	mg/L
OW-01	9/11/2014	Chloride	60	10	5	250000000	mg/L
OW-01	9/11/2014	Fluoride, Total	ND	0.5	0.089	1600000	mg/L
OW-01	9/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OW-01	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-01	9/11/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-01	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-01	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	11/10/2014	Bromide	0.27	0.1	0.026	NA	mg/L
OW-01	11/10/2014	Chloride	72	10	0.43	250000000	mg/L
OW-01	11/10/2014	Fluoride, Total	0.3	0.1	0.015	1600000	mg/L
OW-01	11/10/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-01	11/10/2014	Nitrogen, Nitrite	ND	0.1	0.01	1000000	mg/L
OW-01	11/10/2014	Nitrogen, Nitrate	0.3	0.1	0.0064	10000000	mg/L
OW-01	11/10/2014	Sulfate	170	10	1.6	600000000	mg/L
OW-01	11/10/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-01	11/10/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	3/9/2015	Bromide	0.28	0.1	0.077	NA	mg/L
OW-01	3/9/2015	Chloride	67	10	2.7	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2015	Fluoride, Total	0.23	0.1	0.029	1600000	mg/L
OW-01	3/9/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-01	3/9/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	3/9/2015	Sulfate	170	10	2.3	600000000	mg/L
OW-01	3/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	3/9/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-01	6/3/2015	Bromide	ND	0.5	0.39	NA	mg/L
OW-01	6/3/2015	Chloride	77	2.5	0.67	250000000	mg/L
OW-01	6/3/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-01	6/3/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-01	6/3/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	6/3/2015	Sulfate	190	2.5	0.57	600000000	mg/L
OW-01	6/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	6/3/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/3/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-01	8/12/2015	Bromide	0.25	0.1	0.077	NA	mg/L
OW-01	8/12/2015	Chloride	68	10	2.7	250000000	mg/L
OW-01	8/12/2015	Fluoride, Total	0.29	0.1	0.029	1600000	mg/L
OW-01	8/12/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-01	8/12/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	8/12/2015	Sulfate	160	10	2.3	600000000	mg/L
OW-01	8/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	8/12/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	8/12/2015	TPH GRO	ND	0.1	0.08	10100	mg/L
OW-01	10/28/2015	Bromide	0.26	0.1	0.068	NA	mg/L
OW-01	10/28/2015	Chloride	71	10	6.8	250000000	mg/L
OW-01	10/28/2015	Fluoride, Total	0.25	0.1	0.032	1600000	mg/L
OW-01	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
OW-01	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OW-01	10/28/2015	Sulfate	160	10	6.4	600000000	mg/L
OW-01	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	10/28/2015	TPH GRO	ND	0.1	0.024	10100	mg/L
OW-01	3/3/2016	Bromide	0.42	0.1	0.032	NA	mg/L
OW-01	3/3/2016	Chloride	70	10	0.55	250000000	mg/L
OW-01	3/3/2016	Fluoride, Total	0.27	0.1	0.023	1600000	mg/L
OW-01	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-01	3/3/2016	Nitrogen, Nitrite	ND	0.1	0.042	1000000	mg/L
OW-01	3/3/2016	Nitrogen, Nitrate	0.25	0.1	0.042	10000000	mg/L
OW-01	3/3/2016	Sulfate	160	10	1.3	600000000	mg/L
OW-01	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/3/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	6/6/2016	Bromide	0.25	0.1	0.032	NA	mg/L
OW-01	6/6/2016	Chloride	74	10	0.55	250000000	mg/L
OW-01	6/6/2016	Fluoride, Total	0.24	0.1	0.023	1600000	mg/L
OW-01	6/6/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-01	6/6/2016	Nitrate & Nitrite	0.49	1	0.42	NA	mg/L
OW-01	6/6/2016	Sulfate	170	10	1.3	600000000	mg/L
OW-01	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/6/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	9/6/2016	Bromide	0.27	0.5	0.22	NA	mg/L
OW-01	9/6/2016	Chloride	83	2.5	0.25	250000000	mg/L
OW-01	9/6/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-01	9/6/2016	Ortho-Phosphate	1.1	2.5	0.38	NA	mg/L
OW-01	9/6/2016	Nitrate & Nitrite	0.72	1	0.46	NA	mg/L
OW-01	9/6/2016	Sulfate	180	2.5	0.71	600000000	mg/L
OW-01	9/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	9/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/6/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-01	11/15/2016	Bromide	0.27	0.1	0.044	NA	mg/L
OW-01	11/15/2016	Chloride	81	10	1	250000000	mg/L
OW-01	11/15/2016	Fluoride, Total	0.25	0.1	0.05	1600000	mg/L
OW-01	11/15/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
OW-01	11/15/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
OW-01	11/15/2016	Nitrogen, Nitrate	0.29	0.1	0.041	10000000	mg/L
OW-01	11/15/2016	Sulfate	160	10	2.8	600000000	mg/L
OW-01	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/15/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	2/27/2017	Bromide	0.27	0.1	0.031	NA	mg/L
OW-01	2/27/2017	Chloride	86	10	5	250000000	mg/L
OW-01	2/27/2017	Fluoride, Total	0.21	0.1	0.05	1600000	mg/L
OW-01	2/27/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	2/27/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
OW-01	2/27/2017	Nitrogen, Nitrate	0.28	0.1	0.022	10000000	mg/L
OW-01	2/27/2017	Sulfate	160	10	1.9	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	2/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	5/31/2017	Bromide	0.28	0.1	0.014	NA	mg/L
OW-01	5/31/2017	Chloride	91	10	5	250000000	mg/L
OW-01	5/31/2017	Fluoride, Total	0.18	0.1	0.044	1600000	mg/L
OW-01	5/31/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	5/31/2017	Nitrate & Nitrite	0.28	1	0.13	NA	mg/L
OW-01	5/31/2017	Sulfate	160	10	1.9	600000000	mg/L
OW-01	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	5/31/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	9/7/2017	Bromide	0.35	0.5	0.073	NA	mg/L
OW-01	9/7/2017	Chloride	110	10	5	250000000	mg/L
OW-01	9/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	9/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	9/7/2017	Nitrate & Nitrite	0.34	1	0.13	NA	mg/L
OW-01	9/7/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	9/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	12/8/2017	Bromide	0.44	0.5	0.073	NA	mg/L
OW-01	12/8/2017	Chloride	96	10	5	250000000	mg/L
OW-01	12/8/2017	Fluoride, Total	0.23	0.5	0.22	1600000	mg/L
OW-01	12/8/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	12/8/2017	Nitrate & Nitrite	0.28	1	0.13	NA	mg/L
OW-01	12/8/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	12/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	12/8/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	12/8/2017	TPH GRO	0.012	0.05	0.0097	10100	mg/L
OW-01	2/27/2018	Bromide	0.4	0.5	0.073	NA	mg/L
OW-01	2/27/2018	Chloride	94	10	5	250000000	mg/L
OW-01	2/27/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	2/27/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	2/27/2018	Nitrate & Nitrite	0.36	1	0.13	NA	mg/L
OW-01	2/27/2018	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	2/27/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	5/15/2018	Bromide	0.29	0.1	0.027	NA	mg/L
OW-01	5/15/2018	Chloride	110	10	0.59	250000000	mg/L
OW-01	5/15/2018	Fluoride, Total	0.11	0.1	0.03	1600000	mg/L
OW-01	5/15/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
OW-01	5/15/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-01	5/15/2018	Sulfate	140	10	4.1	600000000	mg/L
OW-01	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-01	9/11/2018	Bromide	ND	0.5	0.13	NA	mg/L
OW-01	9/11/2018	Chloride	110	10	3.6	250000000	mg/L
OW-01	9/11/2018	Fluoride, Total	0.19	0.5	0.16	1600000	mg/L
OW-01	9/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-01	9/11/2018	Nitrate & Nitrite	0.28	1	0.27	NA	mg/L
OW-01	9/11/2018	Sulfate	160	2.5	1	600000000	mg/L
OW-01	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/11/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-01	11/8/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-01	11/8/2018	Chloride	110	10	10	250000000	mg/L
OW-01	11/8/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-01	11/8/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-01	11/8/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-01	11/8/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-01	11/8/2018	Sulfate	170	2.5	0.63	600000000	mg/L
OW-01	11/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	11/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/8/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-01	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-01	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	3/27/2019	Bromide	0.31	0.5	0.0675	NA	mg/L
OW-01	3/27/2019	Chloride	98	10	10	250000000	mg/L
OW-01	3/27/2019	Fluoride, Total	0.29	0.5	0.25	1600000	mg/L
OW-01	3/27/2019	Nitrogen, Nitrate	0.3	0.5	0.143	10000000	mg/L
OW-01	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-01	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-01	3/27/2019	Sulfate	170	2.5	0.32	600000000	mg/L
OW-01	5/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	5/21/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	5/21/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-01	5/21/2019	Chloride	110	10	1.25	250000000	mg/L
OW-01	5/21/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-01	5/21/2019	Nitrogen, Nitrate	0.34	0.5	0.027	10000000	mg/L
OW-01	5/21/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-01	5/21/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-01	5/21/2019	Sulfate	180	2.5	0.2675	600000000	mg/L
OW-01	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	8/15/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-01	8/15/2019	Chloride	110	10	10	250000000	mg/L
OW-01	8/15/2019	Fluoride, Total	0.26	0.5	0.073	1600000	mg/L
OW-01	8/15/2019	Nitrogen, Nitrate	0.26	0.5	0.025	10000000	mg/L
OW-01	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-01	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-01	8/15/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-01	10/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	10/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	10/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	10/16/2019	Bromide	ND	0.5	0.077	NA	mg/L
OW-01	10/16/2019	Chloride	100	10	10	250000000	mg/L
OW-01	10/16/2019	Fluoride, Total	0.27	0.5	0.144909	1600000	mg/L
OW-01	10/16/2019	Nitrogen, Nitrate & Nitrite	0.24	1	0.0485	10000000	mg/L
OW-01	10/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-01	10/16/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-01	3/9/2020	TPH GRO	0.012	0.05	0.0068	10100	mg/L
OW-01	3/9/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-01	3/9/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-01	3/9/2020	Bromide	0.39	0.5	0.25	NA	mg/L
OW-01	3/9/2020	Fluoride, Total	0.34	0.5	0.11	1600000	mg/L
OW-01	3/9/2020	Nitrogen, Nitrate	0.3	0.5	0.11	10000000	mg/L
OW-01	3/9/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-01	3/9/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	3/9/2020	Sulfate	180	2.5	1.2	600000000	mg/L
OW-01	3/9/2020	Chloride	110	10	5	250000000	mg/L
OW-01	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-01	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-01	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-01	9/20/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-01	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	9/20/2020	Nitrogen, Nitrate	0.31	0.5	0.1	10000000	mg/L
OW-01	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-01	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	9/20/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-01	9/20/2020	Chloride	130	10	5	250000000	mg/L
OW-01	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-01	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-01	12/11/2020	Bicarbonate	406	1	0.5	NA	mg/L
OW-01	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-01	12/11/2020	Nitrogen, Nitrate	0.216	0.1	0.033	10000000	mg/L
OW-01	12/11/2020	Chloride	135	10	1.2	250000000	mg/L
OW-01	12/11/2020	Sulfate	155	10	3.7	600000000	mg/L
OW-01	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-01	12/11/2020	TPH DRO	ND	131	105	16700	ug/L
OW-01	12/11/2020	C28-C40	ND	131	105	NA	ug/L
OW-10	3/22/2012	Bromide	0.64	0.1	0.085	NA	mg/L
OW-10	3/22/2012	Chloride	260	10	4	250000000	mg/L
OW-10	3/22/2012	Fluoride, Total	0.41	0.1	0.02	1600000	mg/L
OW-10	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-10	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-10	3/22/2012	Nitrogen, Nitrate	0.59	0.1	0.05	10000000	mg/L
OW-10	3/22/2012	Sulfate	140	10	4.6	600000000	mg/L
OW-10	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/22/2012	TPH GRO	0.062	0.05	0.014	10100	mg/L
OW-10	6/13/2012	Bromide	ND	2	1.5	NA	mg/L
OW-10	6/13/2012	Chloride	980	50	5.1	250000000	mg/L
OW-10	6/13/2012	Fluoride, Total	0.31	0.1	0.038	1600000	mg/L
OW-10	6/13/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
OW-10	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-10	6/13/2012	Sulfate	160	10	2.4	600000000	mg/L
OW-10	6/13/2012	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/13/2012	TPH GRO	0.14	0.05	0.05	10100	mg/L
OW-10	8/22/2012	Bromide	0.59	0.1	0.074	NA	mg/L
OW-10	8/22/2012	Chloride	280	10	1	250000000	mg/L
OW-10	8/22/2012	Fluoride, Total	0.34	0.1	0.038	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-10	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-10	8/22/2012	Sulfate	130	10	2.4	600000000	mg/L
OW-10	8/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	8/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	8/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-10	11/27/2012	Bromide	11	0.5	0.38	NA	mg/L
OW-10	11/27/2012	Chloride	2100	100	10	250000000	mg/L
OW-10	11/27/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-10	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-10	11/27/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
OW-10	11/27/2012	Sulfate	240	2.5	0.59	600000000	mg/L
OW-10	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/27/2012	TPH GRO	0.13	0.05	0.014	10100	mg/L
OW-10	3/19/2013	Bromide	ND	0.5	0.38	NA	mg/L
OW-10	3/19/2013	Chloride	1700	100	13	250000000	mg/L
OW-10	3/19/2013	Fluoride, Total	ND	0.5	0.1	1600000	mg/L
OW-10	3/19/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-10	3/19/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
OW-10	3/19/2013	Sulfate	230	2.5	1.2	600000000	mg/L
OW-10	3/19/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	3/19/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/19/2013	TPH GRO	0.11	0.05	0.02	10100	mg/L
OW-10	6/13/2013	Bromide	1.9	1	0.26	NA	mg/L
OW-10	6/13/2013	Chloride	2400	100	30	250000000	mg/L
OW-10	6/13/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
OW-10	6/13/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OW-10	6/13/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
OW-10	6/13/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
OW-10	6/13/2013	Sulfate	250	5	1.2	600000000	mg/L
OW-10	6/13/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	6/13/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/13/2013	TPH GRO	0.15	0.05	0.02	10100	mg/L
OW-10	9/4/2013	Bromide	0.98	0.1	0.026	NA	mg/L
OW-10	9/4/2013	Chloride	1200	50	15	250000000	mg/L
OW-10	9/4/2013	Fluoride, Total	0.19	0.1	0.033	1600000	mg/L
OW-10	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	9/4/2013	Nitrate & Nitrite	11	1	0.18	NA	mg/L
OW-10	9/4/2013	Sulfate	180	10	2.5	600000000	mg/L
OW-10	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/4/2013	TPH GRO	0.051	0.05	0.02	10100	mg/L
OW-10	11/11/2013	Bromide	0.73	0.1	0.079	NA	mg/L
OW-10	11/11/2013	Chloride	850	25	19	250000000	mg/L
OW-10	11/11/2013	Fluoride, Total	0.17	0.1	0.035	1600000	mg/L
OW-10	11/11/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-10	11/11/2013	Nitrate & Nitrite	1.3	1	0.38	NA	mg/L
OW-10	11/11/2013	Sulfate	150	25	8	600000000	mg/L
OW-10	11/11/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	11/11/2013	TPH GRO	0.055	0.05	0.02	10100	mg/L
OW-10	3/7/2014	Bromide	0.43	0.1	0.079	NA	mg/L
OW-10	3/7/2014	Chloride	1200	50	39	250000000	mg/L
OW-10	3/7/2014	Fluoride, Total	0.2	0.1	0.035	1600000	mg/L
OW-10	3/7/2014	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-10	3/7/2014	Nitrate & Nitrite	ND	1	0.38	NA	mg/L
OW-10	3/7/2014	Sulfate	190	10	3.2	600000000	mg/L
OW-10	3/7/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	3/7/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/7/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-10	6/3/2014	Bromide	1.2	0.1	0.022	NA	mg/L
OW-10	6/3/2014	Chloride	1500	100	50	250000000	mg/L
OW-10	6/3/2014	Fluoride, Total	ND	0.1	0.018	1600000	mg/L
OW-10	6/3/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
OW-10	6/3/2014	Nitrate & Nitrite	ND	4	0.3	NA	mg/L
OW-10	6/3/2014	Sulfate	200	10	1.4	600000000	mg/L
OW-10	6/3/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/3/2014	TPH GRO	0.069	0.05	0.019	10100	mg/L
OW-10	9/12/2014	Bromide	1.4	0.1	0.022	NA	mg/L
OW-10	9/12/2014	Chloride	1500	50	25	250000000	mg/L
OW-10	9/12/2014	Fluoride, Total	0.12	0.1	0.018	1600000	mg/L
OW-10	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-10	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-10	9/12/2014	Sulfate	200	10	1.6	600000000	mg/L
OW-10	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-10	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/12/2014	TPH GRO	0.064	0.05	0.019	10100	mg/L
OW-10	11/10/2014	Bromide	0.69	0.1	0.026	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/10/2014	Chloride	1600	50	2.2	250000000	mg/L
OW-10	11/10/2014	Fluoride, Total	0.2	0.1	0.015	1600000	mg/L
OW-10	11/10/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-10	11/10/2014	Nitrogen, Nitrite	ND	2	0.2	1000000	mg/L
OW-10	11/10/2014	Nitrogen, Nitrate	0.22	0.1	0.0064	10000000	mg/L
OW-10	11/10/2014	Sulfate	200	10	1.6	600000000	mg/L
OW-10	11/10/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-10	11/10/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/10/2014	TPH GRO	0.087	0.05	0.019	10100	mg/L
OW-10	3/9/2015	Bromide	1.1	0.1	0.077	NA	mg/L
OW-10	3/9/2015	Chloride	840	50	13	250000000	mg/L
OW-10	3/9/2015	Fluoride, Total	0.22	0.1	0.029	1600000	mg/L
OW-10	3/9/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-10	3/9/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	3/9/2015	Sulfate	200	10	2.3	600000000	mg/L
OW-10	3/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	3/9/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-10	6/3/2015	Bromide	1.6	0.5	0.39	NA	mg/L
OW-10	6/3/2015	Chloride	1500	50	13	250000000	mg/L
OW-10	6/3/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-10	6/3/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-10	6/3/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	6/3/2015	Sulfate	240	2.5	0.57	600000000	mg/L
OW-10	6/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	6/3/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/3/2015	TPH GRO	0.067	0.05	0.012	10100	mg/L
OW-10	8/12/2015	Bromide	2.7	2	1.5	NA	mg/L
OW-10	8/12/2015	Chloride	1900	100	27	250000000	mg/L
OW-10	8/12/2015	Fluoride, Total	ND	0.1	0.029	1600000	mg/L
OW-10	8/12/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-10	8/12/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	8/12/2015	Sulfate	240	10	2.3	600000000	mg/L
OW-10	8/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	8/12/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	8/12/2015	TPH GRO	0.064	0.05	0.04	10100	mg/L
OW-10	10/28/2015	Bromide	0.13	0.1	0.068	NA	mg/L
OW-10	10/28/2015	Chloride	1500	50	34	250000000	mg/L
OW-10	10/28/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
OW-10	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
OW-10	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OW-10	10/28/2015	Sulfate	220	10	6.4	600000000	mg/L
OW-10	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-10	3/3/2016	Bromide	1.3	0.1	0.032	NA	mg/L
OW-10	3/3/2016	Chloride	1100	50	2.7	250000000	mg/L
OW-10	3/3/2016	Fluoride, Total	0.2	0.1	0.023	1600000	mg/L
OW-10	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-10	3/3/2016	Nitrogen, Nitrite	ND	2	0.83	1000000	mg/L
OW-10	3/3/2016	Nitrogen, Nitrate	0.4	0.1	0.042	10000000	mg/L
OW-10	3/3/2016	Sulfate	200	10	1.3	600000000	mg/L
OW-10	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/3/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-10	6/6/2016	Bromide	0.94	0.1	0.032	NA	mg/L
OW-10	6/6/2016	Chloride	960	50	2.7	250000000	mg/L
OW-10	6/6/2016	Fluoride, Total	0.22	0.1	0.023	1600000	mg/L
OW-10	6/6/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-10	6/6/2016	Nitrate & Nitrite	0.49	1	0.42	NA	mg/L
OW-10	6/6/2016	Sulfate	200	10	1.3	600000000	mg/L
OW-10	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/6/2016	TPH GRO	0.047	0.05	0.025	10100	mg/L
OW-10	9/6/2016	Bromide	1.1	0.5	0.22	NA	mg/L
OW-10	9/6/2016	Chloride	1100	50	5.1	250000000	mg/L
OW-10	9/6/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	9/6/2016	Ortho-Phosphate	1.4	2.5	0.38	NA	mg/L
OW-10	9/6/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-10	9/6/2016	Sulfate	230	2.5	0.71	600000000	mg/L
OW-10	9/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	9/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/6/2016	TPH GRO	0.04	0.05	0.015	10100	mg/L
OW-10	11/15/2016	Bromide	0.93	0.1	0.044	NA	mg/L
OW-10	11/15/2016	Chloride	550	25	2.5	250000000	mg/L
OW-10	11/15/2016	Fluoride, Total	0.2	0.1	0.05	1600000	mg/L
OW-10	11/15/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
OW-10	11/15/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
OW-10	11/15/2016	Nitrogen, Nitrate	0.52	0.1	0.041	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/15/2016	Sulfate	190	10	2.8	600000000	mg/L
OW-10	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/15/2016	TPH GRO	0.04	0.05	0.025	10100	mg/L
OW-10	2/27/2017	Bromide	0.89	0.1	0.031	NA	mg/L
OW-10	2/27/2017	Chloride	440	25	12	250000000	mg/L
OW-10	2/27/2017	Fluoride, Total	0.14	0.1	0.05	1600000	mg/L
OW-10	2/27/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	2/27/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
OW-10	2/27/2017	Nitrogen, Nitrate	0.55	0.1	0.022	10000000	mg/L
OW-10	2/27/2017	Sulfate	180	10	1.9	600000000	mg/L
OW-10	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	2/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-10	5/31/2017	Bromide	1.1	0.1	0.014	NA	mg/L
OW-10	5/31/2017	Chloride	870	25	12	250000000	mg/L
OW-10	5/31/2017	Fluoride, Total	0.063	0.1	0.044	1600000	mg/L
OW-10	5/31/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	5/31/2017	Nitrate & Nitrite	0.47	1	0.13	NA	mg/L
OW-10	5/31/2017	Sulfate	180	10	1.9	600000000	mg/L
OW-10	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	5/31/2017	TPH GRO	0.027	0.05	0.025	10100	mg/L
OW-10	9/7/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	9/7/2017	Chloride	740	25	12	250000000	mg/L
OW-10	9/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	9/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	9/7/2017	Nitrate & Nitrite	0.59	1	0.13	NA	mg/L
OW-10	9/7/2017	Sulfate	210	2.5	0.48	600000000	mg/L
OW-10	9/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/7/2017	TPH GRO	0.036	0.05	0.025	10100	mg/L
OW-10	12/7/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	12/7/2017	Chloride	650	25	12	250000000	mg/L
OW-10	12/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	12/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	12/7/2017	Nitrate & Nitrite	0.76	1	0.13	NA	mg/L
OW-10	12/7/2017	Sulfate	230	2.5	0.48	600000000	mg/L
OW-10	12/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	12/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	12/7/2017	TPH GRO	0.022	0.05	0.0097	10100	mg/L
OW-10	2/27/2018	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	2/27/2018	Chloride	390	25	12	250000000	mg/L
OW-10	2/27/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	2/27/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	2/27/2018	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
OW-10	2/27/2018	Sulfate	220	2.5	0.48	600000000	mg/L
OW-10	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	2/27/2018	TPH GRO	0.026	0.05	0.025	10100	mg/L
OW-10	5/15/2018	Bromide	0.23	0.1	0.027	NA	mg/L
OW-10	5/15/2018	Chloride	850	25	1.5	250000000	mg/L
OW-10	5/15/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
OW-10	5/15/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
OW-10	5/15/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-10	5/15/2018	Sulfate	200	10	4.1	600000000	mg/L
OW-10	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-10	9/11/2018	Bromide	1.2	0.5	0.13	NA	mg/L
OW-10	9/11/2018	Chloride	830	50	18	250000000	mg/L
OW-10	9/11/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
OW-10	9/11/2018	Ortho-Phosphate	1.5	2.5	0.46	NA	mg/L
OW-10	9/11/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-10	9/11/2018	Nitrogen, Nitrate	1	0.5	0.033	10000000	mg/L
OW-10	9/11/2018	Sulfate	250	10	4.1	600000000	mg/L
OW-10	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/11/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-10	11/8/2018	Bromide	1	0.5	0.1	NA	mg/L
OW-10	11/8/2018	Chloride	860	50	50	250000000	mg/L
OW-10	11/8/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-10	11/8/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-10	11/8/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-10	11/8/2018	Nitrogen, Nitrate	0.94	0.5	0.066	10000000	mg/L
OW-10	11/8/2018	Sulfate	220	10	2.5	600000000	mg/L
OW-10	11/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	11/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/8/2018	TPH GRO	ND	0.05	0.024	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-10	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	3/27/2019	Bromide	1	0.5	0.0675	NA	mg/L
OW-10	3/27/2019	Chloride	460	25	25	250000000	mg/L
OW-10	3/27/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrate	0.94	0.5	0.143	10000000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-10	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-10	3/27/2019	Sulfate	230	2.5	0.32	600000000	mg/L
OW-10	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-10	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	3/27/2019	Bromide	0.99	0.5	0.0675	NA	mg/L
OW-10	3/27/2019	Chloride	500	25	25	250000000	mg/L
OW-10	3/27/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrate	0.91	0.5	0.143	10000000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-10	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-10	3/27/2019	Sulfate	230	2.5	0.32	600000000	mg/L
OW-10	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	5/28/2019	Bromide	0.98	0.5	0.088765	NA	mg/L
OW-10	5/28/2019	Chloride	510	25	25	250000000	mg/L
OW-10	5/28/2019	Fluoride, Total	0.25	0.5	0.073	1600000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrate	0.88	0.5	0.025	10000000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	5/28/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	5/28/2019	Bromide	0.97	0.5	0.088765	NA	mg/L
OW-10	5/28/2019	Chloride	530	25	25	250000000	mg/L
OW-10	5/28/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrate	0.87	0.5	0.025	10000000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	5/28/2019	Sulfate	180	10	1.338	600000000	mg/L
OW-10	5/28/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	5/28/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	8/15/2019	Bromide	1	0.5	0.088765	NA	mg/L
OW-10	8/15/2019	Chloride	860	25	25	250000000	mg/L
OW-10	8/15/2019	Fluoride, Total	0.19	0.5	0.073	1600000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrate	0.75	0.5	0.025	10000000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	8/15/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	8/15/2019	Bromide	0.97	0.5	0.088765	NA	mg/L
OW-10	8/15/2019	Chloride	840	25	25	250000000	mg/L
OW-10	8/15/2019	Fluoride, Total	0.15	0.5	0.073	1600000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrate	0.74	0.5	0.025	10000000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	8/15/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	10/17/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	10/17/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	10/17/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	10/17/2019	Bromide	1	0.5	0.077	NA	mg/L
OW-10	10/17/2019	Chloride	1100	50	50	250000000	mg/L
OW-10	10/17/2019	Fluoride, Total	0.16	0.5	0.144909	1600000	mg/L
OW-10	10/17/2019	Nitrogen, Nitrate	0.75	0.5	0.030387	10000000	mg/L
OW-10	10/17/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	10/17/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	10/17/2019	Sulfate	230	2.5	0.3345	600000000	mg/L
OW-10	3/4/2020	TPH GRO	0.011	0.05	0.0068	10100	mg/L
OW-10	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-10	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-10	3/4/2020	Bromide	1.1	0.5	0.25	NA	mg/L
OW-10	3/4/2020	Nitrogen, Nitrate	0.79	0.5	0.11	10000000	mg/L
OW-10	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-10	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	3/4/2020	Sulfate	220	10	5	600000000	mg/L
OW-10	3/4/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Chloride	1500	50	25	250000000	mg/L
OW-10	3/4/2020	TPH GRO	0.0074	0.05	0.0068	10100	mg/L
OW-10	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-10	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-10	3/4/2020	Bromide	1.1	0.5	0.25	NA	mg/L
OW-10	3/4/2020	Nitrogen, Nitrate	0.8	0.5	0.11	10000000	mg/L
OW-10	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-10	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	3/4/2020	Sulfate	220	10	5	600000000	mg/L
OW-10	3/4/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-10	3/4/2020	Chloride	1400	50	25	250000000	mg/L
OW-10	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-10	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-10	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-10	9/20/2020	Chloride	620	25	12	250000000	mg/L
OW-10	9/20/2020	Bromide	0.64	0.1	0.05	NA	mg/L
OW-10	9/20/2020	Fluoride, Total	0.089	0.1	0.043	1600000	mg/L
OW-10	9/20/2020	Nitrogen, Nitrate	0.88	0.1	0.02	10000000	mg/L
OW-10	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-10	9/20/2020	Sulfate	180	10	5	600000000	mg/L
OW-10	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-10	12/11/2020	Nitrogen, Nitrate	1.13	0.1	0.033	10000000	mg/L
OW-10	12/11/2020	Chloride	348	10	1.2	250000000	mg/L
OW-10	12/11/2020	Sulfate	169	10	3.7	600000000	mg/L
OW-10	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-10	12/11/2020	Nitrogen, Nitrate	1.14	0.1	0.033	10000000	mg/L
OW-10	12/11/2020	Chloride	364	10	1.2	250000000	mg/L
OW-10	12/11/2020	Sulfate	179	10	3.7	600000000	mg/L
OW-10	12/11/2020	Bicarbonate	467	1	0.5	NA	mg/L
OW-10	12/11/2020	Bicarbonate	470	1	0.5	NA	mg/L
OW-10	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-10	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-10	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-10	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-10	12/11/2020	TPH DRO	ND	133	106	16700	ug/L
OW-10	12/11/2020	C28-C40	ND	133	106	NA	ug/L
OW-10	12/11/2020	TPH DRO	ND	143	114	16700	ug/L
OW-10	12/11/2020	C28-C40	ND	143	114	NA	ug/L
OW-10	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-10	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-11	8/22/2012	Bromide	0.21	0.1	0.074	NA	mg/L
OW-11	8/22/2012	Chloride	82	10	1	250000000	mg/L
OW-11	8/22/2012	Fluoride, Total	1.7	0.1	0.038	1600000	mg/L
OW-11	8/22/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
OW-11	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-11	8/22/2012	Sulfate	940	25	5.9	600000000	mg/L
OW-11	9/16/2013	Bromide	0.2	0.1	0.026	NA	mg/L
OW-11	9/16/2013	Chloride	81	10	3	250000000	mg/L
OW-11	9/16/2013	Fluoride, Total	2.6	0.1	0.033	1600000	mg/L
OW-11	9/16/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-11	9/16/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
OW-11	9/16/2013	Nitrogen, Nitrate	0.34	0.1	0.016	10000000	mg/L
OW-11	9/16/2013	Sulfate	960	25	6.2	600000000	mg/L
OW-11	9/12/2014	Bromide	ND	0.1	0.022	NA	mg/L
OW-11	9/12/2014	Chloride	77	10	5	250000000	mg/L
OW-11	9/12/2014	Fluoride, Total	2.3	0.1	0.018	1600000	mg/L
OW-11	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-11	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-11	9/12/2014	Sulfate	960	25	4.1	600000000	mg/L
OW-11	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-11	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/12/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-11	8/17/2015	Bromide	0.35	0.1	0.077	NA	mg/L
OW-11	8/17/2015	Chloride	100	10	2.7	250000000	mg/L
OW-11	8/17/2015	Fluoride, Total	1.9	0.1	0.029	1600000	mg/L
OW-11	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-11	8/17/2015	Nitrate & Nitrite	2.1	1	0.22	NA	mg/L
OW-11	8/17/2015	Sulfate	880	10	2.3	600000000	mg/L
OW-11	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-11	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
OW-11	8/17/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-11	9/9/2016	Bromide	0.33	0.1	0.044	NA	mg/L
OW-11	9/9/2016	Chloride	100	10	1	250000000	mg/L
OW-11	9/9/2016	Fluoride, Total	1.6	0.1	0.05	1600000	mg/L
OW-11	9/9/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
OW-11	9/9/2016	Nitrate & Nitrite	1.7	1	0.46	NA	mg/L
OW-11	9/9/2016	Sulfate	900	10	2.8	600000000	mg/L
OW-11	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-11	9/18/2017	Bromide	0.42	0.5	0.073	NA	mg/L
OW-11	9/18/2017	Chloride	97	10	5	250000000	mg/L
OW-11	9/18/2017	Fluoride, Total	1.7	0.5	0.22	1600000	mg/L
OW-11	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-11	9/18/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
OW-11	9/18/2017	Sulfate	850	25	4.8	600000000	mg/L
OW-11	9/18/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-11	9/18/2017	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/18/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-11	9/18/2018	Bromide	0.28	0.5	0.13	NA	mg/L
OW-11	9/18/2018	Chloride	90	10	3.6	250000000	mg/L
OW-11	9/18/2018	Fluoride, Total	1.8	0.5	0.16	1600000	mg/L
OW-11	9/18/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
OW-11	9/18/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-11	9/18/2018	Nitrogen, Nitrate	0.89	0.5	0.033	10000000	mg/L
OW-11	9/18/2018	Sulfate	1000	10	4.1	600000000	mg/L
OW-11	9/18/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-11	9/18/2018	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/18/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-11	8/20/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-11	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-11	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-11	8/20/2019	Bromide	0.34	0.5	0.088765	NA	mg/L
OW-11	8/20/2019	Chloride	98	10	10	250000000	mg/L
OW-11	8/20/2019	Fluoride, Total	2	0.5	0.073	1600000	mg/L
OW-11	8/20/2019	Nitrogen, Nitrate	1.6	0.5	0.025	10000000	mg/L
OW-11	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-11	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-11	8/20/2019	Sulfate	940	10	1.338	600000000	mg/L
OW-11	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-11	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-11	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-11	9/20/2020	Sulfate	940	25	12	600000000	mg/L
OW-11	9/20/2020	Bromide	ND	0.1	0.05	NA	mg/L
OW-11	9/20/2020	Nitrogen, Nitrate	0.22	0.1	0.02	10000000	mg/L
OW-11	9/20/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-11	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-11	9/20/2020	Chloride	77	10	5	250000000	mg/L
OW-11	9/20/2020	Fluoride, Total	2.3	2	0.87	1600000	mg/L
OW-12	8/22/2012	Bromide	0.13	0.1	0.074	NA	mg/L
OW-12	8/22/2012	Chloride	16	10	1	250000000	mg/L
OW-12	8/22/2012	Fluoride, Total	0.48	0.1	0.038	1600000	mg/L
OW-12	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-12	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-12	8/22/2012	Sulfate	150	10	2.4	600000000	mg/L
OW-12	9/12/2014	Bromide	0.14	0.1	0.022	NA	mg/L
OW-12	9/12/2014	Chloride	19	0.5	0.25	250000000	mg/L
OW-12	9/12/2014	Fluoride, Total	0.47	0.1	0.018	1600000	mg/L
OW-12	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-12	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-12	9/12/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-12	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-12	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/12/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-12	8/13/2015	Bromide	0.14	0.1	0.077	NA	mg/L
OW-12	8/13/2015	Chloride	18	10	2.7	250000000	mg/L
OW-12	8/13/2015	Fluoride, Total	0.49	0.1	0.029	1600000	mg/L
OW-12	8/13/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-12	8/13/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
OW-12	8/13/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
OW-12	8/13/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-12	8/13/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-12	8/13/2015	TPH ORO	ND	5	5	85800	mg/L
OW-12	8/13/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-12	9/8/2016	Bromide	0.14	0.1	0.044	NA	mg/L
OW-12	9/8/2016	Chloride	19	0.5	0.051	250000000	mg/L
OW-12	9/8/2016	Fluoride, Total	0.4	0.1	0.05	1600000	mg/L
OW-12	9/8/2016	Ortho-Phosphate	0.37	0.5	0.076	NA	mg/L
OW-12	9/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-12	9/8/2016	Sulfate	160	10	2.8	600000000	mg/L
OW-12	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-12	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/8/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-12	9/19/2017	Bromide	0.36	0.5	0.073	NA	mg/L
OW-12	9/19/2017	Chloride	17	2.5	1.2	250000000	mg/L
OW-12	9/19/2017	Fluoride, Total	0.52	0.5	0.22	1600000	mg/L
OW-12	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-12	9/19/2017	Nitrogen, Nitrate	0.11	0.5	0.11	10000000	mg/L
OW-12	9/19/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-12	9/19/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-12	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/19/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-12	9/19/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-12	9/19/2018	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/19/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-12	9/17/2020	TPH GRO	0.37	0.05	0.008	10100	mg/L
OW-12	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-12	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-12	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-12	9/17/2020	Nitrogen, Nitrate	7.7	2	0.4	10000000	mg/L
OW-13	8/23/2012	Bromide	0.35	0.1	0.074	NA	mg/L
OW-13	8/23/2012	Chloride	27	10	1	250000000	mg/L
OW-13	8/23/2012	Fluoride, Total	0.25	0.1	0.038	1600000	mg/L
OW-13	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-13	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-13	8/23/2012	Sulfate	150	10	2.4	600000000	mg/L
OW-13	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-13	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-13	9/4/2013	Bromide	0.39	0.1	0.026	NA	mg/L
OW-13	9/4/2013	Chloride	28	10	3	250000000	mg/L
OW-13	9/4/2013	Fluoride, Total	0.28	0.1	0.033	1600000	mg/L
OW-13	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-13	9/4/2013	Nitrate & Nitrite	2.6	1	0.18	NA	mg/L
OW-13	9/4/2013	Sulfate	160	10	2.5	600000000	mg/L
OW-13	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-13	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-13	9/15/2014	Bromide	0.39	0.1	0.022	NA	mg/L
OW-13	9/15/2014	Chloride	28	10	5	250000000	mg/L
OW-13	9/15/2014	Fluoride, Total	0.22	0.1	0.018	1600000	mg/L
OW-13	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-13	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-13	9/15/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-13	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-13	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-13	8/11/2015	Bromide	0.37	0.1	0.077	NA	mg/L
OW-13	8/11/2015	Chloride	30	10	2.7	250000000	mg/L
OW-13	8/11/2015	Fluoride, Total	0.27	0.1	0.029	1600000	mg/L
OW-13	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-13	8/11/2015	Nitrate & Nitrite	4.9	1	0.22	NA	mg/L
OW-13	8/11/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-13	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-13	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-13	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-13	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-13	10/27/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-13	3/4/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	3/4/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-13	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	6/6/2016	TPH GRO	0.052	0.05	0.025	10100	mg/L
OW-13	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/31/2016	TPH GRO	0.068	0.05	0.025	10100	mg/L
OW-13	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	11/15/2016	TPH GRO	0.068	0.05	0.025	10100	mg/L
OW-13	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	2/27/2017	TPH GRO	0.057	0.05	0.025	10100	mg/L
OW-13	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	5/31/2017	TPH GRO	0.059	0.05	0.025	10100	mg/L
OW-13	9/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/6/2017	TPH GRO	0.074	0.05	0.025	10100	mg/L
OW-13	12/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	12/11/2017	TPH GRO	0.064	0.05	0.0097	10100	mg/L
OW-13	2/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/28/2018	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/28/2018	TPH GRO	0.06	0.05	0.025	10100	mg/L
OW-13	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-13	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/11/2018	TPH GRO	0.046	0.05	0.024	10100	mg/L
OW-13	11/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	11/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-13	2/5/2019	TPH GRO	0.042	0.05	0.0211	10100	mg/L
OW-13	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	2/5/2019	TPH GRO	0.044	0.05	0.0211	10100	mg/L
OW-13	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	5/1/2019	TPH GRO	0.048	0.05	0.0307	10100	mg/L
OW-13	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/12/2019	TPH GRO	0.064	0.05	0.0211	10100	mg/L
OW-13	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/12/2019	TPH GRO	0.061	0.05	0.0211	10100	mg/L
OW-13	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-13	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-13	8/13/2019	Chloride	57	2.5	2.5	250000000	mg/L
OW-13	8/13/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OW-13	8/13/2019	Nitrogen, Nitrate	0.12	0.5	0.025	10000000	mg/L
OW-13	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-13	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-13	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-13	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
OW-13	10/14/2019	TPH GRO	0.059	0.05	0.0193	10100	mg/L
OW-13	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	3/2/2020	TPH GRO	0.056	0.05	0.0068	10100	mg/L
OW-13	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-13	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-13	3/2/2020	Bromide	0.52	0.5	0.25	NA	mg/L
OW-13	3/2/2020	Chloride	36	2.5	1.2	250000000	mg/L
OW-13	3/2/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-13	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-13	3/2/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-13	3/2/2020	TPH GRO	0.053	0.05	0.0068	10100	mg/L
OW-13	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-13	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-13	3/2/2020	Bromide	0.51	0.5	0.25	NA	mg/L
OW-13	3/2/2020	Chloride	36	2.5	1.2	250000000	mg/L
OW-13	3/2/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-13	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-13	3/2/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-13	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-13	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-13	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-13	9/17/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-13	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrate	5.06	0.05	0.018	10000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrate & Nitrite	5.06	0.5	0.18	10000000	mg/L
OW-13	12/9/2020	TPH (C6-C10)	134	100	47	NA	ug/L
OW-13	12/9/2020	TPH DRO	ND	128	103	16700	ug/L
OW-13	12/9/2020	C28-C40	ND	128	103	NA	ug/L
OW-14	8/23/2012	Bromide	2.7	0.5	0.37	NA	mg/L
OW-14	8/23/2012	Chloride	410	25	2.6	250000000	mg/L
OW-14	8/23/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-14	8/23/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-14	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-14	8/23/2012	Sulfate	3.5	2.5	0.59	600000000	mg/L
OW-14	8/23/2012	TPH DRO	2.4	1	0.57	16700	mg/L
OW-14	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/23/2012	TPH GRO	15	0.5	0.14	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/4/2013	Bromide	2.5	0.1	0.026	NA	mg/L
OW-14	9/4/2013	Chloride	350	25	7.4	250000000	mg/L
OW-14	9/4/2013	Fluoride, Total	0.21	0.1	0.033	1600000	mg/L
OW-14	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-14	9/4/2013	Nitrate & Nitrite	5.9	1	0.18	NA	mg/L
OW-14	9/4/2013	Sulfate	3.2	0.5	0.12	600000000	mg/L
OW-14	9/4/2013	TPH DRO	7.8	1	0.57	16700	mg/L
OW-14	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/4/2013	TPH GRO	7.6	0.5	0.2	10100	mg/L
OW-14	9/15/2014	Bromide	1.5	0.1	0.022	NA	mg/L
OW-14	9/15/2014	Chloride	330	10	5	250000000	mg/L
OW-14	9/15/2014	Fluoride, Total	0.21	0.1	0.018	1600000	mg/L
OW-14	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-14	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-14	9/15/2014	Sulfate	2.6	0.5	0.082	600000000	mg/L
OW-14	9/15/2014	TPH DRO	4.5	1	0.83	16700	mg/L
OW-14	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/15/2014	TPH GRO	8.2	0.5	0.19	10100	mg/L
OW-14	8/10/2015	Bromide	2.6	0.5	0.39	NA	mg/L
OW-14	8/10/2015	Chloride	320	10	2.7	250000000	mg/L
OW-14	8/10/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-14	8/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-14	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-14	8/10/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
OW-14	8/10/2015	TPH DRO	2.7	1	0.91	16700	mg/L
OW-14	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/10/2015	TPH GRO	8.7	0.5	0.4	10100	mg/L
OW-14	10/27/2015	TPH DRO	4.1	1	0.91	16700	mg/L
OW-14	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-14	10/27/2015	TPH GRO	16	1	0.24	10100	mg/L
OW-14	3/4/2016	TPH DRO	2.9	1	0.69	16700	mg/L
OW-14	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	3/4/2016	TPH GRO	27	1	0.51	10100	mg/L
OW-14	6/6/2016	TPH DRO	4.5	1	0.69	16700	mg/L
OW-14	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	6/6/2016	TPH GRO	27	1	0.51	10100	mg/L
OW-14	8/31/2016	TPH DRO	4.1	1	0.69	16700	mg/L
OW-14	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/31/2016	TPH GRO	31	2.5	1.3	10100	mg/L
OW-14	11/15/2016	TPH DRO	3.4	1	0.69	16700	mg/L
OW-14	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	11/15/2016	TPH GRO	29	2.5	1.3	10100	mg/L
OW-14	2/27/2017	TPH DRO	4.3	1	0.36	16700	mg/L
OW-14	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	2/27/2017	TPH GRO	33	2.5	1.2	10100	mg/L
OW-14	5/30/2017	TPH DRO	4.6	1	0.36	16700	mg/L
OW-14	5/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	5/30/2017	TPH GRO	35	2.5	1.2	10100	mg/L
OW-14	9/6/2017	TPH DRO	4.5	1	0.36	16700	mg/L
OW-14	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/6/2017	TPH GRO	33	0.25	0.12	10100	mg/L
OW-14	12/11/2017	TPH DRO	4.3	1	0.36	16700	mg/L
OW-14	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	12/11/2017	TPH GRO	31	2.5	0.48	10100	mg/L
OW-14	2/27/2018	TPH DRO	4	1	0.63	16700	mg/L
OW-14	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	2/27/2018	TPH GRO	32	2.5	1.2	10100	mg/L
OW-14	5/15/2018	TPH DRO	4.4	1	0.63	16700	mg/L
OW-14	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	5/15/2018	TPH GRO	30	2.5	0.48	10100	mg/L
OW-14	9/11/2018	TPH DRO	3.9	1	0.63	16700	mg/L
OW-14	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/11/2018	TPH GRO	40	2.5	1.2	10100	mg/L
OW-14	11/6/2018	TPH DRO	4.4	1	0.63	16700	mg/L
OW-14	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	11/6/2018	TPH GRO	33	2.5	1.2	10100	mg/L
OW-14	2/5/2019	TPH GRO	36	2.5	1.055	10100	mg/L
OW-14	2/5/2019	TPH DRO	4.3	1	0.63	16700	mg/L
OW-14	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-14	5/1/2019	TPH GRO	29	2.5	1.535	10100	mg/L
OW-14	5/1/2019	TPH DRO	4.4	1	0.35	16700	mg/L
OW-14	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	8/23/2012	Bromide	0.74	0.1	0.074	NA	mg/L
OW-29	8/23/2012	Chloride	140	10	1	250000000	mg/L
OW-29	8/23/2012	Fluoride, Total	0.37	0.1	0.038	1600000	mg/L
OW-29	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-29	8/23/2012	Nitrate & Nitrite	1	1	0.5	NA	mg/L
OW-29	8/23/2012	Sulfate	83	10	2.4	600000000	mg/L
OW-29	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/23/2012	TPH GRO	0.9	0.05	0.014	10100	mg/L
OW-29	9/4/2013	Bromide	0.94	0.1	0.026	NA	mg/L
OW-29	9/4/2013	Chloride	160	10	3	250000000	mg/L
OW-29	9/4/2013	Fluoride, Total	0.43	0.1	0.033	1600000	mg/L
OW-29	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-29	9/4/2013	Nitrate & Nitrite	3.9	1	0.18	NA	mg/L
OW-29	9/4/2013	Sulfate	84	10	2.5	600000000	mg/L
OW-29	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-29	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/4/2013	TPH GRO	0.88	0.05	0.02	10100	mg/L
OW-29	9/15/2014	Bromide	0.77	0.1	0.022	NA	mg/L
OW-29	9/15/2014	Chloride	160	10	5	250000000	mg/L
OW-29	9/15/2014	Fluoride, Total	0.3	0.1	0.018	1600000	mg/L
OW-29	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-29	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-29	9/15/2014	Sulfate	73	10	1.6	600000000	mg/L
OW-29	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-29	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/15/2014	TPH GRO	0.52	0.05	0.019	10100	mg/L
OW-29	8/11/2015	Bromide	0.56	0.1	0.077	NA	mg/L
OW-29	8/11/2015	Chloride	170	10	2.7	250000000	mg/L
OW-29	8/11/2015	Fluoride, Total	0.31	0.1	0.029	1600000	mg/L
OW-29	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-29	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-29	8/11/2015	Sulfate	70	10	2.3	600000000	mg/L
OW-29	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-29	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/11/2015	TPH GRO	2.4	0.25	0.2	10100	mg/L
OW-29	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-29	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-29	10/27/2015	TPH GRO	2.6	0.25	0.06	10100	mg/L
OW-29	3/4/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	3/4/2016	TPH GRO	4.2	0.25	0.13	10100	mg/L
OW-29	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	6/6/2016	TPH GRO	4	0.5	0.25	10100	mg/L
OW-29	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/31/2016	TPH GRO	6.7	0.5	0.25	10100	mg/L
OW-29	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	11/15/2016	TPH GRO	6	0.5	0.25	10100	mg/L
OW-29	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	2/27/2017	TPH GRO	4.5	0.5	0.25	10100	mg/L
OW-29	5/30/2017	TPH DRO	0.51	1	0.36	16700	mg/L
OW-29	5/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	5/30/2017	TPH GRO	3.8	0.5	0.25	10100	mg/L
OW-29	9/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/6/2017	TPH GRO	3.8	0.25	0.12	10100	mg/L
OW-29	12/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	12/11/2017	TPH GRO	3.6	0.5	0.097	10100	mg/L
OW-29	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	2/27/2018	TPH GRO	3.5	0.25	0.12	10100	mg/L
OW-29	5/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	5/16/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	5/16/2018	TPH GRO	1.5	0.5	0.097	10100	mg/L
OW-29	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/11/2018	TPH GRO	3.5	0.25	0.12	10100	mg/L
OW-29	11/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	11/6/2018	TPH GRO	2.5	0.25	0.12	10100	mg/L
OW-29	2/5/2019	TPH GRO	2	0.25	0.1055	10100	mg/L
OW-29	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	5/1/2019	TPH GRO	2.4	0.25	0.1535	10100	mg/L
OW-29	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	5/1/2019	TPH GRO	2.4	0.25	0.1535	10100	mg/L
OW-29	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	8/12/2019	TPH GRO	3.1	0.25	0.1055	10100	mg/L
OW-29	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/14/2019	TPH GRO	2.4	0.05	0.0193	10100	mg/L
OW-29	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/14/2019	TPH GRO	2.5	0.25	0.0965	10100	mg/L
OW-29	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-29	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/15/2019	Bromide	0.21	0.5	0.077	NA	mg/L
OW-29	10/15/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-29	10/15/2019	Fluoride, Total	0.44	0.5	0.144909	1600000	mg/L
OW-29	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-29	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-29	10/15/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-29	2/24/2020	TPH GRO	2.5	0.25	0.034	10100	mg/L
OW-29	2/24/2020	TPH DRO	0.21	0.4	0.2	16700	mg/L
OW-29	2/24/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-29	2/24/2020	Nitrate & Nitrite	ND	1	0.12	NA	mg/L
OW-29	9/17/2020	TPH GRO	0.052	0.05	0.008	10100	mg/L
OW-29	9/17/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
OW-29	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-29	9/17/2020	Nitrate & Nitrite	0.23	1	0.061	NA	mg/L
OW-29	9/17/2020	TPH GRO	ND	0.25	0.04	10100	mg/L
OW-29	9/17/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
OW-29	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-29	9/17/2020	Nitrogen, Nitrate	0.34	0.1	0.02	10000000	mg/L
OW-29	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrate & Nitrite	10	0.5	0.18	10000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrate	10	0.05	0.018	10000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-29	12/9/2020	TPH DRO	292	123	98.7	16700	ug/L
OW-29	12/9/2020	C28-C40	ND	123	98.7	NA	ug/L
OW-29	12/9/2020	TPH (C6-C10)	2950	100	47	NA	ug/L
OW-30	8/23/2012	Bromide	0.35	0.1	0.074	NA	mg/L
OW-30	8/23/2012	Chloride	140	10	1	250000000	mg/L
OW-30	8/23/2012	Fluoride, Total	0.31	0.1	0.038	1600000	mg/L
OW-30	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-30	8/23/2012	Nitrate & Nitrite	1.5	1	0.5	NA	mg/L
OW-30	8/23/2012	Sulfate	53	10	2.4	600000000	mg/L
OW-30	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-30	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/23/2012	TPH GRO	1.8	0.05	0.014	10100	mg/L
OW-30	9/4/2013	Bromide	0.77	0.1	0.026	NA	mg/L
OW-30	9/4/2013	Chloride	170	10	3	250000000	mg/L
OW-30	9/4/2013	Fluoride, Total	0.26	0.1	0.033	1600000	mg/L
OW-30	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-30	9/4/2013	Nitrate & Nitrite	4.6	1	0.18	NA	mg/L
OW-30	9/4/2013	Sulfate	55	10	2.5	600000000	mg/L
OW-30	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-30	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/4/2013	TPH GRO	1.4	0.05	0.02	10100	mg/L
OW-30	9/17/2014	Bromide	0.63	0.1	0.022	NA	mg/L
OW-30	9/17/2014	Chloride	180	10	5	250000000	mg/L
OW-30	9/17/2014	Fluoride, Total	0.2	0.1	0.018	1600000	mg/L
OW-30	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-30	9/17/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-30	9/17/2014	Sulfate	45	10	1.6	600000000	mg/L
OW-30	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-30	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/17/2014	TPH GRO	1.3	0.25	0.096	10100	mg/L
OW-30	8/10/2015	Bromide	0.54	0.1	0.077	NA	mg/L
OW-30	8/10/2015	Chloride	180	10	2.7	250000000	mg/L
OW-30	8/10/2015	Fluoride, Total	0.23	0.1	0.029	1600000	mg/L
OW-30	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-30	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-30	8/10/2015	Sulfate	42	10	2.3	600000000	mg/L
OW-30	8/10/2015	TPH DRO	3.6	1	0.91	16700	mg/L
OW-30	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/10/2015	TPH GRO	2.1	0.05	0.04	10100	mg/L
OW-30	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-30	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-30	10/27/2015	TPH GRO	3.7	0.05	0.012	10100	mg/L
OW-30	3/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	3/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	3/8/2016	TPH GRO	4.4	0.25	0.13	10100	mg/L
OW-30	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	6/6/2016	TPH ORO	ND	5	5	85800	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/6/2016	TPH GRO	4	0.5	0.25	10100	mg/L
OW-30	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/31/2016	TPH GRO	6.9	0.5	0.25	10100	mg/L
OW-30	11/14/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	11/14/2016	TPH GRO	5.2	0.5	0.25	10100	mg/L
OW-30	2/27/2017	TPH DRO	0.47	1	0.36	16700	mg/L
OW-30	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	2/27/2017	TPH GRO	4.2	0.5	0.25	10100	mg/L
OW-30	5/31/2017	TPH DRO	0.81	1	0.36	16700	mg/L
OW-30	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	5/31/2017	TPH GRO	3.5	0.5	0.25	10100	mg/L
OW-30	9/6/2017	TPH DRO	0.48	1	0.36	16700	mg/L
OW-30	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/6/2017	TPH GRO	3.5	0.05	0.025	10100	mg/L
OW-30	12/12/2017	TPH DRO	1.1	1	0.36	16700	mg/L
OW-30	12/12/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	12/12/2017	TPH GRO	3.7	0.5	0.097	10100	mg/L
OW-30	2/28/2018	TPH DRO	0.67	1	0.63	16700	mg/L
OW-30	2/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	2/28/2018	TPH GRO	2.9	0.05	0.025	10100	mg/L
OW-30	5/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-30	5/16/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	5/16/2018	TPH GRO	2.4	0.05	0.0097	10100	mg/L
OW-30	9/19/2018	TPH DRO	1.6	1	0.63	16700	mg/L
OW-30	9/19/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/19/2018	TPH GRO	2.8	0.25	0.12	10100	mg/L
OW-30	12/3/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-30	12/3/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	12/3/2018	TPH GRO	1.3	0.25	0.12	10100	mg/L
OW-30	3/27/2019	TPH GRO	1.9	0.25	0.1535	10100	mg/L
OW-30	3/27/2019	TPH DRO	0.92	1	0.35	16700	mg/L
OW-30	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-30	6/5/2019	TPH GRO	2.1	0.05	0.0211	10100	mg/L
OW-30	6/5/2019	TPH DRO	0.97	1	0.35	16700	mg/L
OW-30	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-30	6/5/2019	TPH GRO	2	0.05	0.0211	10100	mg/L
OW-30	6/5/2019	TPH DRO	0.92	1	0.35	16700	mg/L
OW-30	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	3/22/2012	Bromide	0.22	0.1	0.085	NA	mg/L
OW-50	3/22/2012	Chloride	27	10	4	250000000	mg/L
OW-50	3/22/2012	Fluoride, Total	0.59	0.5	0.1	1600000	mg/L
OW-50	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-50	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-50	3/22/2012	Nitrogen, Nitrate	0.15	0.1	0.05	10000000	mg/L
OW-50	3/22/2012	Sulfate	150	10	4.6	600000000	mg/L
OW-50	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	6/13/2012	Bromide	0.27	0.1	0.074	NA	mg/L
OW-50	6/13/2012	Chloride	27	10	1	250000000	mg/L
OW-50	6/13/2012	Fluoride, Total	0.54	0.1	0.038	1600000	mg/L
OW-50	6/13/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-50	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	6/13/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-50	6/13/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-50	8/23/2012	Bromide	0.22	0.1	0.074	NA	mg/L
OW-50	8/23/2012	Chloride	26	10	1	250000000	mg/L
OW-50	8/23/2012	Fluoride, Total	0.42	0.1	0.038	1600000	mg/L
OW-50	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-50	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	8/23/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-50	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	11/27/2012	Bromide	ND	0.5	0.38	NA	mg/L
OW-50	11/27/2012	Chloride	28	2.5	0.26	250000000	mg/L
OW-50	11/27/2012	Fluoride, Total	0.54	0.5	0.19	1600000	mg/L
OW-50	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-50	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	11/27/2012	Sulfate	160	2.5	0.59	600000000	mg/L
OW-50	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	9/4/2013	Bromide	0.18	0.1	0.026	NA	mg/L
OW-50	9/4/2013	Chloride	26	10	3	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Fluoride, Total	0.5	0.1	0.033	1600000	mg/L
OW-50	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-50	9/4/2013	Nitrate & Nitrite	2	1	0.18	NA	mg/L
OW-50	9/4/2013	Sulfate	140	10	2.5	600000000	mg/L
OW-50	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-50	9/15/2014	Bromide	0.26	0.1	0.022	NA	mg/L
OW-50	9/15/2014	Chloride	30	10	5	250000000	mg/L
OW-50	9/15/2014	Fluoride, Total	0.45	0.1	0.018	1600000	mg/L
OW-50	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-50	9/15/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
OW-50	9/15/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
OW-50	9/15/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-50	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-50	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-50	8/10/2015	Bromide	0.36	0.1	0.077	NA	mg/L
OW-50	8/10/2015	Chloride	31	10	2.7	250000000	mg/L
OW-50	8/10/2015	Fluoride, Total	0.47	0.1	0.029	1600000	mg/L
OW-50	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-50	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-50	8/10/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-50	8/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-50	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-50	8/10/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-50	9/9/2016	Bromide	0.3	0.1	0.044	NA	mg/L
OW-50	9/9/2016	Chloride	31	10	1	250000000	mg/L
OW-50	9/9/2016	Fluoride, Total	0.36	0.1	0.05	1600000	mg/L
OW-50	9/9/2016	Ortho-Phosphate	0.64	0.5	0.076	NA	mg/L
OW-50	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-50	9/9/2016	Sulfate	150	10	2.8	600000000	mg/L
OW-50	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-50	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-50	9/11/2017	Bromide	0.61	0.5	0.073	NA	mg/L
OW-50	9/11/2017	Chloride	35	2.5	1.2	250000000	mg/L
OW-50	9/11/2017	Fluoride, Total	0.37	0.5	0.22	1600000	mg/L
OW-50	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-50	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-50	9/11/2017	Sulfate	160	2.5	0.48	600000000	mg/L
OW-50	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-50	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-50	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-50	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-50	11/7/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-50	11/7/2018	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-50	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-50	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-50	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-50	11/7/2018	Sulfate	170	2.5	0.63	600000000	mg/L
OW-50	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-50	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-50	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-50	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-50	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	3/27/2019	Bromide	0.36	0.5	0.0675	NA	mg/L
OW-50	3/27/2019	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	3/27/2019	Fluoride, Total	0.41	0.5	0.25	1600000	mg/L
OW-50	3/27/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-50	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-50	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-50	3/27/2019	Sulfate	170	2.5	0.32	600000000	mg/L
OW-50	5/1/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-50	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	5/1/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-50	5/1/2019	Chloride	40	2.5	0.3125	250000000	mg/L
OW-50	5/1/2019	Fluoride, Total	0.46	0.5	0.25	1600000	mg/L
OW-50	5/1/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-50	5/1/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-50	5/1/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-50	5/1/2019	Sulfate	170	2.5	0.2675	600000000	mg/L
OW-50	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-50	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	8/16/2019	Bromide	0.41	0.5	0.088765	NA	mg/L
OW-50	8/16/2019	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	8/16/2019	Fluoride, Total	0.48	0.5	0.073	1600000	mg/L
OW-50	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-50	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-50	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-50	8/16/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
OW-50	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-50	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	10/15/2019	Bromide	0.34	0.5	0.077	NA	mg/L
OW-50	10/15/2019	Chloride	42	2.5	2.5	250000000	mg/L
OW-50	10/15/2019	Fluoride, Total	0.39	0.5	0.144909	1600000	mg/L
OW-50	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-50	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-50	10/15/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
OW-50	3/2/2020	TPH GRO	0.019	0.05	0.0068	10100	mg/L
OW-50	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-50	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-50	3/2/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-50	3/2/2020	Chloride	42	2.5	1.2	250000000	mg/L
OW-50	3/2/2020	Fluoride, Total	0.42	0.5	0.11	1600000	mg/L
OW-50	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-50	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-50	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-50	3/2/2020	Sulfate	160	2.5	1.2	600000000	mg/L
OW-50	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-50	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-50	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-50	9/17/2020	Bromide	0.36	0.1	0.05	NA	mg/L
OW-50	9/17/2020	Fluoride, Total	0.46	0.1	0.043	1600000	mg/L
OW-50	9/17/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-50	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-50	9/17/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-50	9/17/2020	Chloride	40	10	5	250000000	mg/L
OW-50	9/17/2020	Sulfate	140	10	5	600000000	mg/L
OW-50	12/9/2020	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
OW-50	12/9/2020	Chemical Oxygen Demand	10.3	10	6.4	NA	mg/L
OW-50	12/9/2020	Bromide	ND	5	0.55	NA	mg/L
OW-50	12/9/2020	Chloride	45.6	5	0.6	250000000	mg/L
OW-50	12/9/2020	Fluoride, Total	ND	5	1.5	1600000	mg/L
OW-50	12/9/2020	Sulfate	152	5	1.85	600000000	mg/L
OW-50	12/9/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-50	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-50	12/9/2020	Phosphorus, Ortho	0.0668	0.05	0.015	NA	mg/L
OW-50	12/9/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-50	12/9/2020	Solids, Total Suspended	98	5	0	NA	mg/L
OW-50	12/9/2020	TPH DRO	ND	129	103	16700	ug/L
OW-50	12/9/2020	C28-C40	ND	129	103	NA	ug/L
OW-50	12/9/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-50	12/9/2020	Solids, Total Suspended	98	5	0	NA	mg/L
OW-52	3/22/2012	Bromide	0.17	0.1	0.085	NA	mg/L
OW-52	3/22/2012	Chloride	26	10	4	250000000	mg/L
OW-52	3/22/2012	Fluoride, Total	0.56	0.1	0.02	1600000	mg/L
OW-52	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-52	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-52	3/22/2012	Nitrogen, Nitrate	ND	0.1	0.05	10000000	mg/L
OW-52	3/22/2012	Sulfate	130	10	4.6	600000000	mg/L
OW-52	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	6/13/2012	Bromide	0.19	0.1	0.074	NA	mg/L
OW-52	6/13/2012	Chloride	27	10	1	250000000	mg/L
OW-52	6/13/2012	Fluoride, Total	0.58	0.1	0.038	1600000	mg/L
OW-52	6/13/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-52	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	6/13/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-52	6/13/2012	TPH DRO	ND	1	0.4	16700	mg/L
OW-52	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-52	8/23/2012	Bromide	0.16	0.1	0.074	NA	mg/L
OW-52	8/23/2012	Chloride	25	10	1	250000000	mg/L
OW-52	8/23/2012	Fluoride, Total	0.49	0.1	0.038	1600000	mg/L
OW-52	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-52	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	8/23/2012	Sulfate	120	10	2.4	600000000	mg/L
OW-52	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	8/23/2012	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	11/27/2012	Bromide	ND	0.5	0.38	NA	mg/L
OW-52	11/27/2012	Chloride	28	2.5	0.26	250000000	mg/L
OW-52	11/27/2012	Fluoride, Total	0.64	0.5	0.19	1600000	mg/L
OW-52	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-52	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	11/27/2012	Sulfate	140	2.5	0.59	600000000	mg/L
OW-52	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	9/4/2013	Bromide	0.17	0.1	0.026	NA	mg/L
OW-52	9/4/2013	Chloride	27	10	3	250000000	mg/L
OW-52	9/4/2013	Fluoride, Total	0.5	0.1	0.033	1600000	mg/L
OW-52	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-52	9/4/2013	Nitrate & Nitrite	4.6	1	0.18	NA	mg/L
OW-52	9/4/2013	Sulfate	140	10	2.5	600000000	mg/L
OW-52	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-52	9/15/2014	Bromide	0.19	0.1	0.022	NA	mg/L
OW-52	9/15/2014	Chloride	27	10	5	250000000	mg/L
OW-52	9/15/2014	Fluoride, Total	0.5	0.1	0.018	1600000	mg/L
OW-52	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-52	9/15/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
OW-52	9/15/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
OW-52	9/15/2014	Sulfate	130	10	1.6	600000000	mg/L
OW-52	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-52	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-52	8/10/2015	Bromide	0.28	0.1	0.077	NA	mg/L
OW-52	8/10/2015	Chloride	25	10	2.7	250000000	mg/L
OW-52	8/10/2015	Fluoride, Total	0.47	0.1	0.029	1600000	mg/L
OW-52	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-52	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-52	8/10/2015	Sulfate	130	10	2.3	600000000	mg/L
OW-52	8/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-52	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-52	8/10/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-52	9/9/2016	Bromide	0.19	0.1	0.044	NA	mg/L
OW-52	9/9/2016	Chloride	27	10	1	250000000	mg/L
OW-52	9/9/2016	Fluoride, Total	0.38	0.1	0.05	1600000	mg/L
OW-52	9/9/2016	Ortho-Phosphate	0.53	0.5	0.076	NA	mg/L
OW-52	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-52	9/9/2016	Sulfate	140	10	2.8	600000000	mg/L
OW-52	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-52	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-52	9/11/2017	Bromide	0.16	0.5	0.073	NA	mg/L
OW-52	9/11/2017	Chloride	25	2.5	1.2	250000000	mg/L
OW-52	9/11/2017	Fluoride, Total	0.43	0.5	0.22	1600000	mg/L
OW-52	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-52	9/11/2017	Sulfate	130	2.5	0.48	600000000	mg/L
OW-52	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-52	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-52	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-52	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-52	11/7/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-52	11/7/2018	Chloride	29	2.5	2.5	250000000	mg/L
OW-52	11/7/2018	Fluoride, Total	0.53	0.5	0.5	1600000	mg/L
OW-52	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-52	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-52	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-52	11/7/2018	Sulfate	150	2.5	0.63	600000000	mg/L
OW-52	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-52	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-52	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-52	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-52	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	3/27/2019	Bromide	0.27	0.5	0.0675	NA	mg/L
OW-52	3/27/2019	Chloride	28	2.5	2.5	250000000	mg/L
OW-52	3/27/2019	Fluoride, Total	0.5	0.5	0.25	1600000	mg/L
OW-52	3/27/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-52	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-52	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-52	3/27/2019	Sulfate	140	2.5	0.32	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	5/1/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-52	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	5/1/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	5/1/2019	Chloride	26	2.5	0.3125	250000000	mg/L
OW-52	5/1/2019	Fluoride, Total	0.52	0.5	0.25	1600000	mg/L
OW-52	5/1/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-52	5/1/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-52	5/1/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-52	5/1/2019	Sulfate	140	2.5	0.2675	600000000	mg/L
OW-52	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-52	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	8/16/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	8/16/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-52	8/16/2019	Fluoride, Total	0.53	0.5	0.073	1600000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-52	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	8/16/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-52	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	8/16/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	8/16/2019	Chloride	26	2.5	2.5	250000000	mg/L
OW-52	8/16/2019	Fluoride, Total	0.54	0.5	0.073	1600000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-52	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	8/16/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-52	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	10/15/2019	Bromide	0.23	0.5	0.077	NA	mg/L
OW-52	10/15/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-52	10/15/2019	Fluoride, Total	0.45	0.5	0.144909	1600000	mg/L
OW-52	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-52	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	10/15/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	3/2/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
OW-52	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-52	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-52	3/2/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-52	3/2/2020	Chloride	27	2.5	1.2	250000000	mg/L
OW-52	3/2/2020	Fluoride, Total	0.54	0.5	0.11	1600000	mg/L
OW-52	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-52	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-52	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	3/2/2020	Sulfate	140	2.5	1.2	600000000	mg/L
OW-52	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-52	9/17/2020	TPH DRO	0.34	0.07	0.067	16700	mg/L
OW-52	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-52	9/17/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-52	9/17/2020	Chloride	29	2.5	1.2	250000000	mg/L
OW-52	9/17/2020	Fluoride, Total	0.57	0.5	0.22	1600000	mg/L
OW-52	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-52	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-52	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	9/17/2020	Sulfate	140	2.5	1.2	600000000	mg/L
OW-52	12/9/2020	Solids, Total Suspended	ND	1	0	NA	mg/L
OW-52	12/9/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-52	12/9/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
OW-52	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-52	12/9/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-52	12/9/2020	Bromide	ND	5	0.55	NA	mg/L
OW-52	12/9/2020	Chloride	27.8	5	0.6	250000000	mg/L
OW-52	12/9/2020	Fluoride, Total	ND	5	1.5	1600000	mg/L
OW-52	12/9/2020	Sulfate	138	5	1.85	600000000	mg/L
OW-52	12/9/2020	Chemical Oxygen Demand	ND	10	6.4	NA	mg/L
OW-52	12/9/2020	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
OW-52	12/9/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-52	12/9/2020	TPH DRO	ND	126	101	16700	ug/L
OW-52	12/9/2020	C28-C40	ND	126	101	NA	ug/L
OW-52	12/9/2020	Solids, Total Suspended	ND	1	0	NA	mg/L
OW-54	6/1/2016	Chloride	360	10	0.55	250000000	mg/L
OW-54	6/1/2016	Cyanide, Total	0.00805	0.01	0.006	1460	mg/L
OW-54	6/1/2016	Fluoride, Total	0.39	0.5	0.11	1600000	mg/L
OW-54	6/1/2016	Sulfate	86	2.5	0.32	600000000	mg/L
OW-54	6/1/2016	TPH DRO	2.3	1	0.69	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	6/1/2016	TPH GRO	4.8	0.5	0.25	10100	mg/L
OW-54	9/16/2016	TPH DRO	1.6	1	0.69	16700	mg/L
OW-54	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	9/16/2016	TPH GRO	3.2	0.25	0.075	10100	mg/L
OW-54	11/9/2016	TPH DRO	1.8	1	0.69	16700	mg/L
OW-54	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	11/9/2016	TPH GRO	4.5	0.25	0.13	10100	mg/L
OW-54	3/29/2017	Bromide	2.1	0.1	0.031	NA	mg/L
OW-54	3/29/2017	Chloride	330	10	5	250000000	mg/L
OW-54	3/29/2017	Fluoride, Total	0.12	0.1	0.05	1600000	mg/L
OW-54	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-54	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	3/29/2017	Sulfate	42	0.5	0.096	600000000	mg/L
OW-54	3/29/2017	TPH DRO	1.7	1	0.36	16700	mg/L
OW-54	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	3/29/2017	TPH GRO	2.6	0.05	0.0097	10100	mg/L
OW-54	6/21/2017	Bromide	2.6	0.5	0.073	NA	mg/L
OW-54	6/21/2017	Chloride	300	10	5	250000000	mg/L
OW-54	6/21/2017	Fluoride, Total	0.38	0.5	0.22	1600000	mg/L
OW-54	6/21/2017	Ortho-Phosphate	1.7	2.5	1.2	NA	mg/L
OW-54	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	6/21/2017	Sulfate	40	2.5	0.48	600000000	mg/L
OW-54	6/21/2017	TPH DRO	1.9	1	0.36	16700	mg/L
OW-54	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	6/21/2017	TPH GRO	2.9	0.05	0.025	10100	mg/L
OW-54	9/11/2017	Bromide	2	0.5	0.073	NA	mg/L
OW-54	9/11/2017	Chloride	290	10	5	250000000	mg/L
OW-54	9/11/2017	Fluoride, Total	0.25	0.5	0.22	1600000	mg/L
OW-54	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-54	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	9/11/2017	Sulfate	31	2.5	0.48	600000000	mg/L
OW-54	9/11/2017	TPH DRO	1.7	1	0.36	16700	mg/L
OW-54	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	9/11/2017	TPH GRO	3.1	0.05	0.025	10100	mg/L
OW-54	12/6/2017	Bromide	3.3	0.5	0.073	NA	mg/L
OW-54	12/6/2017	Chloride	270	10	5	250000000	mg/L
OW-54	12/6/2017	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
OW-54	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-54	12/6/2017	Nitrate & Nitrite	0.17	1	0.13	NA	mg/L
OW-54	12/6/2017	Sulfate	34	2.5	0.48	600000000	mg/L
OW-54	12/6/2017	TPH DRO	2.4	1	0.36	16700	mg/L
OW-54	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	12/6/2017	TPH GRO	2.6	0.05	0.0097	10100	mg/L
OW-54	2/22/2018	Bromide	2.1	0.5	0.073	NA	mg/L
OW-54	2/22/2018	Chloride	250	10	5	250000000	mg/L
OW-54	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-54	2/22/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
OW-54	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-54	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-54	2/22/2018	Sulfate	37	2.5	0.48	600000000	mg/L
OW-54	2/22/2018	TPH DRO	2.2	1	0.63	16700	mg/L
OW-54	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	2/22/2018	TPH GRO	2.4	0.25	0.12	10100	mg/L
OW-54	5/8/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-54	5/8/2018	Chloride	260	10	0.59	250000000	mg/L
OW-54	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-54	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-54	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-54	5/8/2018	Nitrogen, Nitrate	0.24	0.5	0.033	10000000	mg/L
OW-54	5/8/2018	Sulfate	34	2.5	1	600000000	mg/L
OW-54	5/8/2018	TPH DRO	1.8	1	0.63	16700	mg/L
OW-54	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	5/8/2018	TPH GRO	2.1	0.05	0.0097	10100	mg/L
OW-54	8/28/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-54	8/28/2018	Chloride	260	10	0.59	250000000	mg/L
OW-54	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-54	8/28/2018	Ortho-Phosphate	2.5	2.5	0.46	NA	mg/L
OW-54	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-54	8/28/2018	Sulfate	30	2.5	1	600000000	mg/L
OW-54	8/28/2018	TPH DRO	2.2	1	0.63	16700	mg/L
OW-54	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	8/28/2018	TPH GRO	2.1	0.05	0.024	10100	mg/L
OW-54	11/7/2018	Bromide	2.2	0.5	0.1	NA	mg/L
OW-54	11/7/2018	Chloride	250	10	10	250000000	mg/L
OW-54	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-54	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-54	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-54	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/7/2018	Sulfate	33	2.5	0.63	600000000	mg/L
OW-54	11/7/2018	TPH DRO	1.9	1	0.63	16700	mg/L
OW-54	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	11/7/2018	TPH GRO	1.6	0.05	0.024	10100	mg/L
OW-54	2/6/2019	TPH GRO	1.4	0.05	0.0211	10100	mg/L
OW-54	2/6/2019	Bromide	2.1	0.5	0.0675	NA	mg/L
OW-54	2/6/2019	Chloride	230	10	10	250000000	mg/L
OW-54	2/6/2019	Fluoride, Total	0.4	0.5	0.25	1600000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-54	2/6/2019	Phosphorus, Ortho	1.1	2.5	0.1305	NA	mg/L
OW-54	2/6/2019	Sulfate	30	2.5	0.32	600000000	mg/L
OW-54	2/6/2019	TPH DRO	1.6	1	0.63	16700	mg/L
OW-54	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	2/6/2019	TPH GRO	1.3	0.05	0.0211	10100	mg/L
OW-54	2/6/2019	Bromide	2.2	0.5	0.0675	NA	mg/L
OW-54	2/6/2019	Chloride	250	10	10	250000000	mg/L
OW-54	2/6/2019	Fluoride, Total	0.45	0.5	0.25	1600000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-54	2/6/2019	Phosphorus, Ortho	1.1	2.5	0.1305	NA	mg/L
OW-54	2/6/2019	Sulfate	34	2.5	0.32	600000000	mg/L
OW-54	2/6/2019	TPH DRO	1.7	1	0.63	16700	mg/L
OW-54	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	TPH GRO	1.6	0.25	0.1535	10100	mg/L
OW-54	5/2/2019	TPH DRO	1.7	1	0.35	16700	mg/L
OW-54	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-54	5/2/2019	Chloride	240	10	1.25	250000000	mg/L
OW-54	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-54	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-54	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-54	5/2/2019	Sulfate	34	2.5	0.2675	600000000	mg/L
OW-54	5/2/2019	TPH GRO	1.7	0.25	0.1535	10100	mg/L
OW-54	5/2/2019	TPH DRO	1.7	1	0.35	16700	mg/L
OW-54	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-54	5/2/2019	Chloride	230	10	1.25	250000000	mg/L
OW-54	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-54	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-54	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-54	5/2/2019	Sulfate	32	2.5	0.2675	600000000	mg/L
OW-54	8/21/2019	TPH GRO	1.5	0.05	0.0211	10100	mg/L
OW-54	8/21/2019	TPH DRO	2	1	0.35	16700	mg/L
OW-54	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
OW-54	8/21/2019	Chloride	210	10	10	250000000	mg/L
OW-54	8/21/2019	Fluoride, Total	0.14	0.5	0.073	1600000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-54	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-54	8/21/2019	Sulfate	29	2.5	0.3345	600000000	mg/L
OW-54	8/21/2019	TPH GRO	1.8	0.25	0.1055	10100	mg/L
OW-54	8/21/2019	TPH DRO	1.9	1	0.35	16700	mg/L
OW-54	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	8/21/2019	Bromide	2.2	0.5	0.088765	NA	mg/L
OW-54	8/21/2019	Chloride	210	10	10	250000000	mg/L
OW-54	8/21/2019	Fluoride, Total	0.15	0.5	0.073	1600000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrate	0.073	0.5	0.025	10000000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-54	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-54	8/21/2019	Sulfate	32	2.5	0.3345	600000000	mg/L
OW-55	6/1/2016	Chloride	550	25	1.4	250000000	mg/L
OW-55	6/1/2016	Cyanide, Total	0.0161	0.01	0.006	1460	mg/L
OW-55	6/1/2016	Fluoride, Total	0.13	0.5	0.11	1600000	mg/L
OW-55	6/1/2016	Sulfate	16	2.5	0.32	600000000	mg/L
OW-55	6/1/2016	TPH DRO	7.2	1	0.69	16700	mg/L
OW-55	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	6/1/2016	TPH GRO	210	25	13	10100	mg/L
OW-55	9/16/2016	TPH DRO	5.3	1	0.69	16700	mg/L
OW-55	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	9/16/2016	TPH GRO	76	0.5	0.15	10100	mg/L
OW-55	11/9/2016	TPH DRO	3.4	1	0.69	16700	mg/L
OW-55	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	11/9/2016	TPH GRO	51	5	2.5	10100	mg/L
OW-55	3/29/2017	Bromide	1.1	0.1	0.031	NA	mg/L
OW-55	3/29/2017	Chloride	410	25	12	250000000	mg/L
OW-55	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
OW-55	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	3/29/2017	Nitrate & Nitrite	0.73	1	0.13	NA	mg/L
OW-55	3/29/2017	Sulfate	1.2	0.5	0.096	600000000	mg/L
OW-55	3/29/2017	TPH DRO	5.4	1	0.36	16700	mg/L
OW-55	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	3/29/2017	TPH GRO	39	2.5	0.48	10100	mg/L
OW-55	6/21/2017	Bromide	1.8	0.5	0.073	NA	mg/L
OW-55	6/21/2017	Chloride	380	10	5	250000000	mg/L
OW-55	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	6/21/2017	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
OW-55	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	6/21/2017	Sulfate	1.7	2.5	0.48	600000000	mg/L
OW-55	6/21/2017	TPH DRO	6.3	1	0.36	16700	mg/L
OW-55	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	6/21/2017	TPH GRO	42	5	2.5	10100	mg/L
OW-55	9/11/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-55	9/11/2017	Chloride	350	25	12	250000000	mg/L
OW-55	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-55	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	9/11/2017	Sulfate	1.5	2.5	0.48	600000000	mg/L
OW-55	9/11/2017	TPH DRO	5.1	1	0.36	16700	mg/L
OW-55	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	9/11/2017	TPH GRO	46	5	2.5	10100	mg/L
OW-55	12/6/2017	Bromide	3	0.5	0.073	NA	mg/L
OW-55	12/6/2017	Chloride	380	10	5	250000000	mg/L
OW-55	12/6/2017	Fluoride, Total	0.54	0.5	0.22	1600000	mg/L
OW-55	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-55	12/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	12/6/2017	Sulfate	1.3	2.5	0.48	600000000	mg/L
OW-55	12/6/2017	TPH DRO	3.1	1	0.36	16700	mg/L
OW-55	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	12/6/2017	TPH GRO	26	5	0.97	10100	mg/L
OW-55	2/22/2018	Bromide	1.1	0.5	0.073	NA	mg/L
OW-55	2/22/2018	Chloride	320	10	5	250000000	mg/L
OW-55	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	2/22/2018	Ortho-Phosphate	2.6	2.5	1.2	NA	mg/L
OW-55	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-55	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-55	2/22/2018	Sulfate	1.6	2.5	0.48	600000000	mg/L
OW-55	2/22/2018	TPH DRO	3	1	0.63	16700	mg/L
OW-55	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	2/22/2018	TPH GRO	28	5	2.5	10100	mg/L
OW-55	5/8/2018	Bromide	1.1	0.5	0.13	NA	mg/L
OW-55	5/8/2018	Chloride	310	10	0.59	250000000	mg/L
OW-55	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-55	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-55	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-55	5/8/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
OW-55	5/8/2018	Sulfate	1.9	2.5	1	600000000	mg/L
OW-55	5/8/2018	TPH DRO	2.9	1	0.63	16700	mg/L
OW-55	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	5/8/2018	TPH GRO	24	2.5	0.48	10100	mg/L
OW-55	8/28/2018	Bromide	1.1	0.5	0.13	NA	mg/L
OW-55	8/28/2018	Chloride	300	10	0.59	250000000	mg/L
OW-55	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-55	8/28/2018	Ortho-Phosphate	3.1	2.5	0.46	NA	mg/L
OW-55	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-55	8/28/2018	Sulfate	1.9	2.5	1	600000000	mg/L
OW-55	8/28/2018	TPH DRO	3.1	1	0.63	16700	mg/L
OW-55	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	8/28/2018	TPH GRO	23	1	0.49	10100	mg/L
OW-55	11/7/2018	Bromide	1.2	0.5	0.1	NA	mg/L
OW-55	11/7/2018	Chloride	280	10	10	250000000	mg/L
OW-55	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-55	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-55	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-55	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-55	11/7/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-55	11/7/2018	TPH DRO	2.8	1	0.63	16700	mg/L
OW-55	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	11/7/2018	TPH GRO	21	1	0.49	10100	mg/L
OW-55	2/6/2019	TPH GRO	28	1	0.422	10100	mg/L
OW-55	2/6/2019	Bromide	1.1	0.5	0.0675	NA	mg/L
OW-55	2/6/2019	Chloride	270	10	10	250000000	mg/L
OW-55	2/6/2019	Fluoride, Total	0.27	0.5	0.25	1600000	mg/L
OW-55	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-55	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-55	2/6/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-55	2/6/2019	Sulfate	3	2.5	0.32	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	TPH DRO	2.9	1	0.63	16700	mg/L
OW-55	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-55	5/2/2019	TPH GRO	23	2.5	1.535	10100	mg/L
OW-55	5/2/2019	TPH DRO	3.6	1	0.35	16700	mg/L
OW-55	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-55	5/2/2019	Bromide	1	0.5	0.088765	NA	mg/L
OW-55	5/2/2019	Chloride	270	10	1.25	250000000	mg/L
OW-55	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-55	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-55	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-55	5/2/2019	Sulfate	2.6	2.5	0.2675	600000000	mg/L
OW-56	6/1/2016	TPH DRO	1.4	1	0.69	16700	mg/L
OW-56	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	6/1/2016	TPH GRO	0.49	0.05	0.025	10100	mg/L
OW-56	9/16/2016	TPH DRO	0.77	1	0.69	16700	mg/L
OW-56	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	9/16/2016	TPH GRO	1.2	0.25	0.075	10100	mg/L
OW-56	11/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-56	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	11/9/2016	TPH GRO	0.61	0.1	0.051	10100	mg/L
OW-56	3/29/2017	Bromide	1.8	0.1	0.031	NA	mg/L
OW-56	3/29/2017	Chloride	630	25	12	250000000	mg/L
OW-56	3/29/2017	Fluoride, Total	0.1	0.1	0.05	1600000	mg/L
OW-56	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-56	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-56	3/29/2017	Sulfate	24	0.5	0.096	600000000	mg/L
OW-56	3/29/2017	TPH DRO	0.52	1	0.36	16700	mg/L
OW-56	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	3/29/2017	TPH GRO	0.15	0.05	0.0097	10100	mg/L
OW-56	6/21/2017	Bromide	1.9	0.5	0.073	NA	mg/L
OW-56	6/21/2017	Chloride	650	25	12	250000000	mg/L
OW-56	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-56	6/21/2017	Ortho-Phosphate	1.6	2.5	1.2	NA	mg/L
OW-56	6/21/2017	Nitrate & Nitrite	0.13	1	0.13	NA	mg/L
OW-56	6/21/2017	Sulfate	23	2.5	0.48	600000000	mg/L
OW-56	6/21/2017	TPH DRO	0.84	1	0.36	16700	mg/L
OW-56	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	6/21/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
OW-56	9/11/2017	Bromide	1.7	0.5	0.073	NA	mg/L
OW-56	9/11/2017	Chloride	580	25	12	250000000	mg/L
OW-56	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-56	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-56	9/11/2017	Sulfate	20	2.5	0.48	600000000	mg/L
OW-56	9/11/2017	TPH DRO	0.51	1	0.36	16700	mg/L
OW-56	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	9/11/2017	TPH GRO	0.36	0.05	0.025	10100	mg/L
OW-56	12/6/2017	Bromide	3.1	0.5	0.073	NA	mg/L
OW-56	12/6/2017	Chloride	590	25	12	250000000	mg/L
OW-56	12/6/2017	Fluoride, Total	0.27	0.5	0.22	1600000	mg/L
OW-56	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	12/6/2017	Nitrate & Nitrite	0.22	1	0.13	NA	mg/L
OW-56	12/6/2017	Sulfate	18	2.5	0.48	600000000	mg/L
OW-56	12/6/2017	TPH DRO	0.83	1	0.36	16700	mg/L
OW-56	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	12/6/2017	TPH GRO	1	0.05	0.0097	10100	mg/L
OW-56	2/22/2018	Bromide	1.9	0.5	0.073	NA	mg/L
OW-56	2/22/2018	Chloride	620	25	12	250000000	mg/L
OW-56	2/22/2018	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
OW-56	2/22/2018	Ortho-Phosphate	1.7	2.5	1.2	NA	mg/L
OW-56	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-56	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-56	2/22/2018	Sulfate	17	2.5	0.48	600000000	mg/L
OW-56	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	2/22/2018	TPH GRO	0.13	0.05	0.025	10100	mg/L
OW-56	5/8/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-56	5/8/2018	Chloride	590	25	1.5	250000000	mg/L
OW-56	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-56	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-56	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-56	5/8/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-56	5/8/2018	Sulfate	20	2.5	1	600000000	mg/L
OW-56	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	5/8/2018	TPH GRO	0.1	0.05	0.0097	10100	mg/L
OW-56	8/28/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-56	8/28/2018	Chloride	620	25	9.1	250000000	mg/L
OW-56	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Ortho-Phosphate	1.9	2.5	0.46	NA	mg/L
OW-56	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-56	8/28/2018	Sulfate	21	2.5	1	600000000	mg/L
OW-56	8/28/2018	TPH DRO	0.68	1	0.63	16700	mg/L
OW-56	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	8/28/2018	TPH GRO	0.59	0.05	0.024	10100	mg/L
OW-56	11/7/2018	Bromide	2.2	0.5	0.1	NA	mg/L
OW-56	11/7/2018	Chloride	640	25	25	250000000	mg/L
OW-56	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-56	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-56	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-56	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-56	11/7/2018	Sulfate	18	2.5	0.63	600000000	mg/L
OW-56	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	11/7/2018	TPH GRO	0.31	0.05	0.024	10100	mg/L
OW-56	2/6/2019	TPH GRO	0.15	0.05	0.0211	10100	mg/L
OW-56	2/6/2019	Bromide	2	0.5	0.0675	NA	mg/L
OW-56	2/6/2019	Chloride	640	25	25	250000000	mg/L
OW-56	2/6/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-56	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-56	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-56	2/6/2019	Phosphorus, Ortho	0.95	2.5	0.1305	NA	mg/L
OW-56	2/6/2019	Sulfate	21	2.5	0.32	600000000	mg/L
OW-56	2/6/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	5/2/2019	TPH GRO	0.22	0.05	0.0307	10100	mg/L
OW-56	5/2/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-56	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	5/2/2019	Bromide	1.9	0.5	0.088765	NA	mg/L
OW-56	5/2/2019	Chloride	710	25	3.125	250000000	mg/L
OW-56	5/2/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-56	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-56	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-56	5/2/2019	Sulfate	22	2.5	0.2675	600000000	mg/L
OW-56	8/21/2019	TPH GRO	0.25	0.05	0.0211	10100	mg/L
OW-56	8/21/2019	TPH DRO	0.53	1	0.35	16700	mg/L
OW-56	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	8/21/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
OW-56	8/21/2019	Chloride	660	25	25	250000000	mg/L
OW-56	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-56	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-56	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-56	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-56	8/21/2019	Sulfate	21	2.5	0.3345	600000000	mg/L
OW-56	10/15/2019	TPH GRO	0.38	0.05	0.0193	10100	mg/L
OW-56	10/15/2019	TPH DRO	0.74	1	0.35	16700	mg/L
OW-56	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	10/15/2019	Bromide	1.6	0.5	0.077	NA	mg/L
OW-56	10/15/2019	Chloride	550	25	25	250000000	mg/L
OW-56	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-56	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-56	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-56	10/15/2019	Sulfate	20	2.5	0.3345	600000000	mg/L
OW-56	3/2/2020	TPH GRO	0.22	0.05	0.0068	10100	mg/L
OW-56	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-56	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-56	3/2/2020	Bromide	1.8	0.5	0.25	NA	mg/L
OW-56	3/2/2020	Fluoride, Total	0.36	0.5	0.11	1600000	mg/L
OW-56	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-56	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-56	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	3/2/2020	Sulfate	19	2.5	1.2	600000000	mg/L
OW-56	3/2/2020	Chloride	620	25	12	250000000	mg/L
OW-56	9/21/2020	TPH GRO	0.56	0.05	0.008	10100	mg/L
OW-56	9/21/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
OW-56	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-56	9/21/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-56	9/21/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-56	12/23/2020	Sulfate	8.26	1	0.37	600000000	mg/L
OW-56	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-56	12/23/2020	Chloride	483	20	2.4	250000000	mg/L
OW-56	12/23/2020	TPH (C6-C10)	2560	100	47	NA	ug/L
OW-56	12/23/2020	TPH DRO	3380	142	113	16700	ug/L
OW-56	12/23/2020	C28-C40	160	142	113	NA	ug/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	Chloride	180	10	1	250000000	mg/L
OW-57	10/1/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
OW-57	10/1/2016	Fluoride, Total	0.22	0.1	0.05	1600000	mg/L
OW-57	10/1/2016	Sulfate	6.2	0.5	0.14	600000000	mg/L
OW-57	10/1/2016	TPH DRO	9.3	1	0.69	16700	mg/L
OW-57	10/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-57	10/1/2016	TPH GRO	46	10	5.1	10100	mg/L
OW-57	11/8/2016	TPH DRO	7.8	1	0.69	16700	mg/L
OW-57	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-57	11/8/2016	TPH GRO	39	10	5.1	10100	mg/L
OW-57	3/30/2017	Bromide	2.2	0.1	0.031	NA	mg/L
OW-57	3/30/2017	Chloride	160	10	5	250000000	mg/L
OW-57	3/30/2017	Fluoride, Total	0.27	0.1	0.05	1600000	mg/L
OW-57	3/30/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-57	3/30/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
OW-57	3/30/2017	Nitrogen, Nitrate	0.064	0.1	0.022	10000000	mg/L
OW-57	3/30/2017	Sulfate	4.1	0.5	0.096	600000000	mg/L
OW-57	3/30/2017	TPH DRO	5.8	1	0.36	16700	mg/L
OW-57	3/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	3/30/2017	TPH GRO	26	5	0.97	10100	mg/L
OW-57	6/21/2017	Bromide	2.3	0.5	0.073	NA	mg/L
OW-57	6/21/2017	Chloride	170	10	5	250000000	mg/L
OW-57	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	6/21/2017	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
OW-57	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-57	6/21/2017	Sulfate	2.3	2.5	0.48	600000000	mg/L
OW-57	6/21/2017	TPH DRO	8.3	1	0.36	16700	mg/L
OW-57	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	6/21/2017	TPH GRO	30	5	2.5	10100	mg/L
OW-57	9/19/2017	Bromide	1.9	0.5	0.073	NA	mg/L
OW-57	9/19/2017	Chloride	150	10	5	250000000	mg/L
OW-57	9/19/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-57	9/19/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-57	9/19/2017	Sulfate	1.8	2.5	0.48	600000000	mg/L
OW-57	9/19/2017	TPH DRO	9.6	1	0.36	16700	mg/L
OW-57	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	9/19/2017	TPH GRO	28	2.5	1.2	10100	mg/L
OW-57	12/6/2017	Bromide	2.5	0.5	0.073	NA	mg/L
OW-57	12/6/2017	Chloride	150	10	5	250000000	mg/L
OW-57	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	12/6/2017	Nitrate & Nitrite	0.17	1	0.13	NA	mg/L
OW-57	12/6/2017	Sulfate	1.7	2.5	0.48	600000000	mg/L
OW-57	12/6/2017	TPH DRO	8.5	1	0.36	16700	mg/L
OW-57	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	12/6/2017	TPH GRO	30	5	0.97	10100	mg/L
OW-57	2/20/2018	Bromide	2	0.5	0.073	NA	mg/L
OW-57	2/20/2018	Chloride	150	10	5	250000000	mg/L
OW-57	2/20/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	2/20/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	2/20/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-57	2/20/2018	Sulfate	1.2	2.5	0.48	600000000	mg/L
OW-57	2/20/2018	TPH DRO	8.8	1	0.63	16700	mg/L
OW-57	2/20/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	2/20/2018	TPH GRO	28	5	0.97	10100	mg/L
OW-57	5/8/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-57	5/8/2018	Chloride	140	10	0.59	250000000	mg/L
OW-57	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-57	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-57	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-57	5/8/2018	Nitrogen, Nitrate	0.23	0.5	0.033	10000000	mg/L
OW-57	5/8/2018	Sulfate	1.5	2.5	1	600000000	mg/L
OW-57	5/8/2018	TPH DRO	8	1	0.63	16700	mg/L
OW-57	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	5/8/2018	TPH GRO	27	2.5	0.48	10100	mg/L
OW-57	8/28/2018	Bromide	2.2	0.5	0.13	NA	mg/L
OW-57	8/28/2018	Chloride	160	10	0.59	250000000	mg/L
OW-57	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-57	8/28/2018	Ortho-Phosphate	2.7	2.5	0.46	NA	mg/L
OW-57	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-57	8/28/2018	Sulfate	1.2	2.5	1	600000000	mg/L
OW-57	8/28/2018	TPH DRO	7.5	1	0.63	16700	mg/L
OW-57	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	8/28/2018	TPH GRO	29	2.5	1.2	10100	mg/L
OW-57	11/29/2018	Bromide	2.3	0.5	0.1	NA	mg/L
OW-57	11/29/2018	Chloride	160	10	10	250000000	mg/L
OW-57	11/29/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-57	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-57	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-57	11/29/2018	Sulfate	0.77	2.5	0.63	600000000	mg/L
OW-57	11/29/2018	TPH DRO	8.6	1	0.63	16700	mg/L
OW-57	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	11/29/2018	TPH GRO	21	1	0.49	10100	mg/L
OW-57	2/20/2019	TPH GRO	25	1	0.422	10100	mg/L
OW-57	2/20/2019	TPH DRO	6.8	1	0.35	16700	mg/L
OW-57	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	2/20/2019	Bromide	2	0.5	0.0675	NA	mg/L
OW-57	2/20/2019	Chloride	150	10	10	250000000	mg/L
OW-57	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-57	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-57	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-57	2/20/2019	Phosphorus, Ortho	1.9	2.5	0.1305	NA	mg/L
OW-57	2/20/2019	Sulfate	2.5	2.5	0.32	600000000	mg/L
OW-57	5/16/2019	TPH GRO	19	1	0.614	10100	mg/L
OW-57	5/16/2019	TPH DRO	7.8	1	0.35	16700	mg/L
OW-57	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	5/16/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
OW-57	5/16/2019	Chloride	140	10	1.25	250000000	mg/L
OW-57	5/16/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-57	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-57	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-57	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-57	5/16/2019	Sulfate	1.1	2.5	0.2675	600000000	mg/L
OW-57	8/21/2019	TPH GRO	26	1	0.422	10100	mg/L
OW-57	8/21/2019	TPH DRO	8.4	1	0.35	16700	mg/L
OW-57	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
OW-57	8/21/2019	Chloride	140	10	10	250000000	mg/L
OW-57	8/21/2019	Fluoride, Total	0.11	0.5	0.073	1600000	mg/L
OW-57	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-57	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-57	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-57	8/21/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-57	11/5/2019	TPH GRO	28	1	0.422	10100	mg/L
OW-57	11/5/2019	TPH DRO	3.6	0.4	0.132	16700	mg/L
OW-57	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-57	11/5/2019	Bromide	2.1	0.5	0.077	NA	mg/L
OW-57	11/5/2019	Chloride	140	10	10	250000000	mg/L
OW-57	11/5/2019	Fluoride, Total	0.17	0.5	0.144909	1600000	mg/L
OW-57	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-57	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-57	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-57	11/5/2019	Sulfate	0.64	2.5	0.3345	600000000	mg/L
OW-57	3/5/2020	TPH GRO	20	1	0.14	10100	mg/L
OW-57	3/5/2020	TPH DRO	2.9	0.4	0.2	16700	mg/L
OW-57	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-57	3/5/2020	Bromide	2.1	0.5	0.25	NA	mg/L
OW-57	3/5/2020	Fluoride, Total	0.48	0.5	0.11	1600000	mg/L
OW-57	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-57	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-57	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-57	3/5/2020	Chloride	150	10	5	250000000	mg/L
OW-57	9/18/2020	TPH GRO	33	2.5	0.4	10100	mg/L
OW-57	9/18/2020	TPH DRO	5.6	0.07	0.067	16700	mg/L
OW-57	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-57	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-57	9/18/2020	Nitrogen, Nitrate	0.27	0.5	0.1	10000000	mg/L
OW-57	12/23/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-57	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate	0.75	0.1	0.033	10000000	mg/L
OW-57	12/23/2020	Chloride	139	10	1.2	250000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate	0.082	0.05	0.018	10000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate & Nitrite	0.082	0.05	0.018	10000000	mg/L
OW-57	12/23/2020	TPH DRO	14800	141	113	16700	ug/L
OW-57	12/23/2020	C28-C40	375	141	113	NA	ug/L
OW-57	12/23/2020	TPH (C6-C10)	24900	2000	940	NA	ug/L
OW-58	9/30/2016	Chloride	160	10	1	250000000	mg/L
OW-58	9/30/2016	Cyanide, Total	0.0273	0.01	0.01	1460	mg/L
OW-58	9/30/2016	Fluoride, Total	0.25	0.1	0.05	1600000	mg/L
OW-58	9/30/2016	Sulfate	1.2	0.5	0.14	600000000	mg/L
OW-58	9/30/2016	TPH DRO	5.6	1	0.69	16700	mg/L
OW-58	9/30/2016	TPH ORO	ND	5	5	85800	mg/L
OW-58	9/30/2016	TPH GRO	150	10	5.1	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	TPH DRO	4.8	1	0.69	16700	mg/L
OW-58	11/7/2016	TPH ORO	ND	5	5	85800	mg/L
OW-58	11/7/2016	TPH GRO	120	25	13	10100	mg/L
OW-58	3/29/2017	Bromide	1.8	0.5	0.15	NA	mg/L
OW-58	3/29/2017	Chloride	150	10	5	250000000	mg/L
OW-58	3/29/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	3/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	3/29/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
OW-58	3/29/2017	TPH DRO	9.2	1	0.36	16700	mg/L
OW-58	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	3/29/2017	TPH GRO	64	5	0.97	10100	mg/L
OW-58	6/21/2017	Bromide	2	0.5	0.073	NA	mg/L
OW-58	6/21/2017	Chloride	150	10	5	250000000	mg/L
OW-58	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	6/21/2017	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
OW-58	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	6/21/2017	Sulfate	0.96	2.5	0.48	600000000	mg/L
OW-58	6/21/2017	TPH DRO	7.9	1	0.36	16700	mg/L
OW-58	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	6/21/2017	TPH GRO	80	10	5	10100	mg/L
OW-58	9/19/2017	Bromide	1.7	0.5	0.073	NA	mg/L
OW-58	9/19/2017	Chloride	130	10	5	250000000	mg/L
OW-58	9/19/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-58	9/19/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-58	9/19/2017	Sulfate	0.78	2.5	0.48	600000000	mg/L
OW-58	9/19/2017	TPH DRO	8.3	1	0.36	16700	mg/L
OW-58	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	9/19/2017	TPH GRO	85	10	5	10100	mg/L
OW-58	12/6/2017	Bromide	2.3	0.5	0.073	NA	mg/L
OW-58	12/6/2017	Chloride	140	10	5	250000000	mg/L
OW-58	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	12/6/2017	Nitrate & Nitrite	0.27	1	0.13	NA	mg/L
OW-58	12/6/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
OW-58	12/6/2017	TPH DRO	6.2	1	0.36	16700	mg/L
OW-58	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	12/6/2017	TPH GRO	83	10	1.9	10100	mg/L
OW-58	2/20/2018	Bromide	1.8	0.5	0.073	NA	mg/L
OW-58	2/20/2018	Chloride	140	10	5	250000000	mg/L
OW-58	2/20/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	2/20/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	2/20/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	2/20/2018	Sulfate	0.53	2.5	0.48	600000000	mg/L
OW-58	2/20/2018	TPH DRO	5.7	1	0.63	16700	mg/L
OW-58	2/20/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	2/20/2018	TPH GRO	77	10	1.9	10100	mg/L
OW-58	5/8/2018	Bromide	1.6	0.5	0.13	NA	mg/L
OW-58	5/8/2018	Chloride	150	10	0.59	250000000	mg/L
OW-58	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-58	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-58	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-58	5/8/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
OW-58	5/8/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-58	5/8/2018	TPH DRO	5.7	1	0.63	16700	mg/L
OW-58	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	5/8/2018	TPH GRO	72	2.5	0.48	10100	mg/L
OW-58	8/28/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-58	8/28/2018	Chloride	160	10	0.59	250000000	mg/L
OW-58	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-58	8/28/2018	Ortho-Phosphate	3.4	2.5	0.46	NA	mg/L
OW-58	8/28/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-58	8/28/2018	Nitrogen, Nitrate	0.07	0.5	0.033	10000000	mg/L
OW-58	8/28/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-58	8/28/2018	TPH DRO	5.6	1	0.63	16700	mg/L
OW-58	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	8/28/2018	TPH GRO	92	2.5	1.2	10100	mg/L
OW-58	11/29/2018	Bromide	1.9	0.5	0.1	NA	mg/L
OW-58	11/29/2018	Chloride	160	10	10	250000000	mg/L
OW-58	11/29/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-58	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-58	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-58	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-58	11/29/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-58	11/29/2018	TPH DRO	6.3	1	0.63	16700	mg/L
OW-58	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	11/29/2018	TPH GRO	69	2.5	1.2	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/28/2019	TPH GRO	57	5	3.07	10100	mg/L
OW-58	3/28/2019	Bromide	1.9	0.5	0.0675	NA	mg/L
OW-58	3/28/2019	Chloride	150	10	10	250000000	mg/L
OW-58	3/28/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
OW-58	3/28/2019	Phosphorus, Ortho	0.34	2.5	0.1305	NA	mg/L
OW-58	3/28/2019	Sulfate	ND	2.5	0.32	600000000	mg/L
OW-58	3/28/2019	TPH DRO	7.4	1	0.35	16700	mg/L
OW-58	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	6/5/2019	TPH GRO	68	5	2.11	10100	mg/L
OW-58	6/5/2019	TPH DRO	7.7	1	0.35	16700	mg/L
OW-58	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	6/5/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-58	6/5/2019	Chloride	190	10	1.25	250000000	mg/L
OW-58	6/5/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	6/5/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-58	6/5/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-58	6/5/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-58	6/5/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
OW-58	8/22/2019	TPH GRO	64	2.5	1.055	10100	mg/L
OW-58	8/22/2019	TPH DRO	9.2	1	0.35	16700	mg/L
OW-58	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	8/22/2019	Bromide	1.9	0.5	0.088765	NA	mg/L
OW-58	8/22/2019	Chloride	140	10	10	250000000	mg/L
OW-58	8/22/2019	Fluoride, Total	0.28	0.5	0.073	1600000	mg/L
OW-58	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-58	8/22/2019	Nitrogen, Nitrite	0.12	0.5	0.027	1000000	mg/L
OW-58	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-58	8/22/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
OW-58	11/18/2019	TPH GRO	75	2.5	1.055	10100	mg/L
OW-58	11/18/2019	TPH DRO	2.9	0.4	0.132	16700	mg/L
OW-58	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-58	11/18/2019	Bromide	1.8	0.5	0.077	NA	mg/L
OW-58	11/18/2019	Chloride	140	10	10	250000000	mg/L
OW-58	11/18/2019	Fluoride, Total	0.5	0.5	0.144909	1600000	mg/L
OW-58	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-58	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-58	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-58	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-58	9/17/2020	TPH GRO	78	5	0.8	10100	mg/L
OW-58	9/17/2020	TPH DRO	6.4	0.07	0.067	16700	mg/L
OW-58	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-58	9/17/2020	Nitrogen, Nitrate	0.18	0.5	0.1	10000000	mg/L
OW-58	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-58	12/22/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-58	12/22/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58	12/22/2020	Chloride	160	10	1.2	250000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-58	12/22/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-58	12/22/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58	12/22/2020	Chloride	162	10	1.2	250000000	mg/L
OW-58	12/22/2020	TPH DRO	**17400**	118	94.4	16700	ug/L
OW-58	12/22/2020	C28-C40	528	118	94.4	NA	ug/L
OW-58	12/22/2020	TPH DRO	**16800**	134	107	16700	ug/L
OW-58	12/22/2020	C28-C40	628	134	107	NA	ug/L
OW-58	12/22/2020	TPH (C6-C10)	64700	5000	2350	NA	ug/L
OW-58	12/22/2020	TPH (C6-C10)	68900	5000	2350	NA	ug/L
OW-58A	3/6/2020	TPH GRO	31	5	0.68	10100	mg/L
OW-58A	3/6/2020	TPH DRO	2.6	0.4	0.2	16700	mg/L
OW-58A	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-58A	3/6/2020	Bromide	2.3	0.5	0.25	NA	mg/L
OW-58A	3/6/2020	Fluoride, Total	0.2	0.5	0.11	1600000	mg/L
OW-58A	3/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-58A	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-58A	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58A	3/6/2020	Sulfate	28	2.5	1.2	600000000	mg/L
OW-58A	3/6/2020	Chloride	190	10	5	250000000	mg/L
OW-58A	9/18/2020	TPH GRO	31	2.5	0.4	10100	mg/L
OW-58A	9/18/2020	TPH DRO	4.5	0.07	0.067	16700	mg/L
OW-58A	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-58A	9/18/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
OW-58A	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58A	12/23/2020	Sulfate	8.7	1	0.37	600000000	mg/L
OW-58A	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrate	0.128	0.1	0.033	10000000	mg/L
OW-58A	12/23/2020	Chloride	176	10	1.2	250000000	mg/L
OW-58A	12/23/2020	TPH (C6-C10)	22500	2000	940	NA	ug/L
OW-58A	12/23/2020	TPH DRO	12500	146	117	16700	ug/L
OW-58A	12/23/2020	C28-C40	ND	146	117	NA	ug/L
OW-59	6/28/2017	Bromide	3.6	0.5	0.073	NA	mg/L
OW-59	6/28/2017	Chloride	2000	100	50	250000000	mg/L
OW-59	6/28/2017	Cyanide, Total	0.0268	0.005	0.005	1460	mg/L
OW-59	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	6/28/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
OW-59	6/28/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
OW-59	6/28/2017	Sulfate	3000	100	19	600000000	mg/L
OW-59	6/28/2017	TPH DRO	0.56	1	0.36	16700	mg/L
OW-59	6/28/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	6/28/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
OW-59	9/21/2017	Bromide	3	0.5	0.073	NA	mg/L
OW-59	9/21/2017	Chloride	2000	100	50	250000000	mg/L
OW-59	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	9/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-59	9/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	9/21/2017	Sulfate	3400	100	19	600000000	mg/L
OW-59	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-59	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	9/21/2017	TPH GRO	2.7	0.05	0.0097	10100	mg/L
OW-59	12/6/2017	Bromide	8.6	0.5	0.073	NA	mg/L
OW-59	12/6/2017	Chloride	1700	100	50	250000000	mg/L
OW-59	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	12/6/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
OW-59	12/6/2017	Sulfate	2600	100	19	600000000	mg/L
OW-59	12/6/2017	TPH DRO	0.55	1	0.36	16700	mg/L
OW-59	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	12/6/2017	TPH GRO	3.1	0.05	0.0097	10100	mg/L
OW-59	2/22/2018	Bromide	2.7	0.5	0.073	NA	mg/L
OW-59	2/22/2018	Chloride	1900	100	50	250000000	mg/L
OW-59	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	2/22/2018	Ortho-Phosphate	ND	10	5	NA	mg/L
OW-59	2/22/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
OW-59	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	2/22/2018	Sulfate	2700	100	19	600000000	mg/L
OW-59	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	2/22/2018	TPH GRO	0.13	0.05	0.025	10100	mg/L
OW-59	5/8/2018	Bromide	2.5	0.5	0.13	NA	mg/L
OW-59	5/8/2018	Chloride	1800	100	5.9	250000000	mg/L
OW-59	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-59	5/8/2018	Ortho-Phosphate	ND	25	4.6	NA	mg/L
OW-59	5/8/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
OW-59	5/8/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-59	5/8/2018	Sulfate	2400	100	41	600000000	mg/L
OW-59	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	5/8/2018	TPH GRO	2.8	0.05	0.0097	10100	mg/L
OW-59	8/28/2018	Bromide	2.8	2	0.54	NA	mg/L
OW-59	8/28/2018	Chloride	2100	100	36	250000000	mg/L
OW-59	8/28/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
OW-59	8/28/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-59	8/28/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
OW-59	8/28/2018	Sulfate	2600	100	41	600000000	mg/L
OW-59	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	8/28/2018	TPH GRO	0.064	0.05	0.024	10100	mg/L
OW-59	11/7/2018	Bromide	3	0.5	0.1	NA	mg/L
OW-59	11/7/2018	Chloride	2100	100	100	250000000	mg/L
OW-59	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-59	11/7/2018	Ortho-Phosphate	ND	10	10	NA	mg/L
OW-59	11/7/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
OW-59	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-59	11/7/2018	Sulfate	2700	100	25	600000000	mg/L
OW-59	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	11/7/2018	TPH GRO	0.23	0.05	0.024	10100	mg/L
OW-59	2/13/2019	TPH GRO	0.43	0.05	0.0211	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	TPH DRO	0.44	1	0.35	16700	mg/L
OW-59	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	2/13/2019	Bromide	2.9	2	0.27	NA	mg/L
OW-59	2/13/2019	Chloride	2000	100	100	250000000	mg/L
OW-59	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-59	2/13/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-59	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
OW-59	2/13/2019	Phosphorus, Ortho	ND	10	0.522	NA	mg/L
OW-59	2/13/2019	Sulfate	2600	100	12.8	600000000	mg/L
OW-59	5/2/2019	TPH GRO	2.2	0.05	0.0307	10100	mg/L
OW-59	5/2/2019	TPH DRO	0.61	1	0.35	16700	mg/L
OW-59	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	5/2/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
OW-59	5/2/2019	Chloride	2100	100	12.5	250000000	mg/L
OW-59	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-59	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	2	0.09492	10000000	mg/L
OW-59	5/2/2019	Phosphorus, Ortho	ND	10	0.8	NA	mg/L
OW-59	5/2/2019	Sulfate	2700	100	10.7	600000000	mg/L
OW-59	8/21/2019	TPH GRO	0.35	0.05	0.0211	10100	mg/L
OW-59	8/21/2019	TPH DRO	0.38	1	0.35	16700	mg/L
OW-59	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	8/21/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-59	8/21/2019	Chloride	2100	100	100	250000000	mg/L
OW-59	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-59	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-59	8/21/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
OW-59	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-59	8/21/2019	Sulfate	2500	100	13.38	600000000	mg/L
OW-59	10/15/2019	TPH GRO	2.3	0.05	0.0193	10100	mg/L
OW-59	10/15/2019	TPH DRO	0.58	1	0.35	16700	mg/L
OW-59	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	10/15/2019	Bromide	2.1	0.5	0.077	NA	mg/L
OW-59	10/15/2019	Chloride	2000	100	100	250000000	mg/L
OW-59	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-59	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	2	0.097	10000000	mg/L
OW-59	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-59	10/15/2019	Sulfate	2400	100	13.38	600000000	mg/L
OW-59	3/3/2020	TPH GRO	2.8	0.05	0.0068	10100	mg/L
OW-59	3/3/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-59	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-59	3/3/2020	Bromide	2.7	0.5	0.25	NA	mg/L
OW-59	3/3/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-59	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	3/3/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
OW-59	3/3/2020	Chloride	2200	100	50	250000000	mg/L
OW-59	3/3/2020	Sulfate	2600	100	50	600000000	mg/L
OW-59	9/19/2020	TPH GRO	2.3	0.05	0.008	10100	mg/L
OW-59	9/19/2020	TPH DRO	0.21	0.07	0.067	16700	mg/L
OW-59	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-59	9/19/2020	Bromide	3.1	0.5	0.25	NA	mg/L
OW-59	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	9/19/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-59	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	9/19/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-59	9/19/2020	Chloride	2000	100	50	250000000	mg/L
OW-59	9/19/2020	Sulfate	2100	100	50	600000000	mg/L
OW-59	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-59	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-59	12/23/2020	Chloride	2270	100	12	250000000	mg/L
OW-59	12/23/2020	Sulfate	2510	100	37	600000000	mg/L
OW-59	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-59	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-59	12/23/2020	Chloride	2250	100	12	250000000	mg/L
OW-59	12/23/2020	Sulfate	2450	100	37	600000000	mg/L
OW-59	12/23/2020	Bicarbonate	522	1	0.5	NA	mg/L
OW-59	12/23/2020	Bicarbonate	505	1	0.5	NA	mg/L
OW-59	12/23/2020	Phosphorus, Total	0.111	0.1	0.032	NA	mg/L
OW-59	12/23/2020	Phosphorus, Total	0.118	0.1	0.032	NA	mg/L
OW-59	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-59	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-59	12/23/2020	TPH DRO	811	140	112	16700	ug/L
OW-59	12/23/2020	C28-C40	ND	140	112	NA	ug/L
OW-59	12/23/2020	TPH DRO	919	135	108	16700	ug/L
OW-59	12/23/2020	C28-C40	ND	135	108	NA	ug/L
OW-59	12/23/2020	TPH (C6-C10)	995	100	47	NA	ug/L
OW-59	12/23/2020	TPH (C6-C10)	883	100	47	NA	ug/L
OW-60	6/28/2017	Bromide	2.4	0.5	0.073	NA	mg/L
OW-60	6/28/2017	Chloride	1600	100	50	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
OW-60	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	6/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	6/28/2017	Nitrate & Nitrite	3	1	0.13	NA	mg/L
OW-60	6/28/2017	Sulfate	740	10	1.9	600000000	mg/L
OW-60	6/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	6/28/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	6/28/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-60	9/21/2017	Bromide	4.1	0.5	0.073	NA	mg/L
OW-60	9/21/2017	Chloride	1900	100	50	250000000	mg/L
OW-60	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	9/21/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
OW-60	9/21/2017	Nitrogen, Nitrate	10	0.5	0.11	10000000	mg/L
OW-60	9/21/2017	Sulfate	840	10	1.9	600000000	mg/L
OW-60	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	9/21/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-60	12/6/2017	Bromide	10	0.5	0.073	NA	mg/L
OW-60	12/6/2017	Chloride	1700	100	50	250000000	mg/L
OW-60	12/6/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
OW-60	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	12/6/2017	Nitrate & Nitrite	14	2	0.26	NA	mg/L
OW-60	12/6/2017	Sulfate	780	10	1.9	600000000	mg/L
OW-60	12/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	12/6/2017	TPH GRO	0.031	0.05	0.0097	10100	mg/L
OW-60	2/22/2018	Bromide	4.2	0.5	0.073	NA	mg/L
OW-60	2/22/2018	Chloride	1700	100	50	250000000	mg/L
OW-60	2/22/2018	Fluoride, Total	0.64	0.5	0.22	1600000	mg/L
OW-60	2/22/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	2/22/2018	Nitrogen, Nitrite	0.37	0.5	0.034	1000000	mg/L
OW-60	2/22/2018	Nitrogen, Nitrate	18	0.5	0.11	10000000	mg/L
OW-60	2/22/2018	Sulfate	750	10	1.9	600000000	mg/L
OW-60	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	2/22/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-60	5/8/2018	Bromide	4.2	0.5	0.13	NA	mg/L
OW-60	5/8/2018	Chloride	1700	100	5.9	250000000	mg/L
OW-60	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-60	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-60	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-60	5/8/2018	Nitrogen, Nitrate	19	0.5	0.033	10000000	mg/L
OW-60	5/8/2018	Sulfate	730	10	4.1	600000000	mg/L
OW-60	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	5/8/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-60	8/28/2018	Bromide	4.4	0.5	0.13	NA	mg/L
OW-60	8/28/2018	Chloride	1800	100	36	250000000	mg/L
OW-60	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-60	8/28/2018	Ortho-Phosphate	0.9	2.5	0.46	NA	mg/L
OW-60	8/28/2018	Nitrate & Nitrite	18	1	0.27	NA	mg/L
OW-60	8/28/2018	Sulfate	760	10	4.1	600000000	mg/L
OW-60	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	8/28/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-60	11/7/2018	Bromide	4.7	0.5	0.1	NA	mg/L
OW-60	11/7/2018	Chloride	1500	100	100	250000000	mg/L
OW-60	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-60	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-60	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-60	11/7/2018	Nitrogen, Nitrate	20	0.5	0.066	10000000	mg/L
OW-60	11/7/2018	Sulfate	740	10	2.5	600000000	mg/L
OW-60	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-60	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-60	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	2/13/2019	Bromide	4.4	0.5	0.0675	NA	mg/L
OW-60	2/13/2019	Chloride	1700	100	100	250000000	mg/L
OW-60	2/13/2019	Fluoride, Total	0.41	0.5	0.25	1600000	mg/L
OW-60	2/13/2019	Nitrogen, Nitrate	16	0.5	0.143	10000000	mg/L
OW-60	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
OW-60	2/13/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-60	2/13/2019	Sulfate	740	10	1.28	600000000	mg/L
OW-60	5/2/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-60	5/2/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	5/2/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Bromide	4.4	0.5	0.088765	NA	mg/L
OW-60	5/2/2019	Chloride	1800	100	12.5	250000000	mg/L
OW-60	5/2/2019	Fluoride, Total	0.4	0.5	0.25	1600000	mg/L
OW-60	5/2/2019	Nitrogen, Nitrate & Nitrite	15	2	0.09492	10000000	mg/L
OW-60	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-60	5/2/2019	Sulfate	640	10	1.07	600000000	mg/L
OW-60	8/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-60	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	8/21/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
OW-60	8/21/2019	Chloride	1800	100	100	250000000	mg/L
OW-60	8/21/2019	Fluoride, Total	0.21	0.5	0.073	1600000	mg/L
OW-60	8/21/2019	Nitrogen, Nitrate	17	0.5	0.025	10000000	mg/L
OW-60	8/21/2019	Nitrogen, Nitrite	1.8	0.5	0.027	1000000	mg/L
OW-60	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-60	8/21/2019	Sulfate	730	10	1.338	600000000	mg/L
OW-60	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-60	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	10/15/2019	Bromide	4.6	0.5	0.077	NA	mg/L
OW-60	10/15/2019	Chloride	1600	100	100	250000000	mg/L
OW-60	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-60	10/15/2019	Nitrogen, Nitrate & Nitrite	17	1	0.0485	10000000	mg/L
OW-60	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-60	10/15/2019	Sulfate	600	100	13.38	600000000	mg/L
OW-60	3/3/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
OW-60	3/3/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-60	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-60	3/3/2020	Bromide	4.6	0.5	0.25	NA	mg/L
OW-60	3/3/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-60	3/3/2020	Nitrogen, Nitrate	18	0.5	0.11	10000000	mg/L
OW-60	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	3/3/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
OW-60	3/3/2020	Sulfate	780	10	5	600000000	mg/L
OW-60	3/3/2020	Chloride	1800	100	50	250000000	mg/L
OW-60	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-60	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-60	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-60	9/21/2020	Bromide	4.6	0.5	0.25	NA	mg/L
OW-60	9/21/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	9/21/2020	Nitrogen, Nitrate	18	0.5	0.1	10000000	mg/L
OW-60	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-60	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	9/21/2020	Sulfate	630	10	5	600000000	mg/L
OW-60	9/21/2020	Chloride	1500	100	50	250000000	mg/L
OW-60	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-60	12/15/2020	Phosphorus, Total	2.88	0.1	0.032	NA	mg/L
OW-60	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-60	12/15/2020	Nitrogen, Nitrate	19.3	0.1	0.033	10000000	mg/L
OW-60	12/15/2020	Chloride	1740	50	6	250000000	mg/L
OW-60	12/15/2020	Sulfate	647	50	18.5	600000000	mg/L
OW-60	12/15/2020	Nitrogen, Nitrate	18.5	0.5	0.165	10000000	mg/L
OW-60	12/15/2020	Bicarbonate	370	1	0.5	NA	mg/L
OW-60	12/11/2020	TPH DRO	ND	143	114	16700	ug/L
OW-60	12/11/2020	C28-C40	ND	143	114	NA	ug/L
OW-60	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-63	4/29/2018	Bromide	0.51	0.5	0.13	NA	mg/L
OW-63	4/29/2018	Chloride	94	10	0.59	250000000	mg/L
OW-63	4/29/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-63	4/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-63	4/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-63	4/29/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-63	4/29/2018	TPH DRO	5.6	1	0.63	16700	mg/L
OW-63	4/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	4/29/2018	TPH GRO	29	1	0.42	10100	mg/L
OW-63	8/22/2018	Bromide	0.54	0.5	0.13	NA	mg/L
OW-63	8/22/2018	Chloride	88	10	0.59	250000000	mg/L
OW-63	8/22/2018	Fluoride, Total	0.39	0.5	0.15	1600000	mg/L
OW-63	8/22/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-63	8/22/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-63	8/22/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-63	8/22/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-63	8/22/2018	TPH DRO	5.9	1	0.63	16700	mg/L
OW-63	8/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	8/22/2018	TPH GRO	35	1	0.19	10100	mg/L
OW-63	12/3/2018	Bromide	0.54	0.5	0.1	NA	mg/L
OW-63	12/3/2018	Chloride	96	2.5	2.5	250000000	mg/L
OW-63	12/3/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-63	12/3/2018	Ortho-Phosphate	2.5	2.5	2.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/3/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-63	12/3/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-63	12/3/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-63	12/3/2018	TPH DRO	6.1	1	0.63	16700	mg/L
OW-63	12/3/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	12/3/2018	TPH GRO	26	2.5	1.2	10100	mg/L
OW-63	2/20/2019	TPH GRO	28	2.5	1.055	10100	mg/L
OW-63	2/20/2019	TPH DRO	6	1	0.35	16700	mg/L
OW-63	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	2/20/2019	Bromide	0.48	0.5	0.0675	NA	mg/L
OW-63	2/20/2019	Chloride	99	2.5	2.5	250000000	mg/L
OW-63	2/20/2019	Fluoride, Total	0.42	0.5	0.25	1600000	mg/L
OW-63	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-63	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-63	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-63	2/20/2019	Sulfate	0.4	2.5	0.32	600000000	mg/L
OW-63	5/15/2019	TPH GRO	24	1	0.614	10100	mg/L
OW-63	5/15/2019	TPH DRO	6	1	0.35	16700	mg/L
OW-63	5/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	5/15/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-63	5/15/2019	Chloride	92	2.5	0.3125	250000000	mg/L
OW-63	5/15/2019	Fluoride, Total	0.39	0.5	0.25	1600000	mg/L
OW-63	5/15/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-63	5/15/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-63	5/15/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-63	5/15/2019	Sulfate	0.48	2.5	0.2675	600000000	mg/L
OW-63	8/19/2019	TPH GRO	27	2.5	1.535	10100	mg/L
OW-63	8/19/2019	TPH DRO	6.2	1	0.35	16700	mg/L
OW-63	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	8/19/2019	Bromide	0.44	0.5	0.088765	NA	mg/L
OW-63	8/19/2019	Chloride	85	10	10	250000000	mg/L
OW-63	8/19/2019	Fluoride, Total	0.47	0.5	0.073	1600000	mg/L
OW-63	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-63	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	11/18/2019	TPH GRO	31	1	0.422	10100	mg/L
OW-63	11/18/2019	TPH DRO	2.3	0.4	0.132	16700	mg/L
OW-63	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-63	11/18/2019	Bromide	0.44	0.5	0.077	NA	mg/L
OW-63	11/18/2019	Chloride	95	2.5	2.5	250000000	mg/L
OW-63	11/18/2019	Fluoride, Total	0.46	0.5	0.144909	1600000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	11/18/2019	TPH GRO	31	1	0.422	10100	mg/L
OW-63	11/18/2019	TPH DRO	2.2	0.4	0.132	16700	mg/L
OW-63	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-63	11/18/2019	Bromide	0.42	0.5	0.077	NA	mg/L
OW-63	11/18/2019	Chloride	96	2.5	2.5	250000000	mg/L
OW-63	11/18/2019	Fluoride, Total	0.45	0.5	0.144909	1600000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	3/4/2020	TPH GRO	23	1	0.14	10100	mg/L
OW-63	3/4/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
OW-63	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-63	3/4/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-63	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-63	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-63	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-63	3/4/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-63	3/4/2020	Chloride	86	10	5	250000000	mg/L
OW-63	3/4/2020	Fluoride, Total	0.59	0.5	0.11	1600000	mg/L
OW-63	9/16/2020	TPH GRO	29	1	0.16	10100	mg/L
OW-63	9/16/2020	TPH DRO	2.1	0.07	0.067	16700	mg/L
OW-63	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-63	9/16/2020	Bromide	0.37	0.5	0.25	NA	mg/L
OW-63	9/16/2020	Chloride	87	2.5	1.2	250000000	mg/L
OW-63	9/16/2020	Fluoride, Total	0.5	0.5	0.22	1600000	mg/L
OW-63	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-63	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-63	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-63	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-63	12/11/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-63	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-63	12/11/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	Chloride	80.9	5	0.6	250000000	mg/L
OW-63	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-63	12/11/2020	Bicarbonate	814	1	0.5	NA	mg/L
OW-63	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-63	12/11/2020	TPH (C6-C10)	23000	10000	4700	NA	ug/L
OW-63	12/11/2020	TPH DRO	5200	147	118	16700	ug/L
OW-63	12/11/2020	C28-C40	ND	147	118	NA	ug/L
OW-64	4/29/2018	Bromide	1.6	0.5	0.13	NA	mg/L
OW-64	4/29/2018	Chloride	62	2.5	0.15	250000000	mg/L
OW-64	4/29/2018	Fluoride, Total	3.7	0.5	0.15	1600000	mg/L
OW-64	4/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-64	4/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-64	4/29/2018	Sulfate	40	2.5	1	600000000	mg/L
OW-64	4/29/2018	TPH DRO	2.8	1	0.63	16700	mg/L
OW-64	4/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-64	4/29/2018	TPH GRO	17	1	0.42	10100	mg/L
OW-64	8/22/2018	Bromide	1.3	0.5	0.13	NA	mg/L
OW-64	8/22/2018	Chloride	20	2.5	0.15	250000000	mg/L
OW-64	8/22/2018	Fluoride, Total	4.4	0.5	0.15	1600000	mg/L
OW-64	8/22/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-64	8/22/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-64	8/22/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-64	8/22/2018	Sulfate	4.3	2.5	1	600000000	mg/L
OW-64	8/22/2018	TPH DRO	1.3	1	0.63	16700	mg/L
OW-64	8/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-64	8/22/2018	TPH GRO	14	0.25	0.048	10100	mg/L
OW-64	5/15/2019	TPH GRO	5.7	0.25	0.1535	10100	mg/L
OW-64	5/15/2019	TPH DRO	0.72	1	0.35	16700	mg/L
OW-64	5/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-64	5/15/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
OW-64	5/15/2019	Chloride	55	2.5	0.3125	250000000	mg/L
OW-64	5/15/2019	Fluoride, Total	4.3	0.5	0.25	1600000	mg/L
OW-64	5/15/2019	Nitrogen, Nitrate	0.42	0.5	0.027	10000000	mg/L
OW-64	5/15/2019	Nitrogen, Nitrite	0.89	0.5	0.02246	1000000	mg/L
OW-64	5/15/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-64	5/15/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
OW-64	8/19/2019	TPH GRO	2.5	0.5	0.307	10100	mg/L
OW-64	8/19/2019	TPH DRO	0.59	1	0.35	16700	mg/L
OW-64	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
OW-64	8/19/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
OW-64	8/19/2019	Chloride	41	2.5	2.5	250000000	mg/L
OW-64	8/19/2019	Fluoride, Total	4.8	0.5	0.073	1600000	mg/L
OW-64	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-64	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-64	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-64	8/19/2019	Sulfate	25	2.5	0.3345	600000000	mg/L
OW-64	11/18/2019	TPH GRO	0.83	0.25	0.1055	10100	mg/L
OW-64	11/18/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
OW-64	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-64	11/18/2019	Bromide	2	0.5	0.077	NA	mg/L
OW-64	11/18/2019	Chloride	93	2.5	2.5	250000000	mg/L
OW-64	11/18/2019	Fluoride, Total	4.2	0.5	0.144909	1600000	mg/L
OW-64	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-64	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-64	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-64	11/18/2019	Sulfate	72	2.5	0.3345	600000000	mg/L
OW-64	3/4/2020	TPH GRO	2.2	0.05	0.0068	10100	mg/L
OW-64	3/4/2020	TPH DRO	0.5	0.4	0.2	16700	mg/L
OW-64	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-64	3/4/2020	Bromide	1.4	0.5	0.25	NA	mg/L
OW-64	3/4/2020	Chloride	32	2.5	1.2	250000000	mg/L
OW-64	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-64	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-64	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-64	3/4/2020	Sulfate	16	2.5	1.2	600000000	mg/L
OW-64	3/4/2020	Fluoride, Total	4.8	0.5	0.11	1600000	mg/L
OW-64	9/22/2020	TPH GRO	1.3	0.05	0.008	10100	mg/L
OW-64	9/22/2020	TPH DRO	1.2	0.07	0.067	16700	mg/L
OW-64	9/22/2020	TPH ORO	6.7	0.6	0.6	85800	mg/L
OW-64	9/22/2020	Bromide	1.6	0.5	0.25	NA	mg/L
OW-64	9/22/2020	Chloride	52	2.5	1.2	250000000	mg/L
OW-64	9/22/2020	Fluoride, Total	4.7	0.5	0.22	1600000	mg/L
OW-64	9/22/2020	Nitrogen, Nitrate	0.17	0.5	0.1	10000000	mg/L
OW-64	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-64	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-64	9/22/2020	Sulfate	48	2.5	1.2	600000000	mg/L
OW-64	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-64	12/11/2020	Bicarbonate	929	1	0.5	NA	mg/L
OW-64	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Chloride	31.6	1	0.12	250000000	mg/L
OW-64	12/11/2020	Sulfate	22.3	1	0.37	600000000	mg/L
OW-64	12/11/2020	Fluoride, Total	5.37	1	0.3	1600000	mg/L
OW-64	12/11/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-64	12/11/2020	TPH DRO	1770	145	116	16700	ug/L
OW-64	12/11/2020	C28-C40	ND	145	116	NA	ug/L
OW-64	12/11/2020	TPH (C6-C10)	591	100	47	NA	ug/L
PW-2	9/10/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-2	9/10/2014	Nitrogen, Nitrate	0.12	0.1	0.0068	10000000	mg/L
PW-2	9/18/2017	Bromide	ND	0.5	0.073	NA	mg/L
PW-2	9/18/2017	Chloride	6.8	2.5	1.2	250000000	mg/L
PW-2	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-2	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-2	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-2	9/18/2017	Nitrate & Nitrite	0.19	1	0.13	NA	mg/L
PW-2	9/18/2017	Sulfate	340	10	1.9	600000000	mg/L
PW-2	9/21/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
PW-2	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-2	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-2	12/28/2020	Nitrogen, Nitrate & Nitrite	0.096	0.05	0.018	10000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrate	0.096	0.05	0.018	10000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-2	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
PW-3	8/24/2012	Chloride	29	10	1	250000000	mg/L
PW-3	8/24/2012	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-3	8/24/2012	Fluoride, Total	0.35	0.1	0.038	1600000	mg/L
PW-3	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
PW-3	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
PW-3	8/24/2012	Sulfate	740	10	2.4	600000000	mg/L
PW-3	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-3	9/10/2013	Nitrogen, Nitrate	0.15	0.1	0.016	10000000	mg/L
PW-3	9/10/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	9/10/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
PW-3	8/23/2015	Bromide	0.1	0.1	0.077	NA	mg/L
PW-3	8/23/2015	Chloride	31	10	2.7	250000000	mg/L
PW-3	8/23/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	8/23/2015	Fluoride, Total	0.16	0.1	0.029	1600000	mg/L
PW-3	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
PW-3	8/23/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
PW-3	8/23/2015	Sulfate	750	10	2.3	600000000	mg/L
PW-3	8/23/2015	TPH DRO	ND	1	0.91	16700	mg/L
PW-3	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
PW-3	8/23/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
PW-3	8/31/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	8/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
PW-3	9/18/2017	Bromide	0.3	0.5	0.073	NA	mg/L
PW-3	9/18/2017	Chloride	34	2.5	1.2	250000000	mg/L
PW-3	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-3	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-3	9/18/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
PW-3	9/18/2017	Sulfate	770	10	1.9	600000000	mg/L
PW-3	9/19/2018	Bromide	ND	0.5	0.13	NA	mg/L
PW-3	9/19/2018	Chloride	33	2.5	0.91	250000000	mg/L
PW-3	9/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/19/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
PW-3	9/19/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
PW-3	9/19/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
PW-3	9/19/2018	Sulfate	720	10	4.1	600000000	mg/L
PW-3	11/20/2018	Bromide	ND	0.5	0.1	NA	mg/L
PW-3	11/20/2018	Chloride	34	2.5	2.5	250000000	mg/L
PW-3	11/20/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
PW-3	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
PW-3	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
PW-3	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
PW-3	11/20/2018	Sulfate	720	10	2.5	600000000	mg/L
PW-3	2/20/2019	Bromide	0.14	0.5	0.0675	NA	mg/L
PW-3	2/20/2019	Chloride	33	2.5	2.5	250000000	mg/L
PW-3	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-3	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
PW-3	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
PW-3	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
PW-3	2/20/2019	Sulfate	730	10	1.28	600000000	mg/L
PW-3	2/20/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	5/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
PW-3	5/14/2019	Chloride	32	2.5	0.3125	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-3	5/14/2019	Nitrogen, Nitrate	0.13	0.5	0.027	10000000	mg/L
PW-3	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
PW-3	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
PW-3	5/14/2019	Sulfate	730	10	1.07	600000000	mg/L
PW-3	5/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	8/28/2019	Nitrogen, Nitrate	0.087	0.5	0.025	10000000	mg/L
PW-3	8/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-3	8/28/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/21/2020	Nitrogen, Nitrate	0.13	0.5	0.1	10000000	mg/L
PW-3	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-3	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-3	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate	0.1	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate	0.185	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate & Nitrite	0.1	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate & Nitrite	0.185	0.05	0.018	10000000	mg/L
PW-4	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-4	9/10/2013	Nitrogen, Nitrate	0.19	0.1	0.016	10000000	mg/L
PW-4	6/10/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-4	8/31/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-4	8/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
PW-4	3/30/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	3/30/2017	Nitrogen, Nitrate	0.51	0.1	0.022	10000000	mg/L
PW-4	9/18/2017	Bromide	ND	0.5	0.073	NA	mg/L
PW-4	9/18/2017	Chloride	7.4	2.5	1.2	250000000	mg/L
PW-4	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-4	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-4	9/18/2017	Nitrate & Nitrite	0.18	1	0.13	NA	mg/L
PW-4	9/18/2017	Sulfate	410	10	1.9	600000000	mg/L
PW-4	3/1/2018	Bromide	ND	0.5	0.073	NA	mg/L
PW-4	3/1/2018	Chloride	7.5	2.5	1.2	250000000	mg/L
PW-4	3/1/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	3/1/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-4	3/1/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-4	3/1/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
PW-4	3/1/2018	Nitrogen, Nitrate	0.17	0.5	0.11	10000000	mg/L
PW-4	3/1/2018	Sulfate	400	10	1.9	600000000	mg/L
PW-4	9/19/2018	Bromide	ND	0.5	0.13	NA	mg/L
PW-4	9/19/2018	Chloride	7.9	2.5	0.91	250000000	mg/L
PW-4	9/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	9/19/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
PW-4	9/19/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
PW-4	9/19/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
PW-4	9/19/2018	Sulfate	400	10	4.1	600000000	mg/L
PW-4	11/19/2018	Bromide	ND	0.5	0.1	NA	mg/L
PW-4	11/19/2018	Chloride	7.6	2.5	2.5	250000000	mg/L
PW-4	11/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	11/19/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
PW-4	11/19/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
PW-4	11/19/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
PW-4	11/19/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
PW-4	11/19/2018	Sulfate	390	10	2.5	600000000	mg/L
PW-4	2/20/2019	Bromide	0.078	0.5	0.0675	NA	mg/L
PW-4	2/20/2019	Chloride	8	2.5	2.5	250000000	mg/L
PW-4	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-4	2/20/2019	Nitrogen, Nitrate	0.15	0.5	0.143	10000000	mg/L
PW-4	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
PW-4	2/20/2019	Phosphorus, Ortho	0.25	2.5	0.1305	NA	mg/L
PW-4	2/20/2019	Sulfate	410	10	1.28	600000000	mg/L
PW-4	2/20/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	5/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
PW-4	5/14/2019	Chloride	7.8	2.5	0.3125	250000000	mg/L
PW-4	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-4	5/14/2019	Nitrogen, Nitrate	0.18	0.5	0.027	10000000	mg/L
PW-4	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
PW-4	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
PW-4	5/14/2019	Sulfate	410	10	1.07	600000000	mg/L
PW-4	5/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	8/27/2019	Nitrogen, Nitrate	0.11	0.5	0.025	10000000	mg/L
PW-4	8/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-4	8/27/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	8/27/2019	Nitrogen, Nitrate	0.13	0.5	0.025	10000000	mg/L
PW-4	8/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-4	8/27/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/21/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
PW-4	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-4	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-4	12/28/2020	Nitrogen, Nitrate & Nitrite	0.112	0.05	0.018	10000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrate	0.112	0.05	0.018	10000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-4	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
SMW-2	8/23/2012	Bromide	8.4	2	1.5	NA	mg/L
SMW-2	8/23/2012	Chloride	2400	100	10	250000000	mg/L
SMW-2	8/23/2012	Fluoride, Total	0.16	0.1	0.038	1600000	mg/L
SMW-2	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
SMW-2	8/23/2012	Nitrate & Nitrite	ND	2	1	NA	mg/L
SMW-2	8/23/2012	Sulfate	1600	25	5.9	600000000	mg/L
SMW-2	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
SMW-2	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
SMW-2	8/23/2012	TPH GRO	0.28	0.05	0.014	10100	mg/L
SMW-2	9/9/2013	Bromide	2.1	2	0.51	NA	mg/L
SMW-2	9/9/2013	Chloride	2500	100	30	250000000	mg/L
SMW-2	9/9/2013	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
SMW-2	9/9/2013	Fluoride, Total	ND	0.1	0.033	1600000	mg/L
SMW-2	9/9/2013	Ortho-Phosphate	ND	10	5	NA	mg/L
SMW-2	9/9/2013	Nitrate & Nitrite	ND	4	0.72	NA	mg/L
SMW-2	9/9/2013	Sulfate	1500	100	25	600000000	mg/L
SMW-2	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
SMW-2	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/9/2013	TPH GRO	0.15	0.05	0.02	10100	mg/L
SMW-2	9/11/2014	Bromide	2.9	2	0.44	NA	mg/L
SMW-2	9/11/2014	Chloride	2500	100	50	250000000	mg/L
SMW-2	9/11/2014	Cyanide, Total	0.0456	0.01	0.01	1460	mg/L
SMW-2	9/11/2014	Fluoride, Total	ND	2	0.36	1600000	mg/L
SMW-2	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
SMW-2	9/11/2014	Nitrate & Nitrite	ND	2	0.15	NA	mg/L
SMW-2	9/11/2014	Sulfate	1400	100	16	600000000	mg/L
SMW-2	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
SMW-2	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/11/2014	TPH GRO	0.23	0.05	0.019	10100	mg/L
SMW-2	8/17/2015	Bromide	5.1	2	1.5	NA	mg/L
SMW-2	8/17/2015	Chloride	3000	100	68	250000000	mg/L
SMW-2	8/17/2015	Cyanide, Total	0.045	0.01	0.01	1460	mg/L
SMW-2	8/17/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
SMW-2	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
SMW-2	8/17/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
SMW-2	8/17/2015	Sulfate	1600	50	11	600000000	mg/L
SMW-2	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
SMW-2	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
SMW-2	8/17/2015	TPH GRO	0.78	0.05	0.04	10100	mg/L
SMW-2	9/9/2016	Bromide	2.9	2	0.87	NA	mg/L
SMW-2	9/9/2016	Chloride	2500	100	10	250000000	mg/L
SMW-2	9/9/2016	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
SMW-2	9/9/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
SMW-2	9/9/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
SMW-2	9/9/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
SMW-2	9/9/2016	Sulfate	1300	100	28	600000000	mg/L
SMW-2	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
SMW-2	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/9/2016	TPH GRO	1	0.05	0.015	10100	mg/L
SMW-2	6/28/2017	Bromide	2.8	0.5	0.073	NA	mg/L
SMW-2	6/28/2017	Chloride	2600	250	120	250000000	mg/L
SMW-2	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	6/28/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
SMW-2	6/28/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
SMW-2	6/28/2017	Sulfate	1500	25	4.8	600000000	mg/L
SMW-2	9/11/2017	Bromide	2.5	0.5	0.073	NA	mg/L
SMW-2	9/11/2017	Chloride	2900	100	50	250000000	mg/L
SMW-2	9/11/2017	Cyanide, Total	0.036	0.005	0.005	1460	mg/L
SMW-2	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-2	9/11/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
SMW-2	9/11/2017	Sulfate	1400	100	19	600000000	mg/L
SMW-2	9/11/2017	TPH DRO	0.41	1	0.36	16700	mg/L
SMW-2	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/11/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
SMW-2	9/18/2018	Bromide	2.3	0.5	0.13	NA	mg/L
SMW-2	9/18/2018	Chloride	2900	250	91	250000000	mg/L
SMW-2	9/18/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
SMW-2	9/18/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
SMW-2	9/18/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
SMW-2	9/18/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/18/2018	Sulfate	1500	250	63	600000000	mg/L
SMW-2	9/18/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-2	9/18/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/18/2018	TPH GRO	0.25	0.05	0.024	10100	mg/L
SMW-2	8/22/2019	TPH GRO	0.21	0.05	0.0211	10100	mg/L
SMW-2	8/22/2019	Bromide	2.8	0.5	0.088765	NA	mg/L
SMW-2	8/22/2019	Chloride	2900	250	250	250000000	mg/L
SMW-2	8/22/2019	Fluoride, Total	0.093	0.5	0.073	1600000	mg/L
SMW-2	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
SMW-2	8/22/2019	Nitrogen, Nitrite	3.3	2	0.108	1000000	mg/L
SMW-2	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
SMW-2	8/22/2019	Sulfate	1400	250	33.45	600000000	mg/L
SMW-2	8/22/2019	Cyanide, Total	0.0374	0.005	0.005	1460	mg/L
SMW-2	8/22/2019	TPH DRO	1.1	1	0.35	16700	mg/L
SMW-2	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
SMW-2	9/19/2020	TPH GRO	0.57	0.05	0.008	10100	mg/L
SMW-2	9/19/2020	TPH DRO	0.1	0.07	0.067	16700	mg/L
SMW-2	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
SMW-2	9/19/2020	Chloride	2700	250	120	250000000	mg/L
SMW-2	9/19/2020	Sulfate	1200	250	120	600000000	mg/L
SMW-2	9/19/2020	Bromide	2.8	0.5	0.25	NA	mg/L
SMW-2	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	9/19/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
SMW-2	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-2	9/19/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
SMW-2	9/19/2020	Cyanide, Total	0.0337	0.01	0.0039	1460	mg/L
SMW-4	8/24/2012	Bromide	0.35	0.1	0.074	NA	mg/L
SMW-4	8/24/2012	Chloride	58	10	1	250000000	mg/L
SMW-4	8/24/2012	Fluoride, Total	1	0.1	0.038	1600000	mg/L
SMW-4	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
SMW-4	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
SMW-4	8/24/2012	Sulfate	150	10	2.4	600000000	mg/L
SMW-4	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
SMW-4	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
SMW-4	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
SMW-4	9/9/2013	Bromide	0.16	0.1	0.026	NA	mg/L
SMW-4	9/9/2013	Chloride	59	10	3	250000000	mg/L
SMW-4	9/9/2013	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/9/2013	Fluoride, Total	0.93	0.1	0.033	1600000	mg/L
SMW-4	9/9/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
SMW-4	9/9/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
SMW-4	9/9/2013	Sulfate	170	10	2.5	600000000	mg/L
SMW-4	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
SMW-4	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/9/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
SMW-4	9/11/2014	Bromide	0.19	0.1	0.022	NA	mg/L
SMW-4	9/11/2014	Chloride	53	10	5	250000000	mg/L
SMW-4	9/11/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/11/2014	Fluoride, Total	1.1	0.1	0.018	1600000	mg/L
SMW-4	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
SMW-4	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
SMW-4	9/11/2014	Sulfate	150	10	1.6	600000000	mg/L
SMW-4	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
SMW-4	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
SMW-4	8/14/2015	Bromide	0.17	0.1	0.077	NA	mg/L
SMW-4	8/14/2015	Chloride	55	10	2.7	250000000	mg/L
SMW-4	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	8/14/2015	Fluoride, Total	1	0.1	0.029	1600000	mg/L
SMW-4	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
SMW-4	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
SMW-4	8/14/2015	Sulfate	160	10	2.3	600000000	mg/L
SMW-4	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
SMW-4	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
SMW-4	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
SMW-4	9/7/2016	Bromide	0.15	0.1	0.044	NA	mg/L
SMW-4	9/7/2016	Chloride	53	10	1	250000000	mg/L
SMW-4	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/7/2016	Fluoride, Total	0.95	0.1	0.05	1600000	mg/L
SMW-4	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
SMW-4	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
SMW-4	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
SMW-4	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
SMW-4	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/7/2016	TPH GRO	0.028	0.05	0.015	10100	mg/L
SMW-4	6/28/2017	Bromide	0.26	0.5	0.073	NA	mg/L
SMW-4	6/28/2017	Chloride	63	2.5	1.2	250000000	mg/L
SMW-4	6/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
SMW-4	6/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	6/28/2017	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
SMW-4	6/28/2017	Sulfate	180	2.5	0.48	600000000	mg/L
SMW-4	9/11/2017	Bromide	0.15	0.5	0.073	NA	mg/L
SMW-4	9/11/2017	Chloride	56	2.5	1.2	250000000	mg/L
SMW-4	9/11/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/11/2017	Fluoride, Total	0.96	0.5	0.22	1600000	mg/L
SMW-4	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-4	9/11/2017	Nitrate & Nitrite	0.35	1	0.13	NA	mg/L
SMW-4	9/11/2017	Sulfate	160	2.5	0.48	600000000	mg/L
SMW-4	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
SMW-4	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
SMW-4	9/12/2018	Bromide	0.21	0.5	0.13	NA	mg/L
SMW-4	9/12/2018	Chloride	59	2.5	0.91	250000000	mg/L
SMW-4	9/12/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/12/2018	Fluoride, Total	0.97	0.5	0.16	1600000	mg/L
SMW-4	9/12/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
SMW-4	9/12/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
SMW-4	9/12/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
SMW-4	9/12/2018	Sulfate	160	2.5	1	600000000	mg/L
SMW-4	9/12/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-4	9/12/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/12/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
SMW-4	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-4	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-4	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
SMW-4	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
SMW-4	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
SMW-4	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
SMW-4	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
SMW-4	8/13/2019	Chloride	59	2.5	2.5	250000000	mg/L
SMW-4	8/13/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
SMW-4	8/13/2019	Nitrogen, Nitrate	0.11	0.5	0.025	10000000	mg/L
SMW-4	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
SMW-4	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
SMW-4	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
SMW-4	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
SMW-4	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
SMW-4	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
SMW-4	9/20/2020	Bromide	0.12	0.1	0.05	NA	mg/L
SMW-4	9/20/2020	Fluoride, Total	0.77	0.1	0.043	1600000	mg/L
SMW-4	9/20/2020	Nitrogen, Nitrate	0.034	0.1	0.02	10000000	mg/L
SMW-4	9/20/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
SMW-4	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
SMW-4	9/20/2020	Chloride	50	10	5	250000000	mg/L
SMW-4	9/20/2020	Sulfate	140	10	5	600000000	mg/L
SMW-4	9/20/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
STP-1 to EP-2	9/5/2013	Biochemical Oxygen Demand	670	2	2	NA	mg/L
STP-1 to EP-2	9/5/2013	TPH DRO	3.3	1	0.57	16700	mg/L
STP-1 to EP-2	9/5/2013	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/5/2013	TPH GRO	ND	0.5	0.2	10100	mg/L
STP-1 to EP-2	3/5/2014	Biochemical Oxygen Demand	560	2	2	NA	mg/L
STP-1 to EP-2	3/5/2014	Chemical Oxygen Demand	1500	100	100	NA	mg/L
STP-1 to EP-2	9/10/2014	Biochemical Oxygen Demand	270	2	2	NA	mg/L
STP-1 to EP-2	9/10/2014	Bromide	2.2	0.5	0.11	NA	mg/L
STP-1 to EP-2	9/10/2014	Chloride	310	10	5	250000000	mg/L
STP-1 to EP-2	9/10/2014	Chemical Oxygen Demand	1500	100	100	NA	mg/L
STP-1 to EP-2	9/10/2014	Fluoride, Total	54	2	0.36	1600000	mg/L
STP-1 to EP-2	9/10/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
STP-1 to EP-2	9/10/2014	Nitrogen, Nitrite	ND	0.5	0.042	1000000	mg/L
STP-1 to EP-2	9/10/2014	Nitrogen, Nitrate	ND	0.5	0.034	10000000	mg/L
STP-1 to EP-2	9/10/2014	Sulfate	1200	25	4.1	600000000	mg/L
STP-1 to EP-2	9/10/2014	TPH DRO	2.4	1	0.83	16700	mg/L
STP-1 to EP-2	9/10/2014	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/10/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
STP-1 to EP-2	11/12/2014	Biochemical Oxygen Demand	630	2	2	NA	mg/L
STP-1 to EP-2	11/12/2014	Chemical Oxygen Demand	1300	50	50	NA	mg/L
STP-1 to EP-2	8/24/2015	Biochemical Oxygen Demand	380	2	2	NA	mg/L
STP-1 to EP-2	8/24/2015	Chemical Oxygen Demand	81	5	5	NA	mg/L
STP-1 to EP-2	8/24/2015	TPH DRO	2.3	1	0.91	16700	mg/L
STP-1 to EP-2	8/24/2015	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/24/2015	TPH GRO	0.13	0.1	0.08	10100	mg/L
STP-1 to EP-2	6/8/2016	Biochemical Oxygen Demand	160	2	2	NA	mg/L
STP-1 to EP-2	6/8/2016	Chemical Oxygen Demand	410	10	10	NA	mg/L
STP-1 to EP-2	6/8/2016	TPH DRO	2	1	0.69	16700	mg/L
STP-1 to EP-2	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	6/8/2016	TPH GRO	ND	0.25	0.13	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/30/2016	Biochemical Oxygen Demand	310	2	2	NA	mg/L
STP-1 to EP-2	8/30/2016	Chemical Oxygen Demand	660	100	30	NA	mg/L
STP-1 to EP-2	8/30/2016	TPH DRO	5.1	1	0.69	16700	mg/L
STP-1 to EP-2	8/30/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/30/2016	TPH GRO	0.22	0.5	0.15	10100	mg/L
STP-1 to EP-2	11/17/2016	Biochemical Oxygen Demand	1000	2	2	NA	mg/L
STP-1 to EP-2	11/17/2016	Chemical Oxygen Demand	1600	500	500	NA	mg/L
STP-1 to EP-2	11/17/2016	TPH DRO	0.95	1	0.69	16700	mg/L
STP-1 to EP-2	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	11/17/2016	TPH GRO	ND	0.5	0.25	10100	mg/L
STP-1 to EP-2	3/30/2017	Biochemical Oxygen Demand	470	2	2	NA	mg/L
STP-1 to EP-2	3/30/2017	Chemical Oxygen Demand	1330	20	20	NA	mg/L
STP-1 to EP-2	3/30/2017	TPH DRO	11	1	0.36	16700	mg/L
STP-1 to EP-2	3/30/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	3/30/2017	TPH GRO	1.2	0.5	0.097	10100	mg/L
STP-1 to EP-2	6/2/2017	Biochemical Oxygen Demand	1200	2	2	NA	mg/L
STP-1 to EP-2	6/2/2017	Chemical Oxygen Demand	1400	20	20	NA	mg/L
STP-1 to EP-2	6/2/2017	TPH DRO	1.5	1	0.36	16700	mg/L
STP-1 to EP-2	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	6/2/2017	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	9/7/2017	Biochemical Oxygen Demand	640	2	2	NA	mg/L
STP-1 to EP-2	9/7/2017	Chemical Oxygen Demand	1100	20	20	NA	mg/L
STP-1 to EP-2	9/7/2017	TPH DRO	30	1	0.36	16700	mg/L
STP-1 to EP-2	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/7/2017	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	12/12/2017	Biochemical Oxygen Demand	1400	2	2	NA	mg/L
STP-1 to EP-2	12/12/2017	Chemical Oxygen Demand	2100	50	15	NA	mg/L
STP-1 to EP-2	12/12/2017	TPH DRO	3.8	1	0.36	16700	mg/L
STP-1 to EP-2	12/12/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	12/12/2017	TPH GRO	0.24	0.5	0.097	10100	mg/L
STP-1 to EP-2	2/12/2018	Biochemical Oxygen Demand	780	2	2	NA	mg/L
STP-1 to EP-2	2/12/2018	Chemical Oxygen Demand	1400	20	20	NA	mg/L
STP-1 to EP-2	2/12/2018	TPH DRO	61	1	0.63	16700	mg/L
STP-1 to EP-2	2/12/2018	TPH ORO	32	5	5	85800	mg/L
STP-1 to EP-2	2/12/2018	TPH GRO	1.1	0.5	0.097	10100	mg/L
STP-1 to EP-2	5/6/2018	Biochemical Oxygen Demand	770	2	2	NA	mg/L
STP-1 to EP-2	5/6/2018	Chemical Oxygen Demand	1300	50	50	NA	mg/L
STP-1 to EP-2	5/6/2018	TPH DRO	10	1	0.63	16700	mg/L
STP-1 to EP-2	5/6/2018	TPH ORO	8.7	5	5	85800	mg/L
STP-1 to EP-2	5/6/2018	TPH GRO	0.51	0.25	0.048	10100	mg/L
STP-1 to EP-2	8/31/2018	Biochemical Oxygen Demand	1500	2	2	NA	mg/L
STP-1 to EP-2	8/31/2018	Chemical Oxygen Demand	1900	250	250	NA	mg/L
STP-1 to EP-2	8/31/2018	TPH DRO	2.7	1	0.63	16700	mg/L
STP-1 to EP-2	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/31/2018	TPH GRO	0.29	0.5	0.097	10100	mg/L
STP-1 to EP-2	11/8/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
STP-1 to EP-2	11/8/2018	Chemical Oxygen Demand	8080	100	100	NA	mg/L
STP-1 to EP-2	11/8/2018	TPH DRO	14	1	0.63	16700	mg/L
STP-1 to EP-2	11/8/2018	TPH ORO	5.4	5	5	85800	mg/L
STP-1 to EP-2	11/8/2018	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	2/7/2019	Biochemical Oxygen Demand	150	2	2	NA	mg/L
STP-1 to EP-2	2/7/2019	TPH DRO	1.2	1	0.63	16700	mg/L
STP-1 to EP-2	2/7/2019	TPH GRO	0.072	0.05	0.0211	10100	mg/L
STP-1 to EP-2	2/7/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	2/7/2019	Chemical Oxygen Demand	495	10	10	NA	mg/L
STP-1 to EP-2	5/29/2019	TPH GRO	ND	1	0.422	10100	mg/L
STP-1 to EP-2	5/29/2019	TPH DRO	2.1	1	0.35	16700	mg/L
STP-1 to EP-2	5/29/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	5/29/2019	Biochemical Oxygen Demand	1100	2	2	NA	mg/L
STP-1 to EP-2	5/29/2019	Solids, Total Suspended	36	4	4	NA	mg/L
STP-1 to EP-2	5/29/2019	Chemical Oxygen Demand	1590	50	50	NA	mg/L
STP-1 to EP-2	10/9/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
STP-1 to EP-2	10/9/2019	Biochemical Oxygen Demand	120	2	2	NA	mg/L
STP-1 to EP-2	10/9/2019	Solids, Total Suspended	41	4	4	NA	mg/L
STP-1 to EP-2	10/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
STP-1 to EP-2	10/9/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	10/9/2019	Chemical Oxygen Demand	299	10	10	NA	mg/L
STP-1 to EP-2	11/21/2019	TPH GRO	ND	0.5	0.211	10100	mg/L
STP-1 to EP-2	11/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
STP-1 to EP-2	11/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
STP-1 to EP-2	11/21/2019	Solids, Total Suspended	69	4	4	NA	mg/L
STP-1 to EP-2	11/21/2019	Biochemical Oxygen Demand	1600	2	2	NA	mg/L
STP-1 to EP-2	11/21/2019	Chemical Oxygen Demand	2420	625	625	NA	mg/L
STP-1 to EP-2	9/16/2020	Biochemical Oxygen Demand	357	2	2	NA	mg/L
STP-1 to EP-2	9/16/2020	TPH GRO	ND	0.5	0.08	10100	mg/L
STP-1 to EP-2	9/16/2020	TPH DRO	0.63	0.07	0.067	16700	mg/L
STP-1 to EP-2	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
STP-1 to EP-2	9/16/2020	Solids, Total Suspended	230	8	8	NA	mg/L
STP-1 to EP-2	9/16/2020	Chemical Oxygen Demand	882	125	32.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	220	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	203	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Biochemical Oxygen Demand	40.2	2	2	NA	mg/L
STP-1 to EP-2	12/21/2020	Biochemical Oxygen Demand	39	2	2	NA	mg/L
STP-1 to EP-2	12/21/2020	Chemical Oxygen Demand	697	80	51.2	NA	mg/L
STP-1 to EP-2	12/21/2020	Chemical Oxygen Demand	679	80	51.2	NA	mg/L
STP-1 to EP-2	12/21/2020	TPH DRO	1970	149	119	16700	ug/L
STP-1 to EP-2	12/21/2020	C28-C40	1100	149	119	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH DRO	3390	143	114	16700	ug/L
STP-1 to EP-2	12/21/2020	C28-C40	1900	143	114	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH (C6-C10)	141	100	47	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH (C6-C10)	154	100	47	NA	ug/L
STP-1 to EP-2	9/16/2020	Solids, Total Suspended	230	8	8	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	220	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	203	16.7	0	NA	mg/L
STP-1 to EP-2	5/29/2019	Solids, Total Suspended	36	4	4	NA	mg/L
STP-1 to EP-2	10/9/2019	Solids, Total Suspended	41	4	4	NA	mg/L
STP-1 to EP-2	11/21/2019	Solids, Total Suspended	69	4	4	NA	mg/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

CFU/100ml - colony forming units (number of bacteria) per 100 milliliters

MDL - Method Detection Limit

mg/L - milligrams per liter

MPN/100mL - most probable number per 100 milliliters

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

APPENDIX C-2a. VOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
VOLATILE ORGANIC COMPOUNDS								
1,1,1,2-Tetrachloroethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,1,1-Trichloroethane	1611	138	0.22	130	1473	8.57%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
1,1,2,2-Tetrachloroethane	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
1,1,2-Trichloroethane	1611	99	0.2	3.1	1512	6.15%	Remove	Not Skinner List or MNA Compound
1,1-Dichloroethane (1,1-DCA)*	1611	450	0.23	610	1161	27.93%	**Retain**	Skinner List; All Wells; MNA Compound
1,1-Dichloroethene (1,1-DCE)*	1611	346	0.19	240	1265	21.48%	**Retain**	Site Wide COC; All Wells; MNA Compound
1,1-Dichloropropene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,2,3-Trichlorobenzene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,2,3-Trichloropropane	1540	0	0	0	1540	0.00%	Remove	Not Skinner List or MNA Compound
1,2,4-Trichlorobenzene	676	0	0	0	676	0.00%	Remove	Not Skinner List or MNA Compound
1,2,4-Trimethylbenzene	1663	640	0.12	5800	1023	38.48%	**Retain**	Detection >10%
1,2-Dibromo-3-Chloropropane	1540	0	0	0	1540	0.00%	Remove	Not Skinner List or MNA Compound
1,2-Dibromoethane (EDB)	1641	3	0.167	1.5	1638	0.18%	**Retain**	Skinner List; All Wells
1,2-Dichlorobenzene	676	2	0.37	0.52	674	0.30%	Remove	Skinner List but <10% detection
1,2-Dichloroethane (1,2-DCA)*	1611	307	0.28	163	1304	19.06%	**Retain**	Skinner List; All Wells; MNA Compound
1,2-Dichloropropane	1611	6	0.14	0.41	1605	0.37%	Remove	Not Skinner List or MNA Compound
1,3,5-Trimethylbenzene	1663	404	0.15	1900	1259	24.29%	**Retain**	Detection >10%
1,3-Dichlorobenzene	676	0	0	0	676	0.00%	Remove	Skinner List but <10% detection
1,3-Dichloropropane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,4-Dichlorobenzene	676	9	3.1	5.9	667	1.33%	Remove	Skinner List but <10% detection
1,4-Dioxane	20	3	2.26	19.4	17	15.00%	Remove	Skinner List as VOC, however, lab recommends 8270 for best detection limits
1-Methylnaphthalene**	676	186	0.26	270	490	27.51%	Remove	Skinner List as SVOC
2,2-Dichloropropane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
2-Butanone / Methyl Ethyl Ketone (MEK)	1611	129	0.79	2800	1482	8.01%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
2-Chloroethyl vinyl ether	1	0	0	0	1	0.00%	Remove	Not Skinner List or MNA Compound
2-Chlorotoluene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
2-Hexanone	1611	7	2.2	110	1604	0.43%	Remove	Not Skinner List or MNA Compound
2-Methylnaphthalene**	676	136	0.19	450	540	20.12%	Remove	Skinner List as SVOC
4-Chlorotoluene	1610	1	0.5	0.5	1609	0.06%	Remove	Not Skinner List or MNA Compound
4-Methyl-2-Pentanone	1611	43	0.47	120	1568	2.67%	Remove	Not Skinner List or MNA Compound
Acetone	1611	457	0.86	12000	1154	28.37%	**Retain**	Detection >10%
Benzene*	1700	870	0.096	38000	830	51.18%	**Retain**	Skinner List; All Wells; MNA Compound
Bromobenzene	1545	0	0	0	1545	0.00%	Remove	Not Skinner List or MNA Compound
Bromodichloromethane	1611	2	0.23	0.47	1609	0.12%	Remove	Not Skinner List or MNA Compound
Bromoform	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Bromomethane	1611	9	1.1	16	1602	0.56%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
Carbon Disulfide	1611	68	0.41	1300	1543	4.22%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)

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APPENDIX C-2a. VOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
VOLATILE ORGANIC COMPOUNDS								
Carbon tetrachloride	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Chlorobenzene	1611	14	0.35	2	1597	0.87%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
Chloroethane	1611	23	0.46	85	1588	1.43%	Remove	Not Skinner List or MNA Compound
Chloroform	1611	49	0.1	9.7	1562	3.04%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
Chloromethane	1611	31	0.25	55	1580	1.92%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
cis-1,2-Dichloroethene (cis-1,2-DCE)*	1610	261	0.14	100	1349	16.21%	**Retain**	Site Wide COC; All Wells; MNA Compound
cis-1,3-Dichloropropene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Dibromochloromethane	1611	1	0.31	0.31	1610	0.06%	Remove	Not Skinner List or MNA Compound
Dibromomethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
Dichlorodifluoromethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
Ethylbenzene*	1700	754	0.098	3800	946	44.35%	**Retain**	Skinner List; All Wells; MNA Compound
Hexachlorobutadiene	676	0	0	0	676	0.00%	Remove	Not Skinner List or MNA Compound
Isopropylbenzene	1610	589	0.06	200	1021	36.58%	**Retain**	Detection >10%
Methylene Chloride	1611	29	0.11	18	1582	1.80%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
MTBE*	1698	1135	0.28	12000	563	66.84%	**Retain**	Skinner List; All Wells; MNA Compound
Naphthalene	676	197	0.1	660	479	29.14%	Remove	Skinner List as SVOC
n-Butylbenzene	1610	293	0.14	140	1317	18.20%	**Retain**	Detection >10%
n-Propylbenzene	1610	590	0.13	380	1020	36.65%	**Retain**	Detection >10%
Pentafluorobenzene	94	65	10	1000	29	69.15%	**Retain**	Detection >10%
p-Isopropyltoluene	1610	227	0.14	38	1383	14.10%	**Retain**	Detection >10%
sec-Butylbenzene	1610	388	0.12	58	1222	24.10%	**Retain**	Detection >10%
Styrene	1610	20	0.17	4.1	1590	1.24%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
tert-Butylbenzene	1610	57	0.12	2.8	1553	3.54%	Remove	Not Skinner List or MNA Compound
Tetrachloroethene (PCE)*	1611	52	0.14	7.8	1559	3.23%	**Retain**	Skinner List; All Wells; MNA Compound
Toluene*	1700	589	0.067	34000	1111	34.65%	**Retain**	Skinner List; All Wells; MNA Compound
trans-1,2-Dichloroethene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
trans-1,3-Dichloropropene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Trichloroethene (TCE)*	1611	171	0.19	300	1440	10.61%	**Retain**	Skinner List; All Wells; MNA Compound
Trichlorofluoromethane	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Vinyl Chloride*	1611	99	0.29	62	1512	6.15%	**Retain**	Site Wide COC; All Wells; MNA Compound
Xylenes, Total*	1700	594	0.47	25000	1106	34.94%	**Retain**	Skinner List; All Wells; MNA Compound

COC - Constituent of concern
mg/L - milligrams per liter
MNA - Monitored natural attenuation
MTBE - Methyl tert-butyl ether
ND - No data
VOC - Volatile organic compound

Notes:
Bolded analytes are being retained on the analyte list
*Included on both VOC list and MNA list
**Compound included as optional in Skinner List
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
1,2,4-Trichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
1,2-Dichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Skinner List but <10% detection
1,2-Diphenylhydrazine	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound
1,3-Dichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Skinner List but <10% detection
1,4-Dichlorobenzene	1352	8	3.1	7	1344	0.59%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
1,4-Dichlorobenzene-d4	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
1,4-Dioxane	164	99	0	210	65	60.37%	**Retain**	Skinner List; All Wells
1-Methylnaphthalene**	1326	424	0.11	7800	902	31.98%	**Retain**	Skinner List; All Wells
2,4-Dimethylphenol	1352	226	1.1	610	1126	16.72%	**Retain**	Skinner List; All Wells
2,3,4,6-Tetrachlorophenol	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
2,3,5,6-Tetrachlorophenol	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
2,4,5-Trichlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,4,6-Trichlorophenol	1352	1	19	19	1351	0.07%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
2,4-Dichlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,4-Dinitrophenol	1352	3	6.8	7.9	1349	0.22%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
2,4-Dinitrotoluene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,6-Dinitrotoluene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Chloronaphthalene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Chlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Methylnaphthalene**	1326	306	0.86	5600	1020	23.08%	**Retain**	Skinner List; All Wells
2-Methylphenol	1352	161	1.1	2200	1191	11.91%	**Retain**	Skinner List; All Wells
2-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Nitrophenol	1352	1	5.6	5.6	1351	0.07%	Remove	Not Skinner List or MNA Compound
3,3-Dichlorobenzidine	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
3,4-Methylphenol	1303	198	0.28	4300	1105	15.20%	**Retain**	Skinner List; All Wells
3-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4,6-Dinitro-2-methylphenol	1352	1	5	5	1351	0.07%	Remove	Not Skinner List or MNA Compound
4-Bromophenyl-phenylether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Chloro-3-Methylphenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Chloroaniline	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
4-Chlorophenyl-phenylether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Nitrophenol	1352	1	6.4	6.4	1351	0.07%	Remove	Skinner List but <10% detection
7,12-Dimethylbenz(a)anthracene	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound
Acenaphthene	1375	85	0.14	80	1290	6.18%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Acenaphthene-d10	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Acenaphthylene	1375	5	0.39	3.6	1370	0.36%	Remove	Not Skinner List or MNA Compound
Anthracene	1375	4	0.13	1	1371	0.29%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Aniline	1352	62	3.7	160	1290	4.59%	Remove	Not Skinner List or MNA Compound
Anthracene	1375	4	0.13	1	1371	0.29%	Remove	Not Skinner List or MNA Compound
Azobenzene	1187	0	0	0	1187	0.00%	Remove	Not Skinner List or MNA Compound
Benzenethiol**	ND	ND	ND	ND	ND	ND	Remove	On optional Skinner List; not suspected as being at site and not previously analyzed

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APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
Benzidine	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
Benzo(a)anthracene**	1375	7	1.5	54	1368	0.51%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Benzo(a)pyrene**	1375	1	4	4	1374	0.07%	Remove	Skinner List but <10% detection
Benzo(b)fluoranthene**	1375	2	3.5	7.8	1373	0.15%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Benzo(g,h,i)perylene	1375	1	3.8	3.8	1374	0.07%	Remove	Not Skinner List or MNA Compound
Benzo(k)fluoranthene**	1375	0	0	0	1375	0.00%	Remove	Skinner List but <10% detection
Benzoic Acid	1347	350	0.21	190	997	25.98%	**Retain**	Detection >10%
Benzyl Alcohol	1352	16	0.49	26	1336	1.18%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroethoxy)methane	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroethyl)ether	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroisopropyl)ether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-ethylhexyl)phthalate	1352	333	0.23	4800	1019	24.63%	**Retain**	Skinner List; All Wells
Butylbenzylphthalate	1352	23	2.6	27	1329	1.70%	Remove	Not Skinner List or MNA Compound
Carbazole	1352	127	0.22	28	1225	9.39%	Remove	Not Skinner List or MNA Compound
Chrysene**	1375	5	1.2	53	1370	0.36%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Chrysene-d12	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Dibenz(a,h)acridine**	5	0	0	0	5	0.00%	Remove	Skinner List but <10% detection
Dibenzo(a,h)anthracene**	1375	0	0	0	1375	0.00%	Remove	Skinner List but <10% detection
Dibenzofuran	1352	22	0.12	8.3	1330	1.63%	Remove	Not Skinner List or MNA Compound
Diethylphthalate	1352	9	0.69	6.8	1343	0.67%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Dimethylphthalate	1352	50	2.9	61	1302	3.70%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Di-n-butylphthalate	1352	8	2.5	3.6	1344	0.59%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Di-n-octylphthalate	1352	154	3.3	81	1198	11.39%	**Retain**	Detection >10%
Fluoranthene	1375	5	0.27	60	1370	0.36%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Fluorene	1375	124	0.25	380	1251	9.02%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Hexachlorobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Hexachlorobutadiene	1303	0	0	0	1303	0.00%	Remove	Not Skinner List or MNA Compound
Hexachlorocyclopentadiene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Hexachloroethane	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Indene**	ND	ND	ND	ND	ND	ND	Remove	On optional Skinner List; not suspected as being at site and not previously analyzed
Indeno(1,2,3-cd)pyrene**	1375	4	0.11	43	1371	0.29%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Isophorone	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
MTBE*	1698	1135	0.28	12000	563	66.84%	Remove	Skinner List as SVOC, however, lab recommends 8260 for best detection limits
Naphthalene	1375	427	0.21	2300	948	31.05%	**Retain**	Skinner List; All Wells
Naphthalene-d8	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Nitrobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodimethylamine	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodi-n-propylamine	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodiphenylamine	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Pentachlorophenol	1352	4	3.9	25	1348	0.30%	Remove	Not Skinner List or MNA Compound
Perylene-D12	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Phenanthrene	1375	101	0.19	720	1274	7.35%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)

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APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
Phenanthrene-d10	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Phenol	1352	388	0.62	7400	964	28.70%	**Retain**	Skinner List; All Wells
Pyrene	1375	20	0.15	190	1355	1.45%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Pyridine	1352	2	0.5	16	1350	0.15%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Quinoline	5	0	0	0	5	0.00%	Remove	Skinner List but <10% detection
Thiophenol	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound

mg/L - milligrams per liter
MNA - Monitored natural attenuation
MTBE - Methyl tert-butyl ether
ND - No data
SVOC - Semi-volatile organic compound
VOC - Volatile Organic Compound

Notes:
Bolded analytes are being retained on the analyte list
*Included on both VOC list and MNA list
**Compound included as optional in Skinner List
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

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APPENDIX C-2c. TOTAL AND DISSOLVED METALS EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
METALS								
Aluminum, Dissolved	422	188	0.0027	21	234	44.55%	Remove	Not Skinner List or MNA Compound
Aluminum, Total	432	393	0.0026	99	39	90.97%	Remove	Not Skinner List or MNA Compound
Antimony, Dissolved	460	58	0.00022	20.2	402	12.61%	**Retain**	Skinner List; All Wells, Even Years
Antimony, Total	411	37	0.00016	0.009	374	9.00%	**Retain**	Skinner List; All Wells
Antimony, Total Recoverable	65	1	2.31	2.31	64	1.54%	Remove	Not Skinner List or MNA Compound
Arsenic, Dissolved	1033	915	0.00025	580	118	88.58%	**Retain**	Skinner List; All Wells, Even Years
Arsenic, Total	1552	1221	0.00032	0.96	331	78.67%	**Retain**	Skinner List; All Wells
Arsenic, Total Recoverable	65	46	1.48	552	19	70.77%	Remove	Not Skinner List or MNA Compound
Barium, Dissolved	1033	1026	0.0013	55	7	99.32%	**Retain**	Skinner List; All Wells, Even Years
Barium, Total	1618	1612	0.0073	67	6	99.63%	**Retain**	Skinner List; All Wells
Beryllium, Dissolved	459	107	0.00029	0.0036	352	23.31%	**Retain**	Skinner List; All Wells, Even Years
Beryllium, Total	477	183	0.00023	0.008	294	38.36%	**Retain**	Skinner List; All Wells
Boron, Dissolved	422	417	0.0091	18.8	5	98.82%	Remove	Not Skinner List or MNA Compound
Boron, Total	431	425	0.0077	18.6	6	98.61%	Remove	Not Skinner List or MNA Compound
Cadmium, Dissolved	1033	0	0	0	1033	0.00%	**Retain**	Skinner List; All Wells, Even Years
Cadmium, Total	1618	3	0.00064	0.0017	1615	0.19%	**Retain**	Skinner List; All Wells
Calcium, Dissolved	863	863	0.45	4700	0	100.00%	Remove	Not Skinner List or MNA Compound
Calcium, Total	461	460	1.4	3100	1	99.78%	Remove	Not Skinner List or MNA Compound
Chromium, Dissolved	1033	134	0.0013	2.3	899	12.97%	**Retain**	Skinner List; All Wells, Even Years
Chromium, Total	1618	536	0.0011	2.36	1082	33.13%	**Retain**	Skinner List; All Wells
Cobalt, Dissolved	426	27	0.0019	0.091	399	6.34%	**Retain**	Skinner List; All Wells, Even Years
Cobalt, Total	442	70	0.0014	0.11	372	15.84%	**Retain**	Skinner List; All Wells
Copper, Dissolved	1029	222	0.0013	0.15	807	21.57%	Remove	Not Skinner List or MNA Compound
Copper, Total	1607	442	0.0018	0.26	1165	27.50%	Remove	Not Skinner List or MNA Compound
Iron, Dissolved	1033	784	0.0089	750	249	75.90%	Remove	MNA Wells Only; remove from Metals
Iron, Total	1613	1486	0.0089	1400	127	92.13%	Remove	MNA Wells Only; remove from Metals
Lead, Dissolved	1033	338	0.000034	5.06	695	32.72%	**Retain**	Skinner List; All Wells, Even Years
Lead, Total	1552	964	0.000043	0.58	588	62.11%	**Retain**	Skinner List; All Wells
Lead, Total Recoverable	65	25	1.01	19.8	40	38.46%	Remove	Not Skinner List or MNA Compound
Magnesium, Dissolved	863	838	0.14	9200	25	97.10%	Remove	Not Skinner List or MNA Compound
Magnesium, Total	459	415	0.6	5200	44	90.41%	Remove	Not Skinner List or MNA Compound
Manganese, Dissolved	1033	1018	0.00032	76	15	98.55%	Remove	MNA Wells Only; remove from Metals
Manganese, Total	1613	1597	0.00053	81	16	99.01%	Remove	MNA Wells Only; remove from Metals
Mercury, Dissolved	64	0	0	0	64	0.00%	**Retain**	Skinner List; All Wells, Even Years
Mercury, Total	1571	437	0.000037	0.0016	1134	27.82%	**Retain**	Skinner List; All Wells
Molybdenum, Dissolved	422	67	0.0062	0.2	355	15.88%	Remove	Not Skinner List or MNA Compound
Molybdenum, Total	432	72	0.0026	0.21	360	16.67%	Remove	Not Skinner List or MNA Compound

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APPENDIX C-2c. TOTAL AND DISSOLVED METALS EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
METALS								
Nickel, Dissolved	426	277	0.0035	4.16	149	65.02%	**Retain**	Skinner List; All Wells, Even Years
Nickel, Total	443	333	0.0025	4.13	110	75.17%	**Retain**	Skinner List; All Wells
Potassium, Dissolved	863	804	0.13	7800	59	93.16%	Remove	Not Skinner List or MNA Compound
Potassium, Total	459	363	0.3	7600	96	79.08%	Remove	Not Skinner List or MNA Compound
Selenium, Dissolved	1025	540	0.00018	35.5	485	52.68%	**Retain**	Skinner List; All Wells, Even Years
Selenium, Total	1560	838	0.00014	0.47	722	53.72%	**Retain**	Skinner List; All Wells
Selenium, Total Recoverable	65	6	9.73	60	59	9.23%	Remove	Not Skinner List or MNA Compound
Silver, Dissolved	1033	380	0.0009	0.033	653	36.79%	**Retain**	Skinner List; All Wells, Even Years
Silver, Total	1618	380	0.00046	0.039	1238	23.49%	**Retain**	Skinner List; All Wells
Sodium, Dissolved	862	862	0.5	120000	0	100.00%	Remove	Not Skinner List or MNA Compound
Sodium, Total	459	459	16	99000	0	100.00%	Remove	Not Skinner List or MNA Compound
Thallium, Dissolved	449	10	0.000036	0.00069	439	2.23%	Remove	Not Skinner List or MNA Compound
Thallium, Total	393	55	0.000052	0.00041	338	13.99%	Remove	Not Skinner List or MNA Compound
Thallium, Total Recoverable	65	0	0	0	65	0.00%	Remove	Not Skinner List or MNA Compound
Uranium, Dissolved	873	792	0.000071	162	81	90.72%	Remove	Not Skinner List or MNA Compound
Uranium, Total	1391	1187	0.00007	0.28	204	85.33%	Remove	Not Skinner List or MNA Compound
Uranium, Total Recoverable	65	27	10.6	166	38	41.54%	Remove	Not Skinner List or MNA Compound
Vanadium, Dissolved	11	6	0.0022	0.045	5	54.55%	**Retain**	Skinner List; All Wells, Even Years
Vanadium, Total	18	11	0.00091	0.07	7	61.11%	**Retain**	Skinner List; All Wells
Zinc, Dissolved	1033	874	0.0026	0.62	159	84.61%	**Retain**	Skinner List; All Wells, Even Years
Zinc, Total	1618	967	0.0027	1.1	651	59.77%	**Retain**	Skinner List; All Wells

mg/L - milligrams per liter

MNA - Monitored natural attenuation

Notes:

Bolded analytes are being retained on the analyte list

Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

APPENDIX C-2d. GENERAL CHEMISTRY EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
GENERAL CHEMISTRY								
Ammonia	37	5	0.067	1.13	32	13.51%	Remove	Not Skinner List or MNA Compound
Bicarbonate	36	36	147	1200	0	100.00%	Remove	Not Skinner List or MNA Compound
Biochemical Oxygen Demand	214	207	2.35	1600	7	96.73%	**Retain**	Evaporation Pond Samples Only
Bromide	1283	1164	0.034	380	119	90.72%	Remove	Not Skinner List or MNA Compound
Bromide, dissolved	2	2	0.85	0.92	0	100.00%	Remove	Not Skinner List or MNA Compound
Chemical Oxygen Demand	202	201	10.3	14000	1	99.50%	**Retain**	Evaporation Pond Samples Only
Chloride	1328	1328	1.4	250000	0	100.00%	Remove	MNA Wells Only; remove from General Chemistry
Chloride, Dissolved	2	2	1900	2000	0	100.00%	Remove	Not Skinner List or MNA Compound
Coliform, E-Coli	170	161	1	24200	9	94.71%	**Retain**	Evaporation Pond Samples Only
Cyanide, Total	125	45	0.00805	0.111	80	36.00%	**Retain**	Skinner List; All Wells
Fluoride, Dissolved	2	2	0.89	0.98	0	100.00%	Remove	Not Skinner List or MNA Compound
Fluoride, Total	1328	935	0.049	270	393	70.41%	Remove	Not Skinner List or MNA Compound
Hexane Extractable Material	3	3	15	29	0	100.00%	Remove	Not Skinner List or MNA Compound; Will Use TPH ORO
Nitrogen, Nitrate	727	282	0.014	35.6	445	38.79%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrate & Nitrite	664	174	0.068	62	490	31.17%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrate, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Nitrogen, Nitrite	682	43	0.066	53	639	6.30%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrite, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Ortho-Phosphate	1032	76	0.16	12	956	7.36%	Remove	Not Skinner List or MNA Compound and <10% detection
Orthophosphate as P, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Phosphorus, Ortho	250	26	0.0668	1.9	224	10.40%	Remove	Not Skinner List or MNA Compound
Phosphorus, Total	37	13	0.111	2.88	24	35.14%	Remove	Not Skinner List or MNA Compound
Solids, Total Suspended	39	35	9	4180	4	89.74%	Remove	Change to field measurement of turbidity
Sulfate	1328	1221	0.14	57000	107	91.94%	Remove	MNA Wells Only; remove from General Chemistry
Sulfate, Dissolved	2	2	330	390	0	100.00%	Remove	Not Skinner List or MNA Compound
TPH DRO	1440	758	0.072	42900	682	52.64%	**Retain**	Site Wide COC; All Wells
TPH GRO	1437	1021	0.0068	84600	416	71.05%	**Retain**	Site Wide COC; All Wells
TPH ORO	1431	21	1.5	6410	1407	1.22%	**Retain**	Site Wide COC; All Wells

COC - Constituent of concern
DRO - Diesel Range Organic
GRO - Gasoline Range Organic
mg/L - milligrams per liter
MNA - Monitored natural attenuation
ORO - Oil Range Organic
P - Phosphorus
TPH - Total Petroleum Hydrocarbon

Notes:
Bolded analytes are being retained on the analyte list
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

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ATTACHMENT C

CLEAN

REVISED 2022 FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN

(ELECTRONIC COPY)

WESTERN REFINING SOUTHWEST LLC

D/B/A MARATHON GALLUP REFINERY

2022 FACILITY-WIDE GROUNDWATER MONITORING WORK PLAN

FEBRUARY 11, 2022

REVISED SEPTEMBER 30, 2022

REVISED APRIL 1, 2023

Executive Summary

This 2022 Facility-Wide Groundwater Monitoring Work Plan (2022 Plan) has been prepared for the implementation of the facility-wide groundwater and monitored natural attenuation (MNA) groundwater programs at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This 2022 Plan is prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NMED 2022).

The Refinery annually reviews the facility-wide monitoring data and evaluates the facility-wide monitoring program. Revisions and modifications are incorporated into the annual Facility-Wide Groundwater Monitoring Work Plans, due to NMED on April 1 of the same calendar year that the Plan is for. These revisions may include, but are not limited to, a reduction or change in monitoring locations, monitoring frequency, and/or target constituents of concern to be analyzed. Due to delays in receiving approval on the 2021 Plan update, NMED requests presented in comments to the 2021 Facility-Wide Groundwater Monitoring Work Plan (NMED 2021b, NMED 2021c) are incorporated into the 2022 Plan, when applicable. General information regarding the facility-wide monitoring program is presented in Section 3.1. The revisions proposed for the 2022 Plan are discussed in Section 4.0.

The MNA groundwater evaluation was initiated in 2020 and a work plan was developed in 2021. The following presents the historical sequence of correspondence for the MNA Plan:

- "Natural Attenuation Assessment and Proposed Workplan for the Hydrocarbon Seep Area" (MPC 2020), submitted December 15, 2020
- "Disapproval" (NMED 2021d), received January 26, 2021
- "Response to Disapproval" (Western 2021a), submitted August 27, 2021
- "Approval with Modifications (NMED 2021e), received September 28, 2021
- "Response to Approval with Modifications" (Western 2021b), submitted December 17, 2021

Per Comment 11 provided by NMED on the 2021 Plan (NMED 2021c), the Refinery is including a discussion of the MNA groundwater program in the 2022 Plan. The Refinery is using the information from the "Response to Approval with Modifications" (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document. Information regarding the MNA program is provided in Section 3.2.

The Refinery has created a groundwater monitoring work plan with quality assurance practices and controls, as well as standard procedures for sampling, and a schedule of activities to monitor groundwater and surface water at select locations of the Refinery. The persons responsible for the implementation and oversight of this plan are:

Vice President

- Ruth Cade

Remediation Project Manager

- Kateri Luka

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A. HISTORICAL OVERVIEW

B. INVESTIGATION METHODS

C. 2022 ANALYTE EVALUATION

List of Acronyms

COC	constituents of concern
CVOC	chlorinated volatile organic compound
EDB	1,2-dibromomethane
ft	feet/foot
ft/d	feet per day
I-40	Interstate 40
LTU	land treatment unit
MKTF	Marketing Tank Farm
MNA	Monitored Natural Attenuation
MTBE	methyl tert-butyl ether
NM	New Mexico
NMED	New Mexico Environment Department
OW	observation well
PCE	tetrachloroethene
PFAS	Per- and Polyfluoroalkyl Substances
Plan	Facility-Wide Groundwater Monitoring Work Plan
RCRA	Resource Conservation and Recovery Act
Refinery	Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery
SPH	separate phase hydrocarbon
STP	sanitary treatment pond
SVOC	semi-volatile organic compound
SWMU	solid waste management unit
TPH	total petroleum hydrocarbons
VC	vinyl chloride
VOC	volatile organic compound
WWTP	wastewater treatment plant

1.0 Introduction

This 2022 Facility-Wide Groundwater Monitoring Work Plan (2022 Plan) has been prepared for the implementation of the facility-wide groundwater and monitored natural attenuation (MNA) groundwater programs at the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery). This 2022 Plan is prepared in accordance with the Resource Conservation and Recovery Act (RCRA) Post-Closure Permit (NMED 2022). Figure 1-1 presents the Refinery location.

The Refinery annually reviews the facility-wide monitoring data and evaluates the facility-wide monitoring program. Revisions and modifications are incorporated into the annual Facility-Wide Groundwater Monitoring Work Plans, due to NMED on April 1 of the same calendar year that the Plan is for. Annual revisions to the work plan are presented to New Mexico Environment Department (NMED) for review. These revisions may include, but are not limited to, a reduction or change in monitoring locations, monitoring frequency, and/or target constituents of concern (COC) to be analyzed. Because the 2021 Facility-Wide Groundwater Monitoring Work Plan (2021 Plan) was not approved in 2021, NMED requests presented in comments to the 2021 Plan (NMED 2021b, NMED 2021c) are incorporated into the 2022 Plan, when applicable. General information regarding the facility-wide monitoring program is presented in Section 3.1. The revisions proposed for the 2022 Plan are discussed in Section 4.0.

The MNA groundwater evaluation was initiated in 2020 and a work plan developed in 2021. The following presents the historical sequence of correspondence for the MNA work plan:

- "Natural Attenuation Assessment and Proposed Workplan for the Hydrocarbon Seep Area" (MPC 2020), submitted December 15, 2020
- "Disapproval" (NMED 2021d), received January 26, 2021
- "Response to Disapproval" (Western 2021a), submitted August 27, 2021
- "Approval with Modifications (NMED 2021e), received September 28, 2021
- "Response to Approval with Modifications" (Western 2021b), submitted December 17, 2021

Per Comment 11 provided by NMED on the 2021 Plan (NMED 2021c), the Refinery is including a discussion of the MNA groundwater program in the 2022 Plan. The Refinery is using the information from the "Response to Approval with Modifications" (Western 2021b) approved by NMED on April 5, 2022 (NMED 2022), as the basis for the MNA groundwater program presented in this document. Information regarding the MNA program is provided in Section 3.2.

1.1 Refinery Information

Built in the 1950s, the Refinery is located within a rural and sparsely populated area east of Gallup, New Mexico (NM). The nearest population centers are the Pilot Flying J Travel Center refueling

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plaza, the Interstate 40 (I-40) corridor, and a small cluster of residential homes located on the south side of I-40 approximately 2 miles southwest of the Refinery (Jamestown).

The Refinery is indefinitely idled as of October 9, 2020. During operation, the Refinery was a crude oil refining and petroleum products manufacturing facility. There were no organic chemicals, plastics, or synthetic fibers manufactured that contributed to the process flow of wastewater. The Refinery did not manufacturer lubricating oils. As a result of the processing steps, the Refinery produced a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, residual fuel, and commercial products of fertilizer and solid elemental sulfur.

Historically, the Refinery primarily received crude oil via two 6-inch diameter pipelines, which entered the Refinery property from the north (Four Corners Area). In addition, the Refinery also received natural gasoline feedstock via a 4-inch diameter pipeline that came in from the west along the I-40 corridor from the Western Refining Southwest LLC – Wingate Plant, which is also indefinitely idled. Crude oil and other products also arrived at the Refinery via railroad cars. These feed stocks were then stored in tanks until refined into products.

Additional background information on regulatory status, historical operations, and environmental investigations and assessments are provided in Appendix A.

1.2 Monitoring Groups

This 2022 Plan divides the Refinery into nine geographic groups for periodic monitoring. The groups were chosen to reflect site conditions and better track dissolved constituents and separate phase hydrocarbon (SPH) within the footprint of the Refinery. The groups are presented on Figure 1-2 and described below:

- The Eastern Boundary group includes observation wells (OWs) located on the northeast section of the plant and recovery wells from which small quantities of free product have been removed.
- The Tank Farm group includes monitoring wells within the tank farm north of the process area.
- The Marketing Tank Farm (MKTF) group includes monitoring wells installed to delineate a hydrocarbon plume associated with a seep discovered west of the crude tank (Tank 101).
- The Solid Waste Management Unit (SWMU) 1 group consists of a cluster of monitoring wells and leak detection units for the New American Petroleum Institute Separator at the aeration basin, the wastewater treatment plant (WWTP), and the sanitary treatment pond (STP). The SWMU 1 wells and WWTP wells were combined due to the proximity of the two areas (NMED 2021a).
- The Land Treatment Unit (LTU) group includes the monitoring wells surrounding the RCRA permitted LTU.
- The Evaporation Ponds group includes surface sampling locations for the evaporation ponds and for the effluent from the STP.

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- The Western Boundary group consists of the nested wells situated along the northwest and west side of the Refinery.
- The Deep Wells group include five OWs. Three OWs are located in the south-southwest section of the Refinery property and two are located north of the tank farm.
- The Production Wells include PW-2, and PW-3, and PW-4 and are located south, west, and within the MKTF area. The Production Wells were segregated from the Deep Wells in the 2022 Plan as requested by NMED to better reflect the screened intervals of the production wells (NMED 2021a).

Designated wells and sample points are monitored on a quarterly, semiannual, and annual basis following the procedures presented in this 2022 Plan, as described in Section 4.0 and Appendix B.

1.3 New Monitoring Wells for 2022

Several new monitoring wells were installed during 2021. These wells are included in the 2022 Plan. The reports describing the installation of these new monitoring wells are listed below:

- Monitoring wells OW-66, OW-67, OW-68, MKTF-01R, MKTF-02R, MKTF-04R, MKTF-17R, and MKTF-18R were installed between July 19, 2021, and August 16, 2021. Installation procedures and analytical data are provided in the "Investigation Report, SMW-1 and GWM-1 Areas" (Western 2021c) and "Well Installation and Abandonment Report" submitted November 15, 2021 (Western 2021d).
- Monitoring wells OW-12A and OW-70 were installed in August 2021. Installation procedures and analytical data are provided in the "North Drainage Ditch Area Investigation Report" submitted December 17, 2021 (Western 2021e).

The monitoring frequency and analyte list for the monitoring wells installed in 2021 are described in Section 4.0.

2.0 Site Conditions

The Refinery is located within a rural and sparsely populated section of McKinley County, NM. It is situated in the high desert plain on the western flank of the Continental Divide approximately 17 miles east of Gallup, NM (Figure 1-1). The surrounding land is comprised primarily of public and private lands used for cattle and sheep grazing.

2.1 Site Topography

Local topography consists of a gradually inclined down-slope from high ground in the southeast to a lowland fluvial plain in the northwest. The highest point on Refinery property is located at the southeast corner boundary (elevation approximately 7,040 feet [ft]) and the lowest point is located at the northwest corner boundary (elevation approximately 6,860 ft). Surface soils within most of the area of investigation are primarily Rehobeth silty clay loam. The Refinery is located on a flat man-made terrace.

2.2 Surface Water

Surface water in the Refinery consists of the man-made evaporation ponds and aeration basins (Figure 2-1). There are several storm water conveyance ditches located throughout the Refinery. These ditches are discharged into contained basins where storm water is collected and allowed to evaporate or discharged into two designated outfalls. The outfalls are located on the east and west section of the property, identified as Outfall 001 and Outfall 002. Outfall 001 is located directly south of evaporation pond 8 on the western edge of the Refinery's property boundary and Outfall 002 is located north of the railroad loading rack on the eastern section of the Refinery.

Directly west of the crude tank area, there is a concrete barrier with a control valve that discharges from a culvert, which carries storm water flow from the Truck Loading Rack area. The control valve is kept closed. This concrete barrier is located downstream of the "hydrocarbon seep area." The flow from this concrete barrier continues in a north-northwest direction alongside the southern bermed areas of evaporation ponds 3, 4, 5, and 6 and outward towards the Outfall 001 area. At the WWTP, there are three storm drains located on the south, southwest, and west side. These drains are connected to an underground storm culvert that exits on the northwest section of STP-1 into a conveyance ditch along the northern edge of evaporation pond 2 and into a holding pond equipped with manual flow valves, located north of evaporation pond 3. The valves are normally closed but would be opened if the water in the holding pond becomes high. The discharge from this holding pond then flows north-northwest towards the Outfall 001 area.

2.3 Geology

Site boring logs indicate that subsurface fluvial and alluvial soils are primarily comprised of clays and silts with discontinuous inter-bedded sand layers. Very low permeability bedrock (e.g., claystones and siltstones) underlie the surface soils. The Chinle Group, from the Upper Triassic period, crops out over a large area south of the Refinery. The uppermost subunit within the Chinle Group is the Petrified Forest

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Formation, which is also sometimes referred to as the Petrified Forest Member. Inter-bedded within the Chinle Group is the Sonsela Sandstone bed, which lies within and parallels the dip of the Chinle Group. Its high point is located southeast of the Refinery and slopes downward to the northwest as it passes under the Refinery. Due to the hydraulic confinement of the Petrified Forest Formation aquitard, the Sonsela Sandstone bed acts as a water-bearing reservoir and is artesian at its lower extremis. Artesian conditions exist through much of the central and western portions of the Refinery.

2.4 Hydrogeology

Groundwater flow within the shallow alluvium and the upper Chinle Formation is highly variable due to the presence of complex and irregular stratigraphy including sand stringers, cobble beds, and dense clay layers. Hydraulic conductivity ranges from 30 ft per day (ft/d) for gravel-like sands immediately overlying the Petrified Forest Formation to 3×10^{-5} ft/d in the clay soils located near the surface. Groundwater flow within the Lower Chinle Formation is extremely slow and typically averages less than 2.83×10^{-7} ft/d (i.e., less than 0.01 ft per year).

Water level data are collected routinely at the Refinery. Wells at the Refinery have been categorized based on the hydrogeologic unit in which they are screened, including the alluvial/fluvial upper sand aquifer, the Chinle/alluvium aquifer, and the Sonsela Sandstone aquifer. The alluvial/fluvial upper sand aquifer has a limited aerial extent, existing only on the western margin on the Refinery. Groundwater occurrence in this aquifer is sporadic and limited (Appendix B, Figure 1).

The majority of the wells monitored lie within the shallow weathered sediments that comprise the Chinle/alluvium aquifer. Within the Chinle/alluvium aquifer, shallow groundwater located under the Refinery property generally flows along the upper contact of the Chinle Formation. The prevailing flow is from the southeast to the northwest, although localized areas may have varying flow directions based on the subsurface geology (Appendix B, Figure 2).

Groundwater within the Sonsela flows southeast to northwest (Appendix B, Figure 3). Hydraulic heads measured within the Sonsela are generally lower than those observed within the shallow aquifer near the topographic high on which the Refinery process area and tank farm are situated, and higher than those observed within the shallow aquifer in topographically low areas to the west and northwest, near the evaporation ponds. The higher head in the Sonsela in low areas is due to confining pressure from lower permeability Chinle Formation bedrock between the shallow Chinle/alluvium aquifer and the Sonsela Sandstone bed at depth, which makes the Sonsela Sandstone aquifer artesian.

3.0 Groundwater Monitoring Programs

Groundwater monitoring at the Refinery is conducted pursuant to the RCRA Post-Closure Permit (NMED 2022) and in accordance with this 2022 Plan. There are two objectives of the groundwater monitoring program at the Refinery. First, is to monitor facility-wide groundwater conditions and submit the information in a facility-wide annual groundwater report. Second, is to provide information on MNA occurring in the MKTF area. MNA data are submitted in an annual MNA report. Both programs are discussed below.

3.1 Facility-wide Groundwater Monitoring Program

The facility-wide program will consist of fluid-level measurement, and groundwater sample collection and analysis from a series of monitoring wells, recovery wells, outfalls, and evaporation pond locations. The monitoring network is divided into nine groups (Section 1.2 and Figure 1-2). The sampling frequency varies by individual wells. The analytes are consistent across the nine monitoring groups. Section 4.0 presents the 2022 sampling locations and analyte list.

Appendix B presents the procedures used for sample collection and analysis and includes the following activities:

- Well gauging (i.e., depth to groundwater and SPH, if present, and depth to the bottom of the well)
- Well purging and sampling, including equipment, groundwater stabilization criteria, and collection of field quality parameters
- Sample handling and waste management procedures
- Field and laboratory quality assurance procedures

Groundwater samples will not be collected from monitoring wells that have measurable SPH of 0.01 ft or more. If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured. If the well does not have measurable SPH, the recovery system will be removed from the well, and the well will be purged and sampled. For wells that are purged dry, samples will be collected if recharge volume is sufficient for sample collection within 24 hours. Wells not sampled due to insufficient recharge will be documented in the field log. If samples cannot be collected from a location due to safety concerns, such as elevated hydrogen sulfide, arrangements will be made to collect samples from the affected location at a different time by changing the scheduled sampling dates.

Data from the facility-wide groundwater will be presented in an annual report in accordance with the RCRA Post Closure Permit (NMED2022) Parts IV.C.3 and IV.L.4. The report will include:

- Scope of activities, including deviations from the 2022 Plan
- Field monitoring results
- Analytical data results, including comparison to applicable regulatory standards
- Remediation system monitoring
- Summary
- Tables, figures, and appendices will be provided as appropriate

As requested by NMED (MPC 2021, Comment 3), the October 17, 2019, gauging data for Well OW-58A (Figure 1-2) will not be included in future reports.

3.2 Monitored Natural Attenuation Program

MNA groundwater monitoring will be conducted on an annual basis (MPC 2021b) for the select MKTF monitoring wells: MKTF-02R, MKTF-04R, MKTF-09, MKTF-10, MKTF-13, MKTF-16, MKTF-17R, MKTF-19, MKTF-20, MKTF-21, MKTF-22, MKTF-24, and MKTF-25. The well locations are provided on Figure 3-1. The sampling will be conducted concurrently with the third quarter facility-wide monitoring event, following the practices presented in Section 3.2 and Appendix B. Samples will be analyzed for the constituents presented in Table 3-1 and evaluated for evidence of chlorinated volatile organic compounds (CVOCs) MNA and the methyl tert-butyl ether (MTBE) MNA.

The MNA evaluation will be presented in the annual MNA report and will be completed in accordance with the "Response to Approval with Modifications" (Western 2021b). The report will include:

- A summary of the MNA analytical data.
- An update to the United States Environmental Protection Agency quantitative spreadsheet scoring the MNA potential.
- A statistical trend analysis for CVOCs and MTBE.
- A discussion section summarizing natural attenuation progress, including trends in contaminant concentrations and key MNA indicators.
- Tables, figures, and appendices will be provided as appropriate.

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4.0 Facility-wide Groundwater Monitoring Program Revisions

Prior to preparing the 2022 Plan, NMED and the Refinery conducted a meeting on December 3, 2021, to discuss work plan and report presentation. Follow-up communications regarding the 2022 analyte list were conducted via email from January 5, 2022, through January 20, 2022, (Personal Communication 2022). The discussions between NMED and the Refinery are incorporated into this 2022 Plan. The proposed modifications and the rationale are presented in the following sections.

4.1 Modifications to Monitoring Locations

The monitoring locations are presented in Table 4-1 and shown on Figure 1-2. Six monitoring wells were plugged, abandoned, and replaced during 2021: MKTF-01, MKTF-02, MKTF-04, MKTF-17, MKTF-18, and RW-2. Plugging and abandonment were conducted following NM state guidelines (New Mexico Administrative Code 19.24.4). The wells were replaced because the well screens have historically been submerged (NMED 2018, Comment 40; NMED 2019b, Comment 4). The replacement wells are indicated by an "R" following the well designation (e.g., MKTF-01R).

In addition, five new monitoring wells were installed during 2021: OW-66, OW-67, OW-68, OW-70 (NDD-MW-1), and OW-12A (NDD-MW-2).

- Monitoring well OW-66 was installed approximately halfway the distance between OW-29 and OW-13 to evaluate the potential migration of MTBE within the Sonsela aquifer (NMED 2018, Comment 18.3).
- Monitoring wells OW-67 and OW-68 were installed north of EP-2 to evaluate the source of elevated chloride and sulfate concentrations detected in well SMW-2 (NMED 2019a).
- NDD-MW-1 and NDD-MW-2 were installed as part of the North Drainage Ditch investigation (Western 2021e). These identifiers were used during the August 2021 North Drainage Ditch Investigation. These monitoring wells were renamed OW-70 and OW-12A, respectively, to correspond to Refinery naming convention.

4.2 Modifications to Monitoring Frequency

The monitoring frequency was evaluated based on the 2021 sampling events and analytical data. Well OW-12 will be modified from an annual to a semiannual frequency. No other monitoring frequency changes are proposed for the 2022 Plan. Table 4-1 presents the 2022 frequency for the monitoring groups.

The new monitoring wells are incorporated into the LTU, MKTF, and eastern boundary monitoring groups. The new wells will be sampled quarterly. After two years of quarterly sampling, the wells will be evaluated to be sampled annually, if that matches the well group sampling frequency. The new wells have been added to Table 4-1.

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4.3 Modifications to Target Analytes

The 2022 facility-wide analyte list will be used for all wells in the groundwater monitoring program, unless noted in Section 4.3.3. The data will be used to evaluate the groundwater on a facility-wide basis. The 2022 analyte list is presented in Table 4-2. A discussion of the 2022 analyte list preparation is presented below.

4.3.1 Data Set Compilation

Available data collected between 2012 and 2020, regardless of location or group, were tabulated (Appendix C-1) and divided into four categories: volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), total and dissolved metals, and general chemistry. The total number of samples collected for each constituent was compared to the total number of detections and a detection percentage was calculated (Appendix C-2). Lowest detection, highest detection, and total number of non-detects were also noted.

4.3.2 Data Evaluation

The data in Appendix C-2 was first evaluated for inclusion in the Region 5 Waste Management Branch "Modified 'Skinner List' for Constituents of Concern for Wastes from Petroleum Processes" (USEPA 1997). The 1997 Skinner List is provided in Appendix C-3.

- Constituents not included in the Skinner List were removed unless:
    - The analytes were considered to be facility-wide COC based on a frequency of detection greater than 10 percent.
    - The analytes were considered to be facility-wide COC based exceeding the applicable clean-up level within the last 5 years (2017 to 2021), regardless of detection frequency.
- Skinner List constituents with a detection frequency less than 10 percent were removed.
- Skinner List constituents detected at least once in the last 5 years (2017 to 2021) were retained, regardless of detection frequency.

All data provided by analyses where the limit of detection values exceed the cleanup levels are considered data quality exceptions and will not be used to demonstrate compliance. Furthermore, all data quality exceptions are identified in the tables where data are presented and will continue in all future submittals.

4.3.3 Miscellaneous Data Additions and Removals

Analytes that have been added or deleted by NMED through report comments or requests have been incorporated in the analyte list for the specific wells requested, as appropriate.

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- Tetrachloroethene (PCE) and vinyl chloride (VC) had detection frequencies less than 10 percent. PCE and VC are part of the MNA monitoring program; therefore, they are included on the facility-wide analyte list.
- 1,2-Dibromomethane (EDB) had a detection frequency less than 10 percent. EDB is a Skinner List compound and previously requested by NMED; therefore, it is included on the facility-wide analyte list.
- Pesticides were added to EP-2 by NMED comment (NMED 2020, Comment 25 and NMED 2021c, Comment 10).
- Per- and Polyfluoroalkyl Substance, also referred to as PFAS, were added to OW-63 by NMED comment (NMED 2020, Comment 30).
- Total and dissolved uranium were removed from all wells by NMED comment (NMED 2020, Comment 21).
- Pesticides were removed from EP-3, EP-12A, and EP-12B by NMED comment (NMED 2020, Comment 26).
- 1,4-dioxane is a Skinner List VOC constituent. However, based on laboratory recommendation, it has been retained as an SVOC analyte to obtain lower detection limits, in cases of areas with high VOC impact.

Analytes specific to the MNA program are presented in Table 3-1. Field parameters (conductance, dissolved oxygen, oxidation reduction potential, pH, salinity, temperature, and total dissolved solids) were not included in the evaluation. Field parameters will continue to be measured in all wells.

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Figures

Tables

Appendices A through C (Please see attached CD)

Appendix A – Historical Overview

WESTERN REFINING SOUTHWEST LLC

D/B/A MARATHON GALLUP REFINERY

APPENDIX A. BACKGROUND INFORMATION

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3-1. Site Map, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery, Gallup, New Mexico

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List of Attachments

A. RELEVANT FIGURES

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List of Acronyms

AOC	Area of Concern
HP	Hydraulic Profiling
I-40	Interstate 40
IM	interim measures
KOD	Knock Out Drum
LDU	leak detection unit
LIF	Laser-Induced Fluorescence
LTU	land treatment unit
MKTF	Marketing Tank Farm
NAPIS	New American Petroleum Institute Separator Unit
NM	New Mexico
NMED	New Mexico Environment Department
OAPIS	old API Separator
RCRA	Resource Conservation and Recovery Act
Refinery	Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery
SPH	separate phase hydrocarbon
SWMU	solid waste management unit
TPH	total petroleum hydrocarbons
WWTP	wastewater treatment plant

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1.0 Introduction

This appendix provides an overview of background information relevant for the Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery (Refinery) located in Gallup, New Mexico (NM). The Refinery is situated on an 810-acre irregular shaped tract of land that is largely located within the southern one-quarter of Section 28 and throughout Section 33 of Township 15 North, Range 15 West of the New Mexico Prime Meridian. A small component of the property lies within the northeastern one-quarter of Section 4 of Township 14 North, Range 15 West. The Gallup Refinery is located at Exit 39 on Interstate 40 (I-40) at Jamestown, NM approximately 17 miles east of Gallup. The Refinery is indefinitely idled and being maintained near operating conditions.

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2.0 Regulatory Status

The Refinery is regulated under a Resource Conservation and Recovery Act (RCRA) post-closure permit (NMED 2017a), completing corrective action and compliance activities. The following regulatory identification and permit governs the Refinery:

- Standard Industrial Classification code 2911 (petroleum refining) and North American Industry Classification System code 32411
- Final Resource Conservation and Recovery Act Post-Closure Permit, United States Environmental Protection Agency ID Number NMD000333211
- NM Oil Conservation Division Abatement Plan Number AP-111
- 2015 NPDES MSGP, ID #NMR053168

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3.0 Historical Refinery Operations

Built in the 1950s, the Refinery is located within a rural and sparsely populated area east of Gallup, NM. The Refinery is indefinitely idled as of October 9, 2020. During operation, the Refinery was a crude oil refining and petroleum products manufacturing facility. There were no organic chemicals, plastics, or synthetic fibers manufactured that contributed to the process flow of wastewater. The Refinery did not manufacturer lubricating oils. As a result of the processing steps, the Refinery produced a wide range of petroleum products including propane, butane, unleaded gasoline, diesel, residual fuel, and commercial products of fertilizer and solid elemental sulfur.

Historically, the Refinery primarily received crude oil via two 6-inch diameter pipelines, which entered the Refinery property from the north (Four Corners Area). In addition, the Refinery also received natural gasoline feedstock via a 4-inch diameter pipeline that came in from the west along the I-40 corridor from the Western Refining Southwest LLC – Wingate Plant, which is also indefinitely idled. Crude oil and other products also arrived at the Refinery via railroad cars. These feed stocks were then stored in tanks until refined into products.

Above ground storage tanks were used throughout the Refinery to hold and store crude oil, gasoline, intermediate feed stocks, finished products, chemicals, and water. Capacity of these tanks ranged in size from less than 1,000 barrels to 80,000 barrels. Pumps, valves, and piping systems were used throughout the Refinery to transfer various liquids among storage tanks and processing units. A railroad spur track and a railcar loading rack were used to transfer feed stocks and products from Refinery storage tanks into and out of railcars. Several tank truck loading racks were used at the Refinery to load out finished products, received crude oil, other feed stocks, additives, and chemicals when operating.

Even though the Refinery has an indefinite idle status, the process wastewater system remains in operation. The system is a network of curbing, paving, catch basins, and underground piping used to collect wastewater from various processing areas within the Refinery. The wastewater effluent then flows into the equalization tanks and the New American Petroleum Institute Separator Unit (NAPIS). Currently, only remediation fluids are processed through the system.

While the Refinery is in indefinite idle, water is held in EP-2 to evaporate and is not distributed to the other ponds. No wastewater is currently discharged from the Refinery to surface waters of the state.

Currently, all above-ground large tanks have leak detection or equivalent systems, such as radar gauges. Pumps that could leak hydrocarbons are within containment areas and all tanks are located inside earthen bermed areas to contain spills. The NAPIS has double walls and a leak detection system installed.

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4.0 Environmental Investigations and Assessments

There are 14 Solid Waste Management Units (SWMUs) identified at the Refinery and one closed Land Treatment Unit (LTU). On December 31, 2013, the RCRA Post-Closure Care Permit (RCRA Permit) became effective under the New Mexico Administrative Code §20.4.1.901A(10). The RCRA Permit identified an additional 21 Areas of Concern (AOCs) requiring corrective action. These units are listed below, and the locations are identified on Figure 3-1.

RCRA Regulated Units

- LTU

SWMUs

- SWMU 1 – Aeration Basin
- SWMU 2 – Evaporation Ponds
- SWMU 3 – Empty Container Storage Area
- SWMU 4 – Old Burn Pit
- SWMU 5 – Landfill Areas
- SWMU 6 – Tank Farm
- SWMU 7 – Fire Training Area
- SWMU 8 – Railroad Rack Lagoon
- SWMU 9 – Drainage Ditch and the Inactive Land farm
- SWMU 10 – Sludge Pits
- SWMU 11 – Secondary Oil Skimmer
- SWMU 12 – Contact Wastewater Collection System
- SWMU 13 – Drainage Ditch between North and South Evaporation Ponds
- SWMU 14 –API Separator

AOCs

- AOC 15 – New API Separator
- AOC 16 – New API Separator Overflow Tanks
- AOC 17 – Railroad Loading/Unloading Facility
- AOC 18 – Asphalt Tank Farm (tanks 701-709, 713, 714)
- AOC 19 – East Fuel Oil Loading Rack

- AOC 20 – Crude Slop and Ethanol Unloading Facility
- AOC 21 – Main Loading Racks
- AOC 22 – Loading Rack Additive Tank Farm
- AOC 23 – Retail Fuel Tank Farm (tanks 1-7, 912, 913, 1001, 1002)
- AOC 24 – Crude Oil Tank Farm (tanks 101 and 102)
- AOC 25 – Tank 573 (Kerosene Tank)
- AOC 26 – Process Units
- AOC 27 – Boiler and Cooling Unit Area
- AOC 28 – Warehouse and Maintenance Shop Area
- AOC 29 – Equipment Yard and Drum Storage Area
- AOC 30 – Laboratory
- AOC 31 – Tanks 27 and 28
- AOC 32 – Flare and Ancillary Tanks (tanks Z85V2, Z85V3, Z84-T105)
- AOC 33 – Storm Water Collection System
- AOC 34 – Scrap Yard
- AOC 35 – Main Truck Loading Rack, Crude Slop and Ethanol Unloading Facility, Additive Tank Farm/Loading Rack, and Retail Tank Farm (tanks 1-7, 912, 913, 1001, and 1002)

The RCRA Permit was modified in September 2017 (NMED 2017a), with SWMU 8 and AOCs 19 and 25 granted Corrective Action Complete status. AOC 32 was combined with SWMU 14; AOC 33 was combined with SWMU 12. AOCs 20, 21, 22, and 23 were combined to make AOC 35. The schedule in the RCRA Permit Appendix E, Table E-1 was amended to reflect prior submittals, revised due dates and deferral of other units. A new Consent Order was executed in January 2017 (NMED 2017b), which resulted in 11 AOCs (AOC 16, 17, 18, 24, 26, 27, 28, 29, 30, 31, and 34) being removed from the RCRA Permit and transferred to the Consent Order for further evaluation. The Refinery received correspondence from the New Mexico Environmental Department (NMED) on August 19, 2021, to restore the 11 AOCs back to the RCRA Permit. The Permit modification was submitted by the Refinery to NMED on December 2, 2021 (Western 2021a).

Figure 3-1 also identifies known release areas and other Refinery features. Release areas and investigation areas are described in the following subsections. Where appropriate, reference to figures depicting detailed views of specific areas where investigation borings have been conducted or planned are included in the text of the following subsections. The figures referenced have been copied from the relevant work plans and compiled into Attachment A of this appendix. No other modifications were

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made to the figures and their inclusion here is intended to provide an overview of the assessments. For additional detail, refer to the relevant work plan or report.

4.1 New American Petroleum Institute Separator Unit

The NAPIS unit (AOC 15 on Figure 3-1) was put into service in October 2004 (Attachment A-1). The NAPIS has one up gradient well, NAPIS-1, located on the east side and three down-gradient shallow monitoring wells, NAPIS 2, NAPIS-3, and KA-3, which are located along the west side (Figure 3-1 and Attachment A 1). The NAPIS unit is equipped with three leak detection units (LDUs) on the east and west bays, including the oil sump section in the east bay, and are designated as East LDU, West LDU, and oil sump LDU. The Refinery is currently investigating the source of the fluid found in the East and West LDU's. Preliminary assessment of the NAPIS does not indicate leaking from the concrete secondary containment (Western 2021b).

4.2 Aeration Basin

The aeration basin (SWMU-1 on Figure 3-1 and Attachment A-1) in the Facility's RCRA Permit (NMED 2017a), includes three cells known as aeration lagoon (AL)-1, AL-2 and holding pond 1 (currently referred to as EP-1) (Attachment A-1). These three cells have been out of service since the startup of the WWTP in 2012. SWUM-1 closure is scheduled to begin during the first quarter of 2022 with the excavation of AL-1 and AL-2, followed by the excavation of EP-1 during the first quarter of 2023.

4.3 Heat Exchanger Bundle Pad

A workplan to investigate benzene exceedances near the Bundle Cleaning Pad (near SWMU 3 in the center of the Refinery on Figure 3-1 and Attachment A-2) was submitted to NMED in September 2021 (Western 2021c). Benzene exceedances have been found near the Bundle Cleaning Pad, in MKTF-16, since 2013 (Attachment A-2). The workplan proposed to install soil borings around the Bundle Pad to evaluate the source of the benzene found in MKTF-16.

4.4 North Drainage Ditch

On April 22, 2015, the Refinery notified NMED-Hazardous Waste Bureau of the discovery of separate phase hydrocarbon (SPH) in a drainage ditch in the northern portion of the property, north of SWMU 4 on Figure 3-1 and Attachment A-3. Surface water samples were collected from the standing water in the drainage ditch. Benzene, toluene, ethylbenzene, and xylenes were detected as well as methyl tert-butyl ether, total petroleum hydrocarbons (TPH)-gasoline range organics, and TPH-diesel range organics. An investigation was conducted in May 2016 with installation of well OW-56. An additional investigation in the North Drainage Ditch was conducted in August 2021, which included the installation of five temporary wells, three new monitoring wells, and soils samples collected from six soil borings. Findings were presented in a report to NMED on December 17, 2021 (Western 2021d).

4.5 Sour Naphtha Release

On March 26, 2017, a sour naphtha release occurred from a pipeline approximately 4 ft beneath the service road near the intersection northwest of the bundle cleaning pad on Figure 3-1 and Attachment A4. The estimated volume released was less than 210 gallons which surfaced and flowed

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down the road to the west. Following the release, approximately 16 tons of impacted soil were excavated. The Sour Naphtha Release Workplan was submitted to NMED on September 28, 2021 (Western 2021e). The Sour Naphtha Release Workplan proposed to install soil borings and collect surface samples to delineate impacts from the sour naphtha release.

4.6 Railcar Release

On May 7, 2017, a hydrocarbon spill was discovered pooling underneath the pipe rack located along the west side of the rail car loading area (Figure 3-1 and Attachment A-5). An estimated 8,820 gallons of recovered gasoline were placed in the slop tank. The on-site laboratory analyzed a release sample, which verified that the released hydrocarbon was gasoline. In an effort to remove impacts, approximately 153 tons of impacted soils were excavated from beneath the pipe rack in November 2018. On March 13, 2019, diesel was discovered leaking in the same area as the 2017 gasoline release. Diesel leaked across the railroad tracks into a culvert, carrying the diesel into the stormwater system. An estimated 1,764 gallons were released; 1,680 gallons were recovered via vacuum truck and 84 gallons were released onto the ground surface. An investigation of the release area was conducted in August 2021. The investigation included collecting surface samples and installing soil borings to delineate the extent of hydrocarbon impacts in the area. The investigation report was submitted to NMED on December 12, 2021 (Western 2021f).

4.7 Flare Knock Out Drum Investigation

The Flare Knock Out Drum (KOD) is located adjacent to OAPIS-1 on Figure 3-1 and Attachment A-6. On April 20, 2017, a hose attached to a Sandpiper (double diaphragm) pump at the flare KOD tank ruptured which resulted in a release of approximately 80 barrels of caustic (approximately 20 to 30 percent [%] sodium hydroxide, with a pH of 12.0) to the surrounding area. Approximately 20 to 30 gallons of caustic were pumped from the area into a vacuum truck, which had been diluted with approximately 100 gallons of water and pumped into the refinery sewer system at a pH of 8.0. An investigation into the affected soils was conducted in July and September of 2021. The investigation consisted of collecting soil samples and pH data to determine if excavation and/or further investigation is warranted. The Flare KOD Investigation report was submitted to NMED on October 27, 2021 (Western 2021g).

4.8 French Drain Investigation

The French Drain is located on the east side of STP-1 (Figure 3-1 and Attachment A-7). Hydrocarbon impacts were discovered in the drain line of the STP-1 French Drain on February 6, 2018. Subsequent investigation efforts were completed on February 8 and 10, 2018. The French Drain Soil Sampling Investigation Work Plan was approved with modifications on January 8, 2021 (MPC 2021). The work plan proposed installation of soil borings and sample collection further north, east and west of the STP-1 French Drain and north of the wastewater treatment plant. This investigation is intended to reduce data gaps and will be utilized to determine if additional remediation or investigation is warranted. The investigation is planned for 2022 pending approval from NMED (NMED 2021).

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4.9 Sanitary Lagoon

The sanitary lagoon is adjacent to well MKTF-25 (Figure 3-1 and Attachment A-8). It was installed when the facility opened in 1957. The lagoon held wastewater and/or raw sewage prior to October 11, 2018 and has since dried out. There is a pipeline that carried sewage from the laboratory, warehouse, truck rack, and machine shop to the sanitary lagoon. The pipeline that discharged to the lagoon was cut and the up-stream portion plugged with concrete on October 11, 2018. A 2019 investigation was conducted in the sanitary lagoon to determine if past use of the lagoon has caused groundwater impacts. The Sanitary Lagoon investigation report, submitted February 2020, concluded that impacts found beneath the Sanitary Lagoon are generally consistent with those observed in the surrounding Marketing Tank Farm (MKTF) wells and that the area should be addressed as part of the larger MKTF plume (MPC 2020). The initial investigation was to include collecting soil samples beneath the pipeline to determine if there were impacts from potential leaks in the pipe. This part of the investigation was postponed due to the Truck Loading Rack release in October 2019. The investigation below the pipeline, which was altered to include analysis for hydrocarbon as well as sewage impacts, was conducted in September 2021. The results of the investigation are pending.

4.10 Tank 570 Release

On October 23, 2019, a tank inspection indicated multiple leaks in the floor of Tank 570 (Figure 3-1). Tank 570 was used for 83 octane gasoline storage and was taken out of service for repair. The gasoline release from Tank 570 was investigated in the November 2019 and May 2021 Laser-Induced Fluorescence (LIF) investigations. The LIF investigations indicated that the gasoline had migrated to the northeast, north, and northwest. Section 4.13 discusses the investigation results.

4.11 Truck Loading Rack Release/Marketing Tank Farm Area

On October 27, 2019, a leak was discovered in an underground gasoline transfer line west of the truck loading rack (Figure 3-1). Hydrocarbon was observed seeping out of the ground into a stormwater ditch. The line was immediately taken out of service when the release was discovered and has since been replaced. The initial volume estimate was greater than 100 barrels of hydrocarbon. The initial LIF Investigation, conducted November 2019, was conducted to investigate the extent of the release in the Marketing Tank Farm and Truck Loading Rack areas. Subsequent LIF investigations conducted in February and May 2021 were conducted, in part, to further delineate the gasoline release originating from Truck Loading Rack release. Section 4.13 discusses the investigation results.

4.12 AOC 35 – Marketing Tank Farm

AOC 35 (Figure 3-1) includes the main truck loading rack, crude slop and ethanol unloading facility, additive tank farm loading rack, and the retail tank farm (Attachment A-9). Historical groundwater sample results within and around AOC 35 have shown impacts from petroleum hydrocarbons. The work originally scheduled for AOC 35, described in the investigation work plan originally dated August 2018, was postponed due to the Truck Loading Rack Release. The Revised AOC 35 Investigation Work Plan No. 2 (Western 2021h) was submitted to NMED on September 1, 2021 and included revisions to the

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original work plan to incorporate the Truck Loading Rack release as well as data from LIF investigations in the area. The investigation will be conducted once the revised work plan is approved by NMED.

4.13 Laser-Induced Fluorescence/Hydraulic Profiling Investigations

In response to more recent releases (approximately 2019 to present) a series of LIF/Hydraulic Profiling (HP) investigations were conducted. LIF is a direct push site characterization method in which laser light excites fluorescent molecules that exist in most petroleum fuels and oils. Fluorescence is measured as a proxy for SPH presence. The HP tool is run concurrently and is used to assess the geologic unit permeability and hydrostratigraphy. The combination of LIF and HP tools on a single direct push probe facilitates investigation of SPH while simultaneously characterizing lithologic variability that influences SPH mass storage and transport.

The November 2019 LIF investigation was conducted to investigate the extent of the releases in the Marketing Tank Farm and Tank 570 areas. A subsequent LIF investigation in February 2021 was conducted to further delineate the gasoline release originating from the Marketing Tank Farm and Truck Loading Rack areas. The May 2021 investigation focused on Tank 570 and additional areas of the Refinery, including the northern and eastern boundary, Tank Farm, Marketing Tank Farm, and in and around the wastewater. Data gaps from the initial Marketing Tank Farm investigation were also addressed. The Marketing Tank Farm LIF report (Western 2021i), the Tank 570 and additional areas report (Western 2021j), and the Marketing Tank Farm Addendum (Western 2021k) have been submitted to NMED. Additional details on the methods and the investigations can be found in these reports.

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5.0 Interim Actions

This section describes ongoing interim remediation actions conducted at the Refinery.

5.1 Hydrocarbon Seep Area

In June 2013, a hydrocarbon seep was discovered east of Tanks 101 and 102 (Figure 3-1 and Attachment A 10). Excavations in the area indicated sufficient hydrocarbons were present for six 6-inch sumps to be installed for fluid recovery via vacuum truck. The area was identified as the "Hydrocarbon Seep Area" and quarterly interim measures (IM) reports are submitted to NMED. Additionally, in 2016, a series of retention ditches were installed north of the sumps. Fluid is extracted from the sumps, at a minimum, of once a month. Standing water and/or hydrocarbon found in the first retention ditch is also recovered, though the retention ditch has been dry since January 2020. Between 2013 and 2018, 19,009 gallons of SPH and 1,549,620 gallons of water were extracted from the sumps. Since 2019, no measurable SPH has been extracted from the sumps and 49,300 gallons of water have been extracted. A total of 50 MKTF monitoring wells have been installed to monitor impacts to groundwater in relation to the Hydrocarbon Seep area.

5.2 Borrow Pit Seep Area

A gasoline seep, expected to be related to the Truck Loading Rack release, was discovered December 2020 west of the truck loading rack, in the borrow pit (Figure 3-1 and Attachment A-11). In April 2021, six sumps and two piezometers were installed in the borrow pit. Fluid recovery from the sumps is conducted via vacuum truck 3 to 4 times per week as an IM to prevent further hydrocarbon migration. Recovery efforts began in May 2021 with a consistent average of 31.5 gallons of SPH extracted per day through October 2021.

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Figure

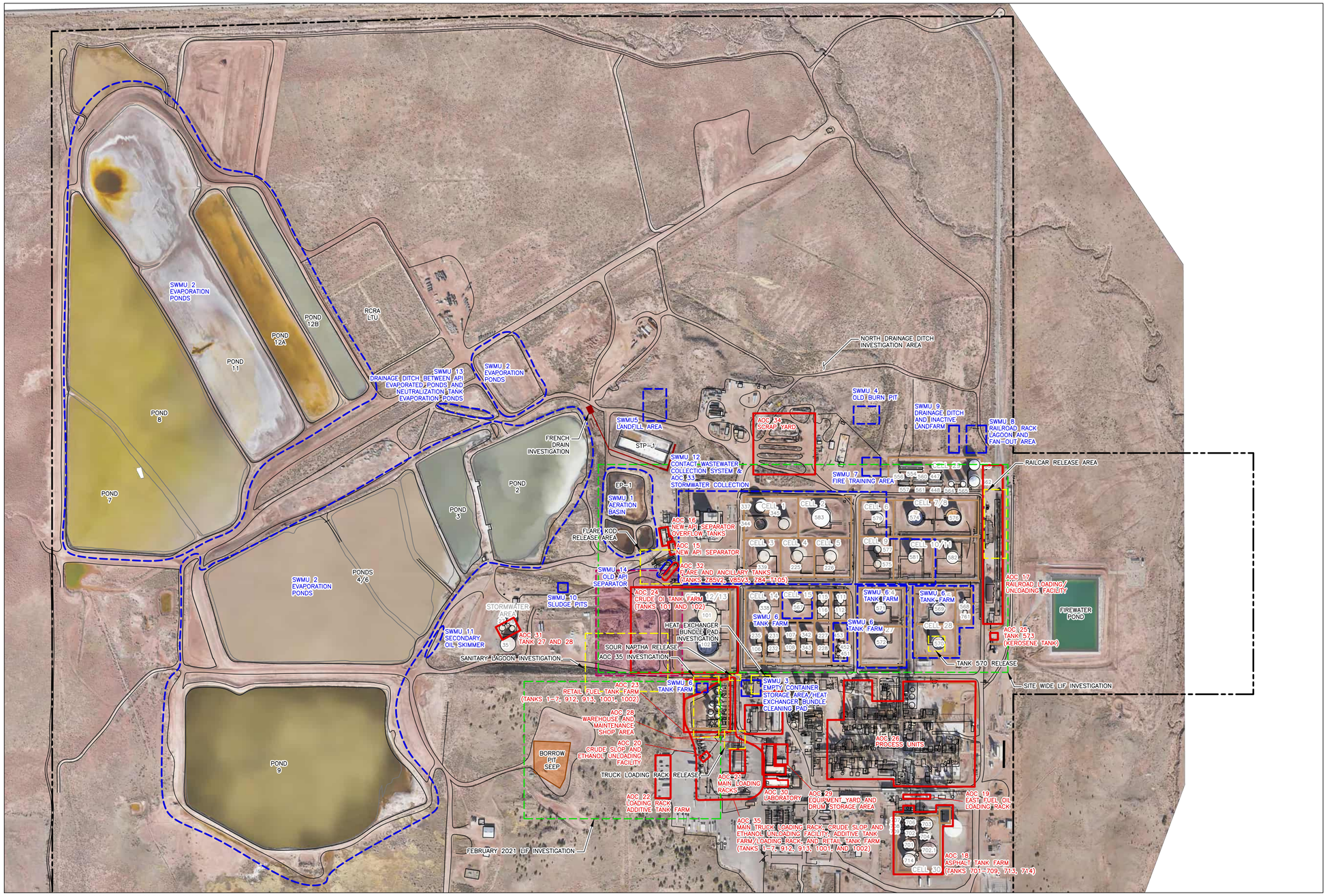

Image Cite: USDA/FSA – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

EXPLANATION

- PROPERTY BOUNDARY (APPROXIMATE)
- AOC LOCATION
- SWMU LOCATION
- FRENCH DRAIN
- RELEASE AND/OR INVESTIGATION AREA
- LIF (LASER INDUCED FLUORESCENCE)
- BORROW PIT SEEP (APPROXIMATE)
- HYDROCARBON SEEP AREA

AOC AREA OF CONCERN
STP SANITARY TREATMENT POND
SWMU SOLID WASTE MANAGEMENT UNIT

N

0 400' 800'

NOTE:

THE FOLLOWING WORK INVESTIGATIONS ARE COMPLETED SITE WIDE: GROUNDWATER MONITORING, FENCELINE MONITORING, WEEKLY ON-SITE SUPPORT.

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FIGURE 3-1

SITE MAP

WESTERN REFINING SOUTHWEST LLC MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

Drawn By: REP	Checked By: BM	Scale: 1" = 400'	Date: 1/24/22	File: 697-SITEMAP-20211014

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Attachment A – Relevant Figures

EXPLANATION

MONITORING WELL LOCATION

NOTES:

AL - AERATION LAGOON
EP - EVAPORATION POND
SWMU - SOLID WASTE MANAGEMENT UNIT

N

0 80'

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FIGURE A-1

SWMU 1 AERIAL PHOTO (MAY 2018)

**WESTERN REFINING SOUTHWEST, LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO**

Drawn By: KEJ	Checked By: CF	Scale: 1" = 80'	Date: 10/15/21	File: 1-2_SWMU1_Fig1-2

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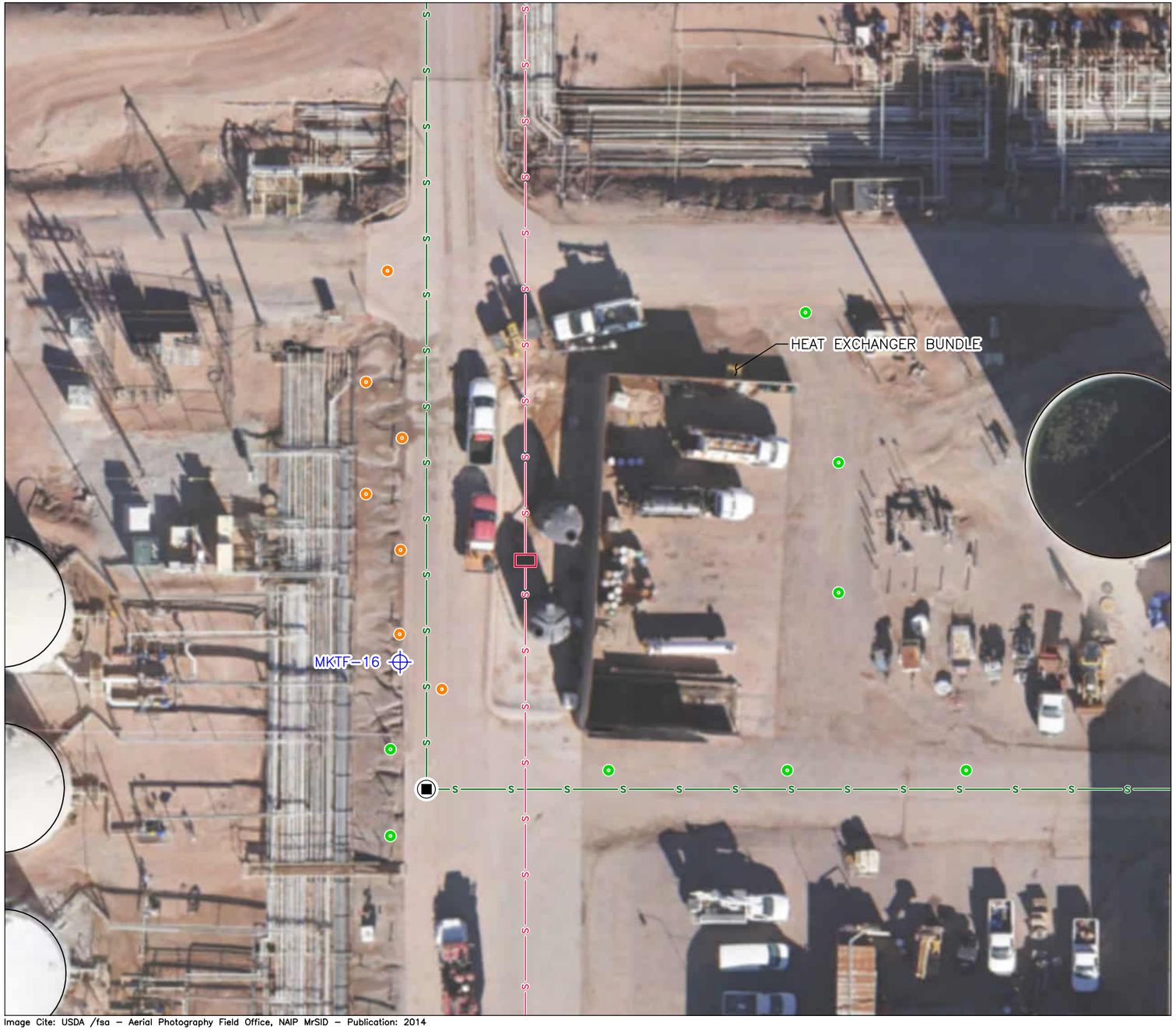

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2 PROPOSED SOIL BORING LOCATIONS
SCALE: 1" = 30'

N

0 30'

Image Cite: USDA /fsa – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

1 KEY MAP
SCALE: 1" = 800'

N

0 800'

EXPLANATION

- MKTF-16 — CHINLE/ALLUVIUM INTERFACE WELL AND DESIGNATION
- PROPOSED BUNDLE PAD INVESTIGATION SOIL BORING LOCATION
- PROPOSED SOUR NAPHTHA INVESTIGATION SOIL BORING LOCATION
- MANHOLE LOCATION
- S — SEWER LINE
- S — PROCESS SEWER LINE
- BUNDLE PAD SUMP
- TANK

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FIGURE A-2

HEAT EXCHANGER BUNDLE PAD INVESTIGATION
PROPOSED SOIL BORING LOCATIONS

WESTERN REFINING SOUTHWEST, LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: PH	Scale: AS SHOWN	Date: 5/12/21	File: 697-BP-SOILLOCS-202109

M:\TOM\MARATHON\CADD\GALLUP_REPORTS\SWMU\SWMU 3_HXBUNDLEPAD\697-BP-SOILLOCS-202109

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Aerial Map Source: Google Map, 03/18/2016.

0 200
SCALE IN FEET

NEW MEXICO

GALLUP SITE LOCATION

LEGEND

- PROPOSED PERMANENT MONITORING WELL LOCATION
- PROPOSED SOIL BORING LOCATION
- PROPOSED TEMPORARY MONITORING WELL LOCATION
- NDD-1 SOIL BORING LOCATION AND IDENTIFICATION NUMBER
- A1 SURFACE WATER SAMPLE LOCATION AND IDENTIFICATION NUMBER
- NDD-1 TEMPORARY MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- OW-14 ALLUVIUM / CHINLE GP MONITORING WELL LOCATION AND IDENTIFICATION NUMBER
- NDD-5 HAND AUGER LOCATION AND IDENTIFICATION NUMBER

MARATHON PETROLEUM COMPANY
GALLUP REFINERY

PROJ. NO.: Marathon	DATE: 09/18/19	FILE: Mathon-dB213

FIGURE A-3
PROPOSED
BORING LOCATION MAP

DiSorbo
Environmental Consulting Firm
8501 N. MoPac Expy.
Suite 300
Austin, Texas 78759

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Image Cite: USDA /fsa – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

2 PROPOSED SOIL BORING LOCATIONS
SCALE: 1" = 60'

N

0 60'

Image Cite: USDA /fsa – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

1 KEY MAP
SCALE: 1" = 800'

N

0 800'

EXPLANATION

- TANK
- SOUR NAPHTHA RELEASE
- UNDERGROUND PRODUCT PIPELINE
- SOUR NAPHTHA RELEASE EXCAVATION EXTENT AREA
- MKTF-LIF-66 — LIF BORING LOCATION AND DESIGNATION
- MKTF-16 — CHINLE/ALLUVIUM INTERFACE WELL AND DESIGNATION
- HISTORICAL SOIL SAMPLE LOCATIONS
- PROPOSED SOIL BORING LOCATION
- LIF — LASER-INDUCED FLORESCENCE

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FIGURE A-4

PROPOSED SOIL BORING LOCATIONS

GALLUP REFINERY
GALLUP, NEW MEXICO

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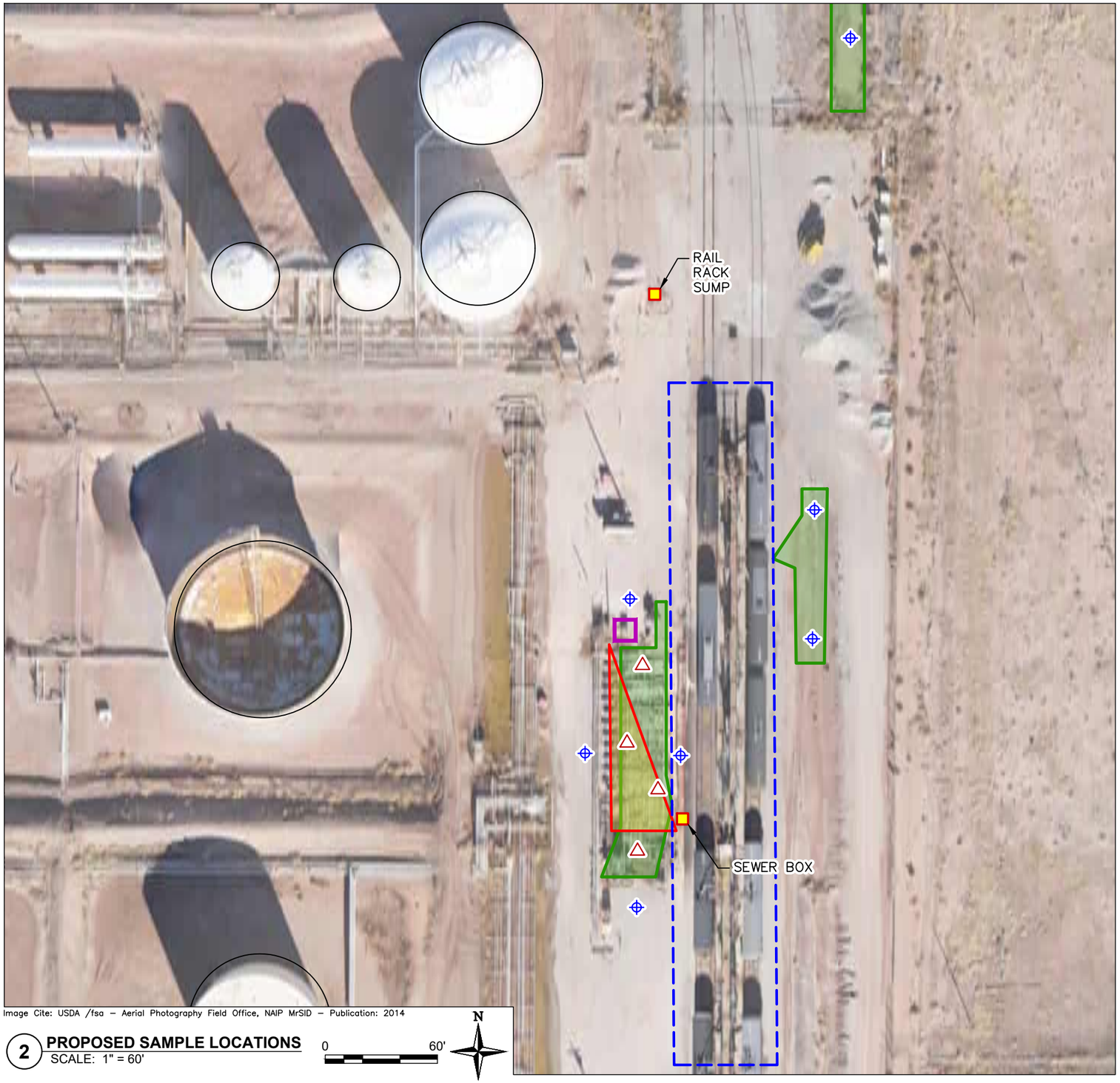

Image Cite: USDA /fsa – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

2 PROPOSED SAMPLE LOCATIONS
SCALE: 1" = 60'

0 60'

N

EXPLANATION

- PROPOSED SOIL BORING
- PROPOSED SOIL SAMPLE
- TANK
- RAIL CAR LOADING AREA
- DIESEL RELEASE EXTENT (MARCH 13, 2019)
- GASOLINE RELEASE EXTENT (MAY 7, 2017)
- DGS 105 ADDITIVE TANK
- RAIL RACK SUMP OR SEWER BOX

Image Cite: USDA /fsa – Aerial Photography Field Office, NAIP MrSID – Publication: 2014

1 KEY MAP
SCALE: 1" = 800'

0 800'

N

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FIGURE A-5

PROPOSED SAMPLE LOCATIONS

**MARATHON PETROLEUM CORP.
GALLUP REFINING DIVISION
GALLUP, NEW MEXICO**

Drawn By: REP	Checked By: PH	Scale: AS SHOWN	Date: 12/9/20	File: 697-RAILCARLOADINGRACK-RELEASE-202012

\\TRIHYDRO.COM\CLIENTS\TGN\MARATHON\CADD\GALLUP_REPORTS\RELEASES\RAILCARLOADINGRACK\697-RAILCARLOADINGRACK-RELEASE-202012

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Image Cite: Trihydro Corporation – UAS Aerial Photography – Publication: 2018

EXPLANATION

KOD–7	SOIL SAMPLE AND DESIGNATION
	EXTENT OF SOIL IMPACTS
6935	EXISTING CONTAINMENT ELEVATION CONTOURS (INTERVAL = 1')
API	AMERICAN PETROLEUM INSTITUTE
KOD	KNOCKOUT DRUM

N

0 20'

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FIGURE A-6

SAMPLE LOCATIONS
FLARE KOD CAUSTIC RELEASE INVESTIGATION

WESTERN REFINING SOUTHWEST LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: EC	Scale:1" = 20'	Date: 9/27/2021	File: 697-KOD-SAMPLOC-202108

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EXPLANATION

- OW–65 MONITORING WELL AND DESIGNATION (APPROXIMATE)
- FRENCH DRAIN
- SD–2 STORM DRAIN AND DESIGNATION

N

0 200'

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FIGURE A-7

FRENCH DRAIN LOCATION

MARATHON PETROLEUM CORP.
GALLUP REFINING DIVISION
GALLUP, NEW MEXICO

Drawn By: REP	Checked By: JP	Scale: 1" = 200'	Date: 9/14/20	File: 697-FD-FRENCHDRAINLOC_202009

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EXPLANATION

- MONITORING WELL
- ESTIMATED LOCATION OF THE SANITARY PIPELINE
- PREVIOUSLY EXCAVATED PIPELINE
- SITE FEATURE

N

0 100 '

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FIGURE A-8

OVERVIEW SANITARY LAGOON AND PIPELINE LOCATIONS

**MARATHON PETROLEUM COMPANY
GALLUP REFINING DIVISION
GALLUP, NEW MEXICO**

Drawn By: KEJ	Checked By: BM	Scale: 1 " = 100 '	Date: 3/18/21	File: 2_Overview_SanitaryLagoon_Fig2.mxd

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EXPLANATION

- MKTF-34 — EXISTING MONITORING WELL LOCATION AND DESIGNATION
- EXISTING SUMP LOCATION
- AOC 35 BOUNDARY
- OILY WATER DRAIN LINE
- SS — SANITARY SEWER LINE

N

0 140'

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FIGURE A-9

AOC 35 MAP

WESTERN REFINING SOUTHWEST, LLC.
MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

Drawn By: REP	Checked By: MS	Scale: 1" = 140'	Date: 8/23/2021	File: 697-GALLUPAOC35-SITEMAP_2021

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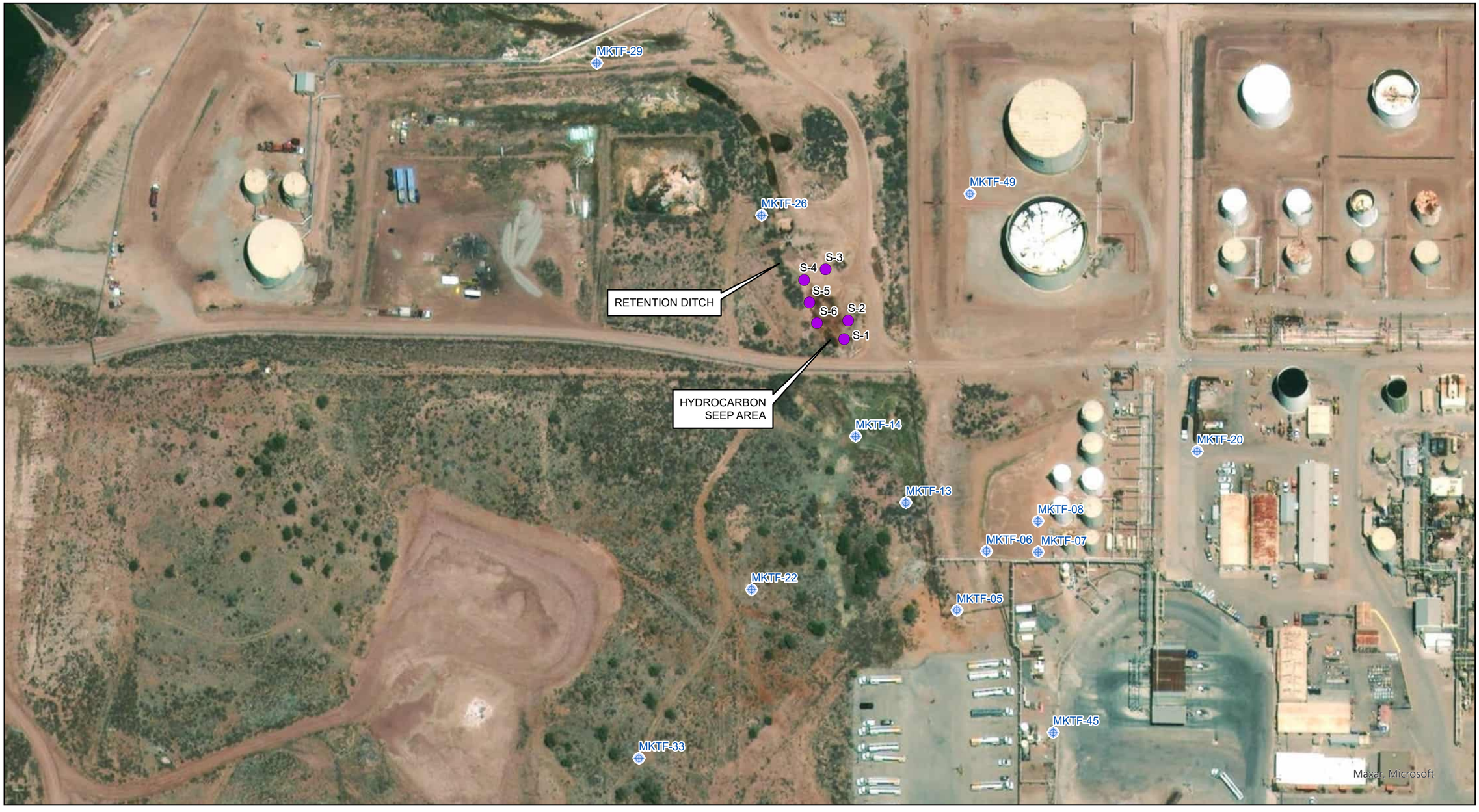

EXPLANATION

- HYDROCARBON SEEP SUMPS
- MONITORING WELLS WITH ONGOING SPH EXTRACTIONS

N

0 140'

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FIGURE A-10

HYDROCARBON SEEP AREA

WESTERN REFINING SOUTHWEST, LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: KEJ	Checked By: BM	Scale: 1" = 140'	Date: 10/12/21	File: 1_HydrocarbonSeepArea_Fig1

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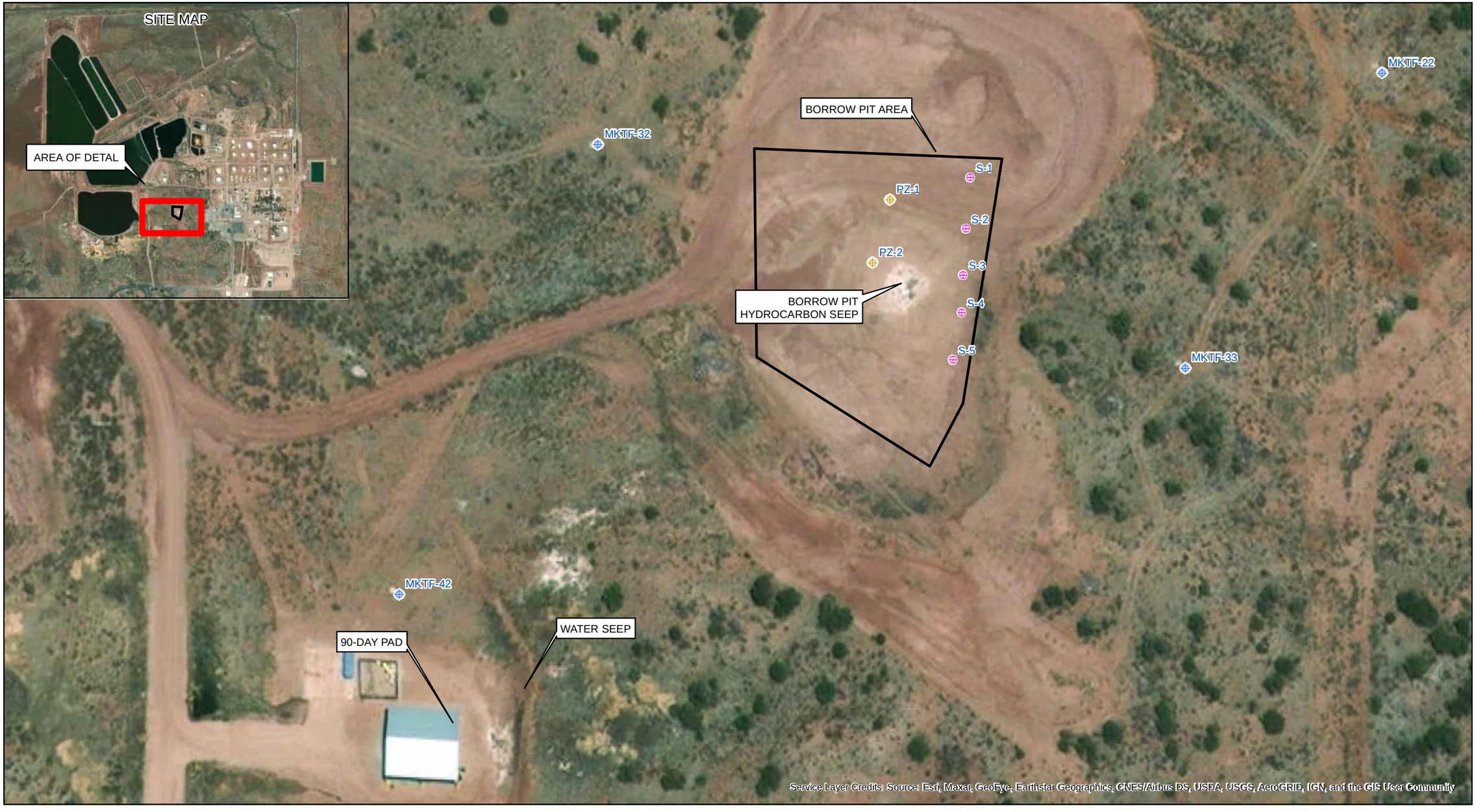

\\TRIHYDRO.COM\CLIENT\SUTONMARATHON\GIS\PROJECTS\GALLUP REFINERY\PAMCOSTESTMATES\20210202\2_ADDNL_WELL_INSTALL\2_SUMPPIEZ_BORROWPIT_FIG2.MXD

EXPLANATION

- LOCATION OF SUMP
- PIEZOMETER LOCATION
- MONITORING WELL
- SITE FEATURE

N

0 80 '

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FIGURE A-11

BORROW PIT SUMPS

WESTERN REFINING SOUTHWEST, LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO

Drawn By: KEJ	Checked By: MS	Scale: 1 " = 80 '	Date: 7/26/21	File: 2_SumpPiez_BorrowPit_Fig2.mxd

Appendix B – Investigation Methods

WESTERN REFINING SOUTHWEST LLC
D/B/A MARATHON GALLUP REFINERY
APPENDIX B. INVESTIGATION METHODS

REVISED APRIL 1, 2023

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3. Sonsela Water Elevation Map 2020, Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery, Gallup, New Mexico

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List of Attachments

A. Water Levels and Well Information

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List of Acronyms

BS/BSD	blank spike/blank spike duplicate
COC	chain of custody
DO	dissolved oxygen
DQO	data quality objectives
ft	foot/feet
in	inch
MKTF	Marketing Tank Farm
MS/MSD	matrix spike/matrix spike duplicate
NMED	New Mexico Environment Department
ORP	oxidation reduction potential
QA	quality assurance
QC	quality control
Refinery	Western Refining Southwest LLC, D/B/A Marathon Gallup Refinery
SPH	separate phase hydrocarbon
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

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1.0 Introduction

This appendix provides an overview of the investigation methods required to conduct groundwater sampling at the Western Refining Southwest LLC D/B/A Marathon Gallup Refinery (Refinery) located in Gallup, New Mexico. Groundwater monitoring is conducted in accordance with the Refinery's Resource Conservation and Recovery Act Post-Closure Permit.

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2.0 Groundwater Sampling Methodology

All monitoring wells scheduled for sampling during a groundwater sampling event will be sampled within 15 working days of the start of the monitoring and sampling event, weather permitting.

2.1 Well Gauging

At the beginning of each quarterly, semiannual, or annual sampling event, monitoring and recovery wells listed in Section 4.0 of the annual "Facility-Wide Groundwater Monitoring Work Plan" will be gauged to record the depth to separate phase hydrocarbon (SPH), if present, the depth to water, and the depth to bottom of the well. The gauging will be performed using an oil/water interface probe attached to a measuring tape capable of recording measurements to the nearest 0.01 foot (ft). If an SPH recovery system is present in a well, recovery system operation will be halted for 24 hours to allow groundwater to equilibrate, and the fluid level will be measured.

Each well is field verified with the well number on the well casing or adjacent to the well to ensure that samples are collected at the correct well location. Wells have a permanent marked reference point on the well casing from which groundwater levels and well depths are measured. The portable pump intake is lowered to the midpoint of the listed screened interval for each specific well using the markings identified on the pump hose, which are set at 1-ft intervals. In wells with dedicated pumps, the pumps have been installed at the midpoint of the screened interval.

All water/SPH levels are measured to an accuracy of the nearest 0.01 feet using an oil/water interface meter. Water levels and well depths in the deeper wells are gauged with an electric water depth meter. After determining water levels, well volumes are calculated using the appropriate conversion factors for a given well based on its internal diameter. Volume is equal to the height of the liquid column times the internal cross-sectional area of the well.

Gauging measurements will be recorded in a logbook or on a field gauging form. Data obtained from the gauging will be reported in the annual groundwater monitoring report.

The potentiometric surfaces for the Alluvial/Fluvial Upper Sand, Alluvium/Chinle, and Sonsela aquifers are presented in Figures 1 through 3, respectively. Attachment A-1 is a summary of the fluid level data collected in 2020 for the non-Marketing Tank Farm (MKTF) wells. Attachment A-2 is a summary of the fluid level data collected in 2020 for the MKTF wells. Attachments A-3 and A-4 include well information for the non-MKTF wells and MKTF wells, respectively. The well information consists of the survey data, screened intervals, and stratigraphic unit in which the wells are screened. Attachment A-5 includes well information for artesian wells also known as Process or Production wells. Information provided for the artesian wells was gathered from well boring logs. These wells are encased; therefore, measurement for depth to bottom cannot be field verified.

2.2 Well Purging and Sampling

Each well will be purged by removing groundwater prior to sampling to ensure that formation water is being sampled. Generally, at least three well volumes (or a minimum of two if the well has low recharge

rate) will be purged from each well prior to sampling. Field water quality parameters measured during purging are pH, conductivity, temperature, dissolved oxygen (DO), oxidation-reduction potential (ORP), salinity, temperature, and total dissolved solids. One or more parameters must stabilize to within 10 percent for a minimum of three consecutive measurements before collecting groundwater samples using low-flow sampling techniques. When purging wells using a bailer, bailing will be considered complete when three well volumes have been removed from the wells. Field parameters will be measured and recorded while bailing, with the understanding that the process of hand-bailing may prevent stabilization of field parameters.

Once purging requirements are met, the well is ready for sample collection. The volume of groundwater purged, the instruments used, and the readings obtained at each interval will be recorded on the field-monitoring log. Well purging and sampling will be performed using 1.5-inch (in) x 3 ft and/or 3-in x 3-ft disposable polyethylene bailers for groundwater sampling and/or appropriately decontaminated portable sampling pumps.

If a well is pumped or bailed dry before two or three well volumes can be evacuated, samples will be collected after sufficient time has elapsed for an adequate volume of water to accumulate for the sampling event. The first sample will be tested for pH, conductivity, temperature, DO, ORP, salinity, temperature, and total dissolved solids. The well will be retested after sampling as a measure of purging efficiency and as a check on the stability of the water samples over time. All well purging and sampling information will be recorded in a logbook or on a field sampling form.

All wells are purged and sampled with dedicated or disposable equipment. Wells MW-1, MW-2, MW-4, MW-5, BW-1C, BW-2A, BW-2B, BW-3B, BW-4B, BW-5B, BW-5C, SMW-4, OW-1, OW-10, OW-13, OW-14, OW-29, and OW-30 are each equipped with a dedicated electrical pump. Wells SMW-2, OW-11, OW-12, OW-50, and OW-52 are purged and sampled using a portable Grundfos pump with dedicated tubing. The remaining wells are hand-bailed if the presence of water is detected. If SPH is detected in any of these wells, no samples will be collected. Purged well water is collected in 55-gallon drums, buckets, or totes and drained to the process sewer upstream of the New American Petroleum Institute Separator for treatment in the wastewater treatment plant.

Groundwater samples will be obtained from each well within 24 hours of the completion of well purging or as soon as the well sufficiently recharges. Sample collection methods will be documented in the logbook or in the field sampling form. The samples will be transferred to the appropriate, clean, laboratory-prepared containers provided by the analytical laboratory.

2.3 Sampling Equipment at Refinery

The following sampling equipment is maintained at the Refinery and used by the sampling personnel:

- Heron Instruments 100 ft. DipperT electric water depth tape complying with US GGG-T-106E, EEC Class II.

- Pall Corporation Acro 50A 0.45-micron disposable filter used with 60 ml disposable syringes for filtering water in the field.
- YSI pH/Conductivity meter Model 63, calibrated with a one-point, two-point, or three-point calibration procedure using pH standards of 7, 4 and 10 (measures pH, temperature, conductivity, TDS, salinity, DO, and ORP)
- IQ Scientific Instruments (measures pH, temperature, conductivity, TDS, salinity, DO, and ORP), Model IQ1806LP.
- Grundfos 2-in pumps with Grundfos 115-volt AC–to-DC converter.
- WaterMark Oil Water Interface Meter (100 ft), Model 101L/SMOIL, S/N 01-5509.

Calibration and maintenance procedures will be performed according to the manufacturer's specifications. In the event an instrument becomes inoperable, a similar instrument will be used.

2.4 Order of Collection

Samples will be collected in the order listed below:

- VOC
- TPH-GRO
- TPH-DRO and TPH-ORO
- SVOC
- Total Metals
- Dissolved metals
- MNA parameters (MKTF area well subset only)
- BOD
- COD
- Cyanide
- E-Coli

If additional well specific parameters are required by the annual work plan, sampling order will be adjusted for the analyte as appropriate.

2.5 Filtration

Groundwater samples are collected and analyzed for both total and dissolved metals. Samples are filtered prior to dissolve metals analysis. For dissolved metals, sample water is poured into a jar and then extracted with a syringe. The syringe is then used to force the sample water through a 0.45-micron

pore filter into the proper sample bottle to collect dissolved metals samples. Filtration must be performed within 2 hours of sample collection. Pour the filtrate into a sample bottle containing HNO3 preservative.

For samples destined for total metals analysis, do not filter the sample, and preserve with HNO3 to pH <2 in the field.

2.6 Sample Handling

All sample containers are supplied by the contracted analytical laboratory and shipped to the Refinery in sealed coolers. Chemical preservation is also provided by the laboratory through pre-preserved bottle ware. Collection of groundwater samples are in the order of most volatile to least volatile, such as: volatile organic compounds (VOCs), semivolatile organic compounds, metals, phenols, cyanide, sulfate, chloride, nitrate, and nitrite. At a minimum, the following procedures will be used when collecting samples:

- Neoprene, nitrile, or other protective gloves will be worn when collecting samples for safety and sampling purity. New disposable gloves will be used to collect each sample.
- All samples collected for chemical analysis will be transferred into clean sample containers supplied by the analytical laboratory. The sample containers will be clearly marked. Sample container volumes and preservation methods will be in accordance with the most recent standard United States Environmental Protection Agency (USEPA) and industry accepted practices for use by accredited analytical laboratories. Sufficient sample volume will be obtained for the laboratory to complete the method-specific quality control (QC) analyses on a laboratory-batch basis.
- Sample labels and documentation will be completed for each sample.

Immediately after the samples are collected, they will be stored in a cooler with ice or other appropriate storage method until they are delivered to the analytical laboratory. Standard chain-of-custody procedures, as described in “Sample Custody” section of this Appendix, will be followed for all samples collected. All samples will be submitted to the laboratory to conduct the analyses within the method holding times.

2.7 General Well Sampling Procedures

Sample bottles and labels will be separated into plastic bags for each well to be sampled. The plastic bags, with the sample bottles, will be placed in an ice chest to take into the field. A logbook and/or field sample form will be used to document weather conditions and sample date and time. The label will be complete with location, date, time, analysis, preservative, and the name of the sampler. For low-flow sampling, converter speed will be adjusted prior to filling bottles. Sample labels will be affixed, and bottles will be filled according to lab instructions. Bottles with septa lids will be used for samples intended for VOC analysis. VOC bottles will be filled to the neck and a final amount of water will be added using the cap to form meniscus before screwing the lid onto the sample bottle. To ensure a

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proper sample has been collected, the bottles will be turned upside down and examined for bubbles, if bubbles are detected in the vial, the collection procedure will be repeated. If no bubbles are present, the lid will be secured, and the bottles will be packed in bubble wrap and placed in the cooler until sampling is completed.

Any reusable equipment that is not dedicated to a specific well will be decontaminated. Completed samples will be refrigerated until they are shipped to the laboratory. Appropriate shipping methods will be arranged to accommodate holding times. Sampling equipment and supplies will be checked, and proper inventory verified prior to sampling. Before departing, quality assurance (QA)/QC requirements will be checked to ensure there are additional equipment and supplies to meet additional requirements.

2.8 Surface Water Sample Collection

At the evaporation ponds, samples will be collected as a grab sample at the pond edge near the inlets. This location will be noted in the field logbook or field sampling form. The sampler will avoid disturbing sediment and gently allow the sample container to fill making sure that undue disturbance does not allow volatile constituents to be lost. The sample bottle will be used for the sample collection in a shallow location near the bank. If a separate bottle and/or bailer are used to refill the sample container, this will be noted in the logbook or field sample form. The decision to use a separate bottle/bailer will be made, if at all, by the sampler and the reasons will be noted in the logbook or field sampling form.

2.9 General Safety Procedures

Sampling personnel will carry a cell phone when collecting samples. While sampling procedures are generally well known and the appropriate sample bottles are ordered to match each sampling event, occasional questions do arise from unforeseen circumstances which may develop during sampling. At such times, sampling personnel contact the Project Manager to verify that sampling is correctly performed. Examples would be if a well were to run dry short of filling the last sample bottle or to determine if there is enough water for sample analysis.

Upon arrival at the field site, the sampler will set out safety equipment such as traffic cones and signs (if required). The vehicle will be parked at a sufficient distance away so as to prevent sample contamination from emissions. For safety, protection, and sampling purity, rubber gloves or disposable nitrile gloves will be worn and changed between each activity. Appropriate sample containers must be used for the type of analyses to be performed.

2.10 Decontamination Procedures

The objective of the decontamination procedures is to minimize the potential for cross-contamination. Most field equipment used for groundwater sampling will be disposable and, therefore, not require decontamination. To prevent cross-contamination, field equipment that comes into contact with water or soil will be decontaminated between each sampling location. The decontamination procedure will consist of washing the equipment with a non-phosphate detergent solution (e.g., Fantastik™, Liqui-Nox®), followed by two rinses of distilled water, and air dried.

Decontamination water and rinsate will be contained and disposed of the same way as purge water, as described in the "Well Purging and Sampling" section of this Appendix. Decontamination procedures and the cleaning agents used will be documented in the logbook or field sample form.

2.11 Field Equipment Calibration Procedures

Field equipment requiring calibration will be calibrated to known standards, in accordance with the manufacturers' recommended schedules and procedures. Calibration checks will be conducted daily, and the instruments will be recalibrated if necessary. Calibration measurements will be recorded in the logbook or field sample form.

If field equipment becomes inoperable, its use will be discontinued until the necessary repairs are made. A properly calibrated replacement instrument will be used in the interim. Instrumentation used during sampling events will be recorded in the logbook or field sample form.

2.12 Collection and Management of Investigation Derived Waste

Investigation derived waste generated during each groundwater sampling event may include purge water, decontamination water, excess sample material, and disposable sampling equipment. All water from all wells generated during sampling and decontamination activities will be temporarily stored in labeled 55-gallon drums until placed in the refinery wastewater treatment system upstream of the API separator. All other solid waste generated during sampling activities (sampling gloves, tubing, etc.) will be disposed of with the refinery's general municipal waste.

2.13 Documentation of Field Activities

Daily field activities, including observations and field procedures, will be recorded using indelible ink in the logbook or on field sample form. The original logbook(s) or field sample form(s) will be maintained at the Refinery. Completed forms will be maintained in a bound and sequentially numbered field file for reference during field activities. The daily record of field activities will include the following information:

- Well identification/evaporation pond location/outfall
- Date
- Start and finish sampling time
- Field team members, including visitors
- Weather conditions
- Daily activities and times conducted
- Observations
- Record of samples collected with sample designations
- Photo log (if needed)

- Field monitoring data, including health and safety monitoring (if needed)
- Equipment used and calibration records, if appropriate
- List of additional data sheets and maps completed
- An inventory of the waste generated and the method of storage or disposal
- Signature of personnel completing the field record

2.14 Sample Custody

All samples collected for analysis will be recorded in the logbook or field sample form. Chain-of-custody forms will be completed at the end of each sampling day, prior to the transfer of samples off site and will accompany the samples during shipment to the laboratory. A signed and dated custody seal will be affixed to the lid of the shipping container. Upon receipt of the samples at the laboratory, the custody seals will be broken, the chain-of-custody (COC) form will be signed as received by the laboratory, and the conditions of the samples will be recorded on the COC form. The original COC form will remain with the laboratory; copies will be sent to the Refinery. The Refinery will maintain copies of all COC forms generated as part of sampling activities. Copies of the COC records will be included with all draft and final laboratory reports submitted to the New Mexico Environment Department (NMED) and Oil Conservation Division.

2.15 Shipping Procedures

The following shipping procedures will be performed during each sampling event:

- Individual sample containers will be packed to prevent breakage and transported in a sealed cooler with ice or other suitable coolant or other USEPA or industry-wide accepted method. The drainage hole at the bottom of the cooler will be sealed and secured in case of sample container leakage.
- Each cooler or other container will be delivered directly to the analytical laboratory.
- Glass bottles will be separated in the shipping container by cushioning material to prevent breakage.
- Plastic containers will be protected from possible puncture during shipping using cushioning material.
- The COC form and sample request form will be shipped inside the sealed storage container to be delivered to the laboratory.
- Signed and dated COC seals will be applied to each cooler prior to transport of samples from the site.

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2.16 Analytical Methods

Groundwater and surface water samples collected during the monitoring events will be analyzed using the specified analytical methods and for the constituents discussed in Section 4.0 of the annual "Facility-Wide Groundwater Monitoring Work Plan."

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3.0 Laboratory Quality Assurance Procedures

Contract analytical laboratories will maintain internal QA programs in accordance with USEPA and industry accepted practices and procedures. At a minimum, the laboratories will use a combination of standards, blanks, surrogates, duplicates, matrix spike/matrix spike duplicates (MS/MSD), blank spike/blank spike duplicates (BS/BSD), and laboratory control samples to demonstrate analytical QA/QC. The laboratories will establish control limits for individual chemicals or groups of chemicals based on the long-term performance of the test methods. In addition, the laboratories will establish internal QA/QC that meets USEPA's laboratory certification requirements. The specific procedures to be completed are identified in the following sections.

3.1 Equipment Calibration Procedures and Frequency

The laboratory's equipment calibration procedures, calibration frequency, and calibration standards will be in accordance with the USEPA test methodology requirements and documented in the laboratory's QA and Standard Operating Procedures manuals. All instruments and equipment used by the laboratory will be operated, calibrated, and maintained according to the manufacturers' guidelines and recommendations. Operation, calibration, and maintenance will be performed by personnel who have been properly trained in these procedures. A routine schedule and record of instrument calibration and maintenance will be kept on file at the laboratory.

3.2 Field QA/QC Samples

Field duplicates, field blanks, equipment rinsate blanks (if required), reagent blanks, and trip blanks may be obtained for QA during sampling activities. The samples will be handled as described in the "Laboratory QA/QC Samples" section of this Appendix.

Field duplicates will consist of two samples either split from the same sample device or collected sequentially. Field duplicate groundwater samples will be collected at a frequency of one per ten regular samples and will be analyzed for the full set of analyses used for the regular sample collected. At a minimum, one duplicate sample per sampling day will be obtained.

Field blanks shall be obtained at a frequency of no less than one per day per site or unit. Field blanks shall be generated by filling sample containers in the field with deionized water and submitting the samples, along with the groundwater or surface water samples, to the analytical laboratory for the appropriate analyses.

Currently, all samples are collected using dedicated or disposable equipment; therefore, equipment blanks will not be collected. However, if non-dedicated or non-disposable equipment are used, equipment blanks shall be obtained for chemical analysis at the rate of 5 percent but no fewer than one rinsate blank per sampling day. Rinsate samples shall be generated by rinsing deionized water through decontaminated sampling equipment. The rinsate sample then shall be placed in the appropriate sample container and submitted with the groundwater or surface water samples to the analytical laboratory for the appropriate analyses.

Reagent blanks shall be obtained at a frequency of 10 percent but no fewer than one per day per unit if chemical analyses requiring the use of chemical reagents are conducted in the field during water sampling activities.

Trip blanks will accompany laboratory sample bottles and shipping and storage containers intended for VOC analyses. Trip blanks will consist of a sample of analyte free deionized water placed in an appropriate sample container. Trip blanks will be analyzed at a frequency of one for each shipping container of samples.

3.3 Laboratory QA/QC Samples

Analytical procedures will be evaluated by analyzing reagent or method blanks, surrogates, MS/MSDs, BS/BSDs and/or laboratory duplicates, as appropriate for each method. The laboratory QA/QC samples and frequency of analysis to be completed will be documented in the cited USEPA or other test methodologies. At a minimum, the laboratory will analyze laboratory blanks, MS/MSDs, BS/BSDs, and laboratory duplicates at a frequency of one in twenty for all batch runs requiring USEPA test methods and a frequency of one in ten for non-USEPA test methods. Laboratory batch QA/QC samples will be project specific.

3.4 Laboratory Deliverables

The analytical data package will be prepared in accordance with USEPA-established Level II analytical support protocol which will include:

- Transmittal letter, including information about the receipt of samples, the testing methodology performed, any deviations from the required procedures, any problems encountered in the analysis of the samples, any data quality exceptions, and any corrective actions taken by the laboratory relative to the quality of the data contained in the report;
- Sample analytical results, including sampling date; date of sample extraction or preparation; date of sample analysis; dilution factors and test method identification; water sample results in consistent units (milligrams per liter or micrograms per liter); and detection limits for undetected analytes. Results will be reported for all field samples, including field duplicates and blanks, submitted for analysis
- Method blank results, including reporting limits for undetected analytes
- Surrogate recovery results and corresponding control limits for samples and method blanks (organic analyses only)
- Laboratory duplicate results for inorganic analyses, including relative percent differences and corresponding control limits
- Sample COC documentation
- Holding times and conditions

- Conformance with required analytical protocol(s)
- Instrument calibration
- Blanks
- Detection/quantitative limits
- Recoveries of surrogates and/or MS/MSDs
- Variability for duplicate analyses
- Completeness
- Data report formats

Data deliverables provided by the laboratory that include analysis of organic compounds will also include the following:

- A cover letter referencing the procedure used and discussing any analytical problems, deviations, and modifications, including signature from authority representative certifying to the quality and authenticity of data as reported
- A report of sample collection, extraction, and analysis dates, including sample holding conditions
- Tabulated results for samples in units as specified, including data qualification in conformance with USEPA protocol, and definition of data descriptor codes
- Final extract volumes (and dilutions required), sample size, wet-to-dry weight ratios, and instrument practical detection/quantitative limit for each analyte
- Analyte concentrations with reporting units identified, including data qualification and a description of the qualifiers
- Quantification of analytes in all blank analyses, as well as identification of method blank associated with each sample
- Recovery assessments and a replicate sample summary, including all surrogate spike recovery data with spike levels/concentrations for each sample and all MS/MSD results (recoveries and spike amounts)

3.5 Review of Field and Laboratory QA/QC Data

The sample data, field, and laboratory QA/QC results will be evaluated for acceptability with respect to the data quality objectives (DQOs). Each group of samples will be compared with the DQOs and evaluated using data validation guidelines contained in USEPA guidance documents: “Guidance Document for the Assessment of RCRA Environmental Data Quality, National Functional Guidelines for Organic Data Review,” “Laboratory Data Validation Functional Guidelines for Evaluating Inorganics

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Analyses," and the most recent version of SW-846, and industry-accepted QA/QC methods and procedures.

The laboratory will notify the Refinery Project Manager of data quality exceptions within one business day of identifying the data quality exception to allow for sample re-analysis, if possible. The Refinery Project Manager will contact NMED within one business day of receipt of laboratory notification of data quality exceptions to discuss the implementations and determine whether the data will still be considered acceptable, or if sample re-analysis or re-sampling is necessary.

3.6 Blanks, Field Duplicates, Reporting Limits and Holding Times

3.6.1 Blanks

The analytical results of field blanks and field rinsate blanks will be reviewed to evaluate the adequacy of the equipment decontamination procedures and the possibility of cross-contamination caused by decontamination of sampling equipment. The analytical results of trip blanks will be reviewed to evaluate the possibility for contamination resulting from the laboratory-prepared sample containers or the sample transport containers. The analytical results of laboratory blanks will be reviewed to evaluate the possibility of contamination caused by the analytical procedures. If constituents are detected in field or laboratory blanks, the sample data will be qualified or rejected, as appropriate. Methods and reasoning for the decision to qualify or reject sample data will be discussed in the annual groundwater report. Furthermore, any impact to data quality and/or need to adjust methods will be addressed in the report.

3.6.2 Field Duplicates

Field duplicates will consist of two samples either split from the same sample device or collected sequentially. The analytical data quality objectives for precision shall be used for water duplicates.

3.6.3 Method Reporting Limits

Method reporting limits for sample analyses will be established at the lowest level practicable for the method and analyte concentrations and will not exceed groundwater or surface water cleanup standards and screening levels. Detection limits that exceed established standards or screening levels and are reported as "not detected" will be considered data quality exceptions and an explanation for its acceptability for use will be provided.

3.6.4 Holding Times

Per USEPA protocol the sampling, extraction, and analysis dates will be reviewed to confirm that extraction and analyses were completed within the recommended holding times. Appropriate data qualifiers will be noted if holding times are exceeded.

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3.7 Representativeness and Comparability

3.7.1 Representativeness

Representativeness is a qualitative parameter related to the degree to which the sample data represent the relevant specific characteristics of the media sampled. Procedures will be implemented to assure representative samples are collected and analyzed, such as repeated measurements of the same parameter at the same location over several distinct sampling events. Any procedures or variations that may affect the collection or analysis of representative samples will be noted and the data will be qualified.

3.7.2 Comparability

Comparability is a qualitative parameter related to whether similar sample data can be compared. To assure comparability, analytical results will be reported in appropriate units for comparison with other data (past studies, comparable sites, screening levels, and cleanup standards), and standard collection and analytical procedures will be implemented. Any procedure or variation that may affect comparability will be noted and the data will be qualified.

3.8 Laboratory Reporting, Documentation, Data Reduction, and Corrective Action

Upon receipt of each laboratory data package, data will be evaluated against the criteria outlined in the previous sections. Any deviation from the established criteria will be noted and the data will be qualified. A full review and discussion of analytical data QA/QC and all data qualifiers will be submitted as appendices or attachments to the groundwater monitoring reports. Data validation procedures for all samples will include checking the following, when appropriate:

- Holding times
- Detection limits
- Field equipment rinsate blanks
- Field blanks
- Field duplicates
- Trip blanks
- Reagent blanks
- Laboratory duplicates
- Laboratory blanks
- Laboratory MS/MSD

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- Laboratory BS/BSD
- Surrogate recoveries

If significant quality assurance problems are encountered, appropriate corrective action will be implemented. All corrective action will be reported, and the corrected data will be qualified.

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Figures

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EXPLANATION

BW–5A
DRY
MONITORING WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL)

NOTE:

1. GROUNDWATER ELEVATIONS SURFACE GENERATED USING 3RD QUARTER ANNUAL MONITORING EVENT.

N

0 400'

DRAFT

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FIGURE 1

ALLUVIAL/FLUVIAL UPPER SAND WATER ELEVATION MAP 2020

**WESTERN REFINING SOUTHWEST LLC
MARATHON GALLUP REFINERY
GALLUP, NEW MEXICO**

Drawn By: SB	Checked By: CF	Scale: 1" = 400'	Date: 1/24/22	File: 697-G-GW_PS-MAPALLUVIAL-202009

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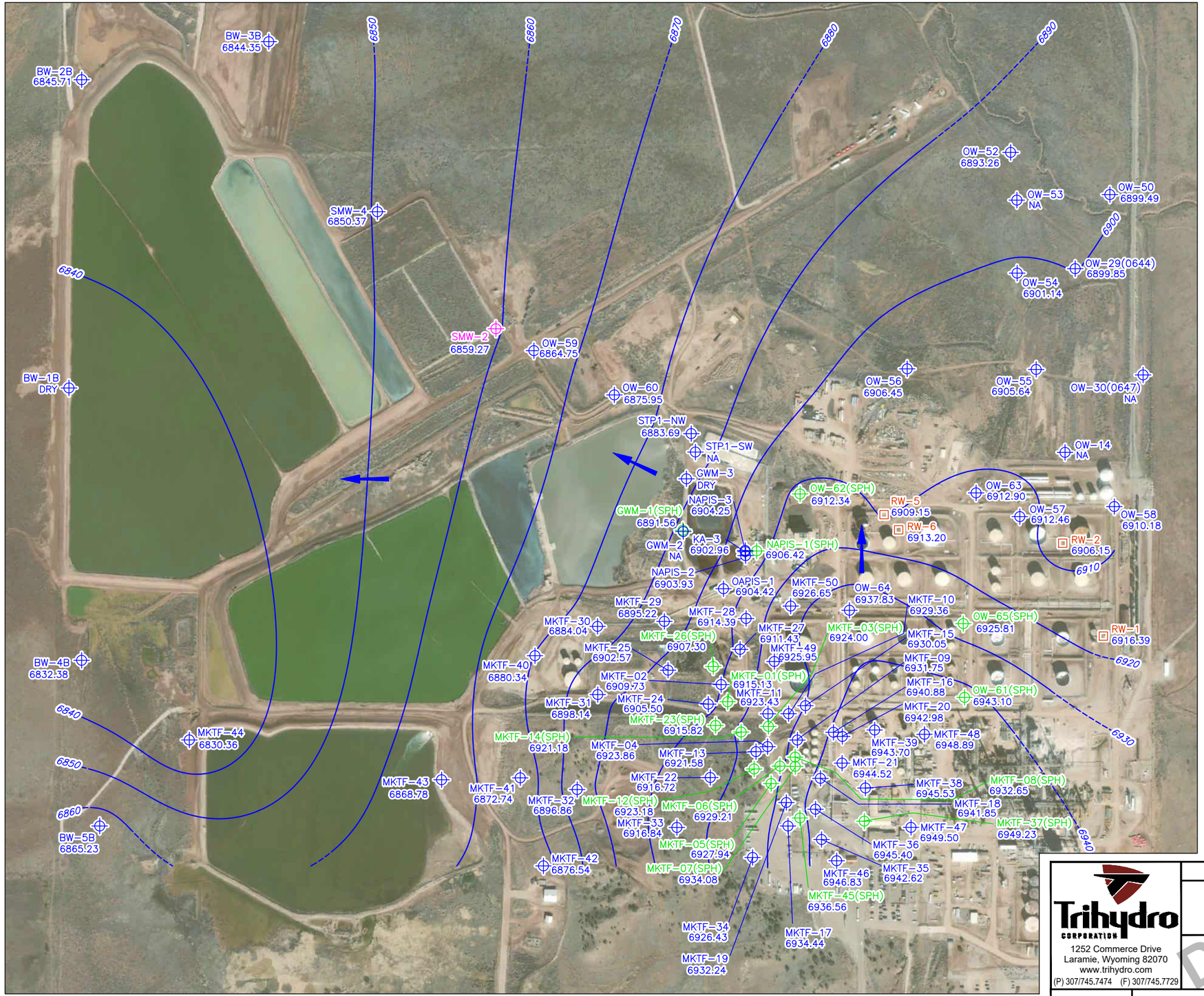

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EXPLANATION

- OW-52 6893.26 — CHINLE/ALLUVIUM INTERFACE WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL, DECEMBER 2020)
- SMW-2 6859.27 — UPPER SAND WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL, DECEMBER 2020)
- OW-62(SPH) 6912.34 — SPH MONITORING WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL,DECEMBER 2020)
- RW-5 6909.15 — RECOVERY WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL, DECEMBER 2020)
- 6900 — LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FT AMSL, DASHED WHERE INFERRED)
- ESTIMATED GROUNDWATER FLOW DIRECTION
- FT AMSL — FEET ABOVE MEAN SEA LEVEL
- SPH — SINGLE-PHASE HYDROCARBON

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FIGURE 2
ALLUVIUM / CHINLE GROUP INTERFACE WATER ELEVATION MAP 2020
WESTERN REFINING SOUTHWEST LLC D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

Drawn By: REP	Checked By: MS	Scale: 1" = 500'	Date: 1/21/22	File: 697-GW-AC-WTRELEVMAP-2020

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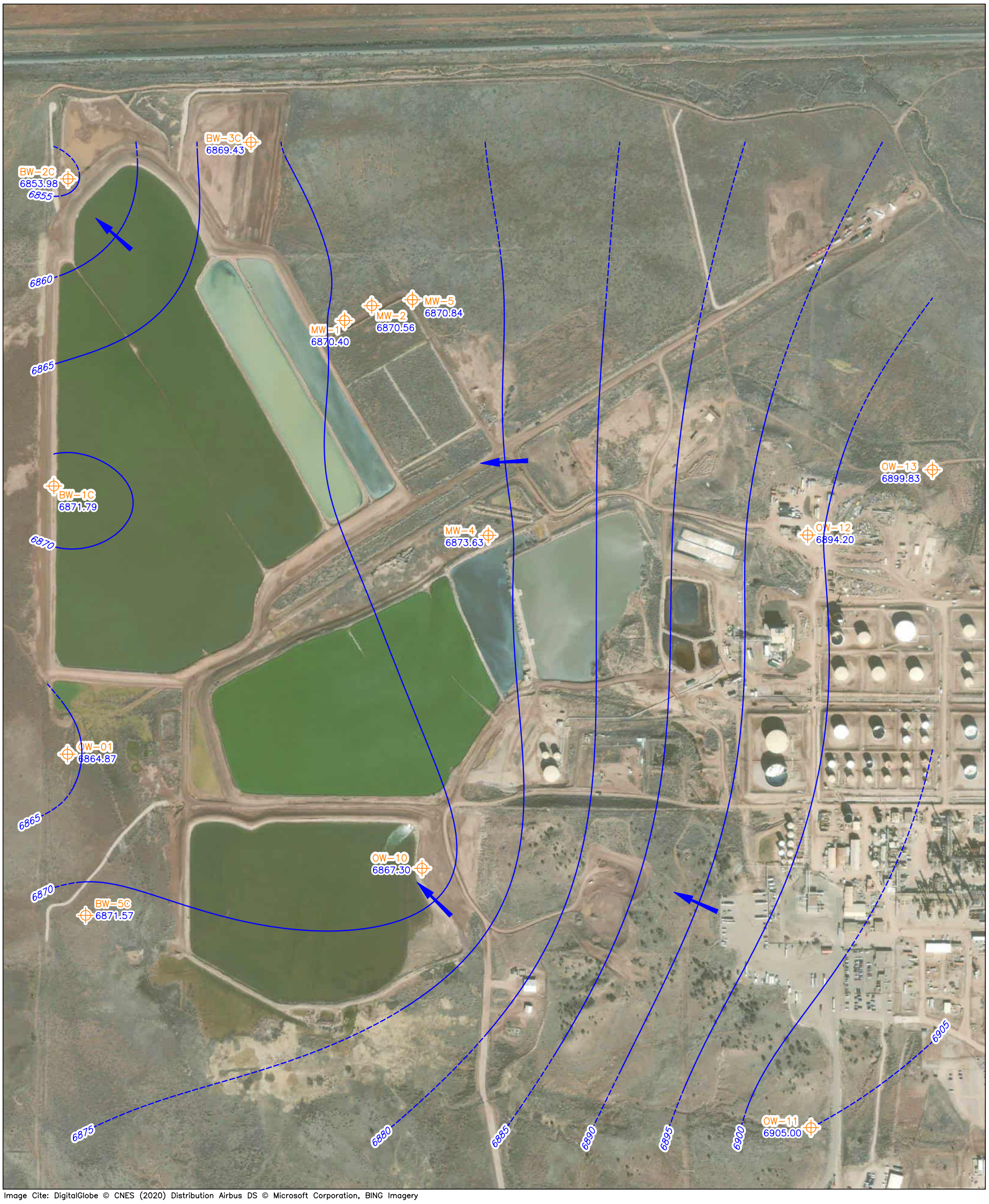

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EXPLANATION

OW-10 6867.30 — SONSELA WELL AND DESIGNATION (SHOWING GROUNDWATER ELEVATION IN FT AMSL, SEPTEMBER AND DECEMBER 2020)

6880 — LINE OF EQUAL ELEVATION OF POTENTIOMETRIC SURFACE (FT AMSL, DASHED WHERE INFERRED)

ESTIMATED GROUNDWATER FLOW DIRECTION

FT AMSL — FEET ABOVE MEAN SEA LEVEL

N

0 500'

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Figure 3

SONSELA WATER ELEVATION MAP 2020

WESTERN REFINING SOUTHWEST LLC D/B/A MARATHON GALLUP REFINERY GALLUP, NEW MEXICO

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Drawn By: REP	Checked By: MS	Scale: 1" = 500'	Date: 1/21/22	File: 697-GW-S-WTRELEVMAP-2020

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Attachment A – Water Levels and Well Information

ATTACHMENT A-1. 2020 FLUID LEVEL DATA FOR NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Elevation Product Surface	Elevation Water Surface	Depth To Water	Depth To Product
BW-1A	9/14/2020	6885.12	NA	Dry	Dry	ND
BW-1B	9/14/2020	6885.78	NA	Dry	Dry	ND
BW-1C	9/14/2020	6885.68	NA	6871.79	13.89	ND
BW-2A	9/14/2020	6874.69	NA	6841.76	32.93	ND
BW-2B	9/14/2020	6874.5	NA	6845.71	28.79	ND
BW-2C	9/14/2020	6875.3	NA	6853.98	21.32	ND
BW-3A	9/14/2020	6878.39	NA	Dry	Dry	ND
BW-3B	9/14/2020	6878.59	NA	6844.35	34.24	ND
BW-3C	9/14/2020	6877.95	NA	6869.43	8.52	ND
BW-4A	3/9/2020	6873.18	NA	6834.84	38.34	ND
BW-4A	6/30/2020	6873.18	NA	Dry	Dry	ND
BW-4A	9/14/2020	6873.18	NA	Dry	Dry	ND
BW-4A	12/7/2020	6873.18	NA	Dry	Dry	ND
BW-4B	3/9/2020	6873.23	NA	6832.88	40.35	ND
BW-4B	6/26/2020	6873.23	NA	NA	NA	NA
BW-4B	6/30/2020	6873.23	NA	6828.48	44.75	ND
BW-4B	9/14/2020	6873.23	6833.38	6833.37	39.86	39.85
BW-4B	12/7/2020	6873.23	NA	6837.37	35.86	ND
BW-5A	3/5/2020	6877.00	NA	Dry	Dry	ND
BW-5A	6/26/2020	6877.00	NA	6853.79	23.21	ND
BW-5A	9/14/2020	6877.00	NA	Dry	Dry	ND
BW-5A	12/7/2020	6877.00	NA	6853.73	23.27	ND
BW-5B	3/5/2020	6876.82	NA	6866.88	9.94	ND
BW-5B	6/26/2020	6876.82	NA	6866.61	10.21	ND
BW-5B	9/14/2020	6876.82	NA	6866.21	10.61	ND
BW-5B	12/7/2020	6876.82	NA	6866.29	10.53	ND
BW-5C	3/5/2020	6876.85	NA	6874.05	2.8	ND
BW-5C	6/26/2020	6876.85	NA	6873.47	3.38	ND
BW-5C	9/14/2020	6876.85	NA	6872.49	4.36	ND
BW-5C	12/7/2020	6876.85	NA	6872.58	4.27	ND
GWM-1	3/3/2020	6912.61	6891.21	6891.13	21.48	21.4
GWM-1	7/1/2020	6912.61	6891.79	6892.24	20.37	20.82
GWM-1	9/15/2020	6912.61	6891.88	6891.21	21.4	20.73
GWM-1	11/9/2020	6912.61	6891.73	6890.89	21.72	20.88
GWM-1	12/7/2020	6912.61	6891.7	6890.76	21.85	20.91
GWM-2	3/3/2020	6913.09	NA	Dry	Dry	ND
GWM-2	7/1/2020	6913.09	NA	Dry	Dry	ND
GWM-2	9/15/2020	6913.09	NA	Dry	Dry	ND
GWM-2	11/10/2020	6913.09	NA	Dry	Dry	ND
GWM-2	12/7/2020	6913.09	NA	Dry	Dry	ND
GWM-3	3/3/2020	6910.25	NA	Dry	Dry	ND
GWM-3	7/1/2020	6910.25	NA	Dry	Dry	ND
GWM-3	9/15/2020	6910.25	NA	Dry	Dry	ND
GWM-3	10/11/2020	6910.25	NA	Dry	Dry	ND
GWM-3	12/7/2020	6910.25	NA	Dry	Dry	ND
KA-3	3/3/2020	6912.52	NA	6903.22	9.3	ND

ATTACHMENT A-1. 2020 FLUID LEVEL DATA FOR NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Elevation Product Surface	Elevation Water Surface	Depth To Water	Depth To Product
KA-3	7/1/2020	6912.52	NA	6903.77	8.75	ND
KA-3	12/7/2020	6912.52	NA	6902.96	9.56	ND
MW-1	6/30/2020	6878.12	NA	6870.87	7.25	ND
MW-1	9/14/2020	6878.12	NA	6870.4	7.72	ND
MW-2	6/30/2020	6880.30	NA	6871.01	9.29	ND
MW-2	9/14/2020	6880.30	NA	6870.56	9.74	ND
MW-4	6/30/2020	6881.63	NA	6874.13	7.5	ND
MW-4	9/14/2020	6881.63	NA	6873.63	8	ND
MW-5	6/30/2020	6882.83	NA	6871.37	11.46	ND
MW-5	9/14/2020	6882.83	NA	6870.84	11.99	ND
NAPIS-1	3/4/2020	6913.86	6906.17	6906.12	7.74	7.69
NAPIS-1	7/1/2020	6913.86	6906.48	6906.44	7.42	7.38
NAPIS-1	9/15/2020	6913.86	6907.16	6907.15	6.71	6.7
NAPIS-1	11/10/2020	6913.86	6906.67	6906.66	7.2	7.19
NAPIS-1	12/7/2020	6913.86	NA	6906.42	7.44	ND
NAPIS-2	3/3/2020	6912.65	NA	6903.19	9.46	ND
NAPIS-2	7/1/2020	6912.65	NA	6903.53	9.12	ND
NAPIS-2	9/15/2020	6912.65	NA	6904.53	8.12	ND
NAPIS-2	11/10/2020	6912.65	NA	6904.14	8.51	ND
NAPIS-2	12/7/2020	6912.65	NA	6903.93	8.72	ND
NAPIS-3	7/1/2020	6912.76	NA	6902.66	10.1	ND
NAPIS-3	9/15/2020	6912.76	NA	6903.51	9.25	ND
NAPIS-3	11/10/2020	6912.76	NA	6903.29	9.47	ND
NAPIS-3	12/7/2020	6912.76	NA	6904.25	8.51	ND
OAPIS-1	3/3/2020	6916.73	NA	6904.27	12.46	ND
OAPIS-1	7/1/2020	6916.73	NA	6904.13	12.6	ND
OAPIS-1	9/15/2020	6916.73	NA	6904.83	11.9	ND
OAPIS-1	11/10/2020	6916.73	NA	6904.71	12.02	ND
OAPIS-1	12/7/2020	6916.73	NA	6904.42	12.31	ND
OW-01	3/9/2020	6866.62	NA	6864.92	1.7	ND
OW-01	6/30/2020	6866.62	NA	6865.02	1.6	ND
OW-01	9/15/2020	6866.62	NA	6865.17	1.45	ND
OW-01	12/7/2020	6866.62	NA	6864.87	1.75	ND
OW-10	3/4/2020	6874.91	NA	6869.48	5.43	ND
OW-10	6/30/2020	6874.91	NA	6868.16	6.75	ND
OW-10	9/20/2020	6874.91	NA	6867.21	7.7	ND
OW-10	10/9/2020	6874.91	NA	6867.21	7.7	ND
OW-10	12/7/2020	6874.91	NA	6867.3	7.61	ND
OW-11	9/15/2020	6923.51	NA	6905	18.51	ND
OW-12	6/30/2020	6940.69	NA	Dry	Dry	ND
OW-12	9/14/2020	6940.69	NA	6894.24	46.45	ND
OW-12	11/9/2020	6940.69	NA	6894.2	46.49	ND
OW-13	3/2/2020	6920.07	NA	6900.16	19.91	ND
OW-13	6/30/2020	6920.07	NA	6897.91	22.16	ND
OW-13	9/14/2020	6920.07	NA	6899.08	20.99	ND
OW-13	11/9/2020	6920.07	NA	6899.69	20.38	ND

ATTACHMENT A-1. 2020 FLUID LEVEL DATA FOR NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Elevation Product Surface	Elevation Water Surface	Depth To Water	Depth To Product
OW-13	12/7/2020	6920.07	NA	6899.83	20.24	ND
OW-14	3/2/2020	6926.65	NA	NA	NA	NA
OW-14	6/30/2020	6926.65	NA	6903.9	22.75	ND
OW-14	9/14/2020	6926.65	NA	NA	NA	NA
OW-14	12/7/2020	6926.65	NA	6902.25	24.4	NA
OW-29	2/24/2020	6917.00	NA	6900.52	16.48	ND
OW-29	6/30/2020	6917.00	NA	6899.58	17.42	ND
OW-29	9/14/2020	6917.00	NA	6902.43	14.57	ND
OW-29	11/9/2020	6917.00	NA	6899.77	17.23	ND
OW-29	12/7/2020	6917.00	NA	6899.85	17.15	ND
OW-30	3/2/2020	6924.69	NA	NA	NA	NA
OW-30	6/30/2020	6924.69	NA	6902.36	22.33	ND
OW-30	9/15/2020	6924.69	NA	NA	NA	ND
OW-30	12/7/2020	6924.69	NA	6902.47	22.22	ND
OW-50	3/2/2020	6914.21	NA	6900.16	14.05	ND
OW-50	6/30/2020	6914.21	NA	6899.6	14.61	ND
OW-50	9/14/2020	6914.21	NA	6899.1	15.11	ND
OW-50	11/9/2020	6914.21	NA	6899.34	14.87	ND
OW-50	12/7/2020	6914.21	NA	6899.49	14.72	ND
OW-52	3/2/2020	6907.68	NA	6893.97	13.71	ND
OW-52	6/30/2020	6907.68	NA	6893.48	14.2	ND
OW-52	9/14/2020	6907.68	NA	6893.12	14.56	ND
OW-52	10/9/2020	6907.68	NA	6893.16	14.52	ND
OW-52	12/7/2020	6907.68	NA	6893.26	14.42	ND
OW-53	3/2/2020	6914.38	NA	Dry	Dry	ND
OW-53	6/30/2020	6914.38	NA	Dry	Dry	ND
OW-53	9/14/2020	6914.38	NA	Dry	Dry	ND
OW-53	11/9/2020	6914.38	NA	Dry	Dry	ND
OW-53	12/7/2020	6914.38	NA	Dry	Dry	ND
OW-54	3/2/2020	6918.92	NA	6901.74	17.18	ND
OW-54	6/30/2020	6918.92	NA	6901.17	17.75	ND
OW-54	9/14/2020	6918.92	NA	6900.75	18.17	ND
OW-54	10/9/2020	6918.92	NA	6901	17.92	ND
OW-54	12/7/2020	6918.92	NA	6901.14	17.78	ND
OW-55	3/2/2020	6923.25	NA	6906.29	16.96	ND
OW-55	6/30/2020	6923.25	NA	6905.83	17.42	ND
OW-55	9/14/2020	6923.25	NA	6905.29	17.96	ND
OW-55	10/9/2020	6923.25	NA	6905.55	17.7	ND
OW-55	12/7/2020	6923.25	NA	6905.64	17.61	ND
OW-56	3/2/2020	6920.18	NA	6907.16	13.02	ND
OW-56	6/30/2020	6920.18	NA	6905.85	14.33	ND
OW-56	9/14/2020	6920.18	NA	6905.82	14.36	ND
OW-56	11/9/2020	6920.18	NA	6905.97	14.21	ND
OW-56	12/7/2020	6920.18	NA	6906.45	13.73	ND
OW-57	3/4/2020	6933.10	NA	6913.13	19.97	ND
OW-57	6/30/2020	6933.10	NA	6912.88	20.22	ND

ATTACHMENT A-1. 2020 FLUID LEVEL DATA FOR NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Elevation Product Surface	Elevation Water Surface	Depth To Water	Depth To Product
OW-57	9/14/2020	6933.10	NA	6912.6	20.5	ND
OW-57	11/9/2020	6933.10	NA	6912.57	20.53	ND
OW-57	12/7/2020	6933.10	NA	6912.46	20.64	ND
OW-58	6/30/2020	6934.50	NA	6910.38	24.12	ND
OW-58	9/14/2020	6934.50	NA	6910.95	23.55	ND
OW-58	11/9/2020	6934.50	NA	6911.19	23.31	ND
OW-58	12/8/2020	6934.50	NA	6910.18	24.32	ND
OW-58A	3/5/2020	6935.88	NA	6909.75	26.13	ND
OW-58A	6/30/2020	6935.88	NA	6909.38	26.5	ND
OW-58A	9/15/2020	6935.88	NA	6909.01	26.87	ND
OW-58A	11/9/2020	6935.88	NA	6911.57	24.31	ND
OW-58A	12/8/2020	6935.88	NA	6909.17	26.71	ND
OW-59	6/30/2020	6889.73	NA	6866.06	23.67	ND
OW-59	9/14/2020	6889.73	NA	6865.67	24.06	ND
OW-59	12/7/2020	6889.73	NA	6865.82	23.91	ND
OW-60	3/3/2020	6893.51	NA	6877.37	16.14	ND
OW-60	6/30/2020	6893.51	NA	6877.01	16.5	ND
OW-60	9/14/2020	6893.51	NA	6876.94	16.57	ND
OW-60	11/9/2020	6893.51	NA	6877.16	16.35	ND
OW-60	12/7/2020	6893.51	NA	6876.96	16.55	ND
OW-61	3/4/2020	6963.57	6945.29	6942.48	21.09	18.28
OW-61	6/29/2020	6963.57	6946.4	6945.53	18.04	17.17
OW-61	9/15/2020	6963.57	6946.69	6944.17	19.4	16.88
OW-61	11/9/2020	6963.57	6945.35	6943.99	19.58	18.22
OW-61	12/8/2020	6963.57	6945.17	6943.27	20.3	18.4
OW-62	3/10/2020	6937.36	6913.78	6913.2	24.16	23.58
OW-62	6/30/2020	6937.36	6913.74	6913.45	23.91	23.62
OW-62	9/15/2020	6937.36	6913.74	6913.49	23.87	23.62
OW-62	11/9/2020	6937.36	6913.66	6913.36	24	23.7
OW-62	12/8/2020	6937.36	6913.67	6913.38	23.98	23.69
OW-63	3/4/2020	6935.06	NA	6914.65	20.41	ND
OW-63	6/29/2020	6935.06	NA	6914.6	20.46	ND
OW-63	9/14/2020	6935.06	NA	6914.33	20.73	ND
OW-63	11/9/2020	6935.06	NA	6914.21	20.85	ND
OW-63	12/8/2020	6935.06	NA	6914.09	20.97	ND
OW-64	3/4/2020	6947.40	NA	6939.9	7.5	ND
OW-64	6/30/2020	6947.40	NA	6939.05	8.35	ND
OW-64	9/14/2020	6947.40	NA	6939.45	7.95	ND
OW-64	11/9/2020	6947.40	NA	6939.22	8.18	ND
OW-64	12/7/2020	6947.40	NA	6939.14	8.26	ND
OW-65	3/4/2020	6954.05	6930.22	6923.97	30.08	23.83
OW-65	6/29/2020	6954.05	6929.97	6922.64	31.41	24.08
OW-65	9/14/2020	6954.05	6929.35	6923.29	30.76	24.7
OW-65	11/9/2020	6954.05	6929	6921.7	32.35	25.05
OW-65	12/8/2020	6954.05	6928.26	6922.1	31.95	25.79
RW-1	3/4/2020	6946.06	NA	NA	NA	NA

ATTACHMENT A-1. 2020 FLUID LEVEL DATA FOR NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Elevation Product Surface	Elevation Water Surface	Depth To Water	Depth To Product
RW-1	6/30/2020	6946.06	6917.81	6916.56	29.5	28.25
RW-1	9/19/2020	6946.06	6917.99	6915.86	30.2	28.07
RW-1	11/10/2020	6946.06	6916.56	6915.73	30.33	29.5
RW-1	12/8/2020	6946.06	6916.56	6915.73	30.33	29.5
RW-2	3/4/2020	6928.53	NA	NA	NA	NA
RW-2	6/30/2020	6928.53	6907.87	6907.53	21	20.66
RW-2	9/19/2020	6928.53	6906.43	6906.3	22.23	22.1
RW-2	11/9/2020	6928.53	6906.44	6906.25	22.28	22.09
RW-2	12/8/2020	6928.53	6906.33	6906.15	22.38	22.2
RW-5	3/4/2020	6943.57	NA	NA	NA	NA
RW-5	6/30/2020	6943.57	6914.92	6911.52	32.05	28.65
RW-5	9/19/2020	6943.57	6913.98	6910.76	32.81	29.59
RW-5	11/9/2020	6943.57	6913.71	6910.54	33.03	29.86
RW-5	12/8/2020	6943.57	6910.42	6904.06	39.51	33.15
RW-6	3/4/2020	6944.01	NA	NA	NA	NA
RW-6	6/30/2020	6944.01	6915.14	6913.51	30.5	28.87
RW-6	9/19/2020	6944.01	6914.29	6911.37	32.64	29.72
RW-6	11/9/2020	6944.01	6914.03	6910.96	33.05	29.98
RW-6	12/8/2020	6944.01	6913.83	6910.7	33.31	30.18
SMW-2	6/30/2020	6883.97	NA	6859.72	24.25	ND
SMW-2	9/14/2020	6883.97	NA	6859.27	24.7	ND
SMW-4	6/30/2020	6879.52	NA	6850.35	29.17	ND
SMW-4	9/14/2020	6879.52	NA	6850.37	29.15	ND
STP1-NW	3/3/2020	6904.47	NA	6884.2	20.27	ND
STP1-NW	6/30/2020	6904.47	NA	6883.8	20.67	ND
STP1-NW	12/8/2020	6904.47	NA	6883.69	20.78	ND
STP1-SW	3/3/2020	6912.38	NA	NA	NA	NA
STP1-SW	12/8/2020	6912.38	NA	6883.15	29.23	NA

Definitions:
DRY = no water detected
NA = no data
ND = not detected
Monitoring wells were not monitored during the second quarter due to the COVID-19 pandemic and state shutdowns.

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-01	2/24/2020	6920.67	6915.80	6915.51	5.16	4.87
MKTF-01	6/26/2020	6920.67	6915.17	6914.96	5.71	5.50
MKTF-01	9/15/2020	6920.67	6915.06	6915.05	5.62	5.61
MKTF-01	11/10/2020	6920.67	6915.06	6914.78	5.89	5.61
MKTF-01	12/3/2020	6920.67	6914.93	6914.65	6.02	5.74
MKTF-02	2/24/2020	6917.45	NA	6910.93	6.52	ND
MKTF-02	6/26/2020	6917.45	NA	6909.75	7.70	ND
MKTF-02	9/15/2020	6917.45	NA	6909.57	7.88	ND
MKTF-02	11/10/2020	6917.45	NA	6910.02	7.43	ND
MKTF-02	12/3/2020	6917.45	NA	6909.73	7.72	ND
MKTF-03	3/5/2020	6931.69	6925.22	6923.85	7.84	6.47
MKTF-03	6/26/2020	6931.69	6924.33	6923.06	8.63	7.36
MKTF-03	9/15/2020	6931.69	6924.61	6924.60	7.09	7.08
MKTF-03	11/10/2020	6931.69	6924.56	6923.26	8.43	7.13
MKTF-03	12/3/2020	6931.69	6924.23	6923.07	8.62	7.46
MKTF-04	3/2/2020	6933.57	NA	6925.10	8.47	ND
MKTF-04	6/26/2020	6933.57	NA	6923.82	9.75	ND
MKTF-04	9/15/2020	6933.57	6924.18	6924.17	9.40	9.39
MKTF-04	11/10/2020	6933.57	NA	6924.37	9.20	ND
MKTF-04	12/3/2020	6933.57	6923.87	6923.86	9.71	9.70
MKTF-05	3/5/2020	6942.22	6928.64	6928.50	13.72	13.58
MKTF-05	6/25/2020	6942.22	6928.16	6927.42	14.80	14.06
MKTF-05	9/15/2020	6942.22	6928.57	6927.54	14.68	13.65
MKTF-05	11/10/2020	6942.22	6928.20	6927.32	14.90	14.02
MKTF-05	12/3/2020	6942.22	6928.10	6927.29	14.93	14.12
MKTF-06	3/5/2020	6946.81	6929.92	6928.21	18.60	16.89
MKTF-06	6/25/2020	6946.81	6932.76	6927.91	18.90	14.05
MKTF-06	9/15/2020	6946.81	6930.03	6928.10	18.71	16.78
MKTF-06	11/10/2020	6946.81	6929.61	6928.22	18.59	17.20
MKTF-06	12/3/2020	6946.81	6929.43	6928.32	18.49	17.38
MKTF-07	3/5/2020	6947.18	6934.68	6933.46	13.72	12.50
MKTF-07	6/25/2020	6947.18	6934.95	6933.42	13.76	12.23
MKTF-07	9/18/2020	6947.18	6935.76	6933.41	13.77	11.42
MKTF-07	11/10/2020	6947.18	6934.62	6933.42	13.76	12.56
MKTF-07	12/3/2020	6947.18	6934.25	6933.38	13.80	12.93
MKTF-08	3/5/2020	6947.09	6933.06	6932.72	14.37	14.03
MKTF-08	6/25/2020	6947.09	6933.09	6932.69	14.40	14.00

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-08	9/18/2020	6947.09	6933.33	6932.94	14.15	13.76
MKTF-08	11/10/2020	6947.09	6932.86	6932.40	14.69	14.23
MKTF-08	12/3/2020	6947.09	6932.73	6932.33	14.76	14.36
MKTF-09	3/2/2020	6946.50	NA	6932.27	14.23	ND
MKTF-09	6/25/2020	6946.50	NA	6931.95	14.55	ND
MKTF-09	9/18/2020	6946.50	6932.31	6932.30	14.20	14.19
MKTF-09	11/10/2020	6946.50	6931.89	6931.88	14.62	14.61
MKTF-09	12/3/2020	6946.50	6931.75	6931.74	14.76	14.75
MKTF-10	3/2/2020	6937.16	NA	6929.49	7.67	ND
MKTF-10	6/25/2020	6937.16	NA	6930.09	7.07	ND
MKTF-10	9/18/2020	6937.16	6929.64	6929.63	7.53	7.52
MKTF-10	11/10/2020	6937.16	NA	6929.37	7.79	ND
MKTF-10	12/3/2020	6937.16	NA	6929.36	7.80	ND
MKTF-11	3/2/2020	6931.34	NA	6923.45	7.89	ND
MKTF-11	6/26/2020	6931.34	6923.67	6923.66	7.68	7.67
MKTF-11	9/18/2020	6931.34	6923.75	6923.74	7.60	7.59
MKTF-11	11/10/2020	6931.34	NA	6923.73	7.61	ND
MKTF-11	12/3/2020	6931.34	6923.45	6923.43	7.91	7.89
MKTF-12	2/27/2020	6942.11	6924.27	6924.19	17.92	17.84
MKTF-12	6/29/2020	6942.11	6922.98	6922.86	19.25	19.13
MKTF-12	9/18/2020	6942.11	6923.47	6923.46	18.65	18.64
MKTF-12	11/10/2020	6942.11	6924.14	6924.11	18.00	17.97
MKTF-12	12/3/2020	6942.11	6923.21	6923.05	19.06	18.90
MKTF-13	2/27/2020	6935.18	6924.05	6917.87	17.31	11.13
MKTF-13	6/29/2020	6935.18	6922.51	6916.97	18.21	12.67
MKTF-13	9/18/2020	6935.18	6922.63	6918.26	16.92	12.55
MKTF-13	11/10/2020	6935.18	6923.20	6918.82	16.36	11.98
MKTF-13	12/3/2020	6935.18	6922.34	6918.53	16.65	12.84
MKTF-14	2/27/2020	6928.02	6922.67	6922.37	5.65	5.35
MKTF-14	6/29/2020	6928.02	6921.64	6919.44	8.58	6.38
MKTF-14	9/18/2020	6928.02	6921.84	6919.86	8.16	6.18
MKTF-14	11/10/2020	6928.02	6922.04	6921.74	6.28	5.98
MKTF-14	12/3/2020	6928.02	6921.23	6920.96	7.06	6.79
MKTF-15	2/3/2020	6943.48	6930.46	6930.37	13.11	13.02
MKTF-15	6/26/2020	6943.48	6930.37	6930.31	13.17	13.11
MKTF-15	9/18/2020	6943.48	6930.48	6930.45	13.03	13.00
MKTF-15	11/10/2020	6943.48	6930.09	6929.88	13.60	13.39

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-16	2/5/2020	6950.58	NA	6940.90	9.68	ND
MKTF-16	6/26/2020	6950.58	NA	6941.04	9.54	ND
MKTF-16	9/18/2020	6950.58	6941.40	6941.39	9.19	9.18
MKTF-16	11/10/2020	6950.58	NA	6943.38	7.20	ND
MKTF-16	12/8/2020	6950.58	NA	6940.88	9.70	ND
MKTF-17	2/3/2020	6945.76	6934.32	6928.91	16.85	11.44
MKTF-17	6/29/2020	6945.76	6935.57	6930.26	15.50	10.19
MKTF-17	9/14/2020	6945.76	6935.76	6930.39	15.37	10
MKTF-17	11/10/2020	6945.76	6934.37	6934.17	11.59	11.39
MKTF-17	12/4/2020	6945.76	6934.48	6934.29	11.47	11.28
MKTF-18	2/5/2020	6950.65	NA	6941.55	9.10	ND
MKTF-18	6/30/2020	6950.65	NA	6941.67	8.98	ND
MKTF-18	9/18/2020	6950.65	6942.16	6942.15	8.50	8.49
MKTF-18	11/10/2020	6950.65	NA	6941.91	8.74	ND
MKTF-18	12/4/2020	6950.65	NA	6941.85	8.80	ND
MKTF-19	2/3/2020	6944.67	6933.32	6932.27	12.40	11.35
MKTF-19	6/29/2020	6944.67	6932.59	6931.38	13.29	12.08
MKTF-19	9/14/2020	6944.67	6932.72	6932.70	11.97	11.95
MKTF-19	11/10/2020	6944.67	6932.45	6931.12	13.55	12.22
MKTF-19	12/4/2020	6944.67	6932.49	6931.25	13.42	12.18
MKTF-20	2/5/2020	6951.78	NA	6942.76	9.02	ND
MKTF-20	6/26/2020	6951.78	NA	6943.11	8.67	ND
MKTF-20	9/15/2020	6951.78	6943.24	6942.43	9.35	8.54
MKTF-20	11/10/2020	6951.78	6943.68	6942.88	8.90	8.10
MKTF-20	12/8/2020	6951.78	6943.02	6942.83	8.95	8.76
MKTF-21	2/5/2020	6952.57	NA	6944.32	8.25	ND
MKTF-21	6/26/2020	6952.57	6944.40	6944.37	8.20	8.17
MKTF-21	9/15/2020	6952.57	6945.49	6945.48	7.09	7.08
MKTF-21	11/10/2020	6952.57	NA	6946.16	6.41	ND
MKTF-21	12/4/2020	6952.57	6944.53	6944.52	8.05	8.04
MKTF-22	2/27/2020	6942.31	6917.83	6916.78	25.53	24.48
MKTF-22	6/29/2020	6942.31	6917.74	6914.60	27.71	24.57
MKTF-22	9/14/2020	6942.31	6917.33	6914.63	27.68	24.98
MKTF-22	11/10/2020	6942.31	6917.37	6915.02	27.29	24.94
MKTF-22	12/4/2020	6942.31	6917.21	6914.76	27.55	25.10
MKTF-23	2/27/2020	6929.98	NA	6916.56	13.42	ND
MKTF-23	6/29/2020	6929.98	NA	6916.73	13.25	ND

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-23	9/19/2020	6929.98	6914.56	6914.54	15.44	15.42
MKTF-23	11/10/2020	6929.98	NA	6915.75	14.23	ND
MKTF-23	12/4/2020	6929.98	6915.83	6915.82	14.16	14.15
MKTF-24	2/24/2020	6928.72	NA	6906.55	22.17	ND
MKTF-24	6/26/2020	6928.72	NA	6905.92	22.80	ND
MKTF-24	9/15/2020	6928.72	NA	6905.37	23.35	ND
MKTF-24	11/10/2020	6928.72	NA	6905.40	23.32	ND
MKTF-24	12/4/2020	6928.72	NA	6905.50	23.22	ND
MKTF-25	2/26/2020	6916.19	NA	6903.25	12.94	ND
MKTF-25	6/26/2020	6916.19	NA	6902.86	13.33	ND
MKTF-25	9/15/2020	6916.19	NA	6902.29	13.90	ND
MKTF-25	11/10/2020	6916.19	NA	6902.44	13.75	ND
MKTF-25	12/4/2020	6916.19	NA	6902.57	13.62	ND
MKTF-26	2/26/2020	6915.31	6906.96	6906.20	9.11	8.35
MKTF-26	6/26/2020	6915.31	6906.70	6905.81	9.50	8.61
MKTF-26	9/15/2020	6915.31	6906.50	6905.75	9.56	8.81
MKTF-26	11/10/2020	6915.31	6906.66	6905.95	9.36	8.65
MKTF-26	12/4/2020	6915.31	6907.64	6905.92	9.39	7.67
MKTF-27	2/24/2020	6917.90	NA	6914.29	3.61	ND
MKTF-27	6/30/2020	6917.90	NA	6911.20	6.70	ND
MKTF-27	9/15/2020	6917.90	NA	6911.69	6.21	ND
MKTF-27	11/10/2020	6917.90	NA	6911.18	6.72	ND
MKTF-27	12/4/2020	6917.90	NA	6911.43	6.47	ND
MKTF-28	2/24/2020	6921.52	NA	6916.99	4.53	ND
MKTF-28	6/30/2020	6921.52	NA	6916.68	4.84	ND
MKTF-28	9/15/2020	6921.52	NA	6916.93	4.59	ND
MKTF-28	11/10/2020	6921.52	NA	6912.71	8.81	ND
MKTF-28	12/4/2020	6921.52	NA	6914.39	7.13	ND
MKTF-29	2/24/2020	6901.62	NA	6897.13	4.49	ND
MKTF-29	6/26/2020	6901.62	NA	6895.20	6.42	ND
MKTF-29	9/15/2020	6901.62	NA	6893.61	8.01	ND
MKTF-29	11/10/2020	6901.62	NA	6894.64	6.98	ND
MKTF-29	12/4/2020	6901.62	NA	6895.22	6.40	ND
MKTF-30	2/26/2020	6900.80	NA	6885.49	15.31	ND
MKTF-30	6/26/2020	6900.80	NA	6884.61	16.19	ND
MKTF-30	9/15/2020	6900.80	NA	6884.14	16.66	ND
MKTF-30	11/10/2020	6900.80	NA	6883.93	16.87	ND

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-30	12/4/2020	6900.80	NA	6884.04	16.76	ND
MKTF-31	2/24/2020	6906.87	NA	6898.77	8.10	ND
MKTF-31	6/26/2020	6906.87	NA	6898.62	8.25	ND
MKTF-31	9/15/2020	6906.87	NA	6898.12	8.75	ND
MKTF-31	11/10/2020	6906.87	NA	6898.08	8.79	ND
MKTF-31	12/4/2020	6906.87	NA	6898.14	8.73	ND
MKTF-32	2/26/2020	6911.11	NA	6897.33	13.78	ND
MKTF-32	6/29/2020	6911.11	NA	6896.86	14.25	ND
MKTF-32	9/14/2020	6911.11	NA	6896.53	14.58	ND
MKTF-32	11/10/2020	6911.11	NA	6896.80	14.31	ND
MKTF-32	12/4/2020	6911.11	NA	6896.86	14.25	ND
MKTF-33	2/27/2020	6939.75	NA	6917.04	22.71	ND
MKTF-33	6/29/2020	6939.75	NA	6918.58	21.17	ND
MKTF-33	9/14/2020	6939.75	6918.14	6911.73	28.02	21.61
MKTF-33	11/10/2020	6939.75	6918.10	6911.94	27.81	21.65
MKTF-33	12/4/2020	6939.75	6918.06	6911.98	27.77	21.69
MKTF-34	2/5/2020	6945.35	NA	6927.57	17.78	ND
MKTF-34	6/29/2020	6945.35	6926.31	6926.29	19.06	19.04
MKTF-34	9/14/2020	6945.35	NA	6926.26	19.09	ND
MKTF-34	11/10/2020	6945.35	NA	6926.27	19.08	ND
MKTF-34	12/4/2020	6945.35	6926.44	6926.43	18.92	18.91
MKTF-35	2/5/2020	6951.65	NA	6942.37	9.28	ND
MKTF-35	6/30/2020	6951.65	NA	6942.40	9.25	ND
MKTF-35	9/14/2020	6951.65	NA	6943.06	8.59	ND
MKTF-35	11/10/2020	6951.65	NA	6942.79	8.86	ND
MKTF-35	12/4/2020	6951.65	6942.63	6942.62	9.03	9.02
MKTF-36	2/3/2020	6950.12	6942.23	6941.68	8.44	7.89
MKTF-36	6/30/2020	6950.12	6942.08	6941.87	8.25	8.04
MKTF-36	9/14/2020	6950.12	NA	6942.25	7.87	ND
MKTF-36	11/10/2020	6950.12	6942.14	6942.09	8.03	7.98
MKTF-36	12/4/2020	6950.12	6942.02	6941.95	8.17	8.1
MKTF-37	2/3/2020	6958.87	6949.10	6948.98	9.89	9.77
MKTF-37	6/30/2020	6958.87	6949.26	6949.24	9.63	9.61
MKTF-37	9/14/2020	6958.87	NA	6950.11	8.76	ND
MKTF-37	11/10/2020	6958.87	6949.51	6949.50	9.37	9.36
MKTF-37	12/4/2020	6958.87	6949.23	6949.22	9.65	9.64
MKTF-38	3/4/2020	6954.89	NA	6945.28	9.61	ND

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-38	6/26/2020	6954.89	NA	6945.51	9.38	ND
MKTF-38	9/14/2020	6954.89	NA	6946.34	8.55	ND
MKTF-38	11/10/2020	6954.89	NA	6945.77	9.12	ND
MKTF-38	12/4/2020	6954.89	6945.54	6945.53	9.36	9.35
MKTF-39	2/3/2020	6953.75	NA	6943.65	10.10	ND
MKTF-39	6/26/2020	6953.75	NA	6944.12	9.63	ND
MKTF-39	9/15/2020	6953.75	NA	6944.17	9.58	ND
MKTF-39	11/10/2020	6953.75	NA	6943.70	10.05	ND
MKTF-39	12/4/2020	6953.75	NA	6943.60	10.15	ND
MKTF-40	2/27/2020	6894.33	NA	6881.10	13.23	ND
MKTF-40	6/26/2020	6894.33	NA	6881.58	12.75	ND
MKTF-40	9/15/2020	6894.33	NA	6880.94	13.39	ND
MKTF-40	11/10/2020	6894.33	NA	6880.62	13.71	ND
MKTF-40	12/4/2020	6894.33	NA	6880.34	13.99	ND
MKTF-41	2/26/2020	6893.64	NA	6873.49	20.15	ND
MKTF-41	6/29/2020	6893.64	NA	6873.87	19.77	ND
MKTF-41	9/14/2020	6893.64	NA	6872.92	20.72	ND
MKTF-41	11/10/2020	6893.64	NA	6872.63	21.01	ND
MKTF-41	12/4/2020	6893.64	NA	6872.74	20.90	ND
MKTF-42	2/26/2020	6892.95	NA	6876.16	16.79	ND
MKTF-42	6/30/2020	6892.95	NA	6876.70	16.25	ND
MKTF-42	9/14/2020	6892.95	NA	6876.60	16.35	ND
MKTF-42	11/10/2020	6892.95	NA	6877.65	15.30	ND
MKTF-42	12/4/2020	6892.95	NA	6876.54	16.41	ND
MKTF-43	2/26/2020	6876.90	NA	6870.57	6.33	ND
MKTF-43	6/30/2020	6876.90	NA	6871.40	5.50	ND
MKTF-43	9/14/2020	6876.90	NA	6870.45	6.45	ND
MKTF-43	11/10/2020	6876.90	NA	6869.42	7.48	ND
MKTF-43	12/4/2020	6876.90	NA	6868.78	8.12	ND
MKTF-44	3/4/2020	6869.95	NA	6839.61	30.34	ND
MKTF-44	6/26/2020	6869.95	NA	6836.87	33.08	ND
MKTF-44	9/14/2020	6869.95	NA	6841.95	28.00	ND
MKTF-44	12/4/2020	6869.95	NA	6830.36	39.59	ND
MKTF-45	2/3/2020	6949.59	6939.99	6930.97	18.62	9.60
MKTF-45	6/30/2020	6949.59	6938.51	6930.51	19.08	11.08
MKTF-45	9/14/2020	6949.59	6936.45	6931.16	18.43	13.14
MKTF-45	11/10/2020	6949.59	6936.65	6934.83	14.76	12.94

ATTACHMENT A-2. 2020 FLUID LEVEL DATA FOR MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Measured	Measuring Point Elevation	Product Surface Elevation	Water Surface Elevation	Depth To Water	Depth To Product
MKTF-45	12/4/2020	6949.59	6936.93	6935.08	14.51	12.66
MKTF-46	3/5/2020	6957.60	NA	6946.67	10.93	ND
MKTF-46	6/30/2020	6957.60	NA	6946.52	11.08	ND
MKTF-46	9/14/2020	6957.60	NA	6947.42	10.18	ND
MKTF-46	11/10/2020	6957.60	NA	6947.03	10.57	ND
MKTF-46	12/4/2020	6957.60	NA	6946.83	10.77	ND
MKTF-47	3/5/2020	6959.09	NA	6949.20	9.89	ND
MKTF-47	6/29/2020	6959.09	NA	6949.59	9.50	ND
MKTF-47	9/15/2020	6959.09	6950.56	6950.55	8.54	8.53
MKTF-47	11/10/2020	6959.09	NA	6949.76	9.33	ND
MKTF-47	12/4/2020	6959.09	6949.51	6949.50	9.59	9.58
MKTF-48	3/3/2020	6961.73	6949.07	6948.91	12.82	12.66
MKTF-48	6/29/2020	6961.73	NA	6950.15	11.58	ND
MKTF-48	9/15/2020	6961.73	6949.88	6949.87	11.86	11.85
MKTF-48	11/10/2020	6961.73	6949.33	6949.22	12.51	12.40
MKTF-48	12/4/2020	6961.73	6948.96	6948.63	13.10	12.77
MKTF-49	3/4/2020	6946.76	NA	6926.49	20.27	ND
MKTF-49	6/30/2020	6946.76	NA	6926.11	20.65	ND
MKTF-49	9/15/2020	6946.76	NA	6926.43	20.33	ND
MKTF-49	11/10/2020	6946.76	NA	6926.01	20.75	ND
MKTF-49	12/4/2020	6946.76	NA	6925.95	20.81	ND
MKTF-50	3/4/2020	6942.82	NA	6926.95	15.87	ND
MKTF-50	6/30/2020	6942.82	NA	6926.82	16.00	ND
MKTF-50	9/15/2020	6942.82	6927.46	6927.45	15.37	15.36
MKTF-50	11/10/2020	6942.82	NA	6926.79	16.03	ND
MKTF-50	12/4/2020	6942.82	NA	6926.65	16.17	ND

Definitions:
NA = no data
ND = Not measured
Monitoring wells were not monitored during the second quarter due to the COVID-19 pandemic and state shutdowns.

ATTACHMENT A-3. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Installation Date	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table [1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
BW-1A	09/14/20	11/10/03	2	6,883.17	6,885.12	1.95	6,847.50	43.70	ND	NA	DRY	DRY	NA	30 - 35	Upper Sand
BW-1B	09/14/20	10/28/03	2	6,883.17	6,885.78	2.61	6,818.33	73.38	ND	NA	DRY	DRY	NA	54.6 - 64.6	Chinle/Alluvial Interface
BW-1C	09/14/20	11/10/03	2	6,883.17	6,885.68	2.51	6,749.29	145.29	ND	NA	13.89	6,871.79	NA	125 -135	Sonsela Sandstone
BW-2A	09/14/20	11/10/03	2	6,871.88	6,874.69	2.81	6,807.12	67.21	ND	NA	32.93	6,841.76	NA	55 - 65	Upper Sand
BW-2B	09/14/20	10/28/03	2	6,871.66	6,874.50	2.84	6,782.24	92.26	ND	NA	28.79	6,845.71	NA	80 - 90	Chinle/Alluvial Interface
BW-2C	09/14/20	10/28/03	2	6,872.90	6,875.30	2.40	6,722.46	149.10	ND	NA	21.32	6,853.98	NA	139.5 - 149.5	Sonsela Sandstone
BW-3A	09/14/20	06/15/04	2	6,875.94	6,878.39	2.45	6,826.04	53.30	ND	NA	DRY	DRY	NA	39.5 - 49.5	Upper Sand
BW-3B	09/14/20	10/15/03	2	6,876.16	6,878.59	2.43	6,809.19	69.54	ND	NA	34.24	6,844.35	NA	63 - 73	Chinle/Alluvial Interface
BW-3C	09/14/20	07/20/04	2	6,875.72	6,877.95	2.23	6,723.40	150.20	ND	NA	8.52	6,869.43	NA	144.5 - 154.5	Sonsela Sandstone
BW-4A	09/14/20	06/29/17	2	6,869.28	6,872.20	2.92	6,908.18	38.90	ND	NA	DRY	DRY	NA	21 - 36	Upper Sand
BW-4A	12/07/20	06/29/17	2	6,869.28	6,872.20	2.92	6,908.18	38.90	ND	NA	DRY	DRY	NA	21 - 36	Upper Sand
BW-4B	09/14/20	06/29/17	2	6,869.45	6,872.24	2.79	6,932.95	63.50	39.85	0.01	39.86	6,832.38	NA	41 - 61	Chinle/Alluvial Interface
BW-4B	12/07/20	06/29/17	2	6,869.45	6,872.24	2.79	6,932.95	63.50	ND	NA	35.86	6,832.38	NA	41 - 61	Chinle/Alluvial Interface
BW-5A	09/14/20	06/29/17	2	6,873.18	6,876.06	2.88	6,896.58	23.40	ND	NA	DRY	DRY	NA	10 - 20	Upper Sand
BW-5A	12/07/20	06/29/17	2	6,873.18	6,876.06	2.88	6,896.58	23.40	ND	NA	23.27	DRY	NA	10 - 20	Upper Sand
BW-5B	09/14/20	06/29/17	2	6,873.30	6,875.84	2.54	6,934.75	61.45	ND	NA	10.61	6,865.23	NA	48 - 58	Chinle/Alluvial Interface
BW-5B	12/07/20	06/29/17	2	6,873.30	6,875.84	2.54	6,934.75	61.45	ND	NA	10.53	6,865.23	NA	48 - 58	Chinle/Alluvial Interface
BW-5C	09/14/20	06/29/17	2	6,872.92	6,875.93	3.01	6,949.27	76.35	ND	NA	4.36	6,871.57	NA	64.3-74.30	Sonsela Sandstone
BW-5C	12/07/20	06/29/17	2	6,872.92	6,875.93	3.01	6,949.27	76.35	ND	NA	4.27	6,871.57	NA	64.3-74.30	Sonsela Sandstone
GWM-1	09/15/20	07/08/04	2	6,910.22	6,912.61	2.39	6,886.41	26.65	20.73	0.67	21.40	6,891.21	6891.75	17.5 - 23.5	Chinle/Alluvial Interface
GWM-1	11/09/20	07/08/04	2	6,910.22	6,912.61	2.39	6,886.41	26.65	20.88	0.84	21.72	6,890.89	6891.56	17.5 - 23.5	Chinle/Alluvial Interface
GWM-1	12/07/20	07/08/04	2	6,910.22	6,912.61	2.39	6,886.41	26.45	20.91	0.94	21.85	6,890.89	6891.56	17.5 - 23.5	Chinle/Alluvial Interface
GWM-2	09/15/20	09/25/05	2	6,910.32	6,913.09	2.77	6,894.28	18.08	ND	NA	DRY	NA	NA	3.2 - 16.2	Chinle/Alluvial Interface
GWM-2	11/10/20	09/25/05	2	6,910.32	6,913.09	2.77	6,894.28	18.08	ND	NA	DRY	NA	NA	3.2 - 16.2	Chinle/Alluvial Interface
GWM-2	12/07/20	09/25/05	2	6,910.32	6,913.09	2.77	6,894.28	18.08	ND	NA	DRY	NA	NA	3.2 - 16.2	Chinle/Alluvial Interface
GWM-3	09/15/20	09/25/05	2	6,907.35	6,910.25	2.90	6,892.45	19.15	ND	NA	DRY	DRY	NA	3 - 15	Chinle/Alluvial Interface
GWM-3	10/11/20	09/25/05	2	6,907.35	6,910.25	2.90	6,892.45	19.15	ND	NA	DRY	DRY	NA	3 - 15	Chinle/Alluvial Interface
GWM-3	12/07/20	09/25/05	2	6,907.35	6,910.25	2.90	6,892.45	19.15	ND	NA	DRY	DRY	NA	3 - 15	Chinle/Alluvial Interface
KA-3	12/07/20	06/11/07	2	6,913.29	6,912.52	-0.77	6,889.32	23.20	ND	NA	9.56	6,902.96	NA	15 - 25	Chinle/Alluvial Interface
MW-1	09/14/20	10/14/81	5	6,876.63	6,878.12	1.49	6,747.29	135.30	ND	NA	7.72	6,870.40	NA	117.72 - 127.72	Sonsela Sandstone
MW-2	09/14/20	10/15/81	5	6,878.39	6,880.30	1.91	6,742.82	138.20	ND	NA	9.74	6,870.56	NA	112 - 122	Sonsela Sandstone
MW-4	09/14/20	10/16/81	5	6,879.89	6,881.63	1.74	6,759.91	125.90	ND	NA	8.00	6,873.63	NA	101 - 121	Sonsela Sandstone
MW-5	09/14/20	07/21/86	4	6,880.20	6,882.83	2.63	6,752.00	133.00	ND	NA	11.99	6,870.84	NA	115 - 125	Sonsela Sandstone
NAPIS-1	09/15/20	03/14/08	2	6,913.62	6,913.86	0.24	6,900.33	13.58	6.70	0.01	6.71	6,907.15	6907.158	3.7 - 13.7	Chinle/Alluvial Interface
NAPIS-1	11/10/20	03/14/08	2	6,913.62	6,913.86	0.24	6,900.33	13.58	7.19	0.01	7.20	6,906.66	6906.668	3.7 - 13.7	Chinle/Alluvial Interface
NAPIS-1	12/07/20	03/14/08	2	6,913.62	6,913.86	0.24	6,900.33	13.76	ND	NA	7.44	6,906.42	NA	3.7 - 13.7	Chinle/Alluvial Interface

ATTACHMENT A-3. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Installation Date	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table [1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
NAPIS-2	09/15/20	03/14/08	2	6,913.40	6,912.65	-0.75	6,899.04	14.60	ND	NA	8.12	6,904.53	NA	4.2 - 14.2	Chinle/Alluvial Interface
NAPIS-2	11/10/20	03/14/08	2	6,913.40	6,912.65	-0.75	6,899.04	14.60	ND	NA	8.51	6,904.14	NA	4.2 - 14.2	Chinle/Alluvial Interface
NAPIS-2	12/07/20	03/14/08	2	6,913.40	6,912.65	-0.75	6,899.04	14.61	ND	NA	8.72	6,903.93	NA	4.2 - 14.2	Chinle/Alluvial Interface
NAPIS-3	09/15/20	03/14/08	2	6,913.38	6,912.76	-0.62	6,882.34	31.50	ND	NA	9.25	6,903.51	NA	25.4 - 30-4	Chinle/Alluvial Interface
NAPIS-3	11/10/20	03/14/08	2	6,913.38	6,912.76	-0.62	6,882.34	31.50	ND	NA	9.47	6,903.29	NA	25.4 - 30-4	Chinle/Alluvial Interface
NAPIS-3	12/07/20	03/14/08	2	6,913.38	6,912.76	-0.62	6,882.34	31.50	ND	NA	8.51	6,904.25	NA	25.4 - 30-4	Chinle/Alluvial Interface
OAPIS-1	09/15/20	07/17/12	2	6,914.37	6,916.73	2.36	6,888.37	28.00	ND	NA	11.90	6,904.83	NA	16 - 26	Chinle/Alluvial Interface
OAPIS-1	11/10/20	07/17/12	2	6,914.37	6,916.73	2.36	6,888.37	28.00	ND	NA	12.02	6,904.71	NA	16 - 26	Chinle/Alluvial Interface
OAPIS-1	12/07/20	07/17/12	2	6,914.37	6,916.73	2.36	6,888.37	28.00	ND	NA	12.31	6,904.42	NA	16 - 26	Chinle/Alluvial Interface
OW-1	09/15/20	01/05/81	4	6,866.32	6,866.62	0.30	6,772.07	99.39	ND	NA	1.45	6,865.17	NA	89.3 - 99.3	Sonsela Sandstone
OW-1	12/07/20	01/05/81	4	6,866.32	6,866.62	0.30	6,772.07	99.39	ND	NA	1.75	6,864.87	NA	89.3 - 99.3	Sonsela Sandstone
OW-10	10/09/20	11/25/80	4	6,873.67	6,874.91	1.24	6,814.58	66.30	ND	NA	7.70	6,867.21	NA	40 - 60	Sonsela Sandstone
OW-10	12/07/20	11/25/80	4	6,873.67	6,874.91	1.24	6,814.58	66.30	ND	NA	7.61	6,867.30	NA	40 - 60	Sonsela Sandstone
OW-11	09/15/20	09/25/81	4	6,922.05	6,923.51	1.46	6,857.72	65.83	ND	NA	18.51	6,905.00	NA	43 - 65	Sonsela Sandstone
OW-12	11/09/20	12/15/80	4	6,939.57	6,940.69	1.12	6,811.84	131.20	ND	NA	46.49	6,894.20	NA	117.8 - 137.8	Sonsela Sandstone
OW-13	09/14/20	12/10/80	4	6,918.95	6,920.07	1.12	6,820.92	91.65	ND	NA	20.99	6,899.08	NA	78.2 - 98.2	Sonsela Sandstone
OW-13	11/09/20	12/10/80	4	6,918.95	6,920.07	1.12	6,820.92	91.65	ND	NA	20.38	6,899.69	NA	78.2 - 98.2	Sonsela Sandstone
OW-13	12/07/20	12/10/80	4	6,918.95	6,920.07	1.12	6,820.92	91.65	ND	NA	20.24	6,899.83	NA	78.2 - 98.2	Sonsela Sandstone
OW-14	09/14/20	12/17/80	4	6,924.55	6,926.65	2.10	6,880.13	46.52	NM	NA	NM	NA	NA	35 - 45	Chinle/Alluvial Interface
OW-14	12/07/20	12/17/80	4	6,924.55	6,926.65	2.10	6,880.13	46.52	NM	NA	24.40	NA	NA	35 - 45	Chinle/Alluvial Interface
OW-29	09/14/20	08/23/96	4	6,913.89	6,917.00	3.11	6,865.92	51.05	ND	NA	14.57	6,902.43	NA	37.5 - 47.5	Chinle/Alluvial Interface
OW-29	11/09/20	08/23/96	4	6,913.89	6,917.00	3.11	6,865.92	51.05	ND	NA	17.23	6,899.77	NA	37.5 - 47.5	Chinle/Alluvial Interface
OW-29	12/07/20	08/23/96	4	6,913.89	6,917.00	3.11	6,865.92	51.05	ND	NA	17.15	6,899.85	NA	37.5 - 47.5	Chinle/Alluvial Interface
OW-30	09/15/20	08/28/96	4	6,921.81	6,924.69	2.88	6,874.79	49.90	ND	NA	NM	NA	NA	37.9 - 47.9	Chinle/Alluvial Interface
OW-30	12/07/20	08/28/96	4	6,921.81	6,924.69	2.88	6,874.79	49.90	ND	NA	22.22	NA	NA	37.9 - 47.9	Chinle/Alluvial Interface
OW-50	09/14/20	10/05/09	2	6,912.63	6,914.21	1.58	6,850.21	39.02	ND	NA	15.11	6,899.10	NA	48 - 63	Chinle/Alluvial Interface
OW-50	11/09/20	10/05/09	2	6,912.63	6,914.21	1.58	6,850.21	39.02	ND	NA	14.87	6,899.34	NA	48 - 63	Chinle/Alluvial Interface
OW-50	12/07/20	10/05/09	2	6,912.63	6,914.21	1.58	6,850.21	39.02	ND	NA	14.72	6,899.49	NA	48 - 63	Chinle/Alluvial Interface
OW-52	09/14/20	10/06/09	2	6,906.53	6,907.68	1.15	6,829.94	40.43	ND	NA	14.56	6,893.12	NA	64 - 79	Chinle/Alluvial Interface
OW-52	10/09/20	10/06/09	2	6,906.53	6,907.68	1.15	6,829.94	40.43	ND	NA	14.52	6,893.16	NA	64 - 79	Chinle/Alluvial Interface
OW-52	12/07/20	10/06/09	2	6,906.53	6,907.68	1.15	6,829.94	40.43	ND	NA	14.42	6,893.26	NA	64 - 79	Chinle/Alluvial Interface
OW-53	09/14/20	05/31/16	2	6,911.71	6,914.38	2.67	6,945.62	33.91	ND	NA	DRY	NA	NA	16 - 31	Chinle/Alluvial Interface
OW-53	11/09/20	05/31/16	2	6,911.71	6,914.38	2.67	6,945.62	33.91	ND	NA	DRY	NA	NA	16 - 31	Chinle/Alluvial Interface
OW-53	12/07/20	05/31/16	2	6,911.71	6,914.38	2.67	6,945.62	33.91	ND	NA	DRY	NA	NA	16 - 31	Chinle/Alluvial Interface

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ATTACHMENT A-3. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Installation Date	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table [1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
OW-54	09/14/20	06/01/16	2	6,916.27	6,918.92	2.65	6,940.85	24.58	ND	NA	18.17	6,900.75	NA	13 - 28	Chinle/Alluvial Interface
OW-54	10/09/20	06/01/16	2	6,916.27	6,918.92	2.65	6,940.85	24.58	ND	NA	17.92	6,901.00	NA	13 - 28	Chinle/Alluvial Interface
OW-54	12/07/20	06/01/16	2	6,916.27	6,918.92	2.65	6,940.85	24.58	ND	NA	17.78	6,901.14	NA	13 - 28	Chinle/Alluvial Interface
OW-55	09/14/20	06/01/16	2	6,921.02	6,923.25	2.23	6,945.50	24.48	ND	NA	17.96	6,905.29	NA	13 - 28	Chinle/Alluvial Interface
OW-55	10/09/20	06/01/16	2	6,921.02	6,923.25	2.23	6,945.50	24.48	ND	NA	17.70	6,905.55	NA	13 - 28	Chinle/Alluvial Interface
OW-55	12/07/20	06/01/16	2	6,921.02	6,923.25	2.23	6,945.50	24.48	ND	NA	17.61	6,905.64	NA	13 - 28	Chinle/Alluvial Interface
OW-56	09/14/20	06/01/16	2	6,917.61	6,920.18	2.57	6,936.19	18.58	ND	NA	14.36	6,905.82	NA	6 - 16	Chinle/Alluvial Interface
OW-56	11/09/20	06/01/16	2	6,917.61	6,920.18	2.57	6,936.19	18.58	ND	NA	14.21	6,905.97	NA	6 - 16	Chinle/Alluvial Interface
OW-56	12/07/20	06/01/16	2	6,917.61	6,920.18	2.57	6,936.19	18.58	ND	NA	13.73	6,906.45	NA	6 - 16	Chinle/Alluvial Interface
OW-57	09/14/20	10/05/16	2	6,930.64	6,933.10	2.46	6,958.73	28.09	ND	NA	20.50	6,912.60	NA	15 - 25	Chinle/Alluvial Interface
OW-57	11/09/20	10/05/16	2	6,930.64	6,933.10	2.46	6,958.73	28.09	ND	NA	20.53	6,912.57	NA	15 - 25	Chinle/Alluvial Interface
OW-57	12/07/20	10/05/16	2	6,930.64	6,933.10	2.46	6,959.03	28.39	ND	NA	20.64	6,912.46	NA	15 - 25	Chinle/Alluvial Interface
OW-58	09/14/20	10/03/16	2	6,934.71	6,934.50	-0.21	6,982.71	48.00	ND	NA	23.55	6,910.95	NA	38 - 48	Chinle/Alluvial Interface
OW-58	11/09/20	10/03/16	2	6,934.71	6,934.50	-0.21	6,982.71	48.00	ND	NA	23.31	6,911.19	NA	38 - 48	Chinle/Alluvial Interface
OW-58	12/08/20	10/03/16	2	6,934.71	6,934.50	-0.21	6,982.66	47.95	ND	NA	24.32	6,910.18	NA	38 - 48	Chinle/Alluvial Interface
OW-58A	09/15/20	10/17/19	4	6,933.39	6,936.29	2.90	6,969.39	36.00	ND	NA	26.87	6,909.42	NA	25 - 33	Chinle/Alluvial Interface
OW-58A	11/09/20	10/17/19	4	6,933.39	6,936.29	2.90	6,970.30	36.91	ND	NA	24.31	6,911.98	NA	25 - 33	Chinle/Alluvial Interface
OW-58A	12/08/20	10/17/19	4	6,933.39	6,936.29	2.90	6,969.77	36.38	ND	NA	26.71	6,909.58	NA	25 - 33	Chinle/Alluvial Interface
OW-59	09/14/20	06/29/17	2	6,886.40	6,888.66	2.26	6,924.92	38.52	ND	NA	24.06	6,864.60	NA	20 - 35	Chinle/Alluvial Interface
OW-59	12/07/20	06/29/17	2	6,886.40	6,888.66	2.26	6,924.95	38.55	ND	NA	23.91	6,864.75	NA	20 - 35	Chinle/Alluvial Interface
OW-60	9/14/2020	06/29/17	2	6,889.93	6,892.50	2.57	6,935.63	45.70	ND	NA	16.57	6,875.93	NA	25 - 45	Chinle/Alluvial Interface
OW-60	11/9/2020	06/29/17	2	6,889.93	6,892.50	2.57	6,935.63	45.70	ND	NA	16.35	6,876.15	NA	25 - 45	Chinle/Alluvial Interface
OW-60	12/7/2020	06/29/17	2	6,889.93	6,892.50	2.57	6,935.63	45.70	ND	NA	16.55	6,875.95	NA	25 - 45	Chinle/Alluvial Interface
OW-61	9/15/2020	03/14/18	4	6,959.29	6,961.88	2.59	6,991.14	31.85	16.88	2.52	19.40	6,942.48	6944.496	8 - 28	Chinle/Alluvial Interface
OW-61	11/9/2020	03/14/18	4	6,959.29	6,961.88	2.59	6,991.14	31.85	18.22	1.36	19.58	6,942.30	6943.388	8 - 28	Chinle/Alluvial Interface
OW-61	12/8/2020	03/14/18	4	6,959.29	6,961.88	2.59	6,990.62	31.33	18.40	1.90	20.30	6,941.58	6943.1	8 - 28	Chinle/Alluvial Interface
OW-62	9/15/2020	03/15/18	4	6,933.21	6,936.09	2.88	6,965.26	32.05	23.62	0.25	23.87	6,912.22	6912.42	8 - 28	Chinle/Alluvial Interface
OW-62	11/9/2020	03/15/18	4	6,933.21	6,936.09	2.88	6,965.26	32.05	23.70	0.30	24.00	6,912.09	6912.33	8 - 28	Chinle/Alluvial Interface
OW-62	12/8/2020	03/15/18	4	6,933.21	6,936.09	2.88	6,964.87	31.66	23.69	0.29	23.98	6,912.11	6912.34	8 - 28	Chinle/Alluvial Interface
OW-63	09/14/20	03/14/18	4	6,930.87	6,933.87	3.00	6,962.92	32.05	ND	NA	20.73	6,913.14	NA	9 - 29	Chinle/Alluvial Interface
OW-63	11/09/20	03/14/18	4	6,930.87	6,933.87	3.00	6,962.92	32.05	ND	NA	20.85	6,913.02	NA	9 - 29	Chinle/Alluvial Interface
OW-63	12/08/20	03/14/18	4	6,930.87	6,933.87	3.00	6,963.09	32.22	ND	NA	20.97	6,912.90	NA	9 - 29	Chinle/Alluvial Interface
OW-64	9/14/2020	03/16/18	4	6,943.32	6,946.09	2.77	6,970.67	27.35	ND	NA	7.95	6,938.14	NA	4 - 24	Chinle/Alluvial Interface
OW-64	11/9/2020	03/16/18	4	6,943.32	6,946.09	2.77	6,970.67	27.35	ND	NA	8.18	6,937.91	NA	4 - 24	Chinle/Alluvial Interface
OW-64	12/7/2020	03/16/18	4	6,943.32	6,946.09	2.77	6,970.67	27.35	ND	NA	8.26	6,937.83	NA	4 - 24	Chinle/Alluvial Interface
OW-65	9/14/2020	03/12/18	4	6,949.95	6,952.83	2.88	6,992.75	42.80	24.70	6.06	30.76	6,922.07	6926.918	17 - 37	Chinle/Alluvial Interface

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ATTACHMENT A-3. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
NON-MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Installation Date	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table [1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
OW-65	11/9/2020	03/12/18	4	6,949.95	6,952.83	2.88	6,992.75	42.80	25.05	7.30	32.35	6,920.48	6926.32	17 - 37	Chinle/Alluvial Interface
OW-65	12/8/2020	03/12/18	4	6,949.95	6,952.83	2.88	6,992.45	42.50	25.79	6.16	31.95	6,920.88	6925.808	17 - 37	Chinle/Alluvial Interface
RW-1	9/19/2020	03/28/95	4	6,942.86	6,946.06	3.20	6,903.02	43.45	28.07	2.13	30.20	6,915.86	6,917.56	25 - 40	Chinle/Alluvial Interface
RW-1	11/10/2020	03/28/95	4	6,942.86	6,946.06	3.20	6,903.02	43.45	29.50	0.83	30.33	6,915.73	6,916.39	25 - 40	Chinle/Alluvial Interface
RW-1	12/8/2020	03/28/95	4	6,942.86	6,946.06	3.20	6,903.02	43.45	29.50	0.83	30.33	6,915.73	6,916.39	25 - 40	Chinle/Alluvial Interface
RW-2	9/19/2020	03/29/95	4	6,926.40	6,928.53	2.13	6,888.73	40.00	22.10	0.13	22.23	6,906.30	NA	26.1 - 36.1	Chinle/Alluvial Interface
RW-2	11/9/2020	03/29/95	4	6,926.40	6,928.53	2.13	6,888.73	40.00	22.09	0.19	22.28	6,906.25	NA	26.1 - 36.1	Chinle/Alluvial Interface
RW-2	12/8/2020	03/29/95	4	6,926.40	6,928.53	2.13	6,888.73	40.00	22.20	0.18	22.38	6,906.15	NA	26.1 - 36.1	Chinle/Alluvial Interface
RW-5	9/19/2020	08/27/97	4	6,941.53	6,943.57	2.04	6,903.98	39.51	29.59	3.22	32.81	6,910.76	6,913.34	29.5 - 39.5	Chinle/Alluvial Interface
RW-5	11/9/2020	08/27/97	4	6,941.53	6,943.57	2.04	6,903.98	39.51	29.86	3.17	33.03	6,910.54	6,913.08	29.5 - 39.5	Chinle/Alluvial Interface
RW-5	12/8/2020	08/27/97	4	6,941.53	6,943.57	2.04	6,903.98	39.51	33.15	6.36	39.51	6,904.06	6,909.15	29.5 - 39.5	Chinle/Alluvial Interface
RW-6	9/19/2020	08/27/97	4	6,941.96	6,944.01	2.05	6,903.11	40.85	29.72	2.92	32.64	6,911.37	6,913.71	28.5 - 38.5	Chinle/Alluvial Interface
RW-6	11/9/2020	08/27/97	4	6,941.96	6,944.01	2.05	6,903.11	40.85	29.98	3.07	33.05	6,910.96	6,913.42	28.5 - 38.5	Chinle/Alluvial Interface
RW-6	12/8/2020	08/27/97	4	6,941.96	6,944.01	2.05	6,903.11	40.85	30.18	3.13	33.31	6,910.70	6,913.20	28.5 - 38.5	Chinle/Alluvial Interface
SMW-2	9/14/2020	09/26/85	2	6,881.63	6,883.97	2.34	6,831.17	53.11	ND	NA	24.70	6,859.27	NA	34.31 - 54.31	Chinle/Alluvial Interface and Upper Sand Well
SMW-4	9/14/2020	09/25/85	2	6,877.63	6,879.52	1.89	6,809.84	62.90	ND	NA	29.15	6,850.37	NA	51.7 - 71.7	Chinle/Alluvial Interface
STP1-NW	12/8/2020	05/06/14	2	6,904.50	6,904.47	-0.03	6,854.47	50.28	ND	NA	20.78	6,883.69	NA	20 - 50	Chinle/Alluvial Interface
STP1-SW	12/8/2020	05/06/14	2	6,912.40	6,912.38	-0.02	6,854.47	29.25	NM	NA	29.23	NA	NA	15 - 30	Chinle/Alluvial Interface

Definitions:

DRY = no water detected
DTW = depth to water
ft = feet
GW = groundwater
ID = identification
in = inch
NA = not applicable
NS = not surveyed
SPH = separate phase hydrocarbons
* Checked for Artesian flow conditions.
Negative number in Stick up Length column indicates well is flushmount and located at or below ground level.
Depth to Water Column - if 0.00 is indicated - means water is at top of casing (full) under artesian flow conditions.

Note:
1. Corrected Water Table Elevation applies only if SPH thickness column measurement exists. (0.8 X SPH thickness + Groundwater Elevation)

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-01	02/24/20	11/14/13	4	6,918.28	6,920.67	6,920.67	2.39	6,903.25	17.42	4.87	0.29	5.16	6,915.51	6915.74	5 - 15	Chinle/Alluvium Interface
MKTF-01	06/26/20	11/14/13	4	6,918.28	6,920.67	6,920.67	2.39	6,903.25	17.42	5.50	0.21	5.71	6,914.96	6915.13	5 - 15	Chinle/Alluvium Interface
MKTF-01	09/15/20	11/14/13	4	6,918.28	6,920.67	6,920.67	2.39	6,903.19	17.48	5.61	0.01	5.62	6,914.96	6915.13	5 - 15	Chinle/Alluvium Interface
MKTF-01	11/10/20	11/14/13	4	6,918.28	6,920.67	6,920.67	2.39	6,903.25	17.48	5.61	0.28	5.89	6,914.96	6915.13	5 - 15	Chinle/Alluvium Interface
MKTF-01	12/03/20	11/14/13	4	6,918.28	6,920.67	6,920.67	2.39	6,903.25	17.43	5.74	0.28	6.02	6,914.96	6915.13	5 - 15	Chinle/Alluvium Interface
MKTF-02	02/24/20	11/14/13	4	6,915.00	6,917.45	6,917.18	2.45	6,896.97	20.48	ND	0.00	6.52	6,910.93	NA	7 - 17	Chinle/Alluvium Interface
MKTF-02	06/26/20	11/14/13	4	6,915.00	6,917.45	6,917.18	2.45	6,896.97	20.48	ND	0.00	7.70	6,909.75	NA	7 - 17	Chinle/Alluvium Interface
MKTF-02	09/15/20	11/14/13	4	6,915.00	6,917.45	6,917.18	2.45	6,896.91	20.54	ND	0.00	7.88	6,909.57	NA	7 - 17	Chinle/Alluvium Interface
MKTF-02	11/10/20	11/14/13	4	6,915.00	6,917.45	6,917.18	2.45	6,896.97	20.54	ND	0.00	7.43	6,910.02	NA	7 - 17	Chinle/Alluvium Interface
MKTF-02	12/03/20	11/14/13	4	6,915.00	6,917.45	6,917.18	2.45	6,896.97	20.54	ND	0.00	7.72	6,909.73	NA	7 - 17	Chinle/Alluvium Interface
MKTF-03	03/05/20	11/07/13	4	6,931.73	6,931.69	6,930.85	-0.04	6,913.24	18.45	6.47	1.37	7.84	6,923.85	6924.95	3 - 18	Chinle/Alluvium Interface
MKTF-03	06/26/20	11/07/13	4	6,931.73	6,931.69	6,930.85	-0.04	6,913.24	18.45	7.36	1.27	8.63	6,923.06	6924.08	3 - 18	Chinle/Alluvium Interface
MKTF-03	09/15/20	11/07/13	4	6,931.73	6,931.69	6,930.85	-0.04	6,913.10	18.59	7.08	0.01	7.09	6,924.60	6924.61	3 - 18	Chinle/Alluvium Interface
MKTF-03	11/10/20	11/07/13	4	6,931.73	6,931.69	6,930.85	-0.04	6,913.10	18.59	7.13	1.30	8.43	6,923.26	6924.30	3 - 18	Chinle/Alluvium Interface
MKTF-03	12/03/20	11/07/13	4	6,931.73	6,931.69	6,930.85	-0.04	6,913.11	18.58	7.46	1.16	8.62	6,923.07	6924.00	3 - 18	Chinle/Alluvium Interface
MKTF-04	03/02/20	11/12/13	4	6,933.90	6,933.57	6,933.24	-0.33	6,911.36	22.21	ND	0.00	8.47	6,925.10	NA	10 - 22	Chinle/Alluvium Interface
MKTF-04	06/26/20	11/12/13	4	6,933.90	6,933.57	6,933.24	-0.33	6,911.42	22.15	ND	0.00	9.75	6,923.82	NA	10 - 22	Chinle/Alluvium Interface
MKTF-04	09/15/20	11/12/13	4	6,933.90	6,933.57	6,933.24	-0.33	6,910.85	22.72	9.39	0.01	9.40	6,924.17	NA	10 - 22	Chinle/Alluvium Interface
MKTF-04	11/10/20	11/12/13	4	6,933.90	6,933.57	6,933.24	-0.33	6,910.85	22.72	ND	0.00	9.20	6,924.37	NA	10 - 22	Chinle/Alluvium Interface
MKTF-04	12/03/20	11/12/13	4	6,933.90	6,933.57	6,933.24	-0.33	6,910.85	22.72	9.70	0.01	9.71	6,923.86	NA	10 - 22	Chinle/Alluvium Interface
MKTF-05	03/05/20	11/20/13	4	6,939.49	6,942.22	6,941.95	2.73	6,924.47	17.75	13.58	0.14	13.72	6,928.50	6928.61	4 - 14	Chinle/Alluvium Interface
MKTF-05	06/25/20	11/20/13	4	6,939.49	6,942.22	6,941.95	2.73	6,924.47	17.75	14.06	0.75	14.80	6,927.42	6928.02	4 - 14	Chinle/Alluvium Interface
MKTF-05	09/15/20	11/20/13	4	6,939.49	6,942.22	6,941.95	2.73	6,924.39	17.83	13.65	1.03	14.68	6,927.54	6928.36	4 - 14	Chinle/Alluvium Interface
MKTF-05	11/10/20	11/20/13	4	6,939.49	6,942.22	6,941.95	2.73	6,924.39	17.83	14.02	0.88	14.90	6,927.32	6928.02	4 - 14	Chinle/Alluvium Interface
MKTF-05	12/03/20	11/20/13	4	6,939.49	6,942.22	6,941.95	2.73	6,924.42	17.80	14.12	0.81	14.93	6,927.29	6927.94	4 - 14	Chinle/Alluvium Interface
MKTF-06	03/05/20	11/11/13	4	6,944.24	6,946.81	6,946.63	2.57	6,923.04	23.77	16.89	1.71	18.60	6,928.21	6929.58	8 - 20	Chinle/Alluvium Interface
MKTF-06	06/25/20	11/11/13	4	6,944.24	6,946.81	6,946.63	2.57	6,923.04	23.77	14.05	4.86	18.90	6,927.91	6931.79	8 - 20	Chinle/Alluvium Interface
MKTF-06	09/15/20	11/11/13	4	6,944.24	6,946.81	6,946.63	2.57	6,923.02	23.79	16.78	1.93	18.71	6,928.10	6929.64	8 - 20	Chinle/Alluvium Interface
MKTF-06	11/10/20	11/11/13	4	6,944.24	6,946.81	6,946.63	2.57	6,923.02	23.79	17.20	1.39	18.59	6,928.22	6929.33	8 - 20	Chinle/Alluvium Interface
MKTF-06	12/03/20	11/11/13	4	6,944.24	6,946.81	6,946.63	2.57	6,923.02	23.79	17.38	1.11	18.49	6,928.32	6929.21	8 - 20	Chinle/Alluvium Interface
MKTF-07	03/05/20	11/11/13	4	6,944.40	6,947.18	6,947.06	2.78	6,929.56	17.62	12.50	1.22	13.72	6,933.46	6934.44	4 - 14	Chinle/Alluvium Interface
MKTF-07	06/25/20	11/11/13	4	6,944.40	6,947.18	6,947.06	2.78	6,929.56	17.62	12.23	1.53	13.76	6,933.42	6934.64	4 - 14	Chinle/Alluvium Interface
MKTF-07	09/18/20	11/11/13	4	6,944.40	6,947.18	6,947.06	2.78	6,929.75	17.43	11.42	2.35	13.77	6,933.41	6935.29	4 - 14	Chinle/Alluvium Interface
MKTF-07	11/10/20	11/11/13	4	6,944.40	6,947.18	6,947.06	2.78	6,929.75	17.43	12.56	1.20	13.76	6,933.42	6934.38	4 - 14	Chinle/Alluvium Interface
MKTF-07	12/03/20	11/11/13	4	6,944.40	6,947.18	6,947.06	2.78	6,929.52	17.66	12.93	0.87	13.80	6,933.38	6934.08	4 - 14	Chinle/Alluvium Interface
MKTF-08	03/05/20	11/11/13	4	6,944.02	6,947.09	6,942.67	3.07	6,925.11	21.98	14.03	0.34	14.37	6,932.72	6932.99	8 - 18	Chinle/Alluvium Interface
MKTF-08	06/25/20	11/11/13	4	6,944.02	6,947.09	6,942.67	3.07	6,925.11	21.98	14.00	0.40	14.40	6,932.69	6933.01	8 - 18	Chinle/Alluvium Interface
MKTF-08	09/18/20	11/11/13	4	6,944.02	6,947.09	6,942.67	3.07	6,925.09	22.00	13.76	0.39	14.15	6,932.94	6933.25	8 - 18	Chinle/Alluvium Interface
MKTF-08	11/10/20	11/11/13	4	6,944.02	6,947.09	6,942.67	3.07	6,925.09	22.00	14.23	0.46	14.69	6,932.40	6932.77	8 - 18	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-08	12/03/20	11/11/13	4	6,944.02	6,947.09	6,942.67	3.07	6,925.08	22.01	14.36	0.40	14.76	6,932.33	6932.65	8 - 18	Chinle/Alluvium Interface
MKTF-09	03/02/20	11/11/13	4	6,943.57	6,946.50	6,945.90	2.93	6,923.74	22.76	ND	0.00	14.23	6,932.27	NA	7 - 19	Chinle/Alluvium Interface
MKTF-09	06/25/20	11/11/13	4	6,943.57	6,946.50	6,945.90	2.93	6,923.73	22.77	ND	0.00	14.55	6,931.95	NA	7 - 19	Chinle/Alluvium Interface
MKTF-09	09/18/20	11/11/13	4	6,943.57	6,946.50	6,945.90	2.93	6,924.09	22.41	14.19	0.01	14.20	6,932.30	6932.31	7 - 19	Chinle/Alluvium Interface
MKTF-09	11/10/20	11/11/13	4	6,943.57	6,946.50	6,945.90	2.93	6,924.09	22.41	14.61	0.01	14.62	6,931.88	6931.89	7 - 19	Chinle/Alluvium Interface
MKTF-09	12/03/20	11/11/13	4	6,943.57	6,946.50	6,945.90	2.93	6,923.72	22.78	14.75	0.01	14.76	6,931.74	6931.75	7 - 19	Chinle/Alluvium Interface
MKTF-10	03/02/20	10/31/13	4	6,937.51	6,937.16	6,936.63	-0.35	6,921.17	15.99	ND	0.00	7.67	6,929.49	NA	7 - 17	Chinle/Alluvium Interface
MKTF-10	06/25/20	10/31/13	4	6,937.51	6,937.16	6,936.63	-0.35	6,921.17	15.99	ND	0.00	7.07	6,930.09	NA	7 - 17	Chinle/Alluvium Interface
MKTF-10	09/18/20	10/31/13	4	6,937.51	6,937.16	6,936.63	-0.35	6,920.75	16.41	7.52	0.01	7.53	6,929.63	6929.64	7 - 17	Chinle/Alluvium Interface
MKTF-10	11/10/20	10/31/13	4	6,937.51	6,937.16	6,936.63	-0.35	6,920.75	16.41	ND	0.00	7.79	6,929.37	NA	7 - 17	Chinle/Alluvium Interface
MKTF-10	12/03/20	10/31/13	4	6,937.51	6,937.16	6,936.63	-0.35	6,920.66	16.50	ND	0.00	7.80	6,929.36	NA	7 - 17	Chinle/Alluvium Interface
MKTF-11	03/02/20	10/31/13	4	6,931.61	6,931.34	6,930.86	-0.27	6,913.20	18.14	ND	0.00	7.89	6,923.45	NA	8 - 18	Chinle/Alluvium Interface
MKTF-11	06/26/20	10/31/13	4	6,931.61	6,931.34	6,930.86	-0.27	6,913.20	18.14	7.67	0.01	7.68	6,923.66	6923.67	8 - 18	Chinle/Alluvium Interface
MKTF-11	09/18/20	10/31/13	4	6,931.61	6,931.34	6,930.86	-0.27	6,912.89	18.45	7.59	0.01	7.60	6,923.74	6923.75	8 - 18	Chinle/Alluvium Interface
MKTF-11	11/10/20	10/31/13	4	6,931.61	6,931.34	6,930.86	-0.27	6,912.89	18.45	ND	0.00	7.61	6,923.73	NA	8 - 18	Chinle/Alluvium Interface
MKTF-11	12/03/20	10/31/13	4	6,931.61	6,931.34	6,930.86	-0.27	6,912.89	18.45	7.89	0.02	7.91	6,923.43	NA	8 - 18	Chinle/Alluvium Interface
MKTF-12	02/27/20	11/07/13	4	6,939.70	6,942.11	6,941.88	2.41	6,916.51	25.60	17.84	0.08	17.92	6,924.19	6924.25	12 - 22	Chinle/Alluvium Interface
MKTF-12	06/29/20	11/07/13	4	6,939.70	6,942.11	6,941.88	2.41	6,916.51	25.60	19.13	0.12	19.25	6,922.86	6922.96	12 - 22	Chinle/Alluvium Interface
MKTF-12	09/18/20	11/07/13	4	6,939.70	6,942.11	6,941.88	2.41	6,916.29	25.82	18.64	0.01	18.65	6,923.46	6923.47	12 - 22	Chinle/Alluvium Interface
MKTF-12	11/10/20	11/07/13	4	6,939.70	6,942.11	6,941.88	2.41	6,916.29	25.82	17.97	0.03	18.00	6,924.11	6924.13	12 - 22	Chinle/Alluvium Interface
MKTF-12	12/03/20	11/07/13	4	6,939.70	6,942.11	6,941.88	2.41	6,916.22	25.89	18.90	0.16	19.06	6,923.05	6923.18	12 - 22	Chinle/Alluvium Interface
MKTF-13	02/27/20	11/12/13	4	6,933.67	6,935.18	6,934.83	1.51	6,913.93	21.25	11.13	6.18	17.31	6,917.87	6922.81	8 - 18	Chinle/Alluvium Interface
MKTF-13	06/29/20	11/12/13	4	6,933.67	6,935.18	6,934.83	1.51	6,913.93	21.25	12.67	5.54	18.21	6,916.97	6921.40	8 - 18	Chinle/Alluvium Interface
MKTF-13	09/18/20	11/12/13	4	6,933.67	6,935.18	6,934.83	1.51	6,913.05	22.13	12.55	4.37	16.92	6,918.26	6921.76	8 - 18	Chinle/Alluvium Interface
MKTF-13	11/10/20	11/12/13	4	6,933.67	6,935.18	6,934.83	1.51	6,913.05	22.13	11.98	4.38	16.36	6,918.82	6922.32	8 - 18	Chinle/Alluvium Interface
MKTF-13	12/03/20	11/12/13	4	6,933.67	6,935.18	6,934.83	1.51	6,913.26	21.92	12.84	3.81	16.65	6,918.53	6921.58	8 - 18	Chinle/Alluvium Interface
MKTF-14	02/27/20	11/12/13	4	6,925.65	6,928.02	6,927.80	2.37	6,910.56	17.46	5.35	0.30	5.65	6,922.37	6922.61	4 - 14	Chinle/Alluvium Interface
MKTF-14	06/29/20	11/12/13	4	6,925.65	6,928.02	6,927.80	2.37	6,910.56	17.46	6.38	2.20	8.58	6,919.44	6921.20	4 - 14	Chinle/Alluvium Interface
MKTF-14	09/18/20	11/12/13	4	6,925.65	6,928.02	6,927.80	2.37	6,910.70	17.32	6.18	1.98	8.16	6,919.86	6921.44	4 - 14	Chinle/Alluvium Interface
MKTF-14	11/10/20	11/12/13	4	6,925.65	6,928.02	6,927.80	2.37	6,910.70	17.32	5.98	0.30	6.28	6,921.74	6921.98	4 - 14	Chinle/Alluvium Interface
MKTF-14	12/03/20	11/12/13	4	6,925.65	6,928.02	6,927.80	2.37	6,910.47	17.55	6.79	0.27	7.06	6,920.96	6921.18	4 - 14	Chinle/Alluvium Interface
MKTF-15	02/03/20	10/29/13	2	6,943.74	6,943.48	6,943.19	-0.26	6,924.00	19.48	13.02	0.09	13.11	6,930.37	6,930.44	9 - 19	Chinle/Alluvium Interface
MKTF-15	06/26/20	10/29/13	2	6,943.74	6,943.48	6,943.19	-0.26	6,924.00	19.48	13.11	0.06	13.17	6,930.31	6,930.36	9 - 19	Chinle/Alluvium Interface
MKTF-15	09/18/20	10/29/13	2	6,943.74	6,943.48	6,943.19	-0.26	6,924.30	19.18	13.00	0.03	13.03	6,930.45	6,930.47	9 - 19	Chinle/Alluvium Interface
MKTF-15	11/10/20	10/29/13	2	6,943.74	6,943.48	6,943.19	-0.26	6,924.30	19.18	13.25	0.25	13.50	6,929.98	6,930.18	9 - 19	Chinle/Alluvium Interface
MKTF-15	11/10/20	10/29/13	2	6,943.74	6,943.48	6,943.19	-0.26	6,923.96	19.52	13.39	0.21	13.60	6,929.88	6,930.05	9 - 19	Chinle/Alluvium Interface
MKTF-16	02/05/20	11/07/13	2	6,951.00	6,950.58	6,950.58	-0.42	6,936.48	14.10	ND	0.00	9.68	6,940.90	NA	4 - 14	Chinle/Alluvium Interface
MKTF-16	06/26/20	11/07/13	2	6,951.00	6,950.58	6,950.58	-0.42	6,936.48	14.10	ND	0.00	9.54	6,941.04	NA	4 - 14	Chinle/Alluvium Interface
MKTF-16	09/18/20	11/07/13	2	6,951.00	6,950.58	6,950.58	-0.42	6,939.66	10.92	9.18	0.01	9.19	6,941.39	6,941.40	4 - 14	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-16	11/10/20	11/07/13	2	6,951.00	6,950.58	6,950.58	-0.42	6,939.66	10.92	ND	0.00	7.20	6,943.38	NA	4 - 14	Chinle/Alluvium Interface
MKTF-16	12/08/20	11/07/13	2	6,951.00	6,950.58	6,950.58	-0.42	6,939.63	10.95	ND	0.00	9.70	6,940.88	NA	4 - 14	Chinle/Alluvium Interface
MKTF-17	02/03/20	11/14/13	2	6,945.79	6,945.76	6,945.64	-0.03	6,921.65	24.11	11.44	5.41	16.85	6,928.91	6,933.24	14 - 24	Chinle/Alluvium Interface
MKTF-17	06/29/20	11/14/13	2	6,945.79	6,945.76	6,945.64	-0.03	6,921.65	24.11	10.19	5.31	15.50	6,930.26	6,934.51	14 - 24	Chinle/Alluvium Interface
MKTF-17	09/14/20	11/14/13	2	6,945.79	6,945.76	6,945.64	-0.03	6,921.09	24.67	10.00	5.37	15.37	6,930.39	6,934.69	14 - 24	Chinle/Alluvium Interface
MKTF-17	11/10/20	11/14/13	2	6,945.79	6,945.76	6,945.64	-0.03	6,921.09	24.67	11.39	0.20	11.59	6,934.17	6,934.33	14 - 24	Chinle/Alluvium Interface
MKTF-17	12/04/20	11/14/13	2	6,945.79	6,945.76	6,945.64	-0.03	6,921.10	24.66	11.28	0.19	11.47	6,934.29	6,934.44	14 - 24	Chinle/Alluvium Interface
MKTF-18	02/05/20	11/15/13	2	6,950.97	6,950.65	6,950.17	-0.32	6,925.27	25.38	ND	0.00	9.10	6,941.55	NA	17 - 27	Chinle/Alluvium Interface
MKTF-18	06/30/20	11/15/13	2	6,950.97	6,950.65	6,950.17	-0.32	6,925.27	25.38	ND	0.00	8.98	6,941.67	NA	17 - 27	Chinle/Alluvium Interface
MKTF-18	09/18/20	11/15/13	2	6,950.97	6,950.65	6,950.17	-0.32	6,928.92	21.73	8.49	0.01	8.50	6,942.15	6,942.16	17 - 27	Chinle/Alluvium Interface
MKTF-18	11/10/20	11/15/13	2	6,950.97	6,950.65	6,950.17	-0.32	6,928.92	21.73	ND	0.00	8.74	6,941.91	NA	17 - 27	Chinle/Alluvium Interface
MKTF-18	12/04/20	11/15/13	2	6,950.97	6,950.65	6,950.17	-0.32	6,925.15	25.50	ND	0.00	8.80	6,941.85	NA	17 - 27	Chinle/Alluvium Interface
MKTF-19	02/03/20	11/05/13	2	6,944.89	6,944.67	6,944.34	-0.22	6,927.20	17.47	11.35	1.05	12.40	6,932.27	6,933.11	10 - 20	Chinle/Alluvium Interface
MKTF-19	06/29/20	11/05/13	2	6,944.89	6,944.67	6,944.34	-0.22	6,927.20	17.47	12.08	1.21	13.29	6,931.38	6,932.35	10 - 20	Chinle/Alluvium Interface
MKTF-19	09/14/20	11/05/13	2	6,944.89	6,944.67	6,944.34	-0.22	6,925.43	19.24	11.95	0.02	11.97	6,932.70	6,932.72	10 - 20	Chinle/Alluvium Interface
MKTF-19	11/10/20	11/05/13	2	6,944.89	6,944.67	6,944.34	-0.22	6,925.43	19.24	12.22	1.33	13.55	6,931.12	6,932.18	10 - 20	Chinle/Alluvium Interface
MKTF-19	12/04/20	11/05/13	2	6,944.89	6,944.67	6,944.34	-0.22	6,925.29	19.38	12.18	1.24	13.42	6,931.25	6,932.24	10 - 20	Chinle/Alluvium Interface
MKTF-20	02/05/20	02/10/14	4	6,951.89	6,951.78	6,951.17	-0.11	6,942.95	8.83	ND	0.00	9.02	6,942.76	NA	2 - 10	Chinle/Alluvium Interface
MKTF-20	06/26/20	02/10/14	4	6,951.89	6,951.78	6,951.17	-0.11	6,942.95	8.83	ND	0.00	8.67	6,943.11	NA	2 - 10	Chinle/Alluvium Interface
MKTF-20	09/15/20	02/10/14	4	6,951.89	6,951.78	6,951.17	-0.11	6,942.16	9.62	8.54	0.81	9.35	6,942.43	6,943.08	2 - 10	Chinle/Alluvium Interface
MKTF-20	11/10/20	02/10/14	4	6,951.89	6,951.78	6,951.17	-0.11	6,942.16	9.62	8.10	0.80	8.90	6,942.88	6,943.52	2 - 10	Chinle/Alluvium Interface
MKTF-20	12/08/20	02/10/14	4	6,951.89	6,951.78	6,951.17	-0.11	6,942.18	9.60	8.76	0.19	8.95	6,942.83	6,942.98	2 - 10	Chinle/Alluvium Interface
MKTF-21	02/05/20	02/10/14	4	6,952.68	6,952.57	6,952.00	-0.11	6,943.74	8.83	ND	0.00	8.25	6,944.32	NA	2 - 10	Chinle/Alluvium Interface
MKTF-21	06/26/20	02/10/14	4	6,952.68	6,952.57	6,952.00	-0.11	6,943.74	8.83	8.17	0.03	8.20	6,944.37	6944.39	2 - 10	Chinle/Alluvium Interface
MKTF-21	09/15/20	02/10/14	4	6,952.68	6,952.57	6,952.00	-0.11	6,943.73	8.84	7.08	0.01	7.09	6,945.48	6945.49	2 - 10	Chinle/Alluvium Interface
MKTF-21	11/10/20	02/10/14	4	6,952.68	6,952.57	6,952.00	-0.11	6,943.73	8.84	ND	0.00	6.41	6,946.16	NA	2 - 10	Chinle/Alluvium Interface
MKTF-21	12/04/20	02/10/14	4	6,952.68	6,952.57	6,952.00	-0.11	6,943.77	8.80	8.04	0.01	8.05	6,944.52	NA	2 - 10	Chinle/Alluvium Interface
MKTF-22	02/27/20	11/08/13	2	6,939.76	6,942.31	6,938.57	2.55	6,907.06	35.25	24.48	1.05	25.53	6,916.78	6917.62	22 - 32	Chinle/Alluvium Interface
MKTF-22	06/29/20	11/08/13	2	6,939.76	6,942.31	6,938.57	2.55	6,907.06	35.25	24.57	3.14	27.71	6,914.60	6917.11	22 - 32	Chinle/Alluvium Interface
MKTF-22	09/14/20	11/08/13	2	6,939.76	6,942.31	6,938.57	2.55	6,907.22	35.09	24.98	2.70	27.68	6,914.63	6916.79	22 - 32	Chinle/Alluvium Interface
MKTF-22	11/10/20	11/08/13	2	6,939.76	6,942.31	6,938.57	2.55	6,907.22	35.09	24.94	2.35	27.29	6,915.02	6916.90	22 - 32	Chinle/Alluvium Interface
MKTF-22	12/04/20	11/08/13	2	6,939.76	6,942.31	6,938.57	2.55	6,907.22	35.09	25.10	2.45	27.55	6,914.76	6916.72	22 - 32	Chinle/Alluvium Interface
MKTF-23	02/27/20	11/04/13	2	6,927.23	6,929.98	6,925.79	2.75	6,909.62	20.36	ND	0.00	13.42	6,916.56	NA	7 - 17	Chinle/Alluvium Interface
MKTF-23	06/29/20	11/04/13	2	6,927.23	6,929.98	6,925.79	2.75	6,909.62	20.36	ND	0.00	13.25	6,916.73	NA	7 - 17	Chinle/Alluvium Interface
MKTF-23	09/19/20	11/04/13	2	6,927.23	6,929.98	6,925.79	2.75	6,909.96	20.02	15.42	0.02	15.44	6,914.54	6,914.56	7 - 17	Chinle/Alluvium Interface
MKTF-23	11/10/20	11/04/13	2	6,927.23	6,929.98	6,925.79	2.75	6,909.96	20.02	ND	0.00	14.23	6,915.75	NA	7 - 17	Chinle/Alluvium Interface
MKTF-23	12/04/20	11/04/13	2	6,927.23	6,929.98	6,925.79	2.75	6,909.59	20.39	14.15	0.01	14.16	6,915.82	NA	7 - 17	Chinle/Alluvium Interface
MKTF-24	02/24/20	10/29/13	2	6,926.07	6,928.72	6,924.62	2.65	6,898.25	30.47	ND	0.00	22.17	6,906.55	NA	18 - 28	Chinle/Alluvium Interface
MKTF-24	06/26/20	10/29/13	2	6,926.07	6,928.72	6,924.62	2.65	6,898.25	30.47	ND	0.00	22.80	6,905.92	NA	18 - 28	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-24	09/15/20	10/29/13	2	6,926.07	6,928.72	6,924.62	2.65	6,897.59	31.13	ND	0.00	23.35	6,905.37	NA	18 - 28	Chinle/Alluvium Interface
MKTF-24	11/10/20	10/29/13	2	6,926.07	6,928.72	6,924.62	2.65	6,897.59	31.13	ND	0.00	23.32	6,905.40	NA	18 - 28	Chinle/Alluvium Interface
MKTF-24	12/04/20	10/29/13	2	6,926.07	6,928.72	6,924.62	2.65	6,897.54	31.18	ND	0.00	23.22	6,905.50	NA	18 - 28	Chinle/Alluvium Interface
MKTF-25	02/26/20	10/30/13	2	6,913.35	6,916.19	6,911.79	2.84	6,896.76	19.43	ND	0.00	12.94	6,903.25	NA	6 - 16	Chinle/Alluvium Interface
MKTF-25	06/26/20	10/30/13	2	6,913.35	6,916.19	6,911.79	2.84	6,896.76	19.43	ND	0.00	13.33	6,902.86	NA	6 - 16	Chinle/Alluvium Interface
MKTF-25	09/15/20	10/30/13	2	6,913.35	6,916.19	6,911.79	2.84	6,896.10	20.09	ND	0.00	13.90	6,902.29	NA	6 - 16	Chinle/Alluvium Interface
MKTF-25	11/10/20	10/30/13	2	6,913.35	6,916.19	6,911.79	2.84	6,896.10	20.09	ND	0.00	13.75	6,902.44	NA	6 - 16	Chinle/Alluvium Interface
MKTF-25	12/04/20	10/30/13	2	6,913.35	6,916.19	6,911.79	2.84	6,895.81	20.38	ND	0.00	13.62	6,902.57	NA	6 - 16	Chinle/Alluvium Interface
MKTF-26	02/26/20	10/30/13	2	6,912.55	6,915.31	6,911.35	2.76	6,898.16	17.15	8.35	0.76	9.11	6,906.20	6906.81	4 - 14	Chinle/Alluvium Interface
MKTF-26	06/26/20	10/30/13	2	6,912.55	6,915.31	6,911.35	2.76	6,898.16	17.15	8.61	0.89	9.50	6,905.81	6906.52	4 - 14	Chinle/Alluvium Interface
MKTF-26	09/15/20	10/30/13	2	6,912.55	6,915.31	6,911.35	2.76	6,898.16	16.85	8.81	0.75	9.56	6,905.75	6906.35	4 - 14	Chinle/Alluvium Interface
MKTF-26	11/10/20	10/30/13	2	6,912.55	6,915.31	6,911.35	2.76	6,898.16	16.85	8.65	0.71	9.36	6,905.95	6906.52	4 - 14	Chinle/Alluvium Interface
MKTF-26	12/04/20	10/30/13	2	6,912.55	6,915.31	6,911.35	2.76	6,898.16	17.16	7.67	1.72	9.39	6,905.92	6907.30	4 - 14	Chinle/Alluvium Interface
MKTF-27	02/24/20	10/30/13	2	6,915.36	6,917.90	6,914.18	2.54	6,903.18	14.72	ND	0.00	3.61	6,914.29	NA	1 - 12	Chinle/Alluvium Interface
MKTF-27	06/30/20	10/30/13	2	6,915.36	6,917.90	6,914.18	2.54	6,903.18	14.72	ND	0.00	6.70	6,911.20	NA	1 - 12	Chinle/Alluvium Interface
MKTF-27	09/15/20	10/30/13	2	6,915.36	6,917.90	6,914.18	2.54	6,903.18	14.72	ND	0.00	6.21	6,911.69	NA	1 - 12	Chinle/Alluvium Interface
MKTF-27	11/10/20	10/30/13	2	6,915.36	6,917.90	6,914.18	2.54	6,903.18	14.72	ND	0.00	6.72	6,911.18	NA	1 - 12	Chinle/Alluvium Interface
MKTF-27	12/04/20	10/30/13	2	6,915.36	6,917.90	6,914.18	2.54	6,903.16	14.74	ND	0.00	6.47	6,911.43	NA	1 - 12	Chinle/Alluvium Interface
MKTF-28	02/24/20	04/02/14	2	6,918.67	6,921.52	6,917.51	2.85	6,905.36	16.16	ND	0.00	4.53	6,916.99	NA	3 - 13	Chinle/Alluvium Interface
MKTF-28	06/30/20	04/02/14	2	6,918.67	6,921.52	6,917.51	2.85	6,905.36	16.16	ND	0.00	4.84	6,916.68	NA	3 - 13	Chinle/Alluvium Interface
MKTF-28	09/15/20	04/02/14	2	6,918.67	6,921.52	6,917.51	2.85	6,905.36	16.17	ND	0.00	4.59	6,916.93	NA	3 - 13	Chinle/Alluvium Interface
MKTF-28	11/10/20	04/02/14	2	6,918.67	6,921.52	6,917.51	2.85	6,905.36	16.17	ND	0.00	8.81	6,912.71	NA	3 - 13	Chinle/Alluvium Interface
MKTF-28	12/04/20	04/02/14	2	6,918.67	6,921.52	6,917.51	2.85	6,905.36	16.16	ND	0.00	7.13	6,914.39	NA	3 - 13	Chinle/Alluvium Interface
MKTF-29	02/24/20	04/02/14	2	6,898.83	6,901.62	6,897.67	2.79	6,878.78	22.84	ND	0.00	4.49	6,897.13	NA	10 - 20	Chinle/Alluvium Interface
MKTF-29	06/26/20	04/02/14	2	6,898.83	6,901.62	6,897.67	2.79	6,878.78	22.84	ND	0.00	6.42	6,895.20	NA	10 - 20	Chinle/Alluvium Interface
MKTF-29	09/15/20	04/02/14	2	6,898.83	6,901.62	6,897.67	2.79	6,878.84	22.78	ND	0.00	8.01	6,893.61	NA	10 - 20	Chinle/Alluvium Interface
MKTF-29	11/10/20	04/02/14	2	6,898.83	6,901.62	6,897.67	2.79	6,878.84	22.78	ND	0.00	6.98	6,894.64	NA	10 - 20	Chinle/Alluvium Interface
MKTF-29	12/04/20	04/02/14	2	6,898.83	6,901.62	6,897.67	2.79	6,878.77	22.85	ND	0.00	6.40	6,895.22	NA	10 - 20	Chinle/Alluvium Interface
MKTF-30	02/26/20	04/01/14	2	6,898.10	6,900.80	6,896.68	2.70	6,877.60	23.20	ND	0.00	15.31	6,885.49	NA	10 - 20	Chinle/Alluvium Interface
MKTF-30	06/26/20	04/01/14	2	6,898.10	6,900.80	6,896.68	2.70	6,877.60	23.20	ND	0.00	16.19	6,884.61	NA	10 - 20	Chinle/Alluvium Interface
MKTF-30	09/15/20	04/01/14	2	6,898.10	6,900.80	6,896.68	2.70	6,877.58	23.22	ND	0.00	16.66	6,884.14	NA	10 - 20	Chinle/Alluvium Interface
MKTF-30	11/10/20	04/01/14	2	6,898.10	6,900.80	6,896.68	2.70	6,877.58	23.22	ND	0.00	16.87	6,883.93	NA	10 - 20	Chinle/Alluvium Interface
MKTF-30	12/04/20	04/01/14	2	6,898.10	6,900.80	6,896.68	2.70	6,877.58	23.22	ND	0.00	16.76	6,884.04	NA	10 - 20	Chinle/Alluvium Interface
MKTF-31	02/24/20	04/01/14	2	6,904.26	6,906.87	6,903.11	2.61	6,884.06	22.81	ND	0.00	8.10	6,898.77	NA	6 - 21	Chinle/Alluvium Interface
MKTF-31	06/26/20	04/01/14	2	6,904.26	6,906.87	6,903.11	2.61	6,884.06	22.81	ND	0.00	8.25	6,898.62	NA	6 - 21	Chinle/Alluvium Interface
MKTF-31	09/15/20	04/01/14	2	6,904.26	6,906.87	6,903.11	2.61	6,887.53	19.34	ND	0.00	8.75	6,898.12	NA	6 - 21	Chinle/Alluvium Interface
MKTF-31	11/10/20	04/01/14	2	6,904.26	6,906.87	6,903.11	2.61	6,887.53	19.34	ND	0.00	8.79	6,898.08	NA	6 - 21	Chinle/Alluvium Interface
MKTF-31	12/04/20	04/01/14	2	6,904.26	6,906.87	6,903.11	2.61	6,887.50	19.37	ND	0.00	8.73	6,898.14	NA	6 - 21	Chinle/Alluvium Interface
MKTF-32	02/26/20	03/31/14	2	6,908.44	6,911.11	6,907.16	2.67	6,883.36	27.75	ND	0.00	13.78	6,897.33	NA	9- 25	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-32	06/29/20	03/31/14	2	6,908.44	6,911.11	6,907.16	2.67	6,883.36	27.75	ND	0.00	14.25	6,896.86	NA	10 - 24	Chinle/Alluvium Interface
MKTF-32	09/14/20	03/31/14	2	6,908.44	6,911.11	6,907.16	2.67	6,883.65	27.46	ND	0.00	14.58	6,896.53	NA	9- 26	Chinle/Alluvium Interface
MKTF-32	11/10/20	03/31/14	2	6,908.44	6,911.11	6,907.16	2.67	6,883.65	27.46	ND	0.00	14.31	6,896.80	NA	9- 26	Chinle/Alluvium Interface
MKTF-32	12/04/20	03/31/14	2	6,908.44	6,911.11	6,907.16	2.67	6,883.29	27.82	ND	0.00	14.25	6,896.86	NA	9- 26	Chinle/Alluvium Interface
MKTF-33	02/27/20	04/03/14	2	6,936.59	6,939.75	6,936.59	3.16	6,906.55	33.20	ND	0.00	22.71	6,917.04	NA	20 - 30	Chinle/Alluvium Interface
MKTF-33	06/29/20	04/03/14	2	6,936.59	6,939.75	6,936.59	3.16	6,906.55	33.20	ND	0.00	21.17	6,918.58	NA	20 - 30	Chinle/Alluvium Interface
MKTF-33	09/14/20	04/03/14	2	6,936.59	6,939.75	6,936.59	3.16	6,906.60	33.15	21.61	6.41	28.02	6,911.73	6916.86	20 - 30	Chinle/Alluvium Interface
MKTF-33	11/10/20	04/03/14	2	6,936.59	6,939.75	6,936.59	3.16	6,906.60	33.15	21.65	6.16	27.81	6,911.94	6916.87	20 - 30	Chinle/Alluvium Interface
MKTF-33	12/04/20	04/03/14	2	6,936.59	6,939.75	6,936.59	3.16	6,906.18	33.57	21.69	6.08	27.77	6,911.98	6916.84	20 - 30	Chinle/Alluvium Interface
MKTF-34	02/05/20	03/31/14	2	6,942.42	6,945.35	3,943.52	2.93	6,917.65	27.70	ND	0.00	17.78	6,927.57	NA	9 - 24	Chinle/Alluvium Interface
MKTF-34	06/29/20	03/31/14	2	6,942.42	6,945.35	3,943.52	2.93	6,917.65	27.70	19.04	0.02	19.06	6,926.29	6926.31	9 - 24	Chinle/Alluvium Interface
MKTF-34	09/14/20	03/31/14	2	6,942.42	6,945.35	3,943.52	2.93	6,917.59	27.76	ND	0.00	19.09	6,926.26	NA	9 - 24	Chinle/Alluvium Interface
MKTF-34	11/10/20	03/31/14	2	6,942.42	6,945.35	3,943.52	2.93	6,917.59	27.76	ND	0.00	19.08	6,926.27	NA	9 - 24	Chinle/Alluvium Interface
MKTF-34	12/04/20	03/31/14	2	6,942.42	6,945.35	3,943.52	2.93	6,917.57	27.78	18.91	0.01	18.92	6,926.43	NA	9 - 24	Chinle/Alluvium Interface
MKTF-35	02/05/20	11/19/14	2	6,951.90	6,951.65	6,951.25	-0.25	6,935.20	16.45	ND	0.00	9.28	6,942.37	NA	6 - 16	Chinle/Alluvium Interface
MKTF-35	06/30/20	11/19/14	2	6,951.90	6,951.65	6,951.25	-0.25	6,935.20	16.45	ND	0.00	9.25	6,942.40	NA	6 - 16	Chinle/Alluvium Interface
MKTF-35	09/14/20	11/19/14	2	6,951.90	6,951.65	6,951.25	-0.25	6,935.42	16.23	ND	0.00	8.59	6,943.06	NA	6 - 16	Chinle/Alluvium Interface
MKTF-35	11/10/20	11/19/14	2	6,951.90	6,951.65	6,951.25	-0.25	6,935.42	16.23	ND	0.00	8.86	6,942.79	NA	6 - 16	Chinle/Alluvium Interface
MKTF-35	12/04/20	11/19/14	2	6,951.90	6,951.65	6,951.25	-0.25	6,935.26	16.39	9.02	0.01	9.03	6,942.62	NA	6 - 16	Chinle/Alluvium Interface
MKTF-36	02/03/20	11/19/14	2	6,953.90	6,953.51	6,949.87	-0.39	6,937.90	15.61	7.89	0.55	8.44	6,945.07	6945.51	5 - 15	Chinle/Alluvium Interface
MKTF-36	06/30/20	11/19/14	2	6,953.90	6,953.51	6,949.87	-0.39	6,937.90	15.61	8.04	0.21	8.25	6,945.26	6945.43	5 - 15	Chinle/Alluvium Interface
MKTF-36	09/14/20	11/19/14	2	6,953.90	6,953.51	6,949.87	-0.39	6,937.93	15.58	ND	0.00	7.87	6,945.64	NA	5 - 15	Chinle/Alluvium Interface
MKTF-36	11/10/20	11/19/14	2	6,953.90	6,953.51	6,949.87	-0.39	6,937.93	15.58	7.98	0.05	8.03	6,945.48	6945.52	5 - 15	Chinle/Alluvium Interface
MKTF-36	12/04/20	11/19/14	2	6,953.90	6,953.51	6,949.87	-0.39	6,937.93	15.58	8.10	0.07	8.17	6,945.34	6945.40	5 - 15	Chinle/Alluvium Interface
MKTF-37	02/03/20	11/18/14	2	6,959.07	6,958.87	6,958.62	-0.20	6,934.27	24.60	9.77	0.12	9.89	6,948.98	6949.08	4 - 24	Chinle/Alluvium Interface
MKTF-37	06/30/20	11/18/14	2	6,959.07	6,958.87	6,958.62	-0.20	6,934.27	24.60	9.61	0.02	9.63	6,949.24	6949.26	4 - 24	Chinle/Alluvium Interface
MKTF-37	09/14/20	11/18/14	2	6,959.07	6,958.87	6,958.62	-0.20	6,934.33	24.54	ND	0.00	8.76	6,950.11	NA	4 - 24	Chinle/Alluvium Interface
MKTF-37	11/10/20	11/18/14	2	6,959.07	6,958.87	6,958.62	-0.20	6,934.33	24.54	9.36	0.01	9.37	6,949.50	6949.51	4 - 24	Chinle/Alluvium Interface
MKTF-37	12/04/20	11/18/14	2	6,959.07	6,958.87	6,958.62	-0.20	6,934.26	24.61	9.64	0.01	9.65	6,949.22	6949.23	4 - 24	Chinle/Alluvium Interface
MKTF-38	03/04/20	11/20/14	2	6,955.17	6,954.89	6,954.54	-0.28	6,934.58	20.31	ND	0.00	9.61	6,945.28	NA	5 - 20	Chinle/Alluvium Interface
MKTF-38	06/26/20	11/20/14	2	6,955.17	6,954.89	6,954.54	-0.28	6,934.56	20.33	ND	0.00	9.38	6,945.51	NA	5 - 20	Chinle/Alluvium Interface
MKTF-38	09/14/20	11/20/14	2	6,955.17	6,954.89	6,954.54	-0.28	6,934.71	20.18	ND	0.00	8.55	6,946.34	NA	5 - 20	Chinle/Alluvium Interface
MKTF-38	11/10/20	11/20/14	2	6,955.17	6,954.89	6,954.54	-0.28	6,934.71	20.18	ND	0.00	9.12	6,945.77	NA	5 - 20	Chinle/Alluvium Interface
MKTF-38	12/04/20	11/20/14	2	6,955.17	6,954.89	6,954.54	-0.28	6,933.59	21.30	9.35	0.01	9.36	6,945.53	NA	5 - 20	Chinle/Alluvium Interface
MKTF-39	02/03/20	11/14/14	2	6,953.97	6,953.75	6,953.12	-0.22	6,938.55	15.20	ND	0.00	10.10	6,943.65	NA	5 - 15	Chinle/Alluvium Interface
MKTF-39	06/26/20	11/14/14	2	6,953.97	6,953.75	6,953.12	-0.22	6,938.75	15.00	ND	0.00	9.63	6,944.12	NA	5 - 15	Chinle/Alluvium Interface
MKTF-39	09/15/20	11/14/14	2	6,953.97	6,953.75	6,953.12	-0.22	6,939.56	14.19	ND	0.00	9.58	6,944.17	NA	5 - 15	Chinle/Alluvium Interface
MKTF-39	11/10/20	11/14/14	2	6,953.97	6,953.75	6,953.12	-0.22	6,939.56	14.19	ND	0.00	10.05	6,943.70	NA	5 - 15	Chinle/Alluvium Interface
MKTF-39	12/04/20	11/14/14	2	6,953.97	6,953.75	6,953.12	-0.22	6,939.56	15.19	ND	0.00	10.15	6,943.70	NA	5 - 15	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-40	02/27/20	11/13/14	2	6,891.35	6,894.33	6,890.48	2.98	6,870.69	23.64	ND	0.00	13.23	6,881.10	NA	5 - 20	Chinle/Alluvium Interface
MKTF-40	06/26/20	11/13/14	2	6,891.35	6,894.33	6,890.48	2.98	6,870.69	23.64	ND	0.00	12.75	6,881.58	NA	5 - 20	Chinle/Alluvium Interface
MKTF-40	09/15/20	11/13/14	2	6,891.35	6,894.33	6,890.48	2.98	6,870.67	23.66	ND	0.00	13.39	6,880.94	NA	5 - 20	Chinle/Alluvium Interface
MKTF-40	11/10/20	11/13/14	2	6,891.35	6,894.33	6,890.48	2.98	6,870.67	23.66	ND	0.00	13.71	6,880.62	NA	5 - 20	Chinle/Alluvium Interface
MKTF-40	12/04/20	11/13/14	2	6,891.35	6,894.33	6,890.48	2.98	6,870.66	23.67	ND	0.00	13.99	6,880.34	NA	5 - 20	Chinle/Alluvium Interface
MKTF-41	02/26/20	11/14/14	2	6,891.11	6,893.64	6,889.80	2.53	6,853.54	40.10	ND	0.00	20.15	6,873.49	NA	22 - 37	Chinle/Alluvium Interface
MKTF-41	06/29/20	11/14/14	2	6,891.11	6,893.64	6,889.80	2.53	6,853.54	40.10	ND	0.00	19.77	6,873.87	NA	22 - 37	Chinle/Alluvium Interface
MKTF-41	09/14/20	11/14/14	2	6,891.11	6,893.64	6,889.80	2.53	6,853.98	39.66	ND	0.00	20.72	6,872.92	NA	22 - 37	Chinle/Alluvium Interface
MKTF-41	11/10/20	11/14/14	2	6,891.11	6,893.64	6,889.80	2.53	6,853.98	39.66	ND	0.00	21.01	6,872.63	NA	22 - 37	Chinle/Alluvium Interface
MKTF-41	12/04/20	11/14/14	2	6,891.11	6,893.64	6,889.80	2.53	6,853.84	39.80	ND	0.00	20.90	6,872.74	NA	22 - 37	Chinle/Alluvium Interface
MKTF-42	02/26/20	11/12/14	2	6,890.42	6,892.95	6,888.75	2.53	6,859.80	33.15	ND	0.00	16.79	6,876.16	NA	10 - 30	Chinle/Alluvium Interface
MKTF-42	06/30/20	11/12/14	2	6,890.42	6,892.95	6,888.75	2.53	6,859.80	33.15	ND	0.00	16.25	6,876.70	NA	10 - 30	Chinle/Alluvium Interface
MKTF-42	09/14/20	11/12/14	2	6,890.42	6,892.95	6,888.75	2.53	6,859.85	33.10	ND	0.00	16.35	6,876.60	NA	10 - 30	Chinle/Alluvium Interface
MKTF-42	11/10/20	11/12/14	2	6,890.42	6,892.95	6,888.75	2.53	6,859.85	33.10	ND	0.00	15.30	6,877.65	NA	10 - 30	Chinle/Alluvium Interface
MKTF-42	12/04/20	11/12/14	2	6,890.42	6,892.95	6,888.75	2.53	6,860.00	32.95	ND	0.00	16.41	6,876.54	NA	10 - 30	Chinle/Alluvium Interface
MKTF-43	02/26/20	11/11/14	2	6,874.12	6,876.90	6,873.22	2.78	6,861.47	15.43	ND	0.00	6.33	6,870.57	NA	2 - 12	Chinle/Alluvium Interface
MKTF-43	06/30/20	11/11/14	2	6,874.12	6,876.90	6,873.22	2.78	6,861.47	15.43	ND	0.00	5.50	6,871.40	NA	2 - 12	Chinle/Alluvium Interface
MKTF-43	09/14/20	11/11/14	2	6,874.12	6,876.90	6,873.22	2.78	6,860.68	16.22	ND	0.00	6.45	6,870.45	NA	2 - 12	Chinle/Alluvium Interface
MKTF-43	11/10/20	11/11/14	2	6,874.12	6,876.90	6,873.22	2.78	6,860.68	16.22	ND	0.00	7.48	6,869.42	NA	2 - 12	Chinle/Alluvium Interface
MKTF-43	12/04/20	11/11/14	2	6,874.12	6,876.90	6,873.22	2.78	6,859.98	16.92	ND	0.00	8.12	6,868.78	NA	2 - 12	Chinle/Alluvium Interface
MKTF-44	03/04/20	11/11/14	2	6,867.41	6,869.95	6,866.06	2.54	6,818.80	51.15	ND	0.00	30.34	6,839.61	NA	38 - 48	Chinle/Alluvium Interface
MKTF-44	06/26/20	11/11/14	2	6,867.41	6,869.95	6,866.06	2.54	6,818.80	51.15	ND	0.00	33.08	6,836.87	NA	38 - 48	Chinle/Alluvium Interface
MKTF-44	09/14/20	11/11/14	2	6,867.41	6,869.95	6,866.06	2.54	6,818.00	51.95	ND	0.00	28.00	6,841.95	NA	38 - 48	Chinle/Alluvium Interface
MKTF-44	12/04/20	11/11/14	2	6,867.41	6,869.95	6,866.06	2.54	6,818.56	51.39	ND	0.00	39.59	6,830.36	NA	38 - 48	Chinle/Alluvium Interface
MKTF-45	02/03/20	Pre-existing	4	6,948.63	6,949.59	6,948.27	0.96	6,919.35	30.24	9.60	9.02	18.62	6,930.97	6938.19	Unknown	Chinle/Alluvium Interface
MKTF-45	06/30/20	Pre-existing	4	6,948.63	6,949.59	6,948.27	0.96	6,919.35	30.24	11.08	8.00	19.08	6,930.51	6936.91	Unknown	Chinle/Alluvium Interface
MKTF-45	09/14/20	Pre-existing	4	6,948.63	6,949.59	6,948.27	0.96	6,912.14	37.45	13.14	5.29	18.43	6,931.16	6935.39	Unknown	Chinle/Alluvium Interface
MKTF-45	11/10/20	Pre-existing	4	6,948.63	6,949.59	6,948.27	0.96	6,912.14	37.45	12.94	1.82	14.76	6,934.83	6936.29	Unknown	Chinle/Alluvium Interface
MKTF-45	12/04/20	Pre-existing	4	6,948.63	6,949.59	6,948.27	0.96	6,919.14	30.45	12.66	1.85	14.51	6,935.08	6936.56	Unknown	Chinle/Alluvium Interface
MKTF-46	03/05/20	10/12/19	2	6,954.73	6,957.60	6,866.06	2.87	6,939.60	18.00	ND	0.00	10.93	6,946.67	NA	3 - 18	Chinle/Alluvium Interface
MKTF-46	06/30/20	10/12/19	2	6,954.73	6,957.60	6,866.06	2.87	6,939.60	18.00	ND	0.00	11.08	6,946.52	NA	3 - 18	Chinle/Alluvium Interface
MKTF-46	09/14/20	10/12/19	2	6,954.73	6,957.60	6,866.06	2.87	6,932.31	25.29	ND	0.00	10.18	6,947.42	NA	3 - 18	Chinle/Alluvium Interface
MKTF-46	11/10/20	10/12/19	2	6,954.73	6,957.60	6,866.06	2.87	6,932.31	25.29	ND	0.00	10.57	6,947.03	NA	3 - 18	Chinle/Alluvium Interface
MKTF-46	12/04/20	10/12/19	2	6,954.73	6,957.60	6,866.06	2.87	6,936.30	21.30	ND	0.00	10.77	6,946.83	NA	3 - 18	Chinle/Alluvium Interface
MKTF-47	03/05/20	10/14/19	2	6,959.51	6,959.09	6,866.06	-0.42	6,944.79	14.00	ND	0.00	9.89	6,949.20	NA	4 - 14	Chinle/Alluvium Interface
MKTF-47	06/29/20	10/14/19	2	6,959.51	6,959.09	6,866.06	-0.42	6,944.79	14.00	ND	0.00	9.50	6,949.59	NA	4 - 14	Chinle/Alluvium Interface
MKTF-47	09/15/20	10/14/19	2	6,959.51	6,959.09	6,866.06	-0.42	6,944.79	14.31	8.53	0.01	8.54	6,950.55	6950.56	4 - 14	Chinle/Alluvium Interface
MKTF-47	11/10/20	10/14/19	2	6,959.51	6,959.09	6,866.06	-0.42	6,944.79	14.31	ND	0.00	9.33	6,949.76	NA	4 - 14	Chinle/Alluvium Interface
MKTF-47	12/04/20	10/14/19	2	6,959.51	6,959.09	6,866.06	-0.42	6,944.79	14.31	9.58	0.01	9.59	6,949.50	NA	4 - 14	Chinle/Alluvium Interface

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ATTACHMENT A-4. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
MKTF WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Sample Date	Date of Installation	Casing Diameter (in)	Surface Elevation (ft)	Well Casing Rim Elevation (ft)	Ground Elevation Inside Steel Sleeve (ft)	Stick-up length (ft)	Well Casing Bottom Elevation (ft)	Total Well Depth (ft)	Depth to SPH (ft)	SPH Column Thickness (ft)	DTW (ft)	GW Elevation (ft)	Corrected Water Table[1] Elevation (ft)	Screened Interval Depth Top to Bottom (ft)	Stratigraphic unit in which screen exists
MKTF-48	03/03/20	10/14/19	2	6,959.24	6,961.73	6,866.06	2.49	6,940.81	18.00	12.66	0.16	12.82	6,948.91	6949.04	2 - 17	Chinle/Alluvium Interface
MKTF-48	06/29/20	10/14/19	2	6,959.24	6,961.73	6,866.06	2.49	6,940.81	18.00	ND	0.00	11.58	6,950.15	NA	2 - 17	Chinle/Alluvium Interface
MKTF-48	09/15/20	10/14/19	2	6,959.24	6,961.73	6,866.06	2.49	6,940.81	19.91	11.85	0.01	11.86	6,949.87	6949.88	2 - 17	Chinle/Alluvium Interface
MKTF-48	11/10/20	10/14/19	2	6,959.24	6,961.73	6,866.06	2.49	6,940.81	19.91	12.40	0.11	12.51	6,949.22	6949.31	2 - 17	Chinle/Alluvium Interface
MKTF-48	12/04/20	10/14/19	2	6,959.24	6,961.73	6,866.06	2.49	6,940.81	20.94	12.77	0.33	13.10	6,948.63	6948.89	2 - 17	Chinle/Alluvium Interface
MKTF-49	03/04/20	10/15/19	2	6,944.00	6,946.76	6,866.06	2.76	6,921.86	28.00	ND	0.00	20.27	6,926.49	NA	5 - 25	Chinle/Alluvium Interface
MKTF-49	06/30/20	10/15/19	2	6,944.00	6,946.76	6,866.06	2.76	6,921.86	28.00	ND	0.00	20.65	6,926.11	NA	5 - 25	Chinle/Alluvium Interface
MKTF-49	09/15/20	10/15/19	2	6,944.00	6,946.76	6,866.06	2.76	6,921.86	24.96	ND	0.00	20.33	6,926.43	NA	5 - 25	Chinle/Alluvium Interface
MKTF-49	11/10/20	10/15/19	2	6,944.00	6,946.76	6,866.06	2.76	6,921.86	24.96	ND	0.00	20.75	6,926.01	NA	5 - 25	Chinle/Alluvium Interface
MKTF-49	12/04/20	10/15/19	2	6,944.00	6,946.76	6,866.06	2.76	6,921.86	24.97	ND	0.00	20.81	6,925.95	NA	5 - 25	Chinle/Alluvium Interface
MKTF-50	03/04/20	10/16/19	2	6,939.68	6,942.82	6,948.27	3.14	6,921.17	26.00	ND	0.00	15.87	6,926.95	NA	3 - 18	Chinle/Alluvium Interface
MKTF-50	06/30/20	10/16/19	2	6,939.68	6,942.82	6,948.27	3.14	6,921.17	26.00	ND	0.00	16.00	6,926.82	NA	3 - 18	Chinle/Alluvium Interface
MKTF-50	09/15/20	10/16/19	2	6,939.68	6,942.82	6,948.27	3.14	6,921.17	22.64	15.36	0.01	15.37	6,927.45	6927.46	3 - 18	Chinle/Alluvium Interface
MKTF-50	11/10/20	10/16/19	2	6,939.68	6,942.82	6,948.27	3.14	6,921.17	22.64	ND	0.00	16.03	6,926.79	NA	3 - 18	Chinle/Alluvium Interface
MKTF-50	12/04/20	10/16/19	2	6,939.68	6,942.82	6,948.27	3.14	6,921.17	21.63	ND	0.00	16.17	6,926.65	NA	3 - 18	Chinle/Alluvium Interface

Definitions:
NA = not applicable
DTW = depth to water
SPH = separate phase hydrocarbons
NS = Not Surveyed
NM = Not Measured
DRY = no water detected
in = inch
ft = feet

Notes:
1. Corrected Water Table Elevation applies only if SPH thickness column measurement exists. (0.8 X SPH thickness + Groundwater Elevation)
Negative number in Stick up Length column indicates well is flushmount and located at or below ground level.
Depth to Water Column - if 0.00 is indicated - means water is at top of casing (full) under artesian flow conditions.

ATTACHMENT A-5. WELL INFORMATION - SURVEY DATA, SCREENED INTERVAL, STRATIGRAPHIC UNIT
ARTESIAN WATER WELLS
GALLUP REFINERY, GALLUP, NEW MEXICO

Well ID	Date of Installation	Submersible pump depth (ft)	Casing Diameter (in)	Well Head Elevation Mark* (North) (ft)	Well Head Elevation Mark* (West) (ft)	Well Head Elevation Mark* (Z) (ft)	Measuring Point Discription	Total Well Depth (ft bgs)
PW-2	9/24/1956	800	16.0	3300.40	4694.28	162.78	1st Discharge tee or elbow	1075.00
PW-3	4/1979	900	14.0	2932.83	1387.79	248.00	1st Discharge tee or elbow	1030.00
PW-4	11/12/1999	750	12.0 [2]	1895.73	2979.78	178.51	1st Discharge tee or elbow	1020.00 [3]

Well ID	Well Casing Bottom Elevation (ft)	Stratigraphic unit	Aquifer
PW-2	2225.40	Chinle	San Andreas/Yeso Aquifer
PW-3	1902.83	Chinle	San Andreas/Yeso Aquifer
PW-4	819.73	Chinle	San Andreas/Yeso Aquifer

Notes
bgs = below ground surface
ft = feet
ID = identification
in = inch
MSL = mean sea level
* Basis of survey Refinery Control Point at 1000W, 2575N, plant elevation = 254.87 ft and MSL elevation = 6959.41 ft

1) Well casing bottom elevation using Well Head Elevation Mark (North) as a reference point.
2) Actual well casing diameter is 12 inches. The 176 ft of 24 in steel casing is the actual cemented support for development of the well.
3) The actual total well depth is 1020 ft with additonal 56 ft x 7-7/8 in diameter open exploratory hole which was accounted for as total well depth of 1076 ft.

Appendix C – 2022 Analyte Evaluation

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-11	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-11	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-11	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-11	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-11	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-11	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-11	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-11	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-11	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-11	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-11	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-11	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-11	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-11	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-11	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-11	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-11	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-11	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-11	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-11	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-11	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-11	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-11	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-11	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-11	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-11	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-11	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-11	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-11	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-11	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-11	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-11	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-11	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-11	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-11	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-11	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-11	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-11	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-11	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-11	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-11	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-11	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-11	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-11	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-11	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-11	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-11	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-11	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-11	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-11	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-11	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-11	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-11	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-11	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-11	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-11	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-11	11/6/2012	Acetone	120	100	15	14064	ug/L
EP-11	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-11	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-11	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-11	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-11	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-11	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-11	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-11	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-11	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	11/6/2012	Carbon Disulfide	590	100	8.4	810	ug/L
EP-11	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-11	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-11	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-11	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-11	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-11	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-11	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-11	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-11	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-11	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-11	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-11	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-11	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-11	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-11	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-11	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-11	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-11	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-11	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-11	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-11	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-11	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-11	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-11	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-11	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-11	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-11	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-11	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-11	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-11	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-11	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-11	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-11	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-11	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-11	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-11	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-11	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-11	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-11	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-11	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-11	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-11	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-11	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-11	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-11	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-11	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-11	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-11	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-11	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-11	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-11	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-11	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-11	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-11	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-11	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-11	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-11	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-11	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-11	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-11	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-11	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-11	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-11	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-11	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-11	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-11	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-11	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-11	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-11	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-11	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-11	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-11	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-11	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-11	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-11	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-11	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-11	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-11	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-11	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-11	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-11	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-11	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-11	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-11	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-11	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-11	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-11	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-11	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-11	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-11	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-11	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-11	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-11	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-11	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-11	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-11	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-11	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-11	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-11	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-11	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-11	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-11	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-11	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-11	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-11	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-11	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-11	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-11	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-11	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-11	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-11	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-11	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-11	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-11	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-11	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-11	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-11	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-11	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-11	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-11	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-11	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-11	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-11	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-11	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-11	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-11	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-11	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-11	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-11	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-11	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-11	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-11	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-11	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-11	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-11	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-11	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-11	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-11	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-11	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-11	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-11	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-11	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-11	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-11	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-11	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-11	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-11	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-11	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-11	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-11	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-11	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-11	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-11	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-11	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-11	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-11	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-11	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-11	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-11	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-11	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-11	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-11	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-11	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-11	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-11	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-11	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-11	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-11	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-11	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-11	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-11	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-11	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-11	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-11	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-11	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-11	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-11	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-11	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-11	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-11	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-11	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-11	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-11	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-11	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-11	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-11	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-11	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-11	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-11	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-11	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-11	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-11	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-11	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-11	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-11	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-11	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-11	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-11	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-11	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-11	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-11	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-11	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-11	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-11	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-11	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-11	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-11	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-11	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-11	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-11	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-11	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-11	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-11	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-11	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-11	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-11	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-11	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-11	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-11	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-11	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-11	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-11	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-11	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-11	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-11	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-11	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-11	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-11	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-11	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-11	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-11	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-11	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-11	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-11	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-11	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-11	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-11	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-11	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-11	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-11	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-11	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-11	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-11	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-11	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-11	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-11	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-11	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-11	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-11	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-11	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-11	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-11	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-11	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-11	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-11	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-11	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-11	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-11	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-11	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-11	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-11	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-11	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-11	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-11	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-11	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-11	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-11	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-11	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-11	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-11	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-11	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-11	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-11	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-11	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-11	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-11	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-11	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-11	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-11	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-11	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-11	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-11	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-11	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-11	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-11	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-11	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-11	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-11	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-11	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-11	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-11	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-11	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-11	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-11	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-11	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-11	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-11	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-11	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-11	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-11	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-11	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-11	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-11	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-11	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-11	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-11	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-11	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-11	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-11	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-11	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-11	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-11	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-11	9/1/2015	Benzene	*ND*	*5.1*	0.65	5	ug/L
EP-11	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-11	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-11	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-11	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-11	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-11	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-11	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-11	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-11	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-11	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-11	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-11	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-11	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-11	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-11	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-11	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-11	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-11	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-11	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-11	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-11	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-11	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-11	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-11	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-11	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-11	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-11	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-11	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-11	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-11	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-11	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-11	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-11	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-11	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-11	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-11	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-11	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-11	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-11	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-11	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-11	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-11	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-11	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-11	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-11	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-11	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-11	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-11	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-11	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-11	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-11	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-11	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-11	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-11	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-11	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-11	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-11	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-11	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-11	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-11	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-11	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-11	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-11	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-11	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-11	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-11	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-11	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-11	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-11	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-11	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-11	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-11	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-11	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-11	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-11	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-11	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-11	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-11	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-11	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-11	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-11	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-11	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-11	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-11	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-11	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-11	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-11	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-11	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-11	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-11	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-11	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-11	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-11	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-11	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-11	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-11	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-11	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-11	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-11	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-11	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-11	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-11	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-11	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-11	3/30/2017	Acetone	9.2	50	8.8	14064	ug/L
EP-11	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-11	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-11	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-11	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-11	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-11	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-11	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-11	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-11	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-11	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-11	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-11	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-11	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-11	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-11	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-11	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-11	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-11	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-11	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-11	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-11	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-11	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-11	3/30/2017	1,2,4-Trimethylbenzene	2.5	5	1	56	ug/L
EP-11	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-11	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-11	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-11	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-11	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-11	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-11	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-11	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-11	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-11	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-11	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-11	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-11	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-11	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-11	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-11	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-11	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-11	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-11	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-11	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-11	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-11	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-11	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-11	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-11	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-11	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-11	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-11	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-11	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-11	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-11	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-11	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-11	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-11	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-11	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-11	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-11	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-11	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-11	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-11	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-11	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-11	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-11	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-11	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-11	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-11	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-11	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-11	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-11	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-11	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-11	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-11	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-11	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-11	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-11	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-11	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-11	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-11	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-11	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-11	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-11	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-11	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-11	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-11	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-11	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-11	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-11	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-11	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-11	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-11	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-11	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-11	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-11	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-11	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-11	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-11	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-11	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-11	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-11	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-11	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-11	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-11	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-11	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-11	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-11	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-11	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-11	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-11	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-11	2/23/2018	Acetone	36	10	0.82	14064	ug/L
EP-11	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-11	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-11	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-11	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-11	2/23/2018	Chloromethane	2.9	3	0.29	20.32	ug/L
EP-11	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-11	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-11	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-11	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-11	2/23/2018	Carbon Disulfide	0.7	10	0.4	810	ug/L
EP-11	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-11	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-11	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-11	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-11	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-11	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-11	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-11	2/23/2018	2-Butanone	3.1	10	1.1	5565	ug/L
EP-11	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-11	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-11	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-11	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-11	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-11	2/23/2018	1,2,4-Trimethylbenzene	0.43	1	0.11	56	ug/L
EP-11	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-11	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-11	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-11	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-11	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-11	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-11	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-11	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-11	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-11	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-11	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-11	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-11	2/23/2018	4-Methyl-2-Pentanone	0.72	10	0.71	1243	ug/L
EP-11	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-11	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-11	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-11	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-11	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-11	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-11	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-11	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-11	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-11	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-11	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-11	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-11	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-11	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-11	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-11	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-11	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-11	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-11	9/7/2018	Acetone	66	50	3.9	14064	ug/L
EP-11	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-11	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-11	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-11	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-11	9/7/2018	Chloromethane	**31**	3	0.29	20.32	ug/L
EP-11	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-11	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-11	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-11	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-11	9/7/2018	Carbon Disulfide	0.6	10	0.39	810	ug/L
EP-11	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-11	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-11	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-11	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-11	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-11	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-11	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-11	9/7/2018	2-Butanone	48	10	1.3	5565	ug/L
EP-11	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-11	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-11	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-11	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-11	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-11	9/7/2018	1,2,4-Trimethylbenzene	1.2	1	0.25	56	ug/L
EP-11	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-11	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-11	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-11	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-11	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-11	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-11	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-11	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-11	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-11	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-11	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-11	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-11	9/7/2018	4-Methyl-2-Pentanone	2.8	10	0.45	1243	ug/L
EP-11	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-11	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-11	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-11	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-11	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-11	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-11	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-11	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-11	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-11	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-11	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-11	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-11	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-11	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-11	9/7/2018	Xylenes, Total	1	1.5	0.64	620	ug/L
EP-11	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-11	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-11	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-11	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-11	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-11	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-11	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-11	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-11	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-11	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-11	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-11	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-11	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-11	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-11	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-11	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-11	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-11	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-11	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-11	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-11	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-11	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-11	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-11	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-11	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-11	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-11	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-11	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-11	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-11	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-11	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-11	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-11	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-11	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-11	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-11	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-11	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-11	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-11	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-11	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-11	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-11	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-11	4/29/2019	Chloromethane	*4.6*	*30*	3.209873	20.32	ug/L
EP-11	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-11	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-11	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-11	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-11	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-11	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-11	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-11	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-11	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-11	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-11	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-11	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-11	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-11	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-11	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-11	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-11	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-11	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-11	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-11	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-11	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-11	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-11	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-11	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-11	12/22/2020	Acetone	36.1	25	10	14064	ug/L
EP-11	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-11	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-11	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-11	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-11	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-11	12/22/2020	Carbon Disulfide	2.27	1	0.5	810	ug/L
EP-11	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-11	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-11	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-11	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-11	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-11	12/22/2020	Chloromethane	11.1	1	0.83	20.32	ug/L
EP-11	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-11	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-11	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-11	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-11	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-11	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-11	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-11	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-11	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-11	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-11	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-11	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-11	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-11	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-11	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-11	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-11	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-11	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-11	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-11	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-11	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-11	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-11	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-11	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-11	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-11	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-11	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-11	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-11	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-11	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-11	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-11	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-11	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-11	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-11	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-11	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-11	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-11	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-11	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-11	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-11	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-11	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-11	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-11	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-11	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-11	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-11	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-11	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-11	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-11	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-12A	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12A	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-12A	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12A	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12A	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12A	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12A	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-12A	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12A	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-12A	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12A	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-12A	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12A	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12A	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12A	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12A	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12A	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12A	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12A	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12A	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12A	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12A	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12A	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12A	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12A	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12A	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12A	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12A	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12A	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12A	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12A	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12A	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-12A	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12A	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-12A	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12A	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12A	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12A	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12A	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12A	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12A	5/29/2012	Toluene	ND	10	4.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12A	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12A	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12A	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12A	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12A	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12A	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12A	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12A	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12A	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12A	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12A	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12A	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-12A	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12A	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12A	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12A	11/6/2012	Acetone	150	100	15	14064	ug/L
EP-12A	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12A	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12A	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12A	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12A	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-12A	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12A	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-12A	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12A	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	11/6/2012	Carbon Disulfide	610	100	8.4	810	ug/L
EP-12A	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12A	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12A	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12A	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12A	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12A	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12A	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12A	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12A	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12A	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12A	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12A	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12A	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12A	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12A	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12A	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12A	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12A	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12A	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12A	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12A	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-12A	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12A	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-12A	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12A	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12A	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12A	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12A	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12A	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12A	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12A	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12A	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12A	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12A	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12A	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12A	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12A	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12A	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12A	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12A	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12A	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12A	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12A	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-12A	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12A	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12A	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12A	5/28/2013	Acetone	170	100	17	14064	ug/L
EP-12A	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12A	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12A	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12A	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12A	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12A	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12A	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12A	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	5/28/2013	Carbon Disulfide	140	100	8	810	ug/L
EP-12A	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12A	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12A	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12A	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12A	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12A	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12A	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12A	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12A	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12A	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12A	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12A	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12A	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12A	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12A	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12A	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12A	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12A	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12A	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12A	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12A	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-12A	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12A	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12A	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12A	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12A	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12A	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12A	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12A	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12A	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12A	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12A	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12A	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12A	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12A	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12A	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12A	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12A	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12A	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12A	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12A	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12A	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-12A	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12A	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12A	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-12A	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12A	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12A	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12A	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12A	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12A	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12A	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12A	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12A	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12A	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12A	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12A	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12A	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12A	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12A	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12A	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12A	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12A	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12A	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12A	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12A	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12A	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12A	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12A	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12A	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12A	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12A	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12A	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12A	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12A	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-12A	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12A	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12A	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12A	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12A	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12A	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12A	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12A	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12A	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12A	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12A	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12A	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12A	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12A	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12A	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12A	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12A	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12A	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12A	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12A	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12A	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-12A	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12A	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12A	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12A	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-12A	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12A	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-12A	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12A	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12A	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12A	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12A	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12A	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-12A	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12A	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12A	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12A	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12A	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12A	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12A	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12A	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12A	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12A	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12A	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12A	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12A	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12A	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12A	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12A	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12A	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12A	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12A	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12A	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12A	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12A	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-12A	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12A	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12A	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12A	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12A	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12A	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12A	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12A	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12A	3/5/2014	Toluene	ND	10	1.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12A	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12A	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12A	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12A	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12A	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12A	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12A	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12A	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12A	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12A	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12A	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-12A	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12A	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12A	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-12A	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12A	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-12A	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12A	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12A	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12A	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12A	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12A	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-12A	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12A	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12A	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12A	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12A	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12A	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12A	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12A	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12A	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12A	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12A	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12A	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12A	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12A	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12A	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12A	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12A	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12A	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12A	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12A	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12A	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-12A	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12A	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12A	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12A	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12A	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12A	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12A	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12A	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12A	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12A	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12A	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12A	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12A	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12A	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12A	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12A	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12A	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12A	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12A	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12A	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12A	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-12A	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12A	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12A	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12A	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12A	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12A	3/25/2015	Benzene	ND	5	0.65	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12A	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12A	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12A	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12A	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12A	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12A	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12A	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12A	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12A	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12A	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12A	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12A	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12A	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12A	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12A	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12A	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12A	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12A	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12A	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12A	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12A	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12A	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12A	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12A	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12A	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-12A	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12A	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12A	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12A	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12A	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12A	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12A	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12A	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12A	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12A	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12A	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12A	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12A	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12A	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12A	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12A	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12A	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12A	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12A	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-12A	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12A	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12A	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12A	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-12A	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12A	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12A	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12A	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12A	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12A	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12A	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12A	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12A	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12A	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12A	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12A	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12A	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12A	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12A	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12A	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12A	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12A	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12A	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12A	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12A	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12A	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12A	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12A	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12A	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-12A	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12A	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12A	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12A	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12A	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12A	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12A	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12A	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12A	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12A	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12A	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12A	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12A	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12A	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12A	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12A	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12A	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12A	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12A	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-12A	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-12A	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-12A	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-12A	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-12A	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-12A	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-12A	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-12A	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-12A	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-12A	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-12A	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-12A	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-12A	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-12A	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-12A	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-12A	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-12A	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-12A	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-12A	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-12A	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-12A	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-12A	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-12A	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-12A	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-12A	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-12A	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-12A	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-12A	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-12A	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-12A	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-12A	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-12A	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-12A	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-12A	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-12A	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-12A	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-12A	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-12A	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-12A	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-12A	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12A	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-12A	8/30/2016	Toluene	ND	10	1.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-12A	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-12A	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-12A	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-12A	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-12A	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12A	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-12A	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12A	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-12A	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-12A	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12A	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-12A	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-12A	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12A	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-12A	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12A	3/30/2017	Acetone	11	50	8.8	14064	ug/L
EP-12A	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-12A	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-12A	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12A	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-12A	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-12A	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-12A	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12A	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12A	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12A	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-12A	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12A	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12A	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-12A	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12A	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12A	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-12A	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12A	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12A	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12A	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-12A	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12A	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-12A	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12A	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-12A	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12A	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12A	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12A	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-12A	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-12A	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-12A	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-12A	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-12A	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-12A	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12A	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12A	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-12A	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12A	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-12A	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12A	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-12A	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12A	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-12A	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-12A	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-12A	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-12A	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12A	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12A	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-12A	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12A	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-12A	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-12A	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12A	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-12A	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-12A	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-12A	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12A	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-12A	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-12A	10/24/2017	Benzene	ND	5	0.62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12A	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-12A	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-12A	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-12A	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12A	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12A	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12A	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-12A	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12A	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12A	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-12A	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12A	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12A	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-12A	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12A	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12A	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12A	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-12A	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12A	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-12A	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12A	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-12A	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12A	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12A	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12A	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-12A	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-12A	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-12A	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-12A	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-12A	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-12A	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12A	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12A	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-12A	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12A	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-12A	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12A	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-12A	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12A	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-12A	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-12A	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-12A	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-12A	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12A	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12A	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-12A	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12A	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-12A	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-12A	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12A	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-12A	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-12A	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-12A	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-12A	9/7/2018	Acetone	98	10	0.79	14064	ug/L
EP-12A	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-12A	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-12A	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-12A	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-12A	9/7/2018	Chloromethane	1.4	3	0.29	20.32	ug/L
EP-12A	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-12A	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-12A	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-12A	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-12A	9/7/2018	Carbon Disulfide	0.77	10	0.39	810	ug/L
EP-12A	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-12A	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-12A	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-12A	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-12A	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-12A	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-12A	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-12A	9/7/2018	2-Butanone	8.3	10	1.3	5565	ug/L
EP-12A	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-12A	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-12A	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-12A	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-12A	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-12A	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-12A	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-12A	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-12A	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-12A	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-12A	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-12A	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-12A	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-12A	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-12A	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-12A	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-12A	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-12A	9/7/2018	4-Methyl-2-Pentanone	1.6	10	0.45	1243	ug/L
EP-12A	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-12A	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-12A	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-12A	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-12A	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-12A	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-12A	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-12A	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-12A	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-12A	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-12A	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-12A	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-12A	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-12A	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-12A	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-12A	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-12A	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-12A	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-12A	11/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
EP-12A	11/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
EP-12A	11/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
EP-12A	11/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
EP-12A	11/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
EP-12A	11/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
EP-12A	11/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
EP-12A	11/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
EP-12A	11/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
EP-12A	11/21/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
EP-12A	11/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
EP-12A	11/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
EP-12A	11/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
EP-12A	11/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
EP-12A	11/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
EP-12A	11/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
EP-12A	11/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
EP-12A	11/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
EP-12A	11/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
EP-12A	11/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
EP-12A	11/21/2019	2-Butanone	15	50	10.447083	5565	ug/L
EP-12A	11/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
EP-12A	11/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
EP-12A	11/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
EP-12A	11/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
EP-12A	11/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
EP-12A	11/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
EP-12A	11/21/2019	Acetone	140	50	5.996982	14064	ug/L
EP-12A	11/21/2019	Benzene	ND	5	0.833195	5	ug/L
EP-12A	11/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
EP-12A	11/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
EP-12A	11/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
EP-12A	11/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
EP-12A	11/21/2019	Carbon Disulfide	32	50	2.262784	810	ug/L
EP-12A	11/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
EP-12A	11/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
EP-12A	11/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
EP-12A	11/21/2019	Chloroform	ND	5	0.609453	100	ug/L
EP-12A	11/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
EP-12A	11/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
EP-12A	11/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
EP-12A	11/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
EP-12A	11/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
EP-12A	11/21/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
EP-12A	11/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
EP-12A	11/21/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
EP-12A	11/21/2019	MTBE	ND	5	2.280475	143	ug/L
EP-12A	11/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
EP-12A	11/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
EP-12A	11/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
EP-12A	11/21/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
EP-12A	11/21/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
EP-12A	11/21/2019	Styrene	ND	5	0.956617	100	ug/L
EP-12A	11/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
EP-12A	11/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
EP-12A	11/21/2019	Toluene	ND	5	1.752181	1000	ug/L
EP-12A	11/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
EP-12A	11/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
EP-12A	11/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
EP-12A	11/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
EP-12A	11/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
EP-12A	11/21/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
EP-12A	12/22/2020	Acetone	37.4	25	10	14064	ug/L
EP-12A	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-12A	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-12A	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-12A	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-12A	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-12A	12/22/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-12A	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-12A	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-12A	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-12A	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-12A	12/22/2020	Chloromethane	4.2	1	0.83	20.32	ug/L
EP-12A	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-12A	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-12A	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-12A	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12A	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-12A	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-12A	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-12A	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-12A	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-12A	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-12A	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-12A	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-12A	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-12A	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-12A	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-12A	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-12A	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-12A	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-12A	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-12A	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-12A	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-12A	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-12A	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-12A	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-12A	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-12A	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-12A	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-12A	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-12A	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-12A	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-12A	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-12A	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-12A	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-12A	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-12A	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-12A	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-12A	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-12A	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12A	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-12A	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-12A	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-12A	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-12A	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-12A	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-12A	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-12A	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-12A	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-12A	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-12B	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12B	5/29/2012	Acetone	100	100	21	14064	ug/L
EP-12B	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12B	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12B	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12B	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12B	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-12B	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12B	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-12B	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-12B	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-12B	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12B	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12B	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12B	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12B	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12B	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12B	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12B	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12B	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12B	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12B	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12B	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12B	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12B	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12B	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12B	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12B	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12B	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12B	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12B	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12B	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-12B	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12B	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-12B	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12B	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12B	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12B	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12B	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12B	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12B	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12B	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12B	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12B	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12B	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12B	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12B	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12B	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12B	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12B	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12B	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12B	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12B	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12B	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-12B	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12B	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12B	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-12B	11/6/2012	Acetone	240	100	15	14064	ug/L
EP-12B	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-12B	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-12B	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-12B	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-12B	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-12B	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-12B	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-12B	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	11/6/2012	Carbon Disulfide	470	100	8.4	810	ug/L
EP-12B	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-12B	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-12B	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-12B	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-12B	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-12B	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-12B	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-12B	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-12B	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-12B	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-12B	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-12B	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-12B	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-12B	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-12B	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-12B	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-12B	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-12B	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-12B	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-12B	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-12B	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-12B	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-12B	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-12B	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-12B	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-12B	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-12B	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-12B	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-12B	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-12B	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-12B	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-12B	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-12B	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-12B	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-12B	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-12B	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-12B	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-12B	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-12B	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-12B	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-12B	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-12B	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-12B	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-12B	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-12B	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-12B	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12B	5/28/2013	Acetone	530	100	17	14064	ug/L
EP-12B	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12B	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12B	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12B	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12B	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12B	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12B	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12B	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12B	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12B	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12B	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12B	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12B	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12B	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12B	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12B	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12B	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12B	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12B	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12B	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12B	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12B	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12B	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12B	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12B	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12B	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12B	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12B	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12B	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-12B	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12B	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12B	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12B	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12B	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12B	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12B	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12B	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12B	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12B	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12B	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12B	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12B	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12B	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12B	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-12B	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12B	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12B	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12B	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12B	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12B	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-12B	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12B	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-12B	10/15/2013	Acetone	280	100	17	14064	ug/L
EP-12B	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-12B	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-12B	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-12B	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-12B	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-12B	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-12B	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-12B	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-12B	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-12B	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-12B	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-12B	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-12B	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-12B	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-12B	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-12B	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-12B	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-12B	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-12B	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-12B	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-12B	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-12B	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-12B	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-12B	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-12B	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-12B	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-12B	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-12B	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-12B	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-12B	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-12B	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-12B	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-12B	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-12B	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-12B	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-12B	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-12B	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-12B	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-12B	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-12B	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-12B	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-12B	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-12B	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-12B	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-12B	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-12B	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-12B	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-12B	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-12B	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-12B	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-12B	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-12B	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-12B	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-12B	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12B	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-12B	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12B	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-12B	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12B	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12B	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12B	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12B	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12B	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-12B	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12B	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12B	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12B	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12B	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12B	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12B	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12B	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12B	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12B	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12B	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12B	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12B	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12B	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12B	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12B	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12B	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12B	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12B	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12B	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12B	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12B	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-12B	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12B	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12B	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12B	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12B	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12B	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12B	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12B	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12B	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12B	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12B	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12B	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12B	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12B	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12B	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12B	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12B	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12B	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12B	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12B	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12B	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-12B	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12B	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-12B	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-12B	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-12B	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-12B	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-12B	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-12B	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-12B	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-12B	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-12B	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-12B	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-12B	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-12B	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-12B	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-12B	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-12B	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-12B	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-12B	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-12B	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-12B	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-12B	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-12B	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-12B	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-12B	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-12B	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-12B	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-12B	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-12B	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-12B	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-12B	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-12B	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-12B	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-12B	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-12B	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-12B	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-12B	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-12B	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-12B	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-12B	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-12B	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-12B	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-12B	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-12B	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-12B	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-12B	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-12B	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-12B	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-12B	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-12B	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-12B	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-12B	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-12B	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-12B	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-12B	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12B	3/25/2015	Acetone	130	100	9.4	14064	ug/L
EP-12B	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12B	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-12B	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12B	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12B	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12B	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12B	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12B	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12B	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12B	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12B	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12B	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12B	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12B	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12B	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12B	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12B	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12B	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12B	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12B	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12B	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12B	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12B	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12B	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12B	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12B	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-12B	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12B	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12B	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12B	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12B	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12B	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12B	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12B	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-12B	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12B	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12B	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12B	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12B	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-12B	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12B	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12B	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12B	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12B	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-12B	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-12B	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-12B	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-12B	9/1/2015	Benzene	**9.9**	5	0.65	5	ug/L
EP-12B	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-12B	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-12B	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-12B	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-12B	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-12B	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-12B	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-12B	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-12B	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-12B	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-12B	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-12B	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-12B	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-12B	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-12B	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-12B	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-12B	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-12B	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-12B	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-12B	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-12B	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-12B	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-12B	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-12B	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-12B	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-12B	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-12B	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-12B	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-12B	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-12B	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-12B	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-12B	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-12B	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-12B	9/1/2015	Toluene	21	10	1.1	1000	ug/L
EP-12B	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-12B	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-12B	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-12B	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-12B	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-12B	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-12B	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-12B	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-12B	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-12B	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-12B	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-12B	8/30/2016	Acetone	170	100	49	14064	ug/L
EP-12B	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-12B	8/30/2016	Benzene	*3.5*	*10*	0.96	5	ug/L
EP-12B	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-12B	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-12B	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-12B	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-12B	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-12B	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-12B	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-12B	8/30/2016	Carbon Disulfide	16	100	6	810	ug/L
EP-12B	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-12B	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-12B	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-12B	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-12B	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-12B	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-12B	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-12B	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-12B	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-12B	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-12B	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-12B	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-12B	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-12B	8/30/2016	1,2,4-Trimethylbenzene	1.7	10	1.1	56	ug/L
EP-12B	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-12B	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-12B	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-12B	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-12B	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-12B	8/30/2016	Ethylbenzene	1.2	10	1.1	700	ug/L
EP-12B	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-12B	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-12B	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-12B	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-12B	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-12B	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-12B	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-12B	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-12B	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-12B	8/30/2016	Toluene	2.4	10	1.2	1000	ug/L
EP-12B	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-12B	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-12B	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-12B	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-12B	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-12B	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-12B	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-12B	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-12B	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-12B	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-12B	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-12B	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-12B	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-12B	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-12B	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-12B	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12B	3/30/2017	Acetone	87	50	8.8	14064	ug/L
EP-12B	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-12B	3/30/2017	Benzene	**6.8**	5	0.96	5	ug/L
EP-12B	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12B	3/30/2017	Bromomethane	**9.1**	15	7.8	7.54	ug/L
EP-12B	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-12B	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-12B	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12B	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12B	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-12B	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12B	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12B	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-12B	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12B	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12B	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-12B	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12B	3/30/2017	2-Butanone	25	50	11	5565	ug/L
EP-12B	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12B	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-12B	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12B	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-12B	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12B	3/30/2017	1,2,4-Trimethylbenzene	5.5	5	1	56	ug/L
EP-12B	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12B	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12B	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-12B	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-12B	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-12B	3/30/2017	Ethylbenzene	4.2	5	1.1	700	ug/L
EP-12B	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-12B	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-12B	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-12B	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12B	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12B	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-12B	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12B	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-12B	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12B	3/30/2017	Toluene	12	5	0.89	1000	ug/L
EP-12B	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12B	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-12B	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-12B	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-12B	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-12B	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12B	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12B	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-12B	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12B	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-12B	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-12B	3/30/2017	Xylenes, Total	13	7.5	3.2	620	ug/L
EP-12B	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-12B	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-12B	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-12B	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-12B	10/24/2017	Acetone	130	50	8.2	14064	ug/L
EP-12B	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-12B	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-12B	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-12B	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-12B	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-12B	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-12B	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-12B	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-12B	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-12B	10/24/2017	Carbon Disulfide	12	50	4	810	ug/L
EP-12B	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-12B	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-12B	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-12B	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-12B	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-12B	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-12B	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-12B	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-12B	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-12B	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-12B	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-12B	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-12B	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-12B	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-12B	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-12B	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-12B	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-12B	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-12B	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-12B	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-12B	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-12B	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-12B	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-12B	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-12B	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-12B	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-12B	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-12B	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-12B	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-12B	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-12B	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-12B	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-12B	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-12B	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-12B	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-12B	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-12B	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-12B	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-12B	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-12B	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-12B	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-12B	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-12B	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-12B	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-12B	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-12B	2/22/2018	Acetone	110	50	4.1	14064	ug/L
EP-12B	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
EP-12B	2/22/2018	Benzene	1.4	1	0.062	5	ug/L
EP-12B	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-12B	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-12B	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
EP-12B	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-12B	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-12B	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-12B	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-12B	2/22/2018	Carbon Disulfide	29	10	0.4	810	ug/L
EP-12B	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-12B	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-12B	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-12B	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-12B	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-12B	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-12B	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-12B	2/22/2018	2-Butanone	34	10	1.1	5565	ug/L
EP-12B	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-12B	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-12B	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-12B	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-12B	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-12B	2/22/2018	1,2,4-Trimethylbenzene	0.87	1	0.11	56	ug/L
EP-12B	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-12B	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-12B	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-12B	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-12B	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-12B	2/22/2018	Ethylbenzene	0.34	1	0.093	700	ug/L
EP-12B	2/22/2018	Styrene	ND	1	0.16	100	ug/L
EP-12B	2/22/2018	n-Propylbenzene	0.18	1	0.074	660	ug/L
EP-12B	2/22/2018	n-Butylbenzene	0.2	3	0.13	1000	ug/L
EP-12B	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-12B	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-12B	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-12B	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-12B	2/22/2018	1,3,5-Trimethylbenzene	0.28	1	0.087	60	ug/L
EP-12B	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-12B	2/22/2018	Toluene	2.2	1	0.064	1000	ug/L
EP-12B	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-12B	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-12B	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-12B	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-12B	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-12B	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-12B	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-12B	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-12B	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-12B	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-12B	2/22/2018	Xylenes, Total	2.1	1.5	0.32	620	ug/L
EP-12B	2/22/2018	MTBE	ND	1	0.24	143	ug/L
EP-12B	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-12B	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-12B	9/7/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-12B	9/7/2018	Acetone	51	10	1.6	14064	ug/L
EP-12B	9/7/2018	Chloroform	ND	1	0.8	100	ug/L
EP-12B	9/7/2018	Benzene	ND	1	0.35	5	ug/L
EP-12B	9/7/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-12B	9/7/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-12B	9/7/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-12B	9/7/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-12B	9/7/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-12B	9/7/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-12B	9/7/2018	Methylene Chloride	ND	3	0.41	5	ug/L
EP-12B	9/7/2018	Carbon Disulfide	23	10	0.77	810	ug/L
EP-12B	9/7/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-12B	9/7/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-12B	9/7/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-12B	9/7/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-12B	9/7/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-12B	9/7/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-12B	9/7/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-12B	9/7/2018	2-Butanone	4.3	10	2.5	5565	ug/L
EP-12B	9/7/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-12B	9/7/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-12B	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-12B	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-12B	9/7/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-12B	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-12B	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-12B	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-12B	9/7/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-12B	9/7/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-12B	9/7/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-12B	9/7/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-12B	9/7/2018	Styrene	ND	1	0.5	100	ug/L
EP-12B	9/7/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-12B	9/7/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-12B	9/7/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-12B	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-12B	9/7/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-12B	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-12B	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-12B	9/7/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-12B	9/7/2018	Toluene	ND	1	0.34	1000	ug/L
EP-12B	9/7/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-12B	9/7/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-12B	9/7/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-12B	9/7/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-12B	9/7/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-12B	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-12B	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-12B	9/7/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-12B	9/7/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-12B	9/7/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-12B	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-12B	9/7/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-12B	9/7/2018	MTBE	ND	1	0.64	143	ug/L
EP-12B	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-12B	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-12B	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-12B	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-12B	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-12B	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-12B	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-12B	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-12B	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-12B	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-12B	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-12B	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-12B	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-12B	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-12B	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-12B	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-12B	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-12B	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-12B	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-12B	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-12B	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-12B	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-12B	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-12B	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-12B	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-12B	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-12B	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-12B	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-12B	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-12B	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-12B	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-12B	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-12B	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-12B	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-12B	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-12B	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-12B	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-12B	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-12B	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-12B	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-12B	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-12B	4/29/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-12B	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-12B	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-12B	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-12B	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-12B	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-12B	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-12B	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-12B	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-12B	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-12B	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-12B	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-12B	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-12B	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-12B	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-12B	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-12B	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-12B	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-12B	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-12B	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-12B	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-12B	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-12B	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-12B	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-12B	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-12B	11/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
EP-12B	11/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
EP-12B	11/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
EP-12B	11/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
EP-12B	11/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
EP-12B	11/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
EP-12B	11/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
EP-12B	11/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
EP-12B	11/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
EP-12B	11/21/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
EP-12B	11/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
EP-12B	11/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
EP-12B	11/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
EP-12B	11/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
EP-12B	11/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
EP-12B	11/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
EP-12B	11/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
EP-12B	11/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
EP-12B	11/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
EP-12B	11/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
EP-12B	11/21/2019	2-Butanone	17	50	10.447083	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
EP-12B	11/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
EP-12B	11/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
EP-12B	11/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
EP-12B	11/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
EP-12B	11/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
EP-12B	11/21/2019	Acetone	ND	50	5.996982	14064	ug/L
EP-12B	11/21/2019	Benzene	1.2	5	0.833195	5	ug/L
EP-12B	11/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
EP-12B	11/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
EP-12B	11/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
EP-12B	11/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
EP-12B	11/21/2019	Carbon Disulfide	31	50	2.262784	810	ug/L
EP-12B	11/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
EP-12B	11/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
EP-12B	11/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
EP-12B	11/21/2019	Chloroform	ND	5	0.609453	100	ug/L
EP-12B	11/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
EP-12B	11/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
EP-12B	11/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
EP-12B	11/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
EP-12B	11/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
EP-12B	11/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
EP-12B	11/21/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
EP-12B	11/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
EP-12B	11/21/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
EP-12B	11/21/2019	MTBE	ND	5	2.280475	143	ug/L
EP-12B	11/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
EP-12B	11/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
EP-12B	11/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
EP-12B	11/21/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
EP-12B	11/21/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
EP-12B	11/21/2019	Styrene	ND	5	0.956617	100	ug/L
EP-12B	11/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
EP-12B	11/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
EP-12B	11/21/2019	Toluene	ND	5	1.752181	1000	ug/L
EP-12B	11/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
EP-12B	11/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
EP-12B	11/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
EP-12B	11/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
EP-12B	11/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
EP-12B	11/21/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
EP-12B	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-12B	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-12B	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-12B	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-12B	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-12B	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-12B	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-12B	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-12B	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-12B	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-12B	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-12B	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-12B	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-12B	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-12B	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-12B	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-12B	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-12B	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-12B	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-12B	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-12B	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-12B	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-12B	9/18/2020	2-Butanone	1.8	10	1.1	5565	ug/L
EP-12B	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-12B	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-12B	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-12B	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-12B	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-12B	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-12B	9/18/2020	Acetone	24	10	2.3	14064	ug/L
EP-12B	9/18/2020	Benzene	ND	1	0.23	5	ug/L
EP-12B	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-12B	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-12B	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-12B	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-12B	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-12B	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-12B	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-12B	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
EP-12B	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-12B	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-12B	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-12B	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-12B	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-12B	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-12B	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-12B	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-12B	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-12B	9/18/2020	MTBE	ND	1	0.39	143	ug/L
EP-12B	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-12B	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-12B	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-12B	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-12B	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-12B	9/18/2020	Styrene	ND	1	0.13	100	ug/L
EP-12B	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-12B	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-12B	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
EP-12B	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-12B	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-12B	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-12B	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-12B	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-12B	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-12B	12/22/2020	Acetone	ND	25	10	14064	ug/L
EP-12B	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-12B	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-12B	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-12B	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-12B	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-12B	12/22/2020	Carbon Disulfide	1.21	1	0.5	810	ug/L
EP-12B	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-12B	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-12B	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-12B	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-12B	12/22/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-12B	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-12B	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-12B	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-12B	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12B	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-12B	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-12B	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-12B	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-12B	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-12B	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-12B	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-12B	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-12B	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-12B	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-12B	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-12B	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-12B	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-12B	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-12B	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-12B	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-12B	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-12B	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-12B	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-12B	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-12B	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-12B	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-12B	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-12B	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-12B	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-12B	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-12B	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-12B	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-12B	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-12B	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-12B	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-12B	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-12B	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-12B	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-12B	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-12B	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-12B	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-12B	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-12B	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-12B	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-12B	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-12B	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-12B	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-12B	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-2	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-2	5/29/2012	Acetone	430	100	21	14064	ug/L
EP-2	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-2	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-2	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-2	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-2	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-2	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-2	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-2	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-2	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-2	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-2	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-2	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-2	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-2	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-2	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-2	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-2	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-2	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-2	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-2	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-2	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-2	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-2	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-2	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-2	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-2	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-2	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-2	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-2	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-2	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-2	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-2	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-2	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-2	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-2	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-2	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-2	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-2	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-2	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-2	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-2	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-2	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-2	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-2	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-2	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-2	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-2	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-2	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-2	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-2	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-2	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-2	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-2	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-2	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-2	11/6/2012	Acetone	2400	500	75	14064	ug/L
EP-2	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-2	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-2	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-2	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-2	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-2	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-2	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-2	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-2	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-2	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-2	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-2	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-2	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-2	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-2	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-2	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-2	11/6/2012	2-Butanone	380	100	22	5565	ug/L
EP-2	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-2	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-2	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-2	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-2	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-2	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-2	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-2	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-2	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-2	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-2	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-2	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-2	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-2	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-2	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-2	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-2	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-2	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-2	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-2	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-2	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-2	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-2	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-2	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-2	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-2	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-2	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-2	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-2	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-2	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-2	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-2	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-2	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-2	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-2	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-2	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-2	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-2	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-2	5/28/2013	Acetone	4600	500	86	14064	ug/L
EP-2	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-2	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-2	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-2	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-2	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-2	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-2	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-2	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-2	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-2	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-2	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-2	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-2	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-2	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-2	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-2	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	2-Butanone	470	100	10	5565	ug/L
EP-2	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-2	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-2	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-2	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-2	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-2	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-2	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-2	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-2	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-2	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-2	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-2	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-2	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-2	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-2	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-2	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-2	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-2	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-2	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-2	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-2	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-2	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-2	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-2	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-2	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-2	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-2	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-2	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-2	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-2	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-2	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-2	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-2	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-2	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-2	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-2	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-2	10/15/2013	Acetone	600	100	17	14064	ug/L
EP-2	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-2	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-2	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-2	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-2	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-2	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-2	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-2	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-2	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-2	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-2	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-2	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-2	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-2	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-2	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-2	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-2	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-2	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-2	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-2	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-2	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-2	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-2	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-2	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-2	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-2	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-2	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-2	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-2	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-2	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-2	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-2	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-2	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-2	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-2	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-2	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-2	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-2	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-2	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-2	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-2	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-2	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-2	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-2	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-2	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-2	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-2	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-2	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-2	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-2	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-2	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-2	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-2	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-2	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-2	3/5/2014	Acetone	670	100	49	14064	ug/L
EP-2	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-2	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-2	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-2	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-2	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-2	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-2	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-2	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-2	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-2	3/5/2014	Carbon Disulfide	110	100	7.4	810	ug/L
EP-2	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-2	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-2	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-2	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-2	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-2	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-2	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-2	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-2	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-2	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-2	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-2	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-2	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-2	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-2	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-2	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-2	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-2	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-2	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-2	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-2	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-2	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-2	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-2	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-2	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-2	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-2	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-2	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-2	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-2	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-2	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-2	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-2	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-2	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-2	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-2	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-2	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-2	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-2	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-2	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-2	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-2	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-2	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-2	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-2	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-2	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-2	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-2	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-2	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-2	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-2	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-2	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-2	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-2	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-2	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-2	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-2	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-2	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-2	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-2	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-2	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-2	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-2	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-2	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-2	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-2	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-2	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-2	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-2	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-2	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-2	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-2	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-2	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-2	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-2	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-2	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-2	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-2	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-2	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-2	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-2	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-2	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-2	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-2	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-2	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-2	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-2	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-2	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-2	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-2	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-2	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-2	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-2	3/24/2015	Acetone	520	100	9.4	14064	ug/L
EP-2	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-2	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-2	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-2	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-2	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-2	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-2	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-2	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-2	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-2	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-2	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-2	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-2	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-2	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-2	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-2	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-2	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-2	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-2	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-2	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-2	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-2	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-2	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-2	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-2	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-2	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-2	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-2	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-2	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-2	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-2	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-2	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-2	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-2	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-2	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-2	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-2	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-2	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-2	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-2	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-2	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-2	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-2	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-2	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-2	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-2	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-2	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-2	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-2	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-2	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-2	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-2	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-2	9/1/2015	Benzene	**10**	5	0.65	5	ug/L
EP-2	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-2	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-2	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-2	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-2	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-2	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-2	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-2	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-2	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-2	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-2	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-2	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-2	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-2	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-2	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-2	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-2	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-2	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-2	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-2	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-2	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-2	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-2	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-2	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-2	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-2	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-2	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-2	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-2	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-2	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-2	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-2	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-2	9/1/2015	Toluene	22	10	1.1	1000	ug/L
EP-2	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-2	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-2	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-2	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-2	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-2	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-2	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-2	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-2	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-2	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-2	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-2	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-2	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-2	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-2	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-2	8/29/2016	Acetone	140	10	4.9	14064	ug/L
EP-2	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-2	8/29/2016	Benzene	3.9	1	0.096	5	ug/L
EP-2	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-2	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-2	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-2	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-2	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-2	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-2	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-2	8/29/2016	Carbon Disulfide	17	10	0.6	810	ug/L
EP-2	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-2	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-2	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-2	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-2	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-2	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-2	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-2	8/29/2016	2-Butanone	8.1	10	0.74	5565	ug/L
EP-2	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-2	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-2	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-2	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-2	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-2	8/29/2016	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
EP-2	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-2	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-2	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-2	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-2	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-2	8/29/2016	Ethylbenzene	0.43	1	0.11	700	ug/L
EP-2	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-2	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-2	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-2	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-2	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-2	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-2	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-2	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-2	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-2	8/29/2016	Toluene	2.9	1	0.12	1000	ug/L
EP-2	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-2	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-2	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-2	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-2	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-2	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-2	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-2	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-2	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-2	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-2	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-2	8/29/2016	Xylenes, Total	2.4	1.5	0.37	620	ug/L
EP-2	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-2	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-2	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-2	3/30/2017	Acetone	140	50	8.8	14064	ug/L
EP-2	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-2	3/30/2017	Benzene	**13**	5	0.96	5	ug/L
EP-2	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-2	3/30/2017	Bromomethane	**14**	15	7.8	7.54	ug/L
EP-2	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-2	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-2	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-2	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-2	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-2	3/30/2017	Carbon Disulfide	27	50	6	810	ug/L
EP-2	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-2	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-2	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-2	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-2	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-2	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-2	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-2	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-2	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-2	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-2	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-2	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-2	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-2	3/30/2017	1,2,4-Trimethylbenzene	8.5	5	1	56	ug/L
EP-2	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-2	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-2	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-2	3/30/2017	Isopropylbenzene	2.1	5	0.98	447	ug/L
EP-2	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-2	3/30/2017	Ethylbenzene	6.8	5	1.1	700	ug/L
EP-2	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-2	3/30/2017	n-Propylbenzene	3.3	5	1.3	660	ug/L
EP-2	3/30/2017	n-Butylbenzene	3.5	15	1.6	1000	ug/L
EP-2	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-2	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-2	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-2	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-2	3/30/2017	1,3,5-Trimethylbenzene	3.1	5	1.2	60	ug/L
EP-2	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-2	3/30/2017	Toluene	22	5	0.89	1000	ug/L
EP-2	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-2	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-2	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-2	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-2	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-2	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-2	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-2	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-2	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-2	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-2	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-2	3/30/2017	Xylenes, Total	23	7.5	3.2	620	ug/L
EP-2	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-2	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-2	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-2	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-2	10/24/2017	Acetone	82	50	8.2	14064	ug/L
EP-2	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-2	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-2	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-2	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-2	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-2	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-2	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-2	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-2	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-2	10/24/2017	Carbon Disulfide	13	50	4	810	ug/L
EP-2	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-2	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-2	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-2	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-2	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-2	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-2	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-2	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-2	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-2	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-2	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-2	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-2	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-2	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-2	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-2	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-2	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-2	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-2	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-2	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-2	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-2	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-2	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-2	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-2	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-2	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-2	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-2	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-2	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-2	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-2	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-2	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-2	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-2	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-2	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-2	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-2	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-2	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-2	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-2	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-2	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-2	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-2	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-2	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-2	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-2	2/21/2018	Acetone	460	50	4.1	14064	ug/L
EP-2	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-2	2/21/2018	Benzene	**21**	5	0.31	5	ug/L
EP-2	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-2	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-2	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-2	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-2	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-2	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-2	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-2	2/21/2018	Carbon Disulfide	25	50	2	810	ug/L
EP-2	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-2	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-2	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-2	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-2	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-2	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-2	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-2	2/21/2018	2-Butanone	ND	50	5.7	5565	ug/L
EP-2	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-2	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-2	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-2	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-2	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-2	2/21/2018	1,2,4-Trimethylbenzene	12	5	0.56	56	ug/L
EP-2	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-2	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-2	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-2	2/21/2018	Isopropylbenzene	1.1	5	0.26	447	ug/L
EP-2	2/21/2018	p-Isopropyltoluene	0.86	5	0.48	NA	ug/L
EP-2	2/21/2018	Ethylbenzene	5.7	5	0.47	700	ug/L
EP-2	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-2	2/21/2018	n-Propylbenzene	2.3	5	0.37	660	ug/L
EP-2	2/21/2018	n-Butylbenzene	1.6	15	0.65	1000	ug/L
EP-2	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-2	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-2	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-2	2/21/2018	1,3,5-Trimethylbenzene	3.9	5	0.44	60	ug/L
EP-2	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-2	2/21/2018	Toluene	34	5	0.32	1000	ug/L
EP-2	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-2	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-2	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-2	2/21/2018	sec-Butylbenzene	0.87	5	0.55	2000	ug/L
EP-2	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-2	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-2	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-2	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-2	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-2	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-2	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-2	2/21/2018	Xylenes, Total	35	7.5	1.6	620	ug/L
EP-2	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-2	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-2	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-2	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-2	9/6/2018	Acetone	110	10	1.6	14064	ug/L
EP-2	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-2	9/6/2018	Benzene	1.2	1	0.35	5	ug/L
EP-2	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-2	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-2	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-2	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-2	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-2	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-2	9/6/2018	Methylene Chloride	0.57	3	0.41	5	ug/L
EP-2	9/6/2018	Carbon Disulfide	2.3	10	0.77	810	ug/L
EP-2	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-2	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-2	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-2	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-2	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-2	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-2	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-2	9/6/2018	2-Butanone	5.4	10	2.5	5565	ug/L
EP-2	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-2	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-2	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-2	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-2	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-2	9/6/2018	1,2,4-Trimethylbenzene	0.53	1	0.51	56	ug/L
EP-2	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-2	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-2	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-2	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-2	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-2	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-2	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-2	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-2	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-2	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-2	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-2	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-2	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-2	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-2	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-2	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-2	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-2	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-2	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-2	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-2	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-2	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-2	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-2	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-2	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-2	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-2	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-2	9/6/2018	Xylenes, Total	1.8	1.5	1.3	620	ug/L
EP-2	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-2	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-2	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-2	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-2	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-2	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-2	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-2	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-2	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-2	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-2	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-2	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-2	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-2	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-2	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-2	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-2	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-2	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-2	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-2	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-2	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-2	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-2	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-2	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-2	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-2	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-2	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-2	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-2	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-2	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-2	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-2	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-2	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-2	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-2	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-2	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-2	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-2	4/30/2019	Carbon Disulfide	4.9	100	4.525567	810	ug/L
EP-2	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-2	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-2	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-2	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-2	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-2	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-2	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-2	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-2	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-2	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-2	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-2	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-2	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-2	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-2	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-2	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-2	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-2	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-2	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-2	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-2	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-2	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-2	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-2	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-2	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-2	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-2	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-2	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-2	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-2	11/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-2	11/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-2	11/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-2	11/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-2	11/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-2	11/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-2	11/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-2	11/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-2	11/21/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-2	11/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-2	11/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-2	11/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-2	11/21/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-2	11/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-2	11/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-2	11/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-2	11/21/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-2	11/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-2	11/21/2019	2-Butanone	46	100	20.894166	5565	ug/L
EP-2	11/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-2	11/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-2	11/21/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-2	11/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-2	11/21/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-2	11/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-2	11/21/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-2	11/21/2019	Benzene	**18**	10	1.666391	5	ug/L
EP-2	11/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-2	11/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-2	11/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-2	11/21/2019	Bromomethane	**11**	30	2.730824	7.54	ug/L
EP-2	11/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-2	11/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-2	11/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-2	11/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-2	11/21/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-2	11/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-2	11/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-2	11/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-2	11/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-2	11/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-2	11/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-2	11/21/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-2	11/21/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-2	11/21/2019	MTBE	ND	10	4.56095	143	ug/L
EP-2	11/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-2	11/21/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-2	11/21/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-2	11/21/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-2	11/21/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-2	11/21/2019	Styrene	ND	10	1.913234	100	ug/L
EP-2	11/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-2	11/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-2	11/21/2019	Toluene	9.9	10	3.504362	1000	ug/L
EP-2	11/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-2	11/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-2	11/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-2	11/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-2	11/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-2	11/21/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-2	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
EP-2	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
EP-2	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
EP-2	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
EP-2	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
EP-2	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
EP-2	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
EP-2	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
EP-2	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
EP-2	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-2	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
EP-2	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
EP-2	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
EP-2	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
EP-2	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
EP-2	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
EP-2	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
EP-2	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-2	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-2	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
EP-2	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
EP-2	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
EP-2	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
EP-2	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
EP-2	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
EP-2	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
EP-2	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-2	9/16/2020	Acetone	590	100	23	14064	ug/L
EP-2	9/16/2020	Benzene	ND	5	2.3	5	ug/L
EP-2	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
EP-2	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
EP-2	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
EP-2	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
EP-2	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
EP-2	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
EP-2	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-2	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
EP-2	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
EP-2	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
EP-2	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
EP-2	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
EP-2	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
EP-2	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
EP-2	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
EP-2	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
EP-2	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
EP-2	9/16/2020	MTBE	ND	10	3.9	143	ug/L
EP-2	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
EP-2	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-2	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
EP-2	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
EP-2	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
EP-2	9/16/2020	Styrene	ND	10	1.3	100	ug/L
EP-2	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
EP-2	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
EP-2	9/16/2020	Toluene	ND	10	2	1000	ug/L
EP-2	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
EP-2	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
EP-2	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
EP-2	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
EP-2	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-2	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
EP-2	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-2	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-2	9/17/2020	Acetone	2.4	10	2.3	14064	ug/L
EP-2	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-2	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-2	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-2	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-2	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-2	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-2	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-2	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-2	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-2	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-2	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-2	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-2	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-2	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-2	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-2	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-2	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-2	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-2	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-2	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-2	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-2	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-2	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-2	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-2	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-2	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-2	9/17/2020	2-Butanone	3.4	10	1.1	5565	ug/L
EP-2	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-2	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-2	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-2	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-2	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-2	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-2	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-2	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-2	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-2	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-2	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-2	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-2	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-2	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-2	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-2	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-2	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-2	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-2	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-2	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-2	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-2	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-2	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-2	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-2	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-2	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-2	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-2	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-2	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-2	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-2	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-2	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-2	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-2	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-2	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-2	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-2	12/21/2020	Carbon Disulfide	5.75	1	0.5	810	ug/L
EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-3	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-3	5/29/2012	Acetone	210	100	21	14064	ug/L
EP-3	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-3	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-3	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-3	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-3	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-3	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-3	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-3	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-3	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-3	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-3	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-3	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-3	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-3	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-3	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-3	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-3	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-3	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-3	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-3	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-3	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-3	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-3	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-3	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-3	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-3	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-3	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-3	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-3	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-3	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-3	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-3	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-3	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-3	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-3	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-3	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-3	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-3	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-3	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-3	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-3	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-3	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-3	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-3	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-3	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-3	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-3	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-3	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-3	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-3	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-3	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-3	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-3	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-3	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-3	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/6/2012	Acetone	240	100	15	14064	ug/L
EP-3	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-3	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-3	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-3	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-3	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-3	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-3	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-3	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-3	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	11/6/2012	Carbon Disulfide	380	100	8.4	810	ug/L
EP-3	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-3	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-3	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-3	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-3	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-3	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-3	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-3	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-3	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-3	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-3	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-3	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-3	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-3	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-3	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-3	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-3	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-3	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-3	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-3	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-3	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-3	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-3	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-3	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-3	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-3	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-3	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-3	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-3	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-3	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-3	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-3	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-3	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-3	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-3	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-3	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-3	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-3	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-3	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-3	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-3	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-3	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-3	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-3	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-3	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-3	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	5/28/2013	Acetone	200	100	17	14064	ug/L
EP-3	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-3	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-3	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-3	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-3	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-3	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	5/28/2013	2-Butanone	ND	100	10	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-3	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-3	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-3	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-3	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-3	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-3	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-3	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-3	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-3	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	10/15/2013	Acetone	160	100	17	14064	ug/L
EP-3	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-3	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-3	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-3	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-3	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-3	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-3	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-3	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-3	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-3	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-3	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-3	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-3	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-3	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-3	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-3	3/5/2014	Acetone	300	100	49	14064	ug/L
EP-3	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-3	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-3	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-3	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-3	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-3	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-3	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-3	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-3	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-3	3/5/2014	Carbon Disulfide	140	100	8	810	ug/L
EP-3	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-3	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-3	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-3	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-3	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-3	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-3	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-3	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-3	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-3	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-3	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-3	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-3	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-3	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-3	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-3	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-3	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-3	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-3	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-3	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-3	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-3	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-3	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-3	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-3	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-3	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-3	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-3	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-3	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-3	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-3	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-3	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-3	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-3	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-3	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-3	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-3	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-3	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-3	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-3	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-3	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-3	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-3	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-3	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-3	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-3	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-3	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-3	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-3	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-3	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-3	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-3	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-3	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-3	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-3	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-3	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-3	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-3	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-3	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-3	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-3	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-3	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-3	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-3	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-3	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-3	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-3	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-3	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-3	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-3	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-3	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-3	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-3	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-3	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-3	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-3	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-3	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-3	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-3	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-3	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-3	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-3	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-3	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-3	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-3	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-3	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-3	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-3	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-3	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-3	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-3	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-3	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-3	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-3	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-3	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-3	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-3	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-3	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-3	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-3	3/24/2015	Acetone	280	100	9.4	14064	ug/L
EP-3	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-3	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-3	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-3	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-3	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-3	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-3	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-3	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-3	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-3	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-3	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-3	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-3	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-3	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-3	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-3	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-3	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-3	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-3	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-3	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-3	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-3	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-3	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-3	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-3	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-3	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-3	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-3	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-3	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-3	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-3	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-3	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-3	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-3	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-3	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-3	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-3	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-3	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-3	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-3	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-3	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-3	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-3	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-3	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-3	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-3	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-3	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-3	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-3	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-3	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-3	9/1/2015	Benzene	**11**	5	0.65	5	ug/L
EP-3	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-3	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-3	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-3	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-3	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-3	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-3	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-3	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-3	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-3	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-3	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-3	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-3	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-3	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-3	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-3	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-3	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-3	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-3	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-3	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-3	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-3	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-3	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-3	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-3	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-3	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-3	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-3	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-3	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-3	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-3	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-3	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-3	9/1/2015	Toluene	19	10	1.1	1000	ug/L
EP-3	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-3	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-3	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-3	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-3	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-3	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-3	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-3	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-3	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-3	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-3	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-3	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-3	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-3	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-3	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-3	8/29/2016	Acetone	50	10	4.9	14064	ug/L
EP-3	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-3	8/29/2016	Benzene	**8.4**	1	0.096	5	ug/L
EP-3	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-3	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-3	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-3	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-3	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-3	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-3	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-3	8/29/2016	Carbon Disulfide	21	10	0.6	810	ug/L
EP-3	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-3	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-3	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-3	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-3	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-3	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-3	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-3	8/29/2016	2-Butanone	4	10	0.74	5565	ug/L
EP-3	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-3	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-3	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-3	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-3	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-3	8/29/2016	1,2,4-Trimethylbenzene	0.28	1	0.11	56	ug/L
EP-3	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-3	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-3	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-3	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-3	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-3	8/29/2016	Ethylbenzene	0.84	1	0.11	700	ug/L
EP-3	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-3	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-3	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-3	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-3	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-3	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-3	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-3	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-3	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-3	8/29/2016	Toluene	5.2	1	0.12	1000	ug/L
EP-3	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-3	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-3	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-3	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-3	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-3	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-3	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-3	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-3	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-3	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-3	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-3	8/29/2016	Xylenes, Total	3.9	1.5	0.37	620	ug/L
EP-3	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-3	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-3	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-3	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/30/2017	Acetone	120	50	8.8	14064	ug/L
EP-3	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-3	3/30/2017	Benzene	4	5	0.96	5	ug/L
EP-3	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-3	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-3	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-3	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-3	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-3	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-3	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-3	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-3	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-3	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-3	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-3	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-3	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-3	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-3	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-3	3/30/2017	2-Butanone	27	50	11	5565	ug/L
EP-3	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-3	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-3	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-3	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-3	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-3	3/30/2017	1,2,4-Trimethylbenzene	4.1	5	1	56	ug/L
EP-3	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-3	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-3	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-3	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-3	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-3	3/30/2017	Ethylbenzene	3.2	5	1.1	700	ug/L
EP-3	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-3	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-3	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-3	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-3	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-3	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-3	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-3	3/30/2017	1,3,5-Trimethylbenzene	1.6	5	1.2	60	ug/L
EP-3	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-3	3/30/2017	Toluene	6.9	5	0.89	1000	ug/L
EP-3	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-3	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-3	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-3	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-3	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-3	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-3	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-3	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-3	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-3	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-3	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-3	3/30/2017	Xylenes, Total	9.2	7.5	3.2	620	ug/L
EP-3	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-3	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-3	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-3	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-3	10/24/2017	Acetone	91	50	8.2	14064	ug/L
EP-3	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-3	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-3	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-3	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-3	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-3	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-3	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-3	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-3	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-3	10/24/2017	Carbon Disulfide	14	50	4	810	ug/L
EP-3	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-3	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-3	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-3	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-3	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-3	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-3	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-3	10/24/2017	2-Butanone	ND	50	11	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-3	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-3	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-3	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-3	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-3	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-3	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-3	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-3	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-3	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-3	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-3	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-3	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-3	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-3	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-3	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-3	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-3	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-3	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-3	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-3	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-3	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-3	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-3	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-3	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-3	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-3	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-3	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-3	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-3	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-3	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-3	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-3	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-3	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-3	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-3	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-3	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-3	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-3	2/21/2018	Acetone	310	50	4.1	14064	ug/L
EP-3	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-3	2/21/2018	Benzene	3.4	5	0.31	5	ug/L
EP-3	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-3	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-3	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-3	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-3	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-3	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-3	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-3	2/21/2018	Carbon Disulfide	23	50	2	810	ug/L
EP-3	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-3	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-3	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-3	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-3	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-3	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-3	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-3	2/21/2018	2-Butanone	55	50	5.7	5565	ug/L
EP-3	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-3	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-3	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-3	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-3	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-3	2/21/2018	1,2,4-Trimethylbenzene	2	5	0.56	56	ug/L
EP-3	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-3	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-3	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-3	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-3	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-3	2/21/2018	Ethylbenzene	0.82	5	0.47	700	ug/L
EP-3	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-3	2/21/2018	n-Propylbenzene	0.51	5	0.37	660	ug/L
EP-3	2/21/2018	n-Butylbenzene	0.69	15	0.65	1000	ug/L
EP-3	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-3	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-3	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-3	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	2/21/2018	1,3,5-Trimethylbenzene	0.58	5	0.44	60	ug/L
EP-3	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-3	2/21/2018	Toluene	5.4	5	0.32	1000	ug/L
EP-3	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-3	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-3	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-3	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-3	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-3	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-3	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-3	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-3	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-3	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-3	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-3	2/21/2018	Xylenes, Total	4.8	7.5	1.6	620	ug/L
EP-3	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-3	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-3	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-3	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-3	9/6/2018	Acetone	65	10	1.6	14064	ug/L
EP-3	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-3	9/6/2018	Benzene	0.39	1	0.35	5	ug/L
EP-3	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-3	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-3	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-3	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-3	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-3	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-3	9/6/2018	Methylene Chloride	0.64	3	0.41	5	ug/L
EP-3	9/6/2018	Carbon Disulfide	3.5	10	0.77	810	ug/L
EP-3	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-3	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-3	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-3	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-3	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-3	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-3	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-3	9/6/2018	2-Butanone	4.6	10	2.5	5565	ug/L
EP-3	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-3	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-3	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-3	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-3	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-3	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-3	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-3	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-3	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-3	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-3	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-3	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-3	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-3	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-3	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-3	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-3	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-3	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-3	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-3	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-3	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-3	9/6/2018	Toluene	0.54	1	0.34	1000	ug/L
EP-3	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-3	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-3	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-3	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-3	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-3	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-3	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-3	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-3	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-3	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-3	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-3	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-3	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-3	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-3	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-3	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-3	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-3	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-3	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	4/30/2019	Carbon Disulfide	6.4	100	4.525567	810	ug/L
EP-3	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-3	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-3	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-3	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	4/30/2019	Carbon Disulfide	5.9	100	4.525567	810	ug/L
EP-3	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	11/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-3	11/20/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-3	11/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-3	11/20/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-3	11/20/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-3	11/20/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-3	11/20/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-3	11/20/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-3	11/20/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-3	11/20/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-3	11/20/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-3	11/20/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-3	11/20/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-3	11/20/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-3	11/20/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-3	11/20/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-3	11/20/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-3	11/20/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-3	11/20/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-3	11/20/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-3	11/20/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-3	11/20/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-3	11/20/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/20/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-3	11/20/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-3	11/20/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-3	11/20/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-3	11/20/2019	Acetone	180	100	11.993964	14064	ug/L
EP-3	11/20/2019	Benzene	ND	5	1.666391	5	ug/L
EP-3	11/20/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-3	11/20/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-3	11/20/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-3	11/20/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-3	11/20/2019	Carbon Disulfide	29	100	4.525567	810	ug/L
EP-3	11/20/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-3	11/20/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-3	11/20/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-3	11/20/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-3	11/20/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-3	11/20/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-3	11/20/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-3	11/20/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-3	11/20/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-3	11/20/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-3	11/20/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-3	11/20/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-3	11/20/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-3	11/20/2019	MTBE	ND	10	4.56095	143	ug/L
EP-3	11/20/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-3	11/20/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-3	11/20/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-3	11/20/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-3	11/20/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-3	11/20/2019	Styrene	ND	10	1.913234	100	ug/L
EP-3	11/20/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-3	11/20/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-3	11/20/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-3	11/20/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-3	11/20/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-3	11/20/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-3	11/20/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-3	11/20/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-3	11/20/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-3	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
EP-3	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
EP-3	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
EP-3	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
EP-3	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
EP-3	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
EP-3	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
EP-3	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
EP-3	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
EP-3	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
EP-3	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-3	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
EP-3	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
EP-3	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
EP-3	9/16/2020	1,2-Dichloroethane	ND	0.5	2.2	5	ug/L
EP-3	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
EP-3	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
EP-3	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
EP-3	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-3	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-3	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
EP-3	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
EP-3	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
EP-3	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-3	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
EP-3	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
EP-3	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
EP-3	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
EP-3	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-3	9/16/2020	Acetone	500	100	23	14064	ug/L
EP-3	9/16/2020	Benzene	ND	5	2.3	5	ug/L
EP-3	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
EP-3	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
EP-3	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
EP-3	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
EP-3	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
EP-3	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-3	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
EP-3	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
EP-3	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
EP-3	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
EP-3	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
EP-3	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
EP-3	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
EP-3	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
EP-3	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
EP-3	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
EP-3	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
EP-3	9/16/2020	MTBE	ND	10	3.9	143	ug/L
EP-3	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
EP-3	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-3	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
EP-3	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
EP-3	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
EP-3	9/16/2020	Styrene	ND	10	1.3	100	ug/L
EP-3	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
EP-3	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
EP-3	9/16/2020	Toluene	ND	10	2	1000	ug/L
EP-3	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
EP-3	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
EP-3	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
EP-3	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
EP-3	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-3	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
EP-3	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-3	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-3	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-3	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-3	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-3	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-3	12/21/2020	Carbon Disulfide	1.54	1	0.5	810	ug/L
EP-3	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-3	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-3	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-3	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-3	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-3	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-3	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-3	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-3	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-3	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-3	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-3	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-3	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-3	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-3	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-3	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-3	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-3	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-3	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-3	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-3	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-3	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-3	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-3	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-3	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-3	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-3	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-3	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-3	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-3	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-3	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-3	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-3	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-3	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-3	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-3	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-3	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-3	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-3	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-3	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-3	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-3	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-3	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-3	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-3	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-3	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-3	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-3	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-3	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-3	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-3	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-3	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-3	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-3	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-3	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-3	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-4	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-4	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-4	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-4	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-4	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-4	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-4	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-4	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-4	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-4	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-4	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-4	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-4	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-4	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-4	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-4	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-4	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-4	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-4	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-4	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-4	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-4	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-4	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-4	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-4	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-4	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-4	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-4	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-4	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-4	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-4	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-4	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-4	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-4	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-4	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-4	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-4	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-4	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-4	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-4	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-4	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-4	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-4	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-4	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-4	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-4	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-4	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-4	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-4	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-4	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-4	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-4	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-4	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-4	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-4	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-4	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-4	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-4	11/6/2012	Acetone	130	100	15	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-4	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-4	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-4	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-4	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-4	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-4	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-4	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-4	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	11/6/2012	Carbon Disulfide	780	100	8.4	810	ug/L
EP-4	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-4	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-4	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-4	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-4	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-4	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-4	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-4	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-4	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-4	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-4	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-4	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-4	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-4	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-4	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-4	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-4	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-4	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-4	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-4	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-4	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-4	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-4	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-4	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-4	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-4	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-4	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-4	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-4	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-4	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-4	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-4	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-4	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-4	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-4	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-4	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-4	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-4	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-4	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-4	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-4	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-4	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-4	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-4	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-4	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-4	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	5/28/2013	Acetone	120	100	17	14064	ug/L
EP-4	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-4	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-4	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-4	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-4	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-4	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-4	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-4	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-4	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-4	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-4	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-4	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-4	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-4	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-4	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-4	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-4	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	10/15/2013	Acetone	120	100	17	14064	ug/L
EP-4	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-4	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-4	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-4	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-4	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-4	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-4	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-4	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-4	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-4	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-4	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-4	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-4	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-4	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-4	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-4	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-4	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-4	3/5/2014	Acetone	310	100	49	14064	ug/L
EP-4	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-4	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-4	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-4	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-4	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-4	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-4	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-4	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-4	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-4	3/5/2014	Carbon Disulfide	150	100	8	810	ug/L
EP-4	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-4	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-4	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-4	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-4	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-4	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-4	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-4	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-4	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-4	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-4	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-4	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-4	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-4	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-4	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-4	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-4	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-4	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-4	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-4	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-4	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-4	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-4	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-4	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-4	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-4	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-4	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-4	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-4	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-4	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-4	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-4	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-4	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-4	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-4	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-4	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-4	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-4	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-4	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-4	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-4	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-4	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-4	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-4	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-4	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-4	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-4	11/12/2014	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-4	11/12/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-4	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-4	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-4	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-4	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-4	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-4	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-4	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-4	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-4	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-4	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-4	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-4	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-4	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-4	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-4	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-4	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-4	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-4	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-4	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-4	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-4	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-4	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-4	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-4	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-4	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-4	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-4	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-4	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-4	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-4	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-4	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-4	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-4	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-4	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-4	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-4	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-4	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-4	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-4	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-4	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-4	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-4	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-4	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-4	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-4	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-4	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-4	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-4	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-4	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-4	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-4	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-4	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-4	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-4	3/24/2015	Acetone	ND	100	9.4	14064	ug/L
EP-4	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-4	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-4	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-4	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-4	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-4	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-4	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-4	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-4	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-4	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-4	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-4	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-4	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-4	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-4	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-4	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-4	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-4	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-4	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-4	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-4	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-4	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-4	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-4	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-4	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-4	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-4	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-4	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-4	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-4	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-4	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-4	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-4	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-4	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-4	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-4	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-4	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-4	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-4	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-4	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-4	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-4	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-4	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-4	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-4	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-4	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-4	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-4	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-4	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-4	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-4	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-4	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-4	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-4	9/1/2015	Benzene	**11**	5	0.65	5	ug/L
EP-4	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-4	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-4	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-4	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-4	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-4	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-4	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-4	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-4	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-4	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-4	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-4	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-4	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-4	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-4	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-4	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-4	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-4	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-4	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-4	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-4	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-4	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-4	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-4	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-4	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-4	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-4	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-4	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-4	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-4	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-4	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-4	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-4	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-4	9/1/2015	Toluene	21	10	1.1	1000	ug/L
EP-4	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-4	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-4	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-4	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-4	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-4	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-4	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-4	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-4	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-4	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-4	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-4	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-4	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-4	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-4	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-4	8/29/2016	Acetone	22	10	4.9	14064	ug/L
EP-4	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-4	8/29/2016	Benzene	2.5	1	0.096	5	ug/L
EP-4	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-4	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-4	8/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
EP-4	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-4	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-4	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-4	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-4	8/29/2016	Carbon Disulfide	14	10	0.6	810	ug/L
EP-4	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-4	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-4	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-4	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-4	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-4	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-4	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-4	8/29/2016	2-Butanone	1.7	10	0.74	5565	ug/L
EP-4	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-4	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-4	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-4	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-4	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-4	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-4	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-4	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-4	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-4	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-4	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-4	8/29/2016	Ethylbenzene	0.29	1	0.11	700	ug/L
EP-4	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-4	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-4	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-4	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-4	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-4	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-4	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-4	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-4	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-4	8/29/2016	Toluene	1.5	1	0.12	1000	ug/L
EP-4	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-4	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-4	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-4	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-4	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-4	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-4	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-4	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-4	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-4	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-4	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-4	8/29/2016	Xylenes, Total	1.3	1.5	0.37	620	ug/L
EP-4	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-4	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-4	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-4	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-4	3/30/2017	Acetone	130	50	8.8	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-4	3/30/2017	Benzene	**7.1**	5	0.96	5	ug/L
EP-4	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-4	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-4	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-4	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-4	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-4	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-4	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-4	3/30/2017	Carbon Disulfide	23	50	6	810	ug/L
EP-4	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-4	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-4	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-4	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-4	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-4	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-4	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-4	3/30/2017	2-Butanone	26	50	11	5565	ug/L
EP-4	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-4	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-4	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-4	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-4	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-4	3/30/2017	1,2,4-Trimethylbenzene	5.7	5	1	56	ug/L
EP-4	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-4	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-4	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-4	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-4	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-4	3/30/2017	Ethylbenzene	4.5	5	1.1	700	ug/L
EP-4	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-4	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-4	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-4	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-4	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-4	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-4	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-4	3/30/2017	1,3,5-Trimethylbenzene	2.3	5	1.2	60	ug/L
EP-4	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-4	3/30/2017	Toluene	13	5	0.89	1000	ug/L
EP-4	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-4	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-4	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-4	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-4	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-4	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-4	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-4	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-4	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-4	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-4	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-4	3/30/2017	Xylenes, Total	14	7.5	3.2	620	ug/L
EP-4	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-4	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-4	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-4	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-4	10/24/2017	Acetone	94	50	8.2	14064	ug/L
EP-4	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-4	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-4	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-4	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-4	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-4	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-4	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-4	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-4	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-4	10/24/2017	Carbon Disulfide	13	50	4	810	ug/L
EP-4	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-4	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-4	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-4	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-4	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-4	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-4	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-4	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-4	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-4	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-4	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-4	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-4	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-4	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-4	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-4	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-4	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-4	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-4	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-4	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-4	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-4	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-4	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-4	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-4	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-4	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-4	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-4	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-4	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-4	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-4	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-4	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-4	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-4	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-4	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-4	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-4	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-4	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-4	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-4	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-4	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-4	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-4	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-4	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-4	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-4	2/21/2018	Acetone	220	50	4.1	14064	ug/L
EP-4	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-4	2/21/2018	Benzene	1.3	5	0.31	5	ug/L
EP-4	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-4	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-4	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-4	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-4	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-4	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-4	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-4	2/21/2018	Carbon Disulfide	28	50	2	810	ug/L
EP-4	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-4	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-4	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-4	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-4	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-4	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-4	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-4	2/21/2018	2-Butanone	29	50	5.7	5565	ug/L
EP-4	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-4	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-4	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-4	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-4	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-4	2/21/2018	1,2,4-Trimethylbenzene	0.84	5	0.56	56	ug/L
EP-4	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-4	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-4	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-4	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-4	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-4	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-4	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-4	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-4	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-4	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-4	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-4	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-4	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-4	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-4	2/21/2018	Toluene	1.9	5	0.32	1000	ug/L
EP-4	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-4	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-4	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-4	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-4	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-4	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-4	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-4	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-4	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-4	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-4	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-4	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-4	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-4	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-4	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-4	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-4	9/6/2018	Acetone	27	10	1.6	14064	ug/L
EP-4	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-4	9/6/2018	Benzene	ND	1	0.35	5	ug/L
EP-4	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-4	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-4	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-4	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-4	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-4	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-4	9/6/2018	Methylene Chloride	0.54	3	0.41	5	ug/L
EP-4	9/6/2018	Carbon Disulfide	5.2	10	0.77	810	ug/L
EP-4	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-4	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-4	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-4	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-4	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-4	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-4	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-4	9/6/2018	2-Butanone	3.3	10	2.5	5565	ug/L
EP-4	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-4	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-4	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-4	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-4	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-4	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-4	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-4	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-4	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-4	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-4	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-4	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-4	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-4	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-4	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-4	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-4	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-4	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-4	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-4	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-4	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-4	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-4	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-4	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-4	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-4	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-4	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-4	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-4	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-4	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-4	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-4	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-4	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-4	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-4	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-4	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-4	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-4	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-4	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-4	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-4	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-4	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-4	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-4	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-4	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-4	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-4	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-4	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-4	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-4	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-4	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-4	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-4	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-4	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-4	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-4	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-4	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-4	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-4	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-4	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-4	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-4	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-4	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-4	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-4	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-4	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-4	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-4	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-4	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-4	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-4	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-4	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-4	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-4	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-4	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-4	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-4	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-4	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-4	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-4	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-4	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-4	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-4	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-4	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-4	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-4	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-4	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-4	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-4	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-4	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-4	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-4	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-4	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-4	4/30/2019	Carbon Disulfide	5.8	100	4.525567	810	ug/L
EP-4	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-4	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-4	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-4	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-4	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-4	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-4	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-4	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-4	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-4	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-4	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-4	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-4	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-4	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-4	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-4	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-4	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-4	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-4	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-4	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-4	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-4	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-4	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-4	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-4	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-4	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-4	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-4	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-4	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
EP-4	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-4	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-4	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-4	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-4	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-4	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-4	9/17/2020	Acetone	16	10	2.3	14064	ug/L
EP-4	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-4	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-4	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-4	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-4	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-4	9/17/2020	Carbon Disulfide	2.1	10	0.44	810	ug/L
EP-4	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-4	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-4	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-4	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-4	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-4	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-4	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-4	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-4	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-4	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-4	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-4	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-4	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-4	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-4	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-4	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-4	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-4	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-4	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-4	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-4	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-4	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-4	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-4	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-4	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-4	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-4	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-4	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-4	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-4	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-4	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-4	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-4	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-4	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-4	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-4	12/21/2020	Carbon Disulfide	1.06	1	0.5	810	ug/L
EP-4	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-4	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-4	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-4	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-4	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-4	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-4	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-4	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-4	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-4	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-4	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-4	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-4	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-4	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-4	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-4	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-4	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-4	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-4	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-4	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-4	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-4	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-4	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-4	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-4	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-4	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-4	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-4	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-4	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-4	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-4	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-4	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-4	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-4	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-4	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-4	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-4	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-4	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-4	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-4	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-4	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-4	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-4	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-4	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-4	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-4	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-4	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-4	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-4	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-4	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-4	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-4	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-4	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-4	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-4	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-4	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-5	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-5	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-5	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-5	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-5	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-5	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-5	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-5	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-5	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-5	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-5	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-5	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-5	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-5	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-5	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-5	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-5	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-5	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-5	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-5	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-5	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-5	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-5	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-5	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-5	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-5	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-5	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-5	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-5	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-5	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-5	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-5	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-5	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-5	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-5	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-5	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-5	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-5	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-5	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-5	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-5	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-5	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-5	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-5	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-5	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-5	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-5	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-5	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-5	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-5	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-5	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-5	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-5	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-5	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-5	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-5	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-5	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-5	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-5	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-5	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-5	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-5	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-5	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-5	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-5	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-5	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	11/6/2012	Carbon Disulfide	**1300**	100	8.4	810	ug/L
EP-5	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-5	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-5	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-5	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-5	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-5	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-5	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-5	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-5	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-5	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-5	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-5	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-5	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-5	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-5	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-5	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-5	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-5	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-5	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-5	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-5	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-5	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-5	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-5	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-5	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-5	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-5	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-5	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-5	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-5	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-5	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-5	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-5	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-5	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-5	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-5	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-5	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-5	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-5	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-5	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-5	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-5	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-5	11/6/2012	MTBE	ND	10	9.6	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-5	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-5	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	5/28/2013	Acetone	110	100	17	14064	ug/L
EP-5	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-5	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-5	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-5	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-5	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-5	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-5	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-5	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-5	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-5	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-5	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-5	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-5	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-5	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-5	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-5	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-5	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-5	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-5	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-5	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-5	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-5	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-5	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-5	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-5	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-5	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-5	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-5	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-5	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-5	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-5	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-5	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-5	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	3/5/2014	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-5	3/5/2014	Acetone	280	100	49	14064	ug/L
EP-5	3/5/2014	Chloroform	ND	10	4.7	100	ug/L
EP-5	3/5/2014	Benzene	*ND*	*10*	4.6	5	ug/L
EP-5	3/5/2014	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-5	3/5/2014	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-5	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-5	3/5/2014	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-5	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-5	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-5	3/5/2014	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-5	3/5/2014	Carbon Disulfide	120	100	8	810	ug/L
EP-5	3/5/2014	Bromoform	ND	10	3.7	32.9	ug/L
EP-5	3/5/2014	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-5	3/5/2014	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-5	3/5/2014	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-5	3/5/2014	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-5	3/5/2014	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-5	3/5/2014	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-5	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-5	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-5	3/5/2014	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-5	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-5	3/5/2014	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-5	3/5/2014	2-Chlorotoluene	ND	10	5	233	ug/L
EP-5	3/5/2014	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-5	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.7	0.0033	ug/L
EP-5	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-5	3/5/2014	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-5	3/5/2014	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-5	3/5/2014	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-5	3/5/2014	Ethylbenzene	ND	10	4.5	700	ug/L
EP-5	3/5/2014	Styrene	ND	10	5.8	100	ug/L
EP-5	3/5/2014	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-5	3/5/2014	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-5	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-5	3/5/2014	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-5	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-5	3/5/2014	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-5	3/5/2014	Bromobenzene	ND	10	5.7	62	ug/L
EP-5	3/5/2014	Toluene	ND	10	4.4	1000	ug/L
EP-5	3/5/2014	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-5	3/5/2014	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-5	3/5/2014	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-5	3/5/2014	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-5	3/5/2014	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-5	3/5/2014	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-5	3/5/2014	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
EP-5	3/5/2014	1,1-Dichloropropene	ND	10	3.4	NA	ug/L
EP-5	3/5/2014	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-5	3/5/2014	2,2-Dichloropropane	ND	20	5.3	NA	ug/L
EP-5	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-5	3/5/2014	Xylenes, Total	ND	15	14	620	ug/L
EP-5	3/5/2014	MTBE	ND	10	7.7	143	ug/L
EP-5	3/5/2014	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-5	3/5/2014	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-5	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-5	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-5	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-5	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-5	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-5	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-5	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-5	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-5	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-5	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-5	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-5	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-5	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-5	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-5	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-5	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-5	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-5	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-5	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-5	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-5	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-5	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-5	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-5	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-5	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-5	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-5	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-5	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-5	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-5	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-5	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-5	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-5	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-5	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-5	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-5	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-5	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-5	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-5	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-5	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-5	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-5	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-5	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-5	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-5	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-5	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-5	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-5	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-5	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-5	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-5	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-5	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-5	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-5	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-5	11/12/2014	MTBE	ND	10	2.5	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-5	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-5	3/24/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-5	3/24/2015	Acetone	ND	100	9.4	14064	ug/L
EP-5	3/24/2015	Chloroform	ND	10	2.1	100	ug/L
EP-5	3/24/2015	Benzene	*ND*	*10*	0.65	5	ug/L
EP-5	3/24/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-5	3/24/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-5	3/24/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-5	3/24/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-5	3/24/2015	Chloroethane	ND	20	1	20857	ug/L
EP-5	3/24/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-5	3/24/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-5	3/24/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-5	3/24/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-5	3/24/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-5	3/24/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-5	3/24/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-5	3/24/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-5	3/24/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-5	3/24/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-5	3/24/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-5	3/24/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-5	3/24/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	3/24/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-5	3/24/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	3/24/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-5	3/24/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-5	3/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-5	3/24/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-5	3/24/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-5	3/24/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-5	3/24/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-5	3/24/2015	Styrene	ND	10	1.1	100	ug/L
EP-5	3/24/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-5	3/24/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-5	3/24/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-5	3/24/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-5	3/24/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-5	3/24/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-5	3/24/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-5	3/24/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-5	3/24/2015	Toluene	ND	10	1.1	1000	ug/L
EP-5	3/24/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-5	3/24/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-5	3/24/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	3/24/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-5	3/24/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-5	3/24/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-5	3/24/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-5	3/24/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-5	3/24/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-5	3/24/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-5	3/24/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-5	3/24/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-5	3/24/2015	MTBE	ND	10	1.7	143	ug/L
EP-5	3/24/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-5	3/24/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-5	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-5	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-5	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-5	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-5	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-5	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-5	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-5	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-5	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-5	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-5	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-5	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-5	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-5	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-5	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-5	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-5	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-5	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-5	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-5	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-5	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-5	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-5	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-5	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-5	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-5	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-5	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-5	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-5	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-5	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-5	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-5	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-5	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-5	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-5	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-5	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-5	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-5	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-5	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-5	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-5	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-5	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-5	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-5	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-5	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-5	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-5	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-5	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-5	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-5	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-5	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-5	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-5	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-5	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-5	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-5	8/29/2016	Acetone	13	10	4.9	14064	ug/L
EP-5	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-5	8/29/2016	Benzene	0.11	1	0.096	5	ug/L
EP-5	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-5	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-5	8/29/2016	Chloromethane	0.25	3	0.21	20.32	ug/L
EP-5	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-5	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-5	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-5	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-5	8/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
EP-5	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L
EP-5	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-5	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-5	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-5	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-5	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-5	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-5	8/29/2016	2-Butanone	ND	10	0.74	5565	ug/L
EP-5	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-5	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-5	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-5	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-5	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-5	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-5	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-5	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-5	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-5	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-5	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-5	8/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
EP-5	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-5	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-5	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-5	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-5	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-5	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-5	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-5	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-5	8/29/2016	Toluene	ND	1	0.12	1000	ug/L
EP-5	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-5	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-5	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-5	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-5	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-5	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-5	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-5	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-5	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-5	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-5	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-5	8/29/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
EP-5	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-5	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-5	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-5	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-5	3/30/2017	Acetone	17	50	8.8	14064	ug/L
EP-5	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-5	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-5	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-5	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-5	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-5	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-5	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-5	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-5	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-5	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-5	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-5	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-5	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-5	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-5	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-5	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-5	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-5	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-5	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-5	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-5	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-5	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-5	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-5	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-5	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-5	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-5	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-5	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-5	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-5	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-5	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-5	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-5	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-5	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-5	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-5	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-5	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-5	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-5	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-5	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-5	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-5	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-5	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-5	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-5	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-5	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-5	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-5	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-5	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-5	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-5	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-5	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-5	3/30/2017	MTBE	ND	5	1.5	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-5	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-5	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-5	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-5	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-5	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-5	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-5	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-5	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-5	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-5	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-5	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-5	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-5	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-5	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-5	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-5	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-5	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-5	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-5	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-5	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-5	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-5	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-5	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-5	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-5	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-5	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-5	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-5	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-5	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-5	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-5	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-5	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-5	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-5	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-5	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-5	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-5	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-5	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-5	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-5	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-5	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-5	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-5	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-5	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-5	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-5	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-5	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-5	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-5	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-5	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-5	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-5	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-5	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-5	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-5	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-5	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-5	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-5	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-5	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-5	2/21/2018	Acetone	140	50	4.1	14064	ug/L
EP-5	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-5	2/21/2018	Benzene	0.41	5	0.31	5	ug/L
EP-5	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-5	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-5	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-5	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-5	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-5	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-5	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-5	2/21/2018	Carbon Disulfide	21	50	2	810	ug/L
EP-5	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-5	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-5	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-5	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-5	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-5	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-5	2/21/2018	2-Butanone	18	50	5.7	5565	ug/L
EP-5	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-5	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-5	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-5	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-5	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-5	2/21/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
EP-5	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-5	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-5	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-5	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-5	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-5	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-5	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-5	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-5	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-5	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-5	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-5	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-5	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-5	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
EP-5	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-5	2/21/2018	Toluene	0.52	5	0.32	1000	ug/L
EP-5	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-5	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-5	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-5	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-5	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-5	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-5	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-5	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-5	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-5	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-5	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-5	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-5	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-5	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-5	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-5	9/6/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-5	9/6/2018	Acetone	5.2	10	1.6	14064	ug/L
EP-5	9/6/2018	Chloroform	ND	1	0.8	100	ug/L
EP-5	9/6/2018	Benzene	ND	1	0.35	5	ug/L
EP-5	9/6/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-5	9/6/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-5	9/6/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-5	9/6/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-5	9/6/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-5	9/6/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-5	9/6/2018	Methylene Chloride	0.5	3	0.41	5	ug/L
EP-5	9/6/2018	Carbon Disulfide	1.7	10	0.77	810	ug/L
EP-5	9/6/2018	Bromoform	ND	1	0.65	32.9	ug/L
EP-5	9/6/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-5	9/6/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-5	9/6/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-5	9/6/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-5	9/6/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-5	9/6/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-5	9/6/2018	2-Butanone	ND	10	2.5	5565	ug/L
EP-5	9/6/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-5	9/6/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-5	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-5	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-5	9/6/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-5	9/6/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-5	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-5	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-5	9/6/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-5	9/6/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-5	9/6/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-5	9/6/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-5	9/6/2018	Styrene	ND	1	0.5	100	ug/L
EP-5	9/6/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-5	9/6/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-5	9/6/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-5	9/6/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-5	9/6/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-5	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-5	9/6/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-5	9/6/2018	Toluene	ND	1	0.34	1000	ug/L
EP-5	9/6/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-5	9/6/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-5	9/6/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-5	9/6/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-5	9/6/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-5	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-5	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-5	9/6/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-5	9/6/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-5	9/6/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-5	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-5	9/6/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-5	9/6/2018	MTBE	ND	1	0.64	143	ug/L
EP-5	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-5	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-5	4/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-5	4/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-5	4/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-5	4/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-5	4/30/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-5	4/30/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-5	4/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-5	4/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-5	4/30/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-5	4/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-5	4/30/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-5	4/30/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-5	4/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-5	4/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-5	4/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-5	4/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-5	4/30/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-5	4/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-5	4/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-5	4/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-5	4/30/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-5	4/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-5	4/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-5	4/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-5	4/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-5	4/30/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-5	4/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-5	4/30/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-5	4/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-5	4/30/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-5	4/30/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-5	4/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-5	4/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-5	4/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-5	4/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-5	4/30/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-5	4/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-5	4/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-5	4/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-5	4/30/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-5	4/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-5	4/30/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-5	4/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-5	4/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-5	4/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-5	4/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-5	4/30/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-5	4/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-5	4/30/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-5	4/30/2019	MTBE	ND	10	4.56095	143	ug/L
EP-5	4/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-5	4/30/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-5	4/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-5	4/30/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-5	4/30/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	4/30/2019	Styrene	ND	10	1.913234	100	ug/L
EP-5	4/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-5	4/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-5	4/30/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-5	4/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-5	4/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-5	4/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-5	4/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-5	4/30/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-5	4/30/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-5	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-5	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-5	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-5	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-5	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-5	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-5	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-5	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-5	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-5	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-5	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-5	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-5	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-5	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-5	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-5	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-5	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-5	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-5	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-5	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-5	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-5	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-5	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
EP-5	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-5	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-5	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-5	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-5	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-5	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-5	9/17/2020	Acetone	5.2	10	2.3	14064	ug/L
EP-5	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-5	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-5	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-5	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-5	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-5	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-5	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-5	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-5	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-5	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-5	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-5	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-5	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-5	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-5	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-5	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-5	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-5	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-5	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-5	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-5	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-5	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-5	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-5	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-5	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-5	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-5	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-5	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-5	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-5	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-5	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-5	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-5	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-5	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-5	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-5	12/21/2020	Acetone	ND	25	10	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-5	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-5	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-5	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-5	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-5	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-5	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-5	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-5	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-5	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-5	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-5	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-5	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-5	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-5	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-5	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-5	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-5	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-5	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-5	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-5	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-5	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-5	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-5	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-5	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-5	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-5	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-5	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-5	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-5	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-5	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-5	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-5	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-5	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-5	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-5	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-5	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-5	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-5	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-5	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-5	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-5	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-5	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-5	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-5	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-5	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-5	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-5	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-5	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-5	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-5	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-5	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-5	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-5	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-5	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-5	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-5	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-5	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-5	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-5	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-5	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-5	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-5	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-6	5/29/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
EP-6	5/29/2012	Acetone	ND	10	2.1	14064	ug/L
EP-6	5/29/2012	Chloroform	ND	1	0.35	100	ug/L
EP-6	5/29/2012	Benzene	ND	1	0.4	5	ug/L
EP-6	5/29/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
EP-6	5/29/2012	Bromomethane	ND	3	0.56	7.54	ug/L
EP-6	5/29/2012	Chloromethane	ND	3	0.56	20.32	ug/L
EP-6	5/29/2012	Dibromomethane	ND	1	0.65	8	ug/L
EP-6	5/29/2012	Chloroethane	ND	2	0.47	20857	ug/L
EP-6	5/29/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
EP-6	5/29/2012	Methylene Chloride	ND	3	0.35	5	ug/L
EP-6	5/29/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
EP-6	5/29/2012	Bromoform	ND	1	0.43	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/29/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
EP-6	5/29/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
EP-6	5/29/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
EP-6	5/29/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
EP-6	5/29/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
EP-6	5/29/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
EP-6	5/29/2012	2-Butanone	ND	10	2.2	5565	ug/L
EP-6	5/29/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
EP-6	5/29/2012	Trichloroethene	ND	1	0.3	5	ug/L
EP-6	5/29/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
EP-6	5/29/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
EP-6	5/29/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
EP-6	5/29/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
EP-6	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
EP-6	5/29/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
EP-6	5/29/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
EP-6	5/29/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
EP-6	5/29/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
EP-6	5/29/2012	Ethylbenzene	ND	1	0.38	700	ug/L
EP-6	5/29/2012	Styrene	ND	1	0.41	100	ug/L
EP-6	5/29/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
EP-6	5/29/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
EP-6	5/29/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
EP-6	5/29/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
EP-6	5/29/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
EP-6	5/29/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
EP-6	5/29/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
EP-6	5/29/2012	Bromobenzene	ND	1	0.63	62	ug/L
EP-6	5/29/2012	Toluene	ND	1	0.47	1000	ug/L
EP-6	5/29/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
EP-6	5/29/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
EP-6	5/29/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
EP-6	5/29/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
EP-6	5/29/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
EP-6	5/29/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
EP-6	5/29/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
EP-6	5/29/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
EP-6	5/29/2012	2-Hexanone	ND	10	0.89	38	ug/L
EP-6	5/29/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
EP-6	5/29/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
EP-6	5/29/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-6	5/29/2012	MTBE	ND	1	0.96	143	ug/L
EP-6	5/29/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
EP-6	5/29/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
EP-6	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-6	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-6	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-6	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-6	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-6	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-6	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-6	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-6	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-6	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-6	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-6	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-6	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-6	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-6	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-6	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-6	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-6	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-6	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-6	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-6	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-6	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-6	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-6	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-6	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-6	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-6	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-6	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-6	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-6	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-6	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-6	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-6	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-6	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-6	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-6	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-6	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-6	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-6	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-6	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-6	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-6	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-6	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-6	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-6	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-6	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-6	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-6	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-6	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-6	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-6	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-6	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-6	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-6	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-6	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-6	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-6	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-6	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-6	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-6	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-6	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-6	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-6	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-6	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-6	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-6	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	5/28/2013	Carbon Disulfide	110	100	8	810	ug/L
EP-6	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-6	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-6	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-6	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-6	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-6	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-6	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-6	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-6	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-6	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-6	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-6	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-6	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-6	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-6	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-6	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-6	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-6	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-6	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-6	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-6	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-6	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-6	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-6	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-6	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-6	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-6	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-6	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-6	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-6	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-6	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-6	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-6	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-6	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-6	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-6	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-6	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-6	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-6	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-6	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-6	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-6	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-6	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-6	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-6	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-6	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-6	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-6	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-6	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-6	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-6	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-6	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-6	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-6	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-6	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-6	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-6	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-6	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-6	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-6	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-6	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-6	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-6	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-6	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-6	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-6	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-6	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-6	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-6	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-6	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-6	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-6	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-6	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-6	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-6	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-6	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-6	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-6	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-6	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-6	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-6	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-6	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-6	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-6	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-6	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-6	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-6	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-6	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-6	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-6	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-6	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-6	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-6	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-6	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-6	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-6	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-6	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-6	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-6	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-6	3/5/2014	Acetone	140	100	49	14064	ug/L
EP-6	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-6	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-6	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-6	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-6	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-6	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-6	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-6	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-6	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-6	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-6	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-6	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-6	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-6	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-6	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-6	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-6	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-6	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-6	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-6	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-6	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-6	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-6	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-6	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-6	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-6	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-6	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-6	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-6	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-6	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-6	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-6	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-6	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-6	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-6	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-6	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-6	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-6	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-6	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-6	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-6	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-6	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-6	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-6	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-6	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-6	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-6	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-6	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-6	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-6	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-6	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-6	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-6	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-6	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-6	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-6	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-6	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-6	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-6	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-6	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-6	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-6	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-6	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-6	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-6	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-6	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-6	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-6	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-6	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-6	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-6	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-6	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-6	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-6	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-6	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-6	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-6	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-6	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-6	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-6	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-6	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-6	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-6	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-6	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-6	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-6	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-6	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-6	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-6	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-6	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-6	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-6	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-6	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-6	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-6	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-6	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-6	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-6	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-6	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-6	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-6	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-6	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-6	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-6	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-6	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-6	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-6	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-6	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-6	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-6	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-6	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-6	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-6	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-6	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-6	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-6	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-6	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-6	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-6	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-6	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-6	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-6	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-6	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-6	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-6	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-6	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-6	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-6	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-6	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-6	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-6	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-6	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-6	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-6	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-6	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-6	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-6	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-6	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-6	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-6	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-6	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-6	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-6	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-6	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-6	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-6	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-6	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-6	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-6	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-6	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-6	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-6	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-6	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-6	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-6	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-6	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-6	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-6	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-6	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-6	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-6	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-6	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-6	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-6	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-6	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-6	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-6	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-6	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-6	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-6	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-6	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-6	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-6	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-6	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-6	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-6	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-6	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-6	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-6	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-6	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-6	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-6	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-6	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-6	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-6	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-6	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-6	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-6	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-6	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-6	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-6	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-6	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-6	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-6	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-6	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-6	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-6	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-6	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-6	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-6	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-6	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-6	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-6	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-6	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-6	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-6	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-6	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-6	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-6	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-6	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-6	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-6	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-6	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-6	8/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-6	8/29/2016	Acetone	9	10	4.9	14064	ug/L
EP-6	8/29/2016	Chloroform	ND	1	0.089	100	ug/L
EP-6	8/29/2016	Benzene	ND	1	0.096	5	ug/L
EP-6	8/29/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
EP-6	8/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
EP-6	8/29/2016	Chloromethane	0.38	3	0.21	20.32	ug/L
EP-6	8/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
EP-6	8/29/2016	Chloroethane	ND	2	0.19	20857	ug/L
EP-6	8/29/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-6	8/29/2016	Methylene Chloride	ND	3	0.19	5	ug/L
EP-6	8/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
EP-6	8/29/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	8/29/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
EP-6	8/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
EP-6	8/29/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
EP-6	8/29/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
EP-6	8/29/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
EP-6	8/29/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
EP-6	8/29/2016	2-Butanone	ND	10	0.74	5565	ug/L
EP-6	8/29/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
EP-6	8/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
EP-6	8/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
EP-6	8/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
EP-6	8/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-6	8/29/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
EP-6	8/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
EP-6	8/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
EP-6	8/29/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
EP-6	8/29/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
EP-6	8/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
EP-6	8/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
EP-6	8/29/2016	Styrene	ND	1	0.11	100	ug/L
EP-6	8/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
EP-6	8/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
EP-6	8/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
EP-6	8/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
EP-6	8/29/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
EP-6	8/29/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
EP-6	8/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
EP-6	8/29/2016	Bromobenzene	ND	1	0.098	62	ug/L
EP-6	8/29/2016	Toluene	ND	1	0.12	1000	ug/L
EP-6	8/29/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-6	8/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
EP-6	8/29/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-6	8/29/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
EP-6	8/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
EP-6	8/29/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
EP-6	8/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
EP-6	8/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
EP-6	8/29/2016	2-Hexanone	ND	10	0.84	38	ug/L
EP-6	8/29/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
EP-6	8/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
EP-6	8/29/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
EP-6	8/29/2016	MTBE	ND	1	0.21	143	ug/L
EP-6	8/29/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
EP-6	8/29/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
EP-6	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-6	3/30/2017	Acetone	17	50	8.8	14064	ug/L
EP-6	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-6	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-6	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-6	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-6	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-6	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-6	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-6	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-6	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-6	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-6	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-6	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-6	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-6	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-6	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-6	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-6	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-6	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-6	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-6	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-6	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-6	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-6	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-6	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-6	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-6	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-6	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-6	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-6	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-6	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-6	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-6	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-6	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-6	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-6	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-6	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-6	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-6	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-6	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-6	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-6	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-6	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-6	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-6	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-6	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-6	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-6	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-6	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-6	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-6	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-6	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-6	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-6	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-6	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-6	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-6	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-6	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-6	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-6	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-6	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-6	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-6	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-6	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-6	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-6	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-6	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-6	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-6	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-6	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-6	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-6	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-6	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-6	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-6	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-6	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-6	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-6	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-6	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-6	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-6	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-6	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-6	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-6	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-6	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-6	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-6	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-6	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-6	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-6	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-6	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-6	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-6	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-6	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-6	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-6	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-6	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-6	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-6	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-6	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-6	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-6	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-6	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-6	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-6	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-6	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-6	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-6	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-6	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-6	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-6	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-6	2/21/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
EP-6	2/21/2018	Acetone	67	50	4.1	14064	ug/L
EP-6	2/21/2018	Chloroform	ND	5	2	100	ug/L
EP-6	2/21/2018	Benzene	ND	5	0.31	5	ug/L
EP-6	2/21/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
EP-6	2/21/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
EP-6	2/21/2018	Chloromethane	ND	15	1.5	20.32	ug/L
EP-6	2/21/2018	Dibromomethane	ND	5	0.45	8	ug/L
EP-6	2/21/2018	Chloroethane	ND	10	1.2	20857	ug/L
EP-6	2/21/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
EP-6	2/21/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
EP-6	2/21/2018	Carbon Disulfide	11	50	2	810	ug/L
EP-6	2/21/2018	Bromoform	ND	5	1.1	32.9	ug/L
EP-6	2/21/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
EP-6	2/21/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
EP-6	2/21/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
EP-6	2/21/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
EP-6	2/21/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
EP-6	2/21/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
EP-6	2/21/2018	2-Butanone	6.4	50	5.7	5565	ug/L
EP-6	2/21/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
EP-6	2/21/2018	Trichloroethene	ND	5	0.56	5	ug/L
EP-6	2/21/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
EP-6	2/21/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
EP-6	2/21/2018	2-Chlorotoluene	ND	5	2	233	ug/L
EP-6	2/21/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
EP-6	2/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
EP-6	2/21/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
EP-6	2/21/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
EP-6	2/21/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
EP-6	2/21/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
EP-6	2/21/2018	Ethylbenzene	ND	5	0.47	700	ug/L
EP-6	2/21/2018	Styrene	ND	5	0.78	100	ug/L
EP-6	2/21/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
EP-6	2/21/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
EP-6	2/21/2018	4-Chlorotoluene	ND	5	2	250	ug/L
EP-6	2/21/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
EP-6	2/21/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
EP-6	2/21/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
EP-6	2/21/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
EP-6	2/21/2018	Bromobenzene	ND	5	0.7	62	ug/L
EP-6	2/21/2018	Toluene	ND	5	0.32	1000	ug/L
EP-6	2/21/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
EP-6	2/21/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
EP-6	2/21/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
EP-6	2/21/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
EP-6	2/21/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
EP-6	2/21/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
EP-6	2/21/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
EP-6	2/21/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
EP-6	2/21/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
EP-6	2/21/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
EP-6	2/21/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
EP-6	2/21/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
EP-6	2/21/2018	MTBE	ND	5	1.2	143	ug/L
EP-6	2/21/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
EP-6	2/21/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
EP-6	9/7/2018	Carbon tetrachloride	ND	1	0.27	5	ug/L
EP-6	9/7/2018	Acetone	2	10	1.6	14064	ug/L
EP-6	9/7/2018	Chloroform	ND	1	0.8	100	ug/L
EP-6	9/7/2018	Benzene	ND	1	0.35	5	ug/L
EP-6	9/7/2018	1,1,1-Trichloroethane	ND	1	0.31	200	ug/L
EP-6	9/7/2018	Bromomethane	ND	3	0.51	7.54	ug/L
EP-6	9/7/2018	Chloromethane	ND	3	0.59	20.32	ug/L
EP-6	9/7/2018	Dibromomethane	ND	1	0.64	8	ug/L
EP-6	9/7/2018	Chloroethane	ND	2	0.33	20857	ug/L
EP-6	9/7/2018	Vinyl Chloride	ND	1	0.22	2	ug/L
EP-6	9/7/2018	Methylene Chloride	0.47	3	0.41	5	ug/L
EP-6	9/7/2018	Carbon Disulfide	ND	10	0.77	810	ug/L
EP-6	9/7/2018	Bromoform	ND	1	0.65	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/7/2018	Bromodichloromethane	ND	1	0.57	1.34	ug/L
EP-6	9/7/2018	1,1-Dichloroethane	ND	1	0.8	25	ug/L
EP-6	9/7/2018	1,1-Dichloroethene	ND	1	0.24	7	ug/L
EP-6	9/7/2018	Trichlorofluoromethane	ND	1	0.34	1137	ug/L
EP-6	9/7/2018	Dichlorodifluoromethane	ND	1	2	197	ug/L
EP-6	9/7/2018	1,2-Dichloropropane	ND	1	0.31	5	ug/L
EP-6	9/7/2018	2-Butanone	ND	10	2.5	5565	ug/L
EP-6	9/7/2018	1,1,2-Trichloroethane	ND	1	0.47	5	ug/L
EP-6	9/7/2018	Trichloroethene	ND	1	0.52	5	ug/L
EP-6	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.66	10	ug/L
EP-6	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.56	70	ug/L
EP-6	9/7/2018	2-Chlorotoluene	ND	1	0.8	233	ug/L
EP-6	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
EP-6	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.94	0.0033	ug/L
EP-6	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	1.1	0.0084	ug/L
EP-6	9/7/2018	tert-Butylbenzene	ND	1	0.44	690	ug/L
EP-6	9/7/2018	Isopropylbenzene	ND	1	0.44	447	ug/L
EP-6	9/7/2018	p-Isopropyltoluene	ND	1	0.48	NA	ug/L
EP-6	9/7/2018	Ethylbenzene	ND	1	0.45	700	ug/L
EP-6	9/7/2018	Styrene	ND	1	0.5	100	ug/L
EP-6	9/7/2018	n-Propylbenzene	ND	1	0.49	660	ug/L
EP-6	9/7/2018	n-Butylbenzene	ND	3	0.5	1000	ug/L
EP-6	9/7/2018	4-Chlorotoluene	ND	1	0.8	250	ug/L
EP-6	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.46	0.05	ug/L
EP-6	9/7/2018	1,2-Dichloroethane	ND	1	0.8	5	ug/L
EP-6	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.91	1243	ug/L
EP-6	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.46	60	ug/L
EP-6	9/7/2018	Bromobenzene	ND	1	0.64	62	ug/L
EP-6	9/7/2018	Toluene	ND	1	0.34	1000	ug/L
EP-6	9/7/2018	Chlorobenzene	ND	1	0.58	77.6	ug/L
EP-6	9/7/2018	Dibromochloromethane	ND	1	0.47	1.68	ug/L
EP-6	9/7/2018	Tetrachloroethene	ND	1	0.3	5	ug/L
EP-6	9/7/2018	sec-Butylbenzene	ND	1	0.4	2000	ug/L
EP-6	9/7/2018	1,3-Dichloropropane	ND	1	0.54	370	ug/L
EP-6	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.75	70	ug/L
EP-6	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
EP-6	9/7/2018	1,1-Dichloropropene	ND	1	0.32	NA	ug/L
EP-6	9/7/2018	2-Hexanone	ND	10	1.8	38	ug/L
EP-6	9/7/2018	2,2-Dichloropropane	ND	2	0.37	NA	ug/L
EP-6	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.5	5.74	ug/L
EP-6	9/7/2018	Xylenes, Total	ND	1.5	1.3	620	ug/L
EP-6	9/7/2018	MTBE	ND	1	0.64	143	ug/L
EP-6	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.6	NA	ug/L
EP-6	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.55	NA	ug/L
EP-6	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-6	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-6	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-6	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-6	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-6	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-6	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-6	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-6	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-6	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-6	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-6	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-6	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-6	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-6	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-6	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-6	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-6	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-6	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-6	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-6	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-6	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-6	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-6	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-6	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-6	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-6	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-6	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-6	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-6	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-6	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-6	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-6	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-6	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-6	4/29/2019	Carbon Disulfide	13	100	4.525567	810	ug/L
EP-6	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-6	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-6	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-6	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-6	4/29/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
EP-6	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-6	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-6	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-6	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-6	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-6	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-6	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-6	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-6	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-6	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-6	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-6	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-6	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-6	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-6	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-6	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-6	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-6	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-6	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-6	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-6	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-6	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-6	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-6	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-6	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-6	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-6	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-6	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-6	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-6	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-6	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-6	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-6	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-6	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-6	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
EP-6	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-6	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-6	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-6	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-6	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-6	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-6	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-6	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-6	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-6	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-6	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-6	9/17/2020	2-Butanone	1.3	10	1.1	5565	ug/L
EP-6	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-6	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-6	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-6	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-6	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-6	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-6	9/17/2020	Acetone	3.6	10	2.3	14064	ug/L
EP-6	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-6	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-6	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-6	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-6	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-6	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-6	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-6	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-6	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-6	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-6	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
EP-6	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-6	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-6	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-6	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-6	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-6	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-6	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-6	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-6	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-6	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-6	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-6	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-6	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-6	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-6	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-6	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-6	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-6	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-6	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-6	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-6	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-6	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-6	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-6	12/21/2020	Acetone	ND	25	10	14064	ug/L
EP-6	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-6	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-6	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-6	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-6	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-6	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-6	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-6	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-6	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-6	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-6	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-6	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
EP-6	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-6	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-6	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-6	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-6	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-6	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-6	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-6	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-6	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-6	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-6	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-6	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-6	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-6	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-6	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-6	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-6	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-6	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-6	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-6	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-6	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-6	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-6	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-6	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-6	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-6	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-6	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-6	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-6	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-6	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-6	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-6	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-6	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-6	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-6	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-6	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-6	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-6	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-6	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-6	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-6	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-6	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-6	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-6	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-6	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-6	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-6	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-6	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-6	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-6	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acetone	ND	10	1.199396	14064	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbon Disulfide	1.5	10	0.452557	810	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-7	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-7	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-7	5/29/2012	Chloroform	ND	10	3.5	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-7	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-7	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-7	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-7	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-7	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-7	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-7	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-7	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-7	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-7	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-7	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-7	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-7	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-7	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-7	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-7	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-7	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-7	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-7	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-7	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-7	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-7	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-7	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-7	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-7	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-7	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-7	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-7	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-7	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-7	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-7	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-7	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-7	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-7	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-7	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-7	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-7	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-7	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-7	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-7	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-7	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-7	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-7	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-7	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-7	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-7	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-7	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-7	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-7	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-7	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-7	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-7	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-7	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-7	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-7	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-7	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-7	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-7	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-7	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-7	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-7	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-7	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-7	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-7	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-7	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-7	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-7	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-7	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-7	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-7	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-7	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-7	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-7	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-7	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-7	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-7	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-7	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-7	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-7	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-7	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-7	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-7	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-7	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-7	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-7	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-7	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-7	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-7	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-7	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-7	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-7	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-7	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-7	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-7	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-7	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-7	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-7	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-7	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-7	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-7	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-7	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-7	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-7	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-7	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-7	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-7	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-7	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-7	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-7	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-7	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-7	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-7	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-7	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-7	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-7	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-7	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-7	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-7	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-7	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-7	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-7	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-7	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-7	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-7	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-7	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-7	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-7	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-7	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-7	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-7	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-7	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-7	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-7	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-7	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-7	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-7	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-7	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-7	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-7	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-7	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-7	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-7	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-7	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-7	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-7	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-7	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-7	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-7	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-7	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-7	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-7	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-7	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-7	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-7	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-7	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-7	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-7	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-7	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-7	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-7	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-7	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-7	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-7	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-7	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-7	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-7	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-7	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-7	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-7	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-7	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-7	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-7	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-7	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-7	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-7	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-7	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-7	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-7	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-7	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-7	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-7	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-7	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-7	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-7	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-7	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-7	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-7	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-7	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-7	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-7	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-7	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-7	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-7	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-7	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-7	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-7	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-7	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-7	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-7	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-7	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-7	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-7	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-7	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-7	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-7	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-7	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-7	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-7	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-7	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-7	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-7	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-7	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-7	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-7	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-7	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-7	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-7	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-7	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-7	3/5/2014	Chloroform	ND	10	3.2	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-7	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-7	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-7	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-7	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-7	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-7	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-7	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-7	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-7	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-7	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-7	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-7	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-7	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-7	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-7	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-7	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-7	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-7	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-7	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-7	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-7	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-7	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-7	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-7	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-7	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-7	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-7	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-7	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-7	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-7	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-7	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-7	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-7	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-7	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-7	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-7	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-7	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-7	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-7	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-7	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-7	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-7	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-7	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-7	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-7	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-7	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-7	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-7	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-7	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-7	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-7	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-7	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-7	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-7	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-7	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-7	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-7	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-7	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-7	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-7	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-7	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-7	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-7	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-7	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-7	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-7	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-7	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-7	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-7	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-7	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-7	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-7	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-7	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-7	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-7	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-7	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-7	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-7	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-7	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-7	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-7	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-7	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-7	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-7	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-7	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-7	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-7	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-7	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-7	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-7	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-7	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-7	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-7	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-7	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-7	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-7	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-7	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-7	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-7	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-7	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-7	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-7	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-7	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-7	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-7	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-7	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-7	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-7	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-7	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-7	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-7	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-7	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-7	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-7	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-7	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-7	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-7	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-7	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-7	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-7	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-7	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-7	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-7	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-7	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-7	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-7	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-7	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-7	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-7	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-7	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-7	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-7	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-7	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-7	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-7	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-7	3/25/2015	Styrene	ND	10	1.1	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-7	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-7	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-7	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-7	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-7	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-7	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-7	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-7	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-7	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-7	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-7	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-7	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-7	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-7	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-7	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-7	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-7	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-7	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-7	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-7	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-7	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-7	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-7	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-7	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-7	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-7	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-7	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-7	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-7	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-7	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-7	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-7	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-7	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-7	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-7	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-7	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-7	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-7	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-7	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-7	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-7	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-7	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-7	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-7	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-7	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-7	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-7	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-7	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-7	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-7	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-7	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-7	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-7	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-7	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-7	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-7	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-7	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-7	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-7	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-7	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-7	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-7	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-7	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-7	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-7	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-7	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-7	8/30/2016	Chloroform	ND	10	0.89	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-7	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-7	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-7	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-7	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-7	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-7	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-7	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-7	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-7	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-7	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-7	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-7	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-7	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-7	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-7	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-7	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-7	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-7	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-7	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-7	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-7	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-7	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-7	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-7	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-7	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-7	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-7	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-7	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-7	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-7	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-7	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-7	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-7	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-7	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-7	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-7	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-7	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-7	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-7	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-7	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-7	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-7	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-7	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-7	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-7	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-7	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-7	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-7	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-7	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-7	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-7	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-7	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-7	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-7	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-7	3/30/2017	Acetone	9.5	50	8.8	14064	ug/L
EP-7	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-7	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-7	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-7	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-7	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-7	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-7	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-7	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-7	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-7	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-7	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-7	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-7	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-7	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-7	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-7	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-7	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-7	3/30/2017	2-Butanone	16	50	11	5565	ug/L
EP-7	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-7	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-7	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-7	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-7	3/30/2017	1,2,4-Trimethylbenzene	2.3	5	1	56	ug/L
EP-7	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-7	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-7	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-7	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-7	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-7	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-7	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-7	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-7	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-7	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-7	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-7	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-7	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-7	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-7	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-7	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-7	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-7	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-7	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-7	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-7	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-7	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-7	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-7	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-7	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-7	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-7	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-7	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-7	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-7	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-7	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-7	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-7	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-7	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-7	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-7	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-7	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-7	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-7	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-7	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-7	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-7	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-7	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-7	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-7	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-7	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-7	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-7	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-7	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-7	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-7	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-7	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-7	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-7	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-7	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-7	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-7	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-7	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-7	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-7	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-7	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-7	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-7	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-7	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-7	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-7	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-7	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-7	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-7	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-7	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-7	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-7	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-7	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-7	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-7	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-7	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-7	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-7	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-7	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-7	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-7	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-7	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-7	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-7	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-7	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-7	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-7	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-7	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-7	2/23/2018	Acetone	28	10	0.82	14064	ug/L
EP-7	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-7	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-7	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-7	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-7	2/23/2018	Chloromethane	2.4	3	0.29	20.32	ug/L
EP-7	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-7	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-7	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-7	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-7	2/23/2018	Carbon Disulfide	0.41	10	0.4	810	ug/L
EP-7	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-7	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-7	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-7	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-7	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-7	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-7	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-7	2/23/2018	2-Butanone	2.2	10	1.1	5565	ug/L
EP-7	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-7	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-7	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-7	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-7	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-7	2/23/2018	1,2,4-Trimethylbenzene	0.44	1	0.11	56	ug/L
EP-7	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-7	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-7	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-7	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-7	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-7	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-7	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-7	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-7	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-7	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-7	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-7	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-7	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-7	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-7	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-7	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-7	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-7	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-7	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-7	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-7	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-7	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-7	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-7	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-7	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-7	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-7	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-7	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-7	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-7	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-7	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-7	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-7	9/7/2018	Acetone	27	10	0.79	14064	ug/L
EP-7	9/7/2018	Chloroform	ND	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-7	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-7	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-7	9/7/2018	Chloromethane	2.1	3	0.29	20.32	ug/L
EP-7	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-7	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-7	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-7	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-7	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-7	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-7	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-7	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-7	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-7	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-7	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-7	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-7	9/7/2018	2-Butanone	1.7	10	1.3	5565	ug/L
EP-7	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-7	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-7	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-7	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-7	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-7	9/7/2018	1,2,4-Trimethylbenzene	0.47	1	0.25	56	ug/L
EP-7	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-7	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-7	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-7	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-7	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-7	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-7	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-7	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-7	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-7	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-7	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-7	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-7	9/7/2018	4-Methyl-2-Pentanone	0.58	10	0.45	1243	ug/L
EP-7	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-7	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-7	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-7	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-7	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-7	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-7	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-7	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-7	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-7	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-7	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-7	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-7	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-7	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-7	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-7	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-7	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-7	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-7	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-7	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-7	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-7	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-7	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-7	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-7	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-7	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-7	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-7	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-7	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-7	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-7	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-7	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-7	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-7	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-7	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-7	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-7	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-7	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-7	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-7	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-7	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-7	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-7	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-7	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-7	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-7	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-7	4/29/2019	Acetone	16	100	11.993964	14064	ug/L
EP-7	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-7	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-7	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-7	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-7	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-7	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-7	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-7	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-7	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-7	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-7	4/29/2019	Chloromethane	*4.7*	*30*	3.209873	20.32	ug/L
EP-7	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-7	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-7	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-7	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-7	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-7	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-7	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-7	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-7	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-7	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-7	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-7	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-7	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-7	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-7	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-7	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-7	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-7	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-7	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-7	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-7	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-7	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-7	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-7	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-7	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-7	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-7	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-7	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-7	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-7	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-7	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-7	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-7	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-7	11/20/2019	1,2,4-Trimethylbenzene	0.55	1	0.213199	56	ug/L
EP-7	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-7	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-7	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-7	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-7	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-7	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-7	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-7	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-7	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-7	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-7	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-7	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-7	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-7	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-7	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-7	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-7	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-7	11/20/2019	Acetone	58	10	1.199396	14064	ug/L
EP-7	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-7	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-7	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-7	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-7	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
EP-7	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-7	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-7	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-7	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-7	11/20/2019	Chloromethane	0.9	3	0.320987	20.32	ug/L
EP-7	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-7	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-7	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-7	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-7	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-7	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-7	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-7	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-7	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-7	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-7	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-7	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-7	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-7	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-7	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-7	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-7	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-7	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-7	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-7	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-7	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-7	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-7	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-7	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-7	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-7	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-7	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-7	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-7	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-7	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-7	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-7	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-7	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-7	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-7	9/17/2020	1,2,4-Trimethylbenzene	0.35	1	0.12	56	ug/L
EP-7	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-7	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-7	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-7	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-7	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-7	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-7	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-7	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-7	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-7	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-7	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-7	9/17/2020	2-Butanone	6.7	10	1.1	5565	ug/L
EP-7	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-7	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-7	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-7	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-7	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-7	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-7	9/17/2020	Acetone	58	10	2.3	14064	ug/L
EP-7	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-7	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-7	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-7	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-7	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-7	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-7	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-7	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-7	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-7	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-7	9/17/2020	Chloromethane	1.3	3	0.4	20.32	ug/L
EP-7	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-7	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-7	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-7	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-7	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-7	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-7	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-7	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-7	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-7	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-7	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-7	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-7	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-7	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-7	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-7	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-7	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-7	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-7	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-7	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-7	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-7	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-7	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-7	12/21/2020	Acetone	44.6	25	10	14064	ug/L
EP-7	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-7	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-7	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-7	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-7	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-7	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-7	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-7	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-7	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-7	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-7	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-7	12/21/2020	Chloromethane	3.01	1	0.83	20.32	ug/L
EP-7	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-7	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-7	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-7	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-7	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-7	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-7	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-7	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-7	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-7	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-7	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-7	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-7	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-7	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-7	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-7	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-7	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-7	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-7	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-7	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-7	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-7	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-7	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-7	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-7	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-7	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-7	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-7	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-7	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-7	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-7	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-7	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-7	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-7	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-7	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-7	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-7	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-7	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-7	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-7	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-7	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-7	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-7	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-7	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-7	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-7	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-7	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-7	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-7	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-7	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-8	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-8	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-8	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-8	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-8	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-8	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-8	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-8	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-8	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-8	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-8	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-8	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-8	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-8	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-8	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-8	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-8	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-8	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-8	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-8	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-8	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-8	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-8	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-8	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-8	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-8	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-8	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-8	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-8	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-8	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-8	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-8	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-8	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-8	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-8	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-8	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-8	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-8	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-8	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-8	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-8	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-8	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-8	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-8	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-8	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-8	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-8	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-8	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-8	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-8	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-8	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-8	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-8	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-8	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-8	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-8	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-8	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-8	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-8	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-8	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-8	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-8	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-8	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-8	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-8	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-8	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-8	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-8	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-8	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-8	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-8	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-8	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-8	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-8	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-8	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-8	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-8	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-8	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-8	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-8	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-8	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-8	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-8	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-8	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-8	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-8	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-8	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-8	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-8	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-8	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-8	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-8	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-8	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-8	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-8	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-8	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-8	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-8	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-8	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-8	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-8	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-8	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-8	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-8	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-8	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-8	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-8	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-8	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-8	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-8	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-8	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-8	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-8	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-8	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-8	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-8	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-8	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-8	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-8	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-8	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-8	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-8	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-8	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-8	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-8	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-8	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-8	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-8	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-8	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-8	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-8	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-8	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-8	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-8	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-8	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-8	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-8	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-8	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-8	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-8	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-8	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-8	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-8	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-8	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-8	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-8	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-8	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-8	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-8	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-8	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-8	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-8	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-8	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-8	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-8	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-8	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-8	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-8	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-8	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-8	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-8	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-8	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-8	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-8	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-8	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-8	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-8	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-8	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-8	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-8	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-8	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-8	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-8	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-8	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-8	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-8	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-8	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-8	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-8	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-8	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-8	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-8	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-8	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-8	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-8	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-8	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-8	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-8	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-8	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-8	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-8	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-8	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-8	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-8	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-8	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-8	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-8	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-8	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-8	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-8	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-8	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-8	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-8	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-8	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-8	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-8	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-8	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-8	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-8	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-8	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-8	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-8	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-8	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-8	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-8	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-8	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-8	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-8	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-8	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-8	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-8	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-8	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-8	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-8	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-8	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-8	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-8	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-8	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-8	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-8	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-8	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-8	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-8	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-8	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-8	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-8	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-8	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-8	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-8	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-8	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-8	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-8	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-8	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-8	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-8	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-8	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-8	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-8	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-8	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-8	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-8	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-8	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-8	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-8	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-8	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-8	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-8	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-8	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-8	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-8	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-8	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-8	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-8	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-8	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-8	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-8	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-8	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-8	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-8	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-8	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-8	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-8	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-8	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-8	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-8	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-8	11/12/2014	Acetone	ND	100	49	14064	ug/L
EP-8	11/12/2014	Chloroform	ND	10	3.2	100	ug/L
EP-8	11/12/2014	Benzene	ND	5	1.5	5	ug/L
EP-8	11/12/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-8	11/12/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-8	11/12/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-8	11/12/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-8	11/12/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-8	11/12/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-8	11/12/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-8	11/12/2014	Carbon Disulfide	ND	100	7.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/12/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-8	11/12/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-8	11/12/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-8	11/12/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-8	11/12/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	11/12/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-8	11/12/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-8	11/12/2014	2-Butanone	ND	100	14	5565	ug/L
EP-8	11/12/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-8	11/12/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-8	11/12/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-8	11/12/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-8	11/12/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-8	11/12/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-8	11/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-8	11/12/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-8	11/12/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-8	11/12/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-8	11/12/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-8	11/12/2014	Styrene	ND	10	1.2	100	ug/L
EP-8	11/12/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-8	11/12/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-8	11/12/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-8	11/12/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-8	11/12/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-8	11/12/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-8	11/12/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-8	11/12/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-8	11/12/2014	Toluene	ND	10	1.7	1000	ug/L
EP-8	11/12/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-8	11/12/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-8	11/12/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-8	11/12/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-8	11/12/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-8	11/12/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	11/12/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-8	11/12/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-8	11/12/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-8	11/12/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-8	11/12/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-8	11/12/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-8	11/12/2014	MTBE	ND	10	2.5	143	ug/L
EP-8	11/12/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-8	11/12/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-8	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-8	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-8	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-8	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-8	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-8	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-8	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-8	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-8	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-8	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-8	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-8	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-8	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-8	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-8	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-8	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-8	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-8	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-8	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-8	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-8	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-8	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-8	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-8	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-8	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-8	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-8	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-8	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-8	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-8	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-8	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-8	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-8	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-8	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-8	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-8	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-8	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-8	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-8	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-8	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-8	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-8	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-8	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-8	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-8	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-8	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-8	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-8	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-8	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-8	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-8	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-8	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-8	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-8	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-8	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-8	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-8	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-8	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-8	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-8	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-8	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-8	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-8	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-8	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-8	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-8	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-8	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-8	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-8	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-8	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-8	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-8	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-8	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-8	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-8	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-8	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-8	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-8	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-8	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-8	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-8	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-8	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-8	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-8	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-8	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-8	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-8	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-8	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-8	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-8	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-8	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-8	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-8	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-8	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-8	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-8	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-8	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-8	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-8	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-8	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-8	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-8	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-8	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-8	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-8	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-8	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-8	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-8	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-8	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-8	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-8	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-8	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-8	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-8	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-8	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-8	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-8	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-8	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-8	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-8	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-8	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-8	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-8	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-8	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-8	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-8	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-8	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-8	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-8	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-8	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-8	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-8	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-8	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-8	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-8	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-8	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-8	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-8	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-8	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-8	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-8	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-8	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-8	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-8	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-8	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-8	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-8	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-8	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-8	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-8	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-8	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-8	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-8	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-8	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-8	3/30/2017	Acetone	12	50	8.8	14064	ug/L
EP-8	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-8	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-8	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-8	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-8	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-8	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-8	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-8	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-8	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-8	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-8	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-8	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-8	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-8	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-8	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-8	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-8	3/30/2017	2-Butanone	17	50	11	5565	ug/L
EP-8	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-8	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-8	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-8	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-8	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-8	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-8	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-8	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-8	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-8	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-8	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-8	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-8	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-8	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-8	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-8	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-8	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-8	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-8	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-8	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-8	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-8	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-8	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-8	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-8	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-8	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-8	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-8	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-8	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-8	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-8	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-8	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-8	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-8	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-8	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-8	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-8	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-8	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-8	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-8	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-8	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-8	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-8	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-8	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-8	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-8	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-8	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-8	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-8	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-8	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-8	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-8	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-8	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-8	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-8	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-8	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-8	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-8	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-8	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-8	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-8	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-8	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-8	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-8	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-8	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-8	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-8	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-8	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L
EP-8	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-8	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-8	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-8	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-8	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-8	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-8	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-8	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-8	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-8	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-8	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-8	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-8	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-8	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-8	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-8	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-8	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-8	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-8	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-8	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-8	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-8	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-8	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-8	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-8	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-8	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-8	2/23/2018	Acetone	36	10	0.82	14064	ug/L
EP-8	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-8	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-8	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-8	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-8	2/23/2018	Chloromethane	0.87	3	0.29	20.32	ug/L
EP-8	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-8	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-8	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-8	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-8	2/23/2018	Carbon Disulfide	1.9	10	0.4	810	ug/L
EP-8	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-8	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-8	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-8	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-8	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-8	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-8	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-8	2/23/2018	2-Butanone	2.8	10	1.1	5565	ug/L
EP-8	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-8	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-8	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-8	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-8	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-8	2/23/2018	1,2,4-Trimethylbenzene	0.32	1	0.11	56	ug/L
EP-8	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-8	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-8	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-8	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-8	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-8	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-8	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-8	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-8	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-8	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-8	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-8	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-8	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-8	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-8	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-8	2/23/2018	Toluene	ND	1	0.064	1000	ug/L
EP-8	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-8	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-8	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-8	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-8	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-8	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-8	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-8	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L
EP-8	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-8	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-8	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-8	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-8	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-8	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-8	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-8	9/7/2018	Acetone	8.3	10	0.79	14064	ug/L
EP-8	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-8	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-8	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-8	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-8	9/7/2018	Chloromethane	1.2	3	0.29	20.32	ug/L
EP-8	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-8	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-8	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-8	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-8	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-8	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-8	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-8	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-8	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-8	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-8	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-8	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-8	9/7/2018	2-Butanone	ND	10	1.3	5565	ug/L
EP-8	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-8	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-8	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-8	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-8	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-8	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-8	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-8	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-8	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-8	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-8	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-8	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-8	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-8	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-8	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-8	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-8	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-8	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-8	9/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
EP-8	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-8	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-8	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-8	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-8	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-8	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-8	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-8	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-8	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-8	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-8	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-8	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-8	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-8	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-8	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-8	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-8	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-8	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-8	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-8	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-8	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-8	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-8	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-8	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-8	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-8	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-8	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-8	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-8	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-8	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-8	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-8	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-8	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-8	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-8	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-8	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-8	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-8	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-8	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-8	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-8	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-8	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-8	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-8	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-8	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-8	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-8	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-8	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-8	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-8	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-8	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-8	4/29/2019	Chloromethane	*4.2*	*30*	3.209873	20.32	ug/L
EP-8	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-8	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-8	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-8	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-8	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-8	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-8	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-8	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-8	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-8	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-8	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-8	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-8	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-8	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-8	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-8	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-8	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-8	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-8	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-8	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-8	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-8	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-8	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-8	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-8	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-8	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-8	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-8	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-8	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-8	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-8	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-8	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-8	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
EP-8	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-8	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-8	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-8	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-8	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-8	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-8	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-8	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-8	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-8	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-8	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-8	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-8	4/29/2019	Acetone	17	100	11.993964	14064	ug/L
EP-8	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-8	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-8	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-8	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-8	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-8	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-8	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-8	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-8	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-8	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-8	4/29/2019	Chloromethane	*5*	*30*	3.209873	20.32	ug/L
EP-8	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-8	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-8	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-8	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-8	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-8	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-8	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-8	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-8	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-8	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-8	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-8	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-8	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-8	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-8	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-8	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-8	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-8	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-8	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-8	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-8	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-8	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-8	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-8	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-8	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-8	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-8	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-8	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-8	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-8	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-8	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-8	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-8	11/20/2019	1,2,4-Trimethylbenzene	0.5	1	0.213199	56	ug/L
EP-8	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-8	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-8	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-8	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-8	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-8	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-8	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-8	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-8	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-8	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-8	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-8	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-8	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-8	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
EP-8	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-8	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-8	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-8	11/20/2019	Acetone	45	10	1.199396	14064	ug/L
EP-8	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-8	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-8	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-8	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-8	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-8	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-8	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-8	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-8	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-8	11/20/2019	Chloromethane	1.3	3	0.320987	20.32	ug/L
EP-8	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-8	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-8	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-8	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-8	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-8	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-8	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-8	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-8	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-8	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-8	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-8	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-8	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-8	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-8	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-8	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-8	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-8	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-8	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-8	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-8	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-8	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-8	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-8	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-8	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-8	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-8	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-8	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-8	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-8	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-8	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-8	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-8	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-8	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-8	9/17/2020	1,2,4-Trimethylbenzene	0.4	1	0.12	56	ug/L
EP-8	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-8	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-8	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-8	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-8	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-8	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-8	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-8	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-8	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-8	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-8	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-8	9/17/2020	2-Butanone	5.8	10	1.1	5565	ug/L
EP-8	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-8	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-8	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-8	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-8	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-8	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-8	9/17/2020	Acetone	69	10	2.3	14064	ug/L
EP-8	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-8	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-8	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-8	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-8	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-8	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-8	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
EP-8	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-8	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-8	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-8	9/17/2020	Chloromethane	4.4	3	0.4	20.32	ug/L
EP-8	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-8	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-8	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-8	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-8	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-8	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-8	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-8	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-8	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-8	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-8	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-8	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-8	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-8	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-8	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-8	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-8	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-8	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-8	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-8	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-8	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-8	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-8	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-8	12/22/2020	Acetone	ND	25	10	14064	ug/L
EP-8	12/22/2020	Benzene	ND	1	0.38	5	ug/L
EP-8	12/22/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-8	12/22/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-8	12/22/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-8	12/22/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-8	12/22/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-8	12/22/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-8	12/22/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-8	12/22/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-8	12/22/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-8	12/22/2020	Chloroform	ND	1	0.6	100	ug/L
EP-8	12/22/2020	Chloromethane	2.41	1	0.83	20.32	ug/L
EP-8	12/22/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-8	12/22/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-8	12/22/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-8	12/22/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-8	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-8	12/22/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-8	12/22/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-8	12/22/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-8	12/22/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-8	12/22/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-8	12/22/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-8	12/22/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-8	12/22/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-8	12/22/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-8	12/22/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-8	12/22/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-8	12/22/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-8	12/22/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-8	12/22/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-8	12/22/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-8	12/22/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-8	12/22/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-8	12/22/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-8	12/22/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-8	12/22/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-8	12/22/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-8	12/22/2020	MTBE	ND	1	0.74	143	ug/L
EP-8	12/22/2020	Naphthalene	ND	1	1	30	ug/L
EP-8	12/22/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-8	12/22/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-8	12/22/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-8	12/22/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-8	12/22/2020	Styrene	ND	1	1	100	ug/L
EP-8	12/22/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-8	12/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
EP-8	12/22/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-8	12/22/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-8	12/22/2020	Toluene	ND	1	0.41	1000	ug/L
EP-8	12/22/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-8	12/22/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-8	12/22/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-8	12/22/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-8	12/22/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-8	12/22/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-8	12/22/2020	Trichloroethene	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	12/22/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-8	12/22/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-8	12/22/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-8	12/22/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-8	12/22/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-8	12/22/2020	Xylenes, Total	ND	10	1.6	620	ug/L
EP-9	5/29/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-9	5/29/2012	Acetone	ND	100	21	14064	ug/L
EP-9	5/29/2012	Chloroform	ND	10	3.5	100	ug/L
EP-9	5/29/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-9	5/29/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-9	5/29/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-9	5/29/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
EP-9	5/29/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-9	5/29/2012	Chloroethane	ND	20	4.7	20857	ug/L
EP-9	5/29/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-9	5/29/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	5/29/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
EP-9	5/29/2012	Bromoform	ND	10	4.3	32.9	ug/L
EP-9	5/29/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-9	5/29/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-9	5/29/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-9	5/29/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-9	5/29/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-9	5/29/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-9	5/29/2012	2-Butanone	ND	100	22	5565	ug/L
EP-9	5/29/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-9	5/29/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-9	5/29/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-9	5/29/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-9	5/29/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-9	5/29/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-9	5/29/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-9	5/29/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-9	5/29/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-9	5/29/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-9	5/29/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-9	5/29/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-9	5/29/2012	Styrene	ND	10	4.1	100	ug/L
EP-9	5/29/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-9	5/29/2012	n-Butylbenzene	ND	10	4	1000	ug/L
EP-9	5/29/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-9	5/29/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-9	5/29/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-9	5/29/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-9	5/29/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-9	5/29/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-9	5/29/2012	Toluene	ND	10	4.7	1000	ug/L
EP-9	5/29/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-9	5/29/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-9	5/29/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-9	5/29/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-9	5/29/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-9	5/29/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-9	5/29/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-9	5/29/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-9	5/29/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-9	5/29/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-9	5/29/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-9	5/29/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-9	5/29/2012	MTBE	ND	10	9.6	143	ug/L
EP-9	5/29/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-9	5/29/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-9	11/6/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
EP-9	11/6/2012	Acetone	ND	100	15	14064	ug/L
EP-9	11/6/2012	Chloroform	ND	10	3.5	100	ug/L
EP-9	11/6/2012	Benzene	*ND*	*10*	4	5	ug/L
EP-9	11/6/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
EP-9	11/6/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
EP-9	11/6/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
EP-9	11/6/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
EP-9	11/6/2012	Chloroethane	ND	20	4.4	20857	ug/L
EP-9	11/6/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
EP-9	11/6/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	11/6/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
EP-9	11/6/2012	Bromoform	ND	10	4.3	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/6/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
EP-9	11/6/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
EP-9	11/6/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
EP-9	11/6/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
EP-9	11/6/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
EP-9	11/6/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
EP-9	11/6/2012	2-Butanone	ND	100	22	5565	ug/L
EP-9	11/6/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
EP-9	11/6/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
EP-9	11/6/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
EP-9	11/6/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
EP-9	11/6/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
EP-9	11/6/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
EP-9	11/6/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
EP-9	11/6/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
EP-9	11/6/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
EP-9	11/6/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
EP-9	11/6/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
EP-9	11/6/2012	Ethylbenzene	ND	10	3.8	700	ug/L
EP-9	11/6/2012	Styrene	ND	10	4.1	100	ug/L
EP-9	11/6/2012	n-Propylbenzene	ND	10	4	660	ug/L
EP-9	11/6/2012	n-Butylbenzene	ND	30	4	1000	ug/L
EP-9	11/6/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
EP-9	11/6/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
EP-9	11/6/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
EP-9	11/6/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
EP-9	11/6/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
EP-9	11/6/2012	Bromobenzene	ND	10	6.3	62	ug/L
EP-9	11/6/2012	Toluene	ND	10	4.7	1000	ug/L
EP-9	11/6/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
EP-9	11/6/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
EP-9	11/6/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
EP-9	11/6/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
EP-9	11/6/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
EP-9	11/6/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
EP-9	11/6/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
EP-9	11/6/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
EP-9	11/6/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
EP-9	11/6/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
EP-9	11/6/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
EP-9	11/6/2012	Xylenes, Total	ND	15	13	620	ug/L
EP-9	11/6/2012	MTBE	ND	10	9.6	143	ug/L
EP-9	11/6/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
EP-9	11/6/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
EP-9	5/28/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-9	5/28/2013	Acetone	ND	100	17	14064	ug/L
EP-9	5/28/2013	Chloroform	ND	10	4.7	100	ug/L
EP-9	5/28/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-9	5/28/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-9	5/28/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-9	5/28/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-9	5/28/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-9	5/28/2013	Chloroethane	ND	20	3	20857	ug/L
EP-9	5/28/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-9	5/28/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	5/28/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-9	5/28/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-9	5/28/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-9	5/28/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-9	5/28/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-9	5/28/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-9	5/28/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-9	5/28/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-9	5/28/2013	2-Butanone	ND	100	10	5565	ug/L
EP-9	5/28/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-9	5/28/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-9	5/28/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-9	5/28/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-9	5/28/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-9	5/28/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-9	5/28/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-9	5/28/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-9	5/28/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-9	5/28/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-9	5/28/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-9	5/28/2013	Ethylbenzene	ND	10	4.5	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	Styrene	ND	10	5.8	100	ug/L
EP-9	5/28/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-9	5/28/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-9	5/28/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-9	5/28/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-9	5/28/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-9	5/28/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-9	5/28/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-9	5/28/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-9	5/28/2013	Toluene	ND	10	4.4	1000	ug/L
EP-9	5/28/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-9	5/28/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-9	5/28/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-9	5/28/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-9	5/28/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-9	5/28/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-9	5/28/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-9	5/28/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	5/28/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
EP-9	5/28/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-9	5/28/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-9	5/28/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-9	5/28/2013	MTBE	ND	10	7.7	143	ug/L
EP-9	5/28/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-9	5/28/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	10/15/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
EP-9	10/15/2013	Acetone	ND	100	17	14064	ug/L
EP-9	10/15/2013	Chloroform	ND	10	4.7	100	ug/L
EP-9	10/15/2013	Benzene	*ND*	*10*	4.6	5	ug/L
EP-9	10/15/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
EP-9	10/15/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
EP-9	10/15/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
EP-9	10/15/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
EP-9	10/15/2013	Chloroethane	ND	20	3	20857	ug/L
EP-9	10/15/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
EP-9	10/15/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
EP-9	10/15/2013	Carbon Disulfide	ND	100	8	810	ug/L
EP-9	10/15/2013	Bromoform	ND	10	3.7	32.9	ug/L
EP-9	10/15/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
EP-9	10/15/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
EP-9	10/15/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
EP-9	10/15/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
EP-9	10/15/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
EP-9	10/15/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
EP-9	10/15/2013	2-Butanone	ND	100	10	5565	ug/L
EP-9	10/15/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
EP-9	10/15/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
EP-9	10/15/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
EP-9	10/15/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
EP-9	10/15/2013	2-Chlorotoluene	ND	10	5	233	ug/L
EP-9	10/15/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
EP-9	10/15/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
EP-9	10/15/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
EP-9	10/15/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
EP-9	10/15/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
EP-9	10/15/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
EP-9	10/15/2013	Ethylbenzene	ND	10	4.5	700	ug/L
EP-9	10/15/2013	Styrene	ND	10	5.8	100	ug/L
EP-9	10/15/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
EP-9	10/15/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
EP-9	10/15/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
EP-9	10/15/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
EP-9	10/15/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
EP-9	10/15/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
EP-9	10/15/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
EP-9	10/15/2013	Bromobenzene	ND	10	5.7	62	ug/L
EP-9	10/15/2013	Toluene	ND	10	4.4	1000	ug/L
EP-9	10/15/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
EP-9	10/15/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
EP-9	10/15/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
EP-9	10/15/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
EP-9	10/15/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
EP-9	10/15/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
EP-9	10/15/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
EP-9	10/15/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	10/15/2013	2-Hexanone	*ND*	*100*	13	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
EP-9	10/15/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
EP-9	10/15/2013	Xylenes, Total	ND	15	14	620	ug/L
EP-9	10/15/2013	MTBE	ND	10	7.7	143	ug/L
EP-9	10/15/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
EP-9	10/15/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
EP-9	3/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-9	3/5/2014	Acetone	ND	100	49	14064	ug/L
EP-9	3/5/2014	Chloroform	ND	10	3.2	100	ug/L
EP-9	3/5/2014	Benzene	*ND*	*10*	1.5	5	ug/L
EP-9	3/5/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-9	3/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-9	3/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-9	3/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-9	3/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-9	3/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
EP-9	3/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-9	3/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-9	3/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
EP-9	3/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-9	3/5/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-9	3/5/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-9	3/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	3/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-9	3/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-9	3/5/2014	2-Butanone	ND	100	14	5565	ug/L
EP-9	3/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-9	3/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-9	3/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-9	3/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-9	3/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-9	3/5/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-9	3/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-9	3/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-9	3/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-9	3/5/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-9	3/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-9	3/5/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-9	3/5/2014	Styrene	ND	10	1.2	100	ug/L
EP-9	3/5/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-9	3/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-9	3/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-9	3/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-9	3/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-9	3/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-9	3/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-9	3/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-9	3/5/2014	Toluene	ND	10	1.7	1000	ug/L
EP-9	3/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-9	3/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-9	3/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-9	3/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-9	3/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-9	3/5/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	3/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-9	3/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-9	3/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-9	3/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-9	3/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-9	3/5/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-9	3/5/2014	MTBE	ND	10	2.5	143	ug/L
EP-9	3/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-9	3/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
EP-9	11/13/2014	Acetone	ND	100	49	14064	ug/L
EP-9	11/13/2014	Chloroform	ND	10	3.2	100	ug/L
EP-9	11/13/2014	Benzene	ND	5	1.5	5	ug/L
EP-9	11/13/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
EP-9	11/13/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
EP-9	11/13/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
EP-9	11/13/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
EP-9	11/13/2014	Chloroethane	ND	20	4.8	20857	ug/L
EP-9	11/13/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
EP-9	11/13/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
EP-9	11/13/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
EP-9	11/13/2014	Bromoform	ND	10	2.5	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/13/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
EP-9	11/13/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
EP-9	11/13/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
EP-9	11/13/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	11/13/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
EP-9	11/13/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
EP-9	11/13/2014	2-Butanone	ND	100	14	5565	ug/L
EP-9	11/13/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
EP-9	11/13/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
EP-9	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
EP-9	11/13/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
EP-9	11/13/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
EP-9	11/13/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
EP-9	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
EP-9	11/13/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
EP-9	11/13/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
EP-9	11/13/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
EP-9	11/13/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Ethylbenzene	ND	10	1.3	700	ug/L
EP-9	11/13/2014	Styrene	ND	10	1.2	100	ug/L
EP-9	11/13/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
EP-9	11/13/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
EP-9	11/13/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
EP-9	11/13/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
EP-9	11/13/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
EP-9	11/13/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
EP-9	11/13/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
EP-9	11/13/2014	Bromobenzene	ND	10	1.8	62	ug/L
EP-9	11/13/2014	Toluene	ND	10	1.7	1000	ug/L
EP-9	11/13/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
EP-9	11/13/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
EP-9	11/13/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
EP-9	11/13/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
EP-9	11/13/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
EP-9	11/13/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	11/13/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
EP-9	11/13/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
EP-9	11/13/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
EP-9	11/13/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
EP-9	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
EP-9	11/13/2014	Xylenes, Total	ND	15	3.8	620	ug/L
EP-9	11/13/2014	MTBE	ND	10	2.5	143	ug/L
EP-9	11/13/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
EP-9	11/13/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
EP-9	3/25/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-9	3/25/2015	Acetone	ND	100	9.4	14064	ug/L
EP-9	3/25/2015	Chloroform	ND	10	2.1	100	ug/L
EP-9	3/25/2015	Benzene	ND	5	0.65	5	ug/L
EP-9	3/25/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-9	3/25/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-9	3/25/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-9	3/25/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-9	3/25/2015	Chloroethane	ND	20	1	20857	ug/L
EP-9	3/25/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-9	3/25/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-9	3/25/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-9	3/25/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-9	3/25/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-9	3/25/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-9	3/25/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-9	3/25/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	3/25/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-9	3/25/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-9	3/25/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-9	3/25/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-9	3/25/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	3/25/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-9	3/25/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	3/25/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-9	3/25/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-9	3/25/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-9	3/25/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-9	3/25/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-9	3/25/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-9	3/25/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Ethylbenzene	ND	10	1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/25/2015	Styrene	ND	10	1.1	100	ug/L
EP-9	3/25/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-9	3/25/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-9	3/25/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-9	3/25/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-9	3/25/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-9	3/25/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-9	3/25/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	3/25/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-9	3/25/2015	Toluene	ND	10	1.1	1000	ug/L
EP-9	3/25/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-9	3/25/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-9	3/25/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	3/25/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-9	3/25/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-9	3/25/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-9	3/25/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-9	3/25/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
EP-9	3/25/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-9	3/25/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	3/25/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-9	3/25/2015	MTBE	ND	10	1.7	143	ug/L
EP-9	3/25/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	3/25/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	9/1/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
EP-9	9/1/2015	Acetone	ND	100	9.4	14064	ug/L
EP-9	9/1/2015	Chloroform	ND	10	2.1	100	ug/L
EP-9	9/1/2015	Benzene	ND	5	0.65	5	ug/L
EP-9	9/1/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
EP-9	9/1/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
EP-9	9/1/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
EP-9	9/1/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
EP-9	9/1/2015	Chloroethane	ND	20	1	20857	ug/L
EP-9	9/1/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
EP-9	9/1/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
EP-9	9/1/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
EP-9	9/1/2015	Bromoform	ND	10	1.6	32.9	ug/L
EP-9	9/1/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
EP-9	9/1/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
EP-9	9/1/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
EP-9	9/1/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
EP-9	9/1/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
EP-9	9/1/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
EP-9	9/1/2015	2-Butanone	ND	100	3.6	5565	ug/L
EP-9	9/1/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
EP-9	9/1/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	9/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
EP-9	9/1/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	9/1/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
EP-9	9/1/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
EP-9	9/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
EP-9	9/1/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
EP-9	9/1/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
EP-9	9/1/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
EP-9	9/1/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Ethylbenzene	ND	10	1	700	ug/L
EP-9	9/1/2015	Styrene	ND	10	1.1	100	ug/L
EP-9	9/1/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
EP-9	9/1/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
EP-9	9/1/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
EP-9	9/1/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
EP-9	9/1/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
EP-9	9/1/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
EP-9	9/1/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	9/1/2015	Bromobenzene	ND	10	1.1	62	ug/L
EP-9	9/1/2015	Toluene	ND	10	1.1	1000	ug/L
EP-9	9/1/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
EP-9	9/1/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
EP-9	9/1/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
EP-9	9/1/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
EP-9	9/1/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
EP-9	9/1/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
EP-9	9/1/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
EP-9	9/1/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/1/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
EP-9	9/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	9/1/2015	Xylenes, Total	ND	15	2.8	620	ug/L
EP-9	9/1/2015	MTBE	ND	10	1.7	143	ug/L
EP-9	9/1/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	9/1/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
EP-9	8/30/2016	Acetone	ND	100	49	14064	ug/L
EP-9	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
EP-9	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
EP-9	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
EP-9	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
EP-9	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
EP-9	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
EP-9	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
EP-9	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
EP-9	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
EP-9	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
EP-9	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
EP-9	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
EP-9	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
EP-9	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
EP-9	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
EP-9	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
EP-9	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
EP-9	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
EP-9	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
EP-9	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
EP-9	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
EP-9	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
EP-9	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
EP-9	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
EP-9	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
EP-9	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
EP-9	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
EP-9	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
EP-9	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
EP-9	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
EP-9	8/30/2016	Styrene	ND	10	1.1	100	ug/L
EP-9	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
EP-9	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
EP-9	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
EP-9	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
EP-9	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
EP-9	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
EP-9	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
EP-9	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
EP-9	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
EP-9	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
EP-9	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
EP-9	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
EP-9	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
EP-9	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
EP-9	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
EP-9	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
EP-9	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
EP-9	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
EP-9	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
EP-9	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
EP-9	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
EP-9	8/30/2016	MTBE	ND	10	2.1	143	ug/L
EP-9	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
EP-9	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
EP-9	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-9	3/30/2017	Acetone	12	50	8.8	14064	ug/L
EP-9	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
EP-9	3/30/2017	Benzene	ND	5	0.96	5	ug/L
EP-9	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-9	3/30/2017	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
EP-9	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
EP-9	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
EP-9	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-9	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-9	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-9	3/30/2017	Carbon Disulfide	ND	50	6	810	ug/L
EP-9	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-9	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
EP-9	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-9	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-9	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
EP-9	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-9	3/30/2017	2-Butanone	ND	50	11	5565	ug/L
EP-9	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-9	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
EP-9	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-9	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
EP-9	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-9	3/30/2017	1,2,4-Trimethylbenzene	ND	5	1	56	ug/L
EP-9	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-9	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-9	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-9	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
EP-9	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
EP-9	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
EP-9	3/30/2017	Styrene	ND	5	1.6	100	ug/L
EP-9	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
EP-9	3/30/2017	n-Butylbenzene	ND	15	1.6	1000	ug/L
EP-9	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-9	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-9	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
EP-9	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-9	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
EP-9	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-9	3/30/2017	Toluene	ND	5	0.89	1000	ug/L
EP-9	3/30/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-9	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
EP-9	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
EP-9	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
EP-9	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
EP-9	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-9	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-9	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
EP-9	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-9	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
EP-9	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
EP-9	3/30/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-9	3/30/2017	MTBE	ND	5	1.5	143	ug/L
EP-9	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
EP-9	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
EP-9	10/24/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
EP-9	10/24/2017	Acetone	ND	50	8.2	14064	ug/L
EP-9	10/24/2017	Chloroform	ND	5	4	100	ug/L
EP-9	10/24/2017	Benzene	ND	5	0.62	5	ug/L
EP-9	10/24/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
EP-9	10/24/2017	Bromomethane	*ND*	*15*	2.6	7.54	ug/L
EP-9	10/24/2017	Chloromethane	ND	15	2.9	20.32	ug/L
EP-9	10/24/2017	Dibromomethane	ND	5	0.91	8	ug/L
EP-9	10/24/2017	Chloroethane	ND	10	2.3	20857	ug/L
EP-9	10/24/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
EP-9	10/24/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
EP-9	10/24/2017	Carbon Disulfide	ND	50	4	810	ug/L
EP-9	10/24/2017	Bromoform	ND	5	2.1	32.9	ug/L
EP-9	10/24/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
EP-9	10/24/2017	1,1-Dichloroethane	ND	5	4	25	ug/L
EP-9	10/24/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
EP-9	10/24/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
EP-9	10/24/2017	Dichlorodifluoromethane	ND	5	10	197	ug/L
EP-9	10/24/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
EP-9	10/24/2017	2-Butanone	ND	50	11	5565	ug/L
EP-9	10/24/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
EP-9	10/24/2017	Trichloroethene	ND	5	1.1	5	ug/L
EP-9	10/24/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
EP-9	10/24/2017	1,2,3-Trichlorobenzene	ND	5	1.2	70	ug/L
EP-9	10/24/2017	2-Chlorotoluene	ND	5	4	233	ug/L
EP-9	10/24/2017	1,2,4-Trimethylbenzene	ND	5	1.1	56	ug/L
EP-9	10/24/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
EP-9	10/24/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
EP-9	10/24/2017	tert-Butylbenzene	ND	5	1	690	ug/L
EP-9	10/24/2017	Isopropylbenzene	ND	5	0.51	447	ug/L
EP-9	10/24/2017	p-Isopropyltoluene	ND	5	0.96	NA	ug/L
EP-9	10/24/2017	Ethylbenzene	ND	5	0.93	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Styrene	ND	5	1.6	100	ug/L
EP-9	10/24/2017	n-Propylbenzene	ND	5	0.74	660	ug/L
EP-9	10/24/2017	n-Butylbenzene	ND	15	1.3	1000	ug/L
EP-9	10/24/2017	4-Chlorotoluene	ND	5	4	250	ug/L
EP-9	10/24/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
EP-9	10/24/2017	1,2-Dichloroethane	ND	5	4	5	ug/L
EP-9	10/24/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
EP-9	10/24/2017	1,3,5-Trimethylbenzene	ND	5	0.87	60	ug/L
EP-9	10/24/2017	Bromobenzene	ND	5	1.4	62	ug/L
EP-9	10/24/2017	Toluene	ND	5	0.64	1000	ug/L
EP-9	10/24/2017	Chlorobenzene	ND	5	1.1	77.6	ug/L
EP-9	10/24/2017	Dibromochloromethane	*ND*	*5*	0.72	1.68	ug/L
EP-9	10/24/2017	Tetrachloroethene	ND	5	1.3	5	ug/L
EP-9	10/24/2017	sec-Butylbenzene	ND	5	1.1	2000	ug/L
EP-9	10/24/2017	1,3-Dichloropropane	ND	5	1.7	370	ug/L
EP-9	10/24/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
EP-9	10/24/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
EP-9	10/24/2017	1,1-Dichloropropene	ND	5	0.93	NA	ug/L
EP-9	10/24/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
EP-9	10/24/2017	2,2-Dichloropropane	ND	10	1.6	NA	ug/L
EP-9	10/24/2017	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
EP-9	10/24/2017	Xylenes, Total	ND	7.5	3.2	620	ug/L
EP-9	10/24/2017	MTBE	ND	5	2.4	143	ug/L
EP-9	10/24/2017	cis-1,3-Dichloropropene	ND	5	0.82	NA	ug/L
EP-9	10/24/2017	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
EP-9	2/23/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
EP-9	2/23/2018	Acetone	27	10	0.82	14064	ug/L
EP-9	2/23/2018	Chloroform	ND	1	0.4	100	ug/L
EP-9	2/23/2018	Benzene	ND	1	0.062	5	ug/L
EP-9	2/23/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
EP-9	2/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-9	2/23/2018	Chloromethane	0.73	3	0.29	20.32	ug/L
EP-9	2/23/2018	Dibromomethane	ND	1	0.091	8	ug/L
EP-9	2/23/2018	Chloroethane	ND	2	0.23	20857	ug/L
EP-9	2/23/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
EP-9	2/23/2018	Methylene Chloride	ND	3	0.11	5	ug/L
EP-9	2/23/2018	Carbon Disulfide	0.91	10	0.4	810	ug/L
EP-9	2/23/2018	Bromoform	ND	1	0.21	32.9	ug/L
EP-9	2/23/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
EP-9	2/23/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-9	2/23/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
EP-9	2/23/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
EP-9	2/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-9	2/23/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
EP-9	2/23/2018	2-Butanone	1.6	10	1.1	5565	ug/L
EP-9	2/23/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
EP-9	2/23/2018	Trichloroethene	ND	1	0.11	5	ug/L
EP-9	2/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
EP-9	2/23/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
EP-9	2/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-9	2/23/2018	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
EP-9	2/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
EP-9	2/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
EP-9	2/23/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
EP-9	2/23/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
EP-9	2/23/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
EP-9	2/23/2018	Ethylbenzene	ND	1	0.093	700	ug/L
EP-9	2/23/2018	Styrene	ND	1	0.16	100	ug/L
EP-9	2/23/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
EP-9	2/23/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
EP-9	2/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-9	2/23/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
EP-9	2/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-9	2/23/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
EP-9	2/23/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
EP-9	2/23/2018	Bromobenzene	ND	1	0.14	62	ug/L
EP-9	2/23/2018	Toluene	0.17	1	0.064	1000	ug/L
EP-9	2/23/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
EP-9	2/23/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
EP-9	2/23/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
EP-9	2/23/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
EP-9	2/23/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
EP-9	2/23/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
EP-9	2/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-9	2/23/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
EP-9	2/23/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	2/23/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
EP-9	2/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
EP-9	2/23/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
EP-9	2/23/2018	MTBE	ND	1	0.24	143	ug/L
EP-9	2/23/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
EP-9	2/23/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
EP-9	9/7/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
EP-9	9/7/2018	Acetone	16	10	0.79	14064	ug/L
EP-9	9/7/2018	Chloroform	ND	1	0.4	100	ug/L
EP-9	9/7/2018	Benzene	ND	1	0.17	5	ug/L
EP-9	9/7/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
EP-9	9/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
EP-9	9/7/2018	Chloromethane	2.5	3	0.29	20.32	ug/L
EP-9	9/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
EP-9	9/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
EP-9	9/7/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
EP-9	9/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
EP-9	9/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
EP-9	9/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
EP-9	9/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
EP-9	9/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
EP-9	9/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
EP-9	9/7/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
EP-9	9/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
EP-9	9/7/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
EP-9	9/7/2018	2-Butanone	1.5	10	1.3	5565	ug/L
EP-9	9/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
EP-9	9/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
EP-9	9/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
EP-9	9/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
EP-9	9/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
EP-9	9/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
EP-9	9/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
EP-9	9/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
EP-9	9/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
EP-9	9/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
EP-9	9/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
EP-9	9/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
EP-9	9/7/2018	Styrene	ND	1	0.25	100	ug/L
EP-9	9/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
EP-9	9/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-9	9/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
EP-9	9/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
EP-9	9/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
EP-9	9/7/2018	4-Methyl-2-Pentanone	0.47	10	0.45	1243	ug/L
EP-9	9/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
EP-9	9/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
EP-9	9/7/2018	Toluene	ND	1	0.17	1000	ug/L
EP-9	9/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
EP-9	9/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
EP-9	9/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
EP-9	9/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
EP-9	9/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
EP-9	9/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
EP-9	9/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
EP-9	9/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
EP-9	9/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
EP-9	9/7/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
EP-9	9/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
EP-9	9/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
EP-9	9/7/2018	MTBE	ND	1	0.32	143	ug/L
EP-9	9/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
EP-9	9/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
EP-9	4/29/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
EP-9	4/29/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
EP-9	4/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
EP-9	4/29/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
EP-9	4/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
EP-9	4/29/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
EP-9	4/29/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
EP-9	4/29/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
EP-9	4/29/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
EP-9	4/29/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
EP-9	4/29/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
EP-9	4/29/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
EP-9	4/29/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	4/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
EP-9	4/29/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
EP-9	4/29/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
EP-9	4/29/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
EP-9	4/29/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
EP-9	4/29/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
EP-9	4/29/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
EP-9	4/29/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
EP-9	4/29/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
EP-9	4/29/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
EP-9	4/29/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
EP-9	4/29/2019	2-Butanone	ND	100	20.894166	5565	ug/L
EP-9	4/29/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
EP-9	4/29/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
EP-9	4/29/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
EP-9	4/29/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
EP-9	4/29/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
EP-9	4/29/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
EP-9	4/29/2019	Acetone	ND	100	11.993964	14064	ug/L
EP-9	4/29/2019	Benzene	*ND*	*10*	1.666391	5	ug/L
EP-9	4/29/2019	Bromobenzene	ND	10	2.44727	62	ug/L
EP-9	4/29/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
EP-9	4/29/2019	Bromoform	ND	10	2.886632	32.9	ug/L
EP-9	4/29/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
EP-9	4/29/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
EP-9	4/29/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
EP-9	4/29/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
EP-9	4/29/2019	Chloroethane	ND	20	1.778026	20857	ug/L
EP-9	4/29/2019	Chloroform	ND	10	1.218906	100	ug/L
EP-9	4/29/2019	Chloromethane	*5.2*	*30*	3.209873	20.32	ug/L
EP-9	4/29/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
EP-9	4/29/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
EP-9	4/29/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
EP-9	4/29/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
EP-9	4/29/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
EP-9	4/29/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
EP-9	4/29/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
EP-9	4/29/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
EP-9	4/29/2019	MTBE	ND	10	4.56095	143	ug/L
EP-9	4/29/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
EP-9	4/29/2019	Naphthalene	ND	20	2.750713	30	ug/L
EP-9	4/29/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
EP-9	4/29/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
EP-9	4/29/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
EP-9	4/29/2019	Styrene	ND	10	1.913234	100	ug/L
EP-9	4/29/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
EP-9	4/29/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
EP-9	4/29/2019	Toluene	ND	10	3.504362	1000	ug/L
EP-9	4/29/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
EP-9	4/29/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
EP-9	4/29/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
EP-9	4/29/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
EP-9	11/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
EP-9	11/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
EP-9	11/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
EP-9	11/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
EP-9	11/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
EP-9	11/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
EP-9	11/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
EP-9	11/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
EP-9	11/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
EP-9	11/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
EP-9	11/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
EP-9	11/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
EP-9	11/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
EP-9	11/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
EP-9	11/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
EP-9	11/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
EP-9	11/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
EP-9	11/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
EP-9	11/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
EP-9	11/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
EP-9	11/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
EP-9	11/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
EP-9	11/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
EP-9	11/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
EP-9	11/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
EP-9	11/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
EP-9	11/20/2019	Acetone	13	10	1.199396	14064	ug/L
EP-9	11/20/2019	Benzene	ND	1	0.166639	5	ug/L
EP-9	11/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
EP-9	11/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
EP-9	11/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
EP-9	11/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
EP-9	11/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
EP-9	11/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
EP-9	11/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
EP-9	11/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
EP-9	11/20/2019	Chloroform	ND	1	0.121891	100	ug/L
EP-9	11/20/2019	Chloromethane	1.4	3	0.320987	20.32	ug/L
EP-9	11/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
EP-9	11/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
EP-9	11/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
EP-9	11/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
EP-9	11/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
EP-9	11/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
EP-9	11/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
EP-9	11/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
EP-9	11/20/2019	MTBE	ND	1	0.456095	143	ug/L
EP-9	11/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
EP-9	11/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
EP-9	11/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
EP-9	11/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
EP-9	11/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
EP-9	11/20/2019	Styrene	ND	1	0.191323	100	ug/L
EP-9	11/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
EP-9	11/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
EP-9	11/20/2019	Toluene	ND	1	0.350436	1000	ug/L
EP-9	11/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
EP-9	11/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
EP-9	11/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
EP-9	11/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
EP-9	11/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
EP-9	11/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
EP-9	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
EP-9	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
EP-9	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
EP-9	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
EP-9	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
EP-9	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
EP-9	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
EP-9	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
EP-9	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
EP-9	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
EP-9	9/17/2020	1,2,4-Trimethylbenzene	0.4	1	0.12	56	ug/L
EP-9	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
EP-9	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
EP-9	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
EP-9	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
EP-9	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
EP-9	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
EP-9	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
EP-9	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
EP-9	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
EP-9	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
EP-9	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
EP-9	9/17/2020	2-Butanone	5.2	10	1.1	5565	ug/L
EP-9	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
EP-9	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
EP-9	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
EP-9	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
EP-9	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
EP-9	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
EP-9	9/17/2020	Acetone	56	10	2.3	14064	ug/L
EP-9	9/17/2020	Benzene	ND	1	0.23	5	ug/L
EP-9	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
EP-9	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
EP-9	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
EP-9	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
EP-9	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
EP-9	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
EP-9	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
EP-9	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
EP-9	9/17/2020	Chloromethane	1.4	3	0.4	20.32	ug/L
EP-9	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
EP-9	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
EP-9	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
EP-9	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
EP-9	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
EP-9	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
EP-9	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
EP-9	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
EP-9	9/17/2020	MTBE	ND	1	0.39	143	ug/L
EP-9	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
EP-9	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
EP-9	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
EP-9	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
EP-9	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
EP-9	9/17/2020	Styrene	ND	1	0.13	100	ug/L
EP-9	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
EP-9	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
EP-9	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
EP-9	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
EP-9	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
EP-9	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
EP-9	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
EP-9	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
EP-9	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
EP-9	12/21/2020	Acetone	42.2	25	10	14064	ug/L
EP-9	12/21/2020	Benzene	ND	1	0.38	5	ug/L
EP-9	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
EP-9	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
EP-9	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
EP-9	12/21/2020	2-Butanone	ND	25	2.6	5565	ug/L
EP-9	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
EP-9	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
EP-9	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
EP-9	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
EP-9	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
EP-9	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
EP-9	12/21/2020	Chloromethane	1.67	1	0.83	20.32	ug/L
EP-9	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
EP-9	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
EP-9	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
EP-9	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-9	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
EP-9	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
EP-9	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
EP-9	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
EP-9	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
EP-9	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
EP-9	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
EP-9	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
EP-9	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
EP-9	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
EP-9	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
EP-9	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
EP-9	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
EP-9	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
EP-9	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
EP-9	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
EP-9	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
EP-9	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
EP-9	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
EP-9	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
EP-9	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
EP-9	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
EP-9	12/21/2020	MTBE	ND	1	0.74	143	ug/L
EP-9	12/21/2020	Naphthalene	ND	1	1	30	ug/L
EP-9	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
EP-9	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
EP-9	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
EP-9	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
EP-9	12/21/2020	Styrene	ND	1	1	100	ug/L
EP-9	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
EP-9	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
EP-9	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
EP-9	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
EP-9	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
EP-9	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
EP-9	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
EP-9	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
EP-9	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
EP-9	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
EP-9	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
EP-9	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
EP-9	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
EP-9	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
EP-9	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
EP-9	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
EP-9	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
KA-3	3/20/2012	Benzene	**15**	2	0.28	5	ug/L
KA-3	3/20/2012	Ethylbenzene	4.2	2	0.22	700	ug/L
KA-3	3/20/2012	Toluene	ND	2	0.24	1000	ug/L
KA-3	3/20/2012	Xylenes, Total	ND	4	0.66	620	ug/L
KA-3	3/20/2012	MTBE	35	5	0.29	143	ug/L
KA-3	6/12/2012	Benzene	**13**	1	0.14	5	ug/L
KA-3	6/12/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	6/12/2012	Ethylbenzene	4.5	1	0.11	700	ug/L
KA-3	6/12/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
KA-3	6/12/2012	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/12/2012	Xylenes, Total	ND	2	0.33	620	ug/L
KA-3	6/12/2012	MTBE	28	2.5	0.14	143	ug/L
KA-3	8/21/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
KA-3	8/21/2012	Acetone	ND	10	1.5	14064	ug/L
KA-3	8/21/2012	Chloroform	ND	1	0.35	100	ug/L
KA-3	8/21/2012	Benzene	ND	1	0.4	5	ug/L
KA-3	8/21/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
KA-3	8/21/2012	Bromomethane	ND	3	0.56	7.54	ug/L
KA-3	8/21/2012	Chloromethane	ND	3	0.65	20.32	ug/L
KA-3	8/21/2012	Dibromomethane	ND	1	0.65	8	ug/L
KA-3	8/21/2012	Chloroethane	ND	2	0.44	20857	ug/L
KA-3	8/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
KA-3	8/21/2012	Methylene Chloride	ND	3	0.35	5	ug/L
KA-3	8/21/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
KA-3	8/21/2012	Bromoform	ND	1	0.43	32.9	ug/L
KA-3	8/21/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
KA-3	8/21/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
KA-3	8/21/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
KA-3	8/21/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
KA-3	8/21/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
KA-3	8/21/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
KA-3	8/21/2012	2-Butanone	ND	10	2.2	5565	ug/L
KA-3	8/21/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
KA-3	8/21/2012	Trichloroethene	ND	1	0.3	5	ug/L
KA-3	8/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
KA-3	8/21/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
KA-3	8/21/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
KA-3	8/21/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
KA-3	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
KA-3	8/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
KA-3	8/21/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
KA-3	8/21/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
KA-3	8/21/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
KA-3	8/21/2012	Ethylbenzene	ND	1	0.38	700	ug/L
KA-3	8/21/2012	Styrene	ND	1	0.41	100	ug/L
KA-3	8/21/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
KA-3	8/21/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
KA-3	8/21/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
KA-3	8/21/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
KA-3	8/21/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
KA-3	8/21/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
KA-3	8/21/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
KA-3	8/21/2012	Bromobenzene	ND	1	0.63	62	ug/L
KA-3	8/21/2012	Toluene	ND	1	0.47	1000	ug/L
KA-3	8/21/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
KA-3	8/21/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
KA-3	8/21/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
KA-3	8/21/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
KA-3	8/21/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
KA-3	8/21/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/21/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
KA-3	8/21/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
KA-3	8/21/2012	2-Hexanone	ND	10	0.89	38	ug/L
KA-3	8/21/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
KA-3	8/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
KA-3	8/21/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
KA-3	8/21/2012	MTBE	23	1	0.96	143	ug/L
KA-3	8/21/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
KA-3	8/21/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
KA-3	11/28/2012	Benzene	ND	2	0.28	5	ug/L
KA-3	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
KA-3	11/28/2012	Ethylbenzene	ND	2	0.22	700	ug/L
KA-3	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
KA-3	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
KA-3	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
KA-3	11/28/2012	MTBE	ND	5	0.29	143	ug/L
KA-3	3/18/2013	Benzene	**11**	1	0.19	5	ug/L
KA-3	3/18/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
KA-3	3/18/2013	Ethylbenzene	11	1	0.18	700	ug/L
KA-3	3/18/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	3/18/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	3/18/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	3/18/2013	MTBE	17	2.5	0.21	143	ug/L
KA-3	6/12/2013	Benzene	**9**	1	0.19	5	ug/L
KA-3	6/12/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
KA-3	6/12/2013	Ethylbenzene	8.3	1	0.18	700	ug/L
KA-3	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	6/12/2013	MTBE	31	2.5	0.21	143	ug/L
KA-3	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
KA-3	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
KA-3	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
KA-3	9/3/2013	Benzene	3.4	1	0.46	5	ug/L
KA-3	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
KA-3	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
KA-3	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
KA-3	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
KA-3	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
KA-3	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
KA-3	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
KA-3	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
KA-3	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
KA-3	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
KA-3	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
KA-3	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
KA-3	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
KA-3	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
KA-3	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
KA-3	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
KA-3	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
KA-3	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L
KA-3	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
KA-3	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
KA-3	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
KA-3	9/3/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
KA-3	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
KA-3	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
KA-3	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
KA-3	9/3/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
KA-3	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
KA-3	9/3/2013	Ethylbenzene	1.4	1	0.45	700	ug/L
KA-3	9/3/2013	Styrene	ND	1	0.58	100	ug/L
KA-3	9/3/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
KA-3	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
KA-3	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
KA-3	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
KA-3	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
KA-3	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
KA-3	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
KA-3	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
KA-3	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
KA-3	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
KA-3	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
KA-3	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
KA-3	9/3/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
KA-3	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
KA-3	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
KA-3	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
KA-3	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
KA-3	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
KA-3	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
KA-3	9/3/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
KA-3	9/3/2013	MTBE	20	1	0.77	143	ug/L
KA-3	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
KA-3	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
KA-3	11/12/2013	Benzene	2.4	1	0.19	5	ug/L
KA-3	11/12/2013	Ethylbenzene	1.8	1	0.18	700	ug/L
KA-3	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
KA-3	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
KA-3	11/12/2013	MTBE	6.5	2.5	0.21	143	ug/L
KA-3	3/10/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	3/10/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	3/10/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	3/10/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	3/10/2014	MTBE	3.9	2.5	0.093	143	ug/L
KA-3	6/5/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	6/5/2014	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	6/5/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	6/5/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	6/5/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	6/5/2014	MTBE	5.6	2.5	0.093	143	ug/L
KA-3	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
KA-3	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
KA-3	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
KA-3	9/11/2014	Benzene	ND	1	0.15	5	ug/L
KA-3	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
KA-3	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
KA-3	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
KA-3	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
KA-3	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
KA-3	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
KA-3	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
KA-3	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
KA-3	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
KA-3	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
KA-3	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
KA-3	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
KA-3	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
KA-3	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
KA-3	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
KA-3	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
KA-3	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
KA-3	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
KA-3	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
KA-3	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
KA-3	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
KA-3	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
KA-3	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
KA-3	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
KA-3	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
KA-3	9/11/2014	Styrene	ND	1	0.12	100	ug/L
KA-3	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
KA-3	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
KA-3	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
KA-3	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
KA-3	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
KA-3	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
KA-3	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
KA-3	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
KA-3	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
KA-3	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
KA-3	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
KA-3	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
KA-3	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
KA-3	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
KA-3	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
KA-3	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
KA-3	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
KA-3	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
KA-3	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
KA-3	9/11/2014	MTBE	ND	1	0.25	143	ug/L
KA-3	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
KA-3	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
KA-3	11/11/2014	Benzene	ND	1	0.12	5	ug/L
KA-3	11/11/2014	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	11/11/2014	Toluene	ND	1	0.13	1000	ug/L
KA-3	11/11/2014	Xylenes, Total	ND	2	0.39	620	ug/L
KA-3	11/11/2014	MTBE	13	2.5	0.093	143	ug/L
KA-3	3/10/2015	Benzene	ND	1	0.12	5	ug/L
KA-3	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
KA-3	3/10/2015	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
KA-3	3/10/2015	Xylenes, Total	ND	2	0.38	620	ug/L
KA-3	3/10/2015	MTBE	8.8	2.5	0.12	143	ug/L
KA-3	6/2/2015	Benzene	ND	1	0.12	5	ug/L
KA-3	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
KA-3	6/2/2015	Ethylbenzene	ND	1	0.12	700	ug/L
KA-3	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
KA-3	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
KA-3	6/2/2015	MTBE	12	2.5	0.12	143	ug/L
KA-3	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
KA-3	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
KA-3	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
KA-3	8/11/2015	Benzene	ND	1	0.065	5	ug/L
KA-3	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
KA-3	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
KA-3	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
KA-3	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
KA-3	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
KA-3	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
KA-3	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
KA-3	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
KA-3	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
KA-3	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
KA-3	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
KA-3	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
KA-3	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
KA-3	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
KA-3	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
KA-3	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
KA-3	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
KA-3	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
KA-3	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
KA-3	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
KA-3	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
KA-3	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
KA-3	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
KA-3	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
KA-3	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
KA-3	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
KA-3	8/11/2015	Styrene	ND	1	0.11	100	ug/L
KA-3	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
KA-3	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
KA-3	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
KA-3	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
KA-3	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
KA-3	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
KA-3	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
KA-3	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
KA-3	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
KA-3	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
KA-3	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
KA-3	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
KA-3	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
KA-3	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
KA-3	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
KA-3	8/11/2015	MTBE	11	1	0.17	143	ug/L
KA-3	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
KA-3	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
KA-3	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
KA-3	10/28/2015	Benzene	ND	1	0.065	5	ug/L
KA-3	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
KA-3	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
KA-3	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
KA-3	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
KA-3	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
KA-3	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
KA-3	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
KA-3	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
KA-3	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
KA-3	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
KA-3	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
KA-3	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
KA-3	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
KA-3	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
KA-3	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
KA-3	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
KA-3	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
KA-3	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
KA-3	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
KA-3	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
KA-3	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
KA-3	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
KA-3	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
KA-3	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
KA-3	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
KA-3	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
KA-3	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
KA-3	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
KA-3	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
KA-3	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
KA-3	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
KA-3	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
KA-3	10/28/2015	Styrene	ND	1	0.11	100	ug/L
KA-3	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
KA-3	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
KA-3	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
KA-3	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
KA-3	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
KA-3	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
KA-3	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
KA-3	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
KA-3	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
KA-3	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
KA-3	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
KA-3	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
KA-3	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
KA-3	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
KA-3	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
KA-3	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
KA-3	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
KA-3	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
KA-3	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
KA-3	10/28/2015	MTBE	11	1	0.17	143	ug/L
KA-3	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	3/3/2016	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	3/3/2016	Benzene	**5.4**	1	0.096	5	ug/L
KA-3	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
KA-3	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
KA-3	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
KA-3	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
KA-3	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
KA-3	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
KA-3	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
KA-3	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
KA-3	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
KA-3	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
KA-3	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
KA-3	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
KA-3	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
KA-3	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
KA-3	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
KA-3	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
KA-3	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
KA-3	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
KA-3	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
KA-3	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
KA-3	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	3/3/2016	Ethylbenzene	2.7	1	0.11	700	ug/L
KA-3	3/3/2016	Styrene	ND	1	0.095	100	ug/L
KA-3	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
KA-3	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
KA-3	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
KA-3	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
KA-3	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
KA-3	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
KA-3	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
KA-3	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
KA-3	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
KA-3	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	3/3/2016	MTBE	15	1	0.21	143	ug/L
KA-3	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
KA-3	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	6/7/2016	Acetone	ND	10	4.9	14064	ug/L
KA-3	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	6/7/2016	Benzene	**6**	1	0.096	5	ug/L
KA-3	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	6/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	6/7/2016	1-Methylnaphthalene	0.63	4	0.2	NA	ug/L
KA-3	6/7/2016	Naphthalene	1.1	2	0.093	30	ug/L
KA-3	6/7/2016	2-Methylnaphthalene	**0.46**	4	0.16		ug/L
KA-3	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	6/7/2016	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
KA-3	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	6/7/2016	tert-Butylbenzene	0.23	1	0.12	690	ug/L
KA-3	6/7/2016	Isopropylbenzene	0.17	1	0.1	447	ug/L
KA-3	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	6/7/2016	Ethylbenzene	1.5	1	0.11	700	ug/L
KA-3	6/7/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	6/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
KA-3	6/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	6/7/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	6/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
KA-3	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	6/7/2016	cis-1,2-Dichloroethene	0.16	1	0.12	70	ug/L
KA-3	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	6/7/2016	MTBE	37	1	0.21	143	ug/L
KA-3	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	9/1/2016	Acetone	9.7	10	4.9	14064	ug/L
KA-3	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	9/1/2016	Benzene	**7.1**	1	0.096	5	ug/L
KA-3	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	9/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	9/1/2016	1-Methylnaphthalene	2.8	4	0.2	NA	ug/L
KA-3	9/1/2016	Naphthalene	5	2	0.093	30	ug/L
KA-3	9/1/2016	2-Methylnaphthalene	**1.8**	4	0.16		ug/L
KA-3	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	9/1/2016	tert-Butylbenzene	0.2	1	0.12	690	ug/L
KA-3	9/1/2016	Isopropylbenzene	0.25	1	0.1	447	ug/L
KA-3	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	9/1/2016	Ethylbenzene	3.2	1	0.11	700	ug/L
KA-3	9/1/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	9/1/2016	n-Propylbenzene	0.26	1	0.13	660	ug/L
KA-3	9/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	9/1/2016	sec-Butylbenzene	0.18	1	0.12	2000	ug/L
KA-3	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
KA-3	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	9/1/2016	MTBE	45	1	0.21	143	ug/L
KA-3	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	11/14/2016	Acetone	5.4	10	4.9	14064	ug/L
KA-3	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
KA-3	11/14/2016	Benzene	4.4	1	0.096	5	ug/L
KA-3	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	11/14/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
KA-3	11/14/2016	1-Methylnaphthalene	1.1	4	0.2	NA	ug/L
KA-3	11/14/2016	Naphthalene	1.5	2	0.093	30	ug/L
KA-3	11/14/2016	2-Methylnaphthalene	**0.62**	4	0.16		ug/L
KA-3	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
KA-3	11/14/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	11/14/2016	tert-Butylbenzene	0.26	1	0.12	690	ug/L
KA-3	11/14/2016	Isopropylbenzene	0.11	1	0.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	11/14/2016	Ethylbenzene	1.3	1	0.11	700	ug/L
KA-3	11/14/2016	Styrene	ND	1	0.11	100	ug/L
KA-3	11/14/2016	n-Propylbenzene	0.25	1	0.13	660	ug/L
KA-3	11/14/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	11/14/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
KA-3	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	11/14/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	11/14/2016	Toluene	ND	1	0.12	1000	ug/L
KA-3	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	11/14/2016	sec-Butylbenzene	0.36	1	0.12	2000	ug/L
KA-3	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	11/14/2016	cis-1,2-Dichloroethene	0.18	1	0.12	70	ug/L
KA-3	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
KA-3	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	11/14/2016	MTBE	37	1	0.21	143	ug/L
KA-3	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	2/21/2017	Acetone	ND	10	4.9	14064	ug/L
KA-3	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
KA-3	2/21/2017	Benzene	**17**	1	0.096	5	ug/L
KA-3	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
KA-3	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
KA-3	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
KA-3	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
KA-3	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
KA-3	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
KA-3	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
KA-3	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
KA-3	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
KA-3	2/21/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
KA-3	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
KA-3	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
KA-3	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
KA-3	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
KA-3	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L
KA-3	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
KA-3	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
KA-3	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
KA-3	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
KA-3	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
KA-3	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
KA-3	2/21/2017	tert-Butylbenzene	0.19	1	0.12	690	ug/L
KA-3	2/21/2017	Isopropylbenzene	0.93	1	0.1	447	ug/L
KA-3	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
KA-3	2/21/2017	Ethylbenzene	7.7	1	0.11	700	ug/L
KA-3	2/21/2017	Styrene	ND	1	0.11	100	ug/L
KA-3	2/21/2017	n-Propylbenzene	0.73	1	0.13	660	ug/L
KA-3	2/21/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
KA-3	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
KA-3	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
KA-3	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
KA-3	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
KA-3	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
KA-3	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
KA-3	2/21/2017	Toluene	ND	1	0.12	1000	ug/L
KA-3	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
KA-3	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
KA-3	2/21/2017	sec-Butylbenzene	0.36	1	0.12	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
KA-3	2/21/2017	cis-1,2-Dichloroethene	0.16	1	0.12	70	ug/L
KA-3	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
KA-3	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
KA-3	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
KA-3	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
KA-3	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
KA-3	2/21/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
KA-3	2/21/2017	MTBE	46	1	0.21	143	ug/L
KA-3	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
KA-3	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
KA-3	6/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	6/1/2017	Acetone	5.7	10	0.82	14064	ug/L
KA-3	6/1/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	6/1/2017	Benzene	0.48	1	0.062	5	ug/L
KA-3	6/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	6/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	6/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	6/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	6/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	6/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	6/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	6/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	6/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	6/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	6/1/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	6/1/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	6/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	6/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	6/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	6/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	6/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	6/1/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	6/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	6/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	6/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	6/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	6/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	6/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	6/1/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
KA-3	6/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	6/1/2017	Ethylbenzene	0.27	1	0.093	700	ug/L
KA-3	6/1/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	6/1/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
KA-3	6/1/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	6/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	6/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	6/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	6/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	6/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	6/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	6/1/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	6/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	6/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	6/1/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	6/1/2017	sec-Butylbenzene	0.46	1	0.11	2000	ug/L
KA-3	6/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	6/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	6/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	6/1/2017	Pentafluorobenzene	ND	0	0		None
KA-3	6/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	6/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	6/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	6/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	6/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	6/1/2017	MTBE	46	1	0.24	143	ug/L
KA-3	6/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	6/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	9/5/2017	Acetone	5.2	10	0.82	14064	ug/L
KA-3	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	9/5/2017	Benzene	2.5	1	0.062	5	ug/L
KA-3	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	9/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	9/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	9/5/2017	Isopropylbenzene	0.06	1	0.051	447	ug/L
KA-3	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	9/5/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
KA-3	9/5/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	9/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
KA-3	9/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	9/5/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	9/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	9/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	9/5/2017	MTBE	41	1	0.24	143	ug/L
KA-3	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	12/4/2017	Acetone	3	10	0.82	14064	ug/L
KA-3	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
KA-3	12/4/2017	Benzene	4.2	1	0.062	5	ug/L
KA-3	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	12/4/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	12/4/2017	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	12/4/2017	1-Methylnaphthalene	0.91	4	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/4/2017	Naphthalene	1.1	2	0.11	30	ug/L
KA-3	12/4/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
KA-3	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	12/4/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
KA-3	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	12/4/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
KA-3	12/4/2017	Isopropylbenzene	0.16	1	0.051	447	ug/L
KA-3	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	12/4/2017	Ethylbenzene	2	1	0.093	700	ug/L
KA-3	12/4/2017	Styrene	ND	1	0.16	100	ug/L
KA-3	12/4/2017	n-Propylbenzene	0.15	1	0.074	660	ug/L
KA-3	12/4/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	12/4/2017	Toluene	ND	1	0.064	1000	ug/L
KA-3	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	12/4/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
KA-3	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	12/4/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	12/4/2017	MTBE	40	1	0.24	143	ug/L
KA-3	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	2/9/2018	Acetone	ND	10	0.82	14064	ug/L
KA-3	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
KA-3	2/9/2018	Benzene	3.3	1	0.062	5	ug/L
KA-3	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	2/9/2018	1-Methylnaphthalene	0.92	4	0.16	NA	ug/L
KA-3	2/9/2018	Naphthalene	1	2	0.11	30	ug/L
KA-3	2/9/2018	2-Methylnaphthalene	**0.66**	4	0.15		ug/L
KA-3	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	2/9/2018	1,2,4-Trimethylbenzene	0.22	1	0.11	56	ug/L
KA-3	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	2/9/2018	tert-Butylbenzene	0.16	1	0.1	690	ug/L
KA-3	2/9/2018	Isopropylbenzene	0.2	1	0.051	447	ug/L
KA-3	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
KA-3	2/9/2018	Ethylbenzene	1.8	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/9/2018	Styrene	ND	1	0.16	100	ug/L
KA-3	2/9/2018	n-Propylbenzene	0.21	1	0.074	660	ug/L
KA-3	2/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
KA-3	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	2/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
KA-3	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	2/9/2018	Toluene	ND	1	0.064	1000	ug/L
KA-3	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	2/9/2018	sec-Butylbenzene	0.13	1	0.11	2000	ug/L
KA-3	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	2/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
KA-3	2/9/2018	MTBE	29	1	0.24	143	ug/L
KA-3	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
KA-3	4/30/2018	Acetone	5.9	10	0.82	14064	ug/L
KA-3	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
KA-3	4/30/2018	Benzene	**590**	10	0.62	5	ug/L
KA-3	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
KA-3	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
KA-3	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
KA-3	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
KA-3	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
KA-3	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
KA-3	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
KA-3	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
KA-3	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
KA-3	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
KA-3	4/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
KA-3	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
KA-3	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
KA-3	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
KA-3	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
KA-3	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
KA-3	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
KA-3	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
KA-3	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
KA-3	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
KA-3	4/30/2018	1-Methylnaphthalene	3.5	4	0.16	NA	ug/L
KA-3	4/30/2018	Naphthalene	8.2	2	0.11	30	ug/L
KA-3	4/30/2018	2-Methylnaphthalene	**1.3**	4	0.15		ug/L
KA-3	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
KA-3	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
KA-3	4/30/2018	1,2,4-Trimethylbenzene	11	1	0.11	56	ug/L
KA-3	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
KA-3	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
KA-3	4/30/2018	tert-Butylbenzene	0.16	1	0.1	690	ug/L
KA-3	4/30/2018	Isopropylbenzene	4.4	1	0.051	447	ug/L
KA-3	4/30/2018	p-Isopropyltoluene	0.14	1	0.096	NA	ug/L
KA-3	4/30/2018	Ethylbenzene	54	1	0.093	700	ug/L
KA-3	4/30/2018	Styrene	ND	1	0.16	100	ug/L
KA-3	4/30/2018	n-Propylbenzene	3.2	1	0.074	660	ug/L
KA-3	4/30/2018	n-Butylbenzene	0.3	3	0.13	1000	ug/L
KA-3	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
KA-3	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
KA-3	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
KA-3	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
KA-3	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
KA-3	4/30/2018	1,3,5-Trimethylbenzene	3.1	1	0.087	60	ug/L
KA-3	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
KA-3	4/30/2018	Toluene	510	10	0.64	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
KA-3	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
KA-3	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
KA-3	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
KA-3	4/30/2018	sec-Butylbenzene	0.49	1	0.11	2000	ug/L
KA-3	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
KA-3	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
KA-3	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
KA-3	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
KA-3	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
KA-3	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
KA-3	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
KA-3	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
KA-3	4/30/2018	Xylenes, Total	58	1.5	0.32	620	ug/L
KA-3	4/30/2018	MTBE	32	1	0.24	143	ug/L
KA-3	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
KA-3	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
KA-3	4/9/2019	Benzene	**210**	10	1.666391	5	ug/L
KA-3	4/9/2019	Ethylbenzene	28	1	0.132341	700	ug/L
KA-3	4/9/2019	MTBE	61	1	0.456095	143	ug/L
KA-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	4/9/2019	Xylenes, Total	1.2	1.5	0.454415	620	ug/L
KA-3	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	5/28/2019	Ethylbenzene	15	1	0.132341	700	ug/L
KA-3	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	5/28/2019	Isopropylbenzene	1.3	1	0.191522	447	ug/L
KA-3	5/28/2019	MTBE	61	1	0.456095	143	ug/L
KA-3	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	5/28/2019	Naphthalene	5.7	2	0.275071	30	ug/L
KA-3	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
KA-3	5/28/2019	n-Propylbenzene	0.91	1	0.214308	660	ug/L
KA-3	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
KA-3	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
KA-3	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	5/28/2019	Xylenes, Total	0.57	1.5	0.454415	620	ug/L
KA-3	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
KA-3	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	5/28/2019	1,2,4-Trimethylbenzene	0.32	1	0.213199	56	ug/L
KA-3	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
KA-3	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	5/28/2019	1-Methylnaphthalene	5.6	4	0.314954	NA	ug/L
KA-3	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	5/28/2019	2-Methylnaphthalene	**2.2**	4	0.345376		ug/L
KA-3	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	5/28/2019	Acetone	5.5	10	1.199396	14064	ug/L
KA-3	5/28/2019	Benzene	**200**	10	1.666391	5	ug/L
KA-3	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
KA-3	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
KA-3	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
KA-3	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	8/22/2019	1-Methylnaphthalene	19	4	0.314954	NA	ug/L
KA-3	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
KA-3	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	8/22/2019	2-Methylnaphthalene	**11**	4	0.345376		ug/L
KA-3	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	8/22/2019	Acetone	3.9	10	1.199396	14064	ug/L
KA-3	8/22/2019	Benzene	**380**	10	1.666391	5	ug/L
KA-3	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	8/22/2019	Ethylbenzene	48	1	0.132341	700	ug/L
KA-3	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	8/22/2019	Isopropylbenzene	4.8	1	0.191522	447	ug/L
KA-3	8/22/2019	MTBE	68	1	0.456095	143	ug/L
KA-3	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	8/22/2019	Naphthalene	15	2	0.275071	30	ug/L
KA-3	8/22/2019	n-Butylbenzene	1.2	3	0.22757	1000	ug/L
KA-3	8/22/2019	n-Propylbenzene	4	1	0.214308	660	ug/L
KA-3	8/22/2019	sec-Butylbenzene	1.1	1	0.247731	2000	ug/L
KA-3	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	8/22/2019	tert-Butylbenzene	0.4	1	0.206985	690	ug/L
KA-3	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	8/22/2019	Xylenes, Total	0.62	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
KA-3	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
KA-3	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
KA-3	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
KA-3	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
KA-3	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
KA-3	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
KA-3	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
KA-3	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
KA-3	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
KA-3	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
KA-3	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
KA-3	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
KA-3	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
KA-3	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
KA-3	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
KA-3	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
KA-3	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	2.7	4	0.314954	NA	ug/L
KA-3	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
KA-3	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
KA-3	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
KA-3	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	**1.2**	4	0.345376		ug/L
KA-3	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
KA-3	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
KA-3	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
KA-3	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
KA-3	10/21/2019	Benzene	**57**	1	0.166639	5	ug/L
KA-3	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
KA-3	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
KA-3	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
KA-3	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
KA-3	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
KA-3	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
KA-3	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
KA-3	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
KA-3	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
KA-3	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
KA-3	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
KA-3	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
KA-3	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
KA-3	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
KA-3	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
KA-3	10/21/2019	Ethylbenzene	6.2	1	0.132341	700	ug/L
KA-3	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
KA-3	10/21/2019	Isopropylbenzene	0.57	1	0.191522	447	ug/L
KA-3	10/21/2019	MTBE	56	1	0.456095	143	ug/L
KA-3	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
KA-3	10/21/2019	Naphthalene	2.3	2	0.275071	30	ug/L
KA-3	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
KA-3	10/21/2019	n-Propylbenzene	0.48	1	0.214308	660	ug/L
KA-3	10/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
KA-3	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
KA-3	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
KA-3	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
KA-3	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
KA-3	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
KA-3	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
KA-3	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
KA-3	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
KA-3	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
KA-3	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
KA-3	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
KA-3	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
KA-3	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
KA-3	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
KA-3	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
KA-3	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
KA-3	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
KA-3	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
KA-3	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
KA-3	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
KA-3	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
KA-3	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
KA-3	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
KA-3	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
KA-3	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
KA-3	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
KA-3	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
KA-3	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
KA-3	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
KA-3	3/4/2020	1-Methylnaphthalene	5.6	4	0.84	NA	ug/L
KA-3	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
KA-3	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
KA-3	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
KA-3	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
KA-3	3/4/2020	2-Methylnaphthalene	**2.5**	4	0.69		ug/L
KA-3	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
KA-3	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
KA-3	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
KA-3	3/4/2020	Acetone	3.5	10	2.3	14064	ug/L
KA-3	3/4/2020	Benzene	**98**	1	0.23	5	ug/L
KA-3	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
KA-3	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
KA-3	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
KA-3	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
KA-3	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
KA-3	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
KA-3	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
KA-3	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
KA-3	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
KA-3	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
KA-3	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
KA-3	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
KA-3	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
KA-3	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
KA-3	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
KA-3	3/4/2020	Ethylbenzene	2.2	1	0.21	700	ug/L
KA-3	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
KA-3	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
KA-3	3/4/2020	MTBE	64	1	0.39	143	ug/L
KA-3	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
KA-3	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
KA-3	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
KA-3	3/4/2020	Naphthalene	4.2	2	0.28	30	ug/L
KA-3	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
KA-3	3/4/2020	Styrene	ND	1	0.13	100	ug/L
KA-3	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
KA-3	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
KA-3	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
KA-3	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
KA-3	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
KA-3	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
KA-3	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
KA-3	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
KA-3	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
KA-3	9/22/2020	Ethylbenzene	27	1	0.21	700	ug/L
KA-3	9/22/2020	MTBE	59	1	0.39	143	ug/L
KA-3	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
KA-3	9/22/2020	Xylenes, Total	0.64	1.5	0.55	620	ug/L
KA-3	9/22/2020	Benzene	**310**	10	2.3	5	ug/L
KA-3	9/22/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
KA-3	12/17/2020	Acetone	ND	25	10	14064	ug/L
KA-3	12/17/2020	Benzene	ND	1	0.38	5	ug/L
KA-3	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
KA-3	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
KA-3	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
KA-3	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
KA-3	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
KA-3	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
KA-3	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
KA-3	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
KA-3	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
KA-3	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
KA-3	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
KA-3	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
KA-3	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
KA-3	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
KA-3	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
KA-3	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
KA-3	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
KA-3	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
KA-3	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
KA-3	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
KA-3	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
KA-3	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
KA-3	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
KA-3	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
KA-3	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
KA-3	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
KA-3	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
KA-3	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
KA-3	12/17/2020	Ethylbenzene	3.03	1	0.5	700	ug/L
KA-3	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
KA-3	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
KA-3	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
KA-3	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
KA-3	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
KA-3	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
KA-3	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
KA-3	12/17/2020	MTBE	43.6	1	0.74	143	ug/L
KA-3	12/17/2020	Naphthalene	ND	1	1	30	ug/L
KA-3	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
KA-3	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
KA-3	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
KA-3	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
KA-3	12/17/2020	Styrene	ND	1	1	100	ug/L
KA-3	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
KA-3	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
KA-3	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
KA-3	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
KA-3	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
KA-3	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
KA-3	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
KA-3	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
KA-3	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
KA-3	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
KA-3	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
KA-3	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
KA-3	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
KA-3	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
KA-3	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
KA-3	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
KA-3	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
KA-3	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
LDU - East	3/20/2012	Benzene	**1400**	200	28	5	ug/L
LDU - East	3/20/2012	Ethylbenzene	560	200	22	700	ug/L
LDU - East	3/20/2012	Toluene	**3100**	200	24	1000	ug/L
LDU - East	3/20/2012	Xylenes, Total	**8000**	400	66	620	ug/L
LDU - East	3/20/2012	MTBE	*ND*	*500*	29	143	ug/L
LDU - East	6/12/2012	Benzene	**1300**	100	14	5	ug/L
LDU - East	6/12/2012	1,2,4-Trimethylbenzene	**940**	100	12	56	ug/L
LDU - East	6/12/2012	Ethylbenzene	460	100	11	700	ug/L
LDU - East	6/12/2012	1,3,5-Trimethylbenzene	**300**	100	11	60	ug/L
LDU - East	6/12/2012	Toluene	**1100**	100	12	1000	ug/L
LDU - East	6/12/2012	Xylenes, Total	**6300**	200	33	620	ug/L
LDU - East	6/12/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	8/21/2012	Benzene	**1200**	100	14	5	ug/L
LDU - East	8/21/2012	1,2,4-Trimethylbenzene	**840**	100	12	56	ug/L
LDU - East	8/21/2012	Ethylbenzene	460	100	11	700	ug/L
LDU - East	8/21/2012	1,3,5-Trimethylbenzene	**280**	100	11	60	ug/L
LDU - East	8/21/2012	Toluene	330	100	12	1000	ug/L
LDU - East	8/21/2012	Xylenes, Total	**5700**	200	33	620	ug/L
LDU - East	8/21/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	11/28/2012	Benzene	**1100**	100	14	5	ug/L
LDU - East	11/28/2012	Ethylbenzene	510	100	11	700	ug/L
LDU - East	11/28/2012	Toluene	890	100	12	1000	ug/L
LDU - East	11/28/2012	Xylenes, Total	**6700**	200	33	620	ug/L
LDU - East	11/28/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - East	3/18/2013	Benzene	**12000**	200	37	5	ug/L
LDU - East	3/18/2013	1,2,4-Trimethylbenzene	**900**	200	34	56	ug/L
LDU - East	3/18/2013	Ethylbenzene	610	200	36	700	ug/L
LDU - East	3/18/2013	1,3,5-Trimethylbenzene	**290**	200	36	60	ug/L
LDU - East	3/18/2013	Toluene	**4600**	200	36	1000	ug/L
LDU - East	3/18/2013	Xylenes, Total	**7000**	400	110	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/18/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	6/12/2013	Benzene	**9400**	200	37	5	ug/L
LDU - East	6/12/2013	1,2,4-Trimethylbenzene	**800**	200	34	56	ug/L
LDU - East	6/12/2013	Ethylbenzene	510	200	36	700	ug/L
LDU - East	6/12/2013	1,3,5-Trimethylbenzene	**280**	200	36	60	ug/L
LDU - East	6/12/2013	Toluene	**2200**	200	36	1000	ug/L
LDU - East	6/12/2013	Xylenes, Total	**6100**	400	110	620	ug/L
LDU - East	6/12/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	11/12/2013	Benzene	**190**	100	37	5	ug/L
LDU - East	11/12/2013	Ethylbenzene	130	100	36	700	ug/L
LDU - East	11/12/2013	Toluene	170	100	36	1000	ug/L
LDU - East	11/12/2013	Xylenes, Total	**5600**	400	110	620	ug/L
LDU - East	11/12/2013	MTBE	*ND*	*500*	42	143	ug/L
LDU - East	3/10/2014	Benzene	**9800**	200	24	5	ug/L
LDU - East	3/10/2014	1,2,4-Trimethylbenzene	**5800**	200	22	56	ug/L
LDU - East	3/10/2014	Ethylbenzene	**3800**	200	25	700	ug/L
LDU - East	3/10/2014	1,3,5-Trimethylbenzene	**1900**	200	25	60	ug/L
LDU - East	3/10/2014	Toluene	**27000**	2000	270	1000	ug/L
LDU - East	3/10/2014	Xylenes, Total	**25000**	400	78	620	ug/L
LDU - East	3/10/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	5/14/2014	Carbon tetrachloride	*ND*	*100*	14	5	ug/L
LDU - East	5/14/2014	Acetone	3500	1000	490	14064	ug/L
LDU - East	5/14/2014	Chloroform	ND	100	32	100	ug/L
LDU - East	5/14/2014	Benzene	**4100**	100	15	5	ug/L
LDU - East	5/14/2014	1,1,1-Trichloroethane	ND	100	12	200	ug/L
LDU - East	5/14/2014	Bromomethane	*ND*	*300*	41	7.54	ug/L
LDU - East	5/14/2014	Chloromethane	*ND*	*300*	52	20.32	ug/L
LDU - East	5/14/2014	Dibromomethane	*ND*	*100*	19	8	ug/L
LDU - East	5/14/2014	Chloroethane	ND	200	48	20857	ug/L
LDU - East	5/14/2014	Vinyl Chloride	*ND*	*100*	46	2	ug/L
LDU - East	5/14/2014	Methylene Chloride	*ND*	*300*	27	5	ug/L
LDU - East	5/14/2014	Carbon Disulfide	*ND*	*1000*	74	810	ug/L
LDU - East	5/14/2014	Bromoform	*ND*	*100*	25	32.9	ug/L
LDU - East	5/14/2014	Bromodichloromethane	*ND*	*100*	16	1.34	ug/L
LDU - East	5/14/2014	1,1-Dichloroethane	*ND*	*100*	28	25	ug/L
LDU - East	5/14/2014	1,1-Dichloroethene	*ND*	*100*	21	7	ug/L
LDU - East	5/14/2014	Trichlorofluoromethane	ND	100	13	1137	ug/L
LDU - East	5/14/2014	Dichlorodifluoromethane	ND	100	23	197	ug/L
LDU - East	5/14/2014	1,2-Dichloropropane	*ND*	*100*	21	5	ug/L
LDU - East	5/14/2014	2-Butanone	ND	1000	140	5565	ug/L
LDU - East	5/14/2014	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
LDU - East	5/14/2014	Trichloroethene	*ND*	*100*	19	5	ug/L
LDU - East	5/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*200*	22	10	ug/L
LDU - East	5/14/2014	1,2,3-Trichlorobenzene	*ND*	*100*	18	70	ug/L
LDU - East	5/14/2014	Hexachlorobutadiene	*ND*	*100*	28	1.39	ug/L
LDU - East	5/14/2014	1-Methylnaphthalene	ND	400	44	NA	ug/L
LDU - East	5/14/2014	Naphthalene	**660**	200	14	30	ug/L
LDU - East	5/14/2014	2-Methylnaphthalene	**450**	400	56		ug/L
LDU - East	5/14/2014	2-Chlorotoluene	ND	100	13	233	ug/L
LDU - East	5/14/2014	1,2-Dichlorobenzene	ND	100	13	600	ug/L
LDU - East	5/14/2014	1,2,4-Trimethylbenzene	**3200**	100	12	56	ug/L
LDU - East	5/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*200*	22	0.0033	ug/L
LDU - East	5/14/2014	1,2,3-Trichloropropane	*ND*	*200*	19	0.0084	ug/L
LDU - East	5/14/2014	tert-Butylbenzene	ND	100	14	690	ug/L
LDU - East	5/14/2014	Isopropylbenzene	130	100	16	447	ug/L
LDU - East	5/14/2014	p-Isopropyltoluene	ND	100	18	NA	ug/L
LDU - East	5/14/2014	Ethylbenzene	**860**	100	13	700	ug/L
LDU - East	5/14/2014	Styrene	ND	100	12	100	ug/L
LDU - East	5/14/2014	n-Propylbenzene	330	100	14	660	ug/L
LDU - East	5/14/2014	n-Butylbenzene	ND	300	21	1000	ug/L
LDU - East	5/14/2014	4-Chlorotoluene	ND	100	87	250	ug/L
LDU - East	5/14/2014	1,4-Dichlorobenzene	*ND*	*100*	26	75	ug/L
LDU - East	5/14/2014	1,2-Dibromoethane	*ND*	*100*	10	0.05	ug/L
LDU - East	5/14/2014	1,2-Dichloroethane	*ND*	*100*	26	5	ug/L
LDU - East	5/14/2014	4-Methyl-2-Pentanone	ND	1000	110	1243	ug/L
LDU - East	5/14/2014	1,3,5-Trimethylbenzene	**920**	100	13	60	ug/L
LDU - East	5/14/2014	Bromobenzene	*ND*	*100*	18	62	ug/L
LDU - East	5/14/2014	Toluene	**6100**	100	17	1000	ug/L
LDU - East	5/14/2014	Chlorobenzene	*ND*	*100*	14	77.6	ug/L
LDU - East	5/14/2014	1,2,4-Trichlorobenzene	*ND*	*100*	30	70	ug/L
LDU - East	5/14/2014	Dibromochloromethane	*ND*	*100*	12	1.68	ug/L
LDU - East	5/14/2014	Tetrachloroethene	*ND*	*100*	20	5	ug/L
LDU - East	5/14/2014	sec-Butylbenzene	ND	100	15	2000	ug/L
LDU - East	5/14/2014	1,3-Dichloropropane	ND	100	18	370	ug/L
LDU - East	5/14/2014	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
LDU - East	5/14/2014	trans-1,2-Dichloroethene	ND	100	25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	5/14/2014	1,3-Dichlorobenzene	ND	100	17	N/A	ug/L
LDU - East	5/14/2014	1,1-Dichloropropene	ND	100	23	NA	ug/L
LDU - East	5/14/2014	2-Hexanone	*ND*	*1000*	86	38	ug/L
LDU - East	5/14/2014	2,2-Dichloropropane	ND	200	27	NA	ug/L
LDU - East	5/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*100*	12	5.74	ug/L
LDU - East	5/14/2014	Xylenes, Total	**7400**	150	38	620	ug/L
LDU - East	5/14/2014	MTBE	ND	100	25	143	ug/L
LDU - East	5/14/2014	cis-1,3-Dichloropropene	ND	100	17	NA	ug/L
LDU - East	5/14/2014	trans-1,3-Dichloropropene	ND	100	18	NA	ug/L
LDU - East	6/3/2014	Benzene	**8900**	200	24	5	ug/L
LDU - East	6/3/2014	1,2,4-Trimethylbenzene	**3600**	200	22	56	ug/L
LDU - East	6/3/2014	Ethylbenzene	**2300**	200	25	700	ug/L
LDU - East	6/3/2014	1,3,5-Trimethylbenzene	**1200**	200	25	60	ug/L
LDU - East	6/3/2014	Toluene	**21000**	2000	270	1000	ug/L
LDU - East	6/3/2014	Xylenes, Total	**19000**	400	78	620	ug/L
LDU - East	6/3/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	10/16/2014	Benzene	**1800**	100	12	5	ug/L
LDU - East	10/16/2014	1,2,4-Trimethylbenzene	**1200**	100	11	56	ug/L
LDU - East	10/16/2014	Ethylbenzene	550	100	12	700	ug/L
LDU - East	10/16/2014	1,3,5-Trimethylbenzene	**340**	100	12	60	ug/L
LDU - East	10/16/2014	Toluene	**5500**	100	13	1000	ug/L
LDU - East	10/16/2014	Xylenes, Total	**6600**	200	39	620	ug/L
LDU - East	10/16/2014	MTBE	*ND*	*250*	9.3	143	ug/L
LDU - East	11/11/2014	Benzene	**1700**	200	24	5	ug/L
LDU - East	11/11/2014	Ethylbenzene	**720**	200	25	700	ug/L
LDU - East	11/11/2014	Toluene	**4800**	200	27	1000	ug/L
LDU - East	11/11/2014	Xylenes, Total	**8200**	400	78	620	ug/L
LDU - East	11/11/2014	MTBE	*ND*	*500*	19	143	ug/L
LDU - East	3/10/2015	Benzene	**1300**	20	2.3	5	ug/L
LDU - East	3/10/2015	1,2,4-Trimethylbenzene	**1100**	20	2.7	56	ug/L
LDU - East	3/10/2015	Ethylbenzene	470	20	2.4	700	ug/L
LDU - East	3/10/2015	1,3,5-Trimethylbenzene	**370**	20	2.6	60	ug/L
LDU - East	3/10/2015	Toluene	460	20	2.3	1000	ug/L
LDU - East	3/10/2015	Xylenes, Total	**1900**	40	7.7	620	ug/L
LDU - East	3/10/2015	MTBE	ND	50	2.4	143	ug/L
LDU - East	6/1/2015	Benzene	**1200**	20	1.3	5	ug/L
LDU - East	6/1/2015	1,2,4-Trimethylbenzene	**960**	20	3.2	56	ug/L
LDU - East	6/1/2015	Ethylbenzene	430	20	2	700	ug/L
LDU - East	6/1/2015	1,3,5-Trimethylbenzene	**300**	20	2.5	60	ug/L
LDU - East	6/1/2015	Toluene	1000	20	2.2	1000	ug/L
LDU - East	6/1/2015	Xylenes, Total	**2000**	30	5.6	620	ug/L
LDU - East	6/1/2015	MTBE	ND	20	3.5	143	ug/L
LDU - East	8/11/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
LDU - East	8/11/2015	Acetone	ND	200	19	14064	ug/L
LDU - East	8/11/2015	Chloroform	ND	20	4.3	100	ug/L
LDU - East	8/11/2015	Benzene	**1200**	20	1.3	5	ug/L
LDU - East	8/11/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
LDU - East	8/11/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
LDU - East	8/11/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
LDU - East	8/11/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
LDU - East	8/11/2015	Chloroethane	ND	40	2.1	20857	ug/L
LDU - East	8/11/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
LDU - East	8/11/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
LDU - East	8/11/2015	Carbon Disulfide	ND	200	13	810	ug/L
LDU - East	8/11/2015	Bromoform	ND	20	3.2	32.9	ug/L
LDU - East	8/11/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
LDU - East	8/11/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
LDU - East	8/11/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
LDU - East	8/11/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
LDU - East	8/11/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
LDU - East	8/11/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
LDU - East	8/11/2015	2-Butanone	460	200	7.3	5565	ug/L
LDU - East	8/11/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
LDU - East	8/11/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
LDU - East	8/11/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
LDU - East	8/11/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
LDU - East	8/11/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
LDU - East	8/11/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
LDU - East	8/11/2015	Naphthalene	**160**	40	4.4	30	ug/L
LDU - East	8/11/2015	2-Methylnaphthalene	**97**	80	12		ug/L
LDU - East	8/11/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
LDU - East	8/11/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
LDU - East	8/11/2015	1,2,4-Trimethylbenzene	**740**	20	3.2	56	ug/L
LDU - East	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
LDU - East	8/11/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
LDU - East	8/11/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/11/2015	Isopropylbenzene	32	20	3	447	ug/L
LDU - East	8/11/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
LDU - East	8/11/2015	Ethylbenzene	340	20	2	700	ug/L
LDU - East	8/11/2015	Styrene	ND	20	2.1	100	ug/L
LDU - East	8/11/2015	n-Propylbenzene	45	20	3.3	660	ug/L
LDU - East	8/11/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
LDU - East	8/11/2015	4-Chlorotoluene	ND	20	3	250	ug/L
LDU - East	8/11/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
LDU - East	8/11/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
LDU - East	8/11/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
LDU - East	8/11/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
LDU - East	8/11/2015	1,3,5-Trimethylbenzene	**240**	20	2.5	60	ug/L
LDU - East	8/11/2015	Bromobenzene	ND	20	2.2	62	ug/L
LDU - East	8/11/2015	Toluene	**1100**	20	2.2	1000	ug/L
LDU - East	8/11/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
LDU - East	8/11/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
LDU - East	8/11/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
LDU - East	8/11/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
LDU - East	8/11/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
LDU - East	8/11/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
LDU - East	8/11/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
LDU - East	8/11/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
LDU - East	8/11/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
LDU - East	8/11/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - East	8/11/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
LDU - East	8/11/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
LDU - East	8/11/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
LDU - East	8/11/2015	Xylenes, Total	**1700**	30	5.6	620	ug/L
LDU - East	8/11/2015	MTBE	ND	20	3.5	143	ug/L
LDU - East	8/11/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
LDU - East	8/11/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - East	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
LDU - East	10/29/2015	Acetone	ND	100	9.4	14064	ug/L
LDU - East	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
LDU - East	10/29/2015	Benzene	**560**	10	0.65	5	ug/L
LDU - East	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
LDU - East	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
LDU - East	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
LDU - East	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
LDU - East	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
LDU - East	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
LDU - East	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
LDU - East	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
LDU - East	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
LDU - East	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
LDU - East	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
LDU - East	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
LDU - East	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
LDU - East	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
LDU - East	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
LDU - East	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
LDU - East	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
LDU - East	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
LDU - East	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
LDU - East	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
LDU - East	10/29/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
LDU - East	10/29/2015	1-Methylnaphthalene	49	40	5.4	NA	ug/L
LDU - East	10/29/2015	Naphthalene	**170**	20	2.2	30	ug/L
LDU - East	10/29/2015	2-Methylnaphthalene	**69**	40	5.9		ug/L
LDU - East	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
LDU - East	10/29/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
LDU - East	10/29/2015	1,2,4-Trimethylbenzene	**310**	10	1.6	56	ug/L
LDU - East	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
LDU - East	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
LDU - East	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
LDU - East	10/29/2015	Isopropylbenzene	26	10	1.5	447	ug/L
LDU - East	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
LDU - East	10/29/2015	Ethylbenzene	250	10	1	700	ug/L
LDU - East	10/29/2015	Styrene	ND	10	1.1	100	ug/L
LDU - East	10/29/2015	n-Propylbenzene	36	10	1.6	660	ug/L
LDU - East	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
LDU - East	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
LDU - East	10/29/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
LDU - East	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
LDU - East	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
LDU - East	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	10/29/2015	1,3,5-Trimethylbenzene	**220**	10	1.2	60	ug/L
LDU - East	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
LDU - East	10/29/2015	Toluene	44	10	1.1	1000	ug/L
LDU - East	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
LDU - East	10/29/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
LDU - East	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
LDU - East	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
LDU - East	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
LDU - East	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
LDU - East	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
LDU - East	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
LDU - East	10/29/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L
LDU - East	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
LDU - East	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
LDU - East	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
LDU - East	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - East	10/29/2015	Xylenes, Total	**1100**	15	2.8	620	ug/L
LDU - East	10/29/2015	MTBE	22	10	1.7	143	ug/L
LDU - East	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - East	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - East	3/1/2016	Benzene	**410**	50	4.8	5	ug/L
LDU - East	3/1/2016	1,2,4-Trimethylbenzene	**180**	50	5.2	56	ug/L
LDU - East	3/1/2016	Ethylbenzene	270	50	5.6	700	ug/L
LDU - East	3/1/2016	1,3,5-Trimethylbenzene	**310**	50	5.8	60	ug/L
LDU - East	3/1/2016	Toluene	ND	50	4.5	1000	ug/L
LDU - East	3/1/2016	Xylenes, Total	140	75	16	620	ug/L
LDU - East	3/1/2016	MTBE	ND	50	11	143	ug/L
LDU - East	6/7/2016	Benzene	**360**	5	0.48	5	ug/L
LDU - East	6/7/2016	1,2,4-Trimethylbenzene	**130**	5	0.55	56	ug/L
LDU - East	6/7/2016	Ethylbenzene	250	5	0.56	700	ug/L
LDU - East	6/7/2016	1,3,5-Trimethylbenzene	**250**	5	0.58	60	ug/L
LDU - East	6/7/2016	Toluene	32	5	0.59	1000	ug/L
LDU - East	6/7/2016	Xylenes, Total	97	7.5	1.8	620	ug/L
LDU - East	6/7/2016	MTBE	13	5	1.1	143	ug/L
LDU - East	7/7/2016	Benzene	**430**	50	4.8	5	ug/L
LDU - East	7/7/2016	1,2,4-Trimethylbenzene	**340**	50	5.5	56	ug/L
LDU - East	7/7/2016	Ethylbenzene	270	50	5.6	700	ug/L
LDU - East	7/7/2016	1,3,5-Trimethylbenzene	**220**	50	5.8	60	ug/L
LDU - East	7/7/2016	Toluene	66	50	5.9	1000	ug/L
LDU - East	7/7/2016	Xylenes, Total	180	75	18	620	ug/L
LDU - East	7/7/2016	MTBE	ND	50	11	143	ug/L
LDU - East	11/17/2016	Benzene	**110**	5	0.48	5	ug/L
LDU - East	11/17/2016	1,2,4-Trimethylbenzene	7	5	0.55	56	ug/L
LDU - East	11/17/2016	Ethylbenzene	100	5	0.56	700	ug/L
LDU - East	11/17/2016	1,3,5-Trimethylbenzene	39	5	0.58	60	ug/L
LDU - East	11/17/2016	Toluene	8.2	5	0.59	1000	ug/L
LDU - East	11/17/2016	Xylenes, Total	9.8	7.5	1.8	620	ug/L
LDU - East	11/17/2016	MTBE	6.3	5	1.1	143	ug/L
LDU - East	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
LDU - East	2/21/2017	Acetone	2000	100	49	14064	ug/L
LDU - East	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
LDU - East	2/21/2017	Benzene	**230**	10	0.96	5	ug/L
LDU - East	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
LDU - East	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
LDU - East	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
LDU - East	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
LDU - East	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L
LDU - East	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
LDU - East	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
LDU - East	2/21/2017	Carbon Disulfide	ND	100	6	810	ug/L
LDU - East	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
LDU - East	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
LDU - East	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
LDU - East	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
LDU - East	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
LDU - East	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
LDU - East	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
LDU - East	2/21/2017	2-Butanone	360	100	7.4	5565	ug/L
LDU - East	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
LDU - East	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
LDU - East	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
LDU - East	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
LDU - East	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
LDU - East	2/21/2017	1-Methylnaphthalene	55	40	2	NA	ug/L
LDU - East	2/21/2017	Naphthalene	**92**	20	0.93	30	ug/L
LDU - East	2/21/2017	2-Methylnaphthalene	**58**	40	1.6		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
LDU - East	2/21/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
LDU - East	2/21/2017	1,2,4-Trimethylbenzene	**110**	10	1.1	56	ug/L
LDU - East	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
LDU - East	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
LDU - East	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
LDU - East	2/21/2017	Isopropylbenzene	18	10	1	447	ug/L
LDU - East	2/21/2017	p-Isopropyltoluene	7.5	10	1.4	NA	ug/L
LDU - East	2/21/2017	Ethylbenzene	140	10	1.1	700	ug/L
LDU - East	2/21/2017	Styrene	ND	10	1.1	100	ug/L
LDU - East	2/21/2017	n-Propylbenzene	28	10	1.3	660	ug/L
LDU - East	2/21/2017	n-Butylbenzene	6.8	30	1.6	1000	ug/L
LDU - East	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
LDU - East	2/21/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
LDU - East	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
LDU - East	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
LDU - East	2/21/2017	4-Methyl-2-Pentanone	52	100	4.3	1243	ug/L
LDU - East	2/21/2017	1,3,5-Trimethylbenzene	**100**	10	1.2	60	ug/L
LDU - East	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
LDU - East	2/21/2017	Toluene	140	10	1.2	1000	ug/L
LDU - East	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
LDU - East	2/21/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
LDU - East	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
LDU - East	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
LDU - East	2/21/2017	sec-Butylbenzene	6.5	10	1.2	2000	ug/L
LDU - East	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
LDU - East	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
LDU - East	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
LDU - East	2/21/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
LDU - East	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - East	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
LDU - East	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
LDU - East	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - East	2/21/2017	Xylenes, Total	300	15	3.7	620	ug/L
LDU - East	2/21/2017	MTBE	13	10	2.1	143	ug/L
LDU - East	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - East	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
LDU - East	6/2/2017	Benzene	**170**	10	0.62	5	ug/L
LDU - East	6/2/2017	Ethylbenzene	63	10	0.93	700	ug/L
LDU - East	6/2/2017	Toluene	6.6	10	0.64	1000	ug/L
LDU - East	6/2/2017	Pentafluorobenzene	ND	0	0		None
LDU - East	6/2/2017	Xylenes, Total	75	15	3.2	620	ug/L
LDU - East	6/2/2017	MTBE	2.5	10	2.4	143	ug/L
LDU - East	9/5/2017	Benzene	**530**	10	0.62	5	ug/L
LDU - East	9/5/2017	Ethylbenzene	190	10	0.93	700	ug/L
LDU - East	9/5/2017	Toluene	230	10	0.64	1000	ug/L
LDU - East	9/5/2017	Xylenes, Total	**900**	15	3.2	620	ug/L
LDU - East	9/5/2017	MTBE	ND	10	2.4	143	ug/L
LDU - East	12/4/2017	Benzene	**1700**	50	3.1	5	ug/L
LDU - East	12/4/2017	Ethylbenzene	180	5	0.47	700	ug/L
LDU - East	12/4/2017	Toluene	60	5	0.32	1000	ug/L
LDU - East	12/4/2017	Xylenes, Total	180	7.5	1.6	620	ug/L
LDU - East	12/4/2017	MTBE	ND	5	1.2	143	ug/L
LDU - East	2/12/2018	Benzene	**1900**	100	6.2	5	ug/L
LDU - East	2/12/2018	1,2,4-Trimethylbenzene	25	10	1.1	56	ug/L
LDU - East	2/12/2018	Ethylbenzene	290	10	0.93	700	ug/L
LDU - East	2/12/2018	1,3,5-Trimethylbenzene	**110**	10	0.87	60	ug/L
LDU - East	2/12/2018	Toluene	47	10	0.64	1000	ug/L
LDU - East	2/12/2018	Xylenes, Total	80	15	3.2	620	ug/L
LDU - East	2/12/2018	MTBE	ND	10	2.4	143	ug/L
LDU - East	4/30/2018	Benzene	**710**	10	0.62	5	ug/L
LDU - East	4/30/2018	1,2,4-Trimethylbenzene	**160**	10	1.1	56	ug/L
LDU - East	4/30/2018	Ethylbenzene	260	10	0.93	700	ug/L
LDU - East	4/30/2018	1,3,5-Trimethylbenzene	**150**	10	0.87	60	ug/L
LDU - East	4/30/2018	Toluene	37	10	0.64	1000	ug/L
LDU - East	4/30/2018	Xylenes, Total	600	15	3.2	620	ug/L
LDU - East	4/30/2018	MTBE	ND	10	2.4	143	ug/L
LDU - East	4/9/2019	Benzene	**1500**	20	3.332781	5	ug/L
LDU - East	4/9/2019	Ethylbenzene	150	2	0.264682	700	ug/L
LDU - East	4/9/2019	MTBE	1.2	2	0.91219	143	ug/L
LDU - East	4/9/2019	Toluene	28	2	0.700872	1000	ug/L
LDU - East	4/9/2019	Xylenes, Total	27	3	0.90883	620	ug/L
LDU - East	5/28/2019	Benzene	**890**	20	3.332781	5	ug/L
LDU - East	5/28/2019	Ethylbenzene	91	2	0.264682	700	ug/L
LDU - East	5/28/2019	Toluene	72	2	0.700872	1000	ug/L
LDU - East	5/28/2019	Xylenes, Total	56	3	0.90883	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/22/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
LDU - East	8/22/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
LDU - East	8/22/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
LDU - East	8/22/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
LDU - East	8/22/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
LDU - East	8/22/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
LDU - East	8/22/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
LDU - East	8/22/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
LDU - East	8/22/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
LDU - East	8/22/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
LDU - East	8/22/2019	1,2,4-Trimethylbenzene	37	2	0.426398	56	ug/L
LDU - East	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
LDU - East	8/22/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
LDU - East	8/22/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
LDU - East	8/22/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
LDU - East	8/22/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
LDU - East	8/22/2019	1,3,5-Trimethylbenzene	11	2	0.37732	60	ug/L
LDU - East	8/22/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
LDU - East	8/22/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
LDU - East	8/22/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
LDU - East	8/22/2019	1-Methylnaphthalene	16	8	0.629909	NA	ug/L
LDU - East	8/22/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
LDU - East	8/22/2019	2-Butanone	11	20	4.178833	5565	ug/L
LDU - East	8/22/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
LDU - East	8/22/2019	2-Hexanone	ND	20	3.094384	38	ug/L
LDU - East	8/22/2019	2-Methylnaphthalene	**14**	8	0.690752		ug/L
LDU - East	8/22/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
LDU - East	8/22/2019	p-Isopropyltoluene	2.6	2	0.434579	NA	ug/L
LDU - East	8/22/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
LDU - East	8/22/2019	Acetone	33	20	2.398793	14064	ug/L
LDU - East	8/22/2019	Benzene	**600**	20	3.332781	5	ug/L
LDU - East	8/22/2019	Bromobenzene	ND	2	0.489454	62	ug/L
LDU - East	8/22/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
LDU - East	8/22/2019	Bromoform	ND	2	0.577326	32.9	ug/L
LDU - East	8/22/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
LDU - East	8/22/2019	Carbon Disulfide	4.2	20	0.905113	810	ug/L
LDU - East	8/22/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
LDU - East	8/22/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
LDU - East	8/22/2019	Chloroethane	ND	4	0.355605	20857	ug/L
LDU - East	8/22/2019	Chloroform	ND	2	0.243781	100	ug/L
LDU - East	8/22/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
LDU - East	8/22/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
LDU - East	8/22/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
LDU - East	8/22/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
LDU - East	8/22/2019	Dibromomethane	ND	2	0.418417	8	ug/L
LDU - East	8/22/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
LDU - East	8/22/2019	Ethylbenzene	57	2	0.264682	700	ug/L
LDU - East	8/22/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
LDU - East	8/22/2019	Isopropylbenzene	7.4	2	0.383045	447	ug/L
LDU - East	8/22/2019	MTBE	2.4	2	0.91219	143	ug/L
LDU - East	8/22/2019	Methylene Chloride	*0.88*	*6*	0.309003	5	ug/L
LDU - East	8/22/2019	Naphthalene	30	4	0.550143	30	ug/L
LDU - East	8/22/2019	n-Butylbenzene	3.4	6	0.455139	1000	ug/L
LDU - East	8/22/2019	n-Propylbenzene	8.5	2	0.428616	660	ug/L
LDU - East	8/22/2019	sec-Butylbenzene	2.6	2	0.495463	2000	ug/L
LDU - East	8/22/2019	Styrene	ND	2	0.382647	100	ug/L
LDU - East	8/22/2019	tert-Butylbenzene	0.47	2	0.41397	690	ug/L
LDU - East	8/22/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
LDU - East	8/22/2019	Toluene	150	2	0.700872	1000	ug/L
LDU - East	8/22/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
LDU - East	8/22/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
LDU - East	8/22/2019	Trichloroethene	ND	2	0.332544	5	ug/L
LDU - East	8/22/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
LDU - East	8/22/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
LDU - East	8/22/2019	Xylenes, Total	150	3	0.90883	620	ug/L
LDU - East	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
LDU - East	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
LDU - East	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
LDU - East	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
LDU - East	11/19/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
LDU - East	11/19/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
LDU - East	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
LDU - East	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
LDU - East	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
LDU - East	11/19/2019	1,2,4-Trimethylbenzene	45	5	1.065995	56	ug/L
LDU - East	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
LDU - East	11/19/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
LDU - East	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
LDU - East	11/19/2019	1,3,5-Trimethylbenzene	19	5	0.943299	60	ug/L
LDU - East	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
LDU - East	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
LDU - East	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
LDU - East	11/19/2019	1-Methylnaphthalene	26	20	1.574772	NA	ug/L
LDU - East	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
LDU - East	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
LDU - East	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
LDU - East	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
LDU - East	11/19/2019	2-Methylnaphthalene	**22**	20	1.72688		ug/L
LDU - East	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
LDU - East	11/19/2019	p-Isopropyltoluene	3.9	5	1.086447	NA	ug/L
LDU - East	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
LDU - East	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
LDU - East	11/19/2019	Benzene	**1300**	50	8.331953	5	ug/L
LDU - East	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
LDU - East	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
LDU - East	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
LDU - East	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
LDU - East	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
LDU - East	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
LDU - East	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
LDU - East	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
LDU - East	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
LDU - East	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
LDU - East	11/19/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
LDU - East	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
LDU - East	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
LDU - East	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
LDU - East	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
LDU - East	11/19/2019	Ethylbenzene	82	5	0.661704	700	ug/L
LDU - East	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
LDU - East	11/19/2019	Isopropylbenzene	11	5	0.957611	447	ug/L
LDU - East	11/19/2019	MTBE	ND	5	2.280475	143	ug/L
LDU - East	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
LDU - East	11/19/2019	Naphthalene	**34**	10	1.375357	30	ug/L
LDU - East	11/19/2019	n-Butylbenzene	3.1	15	1.137848	1000	ug/L
LDU - East	11/19/2019	n-Propylbenzene	14	5	1.07154	660	ug/L
LDU - East	11/19/2019	sec-Butylbenzene	3.6	5	1.238656	2000	ug/L
LDU - East	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
LDU - East	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
LDU - East	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
LDU - East	11/19/2019	Toluene	360	5	1.752181	1000	ug/L
LDU - East	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
LDU - East	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
LDU - East	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L
LDU - East	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
LDU - East	11/19/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
LDU - East	11/19/2019	Xylenes, Total	210	7.5	2.272075	620	ug/L
LDU - East	3/10/2020	Toluene	38	5	1	1000	ug/L
LDU - East	3/10/2020	Xylenes, Total	57	7.5	2.8	620	ug/L
LDU - East	3/10/2020	Benzene	**620**	50	11	5	ug/L
LDU - East	3/10/2020	Ethylbenzene	50	5	1.1	700	ug/L
LDU - East	3/10/2020	MTBE	ND	5	2	143	ug/L
LDU - East	12/17/2020	Acetone	295	25	10	14064	ug/L
LDU - East	12/17/2020	Benzene	**285**	1	0.38	5	ug/L
LDU - East	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
LDU - East	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
LDU - East	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
LDU - East	12/17/2020	2-Butanone	35.1	25	2.6	5565	ug/L
LDU - East	12/17/2020	Carbon Disulfide	43.1	1	0.5	810	ug/L
LDU - East	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
LDU - East	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
LDU - East	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
LDU - East	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
LDU - East	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
LDU - East	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
LDU - East	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
LDU - East	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
LDU - East	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - East	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
LDU - East	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
LDU - East	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
LDU - East	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
LDU - East	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
LDU - East	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
LDU - East	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
LDU - East	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
LDU - East	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
LDU - East	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
LDU - East	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
LDU - East	12/17/2020	Ethylbenzene	56	1	0.5	700	ug/L
LDU - East	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
LDU - East	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
LDU - East	12/17/2020	Isopropylbenzene	9.47	1	0.53	447	ug/L
LDU - East	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
LDU - East	12/17/2020	1-Methylnaphthalene	11.5	5	4.2	NA	ug/L
LDU - East	12/17/2020	2-Methylnaphthalene	**11.4**	10	4.6		ug/L
LDU - East	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
LDU - East	12/17/2020	MTBE	3.5	1	0.74	143	ug/L
LDU - East	12/17/2020	Naphthalene	22.5	1	1	30	ug/L
LDU - East	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
LDU - East	12/17/2020	n-Propylbenzene	12.1	1	0.69	660	ug/L
LDU - East	12/17/2020	p-Isopropyltoluene	4.48	1	0.71	NA	ug/L
LDU - East	12/17/2020	sec-Butylbenzene	4.09	1	0.7	2000	ug/L
LDU - East	12/17/2020	Styrene	ND	1	1	100	ug/L
LDU - East	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
LDU - East	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
LDU - East	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
LDU - East	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
LDU - East	12/17/2020	Toluene	52.1	1	0.41	1000	ug/L
LDU - East	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
LDU - East	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - East	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
LDU - East	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
LDU - East	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
LDU - East	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
LDU - East	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
LDU - East	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
LDU - East	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
LDU - East	12/17/2020	1,2,4-Trimethylbenzene	32.2	1	0.82	56	ug/L
LDU - East	12/17/2020	1,3,5-Trimethylbenzene	24.1	1	0.56	60	ug/L
LDU - East	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
LDU - East	12/17/2020	Xylenes, Total	93.2	10	1.6	620	ug/L
LDU - West	3/20/2012	Benzene	**1600**	50	7.1	5	ug/L
LDU - West	3/20/2012	Ethylbenzene	690	50	5.6	700	ug/L
LDU - West	3/20/2012	Toluene	**6000**	100	12	1000	ug/L
LDU - West	3/20/2012	Xylenes, Total	**7600**	100	17	620	ug/L
LDU - West	3/20/2012	MTBE	ND	120	7.2	143	ug/L
LDU - West	6/12/2012	Benzene	**1400**	100	14	5	ug/L
LDU - West	6/12/2012	1,2,4-Trimethylbenzene	**810**	100	12	56	ug/L
LDU - West	6/12/2012	Ethylbenzene	410	100	11	700	ug/L
LDU - West	6/12/2012	1,3,5-Trimethylbenzene	**260**	100	11	60	ug/L
LDU - West	6/12/2012	Toluene	**3500**	100	12	1000	ug/L
LDU - West	6/12/2012	Xylenes, Total	**5700**	200	33	620	ug/L
LDU - West	6/12/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	8/21/2012	Benzene	**1800**	100	14	5	ug/L
LDU - West	8/21/2012	1,2,4-Trimethylbenzene	**550**	100	12	56	ug/L
LDU - West	8/21/2012	Ethylbenzene	660	100	11	700	ug/L
LDU - West	8/21/2012	1,3,5-Trimethylbenzene	**240**	100	11	60	ug/L
LDU - West	8/21/2012	Toluene	**3200**	100	12	1000	ug/L
LDU - West	8/21/2012	Xylenes, Total	**3100**	200	33	620	ug/L
LDU - West	8/21/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	11/28/2012	Benzene	**2000**	100	14	5	ug/L
LDU - West	11/28/2012	Ethylbenzene	570	100	11	700	ug/L
LDU - West	11/28/2012	Toluene	**1900**	100	12	1000	ug/L
LDU - West	11/28/2012	Xylenes, Total	**5100**	200	33	620	ug/L
LDU - West	11/28/2012	MTBE	*ND*	*250*	14	143	ug/L
LDU - West	3/18/2013	Benzene	**3900**	100	19	5	ug/L
LDU - West	3/18/2013	1,2,4-Trimethylbenzene	**610**	100	17	56	ug/L
LDU - West	3/18/2013	Ethylbenzene	380	100	18	700	ug/L
LDU - West	3/18/2013	1,3,5-Trimethylbenzene	**210**	100	18	60	ug/L
LDU - West	3/18/2013	Toluene	420	100	18	1000	ug/L
LDU - West	3/18/2013	Xylenes, Total	**4000**	200	54	620	ug/L
LDU - West	3/18/2013	MTBE	*ND*	*250*	21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	6/12/2013	Benzene	**6000**	100	19	5	ug/L
LDU - West	6/12/2013	1,2,4-Trimethylbenzene	**690**	100	17	56	ug/L
LDU - West	6/12/2013	Ethylbenzene	490	100	18	700	ug/L
LDU - West	6/12/2013	1,3,5-Trimethylbenzene	**230**	100	18	60	ug/L
LDU - West	6/12/2013	Toluene	**3000**	100	18	1000	ug/L
LDU - West	6/12/2013	Xylenes, Total	**5200**	200	54	620	ug/L
LDU - West	6/12/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	9/5/2013	Benzene	**1500**	100	19	5	ug/L
LDU - West	9/5/2013	1,2,4-Trimethylbenzene	**1800**	100	17	56	ug/L
LDU - West	9/5/2013	Ethylbenzene	280	100	18	700	ug/L
LDU - West	9/5/2013	1,3,5-Trimethylbenzene	**620**	100	18	60	ug/L
LDU - West	9/5/2013	Toluene	**3100**	100	18	1000	ug/L
LDU - West	9/5/2013	Xylenes, Total	**7800**	200	54	620	ug/L
LDU - West	9/5/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	11/12/2013	Benzene	**2800**	100	19	5	ug/L
LDU - West	11/12/2013	Ethylbenzene	310	100	18	700	ug/L
LDU - West	11/12/2013	Toluene	**3700**	100	18	1000	ug/L
LDU - West	11/12/2013	Xylenes, Total	**6000**	200	54	620	ug/L
LDU - West	11/12/2013	MTBE	*ND*	*250*	21	143	ug/L
LDU - West	3/10/2014	Benzene	**700**	100	12	5	ug/L
LDU - West	3/10/2014	1,2,4-Trimethylbenzene	**570**	100	11	56	ug/L
LDU - West	3/10/2014	Ethylbenzene	170	100	12	700	ug/L
LDU - West	3/10/2014	1,3,5-Trimethylbenzene	**190**	100	12	60	ug/L
LDU - West	3/10/2014	Toluene	140	100	13	1000	ug/L
LDU - West	3/10/2014	Xylenes, Total	**3300**	200	39	620	ug/L
LDU - West	3/10/2014	MTBE	*ND*	*250*	9.3	143	ug/L
LDU - West	5/14/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
LDU - West	5/14/2014	Acetone	ND	500	250	14064	ug/L
LDU - West	5/14/2014	Chloroform	ND	50	16	100	ug/L
LDU - West	5/14/2014	Benzene	**640**	50	7.7	5	ug/L
LDU - West	5/14/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
LDU - West	5/14/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
LDU - West	5/14/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
LDU - West	5/14/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
LDU - West	5/14/2014	Chloroethane	ND	100	24	20857	ug/L
LDU - West	5/14/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
LDU - West	5/14/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
LDU - West	5/14/2014	Carbon Disulfide	ND	500	37	810	ug/L
LDU - West	5/14/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
LDU - West	5/14/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
LDU - West	5/14/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
LDU - West	5/14/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
LDU - West	5/14/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
LDU - West	5/14/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
LDU - West	5/14/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
LDU - West	5/14/2014	2-Butanone	ND	500	71	5565	ug/L
LDU - West	5/14/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
LDU - West	5/14/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
LDU - West	5/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
LDU - West	5/14/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
LDU - West	5/14/2014	Hexachlorobutadiene	*ND*	*50*	14	1.39	ug/L
LDU - West	5/14/2014	1-Methylnaphthalene	ND	200	22	NA	ug/L
LDU - West	5/14/2014	Naphthalene	**140**	100	6.8	30	ug/L
LDU - West	5/14/2014	2-Methylnaphthalene	*ND*	*200*	28		ug/L
LDU - West	5/14/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
LDU - West	5/14/2014	1,2-Dichlorobenzene	ND	50	6.6	600	ug/L
LDU - West	5/14/2014	1,2,4-Trimethylbenzene	**590**	50	6.1	56	ug/L
LDU - West	5/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
LDU - West	5/14/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
LDU - West	5/14/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
LDU - West	5/14/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
LDU - West	5/14/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
LDU - West	5/14/2014	Ethylbenzene	170	50	6.4	700	ug/L
LDU - West	5/14/2014	Styrene	ND	50	5.8	100	ug/L
LDU - West	5/14/2014	n-Propylbenzene	ND	50	7	660	ug/L
LDU - West	5/14/2014	n-Butylbenzene	ND	150	11	1000	ug/L
LDU - West	5/14/2014	4-Chlorotoluene	ND	50	43	250	ug/L
LDU - West	5/14/2014	1,4-Dichlorobenzene	ND	50	13	75	ug/L
LDU - West	5/14/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
LDU - West	5/14/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
LDU - West	5/14/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
LDU - West	5/14/2014	1,3,5-Trimethylbenzene	**190**	50	6.6	60	ug/L
LDU - West	5/14/2014	Bromobenzene	ND	50	9.1	62	ug/L
LDU - West	5/14/2014	Toluene	ND	50	8.5	1000	ug/L
LDU - West	5/14/2014	Chlorobenzene	ND	50	7	77.6	ug/L
LDU - West	5/14/2014	1,2,4-Trichlorobenzene	ND	50	15	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	5/14/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
LDU - West	5/14/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
LDU - West	5/14/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
LDU - West	5/14/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
LDU - West	5/14/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
LDU - West	5/14/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
LDU - West	5/14/2014	1,3-Dichlorobenzene	ND	50	8.7	N/A	ug/L
LDU - West	5/14/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
LDU - West	5/14/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
LDU - West	5/14/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
LDU - West	5/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
LDU - West	5/14/2014	Xylenes, Total	**2400**	75	19	620	ug/L
LDU - West	5/14/2014	MTBE	ND	50	13	143	ug/L
LDU - West	5/14/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
LDU - West	5/14/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
LDU - West	6/3/2014	Benzene	**520**	20	2.4	5	ug/L
LDU - West	6/3/2014	1,2,4-Trimethylbenzene	**760**	20	2.2	56	ug/L
LDU - West	6/3/2014	Ethylbenzene	180	20	2.5	700	ug/L
LDU - West	6/3/2014	1,3,5-Trimethylbenzene	**250**	20	2.5	60	ug/L
LDU - West	6/3/2014	Toluene	35	20	2.7	1000	ug/L
LDU - West	6/3/2014	Xylenes, Total	**2800**	40	7.8	620	ug/L
LDU - West	6/3/2014	MTBE	ND	50	1.9	143	ug/L
LDU - West	9/11/2014	Benzene	**870**	50	6	5	ug/L
LDU - West	9/11/2014	1,2,4-Trimethylbenzene	**410**	50	5.5	56	ug/L
LDU - West	9/11/2014	Ethylbenzene	110	50	6.2	700	ug/L
LDU - West	9/11/2014	1,3,5-Trimethylbenzene	**150**	50	6.2	60	ug/L
LDU - West	9/11/2014	Toluene	300	50	6.6	1000	ug/L
LDU - West	9/11/2014	Xylenes, Total	**940**	100	19	620	ug/L
LDU - West	9/11/2014	MTBE	ND	120	4.7	143	ug/L
LDU - West	3/10/2015	Benzene	**450**	5	0.58	5	ug/L
LDU - West	3/10/2015	1,2,4-Trimethylbenzene	**91**	5	0.68	56	ug/L
LDU - West	3/10/2015	Ethylbenzene	85	5	0.61	700	ug/L
LDU - West	3/10/2015	1,3,5-Trimethylbenzene	37	5	0.66	60	ug/L
LDU - West	3/10/2015	Toluene	86	5	0.58	1000	ug/L
LDU - West	3/10/2015	Xylenes, Total	200	10	1.9	620	ug/L
LDU - West	3/10/2015	MTBE	ND	12	0.6	143	ug/L
LDU - West	8/11/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
LDU - West	8/11/2015	Acetone	ND	200	19	14064	ug/L
LDU - West	8/11/2015	Chloroform	ND	20	4.3	100	ug/L
LDU - West	8/11/2015	Benzene	**2700**	100	6.5	5	ug/L
LDU - West	8/11/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
LDU - West	8/11/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
LDU - West	8/11/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
LDU - West	8/11/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
LDU - West	8/11/2015	Chloroethane	ND	40	2.1	20857	ug/L
LDU - West	8/11/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
LDU - West	8/11/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
LDU - West	8/11/2015	Carbon Disulfide	ND	200	13	810	ug/L
LDU - West	8/11/2015	Bromoform	ND	20	3.2	32.9	ug/L
LDU - West	8/11/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
LDU - West	8/11/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
LDU - West	8/11/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
LDU - West	8/11/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
LDU - West	8/11/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
LDU - West	8/11/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
LDU - West	8/11/2015	2-Butanone	ND	200	7.3	5565	ug/L
LDU - West	8/11/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
LDU - West	8/11/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
LDU - West	8/11/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
LDU - West	8/11/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
LDU - West	8/11/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
LDU - West	8/11/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
LDU - West	8/11/2015	Naphthalene	**56**	40	4.4	30	ug/L
LDU - West	8/11/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
LDU - West	8/11/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
LDU - West	8/11/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
LDU - West	8/11/2015	1,2,4-Trimethylbenzene	**76**	20	3.2	56	ug/L
LDU - West	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
LDU - West	8/11/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
LDU - West	8/11/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
LDU - West	8/11/2015	Isopropylbenzene	ND	20	3	447	ug/L
LDU - West	8/11/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
LDU - West	8/11/2015	Ethylbenzene	83	20	2	700	ug/L
LDU - West	8/11/2015	Styrene	ND	20	2.1	100	ug/L
LDU - West	8/11/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
LDU - West	8/11/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/11/2015	4-Chlorotoluene	ND	20	3	250	ug/L
LDU - West	8/11/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
LDU - West	8/11/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
LDU - West	8/11/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
LDU - West	8/11/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
LDU - West	8/11/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
LDU - West	8/11/2015	Bromobenzene	ND	20	2.2	62	ug/L
LDU - West	8/11/2015	Toluene	740	20	2.2	1000	ug/L
LDU - West	8/11/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
LDU - West	8/11/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
LDU - West	8/11/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
LDU - West	8/11/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
LDU - West	8/11/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
LDU - West	8/11/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
LDU - West	8/11/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
LDU - West	8/11/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
LDU - West	8/11/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
LDU - West	8/11/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - West	8/11/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
LDU - West	8/11/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
LDU - West	8/11/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
LDU - West	8/11/2015	Xylenes, Total	440	30	5.6	620	ug/L
LDU - West	8/11/2015	MTBE	ND	20	3.5	143	ug/L
LDU - West	8/11/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
LDU - West	8/11/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
LDU - West	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
LDU - West	10/29/2015	Acetone	180	100	9.4	14064	ug/L
LDU - West	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
LDU - West	10/29/2015	Benzene	**500**	10	0.65	5	ug/L
LDU - West	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
LDU - West	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
LDU - West	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
LDU - West	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
LDU - West	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
LDU - West	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
LDU - West	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
LDU - West	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
LDU - West	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
LDU - West	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
LDU - West	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
LDU - West	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
LDU - West	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
LDU - West	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
LDU - West	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
LDU - West	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
LDU - West	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
LDU - West	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
LDU - West	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
LDU - West	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
LDU - West	10/29/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
LDU - West	10/29/2015	1-Methylnaphthalene	ND	40	5.4	NA	ug/L
LDU - West	10/29/2015	Naphthalene	**36**	20	2.2	30	ug/L
LDU - West	10/29/2015	2-Methylnaphthalene	**47**	40	5.9		ug/L
LDU - West	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
LDU - West	10/29/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
LDU - West	10/29/2015	1,2,4-Trimethylbenzene	48	10	1.6	56	ug/L
LDU - West	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
LDU - West	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
LDU - West	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
LDU - West	10/29/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
LDU - West	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
LDU - West	10/29/2015	Ethylbenzene	30	10	1	700	ug/L
LDU - West	10/29/2015	Styrene	ND	10	1.1	100	ug/L
LDU - West	10/29/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
LDU - West	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
LDU - West	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
LDU - West	10/29/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
LDU - West	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
LDU - West	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
LDU - West	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
LDU - West	10/29/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
LDU - West	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
LDU - West	10/29/2015	Toluene	190	10	1.1	1000	ug/L
LDU - West	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
LDU - West	10/29/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
LDU - West	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
LDU - West	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
LDU - West	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
LDU - West	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
LDU - West	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
LDU - West	10/29/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L
LDU - West	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
LDU - West	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
LDU - West	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
LDU - West	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - West	10/29/2015	Xylenes, Total	290	15	2.8	620	ug/L
LDU - West	10/29/2015	MTBE	ND	10	1.7	143	ug/L
LDU - West	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - West	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - West	3/1/2016	Benzene	**260**	20	1.9	5	ug/L
LDU - West	3/1/2016	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
LDU - West	3/1/2016	Ethylbenzene	27	20	2.2	700	ug/L
LDU - West	3/1/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
LDU - West	3/1/2016	Toluene	53	20	1.8	1000	ug/L
LDU - West	3/1/2016	Xylenes, Total	47	30	6.5	620	ug/L
LDU - West	3/1/2016	MTBE	ND	20	4.2	143	ug/L
LDU - West	6/7/2016	Benzene	**410**	10	0.96	5	ug/L
LDU - West	6/7/2016	1,2,4-Trimethylbenzene	**62**	1	0.11	56	ug/L
LDU - West	6/7/2016	Ethylbenzene	50	1	0.11	700	ug/L
LDU - West	6/7/2016	1,3,5-Trimethylbenzene	8.2	1	0.12	60	ug/L
LDU - West	6/7/2016	Toluene	49	1	0.12	1000	ug/L
LDU - West	6/7/2016	Xylenes, Total	140	1.5	0.37	620	ug/L
LDU - West	6/7/2016	MTBE	3.2	1	0.21	143	ug/L
LDU - West	7/7/2016	Benzene	**310**	10	0.96	5	ug/L
LDU - West	7/7/2016	1,2,4-Trimethylbenzene	34	10	1.1	56	ug/L
LDU - West	7/7/2016	Ethylbenzene	33	10	1.1	700	ug/L
LDU - West	7/7/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
LDU - West	7/7/2016	Toluene	38	10	1.2	1000	ug/L
LDU - West	7/7/2016	Xylenes, Total	77	15	3.7	620	ug/L
LDU - West	7/7/2016	MTBE	ND	10	2.1	143	ug/L
LDU - West	11/17/2016	Benzene	**140**	10	0.96	5	ug/L
LDU - West	11/17/2016	1,2,4-Trimethylbenzene	9.8	10	1.1	56	ug/L
LDU - West	11/17/2016	Ethylbenzene	38	10	1.1	700	ug/L
LDU - West	11/17/2016	1,3,5-Trimethylbenzene	3.4	10	1.2	60	ug/L
LDU - West	11/17/2016	Toluene	15	10	1.2	1000	ug/L
LDU - West	11/17/2016	Xylenes, Total	24	15	3.7	620	ug/L
LDU - West	11/17/2016	MTBE	ND	10	2.1	143	ug/L
LDU - West	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
LDU - West	2/21/2017	Acetone	ND	100	49	14064	ug/L
LDU - West	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
LDU - West	2/21/2017	Benzene	**290**	10	0.96	5	ug/L
LDU - West	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
LDU - West	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
LDU - West	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
LDU - West	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
LDU - West	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L
LDU - West	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
LDU - West	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
LDU - West	2/21/2017	Carbon Disulfide	19	100	6	810	ug/L
LDU - West	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
LDU - West	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
LDU - West	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
LDU - West	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
LDU - West	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
LDU - West	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
LDU - West	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
LDU - West	2/21/2017	2-Butanone	ND	100	7.4	5565	ug/L
LDU - West	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
LDU - West	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
LDU - West	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
LDU - West	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
LDU - West	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
LDU - West	2/21/2017	1-Methylnaphthalene	26	40	2	NA	ug/L
LDU - West	2/21/2017	Naphthalene	22	20	0.93	30	ug/L
LDU - West	2/21/2017	2-Methylnaphthalene	**23**	40	1.6		ug/L
LDU - West	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
LDU - West	2/21/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
LDU - West	2/21/2017	1,2,4-Trimethylbenzene	17	10	1.1	56	ug/L
LDU - West	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
LDU - West	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
LDU - West	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	2/21/2017	Isopropylbenzene	4.1	10	1	447	ug/L
LDU - West	2/21/2017	p-Isopropyltoluene	2	10	1.4	NA	ug/L
LDU - West	2/21/2017	Ethylbenzene	32	10	1.1	700	ug/L
LDU - West	2/21/2017	Styrene	ND	10	1.1	100	ug/L
LDU - West	2/21/2017	n-Propylbenzene	4	10	1.3	660	ug/L
LDU - West	2/21/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
LDU - West	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
LDU - West	2/21/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
LDU - West	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
LDU - West	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
LDU - West	2/21/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
LDU - West	2/21/2017	1,3,5-Trimethylbenzene	7.6	10	1.2	60	ug/L
LDU - West	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
LDU - West	2/21/2017	Toluene	24	10	1.2	1000	ug/L
LDU - West	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
LDU - West	2/21/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
LDU - West	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
LDU - West	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
LDU - West	2/21/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
LDU - West	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
LDU - West	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
LDU - West	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
LDU - West	2/21/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
LDU - West	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
LDU - West	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
LDU - West	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
LDU - West	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
LDU - West	2/21/2017	Xylenes, Total	60	15	3.7	620	ug/L
LDU - West	2/21/2017	MTBE	9.8	10	2.1	143	ug/L
LDU - West	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
LDU - West	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
LDU - West	6/2/2017	Benzene	**93**	2	0.12	5	ug/L
LDU - West	6/2/2017	Ethylbenzene	15	2	0.19	700	ug/L
LDU - West	6/2/2017	Toluene	4.1	2	0.13	1000	ug/L
LDU - West	6/2/2017	Pentafluorobenzene	ND	0	0		None
LDU - West	6/2/2017	Xylenes, Total	16	3	0.64	620	ug/L
LDU - West	6/2/2017	MTBE	2.5	2	0.48	143	ug/L
LDU - West	9/5/2017	Benzene	**88**	5	0.31	5	ug/L
LDU - West	9/5/2017	Ethylbenzene	15	5	0.47	700	ug/L
LDU - West	9/5/2017	Toluene	1.2	5	0.32	1000	ug/L
LDU - West	9/5/2017	Xylenes, Total	5.1	7.5	1.6	620	ug/L
LDU - West	9/5/2017	MTBE	3.3	5	1.2	143	ug/L
LDU - West	12/4/2017	Benzene	**63**	1	0.12	5	ug/L
LDU - West	12/4/2017	Ethylbenzene	33	1	0.19	700	ug/L
LDU - West	12/4/2017	Toluene	1.8	1	0.13	1000	ug/L
LDU - West	12/4/2017	Xylenes, Total	2.6	1.5	0.64	620	ug/L
LDU - West	12/4/2017	MTBE	1.8	1	0.48	143	ug/L
LDU - West	2/12/2018	Benzene	**1400**	100	6.2	5	ug/L
LDU - West	2/12/2018	1,2,4-Trimethylbenzene	2.9	10	1.1	56	ug/L
LDU - West	2/12/2018	Ethylbenzene	42	10	0.93	700	ug/L
LDU - West	2/12/2018	1,3,5-Trimethylbenzene	1.6	10	0.87	60	ug/L
LDU - West	2/12/2018	Toluene	130	10	0.64	1000	ug/L
LDU - West	2/12/2018	Xylenes, Total	74	15	3.2	620	ug/L
LDU - West	2/12/2018	MTBE	5.6	10	2.4	143	ug/L
LDU - West	4/30/2018	Benzene	**2700**	100	6.2	5	ug/L
LDU - West	4/30/2018	1,2,4-Trimethylbenzene	1.8	10	1.1	56	ug/L
LDU - West	4/30/2018	Ethylbenzene	72	10	0.93	700	ug/L
LDU - West	4/30/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
LDU - West	4/30/2018	Toluene	16	10	0.64	1000	ug/L
LDU - West	4/30/2018	Xylenes, Total	35	15	3.2	620	ug/L
LDU - West	4/30/2018	MTBE	ND	10	2.4	143	ug/L
LDU - West	4/9/2019	Benzene	**160**	2	0.333278	5	ug/L
LDU - West	4/9/2019	Ethylbenzene	20	2	0.264682	700	ug/L
LDU - West	4/9/2019	MTBE	2.9	2	0.91219	143	ug/L
LDU - West	4/9/2019	Toluene	ND	2	0.700872	1000	ug/L
LDU - West	4/9/2019	Xylenes, Total	2.4	3	0.90883	620	ug/L
LDU - West	5/28/2019	Benzene	**8.5**	2	0.333278	5	ug/L
LDU - West	5/28/2019	Ethylbenzene	4	2	0.264682	700	ug/L
LDU - West	5/28/2019	Toluene	ND	2	0.700872	1000	ug/L
LDU - West	5/28/2019	Xylenes, Total	2.3	3	0.90883	620	ug/L
LDU - West	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
LDU - West	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
LDU - West	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
LDU - West	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
LDU - West	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
LDU - West	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
LDU - West	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
LDU - West	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
LDU - West	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
LDU - West	8/22/2019	1,2,4-Trimethylbenzene	0.34	1	0.213199	56	ug/L
LDU - West	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
LDU - West	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
LDU - West	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
LDU - West	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
LDU - West	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
LDU - West	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
LDU - West	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
LDU - West	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
LDU - West	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
LDU - West	8/22/2019	1-Methylnaphthalene	4.5	4	0.314954	NA	ug/L
LDU - West	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
LDU - West	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
LDU - West	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
LDU - West	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
LDU - West	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
LDU - West	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
LDU - West	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
LDU - West	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
LDU - West	8/22/2019	Acetone	6.5	10	1.199396	14064	ug/L
LDU - West	8/22/2019	Benzene	0.98	1	0.166639	5	ug/L
LDU - West	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
LDU - West	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
LDU - West	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
LDU - West	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
LDU - West	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
LDU - West	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
LDU - West	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
LDU - West	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
LDU - West	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
LDU - West	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
LDU - West	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
LDU - West	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
LDU - West	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
LDU - West	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
LDU - West	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
LDU - West	8/22/2019	Ethylbenzene	0.23	1	0.132341	700	ug/L
LDU - West	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
LDU - West	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
LDU - West	8/22/2019	MTBE	3.9	1	0.456095	143	ug/L
LDU - West	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
LDU - West	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
LDU - West	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
LDU - West	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
LDU - West	8/22/2019	sec-Butylbenzene	0.75	1	0.247731	2000	ug/L
LDU - West	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
LDU - West	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
LDU - West	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
LDU - West	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
LDU - West	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
LDU - West	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
LDU - West	8/22/2019	Trichloroethene	0.46	1	0.166272	5	ug/L
LDU - West	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
LDU - West	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
LDU - West	8/22/2019	Xylenes, Total	1.1	1.5	0.454415	620	ug/L
LDU - West	11/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
LDU - West	11/19/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
LDU - West	11/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
LDU - West	11/19/2019	Chloroform	ND	1	0.121891	100	ug/L
LDU - West	11/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
LDU - West	11/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
LDU - West	11/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
LDU - West	11/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
LDU - West	11/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
LDU - West	11/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
LDU - West	11/19/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
LDU - West	11/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
LDU - West	11/19/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
LDU - West	11/19/2019	MTBE	2.7	1	0.456095	143	ug/L
LDU - West	11/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
LDU - West	11/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
LDU - West	11/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	11/19/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
LDU - West	11/19/2019	sec-Butylbenzene	0.37	1	0.247731	2000	ug/L
LDU - West	11/19/2019	Styrene	ND	1	0.191323	100	ug/L
LDU - West	11/19/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
LDU - West	11/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
LDU - West	11/19/2019	Toluene	ND	1	0.350436	1000	ug/L
LDU - West	11/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
LDU - West	11/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
LDU - West	11/19/2019	Trichloroethene	0.22	1	0.166272	5	ug/L
LDU - West	11/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
LDU - West	11/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
LDU - West	11/19/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
LDU - West	11/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
LDU - West	11/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
LDU - West	11/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
LDU - West	11/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
LDU - West	11/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
LDU - West	11/19/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
LDU - West	11/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
LDU - West	11/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
LDU - West	11/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
LDU - West	11/19/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
LDU - West	11/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
LDU - West	11/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
LDU - West	11/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
LDU - West	11/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
LDU - West	11/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
LDU - West	11/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
LDU - West	11/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
LDU - West	11/19/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
LDU - West	11/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
LDU - West	11/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
LDU - West	11/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
LDU - West	11/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
LDU - West	11/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
LDU - West	11/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
LDU - West	11/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
LDU - West	11/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
LDU - West	11/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
LDU - West	11/19/2019	Acetone	ND	10	1.199396	14064	ug/L
LDU - West	11/19/2019	Benzene	2.3	1	0.166639	5	ug/L
LDU - West	11/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
LDU - West	11/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
LDU - West	11/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
LDU - West	11/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
LDU - West	11/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
LDU - West	3/10/2020	Benzene	**150**	5	1.1	5	ug/L
LDU - West	3/10/2020	Ethylbenzene	14	5	1.1	700	ug/L
LDU - West	3/10/2020	MTBE	2.1	5	2	143	ug/L
LDU - West	3/10/2020	Toluene	41	5	1	1000	ug/L
LDU - West	3/10/2020	Xylenes, Total	44	7.5	2.8	620	ug/L
LDU - West	12/17/2020	Acetone	ND	25	10	14064	ug/L
LDU - West	12/17/2020	Benzene	**66.5**	1	0.38	5	ug/L
LDU - West	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
LDU - West	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
LDU - West	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
LDU - West	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
LDU - West	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
LDU - West	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
LDU - West	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
LDU - West	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
LDU - West	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
LDU - West	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
LDU - West	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
LDU - West	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
LDU - West	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
LDU - West	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - West	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
LDU - West	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
LDU - West	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
LDU - West	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
LDU - West	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
LDU - West	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
LDU - West	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
LDU - West	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
LDU - West	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
LDU - West	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
LDU - West	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
LDU - West	12/17/2020	Ethylbenzene	9.37	1	0.5	700	ug/L
LDU - West	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
LDU - West	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
LDU - West	12/17/2020	Isopropylbenzene	1.5	1	0.53	447	ug/L
LDU - West	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
LDU - West	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
LDU - West	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
LDU - West	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
LDU - West	12/17/2020	MTBE	1.74	1	0.74	143	ug/L
LDU - West	12/17/2020	Naphthalene	3.9	1	1	30	ug/L
LDU - West	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
LDU - West	12/17/2020	n-Propylbenzene	1.22	1	0.69	660	ug/L
LDU - West	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
LDU - West	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
LDU - West	12/17/2020	Styrene	ND	1	1	100	ug/L
LDU - West	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
LDU - West	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
LDU - West	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
LDU - West	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
LDU - West	12/17/2020	Toluene	5.91	1	0.41	1000	ug/L
LDU - West	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
LDU - West	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
LDU - West	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
LDU - West	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
LDU - West	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
LDU - West	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
LDU - West	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
LDU - West	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
LDU - West	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
LDU - West	12/17/2020	1,2,4-Trimethylbenzene	9.55	1	0.82	56	ug/L
LDU - West	12/17/2020	1,3,5-Trimethylbenzene	5.52	1	0.56	60	ug/L
LDU - West	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
LDU - West	12/17/2020	Xylenes, Total	16.1	10	1.6	620	ug/L
MKTF-02	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-02	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-02	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-02	4/8/2014	Benzene	**110**	2	0.31	5	ug/L
MKTF-02	4/8/2014	1,1,1-Trichloroethane	2.2	2	0.24	200	ug/L
MKTF-02	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-02	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-02	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-02	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-02	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-02	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-02	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-02	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-02	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-02	4/8/2014	1,1-Dichloroethane	**41**	2	0.57	25	ug/L
MKTF-02	4/8/2014	1,1-Dichloroethene	**34**	2	0.43	7	ug/L
MKTF-02	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-02	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-02	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-02	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-02	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-02	4/8/2014	Trichloroethene	3.4	2	0.39	5	ug/L
MKTF-02	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-02	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-02	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-02	4/8/2014	1,2,4-Trimethylbenzene	3.5	2	0.25	56	ug/L
MKTF-02	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-02	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-02	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-02	4/8/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-02	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-02	4/8/2014	Ethylbenzene	3.5	2	0.25	700	ug/L
MKTF-02	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-02	4/8/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-02	4/8/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-02	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-02	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	4/8/2014	1,2-Dichloroethane	**6.8**	2	0.53	5	ug/L
MKTF-02	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-02	4/8/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-02	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-02	4/8/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-02	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-02	4/8/2014	Dibromochloromethane	*ND*	2	0.24	1.68	ug/L
MKTF-02	4/8/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-02	4/8/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-02	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-02	4/8/2014	cis-1,2-Dichloroethene	5.2	2	0.24	70	ug/L
MKTF-02	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-02	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-02	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-02	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-02	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-02	4/8/2014	Xylenes, Total	7.6	3	0.75	620	ug/L
MKTF-02	4/8/2014	MTBE	36	2	0.5	143	ug/L
MKTF-02	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-02	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-02	6/6/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-02	6/6/2014	Acetone	12	10	4.9	14064	ug/L
MKTF-02	6/6/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-02	6/6/2014	Benzene	**230**	10	1.5	5	ug/L
MKTF-02	6/6/2014	1,1,1-Trichloroethane	3.5	1	0.12	200	ug/L
MKTF-02	6/6/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-02	6/6/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-02	6/6/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-02	6/6/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-02	6/6/2014	Vinyl Chloride	1	1	0.46	2	ug/L
MKTF-02	6/6/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-02	6/6/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-02	6/6/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-02	6/6/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-02	6/6/2014	1,1-Dichloroethane	**70**	1	0.28	25	ug/L
MKTF-02	6/6/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-02	6/6/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	6/6/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-02	6/6/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-02	6/6/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-02	6/6/2014	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-02	6/6/2014	Trichloroethene	4.1	1	0.19	5	ug/L
MKTF-02	6/6/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-02	6/6/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-02	6/6/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	6/6/2014	1,2,4-Trimethylbenzene	31	1	0.12	56	ug/L
MKTF-02	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-02	6/6/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-02	6/6/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-02	6/6/2014	Isopropylbenzene	3.1	1	0.16	447	ug/L
MKTF-02	6/6/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-02	6/6/2014	Ethylbenzene	22	1	0.13	700	ug/L
MKTF-02	6/6/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-02	6/6/2014	n-Propylbenzene	9	1	0.14	660	ug/L
MKTF-02	6/6/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-02	6/6/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-02	6/6/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-02	6/6/2014	1,2-Dichloroethane	**8.1**	1	0.26	5	ug/L
MKTF-02	6/6/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	6/6/2014	1,3,5-Trimethylbenzene	1.9	1	0.13	60	ug/L
MKTF-02	6/6/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-02	6/6/2014	Toluene	3.6	1	0.17	1000	ug/L
MKTF-02	6/6/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	6/6/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-02	6/6/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-02	6/6/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-02	6/6/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	6/6/2014	cis-1,2-Dichloroethene	11	1	0.12	70	ug/L
MKTF-02	6/6/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-02	6/6/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-02	6/6/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-02	6/6/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-02	6/6/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-02	6/6/2014	Xylenes, Total	34	1.5	0.38	620	ug/L
MKTF-02	6/6/2014	MTBE	42	1	0.25	143	ug/L
MKTF-02	6/6/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	9/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-02	9/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-02	9/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-02	9/18/2014	Benzene	**2100**	50	7.7	5	ug/L
MKTF-02	9/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-02	9/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-02	9/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-02	9/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-02	9/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-02	9/18/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-02	9/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-02	9/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-02	9/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-02	9/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-02	9/18/2014	1,1-Dichloroethane	**98**	5	1.4	25	ug/L
MKTF-02	9/18/2014	1,1-Dichloroethene	**24**	5	1.1	7	ug/L
MKTF-02	9/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-02	9/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-02	9/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-02	9/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-02	9/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-02	9/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-02	9/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-02	9/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-02	9/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-02	9/18/2014	1,2,4-Trimethylbenzene	**140**	5	0.61	56	ug/L
MKTF-02	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-02	9/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-02	9/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-02	9/18/2014	Isopropylbenzene	30	5	0.81	447	ug/L
MKTF-02	9/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-02	9/18/2014	Ethylbenzene	340	5	0.64	700	ug/L
MKTF-02	9/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-02	9/18/2014	n-Propylbenzene	130	5	0.7	660	ug/L
MKTF-02	9/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-02	9/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-02	9/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-02	9/18/2014	1,2-Dichloroethane	**5.1**	5	1.3	5	ug/L
MKTF-02	9/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-02	9/18/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-02	9/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-02	9/18/2014	Toluene	44	5	0.85	1000	ug/L
MKTF-02	9/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-02	9/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-02	9/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-02	9/18/2014	sec-Butylbenzene	6.8	5	0.77	2000	ug/L
MKTF-02	9/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-02	9/18/2014	cis-1,2-Dichloroethene	30	5	0.61	70	ug/L
MKTF-02	9/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-02	9/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	9/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-02	9/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-02	9/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-02	9/18/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-02	9/18/2014	MTBE	100	5	1.3	143	ug/L
MKTF-02	9/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-02	9/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-02	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-02	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-02	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-02	11/14/2014	Benzene	**200**	10	1.5	5	ug/L
MKTF-02	11/14/2014	1,1,1-Trichloroethane	3.6	1	0.12	200	ug/L
MKTF-02	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-02	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-02	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-02	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-02	11/14/2014	Vinyl Chloride	**9.7**	1	0.46	2	ug/L
MKTF-02	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-02	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-02	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-02	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-02	11/14/2014	1,1-Dichloroethane	**75**	1	0.28	25	ug/L
MKTF-02	11/14/2014	1,1-Dichloroethene	**78**	1	0.21	7	ug/L
MKTF-02	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-02	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-02	11/14/2014	1,1,2-Trichloroethane	2.4	1	0.14	5	ug/L
MKTF-02	11/14/2014	Trichloroethene	**7.1**	1	0.19	5	ug/L
MKTF-02	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-02	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-02	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	11/14/2014	1,2,4-Trimethylbenzene	2.1	1	0.12	56	ug/L
MKTF-02	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-02	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-02	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-02	11/14/2014	Isopropylbenzene	1.6	1	0.16	447	ug/L
MKTF-02	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-02	11/14/2014	Ethylbenzene	2.9	1	0.13	700	ug/L
MKTF-02	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-02	11/14/2014	n-Propylbenzene	1.2	1	0.14	660	ug/L
MKTF-02	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-02	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-02	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-02	11/14/2014	1,2-Dichloroethane	**16**	1	0.26	5	ug/L
MKTF-02	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-02	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-02	11/14/2014	Toluene	2.2	1	0.17	1000	ug/L
MKTF-02	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-02	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-02	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-02	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	11/14/2014	cis-1,2-Dichloroethene	11	1	0.12	70	ug/L
MKTF-02	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-02	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-02	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-02	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-02	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-02	11/14/2014	Xylenes, Total	1.6	1.5	0.38	620	ug/L
MKTF-02	11/14/2014	MTBE	59	1	0.25	143	ug/L
MKTF-02	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-02	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	3/11/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-02	3/11/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-02	3/11/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-02	3/11/2015	Benzene	**200**	10	0.65	5	ug/L
MKTF-02	3/11/2015	1,1,1-Trichloroethane	2.3	2	0.16	200	ug/L
MKTF-02	3/11/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-02	3/11/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-02	3/11/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-02	3/11/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-02	3/11/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-02	3/11/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-02	3/11/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-02	3/11/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-02	3/11/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-02	3/11/2015	1,1-Dichloroethane	**50**	2	0.8	25	ug/L
MKTF-02	3/11/2015	1,1-Dichloroethene	**31**	2	0.2	7	ug/L
MKTF-02	3/11/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-02	3/11/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-02	3/11/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-02	3/11/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-02	3/11/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-02	3/11/2015	Trichloroethene	2.4	2	0.33	5	ug/L
MKTF-02	3/11/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-02	3/11/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-02	3/11/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-02	3/11/2015	1,2,4-Trimethylbenzene	5.1	2	0.32	56	ug/L
MKTF-02	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-02	3/11/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-02	3/11/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-02	3/11/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-02	3/11/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-02	3/11/2015	Ethylbenzene	4.1	2	0.2	700	ug/L
MKTF-02	3/11/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-02	3/11/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-02	3/11/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-02	3/11/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-02	3/11/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/11/2015	1,2-Dichloroethane	4.5	2	0.35	5	ug/L
MKTF-02	3/11/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-02	3/11/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-02	3/11/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-02	3/11/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-02	3/11/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-02	3/11/2015	Dibromochloromethane	*ND*	2	0.19	1.68	ug/L
MKTF-02	3/11/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-02	3/11/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-02	3/11/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-02	3/11/2015	cis-1,2-Dichloroethene	9.3	2	0.16	70	ug/L
MKTF-02	3/11/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-02	3/11/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-02	3/11/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-02	3/11/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-02	3/11/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-02	3/11/2015	Xylenes, Total	7.6	3	0.56	620	ug/L
MKTF-02	3/11/2015	MTBE	44	2	0.35	143	ug/L
MKTF-02	3/11/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-02	3/11/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-02	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	6/9/2015	Benzene	**470**	10	0.65	5	ug/L
MKTF-02	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-02	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	6/9/2015	Vinyl Chloride	1.4	1	0.13	2	ug/L
MKTF-02	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	6/9/2015	1,1-Dichloroethane	**54**	1	0.4	25	ug/L
MKTF-02	6/9/2015	1,1-Dichloroethene	**26**	1	0.099	7	ug/L
MKTF-02	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-02	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-02	6/9/2015	Trichloroethene	2.5	1	0.16	5	ug/L
MKTF-02	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	6/9/2015	1,2,4-Trimethylbenzene	40	1	0.16	56	ug/L
MKTF-02	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	6/9/2015	Isopropylbenzene	9.4	1	0.15	447	ug/L
MKTF-02	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	6/9/2015	Ethylbenzene	62	1	0.1	700	ug/L
MKTF-02	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	6/9/2015	n-Propylbenzene	29	1	0.16	660	ug/L
MKTF-02	6/9/2015	n-Butylbenzene	3.2	3	0.25	1000	ug/L
MKTF-02	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	6/9/2015	1,2-Dichloroethane	4.1	1	0.18	5	ug/L
MKTF-02	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	6/9/2015	Toluene	11	1	0.11	1000	ug/L
MKTF-02	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	6/9/2015	sec-Butylbenzene	1.7	1	0.23	2000	ug/L
MKTF-02	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	6/9/2015	cis-1,2-Dichloroethene	9.9	1	0.081	70	ug/L
MKTF-02	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	6/9/2015	Xylenes, Total	39	1.5	0.28	620	ug/L
MKTF-02	6/9/2015	MTBE	37	1	0.17	143	ug/L
MKTF-02	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	8/21/2015	Benzene	**370**	10	0.65	5	ug/L
MKTF-02	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-02	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	8/21/2015	Vinyl Chloride	1.3	1	0.13	2	ug/L
MKTF-02	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	8/21/2015	1,1-Dichloroethane	**62**	1	0.4	25	ug/L
MKTF-02	8/21/2015	1,1-Dichloroethene	**59**	1	0.099	7	ug/L
MKTF-02	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-02	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	8/21/2015	1,1,2-Trichloroethane	1.2	1	0.079	5	ug/L
MKTF-02	8/21/2015	Trichloroethene	**5.3**	1	0.16	5	ug/L
MKTF-02	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	8/21/2015	1,2,4-Trimethylbenzene	1.7	1	0.16	56	ug/L
MKTF-02	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	8/21/2015	Isopropylbenzene	7.2	1	0.15	447	ug/L
MKTF-02	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	8/21/2015	Ethylbenzene	11	1	0.1	700	ug/L
MKTF-02	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	8/21/2015	n-Propylbenzene	5.6	1	0.16	660	ug/L
MKTF-02	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-02	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	8/21/2015	1,2-Dichloroethane	**9.1**	1	0.18	5	ug/L
MKTF-02	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	8/21/2015	Toluene	5.6	1	0.11	1000	ug/L
MKTF-02	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	8/21/2015	sec-Butylbenzene	1.3	1	0.23	2000	ug/L
MKTF-02	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	8/21/2015	cis-1,2-Dichloroethene	10	1	0.081	70	ug/L
MKTF-02	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	8/21/2015	Xylenes, Total	3.3	1.5	0.28	620	ug/L
MKTF-02	8/21/2015	MTBE	44	1	0.17	143	ug/L
MKTF-02	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-02	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-02	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-02	11/4/2015	Benzene	**440**	10	0.65	5	ug/L
MKTF-02	11/4/2015	1,1,1-Trichloroethane	1.9	1	0.078	200	ug/L
MKTF-02	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-02	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-02	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-02	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-02	11/4/2015	Vinyl Chloride	1.9	1	0.13	2	ug/L
MKTF-02	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-02	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-02	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-02	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-02	11/4/2015	1,1-Dichloroethane	**66**	1	0.4	25	ug/L
MKTF-02	11/4/2015	1,1-Dichloroethene	**30**	1	0.099	7	ug/L
MKTF-02	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-02	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-02	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-02	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-02	11/4/2015	Trichloroethene	3.5	1	0.16	5	ug/L
MKTF-02	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-02	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-02	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-02	11/4/2015	1,2,4-Trimethylbenzene	8.7	1	0.16	56	ug/L
MKTF-02	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-02	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-02	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-02	11/4/2015	Isopropylbenzene	9.7	1	0.15	447	ug/L
MKTF-02	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-02	11/4/2015	Ethylbenzene	72	1	0.1	700	ug/L
MKTF-02	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-02	11/4/2015	n-Propylbenzene	13	1	0.16	660	ug/L
MKTF-02	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-02	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-02	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-02	11/4/2015	1,2-Dichloroethane	4.8	1	0.18	5	ug/L
MKTF-02	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-02	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-02	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-02	11/4/2015	Toluene	13	1	0.11	1000	ug/L
MKTF-02	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-02	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-02	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-02	11/4/2015	sec-Butylbenzene	1.6	1	0.23	2000	ug/L
MKTF-02	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-02	11/4/2015	cis-1,2-Dichloroethene	13	1	0.081	70	ug/L
MKTF-02	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-02	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-02	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-02	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-02	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	11/4/2015	Xylenes, Total	6.3	1.5	0.28	620	ug/L
MKTF-02	11/4/2015	MTBE	58	1	0.17	143	ug/L
MKTF-02	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	2/24/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-02	2/24/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-02	2/24/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-02	2/24/2016	Benzene	**110**	5	0.48	5	ug/L
MKTF-02	2/24/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-02	2/24/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-02	2/24/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-02	2/24/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-02	2/24/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-02	2/24/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-02	2/24/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-02	2/24/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-02	2/24/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-02	2/24/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-02	2/24/2016	1,1-Dichloroethane	**58**	5	0.54	25	ug/L
MKTF-02	2/24/2016	1,1-Dichloroethene	**110**	5	0.38	7	ug/L
MKTF-02	2/24/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-02	2/24/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-02	2/24/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-02	2/24/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-02	2/24/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-02	2/24/2016	Trichloroethene	**7.3**	5	0.88	5	ug/L
MKTF-02	2/24/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-02	2/24/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-02	2/24/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	2/24/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-02	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-02	2/24/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-02	2/24/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-02	2/24/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-02	2/24/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-02	2/24/2016	Ethylbenzene	ND	5	0.56	700	ug/L
MKTF-02	2/24/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-02	2/24/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
MKTF-02	2/24/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-02	2/24/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-02	2/24/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/24/2016	1,2-Dichloroethane	**15**	5	0.26	5	ug/L
MKTF-02	2/24/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-02	2/24/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-02	2/24/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-02	2/24/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-02	2/24/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-02	2/24/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-02	2/24/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-02	2/24/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-02	2/24/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-02	2/24/2016	cis-1,2-Dichloroethene	5.8	5	0.62	70	ug/L
MKTF-02	2/24/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-02	2/24/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-02	2/24/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-02	2/24/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-02	2/24/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-02	2/24/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-02	2/24/2016	MTBE	36	5	1.1	143	ug/L
MKTF-02	2/24/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-02	2/24/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-02	6/10/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-02	6/10/2016	Acetone	ND	50	25	14064	ug/L
MKTF-02	6/10/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-02	6/10/2016	Benzene	**1200**	20	1.9	5	ug/L
MKTF-02	6/10/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-02	6/10/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-02	6/10/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-02	6/10/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-02	6/10/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-02	6/10/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-02	6/10/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-02	6/10/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-02	6/10/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-02	6/10/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-02	6/10/2016	1,1-Dichloroethane	**46**	5	0.54	25	ug/L
MKTF-02	6/10/2016	1,1-Dichloroethene	**18**	5	0.54	7	ug/L
MKTF-02	6/10/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-02	6/10/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-02	6/10/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-02	6/10/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-02	6/10/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-02	6/10/2016	Trichloroethene	2.9	5	0.88	5	ug/L
MKTF-02	6/10/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-02	6/10/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-02	6/10/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	6/10/2016	1,2,4-Trimethylbenzene	**130**	5	0.55	56	ug/L
MKTF-02	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-02	6/10/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-02	6/10/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-02	6/10/2016	Isopropylbenzene	13	5	0.52	447	ug/L
MKTF-02	6/10/2016	p-Isopropyltoluene	1.6	5	0.7	NA	ug/L
MKTF-02	6/10/2016	Ethylbenzene	210	5	0.56	700	ug/L
MKTF-02	6/10/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-02	6/10/2016	n-Propylbenzene	37	5	0.66	660	ug/L
MKTF-02	6/10/2016	n-Butylbenzene	4.9	15	0.8	1000	ug/L
MKTF-02	6/10/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-02	6/10/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-02	6/10/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-02	6/10/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-02	6/10/2016	1,3,5-Trimethylbenzene	9.7	5	0.58	60	ug/L
MKTF-02	6/10/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-02	6/10/2016	Toluene	26	5	0.59	1000	ug/L
MKTF-02	6/10/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-02	6/10/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-02	6/10/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-02	6/10/2016	sec-Butylbenzene	2.4	5	0.62	2000	ug/L
MKTF-02	6/10/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-02	6/10/2016	cis-1,2-Dichloroethene	12	5	0.62	70	ug/L
MKTF-02	6/10/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-02	6/10/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-02	6/10/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-02	6/10/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-02	6/10/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-02	6/10/2016	Xylenes, Total	160	7.5	1.8	620	ug/L
MKTF-02	6/10/2016	MTBE	87	5	1.1	143	ug/L
MKTF-02	6/10/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/10/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-02	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-02	9/7/2016	Acetone	10	10	4.9	14064	ug/L
MKTF-02	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-02	9/7/2016	Benzene	**1800**	100	9.6	5	ug/L
MKTF-02	9/7/2016	1,1,1-Trichloroethane	0.61	1	0.091	200	ug/L
MKTF-02	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-02	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-02	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-02	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-02	9/7/2016	Vinyl Chloride	1.1	1	0.2	2	ug/L
MKTF-02	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-02	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-02	9/7/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-02	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-02	9/7/2016	1,1-Dichloroethane	**48**	1	0.11	25	ug/L
MKTF-02	9/7/2016	1,1-Dichloroethene	**19**	1	0.11	7	ug/L
MKTF-02	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-02	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-02	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-02	9/7/2016	2-Butanone	3.6	10	0.74	5565	ug/L
MKTF-02	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-02	9/7/2016	Trichloroethene	2.5	1	0.18	5	ug/L
MKTF-02	9/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-02	9/7/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	9/7/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	9/7/2016	1,2,4-Trimethylbenzene	39	10	1.1	56	ug/L
MKTF-02	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-02	9/7/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-02	9/7/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-02	9/7/2016	Isopropylbenzene	12	10	1	447	ug/L
MKTF-02	9/7/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-02	9/7/2016	Ethylbenzene	160	10	1.1	700	ug/L
MKTF-02	9/7/2016	Styrene	0.59	1	0.11	100	ug/L
MKTF-02	9/7/2016	n-Propylbenzene	25	10	1.3	660	ug/L
MKTF-02	9/7/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-02	9/7/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-02	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-02	9/7/2016	1,2-Dichloroethane	3.9	1	0.12	5	ug/L
MKTF-02	9/7/2016	4-Methyl-2-Pentanone	0.98	10	0.43	1243	ug/L
MKTF-02	9/7/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-02	9/7/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-02	9/7/2016	Toluene	17	1	0.12	1000	ug/L
MKTF-02	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-02	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-02	9/7/2016	Tetrachloroethene	0.28	1	0.15	5	ug/L
MKTF-02	9/7/2016	sec-Butylbenzene	3.2	10	1.2	2000	ug/L
MKTF-02	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-02	9/7/2016	cis-1,2-Dichloroethene	15	1	0.12	70	ug/L
MKTF-02	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-02	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-02	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-02	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-02	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-02	9/7/2016	Xylenes, Total	28	1.5	0.37	620	ug/L
MKTF-02	9/7/2016	MTBE	110	1	0.21	143	ug/L
MKTF-02	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-02	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-02	10/28/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	10/28/2016	Acetone	ND	100	49	14064	ug/L
MKTF-02	10/28/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-02	10/28/2016	Benzene	**1600**	100	9.6	5	ug/L
MKTF-02	10/28/2016	1,1,1-Trichloroethane	1	10	0.91	200	ug/L
MKTF-02	10/28/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-02	10/28/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-02	10/28/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-02	10/28/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-02	10/28/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-02	10/28/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-02	10/28/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-02	10/28/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-02	10/28/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-02	10/28/2016	1,1-Dichloroethane	**62**	10	1.1	25	ug/L
MKTF-02	10/28/2016	1,1-Dichloroethene	**37**	10	1.1	7	ug/L
MKTF-02	10/28/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-02	10/28/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/28/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-02	10/28/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-02	10/28/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-02	10/28/2016	Trichloroethene	*2.9*	*10*	1.8	5	ug/L
MKTF-02	10/28/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-02	10/28/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	10/28/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	10/28/2016	1,2,4-Trimethylbenzene	20	10	1.1	56	ug/L
MKTF-02	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-02	10/28/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-02	10/28/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-02	10/28/2016	Isopropylbenzene	6.2	10	1	447	ug/L
MKTF-02	10/28/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-02	10/28/2016	Ethylbenzene	95	10	1.1	700	ug/L
MKTF-02	10/28/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-02	10/28/2016	n-Propylbenzene	12	10	1.3	660	ug/L
MKTF-02	10/28/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-02	10/28/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-02	10/28/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-02	10/28/2016	1,2-Dichloroethane	**7.2**	10	1.2	5	ug/L
MKTF-02	10/28/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-02	10/28/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-02	10/28/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-02	10/28/2016	Toluene	20	10	1.2	1000	ug/L
MKTF-02	10/28/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	10/28/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-02	10/28/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	10/28/2016	sec-Butylbenzene	1.8	10	1.2	2000	ug/L
MKTF-02	10/28/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-02	10/28/2016	cis-1,2-Dichloroethene	17	10	1.2	70	ug/L
MKTF-02	10/28/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-02	10/28/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-02	10/28/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-02	10/28/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-02	10/28/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-02	10/28/2016	Xylenes, Total	9.9	15	3.7	620	ug/L
MKTF-02	10/28/2016	MTBE	**150**	10	2.1	143	ug/L
MKTF-02	10/28/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-02	10/28/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-02	3/16/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	3/16/2017	Acetone	16	100	8.8	14064	ug/L
MKTF-02	3/16/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-02	3/16/2017	Benzene	**4000**	100	9.6	5	ug/L
MKTF-02	3/16/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-02	3/16/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-02	3/16/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-02	3/16/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-02	3/16/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-02	3/16/2017	Vinyl Chloride	**5.1**	10	1.8	2	ug/L
MKTF-02	3/16/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-02	3/16/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-02	3/16/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-02	3/16/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-02	3/16/2017	1,1-Dichloroethane	**62**	10	1	25	ug/L
MKTF-02	3/16/2017	1,1-Dichloroethene	**26**	10	0.81	7	ug/L
MKTF-02	3/16/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-02	3/16/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-02	3/16/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-02	3/16/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-02	3/16/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-02	3/16/2017	Trichloroethene	*4.2*	*10*	1.8	5	ug/L
MKTF-02	3/16/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-02	3/16/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-02	3/16/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	3/16/2017	1,2,4-Trimethylbenzene	**360**	10	1	56	ug/L
MKTF-02	3/16/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-02	3/16/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-02	3/16/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-02	3/16/2017	Isopropylbenzene	33	10	0.98	447	ug/L
MKTF-02	3/16/2017	p-Isopropyltoluene	2.6	10	1.4	NA	ug/L
MKTF-02	3/16/2017	Ethylbenzene	510	10	1.1	700	ug/L
MKTF-02	3/16/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-02	3/16/2017	n-Propylbenzene	96	10	1.3	660	ug/L
MKTF-02	3/16/2017	n-Butylbenzene	9.1	30	1.6	1000	ug/L
MKTF-02	3/16/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	3/16/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-02	3/16/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-02	3/16/2017	1,3,5-Trimethylbenzene	24	10	1.2	60	ug/L
MKTF-02	3/16/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-02	3/16/2017	Toluene	56	10	0.89	1000	ug/L
MKTF-02	3/16/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	3/16/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-02	3/16/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	3/16/2017	sec-Butylbenzene	5.2	10	1	2000	ug/L
MKTF-02	3/16/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-02	3/16/2017	cis-1,2-Dichloroethene	24	10	2	70	ug/L
MKTF-02	3/16/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	3/16/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-02	3/16/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-02	3/16/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-02	3/16/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-02	3/16/2017	Xylenes, Total	230	15	3.2	620	ug/L
MKTF-02	3/16/2017	MTBE	**150**	10	1.5	143	ug/L
MKTF-02	3/16/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-02	3/16/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-02	10/3/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	10/3/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-02	10/3/2017	Chloroform	ND	5	2	100	ug/L
MKTF-02	10/3/2017	Benzene	**2700**	50	3.1	5	ug/L
MKTF-02	10/3/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	10/3/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	10/3/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	10/3/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	10/3/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	10/3/2017	Vinyl Chloride	**5.1**	5	0.89	2	ug/L
MKTF-02	10/3/2017	Methylene Chloride	*1.8*	*15*	0.54	5	ug/L
MKTF-02	10/3/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	10/3/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	10/3/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	10/3/2017	1,1-Dichloroethane	**45**	5	2	25	ug/L
MKTF-02	10/3/2017	1,1-Dichloroethene	**21**	5	0.4	7	ug/L
MKTF-02	10/3/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	10/3/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-02	10/3/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	10/3/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	10/3/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-02	10/3/2017	Trichloroethene	1.9	5	0.56	5	ug/L
MKTF-02	10/3/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	10/3/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	10/3/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	10/3/2017	1,2,4-Trimethylbenzene	53	5	0.56	56	ug/L
MKTF-02	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	10/3/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	10/3/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	10/3/2017	Isopropylbenzene	17	5	0.26	447	ug/L
MKTF-02	10/3/2017	p-Isopropyltoluene	0.88	5	0.48	NA	ug/L
MKTF-02	10/3/2017	Ethylbenzene	150	5	0.47	700	ug/L
MKTF-02	10/3/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-02	10/3/2017	n-Propylbenzene	47	5	0.37	660	ug/L
MKTF-02	10/3/2017	n-Butylbenzene	4.5	15	0.65	1000	ug/L
MKTF-02	10/3/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	10/3/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	10/3/2017	1,2-Dichloroethane	3.5	5	2	5	ug/L
MKTF-02	10/3/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	10/3/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-02	10/3/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	10/3/2017	Toluene	28	5	0.32	1000	ug/L
MKTF-02	10/3/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	10/3/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	10/3/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	10/3/2017	sec-Butylbenzene	2.1	5	0.55	2000	ug/L
MKTF-02	10/3/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	10/3/2017	cis-1,2-Dichloroethene	17	5	1	70	ug/L
MKTF-02	10/3/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	10/3/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	10/3/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	10/3/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	10/3/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	10/3/2017	Xylenes, Total	37	7.5	1.6	620	ug/L
MKTF-02	10/3/2017	MTBE	130	5	1.2	143	ug/L
MKTF-02	10/3/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/3/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	11/20/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	11/20/2017	Acetone	7.4	50	4.1	14064	ug/L
MKTF-02	11/20/2017	Chloroform	ND	5	2	100	ug/L
MKTF-02	11/20/2017	Benzene	**2900**	50	3.1	5	ug/L
MKTF-02	11/20/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	11/20/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	11/20/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	11/20/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	11/20/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	11/20/2017	Vinyl Chloride	**3.9**	5	0.89	2	ug/L
MKTF-02	11/20/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-02	11/20/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	11/20/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	11/20/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	11/20/2017	1,1-Dichloroethane	**47**	5	2	25	ug/L
MKTF-02	11/20/2017	1,1-Dichloroethene	**21**	5	0.4	7	ug/L
MKTF-02	11/20/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	11/20/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-02	11/20/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	11/20/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	11/20/2017	1,1,2-Trichloroethane	0.95	5	0.7	5	ug/L
MKTF-02	11/20/2017	Trichloroethene	2.4	5	0.56	5	ug/L
MKTF-02	11/20/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	11/20/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	11/20/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	11/20/2017	1,2,4-Trimethylbenzene	**200**	5	0.56	56	ug/L
MKTF-02	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	11/20/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	11/20/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	11/20/2017	Isopropylbenzene	21	5	0.26	447	ug/L
MKTF-02	11/20/2017	p-Isopropyltoluene	1.1	5	0.48	NA	ug/L
MKTF-02	11/20/2017	Ethylbenzene	280	5	0.47	700	ug/L
MKTF-02	11/20/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-02	11/20/2017	n-Propylbenzene	59	5	0.37	660	ug/L
MKTF-02	11/20/2017	n-Butylbenzene	4.9	15	0.65	1000	ug/L
MKTF-02	11/20/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	11/20/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	11/20/2017	1,2-Dichloroethane	3.3	5	2	5	ug/L
MKTF-02	11/20/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	11/20/2017	1,3,5-Trimethylbenzene	3	5	0.44	60	ug/L
MKTF-02	11/20/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	11/20/2017	Toluene	50	5	0.32	1000	ug/L
MKTF-02	11/20/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	11/20/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	11/20/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	11/20/2017	sec-Butylbenzene	2.7	5	0.55	2000	ug/L
MKTF-02	11/20/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	11/20/2017	cis-1,2-Dichloroethene	16	5	1	70	ug/L
MKTF-02	11/20/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	11/20/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	11/20/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	11/20/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	11/20/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	11/20/2017	Xylenes, Total	69	7.5	1.6	620	ug/L
MKTF-02	11/20/2017	MTBE	130	5	1.2	143	ug/L
MKTF-02	11/20/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-02	11/20/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	2/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-02	2/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-02	2/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-02	2/6/2018	Benzene	**2600**	50	3.1	5	ug/L
MKTF-02	2/6/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-02	2/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-02	2/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-02	2/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-02	2/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-02	2/6/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-02	2/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-02	2/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-02	2/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-02	2/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-02	2/6/2018	1,1-Dichloroethane	**41**	5	2	25	ug/L
MKTF-02	2/6/2018	1,1-Dichloroethene	**18**	5	0.4	7	ug/L
MKTF-02	2/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-02	2/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-02	2/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-02	2/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-02	2/6/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-02	2/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-02	2/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-02	2/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-02	2/6/2018	1,2,4-Trimethylbenzene	**180**	5	0.56	56	ug/L
MKTF-02	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-02	2/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-02	2/6/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-02	2/6/2018	Isopropylbenzene	14	5	0.26	447	ug/L
MKTF-02	2/6/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-02	2/6/2018	Ethylbenzene	250	5	0.47	700	ug/L
MKTF-02	2/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-02	2/6/2018	n-Propylbenzene	38	5	0.37	660	ug/L
MKTF-02	2/6/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-02	2/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-02	2/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-02	2/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-02	2/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-02	2/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-02	2/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-02	2/6/2018	Toluene	49	5	0.32	1000	ug/L
MKTF-02	2/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-02	2/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-02	2/6/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-02	2/6/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
MKTF-02	2/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-02	2/6/2018	cis-1,2-Dichloroethene	14	5	1	70	ug/L
MKTF-02	2/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-02	2/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-02	2/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-02	2/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-02	2/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-02	2/6/2018	Xylenes, Total	89	7.5	1.6	620	ug/L
MKTF-02	2/6/2018	MTBE	110	5	1.2	143	ug/L
MKTF-02	2/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-02	2/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-02	5/1/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-02	5/1/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-02	5/1/2018	Chloroform	ND	10	4	100	ug/L
MKTF-02	5/1/2018	Benzene	**2900**	100	6.2	5	ug/L
MKTF-02	5/1/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-02	5/1/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-02	5/1/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-02	5/1/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-02	5/1/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-02	5/1/2018	Vinyl Chloride	**6.3**	10	1.8	2	ug/L
MKTF-02	5/1/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-02	5/1/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-02	5/1/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-02	5/1/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-02	5/1/2018	1,1-Dichloroethane	**33**	10	4	25	ug/L
MKTF-02	5/1/2018	1,1-Dichloroethene	**11**	10	0.81	7	ug/L
MKTF-02	5/1/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-02	5/1/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-02	5/1/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-02	5/1/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-02	5/1/2018	1,1,2-Trichloroethane	*1.6*	*10*	1.4	5	ug/L
MKTF-02	5/1/2018	Trichloroethene	*1.8*	*10*	1.1	5	ug/L
MKTF-02	5/1/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-02	5/1/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-02	5/1/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	5/1/2018	1,2,4-Trimethylbenzene	**200**	10	1.1	56	ug/L
MKTF-02	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-02	5/1/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-02	5/1/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-02	5/1/2018	Isopropylbenzene	15	10	0.51	447	ug/L
MKTF-02	5/1/2018	p-Isopropyltoluene	1.1	10	0.96	NA	ug/L
MKTF-02	5/1/2018	Ethylbenzene	240	10	0.93	700	ug/L
MKTF-02	5/1/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-02	5/1/2018	n-Propylbenzene	45	10	0.74	660	ug/L
MKTF-02	5/1/2018	n-Butylbenzene	4.1	30	1.3	1000	ug/L
MKTF-02	5/1/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	5/1/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/1/2018	1,2-Dichloroethane	*4.8*	*10*	4	5	ug/L
MKTF-02	5/1/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-02	5/1/2018	1,3,5-Trimethylbenzene	9.2	10	0.87	60	ug/L
MKTF-02	5/1/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-02	5/1/2018	Toluene	39	10	0.64	1000	ug/L
MKTF-02	5/1/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-02	5/1/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-02	5/1/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-02	5/1/2018	sec-Butylbenzene	2.4	10	1.1	2000	ug/L
MKTF-02	5/1/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-02	5/1/2018	cis-1,2-Dichloroethene	16	10	2	70	ug/L
MKTF-02	5/1/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	5/1/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-02	5/1/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-02	5/1/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-02	5/1/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-02	5/1/2018	Xylenes, Total	120	15	3.2	620	ug/L
MKTF-02	5/1/2018	MTBE	97	10	2.4	143	ug/L
MKTF-02	5/1/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-02	5/1/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-02	8/20/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-02	8/20/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-02	8/20/2018	Chloroform	ND	10	4	100	ug/L
MKTF-02	8/20/2018	Benzene	**2500**	100	17	5	ug/L
MKTF-02	8/20/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-02	8/20/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-02	8/20/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-02	8/20/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-02	8/20/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-02	8/20/2018	Vinyl Chloride	**7.1**	10	1.1	2	ug/L
MKTF-02	8/20/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-02	8/20/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-02	8/20/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-02	8/20/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-02	8/20/2018	1,1-Dichloroethane	**42**	10	4	25	ug/L
MKTF-02	8/20/2018	1,1-Dichloroethene	**24**	10	1.2	7	ug/L
MKTF-02	8/20/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-02	8/20/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-02	8/20/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-02	8/20/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-02	8/20/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-02	8/20/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-02	8/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-02	8/20/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-02	8/20/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-02	8/20/2018	1,2,4-Trimethylbenzene	**60**	10	2.5	56	ug/L
MKTF-02	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-02	8/20/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-02	8/20/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-02	8/20/2018	Isopropylbenzene	7.4	10	2.2	447	ug/L
MKTF-02	8/20/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-02	8/20/2018	Ethylbenzene	140	10	2.2	700	ug/L
MKTF-02	8/20/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-02	8/20/2018	n-Propylbenzene	18	10	2.4	660	ug/L
MKTF-02	8/20/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-02	8/20/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-02	8/20/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-02	8/20/2018	1,2-Dichloroethane	**7.8**	10	4	5	ug/L
MKTF-02	8/20/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-02	8/20/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-02	8/20/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-02	8/20/2018	Toluene	31	10	1.7	1000	ug/L
MKTF-02	8/20/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-02	8/20/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-02	8/20/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	8/20/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-02	8/20/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-02	8/20/2018	cis-1,2-Dichloroethene	9.9	10	3.8	70	ug/L
MKTF-02	8/20/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	8/20/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-02	8/20/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-02	8/20/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-02	8/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-02	8/20/2018	Xylenes, Total	31	15	6.4	620	ug/L
MKTF-02	8/20/2018	MTBE	100	10	3.2	143	ug/L
MKTF-02	8/20/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-02	11/28/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-02	11/28/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-02	11/28/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-02	11/28/2018	Benzene	**5500**	100	17	5	ug/L
MKTF-02	11/28/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-02	11/28/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-02	11/28/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-02	11/28/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-02	11/28/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-02	11/28/2018	Vinyl Chloride	**28**	10	1.2	2	ug/L
MKTF-02	11/28/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-02	11/28/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-02	11/28/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-02	11/28/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-02	11/28/2018	1,1-Dichloroethane	**44**	10	1.8	25	ug/L
MKTF-02	11/28/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
MKTF-02	11/28/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-02	11/28/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-02	11/28/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-02	11/28/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-02	11/28/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-02	11/28/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-02	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-02	11/28/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-02	11/28/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-02	11/28/2018	1,2,4-Trimethylbenzene	**460**	10	2.5	56	ug/L
MKTF-02	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-02	11/28/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-02	11/28/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-02	11/28/2018	Isopropylbenzene	27	10	2.2	447	ug/L
MKTF-02	11/28/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-02	11/28/2018	Ethylbenzene	510	10	2.2	700	ug/L
MKTF-02	11/28/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-02	11/28/2018	n-Propylbenzene	96	10	2.4	660	ug/L
MKTF-02	11/28/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-02	11/28/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-02	11/28/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-02	11/28/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-02	11/28/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-02	11/28/2018	1,3,5-Trimethylbenzene	22	10	2.3	60	ug/L
MKTF-02	11/28/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-02	11/28/2018	Toluene	82	10	1.7	1000	ug/L
MKTF-02	11/28/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-02	11/28/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-02	11/28/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-02	11/28/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-02	11/28/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-02	11/28/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-02	11/28/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-02	11/28/2018	Pentafluorobenzene	**100**	0	0		None
MKTF-02	11/28/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-02	11/28/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-02	11/28/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-02	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-02	11/28/2018	Xylenes, Total	170	15	6.4	620	ug/L
MKTF-02	11/28/2018	MTBE	99	10	4.6	143	ug/L
MKTF-02	11/28/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-02	11/28/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-02	3/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	3/28/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	3/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	3/28/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	3/28/2019	1,1-Dichloroethane	16	20	2.817172	25	ug/L
MKTF-02	3/28/2019	1,1-Dichloroethene	**7.3**	20	4.107764	7	ug/L
MKTF-02	3/28/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	3/28/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	3/28/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	3/28/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	3/28/2019	1,2,4-Trimethylbenzene	**130**	20	4.263982	56	ug/L
MKTF-02	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	3/28/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	3/28/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	3/28/2019	1,2-Dichloroethane	**6.9**	20	3.892755	5	ug/L
MKTF-02	3/28/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	3/28/2019	1,3,5-Trimethylbenzene	24	20	3.773197	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/28/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	3/28/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	3/28/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	3/28/2019	1-Methylnaphthalene	9.3	80	6.29909	NA	ug/L
MKTF-02	3/28/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	3/28/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	3/28/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	3/28/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	3/28/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	3/28/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-02	3/28/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	3/28/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	3/28/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	3/28/2019	Benzene	**620**	20	3.332781	5	ug/L
MKTF-02	3/28/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	3/28/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	3/28/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	3/28/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	3/28/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	3/28/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-02	3/28/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	3/28/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	3/28/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	3/28/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	3/28/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	3/28/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	3/28/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	3/28/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	3/28/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	3/28/2019	Ethylbenzene	10	20	2.646816	700	ug/L
MKTF-02	3/28/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	3/28/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
MKTF-02	3/28/2019	MTBE	47	20	9.1219	143	ug/L
MKTF-02	3/28/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	3/28/2019	Naphthalene	*9.5*	*40*	5.501427	30	ug/L
MKTF-02	3/28/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	3/28/2019	n-Propylbenzene	ND	20	4.28616	660	ug/L
MKTF-02	3/28/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	3/28/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	3/28/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	3/28/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	3/28/2019	Toluene	16	20	7.008724	1000	ug/L
MKTF-02	3/28/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	3/28/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	3/28/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	3/28/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	3/28/2019	Vinyl Chloride	**13**	20	3.581986	2	ug/L
MKTF-02	3/28/2019	Xylenes, Total	130	30	9.088299	620	ug/L
MKTF-02	3/28/2019	1,2-Dibromoethane	0.0086	0.00941	0.003279	0.05	ug/L
MKTF-02	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	5/6/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	5/6/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	5/6/2019	1,1-Dichloroethane	19	20	2.817172	25	ug/L
MKTF-02	5/6/2019	1,1-Dichloroethene	*6.4*	*20*	4.107764	7	ug/L
MKTF-02	5/6/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	5/6/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	5/6/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	5/6/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	5/6/2019	1,2,4-Trimethylbenzene	**130**	20	4.263982	56	ug/L
MKTF-02	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	5/6/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	5/6/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	5/6/2019	1,2-Dichloroethane	**6.4**	20	3.892755	5	ug/L
MKTF-02	5/6/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	5/6/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-02	5/6/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	5/6/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	5/6/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	5/6/2019	1-Methylnaphthalene	16	80	6.29909	NA	ug/L
MKTF-02	5/6/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	5/6/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	5/6/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	5/6/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	5/6/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	5/6/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	5/6/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	5/6/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	5/6/2019	Benzene	**950**	20	3.332781	5	ug/L
MKTF-02	5/6/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	5/6/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	5/6/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	5/6/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	5/6/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	5/6/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-02	5/6/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	5/6/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	5/6/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	5/6/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	5/6/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	5/6/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	5/6/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	5/6/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	5/6/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	5/6/2019	Ethylbenzene	43	20	2.646816	700	ug/L
MKTF-02	5/6/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	5/6/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
MKTF-02	5/6/2019	MTBE	49	20	9.1219	143	ug/L
MKTF-02	5/6/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	5/6/2019	Naphthalene	*12*	*40*	5.501427	30	ug/L
MKTF-02	5/6/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	5/6/2019	n-Propylbenzene	11	20	4.28616	660	ug/L
MKTF-02	5/6/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	5/6/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	5/6/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	5/6/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	5/6/2019	Toluene	19	20	7.008724	1000	ug/L
MKTF-02	5/6/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	5/6/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	5/6/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	5/6/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	5/6/2019	Vinyl Chloride	**19**	20	3.581986	2	ug/L
MKTF-02	5/6/2019	Xylenes, Total	110	30	9.088299	620	ug/L
MKTF-02	5/6/2019	1,2-Dibromoethane	0.013	0.00938	0.00327	0.05	ug/L
MKTF-02	8/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-02	8/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-02	8/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-02	8/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-02	8/23/2019	1,1-Dichloroethane	**27**	20	2.817172	25	ug/L
MKTF-02	8/23/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-02	8/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-02	8/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-02	8/23/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-02	8/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-02	8/23/2019	1,2,4-Trimethylbenzene	18	20	4.263982	56	ug/L
MKTF-02	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-02	8/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-02	8/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-02	8/23/2019	1,2-Dichloroethane	**12**	20	3.892755	5	ug/L
MKTF-02	8/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-02	8/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-02	8/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-02	8/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-02	8/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-02	8/23/2019	1-Methylnaphthalene	12	80	6.29909	NA	ug/L
MKTF-02	8/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-02	8/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-02	8/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-02	8/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-02	8/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-02	8/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-02	8/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-02	8/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-02	8/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-02	8/23/2019	Benzene	**990**	20	3.332781	5	ug/L
MKTF-02	8/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-02	8/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-02	8/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-02	8/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-02	8/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-02	8/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-02	8/23/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-02	8/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-02	8/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-02	8/23/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-02	8/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-02	8/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-02	8/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-02	8/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-02	8/23/2019	Ethylbenzene	78	20	2.646816	700	ug/L
MKTF-02	8/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-02	8/23/2019	Isopropylbenzene	11	20	3.830445	447	ug/L
MKTF-02	8/23/2019	MTBE	51	20	9.1219	143	ug/L
MKTF-02	8/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-02	8/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-02	8/23/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-02	8/23/2019	n-Propylbenzene	27	20	4.28616	660	ug/L
MKTF-02	8/23/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-02	8/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-02	8/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-02	8/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-02	8/23/2019	Toluene	12	20	7.008724	1000	ug/L
MKTF-02	8/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-02	8/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-02	8/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-02	8/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-02	8/23/2019	Vinyl Chloride	**28**	20	3.581986	2	ug/L
MKTF-02	8/23/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-02	8/23/2019	1,2-Dibromoethane	0.015	0.00949	0.003305	0.05	ug/L
MKTF-02	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-02	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-02	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-02	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethane	19	5	0.704293	25	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethene	1.6	5	1.026941	7	ug/L
MKTF-02	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-02	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trimethylbenzene	5.8	5	1.065995	56	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-02	11/19/2019	1,2-Dichloroethane	**5.7**	5	0.973189	5	ug/L
MKTF-02	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-02	11/19/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-02	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.9	20	1.574772	NA	ug/L
MKTF-02	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-02	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-02	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-02	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-02	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-02	11/19/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-02	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-02	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-02	11/19/2019	Benzene	**320**	5	0.833195	5	ug/L
MKTF-02	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-02	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-02	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-02	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-02	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-02	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-02	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-02	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-02	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-02	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-02	11/19/2019	cis-1,2-Dichloroethene	3.2	5	0.950575	70	ug/L
MKTF-02	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-02	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-02	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-02	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-02	11/19/2019	Ethylbenzene	39	5	0.661704	700	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-02	11/19/2019	Isopropylbenzene	3.8	5	0.957611	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	MTBE	25	5	2.280475	143	ug/L
MKTF-02	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-02	11/19/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-02	11/19/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-02	11/19/2019	n-Propylbenzene	5.6	5	1.07154	660	ug/L
MKTF-02	11/19/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-02	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-02	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-02	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-02	11/19/2019	Toluene	2.9	5	1.752181	1000	ug/L
MKTF-02	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-02	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-02	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-02	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-02	11/19/2019	Vinyl Chloride	**22**	5	0.895496	2	ug/L
MKTF-02	11/19/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-02	11/19/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-02	11/19/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-02	11/19/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-02	11/19/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethane	15	5	0.704293	25	ug/L
MKTF-02	11/19/2019	1,1-Dichloroethene	1.4	5	1.026941	7	ug/L
MKTF-02	11/19/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-02	11/19/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-02	11/19/2019	1,2,4-Trimethylbenzene	8.6	5	1.065995	56	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-02	11/19/2019	1,2-Dichloroethane	4.7	5	0.973189	5	ug/L
MKTF-02	11/19/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-02	11/19/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-02	11/19/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.9	20	1.574772	NA	ug/L
MKTF-02	11/19/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-02	11/19/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-02	11/19/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-02	11/19/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-02	11/19/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-02	11/19/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-02	11/19/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-02	11/19/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-02	11/19/2019	Benzene	**360**	5	0.833195	5	ug/L
MKTF-02	11/19/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-02	11/19/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-02	11/19/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-02	11/19/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-02	11/19/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-02	11/19/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-02	11/19/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-02	11/19/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-02	11/19/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-02	11/19/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-02	11/19/2019	cis-1,2-Dichloroethene	3.1	5	0.950575	70	ug/L
MKTF-02	11/19/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-02	11/19/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-02	11/19/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-02	11/19/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-02	11/19/2019	Ethylbenzene	46	5	0.661704	700	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-02	11/19/2019	Isopropylbenzene	4.4	5	0.957611	447	ug/L
MKTF-02	11/19/2019	MTBE	23	5	2.280475	143	ug/L
MKTF-02	11/19/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-02	11/19/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-02	11/19/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-02	11/19/2019	n-Propylbenzene	7.8	5	1.07154	660	ug/L
MKTF-02	11/19/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-02	11/19/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-02	11/19/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-02	11/19/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-02	11/19/2019	Toluene	3	5	1.752181	1000	ug/L
MKTF-02	11/19/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-02	11/19/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-02	11/19/2019	Trichloroethene	ND	5	0.831359	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-02	11/19/2019	Vinyl Chloride	**17**	5	0.895496	2	ug/L
MKTF-02	11/19/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	0.016	0.00933	0.003253	0.05	ug/L
MKTF-02	11/19/2019	1,2-Dibromoethane	0.023	0.00931	0.003244	0.05	ug/L
MKTF-02	2/25/2020	Benzene	**780**	50	11	5	ug/L
MKTF-02	2/25/2020	Ethylbenzene	570	50	11	700	ug/L
MKTF-02	2/25/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-02	2/25/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-02	2/25/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-02	2/25/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-02	2/25/2020	1,1-Dichloroethane	6.5	5	1.4	25	ug/L
MKTF-02	2/25/2020	1,1-Dichloroethene	1.8	5	0.65	7	ug/L
MKTF-02	2/25/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-02	2/25/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-02	2/25/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-02	2/25/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-02	2/25/2020	1,2,4-Trimethylbenzene	**60**	5	0.61	56	ug/L
MKTF-02	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-02	2/25/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-02	2/25/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-02	2/25/2020	1,2-Dichloroethane	2	5	1.1	5	ug/L
MKTF-02	2/25/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-02	2/25/2020	1,3,5-Trimethylbenzene	3.2	5	0.91	60	ug/L
MKTF-02	2/25/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-02	2/25/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-02	2/25/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-02	2/25/2020	1-Methylnaphthalene	60	20	4.2	NA	ug/L
MKTF-02	2/25/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-02	2/25/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-02	2/25/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-02	2/25/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-02	2/25/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
MKTF-02	2/25/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-02	2/25/2020	p-Isopropyltoluene	4.3	5	1	NA	ug/L
MKTF-02	2/25/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-02	2/25/2020	Acetone	18	50	12	14064	ug/L
MKTF-02	2/25/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-02	2/25/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-02	2/25/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-02	2/25/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-02	2/25/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-02	2/25/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-02	2/25/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-02	2/25/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-02	2/25/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-02	2/25/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-02	2/25/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-02	2/25/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-02	2/25/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-02	2/25/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-02	2/25/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-02	2/25/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-02	2/25/2020	Isopropylbenzene	42	5	0.91	447	ug/L
MKTF-02	2/25/2020	MTBE	9.1	5	2	143	ug/L
MKTF-02	2/25/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-02	2/25/2020	n-Butylbenzene	16	15	1.3	1000	ug/L
MKTF-02	2/25/2020	n-Propylbenzene	150	5	0.91	660	ug/L
MKTF-02	2/25/2020	Naphthalene	16	10	1.4	30	ug/L
MKTF-02	2/25/2020	sec-Butylbenzene	11	5	3	2000	ug/L
MKTF-02	2/25/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-02	2/25/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-02	2/25/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-02	2/25/2020	Toluene	10	5	1	1000	ug/L
MKTF-02	2/25/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-02	2/25/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-02	2/25/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-02	2/25/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-02	2/25/2020	Vinyl Chloride	**5**	5	0.98	2	ug/L
MKTF-02	2/25/2020	Xylenes, Total	48	7.5	2.8	620	ug/L
MKTF-02	2/25/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-02	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-02	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-02	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-02	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-02	9/21/2020	1,1-Dichloroethane	21	1	0.27	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	1,1-Dichloroethene	1.4	1	0.13	7	ug/L
MKTF-02	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-02	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-02	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-02	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-02	9/21/2020	1,2,4-Trimethylbenzene	37	1	0.12	56	ug/L
MKTF-02	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-02	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-02	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-02	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-02	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-02	9/21/2020	1,3,5-Trimethylbenzene	1.6	1	0.18	60	ug/L
MKTF-02	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-02	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-02	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-02	9/21/2020	1-Methylnaphthalene	53	4	0.84	NA	ug/L
MKTF-02	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-02	9/21/2020	2-Butanone	4.3	10	1.1	5565	ug/L
MKTF-02	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-02	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-02	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-02	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-02	9/21/2020	p-Isopropyltoluene	3.7	1	0.2	NA	ug/L
MKTF-02	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-02	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-02	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-02	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-02	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-02	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-02	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-02	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-02	9/21/2020	Chloroethane	16	2	0.38	20857	ug/L
MKTF-02	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-02	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-02	9/21/2020	cis-1,2-Dichloroethene	1.9	1	0.39	70	ug/L
MKTF-02	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-02	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-02	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-02	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-02	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-02	9/21/2020	Isopropylbenzene	33	1	0.18	447	ug/L
MKTF-02	9/21/2020	MTBE	61	1	0.39	143	ug/L
MKTF-02	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-02	9/21/2020	n-Butylbenzene	12	3	0.25	1000	ug/L
MKTF-02	9/21/2020	Naphthalene	4.6	2	0.28	30	ug/L
MKTF-02	9/21/2020	sec-Butylbenzene	8.1	1	0.61	2000	ug/L
MKTF-02	9/21/2020	Styrene	0.46	1	0.13	100	ug/L
MKTF-02	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-02	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-02	9/21/2020	Toluene	33	1	0.2	1000	ug/L
MKTF-02	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-02	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-02	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-02	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-02	9/21/2020	Vinyl Chloride	**27**	1	0.2	2	ug/L
MKTF-02	9/21/2020	Xylenes, Total	6.3	1.5	0.55	620	ug/L
MKTF-02	9/21/2020	Benzene	**4000**	50	11	5	ug/L
MKTF-02	9/21/2020	Ethylbenzene	520	50	11	700	ug/L
MKTF-02	9/21/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-02	9/21/2020	n-Propylbenzene	90	5	0.91	660	ug/L
MKTF-02	12/18/2020	1,2-Dibromoethane	ND	0.0205	0.00512	0.05	ug/L
MKTF-02	12/18/2020	Acetone	ND	125	50	14064	ug/L
MKTF-02	12/18/2020	Benzene	**885**	5	1.9	5	ug/L
MKTF-02	12/18/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-02	12/18/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-02	12/18/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-02	12/18/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-02	12/18/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-02	12/18/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-02	12/18/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-02	12/18/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-02	12/18/2020	Chloroform	ND	5	3	100	ug/L
MKTF-02	12/18/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-02	12/18/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-02	12/18/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	12/18/2020	cis-1,2-Dichloroethene	ND	5	2.5	70	ug/L
MKTF-02	12/18/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-02	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-02	12/18/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-02	12/18/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-02	12/18/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-02	12/18/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-02	12/18/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-02	12/18/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-02	12/18/2020	1,1-Dichloroethane	**29.1**	5	2.5	25	ug/L
MKTF-02	12/18/2020	1,2-Dichloroethane	**34**	5	2.5	5	ug/L
MKTF-02	12/18/2020	1,1-Dichloroethene	**8.76**	5	2.5	7	ug/L
MKTF-02	12/18/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-02	12/18/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-02	12/18/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-02	12/18/2020	Ethylbenzene	161	5	2.5	700	ug/L
MKTF-02	12/18/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-02	12/18/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-02	12/18/2020	Isopropylbenzene	8.53	5	2.65	447	ug/L
MKTF-02	12/18/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-02	12/18/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-02	12/18/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-02	12/18/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-02	12/18/2020	MTBE	31.7	5	3.7	143	ug/L
MKTF-02	12/18/2020	Naphthalene	10.3	5	5	30	ug/L
MKTF-02	12/18/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-02	12/18/2020	n-Propylbenzene	19.1	5	3.45	660	ug/L
MKTF-02	12/18/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-02	12/18/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-02	12/18/2020	Styrene	ND	5	5	100	ug/L
MKTF-02	12/18/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-02	12/18/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-02	12/18/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-02	12/18/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-02	12/18/2020	Toluene	11.9	5	2.05	1000	ug/L
MKTF-02	12/18/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-02	12/18/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-02	12/18/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L
MKTF-02	12/18/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-02	12/18/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-02	12/18/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-02	12/18/2020	Trichloroethene	ND	5	2.5	5	ug/L
MKTF-02	12/18/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-02	12/18/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L
MKTF-02	12/18/2020	1,2,4-Trimethylbenzene	25.7	5	4.1	56	ug/L
MKTF-02	12/18/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-02	12/18/2020	Vinyl Chloride	**24.1**	5	2.5	2	ug/L
MKTF-02	12/18/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-04	4/11/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-04	4/11/2014	Acetone	ND	200	99	14064	ug/L
MKTF-04	4/11/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-04	4/11/2014	Benzene	**1000**	20	3.1	5	ug/L
MKTF-04	4/11/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-04	4/11/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-04	4/11/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-04	4/11/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-04	4/11/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-04	4/11/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-04	4/11/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-04	4/11/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-04	4/11/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-04	4/11/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-04	4/11/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
MKTF-04	4/11/2014	1,1-Dichloroethene	**28**	20	4.3	7	ug/L
MKTF-04	4/11/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-04	4/11/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-04	4/11/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-04	4/11/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-04	4/11/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-04	4/11/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-04	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-04	4/11/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-04	4/11/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-04	4/11/2014	1,2,4-Trimethylbenzene	**510**	20	2.5	56	ug/L
MKTF-04	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	4/11/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-04	4/11/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-04	4/11/2014	Isopropylbenzene	28	20	3.2	447	ug/L
MKTF-04	4/11/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-04	4/11/2014	Ethylbenzene	**800**	20	2.5	700	ug/L
MKTF-04	4/11/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-04	4/11/2014	n-Propylbenzene	77	20	2.8	660	ug/L
MKTF-04	4/11/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-04	4/11/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-04	4/11/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-04	4/11/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-04	4/11/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-04	4/11/2014	1,3,5-Trimethylbenzene	**94**	20	2.6	60	ug/L
MKTF-04	4/11/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-04	4/11/2014	Toluene	25	20	3.4	1000	ug/L
MKTF-04	4/11/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-04	4/11/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-04	4/11/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-04	4/11/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-04	4/11/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-04	4/11/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-04	4/11/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-04	4/11/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-04	4/11/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-04	4/11/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-04	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-04	4/11/2014	Xylenes, Total	**1000**	30	7.5	620	ug/L
MKTF-04	4/11/2014	MTBE	**2400**	20	5	143	ug/L
MKTF-04	4/11/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-04	4/11/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-04	6/4/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-04	6/4/2014	Acetone	ND	100	49	14064	ug/L
MKTF-04	6/4/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-04	6/4/2014	Benzene	**670**	10	1.5	5	ug/L
MKTF-04	6/4/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-04	6/4/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-04	6/4/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-04	6/4/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-04	6/4/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-04	6/4/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-04	6/4/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-04	6/4/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-04	6/4/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-04	6/4/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-04	6/4/2014	1,1-Dichloroethane	11	10	2.8	25	ug/L
MKTF-04	6/4/2014	1,1-Dichloroethene	**21**	10	2.1	7	ug/L
MKTF-04	6/4/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	6/4/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-04	6/4/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-04	6/4/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-04	6/4/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	6/4/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-04	6/4/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-04	6/4/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-04	6/4/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-04	6/4/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-04	6/4/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-04	6/4/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-04	6/4/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-04	6/4/2014	Isopropylbenzene	20	10	1.6	447	ug/L
MKTF-04	6/4/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	Ethylbenzene	570	10	1.3	700	ug/L
MKTF-04	6/4/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-04	6/4/2014	n-Propylbenzene	46	10	1.4	660	ug/L
MKTF-04	6/4/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-04	6/4/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-04	6/4/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-04	6/4/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-04	6/4/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-04	6/4/2014	1,3,5-Trimethylbenzene	49	10	1.3	60	ug/L
MKTF-04	6/4/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-04	6/4/2014	Toluene	19	10	1.7	1000	ug/L
MKTF-04	6/4/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-04	6/4/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-04	6/4/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-04	6/4/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-04	6/4/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-04	6/4/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-04	6/4/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-04	6/4/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-04	6/4/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-04	6/4/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-04	6/4/2014	Xylenes, Total	**680**	15	3.8	620	ug/L
MKTF-04	6/4/2014	MTBE	**1800**	10	2.5	143	ug/L
MKTF-04	6/4/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-04	6/4/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-04	9/15/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-04	9/15/2014	Acetone	ND	50	25	14064	ug/L
MKTF-04	9/15/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-04	9/15/2014	Benzene	**150**	5	0.77	5	ug/L
MKTF-04	9/15/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-04	9/15/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-04	9/15/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-04	9/15/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-04	9/15/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-04	9/15/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-04	9/15/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-04	9/15/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-04	9/15/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-04	9/15/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-04	9/15/2014	1,1-Dichloroethane	**37**	5	1.4	25	ug/L
MKTF-04	9/15/2014	1,1-Dichloroethene	**74**	5	1.1	7	ug/L
MKTF-04	9/15/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-04	9/15/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-04	9/15/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-04	9/15/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-04	9/15/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-04	9/15/2014	Trichloroethene	**5.1**	5	0.97	5	ug/L
MKTF-04	9/15/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-04	9/15/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-04	9/15/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-04	9/15/2014	1,2,4-Trimethylbenzene	**96**	5	0.61	56	ug/L
MKTF-04	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-04	9/15/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-04	9/15/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-04	9/15/2014	Isopropylbenzene	11	5	0.81	447	ug/L
MKTF-04	9/15/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-04	9/15/2014	Ethylbenzene	140	5	0.64	700	ug/L
MKTF-04	9/15/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-04	9/15/2014	n-Propylbenzene	19	5	0.7	660	ug/L
MKTF-04	9/15/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-04	9/15/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-04	9/15/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-04	9/15/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-04	9/15/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-04	9/15/2014	1,3,5-Trimethylbenzene	12	5	0.66	60	ug/L
MKTF-04	9/15/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-04	9/15/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-04	9/15/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-04	9/15/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-04	9/15/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-04	9/15/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-04	9/15/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-04	9/15/2014	cis-1,2-Dichloroethene	14	5	0.61	70	ug/L
MKTF-04	9/15/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-04	9/15/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	9/15/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-04	9/15/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-04	9/15/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-04	9/15/2014	Xylenes, Total	140	7.5	1.9	620	ug/L
MKTF-04	9/15/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-04	9/15/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-04	9/15/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-04	11/13/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-04	11/13/2014	Acetone	ND	100	49	14064	ug/L
MKTF-04	11/13/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-04	11/13/2014	Benzene	**180**	10	1.5	5	ug/L
MKTF-04	11/13/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-04	11/13/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-04	11/13/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-04	11/13/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-04	11/13/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-04	11/13/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-04	11/13/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-04	11/13/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-04	11/13/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-04	11/13/2014	1,1-Dichloroethane	**37**	10	2.8	25	ug/L
MKTF-04	11/13/2014	1,1-Dichloroethene	**59**	10	2.1	7	ug/L
MKTF-04	11/13/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	11/13/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-04	11/13/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-04	11/13/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-04	11/13/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	11/13/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-04	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-04	11/13/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-04	11/13/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-04	11/13/2014	1,2,4-Trimethylbenzene	**200**	10	1.2	56	ug/L
MKTF-04	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-04	11/13/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-04	11/13/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-04	11/13/2014	Isopropylbenzene	16	10	1.6	447	ug/L
MKTF-04	11/13/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	Ethylbenzene	280	10	1.3	700	ug/L
MKTF-04	11/13/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-04	11/13/2014	n-Propylbenzene	29	10	1.4	660	ug/L
MKTF-04	11/13/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-04	11/13/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-04	11/13/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-04	11/13/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-04	11/13/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-04	11/13/2014	1,3,5-Trimethylbenzene	19	10	1.3	60	ug/L
MKTF-04	11/13/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-04	11/13/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-04	11/13/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-04	11/13/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-04	11/13/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-04	11/13/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-04	11/13/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-04	11/13/2014	cis-1,2-Dichloroethene	14	10	1.2	70	ug/L
MKTF-04	11/13/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-04	11/13/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-04	11/13/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-04	11/13/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-04	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-04	11/13/2014	Xylenes, Total	260	15	3.8	620	ug/L
MKTF-04	11/13/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-04	11/13/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-04	11/13/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-04	3/16/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	3/16/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	3/16/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	3/16/2015	Benzene	**220**	10	0.65	5	ug/L
MKTF-04	3/16/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	3/16/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	3/16/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	3/16/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-04	3/16/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	3/16/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	3/16/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	3/16/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	3/16/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	3/16/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	3/16/2015	1,1-Dichloroethane	19	10	4	25	ug/L
MKTF-04	3/16/2015	1,1-Dichloroethene	**32**	10	0.99	7	ug/L
MKTF-04	3/16/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	3/16/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	3/16/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	3/16/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	3/16/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	3/16/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	3/16/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	3/16/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	3/16/2015	1,2,4-Trimethylbenzene	**200**	10	1.6	56	ug/L
MKTF-04	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/16/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	3/16/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	3/16/2015	Isopropylbenzene	10	10	1.5	447	ug/L
MKTF-04	3/16/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Ethylbenzene	260	10	1	700	ug/L
MKTF-04	3/16/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	3/16/2015	n-Propylbenzene	21	10	1.6	660	ug/L
MKTF-04	3/16/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	3/16/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	3/16/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	3/16/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	3/16/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	3/16/2015	1,3,5-Trimethylbenzene	24	10	1.2	60	ug/L
MKTF-04	3/16/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	3/16/2015	Toluene	ND	10	1.1	1000	ug/L
MKTF-04	3/16/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	3/16/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	3/16/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	3/16/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-04	3/16/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	3/16/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	3/16/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	3/16/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	3/16/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	3/16/2015	Xylenes, Total	340	15	2.8	620	ug/L
MKTF-04	3/16/2015	MTBE	**1200**	10	1.7	143	ug/L
MKTF-04	3/16/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	3/16/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	6/4/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	6/4/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	6/4/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	6/4/2015	Benzene	**310**	10	0.65	5	ug/L
MKTF-04	6/4/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	6/4/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	6/4/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	6/4/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-04	6/4/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	6/4/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	6/4/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	6/4/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	6/4/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	6/4/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	6/4/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-04	6/4/2015	1,1-Dichloroethene	**22**	10	0.99	7	ug/L
MKTF-04	6/4/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	6/4/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	6/4/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	6/4/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	6/4/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	6/4/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	6/4/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	6/4/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	6/4/2015	1,2,4-Trimethylbenzene	**270**	10	1.6	56	ug/L
MKTF-04	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-04	6/4/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	6/4/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	6/4/2015	Isopropylbenzene	21	10	1.5	447	ug/L
MKTF-04	6/4/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Ethylbenzene	450	10	1	700	ug/L
MKTF-04	6/4/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	6/4/2015	n-Propylbenzene	37	10	1.6	660	ug/L
MKTF-04	6/4/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	6/4/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	6/4/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	6/4/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	6/4/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	6/4/2015	1,3,5-Trimethylbenzene	23	10	1.2	60	ug/L
MKTF-04	6/4/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	6/4/2015	Toluene	13	10	1.1	1000	ug/L
MKTF-04	6/4/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	6/4/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	6/4/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	6/4/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	6/4/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	6/4/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	6/4/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	6/4/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	6/4/2015	Xylenes, Total	560	15	2.8	620	ug/L
MKTF-04	6/4/2015	MTBE	**1300**	10	1.7	143	ug/L
MKTF-04	6/4/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	6/4/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-04	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-04	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-04	8/18/2015	Benzene	**320**	5	0.33	5	ug/L
MKTF-04	8/18/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-04	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-04	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-04	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-04	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-04	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-04	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-04	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-04	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-04	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-04	8/18/2015	1,1-Dichloroethane	7.5	5	2	25	ug/L
MKTF-04	8/18/2015	1,1-Dichloroethene	**16**	5	0.5	7	ug/L
MKTF-04	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-04	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-04	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-04	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-04	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-04	8/18/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-04	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-04	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-04	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-04	8/18/2015	1,2,4-Trimethylbenzene	**270**	5	0.8	56	ug/L
MKTF-04	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-04	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-04	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-04	8/18/2015	Isopropylbenzene	16	5	0.76	447	ug/L
MKTF-04	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-04	8/18/2015	Ethylbenzene	430	5	0.51	700	ug/L
MKTF-04	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-04	8/18/2015	n-Propylbenzene	21	5	0.82	660	ug/L
MKTF-04	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-04	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-04	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-04	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-04	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-04	8/18/2015	1,3,5-Trimethylbenzene	26	5	0.61	60	ug/L
MKTF-04	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-04	8/18/2015	Toluene	11	5	0.54	1000	ug/L
MKTF-04	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-04	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-04	8/18/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-04	8/18/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-04	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-04	8/18/2015	cis-1,2-Dichloroethene	13	5	0.4	70	ug/L
MKTF-04	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-04	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-04	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-04	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-04	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-04	8/18/2015	Xylenes, Total	550	7.5	1.4	620	ug/L
MKTF-04	8/18/2015	MTBE	**1400**	50	8.7	143	ug/L
MKTF-04	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-04	11/3/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-04	11/3/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-04	11/3/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-04	11/3/2015	Benzene	**380**	10	0.65	5	ug/L
MKTF-04	11/3/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-04	11/3/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-04	11/3/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-04	11/3/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/3/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-04	11/3/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-04	11/3/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-04	11/3/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-04	11/3/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-04	11/3/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-04	11/3/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-04	11/3/2015	1,1-Dichloroethene	**20**	10	0.99	7	ug/L
MKTF-04	11/3/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-04	11/3/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-04	11/3/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	11/3/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-04	11/3/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-04	11/3/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-04	11/3/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	11/3/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-04	11/3/2015	1,2,4-Trimethylbenzene	**430**	10	1.6	56	ug/L
MKTF-04	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-04	11/3/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-04	11/3/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-04	11/3/2015	Isopropylbenzene	33	10	1.5	447	ug/L
MKTF-04	11/3/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Ethylbenzene	700	10	1	700	ug/L
MKTF-04	11/3/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-04	11/3/2015	n-Propylbenzene	67	10	1.6	660	ug/L
MKTF-04	11/3/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-04	11/3/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-04	11/3/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	11/3/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-04	11/3/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-04	11/3/2015	1,3,5-Trimethylbenzene	53	10	1.2	60	ug/L
MKTF-04	11/3/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-04	11/3/2015	Toluene	15	10	1.1	1000	ug/L
MKTF-04	11/3/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-04	11/3/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-04	11/3/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-04	11/3/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-04	11/3/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	11/3/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-04	11/3/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-04	11/3/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-04	11/3/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-04	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	11/3/2015	Xylenes, Total	**780**	15	2.8	620	ug/L
MKTF-04	11/3/2015	MTBE	**1500**	10	1.7	143	ug/L
MKTF-04	11/3/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	11/3/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	2/29/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	2/29/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-04	2/29/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	2/29/2016	Benzene	**800**	50	4.8	5	ug/L
MKTF-04	2/29/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-04	2/29/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	2/29/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	2/29/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	2/29/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-04	2/29/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-04	2/29/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-04	2/29/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	2/29/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	2/29/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-04	2/29/2016	1,1-Dichloroethane	5.9	5	0.54	25	ug/L
MKTF-04	2/29/2016	1,1-Dichloroethene	**14**	5	0.38	7	ug/L
MKTF-04	2/29/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-04	2/29/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-04	2/29/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-04	2/29/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-04	2/29/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-04	2/29/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	2/29/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-04	2/29/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	2/29/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	2/29/2016	1,2,4-Trimethylbenzene	**370**	5	0.52	56	ug/L
MKTF-04	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/29/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-04	2/29/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-04	2/29/2016	Isopropylbenzene	25	5	0.49	447	ug/L
MKTF-04	2/29/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-04	2/29/2016	Ethylbenzene	**730**	50	5.6	700	ug/L
MKTF-04	2/29/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-04	2/29/2016	n-Propylbenzene	52	5	0.66	660	ug/L
MKTF-04	2/29/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-04	2/29/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	2/29/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	2/29/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-04	2/29/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-04	2/29/2016	1,3,5-Trimethylbenzene	58	5	0.58	60	ug/L
MKTF-04	2/29/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-04	2/29/2016	Toluene	17	5	0.45	1000	ug/L
MKTF-04	2/29/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-04	2/29/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	2/29/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	2/29/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-04	2/29/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	2/29/2016	cis-1,2-Dichloroethene	5.5	5	0.62	70	ug/L
MKTF-04	2/29/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	2/29/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	2/29/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-04	2/29/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-04	2/29/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	2/29/2016	Xylenes, Total	**800**	7.5	1.6	620	ug/L
MKTF-04	2/29/2016	MTBE	**2200**	50	11	143	ug/L
MKTF-04	2/29/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-04	2/29/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-04	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	6/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-04	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-04	6/9/2016	Benzene	**630**	10	0.96	5	ug/L
MKTF-04	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-04	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-04	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-04	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-04	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-04	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-04	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-04	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-04	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-04	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-04	6/9/2016	1,1-Dichloroethane	12	10	1.1	25	ug/L
MKTF-04	6/9/2016	1,1-Dichloroethene	**21**	10	1.1	7	ug/L
MKTF-04	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-04	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-04	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-04	6/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-04	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-04	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-04	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-04	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-04	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	6/9/2016	1,2,4-Trimethylbenzene	**370**	10	1.1	56	ug/L
MKTF-04	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-04	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-04	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-04	6/9/2016	Isopropylbenzene	21	10	1	447	ug/L
MKTF-04	6/9/2016	p-Isopropyltoluene	4.3	10	1.4	NA	ug/L
MKTF-04	6/9/2016	Ethylbenzene	580	10	1.1	700	ug/L
MKTF-04	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-04	6/9/2016	n-Propylbenzene	45	10	1.3	660	ug/L
MKTF-04	6/9/2016	n-Butylbenzene	8.7	30	1.6	1000	ug/L
MKTF-04	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-04	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-04	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-04	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-04	6/9/2016	1,3,5-Trimethylbenzene	57	10	1.2	60	ug/L
MKTF-04	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-04	6/9/2016	Toluene	15	10	1.2	1000	ug/L
MKTF-04	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-04	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-04	6/9/2016	sec-Butylbenzene	4.6	10	1.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-04	6/9/2016	cis-1,2-Dichloroethene	7.7	10	1.2	70	ug/L
MKTF-04	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-04	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-04	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-04	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-04	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-04	6/9/2016	Xylenes, Total	**720**	15	3.7	620	ug/L
MKTF-04	6/9/2016	MTBE	**1800**	10	2.1	143	ug/L
MKTF-04	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-04	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-04	9/11/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	9/11/2016	Acetone	ND	50	25	14064	ug/L
MKTF-04	9/11/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	9/11/2016	Benzene	**880**	50	4.8	5	ug/L
MKTF-04	9/11/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-04	9/11/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	9/11/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	9/11/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	9/11/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-04	9/11/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	9/11/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-04	9/11/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	9/11/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	9/11/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-04	9/11/2016	1,1-Dichloroethane	6.2	5	0.54	25	ug/L
MKTF-04	9/11/2016	1,1-Dichloroethene	**12**	5	0.54	7	ug/L
MKTF-04	9/11/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-04	9/11/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-04	9/11/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-04	9/11/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-04	9/11/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-04	9/11/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	9/11/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-04	9/11/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	9/11/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	9/11/2016	1,2,4-Trimethylbenzene	**430**	5	0.55	56	ug/L
MKTF-04	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-04	9/11/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-04	9/11/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-04	9/11/2016	Isopropylbenzene	24	5	0.52	447	ug/L
MKTF-04	9/11/2016	p-Isopropyltoluene	3.3	5	0.7	NA	ug/L
MKTF-04	9/11/2016	Ethylbenzene	670	50	5.6	700	ug/L
MKTF-04	9/11/2016	Styrene	0.58	5	0.55	100	ug/L
MKTF-04	9/11/2016	n-Propylbenzene	54	5	0.66	660	ug/L
MKTF-04	9/11/2016	n-Butylbenzene	5.5	15	0.8	1000	ug/L
MKTF-04	9/11/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	9/11/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	9/11/2016	1,2-Dichloroethane	2.6	5	0.58	5	ug/L
MKTF-04	9/11/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-04	9/11/2016	1,3,5-Trimethylbenzene	**69**	5	0.58	60	ug/L
MKTF-04	9/11/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-04	9/11/2016	Toluene	15	5	0.59	1000	ug/L
MKTF-04	9/11/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-04	9/11/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	9/11/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	9/11/2016	sec-Butylbenzene	3.8	5	0.62	2000	ug/L
MKTF-04	9/11/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	9/11/2016	cis-1,2-Dichloroethene	10	5	0.62	70	ug/L
MKTF-04	9/11/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	9/11/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	9/11/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-04	9/11/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-04	9/11/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	9/11/2016	Xylenes, Total	**760**	7.5	1.8	620	ug/L
MKTF-04	9/11/2016	MTBE	**2400**	50	11	143	ug/L
MKTF-04	9/11/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-04	9/11/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-04	11/2/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-04	11/2/2016	Acetone	ND	50	25	14064	ug/L
MKTF-04	11/2/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	11/2/2016	Benzene	**880**	50	4.8	5	ug/L
MKTF-04	11/2/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-04	11/2/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	11/2/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	11/2/2016	Dibromomethane	ND	5	0.6	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-04	11/2/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	11/2/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-04	11/2/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	11/2/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-04	11/2/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-04	11/2/2016	1,1-Dichloroethane	10	5	0.54	25	ug/L
MKTF-04	11/2/2016	1,1-Dichloroethene	**14**	5	0.54	7	ug/L
MKTF-04	11/2/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-04	11/2/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-04	11/2/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-04	11/2/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-04	11/2/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-04	11/2/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	11/2/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-04	11/2/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	11/2/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	11/2/2016	1,2,4-Trimethylbenzene	**370**	5	0.55	56	ug/L
MKTF-04	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-04	11/2/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-04	11/2/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-04	11/2/2016	Isopropylbenzene	24	5	0.52	447	ug/L
MKTF-04	11/2/2016	p-Isopropyltoluene	3.7	5	0.7	NA	ug/L
MKTF-04	11/2/2016	Ethylbenzene	640	50	5.6	700	ug/L
MKTF-04	11/2/2016	Styrene	1.5	5	0.55	100	ug/L
MKTF-04	11/2/2016	n-Propylbenzene	43	5	0.66	660	ug/L
MKTF-04	11/2/2016	n-Butylbenzene	6.1	15	0.8	1000	ug/L
MKTF-04	11/2/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-04	11/2/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-04	11/2/2016	1,2-Dichloroethane	2.3	5	0.58	5	ug/L
MKTF-04	11/2/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-04	11/2/2016	1,3,5-Trimethylbenzene	**63**	5	0.58	60	ug/L
MKTF-04	11/2/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-04	11/2/2016	Toluene	18	5	0.59	1000	ug/L
MKTF-04	11/2/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-04	11/2/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-04	11/2/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	11/2/2016	sec-Butylbenzene	4.5	5	0.62	2000	ug/L
MKTF-04	11/2/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	11/2/2016	cis-1,2-Dichloroethene	5.5	5	0.62	70	ug/L
MKTF-04	11/2/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-04	11/2/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	11/2/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-04	11/2/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-04	11/2/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	11/2/2016	Xylenes, Total	**850**	7.5	1.8	620	ug/L
MKTF-04	11/2/2016	MTBE	**2100**	50	11	143	ug/L
MKTF-04	11/2/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-04	11/2/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-04	3/2/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	3/2/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-04	3/2/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-04	3/2/2017	Benzene	**980**	50	4.8	5	ug/L
MKTF-04	3/2/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	3/2/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-04	3/2/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-04	3/2/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-04	3/2/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	3/2/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	3/2/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	3/2/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-04	3/2/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	3/2/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	3/2/2017	1,1-Dichloroethane	4.6	5	0.52	25	ug/L
MKTF-04	3/2/2017	1,1-Dichloroethene	**7.5**	5	0.4	7	ug/L
MKTF-04	3/2/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	3/2/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-04	3/2/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	3/2/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	3/2/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	3/2/2017	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-04	3/2/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	3/2/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-04	3/2/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	3/2/2017	1,2,4-Trimethylbenzene	**490**	5	0.52	56	ug/L
MKTF-04	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	3/2/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	3/2/2017	Isopropylbenzene	23	5	0.49	447	ug/L
MKTF-04	3/2/2017	p-Isopropyltoluene	3.7	5	0.7	NA	ug/L
MKTF-04	3/2/2017	Ethylbenzene	680	50	5.6	700	ug/L
MKTF-04	3/2/2017	Styrene	0.86	5	0.78	100	ug/L
MKTF-04	3/2/2017	n-Propylbenzene	60	5	0.66	660	ug/L
MKTF-04	3/2/2017	n-Butylbenzene	5.9	15	0.8	1000	ug/L
MKTF-04	3/2/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	3/2/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	3/2/2017	1,2-Dichloroethane	2.5	5	0.58	5	ug/L
MKTF-04	3/2/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	3/2/2017	1,3,5-Trimethylbenzene	**88**	5	0.58	60	ug/L
MKTF-04	3/2/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	3/2/2017	Toluene	15	5	0.45	1000	ug/L
MKTF-04	3/2/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	3/2/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-04	3/2/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-04	3/2/2017	sec-Butylbenzene	5.2	5	0.51	2000	ug/L
MKTF-04	3/2/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-04	3/2/2017	cis-1,2-Dichloroethene	4.8	5	1	70	ug/L
MKTF-04	3/2/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	3/2/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-04	3/2/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	3/2/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-04	3/2/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-04	3/2/2017	Xylenes, Total	**880**	7.5	1.6	620	ug/L
MKTF-04	3/2/2017	MTBE	**2500**	50	7.4	143	ug/L
MKTF-04	3/2/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-04	3/2/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-04	6/8/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	6/8/2017	Acetone	23	50	4.1	14064	ug/L
MKTF-04	6/8/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	6/8/2017	Benzene	**920**	50	3.1	5	ug/L
MKTF-04	6/8/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	6/8/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	6/8/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-04	6/8/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	6/8/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	6/8/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	6/8/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	6/8/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	6/8/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	6/8/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	6/8/2017	1,1-Dichloroethane	6.3	5	2	25	ug/L
MKTF-04	6/8/2017	1,1-Dichloroethene	**13**	5	0.4	7	ug/L
MKTF-04	6/8/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	6/8/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	6/8/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	6/8/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	6/8/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	6/8/2017	Trichloroethene	1.4	5	0.56	5	ug/L
MKTF-04	6/8/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	6/8/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	6/8/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	6/8/2017	1,2,4-Trimethylbenzene	**470**	5	0.56	56	ug/L
MKTF-04	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	6/8/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	6/8/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	6/8/2017	Isopropylbenzene	19	5	0.26	447	ug/L
MKTF-04	6/8/2017	p-Isopropyltoluene	4.1	5	0.48	NA	ug/L
MKTF-04	6/8/2017	Ethylbenzene	590	50	4.7	700	ug/L
MKTF-04	6/8/2017	Styrene	1.3	5	0.78	100	ug/L
MKTF-04	6/8/2017	n-Propylbenzene	41	5	0.37	660	ug/L
MKTF-04	6/8/2017	n-Butylbenzene	6.2	15	0.65	1000	ug/L
MKTF-04	6/8/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	6/8/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	6/8/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	6/8/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	6/8/2017	1,3,5-Trimethylbenzene	**80**	5	0.44	60	ug/L
MKTF-04	6/8/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	6/8/2017	Toluene	16	5	0.32	1000	ug/L
MKTF-04	6/8/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	6/8/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	6/8/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	6/8/2017	sec-Butylbenzene	3.6	5	0.55	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/8/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	6/8/2017	cis-1,2-Dichloroethene	5.9	5	1	70	ug/L
MKTF-04	6/8/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	6/8/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-04	6/8/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	6/8/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	6/8/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	6/8/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	6/8/2017	Xylenes, Total	**890**	7.5	1.6	620	ug/L
MKTF-04	6/8/2017	MTBE	**2000**	50	12	143	ug/L
MKTF-04	6/8/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	6/8/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	9/26/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	9/26/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-04	9/26/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	9/26/2017	Benzene	**1100**	50	3.1	5	ug/L
MKTF-04	9/26/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	9/26/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	9/26/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-04	9/26/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	9/26/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	9/26/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	9/26/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	9/26/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	9/26/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	9/26/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	9/26/2017	1,1-Dichloroethane	3.4	5	2	25	ug/L
MKTF-04	9/26/2017	1,1-Dichloroethene	5.8	5	0.4	7	ug/L
MKTF-04	9/26/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	9/26/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	9/26/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	9/26/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	9/26/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	9/26/2017	Trichloroethene	1.3	5	0.56	5	ug/L
MKTF-04	9/26/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	9/26/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	9/26/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	9/26/2017	1,2,4-Trimethylbenzene	**570**	50	5.6	56	ug/L
MKTF-04	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	9/26/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	9/26/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-04	9/26/2017	Isopropylbenzene	30	5	0.26	447	ug/L
MKTF-04	9/26/2017	p-Isopropyltoluene	5	5	0.48	NA	ug/L
MKTF-04	9/26/2017	Ethylbenzene	**820**	50	4.7	700	ug/L
MKTF-04	9/26/2017	Styrene	1.4	5	0.78	100	ug/L
MKTF-04	9/26/2017	n-Propylbenzene	77	5	0.37	660	ug/L
MKTF-04	9/26/2017	n-Butylbenzene	10	15	0.65	1000	ug/L
MKTF-04	9/26/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	9/26/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	9/26/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	9/26/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	9/26/2017	1,3,5-Trimethylbenzene	**110**	5	0.44	60	ug/L
MKTF-04	9/26/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	9/26/2017	Toluene	19	5	0.32	1000	ug/L
MKTF-04	9/26/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	9/26/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	9/26/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	9/26/2017	sec-Butylbenzene	5.8	5	0.55	2000	ug/L
MKTF-04	9/26/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	9/26/2017	cis-1,2-Dichloroethene	5.2	5	1	70	ug/L
MKTF-04	9/26/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	9/26/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	9/26/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	9/26/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	9/26/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	9/26/2017	Xylenes, Total	**1100**	75	16	620	ug/L
MKTF-04	9/26/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-04	9/26/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	9/26/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	11/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-04	11/28/2017	Acetone	16	50	4.1	14064	ug/L
MKTF-04	11/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-04	11/28/2017	Benzene	**1200**	50	3.1	5	ug/L
MKTF-04	11/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-04	11/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-04	11/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-04	11/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-04	11/28/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-04	11/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-04	11/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-04	11/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-04	11/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-04	11/28/2017	1,1-Dichloroethane	5.7	5	2	25	ug/L
MKTF-04	11/28/2017	1,1-Dichloroethene	**8.7**	5	0.4	7	ug/L
MKTF-04	11/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-04	11/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-04	11/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-04	11/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-04	11/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-04	11/28/2017	Trichloroethene	2.2	5	0.56	5	ug/L
MKTF-04	11/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-04	11/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-04	11/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-04	11/28/2017	1,2,4-Trimethylbenzene	**580**	50	5.6	56	ug/L
MKTF-04	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-04	11/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-04	11/28/2017	tert-Butylbenzene	0.72	5	0.52	690	ug/L
MKTF-04	11/28/2017	Isopropylbenzene	29	5	0.26	447	ug/L
MKTF-04	11/28/2017	p-Isopropyltoluene	5.5	5	0.48	NA	ug/L
MKTF-04	11/28/2017	Ethylbenzene	**820**	50	4.7	700	ug/L
MKTF-04	11/28/2017	Styrene	1.7	5	0.78	100	ug/L
MKTF-04	11/28/2017	n-Propylbenzene	73	5	0.37	660	ug/L
MKTF-04	11/28/2017	n-Butylbenzene	10	15	0.65	1000	ug/L
MKTF-04	11/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-04	11/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-04	11/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-04	11/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-04	11/28/2017	1,3,5-Trimethylbenzene	**110**	5	0.44	60	ug/L
MKTF-04	11/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-04	11/28/2017	Toluene	19	5	0.32	1000	ug/L
MKTF-04	11/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-04	11/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-04	11/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-04	11/28/2017	sec-Butylbenzene	6	5	0.55	2000	ug/L
MKTF-04	11/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-04	11/28/2017	cis-1,2-Dichloroethene	6.1	5	1	70	ug/L
MKTF-04	11/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-04	11/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-04	11/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-04	11/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-04	11/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-04	11/28/2017	Xylenes, Total	**1100**	75	16	620	ug/L
MKTF-04	11/28/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-04	11/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-04	11/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-04	2/14/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	2/14/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-04	2/14/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	2/14/2018	Benzene	**900**	10	0.62	5	ug/L
MKTF-04	2/14/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-04	2/14/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	2/14/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	2/14/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-04	2/14/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-04	2/14/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-04	2/14/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-04	2/14/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-04	2/14/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-04	2/14/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-04	2/14/2018	1,1-Dichloroethane	8.4	10	4	25	ug/L
MKTF-04	2/14/2018	1,1-Dichloroethene	**12**	10	0.81	7	ug/L
MKTF-04	2/14/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-04	2/14/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	2/14/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-04	2/14/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-04	2/14/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	2/14/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-04	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-04	2/14/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-04	2/14/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	2/14/2018	1,2,4-Trimethylbenzene	**420**	10	1.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-04	2/14/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-04	2/14/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-04	2/14/2018	Isopropylbenzene	23	10	0.51	447	ug/L
MKTF-04	2/14/2018	p-Isopropyltoluene	3.9	10	0.96	NA	ug/L
MKTF-04	2/14/2018	Ethylbenzene	600	10	0.93	700	ug/L
MKTF-04	2/14/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-04	2/14/2018	n-Propylbenzene	48	10	0.74	660	ug/L
MKTF-04	2/14/2018	n-Butylbenzene	9.3	30	1.3	1000	ug/L
MKTF-04	2/14/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	2/14/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	2/14/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-04	2/14/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-04	2/14/2018	1,3,5-Trimethylbenzene	**68**	10	0.87	60	ug/L
MKTF-04	2/14/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-04	2/14/2018	Toluene	14	10	0.64	1000	ug/L
MKTF-04	2/14/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	2/14/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-04	2/14/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-04	2/14/2018	sec-Butylbenzene	2.8	10	1.1	2000	ug/L
MKTF-04	2/14/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	2/14/2018	cis-1,2-Dichloroethene	11	10	2	70	ug/L
MKTF-04	2/14/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	2/14/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-04	2/14/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-04	2/14/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-04	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-04	2/14/2018	Xylenes, Total	**710**	15	3.2	620	ug/L
MKTF-04	2/14/2018	MTBE	**2000**	10	2.4	143	ug/L
MKTF-04	2/14/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-04	2/14/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-04	5/2/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-04	5/2/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-04	5/2/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	5/2/2018	Benzene	**1100**	100	6.2	5	ug/L
MKTF-04	5/2/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-04	5/2/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	5/2/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	5/2/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-04	5/2/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-04	5/2/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-04	5/2/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-04	5/2/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-04	5/2/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-04	5/2/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-04	5/2/2018	1,1-Dichloroethane	14	10	4	25	ug/L
MKTF-04	5/2/2018	1,1-Dichloroethene	**20**	10	0.81	7	ug/L
MKTF-04	5/2/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-04	5/2/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	5/2/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-04	5/2/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-04	5/2/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-04	5/2/2018	Trichloroethene	*1.7*	*10*	1.1	5	ug/L
MKTF-04	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-04	5/2/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-04	5/2/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	5/2/2018	1,2,4-Trimethylbenzene	**520**	10	1.1	56	ug/L
MKTF-04	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-04	5/2/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-04	5/2/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-04	5/2/2018	Isopropylbenzene	27	10	0.51	447	ug/L
MKTF-04	5/2/2018	p-Isopropyltoluene	4.8	10	0.96	NA	ug/L
MKTF-04	5/2/2018	Ethylbenzene	**740**	10	0.93	700	ug/L
MKTF-04	5/2/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-04	5/2/2018	n-Propylbenzene	58	10	0.74	660	ug/L
MKTF-04	5/2/2018	n-Butylbenzene	7.8	30	1.3	1000	ug/L
MKTF-04	5/2/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	5/2/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-04	5/2/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-04	5/2/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-04	5/2/2018	1,3,5-Trimethylbenzene	**86**	10	0.87	60	ug/L
MKTF-04	5/2/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-04	5/2/2018	Toluene	16	10	0.64	1000	ug/L
MKTF-04	5/2/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-04	5/2/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-04	5/2/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/2/2018	sec-Butylbenzene	4.7	10	1.1	2000	ug/L
MKTF-04	5/2/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-04	5/2/2018	cis-1,2-Dichloroethene	9.5	10	2	70	ug/L
MKTF-04	5/2/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	5/2/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-04	5/2/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-04	5/2/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-04	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-04	5/2/2018	Xylenes, Total	**890**	15	3.2	620	ug/L
MKTF-04	5/2/2018	MTBE	**2300**	100	24	143	ug/L
MKTF-04	5/2/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-04	5/2/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-04	9/4/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-04	9/4/2018	Acetone	49	100	7.9	14064	ug/L
MKTF-04	9/4/2018	Chloroform	ND	10	4	100	ug/L
MKTF-04	9/4/2018	Benzene	**1100**	100	17	5	ug/L
MKTF-04	9/4/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-04	9/4/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-04	9/4/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-04	9/4/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-04	9/4/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-04	9/4/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-04	9/4/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-04	9/4/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-04	9/4/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-04	9/4/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-04	9/4/2018	1,1-Dichloroethane	7.4	10	4	25	ug/L
MKTF-04	9/4/2018	1,1-Dichloroethene	**7.7**	10	1.2	7	ug/L
MKTF-04	9/4/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-04	9/4/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-04	9/4/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-04	9/4/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-04	9/4/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-04	9/4/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-04	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-04	9/4/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-04	9/4/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-04	9/4/2018	1,2,4-Trimethylbenzene	**480**	10	2.5	56	ug/L
MKTF-04	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-04	9/4/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-04	9/4/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-04	9/4/2018	Isopropylbenzene	27	10	2.2	447	ug/L
MKTF-04	9/4/2018	p-Isopropyltoluene	4	10	2.4	NA	ug/L
MKTF-04	9/4/2018	Ethylbenzene	700	10	2.2	700	ug/L
MKTF-04	9/4/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-04	9/4/2018	n-Propylbenzene	68	10	2.4	660	ug/L
MKTF-04	9/4/2018	n-Butylbenzene	11	30	2.5	1000	ug/L
MKTF-04	9/4/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-04	9/4/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-04	9/4/2018	1,2-Dichloroethane	*4.3*	*10*	4	5	ug/L
MKTF-04	9/4/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-04	9/4/2018	1,3,5-Trimethylbenzene	**93**	10	2.3	60	ug/L
MKTF-04	9/4/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-04	9/4/2018	Toluene	14	10	1.7	1000	ug/L
MKTF-04	9/4/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-04	9/4/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-04	9/4/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-04	9/4/2018	sec-Butylbenzene	4.8	10	2	2000	ug/L
MKTF-04	9/4/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-04	9/4/2018	cis-1,2-Dichloroethene	8	10	3.8	70	ug/L
MKTF-04	9/4/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-04	9/4/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-04	9/4/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-04	9/4/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-04	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-04	9/4/2018	Xylenes, Total	**860**	15	6.4	620	ug/L
MKTF-04	9/4/2018	MTBE	**1800**	10	3.2	143	ug/L
MKTF-04	9/4/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-04	9/4/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-04	11/20/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-04	11/20/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-04	11/20/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-04	11/20/2018	Benzene	**1100**	20	3.5	5	ug/L
MKTF-04	11/20/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-04	11/20/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-04	11/20/2018	Chloromethane	ND	6	0.64	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/20/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-04	11/20/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-04	11/20/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-04	11/20/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-04	11/20/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-04	11/20/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-04	11/20/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-04	11/20/2018	1,1-Dichloroethane	11	2	0.35	25	ug/L
MKTF-04	11/20/2018	1,1-Dichloroethene	**17**	2	0.24	7	ug/L
MKTF-04	11/20/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-04	11/20/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-04	11/20/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-04	11/20/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-04	11/20/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-04	11/20/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-04	11/20/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-04	11/20/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-04	11/20/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-04	11/20/2018	1,2,4-Trimethylbenzene	**460**	20	5.1	56	ug/L
MKTF-04	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-04	11/20/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-04	11/20/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-04	11/20/2018	Isopropylbenzene	20	2	0.44	447	ug/L
MKTF-04	11/20/2018	p-Isopropyltoluene	3.9	2	0.48	NA	ug/L
MKTF-04	11/20/2018	Ethylbenzene	610	20	4.5	700	ug/L
MKTF-04	11/20/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-04	11/20/2018	n-Propylbenzene	49	2	0.49	660	ug/L
MKTF-04	11/20/2018	n-Butylbenzene	6.1	6	0.5	1000	ug/L
MKTF-04	11/20/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-04	11/20/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-04	11/20/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-04	11/20/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-04	11/20/2018	1,3,5-Trimethylbenzene	**73**	2	0.46	60	ug/L
MKTF-04	11/20/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-04	11/20/2018	Toluene	11	2	0.34	1000	ug/L
MKTF-04	11/20/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-04	11/20/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-04	11/20/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-04	11/20/2018	sec-Butylbenzene	3.7	2	0.4	2000	ug/L
MKTF-04	11/20/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-04	11/20/2018	cis-1,2-Dichloroethene	7.1	2	0.75	70	ug/L
MKTF-04	11/20/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-04	11/20/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-04	11/20/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-04	11/20/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-04	11/20/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-04	11/20/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-04	11/20/2018	Xylenes, Total	**650**	30	13	620	ug/L
MKTF-04	11/20/2018	MTBE	**2200**	20	9.1	143	ug/L
MKTF-04	11/20/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-04	11/20/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-04	5/13/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	5/13/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	5/13/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	5/13/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethane	5.4	5	0.704293	25	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethene	**7.5**	5	1.026941	7	ug/L
MKTF-04	5/13/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	5/13/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	5/13/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	5/13/2019	1,2,4-Trimethylbenzene	**410**	5	1.065995	56	ug/L
MKTF-04	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	5/13/2019	1,2-Dichloroethane	1.6	5	0.973189	5	ug/L
MKTF-04	5/13/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	5/13/2019	1,3,5-Trimethylbenzene	**83**	5	0.943299	60	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	5/13/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	210	20	1.574772	NA	ug/L
MKTF-04	5/13/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	5/13/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	5/13/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	5/13/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	2-Methylnaphthalene	**200**	20	1.72688		ug/L
MKTF-04	5/13/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	5/13/2019	p-Isopropyltoluene	4	5	1.086447	NA	ug/L
MKTF-04	5/13/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	5/13/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	5/13/2019	Benzene	**770**	50	8.331953	5	ug/L
MKTF-04	5/13/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	5/13/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	5/13/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	5/13/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	5/13/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	5/13/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	5/13/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	5/13/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	5/13/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	5/13/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	5/13/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	5/13/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	5/13/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	5/13/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	5/13/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	5/13/2019	Ethylbenzene	620	50	6.61704	700	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	5/13/2019	Isopropylbenzene	26	5	0.957611	447	ug/L
MKTF-04	5/13/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	5/13/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	5/13/2019	Naphthalene	**320**	10	1.375357	30	ug/L
MKTF-04	5/13/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	5/13/2019	n-Propylbenzene	54	5	1.07154	660	ug/L
MKTF-04	5/13/2019	sec-Butylbenzene	4.1	5	1.238656	2000	ug/L
MKTF-04	5/13/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	5/13/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	5/13/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	5/13/2019	Toluene	13	5	1.752181	1000	ug/L
MKTF-04	5/13/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	5/13/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	5/13/2019	Trichloroethene	0.87	5	0.831359	5	ug/L
MKTF-04	5/13/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	5/13/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	5/13/2019	Xylenes, Total	**730**	7.5	2.272075	620	ug/L
MKTF-04	5/13/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	5/13/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	5/13/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	5/13/2019	1,2,4-Trimethylbenzene	**420**	5	1.065995	56	ug/L
MKTF-04	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	5/13/2019	1,2-Dichloroethane	1.6	5	0.973189	5	ug/L
MKTF-04	5/13/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	5/13/2019	1,3,5-Trimethylbenzene	**85**	5	0.943299	60	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	5/13/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	220	20	1.574772	NA	ug/L
MKTF-04	5/13/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	5/13/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	5/13/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	5/13/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**200**	20	1.72688		ug/L
MKTF-04	5/13/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	5/13/2019	p-Isopropyltoluene	4.2	5	1.086447	NA	ug/L
MKTF-04	5/13/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	5/13/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	5/13/2019	Benzene	**810**	50	8.331953	5	ug/L
MKTF-04	5/13/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	5/13/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	5/13/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	5/13/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	5/13/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	5/13/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	5/13/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	5/13/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	5/13/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	5/13/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	5/13/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	5/13/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	5/13/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	5/13/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	5/13/2019	Ethylbenzene	630	50	6.61704	700	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	5/13/2019	Isopropylbenzene	25	5	0.957611	447	ug/L
MKTF-04	5/13/2019	MTBE	**1800**	50	22.804749	143	ug/L
MKTF-04	5/13/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	5/13/2019	Naphthalene	**340**	10	1.375357	30	ug/L
MKTF-04	5/13/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	5/13/2019	n-Propylbenzene	56	5	1.07154	660	ug/L
MKTF-04	5/13/2019	sec-Butylbenzene	4.1	5	1.238656	2000	ug/L
MKTF-04	5/13/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	5/13/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	5/13/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	5/13/2019	Toluene	13	5	1.752181	1000	ug/L
MKTF-04	5/13/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	5/13/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	5/13/2019	Trichloroethene	1	5	0.831359	5	ug/L
MKTF-04	5/13/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	5/13/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	5/13/2019	Xylenes, Total	**750**	7.5	2.272075	620	ug/L
MKTF-04	5/13/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	5/13/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	5/13/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	5/13/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethane	5	5	0.704293	25	ug/L
MKTF-04	5/13/2019	1,1-Dichloroethene	**8.1**	5	1.026941	7	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-04	5/13/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-04	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-04	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-04	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-04	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethane	13	1	0.140859	25	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethene	**17**	1	0.205388	7	ug/L
MKTF-04	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-04	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-04	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-04	8/21/2019	1,2,4-Trimethylbenzene	**250**	10	2.131991	56	ug/L
MKTF-04	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-04	8/21/2019	1,2-Dichloroethane	1.5	1	0.194638	5	ug/L
MKTF-04	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-04	8/21/2019	1,3,5-Trimethylbenzene	57	1	0.18866	60	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-04	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	150	40	3.149545	NA	ug/L
MKTF-04	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-04	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-04	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-04	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**110**	40	3.45376		ug/L
MKTF-04	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-04	8/21/2019	p-Isopropyltoluene	3.5	1	0.217289	NA	ug/L
MKTF-04	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-04	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-04	8/21/2019	Benzene	**530**	10	1.666391	5	ug/L
MKTF-04	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-04	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-04	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-04	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-04	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-04	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-04	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-04	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-04	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-04	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-04	8/21/2019	cis-1,2-Dichloroethene	9.1	1	0.190115	70	ug/L
MKTF-04	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-04	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-04	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-04	8/21/2019	Ethylbenzene	420	10	1.323408	700	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-04	8/21/2019	Isopropylbenzene	20	1	0.191522	447	ug/L
MKTF-04	8/21/2019	MTBE	**1600**	10	4.56095	143	ug/L
MKTF-04	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-04	8/21/2019	Naphthalene	**220**	20	2.750713	30	ug/L
MKTF-04	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-04	8/21/2019	n-Propylbenzene	49	1	0.214308	660	ug/L
MKTF-04	8/21/2019	sec-Butylbenzene	4	1	0.247731	2000	ug/L
MKTF-04	8/21/2019	Styrene	0.45	1	0.191323	100	ug/L
MKTF-04	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-04	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-04	8/21/2019	Toluene	9.1	1	0.350436	1000	ug/L
MKTF-04	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-04	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-04	8/21/2019	Trichloroethene	0.83	1	0.166272	5	ug/L
MKTF-04	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-04	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-04	8/21/2019	Xylenes, Total	440	15	4.544149	620	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	8/21/2019	Isopropylbenzene	29	5	0.957611	447	ug/L
MKTF-04	8/21/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	8/21/2019	Methylene Chloride	*1.1*	*15*	0.772507	5	ug/L
MKTF-04	8/21/2019	Naphthalene	**360**	10	1.375357	30	ug/L
MKTF-04	8/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	8/21/2019	n-Propylbenzene	68	5	1.07154	660	ug/L
MKTF-04	8/21/2019	sec-Butylbenzene	5.3	5	1.238656	2000	ug/L
MKTF-04	8/21/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	8/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	8/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	8/21/2019	Toluene	12	5	1.752181	1000	ug/L
MKTF-04	8/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	8/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	8/21/2019	Trichloroethene	1.2	5	0.831359	5	ug/L
MKTF-04	8/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	8/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	8/21/2019	Xylenes, Total	**700**	7.5	2.272075	620	ug/L
MKTF-04	8/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	8/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	8/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	8/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethane	6.8	5	0.704293	25	ug/L
MKTF-04	8/21/2019	1,1-Dichloroethene	**10**	5	1.026941	7	ug/L
MKTF-04	8/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	8/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	8/21/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	8/21/2019	1,2,4-Trimethylbenzene	**420**	5	1.065995	56	ug/L
MKTF-04	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	8/21/2019	1,2-Dichloroethane	2.7	5	0.973189	5	ug/L
MKTF-04	8/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	8/21/2019	1,3,5-Trimethylbenzene	**82**	5	0.943299	60	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	8/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	250	20	1.574772	NA	ug/L
MKTF-04	8/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	8/21/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	8/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	8/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**210**	20	1.72688		ug/L
MKTF-04	8/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	8/21/2019	p-Isopropyltoluene	4.5	5	1.086447	NA	ug/L
MKTF-04	8/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	8/21/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	8/21/2019	Benzene	**820**	50	8.331953	5	ug/L
MKTF-04	8/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	8/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	8/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	8/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	8/21/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	8/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	8/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	8/21/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	8/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	8/21/2019	cis-1,2-Dichloroethene	4	5	0.950575	70	ug/L
MKTF-04	8/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	8/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	8/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	8/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	8/21/2019	Ethylbenzene	630	50	6.61704	700	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-04	8/21/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-04	10/30/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	10/30/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-04	10/30/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	10/30/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethane	5.2	5	0.704293	25	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethene	6.7	5	1.026941	7	ug/L
MKTF-04	10/30/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	10/30/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trimethylbenzene	**350**	5	1.065995	56	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	10/30/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-04	10/30/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	10/30/2019	1,3,5-Trimethylbenzene	**64**	5	0.943299	60	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	10/30/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	170	20	1.574772	NA	ug/L
MKTF-04	10/30/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	10/30/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	10/30/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	10/30/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**150**	20	1.72688		ug/L
MKTF-04	10/30/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	10/30/2019	p-Isopropyltoluene	3.3	5	1.086447	NA	ug/L
MKTF-04	10/30/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	10/30/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	10/30/2019	Benzene	**790**	50	8.331953	5	ug/L
MKTF-04	10/30/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	10/30/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	10/30/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	10/30/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	10/30/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	10/30/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	10/30/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	10/30/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	10/30/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	10/30/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	10/30/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	10/30/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	10/30/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	10/30/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	10/30/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	10/30/2019	Ethylbenzene	600	50	6.61704	700	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	10/30/2019	Isopropylbenzene	23	5	0.957611	447	ug/L
MKTF-04	10/30/2019	MTBE	**1700**	50	22.804749	143	ug/L
MKTF-04	10/30/2019	Methylene Chloride	*1.2*	*15*	0.772507	5	ug/L
MKTF-04	10/30/2019	Naphthalene	**300**	10	1.375357	30	ug/L
MKTF-04	10/30/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	10/30/2019	n-Propylbenzene	51	5	1.07154	660	ug/L
MKTF-04	10/30/2019	sec-Butylbenzene	3.7	5	1.238656	2000	ug/L
MKTF-04	10/30/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	10/30/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	10/30/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	10/30/2019	Toluene	11	5	1.752181	1000	ug/L
MKTF-04	10/30/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	10/30/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	10/30/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-04	10/30/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	10/30/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	10/30/2019	Xylenes, Total	**630**	7.5	2.272075	620	ug/L
MKTF-04	10/30/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-04	10/30/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-04	10/30/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethane	5.5	5	0.704293	25	ug/L
MKTF-04	10/30/2019	1,1-Dichloroethene	**7.3**	5	1.026941	7	ug/L
MKTF-04	10/30/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-04	10/30/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-04	10/30/2019	1,2,4-Trimethylbenzene	**410**	5	1.065995	56	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-04	10/30/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-04	10/30/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-04	10/30/2019	1,3,5-Trimethylbenzene	**79**	5	0.943299	60	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-04	10/30/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	200	20	1.574772	NA	ug/L
MKTF-04	10/30/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-04	10/30/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-04	10/30/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-04	10/30/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**180**	20	1.72688		ug/L
MKTF-04	10/30/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-04	10/30/2019	p-Isopropyltoluene	3.8	5	1.086447	NA	ug/L
MKTF-04	10/30/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-04	10/30/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-04	10/30/2019	Benzene	**930**	50	8.331953	5	ug/L
MKTF-04	10/30/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-04	10/30/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-04	10/30/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-04	10/30/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-04	10/30/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-04	10/30/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-04	10/30/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-04	10/30/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-04	10/30/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-04	10/30/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-04	10/30/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-04	10/30/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-04	10/30/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-04	10/30/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-04	10/30/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-04	10/30/2019	Ethylbenzene	**710**	50	6.61704	700	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-04	10/30/2019	Isopropylbenzene	28	5	0.957611	447	ug/L
MKTF-04	10/30/2019	MTBE	**1800**	50	22.804749	143	ug/L
MKTF-04	10/30/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-04	10/30/2019	Naphthalene	**340**	10	1.375357	30	ug/L
MKTF-04	10/30/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-04	10/30/2019	n-Propylbenzene	61	5	1.07154	660	ug/L
MKTF-04	10/30/2019	sec-Butylbenzene	4.5	5	1.238656	2000	ug/L
MKTF-04	10/30/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-04	10/30/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-04	10/30/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-04	10/30/2019	Toluene	12	5	1.752181	1000	ug/L
MKTF-04	10/30/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-04	10/30/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-04	10/30/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-04	10/30/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-04	10/30/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-04	10/30/2019	Xylenes, Total	**740**	7.5	2.272075	620	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-04	10/30/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-04	3/3/2020	Benzene	**800**	50	11	5	ug/L
MKTF-04	3/3/2020	MTBE	**2100**	50	20	143	ug/L
MKTF-04	3/3/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-04	3/3/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-04	3/3/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-04	3/3/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-04	3/3/2020	1,1-Dichloroethane	9.1	5	1.4	25	ug/L
MKTF-04	3/3/2020	1,1-Dichloroethene	**13**	5	0.65	7	ug/L
MKTF-04	3/3/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-04	3/3/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-04	3/3/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-04	3/3/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-04	3/3/2020	1,2,4-Trimethylbenzene	**380**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-04	3/3/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-04	3/3/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-04	3/3/2020	1,2-Dichloroethane	2.3	5	1.1	5	ug/L
MKTF-04	3/3/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-04	3/3/2020	1,3,5-Trimethylbenzene	58	5	0.91	60	ug/L
MKTF-04	3/3/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-04	3/3/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-04	3/3/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-04	3/3/2020	1-Methylnaphthalene	140	20	4.2	NA	ug/L
MKTF-04	3/3/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-04	3/3/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-04	3/3/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-04	3/3/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-04	3/3/2020	2-Methylnaphthalene	**140**	20	3.5		ug/L
MKTF-04	3/3/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-04	3/3/2020	p-Isopropyltoluene	3.3	5	1	NA	ug/L
MKTF-04	3/3/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-04	3/3/2020	Acetone	17	50	12	14064	ug/L
MKTF-04	3/3/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-04	3/3/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-04	3/3/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-04	3/3/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-04	3/3/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-04	3/3/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-04	3/3/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-04	3/3/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-04	3/3/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-04	3/3/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-04	3/3/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-04	3/3/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-04	3/3/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-04	3/3/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-04	3/3/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-04	3/3/2020	Ethylbenzene	470	5	1.1	700	ug/L
MKTF-04	3/3/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-04	3/3/2020	Isopropylbenzene	17	5	0.91	447	ug/L
MKTF-04	3/3/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-04	3/3/2020	n-Butylbenzene	4.3	15	1.3	1000	ug/L
MKTF-04	3/3/2020	n-Propylbenzene	36	5	0.91	660	ug/L
MKTF-04	3/3/2020	Naphthalene	**230**	10	1.4	30	ug/L
MKTF-04	3/3/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
MKTF-04	3/3/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-04	3/3/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-04	3/3/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-04	3/3/2020	Toluene	10	5	1	1000	ug/L
MKTF-04	3/3/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-04	3/3/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-04	3/3/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-04	3/3/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-04	3/3/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-04	3/3/2020	Xylenes, Total	560	7.5	2.8	620	ug/L
MKTF-04	3/3/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-09	4/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-09	4/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-09	4/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-09	4/14/2014	Benzene	**1100**	50	7.7	5	ug/L
MKTF-09	4/14/2014	1,1,1-Trichloroethane	72	5	0.61	200	ug/L
MKTF-09	4/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-09	4/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-09	4/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-09	4/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-09	4/14/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-09	4/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-09	4/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-09	4/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-09	4/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-09	4/14/2014	1,1-Dichloroethane	24	5	1.4	25	ug/L
MKTF-09	4/14/2014	1,1-Dichloroethene	**46**	5	1.1	7	ug/L
MKTF-09	4/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	4/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-09	4/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-09	4/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-09	4/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-09	4/14/2014	Trichloroethene	**8.9**	5	0.97	5	ug/L
MKTF-09	4/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	4/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-09	4/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-09	4/14/2014	1,2,4-Trimethylbenzene	**74**	5	0.61	56	ug/L
MKTF-09	4/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-09	4/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-09	4/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-09	4/14/2014	Isopropylbenzene	13	5	0.81	447	ug/L
MKTF-09	4/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-09	4/14/2014	Ethylbenzene	140	5	0.64	700	ug/L
MKTF-09	4/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-09	4/14/2014	n-Propylbenzene	26	5	0.7	660	ug/L
MKTF-09	4/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-09	4/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-09	4/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-09	4/14/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-09	4/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-09	4/14/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-09	4/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-09	4/14/2014	Toluene	38	5	0.85	1000	ug/L
MKTF-09	4/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-09	4/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-09	4/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-09	4/14/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-09	4/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-09	4/14/2014	cis-1,2-Dichloroethene	12	5	0.61	70	ug/L
MKTF-09	4/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-09	4/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-09	4/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-09	4/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-09	4/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-09	4/14/2014	Xylenes, Total	75	7.5	1.9	620	ug/L
MKTF-09	4/14/2014	MTBE	**1200**	50	13	143	ug/L
MKTF-09	4/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-09	4/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-09	6/5/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/5/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	6/5/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	6/5/2014	Benzene	**1300**	100	15	5	ug/L
MKTF-09	6/5/2014	1,1,1-Trichloroethane	65	10	1.2	200	ug/L
MKTF-09	6/5/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	6/5/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	6/5/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	6/5/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	6/5/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	6/5/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	6/5/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	6/5/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	6/5/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	6/5/2014	1,1-Dichloroethane	**26**	10	2.8	25	ug/L
MKTF-09	6/5/2014	1,1-Dichloroethene	**41**	10	2.1	7	ug/L
MKTF-09	6/5/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	6/5/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	6/5/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	6/5/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	6/5/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/5/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-09	6/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	6/5/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	6/5/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	6/5/2014	1,2,4-Trimethylbenzene	**83**	10	1.2	56	ug/L
MKTF-09	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	6/5/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	6/5/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	6/5/2014	Isopropylbenzene	17	10	1.6	447	ug/L
MKTF-09	6/5/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	Ethylbenzene	200	10	1.3	700	ug/L
MKTF-09	6/5/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	6/5/2014	n-Propylbenzene	33	10	1.4	660	ug/L
MKTF-09	6/5/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	6/5/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	6/5/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	6/5/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	6/5/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	6/5/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	6/5/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	6/5/2014	Toluene	52	10	1.7	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/5/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	6/5/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	6/5/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	6/5/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	6/5/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	6/5/2014	cis-1,2-Dichloroethene	14	10	1.2	70	ug/L
MKTF-09	6/5/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	6/5/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	6/5/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	6/5/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	6/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	6/5/2014	Xylenes, Total	98	15	3.8	620	ug/L
MKTF-09	6/5/2014	MTBE	**1200**	10	2.5	143	ug/L
MKTF-09	6/5/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	6/5/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	9/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	9/18/2014	Benzene	**750**	10	1.5	5	ug/L
MKTF-09	9/18/2014	1,1,1-Trichloroethane	110	10	1.2	200	ug/L
MKTF-09	9/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	9/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	9/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	9/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	9/18/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	9/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	9/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	9/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	9/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	9/18/2014	1,1-Dichloroethane	**28**	10	2.8	25	ug/L
MKTF-09	9/18/2014	1,1-Dichloroethene	**65**	10	2.1	7	ug/L
MKTF-09	9/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	9/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	9/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	9/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	9/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-09	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	9/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	9/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	9/18/2014	1,2,4-Trimethylbenzene	38	10	1.2	56	ug/L
MKTF-09	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	9/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	9/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	9/18/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-09	9/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Ethylbenzene	96	10	1.3	700	ug/L
MKTF-09	9/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	9/18/2014	n-Propylbenzene	14	10	1.4	660	ug/L
MKTF-09	9/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	9/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	9/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	9/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	9/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	9/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	9/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	9/18/2014	Toluene	27	10	1.7	1000	ug/L
MKTF-09	9/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	9/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	9/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	9/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	9/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	9/18/2014	cis-1,2-Dichloroethene	21	10	1.2	70	ug/L
MKTF-09	9/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	9/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	9/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	9/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	9/18/2014	Xylenes, Total	43	15	3.8	620	ug/L
MKTF-09	9/18/2014	MTBE	**760**	10	2.5	143	ug/L
MKTF-09	9/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	9/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/14/2014	Acetone	ND	100	49	14064	ug/L
MKTF-09	11/14/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-09	11/14/2014	Benzene	**810**	10	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	1,1,1-Trichloroethane	96	10	1.2	200	ug/L
MKTF-09	11/14/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-09	11/14/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-09	11/14/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-09	11/14/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-09	11/14/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-09	11/14/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-09	11/14/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-09	11/14/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-09	11/14/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-09	11/14/2014	1,1-Dichloroethane	**35**	10	2.8	25	ug/L
MKTF-09	11/14/2014	1,1-Dichloroethene	**68**	10	2.1	7	ug/L
MKTF-09	11/14/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-09	11/14/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-09	11/14/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-09	11/14/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-09	11/14/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/14/2014	Trichloroethene	**11**	10	1.9	5	ug/L
MKTF-09	11/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-09	11/14/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-09	11/14/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-09	11/14/2014	1,2,4-Trimethylbenzene	**87**	10	1.2	56	ug/L
MKTF-09	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-09	11/14/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-09	11/14/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-09	11/14/2014	Isopropylbenzene	14	10	1.6	447	ug/L
MKTF-09	11/14/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Ethylbenzene	150	10	1.3	700	ug/L
MKTF-09	11/14/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-09	11/14/2014	n-Propylbenzene	30	10	1.4	660	ug/L
MKTF-09	11/14/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-09	11/14/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-09	11/14/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-09	11/14/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-09	11/14/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-09	11/14/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-09	11/14/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-09	11/14/2014	Toluene	33	10	1.7	1000	ug/L
MKTF-09	11/14/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-09	11/14/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-09	11/14/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-09	11/14/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-09	11/14/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-09	11/14/2014	cis-1,2-Dichloroethene	24	10	1.2	70	ug/L
MKTF-09	11/14/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-09	11/14/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-09	11/14/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-09	11/14/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-09	11/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-09	11/14/2014	Xylenes, Total	110	15	3.8	620	ug/L
MKTF-09	11/14/2014	MTBE	**770**	10	2.5	143	ug/L
MKTF-09	11/14/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-09	11/14/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-09	3/16/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	3/16/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	3/16/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	3/16/2015	Benzene	**490**	5	0.33	5	ug/L
MKTF-09	3/16/2015	1,1,1-Trichloroethane	130	5	0.39	200	ug/L
MKTF-09	3/16/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	3/16/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	3/16/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	3/16/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	3/16/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	3/16/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	3/16/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	3/16/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	3/16/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	3/16/2015	1,1-Dichloroethane	**34**	5	2	25	ug/L
MKTF-09	3/16/2015	1,1-Dichloroethene	**74**	5	0.5	7	ug/L
MKTF-09	3/16/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	3/16/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	3/16/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	3/16/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	3/16/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	3/16/2015	Trichloroethene	**9**	5	0.82	5	ug/L
MKTF-09	3/16/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/16/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	3/16/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	3/16/2015	1,2,4-Trimethylbenzene	18	5	0.8	56	ug/L
MKTF-09	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	3/16/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	3/16/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	3/16/2015	Isopropylbenzene	7.4	5	0.76	447	ug/L
MKTF-09	3/16/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	3/16/2015	Ethylbenzene	80	5	0.51	700	ug/L
MKTF-09	3/16/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	3/16/2015	n-Propylbenzene	13	5	0.82	660	ug/L
MKTF-09	3/16/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	3/16/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	3/16/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	3/16/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	3/16/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	3/16/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	3/16/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	3/16/2015	Toluene	13	5	0.54	1000	ug/L
MKTF-09	3/16/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	3/16/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	3/16/2015	Tetrachloroethene	**7.1**	5	0.8	5	ug/L
MKTF-09	3/16/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-09	3/16/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	3/16/2015	cis-1,2-Dichloroethene	36	5	0.4	70	ug/L
MKTF-09	3/16/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	3/16/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	3/16/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	3/16/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	3/16/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	3/16/2015	Xylenes, Total	18	7.5	1.4	620	ug/L
MKTF-09	3/16/2015	MTBE	**500**	5	0.87	143	ug/L
MKTF-09	3/16/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	3/16/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	6/4/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	6/4/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	6/4/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	6/4/2015	Benzene	**890**	50	3.3	5	ug/L
MKTF-09	6/4/2015	1,1,1-Trichloroethane	67	5	0.39	200	ug/L
MKTF-09	6/4/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	6/4/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	6/4/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	6/4/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	6/4/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	6/4/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	6/4/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	6/4/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	6/4/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	6/4/2015	1,1-Dichloroethane	**28**	5	2	25	ug/L
MKTF-09	6/4/2015	1,1-Dichloroethene	**55**	5	0.5	7	ug/L
MKTF-09	6/4/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	6/4/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	6/4/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	6/4/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	6/4/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	6/4/2015	Trichloroethene	**7.6**	5	0.82	5	ug/L
MKTF-09	6/4/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-09	6/4/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	6/4/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	6/4/2015	1,2,4-Trimethylbenzene	33	5	0.8	56	ug/L
MKTF-09	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	6/4/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	6/4/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	6/4/2015	Isopropylbenzene	15	5	0.76	447	ug/L
MKTF-09	6/4/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	6/4/2015	Ethylbenzene	150	5	0.51	700	ug/L
MKTF-09	6/4/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	6/4/2015	n-Propylbenzene	22	5	0.82	660	ug/L
MKTF-09	6/4/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	6/4/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	6/4/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	6/4/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	6/4/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	6/4/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	6/4/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	6/4/2015	Toluene	25	5	0.54	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/4/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	6/4/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	6/4/2015	Tetrachloroethene	**7.8**	5	0.8	5	ug/L
MKTF-09	6/4/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-09	6/4/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	6/4/2015	cis-1,2-Dichloroethene	30	5	0.4	70	ug/L
MKTF-09	6/4/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	6/4/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	6/4/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	6/4/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	6/4/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	6/4/2015	Xylenes, Total	39	7.5	1.4	620	ug/L
MKTF-09	6/4/2015	MTBE	**430**	5	0.87	143	ug/L
MKTF-09	6/4/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	6/4/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-09	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-09	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-09	8/18/2015	Benzene	**1200**	50	3.3	5	ug/L
MKTF-09	8/18/2015	1,1,1-Trichloroethane	52	5	0.39	200	ug/L
MKTF-09	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-09	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-09	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-09	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-09	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-09	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-09	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-09	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-09	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-09	8/18/2015	1,1-Dichloroethane	**26**	5	2	25	ug/L
MKTF-09	8/18/2015	1,1-Dichloroethene	**36**	5	0.5	7	ug/L
MKTF-09	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-09	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-09	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-09	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-09	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-09	8/18/2015	Trichloroethene	**5.9**	5	0.82	5	ug/L
MKTF-09	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-09	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-09	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-09	8/18/2015	1,2,4-Trimethylbenzene	50	5	0.8	56	ug/L
MKTF-09	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-09	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-09	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-09	8/18/2015	Isopropylbenzene	17	5	0.76	447	ug/L
MKTF-09	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-09	8/18/2015	Ethylbenzene	200	5	0.51	700	ug/L
MKTF-09	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-09	8/18/2015	n-Propylbenzene	29	5	0.82	660	ug/L
MKTF-09	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-09	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-09	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-09	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-09	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-09	8/18/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-09	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-09	8/18/2015	Toluene	35	5	0.54	1000	ug/L
MKTF-09	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-09	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-09	8/18/2015	Tetrachloroethene	**6.2**	5	0.8	5	ug/L
MKTF-09	8/18/2015	sec-Butylbenzene	5.4	5	1.1	2000	ug/L
MKTF-09	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-09	8/18/2015	cis-1,2-Dichloroethene	27	5	0.4	70	ug/L
MKTF-09	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-09	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-09	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-09	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-09	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-09	8/18/2015	Xylenes, Total	63	7.5	1.4	620	ug/L
MKTF-09	8/18/2015	MTBE	**600**	5	0.87	143	ug/L
MKTF-09	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-09	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-09	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-09	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-09	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-09	11/3/2015	Benzene	**1500**	100	6.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/3/2015	1,1,1-Trichloroethane	48	1	0.078	200	ug/L
MKTF-09	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-09	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-09	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-09	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-09	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-09	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-09	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-09	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-09	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-09	11/3/2015	1,1-Dichloroethane	**27**	1	0.4	25	ug/L
MKTF-09	11/3/2015	1,1-Dichloroethene	**33**	1	0.099	7	ug/L
MKTF-09	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-09	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-09	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-09	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-09	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-09	11/3/2015	Trichloroethene	**6.1**	1	0.16	5	ug/L
MKTF-09	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-09	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-09	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-09	11/3/2015	1,2,4-Trimethylbenzene	**73**	1	0.16	56	ug/L
MKTF-09	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-09	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-09	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-09	11/3/2015	Isopropylbenzene	19	1	0.15	447	ug/L
MKTF-09	11/3/2015	p-Isopropyltoluene	3.2	1	0.19	NA	ug/L
MKTF-09	11/3/2015	Ethylbenzene	230	10	1	700	ug/L
MKTF-09	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-09	11/3/2015	n-Propylbenzene	38	1	0.16	660	ug/L
MKTF-09	11/3/2015	n-Butylbenzene	9	3	0.25	1000	ug/L
MKTF-09	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-09	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-09	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-09	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-09	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-09	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-09	11/3/2015	Toluene	36	1	0.11	1000	ug/L
MKTF-09	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-09	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-09	11/3/2015	Tetrachloroethene	**6.7**	1	0.16	5	ug/L
MKTF-09	11/3/2015	sec-Butylbenzene	6.4	1	0.23	2000	ug/L
MKTF-09	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-09	11/3/2015	cis-1,2-Dichloroethene	30	1	0.081	70	ug/L
MKTF-09	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-09	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-09	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-09	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-09	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-09	11/3/2015	Xylenes, Total	70	1.5	0.28	620	ug/L
MKTF-09	11/3/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-09	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-09	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-09	2/29/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	2/29/2016	Acetone	ND	100	8.8	14064	ug/L
MKTF-09	2/29/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	2/29/2016	Benzene	**1600**	100	9.6	5	ug/L
MKTF-09	2/29/2016	1,1,1-Trichloroethane	46	10	0.63	200	ug/L
MKTF-09	2/29/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	2/29/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	2/29/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	2/29/2016	Chloroethane	ND	20	1.5	20857	ug/L
MKTF-09	2/29/2016	Vinyl Chloride	*ND*	*10*	0.63	2	ug/L
MKTF-09	2/29/2016	Methylene Chloride	*ND*	*30*	0.63	5	ug/L
MKTF-09	2/29/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	2/29/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	2/29/2016	Bromodichloromethane	*ND*	*10*	0.98	1.34	ug/L
MKTF-09	2/29/2016	1,1-Dichloroethane	**29**	10	1.1	25	ug/L
MKTF-09	2/29/2016	1,1-Dichloroethene	**36**	10	0.76	7	ug/L
MKTF-09	2/29/2016	Trichlorofluoromethane	ND	10	0.88	1137	ug/L
MKTF-09	2/29/2016	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-09	2/29/2016	1,2-Dichloropropane	*ND*	*10*	0.47	5	ug/L
MKTF-09	2/29/2016	2-Butanone	ND	100	3.2	5565	ug/L
MKTF-09	2/29/2016	1,1,2-Trichloroethane	*ND*	*10*	0.77	5	ug/L
MKTF-09	2/29/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-09	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.1	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/29/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	2/29/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	2/29/2016	1,2,4-Trimethylbenzene	**65**	10	1	56	ug/L
MKTF-09	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.5	0.0033	ug/L
MKTF-09	2/29/2016	1,2,3-Trichloropropane	*ND*	*20*	1.1	0.0084	ug/L
MKTF-09	2/29/2016	tert-Butylbenzene	ND	10	0.96	690	ug/L
MKTF-09	2/29/2016	Isopropylbenzene	18	10	0.98	447	ug/L
MKTF-09	2/29/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-09	2/29/2016	Ethylbenzene	240	10	1.1	700	ug/L
MKTF-09	2/29/2016	Styrene	ND	10	0.95	100	ug/L
MKTF-09	2/29/2016	n-Propylbenzene	32	10	1.3	660	ug/L
MKTF-09	2/29/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-09	2/29/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	2/29/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	2/29/2016	1,2-Dichloroethane	*ND*	*10*	0.53	5	ug/L
MKTF-09	2/29/2016	4-Methyl-2-Pentanone	ND	100	1.5	1243	ug/L
MKTF-09	2/29/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	2/29/2016	Bromobenzene	ND	10	0.8	62	ug/L
MKTF-09	2/29/2016	Toluene	29	10	0.89	1000	ug/L
MKTF-09	2/29/2016	Chlorobenzene	ND	10	1	77.6	ug/L
MKTF-09	2/29/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	2/29/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-09	2/29/2016	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-09	2/29/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	2/29/2016	cis-1,2-Dichloroethene	27	10	1.2	70	ug/L
MKTF-09	2/29/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	2/29/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	2/29/2016	2-Hexanone	*ND*	*100*	3.6	38	ug/L
MKTF-09	2/29/2016	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-09	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	2/29/2016	Xylenes, Total	64	15	3.2	620	ug/L
MKTF-09	2/29/2016	MTBE	**690**	10	2.1	143	ug/L
MKTF-09	2/29/2016	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	2/29/2016	trans-1,3-Dichloropropene	ND	10	0.85	NA	ug/L
MKTF-09	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-09	6/9/2016	Acetone	13	10	4.9	14064	ug/L
MKTF-09	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-09	6/9/2016	Benzene	**1400**	20	1.9	5	ug/L
MKTF-09	6/9/2016	1,1,1-Trichloroethane	40	1	0.091	200	ug/L
MKTF-09	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-09	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-09	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-09	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-09	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-09	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-09	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-09	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-09	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-09	6/9/2016	1,1-Dichloroethane	**32**	1	0.11	25	ug/L
MKTF-09	6/9/2016	1,1-Dichloroethene	**32**	1	0.11	7	ug/L
MKTF-09	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-09	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-09	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-09	6/9/2016	2-Butanone	5.6	10	0.74	5565	ug/L
MKTF-09	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-09	6/9/2016	Trichloroethene	**6.2**	1	0.18	5	ug/L
MKTF-09	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-09	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-09	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-09	6/9/2016	1,2,4-Trimethylbenzene	**58**	1	0.11	56	ug/L
MKTF-09	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-09	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-09	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-09	6/9/2016	Isopropylbenzene	16	1	0.1	447	ug/L
MKTF-09	6/9/2016	p-Isopropyltoluene	2.4	1	0.14	NA	ug/L
MKTF-09	6/9/2016	Ethylbenzene	210	20	2.2	700	ug/L
MKTF-09	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-09	6/9/2016	n-Propylbenzene	29	1	0.13	660	ug/L
MKTF-09	6/9/2016	n-Butylbenzene	6.8	3	0.16	1000	ug/L
MKTF-09	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-09	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-09	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-09	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-09	6/9/2016	1,3,5-Trimethylbenzene	0.75	1	0.12	60	ug/L
MKTF-09	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-09	6/9/2016	Toluene	29	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-09	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-09	6/9/2016	Tetrachloroethene	**6.5**	1	0.15	5	ug/L
MKTF-09	6/9/2016	sec-Butylbenzene	4.4	1	0.12	2000	ug/L
MKTF-09	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-09	6/9/2016	cis-1,2-Dichloroethene	30	1	0.12	70	ug/L
MKTF-09	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-09	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-09	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-09	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-09	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-09	6/9/2016	Xylenes, Total	56	1.5	0.37	620	ug/L
MKTF-09	6/9/2016	MTBE	**530**	20	4.2	143	ug/L
MKTF-09	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-09	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-09	9/11/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/11/2016	Acetone	ND	100	49	14064	ug/L
MKTF-09	9/11/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	9/11/2016	Benzene	**2000**	100	9.6	5	ug/L
MKTF-09	9/11/2016	1,1,1-Trichloroethane	37	10	0.91	200	ug/L
MKTF-09	9/11/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	9/11/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	9/11/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	9/11/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-09	9/11/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-09	9/11/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-09	9/11/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	9/11/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	9/11/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-09	9/11/2016	1,1-Dichloroethane	22	10	1.1	25	ug/L
MKTF-09	9/11/2016	1,1-Dichloroethene	**24**	10	1.1	7	ug/L
MKTF-09	9/11/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-09	9/11/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-09	9/11/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/11/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-09	9/11/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-09	9/11/2016	Trichloroethene	*4.5*	*10*	1.8	5	ug/L
MKTF-09	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-09	9/11/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	9/11/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	9/11/2016	1,2,4-Trimethylbenzene	53	10	1.1	56	ug/L
MKTF-09	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-09	9/11/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-09	9/11/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-09	9/11/2016	Isopropylbenzene	16	10	1	447	ug/L
MKTF-09	9/11/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-09	9/11/2016	Ethylbenzene	220	10	1.1	700	ug/L
MKTF-09	9/11/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-09	9/11/2016	n-Propylbenzene	27	10	1.3	660	ug/L
MKTF-09	9/11/2016	n-Butylbenzene	5	30	1.6	1000	ug/L
MKTF-09	9/11/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	9/11/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	9/11/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	9/11/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-09	9/11/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	9/11/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-09	9/11/2016	Toluene	30	10	1.2	1000	ug/L
MKTF-09	9/11/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	9/11/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	9/11/2016	Tetrachloroethene	*3.8*	*10*	1.5	5	ug/L
MKTF-09	9/11/2016	sec-Butylbenzene	3.1	10	1.2	2000	ug/L
MKTF-09	9/11/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	9/11/2016	cis-1,2-Dichloroethene	32	10	1.2	70	ug/L
MKTF-09	9/11/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	9/11/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	9/11/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-09	9/11/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-09	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	9/11/2016	Xylenes, Total	59	15	3.7	620	ug/L
MKTF-09	9/11/2016	MTBE	**620**	10	2.1	143	ug/L
MKTF-09	9/11/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-09	9/11/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	11/2/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/2/2016	Acetone	ND	100	49	14064	ug/L
MKTF-09	11/2/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	11/2/2016	Benzene	**1600**	100	9.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/2/2016	1,1,1-Trichloroethane	42	10	0.91	200	ug/L
MKTF-09	11/2/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	11/2/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	11/2/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	11/2/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-09	11/2/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-09	11/2/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-09	11/2/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	11/2/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-09	11/2/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-09	11/2/2016	1,1-Dichloroethane	**28**	10	1.1	25	ug/L
MKTF-09	11/2/2016	1,1-Dichloroethene	**25**	10	1.1	7	ug/L
MKTF-09	11/2/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-09	11/2/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-09	11/2/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/2/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-09	11/2/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-09	11/2/2016	Trichloroethene	*3.6*	*10*	1.8	5	ug/L
MKTF-09	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-09	11/2/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	11/2/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	11/2/2016	1,2,4-Trimethylbenzene	43	10	1.1	56	ug/L
MKTF-09	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-09	11/2/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-09	11/2/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-09	11/2/2016	Isopropylbenzene	14	10	1	447	ug/L
MKTF-09	11/2/2016	p-Isopropyltoluene	2.9	10	1.4	NA	ug/L
MKTF-09	11/2/2016	Ethylbenzene	210	10	1.1	700	ug/L
MKTF-09	11/2/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-09	11/2/2016	n-Propylbenzene	23	10	1.3	660	ug/L
MKTF-09	11/2/2016	n-Butylbenzene	6.5	30	1.6	1000	ug/L
MKTF-09	11/2/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-09	11/2/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-09	11/2/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	11/2/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-09	11/2/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-09	11/2/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-09	11/2/2016	Toluene	26	10	1.2	1000	ug/L
MKTF-09	11/2/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	11/2/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-09	11/2/2016	Tetrachloroethene	**5.3**	10	1.5	5	ug/L
MKTF-09	11/2/2016	sec-Butylbenzene	5	10	1.2	2000	ug/L
MKTF-09	11/2/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	11/2/2016	cis-1,2-Dichloroethene	27	10	1.2	70	ug/L
MKTF-09	11/2/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-09	11/2/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	11/2/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-09	11/2/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-09	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	11/2/2016	Xylenes, Total	52	15	3.7	620	ug/L
MKTF-09	11/2/2016	MTBE	**500**	10	2.1	143	ug/L
MKTF-09	11/2/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-09	11/2/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	3/15/2017	Acetone	13	100	8.8	14064	ug/L
MKTF-09	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-09	3/15/2017	Benzene	**2400**	100	9.6	5	ug/L
MKTF-09	3/15/2017	1,1,1-Trichloroethane	20	10	0.73	200	ug/L
MKTF-09	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-09	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-09	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-09	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-09	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	3/15/2017	1,1-Dichloroethane	19	10	1	25	ug/L
MKTF-09	3/15/2017	1,1-Dichloroethene	**21**	10	0.81	7	ug/L
MKTF-09	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-09	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	3/15/2017	Trichloroethene	**5.4**	10	1.8	5	ug/L
MKTF-09	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-09	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	3/15/2017	1,2,4-Trimethylbenzene	**78**	10	1	56	ug/L
MKTF-09	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	3/15/2017	Isopropylbenzene	20	10	0.98	447	ug/L
MKTF-09	3/15/2017	p-Isopropyltoluene	3.5	10	1.4	NA	ug/L
MKTF-09	3/15/2017	Ethylbenzene	300	10	1.1	700	ug/L
MKTF-09	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	3/15/2017	n-Propylbenzene	38	10	1.3	660	ug/L
MKTF-09	3/15/2017	n-Butylbenzene	10	30	1.6	1000	ug/L
MKTF-09	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-09	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	3/15/2017	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
MKTF-09	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	3/15/2017	Toluene	32	10	0.89	1000	ug/L
MKTF-09	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-09	3/15/2017	Tetrachloroethene	*3.3*	*10*	1.5	5	ug/L
MKTF-09	3/15/2017	sec-Butylbenzene	5.3	10	1	2000	ug/L
MKTF-09	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-09	3/15/2017	cis-1,2-Dichloroethene	20	10	2	70	ug/L
MKTF-09	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-09	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-09	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-09	3/15/2017	Xylenes, Total	83	15	3.2	620	ug/L
MKTF-09	3/15/2017	MTBE	**610**	10	1.5	143	ug/L
MKTF-09	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-09	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-09	6/12/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	6/12/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	6/12/2017	Chloroform	ND	10	4	100	ug/L
MKTF-09	6/12/2017	Benzene	**3000**	100	6.2	5	ug/L
MKTF-09	6/12/2017	1,1,1-Trichloroethane	17	10	0.73	200	ug/L
MKTF-09	6/12/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	6/12/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	6/12/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	6/12/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	6/12/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	6/12/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	6/12/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	6/12/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	6/12/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	6/12/2017	1,1-Dichloroethane	14	10	4	25	ug/L
MKTF-09	6/12/2017	1,1-Dichloroethene	**17**	10	0.81	7	ug/L
MKTF-09	6/12/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	6/12/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	6/12/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	6/12/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	6/12/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	6/12/2017	Trichloroethene	*2.7*	*10*	1.1	5	ug/L
MKTF-09	6/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	6/12/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	6/12/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	6/12/2017	1,2,4-Trimethylbenzene	**87**	10	1.1	56	ug/L
MKTF-09	6/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	6/12/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	6/12/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	6/12/2017	Isopropylbenzene	19	10	0.51	447	ug/L
MKTF-09	6/12/2017	p-Isopropyltoluene	2.4	10	0.96	NA	ug/L
MKTF-09	6/12/2017	Ethylbenzene	300	10	0.93	700	ug/L
MKTF-09	6/12/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	6/12/2017	n-Propylbenzene	42	10	0.74	660	ug/L
MKTF-09	6/12/2017	n-Butylbenzene	8.6	30	1.3	1000	ug/L
MKTF-09	6/12/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	6/12/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	6/12/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	6/12/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	6/12/2017	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
MKTF-09	6/12/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	6/12/2017	Toluene	32	10	0.64	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	6/12/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	6/12/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-09	6/12/2017	sec-Butylbenzene	4.4	10	1.1	2000	ug/L
MKTF-09	6/12/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	6/12/2017	cis-1,2-Dichloroethene	13	10	2	70	ug/L
MKTF-09	6/12/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	6/12/2017	Pentafluorobenzene	ND	0	0		None
MKTF-09	6/12/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	6/12/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	6/12/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	6/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	6/12/2017	Xylenes, Total	86	15	3.2	620	ug/L
MKTF-09	6/12/2017	MTBE	**680**	10	2.4	143	ug/L
MKTF-09	6/12/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	6/12/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	9/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/28/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	9/28/2017	Chloroform	ND	10	4	100	ug/L
MKTF-09	9/28/2017	Benzene	**3000**	100	6.2	5	ug/L
MKTF-09	9/28/2017	1,1,1-Trichloroethane	13	10	0.73	200	ug/L
MKTF-09	9/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	9/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	9/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	9/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	9/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	9/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	9/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	9/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	9/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	9/28/2017	1,1-Dichloroethane	9.8	10	4	25	ug/L
MKTF-09	9/28/2017	1,1-Dichloroethene	**13**	10	0.81	7	ug/L
MKTF-09	9/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	9/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	9/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	9/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	9/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	9/28/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-09	9/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	9/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	9/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	9/28/2017	1,2,4-Trimethylbenzene	**95**	10	1.1	56	ug/L
MKTF-09	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	9/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	9/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	9/28/2017	Isopropylbenzene	21	10	0.51	447	ug/L
MKTF-09	9/28/2017	p-Isopropyltoluene	2.5	10	0.96	NA	ug/L
MKTF-09	9/28/2017	Ethylbenzene	300	10	0.93	700	ug/L
MKTF-09	9/28/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-09	9/28/2017	n-Propylbenzene	43	10	0.74	660	ug/L
MKTF-09	9/28/2017	n-Butylbenzene	8.4	30	1.3	1000	ug/L
MKTF-09	9/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	9/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	9/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	9/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	9/28/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-09	9/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	9/28/2017	Toluene	30	10	0.64	1000	ug/L
MKTF-09	9/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	9/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	9/28/2017	Tetrachloroethene	*1.9*	*10*	1.3	5	ug/L
MKTF-09	9/28/2017	sec-Butylbenzene	4	10	1.1	2000	ug/L
MKTF-09	9/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	9/28/2017	cis-1,2-Dichloroethene	9.6	10	2	70	ug/L
MKTF-09	9/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	9/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	9/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	9/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	9/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	9/28/2017	Xylenes, Total	97	15	3.2	620	ug/L
MKTF-09	9/28/2017	MTBE	**530**	10	2.4	143	ug/L
MKTF-09	9/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	9/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	11/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	11/28/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	11/28/2017	Chloroform	ND	10	4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2017	Benzene	**3200**	100	6.2	5	ug/L
MKTF-09	11/28/2017	1,1,1-Trichloroethane	29	10	0.73	200	ug/L
MKTF-09	11/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	11/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	11/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	11/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	11/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	11/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	11/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	11/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	11/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	11/28/2017	1,1-Dichloroethane	19	10	4	25	ug/L
MKTF-09	11/28/2017	1,1-Dichloroethene	**30**	10	0.81	7	ug/L
MKTF-09	11/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	11/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	11/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	11/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	11/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	11/28/2017	Trichloroethene	*4.4*	*10*	1.1	5	ug/L
MKTF-09	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	11/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	11/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	11/28/2017	1,2,4-Trimethylbenzene	**93**	10	1.1	56	ug/L
MKTF-09	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	11/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	11/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	11/28/2017	Isopropylbenzene	17	10	0.51	447	ug/L
MKTF-09	11/28/2017	p-Isopropyltoluene	4.3	10	0.96	NA	ug/L
MKTF-09	11/28/2017	Ethylbenzene	260	10	0.93	700	ug/L
MKTF-09	11/28/2017	Styrene	2.2	10	1.6	100	ug/L
MKTF-09	11/28/2017	n-Propylbenzene	34	10	0.74	660	ug/L
MKTF-09	11/28/2017	n-Butylbenzene	9.5	30	1.3	1000	ug/L
MKTF-09	11/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	11/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	11/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	11/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	11/28/2017	1,3,5-Trimethylbenzene	2.8	10	0.87	60	ug/L
MKTF-09	11/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	11/28/2017	Toluene	27	10	0.64	1000	ug/L
MKTF-09	11/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	11/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	11/28/2017	Tetrachloroethene	*2.6*	*10*	1.3	5	ug/L
MKTF-09	11/28/2017	sec-Butylbenzene	5.8	10	1.1	2000	ug/L
MKTF-09	11/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	11/28/2017	cis-1,2-Dichloroethene	17	10	2	70	ug/L
MKTF-09	11/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	11/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	11/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	11/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	11/28/2017	Xylenes, Total	86	15	3.2	620	ug/L
MKTF-09	11/28/2017	MTBE	**510**	10	2.4	143	ug/L
MKTF-09	11/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	11/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	2/14/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	2/14/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	2/14/2018	Chloroform	ND	10	4	100	ug/L
MKTF-09	2/14/2018	Benzene	**2700**	100	6.2	5	ug/L
MKTF-09	2/14/2018	1,1,1-Trichloroethane	31	10	0.73	200	ug/L
MKTF-09	2/14/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	2/14/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	2/14/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	2/14/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	2/14/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	2/14/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	2/14/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	2/14/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	2/14/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	2/14/2018	1,1-Dichloroethane	15	10	4	25	ug/L
MKTF-09	2/14/2018	1,1-Dichloroethene	**28**	10	0.81	7	ug/L
MKTF-09	2/14/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	2/14/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	2/14/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	2/14/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	2/14/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	2/14/2018	Trichloroethene	*2.9*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	2/14/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	2/14/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	2/14/2018	1,2,4-Trimethylbenzene	**86**	10	1.1	56	ug/L
MKTF-09	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	2/14/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	2/14/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	2/14/2018	Isopropylbenzene	17	10	0.51	447	ug/L
MKTF-09	2/14/2018	p-Isopropyltoluene	2.4	10	0.96	NA	ug/L
MKTF-09	2/14/2018	Ethylbenzene	250	10	0.93	700	ug/L
MKTF-09	2/14/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-09	2/14/2018	n-Propylbenzene	31	10	0.74	660	ug/L
MKTF-09	2/14/2018	n-Butylbenzene	7.5	30	1.3	1000	ug/L
MKTF-09	2/14/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	2/14/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	2/14/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	2/14/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	2/14/2018	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
MKTF-09	2/14/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-09	2/14/2018	Toluene	24	10	0.64	1000	ug/L
MKTF-09	2/14/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	2/14/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	2/14/2018	Tetrachloroethene	*2*	*10*	1.3	5	ug/L
MKTF-09	2/14/2018	sec-Butylbenzene	4.3	10	1.1	2000	ug/L
MKTF-09	2/14/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	2/14/2018	cis-1,2-Dichloroethene	26	10	2	70	ug/L
MKTF-09	2/14/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	2/14/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	2/14/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	2/14/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	2/14/2018	Xylenes, Total	84	15	3.2	620	ug/L
MKTF-09	2/14/2018	MTBE	**480**	10	2.4	143	ug/L
MKTF-09	2/14/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	2/14/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	5/2/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-09	5/2/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-09	5/2/2018	Chloroform	ND	10	4	100	ug/L
MKTF-09	5/2/2018	Benzene	**2800**	100	6.2	5	ug/L
MKTF-09	5/2/2018	1,1,1-Trichloroethane	33	10	0.73	200	ug/L
MKTF-09	5/2/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-09	5/2/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-09	5/2/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-09	5/2/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-09	5/2/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-09	5/2/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-09	5/2/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-09	5/2/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-09	5/2/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-09	5/2/2018	1,1-Dichloroethane	**26**	10	4	25	ug/L
MKTF-09	5/2/2018	1,1-Dichloroethene	**36**	10	0.81	7	ug/L
MKTF-09	5/2/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-09	5/2/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-09	5/2/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-09	5/2/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-09	5/2/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-09	5/2/2018	Trichloroethene	*3.2*	*10*	1.1	5	ug/L
MKTF-09	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-09	5/2/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-09	5/2/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-09	5/2/2018	1,2,4-Trimethylbenzene	**95**	10	1.1	56	ug/L
MKTF-09	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-09	5/2/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-09	5/2/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-09	5/2/2018	Isopropylbenzene	19	10	0.51	447	ug/L
MKTF-09	5/2/2018	p-Isopropyltoluene	3.1	10	0.96	NA	ug/L
MKTF-09	5/2/2018	Ethylbenzene	280	10	0.93	700	ug/L
MKTF-09	5/2/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-09	5/2/2018	n-Propylbenzene	37	10	0.74	660	ug/L
MKTF-09	5/2/2018	n-Butylbenzene	8.7	30	1.3	1000	ug/L
MKTF-09	5/2/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-09	5/2/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-09	5/2/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-09	5/2/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-09	5/2/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-09	5/2/2018	Bromobenzene	ND	10	1.4	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/2/2018	Toluene	25	10	0.64	1000	ug/L
MKTF-09	5/2/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-09	5/2/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-09	5/2/2018	Tetrachloroethene	*2.5*	*10*	1.3	5	ug/L
MKTF-09	5/2/2018	sec-Butylbenzene	5	10	1.1	2000	ug/L
MKTF-09	5/2/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-09	5/2/2018	cis-1,2-Dichloroethene	23	10	2	70	ug/L
MKTF-09	5/2/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-09	5/2/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-09	5/2/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-09	5/2/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-09	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-09	5/2/2018	Xylenes, Total	98	15	3.2	620	ug/L
MKTF-09	5/2/2018	MTBE	**490**	10	2.4	143	ug/L
MKTF-09	5/2/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-09	5/2/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-09	9/4/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-09	9/4/2018	Acetone	ND	200	16	14064	ug/L
MKTF-09	9/4/2018	Chloroform	ND	20	8	100	ug/L
MKTF-09	9/4/2018	Benzene	**2700**	200	35	5	ug/L
MKTF-09	9/4/2018	1,1,1-Trichloroethane	28	20	3.1	200	ug/L
MKTF-09	9/4/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-09	9/4/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-09	9/4/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-09	9/4/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-09	9/4/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-09	9/4/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-09	9/4/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-09	9/4/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-09	9/4/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-09	9/4/2018	1,1-Dichloroethane	19	20	8	25	ug/L
MKTF-09	9/4/2018	1,1-Dichloroethene	**28**	20	2.4	7	ug/L
MKTF-09	9/4/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-09	9/4/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-09	9/4/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-09	9/4/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-09	9/4/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-09	9/4/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-09	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-09	9/4/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-09	9/4/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-09	9/4/2018	1,2,4-Trimethylbenzene	**99**	20	5.1	56	ug/L
MKTF-09	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-09	9/4/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-09	9/4/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-09	9/4/2018	Isopropylbenzene	17	20	4.4	447	ug/L
MKTF-09	9/4/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-09	9/4/2018	Ethylbenzene	250	20	4.5	700	ug/L
MKTF-09	9/4/2018	Styrene	ND	20	5	100	ug/L
MKTF-09	9/4/2018	n-Propylbenzene	39	20	4.9	660	ug/L
MKTF-09	9/4/2018	n-Butylbenzene	6.7	60	5	1000	ug/L
MKTF-09	9/4/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-09	9/4/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-09	9/4/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-09	9/4/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-09	9/4/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-09	9/4/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-09	9/4/2018	Toluene	19	20	3.4	1000	ug/L
MKTF-09	9/4/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-09	9/4/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-09	9/4/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-09	9/4/2018	sec-Butylbenzene	4.3	20	4	2000	ug/L
MKTF-09	9/4/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-09	9/4/2018	cis-1,2-Dichloroethene	21	20	7.5	70	ug/L
MKTF-09	9/4/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-09	9/4/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-09	9/4/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-09	9/4/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-09	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-09	9/4/2018	Xylenes, Total	84	30	13	620	ug/L
MKTF-09	9/4/2018	MTBE	**430**	20	6.4	143	ug/L
MKTF-09	9/4/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-09	9/4/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-09	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-09	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-09	11/28/2018	Chloroform	ND	20	4.7	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2018	Benzene	**3300**	200	35	5	ug/L
MKTF-09	11/28/2018	1,1,1-Trichloroethane	31	20	3.3	200	ug/L
MKTF-09	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-09	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-09	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-09	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-09	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-09	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-09	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-09	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-09	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-09	11/28/2018	1,1-Dichloroethane	22	20	3.5	25	ug/L
MKTF-09	11/28/2018	1,1-Dichloroethene	**34**	20	2.4	7	ug/L
MKTF-09	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-09	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-09	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-09	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-09	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-09	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-09	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-09	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-09	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-09	11/28/2018	1,2,4-Trimethylbenzene	**110**	20	5.1	56	ug/L
MKTF-09	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-09	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-09	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-09	11/28/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-09	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-09	11/28/2018	Ethylbenzene	190	20	4.5	700	ug/L
MKTF-09	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-09	11/28/2018	n-Propylbenzene	22	20	4.9	660	ug/L
MKTF-09	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-09	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-09	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-09	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-09	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-09	11/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-09	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-09	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-09	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-09	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-09	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-09	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-09	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-09	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-09	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-09	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-09	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-09	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-09	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-09	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-09	11/28/2018	Xylenes, Total	73	30	13	620	ug/L
MKTF-09	11/28/2018	MTBE	**560**	20	9.1	143	ug/L
MKTF-09	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-09	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-09	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-09	5/13/2019	1,1,1-Trichloroethane	5.9	10	1.729216	200	ug/L
MKTF-09	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-09	5/13/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-09	5/13/2019	1,1-Dichloroethane	6.8	10	1.408586	25	ug/L
MKTF-09	5/13/2019	1,1-Dichloroethene	*6.3*	*10*	2.053882	7	ug/L
MKTF-09	5/13/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-09	5/13/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-09	5/13/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-09	5/13/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-09	5/13/2019	1,2,4-Trimethylbenzene	**120**	10	2.131991	56	ug/L
MKTF-09	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-09	5/13/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-09	5/13/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-09	5/13/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-09	5/13/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-09	5/13/2019	1,3,5-Trimethylbenzene	2.1	10	1.886598	60	ug/L
MKTF-09	5/13/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-09	5/13/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-09	5/13/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-09	5/13/2019	1-Methylnaphthalene	120	40	3.149545	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/13/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-09	5/13/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-09	5/13/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-09	5/13/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-09	5/13/2019	2-Methylnaphthalene	**16**	40	3.45376		ug/L
MKTF-09	5/13/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-09	5/13/2019	p-Isopropyltoluene	2.4	10	2.172894	NA	ug/L
MKTF-09	5/13/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-09	5/13/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-09	5/13/2019	Benzene	**3200**	100	16.663906	5	ug/L
MKTF-09	5/13/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-09	5/13/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-09	5/13/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-09	5/13/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-09	5/13/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-09	5/13/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-09	5/13/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-09	5/13/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-09	5/13/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-09	5/13/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-09	5/13/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-09	5/13/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-09	5/13/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-09	5/13/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-09	5/13/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-09	5/13/2019	Ethylbenzene	280	10	1.323408	700	ug/L
MKTF-09	5/13/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-09	5/13/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-09	5/13/2019	MTBE	**310**	10	4.56095	143	ug/L
MKTF-09	5/13/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-09	5/13/2019	Naphthalene	**82**	20	2.750713	30	ug/L
MKTF-09	5/13/2019	n-Butylbenzene	8.1	30	2.275695	1000	ug/L
MKTF-09	5/13/2019	n-Propylbenzene	47	10	2.14308	660	ug/L
MKTF-09	5/13/2019	sec-Butylbenzene	4.7	10	2.477313	2000	ug/L
MKTF-09	5/13/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-09	5/13/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-09	5/13/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-09	5/13/2019	Toluene	25	10	3.504362	1000	ug/L
MKTF-09	5/13/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-09	5/13/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-09	5/13/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-09	5/13/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-09	5/13/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-09	5/13/2019	Xylenes, Total	95	15	4.544149	620	ug/L
MKTF-09	8/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-09	8/28/2019	1,1,1-Trichloroethane	11	20	3.458431	200	ug/L
MKTF-09	8/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-09	8/28/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-09	8/28/2019	1,1-Dichloroethane	14	20	2.817172	25	ug/L
MKTF-09	8/28/2019	1,1-Dichloroethene	**17**	20	4.107764	7	ug/L
MKTF-09	8/28/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-09	8/28/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-09	8/28/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-09	8/28/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-09	8/28/2019	1,2,4-Trimethylbenzene	**110**	20	4.263982	56	ug/L
MKTF-09	8/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-09	8/28/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-09	8/28/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-09	8/28/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-09	8/28/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-09	8/28/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-09	8/28/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-09	8/28/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-09	8/28/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-09	8/28/2019	1-Methylnaphthalene	78	80	6.29909	NA	ug/L
MKTF-09	8/28/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-09	8/28/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-09	8/28/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-09	8/28/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-09	8/28/2019	2-Methylnaphthalene	**26**	80	6.90752		ug/L
MKTF-09	8/28/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-09	8/28/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-09	8/28/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-09	8/28/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-09	8/28/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-09	8/28/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-09	8/28/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-09	8/28/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-09	8/28/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-09	8/28/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-09	8/28/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-09	8/28/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-09	8/28/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-09	8/28/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-09	8/28/2019	cis-1,2-Dichloroethene	12	20	3.802301	70	ug/L
MKTF-09	8/28/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-09	8/28/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-09	8/28/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-09	8/28/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-09	8/28/2019	Ethylbenzene	270	20	2.646816	700	ug/L
MKTF-09	8/28/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-09	8/28/2019	Isopropylbenzene	22	20	3.830445	447	ug/L
MKTF-09	8/28/2019	MTBE	**420**	20	9.1219	143	ug/L
MKTF-09	8/28/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-09	8/28/2019	Naphthalene	**54**	40	5.501427	30	ug/L
MKTF-09	8/28/2019	n-Butylbenzene	25	60	4.551391	1000	ug/L
MKTF-09	8/28/2019	n-Propylbenzene	46	20	4.28616	660	ug/L
MKTF-09	8/28/2019	sec-Butylbenzene	8.4	20	4.954626	2000	ug/L
MKTF-09	8/28/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-09	8/28/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-09	8/28/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-09	8/28/2019	Toluene	21	20	7.008724	1000	ug/L
MKTF-09	8/28/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-09	8/28/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-09	8/28/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-09	8/28/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-09	8/28/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-09	8/28/2019	Xylenes, Total	98	30	9.088299	620	ug/L
MKTF-09	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-09	11/18/2019	1,1,1-Trichloroethane	14	10	1.729216	200	ug/L
MKTF-09	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-09	11/18/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-09	11/18/2019	1,1-Dichloroethane	11	10	1.408586	25	ug/L
MKTF-09	11/18/2019	1,1-Dichloroethene	**15**	10	2.053882	7	ug/L
MKTF-09	11/18/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-09	11/18/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-09	11/18/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-09	11/18/2019	1,2,4-Trimethylbenzene	**88**	10	2.131991	56	ug/L
MKTF-09	11/18/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-09	11/18/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-09	11/18/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-09	11/18/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-09	11/18/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
MKTF-09	11/18/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-09	11/18/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-09	11/18/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-09	11/18/2019	1-Methylnaphthalene	74	40	3.149545	NA	ug/L
MKTF-09	11/18/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-09	11/18/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-09	11/18/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-09	11/18/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-09	11/18/2019	2-Methylnaphthalene	**12**	40	3.45376		ug/L
MKTF-09	11/18/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-09	11/18/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-09	11/18/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-09	11/18/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-09	11/18/2019	Benzene	**3700**	100	16.663906	5	ug/L
MKTF-09	11/18/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-09	11/18/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-09	11/18/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-09	11/18/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-09	11/18/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-09	11/18/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-09	11/18/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-09	11/18/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-09	11/18/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-09	11/18/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-09	11/18/2019	cis-1,2-Dichloroethene	11	10	1.901151	70	ug/L
MKTF-09	11/18/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-09	11/18/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-09	11/18/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/18/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-09	11/18/2019	Ethylbenzene	230	10	1.323408	700	ug/L
MKTF-09	11/18/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-09	11/18/2019	Isopropylbenzene	15	10	1.915223	447	ug/L
MKTF-09	11/18/2019	MTBE	**450**	10	4.56095	143	ug/L
MKTF-09	11/18/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-09	11/18/2019	Naphthalene	**52**	20	2.750713	30	ug/L
MKTF-09	11/18/2019	n-Butylbenzene	5.3	30	2.275695	1000	ug/L
MKTF-09	11/18/2019	n-Propylbenzene	34	10	2.14308	660	ug/L
MKTF-09	11/18/2019	sec-Butylbenzene	3.6	10	2.477313	2000	ug/L
MKTF-09	11/18/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-09	11/18/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-09	11/18/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-09	11/18/2019	Toluene	14	10	3.504362	1000	ug/L
MKTF-09	11/18/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-09	11/18/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-09	11/18/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-09	11/18/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-09	11/18/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-09	11/18/2019	Xylenes, Total	69	15	4.544149	620	ug/L
MKTF-09	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-09	3/3/2020	1,1,1-Trichloroethane	26	1	0.3	200	ug/L
MKTF-09	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-09	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethane	17	1	0.27	25	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethene	**35**	1	0.13	7	ug/L
MKTF-09	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-09	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-09	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-09	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-09	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	0.52	1	0.15	600	ug/L
MKTF-09	3/3/2020	1,2-Dichloroethane	0.45	1	0.22	5	ug/L
MKTF-09	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-09	3/3/2020	1,3,5-Trimethylbenzene	2.1	1	0.18	60	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-09	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	76	4	0.84	NA	ug/L
MKTF-09	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-09	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-09	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-09	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	**10**	4	0.69		ug/L
MKTF-09	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-09	3/3/2020	p-Isopropyltoluene	2	1	0.2	NA	ug/L
MKTF-09	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-09	3/3/2020	Acetone	11	10	2.3	14064	ug/L
MKTF-09	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-09	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-09	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-09	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-09	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-09	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-09	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-09	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-09	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-09	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-09	3/3/2020	cis-1,2-Dichloroethene	19	1	0.39	70	ug/L
MKTF-09	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-09	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-09	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-09	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-09	3/3/2020	Isopropylbenzene	12	1	0.18	447	ug/L
MKTF-09	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-09	3/3/2020	n-Butylbenzene	6.3	3	0.25	1000	ug/L
MKTF-09	3/3/2020	n-Propylbenzene	26	1	0.18	660	ug/L
MKTF-09	3/3/2020	Naphthalene	**41**	2	0.28	30	ug/L
MKTF-09	3/3/2020	sec-Butylbenzene	3.6	1	0.61	2000	ug/L
MKTF-09	3/3/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-09	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-09	3/3/2020	Tetrachloroethene	1.2	1	0.36	5	ug/L
MKTF-09	3/3/2020	Toluene	12	1	0.2	1000	ug/L
MKTF-09	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-09	3/3/2020	Trichloroethene	2.2	1	0.2	5	ug/L
MKTF-09	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-09	3/3/2020	Vinyl Chloride	0.42	1	0.2	2	ug/L
MKTF-09	3/3/2020	Xylenes, Total	59	1.5	0.55	620	ug/L
MKTF-09	3/3/2020	Benzene	**3200**	100	23	5	ug/L
MKTF-09	3/3/2020	1,2,4-Trimethylbenzene	**96**	10	1.2	56	ug/L
MKTF-09	3/3/2020	Ethylbenzene	200	10	2.1	700	ug/L
MKTF-09	3/3/2020	MTBE	**480**	10	3.9	143	ug/L
MKTF-09	3/3/2020	Benzene	**3300**	200	45	5	ug/L
MKTF-09	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-09	3/3/2020	1,1,1-Trichloroethane	28	20	6	200	ug/L
MKTF-09	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-09	3/3/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethane	19	20	5.5	25	ug/L
MKTF-09	3/3/2020	1,1-Dichloroethene	**28**	20	2.6	7	ug/L
MKTF-09	3/3/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-09	3/3/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-09	3/3/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-09	3/3/2020	1,2,4-Trimethylbenzene	**96**	20	2.4	56	ug/L
MKTF-09	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-09	3/3/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-09	3/3/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-09	3/3/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-09	3/3/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-09	3/3/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	67	80	17	NA	ug/L
MKTF-09	3/3/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-09	3/3/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-09	3/3/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-09	3/3/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-09	3/3/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-09	3/3/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-09	3/3/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-09	3/3/2020	Acetone	ND	200	47	14064	ug/L
MKTF-09	3/3/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-09	3/3/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-09	3/3/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-09	3/3/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-09	3/3/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-09	3/3/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-09	3/3/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-09	3/3/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-09	3/3/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-09	3/3/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-09	3/3/2020	cis-1,2-Dichloroethene	21	20	7.8	70	ug/L
MKTF-09	3/3/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-09	3/3/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-09	3/3/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-09	3/3/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-09	3/3/2020	Ethylbenzene	190	20	4.3	700	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-09	3/3/2020	Isopropylbenzene	11	20	3.7	447	ug/L
MKTF-09	3/3/2020	MTBE	**530**	20	7.9	143	ug/L
MKTF-09	3/3/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-09	3/3/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-09	3/3/2020	n-Propylbenzene	25	20	3.6	660	ug/L
MKTF-09	3/3/2020	Naphthalene	**40**	40	5.6	30	ug/L
MKTF-09	3/3/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-09	3/3/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-09	3/3/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-09	3/3/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-09	3/3/2020	Toluene	9.9	20	4	1000	ug/L
MKTF-09	3/3/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-09	3/3/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-09	3/3/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-09	3/3/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-09	3/3/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-09	3/3/2020	Xylenes, Total	55	30	11	620	ug/L
MKTF-10	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-10	4/11/2014	Acetone	1200	500	250	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-10	4/11/2014	Benzene	**14000**	500	77	5	ug/L
MKTF-10	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-10	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-10	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-10	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-10	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-10	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-10	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-10	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-10	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-10	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-10	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-10	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-10	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-10	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-10	4/11/2014	2-Butanone	1000	500	71	5565	ug/L
MKTF-10	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-10	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-10	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-10	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-10	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-10	4/11/2014	1,2,4-Trimethylbenzene	**960**	50	6.1	56	ug/L
MKTF-10	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-10	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-10	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-10	4/11/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-10	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-10	4/11/2014	Ethylbenzene	**1500**	50	6.4	700	ug/L
MKTF-10	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-10	4/11/2014	n-Propylbenzene	130	50	7	660	ug/L
MKTF-10	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-10	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-10	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-10	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-10	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-10	4/11/2014	1,3,5-Trimethylbenzene	**210**	50	6.6	60	ug/L
MKTF-10	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-10	4/11/2014	Toluene	**19000**	500	85	1000	ug/L
MKTF-10	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-10	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-10	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-10	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-10	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-10	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-10	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-10	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-10	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-10	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-10	4/11/2014	Xylenes, Total	**6900**	75	19	620	ug/L
MKTF-10	4/11/2014	MTBE	ND	50	13	143	ug/L
MKTF-10	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-10	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-10	6/6/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-10	6/6/2014	Acetone	210	100	49	14064	ug/L
MKTF-10	6/6/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-10	6/6/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-10	6/6/2014	1,1,1-Trichloroethane	15	10	1.2	200	ug/L
MKTF-10	6/6/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-10	6/6/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-10	6/6/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-10	6/6/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-10	6/6/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-10	6/6/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-10	6/6/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-10	6/6/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-10	6/6/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-10	6/6/2014	1,1-Dichloroethane	**51**	10	2.8	25	ug/L
MKTF-10	6/6/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-10	6/6/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-10	6/6/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-10	6/6/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-10	6/6/2014	2-Butanone	1800	100	14	5565	ug/L
MKTF-10	6/6/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/6/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-10	6/6/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-10	6/6/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-10	6/6/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-10	6/6/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-10	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-10	6/6/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-10	6/6/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-10	6/6/2014	Isopropylbenzene	19	10	1.6	447	ug/L
MKTF-10	6/6/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-10	6/6/2014	Ethylbenzene	**740**	10	1.3	700	ug/L
MKTF-10	6/6/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-10	6/6/2014	n-Propylbenzene	38	10	1.4	660	ug/L
MKTF-10	6/6/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-10	6/6/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-10	6/6/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-10	6/6/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-10	6/6/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-10	6/6/2014	1,3,5-Trimethylbenzene	**65**	10	1.3	60	ug/L
MKTF-10	6/6/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-10	6/6/2014	Toluene	**14000**	200	34	1000	ug/L
MKTF-10	6/6/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-10	6/6/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-10	6/6/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-10	6/6/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-10	6/6/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-10	6/6/2014	cis-1,2-Dichloroethene	33	10	1.2	70	ug/L
MKTF-10	6/6/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-10	6/6/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-10	6/6/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-10	6/6/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-10	6/6/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-10	6/6/2014	Xylenes, Total	**3400**	300	75	620	ug/L
MKTF-10	6/6/2014	MTBE	19	10	2.5	143	ug/L
MKTF-10	6/6/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-10	6/6/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-10	9/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-10	9/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-10	9/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-10	9/18/2014	Benzene	**11000**	500	77	5	ug/L
MKTF-10	9/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-10	9/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-10	9/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-10	9/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-10	9/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-10	9/18/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-10	9/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-10	9/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-10	9/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-10	9/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-10	9/18/2014	1,1-Dichloroethane	**57**	50	14	25	ug/L
MKTF-10	9/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-10	9/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	9/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-10	9/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-10	9/18/2014	2-Butanone	2800	500	71	5565	ug/L
MKTF-10	9/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-10	9/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-10	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-10	9/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-10	9/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-10	9/18/2014	1,2,4-Trimethylbenzene	**500**	50	6.1	56	ug/L
MKTF-10	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-10	9/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-10	9/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-10	9/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-10	9/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-10	9/18/2014	Ethylbenzene	**930**	50	6.4	700	ug/L
MKTF-10	9/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-10	9/18/2014	n-Propylbenzene	68	50	7	660	ug/L
MKTF-10	9/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-10	9/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-10	9/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-10	9/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-10	9/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-10	9/18/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-10	9/18/2014	Toluene	**15000**	500	85	1000	ug/L
MKTF-10	9/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-10	9/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-10	9/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-10	9/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-10	9/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-10	9/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-10	9/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-10	9/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	9/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-10	9/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-10	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-10	9/18/2014	Xylenes, Total	**4000**	75	19	620	ug/L
MKTF-10	9/18/2014	MTBE	ND	50	13	143	ug/L
MKTF-10	9/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-10	9/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-10	11/14/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-10	11/14/2014	Acetone	ND	200	99	14064	ug/L
MKTF-10	11/14/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-10	11/14/2014	Benzene	**11000**	200	31	5	ug/L
MKTF-10	11/14/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-10	11/14/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-10	11/14/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-10	11/14/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-10	11/14/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-10	11/14/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-10	11/14/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-10	11/14/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-10	11/14/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-10	11/14/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-10	11/14/2014	1,1-Dichloroethane	**39**	20	5.7	25	ug/L
MKTF-10	11/14/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-10	11/14/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-10	11/14/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-10	11/14/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-10	11/14/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-10	11/14/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-10	11/14/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-10	11/14/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-10	11/14/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-10	11/14/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-10	11/14/2014	1,2,4-Trimethylbenzene	**1500**	200	25	56	ug/L
MKTF-10	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-10	11/14/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-10	11/14/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-10	11/14/2014	Isopropylbenzene	120	20	3.2	447	ug/L
MKTF-10	11/14/2014	p-Isopropyltoluene	34	20	3.5	NA	ug/L
MKTF-10	11/14/2014	Ethylbenzene	**1700**	200	25	700	ug/L
MKTF-10	11/14/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-10	11/14/2014	n-Propylbenzene	360	20	2.8	660	ug/L
MKTF-10	11/14/2014	n-Butylbenzene	84	60	4.3	1000	ug/L
MKTF-10	11/14/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-10	11/14/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-10	11/14/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-10	11/14/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-10	11/14/2014	1,3,5-Trimethylbenzene	**570**	20	2.6	60	ug/L
MKTF-10	11/14/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-10	11/14/2014	Toluene	**20000**	500	85	1000	ug/L
MKTF-10	11/14/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-10	11/14/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-10	11/14/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-10	11/14/2014	sec-Butylbenzene	40	20	3.1	2000	ug/L
MKTF-10	11/14/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-10	11/14/2014	cis-1,2-Dichloroethene	66	20	2.4	70	ug/L
MKTF-10	11/14/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-10	11/14/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-10	11/14/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-10	11/14/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-10	11/14/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-10	11/14/2014	Xylenes, Total	**7600**	300	75	620	ug/L
MKTF-10	11/14/2014	MTBE	ND	20	5	143	ug/L
MKTF-10	11/14/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-10	11/14/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-10	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	3/16/2015	Acetone	ND	500	47	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	3/16/2015	Benzene	**11000**	500	33	5	ug/L
MKTF-10	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	3/16/2015	1,1-Dichloroethane	**78**	50	20	25	ug/L
MKTF-10	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-10	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	3/16/2015	1,2,4-Trimethylbenzene	**960**	50	8	56	ug/L
MKTF-10	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	3/16/2015	Isopropylbenzene	51	50	7.6	447	ug/L
MKTF-10	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	3/16/2015	Ethylbenzene	**1600**	50	5.1	700	ug/L
MKTF-10	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	3/16/2015	n-Propylbenzene	140	50	8.2	660	ug/L
MKTF-10	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	3/16/2015	1,3,5-Trimethylbenzene	**240**	50	6.1	60	ug/L
MKTF-10	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	3/16/2015	Toluene	**21000**	500	54	1000	ug/L
MKTF-10	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	3/16/2015	Xylenes, Total	**6800**	75	14	620	ug/L
MKTF-10	3/16/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	6/4/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	6/4/2015	Acetone	ND	500	47	14064	ug/L
MKTF-10	6/4/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	6/4/2015	Benzene	**10000**	500	33	5	ug/L
MKTF-10	6/4/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	6/4/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	6/4/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	6/4/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	6/4/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	6/4/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	6/4/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	6/4/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	6/4/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	6/4/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	6/4/2015	1,1-Dichloroethane	**60**	50	20	25	ug/L
MKTF-10	6/4/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	6/4/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	6/4/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	6/4/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	6/4/2015	2-Butanone	1300	500	18	5565	ug/L
MKTF-10	6/4/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/4/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	6/4/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	6/4/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	6/4/2015	1,2,4-Trimethylbenzene	**790**	50	8	56	ug/L
MKTF-10	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	6/4/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	6/4/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	6/4/2015	Isopropylbenzene	54	50	7.6	447	ug/L
MKTF-10	6/4/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	6/4/2015	Ethylbenzene	**1500**	50	5.1	700	ug/L
MKTF-10	6/4/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	6/4/2015	n-Propylbenzene	130	50	8.2	660	ug/L
MKTF-10	6/4/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	6/4/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	6/4/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	6/4/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	6/4/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	6/4/2015	1,3,5-Trimethylbenzene	**210**	50	6.1	60	ug/L
MKTF-10	6/4/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	6/4/2015	Toluene	**20000**	500	54	1000	ug/L
MKTF-10	6/4/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	6/4/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	6/4/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	6/4/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	6/4/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	6/4/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	6/4/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	6/4/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	6/4/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	6/4/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	6/4/2015	Xylenes, Total	**6500**	75	14	620	ug/L
MKTF-10	6/4/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	6/4/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	6/4/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	8/18/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	8/18/2015	Acetone	520	500	47	14064	ug/L
MKTF-10	8/18/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	8/18/2015	Benzene	**9200**	500	33	5	ug/L
MKTF-10	8/18/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	8/18/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	8/18/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	8/18/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	8/18/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	8/18/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	8/18/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	8/18/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	8/18/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	8/18/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	8/18/2015	1,1-Dichloroethane	**67**	50	20	25	ug/L
MKTF-10	8/18/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	8/18/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	8/18/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	8/18/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	8/18/2015	2-Butanone	1600	500	18	5565	ug/L
MKTF-10	8/18/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	8/18/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	8/18/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	8/18/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	8/18/2015	1,2,4-Trimethylbenzene	**880**	50	8	56	ug/L
MKTF-10	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	8/18/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	8/18/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	8/18/2015	Isopropylbenzene	54	50	7.6	447	ug/L
MKTF-10	8/18/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	8/18/2015	Ethylbenzene	**1500**	50	5.1	700	ug/L
MKTF-10	8/18/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	8/18/2015	n-Propylbenzene	140	50	8.2	660	ug/L
MKTF-10	8/18/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	8/18/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	8/18/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	8/18/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	8/18/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	8/18/2015	1,3,5-Trimethylbenzene	**220**	50	6.1	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/18/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	8/18/2015	Toluene	**19000**	500	54	1000	ug/L
MKTF-10	8/18/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	8/18/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	8/18/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	8/18/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	8/18/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	8/18/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-10	8/18/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	8/18/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	8/18/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	8/18/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	8/18/2015	Xylenes, Total	**6500**	75	14	620	ug/L
MKTF-10	8/18/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	8/18/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	8/18/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-10	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-10	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-10	11/3/2015	Benzene	**12000**	500	33	5	ug/L
MKTF-10	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-10	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-10	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-10	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-10	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-10	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-10	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-10	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-10	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-10	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-10	11/3/2015	1,1-Dichloroethane	**78**	50	20	25	ug/L
MKTF-10	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-10	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-10	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-10	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-10	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-10	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-10	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-10	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-10	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-10	11/3/2015	1,2,4-Trimethylbenzene	**850**	50	8	56	ug/L
MKTF-10	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-10	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-10	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-10	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-10	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-10	11/3/2015	Ethylbenzene	**1600**	50	5.1	700	ug/L
MKTF-10	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-10	11/3/2015	n-Propylbenzene	120	50	8.2	660	ug/L
MKTF-10	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-10	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-10	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-10	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-10	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-10	11/3/2015	1,3,5-Trimethylbenzene	**210**	50	6.1	60	ug/L
MKTF-10	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-10	11/3/2015	Toluene	**22000**	500	54	1000	ug/L
MKTF-10	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-10	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-10	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-10	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-10	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-10	11/3/2015	cis-1,2-Dichloroethene	57	50	4	70	ug/L
MKTF-10	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-10	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-10	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-10	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-10	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-10	11/3/2015	Xylenes, Total	**6800**	75	14	620	ug/L
MKTF-10	11/3/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-10	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-10	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-10	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	2/29/2016	Acetone	ND	1000	88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	2/29/2016	Benzene	**11000**	1000	96	5	ug/L
MKTF-10	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-10	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-10	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-10	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-10	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-10	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-10	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-10	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-10	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-10	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-10	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-10	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-10	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	2/29/2016	1,2,4-Trimethylbenzene	**900**	100	10	56	ug/L
MKTF-10	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-10	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-10	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-10	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-10	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	2/29/2016	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-10	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-10	2/29/2016	n-Propylbenzene	120	100	13	660	ug/L
MKTF-10	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-10	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-10	2/29/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L
MKTF-10	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-10	2/29/2016	Toluene	**23000**	1000	89	1000	ug/L
MKTF-10	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-10	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-10	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-10	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-10	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-10	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	2/29/2016	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-10	2/29/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-10	6/9/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-10	6/9/2016	Acetone	290	200	98	14064	ug/L
MKTF-10	6/9/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-10	6/9/2016	Benzene	**15000**	200	19	5	ug/L
MKTF-10	6/9/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-10	6/9/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-10	6/9/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-10	6/9/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-10	6/9/2016	Chloroethane	39	40	3.8	20857	ug/L
MKTF-10	6/9/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-10	6/9/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-10	6/9/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-10	6/9/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-10	6/9/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-10	6/9/2016	1,1-Dichloroethane	**39**	20	2.2	25	ug/L
MKTF-10	6/9/2016	1,1-Dichloroethene	**7.1**	20	2.1	7	ug/L
MKTF-10	6/9/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-10	6/9/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-10	6/9/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-10	6/9/2016	2-Butanone	690	200	15	5565	ug/L
MKTF-10	6/9/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/9/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-10	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-10	6/9/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-10	6/9/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-10	6/9/2016	1,2,4-Trimethylbenzene	**900**	20	2.2	56	ug/L
MKTF-10	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-10	6/9/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-10	6/9/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-10	6/9/2016	Isopropylbenzene	52	20	2.1	447	ug/L
MKTF-10	6/9/2016	p-Isopropyltoluene	8.6	20	2.8	NA	ug/L
MKTF-10	6/9/2016	Ethylbenzene	**1700**	20	2.2	700	ug/L
MKTF-10	6/9/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-10	6/9/2016	n-Propylbenzene	130	20	2.6	660	ug/L
MKTF-10	6/9/2016	n-Butylbenzene	21	60	3.2	1000	ug/L
MKTF-10	6/9/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-10	6/9/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-10	6/9/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-10	6/9/2016	4-Methyl-2-Pentanone	72	200	8.6	1243	ug/L
MKTF-10	6/9/2016	1,3,5-Trimethylbenzene	**200**	20	2.3	60	ug/L
MKTF-10	6/9/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-10	6/9/2016	Toluene	**22000**	500	59	1000	ug/L
MKTF-10	6/9/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-10	6/9/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-10	6/9/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-10	6/9/2016	sec-Butylbenzene	11	20	2.5	2000	ug/L
MKTF-10	6/9/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-10	6/9/2016	cis-1,2-Dichloroethene	23	20	2.5	70	ug/L
MKTF-10	6/9/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-10	6/9/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-10	6/9/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-10	6/9/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-10	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-10	6/9/2016	Xylenes, Total	**8900**	300	73	620	ug/L
MKTF-10	6/9/2016	MTBE	18	20	4.2	143	ug/L
MKTF-10	6/9/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-10	6/9/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-10	9/11/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	9/11/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-10	9/11/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	9/11/2016	Benzene	**16000**	1000	96	5	ug/L
MKTF-10	9/11/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-10	9/11/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	9/11/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	9/11/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	9/11/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-10	9/11/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-10	9/11/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-10	9/11/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	9/11/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	9/11/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-10	9/11/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	9/11/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-10	9/11/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-10	9/11/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-10	9/11/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-10	9/11/2016	2-Butanone	1300	1000	74	5565	ug/L
MKTF-10	9/11/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-10	9/11/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-10	9/11/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	9/11/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	9/11/2016	1,2,4-Trimethylbenzene	**840**	100	11	56	ug/L
MKTF-10	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-10	9/11/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-10	9/11/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-10	9/11/2016	Isopropylbenzene	42	100	10	447	ug/L
MKTF-10	9/11/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	9/11/2016	Ethylbenzene	**1600**	100	11	700	ug/L
MKTF-10	9/11/2016	Styrene	ND	100	11	100	ug/L
MKTF-10	9/11/2016	n-Propylbenzene	120	100	13	660	ug/L
MKTF-10	9/11/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	9/11/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	9/11/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	9/11/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	9/11/2016	4-Methyl-2-Pentanone	120	1000	43	1243	ug/L
MKTF-10	9/11/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-10	9/11/2016	Toluene	**20000**	1000	120	1000	ug/L
MKTF-10	9/11/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	9/11/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	9/11/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	9/11/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-10	9/11/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	9/11/2016	cis-1,2-Dichloroethene	*32*	*100*	12	70	ug/L
MKTF-10	9/11/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	9/11/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	9/11/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-10	9/11/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-10	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	9/11/2016	Xylenes, Total	**7300**	150	37	620	ug/L
MKTF-10	9/11/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	9/11/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-10	9/11/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	11/2/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	11/2/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-10	11/2/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	11/2/2016	Benzene	**17000**	1000	96	5	ug/L
MKTF-10	11/2/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-10	11/2/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	11/2/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	11/2/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	11/2/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-10	11/2/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-10	11/2/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-10	11/2/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	11/2/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-10	11/2/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-10	11/2/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-10	11/2/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-10	11/2/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-10	11/2/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-10	11/2/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-10	11/2/2016	2-Butanone	690	1000	74	5565	ug/L
MKTF-10	11/2/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-10	11/2/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-10	11/2/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	11/2/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	11/2/2016	1,2,4-Trimethylbenzene	**850**	100	11	56	ug/L
MKTF-10	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-10	11/2/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-10	11/2/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-10	11/2/2016	Isopropylbenzene	49	100	10	447	ug/L
MKTF-10	11/2/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	11/2/2016	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-10	11/2/2016	Styrene	ND	100	11	100	ug/L
MKTF-10	11/2/2016	n-Propylbenzene	130	100	13	660	ug/L
MKTF-10	11/2/2016	n-Butylbenzene	32	300	16	1000	ug/L
MKTF-10	11/2/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-10	11/2/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-10	11/2/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	11/2/2016	4-Methyl-2-Pentanone	62	1000	43	1243	ug/L
MKTF-10	11/2/2016	1,3,5-Trimethylbenzene	**200**	100	12	60	ug/L
MKTF-10	11/2/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-10	11/2/2016	Toluene	**22000**	1000	120	1000	ug/L
MKTF-10	11/2/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	11/2/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-10	11/2/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	11/2/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-10	11/2/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	11/2/2016	cis-1,2-Dichloroethene	*26*	*100*	12	70	ug/L
MKTF-10	11/2/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-10	11/2/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	11/2/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-10	11/2/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-10	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	11/2/2016	Xylenes, Total	**8000**	150	37	620	ug/L
MKTF-10	11/2/2016	MTBE	ND	100	21	143	ug/L
MKTF-10	11/2/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-10	11/2/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	3/2/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	3/2/2017	Acetone	ND	1000	88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/2/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-10	3/2/2017	Benzene	**18000**	1000	96	5	ug/L
MKTF-10	3/2/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	3/2/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-10	3/2/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-10	3/2/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-10	3/2/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-10	3/2/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	3/2/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	3/2/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-10	3/2/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	3/2/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	3/2/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
MKTF-10	3/2/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	3/2/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	3/2/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-10	3/2/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	3/2/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	3/2/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	3/2/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-10	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	3/2/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-10	3/2/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	3/2/2017	1,2,4-Trimethylbenzene	**980**	100	10	56	ug/L
MKTF-10	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	3/2/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	3/2/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	3/2/2017	Isopropylbenzene	40	100	9.8	447	ug/L
MKTF-10	3/2/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-10	3/2/2017	Ethylbenzene	**1600**	100	11	700	ug/L
MKTF-10	3/2/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	3/2/2017	n-Propylbenzene	110	100	13	660	ug/L
MKTF-10	3/2/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-10	3/2/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	3/2/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	3/2/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-10	3/2/2017	4-Methyl-2-Pentanone	84	1000	71	1243	ug/L
MKTF-10	3/2/2017	1,3,5-Trimethylbenzene	**220**	100	12	60	ug/L
MKTF-10	3/2/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	3/2/2017	Toluene	**21000**	1000	89	1000	ug/L
MKTF-10	3/2/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	3/2/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-10	3/2/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-10	3/2/2017	sec-Butylbenzene	33	100	10	2000	ug/L
MKTF-10	3/2/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-10	3/2/2017	cis-1,2-Dichloroethene	*43*	*100*	20	70	ug/L
MKTF-10	3/2/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	3/2/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-10	3/2/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	3/2/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-10	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-10	3/2/2017	Xylenes, Total	**7800**	150	32	620	ug/L
MKTF-10	3/2/2017	MTBE	28	100	15	143	ug/L
MKTF-10	3/2/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-10	3/2/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-10	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	6/8/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	6/8/2017	Benzene	**12000**	1000	62	5	ug/L
MKTF-10	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	6/8/2017	Chloroethane	77	200	23	20857	ug/L
MKTF-10	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	6/8/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	6/8/2017	1,2,4-Trimethylbenzene	**930**	100	11	56	ug/L
MKTF-10	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	6/8/2017	Isopropylbenzene	55	100	5.1	447	ug/L
MKTF-10	6/8/2017	p-Isopropyltoluene	12	100	9.6	NA	ug/L
MKTF-10	6/8/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	6/8/2017	n-Propylbenzene	120	100	7.4	660	ug/L
MKTF-10	6/8/2017	n-Butylbenzene	18	300	13	1000	ug/L
MKTF-10	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-10	6/8/2017	1,3,5-Trimethylbenzene	**220**	100	8.7	60	ug/L
MKTF-10	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	6/8/2017	Toluene	**20000**	1000	64	1000	ug/L
MKTF-10	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	6/8/2017	sec-Butylbenzene	11	100	11	2000	ug/L
MKTF-10	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	6/8/2017	cis-1,2-Dichloroethene	*45*	*100*	20	70	ug/L
MKTF-10	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-10	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	6/8/2017	Xylenes, Total	**8200**	150	32	620	ug/L
MKTF-10	6/8/2017	MTBE	ND	100	24	143	ug/L
MKTF-10	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	9/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	9/28/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	9/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	9/28/2017	Benzene	**9500**	100	6.2	5	ug/L
MKTF-10	9/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	9/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	9/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	9/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	9/28/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-10	9/28/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	9/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	9/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	9/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	9/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	9/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	9/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	9/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	9/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	9/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	9/28/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	9/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	9/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	9/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	9/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	9/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	9/28/2017	1,2,4-Trimethylbenzene	**920**	100	11	56	ug/L
MKTF-10	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	9/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	9/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	9/28/2017	Isopropylbenzene	53	100	5.1	447	ug/L
MKTF-10	9/28/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-10	9/28/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	9/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	9/28/2017	n-Propylbenzene	130	100	7.4	660	ug/L
MKTF-10	9/28/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-10	9/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	9/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	9/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	9/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/28/2017	1,3,5-Trimethylbenzene	**210**	100	8.7	60	ug/L
MKTF-10	9/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	9/28/2017	Toluene	**8800**	100	6.4	1000	ug/L
MKTF-10	9/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	9/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	9/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	9/28/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-10	9/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	9/28/2017	cis-1,2-Dichloroethene	*53*	*100*	20	70	ug/L
MKTF-10	9/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	9/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	9/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	9/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	9/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	9/28/2017	Xylenes, Total	**8700**	150	32	620	ug/L
MKTF-10	9/28/2017	MTBE	ND	100	24	143	ug/L
MKTF-10	9/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	9/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	11/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-10	11/28/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-10	11/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-10	11/28/2017	Benzene	**9800**	100	6.2	5	ug/L
MKTF-10	11/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-10	11/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-10	11/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-10	11/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-10	11/28/2017	Chloroethane	67	200	23	20857	ug/L
MKTF-10	11/28/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-10	11/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-10	11/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-10	11/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-10	11/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-10	11/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-10	11/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-10	11/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-10	11/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-10	11/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-10	11/28/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-10	11/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-10	11/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-10	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-10	11/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-10	11/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-10	11/28/2017	1,2,4-Trimethylbenzene	**1000**	100	11	56	ug/L
MKTF-10	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-10	11/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-10	11/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-10	11/28/2017	Isopropylbenzene	68	100	5.1	447	ug/L
MKTF-10	11/28/2017	p-Isopropyltoluene	24	100	9.6	NA	ug/L
MKTF-10	11/28/2017	Ethylbenzene	**1800**	100	9.3	700	ug/L
MKTF-10	11/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-10	11/28/2017	n-Propylbenzene	140	100	7.4	660	ug/L
MKTF-10	11/28/2017	n-Butylbenzene	34	300	13	1000	ug/L
MKTF-10	11/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-10	11/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-10	11/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-10	11/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-10	11/28/2017	1,3,5-Trimethylbenzene	**250**	100	8.7	60	ug/L
MKTF-10	11/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-10	11/28/2017	Toluene	**4700**	100	6.4	1000	ug/L
MKTF-10	11/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-10	11/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-10	11/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-10	11/28/2017	sec-Butylbenzene	23	100	11	2000	ug/L
MKTF-10	11/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-10	11/28/2017	cis-1,2-Dichloroethene	*51*	*100*	20	70	ug/L
MKTF-10	11/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-10	11/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-10	11/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-10	11/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-10	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-10	11/28/2017	Xylenes, Total	**8300**	150	32	620	ug/L
MKTF-10	11/28/2017	MTBE	35	100	24	143	ug/L
MKTF-10	11/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-10	11/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-10	2/14/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Acetone	ND	500	41	14064	ug/L
MKTF-10	2/14/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	2/14/2018	Benzene	**10000**	500	31	5	ug/L
MKTF-10	2/14/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-10	2/14/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	2/14/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	2/14/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-10	2/14/2018	Chloroethane	65	100	12	20857	ug/L
MKTF-10	2/14/2018	Vinyl Chloride	**18**	50	8.9	2	ug/L
MKTF-10	2/14/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-10	2/14/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-10	2/14/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-10	2/14/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-10	2/14/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	2/14/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-10	2/14/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-10	2/14/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	2/14/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-10	2/14/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-10	2/14/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-10	2/14/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-10	2/14/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-10	2/14/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-10	2/14/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	2/14/2018	1,2,4-Trimethylbenzene	**970**	50	5.6	56	ug/L
MKTF-10	2/14/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-10	2/14/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-10	2/14/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-10	2/14/2018	Isopropylbenzene	62	50	2.6	447	ug/L
MKTF-10	2/14/2018	p-Isopropyltoluene	7.5	50	4.8	NA	ug/L
MKTF-10	2/14/2018	Ethylbenzene	**1800**	50	4.7	700	ug/L
MKTF-10	2/14/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-10	2/14/2018	n-Propylbenzene	130	50	3.7	660	ug/L
MKTF-10	2/14/2018	n-Butylbenzene	22	150	6.5	1000	ug/L
MKTF-10	2/14/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	2/14/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-10	2/14/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	2/14/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-10	2/14/2018	1,3,5-Trimethylbenzene	**230**	50	4.4	60	ug/L
MKTF-10	2/14/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-10	2/14/2018	Toluene	**3700**	50	3.2	1000	ug/L
MKTF-10	2/14/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-10	2/14/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-10	2/14/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-10	2/14/2018	sec-Butylbenzene	11	50	5.5	2000	ug/L
MKTF-10	2/14/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-10	2/14/2018	cis-1,2-Dichloroethene	66	50	10	70	ug/L
MKTF-10	2/14/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	2/14/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-10	2/14/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-10	2/14/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-10	2/14/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-10	2/14/2018	Xylenes, Total	**8300**	75	16	620	ug/L
MKTF-10	2/14/2018	MTBE	14	50	12	143	ug/L
MKTF-10	2/14/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-10	2/14/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	5/2/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-10	5/2/2018	Acetone	ND	500	41	14064	ug/L
MKTF-10	5/2/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	5/2/2018	Benzene	**13000**	500	31	5	ug/L
MKTF-10	5/2/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-10	5/2/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	5/2/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	5/2/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-10	5/2/2018	Chloroethane	85	100	12	20857	ug/L
MKTF-10	5/2/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-10	5/2/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-10	5/2/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-10	5/2/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-10	5/2/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-10	5/2/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	5/2/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-10	5/2/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-10	5/2/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	5/2/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-10	5/2/2018	2-Butanone	ND	500	57	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/2/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-10	5/2/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-10	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-10	5/2/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-10	5/2/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	5/2/2018	1,2,4-Trimethylbenzene	**1200**	50	5.6	56	ug/L
MKTF-10	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-10	5/2/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-10	5/2/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-10	5/2/2018	Isopropylbenzene	73	50	2.6	447	ug/L
MKTF-10	5/2/2018	p-Isopropyltoluene	11	50	4.8	NA	ug/L
MKTF-10	5/2/2018	Ethylbenzene	**2100**	50	4.7	700	ug/L
MKTF-10	5/2/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-10	5/2/2018	n-Propylbenzene	170	50	3.7	660	ug/L
MKTF-10	5/2/2018	n-Butylbenzene	20	150	6.5	1000	ug/L
MKTF-10	5/2/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	5/2/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-10	5/2/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	5/2/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-10	5/2/2018	1,3,5-Trimethylbenzene	**270**	50	4.4	60	ug/L
MKTF-10	5/2/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-10	5/2/2018	Toluene	**4900**	50	3.2	1000	ug/L
MKTF-10	5/2/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-10	5/2/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-10	5/2/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-10	5/2/2018	sec-Butylbenzene	14	50	5.5	2000	ug/L
MKTF-10	5/2/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-10	5/2/2018	cis-1,2-Dichloroethene	60	50	10	70	ug/L
MKTF-10	5/2/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	5/2/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-10	5/2/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-10	5/2/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-10	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-10	5/2/2018	Xylenes, Total	**9600**	75	16	620	ug/L
MKTF-10	5/2/2018	MTBE	30	50	12	143	ug/L
MKTF-10	5/2/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-10	5/2/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-10	9/4/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-10	9/4/2018	Acetone	ND	500	39	14064	ug/L
MKTF-10	9/4/2018	Chloroform	ND	50	20	100	ug/L
MKTF-10	9/4/2018	Benzene	**10000**	500	87	5	ug/L
MKTF-10	9/4/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-10	9/4/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-10	9/4/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-10	9/4/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-10	9/4/2018	Chloroethane	63	100	8.2	20857	ug/L
MKTF-10	9/4/2018	Vinyl Chloride	**18**	50	5.5	2	ug/L
MKTF-10	9/4/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-10	9/4/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-10	9/4/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-10	9/4/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-10	9/4/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-10	9/4/2018	1,1-Dichloroethene	**12**	50	6	7	ug/L
MKTF-10	9/4/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-10	9/4/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-10	9/4/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-10	9/4/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-10	9/4/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-10	9/4/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-10	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-10	9/4/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-10	9/4/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-10	9/4/2018	1,2,4-Trimethylbenzene	**1000**	50	13	56	ug/L
MKTF-10	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-10	9/4/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-10	9/4/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-10	9/4/2018	Isopropylbenzene	62	50	11	447	ug/L
MKTF-10	9/4/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-10	9/4/2018	Ethylbenzene	**1800**	50	11	700	ug/L
MKTF-10	9/4/2018	Styrene	ND	50	13	100	ug/L
MKTF-10	9/4/2018	n-Propylbenzene	150	50	12	660	ug/L
MKTF-10	9/4/2018	n-Butylbenzene	14	150	12	1000	ug/L
MKTF-10	9/4/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-10	9/4/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-10	9/4/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-10	9/4/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	1,3,5-Trimethylbenzene	**230**	50	12	60	ug/L
MKTF-10	9/4/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-10	9/4/2018	Toluene	**2400**	50	8.4	1000	ug/L
MKTF-10	9/4/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-10	9/4/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-10	9/4/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-10	9/4/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-10	9/4/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-10	9/4/2018	cis-1,2-Dichloroethene	47	50	19	70	ug/L
MKTF-10	9/4/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-10	9/4/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-10	9/4/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-10	9/4/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-10	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-10	9/4/2018	Xylenes, Total	**8100**	75	32	620	ug/L
MKTF-10	9/4/2018	MTBE	ND	50	16	143	ug/L
MKTF-10	9/4/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-10	9/4/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-10	11/20/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-10	11/20/2018	Acetone	ND	200	15	14064	ug/L
MKTF-10	11/20/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-10	11/20/2018	Benzene	**11000**	200	35	5	ug/L
MKTF-10	11/20/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-10	11/20/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-10	11/20/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-10	11/20/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-10	11/20/2018	Chloroethane	73	40	3.3	20857	ug/L
MKTF-10	11/20/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-10	11/20/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-10	11/20/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-10	11/20/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-10	11/20/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-10	11/20/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-10	11/20/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-10	11/20/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-10	11/20/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-10	11/20/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-10	11/20/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-10	11/20/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-10	11/20/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-10	11/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-10	11/20/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-10	11/20/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-10	11/20/2018	1,2,4-Trimethylbenzene	**1100**	20	5.1	56	ug/L
MKTF-10	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-10	11/20/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-10	11/20/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-10	11/20/2018	Isopropylbenzene	60	20	4.4	447	ug/L
MKTF-10	11/20/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-10	11/20/2018	Ethylbenzene	**1900**	20	4.5	700	ug/L
MKTF-10	11/20/2018	Styrene	ND	20	5	100	ug/L
MKTF-10	11/20/2018	n-Propylbenzene	140	20	4.9	660	ug/L
MKTF-10	11/20/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-10	11/20/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-10	11/20/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-10	11/20/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-10	11/20/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-10	11/20/2018	1,3,5-Trimethylbenzene	**250**	20	4.6	60	ug/L
MKTF-10	11/20/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-10	11/20/2018	Toluene	**1900**	20	3.4	1000	ug/L
MKTF-10	11/20/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-10	11/20/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-10	11/20/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-10	11/20/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-10	11/20/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-10	11/20/2018	cis-1,2-Dichloroethene	58	20	7.5	70	ug/L
MKTF-10	11/20/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-10	11/20/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-10	11/20/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-10	11/20/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-10	11/20/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-10	11/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-10	11/20/2018	Xylenes, Total	**8000**	300	130	620	ug/L
MKTF-10	11/20/2018	MTBE	ND	20	9.1	143	ug/L
MKTF-10	11/20/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-10	11/20/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-10	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-10	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-10	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-10	5/13/2019	1,1-Dichloroethane	**27**	50	7.04293	25	ug/L
MKTF-10	5/13/2019	1,1-Dichloroethene	**13**	50	10.269409	7	ug/L
MKTF-10	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-10	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-10	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-10	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-10	5/13/2019	1,2,4-Trimethylbenzene	**830**	50	10.659955	56	ug/L
MKTF-10	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-10	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-10	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-10	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-10	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-10	5/13/2019	1,3,5-Trimethylbenzene	**220**	50	9.432992	60	ug/L
MKTF-10	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-10	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-10	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-10	5/13/2019	1-Methylnaphthalene	73	200	15.747724	NA	ug/L
MKTF-10	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-10	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-10	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-10	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-10	5/13/2019	2-Methylnaphthalene	**88**	200	17.2688		ug/L
MKTF-10	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-10	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-10	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-10	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-10	5/13/2019	Benzene	**5500**	500	83.319528	5	ug/L
MKTF-10	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-10	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-10	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-10	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-10	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-10	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-10	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-10	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-10	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-10	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-10	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-10	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-10	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-10	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-10	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-10	5/13/2019	Ethylbenzene	**1700**	50	6.61704	700	ug/L
MKTF-10	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-10	5/13/2019	Isopropylbenzene	60	50	9.576114	447	ug/L
MKTF-10	5/13/2019	MTBE	24	50	22.804749	143	ug/L
MKTF-10	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-10	5/13/2019	Naphthalene	**200**	100	13.753567	30	ug/L
MKTF-10	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-10	5/13/2019	n-Propylbenzene	130	50	10.7154	660	ug/L
MKTF-10	5/13/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
MKTF-10	5/13/2019	Styrene	ND	50	9.566168	100	ug/L
MKTF-10	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-10	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-10	5/13/2019	Toluene	900	50	17.521811	1000	ug/L
MKTF-10	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-10	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-10	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-10	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-10	5/13/2019	Vinyl Chloride	**23**	50	8.954964	2	ug/L
MKTF-10	5/13/2019	Xylenes, Total	**7900**	75	22.720747	620	ug/L
MKTF-10	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-10	8/22/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-10	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-10	8/22/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-10	8/22/2019	1,1-Dichloroethane	**37**	10	1.408586	25	ug/L
MKTF-10	8/22/2019	1,1-Dichloroethene	**7.5**	10	2.053882	7	ug/L
MKTF-10	8/22/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-10	8/22/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-10	8/22/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-10	8/22/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-10	8/22/2019	1,2,4-Trimethylbenzene	**850**	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-10	8/22/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-10	8/22/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-10	8/22/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-10	8/22/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-10	8/22/2019	1,3,5-Trimethylbenzene	**190**	10	1.886598	60	ug/L
MKTF-10	8/22/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-10	8/22/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-10	8/22/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-10	8/22/2019	1-Methylnaphthalene	66	40	3.149545	NA	ug/L
MKTF-10	8/22/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-10	8/22/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-10	8/22/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-10	8/22/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-10	8/22/2019	2-Methylnaphthalene	**85**	40	3.45376		ug/L
MKTF-10	8/22/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-10	8/22/2019	p-Isopropyltoluene	9	10	2.172894	NA	ug/L
MKTF-10	8/22/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-10	8/22/2019	Acetone	100	100	11.993964	14064	ug/L
MKTF-10	8/22/2019	Benzene	**4600**	100	16.663906	5	ug/L
MKTF-10	8/22/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-10	8/22/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-10	8/22/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-10	8/22/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-10	8/22/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-10	8/22/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-10	8/22/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-10	8/22/2019	Chloroethane	30	20	1.778026	20857	ug/L
MKTF-10	8/22/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-10	8/22/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-10	8/22/2019	cis-1,2-Dichloroethene	34	10	1.901151	70	ug/L
MKTF-10	8/22/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-10	8/22/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-10	8/22/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-10	8/22/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-10	8/22/2019	Ethylbenzene	**1600**	100	13.23408	700	ug/L
MKTF-10	8/22/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-10	8/22/2019	Isopropylbenzene	57	10	1.915223	447	ug/L
MKTF-10	8/22/2019	MTBE	19	10	4.56095	143	ug/L
MKTF-10	8/22/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-10	8/22/2019	Naphthalene	**180**	20	2.750713	30	ug/L
MKTF-10	8/22/2019	n-Butylbenzene	21	30	2.275695	1000	ug/L
MKTF-10	8/22/2019	n-Propylbenzene	120	10	2.14308	660	ug/L
MKTF-10	8/22/2019	sec-Butylbenzene	11	10	2.477313	2000	ug/L
MKTF-10	8/22/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-10	8/22/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-10	8/22/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-10	8/22/2019	Toluene	660	10	3.504362	1000	ug/L
MKTF-10	8/22/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-10	8/22/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-10	8/22/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-10	8/22/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-10	8/22/2019	Vinyl Chloride	**10**	10	1.790993	2	ug/L
MKTF-10	8/22/2019	Xylenes, Total	**7400**	150	45.441493	620	ug/L
MKTF-10	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-10	10/30/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-10	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-10	10/30/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-10	10/30/2019	1,1-Dichloroethane	**31**	10	1.408586	25	ug/L
MKTF-10	10/30/2019	1,1-Dichloroethene	*5.9*	*10*	2.053882	7	ug/L
MKTF-10	10/30/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-10	10/30/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-10	10/30/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-10	10/30/2019	1,2,4-Trimethylbenzene	**760**	10	2.131991	56	ug/L
MKTF-10	10/30/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-10	10/30/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-10	10/30/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-10	10/30/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-10	10/30/2019	1,3,5-Trimethylbenzene	**200**	10	1.886598	60	ug/L
MKTF-10	10/30/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-10	10/30/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-10	10/30/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-10	10/30/2019	1-Methylnaphthalene	65	40	3.149545	NA	ug/L
MKTF-10	10/30/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-10	10/30/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-10	10/30/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	10/30/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-10	10/30/2019	2-Methylnaphthalene	**80**	40	3.45376		ug/L
MKTF-10	10/30/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-10	10/30/2019	p-Isopropyltoluene	6.6	10	2.172894	NA	ug/L
MKTF-10	10/30/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-10	10/30/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-10	10/30/2019	Benzene	**5500**	100	16.663906	5	ug/L
MKTF-10	10/30/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-10	10/30/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-10	10/30/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-10	10/30/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-10	10/30/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-10	10/30/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-10	10/30/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-10	10/30/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-10	10/30/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-10	10/30/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-10	10/30/2019	cis-1,2-Dichloroethene	39	10	1.901151	70	ug/L
MKTF-10	10/30/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-10	10/30/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-10	10/30/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-10	10/30/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-10	10/30/2019	Ethylbenzene	**1700**	100	13.23408	700	ug/L
MKTF-10	10/30/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-10	10/30/2019	Isopropylbenzene	61	10	1.915223	447	ug/L
MKTF-10	10/30/2019	MTBE	17	10	4.56095	143	ug/L
MKTF-10	10/30/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-10	10/30/2019	Naphthalene	**180**	20	2.750713	30	ug/L
MKTF-10	10/30/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
MKTF-10	10/30/2019	n-Propylbenzene	120	10	2.14308	660	ug/L
MKTF-10	10/30/2019	sec-Butylbenzene	9.9	10	2.477313	2000	ug/L
MKTF-10	10/30/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-10	10/30/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-10	10/30/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-10	10/30/2019	Toluene	570	10	3.504362	1000	ug/L
MKTF-10	10/30/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-10	10/30/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-10	10/30/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-10	10/30/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-10	10/30/2019	Vinyl Chloride	**10**	10	1.790993	2	ug/L
MKTF-10	10/30/2019	Xylenes, Total	**7200**	150	45.441493	620	ug/L
MKTF-10	3/3/2020	Benzene	**4800**	100	23	5	ug/L
MKTF-10	3/3/2020	Ethylbenzene	**1700**	100	21	700	ug/L
MKTF-10	3/3/2020	Xylenes, Total	**8200**	150	55	620	ug/L
MKTF-10	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-10	3/3/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-10	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-10	3/3/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-10	3/3/2020	1,1-Dichloroethane	**47**	10	2.7	25	ug/L
MKTF-10	3/3/2020	1,1-Dichloroethene	*6.6*	*10*	1.3	7	ug/L
MKTF-10	3/3/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-10	3/3/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-10	3/3/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-10	3/3/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
MKTF-10	3/3/2020	1,2,4-Trimethylbenzene	**950**	10	1.2	56	ug/L
MKTF-10	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-10	3/3/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-10	3/3/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-10	3/3/2020	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-10	3/3/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-10	3/3/2020	1,3,5-Trimethylbenzene	**220**	10	1.8	60	ug/L
MKTF-10	3/3/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-10	3/3/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-10	3/3/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	3/3/2020	1-Methylnaphthalene	60	40	8.4	NA	ug/L
MKTF-10	3/3/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-10	3/3/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-10	3/3/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-10	3/3/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-10	3/3/2020	2-Methylnaphthalene	**95**	40	6.9		ug/L
MKTF-10	3/3/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-10	3/3/2020	p-Isopropyltoluene	7.6	10	2	NA	ug/L
MKTF-10	3/3/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-10	3/3/2020	Acetone	40	100	23	14064	ug/L
MKTF-10	3/3/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-10	3/3/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-10	3/3/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-10	3/3/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-10	3/3/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-10	3/3/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-10	3/3/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-10	3/3/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-10	3/3/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-10	3/3/2020	cis-1,2-Dichloroethene	41	10	3.9	70	ug/L
MKTF-10	3/3/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-10	3/3/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-10	3/3/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-10	3/3/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-10	3/3/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-10	3/3/2020	Isopropylbenzene	62	10	1.8	447	ug/L
MKTF-10	3/3/2020	MTBE	9.4	10	3.9	143	ug/L
MKTF-10	3/3/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-10	3/3/2020	n-Butylbenzene	12	30	2.5	1000	ug/L
MKTF-10	3/3/2020	n-Propylbenzene	110	10	1.8	660	ug/L
MKTF-10	3/3/2020	Naphthalene	**170**	20	2.8	30	ug/L
MKTF-10	3/3/2020	sec-Butylbenzene	9.9	10	6.1	2000	ug/L
MKTF-10	3/3/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-10	3/3/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-10	3/3/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-10	3/3/2020	Toluene	650	10	2	1000	ug/L
MKTF-10	3/3/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-10	3/3/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-10	3/3/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-10	3/3/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-10	3/3/2020	Vinyl Chloride	**8.9**	10	2	2	ug/L
MKTF-10	12/18/2020	Acetone	ND	625	250	14064	ug/L
MKTF-10	12/18/2020	Benzene	**4670**	25	9.5	5	ug/L
MKTF-10	12/18/2020	Bromodichloromethane	*ND*	*25*	12.5	1.34	ug/L
MKTF-10	12/18/2020	Bromoform	*ND*	*125*	17.8	32.9	ug/L
MKTF-10	12/18/2020	Bromomethane	*ND*	*25*	24.5	7.54	ug/L
MKTF-10	12/18/2020	2-Butanone	ND	625	65	5565	ug/L
MKTF-10	12/18/2020	Carbon Disulfide	104	25	12.5	810	ug/L
MKTF-10	12/18/2020	Carbon tetrachloride	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	Chlorobenzene	ND	25	12.5	77.6	ug/L
MKTF-10	12/18/2020	Dibromochloromethane	*ND*	*25*	12.5	1.68	ug/L
MKTF-10	12/18/2020	Chloroethane	ND	25	19	20857	ug/L
MKTF-10	12/18/2020	Chloroform	ND	25	15	100	ug/L
MKTF-10	12/18/2020	Chloromethane	*ND*	*25*	20.8	20.32	ug/L
MKTF-10	12/18/2020	2-Chlorotoluene	ND	25	14.3	233	ug/L
MKTF-10	12/18/2020	4-Chlorotoluene	ND	25	14	250	ug/L
MKTF-10	12/18/2020	cis-1,2-Dichloroethene	ND	25	12.5	70	ug/L
MKTF-10	12/18/2020	cis-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-10	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*125*	37.5	0.0033	ug/L
MKTF-10	12/18/2020	1,2-Dibromoethane	*ND*	*25*	12.5	0.05	ug/L
MKTF-10	12/18/2020	Dibromomethane	*ND*	*125*	14.8	8	ug/L
MKTF-10	12/18/2020	1,2-Dichlorobenzene	ND	25	12.5	600	ug/L
MKTF-10	12/18/2020	1,3-Dichlorobenzene	ND	25	13.5	N/A	ug/L
MKTF-10	12/18/2020	1,4-Dichlorobenzene	ND	25	16	75	ug/L
MKTF-10	12/18/2020	Dichlorodifluoromethane	ND	25	21.3	197	ug/L
MKTF-10	12/18/2020	1,1-Dichloroethane	**40**	25	12.5	25	ug/L
MKTF-10	12/18/2020	1,2-Dichloroethane	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	1,1-Dichloroethene	*ND*	*25*	12.5	7	ug/L
MKTF-10	12/18/2020	1,2-Dichloropropane	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	1,3-Dichloropropane	ND	25	12.5	370	ug/L
MKTF-10	12/18/2020	2,2-Dichloropropane	ND	25	12.5	NA	ug/L
MKTF-10	12/18/2020	1,1-Dichloropropene	ND	25	12.5	NA	ug/L
MKTF-10	12/18/2020	Ethylbenzene	**1800**	25	12.5	700	ug/L
MKTF-10	12/18/2020	Hexachlorobutadiene	*ND*	*125*	22.5	1.39	ug/L
MKTF-10	12/18/2020	2-Hexanone	*ND*	*625*	77.5	38	ug/L
MKTF-10	12/18/2020	Isopropylbenzene	70.4	25	13.3	447	ug/L
MKTF-10	12/18/2020	Methylene Chloride	*ND*	*125*	75	5	ug/L
MKTF-10	12/18/2020	1-Methylnaphthalene	ND	125	105	NA	ug/L
MKTF-10	12/18/2020	2-Methylnaphthalene	*ND*	*250*	115		ug/L
MKTF-10	12/18/2020	4-Methyl-2-Pentanone	ND	625	45	1243	ug/L
MKTF-10	12/18/2020	MTBE	ND	25	18.5	143	ug/L
MKTF-10	12/18/2020	Naphthalene	**189**	25	25	30	ug/L
MKTF-10	12/18/2020	n-Butylbenzene	ND	25	19	1000	ug/L
MKTF-10	12/18/2020	n-Propylbenzene	116	25	17.3	660	ug/L
MKTF-10	12/18/2020	p-Isopropyltoluene	ND	25	17.8	NA	ug/L
MKTF-10	12/18/2020	sec-Butylbenzene	ND	25	17.5	2000	ug/L
MKTF-10	12/18/2020	Styrene	ND	25	25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	tert-Butylbenzene	ND	25	15.8	690	ug/L
MKTF-10	12/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*25*	13	5.74	ug/L
MKTF-10	12/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*25*	12.5	10	ug/L
MKTF-10	12/18/2020	Tetrachloroethene	*ND*	*25*	14.5	5	ug/L
MKTF-10	12/18/2020	Toluene	284	25	10.3	1000	ug/L
MKTF-10	12/18/2020	trans-1,2-Dichloroethene	ND	25	12.5	100	ug/L
MKTF-10	12/18/2020	trans-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-10	12/18/2020	1,2,3-Trichlorobenzene	ND	25	17.5	70	ug/L
MKTF-10	12/18/2020	1,2,4-Trichlorobenzene	ND	25	20.5	70	ug/L
MKTF-10	12/18/2020	1,1,1-Trichloroethane	ND	25	12.5	200	ug/L
MKTF-10	12/18/2020	1,1,2-Trichloroethane	*ND*	*125*	12.5	5	ug/L
MKTF-10	12/18/2020	Trichloroethene	*ND*	*25*	12.5	5	ug/L
MKTF-10	12/18/2020	Trichlorofluoromethane	ND	25	13	1137	ug/L
MKTF-10	12/18/2020	1,2,3-Trichloropropane	*ND*	*125*	21	0.0084	ug/L
MKTF-10	12/18/2020	1,2,4-Trimethylbenzene	**1070**	25	20.5	56	ug/L
MKTF-10	12/18/2020	1,3,5-Trimethylbenzene	**246**	25	14	60	ug/L
MKTF-10	12/18/2020	Vinyl Chloride	*ND*	*25*	12.5	2	ug/L
MKTF-10	12/18/2020	Xylenes, Total	**8600**	250	40	620	ug/L
MKTF-11	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-11	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-11	4/11/2014	Benzene	**15000**	500	77	5	ug/L
MKTF-11	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-11	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-11	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-11	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-11	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-11	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-11	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-11	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-11	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-11	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-11	4/11/2014	1,1-Dichloroethane	**65**	50	14	25	ug/L
MKTF-11	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-11	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-11	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-11	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-11	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-11	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-11	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-11	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-11	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-11	4/11/2014	1,2,4-Trimethylbenzene	**410**	50	6.1	56	ug/L
MKTF-11	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-11	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-11	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-11	4/11/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-11	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-11	4/11/2014	Ethylbenzene	**930**	50	6.4	700	ug/L
MKTF-11	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-11	4/11/2014	n-Propylbenzene	97	50	7	660	ug/L
MKTF-11	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-11	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-11	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-11	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-11	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-11	4/11/2014	1,3,5-Trimethylbenzene	**62**	50	6.6	60	ug/L
MKTF-11	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-11	4/11/2014	Toluene	**7600**	500	85	1000	ug/L
MKTF-11	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-11	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-11	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-11	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-11	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-11	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-11	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-11	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-11	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-11	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-11	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-11	4/11/2014	Xylenes, Total	**2200**	75	19	620	ug/L
MKTF-11	4/11/2014	MTBE	**150**	50	13	143	ug/L
MKTF-11	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-11	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-11	6/5/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/5/2014	Acetone	290	50	25	14064	ug/L
MKTF-11	6/5/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-11	6/5/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-11	6/5/2014	1,1,1-Trichloroethane	14	5	0.61	200	ug/L
MKTF-11	6/5/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-11	6/5/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-11	6/5/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-11	6/5/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-11	6/5/2014	Vinyl Chloride	**18**	5	2.3	2	ug/L
MKTF-11	6/5/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-11	6/5/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-11	6/5/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-11	6/5/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-11	6/5/2014	1,1-Dichloroethane	**53**	5	1.4	25	ug/L
MKTF-11	6/5/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-11	6/5/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-11	6/5/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-11	6/5/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-11	6/5/2014	2-Butanone	170	50	7.1	5565	ug/L
MKTF-11	6/5/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-11	6/5/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-11	6/5/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-11	6/5/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-11	6/5/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-11	6/5/2014	1,2,4-Trimethylbenzene	**270**	5	0.61	56	ug/L
MKTF-11	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-11	6/5/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-11	6/5/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-11	6/5/2014	Isopropylbenzene	29	5	0.81	447	ug/L
MKTF-11	6/5/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-11	6/5/2014	Ethylbenzene	**750**	200	25	700	ug/L
MKTF-11	6/5/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-11	6/5/2014	n-Propylbenzene	68	5	0.7	660	ug/L
MKTF-11	6/5/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-11	6/5/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-11	6/5/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-11	6/5/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-11	6/5/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-11	6/5/2014	1,3,5-Trimethylbenzene	52	5	0.66	60	ug/L
MKTF-11	6/5/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-11	6/5/2014	Toluene	**7800**	200	34	1000	ug/L
MKTF-11	6/5/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-11	6/5/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-11	6/5/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-11	6/5/2014	sec-Butylbenzene	7.8	5	0.77	2000	ug/L
MKTF-11	6/5/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-11	6/5/2014	cis-1,2-Dichloroethene	16	5	0.61	70	ug/L
MKTF-11	6/5/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-11	6/5/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-11	6/5/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-11	6/5/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-11	6/5/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-11	6/5/2014	Xylenes, Total	**2200**	300	75	620	ug/L
MKTF-11	6/5/2014	MTBE	96	5	1.3	143	ug/L
MKTF-11	6/5/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-11	6/5/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-11	9/15/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	9/15/2014	Acetone	ND	500	250	14064	ug/L
MKTF-11	9/15/2014	Chloroform	ND	50	16	100	ug/L
MKTF-11	9/15/2014	Benzene	**9500**	500	77	5	ug/L
MKTF-11	9/15/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-11	9/15/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-11	9/15/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-11	9/15/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-11	9/15/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-11	9/15/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-11	9/15/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-11	9/15/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-11	9/15/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-11	9/15/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-11	9/15/2014	1,1-Dichloroethane	**57**	50	14	25	ug/L
MKTF-11	9/15/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-11	9/15/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	9/15/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-11	9/15/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-11	9/15/2014	2-Butanone	ND	500	71	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/15/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-11	9/15/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-11	9/15/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-11	9/15/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-11	9/15/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-11	9/15/2014	1,2,4-Trimethylbenzene	**360**	50	6.1	56	ug/L
MKTF-11	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-11	9/15/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-11	9/15/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-11	9/15/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-11	9/15/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-11	9/15/2014	Ethylbenzene	**720**	50	6.4	700	ug/L
MKTF-11	9/15/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-11	9/15/2014	n-Propylbenzene	69	50	7	660	ug/L
MKTF-11	9/15/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-11	9/15/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-11	9/15/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-11	9/15/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-11	9/15/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-11	9/15/2014	1,3,5-Trimethylbenzene	58	50	6.6	60	ug/L
MKTF-11	9/15/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-11	9/15/2014	Toluene	**7100**	500	85	1000	ug/L
MKTF-11	9/15/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-11	9/15/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-11	9/15/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-11	9/15/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-11	9/15/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-11	9/15/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-11	9/15/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-11	9/15/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-11	9/15/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-11	9/15/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-11	9/15/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-11	9/15/2014	Xylenes, Total	**2000**	75	19	620	ug/L
MKTF-11	9/15/2014	MTBE	83	50	13	143	ug/L
MKTF-11	9/15/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-11	9/15/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-11	11/13/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/13/2014	Acetone	ND	200	99	14064	ug/L
MKTF-11	11/13/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-11	11/13/2014	Benzene	**9500**	200	31	5	ug/L
MKTF-11	11/13/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-11	11/13/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-11	11/13/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-11	11/13/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-11	11/13/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-11	11/13/2014	Vinyl Chloride	**54**	20	9.1	2	ug/L
MKTF-11	11/13/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-11	11/13/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-11	11/13/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-11	11/13/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-11	11/13/2014	1,1-Dichloroethane	**47**	20	5.7	25	ug/L
MKTF-11	11/13/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-11	11/13/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	11/13/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-11	11/13/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-11	11/13/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-11	11/13/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/13/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-11	11/13/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-11	11/13/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-11	11/13/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-11	11/13/2014	1,2,4-Trimethylbenzene	**400**	20	2.5	56	ug/L
MKTF-11	11/13/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-11	11/13/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-11	11/13/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-11	11/13/2014	Isopropylbenzene	29	20	3.2	447	ug/L
MKTF-11	11/13/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-11	11/13/2014	Ethylbenzene	**770**	20	2.5	700	ug/L
MKTF-11	11/13/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-11	11/13/2014	n-Propylbenzene	78	20	2.8	660	ug/L
MKTF-11	11/13/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-11	11/13/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-11	11/13/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-11	11/13/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-11	11/13/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	1,3,5-Trimethylbenzene	60	20	2.6	60	ug/L
MKTF-11	11/13/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-11	11/13/2014	Toluene	**8200**	200	34	1000	ug/L
MKTF-11	11/13/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-11	11/13/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-11	11/13/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-11	11/13/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-11	11/13/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-11	11/13/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-11	11/13/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-11	11/13/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-11	11/13/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-11	11/13/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-11	11/13/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-11	11/13/2014	Xylenes, Total	**2300**	30	7.5	620	ug/L
MKTF-11	11/13/2014	MTBE	80	20	5	143	ug/L
MKTF-11	11/13/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-11	11/13/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-11	3/16/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-11	3/16/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	3/16/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	3/16/2015	Benzene	**10000**	200	13	5	ug/L
MKTF-11	3/16/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	3/16/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	3/16/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	3/16/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	3/16/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	3/16/2015	Vinyl Chloride	**45**	20	2.5	2	ug/L
MKTF-11	3/16/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	3/16/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	3/16/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	3/16/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	3/16/2015	1,1-Dichloroethane	**48**	20	8	25	ug/L
MKTF-11	3/16/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	3/16/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	3/16/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	3/16/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	3/16/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-11	3/16/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	3/16/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	3/16/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	3/16/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	3/16/2015	1,2,4-Trimethylbenzene	**510**	20	3.2	56	ug/L
MKTF-11	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	3/16/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	3/16/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	3/16/2015	Isopropylbenzene	33	20	3	447	ug/L
MKTF-11	3/16/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	3/16/2015	Ethylbenzene	**930**	20	2	700	ug/L
MKTF-11	3/16/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	3/16/2015	n-Propylbenzene	94	20	3.3	660	ug/L
MKTF-11	3/16/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	3/16/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	3/16/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	3/16/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/16/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	3/16/2015	1,3,5-Trimethylbenzene	**110**	20	2.5	60	ug/L
MKTF-11	3/16/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	3/16/2015	Toluene	**11000**	200	22	1000	ug/L
MKTF-11	3/16/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	3/16/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	3/16/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	3/16/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	3/16/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	3/16/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	3/16/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	3/16/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	3/16/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	3/16/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	3/16/2015	Xylenes, Total	**3700**	300	56	620	ug/L
MKTF-11	3/16/2015	MTBE	48	20	3.5	143	ug/L
MKTF-11	3/16/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	3/16/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	6/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	6/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	6/4/2015	Benzene	**12000**	200	13	5	ug/L
MKTF-11	6/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	6/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	6/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	6/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	6/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	6/4/2015	Vinyl Chloride	**34**	20	2.5	2	ug/L
MKTF-11	6/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	6/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	6/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	6/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	6/4/2015	1,1-Dichloroethane	**31**	20	8	25	ug/L
MKTF-11	6/4/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	6/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	6/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	6/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	6/4/2015	2-Butanone	430	200	7.3	5565	ug/L
MKTF-11	6/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	6/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	6/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	6/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	6/4/2015	1,2,4-Trimethylbenzene	**570**	20	3.2	56	ug/L
MKTF-11	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	6/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	6/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	6/4/2015	Isopropylbenzene	36	20	3	447	ug/L
MKTF-11	6/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	6/4/2015	Ethylbenzene	**1200**	20	2	700	ug/L
MKTF-11	6/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	6/4/2015	n-Propylbenzene	99	20	3.3	660	ug/L
MKTF-11	6/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	6/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	6/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	6/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	6/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	6/4/2015	1,3,5-Trimethylbenzene	**140**	20	2.5	60	ug/L
MKTF-11	6/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	6/4/2015	Toluene	**13000**	200	22	1000	ug/L
MKTF-11	6/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	6/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	6/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	6/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	6/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	6/4/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	6/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	6/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	6/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	6/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	6/4/2015	Xylenes, Total	**4900**	30	5.6	620	ug/L
MKTF-11	6/4/2015	MTBE	41	20	3.5	143	ug/L
MKTF-11	6/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	6/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	8/18/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-11	8/18/2015	Acetone	ND	200	19	14064	ug/L
MKTF-11	8/18/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-11	8/18/2015	Benzene	**3700**	200	13	5	ug/L
MKTF-11	8/18/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-11	8/18/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-11	8/18/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-11	8/18/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-11	8/18/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-11	8/18/2015	Vinyl Chloride	**49**	20	2.5	2	ug/L
MKTF-11	8/18/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-11	8/18/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-11	8/18/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-11	8/18/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-11	8/18/2015	1,1-Dichloroethane	**63**	20	8	25	ug/L
MKTF-11	8/18/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-11	8/18/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-11	8/18/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-11	8/18/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-11	8/18/2015	2-Butanone	ND	200	7.3	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/18/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-11	8/18/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-11	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-11	8/18/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-11	8/18/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-11	8/18/2015	1,2,4-Trimethylbenzene	**230**	20	3.2	56	ug/L
MKTF-11	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-11	8/18/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-11	8/18/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-11	8/18/2015	Isopropylbenzene	22	20	3	447	ug/L
MKTF-11	8/18/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-11	8/18/2015	Ethylbenzene	500	20	2	700	ug/L
MKTF-11	8/18/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-11	8/18/2015	n-Propylbenzene	51	20	3.3	660	ug/L
MKTF-11	8/18/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-11	8/18/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-11	8/18/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-11	8/18/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-11	8/18/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-11	8/18/2015	1,3,5-Trimethylbenzene	46	20	2.5	60	ug/L
MKTF-11	8/18/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-11	8/18/2015	Toluene	**4200**	200	22	1000	ug/L
MKTF-11	8/18/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-11	8/18/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-11	8/18/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-11	8/18/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-11	8/18/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-11	8/18/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-11	8/18/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-11	8/18/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	8/18/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-11	8/18/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-11	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	8/18/2015	Xylenes, Total	**1500**	30	5.6	620	ug/L
MKTF-11	8/18/2015	MTBE	82	20	3.5	143	ug/L
MKTF-11	8/18/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	8/18/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-11	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-11	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-11	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-11	11/3/2015	Benzene	**11000**	500	33	5	ug/L
MKTF-11	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-11	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-11	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-11	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-11	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-11	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-11	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-11	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-11	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-11	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-11	11/3/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-11	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-11	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-11	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-11	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-11	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-11	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-11	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-11	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-11	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-11	11/3/2015	1,2,4-Trimethylbenzene	**570**	50	8	56	ug/L
MKTF-11	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-11	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-11	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-11	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-11	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-11	11/3/2015	Ethylbenzene	**960**	50	5.1	700	ug/L
MKTF-11	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-11	11/3/2015	n-Propylbenzene	87	50	8.2	660	ug/L
MKTF-11	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-11	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-11	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-11	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/3/2015	1,3,5-Trimethylbenzene	**140**	50	6.1	60	ug/L
MKTF-11	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-11	11/3/2015	Toluene	**13000**	500	54	1000	ug/L
MKTF-11	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-11	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-11	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-11	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-11	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-11	11/3/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-11	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-11	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-11	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-11	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-11	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-11	11/3/2015	Xylenes, Total	**3900**	75	14	620	ug/L
MKTF-11	11/3/2015	MTBE	56	50	8.7	143	ug/L
MKTF-11	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-11	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-11	2/29/2016	Acetone	ND	1000	88	14064	ug/L
MKTF-11	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-11	2/29/2016	Benzene	**5100**	100	9.6	5	ug/L
MKTF-11	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-11	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-11	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-11	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-11	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-11	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-11	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-11	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-11	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-11	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-11	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-11	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-11	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-11	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-11	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-11	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-11	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-11	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-11	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-11	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-11	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-11	2/29/2016	1,2,4-Trimethylbenzene	**310**	100	10	56	ug/L
MKTF-11	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-11	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-11	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-11	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-11	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-11	2/29/2016	Ethylbenzene	670	100	11	700	ug/L
MKTF-11	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-11	2/29/2016	n-Propylbenzene	ND	100	13	660	ug/L
MKTF-11	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-11	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-11	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-11	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-11	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-11	2/29/2016	1,3,5-Trimethylbenzene	*ND*	*100*	12	60	ug/L
MKTF-11	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-11	2/29/2016	Toluene	**6400**	100	8.9	1000	ug/L
MKTF-11	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-11	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-11	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-11	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-11	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-11	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-11	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-11	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-11	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-11	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-11	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-11	2/29/2016	Xylenes, Total	**2200**	150	32	620	ug/L
MKTF-11	2/29/2016	MTBE	120	100	21	143	ug/L
MKTF-11	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-11	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-11	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/9/2016	Acetone	200	100	49	14064	ug/L
MKTF-11	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-11	6/9/2016	Benzene	**4500**	100	9.6	5	ug/L
MKTF-11	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-11	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-11	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-11	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-11	6/9/2016	Chloroethane	24	20	1.9	20857	ug/L
MKTF-11	6/9/2016	Vinyl Chloride	**62**	10	2	2	ug/L
MKTF-11	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-11	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-11	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-11	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-11	6/9/2016	1,1-Dichloroethane	**64**	10	1.1	25	ug/L
MKTF-11	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-11	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-11	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-11	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-11	6/9/2016	2-Butanone	170	100	7.4	5565	ug/L
MKTF-11	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-11	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-11	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-11	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-11	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-11	6/9/2016	1,2,4-Trimethylbenzene	**290**	10	1.1	56	ug/L
MKTF-11	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-11	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-11	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-11	6/9/2016	Isopropylbenzene	22	10	1	447	ug/L
MKTF-11	6/9/2016	p-Isopropyltoluene	3.5	10	1.4	NA	ug/L
MKTF-11	6/9/2016	Ethylbenzene	570	10	1.1	700	ug/L
MKTF-11	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-11	6/9/2016	n-Propylbenzene	58	10	1.3	660	ug/L
MKTF-11	6/9/2016	n-Butylbenzene	9.5	30	1.6	1000	ug/L
MKTF-11	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-11	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-11	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-11	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-11	6/9/2016	1,3,5-Trimethylbenzene	52	10	1.2	60	ug/L
MKTF-11	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-11	6/9/2016	Toluene	**5800**	100	12	1000	ug/L
MKTF-11	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-11	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-11	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-11	6/9/2016	sec-Butylbenzene	8.9	10	1.2	2000	ug/L
MKTF-11	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-11	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-11	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-11	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-11	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-11	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-11	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-11	6/9/2016	Xylenes, Total	**1800**	15	3.7	620	ug/L
MKTF-11	6/9/2016	MTBE	78	10	2.1	143	ug/L
MKTF-11	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-11	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-11	9/11/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-11	9/11/2016	Acetone	ND	500	250	14064	ug/L
MKTF-11	9/11/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-11	9/11/2016	Benzene	**4500**	50	4.8	5	ug/L
MKTF-11	9/11/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-11	9/11/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-11	9/11/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-11	9/11/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-11	9/11/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-11	9/11/2016	Vinyl Chloride	**56**	50	9.8	2	ug/L
MKTF-11	9/11/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-11	9/11/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-11	9/11/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-11	9/11/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-11	9/11/2016	1,1-Dichloroethane	**53**	50	5.4	25	ug/L
MKTF-11	9/11/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-11	9/11/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-11	9/11/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-11	9/11/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-11	9/11/2016	2-Butanone	270	500	37	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/11/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-11	9/11/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-11	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-11	9/11/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-11	9/11/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	9/11/2016	1,2,4-Trimethylbenzene	**250**	50	5.5	56	ug/L
MKTF-11	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-11	9/11/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-11	9/11/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-11	9/11/2016	Isopropylbenzene	19	50	5.2	447	ug/L
MKTF-11	9/11/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-11	9/11/2016	Ethylbenzene	530	50	5.6	700	ug/L
MKTF-11	9/11/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-11	9/11/2016	n-Propylbenzene	58	50	6.6	660	ug/L
MKTF-11	9/11/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-11	9/11/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-11	9/11/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-11	9/11/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-11	9/11/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
MKTF-11	9/11/2016	1,3,5-Trimethylbenzene	45	50	5.8	60	ug/L
MKTF-11	9/11/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-11	9/11/2016	Toluene	**4800**	50	5.9	1000	ug/L
MKTF-11	9/11/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-11	9/11/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-11	9/11/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	9/11/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-11	9/11/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-11	9/11/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-11	9/11/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-11	9/11/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	9/11/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-11	9/11/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-11	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-11	9/11/2016	Xylenes, Total	**1600**	75	18	620	ug/L
MKTF-11	9/11/2016	MTBE	81	50	11	143	ug/L
MKTF-11	9/11/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-11	9/11/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-11	11/2/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-11	11/2/2016	Acetone	ND	500	250	14064	ug/L
MKTF-11	11/2/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-11	11/2/2016	Benzene	**3900**	50	4.8	5	ug/L
MKTF-11	11/2/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-11	11/2/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-11	11/2/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-11	11/2/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-11	11/2/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-11	11/2/2016	Vinyl Chloride	**51**	50	9.8	2	ug/L
MKTF-11	11/2/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-11	11/2/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-11	11/2/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-11	11/2/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-11	11/2/2016	1,1-Dichloroethane	**57**	50	5.4	25	ug/L
MKTF-11	11/2/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-11	11/2/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-11	11/2/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-11	11/2/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-11	11/2/2016	2-Butanone	220	500	37	5565	ug/L
MKTF-11	11/2/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-11	11/2/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-11	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-11	11/2/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-11	11/2/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	11/2/2016	1,2,4-Trimethylbenzene	**250**	50	5.5	56	ug/L
MKTF-11	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-11	11/2/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-11	11/2/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-11	11/2/2016	Isopropylbenzene	21	50	5.2	447	ug/L
MKTF-11	11/2/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-11	11/2/2016	Ethylbenzene	520	50	5.6	700	ug/L
MKTF-11	11/2/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-11	11/2/2016	n-Propylbenzene	56	50	6.6	660	ug/L
MKTF-11	11/2/2016	n-Butylbenzene	17	150	8	1000	ug/L
MKTF-11	11/2/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-11	11/2/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-11	11/2/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-11	11/2/2016	4-Methyl-2-Pentanone	26	500	21	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	1,3,5-Trimethylbenzene	49	50	5.8	60	ug/L
MKTF-11	11/2/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-11	11/2/2016	Toluene	**4500**	50	5.9	1000	ug/L
MKTF-11	11/2/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-11	11/2/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-11	11/2/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/2/2016	sec-Butylbenzene	17	50	6.2	2000	ug/L
MKTF-11	11/2/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-11	11/2/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-11	11/2/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-11	11/2/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-11	11/2/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-11	11/2/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-11	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-11	11/2/2016	Xylenes, Total	**1600**	75	18	620	ug/L
MKTF-11	11/2/2016	MTBE	71	50	11	143	ug/L
MKTF-11	11/2/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-11	11/2/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-11	3/2/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	3/2/2017	Acetone	ND	200	18	14064	ug/L
MKTF-11	3/2/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-11	3/2/2017	Benzene	**3900**	200	19	5	ug/L
MKTF-11	3/2/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	3/2/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-11	3/2/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-11	3/2/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-11	3/2/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-11	3/2/2017	Vinyl Chloride	**54**	20	3.6	2	ug/L
MKTF-11	3/2/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	3/2/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-11	3/2/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	3/2/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	3/2/2017	1,1-Dichloroethane	**55**	20	2.1	25	ug/L
MKTF-11	3/2/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	3/2/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	3/2/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-11	3/2/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	3/2/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-11	3/2/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	3/2/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	3/2/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	3/2/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	3/2/2017	1,2,4-Trimethylbenzene	**330**	20	2.1	56	ug/L
MKTF-11	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	3/2/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	3/2/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	3/2/2017	Isopropylbenzene	23	20	2	447	ug/L
MKTF-11	3/2/2017	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-11	3/2/2017	Ethylbenzene	590	20	2.2	700	ug/L
MKTF-11	3/2/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	3/2/2017	n-Propylbenzene	67	20	2.6	660	ug/L
MKTF-11	3/2/2017	n-Butylbenzene	4.3	60	3.2	1000	ug/L
MKTF-11	3/2/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	3/2/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	3/2/2017	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-11	3/2/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-11	3/2/2017	1,3,5-Trimethylbenzene	58	20	2.3	60	ug/L
MKTF-11	3/2/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	3/2/2017	Toluene	**3400**	200	18	1000	ug/L
MKTF-11	3/2/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	3/2/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L
MKTF-11	3/2/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-11	3/2/2017	sec-Butylbenzene	14	20	2	2000	ug/L
MKTF-11	3/2/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-11	3/2/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	3/2/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	3/2/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-11	3/2/2017	2-Hexanone	*21*	*200*	13	38	ug/L
MKTF-11	3/2/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-11	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-11	3/2/2017	Xylenes, Total	**1600**	30	6.5	620	ug/L
MKTF-11	3/2/2017	MTBE	65	20	3	143	ug/L
MKTF-11	3/2/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-11	3/2/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-11	6/8/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/8/2017	Acetone	50	200	16	14064	ug/L
MKTF-11	6/8/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	6/8/2017	Benzene	**4500**	200	12	5	ug/L
MKTF-11	6/8/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	6/8/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	6/8/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	6/8/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	6/8/2017	Chloroethane	24	40	4.7	20857	ug/L
MKTF-11	6/8/2017	Vinyl Chloride	**42**	20	3.6	2	ug/L
MKTF-11	6/8/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	6/8/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	6/8/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	6/8/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	6/8/2017	1,1-Dichloroethane	**53**	20	8	25	ug/L
MKTF-11	6/8/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	6/8/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	6/8/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	6/8/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	6/8/2017	2-Butanone	130	200	23	5565	ug/L
MKTF-11	6/8/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	6/8/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	6/8/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	6/8/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	6/8/2017	1,2,4-Trimethylbenzene	**210**	20	2.3	56	ug/L
MKTF-11	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	6/8/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	6/8/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	6/8/2017	Isopropylbenzene	18	20	1	447	ug/L
MKTF-11	6/8/2017	p-Isopropyltoluene	2.9	20	1.9	NA	ug/L
MKTF-11	6/8/2017	Ethylbenzene	470	20	1.9	700	ug/L
MKTF-11	6/8/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	6/8/2017	n-Propylbenzene	42	20	1.5	660	ug/L
MKTF-11	6/8/2017	n-Butylbenzene	6.7	60	2.6	1000	ug/L
MKTF-11	6/8/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	6/8/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	6/8/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	6/8/2017	4-Methyl-2-Pentanone	16	200	14	1243	ug/L
MKTF-11	6/8/2017	1,3,5-Trimethylbenzene	44	20	1.7	60	ug/L
MKTF-11	6/8/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	6/8/2017	Toluene	**4700**	200	13	1000	ug/L
MKTF-11	6/8/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	6/8/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	6/8/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	6/8/2017	sec-Butylbenzene	8.6	20	2.2	2000	ug/L
MKTF-11	6/8/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	6/8/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	6/8/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	6/8/2017	Pentafluorobenzene	**200**	0	0		None
MKTF-11	6/8/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	6/8/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	6/8/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	6/8/2017	Xylenes, Total	**1500**	30	6.4	620	ug/L
MKTF-11	6/8/2017	MTBE	50	20	4.8	143	ug/L
MKTF-11	6/8/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	6/8/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	9/26/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	9/26/2017	Acetone	42	200	16	14064	ug/L
MKTF-11	9/26/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	9/26/2017	Benzene	**10000**	200	12	5	ug/L
MKTF-11	9/26/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	9/26/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	9/26/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	9/26/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	9/26/2017	Chloroethane	17	40	4.7	20857	ug/L
MKTF-11	9/26/2017	Vinyl Chloride	**22**	20	3.6	2	ug/L
MKTF-11	9/26/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	9/26/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	9/26/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	9/26/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	9/26/2017	1,1-Dichloroethane	25	20	8	25	ug/L
MKTF-11	9/26/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	9/26/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	9/26/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	9/26/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/26/2017	2-Butanone	200	200	23	5565	ug/L
MKTF-11	9/26/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	9/26/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	9/26/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	9/26/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	9/26/2017	1,2,4-Trimethylbenzene	**340**	20	2.3	56	ug/L
MKTF-11	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	9/26/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	9/26/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	9/26/2017	Isopropylbenzene	25	20	1	447	ug/L
MKTF-11	9/26/2017	p-Isopropyltoluene	4	20	1.9	NA	ug/L
MKTF-11	9/26/2017	Ethylbenzene	**810**	20	1.9	700	ug/L
MKTF-11	9/26/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	9/26/2017	n-Propylbenzene	65	20	1.5	660	ug/L
MKTF-11	9/26/2017	n-Butylbenzene	8.4	60	2.6	1000	ug/L
MKTF-11	9/26/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	9/26/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	9/26/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	9/26/2017	4-Methyl-2-Pentanone	47	200	14	1243	ug/L
MKTF-11	9/26/2017	1,3,5-Trimethylbenzene	**72**	20	1.7	60	ug/L
MKTF-11	9/26/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	9/26/2017	Toluene	**10000**	200	13	1000	ug/L
MKTF-11	9/26/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	9/26/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	9/26/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	9/26/2017	sec-Butylbenzene	8.8	20	2.2	2000	ug/L
MKTF-11	9/26/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	9/26/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	9/26/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	9/26/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	9/26/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	9/26/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	9/26/2017	Xylenes, Total	**2800**	30	6.4	620	ug/L
MKTF-11	9/26/2017	MTBE	54	20	4.8	143	ug/L
MKTF-11	9/26/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	9/26/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	11/28/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	11/28/2017	Acetone	94	200	16	14064	ug/L
MKTF-11	11/28/2017	Chloroform	ND	20	8	100	ug/L
MKTF-11	11/28/2017	Benzene	**9900**	200	12	5	ug/L
MKTF-11	11/28/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	11/28/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	11/28/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	11/28/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	11/28/2017	Chloroethane	23	40	4.7	20857	ug/L
MKTF-11	11/28/2017	Vinyl Chloride	**30**	20	3.6	2	ug/L
MKTF-11	11/28/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	11/28/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	11/28/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	11/28/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	11/28/2017	1,1-Dichloroethane	**40**	20	8	25	ug/L
MKTF-11	11/28/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	11/28/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	11/28/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	11/28/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	11/28/2017	2-Butanone	150	200	23	5565	ug/L
MKTF-11	11/28/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	11/28/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	11/28/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	11/28/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	11/28/2017	1,2,4-Trimethylbenzene	**330**	20	2.3	56	ug/L
MKTF-11	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	11/28/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	11/28/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	11/28/2017	Isopropylbenzene	27	20	1	447	ug/L
MKTF-11	11/28/2017	p-Isopropyltoluene	5.6	20	1.9	NA	ug/L
MKTF-11	11/28/2017	Ethylbenzene	**840**	20	1.9	700	ug/L
MKTF-11	11/28/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-11	11/28/2017	n-Propylbenzene	68	20	1.5	660	ug/L
MKTF-11	11/28/2017	n-Butylbenzene	10	60	2.6	1000	ug/L
MKTF-11	11/28/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	11/28/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	11/28/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	4-Methyl-2-Pentanone	29	200	14	1243	ug/L
MKTF-11	11/28/2017	1,3,5-Trimethylbenzene	**63**	20	1.7	60	ug/L
MKTF-11	11/28/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	11/28/2017	Toluene	**8800**	200	13	1000	ug/L
MKTF-11	11/28/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	11/28/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	11/28/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	11/28/2017	sec-Butylbenzene	12	20	2.2	2000	ug/L
MKTF-11	11/28/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	11/28/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	11/28/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	11/28/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	11/28/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	11/28/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	11/28/2017	Xylenes, Total	**2600**	30	6.4	620	ug/L
MKTF-11	11/28/2017	MTBE	68	20	4.8	143	ug/L
MKTF-11	11/28/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	11/28/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	2/8/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	2/8/2018	Acetone	110	200	16	14064	ug/L
MKTF-11	2/8/2018	Chloroform	ND	20	8	100	ug/L
MKTF-11	2/8/2018	Benzene	**13000**	200	12	5	ug/L
MKTF-11	2/8/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	2/8/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	2/8/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	2/8/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	2/8/2018	Chloroethane	23	40	4.7	20857	ug/L
MKTF-11	2/8/2018	Vinyl Chloride	**25**	20	3.6	2	ug/L
MKTF-11	2/8/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	2/8/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	2/8/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	2/8/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	2/8/2018	1,1-Dichloroethane	**31**	20	8	25	ug/L
MKTF-11	2/8/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	2/8/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	2/8/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	2/8/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	2/8/2018	2-Butanone	150	200	23	5565	ug/L
MKTF-11	2/8/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	2/8/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	2/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	2/8/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	2/8/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	2/8/2018	1,2,4-Trimethylbenzene	**370**	20	2.3	56	ug/L
MKTF-11	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	2/8/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	2/8/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	2/8/2018	Isopropylbenzene	29	20	1	447	ug/L
MKTF-11	2/8/2018	p-Isopropyltoluene	4.6	20	1.9	NA	ug/L
MKTF-11	2/8/2018	Ethylbenzene	**1000**	20	1.9	700	ug/L
MKTF-11	2/8/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-11	2/8/2018	n-Propylbenzene	70	20	1.5	660	ug/L
MKTF-11	2/8/2018	n-Butylbenzene	9.4	60	2.6	1000	ug/L
MKTF-11	2/8/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	2/8/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	2/8/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	2/8/2018	4-Methyl-2-Pentanone	33	200	14	1243	ug/L
MKTF-11	2/8/2018	1,3,5-Trimethylbenzene	**68**	20	1.7	60	ug/L
MKTF-11	2/8/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	2/8/2018	Toluene	**12000**	200	13	1000	ug/L
MKTF-11	2/8/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	2/8/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	2/8/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	2/8/2018	sec-Butylbenzene	9.7	20	2.2	2000	ug/L
MKTF-11	2/8/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	2/8/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	2/8/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	2/8/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	2/8/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	2/8/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	2/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	2/8/2018	Xylenes, Total	**3100**	30	6.4	620	ug/L
MKTF-11	2/8/2018	MTBE	59	20	4.8	143	ug/L
MKTF-11	2/8/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	2/8/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/2/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-11	5/2/2018	Acetone	71	200	16	14064	ug/L
MKTF-11	5/2/2018	Chloroform	ND	20	8	100	ug/L
MKTF-11	5/2/2018	Benzene	**13000**	200	12	5	ug/L
MKTF-11	5/2/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-11	5/2/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-11	5/2/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-11	5/2/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-11	5/2/2018	Chloroethane	24	40	4.7	20857	ug/L
MKTF-11	5/2/2018	Vinyl Chloride	**28**	20	3.6	2	ug/L
MKTF-11	5/2/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-11	5/2/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-11	5/2/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-11	5/2/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-11	5/2/2018	1,1-Dichloroethane	**32**	20	8	25	ug/L
MKTF-11	5/2/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-11	5/2/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-11	5/2/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-11	5/2/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-11	5/2/2018	2-Butanone	130	200	23	5565	ug/L
MKTF-11	5/2/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-11	5/2/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-11	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-11	5/2/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-11	5/2/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-11	5/2/2018	1,2,4-Trimethylbenzene	**500**	20	2.3	56	ug/L
MKTF-11	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-11	5/2/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-11	5/2/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-11	5/2/2018	Isopropylbenzene	35	20	1	447	ug/L
MKTF-11	5/2/2018	p-Isopropyltoluene	4.5	20	1.9	NA	ug/L
MKTF-11	5/2/2018	Ethylbenzene	**1200**	20	1.9	700	ug/L
MKTF-11	5/2/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-11	5/2/2018	n-Propylbenzene	96	20	1.5	660	ug/L
MKTF-11	5/2/2018	n-Butylbenzene	10	60	2.6	1000	ug/L
MKTF-11	5/2/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-11	5/2/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-11	5/2/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-11	5/2/2018	4-Methyl-2-Pentanone	21	200	14	1243	ug/L
MKTF-11	5/2/2018	1,3,5-Trimethylbenzene	**94**	20	1.7	60	ug/L
MKTF-11	5/2/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-11	5/2/2018	Toluene	**12000**	200	13	1000	ug/L
MKTF-11	5/2/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-11	5/2/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-11	5/2/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-11	5/2/2018	sec-Butylbenzene	11	20	2.2	2000	ug/L
MKTF-11	5/2/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-11	5/2/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-11	5/2/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-11	5/2/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-11	5/2/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-11	5/2/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-11	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-11	5/2/2018	Xylenes, Total	**3800**	30	6.4	620	ug/L
MKTF-11	5/2/2018	MTBE	75	20	4.8	143	ug/L
MKTF-11	5/2/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-11	5/2/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-11	9/4/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-11	9/4/2018	Acetone	ND	500	39	14064	ug/L
MKTF-11	9/4/2018	Chloroform	ND	50	20	100	ug/L
MKTF-11	9/4/2018	Benzene	**10000**	500	87	5	ug/L
MKTF-11	9/4/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-11	9/4/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-11	9/4/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-11	9/4/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-11	9/4/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-11	9/4/2018	Vinyl Chloride	**27**	50	5.5	2	ug/L
MKTF-11	9/4/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-11	9/4/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-11	9/4/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-11	9/4/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-11	9/4/2018	1,1-Dichloroethane	**29**	50	20	25	ug/L
MKTF-11	9/4/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-11	9/4/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-11	9/4/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-11	9/4/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-11	9/4/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-11	9/4/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-11	9/4/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-11	9/4/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-11	9/4/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-11	9/4/2018	1,2,4-Trimethylbenzene	**370**	50	13	56	ug/L
MKTF-11	9/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-11	9/4/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-11	9/4/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-11	9/4/2018	Isopropylbenzene	24	50	11	447	ug/L
MKTF-11	9/4/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-11	9/4/2018	Ethylbenzene	**810**	50	11	700	ug/L
MKTF-11	9/4/2018	Styrene	ND	50	13	100	ug/L
MKTF-11	9/4/2018	n-Propylbenzene	73	50	12	660	ug/L
MKTF-11	9/4/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	9/4/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-11	9/4/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-11	9/4/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-11	9/4/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-11	9/4/2018	1,3,5-Trimethylbenzene	**63**	50	12	60	ug/L
MKTF-11	9/4/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-11	9/4/2018	Toluene	**5700**	500	84	1000	ug/L
MKTF-11	9/4/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-11	9/4/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-11	9/4/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	9/4/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-11	9/4/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-11	9/4/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-11	9/4/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-11	9/4/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-11	9/4/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-11	9/4/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-11	9/4/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-11	9/4/2018	Xylenes, Total	**2500**	75	32	620	ug/L
MKTF-11	9/4/2018	MTBE	64	50	16	143	ug/L
MKTF-11	9/4/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-11	9/4/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-11	11/20/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-11	11/20/2018	Acetone	ND	500	38	14064	ug/L
MKTF-11	11/20/2018	Chloroform	ND	50	12	100	ug/L
MKTF-11	11/20/2018	Benzene	**11000**	200	35	5	ug/L
MKTF-11	11/20/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
MKTF-11	11/20/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
MKTF-11	11/20/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
MKTF-11	11/20/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-11	11/20/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-11	11/20/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
MKTF-11	11/20/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-11	11/20/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-11	11/20/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-11	11/20/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-11	11/20/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
MKTF-11	11/20/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-11	11/20/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
MKTF-11	11/20/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
MKTF-11	11/20/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
MKTF-11	11/20/2018	2-Butanone	ND	500	71	5565	ug/L
MKTF-11	11/20/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-11	11/20/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-11	11/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-11	11/20/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-11	11/20/2018	2-Chlorotoluene	ND	50	13	233	ug/L
MKTF-11	11/20/2018	1,2,4-Trimethylbenzene	**310**	50	13	56	ug/L
MKTF-11	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-11	11/20/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-11	11/20/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-11	11/20/2018	Isopropylbenzene	ND	50	11	447	ug/L
MKTF-11	11/20/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-11	11/20/2018	Ethylbenzene	470	50	11	700	ug/L
MKTF-11	11/20/2018	Styrene	ND	50	13	100	ug/L
MKTF-11	11/20/2018	n-Propylbenzene	ND	50	12	660	ug/L
MKTF-11	11/20/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-11	11/20/2018	4-Chlorotoluene	ND	50	14	250	ug/L
MKTF-11	11/20/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-11	11/20/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/20/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-11	11/20/2018	1,3,5-Trimethylbenzene	**70**	50	12	60	ug/L
MKTF-11	11/20/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-11	11/20/2018	Toluene	**4700**	50	8.4	1000	ug/L
MKTF-11	11/20/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-11	11/20/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-11	11/20/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-11	11/20/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-11	11/20/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-11	11/20/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-11	11/20/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
MKTF-11	11/20/2018	Pentafluorobenzene	**500**	0	0		None
MKTF-11	11/20/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-11	11/20/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-11	11/20/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
MKTF-11	11/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-11	11/20/2018	Xylenes, Total	**2500**	75	32	620	ug/L
MKTF-11	11/20/2018	MTBE	71	50	23	143	ug/L
MKTF-11	11/20/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-11	11/20/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-11	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-11	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-11	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-11	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-11	5/13/2019	1,1-Dichloroethane	**55**	50	7.04293	25	ug/L
MKTF-11	5/13/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
MKTF-11	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-11	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-11	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-11	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-11	5/13/2019	1,2,4-Trimethylbenzene	**260**	50	10.659955	56	ug/L
MKTF-11	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-11	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-11	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-11	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-11	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-11	5/13/2019	1,3,5-Trimethylbenzene	53	50	9.432992	60	ug/L
MKTF-11	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-11	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-11	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-11	5/13/2019	1-Methylnaphthalene	17	200	15.747724	NA	ug/L
MKTF-11	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-11	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-11	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-11	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-11	5/13/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
MKTF-11	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-11	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-11	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-11	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-11	5/13/2019	Benzene	**6100**	500	83.319528	5	ug/L
MKTF-11	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-11	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-11	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-11	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-11	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-11	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-11	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-11	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-11	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-11	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-11	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-11	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-11	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-11	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-11	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-11	5/13/2019	Ethylbenzene	570	50	6.61704	700	ug/L
MKTF-11	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-11	5/13/2019	Isopropylbenzene	19	50	9.576114	447	ug/L
MKTF-11	5/13/2019	MTBE	46	50	22.804749	143	ug/L
MKTF-11	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-11	5/13/2019	Naphthalene	**54**	100	13.753567	30	ug/L
MKTF-11	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-11	5/13/2019	n-Propylbenzene	47	50	10.7154	660	ug/L
MKTF-11	5/13/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
MKTF-11	5/13/2019	Styrene	ND	50	9.566168	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-11	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-11	5/13/2019	Toluene	**3400**	50	17.521811	1000	ug/L
MKTF-11	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-11	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-11	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-11	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-11	5/13/2019	Vinyl Chloride	**44**	50	8.954964	2	ug/L
MKTF-11	5/13/2019	Xylenes, Total	**1800**	75	22.720747	620	ug/L
MKTF-11	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-11	8/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-11	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-11	8/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-11	8/21/2019	1,1-Dichloroethane	**39**	10	1.408586	25	ug/L
MKTF-11	8/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-11	8/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-11	8/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-11	8/21/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-11	8/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-11	8/21/2019	1,2,4-Trimethylbenzene	**270**	10	2.131991	56	ug/L
MKTF-11	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-11	8/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-11	8/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-11	8/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-11	8/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-11	8/21/2019	1,3,5-Trimethylbenzene	44	10	1.886598	60	ug/L
MKTF-11	8/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-11	8/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-11	8/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-11	8/21/2019	1-Methylnaphthalene	15	40	3.149545	NA	ug/L
MKTF-11	8/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-11	8/21/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-11	8/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-11	8/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-11	8/21/2019	2-Methylnaphthalene	**17**	40	3.45376		ug/L
MKTF-11	8/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-11	8/21/2019	p-Isopropyltoluene	4.2	10	2.172894	NA	ug/L
MKTF-11	8/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-11	8/21/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-11	8/21/2019	Benzene	**9100**	100	16.663906	5	ug/L
MKTF-11	8/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-11	8/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-11	8/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-11	8/21/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-11	8/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-11	8/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-11	8/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-11	8/21/2019	Chloroethane	23	20	1.778026	20857	ug/L
MKTF-11	8/21/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-11	8/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-11	8/21/2019	cis-1,2-Dichloroethene	6.9	10	1.901151	70	ug/L
MKTF-11	8/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-11	8/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-11	8/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-11	8/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-11	8/21/2019	Ethylbenzene	670	10	1.323408	700	ug/L
MKTF-11	8/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-11	8/21/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-11	8/21/2019	MTBE	28	10	4.56095	143	ug/L
MKTF-11	8/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-11	8/21/2019	Naphthalene	**50**	20	2.750713	30	ug/L
MKTF-11	8/21/2019	n-Butylbenzene	13	30	2.275695	1000	ug/L
MKTF-11	8/21/2019	n-Propylbenzene	47	10	2.14308	660	ug/L
MKTF-11	8/21/2019	sec-Butylbenzene	8.2	10	2.477313	2000	ug/L
MKTF-11	8/21/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-11	8/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-11	8/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-11	8/21/2019	Toluene	**1400**	100	35.043621	1000	ug/L
MKTF-11	8/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-11	8/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-11	8/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-11	8/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-11	8/21/2019	Vinyl Chloride	**28**	10	1.790993	2	ug/L
MKTF-11	8/21/2019	Xylenes, Total	**1700**	15	4.544149	620	ug/L
MKTF-11	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-11	10/30/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-11	10/30/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-11	10/30/2019	1,1-Dichloroethane	**27**	20	2.817172	25	ug/L
MKTF-11	10/30/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-11	10/30/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-11	10/30/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-11	10/30/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-11	10/30/2019	1,2,4-Trimethylbenzene	**300**	20	4.263982	56	ug/L
MKTF-11	10/30/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-11	10/30/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-11	10/30/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-11	10/30/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-11	10/30/2019	1,3,5-Trimethylbenzene	55	20	3.773197	60	ug/L
MKTF-11	10/30/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-11	10/30/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-11	10/30/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-11	10/30/2019	1-Methylnaphthalene	14	80	6.29909	NA	ug/L
MKTF-11	10/30/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-11	10/30/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-11	10/30/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-11	10/30/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-11	10/30/2019	2-Methylnaphthalene	**13**	80	6.90752		ug/L
MKTF-11	10/30/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-11	10/30/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-11	10/30/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-11	10/30/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-11	10/30/2019	Benzene	**13000**	200	33.327811	5	ug/L
MKTF-11	10/30/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-11	10/30/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-11	10/30/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-11	10/30/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-11	10/30/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-11	10/30/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-11	10/30/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-11	10/30/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-11	10/30/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-11	10/30/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-11	10/30/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-11	10/30/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-11	10/30/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-11	10/30/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-11	10/30/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-11	10/30/2019	Ethylbenzene	**850**	20	2.646816	700	ug/L
MKTF-11	10/30/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-11	10/30/2019	Isopropylbenzene	25	20	3.830445	447	ug/L
MKTF-11	10/30/2019	MTBE	41	20	9.1219	143	ug/L
MKTF-11	10/30/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-11	10/30/2019	Naphthalene	**67**	40	5.501427	30	ug/L
MKTF-11	10/30/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-11	10/30/2019	n-Propylbenzene	58	20	4.28616	660	ug/L
MKTF-11	10/30/2019	sec-Butylbenzene	6.8	20	4.954626	2000	ug/L
MKTF-11	10/30/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-11	10/30/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-11	10/30/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-11	10/30/2019	Toluene	**1500**	20	7.008724	1000	ug/L
MKTF-11	10/30/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-11	10/30/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-11	10/30/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-11	10/30/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-11	10/30/2019	Vinyl Chloride	**23**	20	3.581986	2	ug/L
MKTF-11	10/30/2019	Xylenes, Total	**2200**	30	9.088299	620	ug/L
MKTF-11	3/3/2020	Benzene	**6000**	200	45	5	ug/L
MKTF-11	3/3/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-11	3/3/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-11	3/3/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-11	3/3/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-11	3/3/2020	1,1-Dichloroethane	**35**	20	5.5	25	ug/L
MKTF-11	3/3/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
MKTF-11	3/3/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-11	3/3/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-11	3/3/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-11	3/3/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-11	3/3/2020	1,2,4-Trimethylbenzene	**180**	20	2.4	56	ug/L
MKTF-11	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-11	3/3/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-11	3/3/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-11	3/3/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-11	3/3/2020	1,3,5-Trimethylbenzene	35	20	3.6	60	ug/L
MKTF-11	3/3/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-11	3/3/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-11	3/3/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-11	3/3/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-11	3/3/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-11	3/3/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-11	3/3/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-11	3/3/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-11	3/3/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-11	3/3/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-11	3/3/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-11	3/3/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-11	3/3/2020	Acetone	ND	200	47	14064	ug/L
MKTF-11	3/3/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-11	3/3/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-11	3/3/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-11	3/3/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-11	3/3/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-11	3/3/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-11	3/3/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-11	3/3/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-11	3/3/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-11	3/3/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-11	3/3/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-11	3/3/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-11	3/3/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-11	3/3/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-11	3/3/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-11	3/3/2020	Ethylbenzene	320	20	4.3	700	ug/L
MKTF-11	3/3/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-11	3/3/2020	Isopropylbenzene	12	20	3.7	447	ug/L
MKTF-11	3/3/2020	MTBE	59	20	7.9	143	ug/L
MKTF-11	3/3/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-11	3/3/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-11	3/3/2020	n-Propylbenzene	21	20	3.6	660	ug/L
MKTF-11	3/3/2020	Naphthalene	*30*	*40*	5.6	30	ug/L
MKTF-11	3/3/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-11	3/3/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-11	3/3/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-11	3/3/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-11	3/3/2020	Toluene	860	20	4	1000	ug/L
MKTF-11	3/3/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-11	3/3/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-11	3/3/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-11	3/3/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-11	3/3/2020	Vinyl Chloride	**27**	20	3.9	2	ug/L
MKTF-11	3/3/2020	Xylenes, Total	**1100**	30	11	620	ug/L
MKTF-13	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-13	3/15/2017	Acetone	30	100	8.8	14064	ug/L
MKTF-13	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-13	3/15/2017	Benzene	**3000**	100	9.6	5	ug/L
MKTF-13	3/15/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-13	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-13	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-13	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-13	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-13	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-13	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-13	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-13	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-13	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-13	3/15/2017	1,1-Dichloroethane	ND	10	1	25	ug/L
MKTF-13	3/15/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-13	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-13	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-13	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-13	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-13	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-13	3/15/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-13	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-13	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-13	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-13	3/15/2017	1,2,4-Trimethylbenzene	**680**	10	1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-13	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-13	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-13	3/15/2017	Isopropylbenzene	40	10	0.98	447	ug/L
MKTF-13	3/15/2017	p-Isopropyltoluene	9	10	1.4	NA	ug/L
MKTF-13	3/15/2017	Ethylbenzene	**870**	10	1.1	700	ug/L
MKTF-13	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-13	3/15/2017	n-Propylbenzene	83	10	1.3	660	ug/L
MKTF-13	3/15/2017	n-Butylbenzene	15	30	1.6	1000	ug/L
MKTF-13	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-13	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-13	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-13	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-13	3/15/2017	1,3,5-Trimethylbenzene	**170**	10	1.2	60	ug/L
MKTF-13	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-13	3/15/2017	Toluene	210	10	0.89	1000	ug/L
MKTF-13	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-13	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-13	3/15/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-13	3/15/2017	sec-Butylbenzene	10	10	1	2000	ug/L
MKTF-13	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-13	3/15/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-13	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-13	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-13	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-13	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-13	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-13	3/15/2017	Xylenes, Total	**4000**	150	32	620	ug/L
MKTF-13	3/15/2017	MTBE	**2300**	100	15	143	ug/L
MKTF-13	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-13	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-13	5/10/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-13	5/10/2018	Acetone	37	50	4.1	14064	ug/L
MKTF-13	5/10/2018	Chloroform	ND	5	2	100	ug/L
MKTF-13	5/10/2018	Benzene	**4800**	50	3.1	5	ug/L
MKTF-13	5/10/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-13	5/10/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-13	5/10/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-13	5/10/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-13	5/10/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-13	5/10/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-13	5/10/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-13	5/10/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-13	5/10/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-13	5/10/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-13	5/10/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-13	5/10/2018	1,1-Dichloroethene	2.5	5	0.4	7	ug/L
MKTF-13	5/10/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-13	5/10/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-13	5/10/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-13	5/10/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-13	5/10/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-13	5/10/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-13	5/10/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-13	5/10/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-13	5/10/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-13	5/10/2018	1,2,4-Trimethylbenzene	**690**	50	5.6	56	ug/L
MKTF-13	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-13	5/10/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-13	5/10/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-13	5/10/2018	Isopropylbenzene	40	5	0.26	447	ug/L
MKTF-13	5/10/2018	p-Isopropyltoluene	8.8	5	0.48	NA	ug/L
MKTF-13	5/10/2018	Ethylbenzene	**870**	50	4.7	700	ug/L
MKTF-13	5/10/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-13	5/10/2018	n-Propylbenzene	75	5	0.37	660	ug/L
MKTF-13	5/10/2018	n-Butylbenzene	13	15	0.65	1000	ug/L
MKTF-13	5/10/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-13	5/10/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-13	5/10/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-13	5/10/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-13	5/10/2018	1,3,5-Trimethylbenzene	**180**	5	0.44	60	ug/L
MKTF-13	5/10/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-13	5/10/2018	Toluene	150	5	0.32	1000	ug/L
MKTF-13	5/10/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-13	5/10/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-13	5/10/2018	Tetrachloroethene	ND	5	0.65	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/10/2018	sec-Butylbenzene	8.9	5	0.55	2000	ug/L
MKTF-13	5/10/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-13	5/10/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-13	5/10/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-13	5/10/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-13	5/10/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-13	5/10/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-13	5/10/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-13	5/10/2018	Xylenes, Total	**4000**	75	16	620	ug/L
MKTF-13	5/10/2018	MTBE	**2000**	50	12	143	ug/L
MKTF-13	5/10/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-13	5/10/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-13	8/30/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-13	8/30/2018	Acetone	17	200	16	14064	ug/L
MKTF-13	8/30/2018	Chloroform	ND	20	8	100	ug/L
MKTF-13	8/30/2018	Benzene	**3500**	200	35	5	ug/L
MKTF-13	8/30/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-13	8/30/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-13	8/30/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-13	8/30/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-13	8/30/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-13	8/30/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-13	8/30/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-13	8/30/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-13	8/30/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-13	8/30/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-13	8/30/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-13	8/30/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-13	8/30/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-13	8/30/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-13	8/30/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-13	8/30/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-13	8/30/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-13	8/30/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-13	8/30/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-13	8/30/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-13	8/30/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-13	8/30/2018	1,2,4-Trimethylbenzene	**580**	20	5.1	56	ug/L
MKTF-13	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-13	8/30/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-13	8/30/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-13	8/30/2018	Isopropylbenzene	29	20	4.4	447	ug/L
MKTF-13	8/30/2018	p-Isopropyltoluene	6.5	20	4.8	NA	ug/L
MKTF-13	8/30/2018	Ethylbenzene	650	20	4.5	700	ug/L
MKTF-13	8/30/2018	Styrene	ND	20	5	100	ug/L
MKTF-13	8/30/2018	n-Propylbenzene	59	20	4.9	660	ug/L
MKTF-13	8/30/2018	n-Butylbenzene	7	60	5	1000	ug/L
MKTF-13	8/30/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-13	8/30/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-13	8/30/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-13	8/30/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-13	8/30/2018	1,3,5-Trimethylbenzene	**150**	20	4.6	60	ug/L
MKTF-13	8/30/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-13	8/30/2018	Toluene	120	20	3.4	1000	ug/L
MKTF-13	8/30/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-13	8/30/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-13	8/30/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-13	8/30/2018	sec-Butylbenzene	5.8	20	4	2000	ug/L
MKTF-13	8/30/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-13	8/30/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-13	8/30/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-13	8/30/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-13	8/30/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-13	8/30/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-13	8/30/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-13	8/30/2018	Xylenes, Total	**3200**	30	13	620	ug/L
MKTF-13	8/30/2018	MTBE	**1200**	20	6.4	143	ug/L
MKTF-13	8/30/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-13	8/30/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-13	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-13	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-13	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-13	11/28/2018	Benzene	**4500**	200	35	5	ug/L
MKTF-13	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-13	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-13	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-13	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-13	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-13	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-13	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-13	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-13	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-13	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-13	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-13	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-13	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-13	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-13	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-13	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-13	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-13	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-13	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-13	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-13	11/28/2018	1,2,4-Trimethylbenzene	**520**	20	5.1	56	ug/L
MKTF-13	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-13	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-13	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-13	11/28/2018	Isopropylbenzene	22	20	4.4	447	ug/L
MKTF-13	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-13	11/28/2018	Ethylbenzene	530	20	4.5	700	ug/L
MKTF-13	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-13	11/28/2018	n-Propylbenzene	40	20	4.9	660	ug/L
MKTF-13	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-13	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-13	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-13	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-13	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-13	11/28/2018	1,3,5-Trimethylbenzene	**140**	20	4.6	60	ug/L
MKTF-13	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-13	11/28/2018	Toluene	130	20	3.4	1000	ug/L
MKTF-13	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-13	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-13	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-13	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-13	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-13	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-13	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-13	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-13	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-13	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-13	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-13	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-13	11/28/2018	Xylenes, Total	**2800**	30	13	620	ug/L
MKTF-13	11/28/2018	MTBE	**1400**	20	9.1	143	ug/L
MKTF-13	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-13	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-13	3/26/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	3/26/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	3/26/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	3/26/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	3/26/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	3/26/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	3/26/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	3/26/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	3/26/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-13	3/26/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	3/26/2019	1,2,4-Trimethylbenzene	**590**	20	4.263982	56	ug/L
MKTF-13	3/26/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-13	3/26/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	3/26/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	3/26/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	3/26/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	3/26/2019	1,3,5-Trimethylbenzene	**180**	20	3.773197	60	ug/L
MKTF-13	3/26/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	3/26/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	3/26/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	3/26/2019	1-Methylnaphthalene	120	80	6.29909	NA	ug/L
MKTF-13	3/26/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	3/26/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	3/26/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	3/26/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	2-Methylnaphthalene	**140**	80	6.90752		ug/L
MKTF-13	3/26/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	3/26/2019	p-Isopropyltoluene	9	20	4.345787	NA	ug/L
MKTF-13	3/26/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	3/26/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	3/26/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-13	3/26/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	3/26/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	3/26/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	3/26/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	3/26/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-13	3/26/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	3/26/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	3/26/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	3/26/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	3/26/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	3/26/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	3/26/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	3/26/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	3/26/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	3/26/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	3/26/2019	Ethylbenzene	600	20	2.646816	700	ug/L
MKTF-13	3/26/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	3/26/2019	Isopropylbenzene	33	20	3.830445	447	ug/L
MKTF-13	3/26/2019	MTBE	**440**	20	9.1219	143	ug/L
MKTF-13	3/26/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	3/26/2019	Naphthalene	**210**	40	5.501427	30	ug/L
MKTF-13	3/26/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	3/26/2019	n-Propylbenzene	60	20	4.28616	660	ug/L
MKTF-13	3/26/2019	sec-Butylbenzene	8.8	20	4.954626	2000	ug/L
MKTF-13	3/26/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	3/26/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	3/26/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	3/26/2019	Toluene	140	20	7.008724	1000	ug/L
MKTF-13	3/26/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	3/26/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	3/26/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	3/26/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	3/26/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	3/26/2019	Xylenes, Total	**3500**	30	9.088299	620	ug/L
MKTF-13	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	5/9/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	5/9/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-13	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	5/9/2019	1,2,4-Trimethylbenzene	**390**	20	4.263982	56	ug/L
MKTF-13	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-13	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	5/9/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-13	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	5/9/2019	1-Methylnaphthalene	110	80	6.29909	NA	ug/L
MKTF-13	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-13	5/9/2019	2-Methylnaphthalene	**120**	80	6.90752		ug/L
MKTF-13	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	5/9/2019	p-Isopropyltoluene	5.3	20	4.345787	NA	ug/L
MKTF-13	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	5/9/2019	Benzene	**3200**	200	33.327811	5	ug/L
MKTF-13	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	5/9/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	5/9/2019	Ethylbenzene	320	20	2.646816	700	ug/L
MKTF-13	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	5/9/2019	Isopropylbenzene	14	20	3.830445	447	ug/L
MKTF-13	5/9/2019	MTBE	**480**	20	9.1219	143	ug/L
MKTF-13	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	5/9/2019	Naphthalene	**170**	40	5.501427	30	ug/L
MKTF-13	5/9/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	5/9/2019	n-Propylbenzene	21	20	4.28616	660	ug/L
MKTF-13	5/9/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-13	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	5/9/2019	Toluene	120	20	7.008724	1000	ug/L
MKTF-13	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	5/9/2019	Xylenes, Total	**2600**	30	9.088299	620	ug/L
MKTF-13	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-13	10/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-13	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-13	10/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-13	10/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-13	10/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-13	10/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-13	10/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-13	10/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-13	10/29/2019	1,2,4-Trimethylbenzene	**350**	20	4.263982	56	ug/L
MKTF-13	10/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-13	10/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-13	10/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-13	10/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-13	10/29/2019	1,3,5-Trimethylbenzene	**100**	20	3.773197	60	ug/L
MKTF-13	10/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-13	10/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-13	10/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-13	10/29/2019	1-Methylnaphthalene	81	80	6.29909	NA	ug/L
MKTF-13	10/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-13	10/29/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-13	10/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-13	10/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-13	10/29/2019	2-Methylnaphthalene	**93**	80	6.90752		ug/L
MKTF-13	10/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-13	10/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-13	10/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-13	10/29/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-13	10/29/2019	Benzene	**4700**	200	33.327811	5	ug/L
MKTF-13	10/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-13	10/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-13	10/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-13	10/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-13	10/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-13	10/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-13	10/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-13	10/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-13	10/29/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-13	10/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-13	10/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-13	10/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-13	10/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-13	10/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-13	10/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-13	10/29/2019	Ethylbenzene	600	20	2.646816	700	ug/L
MKTF-13	10/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-13	10/29/2019	Isopropylbenzene	25	20	3.830445	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	10/29/2019	MTBE	**330**	20	9.1219	143	ug/L
MKTF-13	10/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-13	10/29/2019	Naphthalene	**150**	40	5.501427	30	ug/L
MKTF-13	10/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-13	10/29/2019	n-Propylbenzene	41	20	4.28616	660	ug/L
MKTF-13	10/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-13	10/29/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-13	10/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-13	10/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-13	10/29/2019	Toluene	110	20	7.008724	1000	ug/L
MKTF-13	10/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-13	10/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-13	10/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-13	10/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-13	10/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-13	10/29/2019	Xylenes, Total	**2600**	30	9.088299	620	ug/L
MKTF-15	4/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-15	4/10/2014	Acetone	ND	100	49	14064	ug/L
MKTF-15	4/10/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-15	4/10/2014	Benzene	**16000**	200	31	5	ug/L
MKTF-15	4/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-15	4/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-15	4/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-15	4/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-15	4/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-15	4/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-15	4/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-15	4/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-15	4/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-15	4/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-15	4/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-15	4/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-15	4/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-15	4/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-15	4/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-15	4/10/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-15	4/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-15	4/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-15	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-15	4/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-15	4/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-15	4/10/2014	1,2,4-Trimethylbenzene	**460**	10	1.2	56	ug/L
MKTF-15	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-15	4/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-15	4/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-15	4/10/2014	Isopropylbenzene	53	10	1.6	447	ug/L
MKTF-15	4/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-15	4/10/2014	Ethylbenzene	**1200**	200	25	700	ug/L
MKTF-15	4/10/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-15	4/10/2014	n-Propylbenzene	94	10	1.4	660	ug/L
MKTF-15	4/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-15	4/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-15	4/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-15	4/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-15	4/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-15	4/10/2014	1,3,5-Trimethylbenzene	**110**	10	1.3	60	ug/L
MKTF-15	4/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-15	4/10/2014	Toluene	**2400**	200	34	1000	ug/L
MKTF-15	4/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-15	4/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-15	4/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-15	4/10/2014	sec-Butylbenzene	12	10	1.5	2000	ug/L
MKTF-15	4/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-15	4/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-15	4/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-15	4/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-15	4/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-15	4/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-15	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-15	4/10/2014	Xylenes, Total	**6100**	300	75	620	ug/L
MKTF-15	4/10/2014	MTBE	**270**	10	2.5	143	ug/L
MKTF-15	4/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-15	4/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-15	6/5/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-15	6/5/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-15	6/5/2014	1,2,4-Trimethylbenzene	**330**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-15	6/5/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-15	6/5/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-15	6/5/2014	Isopropylbenzene	59	5	0.81	447	ug/L
MKTF-15	6/5/2014	p-Isopropyltoluene	5.9	5	0.88	NA	ug/L
MKTF-15	6/5/2014	Ethylbenzene	**1300**	200	25	700	ug/L
MKTF-15	6/5/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-15	6/5/2014	n-Propylbenzene	97	5	0.7	660	ug/L
MKTF-15	6/5/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-15	6/5/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-15	6/5/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-15	6/5/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-15	6/5/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-15	6/5/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-15	6/5/2014	Acetone	290	50	25	14064	ug/L
MKTF-15	6/5/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-15	6/5/2014	Benzene	**12000**	200	31	5	ug/L
MKTF-15	6/5/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-15	6/5/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-15	6/5/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-15	6/5/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-15	6/5/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-15	6/5/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-15	6/5/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-15	6/5/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-15	6/5/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-15	6/5/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-15	6/5/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-15	6/5/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-15	6/5/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-15	6/5/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-15	6/5/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-15	6/5/2014	2-Butanone	62	50	7.1	5565	ug/L
MKTF-15	6/5/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-15	6/5/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-15	6/5/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-15	6/5/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-15	6/5/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-15	6/5/2014	sec-Butylbenzene	12	5	0.77	2000	ug/L
MKTF-15	6/5/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-15	6/5/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-15	6/5/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-15	6/5/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-15	6/5/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-15	6/5/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-15	6/5/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-15	6/5/2014	Xylenes, Total	**3700**	300	75	620	ug/L
MKTF-15	6/5/2014	MTBE	**270**	5	1.3	143	ug/L
MKTF-15	6/5/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-15	6/5/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-15	6/5/2014	1,3,5-Trimethylbenzene	**95**	5	0.66	60	ug/L
MKTF-15	6/5/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-15	6/5/2014	Toluene	**8800**	200	34	1000	ug/L
MKTF-15	6/5/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-15	9/17/2014	n-Propylbenzene	140	50	7	660	ug/L
MKTF-15	9/17/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-15	9/17/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-15	9/17/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-15	9/17/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-15	9/17/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-15	9/17/2014	1,3,5-Trimethylbenzene	**180**	50	6.6	60	ug/L
MKTF-15	9/17/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-15	9/17/2014	Toluene	**7000**	500	85	1000	ug/L
MKTF-15	9/17/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-15	9/17/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-15	9/17/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-15	9/17/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-15	9/17/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-15	9/17/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-15	9/17/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-15	9/17/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-15	9/17/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-15	9/17/2014	Acetone	ND	500	250	14064	ug/L
MKTF-15	9/17/2014	Chloroform	ND	50	16	100	ug/L
MKTF-15	9/17/2014	Benzene	**11000**	500	77	5	ug/L
MKTF-15	9/17/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/17/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-15	9/17/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-15	9/17/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-15	9/17/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-15	9/17/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-15	9/17/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-15	9/17/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-15	9/17/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-15	9/17/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-15	9/17/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-15	9/17/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-15	9/17/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-15	9/17/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-15	9/17/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-15	9/17/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-15	9/17/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-15	9/17/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-15	9/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-15	9/17/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-15	9/17/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-15	9/17/2014	1,2,4-Trimethylbenzene	**660**	50	6.1	56	ug/L
MKTF-15	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-15	9/17/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-15	9/17/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-15	9/17/2014	Isopropylbenzene	68	50	8.1	447	ug/L
MKTF-15	9/17/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-15	9/17/2014	Ethylbenzene	**1400**	50	6.4	700	ug/L
MKTF-15	9/17/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-15	9/17/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-15	9/17/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-15	9/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-15	9/17/2014	Xylenes, Total	**4300**	75	19	620	ug/L
MKTF-15	9/17/2014	MTBE	**380**	50	13	143	ug/L
MKTF-15	9/17/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-15	9/17/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-15	9/11/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-15	9/11/2016	Acetone	1200	500	250	14064	ug/L
MKTF-15	9/11/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-15	9/11/2016	Benzene	**24000**	500	48	5	ug/L
MKTF-15	9/11/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-15	9/11/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-15	9/11/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-15	9/11/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-15	9/11/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-15	9/11/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-15	9/11/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-15	9/11/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-15	9/11/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-15	9/11/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-15	9/11/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-15	9/11/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-15	9/11/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-15	9/11/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-15	9/11/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-15	9/11/2016	2-Butanone	1300	500	37	5565	ug/L
MKTF-15	9/11/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-15	9/11/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-15	9/11/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-15	9/11/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-15	9/11/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	9/11/2016	1,2,4-Trimethylbenzene	**570**	50	5.5	56	ug/L
MKTF-15	9/11/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-15	9/11/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-15	9/11/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-15	9/11/2016	Isopropylbenzene	120	50	5.2	447	ug/L
MKTF-15	9/11/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-15	9/11/2016	Ethylbenzene	**2000**	50	5.6	700	ug/L
MKTF-15	9/11/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-15	9/11/2016	n-Propylbenzene	140	50	6.6	660	ug/L
MKTF-15	9/11/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-15	9/11/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-15	9/11/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-15	9/11/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-15	9/11/2016	4-Methyl-2-Pentanone	83	500	21	1243	ug/L
MKTF-15	9/11/2016	1,3,5-Trimethylbenzene	**170**	50	5.8	60	ug/L
MKTF-15	9/11/2016	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/11/2016	Toluene	**16000**	500	59	1000	ug/L
MKTF-15	9/11/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-15	9/11/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-15	9/11/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	9/11/2016	sec-Butylbenzene	7.8	50	6.2	2000	ug/L
MKTF-15	9/11/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-15	9/11/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-15	9/11/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-15	9/11/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-15	9/11/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-15	9/11/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-15	9/11/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-15	9/11/2016	Xylenes, Total	**7300**	75	18	620	ug/L
MKTF-15	9/11/2016	MTBE	93	50	11	143	ug/L
MKTF-15	9/11/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-15	9/11/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-15	11/2/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-15	11/2/2016	Acetone	400	500	250	14064	ug/L
MKTF-15	11/2/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-15	11/2/2016	Benzene	**20000**	500	48	5	ug/L
MKTF-15	11/2/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-15	11/2/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-15	11/2/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-15	11/2/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-15	11/2/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-15	11/2/2016	Vinyl Chloride	**24**	50	9.8	2	ug/L
MKTF-15	11/2/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-15	11/2/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-15	11/2/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-15	11/2/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-15	11/2/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-15	11/2/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-15	11/2/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-15	11/2/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-15	11/2/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-15	11/2/2016	2-Butanone	660	500	37	5565	ug/L
MKTF-15	11/2/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-15	11/2/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-15	11/2/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-15	11/2/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-15	11/2/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	11/2/2016	1,2,4-Trimethylbenzene	**630**	50	5.5	56	ug/L
MKTF-15	11/2/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-15	11/2/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-15	11/2/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-15	11/2/2016	Isopropylbenzene	120	50	5.2	447	ug/L
MKTF-15	11/2/2016	p-Isopropyltoluene	17	50	7	NA	ug/L
MKTF-15	11/2/2016	Ethylbenzene	**2100**	50	5.6	700	ug/L
MKTF-15	11/2/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-15	11/2/2016	n-Propylbenzene	150	50	6.6	660	ug/L
MKTF-15	11/2/2016	n-Butylbenzene	19	150	8	1000	ug/L
MKTF-15	11/2/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-15	11/2/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-15	11/2/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-15	11/2/2016	4-Methyl-2-Pentanone	60	500	21	1243	ug/L
MKTF-15	11/2/2016	1,3,5-Trimethylbenzene	**190**	50	5.8	60	ug/L
MKTF-15	11/2/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-15	11/2/2016	Toluene	**16000**	500	59	1000	ug/L
MKTF-15	11/2/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-15	11/2/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-15	11/2/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	11/2/2016	sec-Butylbenzene	23	50	6.2	2000	ug/L
MKTF-15	11/2/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-15	11/2/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-15	11/2/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-15	11/2/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-15	11/2/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-15	11/2/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-15	11/2/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-15	11/2/2016	Xylenes, Total	**7600**	75	18	620	ug/L
MKTF-15	11/2/2016	MTBE	99	50	11	143	ug/L
MKTF-15	11/2/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-15	11/2/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-15	3/2/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	3/2/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-15	3/2/2017	Chloroform	ND	100	8.9	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Benzene	**24000**	1000	96	5	ug/L
MKTF-15	3/2/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	3/2/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-15	3/2/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-15	3/2/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-15	3/2/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	3/2/2017	Vinyl Chloride	**45**	100	18	2	ug/L
MKTF-15	3/2/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	3/2/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-15	3/2/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	3/2/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	3/2/2017	1,1-Dichloroethane	**42**	100	10	25	ug/L
MKTF-15	3/2/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	3/2/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	3/2/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-15	3/2/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	3/2/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-15	3/2/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	3/2/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-15	3/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	3/2/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-15	3/2/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	3/2/2017	1,2,4-Trimethylbenzene	**750**	100	10	56	ug/L
MKTF-15	3/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	3/2/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	3/2/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	3/2/2017	Isopropylbenzene	110	100	9.8	447	ug/L
MKTF-15	3/2/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-15	3/2/2017	Ethylbenzene	**2100**	100	11	700	ug/L
MKTF-15	3/2/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	3/2/2017	n-Propylbenzene	160	100	13	660	ug/L
MKTF-15	3/2/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-15	3/2/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	3/2/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	3/2/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-15	3/2/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	3/2/2017	1,3,5-Trimethylbenzene	**210**	100	12	60	ug/L
MKTF-15	3/2/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	3/2/2017	Toluene	**17000**	1000	89	1000	ug/L
MKTF-15	3/2/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	3/2/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-15	3/2/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-15	3/2/2017	sec-Butylbenzene	39	100	10	2000	ug/L
MKTF-15	3/2/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-15	3/2/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	3/2/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	3/2/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-15	3/2/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	3/2/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-15	3/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-15	3/2/2017	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-15	3/2/2017	MTBE	**160**	100	15	143	ug/L
MKTF-15	3/2/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-15	3/2/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-15	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	6/8/2017	Acetone	280	1000	82	14064	ug/L
MKTF-15	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-15	6/8/2017	Benzene	**23000**	1000	62	5	ug/L
MKTF-15	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	6/8/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-15	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-15	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	6/8/2017	2-Butanone	470	1000	110	5565	ug/L
MKTF-15	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	6/8/2017	1,2,4-Trimethylbenzene	**790**	100	11	56	ug/L
MKTF-15	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	6/8/2017	Isopropylbenzene	160	100	5.1	447	ug/L
MKTF-15	6/8/2017	p-Isopropyltoluene	23	100	9.6	NA	ug/L
MKTF-15	6/8/2017	Ethylbenzene	**2600**	100	9.3	700	ug/L
MKTF-15	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	6/8/2017	n-Propylbenzene	190	100	7.4	660	ug/L
MKTF-15	6/8/2017	n-Butylbenzene	23	300	13	1000	ug/L
MKTF-15	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	6/8/2017	1,3,5-Trimethylbenzene	**250**	100	8.7	60	ug/L
MKTF-15	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	6/8/2017	Toluene	**22000**	1000	64	1000	ug/L
MKTF-15	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	6/8/2017	sec-Butylbenzene	27	100	11	2000	ug/L
MKTF-15	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	6/8/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-15	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	6/8/2017	Xylenes, Total	**8700**	150	32	620	ug/L
MKTF-15	6/8/2017	MTBE	130	100	24	143	ug/L
MKTF-15	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	11/28/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	11/28/2017	Acetone	200	1000	82	14064	ug/L
MKTF-15	11/28/2017	Chloroform	ND	100	40	100	ug/L
MKTF-15	11/28/2017	Benzene	**18000**	1000	62	5	ug/L
MKTF-15	11/28/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	11/28/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	11/28/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	11/28/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	11/28/2017	Chloroethane	41	200	23	20857	ug/L
MKTF-15	11/28/2017	Vinyl Chloride	**18**	100	18	2	ug/L
MKTF-15	11/28/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	11/28/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	11/28/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	11/28/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	11/28/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-15	11/28/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	11/28/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	11/28/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	11/28/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	11/28/2017	2-Butanone	360	1000	110	5565	ug/L
MKTF-15	11/28/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	11/28/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-15	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	11/28/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	11/28/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	11/28/2017	1,2,4-Trimethylbenzene	**720**	100	11	56	ug/L
MKTF-15	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	11/28/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	11/28/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	11/28/2017	Isopropylbenzene	120	100	5.1	447	ug/L
MKTF-15	11/28/2017	p-Isopropyltoluene	27	100	9.6	NA	ug/L
MKTF-15	11/28/2017	Ethylbenzene	**2200**	100	9.3	700	ug/L
MKTF-15	11/28/2017	Styrene	ND	100	16	100	ug/L
MKTF-15	11/28/2017	n-Propylbenzene	170	100	7.4	660	ug/L
MKTF-15	11/28/2017	n-Butylbenzene	31	300	13	1000	ug/L
MKTF-15	11/28/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	11/28/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	11/28/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	11/28/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	11/28/2017	1,3,5-Trimethylbenzene	**210**	100	8.7	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/28/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	11/28/2017	Toluene	**15000**	1000	64	1000	ug/L
MKTF-15	11/28/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	11/28/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	11/28/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	11/28/2017	sec-Butylbenzene	30	100	11	2000	ug/L
MKTF-15	11/28/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	11/28/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	11/28/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	11/28/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	11/28/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	11/28/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	11/28/2017	Xylenes, Total	**7700**	150	32	620	ug/L
MKTF-15	11/28/2017	MTBE	**160**	100	24	143	ug/L
MKTF-15	11/28/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	11/28/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	5/2/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-15	5/2/2018	Acetone	ND	1000	82	14064	ug/L
MKTF-15	5/2/2018	Chloroform	ND	100	40	100	ug/L
MKTF-15	5/2/2018	Benzene	**16000**	1000	62	5	ug/L
MKTF-15	5/2/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-15	5/2/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-15	5/2/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-15	5/2/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-15	5/2/2018	Chloroethane	ND	200	23	20857	ug/L
MKTF-15	5/2/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-15	5/2/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-15	5/2/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-15	5/2/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-15	5/2/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-15	5/2/2018	1,1-Dichloroethane	**75**	100	40	25	ug/L
MKTF-15	5/2/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-15	5/2/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-15	5/2/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-15	5/2/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-15	5/2/2018	2-Butanone	ND	1000	110	5565	ug/L
MKTF-15	5/2/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-15	5/2/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-15	5/2/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-15	5/2/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-15	5/2/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-15	5/2/2018	1,2,4-Trimethylbenzene	**790**	100	11	56	ug/L
MKTF-15	5/2/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-15	5/2/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-15	5/2/2018	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-15	5/2/2018	Isopropylbenzene	120	100	5.1	447	ug/L
MKTF-15	5/2/2018	p-Isopropyltoluene	16	100	9.6	NA	ug/L
MKTF-15	5/2/2018	Ethylbenzene	**2400**	100	9.3	700	ug/L
MKTF-15	5/2/2018	Styrene	ND	100	16	100	ug/L
MKTF-15	5/2/2018	n-Propylbenzene	170	100	7.4	660	ug/L
MKTF-15	5/2/2018	n-Butylbenzene	21	300	13	1000	ug/L
MKTF-15	5/2/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-15	5/2/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-15	5/2/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-15	5/2/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-15	5/2/2018	1,3,5-Trimethylbenzene	**220**	100	8.7	60	ug/L
MKTF-15	5/2/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-15	5/2/2018	Toluene	**11000**	1000	64	1000	ug/L
MKTF-15	5/2/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-15	5/2/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-15	5/2/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-15	5/2/2018	sec-Butylbenzene	20	100	11	2000	ug/L
MKTF-15	5/2/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-15	5/2/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-15	5/2/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-15	5/2/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-15	5/2/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-15	5/2/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-15	5/2/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-15	5/2/2018	Xylenes, Total	**7900**	150	32	620	ug/L
MKTF-15	5/2/2018	MTBE	**180**	100	24	143	ug/L
MKTF-15	5/2/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-15	5/2/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-15	8/28/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-15	8/28/2018	Acetone	ND	500	39	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Chloroform	ND	50	20	100	ug/L
MKTF-15	8/28/2018	Benzene	**17000**	500	87	5	ug/L
MKTF-15	8/28/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-15	8/28/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-15	8/28/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-15	8/28/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-15	8/28/2018	Chloroethane	25	100	8.2	20857	ug/L
MKTF-15	8/28/2018	Vinyl Chloride	**21**	50	5.5	2	ug/L
MKTF-15	8/28/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
MKTF-15	8/28/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-15	8/28/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-15	8/28/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-15	8/28/2018	1,1-Dichloroethane	**76**	50	20	25	ug/L
MKTF-15	8/28/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-15	8/28/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-15	8/28/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-15	8/28/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-15	8/28/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-15	8/28/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-15	8/28/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-15	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-15	8/28/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-15	8/28/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-15	8/28/2018	1,2,4-Trimethylbenzene	**710**	50	13	56	ug/L
MKTF-15	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-15	8/28/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-15	8/28/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-15	8/28/2018	Isopropylbenzene	97	50	11	447	ug/L
MKTF-15	8/28/2018	p-Isopropyltoluene	15	50	12	NA	ug/L
MKTF-15	8/28/2018	Ethylbenzene	**1800**	50	11	700	ug/L
MKTF-15	8/28/2018	Styrene	ND	50	13	100	ug/L
MKTF-15	8/28/2018	n-Propylbenzene	160	50	12	660	ug/L
MKTF-15	8/28/2018	n-Butylbenzene	19	150	12	1000	ug/L
MKTF-15	8/28/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-15	8/28/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-15	8/28/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-15	8/28/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-15	8/28/2018	1,3,5-Trimethylbenzene	**200**	50	12	60	ug/L
MKTF-15	8/28/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-15	8/28/2018	Toluene	**4600**	500	84	1000	ug/L
MKTF-15	8/28/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-15	8/28/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-15	8/28/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-15	8/28/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-15	8/28/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-15	8/28/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-15	8/28/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-15	8/28/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-15	8/28/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-15	8/28/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-15	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-15	8/28/2018	Xylenes, Total	**5800**	75	32	620	ug/L
MKTF-15	8/28/2018	MTBE	140	50	16	143	ug/L
MKTF-15	8/28/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-15	8/28/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-15	5/13/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
MKTF-15	5/13/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
MKTF-15	5/13/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
MKTF-15	5/13/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
MKTF-15	5/13/2019	1,1-Dichloroethane	*25*	*50*	7.04293	25	ug/L
MKTF-15	5/13/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
MKTF-15	5/13/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
MKTF-15	5/13/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
MKTF-15	5/13/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
MKTF-15	5/13/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
MKTF-15	5/13/2019	1,2,4-Trimethylbenzene	**510**	50	10.659955	56	ug/L
MKTF-15	5/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
MKTF-15	5/13/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
MKTF-15	5/13/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
MKTF-15	5/13/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
MKTF-15	5/13/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
MKTF-15	5/13/2019	1,3,5-Trimethylbenzene	**170**	50	9.432992	60	ug/L
MKTF-15	5/13/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
MKTF-15	5/13/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
MKTF-15	5/13/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
MKTF-15	5/13/2019	1-Methylnaphthalene	24	200	15.747724	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	5/13/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
MKTF-15	5/13/2019	2-Butanone	ND	500	104.47083	5565	ug/L
MKTF-15	5/13/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
MKTF-15	5/13/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
MKTF-15	5/13/2019	2-Methylnaphthalene	**20**	200	17.2688		ug/L
MKTF-15	5/13/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
MKTF-15	5/13/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
MKTF-15	5/13/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
MKTF-15	5/13/2019	Acetone	ND	500	59.969821	14064	ug/L
MKTF-15	5/13/2019	Benzene	**18000**	500	83.319528	5	ug/L
MKTF-15	5/13/2019	Bromobenzene	ND	50	12.236352	62	ug/L
MKTF-15	5/13/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
MKTF-15	5/13/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
MKTF-15	5/13/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
MKTF-15	5/13/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
MKTF-15	5/13/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
MKTF-15	5/13/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
MKTF-15	5/13/2019	Chloroethane	ND	100	8.890131	20857	ug/L
MKTF-15	5/13/2019	Chloroform	ND	50	6.094528	100	ug/L
MKTF-15	5/13/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
MKTF-15	5/13/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
MKTF-15	5/13/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
MKTF-15	5/13/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
MKTF-15	5/13/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
MKTF-15	5/13/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
MKTF-15	5/13/2019	Ethylbenzene	**1800**	50	6.61704	700	ug/L
MKTF-15	5/13/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
MKTF-15	5/13/2019	Isopropylbenzene	110	50	9.576114	447	ug/L
MKTF-15	5/13/2019	MTBE	68	50	22.804749	143	ug/L
MKTF-15	5/13/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
MKTF-15	5/13/2019	Naphthalene	**87**	100	13.753567	30	ug/L
MKTF-15	5/13/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
MKTF-15	5/13/2019	n-Propylbenzene	140	50	10.7154	660	ug/L
MKTF-15	5/13/2019	sec-Butylbenzene	15	50	12.386564	2000	ug/L
MKTF-15	5/13/2019	Styrene	ND	50	9.566168	100	ug/L
MKTF-15	5/13/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
MKTF-15	5/13/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
MKTF-15	5/13/2019	Toluene	**4900**	50	17.521811	1000	ug/L
MKTF-15	5/13/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
MKTF-15	5/13/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
MKTF-15	5/13/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
MKTF-15	5/13/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
MKTF-15	5/13/2019	Vinyl Chloride	**26**	50	8.954964	2	ug/L
MKTF-15	5/13/2019	Xylenes, Total	**5800**	75	22.720747	620	ug/L
MKTF-16	4/10/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
MKTF-16	4/10/2014	Acetone	ND	200	99	14064	ug/L
MKTF-16	4/10/2014	Chloroform	ND	20	6.3	100	ug/L
MKTF-16	4/10/2014	Benzene	**11000**	200	31	5	ug/L
MKTF-16	4/10/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
MKTF-16	4/10/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
MKTF-16	4/10/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
MKTF-16	4/10/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
MKTF-16	4/10/2014	Chloroethane	ND	40	9.5	20857	ug/L
MKTF-16	4/10/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
MKTF-16	4/10/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
MKTF-16	4/10/2014	Carbon Disulfide	ND	200	15	810	ug/L
MKTF-16	4/10/2014	Bromoform	ND	20	5	32.9	ug/L
MKTF-16	4/10/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
MKTF-16	4/10/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
MKTF-16	4/10/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
MKTF-16	4/10/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-16	4/10/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
MKTF-16	4/10/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
MKTF-16	4/10/2014	2-Butanone	ND	200	28	5565	ug/L
MKTF-16	4/10/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-16	4/10/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
MKTF-16	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
MKTF-16	4/10/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
MKTF-16	4/10/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-16	4/10/2014	1,2,4-Trimethylbenzene	**490**	20	2.5	56	ug/L
MKTF-16	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
MKTF-16	4/10/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
MKTF-16	4/10/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
MKTF-16	4/10/2014	Isopropylbenzene	53	20	3.2	447	ug/L
MKTF-16	4/10/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
MKTF-16	4/10/2014	Ethylbenzene	**1100**	20	2.5	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	4/10/2014	Styrene	ND	20	2.3	100	ug/L
MKTF-16	4/10/2014	n-Propylbenzene	99	20	2.8	660	ug/L
MKTF-16	4/10/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
MKTF-16	4/10/2014	4-Chlorotoluene	ND	20	17	250	ug/L
MKTF-16	4/10/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
MKTF-16	4/10/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
MKTF-16	4/10/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
MKTF-16	4/10/2014	1,3,5-Trimethylbenzene	**120**	20	2.6	60	ug/L
MKTF-16	4/10/2014	Bromobenzene	ND	20	3.6	62	ug/L
MKTF-16	4/10/2014	Toluene	**7500**	200	34	1000	ug/L
MKTF-16	4/10/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
MKTF-16	4/10/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
MKTF-16	4/10/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
MKTF-16	4/10/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
MKTF-16	4/10/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-16	4/10/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
MKTF-16	4/10/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
MKTF-16	4/10/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
MKTF-16	4/10/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-16	4/10/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
MKTF-16	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
MKTF-16	4/10/2014	Xylenes, Total	**3600**	30	7.5	620	ug/L
MKTF-16	4/10/2014	MTBE	**270**	20	5	143	ug/L
MKTF-16	4/10/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
MKTF-16	4/10/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-16	6/5/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	6/5/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	6/5/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	6/5/2014	Benzene	**18000**	500	77	5	ug/L
MKTF-16	6/5/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-16	6/5/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	6/5/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	6/5/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	6/5/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	6/5/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-16	6/5/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	6/5/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	6/5/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	6/5/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	6/5/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-16	6/5/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	6/5/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	6/5/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	6/5/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	6/5/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	6/5/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	6/5/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	6/5/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	6/5/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	6/5/2014	Hexachlorobutadiene	*ND*	*50*	14	1.39	ug/L
MKTF-16	6/5/2014	1-Methylnaphthalene	ND	200	22	NA	ug/L
MKTF-16	6/5/2014	Naphthalene	**240**	100	6.8	30	ug/L
MKTF-16	6/5/2014	2-Methylnaphthalene	*ND*	*200*	28		ug/L
MKTF-16	6/5/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	6/5/2014	1,2-Dichlorobenzene	ND	50	6.6	600	ug/L
MKTF-16	6/5/2014	1,2,4-Trimethylbenzene	**1200**	50	6.1	56	ug/L
MKTF-16	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	6/5/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	6/5/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	6/5/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	6/5/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	6/5/2014	Ethylbenzene	**1700**	50	6.4	700	ug/L
MKTF-16	6/5/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	6/5/2014	n-Propylbenzene	150	50	7	660	ug/L
MKTF-16	6/5/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	6/5/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	6/5/2014	1,4-Dichlorobenzene	ND	50	13	75	ug/L
MKTF-16	6/5/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	6/5/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	6/5/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	6/5/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	6/5/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	6/5/2014	Toluene	**3700**	50	8.5	1000	ug/L
MKTF-16	6/5/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	6/5/2014	1,2,4-Trichlorobenzene	ND	50	15	70	ug/L
MKTF-16	6/5/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/5/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	6/5/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	6/5/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	6/5/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	6/5/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	6/5/2014	1,3-Dichlorobenzene	ND	50	8.7	N/A	ug/L
MKTF-16	6/5/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	6/5/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	6/5/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	6/5/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	6/5/2014	Xylenes, Total	**8100**	75	19	620	ug/L
MKTF-16	6/5/2014	MTBE	**2000**	50	13	143	ug/L
MKTF-16	6/5/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	6/5/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	9/17/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	9/17/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	9/17/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	9/17/2014	Benzene	**17000**	500	77	5	ug/L
MKTF-16	9/17/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-16	9/17/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	9/17/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	9/17/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	9/17/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	9/17/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-16	9/17/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	9/17/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	9/17/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	9/17/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	9/17/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-16	9/17/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	9/17/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	9/17/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	9/17/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	9/17/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	9/17/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	9/17/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	9/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	9/17/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	9/17/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	9/17/2014	1,2,4-Trimethylbenzene	**1100**	50	6.1	56	ug/L
MKTF-16	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	9/17/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	9/17/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	9/17/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	9/17/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	9/17/2014	Ethylbenzene	**1200**	50	6.4	700	ug/L
MKTF-16	9/17/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	9/17/2014	n-Propylbenzene	120	50	7	660	ug/L
MKTF-16	9/17/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	9/17/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	9/17/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	9/17/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	9/17/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	9/17/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	9/17/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	9/17/2014	Toluene	**1400**	50	8.5	1000	ug/L
MKTF-16	9/17/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	9/17/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-16	9/17/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	9/17/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	9/17/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	9/17/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	9/17/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	9/17/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	9/17/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	9/17/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	9/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	9/17/2014	Xylenes, Total	**5300**	75	19	620	ug/L
MKTF-16	9/17/2014	MTBE	**2100**	50	13	143	ug/L
MKTF-16	9/17/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	9/17/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-16	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-16	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-16	11/18/2014	Benzene	**20000**	500	77	5	ug/L
MKTF-16	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-16	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-16	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-16	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-16	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-16	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-16	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-16	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-16	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-16	11/18/2014	1,1-Dichloroethane	**81**	50	14	25	ug/L
MKTF-16	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-16	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-16	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-16	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-16	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-16	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-16	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-16	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-16	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-16	11/18/2014	1,2,4-Trimethylbenzene	**1000**	50	6.1	56	ug/L
MKTF-16	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-16	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-16	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-16	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-16	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-16	11/18/2014	Ethylbenzene	**1300**	50	6.4	700	ug/L
MKTF-16	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-16	11/18/2014	n-Propylbenzene	90	50	7	660	ug/L
MKTF-16	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-16	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-16	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-16	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-16	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-16	11/18/2014	1,3,5-Trimethylbenzene	**360**	50	6.6	60	ug/L
MKTF-16	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-16	11/18/2014	Toluene	**1200**	50	8.5	1000	ug/L
MKTF-16	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-16	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-16	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-16	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-16	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-16	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-16	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-16	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-16	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-16	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-16	11/18/2014	Xylenes, Total	**5800**	75	19	620	ug/L
MKTF-16	11/18/2014	MTBE	**1400**	50	13	143	ug/L
MKTF-16	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-16	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-16	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	3/16/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	3/16/2015	Benzene	**19000**	500	33	5	ug/L
MKTF-16	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-16	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	3/16/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-16	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	3/16/2015	1,2,4-Trimethylbenzene	**940**	50	8	56	ug/L
MKTF-16	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	3/16/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	3/16/2015	Ethylbenzene	**1400**	50	5.1	700	ug/L
MKTF-16	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	3/16/2015	n-Propylbenzene	110	50	8.2	660	ug/L
MKTF-16	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	3/16/2015	1,3,5-Trimethylbenzene	**310**	50	6.1	60	ug/L
MKTF-16	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	3/16/2015	Toluene	450	50	5.4	1000	ug/L
MKTF-16	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-16	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	3/16/2015	Xylenes, Total	**5400**	75	14	620	ug/L
MKTF-16	3/16/2015	MTBE	**1600**	50	8.7	143	ug/L
MKTF-16	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	6/8/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	6/8/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	6/8/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	6/8/2015	Benzene	**23000**	500	33	5	ug/L
MKTF-16	6/8/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-16	6/8/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	6/8/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	6/8/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	6/8/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	6/8/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	6/8/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	6/8/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	6/8/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	6/8/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	6/8/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-16	6/8/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	6/8/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	6/8/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	6/8/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	6/8/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	6/8/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	6/8/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	6/8/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	6/8/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	6/8/2015	1,2,4-Trimethylbenzene	**770**	50	8	56	ug/L
MKTF-16	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	6/8/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	6/8/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	6/8/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	6/8/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	6/8/2015	Ethylbenzene	**1400**	50	5.1	700	ug/L
MKTF-16	6/8/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	6/8/2015	n-Propylbenzene	84	50	8.2	660	ug/L
MKTF-16	6/8/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	6/8/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	6/8/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	6/8/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	6/8/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	6/8/2015	1,3,5-Trimethylbenzene	**270**	50	6.1	60	ug/L
MKTF-16	6/8/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	6/8/2015	Toluene	**1300**	50	5.4	1000	ug/L
MKTF-16	6/8/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	6/8/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	6/8/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	6/8/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	6/8/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	6/8/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	6/8/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	6/8/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	6/8/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	6/8/2015	Xylenes, Total	**5300**	75	14	620	ug/L
MKTF-16	6/8/2015	MTBE	**2000**	50	8.7	143	ug/L
MKTF-16	6/8/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	6/8/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	8/23/2015	Carbon tetrachloride	*ND*	*100*	7.8	5	ug/L
MKTF-16	8/23/2015	Acetone	ND	1000	94	14064	ug/L
MKTF-16	8/23/2015	Chloroform	ND	100	21	100	ug/L
MKTF-16	8/23/2015	Benzene	**24000**	1000	65	5	ug/L
MKTF-16	8/23/2015	1,1,1-Trichloroethane	ND	100	7.8	200	ug/L
MKTF-16	8/23/2015	Bromomethane	*ND*	*300*	120	7.54	ug/L
MKTF-16	8/23/2015	Chloromethane	*ND*	*300*	17	20.32	ug/L
MKTF-16	8/23/2015	Dibromomethane	*ND*	*100*	23	8	ug/L
MKTF-16	8/23/2015	Chloroethane	ND	200	10	20857	ug/L
MKTF-16	8/23/2015	Vinyl Chloride	*ND*	*100*	13	2	ug/L
MKTF-16	8/23/2015	Methylene Chloride	*ND*	*300*	36	5	ug/L
MKTF-16	8/23/2015	Carbon Disulfide	*ND*	*1000*	67	810	ug/L
MKTF-16	8/23/2015	Bromoform	*ND*	*100*	16	32.9	ug/L
MKTF-16	8/23/2015	Bromodichloromethane	*ND*	*100*	9	1.34	ug/L
MKTF-16	8/23/2015	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	8/23/2015	1,1-Dichloroethene	*ND*	*100*	9.9	7	ug/L
MKTF-16	8/23/2015	Trichlorofluoromethane	ND	100	13	1137	ug/L
MKTF-16	8/23/2015	Dichlorodifluoromethane	ND	100	69	197	ug/L
MKTF-16	8/23/2015	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-16	8/23/2015	2-Butanone	ND	1000	36	5565	ug/L
MKTF-16	8/23/2015	1,1,2-Trichloroethane	*ND*	*100*	7.9	5	ug/L
MKTF-16	8/23/2015	Trichloroethene	*ND*	*100*	16	5	ug/L
MKTF-16	8/23/2015	1,1,2,2-Tetrachloroethane	*ND*	*200*	18	10	ug/L
MKTF-16	8/23/2015	1,2,3-Trichlorobenzene	*ND*	*100*	27	70	ug/L
MKTF-16	8/23/2015	2-Chlorotoluene	ND	100	7.9	233	ug/L
MKTF-16	8/23/2015	1,2,4-Trimethylbenzene	**890**	100	16	56	ug/L
MKTF-16	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*200*	14	0.0033	ug/L
MKTF-16	8/23/2015	1,2,3-Trichloropropane	*ND*	*200*	16	0.0084	ug/L
MKTF-16	8/23/2015	tert-Butylbenzene	ND	100	13	690	ug/L
MKTF-16	8/23/2015	Isopropylbenzene	ND	100	15	447	ug/L
MKTF-16	8/23/2015	p-Isopropyltoluene	ND	100	19	NA	ug/L
MKTF-16	8/23/2015	Ethylbenzene	**1400**	100	10	700	ug/L
MKTF-16	8/23/2015	Styrene	ND	100	11	100	ug/L
MKTF-16	8/23/2015	n-Propylbenzene	110	100	16	660	ug/L
MKTF-16	8/23/2015	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	8/23/2015	4-Chlorotoluene	ND	100	15	250	ug/L
MKTF-16	8/23/2015	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	8/23/2015	1,2-Dichloroethane	*ND*	*100*	18	5	ug/L
MKTF-16	8/23/2015	4-Methyl-2-Pentanone	ND	1000	26	1243	ug/L
MKTF-16	8/23/2015	1,3,5-Trimethylbenzene	**320**	100	12	60	ug/L
MKTF-16	8/23/2015	Bromobenzene	*ND*	*100*	11	62	ug/L
MKTF-16	8/23/2015	Toluene	640	100	11	1000	ug/L
MKTF-16	8/23/2015	Chlorobenzene	*ND*	*100*	9.3	77.6	ug/L
MKTF-16	8/23/2015	Dibromochloromethane	*ND*	*100*	9.7	1.68	ug/L
MKTF-16	8/23/2015	Tetrachloroethene	*ND*	*100*	16	5	ug/L
MKTF-16	8/23/2015	sec-Butylbenzene	ND	100	23	2000	ug/L
MKTF-16	8/23/2015	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	8/23/2015	cis-1,2-Dichloroethene	*ND*	*100*	8.1	70	ug/L
MKTF-16	8/23/2015	trans-1,2-Dichloroethene	ND	100	9.4	100	ug/L
MKTF-16	8/23/2015	1,1-Dichloropropene	ND	100	12	NA	ug/L
MKTF-16	8/23/2015	2-Hexanone	*ND*	*1000*	48	38	ug/L
MKTF-16	8/23/2015	2,2-Dichloropropane	ND	200	15	NA	ug/L
MKTF-16	8/23/2015	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	8/23/2015	Xylenes, Total	**5600**	150	28	620	ug/L
MKTF-16	8/23/2015	MTBE	**2100**	100	17	143	ug/L
MKTF-16	8/23/2015	cis-1,3-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	8/23/2015	trans-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	11/3/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-16	11/3/2015	Acetone	ND	500	47	14064	ug/L
MKTF-16	11/3/2015	Chloroform	ND	50	11	100	ug/L
MKTF-16	11/3/2015	Benzene	**28000**	500	33	5	ug/L
MKTF-16	11/3/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-16	11/3/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-16	11/3/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-16	11/3/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-16	11/3/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-16	11/3/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-16	11/3/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-16	11/3/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-16	11/3/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-16	11/3/2015	1,1-Dichloroethane	**61**	50	20	25	ug/L
MKTF-16	11/3/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-16	11/3/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-16	11/3/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-16	11/3/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-16	11/3/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-16	11/3/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-16	11/3/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-16	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-16	11/3/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	11/3/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-16	11/3/2015	1,2,4-Trimethylbenzene	**1100**	50	8	56	ug/L
MKTF-16	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-16	11/3/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-16	11/3/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-16	11/3/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-16	11/3/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-16	11/3/2015	Ethylbenzene	**1700**	50	5.1	700	ug/L
MKTF-16	11/3/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-16	11/3/2015	n-Propylbenzene	92	50	8.2	660	ug/L
MKTF-16	11/3/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-16	11/3/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-16	11/3/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-16	11/3/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-16	11/3/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-16	11/3/2015	1,3,5-Trimethylbenzene	**330**	50	6.1	60	ug/L
MKTF-16	11/3/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-16	11/3/2015	Toluene	620	50	5.4	1000	ug/L
MKTF-16	11/3/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-16	11/3/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-16	11/3/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-16	11/3/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-16	11/3/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-16	11/3/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-16	11/3/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-16	11/3/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-16	11/3/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-16	11/3/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-16	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-16	11/3/2015	Xylenes, Total	**6600**	75	14	620	ug/L
MKTF-16	11/3/2015	MTBE	**1700**	50	8.7	143	ug/L
MKTF-16	11/3/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-16	11/3/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-16	2/29/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	2/29/2016	Acetone	ND	1000	88	14064	ug/L
MKTF-16	2/29/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	2/29/2016	Benzene	**19000**	1000	96	5	ug/L
MKTF-16	2/29/2016	1,1,1-Trichloroethane	ND	100	6.3	200	ug/L
MKTF-16	2/29/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	2/29/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	2/29/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	2/29/2016	Chloroethane	ND	200	15	20857	ug/L
MKTF-16	2/29/2016	Vinyl Chloride	*ND*	*100*	6.3	2	ug/L
MKTF-16	2/29/2016	Methylene Chloride	*ND*	*300*	6.3	5	ug/L
MKTF-16	2/29/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	2/29/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	2/29/2016	Bromodichloromethane	*ND*	*100*	9.8	1.34	ug/L
MKTF-16	2/29/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-16	2/29/2016	1,1-Dichloroethene	*ND*	*100*	7.6	7	ug/L
MKTF-16	2/29/2016	Trichlorofluoromethane	ND	100	8.8	1137	ug/L
MKTF-16	2/29/2016	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-16	2/29/2016	1,2-Dichloropropane	*ND*	*100*	4.7	5	ug/L
MKTF-16	2/29/2016	2-Butanone	ND	1000	32	5565	ug/L
MKTF-16	2/29/2016	1,1,2-Trichloroethane	*ND*	*100*	7.7	5	ug/L
MKTF-16	2/29/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	2/29/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	11	10	ug/L
MKTF-16	2/29/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	2/29/2016	1,2,4-Trimethylbenzene	**690**	100	10	56	ug/L
MKTF-16	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	15	0.0033	ug/L
MKTF-16	2/29/2016	1,2,3-Trichloropropane	*ND*	*200*	11	0.0084	ug/L
MKTF-16	2/29/2016	tert-Butylbenzene	ND	100	9.6	690	ug/L
MKTF-16	2/29/2016	Isopropylbenzene	ND	100	9.8	447	ug/L
MKTF-16	2/29/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	2/29/2016	Ethylbenzene	**1000**	100	11	700	ug/L
MKTF-16	2/29/2016	Styrene	ND	100	9.5	100	ug/L
MKTF-16	2/29/2016	n-Propylbenzene	ND	100	13	660	ug/L
MKTF-16	2/29/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	2/29/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	2/29/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	2/29/2016	1,2-Dichloroethane	*ND*	*100*	5.3	5	ug/L
MKTF-16	2/29/2016	4-Methyl-2-Pentanone	ND	1000	15	1243	ug/L
MKTF-16	2/29/2016	1,3,5-Trimethylbenzene	**240**	100	12	60	ug/L
MKTF-16	2/29/2016	Bromobenzene	*ND*	*100*	8	62	ug/L
MKTF-16	2/29/2016	Toluene	280	100	8.9	1000	ug/L
MKTF-16	2/29/2016	Chlorobenzene	*ND*	*100*	10	77.6	ug/L
MKTF-16	2/29/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	2/29/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	2/29/2016	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	2/29/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	2/29/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	2/29/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	2/29/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	2/29/2016	2-Hexanone	*ND*	*1000*	36	38	ug/L
MKTF-16	2/29/2016	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-16	2/29/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	2/29/2016	Xylenes, Total	**3900**	150	32	620	ug/L
MKTF-16	2/29/2016	MTBE	**1400**	100	21	143	ug/L
MKTF-16	2/29/2016	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	2/29/2016	trans-1,3-Dichloropropene	ND	100	8.5	NA	ug/L
MKTF-16	6/9/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-16	6/9/2016	Acetone	ND	200	98	14064	ug/L
MKTF-16	6/9/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-16	6/9/2016	Benzene	**16000**	200	19	5	ug/L
MKTF-16	6/9/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-16	6/9/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-16	6/9/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-16	6/9/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-16	6/9/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-16	6/9/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-16	6/9/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-16	6/9/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-16	6/9/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-16	6/9/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-16	6/9/2016	1,1-Dichloroethane	**49**	20	2.2	25	ug/L
MKTF-16	6/9/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-16	6/9/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-16	6/9/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-16	6/9/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-16	6/9/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-16	6/9/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-16	6/9/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-16	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-16	6/9/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-16	6/9/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-16	6/9/2016	1,2,4-Trimethylbenzene	**730**	20	2.2	56	ug/L
MKTF-16	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-16	6/9/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-16	6/9/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-16	6/9/2016	Isopropylbenzene	22	20	2.1	447	ug/L
MKTF-16	6/9/2016	p-Isopropyltoluene	5	20	2.8	NA	ug/L
MKTF-16	6/9/2016	Ethylbenzene	**1100**	20	2.2	700	ug/L
MKTF-16	6/9/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-16	6/9/2016	n-Propylbenzene	67	20	2.6	660	ug/L
MKTF-16	6/9/2016	n-Butylbenzene	16	60	3.2	1000	ug/L
MKTF-16	6/9/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-16	6/9/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-16	6/9/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-16	6/9/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-16	6/9/2016	1,3,5-Trimethylbenzene	**240**	20	2.3	60	ug/L
MKTF-16	6/9/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-16	6/9/2016	Toluene	340	20	2.4	1000	ug/L
MKTF-16	6/9/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/9/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-16	6/9/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-16	6/9/2016	sec-Butylbenzene	5.9	20	2.5	2000	ug/L
MKTF-16	6/9/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-16	6/9/2016	cis-1,2-Dichloroethene	8.4	20	2.5	70	ug/L
MKTF-16	6/9/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-16	6/9/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-16	6/9/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-16	6/9/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-16	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-16	6/9/2016	Xylenes, Total	**3600**	30	7.3	620	ug/L
MKTF-16	6/9/2016	MTBE	**1400**	20	4.2	143	ug/L
MKTF-16	6/9/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-16	6/9/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-16	9/12/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	9/12/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-16	9/12/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	9/12/2016	Benzene	**23000**	1000	96	5	ug/L
MKTF-16	9/12/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-16	9/12/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	9/12/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	9/12/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	9/12/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-16	9/12/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-16	9/12/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-16	9/12/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	9/12/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	9/12/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-16	9/12/2016	1,1-Dichloroethane	**65**	100	11	25	ug/L
MKTF-16	9/12/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-16	9/12/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-16	9/12/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-16	9/12/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-16	9/12/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-16	9/12/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-16	9/12/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-16	9/12/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-16	9/12/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	9/12/2016	1,2,4-Trimethylbenzene	**780**	100	11	56	ug/L
MKTF-16	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-16	9/12/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-16	9/12/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-16	9/12/2016	Isopropylbenzene	19	100	10	447	ug/L
MKTF-16	9/12/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	9/12/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-16	9/12/2016	Styrene	ND	100	11	100	ug/L
MKTF-16	9/12/2016	n-Propylbenzene	82	100	13	660	ug/L
MKTF-16	9/12/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	9/12/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	9/12/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	9/12/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	9/12/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-16	9/12/2016	1,3,5-Trimethylbenzene	**270**	100	12	60	ug/L
MKTF-16	9/12/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-16	9/12/2016	Toluene	240	100	12	1000	ug/L
MKTF-16	9/12/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	9/12/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	9/12/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	9/12/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-16	9/12/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	9/12/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	9/12/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	9/12/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	9/12/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-16	9/12/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-16	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	9/12/2016	Xylenes, Total	**4300**	150	37	620	ug/L
MKTF-16	9/12/2016	MTBE	**1700**	100	21	143	ug/L
MKTF-16	9/12/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	9/12/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	11/3/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	11/3/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-16	11/3/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	11/3/2016	Benzene	**19000**	1000	96	5	ug/L
MKTF-16	11/3/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	11/3/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	11/3/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	11/3/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-16	11/3/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-16	11/3/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-16	11/3/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	11/3/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-16	11/3/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-16	11/3/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-16	11/3/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-16	11/3/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-16	11/3/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-16	11/3/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-16	11/3/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-16	11/3/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-16	11/3/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-16	11/3/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-16	11/3/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	11/3/2016	1,2,4-Trimethylbenzene	**560**	100	11	56	ug/L
MKTF-16	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-16	11/3/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-16	11/3/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-16	11/3/2016	Isopropylbenzene	15	100	10	447	ug/L
MKTF-16	11/3/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	11/3/2016	Ethylbenzene	**880**	100	11	700	ug/L
MKTF-16	11/3/2016	Styrene	ND	100	11	100	ug/L
MKTF-16	11/3/2016	n-Propylbenzene	52	100	13	660	ug/L
MKTF-16	11/3/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	11/3/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-16	11/3/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-16	11/3/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	11/3/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-16	11/3/2016	1,3,5-Trimethylbenzene	**210**	100	12	60	ug/L
MKTF-16	11/3/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-16	11/3/2016	Toluene	220	100	12	1000	ug/L
MKTF-16	11/3/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	11/3/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-16	11/3/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	11/3/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-16	11/3/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	11/3/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-16	11/3/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-16	11/3/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	11/3/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-16	11/3/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-16	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	11/3/2016	Xylenes, Total	**3400**	150	37	620	ug/L
MKTF-16	11/3/2016	MTBE	**970**	100	21	143	ug/L
MKTF-16	11/3/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-16	11/3/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	3/14/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	3/14/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-16	3/14/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-16	3/14/2017	Benzene	**22000**	1000	96	5	ug/L
MKTF-16	3/14/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	3/14/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-16	3/14/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-16	3/14/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-16	3/14/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	3/14/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	3/14/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	3/14/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-16	3/14/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	3/14/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	3/14/2017	1,1-Dichloroethane	**30**	100	10	25	ug/L
MKTF-16	3/14/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	3/14/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	3/14/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-16	3/14/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	3/14/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	3/14/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	3/14/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-16	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	3/14/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	3/14/2017	1,2,4-Trimethylbenzene	**750**	100	10	56	ug/L
MKTF-16	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	3/14/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	3/14/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	3/14/2017	Isopropylbenzene	33	100	9.8	447	ug/L
MKTF-16	3/14/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-16	3/14/2017	Ethylbenzene	**1700**	100	11	700	ug/L
MKTF-16	3/14/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	3/14/2017	n-Propylbenzene	86	100	13	660	ug/L
MKTF-16	3/14/2017	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-16	3/14/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	3/14/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	3/14/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-16	3/14/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	3/14/2017	1,3,5-Trimethylbenzene	**230**	100	12	60	ug/L
MKTF-16	3/14/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	3/14/2017	Toluene	340	100	8.9	1000	ug/L
MKTF-16	3/14/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	3/14/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-16	3/14/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	3/14/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
MKTF-16	3/14/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-16	3/14/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	3/14/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	3/14/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-16	3/14/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	3/14/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-16	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-16	3/14/2017	Xylenes, Total	**4900**	150	32	620	ug/L
MKTF-16	3/14/2017	MTBE	**720**	100	15	143	ug/L
MKTF-16	3/14/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-16	3/14/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-16	6/8/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	6/8/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	6/8/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	6/8/2017	Benzene	**19000**	1000	62	5	ug/L
MKTF-16	6/8/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	6/8/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	6/8/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	6/8/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	6/8/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	6/8/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	6/8/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	6/8/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	6/8/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	6/8/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	6/8/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	6/8/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	6/8/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	6/8/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	6/8/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	6/8/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	6/8/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	6/8/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	6/8/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	6/8/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	6/8/2017	1,2,4-Trimethylbenzene	**440**	100	11	56	ug/L
MKTF-16	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	6/8/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	6/8/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	6/8/2017	Isopropylbenzene	13	100	5.1	447	ug/L
MKTF-16	6/8/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	6/8/2017	Ethylbenzene	**710**	100	9.3	700	ug/L
MKTF-16	6/8/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	6/8/2017	n-Propylbenzene	31	100	7.4	660	ug/L
MKTF-16	6/8/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	6/8/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	6/8/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	6/8/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	6/8/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	6/8/2017	1,3,5-Trimethylbenzene	**180**	100	8.7	60	ug/L
MKTF-16	6/8/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	6/8/2017	Toluene	220	100	6.4	1000	ug/L
MKTF-16	6/8/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	6/8/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	6/8/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	6/8/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	6/8/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	6/8/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	6/8/2017	Pentafluorobenzene	**1000**	0	0		None
MKTF-16	6/8/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	6/8/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	6/8/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	6/8/2017	Xylenes, Total	**2800**	150	32	620	ug/L
MKTF-16	6/8/2017	MTBE	**820**	100	24	143	ug/L
MKTF-16	6/8/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	6/8/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	9/26/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	9/26/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	9/26/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	9/26/2017	Benzene	**23000**	1000	62	5	ug/L
MKTF-16	9/26/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	9/26/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	9/26/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	9/26/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	9/26/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	9/26/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	9/26/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	9/26/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	9/26/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	9/26/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	9/26/2017	1,1-Dichloroethane	**42**	100	40	25	ug/L
MKTF-16	9/26/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	9/26/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	9/26/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	9/26/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	9/26/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	9/26/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	9/26/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	9/26/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	9/26/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	9/26/2017	1,2,4-Trimethylbenzene	**750**	100	11	56	ug/L
MKTF-16	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	9/26/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	9/26/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	9/26/2017	Isopropylbenzene	31	100	5.1	447	ug/L
MKTF-16	9/26/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	9/26/2017	Ethylbenzene	**1600**	100	9.3	700	ug/L
MKTF-16	9/26/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	9/26/2017	n-Propylbenzene	88	100	7.4	660	ug/L
MKTF-16	9/26/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	9/26/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	9/26/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	9/26/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	9/26/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	9/26/2017	1,3,5-Trimethylbenzene	**200**	100	8.7	60	ug/L
MKTF-16	9/26/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	9/26/2017	Toluene	240	100	6.4	1000	ug/L
MKTF-16	9/26/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	9/26/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	9/26/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	9/26/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	9/26/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	9/26/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	9/26/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	9/26/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	9/26/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	9/26/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	9/26/2017	Xylenes, Total	**3900**	150	32	620	ug/L
MKTF-16	9/26/2017	MTBE	**920**	100	24	143	ug/L
MKTF-16	9/26/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	9/26/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	11/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-16	11/29/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-16	11/29/2017	Chloroform	ND	100	40	100	ug/L
MKTF-16	11/29/2017	Benzene	**21000**	1000	62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-16	11/29/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	11/29/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	11/29/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-16	11/29/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-16	11/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-16	11/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-16	11/29/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-16	11/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-16	11/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-16	11/29/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-16	11/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-16	11/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-16	11/29/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	11/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-16	11/29/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-16	11/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-16	11/29/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-16	11/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-16	11/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-16	11/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	11/29/2017	1,2,4-Trimethylbenzene	**690**	100	11	56	ug/L
MKTF-16	11/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-16	11/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-16	11/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-16	11/29/2017	Isopropylbenzene	33	100	5.1	447	ug/L
MKTF-16	11/29/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-16	11/29/2017	Ethylbenzene	**1400**	100	9.3	700	ug/L
MKTF-16	11/29/2017	Styrene	ND	100	16	100	ug/L
MKTF-16	11/29/2017	n-Propylbenzene	67	100	7.4	660	ug/L
MKTF-16	11/29/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-16	11/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	11/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-16	11/29/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	11/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-16	11/29/2017	1,3,5-Trimethylbenzene	**190**	100	8.7	60	ug/L
MKTF-16	11/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-16	11/29/2017	Toluene	210	100	6.4	1000	ug/L
MKTF-16	11/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-16	11/29/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-16	11/29/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-16	11/29/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-16	11/29/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-16	11/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-16	11/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	11/29/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-16	11/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-16	11/29/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-16	11/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-16	11/29/2017	Xylenes, Total	**3200**	150	32	620	ug/L
MKTF-16	11/29/2017	MTBE	**800**	100	24	143	ug/L
MKTF-16	11/29/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-16	11/29/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-16	2/15/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-16	2/15/2018	Acetone	50	100	8.2	14064	ug/L
MKTF-16	2/15/2018	Chloroform	ND	10	4	100	ug/L
MKTF-16	2/15/2018	Benzene	**1800**	100	6.2	5	ug/L
MKTF-16	2/15/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-16	2/15/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-16	2/15/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-16	2/15/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-16	2/15/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-16	2/15/2018	Vinyl Chloride	**5.8**	10	1.8	2	ug/L
MKTF-16	2/15/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-16	2/15/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-16	2/15/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-16	2/15/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-16	2/15/2018	1,1-Dichloroethane	6.2	10	4	25	ug/L
MKTF-16	2/15/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-16	2/15/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-16	2/15/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-16	2/15/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-16	2/15/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-16	2/15/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-16	2/15/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-16	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/15/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-16	2/15/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-16	2/15/2018	1,2,4-Trimethylbenzene	26	10	1.1	56	ug/L
MKTF-16	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-16	2/15/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-16	2/15/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-16	2/15/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
MKTF-16	2/15/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
MKTF-16	2/15/2018	Ethylbenzene	15	10	0.93	700	ug/L
MKTF-16	2/15/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-16	2/15/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
MKTF-16	2/15/2018	n-Butylbenzene	1.9	30	1.3	1000	ug/L
MKTF-16	2/15/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-16	2/15/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-16	2/15/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-16	2/15/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-16	2/15/2018	1,3,5-Trimethylbenzene	41	10	0.87	60	ug/L
MKTF-16	2/15/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-16	2/15/2018	Toluene	24	10	0.64	1000	ug/L
MKTF-16	2/15/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-16	2/15/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-16	2/15/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-16	2/15/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-16	2/15/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-16	2/15/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-16	2/15/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-16	2/15/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-16	2/15/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-16	2/15/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-16	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-16	2/15/2018	Xylenes, Total	230	15	3.2	620	ug/L
MKTF-16	2/15/2018	MTBE	40	10	2.4	143	ug/L
MKTF-16	2/15/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-16	2/15/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-16	5/11/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-16	5/11/2018	Acetone	ND	500	41	14064	ug/L
MKTF-16	5/11/2018	Chloroform	ND	50	20	100	ug/L
MKTF-16	5/11/2018	Benzene	**19000**	500	31	5	ug/L
MKTF-16	5/11/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-16	5/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-16	5/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-16	5/11/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-16	5/11/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-16	5/11/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-16	5/11/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-16	5/11/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-16	5/11/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-16	5/11/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-16	5/11/2018	1,1-Dichloroethane	**36**	50	20	25	ug/L
MKTF-16	5/11/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-16	5/11/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-16	5/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-16	5/11/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-16	5/11/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-16	5/11/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-16	5/11/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-16	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-16	5/11/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-16	5/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-16	5/11/2018	1,2,4-Trimethylbenzene	**690**	50	5.6	56	ug/L
MKTF-16	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-16	5/11/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-16	5/11/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-16	5/11/2018	Isopropylbenzene	30	50	2.6	447	ug/L
MKTF-16	5/11/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-16	5/11/2018	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-16	5/11/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-16	5/11/2018	n-Propylbenzene	78	50	3.7	660	ug/L
MKTF-16	5/11/2018	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-16	5/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-16	5/11/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-16	5/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-16	5/11/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-16	5/11/2018	1,3,5-Trimethylbenzene	**98**	50	4.4	60	ug/L
MKTF-16	5/11/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-16	5/11/2018	Toluene	170	50	3.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-16	5/11/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-16	5/11/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-16	5/11/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-16	5/11/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-16	5/11/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-16	5/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-16	5/11/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-16	5/11/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-16	5/11/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-16	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-16	5/11/2018	Xylenes, Total	**2000**	75	16	620	ug/L
MKTF-16	5/11/2018	MTBE	**640**	50	12	143	ug/L
MKTF-16	5/11/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-16	5/11/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-16	8/31/2018	Carbon tetrachloride	*ND*	*100*	13	5	ug/L
MKTF-16	8/31/2018	Acetone	ND	1000	79	14064	ug/L
MKTF-16	8/31/2018	Chloroform	ND	100	40	100	ug/L
MKTF-16	8/31/2018	Benzene	**17000**	1000	170	5	ug/L
MKTF-16	8/31/2018	1,1,1-Trichloroethane	ND	100	15	200	ug/L
MKTF-16	8/31/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-16	8/31/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-16	8/31/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-16	8/31/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-16	8/31/2018	Vinyl Chloride	*ND*	*100*	11	2	ug/L
MKTF-16	8/31/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L
MKTF-16	8/31/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-16	8/31/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-16	8/31/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-16	8/31/2018	1,1-Dichloroethane	**47**	100	40	25	ug/L
MKTF-16	8/31/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-16	8/31/2018	Trichlorofluoromethane	ND	100	17	1137	ug/L
MKTF-16	8/31/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-16	8/31/2018	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-16	8/31/2018	2-Butanone	ND	1000	130	5565	ug/L
MKTF-16	8/31/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-16	8/31/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-16	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-16	8/31/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-16	8/31/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-16	8/31/2018	1,2,4-Trimethylbenzene	**580**	100	25	56	ug/L
MKTF-16	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-16	8/31/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-16	8/31/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-16	8/31/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-16	8/31/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-16	8/31/2018	Ethylbenzene	**1300**	100	22	700	ug/L
MKTF-16	8/31/2018	Styrene	ND	100	25	100	ug/L
MKTF-16	8/31/2018	n-Propylbenzene	66	100	24	660	ug/L
MKTF-16	8/31/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	8/31/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-16	8/31/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-16	8/31/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-16	8/31/2018	4-Methyl-2-Pentanone	ND	1000	45	1243	ug/L
MKTF-16	8/31/2018	1,3,5-Trimethylbenzene	**70**	100	23	60	ug/L
MKTF-16	8/31/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-16	8/31/2018	Toluene	130	100	17	1000	ug/L
MKTF-16	8/31/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-16	8/31/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-16	8/31/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	8/31/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-16	8/31/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-16	8/31/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-16	8/31/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	8/31/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-16	8/31/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-16	8/31/2018	2,2-Dichloropropane	ND	200	18	NA	ug/L
MKTF-16	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-16	8/31/2018	Xylenes, Total	**1400**	150	64	620	ug/L
MKTF-16	8/31/2018	MTBE	**640**	100	32	143	ug/L
MKTF-16	8/31/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-16	8/31/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-16	11/29/2018	Carbon tetrachloride	*ND*	*100*	14	5	ug/L
MKTF-16	11/29/2018	Acetone	ND	1000	76	14064	ug/L
MKTF-16	11/29/2018	Chloroform	ND	100	24	100	ug/L
MKTF-16	11/29/2018	Benzene	**17000**	1000	170	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2018	1,1,1-Trichloroethane	ND	100	16	200	ug/L
MKTF-16	11/29/2018	Bromomethane	*ND*	*300*	27	7.54	ug/L
MKTF-16	11/29/2018	Chloromethane	*ND*	*300*	32	20.32	ug/L
MKTF-16	11/29/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-16	11/29/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-16	11/29/2018	Vinyl Chloride	*ND*	*100*	12	2	ug/L
MKTF-16	11/29/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L
MKTF-16	11/29/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-16	11/29/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-16	11/29/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-16	11/29/2018	1,1-Dichloroethane	*ND*	*100*	18	25	ug/L
MKTF-16	11/29/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-16	11/29/2018	Trichlorofluoromethane	ND	100	14	1137	ug/L
MKTF-16	11/29/2018	Dichlorodifluoromethane	ND	100	26	197	ug/L
MKTF-16	11/29/2018	1,2-Dichloropropane	*ND*	*100*	17	5	ug/L
MKTF-16	11/29/2018	2-Butanone	ND	1000	140	5565	ug/L
MKTF-16	11/29/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-16	11/29/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-16	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-16	11/29/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-16	11/29/2018	2-Chlorotoluene	ND	100	25	233	ug/L
MKTF-16	11/29/2018	1,2,4-Trimethylbenzene	**390**	100	25	56	ug/L
MKTF-16	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-16	11/29/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-16	11/29/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-16	11/29/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-16	11/29/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-16	11/29/2018	Ethylbenzene	**890**	100	22	700	ug/L
MKTF-16	11/29/2018	Styrene	ND	100	25	100	ug/L
MKTF-16	11/29/2018	n-Propylbenzene	42	100	24	660	ug/L
MKTF-16	11/29/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-16	11/29/2018	4-Chlorotoluene	ND	100	28	250	ug/L
MKTF-16	11/29/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-16	11/29/2018	1,2-Dichloroethane	*ND*	*100*	19	5	ug/L
MKTF-16	11/29/2018	4-Methyl-2-Pentanone	ND	1000	45	1243	ug/L
MKTF-16	11/29/2018	1,3,5-Trimethylbenzene	*36*	*100*	23	60	ug/L
MKTF-16	11/29/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-16	11/29/2018	Toluene	120	100	17	1000	ug/L
MKTF-16	11/29/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-16	11/29/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-16	11/29/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-16	11/29/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-16	11/29/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-16	11/29/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-16	11/29/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-16	11/29/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-16	11/29/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-16	11/29/2018	2,2-Dichloropropane	ND	200	23	NA	ug/L
MKTF-16	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-16	11/29/2018	Xylenes, Total	**720**	150	64	620	ug/L
MKTF-16	11/29/2018	MTBE	**690**	100	46	143	ug/L
MKTF-16	11/29/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-16	11/29/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-16	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	25.239924	5.74	ug/L
MKTF-16	2/20/2019	1,1,1-Trichloroethane	ND	100	16.381583	200	ug/L
MKTF-16	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	32.82991	10	ug/L
MKTF-16	2/20/2019	1,1,2-Trichloroethane	*ND*	*100*	23.272323	5	ug/L
MKTF-16	2/20/2019	1,1-Dichloroethane	**53**	100	17.519663	25	ug/L
MKTF-16	2/20/2019	1,1-Dichloroethene	*ND*	*100*	12.048782	7	ug/L
MKTF-16	2/20/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	2/20/2019	1,2,3-Trichlorobenzene	*ND*	*100*	28.030804	70	ug/L
MKTF-16	2/20/2019	1,2,3-Trichloropropane	*ND*	*200*	56.600446	0.0084	ug/L
MKTF-16	2/20/2019	1,2,4-Trichlorobenzene	*ND*	*100*	26.641017	70	ug/L
MKTF-16	2/20/2019	1,2,4-Trimethylbenzene	**540**	100	25.331434	56	ug/L
MKTF-16	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47.089717	0.0033	ug/L
MKTF-16	2/20/2019	1,2-Dibromoethane	*ND*	*100*	22.952854	0.05	ug/L
MKTF-16	2/20/2019	1,2-Dichlorobenzene	ND	100	31.146486	600	ug/L
MKTF-16	2/20/2019	1,2-Dichloroethane	*ND*	*100*	18.952538	5	ug/L
MKTF-16	2/20/2019	1,2-Dichloropropane	*ND*	*100*	16.522576	5	ug/L
MKTF-16	2/20/2019	1,3,5-Trimethylbenzene	**75**	100	23.141407	60	ug/L
MKTF-16	2/20/2019	1,3-Dichlorobenzene	ND	100	31.262236	N/A	ug/L
MKTF-16	2/20/2019	1,3-Dichloropropane	ND	100	27.075628	370	ug/L
MKTF-16	2/20/2019	1,4-Dichlorobenzene	*ND*	*100*	28.770684	75	ug/L
MKTF-16	2/20/2019	1-Methylnaphthalene	ND	400	33.581697	NA	ug/L
MKTF-16	2/20/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	2/20/2019	2-Butanone	ND	1000	141.086887	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/20/2019	2-Chlorotoluene	ND	100	25.013821	233	ug/L
MKTF-16	2/20/2019	2-Hexanone	*ND*	*1000*	90.657444	38	ug/L
MKTF-16	2/20/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	2/20/2019	4-Chlorotoluene	ND	100	28.080088	250	ug/L
MKTF-16	2/20/2019	p-Isopropyltoluene	ND	100	24.033856	NA	ug/L
MKTF-16	2/20/2019	4-Methyl-2-Pentanone	ND	1000	45.327736	1243	ug/L
MKTF-16	2/20/2019	Acetone	ND	1000	75.706961	14064	ug/L
MKTF-16	2/20/2019	Benzene	**21000**	1000	174.895719	5	ug/L
MKTF-16	2/20/2019	Bromobenzene	*ND*	*100*	31.790623	62	ug/L
MKTF-16	2/20/2019	Bromodichloromethane	*ND*	*100*	28.276698	1.34	ug/L
MKTF-16	2/20/2019	Bromoform	*ND*	*100*	32.331032	32.9	ug/L
MKTF-16	2/20/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	2/20/2019	Carbon Disulfide	*ND*	*1000*	38.503109	810	ug/L
MKTF-16	2/20/2019	Carbon tetrachloride	*ND*	*100*	13.734836	5	ug/L
MKTF-16	2/20/2019	Chlorobenzene	*ND*	*100*	29.052751	77.6	ug/L
MKTF-16	2/20/2019	Chloroethane	ND	200	16.433711	20857	ug/L
MKTF-16	2/20/2019	Chloroform	ND	100	23.522376	100	ug/L
MKTF-16	2/20/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	2/20/2019	cis-1,2-Dichloroethene	*ND*	*100*	37.598114	70	ug/L
MKTF-16	2/20/2019	cis-1,3-Dichloropropene	ND	100	29.822803	NA	ug/L
MKTF-16	2/20/2019	Dibromochloromethane	*ND*	*100*	23.701241	1.68	ug/L
MKTF-16	2/20/2019	Dibromomethane	*ND*	*100*	32.214742	8	ug/L
MKTF-16	2/20/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	2/20/2019	Ethylbenzene	**1400**	100	22.340224	700	ug/L
MKTF-16	2/20/2019	Hexachlorobutadiene	*ND*	*100*	39.118693	1.39	ug/L
MKTF-16	2/20/2019	Isopropylbenzene	29	100	22.110419	447	ug/L
MKTF-16	2/20/2019	MTBE	**610**	100	45.609498	143	ug/L
MKTF-16	2/20/2019	Methylene Chloride	*ND*	*300*	20.569479	5	ug/L
MKTF-16	2/20/2019	Naphthalene	**120**	200	28.962606	30	ug/L
MKTF-16	2/20/2019	n-Butylbenzene	ND	300	24.833047	1000	ug/L
MKTF-16	2/20/2019	n-Propylbenzene	75	100	24.258624	660	ug/L
MKTF-16	2/20/2019	sec-Butylbenzene	ND	100	20.22547	2000	ug/L
MKTF-16	2/20/2019	Styrene	ND	100	25.014573	100	ug/L
MKTF-16	2/20/2019	tert-Butylbenzene	ND	100	22.146975	690	ug/L
MKTF-16	2/20/2019	Tetrachloroethene	*ND*	*100*	15.145171	5	ug/L
MKTF-16	2/20/2019	Toluene	190	100	16.81394	1000	ug/L
MKTF-16	2/20/2019	trans-1,2-Dichloroethene	ND	100	18.226961	100	ug/L
MKTF-16	2/20/2019	trans-1,3-Dichloropropene	ND	100	27.546771	NA	ug/L
MKTF-16	2/20/2019	Trichloroethene	*ND*	*100*	25.755642	5	ug/L
MKTF-16	2/20/2019	Trichlorofluoromethane	ND	100	14.411616	1137	ug/L
MKTF-16	2/20/2019	Vinyl Chloride	*ND*	*100*	12.107431	2	ug/L
MKTF-16	2/20/2019	Xylenes, Total	**1600**	150	64.128772	620	ug/L
MKTF-16	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	5/14/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	5/14/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	5/14/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
MKTF-16	5/14/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	5/14/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	5/14/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	5/14/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
MKTF-16	5/14/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	5/14/2019	1,2,4-Trimethylbenzene	**240**	100	21.319909	56	ug/L
MKTF-16	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
MKTF-16	5/14/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	5/14/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	5/14/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	5/14/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	5/14/2019	1,3,5-Trimethylbenzene	*40*	*100*	18.865985	60	ug/L
MKTF-16	5/14/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	5/14/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	5/14/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	5/14/2019	1-Methylnaphthalene	ND	400	31.495448	NA	ug/L
MKTF-16	5/14/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	5/14/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	5/14/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	5/14/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	5/14/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	5/14/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	5/14/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	5/14/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	5/14/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	5/14/2019	Benzene	**14000**	1000	166.639056	5	ug/L
MKTF-16	5/14/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	5/14/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	5/14/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/14/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	5/14/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	5/14/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	5/14/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	5/14/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	5/14/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	5/14/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	5/14/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	5/14/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	5/14/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	5/14/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-16	5/14/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	5/14/2019	Ethylbenzene	**710**	100	13.23408	700	ug/L
MKTF-16	5/14/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	5/14/2019	Isopropylbenzene	ND	100	19.152227	447	ug/L
MKTF-16	5/14/2019	MTBE	**620**	100	45.609498	143	ug/L
MKTF-16	5/14/2019	Methylene Chloride	**18**	300	15.450147	5	ug/L
MKTF-16	5/14/2019	Naphthalene	**81**	200	27.507134	30	ug/L
MKTF-16	5/14/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	5/14/2019	n-Propylbenzene	29	100	21.4308	660	ug/L
MKTF-16	5/14/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	5/14/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	5/14/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	5/14/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-16	5/14/2019	Toluene	110	100	35.043621	1000	ug/L
MKTF-16	5/14/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	5/14/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	5/14/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	5/14/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	5/14/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	5/14/2019	Xylenes, Total	620	150	45.441493	620	ug/L
MKTF-16	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	8/22/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	8/22/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	8/22/2019	1,1-Dichloroethane	**64**	100	14.08586	25	ug/L
MKTF-16	8/22/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	8/22/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	8/22/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	8/22/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
MKTF-16	8/22/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	8/22/2019	1,2,4-Trimethylbenzene	**93**	100	21.319909	56	ug/L
MKTF-16	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
MKTF-16	8/22/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	8/22/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	8/22/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	8/22/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	8/22/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
MKTF-16	8/22/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	8/22/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	8/22/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	8/22/2019	1-Methylnaphthalene	ND	400	31.495448	NA	ug/L
MKTF-16	8/22/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	8/22/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	8/22/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	8/22/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	8/22/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	8/22/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	8/22/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	8/22/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	8/22/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	8/22/2019	Benzene	**9800**	100	16.663906	5	ug/L
MKTF-16	8/22/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	8/22/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	8/22/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-16	8/22/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	8/22/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	8/22/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	8/22/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	8/22/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	8/22/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	8/22/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	8/22/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	8/22/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	8/22/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	8/22/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/22/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	8/22/2019	Ethylbenzene	480	100	13.23408	700	ug/L
MKTF-16	8/22/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	8/22/2019	Isopropylbenzene	ND	100	19.152227	447	ug/L
MKTF-16	8/22/2019	MTBE	**550**	100	45.609498	143	ug/L
MKTF-16	8/22/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-16	8/22/2019	Naphthalene	**48**	200	27.507134	30	ug/L
MKTF-16	8/22/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	8/22/2019	n-Propylbenzene	ND	100	21.4308	660	ug/L
MKTF-16	8/22/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	8/22/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	8/22/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	8/22/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-16	8/22/2019	Toluene	43	100	35.043621	1000	ug/L
MKTF-16	8/22/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	8/22/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	8/22/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	8/22/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	8/22/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	8/22/2019	Xylenes, Total	110	150	45.441493	620	ug/L
MKTF-16	10/30/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-16	10/30/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
MKTF-16	10/30/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-16	10/30/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-16	10/30/2019	1,1-Dichloroethane	**69**	100	14.08586	25	ug/L
MKTF-16	10/30/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
MKTF-16	10/30/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-16	10/30/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-16	10/30/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-16	10/30/2019	1,2,4-Trimethylbenzene	**380**	100	21.319909	56	ug/L
MKTF-16	10/30/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-16	10/30/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-16	10/30/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-16	10/30/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-16	10/30/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
MKTF-16	10/30/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-16	10/30/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-16	10/30/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-16	10/30/2019	1-Methylnaphthalene	32	400	31.495448	NA	ug/L
MKTF-16	10/30/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-16	10/30/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-16	10/30/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-16	10/30/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-16	10/30/2019	2-Methylnaphthalene	*ND*	*400*	34.537601		ug/L
MKTF-16	10/30/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-16	10/30/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-16	10/30/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-16	10/30/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-16	10/30/2019	Benzene	**15000**	1000	166.639056	5	ug/L
MKTF-16	10/30/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-16	10/30/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-16	10/30/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-16	10/30/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-16	10/30/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-16	10/30/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-16	10/30/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-16	10/30/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-16	10/30/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-16	10/30/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-16	10/30/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-16	10/30/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-16	10/30/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-16	10/30/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-16	10/30/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-16	10/30/2019	Ethylbenzene	**1500**	100	13.23408	700	ug/L
MKTF-16	10/30/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-16	10/30/2019	Isopropylbenzene	21	100	19.152227	447	ug/L
MKTF-16	10/30/2019	MTBE	**620**	100	45.609498	143	ug/L
MKTF-16	10/30/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-16	10/30/2019	Naphthalene	**140**	200	27.507134	30	ug/L
MKTF-16	10/30/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
MKTF-16	10/30/2019	n-Propylbenzene	74	100	21.4308	660	ug/L
MKTF-16	10/30/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-16	10/30/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-16	10/30/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-16	10/30/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Toluene	95	100	35.043621	1000	ug/L
MKTF-16	10/30/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-16	10/30/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-16	10/30/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-16	10/30/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-16	10/30/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
MKTF-16	10/30/2019	Xylenes, Total	430	150	45.441493	620	ug/L
MKTF-16	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
MKTF-16	12/23/2020	Benzene	**14700**	100	38	5	ug/L
MKTF-16	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
MKTF-16	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
MKTF-16	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
MKTF-16	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
MKTF-16	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
MKTF-16	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
MKTF-16	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
MKTF-16	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
MKTF-16	12/23/2020	Chloroform	ND	100	60	100	ug/L
MKTF-16	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
MKTF-16	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
MKTF-16	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
MKTF-16	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
MKTF-16	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-16	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
MKTF-16	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
MKTF-16	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
MKTF-16	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
MKTF-16	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
MKTF-16	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
MKTF-16	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
MKTF-16	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
MKTF-16	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
MKTF-16	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
MKTF-16	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
MKTF-16	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
MKTF-16	12/23/2020	Ethylbenzene	**1320**	100	50	700	ug/L
MKTF-16	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
MKTF-16	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
MKTF-16	12/23/2020	Isopropylbenzene	ND	100	53	447	ug/L
MKTF-16	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
MKTF-16	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
MKTF-16	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
MKTF-16	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
MKTF-16	12/23/2020	MTBE	**279**	100	74	143	ug/L
MKTF-16	12/23/2020	Naphthalene	*ND*	*100*	100	30	ug/L
MKTF-16	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
MKTF-16	12/23/2020	n-Propylbenzene	ND	100	69	660	ug/L
MKTF-16	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
MKTF-16	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
MKTF-16	12/23/2020	Styrene	ND	100	100	100	ug/L
MKTF-16	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
MKTF-16	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
MKTF-16	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
MKTF-16	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
MKTF-16	12/23/2020	Toluene	129	100	41	1000	ug/L
MKTF-16	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
MKTF-16	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-16	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
MKTF-16	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
MKTF-16	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
MKTF-16	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
MKTF-16	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
MKTF-16	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
MKTF-16	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
MKTF-16	12/23/2020	1,2,4-Trimethylbenzene	**236**	100	82	56	ug/L
MKTF-16	12/23/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L
MKTF-16	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
MKTF-16	12/23/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
MKTF-16	12/23/2020	1,4-Dioxane	**19.4**	1	0.3	4.59	ug/L
MKTF-17	4/9/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	4/9/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	4/9/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	4/9/2014	Benzene	**3500**	100	15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	4/9/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	4/9/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	4/9/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	4/9/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	4/9/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	4/9/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	4/9/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	4/9/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	4/9/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	4/9/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	4/9/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	4/9/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	4/9/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	4/9/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	4/9/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	4/9/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	4/9/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	4/9/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	4/9/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-17	4/9/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	4/9/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	4/9/2014	1,2,4-Trimethylbenzene	**74**	10	1.2	56	ug/L
MKTF-17	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	4/9/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	4/9/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	4/9/2014	Isopropylbenzene	37	10	1.6	447	ug/L
MKTF-17	4/9/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	4/9/2014	Ethylbenzene	580	10	1.3	700	ug/L
MKTF-17	4/9/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	4/9/2014	n-Propylbenzene	96	10	1.4	660	ug/L
MKTF-17	4/9/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	4/9/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	4/9/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	4/9/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	4/9/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	4/9/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	4/9/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	4/9/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	4/9/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	4/9/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	4/9/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	4/9/2014	sec-Butylbenzene	10	10	1.5	2000	ug/L
MKTF-17	4/9/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	4/9/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	4/9/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	4/9/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	4/9/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	4/9/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	4/9/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	4/9/2014	Xylenes, Total	270	15	3.8	620	ug/L
MKTF-17	4/9/2014	MTBE	**1300**	10	2.5	143	ug/L
MKTF-17	4/9/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	4/9/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	6/6/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	6/6/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	6/6/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	6/6/2014	Benzene	**2600**	100	15	5	ug/L
MKTF-17	6/6/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	6/6/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	6/6/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	6/6/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	6/6/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	6/6/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	6/6/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	6/6/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	6/6/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	6/6/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	6/6/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	6/6/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	6/6/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	6/6/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	6/6/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	6/6/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	6/6/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	6/6/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	6/6/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/6/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	6/6/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
MKTF-17	6/6/2014	1-Methylnaphthalene	ND	40	4.4	NA	ug/L
MKTF-17	6/6/2014	Naphthalene	ND	20	1.4	30	ug/L
MKTF-17	6/6/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
MKTF-17	6/6/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	6/6/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
MKTF-17	6/6/2014	1,2,4-Trimethylbenzene	**64**	10	1.2	56	ug/L
MKTF-17	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	6/6/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	6/6/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	6/6/2014	Isopropylbenzene	30	10	1.6	447	ug/L
MKTF-17	6/6/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	6/6/2014	Ethylbenzene	480	10	1.3	700	ug/L
MKTF-17	6/6/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	6/6/2014	n-Propylbenzene	60	10	1.4	660	ug/L
MKTF-17	6/6/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	6/6/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	6/6/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
MKTF-17	6/6/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	6/6/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	6/6/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	6/6/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	6/6/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	6/6/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	6/6/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	6/6/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-17	6/6/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	6/6/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	6/6/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-17	6/6/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	6/6/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	6/6/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	6/6/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
MKTF-17	6/6/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	6/6/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	6/6/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	6/6/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	6/6/2014	Xylenes, Total	68	15	3.8	620	ug/L
MKTF-17	6/6/2014	MTBE	**1100**	10	2.5	143	ug/L
MKTF-17	6/6/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	6/6/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-17	9/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-17	9/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-17	9/18/2014	Benzene	**550**	10	1.5	5	ug/L
MKTF-17	9/18/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-17	9/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-17	9/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-17	9/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-17	9/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-17	9/18/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-17	9/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-17	9/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-17	9/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-17	9/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-17	9/18/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-17	9/18/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-17	9/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-17	9/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-17	9/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-17	9/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-17	9/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	9/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-17	9/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-17	9/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-17	9/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-17	9/18/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-17	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-17	9/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-17	9/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-17	9/18/2014	Isopropylbenzene	29	10	1.6	447	ug/L
MKTF-17	9/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Ethylbenzene	240	10	1.3	700	ug/L
MKTF-17	9/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-17	9/18/2014	n-Propylbenzene	66	10	1.4	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-17	9/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-17	9/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-17	9/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-17	9/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-17	9/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-17	9/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-17	9/18/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-17	9/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-17	9/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-17	9/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-17	9/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-17	9/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-17	9/18/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	9/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-17	9/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-17	9/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-17	9/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-17	9/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-17	9/18/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-17	9/18/2014	MTBE	**690**	10	2.5	143	ug/L
MKTF-17	9/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-17	9/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-17	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-17	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-17	11/18/2014	Benzene	**140**	10	1.5	5	ug/L
MKTF-17	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-17	11/18/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-17	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-17	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-17	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-17	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-17	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-17	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-17	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-17	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-17	11/18/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-17	11/18/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-17	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-17	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-17	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-17	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-17	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-17	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-17	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-17	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-17	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-17	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-17	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-17	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-17	11/18/2014	Isopropylbenzene	9.1	1	0.16	447	ug/L
MKTF-17	11/18/2014	p-Isopropyltoluene	3	1	0.18	NA	ug/L
MKTF-17	11/18/2014	Ethylbenzene	78	1	0.13	700	ug/L
MKTF-17	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-17	11/18/2014	n-Propylbenzene	13	1	0.14	660	ug/L
MKTF-17	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-17	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-17	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-17	11/18/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-17	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-17	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-17	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-17	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-17	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-17	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-17	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-17	11/18/2014	sec-Butylbenzene	2.1	1	0.15	2000	ug/L
MKTF-17	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-17	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-17	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-17	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-17	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-17	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-17	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-17	11/18/2014	MTBE	**570**	100	25	143	ug/L
MKTF-17	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-17	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-17	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	3/12/2015	Benzene	2.8	1	0.065	5	ug/L
MKTF-17	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-17	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-17	3/12/2015	p-Isopropyltoluene	1.2	1	0.19	NA	ug/L
MKTF-17	3/12/2015	Ethylbenzene	5.9	1	0.1	700	ug/L
MKTF-17	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-17	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-17	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-17	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-17	3/12/2015	MTBE	**590**	5	0.87	143	ug/L
MKTF-17	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	6/8/2015	Benzene	**11**	1	0.065	5	ug/L
MKTF-17	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	6/8/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	6/8/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	6/8/2015	Isopropylbenzene	1.1	1	0.15	447	ug/L
MKTF-17	6/8/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-17	6/8/2015	Ethylbenzene	18	1	0.1	700	ug/L
MKTF-17	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	6/8/2015	n-Propylbenzene	1.4	1	0.16	660	ug/L
MKTF-17	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	6/8/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	6/8/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-17	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	6/8/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-17	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	6/8/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	6/8/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-17	6/8/2015	MTBE	**500**	10	1.7	143	ug/L
MKTF-17	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-17	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-17	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-17	8/18/2015	Benzene	**36**	1	0.065	5	ug/L
MKTF-17	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-17	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-17	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-17	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-17	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-17	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-17	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-17	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-17	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-17	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-17	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-17	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-17	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-17	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-17	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-17	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-17	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-17	8/18/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-17	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-17	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-17	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-17	8/18/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-17	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-17	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-17	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-17	8/18/2015	Isopropylbenzene	19	1	0.15	447	ug/L
MKTF-17	8/18/2015	p-Isopropyltoluene	1.9	1	0.19	NA	ug/L
MKTF-17	8/18/2015	Ethylbenzene	300	10	1	700	ug/L
MKTF-17	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-17	8/18/2015	n-Propylbenzene	34	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/18/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-17	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-17	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-17	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-17	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-17	8/18/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-17	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-17	8/18/2015	Toluene	1.1	1	0.11	1000	ug/L
MKTF-17	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-17	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-17	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-17	8/18/2015	sec-Butylbenzene	2.6	1	0.23	2000	ug/L
MKTF-17	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-17	8/18/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-17	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-17	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-17	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-17	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-17	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	8/18/2015	Xylenes, Total	1.8	1.5	0.28	620	ug/L
MKTF-17	8/18/2015	MTBE	**640**	10	1.7	143	ug/L
MKTF-17	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	11/3/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-17	11/3/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-17	11/3/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-17	11/3/2015	Benzene	**29**	2	0.13	5	ug/L
MKTF-17	11/3/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-17	11/3/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-17	11/3/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-17	11/3/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-17	11/3/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-17	11/3/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-17	11/3/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-17	11/3/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-17	11/3/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-17	11/3/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-17	11/3/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-17	11/3/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-17	11/3/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-17	11/3/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-17	11/3/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-17	11/3/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-17	11/3/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-17	11/3/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-17	11/3/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-17	11/3/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-17	11/3/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-17	11/3/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-17	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-17	11/3/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-17	11/3/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-17	11/3/2015	Isopropylbenzene	22	2	0.3	447	ug/L
MKTF-17	11/3/2015	p-Isopropyltoluene	2.4	2	0.38	NA	ug/L
MKTF-17	11/3/2015	Ethylbenzene	310	20	2	700	ug/L
MKTF-17	11/3/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-17	11/3/2015	n-Propylbenzene	41	2	0.33	660	ug/L
MKTF-17	11/3/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-17	11/3/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-17	11/3/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-17	11/3/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-17	11/3/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-17	11/3/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-17	11/3/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-17	11/3/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-17	11/3/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-17	11/3/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-17	11/3/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-17	11/3/2015	sec-Butylbenzene	5	2	0.46	2000	ug/L
MKTF-17	11/3/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-17	11/3/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-17	11/3/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-17	11/3/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-17	11/3/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-17	11/3/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-17	11/3/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/3/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-17	11/3/2015	MTBE	**770**	20	3.5	143	ug/L
MKTF-17	11/3/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-17	11/3/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-17	2/26/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-17	2/26/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-17	2/26/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-17	2/26/2016	Benzene	**260**	5	0.48	5	ug/L
MKTF-17	2/26/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-17	2/26/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-17	2/26/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-17	2/26/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-17	2/26/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-17	2/26/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-17	2/26/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-17	2/26/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-17	2/26/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-17	2/26/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-17	2/26/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-17	2/26/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
MKTF-17	2/26/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-17	2/26/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-17	2/26/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-17	2/26/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-17	2/26/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-17	2/26/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-17	2/26/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-17	2/26/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-17	2/26/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	2/26/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-17	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-17	2/26/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-17	2/26/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-17	2/26/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-17	2/26/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-17	2/26/2016	Ethylbenzene	18	5	0.56	700	ug/L
MKTF-17	2/26/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-17	2/26/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
MKTF-17	2/26/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-17	2/26/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-17	2/26/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-17	2/26/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-17	2/26/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-17	2/26/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-17	2/26/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-17	2/26/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-17	2/26/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-17	2/26/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-17	2/26/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	2/26/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-17	2/26/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-17	2/26/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-17	2/26/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-17	2/26/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-17	2/26/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-17	2/26/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-17	2/26/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-17	2/26/2016	Xylenes, Total	23	7.5	1.6	620	ug/L
MKTF-17	2/26/2016	MTBE	**640**	5	1.1	143	ug/L
MKTF-17	2/26/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-17	2/26/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-17	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-17	6/10/2016	Acetone	40	10	4.9	14064	ug/L
MKTF-17	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-17	6/10/2016	Benzene	**1900**	50	4.8	5	ug/L
MKTF-17	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-17	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-17	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-17	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-17	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-17	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-17	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-17	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-17	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-17	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-17	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-17	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-17	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-17	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-17	6/10/2016	2-Butanone	6.4	10	0.74	5565	ug/L
MKTF-17	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-17	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-17	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-17	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-17	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-17	6/10/2016	1,2,4-Trimethylbenzene	**230**	50	5.5	56	ug/L
MKTF-17	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-17	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-17	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-17	6/10/2016	Isopropylbenzene	23	1	0.1	447	ug/L
MKTF-17	6/10/2016	p-Isopropyltoluene	2	1	0.14	NA	ug/L
MKTF-17	6/10/2016	Ethylbenzene	520	50	5.6	700	ug/L
MKTF-17	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-17	6/10/2016	n-Propylbenzene	43	1	0.13	660	ug/L
MKTF-17	6/10/2016	n-Butylbenzene	1.6	3	0.16	1000	ug/L
MKTF-17	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-17	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-17	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-17	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-17	6/10/2016	1,3,5-Trimethylbenzene	4.6	1	0.12	60	ug/L
MKTF-17	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-17	6/10/2016	Toluene	6	1	0.12	1000	ug/L
MKTF-17	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-17	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-17	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-17	6/10/2016	sec-Butylbenzene	2.9	1	0.12	2000	ug/L
MKTF-17	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-17	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-17	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-17	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-17	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-17	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-17	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-17	6/10/2016	Xylenes, Total	240	75	18	620	ug/L
MKTF-17	6/10/2016	MTBE	**490**	50	11	143	ug/L
MKTF-17	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-17	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-17	9/13/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-17	9/13/2016	Acetone	ND	100	49	14064	ug/L
MKTF-17	9/13/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-17	9/13/2016	Benzene	**1300**	100	9.6	5	ug/L
MKTF-17	9/13/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-17	9/13/2016	Bromomethane	**9.3**	30	7.8	7.54	ug/L
MKTF-17	9/13/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-17	9/13/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-17	9/13/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-17	9/13/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-17	9/13/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-17	9/13/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-17	9/13/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-17	9/13/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-17	9/13/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-17	9/13/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-17	9/13/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-17	9/13/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-17	9/13/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-17	9/13/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-17	9/13/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-17	9/13/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-17	9/13/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-17	9/13/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-17	9/13/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-17	9/13/2016	1,2,4-Trimethylbenzene	12	10	1.1	56	ug/L
MKTF-17	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-17	9/13/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-17	9/13/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-17	9/13/2016	Isopropylbenzene	33	10	1	447	ug/L
MKTF-17	9/13/2016	p-Isopropyltoluene	3.4	10	1.4	NA	ug/L
MKTF-17	9/13/2016	Ethylbenzene	550	10	1.1	700	ug/L
MKTF-17	9/13/2016	Styrene	3.1	10	1.1	100	ug/L
MKTF-17	9/13/2016	n-Propylbenzene	50	10	1.3	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	n-Butylbenzene	3.9	30	1.6	1000	ug/L
MKTF-17	9/13/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-17	9/13/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-17	9/13/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-17	9/13/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-17	9/13/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-17	9/13/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-17	9/13/2016	Toluene	2.1	10	1.2	1000	ug/L
MKTF-17	9/13/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-17	9/13/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-17	9/13/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-17	9/13/2016	sec-Butylbenzene	5.4	10	1.2	2000	ug/L
MKTF-17	9/13/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-17	9/13/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-17	9/13/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-17	9/13/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-17	9/13/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-17	9/13/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-17	9/13/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-17	9/13/2016	Xylenes, Total	ND	15	3.7	620	ug/L
MKTF-17	9/13/2016	MTBE	**380**	10	2.1	143	ug/L
MKTF-17	9/13/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-17	9/13/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-17	11/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-17	11/8/2016	Acetone	ND	50	25	14064	ug/L
MKTF-17	11/8/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-17	11/8/2016	Benzene	**760**	50	4.8	5	ug/L
MKTF-17	11/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-17	11/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-17	11/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-17	11/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-17	11/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-17	11/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-17	11/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-17	11/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-17	11/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-17	11/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-17	11/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-17	11/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-17	11/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-17	11/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-17	11/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-17	11/8/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-17	11/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-17	11/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-17	11/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-17	11/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-17	11/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	11/8/2016	1,2,4-Trimethylbenzene	1.7	5	0.55	56	ug/L
MKTF-17	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-17	11/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-17	11/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-17	11/8/2016	Isopropylbenzene	20	5	0.52	447	ug/L
MKTF-17	11/8/2016	p-Isopropyltoluene	2.3	5	0.7	NA	ug/L
MKTF-17	11/8/2016	Ethylbenzene	390	5	0.56	700	ug/L
MKTF-17	11/8/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-17	11/8/2016	n-Propylbenzene	32	5	0.66	660	ug/L
MKTF-17	11/8/2016	n-Butylbenzene	2.7	15	0.8	1000	ug/L
MKTF-17	11/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-17	11/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-17	11/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-17	11/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-17	11/8/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-17	11/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-17	11/8/2016	Toluene	1.9	5	0.59	1000	ug/L
MKTF-17	11/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-17	11/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-17	11/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	11/8/2016	sec-Butylbenzene	3.5	5	0.62	2000	ug/L
MKTF-17	11/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-17	11/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-17	11/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-17	11/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-17	11/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-17	11/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-17	11/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/8/2016	Xylenes, Total	4.3	7.5	1.8	620	ug/L
MKTF-17	11/8/2016	MTBE	**360**	5	1.1	143	ug/L
MKTF-17	11/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-17	11/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-17	3/15/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-17	3/15/2017	Acetone	18	100	8.8	14064	ug/L
MKTF-17	3/15/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-17	3/15/2017	Benzene	**290**	10	0.96	5	ug/L
MKTF-17	3/15/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-17	3/15/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-17	3/15/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-17	3/15/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-17	3/15/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-17	3/15/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-17	3/15/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-17	3/15/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-17	3/15/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-17	3/15/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-17	3/15/2017	1,1-Dichloroethane	ND	10	1	25	ug/L
MKTF-17	3/15/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-17	3/15/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-17	3/15/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-17	3/15/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-17	3/15/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-17	3/15/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-17	3/15/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-17	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-17	3/15/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-17	3/15/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-17	3/15/2017	1,2,4-Trimethylbenzene	34	10	1	56	ug/L
MKTF-17	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-17	3/15/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-17	3/15/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-17	3/15/2017	Isopropylbenzene	10	10	0.98	447	ug/L
MKTF-17	3/15/2017	p-Isopropyltoluene	2.2	10	1.4	NA	ug/L
MKTF-17	3/15/2017	Ethylbenzene	230	10	1.1	700	ug/L
MKTF-17	3/15/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-17	3/15/2017	n-Propylbenzene	16	10	1.3	660	ug/L
MKTF-17	3/15/2017	n-Butylbenzene	1.8	30	1.6	1000	ug/L
MKTF-17	3/15/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-17	3/15/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-17	3/15/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-17	3/15/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-17	3/15/2017	1,3,5-Trimethylbenzene	3.5	10	1.2	60	ug/L
MKTF-17	3/15/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-17	3/15/2017	Toluene	2.2	10	0.89	1000	ug/L
MKTF-17	3/15/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-17	3/15/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-17	3/15/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-17	3/15/2017	sec-Butylbenzene	2.2	10	1	2000	ug/L
MKTF-17	3/15/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-17	3/15/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-17	3/15/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-17	3/15/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-17	3/15/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-17	3/15/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-17	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-17	3/15/2017	Xylenes, Total	70	15	3.2	620	ug/L
MKTF-17	3/15/2017	MTBE	**280**	10	1.5	143	ug/L
MKTF-17	3/15/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-17	3/15/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-17	6/14/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	6/14/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	6/14/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	6/14/2017	Benzene	**260**	5	0.31	5	ug/L
MKTF-17	6/14/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	6/14/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	6/14/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	6/14/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	6/14/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	6/14/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	6/14/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	6/14/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	6/14/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	6/14/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	6/14/2017	1,1-Dichloroethane	ND	5	2	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/14/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	6/14/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	6/14/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	6/14/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	6/14/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	6/14/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	6/14/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	6/14/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	6/14/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	6/14/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	6/14/2017	1,2,4-Trimethylbenzene	**75**	5	0.56	56	ug/L
MKTF-17	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	6/14/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	6/14/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	6/14/2017	Isopropylbenzene	35	5	0.26	447	ug/L
MKTF-17	6/14/2017	p-Isopropyltoluene	2.1	5	0.48	NA	ug/L
MKTF-17	6/14/2017	Ethylbenzene	580	50	4.7	700	ug/L
MKTF-17	6/14/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-17	6/14/2017	n-Propylbenzene	77	5	0.37	660	ug/L
MKTF-17	6/14/2017	n-Butylbenzene	3.5	15	0.65	1000	ug/L
MKTF-17	6/14/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	6/14/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	6/14/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	6/14/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	6/14/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	6/14/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	6/14/2017	Toluene	1.7	5	0.32	1000	ug/L
MKTF-17	6/14/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	6/14/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	6/14/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	6/14/2017	sec-Butylbenzene	5.9	5	0.55	2000	ug/L
MKTF-17	6/14/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	6/14/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	6/14/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-17	6/14/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	6/14/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	6/14/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	6/14/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	6/14/2017	Xylenes, Total	4.8	7.5	1.6	620	ug/L
MKTF-17	6/14/2017	MTBE	**390**	5	1.2	143	ug/L
MKTF-17	6/14/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	6/14/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	9/26/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	9/26/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	9/26/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	9/26/2017	Benzene	**47**	5	0.31	5	ug/L
MKTF-17	9/26/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	9/26/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	9/26/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	9/26/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	9/26/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	9/26/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	9/26/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	9/26/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	9/26/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	9/26/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	9/26/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	9/26/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	9/26/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	9/26/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	9/26/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	9/26/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	9/26/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	9/26/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	9/26/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	9/26/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	9/26/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	9/26/2017	1,2,4-Trimethylbenzene	0.73	5	0.56	56	ug/L
MKTF-17	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	9/26/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	9/26/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	9/26/2017	Isopropylbenzene	49	5	0.26	447	ug/L
MKTF-17	9/26/2017	p-Isopropyltoluene	2.2	5	0.48	NA	ug/L
MKTF-17	9/26/2017	Ethylbenzene	680	50	4.7	700	ug/L
MKTF-17	9/26/2017	Styrene	ND	5	0.78	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/26/2017	n-Propylbenzene	110	5	0.37	660	ug/L
MKTF-17	9/26/2017	n-Butylbenzene	4.9	15	0.65	1000	ug/L
MKTF-17	9/26/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	9/26/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	9/26/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	9/26/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	9/26/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	9/26/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	9/26/2017	Toluene	1.1	5	0.32	1000	ug/L
MKTF-17	9/26/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	9/26/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	9/26/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	9/26/2017	sec-Butylbenzene	8.7	5	0.55	2000	ug/L
MKTF-17	9/26/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	9/26/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	9/26/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	9/26/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	9/26/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	9/26/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	9/26/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	9/26/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	9/26/2017	MTBE	**940**	5	1.2	143	ug/L
MKTF-17	9/26/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	9/26/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	12/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	12/1/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	12/1/2017	Chloroform	ND	5	2	100	ug/L
MKTF-17	12/1/2017	Benzene	**140**	5	0.31	5	ug/L
MKTF-17	12/1/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	12/1/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	12/1/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	12/1/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	12/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	12/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	12/1/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	12/1/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	12/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	12/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	12/1/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	12/1/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	12/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	12/1/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	12/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	12/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	12/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	12/1/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	12/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	12/1/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	12/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	12/1/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
MKTF-17	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	12/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	12/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	12/1/2017	Isopropylbenzene	9.7	5	0.26	447	ug/L
MKTF-17	12/1/2017	p-Isopropyltoluene	1.5	5	0.48	NA	ug/L
MKTF-17	12/1/2017	Ethylbenzene	170	5	0.47	700	ug/L
MKTF-17	12/1/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-17	12/1/2017	n-Propylbenzene	16	5	0.37	660	ug/L
MKTF-17	12/1/2017	n-Butylbenzene	1.6	15	0.65	1000	ug/L
MKTF-17	12/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	12/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	12/1/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	12/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	12/1/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	12/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	12/1/2017	Toluene	0.8	5	0.32	1000	ug/L
MKTF-17	12/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	12/1/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	12/1/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	12/1/2017	sec-Butylbenzene	2.5	5	0.55	2000	ug/L
MKTF-17	12/1/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	12/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	12/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	12/1/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	12/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	12/1/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	12/1/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	12/1/2017	MTBE	**1500**	50	12	143	ug/L
MKTF-17	12/1/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	12/1/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	2/16/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	2/16/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	2/16/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	2/16/2018	Benzene	**220**	5	0.31	5	ug/L
MKTF-17	2/16/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	2/16/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	2/16/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	2/16/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	2/16/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	2/16/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	2/16/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	2/16/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	2/16/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	2/16/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-17	2/16/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	2/16/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	2/16/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	2/16/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	2/16/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	2/16/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	2/16/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	2/16/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	2/16/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	2/16/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	2/16/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	2/16/2018	1,2,4-Trimethylbenzene	0.62	5	0.56	56	ug/L
MKTF-17	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	2/16/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	2/16/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	2/16/2018	Isopropylbenzene	9.9	5	0.26	447	ug/L
MKTF-17	2/16/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-17	2/16/2018	Ethylbenzene	210	5	0.47	700	ug/L
MKTF-17	2/16/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-17	2/16/2018	n-Propylbenzene	13	5	0.37	660	ug/L
MKTF-17	2/16/2018	n-Butylbenzene	0.83	15	0.65	1000	ug/L
MKTF-17	2/16/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	2/16/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	2/16/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	2/16/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	2/16/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	2/16/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	2/16/2018	Toluene	0.98	5	0.32	1000	ug/L
MKTF-17	2/16/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	2/16/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	2/16/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	2/16/2018	sec-Butylbenzene	1.5	5	0.55	2000	ug/L
MKTF-17	2/16/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	2/16/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	2/16/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	2/16/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	2/16/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	2/16/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	2/16/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	2/16/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-17	2/16/2018	MTBE	**4900**	50	12	143	ug/L
MKTF-17	2/16/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	2/16/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	5/4/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-17	5/4/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-17	5/4/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	5/4/2018	Benzene	**47**	5	0.31	5	ug/L
MKTF-17	5/4/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-17	5/4/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	5/4/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	5/4/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-17	5/4/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-17	5/4/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-17	5/4/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-17	5/4/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-17	5/4/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-17	5/4/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	5/4/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	5/4/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-17	5/4/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-17	5/4/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	5/4/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-17	5/4/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-17	5/4/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-17	5/4/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-17	5/4/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-17	5/4/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-17	5/4/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	5/4/2018	1,2,4-Trimethylbenzene	1.4	5	0.56	56	ug/L
MKTF-17	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-17	5/4/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-17	5/4/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-17	5/4/2018	Isopropylbenzene	7.2	5	0.26	447	ug/L
MKTF-17	5/4/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-17	5/4/2018	Ethylbenzene	140	5	0.47	700	ug/L
MKTF-17	5/4/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-17	5/4/2018	n-Propylbenzene	9.1	5	0.37	660	ug/L
MKTF-17	5/4/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-17	5/4/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	5/4/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-17	5/4/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	5/4/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-17	5/4/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-17	5/4/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-17	5/4/2018	Toluene	1.1	5	0.32	1000	ug/L
MKTF-17	5/4/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-17	5/4/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-17	5/4/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-17	5/4/2018	sec-Butylbenzene	1.5	5	0.55	2000	ug/L
MKTF-17	5/4/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-17	5/4/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-17	5/4/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	5/4/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-17	5/4/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-17	5/4/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-17	5/4/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-17	5/4/2018	Xylenes, Total	*2*	7.5	1.6	620	ug/L
MKTF-17	5/4/2018	MTBE	**7400**	50	12	143	ug/L
MKTF-17	5/4/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-17	5/4/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-17	8/24/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
MKTF-17	8/24/2018	Acetone	ND	50	3.9	14064	ug/L
MKTF-17	8/24/2018	Chloroform	ND	5	2	100	ug/L
MKTF-17	8/24/2018	Benzene	2.7	5	0.87	5	ug/L
MKTF-17	8/24/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
MKTF-17	8/24/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-17	8/24/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-17	8/24/2018	Dibromomethane	ND	5	1.6	8	ug/L
MKTF-17	8/24/2018	Chloroethane	ND	10	0.82	20857	ug/L
MKTF-17	8/24/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
MKTF-17	8/24/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
MKTF-17	8/24/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
MKTF-17	8/24/2018	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-17	8/24/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
MKTF-17	8/24/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-17	8/24/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
MKTF-17	8/24/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
MKTF-17	8/24/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-17	8/24/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
MKTF-17	8/24/2018	2-Butanone	ND	50	6.3	5565	ug/L
MKTF-17	8/24/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
MKTF-17	8/24/2018	Trichloroethene	ND	5	1.3	5	ug/L
MKTF-17	8/24/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
MKTF-17	8/24/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
MKTF-17	8/24/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-17	8/24/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
MKTF-17	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
MKTF-17	8/24/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
MKTF-17	8/24/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
MKTF-17	8/24/2018	Isopropylbenzene	8	5	1.1	447	ug/L
MKTF-17	8/24/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
MKTF-17	8/24/2018	Ethylbenzene	120	5	1.1	700	ug/L
MKTF-17	8/24/2018	Styrene	ND	5	1.3	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	n-Propylbenzene	14	5	1.2	660	ug/L
MKTF-17	8/24/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-17	8/24/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-17	8/24/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
MKTF-17	8/24/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-17	8/24/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
MKTF-17	8/24/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
MKTF-17	8/24/2018	Bromobenzene	ND	5	1.6	62	ug/L
MKTF-17	8/24/2018	Toluene	ND	5	0.84	1000	ug/L
MKTF-17	8/24/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
MKTF-17	8/24/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-17	8/24/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	8/24/2018	sec-Butylbenzene	1.5	5	1	2000	ug/L
MKTF-17	8/24/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
MKTF-17	8/24/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-17	8/24/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-17	8/24/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-17	8/24/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
MKTF-17	8/24/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
MKTF-17	8/24/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-17	8/24/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
MKTF-17	8/24/2018	MTBE	**5300**	50	16	143	ug/L
MKTF-17	8/24/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
MKTF-17	8/24/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
MKTF-17	11/28/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-17	11/28/2018	Acetone	ND	50	3.8	14064	ug/L
MKTF-17	11/28/2018	Chloroform	ND	5	1.2	100	ug/L
MKTF-17	11/28/2018	Benzene	ND	5	0.87	5	ug/L
MKTF-17	11/28/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
MKTF-17	11/28/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
MKTF-17	11/28/2018	Chloromethane	ND	15	1.6	20.32	ug/L
MKTF-17	11/28/2018	Dibromomethane	ND	5	1.6	8	ug/L
MKTF-17	11/28/2018	Chloroethane	ND	10	0.82	20857	ug/L
MKTF-17	11/28/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
MKTF-17	11/28/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
MKTF-17	11/28/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
MKTF-17	11/28/2018	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-17	11/28/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
MKTF-17	11/28/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
MKTF-17	11/28/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
MKTF-17	11/28/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
MKTF-17	11/28/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
MKTF-17	11/28/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
MKTF-17	11/28/2018	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-17	11/28/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
MKTF-17	11/28/2018	Trichloroethene	ND	5	1.3	5	ug/L
MKTF-17	11/28/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
MKTF-17	11/28/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
MKTF-17	11/28/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
MKTF-17	11/28/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
MKTF-17	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
MKTF-17	11/28/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
MKTF-17	11/28/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
MKTF-17	11/28/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
MKTF-17	11/28/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
MKTF-17	11/28/2018	Ethylbenzene	28	5	1.1	700	ug/L
MKTF-17	11/28/2018	Styrene	ND	5	1.3	100	ug/L
MKTF-17	11/28/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
MKTF-17	11/28/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-17	11/28/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
MKTF-17	11/28/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
MKTF-17	11/28/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
MKTF-17	11/28/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
MKTF-17	11/28/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
MKTF-17	11/28/2018	Bromobenzene	ND	5	1.6	62	ug/L
MKTF-17	11/28/2018	Toluene	ND	5	0.84	1000	ug/L
MKTF-17	11/28/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
MKTF-17	11/28/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-17	11/28/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-17	11/28/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
MKTF-17	11/28/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
MKTF-17	11/28/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-17	11/28/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
MKTF-17	11/28/2018	Pentafluorobenzene	**50**	0	0		None
MKTF-17	11/28/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-17	11/28/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/28/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
MKTF-17	11/28/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-17	11/28/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
MKTF-17	11/28/2018	MTBE	**5700**	50	23	143	ug/L
MKTF-17	11/28/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
MKTF-17	11/28/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
MKTF-17	5/9/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	5/9/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	5/9/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	5/9/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-17	5/9/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	5/9/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	5/9/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	5/9/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	5/9/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-17	5/9/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	5/9/2019	1,2,4-Trimethylbenzene	**190**	5	1.065995	56	ug/L
MKTF-17	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-17	5/9/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	5/9/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	5/9/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	5/9/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-17	5/9/2019	1,3,5-Trimethylbenzene	17	5	0.943299	60	ug/L
MKTF-17	5/9/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	5/9/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	5/9/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	5/9/2019	1-Methylnaphthalene	42	20	1.574772	NA	ug/L
MKTF-17	5/9/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	5/9/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	5/9/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	5/9/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-17	5/9/2019	2-Methylnaphthalene	**25**	20	1.72688		ug/L
MKTF-17	5/9/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	5/9/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-17	5/9/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-17	5/9/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-17	5/9/2019	Benzene	**2200**	50	8.331953	5	ug/L
MKTF-17	5/9/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	5/9/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	5/9/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	5/9/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	5/9/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	5/9/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	5/9/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	5/9/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	5/9/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	5/9/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	5/9/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	5/9/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	5/9/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	5/9/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	5/9/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	5/9/2019	Ethylbenzene	490	5	0.661704	700	ug/L
MKTF-17	5/9/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	5/9/2019	Isopropylbenzene	27	5	0.957611	447	ug/L
MKTF-17	5/9/2019	MTBE	**4300**	50	22.804749	143	ug/L
MKTF-17	5/9/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	5/9/2019	Naphthalene	**150**	10	1.375357	30	ug/L
MKTF-17	5/9/2019	n-Butylbenzene	2.7	15	1.137848	1000	ug/L
MKTF-17	5/9/2019	n-Propylbenzene	46	5	1.07154	660	ug/L
MKTF-17	5/9/2019	sec-Butylbenzene	3.1	5	1.238656	2000	ug/L
MKTF-17	5/9/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-17	5/9/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	5/9/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	5/9/2019	Toluene	2.2	5	1.752181	1000	ug/L
MKTF-17	5/9/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	5/9/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	5/9/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	5/9/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	5/9/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	5/9/2019	Xylenes, Total	150	7.5	2.272075	620	ug/L
MKTF-17	5/9/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-17	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-17	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	8/20/2019	1,2,4-Trimethylbenzene	**88**	5	1.065995	56	ug/L
MKTF-17	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-17	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-17	8/20/2019	1,3,5-Trimethylbenzene	1.8	5	0.943299	60	ug/L
MKTF-17	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	8/20/2019	1-Methylnaphthalene	24	20	1.574772	NA	ug/L
MKTF-17	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-17	8/20/2019	2-Methylnaphthalene	**6.9**	20	1.72688		ug/L
MKTF-17	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	8/20/2019	p-Isopropyltoluene	1.8	5	1.086447	NA	ug/L
MKTF-17	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-17	8/20/2019	Acetone	18	50	5.996982	14064	ug/L
MKTF-17	8/20/2019	Benzene	**870**	50	8.331953	5	ug/L
MKTF-17	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	8/20/2019	Ethylbenzene	640	50	6.61704	700	ug/L
MKTF-17	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	8/20/2019	Isopropylbenzene	34	5	0.957611	447	ug/L
MKTF-17	8/20/2019	MTBE	**4300**	50	22.804749	143	ug/L
MKTF-17	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	8/20/2019	Naphthalene	29	10	1.375357	30	ug/L
MKTF-17	8/20/2019	n-Butylbenzene	6.7	15	1.137848	1000	ug/L
MKTF-17	8/20/2019	n-Propylbenzene	66	5	1.07154	660	ug/L
MKTF-17	8/20/2019	sec-Butylbenzene	4.7	5	1.238656	2000	ug/L
MKTF-17	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-17	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	8/20/2019	Toluene	2.6	5	1.752181	1000	ug/L
MKTF-17	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	8/20/2019	Xylenes, Total	78	7.5	2.272075	620	ug/L
MKTF-17	8/20/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-17	10/29/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-17	10/29/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-17	10/29/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-17	10/29/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-17	10/29/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-17	10/29/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-17	10/29/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-17	10/29/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-17	10/29/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-17	10/29/2019	1,2,4-Trimethylbenzene	**150**	5	1.065995	56	ug/L
MKTF-17	10/29/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-17	10/29/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-17	10/29/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-17	10/29/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	1,3,5-Trimethylbenzene	38	5	0.943299	60	ug/L
MKTF-17	10/29/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-17	10/29/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-17	10/29/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-17	10/29/2019	1-Methylnaphthalene	42	20	1.574772	NA	ug/L
MKTF-17	10/29/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-17	10/29/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-17	10/29/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-17	10/29/2019	2-Hexanone	*8*	*50*	7.73596	38	ug/L
MKTF-17	10/29/2019	2-Methylnaphthalene	**11**	20	1.72688		ug/L
MKTF-17	10/29/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-17	10/29/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-17	10/29/2019	4-Methyl-2-Pentanone	4.4	50	3.569477	1243	ug/L
MKTF-17	10/29/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-17	10/29/2019	Benzene	**12000**	500	83.319528	5	ug/L
MKTF-17	10/29/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-17	10/29/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-17	10/29/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-17	10/29/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-17	10/29/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-17	10/29/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-17	10/29/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-17	10/29/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-17	10/29/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-17	10/29/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-17	10/29/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-17	10/29/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-17	10/29/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-17	10/29/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-17	10/29/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-17	10/29/2019	Ethylbenzene	**1100**	50	6.61704	700	ug/L
MKTF-17	10/29/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-17	10/29/2019	Isopropylbenzene	42	5	0.957611	447	ug/L
MKTF-17	10/29/2019	MTBE	**2500**	50	22.804749	143	ug/L
MKTF-17	10/29/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-17	10/29/2019	Naphthalene	**110**	10	1.375357	30	ug/L
MKTF-17	10/29/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-17	10/29/2019	n-Propylbenzene	85	5	1.07154	660	ug/L
MKTF-17	10/29/2019	sec-Butylbenzene	4.6	5	1.238656	2000	ug/L
MKTF-17	10/29/2019	Styrene	1.5	5	0.956617	100	ug/L
MKTF-17	10/29/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-17	10/29/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-17	10/29/2019	Toluene	**23000**	500	175.218107	1000	ug/L
MKTF-17	10/29/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-17	10/29/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-17	10/29/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-17	10/29/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-17	10/29/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-17	10/29/2019	Xylenes, Total	**3100**	75	22.720747	620	ug/L
MKTF-17	10/29/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-18	4/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	4/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	4/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	4/14/2014	Benzene	**290**	5	0.77	5	ug/L
MKTF-18	4/14/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	4/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	4/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	4/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	4/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	4/14/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	4/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	4/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	4/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	4/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	4/14/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	4/14/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	4/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	4/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	4/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	4/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	4/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	4/14/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	4/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	4/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	4/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	4/14/2014	1,2,4-Trimethylbenzene	**91**	5	0.61	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	4/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	4/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	4/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	4/14/2014	Isopropylbenzene	5.2	5	0.81	447	ug/L
MKTF-18	4/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	4/14/2014	Ethylbenzene	58	5	0.64	700	ug/L
MKTF-18	4/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	4/14/2014	n-Propylbenzene	7.6	5	0.7	660	ug/L
MKTF-18	4/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	4/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	4/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	4/14/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	4/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	4/14/2014	1,3,5-Trimethylbenzene	24	5	0.66	60	ug/L
MKTF-18	4/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	4/14/2014	Toluene	15	5	0.85	1000	ug/L
MKTF-18	4/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	4/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	4/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	4/14/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	4/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	4/14/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-18	4/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	4/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	4/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	4/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	4/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	4/14/2014	Xylenes, Total	44	7.5	1.9	620	ug/L
MKTF-18	4/14/2014	MTBE	**150**	5	1.3	143	ug/L
MKTF-18	4/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	4/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	6/6/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	6/6/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	6/6/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	6/6/2014	Benzene	**290**	5	0.77	5	ug/L
MKTF-18	6/6/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	6/6/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	6/6/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	6/6/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	6/6/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	6/6/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	6/6/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	6/6/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	6/6/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	6/6/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	6/6/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	6/6/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	6/6/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	6/6/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	6/6/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	6/6/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	6/6/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	6/6/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	6/6/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	6/6/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	6/6/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	6/6/2014	1,2,4-Trimethylbenzene	**88**	5	0.61	56	ug/L
MKTF-18	6/6/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	6/6/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	6/6/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	6/6/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-18	6/6/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	6/6/2014	Ethylbenzene	36	5	0.64	700	ug/L
MKTF-18	6/6/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	6/6/2014	n-Propylbenzene	6.6	5	0.7	660	ug/L
MKTF-18	6/6/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	6/6/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	6/6/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	6/6/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	6/6/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	6/6/2014	1,3,5-Trimethylbenzene	29	5	0.66	60	ug/L
MKTF-18	6/6/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	6/6/2014	Toluene	14	5	0.85	1000	ug/L
MKTF-18	6/6/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	6/6/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	6/6/2014	Tetrachloroethene	ND	5	1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	6/6/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	6/6/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-18	6/6/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	6/6/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	6/6/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	6/6/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	6/6/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	6/6/2014	Xylenes, Total	55	7.5	1.9	620	ug/L
MKTF-18	6/6/2014	MTBE	140	5	1.3	143	ug/L
MKTF-18	6/6/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	6/6/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	9/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	9/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	9/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	9/18/2014	Benzene	**120**	5	0.77	5	ug/L
MKTF-18	9/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	9/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	9/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-18	9/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	9/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	9/18/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-18	9/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	9/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	9/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	9/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	9/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	9/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	9/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	9/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	9/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	9/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	9/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	9/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	9/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	9/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	9/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	9/18/2014	1,2,4-Trimethylbenzene	**95**	5	0.61	56	ug/L
MKTF-18	9/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	9/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	9/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	9/18/2014	Isopropylbenzene	7.8	5	0.81	447	ug/L
MKTF-18	9/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	9/18/2014	Ethylbenzene	69	5	0.64	700	ug/L
MKTF-18	9/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	9/18/2014	n-Propylbenzene	11	5	0.7	660	ug/L
MKTF-18	9/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	9/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	9/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	9/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	9/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	9/18/2014	1,3,5-Trimethylbenzene	25	5	0.66	60	ug/L
MKTF-18	9/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	9/18/2014	Toluene	13	5	0.85	1000	ug/L
MKTF-18	9/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	9/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	9/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	9/18/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	9/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	9/18/2014	cis-1,2-Dichloroethene	7.3	5	0.61	70	ug/L
MKTF-18	9/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	9/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	9/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	9/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	9/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	9/18/2014	Xylenes, Total	42	7.5	1.9	620	ug/L
MKTF-18	9/18/2014	MTBE	120	5	1.3	143	ug/L
MKTF-18	9/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	9/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	11/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-18	11/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-18	11/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-18	11/18/2014	Benzene	**96**	5	0.77	5	ug/L
MKTF-18	11/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-18	11/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-18	11/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-18	11/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-18	11/18/2014	Vinyl Chloride	*ND*	*5*	0.53	2	ug/L
MKTF-18	11/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-18	11/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-18	11/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-18	11/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-18	11/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-18	11/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-18	11/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	11/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-18	11/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-18	11/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-18	11/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-18	11/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-18	11/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-18	11/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-18	11/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-18	11/18/2014	1,2,4-Trimethylbenzene	**96**	5	0.61	56	ug/L
MKTF-18	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-18	11/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-18	11/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-18	11/18/2014	Isopropylbenzene	8.8	5	0.81	447	ug/L
MKTF-18	11/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-18	11/18/2014	Ethylbenzene	90	5	0.64	700	ug/L
MKTF-18	11/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-18	11/18/2014	n-Propylbenzene	13	5	0.7	660	ug/L
MKTF-18	11/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-18	11/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-18	11/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-18	11/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-18	11/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-18	11/18/2014	1,3,5-Trimethylbenzene	23	5	0.66	60	ug/L
MKTF-18	11/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-18	11/18/2014	Toluene	7.6	5	0.85	1000	ug/L
MKTF-18	11/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-18	11/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-18	11/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-18	11/18/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-18	11/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-18	11/18/2014	cis-1,2-Dichloroethene	5.6	5	0.61	70	ug/L
MKTF-18	11/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-18	11/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-18	11/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-18	11/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-18	11/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-18	11/18/2014	Xylenes, Total	47	7.5	1.9	620	ug/L
MKTF-18	11/18/2014	MTBE	100	5	1.3	143	ug/L
MKTF-18	11/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-18	11/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-18	3/17/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-18	3/17/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-18	3/17/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-18	3/17/2015	Benzene	**58**	5	0.33	5	ug/L
MKTF-18	3/17/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-18	3/17/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-18	3/17/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-18	3/17/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-18	3/17/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-18	3/17/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-18	3/17/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-18	3/17/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-18	3/17/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-18	3/17/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-18	3/17/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-18	3/17/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
MKTF-18	3/17/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-18	3/17/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-18	3/17/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-18	3/17/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-18	3/17/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-18	3/17/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-18	3/17/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-18	3/17/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-18	3/17/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-18	3/17/2015	1,2,4-Trimethylbenzene	**65**	5	0.8	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-18	3/17/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-18	3/17/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-18	3/17/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
MKTF-18	3/17/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-18	3/17/2015	Ethylbenzene	17	5	0.51	700	ug/L
MKTF-18	3/17/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-18	3/17/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
MKTF-18	3/17/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-18	3/17/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-18	3/17/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-18	3/17/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-18	3/17/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-18	3/17/2015	1,3,5-Trimethylbenzene	19	5	0.61	60	ug/L
MKTF-18	3/17/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-18	3/17/2015	Toluene	ND	5	0.54	1000	ug/L
MKTF-18	3/17/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-18	3/17/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-18	3/17/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-18	3/17/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-18	3/17/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-18	3/17/2015	cis-1,2-Dichloroethene	5.6	5	0.4	70	ug/L
MKTF-18	3/17/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-18	3/17/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-18	3/17/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-18	3/17/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-18	3/17/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-18	3/17/2015	Xylenes, Total	29	7.5	1.4	620	ug/L
MKTF-18	3/17/2015	MTBE	91	5	0.87	143	ug/L
MKTF-18	3/17/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-18	3/17/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-18	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-18	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-18	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-18	6/8/2015	Benzene	**50**	1	0.065	5	ug/L
MKTF-18	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-18	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-18	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-18	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-18	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-18	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-18	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-18	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-18	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-18	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-18	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-18	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-18	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-18	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-18	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-18	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-18	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-18	6/8/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-18	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-18	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-18	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-18	6/8/2015	1,2,4-Trimethylbenzene	51	1	0.16	56	ug/L
MKTF-18	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-18	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-18	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-18	6/8/2015	Isopropylbenzene	6	1	0.15	447	ug/L
MKTF-18	6/8/2015	p-Isopropyltoluene	2	1	0.19	NA	ug/L
MKTF-18	6/8/2015	Ethylbenzene	49	1	0.1	700	ug/L
MKTF-18	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-18	6/8/2015	n-Propylbenzene	7.1	1	0.16	660	ug/L
MKTF-18	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-18	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-18	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-18	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-18	6/8/2015	1,3,5-Trimethylbenzene	12	1	0.12	60	ug/L
MKTF-18	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-18	6/8/2015	Toluene	3.3	1	0.11	1000	ug/L
MKTF-18	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-18	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-18	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/8/2015	sec-Butylbenzene	1.9	1	0.23	2000	ug/L
MKTF-18	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-18	6/8/2015	cis-1,2-Dichloroethene	4.5	1	0.081	70	ug/L
MKTF-18	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-18	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-18	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-18	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-18	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	6/8/2015	Xylenes, Total	31	1.5	0.28	620	ug/L
MKTF-18	6/8/2015	MTBE	82	1	0.17	143	ug/L
MKTF-18	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-18	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-18	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-18	8/18/2015	Benzene	**32**	1	0.065	5	ug/L
MKTF-18	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-18	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-18	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-18	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-18	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-18	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-18	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-18	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-18	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-18	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-18	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-18	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-18	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-18	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-18	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-18	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-18	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-18	8/18/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-18	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-18	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-18	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-18	8/18/2015	1,2,4-Trimethylbenzene	47	1	0.16	56	ug/L
MKTF-18	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-18	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-18	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-18	8/18/2015	Isopropylbenzene	7.7	1	0.15	447	ug/L
MKTF-18	8/18/2015	p-Isopropyltoluene	2.3	1	0.19	NA	ug/L
MKTF-18	8/18/2015	Ethylbenzene	54	1	0.1	700	ug/L
MKTF-18	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-18	8/18/2015	n-Propylbenzene	12	1	0.16	660	ug/L
MKTF-18	8/18/2015	n-Butylbenzene	4.4	3	0.25	1000	ug/L
MKTF-18	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-18	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-18	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-18	8/18/2015	1,3,5-Trimethylbenzene	9	1	0.12	60	ug/L
MKTF-18	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-18	8/18/2015	Toluene	1.6	1	0.11	1000	ug/L
MKTF-18	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-18	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-18	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-18	8/18/2015	sec-Butylbenzene	3.4	1	0.23	2000	ug/L
MKTF-18	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-18	8/18/2015	cis-1,2-Dichloroethene	5.6	1	0.081	70	ug/L
MKTF-18	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-18	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-18	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-18	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-18	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	8/18/2015	Xylenes, Total	19	1.5	0.28	620	ug/L
MKTF-18	8/18/2015	MTBE	100	1	0.17	143	ug/L
MKTF-18	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	11/3/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-18	11/3/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-18	11/3/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-18	11/3/2015	Benzene	**19**	2	0.13	5	ug/L
MKTF-18	11/3/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-18	11/3/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-18	11/3/2015	Chloromethane	ND	6	0.35	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/3/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-18	11/3/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-18	11/3/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-18	11/3/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-18	11/3/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-18	11/3/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-18	11/3/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-18	11/3/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	11/3/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-18	11/3/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-18	11/3/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-18	11/3/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-18	11/3/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-18	11/3/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-18	11/3/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-18	11/3/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-18	11/3/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-18	11/3/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-18	11/3/2015	1,2,4-Trimethylbenzene	51	2	0.32	56	ug/L
MKTF-18	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-18	11/3/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-18	11/3/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-18	11/3/2015	Isopropylbenzene	6.7	2	0.3	447	ug/L
MKTF-18	11/3/2015	p-Isopropyltoluene	2.6	2	0.38	NA	ug/L
MKTF-18	11/3/2015	Ethylbenzene	41	2	0.2	700	ug/L
MKTF-18	11/3/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-18	11/3/2015	n-Propylbenzene	11	2	0.33	660	ug/L
MKTF-18	11/3/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-18	11/3/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-18	11/3/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-18	11/3/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-18	11/3/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-18	11/3/2015	1,3,5-Trimethylbenzene	7.2	2	0.25	60	ug/L
MKTF-18	11/3/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-18	11/3/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-18	11/3/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-18	11/3/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-18	11/3/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-18	11/3/2015	sec-Butylbenzene	3.7	2	0.46	2000	ug/L
MKTF-18	11/3/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-18	11/3/2015	cis-1,2-Dichloroethene	4.6	2	0.16	70	ug/L
MKTF-18	11/3/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-18	11/3/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-18	11/3/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-18	11/3/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-18	11/3/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-18	11/3/2015	Xylenes, Total	17	3	0.56	620	ug/L
MKTF-18	11/3/2015	MTBE	83	2	0.35	143	ug/L
MKTF-18	11/3/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-18	11/3/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-18	2/26/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	2/26/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-18	2/26/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	2/26/2016	Benzene	**17**	1	0.096	5	ug/L
MKTF-18	2/26/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-18	2/26/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	2/26/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	2/26/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	2/26/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-18	2/26/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-18	2/26/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-18	2/26/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	2/26/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	2/26/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-18	2/26/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	2/26/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-18	2/26/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-18	2/26/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-18	2/26/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-18	2/26/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-18	2/26/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-18	2/26/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	2/26/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-18	2/26/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	2/26/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	2/26/2016	1,2,4-Trimethylbenzene	14	1	0.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-18	2/26/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-18	2/26/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-18	2/26/2016	Isopropylbenzene	6	1	0.098	447	ug/L
MKTF-18	2/26/2016	p-Isopropyltoluene	1.7	1	0.14	NA	ug/L
MKTF-18	2/26/2016	Ethylbenzene	34	1	0.11	700	ug/L
MKTF-18	2/26/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-18	2/26/2016	n-Propylbenzene	7.1	1	0.13	660	ug/L
MKTF-18	2/26/2016	n-Butylbenzene	3	3	0.16	1000	ug/L
MKTF-18	2/26/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	2/26/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	2/26/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-18	2/26/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-18	2/26/2016	1,3,5-Trimethylbenzene	1.2	1	0.12	60	ug/L
MKTF-18	2/26/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-18	2/26/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-18	2/26/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-18	2/26/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	2/26/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	2/26/2016	sec-Butylbenzene	3.2	1	0.11	2000	ug/L
MKTF-18	2/26/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	2/26/2016	cis-1,2-Dichloroethene	4.2	1	0.12	70	ug/L
MKTF-18	2/26/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	2/26/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	2/26/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-18	2/26/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-18	2/26/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	2/26/2016	Xylenes, Total	5.6	1.5	0.32	620	ug/L
MKTF-18	2/26/2016	MTBE	71	1	0.21	143	ug/L
MKTF-18	2/26/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	2/26/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-18	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	6/10/2016	Acetone	9.8	10	4.9	14064	ug/L
MKTF-18	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	6/10/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	6/10/2016	1,1-Dichloroethane	0.82	1	0.11	25	ug/L
MKTF-18	6/10/2016	1,1-Dichloroethene	0.69	1	0.11	7	ug/L
MKTF-18	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	6/10/2016	2-Butanone	4.4	10	0.74	5565	ug/L
MKTF-18	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	6/10/2016	1,2,4-Trimethylbenzene	4	1	0.11	56	ug/L
MKTF-18	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	6/10/2016	tert-Butylbenzene	0.31	1	0.12	690	ug/L
MKTF-18	6/10/2016	Isopropylbenzene	3.6	1	0.1	447	ug/L
MKTF-18	6/10/2016	p-Isopropyltoluene	1.1	1	0.14	NA	ug/L
MKTF-18	6/10/2016	Ethylbenzene	21	1	0.11	700	ug/L
MKTF-18	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	6/10/2016	n-Propylbenzene	5.3	1	0.13	660	ug/L
MKTF-18	6/10/2016	n-Butylbenzene	2.2	3	0.16	1000	ug/L
MKTF-18	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-18	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	6/10/2016	1,3,5-Trimethylbenzene	0.4	1	0.12	60	ug/L
MKTF-18	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	6/10/2016	Toluene	0.48	1	0.12	1000	ug/L
MKTF-18	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/10/2016	sec-Butylbenzene	2.3	1	0.12	2000	ug/L
MKTF-18	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	6/10/2016	cis-1,2-Dichloroethene	3.6	1	0.12	70	ug/L
MKTF-18	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	6/10/2016	Xylenes, Total	2.5	1.5	0.37	620	ug/L
MKTF-18	6/10/2016	MTBE	92	1	0.21	143	ug/L
MKTF-18	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-18	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	9/13/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	9/13/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	9/13/2016	1,1-Dichloroethene	0.62	1	0.11	7	ug/L
MKTF-18	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-18	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	9/13/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	9/13/2016	1,2,4-Trimethylbenzene	1.1	1	0.11	56	ug/L
MKTF-18	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	9/13/2016	tert-Butylbenzene	0.37	1	0.12	690	ug/L
MKTF-18	9/13/2016	Isopropylbenzene	2.4	1	0.1	447	ug/L
MKTF-18	9/13/2016	p-Isopropyltoluene	0.91	1	0.14	NA	ug/L
MKTF-18	9/13/2016	Ethylbenzene	15	1	0.11	700	ug/L
MKTF-18	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	9/13/2016	n-Propylbenzene	3	1	0.13	660	ug/L
MKTF-18	9/13/2016	n-Butylbenzene	1.3	3	0.16	1000	ug/L
MKTF-18	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-18	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	9/13/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
MKTF-18	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	9/13/2016	Toluene	0.37	1	0.12	1000	ug/L
MKTF-18	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	9/13/2016	sec-Butylbenzene	1.6	1	0.12	2000	ug/L
MKTF-18	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	9/13/2016	cis-1,2-Dichloroethene	2.7	1	0.12	70	ug/L
MKTF-18	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	9/13/2016	Xylenes, Total	1.3	1.5	0.37	620	ug/L
MKTF-18	9/13/2016	MTBE	74	1	0.21	143	ug/L
MKTF-18	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	11/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	11/8/2016	Acetone	5.5	10	4.9	14064	ug/L
MKTF-18	11/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	11/8/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-18	11/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-18	11/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	11/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	11/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-18	11/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-18	11/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-18	11/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	11/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-18	11/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-18	11/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-18	11/8/2016	1,1-Dichloroethene	0.6	1	0.11	7	ug/L
MKTF-18	11/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-18	11/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-18	11/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-18	11/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-18	11/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-18	11/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	11/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-18	11/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	11/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	11/8/2016	1,2,4-Trimethylbenzene	0.78	1	0.11	56	ug/L
MKTF-18	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-18	11/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-18	11/8/2016	tert-Butylbenzene	0.32	1	0.12	690	ug/L
MKTF-18	11/8/2016	Isopropylbenzene	2	1	0.1	447	ug/L
MKTF-18	11/8/2016	p-Isopropyltoluene	0.99	1	0.14	NA	ug/L
MKTF-18	11/8/2016	Ethylbenzene	14	1	0.11	700	ug/L
MKTF-18	11/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-18	11/8/2016	n-Propylbenzene	2.6	1	0.13	660	ug/L
MKTF-18	11/8/2016	n-Butylbenzene	1.3	3	0.16	1000	ug/L
MKTF-18	11/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-18	11/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-18	11/8/2016	1,2-Dichloroethane	0.42	1	0.12	5	ug/L
MKTF-18	11/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-18	11/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-18	11/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-18	11/8/2016	Toluene	0.3	1	0.12	1000	ug/L
MKTF-18	11/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	11/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-18	11/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	11/8/2016	sec-Butylbenzene	1.5	1	0.12	2000	ug/L
MKTF-18	11/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	11/8/2016	cis-1,2-Dichloroethene	2.9	1	0.12	70	ug/L
MKTF-18	11/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-18	11/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	11/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-18	11/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-18	11/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	11/8/2016	Xylenes, Total	0.76	1.5	0.37	620	ug/L
MKTF-18	11/8/2016	MTBE	81	1	0.21	143	ug/L
MKTF-18	11/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-18	11/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-18	3/1/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-18	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-18	3/1/2017	Benzene	**27**	1	0.096	5	ug/L
MKTF-18	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-18	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-18	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-18	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-18	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-18	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-18	3/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-18	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-18	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-18	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-18	3/1/2017	1,1-Dichloroethane	0.85	1	0.1	25	ug/L
MKTF-18	3/1/2017	1,1-Dichloroethene	0.69	1	0.081	7	ug/L
MKTF-18	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-18	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-18	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-18	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-18	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-18	3/1/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-18	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-18	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-18	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-18	3/1/2017	1,2,4-Trimethylbenzene	1.3	1	0.1	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-18	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-18	3/1/2017	tert-Butylbenzene	0.31	1	0.1	690	ug/L
MKTF-18	3/1/2017	Isopropylbenzene	4.7	1	0.098	447	ug/L
MKTF-18	3/1/2017	p-Isopropyltoluene	1	1	0.14	NA	ug/L
MKTF-18	3/1/2017	Ethylbenzene	26	1	0.11	700	ug/L
MKTF-18	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-18	3/1/2017	n-Propylbenzene	8.3	1	0.13	660	ug/L
MKTF-18	3/1/2017	n-Butylbenzene	3	3	0.16	1000	ug/L
MKTF-18	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-18	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-18	3/1/2017	1,2-Dichloroethane	0.47	1	0.12	5	ug/L
MKTF-18	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-18	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-18	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-18	3/1/2017	Toluene	0.33	1	0.089	1000	ug/L
MKTF-18	3/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-18	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-18	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-18	3/1/2017	sec-Butylbenzene	3	1	0.1	2000	ug/L
MKTF-18	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-18	3/1/2017	cis-1,2-Dichloroethene	3.1	1	0.2	70	ug/L
MKTF-18	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-18	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-18	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-18	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-18	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-18	3/1/2017	Xylenes, Total	0.85	1.5	0.32	620	ug/L
MKTF-18	3/1/2017	MTBE	93	1	0.15	143	ug/L
MKTF-18	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-18	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-18	6/14/2017	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	6/14/2017	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	6/14/2017	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	6/14/2017	Benzene	**30**	2	0.12	5	ug/L
MKTF-18	6/14/2017	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	6/14/2017	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	6/14/2017	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	6/14/2017	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	6/14/2017	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	6/14/2017	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	6/14/2017	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	6/14/2017	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	6/14/2017	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	6/14/2017	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	6/14/2017	1,1-Dichloroethane	0.93	2	0.8	25	ug/L
MKTF-18	6/14/2017	1,1-Dichloroethene	0.8	2	0.16	7	ug/L
MKTF-18	6/14/2017	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	6/14/2017	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	6/14/2017	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	6/14/2017	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	6/14/2017	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	6/14/2017	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	6/14/2017	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	6/14/2017	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	6/14/2017	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	6/14/2017	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
MKTF-18	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	6/14/2017	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	6/14/2017	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-18	6/14/2017	Isopropylbenzene	4.2	2	0.1	447	ug/L
MKTF-18	6/14/2017	p-Isopropyltoluene	0.65	2	0.19	NA	ug/L
MKTF-18	6/14/2017	Ethylbenzene	22	2	0.19	700	ug/L
MKTF-18	6/14/2017	Styrene	ND	2	0.31	100	ug/L
MKTF-18	6/14/2017	n-Propylbenzene	7.3	2	0.15	660	ug/L
MKTF-18	6/14/2017	n-Butylbenzene	3.1	6	0.26	1000	ug/L
MKTF-18	6/14/2017	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	6/14/2017	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	6/14/2017	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	6/14/2017	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	6/14/2017	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	6/14/2017	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	6/14/2017	Toluene	ND	2	0.13	1000	ug/L
MKTF-18	6/14/2017	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	6/14/2017	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	6/14/2017	Tetrachloroethene	ND	2	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/14/2017	sec-Butylbenzene	3	2	0.22	2000	ug/L
MKTF-18	6/14/2017	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	6/14/2017	cis-1,2-Dichloroethene	3.3	2	0.41	70	ug/L
MKTF-18	6/14/2017	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-18	6/14/2017	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	6/14/2017	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	6/14/2017	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	6/14/2017	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	6/14/2017	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-18	6/14/2017	MTBE	100	2	0.48	143	ug/L
MKTF-18	6/14/2017	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	6/14/2017	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	2/16/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	2/16/2018	Acetone	1.8	20	1.6	14064	ug/L
MKTF-18	2/16/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	2/16/2018	Benzene	**130**	2	0.12	5	ug/L
MKTF-18	2/16/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	2/16/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	2/16/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	2/16/2018	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	2/16/2018	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	2/16/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	2/16/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	2/16/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	2/16/2018	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	2/16/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	2/16/2018	1,1-Dichloroethane	1	2	0.8	25	ug/L
MKTF-18	2/16/2018	1,1-Dichloroethene	0.72	2	0.16	7	ug/L
MKTF-18	2/16/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	2/16/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	2/16/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	2/16/2018	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	2/16/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	2/16/2018	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	2/16/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	2/16/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	2/16/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	2/16/2018	1,2,4-Trimethylbenzene	0.23	2	0.23	56	ug/L
MKTF-18	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	2/16/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	2/16/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-18	2/16/2018	Isopropylbenzene	3.8	2	0.1	447	ug/L
MKTF-18	2/16/2018	p-Isopropyltoluene	0.23	2	0.19	NA	ug/L
MKTF-18	2/16/2018	Ethylbenzene	21	2	0.19	700	ug/L
MKTF-18	2/16/2018	Styrene	ND	2	0.31	100	ug/L
MKTF-18	2/16/2018	n-Propylbenzene	5	2	0.15	660	ug/L
MKTF-18	2/16/2018	n-Butylbenzene	1.8	6	0.26	1000	ug/L
MKTF-18	2/16/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	2/16/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	2/16/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	2/16/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	2/16/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	2/16/2018	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	2/16/2018	Toluene	0.33	2	0.13	1000	ug/L
MKTF-18	2/16/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	2/16/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	2/16/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-18	2/16/2018	sec-Butylbenzene	2.1	2	0.22	2000	ug/L
MKTF-18	2/16/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	2/16/2018	cis-1,2-Dichloroethene	5.1	2	0.41	70	ug/L
MKTF-18	2/16/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	2/16/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	2/16/2018	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	2/16/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	2/16/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	2/16/2018	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-18	2/16/2018	MTBE	**160**	2	0.48	143	ug/L
MKTF-18	2/16/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	2/16/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	5/4/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-18	5/4/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	5/4/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	5/4/2018	Benzene	**110**	2	0.12	5	ug/L
MKTF-18	5/4/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
MKTF-18	5/4/2018	Bromomethane	ND	6	0.51	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	5/4/2018	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-18	5/4/2018	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-18	5/4/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	5/4/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
MKTF-18	5/4/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-18	5/4/2018	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-18	5/4/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-18	5/4/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	5/4/2018	1,1-Dichloroethene	0.62	2	0.16	7	ug/L
MKTF-18	5/4/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-18	5/4/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	5/4/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-18	5/4/2018	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-18	5/4/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-18	5/4/2018	Trichloroethene	ND	2	0.22	5	ug/L
MKTF-18	5/4/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-18	5/4/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-18	5/4/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-18	5/4/2018	1,2,4-Trimethylbenzene	0.68	2	0.23	56	ug/L
MKTF-18	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-18	5/4/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-18	5/4/2018	tert-Butylbenzene	0.25	2	0.21	690	ug/L
MKTF-18	5/4/2018	Isopropylbenzene	2.7	2	0.1	447	ug/L
MKTF-18	5/4/2018	p-Isopropyltoluene	0.32	2	0.19	NA	ug/L
MKTF-18	5/4/2018	Ethylbenzene	14	2	0.19	700	ug/L
MKTF-18	5/4/2018	Styrene	ND	2	0.31	100	ug/L
MKTF-18	5/4/2018	n-Propylbenzene	3.4	2	0.15	660	ug/L
MKTF-18	5/4/2018	n-Butylbenzene	1.3	6	0.26	1000	ug/L
MKTF-18	5/4/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	5/4/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-18	5/4/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	5/4/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	5/4/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-18	5/4/2018	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-18	5/4/2018	Toluene	ND	2	0.13	1000	ug/L
MKTF-18	5/4/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-18	5/4/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-18	5/4/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-18	5/4/2018	sec-Butylbenzene	1.8	2	0.22	2000	ug/L
MKTF-18	5/4/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-18	5/4/2018	cis-1,2-Dichloroethene	3.2	2	0.41	70	ug/L
MKTF-18	5/4/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	5/4/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-18	5/4/2018	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-18	5/4/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-18	5/4/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-18	5/4/2018	Xylenes, Total	0.73	3	0.64	620	ug/L
MKTF-18	5/4/2018	MTBE	140	2	0.48	143	ug/L
MKTF-18	5/4/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-18	5/4/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-18	8/24/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-18	8/24/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-18	8/24/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-18	8/24/2018	Benzene	**190**	2	0.35	5	ug/L
MKTF-18	8/24/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-18	8/24/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-18	8/24/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-18	8/24/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-18	8/24/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-18	8/24/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-18	8/24/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-18	8/24/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-18	8/24/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-18	8/24/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-18	8/24/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-18	8/24/2018	1,1-Dichloroethene	0.39	2	0.24	7	ug/L
MKTF-18	8/24/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-18	8/24/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-18	8/24/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-18	8/24/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-18	8/24/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-18	8/24/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-18	8/24/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-18	8/24/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-18	8/24/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/24/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-18	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-18	8/24/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-18	8/24/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-18	8/24/2018	Isopropylbenzene	1.7	2	0.44	447	ug/L
MKTF-18	8/24/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-18	8/24/2018	Ethylbenzene	11	2	0.45	700	ug/L
MKTF-18	8/24/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-18	8/24/2018	n-Propylbenzene	1.9	2	0.49	660	ug/L
MKTF-18	8/24/2018	n-Butylbenzene	0.74	6	0.5	1000	ug/L
MKTF-18	8/24/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-18	8/24/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-18	8/24/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-18	8/24/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-18	8/24/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-18	8/24/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-18	8/24/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-18	8/24/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-18	8/24/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-18	8/24/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	8/24/2018	sec-Butylbenzene	0.69	2	0.4	2000	ug/L
MKTF-18	8/24/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-18	8/24/2018	cis-1,2-Dichloroethene	2	2	0.75	70	ug/L
MKTF-18	8/24/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-18	8/24/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-18	8/24/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-18	8/24/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-18	8/24/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-18	8/24/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-18	8/24/2018	MTBE	110	2	0.64	143	ug/L
MKTF-18	8/24/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-18	8/24/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-18	11/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-18	11/28/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-18	11/28/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-18	11/28/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-18	11/28/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-18	11/28/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-18	11/28/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-18	11/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-18	11/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-18	11/28/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-18	11/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-18	11/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-18	11/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-18	11/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-18	11/28/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-18	11/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-18	11/28/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-18	11/28/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-18	11/28/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-18	11/28/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-18	11/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-18	11/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-18	11/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-18	11/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-18	11/28/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-18	11/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-18	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-18	11/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-18	11/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-18	11/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-18	11/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-18	11/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-18	11/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-18	11/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-18	11/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-18	11/28/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-18	11/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-18	11/28/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-18	11/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-18	11/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-18	11/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-18	11/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-18	11/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-18	11/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	11/28/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-18	11/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-18	11/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-18	11/28/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-18	11/28/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-18	11/28/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	11/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-18	11/28/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-18	11/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-18	11/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-18	11/28/2018	MTBE	130	2	0.91	143	ug/L
MKTF-18	11/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-18	11/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-18	5/16/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-18	5/16/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-18	5/16/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-18	5/16/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-18	5/16/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-18	5/16/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-18	5/16/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-18	5/16/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-18	5/16/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-18	5/16/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-18	5/16/2019	1,2,4-Trimethylbenzene	0.44	2	0.426398	56	ug/L
MKTF-18	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-18	5/16/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-18	5/16/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-18	5/16/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-18	5/16/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-18	5/16/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-18	5/16/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-18	5/16/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-18	5/16/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-18	5/16/2019	1-Methylnaphthalene	120	8	0.629909	NA	ug/L
MKTF-18	5/16/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-18	5/16/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-18	5/16/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-18	5/16/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-18	5/16/2019	2-Methylnaphthalene	**28**	8	0.690752		ug/L
MKTF-18	5/16/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-18	5/16/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-18	5/16/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-18	5/16/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-18	5/16/2019	Benzene	**140**	2	0.333278	5	ug/L
MKTF-18	5/16/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-18	5/16/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-18	5/16/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-18	5/16/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-18	5/16/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-18	5/16/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-18	5/16/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-18	5/16/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-18	5/16/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-18	5/16/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-18	5/16/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-18	5/16/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-18	5/16/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-18	5/16/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-18	5/16/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-18	5/16/2019	Ethylbenzene	2.3	2	0.264682	700	ug/L
MKTF-18	5/16/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-18	5/16/2019	Isopropylbenzene	3.7	2	0.383045	447	ug/L
MKTF-18	5/16/2019	MTBE	130	2	0.91219	143	ug/L
MKTF-18	5/16/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-18	5/16/2019	Naphthalene	19	4	0.550143	30	ug/L
MKTF-18	5/16/2019	n-Butylbenzene	1.9	6	0.455139	1000	ug/L
MKTF-18	5/16/2019	n-Propylbenzene	5.4	2	0.428616	660	ug/L
MKTF-18	5/16/2019	sec-Butylbenzene	2.4	2	0.495463	2000	ug/L
MKTF-18	5/16/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-18	5/16/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-18	5/16/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-18	5/16/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-18	5/16/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-18	5/16/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-18	5/16/2019	Trichloroethene	ND	2	0.332544	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/16/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-18	5/16/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-18	5/16/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-18	5/16/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-18	10/29/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-18	10/29/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-18	10/29/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-18	10/29/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-18	10/29/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-18	10/29/2019	1,1-Dichloroethene	0.76	2	0.410776	7	ug/L
MKTF-18	10/29/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-18	10/29/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-18	10/29/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-18	10/29/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-18	10/29/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-18	10/29/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-18	10/29/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-18	10/29/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-18	10/29/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-18	10/29/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-18	10/29/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-18	10/29/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-18	10/29/2019	1-Methylnaphthalene	110	8	0.629909	NA	ug/L
MKTF-18	10/29/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-18	10/29/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-18	10/29/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-18	10/29/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-18	10/29/2019	2-Methylnaphthalene	**29**	8	0.690752		ug/L
MKTF-18	10/29/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-18	10/29/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-18	10/29/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-18	10/29/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-18	10/29/2019	Benzene	**160**	2	0.333278	5	ug/L
MKTF-18	10/29/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-18	10/29/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-18	10/29/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-18	10/29/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-18	10/29/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-18	10/29/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-18	10/29/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-18	10/29/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-18	10/29/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-18	10/29/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-18	10/29/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-18	10/29/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-18	10/29/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-18	10/29/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-18	10/29/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-18	10/29/2019	Ethylbenzene	0.83	2	0.264682	700	ug/L
MKTF-18	10/29/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-18	10/29/2019	Isopropylbenzene	2.1	2	0.383045	447	ug/L
MKTF-18	10/29/2019	MTBE	88	2	0.91219	143	ug/L
MKTF-18	10/29/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-18	10/29/2019	Naphthalene	21	4	0.550143	30	ug/L
MKTF-18	10/29/2019	n-Butylbenzene	0.75	6	0.455139	1000	ug/L
MKTF-18	10/29/2019	n-Propylbenzene	2.6	2	0.428616	660	ug/L
MKTF-18	10/29/2019	sec-Butylbenzene	1.1	2	0.495463	2000	ug/L
MKTF-18	10/29/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-18	10/29/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-18	10/29/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-18	10/29/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-18	10/29/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-18	10/29/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-18	10/29/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-18	10/29/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-18	10/29/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-18	10/29/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-18	10/29/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-18	2/6/2020	1,1,1,2-Tetrachloroethane	ND	2	0.41	5.74	ug/L
MKTF-18	2/6/2020	1,1,1-Trichloroethane	ND	2	0.35	200	ug/L
MKTF-18	2/6/2020	1,1,2,2-Tetrachloroethane	ND	4	1.1	10	ug/L
MKTF-18	2/6/2020	1,1,2-Trichloroethane	ND	2	0.43	5	ug/L
MKTF-18	2/6/2020	1,1-Dichloroethane	0.51	2	0.28	25	ug/L
MKTF-18	2/6/2020	1,1-Dichloroethene	ND	2	0.41	7	ug/L
MKTF-18	2/6/2020	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	2/6/2020	1,2,3-Trichlorobenzene	ND	2	0.6	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/6/2020	1,2,3-Trichloropropane	*ND*	*4*	0.59	0.0084	ug/L
MKTF-18	2/6/2020	1,2,4-Trichlorobenzene	ND	2	0.39	70	ug/L
MKTF-18	2/6/2020	1,2,4-Trimethylbenzene	ND	2	0.43	56	ug/L
MKTF-18	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65	0.0033	ug/L
MKTF-18	2/6/2020	1,2-Dibromoethane	*ND*	*2*	0.33	0.05	ug/L
MKTF-18	2/6/2020	1,2-Dichlorobenzene	ND	2	0.59	600	ug/L
MKTF-18	2/6/2020	1,2-Dichloroethane	ND	2	0.39	5	ug/L
MKTF-18	2/6/2020	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-18	2/6/2020	1,3,5-Trimethylbenzene	ND	2	0.38	60	ug/L
MKTF-18	2/6/2020	1,3-Dichlorobenzene	ND	2	0.5	N/A	ug/L
MKTF-18	2/6/2020	1,3-Dichloropropane	ND	2	0.4	370	ug/L
MKTF-18	2/6/2020	1,4-Dichlorobenzene	ND	2	0.59	75	ug/L
MKTF-18	2/6/2020	1-Methylnaphthalene	73	8	0.63	NA	ug/L
MKTF-18	2/6/2020	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-18	2/6/2020	2-Butanone	ND	20	4.2	5565	ug/L
MKTF-18	2/6/2020	2-Chlorotoluene	ND	2	0.49	233	ug/L
MKTF-18	2/6/2020	2-Hexanone	ND	20	3.1	38	ug/L
MKTF-18	2/6/2020	2-Methylnaphthalene	**15**	8	0.69		ug/L
MKTF-18	2/6/2020	4-Chlorotoluene	ND	2	0.47	250	ug/L
MKTF-18	2/6/2020	p-Isopropyltoluene	ND	2	0.43	NA	ug/L
MKTF-18	2/6/2020	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-18	2/6/2020	Acetone	6.2	20	2.4	14064	ug/L
MKTF-18	2/6/2020	Benzene	**190**	2	0.33	5	ug/L
MKTF-18	2/6/2020	Bromobenzene	ND	2	0.49	62	ug/L
MKTF-18	2/6/2020	Bromodichloromethane	*ND*	*2*	0.27	1.34	ug/L
MKTF-18	2/6/2020	Bromoform	ND	2	0.58	32.9	ug/L
MKTF-18	2/6/2020	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-18	2/6/2020	Carbon Disulfide	ND	20	0.91	810	ug/L
MKTF-18	2/6/2020	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-18	2/6/2020	Chlorobenzene	ND	2	0.39	77.6	ug/L
MKTF-18	2/6/2020	Chloroethane	ND	4	0.36	20857	ug/L
MKTF-18	2/6/2020	Chloroform	ND	2	0.24	100	ug/L
MKTF-18	2/6/2020	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-18	2/6/2020	cis-1,2-Dichloroethene	2.3	2	0.38	70	ug/L
MKTF-18	2/6/2020	cis-1,3-Dichloropropene	ND	2	0.28	NA	ug/L
MKTF-18	2/6/2020	Dibromochloromethane	*ND*	*2*	0.48	1.68	ug/L
MKTF-18	2/6/2020	Dibromomethane	ND	2	0.42	8	ug/L
MKTF-18	2/6/2020	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-18	2/6/2020	Ethylbenzene	ND	2	0.26	700	ug/L
MKTF-18	2/6/2020	Hexachlorobutadiene	*ND*	*2*	0.62	1.39	ug/L
MKTF-18	2/6/2020	Isopropylbenzene	ND	2	0.38	447	ug/L
MKTF-18	2/6/2020	MTBE	110	2	0.91	143	ug/L
MKTF-18	2/6/2020	Methylene Chloride	*ND*	*6*	0.31	5	ug/L
MKTF-18	2/6/2020	n-Butylbenzene	ND	6	0.46	1000	ug/L
MKTF-18	2/6/2020	n-Propylbenzene	ND	2	0.43	660	ug/L
MKTF-18	2/6/2020	Naphthalene	13	4	0.55	30	ug/L
MKTF-18	2/6/2020	sec-Butylbenzene	ND	2	0.5	2000	ug/L
MKTF-18	2/6/2020	Styrene	ND	2	0.38	100	ug/L
MKTF-18	2/6/2020	tert-Butylbenzene	ND	2	0.41	690	ug/L
MKTF-18	2/6/2020	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-18	2/6/2020	Toluene	24	2	0.7	1000	ug/L
MKTF-18	2/6/2020	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-18	2/6/2020	trans-1,3-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-18	2/6/2020	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-18	2/6/2020	Trichlorofluoromethane	ND	2	0.38	1137	ug/L
MKTF-18	2/6/2020	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-18	2/6/2020	Xylenes, Total	2.6	3	0.91	620	ug/L
MKTF-18	2/6/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-18	12/16/2020	1,2-Dibromoethane	ND	0.0193	0.00483	0.05	ug/L
MKTF-18	12/16/2020	Acetone	ND	50	20	14064	ug/L
MKTF-18	12/16/2020	Benzene	**371**	2	0.76	5	ug/L
MKTF-18	12/16/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
MKTF-18	12/16/2020	Bromoform	ND	10	1.42	32.9	ug/L
MKTF-18	12/16/2020	Bromomethane	ND	2	1.96	7.54	ug/L
MKTF-18	12/16/2020	2-Butanone	ND	50	5.2	5565	ug/L
MKTF-18	12/16/2020	Carbon Disulfide	ND	2	1	810	ug/L
MKTF-18	12/16/2020	Carbon tetrachloride	ND	2	1	5	ug/L
MKTF-18	12/16/2020	Chlorobenzene	ND	2	1	77.6	ug/L
MKTF-18	12/16/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
MKTF-18	12/16/2020	Chloroethane	ND	2	1.52	20857	ug/L
MKTF-18	12/16/2020	Chloroform	ND	2	1.2	100	ug/L
MKTF-18	12/16/2020	Chloromethane	ND	2	1.66	20.32	ug/L
MKTF-18	12/16/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
MKTF-18	12/16/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
MKTF-18	12/16/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
MKTF-18	12/16/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
MKTF-18	12/16/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
MKTF-18	12/16/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
MKTF-18	12/16/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
MKTF-18	12/16/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
MKTF-18	12/16/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
MKTF-18	12/16/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
MKTF-18	12/16/2020	1,1-Dichloroethane	ND	2	1	25	ug/L
MKTF-18	12/16/2020	1,2-Dichloroethane	ND	2	1	5	ug/L
MKTF-18	12/16/2020	1,1-Dichloroethene	ND	2	1	7	ug/L
MKTF-18	12/16/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
MKTF-18	12/16/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
MKTF-18	12/16/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
MKTF-18	12/16/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
MKTF-18	12/16/2020	Ethylbenzene	ND	2	1	700	ug/L
MKTF-18	12/16/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
MKTF-18	12/16/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L
MKTF-18	12/16/2020	Isopropylbenzene	ND	2	1.06	447	ug/L
MKTF-18	12/16/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
MKTF-18	12/16/2020	1-Methylnaphthalene	86.3	10	8.4	NA	ug/L
MKTF-18	12/16/2020	2-Methylnaphthalene	**22**	20	9.2		ug/L
MKTF-18	12/16/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
MKTF-18	12/16/2020	MTBE	96.7	2	1.48	143	ug/L
MKTF-18	12/16/2020	Naphthalene	13.4	2	2	30	ug/L
MKTF-18	12/16/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
MKTF-18	12/16/2020	n-Propylbenzene	ND	2	1.38	660	ug/L
MKTF-18	12/16/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
MKTF-18	12/16/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
MKTF-18	12/16/2020	Styrene	ND	2	2	100	ug/L
MKTF-18	12/16/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
MKTF-18	12/16/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
MKTF-18	12/16/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
MKTF-18	12/16/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
MKTF-18	12/16/2020	Toluene	ND	2	0.82	1000	ug/L
MKTF-18	12/16/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
MKTF-18	12/16/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-18	12/16/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
MKTF-18	12/16/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
MKTF-18	12/16/2020	1,1,1-Trichloroethane	ND	2	1	200	ug/L
MKTF-18	12/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
MKTF-18	12/16/2020	Trichloroethene	ND	2	1	5	ug/L
MKTF-18	12/16/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
MKTF-18	12/16/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
MKTF-18	12/16/2020	1,2,4-Trimethylbenzene	ND	2	1.64	56	ug/L
MKTF-18	12/16/2020	1,3,5-Trimethylbenzene	ND	2	1.12	60	ug/L
MKTF-18	12/16/2020	Vinyl Chloride	ND	2	1	2	ug/L
MKTF-18	12/16/2020	Xylenes, Total	ND	20	3.2	620	ug/L
MKTF-19	4/9/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	4/9/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	4/9/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	4/9/2014	Benzene	**1400**	50	7.7	5	ug/L
MKTF-19	4/9/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	4/9/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	4/9/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	4/9/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	4/9/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	4/9/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-19	4/9/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	4/9/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	4/9/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	4/9/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	4/9/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	4/9/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	4/9/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	4/9/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	4/9/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	4/9/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	4/9/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	4/9/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	4/9/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	4/9/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	4/9/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	4/9/2014	1,2,4-Trimethylbenzene	**590**	50	6.1	56	ug/L
MKTF-19	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	4/9/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	4/9/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	4/9/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	4/9/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	4/9/2014	Ethylbenzene	680	50	6.4	700	ug/L
MKTF-19	4/9/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	4/9/2014	n-Propylbenzene	86	50	7	660	ug/L
MKTF-19	4/9/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	4/9/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	4/9/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	4/9/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	4/9/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	4/9/2014	1,3,5-Trimethylbenzene	**99**	50	6.6	60	ug/L
MKTF-19	4/9/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	4/9/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	4/9/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	4/9/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	4/9/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	4/9/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	4/9/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	4/9/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-19	4/9/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	4/9/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	4/9/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	4/9/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	4/9/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	4/9/2014	Xylenes, Total	610	75	19	620	ug/L
MKTF-19	4/9/2014	MTBE	**9700**	50	13	143	ug/L
MKTF-19	4/9/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	4/9/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	9/24/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	9/24/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	9/24/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	9/24/2014	Benzene	**1800**	50	7.7	5	ug/L
MKTF-19	9/24/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	9/24/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	9/24/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	9/24/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	9/24/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	9/24/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-19	9/24/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	9/24/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	9/24/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	9/24/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	9/24/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	9/24/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	9/24/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	9/24/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	9/24/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	9/24/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	9/24/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	9/24/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	9/24/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	9/24/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	9/24/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	9/24/2014	1,2,4-Trimethylbenzene	**690**	50	6.1	56	ug/L
MKTF-19	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	9/24/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	9/24/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-19	9/24/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	9/24/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	9/24/2014	Ethylbenzene	**730**	50	6.4	700	ug/L
MKTF-19	9/24/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	9/24/2014	n-Propylbenzene	100	50	7	660	ug/L
MKTF-19	9/24/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	9/24/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	9/24/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	9/24/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	9/24/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	9/24/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L
MKTF-19	9/24/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	9/24/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	9/24/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	9/24/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	9/24/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	9/24/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	9/24/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	9/24/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/24/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	9/24/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	9/24/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	9/24/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	9/24/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	9/24/2014	Xylenes, Total	**760**	75	19	620	ug/L
MKTF-19	9/24/2014	MTBE	**11000**	500	130	143	ug/L
MKTF-19	9/24/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	9/24/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-19	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-19	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-19	11/18/2014	Benzene	**2300**	50	7.7	5	ug/L
MKTF-19	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-19	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-19	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-19	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-19	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-19	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-19	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-19	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-19	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-19	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-19	11/18/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-19	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-19	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-19	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-19	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-19	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-19	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-19	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-19	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-19	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-19	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-19	11/18/2014	1,2,4-Trimethylbenzene	**830**	50	6.1	56	ug/L
MKTF-19	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-19	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-19	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-19	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-19	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-19	11/18/2014	Ethylbenzene	**740**	50	6.4	700	ug/L
MKTF-19	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-19	11/18/2014	n-Propylbenzene	110	50	7	660	ug/L
MKTF-19	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-19	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-19	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-19	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-19	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-19	11/18/2014	1,3,5-Trimethylbenzene	**110**	50	6.6	60	ug/L
MKTF-19	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-19	11/18/2014	Toluene	ND	50	8.5	1000	ug/L
MKTF-19	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-19	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-19	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-19	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-19	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-19	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-19	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-19	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-19	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-19	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-19	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-19	11/18/2014	Xylenes, Total	360	75	19	620	ug/L
MKTF-19	11/18/2014	MTBE	**9700**	500	130	143	ug/L
MKTF-19	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-19	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-19	3/12/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	3/12/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	3/12/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	3/12/2015	Benzene	**1400**	50	3.3	5	ug/L
MKTF-19	3/12/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	3/12/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	3/12/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	3/12/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	3/12/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	3/12/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/12/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	3/12/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	3/12/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	3/12/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	3/12/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	3/12/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	3/12/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	3/12/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	3/12/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	3/12/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	3/12/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	3/12/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	3/12/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	3/12/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	3/12/2015	1,2,4-Trimethylbenzene	**390**	10	1.6	56	ug/L
MKTF-19	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	3/12/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	3/12/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	3/12/2015	Isopropylbenzene	18	10	1.5	447	ug/L
MKTF-19	3/12/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	3/12/2015	Ethylbenzene	430	10	1	700	ug/L
MKTF-19	3/12/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	3/12/2015	n-Propylbenzene	37	10	1.6	660	ug/L
MKTF-19	3/12/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	3/12/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	3/12/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	3/12/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	3/12/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	3/12/2015	1,3,5-Trimethylbenzene	47	10	1.2	60	ug/L
MKTF-19	3/12/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	3/12/2015	Toluene	ND	10	1.1	1000	ug/L
MKTF-19	3/12/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	3/12/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	3/12/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	3/12/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	3/12/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	3/12/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	3/12/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	3/12/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	3/12/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	3/12/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	3/12/2015	Xylenes, Total	150	15	2.8	620	ug/L
MKTF-19	3/12/2015	MTBE	**9700**	50	8.7	143	ug/L
MKTF-19	3/12/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	3/12/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	6/8/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	6/8/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	6/8/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	6/8/2015	Benzene	**1800**	100	6.5	5	ug/L
MKTF-19	6/8/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	6/8/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	6/8/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	6/8/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	6/8/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	6/8/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	6/8/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	6/8/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	6/8/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	6/8/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	6/8/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	6/8/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	6/8/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	6/8/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	6/8/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	6/8/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	6/8/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	6/8/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	6/8/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	6/8/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	6/8/2015	1,2,4-Trimethylbenzene	**420**	10	1.6	56	ug/L
MKTF-19	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	6/8/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	6/8/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/8/2015	Isopropylbenzene	29	10	1.5	447	ug/L
MKTF-19	6/8/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Ethylbenzene	590	10	1	700	ug/L
MKTF-19	6/8/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	6/8/2015	n-Propylbenzene	62	10	1.6	660	ug/L
MKTF-19	6/8/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	6/8/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	6/8/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	6/8/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	6/8/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	6/8/2015	1,3,5-Trimethylbenzene	55	10	1.2	60	ug/L
MKTF-19	6/8/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	6/8/2015	Toluene	13	10	1.1	1000	ug/L
MKTF-19	6/8/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	6/8/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	6/8/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	6/8/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	6/8/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	6/8/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	6/8/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	6/8/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	6/8/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	6/8/2015	Xylenes, Total	310	15	2.8	620	ug/L
MKTF-19	6/8/2015	MTBE	**9100**	100	17	143	ug/L
MKTF-19	6/8/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	6/8/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	8/18/2015	Benzene	**2400**	100	6.5	5	ug/L
MKTF-19	8/18/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	8/18/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	8/18/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	8/18/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	8/18/2015	1,2,4-Trimethylbenzene	**520**	10	1.6	56	ug/L
MKTF-19	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	8/18/2015	Isopropylbenzene	31	10	1.5	447	ug/L
MKTF-19	8/18/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Ethylbenzene	**740**	10	1	700	ug/L
MKTF-19	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	8/18/2015	n-Propylbenzene	80	10	1.6	660	ug/L
MKTF-19	8/18/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	8/18/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	8/18/2015	1,3,5-Trimethylbenzene	**73**	10	1.2	60	ug/L
MKTF-19	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	8/18/2015	Toluene	15	10	1.1	1000	ug/L
MKTF-19	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	8/18/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	8/18/2015	Xylenes, Total	450	15	2.8	620	ug/L
MKTF-19	8/18/2015	MTBE	**8800**	100	17	143	ug/L
MKTF-19	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	11/3/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-19	11/3/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-19	11/3/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-19	11/3/2015	Benzene	**2800**	100	6.5	5	ug/L
MKTF-19	11/3/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-19	11/3/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-19	11/3/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-19	11/3/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-19	11/3/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-19	11/3/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-19	11/3/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-19	11/3/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-19	11/3/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-19	11/3/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-19	11/3/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	11/3/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-19	11/3/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-19	11/3/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-19	11/3/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-19	11/3/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-19	11/3/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-19	11/3/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	11/3/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-19	11/3/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	11/3/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-19	11/3/2015	1,2,4-Trimethylbenzene	**530**	10	1.6	56	ug/L
MKTF-19	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-19	11/3/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-19	11/3/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-19	11/3/2015	Isopropylbenzene	26	10	1.5	447	ug/L
MKTF-19	11/3/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Ethylbenzene	**760**	10	1	700	ug/L
MKTF-19	11/3/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-19	11/3/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-19	11/3/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-19	11/3/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-19	11/3/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	11/3/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-19	11/3/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-19	11/3/2015	1,3,5-Trimethylbenzene	**94**	10	1.2	60	ug/L
MKTF-19	11/3/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-19	11/3/2015	Toluene	22	10	1.1	1000	ug/L
MKTF-19	11/3/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-19	11/3/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-19	11/3/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-19	11/3/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-19	11/3/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	11/3/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-19	11/3/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-19	11/3/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-19	11/3/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-19	11/3/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	11/3/2015	Xylenes, Total	**930**	15	2.8	620	ug/L
MKTF-19	11/3/2015	MTBE	**8400**	100	17	143	ug/L
MKTF-19	11/3/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	11/3/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-19	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	2/25/2016	Benzene	**1500**	20	1.9	5	ug/L
MKTF-19	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-19	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-19	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-19	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	2/25/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-19	2/25/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	2/25/2016	1,1-Dichloroethene	*ND*	*20*	1.5	7	ug/L
MKTF-19	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-19	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-19	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-19	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-19	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-19	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-19	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	2/25/2016	1,2,4-Trimethylbenzene	**680**	20	2.1	56	ug/L
MKTF-19	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-19	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-19	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-19	2/25/2016	Isopropylbenzene	33	20	2	447	ug/L
MKTF-19	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-19	2/25/2016	Ethylbenzene	**790**	20	2.2	700	ug/L
MKTF-19	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-19	2/25/2016	n-Propylbenzene	99	20	2.6	660	ug/L
MKTF-19	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-19	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-19	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-19	2/25/2016	1,3,5-Trimethylbenzene	**82**	20	2.3	60	ug/L
MKTF-19	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-19	2/25/2016	Toluene	ND	20	1.8	1000	ug/L
MKTF-19	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-19	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	2/25/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-19	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-19	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-19	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	2/25/2016	Xylenes, Total	**670**	30	6.5	620	ug/L
MKTF-19	2/25/2016	MTBE	**8600**	200	42	143	ug/L
MKTF-19	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-19	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-19	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/10/2016	Acetone	ND	100	49	14064	ug/L
MKTF-19	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-19	6/10/2016	Benzene	**1500**	100	9.6	5	ug/L
MKTF-19	6/10/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-19	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-19	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-19	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-19	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-19	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-19	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-19	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-19	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-19	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-19	6/10/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-19	6/10/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-19	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-19	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-19	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/10/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-19	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-19	6/10/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-19	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-19	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-19	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	6/10/2016	1,2,4-Trimethylbenzene	**580**	10	1.1	56	ug/L
MKTF-19	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-19	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-19	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/10/2016	Isopropylbenzene	34	10	1	447	ug/L
MKTF-19	6/10/2016	p-Isopropyltoluene	5.4	10	1.4	NA	ug/L
MKTF-19	6/10/2016	Ethylbenzene	690	10	1.1	700	ug/L
MKTF-19	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-19	6/10/2016	n-Propylbenzene	90	10	1.3	660	ug/L
MKTF-19	6/10/2016	n-Butylbenzene	17	30	1.6	1000	ug/L
MKTF-19	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-19	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-19	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-19	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-19	6/10/2016	1,3,5-Trimethylbenzene	**79**	10	1.2	60	ug/L
MKTF-19	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-19	6/10/2016	Toluene	6.4	10	1.2	1000	ug/L
MKTF-19	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-19	6/10/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-19	6/10/2016	sec-Butylbenzene	6.5	10	1.2	2000	ug/L
MKTF-19	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-19	6/10/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-19	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-19	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-19	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-19	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-19	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-19	6/10/2016	Xylenes, Total	**660**	15	3.7	620	ug/L
MKTF-19	6/10/2016	MTBE	**7900**	100	21	143	ug/L
MKTF-19	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-19	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-19	9/13/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	9/13/2016	Acetone	ND	200	98	14064	ug/L
MKTF-19	9/13/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	9/13/2016	Benzene	**1400**	20	1.9	5	ug/L
MKTF-19	9/13/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-19	9/13/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	9/13/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	9/13/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	9/13/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-19	9/13/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-19	9/13/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-19	9/13/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	9/13/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	9/13/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-19	9/13/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	9/13/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-19	9/13/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-19	9/13/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-19	9/13/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-19	9/13/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-19	9/13/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-19	9/13/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	9/13/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-19	9/13/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	9/13/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	9/13/2016	1,2,4-Trimethylbenzene	**620**	20	2.2	56	ug/L
MKTF-19	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-19	9/13/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-19	9/13/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-19	9/13/2016	Isopropylbenzene	35	20	2.1	447	ug/L
MKTF-19	9/13/2016	p-Isopropyltoluene	6.9	20	2.8	NA	ug/L
MKTF-19	9/13/2016	Ethylbenzene	690	20	2.2	700	ug/L
MKTF-19	9/13/2016	Styrene	3.3	20	2.2	100	ug/L
MKTF-19	9/13/2016	n-Propylbenzene	85	20	2.6	660	ug/L
MKTF-19	9/13/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
MKTF-19	9/13/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	9/13/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	9/13/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-19	9/13/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-19	9/13/2016	1,3,5-Trimethylbenzene	**100**	20	2.3	60	ug/L
MKTF-19	9/13/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-19	9/13/2016	Toluene	7.5	20	2.4	1000	ug/L
MKTF-19	9/13/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-19	9/13/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	9/13/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	9/13/2016	sec-Butylbenzene	9	20	2.5	2000	ug/L
MKTF-19	9/13/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	9/13/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	9/13/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	9/13/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-19	9/13/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-19	9/13/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	9/13/2016	Xylenes, Total	**920**	30	7.3	620	ug/L
MKTF-19	9/13/2016	MTBE	**8900**	200	42	143	ug/L
MKTF-19	9/13/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	9/13/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	11/8/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	11/8/2016	Acetone	ND	200	98	14064	ug/L
MKTF-19	11/8/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	11/8/2016	Benzene	**1300**	20	1.9	5	ug/L
MKTF-19	11/8/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-19	11/8/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	11/8/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	11/8/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	11/8/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-19	11/8/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-19	11/8/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-19	11/8/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	11/8/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-19	11/8/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-19	11/8/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-19	11/8/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
MKTF-19	11/8/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-19	11/8/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-19	11/8/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-19	11/8/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-19	11/8/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-19	11/8/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	11/8/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-19	11/8/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	11/8/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	11/8/2016	1,2,4-Trimethylbenzene	**630**	20	2.2	56	ug/L
MKTF-19	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-19	11/8/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-19	11/8/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-19	11/8/2016	Isopropylbenzene	32	20	2.1	447	ug/L
MKTF-19	11/8/2016	p-Isopropyltoluene	6.2	20	2.8	NA	ug/L
MKTF-19	11/8/2016	Ethylbenzene	700	20	2.2	700	ug/L
MKTF-19	11/8/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-19	11/8/2016	n-Propylbenzene	84	20	2.6	660	ug/L
MKTF-19	11/8/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
MKTF-19	11/8/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-19	11/8/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-19	11/8/2016	1,2-Dichloroethane	**7**	20	2.3	5	ug/L
MKTF-19	11/8/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-19	11/8/2016	1,3,5-Trimethylbenzene	**110**	20	2.3	60	ug/L
MKTF-19	11/8/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-19	11/8/2016	Toluene	6.8	20	2.4	1000	ug/L
MKTF-19	11/8/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-19	11/8/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-19	11/8/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	11/8/2016	sec-Butylbenzene	8.8	20	2.5	2000	ug/L
MKTF-19	11/8/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	11/8/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-19	11/8/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-19	11/8/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	11/8/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-19	11/8/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-19	11/8/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	11/8/2016	Xylenes, Total	**1000**	30	7.3	620	ug/L
MKTF-19	11/8/2016	MTBE	**10000**	200	42	143	ug/L
MKTF-19	11/8/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	11/8/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-19	3/15/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	3/15/2017	Acetone	ND	200	18	14064	ug/L
MKTF-19	3/15/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-19	3/15/2017	Benzene	**1800**	20	1.9	5	ug/L
MKTF-19	3/15/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-19	3/15/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-19	3/15/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-19	3/15/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-19	3/15/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-19	3/15/2017	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-19	3/15/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-19	3/15/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-19	3/15/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-19	3/15/2017	1,1-Dichloroethane	ND	20	2.1	25	ug/L
MKTF-19	3/15/2017	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-19	3/15/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-19	3/15/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-19	3/15/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-19	3/15/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-19	3/15/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-19	3/15/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-19	3/15/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-19	3/15/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	3/15/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	3/15/2017	1,2,4-Trimethylbenzene	**660**	20	2.1	56	ug/L
MKTF-19	3/15/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-19	3/15/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-19	3/15/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-19	3/15/2017	Isopropylbenzene	24	20	2	447	ug/L
MKTF-19	3/15/2017	p-Isopropyltoluene	5.8	20	2.8	NA	ug/L
MKTF-19	3/15/2017	Ethylbenzene	600	20	2.2	700	ug/L
MKTF-19	3/15/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-19	3/15/2017	n-Propylbenzene	54	20	2.6	660	ug/L
MKTF-19	3/15/2017	n-Butylbenzene	11	60	3.2	1000	ug/L
MKTF-19	3/15/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	3/15/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-19	3/15/2017	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-19	3/15/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-19	3/15/2017	1,3,5-Trimethylbenzene	**98**	20	2.3	60	ug/L
MKTF-19	3/15/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-19	3/15/2017	Toluene	9.8	20	1.8	1000	ug/L
MKTF-19	3/15/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	3/15/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L
MKTF-19	3/15/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	3/15/2017	sec-Butylbenzene	5.2	20	2	2000	ug/L
MKTF-19	3/15/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-19	3/15/2017	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-19	3/15/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	3/15/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-19	3/15/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-19	3/15/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-19	3/15/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-19	3/15/2017	Xylenes, Total	**920**	30	6.5	620	ug/L
MKTF-19	3/15/2017	MTBE	**9000**	200	30	143	ug/L
MKTF-19	3/15/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-19	3/15/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-19	6/14/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/14/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	6/14/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	6/14/2017	Benzene	**2300**	100	6.2	5	ug/L
MKTF-19	6/14/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	6/14/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	6/14/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	6/14/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	6/14/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	6/14/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	6/14/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	6/14/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	6/14/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	6/14/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	6/14/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	6/14/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	6/14/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	6/14/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	6/14/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	6/14/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	6/14/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	6/14/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	6/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	6/14/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	6/14/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	6/14/2017	1,2,4-Trimethylbenzene	**600**	10	1.1	56	ug/L
MKTF-19	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	6/14/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	6/14/2017	tert-Butylbenzene	ND	10	1	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/14/2017	Isopropylbenzene	30	10	0.51	447	ug/L
MKTF-19	6/14/2017	p-Isopropyltoluene	4.2	10	0.96	NA	ug/L
MKTF-19	6/14/2017	Ethylbenzene	**780**	10	0.93	700	ug/L
MKTF-19	6/14/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	6/14/2017	n-Propylbenzene	81	10	0.74	660	ug/L
MKTF-19	6/14/2017	n-Butylbenzene	10	30	1.3	1000	ug/L
MKTF-19	6/14/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	6/14/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	6/14/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	6/14/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	6/14/2017	1,3,5-Trimethylbenzene	**87**	10	0.87	60	ug/L
MKTF-19	6/14/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	6/14/2017	Toluene	8.4	10	0.64	1000	ug/L
MKTF-19	6/14/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	6/14/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	6/14/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	6/14/2017	sec-Butylbenzene	5	10	1.1	2000	ug/L
MKTF-19	6/14/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	6/14/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	6/14/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-19	6/14/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	6/14/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	6/14/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	6/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	6/14/2017	Xylenes, Total	**900**	15	3.2	620	ug/L
MKTF-19	6/14/2017	MTBE	**10000**	100	24	143	ug/L
MKTF-19	6/14/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	6/14/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	9/26/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	9/26/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	9/26/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	9/26/2017	Benzene	**3200**	100	6.2	5	ug/L
MKTF-19	9/26/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	9/26/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	9/26/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	9/26/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	9/26/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	9/26/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	9/26/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	9/26/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	9/26/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	9/26/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	9/26/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	9/26/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	9/26/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	9/26/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	9/26/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	9/26/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	9/26/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	9/26/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	9/26/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	9/26/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	9/26/2017	1,2,4-Trimethylbenzene	**530**	10	1.1	56	ug/L
MKTF-19	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	9/26/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	9/26/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-19	9/26/2017	Isopropylbenzene	26	10	0.51	447	ug/L
MKTF-19	9/26/2017	p-Isopropyltoluene	5.2	10	0.96	NA	ug/L
MKTF-19	9/26/2017	Ethylbenzene	**800**	10	0.93	700	ug/L
MKTF-19	9/26/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	9/26/2017	n-Propylbenzene	73	10	0.74	660	ug/L
MKTF-19	9/26/2017	n-Butylbenzene	13	30	1.3	1000	ug/L
MKTF-19	9/26/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	9/26/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	9/26/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	9/26/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	9/26/2017	1,3,5-Trimethylbenzene	**67**	10	0.87	60	ug/L
MKTF-19	9/26/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	9/26/2017	Toluene	14	10	0.64	1000	ug/L
MKTF-19	9/26/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	9/26/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	9/26/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	9/26/2017	sec-Butylbenzene	6	10	1.1	2000	ug/L
MKTF-19	9/26/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	9/26/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	9/26/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	9/26/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	9/26/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	9/26/2017	Xylenes, Total	**870**	15	3.2	620	ug/L
MKTF-19	9/26/2017	MTBE	**12000**	100	24	143	ug/L
MKTF-19	9/26/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	9/26/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	12/1/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-19	12/1/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-19	12/1/2017	Chloroform	ND	10	4	100	ug/L
MKTF-19	12/1/2017	Benzene	**1900**	100	6.2	5	ug/L
MKTF-19	12/1/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-19	12/1/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-19	12/1/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-19	12/1/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-19	12/1/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-19	12/1/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-19	12/1/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-19	12/1/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-19	12/1/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-19	12/1/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-19	12/1/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-19	12/1/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-19	12/1/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-19	12/1/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-19	12/1/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-19	12/1/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-19	12/1/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-19	12/1/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-19	12/1/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-19	12/1/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-19	12/1/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-19	12/1/2017	1,2,4-Trimethylbenzene	**720**	10	1.1	56	ug/L
MKTF-19	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-19	12/1/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-19	12/1/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-19	12/1/2017	Isopropylbenzene	34	10	0.51	447	ug/L
MKTF-19	12/1/2017	p-Isopropyltoluene	6.3	10	0.96	NA	ug/L
MKTF-19	12/1/2017	Ethylbenzene	**750**	10	0.93	700	ug/L
MKTF-19	12/1/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-19	12/1/2017	n-Propylbenzene	100	10	0.74	660	ug/L
MKTF-19	12/1/2017	n-Butylbenzene	14	30	1.3	1000	ug/L
MKTF-19	12/1/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-19	12/1/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-19	12/1/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-19	12/1/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-19	12/1/2017	1,3,5-Trimethylbenzene	**100**	10	0.87	60	ug/L
MKTF-19	12/1/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-19	12/1/2017	Toluene	5.9	10	0.64	1000	ug/L
MKTF-19	12/1/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-19	12/1/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-19	12/1/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-19	12/1/2017	sec-Butylbenzene	7.4	10	1.1	2000	ug/L
MKTF-19	12/1/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-19	12/1/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-19	12/1/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-19	12/1/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-19	12/1/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-19	12/1/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-19	12/1/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-19	12/1/2017	Xylenes, Total	**750**	15	3.2	620	ug/L
MKTF-19	12/1/2017	MTBE	**11000**	100	24	143	ug/L
MKTF-19	12/1/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-19	12/1/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-19	2/16/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/16/2018	Acetone	ND	200	16	14064	ug/L
MKTF-19	2/16/2018	Chloroform	ND	20	8	100	ug/L
MKTF-19	2/16/2018	Benzene	**1900**	20	1.2	5	ug/L
MKTF-19	2/16/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-19	2/16/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-19	2/16/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-19	2/16/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-19	2/16/2018	Chloroethane	ND	40	4.7	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/16/2018	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L
MKTF-19	2/16/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-19	2/16/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-19	2/16/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-19	2/16/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-19	2/16/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-19	2/16/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-19	2/16/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-19	2/16/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-19	2/16/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-19	2/16/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-19	2/16/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-19	2/16/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-19	2/16/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-19	2/16/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-19	2/16/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	2/16/2018	1,2,4-Trimethylbenzene	**670**	20	2.3	56	ug/L
MKTF-19	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-19	2/16/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-19	2/16/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-19	2/16/2018	Isopropylbenzene	36	20	1	447	ug/L
MKTF-19	2/16/2018	p-Isopropyltoluene	4.8	20	1.9	NA	ug/L
MKTF-19	2/16/2018	Ethylbenzene	**740**	20	1.9	700	ug/L
MKTF-19	2/16/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-19	2/16/2018	n-Propylbenzene	97	20	1.5	660	ug/L
MKTF-19	2/16/2018	n-Butylbenzene	14	60	2.6	1000	ug/L
MKTF-19	2/16/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	2/16/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-19	2/16/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-19	2/16/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-19	2/16/2018	1,3,5-Trimethylbenzene	**85**	20	1.7	60	ug/L
MKTF-19	2/16/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-19	2/16/2018	Toluene	3.7	20	1.3	1000	ug/L
MKTF-19	2/16/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-19	2/16/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-19	2/16/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-19	2/16/2018	sec-Butylbenzene	6.1	20	2.2	2000	ug/L
MKTF-19	2/16/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-19	2/16/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-19	2/16/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	2/16/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-19	2/16/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-19	2/16/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-19	2/16/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-19	2/16/2018	Xylenes, Total	**640**	30	6.4	620	ug/L
MKTF-19	2/16/2018	MTBE	**10000**	200	48	143	ug/L
MKTF-19	2/16/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-19	2/16/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-19	5/4/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-19	5/4/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-19	5/4/2018	Chloroform	ND	5	2	100	ug/L
MKTF-19	5/4/2018	Benzene	**2000**	50	3.1	5	ug/L
MKTF-19	5/4/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-19	5/4/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-19	5/4/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-19	5/4/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-19	5/4/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-19	5/4/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-19	5/4/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-19	5/4/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-19	5/4/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-19	5/4/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-19	5/4/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-19	5/4/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-19	5/4/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-19	5/4/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-19	5/4/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-19	5/4/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-19	5/4/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-19	5/4/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-19	5/4/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-19	5/4/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-19	5/4/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-19	5/4/2018	1,2,4-Trimethylbenzene	**780**	50	5.6	56	ug/L
MKTF-19	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-19	5/4/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-19	5/4/2018	Isopropylbenzene	41	5	0.26	447	ug/L
MKTF-19	5/4/2018	p-Isopropyltoluene	6	5	0.48	NA	ug/L
MKTF-19	5/4/2018	Ethylbenzene	**870**	50	4.7	700	ug/L
MKTF-19	5/4/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-19	5/4/2018	n-Propylbenzene	120	5	0.37	660	ug/L
MKTF-19	5/4/2018	n-Butylbenzene	15	15	0.65	1000	ug/L
MKTF-19	5/4/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-19	5/4/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-19	5/4/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-19	5/4/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-19	5/4/2018	1,3,5-Trimethylbenzene	**100**	5	0.44	60	ug/L
MKTF-19	5/4/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-19	5/4/2018	Toluene	5.7	5	0.32	1000	ug/L
MKTF-19	5/4/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-19	5/4/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-19	5/4/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-19	5/4/2018	sec-Butylbenzene	7.8	5	0.55	2000	ug/L
MKTF-19	5/4/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-19	5/4/2018	cis-1,2-Dichloroethene	2	5	1	70	ug/L
MKTF-19	5/4/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-19	5/4/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-19	5/4/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-19	5/4/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-19	5/4/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-19	5/4/2018	Xylenes, Total	**820**	7.5	1.6	620	ug/L
MKTF-19	5/4/2018	MTBE	**11000**	500	120	143	ug/L
MKTF-19	5/4/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-19	5/4/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-19	8/24/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-19	8/24/2018	Acetone	ND	200	16	14064	ug/L
MKTF-19	8/24/2018	Chloroform	ND	20	8	100	ug/L
MKTF-19	8/24/2018	Benzene	**1700**	20	3.5	5	ug/L
MKTF-19	8/24/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-19	8/24/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-19	8/24/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-19	8/24/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-19	8/24/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-19	8/24/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-19	8/24/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-19	8/24/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-19	8/24/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-19	8/24/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-19	8/24/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-19	8/24/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-19	8/24/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-19	8/24/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-19	8/24/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-19	8/24/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-19	8/24/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-19	8/24/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-19	8/24/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-19	8/24/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-19	8/24/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-19	8/24/2018	1,2,4-Trimethylbenzene	**720**	20	5.1	56	ug/L
MKTF-19	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-19	8/24/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-19	8/24/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-19	8/24/2018	Isopropylbenzene	34	20	4.4	447	ug/L
MKTF-19	8/24/2018	p-Isopropyltoluene	6.4	20	4.8	NA	ug/L
MKTF-19	8/24/2018	Ethylbenzene	**710**	20	4.5	700	ug/L
MKTF-19	8/24/2018	Styrene	ND	20	5	100	ug/L
MKTF-19	8/24/2018	n-Propylbenzene	99	20	4.9	660	ug/L
MKTF-19	8/24/2018	n-Butylbenzene	16	60	5	1000	ug/L
MKTF-19	8/24/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-19	8/24/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-19	8/24/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-19	8/24/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-19	8/24/2018	1,3,5-Trimethylbenzene	**110**	20	4.6	60	ug/L
MKTF-19	8/24/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-19	8/24/2018	Toluene	4.3	20	3.4	1000	ug/L
MKTF-19	8/24/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-19	8/24/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-19	8/24/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	8/24/2018	sec-Butylbenzene	7.7	20	4	2000	ug/L
MKTF-19	8/24/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/24/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-19	8/24/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-19	8/24/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-19	8/24/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-19	8/24/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-19	8/24/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-19	8/24/2018	Xylenes, Total	**740**	30	13	620	ug/L
MKTF-19	8/24/2018	MTBE	**9700**	200	64	143	ug/L
MKTF-19	8/24/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-19	8/24/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-19	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-19	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-19	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-19	11/28/2018	Benzene	**1900**	20	3.5	5	ug/L
MKTF-19	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-19	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-19	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-19	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-19	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-19	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-19	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-19	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-19	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-19	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-19	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-19	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-19	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-19	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-19	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-19	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-19	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-19	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-19	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-19	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-19	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-19	11/28/2018	1,2,4-Trimethylbenzene	**580**	20	5.1	56	ug/L
MKTF-19	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-19	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-19	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-19	11/28/2018	Isopropylbenzene	28	20	4.4	447	ug/L
MKTF-19	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-19	11/28/2018	Ethylbenzene	630	20	4.5	700	ug/L
MKTF-19	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-19	11/28/2018	n-Propylbenzene	79	20	4.9	660	ug/L
MKTF-19	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-19	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-19	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-19	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-19	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-19	11/28/2018	1,3,5-Trimethylbenzene	**79**	20	4.6	60	ug/L
MKTF-19	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-19	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-19	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-19	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-19	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-19	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-19	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-19	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-19	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-19	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-19	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-19	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-19	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-19	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-19	11/28/2018	Xylenes, Total	570	30	13	620	ug/L
MKTF-19	11/28/2018	MTBE	**10000**	200	91	143	ug/L
MKTF-19	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-19	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-19	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	5/9/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	5/9/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	5/9/2019	1,2,4-Trimethylbenzene	**630**	20	4.263982	56	ug/L
MKTF-19	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	5/9/2019	1,3,5-Trimethylbenzene	**100**	20	3.773197	60	ug/L
MKTF-19	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	5/9/2019	1-Methylnaphthalene	270	80	6.29909	NA	ug/L
MKTF-19	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	5/9/2019	2-Methylnaphthalene	**360**	80	6.90752		ug/L
MKTF-19	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	5/9/2019	p-Isopropyltoluene	5.4	20	4.345787	NA	ug/L
MKTF-19	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	5/9/2019	Benzene	**1800**	20	3.332781	5	ug/L
MKTF-19	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	5/9/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	5/9/2019	Ethylbenzene	**770**	20	2.646816	700	ug/L
MKTF-19	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	5/9/2019	Isopropylbenzene	39	20	3.830445	447	ug/L
MKTF-19	5/9/2019	MTBE	**7800**	200	91.218997	143	ug/L
MKTF-19	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	5/9/2019	Naphthalene	**600**	40	5.501427	30	ug/L
MKTF-19	5/9/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-19	5/9/2019	n-Propylbenzene	110	20	4.28616	660	ug/L
MKTF-19	5/9/2019	sec-Butylbenzene	7.1	20	4.954626	2000	ug/L
MKTF-19	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	5/9/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	5/9/2019	Xylenes, Total	610	30	9.088299	620	ug/L
MKTF-19	5/9/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-19	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	8/19/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	8/19/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	8/19/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	8/19/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	8/19/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	8/19/2019	1,2,4-Trimethylbenzene	**680**	20	4.263982	56	ug/L
MKTF-19	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	8/19/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	8/19/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	8/19/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	220	80	6.29909	NA	ug/L
MKTF-19	8/19/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	8/19/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	8/19/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	8/19/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**290**	80	6.90752		ug/L
MKTF-19	8/19/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	8/19/2019	p-Isopropyltoluene	10	20	4.345787	NA	ug/L
MKTF-19	8/19/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	8/19/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	8/19/2019	Benzene	**1400**	20	3.332781	5	ug/L
MKTF-19	8/19/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	8/19/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	8/19/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	8/19/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	8/19/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	8/19/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	8/19/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	8/19/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	8/19/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	8/19/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	8/19/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	8/19/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	8/19/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	8/19/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	8/19/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	8/19/2019	Ethylbenzene	**720**	20	2.646816	700	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	8/19/2019	Isopropylbenzene	37	20	3.830445	447	ug/L
MKTF-19	8/19/2019	MTBE	**8100**	200	91.218997	143	ug/L
MKTF-19	8/19/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	8/19/2019	Naphthalene	**490**	40	5.501427	30	ug/L
MKTF-19	8/19/2019	n-Butylbenzene	33	60	4.551391	1000	ug/L
MKTF-19	8/19/2019	n-Propylbenzene	100	20	4.28616	660	ug/L
MKTF-19	8/19/2019	sec-Butylbenzene	11	20	4.954626	2000	ug/L
MKTF-19	8/19/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	8/19/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	8/19/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	8/19/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	8/19/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	8/19/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	8/19/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	8/19/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	8/19/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	8/19/2019	Xylenes, Total	**710**	30	9.088299	620	ug/L
MKTF-19	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	8/19/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	8/19/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	8/19/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	8/19/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	8/19/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	8/19/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	8/19/2019	1,2,4-Trimethylbenzene	**690**	20	4.263982	56	ug/L
MKTF-19	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	8/19/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	8/19/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	8/19/2019	1,3,5-Trimethylbenzene	**120**	20	3.773197	60	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	8/19/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	230	80	6.29909	NA	ug/L
MKTF-19	8/19/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	8/19/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	8/19/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	8/19/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**310**	80	6.90752		ug/L
MKTF-19	8/19/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	8/19/2019	p-Isopropyltoluene	10	20	4.345787	NA	ug/L
MKTF-19	8/19/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	8/19/2019	Benzene	**1400**	20	3.332781	5	ug/L
MKTF-19	8/19/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	8/19/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	8/19/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	8/19/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	8/19/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	8/19/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	8/19/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	8/19/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	8/19/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-19	8/19/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	8/19/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	8/19/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	8/19/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	8/19/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	8/19/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	8/19/2019	Ethylbenzene	**720**	20	2.646816	700	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	8/19/2019	Isopropylbenzene	37	20	3.830445	447	ug/L
MKTF-19	8/19/2019	MTBE	**8300**	200	91.218997	143	ug/L
MKTF-19	8/19/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	8/19/2019	Naphthalene	**500**	40	5.501427	30	ug/L
MKTF-19	8/19/2019	n-Butylbenzene	35	60	4.551391	1000	ug/L
MKTF-19	8/19/2019	n-Propylbenzene	110	20	4.28616	660	ug/L
MKTF-19	8/19/2019	sec-Butylbenzene	11	20	4.954626	2000	ug/L
MKTF-19	8/19/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	8/19/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	8/19/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	8/19/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-19	8/19/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	8/19/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	8/19/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	8/19/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	8/19/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	8/19/2019	Xylenes, Total	**690**	30	9.088299	620	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
MKTF-19	8/19/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-19	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-19	10/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-19	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-19	10/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-19	10/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-19	10/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-19	10/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-19	10/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-19	10/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-19	10/29/2019	1,2,4-Trimethylbenzene	**480**	20	4.263982	56	ug/L
MKTF-19	10/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-19	10/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-19	10/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-19	10/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-19	10/29/2019	1,3,5-Trimethylbenzene	**86**	20	3.773197	60	ug/L
MKTF-19	10/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-19	10/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-19	10/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-19	10/29/2019	1-Methylnaphthalene	190	80	6.29909	NA	ug/L
MKTF-19	10/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-19	10/29/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-19	10/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-19	10/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-19	10/29/2019	2-Methylnaphthalene	**240**	80	6.90752		ug/L
MKTF-19	10/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-19	10/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-19	10/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-19	10/29/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-19	10/29/2019	Benzene	**1600**	20	3.332781	5	ug/L
MKTF-19	10/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-19	10/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-19	10/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-19	10/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-19	10/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-19	10/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-19	10/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-19	10/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-19	10/29/2019	Chloroform	ND	20	2.437811	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	10/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-19	10/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-19	10/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-19	10/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-19	10/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-19	10/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-19	10/29/2019	Ethylbenzene	610	20	2.646816	700	ug/L
MKTF-19	10/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-19	10/29/2019	Isopropylbenzene	26	20	3.830445	447	ug/L
MKTF-19	10/29/2019	MTBE	**7900**	200	91.218997	143	ug/L
MKTF-19	10/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-19	10/29/2019	Naphthalene	**450**	40	5.501427	30	ug/L
MKTF-19	10/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-19	10/29/2019	n-Propylbenzene	67	20	4.28616	660	ug/L
MKTF-19	10/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-19	10/29/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-19	10/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-19	10/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-19	10/29/2019	Toluene	13	20	7.008724	1000	ug/L
MKTF-19	10/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-19	10/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-19	10/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-19	10/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-19	10/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-19	10/29/2019	Xylenes, Total	610	30	9.088299	620	ug/L
MKTF-19	10/29/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
MKTF-20	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-20	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-20	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-20	4/11/2014	Benzene	**25000**	500	77	5	ug/L
MKTF-20	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-20	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-20	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-20	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-20	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-20	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-20	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-20	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-20	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-20	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-20	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-20	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-20	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-20	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-20	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-20	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-20	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-20	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-20	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-20	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-20	4/11/2014	1,2,4-Trimethylbenzene	**1900**	50	6.1	56	ug/L
MKTF-20	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-20	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-20	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-20	4/11/2014	Isopropylbenzene	76	50	8.1	447	ug/L
MKTF-20	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-20	4/11/2014	Ethylbenzene	**2800**	50	6.4	700	ug/L
MKTF-20	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-20	4/11/2014	n-Propylbenzene	260	50	7	660	ug/L
MKTF-20	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-20	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-20	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-20	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-20	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-20	4/11/2014	1,3,5-Trimethylbenzene	**500**	50	6.6	60	ug/L
MKTF-20	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-20	4/11/2014	Toluene	**17000**	500	85	1000	ug/L
MKTF-20	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-20	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-20	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-20	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-20	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-20	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-20	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-20	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-20	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-20	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-20	4/11/2014	Xylenes, Total	**14000**	75	19	620	ug/L
MKTF-20	4/11/2014	MTBE	**380**	50	13	143	ug/L
MKTF-20	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-20	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-20	11/18/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-20	11/18/2014	Acetone	ND	500	250	14064	ug/L
MKTF-20	11/18/2014	Chloroform	ND	50	16	100	ug/L
MKTF-20	11/18/2014	Benzene	**4400**	50	7.7	5	ug/L
MKTF-20	11/18/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-20	11/18/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-20	11/18/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-20	11/18/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-20	11/18/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-20	11/18/2014	Vinyl Chloride	*ND*	*50*	5.3	2	ug/L
MKTF-20	11/18/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-20	11/18/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-20	11/18/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-20	11/18/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-20	11/18/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-20	11/18/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-20	11/18/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	11/18/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-20	11/18/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-20	11/18/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-20	11/18/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-20	11/18/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-20	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-20	11/18/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-20	11/18/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-20	11/18/2014	1,2,4-Trimethylbenzene	**1800**	50	6.1	56	ug/L
MKTF-20	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-20	11/18/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-20	11/18/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-20	11/18/2014	Isopropylbenzene	ND	50	8.1	447	ug/L
MKTF-20	11/18/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-20	11/18/2014	Ethylbenzene	480	50	6.4	700	ug/L
MKTF-20	11/18/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-20	11/18/2014	n-Propylbenzene	120	50	7	660	ug/L
MKTF-20	11/18/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-20	11/18/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-20	11/18/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-20	11/18/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-20	11/18/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-20	11/18/2014	1,3,5-Trimethylbenzene	**530**	50	6.6	60	ug/L
MKTF-20	11/18/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-20	11/18/2014	Toluene	**1300**	50	8.5	1000	ug/L
MKTF-20	11/18/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-20	11/18/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-20	11/18/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-20	11/18/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-20	11/18/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-20	11/18/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-20	11/18/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-20	11/18/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-20	11/18/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-20	11/18/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-20	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-20	11/18/2014	Xylenes, Total	**10000**	75	19	620	ug/L
MKTF-20	11/18/2014	MTBE	83	50	13	143	ug/L
MKTF-20	11/18/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-20	11/18/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-20	3/16/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-20	3/16/2015	Acetone	ND	500	47	14064	ug/L
MKTF-20	3/16/2015	Chloroform	ND	50	11	100	ug/L
MKTF-20	3/16/2015	Benzene	**7000**	200	13	5	ug/L
MKTF-20	3/16/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-20	3/16/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-20	3/16/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-20	3/16/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-20	3/16/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-20	3/16/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-20	3/16/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-20	3/16/2015	Carbon Disulfide	ND	500	34	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/16/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-20	3/16/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-20	3/16/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	3/16/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-20	3/16/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	3/16/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-20	3/16/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-20	3/16/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-20	3/16/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-20	3/16/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-20	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-20	3/16/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	3/16/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-20	3/16/2015	1,2,4-Trimethylbenzene	**1300**	50	8	56	ug/L
MKTF-20	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-20	3/16/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-20	3/16/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-20	3/16/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-20	3/16/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L
MKTF-20	3/16/2015	Ethylbenzene	89	50	5.1	700	ug/L
MKTF-20	3/16/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-20	3/16/2015	n-Propylbenzene	ND	50	8.2	660	ug/L
MKTF-20	3/16/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-20	3/16/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-20	3/16/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-20	3/16/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-20	3/16/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-20	3/16/2015	1,3,5-Trimethylbenzene	**390**	50	6.1	60	ug/L
MKTF-20	3/16/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-20	3/16/2015	Toluene	**2300**	50	5.4	1000	ug/L
MKTF-20	3/16/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-20	3/16/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-20	3/16/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-20	3/16/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-20	3/16/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-20	3/16/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-20	3/16/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-20	3/16/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-20	3/16/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-20	3/16/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-20	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-20	3/16/2015	Xylenes, Total	**9600**	300	56	620	ug/L
MKTF-20	3/16/2015	MTBE	ND	50	8.7	143	ug/L
MKTF-20	3/16/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-20	3/16/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-20	6/8/2015	Carbon tetrachloride	*ND*	*50*	3.9	5	ug/L
MKTF-20	6/8/2015	Acetone	ND	500	47	14064	ug/L
MKTF-20	6/8/2015	Chloroform	ND	50	11	100	ug/L
MKTF-20	6/8/2015	Benzene	**5900**	500	33	5	ug/L
MKTF-20	6/8/2015	1,1,1-Trichloroethane	ND	50	3.9	200	ug/L
MKTF-20	6/8/2015	Bromomethane	*ND*	*150*	58	7.54	ug/L
MKTF-20	6/8/2015	Chloromethane	*ND*	*150*	8.7	20.32	ug/L
MKTF-20	6/8/2015	Dibromomethane	*ND*	*50*	12	8	ug/L
MKTF-20	6/8/2015	Chloroethane	ND	100	5.2	20857	ug/L
MKTF-20	6/8/2015	Vinyl Chloride	*ND*	*50*	6.3	2	ug/L
MKTF-20	6/8/2015	Methylene Chloride	*ND*	*150*	18	5	ug/L
MKTF-20	6/8/2015	Carbon Disulfide	ND	500	34	810	ug/L
MKTF-20	6/8/2015	Bromoform	*ND*	*50*	8.1	32.9	ug/L
MKTF-20	6/8/2015	Bromodichloromethane	*ND*	*50*	4.5	1.34	ug/L
MKTF-20	6/8/2015	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	6/8/2015	1,1-Dichloroethene	*ND*	*50*	5	7	ug/L
MKTF-20	6/8/2015	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-20	6/8/2015	Dichlorodifluoromethane	ND	50	35	197	ug/L
MKTF-20	6/8/2015	1,2-Dichloropropane	*ND*	*50*	7.6	5	ug/L
MKTF-20	6/8/2015	2-Butanone	ND	500	18	5565	ug/L
MKTF-20	6/8/2015	1,1,2-Trichloroethane	*ND*	*50*	3.9	5	ug/L
MKTF-20	6/8/2015	Trichloroethene	*ND*	*50*	8.2	5	ug/L
MKTF-20	6/8/2015	1,1,2,2-Tetrachloroethane	*ND*	*100*	9	10	ug/L
MKTF-20	6/8/2015	1,2,3-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	6/8/2015	2-Chlorotoluene	ND	50	4	233	ug/L
MKTF-20	6/8/2015	1,2,4-Trimethylbenzene	**940**	50	8	56	ug/L
MKTF-20	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*100*	6.8	0.0033	ug/L
MKTF-20	6/8/2015	1,2,3-Trichloropropane	*ND*	*100*	7.9	0.0084	ug/L
MKTF-20	6/8/2015	tert-Butylbenzene	ND	50	6.5	690	ug/L
MKTF-20	6/8/2015	Isopropylbenzene	ND	50	7.6	447	ug/L
MKTF-20	6/8/2015	p-Isopropyltoluene	ND	50	9.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/8/2015	Ethylbenzene	140	50	5.1	700	ug/L
MKTF-20	6/8/2015	Styrene	ND	50	5.3	100	ug/L
MKTF-20	6/8/2015	n-Propylbenzene	ND	50	8.2	660	ug/L
MKTF-20	6/8/2015	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-20	6/8/2015	4-Chlorotoluene	ND	50	7.5	250	ug/L
MKTF-20	6/8/2015	1,2-Dibromoethane	*ND*	*50*	6.7	0.05	ug/L
MKTF-20	6/8/2015	1,2-Dichloroethane	*ND*	*50*	8.8	5	ug/L
MKTF-20	6/8/2015	4-Methyl-2-Pentanone	ND	500	13	1243	ug/L
MKTF-20	6/8/2015	1,3,5-Trimethylbenzene	**340**	50	6.1	60	ug/L
MKTF-20	6/8/2015	Bromobenzene	ND	50	5.4	62	ug/L
MKTF-20	6/8/2015	Toluene	620	50	5.4	1000	ug/L
MKTF-20	6/8/2015	Chlorobenzene	ND	50	4.7	77.6	ug/L
MKTF-20	6/8/2015	Dibromochloromethane	*ND*	*50*	4.8	1.68	ug/L
MKTF-20	6/8/2015	Tetrachloroethene	*ND*	*50*	8	5	ug/L
MKTF-20	6/8/2015	sec-Butylbenzene	ND	50	11	2000	ug/L
MKTF-20	6/8/2015	1,3-Dichloropropane	ND	50	8.6	370	ug/L
MKTF-20	6/8/2015	cis-1,2-Dichloroethene	ND	50	4	70	ug/L
MKTF-20	6/8/2015	trans-1,2-Dichloroethene	ND	50	4.7	100	ug/L
MKTF-20	6/8/2015	1,1-Dichloropropene	ND	50	5.8	NA	ug/L
MKTF-20	6/8/2015	2-Hexanone	*ND*	*500*	24	38	ug/L
MKTF-20	6/8/2015	2,2-Dichloropropane	ND	100	7.6	NA	ug/L
MKTF-20	6/8/2015	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.5	5.74	ug/L
MKTF-20	6/8/2015	Xylenes, Total	**7300**	75	14	620	ug/L
MKTF-20	6/8/2015	MTBE	65	50	8.7	143	ug/L
MKTF-20	6/8/2015	cis-1,3-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-20	6/8/2015	trans-1,3-Dichloropropene	ND	50	5.7	NA	ug/L
MKTF-20	3/1/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-20	3/1/2016	Acetone	ND	500	44	14064	ug/L
MKTF-20	3/1/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-20	3/1/2016	Benzene	**13000**	500	48	5	ug/L
MKTF-20	3/1/2016	1,1,1-Trichloroethane	ND	50	3.2	200	ug/L
MKTF-20	3/1/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-20	3/1/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-20	3/1/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-20	3/1/2016	Chloroethane	ND	100	7.3	20857	ug/L
MKTF-20	3/1/2016	Vinyl Chloride	*ND*	*50*	3.2	2	ug/L
MKTF-20	3/1/2016	Methylene Chloride	*ND*	*150*	3.1	5	ug/L
MKTF-20	3/1/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-20	3/1/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-20	3/1/2016	Bromodichloromethane	*ND*	*50*	4.9	1.34	ug/L
MKTF-20	3/1/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-20	3/1/2016	1,1-Dichloroethene	*ND*	*50*	3.8	7	ug/L
MKTF-20	3/1/2016	Trichlorofluoromethane	ND	50	4.4	1137	ug/L
MKTF-20	3/1/2016	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-20	3/1/2016	1,2-Dichloropropane	*ND*	*50*	2.4	5	ug/L
MKTF-20	3/1/2016	2-Butanone	ND	500	16	5565	ug/L
MKTF-20	3/1/2016	1,1,2-Trichloroethane	*ND*	*50*	3.8	5	ug/L
MKTF-20	3/1/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-20	3/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	5.3	10	ug/L
MKTF-20	3/1/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-20	3/1/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-20	3/1/2016	1,2,4-Trimethylbenzene	**1200**	50	5.2	56	ug/L
MKTF-20	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	7.7	0.0033	ug/L
MKTF-20	3/1/2016	1,2,3-Trichloropropane	*ND*	*100*	5.6	0.0084	ug/L
MKTF-20	3/1/2016	tert-Butylbenzene	ND	50	4.8	690	ug/L
MKTF-20	3/1/2016	Isopropylbenzene	ND	50	4.9	447	ug/L
MKTF-20	3/1/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-20	3/1/2016	Ethylbenzene	**1100**	50	5.6	700	ug/L
MKTF-20	3/1/2016	Styrene	ND	50	4.8	100	ug/L
MKTF-20	3/1/2016	n-Propylbenzene	73	50	6.6	660	ug/L
MKTF-20	3/1/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-20	3/1/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-20	3/1/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-20	3/1/2016	1,2-Dichloroethane	*ND*	*50*	2.6	5	ug/L
MKTF-20	3/1/2016	4-Methyl-2-Pentanone	ND	500	7.5	1243	ug/L
MKTF-20	3/1/2016	1,3,5-Trimethylbenzene	**380**	50	5.8	60	ug/L
MKTF-20	3/1/2016	Bromobenzene	ND	50	4	62	ug/L
MKTF-20	3/1/2016	Toluene	470	50	4.5	1000	ug/L
MKTF-20	3/1/2016	Chlorobenzene	ND	50	5.2	77.6	ug/L
MKTF-20	3/1/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-20	3/1/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-20	3/1/2016	sec-Butylbenzene	ND	50	5.4	2000	ug/L
MKTF-20	3/1/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-20	3/1/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-20	3/1/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-20	3/1/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/1/2016	2-Hexanone	*ND*	*500*	18	38	ug/L
MKTF-20	3/1/2016	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-20	3/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-20	3/1/2016	Xylenes, Total	**9200**	75	16	620	ug/L
MKTF-20	3/1/2016	MTBE	130	50	11	143	ug/L
MKTF-20	3/1/2016	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-20	3/1/2016	trans-1,3-Dichloropropene	ND	50	4.2	NA	ug/L
MKTF-20	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-20	6/9/2016	Acetone	120	100	49	14064	ug/L
MKTF-20	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-20	6/9/2016	Benzene	**11000**	200	19	5	ug/L
MKTF-20	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-20	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-20	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-20	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-20	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-20	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-20	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-20	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-20	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-20	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-20	6/9/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-20	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-20	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-20	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-20	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-20	6/9/2016	2-Butanone	47	100	7.4	5565	ug/L
MKTF-20	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-20	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-20	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-20	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-20	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-20	6/9/2016	1,2,4-Trimethylbenzene	**970**	10	1.1	56	ug/L
MKTF-20	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-20	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-20	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-20	6/9/2016	Isopropylbenzene	20	10	1	447	ug/L
MKTF-20	6/9/2016	p-Isopropyltoluene	4.5	10	1.4	NA	ug/L
MKTF-20	6/9/2016	Ethylbenzene	**850**	10	1.1	700	ug/L
MKTF-20	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-20	6/9/2016	n-Propylbenzene	58	10	1.3	660	ug/L
MKTF-20	6/9/2016	n-Butylbenzene	20	30	1.6	1000	ug/L
MKTF-20	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-20	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-20	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-20	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-20	6/9/2016	1,3,5-Trimethylbenzene	**310**	10	1.2	60	ug/L
MKTF-20	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-20	6/9/2016	Toluene	390	10	1.2	1000	ug/L
MKTF-20	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-20	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-20	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	6/9/2016	sec-Butylbenzene	4.3	10	1.2	2000	ug/L
MKTF-20	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-20	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-20	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-20	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-20	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-20	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-20	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-20	6/9/2016	Xylenes, Total	**7900**	300	73	620	ug/L
MKTF-20	6/9/2016	MTBE	**160**	10	2.1	143	ug/L
MKTF-20	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-20	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-20	9/12/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	9/12/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-20	9/12/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	9/12/2016	Benzene	**18000**	1000	96	5	ug/L
MKTF-20	9/12/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-20	9/12/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	9/12/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	9/12/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	9/12/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-20	9/12/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-20	9/12/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-20	9/12/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-20	9/12/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-20	9/12/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-20	9/12/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-20	9/12/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-20	9/12/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-20	9/12/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-20	9/12/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-20	9/12/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-20	9/12/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-20	9/12/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	9/12/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	9/12/2016	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-20	9/12/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-20	9/12/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-20	9/12/2016	Isopropylbenzene	28	100	10	447	ug/L
MKTF-20	9/12/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-20	9/12/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-20	9/12/2016	Styrene	ND	100	11	100	ug/L
MKTF-20	9/12/2016	n-Propylbenzene	110	100	13	660	ug/L
MKTF-20	9/12/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-20	9/12/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-20	9/12/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-20	9/12/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	9/12/2016	4-Methyl-2-Pentanone	ND	1000	43	1243	ug/L
MKTF-20	9/12/2016	1,3,5-Trimethylbenzene	**410**	100	12	60	ug/L
MKTF-20	9/12/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-20	9/12/2016	Toluene	480	100	12	1000	ug/L
MKTF-20	9/12/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	9/12/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-20	9/12/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	9/12/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-20	9/12/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	9/12/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-20	9/12/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-20	9/12/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-20	9/12/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-20	9/12/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-20	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	9/12/2016	Xylenes, Total	**8800**	150	37	620	ug/L
MKTF-20	9/12/2016	MTBE	**160**	100	21	143	ug/L
MKTF-20	9/12/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-20	9/12/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	11/3/2016	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	11/3/2016	Acetone	ND	1000	490	14064	ug/L
MKTF-20	11/3/2016	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	11/3/2016	Benzene	**13000**	1000	96	5	ug/L
MKTF-20	11/3/2016	1,1,1-Trichloroethane	ND	100	9.1	200	ug/L
MKTF-20	11/3/2016	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	11/3/2016	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	11/3/2016	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	11/3/2016	Chloroethane	ND	200	19	20857	ug/L
MKTF-20	11/3/2016	Vinyl Chloride	*ND*	*100*	20	2	ug/L
MKTF-20	11/3/2016	Methylene Chloride	*ND*	*300*	19	5	ug/L
MKTF-20	11/3/2016	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-20	11/3/2016	Bromoform	*ND*	*100*	10	32.9	ug/L
MKTF-20	11/3/2016	Bromodichloromethane	*ND*	*100*	14	1.34	ug/L
MKTF-20	11/3/2016	1,1-Dichloroethane	*ND*	*100*	11	25	ug/L
MKTF-20	11/3/2016	1,1-Dichloroethene	*ND*	*100*	11	7	ug/L
MKTF-20	11/3/2016	Trichlorofluoromethane	ND	100	20	1137	ug/L
MKTF-20	11/3/2016	Dichlorodifluoromethane	ND	100	36	197	ug/L
MKTF-20	11/3/2016	1,2-Dichloropropane	*ND*	*100*	11	5	ug/L
MKTF-20	11/3/2016	2-Butanone	ND	1000	74	5565	ug/L
MKTF-20	11/3/2016	1,1,2-Trichloroethane	*ND*	*100*	13	5	ug/L
MKTF-20	11/3/2016	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*200*	13	10	ug/L
MKTF-20	11/3/2016	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	11/3/2016	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	11/3/2016	1,2,4-Trimethylbenzene	**1200**	100	11	56	ug/L
MKTF-20	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*200*	23	0.0033	ug/L
MKTF-20	11/3/2016	1,2,3-Trichloropropane	*ND*	*200*	20	0.0084	ug/L
MKTF-20	11/3/2016	tert-Butylbenzene	ND	100	12	690	ug/L
MKTF-20	11/3/2016	Isopropylbenzene	35	100	10	447	ug/L
MKTF-20	11/3/2016	p-Isopropyltoluene	ND	100	14	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Ethylbenzene	**1100**	100	11	700	ug/L
MKTF-20	11/3/2016	Styrene	ND	100	11	100	ug/L
MKTF-20	11/3/2016	n-Propylbenzene	110	100	13	660	ug/L
MKTF-20	11/3/2016	n-Butylbenzene	ND	300	16	1000	ug/L
MKTF-20	11/3/2016	4-Chlorotoluene	ND	100	13	250	ug/L
MKTF-20	11/3/2016	1,2-Dibromoethane	*ND*	*100*	11	0.05	ug/L
MKTF-20	11/3/2016	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	11/3/2016	4-Methyl-2-Pentanone	46	1000	43	1243	ug/L
MKTF-20	11/3/2016	1,3,5-Trimethylbenzene	**350**	100	12	60	ug/L
MKTF-20	11/3/2016	Bromobenzene	*ND*	*100*	9.8	62	ug/L
MKTF-20	11/3/2016	Toluene	400	100	12	1000	ug/L
MKTF-20	11/3/2016	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	11/3/2016	Dibromochloromethane	*ND*	*100*	8.7	1.68	ug/L
MKTF-20	11/3/2016	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	11/3/2016	sec-Butylbenzene	ND	100	12	2000	ug/L
MKTF-20	11/3/2016	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	11/3/2016	cis-1,2-Dichloroethene	*ND*	*100*	12	70	ug/L
MKTF-20	11/3/2016	trans-1,2-Dichloroethene	ND	100	40	100	ug/L
MKTF-20	11/3/2016	1,1-Dichloropropene	ND	100	13	NA	ug/L
MKTF-20	11/3/2016	2-Hexanone	*ND*	*1000*	84	38	ug/L
MKTF-20	11/3/2016	2,2-Dichloropropane	ND	200	17	NA	ug/L
MKTF-20	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	11/3/2016	Xylenes, Total	**9200**	150	37	620	ug/L
MKTF-20	11/3/2016	MTBE	**190**	100	21	143	ug/L
MKTF-20	11/3/2016	cis-1,3-Dichloropropene	ND	100	11	NA	ug/L
MKTF-20	11/3/2016	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	3/14/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	3/14/2017	Acetone	ND	1000	88	14064	ug/L
MKTF-20	3/14/2017	Chloroform	ND	100	8.9	100	ug/L
MKTF-20	3/14/2017	Benzene	**17000**	1000	96	5	ug/L
MKTF-20	3/14/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	3/14/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
MKTF-20	3/14/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
MKTF-20	3/14/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
MKTF-20	3/14/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	3/14/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	3/14/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	3/14/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
MKTF-20	3/14/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	3/14/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	3/14/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
MKTF-20	3/14/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	3/14/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	3/14/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
MKTF-20	3/14/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	3/14/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	3/14/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	3/14/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
MKTF-20	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	3/14/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
MKTF-20	3/14/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	3/14/2017	1,2,4-Trimethylbenzene	**1200**	100	10	56	ug/L
MKTF-20	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	3/14/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	3/14/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	3/14/2017	Isopropylbenzene	14	100	9.8	447	ug/L
MKTF-20	3/14/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
MKTF-20	3/14/2017	Ethylbenzene	260	100	11	700	ug/L
MKTF-20	3/14/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	3/14/2017	n-Propylbenzene	37	100	13	660	ug/L
MKTF-20	3/14/2017	n-Butylbenzene	19	300	16	1000	ug/L
MKTF-20	3/14/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	3/14/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	3/14/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
MKTF-20	3/14/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	3/14/2017	1,3,5-Trimethylbenzene	**420**	100	12	60	ug/L
MKTF-20	3/14/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	3/14/2017	Toluene	**2200**	100	8.9	1000	ug/L
MKTF-20	3/14/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	3/14/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
MKTF-20	3/14/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	3/14/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
MKTF-20	3/14/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
MKTF-20	3/14/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	3/14/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	3/14/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/14/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	3/14/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
MKTF-20	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
MKTF-20	3/14/2017	Xylenes, Total	**9800**	150	32	620	ug/L
MKTF-20	3/14/2017	MTBE	**230**	100	15	143	ug/L
MKTF-20	3/14/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-20	3/14/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
MKTF-20	6/12/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	6/12/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	6/12/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	6/12/2017	Benzene	**21000**	1000	62	5	ug/L
MKTF-20	6/12/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	6/12/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	6/12/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	6/12/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	6/12/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	6/12/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	6/12/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	6/12/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	6/12/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	6/12/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	6/12/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	6/12/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	6/12/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	6/12/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	6/12/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	6/12/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	6/12/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	6/12/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	6/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	6/12/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	6/12/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	6/12/2017	1,2,4-Trimethylbenzene	**1600**	100	11	56	ug/L
MKTF-20	6/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	6/12/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	6/12/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	6/12/2017	Isopropylbenzene	ND	100	5.1	447	ug/L
MKTF-20	6/12/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	6/12/2017	Ethylbenzene	700	100	9.3	700	ug/L
MKTF-20	6/12/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	6/12/2017	n-Propylbenzene	ND	100	7.4	660	ug/L
MKTF-20	6/12/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-20	6/12/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	6/12/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	6/12/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	6/12/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	6/12/2017	1,3,5-Trimethylbenzene	**480**	100	8.7	60	ug/L
MKTF-20	6/12/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	6/12/2017	Toluene	**3500**	100	6.4	1000	ug/L
MKTF-20	6/12/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	6/12/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	6/12/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	6/12/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	6/12/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	6/12/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	6/12/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	6/12/2017	Pentafluorobenzene	ND	0	0		None
MKTF-20	6/12/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	6/12/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	6/12/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	6/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	6/12/2017	Xylenes, Total	**14000**	150	32	620	ug/L
MKTF-20	6/12/2017	MTBE	**160**	100	24	143	ug/L
MKTF-20	6/12/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	6/12/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	9/26/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	9/26/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	9/26/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	9/26/2017	Benzene	**16000**	1000	62	5	ug/L
MKTF-20	9/26/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	9/26/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	9/26/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	9/26/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	9/26/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	9/26/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	9/26/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/26/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	9/26/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	9/26/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	9/26/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	9/26/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	9/26/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	9/26/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	9/26/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	9/26/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	9/26/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	9/26/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	9/26/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	9/26/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	9/26/2017	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	9/26/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	9/26/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	9/26/2017	Isopropylbenzene	ND	100	5.1	447	ug/L
MKTF-20	9/26/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	9/26/2017	Ethylbenzene	580	100	9.3	700	ug/L
MKTF-20	9/26/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	9/26/2017	n-Propylbenzene	ND	100	7.4	660	ug/L
MKTF-20	9/26/2017	n-Butylbenzene	ND	300	13	1000	ug/L
MKTF-20	9/26/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	9/26/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	9/26/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	9/26/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	9/26/2017	1,3,5-Trimethylbenzene	**410**	100	8.7	60	ug/L
MKTF-20	9/26/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	9/26/2017	Toluene	340	100	6.4	1000	ug/L
MKTF-20	9/26/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	9/26/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	9/26/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	9/26/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	9/26/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	9/26/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	9/26/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	9/26/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	9/26/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	9/26/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	9/26/2017	Xylenes, Total	**11000**	150	32	620	ug/L
MKTF-20	9/26/2017	MTBE	**170**	100	24	143	ug/L
MKTF-20	9/26/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	9/26/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	11/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	11/29/2017	Acetone	ND	1000	82	14064	ug/L
MKTF-20	11/29/2017	Chloroform	ND	100	40	100	ug/L
MKTF-20	11/29/2017	Benzene	**17000**	1000	62	5	ug/L
MKTF-20	11/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	11/29/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	11/29/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	11/29/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	11/29/2017	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	11/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	11/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	11/29/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	11/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	11/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	11/29/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	11/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	11/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	11/29/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	11/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	11/29/2017	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	11/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	11/29/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	11/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	11/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	11/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	11/29/2017	1,2,4-Trimethylbenzene	**1400**	100	11	56	ug/L
MKTF-20	11/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	11/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	11/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	11/29/2017	Isopropylbenzene	28	100	5.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	11/29/2017	Ethylbenzene	**800**	100	9.3	700	ug/L
MKTF-20	11/29/2017	Styrene	ND	100	16	100	ug/L
MKTF-20	11/29/2017	n-Propylbenzene	57	100	7.4	660	ug/L
MKTF-20	11/29/2017	n-Butylbenzene	32	300	13	1000	ug/L
MKTF-20	11/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	11/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	11/29/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	11/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	11/29/2017	1,3,5-Trimethylbenzene	**410**	100	8.7	60	ug/L
MKTF-20	11/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	11/29/2017	Toluene	240	100	6.4	1000	ug/L
MKTF-20	11/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	11/29/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	11/29/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	11/29/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	11/29/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	11/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	11/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	11/29/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	11/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	11/29/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	11/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	11/29/2017	Xylenes, Total	**11000**	150	32	620	ug/L
MKTF-20	11/29/2017	MTBE	100	100	24	143	ug/L
MKTF-20	11/29/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	11/29/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	2/15/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
MKTF-20	2/15/2018	Acetone	ND	1000	82	14064	ug/L
MKTF-20	2/15/2018	Chloroform	ND	100	40	100	ug/L
MKTF-20	2/15/2018	Benzene	**12000**	1000	62	5	ug/L
MKTF-20	2/15/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
MKTF-20	2/15/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	2/15/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	2/15/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
MKTF-20	2/15/2018	Chloroethane	ND	200	23	20857	ug/L
MKTF-20	2/15/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
MKTF-20	2/15/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
MKTF-20	2/15/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
MKTF-20	2/15/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
MKTF-20	2/15/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
MKTF-20	2/15/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	2/15/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
MKTF-20	2/15/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
MKTF-20	2/15/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	2/15/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
MKTF-20	2/15/2018	2-Butanone	ND	1000	110	5565	ug/L
MKTF-20	2/15/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
MKTF-20	2/15/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
MKTF-20	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
MKTF-20	2/15/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
MKTF-20	2/15/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	2/15/2018	1,2,4-Trimethylbenzene	**1300**	100	11	56	ug/L
MKTF-20	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
MKTF-20	2/15/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
MKTF-20	2/15/2018	tert-Butylbenzene	ND	100	10	690	ug/L
MKTF-20	2/15/2018	Isopropylbenzene	13	100	5.1	447	ug/L
MKTF-20	2/15/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
MKTF-20	2/15/2018	Ethylbenzene	**960**	100	9.3	700	ug/L
MKTF-20	2/15/2018	Styrene	ND	100	16	100	ug/L
MKTF-20	2/15/2018	n-Propylbenzene	52	100	7.4	660	ug/L
MKTF-20	2/15/2018	n-Butylbenzene	25	300	13	1000	ug/L
MKTF-20	2/15/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	2/15/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
MKTF-20	2/15/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	2/15/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
MKTF-20	2/15/2018	1,3,5-Trimethylbenzene	**360**	100	8.7	60	ug/L
MKTF-20	2/15/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
MKTF-20	2/15/2018	Toluene	190	100	6.4	1000	ug/L
MKTF-20	2/15/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
MKTF-20	2/15/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
MKTF-20	2/15/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
MKTF-20	2/15/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
MKTF-20	2/15/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
MKTF-20	2/15/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
MKTF-20	2/15/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/15/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
MKTF-20	2/15/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
MKTF-20	2/15/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
MKTF-20	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
MKTF-20	2/15/2018	Xylenes, Total	**12000**	150	32	620	ug/L
MKTF-20	2/15/2018	MTBE	55	100	24	143	ug/L
MKTF-20	2/15/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
MKTF-20	2/15/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
MKTF-20	5/11/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-20	5/11/2018	Acetone	ND	500	41	14064	ug/L
MKTF-20	5/11/2018	Chloroform	ND	50	20	100	ug/L
MKTF-20	5/11/2018	Benzene	**13000**	500	31	5	ug/L
MKTF-20	5/11/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-20	5/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-20	5/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-20	5/11/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-20	5/11/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-20	5/11/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-20	5/11/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-20	5/11/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-20	5/11/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-20	5/11/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-20	5/11/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-20	5/11/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-20	5/11/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-20	5/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-20	5/11/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-20	5/11/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-20	5/11/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-20	5/11/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-20	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-20	5/11/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-20	5/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-20	5/11/2018	1,2,4-Trimethylbenzene	**1600**	50	5.6	56	ug/L
MKTF-20	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-20	5/11/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-20	5/11/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-20	5/11/2018	Isopropylbenzene	21	50	2.6	447	ug/L
MKTF-20	5/11/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-20	5/11/2018	Ethylbenzene	**1300**	50	4.7	700	ug/L
MKTF-20	5/11/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-20	5/11/2018	n-Propylbenzene	64	50	3.7	660	ug/L
MKTF-20	5/11/2018	n-Butylbenzene	15	150	6.5	1000	ug/L
MKTF-20	5/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-20	5/11/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-20	5/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-20	5/11/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-20	5/11/2018	1,3,5-Trimethylbenzene	**470**	50	4.4	60	ug/L
MKTF-20	5/11/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-20	5/11/2018	Toluene	140	50	3.2	1000	ug/L
MKTF-20	5/11/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-20	5/11/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-20	5/11/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-20	5/11/2018	sec-Butylbenzene	7.5	50	5.5	2000	ug/L
MKTF-20	5/11/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-20	5/11/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-20	5/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-20	5/11/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-20	5/11/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-20	5/11/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-20	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-20	5/11/2018	Xylenes, Total	**13000**	75	16	620	ug/L
MKTF-20	5/11/2018	MTBE	130	50	12	143	ug/L
MKTF-20	5/11/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-20	5/11/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-20	8/31/2018	Carbon tetrachloride	*ND*	*100*	13	5	ug/L
MKTF-20	8/31/2018	Acetone	ND	1000	79	14064	ug/L
MKTF-20	8/31/2018	Chloroform	ND	100	40	100	ug/L
MKTF-20	8/31/2018	Benzene	**9900**	100	17	5	ug/L
MKTF-20	8/31/2018	1,1,1-Trichloroethane	ND	100	15	200	ug/L
MKTF-20	8/31/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
MKTF-20	8/31/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
MKTF-20	8/31/2018	Dibromomethane	*ND*	*100*	32	8	ug/L
MKTF-20	8/31/2018	Chloroethane	ND	200	16	20857	ug/L
MKTF-20	8/31/2018	Vinyl Chloride	*ND*	*100*	11	2	ug/L
MKTF-20	8/31/2018	Methylene Chloride	*ND*	*300*	21	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/31/2018	Carbon Disulfide	*ND*	*1000*	39	810	ug/L
MKTF-20	8/31/2018	Bromoform	*ND*	*100*	32	32.9	ug/L
MKTF-20	8/31/2018	Bromodichloromethane	*ND*	*100*	28	1.34	ug/L
MKTF-20	8/31/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
MKTF-20	8/31/2018	1,1-Dichloroethene	*ND*	*100*	12	7	ug/L
MKTF-20	8/31/2018	Trichlorofluoromethane	ND	100	17	1137	ug/L
MKTF-20	8/31/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
MKTF-20	8/31/2018	1,2-Dichloropropane	*ND*	*100*	15	5	ug/L
MKTF-20	8/31/2018	2-Butanone	ND	1000	130	5565	ug/L
MKTF-20	8/31/2018	1,1,2-Trichloroethane	*ND*	*100*	23	5	ug/L
MKTF-20	8/31/2018	Trichloroethene	*ND*	*100*	26	5	ug/L
MKTF-20	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	33	10	ug/L
MKTF-20	8/31/2018	1,2,3-Trichlorobenzene	*ND*	*100*	28	70	ug/L
MKTF-20	8/31/2018	2-Chlorotoluene	ND	100	40	233	ug/L
MKTF-20	8/31/2018	1,2,4-Trimethylbenzene	**1400**	100	25	56	ug/L
MKTF-20	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	47	0.0033	ug/L
MKTF-20	8/31/2018	1,2,3-Trichloropropane	*ND*	*200*	57	0.0084	ug/L
MKTF-20	8/31/2018	tert-Butylbenzene	ND	100	22	690	ug/L
MKTF-20	8/31/2018	Isopropylbenzene	ND	100	22	447	ug/L
MKTF-20	8/31/2018	p-Isopropyltoluene	ND	100	24	NA	ug/L
MKTF-20	8/31/2018	Ethylbenzene	**770**	100	22	700	ug/L
MKTF-20	8/31/2018	Styrene	ND	100	25	100	ug/L
MKTF-20	8/31/2018	n-Propylbenzene	63	100	24	660	ug/L
MKTF-20	8/31/2018	n-Butylbenzene	ND	300	25	1000	ug/L
MKTF-20	8/31/2018	4-Chlorotoluene	ND	100	40	250	ug/L
MKTF-20	8/31/2018	1,2-Dibromoethane	*ND*	*100*	23	0.05	ug/L
MKTF-20	8/31/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
MKTF-20	8/31/2018	4-Methyl-2-Pentanone	50	1000	45	1243	ug/L
MKTF-20	8/31/2018	1,3,5-Trimethylbenzene	**430**	100	23	60	ug/L
MKTF-20	8/31/2018	Bromobenzene	*ND*	*100*	32	62	ug/L
MKTF-20	8/31/2018	Toluene	64	100	17	1000	ug/L
MKTF-20	8/31/2018	Chlorobenzene	*ND*	*100*	29	77.6	ug/L
MKTF-20	8/31/2018	Dibromochloromethane	*ND*	*100*	24	1.68	ug/L
MKTF-20	8/31/2018	Tetrachloroethene	*ND*	*100*	15	5	ug/L
MKTF-20	8/31/2018	sec-Butylbenzene	ND	100	20	2000	ug/L
MKTF-20	8/31/2018	1,3-Dichloropropane	ND	100	27	370	ug/L
MKTF-20	8/31/2018	cis-1,2-Dichloroethene	*ND*	*100*	38	70	ug/L
MKTF-20	8/31/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
MKTF-20	8/31/2018	1,1-Dichloropropene	ND	100	16	NA	ug/L
MKTF-20	8/31/2018	2-Hexanone	*ND*	*1000*	91	38	ug/L
MKTF-20	8/31/2018	2,2-Dichloropropane	ND	200	18	NA	ug/L
MKTF-20	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	25	5.74	ug/L
MKTF-20	8/31/2018	Xylenes, Total	**9100**	150	64	620	ug/L
MKTF-20	8/31/2018	MTBE	96	100	32	143	ug/L
MKTF-20	8/31/2018	cis-1,3-Dichloropropene	ND	100	30	NA	ug/L
MKTF-20	8/31/2018	trans-1,3-Dichloropropene	ND	100	28	NA	ug/L
MKTF-20	11/29/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-20	11/29/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-20	11/29/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-20	11/29/2018	Benzene	**3000**	100	17	5	ug/L
MKTF-20	11/29/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-20	11/29/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-20	11/29/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-20	11/29/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-20	11/29/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-20	11/29/2018	Vinyl Chloride	*ND*	*10*	1.2	2	ug/L
MKTF-20	11/29/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-20	11/29/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-20	11/29/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-20	11/29/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-20	11/29/2018	1,1-Dichloroethane	ND	10	1.8	25	ug/L
MKTF-20	11/29/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
MKTF-20	11/29/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-20	11/29/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-20	11/29/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-20	11/29/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-20	11/29/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-20	11/29/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-20	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-20	11/29/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-20	11/29/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-20	11/29/2018	1,2,4-Trimethylbenzene	**530**	10	2.5	56	ug/L
MKTF-20	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-20	11/29/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-20	11/29/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-20	11/29/2018	Isopropylbenzene	3.7	10	2.2	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-20	11/29/2018	Ethylbenzene	120	10	2.2	700	ug/L
MKTF-20	11/29/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-20	11/29/2018	n-Propylbenzene	8.1	10	2.4	660	ug/L
MKTF-20	11/29/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-20	11/29/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-20	11/29/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-20	11/29/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-20	11/29/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-20	11/29/2018	1,3,5-Trimethylbenzene	**220**	10	2.3	60	ug/L
MKTF-20	11/29/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-20	11/29/2018	Toluene	20	10	1.7	1000	ug/L
MKTF-20	11/29/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-20	11/29/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-20	11/29/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	11/29/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-20	11/29/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-20	11/29/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-20	11/29/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-20	11/29/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-20	11/29/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-20	11/29/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-20	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-20	11/29/2018	Xylenes, Total	**2500**	15	6.4	620	ug/L
MKTF-20	11/29/2018	MTBE	26	10	4.6	143	ug/L
MKTF-20	11/29/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-20	11/29/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-20	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.523992	5.74	ug/L
MKTF-20	2/20/2019	1,1,1-Trichloroethane	ND	10	1.638158	200	ug/L
MKTF-20	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.282991	10	ug/L
MKTF-20	2/20/2019	1,1,2-Trichloroethane	*ND*	*10*	2.327232	5	ug/L
MKTF-20	2/20/2019	1,1-Dichloroethane	ND	10	1.751966	25	ug/L
MKTF-20	2/20/2019	1,1-Dichloroethene	*ND*	*10*	1.204878	7	ug/L
MKTF-20	2/20/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	2/20/2019	1,2,3-Trichlorobenzene	ND	10	2.80308	70	ug/L
MKTF-20	2/20/2019	1,2,3-Trichloropropane	*ND*	*20*	5.660045	0.0084	ug/L
MKTF-20	2/20/2019	1,2,4-Trichlorobenzene	ND	10	2.664102	70	ug/L
MKTF-20	2/20/2019	1,2,4-Trimethylbenzene	**160**	10	2.533143	56	ug/L
MKTF-20	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.708972	0.0033	ug/L
MKTF-20	2/20/2019	1,2-Dibromoethane	*ND*	*10*	2.295285	0.05	ug/L
MKTF-20	2/20/2019	1,2-Dichlorobenzene	ND	10	3.114649	600	ug/L
MKTF-20	2/20/2019	1,2-Dichloroethane	*ND*	*10*	1.895254	5	ug/L
MKTF-20	2/20/2019	1,2-Dichloropropane	*ND*	*10*	1.652258	5	ug/L
MKTF-20	2/20/2019	1,3,5-Trimethylbenzene	31	10	2.314141	60	ug/L
MKTF-20	2/20/2019	1,3-Dichlorobenzene	ND	10	3.126224	N/A	ug/L
MKTF-20	2/20/2019	1,3-Dichloropropane	ND	10	2.707563	370	ug/L
MKTF-20	2/20/2019	1,4-Dichlorobenzene	ND	10	2.877068	75	ug/L
MKTF-20	2/20/2019	1-Methylnaphthalene	4.5	40	3.35817	NA	ug/L
MKTF-20	2/20/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	2/20/2019	2-Butanone	ND	100	14.108689	5565	ug/L
MKTF-20	2/20/2019	2-Chlorotoluene	ND	10	2.501382	233	ug/L
MKTF-20	2/20/2019	2-Hexanone	*ND*	*100*	9.065744	38	ug/L
MKTF-20	2/20/2019	2-Methylnaphthalene	**4.4**	40	3.45376		ug/L
MKTF-20	2/20/2019	4-Chlorotoluene	ND	10	2.808009	250	ug/L
MKTF-20	2/20/2019	p-Isopropyltoluene	ND	10	2.403386	NA	ug/L
MKTF-20	2/20/2019	4-Methyl-2-Pentanone	40	100	4.532774	1243	ug/L
MKTF-20	2/20/2019	Acetone	ND	100	7.570696	14064	ug/L
MKTF-20	2/20/2019	Benzene	**2100**	100	17.489572	5	ug/L
MKTF-20	2/20/2019	Bromobenzene	ND	10	3.179062	62	ug/L
MKTF-20	2/20/2019	Bromodichloromethane	*ND*	*10*	2.82767	1.34	ug/L
MKTF-20	2/20/2019	Bromoform	ND	10	3.233103	32.9	ug/L
MKTF-20	2/20/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	2/20/2019	Carbon Disulfide	ND	100	3.850311	810	ug/L
MKTF-20	2/20/2019	Carbon tetrachloride	*ND*	*10*	1.373484	5	ug/L
MKTF-20	2/20/2019	Chlorobenzene	ND	10	2.905275	77.6	ug/L
MKTF-20	2/20/2019	Chloroethane	ND	20	1.643371	20857	ug/L
MKTF-20	2/20/2019	Chloroform	ND	10	2.352238	100	ug/L
MKTF-20	2/20/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	2/20/2019	cis-1,2-Dichloroethene	ND	10	3.759811	70	ug/L
MKTF-20	2/20/2019	cis-1,3-Dichloropropene	ND	10	2.98228	NA	ug/L
MKTF-20	2/20/2019	Dibromochloromethane	*ND*	*10*	2.370124	1.68	ug/L
MKTF-20	2/20/2019	Dibromomethane	*ND*	*10*	3.221474	8	ug/L
MKTF-20	2/20/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	2/20/2019	Ethylbenzene	230	10	2.234022	700	ug/L
MKTF-20	2/20/2019	Hexachlorobutadiene	*ND*	*10*	3.911869	1.39	ug/L
MKTF-20	2/20/2019	Isopropylbenzene	6.3	10	2.211042	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/20/2019	MTBE	**220**	10	4.56095	143	ug/L
MKTF-20	2/20/2019	Methylene Chloride	*ND*	*30*	2.056948	5	ug/L
MKTF-20	2/20/2019	Naphthalene	24	20	2.896261	30	ug/L
MKTF-20	2/20/2019	n-Butylbenzene	ND	30	2.483305	1000	ug/L
MKTF-20	2/20/2019	n-Propylbenzene	13	10	2.425862	660	ug/L
MKTF-20	2/20/2019	sec-Butylbenzene	ND	10	2.022547	2000	ug/L
MKTF-20	2/20/2019	Styrene	ND	10	2.501457	100	ug/L
MKTF-20	2/20/2019	tert-Butylbenzene	ND	10	2.214697	690	ug/L
MKTF-20	2/20/2019	Tetrachloroethene	*ND*	*10*	1.514517	5	ug/L
MKTF-20	2/20/2019	Toluene	2.1	10	1.681394	1000	ug/L
MKTF-20	2/20/2019	trans-1,2-Dichloroethene	ND	10	1.822696	100	ug/L
MKTF-20	2/20/2019	trans-1,3-Dichloropropene	ND	10	2.754677	NA	ug/L
MKTF-20	2/20/2019	Trichloroethene	*ND*	*10*	2.575564	5	ug/L
MKTF-20	2/20/2019	Trichlorofluoromethane	ND	10	1.441162	1137	ug/L
MKTF-20	2/20/2019	Vinyl Chloride	*ND*	*10*	1.210743	2	ug/L
MKTF-20	2/20/2019	Xylenes, Total	140	15	6.412877	620	ug/L
MKTF-20	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	5/14/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	5/14/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	5/14/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	5/14/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-20	5/14/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	5/14/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	5/14/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-20	5/14/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	5/14/2019	1,2,4-Trimethylbenzene	**840**	10	2.131991	56	ug/L
MKTF-20	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-20	5/14/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	5/14/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	5/14/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	5/14/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	5/14/2019	1,3,5-Trimethylbenzene	**230**	10	1.886598	60	ug/L
MKTF-20	5/14/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	5/14/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	5/14/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	5/14/2019	1-Methylnaphthalene	53	40	3.149545	NA	ug/L
MKTF-20	5/14/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	5/14/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-20	5/14/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	5/14/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	5/14/2019	2-Methylnaphthalene	**52**	40	3.45376		ug/L
MKTF-20	5/14/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	5/14/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-20	5/14/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	5/14/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-20	5/14/2019	Benzene	**2300**	100	16.663906	5	ug/L
MKTF-20	5/14/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	5/14/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	5/14/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	5/14/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	5/14/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	5/14/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	5/14/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	5/14/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	5/14/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	5/14/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	5/14/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	5/14/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	5/14/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	5/14/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	5/14/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	5/14/2019	Ethylbenzene	**1000**	100	13.23408	700	ug/L
MKTF-20	5/14/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	5/14/2019	Isopropylbenzene	3.2	10	1.915223	447	ug/L
MKTF-20	5/14/2019	MTBE	32	10	4.56095	143	ug/L
MKTF-20	5/14/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	5/14/2019	Naphthalene	**260**	20	2.750713	30	ug/L
MKTF-20	5/14/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
MKTF-20	5/14/2019	n-Propylbenzene	3.9	10	2.14308	660	ug/L
MKTF-20	5/14/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
MKTF-20	5/14/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	5/14/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	5/14/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	5/14/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-20	5/14/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/14/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	5/14/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	5/14/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	5/14/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	5/14/2019	Xylenes, Total	**3500**	150	45.441493	620	ug/L
MKTF-20	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	8/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	8/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	8/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	8/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
MKTF-20	8/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	8/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	8/21/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-20	8/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	8/21/2019	1,2,4-Trimethylbenzene	**1100**	100	21.319909	56	ug/L
MKTF-20	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-20	8/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	8/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	8/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	8/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	8/21/2019	1,3,5-Trimethylbenzene	**200**	10	1.886598	60	ug/L
MKTF-20	8/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	8/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	8/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	8/21/2019	1-Methylnaphthalene	55	40	3.149545	NA	ug/L
MKTF-20	8/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	8/21/2019	2-Butanone	92	100	20.894166	5565	ug/L
MKTF-20	8/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	8/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	8/21/2019	2-Methylnaphthalene	**62**	40	3.45376		ug/L
MKTF-20	8/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	8/21/2019	p-Isopropyltoluene	4.9	10	2.172894	NA	ug/L
MKTF-20	8/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	8/21/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-20	8/21/2019	Benzene	**4800**	100	16.663906	5	ug/L
MKTF-20	8/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	8/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	8/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	8/21/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	8/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	8/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	8/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	8/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	8/21/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	8/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	8/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	8/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	8/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	8/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	8/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	8/21/2019	Ethylbenzene	**1100**	100	13.23408	700	ug/L
MKTF-20	8/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	8/21/2019	Isopropylbenzene	9.3	10	1.915223	447	ug/L
MKTF-20	8/21/2019	MTBE	35	10	4.56095	143	ug/L
MKTF-20	8/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	8/21/2019	Naphthalene	**290**	20	2.750713	30	ug/L
MKTF-20	8/21/2019	n-Butylbenzene	13	30	2.275695	1000	ug/L
MKTF-20	8/21/2019	n-Propylbenzene	17	10	2.14308	660	ug/L
MKTF-20	8/21/2019	sec-Butylbenzene	4	10	2.477313	2000	ug/L
MKTF-20	8/21/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	8/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	8/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	8/21/2019	Toluene	9	10	3.504362	1000	ug/L
MKTF-20	8/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-20	8/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	8/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	8/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	8/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	8/21/2019	Xylenes, Total	**3700**	150	45.441493	620	ug/L
MKTF-20	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-20	11/5/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
MKTF-20	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-20	11/5/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-20	11/5/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
MKTF-20	11/5/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/5/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-20	11/5/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-20	11/5/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-20	11/5/2019	1,2,4-Trimethylbenzene	**190**	10	2.131991	56	ug/L
MKTF-20	11/5/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-20	11/5/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-20	11/5/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
MKTF-20	11/5/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-20	11/5/2019	1,3,5-Trimethylbenzene	31	10	1.886598	60	ug/L
MKTF-20	11/5/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
MKTF-20	11/5/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-20	11/5/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-20	11/5/2019	1-Methylnaphthalene	9.6	40	3.149545	NA	ug/L
MKTF-20	11/5/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-20	11/5/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-20	11/5/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-20	11/5/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-20	11/5/2019	2-Methylnaphthalene	**9.1**	40	3.45376		ug/L
MKTF-20	11/5/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-20	11/5/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-20	11/5/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-20	11/5/2019	Acetone	33	100	11.993964	14064	ug/L
MKTF-20	11/5/2019	Benzene	**2400**	100	16.663906	5	ug/L
MKTF-20	11/5/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-20	11/5/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-20	11/5/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-20	11/5/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-20	11/5/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-20	11/5/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-20	11/5/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-20	11/5/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-20	11/5/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-20	11/5/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-20	11/5/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
MKTF-20	11/5/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-20	11/5/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-20	11/5/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-20	11/5/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-20	11/5/2019	Ethylbenzene	260	10	1.323408	700	ug/L
MKTF-20	11/5/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-20	11/5/2019	Isopropylbenzene	8.5	10	1.915223	447	ug/L
MKTF-20	11/5/2019	MTBE	**170**	10	4.56095	143	ug/L
MKTF-20	11/5/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-20	11/5/2019	Naphthalene	**37**	20	2.750713	30	ug/L
MKTF-20	11/5/2019	n-Butylbenzene	2.8	30	2.275695	1000	ug/L
MKTF-20	11/5/2019	n-Propylbenzene	18	10	2.14308	660	ug/L
MKTF-20	11/5/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
MKTF-20	11/5/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-20	11/5/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-20	11/5/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-20	11/5/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-20	11/5/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-20	11/5/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-20	11/5/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
MKTF-20	11/5/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-20	11/5/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
MKTF-20	11/5/2019	Xylenes, Total	96	15	4.544149	620	ug/L
MKTF-20	2/5/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-20	2/5/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-20	2/5/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-20	2/5/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-20	2/5/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-20	2/5/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-20	2/5/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-20	2/5/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-20	2/5/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-20	2/5/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	2/5/2020	1,2,4-Trimethylbenzene	**170**	10	2.1	56	ug/L
MKTF-20	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-20	2/5/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-20	2/5/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-20	2/5/2020	1,2-Dichloroethane	ND	5	1.9	5	ug/L
MKTF-20	2/5/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-20	2/5/2020	1,3,5-Trimethylbenzene	49	10	1.9	60	ug/L
MKTF-20	2/5/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-20	2/5/2020	1,3-Dichloropropane	ND	10	2	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/5/2020	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MKTF-20	2/5/2020	1-Methylnaphthalene	7.2	40	3.1	NA	ug/L
MKTF-20	2/5/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-20	2/5/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-20	2/5/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-20	2/5/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-20	2/5/2020	2-Methylnaphthalene	**5.8**	40	3.5		ug/L
MKTF-20	2/5/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-20	2/5/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-20	2/5/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-20	2/5/2020	Acetone	19	100	12	14064	ug/L
MKTF-20	2/5/2020	Benzene	**620**	10	1.7	5	ug/L
MKTF-20	2/5/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-20	2/5/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-20	2/5/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-20	2/5/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-20	2/5/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-20	2/5/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-20	2/5/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-20	2/5/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-20	2/5/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-20	2/5/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-20	2/5/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-20	2/5/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-20	2/5/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-20	2/5/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-20	2/5/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-20	2/5/2020	Ethylbenzene	58	10	1.3	700	ug/L
MKTF-20	2/5/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-20	2/5/2020	Isopropylbenzene	ND	10	1.9	447	ug/L
MKTF-20	2/5/2020	MTBE	5.7	10	4.6	143	ug/L
MKTF-20	2/5/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-20	2/5/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-20	2/5/2020	n-Propylbenzene	2.2	10	2.1	660	ug/L
MKTF-20	2/5/2020	Naphthalene	6.6	20	2.8	30	ug/L
MKTF-20	2/5/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-20	2/5/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-20	2/5/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-20	2/5/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-20	2/5/2020	Toluene	3.9	10	3.5	1000	ug/L
MKTF-20	2/5/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-20	2/5/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-20	2/5/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-20	2/5/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-20	2/5/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-20	2/5/2020	Xylenes, Total	530	15	4.5	620	ug/L
MKTF-21	4/11/2014	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
MKTF-21	4/11/2014	Acetone	ND	500	250	14064	ug/L
MKTF-21	4/11/2014	Chloroform	ND	50	16	100	ug/L
MKTF-21	4/11/2014	Benzene	**7200**	500	77	5	ug/L
MKTF-21	4/11/2014	1,1,1-Trichloroethane	ND	50	6.1	200	ug/L
MKTF-21	4/11/2014	Bromomethane	*ND*	*150*	21	7.54	ug/L
MKTF-21	4/11/2014	Chloromethane	*ND*	*150*	26	20.32	ug/L
MKTF-21	4/11/2014	Dibromomethane	*ND*	*50*	9.4	8	ug/L
MKTF-21	4/11/2014	Chloroethane	ND	100	24	20857	ug/L
MKTF-21	4/11/2014	Vinyl Chloride	*ND*	*50*	23	2	ug/L
MKTF-21	4/11/2014	Methylene Chloride	*ND*	*150*	13	5	ug/L
MKTF-21	4/11/2014	Carbon Disulfide	ND	500	37	810	ug/L
MKTF-21	4/11/2014	Bromoform	*ND*	*50*	13	32.9	ug/L
MKTF-21	4/11/2014	Bromodichloromethane	*ND*	*50*	8.2	1.34	ug/L
MKTF-21	4/11/2014	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-21	4/11/2014	1,1-Dichloroethene	*ND*	*50*	11	7	ug/L
MKTF-21	4/11/2014	Trichlorofluoromethane	ND	50	6.4	1137	ug/L
MKTF-21	4/11/2014	Dichlorodifluoromethane	ND	50	12	197	ug/L
MKTF-21	4/11/2014	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
MKTF-21	4/11/2014	2-Butanone	ND	500	71	5565	ug/L
MKTF-21	4/11/2014	1,1,2-Trichloroethane	*ND*	*50*	6.9	5	ug/L
MKTF-21	4/11/2014	Trichloroethene	*ND*	*50*	9.7	5	ug/L
MKTF-21	4/11/2014	1,1,2,2-Tetrachloroethane	*ND*	*100*	11	10	ug/L
MKTF-21	4/11/2014	1,2,3-Trichlorobenzene	ND	50	9.2	70	ug/L
MKTF-21	4/11/2014	2-Chlorotoluene	ND	50	6.4	233	ug/L
MKTF-21	4/11/2014	1,2,4-Trimethylbenzene	**2200**	50	6.1	56	ug/L
MKTF-21	4/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*100*	11	0.0033	ug/L
MKTF-21	4/11/2014	1,2,3-Trichloropropane	*ND*	*100*	9.6	0.0084	ug/L
MKTF-21	4/11/2014	tert-Butylbenzene	ND	50	6.8	690	ug/L
MKTF-21	4/11/2014	Isopropylbenzene	100	50	8.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	4/11/2014	p-Isopropyltoluene	ND	50	8.8	NA	ug/L
MKTF-21	4/11/2014	Ethylbenzene	**2100**	50	6.4	700	ug/L
MKTF-21	4/11/2014	Styrene	ND	50	5.8	100	ug/L
MKTF-21	4/11/2014	n-Propylbenzene	380	50	7	660	ug/L
MKTF-21	4/11/2014	n-Butylbenzene	ND	150	11	1000	ug/L
MKTF-21	4/11/2014	4-Chlorotoluene	ND	50	43	250	ug/L
MKTF-21	4/11/2014	1,2-Dibromoethane	*ND*	*50*	5	0.05	ug/L
MKTF-21	4/11/2014	1,2-Dichloroethane	*ND*	*50*	13	5	ug/L
MKTF-21	4/11/2014	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-21	4/11/2014	1,3,5-Trimethylbenzene	**600**	50	6.6	60	ug/L
MKTF-21	4/11/2014	Bromobenzene	ND	50	9.1	62	ug/L
MKTF-21	4/11/2014	Toluene	**13000**	500	85	1000	ug/L
MKTF-21	4/11/2014	Chlorobenzene	ND	50	7	77.6	ug/L
MKTF-21	4/11/2014	Dibromochloromethane	*ND*	*50*	6	1.68	ug/L
MKTF-21	4/11/2014	Tetrachloroethene	*ND*	*50*	10	5	ug/L
MKTF-21	4/11/2014	sec-Butylbenzene	ND	50	7.7	2000	ug/L
MKTF-21	4/11/2014	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-21	4/11/2014	cis-1,2-Dichloroethene	ND	50	6.1	70	ug/L
MKTF-21	4/11/2014	trans-1,2-Dichloroethene	ND	50	13	100	ug/L
MKTF-21	4/11/2014	1,1-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	4/11/2014	2-Hexanone	*ND*	*500*	43	38	ug/L
MKTF-21	4/11/2014	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-21	4/11/2014	1,1,1,2-Tetrachloroethane	*ND*	*50*	6.1	5.74	ug/L
MKTF-21	4/11/2014	Xylenes, Total	**11000**	75	19	620	ug/L
MKTF-21	4/11/2014	MTBE	**580**	50	13	143	ug/L
MKTF-21	4/11/2014	cis-1,3-Dichloropropene	ND	50	8.4	NA	ug/L
MKTF-21	4/11/2014	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
MKTF-21	3/16/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-21	3/16/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-21	3/16/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-21	3/16/2015	Benzene	**3700**	50	3.3	5	ug/L
MKTF-21	3/16/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-21	3/16/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-21	3/16/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-21	3/16/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-21	3/16/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-21	3/16/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-21	3/16/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-21	3/16/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-21	3/16/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-21	3/16/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-21	3/16/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	3/16/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-21	3/16/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-21	3/16/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-21	3/16/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-21	3/16/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-21	3/16/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-21	3/16/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	3/16/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-21	3/16/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-21	3/16/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-21	3/16/2015	1,2,4-Trimethylbenzene	**110**	10	1.6	56	ug/L
MKTF-21	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-21	3/16/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-21	3/16/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-21	3/16/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
MKTF-21	3/16/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Ethylbenzene	13	10	1	700	ug/L
MKTF-21	3/16/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-21	3/16/2015	n-Propylbenzene	16	10	1.6	660	ug/L
MKTF-21	3/16/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-21	3/16/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-21	3/16/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	3/16/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-21	3/16/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-21	3/16/2015	1,3,5-Trimethylbenzene	51	10	1.2	60	ug/L
MKTF-21	3/16/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-21	3/16/2015	Toluene	260	10	1.1	1000	ug/L
MKTF-21	3/16/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-21	3/16/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-21	3/16/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	3/16/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-21	3/16/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	3/16/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-21	3/16/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-21	3/16/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-21	3/16/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	3/16/2015	Xylenes, Total	270	15	2.8	620	ug/L
MKTF-21	3/16/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-21	3/16/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	3/16/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	6/10/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-21	6/10/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-21	6/10/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-21	6/10/2015	Benzene	**6200**	100	6.5	5	ug/L
MKTF-21	6/10/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-21	6/10/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-21	6/10/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-21	6/10/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-21	6/10/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-21	6/10/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-21	6/10/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-21	6/10/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-21	6/10/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-21	6/10/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-21	6/10/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	6/10/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-21	6/10/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-21	6/10/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-21	6/10/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-21	6/10/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-21	6/10/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-21	6/10/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	6/10/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-21	6/10/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-21	6/10/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-21	6/10/2015	1,2,4-Trimethylbenzene	**110**	10	1.6	56	ug/L
MKTF-21	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-21	6/10/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-21	6/10/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-21	6/10/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
MKTF-21	6/10/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Ethylbenzene	180	10	1	700	ug/L
MKTF-21	6/10/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-21	6/10/2015	n-Propylbenzene	15	10	1.6	660	ug/L
MKTF-21	6/10/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-21	6/10/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-21	6/10/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	6/10/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-21	6/10/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-21	6/10/2015	1,3,5-Trimethylbenzene	47	10	1.2	60	ug/L
MKTF-21	6/10/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-21	6/10/2015	Toluene	480	10	1.1	1000	ug/L
MKTF-21	6/10/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-21	6/10/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-21	6/10/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-21	6/10/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-21	6/10/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	6/10/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-21	6/10/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-21	6/10/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	2-Hexanone	**110**	100	4.8	38	ug/L
MKTF-21	6/10/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-21	6/10/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	6/10/2015	Xylenes, Total	**810**	15	2.8	620	ug/L
MKTF-21	6/10/2015	MTBE	**820**	10	1.7	143	ug/L
MKTF-21	6/10/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	6/10/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	3/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	3/1/2016	Acetone	ND	100	8.8	14064	ug/L
MKTF-21	3/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-21	3/1/2016	Benzene	**4600**	100	9.6	5	ug/L
MKTF-21	3/1/2016	1,1,1-Trichloroethane	ND	10	0.63	200	ug/L
MKTF-21	3/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-21	3/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-21	3/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-21	3/1/2016	Chloroethane	ND	20	1.5	20857	ug/L
MKTF-21	3/1/2016	Vinyl Chloride	*ND*	*10*	0.63	2	ug/L
MKTF-21	3/1/2016	Methylene Chloride	*ND*	*30*	0.63	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-21	3/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-21	3/1/2016	Bromodichloromethane	*ND*	*10*	0.98	1.34	ug/L
MKTF-21	3/1/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-21	3/1/2016	1,1-Dichloroethene	*ND*	*10*	0.76	7	ug/L
MKTF-21	3/1/2016	Trichlorofluoromethane	ND	10	0.88	1137	ug/L
MKTF-21	3/1/2016	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-21	3/1/2016	1,2-Dichloropropane	*ND*	*10*	0.47	5	ug/L
MKTF-21	3/1/2016	2-Butanone	ND	100	3.2	5565	ug/L
MKTF-21	3/1/2016	1,1,2-Trichloroethane	*ND*	*10*	0.77	5	ug/L
MKTF-21	3/1/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-21	3/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.1	10	ug/L
MKTF-21	3/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-21	3/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	3/1/2016	1,2,4-Trimethylbenzene	**140**	10	1	56	ug/L
MKTF-21	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.5	0.0033	ug/L
MKTF-21	3/1/2016	1,2,3-Trichloropropane	*ND*	*20*	1.1	0.0084	ug/L
MKTF-21	3/1/2016	tert-Butylbenzene	ND	10	0.96	690	ug/L
MKTF-21	3/1/2016	Isopropylbenzene	ND	10	0.98	447	ug/L
MKTF-21	3/1/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-21	3/1/2016	Ethylbenzene	150	10	1.1	700	ug/L
MKTF-21	3/1/2016	Styrene	ND	10	0.95	100	ug/L
MKTF-21	3/1/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
MKTF-21	3/1/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
MKTF-21	3/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-21	3/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-21	3/1/2016	1,2-Dichloroethane	*ND*	*10*	0.53	5	ug/L
MKTF-21	3/1/2016	4-Methyl-2-Pentanone	ND	100	1.5	1243	ug/L
MKTF-21	3/1/2016	1,3,5-Trimethylbenzene	**67**	10	1.2	60	ug/L
MKTF-21	3/1/2016	Bromobenzene	ND	10	0.8	62	ug/L
MKTF-21	3/1/2016	Toluene	340	10	0.89	1000	ug/L
MKTF-21	3/1/2016	Chlorobenzene	ND	10	1	77.6	ug/L
MKTF-21	3/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-21	3/1/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-21	3/1/2016	sec-Butylbenzene	ND	10	1.1	2000	ug/L
MKTF-21	3/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-21	3/1/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-21	3/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-21	3/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	3/1/2016	2-Hexanone	*ND*	*100*	3.6	38	ug/L
MKTF-21	3/1/2016	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-21	3/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	3/1/2016	Xylenes, Total	**1300**	15	3.2	620	ug/L
MKTF-21	3/1/2016	MTBE	**480**	10	2.1	143	ug/L
MKTF-21	3/1/2016	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-21	3/1/2016	trans-1,3-Dichloropropene	ND	10	0.85	NA	ug/L
MKTF-21	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	6/9/2016	Acetone	170	100	49	14064	ug/L
MKTF-21	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-21	6/9/2016	Benzene	**7500**	100	9.6	5	ug/L
MKTF-21	6/9/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-21	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-21	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-21	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-21	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-21	6/9/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-21	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-21	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-21	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-21	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-21	6/9/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-21	6/9/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-21	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-21	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-21	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-21	6/9/2016	2-Butanone	110	100	7.4	5565	ug/L
MKTF-21	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-21	6/9/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-21	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-21	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-21	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
MKTF-21	6/9/2016	1-Methylnaphthalene	10	40	2	NA	ug/L
MKTF-21	6/9/2016	Naphthalene	19	20	0.93	30	ug/L
MKTF-21	6/9/2016	2-Methylnaphthalene	**12**	40	1.6		ug/L
MKTF-21	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	6/9/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	6/9/2016	1,2,4-Trimethylbenzene	**140**	10	1.1	56	ug/L
MKTF-21	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-21	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-21	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-21	6/9/2016	Isopropylbenzene	7.4	10	1	447	ug/L
MKTF-21	6/9/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-21	6/9/2016	Ethylbenzene	250	10	1.1	700	ug/L
MKTF-21	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-21	6/9/2016	n-Propylbenzene	13	10	1.3	660	ug/L
MKTF-21	6/9/2016	n-Butylbenzene	6.6	30	1.6	1000	ug/L
MKTF-21	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-21	6/9/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
MKTF-21	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-21	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-21	6/9/2016	4-Methyl-2-Pentanone	43	100	4.3	1243	ug/L
MKTF-21	6/9/2016	1,3,5-Trimethylbenzene	**66**	10	1.2	60	ug/L
MKTF-21	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-21	6/9/2016	Toluene	170	10	1.2	1000	ug/L
MKTF-21	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-21	6/9/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-21	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-21	6/9/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-21	6/9/2016	sec-Butylbenzene	1.6	10	1.2	2000	ug/L
MKTF-21	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-21	6/9/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-21	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-21	6/9/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
MKTF-21	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-21	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-21	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-21	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-21	6/9/2016	Xylenes, Total	**1300**	15	3.7	620	ug/L
MKTF-21	6/9/2016	MTBE	**550**	10	2.1	143	ug/L
MKTF-21	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-21	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-21	9/12/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-21	9/12/2016	Acetone	ND	500	250	14064	ug/L
MKTF-21	9/12/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-21	9/12/2016	Benzene	**9300**	500	48	5	ug/L
MKTF-21	9/12/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-21	9/12/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	9/12/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	9/12/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	9/12/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-21	9/12/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-21	9/12/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-21	9/12/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	9/12/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-21	9/12/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-21	9/12/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-21	9/12/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-21	9/12/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-21	9/12/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-21	9/12/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-21	9/12/2016	2-Butanone	ND	500	37	5565	ug/L
MKTF-21	9/12/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-21	9/12/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	9/12/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-21	9/12/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	9/12/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	9/12/2016	1,2,4-Trimethylbenzene	**240**	50	5.5	56	ug/L
MKTF-21	9/12/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-21	9/12/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-21	9/12/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-21	9/12/2016	Isopropylbenzene	8.2	50	5.2	447	ug/L
MKTF-21	9/12/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	9/12/2016	Ethylbenzene	480	50	5.6	700	ug/L
MKTF-21	9/12/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-21	9/12/2016	n-Propylbenzene	21	50	6.6	660	ug/L
MKTF-21	9/12/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	9/12/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-21	9/12/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-21	9/12/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	9/12/2016	4-Methyl-2-Pentanone	48	500	21	1243	ug/L
MKTF-21	9/12/2016	1,3,5-Trimethylbenzene	**110**	50	5.8	60	ug/L
MKTF-21	9/12/2016	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/12/2016	Toluene	59	50	5.9	1000	ug/L
MKTF-21	9/12/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-21	9/12/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-21	9/12/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	9/12/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-21	9/12/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	9/12/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-21	9/12/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-21	9/12/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	9/12/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-21	9/12/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-21	9/12/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	9/12/2016	Xylenes, Total	**2000**	75	18	620	ug/L
MKTF-21	9/12/2016	MTBE	**680**	50	11	143	ug/L
MKTF-21	9/12/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-21	9/12/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-21	11/3/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
MKTF-21	11/3/2016	Acetone	ND	500	250	14064	ug/L
MKTF-21	11/3/2016	Chloroform	ND	50	4.4	100	ug/L
MKTF-21	11/3/2016	Benzene	**7600**	500	48	5	ug/L
MKTF-21	11/3/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
MKTF-21	11/3/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	11/3/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	11/3/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	11/3/2016	Chloroethane	ND	100	9.6	20857	ug/L
MKTF-21	11/3/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-21	11/3/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
MKTF-21	11/3/2016	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	11/3/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
MKTF-21	11/3/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
MKTF-21	11/3/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
MKTF-21	11/3/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
MKTF-21	11/3/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
MKTF-21	11/3/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
MKTF-21	11/3/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
MKTF-21	11/3/2016	2-Butanone	ND	500	37	5565	ug/L
MKTF-21	11/3/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
MKTF-21	11/3/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
MKTF-21	11/3/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	11/3/2016	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	11/3/2016	1,2,4-Trimethylbenzene	**230**	50	5.5	56	ug/L
MKTF-21	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
MKTF-21	11/3/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
MKTF-21	11/3/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
MKTF-21	11/3/2016	Isopropylbenzene	8.5	50	5.2	447	ug/L
MKTF-21	11/3/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	11/3/2016	Ethylbenzene	400	50	5.6	700	ug/L
MKTF-21	11/3/2016	Styrene	ND	50	5.5	100	ug/L
MKTF-21	11/3/2016	n-Propylbenzene	19	50	6.6	660	ug/L
MKTF-21	11/3/2016	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	11/3/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
MKTF-21	11/3/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
MKTF-21	11/3/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	11/3/2016	4-Methyl-2-Pentanone	32	500	21	1243	ug/L
MKTF-21	11/3/2016	1,3,5-Trimethylbenzene	**96**	50	5.8	60	ug/L
MKTF-21	11/3/2016	Bromobenzene	ND	50	4.9	62	ug/L
MKTF-21	11/3/2016	Toluene	68	50	5.9	1000	ug/L
MKTF-21	11/3/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
MKTF-21	11/3/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
MKTF-21	11/3/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	11/3/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
MKTF-21	11/3/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	11/3/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
MKTF-21	11/3/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
MKTF-21	11/3/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	11/3/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
MKTF-21	11/3/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
MKTF-21	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	11/3/2016	Xylenes, Total	**2300**	75	18	620	ug/L
MKTF-21	11/3/2016	MTBE	**770**	50	11	143	ug/L
MKTF-21	11/3/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
MKTF-21	11/3/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
MKTF-21	3/14/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	3/14/2017	Acetone	ND	500	44	14064	ug/L
MKTF-21	3/14/2017	Chloroform	ND	50	4.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Benzene	**8000**	500	48	5	ug/L
MKTF-21	3/14/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	3/14/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-21	3/14/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-21	3/14/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-21	3/14/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	3/14/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	3/14/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	3/14/2017	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-21	3/14/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	3/14/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	3/14/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
MKTF-21	3/14/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	3/14/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	3/14/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-21	3/14/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	3/14/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	3/14/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	3/14/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-21	3/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	3/14/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-21	3/14/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	3/14/2017	1,2,4-Trimethylbenzene	**260**	50	5.2	56	ug/L
MKTF-21	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	3/14/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	3/14/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	3/14/2017	Isopropylbenzene	13	50	4.9	447	ug/L
MKTF-21	3/14/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-21	3/14/2017	Ethylbenzene	460	50	5.6	700	ug/L
MKTF-21	3/14/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	3/14/2017	n-Propylbenzene	20	50	6.6	660	ug/L
MKTF-21	3/14/2017	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-21	3/14/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	3/14/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	3/14/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-21	3/14/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	3/14/2017	1,3,5-Trimethylbenzene	**96**	50	5.8	60	ug/L
MKTF-21	3/14/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	3/14/2017	Toluene	38	50	4.5	1000	ug/L
MKTF-21	3/14/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	3/14/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
MKTF-21	3/14/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-21	3/14/2017	sec-Butylbenzene	ND	50	5.1	2000	ug/L
MKTF-21	3/14/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-21	3/14/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	3/14/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	3/14/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
MKTF-21	3/14/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	3/14/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-21	3/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-21	3/14/2017	Xylenes, Total	**2000**	75	16	620	ug/L
MKTF-21	3/14/2017	MTBE	**610**	50	7.4	143	ug/L
MKTF-21	3/14/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-21	3/14/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
MKTF-21	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	6/21/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	6/21/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	6/21/2017	Benzene	**10000**	500	31	5	ug/L
MKTF-21	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	6/21/2017	1,2,4-Trimethylbenzene	**340**	50	5.6	56	ug/L
MKTF-21	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	6/21/2017	Isopropylbenzene	19	50	2.6	447	ug/L
MKTF-21	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	6/21/2017	Ethylbenzene	690	50	4.7	700	ug/L
MKTF-21	6/21/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	6/21/2017	n-Propylbenzene	31	50	3.7	660	ug/L
MKTF-21	6/21/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	6/21/2017	1,3,5-Trimethylbenzene	**120**	50	4.4	60	ug/L
MKTF-21	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	6/21/2017	Toluene	41	50	3.2	1000	ug/L
MKTF-21	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	6/21/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	6/21/2017	Pentafluorobenzene	**500**	0	0		None
MKTF-21	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	6/21/2017	Xylenes, Total	**2600**	75	16	620	ug/L
MKTF-21	6/21/2017	MTBE	**1200**	50	12	143	ug/L
MKTF-21	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	9/26/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	9/26/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	9/26/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	9/26/2017	Benzene	**6300**	500	31	5	ug/L
MKTF-21	9/26/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	9/26/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	9/26/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	9/26/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	9/26/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	9/26/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	9/26/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	9/26/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	9/26/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	9/26/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	9/26/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	9/26/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	9/26/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	9/26/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	9/26/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	9/26/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	9/26/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	9/26/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-21	9/26/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	9/26/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	9/26/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	9/26/2017	1,2,4-Trimethylbenzene	**290**	50	5.6	56	ug/L
MKTF-21	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	9/26/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	9/26/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	9/26/2017	Isopropylbenzene	18	50	2.6	447	ug/L
MKTF-21	9/26/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	9/26/2017	Ethylbenzene	610	50	4.7	700	ug/L
MKTF-21	9/26/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	9/26/2017	n-Propylbenzene	33	50	3.7	660	ug/L
MKTF-21	9/26/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	9/26/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	9/26/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	9/26/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	9/26/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	9/26/2017	1,3,5-Trimethylbenzene	**89**	50	4.4	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	9/26/2017	Toluene	16	50	3.2	1000	ug/L
MKTF-21	9/26/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	9/26/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	9/26/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	9/26/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	9/26/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	9/26/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	9/26/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	9/26/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	9/26/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	9/26/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	9/26/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	9/26/2017	Xylenes, Total	**830**	75	16	620	ug/L
MKTF-21	9/26/2017	MTBE	**630**	50	12	143	ug/L
MKTF-21	9/26/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	9/26/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	11/28/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-21	11/28/2017	Acetone	ND	500	41	14064	ug/L
MKTF-21	11/28/2017	Chloroform	ND	50	20	100	ug/L
MKTF-21	11/28/2017	Benzene	**4900**	50	3.1	5	ug/L
MKTF-21	11/28/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-21	11/28/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-21	11/28/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-21	11/28/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-21	11/28/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-21	11/28/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-21	11/28/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-21	11/28/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-21	11/28/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-21	11/28/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-21	11/28/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-21	11/28/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-21	11/28/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-21	11/28/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-21	11/28/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-21	11/28/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-21	11/28/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-21	11/28/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-21	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-21	11/28/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-21	11/28/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-21	11/28/2017	1,2,4-Trimethylbenzene	**290**	50	5.6	56	ug/L
MKTF-21	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-21	11/28/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-21	11/28/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-21	11/28/2017	Isopropylbenzene	18	50	2.6	447	ug/L
MKTF-21	11/28/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-21	11/28/2017	Ethylbenzene	520	50	4.7	700	ug/L
MKTF-21	11/28/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-21	11/28/2017	n-Propylbenzene	29	50	3.7	660	ug/L
MKTF-21	11/28/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
MKTF-21	11/28/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-21	11/28/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-21	11/28/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-21	11/28/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-21	11/28/2017	1,3,5-Trimethylbenzene	**97**	50	4.4	60	ug/L
MKTF-21	11/28/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-21	11/28/2017	Toluene	18	50	3.2	1000	ug/L
MKTF-21	11/28/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-21	11/28/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-21	11/28/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-21	11/28/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-21	11/28/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-21	11/28/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-21	11/28/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-21	11/28/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-21	11/28/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-21	11/28/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-21	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-21	11/28/2017	Xylenes, Total	**1400**	75	16	620	ug/L
MKTF-21	11/28/2017	MTBE	**520**	50	12	143	ug/L
MKTF-21	11/28/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-21	11/28/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-21	2/15/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-21	2/15/2018	Acetone	52	200	16	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/15/2018	Chloroform	ND	20	8	100	ug/L
MKTF-21	2/15/2018	Benzene	**3400**	200	12	5	ug/L
MKTF-21	2/15/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-21	2/15/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-21	2/15/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-21	2/15/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-21	2/15/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-21	2/15/2018	Vinyl Chloride	*ND*	*20*	3.6	2	ug/L
MKTF-21	2/15/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-21	2/15/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-21	2/15/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-21	2/15/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-21	2/15/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-21	2/15/2018	1,1-Dichloroethene	*ND*	*20*	1.6	7	ug/L
MKTF-21	2/15/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-21	2/15/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-21	2/15/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-21	2/15/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-21	2/15/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-21	2/15/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-21	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-21	2/15/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-21	2/15/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-21	2/15/2018	1,2,4-Trimethylbenzene	**220**	20	2.3	56	ug/L
MKTF-21	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-21	2/15/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-21	2/15/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-21	2/15/2018	Isopropylbenzene	7.4	20	1	447	ug/L
MKTF-21	2/15/2018	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-21	2/15/2018	Ethylbenzene	310	20	1.9	700	ug/L
MKTF-21	2/15/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-21	2/15/2018	n-Propylbenzene	15	20	1.5	660	ug/L
MKTF-21	2/15/2018	n-Butylbenzene	4.9	60	2.6	1000	ug/L
MKTF-21	2/15/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-21	2/15/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-21	2/15/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-21	2/15/2018	4-Methyl-2-Pentanone	23	200	14	1243	ug/L
MKTF-21	2/15/2018	1,3,5-Trimethylbenzene	46	20	1.7	60	ug/L
MKTF-21	2/15/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-21	2/15/2018	Toluene	3.5	20	1.3	1000	ug/L
MKTF-21	2/15/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-21	2/15/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-21	2/15/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-21	2/15/2018	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-21	2/15/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-21	2/15/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-21	2/15/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-21	2/15/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-21	2/15/2018	2-Hexanone	*17*	*200*	13	38	ug/L
MKTF-21	2/15/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-21	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-21	2/15/2018	Xylenes, Total	390	30	6.4	620	ug/L
MKTF-21	2/15/2018	MTBE	**390**	20	4.8	143	ug/L
MKTF-21	2/15/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-21	2/15/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-21	5/11/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-21	5/11/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-21	5/11/2018	Chloroform	ND	10	4	100	ug/L
MKTF-21	5/11/2018	Benzene	**4800**	100	6.2	5	ug/L
MKTF-21	5/11/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-21	5/11/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-21	5/11/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-21	5/11/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-21	5/11/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-21	5/11/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-21	5/11/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-21	5/11/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-21	5/11/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-21	5/11/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-21	5/11/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-21	5/11/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
MKTF-21	5/11/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-21	5/11/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-21	5/11/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-21	5/11/2018	2-Butanone	48	100	11	5565	ug/L
MKTF-21	5/11/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/11/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-21	5/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-21	5/11/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-21	5/11/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-21	5/11/2018	1,2,4-Trimethylbenzene	**310**	10	1.1	56	ug/L
MKTF-21	5/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-21	5/11/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-21	5/11/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-21	5/11/2018	Isopropylbenzene	11	10	0.51	447	ug/L
MKTF-21	5/11/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
MKTF-21	5/11/2018	Ethylbenzene	470	10	0.93	700	ug/L
MKTF-21	5/11/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-21	5/11/2018	n-Propylbenzene	21	10	0.74	660	ug/L
MKTF-21	5/11/2018	n-Butylbenzene	2.2	30	1.3	1000	ug/L
MKTF-21	5/11/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-21	5/11/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-21	5/11/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-21	5/11/2018	4-Methyl-2-Pentanone	14	100	7.1	1243	ug/L
MKTF-21	5/11/2018	1,3,5-Trimethylbenzene	**62**	10	0.87	60	ug/L
MKTF-21	5/11/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-21	5/11/2018	Toluene	7.4	10	0.64	1000	ug/L
MKTF-21	5/11/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-21	5/11/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-21	5/11/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-21	5/11/2018	sec-Butylbenzene	1.3	10	1.1	2000	ug/L
MKTF-21	5/11/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-21	5/11/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-21	5/11/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-21	5/11/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-21	5/11/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-21	5/11/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-21	5/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-21	5/11/2018	Xylenes, Total	**670**	15	3.2	620	ug/L
MKTF-21	5/11/2018	MTBE	**520**	10	2.4	143	ug/L
MKTF-21	5/11/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-21	5/11/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-21	8/31/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-21	8/31/2018	Acetone	72	200	16	14064	ug/L
MKTF-21	8/31/2018	Chloroform	ND	20	8	100	ug/L
MKTF-21	8/31/2018	Benzene	**5900**	200	35	5	ug/L
MKTF-21	8/31/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-21	8/31/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-21	8/31/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-21	8/31/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-21	8/31/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-21	8/31/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-21	8/31/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-21	8/31/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-21	8/31/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-21	8/31/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-21	8/31/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-21	8/31/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-21	8/31/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-21	8/31/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-21	8/31/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-21	8/31/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-21	8/31/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-21	8/31/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-21	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-21	8/31/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-21	8/31/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-21	8/31/2018	1,2,4-Trimethylbenzene	**370**	20	5.1	56	ug/L
MKTF-21	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-21	8/31/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-21	8/31/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-21	8/31/2018	Isopropylbenzene	20	20	4.4	447	ug/L
MKTF-21	8/31/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-21	8/31/2018	Ethylbenzene	**800**	20	4.5	700	ug/L
MKTF-21	8/31/2018	Styrene	ND	20	5	100	ug/L
MKTF-21	8/31/2018	n-Propylbenzene	42	20	4.9	660	ug/L
MKTF-21	8/31/2018	n-Butylbenzene	5.3	60	5	1000	ug/L
MKTF-21	8/31/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-21	8/31/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-21	8/31/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-21	8/31/2018	4-Methyl-2-Pentanone	18	200	9.1	1243	ug/L
MKTF-21	8/31/2018	1,3,5-Trimethylbenzene	**100**	20	4.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/31/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-21	8/31/2018	Toluene	13	20	3.4	1000	ug/L
MKTF-21	8/31/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-21	8/31/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-21	8/31/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-21	8/31/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-21	8/31/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-21	8/31/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-21	8/31/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-21	8/31/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-21	8/31/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-21	8/31/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-21	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-21	8/31/2018	Xylenes, Total	**990**	30	13	620	ug/L
MKTF-21	8/31/2018	MTBE	**500**	20	6.4	143	ug/L
MKTF-21	8/31/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-21	8/31/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-21	11/29/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-21	11/29/2018	Acetone	ND	200	15	14064	ug/L
MKTF-21	11/29/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-21	11/29/2018	Benzene	**2000**	200	35	5	ug/L
MKTF-21	11/29/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-21	11/29/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-21	11/29/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-21	11/29/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-21	11/29/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-21	11/29/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-21	11/29/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-21	11/29/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-21	11/29/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-21	11/29/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-21	11/29/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-21	11/29/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-21	11/29/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-21	11/29/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-21	11/29/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-21	11/29/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-21	11/29/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-21	11/29/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-21	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-21	11/29/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-21	11/29/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-21	11/29/2018	1,2,4-Trimethylbenzene	**99**	20	5.1	56	ug/L
MKTF-21	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-21	11/29/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-21	11/29/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-21	11/29/2018	Isopropylbenzene	4.8	20	4.4	447	ug/L
MKTF-21	11/29/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-21	11/29/2018	Ethylbenzene	110	20	4.5	700	ug/L
MKTF-21	11/29/2018	Styrene	ND	20	5	100	ug/L
MKTF-21	11/29/2018	n-Propylbenzene	8.3	20	4.9	660	ug/L
MKTF-21	11/29/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-21	11/29/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-21	11/29/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-21	11/29/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-21	11/29/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-21	11/29/2018	1,3,5-Trimethylbenzene	30	20	4.6	60	ug/L
MKTF-21	11/29/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-21	11/29/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-21	11/29/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-21	11/29/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-21	11/29/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-21	11/29/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-21	11/29/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-21	11/29/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-21	11/29/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-21	11/29/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-21	11/29/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-21	11/29/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-21	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-21	11/29/2018	Xylenes, Total	140	30	13	620	ug/L
MKTF-21	11/29/2018	MTBE	**220**	20	9.1	143	ug/L
MKTF-21	11/29/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-21	11/29/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-21	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
MKTF-21	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
MKTF-21	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
MKTF-21	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
MKTF-21	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
MKTF-21	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
MKTF-21	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
MKTF-21	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
MKTF-21	2/20/2019	1,2,4-Trimethylbenzene	**1500**	20	5.066287	56	ug/L
MKTF-21	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
MKTF-21	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
MKTF-21	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
MKTF-21	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
MKTF-21	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
MKTF-21	2/20/2019	1,3,5-Trimethylbenzene	**590**	20	4.628281	60	ug/L
MKTF-21	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
MKTF-21	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
MKTF-21	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
MKTF-21	2/20/2019	1-Methylnaphthalene	74	80	6.716339	NA	ug/L
MKTF-21	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
MKTF-21	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
MKTF-21	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
MKTF-21	2/20/2019	2-Methylnaphthalene	**80**	80	6.90752		ug/L
MKTF-21	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
MKTF-21	2/20/2019	p-Isopropyltoluene	6	20	4.806771	NA	ug/L
MKTF-21	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
MKTF-21	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
MKTF-21	2/20/2019	Benzene	**2000**	200	34.979144	5	ug/L
MKTF-21	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
MKTF-21	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
MKTF-21	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
MKTF-21	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
MKTF-21	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
MKTF-21	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
MKTF-21	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
MKTF-21	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
MKTF-21	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
MKTF-21	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
MKTF-21	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
MKTF-21	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
MKTF-21	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	2/20/2019	Ethylbenzene	**1200**	20	4.468045	700	ug/L
MKTF-21	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
MKTF-21	2/20/2019	Isopropylbenzene	11	20	4.422084	447	ug/L
MKTF-21	2/20/2019	MTBE	15	20	9.1219	143	ug/L
MKTF-21	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
MKTF-21	2/20/2019	Naphthalene	**320**	40	5.792521	30	ug/L
MKTF-21	2/20/2019	n-Butylbenzene	16	60	4.966609	1000	ug/L
MKTF-21	2/20/2019	n-Propylbenzene	27	20	4.851725	660	ug/L
MKTF-21	2/20/2019	sec-Butylbenzene	6.5	20	4.045094	2000	ug/L
MKTF-21	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
MKTF-21	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
MKTF-21	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
MKTF-21	2/20/2019	Toluene	16	20	3.362788	1000	ug/L
MKTF-21	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
MKTF-21	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
MKTF-21	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
MKTF-21	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
MKTF-21	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
MKTF-21	2/20/2019	Xylenes, Total	**7100**	300	128.257545	620	ug/L
MKTF-21	5/14/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	5/14/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	5/14/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	5/14/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	5/14/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	5/14/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	5/14/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	5/14/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	5/14/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-21	5/14/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	5/14/2019	1,2,4-Trimethylbenzene	**150**	20	4.263982	56	ug/L
MKTF-21	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-21	5/14/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	5/14/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	5/14/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	5/14/2019	1,3,5-Trimethylbenzene	36	20	3.773197	60	ug/L
MKTF-21	5/14/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	5/14/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	5/14/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	5/14/2019	1-Methylnaphthalene	6.9	80	6.29909	NA	ug/L
MKTF-21	5/14/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	5/14/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	5/14/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-21	5/14/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	5/14/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-21	5/14/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	5/14/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-21	5/14/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-21	5/14/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	5/14/2019	Benzene	**2400**	200	33.327811	5	ug/L
MKTF-21	5/14/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	5/14/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	5/14/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	5/14/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	5/14/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	5/14/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-21	5/14/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	5/14/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	5/14/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	5/14/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	5/14/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	5/14/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	5/14/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	5/14/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	5/14/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	5/14/2019	Ethylbenzene	280	20	2.646816	700	ug/L
MKTF-21	5/14/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	5/14/2019	Isopropylbenzene	5.9	20	3.830445	447	ug/L
MKTF-21	5/14/2019	MTBE	**290**	20	9.1219	143	ug/L
MKTF-21	5/14/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	5/14/2019	Naphthalene	**33**	40	5.501427	30	ug/L
MKTF-21	5/14/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-21	5/14/2019	n-Propylbenzene	12	20	4.28616	660	ug/L
MKTF-21	5/14/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	5/14/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	5/14/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	5/14/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	5/14/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-21	5/14/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	5/14/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	5/14/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	5/14/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	5/14/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	5/14/2019	Xylenes, Total	220	30	9.088299	620	ug/L
MKTF-21	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	8/22/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	8/22/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	8/22/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	8/22/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	8/22/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	8/22/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	8/22/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-21	8/22/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	8/22/2019	1,2,4-Trimethylbenzene	**360**	20	4.263982	56	ug/L
MKTF-21	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-21	8/22/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-21	8/22/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	8/22/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	8/22/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	8/22/2019	1,3,5-Trimethylbenzene	**95**	20	3.773197	60	ug/L
MKTF-21	8/22/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	8/22/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	8/22/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	8/22/2019	1-Methylnaphthalene	18	80	6.29909	NA	ug/L
MKTF-21	8/22/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	8/22/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	8/22/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/22/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	8/22/2019	2-Methylnaphthalene	**20**	80	6.90752		ug/L
MKTF-21	8/22/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	8/22/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-21	8/22/2019	4-Methyl-2-Pentanone	19	200	14.27791	1243	ug/L
MKTF-21	8/22/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	8/22/2019	Benzene	**5400**	200	33.327811	5	ug/L
MKTF-21	8/22/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	8/22/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	8/22/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	8/22/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	8/22/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	8/22/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-21	8/22/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	8/22/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	8/22/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	8/22/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	8/22/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	8/22/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	8/22/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	8/22/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	8/22/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	8/22/2019	Ethylbenzene	680	20	2.646816	700	ug/L
MKTF-21	8/22/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	8/22/2019	Isopropylbenzene	18	20	3.830445	447	ug/L
MKTF-21	8/22/2019	MTBE	**290**	20	9.1219	143	ug/L
MKTF-21	8/22/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	8/22/2019	Naphthalene	**88**	40	5.501427	30	ug/L
MKTF-21	8/22/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
MKTF-21	8/22/2019	n-Propylbenzene	35	20	4.28616	660	ug/L
MKTF-21	8/22/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	8/22/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	8/22/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	8/22/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	8/22/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-21	8/22/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	8/22/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	8/22/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	8/22/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	8/22/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	8/22/2019	Xylenes, Total	500	30	9.088299	620	ug/L
MKTF-21	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-21	11/5/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-21	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-21	11/5/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-21	11/5/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
MKTF-21	11/5/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
MKTF-21	11/5/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-21	11/5/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-21	11/5/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-21	11/5/2019	1,2,4-Trimethylbenzene	**1100**	20	4.263982	56	ug/L
MKTF-21	11/5/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-21	11/5/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-21	11/5/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-21	11/5/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-21	11/5/2019	1,3,5-Trimethylbenzene	26	20	3.773197	60	ug/L
MKTF-21	11/5/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-21	11/5/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-21	11/5/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-21	11/5/2019	1-Methylnaphthalene	49	80	6.29909	NA	ug/L
MKTF-21	11/5/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-21	11/5/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-21	11/5/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-21	11/5/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-21	11/5/2019	2-Methylnaphthalene	**51**	80	6.90752		ug/L
MKTF-21	11/5/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-21	11/5/2019	p-Isopropyltoluene	4.4	20	4.345787	NA	ug/L
MKTF-21	11/5/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-21	11/5/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-21	11/5/2019	Benzene	**5600**	200	33.327811	5	ug/L
MKTF-21	11/5/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-21	11/5/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-21	11/5/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-21	11/5/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-21	11/5/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-21	11/5/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/5/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-21	11/5/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-21	11/5/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-21	11/5/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-21	11/5/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-21	11/5/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-21	11/5/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-21	11/5/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-21	11/5/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-21	11/5/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
MKTF-21	11/5/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-21	11/5/2019	Isopropylbenzene	12	20	3.830445	447	ug/L
MKTF-21	11/5/2019	MTBE	29	20	9.1219	143	ug/L
MKTF-21	11/5/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-21	11/5/2019	Naphthalene	**270**	40	5.501427	30	ug/L
MKTF-21	11/5/2019	n-Butylbenzene	6.5	60	4.551391	1000	ug/L
MKTF-21	11/5/2019	n-Propylbenzene	32	20	4.28616	660	ug/L
MKTF-21	11/5/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-21	11/5/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-21	11/5/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-21	11/5/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-21	11/5/2019	Toluene	8.2	20	7.008724	1000	ug/L
MKTF-21	11/5/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-21	11/5/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-21	11/5/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-21	11/5/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-21	11/5/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-21	11/5/2019	Xylenes, Total	**2800**	30	9.088299	620	ug/L
MKTF-21	2/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1	5.74	ug/L
MKTF-21	2/5/2020	1,1,1-Trichloroethane	ND	5	0.86	200	ug/L
MKTF-21	2/5/2020	1,1,2,2-Tetrachloroethane	ND	10	2.7	10	ug/L
MKTF-21	2/5/2020	1,1,2-Trichloroethane	ND	5	1.1	5	ug/L
MKTF-21	2/5/2020	1,1-Dichloroethane	ND	5	0.7	25	ug/L
MKTF-21	2/5/2020	1,1-Dichloroethene	ND	5	1	7	ug/L
MKTF-21	2/5/2020	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
MKTF-21	2/5/2020	1,2,3-Trichlorobenzene	ND	5	1.5	70	ug/L
MKTF-21	2/5/2020	1,2,3-Trichloropropane	*ND*	*10*	1.5	0.0084	ug/L
MKTF-21	2/5/2020	1,2,4-Trichlorobenzene	ND	5	0.98	70	ug/L
MKTF-21	2/5/2020	1,2,4-Trimethylbenzene	6.8	5	1.1	56	ug/L
MKTF-21	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.6	0.0033	ug/L
MKTF-21	2/5/2020	1,2-Dibromoethane	*ND*	*5*	0.83	0.05	ug/L
MKTF-21	2/5/2020	1,2-Dichlorobenzene	ND	5	1.5	600	ug/L
MKTF-21	2/5/2020	1,2-Dichloroethane	ND	5	0.97	5	ug/L
MKTF-21	2/5/2020	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-21	2/5/2020	1,3,5-Trimethylbenzene	ND	5	0.94	60	ug/L
MKTF-21	2/5/2020	1,3-Dichlorobenzene	ND	5	1.2	N/A	ug/L
MKTF-21	2/5/2020	1,3-Dichloropropane	ND	5	1	370	ug/L
MKTF-21	2/5/2020	1,4-Dichlorobenzene	ND	5	1.5	75	ug/L
MKTF-21	2/5/2020	1-Methylnaphthalene	ND	20	1.6	NA	ug/L
MKTF-21	2/5/2020	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
MKTF-21	2/5/2020	2-Butanone	ND	50	10	5565	ug/L
MKTF-21	2/5/2020	2-Chlorotoluene	ND	5	1.2	233	ug/L
MKTF-21	2/5/2020	2-Hexanone	*ND*	*50*	7.7	38	ug/L
MKTF-21	2/5/2020	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
MKTF-21	2/5/2020	4-Chlorotoluene	ND	5	1.2	250	ug/L
MKTF-21	2/5/2020	p-Isopropyltoluene	ND	5	1.1	NA	ug/L
MKTF-21	2/5/2020	4-Methyl-2-Pentanone	5.2	50	3.6	1243	ug/L
MKTF-21	2/5/2020	Acetone	22	50	6	14064	ug/L
MKTF-21	2/5/2020	Benzene	**58**	5	0.83	5	ug/L
MKTF-21	2/5/2020	Bromobenzene	ND	5	1.2	62	ug/L
MKTF-21	2/5/2020	Bromodichloromethane	*ND*	*5*	0.67	1.34	ug/L
MKTF-21	2/5/2020	Bromoform	ND	5	1.4	32.9	ug/L
MKTF-21	2/5/2020	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
MKTF-21	2/5/2020	Carbon Disulfide	ND	50	2.3	810	ug/L
MKTF-21	2/5/2020	Carbon tetrachloride	ND	5	0.7	5	ug/L
MKTF-21	2/5/2020	Chlorobenzene	ND	5	0.97	77.6	ug/L
MKTF-21	2/5/2020	Chloroethane	ND	10	0.89	20857	ug/L
MKTF-21	2/5/2020	Chloroform	9.7	5	0.61	100	ug/L
MKTF-21	2/5/2020	Chloromethane	ND	15	1.6	20.32	ug/L
MKTF-21	2/5/2020	cis-1,2-Dichloroethene	ND	5	0.95	70	ug/L
MKTF-21	2/5/2020	cis-1,3-Dichloropropene	ND	5	0.69	NA	ug/L
MKTF-21	2/5/2020	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
MKTF-21	2/5/2020	Dibromomethane	ND	5	1	8	ug/L
MKTF-21	2/5/2020	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
MKTF-21	2/5/2020	Ethylbenzene	2.6	5	0.66	700	ug/L
MKTF-21	2/5/2020	Hexachlorobutadiene	*ND*	*5*	1.5	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/5/2020	Isopropylbenzene	ND	5	0.96	447	ug/L
MKTF-21	2/5/2020	MTBE	50	5	2.3	143	ug/L
MKTF-21	2/5/2020	Methylene Chloride	*ND*	*15*	0.77	5	ug/L
MKTF-21	2/5/2020	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-21	2/5/2020	n-Propylbenzene	ND	5	1.1	660	ug/L
MKTF-21	2/5/2020	Naphthalene	ND	10	1.4	30	ug/L
MKTF-21	2/5/2020	sec-Butylbenzene	ND	5	1.2	2000	ug/L
MKTF-21	2/5/2020	Styrene	ND	5	0.96	100	ug/L
MKTF-21	2/5/2020	tert-Butylbenzene	ND	5	1	690	ug/L
MKTF-21	2/5/2020	Tetrachloroethene	ND	5	0.75	5	ug/L
MKTF-21	2/5/2020	Toluene	ND	5	1.8	1000	ug/L
MKTF-21	2/5/2020	trans-1,2-Dichloroethene	ND	5	0.9	100	ug/L
MKTF-21	2/5/2020	trans-1,3-Dichloropropene	ND	5	0.83	NA	ug/L
MKTF-21	2/5/2020	Trichloroethene	ND	5	0.83	5	ug/L
MKTF-21	2/5/2020	Trichlorofluoromethane	ND	5	0.95	1137	ug/L
MKTF-21	2/5/2020	Vinyl Chloride	*ND*	*5*	0.9	2	ug/L
MKTF-21	2/5/2020	Xylenes, Total	ND	7.5	2.3	620	ug/L
MKTF-22	4/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-22	4/10/2014	Acetone	ND	100	49	14064	ug/L
MKTF-22	4/10/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-22	4/10/2014	Benzene	**2300**	100	15	5	ug/L
MKTF-22	4/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-22	4/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-22	4/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-22	4/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-22	4/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-22	4/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-22	4/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-22	4/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-22	4/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-22	4/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-22	4/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-22	4/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-22	4/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-22	4/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-22	4/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-22	4/10/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-22	4/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	4/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-22	4/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-22	4/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-22	4/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-22	4/10/2014	1,2,4-Trimethylbenzene	**89**	10	1.2	56	ug/L
MKTF-22	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-22	4/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-22	4/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-22	4/10/2014	Isopropylbenzene	15	10	1.6	447	ug/L
MKTF-22	4/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-22	4/10/2014	Ethylbenzene	280	10	1.3	700	ug/L
MKTF-22	4/10/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-22	4/10/2014	n-Propylbenzene	33	10	1.4	660	ug/L
MKTF-22	4/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-22	4/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-22	4/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-22	4/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-22	4/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-22	4/10/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-22	4/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-22	4/10/2014	Toluene	21	10	1.7	1000	ug/L
MKTF-22	4/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-22	4/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-22	4/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-22	4/10/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-22	4/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-22	4/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-22	4/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-22	4/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-22	4/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-22	4/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-22	4/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-22	4/10/2014	Xylenes, Total	32	15	3.8	620	ug/L
MKTF-22	4/10/2014	MTBE	**3700**	100	25	143	ug/L
MKTF-22	4/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-22	4/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/17/2014	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/17/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-22	11/17/2014	Benzene	**1600**	200	31	5	ug/L
MKTF-22	11/17/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-22	11/17/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-22	11/17/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-22	11/17/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-22	11/17/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-22	11/17/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-22	11/17/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-22	11/17/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-22	11/17/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-22	11/17/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-22	11/17/2014	1,1-Dichloroethane	15	10	2.8	25	ug/L
MKTF-22	11/17/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-22	11/17/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-22	11/17/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-22	11/17/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-22	11/17/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-22	11/17/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/17/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-22	11/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-22	11/17/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-22	11/17/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-22	11/17/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-22	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-22	11/17/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-22	11/17/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-22	11/17/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-22	11/17/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Ethylbenzene	90	10	1.3	700	ug/L
MKTF-22	11/17/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-22	11/17/2014	n-Propylbenzene	13	10	1.4	660	ug/L
MKTF-22	11/17/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-22	11/17/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-22	11/17/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-22	11/17/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-22	11/17/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-22	11/17/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-22	11/17/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-22	11/17/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-22	11/17/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-22	11/17/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-22	11/17/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-22	11/17/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-22	11/17/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-22	11/17/2014	cis-1,2-Dichloroethene	10	10	1.2	70	ug/L
MKTF-22	11/17/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-22	11/17/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-22	11/17/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-22	11/17/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-22	11/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-22	11/17/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-22	11/17/2014	MTBE	**3900**	200	50	143	ug/L
MKTF-22	11/17/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-22	11/17/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-22	3/12/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	3/12/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	3/12/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	3/12/2015	Benzene	**2600**	200	13	5	ug/L
MKTF-22	3/12/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	3/12/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	3/12/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	3/12/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	3/12/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	3/12/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	3/12/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	3/12/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	3/12/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	3/12/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	3/12/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	3/12/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	3/12/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	3/12/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	3/12/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	3/12/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	3/12/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/12/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	3/12/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	3/12/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	3/12/2015	1,2,4-Trimethylbenzene	**58**	20	3.2	56	ug/L
MKTF-22	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	3/12/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	3/12/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	3/12/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	3/12/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	3/12/2015	Ethylbenzene	250	20	2	700	ug/L
MKTF-22	3/12/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	3/12/2015	n-Propylbenzene	31	20	3.3	660	ug/L
MKTF-22	3/12/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	3/12/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	3/12/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	3/12/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	3/12/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	3/12/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	3/12/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	3/12/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	3/12/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	3/12/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	3/12/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	3/12/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	3/12/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	3/12/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	3/12/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	3/12/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	3/12/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	3/12/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	3/12/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	3/12/2015	MTBE	**5100**	200	35	143	ug/L
MKTF-22	3/12/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	3/12/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	6/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	6/9/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	6/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	6/9/2015	Benzene	**2900**	200	13	5	ug/L
MKTF-22	6/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	6/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	6/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	6/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	6/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	6/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	6/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	6/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	6/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	6/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	6/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	6/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	6/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	6/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	6/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	6/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	6/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	6/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	6/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	6/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	6/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	6/9/2015	1,2,4-Trimethylbenzene	53	20	3.2	56	ug/L
MKTF-22	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	6/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	6/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	6/9/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	6/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	6/9/2015	Ethylbenzene	320	20	2	700	ug/L
MKTF-22	6/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	6/9/2015	n-Propylbenzene	33	20	3.3	660	ug/L
MKTF-22	6/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	6/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	6/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	6/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	6/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	6/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	6/9/2015	Toluene	22	20	2.2	1000	ug/L
MKTF-22	6/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	6/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	6/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	6/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	6/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	6/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	6/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	6/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	6/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	6/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	6/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	6/9/2015	Xylenes, Total	47	30	5.6	620	ug/L
MKTF-22	6/9/2015	MTBE	**5700**	200	35	143	ug/L
MKTF-22	6/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	6/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	8/20/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	8/20/2015	Acetone	ND	200	19	14064	ug/L
MKTF-22	8/20/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	8/20/2015	Benzene	**1200**	20	1.3	5	ug/L
MKTF-22	8/20/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	8/20/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	8/20/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	8/20/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	8/20/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	8/20/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	8/20/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	8/20/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	8/20/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	8/20/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	8/20/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	8/20/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	8/20/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	8/20/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	8/20/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	8/20/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	8/20/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	8/20/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	8/20/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	8/20/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	8/20/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	8/20/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-22	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	8/20/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	8/20/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	8/20/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	8/20/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	8/20/2015	Ethylbenzene	97	20	2	700	ug/L
MKTF-22	8/20/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	8/20/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
MKTF-22	8/20/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	8/20/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	8/20/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	8/20/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	8/20/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	8/20/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	8/20/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	8/20/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	8/20/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	8/20/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	8/20/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	8/20/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	8/20/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	8/20/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	8/20/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	8/20/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	8/20/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	8/20/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	8/20/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	8/20/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	8/20/2015	MTBE	**4800**	200	35	143	ug/L
MKTF-22	8/20/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	8/20/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	11/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-22	11/9/2015	Acetone	ND	200	19	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-22	11/9/2015	Benzene	**2700**	200	13	5	ug/L
MKTF-22	11/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-22	11/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-22	11/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-22	11/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-22	11/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-22	11/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-22	11/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-22	11/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-22	11/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-22	11/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-22	11/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	11/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-22	11/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-22	11/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-22	11/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-22	11/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-22	11/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-22	11/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-22	11/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-22	11/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-22	11/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-22	11/9/2015	1,2,4-Trimethylbenzene	29	20	3.2	56	ug/L
MKTF-22	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-22	11/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-22	11/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-22	11/9/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-22	11/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-22	11/9/2015	Ethylbenzene	350	20	2	700	ug/L
MKTF-22	11/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-22	11/9/2015	n-Propylbenzene	32	20	3.3	660	ug/L
MKTF-22	11/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-22	11/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-22	11/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-22	11/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-22	11/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-22	11/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-22	11/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-22	11/9/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-22	11/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-22	11/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-22	11/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-22	11/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-22	11/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-22	11/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-22	11/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-22	11/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	11/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-22	11/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-22	11/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	11/9/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-22	11/9/2015	MTBE	**5500**	200	35	143	ug/L
MKTF-22	11/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	11/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-22	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-22	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-22	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-22	2/25/2016	Benzene	**4000**	200	19	5	ug/L
MKTF-22	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-22	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-22	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-22	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-22	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-22	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-22	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-22	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-22	2/25/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-22	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-22	2/25/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-22	2/25/2016	1,1-Dichloroethene	*ND*	*20*	1.5	7	ug/L
MKTF-22	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-22	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-22	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-22	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-22	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-22	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-22	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-22	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	2/25/2016	1,2,4-Trimethylbenzene	43	20	2.1	56	ug/L
MKTF-22	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-22	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-22	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-22	2/25/2016	Isopropylbenzene	20	20	2	447	ug/L
MKTF-22	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-22	2/25/2016	Ethylbenzene	570	20	2.2	700	ug/L
MKTF-22	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-22	2/25/2016	n-Propylbenzene	50	20	2.6	660	ug/L
MKTF-22	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-22	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-22	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-22	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-22	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-22	2/25/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-22	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-22	2/25/2016	Toluene	32	20	1.8	1000	ug/L
MKTF-22	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-22	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-22	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-22	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-22	2/25/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
MKTF-22	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-22	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-22	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-22	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	2/25/2016	Xylenes, Total	70	30	6.5	620	ug/L
MKTF-22	2/25/2016	MTBE	**7200**	200	42	143	ug/L
MKTF-22	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-22	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-22	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/10/2016	Acetone	82	100	49	14064	ug/L
MKTF-22	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	6/10/2016	Benzene	**3800**	50	4.8	5	ug/L
MKTF-22	6/10/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-22	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-22	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-22	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-22	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-22	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-22	6/10/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-22	6/10/2016	1,1-Dichloroethene	*6.9*	*10*	1.1	7	ug/L
MKTF-22	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-22	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-22	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/10/2016	2-Butanone	31	100	7.4	5565	ug/L
MKTF-22	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-22	6/10/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-22	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	6/10/2016	1,2,4-Trimethylbenzene	25	10	1.1	56	ug/L
MKTF-22	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-22	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-22	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-22	6/10/2016	Isopropylbenzene	21	10	1	447	ug/L
MKTF-22	6/10/2016	p-Isopropyltoluene	3.8	10	1.4	NA	ug/L
MKTF-22	6/10/2016	Ethylbenzene	500	10	1.1	700	ug/L
MKTF-22	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-22	6/10/2016	n-Propylbenzene	51	10	1.3	660	ug/L
MKTF-22	6/10/2016	n-Butylbenzene	14	30	1.6	1000	ug/L
MKTF-22	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-22	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-22	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-22	6/10/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-22	6/10/2016	Toluene	35	10	1.2	1000	ug/L
MKTF-22	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-22	6/10/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	6/10/2016	sec-Butylbenzene	7.4	10	1.2	2000	ug/L
MKTF-22	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	6/10/2016	cis-1,2-Dichloroethene	8	10	1.2	70	ug/L
MKTF-22	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-22	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-22	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-22	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	6/10/2016	Xylenes, Total	62	15	3.7	620	ug/L
MKTF-22	6/10/2016	MTBE	**6500**	50	11	143	ug/L
MKTF-22	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-22	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	9/10/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-22	9/10/2016	Acetone	ND	200	98	14064	ug/L
MKTF-22	9/10/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-22	9/10/2016	Benzene	**4200**	200	19	5	ug/L
MKTF-22	9/10/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-22	9/10/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-22	9/10/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-22	9/10/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-22	9/10/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-22	9/10/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-22	9/10/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-22	9/10/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-22	9/10/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-22	9/10/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-22	9/10/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
MKTF-22	9/10/2016	1,1-Dichloroethene	**9.4**	20	2.1	7	ug/L
MKTF-22	9/10/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-22	9/10/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-22	9/10/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-22	9/10/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-22	9/10/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-22	9/10/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-22	9/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-22	9/10/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-22	9/10/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	9/10/2016	1,2,4-Trimethylbenzene	15	20	2.2	56	ug/L
MKTF-22	9/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-22	9/10/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-22	9/10/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-22	9/10/2016	Isopropylbenzene	18	20	2.1	447	ug/L
MKTF-22	9/10/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-22	9/10/2016	Ethylbenzene	430	20	2.2	700	ug/L
MKTF-22	9/10/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-22	9/10/2016	n-Propylbenzene	43	20	2.6	660	ug/L
MKTF-22	9/10/2016	n-Butylbenzene	8.5	60	3.2	1000	ug/L
MKTF-22	9/10/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-22	9/10/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-22	9/10/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-22	9/10/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-22	9/10/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-22	9/10/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-22	9/10/2016	Toluene	30	20	2.4	1000	ug/L
MKTF-22	9/10/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-22	9/10/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-22	9/10/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	9/10/2016	sec-Butylbenzene	4.2	20	2.5	2000	ug/L
MKTF-22	9/10/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-22	9/10/2016	cis-1,2-Dichloroethene	11	20	2.5	70	ug/L
MKTF-22	9/10/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-22	9/10/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-22	9/10/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-22	9/10/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-22	9/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-22	9/10/2016	Xylenes, Total	49	30	7.3	620	ug/L
MKTF-22	9/10/2016	MTBE	**8800**	200	42	143	ug/L
MKTF-22	9/10/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-22	9/10/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-22	11/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/1/2016	Acetone	ND	100	49	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	11/1/2016	Benzene	**3700**	100	9.6	5	ug/L
MKTF-22	11/1/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-22	11/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	11/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	11/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	11/1/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-22	11/1/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-22	11/1/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-22	11/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	11/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-22	11/1/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-22	11/1/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-22	11/1/2016	1,1-Dichloroethene	*6.8*	*10*	1.1	7	ug/L
MKTF-22	11/1/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-22	11/1/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-22	11/1/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/1/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-22	11/1/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-22	11/1/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	11/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-22	11/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	11/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	11/1/2016	1,2,4-Trimethylbenzene	15	10	1.1	56	ug/L
MKTF-22	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-22	11/1/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-22	11/1/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-22	11/1/2016	Isopropylbenzene	18	10	1	447	ug/L
MKTF-22	11/1/2016	p-Isopropyltoluene	4.1	10	1.4	NA	ug/L
MKTF-22	11/1/2016	Ethylbenzene	460	10	1.1	700	ug/L
MKTF-22	11/1/2016	Styrene	2.1	10	1.1	100	ug/L
MKTF-22	11/1/2016	n-Propylbenzene	44	10	1.3	660	ug/L
MKTF-22	11/1/2016	n-Butylbenzene	13	30	1.6	1000	ug/L
MKTF-22	11/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-22	11/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-22	11/1/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	11/1/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-22	11/1/2016	1,3,5-Trimethylbenzene	1.9	10	1.2	60	ug/L
MKTF-22	11/1/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-22	11/1/2016	Toluene	32	10	1.2	1000	ug/L
MKTF-22	11/1/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	11/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-22	11/1/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	11/1/2016	sec-Butylbenzene	7.8	10	1.2	2000	ug/L
MKTF-22	11/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	11/1/2016	cis-1,2-Dichloroethene	6.6	10	1.2	70	ug/L
MKTF-22	11/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-22	11/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	11/1/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-22	11/1/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-22	11/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	11/1/2016	Xylenes, Total	54	15	3.7	620	ug/L
MKTF-22	11/1/2016	MTBE	**8000**	100	21	143	ug/L
MKTF-22	11/1/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-22	11/1/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	3/8/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	3/8/2017	Acetone	34	100	8.8	14064	ug/L
MKTF-22	3/8/2017	Chloroform	ND	10	0.89	100	ug/L
MKTF-22	3/8/2017	Benzene	**3500**	100	9.6	5	ug/L
MKTF-22	3/8/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	3/8/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-22	3/8/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-22	3/8/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-22	3/8/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	3/8/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	3/8/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	3/8/2017	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-22	3/8/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	3/8/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	3/8/2017	1,1-Dichloroethane	1.7	10	1	25	ug/L
MKTF-22	3/8/2017	1,1-Dichloroethene	**8.6**	10	0.81	7	ug/L
MKTF-22	3/8/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	3/8/2017	Dichlorodifluoromethane	ND	10	3.2	197	ug/L
MKTF-22	3/8/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	3/8/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	3/8/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-22	3/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	3/8/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-22	3/8/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	3/8/2017	1,2,4-Trimethylbenzene	12	10	1	56	ug/L
MKTF-22	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	3/8/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	3/8/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	3/8/2017	Isopropylbenzene	19	10	0.98	447	ug/L
MKTF-22	3/8/2017	p-Isopropyltoluene	3.2	10	1.4	NA	ug/L
MKTF-22	3/8/2017	Ethylbenzene	420	10	1.1	700	ug/L
MKTF-22	3/8/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	3/8/2017	n-Propylbenzene	50	10	1.3	660	ug/L
MKTF-22	3/8/2017	n-Butylbenzene	15	30	1.6	1000	ug/L
MKTF-22	3/8/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	3/8/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	3/8/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-22	3/8/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	3/8/2017	1,3,5-Trimethylbenzene	2.2	10	1.2	60	ug/L
MKTF-22	3/8/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	3/8/2017	Toluene	30	10	0.89	1000	ug/L
MKTF-22	3/8/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	3/8/2017	Dibromochloromethane	*ND*	*10*	0.78	1.68	ug/L
MKTF-22	3/8/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-22	3/8/2017	sec-Butylbenzene	7.6	10	1	2000	ug/L
MKTF-22	3/8/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-22	3/8/2017	cis-1,2-Dichloroethene	8.3	10	2	70	ug/L
MKTF-22	3/8/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	3/8/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-22	3/8/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	3/8/2017	2,2-Dichloropropane	ND	20	1.2	NA	ug/L
MKTF-22	3/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-22	3/8/2017	Xylenes, Total	46	15	3.2	620	ug/L
MKTF-22	3/8/2017	MTBE	**6500**	100	15	143	ug/L
MKTF-22	3/8/2017	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-22	3/8/2017	trans-1,3-Dichloropropene	ND	10	0.89	NA	ug/L
MKTF-22	6/8/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/8/2017	Acetone	21	100	8.2	14064	ug/L
MKTF-22	6/8/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	6/8/2017	Benzene	**2900**	100	6.2	5	ug/L
MKTF-22	6/8/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	6/8/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	6/8/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	6/8/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	6/8/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	6/8/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	6/8/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	6/8/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	6/8/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	6/8/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	6/8/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	6/8/2017	1,1-Dichloroethene	**9**	10	0.81	7	ug/L
MKTF-22	6/8/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	6/8/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	6/8/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	6/8/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	6/8/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	6/8/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	6/8/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	6/8/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	6/8/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	6/8/2017	1,2,4-Trimethylbenzene	4	10	1.1	56	ug/L
MKTF-22	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	6/8/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	6/8/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	6/8/2017	Isopropylbenzene	6.4	10	0.51	447	ug/L
MKTF-22	6/8/2017	p-Isopropyltoluene	1.7	10	0.96	NA	ug/L
MKTF-22	6/8/2017	Ethylbenzene	180	10	0.93	700	ug/L
MKTF-22	6/8/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	6/8/2017	n-Propylbenzene	13	10	0.74	660	ug/L
MKTF-22	6/8/2017	n-Butylbenzene	5.1	30	1.3	1000	ug/L
MKTF-22	6/8/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	6/8/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	6/8/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	6/8/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	6/8/2017	1,3,5-Trimethylbenzene	1.4	10	0.87	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/8/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	6/8/2017	Toluene	14	10	0.64	1000	ug/L
MKTF-22	6/8/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	6/8/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	6/8/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	6/8/2017	sec-Butylbenzene	2.7	10	1.1	2000	ug/L
MKTF-22	6/8/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	6/8/2017	cis-1,2-Dichloroethene	9.4	10	2	70	ug/L
MKTF-22	6/8/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	6/8/2017	Pentafluorobenzene	**100**	0	0		None
MKTF-22	6/8/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	6/8/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	6/8/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	6/8/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	6/8/2017	Xylenes, Total	22	15	3.2	620	ug/L
MKTF-22	6/8/2017	MTBE	**5900**	100	24	143	ug/L
MKTF-22	6/8/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	6/8/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	10/3/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	10/3/2017	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	10/3/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	10/3/2017	Benzene	**2400**	100	6.2	5	ug/L
MKTF-22	10/3/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	10/3/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	10/3/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	10/3/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	10/3/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	10/3/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	10/3/2017	Methylene Chloride	*3.3*	*30*	1.1	5	ug/L
MKTF-22	10/3/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	10/3/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	10/3/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	10/3/2017	1,1-Dichloroethane	4.1	10	4	25	ug/L
MKTF-22	10/3/2017	1,1-Dichloroethene	*5.1*	*10*	0.81	7	ug/L
MKTF-22	10/3/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	10/3/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	10/3/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	10/3/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	10/3/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	10/3/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	10/3/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	10/3/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	10/3/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	10/3/2017	1,2,4-Trimethylbenzene	15	10	1.1	56	ug/L
MKTF-22	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	10/3/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	10/3/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	10/3/2017	Isopropylbenzene	15	10	0.51	447	ug/L
MKTF-22	10/3/2017	p-Isopropyltoluene	2.3	10	0.96	NA	ug/L
MKTF-22	10/3/2017	Ethylbenzene	280	10	0.93	700	ug/L
MKTF-22	10/3/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	10/3/2017	n-Propylbenzene	42	10	0.74	660	ug/L
MKTF-22	10/3/2017	n-Butylbenzene	13	30	1.3	1000	ug/L
MKTF-22	10/3/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	10/3/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	10/3/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	10/3/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	10/3/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-22	10/3/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	10/3/2017	Toluene	18	10	0.64	1000	ug/L
MKTF-22	10/3/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	10/3/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	10/3/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	10/3/2017	sec-Butylbenzene	6.6	10	1.1	2000	ug/L
MKTF-22	10/3/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	10/3/2017	cis-1,2-Dichloroethene	6.1	10	2	70	ug/L
MKTF-22	10/3/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	10/3/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	10/3/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	10/3/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	10/3/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	10/3/2017	Xylenes, Total	37	15	3.2	620	ug/L
MKTF-22	10/3/2017	MTBE	**4900**	100	24	143	ug/L
MKTF-22	10/3/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	10/3/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	11/28/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	Acetone	23	100	8.2	14064	ug/L
MKTF-22	11/28/2017	Chloroform	ND	10	4	100	ug/L
MKTF-22	11/28/2017	Benzene	**2500**	100	6.2	5	ug/L
MKTF-22	11/28/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	11/28/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	11/28/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	11/28/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	11/28/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	11/28/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	11/28/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	11/28/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	11/28/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	11/28/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	11/28/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	11/28/2017	1,1-Dichloroethene	*6.2*	*10*	0.81	7	ug/L
MKTF-22	11/28/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	11/28/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	11/28/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	11/28/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	11/28/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	11/28/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	11/28/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	11/28/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	11/28/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	11/28/2017	1,2,4-Trimethylbenzene	9.4	10	1.1	56	ug/L
MKTF-22	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	11/28/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	11/28/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	11/28/2017	Isopropylbenzene	10	10	0.51	447	ug/L
MKTF-22	11/28/2017	p-Isopropyltoluene	3.6	10	0.96	NA	ug/L
MKTF-22	11/28/2017	Ethylbenzene	180	10	0.93	700	ug/L
MKTF-22	11/28/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-22	11/28/2017	n-Propylbenzene	23	10	0.74	660	ug/L
MKTF-22	11/28/2017	n-Butylbenzene	11	30	1.3	1000	ug/L
MKTF-22	11/28/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	11/28/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	11/28/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	11/28/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	11/28/2017	1,3,5-Trimethylbenzene	1.7	10	0.87	60	ug/L
MKTF-22	11/28/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	11/28/2017	Toluene	13	10	0.64	1000	ug/L
MKTF-22	11/28/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	11/28/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	11/28/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	11/28/2017	sec-Butylbenzene	6.1	10	1.1	2000	ug/L
MKTF-22	11/28/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	11/28/2017	cis-1,2-Dichloroethene	8	10	2	70	ug/L
MKTF-22	11/28/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	11/28/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	11/28/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	11/28/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	11/28/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	11/28/2017	Xylenes, Total	25	15	3.2	620	ug/L
MKTF-22	11/28/2017	MTBE	**6000**	100	24	143	ug/L
MKTF-22	11/28/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	11/28/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	2/8/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	2/8/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	2/8/2018	Chloroform	ND	10	4	100	ug/L
MKTF-22	2/8/2018	Benzene	**2300**	100	6.2	5	ug/L
MKTF-22	2/8/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	2/8/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	2/8/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	2/8/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	2/8/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	2/8/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	2/8/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	2/8/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	2/8/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	2/8/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	2/8/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	2/8/2018	1,1-Dichloroethene	*6.8*	*10*	0.81	7	ug/L
MKTF-22	2/8/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	2/8/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	2/8/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	2/8/2018	2-Butanone	ND	100	11	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	2/8/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	2/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	2/8/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	2/8/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	2/8/2018	1,2,4-Trimethylbenzene	5.6	10	1.1	56	ug/L
MKTF-22	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	2/8/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	2/8/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	2/8/2018	Isopropylbenzene	7	10	0.51	447	ug/L
MKTF-22	2/8/2018	p-Isopropyltoluene	2.5	10	0.96	NA	ug/L
MKTF-22	2/8/2018	Ethylbenzene	140	10	0.93	700	ug/L
MKTF-22	2/8/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-22	2/8/2018	n-Propylbenzene	14	10	0.74	660	ug/L
MKTF-22	2/8/2018	n-Butylbenzene	8.1	30	1.3	1000	ug/L
MKTF-22	2/8/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	2/8/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	2/8/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	2/8/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-22	2/8/2018	1,3,5-Trimethylbenzene	1.1	10	0.87	60	ug/L
MKTF-22	2/8/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	2/8/2018	Toluene	9.3	10	0.64	1000	ug/L
MKTF-22	2/8/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	2/8/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	2/8/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	2/8/2018	sec-Butylbenzene	4	10	1.1	2000	ug/L
MKTF-22	2/8/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	2/8/2018	cis-1,2-Dichloroethene	7.8	10	2	70	ug/L
MKTF-22	2/8/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	2/8/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	2/8/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	2/8/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	2/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	2/8/2018	Xylenes, Total	18	15	3.2	620	ug/L
MKTF-22	2/8/2018	MTBE	**5700**	100	24	143	ug/L
MKTF-22	2/8/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	2/8/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	5/10/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-22	5/10/2018	Acetone	ND	100	8.2	14064	ug/L
MKTF-22	5/10/2018	Chloroform	ND	10	4	100	ug/L
MKTF-22	5/10/2018	Benzene	**2500**	100	6.2	5	ug/L
MKTF-22	5/10/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-22	5/10/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-22	5/10/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-22	5/10/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-22	5/10/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-22	5/10/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-22	5/10/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-22	5/10/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-22	5/10/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-22	5/10/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-22	5/10/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-22	5/10/2018	1,1-Dichloroethene	**8.2**	10	0.81	7	ug/L
MKTF-22	5/10/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-22	5/10/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-22	5/10/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-22	5/10/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-22	5/10/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-22	5/10/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-22	5/10/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-22	5/10/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-22	5/10/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-22	5/10/2018	1,2,4-Trimethylbenzene	4.7	10	1.1	56	ug/L
MKTF-22	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-22	5/10/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-22	5/10/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-22	5/10/2018	Isopropylbenzene	8.5	10	0.51	447	ug/L
MKTF-22	5/10/2018	p-Isopropyltoluene	2	10	0.96	NA	ug/L
MKTF-22	5/10/2018	Ethylbenzene	150	10	0.93	700	ug/L
MKTF-22	5/10/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-22	5/10/2018	n-Propylbenzene	18	10	0.74	660	ug/L
MKTF-22	5/10/2018	n-Butylbenzene	8.6	30	1.3	1000	ug/L
MKTF-22	5/10/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-22	5/10/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-22	5/10/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-22	5/10/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/10/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
MKTF-22	5/10/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-22	5/10/2018	Toluene	8.8	10	0.64	1000	ug/L
MKTF-22	5/10/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-22	5/10/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-22	5/10/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-22	5/10/2018	sec-Butylbenzene	4.8	10	1.1	2000	ug/L
MKTF-22	5/10/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-22	5/10/2018	cis-1,2-Dichloroethene	9.4	10	2	70	ug/L
MKTF-22	5/10/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-22	5/10/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-22	5/10/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-22	5/10/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-22	5/10/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-22	5/10/2018	Xylenes, Total	14	15	3.2	620	ug/L
MKTF-22	5/10/2018	MTBE	**5900**	100	24	143	ug/L
MKTF-22	5/10/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-22	5/10/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-22	8/30/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-22	8/30/2018	Acetone	ND	200	16	14064	ug/L
MKTF-22	8/30/2018	Chloroform	ND	20	8	100	ug/L
MKTF-22	8/30/2018	Benzene	**2200**	200	35	5	ug/L
MKTF-22	8/30/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
MKTF-22	8/30/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-22	8/30/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-22	8/30/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-22	8/30/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-22	8/30/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
MKTF-22	8/30/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-22	8/30/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-22	8/30/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-22	8/30/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-22	8/30/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-22	8/30/2018	1,1-Dichloroethene	**8.1**	20	2.4	7	ug/L
MKTF-22	8/30/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-22	8/30/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-22	8/30/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-22	8/30/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-22	8/30/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-22	8/30/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-22	8/30/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-22	8/30/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-22	8/30/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-22	8/30/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-22	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-22	8/30/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-22	8/30/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-22	8/30/2018	Isopropylbenzene	5.8	20	4.4	447	ug/L
MKTF-22	8/30/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-22	8/30/2018	Ethylbenzene	120	20	4.5	700	ug/L
MKTF-22	8/30/2018	Styrene	ND	20	5	100	ug/L
MKTF-22	8/30/2018	n-Propylbenzene	13	20	4.9	660	ug/L
MKTF-22	8/30/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-22	8/30/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-22	8/30/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-22	8/30/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-22	8/30/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-22	8/30/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-22	8/30/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-22	8/30/2018	Toluene	5.6	20	3.4	1000	ug/L
MKTF-22	8/30/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-22	8/30/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-22	8/30/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	8/30/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-22	8/30/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-22	8/30/2018	cis-1,2-Dichloroethene	8	20	7.5	70	ug/L
MKTF-22	8/30/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-22	8/30/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-22	8/30/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-22	8/30/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-22	8/30/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-22	8/30/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-22	8/30/2018	MTBE	**5400**	200	64	143	ug/L
MKTF-22	8/30/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-22	8/30/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-22	11/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2018	Acetone	ND	200	15	14064	ug/L
MKTF-22	11/28/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-22	11/28/2018	Benzene	**3000**	200	35	5	ug/L
MKTF-22	11/28/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-22	11/28/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-22	11/28/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-22	11/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-22	11/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-22	11/28/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
MKTF-22	11/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-22	11/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-22	11/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-22	11/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-22	11/28/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
MKTF-22	11/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-22	11/28/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-22	11/28/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-22	11/28/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-22	11/28/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-22	11/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-22	11/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-22	11/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-22	11/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-22	11/28/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-22	11/28/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-22	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-22	11/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-22	11/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-22	11/28/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-22	11/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-22	11/28/2018	Ethylbenzene	170	20	4.5	700	ug/L
MKTF-22	11/28/2018	Styrene	ND	20	5	100	ug/L
MKTF-22	11/28/2018	n-Propylbenzene	ND	20	4.9	660	ug/L
MKTF-22	11/28/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-22	11/28/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-22	11/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-22	11/28/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-22	11/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-22	11/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-22	11/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-22	11/28/2018	Toluene	ND	20	3.4	1000	ug/L
MKTF-22	11/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-22	11/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-22	11/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-22	11/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-22	11/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-22	11/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-22	11/28/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-22	11/28/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-22	11/28/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-22	11/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-22	11/28/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-22	11/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-22	11/28/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-22	11/28/2018	MTBE	**6000**	200	91	143	ug/L
MKTF-22	11/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-22	11/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-22	5/9/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	5/9/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	5/9/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	5/9/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	5/9/2019	1,1-Dichloroethane	11	20	2.817172	25	ug/L
MKTF-22	5/9/2019	1,1-Dichloroethene	**15**	20	4.107764	7	ug/L
MKTF-22	5/9/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	5/9/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	5/9/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-22	5/9/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	5/9/2019	1,2,4-Trimethylbenzene	6.3	20	4.263982	56	ug/L
MKTF-22	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-22	5/9/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	5/9/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	5/9/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	5/9/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	5/9/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	5/9/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	5/9/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/9/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	5/9/2019	1-Methylnaphthalene	70	80	6.29909	NA	ug/L
MKTF-22	5/9/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	5/9/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	5/9/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	5/9/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	5/9/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	5/9/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	5/9/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-22	5/9/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-22	5/9/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	5/9/2019	Benzene	**3500**	200	33.327811	5	ug/L
MKTF-22	5/9/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	5/9/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	5/9/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	5/9/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	5/9/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	5/9/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	5/9/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	5/9/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	5/9/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	5/9/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-22	5/9/2019	cis-1,2-Dichloroethene	12	20	3.802301	70	ug/L
MKTF-22	5/9/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	5/9/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	5/9/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	5/9/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	5/9/2019	Ethylbenzene	330	20	2.646816	700	ug/L
MKTF-22	5/9/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	5/9/2019	Isopropylbenzene	15	20	3.830445	447	ug/L
MKTF-22	5/9/2019	MTBE	**3300**	20	9.1219	143	ug/L
MKTF-22	5/9/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	5/9/2019	Naphthalene	*15*	*40*	5.501427	30	ug/L
MKTF-22	5/9/2019	n-Butylbenzene	9.3	60	4.551391	1000	ug/L
MKTF-22	5/9/2019	n-Propylbenzene	35	20	4.28616	660	ug/L
MKTF-22	5/9/2019	sec-Butylbenzene	6	20	4.954626	2000	ug/L
MKTF-22	5/9/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	5/9/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	5/9/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	5/9/2019	Toluene	9.1	20	7.008724	1000	ug/L
MKTF-22	5/9/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	5/9/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	5/9/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	5/9/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	5/9/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	5/9/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-22	5/9/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-22	8/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	8/20/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	8/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	8/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	8/20/2019	1,1-Dichloroethane	13	20	2.817172	25	ug/L
MKTF-22	8/20/2019	1,1-Dichloroethene	**17**	20	4.107764	7	ug/L
MKTF-22	8/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	8/20/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	8/20/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-22	8/20/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	8/20/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-22	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-22	8/20/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	8/20/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	8/20/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	8/20/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	8/20/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	8/20/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	8/20/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-22	8/20/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	8/20/2019	1-Methylnaphthalene	34	80	6.29909	NA	ug/L
MKTF-22	8/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	8/20/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	8/20/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	8/20/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	8/20/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	8/20/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	8/20/2019	p-Isopropyltoluene	6.2	20	4.345787	NA	ug/L
MKTF-22	8/20/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	8/20/2019	Benzene	**3200**	200	33.327811	5	ug/L
MKTF-22	8/20/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	8/20/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	8/20/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	8/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	8/20/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	8/20/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	8/20/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	8/20/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	8/20/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	8/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-22	8/20/2019	cis-1,2-Dichloroethene	8.9	20	3.802301	70	ug/L
MKTF-22	8/20/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	8/20/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	8/20/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	8/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	8/20/2019	Ethylbenzene	260	20	2.646816	700	ug/L
MKTF-22	8/20/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	8/20/2019	Isopropylbenzene	16	20	3.830445	447	ug/L
MKTF-22	8/20/2019	MTBE	**2700**	20	9.1219	143	ug/L
MKTF-22	8/20/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	8/20/2019	Naphthalene	*13*	*40*	5.501427	30	ug/L
MKTF-22	8/20/2019	n-Butylbenzene	23	60	4.551391	1000	ug/L
MKTF-22	8/20/2019	n-Propylbenzene	29	20	4.28616	660	ug/L
MKTF-22	8/20/2019	sec-Butylbenzene	7.8	20	4.954626	2000	ug/L
MKTF-22	8/20/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	8/20/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	8/20/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	8/20/2019	Toluene	8.7	20	7.008724	1000	ug/L
MKTF-22	8/20/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	8/20/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	8/20/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	8/20/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	8/20/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	8/20/2019	Xylenes, Total	14	30	9.088299	620	ug/L
MKTF-22	8/20/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-22	10/24/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-22	10/24/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-22	10/24/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-22	10/24/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-22	10/24/2019	1,1-Dichloroethane	13	20	2.817172	25	ug/L
MKTF-22	10/24/2019	1,1-Dichloroethene	**13**	20	4.107764	7	ug/L
MKTF-22	10/24/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-22	10/24/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-22	10/24/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-22	10/24/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-22	10/24/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-22	10/24/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-22	10/24/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-22	10/24/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-22	10/24/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-22	10/24/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-22	10/24/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-22	10/24/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	35	80	6.29909	NA	ug/L
MKTF-22	10/24/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-22	10/24/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-22	10/24/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-22	10/24/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-22	10/24/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-22	10/24/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-22	10/24/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-22	10/24/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-22	10/24/2019	Benzene	**3400**	200	33.327811	5	ug/L
MKTF-22	10/24/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-22	10/24/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-22	10/24/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-22	10/24/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-22	10/24/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-22	10/24/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-22	10/24/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-22	10/24/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-22	10/24/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-22	10/24/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-22	10/24/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-22	10/24/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-22	10/24/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-22	10/24/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-22	10/24/2019	Ethylbenzene	270	20	2.646816	700	ug/L
MKTF-22	10/24/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-22	10/24/2019	Isopropylbenzene	13	20	3.830445	447	ug/L
MKTF-22	10/24/2019	MTBE	**2600**	20	9.1219	143	ug/L
MKTF-22	10/24/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-22	10/24/2019	Naphthalene	*7.7*	*40*	5.501427	30	ug/L
MKTF-22	10/24/2019	n-Butylbenzene	5	60	4.551391	1000	ug/L
MKTF-22	10/24/2019	n-Propylbenzene	27	20	4.28616	660	ug/L
MKTF-22	10/24/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-22	10/24/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-22	10/24/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-22	10/24/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-22	10/24/2019	Toluene	ND	20	7.008724	1000	ug/L
MKTF-22	10/24/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-22	10/24/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-22	10/24/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-22	10/24/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-22	10/24/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
MKTF-22	10/24/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-22	10/24/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-23	9/23/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-23	9/23/2014	Acetone	ND	100	49	14064	ug/L
MKTF-23	9/23/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-23	9/23/2014	Benzene	**2700**	100	15	5	ug/L
MKTF-23	9/23/2014	1,1,1-Trichloroethane	24	10	1.2	200	ug/L
MKTF-23	9/23/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-23	9/23/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-23	9/23/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-23	9/23/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-23	9/23/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-23	9/23/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-23	9/23/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-23	9/23/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-23	9/23/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-23	9/23/2014	1,1-Dichloroethane	**92**	10	2.8	25	ug/L
MKTF-23	9/23/2014	1,1-Dichloroethene	**47**	10	2.1	7	ug/L
MKTF-23	9/23/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	9/23/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-23	9/23/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-23	9/23/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-23	9/23/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-23	9/23/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-23	9/23/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-23	9/23/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-23	9/23/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-23	9/23/2014	1,2,4-Trimethylbenzene	**540**	10	1.2	56	ug/L
MKTF-23	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-23	9/23/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-23	9/23/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-23	9/23/2014	Isopropylbenzene	26	10	1.6	447	ug/L
MKTF-23	9/23/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-23	9/23/2014	Ethylbenzene	340	10	1.3	700	ug/L
MKTF-23	9/23/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-23	9/23/2014	n-Propylbenzene	58	10	1.4	660	ug/L
MKTF-23	9/23/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-23	9/23/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-23	9/23/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-23	9/23/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-23	9/23/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-23	9/23/2014	1,3,5-Trimethylbenzene	**150**	10	1.3	60	ug/L
MKTF-23	9/23/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-23	9/23/2014	Toluene	**1400**	100	17	1000	ug/L
MKTF-23	9/23/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-23	9/23/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-23	9/23/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-23	9/23/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-23	9/23/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-23	9/23/2014	cis-1,2-Dichloroethene	29	10	1.2	70	ug/L
MKTF-23	9/23/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-23	9/23/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-23	9/23/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	9/23/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-23	9/23/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-23	9/23/2014	Xylenes, Total	**1600**	15	3.8	620	ug/L
MKTF-23	9/23/2014	MTBE	**480**	10	2.5	143	ug/L
MKTF-23	9/23/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-23	9/23/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-23	11/17/2014	Acetone	ND	100	49	14064	ug/L
MKTF-23	11/17/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-23	11/17/2014	Benzene	**3600**	100	15	5	ug/L
MKTF-23	11/17/2014	1,1,1-Trichloroethane	24	10	1.2	200	ug/L
MKTF-23	11/17/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-23	11/17/2014	Chloromethane	**55**	30	5.2	20.32	ug/L
MKTF-23	11/17/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-23	11/17/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-23	11/17/2014	Vinyl Chloride	**22**	10	1.1	2	ug/L
MKTF-23	11/17/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-23	11/17/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-23	11/17/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-23	11/17/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-23	11/17/2014	1,1-Dichloroethane	**150**	10	2.8	25	ug/L
MKTF-23	11/17/2014	1,1-Dichloroethene	**64**	10	2.1	7	ug/L
MKTF-23	11/17/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	11/17/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-23	11/17/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-23	11/17/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-23	11/17/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-23	11/17/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-23	11/17/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-23	11/17/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-23	11/17/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-23	11/17/2014	1,2,4-Trimethylbenzene	**890**	10	1.2	56	ug/L
MKTF-23	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-23	11/17/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-23	11/17/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-23	11/17/2014	Isopropylbenzene	34	10	1.6	447	ug/L
MKTF-23	11/17/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Ethylbenzene	470	10	1.3	700	ug/L
MKTF-23	11/17/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-23	11/17/2014	n-Propylbenzene	66	10	1.4	660	ug/L
MKTF-23	11/17/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-23	11/17/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-23	11/17/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-23	11/17/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-23	11/17/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-23	11/17/2014	1,3,5-Trimethylbenzene	**220**	10	1.3	60	ug/L
MKTF-23	11/17/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-23	11/17/2014	Toluene	**3000**	100	17	1000	ug/L
MKTF-23	11/17/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-23	11/17/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-23	11/17/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-23	11/17/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-23	11/17/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-23	11/17/2014	cis-1,2-Dichloroethene	43	10	1.2	70	ug/L
MKTF-23	11/17/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-23	11/17/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-23	11/17/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-23	11/17/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-23	11/17/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-23	11/17/2014	Xylenes, Total	**4500**	150	38	620	ug/L
MKTF-23	11/17/2014	MTBE	**570**	100	25	143	ug/L
MKTF-23	11/17/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-23	11/17/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-23	3/12/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-23	3/12/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-23	3/12/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-23	3/12/2015	Benzene	**3300**	100	6.5	5	ug/L
MKTF-23	3/12/2015	1,1,1-Trichloroethane	49	10	0.78	200	ug/L
MKTF-23	3/12/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-23	3/12/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-23	3/12/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-23	3/12/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-23	3/12/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-23	3/12/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-23	3/12/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-23	3/12/2015	Bromoform	ND	10	1.6	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	3/12/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-23	3/12/2015	1,1-Dichloroethane	**120**	10	4	25	ug/L
MKTF-23	3/12/2015	1,1-Dichloroethene	**53**	10	0.99	7	ug/L
MKTF-23	3/12/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	3/12/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-23	3/12/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-23	3/12/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-23	3/12/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-23	3/12/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	3/12/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-23	3/12/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	3/12/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-23	3/12/2015	1,2,4-Trimethylbenzene	**1400**	100	16	56	ug/L
MKTF-23	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-23	3/12/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-23	3/12/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-23	3/12/2015	Isopropylbenzene	44	10	1.5	447	ug/L
MKTF-23	3/12/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-23	3/12/2015	Ethylbenzene	600	10	1	700	ug/L
MKTF-23	3/12/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-23	3/12/2015	n-Propylbenzene	93	10	1.6	660	ug/L
MKTF-23	3/12/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-23	3/12/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-23	3/12/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-23	3/12/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-23	3/12/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-23	3/12/2015	1,3,5-Trimethylbenzene	**380**	10	1.2	60	ug/L
MKTF-23	3/12/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-23	3/12/2015	Toluene	**4800**	100	11	1000	ug/L
MKTF-23	3/12/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-23	3/12/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-23	3/12/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	3/12/2015	sec-Butylbenzene	10	10	2.3	2000	ug/L
MKTF-23	3/12/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-23	3/12/2015	cis-1,2-Dichloroethene	55	10	0.81	70	ug/L
MKTF-23	3/12/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-23	3/12/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-23	3/12/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-23	3/12/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-23	3/12/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	3/12/2015	Xylenes, Total	**8100**	150	28	620	ug/L
MKTF-23	3/12/2015	MTBE	**1100**	10	1.7	143	ug/L
MKTF-23	3/12/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	3/12/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	6/9/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-23	6/9/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-23	6/9/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-23	6/9/2015	Benzene	**2900**	100	6.5	5	ug/L
MKTF-23	6/9/2015	1,1,1-Trichloroethane	34	10	0.78	200	ug/L
MKTF-23	6/9/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-23	6/9/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-23	6/9/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-23	6/9/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-23	6/9/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-23	6/9/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-23	6/9/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-23	6/9/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-23	6/9/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-23	6/9/2015	1,1-Dichloroethane	**130**	10	4	25	ug/L
MKTF-23	6/9/2015	1,1-Dichloroethene	**62**	10	0.99	7	ug/L
MKTF-23	6/9/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-23	6/9/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-23	6/9/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-23	6/9/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-23	6/9/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-23	6/9/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	6/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-23	6/9/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	6/9/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-23	6/9/2015	1,2,4-Trimethylbenzene	**1100**	100	16	56	ug/L
MKTF-23	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-23	6/9/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-23	6/9/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-23	6/9/2015	Isopropylbenzene	41	10	1.5	447	ug/L
MKTF-23	6/9/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Ethylbenzene	510	10	1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-23	6/9/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-23	6/9/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-23	6/9/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-23	6/9/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-23	6/9/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-23	6/9/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-23	6/9/2015	1,3,5-Trimethylbenzene	**280**	10	1.2	60	ug/L
MKTF-23	6/9/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-23	6/9/2015	Toluene	**3000**	100	11	1000	ug/L
MKTF-23	6/9/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-23	6/9/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-23	6/9/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-23	6/9/2015	sec-Butylbenzene	10	10	2.3	2000	ug/L
MKTF-23	6/9/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-23	6/9/2015	cis-1,2-Dichloroethene	42	10	0.81	70	ug/L
MKTF-23	6/9/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-23	6/9/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-23	6/9/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-23	6/9/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-23	6/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	6/9/2015	Xylenes, Total	**6500**	150	28	620	ug/L
MKTF-23	6/9/2015	MTBE	**1100**	10	1.7	143	ug/L
MKTF-23	6/9/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	6/9/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	8/21/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-23	8/21/2015	Acetone	ND	200	19	14064	ug/L
MKTF-23	8/21/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-23	8/21/2015	Benzene	**3000**	200	13	5	ug/L
MKTF-23	8/21/2015	1,1,1-Trichloroethane	31	20	1.6	200	ug/L
MKTF-23	8/21/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-23	8/21/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-23	8/21/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-23	8/21/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-23	8/21/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-23	8/21/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-23	8/21/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-23	8/21/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-23	8/21/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-23	8/21/2015	1,1-Dichloroethane	**130**	20	8	25	ug/L
MKTF-23	8/21/2015	1,1-Dichloroethene	**54**	20	2	7	ug/L
MKTF-23	8/21/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-23	8/21/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-23	8/21/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-23	8/21/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-23	8/21/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-23	8/21/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-23	8/21/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-23	8/21/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-23	8/21/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-23	8/21/2015	1,2,4-Trimethylbenzene	**920**	20	3.2	56	ug/L
MKTF-23	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-23	8/21/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-23	8/21/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-23	8/21/2015	Isopropylbenzene	29	20	3	447	ug/L
MKTF-23	8/21/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-23	8/21/2015	Ethylbenzene	420	20	2	700	ug/L
MKTF-23	8/21/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-23	8/21/2015	n-Propylbenzene	54	20	3.3	660	ug/L
MKTF-23	8/21/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-23	8/21/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-23	8/21/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-23	8/21/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-23	8/21/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-23	8/21/2015	1,3,5-Trimethylbenzene	**240**	20	2.5	60	ug/L
MKTF-23	8/21/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-23	8/21/2015	Toluene	**2700**	200	22	1000	ug/L
MKTF-23	8/21/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-23	8/21/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-23	8/21/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-23	8/21/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-23	8/21/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-23	8/21/2015	cis-1,2-Dichloroethene	45	20	1.6	70	ug/L
MKTF-23	8/21/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-23	8/21/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	8/21/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	8/21/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-23	8/21/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	8/21/2015	Xylenes, Total	**6200**	300	56	620	ug/L
MKTF-23	8/21/2015	MTBE	**1200**	20	3.5	143	ug/L
MKTF-23	8/21/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	8/21/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	11/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-23	11/9/2015	Acetone	ND	200	19	14064	ug/L
MKTF-23	11/9/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-23	11/9/2015	Benzene	**2600**	200	13	5	ug/L
MKTF-23	11/9/2015	1,1,1-Trichloroethane	27	20	1.6	200	ug/L
MKTF-23	11/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-23	11/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-23	11/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-23	11/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-23	11/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-23	11/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-23	11/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-23	11/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-23	11/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-23	11/9/2015	1,1-Dichloroethane	**110**	20	8	25	ug/L
MKTF-23	11/9/2015	1,1-Dichloroethene	**49**	20	2	7	ug/L
MKTF-23	11/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-23	11/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-23	11/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-23	11/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-23	11/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-23	11/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-23	11/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-23	11/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-23	11/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-23	11/9/2015	1,2,4-Trimethylbenzene	**1400**	20	3.2	56	ug/L
MKTF-23	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-23	11/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-23	11/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-23	11/9/2015	Isopropylbenzene	48	20	3	447	ug/L
MKTF-23	11/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-23	11/9/2015	Ethylbenzene	570	20	2	700	ug/L
MKTF-23	11/9/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-23	11/9/2015	n-Propylbenzene	92	20	3.3	660	ug/L
MKTF-23	11/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-23	11/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-23	11/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-23	11/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-23	11/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-23	11/9/2015	1,3,5-Trimethylbenzene	**380**	20	2.5	60	ug/L
MKTF-23	11/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-23	11/9/2015	Toluene	**3000**	200	22	1000	ug/L
MKTF-23	11/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-23	11/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-23	11/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-23	11/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-23	11/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-23	11/9/2015	cis-1,2-Dichloroethene	49	20	1.6	70	ug/L
MKTF-23	11/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-23	11/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	11/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-23	11/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-23	11/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	11/9/2015	Xylenes, Total	**7800**	300	56	620	ug/L
MKTF-23	11/9/2015	MTBE	**1400**	20	3.5	143	ug/L
MKTF-23	11/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	11/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-23	2/25/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-23	2/25/2016	Acetone	ND	200	18	14064	ug/L
MKTF-23	2/25/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-23	2/25/2016	Benzene	**3100**	200	19	5	ug/L
MKTF-23	2/25/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-23	2/25/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-23	2/25/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-23	2/25/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-23	2/25/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-23	2/25/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-23	2/25/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-23	2/25/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-23	2/25/2016	Bromoform	ND	20	2	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-23	2/25/2016	1,1-Dichloroethane	**110**	20	2.2	25	ug/L
MKTF-23	2/25/2016	1,1-Dichloroethene	**58**	20	1.5	7	ug/L
MKTF-23	2/25/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-23	2/25/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-23	2/25/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-23	2/25/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-23	2/25/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-23	2/25/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-23	2/25/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-23	2/25/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-23	2/25/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-23	2/25/2016	1,2,4-Trimethylbenzene	**1300**	20	2.1	56	ug/L
MKTF-23	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-23	2/25/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-23	2/25/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-23	2/25/2016	Isopropylbenzene	29	20	2	447	ug/L
MKTF-23	2/25/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-23	2/25/2016	Ethylbenzene	310	20	2.2	700	ug/L
MKTF-23	2/25/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-23	2/25/2016	n-Propylbenzene	48	20	2.6	660	ug/L
MKTF-23	2/25/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-23	2/25/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-23	2/25/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-23	2/25/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-23	2/25/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-23	2/25/2016	1,3,5-Trimethylbenzene	**350**	20	2.3	60	ug/L
MKTF-23	2/25/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-23	2/25/2016	Toluene	**1200**	20	1.8	1000	ug/L
MKTF-23	2/25/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-23	2/25/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-23	2/25/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-23	2/25/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-23	2/25/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-23	2/25/2016	cis-1,2-Dichloroethene	36	20	2.5	70	ug/L
MKTF-23	2/25/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-23	2/25/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-23	2/25/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-23	2/25/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-23	2/25/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-23	2/25/2016	Xylenes, Total	**6700**	300	65	620	ug/L
MKTF-23	2/25/2016	MTBE	**1600**	20	4.2	143	ug/L
MKTF-23	2/25/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-23	2/25/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-23	6/10/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-23	6/10/2016	Acetone	ND	100	49	14064	ug/L
MKTF-23	6/10/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-23	6/10/2016	Benzene	**3200**	50	4.8	5	ug/L
MKTF-23	6/10/2016	1,1,1-Trichloroethane	16	10	0.91	200	ug/L
MKTF-23	6/10/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-23	6/10/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-23	6/10/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-23	6/10/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-23	6/10/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-23	6/10/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-23	6/10/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-23	6/10/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-23	6/10/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-23	6/10/2016	1,1-Dichloroethane	**96**	10	1.1	25	ug/L
MKTF-23	6/10/2016	1,1-Dichloroethene	**56**	10	1.1	7	ug/L
MKTF-23	6/10/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-23	6/10/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-23	6/10/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-23	6/10/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-23	6/10/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-23	6/10/2016	Trichloroethene	*4.3*	*10*	1.8	5	ug/L
MKTF-23	6/10/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-23	6/10/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-23	6/10/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-23	6/10/2016	1,2,4-Trimethylbenzene	**1500**	50	5.5	56	ug/L
MKTF-23	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-23	6/10/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-23	6/10/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-23	6/10/2016	Isopropylbenzene	33	10	1	447	ug/L
MKTF-23	6/10/2016	p-Isopropyltoluene	20	10	1.4	NA	ug/L
MKTF-23	6/10/2016	Ethylbenzene	300	10	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/10/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-23	6/10/2016	n-Propylbenzene	65	10	1.3	660	ug/L
MKTF-23	6/10/2016	n-Butylbenzene	74	30	1.6	1000	ug/L
MKTF-23	6/10/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-23	6/10/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-23	6/10/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-23	6/10/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-23	6/10/2016	1,3,5-Trimethylbenzene	**520**	10	1.2	60	ug/L
MKTF-23	6/10/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-23	6/10/2016	Toluene	980	10	1.2	1000	ug/L
MKTF-23	6/10/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-23	6/10/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-23	6/10/2016	Tetrachloroethene	*1.5*	*10*	1.5	5	ug/L
MKTF-23	6/10/2016	sec-Butylbenzene	22	10	1.2	2000	ug/L
MKTF-23	6/10/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-23	6/10/2016	cis-1,2-Dichloroethene	34	10	1.2	70	ug/L
MKTF-23	6/10/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-23	6/10/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-23	6/10/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-23	6/10/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-23	6/10/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-23	6/10/2016	Xylenes, Total	**6100**	75	18	620	ug/L
MKTF-23	6/10/2016	MTBE	**1400**	10	2.1	143	ug/L
MKTF-23	6/10/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-23	6/10/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-23	10/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
MKTF-23	10/29/2019	1,1,1-Trichloroethane	18	100	17.292157	200	ug/L
MKTF-23	10/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
MKTF-23	10/29/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
MKTF-23	10/29/2019	1,1-Dichloroethane	**61**	100	14.08586	25	ug/L
MKTF-23	10/29/2019	1,1-Dichloroethene	**42**	100	20.538818	7	ug/L
MKTF-23	10/29/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
MKTF-23	10/29/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
MKTF-23	10/29/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
MKTF-23	10/29/2019	1,2,4-Trimethylbenzene	**910**	100	21.319909	56	ug/L
MKTF-23	10/29/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
MKTF-23	10/29/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
MKTF-23	10/29/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
MKTF-23	10/29/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
MKTF-23	10/29/2019	1,3,5-Trimethylbenzene	**260**	100	18.865985	60	ug/L
MKTF-23	10/29/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
MKTF-23	10/29/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
MKTF-23	10/29/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
MKTF-23	10/29/2019	1-Methylnaphthalene	99	400	31.495448	NA	ug/L
MKTF-23	10/29/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
MKTF-23	10/29/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
MKTF-23	10/29/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
MKTF-23	10/29/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
MKTF-23	10/29/2019	2-Methylnaphthalene	**120**	400	34.537601		ug/L
MKTF-23	10/29/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
MKTF-23	10/29/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
MKTF-23	10/29/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
MKTF-23	10/29/2019	Acetone	ND	1000	119.939642	14064	ug/L
MKTF-23	10/29/2019	Benzene	**4800**	100	16.663906	5	ug/L
MKTF-23	10/29/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
MKTF-23	10/29/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
MKTF-23	10/29/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
MKTF-23	10/29/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
MKTF-23	10/29/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
MKTF-23	10/29/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
MKTF-23	10/29/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
MKTF-23	10/29/2019	Chloroethane	ND	200	17.780262	20857	ug/L
MKTF-23	10/29/2019	Chloroform	ND	100	12.189055	100	ug/L
MKTF-23	10/29/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
MKTF-23	10/29/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
MKTF-23	10/29/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
MKTF-23	10/29/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
MKTF-23	10/29/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
MKTF-23	10/29/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
MKTF-23	10/29/2019	Ethylbenzene	**1200**	100	13.23408	700	ug/L
MKTF-23	10/29/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
MKTF-23	10/29/2019	Isopropylbenzene	34	100	19.152227	447	ug/L
MKTF-23	10/29/2019	MTBE	**330**	100	45.609498	143	ug/L
MKTF-23	10/29/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
MKTF-23	10/29/2019	Naphthalene	**260**	200	27.507134	30	ug/L
MKTF-23	10/29/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	10/29/2019	n-Propylbenzene	100	100	21.4308	660	ug/L
MKTF-23	10/29/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
MKTF-23	10/29/2019	Styrene	ND	100	19.132336	100	ug/L
MKTF-23	10/29/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
MKTF-23	10/29/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
MKTF-23	10/29/2019	Toluene	**8300**	100	35.043621	1000	ug/L
MKTF-23	10/29/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
MKTF-23	10/29/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
MKTF-23	10/29/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
MKTF-23	10/29/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
MKTF-23	10/29/2019	Vinyl Chloride	**53**	100	17.909928	2	ug/L
MKTF-23	10/29/2019	Xylenes, Total	**7100**	150	45.441493	620	ug/L
MKTF-23	10/29/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-24	4/8/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-24	4/8/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-24	4/8/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-24	4/8/2014	Benzene	**450**	10	1.5	5	ug/L
MKTF-24	4/8/2014	1,1,1-Trichloroethane	21	1	0.12	200	ug/L
MKTF-24	4/8/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-24	4/8/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-24	4/8/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-24	4/8/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-24	4/8/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-24	4/8/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-24	4/8/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-24	4/8/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-24	4/8/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-24	4/8/2014	1,1-Dichloroethane	**200**	10	2.8	25	ug/L
MKTF-24	4/8/2014	1,1-Dichloroethene	**88**	1	0.21	7	ug/L
MKTF-24	4/8/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-24	4/8/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-24	4/8/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-24	4/8/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-24	4/8/2014	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-24	4/8/2014	Trichloroethene	**5.2**	1	0.19	5	ug/L
MKTF-24	4/8/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-24	4/8/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-24	4/8/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-24	4/8/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-24	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-24	4/8/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-24	4/8/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-24	4/8/2014	Isopropylbenzene	20	1	0.16	447	ug/L
MKTF-24	4/8/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-24	4/8/2014	Ethylbenzene	65	1	0.13	700	ug/L
MKTF-24	4/8/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-24	4/8/2014	n-Propylbenzene	38	1	0.14	660	ug/L
MKTF-24	4/8/2014	n-Butylbenzene	9.1	3	0.21	1000	ug/L
MKTF-24	4/8/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-24	4/8/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-24	4/8/2014	1,2-Dichloroethane	**14**	1	0.26	5	ug/L
MKTF-24	4/8/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-24	4/8/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-24	4/8/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-24	4/8/2014	Toluene	6.7	1	0.17	1000	ug/L
MKTF-24	4/8/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-24	4/8/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-24	4/8/2014	Tetrachloroethene	1.9	1	0.2	5	ug/L
MKTF-24	4/8/2014	sec-Butylbenzene	5	1	0.15	2000	ug/L
MKTF-24	4/8/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-24	4/8/2014	cis-1,2-Dichloroethene	57	1	0.12	70	ug/L
MKTF-24	4/8/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-24	4/8/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-24	4/8/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-24	4/8/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-24	4/8/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-24	4/8/2014	Xylenes, Total	2.3	1.5	0.38	620	ug/L
MKTF-24	4/8/2014	MTBE	**180**	1	0.25	143	ug/L
MKTF-24	4/8/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-24	4/8/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-24	9/24/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-24	9/24/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-24	9/24/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-24	9/24/2014	Benzene	**1600**	20	3.1	5	ug/L
MKTF-24	9/24/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-24	9/24/2014	Bromomethane	ND	6	0.83	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/24/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-24	9/24/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-24	9/24/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-24	9/24/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-24	9/24/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-24	9/24/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-24	9/24/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-24	9/24/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-24	9/24/2014	1,1-Dichloroethane	**140**	2	0.57	25	ug/L
MKTF-24	9/24/2014	1,1-Dichloroethene	**67**	2	0.43	7	ug/L
MKTF-24	9/24/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-24	9/24/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-24	9/24/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-24	9/24/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-24	9/24/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-24	9/24/2014	Trichloroethene	5	2	0.39	5	ug/L
MKTF-24	9/24/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-24	9/24/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-24	9/24/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-24	9/24/2014	1,2,4-Trimethylbenzene	2.3	2	0.25	56	ug/L
MKTF-24	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-24	9/24/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-24	9/24/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-24	9/24/2014	Isopropylbenzene	24	2	0.32	447	ug/L
MKTF-24	9/24/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-24	9/24/2014	Ethylbenzene	58	2	0.25	700	ug/L
MKTF-24	9/24/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-24	9/24/2014	n-Propylbenzene	39	2	0.28	660	ug/L
MKTF-24	9/24/2014	n-Butylbenzene	8.7	6	0.43	1000	ug/L
MKTF-24	9/24/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-24	9/24/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-24	9/24/2014	1,2-Dichloroethane	**9.8**	2	0.53	5	ug/L
MKTF-24	9/24/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-24	9/24/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-24	9/24/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-24	9/24/2014	Toluene	8.7	2	0.34	1000	ug/L
MKTF-24	9/24/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-24	9/24/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-24	9/24/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-24	9/24/2014	sec-Butylbenzene	6.5	2	0.31	2000	ug/L
MKTF-24	9/24/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-24	9/24/2014	cis-1,2-Dichloroethene	44	2	0.24	70	ug/L
MKTF-24	9/24/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-24	9/24/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-24	9/24/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-24	9/24/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-24	9/24/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-24	9/24/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-24	9/24/2014	MTBE	**170**	2	0.5	143	ug/L
MKTF-24	9/24/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-24	9/24/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-24	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-24	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-24	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-24	11/14/2014	Benzene	**1600**	50	7.7	5	ug/L
MKTF-24	11/14/2014	1,1,1-Trichloroethane	4.6	1	0.12	200	ug/L
MKTF-24	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-24	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-24	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-24	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-24	11/14/2014	Vinyl Chloride	**14**	1	0.46	2	ug/L
MKTF-24	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-24	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-24	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-24	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-24	11/14/2014	1,1-Dichloroethane	**150**	10	2.8	25	ug/L
MKTF-24	11/14/2014	1,1-Dichloroethene	**58**	1	0.21	7	ug/L
MKTF-24	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-24	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-24	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-24	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-24	11/14/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-24	11/14/2014	Trichloroethene	4.9	1	0.19	5	ug/L
MKTF-24	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-24	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-24	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/14/2014	1,2,4-Trimethylbenzene	2.7	1	0.12	56	ug/L
MKTF-24	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-24	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-24	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-24	11/14/2014	Isopropylbenzene	18	1	0.16	447	ug/L
MKTF-24	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-24	11/14/2014	Ethylbenzene	49	1	0.13	700	ug/L
MKTF-24	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-24	11/14/2014	n-Propylbenzene	28	1	0.14	660	ug/L
MKTF-24	11/14/2014	n-Butylbenzene	5.8	3	0.21	1000	ug/L
MKTF-24	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-24	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-24	11/14/2014	1,2-Dichloroethane	**9.6**	1	0.26	5	ug/L
MKTF-24	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-24	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-24	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-24	11/14/2014	Toluene	9.5	1	0.17	1000	ug/L
MKTF-24	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-24	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-24	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-24	11/14/2014	sec-Butylbenzene	4	1	0.15	2000	ug/L
MKTF-24	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-24	11/14/2014	cis-1,2-Dichloroethene	39	1	0.12	70	ug/L
MKTF-24	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-24	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-24	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-24	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-24	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-24	11/14/2014	Xylenes, Total	2.9	1.5	0.38	620	ug/L
MKTF-24	11/14/2014	MTBE	63	1	0.25	143	ug/L
MKTF-24	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-24	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-24	3/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-24	3/11/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-24	3/11/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-24	3/11/2015	Benzene	**2600**	500	33	5	ug/L
MKTF-24	3/11/2015	1,1,1-Trichloroethane	10	5	0.39	200	ug/L
MKTF-24	3/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-24	3/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-24	3/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-24	3/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-24	3/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-24	3/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-24	3/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-24	3/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-24	3/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-24	3/11/2015	1,1-Dichloroethane	**100**	5	2	25	ug/L
MKTF-24	3/11/2015	1,1-Dichloroethene	**51**	5	0.5	7	ug/L
MKTF-24	3/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-24	3/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-24	3/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-24	3/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-24	3/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-24	3/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-24	3/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-24	3/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-24	3/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-24	3/11/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
MKTF-24	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-24	3/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-24	3/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-24	3/11/2015	Isopropylbenzene	16	5	0.76	447	ug/L
MKTF-24	3/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-24	3/11/2015	Ethylbenzene	31	5	0.51	700	ug/L
MKTF-24	3/11/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-24	3/11/2015	n-Propylbenzene	24	5	0.82	660	ug/L
MKTF-24	3/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-24	3/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-24	3/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-24	3/11/2015	1,2-Dichloroethane	**7**	5	0.88	5	ug/L
MKTF-24	3/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-24	3/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-24	3/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-24	3/11/2015	Toluene	12	5	0.54	1000	ug/L
MKTF-24	3/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-24	3/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-24	3/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-24	3/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-24	3/11/2015	cis-1,2-Dichloroethene	35	5	0.4	70	ug/L
MKTF-24	3/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-24	3/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-24	3/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-24	3/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-24	3/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-24	3/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-24	3/11/2015	MTBE	**170**	5	0.87	143	ug/L
MKTF-24	3/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	3/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-24	6/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-24	6/10/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-24	6/10/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-24	6/10/2015	Benzene	**2900**	50	3.3	5	ug/L
MKTF-24	6/10/2015	1,1,1-Trichloroethane	11	5	0.39	200	ug/L
MKTF-24	6/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-24	6/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-24	6/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-24	6/10/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-24	6/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-24	6/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-24	6/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-24	6/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-24	6/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-24	6/10/2015	1,1-Dichloroethane	**120**	5	2	25	ug/L
MKTF-24	6/10/2015	1,1-Dichloroethene	**58**	5	0.5	7	ug/L
MKTF-24	6/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-24	6/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-24	6/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-24	6/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-24	6/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-24	6/10/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-24	6/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-24	6/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-24	6/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-24	6/10/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
MKTF-24	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-24	6/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-24	6/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-24	6/10/2015	Isopropylbenzene	11	5	0.76	447	ug/L
MKTF-24	6/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-24	6/10/2015	Ethylbenzene	46	5	0.51	700	ug/L
MKTF-24	6/10/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-24	6/10/2015	n-Propylbenzene	16	5	0.82	660	ug/L
MKTF-24	6/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-24	6/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-24	6/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-24	6/10/2015	1,2-Dichloroethane	**8.3**	5	0.88	5	ug/L
MKTF-24	6/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-24	6/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-24	6/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-24	6/10/2015	Toluene	15	5	0.54	1000	ug/L
MKTF-24	6/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-24	6/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-24	6/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-24	6/10/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-24	6/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-24	6/10/2015	cis-1,2-Dichloroethene	36	5	0.4	70	ug/L
MKTF-24	6/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-24	6/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-24	6/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-24	6/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-24	6/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-24	6/10/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-24	6/10/2015	MTBE	**170**	5	0.87	143	ug/L
MKTF-24	6/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	6/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-24	8/20/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-24	8/20/2015	Acetone	ND	200	19	14064	ug/L
MKTF-24	8/20/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-24	8/20/2015	Benzene	**2700**	200	13	5	ug/L
MKTF-24	8/20/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-24	8/20/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-24	8/20/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-24	8/20/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-24	8/20/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-24	8/20/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-24	8/20/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-24	8/20/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-24	8/20/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-24	8/20/2015	1,1-Dichloroethane	**110**	20	8	25	ug/L
MKTF-24	8/20/2015	1,1-Dichloroethene	**49**	20	2	7	ug/L
MKTF-24	8/20/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-24	8/20/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-24	8/20/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-24	8/20/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-24	8/20/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-24	8/20/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-24	8/20/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-24	8/20/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-24	8/20/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-24	8/20/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-24	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-24	8/20/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-24	8/20/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-24	8/20/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-24	8/20/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-24	8/20/2015	Ethylbenzene	56	20	2	700	ug/L
MKTF-24	8/20/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-24	8/20/2015	n-Propylbenzene	28	20	3.3	660	ug/L
MKTF-24	8/20/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-24	8/20/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-24	8/20/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-24	8/20/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-24	8/20/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-24	8/20/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-24	8/20/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-24	8/20/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-24	8/20/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-24	8/20/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-24	8/20/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-24	8/20/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-24	8/20/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-24	8/20/2015	cis-1,2-Dichloroethene	28	20	1.6	70	ug/L
MKTF-24	8/20/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-24	8/20/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	8/20/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-24	8/20/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-24	8/20/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	8/20/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-24	8/20/2015	MTBE	**200**	20	3.5	143	ug/L
MKTF-24	8/20/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	8/20/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	11/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-24	11/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-24	11/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-24	11/4/2015	Benzene	**2800**	200	13	5	ug/L
MKTF-24	11/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-24	11/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-24	11/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-24	11/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-24	11/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-24	11/4/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-24	11/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-24	11/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-24	11/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-24	11/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-24	11/4/2015	1,1-Dichloroethane	**120**	20	8	25	ug/L
MKTF-24	11/4/2015	1,1-Dichloroethene	**46**	20	2	7	ug/L
MKTF-24	11/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-24	11/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-24	11/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-24	11/4/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-24	11/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-24	11/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-24	11/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-24	11/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-24	11/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
MKTF-24	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-24	11/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-24	11/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-24	11/4/2015	Isopropylbenzene	ND	20	3	447	ug/L
MKTF-24	11/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-24	11/4/2015	Ethylbenzene	54	20	2	700	ug/L
MKTF-24	11/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-24	11/4/2015	n-Propylbenzene	33	20	3.3	660	ug/L
MKTF-24	11/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-24	11/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-24	11/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-24	11/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-24	11/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-24	11/4/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-24	11/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-24	11/4/2015	Toluene	ND	20	2.2	1000	ug/L
MKTF-24	11/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-24	11/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-24	11/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-24	11/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-24	11/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-24	11/4/2015	cis-1,2-Dichloroethene	34	20	1.6	70	ug/L
MKTF-24	11/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-24	11/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	11/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-24	11/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-24	11/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	11/4/2015	Xylenes, Total	ND	30	5.6	620	ug/L
MKTF-24	11/4/2015	MTBE	**210**	20	3.5	143	ug/L
MKTF-24	11/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	11/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-24	2/22/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/22/2016	Acetone	ND	200	18	14064	ug/L
MKTF-24	2/22/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	2/22/2016	Benzene	**5600**	200	19	5	ug/L
MKTF-24	2/22/2016	1,1,1-Trichloroethane	ND	20	1.3	200	ug/L
MKTF-24	2/22/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	2/22/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	2/22/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	2/22/2016	Chloroethane	ND	40	2.9	20857	ug/L
MKTF-24	2/22/2016	Vinyl Chloride	*ND*	*20*	1.3	2	ug/L
MKTF-24	2/22/2016	Methylene Chloride	*ND*	*60*	1.3	5	ug/L
MKTF-24	2/22/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	2/22/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	2/22/2016	Bromodichloromethane	*ND*	*20*	2	1.34	ug/L
MKTF-24	2/22/2016	1,1-Dichloroethane	**93**	20	2.2	25	ug/L
MKTF-24	2/22/2016	1,1-Dichloroethene	**51**	20	1.5	7	ug/L
MKTF-24	2/22/2016	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	2/22/2016	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-24	2/22/2016	1,2-Dichloropropane	*ND*	*20*	0.94	5	ug/L
MKTF-24	2/22/2016	2-Butanone	ND	200	6.4	5565	ug/L
MKTF-24	2/22/2016	1,1,2-Trichloroethane	*ND*	*20*	1.5	5	ug/L
MKTF-24	2/22/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	2/22/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.1	10	ug/L
MKTF-24	2/22/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	2/22/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	2/22/2016	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
MKTF-24	2/22/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	3.1	0.0033	ug/L
MKTF-24	2/22/2016	1,2,3-Trichloropropane	*ND*	*40*	2.2	0.0084	ug/L
MKTF-24	2/22/2016	tert-Butylbenzene	ND	20	1.9	690	ug/L
MKTF-24	2/22/2016	Isopropylbenzene	37	20	2	447	ug/L
MKTF-24	2/22/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	2/22/2016	Ethylbenzene	310	20	2.2	700	ug/L
MKTF-24	2/22/2016	Styrene	ND	20	1.9	100	ug/L
MKTF-24	2/22/2016	n-Propylbenzene	94	20	2.6	660	ug/L
MKTF-24	2/22/2016	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-24	2/22/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	2/22/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	2/22/2016	1,2-Dichloroethane	*ND*	*20*	1.1	5	ug/L
MKTF-24	2/22/2016	4-Methyl-2-Pentanone	ND	200	3	1243	ug/L
MKTF-24	2/22/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	2/22/2016	Bromobenzene	ND	20	1.6	62	ug/L
MKTF-24	2/22/2016	Toluene	27	20	1.8	1000	ug/L
MKTF-24	2/22/2016	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	2/22/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/22/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	2/22/2016	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-24	2/22/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	2/22/2016	cis-1,2-Dichloroethene	32	20	2.5	70	ug/L
MKTF-24	2/22/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	2/22/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	2/22/2016	2-Hexanone	*ND*	*200*	7.2	38	ug/L
MKTF-24	2/22/2016	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-24	2/22/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	2/22/2016	Xylenes, Total	ND	30	6.5	620	ug/L
MKTF-24	2/22/2016	MTBE	**210**	20	4.2	143	ug/L
MKTF-24	2/22/2016	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-24	2/22/2016	trans-1,3-Dichloropropene	ND	20	1.7	NA	ug/L
MKTF-24	6/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-24	6/8/2016	Acetone	44	50	25	14064	ug/L
MKTF-24	6/8/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-24	6/8/2016	Benzene	**3000**	50	4.8	5	ug/L
MKTF-24	6/8/2016	1,1,1-Trichloroethane	3.6	5	0.46	200	ug/L
MKTF-24	6/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-24	6/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-24	6/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-24	6/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-24	6/8/2016	Vinyl Chloride	**4.9**	5	0.98	2	ug/L
MKTF-24	6/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-24	6/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-24	6/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-24	6/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-24	6/8/2016	1,1-Dichloroethane	**92**	5	0.54	25	ug/L
MKTF-24	6/8/2016	1,1-Dichloroethene	**46**	5	0.54	7	ug/L
MKTF-24	6/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-24	6/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-24	6/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-24	6/8/2016	2-Butanone	12	50	3.7	5565	ug/L
MKTF-24	6/8/2016	1,1,2-Trichloroethane	1.4	5	0.64	5	ug/L
MKTF-24	6/8/2016	Trichloroethene	4.3	5	0.88	5	ug/L
MKTF-24	6/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-24	6/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-24	6/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-24	6/8/2016	1,2,4-Trimethylbenzene	3.2	5	0.55	56	ug/L
MKTF-24	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-24	6/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-24	6/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
MKTF-24	6/8/2016	Isopropylbenzene	13	5	0.52	447	ug/L
MKTF-24	6/8/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-24	6/8/2016	Ethylbenzene	74	5	0.56	700	ug/L
MKTF-24	6/8/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-24	6/8/2016	n-Propylbenzene	22	5	0.66	660	ug/L
MKTF-24	6/8/2016	n-Butylbenzene	4.2	15	0.8	1000	ug/L
MKTF-24	6/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-24	6/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-24	6/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-24	6/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-24	6/8/2016	1,3,5-Trimethylbenzene	0.75	5	0.58	60	ug/L
MKTF-24	6/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-24	6/8/2016	Toluene	18	5	0.59	1000	ug/L
MKTF-24	6/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-24	6/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-24	6/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-24	6/8/2016	sec-Butylbenzene	3.2	5	0.62	2000	ug/L
MKTF-24	6/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-24	6/8/2016	cis-1,2-Dichloroethene	28	5	0.62	70	ug/L
MKTF-24	6/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-24	6/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-24	6/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-24	6/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-24	6/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-24	6/8/2016	Xylenes, Total	6	7.5	1.8	620	ug/L
MKTF-24	6/8/2016	MTBE	**210**	5	1.1	143	ug/L
MKTF-24	6/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-24	6/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-24	9/7/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	9/7/2016	Acetone	ND	200	98	14064	ug/L
MKTF-24	9/7/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	9/7/2016	Benzene	**5300**	200	19	5	ug/L
MKTF-24	9/7/2016	1,1,1-Trichloroethane	3.5	20	1.8	200	ug/L
MKTF-24	9/7/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	9/7/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	9/7/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-24	9/7/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-24	9/7/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-24	9/7/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	9/7/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	9/7/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-24	9/7/2016	1,1-Dichloroethane	**94**	20	2.2	25	ug/L
MKTF-24	9/7/2016	1,1-Dichloroethene	**42**	20	2.1	7	ug/L
MKTF-24	9/7/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-24	9/7/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-24	9/7/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-24	9/7/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-24	9/7/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-24	9/7/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	9/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-24	9/7/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	9/7/2016	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	9/7/2016	1,2,4-Trimethylbenzene	9.3	20	2.2	56	ug/L
MKTF-24	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-24	9/7/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-24	9/7/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-24	9/7/2016	Isopropylbenzene	35	20	2.1	447	ug/L
MKTF-24	9/7/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	9/7/2016	Ethylbenzene	210	20	2.2	700	ug/L
MKTF-24	9/7/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-24	9/7/2016	n-Propylbenzene	65	20	2.6	660	ug/L
MKTF-24	9/7/2016	n-Butylbenzene	15	60	3.2	1000	ug/L
MKTF-24	9/7/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	9/7/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	9/7/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
MKTF-24	9/7/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-24	9/7/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	9/7/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-24	9/7/2016	Toluene	21	20	2.4	1000	ug/L
MKTF-24	9/7/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-24	9/7/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-24	9/7/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	9/7/2016	sec-Butylbenzene	11	20	2.5	2000	ug/L
MKTF-24	9/7/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	9/7/2016	cis-1,2-Dichloroethene	27	20	2.5	70	ug/L
MKTF-24	9/7/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	9/7/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	9/7/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-24	9/7/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-24	9/7/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	9/7/2016	Xylenes, Total	11	30	7.3	620	ug/L
MKTF-24	9/7/2016	MTBE	**170**	20	4.2	143	ug/L
MKTF-24	9/7/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	9/7/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	10/28/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/28/2016	Acetone	ND	200	98	14064	ug/L
MKTF-24	10/28/2016	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	10/28/2016	Benzene	**6100**	200	19	5	ug/L
MKTF-24	10/28/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
MKTF-24	10/28/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	10/28/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	10/28/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	10/28/2016	Chloroethane	ND	40	3.8	20857	ug/L
MKTF-24	10/28/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-24	10/28/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
MKTF-24	10/28/2016	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	10/28/2016	Bromoform	ND	20	2	32.9	ug/L
MKTF-24	10/28/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
MKTF-24	10/28/2016	1,1-Dichloroethane	**88**	20	2.2	25	ug/L
MKTF-24	10/28/2016	1,1-Dichloroethene	**45**	20	2.1	7	ug/L
MKTF-24	10/28/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
MKTF-24	10/28/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
MKTF-24	10/28/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/28/2016	2-Butanone	ND	200	15	5565	ug/L
MKTF-24	10/28/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
MKTF-24	10/28/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	10/28/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
MKTF-24	10/28/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	10/28/2016	2-Chlorotoluene	ND	20	8	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/28/2016	1,2,4-Trimethylbenzene	10	20	2.2	56	ug/L
MKTF-24	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
MKTF-24	10/28/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
MKTF-24	10/28/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
MKTF-24	10/28/2016	Isopropylbenzene	39	20	2.1	447	ug/L
MKTF-24	10/28/2016	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	10/28/2016	Ethylbenzene	300	20	2.2	700	ug/L
MKTF-24	10/28/2016	Styrene	ND	20	2.2	100	ug/L
MKTF-24	10/28/2016	n-Propylbenzene	93	20	2.6	660	ug/L
MKTF-24	10/28/2016	n-Butylbenzene	17	60	3.2	1000	ug/L
MKTF-24	10/28/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
MKTF-24	10/28/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
MKTF-24	10/28/2016	1,2-Dichloroethane	**7.9**	20	2.3	5	ug/L
MKTF-24	10/28/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
MKTF-24	10/28/2016	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	10/28/2016	Bromobenzene	ND	20	2	62	ug/L
MKTF-24	10/28/2016	Toluene	25	20	2.4	1000	ug/L
MKTF-24	10/28/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
MKTF-24	10/28/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
MKTF-24	10/28/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	10/28/2016	sec-Butylbenzene	12	20	2.5	2000	ug/L
MKTF-24	10/28/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	10/28/2016	cis-1,2-Dichloroethene	35	20	2.5	70	ug/L
MKTF-24	10/28/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
MKTF-24	10/28/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	10/28/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
MKTF-24	10/28/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
MKTF-24	10/28/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	10/28/2016	Xylenes, Total	15	30	7.3	620	ug/L
MKTF-24	10/28/2016	MTBE	**230**	20	4.2	143	ug/L
MKTF-24	10/28/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	10/28/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
MKTF-24	3/29/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	3/29/2017	Acetone	ND	200	18	14064	ug/L
MKTF-24	3/29/2017	Chloroform	ND	20	1.8	100	ug/L
MKTF-24	3/29/2017	Benzene	**3000**	200	19	5	ug/L
MKTF-24	3/29/2017	1,1,1-Trichloroethane	3.1	20	1.5	200	ug/L
MKTF-24	3/29/2017	Bromomethane	*ND*	*60*	16	7.54	ug/L
MKTF-24	3/29/2017	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
MKTF-24	3/29/2017	Dibromomethane	*ND*	*20*	2.4	8	ug/L
MKTF-24	3/29/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	3/29/2017	Vinyl Chloride	**16**	20	3.6	2	ug/L
MKTF-24	3/29/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	3/29/2017	Carbon Disulfide	ND	200	12	810	ug/L
MKTF-24	3/29/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	3/29/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	3/29/2017	1,1-Dichloroethane	**79**	20	2.1	25	ug/L
MKTF-24	3/29/2017	1,1-Dichloroethene	**35**	20	1.6	7	ug/L
MKTF-24	3/29/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	3/29/2017	Dichlorodifluoromethane	ND	20	6.5	197	ug/L
MKTF-24	3/29/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	3/29/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	3/29/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	3/29/2017	Trichloroethene	*ND*	*20*	3.5	5	ug/L
MKTF-24	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	3/29/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	3/29/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	3/29/2017	1,2,4-Trimethylbenzene	ND	20	2.1	56	ug/L
MKTF-24	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	3/29/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	3/29/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	3/29/2017	Isopropylbenzene	10	20	2	447	ug/L
MKTF-24	3/29/2017	p-Isopropyltoluene	ND	20	2.8	NA	ug/L
MKTF-24	3/29/2017	Ethylbenzene	42	20	2.2	700	ug/L
MKTF-24	3/29/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	3/29/2017	n-Propylbenzene	18	20	2.6	660	ug/L
MKTF-24	3/29/2017	n-Butylbenzene	ND	60	3.2	1000	ug/L
MKTF-24	3/29/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	3/29/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	3/29/2017	1,2-Dichloroethane	**10**	20	2.3	5	ug/L
MKTF-24	3/29/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	3/29/2017	1,3,5-Trimethylbenzene	ND	20	2.3	60	ug/L
MKTF-24	3/29/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	3/29/2017	Toluene	15	20	1.8	1000	ug/L
MKTF-24	3/29/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	3/29/2017	Dibromochloromethane	*ND*	*20*	1.6	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	3/29/2017	sec-Butylbenzene	6.9	20	2	2000	ug/L
MKTF-24	3/29/2017	1,3-Dichloropropane	ND	20	3.1	370	ug/L
MKTF-24	3/29/2017	cis-1,2-Dichloroethene	22	20	4.1	70	ug/L
MKTF-24	3/29/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	3/29/2017	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-24	3/29/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	3/29/2017	2,2-Dichloropropane	ND	40	2.4	NA	ug/L
MKTF-24	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-24	3/29/2017	Xylenes, Total	ND	30	6.5	620	ug/L
MKTF-24	3/29/2017	MTBE	**190**	20	3	143	ug/L
MKTF-24	3/29/2017	cis-1,3-Dichloropropene	ND	20	2	NA	ug/L
MKTF-24	3/29/2017	trans-1,3-Dichloropropene	ND	20	1.8	NA	ug/L
MKTF-24	6/5/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	6/5/2017	Acetone	ND	200	16	14064	ug/L
MKTF-24	6/5/2017	Chloroform	ND	20	8	100	ug/L
MKTF-24	6/5/2017	Benzene	**6000**	200	12	5	ug/L
MKTF-24	6/5/2017	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	6/5/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	6/5/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	6/5/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	6/5/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	6/5/2017	Vinyl Chloride	**27**	20	3.6	2	ug/L
MKTF-24	6/5/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	6/5/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	6/5/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	6/5/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	6/5/2017	1,1-Dichloroethane	**88**	20	8	25	ug/L
MKTF-24	6/5/2017	1,1-Dichloroethene	**39**	20	1.6	7	ug/L
MKTF-24	6/5/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	6/5/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	6/5/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	6/5/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	6/5/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	6/5/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	6/5/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	6/5/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	6/5/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	6/5/2017	1,2,4-Trimethylbenzene	4.2	20	2.3	56	ug/L
MKTF-24	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	6/5/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	6/5/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	6/5/2017	Isopropylbenzene	35	20	1	447	ug/L
MKTF-24	6/5/2017	p-Isopropyltoluene	2.7	20	1.9	NA	ug/L
MKTF-24	6/5/2017	Ethylbenzene	300	20	1.9	700	ug/L
MKTF-24	6/5/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	6/5/2017	n-Propylbenzene	89	20	1.5	660	ug/L
MKTF-24	6/5/2017	n-Butylbenzene	15	60	2.6	1000	ug/L
MKTF-24	6/5/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	6/5/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	6/5/2017	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-24	6/5/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	6/5/2017	1,3,5-Trimethylbenzene	2.6	20	1.7	60	ug/L
MKTF-24	6/5/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	6/5/2017	Toluene	24	20	1.3	1000	ug/L
MKTF-24	6/5/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	6/5/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	6/5/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	6/5/2017	sec-Butylbenzene	8.8	20	2.2	2000	ug/L
MKTF-24	6/5/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	6/5/2017	cis-1,2-Dichloroethene	29	20	4.1	70	ug/L
MKTF-24	6/5/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	6/5/2017	Pentafluorobenzene	**200**	0	0		None
MKTF-24	6/5/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	6/5/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	6/5/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	6/5/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	6/5/2017	Xylenes, Total	8.3	30	6.4	620	ug/L
MKTF-24	6/5/2017	MTBE	**200**	20	4.8	143	ug/L
MKTF-24	6/5/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	6/5/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	10/3/2017	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/3/2017	Acetone	ND	200	16	14064	ug/L
MKTF-24	10/3/2017	Chloroform	ND	20	8	100	ug/L
MKTF-24	10/3/2017	Benzene	**2600**	200	12	5	ug/L
MKTF-24	10/3/2017	1,1,1-Trichloroethane	4.3	20	1.5	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/3/2017	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	10/3/2017	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	10/3/2017	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	10/3/2017	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	10/3/2017	Vinyl Chloride	**18**	20	3.6	2	ug/L
MKTF-24	10/3/2017	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	10/3/2017	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	10/3/2017	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	10/3/2017	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	10/3/2017	1,1-Dichloroethane	**72**	20	8	25	ug/L
MKTF-24	10/3/2017	1,1-Dichloroethene	**35**	20	1.6	7	ug/L
MKTF-24	10/3/2017	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	10/3/2017	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	10/3/2017	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	10/3/2017	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	10/3/2017	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	10/3/2017	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	10/3/2017	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	10/3/2017	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	10/3/2017	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	10/3/2017	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	10/3/2017	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	10/3/2017	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	10/3/2017	Isopropylbenzene	19	20	1	447	ug/L
MKTF-24	10/3/2017	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-24	10/3/2017	Ethylbenzene	71	20	1.9	700	ug/L
MKTF-24	10/3/2017	Styrene	ND	20	3.1	100	ug/L
MKTF-24	10/3/2017	n-Propylbenzene	34	20	1.5	660	ug/L
MKTF-24	10/3/2017	n-Butylbenzene	4.6	60	2.6	1000	ug/L
MKTF-24	10/3/2017	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	10/3/2017	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	10/3/2017	1,2-Dichloroethane	**9.9**	20	8	5	ug/L
MKTF-24	10/3/2017	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	10/3/2017	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	10/3/2017	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	10/3/2017	Toluene	19	20	1.3	1000	ug/L
MKTF-24	10/3/2017	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	10/3/2017	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	10/3/2017	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	10/3/2017	sec-Butylbenzene	3.1	20	2.2	2000	ug/L
MKTF-24	10/3/2017	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	10/3/2017	cis-1,2-Dichloroethene	18	20	4.1	70	ug/L
MKTF-24	10/3/2017	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	10/3/2017	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	10/3/2017	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	10/3/2017	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	10/3/2017	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	10/3/2017	Xylenes, Total	ND	30	6.4	620	ug/L
MKTF-24	10/3/2017	MTBE	**160**	20	4.8	143	ug/L
MKTF-24	10/3/2017	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	10/3/2017	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	11/20/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-24	11/20/2017	Acetone	16	100	8.2	14064	ug/L
MKTF-24	11/20/2017	Chloroform	ND	10	4	100	ug/L
MKTF-24	11/20/2017	Benzene	**5500**	100	6.2	5	ug/L
MKTF-24	11/20/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
MKTF-24	11/20/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-24	11/20/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-24	11/20/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-24	11/20/2017	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-24	11/20/2017	Vinyl Chloride	**31**	10	1.8	2	ug/L
MKTF-24	11/20/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-24	11/20/2017	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-24	11/20/2017	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-24	11/20/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-24	11/20/2017	1,1-Dichloroethane	**72**	10	4	25	ug/L
MKTF-24	11/20/2017	1,1-Dichloroethene	**24**	10	0.81	7	ug/L
MKTF-24	11/20/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-24	11/20/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-24	11/20/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-24	11/20/2017	2-Butanone	ND	100	11	5565	ug/L
MKTF-24	11/20/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-24	11/20/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
MKTF-24	11/20/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-24	11/20/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-24	11/20/2017	1,2,4-Trimethylbenzene	3.9	10	1.1	56	ug/L
MKTF-24	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-24	11/20/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-24	11/20/2017	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-24	11/20/2017	Isopropylbenzene	42	10	0.51	447	ug/L
MKTF-24	11/20/2017	p-Isopropyltoluene	1.5	10	0.96	NA	ug/L
MKTF-24	11/20/2017	Ethylbenzene	320	10	0.93	700	ug/L
MKTF-24	11/20/2017	Styrene	ND	10	1.6	100	ug/L
MKTF-24	11/20/2017	n-Propylbenzene	91	10	0.74	660	ug/L
MKTF-24	11/20/2017	n-Butylbenzene	14	30	1.3	1000	ug/L
MKTF-24	11/20/2017	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-24	11/20/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-24	11/20/2017	1,2-Dichloroethane	**5.6**	10	4	5	ug/L
MKTF-24	11/20/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-24	11/20/2017	1,3,5-Trimethylbenzene	2.2	10	0.87	60	ug/L
MKTF-24	11/20/2017	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-24	11/20/2017	Toluene	23	10	0.64	1000	ug/L
MKTF-24	11/20/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-24	11/20/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-24	11/20/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-24	11/20/2017	sec-Butylbenzene	7.9	10	1.1	2000	ug/L
MKTF-24	11/20/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-24	11/20/2017	cis-1,2-Dichloroethene	19	10	2	70	ug/L
MKTF-24	11/20/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-24	11/20/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-24	11/20/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-24	11/20/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-24	11/20/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-24	11/20/2017	Xylenes, Total	18	15	3.2	620	ug/L
MKTF-24	11/20/2017	MTBE	**160**	10	2.4	143	ug/L
MKTF-24	11/20/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-24	11/20/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-24	2/6/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/6/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	2/6/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	2/6/2018	Benzene	**6300**	200	12	5	ug/L
MKTF-24	2/6/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	2/6/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	2/6/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	2/6/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	2/6/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	2/6/2018	Vinyl Chloride	**37**	20	3.6	2	ug/L
MKTF-24	2/6/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	2/6/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	2/6/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	2/6/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	2/6/2018	1,1-Dichloroethane	**82**	20	8	25	ug/L
MKTF-24	2/6/2018	1,1-Dichloroethene	**27**	20	1.6	7	ug/L
MKTF-24	2/6/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	2/6/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	2/6/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	2/6/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	2/6/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	2/6/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	2/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	2/6/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	2/6/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	2/6/2018	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	2/6/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	2/6/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	2/6/2018	Isopropylbenzene	43	20	1	447	ug/L
MKTF-24	2/6/2018	p-Isopropyltoluene	ND	20	1.9	NA	ug/L
MKTF-24	2/6/2018	Ethylbenzene	410	20	1.9	700	ug/L
MKTF-24	2/6/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-24	2/6/2018	n-Propylbenzene	95	20	1.5	660	ug/L
MKTF-24	2/6/2018	n-Butylbenzene	ND	60	2.6	1000	ug/L
MKTF-24	2/6/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	2/6/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	2/6/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
MKTF-24	2/6/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	2/6/2018	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	2/6/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	2/6/2018	Toluene	30	20	1.3	1000	ug/L
MKTF-24	2/6/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/6/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	2/6/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	2/6/2018	sec-Butylbenzene	ND	20	2.2	2000	ug/L
MKTF-24	2/6/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	2/6/2018	cis-1,2-Dichloroethene	ND	20	4.1	70	ug/L
MKTF-24	2/6/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	2/6/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	2/6/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	2/6/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	2/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	2/6/2018	Xylenes, Total	ND	30	6.4	620	ug/L
MKTF-24	2/6/2018	MTBE	**170**	20	4.8	143	ug/L
MKTF-24	2/6/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	2/6/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	5/1/2018	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
MKTF-24	5/1/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	5/1/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	5/1/2018	Benzene	**5500**	200	12	5	ug/L
MKTF-24	5/1/2018	1,1,1-Trichloroethane	ND	20	1.5	200	ug/L
MKTF-24	5/1/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	5/1/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	5/1/2018	Dibromomethane	*ND*	*20*	1.8	8	ug/L
MKTF-24	5/1/2018	Chloroethane	ND	40	4.7	20857	ug/L
MKTF-24	5/1/2018	Vinyl Chloride	**31**	20	3.6	2	ug/L
MKTF-24	5/1/2018	Methylene Chloride	*ND*	*60*	2.2	5	ug/L
MKTF-24	5/1/2018	Carbon Disulfide	ND	200	8	810	ug/L
MKTF-24	5/1/2018	Bromoform	ND	20	4.2	32.9	ug/L
MKTF-24	5/1/2018	Bromodichloromethane	*ND*	*20*	3.5	1.34	ug/L
MKTF-24	5/1/2018	1,1-Dichloroethane	**66**	20	8	25	ug/L
MKTF-24	5/1/2018	1,1-Dichloroethene	**16**	20	1.6	7	ug/L
MKTF-24	5/1/2018	Trichlorofluoromethane	ND	20	3.7	1137	ug/L
MKTF-24	5/1/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	5/1/2018	1,2-Dichloropropane	*ND*	*20*	2	5	ug/L
MKTF-24	5/1/2018	2-Butanone	ND	200	23	5565	ug/L
MKTF-24	5/1/2018	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
MKTF-24	5/1/2018	Trichloroethene	*ND*	*20*	2.2	5	ug/L
MKTF-24	5/1/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.7	10	ug/L
MKTF-24	5/1/2018	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
MKTF-24	5/1/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	5/1/2018	1,2,4-Trimethylbenzene	ND	20	2.3	56	ug/L
MKTF-24	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	28	0.0033	ug/L
MKTF-24	5/1/2018	1,2,3-Trichloropropane	*ND*	*40*	7.8	0.0084	ug/L
MKTF-24	5/1/2018	tert-Butylbenzene	ND	20	2.1	690	ug/L
MKTF-24	5/1/2018	Isopropylbenzene	36	20	1	447	ug/L
MKTF-24	5/1/2018	p-Isopropyltoluene	2	20	1.9	NA	ug/L
MKTF-24	5/1/2018	Ethylbenzene	300	20	1.9	700	ug/L
MKTF-24	5/1/2018	Styrene	ND	20	3.1	100	ug/L
MKTF-24	5/1/2018	n-Propylbenzene	76	20	1.5	660	ug/L
MKTF-24	5/1/2018	n-Butylbenzene	12	60	2.6	1000	ug/L
MKTF-24	5/1/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	5/1/2018	1,2-Dibromoethane	*ND*	*20*	2.6	0.05	ug/L
MKTF-24	5/1/2018	1,2-Dichloroethane	**8.3**	20	8	5	ug/L
MKTF-24	5/1/2018	4-Methyl-2-Pentanone	ND	200	14	1243	ug/L
MKTF-24	5/1/2018	1,3,5-Trimethylbenzene	ND	20	1.7	60	ug/L
MKTF-24	5/1/2018	Bromobenzene	ND	20	2.8	62	ug/L
MKTF-24	5/1/2018	Toluene	29	20	1.3	1000	ug/L
MKTF-24	5/1/2018	Chlorobenzene	ND	20	2.1	77.6	ug/L
MKTF-24	5/1/2018	Dibromochloromethane	*ND*	*20*	1.4	1.68	ug/L
MKTF-24	5/1/2018	Tetrachloroethene	*ND*	*20*	2.6	5	ug/L
MKTF-24	5/1/2018	sec-Butylbenzene	8.2	20	2.2	2000	ug/L
MKTF-24	5/1/2018	1,3-Dichloropropane	ND	20	3.3	370	ug/L
MKTF-24	5/1/2018	cis-1,2-Dichloroethene	22	20	4.1	70	ug/L
MKTF-24	5/1/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	5/1/2018	1,1-Dichloropropene	ND	20	1.9	NA	ug/L
MKTF-24	5/1/2018	2-Hexanone	*ND*	*200*	13	38	ug/L
MKTF-24	5/1/2018	2,2-Dichloropropane	ND	40	3.1	NA	ug/L
MKTF-24	5/1/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.1	5.74	ug/L
MKTF-24	5/1/2018	Xylenes, Total	6.5	30	6.4	620	ug/L
MKTF-24	5/1/2018	MTBE	130	20	4.8	143	ug/L
MKTF-24	5/1/2018	cis-1,3-Dichloropropene	ND	20	1.6	NA	ug/L
MKTF-24	5/1/2018	trans-1,3-Dichloropropene	ND	20	4.4	NA	ug/L
MKTF-24	8/20/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-24	8/20/2018	Acetone	ND	200	16	14064	ug/L
MKTF-24	8/20/2018	Chloroform	ND	20	8	100	ug/L
MKTF-24	8/20/2018	Benzene	**4800**	200	35	5	ug/L
MKTF-24	8/20/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
MKTF-24	8/20/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
MKTF-24	8/20/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-24	8/20/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-24	8/20/2018	Vinyl Chloride	**32**	20	2.2	2	ug/L
MKTF-24	8/20/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-24	8/20/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-24	8/20/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-24	8/20/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-24	8/20/2018	1,1-Dichloroethane	**74**	20	8	25	ug/L
MKTF-24	8/20/2018	1,1-Dichloroethene	**22**	20	2.4	7	ug/L
MKTF-24	8/20/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
MKTF-24	8/20/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
MKTF-24	8/20/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
MKTF-24	8/20/2018	2-Butanone	ND	200	25	5565	ug/L
MKTF-24	8/20/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-24	8/20/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-24	8/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-24	8/20/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-24	8/20/2018	2-Chlorotoluene	ND	20	8	233	ug/L
MKTF-24	8/20/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-24	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-24	8/20/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-24	8/20/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-24	8/20/2018	Isopropylbenzene	35	20	4.4	447	ug/L
MKTF-24	8/20/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-24	8/20/2018	Ethylbenzene	320	20	4.5	700	ug/L
MKTF-24	8/20/2018	Styrene	ND	20	5	100	ug/L
MKTF-24	8/20/2018	n-Propylbenzene	89	20	4.9	660	ug/L
MKTF-24	8/20/2018	n-Butylbenzene	13	60	5	1000	ug/L
MKTF-24	8/20/2018	4-Chlorotoluene	ND	20	8	250	ug/L
MKTF-24	8/20/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-24	8/20/2018	1,2-Dichloroethane	**8.2**	20	8	5	ug/L
MKTF-24	8/20/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-24	8/20/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-24	8/20/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-24	8/20/2018	Toluene	25	20	3.4	1000	ug/L
MKTF-24	8/20/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-24	8/20/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-24	8/20/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	8/20/2018	sec-Butylbenzene	6.4	20	4	2000	ug/L
MKTF-24	8/20/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-24	8/20/2018	cis-1,2-Dichloroethene	11	20	7.5	70	ug/L
MKTF-24	8/20/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
MKTF-24	8/20/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
MKTF-24	8/20/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-24	8/20/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
MKTF-24	8/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-24	8/20/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-24	8/20/2018	MTBE	120	20	6.4	143	ug/L
MKTF-24	8/20/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-24	8/20/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-24	10/10/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-24	10/10/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-24	10/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-24	10/10/2018	Benzene	**2500**	100	17	5	ug/L
MKTF-24	10/10/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-24	10/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-24	10/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-24	10/10/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-24	10/10/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-24	10/10/2018	Vinyl Chloride	**12**	1	0.11	2	ug/L
MKTF-24	10/10/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-24	10/10/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-24	10/10/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-24	10/10/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-24	10/10/2018	1,1-Dichloroethane	**80**	1	0.4	25	ug/L
MKTF-24	10/10/2018	1,1-Dichloroethene	**29**	1	0.12	7	ug/L
MKTF-24	10/10/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-24	10/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-24	10/10/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-24	10/10/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-24	10/10/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-24	10/10/2018	Trichloroethene	2.3	1	0.26	5	ug/L
MKTF-24	10/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-24	10/10/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/10/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
MKTF-24	10/10/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
MKTF-24	10/10/2018	Naphthalene	ND	2	0.29	30	ug/L
MKTF-24	10/10/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
MKTF-24	10/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-24	10/10/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
MKTF-24	10/10/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-24	10/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-24	10/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-24	10/10/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-24	10/10/2018	Isopropylbenzene	16	1	0.22	447	ug/L
MKTF-24	10/10/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-24	10/10/2018	Ethylbenzene	38	1	0.22	700	ug/L
MKTF-24	10/10/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-24	10/10/2018	n-Propylbenzene	24	1	0.24	660	ug/L
MKTF-24	10/10/2018	n-Butylbenzene	5.2	3	0.25	1000	ug/L
MKTF-24	10/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-24	10/10/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
MKTF-24	10/10/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-24	10/10/2018	1,2-Dichloroethane	**5.6**	1	0.4	5	ug/L
MKTF-24	10/10/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-24	10/10/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-24	10/10/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-24	10/10/2018	Toluene	14	1	0.17	1000	ug/L
MKTF-24	10/10/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-24	10/10/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-24	10/10/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-24	10/10/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-24	10/10/2018	sec-Butylbenzene	3.8	1	0.2	2000	ug/L
MKTF-24	10/10/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-24	10/10/2018	cis-1,2-Dichloroethene	14	1	0.38	70	ug/L
MKTF-24	10/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-24	10/10/2018	Pentafluorobenzene	ND	0	0		None
MKTF-24	10/10/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
MKTF-24	10/10/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-24	10/10/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-24	10/10/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-24	10/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-24	10/10/2018	Xylenes, Total	4.8	1.5	0.64	620	ug/L
MKTF-24	10/10/2018	MTBE	120	1	0.32	143	ug/L
MKTF-24	10/10/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-24	10/10/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-24	11/15/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
MKTF-24	11/15/2018	Acetone	ND	200	15	14064	ug/L
MKTF-24	11/15/2018	Chloroform	ND	20	4.7	100	ug/L
MKTF-24	11/15/2018	Benzene	**4800**	200	35	5	ug/L
MKTF-24	11/15/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
MKTF-24	11/15/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
MKTF-24	11/15/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
MKTF-24	11/15/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
MKTF-24	11/15/2018	Chloroethane	ND	40	3.3	20857	ug/L
MKTF-24	11/15/2018	Vinyl Chloride	**28**	20	2.4	2	ug/L
MKTF-24	11/15/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
MKTF-24	11/15/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
MKTF-24	11/15/2018	Bromoform	ND	20	6.5	32.9	ug/L
MKTF-24	11/15/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
MKTF-24	11/15/2018	1,1-Dichloroethane	**76**	20	3.5	25	ug/L
MKTF-24	11/15/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
MKTF-24	11/15/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
MKTF-24	11/15/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
MKTF-24	11/15/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
MKTF-24	11/15/2018	2-Butanone	ND	200	28	5565	ug/L
MKTF-24	11/15/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
MKTF-24	11/15/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
MKTF-24	11/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
MKTF-24	11/15/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
MKTF-24	11/15/2018	2-Chlorotoluene	ND	20	5	233	ug/L
MKTF-24	11/15/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
MKTF-24	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
MKTF-24	11/15/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
MKTF-24	11/15/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
MKTF-24	11/15/2018	Isopropylbenzene	ND	20	4.4	447	ug/L
MKTF-24	11/15/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
MKTF-24	11/15/2018	Ethylbenzene	200	20	4.5	700	ug/L
MKTF-24	11/15/2018	Styrene	ND	20	5	100	ug/L
MKTF-24	11/15/2018	n-Propylbenzene	31	20	4.9	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	n-Butylbenzene	ND	60	5	1000	ug/L
MKTF-24	11/15/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
MKTF-24	11/15/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
MKTF-24	11/15/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	11/15/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
MKTF-24	11/15/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
MKTF-24	11/15/2018	Bromobenzene	ND	20	6.4	62	ug/L
MKTF-24	11/15/2018	Toluene	21	20	3.4	1000	ug/L
MKTF-24	11/15/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
MKTF-24	11/15/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
MKTF-24	11/15/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
MKTF-24	11/15/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
MKTF-24	11/15/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
MKTF-24	11/15/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
MKTF-24	11/15/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
MKTF-24	11/15/2018	Pentafluorobenzene	**200**	0	0		None
MKTF-24	11/15/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
MKTF-24	11/15/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
MKTF-24	11/15/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
MKTF-24	11/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
MKTF-24	11/15/2018	Xylenes, Total	ND	30	13	620	ug/L
MKTF-24	11/15/2018	MTBE	120	20	9.1	143	ug/L
MKTF-24	11/15/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
MKTF-24	11/15/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
MKTF-24	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	5/6/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	5/6/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	5/6/2019	1,1-Dichloroethane	**47**	20	2.817172	25	ug/L
MKTF-24	5/6/2019	1,1-Dichloroethene	**14**	20	4.107764	7	ug/L
MKTF-24	5/6/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	5/6/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	5/6/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-24	5/6/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	5/6/2019	1,2,4-Trimethylbenzene	4.7	20	4.263982	56	ug/L
MKTF-24	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-24	5/6/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	5/6/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	5/6/2019	1,2-Dichloroethane	**6.6**	20	3.892755	5	ug/L
MKTF-24	5/6/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	5/6/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	5/6/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	5/6/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	5/6/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	5/6/2019	1-Methylnaphthalene	ND	80	6.29909	NA	ug/L
MKTF-24	5/6/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	5/6/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	5/6/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	5/6/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	5/6/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	5/6/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	5/6/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	5/6/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	5/6/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	5/6/2019	Benzene	**3000**	200	33.327811	5	ug/L
MKTF-24	5/6/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	5/6/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	5/6/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	5/6/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	5/6/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	5/6/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	5/6/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	5/6/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-24	5/6/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	5/6/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	5/6/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-24	5/6/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	5/6/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	5/6/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	5/6/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	5/6/2019	Ethylbenzene	120	20	2.646816	700	ug/L
MKTF-24	5/6/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	5/6/2019	Isopropylbenzene	19	20	3.830445	447	ug/L
MKTF-24	5/6/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	5/6/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	5/6/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/6/2019	n-Butylbenzene	4.6	60	4.551391	1000	ug/L
MKTF-24	5/6/2019	n-Propylbenzene	36	20	4.28616	660	ug/L
MKTF-24	5/6/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
MKTF-24	5/6/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	5/6/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	5/6/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	5/6/2019	Toluene	14	20	7.008724	1000	ug/L
MKTF-24	5/6/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	5/6/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	5/6/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-24	5/6/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	5/6/2019	Vinyl Chloride	**22**	20	3.581986	2	ug/L
MKTF-24	5/6/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-24	5/6/2019	1,2-Dibromoethane	0.012	0.00946	0.003297	0.05	ug/L
MKTF-24	8/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	8/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	8/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	8/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	8/23/2019	1,1-Dichloroethane	**53**	20	2.817172	25	ug/L
MKTF-24	8/23/2019	1,1-Dichloroethene	**19**	20	4.107764	7	ug/L
MKTF-24	8/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	8/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	8/23/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
MKTF-24	8/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	8/23/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
MKTF-24	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
MKTF-24	8/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	8/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	8/23/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
MKTF-24	8/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	8/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	8/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	8/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	8/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	8/23/2019	1-Methylnaphthalene	17	80	6.29909	NA	ug/L
MKTF-24	8/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	8/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	8/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	8/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	8/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	8/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	8/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	8/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	8/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	8/23/2019	Benzene	**4100**	200	33.327811	5	ug/L
MKTF-24	8/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	8/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	8/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	8/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	8/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	8/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	8/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	8/23/2019	Chloroethane	19	40	3.556052	20857	ug/L
MKTF-24	8/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	8/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	8/23/2019	cis-1,2-Dichloroethene	8.6	20	3.802301	70	ug/L
MKTF-24	8/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	8/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	8/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	8/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	8/23/2019	Ethylbenzene	240	20	2.646816	700	ug/L
MKTF-24	8/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	8/23/2019	Isopropylbenzene	33	20	3.830445	447	ug/L
MKTF-24	8/23/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	8/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	8/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-24	8/23/2019	n-Butylbenzene	27	60	4.551391	1000	ug/L
MKTF-24	8/23/2019	n-Propylbenzene	64	20	4.28616	660	ug/L
MKTF-24	8/23/2019	sec-Butylbenzene	10	20	4.954626	2000	ug/L
MKTF-24	8/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	8/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	8/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	8/23/2019	Toluene	22	20	7.008724	1000	ug/L
MKTF-24	8/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	8/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	8/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	8/23/2019	Vinyl Chloride	**38**	20	3.581986	2	ug/L
MKTF-24	8/23/2019	Xylenes, Total	12	30	9.088299	620	ug/L
MKTF-24	8/23/2019	1,2-Dibromoethane	0.0047	0.00938	0.00327	0.05	ug/L
MKTF-24	10/23/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
MKTF-24	10/23/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
MKTF-24	10/23/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
MKTF-24	10/23/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
MKTF-24	10/23/2019	1,1-Dichloroethane	**33**	20	2.817172	25	ug/L
MKTF-24	10/23/2019	1,1-Dichloroethene	**11**	20	4.107764	7	ug/L
MKTF-24	10/23/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
MKTF-24	10/23/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
MKTF-24	10/23/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
MKTF-24	10/23/2019	1,2,4-Trimethylbenzene	5.3	20	4.263982	56	ug/L
MKTF-24	10/23/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
MKTF-24	10/23/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
MKTF-24	10/23/2019	1,2-Dichloroethane	**9.3**	20	3.892755	5	ug/L
MKTF-24	10/23/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
MKTF-24	10/23/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
MKTF-24	10/23/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
MKTF-24	10/23/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
MKTF-24	10/23/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	11	80	6.29909	NA	ug/L
MKTF-24	10/23/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
MKTF-24	10/23/2019	2-Butanone	ND	200	41.788332	5565	ug/L
MKTF-24	10/23/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
MKTF-24	10/23/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
MKTF-24	10/23/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
MKTF-24	10/23/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
MKTF-24	10/23/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
MKTF-24	10/23/2019	Acetone	ND	200	23.987928	14064	ug/L
MKTF-24	10/23/2019	Benzene	**5000**	200	33.327811	5	ug/L
MKTF-24	10/23/2019	Bromobenzene	ND	20	4.894541	62	ug/L
MKTF-24	10/23/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
MKTF-24	10/23/2019	Bromoform	ND	20	5.773263	32.9	ug/L
MKTF-24	10/23/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
MKTF-24	10/23/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
MKTF-24	10/23/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
MKTF-24	10/23/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
MKTF-24	10/23/2019	Chloroethane	ND	40	3.556052	20857	ug/L
MKTF-24	10/23/2019	Chloroform	ND	20	2.437811	100	ug/L
MKTF-24	10/23/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
MKTF-24	10/23/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
MKTF-24	10/23/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
MKTF-24	10/23/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
MKTF-24	10/23/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
MKTF-24	10/23/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
MKTF-24	10/23/2019	Ethylbenzene	310	20	2.646816	700	ug/L
MKTF-24	10/23/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
MKTF-24	10/23/2019	Isopropylbenzene	32	20	3.830445	447	ug/L
MKTF-24	10/23/2019	MTBE	110	20	9.1219	143	ug/L
MKTF-24	10/23/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
MKTF-24	10/23/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
MKTF-24	10/23/2019	n-Butylbenzene	11	60	4.551391	1000	ug/L
MKTF-24	10/23/2019	n-Propylbenzene	64	20	4.28616	660	ug/L
MKTF-24	10/23/2019	sec-Butylbenzene	7.4	20	4.954626	2000	ug/L
MKTF-24	10/23/2019	Styrene	ND	20	3.826467	100	ug/L
MKTF-24	10/23/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
MKTF-24	10/23/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
MKTF-24	10/23/2019	Toluene	24	20	7.008724	1000	ug/L
MKTF-24	10/23/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
MKTF-24	10/23/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
MKTF-24	10/23/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
MKTF-24	10/23/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
MKTF-24	10/23/2019	Vinyl Chloride	**37**	20	3.581986	2	ug/L
MKTF-24	10/23/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
MKTF-24	10/23/2019	1,2-Dibromoethane	0.0037	0.00943	0.003288	0.05	ug/L
MKTF-24	2/25/2020	Benzene	**2900**	200	45	5	ug/L
MKTF-24	2/25/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-24	2/25/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-24	2/25/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-24	2/25/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	2/25/2020	1,1-Dichloroethane	**38**	20	5.5	25	ug/L
MKTF-24	2/25/2020	1,1-Dichloroethene	**20**	20	2.6	7	ug/L
MKTF-24	2/25/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/25/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-24	2/25/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-24	2/25/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-24	2/25/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
MKTF-24	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-24	2/25/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-24	2/25/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-24	2/25/2020	1,2-Dichloroethane	**10**	20	4.4	5	ug/L
MKTF-24	2/25/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-24	2/25/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
MKTF-24	2/25/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-24	2/25/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-24	2/25/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-24	2/25/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-24	2/25/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-24	2/25/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-24	2/25/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-24	2/25/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-24	2/25/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-24	2/25/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-24	2/25/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-24	2/25/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-24	2/25/2020	Acetone	50	200	47	14064	ug/L
MKTF-24	2/25/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-24	2/25/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-24	2/25/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-24	2/25/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-24	2/25/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-24	2/25/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-24	2/25/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-24	2/25/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-24	2/25/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-24	2/25/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-24	2/25/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-24	2/25/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-24	2/25/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-24	2/25/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-24	2/25/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-24	2/25/2020	Ethylbenzene	83	20	4.3	700	ug/L
MKTF-24	2/25/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-24	2/25/2020	Isopropylbenzene	8.5	20	3.7	447	ug/L
MKTF-24	2/25/2020	MTBE	110	20	7.9	143	ug/L
MKTF-24	2/25/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-24	2/25/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
MKTF-24	2/25/2020	n-Propylbenzene	13	20	3.6	660	ug/L
MKTF-24	2/25/2020	Naphthalene	*ND*	*40*	5.6	30	ug/L
MKTF-24	2/25/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-24	2/25/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-24	2/25/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-24	2/25/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-24	2/25/2020	Toluene	11	20	4	1000	ug/L
MKTF-24	2/25/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-24	2/25/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-24	2/25/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-24	2/25/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	2/25/2020	Vinyl Chloride	**28**	20	3.9	2	ug/L
MKTF-24	2/25/2020	Xylenes, Total	ND	30	11	620	ug/L
MKTF-24	2/25/2020	1,2-Dibromoethane	0.0076	0.0093	0.0061	0.05	ug/L
MKTF-24	9/19/2020	Benzene	**6100**	100	45	5	ug/L
MKTF-24	9/19/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-24	9/19/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-24	9/19/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-24	9/19/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-24	9/19/2020	1,1-Dichloroethane	**41**	20	5.5	25	ug/L
MKTF-24	9/19/2020	1,1-Dichloroethene	*6.1*	*20*	2.6	7	ug/L
MKTF-24	9/19/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-24	9/19/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-24	9/19/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-24	9/19/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-24	9/19/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
MKTF-24	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-24	9/19/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-24	9/19/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-24	9/19/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-24	9/19/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-24	9/19/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-24	9/19/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-24	9/19/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-24	9/19/2020	1-Methylnaphthalene	ND	80	17	NA	ug/L
MKTF-24	9/19/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-24	9/19/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-24	9/19/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-24	9/19/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-24	9/19/2020	2-Methylnaphthalene	*ND*	*80*	14		ug/L
MKTF-24	9/19/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-24	9/19/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
MKTF-24	9/19/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-24	9/19/2020	Acetone	ND	200	47	14064	ug/L
MKTF-24	9/19/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-24	9/19/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-24	9/19/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-24	9/19/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-24	9/19/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-24	9/19/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-24	9/19/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-24	9/19/2020	Chloroethane	27	40	7.5	20857	ug/L
MKTF-24	9/19/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-24	9/19/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-24	9/19/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-24	9/19/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-24	9/19/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-24	9/19/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-24	9/19/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-24	9/19/2020	Ethylbenzene	240	20	4.3	700	ug/L
MKTF-24	9/19/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-24	9/19/2020	Isopropylbenzene	13	20	3.7	447	ug/L
MKTF-24	9/19/2020	MTBE	120	20	7.9	143	ug/L
MKTF-24	9/19/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-24	9/19/2020	n-Butylbenzene	5.5	60	5.1	1000	ug/L
MKTF-24	9/19/2020	n-Propylbenzene	19	20	3.6	660	ug/L
MKTF-24	9/19/2020	Naphthalene	*ND*	*40*	5.6	30	ug/L
MKTF-24	9/19/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
MKTF-24	9/19/2020	Styrene	ND	20	2.6	100	ug/L
MKTF-24	9/19/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-24	9/19/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-24	9/19/2020	Toluene	24	20	4	1000	ug/L
MKTF-24	9/19/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-24	9/19/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-24	9/19/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-24	9/19/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-24	9/19/2020	Vinyl Chloride	**37**	20	3.9	2	ug/L
MKTF-24	9/19/2020	Xylenes, Total	ND	30	11	620	ug/L
MKTF-24	9/19/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
MKTF-24	12/18/2020	1,2-Dibromoethane	ND	0.0202	0.00504	0.05	ug/L
MKTF-24	12/18/2020	Acetone	ND	625	250	14064	ug/L
MKTF-24	12/18/2020	Benzene	**5020**	25	9.5	5	ug/L
MKTF-24	12/18/2020	Bromodichloromethane	*ND*	*25*	12.5	1.34	ug/L
MKTF-24	12/18/2020	Bromoform	*ND*	*125*	17.8	32.9	ug/L
MKTF-24	12/18/2020	Bromomethane	*ND*	*25*	24.5	7.54	ug/L
MKTF-24	12/18/2020	2-Butanone	ND	625	65	5565	ug/L
MKTF-24	12/18/2020	Carbon Disulfide	ND	25	12.5	810	ug/L
MKTF-24	12/18/2020	Carbon tetrachloride	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	Chlorobenzene	ND	25	12.5	77.6	ug/L
MKTF-24	12/18/2020	Dibromochloromethane	*ND*	*25*	12.5	1.68	ug/L
MKTF-24	12/18/2020	Chloroethane	ND	25	19	20857	ug/L
MKTF-24	12/18/2020	Chloroform	ND	25	15	100	ug/L
MKTF-24	12/18/2020	Chloromethane	*ND*	*25*	20.8	20.32	ug/L
MKTF-24	12/18/2020	2-Chlorotoluene	ND	25	14.3	233	ug/L
MKTF-24	12/18/2020	4-Chlorotoluene	ND	25	14	250	ug/L
MKTF-24	12/18/2020	cis-1,2-Dichloroethene	ND	25	12.5	70	ug/L
MKTF-24	12/18/2020	cis-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-24	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*125*	37.5	0.0033	ug/L
MKTF-24	12/18/2020	1,2-Dibromoethane	*ND*	*25*	12.5	0.05	ug/L
MKTF-24	12/18/2020	Dibromomethane	*ND*	*125*	14.8	8	ug/L
MKTF-24	12/18/2020	1,2-Dichlorobenzene	ND	25	12.5	600	ug/L
MKTF-24	12/18/2020	1,3-Dichlorobenzene	ND	25	13.5	N/A	ug/L
MKTF-24	12/18/2020	1,4-Dichlorobenzene	ND	25	16	75	ug/L
MKTF-24	12/18/2020	Dichlorodifluoromethane	ND	25	21.3	197	ug/L
MKTF-24	12/18/2020	1,1-Dichloroethane	**39.3**	25	12.5	25	ug/L
MKTF-24	12/18/2020	1,2-Dichloroethane	**163**	25	12.5	5	ug/L
MKTF-24	12/18/2020	1,1-Dichloroethene	*ND*	*25*	12.5	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	1,2-Dichloropropane	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	1,3-Dichloropropane	ND	25	12.5	370	ug/L
MKTF-24	12/18/2020	2,2-Dichloropropane	ND	25	12.5	NA	ug/L
MKTF-24	12/18/2020	1,1-Dichloropropene	ND	25	12.5	NA	ug/L
MKTF-24	12/18/2020	Ethylbenzene	223	25	12.5	700	ug/L
MKTF-24	12/18/2020	Hexachlorobutadiene	*ND*	*125*	22.5	1.39	ug/L
MKTF-24	12/18/2020	2-Hexanone	*ND*	*625*	77.5	38	ug/L
MKTF-24	12/18/2020	Isopropylbenzene	ND	25	13.3	447	ug/L
MKTF-24	12/18/2020	Methylene Chloride	*ND*	*125*	75	5	ug/L
MKTF-24	12/18/2020	1-Methylnaphthalene	ND	125	105	NA	ug/L
MKTF-24	12/18/2020	2-Methylnaphthalene	*ND*	*250*	115		ug/L
MKTF-24	12/18/2020	4-Methyl-2-Pentanone	ND	625	45	1243	ug/L
MKTF-24	12/18/2020	MTBE	98.9	25	18.5	143	ug/L
MKTF-24	12/18/2020	Naphthalene	ND	25	25	30	ug/L
MKTF-24	12/18/2020	n-Butylbenzene	ND	25	19	1000	ug/L
MKTF-24	12/18/2020	n-Propylbenzene	36	25	17.3	660	ug/L
MKTF-24	12/18/2020	p-Isopropyltoluene	ND	25	17.8	NA	ug/L
MKTF-24	12/18/2020	sec-Butylbenzene	ND	25	17.5	2000	ug/L
MKTF-24	12/18/2020	Styrene	ND	25	25	100	ug/L
MKTF-24	12/18/2020	tert-Butylbenzene	ND	25	15.8	690	ug/L
MKTF-24	12/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*25*	13	5.74	ug/L
MKTF-24	12/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*25*	12.5	10	ug/L
MKTF-24	12/18/2020	Tetrachloroethene	*ND*	*25*	14.5	5	ug/L
MKTF-24	12/18/2020	Toluene	ND	25	10.3	1000	ug/L
MKTF-24	12/18/2020	trans-1,2-Dichloroethene	ND	25	12.5	100	ug/L
MKTF-24	12/18/2020	trans-1,3-Dichloropropene	ND	125	12.5	NA	ug/L
MKTF-24	12/18/2020	1,2,3-Trichlorobenzene	ND	25	17.5	70	ug/L
MKTF-24	12/18/2020	1,2,4-Trichlorobenzene	ND	25	20.5	70	ug/L
MKTF-24	12/18/2020	1,1,1-Trichloroethane	ND	25	12.5	200	ug/L
MKTF-24	12/18/2020	1,1,2-Trichloroethane	*ND*	*125*	12.5	5	ug/L
MKTF-24	12/18/2020	Trichloroethene	*ND*	*25*	12.5	5	ug/L
MKTF-24	12/18/2020	Trichlorofluoromethane	ND	25	13	1137	ug/L
MKTF-24	12/18/2020	1,2,3-Trichloropropane	*ND*	*125*	21	0.0084	ug/L
MKTF-24	12/18/2020	1,2,4-Trimethylbenzene	ND	25	20.5	56	ug/L
MKTF-24	12/18/2020	1,3,5-Trimethylbenzene	ND	25	14	60	ug/L
MKTF-24	12/18/2020	Vinyl Chloride	**33.2**	25	12.5	2	ug/L
MKTF-24	12/18/2020	Xylenes, Total	ND	250	40	620	ug/L
MKTF-25	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-25	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-25	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-25	4/8/2014	Benzene	**1000**	20	3.1	5	ug/L
MKTF-25	4/8/2014	1,1,1-Trichloroethane	76	2	0.24	200	ug/L
MKTF-25	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-25	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-25	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-25	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-25	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-25	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-25	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-25	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-25	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-25	4/8/2014	1,1-Dichloroethane	**330**	20	5.7	25	ug/L
MKTF-25	4/8/2014	1,1-Dichloroethene	**150**	2	0.43	7	ug/L
MKTF-25	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-25	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-25	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-25	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-25	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-25	4/8/2014	Trichloroethene	**30**	2	0.39	5	ug/L
MKTF-25	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-25	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-25	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-25	4/8/2014	1,2,4-Trimethylbenzene	9.9	2	0.25	56	ug/L
MKTF-25	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-25	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-25	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-25	4/8/2014	Isopropylbenzene	34	2	0.32	447	ug/L
MKTF-25	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-25	4/8/2014	Ethylbenzene	130	2	0.25	700	ug/L
MKTF-25	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-25	4/8/2014	n-Propylbenzene	39	2	0.28	660	ug/L
MKTF-25	4/8/2014	n-Butylbenzene	14	6	0.43	1000	ug/L
MKTF-25	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-25	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-25	4/8/2014	1,2-Dichloroethane	**10**	2	0.53	5	ug/L
MKTF-25	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	4/8/2014	1,3,5-Trimethylbenzene	3	2	0.26	60	ug/L
MKTF-25	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-25	4/8/2014	Toluene	9.2	2	0.34	1000	ug/L
MKTF-25	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-25	4/8/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-25	4/8/2014	Tetrachloroethene	3.3	2	0.4	5	ug/L
MKTF-25	4/8/2014	sec-Butylbenzene	5.8	2	0.31	2000	ug/L
MKTF-25	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-25	4/8/2014	cis-1,2-Dichloroethene	54	2	0.24	70	ug/L
MKTF-25	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-25	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-25	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-25	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-25	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-25	4/8/2014	Xylenes, Total	13	3	0.75	620	ug/L
MKTF-25	4/8/2014	MTBE	**270**	2	0.5	143	ug/L
MKTF-25	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-25	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-25	9/23/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-25	9/23/2014	Acetone	ND	100	49	14064	ug/L
MKTF-25	9/23/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-25	9/23/2014	Benzene	**530**	10	1.5	5	ug/L
MKTF-25	9/23/2014	1,1,1-Trichloroethane	30	10	1.2	200	ug/L
MKTF-25	9/23/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-25	9/23/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-25	9/23/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-25	9/23/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-25	9/23/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
MKTF-25	9/23/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-25	9/23/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-25	9/23/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-25	9/23/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-25	9/23/2014	1,1-Dichloroethane	**250**	10	2.8	25	ug/L
MKTF-25	9/23/2014	1,1-Dichloroethene	**100**	10	2.1	7	ug/L
MKTF-25	9/23/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-25	9/23/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-25	9/23/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-25	9/23/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-25	9/23/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-25	9/23/2014	Trichloroethene	**24**	10	1.9	5	ug/L
MKTF-25	9/23/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-25	9/23/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-25	9/23/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-25	9/23/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
MKTF-25	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-25	9/23/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-25	9/23/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-25	9/23/2014	Isopropylbenzene	38	10	1.6	447	ug/L
MKTF-25	9/23/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	Ethylbenzene	12	10	1.3	700	ug/L
MKTF-25	9/23/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-25	9/23/2014	n-Propylbenzene	41	10	1.4	660	ug/L
MKTF-25	9/23/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-25	9/23/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-25	9/23/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-25	9/23/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-25	9/23/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-25	9/23/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-25	9/23/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-25	9/23/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-25	9/23/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-25	9/23/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-25	9/23/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-25	9/23/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-25	9/23/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-25	9/23/2014	cis-1,2-Dichloroethene	46	10	1.2	70	ug/L
MKTF-25	9/23/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-25	9/23/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-25	9/23/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-25	9/23/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-25	9/23/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-25	9/23/2014	Xylenes, Total	ND	15	3.8	620	ug/L
MKTF-25	9/23/2014	MTBE	**230**	10	2.5	143	ug/L
MKTF-25	9/23/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-25	9/23/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/14/2014	Acetone	ND	50	25	14064	ug/L
MKTF-25	11/14/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-25	11/14/2014	Benzene	**580**	50	7.7	5	ug/L
MKTF-25	11/14/2014	1,1,1-Trichloroethane	23	5	0.61	200	ug/L
MKTF-25	11/14/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-25	11/14/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-25	11/14/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-25	11/14/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-25	11/14/2014	Vinyl Chloride	**46**	5	2.3	2	ug/L
MKTF-25	11/14/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-25	11/14/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-25	11/14/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-25	11/14/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-25	11/14/2014	1,1-Dichloroethane	**230**	5	1.4	25	ug/L
MKTF-25	11/14/2014	1,1-Dichloroethene	**98**	5	1.1	7	ug/L
MKTF-25	11/14/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	11/14/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-25	11/14/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-25	11/14/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-25	11/14/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-25	11/14/2014	Trichloroethene	**27**	5	0.97	5	ug/L
MKTF-25	11/14/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-25	11/14/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-25	11/14/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-25	11/14/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-25	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-25	11/14/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-25	11/14/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-25	11/14/2014	Isopropylbenzene	40	5	0.81	447	ug/L
MKTF-25	11/14/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-25	11/14/2014	Ethylbenzene	23	5	0.64	700	ug/L
MKTF-25	11/14/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-25	11/14/2014	n-Propylbenzene	37	5	0.7	660	ug/L
MKTF-25	11/14/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-25	11/14/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-25	11/14/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-25	11/14/2014	1,2-Dichloroethane	**12**	5	1.3	5	ug/L
MKTF-25	11/14/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-25	11/14/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-25	11/14/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-25	11/14/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-25	11/14/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-25	11/14/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-25	11/14/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-25	11/14/2014	sec-Butylbenzene	6.6	5	0.77	2000	ug/L
MKTF-25	11/14/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-25	11/14/2014	cis-1,2-Dichloroethene	44	5	0.61	70	ug/L
MKTF-25	11/14/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-25	11/14/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	11/14/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-25	11/14/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-25	11/14/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-25	11/14/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-25	11/14/2014	MTBE	**180**	5	1.3	143	ug/L
MKTF-25	11/14/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-25	11/14/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-25	3/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	3/11/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	3/11/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	3/11/2015	Benzene	**970**	50	3.3	5	ug/L
MKTF-25	3/11/2015	1,1,1-Trichloroethane	53	5	0.39	200	ug/L
MKTF-25	3/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	3/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	3/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	3/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	3/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	3/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	3/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	3/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	3/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	3/11/2015	1,1-Dichloroethane	**280**	50	20	25	ug/L
MKTF-25	3/11/2015	1,1-Dichloroethene	**140**	5	0.5	7	ug/L
MKTF-25	3/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	3/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	3/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	3/11/2015	2-Butanone	ND	50	1.8	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	3/11/2015	Trichloroethene	**31**	5	0.82	5	ug/L
MKTF-25	3/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	3/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	3/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	3/11/2015	1,2,4-Trimethylbenzene	8.6	5	0.8	56	ug/L
MKTF-25	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	3/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	3/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	3/11/2015	Isopropylbenzene	37	5	0.76	447	ug/L
MKTF-25	3/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	3/11/2015	Ethylbenzene	170	5	0.51	700	ug/L
MKTF-25	3/11/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	3/11/2015	n-Propylbenzene	51	5	0.82	660	ug/L
MKTF-25	3/11/2015	n-Butylbenzene	16	15	1.2	1000	ug/L
MKTF-25	3/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	3/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	3/11/2015	1,2-Dichloroethane	**12**	5	0.88	5	ug/L
MKTF-25	3/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	3/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	3/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	3/11/2015	Toluene	12	5	0.54	1000	ug/L
MKTF-25	3/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	3/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	3/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	3/11/2015	sec-Butylbenzene	7.3	5	1.1	2000	ug/L
MKTF-25	3/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	3/11/2015	cis-1,2-Dichloroethene	55	5	0.4	70	ug/L
MKTF-25	3/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	3/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	3/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	3/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	3/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	3/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-25	3/11/2015	MTBE	**270**	5	0.87	143	ug/L
MKTF-25	3/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	3/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	6/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	6/10/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	6/10/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	6/10/2015	Benzene	**1000**	50	3.3	5	ug/L
MKTF-25	6/10/2015	1,1,1-Trichloroethane	50	5	0.39	200	ug/L
MKTF-25	6/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	6/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	6/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	6/10/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	6/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	6/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	6/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	6/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	6/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	6/10/2015	1,1-Dichloroethane	**280**	5	2	25	ug/L
MKTF-25	6/10/2015	1,1-Dichloroethene	**120**	5	0.5	7	ug/L
MKTF-25	6/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	6/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	6/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	6/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	6/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	6/10/2015	Trichloroethene	**29**	5	0.82	5	ug/L
MKTF-25	6/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	6/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	6/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	6/10/2015	1,2,4-Trimethylbenzene	18	5	0.8	56	ug/L
MKTF-25	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	6/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	6/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	6/10/2015	Isopropylbenzene	40	5	0.76	447	ug/L
MKTF-25	6/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	6/10/2015	Ethylbenzene	99	5	0.51	700	ug/L
MKTF-25	6/10/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	6/10/2015	n-Propylbenzene	42	5	0.82	660	ug/L
MKTF-25	6/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-25	6/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	6/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	6/10/2015	1,2-Dichloroethane	**11**	5	0.88	5	ug/L
MKTF-25	6/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	6/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	6/10/2015	Toluene	6.6	5	0.54	1000	ug/L
MKTF-25	6/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	6/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	6/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	6/10/2015	sec-Butylbenzene	6.1	5	1.1	2000	ug/L
MKTF-25	6/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	6/10/2015	cis-1,2-Dichloroethene	44	5	0.4	70	ug/L
MKTF-25	6/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	6/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	6/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	6/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	6/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	6/10/2015	Xylenes, Total	16	7.5	1.4	620	ug/L
MKTF-25	6/10/2015	MTBE	**210**	5	0.87	143	ug/L
MKTF-25	6/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	6/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	8/21/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-25	8/21/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	8/21/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	8/21/2015	Benzene	**1200**	50	3.3	5	ug/L
MKTF-25	8/21/2015	1,1,1-Trichloroethane	61	5	0.39	200	ug/L
MKTF-25	8/21/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	8/21/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	8/21/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	8/21/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	8/21/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	8/21/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	8/21/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	8/21/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	8/21/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	8/21/2015	1,1-Dichloroethane	**320**	5	2	25	ug/L
MKTF-25	8/21/2015	1,1-Dichloroethene	**160**	5	0.5	7	ug/L
MKTF-25	8/21/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	8/21/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	8/21/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	8/21/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	8/21/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	8/21/2015	Trichloroethene	**37**	5	0.82	5	ug/L
MKTF-25	8/21/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	8/21/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	8/21/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	8/21/2015	1,2,4-Trimethylbenzene	5.6	5	0.8	56	ug/L
MKTF-25	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	8/21/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	8/21/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	8/21/2015	Isopropylbenzene	44	5	0.76	447	ug/L
MKTF-25	8/21/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	8/21/2015	Ethylbenzene	130	5	0.51	700	ug/L
MKTF-25	8/21/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	8/21/2015	n-Propylbenzene	57	5	0.82	660	ug/L
MKTF-25	8/21/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-25	8/21/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	8/21/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	8/21/2015	1,2-Dichloroethane	**12**	5	0.88	5	ug/L
MKTF-25	8/21/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	8/21/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	8/21/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	8/21/2015	Toluene	9.9	5	0.54	1000	ug/L
MKTF-25	8/21/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	8/21/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	8/21/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	8/21/2015	sec-Butylbenzene	8.3	5	1.1	2000	ug/L
MKTF-25	8/21/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	8/21/2015	cis-1,2-Dichloroethene	47	5	0.4	70	ug/L
MKTF-25	8/21/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	8/21/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	8/21/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	8/21/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	8/21/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	8/21/2015	Xylenes, Total	8.9	7.5	1.4	620	ug/L
MKTF-25	8/21/2015	MTBE	**240**	5	0.87	143	ug/L
MKTF-25	8/21/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	8/21/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	11/5/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/5/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-25	11/5/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-25	11/5/2015	Benzene	**1100**	50	3.3	5	ug/L
MKTF-25	11/5/2015	1,1,1-Trichloroethane	45	5	0.39	200	ug/L
MKTF-25	11/5/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-25	11/5/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-25	11/5/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-25	11/5/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-25	11/5/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-25	11/5/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-25	11/5/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-25	11/5/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-25	11/5/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-25	11/5/2015	1,1-Dichloroethane	**300**	5	2	25	ug/L
MKTF-25	11/5/2015	1,1-Dichloroethene	**130**	5	0.5	7	ug/L
MKTF-25	11/5/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-25	11/5/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-25	11/5/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-25	11/5/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-25	11/5/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-25	11/5/2015	Trichloroethene	**36**	5	0.82	5	ug/L
MKTF-25	11/5/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-25	11/5/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-25	11/5/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-25	11/5/2015	1,2,4-Trimethylbenzene	5.6	5	0.8	56	ug/L
MKTF-25	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-25	11/5/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-25	11/5/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-25	11/5/2015	Isopropylbenzene	49	5	0.76	447	ug/L
MKTF-25	11/5/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-25	11/5/2015	Ethylbenzene	140	5	0.51	700	ug/L
MKTF-25	11/5/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-25	11/5/2015	n-Propylbenzene	44	5	0.82	660	ug/L
MKTF-25	11/5/2015	n-Butylbenzene	16	15	1.2	1000	ug/L
MKTF-25	11/5/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-25	11/5/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-25	11/5/2015	1,2-Dichloroethane	**13**	5	0.88	5	ug/L
MKTF-25	11/5/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-25	11/5/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-25	11/5/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-25	11/5/2015	Toluene	8.7	5	0.54	1000	ug/L
MKTF-25	11/5/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-25	11/5/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-25	11/5/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-25	11/5/2015	sec-Butylbenzene	8.4	5	1.1	2000	ug/L
MKTF-25	11/5/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-25	11/5/2015	cis-1,2-Dichloroethene	49	5	0.4	70	ug/L
MKTF-25	11/5/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-25	11/5/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-25	11/5/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-25	11/5/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-25	11/5/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
MKTF-25	11/5/2015	Xylenes, Total	16	7.5	1.4	620	ug/L
MKTF-25	11/5/2015	MTBE	**250**	5	0.87	143	ug/L
MKTF-25	11/5/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	11/5/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-25	2/23/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-25	2/23/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-25	2/23/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-25	2/23/2016	Benzene	**1200**	50	4.8	5	ug/L
MKTF-25	2/23/2016	1,1,1-Trichloroethane	46	5	0.32	200	ug/L
MKTF-25	2/23/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-25	2/23/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-25	2/23/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-25	2/23/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-25	2/23/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-25	2/23/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-25	2/23/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-25	2/23/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-25	2/23/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-25	2/23/2016	1,1-Dichloroethane	**300**	5	0.54	25	ug/L
MKTF-25	2/23/2016	1,1-Dichloroethene	**120**	5	0.38	7	ug/L
MKTF-25	2/23/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-25	2/23/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-25	2/23/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-25	2/23/2016	2-Butanone	ND	50	1.6	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-25	2/23/2016	Trichloroethene	**29**	5	0.88	5	ug/L
MKTF-25	2/23/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-25	2/23/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-25	2/23/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	2/23/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
MKTF-25	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-25	2/23/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-25	2/23/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-25	2/23/2016	Isopropylbenzene	47	5	0.49	447	ug/L
MKTF-25	2/23/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-25	2/23/2016	Ethylbenzene	190	5	0.56	700	ug/L
MKTF-25	2/23/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-25	2/23/2016	n-Propylbenzene	55	5	0.66	660	ug/L
MKTF-25	2/23/2016	n-Butylbenzene	16	15	0.8	1000	ug/L
MKTF-25	2/23/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-25	2/23/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-25	2/23/2016	1,2-Dichloroethane	**13**	5	0.26	5	ug/L
MKTF-25	2/23/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-25	2/23/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-25	2/23/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-25	2/23/2016	Toluene	11	5	0.45	1000	ug/L
MKTF-25	2/23/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-25	2/23/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-25	2/23/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-25	2/23/2016	sec-Butylbenzene	5.6	5	0.54	2000	ug/L
MKTF-25	2/23/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-25	2/23/2016	cis-1,2-Dichloroethene	45	5	0.62	70	ug/L
MKTF-25	2/23/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-25	2/23/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	2/23/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-25	2/23/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-25	2/23/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-25	2/23/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-25	2/23/2016	MTBE	**200**	5	1.1	143	ug/L
MKTF-25	2/23/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-25	2/23/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-25	6/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-25	6/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	6/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	6/9/2016	Benzene	**990**	50	4.8	5	ug/L
MKTF-25	6/9/2016	1,1,1-Trichloroethane	64	10	0.91	200	ug/L
MKTF-25	6/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	6/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	6/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	6/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	6/9/2016	Vinyl Chloride	**6.6**	10	2	2	ug/L
MKTF-25	6/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	6/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	6/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	6/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	6/9/2016	1,1-Dichloroethane	**610**	10	1.1	25	ug/L
MKTF-25	6/9/2016	1,1-Dichloroethene	**240**	10	1.1	7	ug/L
MKTF-25	6/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	6/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	6/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	6/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	6/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	6/9/2016	Trichloroethene	**64**	10	1.8	5	ug/L
MKTF-25	6/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	6/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	6/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	6/9/2016	1,2,4-Trimethylbenzene	21	10	1.1	56	ug/L
MKTF-25	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	6/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	6/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	6/9/2016	Isopropylbenzene	93	10	1	447	ug/L
MKTF-25	6/9/2016	p-Isopropyltoluene	2.4	10	1.4	NA	ug/L
MKTF-25	6/9/2016	Ethylbenzene	190	10	1.1	700	ug/L
MKTF-25	6/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	6/9/2016	n-Propylbenzene	86	10	1.3	660	ug/L
MKTF-25	6/9/2016	n-Butylbenzene	29	30	1.6	1000	ug/L
MKTF-25	6/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	6/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	6/9/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-25	6/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/9/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
MKTF-25	6/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	6/9/2016	Toluene	13	10	1.2	1000	ug/L
MKTF-25	6/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	6/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	6/9/2016	Tetrachloroethene	**6**	10	1.5	5	ug/L
MKTF-25	6/9/2016	sec-Butylbenzene	15	10	1.2	2000	ug/L
MKTF-25	6/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	6/9/2016	cis-1,2-Dichloroethene	**100**	10	1.2	70	ug/L
MKTF-25	6/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	6/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	6/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	6/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	6/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	6/9/2016	Xylenes, Total	18	15	3.7	620	ug/L
MKTF-25	6/9/2016	MTBE	**480**	10	2.1	143	ug/L
MKTF-25	6/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	6/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	9/9/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-25	9/9/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	9/9/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	9/9/2016	Benzene	**920**	10	0.96	5	ug/L
MKTF-25	9/9/2016	1,1,1-Trichloroethane	5.9	10	0.91	200	ug/L
MKTF-25	9/9/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	9/9/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	9/9/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	9/9/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	9/9/2016	Vinyl Chloride	**5.9**	10	2	2	ug/L
MKTF-25	9/9/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	9/9/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	9/9/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	9/9/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	9/9/2016	1,1-Dichloroethane	**180**	10	1.1	25	ug/L
MKTF-25	9/9/2016	1,1-Dichloroethene	**55**	10	1.1	7	ug/L
MKTF-25	9/9/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	9/9/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	9/9/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	9/9/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	9/9/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	9/9/2016	Trichloroethene	**11**	10	1.8	5	ug/L
MKTF-25	9/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	9/9/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	9/9/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	9/9/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
MKTF-25	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	9/9/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	9/9/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	9/9/2016	Isopropylbenzene	25	10	1	447	ug/L
MKTF-25	9/9/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-25	9/9/2016	Ethylbenzene	18	10	1.1	700	ug/L
MKTF-25	9/9/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	9/9/2016	n-Propylbenzene	32	10	1.3	660	ug/L
MKTF-25	9/9/2016	n-Butylbenzene	9	30	1.6	1000	ug/L
MKTF-25	9/9/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	9/9/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	9/9/2016	1,2-Dichloroethane	**7.9**	10	1.2	5	ug/L
MKTF-25	9/9/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-25	9/9/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-25	9/9/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	9/9/2016	Toluene	5	10	1.2	1000	ug/L
MKTF-25	9/9/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	9/9/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	9/9/2016	Tetrachloroethene	*2.1*	*10*	1.5	5	ug/L
MKTF-25	9/9/2016	sec-Butylbenzene	5.9	10	1.2	2000	ug/L
MKTF-25	9/9/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	9/9/2016	cis-1,2-Dichloroethene	40	10	1.2	70	ug/L
MKTF-25	9/9/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	9/9/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	9/9/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	9/9/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	9/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	9/9/2016	Xylenes, Total	ND	15	3.7	620	ug/L
MKTF-25	9/9/2016	MTBE	**150**	10	2.1	143	ug/L
MKTF-25	9/9/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	9/9/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	11/1/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/1/2016	Acetone	ND	100	49	14064	ug/L
MKTF-25	11/1/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-25	11/1/2016	Benzene	**960**	10	0.96	5	ug/L
MKTF-25	11/1/2016	1,1,1-Trichloroethane	14	10	0.91	200	ug/L
MKTF-25	11/1/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-25	11/1/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-25	11/1/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-25	11/1/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-25	11/1/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-25	11/1/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-25	11/1/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-25	11/1/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-25	11/1/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-25	11/1/2016	1,1-Dichloroethane	**220**	10	1.1	25	ug/L
MKTF-25	11/1/2016	1,1-Dichloroethene	**88**	10	1.1	7	ug/L
MKTF-25	11/1/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-25	11/1/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-25	11/1/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-25	11/1/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-25	11/1/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-25	11/1/2016	Trichloroethene	**18**	10	1.8	5	ug/L
MKTF-25	11/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-25	11/1/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-25	11/1/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	11/1/2016	1,2,4-Trimethylbenzene	2.5	10	1.1	56	ug/L
MKTF-25	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-25	11/1/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-25	11/1/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-25	11/1/2016	Isopropylbenzene	23	10	1	447	ug/L
MKTF-25	11/1/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
MKTF-25	11/1/2016	Ethylbenzene	46	10	1.1	700	ug/L
MKTF-25	11/1/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-25	11/1/2016	n-Propylbenzene	28	10	1.3	660	ug/L
MKTF-25	11/1/2016	n-Butylbenzene	8	30	1.6	1000	ug/L
MKTF-25	11/1/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-25	11/1/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-25	11/1/2016	1,2-Dichloroethane	**8.6**	10	1.2	5	ug/L
MKTF-25	11/1/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-25	11/1/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-25	11/1/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-25	11/1/2016	Toluene	6	10	1.2	1000	ug/L
MKTF-25	11/1/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-25	11/1/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-25	11/1/2016	Tetrachloroethene	*2.7*	*10*	1.5	5	ug/L
MKTF-25	11/1/2016	sec-Butylbenzene	5.4	10	1.2	2000	ug/L
MKTF-25	11/1/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-25	11/1/2016	cis-1,2-Dichloroethene	44	10	1.2	70	ug/L
MKTF-25	11/1/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-25	11/1/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-25	11/1/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-25	11/1/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-25	11/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-25	11/1/2016	Xylenes, Total	4.6	15	3.7	620	ug/L
MKTF-25	11/1/2016	MTBE	**190**	10	2.1	143	ug/L
MKTF-25	11/1/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-25	11/1/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-25	3/29/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	3/29/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-25	3/29/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-25	3/29/2017	Benzene	**780**	50	4.8	5	ug/L
MKTF-25	3/29/2017	1,1,1-Trichloroethane	21	5	0.36	200	ug/L
MKTF-25	3/29/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-25	3/29/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-25	3/29/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-25	3/29/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	3/29/2017	Vinyl Chloride	**2.7**	5	0.89	2	ug/L
MKTF-25	3/29/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	3/29/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-25	3/29/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	3/29/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	3/29/2017	1,1-Dichloroethane	**150**	5	0.52	25	ug/L
MKTF-25	3/29/2017	1,1-Dichloroethene	**74**	5	0.4	7	ug/L
MKTF-25	3/29/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	3/29/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-25	3/29/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	3/29/2017	2-Butanone	ND	50	5.7	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/29/2017	1,1,2-Trichloroethane	1.3	5	0.7	5	ug/L
MKTF-25	3/29/2017	Trichloroethene	**17**	5	0.88	5	ug/L
MKTF-25	3/29/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	3/29/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-25	3/29/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	3/29/2017	1,2,4-Trimethylbenzene	1.4	5	0.52	56	ug/L
MKTF-25	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	3/29/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	3/29/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	3/29/2017	Isopropylbenzene	27	5	0.49	447	ug/L
MKTF-25	3/29/2017	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-25	3/29/2017	Ethylbenzene	24	5	0.56	700	ug/L
MKTF-25	3/29/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	3/29/2017	n-Propylbenzene	25	5	0.66	660	ug/L
MKTF-25	3/29/2017	n-Butylbenzene	11	15	0.8	1000	ug/L
MKTF-25	3/29/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	3/29/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	3/29/2017	1,2-Dichloroethane	**5.7**	5	0.58	5	ug/L
MKTF-25	3/29/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	3/29/2017	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-25	3/29/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	3/29/2017	Toluene	4.5	5	0.45	1000	ug/L
MKTF-25	3/29/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	3/29/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-25	3/29/2017	Tetrachloroethene	0.84	5	0.76	5	ug/L
MKTF-25	3/29/2017	sec-Butylbenzene	5.3	5	0.51	2000	ug/L
MKTF-25	3/29/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-25	3/29/2017	cis-1,2-Dichloroethene	20	5	1	70	ug/L
MKTF-25	3/29/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	3/29/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-25	3/29/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	3/29/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-25	3/29/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-25	3/29/2017	Xylenes, Total	4.3	7.5	1.6	620	ug/L
MKTF-25	3/29/2017	MTBE	120	5	0.74	143	ug/L
MKTF-25	3/29/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-25	3/29/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-25	6/5/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	6/5/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	6/5/2017	Chloroform	ND	5	2	100	ug/L
MKTF-25	6/5/2017	Benzene	**620**	50	3.1	5	ug/L
MKTF-25	6/5/2017	1,1,1-Trichloroethane	17	5	0.36	200	ug/L
MKTF-25	6/5/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	6/5/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	6/5/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	6/5/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	6/5/2017	Vinyl Chloride	*0.96*	*5*	0.89	2	ug/L
MKTF-25	6/5/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	6/5/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	6/5/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	6/5/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	6/5/2017	1,1-Dichloroethane	**160**	5	2	25	ug/L
MKTF-25	6/5/2017	1,1-Dichloroethene	**86**	5	0.4	7	ug/L
MKTF-25	6/5/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	6/5/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	6/5/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	6/5/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	6/5/2017	1,1,2-Trichloroethane	1.3	5	0.7	5	ug/L
MKTF-25	6/5/2017	Trichloroethene	**19**	5	0.56	5	ug/L
MKTF-25	6/5/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	6/5/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	6/5/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	6/5/2017	1,2,4-Trimethylbenzene	1.3	5	0.56	56	ug/L
MKTF-25	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	6/5/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	6/5/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	6/5/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-25	6/5/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-25	6/5/2017	Ethylbenzene	21	5	0.47	700	ug/L
MKTF-25	6/5/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	6/5/2017	n-Propylbenzene	19	5	0.37	660	ug/L
MKTF-25	6/5/2017	n-Butylbenzene	8.3	15	0.65	1000	ug/L
MKTF-25	6/5/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	6/5/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	6/5/2017	1,2-Dichloroethane	**6.4**	5	2	5	ug/L
MKTF-25	6/5/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/5/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	6/5/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	6/5/2017	Toluene	2.8	5	0.32	1000	ug/L
MKTF-25	6/5/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	6/5/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	6/5/2017	Tetrachloroethene	0.76	5	0.65	5	ug/L
MKTF-25	6/5/2017	sec-Butylbenzene	3.6	5	0.55	2000	ug/L
MKTF-25	6/5/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	6/5/2017	cis-1,2-Dichloroethene	24	5	1	70	ug/L
MKTF-25	6/5/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	6/5/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-25	6/5/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	6/5/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	6/5/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	6/5/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	6/5/2017	Xylenes, Total	3	7.5	1.6	620	ug/L
MKTF-25	6/5/2017	MTBE	120	5	1.2	143	ug/L
MKTF-25	6/5/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	6/5/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-25	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-25	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-25	9/25/2017	Benzene	**1600**	100	6.2	5	ug/L
MKTF-25	9/25/2017	1,1,1-Trichloroethane	20	1	0.073	200	ug/L
MKTF-25	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-25	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-25	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-25	9/25/2017	Chloroethane	0.46	2	0.23	20857	ug/L
MKTF-25	9/25/2017	Vinyl Chloride	**3.1**	1	0.18	2	ug/L
MKTF-25	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-25	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-25	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-25	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-25	9/25/2017	1,1-Dichloroethane	**240**	10	4	25	ug/L
MKTF-25	9/25/2017	1,1-Dichloroethene	**110**	10	0.81	7	ug/L
MKTF-25	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-25	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-25	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-25	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-25	9/25/2017	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-25	9/25/2017	Trichloroethene	**27**	1	0.11	5	ug/L
MKTF-25	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-25	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-25	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-25	9/25/2017	1,2,4-Trimethylbenzene	3.5	1	0.11	56	ug/L
MKTF-25	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-25	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-25	9/25/2017	tert-Butylbenzene	0.12	1	0.1	690	ug/L
MKTF-25	9/25/2017	Isopropylbenzene	46	1	0.051	447	ug/L
MKTF-25	9/25/2017	p-Isopropyltoluene	0.89	1	0.096	NA	ug/L
MKTF-25	9/25/2017	Ethylbenzene	130	10	0.93	700	ug/L
MKTF-25	9/25/2017	Styrene	0.17	1	0.16	100	ug/L
MKTF-25	9/25/2017	n-Propylbenzene	57	1	0.074	660	ug/L
MKTF-25	9/25/2017	n-Butylbenzene	15	3	0.13	1000	ug/L
MKTF-25	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-25	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-25	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-25	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-25	9/25/2017	1,3,5-Trimethylbenzene	1.2	1	0.087	60	ug/L
MKTF-25	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-25	9/25/2017	Toluene	10	1	0.064	1000	ug/L
MKTF-25	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-25	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-25	9/25/2017	Tetrachloroethene	2.3	1	0.13	5	ug/L
MKTF-25	9/25/2017	sec-Butylbenzene	7.5	1	0.11	2000	ug/L
MKTF-25	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-25	9/25/2017	cis-1,2-Dichloroethene	52	1	0.2	70	ug/L
MKTF-25	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-25	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-25	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-25	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-25	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-25	9/25/2017	Xylenes, Total	14	1.5	0.32	620	ug/L
MKTF-25	9/25/2017	MTBE	**230**	10	2.4	143	ug/L
MKTF-25	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-25	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/21/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	11/21/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	11/21/2017	Chloroform	ND	5	2	100	ug/L
MKTF-25	11/21/2017	Benzene	**1600**	50	3.1	5	ug/L
MKTF-25	11/21/2017	1,1,1-Trichloroethane	16	5	0.36	200	ug/L
MKTF-25	11/21/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	11/21/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	11/21/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	11/21/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	11/21/2017	Vinyl Chloride	**3.2**	5	0.89	2	ug/L
MKTF-25	11/21/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	11/21/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	11/21/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	11/21/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	11/21/2017	1,1-Dichloroethane	**210**	5	2	25	ug/L
MKTF-25	11/21/2017	1,1-Dichloroethene	**94**	5	0.4	7	ug/L
MKTF-25	11/21/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	11/21/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	11/21/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	11/21/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	11/21/2017	1,1,2-Trichloroethane	1.2	5	0.7	5	ug/L
MKTF-25	11/21/2017	Trichloroethene	**21**	5	0.56	5	ug/L
MKTF-25	11/21/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	11/21/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	11/21/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	11/21/2017	1,2,4-Trimethylbenzene	4.5	5	0.56	56	ug/L
MKTF-25	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	11/21/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	11/21/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	11/21/2017	Isopropylbenzene	48	5	0.26	447	ug/L
MKTF-25	11/21/2017	p-Isopropyltoluene	0.53	5	0.48	NA	ug/L
MKTF-25	11/21/2017	Ethylbenzene	140	5	0.47	700	ug/L
MKTF-25	11/21/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-25	11/21/2017	n-Propylbenzene	57	5	0.37	660	ug/L
MKTF-25	11/21/2017	n-Butylbenzene	14	15	0.65	1000	ug/L
MKTF-25	11/21/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	11/21/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	11/21/2017	1,2-Dichloroethane	**9.7**	5	2	5	ug/L
MKTF-25	11/21/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	11/21/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	11/21/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	11/21/2017	Toluene	11	5	0.32	1000	ug/L
MKTF-25	11/21/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	11/21/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	11/21/2017	Tetrachloroethene	1.9	5	0.65	5	ug/L
MKTF-25	11/21/2017	sec-Butylbenzene	7	5	0.55	2000	ug/L
MKTF-25	11/21/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	11/21/2017	cis-1,2-Dichloroethene	47	5	1	70	ug/L
MKTF-25	11/21/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	11/21/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	11/21/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	11/21/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	11/21/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	11/21/2017	Xylenes, Total	13	7.5	1.6	620	ug/L
MKTF-25	11/21/2017	MTBE	**200**	5	1.2	143	ug/L
MKTF-25	11/21/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	11/21/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	2/5/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	2/5/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	2/5/2018	Chloroform	ND	5	2	100	ug/L
MKTF-25	2/5/2018	Benzene	**2000**	50	3.1	5	ug/L
MKTF-25	2/5/2018	1,1,1-Trichloroethane	14	5	0.36	200	ug/L
MKTF-25	2/5/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	2/5/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	2/5/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	2/5/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	2/5/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-25	2/5/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	2/5/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	2/5/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	2/5/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	2/5/2018	1,1-Dichloroethane	**220**	5	2	25	ug/L
MKTF-25	2/5/2018	1,1-Dichloroethene	**110**	5	0.4	7	ug/L
MKTF-25	2/5/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	2/5/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	2/5/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/5/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	2/5/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-25	2/5/2018	Trichloroethene	**25**	5	0.56	5	ug/L
MKTF-25	2/5/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	2/5/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	2/5/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	2/5/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
MKTF-25	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	2/5/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	2/5/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	2/5/2018	Isopropylbenzene	44	5	0.26	447	ug/L
MKTF-25	2/5/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
MKTF-25	2/5/2018	Ethylbenzene	110	5	0.47	700	ug/L
MKTF-25	2/5/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-25	2/5/2018	n-Propylbenzene	45	5	0.37	660	ug/L
MKTF-25	2/5/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
MKTF-25	2/5/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	2/5/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	2/5/2018	1,2-Dichloroethane	**10**	5	2	5	ug/L
MKTF-25	2/5/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	2/5/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	2/5/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	2/5/2018	Toluene	10	5	0.32	1000	ug/L
MKTF-25	2/5/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	2/5/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	2/5/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-25	2/5/2018	sec-Butylbenzene	6.9	5	0.55	2000	ug/L
MKTF-25	2/5/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	2/5/2018	cis-1,2-Dichloroethene	50	5	1	70	ug/L
MKTF-25	2/5/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	2/5/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	2/5/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	2/5/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	2/5/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	2/5/2018	Xylenes, Total	9.7	7.5	1.6	620	ug/L
MKTF-25	2/5/2018	MTBE	**250**	5	1.2	143	ug/L
MKTF-25	2/5/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	2/5/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	5/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-25	5/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-25	5/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-25	5/6/2018	Benzene	**3400**	50	3.1	5	ug/L
MKTF-25	5/6/2018	1,1,1-Trichloroethane	13	5	0.36	200	ug/L
MKTF-25	5/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-25	5/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-25	5/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-25	5/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-25	5/6/2018	Vinyl Chloride	**4**	5	0.89	2	ug/L
MKTF-25	5/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-25	5/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-25	5/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-25	5/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-25	5/6/2018	1,1-Dichloroethane	**230**	5	2	25	ug/L
MKTF-25	5/6/2018	1,1-Dichloroethene	**110**	5	0.4	7	ug/L
MKTF-25	5/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-25	5/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-25	5/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-25	5/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-25	5/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-25	5/6/2018	Trichloroethene	**26**	5	0.56	5	ug/L
MKTF-25	5/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-25	5/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-25	5/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-25	5/6/2018	1,2,4-Trimethylbenzene	4.6	5	0.56	56	ug/L
MKTF-25	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-25	5/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-25	5/6/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-25	5/6/2018	Isopropylbenzene	57	5	0.26	447	ug/L
MKTF-25	5/6/2018	p-Isopropyltoluene	1.4	5	0.48	NA	ug/L
MKTF-25	5/6/2018	Ethylbenzene	150	5	0.47	700	ug/L
MKTF-25	5/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-25	5/6/2018	n-Propylbenzene	85	5	0.37	660	ug/L
MKTF-25	5/6/2018	n-Butylbenzene	19	15	0.65	1000	ug/L
MKTF-25	5/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-25	5/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-25	5/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-25	5/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-25	5/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-25	5/6/2018	Toluene	15	5	0.32	1000	ug/L
MKTF-25	5/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-25	5/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-25	5/6/2018	Tetrachloroethene	2.7	5	0.65	5	ug/L
MKTF-25	5/6/2018	sec-Butylbenzene	9.5	5	0.55	2000	ug/L
MKTF-25	5/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-25	5/6/2018	cis-1,2-Dichloroethene	53	5	1	70	ug/L
MKTF-25	5/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-25	5/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-25	5/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-25	5/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-25	5/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-25	5/6/2018	Xylenes, Total	9	7.5	1.6	620	ug/L
MKTF-25	5/6/2018	MTBE	**260**	5	1.2	143	ug/L
MKTF-25	5/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-25	5/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-25	8/17/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-25	8/17/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-25	8/17/2018	Chloroform	ND	10	4	100	ug/L
MKTF-25	8/17/2018	Benzene	**4500**	100	17	5	ug/L
MKTF-25	8/17/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
MKTF-25	8/17/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-25	8/17/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-25	8/17/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-25	8/17/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-25	8/17/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-25	8/17/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-25	8/17/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-25	8/17/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-25	8/17/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-25	8/17/2018	1,1-Dichloroethane	**140**	10	4	25	ug/L
MKTF-25	8/17/2018	1,1-Dichloroethene	**49**	10	1.2	7	ug/L
MKTF-25	8/17/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-25	8/17/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-25	8/17/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-25	8/17/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-25	8/17/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-25	8/17/2018	Trichloroethene	**6**	10	2.6	5	ug/L
MKTF-25	8/17/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-25	8/17/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-25	8/17/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-25	8/17/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
MKTF-25	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-25	8/17/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-25	8/17/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-25	8/17/2018	Isopropylbenzene	35	10	2.2	447	ug/L
MKTF-25	8/17/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-25	8/17/2018	Ethylbenzene	26	10	2.2	700	ug/L
MKTF-25	8/17/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-25	8/17/2018	n-Propylbenzene	64	10	2.4	660	ug/L
MKTF-25	8/17/2018	n-Butylbenzene	12	30	2.5	1000	ug/L
MKTF-25	8/17/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-25	8/17/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-25	8/17/2018	1,2-Dichloroethane	**8.5**	10	4	5	ug/L
MKTF-25	8/17/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-25	8/17/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-25	8/17/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-25	8/17/2018	Toluene	17	10	1.7	1000	ug/L
MKTF-25	8/17/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-25	8/17/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-25	8/17/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-25	8/17/2018	sec-Butylbenzene	5.6	10	2	2000	ug/L
MKTF-25	8/17/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-25	8/17/2018	cis-1,2-Dichloroethene	52	10	3.8	70	ug/L
MKTF-25	8/17/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-25	8/17/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-25	8/17/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-25	8/17/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-25	8/17/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-25	8/17/2018	Xylenes, Total	ND	15	6.4	620	ug/L
MKTF-25	8/17/2018	MTBE	**250**	10	3.2	143	ug/L
MKTF-25	8/17/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-25	8/17/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-25	11/15/2018	Acetone	ND	100	7.6	14064	ug/L
MKTF-25	11/15/2018	Chloroform	ND	10	2.4	100	ug/L
MKTF-25	11/15/2018	Benzene	**1700**	100	17	5	ug/L
MKTF-25	11/15/2018	1,1,1-Trichloroethane	ND	10	1.6	200	ug/L
MKTF-25	11/15/2018	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-25	11/15/2018	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-25	11/15/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-25	11/15/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-25	11/15/2018	Vinyl Chloride	*ND*	*10*	1.2	2	ug/L
MKTF-25	11/15/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-25	11/15/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-25	11/15/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-25	11/15/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-25	11/15/2018	1,1-Dichloroethane	**130**	10	1.8	25	ug/L
MKTF-25	11/15/2018	1,1-Dichloroethene	**27**	10	1.2	7	ug/L
MKTF-25	11/15/2018	Trichlorofluoromethane	ND	10	1.4	1137	ug/L
MKTF-25	11/15/2018	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-25	11/15/2018	1,2-Dichloropropane	*ND*	*10*	1.7	5	ug/L
MKTF-25	11/15/2018	2-Butanone	ND	100	14	5565	ug/L
MKTF-25	11/15/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
MKTF-25	11/15/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
MKTF-25	11/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-25	11/15/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-25	11/15/2018	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-25	11/15/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
MKTF-25	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-25	11/15/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-25	11/15/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-25	11/15/2018	Isopropylbenzene	ND	10	2.2	447	ug/L
MKTF-25	11/15/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
MKTF-25	11/15/2018	Ethylbenzene	ND	10	2.2	700	ug/L
MKTF-25	11/15/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-25	11/15/2018	n-Propylbenzene	ND	10	2.4	660	ug/L
MKTF-25	11/15/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-25	11/15/2018	4-Chlorotoluene	ND	10	2.8	250	ug/L
MKTF-25	11/15/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-25	11/15/2018	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-25	11/15/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-25	11/15/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
MKTF-25	11/15/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-25	11/15/2018	Toluene	ND	10	1.7	1000	ug/L
MKTF-25	11/15/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-25	11/15/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-25	11/15/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-25	11/15/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
MKTF-25	11/15/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-25	11/15/2018	cis-1,2-Dichloroethene	29	10	3.8	70	ug/L
MKTF-25	11/15/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-25	11/15/2018	Pentafluorobenzene	**100**	0	0		None
MKTF-25	11/15/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-25	11/15/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-25	11/15/2018	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-25	11/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-25	11/15/2018	Xylenes, Total	ND	15	6.4	620	ug/L
MKTF-25	11/15/2018	MTBE	**200**	10	4.6	143	ug/L
MKTF-25	11/15/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-25	11/15/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-25	5/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
MKTF-25	5/6/2019	1,1,1-Trichloroethane	3.2	10	1.729216	200	ug/L
MKTF-25	5/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
MKTF-25	5/6/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
MKTF-25	5/6/2019	1,1-Dichloroethane	**140**	10	1.408586	25	ug/L
MKTF-25	5/6/2019	1,1-Dichloroethene	**50**	10	2.053882	7	ug/L
MKTF-25	5/6/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
MKTF-25	5/6/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
MKTF-25	5/6/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
MKTF-25	5/6/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
MKTF-25	5/6/2019	1,2,4-Trimethylbenzene	2.3	10	2.131991	56	ug/L
MKTF-25	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
MKTF-25	5/6/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
MKTF-25	5/6/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
MKTF-25	5/6/2019	1,2-Dichloroethane	**6.1**	10	1.946378	5	ug/L
MKTF-25	5/6/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
MKTF-25	5/6/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L
MKTF-25	5/6/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
MKTF-25	5/6/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
MKTF-25	5/6/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
MKTF-25	5/6/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
MKTF-25	5/6/2019	2-Butanone	ND	100	20.894166	5565	ug/L
MKTF-25	5/6/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
MKTF-25	5/6/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
MKTF-25	5/6/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
MKTF-25	5/6/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
MKTF-25	5/6/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
MKTF-25	5/6/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
MKTF-25	5/6/2019	Acetone	ND	100	11.993964	14064	ug/L
MKTF-25	5/6/2019	Benzene	**370**	10	1.666391	5	ug/L
MKTF-25	5/6/2019	Bromobenzene	ND	10	2.44727	62	ug/L
MKTF-25	5/6/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
MKTF-25	5/6/2019	Bromoform	ND	10	2.886632	32.9	ug/L
MKTF-25	5/6/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
MKTF-25	5/6/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
MKTF-25	5/6/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
MKTF-25	5/6/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
MKTF-25	5/6/2019	Chloroethane	ND	20	1.778026	20857	ug/L
MKTF-25	5/6/2019	Chloroform	ND	10	1.218906	100	ug/L
MKTF-25	5/6/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
MKTF-25	5/6/2019	cis-1,2-Dichloroethene	35	10	1.901151	70	ug/L
MKTF-25	5/6/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
MKTF-25	5/6/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
MKTF-25	5/6/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
MKTF-25	5/6/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
MKTF-25	5/6/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
MKTF-25	5/6/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
MKTF-25	5/6/2019	Isopropylbenzene	21	10	1.915223	447	ug/L
MKTF-25	5/6/2019	MTBE	**290**	10	4.56095	143	ug/L
MKTF-25	5/6/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
MKTF-25	5/6/2019	Naphthalene	ND	20	2.750713	30	ug/L
MKTF-25	5/6/2019	n-Butylbenzene	6.3	30	2.275695	1000	ug/L
MKTF-25	5/6/2019	n-Propylbenzene	5.7	10	2.14308	660	ug/L
MKTF-25	5/6/2019	sec-Butylbenzene	4.1	10	2.477313	2000	ug/L
MKTF-25	5/6/2019	Styrene	ND	10	1.913234	100	ug/L
MKTF-25	5/6/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
MKTF-25	5/6/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
MKTF-25	5/6/2019	Toluene	ND	10	3.504362	1000	ug/L
MKTF-25	5/6/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
MKTF-25	5/6/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
MKTF-25	5/6/2019	Trichloroethene	**12**	10	1.662718	5	ug/L
MKTF-25	5/6/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
MKTF-25	5/6/2019	Vinyl Chloride	**7**	10	1.790993	2	ug/L
MKTF-25	5/6/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
MKTF-25	5/6/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-25	8/27/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-25	8/27/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-25	8/27/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-25	8/27/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-25	8/27/2019	1,1-Dichloroethane	**130**	5	0.704293	25	ug/L
MKTF-25	8/27/2019	1,1-Dichloroethene	**52**	5	1.026941	7	ug/L
MKTF-25	8/27/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-25	8/27/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-25	8/27/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-25	8/27/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-25	8/27/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
MKTF-25	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-25	8/27/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-25	8/27/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-25	8/27/2019	1,2-Dichloroethane	**10**	5	0.973189	5	ug/L
MKTF-25	8/27/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-25	8/27/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-25	8/27/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-25	8/27/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-25	8/27/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-25	8/27/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
MKTF-25	8/27/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-25	8/27/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-25	8/27/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-25	8/27/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-25	8/27/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-25	8/27/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-25	8/27/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-25	8/27/2019	Acetone	14	50	5.996982	14064	ug/L
MKTF-25	8/27/2019	Benzene	**130**	5	0.833195	5	ug/L
MKTF-25	8/27/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-25	8/27/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-25	8/27/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-25	8/27/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-25	8/27/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-25	8/27/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-25	8/27/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-25	8/27/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-25	8/27/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-25	8/27/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-25	8/27/2019	cis-1,2-Dichloroethene	25	5	0.950575	70	ug/L
MKTF-25	8/27/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-25	8/27/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-25	8/27/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-25	8/27/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-25	8/27/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
MKTF-25	8/27/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-25	8/27/2019	Isopropylbenzene	2	5	0.957611	447	ug/L
MKTF-25	8/27/2019	MTBE	**850**	5	2.280475	143	ug/L
MKTF-25	8/27/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-25	8/27/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-25	8/27/2019	n-Butylbenzene	4.5	15	1.137848	1000	ug/L
MKTF-25	8/27/2019	n-Propylbenzene	1.4	5	1.07154	660	ug/L
MKTF-25	8/27/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-25	8/27/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-25	8/27/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-25	8/27/2019	Tetrachloroethene	1.6	5	0.747625	5	ug/L
MKTF-25	8/27/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-25	8/27/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-25	8/27/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-25	8/27/2019	Trichloroethene	**13**	5	0.831359	5	ug/L
MKTF-25	8/27/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-25	8/27/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-25	8/27/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-25	8/27/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-25	10/23/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-25	10/23/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-25	10/23/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-25	10/23/2019	1,1,2-Trichloroethane	1.5	5	1.07915	5	ug/L
MKTF-25	10/23/2019	1,1-Dichloroethane	**110**	5	0.704293	25	ug/L
MKTF-25	10/23/2019	1,1-Dichloroethene	**59**	5	1.026941	7	ug/L
MKTF-25	10/23/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-25	10/23/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-25	10/23/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-25	10/23/2019	1,2,4-Trimethylbenzene	1.3	5	1.065995	56	ug/L
MKTF-25	10/23/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-25	10/23/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-25	10/23/2019	1,2-Dichloroethane	**9.1**	5	0.973189	5	ug/L
MKTF-25	10/23/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-25	10/23/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-25	10/23/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-25	10/23/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-25	10/23/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
MKTF-25	10/23/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-25	10/23/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-25	10/23/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-25	10/23/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
MKTF-25	10/23/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-25	10/23/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-25	10/23/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-25	10/23/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-25	10/23/2019	Benzene	**370**	5	0.833195	5	ug/L
MKTF-25	10/23/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-25	10/23/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-25	10/23/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-25	10/23/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-25	10/23/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-25	10/23/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-25	10/23/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-25	10/23/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-25	10/23/2019	Chloroform	ND	5	0.609453	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	10/23/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-25	10/23/2019	cis-1,2-Dichloroethene	27	5	0.950575	70	ug/L
MKTF-25	10/23/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-25	10/23/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-25	10/23/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-25	10/23/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-25	10/23/2019	Ethylbenzene	0.81	5	0.661704	700	ug/L
MKTF-25	10/23/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-25	10/23/2019	Isopropylbenzene	7.7	5	0.957611	447	ug/L
MKTF-25	10/23/2019	MTBE	**880**	5	2.280475	143	ug/L
MKTF-25	10/23/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	10	1.375357	30	ug/L
MKTF-25	10/23/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
MKTF-25	10/23/2019	n-Propylbenzene	3.3	5	1.07154	660	ug/L
MKTF-25	10/23/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
MKTF-25	10/23/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-25	10/23/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-25	10/23/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-25	10/23/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-25	10/23/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-25	10/23/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-25	10/23/2019	Trichloroethene	**11**	5	0.831359	5	ug/L
MKTF-25	10/23/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-25	10/23/2019	Vinyl Chloride	**3.3**	5	0.895496	2	ug/L
MKTF-25	10/23/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-25	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-25	2/27/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-25	2/27/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-25	2/27/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-25	2/27/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-25	2/27/2020	1,1-Dichloroethane	**100**	5	1.4	25	ug/L
MKTF-25	2/27/2020	1,1-Dichloroethene	**63**	5	0.65	7	ug/L
MKTF-25	2/27/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-25	2/27/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-25	2/27/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-25	2/27/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-25	2/27/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-25	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-25	2/27/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-25	2/27/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-25	2/27/2020	1,2-Dichloroethane	**8.8**	5	1.1	5	ug/L
MKTF-25	2/27/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-25	2/27/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
MKTF-25	2/27/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-25	2/27/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-25	2/27/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-25	2/27/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
MKTF-25	2/27/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-25	2/27/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-25	2/27/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-25	2/27/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-25	2/27/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
MKTF-25	2/27/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-25	2/27/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
MKTF-25	2/27/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-25	2/27/2020	Acetone	16	50	12	14064	ug/L
MKTF-25	2/27/2020	Benzene	**420**	5	1.1	5	ug/L
MKTF-25	2/27/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-25	2/27/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-25	2/27/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-25	2/27/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-25	2/27/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-25	2/27/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-25	2/27/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-25	2/27/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-25	2/27/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-25	2/27/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-25	2/27/2020	cis-1,2-Dichloroethene	27	5	1.9	70	ug/L
MKTF-25	2/27/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-25	2/27/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-25	2/27/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-25	2/27/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-25	2/27/2020	Ethylbenzene	ND	5	1.1	700	ug/L
MKTF-25	2/27/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-25	2/27/2020	Isopropylbenzene	7.7	5	0.91	447	ug/L
MKTF-25	2/27/2020	MTBE	**620**	5	2	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/27/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-25	2/27/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
MKTF-25	2/27/2020	n-Propylbenzene	2.3	5	0.91	660	ug/L
MKTF-25	2/27/2020	Naphthalene	ND	10	1.4	30	ug/L
MKTF-25	2/27/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
MKTF-25	2/27/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-25	2/27/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-25	2/27/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-25	2/27/2020	Toluene	ND	5	1	1000	ug/L
MKTF-25	2/27/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-25	2/27/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-25	2/27/2020	Trichloroethene	**12**	5	1	5	ug/L
MKTF-25	2/27/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-25	2/27/2020	Vinyl Chloride	**4.2**	5	0.98	2	ug/L
MKTF-25	2/27/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
MKTF-25	2/27/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-25	12/18/2020	Acetone	211	125	50	14064	ug/L
MKTF-25	12/18/2020	Benzene	**629**	5	1.9	5	ug/L
MKTF-25	12/18/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-25	12/18/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-25	12/18/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-25	12/18/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-25	12/18/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-25	12/18/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-25	12/18/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-25	12/18/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-25	12/18/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-25	12/18/2020	Chloroform	ND	5	3	100	ug/L
MKTF-25	12/18/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-25	12/18/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-25	12/18/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L
MKTF-25	12/18/2020	cis-1,2-Dichloroethene	14.9	5	2.5	70	ug/L
MKTF-25	12/18/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-25	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-25	12/18/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-25	12/18/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-25	12/18/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-25	12/18/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-25	12/18/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-25	12/18/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-25	12/18/2020	1,1-Dichloroethane	**91.8**	5	2.5	25	ug/L
MKTF-25	12/18/2020	1,2-Dichloroethane	**32.1**	5	2.5	5	ug/L
MKTF-25	12/18/2020	1,1-Dichloroethene	**61.3**	5	2.5	7	ug/L
MKTF-25	12/18/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-25	12/18/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-25	12/18/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-25	12/18/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-25	12/18/2020	Ethylbenzene	ND	5	2.5	700	ug/L
MKTF-25	12/18/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-25	12/18/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-25	12/18/2020	Isopropylbenzene	ND	5	2.65	447	ug/L
MKTF-25	12/18/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-25	12/18/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-25	12/18/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-25	12/18/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-25	12/18/2020	MTBE	**795**	5	3.7	143	ug/L
MKTF-25	12/18/2020	Naphthalene	ND	5	5	30	ug/L
MKTF-25	12/18/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-25	12/18/2020	n-Propylbenzene	ND	5	3.45	660	ug/L
MKTF-25	12/18/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-25	12/18/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-25	12/18/2020	Styrene	ND	5	5	100	ug/L
MKTF-25	12/18/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-25	12/18/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-25	12/18/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-25	12/18/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-25	12/18/2020	Toluene	ND	5	2.05	1000	ug/L
MKTF-25	12/18/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-25	12/18/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-25	12/18/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L
MKTF-25	12/18/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-25	12/18/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-25	12/18/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-25	12/18/2020	Trichloroethene	**9.7**	5	2.5	5	ug/L
MKTF-25	12/18/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-25	12/18/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	12/18/2020	1,2,4-Trimethylbenzene	ND	5	4.1	56	ug/L
MKTF-25	12/18/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-25	12/18/2020	Vinyl Chloride	*ND*	*5*	2.5	2	ug/L
MKTF-25	12/18/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-25	12/18/2020	1,2-Dibromoethane	ND	0.0202	0.00504	0.05	ug/L
MKTF-27	4/8/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-27	4/8/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-27	4/8/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-27	4/8/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-27	4/8/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-27	4/8/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-27	4/8/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-27	4/8/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-27	4/8/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-27	4/8/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-27	4/8/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-27	4/8/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-27	4/8/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-27	4/8/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-27	4/8/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-27	4/8/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
MKTF-27	4/8/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-27	4/8/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-27	4/8/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-27	4/8/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-27	4/8/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-27	4/8/2014	Trichloroethene	ND	2	0.39	5	ug/L
MKTF-27	4/8/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-27	4/8/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-27	4/8/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-27	4/8/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-27	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-27	4/8/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-27	4/8/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-27	4/8/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-27	4/8/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-27	4/8/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-27	4/8/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-27	4/8/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-27	4/8/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-27	4/8/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-27	4/8/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-27	4/8/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-27	4/8/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-27	4/8/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-27	4/8/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-27	4/8/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-27	4/8/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-27	4/8/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-27	4/8/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-27	4/8/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-27	4/8/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-27	4/8/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-27	4/8/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-27	4/8/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-27	4/8/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-27	4/8/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-27	4/8/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-27	4/8/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-27	4/8/2014	MTBE	38	2	0.5	143	ug/L
MKTF-27	4/8/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-27	4/8/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-27	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-27	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-27	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-27	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-27	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-27	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-27	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-27	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-27	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-27	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-27	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-27	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/24/2014	1,1-Dichloroethane	2	1	0.28	25	ug/L
MKTF-27	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-27	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-27	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-27	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-27	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-27	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-27	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-27	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-27	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-27	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-27	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-27	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-27	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-27	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-27	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-27	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-27	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-27	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-27	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-27	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-27	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-27	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-27	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-27	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-27	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-27	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-27	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-27	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-27	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-27	9/24/2014	MTBE	11	1	0.25	143	ug/L
MKTF-27	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-27	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-27	11/14/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-27	11/14/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-27	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-27	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-27	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-27	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-27	11/14/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-27	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-27	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-27	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-27	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-27	11/14/2014	1,1-Dichloroethane	2.8	1	0.28	25	ug/L
MKTF-27	11/14/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-27	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-27	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-27	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	11/14/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	11/14/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-27	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-27	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-27	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	11/14/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-27	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-27	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-27	11/14/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-27	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-27	11/14/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-27	11/14/2014	Styrene	ND	1	0.12	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/14/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-27	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-27	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-27	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-27	11/14/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-27	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-27	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-27	11/14/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-27	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-27	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-27	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	11/14/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-27	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-27	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-27	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-27	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-27	11/14/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-27	11/14/2014	MTBE	19	1	0.25	143	ug/L
MKTF-27	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-27	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	3/11/2015	1,1-Dichloroethane	1.6	1	0.4	25	ug/L
MKTF-27	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	3/11/2015	MTBE	8.9	1	0.17	143	ug/L
MKTF-27	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	6/9/2015	1,1-Dichloroethane	2	1	0.4	25	ug/L
MKTF-27	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	6/9/2015	MTBE	34	1	0.17	143	ug/L
MKTF-27	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-27	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-27	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	8/20/2015	MTBE	33	1	0.17	143	ug/L
MKTF-27	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-27	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-27	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-27	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-27	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-27	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-27	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-27	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-27	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-27	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-27	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-27	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-27	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-27	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-27	11/4/2015	1,1-Dichloroethane	2.3	1	0.4	25	ug/L
MKTF-27	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-27	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-27	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-27	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-27	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-27	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-27	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-27	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-27	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-27	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-27	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-27	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-27	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-27	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-27	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-27	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-27	11/4/2015	Styrene	ND	1	0.11	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-27	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-27	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-27	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-27	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-27	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-27	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-27	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-27	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-27	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-27	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-27	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-27	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-27	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-27	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-27	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-27	11/4/2015	MTBE	31	1	0.17	143	ug/L
MKTF-27	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	2/22/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	2/22/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-27	2/22/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	2/22/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-27	2/22/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-27	2/22/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	2/22/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	2/22/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	2/22/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-27	2/22/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-27	2/22/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-27	2/22/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	2/22/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	2/22/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-27	2/22/2016	1,1-Dichloroethane	1.9	1	0.11	25	ug/L
MKTF-27	2/22/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-27	2/22/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-27	2/22/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-27	2/22/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-27	2/22/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-27	2/22/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-27	2/22/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	2/22/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-27	2/22/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	2/22/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	2/22/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-27	2/22/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-27	2/22/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-27	2/22/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-27	2/22/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-27	2/22/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	2/22/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	2/22/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-27	2/22/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	2/22/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	2/22/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	2/22/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	2/22/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-27	2/22/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-27	2/22/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	2/22/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-27	2/22/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-27	2/22/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-27	2/22/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	2/22/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	2/22/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	2/22/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	2/22/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-27	2/22/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	2/22/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	2/22/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-27	2/22/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/22/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	2/22/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	2/22/2016	MTBE	15	1	0.21	143	ug/L
MKTF-27	2/22/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	2/22/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-27	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	6/8/2016	Benzene	0.15	1	0.096	5	ug/L
MKTF-27	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	6/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-27	6/8/2016	1,1-Dichloroethane	2.8	1	0.11	25	ug/L
MKTF-27	6/8/2016	1,1-Dichloroethene	0.74	1	0.11	7	ug/L
MKTF-27	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-27	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	6/8/2016	1,2,4-Trimethylbenzene	0.49	1	0.11	56	ug/L
MKTF-27	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	6/8/2016	Ethylbenzene	0.15	1	0.11	700	ug/L
MKTF-27	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-27	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	6/8/2016	1,2-Dichloroethane	0.7	1	0.12	5	ug/L
MKTF-27	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	6/8/2016	1,3,5-Trimethylbenzene	0.17	1	0.12	60	ug/L
MKTF-27	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	6/8/2016	Toluene	0.4	1	0.12	1000	ug/L
MKTF-27	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	6/8/2016	sec-Butylbenzene	0.16	1	0.12	2000	ug/L
MKTF-27	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	6/8/2016	cis-1,2-Dichloroethene	0.22	1	0.12	70	ug/L
MKTF-27	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	6/8/2016	Xylenes, Total	0.91	1.5	0.37	620	ug/L
MKTF-27	6/8/2016	MTBE	42	1	0.21	143	ug/L
MKTF-27	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	9/7/2016	Benzene	0.31	1	0.096	5	ug/L
MKTF-27	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	1,1-Dichloroethane	1.7	1	0.11	25	ug/L
MKTF-27	9/7/2016	1,1-Dichloroethene	0.58	1	0.11	7	ug/L
MKTF-27	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	9/7/2016	1,2-Dichloropropane	0.41	1	0.11	5	ug/L
MKTF-27	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	9/7/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
MKTF-27	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-27	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	9/7/2016	1,2-Dichloroethane	0.76	1	0.12	5	ug/L
MKTF-27	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	9/7/2016	Toluene	0.21	1	0.12	1000	ug/L
MKTF-27	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	9/7/2016	sec-Butylbenzene	0.31	1	0.12	2000	ug/L
MKTF-27	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	9/7/2016	cis-1,2-Dichloroethene	0.32	1	0.12	70	ug/L
MKTF-27	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-27	9/7/2016	MTBE	26	1	0.21	143	ug/L
MKTF-27	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-27	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-27	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-27	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-27	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-27	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-27	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-27	10/28/2016	1,1-Dichloroethane	1.8	1	0.11	25	ug/L
MKTF-27	10/28/2016	1,1-Dichloroethene	0.39	1	0.11	7	ug/L
MKTF-27	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-27	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-27	10/28/2016	1,2-Dichloropropane	0.24	1	0.11	5	ug/L
MKTF-27	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-27	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-27	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-27	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-27	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-27	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-27	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-27	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	10/28/2016	Styrene	ND	1	0.11	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-27	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-27	10/28/2016	1,2-Dichloroethane	0.57	1	0.12	5	ug/L
MKTF-27	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-27	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-27	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-27	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-27	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-27	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	10/28/2016	cis-1,2-Dichloroethene	0.19	1	0.12	70	ug/L
MKTF-27	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-27	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-27	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-27	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-27	10/28/2016	MTBE	21	1	0.21	143	ug/L
MKTF-27	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-27	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	3/29/2017	Acetone	1.8	10	0.88	14064	ug/L
MKTF-27	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-27	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-27	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-27	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-27	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-27	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-27	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	3/29/2017	1,1-Dichloroethane	1.5	1	0.1	25	ug/L
MKTF-27	3/29/2017	1,1-Dichloroethene	0.36	1	0.081	7	ug/L
MKTF-27	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-27	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-27	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-27	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-27	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-27	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-27	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-27	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-27	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-27	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	3/29/2017	1,2-Dichloroethane	0.59	1	0.12	5	ug/L
MKTF-27	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-27	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-27	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-27	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-27	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-27	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-27	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-27	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	3/29/2017	MTBE	22	1	0.15	143	ug/L
MKTF-27	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-27	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-27	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	6/5/2017	Acetone	3.8	10	0.82	14064	ug/L
MKTF-27	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-27	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	6/5/2017	1,1-Dichloroethane	2.2	1	0.4	25	ug/L
MKTF-27	6/5/2017	1,1-Dichloroethene	0.32	1	0.081	7	ug/L
MKTF-27	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-27	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-27	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	6/5/2017	MTBE	31	1	0.24	143	ug/L
MKTF-27	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	10/3/2017	Acetone	9.7	10	0.82	14064	ug/L
MKTF-27	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	10/3/2017	Benzene	0.13	1	0.062	5	ug/L
MKTF-27	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	10/3/2017	1,1-Dichloroethane	1.7	1	0.4	25	ug/L
MKTF-27	10/3/2017	1,1-Dichloroethene	0.59	1	0.081	7	ug/L
MKTF-27	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	10/3/2017	1,2-Dichloroethane	0.63	1	0.4	5	ug/L
MKTF-27	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	10/3/2017	cis-1,2-Dichloroethene	0.29	1	0.2	70	ug/L
MKTF-27	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	10/3/2017	MTBE	25	1	0.24	143	ug/L
MKTF-27	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	11/20/2017	Acetone	2.2	10	0.82	14064	ug/L
MKTF-27	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-27	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	11/20/2017	1,1-Dichloroethane	1.9	1	0.4	25	ug/L
MKTF-27	11/20/2017	1,1-Dichloroethene	0.48	1	0.081	7	ug/L
MKTF-27	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	11/20/2017	1,2-Dichloropropane	0.14	1	0.1	5	ug/L
MKTF-27	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-27	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	11/20/2017	1,2-Dichloroethane	0.51	1	0.4	5	ug/L
MKTF-27	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	11/20/2017	MTBE	23	1	0.24	143	ug/L
MKTF-27	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-27	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-27	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	2/6/2018	1,1-Dichloroethane	2.3	1	0.4	25	ug/L
MKTF-27	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-27	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-27	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-27	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	2/6/2018	MTBE	18	1	0.24	143	ug/L
MKTF-27	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-27	5/1/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-27	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-27	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-27	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-27	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-27	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-27	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-27	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-27	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-27	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-27	5/1/2018	1,1-Dichloroethane	1.5	1	0.4	25	ug/L
MKTF-27	5/1/2018	1,1-Dichloroethene	0.42	1	0.081	7	ug/L
MKTF-27	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-27	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-27	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-27	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-27	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-27	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-27	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-27	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-27	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-27	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-27	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-27	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-27	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-27	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-27	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-27	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-27	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-27	5/1/2018	1,2-Dichloroethane	0.53	1	0.4	5	ug/L
MKTF-27	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-27	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-27	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-27	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-27	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-27	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-27	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-27	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-27	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-27	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-27	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-27	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-27	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-27	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-27	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-27	5/1/2018	MTBE	25	1	0.24	143	ug/L
MKTF-27	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-27	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-27	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-27	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-27	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-27	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-27	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-27	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-27	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-27	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-27	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-27	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-27	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-27	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-27	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-27	8/20/2018	1,1-Dichloroethane	1.9	1	0.4	25	ug/L
MKTF-27	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-27	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-27	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-27	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-27	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-27	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-27	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-27	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-27	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-27	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-27	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-27	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-27	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-27	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-27	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-27	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-27	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-27	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-27	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-27	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-27	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-27	8/20/2018	1,2-Dichloroethane	0.53	1	0.4	5	ug/L
MKTF-27	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-27	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-27	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-27	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-27	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-27	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-27	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-27	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-27	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-27	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-27	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-27	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-27	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-27	8/20/2018	MTBE	14	1	0.32	143	ug/L
MKTF-27	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-27	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-27	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-27	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-27	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-27	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-27	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-27	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-27	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-27	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-27	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-27	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-27	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-27	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-27	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-27	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-27	11/15/2018	1,1-Dichloroethane	2	1	0.18	25	ug/L
MKTF-27	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-27	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-27	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-27	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-27	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-27	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-27	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-27	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-27	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-27	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-27	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-27	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-27	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-27	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-27	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-27	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-27	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-27	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-27	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-27	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-27	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-27	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-27	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-27	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-27	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-27	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-27	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-27	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-27	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-27	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-27	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-27	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-27	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-27	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-27	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-27	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-27	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-27	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-27	11/15/2018	MTBE	21	1	0.46	143	ug/L
MKTF-27	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-27	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-27	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-27	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-27	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-27	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	3/28/2019	Acetone	5.4	10	1.199396	14064	ug/L
MKTF-27	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	3/28/2019	MTBE	1.8	1	0.456095	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	3/28/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-27	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	5/6/2019	1,1-Dichloroethane	0.83	1	0.140859	25	ug/L
MKTF-27	5/6/2019	1,1-Dichloroethene	0.26	1	0.205388	7	ug/L
MKTF-27	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	5/6/2019	1,2-Dichloroethane	0.33	1	0.194638	5	ug/L
MKTF-27	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	5/6/2019	Acetone	10	10	1.199396	14064	ug/L
MKTF-27	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	5/6/2019	MTBE	19	1	0.456095	143	ug/L
MKTF-27	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	5/6/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-27	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-27	8/21/2019	1,1-Dichloroethane	1.6	1	0.140859	25	ug/L
MKTF-27	8/21/2019	1,1-Dichloroethene	0.47	1	0.205388	7	ug/L
MKTF-27	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-27	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-27	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-27	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	8/21/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-27	8/21/2019	Benzene	**9.7**	1	0.166639	5	ug/L
MKTF-27	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	8/21/2019	MTBE	24	1	0.456095	143	ug/L
MKTF-27	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	8/21/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-27	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-27	10/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-27	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-27	10/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	1,1-Dichloroethane	1.1	1	0.140859	25	ug/L
MKTF-27	10/23/2019	1,1-Dichloroethene	0.4	1	0.205388	7	ug/L
MKTF-27	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-27	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-27	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-27	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-27	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-27	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-27	10/23/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
MKTF-27	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-27	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-27	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-27	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-27	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-27	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-27	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-27	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-27	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-27	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-27	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-27	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-27	10/23/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-27	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-27	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-27	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-27	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-27	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-27	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-27	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-27	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-27	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-27	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-27	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-27	10/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-27	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-27	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-27	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-27	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-27	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-27	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-27	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-27	10/23/2019	MTBE	14	1	0.456095	143	ug/L
MKTF-27	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-27	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-27	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-27	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-27	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-27	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-27	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-27	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-27	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-27	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-27	10/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-27	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-27	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-27	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-27	10/23/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-27	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-27	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-27	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-27	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-27	2/25/2020	1,1-Dichloroethane	0.43	1	0.27	25	ug/L
MKTF-27	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-27	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-27	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-27	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-27	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-27	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-27	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-27	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-27	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-27	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-27	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-27	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-27	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-27	2/25/2020	2-Butanone	2.6	10	1.1	5565	ug/L
MKTF-27	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-27	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-27	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-27	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-27	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	2/25/2020	Acetone	6	10	2.3	14064	ug/L
MKTF-27	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-27	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-27	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-27	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-27	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-27	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-27	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-27	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-27	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-27	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-27	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-27	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-27	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-27	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-27	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-27	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-27	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-27	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-27	2/25/2020	MTBE	6	1	0.39	143	ug/L
MKTF-27	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-27	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-27	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-27	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-27	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-27	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-27	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-27	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-27	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-27	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-27	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-27	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-27	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-27	2/25/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-27	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-27	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-27	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-27	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-27	9/20/2020	1,1-Dichloroethane	1.3	1	0.27	25	ug/L
MKTF-27	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-27	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-27	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-27	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-27	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-27	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-27	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-27	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-27	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-27	9/20/2020	1,2-Dichloroethane	0.39	1	0.22	5	ug/L
MKTF-27	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-27	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-27	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-27	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-27	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-27	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-27	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-27	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-27	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-27	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-27	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-27	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-27	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-27	9/20/2020	Acetone	4.4	10	2.3	14064	ug/L
MKTF-27	9/20/2020	Benzene	0.86	1	0.23	5	ug/L
MKTF-27	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-27	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-27	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-27	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-27	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-27	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-27	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-27	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-27	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-27	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-27	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-27	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-27	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-27	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-27	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-27	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-27	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-27	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-27	9/20/2020	MTBE	29	1	0.39	143	ug/L
MKTF-27	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-27	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-27	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-27	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-27	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-27	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-27	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-27	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-27	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-27	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-27	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-27	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-27	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-27	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-27	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-27	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-27	12/18/2020	1,2-Dibromoethane	ND	0.0204	0.0051	0.05	ug/L
MKTF-27	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-27	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-27	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-27	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-27	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-27	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-27	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-27	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-27	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-27	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-27	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-27	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-27	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-27	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-27	12/18/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-27	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-27	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-27	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-27	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-27	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-27	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-27	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-27	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-27	12/18/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-27	12/18/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-27	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-27	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-27	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-27	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-27	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-27	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-27	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-27	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-27	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-27	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-27	12/18/2020	MTBE	4.4	1	0.74	143	ug/L
MKTF-27	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-27	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-27	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-27	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-27	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-27	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-27	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-27	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-27	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-27	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-27	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-27	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-27	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-27	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-27	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-27	12/18/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-27	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-27	12/18/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-27	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-27	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-27	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-27	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-27	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-27	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-28	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-28	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-28	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-28	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-28	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-28	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-28	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-28	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-28	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-28	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-28	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-28	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-28	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-28	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-28	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-28	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-28	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-28	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-28	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-28	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-28	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-28	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-28	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-28	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-28	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-28	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-28	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-28	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-28	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-28	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-28	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-28	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-28	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-28	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-28	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-28	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-28	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-28	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-28	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-28	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-28	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-28	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-28	9/24/2014	MTBE	16	1	0.25	143	ug/L
MKTF-28	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-28	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	11/14/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	11/14/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	11/14/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-28	11/14/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-28	11/14/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-28	11/14/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-28	11/14/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-28	11/14/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-28	11/14/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-28	11/14/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-28	11/14/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-28	11/14/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-28	11/14/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-28	11/14/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-28	11/14/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-28	11/14/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-28	11/14/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	11/14/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-28	11/14/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-28	11/14/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	11/14/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	11/14/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-28	11/14/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-28	11/14/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-28	11/14/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	11/14/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	11/14/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-28	11/14/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-28	11/14/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-28	11/14/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-28	11/14/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-28	11/14/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-28	11/14/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-28	11/14/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-28	11/14/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-28	11/14/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-28	11/14/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-28	11/14/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-28	11/14/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	11/14/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-28	11/14/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-28	11/14/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	11/14/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	11/14/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-28	11/14/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-28	11/14/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-28	11/14/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	11/14/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	11/14/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-28	11/14/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-28	11/14/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-28	11/14/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-28	11/14/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-28	11/14/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-28	11/14/2014	MTBE	13	1	0.25	143	ug/L
MKTF-28	11/14/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-28	11/14/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-28	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-28	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	8/20/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	8/20/2015	MTBE	1.4	1	0.17	143	ug/L
MKTF-28	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-28	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-28	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-28	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-28	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-28	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-28	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-28	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-28	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-28	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-28	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-28	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-28	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-28	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-28	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-28	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-28	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-28	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-28	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-28	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-28	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-28	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-28	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-28	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-28	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-28	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-28	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-28	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-28	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-28	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-28	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-28	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-28	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-28	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-28	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-28	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-28	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-28	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-28	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-28	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-28	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-28	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-28	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-28	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-28	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-28	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-28	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-28	11/4/2015	MTBE	10	1	0.17	143	ug/L
MKTF-28	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-28	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-28	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-28	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-28	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-28	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-28	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-28	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-28	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-28	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-28	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-28	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-28	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-28	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-28	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-28	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-28	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-28	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-28	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-28	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-28	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-28	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-28	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-28	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-28	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-28	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	2/23/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-28	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-28	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	6/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	6/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	6/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	6/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	6/8/2016	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
MKTF-28	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	6/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	6/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	6/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	6/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	6/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	6/8/2016	MTBE	0.54	1	0.21	143	ug/L
MKTF-28	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	9/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	9/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-28	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	9/8/2016	MTBE	2.1	1	0.21	143	ug/L
MKTF-28	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-28	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-28	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-28	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-28	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-28	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-28	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-28	10/28/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-28	10/28/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-28	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-28	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-28	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-28	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-28	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-28	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-28	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-28	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-28	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-28	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-28	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-28	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-28	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-28	10/28/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-28	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-28	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-28	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-28	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-28	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	10/28/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-28	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-28	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-28	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-28	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-28	10/28/2016	MTBE	5.2	1	0.21	143	ug/L
MKTF-28	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-28	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	3/29/2017	Acetone	1.9	10	0.88	14064	ug/L
MKTF-28	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-28	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-28	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-28	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-28	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-28	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-28	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-28	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-28	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-28	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-28	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-28	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-28	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-28	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-28	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-28	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-28	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	3/29/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-28	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-28	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-28	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-28	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-28	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-28	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-28	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-28	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-28	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	3/29/2017	MTBE	0.97	1	0.15	143	ug/L
MKTF-28	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-28	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-28	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	6/5/2017	Acetone	3.3	10	0.82	14064	ug/L
MKTF-28	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-28	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	6/5/2017	MTBE	0.44	1	0.24	143	ug/L
MKTF-28	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	10/3/2017	Acetone	8.3	10	0.82	14064	ug/L
MKTF-28	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	10/3/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	10/3/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	10/3/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	10/3/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	10/3/2017	MTBE	0.35	1	0.24	143	ug/L
MKTF-28	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	11/20/2017	Acetone	2.8	10	0.82	14064	ug/L
MKTF-28	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-28	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	11/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	11/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-28	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	11/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	11/20/2017	MTBE	3.3	1	0.24	143	ug/L
MKTF-28	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-28	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-28	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	2/6/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-28	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-28	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	2/6/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-28	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-28	5/1/2018	Acetone	1.7	10	0.82	14064	ug/L
MKTF-28	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-28	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-28	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-28	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-28	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-28	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-28	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-28	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-28	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-28	5/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	5/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-28	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-28	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-28	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-28	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-28	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-28	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-28	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-28	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-28	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-28	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-28	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-28	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-28	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-28	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-28	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-28	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-28	5/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-28	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-28	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-28	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-28	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-28	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-28	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-28	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-28	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-28	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-28	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-28	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-28	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-28	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-28	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-28	5/1/2018	MTBE	0.94	1	0.24	143	ug/L
MKTF-28	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-28	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-28	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-28	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-28	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-28	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-28	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-28	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-28	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-28	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-28	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-28	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-28	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-28	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-28	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-28	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-28	8/20/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-28	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-28	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-28	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-28	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-28	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-28	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-28	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-28	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-28	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-28	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-28	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-28	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-28	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-28	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-28	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-28	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-28	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-28	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-28	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-28	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-28	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-28	8/20/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-28	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-28	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-28	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-28	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-28	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-28	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-28	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-28	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-28	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-28	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-28	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-28	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-28	8/20/2018	MTBE	8	1	0.32	143	ug/L
MKTF-28	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-28	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-28	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-28	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-28	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-28	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-28	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-28	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-28	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-28	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-28	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-28	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-28	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-28	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-28	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-28	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-28	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-28	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-28	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-28	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-28	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-28	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-28	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-28	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-28	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-28	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-28	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-28	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-28	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-28	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-28	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-28	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-28	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-28	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-28	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-28	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-28	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-28	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-28	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-28	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-28	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-28	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-28	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-28	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-28	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-28	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-28	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-28	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-28	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-28	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-28	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-28	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-28	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-28	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-28	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-28	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-28	11/15/2018	MTBE	2.8	1	0.46	143	ug/L
MKTF-28	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-28	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-28	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	3/28/2019	Acetone	3.7	10	1.199396	14064	ug/L
MKTF-28	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	3/28/2019	MTBE	0.82	1	0.456095	143	ug/L
MKTF-28	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	5/6/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	5/6/2019	Acetone	5.9	10	1.199396	14064	ug/L
MKTF-28	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	5/6/2019	MTBE	0.74	1	0.456095	143	ug/L
MKTF-28	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-28	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-28	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	8/21/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	8/21/2019	MTBE	4.5	1	0.456095	143	ug/L
MKTF-28	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/21/2019	1,1-Dichloroethane	0.98	1	0.140859	25	ug/L
MKTF-28	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/21/2019	1,2,4-Trimethylbenzene	6.4	1	0.213199	56	ug/L
MKTF-28	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/21/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
MKTF-28	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	26	4	0.314954	NA	ug/L
MKTF-28	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/21/2019	p-Isopropyltoluene	0.51	1	0.217289	NA	ug/L
MKTF-28	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/21/2019	Acetone	31	10	1.199396	14064	ug/L
MKTF-28	10/21/2019	Benzene	**140**	10	1.666391	5	ug/L
MKTF-28	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/21/2019	Ethylbenzene	14	1	0.132341	700	ug/L
MKTF-28	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/21/2019	Isopropylbenzene	1.3	1	0.191522	447	ug/L
MKTF-28	10/21/2019	MTBE	**240**	10	4.56095	143	ug/L
MKTF-28	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/21/2019	Naphthalene	1.3	2	0.275071	30	ug/L
MKTF-28	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/21/2019	n-Propylbenzene	1.5	1	0.214308	660	ug/L
MKTF-28	10/21/2019	sec-Butylbenzene	0.26	1	0.247731	2000	ug/L
MKTF-28	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/21/2019	Toluene	1.2	1	0.350436	1000	ug/L
MKTF-28	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/21/2019	Xylenes, Total	6.2	1.5	0.454415	620	ug/L
MKTF-28	10/21/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-28	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	10/22/2019	MTBE	8.3	1	0.456095	143	ug/L
MKTF-28	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-28	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-28	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-28	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-28	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-28	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-28	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-28	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-28	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-28	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-28	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-28	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-28	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-28	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-28	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-28	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-28	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-28	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-28	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-28	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-28	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-28	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-28	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-28	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-28	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-28	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-28	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-28	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-28	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-28	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-28	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-28	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-28	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-28	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-28	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-28	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-28	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-28	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-28	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-28	10/22/2019	MTBE	4.9	1	0.456095	143	ug/L
MKTF-28	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-28	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-28	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-28	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-28	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-28	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-28	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-28	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-28	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-28	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-28	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-28	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-28	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-28	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-28	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-28	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-28	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-28	2/25/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-28	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-28	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-28	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-28	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-28	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-28	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-28	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-28	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-28	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-28	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-28	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-28	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-28	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-28	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-28	2/25/2020	2-Butanone	4.2	10	1.1	5565	ug/L
MKTF-28	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-28	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-28	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-28	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-28	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	2/25/2020	Acetone	17	10	2.3	14064	ug/L
MKTF-28	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-28	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-28	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-28	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-28	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-28	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-28	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-28	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-28	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-28	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-28	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-28	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-28	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-28	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-28	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-28	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-28	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-28	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-28	2/25/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-28	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-28	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-28	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-28	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-28	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-28	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-28	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-28	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-28	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-28	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-28	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-28	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-28	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-28	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-28	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-28	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-28	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-28	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-28	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-28	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-28	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-28	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-28	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-28	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-28	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-28	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-28	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-28	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-28	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-28	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-28	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-28	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-28	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-28	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-28	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-28	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-28	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-28	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-28	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-28	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-28	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-28	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-28	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-28	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-28	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-28	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-28	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-28	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-28	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-28	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-28	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-28	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-28	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-28	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-28	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-28	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-28	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-28	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-28	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-28	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-28	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-28	9/20/2020	MTBE	2.3	1	0.39	143	ug/L
MKTF-28	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-28	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-28	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-28	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-28	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-28	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-28	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-28	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-28	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-28	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-28	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-28	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-28	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-28	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-28	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-28	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-28	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-28	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-28	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-28	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-28	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-28	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-28	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-28	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-28	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-28	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-28	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-28	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-28	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-28	12/18/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-28	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-28	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-28	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-28	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-28	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-28	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-28	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-28	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-28	12/18/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-28	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-28	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-28	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-28	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-28	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-28	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-28	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-28	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-28	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-28	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-28	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-28	12/18/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-28	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-28	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-28	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-28	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-28	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-28	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-28	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-28	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-28	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-28	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-28	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-28	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-28	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-28	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-28	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-28	12/18/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-28	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-28	12/18/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-28	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-28	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-28	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-28	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-28	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-28	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-29	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-29	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-29	4/9/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-29	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-29	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-29	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-29	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-29	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-29	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-29	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-29	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-29	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-29	4/9/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-29	4/9/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-29	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-29	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-29	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	4/9/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	4/9/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-29	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-29	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-29	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-29	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-29	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-29	4/9/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-29	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-29	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-29	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-29	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-29	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-29	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-29	4/9/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-29	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-29	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-29	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-29	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-29	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-29	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-29	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-29	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-29	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-29	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-29	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-29	4/9/2014	MTBE	12	1	0.25	143	ug/L
MKTF-29	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-29	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-29	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-29	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-29	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-29	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-29	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-29	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-29	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-29	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-29	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-29	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-29	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-29	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-29	9/24/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-29	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-29	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-29	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	9/24/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-29	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-29	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-29	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-29	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-29	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-29	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-29	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-29	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-29	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-29	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-29	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-29	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-29	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-29	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-29	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-29	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-29	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-29	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-29	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-29	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-29	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-29	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-29	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-29	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-29	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-29	9/24/2014	MTBE	13	1	0.25	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-29	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	3/11/2015	MTBE	17	1	0.17	143	ug/L
MKTF-29	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	6/10/2015	MTBE	14	1	0.17	143	ug/L
MKTF-29	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	8/20/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	8/20/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	8/20/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	8/20/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	8/20/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	8/20/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	8/20/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	8/20/2015	MTBE	11	1	0.17	143	ug/L
MKTF-29	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-29	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-29	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-29	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-29	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-29	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-29	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-29	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-29	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-29	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-29	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-29	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-29	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-29	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-29	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-29	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-29	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-29	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-29	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-29	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-29	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-29	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-29	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-29	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-29	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-29	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-29	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-29	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-29	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-29	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-29	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-29	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-29	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-29	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-29	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-29	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-29	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-29	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-29	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-29	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-29	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-29	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-29	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-29	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-29	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-29	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-29	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-29	11/4/2015	MTBE	10	1	0.17	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-29	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-29	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-29	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-29	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-29	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-29	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-29	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-29	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-29	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-29	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-29	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-29	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-29	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-29	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-29	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-29	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-29	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-29	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-29	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-29	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-29	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-29	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-29	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-29	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-29	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-29	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	2/23/2016	MTBE	12	1	0.21	143	ug/L
MKTF-29	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-29	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	6/9/2016	MTBE	8.8	1	0.21	143	ug/L
MKTF-29	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-29	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	9/7/2016	MTBE	2.4	1	0.21	143	ug/L
MKTF-29	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-29	10/28/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-29	10/28/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-29	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-29	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-29	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-29	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-29	10/28/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-29	10/28/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-29	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-29	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-29	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-29	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-29	10/28/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-29	10/28/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-29	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-29	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-29	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-29	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-29	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-29	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-29	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-29	10/28/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-29	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-29	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-29	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-29	10/28/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-29	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	10/28/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-29	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-29	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-29	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-29	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-29	10/28/2016	MTBE	5	1	0.21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-29	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-29	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-29	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-29	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-29	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-29	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-29	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-29	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-29	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-29	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-29	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-29	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-29	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-29	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-29	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-29	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-29	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-29	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	3/29/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-29	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-29	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-29	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-29	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-29	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-29	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-29	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-29	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-29	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	3/29/2017	MTBE	9.4	1	0.15	143	ug/L
MKTF-29	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-29	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-29	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	6/5/2017	Acetone	2.5	10	0.82	14064	ug/L
MKTF-29	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	6/5/2017	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
MKTF-29	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-29	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	6/5/2017	MTBE	5.8	1	0.24	143	ug/L
MKTF-29	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	10/3/2017	Acetone	4.6	10	0.82	14064	ug/L
MKTF-29	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	10/3/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	10/3/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	10/3/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	10/3/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	10/3/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	10/3/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	10/3/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	10/3/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	10/3/2017	MTBE	7.2	1	0.24	143	ug/L
MKTF-29	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	11/20/2017	Acetone	1.8	10	0.82	14064	ug/L
MKTF-29	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-29	11/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	11/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	11/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	11/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	11/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-29	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	11/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	11/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	11/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	MTBE	9.5	1	0.24	143	ug/L
MKTF-29	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-29	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-29	2/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	2/6/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	2/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-29	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	2/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-29	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	2/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	2/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	2/6/2018	MTBE	11	1	0.24	143	ug/L
MKTF-29	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-29	5/1/2018	Acetone	2.7	10	0.82	14064	ug/L
MKTF-29	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-29	5/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-29	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-29	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-29	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-29	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-29	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-29	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-29	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-29	5/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	5/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-29	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-29	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	5/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-29	5/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-29	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-29	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-29	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-29	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-29	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-29	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-29	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-29	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-29	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-29	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-29	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-29	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-29	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-29	5/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-29	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-29	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-29	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-29	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-29	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-29	5/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-29	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-29	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-29	5/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-29	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-29	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-29	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-29	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-29	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-29	5/1/2018	MTBE	7.3	1	0.24	143	ug/L
MKTF-29	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-29	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-29	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-29	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-29	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-29	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-29	8/20/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-29	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-29	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-29	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-29	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-29	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-29	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-29	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-29	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-29	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-29	8/20/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-29	8/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-29	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-29	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-29	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-29	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-29	8/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-29	8/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-29	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-29	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-29	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-29	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-29	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-29	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-29	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-29	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-29	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-29	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-29	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-29	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-29	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-29	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-29	8/20/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-29	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-29	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-29	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-29	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-29	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-29	8/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-29	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-29	8/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-29	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-29	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-29	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-29	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-29	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-29	8/20/2018	MTBE	4.7	1	0.32	143	ug/L
MKTF-29	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-29	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-29	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-29	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-29	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-29	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-29	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-29	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-29	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-29	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-29	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-29	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-29	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-29	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-29	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-29	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-29	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-29	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-29	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-29	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-29	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-29	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-29	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-29	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-29	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-29	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-29	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-29	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-29	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-29	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-29	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-29	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-29	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-29	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-29	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-29	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-29	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-29	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-29	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-29	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-29	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-29	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-29	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-29	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-29	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-29	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-29	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-29	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-29	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-29	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-29	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-29	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-29	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-29	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-29	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-29	11/15/2018	MTBE	3.7	1	0.46	143	ug/L
MKTF-29	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-29	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-29	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	3/28/2019	Acetone	3.3	10	1.199396	14064	ug/L
MKTF-29	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	3/28/2019	MTBE	4.1	1	0.456095	143	ug/L
MKTF-29	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	3/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	3/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	3/28/2019	1,2,4-Trimethylbenzene	0.21	1	0.213199	56	ug/L
MKTF-29	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	3/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	3/28/2019	Acetone	3.6	10	1.199396	14064	ug/L
MKTF-29	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	3/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	3/28/2019	MTBE	4.2	1	0.456095	143	ug/L
MKTF-29	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	3/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-29	3/28/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-29	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	5/6/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	5/6/2019	Acetone	5.6	10	1.199396	14064	ug/L
MKTF-29	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	5/6/2019	MTBE	4.8	1	0.456095	143	ug/L
MKTF-29	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	5/6/2019	1,2-Dibromoethane	ND	0.00967	0.003369	0.05	ug/L
MKTF-29	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	8/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	8/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	8/23/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	8/23/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-29	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	8/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	8/23/2019	MTBE	9	1	0.456095	143	ug/L
MKTF-29	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	8/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	8/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	8/23/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-29	8/23/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	8/23/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	8/23/2019	Acetone	2	10	1.199396	14064	ug/L
MKTF-29	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	8/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-29	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	8/23/2019	MTBE	8.6	1	0.456095	143	ug/L
MKTF-29	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	8/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-29	8/23/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-29	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-29	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-29	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-29	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-29	10/22/2019	1,1-Dichloroethane	0.56	1	0.140859	25	ug/L
MKTF-29	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-29	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-29	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-29	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-29	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-29	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-29	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-29	10/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-29	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-29	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-29	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-29	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-29	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-29	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-29	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-29	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-29	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-29	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-29	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-29	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-29	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-29	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-29	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-29	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-29	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-29	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-29	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-29	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-29	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-29	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-29	10/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-29	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-29	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-29	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-29	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-29	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-29	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-29	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-29	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-29	10/22/2019	MTBE	12	1	0.456095	143	ug/L
MKTF-29	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-29	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-29	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-29	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-29	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-29	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-29	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-29	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-29	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-29	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-29	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-29	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-29	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-29	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-29	10/22/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-29	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-29	2/25/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-29	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-29	2/25/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-29	2/25/2020	1,1-Dichloroethane	0.45	1	0.27	25	ug/L
MKTF-29	2/25/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-29	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-29	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-29	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-29	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-29	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-29	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-29	2/25/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-29	2/25/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-29	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-29	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-29	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-29	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-29	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-29	2/25/2020	2-Butanone	3	10	1.1	5565	ug/L
MKTF-29	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-29	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-29	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-29	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-29	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	2/25/2020	Acetone	7.5	10	2.3	14064	ug/L
MKTF-29	2/25/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-29	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-29	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-29	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-29	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-29	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-29	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-29	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-29	2/25/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-29	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-29	2/25/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-29	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-29	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-29	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-29	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-29	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-29	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-29	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-29	2/25/2020	MTBE	15	1	0.39	143	ug/L
MKTF-29	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-29	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-29	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-29	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-29	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-29	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-29	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-29	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-29	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-29	2/25/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-29	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-29	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-29	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-29	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-29	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-29	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-29	9/20/2020	1,1-Dichloroethane	0.29	1	0.27	25	ug/L
MKTF-29	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-29	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-29	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-29	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-29	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-29	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-29	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-29	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-29	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-29	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-29	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-29	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-29	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-29	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-29	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-29	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-29	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-29	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-29	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-29	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-29	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-29	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-29	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-29	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-29	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-29	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-29	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-29	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-29	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-29	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-29	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-29	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-29	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-29	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-29	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-29	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-29	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-29	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-29	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-29	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-29	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-29	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-29	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-29	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-29	9/20/2020	MTBE	19	1	0.39	143	ug/L
MKTF-29	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-29	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-29	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-29	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-29	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-29	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-29	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-29	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-29	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-29	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-29	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-29	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-29	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-29	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-29	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-29	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-29	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-29	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-29	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-29	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-29	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-29	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-29	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-29	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-29	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-29	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-29	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-29	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-29	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-29	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-29	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-29	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-29	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-29	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-29	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-29	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-29	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-29	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-29	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-29	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-29	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-29	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-29	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-29	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-29	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-29	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-29	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-29	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-29	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-29	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-29	12/15/2020	MTBE	16	1	0.74	143	ug/L
MKTF-29	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-29	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-29	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-29	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-29	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-29	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-29	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-29	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-29	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-29	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-29	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-29	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-29	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-29	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-29	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-29	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-29	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-29	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-29	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-29	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-29	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-29	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-29	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-29	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-30	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	4/9/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-30	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-30	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	4/9/2014	1,1-Dichloroethane	25	1	0.28	25	ug/L
MKTF-30	4/9/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	4/9/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-30	4/9/2014	Trichloroethene	1.4	1	0.19	5	ug/L
MKTF-30	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	4/9/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-30	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	4/9/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-30	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-30	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-30	4/9/2014	MTBE	21	1	0.25	143	ug/L
MKTF-30	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	9/24/2014	1,1,1-Trichloroethane	2.5	1	0.12	200	ug/L
MKTF-30	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-30	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	9/24/2014	1,1-Dichloroethane	**68**	1	0.28	25	ug/L
MKTF-30	9/24/2014	1,1-Dichloroethene	3.5	1	0.21	7	ug/L
MKTF-30	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	9/24/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-30	9/24/2014	Trichloroethene	4	1	0.19	5	ug/L
MKTF-30	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	9/24/2014	1,2-Dichloroethane	4.4	1	0.26	5	ug/L
MKTF-30	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	9/24/2014	cis-1,2-Dichloroethene	4.2	1	0.12	70	ug/L
MKTF-30	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-30	9/24/2014	MTBE	5.9	1	0.25	143	ug/L
MKTF-30	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-30	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-30	11/17/2014	1,1,1-Trichloroethane	3	1	0.12	200	ug/L
MKTF-30	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-30	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-30	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-30	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-30	11/17/2014	Vinyl Chloride	**4.8**	1	0.11	2	ug/L
MKTF-30	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-30	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-30	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-30	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-30	11/17/2014	1,1-Dichloroethane	**87**	1	0.28	25	ug/L
MKTF-30	11/17/2014	1,1-Dichloroethene	2.7	1	0.21	7	ug/L
MKTF-30	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-30	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-30	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	11/17/2014	1,1,2-Trichloroethane	1.1	1	0.14	5	ug/L
MKTF-30	11/17/2014	Trichloroethene	4.4	1	0.19	5	ug/L
MKTF-30	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-30	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-30	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-30	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-30	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-30	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-30	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-30	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-30	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-30	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-30	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-30	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-30	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-30	11/17/2014	1,2-Dichloroethane	**5.3**	1	0.26	5	ug/L
MKTF-30	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-30	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-30	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-30	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-30	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-30	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	11/17/2014	cis-1,2-Dichloroethene	3.9	1	0.12	70	ug/L
MKTF-30	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-30	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-30	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-30	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-30	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-30	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/17/2014	MTBE	3.7	1	0.25	143	ug/L
MKTF-30	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-30	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	3/11/2015	1,1,1-Trichloroethane	1.9	1	0.078	200	ug/L
MKTF-30	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	3/11/2015	1,1-Dichloroethane	**81**	10	4	25	ug/L
MKTF-30	3/11/2015	1,1-Dichloroethene	4	1	0.099	7	ug/L
MKTF-30	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-30	3/11/2015	Trichloroethene	3.6	1	0.16	5	ug/L
MKTF-30	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	3/11/2015	1,2-Dichloroethane	4	1	0.18	5	ug/L
MKTF-30	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	3/11/2015	cis-1,2-Dichloroethene	4.5	1	0.081	70	ug/L
MKTF-30	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	3/11/2015	MTBE	1.9	1	0.17	143	ug/L
MKTF-30	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	6/10/2015	1,1,1-Trichloroethane	2.9	1	0.078	200	ug/L
MKTF-30	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	6/10/2015	1,1-Dichloroethane	**110**	10	4	25	ug/L
MKTF-30	6/10/2015	1,1-Dichloroethene	6.7	1	0.099	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-30	6/10/2015	Trichloroethene	**6.2**	1	0.16	5	ug/L
MKTF-30	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	6/10/2015	1,2-Dichloroethane	5	1	0.18	5	ug/L
MKTF-30	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	6/10/2015	cis-1,2-Dichloroethene	6.7	1	0.081	70	ug/L
MKTF-30	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	6/10/2015	MTBE	2.7	1	0.17	143	ug/L
MKTF-30	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	8/20/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	8/20/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	8/20/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	8/20/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	8/20/2015	1,1,1-Trichloroethane	2.5	1	0.078	200	ug/L
MKTF-30	8/20/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	8/20/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	8/20/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	8/20/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	8/20/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	8/20/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	8/20/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	8/20/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	8/20/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	8/20/2015	1,1-Dichloroethane	**110**	10	4	25	ug/L
MKTF-30	8/20/2015	1,1-Dichloroethene	**8.6**	1	0.099	7	ug/L
MKTF-30	8/20/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	8/20/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	8/20/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	8/20/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	8/20/2015	1,1,2-Trichloroethane	1	1	0.079	5	ug/L
MKTF-30	8/20/2015	Trichloroethene	**6.4**	1	0.16	5	ug/L
MKTF-30	8/20/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	8/20/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	8/20/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	8/20/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	8/20/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	8/20/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	8/20/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	8/20/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	8/20/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	8/20/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	8/20/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	8/20/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	8/20/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	8/20/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	8/20/2015	1,2-Dichloroethane	**5.1**	1	0.18	5	ug/L
MKTF-30	8/20/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	8/20/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	8/20/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	8/20/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	8/20/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	8/20/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	8/20/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	8/20/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	8/20/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	8/20/2015	cis-1,2-Dichloroethene	8.7	1	0.081	70	ug/L
MKTF-30	8/20/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	8/20/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	8/20/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	8/20/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	8/20/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	8/20/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-30	8/20/2015	MTBE	1.9	1	0.17	143	ug/L
MKTF-30	8/20/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	8/20/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-30	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-30	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-30	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-30	11/4/2015	1,1,1-Trichloroethane	3.3	1	0.078	200	ug/L
MKTF-30	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-30	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-30	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-30	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-30	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-30	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-30	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-30	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-30	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-30	11/4/2015	1,1-Dichloroethane	**130**	10	4	25	ug/L
MKTF-30	11/4/2015	1,1-Dichloroethene	**10**	1	0.099	7	ug/L
MKTF-30	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-30	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-30	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-30	11/4/2015	1,1,2-Trichloroethane	1.4	1	0.079	5	ug/L
MKTF-30	11/4/2015	Trichloroethene	**8.8**	1	0.16	5	ug/L
MKTF-30	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-30	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-30	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-30	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-30	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-30	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-30	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-30	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-30	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-30	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-30	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-30	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-30	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-30	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	11/4/2015	1,2-Dichloroethane	**6.8**	1	0.18	5	ug/L
MKTF-30	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-30	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-30	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-30	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-30	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-30	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-30	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-30	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	11/4/2015	cis-1,2-Dichloroethene	12	1	0.081	70	ug/L
MKTF-30	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-30	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-30	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-30	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-30	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/4/2015	MTBE	2.5	1	0.17	143	ug/L
MKTF-30	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-30	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	2/23/2016	1,1,1-Trichloroethane	3.7	1	0.063	200	ug/L
MKTF-30	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-30	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-30	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-30	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-30	2/23/2016	1,1-Dichloroethane	**130**	10	1.1	25	ug/L
MKTF-30	2/23/2016	1,1-Dichloroethene	**10**	1	0.076	7	ug/L
MKTF-30	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-30	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-30	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-30	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-30	2/23/2016	1,1,2-Trichloroethane	1.4	1	0.077	5	ug/L
MKTF-30	2/23/2016	Trichloroethene	**8**	1	0.18	5	ug/L
MKTF-30	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-30	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-30	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-30	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-30	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-30	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-30	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-30	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	2/23/2016	1,2-Dichloroethane	**6.7**	1	0.053	5	ug/L
MKTF-30	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-30	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-30	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-30	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-30	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-30	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	2/23/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-30	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-30	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	2/23/2016	MTBE	2.3	1	0.21	143	ug/L
MKTF-30	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-30	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	6/9/2016	1,1,1-Trichloroethane	4.1	1	0.091	200	ug/L
MKTF-30	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	6/9/2016	1,1-Dichloroethane	**130**	10	1.1	25	ug/L
MKTF-30	6/9/2016	1,1-Dichloroethene	**10**	1	0.11	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	6/9/2016	1,1,2-Trichloroethane	1.2	1	0.13	5	ug/L
MKTF-30	6/9/2016	Trichloroethene	**8.8**	1	0.18	5	ug/L
MKTF-30	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	6/9/2016	1,2-Dichloroethane	**6**	1	0.12	5	ug/L
MKTF-30	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	6/9/2016	Tetrachloroethene	0.77	1	0.15	5	ug/L
MKTF-30	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	6/9/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-30	6/9/2016	MTBE	3.6	1	0.21	143	ug/L
MKTF-30	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-30	9/7/2016	Benzene	0.6	1	0.096	5	ug/L
MKTF-30	9/7/2016	1,1,1-Trichloroethane	2.7	1	0.091	200	ug/L
MKTF-30	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	9/7/2016	Vinyl Chloride	1.8	1	0.2	2	ug/L
MKTF-30	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	9/7/2016	1,1-Dichloroethane	**110**	10	1.1	25	ug/L
MKTF-30	9/7/2016	1,1-Dichloroethene	**12**	1	0.11	7	ug/L
MKTF-30	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	9/7/2016	1,1,2-Trichloroethane	0.96	1	0.13	5	ug/L
MKTF-30	9/7/2016	Trichloroethene	**7.9**	1	0.18	5	ug/L
MKTF-30	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	9/7/2016	Ethylbenzene	0.19	1	0.11	700	ug/L
MKTF-30	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	9/7/2016	1,2-Dichloroethane	**5.7**	1	0.12	5	ug/L
MKTF-30	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	9/7/2016	Tetrachloroethene	0.66	1	0.15	5	ug/L
MKTF-30	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	9/7/2016	cis-1,2-Dichloroethene	12	1	0.12	70	ug/L
MKTF-30	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-30	9/7/2016	MTBE	0.84	1	0.21	143	ug/L
MKTF-30	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	10/28/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	10/28/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-30	10/28/2016	Chloroform	0.2	1	0.089	100	ug/L
MKTF-30	10/28/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-30	10/28/2016	1,1,1-Trichloroethane	2.6	1	0.091	200	ug/L
MKTF-30	10/28/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	10/28/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	10/28/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	10/28/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-30	10/28/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	10/28/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-30	10/28/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	10/28/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-30	10/28/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-30	10/28/2016	1,1-Dichloroethane	**110**	10	1.1	25	ug/L
MKTF-30	10/28/2016	1,1-Dichloroethene	**7.9**	1	0.11	7	ug/L
MKTF-30	10/28/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-30	10/28/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-30	10/28/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-30	10/28/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-30	10/28/2016	1,1,2-Trichloroethane	0.91	1	0.13	5	ug/L
MKTF-30	10/28/2016	Trichloroethene	**6.9**	1	0.18	5	ug/L
MKTF-30	10/28/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-30	10/28/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	10/28/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	10/28/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	10/28/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-30	10/28/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-30	10/28/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-30	10/28/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-30	10/28/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	10/28/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	10/28/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-30	10/28/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	10/28/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	10/28/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-30	10/28/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-30	10/28/2016	1,2-Dichloroethane	**5.2**	1	0.12	5	ug/L
MKTF-30	10/28/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-30	10/28/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	10/28/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-30	10/28/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-30	10/28/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	10/28/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-30	10/28/2016	Tetrachloroethene	0.47	1	0.15	5	ug/L
MKTF-30	10/28/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-30	10/28/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	10/28/2016	cis-1,2-Dichloroethene	10	1	0.12	70	ug/L
MKTF-30	10/28/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-30	10/28/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	10/28/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-30	10/28/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-30	10/28/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	10/28/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/28/2016	MTBE	2	1	0.21	143	ug/L
MKTF-30	10/28/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-30	10/28/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-30	3/29/2017	Chloroform	0.27	1	0.089	100	ug/L
MKTF-30	3/29/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-30	3/29/2017	1,1,1-Trichloroethane	1.6	1	0.073	200	ug/L
MKTF-30	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-30	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-30	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-30	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-30	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	3/29/2017	1,1-Dichloroethane	**97**	10	1	25	ug/L
MKTF-30	3/29/2017	1,1-Dichloroethene	6.6	1	0.081	7	ug/L
MKTF-30	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-30	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	3/29/2017	1,1,2-Trichloroethane	0.89	1	0.14	5	ug/L
MKTF-30	3/29/2017	Trichloroethene	**5.9**	1	0.18	5	ug/L
MKTF-30	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-30	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-30	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	3/29/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-30	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-30	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-30	3/29/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-30	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-30	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	3/29/2017	1,2-Dichloroethane	3.8	1	0.12	5	ug/L
MKTF-30	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-30	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-30	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-30	3/29/2017	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-30	3/29/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-30	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-30	3/29/2017	cis-1,2-Dichloroethene	8.8	1	0.2	70	ug/L
MKTF-30	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-30	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-30	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-30	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	3/29/2017	MTBE	2.8	1	0.15	143	ug/L
MKTF-30	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-30	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-30	6/5/2017	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-30	6/5/2017	Acetone	5	20	1.6	14064	ug/L
MKTF-30	6/5/2017	Chloroform	ND	2	0.8	100	ug/L
MKTF-30	6/5/2017	Benzene	ND	2	0.12	5	ug/L
MKTF-30	6/5/2017	1,1,1-Trichloroethane	0.72	2	0.15	200	ug/L
MKTF-30	6/5/2017	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-30	6/5/2017	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-30	6/5/2017	Dibromomethane	ND	2	0.18	8	ug/L
MKTF-30	6/5/2017	Chloroethane	ND	4	0.47	20857	ug/L
MKTF-30	6/5/2017	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-30	6/5/2017	Methylene Chloride	*1*	*6*	0.22	5	ug/L
MKTF-30	6/5/2017	Carbon Disulfide	ND	20	0.8	810	ug/L
MKTF-30	6/5/2017	Bromoform	ND	2	0.42	32.9	ug/L
MKTF-30	6/5/2017	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
MKTF-30	6/5/2017	1,1-Dichloroethane	**57**	2	0.8	25	ug/L
MKTF-30	6/5/2017	1,1-Dichloroethene	4.4	2	0.16	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
MKTF-30	6/5/2017	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-30	6/5/2017	1,2-Dichloropropane	ND	2	0.2	5	ug/L
MKTF-30	6/5/2017	2-Butanone	ND	20	2.3	5565	ug/L
MKTF-30	6/5/2017	1,1,2-Trichloroethane	0.34	2	0.28	5	ug/L
MKTF-30	6/5/2017	Trichloroethene	3.8	2	0.22	5	ug/L
MKTF-30	6/5/2017	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
MKTF-30	6/5/2017	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-30	6/5/2017	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-30	6/5/2017	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
MKTF-30	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
MKTF-30	6/5/2017	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
MKTF-30	6/5/2017	tert-Butylbenzene	ND	2	0.21	690	ug/L
MKTF-30	6/5/2017	Isopropylbenzene	ND	2	0.1	447	ug/L
MKTF-30	6/5/2017	p-Isopropyltoluene	ND	2	0.19	NA	ug/L
MKTF-30	6/5/2017	Ethylbenzene	ND	2	0.19	700	ug/L
MKTF-30	6/5/2017	Styrene	ND	2	0.31	100	ug/L
MKTF-30	6/5/2017	n-Propylbenzene	ND	2	0.15	660	ug/L
MKTF-30	6/5/2017	n-Butylbenzene	ND	6	0.26	1000	ug/L
MKTF-30	6/5/2017	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-30	6/5/2017	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
MKTF-30	6/5/2017	1,2-Dichloroethane	2.4	2	0.8	5	ug/L
MKTF-30	6/5/2017	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-30	6/5/2017	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
MKTF-30	6/5/2017	Bromobenzene	ND	2	0.28	62	ug/L
MKTF-30	6/5/2017	Toluene	ND	2	0.13	1000	ug/L
MKTF-30	6/5/2017	Chlorobenzene	ND	2	0.21	77.6	ug/L
MKTF-30	6/5/2017	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
MKTF-30	6/5/2017	Tetrachloroethene	ND	2	0.26	5	ug/L
MKTF-30	6/5/2017	sec-Butylbenzene	ND	2	0.22	2000	ug/L
MKTF-30	6/5/2017	1,3-Dichloropropane	ND	2	0.33	370	ug/L
MKTF-30	6/5/2017	cis-1,2-Dichloroethene	4.4	2	0.41	70	ug/L
MKTF-30	6/5/2017	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-30	6/5/2017	Pentafluorobenzene	**20**	0	0		None
MKTF-30	6/5/2017	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
MKTF-30	6/5/2017	2-Hexanone	ND	20	1.3	38	ug/L
MKTF-30	6/5/2017	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
MKTF-30	6/5/2017	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
MKTF-30	6/5/2017	Xylenes, Total	ND	3	0.64	620	ug/L
MKTF-30	6/5/2017	MTBE	2	2	0.48	143	ug/L
MKTF-30	6/5/2017	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
MKTF-30	6/5/2017	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
MKTF-30	10/3/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	10/3/2017	Acetone	6.5	10	0.82	14064	ug/L
MKTF-30	10/3/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	10/3/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-30	10/3/2017	1,1,1-Trichloroethane	1.5	1	0.073	200	ug/L
MKTF-30	10/3/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	10/3/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	10/3/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	10/3/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	10/3/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	10/3/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	10/3/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	10/3/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	10/3/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	10/3/2017	1,1-Dichloroethane	**68**	1	0.4	25	ug/L
MKTF-30	10/3/2017	1,1-Dichloroethene	5	1	0.081	7	ug/L
MKTF-30	10/3/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	10/3/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	10/3/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	10/3/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	10/3/2017	1,1,2-Trichloroethane	0.69	1	0.14	5	ug/L
MKTF-30	10/3/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-30	10/3/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	10/3/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	10/3/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	10/3/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	10/3/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	10/3/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	10/3/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	10/3/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	10/3/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	10/3/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	10/3/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	10/3/2017	n-Propylbenzene	ND	1	0.074	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/3/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	10/3/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	10/3/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	10/3/2017	1,2-Dichloroethane	2.9	1	0.4	5	ug/L
MKTF-30	10/3/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	10/3/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	10/3/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	10/3/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	10/3/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	10/3/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	10/3/2017	Tetrachloroethene	0.27	1	0.13	5	ug/L
MKTF-30	10/3/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	10/3/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	10/3/2017	cis-1,2-Dichloroethene	5.6	1	0.2	70	ug/L
MKTF-30	10/3/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	10/3/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	10/3/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	10/3/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	10/3/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	10/3/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	10/3/2017	MTBE	1.1	1	0.24	143	ug/L
MKTF-30	10/3/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	10/3/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	11/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	11/20/2017	Acetone	1.3	10	0.82	14064	ug/L
MKTF-30	11/20/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	11/20/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-30	11/20/2017	1,1,1-Trichloroethane	1.5	1	0.073	200	ug/L
MKTF-30	11/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	11/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	11/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	11/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	11/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	11/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	11/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	11/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	11/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	11/20/2017	1,1-Dichloroethane	**68**	1	0.4	25	ug/L
MKTF-30	11/20/2017	1,1-Dichloroethene	4.9	1	0.081	7	ug/L
MKTF-30	11/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	11/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	11/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	11/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	11/20/2017	1,1,2-Trichloroethane	0.64	1	0.14	5	ug/L
MKTF-30	11/20/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-30	11/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	11/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	11/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	11/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	11/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	11/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	11/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	11/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	11/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	11/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	11/20/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-30	11/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	11/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	11/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	11/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	11/20/2017	1,2-Dichloroethane	3	1	0.4	5	ug/L
MKTF-30	11/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	11/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	11/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	11/20/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	11/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	11/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	11/20/2017	Tetrachloroethene	0.32	1	0.13	5	ug/L
MKTF-30	11/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	11/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	11/20/2017	cis-1,2-Dichloroethene	6.2	1	0.2	70	ug/L
MKTF-30	11/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	11/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	11/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	11/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	11/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	11/20/2017	MTBE	1.4	1	0.24	143	ug/L
MKTF-30	11/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	11/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	2/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	2/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-30	2/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	2/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-30	2/6/2018	1,1,1-Trichloroethane	1.4	1	0.073	200	ug/L
MKTF-30	2/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	2/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	2/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	2/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	2/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	2/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	2/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	2/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	2/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	2/6/2018	1,1-Dichloroethane	**78**	1	0.4	25	ug/L
MKTF-30	2/6/2018	1,1-Dichloroethene	6.2	1	0.081	7	ug/L
MKTF-30	2/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	2/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	2/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	2/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	2/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-30	2/6/2018	Trichloroethene	5	1	0.11	5	ug/L
MKTF-30	2/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	2/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	2/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	2/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	2/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	2/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	2/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	2/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	2/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	2/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	2/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-30	2/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	2/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	2/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	2/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	2/6/2018	1,2-Dichloroethane	3.4	1	0.4	5	ug/L
MKTF-30	2/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	2/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	2/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	2/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	2/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	2/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	2/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-30	2/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	2/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	2/6/2018	cis-1,2-Dichloroethene	7.6	1	0.2	70	ug/L
MKTF-30	2/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	2/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	2/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	2/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	2/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	2/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	2/6/2018	MTBE	2.8	1	0.24	143	ug/L
MKTF-30	2/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	2/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	5/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-30	5/1/2018	Acetone	1.7	10	0.82	14064	ug/L
MKTF-30	5/1/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	5/1/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-30	5/1/2018	1,1,1-Trichloroethane	0.44	1	0.073	200	ug/L
MKTF-30	5/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	5/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	5/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-30	5/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-30	5/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-30	5/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-30	5/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-30	5/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-30	5/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-30	5/1/2018	1,1-Dichloroethane	**33**	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/1/2018	1,1-Dichloroethene	2	1	0.081	7	ug/L
MKTF-30	5/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-30	5/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	5/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-30	5/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	5/1/2018	1,1,2-Trichloroethane	0.37	1	0.14	5	ug/L
MKTF-30	5/1/2018	Trichloroethene	2	1	0.11	5	ug/L
MKTF-30	5/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-30	5/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-30	5/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	5/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-30	5/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-30	5/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-30	5/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-30	5/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-30	5/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-30	5/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-30	5/1/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-30	5/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-30	5/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-30	5/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	5/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-30	5/1/2018	1,2-Dichloroethane	1.2	1	0.4	5	ug/L
MKTF-30	5/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-30	5/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-30	5/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-30	5/1/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-30	5/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-30	5/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-30	5/1/2018	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-30	5/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-30	5/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-30	5/1/2018	cis-1,2-Dichloroethene	2.4	1	0.2	70	ug/L
MKTF-30	5/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	5/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-30	5/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-30	5/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-30	5/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-30	5/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-30	5/1/2018	MTBE	1.8	1	0.24	143	ug/L
MKTF-30	5/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-30	5/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-30	8/20/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-30	8/20/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-30	8/20/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-30	8/20/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-30	8/20/2018	1,1,1-Trichloroethane	0.87	1	0.15	200	ug/L
MKTF-30	8/20/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-30	8/20/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-30	8/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-30	8/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-30	8/20/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-30	8/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-30	8/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-30	8/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-30	8/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-30	8/20/2018	1,1-Dichloroethane	**60**	1	0.4	25	ug/L
MKTF-30	8/20/2018	1,1-Dichloroethene	4.8	1	0.12	7	ug/L
MKTF-30	8/20/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-30	8/20/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-30	8/20/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-30	8/20/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-30	8/20/2018	1,1,2-Trichloroethane	0.52	1	0.23	5	ug/L
MKTF-30	8/20/2018	Trichloroethene	3.7	1	0.26	5	ug/L
MKTF-30	8/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-30	8/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-30	8/20/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-30	8/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-30	8/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-30	8/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-30	8/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-30	8/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-30	8/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-30	8/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-30	8/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-30	8/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	8/20/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-30	8/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-30	8/20/2018	1,2-Dichloroethane	3.1	1	0.4	5	ug/L
MKTF-30	8/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-30	8/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-30	8/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-30	8/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	8/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-30	8/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-30	8/20/2018	Tetrachloroethene	0.17	1	0.15	5	ug/L
MKTF-30	8/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-30	8/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-30	8/20/2018	cis-1,2-Dichloroethene	4.8	1	0.38	70	ug/L
MKTF-30	8/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	8/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-30	8/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-30	8/20/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-30	8/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-30	8/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-30	8/20/2018	MTBE	1.8	1	0.32	143	ug/L
MKTF-30	8/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-30	8/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-30	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-30	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-30	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-30	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-30	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-30	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-30	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-30	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-30	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-30	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-30	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-30	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-30	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-30	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-30	11/15/2018	1,1-Dichloroethane	**65**	1	0.18	25	ug/L
MKTF-30	11/15/2018	1,1-Dichloroethene	5.1	1	0.12	7	ug/L
MKTF-30	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-30	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-30	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-30	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-30	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-30	11/15/2018	Trichloroethene	3.8	1	0.26	5	ug/L
MKTF-30	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-30	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-30	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-30	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-30	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-30	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-30	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-30	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-30	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-30	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-30	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-30	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-30	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-30	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-30	11/15/2018	1,2-Dichloroethane	3	1	0.19	5	ug/L
MKTF-30	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-30	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-30	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-30	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-30	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-30	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-30	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-30	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-30	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-30	11/15/2018	cis-1,2-Dichloroethene	5.3	1	0.38	70	ug/L
MKTF-30	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-30	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-30	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-30	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-30	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-30	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-30	11/15/2018	MTBE	2.1	1	0.46	143	ug/L
MKTF-30	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-30	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-30	3/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	3/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-30	3/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	3/28/2019	1,1,2-Trichloroethane	0.25	1	0.21583	5	ug/L
MKTF-30	3/28/2019	1,1-Dichloroethane	**27**	1	0.140859	25	ug/L
MKTF-30	3/28/2019	1,1-Dichloroethene	1.7	1	0.205388	7	ug/L
MKTF-30	3/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	3/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	3/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	3/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	3/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	3/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	3/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	3/28/2019	1,2-Dichloroethane	1.1	1	0.194638	5	ug/L
MKTF-30	3/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	3/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	3/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	3/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	3/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	3/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	3/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	3/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	3/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	3/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	3/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	3/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	3/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	3/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	3/28/2019	Acetone	3.7	10	1.199396	14064	ug/L
MKTF-30	3/28/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	3/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	3/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	3/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	3/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	3/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	3/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	3/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	3/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	3/28/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	3/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	3/28/2019	cis-1,2-Dichloroethene	2	1	0.190115	70	ug/L
MKTF-30	3/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	3/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	3/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	3/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	3/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	3/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	3/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	3/28/2019	MTBE	1.3	1	0.456095	143	ug/L
MKTF-30	3/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	3/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	3/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	3/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	3/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	3/28/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	3/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	3/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	3/28/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	3/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	3/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	3/28/2019	Trichloroethene	1.6	1	0.166272	5	ug/L
MKTF-30	3/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	3/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	3/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	3/28/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
MKTF-30	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-30	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	5/6/2019	1,1,2-Trichloroethane	0.23	1	0.21583	5	ug/L
MKTF-30	5/6/2019	1,1-Dichloroethane	**36**	1	0.140859	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/6/2019	1,1-Dichloroethene	2.5	1	0.205388	7	ug/L
MKTF-30	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	5/6/2019	1,2-Dichloroethane	1.2	1	0.194638	5	ug/L
MKTF-30	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	5/6/2019	Acetone	5.5	10	1.199396	14064	ug/L
MKTF-30	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	5/6/2019	cis-1,2-Dichloroethene	2.8	1	0.190115	70	ug/L
MKTF-30	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	5/6/2019	MTBE	1.8	1	0.456095	143	ug/L
MKTF-30	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	5/6/2019	Trichloroethene	2.1	1	0.166272	5	ug/L
MKTF-30	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	5/6/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
MKTF-30	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	8/23/2019	1,1,1-Trichloroethane	0.22	1	0.172922	200	ug/L
MKTF-30	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	8/23/2019	1,1,2-Trichloroethane	0.31	1	0.21583	5	ug/L
MKTF-30	8/23/2019	1,1-Dichloroethane	**39**	1	0.140859	25	ug/L
MKTF-30	8/23/2019	1,1-Dichloroethene	3.1	1	0.205388	7	ug/L
MKTF-30	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-30	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-30	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	8/23/2019	1,2-Dichloroethane	1.7	1	0.194638	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	8/23/2019	Acetone	2	10	1.199396	14064	ug/L
MKTF-30	8/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	8/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	8/23/2019	cis-1,2-Dichloroethene	3.2	1	0.190115	70	ug/L
MKTF-30	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	8/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	8/23/2019	MTBE	1	1	0.456095	143	ug/L
MKTF-30	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	8/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	8/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	8/23/2019	Trichloroethene	2.6	1	0.166272	5	ug/L
MKTF-30	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	8/23/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-30	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	10/23/2019	1,1,1-Trichloroethane	0.28	1	0.172922	200	ug/L
MKTF-30	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	10/23/2019	1,1,2-Trichloroethane	0.35	1	0.21583	5	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethane	**47**	1	0.140859	25	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethene	4.4	1	0.205388	7	ug/L
MKTF-30	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	10/23/2019	1,2-Dichloroethane	2.1	1	0.194638	5	ug/L
MKTF-30	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	10/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-30	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-30	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	10/23/2019	cis-1,2-Dichloroethene	4.3	1	0.190115	70	ug/L
MKTF-30	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	10/23/2019	MTBE	1.5	1	0.456095	143	ug/L
MKTF-30	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	10/23/2019	Trichloroethene	3	1	0.166272	5	ug/L
MKTF-30	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-30	10/23/2019	1,1,1-Trichloroethane	0.28	1	0.172922	200	ug/L
MKTF-30	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-30	10/23/2019	1,1,2-Trichloroethane	0.35	1	0.21583	5	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethane	**47**	1	0.140859	25	ug/L
MKTF-30	10/23/2019	1,1-Dichloroethene	4.5	1	0.205388	7	ug/L
MKTF-30	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-30	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-30	10/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-30	10/23/2019	1,2-Dichloroethane	2.1	1	0.194638	5	ug/L
MKTF-30	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-30	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-30	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-30	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-30	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-30	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-30	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-30	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-30	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-30	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-30	10/23/2019	Acetone	1.2	10	1.199396	14064	ug/L
MKTF-30	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-30	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-30	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-30	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-30	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-30	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-30	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-30	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-30	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-30	10/23/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-30	10/23/2019	cis-1,2-Dichloroethene	4.3	1	0.190115	70	ug/L
MKTF-30	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-30	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-30	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-30	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-30	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-30	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-30	10/23/2019	MTBE	1.2	1	0.456095	143	ug/L
MKTF-30	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-30	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-30	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-30	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-30	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-30	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-30	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-30	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-30	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-30	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-30	10/23/2019	Trichloroethene	3	1	0.166272	5	ug/L
MKTF-30	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-30	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-30	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-30	10/23/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-30	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-30	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-30	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-30	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-30	2/27/2020	1,1-Dichloroethane	**35**	1	0.27	25	ug/L
MKTF-30	2/27/2020	1,1-Dichloroethene	4	1	0.13	7	ug/L
MKTF-30	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-30	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-30	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-30	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-30	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-30	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-30	2/27/2020	1,2-Dichloroethane	1.6	1	0.22	5	ug/L
MKTF-30	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-30	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-30	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-30	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-30	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-30	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-30	2/27/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-30	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-30	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-30	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-30	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	2/27/2020	Acetone	3.3	10	2.3	14064	ug/L
MKTF-30	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-30	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-30	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-30	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-30	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-30	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-30	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-30	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-30	2/27/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-30	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-30	2/27/2020	cis-1,2-Dichloroethene	4	1	0.39	70	ug/L
MKTF-30	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-30	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-30	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-30	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-30	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-30	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-30	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	MTBE	2	1	0.39	143	ug/L
MKTF-30	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-30	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-30	2/27/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-30	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-30	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-30	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-30	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-30	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-30	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-30	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-30	2/27/2020	Trichloroethene	2.6	1	0.2	5	ug/L
MKTF-30	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-30	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-30	2/27/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-30	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-30	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-30	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-30	9/20/2020	1,1,2-Trichloroethane	0.2	1	0.19	5	ug/L
MKTF-30	9/20/2020	1,1-Dichloroethane	**36**	1	0.27	25	ug/L
MKTF-30	9/20/2020	1,1-Dichloroethene	2.2	1	0.13	7	ug/L
MKTF-30	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-30	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-30	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-30	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-30	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-30	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-30	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-30	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-30	9/20/2020	1,2-Dichloroethane	1.6	1	0.22	5	ug/L
MKTF-30	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-30	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-30	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-30	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-30	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-30	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-30	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-30	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-30	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-30	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-30	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-30	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-30	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-30	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-30	9/20/2020	Acetone	2.8	10	2.3	14064	ug/L
MKTF-30	9/20/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-30	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-30	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-30	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-30	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-30	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-30	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-30	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-30	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-30	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-30	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-30	9/20/2020	cis-1,2-Dichloroethene	2.8	1	0.39	70	ug/L
MKTF-30	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-30	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-30	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-30	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-30	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-30	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-30	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-30	9/20/2020	MTBE	3.5	1	0.39	143	ug/L
MKTF-30	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-30	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-30	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-30	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-30	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-30	9/20/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-30	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-30	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-30	9/20/2020	Toluene	ND	1	0.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-30	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-30	9/20/2020	Trichloroethene	1.6	1	0.2	5	ug/L
MKTF-30	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-30	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-30	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-30	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-30	12/15/2020	1,2-Dibromoethane	ND	0.02	0.005	0.05	ug/L
MKTF-30	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-30	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-30	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-30	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-30	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-30	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-30	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-30	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-30	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-30	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-30	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-30	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-30	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-30	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-30	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-30	12/15/2020	cis-1,2-Dichloroethene	1.75	1	0.5	70	ug/L
MKTF-30	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-30	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-30	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-30	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-30	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-30	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-30	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-30	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-30	12/15/2020	1,1-Dichloroethane	24.1	1	0.5	25	ug/L
MKTF-30	12/15/2020	1,2-Dichloroethane	1.22	1	0.5	5	ug/L
MKTF-30	12/15/2020	1,1-Dichloroethene	1.99	1	0.5	7	ug/L
MKTF-30	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-30	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-30	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-30	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-30	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-30	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-30	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-30	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-30	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-30	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-30	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-30	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-30	12/15/2020	MTBE	3.64	1	0.74	143	ug/L
MKTF-30	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-30	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-30	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-30	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-30	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-30	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-30	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-30	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-30	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-30	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-30	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-30	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-30	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-30	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-30	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-30	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-30	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-30	12/15/2020	Trichloroethene	1.11	1	0.5	5	ug/L
MKTF-30	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-30	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-30	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-30	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-30	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-30	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-31	4/8/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	4/8/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	4/8/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	4/8/2014	Benzene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	4/8/2014	1,1,1-Trichloroethane	5.8	1	0.12	200	ug/L
MKTF-31	4/8/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	4/8/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	4/8/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	4/8/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	4/8/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-31	4/8/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	4/8/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	4/8/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	4/8/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	4/8/2014	1,1-Dichloroethane	**28**	1	0.28	25	ug/L
MKTF-31	4/8/2014	1,1-Dichloroethene	**59**	1	0.21	7	ug/L
MKTF-31	4/8/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	4/8/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	4/8/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	4/8/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	4/8/2014	1,1,2-Trichloroethane	1.8	1	0.14	5	ug/L
MKTF-31	4/8/2014	Trichloroethene	3	1	0.19	5	ug/L
MKTF-31	4/8/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-31	4/8/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	4/8/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	4/8/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	4/8/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	4/8/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	4/8/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	4/8/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	4/8/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	4/8/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	4/8/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	4/8/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	4/8/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	4/8/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	4/8/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	4/8/2014	1,2-Dichloroethane	**21**	1	0.26	5	ug/L
MKTF-31	4/8/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	4/8/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	4/8/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	4/8/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	4/8/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	4/8/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	4/8/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	4/8/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	4/8/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	4/8/2014	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	4/8/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	4/8/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	4/8/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	4/8/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	4/8/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	4/8/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	4/8/2014	MTBE	55	1	0.25	143	ug/L
MKTF-31	4/8/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	4/8/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	9/23/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	9/23/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	9/23/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	9/23/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-31	9/23/2014	1,1,1-Trichloroethane	3.7	1	0.12	200	ug/L
MKTF-31	9/23/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	9/23/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	9/23/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	9/23/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	9/23/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-31	9/23/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	9/23/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	9/23/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	9/23/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	9/23/2014	1,1-Dichloroethane	22	1	0.28	25	ug/L
MKTF-31	9/23/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-31	9/23/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	9/23/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	9/23/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	9/23/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	9/23/2014	1,1,2-Trichloroethane	1.6	1	0.14	5	ug/L
MKTF-31	9/23/2014	Trichloroethene	2.4	1	0.19	5	ug/L
MKTF-31	9/23/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/23/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	9/23/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	9/23/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	9/23/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	9/23/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	9/23/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	9/23/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	9/23/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	9/23/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	9/23/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	9/23/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	9/23/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	9/23/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	9/23/2014	1,2-Dichloroethane	**13**	1	0.26	5	ug/L
MKTF-31	9/23/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	9/23/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	9/23/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	9/23/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	9/23/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	9/23/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	9/23/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	9/23/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	9/23/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	9/23/2014	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-31	9/23/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	9/23/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	9/23/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	9/23/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	9/23/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	9/23/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	9/23/2014	MTBE	55	1	0.25	143	ug/L
MKTF-31	9/23/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	9/23/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-31	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-31	11/17/2014	1,1,1-Trichloroethane	3.9	1	0.12	200	ug/L
MKTF-31	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-31	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-31	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-31	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-31	11/17/2014	Vinyl Chloride	1.9	1	0.11	2	ug/L
MKTF-31	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-31	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-31	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-31	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-31	11/17/2014	1,1-Dichloroethane	**29**	1	0.28	25	ug/L
MKTF-31	11/17/2014	1,1-Dichloroethene	**34**	1	0.21	7	ug/L
MKTF-31	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-31	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-31	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	11/17/2014	1,1,2-Trichloroethane	1.6	1	0.14	5	ug/L
MKTF-31	11/17/2014	Trichloroethene	2.4	1	0.19	5	ug/L
MKTF-31	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-31	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-31	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-31	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-31	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-31	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-31	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-31	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-31	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-31	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-31	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-31	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-31	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-31	11/17/2014	1,2-Dichloroethane	**16**	1	0.26	5	ug/L
MKTF-31	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-31	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-31	11/17/2014	Toluene	ND	1	0.17	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-31	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-31	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-31	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	11/17/2014	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-31	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-31	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-31	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-31	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-31	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-31	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-31	11/17/2014	MTBE	58	10	2.5	143	ug/L
MKTF-31	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-31	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	3/11/2015	1,1,1-Trichloroethane	3.9	1	0.078	200	ug/L
MKTF-31	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	3/11/2015	1,1-Dichloroethane	21	1	0.4	25	ug/L
MKTF-31	3/11/2015	1,1-Dichloroethene	**40**	1	0.099	7	ug/L
MKTF-31	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	3/11/2015	1,1,2-Trichloroethane	1.5	1	0.079	5	ug/L
MKTF-31	3/11/2015	Trichloroethene	2.5	1	0.16	5	ug/L
MKTF-31	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	3/11/2015	1,2-Dichloroethane	**14**	1	0.18	5	ug/L
MKTF-31	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	3/11/2015	cis-1,2-Dichloroethene	1.6	1	0.081	70	ug/L
MKTF-31	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	3/11/2015	MTBE	54	1	0.17	143	ug/L
MKTF-31	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	6/10/2015	Benzene	ND	1	0.065	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	1,1,1-Trichloroethane	4.9	1	0.078	200	ug/L
MKTF-31	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	6/10/2015	1,1-Dichloroethane	**29**	1	0.4	25	ug/L
MKTF-31	6/10/2015	1,1-Dichloroethene	**53**	1	0.099	7	ug/L
MKTF-31	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	6/10/2015	1,1,2-Trichloroethane	1.6	1	0.079	5	ug/L
MKTF-31	6/10/2015	Trichloroethene	3.1	1	0.16	5	ug/L
MKTF-31	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	6/10/2015	1,2-Dichloroethane	**18**	1	0.18	5	ug/L
MKTF-31	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	6/10/2015	cis-1,2-Dichloroethene	1.7	1	0.081	70	ug/L
MKTF-31	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	6/10/2015	MTBE	56	1	0.17	143	ug/L
MKTF-31	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	8/21/2015	1,1,1-Trichloroethane	4.8	1	0.078	200	ug/L
MKTF-31	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	8/21/2015	1,1-Dichloroethane	**28**	1	0.4	25	ug/L
MKTF-31	8/21/2015	1,1-Dichloroethene	**47**	1	0.099	7	ug/L
MKTF-31	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	8/21/2015	1,1,2-Trichloroethane	1.7	1	0.079	5	ug/L
MKTF-31	8/21/2015	Trichloroethene	3.2	1	0.16	5	ug/L
MKTF-31	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	8/21/2015	1,2-Dichloroethane	**18**	1	0.18	5	ug/L
MKTF-31	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-31	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	8/21/2015	cis-1,2-Dichloroethene	1.7	1	0.081	70	ug/L
MKTF-31	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	8/21/2015	MTBE	64	1	0.17	143	ug/L
MKTF-31	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-31	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-31	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-31	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-31	11/4/2015	1,1,1-Trichloroethane	5	1	0.078	200	ug/L
MKTF-31	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-31	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-31	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-31	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-31	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-31	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-31	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-31	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-31	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-31	11/4/2015	1,1-Dichloroethane	**33**	1	0.4	25	ug/L
MKTF-31	11/4/2015	1,1-Dichloroethene	**57**	1	0.099	7	ug/L
MKTF-31	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-31	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-31	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-31	11/4/2015	1,1,2-Trichloroethane	2.1	1	0.079	5	ug/L
MKTF-31	11/4/2015	Trichloroethene	3.5	1	0.16	5	ug/L
MKTF-31	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-31	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-31	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-31	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-31	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-31	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-31	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-31	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-31	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-31	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-31	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-31	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-31	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-31	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	11/4/2015	1,2-Dichloroethane	**22**	1	0.18	5	ug/L
MKTF-31	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-31	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-31	11/4/2015	Toluene	ND	1	0.11	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-31	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-31	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-31	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-31	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	11/4/2015	cis-1,2-Dichloroethene	2.1	1	0.081	70	ug/L
MKTF-31	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-31	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-31	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-31	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-31	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-31	11/4/2015	MTBE	79	1	0.17	143	ug/L
MKTF-31	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-31	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-31	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-31	2/23/2016	1,1,1-Trichloroethane	5.6	1	0.063	200	ug/L
MKTF-31	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-31	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-31	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-31	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-31	2/23/2016	1,1-Dichloroethane	**34**	1	0.11	25	ug/L
MKTF-31	2/23/2016	1,1-Dichloroethene	**57**	5	0.38	7	ug/L
MKTF-31	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-31	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-31	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-31	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-31	2/23/2016	1,1,2-Trichloroethane	2.4	1	0.077	5	ug/L
MKTF-31	2/23/2016	Trichloroethene	3.6	1	0.18	5	ug/L
MKTF-31	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-31	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-31	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-31	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-31	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-31	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-31	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-31	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-31	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	2/23/2016	1,2-Dichloroethane	**23**	1	0.053	5	ug/L
MKTF-31	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-31	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-31	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-31	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-31	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	2/23/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-31	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-31	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	2/23/2016	MTBE	61	1	0.21	143	ug/L
MKTF-31	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-31	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-31	6/9/2016	Benzene	0.75	1	0.096	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	1,1,1-Trichloroethane	5.5	1	0.091	200	ug/L
MKTF-31	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-31	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	6/9/2016	1,1-Dichloroethane	**37**	1	0.11	25	ug/L
MKTF-31	6/9/2016	1,1-Dichloroethene	**66**	1	0.11	7	ug/L
MKTF-31	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	6/9/2016	1,1,2-Trichloroethane	2.4	1	0.13	5	ug/L
MKTF-31	6/9/2016	Trichloroethene	4	1	0.18	5	ug/L
MKTF-31	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-31	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	6/9/2016	Isopropylbenzene	0.94	1	0.1	447	ug/L
MKTF-31	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	6/9/2016	n-Butylbenzene	0.26	3	0.16	1000	ug/L
MKTF-31	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	6/9/2016	1,2-Dichloroethane	**22**	1	0.12	5	ug/L
MKTF-31	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-31	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	6/9/2016	sec-Butylbenzene	0.42	1	0.12	2000	ug/L
MKTF-31	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	6/9/2016	cis-1,2-Dichloroethene	2	1	0.12	70	ug/L
MKTF-31	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	6/9/2016	MTBE	80	1	0.21	143	ug/L
MKTF-31	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	9/8/2016	Chloroform	0.29	1	0.089	100	ug/L
MKTF-31	9/8/2016	Benzene	0.77	1	0.096	5	ug/L
MKTF-31	9/8/2016	1,1,1-Trichloroethane	5.6	1	0.091	200	ug/L
MKTF-31	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	9/8/2016	Methylene Chloride	0.86	3	0.19	5	ug/L
MKTF-31	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	9/8/2016	1,1-Dichloroethane	**33**	1	0.11	25	ug/L
MKTF-31	9/8/2016	1,1-Dichloroethene	**69**	1	0.11	7	ug/L
MKTF-31	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	9/8/2016	1,1,2-Trichloroethane	2.4	1	0.13	5	ug/L
MKTF-31	9/8/2016	Trichloroethene	3.8	1	0.18	5	ug/L
MKTF-31	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	9/8/2016	Isopropylbenzene	1.6	1	0.1	447	ug/L
MKTF-31	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-31	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	9/8/2016	1,2-Dichloroethane	**24**	1	0.12	5	ug/L
MKTF-31	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-31	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	9/8/2016	sec-Butylbenzene	0.66	1	0.12	2000	ug/L
MKTF-31	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	9/8/2016	cis-1,2-Dichloroethene	1.4	1	0.12	70	ug/L
MKTF-31	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	9/8/2016	MTBE	63	1	0.21	143	ug/L
MKTF-31	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-31	10/31/2016	Chloroform	0.41	1	0.089	100	ug/L
MKTF-31	10/31/2016	Benzene	0.48	1	0.096	5	ug/L
MKTF-31	10/31/2016	1,1,1-Trichloroethane	4.8	1	0.091	200	ug/L
MKTF-31	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-31	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-31	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-31	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-31	10/31/2016	1,1-Dichloroethane	**31**	1	0.11	25	ug/L
MKTF-31	10/31/2016	1,1-Dichloroethene	**57**	1	0.11	7	ug/L
MKTF-31	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-31	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-31	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-31	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-31	10/31/2016	1,1,2-Trichloroethane	2.2	1	0.13	5	ug/L
MKTF-31	10/31/2016	Trichloroethene	3.7	1	0.18	5	ug/L
MKTF-31	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-31	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-31	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-31	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-31	10/31/2016	Isopropylbenzene	0.71	1	0.1	447	ug/L
MKTF-31	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-31	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	10/31/2016	n-Butylbenzene	0.32	3	0.16	1000	ug/L
MKTF-31	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-31	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-31	10/31/2016	1,2-Dichloroethane	**21**	1	0.12	5	ug/L
MKTF-31	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-31	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-31	10/31/2016	Toluene	0.15	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-31	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	10/31/2016	sec-Butylbenzene	0.37	1	0.12	2000	ug/L
MKTF-31	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	10/31/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-31	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-31	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-31	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-31	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-31	10/31/2016	MTBE	70	1	0.21	143	ug/L
MKTF-31	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-31	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	3/7/2017	Acetone	2.6	10	0.88	14064	ug/L
MKTF-31	3/7/2017	Chloroform	0.45	1	0.089	100	ug/L
MKTF-31	3/7/2017	Benzene	0.62	1	0.096	5	ug/L
MKTF-31	3/7/2017	1,1,1-Trichloroethane	4.7	1	0.073	200	ug/L
MKTF-31	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-31	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-31	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-31	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-31	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	3/7/2017	1,1-Dichloroethane	**35**	1	0.1	25	ug/L
MKTF-31	3/7/2017	1,1-Dichloroethene	**70**	1	0.081	7	ug/L
MKTF-31	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-31	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	3/7/2017	1,1,2-Trichloroethane	2.2	1	0.14	5	ug/L
MKTF-31	3/7/2017	Trichloroethene	4.1	1	0.18	5	ug/L
MKTF-31	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-31	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-31	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	3/7/2017	Isopropylbenzene	1	1	0.098	447	ug/L
MKTF-31	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-31	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-31	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-31	3/7/2017	n-Butylbenzene	0.27	3	0.16	1000	ug/L
MKTF-31	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	3/7/2017	1,2-Dichloroethane	**20**	1	0.12	5	ug/L
MKTF-31	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-31	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-31	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-31	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	3/7/2017	sec-Butylbenzene	0.35	1	0.1	2000	ug/L
MKTF-31	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-31	3/7/2017	cis-1,2-Dichloroethene	1.8	1	0.2	70	ug/L
MKTF-31	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-31	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-31	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-31	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	3/7/2017	MTBE	74	1	0.15	143	ug/L
MKTF-31	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-31	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-31	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	6/5/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	6/5/2017	Chloroform	0.47	1	0.4	100	ug/L
MKTF-31	6/5/2017	Benzene	0.66	1	0.062	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/5/2017	1,1,1-Trichloroethane	5.1	1	0.073	200	ug/L
MKTF-31	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	6/5/2017	1,1-Dichloroethane	**36**	1	0.4	25	ug/L
MKTF-31	6/5/2017	1,1-Dichloroethene	**70**	1	0.081	7	ug/L
MKTF-31	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	6/5/2017	1,1,2-Trichloroethane	2.3	1	0.14	5	ug/L
MKTF-31	6/5/2017	Trichloroethene	4.3	1	0.11	5	ug/L
MKTF-31	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	6/5/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-31	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	6/5/2017	n-Butylbenzene	0.24	3	0.13	1000	ug/L
MKTF-31	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	6/5/2017	1,2-Dichloroethane	**22**	1	0.4	5	ug/L
MKTF-31	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	6/5/2017	sec-Butylbenzene	0.36	1	0.11	2000	ug/L
MKTF-31	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	6/5/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-31	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-31	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	6/5/2017	MTBE	72	1	0.24	143	ug/L
MKTF-31	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	9/25/2017	Chloroform	0.52	1	0.4	100	ug/L
MKTF-31	9/25/2017	Benzene	0.85	1	0.062	5	ug/L
MKTF-31	9/25/2017	1,1,1-Trichloroethane	5.3	1	0.073	200	ug/L
MKTF-31	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	9/25/2017	1,1-Dichloroethane	**41**	1	0.4	25	ug/L
MKTF-31	9/25/2017	1,1-Dichloroethene	**80**	1	0.081	7	ug/L
MKTF-31	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	9/25/2017	1,1,2-Trichloroethane	2.7	1	0.14	5	ug/L
MKTF-31	9/25/2017	Trichloroethene	4.8	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	9/25/2017	Isopropylbenzene	1.8	1	0.051	447	ug/L
MKTF-31	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	9/25/2017	n-Butylbenzene	0.35	3	0.13	1000	ug/L
MKTF-31	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	9/25/2017	1,2-Dichloroethane	**25**	1	0.4	5	ug/L
MKTF-31	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	9/25/2017	sec-Butylbenzene	0.54	1	0.11	2000	ug/L
MKTF-31	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	9/25/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-31	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	9/25/2017	MTBE	76	1	0.24	143	ug/L
MKTF-31	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	11/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	11/21/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	11/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-31	11/21/2017	Benzene	0.62	1	0.062	5	ug/L
MKTF-31	11/21/2017	1,1,1-Trichloroethane	4.6	1	0.073	200	ug/L
MKTF-31	11/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	11/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	11/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	11/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	11/21/2017	Vinyl Chloride	0.29	1	0.18	2	ug/L
MKTF-31	11/21/2017	Methylene Chloride	0.29	3	0.11	5	ug/L
MKTF-31	11/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	11/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	11/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	11/21/2017	1,1-Dichloroethane	**35**	1	0.4	25	ug/L
MKTF-31	11/21/2017	1,1-Dichloroethene	**67**	1	0.081	7	ug/L
MKTF-31	11/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	11/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	11/21/2017	1,2-Dichloropropane	0.19	1	0.1	5	ug/L
MKTF-31	11/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	11/21/2017	1,1,2-Trichloroethane	2.4	1	0.14	5	ug/L
MKTF-31	11/21/2017	Trichloroethene	4.1	1	0.11	5	ug/L
MKTF-31	11/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	11/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	11/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	11/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	11/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	11/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	11/21/2017	Isopropylbenzene	1.6	1	0.051	447	ug/L
MKTF-31	11/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	11/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	11/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-31	11/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	11/21/2017	n-Butylbenzene	0.17	3	0.13	1000	ug/L
MKTF-31	11/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	11/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	11/21/2017	1,2-Dichloroethane	**22**	1	0.4	5	ug/L
MKTF-31	11/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	11/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	11/21/2017	Bromobenzene	ND	1	0.14	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	11/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	11/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	11/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	11/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	11/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	11/21/2017	cis-1,2-Dichloroethene	1.6	1	0.2	70	ug/L
MKTF-31	11/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	11/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	11/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	11/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	11/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	11/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	11/21/2017	MTBE	66	1	0.24	143	ug/L
MKTF-31	11/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	11/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	2/5/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	2/5/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	2/5/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-31	2/5/2018	Benzene	1.3	1	0.062	5	ug/L
MKTF-31	2/5/2018	1,1,1-Trichloroethane	5.6	1	0.073	200	ug/L
MKTF-31	2/5/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	2/5/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	2/5/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	2/5/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	2/5/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	2/5/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	2/5/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	2/5/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	2/5/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	2/5/2018	1,1-Dichloroethane	**44**	1	0.4	25	ug/L
MKTF-31	2/5/2018	1,1-Dichloroethene	**91**	1	0.081	7	ug/L
MKTF-31	2/5/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	2/5/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	2/5/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	2/5/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	2/5/2018	1,1,2-Trichloroethane	2.9	1	0.14	5	ug/L
MKTF-31	2/5/2018	Trichloroethene	**5.6**	1	0.11	5	ug/L
MKTF-31	2/5/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	2/5/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	2/5/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	2/5/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	2/5/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	2/5/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	2/5/2018	Isopropylbenzene	1.7	1	0.051	447	ug/L
MKTF-31	2/5/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	2/5/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	2/5/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-31	2/5/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	2/5/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-31	2/5/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	2/5/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	2/5/2018	1,2-Dichloroethane	**26**	1	0.4	5	ug/L
MKTF-31	2/5/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	2/5/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	2/5/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	2/5/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	2/5/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	2/5/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	2/5/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	2/5/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-31	2/5/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	2/5/2018	cis-1,2-Dichloroethene	1.9	1	0.2	70	ug/L
MKTF-31	2/5/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	2/5/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	2/5/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	2/5/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	2/5/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	2/5/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	2/5/2018	MTBE	85	1	0.24	143	ug/L
MKTF-31	2/5/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	2/5/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	5/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-31	5/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-31	5/6/2018	Chloroform	0.71	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	Benzene	0.99	1	0.062	5	ug/L
MKTF-31	5/6/2018	1,1,1-Trichloroethane	5.8	1	0.073	200	ug/L
MKTF-31	5/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	5/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	5/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-31	5/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-31	5/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-31	5/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-31	5/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-31	5/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-31	5/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-31	5/6/2018	1,1-Dichloroethane	**49**	1	0.4	25	ug/L
MKTF-31	5/6/2018	1,1-Dichloroethene	**93**	1	0.081	7	ug/L
MKTF-31	5/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-31	5/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	5/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-31	5/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	5/6/2018	1,1,2-Trichloroethane	3	1	0.14	5	ug/L
MKTF-31	5/6/2018	Trichloroethene	**6**	1	0.11	5	ug/L
MKTF-31	5/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-31	5/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-31	5/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	5/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-31	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-31	5/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-31	5/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-31	5/6/2018	Isopropylbenzene	1.6	1	0.051	447	ug/L
MKTF-31	5/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-31	5/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-31	5/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-31	5/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-31	5/6/2018	n-Butylbenzene	0.46	3	0.13	1000	ug/L
MKTF-31	5/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	5/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-31	5/6/2018	1,2-Dichloroethane	**29**	1	0.4	5	ug/L
MKTF-31	5/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-31	5/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-31	5/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-31	5/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-31	5/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-31	5/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-31	5/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-31	5/6/2018	sec-Butylbenzene	0.7	1	0.11	2000	ug/L
MKTF-31	5/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-31	5/6/2018	cis-1,2-Dichloroethene	2.1	1	0.2	70	ug/L
MKTF-31	5/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	5/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-31	5/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-31	5/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-31	5/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-31	5/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-31	5/6/2018	MTBE	110	1	0.24	143	ug/L
MKTF-31	5/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-31	5/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-31	8/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-31	8/17/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-31	8/17/2018	Chloroform	0.44	1	0.4	100	ug/L
MKTF-31	8/17/2018	Benzene	0.73	1	0.17	5	ug/L
MKTF-31	8/17/2018	1,1,1-Trichloroethane	4.8	1	0.15	200	ug/L
MKTF-31	8/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-31	8/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-31	8/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-31	8/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-31	8/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-31	8/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-31	8/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-31	8/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-31	8/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-31	8/17/2018	1,1-Dichloroethane	**39**	1	0.4	25	ug/L
MKTF-31	8/17/2018	1,1-Dichloroethene	**73**	10	1.2	7	ug/L
MKTF-31	8/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-31	8/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-31	8/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-31	8/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-31	8/17/2018	1,1,2-Trichloroethane	2.4	1	0.23	5	ug/L
MKTF-31	8/17/2018	Trichloroethene	**5.1**	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-31	8/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-31	8/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-31	8/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-31	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-31	8/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-31	8/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-31	8/17/2018	Isopropylbenzene	1.2	1	0.22	447	ug/L
MKTF-31	8/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-31	8/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-31	8/17/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-31	8/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-31	8/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	8/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-31	8/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-31	8/17/2018	1,2-Dichloroethane	**26**	1	0.4	5	ug/L
MKTF-31	8/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-31	8/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-31	8/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-31	8/17/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	8/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-31	8/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-31	8/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	8/17/2018	sec-Butylbenzene	0.53	1	0.2	2000	ug/L
MKTF-31	8/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-31	8/17/2018	cis-1,2-Dichloroethene	1.6	1	0.38	70	ug/L
MKTF-31	8/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	8/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-31	8/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-31	8/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-31	8/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-31	8/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-31	8/17/2018	MTBE	88	1	0.32	143	ug/L
MKTF-31	8/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-31	8/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-31	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-31	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-31	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-31	11/15/2018	Benzene	1.1	1	0.17	5	ug/L
MKTF-31	11/15/2018	1,1,1-Trichloroethane	4.5	1	0.16	200	ug/L
MKTF-31	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-31	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-31	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-31	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-31	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-31	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-31	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-31	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-31	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-31	11/15/2018	1,1-Dichloroethane	**45**	1	0.18	25	ug/L
MKTF-31	11/15/2018	1,1-Dichloroethene	**69**	1	0.12	7	ug/L
MKTF-31	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-31	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-31	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-31	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-31	11/15/2018	1,1,2-Trichloroethane	2.6	1	0.23	5	ug/L
MKTF-31	11/15/2018	Trichloroethene	4.8	1	0.26	5	ug/L
MKTF-31	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-31	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-31	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-31	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-31	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-31	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-31	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-31	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-31	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-31	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-31	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-31	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-31	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-31	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-31	11/15/2018	1,2-Dichloroethane	**27**	1	0.19	5	ug/L
MKTF-31	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-31	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-31	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-31	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-31	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-31	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-31	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-31	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-31	11/15/2018	cis-1,2-Dichloroethene	1.7	1	0.38	70	ug/L
MKTF-31	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-31	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-31	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-31	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-31	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-31	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-31	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-31	11/15/2018	MTBE	88	1	0.46	143	ug/L
MKTF-31	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-31	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-31	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-31	2/20/2019	1,1,1-Trichloroethane	5.5	1	0.163816	200	ug/L
MKTF-31	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-31	2/20/2019	1,1,2-Trichloroethane	2.8	1	0.232723	5	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethane	**52**	1	0.175197	25	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethene	**95**	1	0.120488	7	ug/L
MKTF-31	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-31	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-31	2/20/2019	1,1,1-Trichloroethane	5.4	1	0.163816	200	ug/L
MKTF-31	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-31	2/20/2019	1,1,2-Trichloroethane	2.9	1	0.232723	5	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethane	**53**	1	0.175197	25	ug/L
MKTF-31	2/20/2019	1,1-Dichloroethene	**95**	1	0.120488	7	ug/L
MKTF-31	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-31	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-31	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-31	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-31	2/20/2019	1,2-Dichloroethane	**31**	1	0.189525	5	ug/L
MKTF-31	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-31	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-31	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-31	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-31	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-31	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-31	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-31	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-31	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
MKTF-31	2/20/2019	Benzene	1.1	1	0.174896	5	ug/L
MKTF-31	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-31	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-31	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-31	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-31	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-31	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-31	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-31	2/20/2019	Chloroform	0.69	1	0.235224	100	ug/L
MKTF-31	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	2/20/2019	cis-1,2-Dichloroethene	2.1	1	0.375981	70	ug/L
MKTF-31	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-31	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-31	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-31	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-31	2/20/2019	Isopropylbenzene	1.4	1	0.221104	447	ug/L
MKTF-31	2/20/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-31	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-31	2/20/2019	n-Butylbenzene	0.42	3	0.24833	1000	ug/L
MKTF-31	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-31	2/20/2019	sec-Butylbenzene	0.49	1	0.202255	2000	ug/L
MKTF-31	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-31	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-31	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-31	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-31	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-31	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-31	2/20/2019	Trichloroethene	**6.3**	1	0.257556	5	ug/L
MKTF-31	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-31	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-31	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-31	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-31	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-31	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-31	2/20/2019	1,2-Dichloroethane	**30**	1	0.189525	5	ug/L
MKTF-31	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-31	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-31	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-31	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-31	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-31	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-31	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-31	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-31	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
MKTF-31	2/20/2019	Benzene	1	1	0.174896	5	ug/L
MKTF-31	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-31	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-31	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-31	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-31	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-31	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-31	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-31	2/20/2019	Chloroform	0.65	1	0.235224	100	ug/L
MKTF-31	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	2/20/2019	cis-1,2-Dichloroethene	1.9	1	0.375981	70	ug/L
MKTF-31	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-31	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-31	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-31	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-31	2/20/2019	Isopropylbenzene	1.5	1	0.221104	447	ug/L
MKTF-31	2/20/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-31	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-31	2/20/2019	n-Butylbenzene	0.44	3	0.24833	1000	ug/L
MKTF-31	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-31	2/20/2019	sec-Butylbenzene	0.54	1	0.202255	2000	ug/L
MKTF-31	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-31	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-31	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-31	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-31	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-31	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-31	2/20/2019	Trichloroethene	**6.1**	1	0.257556	5	ug/L
MKTF-31	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-31	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-31	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	0.0062	0.00933	0.003253	0.05	ug/L
MKTF-31	2/20/2019	1,2-Dibromoethane	0.0039	0.00943	0.003288	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	5/6/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	5/6/2019	Benzene	0.45	1	0.166639	5	ug/L
MKTF-31	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	5/6/2019	Chloroform	0.39	1	0.121891	100	ug/L
MKTF-31	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	5/6/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-31	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	5/6/2019	Isopropylbenzene	0.57	1	0.191522	447	ug/L
MKTF-31	5/6/2019	MTBE	90	1	0.456095	143	ug/L
MKTF-31	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-31	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	5/6/2019	Trichloroethene	4.1	1	0.166272	5	ug/L
MKTF-31	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	5/6/2019	1,1,1-Trichloroethane	3.5	1	0.172922	200	ug/L
MKTF-31	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	5/6/2019	1,1,2-Trichloroethane	2	1	0.21583	5	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethane	**34**	1	0.140859	25	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethene	**50**	1	0.205388	7	ug/L
MKTF-31	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	5/6/2019	1,2-Dichloroethane	**19**	1	0.194638	5	ug/L
MKTF-31	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	5/6/2019	Benzene	0.41	1	0.166639	5	ug/L
MKTF-31	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	5/6/2019	Chloroform	0.39	1	0.121891	100	ug/L
MKTF-31	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	5/6/2019	cis-1,2-Dichloroethene	1.5	1	0.190115	70	ug/L
MKTF-31	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	5/6/2019	Isopropylbenzene	0.48	1	0.191522	447	ug/L
MKTF-31	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	5/6/2019	1,1,1-Trichloroethane	3.6	1	0.172922	200	ug/L
MKTF-31	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	5/6/2019	1,1,2-Trichloroethane	2	1	0.21583	5	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethane	**35**	1	0.140859	25	ug/L
MKTF-31	5/6/2019	1,1-Dichloroethene	**52**	1	0.205388	7	ug/L
MKTF-31	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	5/6/2019	1,2-Dichloroethane	**19**	1	0.194638	5	ug/L
MKTF-31	5/6/2019	MTBE	90	1	0.456095	143	ug/L
MKTF-31	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-31	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	5/6/2019	Trichloroethene	3.9	1	0.166272	5	ug/L
MKTF-31	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	0.0063	0.00936	0.003261	0.05	ug/L
MKTF-31	5/6/2019	1,2-Dibromoethane	0.0071	0.00949	0.003305	0.05	ug/L
MKTF-31	8/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	8/23/2019	1,1,1-Trichloroethane	3.9	1	0.172922	200	ug/L
MKTF-31	8/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	8/23/2019	1,1,2-Trichloroethane	2.5	1	0.21583	5	ug/L
MKTF-31	8/23/2019	1,1-Dichloroethane	**39**	1	0.140859	25	ug/L
MKTF-31	8/23/2019	1,1-Dichloroethene	**60**	1	0.205388	7	ug/L
MKTF-31	8/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	8/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	8/23/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-31	8/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	8/23/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-31	8/23/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-31	8/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	8/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	8/23/2019	1,2-Dichloroethane	**23**	1	0.194638	5	ug/L
MKTF-31	8/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	8/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	8/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	8/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	8/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	8/23/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	8/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	8/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	8/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	8/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	8/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	8/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	8/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	8/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	8/23/2019	Benzene	0.72	1	0.166639	5	ug/L
MKTF-31	8/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	8/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	8/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	8/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-31	8/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	8/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	8/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	8/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	8/23/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-31	8/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	8/23/2019	cis-1,2-Dichloroethene	1.9	1	0.190115	70	ug/L
MKTF-31	8/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	8/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	8/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	8/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	8/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	8/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	8/23/2019	Isopropylbenzene	1	1	0.191522	447	ug/L
MKTF-31	8/23/2019	MTBE	110	1	0.456095	143	ug/L
MKTF-31	8/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-31	8/23/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	8/23/2019	n-Butylbenzene	1.1	3	0.22757	1000	ug/L
MKTF-31	8/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	8/23/2019	sec-Butylbenzene	0.55	1	0.247731	2000	ug/L
MKTF-31	8/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	8/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	8/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	8/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	8/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	8/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	8/23/2019	Trichloroethene	4.8	1	0.166272	5	ug/L
MKTF-31	8/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	8/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-31	8/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	8/23/2019	1,2-Dibromoethane	0.0066	0.00941	0.003279	0.05	ug/L
MKTF-31	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-31	10/22/2019	1,1,1-Trichloroethane	3.6	1	0.172922	200	ug/L
MKTF-31	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-31	10/22/2019	1,1,2-Trichloroethane	2.3	1	0.21583	5	ug/L
MKTF-31	10/22/2019	1,1-Dichloroethane	**36**	1	0.140859	25	ug/L
MKTF-31	10/22/2019	1,1-Dichloroethene	**53**	1	0.205388	7	ug/L
MKTF-31	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-31	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-31	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-31	10/22/2019	1,2,4-Trimethylbenzene	0.22	1	0.213199	56	ug/L
MKTF-31	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-31	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-31	10/22/2019	1,2-Dichloroethane	**21**	1	0.194638	5	ug/L
MKTF-31	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-31	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-31	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-31	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-31	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-31	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-31	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-31	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-31	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-31	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-31	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-31	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-31	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-31	10/22/2019	Benzene	0.6	1	0.166639	5	ug/L
MKTF-31	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-31	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-31	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-31	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-31	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-31	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-31	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-31	10/22/2019	Chloroform	0.48	1	0.121891	100	ug/L
MKTF-31	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-31	10/22/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-31	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-31	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-31	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-31	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-31	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-31	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-31	10/22/2019	Isopropylbenzene	0.93	1	0.191522	447	ug/L
MKTF-31	10/22/2019	MTBE	100	1	0.456095	143	ug/L
MKTF-31	10/22/2019	Methylene Chloride	0.2	3	0.154501	5	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-31	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-31	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-31	10/22/2019	sec-Butylbenzene	0.4	1	0.247731	2000	ug/L
MKTF-31	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-31	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-31	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-31	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-31	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-31	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-31	10/22/2019	Trichloroethene	4.4	1	0.166272	5	ug/L
MKTF-31	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-31	10/22/2019	Vinyl Chloride	0.46	1	0.179099	2	ug/L
MKTF-31	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-31	10/22/2019	1,2-Dibromoethane	0.0055	0.00941	0.003279	0.05	ug/L
MKTF-31	2/25/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-31	2/25/2020	1,1,1-Trichloroethane	4.6	1	0.3	200	ug/L
MKTF-31	2/25/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-31	2/25/2020	1,1,2-Trichloroethane	3.1	1	0.19	5	ug/L
MKTF-31	2/25/2020	1,1-Dichloroethane	**39**	1	0.27	25	ug/L
MKTF-31	2/25/2020	1,1-Dichloroethene	**84**	1	0.13	7	ug/L
MKTF-31	2/25/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	2/25/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-31	2/25/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-31	2/25/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-31	2/25/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	2/25/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-31	2/25/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-31	2/25/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-31	2/25/2020	1,2-Dichloroethane	**28**	1	0.22	5	ug/L
MKTF-31	2/25/2020	1,2-Dichloropropane	0.39	1	0.13	5	ug/L
MKTF-31	2/25/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-31	2/25/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-31	2/25/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	2/25/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-31	2/25/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-31	2/25/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-31	2/25/2020	2-Butanone	2.6	10	1.1	5565	ug/L
MKTF-31	2/25/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	2/25/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-31	2/25/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-31	2/25/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-31	2/25/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-31	2/25/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	2/25/2020	Acetone	3.5	10	2.3	14064	ug/L
MKTF-31	2/25/2020	Benzene	0.92	1	0.23	5	ug/L
MKTF-31	2/25/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-31	2/25/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-31	2/25/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-31	2/25/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-31	2/25/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-31	2/25/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-31	2/25/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	2/25/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-31	2/25/2020	Chloroform	0.47	1	0.13	100	ug/L
MKTF-31	2/25/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-31	2/25/2020	cis-1,2-Dichloroethene	2.2	1	0.39	70	ug/L
MKTF-31	2/25/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-31	2/25/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-31	2/25/2020	Dibromomethane	ND	1	0.31	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/25/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-31	2/25/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-31	2/25/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-31	2/25/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-31	2/25/2020	MTBE	**180**	1	0.39	143	ug/L
MKTF-31	2/25/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-31	2/25/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-31	2/25/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-31	2/25/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-31	2/25/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-31	2/25/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-31	2/25/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-31	2/25/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-31	2/25/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-31	2/25/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-31	2/25/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-31	2/25/2020	Trichloroethene	**5.7**	1	0.2	5	ug/L
MKTF-31	2/25/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-31	2/25/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	2/25/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-31	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-31	9/19/2020	1,1,1-Trichloroethane	3.5	1	0.3	200	ug/L
MKTF-31	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-31	9/19/2020	1,1,2-Trichloroethane	2.2	1	0.19	5	ug/L
MKTF-31	9/19/2020	1,1-Dichloroethane	**48**	1	0.27	25	ug/L
MKTF-31	9/19/2020	1,1-Dichloroethene	**63**	1	0.13	7	ug/L
MKTF-31	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-31	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-31	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-31	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-31	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-31	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-31	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-31	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-31	9/19/2020	1,2-Dichloroethane	**24**	1	0.22	5	ug/L
MKTF-31	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-31	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-31	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-31	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-31	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-31	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-31	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-31	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-31	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-31	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-31	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-31	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-31	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-31	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-31	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-31	9/19/2020	Benzene	0.66	1	0.23	5	ug/L
MKTF-31	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-31	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-31	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-31	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-31	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-31	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-31	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-31	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-31	9/19/2020	Chloroform	0.35	1	0.13	100	ug/L
MKTF-31	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-31	9/19/2020	cis-1,2-Dichloroethene	2.4	1	0.39	70	ug/L
MKTF-31	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-31	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-31	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-31	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-31	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-31	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-31	9/19/2020	Isopropylbenzene	0.75	1	0.18	447	ug/L
MKTF-31	9/19/2020	MTBE	**190**	1	0.39	143	ug/L
MKTF-31	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-31	9/19/2020	n-Butylbenzene	0.29	3	0.25	1000	ug/L
MKTF-31	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-31	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-31	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-31	9/19/2020	Styrene	ND	1	0.13	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-31	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-31	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-31	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-31	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-31	9/19/2020	Trichloroethene	**5.8**	1	0.2	5	ug/L
MKTF-31	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-31	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-31	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-31	9/19/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	ND	0.0201	0.00501	0.05	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	ND	0.0206	0.00515	0.05	ug/L
MKTF-31	12/18/2020	Acetone	ND	25	10	14064	ug/L
MKTF-31	12/18/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-31	12/18/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-31	12/18/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-31	12/18/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-31	12/18/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-31	12/18/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-31	12/18/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-31	12/18/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-31	12/18/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-31	12/18/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-31	12/18/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-31	12/18/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-31	12/18/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-31	12/18/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-31	12/18/2020	cis-1,2-Dichloroethene	1.82	1	0.5	70	ug/L
MKTF-31	12/18/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-31	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-31	12/18/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-31	12/18/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethane	**43.3**	1	0.5	25	ug/L
MKTF-31	12/18/2020	1,2-Dichloroethane	**25.6**	1	0.5	5	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethene	**67.2**	1	0.5	7	ug/L
MKTF-31	12/18/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-31	12/18/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-31	12/18/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-31	12/18/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-31	12/18/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-31	12/18/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-31	12/18/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-31	12/18/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-31	12/18/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-31	12/18/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-31	12/18/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-31	12/18/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-31	12/18/2020	MTBE	**253**	1	0.74	143	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-31	12/18/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-31	12/18/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-31	12/18/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-31	12/18/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-31	12/18/2020	Styrene	ND	1	1	100	ug/L
MKTF-31	12/18/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-31	12/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-31	12/18/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-31	12/18/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-31	12/18/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-31	12/18/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-31	12/18/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-31	12/18/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-31	12/18/2020	1,1,1-Trichloroethane	2.96	1	0.5	200	ug/L
MKTF-31	12/18/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-31	12/18/2020	Trichloroethene	**5.57**	1	0.5	5	ug/L
MKTF-31	12/18/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-31	12/18/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-31	12/18/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-31	12/18/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-31	12/18/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-31	12/18/2020	Xylenes, Total	ND	10	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Acetone	ND	50	20	14064	ug/L
MKTF-31	12/18/2020	Benzene	ND	2	0.76	5	ug/L
MKTF-31	12/18/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
MKTF-31	12/18/2020	Bromoform	ND	10	1.42	32.9	ug/L
MKTF-31	12/18/2020	Bromomethane	ND	2	1.96	7.54	ug/L
MKTF-31	12/18/2020	2-Butanone	ND	50	5.2	5565	ug/L
MKTF-31	12/18/2020	Carbon Disulfide	ND	2	1	810	ug/L
MKTF-31	12/18/2020	Carbon tetrachloride	ND	2	1	5	ug/L
MKTF-31	12/18/2020	Chlorobenzene	ND	2	1	77.6	ug/L
MKTF-31	12/18/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
MKTF-31	12/18/2020	Chloroethane	ND	2	1.52	20857	ug/L
MKTF-31	12/18/2020	Chloroform	ND	2	1.2	100	ug/L
MKTF-31	12/18/2020	Chloromethane	ND	2	1.66	20.32	ug/L
MKTF-31	12/18/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
MKTF-31	12/18/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
MKTF-31	12/18/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
MKTF-31	12/18/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-31	12/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
MKTF-31	12/18/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
MKTF-31	12/18/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
MKTF-31	12/18/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethane	**42.7**	2	1	25	ug/L
MKTF-31	12/18/2020	1,2-Dichloroethane	**25.5**	2	1	5	ug/L
MKTF-31	12/18/2020	1,1-Dichloroethene	**69.2**	2	1	7	ug/L
MKTF-31	12/18/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
MKTF-31	12/18/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
MKTF-31	12/18/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
MKTF-31	12/18/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
MKTF-31	12/18/2020	Ethylbenzene	ND	2	1	700	ug/L
MKTF-31	12/18/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
MKTF-31	12/18/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L
MKTF-31	12/18/2020	Isopropylbenzene	ND	2	1.06	447	ug/L
MKTF-31	12/18/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
MKTF-31	12/18/2020	1-Methylnaphthalene	ND	10	8.4	NA	ug/L
MKTF-31	12/18/2020	2-Methylnaphthalene	*ND*	*20*	9.2		ug/L
MKTF-31	12/18/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
MKTF-31	12/18/2020	MTBE	**247**	2	1.48	143	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	2	2	30	ug/L
MKTF-31	12/18/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
MKTF-31	12/18/2020	n-Propylbenzene	ND	2	1.38	660	ug/L
MKTF-31	12/18/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
MKTF-31	12/18/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
MKTF-31	12/18/2020	Styrene	ND	2	2	100	ug/L
MKTF-31	12/18/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
MKTF-31	12/18/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
MKTF-31	12/18/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
MKTF-31	12/18/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
MKTF-31	12/18/2020	Toluene	ND	2	0.82	1000	ug/L
MKTF-31	12/18/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
MKTF-31	12/18/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-31	12/18/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
MKTF-31	12/18/2020	1,1,1-Trichloroethane	2.99	2	1	200	ug/L
MKTF-31	12/18/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
MKTF-31	12/18/2020	Trichloroethene	**5.37**	2	1	5	ug/L
MKTF-31	12/18/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
MKTF-31	12/18/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
MKTF-31	12/18/2020	1,2,4-Trimethylbenzene	ND	2	1.64	56	ug/L
MKTF-31	12/18/2020	1,3,5-Trimethylbenzene	ND	2	1.12	60	ug/L
MKTF-31	12/18/2020	Vinyl Chloride	ND	2	1	2	ug/L
MKTF-31	12/18/2020	Xylenes, Total	ND	20	3.2	620	ug/L
MKTF-32	4/9/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-32	4/9/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	4/9/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-32	4/9/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-32	4/9/2014	1,1,1-Trichloroethane	1.5	1	0.12	200	ug/L
MKTF-32	4/9/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-32	4/9/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-32	4/9/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-32	4/9/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-32	4/9/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-32	4/9/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-32	4/9/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	4/9/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-32	4/9/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-32	4/9/2014	1,1-Dichloroethane	22	1	0.28	25	ug/L
MKTF-32	4/9/2014	1,1-Dichloroethene	**36**	1	0.21	7	ug/L
MKTF-32	4/9/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	4/9/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-32	4/9/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-32	4/9/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-32	4/9/2014	1,1,2-Trichloroethane	2.3	1	0.14	5	ug/L
MKTF-32	4/9/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-32	4/9/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-32	4/9/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-32	4/9/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-32	4/9/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-32	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-32	4/9/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-32	4/9/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-32	4/9/2014	Isopropylbenzene	2.5	1	0.16	447	ug/L
MKTF-32	4/9/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-32	4/9/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-32	4/9/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-32	4/9/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-32	4/9/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-32	4/9/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-32	4/9/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-32	4/9/2014	1,2-Dichloroethane	**30**	1	0.26	5	ug/L
MKTF-32	4/9/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-32	4/9/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-32	4/9/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-32	4/9/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-32	4/9/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-32	4/9/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-32	4/9/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-32	4/9/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-32	4/9/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-32	4/9/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-32	4/9/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-32	4/9/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-32	4/9/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-32	4/9/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-32	4/9/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-32	4/9/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-32	4/9/2014	MTBE	**150**	1	0.25	143	ug/L
MKTF-32	4/9/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-32	4/9/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-32	9/23/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-32	9/23/2014	Acetone	ND	50	25	14064	ug/L
MKTF-32	9/23/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-32	9/23/2014	Benzene	ND	5	0.77	5	ug/L
MKTF-32	9/23/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-32	9/23/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-32	9/23/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-32	9/23/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-32	9/23/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-32	9/23/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-32	9/23/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-32	9/23/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-32	9/23/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-32	9/23/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-32	9/23/2014	1,1-Dichloroethane	23	5	1.4	25	ug/L
MKTF-32	9/23/2014	1,1-Dichloroethene	**54**	5	1.1	7	ug/L
MKTF-32	9/23/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-32	9/23/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-32	9/23/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-32	9/23/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-32	9/23/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-32	9/23/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-32	9/23/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-32	9/23/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-32	9/23/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-32	9/23/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-32	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-32	9/23/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-32	9/23/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-32	9/23/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-32	9/23/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/23/2014	Ethylbenzene	ND	5	0.64	700	ug/L
MKTF-32	9/23/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-32	9/23/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
MKTF-32	9/23/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-32	9/23/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-32	9/23/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-32	9/23/2014	1,2-Dichloroethane	**29**	5	1.3	5	ug/L
MKTF-32	9/23/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-32	9/23/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-32	9/23/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-32	9/23/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-32	9/23/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-32	9/23/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-32	9/23/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-32	9/23/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-32	9/23/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-32	9/23/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-32	9/23/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-32	9/23/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-32	9/23/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-32	9/23/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-32	9/23/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-32	9/23/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-32	9/23/2014	MTBE	**320**	5	1.3	143	ug/L
MKTF-32	9/23/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-32	9/23/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-32	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-32	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-32	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-32	11/17/2014	1,1,1-Trichloroethane	1.1	1	0.12	200	ug/L
MKTF-32	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-32	11/17/2014	Chloromethane	13	3	0.52	20.32	ug/L
MKTF-32	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-32	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-32	11/17/2014	Vinyl Chloride	2	1	0.11	2	ug/L
MKTF-32	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-32	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-32	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-32	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-32	11/17/2014	1,1-Dichloroethane	24	1	0.28	25	ug/L
MKTF-32	11/17/2014	1,1-Dichloroethene	**41**	1	0.21	7	ug/L
MKTF-32	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-32	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-32	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-32	11/17/2014	1,1,2-Trichloroethane	2.5	1	0.14	5	ug/L
MKTF-32	11/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-32	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-32	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-32	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-32	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-32	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-32	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-32	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-32	11/17/2014	Isopropylbenzene	1.1	1	0.16	447	ug/L
MKTF-32	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-32	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-32	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-32	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-32	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-32	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-32	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-32	11/17/2014	1,2-Dichloroethane	**28**	1	0.26	5	ug/L
MKTF-32	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-32	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-32	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-32	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-32	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-32	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-32	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-32	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-32	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-32	11/17/2014	cis-1,2-Dichloroethene	1.2	1	0.12	70	ug/L
MKTF-32	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-32	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-32	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-32	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-32	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-32	11/17/2014	MTBE	**400**	20	5	143	ug/L
MKTF-32	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-32	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-32	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	3/12/2015	1,1,1-Trichloroethane	1.1	1	0.078	200	ug/L
MKTF-32	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-32	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	3/12/2015	1,1-Dichloroethane	19	1	0.4	25	ug/L
MKTF-32	3/12/2015	1,1-Dichloroethene	**48**	1	0.099	7	ug/L
MKTF-32	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	3/12/2015	1,1,2-Trichloroethane	1.7	1	0.079	5	ug/L
MKTF-32	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-32	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	3/12/2015	1,2-Dichloroethane	**25**	1	0.18	5	ug/L
MKTF-32	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-32	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	3/12/2015	cis-1,2-Dichloroethene	1.3	1	0.081	70	ug/L
MKTF-32	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-32	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	3/12/2015	MTBE	**540**	20	3.5	143	ug/L
MKTF-32	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-32	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	6/9/2015	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-32	6/9/2015	1,1-Dichloroethene	**36**	1	0.099	7	ug/L
MKTF-32	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	6/9/2015	1,1,2-Trichloroethane	2.1	1	0.079	5	ug/L
MKTF-32	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	6/9/2015	1,2,3-Trichloropropane	*ND*	2	0.16	0.0084	ug/L
MKTF-32	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	6/9/2015	1,2-Dichloroethane	**22**	1	0.18	5	ug/L
MKTF-32	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-32	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	6/9/2015	cis-1,2-Dichloroethene	1.5	1	0.081	70	ug/L
MKTF-32	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-32	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	6/9/2015	MTBE	**590**	20	3.5	143	ug/L
MKTF-32	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	8/21/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-32	8/21/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-32	8/21/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-32	8/21/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-32	8/21/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-32	8/21/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-32	8/21/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-32	8/21/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-32	8/21/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-32	8/21/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-32	8/21/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-32	8/21/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-32	8/21/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-32	8/21/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-32	8/21/2015	1,1-Dichloroethane	19	2	0.8	25	ug/L
MKTF-32	8/21/2015	1,1-Dichloroethene	**38**	2	0.2	7	ug/L
MKTF-32	8/21/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-32	8/21/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-32	8/21/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-32	8/21/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-32	8/21/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-32	8/21/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-32	8/21/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-32	8/21/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-32	8/21/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-32	8/21/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-32	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-32	8/21/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-32	8/21/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-32	8/21/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-32	8/21/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/21/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-32	8/21/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-32	8/21/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-32	8/21/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-32	8/21/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-32	8/21/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-32	8/21/2015	1,2-Dichloroethane	**22**	2	0.35	5	ug/L
MKTF-32	8/21/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-32	8/21/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-32	8/21/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-32	8/21/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-32	8/21/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-32	8/21/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-32	8/21/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-32	8/21/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-32	8/21/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-32	8/21/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-32	8/21/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-32	8/21/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-32	8/21/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-32	8/21/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-32	8/21/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	8/21/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-32	8/21/2015	MTBE	**490**	20	3.5	143	ug/L
MKTF-32	8/21/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	8/21/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-32	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-32	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-32	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-32	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-32	11/5/2015	1,1,1-Trichloroethane	1.1	1	0.078	200	ug/L
MKTF-32	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-32	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-32	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-32	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-32	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-32	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-32	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-32	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-32	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-32	11/5/2015	1,1-Dichloroethane	21	1	0.4	25	ug/L
MKTF-32	11/5/2015	1,1-Dichloroethene	**39**	1	0.099	7	ug/L
MKTF-32	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-32	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-32	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-32	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-32	11/5/2015	1,1,2-Trichloroethane	2.2	1	0.079	5	ug/L
MKTF-32	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-32	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-32	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-32	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-32	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-32	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-32	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-32	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-32	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-32	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-32	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-32	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-32	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-32	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-32	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-32	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	11/5/2015	1,2-Dichloroethane	**27**	1	0.18	5	ug/L
MKTF-32	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-32	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-32	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-32	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-32	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-32	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-32	11/5/2015	sec-Butylbenzene	1.5	1	0.23	2000	ug/L
MKTF-32	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	11/5/2015	cis-1,2-Dichloroethene	2	1	0.081	70	ug/L
MKTF-32	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-32	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-32	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-32	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-32	11/5/2015	MTBE	**590**	20	3.5	143	ug/L
MKTF-32	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-32	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-32	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-32	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-32	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-32	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-32	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-32	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-32	2/24/2016	1,1-Dichloroethane	17	1	0.11	25	ug/L
MKTF-32	2/24/2016	1,1-Dichloroethene	**28**	1	0.076	7	ug/L
MKTF-32	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-32	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-32	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-32	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-32	2/24/2016	1,1,2-Trichloroethane	1.6	1	0.077	5	ug/L
MKTF-32	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-32	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-32	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-32	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-32	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-32	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-32	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-32	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-32	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-32	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-32	2/24/2016	1,2-Dichloroethane	**19**	1	0.053	5	ug/L
MKTF-32	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-32	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-32	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-32	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-32	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-32	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-32	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	2/24/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-32	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-32	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-32	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-32	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	2/24/2016	MTBE	**620**	10	2.1	143	ug/L
MKTF-32	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-32	6/9/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-32	6/9/2016	Acetone	ND	20	9.8	14064	ug/L
MKTF-32	6/9/2016	Chloroform	ND	2	0.18	100	ug/L
MKTF-32	6/9/2016	Benzene	0.81	2	0.19	5	ug/L
MKTF-32	6/9/2016	1,1,1-Trichloroethane	1.2	2	0.18	200	ug/L
MKTF-32	6/9/2016	Bromomethane	ND	6	1.6	7.54	ug/L
MKTF-32	6/9/2016	Chloromethane	ND	6	0.43	20.32	ug/L
MKTF-32	6/9/2016	Dibromomethane	ND	2	0.24	8	ug/L
MKTF-32	6/9/2016	Chloroethane	ND	4	0.38	20857	ug/L
MKTF-32	6/9/2016	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	6/9/2016	Methylene Chloride	*ND*	*6*	0.37	5	ug/L
MKTF-32	6/9/2016	Carbon Disulfide	ND	20	1.2	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2016	Bromoform	ND	2	0.2	32.9	ug/L
MKTF-32	6/9/2016	Bromodichloromethane	*ND*	*2*	0.28	1.34	ug/L
MKTF-32	6/9/2016	1,1-Dichloroethane	23	2	0.22	25	ug/L
MKTF-32	6/9/2016	1,1-Dichloroethene	**46**	2	0.21	7	ug/L
MKTF-32	6/9/2016	Trichlorofluoromethane	ND	2	0.41	1137	ug/L
MKTF-32	6/9/2016	Dichlorodifluoromethane	ND	2	0.71	197	ug/L
MKTF-32	6/9/2016	1,2-Dichloropropane	ND	2	0.22	5	ug/L
MKTF-32	6/9/2016	2-Butanone	ND	20	1.5	5565	ug/L
MKTF-32	6/9/2016	1,1,2-Trichloroethane	1.9	2	0.25	5	ug/L
MKTF-32	6/9/2016	Trichloroethene	ND	2	0.35	5	ug/L
MKTF-32	6/9/2016	1,1,2,2-Tetrachloroethane	ND	4	0.26	10	ug/L
MKTF-32	6/9/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-32	6/9/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	6/9/2016	1,2,4-Trimethylbenzene	ND	2	0.22	56	ug/L
MKTF-32	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.47	0.0033	ug/L
MKTF-32	6/9/2016	1,2,3-Trichloropropane	*ND*	*4*	0.4	0.0084	ug/L
MKTF-32	6/9/2016	tert-Butylbenzene	ND	2	0.23	690	ug/L
MKTF-32	6/9/2016	Isopropylbenzene	0.54	2	0.21	447	ug/L
MKTF-32	6/9/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L
MKTF-32	6/9/2016	Ethylbenzene	ND	2	0.22	700	ug/L
MKTF-32	6/9/2016	Styrene	ND	2	0.22	100	ug/L
MKTF-32	6/9/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
MKTF-32	6/9/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
MKTF-32	6/9/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
MKTF-32	6/9/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
MKTF-32	6/9/2016	1,2-Dichloroethane	**26**	2	0.23	5	ug/L
MKTF-32	6/9/2016	4-Methyl-2-Pentanone	ND	20	0.86	1243	ug/L
MKTF-32	6/9/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
MKTF-32	6/9/2016	Bromobenzene	ND	2	0.2	62	ug/L
MKTF-32	6/9/2016	Toluene	ND	2	0.24	1000	ug/L
MKTF-32	6/9/2016	Chlorobenzene	ND	2	0.23	77.6	ug/L
MKTF-32	6/9/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
MKTF-32	6/9/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	6/9/2016	sec-Butylbenzene	1	2	0.25	2000	ug/L
MKTF-32	6/9/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
MKTF-32	6/9/2016	cis-1,2-Dichloroethene	2.1	2	0.25	70	ug/L
MKTF-32	6/9/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
MKTF-32	6/9/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	6/9/2016	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-32	6/9/2016	2,2-Dichloropropane	ND	4	0.33	NA	ug/L
MKTF-32	6/9/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	6/9/2016	Xylenes, Total	ND	3	0.73	620	ug/L
MKTF-32	6/9/2016	MTBE	**640**	20	4.2	143	ug/L
MKTF-32	6/9/2016	cis-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	6/9/2016	trans-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	9/9/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
MKTF-32	9/9/2016	Acetone	ND	20	9.8	14064	ug/L
MKTF-32	9/9/2016	Chloroform	ND	2	0.18	100	ug/L
MKTF-32	9/9/2016	Benzene	0.47	2	0.19	5	ug/L
MKTF-32	9/9/2016	1,1,1-Trichloroethane	0.61	2	0.18	200	ug/L
MKTF-32	9/9/2016	Bromomethane	ND	6	1.6	7.54	ug/L
MKTF-32	9/9/2016	Chloromethane	ND	6	0.43	20.32	ug/L
MKTF-32	9/9/2016	Dibromomethane	ND	2	0.24	8	ug/L
MKTF-32	9/9/2016	Chloroethane	ND	4	0.38	20857	ug/L
MKTF-32	9/9/2016	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	9/9/2016	Methylene Chloride	*1*	*6*	0.37	5	ug/L
MKTF-32	9/9/2016	Carbon Disulfide	ND	20	1.2	810	ug/L
MKTF-32	9/9/2016	Bromoform	ND	2	0.2	32.9	ug/L
MKTF-32	9/9/2016	Bromodichloromethane	*ND*	*2*	0.28	1.34	ug/L
MKTF-32	9/9/2016	1,1-Dichloroethane	12	2	0.22	25	ug/L
MKTF-32	9/9/2016	1,1-Dichloroethene	**26**	2	0.21	7	ug/L
MKTF-32	9/9/2016	Trichlorofluoromethane	ND	2	0.41	1137	ug/L
MKTF-32	9/9/2016	Dichlorodifluoromethane	ND	2	0.71	197	ug/L
MKTF-32	9/9/2016	1,2-Dichloropropane	ND	2	0.22	5	ug/L
MKTF-32	9/9/2016	2-Butanone	ND	20	1.5	5565	ug/L
MKTF-32	9/9/2016	1,1,2-Trichloroethane	1.1	2	0.25	5	ug/L
MKTF-32	9/9/2016	Trichloroethene	ND	2	0.35	5	ug/L
MKTF-32	9/9/2016	1,1,2,2-Tetrachloroethane	ND	4	0.26	10	ug/L
MKTF-32	9/9/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
MKTF-32	9/9/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	9/9/2016	1,2,4-Trimethylbenzene	ND	2	0.22	56	ug/L
MKTF-32	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.47	0.0033	ug/L
MKTF-32	9/9/2016	1,2,3-Trichloropropane	*ND*	*4*	0.4	0.0084	ug/L
MKTF-32	9/9/2016	tert-Butylbenzene	ND	2	0.23	690	ug/L
MKTF-32	9/9/2016	Isopropylbenzene	0.27	2	0.21	447	ug/L
MKTF-32	9/9/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/9/2016	Ethylbenzene	ND	2	0.22	700	ug/L
MKTF-32	9/9/2016	Styrene	ND	2	0.22	100	ug/L
MKTF-32	9/9/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
MKTF-32	9/9/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
MKTF-32	9/9/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
MKTF-32	9/9/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
MKTF-32	9/9/2016	1,2-Dichloroethane	**17**	2	0.23	5	ug/L
MKTF-32	9/9/2016	4-Methyl-2-Pentanone	ND	20	0.86	1243	ug/L
MKTF-32	9/9/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
MKTF-32	9/9/2016	Bromobenzene	ND	2	0.2	62	ug/L
MKTF-32	9/9/2016	Toluene	ND	2	0.24	1000	ug/L
MKTF-32	9/9/2016	Chlorobenzene	ND	2	0.23	77.6	ug/L
MKTF-32	9/9/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
MKTF-32	9/9/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	9/9/2016	sec-Butylbenzene	1.1	2	0.25	2000	ug/L
MKTF-32	9/9/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
MKTF-32	9/9/2016	cis-1,2-Dichloroethene	1.5	2	0.25	70	ug/L
MKTF-32	9/9/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
MKTF-32	9/9/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-32	9/9/2016	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-32	9/9/2016	2,2-Dichloropropane	ND	4	0.33	NA	ug/L
MKTF-32	9/9/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-32	9/9/2016	Xylenes, Total	ND	3	0.73	620	ug/L
MKTF-32	9/9/2016	MTBE	**750**	20	4.2	143	ug/L
MKTF-32	9/9/2016	cis-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	9/9/2016	trans-1,3-Dichloropropene	ND	2	0.21	NA	ug/L
MKTF-32	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-32	10/31/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	10/31/2016	Benzene	0.49	1	0.096	5	ug/L
MKTF-32	10/31/2016	1,1,1-Trichloroethane	0.47	1	0.091	200	ug/L
MKTF-32	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-32	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-32	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-32	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-32	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-32	10/31/2016	1,1-Dichloroethane	15	1	0.11	25	ug/L
MKTF-32	10/31/2016	1,1-Dichloroethene	**30**	1	0.11	7	ug/L
MKTF-32	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-32	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-32	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-32	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-32	10/31/2016	1,1,2-Trichloroethane	1.6	1	0.13	5	ug/L
MKTF-32	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-32	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-32	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-32	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-32	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-32	10/31/2016	Isopropylbenzene	0.22	1	0.1	447	ug/L
MKTF-32	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-32	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-32	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-32	10/31/2016	1,2-Dichloroethane	**20**	1	0.12	5	ug/L
MKTF-32	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-32	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-32	10/31/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-32	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-32	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	10/31/2016	sec-Butylbenzene	0.86	1	0.12	2000	ug/L
MKTF-32	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	10/31/2016	cis-1,2-Dichloroethene	1.6	1	0.12	70	ug/L
MKTF-32	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-32	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-32	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-32	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-32	10/31/2016	MTBE	**630**	10	2.1	143	ug/L
MKTF-32	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-32	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	3/7/2017	Acetone	2.4	10	0.88	14064	ug/L
MKTF-32	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-32	3/7/2017	Benzene	0.45	1	0.096	5	ug/L
MKTF-32	3/7/2017	1,1,1-Trichloroethane	0.58	1	0.073	200	ug/L
MKTF-32	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-32	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-32	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-32	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-32	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	3/7/2017	1,1-Dichloroethane	18	1	0.1	25	ug/L
MKTF-32	3/7/2017	1,1-Dichloroethene	**35**	1	0.081	7	ug/L
MKTF-32	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-32	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	3/7/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	3/7/2017	Trichloroethene	0.24	1	0.18	5	ug/L
MKTF-32	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-32	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-32	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	3/7/2017	Isopropylbenzene	0.22	1	0.098	447	ug/L
MKTF-32	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-32	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-32	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-32	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-32	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	3/7/2017	1,2-Dichloroethane	**18**	1	0.12	5	ug/L
MKTF-32	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-32	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-32	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-32	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-32	3/7/2017	sec-Butylbenzene	0.81	1	0.1	2000	ug/L
MKTF-32	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-32	3/7/2017	cis-1,2-Dichloroethene	1.9	1	0.2	70	ug/L
MKTF-32	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-32	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-32	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-32	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	3/7/2017	MTBE	**660**	10	1.5	143	ug/L
MKTF-32	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-32	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-32	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	6/6/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	6/6/2017	Benzene	0.42	1	0.062	5	ug/L
MKTF-32	6/6/2017	1,1,1-Trichloroethane	0.57	1	0.073	200	ug/L
MKTF-32	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	6/6/2017	1,1-Dichloroethane	19	1	0.4	25	ug/L
MKTF-32	6/6/2017	1,1-Dichloroethene	**38**	1	0.081	7	ug/L
MKTF-32	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	6/6/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	6/6/2017	Trichloroethene	0.26	1	0.11	5	ug/L
MKTF-32	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	6/6/2017	Isopropylbenzene	0.13	1	0.051	447	ug/L
MKTF-32	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	6/6/2017	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
MKTF-32	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	6/6/2017	sec-Butylbenzene	0.63	1	0.11	2000	ug/L
MKTF-32	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	6/6/2017	cis-1,2-Dichloroethene	2	1	0.2	70	ug/L
MKTF-32	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-32	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	6/6/2017	MTBE	**640**	10	2.4	143	ug/L
MKTF-32	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	9/25/2017	Acetone	4.9	10	0.82	14064	ug/L
MKTF-32	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	9/25/2017	Benzene	0.38	1	0.062	5	ug/L
MKTF-32	9/25/2017	1,1,1-Trichloroethane	0.47	1	0.073	200	ug/L
MKTF-32	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	9/25/2017	1,1-Dichloroethane	16	1	0.4	25	ug/L
MKTF-32	9/25/2017	1,1-Dichloroethene	**29**	1	0.081	7	ug/L
MKTF-32	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	9/25/2017	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	9/25/2017	Trichloroethene	0.3	1	0.11	5	ug/L
MKTF-32	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	9/25/2017	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-32	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	9/25/2017	Isopropylbenzene	0.12	1	0.051	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	9/25/2017	1,2-Dichloroethane	**17**	1	0.4	5	ug/L
MKTF-32	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	9/25/2017	sec-Butylbenzene	0.79	1	0.11	2000	ug/L
MKTF-32	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	9/25/2017	cis-1,2-Dichloroethene	1.7	1	0.2	70	ug/L
MKTF-32	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	9/25/2017	MTBE	**690**	10	2.4	143	ug/L
MKTF-32	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	11/27/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	11/27/2017	Benzene	0.28	1	0.062	5	ug/L
MKTF-32	11/27/2017	1,1,1-Trichloroethane	0.29	1	0.073	200	ug/L
MKTF-32	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	11/27/2017	1,1-Dichloroethane	14	1	0.4	25	ug/L
MKTF-32	11/27/2017	1,1-Dichloroethene	**23**	1	0.081	7	ug/L
MKTF-32	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	11/27/2017	1,2-Dichloropropane	0.14	1	0.1	5	ug/L
MKTF-32	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	11/27/2017	1,1,2-Trichloroethane	1.2	1	0.14	5	ug/L
MKTF-32	11/27/2017	Trichloroethene	0.19	1	0.11	5	ug/L
MKTF-32	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-32	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	11/27/2017	1,2-Dichloroethane	**16**	1	0.4	5	ug/L
MKTF-32	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	11/27/2017	sec-Butylbenzene	0.66	1	0.11	2000	ug/L
MKTF-32	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	11/27/2017	cis-1,2-Dichloroethene	1.6	1	0.2	70	ug/L
MKTF-32	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	11/27/2017	MTBE	**600**	10	2.4	143	ug/L
MKTF-32	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-32	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-32	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-32	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	2/7/2018	1,1-Dichloroethane	17	1	0.4	25	ug/L
MKTF-32	2/7/2018	1,1-Dichloroethene	**34**	1	0.081	7	ug/L
MKTF-32	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	2/7/2018	1,1,2-Trichloroethane	1.5	1	0.14	5	ug/L
MKTF-32	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-32	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-32	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	2/7/2018	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
MKTF-32	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-32	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	2/7/2018	cis-1,2-Dichloroethene	2	1	0.2	70	ug/L
MKTF-32	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	2/7/2018	MTBE	**740**	10	2.4	143	ug/L
MKTF-32	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-32	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-32	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-32	5/9/2018	Benzene	0.4	1	0.062	5	ug/L
MKTF-32	5/9/2018	1,1,1-Trichloroethane	0.38	1	0.073	200	ug/L
MKTF-32	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-32	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-32	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-32	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-32	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-32	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-32	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-32	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-32	5/9/2018	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-32	5/9/2018	1,1-Dichloroethene	**29**	1	0.081	7	ug/L
MKTF-32	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-32	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-32	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-32	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-32	5/9/2018	1,1,2-Trichloroethane	1.4	1	0.14	5	ug/L
MKTF-32	5/9/2018	Trichloroethene	0.28	1	0.11	5	ug/L
MKTF-32	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-32	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-32	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-32	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-32	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-32	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-32	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-32	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-32	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-32	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-32	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-32	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-32	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-32	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-32	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-32	5/9/2018	1,2-Dichloroethane	**20**	1	0.4	5	ug/L
MKTF-32	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-32	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-32	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-32	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-32	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-32	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-32	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-32	5/9/2018	sec-Butylbenzene	0.75	1	0.11	2000	ug/L
MKTF-32	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-32	5/9/2018	cis-1,2-Dichloroethene	2.3	1	0.2	70	ug/L
MKTF-32	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-32	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-32	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-32	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-32	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-32	5/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-32	5/9/2018	MTBE	**820**	10	2.4	143	ug/L
MKTF-32	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-32	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-32	8/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-32	8/28/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-32	8/28/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-32	8/28/2018	Benzene	0.76	2	0.35	5	ug/L
MKTF-32	8/28/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-32	8/28/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-32	8/28/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-32	8/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-32	8/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-32	8/28/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-32	8/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-32	8/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-32	8/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-32	8/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-32	8/28/2018	1,1-Dichloroethane	17	2	0.8	25	ug/L
MKTF-32	8/28/2018	1,1-Dichloroethene	**26**	2	0.24	7	ug/L
MKTF-32	8/28/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-32	8/28/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-32	8/28/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-32	8/28/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-32	8/28/2018	1,1,2-Trichloroethane	1.1	2	0.47	5	ug/L
MKTF-32	8/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-32	8/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-32	8/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-32	8/28/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-32	8/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-32	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-32	8/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-32	8/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-32	8/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-32	8/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-32	8/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-32	8/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-32	8/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-32	8/28/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-32	8/28/2018	1,2-Dibromoethane	*ND*	2	0.46	0.05	ug/L
MKTF-32	8/28/2018	1,2-Dichloroethane	**19**	2	0.8	5	ug/L
MKTF-32	8/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-32	8/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-32	8/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-32	8/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-32	8/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-32	8/28/2018	Dibromochloromethane	*ND*	2	0.47	1.68	ug/L
MKTF-32	8/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	8/28/2018	sec-Butylbenzene	0.66	2	0.4	2000	ug/L
MKTF-32	8/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-32	8/28/2018	cis-1,2-Dichloroethene	1.8	2	0.75	70	ug/L
MKTF-32	8/28/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-32	8/28/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-32	8/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-32	8/28/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-32	8/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-32	8/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-32	8/28/2018	MTBE	**780**	10	3.2	143	ug/L
MKTF-32	8/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-32	8/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-32	11/15/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-32	11/15/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-32	11/15/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-32	11/15/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-32	11/15/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-32	11/15/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-32	11/15/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-32	11/15/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-32	11/15/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-32	11/15/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-32	11/15/2018	Methylene Chloride	*ND*	6	0.41	5	ug/L
MKTF-32	11/15/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-32	11/15/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-32	11/15/2018	Bromodichloromethane	*ND*	2	0.57	1.34	ug/L
MKTF-32	11/15/2018	1,1-Dichloroethane	15	2	0.35	25	ug/L
MKTF-32	11/15/2018	1,1-Dichloroethene	**26**	2	0.24	7	ug/L
MKTF-32	11/15/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-32	11/15/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-32	11/15/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-32	11/15/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-32	11/15/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-32	11/15/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-32	11/15/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-32	11/15/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-32	11/15/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-32	11/15/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-32	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	4	0.94	0.0033	ug/L
MKTF-32	11/15/2018	1,2,3-Trichloropropane	*ND*	4	1.1	0.0084	ug/L
MKTF-32	11/15/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-32	11/15/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-32	11/15/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-32	11/15/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-32	11/15/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-32	11/15/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-32	11/15/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-32	11/15/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-32	11/15/2018	1,2-Dibromoethane	*ND*	2	0.46	0.05	ug/L
MKTF-32	11/15/2018	1,2-Dichloroethane	**15**	2	0.38	5	ug/L
MKTF-32	11/15/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-32	11/15/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-32	11/15/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-32	11/15/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-32	11/15/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-32	11/15/2018	Dibromochloromethane	*ND*	2	0.47	1.68	ug/L
MKTF-32	11/15/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-32	11/15/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-32	11/15/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-32	11/15/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-32	11/15/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/15/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-32	11/15/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-32	11/15/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-32	11/15/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-32	11/15/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-32	11/15/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-32	11/15/2018	MTBE	**810**	10	4.6	143	ug/L
MKTF-32	11/15/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-32	11/15/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-32	2/13/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
MKTF-32	2/13/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
MKTF-32	2/13/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
MKTF-32	2/13/2019	1,1,2-Trichloroethane	0.86	2	0.465446	5	ug/L
MKTF-32	2/13/2019	1,1-Dichloroethane	13	2	0.350393	25	ug/L
MKTF-32	2/13/2019	1,1-Dichloroethene	**27**	2	0.240976	7	ug/L
MKTF-32	2/13/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	2/13/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
MKTF-32	2/13/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
MKTF-32	2/13/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
MKTF-32	2/13/2019	1,2,4-Trimethylbenzene	ND	2	0.506629	56	ug/L
MKTF-32	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
MKTF-32	2/13/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
MKTF-32	2/13/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
MKTF-32	2/13/2019	1,2-Dichloroethane	**15**	2	0.379051	5	ug/L
MKTF-32	2/13/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
MKTF-32	2/13/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
MKTF-32	2/13/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
MKTF-32	2/13/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
MKTF-32	2/13/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
MKTF-32	2/13/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
MKTF-32	2/13/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	2/13/2019	2-Butanone	ND	20	2.821738	5565	ug/L
MKTF-32	2/13/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
MKTF-32	2/13/2019	2-Hexanone	ND	20	1.813149	38	ug/L
MKTF-32	2/13/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	2/13/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
MKTF-32	2/13/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
MKTF-32	2/13/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
MKTF-32	2/13/2019	Acetone	5	20	1.514139	14064	ug/L
MKTF-32	2/13/2019	Benzene	ND	2	0.349791	5	ug/L
MKTF-32	2/13/2019	Bromobenzene	ND	2	0.635812	62	ug/L
MKTF-32	2/13/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
MKTF-32	2/13/2019	Bromoform	ND	2	0.646621	32.9	ug/L
MKTF-32	2/13/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	2/13/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
MKTF-32	2/13/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
MKTF-32	2/13/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
MKTF-32	2/13/2019	Chloroethane	ND	4	0.328674	20857	ug/L
MKTF-32	2/13/2019	Chloroform	ND	2	0.470448	100	ug/L
MKTF-32	2/13/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	2/13/2019	cis-1,2-Dichloroethene	2.1	2	0.751962	70	ug/L
MKTF-32	2/13/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
MKTF-32	2/13/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
MKTF-32	2/13/2019	Dibromomethane	ND	2	0.644295	8	ug/L
MKTF-32	2/13/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	2/13/2019	Ethylbenzene	ND	2	0.446804	700	ug/L
MKTF-32	2/13/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
MKTF-32	2/13/2019	Isopropylbenzene	ND	2	0.442208	447	ug/L
MKTF-32	2/13/2019	MTBE	**840**	20	9.1219	143	ug/L
MKTF-32	2/13/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
MKTF-32	2/13/2019	Naphthalene	ND	4	0.579252	30	ug/L
MKTF-32	2/13/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
MKTF-32	2/13/2019	n-Propylbenzene	ND	2	0.485172	660	ug/L
MKTF-32	2/13/2019	sec-Butylbenzene	0.63	2	0.404509	2000	ug/L
MKTF-32	2/13/2019	Styrene	ND	2	0.500291	100	ug/L
MKTF-32	2/13/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
MKTF-32	2/13/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
MKTF-32	2/13/2019	Toluene	ND	2	0.336279	1000	ug/L
MKTF-32	2/13/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
MKTF-32	2/13/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
MKTF-32	2/13/2019	Trichloroethene	ND	2	0.515113	5	ug/L
MKTF-32	2/13/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
MKTF-32	2/13/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
MKTF-32	2/13/2019	Xylenes, Total	ND	3	1.282575	620	ug/L
MKTF-32	2/13/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-32	5/7/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/7/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-32	5/7/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-32	5/7/2019	1,1,2-Trichloroethane	0.86	2	0.43166	5	ug/L
MKTF-32	5/7/2019	1,1-Dichloroethane	13	2	0.281717	25	ug/L
MKTF-32	5/7/2019	1,1-Dichloroethene	**24**	2	0.410776	7	ug/L
MKTF-32	5/7/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	5/7/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-32	5/7/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-32	5/7/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-32	5/7/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-32	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-32	5/7/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-32	5/7/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-32	5/7/2019	1,2-Dichloroethane	**14**	2	0.389276	5	ug/L
MKTF-32	5/7/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-32	5/7/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-32	5/7/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-32	5/7/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-32	5/7/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-32	5/7/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-32	5/7/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	5/7/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-32	5/7/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-32	5/7/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-32	5/7/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	5/7/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-32	5/7/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-32	5/7/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-32	5/7/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-32	5/7/2019	Benzene	ND	2	0.333278	5	ug/L
MKTF-32	5/7/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-32	5/7/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-32	5/7/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-32	5/7/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	5/7/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-32	5/7/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-32	5/7/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-32	5/7/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-32	5/7/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-32	5/7/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	5/7/2019	cis-1,2-Dichloroethene	1.5	2	0.38023	70	ug/L
MKTF-32	5/7/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-32	5/7/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-32	5/7/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-32	5/7/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	5/7/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-32	5/7/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-32	5/7/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-32	5/7/2019	MTBE	**740**	20	9.1219	143	ug/L
MKTF-32	5/7/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-32	5/7/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-32	5/7/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-32	5/7/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-32	5/7/2019	sec-Butylbenzene	0.56	2	0.495463	2000	ug/L
MKTF-32	5/7/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-32	5/7/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-32	5/7/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-32	5/7/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-32	5/7/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-32	5/7/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-32	5/7/2019	Trichloroethene	0.34	2	0.332544	5	ug/L
MKTF-32	5/7/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-32	5/7/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-32	5/7/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-32	5/7/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-32	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-32	8/20/2019	1,1,1-Trichloroethane	0.22	1	0.172922	200	ug/L
MKTF-32	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-32	8/20/2019	1,1,2-Trichloroethane	1.2	1	0.21583	5	ug/L
MKTF-32	8/20/2019	1,1-Dichloroethane	14	1	0.140859	25	ug/L
MKTF-32	8/20/2019	1,1-Dichloroethene	**21**	1	0.205388	7	ug/L
MKTF-32	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-32	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-32	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-32	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-32	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-32	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-32	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-32	8/20/2019	1,2-Dichloroethane	**15**	1	0.194638	5	ug/L
MKTF-32	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-32	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-32	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-32	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-32	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-32	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-32	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-32	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-32	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-32	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-32	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-32	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-32	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-32	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-32	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-32	8/20/2019	Benzene	0.31	1	0.166639	5	ug/L
MKTF-32	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-32	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-32	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-32	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-32	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-32	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-32	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-32	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-32	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-32	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-32	8/20/2019	cis-1,2-Dichloroethene	1.7	1	0.190115	70	ug/L
MKTF-32	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-32	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-32	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-32	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-32	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-32	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-32	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-32	8/20/2019	MTBE	**610**	10	4.56095	143	ug/L
MKTF-32	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-32	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-32	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-32	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-32	8/20/2019	sec-Butylbenzene	0.62	1	0.247731	2000	ug/L
MKTF-32	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-32	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-32	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-32	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-32	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-32	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-32	8/20/2019	Trichloroethene	0.28	1	0.166272	5	ug/L
MKTF-32	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-32	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-32	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-32	8/20/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
MKTF-32	10/23/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-32	10/23/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-32	10/23/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-32	10/23/2019	1,1,2-Trichloroethane	1.1	2	0.43166	5	ug/L
MKTF-32	10/23/2019	1,1-Dichloroethane	12	2	0.281717	25	ug/L
MKTF-32	10/23/2019	1,1-Dichloroethene	**18**	2	0.410776	7	ug/L
MKTF-32	10/23/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-32	10/23/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-32	10/23/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-32	10/23/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-32	10/23/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-32	10/23/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-32	10/23/2019	1,2-Dichloroethane	**14**	2	0.389276	5	ug/L
MKTF-32	10/23/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-32	10/23/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-32	10/23/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-32	10/23/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-32	10/23/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-32	10/23/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-32	10/23/2019	2-Butanone	ND	20	4.178833	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/23/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-32	10/23/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-32	10/23/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-32	10/23/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-32	10/23/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-32	10/23/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-32	10/23/2019	Benzene	0.36	2	0.333278	5	ug/L
MKTF-32	10/23/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-32	10/23/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-32	10/23/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-32	10/23/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-32	10/23/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-32	10/23/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-32	10/23/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-32	10/23/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-32	10/23/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-32	10/23/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-32	10/23/2019	cis-1,2-Dichloroethene	1.5	2	0.38023	70	ug/L
MKTF-32	10/23/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-32	10/23/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-32	10/23/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-32	10/23/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-32	10/23/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-32	10/23/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-32	10/23/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-32	10/23/2019	MTBE	**670**	20	9.1219	143	ug/L
MKTF-32	10/23/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-32	10/23/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-32	10/23/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-32	10/23/2019	sec-Butylbenzene	0.54	2	0.495463	2000	ug/L
MKTF-32	10/23/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-32	10/23/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-32	10/23/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-32	10/23/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-32	10/23/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-32	10/23/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-32	10/23/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-32	10/23/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-32	10/23/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-32	10/23/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-32	10/23/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-32	2/27/2020	MTBE	**900**	20	7.9	143	ug/L
MKTF-32	2/27/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-32	2/27/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-32	2/27/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-32	2/27/2020	1,1,2-Trichloroethane	0.41	2	0.38	5	ug/L
MKTF-32	2/27/2020	1,1-Dichloroethane	10	2	0.55	25	ug/L
MKTF-32	2/27/2020	1,1-Dichloroethene	**25**	2	0.26	7	ug/L
MKTF-32	2/27/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-32	2/27/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-32	2/27/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-32	2/27/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-32	2/27/2020	1,2,4-Trimethylbenzene	ND	2	0.24	56	ug/L
MKTF-32	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-32	2/27/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-32	2/27/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-32	2/27/2020	1,2-Dichloroethane	**13**	2	0.44	5	ug/L
MKTF-32	2/27/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-32	2/27/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-32	2/27/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-32	2/27/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-32	2/27/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-32	2/27/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-32	2/27/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-32	2/27/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-32	2/27/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-32	2/27/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-32	2/27/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-32	2/27/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-32	2/27/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-32	2/27/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-32	2/27/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-32	2/27/2020	Benzene	ND	2	0.45	5	ug/L
MKTF-32	2/27/2020	Bromobenzene	ND	2	0.57	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/27/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-32	2/27/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-32	2/27/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-32	2/27/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-32	2/27/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-32	2/27/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-32	2/27/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-32	2/27/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-32	2/27/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-32	2/27/2020	cis-1,2-Dichloroethene	2.1	2	0.78	70	ug/L
MKTF-32	2/27/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-32	2/27/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-32	2/27/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-32	2/27/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-32	2/27/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-32	2/27/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-32	2/27/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-32	2/27/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-32	2/27/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-32	2/27/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-32	2/27/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-32	2/27/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-32	2/27/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-32	2/27/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-32	2/27/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-32	2/27/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-32	2/27/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-32	2/27/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-32	2/27/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-32	2/27/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-32	2/27/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	2/27/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-32	9/21/2020	MTBE	**1100**	20	7.9	143	ug/L
MKTF-32	9/21/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-32	9/21/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-32	9/21/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-32	9/21/2020	1,1,2-Trichloroethane	0.71	2	0.38	5	ug/L
MKTF-32	9/21/2020	1,1-Dichloroethane	15	2	0.55	25	ug/L
MKTF-32	9/21/2020	1,1-Dichloroethene	**23**	2	0.26	7	ug/L
MKTF-32	9/21/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-32	9/21/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-32	9/21/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-32	9/21/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-32	9/21/2020	1,2,4-Trimethylbenzene	ND	2	0.24	56	ug/L
MKTF-32	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-32	9/21/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-32	9/21/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-32	9/21/2020	1,2-Dichloroethane	**13**	2	0.44	5	ug/L
MKTF-32	9/21/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-32	9/21/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-32	9/21/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-32	9/21/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-32	9/21/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-32	9/21/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-32	9/21/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-32	9/21/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-32	9/21/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-32	9/21/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-32	9/21/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-32	9/21/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-32	9/21/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-32	9/21/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-32	9/21/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-32	9/21/2020	Benzene	ND	2	0.45	5	ug/L
MKTF-32	9/21/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-32	9/21/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-32	9/21/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-32	9/21/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-32	9/21/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-32	9/21/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-32	9/21/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-32	9/21/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-32	9/21/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-32	9/21/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-32	9/21/2020	cis-1,2-Dichloroethene	2.5	2	0.78	70	ug/L
MKTF-32	9/21/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-32	9/21/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-32	9/21/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-32	9/21/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-32	9/21/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-32	9/21/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-32	9/21/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-32	9/21/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-32	9/21/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-32	9/21/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-32	9/21/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-32	9/21/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-32	9/21/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-32	9/21/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-32	9/21/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-32	9/21/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-32	9/21/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-32	9/21/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-32	9/21/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-32	9/21/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-32	9/21/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-32	12/15/2020	1,2-Dibromoethane	ND	0.0199	0.00499	0.05	ug/L
MKTF-32	12/15/2020	Acetone	ND	125	50	14064	ug/L
MKTF-32	12/15/2020	Benzene	ND	5	1.9	5	ug/L
MKTF-32	12/15/2020	Bromodichloromethane	*ND*	*5*	2.5	1.34	ug/L
MKTF-32	12/15/2020	Bromoform	ND	25	3.55	32.9	ug/L
MKTF-32	12/15/2020	Bromomethane	ND	5	4.9	7.54	ug/L
MKTF-32	12/15/2020	2-Butanone	ND	125	13	5565	ug/L
MKTF-32	12/15/2020	Carbon Disulfide	ND	5	2.5	810	ug/L
MKTF-32	12/15/2020	Carbon tetrachloride	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	Chlorobenzene	ND	5	2.5	77.6	ug/L
MKTF-32	12/15/2020	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
MKTF-32	12/15/2020	Chloroethane	ND	5	3.8	20857	ug/L
MKTF-32	12/15/2020	Chloroform	ND	5	3	100	ug/L
MKTF-32	12/15/2020	Chloromethane	ND	5	4.15	20.32	ug/L
MKTF-32	12/15/2020	2-Chlorotoluene	ND	5	2.85	233	ug/L
MKTF-32	12/15/2020	4-Chlorotoluene	ND	5	2.8	250	ug/L
MKTF-32	12/15/2020	cis-1,2-Dichloroethene	ND	5	2.5	70	ug/L
MKTF-32	12/15/2020	cis-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-32	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*25*	7.5	0.0033	ug/L
MKTF-32	12/15/2020	1,2-Dibromoethane	*ND*	*5*	2.5	0.05	ug/L
MKTF-32	12/15/2020	Dibromomethane	*ND*	*25*	2.95	8	ug/L
MKTF-32	12/15/2020	1,2-Dichlorobenzene	ND	5	2.5	600	ug/L
MKTF-32	12/15/2020	1,3-Dichlorobenzene	ND	5	2.7	N/A	ug/L
MKTF-32	12/15/2020	1,4-Dichlorobenzene	ND	5	3.2	75	ug/L
MKTF-32	12/15/2020	Dichlorodifluoromethane	ND	5	4.25	197	ug/L
MKTF-32	12/15/2020	1,1-Dichloroethane	10.3	5	2.5	25	ug/L
MKTF-32	12/15/2020	1,2-Dichloroethane	**11.3**	5	2.5	5	ug/L
MKTF-32	12/15/2020	1,1-Dichloroethene	**17.5**	5	2.5	7	ug/L
MKTF-32	12/15/2020	1,2-Dichloropropane	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	1,3-Dichloropropane	ND	5	2.5	370	ug/L
MKTF-32	12/15/2020	2,2-Dichloropropane	ND	5	2.5	NA	ug/L
MKTF-32	12/15/2020	1,1-Dichloropropene	ND	5	2.5	NA	ug/L
MKTF-32	12/15/2020	Ethylbenzene	ND	5	2.5	700	ug/L
MKTF-32	12/15/2020	Hexachlorobutadiene	*ND*	*25*	4.5	1.39	ug/L
MKTF-32	12/15/2020	2-Hexanone	*ND*	*125*	15.5	38	ug/L
MKTF-32	12/15/2020	Isopropylbenzene	ND	5	2.65	447	ug/L
MKTF-32	12/15/2020	Methylene Chloride	*ND*	*25*	15	5	ug/L
MKTF-32	12/15/2020	1-Methylnaphthalene	ND	25	21	NA	ug/L
MKTF-32	12/15/2020	2-Methylnaphthalene	*ND*	*50*	23		ug/L
MKTF-32	12/15/2020	4-Methyl-2-Pentanone	ND	125	9	1243	ug/L
MKTF-32	12/15/2020	MTBE	**897**	5	3.7	143	ug/L
MKTF-32	12/15/2020	Naphthalene	ND	5	5	30	ug/L
MKTF-32	12/15/2020	n-Butylbenzene	ND	5	3.8	1000	ug/L
MKTF-32	12/15/2020	n-Propylbenzene	ND	5	3.45	660	ug/L
MKTF-32	12/15/2020	p-Isopropyltoluene	ND	5	3.55	NA	ug/L
MKTF-32	12/15/2020	sec-Butylbenzene	ND	5	3.5	2000	ug/L
MKTF-32	12/15/2020	Styrene	ND	5	5	100	ug/L
MKTF-32	12/15/2020	tert-Butylbenzene	ND	5	3.15	690	ug/L
MKTF-32	12/15/2020	1,1,1,2-Tetrachloroethane	ND	5	2.6	5.74	ug/L
MKTF-32	12/15/2020	1,1,2,2-Tetrachloroethane	ND	5	2.5	10	ug/L
MKTF-32	12/15/2020	Tetrachloroethene	ND	5	2.9	5	ug/L
MKTF-32	12/15/2020	Toluene	ND	5	2.05	1000	ug/L
MKTF-32	12/15/2020	trans-1,2-Dichloroethene	ND	5	2.5	100	ug/L
MKTF-32	12/15/2020	trans-1,3-Dichloropropene	ND	25	2.5	NA	ug/L
MKTF-32	12/15/2020	1,2,3-Trichlorobenzene	ND	5	3.5	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	12/15/2020	1,2,4-Trichlorobenzene	ND	5	4.1	70	ug/L
MKTF-32	12/15/2020	1,1,1-Trichloroethane	ND	5	2.5	200	ug/L
MKTF-32	12/15/2020	1,1,2-Trichloroethane	*ND*	*25*	2.5	5	ug/L
MKTF-32	12/15/2020	Trichloroethene	ND	5	2.5	5	ug/L
MKTF-32	12/15/2020	Trichlorofluoromethane	ND	5	2.6	1137	ug/L
MKTF-32	12/15/2020	1,2,3-Trichloropropane	*ND*	*25*	4.2	0.0084	ug/L
MKTF-32	12/15/2020	1,2,4-Trimethylbenzene	ND	5	4.1	56	ug/L
MKTF-32	12/15/2020	1,3,5-Trimethylbenzene	ND	5	2.8	60	ug/L
MKTF-32	12/15/2020	Vinyl Chloride	*ND*	*5*	2.5	2	ug/L
MKTF-32	12/15/2020	Xylenes, Total	ND	50	8	620	ug/L
MKTF-33	4/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-33	4/10/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	4/10/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-33	4/10/2014	Benzene	**28**	1	0.15	5	ug/L
MKTF-33	4/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-33	4/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-33	4/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-33	4/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-33	4/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-33	4/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-33	4/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-33	4/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-33	4/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-33	4/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-33	4/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-33	4/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-33	4/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	4/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-33	4/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-33	4/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-33	4/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	4/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-33	4/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-33	4/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-33	4/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-33	4/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-33	4/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-33	4/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-33	4/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-33	4/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-33	4/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-33	4/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-33	4/10/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-33	4/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-33	4/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-33	4/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-33	4/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-33	4/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-33	4/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-33	4/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-33	4/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-33	4/10/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-33	4/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-33	4/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-33	4/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-33	4/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-33	4/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-33	4/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	4/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-33	4/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-33	4/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-33	4/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-33	4/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-33	4/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-33	4/10/2014	MTBE	**360**	10	2.5	143	ug/L
MKTF-33	4/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-33	4/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-33	9/23/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-33	9/23/2014	Acetone	ND	50	25	14064	ug/L
MKTF-33	9/23/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-33	9/23/2014	Benzene	ND	5	0.77	5	ug/L
MKTF-33	9/23/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-33	9/23/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-33	9/23/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-33	9/23/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-33	9/23/2014	Chloroethane	ND	10	2.4	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/23/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
MKTF-33	9/23/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-33	9/23/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-33	9/23/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-33	9/23/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-33	9/23/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-33	9/23/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-33	9/23/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-33	9/23/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-33	9/23/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-33	9/23/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-33	9/23/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-33	9/23/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-33	9/23/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-33	9/23/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-33	9/23/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-33	9/23/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
MKTF-33	9/23/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-33	9/23/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-33	9/23/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-33	9/23/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
MKTF-33	9/23/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-33	9/23/2014	Ethylbenzene	ND	5	0.64	700	ug/L
MKTF-33	9/23/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-33	9/23/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
MKTF-33	9/23/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-33	9/23/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-33	9/23/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-33	9/23/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-33	9/23/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-33	9/23/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-33	9/23/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-33	9/23/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-33	9/23/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-33	9/23/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-33	9/23/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-33	9/23/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
MKTF-33	9/23/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-33	9/23/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-33	9/23/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-33	9/23/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-33	9/23/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-33	9/23/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-33	9/23/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-33	9/23/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-33	9/23/2014	MTBE	**450**	5	1.3	143	ug/L
MKTF-33	9/23/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-33	9/23/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-33	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-33	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-33	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-33	11/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-33	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-33	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-33	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-33	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-33	11/17/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-33	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-33	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-33	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-33	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-33	11/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-33	11/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-33	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-33	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-33	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-33	11/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	11/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-33	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-33	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-33	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-33	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-33	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-33	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-33	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-33	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-33	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-33	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-33	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-33	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-33	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-33	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-33	11/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-33	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-33	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-33	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-33	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-33	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-33	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-33	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-33	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-33	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-33	11/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-33	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-33	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-33	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-33	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-33	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-33	11/17/2014	MTBE	**410**	20	5	143	ug/L
MKTF-33	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-33	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-33	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	3/12/2015	MTBE	**480**	20	3.5	143	ug/L
MKTF-33	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	6/9/2015	MTBE	**490**	20	3.5	143	ug/L
MKTF-33	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-33	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	8/21/2015	MTBE	**630**	10	1.7	143	ug/L
MKTF-33	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-33	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-33	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-33	11/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-33	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-33	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-33	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-33	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-33	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-33	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-33	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-33	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-33	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-33	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-33	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-33	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-33	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-33	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-33	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-33	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-33	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-33	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-33	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-33	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-33	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-33	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-33	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-33	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-33	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-33	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-33	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-33	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-33	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-33	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-33	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-33	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-33	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-33	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-33	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-33	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-33	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-33	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-33	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-33	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-33	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-33	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-33	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-33	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-33	11/9/2015	MTBE	**580**	10	1.7	143	ug/L
MKTF-33	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	2/25/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	2/25/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-33	2/25/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	2/25/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	2/25/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-33	2/25/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	2/25/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	2/25/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	2/25/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-33	2/25/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-33	2/25/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-33	2/25/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	2/25/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	2/25/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-33	2/25/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	2/25/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-33	2/25/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-33	2/25/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-33	2/25/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-33	2/25/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-33	2/25/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-33	2/25/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	2/25/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-33	2/25/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	2/25/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	2/25/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-33	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-33	2/25/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-33	2/25/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-33	2/25/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-33	2/25/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	2/25/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	2/25/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-33	2/25/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	2/25/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	2/25/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	2/25/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	2/25/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-33	2/25/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-33	2/25/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	2/25/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-33	2/25/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-33	2/25/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-33	2/25/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	2/25/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	2/25/2016	sec-Butylbenzene	1.6	1	0.11	2000	ug/L
MKTF-33	2/25/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/25/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	2/25/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	2/25/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	2/25/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-33	2/25/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-33	2/25/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	2/25/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	2/25/2016	MTBE	**310**	10	2.1	143	ug/L
MKTF-33	2/25/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	2/25/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-33	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	6/10/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-33	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	6/10/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
MKTF-33	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	6/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-33	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	6/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-33	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	6/10/2016	sec-Butylbenzene	0.6	1	0.12	2000	ug/L
MKTF-33	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	6/10/2016	MTBE	**400**	10	2.1	143	ug/L
MKTF-33	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	9/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	9/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	9/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	9/10/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	9/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	9/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	9/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	9/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	9/10/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	9/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	9/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	9/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	9/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	9/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-33	9/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	9/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	9/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	9/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	9/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	9/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	9/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	9/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	9/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	9/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	9/10/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	9/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	9/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	9/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	9/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	9/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	9/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	9/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-33	9/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	9/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	9/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	9/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	9/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	9/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	9/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	9/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	9/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-33	9/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	9/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	9/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	9/10/2016	sec-Butylbenzene	0.81	1	0.12	2000	ug/L
MKTF-33	9/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	9/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	9/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	9/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	9/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	9/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	9/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	9/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	9/10/2016	MTBE	**270**	10	2.1	143	ug/L
MKTF-33	9/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	9/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	11/1/2016	1,2,4-Trimethylbenzene	0.3	1	0.11	56	ug/L
MKTF-33	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-33	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-33	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-33	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-33	11/1/2016	p-Isopropyltoluene	0.2	1	0.14	NA	ug/L
MKTF-33	11/1/2016	Ethylbenzene	0.19	1	0.11	700	ug/L
MKTF-33	11/1/2016	Styrene	0.28	1	0.11	100	ug/L
MKTF-33	11/1/2016	n-Propylbenzene	0.44	1	0.13	660	ug/L
MKTF-33	11/1/2016	n-Butylbenzene	0.42	3	0.16	1000	ug/L
MKTF-33	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-33	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-33	11/1/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	11/1/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-33	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-33	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-33	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-33	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-33	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-33	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-33	11/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-33	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-33	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-33	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-33	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-33	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-33	11/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-33	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-33	11/1/2016	1,2-Dichloroethane	0.34	1	0.12	5	ug/L
MKTF-33	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-33	11/1/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
MKTF-33	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-33	11/1/2016	Toluene	0.15	1	0.12	1000	ug/L
MKTF-33	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-33	11/1/2016	Tetrachloroethene	0.18	1	0.15	5	ug/L
MKTF-33	11/1/2016	sec-Butylbenzene	0.95	1	0.12	2000	ug/L
MKTF-33	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-33	11/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-33	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-33	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-33	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-33	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-33	11/1/2016	MTBE	**200**	10	2.1	143	ug/L
MKTF-33	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-33	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	3/8/2017	Acetone	1.6	10	0.88	14064	ug/L
MKTF-33	3/8/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-33	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-33	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-33	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-33	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-33	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-33	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-33	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-33	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-33	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-33	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-33	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	3/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-33	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-33	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-33	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-33	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-33	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-33	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-33	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-33	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-33	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-33	3/8/2017	sec-Butylbenzene	0.47	1	0.1	2000	ug/L
MKTF-33	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-33	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-33	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-33	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	3/8/2017	MTBE	**230**	10	1.5	143	ug/L
MKTF-33	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-33	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-33	6/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	6/8/2017	Acetone	3.7	10	0.82	14064	ug/L
MKTF-33	6/8/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	6/8/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-33	6/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	6/8/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	6/8/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	6/8/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	6/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	6/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	6/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	6/8/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	6/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	6/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	6/8/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	6/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	6/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	6/8/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	6/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	6/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	6/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	6/8/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	6/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	6/8/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	6/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	6/8/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	6/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	6/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	6/8/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	6/8/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	6/8/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	6/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	6/8/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	6/8/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	6/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	6/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	6/8/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	6/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	6/8/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	6/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	6/8/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	6/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	6/8/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	6/8/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	6/8/2017	sec-Butylbenzene	0.33	1	0.11	2000	ug/L
MKTF-33	6/8/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	6/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	6/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	6/8/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-33	6/8/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	6/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	6/8/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	6/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	6/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	6/8/2017	MTBE	**220**	10	2.4	143	ug/L
MKTF-33	6/8/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	6/8/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	9/25/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-33	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	9/25/2017	sec-Butylbenzene	0.29	1	0.11	2000	ug/L
MKTF-33	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	9/25/2017	MTBE	**250**	10	2.4	143	ug/L
MKTF-33	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	11/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	11/28/2017	Acetone	2.7	10	0.82	14064	ug/L
MKTF-33	11/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	11/28/2017	Benzene	0.11	1	0.062	5	ug/L
MKTF-33	11/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	11/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	11/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	11/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	11/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	11/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	11/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	11/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	11/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	11/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	11/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	11/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	11/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	11/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	11/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	11/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	11/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	11/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	11/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	11/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	11/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	11/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	11/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	11/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	11/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	11/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	11/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-33	11/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	11/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	11/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	11/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	11/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	11/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	11/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	11/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	11/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	11/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	11/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	11/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	11/28/2017	sec-Butylbenzene	0.21	1	0.11	2000	ug/L
MKTF-33	11/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	11/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	11/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	11/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	11/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	11/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	11/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	11/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	11/28/2017	MTBE	**530**	10	2.4	143	ug/L
MKTF-33	11/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	11/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	2/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	2/8/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	2/8/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	2/8/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-33	2/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	2/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	2/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	2/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	2/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	2/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	2/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	2/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	2/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	2/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	2/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	2/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	2/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	2/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	2/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	2/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	2/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	2/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	2/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	2/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	2/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	2/8/2018	1,2,4-Trimethylbenzene	0.37	1	0.11	56	ug/L
MKTF-33	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	2/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	2/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	2/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	2/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	2/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	2/8/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-33	2/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	2/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	2/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	2/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	2/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	2/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	2/8/2018	1,3,5-Trimethylbenzene	0.15	1	0.087	60	ug/L
MKTF-33	2/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	2/8/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	2/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	2/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	2/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	2/8/2018	sec-Butylbenzene	0.12	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	2/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	2/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	2/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	2/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	2/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	2/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	2/8/2018	Xylenes, Total	0.55	1.5	0.32	620	ug/L
MKTF-33	2/8/2018	MTBE	**410**	10	2.4	143	ug/L
MKTF-33	2/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	2/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	5/10/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-33	5/10/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-33	5/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-33	5/10/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-33	5/10/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-33	5/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-33	5/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-33	5/10/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-33	5/10/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-33	5/10/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-33	5/10/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-33	5/10/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-33	5/10/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-33	5/10/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-33	5/10/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-33	5/10/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-33	5/10/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-33	5/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-33	5/10/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-33	5/10/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-33	5/10/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-33	5/10/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-33	5/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-33	5/10/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-33	5/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-33	5/10/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-33	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-33	5/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-33	5/10/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-33	5/10/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-33	5/10/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-33	5/10/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-33	5/10/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-33	5/10/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-33	5/10/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-33	5/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-33	5/10/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-33	5/10/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-33	5/10/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-33	5/10/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-33	5/10/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-33	5/10/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-33	5/10/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-33	5/10/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-33	5/10/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-33	5/10/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-33	5/10/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-33	5/10/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-33	5/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-33	5/10/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-33	5/10/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-33	5/10/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-33	5/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-33	5/10/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-33	5/10/2018	MTBE	**570**	10	2.4	143	ug/L
MKTF-33	5/10/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-33	5/10/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-33	8/30/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-33	8/30/2018	Acetone	ND	20	1.6	14064	ug/L
MKTF-33	8/30/2018	Chloroform	ND	2	0.8	100	ug/L
MKTF-33	8/30/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-33	8/30/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
MKTF-33	8/30/2018	Bromomethane	ND	6	0.51	7.54	ug/L
MKTF-33	8/30/2018	Chloromethane	ND	6	0.59	20.32	ug/L
MKTF-33	8/30/2018	Dibromomethane	ND	2	0.64	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-33	8/30/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
MKTF-33	8/30/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-33	8/30/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-33	8/30/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-33	8/30/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-33	8/30/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-33	8/30/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-33	8/30/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
MKTF-33	8/30/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
MKTF-33	8/30/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
MKTF-33	8/30/2018	2-Butanone	ND	20	2.5	5565	ug/L
MKTF-33	8/30/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-33	8/30/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-33	8/30/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-33	8/30/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-33	8/30/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
MKTF-33	8/30/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-33	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-33	8/30/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-33	8/30/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-33	8/30/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-33	8/30/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-33	8/30/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-33	8/30/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-33	8/30/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-33	8/30/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-33	8/30/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
MKTF-33	8/30/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-33	8/30/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
MKTF-33	8/30/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-33	8/30/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-33	8/30/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-33	8/30/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-33	8/30/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-33	8/30/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-33	8/30/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-33	8/30/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-33	8/30/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-33	8/30/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-33	8/30/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
MKTF-33	8/30/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
MKTF-33	8/30/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-33	8/30/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
MKTF-33	8/30/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-33	8/30/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-33	8/30/2018	MTBE	**580**	20	6.4	143	ug/L
MKTF-33	8/30/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-33	8/30/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-33	11/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-33	11/28/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-33	11/28/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-33	11/28/2018	Benzene	ND	2	0.35	5	ug/L
MKTF-33	11/28/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-33	11/28/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-33	11/28/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-33	11/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-33	11/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-33	11/28/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-33	11/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-33	11/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-33	11/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-33	11/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-33	11/28/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-33	11/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-33	11/28/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-33	11/28/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-33	11/28/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-33	11/28/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-33	11/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-33	11/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-33	11/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-33	11/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-33	11/28/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-33	11/28/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
MKTF-33	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-33	11/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-33	11/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
MKTF-33	11/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
MKTF-33	11/28/2018	Ethylbenzene	ND	2	0.45	700	ug/L
MKTF-33	11/28/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-33	11/28/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
MKTF-33	11/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-33	11/28/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-33	11/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-33	11/28/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
MKTF-33	11/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-33	11/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
MKTF-33	11/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-33	11/28/2018	Toluene	ND	2	0.34	1000	ug/L
MKTF-33	11/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-33	11/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-33	11/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-33	11/28/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-33	11/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-33	11/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-33	11/28/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-33	11/28/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-33	11/28/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-33	11/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-33	11/28/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-33	11/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-33	11/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
MKTF-33	11/28/2018	MTBE	**450**	20	9.1	143	ug/L
MKTF-33	11/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-33	11/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-33	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	5/9/2019	MTBE	**440**	5	2.280475	143	ug/L
MKTF-33	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-33	5/9/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-33	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	5/9/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-33	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	5/9/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	2	0.327295	0.0033	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	5/9/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	5/9/2019	Benzene	0.27	1	0.166639	5	ug/L
MKTF-33	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	5/9/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-33	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	5/9/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	5/9/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-33	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	5/9/2019	MTBE	**300**	5	2.280475	143	ug/L
MKTF-33	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-33	5/9/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	5/9/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-33	5/9/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-33	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-33	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-33	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-33	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-33	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-33	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-33	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-33	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-33	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-33	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-33	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-33	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-33	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-33	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-33	8/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-33	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-33	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-33	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-33	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-33	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-33	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-33	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-33	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-33	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-33	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-33	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-33	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-33	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-33	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-33	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-33	8/20/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-33	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-33	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-33	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-33	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-33	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-33	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-33	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-33	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-33	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-33	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-33	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-33	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-33	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-33	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-33	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-33	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-33	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-33	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-33	8/20/2019	MTBE	**730**	10	4.56095	143	ug/L
MKTF-33	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-33	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-33	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-33	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-33	8/20/2019	sec-Butylbenzene	0.47	1	0.247731	2000	ug/L
MKTF-33	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-33	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-33	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-33	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-33	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-33	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-33	8/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-33	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-33	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-33	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-33	10/24/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-33	10/24/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-33	10/24/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-33	10/24/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-33	10/24/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-33	10/24/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-33	10/24/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-33	10/24/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-33	10/24/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-33	10/24/2019	1,2,4-Trimethylbenzene	ND	2	0.426398	56	ug/L
MKTF-33	10/24/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-33	10/24/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-33	10/24/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
MKTF-33	10/24/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-33	10/24/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
MKTF-33	10/24/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-33	10/24/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-33	10/24/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
MKTF-33	10/24/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-33	10/24/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-33	10/24/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-33	10/24/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
MKTF-33	10/24/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-33	10/24/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
MKTF-33	10/24/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-33	10/24/2019	Acetone	ND	20	2.398793	14064	ug/L
MKTF-33	10/24/2019	Benzene	ND	2	0.333278	5	ug/L
MKTF-33	10/24/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-33	10/24/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-33	10/24/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-33	10/24/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-33	10/24/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-33	10/24/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-33	10/24/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-33	10/24/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-33	10/24/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-33	10/24/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-33	10/24/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-33	10/24/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-33	10/24/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-33	10/24/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-33	10/24/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-33	10/24/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
MKTF-33	10/24/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-33	10/24/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-33	10/24/2019	MTBE	**670**	20	9.1219	143	ug/L
MKTF-33	10/24/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	4	0.550143	30	ug/L
MKTF-33	10/24/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-33	10/24/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-33	10/24/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-33	10/24/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-33	10/24/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-33	10/24/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-33	10/24/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-33	10/24/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-33	10/24/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-33	10/24/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-33	10/24/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-33	10/24/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-33	10/24/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
MKTF-33	10/24/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-33	2/28/2020	MTBE	**800**	20	7.9	143	ug/L
MKTF-33	2/28/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-33	2/28/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-33	2/28/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-33	2/28/2020	1,1,2-Trichloroethane	ND	2	0.38	5	ug/L
MKTF-33	2/28/2020	1,1-Dichloroethane	ND	2	0.55	25	ug/L
MKTF-33	2/28/2020	1,1-Dichloroethene	ND	2	0.26	7	ug/L
MKTF-33	2/28/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-33	2/28/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-33	2/28/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-33	2/28/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/28/2020	1,2,4-Trimethylbenzene	1.7	2	0.24	56	ug/L
MKTF-33	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-33	2/28/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-33	2/28/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-33	2/28/2020	1,2-Dichloroethane	ND	2	0.44	5	ug/L
MKTF-33	2/28/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-33	2/28/2020	1,3,5-Trimethylbenzene	0.38	2	0.36	60	ug/L
MKTF-33	2/28/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-33	2/28/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-33	2/28/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-33	2/28/2020	1-Methylnaphthalene	ND	8	1.7	NA	ug/L
MKTF-33	2/28/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-33	2/28/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-33	2/28/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-33	2/28/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-33	2/28/2020	2-Methylnaphthalene	*ND*	*8*	1.4		ug/L
MKTF-33	2/28/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-33	2/28/2020	p-Isopropyltoluene	ND	2	0.4	NA	ug/L
MKTF-33	2/28/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-33	2/28/2020	Acetone	14	20	4.7	14064	ug/L
MKTF-33	2/28/2020	Benzene	**82**	2	0.45	5	ug/L
MKTF-33	2/28/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-33	2/28/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-33	2/28/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-33	2/28/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-33	2/28/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-33	2/28/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-33	2/28/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-33	2/28/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-33	2/28/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-33	2/28/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-33	2/28/2020	cis-1,2-Dichloroethene	ND	2	0.78	70	ug/L
MKTF-33	2/28/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-33	2/28/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-33	2/28/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-33	2/28/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-33	2/28/2020	Ethylbenzene	ND	2	0.43	700	ug/L
MKTF-33	2/28/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-33	2/28/2020	Isopropylbenzene	ND	2	0.37	447	ug/L
MKTF-33	2/28/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-33	2/28/2020	n-Butylbenzene	ND	6	0.51	1000	ug/L
MKTF-33	2/28/2020	n-Propylbenzene	ND	2	0.36	660	ug/L
MKTF-33	2/28/2020	Naphthalene	ND	4	0.56	30	ug/L
MKTF-33	2/28/2020	sec-Butylbenzene	ND	2	1.2	2000	ug/L
MKTF-33	2/28/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-33	2/28/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-33	2/28/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-33	2/28/2020	Toluene	2.6	2	0.4	1000	ug/L
MKTF-33	2/28/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-33	2/28/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-33	2/28/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-33	2/28/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-33	2/28/2020	Vinyl Chloride	ND	2	0.39	2	ug/L
MKTF-33	2/28/2020	Xylenes, Total	15	3	1.1	620	ug/L
MKTF-33	2/28/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-34	4/9/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-34	4/9/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-34	4/9/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-34	4/9/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-34	4/9/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-34	4/9/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-34	4/9/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-34	4/9/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-34	4/9/2014	Chloroethane	ND	4	0.95	20857	ug/L
MKTF-34	4/9/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
MKTF-34	4/9/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-34	4/9/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-34	4/9/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-34	4/9/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-34	4/9/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-34	4/9/2014	1,1-Dichloroethene	2.8	2	0.43	7	ug/L
MKTF-34	4/9/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-34	4/9/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-34	4/9/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-34	4/9/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-34	4/9/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	4/9/2014	Trichloroethene	2.9	2	0.39	5	ug/L
MKTF-34	4/9/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-34	4/9/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-34	4/9/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-34	4/9/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-34	4/9/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-34	4/9/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-34	4/9/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-34	4/9/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-34	4/9/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-34	4/9/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-34	4/9/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-34	4/9/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-34	4/9/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-34	4/9/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-34	4/9/2014	1,2-Dibromoethane	*ND*	2	0.2	0.05	ug/L
MKTF-34	4/9/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-34	4/9/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-34	4/9/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-34	4/9/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-34	4/9/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-34	4/9/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-34	4/9/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-34	4/9/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-34	4/9/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-34	4/9/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-34	4/9/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-34	4/9/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-34	4/9/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-34	4/9/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-34	4/9/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-34	4/9/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-34	4/9/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-34	4/9/2014	MTBE	ND	2	0.5	143	ug/L
MKTF-34	4/9/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-34	4/9/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-34	9/24/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	9/24/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	9/24/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-34	9/24/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-34	9/24/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-34	9/24/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-34	9/24/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-34	9/24/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-34	9/24/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-34	9/24/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MKTF-34	9/24/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-34	9/24/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-34	9/24/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-34	9/24/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-34	9/24/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-34	9/24/2014	1,1-Dichloroethene	1.1	1	0.21	7	ug/L
MKTF-34	9/24/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	9/24/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-34	9/24/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	9/24/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	9/24/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	9/24/2014	Trichloroethene	2.2	1	0.19	5	ug/L
MKTF-34	9/24/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-34	9/24/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-34	9/24/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	9/24/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	9/24/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-34	9/24/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-34	9/24/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-34	9/24/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-34	9/24/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-34	9/24/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	9/24/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-34	9/24/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-34	9/24/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-34	9/24/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-34	9/24/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-34	9/24/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-34	9/24/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	9/24/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/24/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-34	9/24/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	9/24/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	9/24/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-34	9/24/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-34	9/24/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-34	9/24/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	9/24/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	9/24/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-34	9/24/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-34	9/24/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-34	9/24/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-34	9/24/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-34	9/24/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-34	9/24/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-34	9/24/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	9/24/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	11/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	11/17/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	11/17/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-34	11/17/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-34	11/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-34	11/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-34	11/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-34	11/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-34	11/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-34	11/17/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-34	11/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-34	11/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-34	11/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-34	11/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-34	11/17/2014	1,1-Dichloroethane	1.5	1	0.28	25	ug/L
MKTF-34	11/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-34	11/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	11/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-34	11/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	11/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	11/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	11/17/2014	Trichloroethene	1.4	1	0.19	5	ug/L
MKTF-34	11/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-34	11/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-34	11/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	11/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	11/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-34	11/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-34	11/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-34	11/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-34	11/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-34	11/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	11/17/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-34	11/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-34	11/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-34	11/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-34	11/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-34	11/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-34	11/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	11/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-34	11/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-34	11/17/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	11/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	11/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-34	11/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-34	11/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-34	11/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	11/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	11/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-34	11/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-34	11/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-34	11/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-34	11/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-34	11/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-34	11/17/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-34	11/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	11/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	3/12/2015	Acetone	ND	10	0.94	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	3/12/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	3/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	3/12/2015	Trichloroethene	1.2	1	0.16	5	ug/L
MKTF-34	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	3/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	3/12/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	6/8/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	6/8/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	6/8/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	6/8/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	6/8/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	6/8/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	6/8/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	6/8/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	6/8/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	6/8/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	6/8/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	6/8/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	6/8/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	6/8/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	6/8/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	6/8/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	6/8/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	6/8/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	6/8/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	6/8/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	6/8/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/8/2015	Trichloroethene	1.7	1	0.16	5	ug/L
MKTF-34	6/8/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	6/8/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	6/8/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	6/8/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	6/8/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	6/8/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	6/8/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	6/8/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	6/8/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	6/8/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	6/8/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	6/8/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	6/8/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	6/8/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	6/8/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	6/8/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	6/8/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	6/8/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	6/8/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	6/8/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	6/8/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	6/8/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	6/8/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	6/8/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	6/8/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	6/8/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	6/8/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	6/8/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	6/8/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	6/8/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	6/8/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	6/8/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	6/8/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	6/8/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	6/8/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	8/18/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	8/18/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	8/18/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	8/18/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	8/18/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	8/18/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	8/18/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	8/18/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	8/18/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	8/18/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	8/18/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	8/18/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	8/18/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	8/18/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	8/18/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	8/18/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	8/18/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	8/18/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	8/18/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	8/18/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	8/18/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	8/18/2015	Trichloroethene	1.9	1	0.16	5	ug/L
MKTF-34	8/18/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	8/18/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	8/18/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	8/18/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	8/18/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	8/18/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	8/18/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	8/18/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	8/18/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	8/18/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	8/18/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	8/18/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	8/18/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	8/18/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	8/18/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	8/18/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	8/18/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/18/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	8/18/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	8/18/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	8/18/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	8/18/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	8/18/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	8/18/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	8/18/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	8/18/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	8/18/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	8/18/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	8/18/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	8/18/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	8/18/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	8/18/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	8/18/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	8/18/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-34	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-34	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-34	11/3/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-34	11/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-34	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-34	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-34	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-34	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-34	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-34	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-34	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-34	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-34	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-34	11/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	11/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-34	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-34	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-34	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-34	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-34	11/3/2015	Trichloroethene	2.3	1	0.16	5	ug/L
MKTF-34	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-34	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-34	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-34	11/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-34	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-34	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-34	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-34	11/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-34	11/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-34	11/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-34	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-34	11/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-34	11/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-34	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-34	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-34	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-34	11/3/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-34	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-34	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-34	11/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-34	11/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-34	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	11/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-34	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-34	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-34	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-34	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-34	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	11/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-34	11/3/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-34	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	2/25/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	2/25/2016	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/25/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	2/25/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-34	2/25/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-34	2/25/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	2/25/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	2/25/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	2/25/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-34	2/25/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-34	2/25/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-34	2/25/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	2/25/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	2/25/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-34	2/25/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	2/25/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-34	2/25/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-34	2/25/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-34	2/25/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-34	2/25/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-34	2/25/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-34	2/25/2016	Trichloroethene	1.8	1	0.18	5	ug/L
MKTF-34	2/25/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-34	2/25/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	2/25/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	2/25/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-34	2/25/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-34	2/25/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-34	2/25/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-34	2/25/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-34	2/25/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	2/25/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	2/25/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-34	2/25/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	2/25/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	2/25/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	2/25/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	2/25/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-34	2/25/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-34	2/25/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	2/25/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-34	2/25/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-34	2/25/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-34	2/25/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	2/25/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	2/25/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	2/25/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	2/25/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	2/25/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	2/25/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	2/25/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-34	2/25/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-34	2/25/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	2/25/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	2/25/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-34	2/25/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	2/25/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-34	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	6/10/2016	Benzene	0.45	1	0.096	5	ug/L
MKTF-34	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	6/10/2016	1,1-Dichloroethane	0.24	1	0.11	25	ug/L
MKTF-34	6/10/2016	1,1-Dichloroethene	0.78	1	0.11	7	ug/L
MKTF-34	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	Trichloroethene	2	1	0.18	5	ug/L
MKTF-34	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	6/10/2016	1,2,4-Trimethylbenzene	0.59	1	0.11	56	ug/L
MKTF-34	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	6/10/2016	Ethylbenzene	0.26	1	0.11	700	ug/L
MKTF-34	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	6/10/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	6/10/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	6/10/2016	MTBE	0.58	1	0.21	143	ug/L
MKTF-34	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	9/13/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-34	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	9/13/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	9/13/2016	1,1-Dichloroethene	0.89	1	0.11	7	ug/L
MKTF-34	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-34	9/13/2016	Trichloroethene	1.9	1	0.18	5	ug/L
MKTF-34	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	9/13/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	9/13/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	9/13/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	9/13/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	9/13/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	9/13/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	9/13/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	9/13/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	9/13/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	9/13/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	9/13/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-34	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	9/13/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	9/13/2016	MTBE	0.35	1	0.21	143	ug/L
MKTF-34	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	11/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	11/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-34	11/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	11/8/2016	Benzene	0.14	1	0.096	5	ug/L
MKTF-34	11/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-34	11/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	11/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	11/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	11/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-34	11/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	11/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-34	11/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	11/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-34	11/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-34	11/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-34	11/8/2016	1,1-Dichloroethene	2.8	1	0.11	7	ug/L
MKTF-34	11/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-34	11/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-34	11/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-34	11/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-34	11/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-34	11/8/2016	Trichloroethene	4.8	1	0.18	5	ug/L
MKTF-34	11/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-34	11/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	11/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	11/8/2016	1,2,4-Trimethylbenzene	0.23	1	0.11	56	ug/L
MKTF-34	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-34	11/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-34	11/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-34	11/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-34	11/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	11/8/2016	Ethylbenzene	0.16	1	0.11	700	ug/L
MKTF-34	11/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-34	11/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	11/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	11/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-34	11/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-34	11/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	11/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-34	11/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	11/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-34	11/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-34	11/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	11/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-34	11/8/2016	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-34	11/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-34	11/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	11/8/2016	cis-1,2-Dichloroethene	0.26	1	0.12	70	ug/L
MKTF-34	11/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-34	11/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	11/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-34	11/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-34	11/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	11/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-34	11/8/2016	MTBE	0.97	1	0.21	143	ug/L
MKTF-34	11/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-34	11/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	3/1/2017	Acetone	ND	10	0.88	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-34	3/1/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-34	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-34	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-34	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-34	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	3/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-34	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	3/1/2017	1,1-Dichloroethane	0.47	1	0.1	25	ug/L
MKTF-34	3/1/2017	1,1-Dichloroethene	0.71	1	0.081	7	ug/L
MKTF-34	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-34	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	3/1/2017	Trichloroethene	2.2	1	0.18	5	ug/L
MKTF-34	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-34	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	3/1/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-34	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	3/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	3/1/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-34	3/1/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-34	3/1/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-34	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	3/1/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-34	3/1/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-34	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	3/1/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-34	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-34	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	3/1/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-34	3/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-34	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	3/1/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-34	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-34	3/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-34	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-34	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-34	3/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	3/1/2017	MTBE	0.58	1	0.15	143	ug/L
MKTF-34	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-34	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-34	6/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	6/14/2017	Acetone	5.3	10	0.82	14064	ug/L
MKTF-34	6/14/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	6/14/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-34	6/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	6/14/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	6/14/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	6/14/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	6/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	6/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	6/14/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	6/14/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	6/14/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	6/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	6/14/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	6/14/2017	1,1-Dichloroethene	0.59	1	0.081	7	ug/L
MKTF-34	6/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	6/14/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	6/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	6/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	6/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/14/2017	Trichloroethene	2	1	0.11	5	ug/L
MKTF-34	6/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	6/14/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	6/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	6/14/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	6/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	6/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	6/14/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	6/14/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	6/14/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	6/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	6/14/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	6/14/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	6/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	6/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	6/14/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	6/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	6/14/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	6/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	6/14/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	6/14/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	6/14/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	6/14/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	6/14/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	6/14/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	6/14/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	6/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-34	6/14/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	6/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	6/14/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	6/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	6/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	6/14/2017	MTBE	0.38	1	0.24	143	ug/L
MKTF-34	6/14/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	6/14/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	9/26/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	9/26/2017	Acetone	4.8	10	0.82	14064	ug/L
MKTF-34	9/26/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	9/26/2017	Benzene	0.3	1	0.062	5	ug/L
MKTF-34	9/26/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	9/26/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	9/26/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	9/26/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	9/26/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	9/26/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	9/26/2017	Methylene Chloride	0.14	3	0.11	5	ug/L
MKTF-34	9/26/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	9/26/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	9/26/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	9/26/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	9/26/2017	1,1-Dichloroethene	0.56	1	0.081	7	ug/L
MKTF-34	9/26/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	9/26/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	9/26/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	9/26/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	9/26/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	9/26/2017	Trichloroethene	1.9	1	0.11	5	ug/L
MKTF-34	9/26/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	9/26/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	9/26/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	9/26/2017	1,2,4-Trimethylbenzene	0.14	1	0.11	56	ug/L
MKTF-34	9/26/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	9/26/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	9/26/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	9/26/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	9/26/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	9/26/2017	Ethylbenzene	0.14	1	0.093	700	ug/L
MKTF-34	9/26/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	9/26/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	9/26/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	9/26/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	9/26/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	9/26/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	9/26/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/26/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	9/26/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	9/26/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	9/26/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	9/26/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	9/26/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	9/26/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	9/26/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	9/26/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	9/26/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	9/26/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	9/26/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	9/26/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	9/26/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	9/26/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	9/26/2017	MTBE	0.78	1	0.24	143	ug/L
MKTF-34	9/26/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	9/26/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	12/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	12/1/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-34	12/1/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	12/1/2017	Benzene	0.096	1	0.062	5	ug/L
MKTF-34	12/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	12/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	12/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	12/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	12/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	12/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	12/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	12/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	12/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	12/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	12/1/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	12/1/2017	1,1-Dichloroethene	1.2	1	0.081	7	ug/L
MKTF-34	12/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	12/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	12/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	12/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	12/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	12/1/2017	Trichloroethene	2.6	1	0.11	5	ug/L
MKTF-34	12/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	12/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	12/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	12/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	12/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	12/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	12/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	12/1/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	12/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	12/1/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	12/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-34	12/1/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	12/1/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	12/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	12/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	12/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	12/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	12/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	12/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	12/1/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	12/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	12/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	12/1/2017	Tetrachloroethene	0.14	1	0.13	5	ug/L
MKTF-34	12/1/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	12/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	12/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	12/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	12/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	12/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	12/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	12/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	12/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	12/1/2017	MTBE	0.75	1	0.24	143	ug/L
MKTF-34	12/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	12/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	2/16/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/16/2018	Acetone	0.89	10	0.82	14064	ug/L
MKTF-34	2/16/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	2/16/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-34	2/16/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	2/16/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	2/16/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	2/16/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	2/16/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	2/16/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	2/16/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	2/16/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	2/16/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	2/16/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	2/16/2018	1,1-Dichloroethane	0.47	1	0.4	25	ug/L
MKTF-34	2/16/2018	1,1-Dichloroethene	1.4	1	0.081	7	ug/L
MKTF-34	2/16/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	2/16/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	2/16/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	2/16/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/16/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	2/16/2018	Trichloroethene	3.1	1	0.11	5	ug/L
MKTF-34	2/16/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	2/16/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	2/16/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	2/16/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	2/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	2/16/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	2/16/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	2/16/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	2/16/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	2/16/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	2/16/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-34	2/16/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	2/16/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	2/16/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	2/16/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	2/16/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	2/16/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	2/16/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	2/16/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	2/16/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	2/16/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	2/16/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	2/16/2018	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-34	2/16/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	2/16/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	2/16/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	2/16/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	2/16/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	2/16/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	2/16/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	2/16/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	2/16/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	2/16/2018	MTBE	0.66	1	0.24	143	ug/L
MKTF-34	2/16/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	2/16/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	5/4/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-34	5/4/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-34	5/4/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	5/4/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-34	5/4/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-34	5/4/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	5/4/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	5/4/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-34	5/4/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-34	5/4/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	5/4/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-34	5/4/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-34	5/4/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-34	5/4/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-34	5/4/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	5/4/2018	1,1-Dichloroethene	1.4	1	0.081	7	ug/L
MKTF-34	5/4/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-34	5/4/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	5/4/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-34	5/4/2018	2-Butanone	ND	10	1.1	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-34	5/4/2018	Trichloroethene	2.7	1	0.11	5	ug/L
MKTF-34	5/4/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-34	5/4/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-34	5/4/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	5/4/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-34	5/4/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-34	5/4/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-34	5/4/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-34	5/4/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-34	5/4/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-34	5/4/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-34	5/4/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-34	5/4/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-34	5/4/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-34	5/4/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	5/4/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-34	5/4/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	5/4/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	5/4/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-34	5/4/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-34	5/4/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-34	5/4/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-34	5/4/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-34	5/4/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-34	5/4/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-34	5/4/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-34	5/4/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-34	5/4/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	5/4/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-34	5/4/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-34	5/4/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-34	5/4/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-34	5/4/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-34	5/4/2018	MTBE	0.87	1	0.24	143	ug/L
MKTF-34	5/4/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-34	5/4/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-34	8/24/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-34	8/24/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-34	8/24/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-34	8/24/2018	Benzene	0.24	1	0.17	5	ug/L
MKTF-34	8/24/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-34	8/24/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-34	8/24/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-34	8/24/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-34	8/24/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-34	8/24/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-34	8/24/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-34	8/24/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-34	8/24/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-34	8/24/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-34	8/24/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-34	8/24/2018	1,1-Dichloroethene	2.4	1	0.12	7	ug/L
MKTF-34	8/24/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-34	8/24/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-34	8/24/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-34	8/24/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-34	8/24/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-34	8/24/2018	Trichloroethene	3.6	1	0.26	5	ug/L
MKTF-34	8/24/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-34	8/24/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-34	8/24/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-34	8/24/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-34	8/24/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-34	8/24/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-34	8/24/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-34	8/24/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-34	8/24/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-34	8/24/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-34	8/24/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-34	8/24/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-34	8/24/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	8/24/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-34	8/24/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-34	8/24/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-34	8/24/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-34	8/24/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-34	8/24/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	8/24/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-34	8/24/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	8/24/2018	Tetrachloroethene	0.22	1	0.15	5	ug/L
MKTF-34	8/24/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-34	8/24/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-34	8/24/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-34	8/24/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	8/24/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	8/24/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-34	8/24/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-34	8/24/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-34	8/24/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-34	8/24/2018	MTBE	0.87	1	0.32	143	ug/L
MKTF-34	8/24/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-34	8/24/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-34	11/28/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	11/28/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-34	11/28/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-34	11/28/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-34	11/28/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-34	11/28/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-34	11/28/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-34	11/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-34	11/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-34	11/28/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-34	11/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-34	11/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-34	11/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-34	11/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-34	11/28/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-34	11/28/2018	1,1-Dichloroethene	2.1	1	0.12	7	ug/L
MKTF-34	11/28/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-34	11/28/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-34	11/28/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-34	11/28/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-34	11/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-34	11/28/2018	Trichloroethene	3.7	1	0.26	5	ug/L
MKTF-34	11/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-34	11/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-34	11/28/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-34	11/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-34	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-34	11/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-34	11/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-34	11/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-34	11/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-34	11/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-34	11/28/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-34	11/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-34	11/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	11/28/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-34	11/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-34	11/28/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-34	11/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-34	11/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-34	11/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-34	11/28/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-34	11/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-34	11/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	11/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	11/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-34	11/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-34	11/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-34	11/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	11/28/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-34	11/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	11/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-34	11/28/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-34	11/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-34	11/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-34	11/28/2018	MTBE	1	1	0.46	143	ug/L
MKTF-34	11/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-34	11/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	5/9/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	5/9/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	5/9/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	5/9/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	5/9/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-34	5/9/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	5/9/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	5/9/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-34	5/9/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-34	5/9/2019	1,2,4-Trimethylbenzene	0.22	1	0.213199	56	ug/L
MKTF-34	5/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-34	5/9/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	5/9/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	5/9/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	5/9/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	5/9/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	5/9/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	5/9/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	5/9/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	5/9/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	5/9/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-34	5/9/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	5/9/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	5/9/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	5/9/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	5/9/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	5/9/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	5/9/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	5/9/2019	Acetone	5.5	10	1.199396	14064	ug/L
MKTF-34	5/9/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	5/9/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	5/9/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	5/9/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	5/9/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	5/9/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	5/9/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	5/9/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	5/9/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	5/9/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	5/9/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	5/9/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	5/9/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	5/9/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	5/9/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	5/9/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	5/9/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	5/9/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	5/9/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	5/9/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-34	5/9/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	5/9/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	5/9/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	5/9/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	5/9/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	5/9/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	5/9/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	5/9/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	5/9/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	5/9/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	5/9/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	5/9/2019	Trichloroethene	0.49	1	0.166272	5	ug/L
MKTF-34	5/9/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	5/9/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	5/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	5/9/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
MKTF-34	8/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	8/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	8/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	8/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	8/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	8/19/2019	1,1-Dichloroethene	0.43	1	0.205388	7	ug/L
MKTF-34	8/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	8/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	8/19/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-34	8/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/19/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-34	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-34	8/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	8/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	8/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	8/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	8/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	8/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	8/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	8/19/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	8/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	8/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-34	8/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	8/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	8/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	8/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	8/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	8/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	8/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	8/19/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-34	8/19/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	8/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	8/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	8/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	8/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	8/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	8/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	8/19/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	8/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	8/19/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	8/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	8/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	8/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	8/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	8/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	8/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	8/19/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	8/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	8/19/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	8/19/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-34	8/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	8/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	8/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	8/19/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	8/19/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	8/19/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	8/19/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	8/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	8/19/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	8/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	8/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	8/19/2019	Trichloroethene	0.89	1	0.166272	5	ug/L
MKTF-34	8/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	8/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	8/19/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	8/19/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-34	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-34	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-34	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-34	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-34	10/29/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-34	10/29/2019	1,1-Dichloroethene	0.51	1	0.205388	7	ug/L
MKTF-34	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-34	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-34	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-34	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-34	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-34	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-34	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-34	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-34	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-34	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-34	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-34	10/29/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-34	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-34	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-34	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-34	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-34	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-34	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-34	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-34	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-34	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-34	10/29/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-34	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-34	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-34	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-34	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-34	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-34	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-34	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-34	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-34	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-34	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-34	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-34	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-34	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-34	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-34	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-34	10/29/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-34	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-34	10/29/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-34	10/29/2019	MTBE	0.58	1	0.456095	143	ug/L
MKTF-34	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-34	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-34	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-34	10/29/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-34	10/29/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-34	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-34	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-34	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-34	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-34	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-34	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-34	10/29/2019	Trichloroethene	1	1	0.166272	5	ug/L
MKTF-34	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-34	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-34	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-34	10/29/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-34	2/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.21	5.74	ug/L
MKTF-34	2/5/2020	1,1,1-Trichloroethane	ND	1	0.17	200	ug/L
MKTF-34	2/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.55	10	ug/L
MKTF-34	2/5/2020	1,1,2-Trichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/5/2020	1,1-Dichloroethane	ND	1	0.14	25	ug/L
MKTF-34	2/5/2020	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-34	2/5/2020	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-34	2/5/2020	1,2,3-Trichlorobenzene	ND	1	0.3	70	ug/L
MKTF-34	2/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.3	0.0084	ug/L
MKTF-34	2/5/2020	1,2,4-Trichlorobenzene	ND	1	0.2	70	ug/L
MKTF-34	2/5/2020	1,2,4-Trimethylbenzene	ND	1	0.21	56	ug/L
MKTF-34	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.33	0.0033	ug/L
MKTF-34	2/5/2020	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
MKTF-34	2/5/2020	1,2-Dichlorobenzene	ND	1	0.3	600	ug/L
MKTF-34	2/5/2020	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/5/2020	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-34	2/5/2020	1,3,5-Trimethylbenzene	ND	1	0.19	60	ug/L
MKTF-34	2/5/2020	1,3-Dichlorobenzene	ND	1	0.25	N/A	ug/L
MKTF-34	2/5/2020	1,3-Dichloropropane	ND	1	0.2	370	ug/L
MKTF-34	2/5/2020	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
MKTF-34	2/5/2020	1-Methylnaphthalene	ND	4	0.31	NA	ug/L
MKTF-34	2/5/2020	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-34	2/5/2020	2-Butanone	ND	10	2.1	5565	ug/L
MKTF-34	2/5/2020	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-34	2/5/2020	2-Hexanone	ND	10	1.5	38	ug/L
MKTF-34	2/5/2020	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
MKTF-34	2/5/2020	4-Chlorotoluene	ND	1	0.23	250	ug/L
MKTF-34	2/5/2020	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
MKTF-34	2/5/2020	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-34	2/5/2020	Acetone	ND	10	1.2	14064	ug/L
MKTF-34	2/5/2020	Benzene	ND	1	0.17	5	ug/L
MKTF-34	2/5/2020	Bromobenzene	ND	1	0.24	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	Bromodichloromethane	ND	1	0.13	1.34	ug/L
MKTF-34	2/5/2020	Bromoform	ND	1	0.29	32.9	ug/L
MKTF-34	2/5/2020	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-34	2/5/2020	Carbon Disulfide	ND	10	0.45	810	ug/L
MKTF-34	2/5/2020	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-34	2/5/2020	Chlorobenzene	ND	1	0.19	77.6	ug/L
MKTF-34	2/5/2020	Chloroethane	ND	2	0.18	20857	ug/L
MKTF-34	2/5/2020	Chloroform	ND	1	0.12	100	ug/L
MKTF-34	2/5/2020	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-34	2/5/2020	cis-1,2-Dichloroethene	ND	1	0.19	70	ug/L
MKTF-34	2/5/2020	cis-1,3-Dichloropropene	ND	1	0.14	NA	ug/L
MKTF-34	2/5/2020	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-34	2/5/2020	Dibromomethane	ND	1	0.21	8	ug/L
MKTF-34	2/5/2020	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-34	2/5/2020	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-34	2/5/2020	Hexachlorobutadiene	ND	1	0.31	1.39	ug/L
MKTF-34	2/5/2020	Isopropylbenzene	ND	1	0.19	447	ug/L
MKTF-34	2/5/2020	MTBE	ND	1	0.46	143	ug/L
MKTF-34	2/5/2020	Methylene Chloride	ND	3	0.15	5	ug/L
MKTF-34	2/5/2020	n-Butylbenzene	ND	3	0.23	1000	ug/L
MKTF-34	2/5/2020	n-Propylbenzene	ND	1	0.21	660	ug/L
MKTF-34	2/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/5/2020	sec-Butylbenzene	ND	1	0.25	2000	ug/L
MKTF-34	2/5/2020	Styrene	ND	1	0.19	100	ug/L
MKTF-34	2/5/2020	tert-Butylbenzene	ND	1	0.21	690	ug/L
MKTF-34	2/5/2020	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-34	2/5/2020	Toluene	ND	1	0.35	1000	ug/L
MKTF-34	2/5/2020	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-34	2/5/2020	trans-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-34	2/5/2020	Trichloroethene	0.4	1	0.17	5	ug/L
MKTF-34	2/5/2020	Trichlorofluoromethane	ND	1	0.19	1137	ug/L
MKTF-34	2/5/2020	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-34	2/5/2020	Xylenes, Total	ND	1.5	0.45	620	ug/L
MKTF-34	2/5/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
MKTF-34	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	2/28/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	2/28/2020	Acetone	4.8	10	2.3	14064	ug/L
MKTF-34	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	2/28/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-34	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	2/28/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-34	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	2/28/2020	Acetone	3	10	2.3	14064	ug/L
MKTF-34	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-34	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	2/28/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-34	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-34	2/28/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
MKTF-34	9/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-34	9/16/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-34	9/16/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-34	9/16/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-34	9/16/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-34	9/16/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-34	9/16/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-34	9/16/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-34	9/16/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-34	9/16/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-34	9/16/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-34	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-34	9/16/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-34	9/16/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-34	9/16/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-34	9/16/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-34	9/16/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-34	9/16/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-34	9/16/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-34	9/16/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-34	9/16/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-34	9/16/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-34	9/16/2020	2-Butanone	1.2	10	1.1	5565	ug/L
MKTF-34	9/16/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-34	9/16/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-34	9/16/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-34	9/16/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-34	9/16/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-34	9/16/2020	Acetone	3.4	10	2.3	14064	ug/L
MKTF-34	9/16/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-34	9/16/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-34	9/16/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-34	9/16/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-34	9/16/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-34	9/16/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-34	9/16/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-34	9/16/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-34	9/16/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-34	9/16/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-34	9/16/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-34	9/16/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-34	9/16/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-34	9/16/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-34	9/16/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-34	9/16/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-34	9/16/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-34	9/16/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-34	9/16/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-34	9/16/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-34	9/16/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-34	9/16/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-34	9/16/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-34	9/16/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-34	9/16/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-34	9/16/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-34	9/16/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-34	9/16/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-34	9/16/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-34	9/16/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-34	9/16/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-34	9/16/2020	Trichloroethene	0.89	1	0.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-34	9/16/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-34	9/16/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-34	9/16/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-35	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-35	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-35	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-35	11/21/2014	Benzene	**39**	1	0.15	5	ug/L
MKTF-35	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-35	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-35	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-35	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-35	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-35	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-35	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-35	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-35	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-35	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-35	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-35	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-35	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-35	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-35	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-35	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	11/21/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-35	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-35	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-35	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-35	11/21/2014	1,2,4-Trimethylbenzene	**120**	10	1.2	56	ug/L
MKTF-35	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-35	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-35	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-35	11/21/2014	Isopropylbenzene	5.1	1	0.16	447	ug/L
MKTF-35	11/21/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-35	11/21/2014	Ethylbenzene	52	1	0.13	700	ug/L
MKTF-35	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-35	11/21/2014	n-Propylbenzene	28	1	0.14	660	ug/L
MKTF-35	11/21/2014	n-Butylbenzene	6.1	3	0.21	1000	ug/L
MKTF-35	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-35	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-35	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-35	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-35	11/21/2014	1,3,5-Trimethylbenzene	50	1	0.13	60	ug/L
MKTF-35	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-35	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-35	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-35	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-35	11/21/2014	sec-Butylbenzene	2.7	1	0.15	2000	ug/L
MKTF-35	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-35	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-35	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-35	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-35	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-35	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-35	11/21/2014	Xylenes, Total	73	1.5	0.38	620	ug/L
MKTF-35	11/21/2014	MTBE	66	1	0.25	143	ug/L
MKTF-35	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-35	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-35	3/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	3/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	3/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	3/17/2015	Benzene	**470**	20	1.3	5	ug/L
MKTF-35	3/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	3/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	3/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	3/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	3/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	3/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	3/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	3/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	3/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	3/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	3/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	3/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	3/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	3/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	3/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	3/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	3/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	3/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	3/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	3/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	3/17/2015	1,2,4-Trimethylbenzene	34	1	0.16	56	ug/L
MKTF-35	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	3/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	3/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	3/17/2015	Isopropylbenzene	8.2	1	0.15	447	ug/L
MKTF-35	3/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	3/17/2015	Ethylbenzene	320	20	2	700	ug/L
MKTF-35	3/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	3/17/2015	n-Propylbenzene	35	1	0.16	660	ug/L
MKTF-35	3/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	3/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	3/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	3/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	3/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	3/17/2015	1,3,5-Trimethylbenzene	46	20	2.5	60	ug/L
MKTF-35	3/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	3/17/2015	Toluene	5.2	1	0.11	1000	ug/L
MKTF-35	3/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	3/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	3/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	3/17/2015	sec-Butylbenzene	1.8	1	0.23	2000	ug/L
MKTF-35	3/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	3/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	3/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	3/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	3/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	3/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	3/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	3/17/2015	Xylenes, Total	170	1.5	0.28	620	ug/L
MKTF-35	3/17/2015	MTBE	33	1	0.17	143	ug/L
MKTF-35	3/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	3/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	6/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	6/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	6/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	6/4/2015	Benzene	**790**	10	0.65	5	ug/L
MKTF-35	6/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	6/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	6/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	6/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	6/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	6/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	6/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	6/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	6/4/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	6/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	6/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-35	6/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	6/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	6/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	6/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	6/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	6/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	6/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	6/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	6/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	6/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	6/4/2015	1,2,4-Trimethylbenzene	9.5	1	0.16	56	ug/L
MKTF-35	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	6/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	6/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	6/4/2015	Isopropylbenzene	8.4	1	0.15	447	ug/L
MKTF-35	6/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	6/4/2015	Ethylbenzene	190	10	1	700	ug/L
MKTF-35	6/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	6/4/2015	n-Propylbenzene	22	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	6/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	6/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	6/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	6/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	6/4/2015	1,3,5-Trimethylbenzene	2.3	1	0.12	60	ug/L
MKTF-35	6/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	6/4/2015	Toluene	2.3	1	0.11	1000	ug/L
MKTF-35	6/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	6/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	6/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	6/4/2015	sec-Butylbenzene	1.7	1	0.23	2000	ug/L
MKTF-35	6/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	6/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	6/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	6/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	6/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	6/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	6/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	6/4/2015	Xylenes, Total	2.1	1.5	0.28	620	ug/L
MKTF-35	6/4/2015	MTBE	27	1	0.17	143	ug/L
MKTF-35	6/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	6/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	8/18/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
MKTF-35	8/18/2015	Acetone	ND	50	4.7	14064	ug/L
MKTF-35	8/18/2015	Chloroform	ND	5	1.1	100	ug/L
MKTF-35	8/18/2015	Benzene	**970**	50	3.3	5	ug/L
MKTF-35	8/18/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
MKTF-35	8/18/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
MKTF-35	8/18/2015	Chloromethane	ND	15	0.87	20.32	ug/L
MKTF-35	8/18/2015	Dibromomethane	ND	5	1.2	8	ug/L
MKTF-35	8/18/2015	Chloroethane	ND	10	0.52	20857	ug/L
MKTF-35	8/18/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
MKTF-35	8/18/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
MKTF-35	8/18/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
MKTF-35	8/18/2015	Bromoform	ND	5	0.81	32.9	ug/L
MKTF-35	8/18/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
MKTF-35	8/18/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-35	8/18/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
MKTF-35	8/18/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-35	8/18/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
MKTF-35	8/18/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
MKTF-35	8/18/2015	2-Butanone	ND	50	1.8	5565	ug/L
MKTF-35	8/18/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
MKTF-35	8/18/2015	Trichloroethene	ND	5	0.82	5	ug/L
MKTF-35	8/18/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
MKTF-35	8/18/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
MKTF-35	8/18/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
MKTF-35	8/18/2015	1,2,4-Trimethylbenzene	22	5	0.8	56	ug/L
MKTF-35	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
MKTF-35	8/18/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
MKTF-35	8/18/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
MKTF-35	8/18/2015	Isopropylbenzene	10	5	0.76	447	ug/L
MKTF-35	8/18/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
MKTF-35	8/18/2015	Ethylbenzene	160	5	0.51	700	ug/L
MKTF-35	8/18/2015	Styrene	ND	5	0.53	100	ug/L
MKTF-35	8/18/2015	n-Propylbenzene	36	5	0.82	660	ug/L
MKTF-35	8/18/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
MKTF-35	8/18/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
MKTF-35	8/18/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
MKTF-35	8/18/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
MKTF-35	8/18/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
MKTF-35	8/18/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
MKTF-35	8/18/2015	Bromobenzene	ND	5	0.54	62	ug/L
MKTF-35	8/18/2015	Toluene	ND	5	0.54	1000	ug/L
MKTF-35	8/18/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
MKTF-35	8/18/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
MKTF-35	8/18/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
MKTF-35	8/18/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
MKTF-35	8/18/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
MKTF-35	8/18/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
MKTF-35	8/18/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
MKTF-35	8/18/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
MKTF-35	8/18/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
MKTF-35	8/18/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
MKTF-35	8/18/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/18/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
MKTF-35	8/18/2015	MTBE	61	5	0.87	143	ug/L
MKTF-35	8/18/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-35	8/18/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
MKTF-35	11/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-35	11/3/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-35	11/3/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-35	11/3/2015	Benzene	**190**	10	0.65	5	ug/L
MKTF-35	11/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-35	11/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-35	11/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-35	11/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-35	11/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-35	11/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-35	11/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-35	11/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-35	11/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-35	11/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-35	11/3/2015	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
MKTF-35	11/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-35	11/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-35	11/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-35	11/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	11/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-35	11/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-35	11/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-35	11/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-35	11/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-35	11/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-35	11/3/2015	1,2,4-Trimethylbenzene	9	1	0.16	56	ug/L
MKTF-35	11/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-35	11/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-35	11/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-35	11/3/2015	Isopropylbenzene	5.5	1	0.15	447	ug/L
MKTF-35	11/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-35	11/3/2015	Ethylbenzene	39	1	0.1	700	ug/L
MKTF-35	11/3/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-35	11/3/2015	n-Propylbenzene	16	1	0.16	660	ug/L
MKTF-35	11/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	11/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-35	11/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	11/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-35	11/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-35	11/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-35	11/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-35	11/3/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-35	11/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-35	11/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-35	11/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-35	11/3/2015	sec-Butylbenzene	2.6	1	0.23	2000	ug/L
MKTF-35	11/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	11/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-35	11/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-35	11/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-35	11/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-35	11/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-35	11/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	11/3/2015	Xylenes, Total	2.3	1.5	0.28	620	ug/L
MKTF-35	11/3/2015	MTBE	48	1	0.17	143	ug/L
MKTF-35	11/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	11/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	2/26/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-35	2/26/2016	Acetone	ND	50	4.4	14064	ug/L
MKTF-35	2/26/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-35	2/26/2016	Benzene	**46**	5	0.48	5	ug/L
MKTF-35	2/26/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
MKTF-35	2/26/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-35	2/26/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-35	2/26/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-35	2/26/2016	Chloroethane	ND	10	0.73	20857	ug/L
MKTF-35	2/26/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
MKTF-35	2/26/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
MKTF-35	2/26/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-35	2/26/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-35	2/26/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
MKTF-35	2/26/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/26/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
MKTF-35	2/26/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
MKTF-35	2/26/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-35	2/26/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
MKTF-35	2/26/2016	2-Butanone	ND	50	1.6	5565	ug/L
MKTF-35	2/26/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
MKTF-35	2/26/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-35	2/26/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
MKTF-35	2/26/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-35	2/26/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-35	2/26/2016	1,2,4-Trimethylbenzene	11	5	0.52	56	ug/L
MKTF-35	2/26/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
MKTF-35	2/26/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L
MKTF-35	2/26/2016	tert-Butylbenzene	ND	5	0.48	690	ug/L
MKTF-35	2/26/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
MKTF-35	2/26/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
MKTF-35	2/26/2016	Ethylbenzene	34	5	0.56	700	ug/L
MKTF-35	2/26/2016	Styrene	ND	5	0.48	100	ug/L
MKTF-35	2/26/2016	n-Propylbenzene	12	5	0.66	660	ug/L
MKTF-35	2/26/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
MKTF-35	2/26/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-35	2/26/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-35	2/26/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
MKTF-35	2/26/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
MKTF-35	2/26/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-35	2/26/2016	Bromobenzene	ND	5	0.4	62	ug/L
MKTF-35	2/26/2016	Toluene	ND	5	0.45	1000	ug/L
MKTF-35	2/26/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
MKTF-35	2/26/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-35	2/26/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-35	2/26/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
MKTF-35	2/26/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-35	2/26/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-35	2/26/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-35	2/26/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-35	2/26/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
MKTF-35	2/26/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-35	2/26/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-35	2/26/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-35	2/26/2016	MTBE	20	5	1.1	143	ug/L
MKTF-35	2/26/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-35	2/26/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
MKTF-35	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	6/10/2016	Acetone	6.8	10	4.9	14064	ug/L
MKTF-35	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	6/10/2016	Benzene	**67**	1	0.096	5	ug/L
MKTF-35	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	6/10/2016	1,1-Dichloroethane	0.45	1	0.11	25	ug/L
MKTF-35	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	6/10/2016	2-Butanone	2	10	0.74	5565	ug/L
MKTF-35	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	6/10/2016	1,2,4-Trimethylbenzene	1.2	1	0.11	56	ug/L
MKTF-35	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	6/10/2016	tert-Butylbenzene	0.19	1	0.12	690	ug/L
MKTF-35	6/10/2016	Isopropylbenzene	1.8	1	0.1	447	ug/L
MKTF-35	6/10/2016	p-Isopropyltoluene	0.41	1	0.14	NA	ug/L
MKTF-35	6/10/2016	Ethylbenzene	12	1	0.11	700	ug/L
MKTF-35	6/10/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-35	6/10/2016	n-Propylbenzene	4.5	1	0.13	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/10/2016	n-Butylbenzene	0.53	3	0.16	1000	ug/L
MKTF-35	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	6/10/2016	1,3,5-Trimethylbenzene	0.2	1	0.12	60	ug/L
MKTF-35	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	6/10/2016	Toluene	0.27	1	0.12	1000	ug/L
MKTF-35	6/10/2016	Chlorobenzene	0.69	1	0.11	77.6	ug/L
MKTF-35	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	6/10/2016	sec-Butylbenzene	1.9	1	0.12	2000	ug/L
MKTF-35	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	6/10/2016	Xylenes, Total	5.5	1.5	0.37	620	ug/L
MKTF-35	6/10/2016	MTBE	19	1	0.21	143	ug/L
MKTF-35	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	9/13/2016	Acetone	8.1	10	4.9	14064	ug/L
MKTF-35	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	9/13/2016	Benzene	**370**	1	0.096	5	ug/L
MKTF-35	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	9/13/2016	Bromomethane	1.1	3	0.78	7.54	ug/L
MKTF-35	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	9/13/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-35	9/13/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	9/13/2016	2-Butanone	8.8	10	0.74	5565	ug/L
MKTF-35	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	9/13/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	9/13/2016	1,2,4-Trimethylbenzene	3.6	1	0.11	56	ug/L
MKTF-35	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	9/13/2016	tert-Butylbenzene	0.18	1	0.12	690	ug/L
MKTF-35	9/13/2016	Isopropylbenzene	1.2	1	0.1	447	ug/L
MKTF-35	9/13/2016	p-Isopropyltoluene	0.29	1	0.14	NA	ug/L
MKTF-35	9/13/2016	Ethylbenzene	25	1	0.11	700	ug/L
MKTF-35	9/13/2016	Styrene	0.25	1	0.11	100	ug/L
MKTF-35	9/13/2016	n-Propylbenzene	2.5	1	0.13	660	ug/L
MKTF-35	9/13/2016	n-Butylbenzene	0.32	3	0.16	1000	ug/L
MKTF-35	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	9/13/2016	1,3,5-Trimethylbenzene	0.32	1	0.12	60	ug/L
MKTF-35	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	9/13/2016	Toluene	0.52	1	0.12	1000	ug/L
MKTF-35	9/13/2016	Chlorobenzene	1.1	1	0.11	77.6	ug/L
MKTF-35	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	9/13/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	9/13/2016	sec-Butylbenzene	1.4	1	0.12	2000	ug/L
MKTF-35	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	9/13/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Xylenes, Total	11	1.5	0.37	620	ug/L
MKTF-35	9/13/2016	MTBE	12	1	0.21	143	ug/L
MKTF-35	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	11/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	11/3/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-35	11/3/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	11/3/2016	Benzene	**65**	1	0.096	5	ug/L
MKTF-35	11/3/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-35	11/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	11/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	11/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	11/3/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-35	11/3/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-35	11/3/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-35	11/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	11/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-35	11/3/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-35	11/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-35	11/3/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-35	11/3/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-35	11/3/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-35	11/3/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-35	11/3/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-35	11/3/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-35	11/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	11/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-35	11/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	11/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	11/3/2016	1,2,4-Trimethylbenzene	18	1	0.11	56	ug/L
MKTF-35	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-35	11/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-35	11/3/2016	tert-Butylbenzene	0.25	1	0.12	690	ug/L
MKTF-35	11/3/2016	Isopropylbenzene	3.9	1	0.1	447	ug/L
MKTF-35	11/3/2016	p-Isopropyltoluene	0.49	1	0.14	NA	ug/L
MKTF-35	11/3/2016	Ethylbenzene	55	1	0.11	700	ug/L
MKTF-35	11/3/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-35	11/3/2016	n-Propylbenzene	11	1	0.13	660	ug/L
MKTF-35	11/3/2016	n-Butylbenzene	0.45	3	0.16	1000	ug/L
MKTF-35	11/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-35	11/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-35	11/3/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	11/3/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-35	11/3/2016	1,3,5-Trimethylbenzene	0.32	1	0.12	60	ug/L
MKTF-35	11/3/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-35	11/3/2016	Toluene	0.26	1	0.12	1000	ug/L
MKTF-35	11/3/2016	Chlorobenzene	1.2	1	0.11	77.6	ug/L
MKTF-35	11/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-35	11/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	11/3/2016	sec-Butylbenzene	2.1	1	0.12	2000	ug/L
MKTF-35	11/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	11/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-35	11/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-35	11/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	11/3/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-35	11/3/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-35	11/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	11/3/2016	Xylenes, Total	10	1.5	0.37	620	ug/L
MKTF-35	11/3/2016	MTBE	10	1	0.21	143	ug/L
MKTF-35	11/3/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-35	11/3/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	3/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	3/1/2017	Acetone	ND	10	0.88	14064	ug/L
MKTF-35	3/1/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-35	3/1/2017	Benzene	**53**	1	0.096	5	ug/L
MKTF-35	3/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	3/1/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-35	3/1/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-35	3/1/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-35	3/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	3/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	3/1/2017	Methylene Chloride	0.66	3	0.11	5	ug/L
MKTF-35	3/1/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-35	3/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	3/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	3/1/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	3/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	3/1/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-35	3/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	3/1/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	3/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	3/1/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-35	3/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	3/1/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-35	3/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	3/1/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-35	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	3/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	3/1/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	3/1/2017	Isopropylbenzene	1.4	1	0.098	447	ug/L
MKTF-35	3/1/2017	p-Isopropyltoluene	0.16	1	0.14	NA	ug/L
MKTF-35	3/1/2017	Ethylbenzene	2.7	1	0.11	700	ug/L
MKTF-35	3/1/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	3/1/2017	n-Propylbenzene	3.8	1	0.13	660	ug/L
MKTF-35	3/1/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-35	3/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	3/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	3/1/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-35	3/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	3/1/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-35	3/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	3/1/2017	Toluene	0.11	1	0.089	1000	ug/L
MKTF-35	3/1/2017	Chlorobenzene	0.51	1	0.11	77.6	ug/L
MKTF-35	3/1/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-35	3/1/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	3/1/2017	sec-Butylbenzene	2	1	0.1	2000	ug/L
MKTF-35	3/1/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-35	3/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	3/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	3/1/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-35	3/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	3/1/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-35	3/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-35	3/1/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	3/1/2017	MTBE	7.9	1	0.15	143	ug/L
MKTF-35	3/1/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-35	3/1/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-35	6/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	6/14/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	6/14/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	6/14/2017	Benzene	2.3	1	0.062	5	ug/L
MKTF-35	6/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	6/14/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	6/14/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	6/14/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	6/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	6/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	6/14/2017	Methylene Chloride	0.11	3	0.11	5	ug/L
MKTF-35	6/14/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	6/14/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	6/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	6/14/2017	1,1-Dichloroethane	0.43	1	0.4	25	ug/L
MKTF-35	6/14/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	6/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	6/14/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	6/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	6/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	6/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	6/14/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	6/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	6/14/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	6/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	6/14/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	6/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	6/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	6/14/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-35	6/14/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	6/14/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
MKTF-35	6/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	6/14/2017	n-Propylbenzene	2.7	1	0.074	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/14/2017	n-Butylbenzene	0.19	3	0.13	1000	ug/L
MKTF-35	6/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	6/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	6/14/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	6/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	6/14/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	6/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	6/14/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	6/14/2017	Chlorobenzene	0.4	1	0.11	77.6	ug/L
MKTF-35	6/14/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	6/14/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	6/14/2017	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
MKTF-35	6/14/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	6/14/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	6/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-35	6/14/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	6/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	6/14/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	6/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	6/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	6/14/2017	MTBE	33	1	0.24	143	ug/L
MKTF-35	6/14/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	6/14/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	9/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	9/27/2017	Acetone	10	10	0.82	14064	ug/L
MKTF-35	9/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	9/27/2017	Benzene	1.5	1	0.062	5	ug/L
MKTF-35	9/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	9/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	9/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	9/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	9/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	9/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	9/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	9/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	9/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	9/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	9/27/2017	1,1-Dichloroethane	0.67	1	0.4	25	ug/L
MKTF-35	9/27/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	9/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	9/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	9/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	9/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	9/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	9/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	9/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	9/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	9/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	9/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	9/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	9/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	9/27/2017	tert-Butylbenzene	0.14	1	0.1	690	ug/L
MKTF-35	9/27/2017	Isopropylbenzene	0.37	1	0.051	447	ug/L
MKTF-35	9/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	9/27/2017	Ethylbenzene	0.15	1	0.093	700	ug/L
MKTF-35	9/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	9/27/2017	n-Propylbenzene	0.13	1	0.074	660	ug/L
MKTF-35	9/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	9/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	9/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	9/27/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	9/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	9/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	9/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	9/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	9/27/2017	Chlorobenzene	0.43	1	0.11	77.6	ug/L
MKTF-35	9/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	9/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	9/27/2017	sec-Butylbenzene	1.2	1	0.11	2000	ug/L
MKTF-35	9/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	9/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	9/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	9/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	9/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	9/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	9/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	9/27/2017	MTBE	77	1	0.24	143	ug/L
MKTF-35	9/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	9/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	11/30/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	11/30/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	11/30/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	11/30/2017	Benzene	1.5	1	0.062	5	ug/L
MKTF-35	11/30/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	11/30/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	11/30/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	11/30/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	11/30/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	11/30/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	11/30/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	11/30/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	11/30/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	11/30/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	11/30/2017	1,1-Dichloroethane	0.86	1	0.4	25	ug/L
MKTF-35	11/30/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	11/30/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	11/30/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	11/30/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	11/30/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	11/30/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	11/30/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	11/30/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	11/30/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	11/30/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	11/30/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	11/30/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	11/30/2017	tert-Butylbenzene	0.24	1	0.1	690	ug/L
MKTF-35	11/30/2017	Isopropylbenzene	0.48	1	0.051	447	ug/L
MKTF-35	11/30/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	11/30/2017	Ethylbenzene	0.29	1	0.093	700	ug/L
MKTF-35	11/30/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-35	11/30/2017	n-Propylbenzene	0.26	1	0.074	660	ug/L
MKTF-35	11/30/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	11/30/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	11/30/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	11/30/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	11/30/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	11/30/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	11/30/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	11/30/2017	Toluene	0.1	1	0.064	1000	ug/L
MKTF-35	11/30/2017	Chlorobenzene	0.52	1	0.11	77.6	ug/L
MKTF-35	11/30/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	11/30/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	11/30/2017	sec-Butylbenzene	1.5	1	0.11	2000	ug/L
MKTF-35	11/30/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	11/30/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	11/30/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	11/30/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	11/30/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	11/30/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	11/30/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	11/30/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	11/30/2017	MTBE	110	1	0.24	143	ug/L
MKTF-35	11/30/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	11/30/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	2/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	2/15/2018	Acetone	0.86	10	0.82	14064	ug/L
MKTF-35	2/15/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	2/15/2018	Benzene	2.4	1	0.062	5	ug/L
MKTF-35	2/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	2/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	2/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	2/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	2/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	2/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	2/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	2/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	2/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	2/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/15/2018	1,1-Dichloroethane	0.94	1	0.4	25	ug/L
MKTF-35	2/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	2/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	2/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	2/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	2/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	2/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	2/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	2/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	2/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	2/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	2/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	2/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	2/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-35	2/15/2018	Isopropylbenzene	0.49	1	0.051	447	ug/L
MKTF-35	2/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	2/15/2018	Ethylbenzene	0.38	1	0.093	700	ug/L
MKTF-35	2/15/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-35	2/15/2018	n-Propylbenzene	0.44	1	0.074	660	ug/L
MKTF-35	2/15/2018	n-Butylbenzene	0.3	3	0.13	1000	ug/L
MKTF-35	2/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	2/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	2/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	2/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	2/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	2/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	2/15/2018	Toluene	3.4	1	0.064	1000	ug/L
MKTF-35	2/15/2018	Chlorobenzene	0.49	1	0.11	77.6	ug/L
MKTF-35	2/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	2/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	2/15/2018	sec-Butylbenzene	1.5	1	0.11	2000	ug/L
MKTF-35	2/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	2/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	2/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	2/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	2/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	2/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	2/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	2/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	2/15/2018	MTBE	78	1	0.24	143	ug/L
MKTF-35	2/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	2/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	5/3/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-35	5/3/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-35	5/3/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	5/3/2018	Benzene	**9.9**	1	0.062	5	ug/L
MKTF-35	5/3/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-35	5/3/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	5/3/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	5/3/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-35	5/3/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-35	5/3/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-35	5/3/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-35	5/3/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-35	5/3/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-35	5/3/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-35	5/3/2018	1,1-Dichloroethane	0.81	1	0.4	25	ug/L
MKTF-35	5/3/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-35	5/3/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-35	5/3/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	5/3/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-35	5/3/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-35	5/3/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-35	5/3/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-35	5/3/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-35	5/3/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-35	5/3/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	5/3/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-35	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-35	5/3/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-35	5/3/2018	tert-Butylbenzene	0.15	1	0.1	690	ug/L
MKTF-35	5/3/2018	Isopropylbenzene	0.47	1	0.051	447	ug/L
MKTF-35	5/3/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-35	5/3/2018	Ethylbenzene	0.74	1	0.093	700	ug/L
MKTF-35	5/3/2018	Styrene	ND	1	0.16	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/3/2018	n-Propylbenzene	0.35	1	0.074	660	ug/L
MKTF-35	5/3/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-35	5/3/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	5/3/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-35	5/3/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	5/3/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-35	5/3/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-35	5/3/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-35	5/3/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-35	5/3/2018	Chlorobenzene	0.56	1	0.11	77.6	ug/L
MKTF-35	5/3/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-35	5/3/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-35	5/3/2018	sec-Butylbenzene	1.9	1	0.11	2000	ug/L
MKTF-35	5/3/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-35	5/3/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-35	5/3/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	5/3/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-35	5/3/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-35	5/3/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-35	5/3/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-35	5/3/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-35	5/3/2018	MTBE	56	1	0.24	143	ug/L
MKTF-35	5/3/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-35	5/3/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-35	8/23/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-35	8/23/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-35	8/23/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-35	8/23/2018	Benzene	**11**	1	0.17	5	ug/L
MKTF-35	8/23/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-35	8/23/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-35	8/23/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-35	8/23/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-35	8/23/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-35	8/23/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-35	8/23/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-35	8/23/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-35	8/23/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-35	8/23/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-35	8/23/2018	1,1-Dichloroethane	0.74	1	0.4	25	ug/L
MKTF-35	8/23/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-35	8/23/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-35	8/23/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-35	8/23/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-35	8/23/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-35	8/23/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-35	8/23/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-35	8/23/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-35	8/23/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-35	8/23/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-35	8/23/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-35	8/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-35	8/23/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-35	8/23/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-35	8/23/2018	Isopropylbenzene	0.28	1	0.22	447	ug/L
MKTF-35	8/23/2018	p-Isopropyltoluene	1	1	0.24	NA	ug/L
MKTF-35	8/23/2018	Ethylbenzene	0.68	1	0.22	700	ug/L
MKTF-35	8/23/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-35	8/23/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-35	8/23/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	8/23/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-35	8/23/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-35	8/23/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-35	8/23/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-35	8/23/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-35	8/23/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-35	8/23/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	8/23/2018	Chlorobenzene	0.45	1	0.29	77.6	ug/L
MKTF-35	8/23/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-35	8/23/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	8/23/2018	sec-Butylbenzene	1.4	1	0.2	2000	ug/L
MKTF-35	8/23/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-35	8/23/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-35	8/23/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	8/23/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-35	8/23/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-35	8/23/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/23/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-35	8/23/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-35	8/23/2018	MTBE	63	1	0.32	143	ug/L
MKTF-35	8/23/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-35	8/23/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-35	11/28/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-35	11/28/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-35	11/28/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-35	11/28/2018	Benzene	**19**	1	0.17	5	ug/L
MKTF-35	11/28/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-35	11/28/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-35	11/28/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-35	11/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-35	11/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-35	11/28/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-35	11/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-35	11/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-35	11/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-35	11/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-35	11/28/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-35	11/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-35	11/28/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-35	11/28/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-35	11/28/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-35	11/28/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-35	11/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-35	11/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-35	11/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-35	11/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-35	11/28/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-35	11/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-35	11/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-35	11/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-35	11/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-35	11/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-35	11/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-35	11/28/2018	Ethylbenzene	1.2	1	0.22	700	ug/L
MKTF-35	11/28/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-35	11/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-35	11/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-35	11/28/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-35	11/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-35	11/28/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-35	11/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-35	11/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-35	11/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-35	11/28/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-35	11/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-35	11/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-35	11/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-35	11/28/2018	sec-Butylbenzene	1.2	1	0.2	2000	ug/L
MKTF-35	11/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-35	11/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-35	11/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-35	11/28/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-35	11/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-35	11/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-35	11/28/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-35	11/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-35	11/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-35	11/28/2018	MTBE	77	1	0.46	143	ug/L
MKTF-35	11/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-35	11/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-35	5/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	5/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	5/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	5/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	5/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	5/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	4.9	1	0.294981	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	5/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	5/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	5/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	5/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	5/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	5/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	5/16/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	5/16/2019	Benzene	**19**	1	0.166639	5	ug/L
MKTF-35	5/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	5/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	5/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	5/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	5/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	5/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	5/16/2019	Chlorobenzene	0.39	1	0.193853	77.6	ug/L
MKTF-35	5/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	5/16/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	5/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	5/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	5/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	5/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	5/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	5/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	5/16/2019	Ethylbenzene	2.5	1	0.132341	700	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	5/16/2019	Isopropylbenzene	0.67	1	0.191522	447	ug/L
MKTF-35	5/16/2019	MTBE	40	1	0.456095	143	ug/L
MKTF-35	5/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	5/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	5/16/2019	n-Propylbenzene	0.63	1	0.214308	660	ug/L
MKTF-35	5/16/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	5/16/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	5/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	5/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	5/16/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	5/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	5/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	5/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	5/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	5/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	5/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	5/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	5/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	5/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	5/16/2019	1,2,4-Trimethylbenzene	0.26	1	0.213199	56	ug/L
MKTF-35	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	5/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	5/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	5/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	5/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	5/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	5/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	5/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	5/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	5/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	5/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	5/16/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
MKTF-35	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	5/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	5/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	5/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	5/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	4.7	1	0.294981	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	0.5	4	0.314954	NA	ug/L
MKTF-35	5/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	5/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	5/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	5/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	5/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	5/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	5/16/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	5/16/2019	Benzene	**14**	1	0.166639	5	ug/L
MKTF-35	5/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	5/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	5/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	5/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	5/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	5/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	5/16/2019	Chlorobenzene	0.35	1	0.193853	77.6	ug/L
MKTF-35	5/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	5/16/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	5/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	5/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	5/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	5/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	5/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	5/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	5/16/2019	Ethylbenzene	2.4	1	0.132341	700	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	5/16/2019	Isopropylbenzene	0.67	1	0.191522	447	ug/L
MKTF-35	5/16/2019	MTBE	42	1	0.456095	143	ug/L
MKTF-35	5/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	5/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	5/16/2019	n-Propylbenzene	0.54	1	0.214308	660	ug/L
MKTF-35	5/16/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	5/16/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	5/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	5/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	5/16/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	5/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	5/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	5/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	5/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	5/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	5/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-35	5/16/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-35	8/19/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	8/19/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	8/19/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	8/19/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	8/19/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-35	8/19/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	8/19/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	8/19/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	8/19/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-35	8/19/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	8/19/2019	1,2,4-Trimethylbenzene	0.31	1	0.213199	56	ug/L
MKTF-35	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-35	8/19/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	8/19/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	8/19/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	8/19/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	8/19/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	8/19/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	8/19/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	8/19/2019	1,4-Dichlorobenzene	5.9	1	0.294981	75	ug/L
MKTF-35	8/19/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	8/19/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	8/19/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	8/19/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	8/19/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	8/19/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	8/19/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	8/19/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	8/19/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	8/19/2019	Acetone	5.4	10	1.199396	14064	ug/L
MKTF-35	8/19/2019	Benzene	**22**	1	0.166639	5	ug/L
MKTF-35	8/19/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	8/19/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/19/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	8/19/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	8/19/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	8/19/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	8/19/2019	Chlorobenzene	0.66	1	0.193853	77.6	ug/L
MKTF-35	8/19/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	8/19/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	8/19/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	8/19/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	8/19/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	8/19/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	8/19/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	8/19/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	8/19/2019	Ethylbenzene	3	1	0.132341	700	ug/L
MKTF-35	8/19/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	8/19/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
MKTF-35	8/19/2019	MTBE	26	1	0.456095	143	ug/L
MKTF-35	8/19/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	8/19/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	8/19/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	8/19/2019	n-Propylbenzene	0.81	1	0.214308	660	ug/L
MKTF-35	8/19/2019	sec-Butylbenzene	1.4	1	0.247731	2000	ug/L
MKTF-35	8/19/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	8/19/2019	tert-Butylbenzene	0.3	1	0.206985	690	ug/L
MKTF-35	8/19/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	8/19/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	8/19/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	8/19/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	8/19/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	8/19/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	8/19/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	8/19/2019	Xylenes, Total	0.66	1.5	0.454415	620	ug/L
MKTF-35	8/19/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
MKTF-35	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethane	0.68	1	0.140859	25	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	4.1	1	0.294981	75	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	10/29/2019	Benzene	**56**	1	0.166639	5	ug/L
MKTF-35	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-35	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	10/29/2019	Ethylbenzene	2.2	1	0.132341	700	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	10/29/2019	Isopropylbenzene	0.43	1	0.191522	447	ug/L
MKTF-35	10/29/2019	MTBE	120	1	0.456095	143	ug/L
MKTF-35	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	10/29/2019	n-Propylbenzene	0.29	1	0.214308	660	ug/L
MKTF-35	10/29/2019	sec-Butylbenzene	1.3	1	0.247731	2000	ug/L
MKTF-35	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-35	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	10/29/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	10/29/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-35	10/29/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-35	10/29/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-35	10/29/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethane	0.66	1	0.140859	25	ug/L
MKTF-35	10/29/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-35	10/29/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-35	10/29/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-35	10/29/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-35	10/29/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-35	10/29/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-35	10/29/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-35	10/29/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	4.2	1	0.294981	75	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-35	10/29/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-35	10/29/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-35	10/29/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-35	10/29/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-35	10/29/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-35	10/29/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-35	10/29/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-35	10/29/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-35	10/29/2019	Benzene	**49**	1	0.166639	5	ug/L
MKTF-35	10/29/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-35	10/29/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-35	10/29/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-35	10/29/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-35	10/29/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-35	10/29/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-35	10/29/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-35	10/29/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-35	10/29/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-35	10/29/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-35	10/29/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-35	10/29/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-35	10/29/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-35	10/29/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-35	10/29/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-35	10/29/2019	Ethylbenzene	2	1	0.132341	700	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-35	10/29/2019	Isopropylbenzene	0.41	1	0.191522	447	ug/L
MKTF-35	10/29/2019	MTBE	110	1	0.456095	143	ug/L
MKTF-35	10/29/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-35	10/29/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-35	10/29/2019	n-Propylbenzene	0.29	1	0.214308	660	ug/L
MKTF-35	10/29/2019	sec-Butylbenzene	1.2	1	0.247731	2000	ug/L
MKTF-35	10/29/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-35	10/29/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-35	10/29/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-35	10/29/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-35	10/29/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-35	10/29/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-35	10/29/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-35	10/29/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-35	10/29/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-35	10/29/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
MKTF-35	2/6/2020	Benzene	**6100**	100	17	5	ug/L
MKTF-35	2/6/2020	Toluene	**5300**	100	35	1000	ug/L
MKTF-35	2/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-35	2/6/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-35	2/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-35	2/6/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-35	2/6/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-35	2/6/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-35	2/6/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	2/6/2020	1,2,4-Trimethylbenzene	**240**	10	2.1	56	ug/L
MKTF-35	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-35	2/6/2020	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	2/6/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-35	2/6/2020	1,3,5-Trimethylbenzene	52	10	1.9	60	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-35	2/6/2020	1,3-Dichloropropane	ND	10	2	370	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	3.7	10	2.9	75	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	6.2	40	3.1	NA	ug/L
MKTF-35	2/6/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-35	2/6/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-35	2/6/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-35	2/6/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	**6.6**	40	3.5		ug/L
MKTF-35	2/6/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-35	2/6/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-35	2/6/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-35	2/6/2020	Acetone	ND	100	12	14064	ug/L
MKTF-35	2/6/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-35	2/6/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-35	2/6/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-35	2/6/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-35	2/6/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-35	2/6/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-35	2/6/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-35	2/6/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-35	2/6/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-35	2/6/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-35	2/6/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-35	2/6/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-35	2/6/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-35	2/6/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-35	2/6/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-35	2/6/2020	Ethylbenzene	**800**	10	1.3	700	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-35	2/6/2020	Isopropylbenzene	17	10	1.9	447	ug/L
MKTF-35	2/6/2020	MTBE	**320**	10	4.6	143	ug/L
MKTF-35	2/6/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-35	2/6/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-35	2/6/2020	n-Propylbenzene	37	10	2.1	660	ug/L
MKTF-35	2/6/2020	Naphthalene	**84**	20	2.8	30	ug/L
MKTF-35	2/6/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-35	2/6/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-35	2/6/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-35	2/6/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-35	2/6/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-35	2/6/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-35	2/6/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-35	2/6/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-35	2/6/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-35	2/6/2020	Xylenes, Total	**1800**	15	4.5	620	ug/L
MKTF-35	2/6/2020	Benzene	**6300**	100	17	5	ug/L
MKTF-35	2/6/2020	Toluene	**5300**	100	35	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.1	5.74	ug/L
MKTF-35	2/6/2020	1,1,1-Trichloroethane	ND	10	1.7	200	ug/L
MKTF-35	2/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.5	10	ug/L
MKTF-35	2/6/2020	1,1,2-Trichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethane	ND	10	1.4	25	ug/L
MKTF-35	2/6/2020	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-35	2/6/2020	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-35	2/6/2020	1,2,3-Trichlorobenzene	ND	10	3	70	ug/L
MKTF-35	2/6/2020	1,2,3-Trichloropropane	*ND*	*20*	3	0.0084	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	2/6/2020	1,2,4-Trimethylbenzene	**230**	10	2.1	56	ug/L
MKTF-35	2/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.3	0.0033	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MKTF-35	2/6/2020	1,2-Dichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	2/6/2020	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-35	2/6/2020	1,3,5-Trimethylbenzene	50	10	1.9	60	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	10	2.5	N/A	ug/L
MKTF-35	2/6/2020	1,3-Dichloropropane	ND	10	2	370	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	3.8	10	2.9	75	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	8.1	40	3.1	NA	ug/L
MKTF-35	2/6/2020	2,2-Dichloropropane	ND	20	2.3	NA	ug/L
MKTF-35	2/6/2020	2-Butanone	ND	100	21	5565	ug/L
MKTF-35	2/6/2020	2-Chlorotoluene	ND	10	2.5	233	ug/L
MKTF-35	2/6/2020	2-Hexanone	*ND*	*100*	15	38	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	**7.1**	40	3.5		ug/L
MKTF-35	2/6/2020	4-Chlorotoluene	ND	10	2.3	250	ug/L
MKTF-35	2/6/2020	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
MKTF-35	2/6/2020	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-35	2/6/2020	Acetone	ND	100	12	14064	ug/L
MKTF-35	2/6/2020	Bromobenzene	ND	10	2.4	62	ug/L
MKTF-35	2/6/2020	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
MKTF-35	2/6/2020	Bromoform	ND	10	2.9	32.9	ug/L
MKTF-35	2/6/2020	Bromomethane	*ND*	*30*	2.7	7.54	ug/L
MKTF-35	2/6/2020	Carbon Disulfide	ND	100	4.5	810	ug/L
MKTF-35	2/6/2020	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-35	2/6/2020	Chlorobenzene	ND	10	1.9	77.6	ug/L
MKTF-35	2/6/2020	Chloroethane	ND	20	1.8	20857	ug/L
MKTF-35	2/6/2020	Chloroform	ND	10	1.2	100	ug/L
MKTF-35	2/6/2020	Chloromethane	*ND*	*30*	3.2	20.32	ug/L
MKTF-35	2/6/2020	cis-1,2-Dichloroethene	ND	10	1.9	70	ug/L
MKTF-35	2/6/2020	cis-1,3-Dichloropropene	ND	10	1.4	NA	ug/L
MKTF-35	2/6/2020	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-35	2/6/2020	Dibromomethane	*ND*	*10*	2.1	8	ug/L
MKTF-35	2/6/2020	Dichlorodifluoromethane	ND	10	2.6	197	ug/L
MKTF-35	2/6/2020	Ethylbenzene	**770**	10	1.3	700	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*10*	3.1	1.39	ug/L
MKTF-35	2/6/2020	Isopropylbenzene	15	10	1.9	447	ug/L
MKTF-35	2/6/2020	MTBE	**320**	10	4.6	143	ug/L
MKTF-35	2/6/2020	Methylene Chloride	*ND*	*30*	1.5	5	ug/L
MKTF-35	2/6/2020	n-Butylbenzene	ND	30	2.3	1000	ug/L
MKTF-35	2/6/2020	n-Propylbenzene	35	10	2.1	660	ug/L
MKTF-35	2/6/2020	Naphthalene	**86**	20	2.8	30	ug/L
MKTF-35	2/6/2020	sec-Butylbenzene	ND	10	2.5	2000	ug/L
MKTF-35	2/6/2020	Styrene	ND	10	1.9	100	ug/L
MKTF-35	2/6/2020	tert-Butylbenzene	ND	10	2.1	690	ug/L
MKTF-35	2/6/2020	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-35	2/6/2020	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-35	2/6/2020	trans-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-35	2/6/2020	Trichloroethene	*ND*	*10*	1.7	5	ug/L
MKTF-35	2/6/2020	Trichlorofluoromethane	ND	10	1.9	1137	ug/L
MKTF-35	2/6/2020	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-35	2/6/2020	Xylenes, Total	**1700**	15	4.5	620	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-35	2/6/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-35	9/16/2020	Benzene	**4000**	100	23	5	ug/L
MKTF-35	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-35	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-35	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-35	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
MKTF-35	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-35	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-35	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	1,2,4-Trimethylbenzene	**290**	10	1.2	56	ug/L
MKTF-35	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-35	9/16/2020	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
MKTF-35	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-35	9/16/2020	1,3,5-Trimethylbenzene	7.4	10	1.8	60	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-35	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	3.1	10	2.1	75	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	9.4	40	8.4	NA	ug/L
MKTF-35	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-35	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-35	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-35	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	**11**	40	6.9		ug/L
MKTF-35	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-35	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
MKTF-35	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-35	9/16/2020	Acetone	27	100	23	14064	ug/L
MKTF-35	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-35	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
MKTF-35	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-35	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-35	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-35	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-35	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-35	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-35	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-35	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
MKTF-35	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-35	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-35	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-35	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-35	9/16/2020	Ethylbenzene	640	10	2.1	700	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-35	9/16/2020	Isopropylbenzene	20	10	1.8	447	ug/L
MKTF-35	9/16/2020	MTBE	**160**	10	3.9	143	ug/L
MKTF-35	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-35	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-35	9/16/2020	n-Propylbenzene	54	10	1.8	660	ug/L
MKTF-35	9/16/2020	Naphthalene	**71**	20	2.8	30	ug/L
MKTF-35	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
MKTF-35	9/16/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-35	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-35	9/16/2020	Toluene	130	10	2	1000	ug/L
MKTF-35	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-35	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-35	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-35	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-35	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-35	9/16/2020	Xylenes, Total	**910**	15	5.5	620	ug/L
MKTF-35	9/16/2020	Benzene	**4100**	50	23	5	ug/L
MKTF-35	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
MKTF-35	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
MKTF-35	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
MKTF-35	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
MKTF-35	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
MKTF-35	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-35	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
MKTF-35	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
MKTF-35	9/16/2020	1,2,4-Trimethylbenzene	**290**	10	1.2	56	ug/L
MKTF-35	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
MKTF-35	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
MKTF-35	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
MKTF-35	9/16/2020	1,3,5-Trimethylbenzene	8.1	10	1.8	60	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
MKTF-35	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	3.2	10	2.1	75	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
MKTF-35	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
MKTF-35	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-35	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	**9.9**	40	6.9		ug/L
MKTF-35	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
MKTF-35	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L
MKTF-35	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-35	9/16/2020	Acetone	ND	100	23	14064	ug/L
MKTF-35	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
MKTF-35	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
MKTF-35	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
MKTF-35	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
MKTF-35	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
MKTF-35	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
MKTF-35	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-35	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
MKTF-35	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
MKTF-35	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
MKTF-35	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
MKTF-35	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
MKTF-35	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
MKTF-35	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
MKTF-35	9/16/2020	Ethylbenzene	650	10	2.1	700	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
MKTF-35	9/16/2020	Isopropylbenzene	20	10	1.8	447	ug/L
MKTF-35	9/16/2020	MTBE	**160**	10	3.9	143	ug/L
MKTF-35	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
MKTF-35	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-35	9/16/2020	n-Propylbenzene	55	10	1.8	660	ug/L
MKTF-35	9/16/2020	Naphthalene	**66**	20	2.8	30	ug/L
MKTF-35	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
MKTF-35	9/16/2020	Styrene	ND	10	1.3	100	ug/L
MKTF-35	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
MKTF-35	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
MKTF-35	9/16/2020	Toluene	150	10	2	1000	ug/L
MKTF-35	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
MKTF-35	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
MKTF-35	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
MKTF-35	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
MKTF-35	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-35	9/16/2020	Xylenes, Total	**940**	15	5.5	620	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-35	9/16/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-36	11/21/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-36	11/21/2014	Acetone	ND	100	49	14064	ug/L
MKTF-36	11/21/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-36	11/21/2014	Benzene	**8400**	200	31	5	ug/L
MKTF-36	11/21/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-36	11/21/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-36	11/21/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-36	11/21/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-36	11/21/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-36	11/21/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-36	11/21/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-36	11/21/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-36	11/21/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-36	11/21/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-36	11/21/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-36	11/21/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-36	11/21/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	11/21/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-36	11/21/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-36	11/21/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-36	11/21/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-36	11/21/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-36	11/21/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-36	11/21/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-36	11/21/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-36	11/21/2014	1,2,4-Trimethylbenzene	**270**	10	1.2	56	ug/L
MKTF-36	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-36	11/21/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-36	11/21/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-36	11/21/2014	Isopropylbenzene	41	10	1.6	447	ug/L
MKTF-36	11/21/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/21/2014	Ethylbenzene	**1500**	200	25	700	ug/L
MKTF-36	11/21/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-36	11/21/2014	n-Propylbenzene	99	10	1.4	660	ug/L
MKTF-36	11/21/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-36	11/21/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-36	11/21/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-36	11/21/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-36	11/21/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-36	11/21/2014	1,3,5-Trimethylbenzene	**62**	10	1.3	60	ug/L
MKTF-36	11/21/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-36	11/21/2014	Toluene	32	10	1.7	1000	ug/L
MKTF-36	11/21/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-36	11/21/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-36	11/21/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-36	11/21/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-36	11/21/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-36	11/21/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-36	11/21/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-36	11/21/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-36	11/21/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-36	11/21/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-36	11/21/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-36	11/21/2014	Xylenes, Total	560	15	3.8	620	ug/L
MKTF-36	11/21/2014	MTBE	**7200**	200	50	143	ug/L
MKTF-36	11/21/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-36	11/21/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-36	3/17/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-36	3/17/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-36	3/17/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-36	3/17/2015	Benzene	**8300**	1000	65	5	ug/L
MKTF-36	3/17/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-36	3/17/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-36	3/17/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-36	3/17/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-36	3/17/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-36	3/17/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-36	3/17/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-36	3/17/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-36	3/17/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-36	3/17/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-36	3/17/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-36	3/17/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-36	3/17/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	3/17/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-36	3/17/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-36	3/17/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-36	3/17/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-36	3/17/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	3/17/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-36	3/17/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	3/17/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-36	3/17/2015	1,2,4-Trimethylbenzene	31	10	1.6	56	ug/L
MKTF-36	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-36	3/17/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-36	3/17/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-36	3/17/2015	Isopropylbenzene	30	10	1.5	447	ug/L
MKTF-36	3/17/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Ethylbenzene	**1400**	100	10	700	ug/L
MKTF-36	3/17/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-36	3/17/2015	n-Propylbenzene	81	10	1.6	660	ug/L
MKTF-36	3/17/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-36	3/17/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-36	3/17/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-36	3/17/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-36	3/17/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-36	3/17/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-36	3/17/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-36	3/17/2015	Toluene	23	10	1.1	1000	ug/L
MKTF-36	3/17/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-36	3/17/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-36	3/17/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	3/17/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-36	3/17/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-36	3/17/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-36	3/17/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-36	3/17/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/17/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-36	3/17/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-36	3/17/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	3/17/2015	Xylenes, Total	78	15	2.8	620	ug/L
MKTF-36	3/17/2015	MTBE	**8300**	1000	170	143	ug/L
MKTF-36	3/17/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	3/17/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	6/4/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
MKTF-36	6/4/2015	Acetone	ND	200	19	14064	ug/L
MKTF-36	6/4/2015	Chloroform	ND	20	4.3	100	ug/L
MKTF-36	6/4/2015	Benzene	**8100**	100	6.5	5	ug/L
MKTF-36	6/4/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
MKTF-36	6/4/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
MKTF-36	6/4/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
MKTF-36	6/4/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
MKTF-36	6/4/2015	Chloroethane	ND	40	2.1	20857	ug/L
MKTF-36	6/4/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
MKTF-36	6/4/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
MKTF-36	6/4/2015	Carbon Disulfide	ND	200	13	810	ug/L
MKTF-36	6/4/2015	Bromoform	ND	20	3.2	32.9	ug/L
MKTF-36	6/4/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
MKTF-36	6/4/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
MKTF-36	6/4/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
MKTF-36	6/4/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
MKTF-36	6/4/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
MKTF-36	6/4/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
MKTF-36	6/4/2015	2-Butanone	ND	200	7.3	5565	ug/L
MKTF-36	6/4/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
MKTF-36	6/4/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
MKTF-36	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
MKTF-36	6/4/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
MKTF-36	6/4/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
MKTF-36	6/4/2015	1,2,4-Trimethylbenzene	**65**	20	3.2	56	ug/L
MKTF-36	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
MKTF-36	6/4/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
MKTF-36	6/4/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
MKTF-36	6/4/2015	Isopropylbenzene	44	20	3	447	ug/L
MKTF-36	6/4/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
MKTF-36	6/4/2015	Ethylbenzene	**1600**	20	2	700	ug/L
MKTF-36	6/4/2015	Styrene	ND	20	2.1	100	ug/L
MKTF-36	6/4/2015	n-Propylbenzene	91	20	3.3	660	ug/L
MKTF-36	6/4/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
MKTF-36	6/4/2015	4-Chlorotoluene	ND	20	3	250	ug/L
MKTF-36	6/4/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
MKTF-36	6/4/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
MKTF-36	6/4/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
MKTF-36	6/4/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
MKTF-36	6/4/2015	Bromobenzene	ND	20	2.2	62	ug/L
MKTF-36	6/4/2015	Toluene	34	20	2.2	1000	ug/L
MKTF-36	6/4/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
MKTF-36	6/4/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
MKTF-36	6/4/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
MKTF-36	6/4/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
MKTF-36	6/4/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
MKTF-36	6/4/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
MKTF-36	6/4/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
MKTF-36	6/4/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-36	6/4/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
MKTF-36	6/4/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
MKTF-36	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
MKTF-36	6/4/2015	Xylenes, Total	140	30	5.6	620	ug/L
MKTF-36	6/4/2015	MTBE	**8400**	100	17	143	ug/L
MKTF-36	6/4/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
MKTF-36	6/4/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
MKTF-36	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-36	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-36	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-36	8/18/2015	Benzene	**9000**	200	13	5	ug/L
MKTF-36	8/18/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
MKTF-36	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-36	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-36	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-36	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-36	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-36	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-36	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-36	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-36	8/18/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
MKTF-36	8/18/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
MKTF-36	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-36	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-36	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-36	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-36	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-36	8/18/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-36	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-36	8/18/2015	1,2,4-Trimethylbenzene	32	10	1.6	56	ug/L
MKTF-36	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-36	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-36	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-36	8/18/2015	Isopropylbenzene	33	10	1.5	447	ug/L
MKTF-36	8/18/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Ethylbenzene	**1600**	100	10	700	ug/L
MKTF-36	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-36	8/18/2015	n-Propylbenzene	73	10	1.6	660	ug/L
MKTF-36	8/18/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
MKTF-36	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-36	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-36	8/18/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
MKTF-36	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-36	8/18/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
MKTF-36	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-36	8/18/2015	Toluene	33	10	1.1	1000	ug/L
MKTF-36	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-36	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-36	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-36	8/18/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
MKTF-36	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-36	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-36	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-36	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-36	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-36	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	8/18/2015	Xylenes, Total	64	15	2.8	620	ug/L
MKTF-36	8/18/2015	MTBE	**8000**	100	17	143	ug/L
MKTF-36	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	11/8/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-36	11/8/2016	Acetone	ND	100	49	14064	ug/L
MKTF-36	11/8/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-36	11/8/2016	Benzene	**8400**	100	9.6	5	ug/L
MKTF-36	11/8/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
MKTF-36	11/8/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-36	11/8/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-36	11/8/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-36	11/8/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-36	11/8/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-36	11/8/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-36	11/8/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-36	11/8/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-36	11/8/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-36	11/8/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
MKTF-36	11/8/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
MKTF-36	11/8/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-36	11/8/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-36	11/8/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-36	11/8/2016	2-Butanone	ND	100	7.4	5565	ug/L
MKTF-36	11/8/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-36	11/8/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
MKTF-36	11/8/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-36	11/8/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-36	11/8/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-36	11/8/2016	1,2,4-Trimethylbenzene	**60**	10	1.1	56	ug/L
MKTF-36	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-36	11/8/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-36	11/8/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-36	11/8/2016	Isopropylbenzene	28	10	1	447	ug/L
MKTF-36	11/8/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/8/2016	Ethylbenzene	**1300**	100	11	700	ug/L
MKTF-36	11/8/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-36	11/8/2016	n-Propylbenzene	64	10	1.3	660	ug/L
MKTF-36	11/8/2016	n-Butylbenzene	8	30	1.6	1000	ug/L
MKTF-36	11/8/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-36	11/8/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-36	11/8/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
MKTF-36	11/8/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-36	11/8/2016	1,3,5-Trimethylbenzene	13	10	1.2	60	ug/L
MKTF-36	11/8/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-36	11/8/2016	Toluene	21	10	1.2	1000	ug/L
MKTF-36	11/8/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-36	11/8/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-36	11/8/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-36	11/8/2016	sec-Butylbenzene	5.8	10	1.2	2000	ug/L
MKTF-36	11/8/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-36	11/8/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-36	11/8/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-36	11/8/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-36	11/8/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-36	11/8/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-36	11/8/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-36	11/8/2016	Xylenes, Total	130	15	3.7	620	ug/L
MKTF-36	11/8/2016	MTBE	**6000**	100	21	143	ug/L
MKTF-36	11/8/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-36	11/8/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-36	3/1/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	3/1/2017	Acetone	ND	500	44	14064	ug/L
MKTF-36	3/1/2017	Chloroform	ND	50	4.4	100	ug/L
MKTF-36	3/1/2017	Benzene	**8600**	500	48	5	ug/L
MKTF-36	3/1/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	3/1/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
MKTF-36	3/1/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
MKTF-36	3/1/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
MKTF-36	3/1/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	3/1/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	3/1/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	3/1/2017	Carbon Disulfide	ND	500	30	810	ug/L
MKTF-36	3/1/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	3/1/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	3/1/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
MKTF-36	3/1/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	3/1/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	3/1/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
MKTF-36	3/1/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	3/1/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	3/1/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	3/1/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
MKTF-36	3/1/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	3/1/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
MKTF-36	3/1/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	3/1/2017	1,2,4-Trimethylbenzene	19	50	5.2	56	ug/L
MKTF-36	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	3/1/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	3/1/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	3/1/2017	Isopropylbenzene	31	50	4.9	447	ug/L
MKTF-36	3/1/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
MKTF-36	3/1/2017	Ethylbenzene	**1400**	50	5.6	700	ug/L
MKTF-36	3/1/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	3/1/2017	n-Propylbenzene	78	50	6.6	660	ug/L
MKTF-36	3/1/2017	n-Butylbenzene	ND	150	8	1000	ug/L
MKTF-36	3/1/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	3/1/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	3/1/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
MKTF-36	3/1/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	3/1/2017	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
MKTF-36	3/1/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	3/1/2017	Toluene	13	50	4.5	1000	ug/L
MKTF-36	3/1/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	3/1/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
MKTF-36	3/1/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-36	3/1/2017	sec-Butylbenzene	18	50	5.1	2000	ug/L
MKTF-36	3/1/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
MKTF-36	3/1/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	3/1/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	3/1/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/1/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	3/1/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
MKTF-36	3/1/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
MKTF-36	3/1/2017	Xylenes, Total	32	75	16	620	ug/L
MKTF-36	3/1/2017	MTBE	**8000**	50	7.4	143	ug/L
MKTF-36	3/1/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
MKTF-36	3/1/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
MKTF-36	6/14/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	6/14/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	6/14/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	6/14/2017	Benzene	**9400**	500	31	5	ug/L
MKTF-36	6/14/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	6/14/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	6/14/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	6/14/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	6/14/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	6/14/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	6/14/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	6/14/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	6/14/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	6/14/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	6/14/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	6/14/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	6/14/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	6/14/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	6/14/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	6/14/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	6/14/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	6/14/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	6/14/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	6/14/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	6/14/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	6/14/2017	1,2,4-Trimethylbenzene	**120**	50	5.6	56	ug/L
MKTF-36	6/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	6/14/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	6/14/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	6/14/2017	Isopropylbenzene	28	50	2.6	447	ug/L
MKTF-36	6/14/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	6/14/2017	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-36	6/14/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	6/14/2017	n-Propylbenzene	85	50	3.7	660	ug/L
MKTF-36	6/14/2017	n-Butylbenzene	7.6	150	6.5	1000	ug/L
MKTF-36	6/14/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	6/14/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	6/14/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	6/14/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	6/14/2017	1,3,5-Trimethylbenzene	24	50	4.4	60	ug/L
MKTF-36	6/14/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	6/14/2017	Toluene	17	50	3.2	1000	ug/L
MKTF-36	6/14/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	6/14/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	6/14/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	6/14/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-36	6/14/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	6/14/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	6/14/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	6/14/2017	Pentafluorobenzene	ND	0	0		None
MKTF-36	6/14/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	6/14/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	6/14/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	6/14/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	6/14/2017	Xylenes, Total	270	75	16	620	ug/L
MKTF-36	6/14/2017	MTBE	**3900**	50	12	143	ug/L
MKTF-36	6/14/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	6/14/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	9/27/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	9/27/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	9/27/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	9/27/2017	Benzene	**9100**	500	31	5	ug/L
MKTF-36	9/27/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	9/27/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	9/27/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	9/27/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	9/27/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	9/27/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	9/27/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/27/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	9/27/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	9/27/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	9/27/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	9/27/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	9/27/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	9/27/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	9/27/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	9/27/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	9/27/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	9/27/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	9/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	9/27/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	9/27/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	9/27/2017	1,2,4-Trimethylbenzene	23	50	5.6	56	ug/L
MKTF-36	9/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	9/27/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	9/27/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	9/27/2017	Isopropylbenzene	32	50	2.6	447	ug/L
MKTF-36	9/27/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	9/27/2017	Ethylbenzene	**1600**	50	4.7	700	ug/L
MKTF-36	9/27/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	9/27/2017	n-Propylbenzene	67	50	3.7	660	ug/L
MKTF-36	9/27/2017	n-Butylbenzene	11	150	6.5	1000	ug/L
MKTF-36	9/27/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	9/27/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	9/27/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	9/27/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	9/27/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
MKTF-36	9/27/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	9/27/2017	Toluene	23	50	3.2	1000	ug/L
MKTF-36	9/27/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	9/27/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	9/27/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	9/27/2017	sec-Butylbenzene	6.4	50	5.5	2000	ug/L
MKTF-36	9/27/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	9/27/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	9/27/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	9/27/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	9/27/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	9/27/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	9/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	9/27/2017	Xylenes, Total	67	75	16	620	ug/L
MKTF-36	9/27/2017	MTBE	**2300**	50	12	143	ug/L
MKTF-36	9/27/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	9/27/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	11/30/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	11/30/2017	Acetone	ND	500	41	14064	ug/L
MKTF-36	11/30/2017	Chloroform	ND	50	20	100	ug/L
MKTF-36	11/30/2017	Benzene	**9500**	500	31	5	ug/L
MKTF-36	11/30/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	11/30/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	11/30/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	11/30/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	11/30/2017	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	11/30/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	11/30/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	11/30/2017	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	11/30/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	11/30/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	11/30/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	11/30/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	11/30/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	11/30/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	11/30/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	11/30/2017	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	11/30/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	11/30/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	11/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	11/30/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	11/30/2017	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	11/30/2017	1,2,4-Trimethylbenzene	**64**	50	5.6	56	ug/L
MKTF-36	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	11/30/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	11/30/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	11/30/2017	Isopropylbenzene	40	50	2.6	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/30/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	11/30/2017	Ethylbenzene	**1700**	50	4.7	700	ug/L
MKTF-36	11/30/2017	Styrene	ND	50	7.8	100	ug/L
MKTF-36	11/30/2017	n-Propylbenzene	83	50	3.7	660	ug/L
MKTF-36	11/30/2017	n-Butylbenzene	18	150	6.5	1000	ug/L
MKTF-36	11/30/2017	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	11/30/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	11/30/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	11/30/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	11/30/2017	1,3,5-Trimethylbenzene	14	50	4.4	60	ug/L
MKTF-36	11/30/2017	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	11/30/2017	Toluene	30	50	3.2	1000	ug/L
MKTF-36	11/30/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	11/30/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	11/30/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	11/30/2017	sec-Butylbenzene	11	50	5.5	2000	ug/L
MKTF-36	11/30/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	11/30/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	11/30/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	11/30/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	11/30/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	11/30/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	11/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	11/30/2017	Xylenes, Total	220	75	16	620	ug/L
MKTF-36	11/30/2017	MTBE	**2900**	50	12	143	ug/L
MKTF-36	11/30/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	11/30/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	2/15/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	2/15/2018	Acetone	ND	500	41	14064	ug/L
MKTF-36	2/15/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	2/15/2018	Benzene	**8400**	500	31	5	ug/L
MKTF-36	2/15/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	2/15/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	2/15/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	2/15/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	2/15/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	2/15/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	2/15/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	2/15/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	2/15/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	2/15/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	2/15/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	2/15/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	2/15/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	2/15/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	2/15/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	2/15/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	2/15/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	2/15/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	2/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	2/15/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	2/15/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	2/15/2018	1,2,4-Trimethylbenzene	39	50	5.6	56	ug/L
MKTF-36	2/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	2/15/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	2/15/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	2/15/2018	Isopropylbenzene	35	50	2.6	447	ug/L
MKTF-36	2/15/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	2/15/2018	Ethylbenzene	**1500**	50	4.7	700	ug/L
MKTF-36	2/15/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-36	2/15/2018	n-Propylbenzene	74	50	3.7	660	ug/L
MKTF-36	2/15/2018	n-Butylbenzene	11	150	6.5	1000	ug/L
MKTF-36	2/15/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	2/15/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	2/15/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	2/15/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	2/15/2018	1,3,5-Trimethylbenzene	4.8	50	4.4	60	ug/L
MKTF-36	2/15/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	2/15/2018	Toluene	20	50	3.2	1000	ug/L
MKTF-36	2/15/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	2/15/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	2/15/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	2/15/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
MKTF-36	2/15/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	2/15/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	2/15/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	2/15/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	2/15/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	2/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	2/15/2018	Xylenes, Total	160	*75*	16	620	ug/L
MKTF-36	2/15/2018	MTBE	**2500**	50	12	143	ug/L
MKTF-36	2/15/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	2/15/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	5/3/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
MKTF-36	5/3/2018	Acetone	ND	500	41	14064	ug/L
MKTF-36	5/3/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	5/3/2018	Benzene	**9400**	500	31	5	ug/L
MKTF-36	5/3/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
MKTF-36	5/3/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	5/3/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	5/3/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
MKTF-36	5/3/2018	Chloroethane	ND	100	12	20857	ug/L
MKTF-36	5/3/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
MKTF-36	5/3/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
MKTF-36	5/3/2018	Carbon Disulfide	ND	500	20	810	ug/L
MKTF-36	5/3/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
MKTF-36	5/3/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
MKTF-36	5/3/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	5/3/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
MKTF-36	5/3/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
MKTF-36	5/3/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	5/3/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
MKTF-36	5/3/2018	2-Butanone	ND	500	57	5565	ug/L
MKTF-36	5/3/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
MKTF-36	5/3/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
MKTF-36	5/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
MKTF-36	5/3/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
MKTF-36	5/3/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	5/3/2018	1,2,4-Trimethylbenzene	42	50	5.6	56	ug/L
MKTF-36	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
MKTF-36	5/3/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
MKTF-36	5/3/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
MKTF-36	5/3/2018	Isopropylbenzene	43	50	2.6	447	ug/L
MKTF-36	5/3/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
MKTF-36	5/3/2018	Ethylbenzene	**1900**	50	4.7	700	ug/L
MKTF-36	5/3/2018	Styrene	ND	50	7.8	100	ug/L
MKTF-36	5/3/2018	n-Propylbenzene	90	50	3.7	660	ug/L
MKTF-36	5/3/2018	n-Butylbenzene	13	150	6.5	1000	ug/L
MKTF-36	5/3/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	5/3/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
MKTF-36	5/3/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	5/3/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
MKTF-36	5/3/2018	1,3,5-Trimethylbenzene	5.7	50	4.4	60	ug/L
MKTF-36	5/3/2018	Bromobenzene	ND	50	7	62	ug/L
MKTF-36	5/3/2018	Toluene	30	50	3.2	1000	ug/L
MKTF-36	5/3/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
MKTF-36	5/3/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
MKTF-36	5/3/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
MKTF-36	5/3/2018	sec-Butylbenzene	7	50	5.5	2000	ug/L
MKTF-36	5/3/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
MKTF-36	5/3/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
MKTF-36	5/3/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	5/3/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
MKTF-36	5/3/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
MKTF-36	5/3/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
MKTF-36	5/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
MKTF-36	5/3/2018	Xylenes, Total	190	75	16	620	ug/L
MKTF-36	5/3/2018	MTBE	**2100**	50	12	143	ug/L
MKTF-36	5/3/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
MKTF-36	5/3/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
MKTF-36	9/5/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
MKTF-36	9/5/2018	Acetone	ND	500	39	14064	ug/L
MKTF-36	9/5/2018	Chloroform	ND	50	20	100	ug/L
MKTF-36	9/5/2018	Benzene	**7400**	500	87	5	ug/L
MKTF-36	9/5/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
MKTF-36	9/5/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
MKTF-36	9/5/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
MKTF-36	9/5/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
MKTF-36	9/5/2018	Chloroethane	ND	100	8.2	20857	ug/L
MKTF-36	9/5/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
MKTF-36	9/5/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/5/2018	Carbon Disulfide	ND	500	19	810	ug/L
MKTF-36	9/5/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-36	9/5/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
MKTF-36	9/5/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
MKTF-36	9/5/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
MKTF-36	9/5/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
MKTF-36	9/5/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
MKTF-36	9/5/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
MKTF-36	9/5/2018	2-Butanone	ND	500	63	5565	ug/L
MKTF-36	9/5/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
MKTF-36	9/5/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
MKTF-36	9/5/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
MKTF-36	9/5/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
MKTF-36	9/5/2018	2-Chlorotoluene	ND	50	20	233	ug/L
MKTF-36	9/5/2018	1,2,4-Trimethylbenzene	39	50	13	56	ug/L
MKTF-36	9/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
MKTF-36	9/5/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
MKTF-36	9/5/2018	tert-Butylbenzene	ND	50	11	690	ug/L
MKTF-36	9/5/2018	Isopropylbenzene	36	50	11	447	ug/L
MKTF-36	9/5/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
MKTF-36	9/5/2018	Ethylbenzene	**1500**	50	11	700	ug/L
MKTF-36	9/5/2018	Styrene	ND	50	13	100	ug/L
MKTF-36	9/5/2018	n-Propylbenzene	80	50	12	660	ug/L
MKTF-36	9/5/2018	n-Butylbenzene	ND	150	12	1000	ug/L
MKTF-36	9/5/2018	4-Chlorotoluene	ND	50	20	250	ug/L
MKTF-36	9/5/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
MKTF-36	9/5/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
MKTF-36	9/5/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
MKTF-36	9/5/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
MKTF-36	9/5/2018	Bromobenzene	ND	50	16	62	ug/L
MKTF-36	9/5/2018	Toluene	19	50	8.4	1000	ug/L
MKTF-36	9/5/2018	Chlorobenzene	ND	50	15	77.6	ug/L
MKTF-36	9/5/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
MKTF-36	9/5/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
MKTF-36	9/5/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
MKTF-36	9/5/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
MKTF-36	9/5/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-36	9/5/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
MKTF-36	9/5/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
MKTF-36	9/5/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
MKTF-36	9/5/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
MKTF-36	9/5/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-36	9/5/2018	Xylenes, Total	110	75	32	620	ug/L
MKTF-36	9/5/2018	MTBE	**1300**	50	16	143	ug/L
MKTF-36	9/5/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
MKTF-36	9/5/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
MKTF-36	9/18/2020	Benzene	**9700**	200	45	5	ug/L
MKTF-36	9/18/2020	Ethylbenzene	**2100**	200	43	700	ug/L
MKTF-36	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
MKTF-36	9/18/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
MKTF-36	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
MKTF-36	9/18/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
MKTF-36	9/18/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
MKTF-36	9/18/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
MKTF-36	9/18/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
MKTF-36	9/18/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
MKTF-36	9/18/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
MKTF-36	9/18/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
MKTF-36	9/18/2020	1,2,4-Trimethylbenzene	**650**	20	2.4	56	ug/L
MKTF-36	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
MKTF-36	9/18/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
MKTF-36	9/18/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
MKTF-36	9/18/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
MKTF-36	9/18/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
MKTF-36	9/18/2020	1,3,5-Trimethylbenzene	**170**	20	3.6	60	ug/L
MKTF-36	9/18/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
MKTF-36	9/18/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
MKTF-36	9/18/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
MKTF-36	9/18/2020	1-Methylnaphthalene	250	80	17	NA	ug/L
MKTF-36	9/18/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
MKTF-36	9/18/2020	2-Butanone	ND	200	22	5565	ug/L
MKTF-36	9/18/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
MKTF-36	9/18/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
MKTF-36	9/18/2020	2-Methylnaphthalene	**420**	80	14		ug/L
MKTF-36	9/18/2020	4-Chlorotoluene	ND	20	10	250	ug/L
MKTF-36	9/18/2020	p-Isopropyltoluene	4.2	20	4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
MKTF-36	9/18/2020	Acetone	ND	200	47	14064	ug/L
MKTF-36	9/18/2020	Bromobenzene	ND	20	5.7	62	ug/L
MKTF-36	9/18/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
MKTF-36	9/18/2020	Bromoform	ND	20	6.3	32.9	ug/L
MKTF-36	9/18/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
MKTF-36	9/18/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
MKTF-36	9/18/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
MKTF-36	9/18/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
MKTF-36	9/18/2020	Chloroethane	ND	40	7.5	20857	ug/L
MKTF-36	9/18/2020	Chloroform	ND	20	2.7	100	ug/L
MKTF-36	9/18/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
MKTF-36	9/18/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
MKTF-36	9/18/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
MKTF-36	9/18/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
MKTF-36	9/18/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
MKTF-36	9/18/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
MKTF-36	9/18/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
MKTF-36	9/18/2020	Isopropylbenzene	73	20	3.7	447	ug/L
MKTF-36	9/18/2020	MTBE	**940**	20	7.9	143	ug/L
MKTF-36	9/18/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
MKTF-36	9/18/2020	n-Butylbenzene	22	60	5.1	1000	ug/L
MKTF-36	9/18/2020	n-Propylbenzene	190	20	3.6	660	ug/L
MKTF-36	9/18/2020	Naphthalene	**610**	40	5.6	30	ug/L
MKTF-36	9/18/2020	sec-Butylbenzene	13	20	12	2000	ug/L
MKTF-36	9/18/2020	Styrene	3.3	20	2.6	100	ug/L
MKTF-36	9/18/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
MKTF-36	9/18/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
MKTF-36	9/18/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
MKTF-36	9/18/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
MKTF-36	9/18/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
MKTF-36	9/18/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
MKTF-36	9/18/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
MKTF-36	9/18/2020	Xylenes, Total	**4400**	30	11	620	ug/L
MKTF-36	9/18/2020	Toluene	**22000**	2000	400	1000	ug/L
MKTF-36	9/18/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-37	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-37	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-37	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-37	11/21/2014	Benzene	**140**	20	3.1	5	ug/L
MKTF-37	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-37	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-37	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-37	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-37	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-37	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-37	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-37	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-37	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-37	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-37	11/21/2014	1,1-Dichloroethane	**34**	1	0.28	25	ug/L
MKTF-37	11/21/2014	1,1-Dichloroethene	**210**	20	4.3	7	ug/L
MKTF-37	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-37	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-37	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-37	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-37	11/21/2014	1,1,2-Trichloroethane	1.7	1	0.14	5	ug/L
MKTF-37	11/21/2014	Trichloroethene	**300**	20	3.9	5	ug/L
MKTF-37	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-37	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-37	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-37	11/21/2014	1,2,4-Trimethylbenzene	**510**	20	2.5	56	ug/L
MKTF-37	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-37	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-37	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-37	11/21/2014	Isopropylbenzene	78	1	0.16	447	ug/L
MKTF-37	11/21/2014	p-Isopropyltoluene	4.8	1	0.18	NA	ug/L
MKTF-37	11/21/2014	Ethylbenzene	9.3	1	0.13	700	ug/L
MKTF-37	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-37	11/21/2014	n-Propylbenzene	82	1	0.14	660	ug/L
MKTF-37	11/21/2014	n-Butylbenzene	26	3	0.21	1000	ug/L
MKTF-37	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-37	11/21/2014	1,2-Dibromoethane	**1.5**	1	0.1	0.05	ug/L
MKTF-37	11/21/2014	1,2-Dichloroethane	**17**	1	0.26	5	ug/L
MKTF-37	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-37	11/21/2014	1,3,5-Trimethylbenzene	**140**	20	2.6	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-37	11/21/2014	Toluene	200	20	3.4	1000	ug/L
MKTF-37	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-37	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-37	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-37	11/21/2014	sec-Butylbenzene	11	1	0.15	2000	ug/L
MKTF-37	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-37	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-37	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-37	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-37	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-37	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-37	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-37	11/21/2014	Xylenes, Total	**1300**	30	7.5	620	ug/L
MKTF-37	11/21/2014	MTBE	27	1	0.25	143	ug/L
MKTF-37	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-37	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-37	3/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-37	3/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-37	3/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-37	3/17/2015	Benzene	**820**	100	6.5	5	ug/L
MKTF-37	3/17/2015	1,1,1-Trichloroethane	8.7	1	0.078	200	ug/L
MKTF-37	3/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-37	3/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-37	3/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-37	3/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-37	3/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-37	3/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-37	3/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-37	3/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-37	3/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-37	3/17/2015	1,1-Dichloroethane	18	1	0.4	25	ug/L
MKTF-37	3/17/2015	1,1-Dichloroethene	**81**	10	0.99	7	ug/L
MKTF-37	3/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-37	3/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-37	3/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-37	3/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-37	3/17/2015	1,1,2-Trichloroethane	2.2	1	0.079	5	ug/L
MKTF-37	3/17/2015	Trichloroethene	**120**	10	1.6	5	ug/L
MKTF-37	3/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-37	3/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-37	3/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-37	3/17/2015	1,2,4-Trimethylbenzene	**240**	10	1.6	56	ug/L
MKTF-37	3/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-37	3/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-37	3/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-37	3/17/2015	Isopropylbenzene	47	1	0.15	447	ug/L
MKTF-37	3/17/2015	p-Isopropyltoluene	4.5	1	0.19	NA	ug/L
MKTF-37	3/17/2015	Ethylbenzene	29	1	0.1	700	ug/L
MKTF-37	3/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-37	3/17/2015	n-Propylbenzene	56	10	1.6	660	ug/L
MKTF-37	3/17/2015	n-Butylbenzene	20	3	0.25	1000	ug/L
MKTF-37	3/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-37	3/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-37	3/17/2015	1,2-Dichloroethane	**9.1**	1	0.18	5	ug/L
MKTF-37	3/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-37	3/17/2015	1,3,5-Trimethylbenzene	**110**	10	1.2	60	ug/L
MKTF-37	3/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-37	3/17/2015	Toluene	270	10	1.1	1000	ug/L
MKTF-37	3/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-37	3/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-37	3/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-37	3/17/2015	sec-Butylbenzene	7.3	1	0.23	2000	ug/L
MKTF-37	3/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-37	3/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-37	3/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-37	3/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-37	3/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-37	3/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-37	3/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-37	3/17/2015	Xylenes, Total	490	15	2.8	620	ug/L
MKTF-37	3/17/2015	MTBE	57	1	0.17	143	ug/L
MKTF-37	3/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-37	3/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-37	6/4/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-37	6/4/2015	Acetone	ND	100	9.4	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	6/4/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-37	6/4/2015	Benzene	**1200**	100	6.5	5	ug/L
MKTF-37	6/4/2015	1,1,1-Trichloroethane	19	10	0.78	200	ug/L
MKTF-37	6/4/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-37	6/4/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-37	6/4/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-37	6/4/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-37	6/4/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-37	6/4/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-37	6/4/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-37	6/4/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-37	6/4/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-37	6/4/2015	1,1-Dichloroethane	15	10	4	25	ug/L
MKTF-37	6/4/2015	1,1-Dichloroethene	**100**	10	0.99	7	ug/L
MKTF-37	6/4/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-37	6/4/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-37	6/4/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	6/4/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-37	6/4/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
MKTF-37	6/4/2015	Trichloroethene	**170**	10	1.6	5	ug/L
MKTF-37	6/4/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-37	6/4/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	6/4/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-37	6/4/2015	1,2,4-Trimethylbenzene	**950**	100	16	56	ug/L
MKTF-37	6/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-37	6/4/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-37	6/4/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-37	6/4/2015	Isopropylbenzene	150	10	1.5	447	ug/L
MKTF-37	6/4/2015	p-Isopropyltoluene	21	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Ethylbenzene	17	10	1	700	ug/L
MKTF-37	6/4/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-37	6/4/2015	n-Propylbenzene	190	10	1.6	660	ug/L
MKTF-37	6/4/2015	n-Butylbenzene	140	30	2.5	1000	ug/L
MKTF-37	6/4/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-37	6/4/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	6/4/2015	1,2-Dichloroethane	**11**	10	1.8	5	ug/L
MKTF-37	6/4/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-37	6/4/2015	1,3,5-Trimethylbenzene	**330**	10	1.2	60	ug/L
MKTF-37	6/4/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-37	6/4/2015	Toluene	58	10	1.1	1000	ug/L
MKTF-37	6/4/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-37	6/4/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-37	6/4/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-37	6/4/2015	sec-Butylbenzene	45	10	2.3	2000	ug/L
MKTF-37	6/4/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	6/4/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-37	6/4/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-37	6/4/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-37	6/4/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-37	6/4/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-37	6/4/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	6/4/2015	Xylenes, Total	**930**	15	2.8	620	ug/L
MKTF-37	6/4/2015	MTBE	54	10	1.7	143	ug/L
MKTF-37	6/4/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	6/4/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	8/18/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
MKTF-37	8/18/2015	Acetone	ND	100	9.4	14064	ug/L
MKTF-37	8/18/2015	Chloroform	ND	10	2.1	100	ug/L
MKTF-37	8/18/2015	Benzene	**760**	10	0.65	5	ug/L
MKTF-37	8/18/2015	1,1,1-Trichloroethane	13	10	0.78	200	ug/L
MKTF-37	8/18/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
MKTF-37	8/18/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
MKTF-37	8/18/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
MKTF-37	8/18/2015	Chloroethane	ND	20	1	20857	ug/L
MKTF-37	8/18/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
MKTF-37	8/18/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
MKTF-37	8/18/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
MKTF-37	8/18/2015	Bromoform	ND	10	1.6	32.9	ug/L
MKTF-37	8/18/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
MKTF-37	8/18/2015	1,1-Dichloroethane	18	10	4	25	ug/L
MKTF-37	8/18/2015	1,1-Dichloroethene	**100**	10	0.99	7	ug/L
MKTF-37	8/18/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-37	8/18/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
MKTF-37	8/18/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/18/2015	2-Butanone	ND	100	3.6	5565	ug/L
MKTF-37	8/18/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/18/2015	Trichloroethene	**270**	10	1.6	5	ug/L
MKTF-37	8/18/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
MKTF-37	8/18/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	8/18/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
MKTF-37	8/18/2015	1,2,4-Trimethylbenzene	**880**	10	1.6	56	ug/L
MKTF-37	8/18/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
MKTF-37	8/18/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
MKTF-37	8/18/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
MKTF-37	8/18/2015	Isopropylbenzene	200	10	1.5	447	ug/L
MKTF-37	8/18/2015	p-Isopropyltoluene	17	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Ethylbenzene	24	10	1	700	ug/L
MKTF-37	8/18/2015	Styrene	ND	10	1.1	100	ug/L
MKTF-37	8/18/2015	n-Propylbenzene	180	10	1.6	660	ug/L
MKTF-37	8/18/2015	n-Butylbenzene	110	30	2.5	1000	ug/L
MKTF-37	8/18/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
MKTF-37	8/18/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	8/18/2015	1,2-Dichloroethane	**13**	10	1.8	5	ug/L
MKTF-37	8/18/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
MKTF-37	8/18/2015	1,3,5-Trimethylbenzene	**270**	10	1.2	60	ug/L
MKTF-37	8/18/2015	Bromobenzene	ND	10	1.1	62	ug/L
MKTF-37	8/18/2015	Toluene	140	10	1.1	1000	ug/L
MKTF-37	8/18/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
MKTF-37	8/18/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
MKTF-37	8/18/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
MKTF-37	8/18/2015	sec-Butylbenzene	35	10	2.3	2000	ug/L
MKTF-37	8/18/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	8/18/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
MKTF-37	8/18/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
MKTF-37	8/18/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
MKTF-37	8/18/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
MKTF-37	8/18/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	8/18/2015	Xylenes, Total	**1600**	300	56	620	ug/L
MKTF-37	8/18/2015	MTBE	50	10	1.7	143	ug/L
MKTF-37	8/18/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	8/18/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	11/3/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-37	11/3/2016	Acetone	ND	100	49	14064	ug/L
MKTF-37	11/3/2016	Chloroform	ND	10	0.89	100	ug/L
MKTF-37	11/3/2016	Benzene	**960**	10	0.96	5	ug/L
MKTF-37	11/3/2016	1,1,1-Trichloroethane	8.1	10	0.91	200	ug/L
MKTF-37	11/3/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
MKTF-37	11/3/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
MKTF-37	11/3/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
MKTF-37	11/3/2016	Chloroethane	ND	20	1.9	20857	ug/L
MKTF-37	11/3/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
MKTF-37	11/3/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
MKTF-37	11/3/2016	Carbon Disulfide	ND	100	6	810	ug/L
MKTF-37	11/3/2016	Bromoform	ND	10	1	32.9	ug/L
MKTF-37	11/3/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
MKTF-37	11/3/2016	1,1-Dichloroethane	**26**	10	1.1	25	ug/L
MKTF-37	11/3/2016	1,1-Dichloroethene	**110**	10	1.1	7	ug/L
MKTF-37	11/3/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
MKTF-37	11/3/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
MKTF-37	11/3/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
MKTF-37	11/3/2016	2-Butanone	35	100	7.4	5565	ug/L
MKTF-37	11/3/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
MKTF-37	11/3/2016	Trichloroethene	**200**	10	1.8	5	ug/L
MKTF-37	11/3/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
MKTF-37	11/3/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
MKTF-37	11/3/2016	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	11/3/2016	1,2,4-Trimethylbenzene	**470**	10	1.1	56	ug/L
MKTF-37	11/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
MKTF-37	11/3/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
MKTF-37	11/3/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
MKTF-37	11/3/2016	Isopropylbenzene	73	10	1	447	ug/L
MKTF-37	11/3/2016	p-Isopropyltoluene	5.5	10	1.4	NA	ug/L
MKTF-37	11/3/2016	Ethylbenzene	14	10	1.1	700	ug/L
MKTF-37	11/3/2016	Styrene	ND	10	1.1	100	ug/L
MKTF-37	11/3/2016	n-Propylbenzene	78	10	1.3	660	ug/L
MKTF-37	11/3/2016	n-Butylbenzene	27	30	1.6	1000	ug/L
MKTF-37	11/3/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
MKTF-37	11/3/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
MKTF-37	11/3/2016	1,2-Dichloroethane	**9.3**	10	1.2	5	ug/L
MKTF-37	11/3/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
MKTF-37	11/3/2016	1,3,5-Trimethylbenzene	**70**	10	1.2	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/3/2016	Bromobenzene	ND	10	0.98	62	ug/L
MKTF-37	11/3/2016	Toluene	12	10	1.2	1000	ug/L
MKTF-37	11/3/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-37	11/3/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
MKTF-37	11/3/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-37	11/3/2016	sec-Butylbenzene	11	10	1.2	2000	ug/L
MKTF-37	11/3/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
MKTF-37	11/3/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-37	11/3/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
MKTF-37	11/3/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
MKTF-37	11/3/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
MKTF-37	11/3/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
MKTF-37	11/3/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
MKTF-37	11/3/2016	Xylenes, Total	**840**	15	3.7	620	ug/L
MKTF-37	11/3/2016	MTBE	30	10	2.1	143	ug/L
MKTF-37	11/3/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
MKTF-37	11/3/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
MKTF-37	3/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-37	3/1/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-37	3/1/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-37	3/1/2017	Benzene	**2000**	50	4.8	5	ug/L
MKTF-37	3/1/2017	1,1,1-Trichloroethane	24	5	0.36	200	ug/L
MKTF-37	3/1/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-37	3/1/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-37	3/1/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-37	3/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-37	3/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-37	3/1/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-37	3/1/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-37	3/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-37	3/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-37	3/1/2017	1,1-Dichloroethane	16	5	0.52	25	ug/L
MKTF-37	3/1/2017	1,1-Dichloroethene	**95**	5	0.4	7	ug/L
MKTF-37	3/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-37	3/1/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-37	3/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-37	3/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-37	3/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-37	3/1/2017	Trichloroethene	**210**	5	0.88	5	ug/L
MKTF-37	3/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-37	3/1/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-37	3/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-37	3/1/2017	1,2,4-Trimethylbenzene	**770**	50	5.2	56	ug/L
MKTF-37	3/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-37	3/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-37	3/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-37	3/1/2017	Isopropylbenzene	82	5	0.49	447	ug/L
MKTF-37	3/1/2017	p-Isopropyltoluene	6.4	5	0.7	NA	ug/L
MKTF-37	3/1/2017	Ethylbenzene	24	5	0.56	700	ug/L
MKTF-37	3/1/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-37	3/1/2017	n-Propylbenzene	110	5	0.66	660	ug/L
MKTF-37	3/1/2017	n-Butylbenzene	49	15	0.8	1000	ug/L
MKTF-37	3/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-37	3/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-37	3/1/2017	1,2-Dichloroethane	**8.3**	5	0.58	5	ug/L
MKTF-37	3/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-37	3/1/2017	1,3,5-Trimethylbenzene	**100**	5	0.58	60	ug/L
MKTF-37	3/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-37	3/1/2017	Toluene	180	5	0.45	1000	ug/L
MKTF-37	3/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-37	3/1/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-37	3/1/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-37	3/1/2017	sec-Butylbenzene	15	5	0.51	2000	ug/L
MKTF-37	3/1/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-37	3/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-37	3/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-37	3/1/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-37	3/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-37	3/1/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-37	3/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-37	3/1/2017	Xylenes, Total	**960**	75	16	620	ug/L
MKTF-37	3/1/2017	MTBE	32	5	0.74	143	ug/L
MKTF-37	3/1/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-37	3/1/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-37	5/3/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
MKTF-37	5/3/2018	Acetone	ND	100	8.2	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	Chloroform	ND	10	4	100	ug/L
MKTF-37	5/3/2018	Benzene	**2100**	100	6.2	5	ug/L
MKTF-37	5/3/2018	1,1,1-Trichloroethane	4.4	10	0.73	200	ug/L
MKTF-37	5/3/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-37	5/3/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-37	5/3/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
MKTF-37	5/3/2018	Chloroethane	ND	20	2.3	20857	ug/L
MKTF-37	5/3/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
MKTF-37	5/3/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
MKTF-37	5/3/2018	Carbon Disulfide	ND	100	4	810	ug/L
MKTF-37	5/3/2018	Bromoform	ND	10	2.1	32.9	ug/L
MKTF-37	5/3/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
MKTF-37	5/3/2018	1,1-Dichloroethane	18	10	4	25	ug/L
MKTF-37	5/3/2018	1,1-Dichloroethene	**67**	10	0.81	7	ug/L
MKTF-37	5/3/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
MKTF-37	5/3/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-37	5/3/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
MKTF-37	5/3/2018	2-Butanone	ND	100	11	5565	ug/L
MKTF-37	5/3/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-37	5/3/2018	Trichloroethene	**190**	10	1.1	5	ug/L
MKTF-37	5/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
MKTF-37	5/3/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
MKTF-37	5/3/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	5/3/2018	1,2,4-Trimethylbenzene	**630**	10	1.1	56	ug/L
MKTF-37	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
MKTF-37	5/3/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
MKTF-37	5/3/2018	tert-Butylbenzene	ND	10	1	690	ug/L
MKTF-37	5/3/2018	Isopropylbenzene	84	10	0.51	447	ug/L
MKTF-37	5/3/2018	p-Isopropyltoluene	7.4	10	0.96	NA	ug/L
MKTF-37	5/3/2018	Ethylbenzene	78	10	0.93	700	ug/L
MKTF-37	5/3/2018	Styrene	ND	10	1.6	100	ug/L
MKTF-37	5/3/2018	n-Propylbenzene	100	10	0.74	660	ug/L
MKTF-37	5/3/2018	n-Butylbenzene	40	30	1.3	1000	ug/L
MKTF-37	5/3/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-37	5/3/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
MKTF-37	5/3/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
MKTF-37	5/3/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
MKTF-37	5/3/2018	1,3,5-Trimethylbenzene	36	10	0.87	60	ug/L
MKTF-37	5/3/2018	Bromobenzene	ND	10	1.4	62	ug/L
MKTF-37	5/3/2018	Toluene	50	10	0.64	1000	ug/L
MKTF-37	5/3/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
MKTF-37	5/3/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
MKTF-37	5/3/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
MKTF-37	5/3/2018	sec-Butylbenzene	15	10	1.1	2000	ug/L
MKTF-37	5/3/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
MKTF-37	5/3/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
MKTF-37	5/3/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-37	5/3/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
MKTF-37	5/3/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
MKTF-37	5/3/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
MKTF-37	5/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
MKTF-37	5/3/2018	Xylenes, Total	580	15	3.2	620	ug/L
MKTF-37	5/3/2018	MTBE	41	10	2.4	143	ug/L
MKTF-37	5/3/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
MKTF-37	5/3/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
MKTF-37	8/23/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
MKTF-37	8/23/2018	Acetone	ND	100	7.9	14064	ug/L
MKTF-37	8/23/2018	Chloroform	ND	10	4	100	ug/L
MKTF-37	8/23/2018	Benzene	**1300**	100	17	5	ug/L
MKTF-37	8/23/2018	1,1,1-Trichloroethane	5.5	10	1.5	200	ug/L
MKTF-37	8/23/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
MKTF-37	8/23/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
MKTF-37	8/23/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
MKTF-37	8/23/2018	Chloroethane	ND	20	1.6	20857	ug/L
MKTF-37	8/23/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-37	8/23/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
MKTF-37	8/23/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
MKTF-37	8/23/2018	Bromoform	ND	10	3.2	32.9	ug/L
MKTF-37	8/23/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
MKTF-37	8/23/2018	1,1-Dichloroethane	24	10	4	25	ug/L
MKTF-37	8/23/2018	1,1-Dichloroethene	**76**	10	1.2	7	ug/L
MKTF-37	8/23/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
MKTF-37	8/23/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
MKTF-37	8/23/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/23/2018	2-Butanone	ND	100	13	5565	ug/L
MKTF-37	8/23/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/23/2018	Trichloroethene	**200**	10	2.6	5	ug/L
MKTF-37	8/23/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
MKTF-37	8/23/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
MKTF-37	8/23/2018	2-Chlorotoluene	ND	10	4	233	ug/L
MKTF-37	8/23/2018	1,2,4-Trimethylbenzene	**530**	10	2.5	56	ug/L
MKTF-37	8/23/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
MKTF-37	8/23/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
MKTF-37	8/23/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
MKTF-37	8/23/2018	Isopropylbenzene	67	10	2.2	447	ug/L
MKTF-37	8/23/2018	p-Isopropyltoluene	6.3	10	2.4	NA	ug/L
MKTF-37	8/23/2018	Ethylbenzene	36	10	2.2	700	ug/L
MKTF-37	8/23/2018	Styrene	ND	10	2.5	100	ug/L
MKTF-37	8/23/2018	n-Propylbenzene	88	10	2.4	660	ug/L
MKTF-37	8/23/2018	n-Butylbenzene	34	30	2.5	1000	ug/L
MKTF-37	8/23/2018	4-Chlorotoluene	ND	10	4	250	ug/L
MKTF-37	8/23/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
MKTF-37	8/23/2018	1,2-Dichloroethane	**14**	10	4	5	ug/L
MKTF-37	8/23/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
MKTF-37	8/23/2018	1,3,5-Trimethylbenzene	35	10	2.3	60	ug/L
MKTF-37	8/23/2018	Bromobenzene	ND	10	3.2	62	ug/L
MKTF-37	8/23/2018	Toluene	14	10	1.7	1000	ug/L
MKTF-37	8/23/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
MKTF-37	8/23/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
MKTF-37	8/23/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
MKTF-37	8/23/2018	sec-Butylbenzene	13	10	2	2000	ug/L
MKTF-37	8/23/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
MKTF-37	8/23/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
MKTF-37	8/23/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
MKTF-37	8/23/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
MKTF-37	8/23/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
MKTF-37	8/23/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
MKTF-37	8/23/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
MKTF-37	8/23/2018	Xylenes, Total	370	15	6.4	620	ug/L
MKTF-37	8/23/2018	MTBE	37	10	3.2	143	ug/L
MKTF-37	8/23/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
MKTF-37	8/23/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-37	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-37	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-37	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-37	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-37	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-37	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-37	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-37	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-37	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-37	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-37	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-37	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-37	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-37	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-37	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-37	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-37	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-37	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-37	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-37	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-37	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-37	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-37	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-37	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-37	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-37	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-37	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-37	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-37	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-37	5/14/2019	Acetone	6.4	10	1.199396	14064	ug/L
MKTF-37	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-37	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-37	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-37	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-37	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-37	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-37	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-37	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-37	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-37	5/14/2019	Chloroform	0.79	1	0.121891	100	ug/L
MKTF-37	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-37	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-37	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-37	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-37	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-37	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-37	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-37	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-37	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-37	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-37	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-37	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-37	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-37	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-37	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-37	5/14/2019	Tetrachloroethene	0.45	1	0.149525	5	ug/L
MKTF-37	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-37	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-37	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-37	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-37	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-37	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-37	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-37	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-37	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-37	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-37	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-37	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-37	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-37	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-37	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-37	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-37	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-37	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-37	5/14/2019	Acetone	5.2	10	1.199396	14064	ug/L
MKTF-37	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-37	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-37	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-37	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-37	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-37	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-37	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-37	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-37	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-37	5/14/2019	Chloroform	0.78	1	0.121891	100	ug/L
MKTF-37	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-37	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-37	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-37	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-37	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-37	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-37	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-37	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-37	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-37	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-37	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-37	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-37	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-37	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-37	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-37	5/14/2019	Tetrachloroethene	0.51	1	0.149525	5	ug/L
MKTF-37	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-37	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-37	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-37	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-37	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-37	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-37	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
MKTF-37	5/14/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-37	9/17/2020	1,2,4-Trimethylbenzene	**580**	50	6.1	56	ug/L
MKTF-37	9/17/2020	Benzene	**1300**	50	11	5	ug/L
MKTF-37	9/17/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-37	9/17/2020	1,1,1-Trichloroethane	2.3	5	1.5	200	ug/L
MKTF-37	9/17/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-37	9/17/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-37	9/17/2020	1,1-Dichloroethane	8.1	5	1.4	25	ug/L
MKTF-37	9/17/2020	1,1-Dichloroethene	**33**	5	0.65	7	ug/L
MKTF-37	9/17/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-37	9/17/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-37	9/17/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-37	9/17/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-37	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-37	9/17/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-37	9/17/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-37	9/17/2020	1,2-Dichloroethane	**5.4**	5	1.1	5	ug/L
MKTF-37	9/17/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-37	9/17/2020	1,3,5-Trimethylbenzene	30	5	0.91	60	ug/L
MKTF-37	9/17/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-37	9/17/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-37	9/17/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-37	9/17/2020	1-Methylnaphthalene	53	20	4.2	NA	ug/L
MKTF-37	9/17/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-37	9/17/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-37	9/17/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-37	9/17/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-37	9/17/2020	2-Methylnaphthalene	**77**	20	3.5		ug/L
MKTF-37	9/17/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-37	9/17/2020	p-Isopropyltoluene	7.1	5	1	NA	ug/L
MKTF-37	9/17/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-37	9/17/2020	Acetone	ND	50	12	14064	ug/L
MKTF-37	9/17/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-37	9/17/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-37	9/17/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-37	9/17/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-37	9/17/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-37	9/17/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-37	9/17/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-37	9/17/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-37	9/17/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-37	9/17/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-37	9/17/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-37	9/17/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-37	9/17/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-37	9/17/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-37	9/17/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-37	9/17/2020	Ethylbenzene	81	5	1.1	700	ug/L
MKTF-37	9/17/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-37	9/17/2020	Isopropylbenzene	71	5	0.91	447	ug/L
MKTF-37	9/17/2020	MTBE	33	5	2	143	ug/L
MKTF-37	9/17/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-37	9/17/2020	n-Butylbenzene	39	15	1.3	1000	ug/L
MKTF-37	9/17/2020	n-Propylbenzene	89	5	0.91	660	ug/L
MKTF-37	9/17/2020	Naphthalene	**280**	10	1.4	30	ug/L
MKTF-37	9/17/2020	sec-Butylbenzene	14	5	3	2000	ug/L
MKTF-37	9/17/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-37	9/17/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-37	9/17/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-37	9/17/2020	Toluene	26	5	1	1000	ug/L
MKTF-37	9/17/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-37	9/17/2020	Trichloroethene	**96**	5	1	5	ug/L
MKTF-37	9/17/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-37	9/17/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-37	9/17/2020	Xylenes, Total	420	7.5	2.8	620	ug/L
MKTF-37	9/17/2020	1,2-Dibromoethane	0.012	0.0094	0.0062	0.05	ug/L
MKTF-38	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-38	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-38	11/21/2014	Benzene	2.8	1	0.15	5	ug/L
MKTF-38	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-38	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-38	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-38	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-38	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-38	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-38	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-38	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-38	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-38	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-38	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-38	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-38	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-38	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-38	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-38	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	11/21/2014	Trichloroethene	1.1	1	0.19	5	ug/L
MKTF-38	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-38	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-38	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	11/21/2014	1,2,4-Trimethylbenzene	4.6	1	0.12	56	ug/L
MKTF-38	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-38	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-38	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-38	11/21/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-38	11/21/2014	p-Isopropyltoluene	1.4	1	0.18	NA	ug/L
MKTF-38	11/21/2014	Ethylbenzene	2.9	1	0.13	700	ug/L
MKTF-38	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-38	11/21/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-38	11/21/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-38	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-38	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-38	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-38	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	11/21/2014	1,3,5-Trimethylbenzene	1.5	1	0.13	60	ug/L
MKTF-38	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-38	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-38	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-38	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-38	11/21/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-38	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-38	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-38	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-38	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-38	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-38	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-38	11/21/2014	Xylenes, Total	3.1	1.5	0.38	620	ug/L
MKTF-38	11/21/2014	MTBE	7.4	1	0.25	143	ug/L
MKTF-38	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-38	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	3/16/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	3/16/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	3/16/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	3/16/2015	Benzene	**9.2**	1	0.065	5	ug/L
MKTF-38	3/16/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	3/16/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	3/16/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	3/16/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	3/16/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	3/16/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	3/16/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	3/16/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	3/16/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/16/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	3/16/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	3/16/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	3/16/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	3/16/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	3/16/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	3/16/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	3/16/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	3/16/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	3/16/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	3/16/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	3/16/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	3/16/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	3/16/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	3/16/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	3/16/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	3/16/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	3/16/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	3/16/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	3/16/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	3/16/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	3/16/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	3/16/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	3/16/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	3/16/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	3/16/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	3/16/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	3/16/2015	Toluene	18	1	0.11	1000	ug/L
MKTF-38	3/16/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	3/16/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	3/16/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	3/16/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	3/16/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	3/16/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	3/16/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	3/16/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	3/16/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	3/16/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	3/16/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	3/16/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	3/16/2015	MTBE	6	1	0.17	143	ug/L
MKTF-38	3/16/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	3/16/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	6/10/2015	Benzene	**5.4**	1	0.065	5	ug/L
MKTF-38	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	6/10/2015	MTBE	7.6	1	0.17	143	ug/L
MKTF-38	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	8/24/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	8/24/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	8/24/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	8/24/2015	Benzene	1.7	1	0.065	5	ug/L
MKTF-38	8/24/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	8/24/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	8/24/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	8/24/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	8/24/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	8/24/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	8/24/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	8/24/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	8/24/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	8/24/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	8/24/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	8/24/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	8/24/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	8/24/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	8/24/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	8/24/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	8/24/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	8/24/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	8/24/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	8/24/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	8/24/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	8/24/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	8/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	8/24/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	8/24/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	8/24/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	8/24/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	8/24/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	8/24/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	8/24/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	8/24/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	8/24/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	8/24/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	8/24/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	8/24/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	8/24/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	8/24/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	8/24/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	8/24/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	8/24/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	8/24/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	8/24/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	8/24/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	8/24/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	8/24/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	8/24/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	8/24/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/24/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	8/24/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	8/24/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	8/24/2015	MTBE	7.3	1	0.17	143	ug/L
MKTF-38	8/24/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	8/24/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-38	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-38	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-38	11/9/2015	Benzene	1.3	1	0.065	5	ug/L
MKTF-38	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-38	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-38	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-38	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-38	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-38	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-38	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-38	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-38	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-38	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-38	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-38	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-38	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-38	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-38	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-38	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-38	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-38	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-38	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-38	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-38	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-38	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-38	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-38	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-38	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-38	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-38	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-38	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-38	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-38	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-38	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-38	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-38	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-38	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-38	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-38	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-38	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-38	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-38	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-38	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-38	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-38	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-38	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-38	11/9/2015	MTBE	4.3	1	0.17	143	ug/L
MKTF-38	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	2/29/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	2/29/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-38	2/29/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	2/29/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-38	2/29/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-38	2/29/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	2/29/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	2/29/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	2/29/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-38	2/29/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-38	2/29/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-38	2/29/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	2/29/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-38	2/29/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-38	2/29/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-38	2/29/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-38	2/29/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-38	2/29/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-38	2/29/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-38	2/29/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-38	2/29/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-38	2/29/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-38	2/29/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	2/29/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	2/29/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-38	2/29/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-38	2/29/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-38	2/29/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-38	2/29/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-38	2/29/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	2/29/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	2/29/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-38	2/29/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	2/29/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	2/29/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	2/29/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	2/29/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-38	2/29/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-38	2/29/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	2/29/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-38	2/29/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-38	2/29/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-38	2/29/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	2/29/2016	Tetrachloroethene	1.1	1	0.15	5	ug/L
MKTF-38	2/29/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	2/29/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	2/29/2016	cis-1,2-Dichloroethene	1.3	1	0.12	70	ug/L
MKTF-38	2/29/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	2/29/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	2/29/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-38	2/29/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-38	2/29/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	2/29/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	2/29/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-38	2/29/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	2/29/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-38	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	6/8/2016	Benzene	1.2	1	0.096	5	ug/L
MKTF-38	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	6/8/2016	Vinyl Chloride	0.67	1	0.2	2	ug/L
MKTF-38	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	6/8/2016	1,1-Dichloroethane	2.2	1	0.11	25	ug/L
MKTF-38	6/8/2016	1,1-Dichloroethene	0.39	1	0.11	7	ug/L
MKTF-38	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	6/8/2016	Trichloroethene	0.23	1	0.18	5	ug/L
MKTF-38	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	6/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	6/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	6/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	6/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	6/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	6/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	6/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	6/8/2016	Tetrachloroethene	0.9	1	0.15	5	ug/L
MKTF-38	6/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	6/8/2016	cis-1,2-Dichloroethene	2.3	1	0.12	70	ug/L
MKTF-38	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-38	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	6/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	6/8/2016	MTBE	0.52	1	0.21	143	ug/L
MKTF-38	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	9/13/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	9/13/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	9/13/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-38	9/13/2016	Benzene	0.93	1	0.096	5	ug/L
MKTF-38	9/13/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	9/13/2016	Bromomethane	1.1	3	0.78	7.54	ug/L
MKTF-38	9/13/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	9/13/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	9/13/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	9/13/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	9/13/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	9/13/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	9/13/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	9/13/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	9/13/2016	1,1-Dichloroethane	2.1	1	0.11	25	ug/L
MKTF-38	9/13/2016	1,1-Dichloroethene	0.49	1	0.11	7	ug/L
MKTF-38	9/13/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	9/13/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	9/13/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	9/13/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	9/13/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	9/13/2016	Trichloroethene	0.2	1	0.18	5	ug/L
MKTF-38	9/13/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	9/13/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	9/13/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	9/13/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	9/13/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	9/13/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	9/13/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	9/13/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	9/13/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	9/13/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	9/13/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	9/13/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	9/13/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	9/13/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	9/13/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	9/13/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	9/13/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	9/13/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	9/13/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	9/13/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	9/13/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	9/13/2016	Tetrachloroethene	0.21	1	0.15	5	ug/L
MKTF-38	9/13/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	9/13/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	9/13/2016	cis-1,2-Dichloroethene	1.8	1	0.12	70	ug/L
MKTF-38	9/13/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	9/13/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	9/13/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/13/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	9/13/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	9/13/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	9/13/2016	MTBE	0.6	1	0.21	143	ug/L
MKTF-38	9/13/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	9/13/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-38	11/1/2016	Chloroform	0.13	1	0.089	100	ug/L
MKTF-38	11/1/2016	Benzene	0.39	1	0.096	5	ug/L
MKTF-38	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-38	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-38	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-38	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-38	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-38	11/1/2016	1,1-Dichloroethane	2.9	1	0.11	25	ug/L
MKTF-38	11/1/2016	1,1-Dichloroethene	0.53	1	0.11	7	ug/L
MKTF-38	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-38	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-38	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-38	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-38	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-38	11/1/2016	Trichloroethene	0.22	1	0.18	5	ug/L
MKTF-38	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-38	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	11/1/2016	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-38	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-38	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-38	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-38	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-38	11/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	11/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	11/1/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-38	11/1/2016	n-Propylbenzene	0.21	1	0.13	660	ug/L
MKTF-38	11/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-38	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-38	11/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-38	11/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-38	11/1/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-38	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-38	11/1/2016	Tetrachloroethene	0.2	1	0.15	5	ug/L
MKTF-38	11/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-38	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	11/1/2016	cis-1,2-Dichloroethene	2.4	1	0.12	70	ug/L
MKTF-38	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-38	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-38	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-38	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-38	11/1/2016	MTBE	1	1	0.21	143	ug/L
MKTF-38	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-38	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	3/14/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	3/14/2017	Acetone	1.7	10	0.88	14064	ug/L
MKTF-38	3/14/2017	Chloroform	0.16	1	0.089	100	ug/L
MKTF-38	3/14/2017	Benzene	0.17	1	0.096	5	ug/L
MKTF-38	3/14/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	3/14/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-38	3/14/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-38	3/14/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-38	3/14/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	3/14/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	3/14/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	3/14/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-38	3/14/2017	Bromoform	ND	1	0.21	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/14/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	3/14/2017	1,1-Dichloroethane	1	1	0.1	25	ug/L
MKTF-38	3/14/2017	1,1-Dichloroethene	0.19	1	0.081	7	ug/L
MKTF-38	3/14/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	3/14/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-38	3/14/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	3/14/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	3/14/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	3/14/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-38	3/14/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	3/14/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-38	3/14/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	3/14/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-38	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	3/14/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	3/14/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	3/14/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-38	3/14/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-38	3/14/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-38	3/14/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	3/14/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-38	3/14/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-38	3/14/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	3/14/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	3/14/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-38	3/14/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	3/14/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-38	3/14/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	3/14/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-38	3/14/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	3/14/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-38	3/14/2017	Tetrachloroethene	0.58	1	0.15	5	ug/L
MKTF-38	3/14/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-38	3/14/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-38	3/14/2017	cis-1,2-Dichloroethene	0.88	1	0.2	70	ug/L
MKTF-38	3/14/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	3/14/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-38	3/14/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	3/14/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-38	3/14/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-38	3/14/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	3/14/2017	MTBE	0.48	1	0.15	143	ug/L
MKTF-38	3/14/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-38	3/14/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-38	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	6/21/2017	Acetone	3.3	10	0.82	14064	ug/L
MKTF-38	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	6/21/2017	Benzene	0.79	1	0.062	5	ug/L
MKTF-38	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	6/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	6/21/2017	tert-Butylbenzene	0.22	1	0.1	690	ug/L
MKTF-38	6/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	6/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	6/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	6/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	6/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	6/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	6/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	6/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	6/21/2017	Tetrachloroethene	0.16	1	0.13	5	ug/L
MKTF-38	6/21/2017	sec-Butylbenzene	0.89	1	0.11	2000	ug/L
MKTF-38	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	6/21/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-38	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	6/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	6/21/2017	MTBE	0.68	1	0.24	143	ug/L
MKTF-38	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	9/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	9/28/2017	Acetone	5.8	10	0.82	14064	ug/L
MKTF-38	9/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	9/28/2017	Benzene	2	1	0.062	5	ug/L
MKTF-38	9/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	9/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	9/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	9/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	9/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	9/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	9/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	9/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	9/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	9/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	9/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	9/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	9/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	9/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	9/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	9/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	9/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	9/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	9/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	9/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	9/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	9/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	9/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	9/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	9/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	9/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	9/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	9/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	9/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	9/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	9/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	9/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	9/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	9/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	9/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	9/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	9/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	9/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	9/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	9/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-38	9/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	9/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	9/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	9/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	9/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	9/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	9/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	9/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	9/28/2017	MTBE	0.49	1	0.24	143	ug/L
MKTF-38	9/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	9/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	11/30/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	11/30/2017	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	11/30/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	11/30/2017	Benzene	1.2	1	0.062	5	ug/L
MKTF-38	11/30/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	11/30/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	11/30/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	11/30/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	11/30/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	11/30/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	11/30/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	11/30/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	11/30/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	11/30/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	11/30/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	11/30/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	11/30/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	11/30/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	11/30/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	11/30/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	11/30/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	11/30/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	11/30/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	11/30/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	11/30/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	11/30/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	11/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	11/30/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	11/30/2017	tert-Butylbenzene	0.16	1	0.1	690	ug/L
MKTF-38	11/30/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	11/30/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	11/30/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	11/30/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-38	11/30/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	11/30/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	11/30/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	11/30/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	11/30/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	11/30/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	11/30/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	11/30/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	11/30/2017	Toluene	0.074	1	0.064	1000	ug/L
MKTF-38	11/30/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	11/30/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	11/30/2017	Tetrachloroethene	0.19	1	0.13	5	ug/L
MKTF-38	11/30/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	11/30/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	11/30/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	11/30/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	11/30/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	11/30/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	11/30/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	11/30/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	11/30/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	11/30/2017	MTBE	1	1	0.24	143	ug/L
MKTF-38	11/30/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	11/30/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	2/12/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	2/12/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	2/12/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	2/12/2018	Benzene	0.18	1	0.062	5	ug/L
MKTF-38	2/12/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	2/12/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	2/12/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	2/12/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	2/12/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	2/12/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	2/12/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	2/12/2018	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/12/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	2/12/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	2/12/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	2/12/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	2/12/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	2/12/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	2/12/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	2/12/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	2/12/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	2/12/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	2/12/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	2/12/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	2/12/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	2/12/2018	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
MKTF-38	2/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	2/12/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	2/12/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	2/12/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	2/12/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-38	2/12/2018	Ethylbenzene	0.13	1	0.093	700	ug/L
MKTF-38	2/12/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-38	2/12/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	2/12/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	2/12/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	2/12/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	2/12/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	2/12/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	2/12/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	2/12/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	2/12/2018	Toluene	0.19	1	0.064	1000	ug/L
MKTF-38	2/12/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	2/12/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	2/12/2018	Tetrachloroethene	0.15	1	0.13	5	ug/L
MKTF-38	2/12/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	2/12/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	2/12/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	2/12/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	2/12/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	2/12/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	2/12/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	2/12/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	2/12/2018	Xylenes, Total	0.57	1.5	0.32	620	ug/L
MKTF-38	2/12/2018	MTBE	1	1	0.24	143	ug/L
MKTF-38	2/12/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	2/12/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	5/3/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-38	5/3/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-38	5/3/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	5/3/2018	Benzene	0.3	1	0.062	5	ug/L
MKTF-38	5/3/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-38	5/3/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	5/3/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	5/3/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-38	5/3/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-38	5/3/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-38	5/3/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-38	5/3/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-38	5/3/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-38	5/3/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-38	5/3/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	5/3/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-38	5/3/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-38	5/3/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	5/3/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-38	5/3/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	5/3/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-38	5/3/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-38	5/3/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-38	5/3/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-38	5/3/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	5/3/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-38	5/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-38	5/3/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-38	5/3/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-38	5/3/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-38	5/3/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-38	5/3/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-38	5/3/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-38	5/3/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-38	5/3/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	5/3/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-38	5/3/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	5/3/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-38	5/3/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-38	5/3/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-38	5/3/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-38	5/3/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-38	5/3/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-38	5/3/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-38	5/3/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-38	5/3/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-38	5/3/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-38	5/3/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	5/3/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-38	5/3/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-38	5/3/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-38	5/3/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-38	5/3/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-38	5/3/2018	MTBE	0.78	1	0.24	143	ug/L
MKTF-38	5/3/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-38	5/3/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-38	8/21/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-38	8/21/2018	Acetone	3.7	10	0.79	14064	ug/L
MKTF-38	8/21/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-38	8/21/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-38	8/21/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-38	8/21/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-38	8/21/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-38	8/21/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-38	8/21/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-38	8/21/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-38	8/21/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-38	8/21/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-38	8/21/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-38	8/21/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-38	8/21/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-38	8/21/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-38	8/21/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-38	8/21/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-38	8/21/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-38	8/21/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-38	8/21/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-38	8/21/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-38	8/21/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-38	8/21/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-38	8/21/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-38	8/21/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-38	8/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-38	8/21/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-38	8/21/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-38	8/21/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-38	8/21/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-38	8/21/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-38	8/21/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-38	8/21/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-38	8/21/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	8/21/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-38	8/21/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-38	8/21/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-38	8/21/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-38	8/21/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-38	8/21/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-38	8/21/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-38	8/21/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-38	8/21/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-38	8/21/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-38	8/21/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-38	8/21/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-38	8/21/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-38	8/21/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	8/21/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/21/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-38	8/21/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-38	8/21/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-38	8/21/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-38	8/21/2018	MTBE	0.36	1	0.32	143	ug/L
MKTF-38	8/21/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-38	8/21/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-38	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-38	11/20/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-38	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-38	11/20/2018	Benzene	1.2	1	0.17	5	ug/L
MKTF-38	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-38	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-38	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-38	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-38	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-38	11/20/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-38	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-38	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-38	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-38	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-38	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-38	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-38	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-38	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-38	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-38	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-38	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-38	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-38	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-38	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-38	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-38	11/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-38	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-38	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-38	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-38	11/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-38	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-38	11/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-38	11/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-38	11/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-38	11/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-38	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-38	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-38	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-38	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-38	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-38	11/20/2018	Toluene	53	1	0.17	1000	ug/L
MKTF-38	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-38	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-38	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-38	11/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-38	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-38	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-38	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-38	11/20/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-38	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-38	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-38	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-38	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-38	11/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-38	11/20/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-38	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-38	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-38	6/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-38	6/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-38	6/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-38	6/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-38	6/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-38	6/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-38	6/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-38	6/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-38	6/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-38	6/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-38	6/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-38	6/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-38	6/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-38	6/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-38	6/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-38	6/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-38	6/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-38	6/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-38	6/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-38	6/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-38	6/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-38	6/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-38	6/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-38	6/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-38	6/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-38	6/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-38	6/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-38	6/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-38	6/27/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-38	6/27/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-38	6/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-38	6/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-38	6/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-38	6/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-38	6/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-38	6/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-38	6/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-38	6/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-38	6/27/2019	Chloroform	1.1	1	0.121891	100	ug/L
MKTF-38	6/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-38	6/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-38	6/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-38	6/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-38	6/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-38	6/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-38	6/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-38	6/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-38	6/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-38	6/27/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-38	6/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-38	6/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-38	6/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-38	6/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-38	6/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-38	6/27/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-38	6/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-38	6/27/2019	Tetrachloroethene	0.79	1	0.149525	5	ug/L
MKTF-38	6/27/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-38	6/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-38	6/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-38	6/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-38	6/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-38	6/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-38	6/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-38	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-38	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-38	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-38	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-38	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-38	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-38	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-38	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-38	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-38	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-38	8/20/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-38	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-38	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-38	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-38	8/20/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-38	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-38	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-38	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-38	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-38	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-38	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-38	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-38	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-38	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-38	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-38	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-38	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-38	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-38	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-38	8/20/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-38	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-38	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-38	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-38	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-38	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-38	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-38	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-38	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-38	8/20/2019	Chloroform	0.36	1	0.121891	100	ug/L
MKTF-38	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-38	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-38	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-38	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-38	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-38	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-38	8/20/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-38	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-38	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-38	8/20/2019	MTBE	0.56	1	0.456095	143	ug/L
MKTF-38	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-38	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-38	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-38	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-38	8/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-38	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-38	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-38	8/20/2019	Tetrachloroethene	0.44	1	0.149525	5	ug/L
MKTF-38	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-38	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-38	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-38	8/20/2019	Trichloroethene	0.25	1	0.166272	5	ug/L
MKTF-38	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-38	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-38	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-38	3/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-38	3/5/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-38	3/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-38	3/5/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-38	3/5/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-38	3/5/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-38	3/5/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	3/5/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-38	3/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-38	3/5/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-38	3/5/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-38	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-38	3/5/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-38	3/5/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-38	3/5/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-38	3/5/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-38	3/5/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-38	3/5/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-38	3/5/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	3/5/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-38	3/5/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-38	3/5/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-38	3/5/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	3/5/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	3/5/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-38	3/5/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-38	3/5/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-38	3/5/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-38	3/5/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	3/5/2020	Acetone	3.6	10	2.3	14064	ug/L
MKTF-38	3/5/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-38	3/5/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-38	3/5/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/5/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-38	3/5/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-38	3/5/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-38	3/5/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-38	3/5/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	3/5/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-38	3/5/2020	Chloroform	0.53	1	0.13	100	ug/L
MKTF-38	3/5/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-38	3/5/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-38	3/5/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-38	3/5/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-38	3/5/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-38	3/5/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-38	3/5/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-38	3/5/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-38	3/5/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-38	3/5/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-38	3/5/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-38	3/5/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	3/5/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-38	3/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-38	3/5/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-38	3/5/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-38	3/5/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-38	3/5/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-38	3/5/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-38	3/5/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-38	3/5/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-38	3/5/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-38	3/5/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	3/5/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-38	3/5/2020	Toluene	**1300**	20	4	1000	ug/L
MKTF-38	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-38	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-38	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-38	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-38	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-38	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-38	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-38	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-38	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-38	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-38	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-38	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-38	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-38	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-38	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-38	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-38	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-38	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-38	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-38	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-38	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-38	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-38	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-38	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-38	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-38	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-38	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-38	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-38	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-38	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-38	9/19/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-38	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-38	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-38	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-38	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-38	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-38	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-38	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-38	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-38	9/19/2020	Chloroform	0.8	1	0.13	100	ug/L
MKTF-38	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-38	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-38	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-38	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-38	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-38	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-38	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-38	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-38	9/19/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-38	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-38	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-38	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-38	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-38	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-38	9/19/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-38	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-38	9/19/2020	Tetrachloroethene	0.57	1	0.36	5	ug/L
MKTF-38	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-38	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-38	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-38	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-38	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-38	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-38	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-39	11/18/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
MKTF-39	11/18/2014	Acetone	ND	50	25	14064	ug/L
MKTF-39	11/18/2014	Chloroform	ND	5	1.6	100	ug/L
MKTF-39	11/18/2014	Benzene	**20**	5	0.77	5	ug/L
MKTF-39	11/18/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
MKTF-39	11/18/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
MKTF-39	11/18/2014	Chloromethane	ND	15	2.6	20.32	ug/L
MKTF-39	11/18/2014	Dibromomethane	ND	5	0.94	8	ug/L
MKTF-39	11/18/2014	Chloroethane	ND	10	2.4	20857	ug/L
MKTF-39	11/18/2014	Vinyl Chloride	*ND*	*5*	0.53	2	ug/L
MKTF-39	11/18/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
MKTF-39	11/18/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
MKTF-39	11/18/2014	Bromoform	ND	5	1.3	32.9	ug/L
MKTF-39	11/18/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
MKTF-39	11/18/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-39	11/18/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
MKTF-39	11/18/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
MKTF-39	11/18/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
MKTF-39	11/18/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
MKTF-39	11/18/2014	2-Butanone	ND	50	7.1	5565	ug/L
MKTF-39	11/18/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
MKTF-39	11/18/2014	Trichloroethene	ND	5	0.97	5	ug/L
MKTF-39	11/18/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
MKTF-39	11/18/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
MKTF-39	11/18/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
MKTF-39	11/18/2014	1,2,4-Trimethylbenzene	43	5	0.61	56	ug/L
MKTF-39	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
MKTF-39	11/18/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
MKTF-39	11/18/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
MKTF-39	11/18/2014	Isopropylbenzene	15	5	0.81	447	ug/L
MKTF-39	11/18/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
MKTF-39	11/18/2014	Ethylbenzene	60	5	0.64	700	ug/L
MKTF-39	11/18/2014	Styrene	ND	5	0.58	100	ug/L
MKTF-39	11/18/2014	n-Propylbenzene	19	5	0.7	660	ug/L
MKTF-39	11/18/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
MKTF-39	11/18/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
MKTF-39	11/18/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
MKTF-39	11/18/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
MKTF-39	11/18/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-39	11/18/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
MKTF-39	11/18/2014	Bromobenzene	ND	5	0.91	62	ug/L
MKTF-39	11/18/2014	Toluene	ND	5	0.85	1000	ug/L
MKTF-39	11/18/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
MKTF-39	11/18/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
MKTF-39	11/18/2014	Tetrachloroethene	ND	5	1	5	ug/L
MKTF-39	11/18/2014	sec-Butylbenzene	5.5	5	0.77	2000	ug/L
MKTF-39	11/18/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-39	11/18/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
MKTF-39	11/18/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
MKTF-39	11/18/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	11/18/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
MKTF-39	11/18/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-39	11/18/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
MKTF-39	11/18/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
MKTF-39	11/18/2014	MTBE	ND	5	1.3	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/18/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
MKTF-39	11/18/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
MKTF-39	3/16/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-39	3/16/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-39	3/16/2015	Chloroform	2.2	2	0.43	100	ug/L
MKTF-39	3/16/2015	Benzene	**16**	2	0.13	5	ug/L
MKTF-39	3/16/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-39	3/16/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-39	3/16/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-39	3/16/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-39	3/16/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-39	3/16/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-39	3/16/2015	Methylene Chloride	**6.3**	6	0.72	5	ug/L
MKTF-39	3/16/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-39	3/16/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-39	3/16/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-39	3/16/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-39	3/16/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-39	3/16/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-39	3/16/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-39	3/16/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-39	3/16/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-39	3/16/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-39	3/16/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	3/16/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-39	3/16/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-39	3/16/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-39	3/16/2015	1,2,4-Trimethylbenzene	**64**	2	0.32	56	ug/L
MKTF-39	3/16/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-39	3/16/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-39	3/16/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-39	3/16/2015	Isopropylbenzene	11	2	0.3	447	ug/L
MKTF-39	3/16/2015	p-Isopropyltoluene	5.2	2	0.38	NA	ug/L
MKTF-39	3/16/2015	Ethylbenzene	39	2	0.2	700	ug/L
MKTF-39	3/16/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-39	3/16/2015	n-Propylbenzene	14	2	0.33	660	ug/L
MKTF-39	3/16/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-39	3/16/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-39	3/16/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-39	3/16/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-39	3/16/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-39	3/16/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-39	3/16/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-39	3/16/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-39	3/16/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-39	3/16/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-39	3/16/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-39	3/16/2015	sec-Butylbenzene	5.7	2	0.46	2000	ug/L
MKTF-39	3/16/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-39	3/16/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-39	3/16/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-39	3/16/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	3/16/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-39	3/16/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-39	3/16/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-39	3/16/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-39	3/16/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-39	3/16/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-39	3/16/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	6/10/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-39	6/10/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-39	6/10/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-39	6/10/2015	Benzene	**25**	2	0.13	5	ug/L
MKTF-39	6/10/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-39	6/10/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-39	6/10/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-39	6/10/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-39	6/10/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-39	6/10/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-39	6/10/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-39	6/10/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-39	6/10/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-39	6/10/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-39	6/10/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-39	6/10/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-39	6/10/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/10/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-39	6/10/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-39	6/10/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-39	6/10/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-39	6/10/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	6/10/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-39	6/10/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-39	6/10/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-39	6/10/2015	1,2,4-Trimethylbenzene	**120**	2	0.32	56	ug/L
MKTF-39	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-39	6/10/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-39	6/10/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-39	6/10/2015	Isopropylbenzene	20	2	0.3	447	ug/L
MKTF-39	6/10/2015	p-Isopropyltoluene	8.1	2	0.38	NA	ug/L
MKTF-39	6/10/2015	Ethylbenzene	64	2	0.2	700	ug/L
MKTF-39	6/10/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-39	6/10/2015	n-Propylbenzene	28	2	0.33	660	ug/L
MKTF-39	6/10/2015	n-Butylbenzene	7.1	6	0.49	1000	ug/L
MKTF-39	6/10/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-39	6/10/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-39	6/10/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-39	6/10/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-39	6/10/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-39	6/10/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-39	6/10/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-39	6/10/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-39	6/10/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-39	6/10/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-39	6/10/2015	sec-Butylbenzene	12	2	0.46	2000	ug/L
MKTF-39	6/10/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-39	6/10/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-39	6/10/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-39	6/10/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	6/10/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-39	6/10/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-39	6/10/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-39	6/10/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-39	6/10/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-39	6/10/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-39	6/10/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-39	8/23/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-39	8/23/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-39	8/23/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-39	8/23/2015	Benzene	**23**	1	0.065	5	ug/L
MKTF-39	8/23/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-39	8/23/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-39	8/23/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-39	8/23/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-39	8/23/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-39	8/23/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-39	8/23/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-39	8/23/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-39	8/23/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-39	8/23/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-39	8/23/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-39	8/23/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-39	8/23/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-39	8/23/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-39	8/23/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	8/23/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-39	8/23/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-39	8/23/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-39	8/23/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-39	8/23/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-39	8/23/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-39	8/23/2015	1,2,4-Trimethylbenzene	**98**	1	0.16	56	ug/L
MKTF-39	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-39	8/23/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-39	8/23/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-39	8/23/2015	Isopropylbenzene	20	1	0.15	447	ug/L
MKTF-39	8/23/2015	p-Isopropyltoluene	7.3	1	0.19	NA	ug/L
MKTF-39	8/23/2015	Ethylbenzene	60	1	0.1	700	ug/L
MKTF-39	8/23/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-39	8/23/2015	n-Propylbenzene	23	1	0.16	660	ug/L
MKTF-39	8/23/2015	n-Butylbenzene	3.8	3	0.25	1000	ug/L
MKTF-39	8/23/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-39	8/23/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-39	8/23/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-39	8/23/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	8/23/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-39	8/23/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-39	8/23/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-39	8/23/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-39	8/23/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-39	8/23/2015	sec-Butylbenzene	9.7	1	0.23	2000	ug/L
MKTF-39	8/23/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-39	8/23/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-39	8/23/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-39	8/23/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-39	8/23/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-39	8/23/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-39	8/23/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	8/23/2015	Xylenes, Total	1.6	1.5	0.28	620	ug/L
MKTF-39	8/23/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-39	8/23/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	8/23/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-39	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-39	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-39	11/9/2015	Benzene	**21**	1	0.065	5	ug/L
MKTF-39	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-39	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-39	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-39	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-39	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-39	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-39	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-39	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-39	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-39	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-39	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-39	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-39	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-39	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-39	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-39	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-39	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-39	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-39	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-39	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-39	11/9/2015	1,2,4-Trimethylbenzene	**85**	1	0.16	56	ug/L
MKTF-39	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-39	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-39	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-39	11/9/2015	Isopropylbenzene	24	1	0.15	447	ug/L
MKTF-39	11/9/2015	p-Isopropyltoluene	8.4	1	0.19	NA	ug/L
MKTF-39	11/9/2015	Ethylbenzene	64	1	0.1	700	ug/L
MKTF-39	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-39	11/9/2015	n-Propylbenzene	27	1	0.16	660	ug/L
MKTF-39	11/9/2015	n-Butylbenzene	6.6	3	0.25	1000	ug/L
MKTF-39	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-39	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-39	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-39	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-39	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-39	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-39	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-39	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-39	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-39	11/9/2015	sec-Butylbenzene	12	1	0.23	2000	ug/L
MKTF-39	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-39	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-39	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-39	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-39	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-39	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-39	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-39	11/9/2015	MTBE	ND	1	0.17	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-39	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-39	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-39	3/3/2016	Benzene	**19**	1	0.096	5	ug/L
MKTF-39	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-39	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-39	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-39	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-39	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-39	3/3/2016	Vinyl Chloride	**2.4**	1	0.063	2	ug/L
MKTF-39	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-39	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-39	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-39	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-39	3/3/2016	1,1-Dichloroethane	1.1	1	0.11	25	ug/L
MKTF-39	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-39	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-39	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-39	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-39	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-39	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-39	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-39	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-39	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-39	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	3/3/2016	1,2,4-Trimethylbenzene	**66**	1	0.1	56	ug/L
MKTF-39	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-39	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-39	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-39	3/3/2016	Isopropylbenzene	24	1	0.098	447	ug/L
MKTF-39	3/3/2016	p-Isopropyltoluene	7.4	1	0.14	NA	ug/L
MKTF-39	3/3/2016	Ethylbenzene	64	1	0.11	700	ug/L
MKTF-39	3/3/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-39	3/3/2016	n-Propylbenzene	30	1	0.13	660	ug/L
MKTF-39	3/3/2016	n-Butylbenzene	7.4	3	0.16	1000	ug/L
MKTF-39	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-39	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-39	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-39	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-39	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-39	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-39	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-39	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-39	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-39	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	3/3/2016	sec-Butylbenzene	13	1	0.11	2000	ug/L
MKTF-39	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-39	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-39	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-39	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-39	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-39	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-39	3/3/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-39	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-39	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-39	6/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-39	6/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-39	6/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-39	6/8/2016	Benzene	**16**	1	0.096	5	ug/L
MKTF-39	6/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-39	6/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-39	6/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-39	6/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-39	6/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-39	6/8/2016	Vinyl Chloride	**2.1**	1	0.2	2	ug/L
MKTF-39	6/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-39	6/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-39	6/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-39	6/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-39	6/8/2016	1,1-Dichloroethane	0.99	1	0.11	25	ug/L
MKTF-39	6/8/2016	1,1-Dichloroethene	0.48	1	0.11	7	ug/L
MKTF-39	6/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-39	6/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-39	6/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-39	6/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-39	6/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-39	6/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-39	6/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-39	6/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	6/8/2016	1,2,4-Trimethylbenzene	**82**	1	0.11	56	ug/L
MKTF-39	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-39	6/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-39	6/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-39	6/8/2016	Isopropylbenzene	24	1	0.1	447	ug/L
MKTF-39	6/8/2016	p-Isopropyltoluene	8	1	0.14	NA	ug/L
MKTF-39	6/8/2016	Ethylbenzene	61	1	0.11	700	ug/L
MKTF-39	6/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-39	6/8/2016	n-Propylbenzene	33	1	0.13	660	ug/L
MKTF-39	6/8/2016	n-Butylbenzene	10	3	0.16	1000	ug/L
MKTF-39	6/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-39	6/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-39	6/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-39	6/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-39	6/8/2016	1,3,5-Trimethylbenzene	0.21	1	0.12	60	ug/L
MKTF-39	6/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-39	6/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-39	6/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-39	6/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-39	6/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	6/8/2016	sec-Butylbenzene	15	1	0.12	2000	ug/L
MKTF-39	6/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-39	6/8/2016	cis-1,2-Dichloroethene	0.86	1	0.12	70	ug/L
MKTF-39	6/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-39	6/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-39	6/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-39	6/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-39	6/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-39	6/8/2016	Xylenes, Total	0.69	1.5	0.37	620	ug/L
MKTF-39	6/8/2016	MTBE	0.36	1	0.21	143	ug/L
MKTF-39	6/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-39	6/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-39	9/13/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-39	9/13/2016	Acetone	ND	50	25	14064	ug/L
MKTF-39	9/13/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	9/13/2016	Benzene	**16**	5	0.48	5	ug/L
MKTF-39	9/13/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-39	9/13/2016	Bromomethane	*4.6*	*15*	3.9	7.54	ug/L
MKTF-39	9/13/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	9/13/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	9/13/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-39	9/13/2016	Vinyl Chloride	**3**	5	0.98	2	ug/L
MKTF-39	9/13/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-39	9/13/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	9/13/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-39	9/13/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-39	9/13/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-39	9/13/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-39	9/13/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-39	9/13/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-39	9/13/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-39	9/13/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-39	9/13/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-39	9/13/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	9/13/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-39	9/13/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	9/13/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	9/13/2016	1,2,4-Trimethylbenzene	39	5	0.55	56	ug/L
MKTF-39	9/13/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-39	9/13/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-39	9/13/2016	tert-Butylbenzene	0.71	5	0.58	690	ug/L
MKTF-39	9/13/2016	Isopropylbenzene	25	5	0.52	447	ug/L
MKTF-39	9/13/2016	p-Isopropyltoluene	7.9	5	0.7	NA	ug/L
MKTF-39	9/13/2016	Ethylbenzene	60	5	0.56	700	ug/L
MKTF-39	9/13/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-39	9/13/2016	n-Propylbenzene	31	5	0.66	660	ug/L
MKTF-39	9/13/2016	n-Butylbenzene	10	15	0.8	1000	ug/L
MKTF-39	9/13/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/13/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-39	9/13/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	9/13/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-39	9/13/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	9/13/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-39	9/13/2016	Toluene	ND	5	0.59	1000	ug/L
MKTF-39	9/13/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-39	9/13/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-39	9/13/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	9/13/2016	sec-Butylbenzene	16	5	0.62	2000	ug/L
MKTF-39	9/13/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	9/13/2016	cis-1,2-Dichloroethene	1.4	5	0.62	70	ug/L
MKTF-39	9/13/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-39	9/13/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	9/13/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-39	9/13/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-39	9/13/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	9/13/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
MKTF-39	9/13/2016	MTBE	ND	5	1.1	143	ug/L
MKTF-39	9/13/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-39	9/13/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-39	11/1/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
MKTF-39	11/1/2016	Acetone	ND	50	25	14064	ug/L
MKTF-39	11/1/2016	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	11/1/2016	Benzene	**13**	5	0.48	5	ug/L
MKTF-39	11/1/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
MKTF-39	11/1/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-39	11/1/2016	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	11/1/2016	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	11/1/2016	Chloroethane	ND	10	0.96	20857	ug/L
MKTF-39	11/1/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-39	11/1/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
MKTF-39	11/1/2016	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	11/1/2016	Bromoform	ND	5	0.51	32.9	ug/L
MKTF-39	11/1/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
MKTF-39	11/1/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
MKTF-39	11/1/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
MKTF-39	11/1/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
MKTF-39	11/1/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
MKTF-39	11/1/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
MKTF-39	11/1/2016	2-Butanone	ND	50	3.7	5565	ug/L
MKTF-39	11/1/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
MKTF-39	11/1/2016	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	11/1/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
MKTF-39	11/1/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	11/1/2016	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	11/1/2016	1,2,4-Trimethylbenzene	24	5	0.55	56	ug/L
MKTF-39	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
MKTF-39	11/1/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
MKTF-39	11/1/2016	tert-Butylbenzene	0.72	5	0.58	690	ug/L
MKTF-39	11/1/2016	Isopropylbenzene	23	5	0.52	447	ug/L
MKTF-39	11/1/2016	p-Isopropyltoluene	5.4	5	0.7	NA	ug/L
MKTF-39	11/1/2016	Ethylbenzene	59	5	0.56	700	ug/L
MKTF-39	11/1/2016	Styrene	ND	5	0.55	100	ug/L
MKTF-39	11/1/2016	n-Propylbenzene	28	5	0.66	660	ug/L
MKTF-39	11/1/2016	n-Butylbenzene	7.6	15	0.8	1000	ug/L
MKTF-39	11/1/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
MKTF-39	11/1/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
MKTF-39	11/1/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	11/1/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
MKTF-39	11/1/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	11/1/2016	Bromobenzene	ND	5	0.49	62	ug/L
MKTF-39	11/1/2016	Toluene	ND	5	0.59	1000	ug/L
MKTF-39	11/1/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
MKTF-39	11/1/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
MKTF-39	11/1/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	11/1/2016	sec-Butylbenzene	12	5	0.62	2000	ug/L
MKTF-39	11/1/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	11/1/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
MKTF-39	11/1/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
MKTF-39	11/1/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	11/1/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
MKTF-39	11/1/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
MKTF-39	11/1/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	11/1/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
MKTF-39	11/1/2016	MTBE	ND	5	1.1	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/1/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
MKTF-39	11/1/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
MKTF-39	3/14/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	3/14/2017	Acetone	ND	50	4.4	14064	ug/L
MKTF-39	3/14/2017	Chloroform	ND	5	0.44	100	ug/L
MKTF-39	3/14/2017	Benzene	**12**	5	0.48	5	ug/L
MKTF-39	3/14/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	3/14/2017	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
MKTF-39	3/14/2017	Chloromethane	ND	15	1.1	20.32	ug/L
MKTF-39	3/14/2017	Dibromomethane	ND	5	0.6	8	ug/L
MKTF-39	3/14/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	3/14/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	3/14/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	3/14/2017	Carbon Disulfide	ND	50	3	810	ug/L
MKTF-39	3/14/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	3/14/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	3/14/2017	1,1-Dichloroethane	ND	5	0.52	25	ug/L
MKTF-39	3/14/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	3/14/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	3/14/2017	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
MKTF-39	3/14/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	3/14/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	3/14/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	3/14/2017	Trichloroethene	ND	5	0.88	5	ug/L
MKTF-39	3/14/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	3/14/2017	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
MKTF-39	3/14/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	3/14/2017	1,2,4-Trimethylbenzene	27	5	0.52	56	ug/L
MKTF-39	3/14/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	3/14/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	3/14/2017	tert-Butylbenzene	0.82	5	0.52	690	ug/L
MKTF-39	3/14/2017	Isopropylbenzene	30	5	0.49	447	ug/L
MKTF-39	3/14/2017	p-Isopropyltoluene	8.7	5	0.7	NA	ug/L
MKTF-39	3/14/2017	Ethylbenzene	63	5	0.56	700	ug/L
MKTF-39	3/14/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	3/14/2017	n-Propylbenzene	43	5	0.66	660	ug/L
MKTF-39	3/14/2017	n-Butylbenzene	16	15	0.8	1000	ug/L
MKTF-39	3/14/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	3/14/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	3/14/2017	1,2-Dichloroethane	ND	5	0.58	5	ug/L
MKTF-39	3/14/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	3/14/2017	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
MKTF-39	3/14/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	3/14/2017	Toluene	ND	5	0.45	1000	ug/L
MKTF-39	3/14/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	3/14/2017	Dibromochloromethane	*ND*	*5*	0.39	1.68	ug/L
MKTF-39	3/14/2017	Tetrachloroethene	ND	5	0.76	5	ug/L
MKTF-39	3/14/2017	sec-Butylbenzene	27	5	0.51	2000	ug/L
MKTF-39	3/14/2017	1,3-Dichloropropane	ND	5	0.78	370	ug/L
MKTF-39	3/14/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	3/14/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	3/14/2017	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
MKTF-39	3/14/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	3/14/2017	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
MKTF-39	3/14/2017	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
MKTF-39	3/14/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	3/14/2017	MTBE	ND	5	0.74	143	ug/L
MKTF-39	3/14/2017	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	3/14/2017	trans-1,3-Dichloropropene	ND	5	0.45	NA	ug/L
MKTF-39	6/8/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	6/8/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	6/8/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	6/8/2017	Benzene	**12**	5	0.31	5	ug/L
MKTF-39	6/8/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	6/8/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	6/8/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	6/8/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	6/8/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	6/8/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	6/8/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	6/8/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	6/8/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	6/8/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	6/8/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	6/8/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	6/8/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	6/8/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	6/8/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	6/8/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	6/8/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	6/8/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	6/8/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	6/8/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	6/8/2017	1,2,4-Trimethylbenzene	29	5	0.56	56	ug/L
MKTF-39	6/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	6/8/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	6/8/2017	tert-Butylbenzene	0.67	5	0.52	690	ug/L
MKTF-39	6/8/2017	Isopropylbenzene	28	5	0.26	447	ug/L
MKTF-39	6/8/2017	p-Isopropyltoluene	8.2	5	0.48	NA	ug/L
MKTF-39	6/8/2017	Ethylbenzene	57	5	0.47	700	ug/L
MKTF-39	6/8/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	6/8/2017	n-Propylbenzene	40	5	0.37	660	ug/L
MKTF-39	6/8/2017	n-Butylbenzene	16	15	0.65	1000	ug/L
MKTF-39	6/8/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	6/8/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	6/8/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	6/8/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	6/8/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	6/8/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	6/8/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	6/8/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	6/8/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	6/8/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	6/8/2017	sec-Butylbenzene	25	5	0.55	2000	ug/L
MKTF-39	6/8/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	6/8/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	6/8/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	6/8/2017	Pentafluorobenzene	**50**	0	0		None
MKTF-39	6/8/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	6/8/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	6/8/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	6/8/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	6/8/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	6/8/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	6/8/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	6/8/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	9/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	9/28/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	9/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	9/28/2017	Benzene	**10**	5	0.31	5	ug/L
MKTF-39	9/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	9/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	9/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	9/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	9/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	9/28/2017	Vinyl Chloride	*1.9*	*5*	0.89	2	ug/L
MKTF-39	9/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	9/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	9/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	9/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	9/28/2017	1,1-Dichloroethane	2	5	2	25	ug/L
MKTF-39	9/28/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	9/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	9/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	9/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	9/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	9/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	9/28/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	9/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	9/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	9/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	9/28/2017	1,2,4-Trimethylbenzene	8	5	0.56	56	ug/L
MKTF-39	9/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	9/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	9/28/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
MKTF-39	9/28/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-39	9/28/2017	p-Isopropyltoluene	3	5	0.48	NA	ug/L
MKTF-39	9/28/2017	Ethylbenzene	49	5	0.47	700	ug/L
MKTF-39	9/28/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	9/28/2017	n-Propylbenzene	30	5	0.37	660	ug/L
MKTF-39	9/28/2017	n-Butylbenzene	7.7	15	0.65	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	9/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	9/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	9/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	9/28/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	9/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	9/28/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	9/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	9/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	9/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	9/28/2017	sec-Butylbenzene	13	5	0.55	2000	ug/L
MKTF-39	9/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	9/28/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	9/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	9/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	9/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	9/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	9/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	9/28/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	9/28/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	9/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	9/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	11/28/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	11/28/2017	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	11/28/2017	Chloroform	ND	5	2	100	ug/L
MKTF-39	11/28/2017	Benzene	**13**	5	0.31	5	ug/L
MKTF-39	11/28/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	11/28/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	11/28/2017	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	11/28/2017	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	11/28/2017	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	11/28/2017	Vinyl Chloride	*0.96*	*5*	0.89	2	ug/L
MKTF-39	11/28/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	11/28/2017	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	11/28/2017	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	11/28/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	11/28/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	11/28/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	11/28/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	11/28/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	11/28/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	11/28/2017	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	11/28/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	11/28/2017	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	11/28/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	11/28/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	11/28/2017	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	11/28/2017	1,2,4-Trimethylbenzene	10	5	0.56	56	ug/L
MKTF-39	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	11/28/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	11/28/2017	tert-Butylbenzene	1	5	0.52	690	ug/L
MKTF-39	11/28/2017	Isopropylbenzene	22	5	0.26	447	ug/L
MKTF-39	11/28/2017	p-Isopropyltoluene	3.3	5	0.48	NA	ug/L
MKTF-39	11/28/2017	Ethylbenzene	50	5	0.47	700	ug/L
MKTF-39	11/28/2017	Styrene	ND	5	0.78	100	ug/L
MKTF-39	11/28/2017	n-Propylbenzene	31	5	0.37	660	ug/L
MKTF-39	11/28/2017	n-Butylbenzene	8.5	15	0.65	1000	ug/L
MKTF-39	11/28/2017	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	11/28/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	11/28/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	11/28/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	11/28/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	11/28/2017	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	11/28/2017	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	11/28/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	11/28/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	11/28/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	11/28/2017	sec-Butylbenzene	15	5	0.55	2000	ug/L
MKTF-39	11/28/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	11/28/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	11/28/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	11/28/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	11/28/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	11/28/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	11/28/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	11/28/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/28/2017	MTBE	ND	5	1.2	143	ug/L
MKTF-39	11/28/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	11/28/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	2/8/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	2/8/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	2/8/2018	Chloroform	ND	5	2	100	ug/L
MKTF-39	2/8/2018	Benzene	**13**	5	0.31	5	ug/L
MKTF-39	2/8/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	2/8/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	2/8/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	2/8/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	2/8/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	2/8/2018	Vinyl Chloride	*0.93*	*5*	0.89	2	ug/L
MKTF-39	2/8/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	2/8/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	2/8/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	2/8/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	2/8/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	2/8/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
MKTF-39	2/8/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	2/8/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	2/8/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	2/8/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	2/8/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	2/8/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	2/8/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	2/8/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	2/8/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	2/8/2018	1,2,4-Trimethylbenzene	8.6	5	0.56	56	ug/L
MKTF-39	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	2/8/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	2/8/2018	tert-Butylbenzene	0.67	5	0.52	690	ug/L
MKTF-39	2/8/2018	Isopropylbenzene	21	5	0.26	447	ug/L
MKTF-39	2/8/2018	p-Isopropyltoluene	2.2	5	0.48	NA	ug/L
MKTF-39	2/8/2018	Ethylbenzene	48	5	0.47	700	ug/L
MKTF-39	2/8/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-39	2/8/2018	n-Propylbenzene	27	5	0.37	660	ug/L
MKTF-39	2/8/2018	n-Butylbenzene	7.6	15	0.65	1000	ug/L
MKTF-39	2/8/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	2/8/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	2/8/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	2/8/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	2/8/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	2/8/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	2/8/2018	Toluene	2.4	5	0.32	1000	ug/L
MKTF-39	2/8/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	2/8/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	2/8/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	2/8/2018	sec-Butylbenzene	14	5	0.55	2000	ug/L
MKTF-39	2/8/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	2/8/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	2/8/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	2/8/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	2/8/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	2/8/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	2/8/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	2/8/2018	Xylenes, Total	2.1	7.5	1.6	620	ug/L
MKTF-39	2/8/2018	MTBE	ND	5	1.2	143	ug/L
MKTF-39	2/8/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	2/8/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	5/6/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
MKTF-39	5/6/2018	Acetone	ND	50	4.1	14064	ug/L
MKTF-39	5/6/2018	Chloroform	ND	5	2	100	ug/L
MKTF-39	5/6/2018	Benzene	**12**	5	0.31	5	ug/L
MKTF-39	5/6/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
MKTF-39	5/6/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
MKTF-39	5/6/2018	Chloromethane	ND	15	1.5	20.32	ug/L
MKTF-39	5/6/2018	Dibromomethane	ND	5	0.45	8	ug/L
MKTF-39	5/6/2018	Chloroethane	ND	10	1.2	20857	ug/L
MKTF-39	5/6/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
MKTF-39	5/6/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
MKTF-39	5/6/2018	Carbon Disulfide	ND	50	2	810	ug/L
MKTF-39	5/6/2018	Bromoform	ND	5	1.1	32.9	ug/L
MKTF-39	5/6/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
MKTF-39	5/6/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
MKTF-39	5/6/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	5/6/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
MKTF-39	5/6/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
MKTF-39	5/6/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
MKTF-39	5/6/2018	2-Butanone	ND	50	5.7	5565	ug/L
MKTF-39	5/6/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
MKTF-39	5/6/2018	Trichloroethene	ND	5	0.56	5	ug/L
MKTF-39	5/6/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
MKTF-39	5/6/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
MKTF-39	5/6/2018	2-Chlorotoluene	ND	5	2	233	ug/L
MKTF-39	5/6/2018	1,2,4-Trimethylbenzene	8.3	5	0.56	56	ug/L
MKTF-39	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
MKTF-39	5/6/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
MKTF-39	5/6/2018	tert-Butylbenzene	0.63	5	0.52	690	ug/L
MKTF-39	5/6/2018	Isopropylbenzene	25	5	0.26	447	ug/L
MKTF-39	5/6/2018	p-Isopropyltoluene	2.5	5	0.48	NA	ug/L
MKTF-39	5/6/2018	Ethylbenzene	56	5	0.47	700	ug/L
MKTF-39	5/6/2018	Styrene	ND	5	0.78	100	ug/L
MKTF-39	5/6/2018	n-Propylbenzene	35	5	0.37	660	ug/L
MKTF-39	5/6/2018	n-Butylbenzene	9	15	0.65	1000	ug/L
MKTF-39	5/6/2018	4-Chlorotoluene	ND	5	2	250	ug/L
MKTF-39	5/6/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
MKTF-39	5/6/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
MKTF-39	5/6/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
MKTF-39	5/6/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
MKTF-39	5/6/2018	Bromobenzene	ND	5	0.7	62	ug/L
MKTF-39	5/6/2018	Toluene	ND	5	0.32	1000	ug/L
MKTF-39	5/6/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
MKTF-39	5/6/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
MKTF-39	5/6/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
MKTF-39	5/6/2018	sec-Butylbenzene	18	5	0.55	2000	ug/L
MKTF-39	5/6/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
MKTF-39	5/6/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
MKTF-39	5/6/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
MKTF-39	5/6/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
MKTF-39	5/6/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
MKTF-39	5/6/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
MKTF-39	5/6/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
MKTF-39	5/6/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
MKTF-39	5/6/2018	MTBE	ND	5	1.2	143	ug/L
MKTF-39	5/6/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
MKTF-39	5/6/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
MKTF-39	8/21/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-39	8/21/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-39	8/21/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-39	8/21/2018	Benzene	**8.3**	1	0.17	5	ug/L
MKTF-39	8/21/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-39	8/21/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-39	8/21/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-39	8/21/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-39	8/21/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-39	8/21/2018	Vinyl Chloride	1.4	1	0.11	2	ug/L
MKTF-39	8/21/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-39	8/21/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-39	8/21/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-39	8/21/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-39	8/21/2018	1,1-Dichloroethane	0.91	1	0.4	25	ug/L
MKTF-39	8/21/2018	1,1-Dichloroethene	0.46	1	0.12	7	ug/L
MKTF-39	8/21/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-39	8/21/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-39	8/21/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-39	8/21/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-39	8/21/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-39	8/21/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-39	8/21/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-39	8/21/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-39	8/21/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-39	8/21/2018	1,2,4-Trimethylbenzene	4.2	1	0.25	56	ug/L
MKTF-39	8/21/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-39	8/21/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-39	8/21/2018	tert-Butylbenzene	0.39	1	0.22	690	ug/L
MKTF-39	8/21/2018	Isopropylbenzene	22	1	0.22	447	ug/L
MKTF-39	8/21/2018	p-Isopropyltoluene	1	1	0.24	NA	ug/L
MKTF-39	8/21/2018	Ethylbenzene	45	1	0.22	700	ug/L
MKTF-39	8/21/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-39	8/21/2018	n-Propylbenzene	28	1	0.24	660	ug/L
MKTF-39	8/21/2018	n-Butylbenzene	7.8	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-39	8/21/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-39	8/21/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-39	8/21/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-39	8/21/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-39	8/21/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-39	8/21/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-39	8/21/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-39	8/21/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-39	8/21/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	8/21/2018	sec-Butylbenzene	13	1	0.2	2000	ug/L
MKTF-39	8/21/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-39	8/21/2018	cis-1,2-Dichloroethene	0.76	1	0.38	70	ug/L
MKTF-39	8/21/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-39	8/21/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-39	8/21/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-39	8/21/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-39	8/21/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-39	8/21/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-39	8/21/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-39	8/21/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-39	8/21/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-39	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-39	11/20/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-39	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-39	11/20/2018	Benzene	**8.4**	1	0.17	5	ug/L
MKTF-39	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-39	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-39	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-39	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-39	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-39	11/20/2018	Vinyl Chloride	1.1	1	0.12	2	ug/L
MKTF-39	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-39	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-39	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-39	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-39	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-39	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-39	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-39	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-39	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-39	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-39	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-39	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-39	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-39	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-39	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-39	11/20/2018	1,2,4-Trimethylbenzene	1.4	1	0.25	56	ug/L
MKTF-39	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-39	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-39	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-39	11/20/2018	Isopropylbenzene	14	1	0.22	447	ug/L
MKTF-39	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-39	11/20/2018	Ethylbenzene	30	1	0.22	700	ug/L
MKTF-39	11/20/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-39	11/20/2018	n-Propylbenzene	19	1	0.24	660	ug/L
MKTF-39	11/20/2018	n-Butylbenzene	4.8	3	0.25	1000	ug/L
MKTF-39	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-39	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-39	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-39	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-39	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-39	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-39	11/20/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-39	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-39	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-39	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-39	11/20/2018	sec-Butylbenzene	10	1	0.2	2000	ug/L
MKTF-39	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-39	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-39	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-39	11/20/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-39	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-39	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-39	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-39	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/20/2018	Xylenes, Total	3.9	1.5	0.64	620	ug/L
MKTF-39	11/20/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-39	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-39	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-39	6/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	6/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	6/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	6/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	6/5/2019	1,1-Dichloroethane	0.41	1	0.140859	25	ug/L
MKTF-39	6/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	6/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	6/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	6/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-39	6/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	6/5/2019	1,2,4-Trimethylbenzene	21	1	0.213199	56	ug/L
MKTF-39	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-39	6/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	6/5/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-39	6/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	6/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	6/5/2019	1,3,5-Trimethylbenzene	4.3	1	0.18866	60	ug/L
MKTF-39	6/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	6/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	6/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	6/5/2019	1-Methylnaphthalene	150	40	3.149545	NA	ug/L
MKTF-39	6/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	6/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	6/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	6/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	6/5/2019	2-Methylnaphthalene	**85**	4	0.345376		ug/L
MKTF-39	6/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	6/5/2019	p-Isopropyltoluene	2	1	0.217289	NA	ug/L
MKTF-39	6/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	6/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	6/5/2019	Benzene	**9.1**	1	0.166639	5	ug/L
MKTF-39	6/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	6/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	6/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	6/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	6/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	6/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	6/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	6/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	6/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	6/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	6/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	6/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	6/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-39	6/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	6/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	6/5/2019	Ethylbenzene	34	1	0.132341	700	ug/L
MKTF-39	6/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	6/5/2019	Isopropylbenzene	15	1	0.191522	447	ug/L
MKTF-39	6/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	6/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	6/5/2019	Naphthalene	**33**	2	0.275071	30	ug/L
MKTF-39	6/5/2019	n-Butylbenzene	6.2	3	0.22757	1000	ug/L
MKTF-39	6/5/2019	n-Propylbenzene	19	1	0.214308	660	ug/L
MKTF-39	6/5/2019	sec-Butylbenzene	8.2	1	0.247731	2000	ug/L
MKTF-39	6/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	6/5/2019	tert-Butylbenzene	0.21	1	0.206985	690	ug/L
MKTF-39	6/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	6/5/2019	Toluene	0.8	1	0.350436	1000	ug/L
MKTF-39	6/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	6/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	6/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	6/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	6/5/2019	Vinyl Chloride	0.44	1	0.179099	2	ug/L
MKTF-39	6/5/2019	Xylenes, Total	16	1.5	0.454415	620	ug/L
MKTF-39	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-39	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-39	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-39	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-39	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-39	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-39	8/20/2019	1,2,4-Trimethylbenzene	3.3	5	1.065995	56	ug/L
MKTF-39	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-39	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-39	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-39	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-39	8/20/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
MKTF-39	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	110	20	1.574772	NA	ug/L
MKTF-39	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-39	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-39	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-39	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	**4.1**	20	1.72688		ug/L
MKTF-39	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-39	8/20/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-39	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-39	8/20/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-39	8/20/2019	Benzene	**8.3**	5	0.833195	5	ug/L
MKTF-39	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-39	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-39	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-39	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-39	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-39	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-39	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-39	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-39	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-39	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-39	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-39	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-39	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-39	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-39	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-39	8/20/2019	Ethylbenzene	38	5	0.661704	700	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-39	8/20/2019	Isopropylbenzene	17	5	0.957611	447	ug/L
MKTF-39	8/20/2019	MTBE	ND	5	2.280475	143	ug/L
MKTF-39	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-39	8/20/2019	Naphthalene	14	10	1.375357	30	ug/L
MKTF-39	8/20/2019	n-Butylbenzene	4	15	1.137848	1000	ug/L
MKTF-39	8/20/2019	n-Propylbenzene	20	5	1.07154	660	ug/L
MKTF-39	8/20/2019	sec-Butylbenzene	9.3	5	1.238656	2000	ug/L
MKTF-39	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-39	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-39	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-39	8/20/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-39	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-39	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-39	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-39	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-39	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-39	8/20/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-39	8/20/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
MKTF-39	8/20/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
MKTF-39	8/20/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
MKTF-39	8/20/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
MKTF-39	8/20/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
MKTF-39	8/20/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
MKTF-39	8/20/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
MKTF-39	8/20/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
MKTF-39	8/20/2019	1,2,4-Trimethylbenzene	3.5	5	1.065995	56	ug/L
MKTF-39	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
MKTF-39	8/20/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
MKTF-39	8/20/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
MKTF-39	8/20/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
MKTF-39	8/20/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	120	20	1.574772	NA	ug/L
MKTF-39	8/20/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
MKTF-39	8/20/2019	2-Butanone	ND	50	10.447083	5565	ug/L
MKTF-39	8/20/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
MKTF-39	8/20/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	**4.5**	20	1.72688		ug/L
MKTF-39	8/20/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
MKTF-39	8/20/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
MKTF-39	8/20/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
MKTF-39	8/20/2019	Acetone	ND	50	5.996982	14064	ug/L
MKTF-39	8/20/2019	Benzene	**9.5**	5	0.833195	5	ug/L
MKTF-39	8/20/2019	Bromobenzene	ND	5	1.223635	62	ug/L
MKTF-39	8/20/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
MKTF-39	8/20/2019	Bromoform	ND	5	1.443316	32.9	ug/L
MKTF-39	8/20/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
MKTF-39	8/20/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
MKTF-39	8/20/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
MKTF-39	8/20/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
MKTF-39	8/20/2019	Chloroethane	ND	10	0.889013	20857	ug/L
MKTF-39	8/20/2019	Chloroform	ND	5	0.609453	100	ug/L
MKTF-39	8/20/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
MKTF-39	8/20/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
MKTF-39	8/20/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
MKTF-39	8/20/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
MKTF-39	8/20/2019	Dibromomethane	ND	5	1.046044	8	ug/L
MKTF-39	8/20/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
MKTF-39	8/20/2019	Ethylbenzene	40	5	0.661704	700	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
MKTF-39	8/20/2019	Isopropylbenzene	19	5	0.957611	447	ug/L
MKTF-39	8/20/2019	MTBE	ND	5	2.280475	143	ug/L
MKTF-39	8/20/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
MKTF-39	8/20/2019	Naphthalene	15	10	1.375357	30	ug/L
MKTF-39	8/20/2019	n-Butylbenzene	5.7	15	1.137848	1000	ug/L
MKTF-39	8/20/2019	n-Propylbenzene	24	5	1.07154	660	ug/L
MKTF-39	8/20/2019	sec-Butylbenzene	12	5	1.238656	2000	ug/L
MKTF-39	8/20/2019	Styrene	ND	5	0.956617	100	ug/L
MKTF-39	8/20/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
MKTF-39	8/20/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
MKTF-39	8/20/2019	Toluene	ND	5	1.752181	1000	ug/L
MKTF-39	8/20/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
MKTF-39	8/20/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
MKTF-39	8/20/2019	Trichloroethene	ND	5	0.831359	5	ug/L
MKTF-39	8/20/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
MKTF-39	8/20/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
MKTF-39	8/20/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
MKTF-39	11/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	11/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	11/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	11/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethane	0.49	1	0.140859	25	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	11/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	11/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trimethylbenzene	1.7	1	0.213199	56	ug/L
MKTF-39	11/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-39	11/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	11/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	11/5/2019	1,3,5-Trimethylbenzene	0.26	1	0.18866	60	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	11/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	120	40	3.149545	NA	ug/L
MKTF-39	11/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	11/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	11/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	11/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	**5**	4	0.345376		ug/L
MKTF-39	11/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	11/5/2019	p-Isopropyltoluene	0.98	1	0.217289	NA	ug/L
MKTF-39	11/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	11/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	11/5/2019	Benzene	**10**	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	11/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	11/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	11/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	11/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	11/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	11/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	11/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	11/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	11/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	11/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	11/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	11/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-39	11/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	11/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	11/5/2019	Ethylbenzene	41	1	0.132341	700	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	11/5/2019	Isopropylbenzene	19	1	0.191522	447	ug/L
MKTF-39	11/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	11/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	11/5/2019	Naphthalene	20	2	0.275071	30	ug/L
MKTF-39	11/5/2019	n-Butylbenzene	5.5	3	0.22757	1000	ug/L
MKTF-39	11/5/2019	n-Propylbenzene	26	1	0.214308	660	ug/L
MKTF-39	11/5/2019	sec-Butylbenzene	13	1	0.247731	2000	ug/L
MKTF-39	11/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	11/5/2019	tert-Butylbenzene	0.45	1	0.206985	690	ug/L
MKTF-39	11/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	11/5/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-39	11/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	11/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	11/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	11/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	11/5/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-39	11/5/2019	Xylenes, Total	1.4	1.5	0.454415	620	ug/L
MKTF-39	11/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-39	11/5/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-39	11/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-39	11/5/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethane	0.54	1	0.140859	25	ug/L
MKTF-39	11/5/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-39	11/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-39	11/5/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-39	11/5/2019	1,2,4-Trimethylbenzene	1.7	1	0.213199	56	ug/L
MKTF-39	11/5/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	0.37	1	0.297198	600	ug/L
MKTF-39	11/5/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-39	11/5/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-39	11/5/2019	1,3,5-Trimethylbenzene	0.26	1	0.18866	60	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-39	11/5/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	180	40	3.149545	NA	ug/L
MKTF-39	11/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-39	11/5/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-39	11/5/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-39	11/5/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	**4.5**	4	0.345376		ug/L
MKTF-39	11/5/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-39	11/5/2019	p-Isopropyltoluene	0.91	1	0.217289	NA	ug/L
MKTF-39	11/5/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-39	11/5/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-39	11/5/2019	Benzene	**10**	1	0.166639	5	ug/L
MKTF-39	11/5/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-39	11/5/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-39	11/5/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-39	11/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-39	11/5/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-39	11/5/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-39	11/5/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-39	11/5/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-39	11/5/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-39	11/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-39	11/5/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-39	11/5/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-39	11/5/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-39	11/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-39	11/5/2019	Ethylbenzene	41	1	0.132341	700	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-39	11/5/2019	Isopropylbenzene	18	1	0.191522	447	ug/L
MKTF-39	11/5/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-39	11/5/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-39	11/5/2019	Naphthalene	20	2	0.275071	30	ug/L
MKTF-39	11/5/2019	n-Butylbenzene	4.6	3	0.22757	1000	ug/L
MKTF-39	11/5/2019	n-Propylbenzene	24	1	0.214308	660	ug/L
MKTF-39	11/5/2019	sec-Butylbenzene	11	1	0.247731	2000	ug/L
MKTF-39	11/5/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-39	11/5/2019	tert-Butylbenzene	0.41	1	0.206985	690	ug/L
MKTF-39	11/5/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-39	11/5/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-39	11/5/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-39	11/5/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-39	11/5/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-39	11/5/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-39	11/5/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-39	11/5/2019	Xylenes, Total	1.5	1.5	0.454415	620	ug/L
MKTF-39	2/5/2020	1,1,1,2-Tetrachloroethane	ND	2	0.41	5.74	ug/L
MKTF-39	2/5/2020	1,1,1-Trichloroethane	ND	2	0.35	200	ug/L
MKTF-39	2/5/2020	1,1,2,2-Tetrachloroethane	ND	4	1.1	10	ug/L
MKTF-39	2/5/2020	1,1,2-Trichloroethane	ND	2	0.43	5	ug/L
MKTF-39	2/5/2020	1,1-Dichloroethane	0.45	2	0.28	25	ug/L
MKTF-39	2/5/2020	1,1-Dichloroethene	ND	2	0.41	7	ug/L
MKTF-39	2/5/2020	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-39	2/5/2020	1,2,3-Trichlorobenzene	ND	2	0.6	70	ug/L
MKTF-39	2/5/2020	1,2,3-Trichloropropane	*ND*	*4*	0.59	0.0084	ug/L
MKTF-39	2/5/2020	1,2,4-Trichlorobenzene	ND	2	0.39	70	ug/L
MKTF-39	2/5/2020	1,2,4-Trimethylbenzene	3.4	2	0.43	56	ug/L
MKTF-39	2/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65	0.0033	ug/L
MKTF-39	2/5/2020	1,2-Dibromoethane	*ND*	*2*	0.33	0.05	ug/L
MKTF-39	2/5/2020	1,2-Dichlorobenzene	ND	2	0.59	600	ug/L
MKTF-39	2/5/2020	1,2-Dichloroethane	ND	2	0.39	5	ug/L
MKTF-39	2/5/2020	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-39	2/5/2020	1,3,5-Trimethylbenzene	0.38	2	0.38	60	ug/L
MKTF-39	2/5/2020	1,3-Dichlorobenzene	ND	2	0.5	N/A	ug/L
MKTF-39	2/5/2020	1,3-Dichloropropane	ND	2	0.4	370	ug/L
MKTF-39	2/5/2020	1,4-Dichlorobenzene	ND	2	0.59	75	ug/L
MKTF-39	2/5/2020	1-Methylnaphthalene	110	8	0.63	NA	ug/L
MKTF-39	2/5/2020	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-39	2/5/2020	2-Butanone	ND	20	4.2	5565	ug/L
MKTF-39	2/5/2020	2-Chlorotoluene	ND	2	0.49	233	ug/L
MKTF-39	2/5/2020	2-Hexanone	ND	20	3.1	38	ug/L
MKTF-39	2/5/2020	2-Methylnaphthalene	**7.8**	8	0.69		ug/L
MKTF-39	2/5/2020	4-Chlorotoluene	ND	2	0.47	250	ug/L
MKTF-39	2/5/2020	p-Isopropyltoluene	0.93	2	0.43	NA	ug/L
MKTF-39	2/5/2020	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
MKTF-39	2/5/2020	Acetone	3.6	20	2.4	14064	ug/L
MKTF-39	2/5/2020	Benzene	**9.4**	2	0.33	5	ug/L
MKTF-39	2/5/2020	Bromobenzene	ND	2	0.49	62	ug/L
MKTF-39	2/5/2020	Bromodichloromethane	*ND*	*2*	0.27	1.34	ug/L
MKTF-39	2/5/2020	Bromoform	ND	2	0.58	32.9	ug/L
MKTF-39	2/5/2020	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-39	2/5/2020	Carbon Disulfide	ND	20	0.91	810	ug/L
MKTF-39	2/5/2020	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-39	2/5/2020	Chlorobenzene	ND	2	0.39	77.6	ug/L
MKTF-39	2/5/2020	Chloroethane	ND	4	0.36	20857	ug/L
MKTF-39	2/5/2020	Chloroform	ND	2	0.24	100	ug/L
MKTF-39	2/5/2020	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-39	2/5/2020	cis-1,2-Dichloroethene	ND	2	0.38	70	ug/L
MKTF-39	2/5/2020	cis-1,3-Dichloropropene	ND	2	0.28	NA	ug/L
MKTF-39	2/5/2020	Dibromochloromethane	*ND*	*2*	0.48	1.68	ug/L
MKTF-39	2/5/2020	Dibromomethane	ND	2	0.42	8	ug/L
MKTF-39	2/5/2020	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-39	2/5/2020	Ethylbenzene	38	2	0.26	700	ug/L
MKTF-39	2/5/2020	Hexachlorobutadiene	*ND*	*2*	0.62	1.39	ug/L
MKTF-39	2/5/2020	Isopropylbenzene	16	2	0.38	447	ug/L
MKTF-39	2/5/2020	MTBE	ND	2	0.91	143	ug/L
MKTF-39	2/5/2020	Methylene Chloride	*ND*	*6*	0.31	5	ug/L
MKTF-39	2/5/2020	n-Butylbenzene	5.1	6	0.46	1000	ug/L
MKTF-39	2/5/2020	n-Propylbenzene	22	2	0.43	660	ug/L
MKTF-39	2/5/2020	Naphthalene	25	4	0.55	30	ug/L
MKTF-39	2/5/2020	sec-Butylbenzene	11	2	0.5	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/5/2020	Styrene	ND	2	0.38	100	ug/L
MKTF-39	2/5/2020	tert-Butylbenzene	ND	2	0.41	690	ug/L
MKTF-39	2/5/2020	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-39	2/5/2020	Toluene	ND	2	0.7	1000	ug/L
MKTF-39	2/5/2020	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-39	2/5/2020	trans-1,3-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-39	2/5/2020	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-39	2/5/2020	Trichlorofluoromethane	ND	2	0.38	1137	ug/L
MKTF-39	2/5/2020	Vinyl Chloride	ND	2	0.36	2	ug/L
MKTF-39	2/5/2020	Xylenes, Total	ND	3	0.91	620	ug/L
MKTF-39	9/19/2020	1,1,1,2-Tetrachloroethane	ND	2	0.53	5.74	ug/L
MKTF-39	9/19/2020	1,1,1-Trichloroethane	ND	2	0.6	200	ug/L
MKTF-39	9/19/2020	1,1,2,2-Tetrachloroethane	ND	4	0.55	10	ug/L
MKTF-39	9/19/2020	1,1,2-Trichloroethane	ND	2	0.38	5	ug/L
MKTF-39	9/19/2020	1,1-Dichloroethane	0.63	2	0.55	25	ug/L
MKTF-39	9/19/2020	1,1-Dichloroethene	ND	2	0.26	7	ug/L
MKTF-39	9/19/2020	1,1-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-39	9/19/2020	1,2,3-Trichlorobenzene	ND	2	0.27	70	ug/L
MKTF-39	9/19/2020	1,2,3-Trichloropropane	*ND*	*4*	0.88	0.0084	ug/L
MKTF-39	9/19/2020	1,2,4-Trichlorobenzene	ND	2	0.48	70	ug/L
MKTF-39	9/19/2020	1,2,4-Trimethylbenzene	12	2	0.24	56	ug/L
MKTF-39	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*4*	1.2	0.0033	ug/L
MKTF-39	9/19/2020	1,2-Dibromoethane	*ND*	*2*	0.61	0.05	ug/L
MKTF-39	9/19/2020	1,2-Dichlorobenzene	ND	2	0.31	600	ug/L
MKTF-39	9/19/2020	1,2-Dichloroethane	ND	2	0.44	5	ug/L
MKTF-39	9/19/2020	1,2-Dichloropropane	ND	2	0.27	5	ug/L
MKTF-39	9/19/2020	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
MKTF-39	9/19/2020	1,3-Dichlorobenzene	ND	2	0.32	N/A	ug/L
MKTF-39	9/19/2020	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-39	9/19/2020	1,4-Dichlorobenzene	ND	2	0.42	75	ug/L
MKTF-39	9/19/2020	1-Methylnaphthalene	130	8	1.7	NA	ug/L
MKTF-39	9/19/2020	2,2-Dichloropropane	ND	4	0.52	NA	ug/L
MKTF-39	9/19/2020	2-Butanone	ND	20	2.2	5565	ug/L
MKTF-39	9/19/2020	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-39	9/19/2020	2-Hexanone	ND	20	3.6	38	ug/L
MKTF-39	9/19/2020	2-Methylnaphthalene	**20**	8	1.4		ug/L
MKTF-39	9/19/2020	4-Chlorotoluene	ND	2	1	250	ug/L
MKTF-39	9/19/2020	p-Isopropyltoluene	2.1	2	0.4	NA	ug/L
MKTF-39	9/19/2020	4-Methyl-2-Pentanone	ND	20	2.3	1243	ug/L
MKTF-39	9/19/2020	Acetone	ND	20	4.7	14064	ug/L
MKTF-39	9/19/2020	Benzene	**18**	2	0.45	5	ug/L
MKTF-39	9/19/2020	Bromobenzene	ND	2	0.57	62	ug/L
MKTF-39	9/19/2020	Bromodichloromethane	*ND*	*2*	0.41	1.34	ug/L
MKTF-39	9/19/2020	Bromoform	ND	2	0.63	32.9	ug/L
MKTF-39	9/19/2020	Bromomethane	ND	6	3.1	7.54	ug/L
MKTF-39	9/19/2020	Carbon Disulfide	ND	20	0.89	810	ug/L
MKTF-39	9/19/2020	Carbon tetrachloride	ND	2	0.35	5	ug/L
MKTF-39	9/19/2020	Chlorobenzene	ND	2	0.27	77.6	ug/L
MKTF-39	9/19/2020	Chloroethane	ND	4	0.75	20857	ug/L
MKTF-39	9/19/2020	Chloroform	ND	2	0.27	100	ug/L
MKTF-39	9/19/2020	Chloromethane	ND	6	0.8	20.32	ug/L
MKTF-39	9/19/2020	cis-1,2-Dichloroethene	ND	2	0.78	70	ug/L
MKTF-39	9/19/2020	cis-1,3-Dichloropropene	ND	2	0.72	NA	ug/L
MKTF-39	9/19/2020	Dibromochloromethane	*ND*	*2*	0.57	1.68	ug/L
MKTF-39	9/19/2020	Dibromomethane	ND	2	0.62	8	ug/L
MKTF-39	9/19/2020	Dichlorodifluoromethane	ND	2	0.88	197	ug/L
MKTF-39	9/19/2020	Ethylbenzene	43	2	0.43	700	ug/L
MKTF-39	9/19/2020	Hexachlorobutadiene	*ND*	*2*	0.66	1.39	ug/L
MKTF-39	9/19/2020	Isopropylbenzene	19	2	0.37	447	ug/L
MKTF-39	9/19/2020	MTBE	ND	2	0.79	143	ug/L
MKTF-39	9/19/2020	Methylene Chloride	*ND*	*6*	0.8	5	ug/L
MKTF-39	9/19/2020	n-Butylbenzene	7.3	6	0.51	1000	ug/L
MKTF-39	9/19/2020	n-Propylbenzene	27	2	0.36	660	ug/L
MKTF-39	9/19/2020	Naphthalene	**41**	4	0.56	30	ug/L
MKTF-39	9/19/2020	sec-Butylbenzene	15	2	1.2	2000	ug/L
MKTF-39	9/19/2020	Styrene	ND	2	0.26	100	ug/L
MKTF-39	9/19/2020	tert-Butylbenzene	ND	2	0.49	690	ug/L
MKTF-39	9/19/2020	Tetrachloroethene	ND	2	0.71	5	ug/L
MKTF-39	9/19/2020	Toluene	ND	2	0.4	1000	ug/L
MKTF-39	9/19/2020	trans-1,2-Dichloroethene	ND	2	0.97	100	ug/L
MKTF-39	9/19/2020	trans-1,3-Dichloropropene	ND	2	0.68	NA	ug/L
MKTF-39	9/19/2020	Trichloroethene	ND	2	0.41	5	ug/L
MKTF-39	9/19/2020	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
MKTF-39	9/19/2020	Vinyl Chloride	0.44	2	0.39	2	ug/L
MKTF-39	9/19/2020	Xylenes, Total	ND	3	1.1	620	ug/L
MKTF-39	12/16/2020	Acetone	ND	25	10	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	Benzene	**14.4**	1	0.38	5	ug/L
MKTF-39	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-39	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-39	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-39	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-39	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-39	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-39	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-39	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-39	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-39	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-39	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-39	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-39	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-39	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-39	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-39	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-39	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-39	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-39	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-39	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-39	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-39	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-39	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-39	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-39	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-39	12/16/2020	Ethylbenzene	33.4	1	0.5	700	ug/L
MKTF-39	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-39	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-39	12/16/2020	Isopropylbenzene	12.2	1	0.53	447	ug/L
MKTF-39	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-39	12/16/2020	1-Methylnaphthalene	158	5	4.2	NA	ug/L
MKTF-39	12/16/2020	2-Methylnaphthalene	**16.8**	10	4.6		ug/L
MKTF-39	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-39	12/16/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-39	12/16/2020	Naphthalene	**47.4**	1	1	30	ug/L
MKTF-39	12/16/2020	n-Butylbenzene	3.32	1	0.76	1000	ug/L
MKTF-39	12/16/2020	n-Propylbenzene	16.1	1	0.69	660	ug/L
MKTF-39	12/16/2020	p-Isopropyltoluene	1.09	1	0.71	NA	ug/L
MKTF-39	12/16/2020	sec-Butylbenzene	7.74	1	0.7	2000	ug/L
MKTF-39	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-39	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-39	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-39	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-39	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-39	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-39	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-39	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-39	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-39	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-39	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-39	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-39	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-39	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-39	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-39	12/16/2020	1,2,4-Trimethylbenzene	6.59	1	0.82	56	ug/L
MKTF-39	12/16/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-39	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-39	12/16/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-40	11/21/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-40	11/21/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	11/21/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-40	11/21/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-40	11/21/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-40	11/21/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-40	11/21/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-40	11/21/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-40	11/21/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-40	11/21/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-40	11/21/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-40	11/21/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-40	11/21/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-40	11/21/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-40	11/21/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-40	11/21/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	11/21/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-40	11/21/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-40	11/21/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-40	11/21/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	11/21/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-40	11/21/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-40	11/21/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-40	11/21/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	11/21/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-40	11/21/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-40	11/21/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-40	11/21/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-40	11/21/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-40	11/21/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-40	11/21/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-40	11/21/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-40	11/21/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-40	11/21/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-40	11/21/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-40	11/21/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-40	11/21/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	11/21/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-40	11/21/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-40	11/21/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	11/21/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	11/21/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-40	11/21/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-40	11/21/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-40	11/21/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	11/21/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	11/21/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-40	11/21/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-40	11/21/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-40	11/21/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-40	11/21/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-40	11/21/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-40	11/21/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-40	11/21/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-40	11/21/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	6/10/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-40	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	11/4/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-40	11/4/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-40	11/4/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-40	11/4/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-40	11/4/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-40	11/4/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-40	11/4/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-40	11/4/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-40	11/4/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-40	11/4/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-40	11/4/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-40	11/4/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-40	11/4/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/4/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-40	11/4/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	11/4/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-40	11/4/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-40	11/4/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-40	11/4/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	11/4/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-40	11/4/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-40	11/4/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-40	11/4/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-40	11/4/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-40	11/4/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-40	11/4/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-40	11/4/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-40	11/4/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-40	11/4/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-40	11/4/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-40	11/4/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-40	11/4/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-40	11/4/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-40	11/4/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-40	11/4/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	11/4/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-40	11/4/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	11/4/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-40	11/4/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-40	11/4/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	11/4/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-40	11/4/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-40	11/4/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-40	11/4/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-40	11/4/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-40	11/4/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-40	11/4/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	11/4/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-40	11/4/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-40	11/4/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-40	11/4/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-40	11/4/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-40	11/4/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	11/4/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-40	11/4/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-40	11/4/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	11/4/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	2/23/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	2/23/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-40	2/23/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	2/23/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	2/23/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-40	2/23/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	2/23/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	2/23/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	2/23/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-40	2/23/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-40	2/23/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-40	2/23/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	2/23/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	2/23/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-40	2/23/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-40	2/23/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-40	2/23/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-40	2/23/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-40	2/23/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-40	2/23/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-40	2/23/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-40	2/23/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	2/23/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-40	2/23/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	2/23/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	2/23/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-40	2/23/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-40	2/23/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-40	2/23/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-40	2/23/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-40	2/23/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	2/23/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/23/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-40	2/23/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	2/23/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	2/23/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	2/23/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	2/23/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-40	2/23/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-40	2/23/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	2/23/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-40	2/23/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-40	2/23/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-40	2/23/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	2/23/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	2/23/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	2/23/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	2/23/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	2/23/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	2/23/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	2/23/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-40	2/23/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-40	2/23/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	2/23/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	2/23/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-40	2/23/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	2/23/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-40	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	6/9/2016	1,1-Dichloroethane	0.62	1	0.11	25	ug/L
MKTF-40	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-40	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	6/9/2016	MTBE	0.62	1	0.21	143	ug/L
MKTF-40	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	9/8/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-40	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	9/8/2016	1,1-Dichloroethane	0.65	1	0.11	25	ug/L
MKTF-40	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	9/8/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-40	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-40	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	9/8/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-40	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-40	10/31/2016	Chloroform	0.2	1	0.089	100	ug/L
MKTF-40	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-40	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-40	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-40	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-40	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-40	10/31/2016	1,1-Dichloroethane	0.64	1	0.11	25	ug/L
MKTF-40	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-40	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-40	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-40	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-40	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-40	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-40	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-40	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-40	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-40	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-40	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-40	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-40	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-40	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-40	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-40	10/31/2016	1,2-Dichloroethane	0.37	1	0.12	5	ug/L
MKTF-40	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-40	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-40	10/31/2016	Toluene	0.15	1	0.12	1000	ug/L
MKTF-40	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-40	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-40	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-40	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-40	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-40	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-40	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-40	10/31/2016	MTBE	0.3	1	0.21	143	ug/L
MKTF-40	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-40	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	3/7/2017	Acetone	2.3	10	0.88	14064	ug/L
MKTF-40	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-40	3/7/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-40	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-40	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-40	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-40	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-40	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	3/7/2017	1,1-Dichloroethane	0.62	1	0.1	25	ug/L
MKTF-40	3/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-40	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	3/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-40	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-40	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-40	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	3/7/2017	1,2,3-Trichloropropane	*ND*	2	0.39	0.0084	ug/L
MKTF-40	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	3/7/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-40	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-40	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-40	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-40	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	3/7/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-40	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-40	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-40	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-40	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	3/7/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-40	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-40	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-40	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-40	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-40	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	3/7/2017	MTBE	0.41	1	0.15	143	ug/L
MKTF-40	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-40	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-40	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	6/5/2017	Acetone	4.6	10	0.82	14064	ug/L
MKTF-40	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	6/5/2017	1,1-Dichloroethane	0.66	1	0.4	25	ug/L
MKTF-40	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-40	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	6/5/2017	MTBE	0.46	1	0.24	143	ug/L
MKTF-40	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	9/25/2017	Acetone	5.5	10	0.82	14064	ug/L
MKTF-40	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	9/25/2017	1,1-Dichloroethane	0.81	1	0.4	25	ug/L
MKTF-40	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	9/25/2017	MTBE	0.46	1	0.24	143	ug/L
MKTF-40	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	11/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	11/21/2017	Acetone	2.7	10	0.82	14064	ug/L
MKTF-40	11/21/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	11/21/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-40	11/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	11/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	11/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	11/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	11/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	11/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	11/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	11/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	11/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	11/21/2017	1,1-Dichloroethane	0.59	1	0.4	25	ug/L
MKTF-40	11/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	11/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	11/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	11/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	11/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	11/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	11/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	11/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	11/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	11/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	11/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	11/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	11/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	11/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	11/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	11/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	11/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	11/21/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-40	11/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	11/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	11/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	11/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	11/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	11/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	11/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	11/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	11/21/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	11/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	11/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	11/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	11/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	11/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	11/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	11/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	11/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	11/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	11/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	11/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	11/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	11/21/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-40	11/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	11/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	2/5/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	2/5/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-40	2/5/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	2/5/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-40	2/5/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	2/5/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	2/5/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	2/5/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	2/5/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	2/5/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	2/5/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	2/5/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	2/5/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	2/5/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	2/5/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-40	2/5/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	2/5/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	2/5/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	2/5/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	2/5/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	2/5/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	2/5/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	2/5/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	2/5/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	2/5/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	2/5/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	2/5/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	2/5/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	2/5/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	2/5/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	2/5/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/5/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	2/5/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-40	2/5/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	2/5/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	2/5/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	2/5/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	2/5/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	2/5/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	2/5/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	2/5/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	2/5/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	2/5/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	2/5/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	2/5/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	2/5/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	2/5/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	2/5/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	2/5/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	2/5/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-40	2/5/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	2/5/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	2/5/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	2/5/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	2/5/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-40	2/5/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	2/5/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	5/6/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-40	5/6/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-40	5/6/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	5/6/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-40	5/6/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-40	5/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	5/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	5/6/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-40	5/6/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-40	5/6/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-40	5/6/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-40	5/6/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-40	5/6/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-40	5/6/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-40	5/6/2018	1,1-Dichloroethane	0.77	1	0.4	25	ug/L
MKTF-40	5/6/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-40	5/6/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-40	5/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	5/6/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-40	5/6/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	5/6/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-40	5/6/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-40	5/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-40	5/6/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-40	5/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	5/6/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-40	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-40	5/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-40	5/6/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-40	5/6/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-40	5/6/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-40	5/6/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-40	5/6/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-40	5/6/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-40	5/6/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-40	5/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	5/6/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-40	5/6/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	5/6/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-40	5/6/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-40	5/6/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-40	5/6/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-40	5/6/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-40	5/6/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-40	5/6/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-40	5/6/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-40	5/6/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-40	5/6/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-40	5/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	5/6/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-40	5/6/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-40	5/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-40	5/6/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-40	5/6/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-40	5/6/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-40	5/6/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-40	8/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-40	8/17/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-40	8/17/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-40	8/17/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-40	8/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-40	8/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-40	8/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-40	8/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-40	8/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-40	8/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-40	8/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-40	8/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-40	8/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-40	8/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-40	8/17/2018	1,1-Dichloroethane	0.82	1	0.4	25	ug/L
MKTF-40	8/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-40	8/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-40	8/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-40	8/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-40	8/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-40	8/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-40	8/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-40	8/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-40	8/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-40	8/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-40	8/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-40	8/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-40	8/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-40	8/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-40	8/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-40	8/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-40	8/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-40	8/17/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-40	8/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-40	8/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	8/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-40	8/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-40	8/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-40	8/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-40	8/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-40	8/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-40	8/17/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	8/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-40	8/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-40	8/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	8/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-40	8/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-40	8/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-40	8/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	8/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-40	8/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-40	8/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-40	8/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-40	8/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-40	8/17/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-40	8/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-40	8/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-40	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-40	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-40	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-40	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-40	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-40	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-40	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-40	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-40	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-40	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-40	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-40	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-40	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-40	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-40	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-40	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-40	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-40	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-40	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-40	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-40	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-40	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-40	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-40	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-40	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-40	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-40	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-40	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-40	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-40	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-40	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-40	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-40	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-40	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-40	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-40	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-40	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-40	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-40	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-40	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-40	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-40	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-40	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-40	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-40	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-40	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-40	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-40	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-40	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-40	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-40	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-40	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-40	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-40	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-40	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-40	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-40	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-40	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-40	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-40	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-40	2/20/2019	1,1-Dichloroethane	1	1	0.175197	25	ug/L
MKTF-40	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-40	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-40	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-40	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-40	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-40	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-40	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-40	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-40	2/20/2019	1,2-Dichloroethane	0.28	1	0.189525	5	ug/L
MKTF-40	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-40	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-40	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-40	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-40	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-40	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-40	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-40	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-40	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-40	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-40	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-40	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-40	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-40	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-40	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-40	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-40	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-40	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-40	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-40	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-40	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-40	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-40	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-40	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-40	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-40	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-40	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-40	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-40	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-40	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-40	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-40	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-40	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-40	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-40	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-40	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-40	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-40	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-40	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-40	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-40	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-40	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-40	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-40	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-40	2/20/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-40	5/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	5/6/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	5/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	5/6/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	5/6/2019	1,1-Dichloroethane	0.66	1	0.140859	25	ug/L
MKTF-40	5/6/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	5/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	5/6/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	5/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-40	5/6/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	5/6/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	5/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-40	5/6/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	5/6/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	5/6/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-40	5/6/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	5/6/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	5/6/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	5/6/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	5/6/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	5/6/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	5/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	5/6/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	5/6/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	5/6/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	5/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	5/6/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	5/6/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	5/6/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	5/6/2019	Acetone	5.3	10	1.199396	14064	ug/L
MKTF-40	5/6/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	5/6/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	5/6/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	5/6/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	5/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	5/6/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	5/6/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	5/6/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	5/6/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	5/6/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	5/6/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	5/6/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	5/6/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	5/6/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	5/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	5/6/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	5/6/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	5/6/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	5/6/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-40	5/6/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	5/6/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	5/6/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	5/6/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	5/6/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	5/6/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	5/6/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	5/6/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	5/6/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	5/6/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	5/6/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	5/6/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-40	5/6/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	5/6/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	5/6/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	5/6/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-40	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	8/22/2019	1,1-Dichloroethane	0.78	1	0.140859	25	ug/L
MKTF-40	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-40	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-40	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-40	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	8/22/2019	Acetone	1.7	10	1.199396	14064	ug/L
MKTF-40	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-40	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	8/22/2019	MTBE	ND	1	0.456095	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-40	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	8/22/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
MKTF-40	10/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-40	10/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-40	10/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-40	10/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-40	10/22/2019	1,1-Dichloroethane	0.76	1	0.140859	25	ug/L
MKTF-40	10/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-40	10/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-40	10/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-40	10/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-40	10/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-40	10/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-40	10/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-40	10/22/2019	1,2-Dichloroethane	0.44	1	0.194638	5	ug/L
MKTF-40	10/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-40	10/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-40	10/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-40	10/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-40	10/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-40	10/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-40	10/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-40	10/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-40	10/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-40	10/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-40	10/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-40	10/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-40	10/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-40	10/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-40	10/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-40	10/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-40	10/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-40	10/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-40	10/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-40	10/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-40	10/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-40	10/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-40	10/22/2019	Chloroform	0.19	1	0.121891	100	ug/L
MKTF-40	10/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-40	10/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-40	10/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-40	10/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-40	10/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-40	10/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-40	10/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-40	10/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-40	10/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-40	10/22/2019	MTBE	0.72	1	0.456095	143	ug/L
MKTF-40	10/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-40	10/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-40	10/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-40	10/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-40	10/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-40	10/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-40	10/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-40	10/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-40	10/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-40	10/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-40	10/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-40	10/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-40	10/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-40	10/22/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
MKTF-40	2/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-40	2/28/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-40	2/28/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-40	2/28/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-40	2/28/2020	1,1-Dichloroethane	0.64	1	0.27	25	ug/L
MKTF-40	2/28/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-40	2/28/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	2/28/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-40	2/28/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-40	2/28/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-40	2/28/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	2/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-40	2/28/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-40	2/28/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-40	2/28/2020	1,2-Dichloroethane	0.37	1	0.22	5	ug/L
MKTF-40	2/28/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-40	2/28/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-40	2/28/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-40	2/28/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	2/28/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-40	2/28/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-40	2/28/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-40	2/28/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	2/28/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	2/28/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-40	2/28/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-40	2/28/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-40	2/28/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-40	2/28/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	2/28/2020	Acetone	4	10	2.3	14064	ug/L
MKTF-40	2/28/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-40	2/28/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-40	2/28/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-40	2/28/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-40	2/28/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-40	2/28/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-40	2/28/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-40	2/28/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	2/28/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-40	2/28/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-40	2/28/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-40	2/28/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-40	2/28/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-40	2/28/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-40	2/28/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-40	2/28/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-40	2/28/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-40	2/28/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-40	2/28/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-40	2/28/2020	MTBE	0.76	1	0.39	143	ug/L
MKTF-40	2/28/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-40	2/28/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	2/28/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-40	2/28/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-40	2/28/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-40	2/28/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-40	2/28/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-40	2/28/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-40	2/28/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-40	2/28/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-40	2/28/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-40	2/28/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-40	2/28/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-40	2/28/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	2/28/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-40	2/28/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-40	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-40	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-40	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-40	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-40	9/19/2020	1,1-Dichloroethane	0.79	1	0.27	25	ug/L
MKTF-40	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-40	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-40	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-40	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-40	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-40	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-40	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-40	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-40	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-40	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-40	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-40	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-40	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-40	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-40	9/19/2020	1-Methylnaphthalene	1.8	4	0.84	NA	ug/L
MKTF-40	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-40	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-40	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-40	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-40	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-40	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-40	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-40	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-40	9/19/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-40	9/19/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-40	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-40	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-40	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-40	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-40	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-40	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-40	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-40	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-40	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-40	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-40	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-40	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-40	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-40	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-40	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-40	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-40	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-40	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-40	9/19/2020	MTBE	0.58	1	0.39	143	ug/L
MKTF-40	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-40	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-40	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-40	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-40	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-40	9/19/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-40	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-40	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-40	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-40	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-40	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-40	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-40	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-40	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-40	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-40	9/19/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	ND	0.0196	0.00489	0.05	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	ND	0.0196	0.0049	0.05	ug/L
MKTF-40	12/17/2020	Acetone	ND	25	10	14064	ug/L
MKTF-40	12/17/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-40	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-40	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-40	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-40	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-40	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-40	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-40	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-40	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-40	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-40	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-40	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-40	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-40	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-40	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-40	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-40	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-40	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-40	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-40	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-40	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-40	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-40	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-40	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-40	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-40	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-40	12/17/2020	MTBE	1.03	1	0.74	143	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-40	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-40	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-40	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-40	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-40	12/17/2020	Styrene	ND	1	1	100	ug/L
MKTF-40	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-40	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-40	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-40	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-40	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-40	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-40	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-40	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-40	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-40	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-40	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-40	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-40	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-40	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-40	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-40	12/17/2020	Acetone	ND	25	10	14064	ug/L
MKTF-40	12/17/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-40	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-40	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-40	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-40	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-40	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-40	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-40	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-40	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-40	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-40	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-40	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-40	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-40	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-40	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-40	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-40	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-40	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-40	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-40	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-40	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-40	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-40	12/17/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-40	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-40	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-40	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-40	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-40	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-40	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-40	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-40	12/17/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-40	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-40	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-40	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-40	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-40	12/17/2020	Styrene	ND	1	1	100	ug/L
MKTF-40	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-40	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-40	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-40	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-40	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-40	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-40	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-40	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-40	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-40	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-40	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-40	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-40	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-40	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-40	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-40	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-40	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-41	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-41	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-41	11/18/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-41	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-41	11/18/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MKTF-41	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-41	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-41	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-41	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-41	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-41	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-41	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L
MKTF-41	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-41	11/18/2014	1,1-Dichloroethane	3.6	1	0.28	25	ug/L
MKTF-41	11/18/2014	1,1-Dichloroethene	3.8	1	0.21	7	ug/L
MKTF-41	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-41	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-41	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-41	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-41	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-41	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-41	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-41	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-41	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-41	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-41	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-41	11/18/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-41	11/18/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MKTF-41	11/18/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-41	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-41	11/18/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-41	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-41	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-41	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-41	11/18/2014	1,2-Dichloroethane	2	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-41	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-41	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-41	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-41	11/18/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-41	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-41	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-41	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-41	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-41	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-41	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-41	11/18/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-41	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-41	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	3/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	3/12/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	3/12/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	3/12/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	3/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	3/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	3/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	3/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	3/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	3/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	3/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	3/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	3/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	3/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	3/12/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-41	3/12/2015	1,1-Dichloroethene	1.6	1	0.099	7	ug/L
MKTF-41	3/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	3/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	3/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	3/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	3/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	3/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	3/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	3/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	3/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	3/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	3/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	3/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	3/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	3/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	3/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	3/12/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	3/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	3/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	3/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	3/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	3/12/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	3/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	3/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	3/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	3/12/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	3/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	3/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	3/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	3/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	3/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	3/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	3/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	3/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	3/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	3/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	3/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	3/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	3/12/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	3/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	3/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	6/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	6/9/2015	1,1-Dichloroethane	1.7	1	0.4	25	ug/L
MKTF-41	6/9/2015	1,1-Dichloroethene	1.9	1	0.099	7	ug/L
MKTF-41	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	6/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	6/9/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	6/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	6/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	8/21/2015	1,1-Dichloroethane	1.8	1	0.4	25	ug/L
MKTF-41	8/21/2015	1,1-Dichloroethene	2.1	1	0.099	7	ug/L
MKTF-41	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	8/21/2015	1,2-Dichloroethane	1.3	1	0.18	5	ug/L
MKTF-41	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-41	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-41	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-41	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-41	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-41	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-41	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-41	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-41	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-41	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-41	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-41	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-41	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-41	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-41	11/5/2015	1,1-Dichloroethane	3.1	1	0.4	25	ug/L
MKTF-41	11/5/2015	1,1-Dichloroethene	3.8	1	0.099	7	ug/L
MKTF-41	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-41	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-41	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-41	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-41	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-41	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-41	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-41	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-41	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-41	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-41	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-41	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-41	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-41	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-41	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-41	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-41	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-41	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-41	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	11/5/2015	1,2-Dichloroethane	2.3	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-41	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-41	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-41	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-41	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-41	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-41	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-41	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-41	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-41	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-41	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-41	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-41	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-41	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-41	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-41	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-41	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-41	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-41	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-41	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-41	2/24/2016	1,1-Dichloroethane	2.6	1	0.11	25	ug/L
MKTF-41	2/24/2016	1,1-Dichloroethene	4.1	1	0.076	7	ug/L
MKTF-41	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-41	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-41	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-41	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-41	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-41	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-41	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-41	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-41	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-41	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-41	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-41	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-41	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	2/24/2016	1,2-Dichloroethane	1.9	1	0.053	5	ug/L
MKTF-41	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-41	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-41	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-41	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-41	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-41	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-41	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-41	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	6/9/2016	1,1-Dichloroethane	2.7	1	0.11	25	ug/L
MKTF-41	6/9/2016	1,1-Dichloroethene	3.4	1	0.11	7	ug/L
MKTF-41	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-41	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	6/9/2016	1,1,2-Trichloroethane	0.54	1	0.13	5	ug/L
MKTF-41	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	6/9/2016	1,2-Dichloroethane	2.2	1	0.12	5	ug/L
MKTF-41	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	6/9/2016	MTBE	3	1	0.21	143	ug/L
MKTF-41	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	9/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	9/9/2016	1,1-Dichloroethane	2.5	1	0.11	25	ug/L
MKTF-41	9/9/2016	1,1-Dichloroethene	6.1	1	0.11	7	ug/L
MKTF-41	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	9/9/2016	1,1,2-Trichloroethane	0.53	1	0.13	5	ug/L
MKTF-41	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	9/9/2016	1,2-Dichloroethane	2.4	1	0.12	5	ug/L
MKTF-41	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	9/9/2016	MTBE	0.41	1	0.21	143	ug/L
MKTF-41	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	10/31/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-41	10/31/2016	Chloroform	0.14	1	0.089	100	ug/L
MKTF-41	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-41	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-41	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-41	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-41	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-41	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-41	10/31/2016	1,1-Dichloroethane	2.7	1	0.11	25	ug/L
MKTF-41	10/31/2016	1,1-Dichloroethene	5.4	1	0.11	7	ug/L
MKTF-41	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-41	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-41	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-41	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-41	10/31/2016	1,1,2-Trichloroethane	0.55	1	0.13	5	ug/L
MKTF-41	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-41	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-41	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-41	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-41	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-41	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-41	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-41	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-41	10/31/2016	1,2-Dichloroethane	2.4	1	0.12	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-41	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-41	10/31/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-41	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-41	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-41	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-41	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-41	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-41	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-41	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-41	10/31/2016	MTBE	0.91	1	0.21	143	ug/L
MKTF-41	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-41	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	3/7/2017	Acetone	1	10	0.88	14064	ug/L
MKTF-41	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-41	3/7/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-41	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-41	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-41	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-41	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-41	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	3/7/2017	1,1-Dichloroethane	3.6	1	0.1	25	ug/L
MKTF-41	3/7/2017	1,1-Dichloroethene	5.3	1	0.081	7	ug/L
MKTF-41	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-41	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	3/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	3/7/2017	1,1,2-Trichloroethane	0.52	1	0.14	5	ug/L
MKTF-41	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-41	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-41	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	3/7/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-41	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	3/7/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-41	3/7/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-41	3/7/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-41	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	3/7/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-41	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-41	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	3/7/2017	1,2-Dichloroethane	2.6	1	0.12	5	ug/L
MKTF-41	3/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	3/7/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-41	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	3/7/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-41	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-41	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	3/7/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-41	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-41	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-41	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-41	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-41	3/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	3/7/2017	MTBE	1.2	1	0.15	143	ug/L
MKTF-41	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-41	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	6/6/2017	Acetone	3.9	10	0.82	14064	ug/L
MKTF-41	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	6/6/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	6/6/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	6/6/2017	1,1-Dichloroethene	4.8	1	0.081	7	ug/L
MKTF-41	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	6/6/2017	1,1,2-Trichloroethane	0.47	1	0.14	5	ug/L
MKTF-41	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	6/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	6/6/2017	1,2-Dichloroethane	2.7	1	0.4	5	ug/L
MKTF-41	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	6/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-41	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	6/6/2017	MTBE	1.2	1	0.24	143	ug/L
MKTF-41	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	9/25/2017	MTBE	1.2	1	0.24	143	ug/L
MKTF-41	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	9/25/2017	Acetone	3.4	10	0.82	14064	ug/L
MKTF-41	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	9/25/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	9/25/2017	1,1-Dichloroethene	4.3	1	0.081	7	ug/L
MKTF-41	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	9/25/2017	1,1,2-Trichloroethane	0.63	1	0.14	5	ug/L
MKTF-41	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	9/25/2017	1,2-Dichloroethane	2.7	1	0.4	5	ug/L
MKTF-41	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/27/2017	Acetone	1.7	10	0.82	14064	ug/L
MKTF-41	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	11/27/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-41	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	11/27/2017	1,1-Dichloroethane	3.4	1	0.4	25	ug/L
MKTF-41	11/27/2017	1,1-Dichloroethene	5.3	1	0.081	7	ug/L
MKTF-41	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	11/27/2017	1,1,2-Trichloroethane	0.57	1	0.14	5	ug/L
MKTF-41	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-41	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	1,2-Dichloroethane	2.8	1	0.4	5	ug/L
MKTF-41	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	11/27/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	11/27/2017	MTBE	0.81	1	0.24	143	ug/L
MKTF-41	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-41	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-41	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	2/7/2018	1,1-Dichloroethane	4.1	1	0.4	25	ug/L
MKTF-41	2/7/2018	1,1-Dichloroethene	6	1	0.081	7	ug/L
MKTF-41	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-41	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-41	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	2/7/2018	1,2-Dichloroethane	3.4	1	0.4	5	ug/L
MKTF-41	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-41	2/7/2018	MTBE	1.4	1	0.24	143	ug/L
MKTF-41	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-41	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-41	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	5/9/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-41	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-41	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-41	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-41	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-41	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-41	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-41	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-41	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-41	5/9/2018	1,1-Dichloroethane	4.8	1	0.4	25	ug/L
MKTF-41	5/9/2018	1,1-Dichloroethene	**7.3**	1	0.081	7	ug/L
MKTF-41	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-41	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-41	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-41	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	5/9/2018	1,1,2-Trichloroethane	0.79	1	0.14	5	ug/L
MKTF-41	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-41	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-41	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-41	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-41	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-41	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-41	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-41	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-41	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-41	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-41	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-41	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-41	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-41	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-41	5/9/2018	1,2-Dichloroethane	4	1	0.4	5	ug/L
MKTF-41	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-41	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-41	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-41	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-41	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-41	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-41	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-41	5/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-41	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-41	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-41	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-41	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-41	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-41	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-41	5/9/2018	Xylenes, Total	0.47	1.5	0.32	620	ug/L
MKTF-41	5/9/2018	MTBE	1.6	1	0.24	143	ug/L
MKTF-41	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-41	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-41	8/29/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-41	8/29/2018	Acetone	ND	10	0.79	14064	ug/L
MKTF-41	8/29/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-41	8/29/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-41	8/29/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-41	8/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-41	8/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-41	8/29/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-41	8/29/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-41	8/29/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-41	8/29/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-41	8/29/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-41	8/29/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-41	8/29/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-41	8/29/2018	1,1-Dichloroethane	5	1	0.4	25	ug/L
MKTF-41	8/29/2018	1,1-Dichloroethene	6.9	1	0.12	7	ug/L
MKTF-41	8/29/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-41	8/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-41	8/29/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-41	8/29/2018	1,1,2-Trichloroethane	0.62	1	0.23	5	ug/L
MKTF-41	8/29/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-41	8/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-41	8/29/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-41	8/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-41	8/29/2018	1,2,4-Trimethylbenzene	0.32	1	0.25	56	ug/L
MKTF-41	8/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-41	8/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-41	8/29/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-41	8/29/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-41	8/29/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-41	8/29/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-41	8/29/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-41	8/29/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-41	8/29/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	8/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-41	8/29/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-41	8/29/2018	1,2-Dichloroethane	3.9	1	0.4	5	ug/L
MKTF-41	8/29/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-41	8/29/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-41	8/29/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-41	8/29/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	8/29/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-41	8/29/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-41	8/29/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	8/29/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-41	8/29/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-41	8/29/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-41	8/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	8/29/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-41	8/29/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-41	8/29/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-41	8/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-41	8/29/2018	Xylenes, Total	0.82	1.5	0.64	620	ug/L
MKTF-41	8/29/2018	MTBE	1.1	1	0.32	143	ug/L
MKTF-41	8/29/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-41	8/29/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-41	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-41	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-41	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-41	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-41	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-41	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-41	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-41	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-41	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-41	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-41	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-41	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-41	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-41	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-41	11/15/2018	1,1-Dichloroethane	4.3	1	0.18	25	ug/L
MKTF-41	11/15/2018	1,1-Dichloroethene	7	1	0.12	7	ug/L
MKTF-41	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-41	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-41	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-41	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-41	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-41	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-41	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-41	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-41	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-41	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-41	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-41	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-41	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-41	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-41	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-41	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-41	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-41	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-41	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-41	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/15/2018	1,2-Dichloroethane	3.7	1	0.19	5	ug/L
MKTF-41	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-41	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-41	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-41	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-41	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-41	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-41	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-41	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-41	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-41	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-41	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-41	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-41	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-41	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-41	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-41	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-41	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-41	11/15/2018	MTBE	1.4	1	0.46	143	ug/L
MKTF-41	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-41	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-41	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-41	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-41	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-41	2/13/2019	1,1,2-Trichloroethane	0.57	1	0.232723	5	ug/L
MKTF-41	2/13/2019	1,1-Dichloroethane	4.3	1	0.175197	25	ug/L
MKTF-41	2/13/2019	1,1-Dichloroethene	**7.3**	1	0.120488	7	ug/L
MKTF-41	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-41	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-41	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-41	2/13/2019	1,2,4-Trimethylbenzene	0.53	1	0.253314	56	ug/L
MKTF-41	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-41	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-41	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-41	2/13/2019	1,2-Dichloroethane	3.7	1	0.189525	5	ug/L
MKTF-41	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-41	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-41	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-41	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-41	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-41	2/13/2019	1-Methylnaphthalene	0.8	4	0.335817	NA	ug/L
MKTF-41	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-41	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-41	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-41	2/13/2019	2-Methylnaphthalene	**0.81**	4	0.345376		ug/L
MKTF-41	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-41	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-41	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-41	2/13/2019	Acetone	1.2	10	0.75707	14064	ug/L
MKTF-41	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-41	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-41	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-41	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-41	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-41	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-41	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-41	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-41	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-41	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-41	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-41	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-41	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-41	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-41	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-41	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-41	2/13/2019	MTBE	0.99	1	0.456095	143	ug/L
MKTF-41	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-41	2/13/2019	Naphthalene	0.92	2	0.289626	30	ug/L
MKTF-41	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-41	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-41	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-41	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-41	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-41	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-41	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-41	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-41	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-41	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-41	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-41	2/13/2019	Xylenes, Total	1.3	1.5	0.641288	620	ug/L
MKTF-41	2/13/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
MKTF-41	5/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	5/7/2019	1,1,2-Trichloroethane	0.52	1	0.21583	5	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethane	3.2	1	0.140859	25	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethene	5.4	1	0.205388	7	ug/L
MKTF-41	5/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	5/7/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	5/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	5/7/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	5/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	5/7/2019	1,2,4-Trimethylbenzene	0.49	1	0.213199	56	ug/L
MKTF-41	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	5/7/2019	1,2-Dichloroethane	2.6	1	0.194638	5	ug/L
MKTF-41	5/7/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	5/7/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	5/7/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	0.75	4	0.314954	NA	ug/L
MKTF-41	5/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	5/7/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	5/7/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	5/7/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	**0.68**	4	0.345376		ug/L
MKTF-41	5/7/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	5/7/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	5/7/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	5/7/2019	Acetone	6.2	10	1.199396	14064	ug/L
MKTF-41	5/7/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	5/7/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	5/7/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	5/7/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	5/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	5/7/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	5/7/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	5/7/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	5/7/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	5/7/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	5/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	5/7/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	5/7/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	5/7/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	5/7/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	5/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	5/7/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	5/7/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	5/7/2019	MTBE	0.99	1	0.456095	143	ug/L
MKTF-41	5/7/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	5/7/2019	Naphthalene	0.62	2	0.275071	30	ug/L
MKTF-41	5/7/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	5/7/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	5/7/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	5/7/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	5/7/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	5/7/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	5/7/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	5/7/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	5/7/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	5/7/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	5/7/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	5/7/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	5/7/2019	Xylenes, Total	0.53	1.5	0.454415	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	5/7/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	5/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	5/7/2019	1,1,2-Trichloroethane	0.51	1	0.21583	5	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethane	3	1	0.140859	25	ug/L
MKTF-41	5/7/2019	1,1-Dichloroethene	4	1	0.205388	7	ug/L
MKTF-41	5/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	5/7/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	5/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	5/7/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
MKTF-41	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	5/7/2019	1,2-Dichloroethane	2.5	1	0.194638	5	ug/L
MKTF-41	5/7/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	5/7/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	5/7/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-41	5/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	5/7/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	5/7/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	5/7/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-41	5/7/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	5/7/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	5/7/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	5/7/2019	Acetone	4.8	10	1.199396	14064	ug/L
MKTF-41	5/7/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	5/7/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	5/7/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	5/7/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	5/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	5/7/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	5/7/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	5/7/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	5/7/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	5/7/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	5/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	5/7/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	5/7/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	5/7/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	5/7/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	5/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	5/7/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	5/7/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	5/7/2019	MTBE	0.87	1	0.456095	143	ug/L
MKTF-41	5/7/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-41	5/7/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	5/7/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	5/7/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	5/7/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	5/7/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	5/7/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	5/7/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	5/7/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	5/7/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	5/7/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	5/7/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	5/7/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	5/7/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-41	5/7/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
MKTF-41	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	8/22/2019	1,1,2-Trichloroethane	0.69	1	0.21583	5	ug/L
MKTF-41	8/22/2019	1,1-Dichloroethane	3.9	1	0.140859	25	ug/L
MKTF-41	8/22/2019	1,1-Dichloroethene	5.3	1	0.205388	7	ug/L
MKTF-41	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	8/22/2019	1,2,4-Trimethylbenzene	0.51	1	0.213199	56	ug/L
MKTF-41	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-41	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	8/22/2019	1,2-Dichloroethane	3.3	1	0.194638	5	ug/L
MKTF-41	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	8/22/2019	1-Methylnaphthalene	0.64	4	0.314954	NA	ug/L
MKTF-41	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	8/22/2019	2-Methylnaphthalene	**0.7**	4	0.345376		ug/L
MKTF-41	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	8/22/2019	Acetone	2.2	10	1.199396	14064	ug/L
MKTF-41	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-41	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	8/22/2019	MTBE	1.2	1	0.456095	143	ug/L
MKTF-41	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	8/22/2019	Naphthalene	0.63	2	0.275071	30	ug/L
MKTF-41	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	8/22/2019	Xylenes, Total	0.63	1.5	0.454415	620	ug/L
MKTF-41	8/22/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
MKTF-41	10/23/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-41	10/23/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-41	10/23/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-41	10/23/2019	1,1,2-Trichloroethane	0.63	1	0.21583	5	ug/L
MKTF-41	10/23/2019	1,1-Dichloroethane	3.1	1	0.140859	25	ug/L
MKTF-41	10/23/2019	1,1-Dichloroethene	3.8	1	0.205388	7	ug/L
MKTF-41	10/23/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-41	10/23/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-41	10/23/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-41	10/23/2019	1,2,4-Trimethylbenzene	0.36	1	0.213199	56	ug/L
MKTF-41	10/23/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-41	10/23/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-41	10/23/2019	1,2-Dichloroethane	3	1	0.194638	5	ug/L
MKTF-41	10/23/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-41	10/23/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-41	10/23/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-41	10/23/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-41	10/23/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-41	10/23/2019	1-Methylnaphthalene	0.35	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-41	10/23/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-41	10/23/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-41	10/23/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-41	10/23/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-41	10/23/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-41	10/23/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-41	10/23/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-41	10/23/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-41	10/23/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-41	10/23/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-41	10/23/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-41	10/23/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-41	10/23/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-41	10/23/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-41	10/23/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-41	10/23/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-41	10/23/2019	Chloroform	0.2	1	0.121891	100	ug/L
MKTF-41	10/23/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-41	10/23/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-41	10/23/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-41	10/23/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-41	10/23/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-41	10/23/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-41	10/23/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-41	10/23/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-41	10/23/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-41	10/23/2019	MTBE	1.3	1	0.456095	143	ug/L
MKTF-41	10/23/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-41	10/23/2019	Naphthalene	0.33	2	0.275071	30	ug/L
MKTF-41	10/23/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-41	10/23/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-41	10/23/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-41	10/23/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-41	10/23/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-41	10/23/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-41	10/23/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-41	10/23/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-41	10/23/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-41	10/23/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-41	10/23/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-41	10/23/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-41	10/23/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-41	10/23/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-41	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-41	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-41	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-41	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-41	2/27/2020	1,1-Dichloroethane	3.3	1	0.27	25	ug/L
MKTF-41	2/27/2020	1,1-Dichloroethene	**7.6**	1	0.13	7	ug/L
MKTF-41	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-41	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-41	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-41	2/27/2020	1,2,4-Trimethylbenzene	1.3	1	0.12	56	ug/L
MKTF-41	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-41	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-41	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-41	2/27/2020	1,2-Dichloroethane	3.1	1	0.22	5	ug/L
MKTF-41	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-41	2/27/2020	1,3,5-Trimethylbenzene	0.51	1	0.18	60	ug/L
MKTF-41	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-41	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-41	2/27/2020	1-Methylnaphthalene	1.9	4	0.84	NA	ug/L
MKTF-41	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-41	2/27/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-41	2/27/2020	2-Methylnaphthalene	**2.6**	4	0.69		ug/L
MKTF-41	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-41	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-41	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	2/27/2020	Acetone	3.9	10	2.3	14064	ug/L
MKTF-41	2/27/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-41	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-41	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-41	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-41	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-41	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-41	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-41	2/27/2020	Chloroform	0.2	1	0.13	100	ug/L
MKTF-41	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-41	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-41	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-41	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-41	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-41	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-41	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-41	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-41	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-41	2/27/2020	MTBE	1.2	1	0.39	143	ug/L
MKTF-41	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-41	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-41	2/27/2020	Naphthalene	2	2	0.28	30	ug/L
MKTF-41	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-41	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-41	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-41	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-41	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-41	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-41	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-41	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-41	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-41	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	2/27/2020	Xylenes, Total	2.8	1.5	0.55	620	ug/L
MKTF-41	2/27/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-41	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-41	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-41	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-41	9/21/2020	1,1,2-Trichloroethane	0.65	1	0.19	5	ug/L
MKTF-41	9/21/2020	1,1-Dichloroethane	5.2	1	0.27	25	ug/L
MKTF-41	9/21/2020	1,1-Dichloroethene	**7.1**	1	0.13	7	ug/L
MKTF-41	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-41	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-41	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-41	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-41	9/21/2020	1,2,4-Trimethylbenzene	1.9	1	0.12	56	ug/L
MKTF-41	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-41	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-41	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-41	9/21/2020	1,2-Dichloroethane	4.1	1	0.22	5	ug/L
MKTF-41	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-41	9/21/2020	1,3,5-Trimethylbenzene	0.75	1	0.18	60	ug/L
MKTF-41	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-41	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-41	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-41	9/21/2020	1-Methylnaphthalene	2.6	4	0.84	NA	ug/L
MKTF-41	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-41	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-41	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-41	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-41	9/21/2020	2-Methylnaphthalene	**3.5**	4	0.69		ug/L
MKTF-41	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-41	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-41	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-41	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-41	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-41	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-41	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-41	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-41	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-41	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-41	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-41	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-41	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-41	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-41	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-41	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-41	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-41	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-41	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-41	9/21/2020	Ethylbenzene	0.36	1	0.21	700	ug/L
MKTF-41	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-41	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-41	9/21/2020	MTBE	1	1	0.39	143	ug/L
MKTF-41	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-41	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-41	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-41	9/21/2020	Naphthalene	2.6	2	0.28	30	ug/L
MKTF-41	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-41	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-41	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-41	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-41	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-41	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-41	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-41	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-41	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-41	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-41	9/21/2020	Xylenes, Total	4.3	1.5	0.55	620	ug/L
MKTF-41	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-41	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-41	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-41	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-41	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-41	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-41	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-41	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-41	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-41	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-41	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-41	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-41	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-41	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-41	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-41	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-41	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-41	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-41	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-41	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-41	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-41	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-41	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-41	12/15/2020	1,1-Dichloroethane	3.34	1	0.5	25	ug/L
MKTF-41	12/15/2020	1,2-Dichloroethane	2.99	1	0.5	5	ug/L
MKTF-41	12/15/2020	1,1-Dichloroethene	4.91	1	0.5	7	ug/L
MKTF-41	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-41	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-41	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-41	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-41	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-41	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-41	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-41	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-41	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-41	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-41	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-41	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-41	12/15/2020	Naphthalene	3.22	1	1	30	ug/L
MKTF-41	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-41	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-41	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-41	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-41	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-41	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-41	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-41	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-41	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-41	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-41	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-41	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-41	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-41	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-41	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-41	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-41	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-41	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-41	12/15/2020	1,2,4-Trimethylbenzene	1.22	1	0.82	56	ug/L
MKTF-41	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-41	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-41	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-41	12/15/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
MKTF-42	11/18/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
MKTF-42	11/18/2014	Acetone	ND	100	49	14064	ug/L
MKTF-42	11/18/2014	Chloroform	ND	10	3.2	100	ug/L
MKTF-42	11/18/2014	Benzene	**12**	10	1.5	5	ug/L
MKTF-42	11/18/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
MKTF-42	11/18/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
MKTF-42	11/18/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
MKTF-42	11/18/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
MKTF-42	11/18/2014	Chloroethane	ND	20	4.8	20857	ug/L
MKTF-42	11/18/2014	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
MKTF-42	11/18/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
MKTF-42	11/18/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
MKTF-42	11/18/2014	Bromoform	ND	10	2.5	32.9	ug/L
MKTF-42	11/18/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
MKTF-42	11/18/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
MKTF-42	11/18/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
MKTF-42	11/18/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
MKTF-42	11/18/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
MKTF-42	11/18/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
MKTF-42	11/18/2014	2-Butanone	ND	100	14	5565	ug/L
MKTF-42	11/18/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
MKTF-42	11/18/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
MKTF-42	11/18/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
MKTF-42	11/18/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
MKTF-42	11/18/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
MKTF-42	11/18/2014	1,2,4-Trimethylbenzene	27	10	1.2	56	ug/L
MKTF-42	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
MKTF-42	11/18/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
MKTF-42	11/18/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
MKTF-42	11/18/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
MKTF-42	11/18/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
MKTF-42	11/18/2014	Ethylbenzene	ND	10	1.3	700	ug/L
MKTF-42	11/18/2014	Styrene	ND	10	1.2	100	ug/L
MKTF-42	11/18/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
MKTF-42	11/18/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
MKTF-42	11/18/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
MKTF-42	11/18/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
MKTF-42	11/18/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
MKTF-42	11/18/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
MKTF-42	11/18/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
MKTF-42	11/18/2014	Bromobenzene	ND	10	1.8	62	ug/L
MKTF-42	11/18/2014	Toluene	ND	10	1.7	1000	ug/L
MKTF-42	11/18/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
MKTF-42	11/18/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
MKTF-42	11/18/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
MKTF-42	11/18/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
MKTF-42	11/18/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
MKTF-42	11/18/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
MKTF-42	11/18/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
MKTF-42	11/18/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
MKTF-42	11/18/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
MKTF-42	11/18/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
MKTF-42	11/18/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
MKTF-42	11/18/2014	Xylenes, Total	56	15	3.8	620	ug/L
MKTF-42	11/18/2014	MTBE	ND	10	2.5	143	ug/L
MKTF-42	11/18/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
MKTF-42	11/18/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
MKTF-42	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	3/11/2015	Acetone	10	10	0.94	14064	ug/L
MKTF-42	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	3/11/2015	Benzene	1.7	1	0.065	5	ug/L
MKTF-42	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	3/11/2015	1,2,4-Trimethylbenzene	3.9	1	0.16	56	ug/L
MKTF-42	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-42	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	3/11/2015	1,3,5-Trimethylbenzene	2.6	1	0.12	60	ug/L
MKTF-42	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	3/11/2015	Xylenes, Total	10	1.5	0.28	620	ug/L
MKTF-42	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	6/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	6/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-42	6/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	6/9/2015	Benzene	1.6	1	0.065	5	ug/L
MKTF-42	6/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	6/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	6/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	6/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	6/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	6/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	6/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	6/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	6/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	6/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	6/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	6/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	6/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	6/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	6/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	6/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	6/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	6/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	6/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	6/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	6/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	1,2,4-Trimethylbenzene	3.4	1	0.16	56	ug/L
MKTF-42	6/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	6/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	6/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	6/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	6/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	6/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-42	6/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	6/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	6/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	6/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	6/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	6/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	6/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	6/9/2015	1,3,5-Trimethylbenzene	2.8	1	0.12	60	ug/L
MKTF-42	6/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	6/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	6/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	6/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	6/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	6/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	6/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	6/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	6/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	6/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	6/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	6/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	6/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	6/9/2015	Xylenes, Total	11	1.5	0.28	620	ug/L
MKTF-42	6/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	6/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	6/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	8/21/2015	Acetone	14	10	0.94	14064	ug/L
MKTF-42	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	8/21/2015	Benzene	2.8	1	0.065	5	ug/L
MKTF-42	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	8/21/2015	1,2,4-Trimethylbenzene	6	1	0.16	56	ug/L
MKTF-42	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-42	8/21/2015	Ethylbenzene	1	1	0.1	700	ug/L
MKTF-42	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-42	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	8/21/2015	1,3,5-Trimethylbenzene	4.1	1	0.12	60	ug/L
MKTF-42	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	8/21/2015	Xylenes, Total	17	1.5	0.28	620	ug/L
MKTF-42	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-42	11/5/2015	Acetone	14	10	0.94	14064	ug/L
MKTF-42	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-42	11/5/2015	Benzene	3.3	1	0.065	5	ug/L
MKTF-42	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-42	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-42	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-42	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-42	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-42	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-42	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-42	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-42	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-42	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-42	11/5/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	11/5/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-42	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-42	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-42	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-42	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-42	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-42	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-42	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-42	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-42	11/5/2015	1,2,4-Trimethylbenzene	8.3	1	0.16	56	ug/L
MKTF-42	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-42	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-42	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-42	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-42	11/5/2015	p-Isopropyltoluene	1.1	1	0.19	NA	ug/L
MKTF-42	11/5/2015	Ethylbenzene	1.7	1	0.1	700	ug/L
MKTF-42	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-42	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-42	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-42	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	11/5/2015	1,2-Dichloroethane	1.1	1	0.18	5	ug/L
MKTF-42	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-42	11/5/2015	1,3,5-Trimethylbenzene	5	1	0.12	60	ug/L
MKTF-42	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-42	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-42	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-42	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-42	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-42	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-42	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-42	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-42	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-42	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-42	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-42	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	11/5/2015	Xylenes, Total	22	1.5	0.28	620	ug/L
MKTF-42	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-42	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	2/24/2016	Acetone	23	10	0.88	14064	ug/L
MKTF-42	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	2/24/2016	Benzene	4.1	1	0.096	5	ug/L
MKTF-42	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-42	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-42	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-42	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-42	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-42	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-42	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-42	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-42	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-42	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-42	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-42	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-42	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	2/24/2016	1,2,4-Trimethylbenzene	6.6	1	0.1	56	ug/L
MKTF-42	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-42	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-42	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-42	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-42	2/24/2016	p-Isopropyltoluene	1.1	1	0.14	NA	ug/L
MKTF-42	2/24/2016	Ethylbenzene	1.1	1	0.11	700	ug/L
MKTF-42	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-42	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-42	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-42	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-42	2/24/2016	1,3,5-Trimethylbenzene	3.8	1	0.12	60	ug/L
MKTF-42	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-42	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-42	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-42	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-42	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-42	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-42	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	2/24/2016	Xylenes, Total	26	1.5	0.32	620	ug/L
MKTF-42	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-42	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-42	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-42	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-42	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-42	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-42	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-42	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-42	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-42	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-42	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-42	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-42	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-42	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-42	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-42	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-42	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-42	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-42	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	9/9/2016	Acetone	31	10	4.9	14064	ug/L
MKTF-42	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	9/9/2016	Benzene	4	1	0.096	5	ug/L
MKTF-42	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	9/9/2016	2-Butanone	8.3	10	0.74	5565	ug/L
MKTF-42	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	9/9/2016	1,2,4-Trimethylbenzene	6.6	1	0.11	56	ug/L
MKTF-42	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	9/9/2016	Isopropylbenzene	0.58	1	0.1	447	ug/L
MKTF-42	9/9/2016	p-Isopropyltoluene	1.8	1	0.14	NA	ug/L
MKTF-42	9/9/2016	Ethylbenzene	1.8	1	0.11	700	ug/L
MKTF-42	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	9/9/2016	n-Propylbenzene	0.72	1	0.13	660	ug/L
MKTF-42	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	9/9/2016	1,2-Dichloroethane	0.98	1	0.12	5	ug/L
MKTF-42	9/9/2016	4-Methyl-2-Pentanone	3.2	10	0.43	1243	ug/L
MKTF-42	9/9/2016	1,3,5-Trimethylbenzene	2.9	1	0.12	60	ug/L
MKTF-42	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	9/9/2016	Toluene	0.33	1	0.12	1000	ug/L
MKTF-42	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	9/9/2016	sec-Butylbenzene	0.41	1	0.12	2000	ug/L
MKTF-42	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	9/9/2016	2-Hexanone	2.2	10	0.84	38	ug/L
MKTF-42	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	9/9/2016	Xylenes, Total	25	1.5	0.37	620	ug/L
MKTF-42	9/9/2016	MTBE	0.56	1	0.21	143	ug/L
MKTF-42	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	10/31/2016	Acetone	30	10	4.9	14064	ug/L
MKTF-42	10/31/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	10/31/2016	Benzene	3.4	1	0.096	5	ug/L
MKTF-42	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-42	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-42	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-42	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-42	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-42	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-42	10/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-42	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-42	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-42	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-42	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-42	10/31/2016	2-Butanone	10	10	0.74	5565	ug/L
MKTF-42	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-42	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-42	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	10/31/2016	1,2,4-Trimethylbenzene	5.3	1	0.11	56	ug/L
MKTF-42	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-42	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-42	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-42	10/31/2016	Isopropylbenzene	0.54	1	0.1	447	ug/L
MKTF-42	10/31/2016	p-Isopropyltoluene	2.3	1	0.14	NA	ug/L
MKTF-42	10/31/2016	Ethylbenzene	1.9	1	0.11	700	ug/L
MKTF-42	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-42	10/31/2016	n-Propylbenzene	0.68	1	0.13	660	ug/L
MKTF-42	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-42	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-42	10/31/2016	1,2-Dichloroethane	1.1	1	0.12	5	ug/L
MKTF-42	10/31/2016	4-Methyl-2-Pentanone	3.7	10	0.43	1243	ug/L
MKTF-42	10/31/2016	1,3,5-Trimethylbenzene	2.7	1	0.12	60	ug/L
MKTF-42	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-42	10/31/2016	Toluene	0.49	1	0.12	1000	ug/L
MKTF-42	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-42	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	10/31/2016	sec-Butylbenzene	0.34	1	0.12	2000	ug/L
MKTF-42	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-42	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-42	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	10/31/2016	2-Hexanone	4.2	10	0.84	38	ug/L
MKTF-42	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-42	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	10/31/2016	Xylenes, Total	27	1.5	0.37	620	ug/L
MKTF-42	10/31/2016	MTBE	0.67	1	0.21	143	ug/L
MKTF-42	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-42	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	3/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	3/7/2017	Acetone	28	10	0.88	14064	ug/L
MKTF-42	3/7/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-42	3/7/2017	Benzene	4.9	1	0.096	5	ug/L
MKTF-42	3/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	3/7/2017	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-42	3/7/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-42	3/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	3/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	3/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	3/7/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-42	3/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	3/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	3/7/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-42	3/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	3/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	3/7/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-42	3/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	3/7/2017	2-Butanone	9	10	1.1	5565	ug/L
MKTF-42	3/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	3/7/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-42	3/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	3/7/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-42	3/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	3/7/2017	1,2,4-Trimethylbenzene	4	1	0.1	56	ug/L
MKTF-42	3/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	3/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	3/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	3/7/2017	Isopropylbenzene	0.34	1	0.098	447	ug/L
MKTF-42	3/7/2017	p-Isopropyltoluene	3.1	1	0.14	NA	ug/L
MKTF-42	3/7/2017	Ethylbenzene	1.1	1	0.11	700	ug/L
MKTF-42	3/7/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	3/7/2017	n-Propylbenzene	0.28	1	0.13	660	ug/L
MKTF-42	3/7/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-42	3/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	3/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	3/7/2017	1,2-Dichloroethane	1.3	1	0.12	5	ug/L
MKTF-42	3/7/2017	4-Methyl-2-Pentanone	2.2	10	0.71	1243	ug/L
MKTF-42	3/7/2017	1,3,5-Trimethylbenzene	3.4	1	0.12	60	ug/L
MKTF-42	3/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	3/7/2017	Toluene	0.44	1	0.089	1000	ug/L
MKTF-42	3/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	3/7/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-42	3/7/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	3/7/2017	sec-Butylbenzene	0.2	1	0.1	2000	ug/L
MKTF-42	3/7/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-42	3/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	3/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	3/7/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-42	3/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	3/7/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-42	3/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-42	3/7/2017	Xylenes, Total	24	1.5	0.32	620	ug/L
MKTF-42	3/7/2017	MTBE	1.1	1	0.15	143	ug/L
MKTF-42	3/7/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-42	3/7/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-42	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	6/6/2017	Acetone	35	10	0.82	14064	ug/L
MKTF-42	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	6/6/2017	Benzene	4.9	1	0.062	5	ug/L
MKTF-42	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	6/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	6/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	6/6/2017	2-Butanone	9.9	10	1.1	5565	ug/L
MKTF-42	6/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/6/2017	1,2,4-Trimethylbenzene	4.7	1	0.11	56	ug/L
MKTF-42	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	6/6/2017	Isopropylbenzene	0.34	1	0.051	447	ug/L
MKTF-42	6/6/2017	p-Isopropyltoluene	3.2	1	0.096	NA	ug/L
MKTF-42	6/6/2017	Ethylbenzene	1.1	1	0.093	700	ug/L
MKTF-42	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	6/6/2017	n-Propylbenzene	0.37	1	0.074	660	ug/L
MKTF-42	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	6/6/2017	1,2-Dichloroethane	1.5	1	0.4	5	ug/L
MKTF-42	6/6/2017	4-Methyl-2-Pentanone	1.8	10	0.71	1243	ug/L
MKTF-42	6/6/2017	1,3,5-Trimethylbenzene	2.4	1	0.087	60	ug/L
MKTF-42	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	6/6/2017	Toluene	0.37	1	0.064	1000	ug/L
MKTF-42	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	6/6/2017	sec-Butylbenzene	0.17	1	0.11	2000	ug/L
MKTF-42	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-42	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	6/6/2017	Xylenes, Total	21	1.5	0.32	620	ug/L
MKTF-42	6/6/2017	MTBE	1.4	1	0.24	143	ug/L
MKTF-42	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	9/25/2017	Acetone	37	10	0.82	14064	ug/L
MKTF-42	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	9/25/2017	Benzene	**9.3**	1	0.062	5	ug/L
MKTF-42	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	9/25/2017	1,1-Dichloroethene	0.19	1	0.081	7	ug/L
MKTF-42	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	9/25/2017	2-Butanone	10	10	1.1	5565	ug/L
MKTF-42	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	9/25/2017	1,2,4-Trimethylbenzene	18	1	0.11	56	ug/L
MKTF-42	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	9/25/2017	Isopropylbenzene	1.1	1	0.051	447	ug/L
MKTF-42	9/25/2017	p-Isopropyltoluene	2	1	0.096	NA	ug/L
MKTF-42	9/25/2017	Ethylbenzene	3.9	1	0.093	700	ug/L
MKTF-42	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	9/25/2017	n-Propylbenzene	1.7	1	0.074	660	ug/L
MKTF-42	9/25/2017	n-Butylbenzene	0.59	3	0.13	1000	ug/L
MKTF-42	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	9/25/2017	1,2-Dichloroethane	1.7	1	0.4	5	ug/L
MKTF-42	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-42	9/25/2017	1,3,5-Trimethylbenzene	6.5	1	0.087	60	ug/L
MKTF-42	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	9/25/2017	Toluene	0.98	1	0.064	1000	ug/L
MKTF-42	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	9/25/2017	sec-Butylbenzene	0.46	1	0.11	2000	ug/L
MKTF-42	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	9/25/2017	Xylenes, Total	46	1.5	0.32	620	ug/L
MKTF-42	9/25/2017	MTBE	2	1	0.24	143	ug/L
MKTF-42	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	11/27/2017	Acetone	30	10	0.82	14064	ug/L
MKTF-42	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	11/27/2017	Benzene	**7.1**	1	0.062	5	ug/L
MKTF-42	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	11/27/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	11/27/2017	1,1-Dichloroethene	0.23	1	0.081	7	ug/L
MKTF-42	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	11/27/2017	2-Butanone	7.1	10	1.1	5565	ug/L
MKTF-42	11/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	11/27/2017	1,2,4-Trimethylbenzene	11	1	0.11	56	ug/L
MKTF-42	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	11/27/2017	Isopropylbenzene	0.73	1	0.051	447	ug/L
MKTF-42	11/27/2017	p-Isopropyltoluene	3.7	1	0.096	NA	ug/L
MKTF-42	11/27/2017	Ethylbenzene	2.6	1	0.093	700	ug/L
MKTF-42	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-42	11/27/2017	n-Propylbenzene	0.83	1	0.074	660	ug/L
MKTF-42	11/27/2017	n-Butylbenzene	0.37	3	0.13	1000	ug/L
MKTF-42	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	11/27/2017	1,2-Dichloroethane	1.3	1	0.4	5	ug/L
MKTF-42	11/27/2017	4-Methyl-2-Pentanone	3.4	10	0.71	1243	ug/L
MKTF-42	11/27/2017	1,3,5-Trimethylbenzene	5.2	1	0.087	60	ug/L
MKTF-42	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	11/27/2017	Toluene	0.8	1	0.064	1000	ug/L
MKTF-42	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	11/27/2017	sec-Butylbenzene	0.26	1	0.11	2000	ug/L
MKTF-42	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	11/27/2017	2-Hexanone	2.6	10	0.66	38	ug/L
MKTF-42	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	11/27/2017	Xylenes, Total	37	1.5	0.32	620	ug/L
MKTF-42	11/27/2017	MTBE	2	1	0.24	143	ug/L
MKTF-42	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	2/7/2018	Acetone	36	10	0.82	14064	ug/L
MKTF-42	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	2/7/2018	Benzene	**8.4**	1	0.062	5	ug/L
MKTF-42	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	2/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	2/7/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-42	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	2/7/2018	2-Butanone	12	10	1.1	5565	ug/L
MKTF-42	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-42	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	2/7/2018	1,2,4-Trimethylbenzene	6.5	1	0.11	56	ug/L
MKTF-42	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-42	2/7/2018	p-Isopropyltoluene	4.4	1	0.096	NA	ug/L
MKTF-42	2/7/2018	Ethylbenzene	1.5	1	0.093	700	ug/L
MKTF-42	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-42	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-42	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	2/7/2018	1,2-Dichloroethane	2	1	0.4	5	ug/L
MKTF-42	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-42	2/7/2018	1,3,5-Trimethylbenzene	3.9	1	0.087	60	ug/L
MKTF-42	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-42	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-42	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	2/7/2018	Xylenes, Total	32	1.5	0.32	620	ug/L
MKTF-42	2/7/2018	MTBE	3.3	1	0.24	143	ug/L
MKTF-42	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-42	5/9/2018	Acetone	37	10	0.82	14064	ug/L
MKTF-42	5/9/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	5/9/2018	Benzene	**9.3**	1	0.062	5	ug/L
MKTF-42	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-42	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-42	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-42	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-42	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-42	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-42	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-42	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-42	5/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	5/9/2018	1,1-Dichloroethene	0.26	1	0.081	7	ug/L
MKTF-42	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-42	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-42	5/9/2018	2-Butanone	8.8	10	1.1	5565	ug/L
MKTF-42	5/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-42	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-42	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-42	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	5/9/2018	1,2,4-Trimethylbenzene	8.6	1	0.11	56	ug/L
MKTF-42	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-42	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-42	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-42	5/9/2018	Isopropylbenzene	0.55	1	0.051	447	ug/L
MKTF-42	5/9/2018	p-Isopropyltoluene	3.6	1	0.096	NA	ug/L
MKTF-42	5/9/2018	Ethylbenzene	1.6	1	0.093	700	ug/L
MKTF-42	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-42	5/9/2018	n-Propylbenzene	0.56	1	0.074	660	ug/L
MKTF-42	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-42	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-42	5/9/2018	1,2-Dichloroethane	2.2	1	0.4	5	ug/L
MKTF-42	5/9/2018	4-Methyl-2-Pentanone	2.3	10	0.71	1243	ug/L
MKTF-42	5/9/2018	1,3,5-Trimethylbenzene	4	1	0.087	60	ug/L
MKTF-42	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-42	5/9/2018	Toluene	0.76	1	0.064	1000	ug/L
MKTF-42	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-42	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-42	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-42	5/9/2018	sec-Butylbenzene	0.28	1	0.11	2000	ug/L
MKTF-42	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-42	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-42	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-42	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-42	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-42	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-42	5/9/2018	Xylenes, Total	31	1.5	0.32	620	ug/L
MKTF-42	5/9/2018	MTBE	3.8	1	0.24	143	ug/L
MKTF-42	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-42	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-42	8/29/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-42	8/29/2018	Acetone	46	10	0.79	14064	ug/L
MKTF-42	8/29/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-42	8/29/2018	Benzene	**11**	1	0.17	5	ug/L
MKTF-42	8/29/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-42	8/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-42	8/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-42	8/29/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-42	8/29/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-42	8/29/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-42	8/29/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-42	8/29/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-42	8/29/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-42	8/29/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-42	8/29/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-42	8/29/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-42	8/29/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-42	8/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-42	8/29/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-42	8/29/2018	2-Butanone	12	10	1.3	5565	ug/L
MKTF-42	8/29/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-42	8/29/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-42	8/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-42	8/29/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-42	8/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-42	8/29/2018	1,2,4-Trimethylbenzene	11	1	0.25	56	ug/L
MKTF-42	8/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-42	8/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-42	8/29/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-42	8/29/2018	Isopropylbenzene	0.71	1	0.22	447	ug/L
MKTF-42	8/29/2018	p-Isopropyltoluene	3.7	1	0.24	NA	ug/L
MKTF-42	8/29/2018	Ethylbenzene	1.8	1	0.22	700	ug/L
MKTF-42	8/29/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-42	8/29/2018	n-Propylbenzene	0.93	1	0.24	660	ug/L
MKTF-42	8/29/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-42	8/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-42	8/29/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-42	8/29/2018	1,2-Dichloroethane	2.6	1	0.4	5	ug/L
MKTF-42	8/29/2018	4-Methyl-2-Pentanone	2.9	10	0.45	1243	ug/L
MKTF-42	8/29/2018	1,3,5-Trimethylbenzene	4.6	1	0.23	60	ug/L
MKTF-42	8/29/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-42	8/29/2018	Toluene	0.7	1	0.17	1000	ug/L
MKTF-42	8/29/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/29/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-42	8/29/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-42	8/29/2018	sec-Butylbenzene	0.32	1	0.2	2000	ug/L
MKTF-42	8/29/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-42	8/29/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-42	8/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-42	8/29/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-42	8/29/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-42	8/29/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-42	8/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-42	8/29/2018	Xylenes, Total	32	1.5	0.64	620	ug/L
MKTF-42	8/29/2018	MTBE	4.3	1	0.32	143	ug/L
MKTF-42	8/29/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-42	8/29/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-42	11/15/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
MKTF-42	11/15/2018	Acetone	ND	20	1.5	14064	ug/L
MKTF-42	11/15/2018	Chloroform	ND	2	0.47	100	ug/L
MKTF-42	11/15/2018	Benzene	**30**	2	0.35	5	ug/L
MKTF-42	11/15/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
MKTF-42	11/15/2018	Bromomethane	ND	6	0.55	7.54	ug/L
MKTF-42	11/15/2018	Chloromethane	ND	6	0.64	20.32	ug/L
MKTF-42	11/15/2018	Dibromomethane	ND	2	0.64	8	ug/L
MKTF-42	11/15/2018	Chloroethane	ND	4	0.33	20857	ug/L
MKTF-42	11/15/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
MKTF-42	11/15/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
MKTF-42	11/15/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
MKTF-42	11/15/2018	Bromoform	ND	2	0.65	32.9	ug/L
MKTF-42	11/15/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
MKTF-42	11/15/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
MKTF-42	11/15/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
MKTF-42	11/15/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
MKTF-42	11/15/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
MKTF-42	11/15/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
MKTF-42	11/15/2018	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-42	11/15/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
MKTF-42	11/15/2018	Trichloroethene	ND	2	0.52	5	ug/L
MKTF-42	11/15/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
MKTF-42	11/15/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
MKTF-42	11/15/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
MKTF-42	11/15/2018	1,2,4-Trimethylbenzene	**68**	2	0.51	56	ug/L
MKTF-42	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
MKTF-42	11/15/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
MKTF-42	11/15/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
MKTF-42	11/15/2018	Isopropylbenzene	3.6	2	0.44	447	ug/L
MKTF-42	11/15/2018	p-Isopropyltoluene	2.1	2	0.48	NA	ug/L
MKTF-42	11/15/2018	Ethylbenzene	8.7	2	0.45	700	ug/L
MKTF-42	11/15/2018	Styrene	ND	2	0.5	100	ug/L
MKTF-42	11/15/2018	n-Propylbenzene	4.7	2	0.49	660	ug/L
MKTF-42	11/15/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
MKTF-42	11/15/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
MKTF-42	11/15/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
MKTF-42	11/15/2018	1,2-Dichloroethane	3.9	2	0.38	5	ug/L
MKTF-42	11/15/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
MKTF-42	11/15/2018	1,3,5-Trimethylbenzene	21	2	0.46	60	ug/L
MKTF-42	11/15/2018	Bromobenzene	ND	2	0.64	62	ug/L
MKTF-42	11/15/2018	Toluene	2.1	2	0.34	1000	ug/L
MKTF-42	11/15/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
MKTF-42	11/15/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
MKTF-42	11/15/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
MKTF-42	11/15/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
MKTF-42	11/15/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
MKTF-42	11/15/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
MKTF-42	11/15/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
MKTF-42	11/15/2018	Pentafluorobenzene	**20**	0	0		None
MKTF-42	11/15/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
MKTF-42	11/15/2018	2-Hexanone	ND	20	1.8	38	ug/L
MKTF-42	11/15/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
MKTF-42	11/15/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
MKTF-42	11/15/2018	Xylenes, Total	110	3	1.3	620	ug/L
MKTF-42	11/15/2018	MTBE	5	2	0.91	143	ug/L
MKTF-42	11/15/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
MKTF-42	11/15/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
MKTF-42	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.504798	5.74	ug/L
MKTF-42	2/13/2019	1,1,1-Trichloroethane	ND	1	0.327632	200	ug/L
MKTF-42	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.656598	10	ug/L
MKTF-42	2/13/2019	1,1,2-Trichloroethane	ND	1	0.465446	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	1,1-Dichloroethane	0.69	1	0.350393	25	ug/L
MKTF-42	2/13/2019	1,1-Dichloroethene	0.5	1	0.240976	7	ug/L
MKTF-42	2/13/2019	1,1-Dichloropropene	ND	1	0.325198	NA	ug/L
MKTF-42	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.560616	70	ug/L
MKTF-42	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	1.132009	0.0084	ug/L
MKTF-42	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.53282	70	ug/L
MKTF-42	2/13/2019	1,2,4-Trimethylbenzene	22	1	0.506629	56	ug/L
MKTF-42	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.941794	0.0033	ug/L
MKTF-42	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.459057	0.05	ug/L
MKTF-42	2/13/2019	1,2-Dichlorobenzene	ND	1	0.62293	600	ug/L
MKTF-42	2/13/2019	1,2-Dichloroethane	2.3	1	0.379051	5	ug/L
MKTF-42	2/13/2019	1,2-Dichloropropane	ND	1	0.330452	5	ug/L
MKTF-42	2/13/2019	1,3,5-Trimethylbenzene	8.1	1	0.462828	60	ug/L
MKTF-42	2/13/2019	1,3-Dichlorobenzene	ND	1	0.625245	N/A	ug/L
MKTF-42	2/13/2019	1,3-Dichloropropane	ND	1	0.541513	370	ug/L
MKTF-42	2/13/2019	1,4-Dichlorobenzene	ND	1	0.575414	75	ug/L
MKTF-42	2/13/2019	1-Methylnaphthalene	11	4	0.671634	NA	ug/L
MKTF-42	2/13/2019	2,2-Dichloropropane	ND	2	0.466868	NA	ug/L
MKTF-42	2/13/2019	2-Butanone	3.2	10	2.821738	5565	ug/L
MKTF-42	2/13/2019	2-Chlorotoluene	ND	1	0.500276	233	ug/L
MKTF-42	2/13/2019	2-Hexanone	ND	10	1.813149	38	ug/L
MKTF-42	2/13/2019	2-Methylnaphthalene	**15**	4	0.690752		ug/L
MKTF-42	2/13/2019	4-Chlorotoluene	ND	1	0.561602	250	ug/L
MKTF-42	2/13/2019	p-Isopropyltoluene	0.78	1	0.480677	NA	ug/L
MKTF-42	2/13/2019	4-Methyl-2-Pentanone	6.6	10	0.906555	1243	ug/L
MKTF-42	2/13/2019	Acetone	14	10	1.514139	14064	ug/L
MKTF-42	2/13/2019	Benzene	**17**	1	0.349791	5	ug/L
MKTF-42	2/13/2019	Bromobenzene	ND	1	0.635812	62	ug/L
MKTF-42	2/13/2019	Bromodichloromethane	ND	1	0.565534	1.34	ug/L
MKTF-42	2/13/2019	Bromoform	ND	1	0.646621	32.9	ug/L
MKTF-42	2/13/2019	Bromomethane	ND	3	0.546165	7.54	ug/L
MKTF-42	2/13/2019	Carbon Disulfide	ND	10	0.770062	810	ug/L
MKTF-42	2/13/2019	Carbon tetrachloride	ND	1	0.274697	5	ug/L
MKTF-42	2/13/2019	Chlorobenzene	ND	1	0.581055	77.6	ug/L
MKTF-42	2/13/2019	Chloroethane	ND	2	0.328674	20857	ug/L
MKTF-42	2/13/2019	Chloroform	ND	1	0.470448	100	ug/L
MKTF-42	2/13/2019	Chloromethane	ND	3	0.641975	20.32	ug/L
MKTF-42	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.751962	70	ug/L
MKTF-42	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.596456	NA	ug/L
MKTF-42	2/13/2019	Dibromochloromethane	ND	1	0.474025	1.68	ug/L
MKTF-42	2/13/2019	Dibromomethane	ND	1	0.644295	8	ug/L
MKTF-42	2/13/2019	Dichlorodifluoromethane	ND	1	0.519842	197	ug/L
MKTF-42	2/13/2019	Ethylbenzene	3.1	1	0.446804	700	ug/L
MKTF-42	2/13/2019	Hexachlorobutadiene	ND	1	0.782374	1.39	ug/L
MKTF-42	2/13/2019	Isopropylbenzene	1.1	1	0.442208	447	ug/L
MKTF-42	2/13/2019	MTBE	4.4	1	0.91219	143	ug/L
MKTF-42	2/13/2019	Methylene Chloride	ND	3	0.41139	5	ug/L
MKTF-42	2/13/2019	Naphthalene	**57**	2	0.579252	30	ug/L
MKTF-42	2/13/2019	n-Butylbenzene	ND	3	0.496661	1000	ug/L
MKTF-42	2/13/2019	n-Propylbenzene	1.1	1	0.485172	660	ug/L
MKTF-42	2/13/2019	sec-Butylbenzene	ND	1	0.404509	2000	ug/L
MKTF-42	2/13/2019	Styrene	ND	1	0.500291	100	ug/L
MKTF-42	2/13/2019	tert-Butylbenzene	ND	1	0.442939	690	ug/L
MKTF-42	2/13/2019	Tetrachloroethene	ND	1	0.302903	5	ug/L
MKTF-42	2/13/2019	Toluene	0.87	1	0.336279	1000	ug/L
MKTF-42	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.364539	100	ug/L
MKTF-42	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.550935	NA	ug/L
MKTF-42	2/13/2019	Trichloroethene	ND	1	0.515113	5	ug/L
MKTF-42	2/13/2019	Trichlorofluoromethane	ND	1	0.288232	1137	ug/L
MKTF-42	2/13/2019	Vinyl Chloride	ND	1	0.242149	2	ug/L
MKTF-42	2/13/2019	Xylenes, Total	51	1.5	1.282575	620	ug/L
MKTF-42	2/13/2019	1,2-Dibromoethane	**0.29**	0.09358	0.032613	0.05	ug/L
MKTF-42	5/7/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	5/7/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	5/7/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	5/7/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	5/7/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-42	5/7/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-42	5/7/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	5/7/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	5/7/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-42	5/7/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	5/7/2019	1,2,4-Trimethylbenzene	3.4	2	0.426398	56	ug/L
MKTF-42	5/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-42	5/7/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	5/7/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/7/2019	1,2-Dichloroethane	1.6	2	0.389276	5	ug/L
MKTF-42	5/7/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	5/7/2019	1,3,5-Trimethylbenzene	1.5	2	0.37732	60	ug/L
MKTF-42	5/7/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	5/7/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	5/7/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	5/7/2019	1-Methylnaphthalene	6.7	8	0.629909	NA	ug/L
MKTF-42	5/7/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	5/7/2019	2-Butanone	4.9	20	4.178833	5565	ug/L
MKTF-42	5/7/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-42	5/7/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	5/7/2019	2-Methylnaphthalene	**3.6**	8	0.690752		ug/L
MKTF-42	5/7/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	5/7/2019	p-Isopropyltoluene	1.9	2	0.434579	NA	ug/L
MKTF-42	5/7/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	5/7/2019	Acetone	17	20	2.398793	14064	ug/L
MKTF-42	5/7/2019	Benzene	**7**	2	0.333278	5	ug/L
MKTF-42	5/7/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	5/7/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	5/7/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	5/7/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	5/7/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-42	5/7/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	5/7/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	5/7/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	5/7/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	5/7/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	5/7/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	5/7/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	5/7/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	5/7/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	5/7/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	5/7/2019	Ethylbenzene	0.33	2	0.264682	700	ug/L
MKTF-42	5/7/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	5/7/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
MKTF-42	5/7/2019	MTBE	4	2	0.91219	143	ug/L
MKTF-42	5/7/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	5/7/2019	Naphthalene	9.6	4	0.550143	30	ug/L
MKTF-42	5/7/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	5/7/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
MKTF-42	5/7/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	5/7/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	5/7/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	5/7/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	5/7/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	5/7/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	5/7/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	5/7/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	5/7/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	5/7/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	5/7/2019	Xylenes, Total	15	3	0.90883	620	ug/L
MKTF-42	5/7/2019	1,2-Dibromoethane	**0.22**	0.01867	0.006505	0.05	ug/L
MKTF-42	8/22/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	8/22/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	8/22/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	8/22/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	8/22/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
MKTF-42	8/22/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
MKTF-42	8/22/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	8/22/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	8/22/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
MKTF-42	8/22/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	8/22/2019	1,2,4-Trimethylbenzene	8.3	2	0.426398	56	ug/L
MKTF-42	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
MKTF-42	8/22/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	8/22/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-42	8/22/2019	1,2-Dichloroethane	1.9	2	0.389276	5	ug/L
MKTF-42	8/22/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	8/22/2019	1,3,5-Trimethylbenzene	3	2	0.37732	60	ug/L
MKTF-42	8/22/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	8/22/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	8/22/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	8/22/2019	1-Methylnaphthalene	13	8	0.629909	NA	ug/L
MKTF-42	8/22/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	8/22/2019	2-Butanone	9.5	20	4.178833	5565	ug/L
MKTF-42	8/22/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	8/22/2019	2-Methylnaphthalene	**10**	8	0.690752		ug/L
MKTF-42	8/22/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	8/22/2019	p-Isopropyltoluene	2.1	2	0.434579	NA	ug/L
MKTF-42	8/22/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	8/22/2019	Acetone	19	20	2.398793	14064	ug/L
MKTF-42	8/22/2019	Benzene	**9.6**	2	0.333278	5	ug/L
MKTF-42	8/22/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	8/22/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	8/22/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	8/22/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	8/22/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
MKTF-42	8/22/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	8/22/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	8/22/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	8/22/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	8/22/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	8/22/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	8/22/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	8/22/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	8/22/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	8/22/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	8/22/2019	Ethylbenzene	1.1	2	0.264682	700	ug/L
MKTF-42	8/22/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	8/22/2019	Isopropylbenzene	0.46	2	0.383045	447	ug/L
MKTF-42	8/22/2019	MTBE	4.1	2	0.91219	143	ug/L
MKTF-42	8/22/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	8/22/2019	Naphthalene	26	4	0.550143	30	ug/L
MKTF-42	8/22/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	8/22/2019	n-Propylbenzene	0.83	2	0.428616	660	ug/L
MKTF-42	8/22/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	8/22/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	8/22/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	8/22/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	8/22/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	8/22/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	8/22/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	8/22/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	8/22/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	8/22/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	8/22/2019	Xylenes, Total	22	3	0.90883	620	ug/L
MKTF-42	8/22/2019	1,2-Dibromoethane	**0.15**	0.00938	0.00327	0.05	ug/L
MKTF-42	10/23/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
MKTF-42	10/23/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
MKTF-42	10/23/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
MKTF-42	10/23/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
MKTF-42	10/23/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
MKTF-42	10/23/2019	1,1-Dichloroethene	0.9	2	0.410776	7	ug/L
MKTF-42	10/23/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
MKTF-42	10/23/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
MKTF-42	10/23/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
MKTF-42	10/23/2019	1,2,4-Trimethylbenzene	6.3	2	0.426398	56	ug/L
MKTF-42	10/23/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
MKTF-42	10/23/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
MKTF-42	10/23/2019	1,2-Dichloroethane	2.3	2	0.389276	5	ug/L
MKTF-42	10/23/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
MKTF-42	10/23/2019	1,3,5-Trimethylbenzene	2.5	2	0.37732	60	ug/L
MKTF-42	10/23/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
MKTF-42	10/23/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
MKTF-42	10/23/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	7	8	0.629909	NA	ug/L
MKTF-42	10/23/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
MKTF-42	10/23/2019	2-Butanone	ND	20	4.178833	5565	ug/L
MKTF-42	10/23/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
MKTF-42	10/23/2019	2-Hexanone	ND	20	3.094384	38	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	**6.4**	8	0.690752		ug/L
MKTF-42	10/23/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
MKTF-42	10/23/2019	p-Isopropyltoluene	0.97	2	0.434579	NA	ug/L
MKTF-42	10/23/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
MKTF-42	10/23/2019	Acetone	15	20	2.398793	14064	ug/L
MKTF-42	10/23/2019	Benzene	**11**	2	0.333278	5	ug/L
MKTF-42	10/23/2019	Bromobenzene	ND	2	0.489454	62	ug/L
MKTF-42	10/23/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
MKTF-42	10/23/2019	Bromoform	ND	2	0.577326	32.9	ug/L
MKTF-42	10/23/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
MKTF-42	10/23/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
MKTF-42	10/23/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
MKTF-42	10/23/2019	Chloroethane	ND	4	0.355605	20857	ug/L
MKTF-42	10/23/2019	Chloroform	ND	2	0.243781	100	ug/L
MKTF-42	10/23/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
MKTF-42	10/23/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
MKTF-42	10/23/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
MKTF-42	10/23/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
MKTF-42	10/23/2019	Dibromomethane	ND	2	0.418417	8	ug/L
MKTF-42	10/23/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
MKTF-42	10/23/2019	Ethylbenzene	1.1	2	0.264682	700	ug/L
MKTF-42	10/23/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
MKTF-42	10/23/2019	Isopropylbenzene	0.43	2	0.383045	447	ug/L
MKTF-42	10/23/2019	MTBE	4.4	2	0.91219	143	ug/L
MKTF-42	10/23/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
MKTF-42	10/23/2019	Naphthalene	18	4	0.550143	30	ug/L
MKTF-42	10/23/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
MKTF-42	10/23/2019	n-Propylbenzene	0.7	2	0.428616	660	ug/L
MKTF-42	10/23/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
MKTF-42	10/23/2019	Styrene	ND	2	0.382647	100	ug/L
MKTF-42	10/23/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
MKTF-42	10/23/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
MKTF-42	10/23/2019	Toluene	ND	2	0.700872	1000	ug/L
MKTF-42	10/23/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
MKTF-42	10/23/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
MKTF-42	10/23/2019	Trichloroethene	ND	2	0.332544	5	ug/L
MKTF-42	10/23/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
MKTF-42	10/23/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
MKTF-42	10/23/2019	Xylenes, Total	21	3	0.90883	620	ug/L
MKTF-42	10/23/2019	1,2-Dibromoethane	**0.26**	0.09409	0.032788	0.05	ug/L
MKTF-42	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-42	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-42	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-42	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-42	2/27/2020	1,1-Dichloroethane	0.74	1	0.27	25	ug/L
MKTF-42	2/27/2020	1,1-Dichloroethene	1.2	1	0.13	7	ug/L
MKTF-42	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-42	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-42	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-42	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-42	2/27/2020	1,2,4-Trimethylbenzene	30	1	0.12	56	ug/L
MKTF-42	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-42	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-42	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-42	2/27/2020	1,2-Dichloroethane	2.4	1	0.22	5	ug/L
MKTF-42	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-42	2/27/2020	1,3,5-Trimethylbenzene	12	1	0.18	60	ug/L
MKTF-42	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-42	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-42	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-42	2/27/2020	1-Methylnaphthalene	43	4	0.84	NA	ug/L
MKTF-42	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-42	2/27/2020	2-Butanone	4.3	10	1.1	5565	ug/L
MKTF-42	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-42	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-42	2/27/2020	2-Methylnaphthalene	**50**	4	0.69		ug/L
MKTF-42	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-42	2/27/2020	p-Isopropyltoluene	2.1	1	0.2	NA	ug/L
MKTF-42	2/27/2020	4-Methyl-2-Pentanone	4	10	1.1	1243	ug/L
MKTF-42	2/27/2020	Acetone	12	10	2.3	14064	ug/L
MKTF-42	2/27/2020	Benzene	**22**	1	0.23	5	ug/L
MKTF-42	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-42	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-42	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-42	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-42	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-42	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-42	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-42	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-42	2/27/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-42	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-42	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-42	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-42	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-42	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-42	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/27/2020	Ethylbenzene	3.7	1	0.21	700	ug/L
MKTF-42	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-42	2/27/2020	Isopropylbenzene	2.5	1	0.18	447	ug/L
MKTF-42	2/27/2020	MTBE	4.2	1	0.39	143	ug/L
MKTF-42	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-42	2/27/2020	n-Butylbenzene	0.8	3	0.25	1000	ug/L
MKTF-42	2/27/2020	n-Propylbenzene	2.8	1	0.18	660	ug/L
MKTF-42	2/27/2020	Naphthalene	**98**	2	0.28	30	ug/L
MKTF-42	2/27/2020	sec-Butylbenzene	0.87	1	0.61	2000	ug/L
MKTF-42	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-42	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-42	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-42	2/27/2020	Toluene	0.99	1	0.2	1000	ug/L
MKTF-42	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-42	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-42	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-42	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-42	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	2/27/2020	Xylenes, Total	70	1.5	0.55	620	ug/L
MKTF-42	2/27/2020	1,2-Dibromoethane	**0.22**	0.19	0.12	0.05	ug/L
MKTF-42	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-42	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-42	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-42	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-42	9/21/2020	1,1-Dichloroethane	1.2	1	0.27	25	ug/L
MKTF-42	9/21/2020	1,1-Dichloroethene	2.9	1	0.13	7	ug/L
MKTF-42	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-42	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-42	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-42	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-42	9/21/2020	1,2,4-Trimethylbenzene	47	1	0.12	56	ug/L
MKTF-42	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-42	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-42	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-42	9/21/2020	1,2-Dichloroethane	4.3	1	0.22	5	ug/L
MKTF-42	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-42	9/21/2020	1,3,5-Trimethylbenzene	15	1	0.18	60	ug/L
MKTF-42	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-42	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-42	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-42	9/21/2020	1-Methylnaphthalene	54	4	0.84	NA	ug/L
MKTF-42	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-42	9/21/2020	2-Butanone	2.5	10	1.1	5565	ug/L
MKTF-42	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-42	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-42	9/21/2020	2-Methylnaphthalene	**49**	4	0.69		ug/L
MKTF-42	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-42	9/21/2020	p-Isopropyltoluene	1.6	1	0.2	NA	ug/L
MKTF-42	9/21/2020	4-Methyl-2-Pentanone	3.1	10	1.1	1243	ug/L
MKTF-42	9/21/2020	Acetone	12	10	2.3	14064	ug/L
MKTF-42	9/21/2020	Benzene	**29**	1	0.23	5	ug/L
MKTF-42	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-42	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-42	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-42	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-42	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-42	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-42	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-42	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-42	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-42	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-42	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-42	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-42	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-42	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-42	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-42	9/21/2020	Ethylbenzene	3.7	1	0.21	700	ug/L
MKTF-42	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-42	9/21/2020	Isopropylbenzene	3.3	1	0.18	447	ug/L
MKTF-42	9/21/2020	MTBE	3.5	1	0.39	143	ug/L
MKTF-42	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-42	9/21/2020	n-Butylbenzene	1.4	3	0.25	1000	ug/L
MKTF-42	9/21/2020	n-Propylbenzene	3.9	1	0.18	660	ug/L
MKTF-42	9/21/2020	sec-Butylbenzene	1.2	1	0.61	2000	ug/L
MKTF-42	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-42	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-42	9/21/2020	Toluene	1.1	1	0.2	1000	ug/L
MKTF-42	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-42	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-42	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-42	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-42	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-42	9/21/2020	Xylenes, Total	80	1.5	0.55	620	ug/L
MKTF-42	9/21/2020	Naphthalene	**120**	20	2.8	30	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	**0.162**	0.0202	0.00504	0.05	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	**0.183**	0.0199	0.00497	0.05	ug/L
MKTF-42	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Acetone	ND	25	10	14064	ug/L
MKTF-42	12/16/2020	Benzene	**19.8**	1	0.38	5	ug/L
MKTF-42	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-42	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-42	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-42	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-42	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-42	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-42	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-42	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-42	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-42	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-42	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-42	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-42	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-42	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-42	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-42	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-42	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethene	2.78	1	0.5	7	ug/L
MKTF-42	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-42	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Ethylbenzene	2.44	1	0.5	700	ug/L
MKTF-42	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-42	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-42	12/16/2020	Isopropylbenzene	2.12	1	0.53	447	ug/L
MKTF-42	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-42	12/16/2020	1-Methylnaphthalene	26	5	4.2	NA	ug/L
MKTF-42	12/16/2020	2-Methylnaphthalene	**15.8**	10	4.6		ug/L
MKTF-42	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-42	12/16/2020	MTBE	2.22	1	0.74	143	ug/L
MKTF-42	12/16/2020	Naphthalene	**63.1**	1	1	30	ug/L
MKTF-42	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-42	12/16/2020	n-Propylbenzene	2.37	1	0.69	660	ug/L
MKTF-42	12/16/2020	p-Isopropyltoluene	1.14	1	0.71	NA	ug/L
MKTF-42	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-42	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-42	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-42	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-42	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-42	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-42	12/16/2020	Toluene	1.02	1	0.41	1000	ug/L
MKTF-42	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-42	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-42	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-42	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-42	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-42	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-42	12/16/2020	1,2,4-Trimethylbenzene	23.3	1	0.82	56	ug/L
MKTF-42	12/16/2020	1,3,5-Trimethylbenzene	9.17	1	0.56	60	ug/L
MKTF-42	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-42	12/16/2020	Xylenes, Total	53.8	10	1.6	620	ug/L
MKTF-42	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Acetone	27.1	25	10	14064	ug/L
MKTF-42	12/16/2020	Benzene	**14.2**	1	0.38	5	ug/L
MKTF-42	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-42	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-42	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-42	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-42	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-42	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-42	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-42	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-42	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-42	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-42	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-42	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-42	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-42	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-42	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-42	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-42	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-42	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,1-Dichloroethene	2.07	1	0.5	7	ug/L
MKTF-42	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-42	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-42	12/16/2020	Ethylbenzene	1.25	1	0.5	700	ug/L
MKTF-42	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-42	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-42	12/16/2020	Isopropylbenzene	1.11	1	0.53	447	ug/L
MKTF-42	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-42	12/16/2020	1-Methylnaphthalene	16.1	5	4.2	NA	ug/L
MKTF-42	12/16/2020	2-Methylnaphthalene	**12.7**	10	4.6		ug/L
MKTF-42	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-42	12/16/2020	MTBE	2.51	1	0.74	143	ug/L
MKTF-42	12/16/2020	Naphthalene	**32.2**	1	1	30	ug/L
MKTF-42	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-42	12/16/2020	n-Propylbenzene	1.36	1	0.69	660	ug/L
MKTF-42	12/16/2020	p-Isopropyltoluene	2.22	1	0.71	NA	ug/L
MKTF-42	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-42	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-42	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-42	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-42	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-42	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-42	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-42	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-42	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-42	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-42	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-42	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-42	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-42	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-42	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-42	12/16/2020	1,2,4-Trimethylbenzene	12.1	1	0.82	56	ug/L
MKTF-42	12/16/2020	1,3,5-Trimethylbenzene	4.15	1	0.56	60	ug/L
MKTF-42	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-42	12/16/2020	Xylenes, Total	26.5	10	1.6	620	ug/L
MKTF-43	11/18/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-43	11/18/2014	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	11/18/2014	Chloroform	ND	1	0.32	100	ug/L
MKTF-43	11/18/2014	Benzene	ND	1	0.15	5	ug/L
MKTF-43	11/18/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MKTF-43	11/18/2014	Bromomethane	*ND*	*10*	0.41	7.54	ug/L
MKTF-43	11/18/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MKTF-43	11/18/2014	Dibromomethane	ND	1	0.19	8	ug/L
MKTF-43	11/18/2014	Chloroethane	ND	2	0.48	20857	ug/L
MKTF-43	11/18/2014	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-43	11/18/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MKTF-43	11/18/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MKTF-43	11/18/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/18/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MKTF-43	11/18/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MKTF-43	11/18/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MKTF-43	11/18/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	11/18/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MKTF-43	11/18/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MKTF-43	11/18/2014	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-43	11/18/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	11/18/2014	Trichloroethene	ND	1	0.19	5	ug/L
MKTF-43	11/18/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MKTF-43	11/18/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MKTF-43	11/18/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	11/18/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	11/18/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MKTF-43	11/18/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MKTF-43	11/18/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MKTF-43	11/18/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MKTF-43	11/18/2014	p-Isopropyltoluene	3.6	1	0.18	NA	ug/L
MKTF-43	11/18/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MKTF-43	11/18/2014	Styrene	ND	1	0.12	100	ug/L
MKTF-43	11/18/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MKTF-43	11/18/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MKTF-43	11/18/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MKTF-43	11/18/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MKTF-43	11/18/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MKTF-43	11/18/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	11/18/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MKTF-43	11/18/2014	Bromobenzene	ND	1	0.18	62	ug/L
MKTF-43	11/18/2014	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	11/18/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	11/18/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MKTF-43	11/18/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MKTF-43	11/18/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MKTF-43	11/18/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	11/18/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	11/18/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MKTF-43	11/18/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MKTF-43	11/18/2014	2-Hexanone	ND	10	0.86	38	ug/L
MKTF-43	11/18/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MKTF-43	11/18/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MKTF-43	11/18/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MKTF-43	11/18/2014	MTBE	ND	1	0.25	143	ug/L
MKTF-43	11/18/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MKTF-43	11/18/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	3/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	3/11/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	3/11/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	3/11/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	3/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	3/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	3/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	3/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	3/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	3/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	3/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	3/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	3/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	3/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	3/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	3/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	3/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	3/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	3/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	3/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	3/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	3/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	3/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	3/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	3/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	3/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	3/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	3/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	3/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	3/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	3/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	3/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/11/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	3/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	3/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	3/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	3/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	3/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	3/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	3/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	3/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	3/11/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	3/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	3/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	3/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	3/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	3/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	3/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	3/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	3/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	3/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	3/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	3/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	3/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	3/11/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	3/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	3/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	6/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	6/10/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	6/10/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	6/10/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	6/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	6/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	6/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	6/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	6/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	6/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	6/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	6/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	6/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	6/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	6/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	6/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	6/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	6/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	6/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	6/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	6/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	6/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	6/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	6/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	6/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	6/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	6/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	6/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	6/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	6/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	6/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	6/10/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	6/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	6/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	6/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	6/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	6/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	6/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	6/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	6/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	6/10/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	6/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	6/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	6/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	6/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	6/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	6/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	6/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	6/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	6/10/2015	2-Hexanone	ND	10	0.48	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	6/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	6/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	6/10/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	6/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	6/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	8/21/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	8/21/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	8/21/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	8/21/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	8/21/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	8/21/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	8/21/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	8/21/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	8/21/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	8/21/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	8/21/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	8/21/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	8/21/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-43	8/21/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	8/21/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	8/21/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	8/21/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	8/21/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	8/21/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	8/21/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	8/21/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	8/21/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	8/21/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	8/21/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	8/21/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	8/21/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	8/21/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	8/21/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	8/21/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	8/21/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	8/21/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	8/21/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	8/21/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	8/21/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	8/21/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	8/21/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	8/21/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	8/21/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	8/21/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	8/21/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	8/21/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	8/21/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	8/21/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	8/21/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	8/21/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	8/21/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	8/21/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	8/21/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	8/21/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	8/21/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	8/21/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	8/21/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	8/21/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	8/21/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	8/21/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	8/21/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	8/21/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	11/5/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-43	11/5/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-43	11/5/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-43	11/5/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-43	11/5/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-43	11/5/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-43	11/5/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-43	11/5/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-43	11/5/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-43	11/5/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-43	11/5/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-43	11/5/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-43	11/5/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/5/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-43	11/5/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	11/5/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-43	11/5/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-43	11/5/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-43	11/5/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	11/5/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-43	11/5/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-43	11/5/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-43	11/5/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-43	11/5/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-43	11/5/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-43	11/5/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-43	11/5/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-43	11/5/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-43	11/5/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-43	11/5/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-43	11/5/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-43	11/5/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-43	11/5/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-43	11/5/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-43	11/5/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	11/5/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-43	11/5/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	11/5/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-43	11/5/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-43	11/5/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	11/5/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-43	11/5/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-43	11/5/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-43	11/5/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-43	11/5/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-43	11/5/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-43	11/5/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	11/5/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-43	11/5/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-43	11/5/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-43	11/5/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-43	11/5/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-43	11/5/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	11/5/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-43	11/5/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-43	11/5/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	11/5/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-43	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-43	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-43	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-43	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-43	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-43	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-43	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-43	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-43	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-43	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-43	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-43	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-43	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-43	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-43	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
MKTF-43	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-43	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-43	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-43	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-43	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-43	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-43	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-43	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-43	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-43	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-43	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-43	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-43	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-43	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-43	9/9/2016	Benzene	0.14	1	0.096	5	ug/L
MKTF-43	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-43	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-43	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-43	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	9/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	10/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	10/31/2016	Acetone	7	10	4.9	14064	ug/L
MKTF-43	10/31/2016	Chloroform	0.1	1	0.089	100	ug/L
MKTF-43	10/31/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-43	10/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-43	10/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	10/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	10/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	10/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-43	10/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	10/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-43	10/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	10/31/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-43	10/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-43	10/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-43	10/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-43	10/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-43	10/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-43	10/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-43	10/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-43	10/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	10/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-43	10/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	10/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	10/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	10/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-43	10/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-43	10/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-43	10/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-43	10/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	10/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-43	10/31/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-43	10/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	10/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	10/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-43	10/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-43	10/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	10/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-43	10/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	10/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-43	10/31/2016	Toluene	0.13	1	0.12	1000	ug/L
MKTF-43	10/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	10/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-43	10/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	10/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-43	10/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	10/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-43	10/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-43	10/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	10/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-43	10/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-43	10/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	10/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-43	10/31/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-43	10/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-43	10/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	3/8/2017	Acetone	3.7	10	0.88	14064	ug/L
MKTF-43	3/8/2017	Chloroform	0.16	1	0.089	100	ug/L
MKTF-43	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-43	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-43	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-43	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-43	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-43	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-43	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-43	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-43	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-43	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-43	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	3/8/2017	1,2,3-Trichloropropane	*ND*	2	0.39	0.0084	ug/L
MKTF-43	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-43	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-43	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-43	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-43	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-43	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-43	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-43	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-43	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	3/8/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-43	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-43	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-43	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-43	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-43	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	3/8/2017	MTBE	ND	1	0.15	143	ug/L
MKTF-43	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-43	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-43	6/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	6/6/2017	Acetone	5.4	10	0.82	14064	ug/L
MKTF-43	6/6/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	6/6/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	6/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	6/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	6/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	6/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	6/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	6/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	6/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	6/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	6/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	6/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	6/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	6/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	6/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	6/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	6/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	6/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	6/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	6/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	6/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	6/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	6/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	6/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	6/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	6/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	6/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	6/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	6/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	6/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	6/6/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	6/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	6/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	6/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	6/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	6/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	6/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	6/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	6/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	6/6/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	6/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	6/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	6/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	6/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	6/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	6/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	6/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	6/6/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-43	6/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	6/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	6/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	6/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	6/6/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	6/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	6/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	9/25/2017	Acetone	9.1	10	0.82	14064	ug/L
MKTF-43	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	9/25/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	11/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	11/27/2017	Acetone	3.6	10	0.82	14064	ug/L
MKTF-43	11/27/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	11/27/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-43	11/27/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	11/27/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	11/27/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	11/27/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	11/27/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	11/27/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	11/27/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	11/27/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/27/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	11/27/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	11/27/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	11/27/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	11/27/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	11/27/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	11/27/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	11/27/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	11/27/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	11/27/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	11/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	11/27/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	11/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	11/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	11/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	11/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	11/27/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	11/27/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	11/27/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	11/27/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	11/27/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-43	11/27/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	11/27/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	11/27/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	11/27/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	11/27/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	11/27/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	11/27/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	11/27/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	11/27/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	11/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	11/27/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	11/27/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	11/27/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	11/27/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	11/27/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	11/27/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	11/27/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	11/27/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	11/27/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	11/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	11/27/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	11/27/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-43	11/27/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	11/27/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	2/7/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	2/7/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-43	2/7/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	2/7/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-43	2/7/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	2/7/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	2/7/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	2/7/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	2/7/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	2/7/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	2/7/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	2/7/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	2/7/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	2/7/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	2/7/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	2/7/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	2/7/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	2/7/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	2/7/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	2/7/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	2/7/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	2/7/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	2/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	2/7/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	2/7/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	2/7/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	2/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	2/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	2/7/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	2/7/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	2/7/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/7/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	2/7/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-43	2/7/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	2/7/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	2/7/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	2/7/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	2/7/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	2/7/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	2/7/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	2/7/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	2/7/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	2/7/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	2/7/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	2/7/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	2/7/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	2/7/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	2/7/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	2/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	2/7/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-43	2/7/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	2/7/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	2/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	2/7/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	2/7/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-43	2/7/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	2/7/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	5/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-43	5/9/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-43	5/9/2018	Chloroform	0.72	1	0.4	100	ug/L
MKTF-43	5/9/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-43	5/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-43	5/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	5/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	5/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-43	5/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-43	5/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-43	5/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-43	5/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-43	5/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-43	5/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-43	5/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	5/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-43	5/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-43	5/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	5/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-43	5/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	5/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-43	5/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-43	5/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-43	5/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-43	5/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	5/9/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-43	5/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-43	5/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-43	5/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-43	5/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-43	5/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-43	5/9/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-43	5/9/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-43	5/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-43	5/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-43	5/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	5/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-43	5/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	5/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-43	5/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-43	5/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-43	5/9/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-43	5/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-43	5/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-43	5/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-43	5/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-43	5/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-43	5/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-43	5/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	5/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-43	5/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-43	5/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-43	5/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-43	5/9/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-43	5/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-43	5/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-43	8/30/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-43	8/30/2018	Acetone	12	10	0.79	14064	ug/L
MKTF-43	8/30/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-43	8/30/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-43	8/30/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-43	8/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-43	8/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-43	8/30/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-43	8/30/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-43	8/30/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-43	8/30/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-43	8/30/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-43	8/30/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-43	8/30/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-43	8/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-43	8/30/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-43	8/30/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-43	8/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-43	8/30/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-43	8/30/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-43	8/30/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-43	8/30/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-43	8/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-43	8/30/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-43	8/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-43	8/30/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-43	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-43	8/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-43	8/30/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-43	8/30/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-43	8/30/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-43	8/30/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-43	8/30/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-43	8/30/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-43	8/30/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	8/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-43	8/30/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-43	8/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-43	8/30/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-43	8/30/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-43	8/30/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-43	8/30/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	8/30/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-43	8/30/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-43	8/30/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	8/30/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-43	8/30/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-43	8/30/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-43	8/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	8/30/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-43	8/30/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-43	8/30/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-43	8/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-43	8/30/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-43	8/30/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-43	8/30/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-43	8/30/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-43	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-43	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-43	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-43	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-43	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-43	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-43	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-43	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-43	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-43	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-43	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-43	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-43	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-43	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-43	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-43	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-43	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-43	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-43	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-43	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-43	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-43	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-43	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-43	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-43	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-43	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-43	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-43	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-43	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-43	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-43	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-43	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-43	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-43	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-43	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-43	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-43	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-43	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-43	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-43	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-43	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-43	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-43	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-43	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-43	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-43	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-43	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-43	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-43	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-43	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-43	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-43	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-43	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-43	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-43	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-43	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-43	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-43	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-43	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-43	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-43	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-43	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-43	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-43	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-43	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-43	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-43	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-43	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-43	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-43	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-43	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-43	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-43	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-43	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-43	2/13/2019	Acetone	2.1	10	0.75707	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-43	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-43	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-43	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-43	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-43	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-43	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-43	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-43	2/13/2019	Chloroform	0.78	1	0.235224	100	ug/L
MKTF-43	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-43	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-43	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-43	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-43	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-43	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-43	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-43	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-43	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-43	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-43	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-43	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-43	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-43	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-43	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-43	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-43	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-43	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-43	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-43	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-43	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-43	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-43	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-43	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-43	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-43	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-43	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-43	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-43	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-43	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-43	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-43	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-43	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-43	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-43	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-43	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-43	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-43	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-43	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-43	2/13/2019	Acetone	2.7	10	0.75707	14064	ug/L
MKTF-43	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-43	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-43	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-43	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-43	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-43	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-43	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-43	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-43	2/13/2019	Chloroform	0.77	1	0.235224	100	ug/L
MKTF-43	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-43	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-43	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-43	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-43	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-43	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-43	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-43	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-43	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-43	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-43	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-43	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-43	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-43	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-43	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-43	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-43	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-43	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-43	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-43	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-43	5/8/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	5/8/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	5/8/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	5/8/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	5/8/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	5/8/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	5/8/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	5/8/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	5/8/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	5/8/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	5/8/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	5/8/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	5/8/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	5/8/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	5/8/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	5/8/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	5/8/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	5/8/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	5/8/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	5/8/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	5/8/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	5/8/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	5/8/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	5/8/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	5/8/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	5/8/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	5/8/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	5/8/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	5/8/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	5/8/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	5/8/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	5/8/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	5/8/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	5/8/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	5/8/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	5/8/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	5/8/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	5/8/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	5/8/2019	Chloroform	0.47	1	0.121891	100	ug/L
MKTF-43	5/8/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	5/8/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	5/8/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	5/8/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	5/8/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	5/8/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	5/8/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	5/8/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	5/8/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	5/8/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	5/8/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	5/8/2019	Naphthalene	ND	2	0.275071	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	5/8/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	5/8/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	5/8/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	5/8/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	5/8/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	5/8/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	5/8/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	5/8/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	5/8/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	5/8/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	5/8/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	5/8/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	5/8/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	8/22/2019	Acetone	1.2	10	1.199396	14064	ug/L
MKTF-43	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	8/22/2019	Chloroform	0.55	1	0.121891	100	ug/L
MKTF-43	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	0.82	4	0.314954	NA	ug/L
MKTF-43	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
MKTF-43	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	8/22/2019	Benzene	0.35	1	0.166639	5	ug/L
MKTF-43	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	8/22/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-43	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	8/22/2019	Xylenes, Total	0.7	1.5	0.454415	620	ug/L
MKTF-43	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
MKTF-43	8/22/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
MKTF-43	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-43	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	10/24/2019	Chloroform	0.6	1	0.121891	100	ug/L
MKTF-43	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-43	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-43	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-43	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-43	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-43	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-43	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-43	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-43	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-43	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-43	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-43	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-43	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-43	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-43	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-43	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-43	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-43	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-43	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-43	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-43	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-43	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-43	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-43	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-43	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-43	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-43	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-43	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-43	10/24/2019	Chloroform	0.56	1	0.121891	100	ug/L
MKTF-43	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-43	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-43	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-43	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-43	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-43	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-43	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-43	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-43	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-43	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-43	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-43	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-43	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-43	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-43	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-43	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-43	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-43	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-43	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-43	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-43	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-43	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-43	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
MKTF-43	10/24/2019	1,2-Dibromoethane	ND	0.00923	0.003218	0.05	ug/L
MKTF-43	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	2/27/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-43	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	2/27/2020	2-Butanone	2.9	10	1.1	5565	ug/L
MKTF-43	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-43	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	2/27/2020	Acetone	5.9	10	2.3	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	2/27/2020	Chloroform	0.84	1	0.13	100	ug/L
MKTF-43	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-43	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	2/27/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-43	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	2/27/2020	Naphthalene	0.34	2	0.28	30	ug/L
MKTF-43	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	2/27/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	2/27/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	2/27/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	2/27/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	2/27/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	2/27/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	2/27/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	2/27/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	2/27/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	2/27/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	2/27/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	2/27/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	2/27/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	2/27/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-43	2/27/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	2/27/2020	2-Butanone	4.7	10	1.1	5565	ug/L
MKTF-43	2/27/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	2/27/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-43	2/27/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	2/27/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	2/27/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	2/27/2020	Acetone	6.6	10	2.3	14064	ug/L
MKTF-43	2/27/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	2/27/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	2/27/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	2/27/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	2/27/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	2/27/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	2/27/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	2/27/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	2/27/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	2/27/2020	Chloroform	0.6	1	0.13	100	ug/L
MKTF-43	2/27/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	2/27/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	2/27/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	2/27/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	2/27/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	2/27/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	2/27/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	2/27/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-43	2/27/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	2/27/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	2/27/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-43	2/27/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	2/27/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	2/27/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	2/27/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	2/27/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	2/27/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	2/27/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	2/27/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	2/27/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	2/27/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	2/27/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
MKTF-43	2/27/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
MKTF-43	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-43	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-43	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-43	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-43	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-43	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-43	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-43	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-43	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-43	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-43	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-43	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-43	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-43	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-43	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-43	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-43	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-43	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-43	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-43	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-43	9/21/2020	1-Methylnaphthalene	1.4	4	0.84	NA	ug/L
MKTF-43	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-43	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-43	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-43	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-43	9/21/2020	2-Methylnaphthalene	**1.3**	4	0.69		ug/L
MKTF-43	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-43	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-43	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-43	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-43	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-43	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-43	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-43	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-43	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-43	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-43	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-43	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-43	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-43	9/21/2020	Chloroform	0.36	1	0.13	100	ug/L
MKTF-43	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-43	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-43	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-43	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-43	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-43	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-43	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-43	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-43	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-43	9/21/2020	MTBE	ND	1	0.39	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-43	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-43	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-43	9/21/2020	Naphthalene	0.89	2	0.28	30	ug/L
MKTF-43	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-43	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-43	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-43	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-43	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-43	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-43	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-43	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-43	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-43	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-43	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-43	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-43	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-43	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-43	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-43	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-43	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-43	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-43	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-43	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-43	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-43	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-43	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-43	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-43	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-43	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-43	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-43	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-43	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-43	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-43	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-43	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-43	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-43	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-43	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-43	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-43	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-43	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-43	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-43	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-43	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-43	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-43	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-43	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-43	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-43	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-43	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-43	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-43	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-43	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-43	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-43	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-43	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-43	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-43	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-43	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-43	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-43	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-43	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-43	12/15/2020	Acetone	ND	25	10	14064	ug/L
MKTF-43	12/15/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-43	12/15/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-43	12/15/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-43	12/15/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-43	12/15/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-43	12/15/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-43	12/15/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-43	12/15/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-43	12/15/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-43	12/15/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-43	12/15/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-43	12/15/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-43	12/15/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-43	12/15/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-43	12/15/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-43	12/15/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-43	12/15/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-43	12/15/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-43	12/15/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-43	12/15/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-43	12/15/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-43	12/15/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-43	12/15/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-43	12/15/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-43	12/15/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-43	12/15/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-43	12/15/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-43	12/15/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-43	12/15/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-43	12/15/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-43	12/15/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-43	12/15/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-43	12/15/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-43	12/15/2020	Styrene	ND	1	1	100	ug/L
MKTF-43	12/15/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-43	12/15/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-43	12/15/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-43	12/15/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-43	12/15/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-43	12/15/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-43	12/15/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-43	12/15/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-43	12/15/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-43	12/15/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-43	12/15/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-43	12/15/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-43	12/15/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-43	12/15/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-43	12/15/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-43	12/15/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-43	12/15/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-44	11/21/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
MKTF-44	11/21/2014	Acetone	ND	20	9.9	14064	ug/L
MKTF-44	11/21/2014	Chloroform	ND	2	0.63	100	ug/L
MKTF-44	11/21/2014	Benzene	ND	2	0.31	5	ug/L
MKTF-44	11/21/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
MKTF-44	11/21/2014	Bromomethane	ND	6	0.83	7.54	ug/L
MKTF-44	11/21/2014	Chloromethane	ND	6	1	20.32	ug/L
MKTF-44	11/21/2014	Dibromomethane	ND	2	0.38	8	ug/L
MKTF-44	11/21/2014	Chloroethane	ND	4	0.95	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/21/2014	Vinyl Chloride	ND	2	0.21	2	ug/L
MKTF-44	11/21/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
MKTF-44	11/21/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
MKTF-44	11/21/2014	Bromoform	ND	2	0.5	32.9	ug/L
MKTF-44	11/21/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
MKTF-44	11/21/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
MKTF-44	11/21/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
MKTF-44	11/21/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	11/21/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
MKTF-44	11/21/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
MKTF-44	11/21/2014	2-Butanone	ND	20	2.8	5565	ug/L
MKTF-44	11/21/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
MKTF-44	11/21/2014	Trichloroethene	ND	2	0.39	5	ug/L
MKTF-44	11/21/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
MKTF-44	11/21/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
MKTF-44	11/21/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
MKTF-44	11/21/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
MKTF-44	11/21/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
MKTF-44	11/21/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
MKTF-44	11/21/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
MKTF-44	11/21/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
MKTF-44	11/21/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
MKTF-44	11/21/2014	Ethylbenzene	ND	2	0.25	700	ug/L
MKTF-44	11/21/2014	Styrene	ND	2	0.23	100	ug/L
MKTF-44	11/21/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
MKTF-44	11/21/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
MKTF-44	11/21/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
MKTF-44	11/21/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
MKTF-44	11/21/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
MKTF-44	11/21/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
MKTF-44	11/21/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
MKTF-44	11/21/2014	Bromobenzene	ND	2	0.36	62	ug/L
MKTF-44	11/21/2014	Toluene	ND	2	0.34	1000	ug/L
MKTF-44	11/21/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
MKTF-44	11/21/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
MKTF-44	11/21/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
MKTF-44	11/21/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
MKTF-44	11/21/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
MKTF-44	11/21/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
MKTF-44	11/21/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
MKTF-44	11/21/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
MKTF-44	11/21/2014	2-Hexanone	ND	20	1.7	38	ug/L
MKTF-44	11/21/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
MKTF-44	11/21/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
MKTF-44	11/21/2014	Xylenes, Total	ND	3	0.75	620	ug/L
MKTF-44	11/21/2014	MTBE	ND	2	0.5	143	ug/L
MKTF-44	11/21/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
MKTF-44	11/21/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
MKTF-44	3/12/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-44	3/12/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-44	3/12/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-44	3/12/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-44	3/12/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-44	3/12/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-44	3/12/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-44	3/12/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-44	3/12/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-44	3/12/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-44	3/12/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-44	3/12/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-44	3/12/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-44	3/12/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-44	3/12/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-44	3/12/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-44	3/12/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	3/12/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-44	3/12/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-44	3/12/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-44	3/12/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-44	3/12/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-44	3/12/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-44	3/12/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-44	3/12/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-44	3/12/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-44	3/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-44	3/12/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/12/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-44	3/12/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-44	3/12/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-44	3/12/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-44	3/12/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-44	3/12/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-44	3/12/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-44	3/12/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-44	3/12/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-44	3/12/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-44	3/12/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-44	3/12/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-44	3/12/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-44	3/12/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-44	3/12/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-44	3/12/2015	Dibromochloromethane	*ND*	2	0.19	1.68	ug/L
MKTF-44	3/12/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-44	3/12/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-44	3/12/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
MKTF-44	3/12/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-44	3/12/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-44	3/12/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	3/12/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-44	3/12/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-44	3/12/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-44	3/12/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-44	3/12/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-44	3/12/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-44	3/12/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	6/10/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
MKTF-44	6/10/2015	Acetone	ND	20	1.9	14064	ug/L
MKTF-44	6/10/2015	Chloroform	ND	2	0.43	100	ug/L
MKTF-44	6/10/2015	Benzene	ND	2	0.13	5	ug/L
MKTF-44	6/10/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
MKTF-44	6/10/2015	Bromomethane	ND	6	2.3	7.54	ug/L
MKTF-44	6/10/2015	Chloromethane	ND	6	0.35	20.32	ug/L
MKTF-44	6/10/2015	Dibromomethane	ND	2	0.47	8	ug/L
MKTF-44	6/10/2015	Chloroethane	ND	4	0.21	20857	ug/L
MKTF-44	6/10/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
MKTF-44	6/10/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
MKTF-44	6/10/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
MKTF-44	6/10/2015	Bromoform	ND	2	0.32	32.9	ug/L
MKTF-44	6/10/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
MKTF-44	6/10/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
MKTF-44	6/10/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
MKTF-44	6/10/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
MKTF-44	6/10/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
MKTF-44	6/10/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
MKTF-44	6/10/2015	2-Butanone	ND	20	0.73	5565	ug/L
MKTF-44	6/10/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
MKTF-44	6/10/2015	Trichloroethene	ND	2	0.33	5	ug/L
MKTF-44	6/10/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
MKTF-44	6/10/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
MKTF-44	6/10/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
MKTF-44	6/10/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
MKTF-44	6/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
MKTF-44	6/10/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
MKTF-44	6/10/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
MKTF-44	6/10/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
MKTF-44	6/10/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
MKTF-44	6/10/2015	Ethylbenzene	ND	2	0.2	700	ug/L
MKTF-44	6/10/2015	Styrene	ND	2	0.21	100	ug/L
MKTF-44	6/10/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
MKTF-44	6/10/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
MKTF-44	6/10/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
MKTF-44	6/10/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
MKTF-44	6/10/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
MKTF-44	6/10/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
MKTF-44	6/10/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
MKTF-44	6/10/2015	Bromobenzene	ND	2	0.22	62	ug/L
MKTF-44	6/10/2015	Toluene	ND	2	0.22	1000	ug/L
MKTF-44	6/10/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
MKTF-44	6/10/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
MKTF-44	6/10/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
MKTF-44	6/10/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
MKTF-44	6/10/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
MKTF-44	6/10/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
MKTF-44	6/10/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	6/10/2015	2-Hexanone	ND	20	0.95	38	ug/L
MKTF-44	6/10/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
MKTF-44	6/10/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
MKTF-44	6/10/2015	Xylenes, Total	ND	3	0.56	620	ug/L
MKTF-44	6/10/2015	MTBE	ND	2	0.35	143	ug/L
MKTF-44	6/10/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
MKTF-44	6/10/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
MKTF-44	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-44	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-44	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-44	8/17/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-44	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-44	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-44	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-44	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-44	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MKTF-44	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-44	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-44	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-44	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-44	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-44	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-44	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-44	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-44	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-44	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-44	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-44	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-44	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-44	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-44	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-44	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-44	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-44	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-44	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-44	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-44	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-44	8/17/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-44	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-44	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-44	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-44	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-44	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-44	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-44	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-44	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-44	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-44	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-44	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-44	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-44	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-44	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-44	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-44	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-44	8/17/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-44	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	11/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MKTF-44	11/9/2015	Acetone	ND	10	0.94	14064	ug/L
MKTF-44	11/9/2015	Chloroform	ND	1	0.21	100	ug/L
MKTF-44	11/9/2015	Benzene	ND	1	0.065	5	ug/L
MKTF-44	11/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MKTF-44	11/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MKTF-44	11/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MKTF-44	11/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
MKTF-44	11/9/2015	Chloroethane	ND	2	0.1	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MKTF-44	11/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MKTF-44	11/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MKTF-44	11/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
MKTF-44	11/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MKTF-44	11/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	11/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MKTF-44	11/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MKTF-44	11/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MKTF-44	11/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	11/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
MKTF-44	11/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MKTF-44	11/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
MKTF-44	11/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MKTF-44	11/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MKTF-44	11/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MKTF-44	11/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MKTF-44	11/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MKTF-44	11/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MKTF-44	11/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MKTF-44	11/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MKTF-44	11/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MKTF-44	11/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MKTF-44	11/9/2015	Styrene	ND	1	0.11	100	ug/L
MKTF-44	11/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MKTF-44	11/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	11/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MKTF-44	11/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	11/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MKTF-44	11/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MKTF-44	11/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	11/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
MKTF-44	11/9/2015	Toluene	ND	1	0.11	1000	ug/L
MKTF-44	11/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MKTF-44	11/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MKTF-44	11/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MKTF-44	11/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MKTF-44	11/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	11/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MKTF-44	11/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MKTF-44	11/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MKTF-44	11/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
MKTF-44	11/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MKTF-44	11/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	11/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MKTF-44	11/9/2015	MTBE	ND	1	0.17	143	ug/L
MKTF-44	11/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	11/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	2/24/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	2/24/2016	Acetone	ND	10	0.88	14064	ug/L
MKTF-44	2/24/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	2/24/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	2/24/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
MKTF-44	2/24/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	2/24/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	2/24/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	2/24/2016	Chloroethane	ND	2	0.15	20857	ug/L
MKTF-44	2/24/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
MKTF-44	2/24/2016	Methylene Chloride	ND	3	0.063	5	ug/L
MKTF-44	2/24/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	2/24/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	2/24/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
MKTF-44	2/24/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	2/24/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
MKTF-44	2/24/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
MKTF-44	2/24/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-44	2/24/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
MKTF-44	2/24/2016	2-Butanone	ND	10	0.32	5565	ug/L
MKTF-44	2/24/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
MKTF-44	2/24/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	2/24/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
MKTF-44	2/24/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	2/24/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	2/24/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-44	2/24/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
MKTF-44	2/24/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/24/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
MKTF-44	2/24/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-44	2/24/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	2/24/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	2/24/2016	Styrene	ND	1	0.095	100	ug/L
MKTF-44	2/24/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	2/24/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	2/24/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	2/24/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	2/24/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
MKTF-44	2/24/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
MKTF-44	2/24/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	2/24/2016	Bromobenzene	ND	1	0.08	62	ug/L
MKTF-44	2/24/2016	Toluene	ND	1	0.089	1000	ug/L
MKTF-44	2/24/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
MKTF-44	2/24/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	2/24/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	2/24/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	2/24/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	2/24/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	2/24/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	2/24/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	2/24/2016	2-Hexanone	ND	10	0.36	38	ug/L
MKTF-44	2/24/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-44	2/24/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	2/24/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	2/24/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	2/24/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	2/24/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
MKTF-44	6/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	6/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	6/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	6/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	6/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	6/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	6/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	6/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	6/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-44	6/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	6/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	6/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	6/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	6/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	6/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	6/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-44	6/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	6/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	6/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	6/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	6/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	6/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	6/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	6/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	6/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	6/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	6/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	6/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	6/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	6/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	6/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	6/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	6/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	6/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	6/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	6/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	6/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	6/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	6/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	6/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	6/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	6/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	6/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	6/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	6/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	6/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	6/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	6/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	6/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	6/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	6/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	6/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	6/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	6/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	6/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	6/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	9/9/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
MKTF-44	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MKTF-44	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	9/9/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	9/9/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	11/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	11/1/2016	Acetone	ND	10	4.9	14064	ug/L
MKTF-44	11/1/2016	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	11/1/2016	Benzene	ND	1	0.096	5	ug/L
MKTF-44	11/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MKTF-44	11/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	11/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	11/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	11/1/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	11/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MKTF-44	11/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	11/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
MKTF-44	11/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MKTF-44	11/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MKTF-44	11/1/2016	1,1-Dichloroethene	0.35	1	0.11	7	ug/L
MKTF-44	11/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MKTF-44	11/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MKTF-44	11/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MKTF-44	11/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
MKTF-44	11/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MKTF-44	11/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	11/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MKTF-44	11/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	11/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	11/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	11/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MKTF-44	11/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MKTF-44	11/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MKTF-44	11/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MKTF-44	11/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	11/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	11/1/2016	Styrene	ND	1	0.11	100	ug/L
MKTF-44	11/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	11/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	11/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MKTF-44	11/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MKTF-44	11/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	11/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MKTF-44	11/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	11/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
MKTF-44	11/1/2016	Toluene	ND	1	0.12	1000	ug/L
MKTF-44	11/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	11/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MKTF-44	11/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	11/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MKTF-44	11/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	11/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MKTF-44	11/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MKTF-44	11/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	11/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
MKTF-44	11/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MKTF-44	11/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	11/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MKTF-44	11/1/2016	MTBE	ND	1	0.21	143	ug/L
MKTF-44	11/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MKTF-44	11/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	3/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	3/8/2017	Acetone	1.7	10	0.88	14064	ug/L
MKTF-44	3/8/2017	Chloroform	ND	1	0.089	100	ug/L
MKTF-44	3/8/2017	Benzene	ND	1	0.096	5	ug/L
MKTF-44	3/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	3/8/2017	Bromomethane	ND	3	0.78	7.54	ug/L
MKTF-44	3/8/2017	Chloromethane	ND	3	0.21	20.32	ug/L
MKTF-44	3/8/2017	Dibromomethane	ND	1	0.12	8	ug/L
MKTF-44	3/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	3/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	3/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	3/8/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
MKTF-44	3/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	3/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	3/8/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
MKTF-44	3/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	3/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	3/8/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
MKTF-44	3/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	3/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	3/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	3/8/2017	Trichloroethene	ND	1	0.18	5	ug/L
MKTF-44	3/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	3/8/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MKTF-44	3/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	3/8/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
MKTF-44	3/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	3/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	3/8/2017	Isopropylbenzene	ND	1	0.098	447	ug/L
MKTF-44	3/8/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MKTF-44	3/8/2017	Ethylbenzene	ND	1	0.11	700	ug/L
MKTF-44	3/8/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	3/8/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
MKTF-44	3/8/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
MKTF-44	3/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	3/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	3/8/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MKTF-44	3/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	3/8/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MKTF-44	3/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	3/8/2017	Toluene	ND	1	0.089	1000	ug/L
MKTF-44	3/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	3/8/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
MKTF-44	3/8/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	3/8/2017	sec-Butylbenzene	ND	1	0.1	2000	ug/L
MKTF-44	3/8/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MKTF-44	3/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	3/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	3/8/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MKTF-44	3/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	3/8/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
MKTF-44	3/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MKTF-44	3/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	3/8/2017	MTBE	ND	1	0.15	143	ug/L
MKTF-44	3/8/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MKTF-44	3/8/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
MKTF-44	6/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	6/5/2017	Acetone	3.8	10	0.82	14064	ug/L
MKTF-44	6/5/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	6/5/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	6/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	6/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	6/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	6/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	6/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	6/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	6/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	6/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	6/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	6/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	6/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	6/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	6/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	6/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	6/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	6/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	6/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	6/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	6/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	6/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	6/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	6/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	6/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	6/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	6/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	6/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	6/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	6/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	6/5/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	6/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	6/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	6/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	6/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	6/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	6/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	6/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	6/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	6/5/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	6/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	6/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	6/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	6/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	6/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	6/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	6/5/2017	Pentafluorobenzene	**10**	0	0		None
MKTF-44	6/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	6/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	6/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	6/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	6/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	6/5/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	6/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	6/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	9/25/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	9/25/2017	Acetone	2.6	10	0.82	14064	ug/L
MKTF-44	9/25/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	9/25/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	9/25/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	9/25/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	9/25/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	9/25/2017	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	9/25/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	9/25/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	9/25/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	9/25/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	9/25/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	9/25/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	9/25/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	9/25/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	9/25/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	9/25/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	9/25/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	9/25/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	9/25/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	9/25/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	9/25/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	9/25/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	9/25/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	9/25/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	9/25/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	9/25/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	9/25/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	9/25/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	9/25/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	9/25/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	9/25/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	9/25/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	9/25/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	9/25/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	9/25/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	9/25/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	9/25/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	9/25/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	9/25/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	9/25/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	9/25/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	9/25/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	9/25/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	9/25/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	9/25/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	9/25/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	9/25/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	9/25/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	9/25/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	9/25/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	9/25/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	9/25/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	9/25/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	9/25/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	9/25/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	11/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	11/28/2017	Acetone	2.1	10	0.82	14064	ug/L
MKTF-44	11/28/2017	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	11/28/2017	Benzene	ND	1	0.062	5	ug/L
MKTF-44	11/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	11/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	11/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	11/28/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	11/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	11/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	11/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	11/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	11/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	11/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	11/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	11/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	11/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	11/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	11/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	11/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	11/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	11/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	11/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	11/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	11/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	11/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	11/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	11/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	11/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	11/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	11/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	11/28/2017	Styrene	ND	1	0.16	100	ug/L
MKTF-44	11/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	11/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	11/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	11/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	11/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	11/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	11/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	11/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	11/28/2017	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	11/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	11/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	11/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	11/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	11/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	11/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	11/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	11/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	11/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	11/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	11/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	11/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	11/28/2017	MTBE	ND	1	0.24	143	ug/L
MKTF-44	11/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	11/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	2/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	2/8/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-44	2/8/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	2/8/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-44	2/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	2/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	2/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	2/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	2/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	2/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	2/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	2/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	2/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	2/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	2/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	2/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	2/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	2/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	2/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	2/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	2/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	2/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	2/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	2/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	2/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	2/8/2018	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
MKTF-44	2/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	2/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	2/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	2/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MKTF-44	2/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	2/8/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-44	2/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	2/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	2/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	2/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	2/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	2/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	2/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	2/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	2/8/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	2/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	2/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	2/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	2/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MKTF-44	2/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	2/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	2/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	2/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	2/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	2/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	2/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	2/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	2/8/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-44	2/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	2/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	5/10/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
MKTF-44	5/10/2018	Acetone	ND	10	0.82	14064	ug/L
MKTF-44	5/10/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	5/10/2018	Benzene	ND	1	0.062	5	ug/L
MKTF-44	5/10/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MKTF-44	5/10/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	5/10/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	5/10/2018	Dibromomethane	ND	1	0.091	8	ug/L
MKTF-44	5/10/2018	Chloroethane	ND	2	0.23	20857	ug/L
MKTF-44	5/10/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
MKTF-44	5/10/2018	Methylene Chloride	ND	3	0.11	5	ug/L
MKTF-44	5/10/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
MKTF-44	5/10/2018	Bromoform	ND	1	0.21	32.9	ug/L
MKTF-44	5/10/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MKTF-44	5/10/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	5/10/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MKTF-44	5/10/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MKTF-44	5/10/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	5/10/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MKTF-44	5/10/2018	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	5/10/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MKTF-44	5/10/2018	Trichloroethene	ND	1	0.11	5	ug/L
MKTF-44	5/10/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MKTF-44	5/10/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MKTF-44	5/10/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	5/10/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MKTF-44	5/10/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MKTF-44	5/10/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MKTF-44	5/10/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
MKTF-44	5/10/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
MKTF-44	5/10/2018	p-Isopropyltoluene	0.16	1	0.096	NA	ug/L
MKTF-44	5/10/2018	Ethylbenzene	ND	1	0.093	700	ug/L
MKTF-44	5/10/2018	Styrene	ND	1	0.16	100	ug/L
MKTF-44	5/10/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
MKTF-44	5/10/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
MKTF-44	5/10/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	5/10/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MKTF-44	5/10/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	5/10/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MKTF-44	5/10/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MKTF-44	5/10/2018	Bromobenzene	ND	1	0.14	62	ug/L
MKTF-44	5/10/2018	Toluene	ND	1	0.064	1000	ug/L
MKTF-44	5/10/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
MKTF-44	5/10/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MKTF-44	5/10/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
MKTF-44	5/10/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MKTF-44	5/10/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MKTF-44	5/10/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	5/10/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MKTF-44	5/10/2018	2-Hexanone	ND	10	0.66	38	ug/L
MKTF-44	5/10/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MKTF-44	5/10/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MKTF-44	5/10/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
MKTF-44	5/10/2018	MTBE	ND	1	0.24	143	ug/L
MKTF-44	5/10/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MKTF-44	5/10/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MKTF-44	8/30/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MKTF-44	8/30/2018	Acetone	8.1	10	0.79	14064	ug/L
MKTF-44	8/30/2018	Chloroform	ND	1	0.4	100	ug/L
MKTF-44	8/30/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-44	8/30/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MKTF-44	8/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MKTF-44	8/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MKTF-44	8/30/2018	Dibromomethane	ND	1	0.32	8	ug/L
MKTF-44	8/30/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-44	8/30/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MKTF-44	8/30/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-44	8/30/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-44	8/30/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-44	8/30/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-44	8/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MKTF-44	8/30/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-44	8/30/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MKTF-44	8/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MKTF-44	8/30/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MKTF-44	8/30/2018	2-Butanone	ND	10	1.3	5565	ug/L
MKTF-44	8/30/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-44	8/30/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-44	8/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-44	8/30/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-44	8/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MKTF-44	8/30/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-44	8/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-44	8/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-44	8/30/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-44	8/30/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-44	8/30/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-44	8/30/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-44	8/30/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-44	8/30/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-44	8/30/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	8/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MKTF-44	8/30/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-44	8/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MKTF-44	8/30/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-44	8/30/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-44	8/30/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-44	8/30/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-44	8/30/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-44	8/30/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-44	8/30/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	8/30/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-44	8/30/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-44	8/30/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-44	8/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	8/30/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-44	8/30/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-44	8/30/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MKTF-44	8/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-44	8/30/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-44	8/30/2018	MTBE	ND	1	0.32	143	ug/L
MKTF-44	8/30/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-44	8/30/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-44	11/15/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MKTF-44	11/15/2018	Acetone	ND	10	0.76	14064	ug/L
MKTF-44	11/15/2018	Chloroform	ND	1	0.24	100	ug/L
MKTF-44	11/15/2018	Benzene	ND	1	0.17	5	ug/L
MKTF-44	11/15/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MKTF-44	11/15/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MKTF-44	11/15/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MKTF-44	11/15/2018	Dibromomethane	ND	1	0.32	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	Chloroethane	ND	2	0.16	20857	ug/L
MKTF-44	11/15/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MKTF-44	11/15/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MKTF-44	11/15/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MKTF-44	11/15/2018	Bromoform	ND	1	0.32	32.9	ug/L
MKTF-44	11/15/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MKTF-44	11/15/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MKTF-44	11/15/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MKTF-44	11/15/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MKTF-44	11/15/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MKTF-44	11/15/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MKTF-44	11/15/2018	2-Butanone	ND	10	1.4	5565	ug/L
MKTF-44	11/15/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MKTF-44	11/15/2018	Trichloroethene	ND	1	0.26	5	ug/L
MKTF-44	11/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MKTF-44	11/15/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MKTF-44	11/15/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MKTF-44	11/15/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MKTF-44	11/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MKTF-44	11/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MKTF-44	11/15/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MKTF-44	11/15/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MKTF-44	11/15/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MKTF-44	11/15/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MKTF-44	11/15/2018	Styrene	ND	1	0.25	100	ug/L
MKTF-44	11/15/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MKTF-44	11/15/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	11/15/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MKTF-44	11/15/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MKTF-44	11/15/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MKTF-44	11/15/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MKTF-44	11/15/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MKTF-44	11/15/2018	Bromobenzene	ND	1	0.32	62	ug/L
MKTF-44	11/15/2018	Toluene	ND	1	0.17	1000	ug/L
MKTF-44	11/15/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MKTF-44	11/15/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MKTF-44	11/15/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MKTF-44	11/15/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MKTF-44	11/15/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MKTF-44	11/15/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MKTF-44	11/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MKTF-44	11/15/2018	Pentafluorobenzene	**10**	0	0		None
MKTF-44	11/15/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MKTF-44	11/15/2018	2-Hexanone	ND	10	0.91	38	ug/L
MKTF-44	11/15/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MKTF-44	11/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MKTF-44	11/15/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MKTF-44	11/15/2018	MTBE	ND	1	0.46	143	ug/L
MKTF-44	11/15/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MKTF-44	11/15/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MKTF-44	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
MKTF-44	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
MKTF-44	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
MKTF-44	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
MKTF-44	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
MKTF-44	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
MKTF-44	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
MKTF-44	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
MKTF-44	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
MKTF-44	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
MKTF-44	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
MKTF-44	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
MKTF-44	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
MKTF-44	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
MKTF-44	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
MKTF-44	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
MKTF-44	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
MKTF-44	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
MKTF-44	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
MKTF-44	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
MKTF-44	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
MKTF-44	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
MKTF-44	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
MKTF-44	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
MKTF-44	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
MKTF-44	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
MKTF-44	2/13/2019	Acetone	1.4	10	0.75707	14064	ug/L
MKTF-44	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
MKTF-44	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
MKTF-44	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
MKTF-44	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
MKTF-44	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
MKTF-44	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
MKTF-44	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
MKTF-44	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
MKTF-44	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
MKTF-44	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
MKTF-44	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
MKTF-44	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
MKTF-44	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
MKTF-44	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
MKTF-44	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
MKTF-44	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
MKTF-44	2/13/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
MKTF-44	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
MKTF-44	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
MKTF-44	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
MKTF-44	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
MKTF-44	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
MKTF-44	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
MKTF-44	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
MKTF-44	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
MKTF-44	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
MKTF-44	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
MKTF-44	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
MKTF-44	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
MKTF-44	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
MKTF-44	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
MKTF-44	5/8/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	5/8/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	5/8/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	5/8/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	5/8/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	5/8/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	5/8/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	5/8/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	5/8/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-44	5/8/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	5/8/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-44	5/8/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	5/8/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	5/8/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	5/8/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	5/8/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	5/8/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	5/8/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	5/8/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	5/8/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	5/8/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	5/8/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	5/8/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	5/8/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	5/8/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	5/8/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	5/8/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	5/8/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	5/8/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	5/8/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	5/8/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	5/8/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	5/8/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	5/8/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	5/8/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	5/8/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/8/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	5/8/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	5/8/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	5/8/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	5/8/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	5/8/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	5/8/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	5/8/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	5/8/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	5/8/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	5/8/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-44	5/8/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	5/8/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	5/8/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	5/8/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	5/8/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	5/8/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	5/8/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	5/8/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	5/8/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	5/8/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	5/8/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	5/8/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	5/8/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-44	5/8/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	5/8/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	5/8/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	5/8/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MKTF-44	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MKTF-44	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	8/22/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-44	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	8/22/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MKTF-44	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	10/24/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MKTF-44	10/24/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MKTF-44	10/24/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MKTF-44	10/24/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MKTF-44	10/24/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MKTF-44	10/24/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MKTF-44	10/24/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MKTF-44	10/24/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MKTF-44	10/24/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MKTF-44	10/24/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MKTF-44	10/24/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MKTF-44	10/24/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MKTF-44	10/24/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MKTF-44	10/24/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MKTF-44	10/24/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MKTF-44	10/24/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MKTF-44	10/24/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MKTF-44	10/24/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MKTF-44	10/24/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MKTF-44	10/24/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MKTF-44	10/24/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MKTF-44	10/24/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MKTF-44	10/24/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MKTF-44	10/24/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MKTF-44	10/24/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MKTF-44	10/24/2019	Acetone	ND	10	1.199396	14064	ug/L
MKTF-44	10/24/2019	Benzene	ND	1	0.166639	5	ug/L
MKTF-44	10/24/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MKTF-44	10/24/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MKTF-44	10/24/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MKTF-44	10/24/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MKTF-44	10/24/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MKTF-44	10/24/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MKTF-44	10/24/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MKTF-44	10/24/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MKTF-44	10/24/2019	Chloroform	ND	1	0.121891	100	ug/L
MKTF-44	10/24/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MKTF-44	10/24/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MKTF-44	10/24/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MKTF-44	10/24/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MKTF-44	10/24/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MKTF-44	10/24/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MKTF-44	10/24/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MKTF-44	10/24/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MKTF-44	10/24/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MKTF-44	10/24/2019	MTBE	ND	1	0.456095	143	ug/L
MKTF-44	10/24/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	2	0.275071	30	ug/L
MKTF-44	10/24/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MKTF-44	10/24/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MKTF-44	10/24/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MKTF-44	10/24/2019	Styrene	ND	1	0.191323	100	ug/L
MKTF-44	10/24/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MKTF-44	10/24/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MKTF-44	10/24/2019	Toluene	ND	1	0.350436	1000	ug/L
MKTF-44	10/24/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MKTF-44	10/24/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MKTF-44	10/24/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MKTF-44	10/24/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MKTF-44	10/24/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MKTF-44	3/5/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-44	3/5/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-44	3/5/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-44	3/5/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-44	3/5/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-44	3/5/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-44	3/5/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-44	3/5/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-44	3/5/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-44	3/5/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-44	3/5/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-44	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-44	3/5/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-44	3/5/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-44	3/5/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-44	3/5/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-44	3/5/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-44	3/5/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-44	3/5/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-44	3/5/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-44	3/5/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-44	3/5/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-44	3/5/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	3/5/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-44	3/5/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-44	3/5/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-44	3/5/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-44	3/5/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-44	3/5/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-44	3/5/2020	Acetone	3.6	10	2.3	14064	ug/L
MKTF-44	3/5/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-44	3/5/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-44	3/5/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-44	3/5/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-44	3/5/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-44	3/5/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-44	3/5/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-44	3/5/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-44	3/5/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-44	3/5/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-44	3/5/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-44	3/5/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-44	3/5/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-44	3/5/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-44	3/5/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-44	3/5/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-44	3/5/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-44	3/5/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-44	3/5/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-44	3/5/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-44	3/5/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-44	3/5/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	3/5/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-44	3/5/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-44	3/5/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-44	3/5/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-44	3/5/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-44	3/5/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-44	3/5/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-44	3/5/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-44	3/5/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-44	3/5/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-44	3/5/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-44	3/5/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	3/5/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-44	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-44	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-44	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-44	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-44	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-44	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-44	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-44	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-44	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-44	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-44	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-44	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-44	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-44	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-44	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-44	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-44	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-44	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-44	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-44	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-44	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-44	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-44	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-44	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-44	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-44	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-44	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-44	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-44	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-44	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-44	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-44	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-44	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-44	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-44	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-44	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-44	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-44	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-44	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-44	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-44	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-44	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-44	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-44	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-44	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-44	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-44	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-44	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-44	9/21/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-44	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-44	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-44	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-44	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-44	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-44	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-44	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-44	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-44	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-44	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-44	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-44	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-44	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-44	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-44	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-44	12/23/2020	Acetone	ND	25	10	14064	ug/L
MKTF-44	12/23/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-44	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-44	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-44	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-44	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-44	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-44	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-44	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-44	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-44	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-44	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-44	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-44	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-44	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-44	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-44	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-44	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-44	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-44	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-44	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-44	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-44	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-44	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-44	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-44	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-44	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-44	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-44	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-44	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-44	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-44	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-44	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-44	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-44	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-44	12/23/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-44	12/23/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-44	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-44	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-44	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-44	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-44	12/23/2020	Styrene	ND	1	1	100	ug/L
MKTF-44	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-44	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-44	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-44	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-44	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-44	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-44	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-44	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-44	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-44	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-44	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-44	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-44	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-44	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-44	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-44	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
MKTF-44	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-44	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-46	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethane	0.66	1	0.27	25	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	3/6/2020	Acetone	2.8	10	2.3	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-46	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	3/6/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-46	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-46	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethane	0.67	1	0.27	25	ug/L
MKTF-46	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	3/6/2020	Acetone	3.5	10	2.3	14064	ug/L
MKTF-46	3/6/2020	Benzene	0.4	1	0.23	5	ug/L
MKTF-46	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	3/6/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-46	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-46	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-46	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-46	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-46	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-46	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-46	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-46	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-46	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-46	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-46	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-46	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-46	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-46	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-46	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-46	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
MKTF-46	9/17/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-46	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-46	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-46	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-46	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-46	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-46	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-46	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-46	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-46	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
MKTF-46	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-46	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-46	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-46	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-46	9/17/2020	1,1-Dichloroethane	0.51	1	0.27	25	ug/L
MKTF-46	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-46	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-46	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-46	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-46	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-46	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-46	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-46	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-46	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-46	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-46	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-46	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-46	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-46	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-46	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-46	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-46	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-46	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-46	9/17/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-46	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-46	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-46	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-46	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-46	9/17/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-46	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-46	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-46	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-46	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-46	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-46	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-46	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-46	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-46	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-46	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
MKTF-46	12/16/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
MKTF-46	12/16/2020	Acetone	ND	25	10	14064	ug/L
MKTF-46	12/16/2020	Benzene	ND	1	0.38	5	ug/L
MKTF-46	12/16/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
MKTF-46	12/16/2020	Bromoform	ND	5	0.71	32.9	ug/L
MKTF-46	12/16/2020	Bromomethane	ND	1	0.98	7.54	ug/L
MKTF-46	12/16/2020	2-Butanone	ND	25	2.6	5565	ug/L
MKTF-46	12/16/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
MKTF-46	12/16/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
MKTF-46	12/16/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MKTF-46	12/16/2020	Chloroethane	ND	1	0.76	20857	ug/L
MKTF-46	12/16/2020	Chloroform	ND	1	0.6	100	ug/L
MKTF-46	12/16/2020	Chloromethane	ND	1	0.83	20.32	ug/L
MKTF-46	12/16/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
MKTF-46	12/16/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
MKTF-46	12/16/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
MKTF-46	12/16/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-46	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
MKTF-46	12/16/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
MKTF-46	12/16/2020	Dibromomethane	ND	5	0.59	8	ug/L
MKTF-46	12/16/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
MKTF-46	12/16/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
MKTF-46	12/16/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
MKTF-46	12/16/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
MKTF-46	12/16/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
MKTF-46	12/16/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
MKTF-46	12/16/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
MKTF-46	12/16/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
MKTF-46	12/16/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
MKTF-46	12/16/2020	Ethylbenzene	ND	1	0.5	700	ug/L
MKTF-46	12/16/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
MKTF-46	12/16/2020	2-Hexanone	ND	25	3.1	38	ug/L
MKTF-46	12/16/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
MKTF-46	12/16/2020	Methylene Chloride	ND	5	3	5	ug/L
MKTF-46	12/16/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
MKTF-46	12/16/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
MKTF-46	12/16/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
MKTF-46	12/16/2020	MTBE	ND	1	0.74	143	ug/L
MKTF-46	12/16/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
MKTF-46	12/16/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
MKTF-46	12/16/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
MKTF-46	12/16/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
MKTF-46	12/16/2020	Styrene	ND	1	1	100	ug/L
MKTF-46	12/16/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
MKTF-46	12/16/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
MKTF-46	12/16/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
MKTF-46	12/16/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
MKTF-46	12/16/2020	Toluene	ND	1	0.41	1000	ug/L
MKTF-46	12/16/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
MKTF-46	12/16/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
MKTF-46	12/16/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
MKTF-46	12/16/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
MKTF-46	12/16/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
MKTF-46	12/16/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
MKTF-46	12/16/2020	Trichloroethene	ND	1	0.5	5	ug/L
MKTF-46	12/16/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
MKTF-46	12/16/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
MKTF-46	12/16/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
MKTF-46	12/16/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	12/16/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
MKTF-46	12/16/2020	Xylenes, Total	ND	10	1.6	620	ug/L
MKTF-46	12/16/2020	Naphthalene	ND	1	1	30	ug/L
MKTF-47	3/6/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MKTF-47	3/6/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MKTF-47	3/6/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MKTF-47	3/6/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MKTF-47	3/6/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MKTF-47	3/6/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MKTF-47	3/6/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MKTF-47	3/6/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MKTF-47	3/6/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MKTF-47	3/6/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MKTF-47	3/6/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MKTF-47	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MKTF-47	3/6/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MKTF-47	3/6/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MKTF-47	3/6/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MKTF-47	3/6/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MKTF-47	3/6/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MKTF-47	3/6/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MKTF-47	3/6/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MKTF-47	3/6/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MKTF-47	3/6/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MKTF-47	3/6/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MKTF-47	3/6/2020	2-Butanone	ND	10	1.1	5565	ug/L
MKTF-47	3/6/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MKTF-47	3/6/2020	2-Hexanone	ND	10	1.8	38	ug/L
MKTF-47	3/6/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MKTF-47	3/6/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MKTF-47	3/6/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MKTF-47	3/6/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MKTF-47	3/6/2020	Acetone	3.4	10	2.3	14064	ug/L
MKTF-47	3/6/2020	Benzene	ND	1	0.23	5	ug/L
MKTF-47	3/6/2020	Bromobenzene	ND	1	0.28	62	ug/L
MKTF-47	3/6/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MKTF-47	3/6/2020	Bromoform	ND	1	0.31	32.9	ug/L
MKTF-47	3/6/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MKTF-47	3/6/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MKTF-47	3/6/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MKTF-47	3/6/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MKTF-47	3/6/2020	Chloroethane	ND	2	0.38	20857	ug/L
MKTF-47	3/6/2020	Chloroform	0.23	1	0.13	100	ug/L
MKTF-47	3/6/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MKTF-47	3/6/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MKTF-47	3/6/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MKTF-47	3/6/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MKTF-47	3/6/2020	Dibromomethane	ND	1	0.31	8	ug/L
MKTF-47	3/6/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MKTF-47	3/6/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MKTF-47	3/6/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MKTF-47	3/6/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MKTF-47	3/6/2020	MTBE	ND	1	0.39	143	ug/L
MKTF-47	3/6/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MKTF-47	3/6/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MKTF-47	3/6/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MKTF-47	3/6/2020	Naphthalene	ND	2	0.28	30	ug/L
MKTF-47	3/6/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MKTF-47	3/6/2020	Styrene	ND	1	0.13	100	ug/L
MKTF-47	3/6/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MKTF-47	3/6/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MKTF-47	3/6/2020	Toluene	ND	1	0.2	1000	ug/L
MKTF-47	3/6/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MKTF-47	3/6/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MKTF-47	3/6/2020	Trichloroethene	ND	1	0.2	5	ug/L
MKTF-47	3/6/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MKTF-47	3/6/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MKTF-47	3/6/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MKTF-49	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-49	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-49	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-49	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-49	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-49	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-49	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-49	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-49	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-49	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-49	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-49	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-49	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-49	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-49	3/5/2020	1,3,5-Trimethylbenzene	**210**	5	0.91	60	ug/L
MKTF-49	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-49	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-49	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-49	3/5/2020	1-Methylnaphthalene	6.6	20	4.2	NA	ug/L
MKTF-49	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-49	3/5/2020	2-Butanone	26	50	5.6	5565	ug/L
MKTF-49	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-49	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-49	3/5/2020	2-Methylnaphthalene	**9**	20	3.5		ug/L
MKTF-49	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-49	3/5/2020	p-Isopropyltoluene	16	5	1	NA	ug/L
MKTF-49	3/5/2020	4-Methyl-2-Pentanone	7.9	50	5.6	1243	ug/L
MKTF-49	3/5/2020	Acetone	32	50	12	14064	ug/L
MKTF-49	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-49	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-49	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-49	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-49	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-49	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-49	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-49	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-49	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-49	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-49	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-49	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-49	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-49	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-49	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-49	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-49	3/5/2020	Isopropylbenzene	120	5	0.91	447	ug/L
MKTF-49	3/5/2020	MTBE	11	5	2	143	ug/L
MKTF-49	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-49	3/5/2020	n-Butylbenzene	9.7	15	1.3	1000	ug/L
MKTF-49	3/5/2020	n-Propylbenzene	120	5	0.91	660	ug/L
MKTF-49	3/5/2020	Naphthalene	**46**	10	1.4	30	ug/L
MKTF-49	3/5/2020	sec-Butylbenzene	16	5	3	2000	ug/L
MKTF-49	3/5/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-49	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-49	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-49	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-49	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-49	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-49	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-49	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-49	3/5/2020	Benzene	**20000**	1000	230	5	ug/L
MKTF-49	3/5/2020	1,2,4-Trimethylbenzene	**690**	100	12	56	ug/L
MKTF-49	3/5/2020	Ethylbenzene	**1300**	100	21	700	ug/L
MKTF-49	3/5/2020	Toluene	**8400**	100	20	1000	ug/L
MKTF-49	3/5/2020	Xylenes, Total	**6800**	150	55	620	ug/L
MKTF-49	9/20/2020	Benzene	**23000**	250	110	5	ug/L
MKTF-49	9/20/2020	Toluene	**9900**	500	100	1000	ug/L
MKTF-49	9/20/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
MKTF-49	9/20/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
MKTF-49	9/20/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
MKTF-49	9/20/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
MKTF-49	9/20/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
MKTF-49	9/20/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
MKTF-49	9/20/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
MKTF-49	9/20/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
MKTF-49	9/20/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
MKTF-49	9/20/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
MKTF-49	9/20/2020	1,2,4-Trimethylbenzene	**750**	50	6.1	56	ug/L
MKTF-49	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
MKTF-49	9/20/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
MKTF-49	9/20/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
MKTF-49	9/20/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
MKTF-49	9/20/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
MKTF-49	9/20/2020	1,3,5-Trimethylbenzene	**240**	50	9.1	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	9/20/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
MKTF-49	9/20/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
MKTF-49	9/20/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
MKTF-49	9/20/2020	1-Methylnaphthalene	ND	200	42	NA	ug/L
MKTF-49	9/20/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
MKTF-49	9/20/2020	2-Butanone	ND	500	56	5565	ug/L
MKTF-49	9/20/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
MKTF-49	9/20/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
MKTF-49	9/20/2020	2-Methylnaphthalene	*ND*	*200*	35		ug/L
MKTF-49	9/20/2020	4-Chlorotoluene	ND	50	26	250	ug/L
MKTF-49	9/20/2020	p-Isopropyltoluene	14	50	10	NA	ug/L
MKTF-49	9/20/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
MKTF-49	9/20/2020	Acetone	ND	500	120	14064	ug/L
MKTF-49	9/20/2020	Bromobenzene	ND	50	14	62	ug/L
MKTF-49	9/20/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
MKTF-49	9/20/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
MKTF-49	9/20/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
MKTF-49	9/20/2020	Carbon Disulfide	ND	500	22	810	ug/L
MKTF-49	9/20/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
MKTF-49	9/20/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
MKTF-49	9/20/2020	Chloroethane	ND	100	19	20857	ug/L
MKTF-49	9/20/2020	Chloroform	ND	50	6.7	100	ug/L
MKTF-49	9/20/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
MKTF-49	9/20/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
MKTF-49	9/20/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
MKTF-49	9/20/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
MKTF-49	9/20/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
MKTF-49	9/20/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
MKTF-49	9/20/2020	Ethylbenzene	**1500**	50	11	700	ug/L
MKTF-49	9/20/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
MKTF-49	9/20/2020	Isopropylbenzene	130	50	9.1	447	ug/L
MKTF-49	9/20/2020	MTBE	ND	50	20	143	ug/L
MKTF-49	9/20/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
MKTF-49	9/20/2020	n-Butylbenzene	ND	150	13	1000	ug/L
MKTF-49	9/20/2020	n-Propylbenzene	130	50	9.1	660	ug/L
MKTF-49	9/20/2020	Naphthalene	**47**	100	14	30	ug/L
MKTF-49	9/20/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
MKTF-49	9/20/2020	Styrene	ND	50	6.5	100	ug/L
MKTF-49	9/20/2020	tert-Butylbenzene	ND	50	12	690	ug/L
MKTF-49	9/20/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
MKTF-49	9/20/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
MKTF-49	9/20/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
MKTF-49	9/20/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
MKTF-49	9/20/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
MKTF-49	9/20/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
MKTF-49	9/20/2020	Xylenes, Total	**7500**	75	28	620	ug/L
MKTF-49	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
MKTF-49	12/23/2020	Benzene	**21800**	100	38	5	ug/L
MKTF-49	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
MKTF-49	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
MKTF-49	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
MKTF-49	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
MKTF-49	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
MKTF-49	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
MKTF-49	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
MKTF-49	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
MKTF-49	12/23/2020	Chloroform	ND	100	60	100	ug/L
MKTF-49	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
MKTF-49	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
MKTF-49	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
MKTF-49	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
MKTF-49	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-49	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
MKTF-49	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
MKTF-49	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
MKTF-49	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
MKTF-49	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
MKTF-49	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
MKTF-49	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
MKTF-49	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
MKTF-49	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
MKTF-49	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
MKTF-49	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
MKTF-49	12/23/2020	Ethylbenzene	**1430**	100	50	700	ug/L
MKTF-49	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
MKTF-49	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
MKTF-49	12/23/2020	Isopropylbenzene	116	100	53	447	ug/L
MKTF-49	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
MKTF-49	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
MKTF-49	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
MKTF-49	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
MKTF-49	12/23/2020	MTBE	ND	100	74	143	ug/L
MKTF-49	12/23/2020	Naphthalene	*ND*	*100*	100	30	ug/L
MKTF-49	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
MKTF-49	12/23/2020	n-Propylbenzene	123	100	69	660	ug/L
MKTF-49	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
MKTF-49	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
MKTF-49	12/23/2020	Styrene	ND	100	100	100	ug/L
MKTF-49	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
MKTF-49	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
MKTF-49	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
MKTF-49	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
MKTF-49	12/23/2020	Toluene	**10000**	100	41	1000	ug/L
MKTF-49	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
MKTF-49	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
MKTF-49	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
MKTF-49	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
MKTF-49	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
MKTF-49	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
MKTF-49	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
MKTF-49	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
MKTF-49	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
MKTF-49	12/23/2020	1,2,4-Trimethylbenzene	**637**	100	82	56	ug/L
MKTF-49	12/23/2020	1,3,5-Trimethylbenzene	**216**	100	56	60	ug/L
MKTF-49	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
MKTF-49	12/23/2020	Xylenes, Total	**7450**	1000	160	620	ug/L
MKTF-50	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-50	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-50	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-50	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-50	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-50	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-50	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-50	3/5/2020	1,2,4-Trimethylbenzene	30	5	0.61	56	ug/L
MKTF-50	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-50	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-50	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-50	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-50	3/5/2020	1,3,5-Trimethylbenzene	11	5	0.91	60	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-50	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	47	20	4.2	NA	ug/L
MKTF-50	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-50	3/5/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-50	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-50	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**57**	20	3.5		ug/L
MKTF-50	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-50	3/5/2020	p-Isopropyltoluene	1.7	5	1	NA	ug/L
MKTF-50	3/5/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-50	3/5/2020	Acetone	29	50	12	14064	ug/L
MKTF-50	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-50	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-50	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-50	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-50	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-50	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-50	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-50	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-50	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-50	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-50	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-50	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-50	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-50	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-50	3/5/2020	Isopropylbenzene	82	5	0.91	447	ug/L
MKTF-50	3/5/2020	MTBE	4.5	5	2	143	ug/L
MKTF-50	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-50	3/5/2020	n-Butylbenzene	13	15	1.3	1000	ug/L
MKTF-50	3/5/2020	n-Propylbenzene	130	5	0.91	660	ug/L
MKTF-50	3/5/2020	Naphthalene	**140**	10	1.4	30	ug/L
MKTF-50	3/5/2020	sec-Butylbenzene	13	5	3	2000	ug/L
MKTF-50	3/5/2020	Styrene	ND	5	0.65	100	ug/L
MKTF-50	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-50	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-50	3/5/2020	Toluene	42	5	1	1000	ug/L
MKTF-50	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-50	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-50	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-50	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-50	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-50	3/5/2020	Xylenes, Total	81	7.5	2.8	620	ug/L
MKTF-50	3/5/2020	Benzene	**12000**	200	45	5	ug/L
MKTF-50	3/5/2020	Ethylbenzene	**1300**	200	43	700	ug/L
MKTF-50	3/5/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
MKTF-50	3/5/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
MKTF-50	3/5/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
MKTF-50	3/5/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
MKTF-50	3/5/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
MKTF-50	3/5/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
MKTF-50	3/5/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
MKTF-50	3/5/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
MKTF-50	3/5/2020	1,2,4-Trimethylbenzene	**68**	5	0.61	56	ug/L
MKTF-50	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
MKTF-50	3/5/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
MKTF-50	3/5/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
MKTF-50	3/5/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
MKTF-50	3/5/2020	1,3,5-Trimethylbenzene	24	5	0.91	60	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
MKTF-50	3/5/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	51	20	4.2	NA	ug/L
MKTF-50	3/5/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
MKTF-50	3/5/2020	2-Butanone	ND	50	5.6	5565	ug/L
MKTF-50	3/5/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
MKTF-50	3/5/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**63**	20	3.5		ug/L
MKTF-50	3/5/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
MKTF-50	3/5/2020	p-Isopropyltoluene	3.7	5	1	NA	ug/L
MKTF-50	3/5/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
MKTF-50	3/5/2020	Acetone	30	50	12	14064	ug/L
MKTF-50	3/5/2020	Bromobenzene	ND	5	1.4	62	ug/L
MKTF-50	3/5/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
MKTF-50	3/5/2020	Bromoform	ND	5	1.6	32.9	ug/L
MKTF-50	3/5/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
MKTF-50	3/5/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
MKTF-50	3/5/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
MKTF-50	3/5/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
MKTF-50	3/5/2020	Chloroethane	ND	10	1.9	20857	ug/L
MKTF-50	3/5/2020	Chloroform	ND	5	0.67	100	ug/L
MKTF-50	3/5/2020	Chloromethane	ND	15	2	20.32	ug/L
MKTF-50	3/5/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
MKTF-50	3/5/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
MKTF-50	3/5/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
MKTF-50	3/5/2020	Dibromomethane	ND	5	1.5	8	ug/L
MKTF-50	3/5/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
MKTF-50	3/5/2020	Isopropylbenzene	78	5	0.91	447	ug/L
MKTF-50	3/5/2020	MTBE	4.6	5	2	143	ug/L
MKTF-50	3/5/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
MKTF-50	3/5/2020	n-Butylbenzene	14	15	1.3	1000	ug/L
MKTF-50	3/5/2020	n-Propylbenzene	130	5	0.91	660	ug/L
MKTF-50	3/5/2020	Naphthalene	**150**	10	1.4	30	ug/L
MKTF-50	3/5/2020	sec-Butylbenzene	13	5	3	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Styrene	0.85	5	0.65	100	ug/L
MKTF-50	3/5/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
MKTF-50	3/5/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
MKTF-50	3/5/2020	Toluene	39	5	1	1000	ug/L
MKTF-50	3/5/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
MKTF-50	3/5/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
MKTF-50	3/5/2020	Trichloroethene	ND	5	1	5	ug/L
MKTF-50	3/5/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
MKTF-50	3/5/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
MKTF-50	3/5/2020	Xylenes, Total	140	7.5	2.8	620	ug/L
MKTF-50	3/5/2020	Benzene	**13000**	200	45	5	ug/L
MKTF-50	3/5/2020	Ethylbenzene	**1300**	200	43	700	ug/L
MKTF-50	12/16/2020	Acetone	ND	500	200	14064	ug/L
MKTF-50	12/16/2020	Benzene	**5970**	20	7.6	5	ug/L
MKTF-50	12/16/2020	Bromodichloromethane	*ND*	*20*	10	1.34	ug/L
MKTF-50	12/16/2020	Bromoform	*ND*	*100*	14.2	32.9	ug/L
MKTF-50	12/16/2020	Bromomethane	*ND*	*20*	19.6	7.54	ug/L
MKTF-50	12/16/2020	2-Butanone	ND	500	52	5565	ug/L
MKTF-50	12/16/2020	Carbon Disulfide	ND	20	10	810	ug/L
MKTF-50	12/16/2020	Carbon tetrachloride	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	Chlorobenzene	ND	20	10	77.6	ug/L
MKTF-50	12/16/2020	Dibromochloromethane	*ND*	*20*	10	1.68	ug/L
MKTF-50	12/16/2020	Chloroethane	ND	20	15.2	20857	ug/L
MKTF-50	12/16/2020	Chloroform	ND	20	12	100	ug/L
MKTF-50	12/16/2020	Chloromethane	ND	20	16.6	20.32	ug/L
MKTF-50	12/16/2020	2-Chlorotoluene	ND	20	11.4	233	ug/L
MKTF-50	12/16/2020	4-Chlorotoluene	ND	20	11.2	250	ug/L
MKTF-50	12/16/2020	cis-1,2-Dichloroethene	ND	20	10	70	ug/L
MKTF-50	12/16/2020	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-50	12/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	30	0.0033	ug/L
MKTF-50	12/16/2020	1,2-Dibromoethane	*ND*	*20*	10	0.05	ug/L
MKTF-50	12/16/2020	Dibromomethane	*ND*	*100*	11.8	8	ug/L
MKTF-50	12/16/2020	1,2-Dichlorobenzene	ND	20	10	600	ug/L
MKTF-50	12/16/2020	1,3-Dichlorobenzene	ND	20	10.8	N/A	ug/L
MKTF-50	12/16/2020	1,4-Dichlorobenzene	ND	20	12.8	75	ug/L
MKTF-50	12/16/2020	Dichlorodifluoromethane	ND	20	17	197	ug/L
MKTF-50	12/16/2020	1,1-Dichloroethane	ND	20	10	25	ug/L
MKTF-50	12/16/2020	1,2-Dichloroethane	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	1,1-Dichloroethene	*ND*	*20*	10	7	ug/L
MKTF-50	12/16/2020	1,2-Dichloropropane	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	1,3-Dichloropropane	ND	20	10	370	ug/L
MKTF-50	12/16/2020	2,2-Dichloropropane	ND	20	10	NA	ug/L
MKTF-50	12/16/2020	1,1-Dichloropropene	ND	20	10	NA	ug/L
MKTF-50	12/16/2020	Ethylbenzene	**1130**	20	10	700	ug/L
MKTF-50	12/16/2020	Hexachlorobutadiene	*ND*	*100*	18	1.39	ug/L
MKTF-50	12/16/2020	2-Hexanone	*ND*	*500*	62	38	ug/L
MKTF-50	12/16/2020	Isopropylbenzene	61.1	20	10.6	447	ug/L
MKTF-50	12/16/2020	Methylene Chloride	*ND*	*100*	60	5	ug/L
MKTF-50	12/16/2020	1-Methylnaphthalene	ND	100	84	NA	ug/L
MKTF-50	12/16/2020	2-Methylnaphthalene	*ND*	*200*	92		ug/L
MKTF-50	12/16/2020	4-Methyl-2-Pentanone	ND	500	36	1243	ug/L
MKTF-50	12/16/2020	MTBE	22.5	20	14.8	143	ug/L
MKTF-50	12/16/2020	Naphthalene	**135**	20	20	30	ug/L
MKTF-50	12/16/2020	n-Butylbenzene	ND	20	15.2	1000	ug/L
MKTF-50	12/16/2020	n-Propylbenzene	102	20	13.8	660	ug/L
MKTF-50	12/16/2020	p-Isopropyltoluene	ND	20	14.2	NA	ug/L
MKTF-50	12/16/2020	sec-Butylbenzene	ND	20	14	2000	ug/L
MKTF-50	12/16/2020	Styrene	ND	20	20	100	ug/L
MKTF-50	12/16/2020	tert-Butylbenzene	ND	20	12.6	690	ug/L
MKTF-50	12/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	10.4	5.74	ug/L
MKTF-50	12/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	10	10	ug/L
MKTF-50	12/16/2020	Tetrachloroethene	*ND*	*20*	11.6	5	ug/L
MKTF-50	12/16/2020	Toluene	27.3	20	8.2	1000	ug/L
MKTF-50	12/16/2020	trans-1,2-Dichloroethene	ND	20	10	100	ug/L
MKTF-50	12/16/2020	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
MKTF-50	12/16/2020	1,2,3-Trichlorobenzene	ND	20	14	70	ug/L
MKTF-50	12/16/2020	1,2,4-Trichlorobenzene	ND	20	16.4	70	ug/L
MKTF-50	12/16/2020	1,1,1-Trichloroethane	ND	20	10	200	ug/L
MKTF-50	12/16/2020	1,1,2-Trichloroethane	*ND*	*100*	10	5	ug/L
MKTF-50	12/16/2020	Trichloroethene	*ND*	*20*	10	5	ug/L
MKTF-50	12/16/2020	Trichlorofluoromethane	ND	20	10.4	1137	ug/L
MKTF-50	12/16/2020	1,2,3-Trichloropropane	*ND*	*100*	16.8	0.0084	ug/L
MKTF-50	12/16/2020	1,2,4-Trimethylbenzene	**107**	20	16.4	56	ug/L
MKTF-50	12/16/2020	1,3,5-Trimethylbenzene	38.3	20	11.2	60	ug/L
MKTF-50	12/16/2020	Vinyl Chloride	*ND*	*20*	10	2	ug/L
MKTF-50	12/16/2020	Xylenes, Total	286	200	32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-1	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
MW-1	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
MW-1	8/24/2012	Benzene	ND	1	0.4	5	ug/L
MW-1	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-1	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-1	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-1	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-1	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-1	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-1	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-1	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-1	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-1	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-1	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-1	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-1	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-1	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-1	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-1	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-1	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-1	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-1	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-1	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-1	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-1	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-1	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-1	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-1	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-1	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-1	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-1	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-1	8/24/2012	Styrene	ND	1	0.41	100	ug/L
MW-1	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-1	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-1	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-1	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-1	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-1	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-1	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-1	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-1	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
MW-1	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-1	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-1	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-1	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-1	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-1	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-1	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-1	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-1	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-1	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-1	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-1	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-1	8/24/2012	MTBE	ND	1	0.96	143	ug/L
MW-1	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-1	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-1	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-1	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
MW-1	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
MW-1	9/9/2013	Benzene	ND	1	0.46	5	ug/L
MW-1	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-1	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-1	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-1	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-1	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-1	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-1	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-1	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-1	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-1	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-1	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-1	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-1	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-1	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-1	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
MW-1	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-1	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-1	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-1	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-1	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-1	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-1	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-1	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-1	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-1	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-1	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-1	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-1	9/9/2013	Styrene	ND	1	0.58	100	ug/L
MW-1	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-1	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-1	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-1	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-1	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-1	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-1	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-1	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-1	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
MW-1	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-1	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-1	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-1	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-1	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-1	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-1	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-1	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-1	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-1	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-1	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-1	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-1	9/9/2013	MTBE	ND	1	0.77	143	ug/L
MW-1	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-1	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-1	9/16/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-1	9/16/2014	Acetone	ND	10	4.9	14064	ug/L
MW-1	9/16/2014	Chloroform	ND	1	0.32	100	ug/L
MW-1	9/16/2014	Benzene	ND	1	0.15	5	ug/L
MW-1	9/16/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-1	9/16/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-1	9/16/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-1	9/16/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-1	9/16/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-1	9/16/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-1	9/16/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-1	9/16/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-1	9/16/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-1	9/16/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-1	9/16/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-1	9/16/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-1	9/16/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-1	9/16/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-1	9/16/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-1	9/16/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-1	9/16/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-1	9/16/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-1	9/16/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-1	9/16/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-1	9/16/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-1	9/16/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-1	9/16/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-1	9/16/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-1	9/16/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-1	9/16/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-1	9/16/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-1	9/16/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-1	9/16/2014	Styrene	ND	1	0.12	100	ug/L
MW-1	9/16/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-1	9/16/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-1	9/16/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-1	9/16/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-1	9/16/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/16/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-1	9/16/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-1	9/16/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-1	9/16/2014	Toluene	ND	1	0.17	1000	ug/L
MW-1	9/16/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-1	9/16/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-1	9/16/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-1	9/16/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-1	9/16/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-1	9/16/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-1	9/16/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-1	9/16/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-1	9/16/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-1	9/16/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-1	9/16/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-1	9/16/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-1	9/16/2014	MTBE	ND	1	0.25	143	ug/L
MW-1	9/16/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-1	9/16/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-1	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-1	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-1	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-1	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-1	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-1	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-1	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-1	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-1	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-1	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-1	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-1	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-1	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-1	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-1	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-1	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-1	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-1	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-1	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-1	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-1	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-1	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-1	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-1	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-1	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-1	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-1	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-1	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-1	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-1	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-1	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-1	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-1	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-1	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-1	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-1	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-1	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-1	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-1	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-1	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-1	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-1	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-1	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-1	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-1	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-1	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-1	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-1	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-1	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-1	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-1	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-1	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-1	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-1	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-1	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-1	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-1	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-1	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-1	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-1	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-1	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-1	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-1	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-1	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-1	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-1	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-1	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-1	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-1	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-1	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-1	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-1	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-1	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-1	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-1	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-1	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-1	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-1	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-1	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-1	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-1	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-1	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-1	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-1	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-1	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-1	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-1	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-1	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-1	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-1	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-1	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-1	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-1	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-1	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-1	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-1	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-1	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-1	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-1	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-1	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-1	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-1	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-1	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-1	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-1	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-1	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-1	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-1	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-1	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-1	9/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-1	9/20/2017	Acetone	4.4	10	0.82	14064	ug/L
MW-1	9/20/2017	Chloroform	ND	1	0.4	100	ug/L
MW-1	9/20/2017	Benzene	ND	1	0.062	5	ug/L
MW-1	9/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-1	9/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-1	9/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-1	9/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-1	9/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-1	9/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-1	9/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-1	9/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-1	9/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-1	9/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-1	9/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	9/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-1	9/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-1	9/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-1	9/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-1	9/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-1	9/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-1	9/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-1	9/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-1	9/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-1	9/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-1	9/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-1	9/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-1	9/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-1	9/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-1	9/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-1	9/20/2017	Styrene	ND	1	0.16	100	ug/L
MW-1	9/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-1	9/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-1	9/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-1	9/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-1	9/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-1	9/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-1	9/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-1	9/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-1	9/20/2017	Toluene	ND	1	0.064	1000	ug/L
MW-1	9/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-1	9/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-1	9/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-1	9/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-1	9/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-1	9/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-1	9/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	9/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-1	9/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-1	9/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-1	9/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-1	9/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-1	9/20/2017	MTBE	ND	1	0.24	143	ug/L
MW-1	9/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-1	9/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-1	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-1	9/13/2018	Acetone	ND	10	0.79	14064	ug/L
MW-1	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-1	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-1	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-1	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-1	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-1	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-1	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-1	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-1	9/13/2018	Methylene Chloride	0.41	3	0.21	5	ug/L
MW-1	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-1	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-1	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-1	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-1	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-1	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-1	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-1	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-1	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-1	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-1	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-1	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-1	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-1	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-1	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-1	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-1	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-1	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-1	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-1	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-1	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-1	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-1	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-1	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-1	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-1	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-1	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-1	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-1	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-1	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-1	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-1	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-1	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-1	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-1	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-1	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-1	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-1	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-1	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-1	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-1	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-1	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-1	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-1	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-1	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-1	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-1	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-1	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-1	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-1	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-1	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-1	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-1	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-1	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-1	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-1	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-1	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-1	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-1	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-1	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-1	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-1	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-1	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-1	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-1	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-1	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-1	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-1	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-1	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-1	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-1	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-1	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-1	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-1	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-1	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-1	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-1	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-1	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-1	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-1	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-1	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-1	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-1	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-1	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-1	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-1	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-1	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-1	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-1	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-1	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-1	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-1	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-1	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-1	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-1	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-1	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-1	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-1	12/6/2018	MTBE	ND	1	0.46	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-1	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-1	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-1	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-1	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-1	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-1	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-1	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-1	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-1	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-1	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-1	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-1	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-1	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-1	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-1	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-1	8/12/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-1	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-1	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-1	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-1	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-1	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-1	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-1	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-1	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-1	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-1	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-1	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-1	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-1	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-1	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-1	8/12/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-1	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
MW-1	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-1	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-1	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-1	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-1	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-1	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-1	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-1	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-1	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-1	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-1	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-1	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-1	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-1	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-1	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-1	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-1	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-1	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-1	8/12/2019	MTBE	ND	1	0.456095	143	ug/L
MW-1	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-1	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-1	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-1	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-1	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-1	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
MW-1	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-1	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-1	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-1	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-1	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-1	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-1	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-1	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-1	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-1	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-1	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-1	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-1	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-1	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-1	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-1	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-1	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-1	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-1	9/22/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-1	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-1	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-1	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-1	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-1	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-1	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-1	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-1	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-1	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-1	9/22/2020	1-Methylnaphthalene	1.2	4	0.84	NA	ug/L
MW-1	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-1	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-1	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-1	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-1	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-1	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-1	9/22/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-1	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-1	9/22/2020	Acetone	ND	10	2.3	14064	ug/L
MW-1	9/22/2020	Benzene	ND	1	0.23	5	ug/L
MW-1	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-1	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-1	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-1	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-1	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-1	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-1	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-1	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-1	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
MW-1	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-1	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-1	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-1	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-1	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-1	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-1	9/22/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-1	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-1	9/22/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-1	9/22/2020	MTBE	ND	1	0.39	143	ug/L
MW-1	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-1	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-1	9/22/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-1	9/22/2020	Naphthalene	0.33	2	0.28	30	ug/L
MW-1	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-1	9/22/2020	Styrene	ND	1	0.13	100	ug/L
MW-1	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-1	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-1	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
MW-1	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-1	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-1	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-1	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-1	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-1	9/22/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-2	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-2	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
MW-2	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
MW-2	8/24/2012	Benzene	ND	1	0.4	5	ug/L
MW-2	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-2	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-2	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-2	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-2	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-2	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-2	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-2	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-2	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-2	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-2	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-2	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-2	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-2	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-2	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-2	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-2	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-2	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-2	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-2	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-2	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-2	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-2	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-2	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-2	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-2	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-2	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-2	8/24/2012	Styrene	ND	1	0.41	100	ug/L
MW-2	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-2	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-2	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-2	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-2	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-2	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-2	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-2	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-2	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
MW-2	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-2	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-2	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-2	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-2	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-2	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-2	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-2	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-2	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-2	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-2	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-2	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-2	8/24/2012	MTBE	ND	1	0.96	143	ug/L
MW-2	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-2	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-2	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-2	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-2	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-2	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-2	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-2	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-2	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-2	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-2	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-2	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-2	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-2	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-2	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-2	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-2	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-2	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-2	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-2	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-2	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-2	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-2	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-2	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-2	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-2	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-2	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-2	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-2	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-2	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-2	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-2	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-2	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-2	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-2	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-2	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-2	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-2	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-2	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-2	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-2	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-2	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-2	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-2	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-2	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-2	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-2	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-2	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-2	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-2	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-2	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-2	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-2	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-2	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-2	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-2	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-2	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-2	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-2	9/16/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-2	9/16/2014	Acetone	ND	10	4.9	14064	ug/L
MW-2	9/16/2014	Chloroform	ND	1	0.32	100	ug/L
MW-2	9/16/2014	Benzene	ND	1	0.15	5	ug/L
MW-2	9/16/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-2	9/16/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-2	9/16/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-2	9/16/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-2	9/16/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-2	9/16/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-2	9/16/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-2	9/16/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-2	9/16/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-2	9/16/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-2	9/16/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-2	9/16/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-2	9/16/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-2	9/16/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-2	9/16/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-2	9/16/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-2	9/16/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-2	9/16/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-2	9/16/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-2	9/16/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-2	9/16/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-2	9/16/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-2	9/16/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-2	9/16/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-2	9/16/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-2	9/16/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-2	9/16/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-2	9/16/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-2	9/16/2014	Styrene	ND	1	0.12	100	ug/L
MW-2	9/16/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-2	9/16/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-2	9/16/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-2	9/16/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-2	9/16/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-2	9/16/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-2	9/16/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-2	9/16/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-2	9/16/2014	Toluene	ND	1	0.17	1000	ug/L
MW-2	9/16/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-2	9/16/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-2	9/16/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-2	9/16/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-2	9/16/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-2	9/16/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-2	9/16/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-2	9/16/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-2	9/16/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-2	9/16/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-2	9/16/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-2	9/16/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-2	9/16/2014	MTBE	ND	1	0.25	143	ug/L
MW-2	9/16/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-2	9/16/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-2	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-2	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-2	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-2	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-2	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-2	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-2	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-2	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-2	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-2	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-2	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-2	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-2	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-2	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-2	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-2	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-2	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-2	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-2	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-2	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-2	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-2	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-2	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-2	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-2	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-2	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-2	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-2	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-2	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-2	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-2	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-2	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-2	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-2	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-2	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-2	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-2	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-2	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-2	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-2	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-2	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-2	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-2	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-2	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-2	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-2	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-2	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-2	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-2	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-2	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-2	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-2	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-2	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-2	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-2	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-2	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-2	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-2	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-2	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-2	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-2	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-2	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-2	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-2	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-2	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-2	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-2	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-2	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-2	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-2	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-2	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-2	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-2	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-2	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-2	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-2	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-2	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-2	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-2	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-2	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-2	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-2	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-2	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-2	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-2	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-2	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-2	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-2	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-2	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-2	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-2	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-2	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-2	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-2	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-2	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-2	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-2	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-2	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-2	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-2	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-2	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-2	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-2	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-2	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-2	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-2	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-2	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-2	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-2	9/20/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-2	9/20/2017	Acetone	4.3	10	0.82	14064	ug/L
MW-2	9/20/2017	Chloroform	ND	1	0.4	100	ug/L
MW-2	9/20/2017	Benzene	ND	1	0.062	5	ug/L
MW-2	9/20/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-2	9/20/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-2	9/20/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-2	9/20/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-2	9/20/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-2	9/20/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-2	9/20/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-2	9/20/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-2	9/20/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-2	9/20/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-2	9/20/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	9/20/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-2	9/20/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-2	9/20/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-2	9/20/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-2	9/20/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-2	9/20/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-2	9/20/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-2	9/20/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-2	9/20/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-2	9/20/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/20/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-2	9/20/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-2	9/20/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-2	9/20/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-2	9/20/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-2	9/20/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-2	9/20/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-2	9/20/2017	Styrene	ND	1	0.16	100	ug/L
MW-2	9/20/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-2	9/20/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-2	9/20/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-2	9/20/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-2	9/20/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-2	9/20/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-2	9/20/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-2	9/20/2017	Toluene	ND	1	0.064	1000	ug/L
MW-2	9/20/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-2	9/20/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-2	9/20/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-2	9/20/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-2	9/20/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-2	9/20/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-2	9/20/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	9/20/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-2	9/20/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-2	9/20/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-2	9/20/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-2	9/20/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-2	9/20/2017	MTBE	ND	1	0.24	143	ug/L
MW-2	9/20/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-2	9/20/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-2	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-2	9/13/2018	Acetone	ND	10	0.79	14064	ug/L
MW-2	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-2	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-2	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-2	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-2	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-2	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-2	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-2	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-2	9/13/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-2	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-2	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-2	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-2	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-2	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-2	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-2	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-2	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-2	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-2	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-2	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-2	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-2	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-2	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-2	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-2	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-2	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-2	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-2	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-2	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-2	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-2	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-2	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-2	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-2	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-2	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-2	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-2	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-2	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-2	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-2	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-2	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-2	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-2	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-2	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-2	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-2	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-2	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-2	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-2	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-2	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-2	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-2	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-2	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-2	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-2	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-2	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-2	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-2	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-2	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-2	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-2	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-2	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-2	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-2	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-2	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-2	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-2	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-2	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-2	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-2	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-2	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-2	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-2	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-2	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-2	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-2	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-2	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-2	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-2	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-2	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-2	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-2	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-2	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-2	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-2	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-2	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-2	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-2	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-2	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-2	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-2	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-2	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-2	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-2	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-2	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-2	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-2	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-2	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-2	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-2	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-2	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-2	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-2	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-2	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-2	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-2	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-2	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-2	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-2	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-2	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-2	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-2	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-2	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-2	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-2	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-2	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-2	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-2	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-2	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-2	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-2	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-2	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-2	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-2	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-2	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-2	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-2	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-2	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-2	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-2	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-2	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-2	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-2	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-2	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-2	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-2	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-2	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-2	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-2	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
MW-2	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-2	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-2	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-2	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-2	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-2	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-2	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-2	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-2	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-2	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-2	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-2	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-2	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-2	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-2	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-2	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-2	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-2	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-2	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
MW-2	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-2	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-2	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-2	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-2	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-2	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
MW-2	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-2	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-2	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-2	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-2	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-2	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-2	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-2	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-2	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-2	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-2	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-2	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-2	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-2	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-2	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-2	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-2	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-2	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-2	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-2	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-2	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-2	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-2	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-2	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-2	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-2	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-2	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-2	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-2	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-2	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-2	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-2	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-2	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-2	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-2	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-2	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-2	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-2	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-2	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-2	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-2	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-2	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-2	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-2	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-2	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-2	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-2	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-2	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-2	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-2	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-2	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-2	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-2	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-2	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-2	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-2	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-2	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-2	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-2	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-2	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-2	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-2	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-2	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-2	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-2	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-2	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-2	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-2	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-2	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-2	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-2	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-2	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-2	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-4	8/21/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-4	8/21/2012	Acetone	ND	10	1.5	14064	ug/L
MW-4	8/21/2012	Chloroform	ND	1	0.35	100	ug/L
MW-4	8/21/2012	Benzene	ND	1	0.4	5	ug/L
MW-4	8/21/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-4	8/21/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-4	8/21/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-4	8/21/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-4	8/21/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-4	8/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-4	8/21/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-4	8/21/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-4	8/21/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-4	8/21/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-4	8/21/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-4	8/21/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-4	8/21/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-4	8/21/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-4	8/21/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-4	8/21/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-4	8/21/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-4	8/21/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-4	8/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-4	8/21/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-4	8/21/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-4	8/21/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-4	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-4	8/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-4	8/21/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-4	8/21/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-4	8/21/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-4	8/21/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-4	8/21/2012	Styrene	ND	1	0.41	100	ug/L
MW-4	8/21/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-4	8/21/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-4	8/21/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-4	8/21/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-4	8/21/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-4	8/21/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-4	8/21/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-4	8/21/2012	Toluene	ND	1	0.47	1000	ug/L
MW-4	8/21/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-4	8/21/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-4	8/21/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-4	8/21/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-4	8/21/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-4	8/21/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-4	8/21/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-4	8/21/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-4	8/21/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-4	8/21/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-4	8/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-4	8/21/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-4	8/21/2012	MTBE	ND	1	0.96	143	ug/L
MW-4	8/21/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-4	8/21/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-4	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-4	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-4	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-4	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-4	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-4	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-4	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-4	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-4	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-4	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-4	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-4	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-4	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-4	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
MW-4	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-4	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-4	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-4	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-4	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-4	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-4	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-4	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-4	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-4	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-4	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-4	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-4	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-4	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-4	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-4	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-4	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-4	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-4	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-4	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-4	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-4	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-4	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-4	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-4	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-4	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-4	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-4	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-4	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-4	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-4	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-4	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-4	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-4	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-4	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-4	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-4	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-4	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-4	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-4	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-4	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-4	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-4	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-4	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-4	9/17/2014	Acetone	ND	10	4.9	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
MW-4	9/17/2014	Benzene	ND	1	0.15	5	ug/L
MW-4	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-4	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-4	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-4	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-4	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-4	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-4	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-4	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-4	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-4	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-4	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-4	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-4	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-4	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-4	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-4	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-4	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-4	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-4	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-4	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-4	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-4	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-4	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-4	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-4	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-4	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-4	9/17/2014	Styrene	ND	1	0.12	100	ug/L
MW-4	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-4	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-4	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-4	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-4	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-4	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-4	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-4	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
MW-4	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-4	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-4	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-4	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-4	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-4	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-4	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-4	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-4	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-4	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-4	9/17/2014	MTBE	ND	1	0.25	143	ug/L
MW-4	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-4	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-4	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
MW-4	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
MW-4	8/17/2015	Benzene	ND	1	0.065	5	ug/L
MW-4	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-4	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-4	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-4	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-4	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-4	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-4	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-4	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-4	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-4	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-4	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-4	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-4	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-4	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-4	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-4	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-4	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-4	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-4	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-4	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-4	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-4	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-4	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-4	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-4	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-4	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-4	8/17/2015	Styrene	ND	1	0.11	100	ug/L
MW-4	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-4	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-4	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-4	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-4	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-4	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-4	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-4	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
MW-4	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-4	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-4	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-4	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-4	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-4	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-4	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-4	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-4	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-4	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
MW-4	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-4	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-4	8/17/2015	MTBE	ND	1	0.17	143	ug/L
MW-4	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-4	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-4	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-4	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-4	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-4	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-4	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-4	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-4	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-4	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-4	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-4	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-4	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-4	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-4	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-4	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-4	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-4	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-4	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-4	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-4	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-4	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-4	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-4	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-4	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-4	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-4	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-4	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-4	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-4	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-4	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-4	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-4	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-4	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-4	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-4	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-4	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-4	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-4	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-4	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-4	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-4	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-4	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-4	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-4	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-4	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-4	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-4	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-4	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-4	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-4	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-4	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-4	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-4	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-4	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-4	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-4	9/21/2017	Acetone	3.7	10	0.82	14064	ug/L
MW-4	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
MW-4	9/21/2017	Benzene	ND	1	0.062	5	ug/L
MW-4	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-4	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-4	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-4	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-4	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-4	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-4	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-4	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-4	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-4	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
MW-4	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-4	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-4	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-4	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-4	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-4	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-4	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-4	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-4	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-4	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-4	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-4	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-4	9/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-4	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-4	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-4	9/21/2017	Styrene	ND	1	0.16	100	ug/L
MW-4	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-4	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-4	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-4	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-4	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-4	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-4	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-4	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-4	9/21/2017	Toluene	ND	1	0.064	1000	ug/L
MW-4	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-4	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-4	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-4	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-4	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-4	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-4	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-4	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-4	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-4	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-4	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-4	9/21/2017	MTBE	ND	1	0.24	143	ug/L
MW-4	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-4	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-4	9/13/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-4	9/13/2018	Acetone	ND	10	0.79	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	Chloroform	ND	1	0.4	100	ug/L
MW-4	9/13/2018	Benzene	ND	1	0.17	5	ug/L
MW-4	9/13/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-4	9/13/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-4	9/13/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-4	9/13/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-4	9/13/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-4	9/13/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-4	9/13/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-4	9/13/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-4	9/13/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-4	9/13/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-4	9/13/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-4	9/13/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-4	9/13/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-4	9/13/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-4	9/13/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-4	9/13/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-4	9/13/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-4	9/13/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-4	9/13/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-4	9/13/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-4	9/13/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-4	9/13/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-4	9/13/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-4	9/13/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-4	9/13/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-4	9/13/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-4	9/13/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-4	9/13/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-4	9/13/2018	Styrene	ND	1	0.25	100	ug/L
MW-4	9/13/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-4	9/13/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/13/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-4	9/13/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-4	9/13/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-4	9/13/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-4	9/13/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-4	9/13/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-4	9/13/2018	Toluene	ND	1	0.17	1000	ug/L
MW-4	9/13/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-4	9/13/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-4	9/13/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-4	9/13/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	9/13/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-4	9/13/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-4	9/13/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-4	9/13/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	9/13/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-4	9/13/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-4	9/13/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-4	9/13/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-4	9/13/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-4	9/13/2018	MTBE	ND	1	0.32	143	ug/L
MW-4	9/13/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-4	9/13/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-4	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-4	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-4	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-4	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-4	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-4	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-4	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-4	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-4	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-4	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-4	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-4	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-4	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-4	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-4	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-4	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-4	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-4	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-4	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-4	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-4	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-4	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-4	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-4	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-4	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-4	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-4	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-4	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-4	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-4	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-4	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-4	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-4	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-4	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-4	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-4	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-4	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-4	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-4	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-4	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-4	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-4	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-4	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-4	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-4	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-4	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-4	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-4	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-4	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-4	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-4	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-4	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-4	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-4	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-4	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-4	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-4	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-4	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-4	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-4	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-4	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-4	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-4	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-4	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-4	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-4	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-4	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-4	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-4	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-4	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-4	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-4	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-4	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-4	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-4	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-4	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-4	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-4	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-4	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-4	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-4	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-4	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-4	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-4	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-4	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-4	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
MW-4	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-4	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-4	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-4	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-4	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-4	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-4	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-4	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-4	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-4	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-4	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-4	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-4	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-4	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-4	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-4	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-4	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-4	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
MW-4	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-4	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-4	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-4	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-4	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-4	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
MW-4	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-4	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-4	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-4	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-4	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-4	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-4	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-4	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-4	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-4	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-4	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-4	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-4	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-4	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-4	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-4	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-4	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-4	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-4	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-4	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-4	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-4	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-4	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-4	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-4	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-4	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-4	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-4	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-4	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-4	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-4	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-4	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-4	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-4	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-4	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-4	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-4	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-4	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-4	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-4	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-4	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-4	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-4	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-4	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-4	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-4	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-4	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-4	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-4	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-4	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-4	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-4	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-4	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-4	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-4	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-4	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-4	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-4	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-4	9/18/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-4	9/18/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-4	9/18/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-4	9/18/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
MW-4	9/18/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-4	9/18/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-4	9/18/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-4	9/18/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-4	9/18/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-4	9/18/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-4	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-4	9/18/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-4	9/18/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-4	9/18/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-4	9/18/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-4	9/18/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-4	9/18/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-4	9/18/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-4	9/18/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-4	9/18/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-4	9/18/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-4	9/18/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-4	9/18/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-4	9/18/2020	Acetone	ND	10	2.3	14064	ug/L
MW-4	9/18/2020	Benzene	ND	1	0.23	5	ug/L
MW-4	9/18/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-4	9/18/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-4	9/18/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-4	9/18/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-4	9/18/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-4	9/18/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-4	9/18/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-4	9/18/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-4	9/18/2020	Chloroform	ND	1	0.13	100	ug/L
MW-4	9/18/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-4	9/18/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-4	9/18/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-4	9/18/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-4	9/18/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-4	9/18/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-4	9/18/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-4	9/18/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-4	9/18/2020	MTBE	ND	1	0.39	143	ug/L
MW-4	9/18/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-4	9/18/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-4	9/18/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-4	9/18/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-4	9/18/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-4	9/18/2020	Styrene	ND	1	0.13	100	ug/L
MW-4	9/18/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-4	9/18/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-4	9/18/2020	Toluene	ND	1	0.2	1000	ug/L
MW-4	9/18/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-4	9/18/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-4	9/18/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-4	9/18/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-4	9/18/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
MW-5	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
MW-5	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
MW-5	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
MW-5	8/23/2012	Benzene	ND	1	0.4	5	ug/L
MW-5	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
MW-5	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
MW-5	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
MW-5	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
MW-5	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
MW-5	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
MW-5	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
MW-5	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
MW-5	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
MW-5	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
MW-5	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
MW-5	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
MW-5	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
MW-5	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
MW-5	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
MW-5	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
MW-5	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
MW-5	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
MW-5	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
MW-5	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
MW-5	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
MW-5	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
MW-5	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
MW-5	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
MW-5	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
MW-5	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
MW-5	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
MW-5	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
MW-5	8/23/2012	Styrene	ND	1	0.41	100	ug/L
MW-5	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
MW-5	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
MW-5	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
MW-5	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
MW-5	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
MW-5	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
MW-5	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
MW-5	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
MW-5	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
MW-5	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
MW-5	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
MW-5	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
MW-5	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
MW-5	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
MW-5	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
MW-5	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
MW-5	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
MW-5	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
MW-5	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
MW-5	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
MW-5	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
MW-5	8/23/2012	MTBE	ND	1	0.96	143	ug/L
MW-5	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
MW-5	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
MW-5	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
MW-5	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
MW-5	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
MW-5	9/10/2013	Benzene	ND	1	0.46	5	ug/L
MW-5	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
MW-5	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
MW-5	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
MW-5	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
MW-5	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
MW-5	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
MW-5	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
MW-5	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
MW-5	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
MW-5	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
MW-5	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
MW-5	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
MW-5	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
MW-5	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
MW-5	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
MW-5	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
MW-5	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
MW-5	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
MW-5	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
MW-5	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
MW-5	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
MW-5	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
MW-5	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
MW-5	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
MW-5	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
MW-5	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
MW-5	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
MW-5	9/10/2013	Styrene	ND	1	0.58	100	ug/L
MW-5	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
MW-5	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
MW-5	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
MW-5	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
MW-5	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
MW-5	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
MW-5	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
MW-5	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
MW-5	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
MW-5	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
MW-5	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
MW-5	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
MW-5	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
MW-5	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
MW-5	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
MW-5	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
MW-5	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
MW-5	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
MW-5	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
MW-5	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
MW-5	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
MW-5	9/10/2013	MTBE	ND	1	0.77	143	ug/L
MW-5	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
MW-5	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
MW-5	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-5	9/17/2014	Acetone	ND	10	4.9	14064	ug/L
MW-5	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
MW-5	9/17/2014	Benzene	ND	1	0.15	5	ug/L
MW-5	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
MW-5	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
MW-5	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
MW-5	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
MW-5	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L
MW-5	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
MW-5	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
MW-5	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
MW-5	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
MW-5	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
MW-5	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
MW-5	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
MW-5	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-5	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
MW-5	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
MW-5	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
MW-5	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-5	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
MW-5	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
MW-5	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
MW-5	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-5	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-5	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
MW-5	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
MW-5	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
MW-5	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
MW-5	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
MW-5	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
MW-5	9/17/2014	Styrene	ND	1	0.12	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
MW-5	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
MW-5	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
MW-5	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
MW-5	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
MW-5	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-5	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
MW-5	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
MW-5	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
MW-5	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-5	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
MW-5	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
MW-5	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
MW-5	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-5	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-5	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
MW-5	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
MW-5	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
MW-5	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
MW-5	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
MW-5	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
MW-5	9/17/2014	MTBE	ND	1	0.25	143	ug/L
MW-5	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
MW-5	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
MW-5	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
MW-5	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
MW-5	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
MW-5	8/14/2015	Benzene	ND	1	0.065	5	ug/L
MW-5	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
MW-5	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
MW-5	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
MW-5	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
MW-5	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
MW-5	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
MW-5	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L
MW-5	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
MW-5	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
MW-5	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
MW-5	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
MW-5	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
MW-5	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
MW-5	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-5	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
MW-5	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
MW-5	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
MW-5	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
MW-5	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
MW-5	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
MW-5	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
MW-5	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
MW-5	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
MW-5	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
MW-5	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
MW-5	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
MW-5	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
MW-5	8/14/2015	Styrene	ND	1	0.11	100	ug/L
MW-5	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
MW-5	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
MW-5	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-5	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
MW-5	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
MW-5	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-5	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
MW-5	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
MW-5	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
MW-5	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
MW-5	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
MW-5	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
MW-5	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-5	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
MW-5	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
MW-5	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
MW-5	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
MW-5	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-5	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
MW-5	8/14/2015	MTBE	ND	1	0.17	143	ug/L
MW-5	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
MW-5	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-5	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-5	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
MW-5	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
MW-5	9/7/2016	Benzene	ND	1	0.096	5	ug/L
MW-5	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
MW-5	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
MW-5	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
MW-5	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
MW-5	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
MW-5	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-5	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
MW-5	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
MW-5	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
MW-5	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
MW-5	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
MW-5	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
MW-5	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
MW-5	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
MW-5	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
MW-5	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
MW-5	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
MW-5	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
MW-5	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
MW-5	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
MW-5	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-5	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
MW-5	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
MW-5	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
MW-5	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
MW-5	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
MW-5	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
MW-5	9/7/2016	Styrene	ND	1	0.11	100	ug/L
MW-5	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
MW-5	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
MW-5	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
MW-5	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
MW-5	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
MW-5	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
MW-5	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
MW-5	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
MW-5	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
MW-5	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-5	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
MW-5	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
MW-5	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
MW-5	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
MW-5	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
MW-5	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
MW-5	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
MW-5	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
MW-5	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
MW-5	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
MW-5	9/7/2016	MTBE	ND	1	0.21	143	ug/L
MW-5	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
MW-5	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
MW-5	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
MW-5	9/11/2017	Acetone	5	10	0.82	14064	ug/L
MW-5	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
MW-5	9/11/2017	Benzene	ND	1	0.062	5	ug/L
MW-5	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
MW-5	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
MW-5	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
MW-5	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
MW-5	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
MW-5	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
MW-5	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
MW-5	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
MW-5	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
MW-5	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
MW-5	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
MW-5	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-5	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
MW-5	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
MW-5	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
MW-5	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
MW-5	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
MW-5	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
MW-5	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
MW-5	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
MW-5	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
MW-5	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
MW-5	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
MW-5	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
MW-5	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
MW-5	9/11/2017	Styrene	ND	1	0.16	100	ug/L
MW-5	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
MW-5	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
MW-5	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-5	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
MW-5	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-5	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
MW-5	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
MW-5	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
MW-5	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
MW-5	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
MW-5	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
MW-5	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
MW-5	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
MW-5	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
MW-5	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
MW-5	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
MW-5	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
MW-5	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
MW-5	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
MW-5	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
MW-5	9/11/2017	MTBE	ND	1	0.24	143	ug/L
MW-5	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
MW-5	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
MW-5	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
MW-5	9/17/2018	Acetone	0.99	10	0.79	14064	ug/L
MW-5	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
MW-5	9/17/2018	Benzene	ND	1	0.17	5	ug/L
MW-5	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
MW-5	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
MW-5	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
MW-5	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-5	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-5	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
MW-5	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-5	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-5	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-5	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-5	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
MW-5	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-5	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
MW-5	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
MW-5	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
MW-5	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
MW-5	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-5	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-5	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-5	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-5	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
MW-5	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-5	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-5	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-5	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-5	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-5	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-5	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-5	9/17/2018	Styrene	ND	1	0.25	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-5	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
MW-5	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-5	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
MW-5	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-5	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-5	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-5	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
MW-5	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-5	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
MW-5	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-5	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-5	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-5	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-5	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
MW-5	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-5	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
MW-5	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-5	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-5	9/17/2018	MTBE	ND	1	0.32	143	ug/L
MW-5	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-5	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-5	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
MW-5	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
MW-5	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
MW-5	12/6/2018	Benzene	ND	1	0.17	5	ug/L
MW-5	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
MW-5	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
MW-5	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
MW-5	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
MW-5	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
MW-5	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
MW-5	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
MW-5	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
MW-5	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
MW-5	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
MW-5	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
MW-5	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
MW-5	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
MW-5	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
MW-5	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
MW-5	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
MW-5	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
MW-5	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
MW-5	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
MW-5	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
MW-5	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
MW-5	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
MW-5	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
MW-5	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
MW-5	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
MW-5	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
MW-5	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
MW-5	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
MW-5	12/6/2018	Styrene	ND	1	0.25	100	ug/L
MW-5	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
MW-5	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
MW-5	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
MW-5	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
MW-5	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
MW-5	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
MW-5	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
MW-5	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
MW-5	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
MW-5	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
MW-5	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
MW-5	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
MW-5	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
MW-5	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
MW-5	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
MW-5	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
MW-5	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
MW-5	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
MW-5	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
MW-5	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
MW-5	12/6/2018	MTBE	ND	1	0.46	143	ug/L
MW-5	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
MW-5	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
MW-5	8/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
MW-5	8/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
MW-5	8/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
MW-5	8/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
MW-5	8/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
MW-5	8/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
MW-5	8/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
MW-5	8/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
MW-5	8/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
MW-5	8/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
MW-5	8/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
MW-5	8/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
MW-5	8/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
MW-5	8/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
MW-5	8/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
MW-5	8/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
MW-5	8/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
MW-5	8/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
MW-5	8/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
MW-5	8/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
MW-5	8/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
MW-5	8/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
MW-5	8/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
MW-5	8/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
MW-5	8/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
MW-5	8/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
MW-5	8/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
MW-5	8/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
MW-5	8/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
MW-5	8/14/2019	Acetone	ND	10	1.199396	14064	ug/L
MW-5	8/14/2019	Benzene	ND	1	0.166639	5	ug/L
MW-5	8/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
MW-5	8/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
MW-5	8/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
MW-5	8/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
MW-5	8/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
MW-5	8/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
MW-5	8/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
MW-5	8/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
MW-5	8/14/2019	Chloroform	ND	1	0.121891	100	ug/L
MW-5	8/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
MW-5	8/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
MW-5	8/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
MW-5	8/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
MW-5	8/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
MW-5	8/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
MW-5	8/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
MW-5	8/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
MW-5	8/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
MW-5	8/14/2019	MTBE	ND	1	0.456095	143	ug/L
MW-5	8/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
MW-5	8/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
MW-5	8/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
MW-5	8/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
MW-5	8/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
MW-5	8/14/2019	Styrene	ND	1	0.191323	100	ug/L
MW-5	8/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
MW-5	8/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
MW-5	8/14/2019	Toluene	ND	1	0.350436	1000	ug/L
MW-5	8/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
MW-5	8/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
MW-5	8/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
MW-5	8/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
MW-5	8/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
MW-5	8/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
MW-5	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
MW-5	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
MW-5	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
MW-5	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
MW-5	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
MW-5	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
MW-5	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
MW-5	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
MW-5	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
MW-5	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
MW-5	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
MW-5	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
MW-5	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
MW-5	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
MW-5	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
MW-5	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
MW-5	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
MW-5	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
MW-5	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
MW-5	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
MW-5	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
MW-5	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
MW-5	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
MW-5	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
MW-5	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
MW-5	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
MW-5	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
MW-5	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
MW-5	9/21/2020	Acetone	13	10	2.3	14064	ug/L
MW-5	9/21/2020	Benzene	ND	1	0.23	5	ug/L
MW-5	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
MW-5	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
MW-5	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
MW-5	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
MW-5	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
MW-5	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
MW-5	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
MW-5	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
MW-5	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
MW-5	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
MW-5	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
MW-5	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
MW-5	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
MW-5	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
MW-5	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
MW-5	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
MW-5	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
MW-5	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
MW-5	9/21/2020	MTBE	ND	1	0.39	143	ug/L
MW-5	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
MW-5	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
MW-5	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
MW-5	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
MW-5	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
MW-5	9/21/2020	Styrene	ND	1	0.13	100	ug/L
MW-5	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
MW-5	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
MW-5	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
MW-5	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
MW-5	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
MW-5	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
MW-5	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
MW-5	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
MW-5	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-2	3/20/2012	Benzene	**19**	10	1.4	5	ug/L
NAPIS-2	3/20/2012	Ethylbenzene	11	10	1.1	700	ug/L
NAPIS-2	3/20/2012	Toluene	ND	10	1.2	1000	ug/L
NAPIS-2	3/20/2012	Xylenes, Total	ND	20	3.3	620	ug/L
NAPIS-2	3/20/2012	MTBE	**370**	25	1.4	143	ug/L
NAPIS-2	6/12/2012	Benzene	**18**	10	1.4	5	ug/L
NAPIS-2	6/12/2012	1,2,4-Trimethylbenzene	15	10	1.2	56	ug/L
NAPIS-2	6/12/2012	Ethylbenzene	12	10	1.1	700	ug/L
NAPIS-2	6/12/2012	1,3,5-Trimethylbenzene	ND	10	1.1	60	ug/L
NAPIS-2	6/12/2012	Toluene	ND	10	1.2	1000	ug/L
NAPIS-2	6/12/2012	Xylenes, Total	ND	20	3.3	620	ug/L
NAPIS-2	6/12/2012	MTBE	**340**	25	1.4	143	ug/L
NAPIS-2	8/21/2012	Carbon tetrachloride	ND	5	1.8	5	ug/L
NAPIS-2	8/21/2012	Acetone	ND	50	7.5	14064	ug/L
NAPIS-2	8/21/2012	Chloroform	ND	5	1.8	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/21/2012	Benzene	**10**	5	2	5	ug/L
NAPIS-2	8/21/2012	1,1,1-Trichloroethane	ND	5	1.9	200	ug/L
NAPIS-2	8/21/2012	Bromomethane	*ND*	*15*	2.8	7.54	ug/L
NAPIS-2	8/21/2012	Chloromethane	ND	15	3.3	20.32	ug/L
NAPIS-2	8/21/2012	Dibromomethane	ND	5	3.3	8	ug/L
NAPIS-2	8/21/2012	Chloroethane	ND	10	2.2	20857	ug/L
NAPIS-2	8/21/2012	Vinyl Chloride	*ND*	*5*	2.4	2	ug/L
NAPIS-2	8/21/2012	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
NAPIS-2	8/21/2012	Carbon Disulfide	ND	50	4.2	810	ug/L
NAPIS-2	8/21/2012	Bromoform	ND	5	2.2	32.9	ug/L
NAPIS-2	8/21/2012	Bromodichloromethane	*ND*	*5*	1.7	1.34	ug/L
NAPIS-2	8/21/2012	1,1-Dichloroethane	ND	5	1.5	25	ug/L
NAPIS-2	8/21/2012	1,1-Dichloroethene	ND	5	1.9	7	ug/L
NAPIS-2	8/21/2012	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
NAPIS-2	8/21/2012	Dichlorodifluoromethane	ND	5	4.9	197	ug/L
NAPIS-2	8/21/2012	1,2-Dichloropropane	ND	5	1.9	5	ug/L
NAPIS-2	8/21/2012	2-Butanone	ND	50	11	5565	ug/L
NAPIS-2	8/21/2012	1,1,2-Trichloroethane	ND	5	2.7	5	ug/L
NAPIS-2	8/21/2012	Trichloroethene	ND	5	1.5	5	ug/L
NAPIS-2	8/21/2012	1,1,2,2-Tetrachloroethane	ND	10	3.1	10	ug/L
NAPIS-2	8/21/2012	1,2,3-Trichlorobenzene	ND	5	2.5	70	ug/L
NAPIS-2	8/21/2012	2-Chlorotoluene	ND	5	2.7	233	ug/L
NAPIS-2	8/21/2012	1,2,4-Trimethylbenzene	ND	5	2.3	56	ug/L
NAPIS-2	8/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.9	0.0033	ug/L
NAPIS-2	8/21/2012	1,2,3-Trichloropropane	*ND*	*10*	3.1	0.0084	ug/L
NAPIS-2	8/21/2012	tert-Butylbenzene	ND	5	2.1	690	ug/L
NAPIS-2	8/21/2012	Isopropylbenzene	ND	5	2.3	447	ug/L
NAPIS-2	8/21/2012	p-Isopropyltoluene	ND	5	2.5	NA	ug/L
NAPIS-2	8/21/2012	Ethylbenzene	ND	5	1.9	700	ug/L
NAPIS-2	8/21/2012	Styrene	ND	5	2	100	ug/L
NAPIS-2	8/21/2012	n-Propylbenzene	ND	5	2	660	ug/L
NAPIS-2	8/21/2012	n-Butylbenzene	ND	15	2	1000	ug/L
NAPIS-2	8/21/2012	4-Chlorotoluene	ND	5	2.1	250	ug/L
NAPIS-2	8/21/2012	1,2-Dibromoethane	*ND*	*5*	1.9	0.05	ug/L
NAPIS-2	8/21/2012	1,2-Dichloroethane	ND	5	1.4	5	ug/L
NAPIS-2	8/21/2012	4-Methyl-2-Pentanone	ND	50	4.9	1243	ug/L
NAPIS-2	8/21/2012	1,3,5-Trimethylbenzene	ND	5	1.9	60	ug/L
NAPIS-2	8/21/2012	Bromobenzene	ND	5	3.1	62	ug/L
NAPIS-2	8/21/2012	Toluene	ND	5	2.4	1000	ug/L
NAPIS-2	8/21/2012	Chlorobenzene	ND	5	1.9	77.6	ug/L
NAPIS-2	8/21/2012	Dibromochloromethane	*ND*	*5*	1.6	1.68	ug/L
NAPIS-2	8/21/2012	Tetrachloroethene	ND	5	2.4	5	ug/L
NAPIS-2	8/21/2012	sec-Butylbenzene	ND	5	2.3	2000	ug/L
NAPIS-2	8/21/2012	1,3-Dichloropropane	ND	5	2.6	370	ug/L
NAPIS-2	8/21/2012	cis-1,2-Dichloroethene	ND	5	1.7	70	ug/L
NAPIS-2	8/21/2012	trans-1,2-Dichloroethene	ND	5	1.6	100	ug/L
NAPIS-2	8/21/2012	1,1-Dichloropropene	ND	5	1.9	NA	ug/L
NAPIS-2	8/21/2012	2-Hexanone	*ND*	*50*	4.5	38	ug/L
NAPIS-2	8/21/2012	2,2-Dichloropropane	ND	10	2.3	NA	ug/L
NAPIS-2	8/21/2012	1,1,1,2-Tetrachloroethane	ND	5	2.4	5.74	ug/L
NAPIS-2	8/21/2012	Xylenes, Total	ND	7.5	6.4	620	ug/L
NAPIS-2	8/21/2012	MTBE	**160**	5	4.8	143	ug/L
NAPIS-2	8/21/2012	cis-1,3-Dichloropropene	ND	5	2.8	NA	ug/L
NAPIS-2	8/21/2012	trans-1,3-Dichloropropene	ND	5	3.2	NA	ug/L
NAPIS-2	11/28/2012	Benzene	**16**	2	0.28	5	ug/L
NAPIS-2	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
NAPIS-2	11/28/2012	Ethylbenzene	3	2	0.22	700	ug/L
NAPIS-2	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
NAPIS-2	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
NAPIS-2	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
NAPIS-2	11/28/2012	MTBE	**360**	50	2.9	143	ug/L
NAPIS-2	3/18/2013	Benzene	**70**	1	0.19	5	ug/L
NAPIS-2	3/18/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
NAPIS-2	3/18/2013	Ethylbenzene	56	1	0.18	700	ug/L
NAPIS-2	3/18/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	3/18/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	3/18/2013	Xylenes, Total	2.2	2	0.54	620	ug/L
NAPIS-2	3/18/2013	MTBE	**380**	25	2.1	143	ug/L
NAPIS-2	6/12/2013	Benzene	**13**	1	0.19	5	ug/L
NAPIS-2	6/12/2013	1,2,4-Trimethylbenzene	1.8	1	0.17	56	ug/L
NAPIS-2	6/12/2013	Ethylbenzene	47	1	0.18	700	ug/L
NAPIS-2	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-2	6/12/2013	MTBE	**300**	25	2.1	143	ug/L
NAPIS-2	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
NAPIS-2	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
NAPIS-2	9/3/2013	Benzene	**18**	1	0.46	5	ug/L
NAPIS-2	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
NAPIS-2	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
NAPIS-2	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
NAPIS-2	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
NAPIS-2	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
NAPIS-2	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
NAPIS-2	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
NAPIS-2	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
NAPIS-2	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
NAPIS-2	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
NAPIS-2	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
NAPIS-2	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
NAPIS-2	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
NAPIS-2	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
NAPIS-2	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
NAPIS-2	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
NAPIS-2	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
NAPIS-2	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L
NAPIS-2	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
NAPIS-2	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
NAPIS-2	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
NAPIS-2	9/3/2013	1,2,4-Trimethylbenzene	1.7	1	0.51	56	ug/L
NAPIS-2	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
NAPIS-2	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
NAPIS-2	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
NAPIS-2	9/3/2013	Isopropylbenzene	2.8	1	0.52	447	ug/L
NAPIS-2	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
NAPIS-2	9/3/2013	Ethylbenzene	13	1	0.45	700	ug/L
NAPIS-2	9/3/2013	Styrene	ND	1	0.58	100	ug/L
NAPIS-2	9/3/2013	n-Propylbenzene	2.2	1	0.41	660	ug/L
NAPIS-2	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
NAPIS-2	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
NAPIS-2	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
NAPIS-2	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
NAPIS-2	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
NAPIS-2	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
NAPIS-2	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
NAPIS-2	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
NAPIS-2	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
NAPIS-2	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-2	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
NAPIS-2	9/3/2013	sec-Butylbenzene	1.5	1	0.43	2000	ug/L
NAPIS-2	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
NAPIS-2	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
NAPIS-2	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
NAPIS-2	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-2	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
NAPIS-2	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
NAPIS-2	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
NAPIS-2	9/3/2013	Xylenes, Total	1.6	1.5	1.4	620	ug/L
NAPIS-2	9/3/2013	MTBE	**240**	10	7.7	143	ug/L
NAPIS-2	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
NAPIS-2	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-2	11/12/2013	Benzene	**10**	1	0.19	5	ug/L
NAPIS-2	11/12/2013	Ethylbenzene	8.3	1	0.18	700	ug/L
NAPIS-2	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-2	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-2	11/12/2013	MTBE	**250**	25	2.1	143	ug/L
NAPIS-2	3/10/2014	Benzene	**67**	2	0.24	5	ug/L
NAPIS-2	3/10/2014	Ethylbenzene	28	2	0.25	700	ug/L
NAPIS-2	3/10/2014	Toluene	ND	2	0.27	1000	ug/L
NAPIS-2	3/10/2014	Xylenes, Total	ND	4	0.78	620	ug/L
NAPIS-2	3/10/2014	MTBE	**210**	25	0.93	143	ug/L
NAPIS-2	6/5/2014	Benzene	**86**	1	0.12	5	ug/L
NAPIS-2	6/5/2014	1,2,4-Trimethylbenzene	2.9	1	0.11	56	ug/L
NAPIS-2	6/5/2014	Ethylbenzene	28	1	0.12	700	ug/L
NAPIS-2	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	6/5/2014	Toluene	2.1	1	0.13	1000	ug/L
NAPIS-2	6/5/2014	Xylenes, Total	3.7	2	0.39	620	ug/L
NAPIS-2	6/5/2014	MTBE	**200**	12	0.47	143	ug/L
NAPIS-2	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
NAPIS-2	9/11/2014	Acetone	22	10	4.9	14064	ug/L
NAPIS-2	9/11/2014	Chloroform	ND	1	0.32	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/11/2014	Benzene	**27**	1	0.15	5	ug/L
NAPIS-2	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
NAPIS-2	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
NAPIS-2	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
NAPIS-2	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
NAPIS-2	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
NAPIS-2	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
NAPIS-2	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
NAPIS-2	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
NAPIS-2	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
NAPIS-2	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
NAPIS-2	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
NAPIS-2	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
NAPIS-2	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
NAPIS-2	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
NAPIS-2	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
NAPIS-2	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
NAPIS-2	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
NAPIS-2	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
NAPIS-2	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-2	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-2	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
NAPIS-2	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
NAPIS-2	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
NAPIS-2	9/11/2014	Isopropylbenzene	1.1	1	0.16	447	ug/L
NAPIS-2	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
NAPIS-2	9/11/2014	Ethylbenzene	7	1	0.13	700	ug/L
NAPIS-2	9/11/2014	Styrene	ND	1	0.12	100	ug/L
NAPIS-2	9/11/2014	n-Propylbenzene	1.7	1	0.14	660	ug/L
NAPIS-2	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
NAPIS-2	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
NAPIS-2	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
NAPIS-2	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
NAPIS-2	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-2	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
NAPIS-2	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-2	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-2	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
NAPIS-2	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
NAPIS-2	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
NAPIS-2	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-2	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
NAPIS-2	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
NAPIS-2	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
NAPIS-2	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
NAPIS-2	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
NAPIS-2	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-2	9/11/2014	MTBE	**290**	10	2.5	143	ug/L
NAPIS-2	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
NAPIS-2	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-2	11/11/2014	Benzene	**16**	1	0.12	5	ug/L
NAPIS-2	11/11/2014	Ethylbenzene	5.2	1	0.12	700	ug/L
NAPIS-2	11/11/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-2	11/11/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-2	11/11/2014	MTBE	**340**	25	0.93	143	ug/L
NAPIS-2	3/10/2015	Benzene	**32**	1	0.12	5	ug/L
NAPIS-2	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-2	3/10/2015	Ethylbenzene	12	1	0.12	700	ug/L
NAPIS-2	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	3/10/2015	Xylenes, Total	2.7	2	0.38	620	ug/L
NAPIS-2	3/10/2015	MTBE	**220**	25	1.2	143	ug/L
NAPIS-2	6/2/2015	Benzene	**16**	1	0.12	5	ug/L
NAPIS-2	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-2	6/2/2015	Ethylbenzene	7.3	1	0.12	700	ug/L
NAPIS-2	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-2	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-2	6/2/2015	MTBE	**200**	25	1.2	143	ug/L
NAPIS-2	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-2	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-2	8/11/2015	Chloroform	ND	1	0.21	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/11/2015	Benzene	**12**	1	0.065	5	ug/L
NAPIS-2	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-2	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-2	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-2	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-2	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-2	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-2	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-2	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-2	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-2	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-2	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-2	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-2	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-2	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-2	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-2	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
NAPIS-2	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-2	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-2	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-2	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-2	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-2	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-2	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-2	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-2	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-2	8/11/2015	Ethylbenzene	2.8	1	0.1	700	ug/L
NAPIS-2	8/11/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-2	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-2	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-2	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-2	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-2	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-2	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-2	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-2	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-2	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-2	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-2	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-2	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-2	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-2	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-2	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-2	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-2	8/11/2015	MTBE	**200**	1	0.17	143	ug/L
NAPIS-2	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-2	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-2	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-2	10/28/2015	Benzene	**9.1**	1	0.065	5	ug/L
NAPIS-2	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-2	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-2	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-2	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-2	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-2	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-2	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-2	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-2	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-2	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-2	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-2	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-2	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-2	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-2	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-2	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-2	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-2	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-2	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
NAPIS-2	10/28/2015	1-Methylnaphthalene	6.1	4	0.54	NA	ug/L
NAPIS-2	10/28/2015	Naphthalene	2.9	2	0.22	30	ug/L
NAPIS-2	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
NAPIS-2	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-2	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
NAPIS-2	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-2	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-2	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-2	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-2	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-2	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-2	10/28/2015	Ethylbenzene	2.1	1	0.1	700	ug/L
NAPIS-2	10/28/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-2	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-2	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-2	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
NAPIS-2	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-2	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-2	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-2	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-2	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-2	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
NAPIS-2	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-2	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-2	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-2	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-2	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-2	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
NAPIS-2	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-2	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-2	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-2	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-2	10/28/2015	MTBE	**230**	10	1.7	143	ug/L
NAPIS-2	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	3/1/2016	Acetone	ND	10	0.88	14064	ug/L
NAPIS-2	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	3/1/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-2	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
NAPIS-2	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L
NAPIS-2	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
NAPIS-2	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
NAPIS-2	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
NAPIS-2	3/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-2	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
NAPIS-2	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
NAPIS-2	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
NAPIS-2	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
NAPIS-2	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
NAPIS-2	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
NAPIS-2	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
NAPIS-2	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	3/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	3/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-2	3/1/2016	Naphthalene	ND	2	0.083	30	ug/L
NAPIS-2	3/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	3/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	3/1/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
NAPIS-2	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
NAPIS-2	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
NAPIS-2	3/1/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
NAPIS-2	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	3/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-2	3/1/2016	Styrene	ND	1	0.095	100	ug/L
NAPIS-2	3/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-2	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-2	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	3/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
NAPIS-2	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
NAPIS-2	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
NAPIS-2	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
NAPIS-2	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
NAPIS-2	3/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-2	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	3/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
NAPIS-2	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
NAPIS-2	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	3/1/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-2	3/1/2016	MTBE	ND	1	0.21	143	ug/L
NAPIS-2	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
NAPIS-2	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	6/7/2016	Acetone	12	10	4.9	14064	ug/L
NAPIS-2	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	6/7/2016	Benzene	4.5	1	0.096	5	ug/L
NAPIS-2	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	6/7/2016	1,1-Dichloroethane	0.34	1	0.11	25	ug/L
NAPIS-2	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	6/7/2016	1-Methylnaphthalene	1.2	4	0.2	NA	ug/L
NAPIS-2	6/7/2016	Naphthalene	0.6	2	0.093	30	ug/L
NAPIS-2	6/7/2016	2-Methylnaphthalene	**0.44**	4	0.16		ug/L
NAPIS-2	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	6/7/2016	1,2,4-Trimethylbenzene	0.15	1	0.11	56	ug/L
NAPIS-2	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	6/7/2016	tert-Butylbenzene	0.28	1	0.12	690	ug/L
NAPIS-2	6/7/2016	Isopropylbenzene	1.1	1	0.1	447	ug/L
NAPIS-2	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	6/7/2016	Ethylbenzene	5.1	1	0.11	700	ug/L
NAPIS-2	6/7/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	6/7/2016	n-Propylbenzene	0.91	1	0.13	660	ug/L
NAPIS-2	6/7/2016	n-Butylbenzene	0.4	3	0.16	1000	ug/L
NAPIS-2	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	6/7/2016	Toluene	0.13	1	0.12	1000	ug/L
NAPIS-2	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	6/7/2016	sec-Butylbenzene	0.54	1	0.12	2000	ug/L
NAPIS-2	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	6/7/2016	MTBE	140	1	0.21	143	ug/L
NAPIS-2	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	9/1/2016	Acetone	15	10	4.9	14064	ug/L
NAPIS-2	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	9/1/2016	Benzene	5	1	0.096	5	ug/L
NAPIS-2	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	9/1/2016	1,1-Dichloroethane	0.23	1	0.11	25	ug/L
NAPIS-2	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	9/1/2016	1-Methylnaphthalene	2	4	0.2	NA	ug/L
NAPIS-2	9/1/2016	Naphthalene	2.1	2	0.093	30	ug/L
NAPIS-2	9/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	9/1/2016	tert-Butylbenzene	0.24	1	0.12	690	ug/L
NAPIS-2	9/1/2016	Isopropylbenzene	0.42	1	0.1	447	ug/L
NAPIS-2	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	9/1/2016	Ethylbenzene	1.5	1	0.11	700	ug/L
NAPIS-2	9/1/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	9/1/2016	n-Propylbenzene	0.26	1	0.13	660	ug/L
NAPIS-2	9/1/2016	n-Butylbenzene	0.17	3	0.16	1000	ug/L
NAPIS-2	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-2	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	9/1/2016	sec-Butylbenzene	0.36	1	0.12	2000	ug/L
NAPIS-2	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	9/1/2016	MTBE	**180**	1	0.21	143	ug/L
NAPIS-2	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	11/14/2016	Acetone	7.1	10	4.9	14064	ug/L
NAPIS-2	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	11/14/2016	Benzene	4.1	1	0.096	5	ug/L
NAPIS-2	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	11/14/2016	Bromodichloromethane	0.23	1	0.14	1.34	ug/L
NAPIS-2	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-2	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-2	11/14/2016	1-Methylnaphthalene	1.7	4	0.2	NA	ug/L
NAPIS-2	11/14/2016	Naphthalene	1.4	2	0.093	30	ug/L
NAPIS-2	11/14/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-2	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-2	11/14/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
NAPIS-2	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	11/14/2016	tert-Butylbenzene	0.31	1	0.12	690	ug/L
NAPIS-2	11/14/2016	Isopropylbenzene	0.33	1	0.1	447	ug/L
NAPIS-2	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	11/14/2016	Ethylbenzene	1.4	1	0.11	700	ug/L
NAPIS-2	11/14/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	11/14/2016	n-Propylbenzene	0.6	1	0.13	660	ug/L
NAPIS-2	11/14/2016	n-Butylbenzene	0.48	3	0.16	1000	ug/L
NAPIS-2	11/14/2016	4-Chlorotoluene	0.5	1	0.13	250	ug/L
NAPIS-2	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-2	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	11/14/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	11/14/2016	Toluene	0.13	1	0.12	1000	ug/L
NAPIS-2	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	11/14/2016	sec-Butylbenzene	0.55	1	0.12	2000	ug/L
NAPIS-2	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	11/14/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-2	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-2	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-2	11/14/2016	MTBE	**160**	1	0.21	143	ug/L
NAPIS-2	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/21/2017	Acetone	6.6	10	4.9	14064	ug/L
NAPIS-2	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
NAPIS-2	2/21/2017	Benzene	**24**	1	0.096	5	ug/L
NAPIS-2	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-2	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-2	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-2	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-2	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-2	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-2	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-2	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-2	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-2	2/21/2017	1,1-Dichloroethane	0.24	1	0.11	25	ug/L
NAPIS-2	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-2	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-2	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-2	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-2	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-2	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-2	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-2	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-2	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-2	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-2	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-2	2/21/2017	tert-Butylbenzene	0.25	1	0.12	690	ug/L
NAPIS-2	2/21/2017	Isopropylbenzene	0.74	1	0.1	447	ug/L
NAPIS-2	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-2	2/21/2017	Ethylbenzene	3.1	1	0.11	700	ug/L
NAPIS-2	2/21/2017	Styrene	ND	1	0.11	100	ug/L
NAPIS-2	2/21/2017	n-Propylbenzene	0.6	1	0.13	660	ug/L
NAPIS-2	2/21/2017	n-Butylbenzene	0.25	3	0.16	1000	ug/L
NAPIS-2	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-2	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-2	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-2	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-2	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-2	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-2	2/21/2017	Toluene	0.14	1	0.12	1000	ug/L
NAPIS-2	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-2	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-2	2/21/2017	sec-Butylbenzene	0.46	1	0.12	2000	ug/L
NAPIS-2	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-2	2/21/2017	cis-1,2-Dichloroethene	0.14	1	0.12	70	ug/L
NAPIS-2	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-2	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-2	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-2	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-2	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-2	2/21/2017	Xylenes, Total	0.53	1.5	0.37	620	ug/L
NAPIS-2	2/21/2017	MTBE	**180**	1	0.21	143	ug/L
NAPIS-2	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-2	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-2	6/1/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	6/1/2017	Acetone	ND	10	0.82	14064	ug/L
NAPIS-2	6/1/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	6/1/2017	Benzene	**35**	1	0.062	5	ug/L
NAPIS-2	6/1/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	6/1/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	6/1/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	6/1/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	6/1/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	6/1/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	6/1/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	6/1/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	6/1/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	6/1/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	6/1/2017	1,1-Dichloroethane	0.46	1	0.4	25	ug/L
NAPIS-2	6/1/2017	1,1-Dichloroethene	0.22	1	0.081	7	ug/L
NAPIS-2	6/1/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	6/1/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	6/1/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	6/1/2017	2-Butanone	ND	10	1.1	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/1/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	6/1/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	6/1/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	6/1/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	6/1/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	6/1/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-2	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	6/1/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	6/1/2017	tert-Butylbenzene	0.2	1	0.1	690	ug/L
NAPIS-2	6/1/2017	Isopropylbenzene	2.1	1	0.051	447	ug/L
NAPIS-2	6/1/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	6/1/2017	Ethylbenzene	16	1	0.093	700	ug/L
NAPIS-2	6/1/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	6/1/2017	n-Propylbenzene	1.2	1	0.074	660	ug/L
NAPIS-2	6/1/2017	n-Butylbenzene	0.14	3	0.13	1000	ug/L
NAPIS-2	6/1/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	6/1/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	6/1/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	6/1/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	6/1/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	6/1/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	6/1/2017	Toluene	0.25	1	0.064	1000	ug/L
NAPIS-2	6/1/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	6/1/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	6/1/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	6/1/2017	sec-Butylbenzene	0.98	1	0.11	2000	ug/L
NAPIS-2	6/1/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	6/1/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	6/1/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	6/1/2017	Pentafluorobenzene	ND	0	0		None
NAPIS-2	6/1/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	6/1/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	6/1/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	6/1/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	6/1/2017	Xylenes, Total	0.71	1.5	0.32	620	ug/L
NAPIS-2	6/1/2017	MTBE	140	1	0.24	143	ug/L
NAPIS-2	6/1/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	6/1/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	9/5/2017	Acetone	7.3	10	0.82	14064	ug/L
NAPIS-2	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	9/5/2017	Benzene	**30**	1	0.062	5	ug/L
NAPIS-2	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	9/5/2017	1,2,4-Trimethylbenzene	0.23	1	0.11	56	ug/L
NAPIS-2	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	9/5/2017	tert-Butylbenzene	0.18	1	0.1	690	ug/L
NAPIS-2	9/5/2017	Isopropylbenzene	3.4	1	0.051	447	ug/L
NAPIS-2	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	9/5/2017	Ethylbenzene	37	1	0.093	700	ug/L
NAPIS-2	9/5/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	9/5/2017	n-Propylbenzene	3.5	1	0.074	660	ug/L
NAPIS-2	9/5/2017	n-Butylbenzene	0.47	3	0.13	1000	ug/L
NAPIS-2	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	9/5/2017	Toluene	0.3	1	0.064	1000	ug/L
NAPIS-2	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	9/5/2017	sec-Butylbenzene	1.1	1	0.11	2000	ug/L
NAPIS-2	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	9/5/2017	Xylenes, Total	0.78	1.5	0.32	620	ug/L
NAPIS-2	9/5/2017	MTBE	140	1	0.24	143	ug/L
NAPIS-2	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	12/4/2017	Acetone	5.9	10	0.82	14064	ug/L
NAPIS-2	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	12/4/2017	Benzene	**21**	1	0.062	5	ug/L
NAPIS-2	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	12/4/2017	1,1-Dichloroethane	0.53	1	0.4	25	ug/L
NAPIS-2	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	12/4/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	12/4/2017	1-Methylnaphthalene	5.1	4	0.16	NA	ug/L
NAPIS-2	12/4/2017	Naphthalene	3.7	2	0.11	30	ug/L
NAPIS-2	12/4/2017	2-Methylnaphthalene	**0.34**	4	0.15		ug/L
NAPIS-2	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	12/4/2017	1,2,4-Trimethylbenzene	0.19	1	0.11	56	ug/L
NAPIS-2	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	12/4/2017	tert-Butylbenzene	0.18	1	0.1	690	ug/L
NAPIS-2	12/4/2017	Isopropylbenzene	3.9	1	0.051	447	ug/L
NAPIS-2	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	12/4/2017	Ethylbenzene	38	1	0.093	700	ug/L
NAPIS-2	12/4/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	12/4/2017	n-Propylbenzene	3.8	1	0.074	660	ug/L
NAPIS-2	12/4/2017	n-Butylbenzene	0.43	3	0.13	1000	ug/L
NAPIS-2	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-2	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	12/4/2017	Toluene	0.31	1	0.064	1000	ug/L
NAPIS-2	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	12/4/2017	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
NAPIS-2	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	12/4/2017	Xylenes, Total	0.69	1.5	0.32	620	ug/L
NAPIS-2	12/4/2017	MTBE	**160**	1	0.24	143	ug/L
NAPIS-2	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	2/9/2018	Acetone	8.1	10	0.82	14064	ug/L
NAPIS-2	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-2	2/9/2018	Benzene	**27**	1	0.062	5	ug/L
NAPIS-2	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-2	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	2/9/2018	1-Methylnaphthalene	5.5	4	0.16	NA	ug/L
NAPIS-2	2/9/2018	Naphthalene	4.4	2	0.11	30	ug/L
NAPIS-2	2/9/2018	2-Methylnaphthalene	**1.4**	4	0.15		ug/L
NAPIS-2	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	2/9/2018	1,2,4-Trimethylbenzene	0.5	1	0.11	56	ug/L
NAPIS-2	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	2/9/2018	tert-Butylbenzene	0.32	1	0.1	690	ug/L
NAPIS-2	2/9/2018	Isopropylbenzene	3.3	1	0.051	447	ug/L
NAPIS-2	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	2/9/2018	Ethylbenzene	33	1	0.093	700	ug/L
NAPIS-2	2/9/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	2/9/2018	n-Propylbenzene	3	1	0.074	660	ug/L
NAPIS-2	2/9/2018	n-Butylbenzene	0.58	3	0.13	1000	ug/L
NAPIS-2	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	2/9/2018	1,3,5-Trimethylbenzene	0.15	1	0.087	60	ug/L
NAPIS-2	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	2/9/2018	Toluene	0.69	1	0.064	1000	ug/L
NAPIS-2	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	2/9/2018	sec-Butylbenzene	1.1	1	0.11	2000	ug/L
NAPIS-2	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-2	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	2/9/2018	Xylenes, Total	1.6	1.5	0.32	620	ug/L
NAPIS-2	2/9/2018	MTBE	130	1	0.24	143	ug/L
NAPIS-2	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-2	4/30/2018	Acetone	9.7	10	0.82	14064	ug/L
NAPIS-2	4/30/2018	Chloroform	ND	1	0.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	4/30/2018	Benzene	**32**	1	0.062	5	ug/L
NAPIS-2	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-2	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-2	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-2	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-2	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-2	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-2	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-2	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-2	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-2	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-2	4/30/2018	1,1-Dichloroethane	0.52	1	0.4	25	ug/L
NAPIS-2	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-2	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-2	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-2	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-2	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-2	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-2	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-2	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-2	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-2	4/30/2018	1-Methylnaphthalene	11	4	0.16	NA	ug/L
NAPIS-2	4/30/2018	Naphthalene	7.8	2	0.11	30	ug/L
NAPIS-2	4/30/2018	2-Methylnaphthalene	**1.7**	4	0.15		ug/L
NAPIS-2	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-2	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-2	4/30/2018	1,2,4-Trimethylbenzene	0.84	1	0.11	56	ug/L
NAPIS-2	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-2	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-2	4/30/2018	tert-Butylbenzene	0.25	1	0.1	690	ug/L
NAPIS-2	4/30/2018	Isopropylbenzene	3.7	1	0.051	447	ug/L
NAPIS-2	4/30/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-2	4/30/2018	Ethylbenzene	35	1	0.093	700	ug/L
NAPIS-2	4/30/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-2	4/30/2018	n-Propylbenzene	3.7	1	0.074	660	ug/L
NAPIS-2	4/30/2018	n-Butylbenzene	0.59	3	0.13	1000	ug/L
NAPIS-2	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-2	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-2	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-2	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-2	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-2	4/30/2018	1,3,5-Trimethylbenzene	0.2	1	0.087	60	ug/L
NAPIS-2	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-2	4/30/2018	Toluene	2.3	1	0.064	1000	ug/L
NAPIS-2	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-2	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-2	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-2	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-2	4/30/2018	sec-Butylbenzene	1.2	1	0.11	2000	ug/L
NAPIS-2	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-2	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-2	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-2	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-2	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-2	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-2	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-2	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-2	4/30/2018	Xylenes, Total	0.61	1.5	0.32	620	ug/L
NAPIS-2	4/30/2018	MTBE	99	1	0.24	143	ug/L
NAPIS-2	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-2	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-2	4/9/2019	Benzene	**340**	5	1.666391	5	ug/L
NAPIS-2	4/9/2019	Ethylbenzene	24	1	0.132341	700	ug/L
NAPIS-2	4/9/2019	MTBE	97	1	0.456095	143	ug/L
NAPIS-2	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	4/9/2019	Xylenes, Total	1	1.5	0.454415	620	ug/L
NAPIS-2	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-2	5/28/2019	Benzene	**270**	10	1.666391	5	ug/L
NAPIS-2	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-2	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	5/28/2019	Ethylbenzene	45	1	0.132341	700	ug/L
NAPIS-2	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	5/28/2019	Isopropylbenzene	8.3	1	0.191522	447	ug/L
NAPIS-2	5/28/2019	MTBE	98	1	0.456095	143	ug/L
NAPIS-2	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	5/28/2019	Naphthalene	11	2	0.275071	30	ug/L
NAPIS-2	5/28/2019	n-Butylbenzene	0.51	3	0.22757	1000	ug/L
NAPIS-2	5/28/2019	n-Propylbenzene	3.5	1	0.214308	660	ug/L
NAPIS-2	5/28/2019	sec-Butylbenzene	1.9	1	0.247731	2000	ug/L
NAPIS-2	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	5/28/2019	tert-Butylbenzene	0.29	1	0.206985	690	ug/L
NAPIS-2	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-2	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-2	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	5/28/2019	1,2,4-Trimethylbenzene	0.26	1	0.213199	56	ug/L
NAPIS-2	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-2	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-2	5/28/2019	1-Methylnaphthalene	20	4	0.314954	NA	ug/L
NAPIS-2	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	5/28/2019	2-Methylnaphthalene	**1.8**	4	0.345376		ug/L
NAPIS-2	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-2	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	8/22/2019	1,2,4-Trimethylbenzene	0.32	1	0.213199	56	ug/L
NAPIS-2	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-2	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	1-Methylnaphthalene	24	4	0.314954	NA	ug/L
NAPIS-2	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	8/22/2019	2-Methylnaphthalene	**4.8**	4	0.345376		ug/L
NAPIS-2	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	8/22/2019	Acetone	4.1	10	1.199396	14064	ug/L
NAPIS-2	8/22/2019	Benzene	**220**	10	1.666391	5	ug/L
NAPIS-2	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-2	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-2	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	8/22/2019	Ethylbenzene	44	1	0.132341	700	ug/L
NAPIS-2	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	8/22/2019	Isopropylbenzene	9.1	1	0.191522	447	ug/L
NAPIS-2	8/22/2019	MTBE	110	1	0.456095	143	ug/L
NAPIS-2	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	8/22/2019	Naphthalene	15	2	0.275071	30	ug/L
NAPIS-2	8/22/2019	n-Butylbenzene	1.6	3	0.22757	1000	ug/L
NAPIS-2	8/22/2019	n-Propylbenzene	4.7	1	0.214308	660	ug/L
NAPIS-2	8/22/2019	sec-Butylbenzene	2.4	1	0.247731	2000	ug/L
NAPIS-2	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	8/22/2019	tert-Butylbenzene	0.49	1	0.206985	690	ug/L
NAPIS-2	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	8/22/2019	Toluene	0.45	1	0.350436	1000	ug/L
NAPIS-2	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	8/22/2019	Xylenes, Total	0.85	1.5	0.454415	620	ug/L
NAPIS-2	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-2	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-2	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-2	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-2	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-2	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-2	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-2	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-2	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-2	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-2	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-2	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-2	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-2	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-2	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-2	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-2	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-2	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	25	4	0.314954	NA	ug/L
NAPIS-2	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-2	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-2	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-2	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	**3.8**	4	0.345376		ug/L
NAPIS-2	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-2	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-2	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-2	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-2	10/21/2019	Benzene	**210**	10	1.666391	5	ug/L
NAPIS-2	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-2	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-2	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-2	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-2	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-2	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-2	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-2	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-2	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-2	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-2	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-2	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-2	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-2	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-2	10/21/2019	Ethylbenzene	24	1	0.132341	700	ug/L
NAPIS-2	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-2	10/21/2019	Isopropylbenzene	6.6	1	0.191522	447	ug/L
NAPIS-2	10/21/2019	MTBE	100	1	0.456095	143	ug/L
NAPIS-2	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-2	10/21/2019	Naphthalene	17	2	0.275071	30	ug/L
NAPIS-2	10/21/2019	n-Butylbenzene	0.53	3	0.22757	1000	ug/L
NAPIS-2	10/21/2019	n-Propylbenzene	2.8	1	0.214308	660	ug/L
NAPIS-2	10/21/2019	sec-Butylbenzene	2.1	1	0.247731	2000	ug/L
NAPIS-2	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-2	10/21/2019	tert-Butylbenzene	0.34	1	0.206985	690	ug/L
NAPIS-2	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-2	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-2	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-2	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-2	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-2	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-2	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-2	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-2	3/4/2020	Benzene	**330**	10	2.3	5	ug/L
NAPIS-2	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-2	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-2	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-2	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-2	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-2	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-2	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-2	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-2	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-2	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-2	3/4/2020	1,2,4-Trimethylbenzene	0.59	1	0.12	56	ug/L
NAPIS-2	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-2	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-2	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-2	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-2	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-2	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-2	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-2	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-2	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-2	3/4/2020	1-Methylnaphthalene	33	4	0.84	NA	ug/L
NAPIS-2	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-2	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-2	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-2	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-2	3/4/2020	2-Methylnaphthalene	**8.2**	4	0.69		ug/L
NAPIS-2	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-2	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-2	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-2	3/4/2020	Acetone	7.3	10	2.3	14064	ug/L
NAPIS-2	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-2	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-2	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-2	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-2	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-2	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-2	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-2	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-2	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-2	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-2	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-2	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-2	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-2	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-2	3/4/2020	Ethylbenzene	40	1	0.21	700	ug/L
NAPIS-2	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-2	3/4/2020	Isopropylbenzene	6.3	1	0.18	447	ug/L
NAPIS-2	3/4/2020	MTBE	69	1	0.39	143	ug/L
NAPIS-2	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-2	3/4/2020	n-Butylbenzene	0.69	3	0.25	1000	ug/L
NAPIS-2	3/4/2020	n-Propylbenzene	3.1	1	0.18	660	ug/L
NAPIS-2	3/4/2020	Naphthalene	25	2	0.28	30	ug/L
NAPIS-2	3/4/2020	sec-Butylbenzene	2.1	1	0.61	2000	ug/L
NAPIS-2	3/4/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-2	3/4/2020	tert-Butylbenzene	0.42	1	0.24	690	ug/L
NAPIS-2	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-2	3/4/2020	Toluene	0.6	1	0.2	1000	ug/L
NAPIS-2	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-2	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-2	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-2	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-2	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-2	3/4/2020	Xylenes, Total	2.1	1.5	0.55	620	ug/L
NAPIS-2	9/22/2020	Benzene	**290**	10	2.3	5	ug/L
NAPIS-2	9/22/2020	Ethylbenzene	140	10	2.1	700	ug/L
NAPIS-2	9/22/2020	MTBE	57	1	0.39	143	ug/L
NAPIS-2	9/22/2020	Toluene	0.52	1	0.2	1000	ug/L
NAPIS-2	9/22/2020	Xylenes, Total	1.5	1.5	0.55	620	ug/L
NAPIS-2	12/17/2020	Acetone	ND	25	10	14064	ug/L
NAPIS-2	12/17/2020	Benzene	**204**	1	0.38	5	ug/L
NAPIS-2	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
NAPIS-2	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
NAPIS-2	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
NAPIS-2	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
NAPIS-2	12/17/2020	Carbon Disulfide	8.09	1	0.5	810	ug/L
NAPIS-2	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
NAPIS-2	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-2	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
NAPIS-2	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
NAPIS-2	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
NAPIS-2	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
NAPIS-2	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
NAPIS-2	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
NAPIS-2	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
NAPIS-2	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
NAPIS-2	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
NAPIS-2	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
NAPIS-2	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
NAPIS-2	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
NAPIS-2	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
NAPIS-2	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
NAPIS-2	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
NAPIS-2	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
NAPIS-2	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
NAPIS-2	12/17/2020	Ethylbenzene	50.4	1	0.5	700	ug/L
NAPIS-2	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
NAPIS-2	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
NAPIS-2	12/17/2020	Isopropylbenzene	5.3	1	0.53	447	ug/L
NAPIS-2	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
NAPIS-2	12/17/2020	1-Methylnaphthalene	33.4	5	4.2	NA	ug/L
NAPIS-2	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
NAPIS-2	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
NAPIS-2	12/17/2020	MTBE	73.6	1	0.74	143	ug/L
NAPIS-2	12/17/2020	Naphthalene	24.4	1	1	30	ug/L
NAPIS-2	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
NAPIS-2	12/17/2020	n-Propylbenzene	2.04	1	0.69	660	ug/L
NAPIS-2	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
NAPIS-2	12/17/2020	sec-Butylbenzene	1.16	1	0.7	2000	ug/L
NAPIS-2	12/17/2020	Styrene	ND	1	1	100	ug/L
NAPIS-2	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
NAPIS-2	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
NAPIS-2	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
NAPIS-2	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
NAPIS-2	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
NAPIS-2	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-2	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
NAPIS-2	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
NAPIS-2	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
NAPIS-2	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
NAPIS-2	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
NAPIS-2	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
NAPIS-2	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
NAPIS-2	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
NAPIS-2	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
NAPIS-2	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
NAPIS-2	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
NAPIS-3	3/20/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	3/20/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	3/20/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	3/20/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	3/20/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	6/12/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	6/12/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	6/12/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	6/12/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
NAPIS-3	6/12/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/12/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	6/12/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	10/2/2012	Benzene	ND	1	0.14	5	ug/L
NAPIS-3	10/2/2012	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	10/2/2012	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	10/2/2012	1,3,5-Trimethylbenzene	ND	1	0.11	60	ug/L
NAPIS-3	10/2/2012	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	10/2/2012	Xylenes, Total	ND	2	0.33	620	ug/L
NAPIS-3	10/2/2012	MTBE	ND	2.5	0.14	143	ug/L
NAPIS-3	11/28/2012	Benzene	ND	2	0.28	5	ug/L
NAPIS-3	11/28/2012	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
NAPIS-3	11/28/2012	Ethylbenzene	ND	2	0.22	700	ug/L
NAPIS-3	11/28/2012	1,3,5-Trimethylbenzene	ND	2	0.22	60	ug/L
NAPIS-3	11/28/2012	Toluene	ND	2	0.24	1000	ug/L
NAPIS-3	11/28/2012	Xylenes, Total	ND	4	0.66	620	ug/L
NAPIS-3	11/28/2012	MTBE	ND	5	0.29	143	ug/L
NAPIS-3	3/18/2013	Benzene	ND	2	0.37	5	ug/L
NAPIS-3	3/18/2013	1,2,4-Trimethylbenzene	ND	2	0.34	56	ug/L
NAPIS-3	3/18/2013	Ethylbenzene	ND	2	0.36	700	ug/L
NAPIS-3	3/18/2013	1,3,5-Trimethylbenzene	ND	2	0.36	60	ug/L
NAPIS-3	3/18/2013	Toluene	ND	2	0.36	1000	ug/L
NAPIS-3	3/18/2013	Xylenes, Total	ND	4	1.1	620	ug/L
NAPIS-3	3/18/2013	MTBE	ND	5	0.42	143	ug/L
NAPIS-3	6/12/2013	Benzene	ND	1	0.19	5	ug/L
NAPIS-3	6/12/2013	1,2,4-Trimethylbenzene	ND	1	0.17	56	ug/L
NAPIS-3	6/12/2013	Ethylbenzene	ND	1	0.18	700	ug/L
NAPIS-3	6/12/2013	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	6/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-3	6/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-3	6/12/2013	MTBE	ND	2.5	0.21	143	ug/L
NAPIS-3	9/3/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
NAPIS-3	9/3/2013	Acetone	ND	10	1.7	14064	ug/L
NAPIS-3	9/3/2013	Chloroform	ND	1	0.47	100	ug/L
NAPIS-3	9/3/2013	Benzene	ND	1	0.46	5	ug/L
NAPIS-3	9/3/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
NAPIS-3	9/3/2013	Bromomethane	ND	3	0.49	7.54	ug/L
NAPIS-3	9/3/2013	Chloromethane	ND	3	0.37	20.32	ug/L
NAPIS-3	9/3/2013	Dibromomethane	ND	1	0.52	8	ug/L
NAPIS-3	9/3/2013	Chloroethane	ND	2	0.3	20857	ug/L
NAPIS-3	9/3/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
NAPIS-3	9/3/2013	Methylene Chloride	ND	3	0.35	5	ug/L
NAPIS-3	9/3/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
NAPIS-3	9/3/2013	Bromoform	ND	1	0.37	32.9	ug/L
NAPIS-3	9/3/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
NAPIS-3	9/3/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
NAPIS-3	9/3/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
NAPIS-3	9/3/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
NAPIS-3	9/3/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
NAPIS-3	9/3/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
NAPIS-3	9/3/2013	2-Butanone	ND	10	1	5565	ug/L
NAPIS-3	9/3/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
NAPIS-3	9/3/2013	Trichloroethene	ND	1	0.42	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/3/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
NAPIS-3	9/3/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
NAPIS-3	9/3/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
NAPIS-3	9/3/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
NAPIS-3	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
NAPIS-3	9/3/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
NAPIS-3	9/3/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
NAPIS-3	9/3/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
NAPIS-3	9/3/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
NAPIS-3	9/3/2013	Ethylbenzene	ND	1	0.45	700	ug/L
NAPIS-3	9/3/2013	Styrene	ND	1	0.58	100	ug/L
NAPIS-3	9/3/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
NAPIS-3	9/3/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
NAPIS-3	9/3/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
NAPIS-3	9/3/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
NAPIS-3	9/3/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
NAPIS-3	9/3/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
NAPIS-3	9/3/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
NAPIS-3	9/3/2013	Bromobenzene	ND	1	0.57	62	ug/L
NAPIS-3	9/3/2013	Toluene	ND	1	0.44	1000	ug/L
NAPIS-3	9/3/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
NAPIS-3	9/3/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-3	9/3/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
NAPIS-3	9/3/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
NAPIS-3	9/3/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
NAPIS-3	9/3/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
NAPIS-3	9/3/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
NAPIS-3	9/3/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-3	9/3/2013	2-Hexanone	ND	10	1.3	38	ug/L
NAPIS-3	9/3/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
NAPIS-3	9/3/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
NAPIS-3	9/3/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
NAPIS-3	9/3/2013	MTBE	ND	1	0.77	143	ug/L
NAPIS-3	9/3/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
NAPIS-3	9/3/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
NAPIS-3	11/12/2013	Benzene	ND	1	0.19	5	ug/L
NAPIS-3	11/12/2013	Ethylbenzene	ND	1	0.18	700	ug/L
NAPIS-3	11/12/2013	Toluene	ND	1	0.18	1000	ug/L
NAPIS-3	11/12/2013	Xylenes, Total	ND	2	0.54	620	ug/L
NAPIS-3	11/12/2013	MTBE	ND	2.5	0.21	143	ug/L
NAPIS-3	3/10/2014	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	3/10/2014	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	3/10/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-3	3/10/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-3	3/10/2014	MTBE	ND	2.5	0.093	143	ug/L
NAPIS-3	6/5/2014	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	6/5/2014	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/5/2014	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	6/5/2014	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	6/5/2014	Toluene	ND	1	0.13	1000	ug/L
NAPIS-3	6/5/2014	Xylenes, Total	ND	2	0.39	620	ug/L
NAPIS-3	6/5/2014	MTBE	ND	2.5	0.093	143	ug/L
NAPIS-3	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
NAPIS-3	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
NAPIS-3	9/11/2014	Benzene	3.8	1	0.15	5	ug/L
NAPIS-3	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
NAPIS-3	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
NAPIS-3	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
NAPIS-3	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
NAPIS-3	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
NAPIS-3	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
NAPIS-3	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
NAPIS-3	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
NAPIS-3	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
NAPIS-3	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
NAPIS-3	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
NAPIS-3	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
NAPIS-3	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
NAPIS-3	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
NAPIS-3	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
NAPIS-3	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
NAPIS-3	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
NAPIS-3	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
NAPIS-3	9/11/2014	Ethylbenzene	1.9	1	0.13	700	ug/L
NAPIS-3	9/11/2014	Styrene	ND	1	0.12	100	ug/L
NAPIS-3	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
NAPIS-3	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
NAPIS-3	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
NAPIS-3	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
NAPIS-3	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
NAPIS-3	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
NAPIS-3	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-3	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
NAPIS-3	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
NAPIS-3	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
NAPIS-3	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
NAPIS-3	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
NAPIS-3	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
NAPIS-3	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
NAPIS-3	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
NAPIS-3	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
NAPIS-3	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
NAPIS-3	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
NAPIS-3	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
NAPIS-3	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-3	9/11/2014	MTBE	11	1	0.25	143	ug/L
NAPIS-3	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
NAPIS-3	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	11/13/2014	Benzene	ND	1	0.15	5	ug/L
NAPIS-3	11/13/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	11/13/2014	Ethylbenzene	ND	1	0.13	700	ug/L
NAPIS-3	11/13/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	11/13/2014	Toluene	ND	1	0.17	1000	ug/L
NAPIS-3	11/13/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
NAPIS-3	11/13/2014	MTBE	ND	1	0.25	143	ug/L
NAPIS-3	3/10/2015	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	3/10/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-3	3/10/2015	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	3/10/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	3/10/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	3/10/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-3	3/10/2015	MTBE	ND	2.5	0.12	143	ug/L
NAPIS-3	6/2/2015	Benzene	ND	1	0.12	5	ug/L
NAPIS-3	6/2/2015	1,2,4-Trimethylbenzene	ND	1	0.14	56	ug/L
NAPIS-3	6/2/2015	Ethylbenzene	ND	1	0.12	700	ug/L
NAPIS-3	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
NAPIS-3	6/2/2015	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/2/2015	Xylenes, Total	ND	2	0.38	620	ug/L
NAPIS-3	6/2/2015	MTBE	ND	2.5	0.12	143	ug/L
NAPIS-3	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-3	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-3	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-3	8/11/2015	Benzene	ND	1	0.065	5	ug/L
NAPIS-3	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-3	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-3	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-3	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-3	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-3	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-3	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-3	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-3	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-3	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-3	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-3	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-3	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-3	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-3	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-3	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-3	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-3	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-3	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-3	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-3	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-3	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-3	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-3	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-3	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
NAPIS-3	8/11/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-3	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
NAPIS-3	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-3	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-3	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-3	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-3	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-3	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-3	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-3	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-3	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-3	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-3	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-3	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-3	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-3	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-3	8/11/2015	MTBE	ND	1	0.17	143	ug/L
NAPIS-3	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
NAPIS-3	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
NAPIS-3	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
NAPIS-3	10/28/2015	Benzene	ND	1	0.065	5	ug/L
NAPIS-3	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
NAPIS-3	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
NAPIS-3	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
NAPIS-3	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
NAPIS-3	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
NAPIS-3	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
NAPIS-3	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
NAPIS-3	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
NAPIS-3	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
NAPIS-3	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
NAPIS-3	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
NAPIS-3	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
NAPIS-3	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
NAPIS-3	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
NAPIS-3	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
NAPIS-3	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
NAPIS-3	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
NAPIS-3	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
NAPIS-3	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
NAPIS-3	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
NAPIS-3	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
NAPIS-3	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
NAPIS-3	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
NAPIS-3	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
NAPIS-3	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
NAPIS-3	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
NAPIS-3	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
NAPIS-3	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
NAPIS-3	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
NAPIS-3	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
NAPIS-3	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
NAPIS-3	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
NAPIS-3	10/28/2015	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
NAPIS-3	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
NAPIS-3	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
NAPIS-3	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
NAPIS-3	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
NAPIS-3	10/28/2015	Toluene	ND	1	0.11	1000	ug/L
NAPIS-3	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
NAPIS-3	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
NAPIS-3	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
NAPIS-3	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
NAPIS-3	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
NAPIS-3	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
NAPIS-3	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
NAPIS-3	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
NAPIS-3	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
NAPIS-3	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
NAPIS-3	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
NAPIS-3	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	10/28/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
NAPIS-3	10/28/2015	MTBE	ND	1	0.17	143	ug/L
NAPIS-3	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	3/1/2016	Acetone	ND	10	0.88	14064	ug/L
NAPIS-3	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	3/1/2016	Benzene	**13**	1	0.096	5	ug/L
NAPIS-3	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
NAPIS-3	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L
NAPIS-3	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
NAPIS-3	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
NAPIS-3	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
NAPIS-3	3/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
NAPIS-3	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
NAPIS-3	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
NAPIS-3	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
NAPIS-3	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
NAPIS-3	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
NAPIS-3	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
NAPIS-3	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	3/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	3/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	3/1/2016	Naphthalene	ND	2	0.083	30	ug/L
NAPIS-3	3/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	3/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	3/1/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
NAPIS-3	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
NAPIS-3	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
NAPIS-3	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
NAPIS-3	3/1/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
NAPIS-3	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	3/1/2016	Ethylbenzene	5.3	1	0.11	700	ug/L
NAPIS-3	3/1/2016	Styrene	ND	1	0.095	100	ug/L
NAPIS-3	3/1/2016	n-Propylbenzene	1	1	0.13	660	ug/L
NAPIS-3	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	3/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
NAPIS-3	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
NAPIS-3	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
NAPIS-3	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
NAPIS-3	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
NAPIS-3	3/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	3/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
NAPIS-3	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
NAPIS-3	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	3/1/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	3/1/2016	MTBE	**160**	1	0.21	143	ug/L
NAPIS-3	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
NAPIS-3	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	6/7/2016	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	6/7/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	6/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	6/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	6/7/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	6/7/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	6/7/2016	Naphthalene	ND	2	0.093	30	ug/L
NAPIS-3	6/7/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	6/7/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	6/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	6/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	6/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	6/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	6/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	6/7/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	6/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	6/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	6/7/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	6/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	6/7/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	6/7/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	6/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	6/7/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	6/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	6/7/2016	MTBE	0.44	1	0.21	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	9/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	9/1/2016	Acetone	11	10	4.9	14064	ug/L
NAPIS-3	9/1/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	9/1/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	9/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	9/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	9/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	9/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	9/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	9/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	9/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	9/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	9/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	9/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	9/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	9/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	9/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	9/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	9/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	9/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	9/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	9/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	9/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	9/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	9/1/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	9/1/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	9/1/2016	Naphthalene	0.1	2	0.093	30	ug/L
NAPIS-3	9/1/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	9/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	9/1/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	9/1/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	9/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	9/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	9/1/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	9/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	9/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	9/1/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	9/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	9/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	9/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	9/1/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	9/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	9/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	9/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	9/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	9/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	9/1/2016	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	9/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	9/1/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	9/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	9/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	9/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	9/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	9/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	9/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	9/1/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	9/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	9/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	9/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	9/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	9/1/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	9/1/2016	MTBE	8.4	1	0.21	143	ug/L
NAPIS-3	9/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	9/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	11/14/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	11/14/2016	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	11/14/2016	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	11/14/2016	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	11/14/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	11/14/2016	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	11/14/2016	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	11/14/2016	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	11/14/2016	Chloroethane	ND	2	0.19	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/14/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	11/14/2016	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	11/14/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	11/14/2016	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	11/14/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	11/14/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	11/14/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	11/14/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	11/14/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	11/14/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	11/14/2016	2-Butanone	ND	10	0.74	5565	ug/L
NAPIS-3	11/14/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	11/14/2016	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	11/14/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	11/14/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	11/14/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
NAPIS-3	11/14/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
NAPIS-3	11/14/2016	Naphthalene	ND	2	0.093	30	ug/L
NAPIS-3	11/14/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
NAPIS-3	11/14/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	11/14/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
NAPIS-3	11/14/2016	1,2,4-Trimethylbenzene	0.25	1	0.11	56	ug/L
NAPIS-3	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	11/14/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	11/14/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	11/14/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	11/14/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	11/14/2016	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	11/14/2016	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	11/14/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	11/14/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	11/14/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	11/14/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
NAPIS-3	11/14/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	11/14/2016	1,2-Dichloroethane	0.34	1	0.12	5	ug/L
NAPIS-3	11/14/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	11/14/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	11/14/2016	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	11/14/2016	Toluene	0.21	1	0.12	1000	ug/L
NAPIS-3	11/14/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	11/14/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	11/14/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	11/14/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	11/14/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	11/14/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	11/14/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	11/14/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	11/14/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
NAPIS-3	11/14/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	11/14/2016	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	11/14/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	11/14/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	11/14/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	11/14/2016	MTBE	15	1	0.21	143	ug/L
NAPIS-3	11/14/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	11/14/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	2/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	2/21/2017	Acetone	ND	10	4.9	14064	ug/L
NAPIS-3	2/21/2017	Chloroform	ND	1	0.089	100	ug/L
NAPIS-3	2/21/2017	Benzene	ND	1	0.096	5	ug/L
NAPIS-3	2/21/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
NAPIS-3	2/21/2017	Bromomethane	ND	3	0.78	7.54	ug/L
NAPIS-3	2/21/2017	Chloromethane	ND	3	0.21	20.32	ug/L
NAPIS-3	2/21/2017	Dibromomethane	ND	1	0.12	8	ug/L
NAPIS-3	2/21/2017	Chloroethane	ND	2	0.19	20857	ug/L
NAPIS-3	2/21/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	2/21/2017	Methylene Chloride	ND	3	0.19	5	ug/L
NAPIS-3	2/21/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
NAPIS-3	2/21/2017	Bromoform	ND	1	0.1	32.9	ug/L
NAPIS-3	2/21/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
NAPIS-3	2/21/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
NAPIS-3	2/21/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
NAPIS-3	2/21/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
NAPIS-3	2/21/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
NAPIS-3	2/21/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
NAPIS-3	2/21/2017	2-Butanone	ND	10	0.74	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
NAPIS-3	2/21/2017	Trichloroethene	ND	1	0.18	5	ug/L
NAPIS-3	2/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
NAPIS-3	2/21/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
NAPIS-3	2/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	2/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
NAPIS-3	2/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
NAPIS-3	2/21/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
NAPIS-3	2/21/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
NAPIS-3	2/21/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
NAPIS-3	2/21/2017	Ethylbenzene	ND	1	0.11	700	ug/L
NAPIS-3	2/21/2017	Styrene	ND	1	0.11	100	ug/L
NAPIS-3	2/21/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
NAPIS-3	2/21/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
NAPIS-3	2/21/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
NAPIS-3	2/21/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
NAPIS-3	2/21/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
NAPIS-3	2/21/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
NAPIS-3	2/21/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
NAPIS-3	2/21/2017	Bromobenzene	ND	1	0.098	62	ug/L
NAPIS-3	2/21/2017	Toluene	ND	1	0.12	1000	ug/L
NAPIS-3	2/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	2/21/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
NAPIS-3	2/21/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
NAPIS-3	2/21/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
NAPIS-3	2/21/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
NAPIS-3	2/21/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
NAPIS-3	2/21/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
NAPIS-3	2/21/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
NAPIS-3	2/21/2017	2-Hexanone	ND	10	0.84	38	ug/L
NAPIS-3	2/21/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
NAPIS-3	2/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
NAPIS-3	2/21/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
NAPIS-3	2/21/2017	MTBE	16	1	0.21	143	ug/L
NAPIS-3	2/21/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
NAPIS-3	2/21/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
NAPIS-3	6/2/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	6/2/2017	Acetone	4.2	10	0.82	14064	ug/L
NAPIS-3	6/2/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	6/2/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	6/2/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	6/2/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	6/2/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	6/2/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	6/2/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	6/2/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	6/2/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	6/2/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	6/2/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	6/2/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	6/2/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	6/2/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	6/2/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	6/2/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	6/2/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	6/2/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	6/2/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	6/2/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	6/2/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	6/2/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	6/2/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	6/2/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	6/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	6/2/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	6/2/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	6/2/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	6/2/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	6/2/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	6/2/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	6/2/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	6/2/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	6/2/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	6/2/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	6/2/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	6/2/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/2/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	6/2/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	6/2/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	6/2/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	6/2/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	6/2/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	6/2/2017	sec-Butylbenzene	0.45	1	0.11	2000	ug/L
NAPIS-3	6/2/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	6/2/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	6/2/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	6/2/2017	Pentafluorobenzene	ND	0	0		None
NAPIS-3	6/2/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	6/2/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	6/2/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	6/2/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	6/2/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	6/2/2017	MTBE	40	1	0.24	143	ug/L
NAPIS-3	6/2/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	6/2/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	9/5/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	9/5/2017	Acetone	3.9	10	0.82	14064	ug/L
NAPIS-3	9/5/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	9/5/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	9/5/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	9/5/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	9/5/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	9/5/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	9/5/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	9/5/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	9/5/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	9/5/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	9/5/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	9/5/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	9/5/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	9/5/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	9/5/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	9/5/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	9/5/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	9/5/2017	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	9/5/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	9/5/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	9/5/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	9/5/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	9/5/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	9/5/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	9/5/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	9/5/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	9/5/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	9/5/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	9/5/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	9/5/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	9/5/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	9/5/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	9/5/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	9/5/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	9/5/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	9/5/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	9/5/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	9/5/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	9/5/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	9/5/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	9/5/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	9/5/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	9/5/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	9/5/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	9/5/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	9/5/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	9/5/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	9/5/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	9/5/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	9/5/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	9/5/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	9/5/2017	MTBE	18	1	0.24	143	ug/L
NAPIS-3	9/5/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	9/5/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	12/4/2017	Acetone	2.9	10	0.82	14064	ug/L
NAPIS-3	12/4/2017	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	12/4/2017	Benzene	ND	1	0.062	5	ug/L
NAPIS-3	12/4/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	12/4/2017	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	12/4/2017	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	12/4/2017	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	12/4/2017	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	12/4/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	12/4/2017	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	12/4/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	12/4/2017	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	12/4/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	12/4/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	12/4/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	12/4/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	12/4/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	12/4/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	12/4/2017	2-Butanone	1.8	10	1.1	5565	ug/L
NAPIS-3	12/4/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	12/4/2017	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	12/4/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	12/4/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	12/4/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	12/4/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
NAPIS-3	12/4/2017	Naphthalene	ND	2	0.11	30	ug/L
NAPIS-3	12/4/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	12/4/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	12/4/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	12/4/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
NAPIS-3	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	12/4/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	12/4/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	12/4/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	12/4/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	12/4/2017	Ethylbenzene	ND	1	0.093	700	ug/L
NAPIS-3	12/4/2017	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	12/4/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	12/4/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	12/4/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	12/4/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	12/4/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	12/4/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	12/4/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	12/4/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	12/4/2017	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	12/4/2017	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	12/4/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	12/4/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	12/4/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	12/4/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	12/4/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	12/4/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	12/4/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	12/4/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	12/4/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	12/4/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	12/4/2017	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	12/4/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	12/4/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	12/4/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	12/4/2017	MTBE	42	1	0.24	143	ug/L
NAPIS-3	12/4/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	12/4/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	2/9/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	2/9/2018	Acetone	ND	10	0.82	14064	ug/L
NAPIS-3	2/9/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	2/9/2018	Benzene	0.16	1	0.062	5	ug/L
NAPIS-3	2/9/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	2/9/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	2/9/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	2/9/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	2/9/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	2/9/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	2/9/2018	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/9/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	2/9/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	2/9/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	2/9/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	2/9/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	2/9/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	2/9/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	2/9/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	2/9/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	2/9/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	2/9/2018	Trichloroethene	ND	1	0.11	5	ug/L
NAPIS-3	2/9/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	2/9/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	2/9/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	2/9/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
NAPIS-3	2/9/2018	Naphthalene	ND	2	0.11	30	ug/L
NAPIS-3	2/9/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	2/9/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	2/9/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	2/9/2018	1,2,4-Trimethylbenzene	0.16	1	0.11	56	ug/L
NAPIS-3	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	2/9/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	2/9/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	2/9/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
NAPIS-3	2/9/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	2/9/2018	Ethylbenzene	0.098	1	0.093	700	ug/L
NAPIS-3	2/9/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	2/9/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
NAPIS-3	2/9/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	2/9/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	2/9/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	2/9/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	2/9/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	2/9/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	2/9/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
NAPIS-3	2/9/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	2/9/2018	Toluene	ND	1	0.064	1000	ug/L
NAPIS-3	2/9/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	2/9/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	2/9/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	2/9/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	2/9/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
NAPIS-3	2/9/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	2/9/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	2/9/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	2/9/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	2/9/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	2/9/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	2/9/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	2/9/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	2/9/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
NAPIS-3	2/9/2018	MTBE	33	1	0.24	143	ug/L
NAPIS-3	2/9/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	2/9/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
NAPIS-3	4/30/2018	Acetone	3.2	10	0.82	14064	ug/L
NAPIS-3	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
NAPIS-3	4/30/2018	Benzene	**290**	10	0.62	5	ug/L
NAPIS-3	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
NAPIS-3	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
NAPIS-3	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
NAPIS-3	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
NAPIS-3	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
NAPIS-3	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
NAPIS-3	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
NAPIS-3	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
NAPIS-3	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
NAPIS-3	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
NAPIS-3	4/30/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
NAPIS-3	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
NAPIS-3	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
NAPIS-3	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
NAPIS-3	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
NAPIS-3	4/30/2018	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
NAPIS-3	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
NAPIS-3	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
NAPIS-3	4/30/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
NAPIS-3	4/30/2018	1-Methylnaphthalene	0.51	4	0.16	NA	ug/L
NAPIS-3	4/30/2018	Naphthalene	0.46	2	0.11	30	ug/L
NAPIS-3	4/30/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
NAPIS-3	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
NAPIS-3	4/30/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
NAPIS-3	4/30/2018	1,2,4-Trimethylbenzene	1.9	1	0.11	56	ug/L
NAPIS-3	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
NAPIS-3	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
NAPIS-3	4/30/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
NAPIS-3	4/30/2018	Isopropylbenzene	0.78	1	0.051	447	ug/L
NAPIS-3	4/30/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
NAPIS-3	4/30/2018	Ethylbenzene	8.3	1	0.093	700	ug/L
NAPIS-3	4/30/2018	Styrene	ND	1	0.16	100	ug/L
NAPIS-3	4/30/2018	n-Propylbenzene	0.37	1	0.074	660	ug/L
NAPIS-3	4/30/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
NAPIS-3	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
NAPIS-3	4/30/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
NAPIS-3	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
NAPIS-3	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
NAPIS-3	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
NAPIS-3	4/30/2018	1,3,5-Trimethylbenzene	0.68	1	0.087	60	ug/L
NAPIS-3	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
NAPIS-3	4/30/2018	Toluene	6.6	1	0.064	1000	ug/L
NAPIS-3	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
NAPIS-3	4/30/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
NAPIS-3	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
NAPIS-3	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
NAPIS-3	4/30/2018	sec-Butylbenzene	0.21	1	0.11	2000	ug/L
NAPIS-3	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
NAPIS-3	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
NAPIS-3	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
NAPIS-3	4/30/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
NAPIS-3	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
NAPIS-3	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
NAPIS-3	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
NAPIS-3	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
NAPIS-3	4/30/2018	Xylenes, Total	13	1.5	0.32	620	ug/L
NAPIS-3	4/30/2018	MTBE	32	1	0.24	143	ug/L
NAPIS-3	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
NAPIS-3	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
NAPIS-3	4/9/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	4/9/2019	Ethylbenzene	0.76	1	0.132341	700	ug/L
NAPIS-3	4/9/2019	MTBE	40	1	0.456095	143	ug/L
NAPIS-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	4/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	4/9/2019	Benzene	3.3	1	0.166639	5	ug/L
NAPIS-3	4/9/2019	Ethylbenzene	1.2	1	0.132341	700	ug/L
NAPIS-3	4/9/2019	MTBE	39	1	0.456095	143	ug/L
NAPIS-3	4/9/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	4/9/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	4/9/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
NAPIS-3	4/9/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
NAPIS-3	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	5/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	5/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-3	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-3	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
NAPIS-3	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	5/28/2019	Acetone	11	10	1.199396	14064	ug/L
NAPIS-3	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-3	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	5/28/2019	MTBE	31	1	0.456095	143	ug/L
NAPIS-3	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	5/28/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
NAPIS-3	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
NAPIS-3	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
NAPIS-3	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	8/22/2019	1-Methylnaphthalene	1.1	4	0.314954	NA	ug/L
NAPIS-3	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	8/22/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
NAPIS-3	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	8/22/2019	Acetone	2.4	10	1.199396	14064	ug/L
NAPIS-3	8/22/2019	Benzene	0.54	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
NAPIS-3	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	8/22/2019	MTBE	30	1	0.456095	143	ug/L
NAPIS-3	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
NAPIS-3	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
NAPIS-3	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
NAPIS-3	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
NAPIS-3	10/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
NAPIS-3	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
NAPIS-3	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
NAPIS-3	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
NAPIS-3	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
NAPIS-3	10/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
NAPIS-3	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
NAPIS-3	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
NAPIS-3	10/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
NAPIS-3	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
NAPIS-3	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
NAPIS-3	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
NAPIS-3	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
NAPIS-3	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
NAPIS-3	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
NAPIS-3	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
NAPIS-3	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
NAPIS-3	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
NAPIS-3	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
NAPIS-3	10/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
NAPIS-3	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
NAPIS-3	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
NAPIS-3	10/21/2019	Benzene	ND	1	0.166639	5	ug/L
NAPIS-3	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
NAPIS-3	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
NAPIS-3	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
NAPIS-3	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
NAPIS-3	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
NAPIS-3	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
NAPIS-3	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
NAPIS-3	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
NAPIS-3	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
NAPIS-3	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
NAPIS-3	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
NAPIS-3	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
NAPIS-3	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
NAPIS-3	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
NAPIS-3	10/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
NAPIS-3	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
NAPIS-3	10/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
NAPIS-3	10/21/2019	MTBE	28	1	0.456095	143	ug/L
NAPIS-3	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
NAPIS-3	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
NAPIS-3	10/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
NAPIS-3	10/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
NAPIS-3	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
NAPIS-3	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
NAPIS-3	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
NAPIS-3	10/21/2019	Toluene	ND	1	0.350436	1000	ug/L
NAPIS-3	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
NAPIS-3	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
NAPIS-3	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
NAPIS-3	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
NAPIS-3	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
NAPIS-3	10/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
NAPIS-3	10/21/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
NAPIS-3	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-3	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-3	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-3	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-3	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-3	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-3	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-3	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-3	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-3	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-3	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-3	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-3	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-3	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-3	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-3	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
NAPIS-3	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-3	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-3	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
NAPIS-3	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-3	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-3	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	3/4/2020	Acetone	2.6	10	2.3	14064	ug/L
NAPIS-3	3/4/2020	Benzene	4.7	1	0.23	5	ug/L
NAPIS-3	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-3	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-3	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-3	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-3	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-3	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-3	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-3	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-3	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-3	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-3	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-3	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
NAPIS-3	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-3	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-3	3/4/2020	Ethylbenzene	3	1	0.21	700	ug/L
NAPIS-3	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-3	3/4/2020	Isopropylbenzene	0.37	1	0.18	447	ug/L
NAPIS-3	3/4/2020	MTBE	48	1	0.39	143	ug/L
NAPIS-3	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-3	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
NAPIS-3	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
NAPIS-3	3/4/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-3	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
NAPIS-3	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-3	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
NAPIS-3	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-3	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-3	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-3	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-3	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
NAPIS-3	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-3	3/4/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
NAPIS-3	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
NAPIS-3	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
NAPIS-3	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
NAPIS-3	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
NAPIS-3	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
NAPIS-3	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
NAPIS-3	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
NAPIS-3	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
NAPIS-3	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
NAPIS-3	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
NAPIS-3	9/22/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
NAPIS-3	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
NAPIS-3	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
NAPIS-3	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
NAPIS-3	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
NAPIS-3	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
NAPIS-3	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
NAPIS-3	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
NAPIS-3	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
NAPIS-3	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
NAPIS-3	9/22/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
NAPIS-3	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
NAPIS-3	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
NAPIS-3	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
NAPIS-3	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
NAPIS-3	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
NAPIS-3	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
NAPIS-3	9/22/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
NAPIS-3	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
NAPIS-3	9/22/2020	Acetone	3.4	10	2.3	14064	ug/L
NAPIS-3	9/22/2020	Benzene	1.4	1	0.23	5	ug/L
NAPIS-3	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
NAPIS-3	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
NAPIS-3	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
NAPIS-3	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
NAPIS-3	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
NAPIS-3	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
NAPIS-3	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
NAPIS-3	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
NAPIS-3	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
NAPIS-3	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
NAPIS-3	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
NAPIS-3	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
NAPIS-3	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
NAPIS-3	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
NAPIS-3	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
NAPIS-3	9/22/2020	Ethylbenzene	4.6	1	0.21	700	ug/L
NAPIS-3	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
NAPIS-3	9/22/2020	Isopropylbenzene	0.53	1	0.18	447	ug/L
NAPIS-3	9/22/2020	MTBE	59	1	0.39	143	ug/L
NAPIS-3	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
NAPIS-3	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
NAPIS-3	9/22/2020	n-Propylbenzene	0.21	1	0.18	660	ug/L
NAPIS-3	9/22/2020	Naphthalene	0.5	2	0.28	30	ug/L
NAPIS-3	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
NAPIS-3	9/22/2020	Styrene	ND	1	0.13	100	ug/L
NAPIS-3	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
NAPIS-3	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
NAPIS-3	9/22/2020	Toluene	ND	1	0.2	1000	ug/L
NAPIS-3	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
NAPIS-3	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
NAPIS-3	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
NAPIS-3	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
NAPIS-3	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/22/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
NAPIS-3	9/22/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
NAPIS-3	12/17/2020	Acetone	ND	25	10	14064	ug/L
NAPIS-3	12/17/2020	Benzene	**42.8**	1	0.38	5	ug/L
NAPIS-3	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
NAPIS-3	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
NAPIS-3	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
NAPIS-3	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
NAPIS-3	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
NAPIS-3	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
NAPIS-3	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
NAPIS-3	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
NAPIS-3	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
NAPIS-3	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
NAPIS-3	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
NAPIS-3	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
NAPIS-3	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
NAPIS-3	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
NAPIS-3	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
NAPIS-3	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
NAPIS-3	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
NAPIS-3	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
NAPIS-3	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
NAPIS-3	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
NAPIS-3	12/17/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
NAPIS-3	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
NAPIS-3	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
NAPIS-3	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
NAPIS-3	12/17/2020	Ethylbenzene	4.13	1	0.5	700	ug/L
NAPIS-3	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
NAPIS-3	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
NAPIS-3	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
NAPIS-3	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
NAPIS-3	12/17/2020	1-Methylnaphthalene	6.95	5	4.2	NA	ug/L
NAPIS-3	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
NAPIS-3	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
NAPIS-3	12/17/2020	MTBE	41.9	1	0.74	143	ug/L
NAPIS-3	12/17/2020	Naphthalene	4.11	1	1	30	ug/L
NAPIS-3	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
NAPIS-3	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
NAPIS-3	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
NAPIS-3	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
NAPIS-3	12/17/2020	Styrene	ND	1	1	100	ug/L
NAPIS-3	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
NAPIS-3	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
NAPIS-3	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
NAPIS-3	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
NAPIS-3	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
NAPIS-3	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
NAPIS-3	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
NAPIS-3	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
NAPIS-3	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
NAPIS-3	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
NAPIS-3	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
NAPIS-3	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
NAPIS-3	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
NAPIS-3	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
NAPIS-3	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
NAPIS-3	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
NAPIS-3	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
NAPIS-3	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
NAPIS-3	12/17/2020	1,2-Dibromoethane	ND	0.0203	0.00509	0.05	ug/L
OAPIS-1	3/18/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OAPIS-1	3/18/2013	Acetone	ND	50	12	14064	ug/L
OAPIS-1	3/18/2013	Chloroform	ND	5	2.3	100	ug/L
OAPIS-1	3/18/2013	Benzene	**27**	5	2.6	5	ug/L
OAPIS-1	3/18/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OAPIS-1	3/18/2013	Bromomethane	*ND*	*15*	4.2	7.54	ug/L
OAPIS-1	3/18/2013	Chloromethane	ND	15	1.9	20.32	ug/L
OAPIS-1	3/18/2013	Dibromomethane	ND	5	2.6	8	ug/L
OAPIS-1	3/18/2013	Chloroethane	ND	10	2.9	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/18/2013	Vinyl Chloride	*ND*	*5*	1.7	2	ug/L
OAPIS-1	3/18/2013	Methylene Chloride	*ND*	*15*	2.1	5	ug/L
OAPIS-1	3/18/2013	Carbon Disulfide	ND	50	4	810	ug/L
OAPIS-1	3/18/2013	Bromoform	ND	5	2.2	32.9	ug/L
OAPIS-1	3/18/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OAPIS-1	3/18/2013	1,1-Dichloroethane	ND	5	2.4	25	ug/L
OAPIS-1	3/18/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OAPIS-1	3/18/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OAPIS-1	3/18/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OAPIS-1	3/18/2013	1,2-Dichloropropane	ND	5	2.7	5	ug/L
OAPIS-1	3/18/2013	2-Butanone	ND	50	5	5565	ug/L
OAPIS-1	3/18/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OAPIS-1	3/18/2013	Trichloroethene	ND	5	2.1	5	ug/L
OAPIS-1	3/18/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OAPIS-1	3/18/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OAPIS-1	3/18/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OAPIS-1	3/18/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OAPIS-1	3/18/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.6	0.0033	ug/L
OAPIS-1	3/18/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OAPIS-1	3/18/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OAPIS-1	3/18/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OAPIS-1	3/18/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OAPIS-1	3/18/2013	Ethylbenzene	ND	5	2.2	700	ug/L
OAPIS-1	3/18/2013	Styrene	ND	5	28	100	ug/L
OAPIS-1	3/18/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OAPIS-1	3/18/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OAPIS-1	3/18/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OAPIS-1	3/18/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OAPIS-1	3/18/2013	1,2-Dichloroethane	ND	5	1.9	5	ug/L
OAPIS-1	3/18/2013	4-Methyl-2-Pentanone	ND	50	4.5	1243	ug/L
OAPIS-1	3/18/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OAPIS-1	3/18/2013	Bromobenzene	ND	5	2.9	62	ug/L
OAPIS-1	3/18/2013	Toluene	ND	5	2.2	1000	ug/L
OAPIS-1	3/18/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OAPIS-1	3/18/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OAPIS-1	3/18/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OAPIS-1	3/18/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OAPIS-1	3/18/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OAPIS-1	3/18/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OAPIS-1	3/18/2013	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
OAPIS-1	3/18/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	3/18/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OAPIS-1	3/18/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OAPIS-1	3/18/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OAPIS-1	3/18/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OAPIS-1	3/18/2013	MTBE	**420**	5	3.8	143	ug/L
OAPIS-1	3/18/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OAPIS-1	3/18/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	6/12/2013	Carbon tetrachloride	ND	2	0.92	5	ug/L
OAPIS-1	6/12/2013	Acetone	ND	20	3.4	14064	ug/L
OAPIS-1	6/12/2013	Chloroform	ND	2	0.94	100	ug/L
OAPIS-1	6/12/2013	Benzene	**71**	2	0.92	5	ug/L
OAPIS-1	6/12/2013	1,1,1-Trichloroethane	ND	2	0.8	200	ug/L
OAPIS-1	6/12/2013	Bromomethane	ND	6	0.99	7.54	ug/L
OAPIS-1	6/12/2013	Chloromethane	ND	6	0.74	20.32	ug/L
OAPIS-1	6/12/2013	Dibromomethane	ND	2	1	8	ug/L
OAPIS-1	6/12/2013	Chloroethane	ND	4	0.61	20857	ug/L
OAPIS-1	6/12/2013	Vinyl Chloride	ND	2	0.61	2	ug/L
OAPIS-1	6/12/2013	Methylene Chloride	*ND*	*6*	0.7	5	ug/L
OAPIS-1	6/12/2013	Carbon Disulfide	ND	20	1.6	810	ug/L
OAPIS-1	6/12/2013	Bromoform	ND	2	0.74	32.9	ug/L
OAPIS-1	6/12/2013	Bromodichloromethane	*ND*	*2*	0.97	1.34	ug/L
OAPIS-1	6/12/2013	1,1-Dichloroethane	ND	2	0.67	25	ug/L
OAPIS-1	6/12/2013	1,1-Dichloroethene	ND	2	0.95	7	ug/L
OAPIS-1	6/12/2013	Trichlorofluoromethane	ND	2	0.94	1137	ug/L
OAPIS-1	6/12/2013	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OAPIS-1	6/12/2013	1,2-Dichloropropane	ND	2	0.66	5	ug/L
OAPIS-1	6/12/2013	2-Butanone	ND	20	2	5565	ug/L
OAPIS-1	6/12/2013	1,1,2-Trichloroethane	ND	2	0.83	5	ug/L
OAPIS-1	6/12/2013	Trichloroethene	ND	2	0.85	5	ug/L
OAPIS-1	6/12/2013	1,1,2,2-Tetrachloroethane	ND	4	1	10	ug/L
OAPIS-1	6/12/2013	1,2,3-Trichlorobenzene	ND	2	0.85	70	ug/L
OAPIS-1	6/12/2013	2-Chlorotoluene	ND	2	1	233	ug/L
OAPIS-1	6/12/2013	1,2,4-Trimethylbenzene	2	2	1	56	ug/L
OAPIS-1	6/12/2013	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.71	0.0033	ug/L
OAPIS-1	6/12/2013	1,2,3-Trichloropropane	*ND*	*4*	0.8	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/12/2013	tert-Butylbenzene	ND	2	1	690	ug/L
OAPIS-1	6/12/2013	Isopropylbenzene	2.2	2	1	447	ug/L
OAPIS-1	6/12/2013	p-Isopropyltoluene	ND	2	0.91	NA	ug/L
OAPIS-1	6/12/2013	Ethylbenzene	10	2	0.89	700	ug/L
OAPIS-1	6/12/2013	Styrene	ND	2	1.2	100	ug/L
OAPIS-1	6/12/2013	n-Propylbenzene	2.3	2	0.82	660	ug/L
OAPIS-1	6/12/2013	n-Butylbenzene	ND	6	0.82	1000	ug/L
OAPIS-1	6/12/2013	4-Chlorotoluene	ND	2	0.87	250	ug/L
OAPIS-1	6/12/2013	1,2-Dibromoethane	*ND*	*2*	0.9	0.05	ug/L
OAPIS-1	6/12/2013	1,2-Dichloroethane	ND	2	0.65	5	ug/L
OAPIS-1	6/12/2013	4-Methyl-2-Pentanone	ND	20	1.3	1243	ug/L
OAPIS-1	6/12/2013	1,3,5-Trimethylbenzene	ND	2	0.8	60	ug/L
OAPIS-1	6/12/2013	Bromobenzene	ND	2	1.1	62	ug/L
OAPIS-1	6/12/2013	Toluene	ND	2	0.88	1000	ug/L
OAPIS-1	6/12/2013	Chlorobenzene	ND	2	0.97	77.6	ug/L
OAPIS-1	6/12/2013	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OAPIS-1	6/12/2013	Tetrachloroethene	ND	2	0.98	5	ug/L
OAPIS-1	6/12/2013	sec-Butylbenzene	ND	2	0.86	2000	ug/L
OAPIS-1	6/12/2013	1,3-Dichloropropane	ND	2	0.86	370	ug/L
OAPIS-1	6/12/2013	cis-1,2-Dichloroethene	ND	2	0.94	70	ug/L
OAPIS-1	6/12/2013	trans-1,2-Dichloroethene	ND	2	0.96	100	ug/L
OAPIS-1	6/12/2013	1,1-Dichloropropene	ND	2	0.87	NA	ug/L
OAPIS-1	6/12/2013	2-Hexanone	ND	20	2.5	38	ug/L
OAPIS-1	6/12/2013	2,2-Dichloropropane	ND	4	1.6	NA	ug/L
OAPIS-1	6/12/2013	1,1,1,2-Tetrachloroethane	ND	2	1.1	5.74	ug/L
OAPIS-1	6/12/2013	Xylenes, Total	3.3	3	2.9	620	ug/L
OAPIS-1	6/12/2013	MTBE	**510**	10	7.7	143	ug/L
OAPIS-1	6/12/2013	cis-1,3-Dichloropropene	ND	2	0.91	NA	ug/L
OAPIS-1	6/12/2013	trans-1,3-Dichloropropene	ND	2	0.89	NA	ug/L
OAPIS-1	9/3/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OAPIS-1	9/3/2013	Acetone	ND	50	8.6	14064	ug/L
OAPIS-1	9/3/2013	Chloroform	ND	5	2.3	100	ug/L
OAPIS-1	9/3/2013	Benzene	**81**	5	2.3	5	ug/L
OAPIS-1	9/3/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OAPIS-1	9/3/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OAPIS-1	9/3/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OAPIS-1	9/3/2013	Dibromomethane	ND	5	2.6	8	ug/L
OAPIS-1	9/3/2013	Chloroethane	ND	10	1.5	20857	ug/L
OAPIS-1	9/3/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OAPIS-1	9/3/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	9/3/2013	Carbon Disulfide	ND	50	4	810	ug/L
OAPIS-1	9/3/2013	Bromoform	ND	5	1.9	32.9	ug/L
OAPIS-1	9/3/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OAPIS-1	9/3/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OAPIS-1	9/3/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OAPIS-1	9/3/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OAPIS-1	9/3/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OAPIS-1	9/3/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OAPIS-1	9/3/2013	2-Butanone	ND	50	5	5565	ug/L
OAPIS-1	9/3/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OAPIS-1	9/3/2013	Trichloroethene	ND	5	2.1	5	ug/L
OAPIS-1	9/3/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OAPIS-1	9/3/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OAPIS-1	9/3/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OAPIS-1	9/3/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OAPIS-1	9/3/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OAPIS-1	9/3/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OAPIS-1	9/3/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OAPIS-1	9/3/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OAPIS-1	9/3/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OAPIS-1	9/3/2013	Ethylbenzene	12	5	2.2	700	ug/L
OAPIS-1	9/3/2013	Styrene	ND	5	2.9	100	ug/L
OAPIS-1	9/3/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OAPIS-1	9/3/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OAPIS-1	9/3/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OAPIS-1	9/3/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OAPIS-1	9/3/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OAPIS-1	9/3/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OAPIS-1	9/3/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OAPIS-1	9/3/2013	Bromobenzene	ND	5	2.9	62	ug/L
OAPIS-1	9/3/2013	Toluene	ND	5	2.2	1000	ug/L
OAPIS-1	9/3/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OAPIS-1	9/3/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OAPIS-1	9/3/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OAPIS-1	9/3/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OAPIS-1	9/3/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/3/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OAPIS-1	9/3/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OAPIS-1	9/3/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	9/3/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OAPIS-1	9/3/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OAPIS-1	9/3/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OAPIS-1	9/3/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OAPIS-1	9/3/2013	MTBE	**420**	5	3.8	143	ug/L
OAPIS-1	9/3/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OAPIS-1	9/3/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OAPIS-1	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OAPIS-1	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OAPIS-1	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OAPIS-1	11/11/2013	Benzene	**89**	1	0.46	5	ug/L
OAPIS-1	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OAPIS-1	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OAPIS-1	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OAPIS-1	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OAPIS-1	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OAPIS-1	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OAPIS-1	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OAPIS-1	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OAPIS-1	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OAPIS-1	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OAPIS-1	11/11/2013	1,1-Dichloroethane	1.1	1	0.33	25	ug/L
OAPIS-1	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OAPIS-1	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OAPIS-1	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OAPIS-1	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OAPIS-1	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OAPIS-1	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OAPIS-1	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OAPIS-1	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OAPIS-1	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OAPIS-1	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OAPIS-1	11/11/2013	1,2,4-Trimethylbenzene	1.6	1	0.51	56	ug/L
OAPIS-1	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OAPIS-1	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OAPIS-1	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OAPIS-1	11/11/2013	Isopropylbenzene	2.5	1	0.52	447	ug/L
OAPIS-1	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OAPIS-1	11/11/2013	Ethylbenzene	10	1	0.45	700	ug/L
OAPIS-1	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OAPIS-1	11/11/2013	n-Propylbenzene	2.5	1	0.41	660	ug/L
OAPIS-1	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OAPIS-1	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OAPIS-1	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OAPIS-1	11/11/2013	1,2-Dichloroethane	1	1	0.33	5	ug/L
OAPIS-1	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OAPIS-1	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OAPIS-1	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OAPIS-1	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OAPIS-1	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OAPIS-1	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OAPIS-1	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OAPIS-1	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OAPIS-1	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OAPIS-1	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OAPIS-1	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OAPIS-1	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OAPIS-1	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OAPIS-1	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OAPIS-1	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OAPIS-1	11/11/2013	Xylenes, Total	2.9	1.5	1.4	620	ug/L
OAPIS-1	11/11/2013	MTBE	**430**	10	7.7	143	ug/L
OAPIS-1	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OAPIS-1	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OAPIS-1	3/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OAPIS-1	3/10/2014	Acetone	16	10	4.9	14064	ug/L
OAPIS-1	3/10/2014	Chloroform	ND	1	0.32	100	ug/L
OAPIS-1	3/10/2014	Benzene	**70**	1	0.15	5	ug/L
OAPIS-1	3/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OAPIS-1	3/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OAPIS-1	3/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OAPIS-1	3/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OAPIS-1	3/10/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OAPIS-1	3/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OAPIS-1	3/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OAPIS-1	3/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OAPIS-1	3/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OAPIS-1	3/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OAPIS-1	3/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OAPIS-1	3/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OAPIS-1	3/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OAPIS-1	3/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OAPIS-1	3/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OAPIS-1	3/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OAPIS-1	3/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OAPIS-1	3/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OAPIS-1	3/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OAPIS-1	3/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	3/10/2014	1,2,4-Trimethylbenzene	2.5	1	0.12	56	ug/L
OAPIS-1	3/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OAPIS-1	3/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OAPIS-1	3/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OAPIS-1	3/10/2014	Isopropylbenzene	1.5	1	0.16	447	ug/L
OAPIS-1	3/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OAPIS-1	3/10/2014	Ethylbenzene	6.8	1	0.13	700	ug/L
OAPIS-1	3/10/2014	Styrene	ND	1	0.12	100	ug/L
OAPIS-1	3/10/2014	n-Propylbenzene	1.6	1	0.14	660	ug/L
OAPIS-1	3/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OAPIS-1	3/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OAPIS-1	3/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OAPIS-1	3/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OAPIS-1	3/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	3/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OAPIS-1	3/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OAPIS-1	3/10/2014	Toluene	ND	1	0.17	1000	ug/L
OAPIS-1	3/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	3/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OAPIS-1	3/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OAPIS-1	3/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OAPIS-1	3/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	3/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	3/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OAPIS-1	3/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OAPIS-1	3/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OAPIS-1	3/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OAPIS-1	3/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OAPIS-1	3/10/2014	Xylenes, Total	3.3	1.5	0.38	620	ug/L
OAPIS-1	3/10/2014	MTBE	**450**	10	2.5	143	ug/L
OAPIS-1	3/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OAPIS-1	3/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	6/5/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
OAPIS-1	6/5/2014	Acetone	ND	20	9.9	14064	ug/L
OAPIS-1	6/5/2014	Chloroform	ND	2	0.63	100	ug/L
OAPIS-1	6/5/2014	Benzene	**96**	2	0.31	5	ug/L
OAPIS-1	6/5/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
OAPIS-1	6/5/2014	Bromomethane	ND	6	0.83	7.54	ug/L
OAPIS-1	6/5/2014	Chloromethane	ND	6	1	20.32	ug/L
OAPIS-1	6/5/2014	Dibromomethane	ND	2	0.38	8	ug/L
OAPIS-1	6/5/2014	Chloroethane	ND	4	0.95	20857	ug/L
OAPIS-1	6/5/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
OAPIS-1	6/5/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
OAPIS-1	6/5/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
OAPIS-1	6/5/2014	Bromoform	ND	2	0.5	32.9	ug/L
OAPIS-1	6/5/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
OAPIS-1	6/5/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
OAPIS-1	6/5/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
OAPIS-1	6/5/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OAPIS-1	6/5/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
OAPIS-1	6/5/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
OAPIS-1	6/5/2014	2-Butanone	ND	20	2.8	5565	ug/L
OAPIS-1	6/5/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OAPIS-1	6/5/2014	Trichloroethene	ND	2	0.39	5	ug/L
OAPIS-1	6/5/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
OAPIS-1	6/5/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
OAPIS-1	6/5/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
OAPIS-1	6/5/2014	1,2,4-Trimethylbenzene	6.6	2	0.25	56	ug/L
OAPIS-1	6/5/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
OAPIS-1	6/5/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
OAPIS-1	6/5/2014	Isopropylbenzene	2.2	2	0.32	447	ug/L
OAPIS-1	6/5/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
OAPIS-1	6/5/2014	Ethylbenzene	10	2	0.25	700	ug/L
OAPIS-1	6/5/2014	Styrene	ND	2	0.23	100	ug/L
OAPIS-1	6/5/2014	n-Propylbenzene	2.3	2	0.28	660	ug/L
OAPIS-1	6/5/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
OAPIS-1	6/5/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
OAPIS-1	6/5/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
OAPIS-1	6/5/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
OAPIS-1	6/5/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
OAPIS-1	6/5/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
OAPIS-1	6/5/2014	Bromobenzene	ND	2	0.36	62	ug/L
OAPIS-1	6/5/2014	Toluene	ND	2	0.34	1000	ug/L
OAPIS-1	6/5/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
OAPIS-1	6/5/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
OAPIS-1	6/5/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
OAPIS-1	6/5/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
OAPIS-1	6/5/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
OAPIS-1	6/5/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
OAPIS-1	6/5/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
OAPIS-1	6/5/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
OAPIS-1	6/5/2014	2-Hexanone	ND	20	1.7	38	ug/L
OAPIS-1	6/5/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
OAPIS-1	6/5/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
OAPIS-1	6/5/2014	Xylenes, Total	4.9	3	0.75	620	ug/L
OAPIS-1	6/5/2014	MTBE	**360**	2	0.5	143	ug/L
OAPIS-1	6/5/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
OAPIS-1	6/5/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
OAPIS-1	9/12/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OAPIS-1	9/12/2014	Acetone	ND	50	25	14064	ug/L
OAPIS-1	9/12/2014	Chloroform	ND	5	1.6	100	ug/L
OAPIS-1	9/12/2014	Benzene	**120**	5	0.77	5	ug/L
OAPIS-1	9/12/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OAPIS-1	9/12/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OAPIS-1	9/12/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OAPIS-1	9/12/2014	Dibromomethane	ND	5	0.94	8	ug/L
OAPIS-1	9/12/2014	Chloroethane	ND	10	2.4	20857	ug/L
OAPIS-1	9/12/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OAPIS-1	9/12/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OAPIS-1	9/12/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OAPIS-1	9/12/2014	Bromoform	ND	5	1.3	32.9	ug/L
OAPIS-1	9/12/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OAPIS-1	9/12/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OAPIS-1	9/12/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OAPIS-1	9/12/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	9/12/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OAPIS-1	9/12/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OAPIS-1	9/12/2014	2-Butanone	ND	50	7.1	5565	ug/L
OAPIS-1	9/12/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OAPIS-1	9/12/2014	Trichloroethene	ND	5	0.97	5	ug/L
OAPIS-1	9/12/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OAPIS-1	9/12/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OAPIS-1	9/12/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OAPIS-1	9/12/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OAPIS-1	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OAPIS-1	9/12/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OAPIS-1	9/12/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OAPIS-1	9/12/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OAPIS-1	9/12/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OAPIS-1	9/12/2014	Ethylbenzene	13	5	0.64	700	ug/L
OAPIS-1	9/12/2014	Styrene	ND	5	0.58	100	ug/L
OAPIS-1	9/12/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OAPIS-1	9/12/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OAPIS-1	9/12/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OAPIS-1	9/12/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OAPIS-1	9/12/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OAPIS-1	9/12/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OAPIS-1	9/12/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OAPIS-1	9/12/2014	Bromobenzene	ND	5	0.91	62	ug/L
OAPIS-1	9/12/2014	Toluene	ND	5	0.85	1000	ug/L
OAPIS-1	9/12/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OAPIS-1	9/12/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OAPIS-1	9/12/2014	Tetrachloroethene	ND	5	1	5	ug/L
OAPIS-1	9/12/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OAPIS-1	9/12/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/12/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OAPIS-1	9/12/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OAPIS-1	9/12/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	9/12/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OAPIS-1	9/12/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OAPIS-1	9/12/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OAPIS-1	9/12/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OAPIS-1	9/12/2014	MTBE	**320**	5	1.3	143	ug/L
OAPIS-1	9/12/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OAPIS-1	9/12/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OAPIS-1	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OAPIS-1	11/11/2014	Acetone	ND	50	25	14064	ug/L
OAPIS-1	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OAPIS-1	11/11/2014	Benzene	**150**	5	0.77	5	ug/L
OAPIS-1	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OAPIS-1	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OAPIS-1	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OAPIS-1	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OAPIS-1	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OAPIS-1	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OAPIS-1	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OAPIS-1	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OAPIS-1	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OAPIS-1	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OAPIS-1	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OAPIS-1	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OAPIS-1	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OAPIS-1	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OAPIS-1	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OAPIS-1	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OAPIS-1	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OAPIS-1	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OAPIS-1	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OAPIS-1	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OAPIS-1	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OAPIS-1	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OAPIS-1	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OAPIS-1	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OAPIS-1	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OAPIS-1	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OAPIS-1	11/11/2014	Ethylbenzene	10	5	0.64	700	ug/L
OAPIS-1	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OAPIS-1	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OAPIS-1	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OAPIS-1	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OAPIS-1	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OAPIS-1	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OAPIS-1	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OAPIS-1	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OAPIS-1	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OAPIS-1	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OAPIS-1	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OAPIS-1	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OAPIS-1	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OAPIS-1	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OAPIS-1	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OAPIS-1	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OAPIS-1	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OAPIS-1	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OAPIS-1	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OAPIS-1	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OAPIS-1	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OAPIS-1	11/11/2014	MTBE	**400**	5	1.3	143	ug/L
OAPIS-1	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OAPIS-1	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OAPIS-1	3/10/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OAPIS-1	3/10/2015	Acetone	ND	50	4.7	14064	ug/L
OAPIS-1	3/10/2015	Chloroform	ND	5	1.1	100	ug/L
OAPIS-1	3/10/2015	Benzene	**65**	5	0.33	5	ug/L
OAPIS-1	3/10/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OAPIS-1	3/10/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OAPIS-1	3/10/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OAPIS-1	3/10/2015	Dibromomethane	ND	5	1.2	8	ug/L
OAPIS-1	3/10/2015	Chloroethane	ND	10	0.52	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OAPIS-1	3/10/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	3/10/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OAPIS-1	3/10/2015	Bromoform	ND	5	0.81	32.9	ug/L
OAPIS-1	3/10/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OAPIS-1	3/10/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	3/10/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OAPIS-1	3/10/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	3/10/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OAPIS-1	3/10/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OAPIS-1	3/10/2015	2-Butanone	ND	50	1.8	5565	ug/L
OAPIS-1	3/10/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OAPIS-1	3/10/2015	Trichloroethene	ND	5	0.82	5	ug/L
OAPIS-1	3/10/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OAPIS-1	3/10/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OAPIS-1	3/10/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OAPIS-1	3/10/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OAPIS-1	3/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OAPIS-1	3/10/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OAPIS-1	3/10/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OAPIS-1	3/10/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OAPIS-1	3/10/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OAPIS-1	3/10/2015	Ethylbenzene	5.4	5	0.51	700	ug/L
OAPIS-1	3/10/2015	Styrene	ND	5	0.53	100	ug/L
OAPIS-1	3/10/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OAPIS-1	3/10/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OAPIS-1	3/10/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OAPIS-1	3/10/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OAPIS-1	3/10/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OAPIS-1	3/10/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OAPIS-1	3/10/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OAPIS-1	3/10/2015	Bromobenzene	ND	5	0.54	62	ug/L
OAPIS-1	3/10/2015	Toluene	ND	5	0.54	1000	ug/L
OAPIS-1	3/10/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OAPIS-1	3/10/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OAPIS-1	3/10/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OAPIS-1	3/10/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OAPIS-1	3/10/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OAPIS-1	3/10/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OAPIS-1	3/10/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OAPIS-1	3/10/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OAPIS-1	3/10/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OAPIS-1	3/10/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OAPIS-1	3/10/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OAPIS-1	3/10/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OAPIS-1	3/10/2015	MTBE	**290**	5	0.87	143	ug/L
OAPIS-1	3/10/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	3/10/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OAPIS-1	6/2/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OAPIS-1	6/2/2015	Acetone	28	10	0.94	14064	ug/L
OAPIS-1	6/2/2015	Chloroform	ND	1	0.21	100	ug/L
OAPIS-1	6/2/2015	Benzene	**90**	1	0.065	5	ug/L
OAPIS-1	6/2/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OAPIS-1	6/2/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OAPIS-1	6/2/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OAPIS-1	6/2/2015	Dibromomethane	ND	1	0.23	8	ug/L
OAPIS-1	6/2/2015	Chloroethane	ND	2	0.1	20857	ug/L
OAPIS-1	6/2/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OAPIS-1	6/2/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OAPIS-1	6/2/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OAPIS-1	6/2/2015	Bromoform	ND	1	0.16	32.9	ug/L
OAPIS-1	6/2/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OAPIS-1	6/2/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OAPIS-1	6/2/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OAPIS-1	6/2/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OAPIS-1	6/2/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OAPIS-1	6/2/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OAPIS-1	6/2/2015	2-Butanone	ND	10	0.36	5565	ug/L
OAPIS-1	6/2/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OAPIS-1	6/2/2015	Trichloroethene	ND	1	0.16	5	ug/L
OAPIS-1	6/2/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OAPIS-1	6/2/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OAPIS-1	6/2/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OAPIS-1	6/2/2015	1,2,4-Trimethylbenzene	5.1	1	0.16	56	ug/L
OAPIS-1	6/2/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OAPIS-1	6/2/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/2/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OAPIS-1	6/2/2015	Isopropylbenzene	1.4	1	0.15	447	ug/L
OAPIS-1	6/2/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OAPIS-1	6/2/2015	Ethylbenzene	9	1	0.1	700	ug/L
OAPIS-1	6/2/2015	Styrene	ND	1	0.11	100	ug/L
OAPIS-1	6/2/2015	n-Propylbenzene	1.8	1	0.16	660	ug/L
OAPIS-1	6/2/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	6/2/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OAPIS-1	6/2/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OAPIS-1	6/2/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OAPIS-1	6/2/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OAPIS-1	6/2/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OAPIS-1	6/2/2015	Bromobenzene	ND	1	0.11	62	ug/L
OAPIS-1	6/2/2015	Toluene	ND	1	0.11	1000	ug/L
OAPIS-1	6/2/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OAPIS-1	6/2/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OAPIS-1	6/2/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OAPIS-1	6/2/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OAPIS-1	6/2/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OAPIS-1	6/2/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OAPIS-1	6/2/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OAPIS-1	6/2/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OAPIS-1	6/2/2015	2-Hexanone	ND	10	0.48	38	ug/L
OAPIS-1	6/2/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OAPIS-1	6/2/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	6/2/2015	Xylenes, Total	4.3	1.5	0.28	620	ug/L
OAPIS-1	6/2/2015	MTBE	**280**	10	1.7	143	ug/L
OAPIS-1	6/2/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	6/2/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OAPIS-1	8/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OAPIS-1	8/11/2015	Acetone	ND	50	4.7	14064	ug/L
OAPIS-1	8/11/2015	Chloroform	ND	5	1.1	100	ug/L
OAPIS-1	8/11/2015	Benzene	**140**	5	0.33	5	ug/L
OAPIS-1	8/11/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OAPIS-1	8/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OAPIS-1	8/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OAPIS-1	8/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
OAPIS-1	8/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
OAPIS-1	8/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OAPIS-1	8/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OAPIS-1	8/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OAPIS-1	8/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
OAPIS-1	8/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OAPIS-1	8/11/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	8/11/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OAPIS-1	8/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OAPIS-1	8/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OAPIS-1	8/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OAPIS-1	8/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
OAPIS-1	8/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OAPIS-1	8/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
OAPIS-1	8/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OAPIS-1	8/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OAPIS-1	8/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OAPIS-1	8/11/2015	1,2,4-Trimethylbenzene	6.2	5	0.8	56	ug/L
OAPIS-1	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OAPIS-1	8/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OAPIS-1	8/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OAPIS-1	8/11/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OAPIS-1	8/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OAPIS-1	8/11/2015	Ethylbenzene	15	5	0.51	700	ug/L
OAPIS-1	8/11/2015	Styrene	ND	5	0.53	100	ug/L
OAPIS-1	8/11/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OAPIS-1	8/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OAPIS-1	8/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OAPIS-1	8/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OAPIS-1	8/11/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OAPIS-1	8/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OAPIS-1	8/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OAPIS-1	8/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
OAPIS-1	8/11/2015	Toluene	ND	5	0.54	1000	ug/L
OAPIS-1	8/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OAPIS-1	8/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OAPIS-1	8/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OAPIS-1	8/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OAPIS-1	8/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/11/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OAPIS-1	8/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OAPIS-1	8/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OAPIS-1	8/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OAPIS-1	8/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OAPIS-1	8/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OAPIS-1	8/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OAPIS-1	8/11/2015	MTBE	**290**	5	0.87	143	ug/L
OAPIS-1	8/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	8/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OAPIS-1	10/29/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
OAPIS-1	10/29/2015	Acetone	ND	100	9.4	14064	ug/L
OAPIS-1	10/29/2015	Chloroform	ND	10	2.1	100	ug/L
OAPIS-1	10/29/2015	Benzene	**130**	10	0.65	5	ug/L
OAPIS-1	10/29/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
OAPIS-1	10/29/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
OAPIS-1	10/29/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
OAPIS-1	10/29/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
OAPIS-1	10/29/2015	Chloroethane	ND	20	1	20857	ug/L
OAPIS-1	10/29/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
OAPIS-1	10/29/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
OAPIS-1	10/29/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
OAPIS-1	10/29/2015	Bromoform	ND	10	1.6	32.9	ug/L
OAPIS-1	10/29/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
OAPIS-1	10/29/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
OAPIS-1	10/29/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
OAPIS-1	10/29/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OAPIS-1	10/29/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
OAPIS-1	10/29/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
OAPIS-1	10/29/2015	2-Butanone	ND	100	3.6	5565	ug/L
OAPIS-1	10/29/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
OAPIS-1	10/29/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
OAPIS-1	10/29/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
OAPIS-1	10/29/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	10/29/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
OAPIS-1	10/29/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
OAPIS-1	10/29/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
OAPIS-1	10/29/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
OAPIS-1	10/29/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
OAPIS-1	10/29/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
OAPIS-1	10/29/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
OAPIS-1	10/29/2015	Ethylbenzene	16	10	1	700	ug/L
OAPIS-1	10/29/2015	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	10/29/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
OAPIS-1	10/29/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
OAPIS-1	10/29/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
OAPIS-1	10/29/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OAPIS-1	10/29/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
OAPIS-1	10/29/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
OAPIS-1	10/29/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	10/29/2015	Bromobenzene	ND	10	1.1	62	ug/L
OAPIS-1	10/29/2015	Toluene	ND	10	1.1	1000	ug/L
OAPIS-1	10/29/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
OAPIS-1	10/29/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
OAPIS-1	10/29/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
OAPIS-1	10/29/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
OAPIS-1	10/29/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OAPIS-1	10/29/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
OAPIS-1	10/29/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
OAPIS-1	10/29/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
OAPIS-1	10/29/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
OAPIS-1	10/29/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
OAPIS-1	10/29/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	10/29/2015	Xylenes, Total	ND	15	2.8	620	ug/L
OAPIS-1	10/29/2015	MTBE	**260**	10	1.7	143	ug/L
OAPIS-1	10/29/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	10/29/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	3/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	3/1/2016	Acetone	34	10	0.88	14064	ug/L
OAPIS-1	3/1/2016	Chloroform	ND	1	0.089	100	ug/L
OAPIS-1	3/1/2016	Benzene	**76**	1	0.096	5	ug/L
OAPIS-1	3/1/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OAPIS-1	3/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OAPIS-1	3/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OAPIS-1	3/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OAPIS-1	3/1/2016	Chloroethane	ND	2	0.15	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OAPIS-1	3/1/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OAPIS-1	3/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OAPIS-1	3/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OAPIS-1	3/1/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OAPIS-1	3/1/2016	1,1-Dichloroethane	1.2	1	0.11	25	ug/L
OAPIS-1	3/1/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OAPIS-1	3/1/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OAPIS-1	3/1/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OAPIS-1	3/1/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OAPIS-1	3/1/2016	2-Butanone	ND	10	0.32	5565	ug/L
OAPIS-1	3/1/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OAPIS-1	3/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OAPIS-1	3/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OAPIS-1	3/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OAPIS-1	3/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	3/1/2016	1,2,4-Trimethylbenzene	2.8	1	0.1	56	ug/L
OAPIS-1	3/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OAPIS-1	3/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OAPIS-1	3/1/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OAPIS-1	3/1/2016	Isopropylbenzene	1.4	1	0.098	447	ug/L
OAPIS-1	3/1/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OAPIS-1	3/1/2016	Ethylbenzene	9.8	1	0.11	700	ug/L
OAPIS-1	3/1/2016	Styrene	ND	1	0.095	100	ug/L
OAPIS-1	3/1/2016	n-Propylbenzene	1.5	1	0.13	660	ug/L
OAPIS-1	3/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OAPIS-1	3/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OAPIS-1	3/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OAPIS-1	3/1/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OAPIS-1	3/1/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OAPIS-1	3/1/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OAPIS-1	3/1/2016	Bromobenzene	ND	1	0.08	62	ug/L
OAPIS-1	3/1/2016	Toluene	ND	1	0.089	1000	ug/L
OAPIS-1	3/1/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OAPIS-1	3/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OAPIS-1	3/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	3/1/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OAPIS-1	3/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OAPIS-1	3/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	3/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OAPIS-1	3/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	3/1/2016	2-Hexanone	ND	10	0.36	38	ug/L
OAPIS-1	3/1/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OAPIS-1	3/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	3/1/2016	Xylenes, Total	3.7	1.5	0.32	620	ug/L
OAPIS-1	3/1/2016	MTBE	**260**	10	2.1	143	ug/L
OAPIS-1	3/1/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OAPIS-1	3/1/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OAPIS-1	6/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	6/7/2016	Acetone	25	10	4.9	14064	ug/L
OAPIS-1	6/7/2016	Chloroform	ND	1	0.089	100	ug/L
OAPIS-1	6/7/2016	Benzene	**150**	5	0.48	5	ug/L
OAPIS-1	6/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OAPIS-1	6/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OAPIS-1	6/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OAPIS-1	6/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
OAPIS-1	6/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
OAPIS-1	6/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	6/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OAPIS-1	6/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OAPIS-1	6/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
OAPIS-1	6/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OAPIS-1	6/7/2016	1,1-Dichloroethane	1.3	1	0.11	25	ug/L
OAPIS-1	6/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OAPIS-1	6/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OAPIS-1	6/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OAPIS-1	6/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OAPIS-1	6/7/2016	2-Butanone	3.7	10	0.74	5565	ug/L
OAPIS-1	6/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OAPIS-1	6/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
OAPIS-1	6/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OAPIS-1	6/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OAPIS-1	6/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	6/7/2016	1,2,4-Trimethylbenzene	12	1	0.11	56	ug/L
OAPIS-1	6/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OAPIS-1	6/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OAPIS-1	6/7/2016	Isopropylbenzene	2.6	1	0.1	447	ug/L
OAPIS-1	6/7/2016	p-Isopropyltoluene	0.84	1	0.14	NA	ug/L
OAPIS-1	6/7/2016	Ethylbenzene	18	1	0.11	700	ug/L
OAPIS-1	6/7/2016	Styrene	ND	1	0.11	100	ug/L
OAPIS-1	6/7/2016	n-Propylbenzene	3.3	1	0.13	660	ug/L
OAPIS-1	6/7/2016	n-Butylbenzene	0.78	3	0.16	1000	ug/L
OAPIS-1	6/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OAPIS-1	6/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OAPIS-1	6/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OAPIS-1	6/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OAPIS-1	6/7/2016	1,3,5-Trimethylbenzene	0.15	1	0.12	60	ug/L
OAPIS-1	6/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
OAPIS-1	6/7/2016	Toluene	1.4	1	0.12	1000	ug/L
OAPIS-1	6/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OAPIS-1	6/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OAPIS-1	6/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	6/7/2016	sec-Butylbenzene	0.63	1	0.12	2000	ug/L
OAPIS-1	6/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OAPIS-1	6/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OAPIS-1	6/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OAPIS-1	6/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OAPIS-1	6/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
OAPIS-1	6/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OAPIS-1	6/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OAPIS-1	6/7/2016	Xylenes, Total	8.3	1.5	0.37	620	ug/L
OAPIS-1	6/7/2016	MTBE	**240**	5	1.1	143	ug/L
OAPIS-1	6/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OAPIS-1	6/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OAPIS-1	9/1/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OAPIS-1	9/1/2016	Acetone	31	50	25	14064	ug/L
OAPIS-1	9/1/2016	Chloroform	ND	5	0.44	100	ug/L
OAPIS-1	9/1/2016	Benzene	**180**	5	0.48	5	ug/L
OAPIS-1	9/1/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OAPIS-1	9/1/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OAPIS-1	9/1/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OAPIS-1	9/1/2016	Dibromomethane	ND	5	0.6	8	ug/L
OAPIS-1	9/1/2016	Chloroethane	ND	10	0.96	20857	ug/L
OAPIS-1	9/1/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OAPIS-1	9/1/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OAPIS-1	9/1/2016	Carbon Disulfide	ND	50	3	810	ug/L
OAPIS-1	9/1/2016	Bromoform	ND	5	0.51	32.9	ug/L
OAPIS-1	9/1/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OAPIS-1	9/1/2016	1,1-Dichloroethane	1.4	5	0.54	25	ug/L
OAPIS-1	9/1/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OAPIS-1	9/1/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OAPIS-1	9/1/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OAPIS-1	9/1/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OAPIS-1	9/1/2016	2-Butanone	ND	50	3.7	5565	ug/L
OAPIS-1	9/1/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OAPIS-1	9/1/2016	Trichloroethene	ND	5	0.88	5	ug/L
OAPIS-1	9/1/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OAPIS-1	9/1/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OAPIS-1	9/1/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	9/1/2016	1,2,4-Trimethylbenzene	12	5	0.55	56	ug/L
OAPIS-1	9/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OAPIS-1	9/1/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OAPIS-1	9/1/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OAPIS-1	9/1/2016	Isopropylbenzene	3.1	5	0.52	447	ug/L
OAPIS-1	9/1/2016	p-Isopropyltoluene	0.99	5	0.7	NA	ug/L
OAPIS-1	9/1/2016	Ethylbenzene	23	5	0.56	700	ug/L
OAPIS-1	9/1/2016	Styrene	ND	5	0.55	100	ug/L
OAPIS-1	9/1/2016	n-Propylbenzene	4	5	0.66	660	ug/L
OAPIS-1	9/1/2016	n-Butylbenzene	1	15	0.8	1000	ug/L
OAPIS-1	9/1/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OAPIS-1	9/1/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OAPIS-1	9/1/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OAPIS-1	9/1/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OAPIS-1	9/1/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OAPIS-1	9/1/2016	Bromobenzene	ND	5	0.49	62	ug/L
OAPIS-1	9/1/2016	Toluene	1.5	5	0.59	1000	ug/L
OAPIS-1	9/1/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OAPIS-1	9/1/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OAPIS-1	9/1/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OAPIS-1	9/1/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OAPIS-1	9/1/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/1/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OAPIS-1	9/1/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OAPIS-1	9/1/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OAPIS-1	9/1/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OAPIS-1	9/1/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OAPIS-1	9/1/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OAPIS-1	9/1/2016	Xylenes, Total	9.2	7.5	1.8	620	ug/L
OAPIS-1	9/1/2016	MTBE	**240**	5	1.1	143	ug/L
OAPIS-1	9/1/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OAPIS-1	9/1/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OAPIS-1	11/14/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OAPIS-1	11/14/2016	Acetone	ND	100	49	14064	ug/L
OAPIS-1	11/14/2016	Chloroform	4.4	10	0.89	100	ug/L
OAPIS-1	11/14/2016	Benzene	**150**	10	0.96	5	ug/L
OAPIS-1	11/14/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OAPIS-1	11/14/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OAPIS-1	11/14/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OAPIS-1	11/14/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OAPIS-1	11/14/2016	Chloroethane	ND	20	1.9	20857	ug/L
OAPIS-1	11/14/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OAPIS-1	11/14/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OAPIS-1	11/14/2016	Carbon Disulfide	ND	100	6	810	ug/L
OAPIS-1	11/14/2016	Bromoform	ND	10	1	32.9	ug/L
OAPIS-1	11/14/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OAPIS-1	11/14/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OAPIS-1	11/14/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OAPIS-1	11/14/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OAPIS-1	11/14/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OAPIS-1	11/14/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OAPIS-1	11/14/2016	2-Butanone	ND	100	7.4	5565	ug/L
OAPIS-1	11/14/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OAPIS-1	11/14/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OAPIS-1	11/14/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OAPIS-1	11/14/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OAPIS-1	11/14/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OAPIS-1	11/14/2016	1,2,4-Trimethylbenzene	7.7	10	1.1	56	ug/L
OAPIS-1	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OAPIS-1	11/14/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OAPIS-1	11/14/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OAPIS-1	11/14/2016	Isopropylbenzene	2.7	10	1	447	ug/L
OAPIS-1	11/14/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OAPIS-1	11/14/2016	Ethylbenzene	18	10	1.1	700	ug/L
OAPIS-1	11/14/2016	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	11/14/2016	n-Propylbenzene	4.4	10	1.3	660	ug/L
OAPIS-1	11/14/2016	n-Butylbenzene	3.1	30	1.6	1000	ug/L
OAPIS-1	11/14/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OAPIS-1	11/14/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OAPIS-1	11/14/2016	1,2-Dichloroethane	*3.2*	*10*	1.2	5	ug/L
OAPIS-1	11/14/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OAPIS-1	11/14/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	11/14/2016	Bromobenzene	ND	10	0.98	62	ug/L
OAPIS-1	11/14/2016	Toluene	1.6	10	1.2	1000	ug/L
OAPIS-1	11/14/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OAPIS-1	11/14/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OAPIS-1	11/14/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OAPIS-1	11/14/2016	sec-Butylbenzene	2.5	10	1.2	2000	ug/L
OAPIS-1	11/14/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OAPIS-1	11/14/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OAPIS-1	11/14/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OAPIS-1	11/14/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	11/14/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OAPIS-1	11/14/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OAPIS-1	11/14/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	11/14/2016	Xylenes, Total	ND	15	3.7	620	ug/L
OAPIS-1	11/14/2016	MTBE	**260**	10	2.1	143	ug/L
OAPIS-1	11/14/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	11/14/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OAPIS-1	2/21/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OAPIS-1	2/21/2017	Acetone	ND	100	49	14064	ug/L
OAPIS-1	2/21/2017	Chloroform	ND	10	0.89	100	ug/L
OAPIS-1	2/21/2017	Benzene	**120**	10	0.96	5	ug/L
OAPIS-1	2/21/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OAPIS-1	2/21/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OAPIS-1	2/21/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OAPIS-1	2/21/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OAPIS-1	2/21/2017	Chloroethane	ND	20	1.9	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/21/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OAPIS-1	2/21/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OAPIS-1	2/21/2017	Carbon Disulfide	ND	100	6	810	ug/L
OAPIS-1	2/21/2017	Bromoform	ND	10	1	32.9	ug/L
OAPIS-1	2/21/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OAPIS-1	2/21/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OAPIS-1	2/21/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OAPIS-1	2/21/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OAPIS-1	2/21/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OAPIS-1	2/21/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OAPIS-1	2/21/2017	2-Butanone	ND	100	7.4	5565	ug/L
OAPIS-1	2/21/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OAPIS-1	2/21/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OAPIS-1	2/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OAPIS-1	2/21/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OAPIS-1	2/21/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OAPIS-1	2/21/2017	1,2,4-Trimethylbenzene	3.7	10	1.1	56	ug/L
OAPIS-1	2/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OAPIS-1	2/21/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OAPIS-1	2/21/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OAPIS-1	2/21/2017	Isopropylbenzene	1.6	10	1	447	ug/L
OAPIS-1	2/21/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OAPIS-1	2/21/2017	Ethylbenzene	10	10	1.1	700	ug/L
OAPIS-1	2/21/2017	Styrene	ND	10	1.1	100	ug/L
OAPIS-1	2/21/2017	n-Propylbenzene	1.5	10	1.3	660	ug/L
OAPIS-1	2/21/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OAPIS-1	2/21/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OAPIS-1	2/21/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OAPIS-1	2/21/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OAPIS-1	2/21/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OAPIS-1	2/21/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OAPIS-1	2/21/2017	Bromobenzene	ND	10	0.98	62	ug/L
OAPIS-1	2/21/2017	Toluene	ND	10	1.2	1000	ug/L
OAPIS-1	2/21/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OAPIS-1	2/21/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OAPIS-1	2/21/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OAPIS-1	2/21/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OAPIS-1	2/21/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OAPIS-1	2/21/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OAPIS-1	2/21/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OAPIS-1	2/21/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OAPIS-1	2/21/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OAPIS-1	2/21/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OAPIS-1	2/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OAPIS-1	2/21/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OAPIS-1	2/21/2017	MTBE	**280**	10	2.1	143	ug/L
OAPIS-1	2/21/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OAPIS-1	2/21/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OAPIS-1	6/1/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	6/1/2017	Acetone	ND	50	4.1	14064	ug/L
OAPIS-1	6/1/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	6/1/2017	Benzene	**200**	5	0.31	5	ug/L
OAPIS-1	6/1/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	6/1/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	6/1/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	6/1/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	6/1/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	6/1/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	6/1/2017	Methylene Chloride	*0.92*	*15*	0.54	5	ug/L
OAPIS-1	6/1/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	6/1/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	6/1/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	6/1/2017	1,1-Dichloroethane	2.2	5	2	25	ug/L
OAPIS-1	6/1/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	6/1/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	6/1/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	6/1/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	6/1/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	6/1/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	6/1/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	6/1/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	6/1/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	6/1/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	6/1/2017	1,2,4-Trimethylbenzene	20	5	0.56	56	ug/L
OAPIS-1	6/1/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	6/1/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	6/1/2017	Isopropylbenzene	3	5	0.26	447	ug/L
OAPIS-1	6/1/2017	p-Isopropyltoluene	0.59	5	0.48	NA	ug/L
OAPIS-1	6/1/2017	Ethylbenzene	26	5	0.47	700	ug/L
OAPIS-1	6/1/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	6/1/2017	n-Propylbenzene	4.1	5	0.37	660	ug/L
OAPIS-1	6/1/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OAPIS-1	6/1/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	6/1/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	6/1/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	6/1/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	6/1/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	6/1/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	6/1/2017	Toluene	1.9	5	0.32	1000	ug/L
OAPIS-1	6/1/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	6/1/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	6/1/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	6/1/2017	sec-Butylbenzene	2.6	5	0.55	2000	ug/L
OAPIS-1	6/1/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	6/1/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	6/1/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	6/1/2017	Pentafluorobenzene	ND	0	0		None
OAPIS-1	6/1/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	6/1/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	6/1/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	6/1/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	6/1/2017	Xylenes, Total	9.6	7.5	1.6	620	ug/L
OAPIS-1	6/1/2017	MTBE	**250**	5	1.2	143	ug/L
OAPIS-1	6/1/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	6/1/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	9/5/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	9/5/2017	Acetone	13	50	4.1	14064	ug/L
OAPIS-1	9/5/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	9/5/2017	Benzene	**230**	5	0.31	5	ug/L
OAPIS-1	9/5/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	9/5/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	9/5/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	9/5/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	9/5/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	9/5/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	9/5/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OAPIS-1	9/5/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	9/5/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	9/5/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	9/5/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	9/5/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	9/5/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	9/5/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	9/5/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	9/5/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	9/5/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	9/5/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	9/5/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	9/5/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	9/5/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	9/5/2017	1,2,4-Trimethylbenzene	16	5	0.56	56	ug/L
OAPIS-1	9/5/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	9/5/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OAPIS-1	9/5/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	9/5/2017	Isopropylbenzene	3.2	5	0.26	447	ug/L
OAPIS-1	9/5/2017	p-Isopropyltoluene	0.91	5	0.48	NA	ug/L
OAPIS-1	9/5/2017	Ethylbenzene	27	5	0.47	700	ug/L
OAPIS-1	9/5/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	9/5/2017	n-Propylbenzene	4.2	5	0.37	660	ug/L
OAPIS-1	9/5/2017	n-Butylbenzene	0.98	15	0.65	1000	ug/L
OAPIS-1	9/5/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	9/5/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	9/5/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	9/5/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	9/5/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	9/5/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	9/5/2017	Toluene	1.8	5	0.32	1000	ug/L
OAPIS-1	9/5/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	9/5/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	9/5/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	9/5/2017	sec-Butylbenzene	0.6	5	0.55	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/5/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	9/5/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	9/5/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	9/5/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	9/5/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	9/5/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	9/5/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	9/5/2017	Xylenes, Total	8.7	7.5	1.6	620	ug/L
OAPIS-1	9/5/2017	MTBE	**270**	5	1.2	143	ug/L
OAPIS-1	9/5/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	9/5/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	12/4/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OAPIS-1	12/4/2017	Acetone	38	50	4.1	14064	ug/L
OAPIS-1	12/4/2017	Chloroform	ND	5	2	100	ug/L
OAPIS-1	12/4/2017	Benzene	**130**	5	0.31	5	ug/L
OAPIS-1	12/4/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OAPIS-1	12/4/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OAPIS-1	12/4/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OAPIS-1	12/4/2017	Dibromomethane	ND	5	0.45	8	ug/L
OAPIS-1	12/4/2017	Chloroethane	ND	10	1.2	20857	ug/L
OAPIS-1	12/4/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OAPIS-1	12/4/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OAPIS-1	12/4/2017	Carbon Disulfide	ND	50	2	810	ug/L
OAPIS-1	12/4/2017	Bromoform	ND	5	1.1	32.9	ug/L
OAPIS-1	12/4/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OAPIS-1	12/4/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OAPIS-1	12/4/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OAPIS-1	12/4/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OAPIS-1	12/4/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OAPIS-1	12/4/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OAPIS-1	12/4/2017	2-Butanone	ND	50	5.7	5565	ug/L
OAPIS-1	12/4/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OAPIS-1	12/4/2017	Trichloroethene	ND	5	0.56	5	ug/L
OAPIS-1	12/4/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OAPIS-1	12/4/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OAPIS-1	12/4/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OAPIS-1	12/4/2017	1,2,4-Trimethylbenzene	4.9	5	0.56	56	ug/L
OAPIS-1	12/4/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OAPIS-1	12/4/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OAPIS-1	12/4/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OAPIS-1	12/4/2017	Isopropylbenzene	1.4	5	0.26	447	ug/L
OAPIS-1	12/4/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OAPIS-1	12/4/2017	Ethylbenzene	12	5	0.47	700	ug/L
OAPIS-1	12/4/2017	Styrene	ND	5	0.78	100	ug/L
OAPIS-1	12/4/2017	n-Propylbenzene	1.3	5	0.37	660	ug/L
OAPIS-1	12/4/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OAPIS-1	12/4/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OAPIS-1	12/4/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OAPIS-1	12/4/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OAPIS-1	12/4/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OAPIS-1	12/4/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OAPIS-1	12/4/2017	Bromobenzene	ND	5	0.7	62	ug/L
OAPIS-1	12/4/2017	Toluene	0.87	5	0.32	1000	ug/L
OAPIS-1	12/4/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OAPIS-1	12/4/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OAPIS-1	12/4/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OAPIS-1	12/4/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OAPIS-1	12/4/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OAPIS-1	12/4/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OAPIS-1	12/4/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OAPIS-1	12/4/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OAPIS-1	12/4/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OAPIS-1	12/4/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OAPIS-1	12/4/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OAPIS-1	12/4/2017	Xylenes, Total	3.4	7.5	1.6	620	ug/L
OAPIS-1	12/4/2017	MTBE	**290**	5	1.2	143	ug/L
OAPIS-1	12/4/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OAPIS-1	12/4/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OAPIS-1	2/9/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
OAPIS-1	2/9/2018	Acetone	41	20	1.6	14064	ug/L
OAPIS-1	2/9/2018	Chloroform	ND	2	0.8	100	ug/L
OAPIS-1	2/9/2018	Benzene	**68**	2	0.12	5	ug/L
OAPIS-1	2/9/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
OAPIS-1	2/9/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OAPIS-1	2/9/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OAPIS-1	2/9/2018	Dibromomethane	ND	2	0.18	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Chloroethane	ND	4	0.47	20857	ug/L
OAPIS-1	2/9/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
OAPIS-1	2/9/2018	Methylene Chloride	*0.47*	*6*	0.22	5	ug/L
OAPIS-1	2/9/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
OAPIS-1	2/9/2018	Bromoform	ND	2	0.42	32.9	ug/L
OAPIS-1	2/9/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
OAPIS-1	2/9/2018	1,1-Dichloroethane	1.1	2	0.8	25	ug/L
OAPIS-1	2/9/2018	1,1-Dichloroethene	ND	2	0.16	7	ug/L
OAPIS-1	2/9/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
OAPIS-1	2/9/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OAPIS-1	2/9/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
OAPIS-1	2/9/2018	2-Butanone	ND	20	2.3	5565	ug/L
OAPIS-1	2/9/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OAPIS-1	2/9/2018	Trichloroethene	ND	2	0.22	5	ug/L
OAPIS-1	2/9/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
OAPIS-1	2/9/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OAPIS-1	2/9/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OAPIS-1	2/9/2018	1,2,4-Trimethylbenzene	0.65	2	0.23	56	ug/L
OAPIS-1	2/9/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
OAPIS-1	2/9/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
OAPIS-1	2/9/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
OAPIS-1	2/9/2018	Isopropylbenzene	0.65	2	0.1	447	ug/L
OAPIS-1	2/9/2018	p-Isopropyltoluene	0.34	2	0.19	NA	ug/L
OAPIS-1	2/9/2018	Ethylbenzene	4.9	2	0.19	700	ug/L
OAPIS-1	2/9/2018	Styrene	ND	2	0.31	100	ug/L
OAPIS-1	2/9/2018	n-Propylbenzene	0.54	2	0.15	660	ug/L
OAPIS-1	2/9/2018	n-Butylbenzene	ND	6	0.26	1000	ug/L
OAPIS-1	2/9/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OAPIS-1	2/9/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
OAPIS-1	2/9/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OAPIS-1	2/9/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
OAPIS-1	2/9/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
OAPIS-1	2/9/2018	Bromobenzene	ND	2	0.28	62	ug/L
OAPIS-1	2/9/2018	Toluene	0.66	2	0.13	1000	ug/L
OAPIS-1	2/9/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
OAPIS-1	2/9/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
OAPIS-1	2/9/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
OAPIS-1	2/9/2018	sec-Butylbenzene	0.23	2	0.22	2000	ug/L
OAPIS-1	2/9/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
OAPIS-1	2/9/2018	cis-1,2-Dichloroethene	ND	2	0.41	70	ug/L
OAPIS-1	2/9/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OAPIS-1	2/9/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
OAPIS-1	2/9/2018	2-Hexanone	ND	20	1.3	38	ug/L
OAPIS-1	2/9/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
OAPIS-1	2/9/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
OAPIS-1	2/9/2018	Xylenes, Total	2.9	3	0.64	620	ug/L
OAPIS-1	2/9/2018	MTBE	**240**	2	0.48	143	ug/L
OAPIS-1	2/9/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
OAPIS-1	2/9/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
OAPIS-1	4/30/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OAPIS-1	4/30/2018	Acetone	56	10	0.82	14064	ug/L
OAPIS-1	4/30/2018	Chloroform	ND	1	0.4	100	ug/L
OAPIS-1	4/30/2018	Benzene	**68**	1	0.062	5	ug/L
OAPIS-1	4/30/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OAPIS-1	4/30/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OAPIS-1	4/30/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OAPIS-1	4/30/2018	Dibromomethane	ND	1	0.091	8	ug/L
OAPIS-1	4/30/2018	Chloroethane	ND	2	0.23	20857	ug/L
OAPIS-1	4/30/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OAPIS-1	4/30/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OAPIS-1	4/30/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OAPIS-1	4/30/2018	Bromoform	ND	1	0.21	32.9	ug/L
OAPIS-1	4/30/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OAPIS-1	4/30/2018	1,1-Dichloroethane	1.1	1	0.4	25	ug/L
OAPIS-1	4/30/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OAPIS-1	4/30/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OAPIS-1	4/30/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OAPIS-1	4/30/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OAPIS-1	4/30/2018	2-Butanone	4.4	10	1.1	5565	ug/L
OAPIS-1	4/30/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OAPIS-1	4/30/2018	Trichloroethene	ND	1	0.11	5	ug/L
OAPIS-1	4/30/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OAPIS-1	4/30/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OAPIS-1	4/30/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	4/30/2018	1,2,4-Trimethylbenzene	1.6	1	0.11	56	ug/L
OAPIS-1	4/30/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	4/30/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OAPIS-1	4/30/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OAPIS-1	4/30/2018	Isopropylbenzene	0.73	1	0.051	447	ug/L
OAPIS-1	4/30/2018	p-Isopropyltoluene	0.33	1	0.096	NA	ug/L
OAPIS-1	4/30/2018	Ethylbenzene	6.3	1	0.093	700	ug/L
OAPIS-1	4/30/2018	Styrene	ND	1	0.16	100	ug/L
OAPIS-1	4/30/2018	n-Propylbenzene	0.76	1	0.074	660	ug/L
OAPIS-1	4/30/2018	n-Butylbenzene	0.21	3	0.13	1000	ug/L
OAPIS-1	4/30/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OAPIS-1	4/30/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OAPIS-1	4/30/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OAPIS-1	4/30/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OAPIS-1	4/30/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OAPIS-1	4/30/2018	Bromobenzene	ND	1	0.14	62	ug/L
OAPIS-1	4/30/2018	Toluene	0.66	1	0.064	1000	ug/L
OAPIS-1	4/30/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OAPIS-1	4/30/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OAPIS-1	4/30/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OAPIS-1	4/30/2018	sec-Butylbenzene	0.18	1	0.11	2000	ug/L
OAPIS-1	4/30/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OAPIS-1	4/30/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OAPIS-1	4/30/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OAPIS-1	4/30/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OAPIS-1	4/30/2018	2-Hexanone	ND	10	0.66	38	ug/L
OAPIS-1	4/30/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OAPIS-1	4/30/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OAPIS-1	4/30/2018	Xylenes, Total	3.2	1.5	0.32	620	ug/L
OAPIS-1	4/30/2018	MTBE	**260**	10	2.4	143	ug/L
OAPIS-1	4/30/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OAPIS-1	4/30/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OAPIS-1	9/6/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OAPIS-1	9/6/2018	Acetone	43	10	0.79	14064	ug/L
OAPIS-1	9/6/2018	Chloroform	ND	1	0.4	100	ug/L
OAPIS-1	9/6/2018	Benzene	**110**	10	1.7	5	ug/L
OAPIS-1	9/6/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OAPIS-1	9/6/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OAPIS-1	9/6/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OAPIS-1	9/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
OAPIS-1	9/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
OAPIS-1	9/6/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OAPIS-1	9/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OAPIS-1	9/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OAPIS-1	9/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
OAPIS-1	9/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OAPIS-1	9/6/2018	1,1-Dichloroethane	1	1	0.4	25	ug/L
OAPIS-1	9/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OAPIS-1	9/6/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OAPIS-1	9/6/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OAPIS-1	9/6/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OAPIS-1	9/6/2018	2-Butanone	ND	10	1.3	5565	ug/L
OAPIS-1	9/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OAPIS-1	9/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
OAPIS-1	9/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OAPIS-1	9/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OAPIS-1	9/6/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OAPIS-1	9/6/2018	1,2,4-Trimethylbenzene	4.5	1	0.25	56	ug/L
OAPIS-1	9/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OAPIS-1	9/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OAPIS-1	9/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OAPIS-1	9/6/2018	Isopropylbenzene	1	1	0.22	447	ug/L
OAPIS-1	9/6/2018	p-Isopropyltoluene	0.35	1	0.24	NA	ug/L
OAPIS-1	9/6/2018	Ethylbenzene	9.6	1	0.22	700	ug/L
OAPIS-1	9/6/2018	Styrene	ND	1	0.25	100	ug/L
OAPIS-1	9/6/2018	n-Propylbenzene	1	1	0.24	660	ug/L
OAPIS-1	9/6/2018	n-Butylbenzene	0.27	3	0.25	1000	ug/L
OAPIS-1	9/6/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OAPIS-1	9/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OAPIS-1	9/6/2018	1,2-Dichloroethane	0.4	1	0.4	5	ug/L
OAPIS-1	9/6/2018	4-Methyl-2-Pentanone	1.5	10	0.45	1243	ug/L
OAPIS-1	9/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OAPIS-1	9/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
OAPIS-1	9/6/2018	Toluene	0.8	1	0.17	1000	ug/L
OAPIS-1	9/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OAPIS-1	9/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OAPIS-1	9/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OAPIS-1	9/6/2018	sec-Butylbenzene	0.22	1	0.2	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OAPIS-1	9/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OAPIS-1	9/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OAPIS-1	9/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OAPIS-1	9/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
OAPIS-1	9/6/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OAPIS-1	9/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OAPIS-1	9/6/2018	Xylenes, Total	5	1.5	0.64	620	ug/L
OAPIS-1	9/6/2018	MTBE	**250**	10	3.2	143	ug/L
OAPIS-1	9/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OAPIS-1	9/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OAPIS-1	11/19/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OAPIS-1	11/19/2018	Acetone	25	20	1.5	14064	ug/L
OAPIS-1	11/19/2018	Chloroform	ND	2	0.47	100	ug/L
OAPIS-1	11/19/2018	Benzene	**170**	2	0.35	5	ug/L
OAPIS-1	11/19/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
OAPIS-1	11/19/2018	Bromomethane	ND	6	0.55	7.54	ug/L
OAPIS-1	11/19/2018	Chloromethane	ND	6	0.64	20.32	ug/L
OAPIS-1	11/19/2018	Dibromomethane	ND	2	0.64	8	ug/L
OAPIS-1	11/19/2018	Chloroethane	ND	4	0.33	20857	ug/L
OAPIS-1	11/19/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
OAPIS-1	11/19/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OAPIS-1	11/19/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OAPIS-1	11/19/2018	Bromoform	ND	2	0.65	32.9	ug/L
OAPIS-1	11/19/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OAPIS-1	11/19/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
OAPIS-1	11/19/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OAPIS-1	11/19/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
OAPIS-1	11/19/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
OAPIS-1	11/19/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
OAPIS-1	11/19/2018	2-Butanone	ND	20	2.8	5565	ug/L
OAPIS-1	11/19/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OAPIS-1	11/19/2018	Trichloroethene	ND	2	0.52	5	ug/L
OAPIS-1	11/19/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
OAPIS-1	11/19/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OAPIS-1	11/19/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
OAPIS-1	11/19/2018	1,2,4-Trimethylbenzene	8.9	2	0.51	56	ug/L
OAPIS-1	11/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OAPIS-1	11/19/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OAPIS-1	11/19/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OAPIS-1	11/19/2018	Isopropylbenzene	2.1	2	0.44	447	ug/L
OAPIS-1	11/19/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OAPIS-1	11/19/2018	Ethylbenzene	17	2	0.45	700	ug/L
OAPIS-1	11/19/2018	Styrene	ND	2	0.5	100	ug/L
OAPIS-1	11/19/2018	n-Propylbenzene	2.7	2	0.49	660	ug/L
OAPIS-1	11/19/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OAPIS-1	11/19/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
OAPIS-1	11/19/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OAPIS-1	11/19/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
OAPIS-1	11/19/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OAPIS-1	11/19/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OAPIS-1	11/19/2018	Bromobenzene	ND	2	0.64	62	ug/L
OAPIS-1	11/19/2018	Toluene	ND	2	0.34	1000	ug/L
OAPIS-1	11/19/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OAPIS-1	11/19/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OAPIS-1	11/19/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OAPIS-1	11/19/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
OAPIS-1	11/19/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OAPIS-1	11/19/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OAPIS-1	11/19/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
OAPIS-1	11/19/2018	Pentafluorobenzene	**20**	0	0		None
OAPIS-1	11/19/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
OAPIS-1	11/19/2018	2-Hexanone	ND	20	1.8	38	ug/L
OAPIS-1	11/19/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
OAPIS-1	11/19/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OAPIS-1	11/19/2018	Xylenes, Total	7.1	3	1.3	620	ug/L
OAPIS-1	11/19/2018	MTBE	**290**	2	0.91	143	ug/L
OAPIS-1	11/19/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OAPIS-1	11/19/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OAPIS-1	3/28/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	3/28/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	3/28/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	3/28/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	3/28/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	3/28/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	3/28/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/28/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	3/28/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	3/28/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	3/28/2019	1,2,4-Trimethylbenzene	6.1	2	0.426398	56	ug/L
OAPIS-1	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
OAPIS-1	3/28/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	3/28/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	3/28/2019	1,2-Dichloroethane	0.66	2	0.389276	5	ug/L
OAPIS-1	3/28/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	3/28/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	3/28/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	3/28/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	3/28/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	3/28/2019	1-Methylnaphthalene	20	8	0.629909	NA	ug/L
OAPIS-1	3/28/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	3/28/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	3/28/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	3/28/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	3/28/2019	2-Methylnaphthalene	**3.6**	8	0.690752		ug/L
OAPIS-1	3/28/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	3/28/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
OAPIS-1	3/28/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OAPIS-1	3/28/2019	Acetone	14	20	2.398793	14064	ug/L
OAPIS-1	3/28/2019	Benzene	**77**	2	0.333278	5	ug/L
OAPIS-1	3/28/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	3/28/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	3/28/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	3/28/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	3/28/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	3/28/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	3/28/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	3/28/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	3/28/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	3/28/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	3/28/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	3/28/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	3/28/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	3/28/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	3/28/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	3/28/2019	Ethylbenzene	10	2	0.264682	700	ug/L
OAPIS-1	3/28/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	3/28/2019	Isopropylbenzene	0.99	2	0.383045	447	ug/L
OAPIS-1	3/28/2019	MTBE	**200**	2	0.91219	143	ug/L
OAPIS-1	3/28/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	3/28/2019	Naphthalene	8.2	4	0.550143	30	ug/L
OAPIS-1	3/28/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	3/28/2019	n-Propylbenzene	1.3	2	0.428616	660	ug/L
OAPIS-1	3/28/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	3/28/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	3/28/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	3/28/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	3/28/2019	Toluene	ND	2	0.700872	1000	ug/L
OAPIS-1	3/28/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	3/28/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	3/28/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	3/28/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	3/28/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	3/28/2019	Xylenes, Total	4	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	5/8/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	5/8/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	5/8/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	5/8/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	5/8/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethane	1.1	2	0.281717	25	ug/L
OAPIS-1	5/8/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OAPIS-1	5/8/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OAPIS-1	5/8/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OAPIS-1	5/8/2019	1,2,4-Trimethylbenzene	5.4	2	0.426398	56	ug/L
OAPIS-1	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	5/8/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OAPIS-1	5/8/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	5/8/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	5/8/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	54	8	0.629909	NA	ug/L
OAPIS-1	5/8/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	5/8/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	5/8/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	5/8/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OAPIS-1	5/8/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	5/8/2019	p-Isopropyltoluene	0.53	2	0.434579	NA	ug/L
OAPIS-1	5/8/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OAPIS-1	5/8/2019	Acetone	ND	20	2.398793	14064	ug/L
OAPIS-1	5/8/2019	Benzene	**110**	2	0.333278	5	ug/L
OAPIS-1	5/8/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	5/8/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	5/8/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	5/8/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	5/8/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	5/8/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	5/8/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	5/8/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	5/8/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	5/8/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	5/8/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	5/8/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	5/8/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	5/8/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	5/8/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	5/8/2019	Ethylbenzene	14	2	0.264682	700	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	5/8/2019	Isopropylbenzene	1.3	2	0.383045	447	ug/L
OAPIS-1	5/8/2019	MTBE	**250**	2	0.91219	143	ug/L
OAPIS-1	5/8/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	5/8/2019	Naphthalene	4.5	4	0.550143	30	ug/L
OAPIS-1	5/8/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	5/8/2019	n-Propylbenzene	1.5	2	0.428616	660	ug/L
OAPIS-1	5/8/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	5/8/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	5/8/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	5/8/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	5/8/2019	Toluene	0.95	2	0.700872	1000	ug/L
OAPIS-1	5/8/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	5/8/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	5/8/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	5/8/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	5/8/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	5/8/2019	Xylenes, Total	6.5	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OAPIS-1	5/8/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OAPIS-1	5/8/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OAPIS-1	5/8/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OAPIS-1	5/8/2019	1,2,4-Trimethylbenzene	5.1	2	0.426398	56	ug/L
OAPIS-1	5/8/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OAPIS-1	5/8/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OAPIS-1	5/8/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OAPIS-1	5/8/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OAPIS-1	5/8/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	51	8	0.629909	NA	ug/L
OAPIS-1	5/8/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OAPIS-1	5/8/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OAPIS-1	5/8/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
OAPIS-1	5/8/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OAPIS-1	5/8/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OAPIS-1	5/8/2019	p-Isopropyltoluene	0.48	2	0.434579	NA	ug/L
OAPIS-1	5/8/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Acetone	18	20	2.398793	14064	ug/L
OAPIS-1	5/8/2019	Benzene	**110**	2	0.333278	5	ug/L
OAPIS-1	5/8/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OAPIS-1	5/8/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OAPIS-1	5/8/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OAPIS-1	5/8/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OAPIS-1	5/8/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OAPIS-1	5/8/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OAPIS-1	5/8/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OAPIS-1	5/8/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OAPIS-1	5/8/2019	Chloroform	ND	2	0.243781	100	ug/L
OAPIS-1	5/8/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OAPIS-1	5/8/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OAPIS-1	5/8/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OAPIS-1	5/8/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OAPIS-1	5/8/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OAPIS-1	5/8/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OAPIS-1	5/8/2019	Ethylbenzene	13	2	0.264682	700	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OAPIS-1	5/8/2019	Isopropylbenzene	1.1	2	0.383045	447	ug/L
OAPIS-1	5/8/2019	MTBE	**240**	2	0.91219	143	ug/L
OAPIS-1	5/8/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OAPIS-1	5/8/2019	Naphthalene	3.6	4	0.550143	30	ug/L
OAPIS-1	5/8/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OAPIS-1	5/8/2019	n-Propylbenzene	1.5	2	0.428616	660	ug/L
OAPIS-1	5/8/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
OAPIS-1	5/8/2019	Styrene	ND	2	0.382647	100	ug/L
OAPIS-1	5/8/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
OAPIS-1	5/8/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OAPIS-1	5/8/2019	Toluene	0.87	2	0.700872	1000	ug/L
OAPIS-1	5/8/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OAPIS-1	5/8/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OAPIS-1	5/8/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OAPIS-1	5/8/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OAPIS-1	5/8/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OAPIS-1	5/8/2019	Xylenes, Total	5.9	3	0.90883	620	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OAPIS-1	5/8/2019	1,2-Dibromoethane	ND	0.00921	0.00321	0.05	ug/L
OAPIS-1	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethane	1.5	1	0.140859	25	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	8/22/2019	1,2,4-Trimethylbenzene	19	1	0.213199	56	ug/L
OAPIS-1	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OAPIS-1	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OAPIS-1	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	83	4	0.314954	NA	ug/L
OAPIS-1	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	8/22/2019	2-Butanone	6.5	10	2.089417	5565	ug/L
OAPIS-1	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	8/22/2019	p-Isopropyltoluene	1.2	1	0.217289	NA	ug/L
OAPIS-1	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	8/22/2019	Acetone	29	10	1.199396	14064	ug/L
OAPIS-1	8/22/2019	Benzene	**210**	10	1.666391	5	ug/L
OAPIS-1	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	8/22/2019	Ethylbenzene	32	1	0.132341	700	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	8/22/2019	Isopropylbenzene	3.5	1	0.191522	447	ug/L
OAPIS-1	8/22/2019	MTBE	**290**	10	4.56095	143	ug/L
OAPIS-1	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	8/22/2019	Naphthalene	4.3	2	0.275071	30	ug/L
OAPIS-1	8/22/2019	n-Butylbenzene	1.5	3	0.22757	1000	ug/L
OAPIS-1	8/22/2019	n-Propylbenzene	4.4	1	0.214308	660	ug/L
OAPIS-1	8/22/2019	sec-Butylbenzene	0.88	1	0.247731	2000	ug/L
OAPIS-1	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	8/22/2019	Toluene	2.1	1	0.350436	1000	ug/L
OAPIS-1	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OAPIS-1	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	8/22/2019	Xylenes, Total	12	1.5	0.454415	620	ug/L
OAPIS-1	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethane	1.4	1	0.140859	25	ug/L
OAPIS-1	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	8/22/2019	1,2,4-Trimethylbenzene	19	1	0.213199	56	ug/L
OAPIS-1	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OAPIS-1	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OAPIS-1	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	84	4	0.314954	NA	ug/L
OAPIS-1	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	8/22/2019	2-Butanone	6.5	10	2.089417	5565	ug/L
OAPIS-1	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	8/22/2019	p-Isopropyltoluene	1.2	1	0.217289	NA	ug/L
OAPIS-1	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	8/22/2019	Acetone	33	10	1.199396	14064	ug/L
OAPIS-1	8/22/2019	Benzene	**210**	10	1.666391	5	ug/L
OAPIS-1	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OAPIS-1	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	8/22/2019	Ethylbenzene	32	1	0.132341	700	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	8/22/2019	Isopropylbenzene	3.5	1	0.191522	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	MTBE	**290**	10	4.56095	143	ug/L
OAPIS-1	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	8/22/2019	Naphthalene	4.2	2	0.275071	30	ug/L
OAPIS-1	8/22/2019	n-Butylbenzene	1.6	3	0.22757	1000	ug/L
OAPIS-1	8/22/2019	n-Propylbenzene	4.4	1	0.214308	660	ug/L
OAPIS-1	8/22/2019	sec-Butylbenzene	0.88	1	0.247731	2000	ug/L
OAPIS-1	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	8/22/2019	Toluene	2	1	0.350436	1000	ug/L
OAPIS-1	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OAPIS-1	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	8/22/2019	Xylenes, Total	12	1.5	0.454415	620	ug/L
OAPIS-1	10/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OAPIS-1	10/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OAPIS-1	10/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OAPIS-1	10/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OAPIS-1	10/21/2019	1,1-Dichloroethane	1.1	1	0.140859	25	ug/L
OAPIS-1	10/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OAPIS-1	10/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OAPIS-1	10/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OAPIS-1	10/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OAPIS-1	10/21/2019	1,2,4-Trimethylbenzene	9.4	1	0.213199	56	ug/L
OAPIS-1	10/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OAPIS-1	10/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OAPIS-1	10/21/2019	1,2-Dichloroethane	0.53	1	0.194638	5	ug/L
OAPIS-1	10/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OAPIS-1	10/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OAPIS-1	10/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OAPIS-1	10/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OAPIS-1	10/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	49	4	0.314954	NA	ug/L
OAPIS-1	10/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OAPIS-1	10/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OAPIS-1	10/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OAPIS-1	10/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OAPIS-1	10/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OAPIS-1	10/21/2019	p-Isopropyltoluene	0.67	1	0.217289	NA	ug/L
OAPIS-1	10/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OAPIS-1	10/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OAPIS-1	10/21/2019	Benzene	**170**	10	1.666391	5	ug/L
OAPIS-1	10/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OAPIS-1	10/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OAPIS-1	10/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OAPIS-1	10/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OAPIS-1	10/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OAPIS-1	10/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OAPIS-1	10/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OAPIS-1	10/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OAPIS-1	10/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OAPIS-1	10/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OAPIS-1	10/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OAPIS-1	10/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OAPIS-1	10/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OAPIS-1	10/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OAPIS-1	10/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OAPIS-1	10/21/2019	Ethylbenzene	21	1	0.132341	700	ug/L
OAPIS-1	10/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OAPIS-1	10/21/2019	Isopropylbenzene	2	1	0.191522	447	ug/L
OAPIS-1	10/21/2019	MTBE	**250**	10	4.56095	143	ug/L
OAPIS-1	10/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OAPIS-1	10/21/2019	Naphthalene	1.9	2	0.275071	30	ug/L
OAPIS-1	10/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OAPIS-1	10/21/2019	n-Propylbenzene	2.5	1	0.214308	660	ug/L
OAPIS-1	10/21/2019	sec-Butylbenzene	0.42	1	0.247731	2000	ug/L
OAPIS-1	10/21/2019	Styrene	ND	1	0.191323	100	ug/L
OAPIS-1	10/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OAPIS-1	10/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OAPIS-1	10/21/2019	Toluene	1.5	1	0.350436	1000	ug/L
OAPIS-1	10/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OAPIS-1	10/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OAPIS-1	10/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OAPIS-1	10/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OAPIS-1	10/21/2019	Xylenes, Total	7.4	1.5	0.454415	620	ug/L
OAPIS-1	10/21/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OAPIS-1	3/4/2020	MTBE	**270**	10	3.9	143	ug/L
OAPIS-1	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OAPIS-1	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OAPIS-1	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OAPIS-1	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OAPIS-1	3/4/2020	1,1-Dichloroethane	0.86	1	0.27	25	ug/L
OAPIS-1	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OAPIS-1	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OAPIS-1	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OAPIS-1	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OAPIS-1	3/4/2020	1,2,4-Trimethylbenzene	1.9	1	0.12	56	ug/L
OAPIS-1	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OAPIS-1	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OAPIS-1	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OAPIS-1	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OAPIS-1	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OAPIS-1	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OAPIS-1	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OAPIS-1	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OAPIS-1	3/4/2020	1-Methylnaphthalene	7.5	4	0.84	NA	ug/L
OAPIS-1	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OAPIS-1	3/4/2020	2-Butanone	4.7	10	1.1	5565	ug/L
OAPIS-1	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OAPIS-1	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OAPIS-1	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OAPIS-1	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OAPIS-1	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	3/4/2020	Acetone	26	10	2.3	14064	ug/L
OAPIS-1	3/4/2020	Benzene	**46**	1	0.23	5	ug/L
OAPIS-1	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OAPIS-1	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OAPIS-1	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OAPIS-1	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OAPIS-1	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OAPIS-1	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OAPIS-1	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OAPIS-1	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OAPIS-1	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OAPIS-1	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OAPIS-1	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OAPIS-1	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OAPIS-1	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OAPIS-1	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OAPIS-1	3/4/2020	Ethylbenzene	5.2	1	0.21	700	ug/L
OAPIS-1	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OAPIS-1	3/4/2020	Isopropylbenzene	0.55	1	0.18	447	ug/L
OAPIS-1	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OAPIS-1	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	3/4/2020	n-Propylbenzene	0.64	1	0.18	660	ug/L
OAPIS-1	3/4/2020	Naphthalene	0.72	2	0.28	30	ug/L
OAPIS-1	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OAPIS-1	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OAPIS-1	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OAPIS-1	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OAPIS-1	3/4/2020	Toluene	0.39	1	0.2	1000	ug/L
OAPIS-1	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OAPIS-1	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OAPIS-1	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OAPIS-1	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OAPIS-1	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	3/4/2020	Xylenes, Total	1.7	1.5	0.55	620	ug/L
OAPIS-1	3/4/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
OAPIS-1	9/22/2020	MTBE	**250**	10	3.9	143	ug/L
OAPIS-1	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OAPIS-1	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OAPIS-1	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OAPIS-1	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OAPIS-1	9/22/2020	1,1-Dichloroethane	1.3	1	0.27	25	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OAPIS-1	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OAPIS-1	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OAPIS-1	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OAPIS-1	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OAPIS-1	9/22/2020	1,2,4-Trimethylbenzene	2.2	1	0.12	56	ug/L
OAPIS-1	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OAPIS-1	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OAPIS-1	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OAPIS-1	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OAPIS-1	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OAPIS-1	9/22/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OAPIS-1	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OAPIS-1	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OAPIS-1	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OAPIS-1	9/22/2020	1-Methylnaphthalene	7.3	4	0.84	NA	ug/L
OAPIS-1	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OAPIS-1	9/22/2020	2-Butanone	6.9	10	1.1	5565	ug/L
OAPIS-1	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OAPIS-1	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
OAPIS-1	9/22/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OAPIS-1	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OAPIS-1	9/22/2020	p-Isopropyltoluene	0.34	1	0.2	NA	ug/L
OAPIS-1	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OAPIS-1	9/22/2020	Acetone	54	10	2.3	14064	ug/L
OAPIS-1	9/22/2020	Benzene	**84**	1	0.23	5	ug/L
OAPIS-1	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
OAPIS-1	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OAPIS-1	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
OAPIS-1	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OAPIS-1	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OAPIS-1	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OAPIS-1	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OAPIS-1	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
OAPIS-1	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
OAPIS-1	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OAPIS-1	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OAPIS-1	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OAPIS-1	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OAPIS-1	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
OAPIS-1	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OAPIS-1	9/22/2020	Ethylbenzene	11	1	0.21	700	ug/L
OAPIS-1	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OAPIS-1	9/22/2020	Isopropylbenzene	1.1	1	0.18	447	ug/L
OAPIS-1	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OAPIS-1	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OAPIS-1	9/22/2020	n-Propylbenzene	1.3	1	0.18	660	ug/L
OAPIS-1	9/22/2020	Naphthalene	0.49	2	0.28	30	ug/L
OAPIS-1	9/22/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OAPIS-1	9/22/2020	Styrene	ND	1	0.13	100	ug/L
OAPIS-1	9/22/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OAPIS-1	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OAPIS-1	9/22/2020	Toluene	0.55	1	0.2	1000	ug/L
OAPIS-1	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OAPIS-1	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OAPIS-1	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
OAPIS-1	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OAPIS-1	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OAPIS-1	9/22/2020	Xylenes, Total	2.9	1.5	0.55	620	ug/L
OAPIS-1	9/22/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OAPIS-1	12/17/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
OAPIS-1	12/17/2020	Acetone	27.9	25	10	14064	ug/L
OAPIS-1	12/17/2020	Benzene	**53.8**	1	0.38	5	ug/L
OAPIS-1	12/17/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OAPIS-1	12/17/2020	Bromoform	ND	5	0.71	32.9	ug/L
OAPIS-1	12/17/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OAPIS-1	12/17/2020	2-Butanone	ND	25	2.6	5565	ug/L
OAPIS-1	12/17/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OAPIS-1	12/17/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OAPIS-1	12/17/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OAPIS-1	12/17/2020	Chloroethane	ND	1	0.76	20857	ug/L
OAPIS-1	12/17/2020	Chloroform	ND	1	0.6	100	ug/L
OAPIS-1	12/17/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OAPIS-1	12/17/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OAPIS-1	12/17/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	12/17/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OAPIS-1	12/17/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OAPIS-1	12/17/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OAPIS-1	12/17/2020	Dibromomethane	ND	5	0.59	8	ug/L
OAPIS-1	12/17/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OAPIS-1	12/17/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OAPIS-1	12/17/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OAPIS-1	12/17/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OAPIS-1	12/17/2020	1,1-Dichloroethane	1.04	1	0.5	25	ug/L
OAPIS-1	12/17/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OAPIS-1	12/17/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OAPIS-1	12/17/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OAPIS-1	12/17/2020	Ethylbenzene	5.49	1	0.5	700	ug/L
OAPIS-1	12/17/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OAPIS-1	12/17/2020	2-Hexanone	ND	25	3.1	38	ug/L
OAPIS-1	12/17/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OAPIS-1	12/17/2020	Methylene Chloride	ND	5	3	5	ug/L
OAPIS-1	12/17/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OAPIS-1	12/17/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OAPIS-1	12/17/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OAPIS-1	12/17/2020	MTBE	**260**	1	0.74	143	ug/L
OAPIS-1	12/17/2020	Naphthalene	ND	1	1	30	ug/L
OAPIS-1	12/17/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OAPIS-1	12/17/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OAPIS-1	12/17/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OAPIS-1	12/17/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OAPIS-1	12/17/2020	Styrene	ND	1	1	100	ug/L
OAPIS-1	12/17/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OAPIS-1	12/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OAPIS-1	12/17/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OAPIS-1	12/17/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OAPIS-1	12/17/2020	Toluene	ND	1	0.41	1000	ug/L
OAPIS-1	12/17/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OAPIS-1	12/17/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OAPIS-1	12/17/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OAPIS-1	12/17/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OAPIS-1	12/17/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OAPIS-1	12/17/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OAPIS-1	12/17/2020	Trichloroethene	ND	1	0.5	5	ug/L
OAPIS-1	12/17/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OAPIS-1	12/17/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OAPIS-1	12/17/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OAPIS-1	12/17/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OAPIS-1	12/17/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OAPIS-1	12/17/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-01	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-01	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-01	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-01	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-01	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-01	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-01	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-01	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-01	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-01	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-01	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-01	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-01	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-01	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-01	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-01	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-01	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-01	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-01	3/22/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-01	3/22/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-01	3/22/2012	Naphthalene	ND	2	0.53	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/22/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-01	3/22/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-01	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-01	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-01	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-01	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-01	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-01	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-01	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-01	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-01	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-01	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-01	3/22/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-01	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-01	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-01	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-01	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-01	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-01	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-01	3/22/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-01	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-01	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-01	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-01	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-01	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	3/22/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-01	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-01	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-01	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-01	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-01	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-01	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-01	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-01	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-01	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-01	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-01	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-01	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-01	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-01	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-01	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-01	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-01	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	6/13/2012	Styrene	ND	1	0.41	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-01	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-01	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-01	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-01	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-01	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-01	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-01	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-01	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-01	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-01	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-01	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-01	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-01	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-01	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-01	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-01	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-01	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-01	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-01	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-01	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-01	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-01	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-01	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-01	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-01	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-01	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-01	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-01	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-01	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-01	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-01	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-01	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-01	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-01	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-01	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-01	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-01	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-01	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-01	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-01	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-01	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-01	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-01	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-01	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-01	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-01	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-01	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-01	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-01	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-01	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-01	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-01	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-01	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-01	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-01	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-01	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-01	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-01	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-01	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-01	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-01	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-01	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-01	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-01	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-01	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-01	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-01	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-01	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-01	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-01	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-01	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-01	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-01	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-01	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-01	3/19/2013	Chloroform	ND	1	0.47	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-01	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-01	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-01	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-01	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-01	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-01	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-01	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-01	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-01	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-01	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-01	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-01	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-01	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L
OW-01	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-01	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-01	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	3/19/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	6/13/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-01	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-01	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-01	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-01	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-01	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-01	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-01	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-01	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-01	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-01	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-01	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-01	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-01	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-01	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-01	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-01	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-01	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-01	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-01	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-01	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-01	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-01	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-01	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-01	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-01	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-01	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-01	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-01	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-01	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-01	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-01	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-01	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-01	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-01	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-01	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-01	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-01	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-01	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-01	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-01	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-01	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-01	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-01	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-01	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-01	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-01	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-01	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-01	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-01	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-01	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-01	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-01	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-01	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-01	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-01	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-01	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-01	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-01	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-01	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-01	11/11/2013	MTBE	ND	1	0.77	143	ug/L
OW-01	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-01	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-01	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-01	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-01	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	3/7/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-01	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-01	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	6/3/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	9/11/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
OW-01	9/11/2014	Acetone	ND	20	9.9	14064	ug/L
OW-01	9/11/2014	Chloroform	ND	2	0.63	100	ug/L
OW-01	9/11/2014	Benzene	ND	2	0.31	5	ug/L
OW-01	9/11/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
OW-01	9/11/2014	Bromomethane	ND	6	0.83	7.54	ug/L
OW-01	9/11/2014	Chloromethane	ND	6	1	20.32	ug/L
OW-01	9/11/2014	Dibromomethane	ND	2	0.38	8	ug/L
OW-01	9/11/2014	Chloroethane	ND	4	0.95	20857	ug/L
OW-01	9/11/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
OW-01	9/11/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
OW-01	9/11/2014	Carbon Disulfide	ND	20	1.5	810	ug/L
OW-01	9/11/2014	Bromoform	ND	2	0.5	32.9	ug/L
OW-01	9/11/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
OW-01	9/11/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
OW-01	9/11/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
OW-01	9/11/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OW-01	9/11/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
OW-01	9/11/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
OW-01	9/11/2014	2-Butanone	ND	20	2.8	5565	ug/L
OW-01	9/11/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OW-01	9/11/2014	Trichloroethene	ND	2	0.39	5	ug/L
OW-01	9/11/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
OW-01	9/11/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
OW-01	9/11/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
OW-01	9/11/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
OW-01	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
OW-01	9/11/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
OW-01	9/11/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
OW-01	9/11/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
OW-01	9/11/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
OW-01	9/11/2014	Ethylbenzene	ND	2	0.25	700	ug/L
OW-01	9/11/2014	Styrene	ND	2	0.23	100	ug/L
OW-01	9/11/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
OW-01	9/11/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
OW-01	9/11/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
OW-01	9/11/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
OW-01	9/11/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
OW-01	9/11/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
OW-01	9/11/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
OW-01	9/11/2014	Bromobenzene	ND	2	0.36	62	ug/L
OW-01	9/11/2014	Toluene	ND	2	0.34	1000	ug/L
OW-01	9/11/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
OW-01	9/11/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
OW-01	9/11/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
OW-01	9/11/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
OW-01	9/11/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
OW-01	9/11/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
OW-01	9/11/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
OW-01	9/11/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
OW-01	9/11/2014	2-Hexanone	ND	20	1.7	38	ug/L
OW-01	9/11/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
OW-01	9/11/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
OW-01	9/11/2014	Xylenes, Total	ND	3	0.75	620	ug/L
OW-01	9/11/2014	MTBE	ND	2	0.5	143	ug/L
OW-01	9/11/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
OW-01	9/11/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
OW-01	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-01	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-01	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-01	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-01	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-01	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-01	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-01	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-01	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-01	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-01	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-01	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-01	11/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-01	11/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-01	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-01	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-01	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-01	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-01	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-01	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-01	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-01	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-01	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-01	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-01	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-01	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-01	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-01	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-01	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-01	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-01	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-01	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-01	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-01	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-01	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-01	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-01	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-01	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-01	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-01	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-01	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-01	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-01	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-01	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-01	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-01	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-01	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-01	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-01	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-01	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-01	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-01	11/10/2014	MTBE	ND	1	0.25	143	ug/L
OW-01	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-01	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-01	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-01	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-01	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-01	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-01	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-01	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-01	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-01	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-01	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-01	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-01	3/9/2015	MTBE	ND	1	0.17	143	ug/L
OW-01	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	6/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	6/3/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	6/3/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	6/3/2015	Benzene	ND	1	0.065	5	ug/L
OW-01	6/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	6/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	6/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	6/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	6/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	6/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	6/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	6/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	6/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	6/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	6/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	6/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	6/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	6/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	6/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	6/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	6/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	6/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	6/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-01	6/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	6/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	6/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	6/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	6/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	6/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	6/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	6/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	6/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	6/3/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	6/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	6/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	6/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	6/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	6/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	6/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	6/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	6/3/2015	Toluene	ND	1	0.11	1000	ug/L
OW-01	6/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	6/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	6/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	6/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	6/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	6/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	6/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	6/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	6/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	6/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	6/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	6/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-01	6/3/2015	MTBE	ND	1	0.17	143	ug/L
OW-01	6/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	6/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	8/12/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
OW-01	8/12/2015	Acetone	ND	20	1.9	14064	ug/L
OW-01	8/12/2015	Chloroform	ND	2	0.43	100	ug/L
OW-01	8/12/2015	Benzene	ND	2	0.13	5	ug/L
OW-01	8/12/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
OW-01	8/12/2015	Bromomethane	ND	6	2.3	7.54	ug/L
OW-01	8/12/2015	Chloromethane	ND	6	0.35	20.32	ug/L
OW-01	8/12/2015	Dibromomethane	ND	2	0.47	8	ug/L
OW-01	8/12/2015	Chloroethane	ND	4	0.21	20857	ug/L
OW-01	8/12/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
OW-01	8/12/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
OW-01	8/12/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
OW-01	8/12/2015	Bromoform	ND	2	0.32	32.9	ug/L
OW-01	8/12/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
OW-01	8/12/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-01	8/12/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
OW-01	8/12/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
OW-01	8/12/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OW-01	8/12/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
OW-01	8/12/2015	2-Butanone	ND	20	0.73	5565	ug/L
OW-01	8/12/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
OW-01	8/12/2015	Trichloroethene	ND	2	0.33	5	ug/L
OW-01	8/12/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
OW-01	8/12/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
OW-01	8/12/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
OW-01	8/12/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
OW-01	8/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
OW-01	8/12/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
OW-01	8/12/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
OW-01	8/12/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
OW-01	8/12/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
OW-01	8/12/2015	Ethylbenzene	ND	2	0.2	700	ug/L
OW-01	8/12/2015	Styrene	ND	2	0.21	100	ug/L
OW-01	8/12/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
OW-01	8/12/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
OW-01	8/12/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
OW-01	8/12/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
OW-01	8/12/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
OW-01	8/12/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
OW-01	8/12/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
OW-01	8/12/2015	Bromobenzene	ND	2	0.22	62	ug/L
OW-01	8/12/2015	Toluene	ND	2	0.22	1000	ug/L
OW-01	8/12/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
OW-01	8/12/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
OW-01	8/12/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
OW-01	8/12/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
OW-01	8/12/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
OW-01	8/12/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
OW-01	8/12/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
OW-01	8/12/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
OW-01	8/12/2015	2-Hexanone	ND	20	0.95	38	ug/L
OW-01	8/12/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
OW-01	8/12/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/12/2015	Xylenes, Total	ND	3	0.56	620	ug/L
OW-01	8/12/2015	MTBE	ND	2	0.35	143	ug/L
OW-01	8/12/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
OW-01	8/12/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
OW-01	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-01	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
OW-01	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
OW-01	10/28/2015	Benzene	1.4	1	0.065	5	ug/L
OW-01	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-01	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-01	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-01	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-01	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-01	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-01	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-01	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-01	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-01	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-01	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-01	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-01	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-01	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-01	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-01	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-01	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-01	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-01	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-01	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-01	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-01	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-01	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-01	10/28/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-01	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-01	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-01	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-01	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-01	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-01	10/28/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-01	10/28/2015	Styrene	ND	1	0.11	100	ug/L
OW-01	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-01	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-01	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-01	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-01	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-01	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-01	10/28/2015	Toluene	2.4	1	0.11	1000	ug/L
OW-01	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-01	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-01	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-01	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-01	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-01	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-01	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-01	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-01	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-01	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-01	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	10/28/2015	Xylenes, Total	2.2	1.5	0.28	620	ug/L
OW-01	10/28/2015	MTBE	1.6	1	0.17	143	ug/L
OW-01	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
OW-01	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	3/3/2016	Benzene	ND	1	0.096	5	ug/L
OW-01	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-01	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-01	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-01	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-01	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-01	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-01	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-01	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-01	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-01	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-01	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-01	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-01	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-01	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-01	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OW-01	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-01	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-01	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-01	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	3/3/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	3/3/2016	Styrene	ND	1	0.095	100	ug/L
OW-01	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-01	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-01	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-01	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
OW-01	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-01	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-01	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-01	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	3/3/2016	MTBE	ND	1	0.21	143	ug/L
OW-01	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-01	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	6/6/2016	Benzene	0.13	1	0.096	5	ug/L
OW-01	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	6/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	6/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	6/6/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	6/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	6/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	6/6/2016	MTBE	1	1	0.21	143	ug/L
OW-01	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	9/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	9/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	9/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	9/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-01	9/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	9/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	9/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	9/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	9/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	9/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	9/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	9/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	9/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	9/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	9/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	9/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	9/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	9/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	9/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	9/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	9/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	9/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	9/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	9/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	9/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	9/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	9/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	9/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	9/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	9/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	9/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	9/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	9/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	9/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	9/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	9/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	9/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	9/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	9/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	9/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	9/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	9/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	9/6/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	9/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	9/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	9/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	9/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	9/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	9/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	9/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	9/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	9/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	9/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	9/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	9/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	9/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	9/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	9/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	9/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	9/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	9/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	9/6/2016	MTBE	0.88	1	0.21	143	ug/L
OW-01	9/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	9/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-01	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-01	11/15/2016	Benzene	1.6	1	0.096	5	ug/L
OW-01	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	11/15/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	11/15/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-01	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	11/15/2016	Ethylbenzene	0.39	1	0.11	700	ug/L
OW-01	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-01	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	11/15/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-01	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-01	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	11/15/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	11/15/2016	MTBE	0.88	1	0.21	143	ug/L
OW-01	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-01	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-01	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-01	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-01	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-01	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-01	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-01	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-01	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-01	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-01	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-01	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-01	2/27/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-01	2/27/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-01	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-01	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-01	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-01	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-01	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-01	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-01	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-01	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-01	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-01	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-01	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-01	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-01	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-01	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-01	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-01	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-01	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-01	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-01	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-01	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-01	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-01	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-01	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-01	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-01	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-01	2/27/2017	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-01	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-01	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-01	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-01	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-01	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-01	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-01	2/27/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-01	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-01	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-01	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-01	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-01	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-01	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-01	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-01	2/27/2017	MTBE	1.4	1	0.21	143	ug/L
OW-01	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-01	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-01	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	5/31/2017	Acetone	5.2	10	0.82	14064	ug/L
OW-01	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	5/31/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	5/31/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	5/31/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	5/31/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-01	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	5/31/2017	MTBE	1.6	1	0.24	143	ug/L
OW-01	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	9/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	9/7/2017	Acetone	ND	10	0.82	14064	ug/L
OW-01	9/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	9/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	9/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	9/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	9/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	9/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	9/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	9/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	9/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	9/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	9/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	9/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	9/7/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	9/7/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	9/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	9/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	9/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	9/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	9/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	9/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	9/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	9/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	9/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	9/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	9/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	9/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	9/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	9/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	9/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	9/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	9/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	9/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	9/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	9/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	9/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	9/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	9/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	9/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	9/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	9/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	9/7/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	9/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	9/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	9/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	9/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	9/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	9/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	9/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	9/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	9/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	9/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	9/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	9/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	9/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	9/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	9/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	9/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	9/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	9/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	9/7/2017	MTBE	2	1	0.24	143	ug/L
OW-01	9/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	9/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	12/8/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	12/8/2017	Acetone	1.6	10	0.82	14064	ug/L
OW-01	12/8/2017	Chloroform	ND	1	0.4	100	ug/L
OW-01	12/8/2017	Benzene	ND	1	0.062	5	ug/L
OW-01	12/8/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	12/8/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	12/8/2017	Chloromethane	ND	3	0.29	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/8/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	12/8/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	12/8/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	12/8/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	12/8/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	12/8/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	12/8/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	12/8/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	12/8/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	12/8/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	12/8/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	12/8/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	12/8/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	12/8/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	12/8/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	12/8/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	12/8/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	12/8/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	12/8/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	12/8/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-01	12/8/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	12/8/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	12/8/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	12/8/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	12/8/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	12/8/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	12/8/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	12/8/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	12/8/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	12/8/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	12/8/2017	Styrene	ND	1	0.16	100	ug/L
OW-01	12/8/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	12/8/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	12/8/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	12/8/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	12/8/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	12/8/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	12/8/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	12/8/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	12/8/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	12/8/2017	Toluene	ND	1	0.064	1000	ug/L
OW-01	12/8/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	12/8/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	12/8/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	12/8/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	12/8/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	12/8/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	12/8/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	12/8/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	12/8/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	12/8/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	12/8/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	12/8/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	12/8/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	12/8/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	12/8/2017	MTBE	1.4	1	0.24	143	ug/L
OW-01	12/8/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	12/8/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	2/27/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	2/27/2018	Acetone	ND	10	0.82	14064	ug/L
OW-01	2/27/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	2/27/2018	Benzene	ND	1	0.062	5	ug/L
OW-01	2/27/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	2/27/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	2/27/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	2/27/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	2/27/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	2/27/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	2/27/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	2/27/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	2/27/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	2/27/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	2/27/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	2/27/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	2/27/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	2/27/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	2/27/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	2/27/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	2/27/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	2/27/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	2/27/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	2/27/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	2/27/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	2/27/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-01	2/27/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	2/27/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	2/27/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	2/27/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	2/27/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	2/27/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	2/27/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	2/27/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	2/27/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	2/27/2018	Styrene	ND	1	0.16	100	ug/L
OW-01	2/27/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	2/27/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	2/27/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	2/27/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	2/27/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	2/27/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	2/27/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	2/27/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	2/27/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	2/27/2018	Toluene	ND	1	0.064	1000	ug/L
OW-01	2/27/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	2/27/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	2/27/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	2/27/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	2/27/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	2/27/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	2/27/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	2/27/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	2/27/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	2/27/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	2/27/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	2/27/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	2/27/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	2/27/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	2/27/2018	MTBE	1.1	1	0.24	143	ug/L
OW-01	2/27/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	2/27/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-01	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-01	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-01	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-01	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-01	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-01	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-01	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-01	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-01	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-01	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-01	5/15/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-01	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-01	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-01	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-01	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-01	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-01	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-01	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-01	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-01	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-01	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-01	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-01	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-01	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-01	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-01	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-01	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-01	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-01	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-01	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-01	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-01	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-01	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-01	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-01	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-01	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-01	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-01	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-01	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-01	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-01	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-01	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-01	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-01	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-01	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-01	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-01	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-01	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-01	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-01	5/15/2018	MTBE	2	1	0.24	143	ug/L
OW-01	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-01	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-01	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-01	9/11/2018	Acetone	8.6	10	0.79	14064	ug/L
OW-01	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-01	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-01	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-01	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-01	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-01	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-01	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-01	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-01	9/11/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-01	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-01	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-01	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-01	9/11/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-01	9/11/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-01	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-01	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-01	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-01	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-01	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-01	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-01	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-01	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-01	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-01	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-01	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-01	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-01	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-01	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-01	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-01	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-01	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-01	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-01	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-01	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-01	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-01	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-01	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-01	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-01	9/11/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-01	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-01	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-01	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-01	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-01	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-01	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-01	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-01	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-01	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-01	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-01	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-01	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-01	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-01	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-01	9/11/2018	MTBE	1.9	1	0.32	143	ug/L
OW-01	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-01	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-01	11/8/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-01	11/8/2018	Acetone	ND	10	0.76	14064	ug/L
OW-01	11/8/2018	Chloroform	ND	1	0.24	100	ug/L
OW-01	11/8/2018	Benzene	ND	1	0.17	5	ug/L
OW-01	11/8/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-01	11/8/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-01	11/8/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-01	11/8/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-01	11/8/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-01	11/8/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-01	11/8/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-01	11/8/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-01	11/8/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-01	11/8/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-01	11/8/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-01	11/8/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-01	11/8/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-01	11/8/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-01	11/8/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-01	11/8/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-01	11/8/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-01	11/8/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-01	11/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-01	11/8/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-01	11/8/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-01	11/8/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-01	11/8/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-01	11/8/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-01	11/8/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-01	11/8/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-01	11/8/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-01	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-01	11/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-01	11/8/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-01	11/8/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-01	11/8/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-01	11/8/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-01	11/8/2018	Styrene	ND	1	0.25	100	ug/L
OW-01	11/8/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-01	11/8/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	11/8/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-01	11/8/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-01	11/8/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-01	11/8/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-01	11/8/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-01	11/8/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-01	11/8/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-01	11/8/2018	Toluene	ND	1	0.17	1000	ug/L
OW-01	11/8/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-01	11/8/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-01	11/8/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/8/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-01	11/8/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-01	11/8/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-01	11/8/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-01	11/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-01	11/8/2018	Pentafluorobenzene	ND	0	0		None
OW-01	11/8/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-01	11/8/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-01	11/8/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-01	11/8/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-01	11/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-01	11/8/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-01	11/8/2018	MTBE	1.8	1	0.46	143	ug/L
OW-01	11/8/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-01	11/8/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-01	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	3/27/2019	1,1-Dichloroethane	0.52	1	0.140859	25	ug/L
OW-01	3/27/2019	1,1-Dichloroethene	0.37	1	0.205388	7	ug/L
OW-01	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	3/27/2019	1,2-Dichloroethane	0.35	1	0.194638	5	ug/L
OW-01	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	3/27/2019	Acetone	3.9	10	1.199396	14064	ug/L
OW-01	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	3/27/2019	MTBE	7.3	1	0.456095	143	ug/L
OW-01	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	3/27/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-01	5/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	5/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	5/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	5/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	5/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-01	5/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	5/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	5/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	5/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	5/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	5/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	5/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	5/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	5/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	5/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	5/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	5/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	5/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	5/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	5/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	5/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	5/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	5/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	5/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	5/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	5/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	5/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	5/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	5/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	5/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	5/21/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	5/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	5/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	5/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	5/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	5/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	5/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	5/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	5/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	5/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	5/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	5/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	5/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	5/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	5/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	5/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	5/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	5/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	5/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	5/21/2019	MTBE	2.2	1	0.456095	143	ug/L
OW-01	5/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	5/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	5/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	5/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	5/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	5/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	5/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	5/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	5/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	5/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	5/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	5/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	5/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	5/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	5/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	5/21/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-01	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	8/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-01	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-01	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	8/15/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-01	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	8/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	8/15/2019	MTBE	1.9	1	0.456095	143	ug/L
OW-01	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	8/15/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OW-01	10/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-01	10/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-01	10/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-01	10/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-01	10/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-01	10/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-01	10/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-01	10/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-01	10/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-01	10/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-01	10/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-01	10/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-01	10/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-01	10/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-01	10/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-01	10/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-01	10/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-01	10/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-01	10/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-01	10/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-01	10/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-01	10/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-01	10/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-01	10/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-01	10/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-01	10/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-01	10/16/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-01	10/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-01	10/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-01	10/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-01	10/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-01	10/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-01	10/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-01	10/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-01	10/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-01	10/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-01	10/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-01	10/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-01	10/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-01	10/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-01	10/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-01	10/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-01	10/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-01	10/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-01	10/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-01	10/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-01	10/16/2019	MTBE	1.7	1	0.456095	143	ug/L
OW-01	10/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-01	10/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-01	10/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-01	10/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-01	10/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-01	10/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-01	10/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-01	10/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-01	10/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-01	10/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-01	10/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-01	10/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-01	10/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-01	10/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-01	10/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-01	10/16/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-01	3/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-01	3/9/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-01	3/9/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-01	3/9/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-01	3/9/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-01	3/9/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-01	3/9/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	3/9/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	3/9/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-01	3/9/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-01	3/9/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	3/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-01	3/9/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-01	3/9/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-01	3/9/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	3/9/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-01	3/9/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-01	3/9/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	3/9/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	3/9/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-01	3/9/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-01	3/9/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-01	3/9/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	3/9/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	3/9/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-01	3/9/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-01	3/9/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-01	3/9/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	3/9/2020	Acetone	ND	10	2.3	14064	ug/L
OW-01	3/9/2020	Benzene	ND	1	0.23	5	ug/L
OW-01	3/9/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-01	3/9/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-01	3/9/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	3/9/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-01	3/9/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-01	3/9/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-01	3/9/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	3/9/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-01	3/9/2020	Chloroform	ND	1	0.13	100	ug/L
OW-01	3/9/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-01	3/9/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-01	3/9/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-01	3/9/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-01	3/9/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-01	3/9/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-01	3/9/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-01	3/9/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-01	3/9/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-01	3/9/2020	MTBE	1.6	1	0.39	143	ug/L
OW-01	3/9/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-01	3/9/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	3/9/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-01	3/9/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-01	3/9/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-01	3/9/2020	Styrene	ND	1	0.13	100	ug/L
OW-01	3/9/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-01	3/9/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-01	3/9/2020	Toluene	ND	1	0.2	1000	ug/L
OW-01	3/9/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	3/9/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-01	3/9/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-01	3/9/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-01	3/9/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	3/9/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-01	3/9/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-01	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-01	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-01	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-01	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-01	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-01	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-01	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-01	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-01	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-01	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-01	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-01	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-01	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-01	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-01	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-01	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-01	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-01	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-01	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-01	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-01	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-01	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-01	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-01	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-01	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-01	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-01	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-01	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-01	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-01	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-01	9/20/2020	Benzene	ND	1	0.23	5	ug/L
OW-01	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-01	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-01	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-01	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-01	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-01	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-01	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-01	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-01	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-01	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-01	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-01	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-01	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-01	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-01	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-01	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-01	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-01	9/20/2020	MTBE	2.3	1	0.39	143	ug/L
OW-01	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-01	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-01	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-01	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-01	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-01	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-01	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-01	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-01	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-01	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-01	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-01	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-01	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-01	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-01	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-01	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-01	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-01	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-01	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-01	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-01	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-01	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-01	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-01	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-01	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-01	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-01	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-01	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-01	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-01	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-01	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-01	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-01	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-01	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-01	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-01	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-01	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-01	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-01	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-01	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-01	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-01	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-01	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-01	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-01	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-01	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-01	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-01	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-01	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-01	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-01	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-01	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-01	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-01	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-01	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-01	12/11/2020	MTBE	1.91	1	0.74	143	ug/L
OW-01	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-01	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-01	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-01	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-01	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-01	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-01	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-01	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-01	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-01	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-01	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-01	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-01	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-01	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-01	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-01	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-01	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-01	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-01	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-01	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-01	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-01	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-01	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-01	12/11/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-01	12/11/2020	1,2-Dibromoethane	ND	0.021	0.00524	0.05	ug/L
OW-10	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-10	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-10	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-10	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-10	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-10	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-10	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-10	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-10	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-10	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-10	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-10	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-10	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-10	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-10	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-10	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-10	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-10	3/22/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-10	3/22/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-10	3/22/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-10	3/22/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-10	3/22/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-10	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-10	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-10	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-10	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-10	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-10	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-10	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-10	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-10	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-10	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-10	3/22/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-10	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-10	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-10	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-10	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-10	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-10	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-10	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-10	3/22/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-10	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-10	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-10	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-10	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-10	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/22/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-10	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-10	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-10	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-10	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-10	3/22/2012	MTBE	31	1	0.52	143	ug/L
OW-10	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-10	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-10	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-10	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-10	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-10	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-10	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-10	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-10	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-10	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-10	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-10	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-10	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-10	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-10	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-10	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-10	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-10	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-10	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-10	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-10	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	6/13/2012	MTBE	130	1	0.96	143	ug/L
OW-10	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-10	8/22/2012	Chloroform	ND	1	0.35	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-10	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-10	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-10	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-10	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-10	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-10	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-10	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-10	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	8/22/2012	MTBE	44	1	0.96	143	ug/L
OW-10	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-10	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-10	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-10	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-10	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-10	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-10	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-10	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-10	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-10	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-10	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-10	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-10	11/27/2012	1,1-Dichloroethane	1.6	1	0.3	25	ug/L
OW-10	11/27/2012	1,1-Dichloroethene	2.1	1	0.38	7	ug/L
OW-10	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-10	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-10	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-10	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-10	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-10	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-10	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-10	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-10	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-10	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-10	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-10	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-10	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-10	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-10	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-10	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-10	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-10	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-10	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-10	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-10	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-10	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-10	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-10	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-10	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-10	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-10	11/27/2012	1,2-Dichloroethane	1.1	1	0.29	5	ug/L
OW-10	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-10	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-10	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-10	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-10	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-10	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-10	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-10	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-10	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-10	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-10	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-10	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-10	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-10	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-10	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-10	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-10	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-10	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-10	11/27/2012	MTBE	**230**	10	9.6	143	ug/L
OW-10	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-10	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-10	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-10	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-10	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-10	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-10	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-10	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-10	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-10	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	3/19/2013	1,1-Dichloroethane	1.5	1	0.48	25	ug/L
OW-10	3/19/2013	1,1-Dichloroethene	1.9	1	0.48	7	ug/L
OW-10	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-10	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-10	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-10	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-10	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-10	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-10	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	3/19/2013	1,2-Dichloroethane	1.3	1	0.38	5	ug/L
OW-10	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-10	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-10	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	3/19/2013	MTBE	**170**	1	0.77	143	ug/L
OW-10	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	6/13/2013	1,1-Dichloroethane	1.6	1	0.33	25	ug/L
OW-10	6/13/2013	1,1-Dichloroethene	1.9	1	0.48	7	ug/L
OW-10	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-10	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-10	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-10	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	6/13/2013	1,2-Dichloroethane	1	1	0.33	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	6/13/2013	MTBE	**220**	10	7.7	143	ug/L
OW-10	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-10	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-10	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-10	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	9/4/2013	MTBE	65	1	0.77	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-10	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-10	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-10	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-10	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-10	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-10	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-10	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-10	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-10	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-10	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-10	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-10	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-10	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-10	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-10	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-10	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-10	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-10	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-10	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-10	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-10	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-10	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-10	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-10	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-10	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-10	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-10	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-10	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-10	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-10	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-10	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-10	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-10	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-10	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-10	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-10	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-10	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-10	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-10	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-10	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-10	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-10	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-10	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-10	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-10	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-10	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-10	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-10	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-10	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-10	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-10	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-10	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-10	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-10	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-10	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-10	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-10	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-10	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-10	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-10	11/11/2013	MTBE	62	1	0.77	143	ug/L
OW-10	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-10	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-10	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-10	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-10	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-10	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	3/7/2014	MTBE	79	1	0.25	143	ug/L
OW-10	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	6/3/2014	1,1-Dichloroethane	1.2	1	0.28	25	ug/L
OW-10	6/3/2014	1,1-Dichloroethene	1.2	1	0.21	7	ug/L
OW-10	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-10	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	6/3/2014	MTBE	92	1	0.25	143	ug/L
OW-10	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	9/12/2014	1,1-Dichloroethane	1.6	1	0.28	25	ug/L
OW-10	9/12/2014	1,1-Dichloroethene	1.8	1	0.21	7	ug/L
OW-10	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	9/12/2014	1,2-Dichloroethane	1.1	1	0.26	5	ug/L
OW-10	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	9/12/2014	MTBE	110	1	0.25	143	ug/L
OW-10	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-10	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-10	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-10	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-10	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-10	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-10	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-10	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-10	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-10	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-10	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-10	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-10	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-10	11/10/2014	1,1-Dichloroethane	1.3	1	0.28	25	ug/L
OW-10	11/10/2014	1,1-Dichloroethene	1.7	1	0.21	7	ug/L
OW-10	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-10	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-10	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-10	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-10	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-10	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-10	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-10	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-10	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-10	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-10	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-10	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-10	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-10	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-10	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-10	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-10	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-10	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-10	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-10	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-10	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-10	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-10	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-10	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-10	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-10	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-10	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-10	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-10	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-10	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-10	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-10	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-10	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-10	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-10	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-10	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-10	11/10/2014	MTBE	98	1	0.25	143	ug/L
OW-10	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-10	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-10	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	3/9/2015	MTBE	61	1	0.17	143	ug/L
OW-10	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	6/3/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	6/3/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	6/3/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	6/3/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	6/3/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	6/3/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	6/3/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	6/3/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	6/3/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	6/3/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	6/3/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	6/3/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	6/3/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	6/3/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	6/3/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	6/3/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	6/3/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	6/3/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	6/3/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	6/3/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	6/3/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	6/3/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	6/3/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	6/3/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	6/3/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	6/3/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	6/3/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	6/3/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	6/3/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	6/3/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	6/3/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	6/3/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	6/3/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	6/3/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	6/3/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	6/3/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	6/3/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	6/3/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	6/3/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	6/3/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	6/3/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	6/3/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	6/3/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	6/3/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	6/3/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	6/3/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	6/3/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	6/3/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	6/3/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	6/3/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	6/3/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	6/3/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	6/3/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	6/3/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	6/3/2015	MTBE	55	1	0.17	143	ug/L
OW-10	6/3/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	6/3/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	8/12/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	8/12/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	8/12/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	8/12/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	8/12/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	8/12/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	8/12/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	8/12/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	8/12/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	8/12/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	8/12/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	8/12/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	8/12/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	8/12/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	8/12/2015	1,1-Dichloroethane	1.1	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/12/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	8/12/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	8/12/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	8/12/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	8/12/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	8/12/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	8/12/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	8/12/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	8/12/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	8/12/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	8/12/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-10	8/12/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	8/12/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	8/12/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	8/12/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	8/12/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-10	8/12/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	8/12/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	8/12/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	8/12/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	8/12/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	8/12/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-10	8/12/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	8/12/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	8/12/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	8/12/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	8/12/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	8/12/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	8/12/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	8/12/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	8/12/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	8/12/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	8/12/2015	Toluene	ND	1	0.11	1000	ug/L
OW-10	8/12/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	8/12/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	8/12/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	8/12/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	8/12/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	8/12/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	8/12/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	8/12/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	8/12/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	8/12/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	8/12/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	8/12/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	8/12/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	8/12/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-10	8/12/2015	MTBE	58	1	0.17	143	ug/L
OW-10	8/12/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	8/12/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	10/28/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-10	10/28/2015	Acetone	ND	10	0.94	14064	ug/L
OW-10	10/28/2015	Chloroform	ND	1	0.21	100	ug/L
OW-10	10/28/2015	Benzene	ND	1	0.065	5	ug/L
OW-10	10/28/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-10	10/28/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-10	10/28/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-10	10/28/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-10	10/28/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-10	10/28/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-10	10/28/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-10	10/28/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-10	10/28/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-10	10/28/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-10	10/28/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-10	10/28/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-10	10/28/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-10	10/28/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-10	10/28/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	10/28/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-10	10/28/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-10	10/28/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-10	10/28/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-10	10/28/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	10/28/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-10	10/28/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	10/28/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-10	10/28/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-10	10/28/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-10	10/28/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-10	10/28/2015	1,2,4-Trimethylbenzene	1.6	1	0.16	56	ug/L
OW-10	10/28/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-10	10/28/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-10	10/28/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-10	10/28/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-10	10/28/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-10	10/28/2015	Ethylbenzene	1.1	1	0.1	700	ug/L
OW-10	10/28/2015	Styrene	ND	1	0.11	100	ug/L
OW-10	10/28/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-10	10/28/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	10/28/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-10	10/28/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-10	10/28/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	10/28/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-10	10/28/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-10	10/28/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	10/28/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-10	10/28/2015	Toluene	2.3	1	0.11	1000	ug/L
OW-10	10/28/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-10	10/28/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	10/28/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-10	10/28/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-10	10/28/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-10	10/28/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	10/28/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-10	10/28/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-10	10/28/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-10	10/28/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-10	10/28/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-10	10/28/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-10	10/28/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	10/28/2015	Xylenes, Total	4.2	1.5	0.28	620	ug/L
OW-10	10/28/2015	MTBE	51	1	0.17	143	ug/L
OW-10	10/28/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	10/28/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	3/3/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	3/3/2016	Acetone	ND	10	0.88	14064	ug/L
OW-10	3/3/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	3/3/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	3/3/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-10	3/3/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	3/3/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	3/3/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	3/3/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-10	3/3/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-10	3/3/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-10	3/3/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	3/3/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	3/3/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-10	3/3/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-10	3/3/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-10	3/3/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-10	3/3/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-10	3/3/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-10	3/3/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-10	3/3/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-10	3/3/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	3/3/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-10	3/3/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	3/3/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	3/3/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	3/3/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-10	3/3/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	3/3/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	3/3/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	3/3/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-10	3/3/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L
OW-10	3/3/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-10	3/3/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-10	3/3/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-10	3/3/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	3/3/2016	Ethylbenzene	ND	1	0.11	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/3/2016	Styrene	ND	1	0.095	100	ug/L
OW-10	3/3/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	3/3/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	3/3/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	3/3/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	3/3/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	3/3/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-10	3/3/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-10	3/3/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	3/3/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-10	3/3/2016	Toluene	ND	1	0.089	1000	ug/L
OW-10	3/3/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-10	3/3/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/3/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	3/3/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	3/3/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	3/3/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	3/3/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-10	3/3/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	3/3/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	3/3/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	3/3/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-10	3/3/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-10	3/3/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	3/3/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	3/3/2016	MTBE	39	1	0.21	143	ug/L
OW-10	3/3/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	3/3/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-10	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	6/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	6/6/2016	1,1-Dichloroethane	1.1	1	0.11	25	ug/L
OW-10	6/6/2016	1,1-Dichloroethene	0.9	1	0.11	7	ug/L
OW-10	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	6/6/2016	1,2-Dichloroethane	0.51	1	0.12	5	ug/L
OW-10	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	6/6/2016	Toluene	ND	1	0.12	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	6/6/2016	cis-1,2-Dichloroethene	0.31	1	0.12	70	ug/L
OW-10	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	6/6/2016	MTBE	33	1	0.21	143	ug/L
OW-10	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	9/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	9/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	9/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	9/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	9/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	9/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	9/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	9/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	9/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	9/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	9/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	9/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	9/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	9/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	9/6/2016	1,1-Dichloroethane	0.93	1	0.11	25	ug/L
OW-10	9/6/2016	1,1-Dichloroethene	0.76	1	0.11	7	ug/L
OW-10	9/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	9/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	9/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	9/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	9/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	9/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	9/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	9/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	9/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	9/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	9/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	9/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	9/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	9/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	9/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	9/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	9/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	9/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	9/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	9/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	9/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	9/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	9/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	9/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	9/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	9/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	9/6/2016	1,2-Dichloroethane	0.73	1	0.12	5	ug/L
OW-10	9/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	9/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	9/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	9/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-10	9/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	9/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	9/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	9/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	9/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	9/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	9/6/2016	cis-1,2-Dichloroethene	0.29	1	0.12	70	ug/L
OW-10	9/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	9/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	9/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	9/6/2016	2-Hexanone	ND	10	0.84	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	9/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	9/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	9/6/2016	MTBE	35	1	0.21	143	ug/L
OW-10	9/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	9/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-10	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-10	11/15/2016	Benzene	ND	1	0.096	5	ug/L
OW-10	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-10	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	11/15/2016	1,1-Dichloroethane	0.85	1	0.11	25	ug/L
OW-10	11/15/2016	1,1-Dichloroethene	0.67	1	0.11	7	ug/L
OW-10	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-10	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	11/15/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-10	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	11/15/2016	1,2-Dichloroethane	0.52	1	0.12	5	ug/L
OW-10	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-10	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	11/15/2016	cis-1,2-Dichloroethene	0.28	1	0.12	70	ug/L
OW-10	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	11/15/2016	MTBE	28	1	0.21	143	ug/L
OW-10	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-10	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-10	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-10	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-10	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-10	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-10	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-10	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-10	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-10	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-10	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-10	2/27/2017	1,1-Dichloroethane	0.87	1	0.11	25	ug/L
OW-10	2/27/2017	1,1-Dichloroethene	0.63	1	0.11	7	ug/L
OW-10	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-10	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-10	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-10	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-10	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-10	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-10	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-10	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-10	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-10	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-10	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-10	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-10	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-10	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-10	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-10	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-10	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-10	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-10	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-10	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-10	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-10	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-10	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-10	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-10	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-10	2/27/2017	1,2-Dichloroethane	0.5	1	0.12	5	ug/L
OW-10	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-10	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-10	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-10	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-10	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-10	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-10	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-10	2/27/2017	cis-1,2-Dichloroethene	0.29	1	0.12	70	ug/L
OW-10	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-10	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-10	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-10	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-10	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-10	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-10	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-10	2/27/2017	MTBE	19	1	0.21	143	ug/L
OW-10	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-10	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-10	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	5/31/2017	Acetone	5	10	0.82	14064	ug/L
OW-10	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	5/31/2017	1,1-Dichloroethane	1.1	1	0.4	25	ug/L
OW-10	5/31/2017	1,1-Dichloroethene	0.9	1	0.081	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	5/31/2017	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	5/31/2017	cis-1,2-Dichloroethene	0.25	1	0.2	70	ug/L
OW-10	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-10	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	5/31/2017	MTBE	22	1	0.24	143	ug/L
OW-10	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	9/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	9/7/2017	Acetone	3.5	10	0.82	14064	ug/L
OW-10	9/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	9/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	9/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	9/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	9/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	9/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	9/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	9/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	9/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	9/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	9/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	9/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	9/7/2017	1,1-Dichloroethane	1.2	1	0.4	25	ug/L
OW-10	9/7/2017	1,1-Dichloroethene	0.9	1	0.081	7	ug/L
OW-10	9/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	9/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	9/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	9/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	9/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	9/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	9/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	9/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	9/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	9/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	9/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	9/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	9/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	9/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	9/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	9/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	9/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	9/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	9/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	9/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	9/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	9/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	9/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	9/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	9/7/2017	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	9/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	9/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	9/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	9/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	9/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	9/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	9/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	9/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	9/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	9/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	9/7/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-10	9/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	9/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	9/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	9/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	9/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	9/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	9/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	9/7/2017	MTBE	20	1	0.24	143	ug/L
OW-10	9/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	9/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	12/7/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	12/7/2017	Acetone	1.7	10	0.82	14064	ug/L
OW-10	12/7/2017	Chloroform	ND	1	0.4	100	ug/L
OW-10	12/7/2017	Benzene	ND	1	0.062	5	ug/L
OW-10	12/7/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	12/7/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	12/7/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	12/7/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	12/7/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	12/7/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	12/7/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	12/7/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	12/7/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	12/7/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	12/7/2017	1,1-Dichloroethane	1	1	0.4	25	ug/L
OW-10	12/7/2017	1,1-Dichloroethene	0.86	1	0.081	7	ug/L
OW-10	12/7/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	12/7/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	12/7/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	12/7/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	12/7/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	12/7/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	12/7/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	12/7/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	12/7/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	12/7/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	12/7/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-10	12/7/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	12/7/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	12/7/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	12/7/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	12/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	12/7/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	12/7/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	12/7/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	12/7/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	12/7/2017	Ethylbenzene	ND	1	0.093	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/7/2017	Styrene	ND	1	0.16	100	ug/L
OW-10	12/7/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	12/7/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	12/7/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	12/7/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	12/7/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	12/7/2017	1,2-Dichloroethane	0.55	1	0.4	5	ug/L
OW-10	12/7/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	12/7/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	12/7/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	12/7/2017	Toluene	ND	1	0.064	1000	ug/L
OW-10	12/7/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	12/7/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	12/7/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	12/7/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	12/7/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	12/7/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	12/7/2017	cis-1,2-Dichloroethene	0.32	1	0.2	70	ug/L
OW-10	12/7/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	12/7/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	12/7/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	12/7/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	12/7/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	12/7/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	12/7/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	12/7/2017	MTBE	27	1	0.24	143	ug/L
OW-10	12/7/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	12/7/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	2/27/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	2/27/2018	Acetone	ND	10	0.82	14064	ug/L
OW-10	2/27/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	2/27/2018	Benzene	ND	1	0.062	5	ug/L
OW-10	2/27/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	2/27/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	2/27/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	2/27/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	2/27/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	2/27/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	2/27/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	2/27/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	2/27/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	2/27/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	2/27/2018	1,1-Dichloroethane	1.2	1	0.4	25	ug/L
OW-10	2/27/2018	1,1-Dichloroethene	0.9	1	0.081	7	ug/L
OW-10	2/27/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	2/27/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	2/27/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	2/27/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	2/27/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	2/27/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	2/27/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	2/27/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	2/27/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	2/27/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	2/27/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-10	2/27/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	2/27/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	2/27/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	2/27/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	2/27/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	2/27/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	2/27/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	2/27/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	2/27/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	2/27/2018	Styrene	ND	1	0.16	100	ug/L
OW-10	2/27/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	2/27/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	2/27/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	2/27/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	2/27/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	2/27/2018	1,2-Dichloroethane	0.6	1	0.4	5	ug/L
OW-10	2/27/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	2/27/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	2/27/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	2/27/2018	Toluene	ND	1	0.064	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	2/27/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	2/27/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	2/27/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	2/27/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	2/27/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	2/27/2018	cis-1,2-Dichloroethene	0.34	1	0.2	70	ug/L
OW-10	2/27/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	2/27/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	2/27/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	2/27/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-10	2/27/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	2/27/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	2/27/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	2/27/2018	MTBE	27	1	0.24	143	ug/L
OW-10	2/27/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	2/27/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-10	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-10	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-10	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-10	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-10	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-10	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-10	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-10	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-10	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-10	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-10	5/15/2018	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
OW-10	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-10	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-10	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-10	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-10	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-10	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-10	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-10	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-10	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-10	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-10	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-10	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-10	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-10	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-10	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-10	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-10	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-10	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-10	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-10	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-10	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-10	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-10	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-10	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-10	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-10	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-10	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-10	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-10	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-10	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-10	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-10	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-10	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-10	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-10	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-10	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-10	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-10	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-10	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-10	5/15/2018	MTBE	23	1	0.24	143	ug/L
OW-10	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-10	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-10	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-10	9/11/2018	Acetone	6.8	10	0.79	14064	ug/L
OW-10	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-10	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-10	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-10	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-10	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-10	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-10	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-10	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-10	9/11/2018	Methylene Chloride	0.27	3	0.21	5	ug/L
OW-10	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-10	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-10	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-10	9/11/2018	1,1-Dichloroethane	1.3	1	0.4	25	ug/L
OW-10	9/11/2018	1,1-Dichloroethene	0.86	1	0.12	7	ug/L
OW-10	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-10	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-10	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-10	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-10	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-10	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-10	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-10	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-10	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-10	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-10	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-10	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-10	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-10	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-10	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-10	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-10	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-10	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-10	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-10	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-10	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-10	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-10	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-10	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-10	9/11/2018	1,2-Dichloroethane	0.45	1	0.4	5	ug/L
OW-10	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-10	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-10	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-10	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-10	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-10	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-10	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-10	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-10	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-10	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-10	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-10	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-10	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-10	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-10	9/11/2018	MTBE	19	1	0.32	143	ug/L
OW-10	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-10	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-10	11/8/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-10	11/8/2018	Acetone	ND	10	0.76	14064	ug/L
OW-10	11/8/2018	Chloroform	ND	1	0.24	100	ug/L
OW-10	11/8/2018	Benzene	ND	1	0.17	5	ug/L
OW-10	11/8/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/8/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-10	11/8/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-10	11/8/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-10	11/8/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-10	11/8/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-10	11/8/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-10	11/8/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-10	11/8/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-10	11/8/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-10	11/8/2018	1,1-Dichloroethane	1.2	1	0.18	25	ug/L
OW-10	11/8/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-10	11/8/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-10	11/8/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-10	11/8/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-10	11/8/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-10	11/8/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-10	11/8/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-10	11/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-10	11/8/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-10	11/8/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-10	11/8/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-10	11/8/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-10	11/8/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-10	11/8/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-10	11/8/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-10	11/8/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-10	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-10	11/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-10	11/8/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-10	11/8/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-10	11/8/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-10	11/8/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-10	11/8/2018	Styrene	ND	1	0.25	100	ug/L
OW-10	11/8/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-10	11/8/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	11/8/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-10	11/8/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-10	11/8/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-10	11/8/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-10	11/8/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-10	11/8/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-10	11/8/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-10	11/8/2018	Toluene	ND	1	0.17	1000	ug/L
OW-10	11/8/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-10	11/8/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-10	11/8/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-10	11/8/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-10	11/8/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-10	11/8/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-10	11/8/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-10	11/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-10	11/8/2018	Pentafluorobenzene	ND	0	0		None
OW-10	11/8/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-10	11/8/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-10	11/8/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-10	11/8/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-10	11/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-10	11/8/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-10	11/8/2018	MTBE	15	1	0.46	143	ug/L
OW-10	11/8/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-10	11/8/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-10	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-10	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-10	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	3/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	3/27/2019	Acetone	3.8	10	1.199396	14064	ug/L
OW-10	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	3/27/2019	MTBE	1.5	1	0.456095	143	ug/L
OW-10	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	3/27/2019	1,1-Dichloroethane	0.55	1	0.140859	25	ug/L
OW-10	3/27/2019	1,1-Dichloroethene	0.38	1	0.205388	7	ug/L
OW-10	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	3/27/2019	1,2-Dichloroethane	0.36	1	0.194638	5	ug/L
OW-10	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	3/27/2019	Acetone	3.7	10	1.199396	14064	ug/L
OW-10	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	3/27/2019	MTBE	7.8	1	0.456095	143	ug/L
OW-10	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-10	3/27/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
OW-10	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	5/28/2019	1,1-Dichloroethane	0.55	1	0.140859	25	ug/L
OW-10	5/28/2019	1,1-Dichloroethene	0.38	1	0.205388	7	ug/L
OW-10	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-10	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-10	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	5/28/2019	MTBE	9.2	1	0.456095	143	ug/L
OW-10	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	5/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	5/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	5/28/2019	1,1-Dichloroethane	0.56	1	0.140859	25	ug/L
OW-10	5/28/2019	1,1-Dichloroethene	0.39	1	0.205388	7	ug/L
OW-10	5/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	5/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	5/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	5/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	5/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	5/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	5/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	5/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-10	5/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	5/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	5/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	5/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	5/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	5/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	5/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	5/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	5/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	5/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	5/28/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-10	5/28/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	5/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	5/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	5/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	5/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	5/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	5/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	5/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	5/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	5/28/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	5/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	5/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	5/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	5/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	5/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	5/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	5/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	5/28/2019	MTBE	9.1	1	0.456095	143	ug/L
OW-10	5/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	5/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	5/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	5/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	5/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	5/28/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	5/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	5/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	5/28/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	5/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	5/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	5/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	5/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	5/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	5/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-10	5/28/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-10	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	8/15/2019	1,1-Dichloroethane	0.79	1	0.140859	25	ug/L
OW-10	8/15/2019	1,1-Dichloroethene	0.56	1	0.205388	7	ug/L
OW-10	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	8/15/2019	1,2-Dichloroethane	0.36	1	0.194638	5	ug/L
OW-10	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	8/15/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-10	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	8/15/2019	MTBE	10	1	0.456095	143	ug/L
OW-10	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	8/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	8/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	8/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	8/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	8/15/2019	1,1-Dichloroethane	0.75	1	0.140859	25	ug/L
OW-10	8/15/2019	1,1-Dichloroethene	0.52	1	0.205388	7	ug/L
OW-10	8/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	8/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	8/15/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-10	8/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	8/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	8/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	8/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	8/15/2019	1,2-Dichloroethane	0.33	1	0.194638	5	ug/L
OW-10	8/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	8/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	8/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	8/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	8/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	8/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	8/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	8/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	8/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	8/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	8/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	8/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	8/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	8/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	8/15/2019	Acetone	1.5	10	1.199396	14064	ug/L
OW-10	8/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	8/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	8/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	8/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	8/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	8/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	8/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	8/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	8/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	8/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	8/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	8/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	8/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	8/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	8/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	8/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	8/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	8/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	8/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	8/15/2019	MTBE	9.9	1	0.456095	143	ug/L
OW-10	8/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	8/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	8/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	8/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	8/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	8/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	8/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	8/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	8/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	8/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	8/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	8/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	8/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	8/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	8/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	8/15/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-10	10/17/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-10	10/17/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-10	10/17/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-10	10/17/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-10	10/17/2019	1,1-Dichloroethane	0.83	1	0.140859	25	ug/L
OW-10	10/17/2019	1,1-Dichloroethene	0.59	1	0.205388	7	ug/L
OW-10	10/17/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-10	10/17/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-10	10/17/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-10	10/17/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-10	10/17/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-10	10/17/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-10	10/17/2019	1,2-Dichloroethane	0.54	1	0.194638	5	ug/L
OW-10	10/17/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-10	10/17/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-10	10/17/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-10	10/17/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-10	10/17/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-10	10/17/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-10	10/17/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-10	10/17/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-10	10/17/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-10	10/17/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-10	10/17/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-10	10/17/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-10	10/17/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-10	10/17/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-10	10/17/2019	Acetone	5.8	10	1.199396	14064	ug/L
OW-10	10/17/2019	Benzene	ND	1	0.166639	5	ug/L
OW-10	10/17/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-10	10/17/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-10	10/17/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-10	10/17/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-10	10/17/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-10	10/17/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-10	10/17/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-10	10/17/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-10	10/17/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-10	10/17/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-10	10/17/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-10	10/17/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-10	10/17/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-10	10/17/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-10	10/17/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-10	10/17/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-10	10/17/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-10	10/17/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-10	10/17/2019	MTBE	10	1	0.456095	143	ug/L
OW-10	10/17/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-10	10/17/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-10	10/17/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-10	10/17/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-10	10/17/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-10	10/17/2019	Styrene	ND	1	0.191323	100	ug/L
OW-10	10/17/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-10	10/17/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-10	10/17/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-10	10/17/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-10	10/17/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-10	10/17/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-10	10/17/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-10	10/17/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-10	10/17/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-10	10/17/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-10	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	3/4/2020	1,1-Dichloroethane	0.69	1	0.27	25	ug/L
OW-10	3/4/2020	1,1-Dichloroethene	0.6	1	0.13	7	ug/L
OW-10	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-10	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-10	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/4/2020	Acetone	3.2	10	2.3	14064	ug/L
OW-10	3/4/2020	Benzene	ND	1	0.23	5	ug/L
OW-10	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	3/4/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	3/4/2020	MTBE	9.7	1	0.39	143	ug/L
OW-10	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	3/4/2020	1,1-Dichloroethane	0.71	1	0.27	25	ug/L
OW-10	3/4/2020	1,1-Dichloroethene	0.6	1	0.13	7	ug/L
OW-10	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	3/4/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	3/4/2020	1,2-Dichloroethane	0.49	1	0.22	5	ug/L
OW-10	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	3/4/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	3/4/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	3/4/2020	Acetone	3.1	10	2.3	14064	ug/L
OW-10	3/4/2020	Benzene	ND	1	0.23	5	ug/L
OW-10	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	3/4/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	3/4/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	3/4/2020	MTBE	9.7	1	0.39	143	ug/L
OW-10	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	3/4/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	3/4/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	3/4/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	3/4/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	3/4/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	3/4/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	3/4/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-10	3/4/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-10	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-10	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-10	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-10	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-10	9/20/2020	1,1-Dichloroethane	1.4	1	0.27	25	ug/L
OW-10	9/20/2020	1,1-Dichloroethene	0.75	1	0.13	7	ug/L
OW-10	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-10	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-10	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-10	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-10	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-10	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-10	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-10	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-10	9/20/2020	1,2-Dichloroethane	0.37	1	0.22	5	ug/L
OW-10	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-10	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-10	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-10	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-10	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-10	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-10	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-10	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-10	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-10	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-10	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-10	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-10	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-10	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-10	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-10	9/20/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-10	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-10	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-10	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-10	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-10	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-10	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-10	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-10	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-10	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-10	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-10	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-10	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-10	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-10	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-10	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-10	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-10	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-10	9/20/2020	MTBE	15	1	0.39	143	ug/L
OW-10	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-10	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-10	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-10	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-10	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-10	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-10	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-10	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-10	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-10	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-10	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-10	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-10	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-10	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-10	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-10	9/20/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	ND	0.022	0.0055	0.05	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-10	12/11/2020	1,4-Dioxane	2.27	1	0.3	4.59	ug/L
OW-10	12/11/2020	1,4-Dioxane	2.26	1	0.3	4.59	ug/L
OW-10	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-10	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-10	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-10	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-10	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-10	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-10	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-10	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-10	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-10	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-10	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-10	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-10	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-10	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-10	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-10	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-10	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-10	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-10	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-10	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-10	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-10	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-10	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-10	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-10	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-10	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-10	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-10	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-10	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-10	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-10	12/11/2020	MTBE	7.64	1	0.74	143	ug/L
OW-10	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-10	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-10	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-10	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-10	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-10	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-10	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-10	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-10	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-10	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-10	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-10	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-10	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-10	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-10	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-10	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-10	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-10	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-10	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-10	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-10	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-10	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-10	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-10	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-10	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-10	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-10	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-10	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-10	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-10	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-10	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-10	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-10	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-10	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-10	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-10	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-10	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-10	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-10	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-10	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-10	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-10	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-10	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-10	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-10	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-10	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-10	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-10	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-10	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-10	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-10	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-10	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-10	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-10	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-10	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-10	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-10	12/11/2020	MTBE	7.76	1	0.74	143	ug/L
OW-10	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-10	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-10	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-10	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-10	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-10	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-10	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-10	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-10	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-10	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-10	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-10	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-10	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-10	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-10	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-10	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-10	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-10	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-10	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-10	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-10	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-10	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-10	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-11	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-11	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-11	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-11	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-11	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-11	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-11	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-11	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-11	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-11	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-11	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-11	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-11	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-11	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-11	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-11	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-11	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-11	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-11	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-11	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-11	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-11	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-11	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-11	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-11	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-11	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-11	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-11	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-11	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-11	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-11	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-11	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-11	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-11	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-11	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-11	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-11	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-11	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-11	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-11	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-11	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-11	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-11	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-11	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-11	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-11	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-11	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-11	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-11	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-11	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-11	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-11	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-11	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-11	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-11	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-11	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-11	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-11	9/16/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-11	9/16/2013	Acetone	ND	10	1.7	14064	ug/L
OW-11	9/16/2013	Chloroform	ND	1	0.47	100	ug/L
OW-11	9/16/2013	Benzene	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-11	9/16/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-11	9/16/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-11	9/16/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-11	9/16/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-11	9/16/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-11	9/16/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-11	9/16/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-11	9/16/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-11	9/16/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-11	9/16/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-11	9/16/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-11	9/16/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-11	9/16/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-11	9/16/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-11	9/16/2013	2-Butanone	ND	10	1	5565	ug/L
OW-11	9/16/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-11	9/16/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-11	9/16/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-11	9/16/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-11	9/16/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-11	9/16/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-11	9/16/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-11	9/16/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-11	9/16/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-11	9/16/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-11	9/16/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-11	9/16/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-11	9/16/2013	Styrene	ND	1	0.58	100	ug/L
OW-11	9/16/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-11	9/16/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-11	9/16/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-11	9/16/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-11	9/16/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-11	9/16/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-11	9/16/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-11	9/16/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-11	9/16/2013	Toluene	ND	1	0.44	1000	ug/L
OW-11	9/16/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-11	9/16/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-11	9/16/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-11	9/16/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-11	9/16/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-11	9/16/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-11	9/16/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-11	9/16/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-11	9/16/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-11	9/16/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-11	9/16/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-11	9/16/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-11	9/16/2013	MTBE	ND	1	0.77	143	ug/L
OW-11	9/16/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-11	9/16/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-11	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-11	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-11	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-11	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-11	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-11	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-11	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-11	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-11	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-11	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-11	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-11	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-11	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-11	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-11	9/12/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-11	9/12/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-11	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-11	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-11	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-11	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-11	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-11	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-11	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-11	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-11	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-11	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-11	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-11	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-11	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-11	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-11	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-11	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-11	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-11	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-11	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-11	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-11	9/12/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-11	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-11	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-11	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-11	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-11	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-11	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-11	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-11	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-11	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-11	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-11	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-11	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-11	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-11	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-11	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-11	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-11	9/12/2014	MTBE	ND	1	0.25	143	ug/L
OW-11	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-11	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-11	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-11	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
OW-11	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
OW-11	8/17/2015	Benzene	ND	1	0.065	5	ug/L
OW-11	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-11	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-11	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-11	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-11	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-11	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-11	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-11	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-11	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-11	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-11	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-11	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-11	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-11	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-11	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-11	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-11	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-11	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-11	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-11	8/17/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-11	8/17/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-11	8/17/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-11	8/17/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-11	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-11	8/17/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-11	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-11	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-11	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-11	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-11	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-11	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-11	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-11	8/17/2015	Styrene	ND	1	0.11	100	ug/L
OW-11	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-11	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-11	8/17/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-11	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-11	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-11	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-11	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-11	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
OW-11	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-11	8/17/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-11	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-11	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-11	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-11	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-11	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-11	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-11	8/17/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-11	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-11	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-11	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-11	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-11	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-11	8/17/2015	MTBE	ND	1	0.17	143	ug/L
OW-11	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-11	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-11	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-11	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-11	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-11	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-11	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-11	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-11	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-11	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-11	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-11	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-11	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-11	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-11	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-11	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-11	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-11	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-11	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-11	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-11	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-11	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-11	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-11	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-11	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-11	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-11	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-11	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-11	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-11	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-11	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-11	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-11	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-11	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-11	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-11	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-11	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-11	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-11	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-11	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-11	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-11	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-11	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-11	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-11	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-11	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-11	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-11	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-11	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-11	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-11	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-11	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-11	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-11	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-11	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-11	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-11	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-11	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-11	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-11	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-11	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-11	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-11	9/9/2016	MTBE	ND	1	0.21	143	ug/L
OW-11	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-11	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-11	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-11	9/18/2017	Acetone	5.9	10	0.82	14064	ug/L
OW-11	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
OW-11	9/18/2017	Benzene	ND	1	0.062	5	ug/L
OW-11	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-11	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-11	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-11	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-11	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-11	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-11	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-11	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-11	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-11	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-11	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-11	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-11	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-11	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-11	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-11	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-11	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-11	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-11	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-11	9/18/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-11	9/18/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-11	9/18/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-11	9/18/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-11	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/18/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-11	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-11	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-11	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-11	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-11	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-11	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-11	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-11	9/18/2017	Styrene	ND	1	0.16	100	ug/L
OW-11	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-11	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-11	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-11	9/18/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-11	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-11	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-11	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-11	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-11	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-11	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
OW-11	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-11	9/18/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-11	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-11	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-11	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-11	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-11	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-11	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-11	9/18/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-11	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-11	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-11	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-11	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-11	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-11	9/18/2017	MTBE	ND	1	0.24	143	ug/L
OW-11	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-11	9/18/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-11	9/18/2018	Acetone	ND	10	0.79	14064	ug/L
OW-11	9/18/2018	Chloroform	ND	1	0.4	100	ug/L
OW-11	9/18/2018	Benzene	ND	1	0.17	5	ug/L
OW-11	9/18/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-11	9/18/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-11	9/18/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-11	9/18/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-11	9/18/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-11	9/18/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-11	9/18/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-11	9/18/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-11	9/18/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-11	9/18/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-11	9/18/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-11	9/18/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-11	9/18/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-11	9/18/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-11	9/18/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-11	9/18/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-11	9/18/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-11	9/18/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-11	9/18/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-11	9/18/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-11	9/18/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-11	9/18/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-11	9/18/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-11	9/18/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-11	9/18/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-11	9/18/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-11	9/18/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-11	9/18/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-11	9/18/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-11	9/18/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-11	9/18/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-11	9/18/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-11	9/18/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-11	9/18/2018	Styrene	ND	1	0.25	100	ug/L
OW-11	9/18/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-11	9/18/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	9/18/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-11	9/18/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-11	9/18/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-11	9/18/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-11	9/18/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-11	9/18/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-11	9/18/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-11	9/18/2018	Toluene	ND	1	0.17	1000	ug/L
OW-11	9/18/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-11	9/18/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-11	9/18/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-11	9/18/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-11	9/18/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-11	9/18/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-11	9/18/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-11	9/18/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-11	9/18/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-11	9/18/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-11	9/18/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-11	9/18/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-11	9/18/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-11	9/18/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-11	9/18/2018	MTBE	ND	1	0.32	143	ug/L
OW-11	9/18/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-11	9/18/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-11	8/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-11	8/20/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-11	8/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-11	8/20/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-11	8/20/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-11	8/20/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-11	8/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-11	8/20/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-11	8/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-11	8/20/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	8/20/2019	1,2,4-Trimethylbenzene	0.31	1	0.213199	56	ug/L
OW-11	8/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-11	8/20/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-11	8/20/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-11	8/20/2019	1,2-Dichloroethane	0.38	1	0.194638	5	ug/L
OW-11	8/20/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-11	8/20/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-11	8/20/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-11	8/20/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-11	8/20/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-11	8/20/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-11	8/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-11	8/20/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-11	8/20/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-11	8/20/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-11	8/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-11	8/20/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-11	8/20/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-11	8/20/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-11	8/20/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-11	8/20/2019	Benzene	0.48	1	0.166639	5	ug/L
OW-11	8/20/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-11	8/20/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-11	8/20/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-11	8/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-11	8/20/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-11	8/20/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-11	8/20/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-11	8/20/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-11	8/20/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-11	8/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-11	8/20/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-11	8/20/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-11	8/20/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-11	8/20/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-11	8/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-11	8/20/2019	Ethylbenzene	0.41	1	0.132341	700	ug/L
OW-11	8/20/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-11	8/20/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-11	8/20/2019	MTBE	ND	1	0.456095	143	ug/L
OW-11	8/20/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-11	8/20/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-11	8/20/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-11	8/20/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-11	8/20/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-11	8/20/2019	Styrene	ND	1	0.191323	100	ug/L
OW-11	8/20/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-11	8/20/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-11	8/20/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-11	8/20/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-11	8/20/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-11	8/20/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-11	8/20/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-11	8/20/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-11	8/20/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-11	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-11	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-11	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-11	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-11	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-11	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-11	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-11	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-11	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-11	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-11	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-11	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-11	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-11	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-11	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-11	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-11	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-11	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-11	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-11	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-11	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-11	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-11	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-11	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-11	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-11	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-11	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-11	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-11	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
OW-11	9/20/2020	Benzene	ND	1	0.23	5	ug/L
OW-11	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-11	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-11	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-11	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-11	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-11	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-11	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-11	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-11	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
OW-11	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-11	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-11	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-11	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-11	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-11	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-11	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-11	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-11	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-11	9/20/2020	MTBE	ND	1	0.39	143	ug/L
OW-11	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-11	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-11	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-11	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-11	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-11	9/20/2020	Styrene	ND	1	0.13	100	ug/L
OW-11	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-11	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-11	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
OW-11	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-11	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-11	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-11	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-11	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-11	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-12	8/22/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-12	8/22/2012	Acetone	ND	10	1.5	14064	ug/L
OW-12	8/22/2012	Chloroform	ND	1	0.35	100	ug/L
OW-12	8/22/2012	Benzene	ND	1	0.4	5	ug/L
OW-12	8/22/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-12	8/22/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-12	8/22/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-12	8/22/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-12	8/22/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-12	8/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-12	8/22/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-12	8/22/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-12	8/22/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-12	8/22/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-12	8/22/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-12	8/22/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-12	8/22/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-12	8/22/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-12	8/22/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-12	8/22/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-12	8/22/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-12	8/22/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-12	8/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-12	8/22/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-12	8/22/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-12	8/22/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-12	8/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-12	8/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-12	8/22/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-12	8/22/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-12	8/22/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-12	8/22/2012	Ethylbenzene	ND	1	0.38	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/22/2012	Styrene	ND	1	0.41	100	ug/L
OW-12	8/22/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-12	8/22/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-12	8/22/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-12	8/22/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-12	8/22/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-12	8/22/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-12	8/22/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-12	8/22/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-12	8/22/2012	Toluene	ND	1	0.47	1000	ug/L
OW-12	8/22/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-12	8/22/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-12	8/22/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-12	8/22/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-12	8/22/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-12	8/22/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-12	8/22/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-12	8/22/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-12	8/22/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-12	8/22/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-12	8/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-12	8/22/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-12	8/22/2012	MTBE	ND	1	0.96	143	ug/L
OW-12	8/22/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-12	8/22/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-12	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-12	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
OW-12	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
OW-12	9/10/2013	Benzene	ND	1	0.46	5	ug/L
OW-12	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-12	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-12	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-12	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-12	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-12	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-12	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-12	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-12	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-12	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-12	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-12	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-12	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-12	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-12	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-12	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
OW-12	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-12	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-12	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-12	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-12	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-12	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-12	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-12	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-12	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-12	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-12	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-12	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-12	9/10/2013	Styrene	ND	1	0.58	100	ug/L
OW-12	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-12	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-12	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-12	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-12	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-12	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-12	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-12	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-12	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
OW-12	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-12	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-12	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-12	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-12	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-12	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-12	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-12	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-12	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-12	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-12	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-12	9/10/2013	MTBE	ND	1	0.77	143	ug/L
OW-12	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-12	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-12	9/12/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-12	9/12/2014	Acetone	ND	10	4.9	14064	ug/L
OW-12	9/12/2014	Chloroform	ND	1	0.32	100	ug/L
OW-12	9/12/2014	Benzene	ND	1	0.15	5	ug/L
OW-12	9/12/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-12	9/12/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-12	9/12/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-12	9/12/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-12	9/12/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-12	9/12/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-12	9/12/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-12	9/12/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-12	9/12/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-12	9/12/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-12	9/12/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-12	9/12/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-12	9/12/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-12	9/12/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-12	9/12/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-12	9/12/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-12	9/12/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-12	9/12/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-12	9/12/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-12	9/12/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-12	9/12/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-12	9/12/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-12	9/12/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-12	9/12/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-12	9/12/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-12	9/12/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-12	9/12/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-12	9/12/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-12	9/12/2014	Styrene	ND	1	0.12	100	ug/L
OW-12	9/12/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-12	9/12/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-12	9/12/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-12	9/12/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-12	9/12/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-12	9/12/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-12	9/12/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-12	9/12/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-12	9/12/2014	Toluene	ND	1	0.17	1000	ug/L
OW-12	9/12/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-12	9/12/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-12	9/12/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-12	9/12/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-12	9/12/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-12	9/12/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-12	9/12/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-12	9/12/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-12	9/12/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-12	9/12/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-12	9/12/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-12	9/12/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-12	9/12/2014	MTBE	ND	1	0.25	143	ug/L
OW-12	9/12/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-12	9/12/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-12	8/13/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-12	8/13/2015	Acetone	ND	10	0.94	14064	ug/L
OW-12	8/13/2015	Chloroform	ND	1	0.21	100	ug/L
OW-12	8/13/2015	Benzene	ND	1	0.065	5	ug/L
OW-12	8/13/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-12	8/13/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-12	8/13/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-12	8/13/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-12	8/13/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-12	8/13/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-12	8/13/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-12	8/13/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-12	8/13/2015	Bromoform	ND	1	0.16	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/13/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-12	8/13/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	8/13/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-12	8/13/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-12	8/13/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-12	8/13/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-12	8/13/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-12	8/13/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-12	8/13/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-12	8/13/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-12	8/13/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-12	8/13/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-12	8/13/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-12	8/13/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-12	8/13/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-12	8/13/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-12	8/13/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-12	8/13/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-12	8/13/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-12	8/13/2015	Styrene	ND	1	0.11	100	ug/L
OW-12	8/13/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-12	8/13/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	8/13/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-12	8/13/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-12	8/13/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-12	8/13/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-12	8/13/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-12	8/13/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-12	8/13/2015	Toluene	ND	1	0.11	1000	ug/L
OW-12	8/13/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-12	8/13/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-12	8/13/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-12	8/13/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-12	8/13/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-12	8/13/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-12	8/13/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-12	8/13/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-12	8/13/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-12	8/13/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-12	8/13/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-12	8/13/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-12	8/13/2015	MTBE	ND	1	0.17	143	ug/L
OW-12	8/13/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-12	8/13/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-12	9/8/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-12	9/8/2016	Acetone	ND	10	4.9	14064	ug/L
OW-12	9/8/2016	Chloroform	ND	1	0.089	100	ug/L
OW-12	9/8/2016	Benzene	ND	1	0.096	5	ug/L
OW-12	9/8/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-12	9/8/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-12	9/8/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-12	9/8/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-12	9/8/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-12	9/8/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-12	9/8/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-12	9/8/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-12	9/8/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-12	9/8/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-12	9/8/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-12	9/8/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-12	9/8/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-12	9/8/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-12	9/8/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-12	9/8/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-12	9/8/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-12	9/8/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-12	9/8/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-12	9/8/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-12	9/8/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-12	9/8/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-12	9/8/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-12	9/8/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-12	9/8/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/8/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-12	9/8/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-12	9/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/8/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-12	9/8/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-12	9/8/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-12	9/8/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-12	9/8/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-12	9/8/2016	Styrene	ND	1	0.11	100	ug/L
OW-12	9/8/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-12	9/8/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-12	9/8/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-12	9/8/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-12	9/8/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-12	9/8/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-12	9/8/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-12	9/8/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-12	9/8/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-12	9/8/2016	Toluene	ND	1	0.12	1000	ug/L
OW-12	9/8/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-12	9/8/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-12	9/8/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-12	9/8/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-12	9/8/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-12	9/8/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-12	9/8/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-12	9/8/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-12	9/8/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-12	9/8/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-12	9/8/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-12	9/8/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-12	9/8/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-12	9/8/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-12	9/8/2016	MTBE	ND	1	0.21	143	ug/L
OW-12	9/8/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-12	9/8/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-12	9/19/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-12	9/19/2017	Acetone	1.8	10	0.82	14064	ug/L
OW-12	9/19/2017	Chloroform	ND	1	0.4	100	ug/L
OW-12	9/19/2017	Benzene	ND	1	0.062	5	ug/L
OW-12	9/19/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-12	9/19/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-12	9/19/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-12	9/19/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-12	9/19/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-12	9/19/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-12	9/19/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-12	9/19/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-12	9/19/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-12	9/19/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-12	9/19/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	9/19/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-12	9/19/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-12	9/19/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-12	9/19/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-12	9/19/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-12	9/19/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-12	9/19/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-12	9/19/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-12	9/19/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-12	9/19/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-12	9/19/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-12	9/19/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-12	9/19/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-12	9/19/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/19/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-12	9/19/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-12	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-12	9/19/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-12	9/19/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-12	9/19/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-12	9/19/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-12	9/19/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-12	9/19/2017	Styrene	ND	1	0.16	100	ug/L
OW-12	9/19/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-12	9/19/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-12	9/19/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-12	9/19/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-12	9/19/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-12	9/19/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-12	9/19/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-12	9/19/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-12	9/19/2017	Toluene	ND	1	0.064	1000	ug/L
OW-12	9/19/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-12	9/19/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-12	9/19/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-12	9/19/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-12	9/19/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-12	9/19/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-12	9/19/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-12	9/19/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-12	9/19/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-12	9/19/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-12	9/19/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-12	9/19/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-12	9/19/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-12	9/19/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-12	9/19/2017	MTBE	ND	1	0.24	143	ug/L
OW-12	9/19/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-12	9/19/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-12	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-12	9/19/2018	Acetone	4.2	10	0.79	14064	ug/L
OW-12	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
OW-12	9/19/2018	Benzene	ND	1	0.17	5	ug/L
OW-12	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-12	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-12	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-12	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-12	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-12	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-12	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-12	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-12	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-12	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-12	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-12	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-12	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-12	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-12	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-12	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-12	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-12	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-12	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-12	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-12	9/19/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-12	9/19/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-12	9/19/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-12	9/19/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-12	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-12	9/19/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-12	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-12	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-12	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-12	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-12	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-12	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-12	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-12	9/19/2018	Styrene	ND	1	0.25	100	ug/L
OW-12	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-12	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-12	9/19/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-12	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-12	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-12	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-12	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-12	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-12	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
OW-12	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-12	9/19/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-12	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-12	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-12	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-12	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-12	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-12	9/19/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-12	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-12	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-12	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-12	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-12	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-12	9/19/2018	MTBE	0.51	1	0.32	143	ug/L
OW-12	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-12	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-12	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-12	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-12	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-12	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-12	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-12	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-12	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-12	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-12	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-12	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-12	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-12	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-12	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-12	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-12	9/17/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-12	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-12	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-12	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-12	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-12	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-12	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-12	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-12	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-12	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-12	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-12	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-12	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-12	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-12	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-12	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-12	9/17/2020	Benzene	**29**	1	0.23	5	ug/L
OW-12	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-12	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-12	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-12	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-12	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-12	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-12	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-12	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-12	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-12	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-12	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-12	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-12	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-12	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-12	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-12	9/17/2020	Ethylbenzene	1.9	1	0.21	700	ug/L
OW-12	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-12	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-12	9/17/2020	MTBE	1.5	1	0.39	143	ug/L
OW-12	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-12	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-12	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-12	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-12	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-12	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-12	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-12	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-12	9/17/2020	Toluene	31	1	0.2	1000	ug/L
OW-12	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-12	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-12	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-12	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-12	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-12	9/17/2020	Xylenes, Total	6.7	1.5	0.55	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-13	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-13	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-13	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-13	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-13	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-13	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-13	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-13	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-13	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-13	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-13	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-13	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-13	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-13	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-13	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-13	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-13	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-13	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-13	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-13	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-13	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-13	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-13	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-13	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-13	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-13	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-13	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-13	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-13	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-13	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-13	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-13	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-13	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-13	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-13	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-13	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-13	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-13	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-13	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-13	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-13	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-13	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-13	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-13	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-13	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-13	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-13	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-13	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-13	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-13	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-13	3/21/2012	MTBE	8.2	1	0.52	143	ug/L
OW-13	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-13	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-13	6/14/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	6/14/2012	Acetone	ND	10	2.1	14064	ug/L
OW-13	6/14/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	6/14/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	6/14/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	6/14/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	6/14/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-13	6/14/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	6/14/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-13	6/14/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	6/14/2012	Methylene Chloride	ND	3	0.35	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/14/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-13	6/14/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	6/14/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	6/14/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	6/14/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	6/14/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	6/14/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	6/14/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	6/14/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	6/14/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	6/14/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-13	6/14/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	6/14/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	6/14/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	6/14/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-13	6/14/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-13	6/14/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	6/14/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	6/14/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	6/14/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	6/14/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-13	6/14/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	6/14/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	6/14/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	6/14/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	6/14/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	6/14/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	6/14/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-13	6/14/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	6/14/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	6/14/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	6/14/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	6/14/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	6/14/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	6/14/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	6/14/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	6/14/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	6/14/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	6/14/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	6/14/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	6/14/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	6/14/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	6/14/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	6/14/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	6/14/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	6/14/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	6/14/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	6/14/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	6/14/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	6/14/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	6/14/2012	MTBE	7.9	1	0.96	143	ug/L
OW-13	6/14/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	6/14/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-13	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-13	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-13	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-13	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-13	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-13	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-13	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-13	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	8/23/2012	MTBE	9.2	1	0.96	143	ug/L
OW-13	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-13	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-13	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-13	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-13	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-13	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-13	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-13	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-13	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-13	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-13	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-13	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-13	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-13	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-13	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-13	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-13	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-13	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-13	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-13	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-13	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-13	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-13	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-13	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-13	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-13	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-13	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-13	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-13	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-13	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-13	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-13	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-13	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-13	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-13	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-13	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-13	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-13	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-13	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-13	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-13	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-13	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-13	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-13	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-13	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-13	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-13	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-13	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-13	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-13	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-13	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-13	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-13	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-13	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-13	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-13	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-13	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-13	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-13	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-13	11/27/2012	MTBE	11	1	0.96	143	ug/L
OW-13	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-13	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-13	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-13	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-13	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-13	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-13	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-13	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-13	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-13	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-13	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-13	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-13	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-13	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-13	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-13	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-13	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L
OW-13	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-13	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	3/19/2013	MTBE	12	1	0.77	143	ug/L
OW-13	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	6/13/2013	MTBE	15	1	0.77	143	ug/L
OW-13	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-13	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	9/4/2013	MTBE	14	1	0.77	143	ug/L
OW-13	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-13	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-13	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-13	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-13	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-13	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-13	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-13	11/11/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-13	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-13	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-13	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-13	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-13	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-13	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-13	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-13	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-13	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-13	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-13	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-13	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-13	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-13	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-13	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-13	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-13	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-13	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-13	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-13	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-13	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-13	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-13	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-13	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-13	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-13	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-13	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-13	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-13	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-13	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-13	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-13	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-13	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-13	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-13	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-13	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-13	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-13	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-13	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-13	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-13	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-13	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-13	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-13	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-13	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-13	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-13	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-13	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-13	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-13	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-13	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-13	11/11/2013	MTBE	17	1	0.77	143	ug/L
OW-13	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-13	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-13	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	3/7/2014	MTBE	23	1	0.25	143	ug/L
OW-13	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	6/3/2014	MTBE	20	1	0.25	143	ug/L
OW-13	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-13	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	9/15/2014	MTBE	23	1	0.25	143	ug/L
OW-13	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	11/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	11/10/2014	Acetone	ND	10	4.9	14064	ug/L
OW-13	11/10/2014	Chloroform	ND	1	0.32	100	ug/L
OW-13	11/10/2014	Benzene	ND	1	0.15	5	ug/L
OW-13	11/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-13	11/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-13	11/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-13	11/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-13	11/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-13	11/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-13	11/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-13	11/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-13	11/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-13	11/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-13	11/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-13	11/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-13	11/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	11/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-13	11/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-13	11/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	11/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	11/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-13	11/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-13	11/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-13	11/10/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-13	11/10/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-13	11/10/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-13	11/10/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-13	11/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	11/10/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-13	11/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-13	11/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-13	11/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-13	11/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-13	11/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-13	11/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-13	11/10/2014	Styrene	ND	1	0.12	100	ug/L
OW-13	11/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-13	11/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-13	11/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-13	11/10/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-13	11/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-13	11/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-13	11/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	11/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-13	11/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-13	11/10/2014	Toluene	ND	1	0.17	1000	ug/L
OW-13	11/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	11/10/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-13	11/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-13	11/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-13	11/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	11/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	11/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-13	11/10/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-13	11/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-13	11/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-13	11/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-13	11/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-13	11/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-13	11/10/2014	MTBE	27	1	0.25	143	ug/L
OW-13	11/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-13	11/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	3/9/2015	MTBE	26	1	0.17	143	ug/L
OW-13	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	6/1/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	6/1/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	6/1/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	6/1/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	6/1/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	6/1/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	6/1/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	6/1/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	6/1/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	6/1/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	6/1/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	6/1/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	6/1/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	6/1/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	6/1/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	6/1/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	6/1/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	6/1/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	6/1/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	6/1/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	6/1/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	6/1/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	6/1/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	6/1/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	6/1/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	6/1/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	6/1/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	6/1/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	6/1/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	6/1/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	6/1/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	6/1/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	6/1/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	6/1/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	6/1/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	6/1/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	6/1/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	6/1/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	6/1/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	6/1/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	6/1/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	6/1/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	6/1/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	6/1/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	6/1/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	6/1/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	6/1/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	6/1/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	6/1/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	6/1/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	6/1/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	6/1/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	6/1/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	6/1/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	6/1/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	6/1/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	6/1/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	6/1/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	6/1/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	6/1/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	6/1/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	6/1/2015	MTBE	25	1	0.17	143	ug/L
OW-13	6/1/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	6/1/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	8/11/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	8/11/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	8/11/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	8/11/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	8/11/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	8/11/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	8/11/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	8/11/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	8/11/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	8/11/2015	Vinyl Chloride	ND	1	0.13	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/11/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	8/11/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	8/11/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	8/11/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	8/11/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	8/11/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	8/11/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	8/11/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	8/11/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	8/11/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	8/11/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-13	8/11/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	8/11/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	8/11/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	8/11/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	8/11/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	8/11/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	8/11/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	8/11/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	8/11/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	8/11/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	8/11/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	8/11/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	8/11/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	8/11/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	8/11/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	8/11/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	8/11/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	8/11/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	8/11/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	8/11/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	8/11/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	8/11/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	8/11/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	8/11/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	8/11/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	8/11/2015	Toluene	ND	1	0.11	1000	ug/L
OW-13	8/11/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	8/11/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	8/11/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	8/11/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	8/11/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	8/11/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	8/11/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	8/11/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	8/11/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	8/11/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	8/11/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	8/11/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	8/11/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	8/11/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-13	8/11/2015	MTBE	31	1	0.17	143	ug/L
OW-13	8/11/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	8/11/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	10/27/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-13	10/27/2015	Acetone	ND	10	0.94	14064	ug/L
OW-13	10/27/2015	Chloroform	ND	1	0.21	100	ug/L
OW-13	10/27/2015	Benzene	ND	1	0.065	5	ug/L
OW-13	10/27/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-13	10/27/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-13	10/27/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-13	10/27/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-13	10/27/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-13	10/27/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-13	10/27/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-13	10/27/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-13	10/27/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-13	10/27/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-13	10/27/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	10/27/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-13	10/27/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-13	10/27/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-13	10/27/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	10/27/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-13	10/27/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	10/27/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-13	10/27/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-13	10/27/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	10/27/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-13	10/27/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-13	10/27/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-13	10/27/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-13	10/27/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-13	10/27/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-13	10/27/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-13	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-13	10/27/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-13	10/27/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-13	10/27/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-13	10/27/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-13	10/27/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-13	10/27/2015	Styrene	ND	1	0.11	100	ug/L
OW-13	10/27/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-13	10/27/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	10/27/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-13	10/27/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-13	10/27/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	10/27/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-13	10/27/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-13	10/27/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	10/27/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-13	10/27/2015	Toluene	1.3	1	0.11	1000	ug/L
OW-13	10/27/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-13	10/27/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	10/27/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-13	10/27/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-13	10/27/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-13	10/27/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	10/27/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-13	10/27/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-13	10/27/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-13	10/27/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-13	10/27/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-13	10/27/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-13	10/27/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	10/27/2015	Xylenes, Total	1.6	1.5	0.28	620	ug/L
OW-13	10/27/2015	MTBE	35	1	0.17	143	ug/L
OW-13	10/27/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	10/27/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	3/4/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	3/4/2016	Acetone	ND	10	0.88	14064	ug/L
OW-13	3/4/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	3/4/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	3/4/2016	1,1,1-Trichloroethane	ND	1	0.063	200	ug/L
OW-13	3/4/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	3/4/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	3/4/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	3/4/2016	Chloroethane	ND	2	0.15	20857	ug/L
OW-13	3/4/2016	Vinyl Chloride	ND	1	0.063	2	ug/L
OW-13	3/4/2016	Methylene Chloride	ND	3	0.063	5	ug/L
OW-13	3/4/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	3/4/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	3/4/2016	Bromodichloromethane	ND	1	0.098	1.34	ug/L
OW-13	3/4/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	3/4/2016	1,1-Dichloroethene	ND	1	0.076	7	ug/L
OW-13	3/4/2016	Trichlorofluoromethane	ND	1	0.088	1137	ug/L
OW-13	3/4/2016	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-13	3/4/2016	1,2-Dichloropropane	ND	1	0.047	5	ug/L
OW-13	3/4/2016	2-Butanone	ND	10	0.32	5565	ug/L
OW-13	3/4/2016	1,1,2-Trichloroethane	ND	1	0.077	5	ug/L
OW-13	3/4/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	3/4/2016	1,1,2,2-Tetrachloroethane	ND	2	0.11	10	ug/L
OW-13	3/4/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	3/4/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	3/4/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	3/4/2016	Naphthalene	ND	2	0.083	30	ug/L
OW-13	3/4/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	3/4/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	3/4/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	3/4/2016	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-13	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.15	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/4/2016	1,2,3-Trichloropropane	*ND*	*2*	0.11	0.0084	ug/L
OW-13	3/4/2016	tert-Butylbenzene	ND	1	0.096	690	ug/L
OW-13	3/4/2016	Isopropylbenzene	ND	1	0.098	447	ug/L
OW-13	3/4/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	3/4/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	3/4/2016	Styrene	ND	1	0.095	100	ug/L
OW-13	3/4/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	3/4/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	3/4/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	3/4/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	3/4/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	3/4/2016	1,2-Dichloroethane	ND	1	0.053	5	ug/L
OW-13	3/4/2016	4-Methyl-2-Pentanone	ND	10	0.15	1243	ug/L
OW-13	3/4/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	3/4/2016	Bromobenzene	ND	1	0.08	62	ug/L
OW-13	3/4/2016	Toluene	ND	1	0.089	1000	ug/L
OW-13	3/4/2016	Chlorobenzene	ND	1	0.1	77.6	ug/L
OW-13	3/4/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/4/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	3/4/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	3/4/2016	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	3/4/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	3/4/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	3/4/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	3/4/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	3/4/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	3/4/2016	2-Hexanone	ND	10	0.36	38	ug/L
OW-13	3/4/2016	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-13	3/4/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	3/4/2016	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	3/4/2016	MTBE	35	1	0.21	143	ug/L
OW-13	3/4/2016	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	3/4/2016	trans-1,3-Dichloropropene	ND	1	0.085	NA	ug/L
OW-13	6/6/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	6/6/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	6/6/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	6/6/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	6/6/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	6/6/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	6/6/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	6/6/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	6/6/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	6/6/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	6/6/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	6/6/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	6/6/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	6/6/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	6/6/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	6/6/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	6/6/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	6/6/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	6/6/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	6/6/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	6/6/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	6/6/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	6/6/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	6/6/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	6/6/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	6/6/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	6/6/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	6/6/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	6/6/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	6/6/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	6/6/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	6/6/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	6/6/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	6/6/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	6/6/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	6/6/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	6/6/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	6/6/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	6/6/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	6/6/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	6/6/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	6/6/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/6/2016	1,2-Dichloroethane	0.75	1	0.12	5	ug/L
OW-13	6/6/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	6/6/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	6/6/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	6/6/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	6/6/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	6/6/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	6/6/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	6/6/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	6/6/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	6/6/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	6/6/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	6/6/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	6/6/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	6/6/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	6/6/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	6/6/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	6/6/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	6/6/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	6/6/2016	MTBE	36	1	0.21	143	ug/L
OW-13	6/6/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	6/6/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	8/31/2016	Benzene	0.13	1	0.096	5	ug/L
OW-13	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	8/31/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	8/31/2016	1,2-Dichloroethane	0.79	1	0.12	5	ug/L
OW-13	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	8/31/2016	MTBE	38	1	0.21	143	ug/L
OW-13	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	11/15/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	11/15/2016	Acetone	ND	10	4.9	14064	ug/L
OW-13	11/15/2016	Chloroform	ND	1	0.089	100	ug/L
OW-13	11/15/2016	Benzene	ND	1	0.096	5	ug/L
OW-13	11/15/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	11/15/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	11/15/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	11/15/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	11/15/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	11/15/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	11/15/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	11/15/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	11/15/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	11/15/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	11/15/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	11/15/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	11/15/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	11/15/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	11/15/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	11/15/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	11/15/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	11/15/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	11/15/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	11/15/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	11/15/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	11/15/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	11/15/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-13	11/15/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	11/15/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	11/15/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	11/15/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	11/15/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	11/15/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	11/15/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	11/15/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	11/15/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	11/15/2016	Styrene	ND	1	0.11	100	ug/L
OW-13	11/15/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	11/15/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	11/15/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	11/15/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	11/15/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	11/15/2016	1,2-Dichloroethane	0.76	1	0.12	5	ug/L
OW-13	11/15/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	11/15/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	11/15/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	11/15/2016	Toluene	ND	1	0.12	1000	ug/L
OW-13	11/15/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	11/15/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	11/15/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	11/15/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	11/15/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	11/15/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	11/15/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	11/15/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	11/15/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	11/15/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	11/15/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	11/15/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	11/15/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	11/15/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	11/15/2016	MTBE	44	1	0.21	143	ug/L
OW-13	11/15/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	11/15/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/27/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	2/27/2017	Acetone	ND	10	4.9	14064	ug/L
OW-13	2/27/2017	Chloroform	ND	1	0.089	100	ug/L
OW-13	2/27/2017	Benzene	ND	1	0.096	5	ug/L
OW-13	2/27/2017	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-13	2/27/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-13	2/27/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-13	2/27/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-13	2/27/2017	Chloroethane	ND	2	0.19	20857	ug/L
OW-13	2/27/2017	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	2/27/2017	Methylene Chloride	ND	3	0.19	5	ug/L
OW-13	2/27/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-13	2/27/2017	Bromoform	ND	1	0.1	32.9	ug/L
OW-13	2/27/2017	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-13	2/27/2017	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-13	2/27/2017	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-13	2/27/2017	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-13	2/27/2017	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-13	2/27/2017	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-13	2/27/2017	2-Butanone	ND	10	0.74	5565	ug/L
OW-13	2/27/2017	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-13	2/27/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-13	2/27/2017	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-13	2/27/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-13	2/27/2017	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-13	2/27/2017	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-13	2/27/2017	Naphthalene	ND	2	0.093	30	ug/L
OW-13	2/27/2017	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-13	2/27/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	2/27/2017	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-13	2/27/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-13	2/27/2017	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-13	2/27/2017	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-13	2/27/2017	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-13	2/27/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-13	2/27/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-13	2/27/2017	Styrene	ND	1	0.11	100	ug/L
OW-13	2/27/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-13	2/27/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-13	2/27/2017	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-13	2/27/2017	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-13	2/27/2017	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-13	2/27/2017	1,2-Dichloroethane	0.85	1	0.12	5	ug/L
OW-13	2/27/2017	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-13	2/27/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-13	2/27/2017	Bromobenzene	ND	1	0.098	62	ug/L
OW-13	2/27/2017	Toluene	ND	1	0.12	1000	ug/L
OW-13	2/27/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	2/27/2017	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	2/27/2017	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-13	2/27/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	2/27/2017	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-13	2/27/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-13	2/27/2017	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-13	2/27/2017	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-13	2/27/2017	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-13	2/27/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-13	2/27/2017	2-Hexanone	ND	10	0.84	38	ug/L
OW-13	2/27/2017	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-13	2/27/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-13	2/27/2017	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-13	2/27/2017	MTBE	53	1	0.21	143	ug/L
OW-13	2/27/2017	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-13	2/27/2017	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-13	5/31/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	5/31/2017	Acetone	3.6	10	0.82	14064	ug/L
OW-13	5/31/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	5/31/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	5/31/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	5/31/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	5/31/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	5/31/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	5/31/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	5/31/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	5/31/2017	Methylene Chloride	ND	3	0.11	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/31/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	5/31/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	5/31/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	5/31/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	5/31/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	5/31/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	5/31/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	5/31/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	5/31/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	5/31/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	5/31/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	5/31/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	5/31/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	5/31/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	5/31/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	5/31/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	5/31/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	5/31/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	5/31/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	5/31/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	5/31/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	5/31/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	5/31/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	5/31/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	5/31/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	5/31/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	5/31/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	5/31/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	5/31/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	5/31/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	5/31/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	5/31/2017	1,2-Dichloroethane	0.84	1	0.4	5	ug/L
OW-13	5/31/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	5/31/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	5/31/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	5/31/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	5/31/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	5/31/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	5/31/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	5/31/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	5/31/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	5/31/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	5/31/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	5/31/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	5/31/2017	Pentafluorobenzene	**10**	0	0		None
OW-13	5/31/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	5/31/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	5/31/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	5/31/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	5/31/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	5/31/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	5/31/2017	MTBE	58	1	0.24	143	ug/L
OW-13	5/31/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	5/31/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	9/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	9/6/2017	Acetone	ND	10	0.82	14064	ug/L
OW-13	9/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	9/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	9/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	9/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	9/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	9/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	9/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	9/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	9/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	9/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	9/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	9/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	9/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	9/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	9/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	9/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	9/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	9/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	9/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	9/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	9/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	9/6/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	9/6/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	9/6/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	9/6/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	9/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	9/6/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	9/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	9/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	9/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	9/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	9/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	9/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	9/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	9/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	9/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	9/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	9/6/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	9/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	9/6/2017	1,2-Dichloroethane	0.77	1	0.4	5	ug/L
OW-13	9/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	9/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	9/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	9/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	9/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	9/6/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	9/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	9/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	9/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	9/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	9/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	9/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	9/6/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	9/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	9/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	9/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	9/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	9/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	9/6/2017	MTBE	56	1	0.24	143	ug/L
OW-13	9/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	9/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	12/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	12/11/2017	Acetone	3.6	10	0.82	14064	ug/L
OW-13	12/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-13	12/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-13	12/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	12/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	12/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	12/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	12/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	12/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	12/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	12/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	12/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	12/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	12/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	12/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	12/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	12/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	12/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	12/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	12/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	12/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	12/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	12/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	12/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	12/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	12/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-13	12/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	12/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	12/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	12/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	12/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	12/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	12/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	12/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	12/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-13	12/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	12/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	12/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	12/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	12/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	12/11/2017	1,2-Dichloroethane	0.87	1	0.4	5	ug/L
OW-13	12/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	12/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	12/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	12/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-13	12/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	12/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	12/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	12/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	12/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	12/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	12/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	12/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	12/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	12/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	12/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	12/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	12/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	12/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	12/11/2017	MTBE	56	1	0.24	143	ug/L
OW-13	12/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	12/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	2/28/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	2/28/2018	Acetone	1.2	10	0.82	14064	ug/L
OW-13	2/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	2/28/2018	Benzene	ND	1	0.062	5	ug/L
OW-13	2/28/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	2/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	2/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	2/28/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	2/28/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	2/28/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	2/28/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	2/28/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	2/28/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	2/28/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	2/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	2/28/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	2/28/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	2/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	2/28/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	2/28/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	2/28/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	2/28/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	2/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	2/28/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	2/28/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	2/28/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	2/28/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-13	2/28/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	2/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	2/28/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	2/28/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	2/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	2/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	2/28/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	2/28/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	2/28/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	2/28/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	2/28/2018	Styrene	ND	1	0.16	100	ug/L
OW-13	2/28/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	2/28/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	2/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	2/28/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	2/28/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/28/2018	1,2-Dichloroethane	0.77	1	0.4	5	ug/L
OW-13	2/28/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	2/28/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	2/28/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	2/28/2018	Toluene	ND	1	0.064	1000	ug/L
OW-13	2/28/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	2/28/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	2/28/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	2/28/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	2/28/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	2/28/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-13	2/28/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	2/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	2/28/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	2/28/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	2/28/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	2/28/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	2/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	2/28/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	2/28/2018	MTBE	58	1	0.24	143	ug/L
OW-13	2/28/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	2/28/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	5/15/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-13	5/15/2018	Acetone	ND	10	0.82	14064	ug/L
OW-13	5/15/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	5/15/2018	Benzene	ND	1	0.062	5	ug/L
OW-13	5/15/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-13	5/15/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	5/15/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	5/15/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-13	5/15/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-13	5/15/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-13	5/15/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-13	5/15/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-13	5/15/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-13	5/15/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-13	5/15/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	5/15/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-13	5/15/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-13	5/15/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	5/15/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-13	5/15/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	5/15/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-13	5/15/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-13	5/15/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-13	5/15/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-13	5/15/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	5/15/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-13	5/15/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-13	5/15/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-13	5/15/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	5/15/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-13	5/15/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-13	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-13	5/15/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-13	5/15/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-13	5/15/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-13	5/15/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-13	5/15/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-13	5/15/2018	Styrene	ND	1	0.16	100	ug/L
OW-13	5/15/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-13	5/15/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-13	5/15/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	5/15/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	5/15/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-13	5/15/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-13	5/15/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-13	5/15/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-13	5/15/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-13	5/15/2018	Toluene	ND	1	0.064	1000	ug/L
OW-13	5/15/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-13	5/15/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-13	5/15/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-13	5/15/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-13	5/15/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-13	5/15/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/15/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-13	5/15/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	5/15/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-13	5/15/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-13	5/15/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-13	5/15/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-13	5/15/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-13	5/15/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-13	5/15/2018	MTBE	68	1	0.24	143	ug/L
OW-13	5/15/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-13	5/15/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-13	9/11/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-13	9/11/2018	Acetone	4.5	10	0.79	14064	ug/L
OW-13	9/11/2018	Chloroform	ND	1	0.4	100	ug/L
OW-13	9/11/2018	Benzene	ND	1	0.17	5	ug/L
OW-13	9/11/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-13	9/11/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-13	9/11/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-13	9/11/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-13	9/11/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-13	9/11/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-13	9/11/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-13	9/11/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-13	9/11/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-13	9/11/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-13	9/11/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-13	9/11/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-13	9/11/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-13	9/11/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-13	9/11/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-13	9/11/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-13	9/11/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-13	9/11/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-13	9/11/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	9/11/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	9/11/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-13	9/11/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-13	9/11/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-13	9/11/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-13	9/11/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-13	9/11/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-13	9/11/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-13	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-13	9/11/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-13	9/11/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-13	9/11/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-13	9/11/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-13	9/11/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-13	9/11/2018	Styrene	ND	1	0.25	100	ug/L
OW-13	9/11/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-13	9/11/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	9/11/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-13	9/11/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-13	9/11/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-13	9/11/2018	1,2-Dichloroethane	0.76	1	0.4	5	ug/L
OW-13	9/11/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-13	9/11/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-13	9/11/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-13	9/11/2018	Toluene	ND	1	0.17	1000	ug/L
OW-13	9/11/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-13	9/11/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	9/11/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-13	9/11/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	9/11/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-13	9/11/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-13	9/11/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	9/11/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	9/11/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-13	9/11/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-13	9/11/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-13	9/11/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-13	9/11/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-13	9/11/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-13	9/11/2018	MTBE	75	1	0.32	143	ug/L
OW-13	9/11/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-13	9/11/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-13	11/6/2018	Acetone	ND	10	0.76	14064	ug/L
OW-13	11/6/2018	Chloroform	ND	1	0.24	100	ug/L
OW-13	11/6/2018	Benzene	ND	1	0.17	5	ug/L
OW-13	11/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-13	11/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-13	11/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-13	11/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-13	11/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-13	11/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-13	11/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-13	11/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-13	11/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-13	11/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-13	11/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-13	11/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-13	11/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-13	11/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-13	11/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-13	11/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-13	11/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-13	11/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-13	11/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-13	11/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-13	11/6/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-13	11/6/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-13	11/6/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-13	11/6/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-13	11/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-13	11/6/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-13	11/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-13	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-13	11/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-13	11/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-13	11/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-13	11/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-13	11/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-13	11/6/2018	Styrene	ND	1	0.25	100	ug/L
OW-13	11/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-13	11/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	11/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-13	11/6/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-13	11/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-13	11/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-13	11/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-13	11/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-13	11/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-13	11/6/2018	Toluene	ND	1	0.17	1000	ug/L
OW-13	11/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-13	11/6/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-13	11/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-13	11/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-13	11/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-13	11/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-13	11/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-13	11/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-13	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-13	11/6/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-13	11/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-13	11/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-13	11/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-13	11/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-13	11/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-13	11/6/2018	MTBE	62	1	0.46	143	ug/L
OW-13	11/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-13	11/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-13	2/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-13	2/5/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-13	2/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-13	2/5/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-13	2/5/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-13	2/5/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-13	2/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	2/5/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-13	2/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-13	2/5/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-13	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-13	2/5/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-13	2/5/2019	1,2-Dichloroethane	0.89	1	0.189525	5	ug/L
OW-13	2/5/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-13	2/5/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-13	2/5/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-13	2/5/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-13	2/5/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-13	2/5/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-13	2/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	2/5/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-13	2/5/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-13	2/5/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-13	2/5/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	2/5/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-13	2/5/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-13	2/5/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-13	2/5/2019	Acetone	ND	10	0.75707	14064	ug/L
OW-13	2/5/2019	Benzene	ND	1	0.174896	5	ug/L
OW-13	2/5/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-13	2/5/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-13	2/5/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-13	2/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	2/5/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-13	2/5/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-13	2/5/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-13	2/5/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-13	2/5/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-13	2/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	2/5/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-13	2/5/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-13	2/5/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-13	2/5/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-13	2/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	2/5/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-13	2/5/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-13	2/5/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-13	2/5/2019	MTBE	80	1	0.456095	143	ug/L
OW-13	2/5/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-13	2/5/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-13	2/5/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-13	2/5/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-13	2/5/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-13	2/5/2019	Styrene	ND	1	0.250146	100	ug/L
OW-13	2/5/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-13	2/5/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-13	2/5/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-13	2/5/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-13	2/5/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-13	2/5/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-13	2/5/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-13	2/5/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-13	2/5/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-13	2/5/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-13	2/5/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-13	2/5/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-13	2/5/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-13	2/5/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-13	2/5/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-13	2/5/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	2/5/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-13	2/5/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-13	2/5/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-13	2/5/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-13	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-13	2/5/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-13	2/5/2019	1,2-Dichloroethane	0.84	1	0.189525	5	ug/L
OW-13	2/5/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-13	2/5/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-13	2/5/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-13	2/5/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-13	2/5/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-13	2/5/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	2/5/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-13	2/5/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-13	2/5/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-13	2/5/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	2/5/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-13	2/5/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-13	2/5/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-13	2/5/2019	Acetone	ND	10	0.75707	14064	ug/L
OW-13	2/5/2019	Benzene	ND	1	0.174896	5	ug/L
OW-13	2/5/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-13	2/5/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-13	2/5/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-13	2/5/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	2/5/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-13	2/5/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-13	2/5/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-13	2/5/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-13	2/5/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-13	2/5/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	2/5/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-13	2/5/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-13	2/5/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-13	2/5/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-13	2/5/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	2/5/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-13	2/5/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-13	2/5/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-13	2/5/2019	MTBE	84	1	0.456095	143	ug/L
OW-13	2/5/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-13	2/5/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-13	2/5/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-13	2/5/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-13	2/5/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-13	2/5/2019	Styrene	ND	1	0.250146	100	ug/L
OW-13	2/5/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-13	2/5/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-13	2/5/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-13	2/5/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-13	2/5/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-13	2/5/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-13	2/5/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-13	2/5/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-13	2/5/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-13	2/5/2019	1,2-Dibromoethane	ND	0.00959	0.003342	0.05	ug/L
OW-13	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	5/1/2019	1,2-Dichloroethane	0.62	1	0.194638	5	ug/L
OW-13	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/1/2019	Benzene	0.36	1	0.166639	5	ug/L
OW-13	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	5/1/2019	MTBE	82	1	0.456095	143	ug/L
OW-13	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	5/1/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-13	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/12/2019	1,2-Dichloroethane	0.91	1	0.194638	5	ug/L
OW-13	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/12/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-13	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/12/2019	MTBE	94	1	0.456095	143	ug/L
OW-13	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	8/12/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/12/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/12/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/12/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/12/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/12/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/12/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/12/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/12/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/12/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/12/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/12/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/12/2019	1,2-Dichloroethane	0.96	1	0.194638	5	ug/L
OW-13	8/12/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/12/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/12/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/12/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/12/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/12/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/12/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/12/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/12/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/12/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/12/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/12/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/12/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/12/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/12/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-13	8/12/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/12/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/12/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/12/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/12/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/12/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/12/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/12/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/12/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/12/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	8/12/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/12/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/12/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/12/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/12/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/12/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/12/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/12/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/12/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/12/2019	MTBE	99	1	0.456095	143	ug/L
OW-13	8/12/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/12/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/12/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/12/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/12/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/12/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/12/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/12/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/12/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	8/12/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/12/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/12/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/12/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/12/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	ND	0.00928	0.003235	0.05	ug/L
OW-13	8/12/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-13	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-13	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-13	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-13	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-13	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-13	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
OW-13	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	10/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-13	10/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-13	10/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-13	10/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-13	10/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-13	10/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-13	10/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-13	10/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-13	10/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-13	10/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-13	10/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-13	10/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-13	10/14/2019	1,2-Dichloroethane	0.8	1	0.194638	5	ug/L
OW-13	10/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-13	10/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-13	10/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-13	10/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-13	10/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-13	10/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-13	10/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-13	10/14/2019	2-Butanone	3.7	10	2.089417	5565	ug/L
OW-13	10/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-13	10/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-13	10/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-13	10/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-13	10/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-13	10/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-13	10/14/2019	Acetone	6.4	10	1.199396	14064	ug/L
OW-13	10/14/2019	Benzene	ND	1	0.166639	5	ug/L
OW-13	10/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-13	10/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-13	10/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-13	10/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-13	10/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-13	10/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-13	10/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-13	10/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-13	10/14/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-13	10/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-13	10/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-13	10/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-13	10/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-13	10/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-13	10/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-13	10/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-13	10/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-13	10/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-13	10/14/2019	MTBE	77	1	0.456095	143	ug/L
OW-13	10/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-13	10/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-13	10/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-13	10/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-13	10/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-13	10/14/2019	Styrene	ND	1	0.191323	100	ug/L
OW-13	10/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-13	10/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-13	10/14/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-13	10/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-13	10/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-13	10/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-13	10/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-13	10/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-13	10/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-13	10/14/2019	1,2-Dibromoethane	ND	0.00926	0.003227	0.05	ug/L
OW-13	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	3/2/2020	1,2-Dichloroethane	0.75	1	0.22	5	ug/L
OW-13	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-13	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/2/2020	Acetone	3	10	2.3	14064	ug/L
OW-13	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	3/2/2020	MTBE	86	1	0.39	143	ug/L
OW-13	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	3/2/2020	1,2-Dichloroethane	0.74	1	0.22	5	ug/L
OW-13	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-13	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	3/2/2020	Acetone	3.5	10	2.3	14064	ug/L
OW-13	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	3/2/2020	MTBE	84	1	0.39	143	ug/L
OW-13	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	3/2/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-13	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-13	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-13	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-13	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-13	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-13	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-13	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-13	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-13	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-13	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-13	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-13	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-13	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-13	9/17/2020	1,2-Dichloroethane	0.66	1	0.22	5	ug/L
OW-13	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-13	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-13	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-13	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-13	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-13	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-13	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-13	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-13	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-13	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-13	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-13	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-13	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-13	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-13	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-13	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-13	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-13	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-13	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-13	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-13	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-13	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-13	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-13	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-13	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-13	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-13	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-13	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-13	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-13	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-13	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-13	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-13	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-13	9/17/2020	MTBE	95	1	0.39	143	ug/L
OW-13	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-13	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-13	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-13	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-13	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-13	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-13	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-13	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-13	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-13	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-13	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-13	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-13	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-13	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-13	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-13	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-13	12/9/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-13	12/9/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
OW-13	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-13	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-13	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-13	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-13	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-13	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-13	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-13	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-13	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-13	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-13	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-13	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-13	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-13	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-13	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-13	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-13	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-13	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-13	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-13	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-13	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-13	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-13	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-13	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-13	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-13	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-13	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-13	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-13	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-13	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-13	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-13	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-13	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-13	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-13	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-13	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-13	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-13	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-13	12/9/2020	MTBE	134	1	0.74	143	ug/L
OW-13	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-13	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-13	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-13	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-13	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-13	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-13	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-13	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-13	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-13	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-13	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-13	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-13	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-13	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-13	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-13	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-13	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-13	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-13	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-13	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-13	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-13	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-13	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-13	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-14	3/21/2012	Carbon tetrachloride	*ND*	*10*	2.7	5	ug/L
OW-14	3/21/2012	Acetone	ND	100	21	14064	ug/L
OW-14	3/21/2012	Chloroform	ND	10	4	100	ug/L
OW-14	3/21/2012	Benzene	**2300**	50	12	5	ug/L
OW-14	3/21/2012	1,1,1-Trichloroethane	ND	10	2.4	200	ug/L
OW-14	3/21/2012	Bromomethane	*ND*	*30*	9.8	7.54	ug/L
OW-14	3/21/2012	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	3/21/2012	Dibromomethane	*ND*	*10*	1.5	8	ug/L
OW-14	3/21/2012	Chloroethane	ND	20	7	20857	ug/L
OW-14	3/21/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	3/21/2012	Methylene Chloride	*ND*	*30*	3	5	ug/L
OW-14	3/21/2012	Carbon Disulfide	ND	100	5.4	810	ug/L
OW-14	3/21/2012	Bromoform	ND	10	3.1	32.9	ug/L
OW-14	3/21/2012	Bromodichloromethane	*ND*	*10*	1.3	1.34	ug/L
OW-14	3/21/2012	1,1-Dichloroethane	ND	10	1.7	25	ug/L
OW-14	3/21/2012	1,1-Dichloroethene	*ND*	*10*	2.8	7	ug/L
OW-14	3/21/2012	Trichlorofluoromethane	ND	10	5.2	1137	ug/L
OW-14	3/21/2012	Dichlorodifluoromethane	ND	10	5.5	197	ug/L
OW-14	3/21/2012	1,2-Dichloropropane	*ND*	*10*	3.2	5	ug/L
OW-14	3/21/2012	2-Butanone	ND	100	11	5565	ug/L
OW-14	3/21/2012	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	3/21/2012	Trichloroethene	*ND*	*10*	3.7	5	ug/L
OW-14	3/21/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
OW-14	3/21/2012	1,2,3-Trichlorobenzene	ND	10	1.7	70	ug/L
OW-14	3/21/2012	Hexachlorobutadiene	*ND*	*10*	2.4	1.39	ug/L
OW-14	3/21/2012	1-Methylnaphthalene	ND	40	20	NA	ug/L
OW-14	3/21/2012	Naphthalene	ND	20	5.3	30	ug/L
OW-14	3/21/2012	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	3/21/2012	2-Chlorotoluene	ND	10	1.7	233	ug/L
OW-14	3/21/2012	1,2-Dichlorobenzene	ND	10	1.4	600	ug/L
OW-14	3/21/2012	1,2,4-Trimethylbenzene	ND	10	3.4	56	ug/L
OW-14	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.8	0.0033	ug/L
OW-14	3/21/2012	1,2,3-Trichloropropane	*ND*	*20*	1.8	0.0084	ug/L
OW-14	3/21/2012	tert-Butylbenzene	ND	10	2.3	690	ug/L
OW-14	3/21/2012	Isopropylbenzene	ND	10	1.9	447	ug/L
OW-14	3/21/2012	p-Isopropyltoluene	ND	10	2.2	NA	ug/L
OW-14	3/21/2012	Ethylbenzene	51	10	1.1	700	ug/L
OW-14	3/21/2012	Styrene	ND	10	1.5	100	ug/L
OW-14	3/21/2012	n-Propylbenzene	ND	10	2	660	ug/L
OW-14	3/21/2012	n-Butylbenzene	ND	10	1.9	1000	ug/L
OW-14	3/21/2012	4-Chlorotoluene	ND	10	1.8	250	ug/L
OW-14	3/21/2012	1,4-Dichlorobenzene	ND	10	2.2	75	ug/L
OW-14	3/21/2012	1,2-Dibromoethane	*ND*	*10*	1.7	0.05	ug/L
OW-14	3/21/2012	1,2-Dichloroethane	*ND*	*10*	2.2	5	ug/L
OW-14	3/21/2012	4-Methyl-2-Pentanone	ND	100	5.5	1243	ug/L
OW-14	3/21/2012	1,3,5-Trimethylbenzene	ND	10	2.1	60	ug/L
OW-14	3/21/2012	Bromobenzene	ND	10	2.3	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/21/2012	Toluene	ND	10	1.7	1000	ug/L
OW-14	3/21/2012	Chlorobenzene	ND	10	1.2	77.6	ug/L
OW-14	3/21/2012	1,2,4-Trichlorobenzene	ND	10	2.3	70	ug/L
OW-14	3/21/2012	Dibromochloromethane	*ND*	*10*	0.94	1.68	ug/L
OW-14	3/21/2012	Tetrachloroethene	*ND*	*10*	3.9	5	ug/L
OW-14	3/21/2012	sec-Butylbenzene	ND	10	2.2	2000	ug/L
OW-14	3/21/2012	1,3-Dichloropropane	ND	10	1.5	370	ug/L
OW-14	3/21/2012	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
OW-14	3/21/2012	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
OW-14	3/21/2012	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
OW-14	3/21/2012	1,1-Dichloropropene	ND	10	2.7	NA	ug/L
OW-14	3/21/2012	2-Hexanone	*ND*	*100*	7.8	38	ug/L
OW-14	3/21/2012	2,2-Dichloropropane	ND	20	3.1	NA	ug/L
OW-14	3/21/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	0.71	5.74	ug/L
OW-14	3/21/2012	Xylenes, Total	ND	15	2	620	ug/L
OW-14	3/21/2012	MTBE	**1400**	10	5.2	143	ug/L
OW-14	3/21/2012	cis-1,3-Dichloropropene	ND	10	1.5	NA	ug/L
OW-14	3/21/2012	trans-1,3-Dichloropropene	ND	10	2.5	NA	ug/L
OW-14	6/14/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	6/14/2012	Acetone	ND	100	21	14064	ug/L
OW-14	6/14/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	6/14/2012	Benzene	**2600**	50	20	5	ug/L
OW-14	6/14/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	6/14/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	6/14/2012	Chloromethane	*ND*	*30*	5.6	20.32	ug/L
OW-14	6/14/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	6/14/2012	Chloroethane	ND	20	4.7	20857	ug/L
OW-14	6/14/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	6/14/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	6/14/2012	Carbon Disulfide	ND	100	6.4	810	ug/L
OW-14	6/14/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	6/14/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	6/14/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	6/14/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	6/14/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	6/14/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	6/14/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	6/14/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	6/14/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	6/14/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	6/14/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	6/14/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	6/14/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	6/14/2012	1-Methylnaphthalene	ND	40	20	NA	ug/L
OW-14	6/14/2012	Naphthalene	ND	20	5.3	30	ug/L
OW-14	6/14/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	6/14/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	6/14/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	6/14/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	6/14/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	6/14/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	6/14/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	6/14/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	6/14/2012	Ethylbenzene	53	10	3.8	700	ug/L
OW-14	6/14/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	6/14/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	6/14/2012	n-Butylbenzene	ND	10	4	1000	ug/L
OW-14	6/14/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	6/14/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	6/14/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	6/14/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	6/14/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	6/14/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	6/14/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	6/14/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	6/14/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	6/14/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	6/14/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	6/14/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	6/14/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	6/14/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	6/14/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	6/14/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	6/14/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	6/14/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/14/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	6/14/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	6/14/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	6/14/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	6/14/2012	MTBE	**1200**	10	9.6	143	ug/L
OW-14	6/14/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	6/14/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	8/23/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	8/23/2012	Acetone	ND	100	15	14064	ug/L
OW-14	8/23/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	8/23/2012	Benzene	**2100**	50	20	5	ug/L
OW-14	8/23/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	8/23/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	8/23/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
OW-14	8/23/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	8/23/2012	Chloroethane	ND	20	4.4	20857	ug/L
OW-14	8/23/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	8/23/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	8/23/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
OW-14	8/23/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	8/23/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	8/23/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	8/23/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	8/23/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	8/23/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	8/23/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	8/23/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	8/23/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	8/23/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	8/23/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	8/23/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	8/23/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	8/23/2012	1-Methylnaphthalene	ND	40	7.2	NA	ug/L
OW-14	8/23/2012	Naphthalene	ND	20	3.7	30	ug/L
OW-14	8/23/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	8/23/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	8/23/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	8/23/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	8/23/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	8/23/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	8/23/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	8/23/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	8/23/2012	Ethylbenzene	37	10	3.8	700	ug/L
OW-14	8/23/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	8/23/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	8/23/2012	n-Butylbenzene	ND	30	4	1000	ug/L
OW-14	8/23/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	8/23/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	8/23/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	8/23/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	8/23/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	8/23/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	8/23/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	8/23/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	8/23/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	8/23/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	8/23/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	8/23/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	8/23/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	8/23/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	8/23/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	8/23/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	8/23/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	8/23/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
OW-14	8/23/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	8/23/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	8/23/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	8/23/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	8/23/2012	MTBE	**1600**	10	9.6	143	ug/L
OW-14	8/23/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	8/23/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	11/27/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
OW-14	11/27/2012	Acetone	ND	100	15	14064	ug/L
OW-14	11/27/2012	Chloroform	ND	10	3.5	100	ug/L
OW-14	11/27/2012	Benzene	**2700**	100	40	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/27/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
OW-14	11/27/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
OW-14	11/27/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
OW-14	11/27/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
OW-14	11/27/2012	Chloroethane	ND	20	4.4	20857	ug/L
OW-14	11/27/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
OW-14	11/27/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	11/27/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
OW-14	11/27/2012	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	11/27/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
OW-14	11/27/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
OW-14	11/27/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
OW-14	11/27/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
OW-14	11/27/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
OW-14	11/27/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
OW-14	11/27/2012	2-Butanone	ND	100	22	5565	ug/L
OW-14	11/27/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
OW-14	11/27/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
OW-14	11/27/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
OW-14	11/27/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
OW-14	11/27/2012	Hexachlorobutadiene	*ND*	*10*	5.5	1.39	ug/L
OW-14	11/27/2012	1-Methylnaphthalene	ND	40	7.2	NA	ug/L
OW-14	11/27/2012	Naphthalene	ND	20	3.7	30	ug/L
OW-14	11/27/2012	2-Methylnaphthalene	*ND*	*40*	6		ug/L
OW-14	11/27/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
OW-14	11/27/2012	1,2-Dichlorobenzene	ND	10	4.7	600	ug/L
OW-14	11/27/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
OW-14	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L
OW-14	11/27/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
OW-14	11/27/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
OW-14	11/27/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
OW-14	11/27/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
OW-14	11/27/2012	Ethylbenzene	56	10	3.8	700	ug/L
OW-14	11/27/2012	Styrene	ND	10	4.1	100	ug/L
OW-14	11/27/2012	n-Propylbenzene	ND	10	4	660	ug/L
OW-14	11/27/2012	n-Butylbenzene	ND	30	4	1000	ug/L
OW-14	11/27/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
OW-14	11/27/2012	1,4-Dichlorobenzene	ND	10	4.3	75	ug/L
OW-14	11/27/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
OW-14	11/27/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
OW-14	11/27/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
OW-14	11/27/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
OW-14	11/27/2012	Bromobenzene	ND	10	6.3	62	ug/L
OW-14	11/27/2012	Toluene	ND	10	4.7	1000	ug/L
OW-14	11/27/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
OW-14	11/27/2012	1,2,4-Trichlorobenzene	ND	10	4.3	70	ug/L
OW-14	11/27/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
OW-14	11/27/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
OW-14	11/27/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
OW-14	11/27/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
OW-14	11/27/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
OW-14	11/27/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
OW-14	11/27/2012	1,3-Dichlorobenzene	ND	10	4.7	N/A	ug/L
OW-14	11/27/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
OW-14	11/27/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
OW-14	11/27/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
OW-14	11/27/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
OW-14	11/27/2012	Xylenes, Total	ND	15	13	620	ug/L
OW-14	11/27/2012	MTBE	**1400**	10	9.6	143	ug/L
OW-14	11/27/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
OW-14	11/27/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
OW-14	3/19/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
OW-14	3/19/2013	Acetone	ND	100	23	14064	ug/L
OW-14	3/19/2013	Chloroform	ND	10	4.7	100	ug/L
OW-14	3/19/2013	Benzene	**2800**	100	52	5	ug/L
OW-14	3/19/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
OW-14	3/19/2013	Bromomethane	*ND*	*30*	8.5	7.54	ug/L
OW-14	3/19/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
OW-14	3/19/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
OW-14	3/19/2013	Chloroethane	ND	20	5.7	20857	ug/L
OW-14	3/19/2013	Vinyl Chloride	*ND*	*10*	3.3	2	ug/L
OW-14	3/19/2013	Methylene Chloride	*ND*	*30*	4.2	5	ug/L
OW-14	3/19/2013	Carbon Disulfide	ND	100	8	810	ug/L
OW-14	3/19/2013	Bromoform	ND	10	4.3	32.9	ug/L
OW-14	3/19/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
OW-14	3/19/2013	1,1-Dichloroethane	ND	10	4.8	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/19/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
OW-14	3/19/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
OW-14	3/19/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
OW-14	3/19/2013	1,2-Dichloropropane	*ND*	*10*	5.5	5	ug/L
OW-14	3/19/2013	2-Butanone	ND	100	10	5565	ug/L
OW-14	3/19/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
OW-14	3/19/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
OW-14	3/19/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
OW-14	3/19/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
OW-14	3/19/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
OW-14	3/19/2013	1-Methylnaphthalene	ND	40	6.1	NA	ug/L
OW-14	3/19/2013	Naphthalene	ND	20	3.4	30	ug/L
OW-14	3/19/2013	2-Methylnaphthalene	*ND*	*40*	5.7		ug/L
OW-14	3/19/2013	2-Chlorotoluene	ND	10	5	233	ug/L
OW-14	3/19/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
OW-14	3/19/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
OW-14	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.3	0.0033	ug/L
OW-14	3/19/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
OW-14	3/19/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
OW-14	3/19/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
OW-14	3/19/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
OW-14	3/19/2013	Ethylbenzene	65	10	4.5	700	ug/L
OW-14	3/19/2013	Styrene	ND	10	56	100	ug/L
OW-14	3/19/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
OW-14	3/19/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
OW-14	3/19/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
OW-14	3/19/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
OW-14	3/19/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
OW-14	3/19/2013	1,2-Dichloroethane	*ND*	*10*	3.8	5	ug/L
OW-14	3/19/2013	4-Methyl-2-Pentanone	ND	100	8.9	1243	ug/L
OW-14	3/19/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
OW-14	3/19/2013	Bromobenzene	ND	10	5.7	62	ug/L
OW-14	3/19/2013	Toluene	ND	10	4.4	1000	ug/L
OW-14	3/19/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
OW-14	3/19/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L
OW-14	3/19/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
OW-14	3/19/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
OW-14	3/19/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
OW-14	3/19/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
OW-14	3/19/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
OW-14	3/19/2013	trans-1,2-Dichloroethene	ND	10	3.7	100	ug/L
OW-14	3/19/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
OW-14	3/19/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	3/19/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
OW-14	3/19/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
OW-14	3/19/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
OW-14	3/19/2013	Xylenes, Total	ND	15	14	620	ug/L
OW-14	3/19/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-14	3/19/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
OW-14	3/19/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	6/13/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
OW-14	6/13/2013	Acetone	ND	100	17	14064	ug/L
OW-14	6/13/2013	Chloroform	ND	10	4.7	100	ug/L
OW-14	6/13/2013	Benzene	**3400**	50	23	5	ug/L
OW-14	6/13/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
OW-14	6/13/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
OW-14	6/13/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
OW-14	6/13/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
OW-14	6/13/2013	Chloroethane	ND	20	3	20857	ug/L
OW-14	6/13/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
OW-14	6/13/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
OW-14	6/13/2013	Carbon Disulfide	ND	100	8	810	ug/L
OW-14	6/13/2013	Bromoform	ND	10	3.7	32.9	ug/L
OW-14	6/13/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
OW-14	6/13/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
OW-14	6/13/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
OW-14	6/13/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
OW-14	6/13/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
OW-14	6/13/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
OW-14	6/13/2013	2-Butanone	ND	100	10	5565	ug/L
OW-14	6/13/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
OW-14	6/13/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
OW-14	6/13/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
OW-14	6/13/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
OW-14	6/13/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
OW-14	6/13/2013	1-Methylnaphthalene	ND	40	4.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/13/2013	Naphthalene	ND	20	2.9	30	ug/L
OW-14	6/13/2013	2-Methylnaphthalene	*ND*	*40*	3.9		ug/L
OW-14	6/13/2013	2-Chlorotoluene	ND	10	5	233	ug/L
OW-14	6/13/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
OW-14	6/13/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
OW-14	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
OW-14	6/13/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
OW-14	6/13/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
OW-14	6/13/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
OW-14	6/13/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
OW-14	6/13/2013	Ethylbenzene	73	10	4.5	700	ug/L
OW-14	6/13/2013	Styrene	ND	10	5.8	100	ug/L
OW-14	6/13/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
OW-14	6/13/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
OW-14	6/13/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
OW-14	6/13/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
OW-14	6/13/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
OW-14	6/13/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
OW-14	6/13/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
OW-14	6/13/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
OW-14	6/13/2013	Bromobenzene	ND	10	5.7	62	ug/L
OW-14	6/13/2013	Toluene	ND	10	4.4	1000	ug/L
OW-14	6/13/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
OW-14	6/13/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L
OW-14	6/13/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
OW-14	6/13/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
OW-14	6/13/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
OW-14	6/13/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
OW-14	6/13/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
OW-14	6/13/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
OW-14	6/13/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
OW-14	6/13/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	6/13/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
OW-14	6/13/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
OW-14	6/13/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
OW-14	6/13/2013	Xylenes, Total	ND	15	14	620	ug/L
OW-14	6/13/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-14	6/13/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
OW-14	6/13/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
OW-14	9/4/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-14	9/4/2013	Acetone	ND	50	8.6	14064	ug/L
OW-14	9/4/2013	Chloroform	ND	5	2.3	100	ug/L
OW-14	9/4/2013	Benzene	**2600**	50	23	5	ug/L
OW-14	9/4/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-14	9/4/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OW-14	9/4/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OW-14	9/4/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-14	9/4/2013	Chloroethane	ND	10	1.5	20857	ug/L
OW-14	9/4/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OW-14	9/4/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-14	9/4/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-14	9/4/2013	Bromoform	ND	5	1.9	32.9	ug/L
OW-14	9/4/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-14	9/4/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OW-14	9/4/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-14	9/4/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-14	9/4/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-14	9/4/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OW-14	9/4/2013	2-Butanone	ND	50	5	5565	ug/L
OW-14	9/4/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-14	9/4/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-14	9/4/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-14	9/4/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-14	9/4/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-14	9/4/2013	1-Methylnaphthalene	24	20	2.1	NA	ug/L
OW-14	9/4/2013	Naphthalene	ND	10	1.5	30	ug/L
OW-14	9/4/2013	2-Methylnaphthalene	*ND*	*20*	1.9		ug/L
OW-14	9/4/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-14	9/4/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-14	9/4/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-14	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OW-14	9/4/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-14	9/4/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-14	9/4/2013	Isopropylbenzene	6	5	2.6	447	ug/L
OW-14	9/4/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-14	9/4/2013	Ethylbenzene	63	5	2.2	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/4/2013	Styrene	ND	5	2.9	100	ug/L
OW-14	9/4/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-14	9/4/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-14	9/4/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-14	9/4/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-14	9/4/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-14	9/4/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OW-14	9/4/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OW-14	9/4/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-14	9/4/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-14	9/4/2013	Toluene	ND	5	2.2	1000	ug/L
OW-14	9/4/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-14	9/4/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-14	9/4/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-14	9/4/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-14	9/4/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-14	9/4/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-14	9/4/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-14	9/4/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-14	9/4/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-14	9/4/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	9/4/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-14	9/4/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-14	9/4/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-14	9/4/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OW-14	9/4/2013	MTBE	**940**	5	3.8	143	ug/L
OW-14	9/4/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-14	9/4/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	11/11/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-14	11/11/2013	Acetone	ND	50	8.6	14064	ug/L
OW-14	11/11/2013	Chloroform	ND	5	2.3	100	ug/L
OW-14	11/11/2013	Benzene	**3300**	50	23	5	ug/L
OW-14	11/11/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-14	11/11/2013	Bromomethane	*ND*	*15*	2.5	7.54	ug/L
OW-14	11/11/2013	Chloromethane	ND	15	1.8	20.32	ug/L
OW-14	11/11/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-14	11/11/2013	Chloroethane	ND	10	1.5	20857	ug/L
OW-14	11/11/2013	Vinyl Chloride	*ND*	*5*	1.5	2	ug/L
OW-14	11/11/2013	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-14	11/11/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-14	11/11/2013	Bromoform	ND	5	1.9	32.9	ug/L
OW-14	11/11/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-14	11/11/2013	1,1-Dichloroethane	ND	5	1.7	25	ug/L
OW-14	11/11/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-14	11/11/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-14	11/11/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-14	11/11/2013	1,2-Dichloropropane	ND	5	1.6	5	ug/L
OW-14	11/11/2013	2-Butanone	ND	50	5	5565	ug/L
OW-14	11/11/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-14	11/11/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-14	11/11/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-14	11/11/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-14	11/11/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-14	11/11/2013	1-Methylnaphthalene	27	20	2.1	NA	ug/L
OW-14	11/11/2013	Naphthalene	ND	10	1.5	30	ug/L
OW-14	11/11/2013	2-Methylnaphthalene	*ND*	*20*	1.9		ug/L
OW-14	11/11/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-14	11/11/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-14	11/11/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-14	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.8	0.0033	ug/L
OW-14	11/11/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-14	11/11/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-14	11/11/2013	Isopropylbenzene	6.6	5	2.6	447	ug/L
OW-14	11/11/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-14	11/11/2013	Ethylbenzene	130	5	2.2	700	ug/L
OW-14	11/11/2013	Styrene	ND	5	2.9	100	ug/L
OW-14	11/11/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-14	11/11/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-14	11/11/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-14	11/11/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-14	11/11/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-14	11/11/2013	1,2-Dichloroethane	ND	5	1.6	5	ug/L
OW-14	11/11/2013	4-Methyl-2-Pentanone	ND	50	3.3	1243	ug/L
OW-14	11/11/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-14	11/11/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-14	11/11/2013	Toluene	46	5	2.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/11/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-14	11/11/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-14	11/11/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-14	11/11/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-14	11/11/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-14	11/11/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-14	11/11/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-14	11/11/2013	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-14	11/11/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-14	11/11/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	11/11/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-14	11/11/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-14	11/11/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-14	11/11/2013	Xylenes, Total	19	7.5	7.2	620	ug/L
OW-14	11/11/2013	MTBE	**1100**	50	38	143	ug/L
OW-14	11/11/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-14	11/11/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-14	3/7/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
OW-14	3/7/2014	Acetone	ND	100	49	14064	ug/L
OW-14	3/7/2014	Chloroform	ND	10	3.2	100	ug/L
OW-14	3/7/2014	Benzene	**4000**	50	7.7	5	ug/L
OW-14	3/7/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
OW-14	3/7/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
OW-14	3/7/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	3/7/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
OW-14	3/7/2014	Chloroethane	ND	20	4.8	20857	ug/L
OW-14	3/7/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
OW-14	3/7/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
OW-14	3/7/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
OW-14	3/7/2014	Bromoform	ND	10	2.5	32.9	ug/L
OW-14	3/7/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
OW-14	3/7/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
OW-14	3/7/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
OW-14	3/7/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	3/7/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
OW-14	3/7/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
OW-14	3/7/2014	2-Butanone	ND	100	14	5565	ug/L
OW-14	3/7/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	3/7/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
OW-14	3/7/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
OW-14	3/7/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L
OW-14	3/7/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
OW-14	3/7/2014	1-Methylnaphthalene	ND	40	4.4	NA	ug/L
OW-14	3/7/2014	Naphthalene	ND	20	1.4	30	ug/L
OW-14	3/7/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	3/7/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
OW-14	3/7/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
OW-14	3/7/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
OW-14	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
OW-14	3/7/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
OW-14	3/7/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
OW-14	3/7/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
OW-14	3/7/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
OW-14	3/7/2014	Ethylbenzene	140	10	1.3	700	ug/L
OW-14	3/7/2014	Styrene	ND	10	1.2	100	ug/L
OW-14	3/7/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
OW-14	3/7/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
OW-14	3/7/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
OW-14	3/7/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
OW-14	3/7/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
OW-14	3/7/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
OW-14	3/7/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
OW-14	3/7/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
OW-14	3/7/2014	Bromobenzene	ND	10	1.8	62	ug/L
OW-14	3/7/2014	Toluene	26	10	1.7	1000	ug/L
OW-14	3/7/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
OW-14	3/7/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
OW-14	3/7/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
OW-14	3/7/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
OW-14	3/7/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
OW-14	3/7/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
OW-14	3/7/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	3/7/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
OW-14	3/7/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
OW-14	3/7/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
OW-14	3/7/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/7/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
OW-14	3/7/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
OW-14	3/7/2014	Xylenes, Total	32	15	3.8	620	ug/L
OW-14	3/7/2014	MTBE	**1100**	10	2.5	143	ug/L
OW-14	3/7/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
OW-14	3/7/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
OW-14	6/3/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	6/3/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
OW-14	6/3/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
OW-14	6/3/2014	2-Butanone	ND	200	28	5565	ug/L
OW-14	6/3/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
OW-14	6/3/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
OW-14	6/3/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
OW-14	6/3/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
OW-14	6/3/2014	Hexachlorobutadiene	*ND*	*20*	5.6	1.39	ug/L
OW-14	6/3/2014	1-Methylnaphthalene	ND	80	8.8	NA	ug/L
OW-14	6/3/2014	Naphthalene	*ND*	*40*	2.7	30	ug/L
OW-14	6/3/2014	2-Methylnaphthalene	*ND*	*80*	11		ug/L
OW-14	6/3/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-14	6/3/2014	1,2-Dichlorobenzene	ND	20	2.6	600	ug/L
OW-14	6/3/2014	1,2,4-Trimethylbenzene	ND	20	2.5	56	ug/L
OW-14	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
OW-14	6/3/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
OW-14	6/3/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
OW-14	6/3/2014	Isopropylbenzene	ND	20	3.2	447	ug/L
OW-14	6/3/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
OW-14	6/3/2014	Ethylbenzene	120	20	2.5	700	ug/L
OW-14	6/3/2014	Styrene	ND	20	2.3	100	ug/L
OW-14	6/3/2014	n-Propylbenzene	ND	20	2.8	660	ug/L
OW-14	6/3/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
OW-14	6/3/2014	4-Chlorotoluene	ND	20	17	250	ug/L
OW-14	6/3/2014	1,4-Dichlorobenzene	ND	20	5.1	75	ug/L
OW-14	6/3/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
OW-14	6/3/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
OW-14	6/3/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
OW-14	6/3/2014	1,3,5-Trimethylbenzene	ND	20	2.6	60	ug/L
OW-14	6/3/2014	Bromobenzene	ND	20	3.6	62	ug/L
OW-14	6/3/2014	Toluene	ND	20	3.4	1000	ug/L
OW-14	6/3/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
OW-14	6/3/2014	1,2,4-Trichlorobenzene	ND	20	6	70	ug/L
OW-14	6/3/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
OW-14	6/3/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
OW-14	6/3/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
OW-14	6/3/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-14	6/3/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
OW-14	6/3/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
OW-14	6/3/2014	1,3-Dichlorobenzene	ND	20	3.5	N/A	ug/L
OW-14	6/3/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
OW-14	6/3/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-14	6/3/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
OW-14	6/3/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
OW-14	6/3/2014	Xylenes, Total	ND	30	7.5	620	ug/L
OW-14	6/3/2014	MTBE	**930**	20	5	143	ug/L
OW-14	6/3/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
OW-14	6/3/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
OW-14	6/3/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
OW-14	6/3/2014	Acetone	ND	200	99	14064	ug/L
OW-14	6/3/2014	Chloroform	ND	20	6.3	100	ug/L
OW-14	6/3/2014	Benzene	**3700**	200	31	5	ug/L
OW-14	6/3/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L
OW-14	6/3/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
OW-14	6/3/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
OW-14	6/3/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
OW-14	6/3/2014	Chloroethane	ND	40	9.5	20857	ug/L
OW-14	6/3/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
OW-14	6/3/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
OW-14	6/3/2014	Carbon Disulfide	ND	200	15	810	ug/L
OW-14	6/3/2014	Bromoform	ND	20	5	32.9	ug/L
OW-14	6/3/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
OW-14	6/3/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
OW-14	6/3/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
OW-14	9/15/2014	Carbon tetrachloride	*ND*	*20*	2.8	5	ug/L
OW-14	9/15/2014	Acetone	ND	200	99	14064	ug/L
OW-14	9/15/2014	Chloroform	ND	20	6.3	100	ug/L
OW-14	9/15/2014	Benzene	**3800**	200	31	5	ug/L
OW-14	9/15/2014	1,1,1-Trichloroethane	ND	20	2.4	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/15/2014	Bromomethane	*ND*	*60*	8.3	7.54	ug/L
OW-14	9/15/2014	Chloromethane	*ND*	*60*	10	20.32	ug/L
OW-14	9/15/2014	Dibromomethane	*ND*	*20*	3.8	8	ug/L
OW-14	9/15/2014	Chloroethane	ND	40	9.5	20857	ug/L
OW-14	9/15/2014	Vinyl Chloride	*ND*	*20*	9.1	2	ug/L
OW-14	9/15/2014	Methylene Chloride	*ND*	*60*	5.3	5	ug/L
OW-14	9/15/2014	Carbon Disulfide	ND	200	15	810	ug/L
OW-14	9/15/2014	Bromoform	ND	20	5	32.9	ug/L
OW-14	9/15/2014	Bromodichloromethane	*ND*	*20*	3.3	1.34	ug/L
OW-14	9/15/2014	1,1-Dichloroethane	ND	20	5.7	25	ug/L
OW-14	9/15/2014	1,1-Dichloroethene	*ND*	*20*	4.3	7	ug/L
OW-14	9/15/2014	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	9/15/2014	Dichlorodifluoromethane	ND	20	4.7	197	ug/L
OW-14	9/15/2014	1,2-Dichloropropane	*ND*	*20*	4.2	5	ug/L
OW-14	9/15/2014	2-Butanone	ND	200	28	5565	ug/L
OW-14	9/15/2014	1,1,2-Trichloroethane	*ND*	*20*	2.8	5	ug/L
OW-14	9/15/2014	Trichloroethene	*ND*	*20*	3.9	5	ug/L
OW-14	9/15/2014	1,1,2,2-Tetrachloroethane	*ND*	*40*	4.5	10	ug/L
OW-14	9/15/2014	1,2,3-Trichlorobenzene	ND	20	3.7	70	ug/L
OW-14	9/15/2014	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-14	9/15/2014	1,2,4-Trimethylbenzene	ND	20	2.5	56	ug/L
OW-14	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.3	0.0033	ug/L
OW-14	9/15/2014	1,2,3-Trichloropropane	*ND*	*40*	3.8	0.0084	ug/L
OW-14	9/15/2014	tert-Butylbenzene	ND	20	2.7	690	ug/L
OW-14	9/15/2014	Isopropylbenzene	ND	20	3.2	447	ug/L
OW-14	9/15/2014	p-Isopropyltoluene	ND	20	3.5	NA	ug/L
OW-14	9/15/2014	Ethylbenzene	160	20	2.5	700	ug/L
OW-14	9/15/2014	Styrene	ND	20	2.3	100	ug/L
OW-14	9/15/2014	n-Propylbenzene	ND	20	2.8	660	ug/L
OW-14	9/15/2014	n-Butylbenzene	ND	60	4.3	1000	ug/L
OW-14	9/15/2014	4-Chlorotoluene	ND	20	17	250	ug/L
OW-14	9/15/2014	1,2-Dibromoethane	*ND*	*20*	2	0.05	ug/L
OW-14	9/15/2014	1,2-Dichloroethane	*ND*	*20*	5.3	5	ug/L
OW-14	9/15/2014	4-Methyl-2-Pentanone	ND	200	22	1243	ug/L
OW-14	9/15/2014	1,3,5-Trimethylbenzene	ND	20	2.6	60	ug/L
OW-14	9/15/2014	Bromobenzene	ND	20	3.6	62	ug/L
OW-14	9/15/2014	Toluene	ND	20	3.4	1000	ug/L
OW-14	9/15/2014	Chlorobenzene	ND	20	2.8	77.6	ug/L
OW-14	9/15/2014	Dibromochloromethane	*ND*	*20*	2.4	1.68	ug/L
OW-14	9/15/2014	Tetrachloroethene	*ND*	*20*	4	5	ug/L
OW-14	9/15/2014	sec-Butylbenzene	ND	20	3.1	2000	ug/L
OW-14	9/15/2014	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-14	9/15/2014	cis-1,2-Dichloroethene	ND	20	2.4	70	ug/L
OW-14	9/15/2014	trans-1,2-Dichloroethene	ND	20	5	100	ug/L
OW-14	9/15/2014	1,1-Dichloropropene	ND	20	4.6	NA	ug/L
OW-14	9/15/2014	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-14	9/15/2014	2,2-Dichloropropane	ND	40	5.3	NA	ug/L
OW-14	9/15/2014	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.4	5.74	ug/L
OW-14	9/15/2014	Xylenes, Total	ND	30	7.5	620	ug/L
OW-14	9/15/2014	MTBE	**820**	20	5	143	ug/L
OW-14	9/15/2014	cis-1,3-Dichloropropene	ND	20	3.4	NA	ug/L
OW-14	9/15/2014	trans-1,3-Dichloropropene	ND	20	3.6	NA	ug/L
OW-14	11/10/2014	Carbon tetrachloride	*ND*	*10*	1.4	5	ug/L
OW-14	11/10/2014	Acetone	ND	100	49	14064	ug/L
OW-14	11/10/2014	Chloroform	ND	10	3.2	100	ug/L
OW-14	11/10/2014	Benzene	**3600**	100	15	5	ug/L
OW-14	11/10/2014	1,1,1-Trichloroethane	ND	10	1.2	200	ug/L
OW-14	11/10/2014	Bromomethane	*ND*	*30*	4.1	7.54	ug/L
OW-14	11/10/2014	Chloromethane	*ND*	*30*	5.2	20.32	ug/L
OW-14	11/10/2014	Dibromomethane	*ND*	*10*	1.9	8	ug/L
OW-14	11/10/2014	Chloroethane	ND	20	4.8	20857	ug/L
OW-14	11/10/2014	Vinyl Chloride	*ND*	*10*	4.6	2	ug/L
OW-14	11/10/2014	Methylene Chloride	*ND*	*30*	2.7	5	ug/L
OW-14	11/10/2014	Carbon Disulfide	ND	100	7.4	810	ug/L
OW-14	11/10/2014	Bromoform	ND	10	2.5	32.9	ug/L
OW-14	11/10/2014	Bromodichloromethane	*ND*	*10*	1.6	1.34	ug/L
OW-14	11/10/2014	1,1-Dichloroethane	ND	10	2.8	25	ug/L
OW-14	11/10/2014	1,1-Dichloroethene	*ND*	*10*	2.1	7	ug/L
OW-14	11/10/2014	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	11/10/2014	Dichlorodifluoromethane	ND	10	2.3	197	ug/L
OW-14	11/10/2014	1,2-Dichloropropane	*ND*	*10*	2.1	5	ug/L
OW-14	11/10/2014	2-Butanone	ND	100	14	5565	ug/L
OW-14	11/10/2014	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	11/10/2014	Trichloroethene	*ND*	*10*	1.9	5	ug/L
OW-14	11/10/2014	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.2	10	ug/L
OW-14	11/10/2014	1,2,3-Trichlorobenzene	ND	10	1.8	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/10/2014	Hexachlorobutadiene	*ND*	*10*	2.8	1.39	ug/L
OW-14	11/10/2014	1-Methylnaphthalene	44	40	4.4	NA	ug/L
OW-14	11/10/2014	Naphthalene	ND	20	1.4	30	ug/L
OW-14	11/10/2014	2-Methylnaphthalene	*ND*	*40*	5.6		ug/L
OW-14	11/10/2014	2-Chlorotoluene	ND	10	1.3	233	ug/L
OW-14	11/10/2014	1,2-Dichlorobenzene	ND	10	1.3	600	ug/L
OW-14	11/10/2014	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
OW-14	11/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.2	0.0033	ug/L
OW-14	11/10/2014	1,2,3-Trichloropropane	*ND*	*20*	1.9	0.0084	ug/L
OW-14	11/10/2014	tert-Butylbenzene	ND	10	1.4	690	ug/L
OW-14	11/10/2014	Isopropylbenzene	ND	10	1.6	447	ug/L
OW-14	11/10/2014	p-Isopropyltoluene	ND	10	1.8	NA	ug/L
OW-14	11/10/2014	Ethylbenzene	170	10	1.3	700	ug/L
OW-14	11/10/2014	Styrene	ND	10	1.2	100	ug/L
OW-14	11/10/2014	n-Propylbenzene	ND	10	1.4	660	ug/L
OW-14	11/10/2014	n-Butylbenzene	ND	30	2.1	1000	ug/L
OW-14	11/10/2014	4-Chlorotoluene	ND	10	8.7	250	ug/L
OW-14	11/10/2014	1,4-Dichlorobenzene	ND	10	2.6	75	ug/L
OW-14	11/10/2014	1,2-Dibromoethane	*ND*	*10*	1	0.05	ug/L
OW-14	11/10/2014	1,2-Dichloroethane	*ND*	*10*	2.6	5	ug/L
OW-14	11/10/2014	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
OW-14	11/10/2014	1,3,5-Trimethylbenzene	ND	10	1.3	60	ug/L
OW-14	11/10/2014	Bromobenzene	ND	10	1.8	62	ug/L
OW-14	11/10/2014	Toluene	15	10	1.7	1000	ug/L
OW-14	11/10/2014	Chlorobenzene	ND	10	1.4	77.6	ug/L
OW-14	11/10/2014	1,2,4-Trichlorobenzene	ND	10	3	70	ug/L
OW-14	11/10/2014	Dibromochloromethane	*ND*	*10*	1.2	1.68	ug/L
OW-14	11/10/2014	Tetrachloroethene	*ND*	*10*	2	5	ug/L
OW-14	11/10/2014	sec-Butylbenzene	ND	10	1.5	2000	ug/L
OW-14	11/10/2014	1,3-Dichloropropane	ND	10	1.8	370	ug/L
OW-14	11/10/2014	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	11/10/2014	trans-1,2-Dichloroethene	ND	10	2.5	100	ug/L
OW-14	11/10/2014	1,3-Dichlorobenzene	ND	10	1.7	N/A	ug/L
OW-14	11/10/2014	1,1-Dichloropropene	ND	10	2.3	NA	ug/L
OW-14	11/10/2014	2-Hexanone	*ND*	*100*	8.6	38	ug/L
OW-14	11/10/2014	2,2-Dichloropropane	ND	20	2.7	NA	ug/L
OW-14	11/10/2014	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.2	5.74	ug/L
OW-14	11/10/2014	Xylenes, Total	ND	15	3.8	620	ug/L
OW-14	11/10/2014	MTBE	**810**	10	2.5	143	ug/L
OW-14	11/10/2014	cis-1,3-Dichloropropene	ND	10	1.7	NA	ug/L
OW-14	11/10/2014	trans-1,3-Dichloropropene	ND	10	1.8	NA	ug/L
OW-14	3/9/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	3/9/2015	Acetone	ND	200	19	14064	ug/L
OW-14	3/9/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	3/9/2015	Benzene	**3900**	200	13	5	ug/L
OW-14	3/9/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	3/9/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	3/9/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	3/9/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	3/9/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	3/9/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	3/9/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	3/9/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	3/9/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	3/9/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	3/9/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	3/9/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	3/9/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	3/9/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	3/9/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	3/9/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	3/9/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	3/9/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	3/9/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	3/9/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	3/9/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	3/9/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	3/9/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	3/9/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	3/9/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	3/9/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	3/9/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	3/9/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	3/9/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	3/9/2015	Isopropylbenzene	ND	20	3	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/9/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	3/9/2015	Ethylbenzene	160	20	2	700	ug/L
OW-14	3/9/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	3/9/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	3/9/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	3/9/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	3/9/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	3/9/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	3/9/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	3/9/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	3/9/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
OW-14	3/9/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	3/9/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	3/9/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	3/9/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	3/9/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	3/9/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	3/9/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	3/9/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	3/9/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	3/9/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	3/9/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	3/9/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	3/9/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	3/9/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	3/9/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	3/9/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	3/9/2015	MTBE	**760**	20	3.5	143	ug/L
OW-14	3/9/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	3/9/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	6/1/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	6/1/2015	Acetone	ND	200	19	14064	ug/L
OW-14	6/1/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	6/1/2015	Benzene	**4600**	200	13	5	ug/L
OW-14	6/1/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	6/1/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	6/1/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	6/1/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	6/1/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	6/1/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	6/1/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	6/1/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	6/1/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	6/1/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	6/1/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	6/1/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	6/1/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	6/1/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	6/1/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	6/1/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	6/1/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	6/1/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	6/1/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	6/1/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	6/1/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	6/1/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	6/1/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	6/1/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	6/1/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	6/1/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	6/1/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	6/1/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	6/1/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	6/1/2015	Isopropylbenzene	ND	20	3	447	ug/L
OW-14	6/1/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	6/1/2015	Ethylbenzene	160	20	2	700	ug/L
OW-14	6/1/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	6/1/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	6/1/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	6/1/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	6/1/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	6/1/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	6/1/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	6/1/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	6/1/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/1/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	6/1/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	6/1/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	6/1/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	6/1/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	6/1/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	6/1/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	6/1/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	6/1/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	6/1/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	6/1/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	6/1/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	6/1/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	6/1/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	6/1/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	6/1/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	6/1/2015	MTBE	**740**	20	3.5	143	ug/L
OW-14	6/1/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	6/1/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	8/10/2015	Carbon tetrachloride	*ND*	*10*	0.78	5	ug/L
OW-14	8/10/2015	Acetone	ND	100	9.4	14064	ug/L
OW-14	8/10/2015	Chloroform	ND	10	2.1	100	ug/L
OW-14	8/10/2015	Benzene	**5400**	100	6.5	5	ug/L
OW-14	8/10/2015	1,1,1-Trichloroethane	ND	10	0.78	200	ug/L
OW-14	8/10/2015	Bromomethane	*ND*	*30*	12	7.54	ug/L
OW-14	8/10/2015	Chloromethane	*ND*	*30*	1.7	20.32	ug/L
OW-14	8/10/2015	Dibromomethane	*ND*	*10*	2.3	8	ug/L
OW-14	8/10/2015	Chloroethane	ND	20	1	20857	ug/L
OW-14	8/10/2015	Vinyl Chloride	*ND*	*10*	1.3	2	ug/L
OW-14	8/10/2015	Methylene Chloride	*ND*	*30*	3.6	5	ug/L
OW-14	8/10/2015	Carbon Disulfide	ND	100	6.7	810	ug/L
OW-14	8/10/2015	Bromoform	ND	10	1.6	32.9	ug/L
OW-14	8/10/2015	Bromodichloromethane	*ND*	*10*	0.9	1.34	ug/L
OW-14	8/10/2015	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-14	8/10/2015	1,1-Dichloroethene	*ND*	*10*	0.99	7	ug/L
OW-14	8/10/2015	Trichlorofluoromethane	ND	10	1.3	1137	ug/L
OW-14	8/10/2015	Dichlorodifluoromethane	ND	10	6.9	197	ug/L
OW-14	8/10/2015	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
OW-14	8/10/2015	2-Butanone	ND	100	3.6	5565	ug/L
OW-14	8/10/2015	1,1,2-Trichloroethane	*ND*	*10*	0.79	5	ug/L
OW-14	8/10/2015	Trichloroethene	*ND*	*10*	1.6	5	ug/L
OW-14	8/10/2015	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.8	10	ug/L
OW-14	8/10/2015	1,2,3-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-14	8/10/2015	Hexachlorobutadiene	*ND*	*10*	2.5	1.39	ug/L
OW-14	8/10/2015	1-Methylnaphthalene	ND	40	5.4	NA	ug/L
OW-14	8/10/2015	Naphthalene	ND	20	2.2	30	ug/L
OW-14	8/10/2015	2-Methylnaphthalene	*ND*	*40*	5.9		ug/L
OW-14	8/10/2015	2-Chlorotoluene	ND	10	0.79	233	ug/L
OW-14	8/10/2015	1,2-Dichlorobenzene	ND	10	1.2	600	ug/L
OW-14	8/10/2015	1,2,4-Trimethylbenzene	ND	10	1.6	56	ug/L
OW-14	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*20*	1.4	0.0033	ug/L
OW-14	8/10/2015	1,2,3-Trichloropropane	*ND*	*20*	1.6	0.0084	ug/L
OW-14	8/10/2015	tert-Butylbenzene	ND	10	1.3	690	ug/L
OW-14	8/10/2015	Isopropylbenzene	ND	10	1.5	447	ug/L
OW-14	8/10/2015	p-Isopropyltoluene	ND	10	1.9	NA	ug/L
OW-14	8/10/2015	Ethylbenzene	160	10	1	700	ug/L
OW-14	8/10/2015	Styrene	ND	10	1.1	100	ug/L
OW-14	8/10/2015	n-Propylbenzene	ND	10	1.6	660	ug/L
OW-14	8/10/2015	n-Butylbenzene	ND	30	2.5	1000	ug/L
OW-14	8/10/2015	4-Chlorotoluene	ND	10	1.5	250	ug/L
OW-14	8/10/2015	1,4-Dichlorobenzene	ND	10	1.7	75	ug/L
OW-14	8/10/2015	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-14	8/10/2015	1,2-Dichloroethane	*ND*	*10*	1.8	5	ug/L
OW-14	8/10/2015	4-Methyl-2-Pentanone	ND	100	2.6	1243	ug/L
OW-14	8/10/2015	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-14	8/10/2015	Bromobenzene	ND	10	1.1	62	ug/L
OW-14	8/10/2015	Toluene	ND	10	1.1	1000	ug/L
OW-14	8/10/2015	Chlorobenzene	ND	10	0.93	77.6	ug/L
OW-14	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2.8	70	ug/L
OW-14	8/10/2015	Dibromochloromethane	*ND*	*10*	0.97	1.68	ug/L
OW-14	8/10/2015	Tetrachloroethene	*ND*	*10*	1.6	5	ug/L
OW-14	8/10/2015	sec-Butylbenzene	ND	10	2.3	2000	ug/L
OW-14	8/10/2015	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-14	8/10/2015	cis-1,2-Dichloroethene	ND	10	0.81	70	ug/L
OW-14	8/10/2015	trans-1,2-Dichloroethene	ND	10	0.94	100	ug/L
OW-14	8/10/2015	1,3-Dichlorobenzene	ND	10	0.93	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/10/2015	1,1-Dichloropropene	ND	10	1.2	NA	ug/L
OW-14	8/10/2015	2-Hexanone	*ND*	*100*	4.8	38	ug/L
OW-14	8/10/2015	2,2-Dichloropropane	ND	20	1.5	NA	ug/L
OW-14	8/10/2015	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	8/10/2015	Xylenes, Total	ND	15	2.8	620	ug/L
OW-14	8/10/2015	MTBE	**780**	10	1.7	143	ug/L
OW-14	8/10/2015	cis-1,3-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	8/10/2015	trans-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	10/27/2015	Carbon tetrachloride	*ND*	*20*	1.6	5	ug/L
OW-14	10/27/2015	Acetone	ND	200	19	14064	ug/L
OW-14	10/27/2015	Chloroform	ND	20	4.3	100	ug/L
OW-14	10/27/2015	Benzene	**6200**	100	6.5	5	ug/L
OW-14	10/27/2015	1,1,1-Trichloroethane	ND	20	1.6	200	ug/L
OW-14	10/27/2015	Bromomethane	*ND*	*60*	23	7.54	ug/L
OW-14	10/27/2015	Chloromethane	*ND*	*60*	3.5	20.32	ug/L
OW-14	10/27/2015	Dibromomethane	*ND*	*20*	4.7	8	ug/L
OW-14	10/27/2015	Chloroethane	ND	40	2.1	20857	ug/L
OW-14	10/27/2015	Vinyl Chloride	*ND*	*20*	2.5	2	ug/L
OW-14	10/27/2015	Methylene Chloride	*ND*	*60*	7.2	5	ug/L
OW-14	10/27/2015	Carbon Disulfide	ND	200	13	810	ug/L
OW-14	10/27/2015	Bromoform	ND	20	3.2	32.9	ug/L
OW-14	10/27/2015	Bromodichloromethane	*ND*	*20*	1.8	1.34	ug/L
OW-14	10/27/2015	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-14	10/27/2015	1,1-Dichloroethene	*ND*	*20*	2	7	ug/L
OW-14	10/27/2015	Trichlorofluoromethane	ND	20	2.5	1137	ug/L
OW-14	10/27/2015	Dichlorodifluoromethane	ND	20	14	197	ug/L
OW-14	10/27/2015	1,2-Dichloropropane	*ND*	*20*	3	5	ug/L
OW-14	10/27/2015	2-Butanone	ND	200	7.3	5565	ug/L
OW-14	10/27/2015	1,1,2-Trichloroethane	*ND*	*20*	1.6	5	ug/L
OW-14	10/27/2015	Trichloroethene	*ND*	*20*	3.3	5	ug/L
OW-14	10/27/2015	1,1,2,2-Tetrachloroethane	*ND*	*40*	3.6	10	ug/L
OW-14	10/27/2015	1,2,3-Trichlorobenzene	ND	20	5.3	70	ug/L
OW-14	10/27/2015	Hexachlorobutadiene	*ND*	*20*	5	1.39	ug/L
OW-14	10/27/2015	1-Methylnaphthalene	ND	80	11	NA	ug/L
OW-14	10/27/2015	Naphthalene	*ND*	*40*	4.4	30	ug/L
OW-14	10/27/2015	2-Methylnaphthalene	*ND*	*80*	12		ug/L
OW-14	10/27/2015	2-Chlorotoluene	ND	20	1.6	233	ug/L
OW-14	10/27/2015	1,2-Dichlorobenzene	ND	20	2.4	600	ug/L
OW-14	10/27/2015	1,2,4-Trimethylbenzene	ND	20	3.2	56	ug/L
OW-14	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*40*	2.7	0.0033	ug/L
OW-14	10/27/2015	1,2,3-Trichloropropane	*ND*	*40*	3.2	0.0084	ug/L
OW-14	10/27/2015	tert-Butylbenzene	ND	20	2.6	690	ug/L
OW-14	10/27/2015	Isopropylbenzene	ND	20	3	447	ug/L
OW-14	10/27/2015	p-Isopropyltoluene	ND	20	3.8	NA	ug/L
OW-14	10/27/2015	Ethylbenzene	150	20	2	700	ug/L
OW-14	10/27/2015	Styrene	ND	20	2.1	100	ug/L
OW-14	10/27/2015	n-Propylbenzene	ND	20	3.3	660	ug/L
OW-14	10/27/2015	n-Butylbenzene	ND	60	4.9	1000	ug/L
OW-14	10/27/2015	4-Chlorotoluene	ND	20	3	250	ug/L
OW-14	10/27/2015	1,4-Dichlorobenzene	ND	20	3.3	75	ug/L
OW-14	10/27/2015	1,2-Dibromoethane	*ND*	*20*	2.7	0.05	ug/L
OW-14	10/27/2015	1,2-Dichloroethane	*ND*	*20*	3.5	5	ug/L
OW-14	10/27/2015	4-Methyl-2-Pentanone	ND	200	5.1	1243	ug/L
OW-14	10/27/2015	1,3,5-Trimethylbenzene	ND	20	2.5	60	ug/L
OW-14	10/27/2015	Bromobenzene	ND	20	2.2	62	ug/L
OW-14	10/27/2015	Toluene	ND	20	2.2	1000	ug/L
OW-14	10/27/2015	Chlorobenzene	ND	20	1.9	77.6	ug/L
OW-14	10/27/2015	1,2,4-Trichlorobenzene	ND	20	5.7	70	ug/L
OW-14	10/27/2015	Dibromochloromethane	*ND*	*20*	1.9	1.68	ug/L
OW-14	10/27/2015	Tetrachloroethene	*ND*	*20*	3.2	5	ug/L
OW-14	10/27/2015	sec-Butylbenzene	ND	20	4.6	2000	ug/L
OW-14	10/27/2015	1,3-Dichloropropane	ND	20	3.4	370	ug/L
OW-14	10/27/2015	cis-1,2-Dichloroethene	ND	20	1.6	70	ug/L
OW-14	10/27/2015	trans-1,2-Dichloroethene	ND	20	1.9	100	ug/L
OW-14	10/27/2015	1,3-Dichlorobenzene	ND	20	1.9	N/A	ug/L
OW-14	10/27/2015	1,1-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	10/27/2015	2-Hexanone	*ND*	*200*	9.5	38	ug/L
OW-14	10/27/2015	2,2-Dichloropropane	ND	40	3	NA	ug/L
OW-14	10/27/2015	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-14	10/27/2015	Xylenes, Total	ND	30	5.6	620	ug/L
OW-14	10/27/2015	MTBE	**570**	20	3.5	143	ug/L
OW-14	10/27/2015	cis-1,3-Dichloropropene	ND	20	2.7	NA	ug/L
OW-14	10/27/2015	trans-1,3-Dichloropropene	ND	20	2.3	NA	ug/L
OW-14	3/4/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-14	3/4/2016	Acetone	ND	500	44	14064	ug/L
OW-14	3/4/2016	Chloroform	ND	50	4.4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/4/2016	Benzene	**6500**	500	48	5	ug/L
OW-14	3/4/2016	1,1,1-Trichloroethane	ND	50	3.2	200	ug/L
OW-14	3/4/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-14	3/4/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-14	3/4/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-14	3/4/2016	Chloroethane	ND	100	7.3	20857	ug/L
OW-14	3/4/2016	Vinyl Chloride	*ND*	*50*	3.2	2	ug/L
OW-14	3/4/2016	Methylene Chloride	*ND*	*150*	3.1	5	ug/L
OW-14	3/4/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-14	3/4/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-14	3/4/2016	Bromodichloromethane	*ND*	*50*	4.9	1.34	ug/L
OW-14	3/4/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-14	3/4/2016	1,1-Dichloroethene	*ND*	*50*	3.8	7	ug/L
OW-14	3/4/2016	Trichlorofluoromethane	ND	50	4.4	1137	ug/L
OW-14	3/4/2016	Dichlorodifluoromethane	ND	50	16	197	ug/L
OW-14	3/4/2016	1,2-Dichloropropane	*ND*	*50*	2.4	5	ug/L
OW-14	3/4/2016	2-Butanone	ND	500	16	5565	ug/L
OW-14	3/4/2016	1,1,2-Trichloroethane	*ND*	*50*	3.8	5	ug/L
OW-14	3/4/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-14	3/4/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	5.3	10	ug/L
OW-14	3/4/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-14	3/4/2016	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-14	3/4/2016	1-Methylnaphthalene	ND	200	10	NA	ug/L
OW-14	3/4/2016	Naphthalene	*ND*	*100*	4.2	30	ug/L
OW-14	3/4/2016	2-Methylnaphthalene	*ND*	*200*	7.9		ug/L
OW-14	3/4/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	3/4/2016	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-14	3/4/2016	1,2,4-Trimethylbenzene	ND	50	5.2	56	ug/L
OW-14	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	7.7	0.0033	ug/L
OW-14	3/4/2016	1,2,3-Trichloropropane	*ND*	*100*	5.6	0.0084	ug/L
OW-14	3/4/2016	tert-Butylbenzene	ND	50	4.8	690	ug/L
OW-14	3/4/2016	Isopropylbenzene	ND	50	4.9	447	ug/L
OW-14	3/4/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-14	3/4/2016	Ethylbenzene	230	50	5.6	700	ug/L
OW-14	3/4/2016	Styrene	ND	50	4.8	100	ug/L
OW-14	3/4/2016	n-Propylbenzene	ND	50	6.6	660	ug/L
OW-14	3/4/2016	n-Butylbenzene	ND	150	8	1000	ug/L
OW-14	3/4/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-14	3/4/2016	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-14	3/4/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-14	3/4/2016	1,2-Dichloroethane	*ND*	*50*	2.6	5	ug/L
OW-14	3/4/2016	4-Methyl-2-Pentanone	ND	500	7.5	1243	ug/L
OW-14	3/4/2016	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-14	3/4/2016	Bromobenzene	ND	50	4	62	ug/L
OW-14	3/4/2016	Toluene	ND	50	4.5	1000	ug/L
OW-14	3/4/2016	Chlorobenzene	ND	50	5.2	77.6	ug/L
OW-14	3/4/2016	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-14	3/4/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-14	3/4/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	3/4/2016	sec-Butylbenzene	ND	50	5.4	2000	ug/L
OW-14	3/4/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-14	3/4/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-14	3/4/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-14	3/4/2016	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-14	3/4/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-14	3/4/2016	2-Hexanone	*ND*	*500*	18	38	ug/L
OW-14	3/4/2016	2,2-Dichloropropane	ND	100	6	NA	ug/L
OW-14	3/4/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-14	3/4/2016	Xylenes, Total	ND	75	16	620	ug/L
OW-14	3/4/2016	MTBE	**680**	50	11	143	ug/L
OW-14	3/4/2016	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
OW-14	3/4/2016	trans-1,3-Dichloropropene	ND	50	4.2	NA	ug/L
OW-14	6/6/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	6/6/2016	Acetone	ND	100	49	14064	ug/L
OW-14	6/6/2016	Chloroform	ND	10	0.89	100	ug/L
OW-14	6/6/2016	Benzene	**7800**	100	9.6	5	ug/L
OW-14	6/6/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-14	6/6/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-14	6/6/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-14	6/6/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-14	6/6/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-14	6/6/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-14	6/6/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-14	6/6/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-14	6/6/2016	Bromoform	ND	10	1	32.9	ug/L
OW-14	6/6/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	6/6/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-14	6/6/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-14	6/6/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-14	6/6/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-14	6/6/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-14	6/6/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-14	6/6/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-14	6/6/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-14	6/6/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-14	6/6/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-14	6/6/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-14	6/6/2016	1-Methylnaphthalene	33	40	2	NA	ug/L
OW-14	6/6/2016	Naphthalene	19	20	0.93	30	ug/L
OW-14	6/6/2016	2-Methylnaphthalene	**3.3**	40	1.6		ug/L
OW-14	6/6/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	6/6/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-14	6/6/2016	1,2,4-Trimethylbenzene	8	10	1.1	56	ug/L
OW-14	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-14	6/6/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-14	6/6/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-14	6/6/2016	Isopropylbenzene	9.6	10	1	447	ug/L
OW-14	6/6/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-14	6/6/2016	Ethylbenzene	230	10	1.1	700	ug/L
OW-14	6/6/2016	Styrene	ND	10	1.1	100	ug/L
OW-14	6/6/2016	n-Propylbenzene	11	10	1.3	660	ug/L
OW-14	6/6/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-14	6/6/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-14	6/6/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-14	6/6/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-14	6/6/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-14	6/6/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-14	6/6/2016	1,3,5-Trimethylbenzene	1.7	10	1.2	60	ug/L
OW-14	6/6/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-14	6/6/2016	Toluene	2.6	10	1.2	1000	ug/L
OW-14	6/6/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	6/6/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-14	6/6/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-14	6/6/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-14	6/6/2016	sec-Butylbenzene	3.1	10	1.2	2000	ug/L
OW-14	6/6/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-14	6/6/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	6/6/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-14	6/6/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-14	6/6/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	6/6/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-14	6/6/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-14	6/6/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	6/6/2016	Xylenes, Total	12	15	3.7	620	ug/L
OW-14	6/6/2016	MTBE	**620**	10	2.1	143	ug/L
OW-14	6/6/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	6/6/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-14	8/31/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-14	8/31/2016	Acetone	ND	50	25	14064	ug/L
OW-14	8/31/2016	Chloroform	ND	5	0.44	100	ug/L
OW-14	8/31/2016	Benzene	**8100**	500	48	5	ug/L
OW-14	8/31/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-14	8/31/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-14	8/31/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-14	8/31/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-14	8/31/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-14	8/31/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-14	8/31/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-14	8/31/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-14	8/31/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-14	8/31/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-14	8/31/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-14	8/31/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-14	8/31/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-14	8/31/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-14	8/31/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-14	8/31/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-14	8/31/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-14	8/31/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-14	8/31/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-14	8/31/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-14	8/31/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/31/2016	1-Methylnaphthalene	34	20	1	NA	ug/L
OW-14	8/31/2016	Naphthalene	18	10	0.46	30	ug/L
OW-14	8/31/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-14	8/31/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-14	8/31/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-14	8/31/2016	1,2,4-Trimethylbenzene	7.1	5	0.55	56	ug/L
OW-14	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-14	8/31/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-14	8/31/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-14	8/31/2016	Isopropylbenzene	8.5	5	0.52	447	ug/L
OW-14	8/31/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-14	8/31/2016	Ethylbenzene	250	5	0.56	700	ug/L
OW-14	8/31/2016	Styrene	ND	5	0.55	100	ug/L
OW-14	8/31/2016	n-Propylbenzene	11	5	0.66	660	ug/L
OW-14	8/31/2016	n-Butylbenzene	1.3	15	0.8	1000	ug/L
OW-14	8/31/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-14	8/31/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-14	8/31/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-14	8/31/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-14	8/31/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-14	8/31/2016	1,3,5-Trimethylbenzene	0.82	5	0.58	60	ug/L
OW-14	8/31/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-14	8/31/2016	Toluene	2.9	5	0.59	1000	ug/L
OW-14	8/31/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-14	8/31/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-14	8/31/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-14	8/31/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-14	8/31/2016	sec-Butylbenzene	2.2	5	0.62	2000	ug/L
OW-14	8/31/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-14	8/31/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-14	8/31/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-14	8/31/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-14	8/31/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-14	8/31/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-14	8/31/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-14	8/31/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-14	8/31/2016	Xylenes, Total	8	7.5	1.8	620	ug/L
OW-14	8/31/2016	MTBE	**580**	5	1.1	143	ug/L
OW-14	8/31/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-14	8/31/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-14	11/15/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	11/15/2016	Acetone	ND	100	49	14064	ug/L
OW-14	11/15/2016	Chloroform	ND	10	0.89	100	ug/L
OW-14	11/15/2016	Benzene	**8700**	100	9.6	5	ug/L
OW-14	11/15/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-14	11/15/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-14	11/15/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-14	11/15/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-14	11/15/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-14	11/15/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-14	11/15/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-14	11/15/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-14	11/15/2016	Bromoform	ND	10	1	32.9	ug/L
OW-14	11/15/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-14	11/15/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-14	11/15/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-14	11/15/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-14	11/15/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-14	11/15/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-14	11/15/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-14	11/15/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-14	11/15/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-14	11/15/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-14	11/15/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-14	11/15/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-14	11/15/2016	1-Methylnaphthalene	30	40	2	NA	ug/L
OW-14	11/15/2016	Naphthalene	20	20	0.93	30	ug/L
OW-14	11/15/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-14	11/15/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	11/15/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-14	11/15/2016	1,2,4-Trimethylbenzene	8.4	10	1.1	56	ug/L
OW-14	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-14	11/15/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-14	11/15/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-14	11/15/2016	Isopropylbenzene	10	10	1	447	ug/L
OW-14	11/15/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/15/2016	Ethylbenzene	300	10	1.1	700	ug/L
OW-14	11/15/2016	Styrene	ND	10	1.1	100	ug/L
OW-14	11/15/2016	n-Propylbenzene	13	10	1.3	660	ug/L
OW-14	11/15/2016	n-Butylbenzene	3.4	30	1.6	1000	ug/L
OW-14	11/15/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-14	11/15/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-14	11/15/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-14	11/15/2016	1,2-Dichloroethane	*3.4*	*10*	1.2	5	ug/L
OW-14	11/15/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-14	11/15/2016	1,3,5-Trimethylbenzene	1.5	10	1.2	60	ug/L
OW-14	11/15/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-14	11/15/2016	Toluene	5.7	10	1.2	1000	ug/L
OW-14	11/15/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	11/15/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-14	11/15/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-14	11/15/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-14	11/15/2016	sec-Butylbenzene	4.1	10	1.2	2000	ug/L
OW-14	11/15/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-14	11/15/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-14	11/15/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-14	11/15/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-14	11/15/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-14	11/15/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-14	11/15/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-14	11/15/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-14	11/15/2016	Xylenes, Total	13	15	3.7	620	ug/L
OW-14	11/15/2016	MTBE	**500**	10	2.1	143	ug/L
OW-14	11/15/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-14	11/15/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-14	2/27/2017	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-14	2/27/2017	Acetone	ND	500	250	14064	ug/L
OW-14	2/27/2017	Chloroform	ND	50	4.4	100	ug/L
OW-14	2/27/2017	Benzene	**12000**	500	48	5	ug/L
OW-14	2/27/2017	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-14	2/27/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-14	2/27/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-14	2/27/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-14	2/27/2017	Chloroethane	ND	100	9.6	20857	ug/L
OW-14	2/27/2017	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-14	2/27/2017	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-14	2/27/2017	Carbon Disulfide	ND	500	30	810	ug/L
OW-14	2/27/2017	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-14	2/27/2017	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-14	2/27/2017	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-14	2/27/2017	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-14	2/27/2017	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-14	2/27/2017	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-14	2/27/2017	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-14	2/27/2017	2-Butanone	ND	500	37	5565	ug/L
OW-14	2/27/2017	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-14	2/27/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-14	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-14	2/27/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-14	2/27/2017	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-14	2/27/2017	1-Methylnaphthalene	35	200	10	NA	ug/L
OW-14	2/27/2017	Naphthalene	*24*	*100*	4.6	30	ug/L
OW-14	2/27/2017	2-Methylnaphthalene	*ND*	*200*	7.9		ug/L
OW-14	2/27/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	2/27/2017	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-14	2/27/2017	1,2,4-Trimethylbenzene	7.4	50	5.5	56	ug/L
OW-14	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-14	2/27/2017	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-14	2/27/2017	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-14	2/27/2017	Isopropylbenzene	8.3	50	5.2	447	ug/L
OW-14	2/27/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-14	2/27/2017	Ethylbenzene	390	50	5.6	700	ug/L
OW-14	2/27/2017	Styrene	ND	50	5.5	100	ug/L
OW-14	2/27/2017	n-Propylbenzene	14	50	6.6	660	ug/L
OW-14	2/27/2017	n-Butylbenzene	ND	150	8	1000	ug/L
OW-14	2/27/2017	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-14	2/27/2017	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-14	2/27/2017	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-14	2/27/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-14	2/27/2017	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-14	2/27/2017	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-14	2/27/2017	Bromobenzene	ND	50	4.9	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/27/2017	Toluene	6.2	50	5.9	1000	ug/L
OW-14	2/27/2017	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-14	2/27/2017	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-14	2/27/2017	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-14	2/27/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	2/27/2017	sec-Butylbenzene	ND	50	6.2	2000	ug/L
OW-14	2/27/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-14	2/27/2017	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-14	2/27/2017	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-14	2/27/2017	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-14	2/27/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-14	2/27/2017	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-14	2/27/2017	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-14	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-14	2/27/2017	Xylenes, Total	ND	75	18	620	ug/L
OW-14	2/27/2017	MTBE	**810**	50	11	143	ug/L
OW-14	2/27/2017	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-14	2/27/2017	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-14	5/30/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-14	5/30/2017	Acetone	ND	500	41	14064	ug/L
OW-14	5/30/2017	Chloroform	ND	50	20	100	ug/L
OW-14	5/30/2017	Benzene	**13000**	500	31	5	ug/L
OW-14	5/30/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-14	5/30/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-14	5/30/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-14	5/30/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-14	5/30/2017	Chloroethane	ND	100	12	20857	ug/L
OW-14	5/30/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-14	5/30/2017	Methylene Chloride	**7.3**	150	5.4	5	ug/L
OW-14	5/30/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-14	5/30/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-14	5/30/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-14	5/30/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-14	5/30/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-14	5/30/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-14	5/30/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-14	5/30/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-14	5/30/2017	2-Butanone	ND	500	57	5565	ug/L
OW-14	5/30/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-14	5/30/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-14	5/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-14	5/30/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-14	5/30/2017	Hexachlorobutadiene	*ND*	*50*	40	1.39	ug/L
OW-14	5/30/2017	1-Methylnaphthalene	37	200	8	NA	ug/L
OW-14	5/30/2017	Naphthalene	*28*	*100*	5.7	30	ug/L
OW-14	5/30/2017	2-Methylnaphthalene	*ND*	*200*	7.6		ug/L
OW-14	5/30/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	5/30/2017	1,2-Dichlorobenzene	ND	50	4.5	600	ug/L
OW-14	5/30/2017	1,2,4-Trimethylbenzene	11	50	5.6	56	ug/L
OW-14	5/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-14	5/30/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-14	5/30/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-14	5/30/2017	Isopropylbenzene	14	50	2.6	447	ug/L
OW-14	5/30/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-14	5/30/2017	Ethylbenzene	470	50	4.7	700	ug/L
OW-14	5/30/2017	Styrene	ND	50	7.8	100	ug/L
OW-14	5/30/2017	n-Propylbenzene	21	50	3.7	660	ug/L
OW-14	5/30/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-14	5/30/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-14	5/30/2017	1,4-Dichlorobenzene	ND	50	20	75	ug/L
OW-14	5/30/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-14	5/30/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-14	5/30/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-14	5/30/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-14	5/30/2017	Bromobenzene	ND	50	7	62	ug/L
OW-14	5/30/2017	Toluene	4	50	3.2	1000	ug/L
OW-14	5/30/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-14	5/30/2017	1,2,4-Trichlorobenzene	ND	50	7.1	70	ug/L
OW-14	5/30/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-14	5/30/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-14	5/30/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-14	5/30/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-14	5/30/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-14	5/30/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-14	5/30/2017	Pentafluorobenzene	**500**	0	0		None
OW-14	5/30/2017	1,3-Dichlorobenzene	ND	50	7.6	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/30/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-14	5/30/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-14	5/30/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-14	5/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-14	5/30/2017	Xylenes, Total	20	75	16	620	ug/L
OW-14	5/30/2017	MTBE	**700**	50	12	143	ug/L
OW-14	5/30/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-14	5/30/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-14	9/6/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-14	9/6/2017	Acetone	13	50	4.1	14064	ug/L
OW-14	9/6/2017	Chloroform	ND	5	2	100	ug/L
OW-14	9/6/2017	Benzene	**12000**	100	6.2	5	ug/L
OW-14	9/6/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-14	9/6/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-14	9/6/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-14	9/6/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-14	9/6/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-14	9/6/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-14	9/6/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-14	9/6/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-14	9/6/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-14	9/6/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-14	9/6/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-14	9/6/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-14	9/6/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-14	9/6/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-14	9/6/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-14	9/6/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-14	9/6/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-14	9/6/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-14	9/6/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-14	9/6/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-14	9/6/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-14	9/6/2017	1-Methylnaphthalene	38	20	0.8	NA	ug/L
OW-14	9/6/2017	Naphthalene	**38**	10	0.57	30	ug/L
OW-14	9/6/2017	2-Methylnaphthalene	**1.7**	20	0.76		ug/L
OW-14	9/6/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-14	9/6/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-14	9/6/2017	1,2,4-Trimethylbenzene	12	5	0.56	56	ug/L
OW-14	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-14	9/6/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-14	9/6/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-14	9/6/2017	Isopropylbenzene	14	5	0.26	447	ug/L
OW-14	9/6/2017	p-Isopropyltoluene	1.1	5	0.48	NA	ug/L
OW-14	9/6/2017	Ethylbenzene	540	100	9.3	700	ug/L
OW-14	9/6/2017	Styrene	ND	5	0.78	100	ug/L
OW-14	9/6/2017	n-Propylbenzene	25	5	0.37	660	ug/L
OW-14	9/6/2017	n-Butylbenzene	2.1	15	0.65	1000	ug/L
OW-14	9/6/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-14	9/6/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-14	9/6/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-14	9/6/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-14	9/6/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-14	9/6/2017	1,3,5-Trimethylbenzene	1.6	5	0.44	60	ug/L
OW-14	9/6/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-14	9/6/2017	Toluene	9.1	5	0.32	1000	ug/L
OW-14	9/6/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-14	9/6/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-14	9/6/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-14	9/6/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-14	9/6/2017	sec-Butylbenzene	2.7	5	0.55	2000	ug/L
OW-14	9/6/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-14	9/6/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-14	9/6/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-14	9/6/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-14	9/6/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-14	9/6/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-14	9/6/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-14	9/6/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-14	9/6/2017	Xylenes, Total	33	7.5	1.6	620	ug/L
OW-14	9/6/2017	MTBE	**660**	5	1.2	143	ug/L
OW-14	9/6/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-14	9/6/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-14	12/11/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-14	12/11/2017	Acetone	ND	100	8.2	14064	ug/L
OW-14	12/11/2017	Chloroform	ND	10	4	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	12/11/2017	Benzene	**13000**	1000	62	5	ug/L
OW-14	12/11/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-14	12/11/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-14	12/11/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-14	12/11/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-14	12/11/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-14	12/11/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-14	12/11/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-14	12/11/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-14	12/11/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-14	12/11/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-14	12/11/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-14	12/11/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-14	12/11/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-14	12/11/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-14	12/11/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-14	12/11/2017	2-Butanone	ND	100	11	5565	ug/L
OW-14	12/11/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-14	12/11/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-14	12/11/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-14	12/11/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-14	12/11/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-14	12/11/2017	1-Methylnaphthalene	33	40	1.6	NA	ug/L
OW-14	12/11/2017	Naphthalene	**37**	20	1.1	30	ug/L
OW-14	12/11/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-14	12/11/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-14	12/11/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-14	12/11/2017	1,2,4-Trimethylbenzene	13	10	1.1	56	ug/L
OW-14	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-14	12/11/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-14	12/11/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-14	12/11/2017	Isopropylbenzene	16	10	0.51	447	ug/L
OW-14	12/11/2017	p-Isopropyltoluene	1.7	10	0.96	NA	ug/L
OW-14	12/11/2017	Ethylbenzene	640	10	0.93	700	ug/L
OW-14	12/11/2017	Styrene	ND	10	1.6	100	ug/L
OW-14	12/11/2017	n-Propylbenzene	28	10	0.74	660	ug/L
OW-14	12/11/2017	n-Butylbenzene	3	30	1.3	1000	ug/L
OW-14	12/11/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-14	12/11/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-14	12/11/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-14	12/11/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-14	12/11/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-14	12/11/2017	1,3,5-Trimethylbenzene	2.1	10	0.87	60	ug/L
OW-14	12/11/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-14	12/11/2017	Toluene	13	10	0.64	1000	ug/L
OW-14	12/11/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-14	12/11/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-14	12/11/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-14	12/11/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-14	12/11/2017	sec-Butylbenzene	3.2	10	1.1	2000	ug/L
OW-14	12/11/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-14	12/11/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-14	12/11/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-14	12/11/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-14	12/11/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-14	12/11/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-14	12/11/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-14	12/11/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-14	12/11/2017	Xylenes, Total	52	15	3.2	620	ug/L
OW-14	12/11/2017	MTBE	**630**	10	2.4	143	ug/L
OW-14	12/11/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-14	12/11/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-14	2/27/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-14	2/27/2018	Acetone	ND	1000	82	14064	ug/L
OW-14	2/27/2018	Chloroform	ND	100	40	100	ug/L
OW-14	2/27/2018	Benzene	**14000**	1000	62	5	ug/L
OW-14	2/27/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-14	2/27/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-14	2/27/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-14	2/27/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-14	2/27/2018	Chloroethane	ND	200	23	20857	ug/L
OW-14	2/27/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-14	2/27/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-14	2/27/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-14	2/27/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-14	2/27/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/27/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-14	2/27/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-14	2/27/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-14	2/27/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-14	2/27/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-14	2/27/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-14	2/27/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-14	2/27/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-14	2/27/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-14	2/27/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-14	2/27/2018	Hexachlorobutadiene	*ND*	*100*	80	1.39	ug/L
OW-14	2/27/2018	1-Methylnaphthalene	59	400	16	NA	ug/L
OW-14	2/27/2018	Naphthalene	**44**	200	11	30	ug/L
OW-14	2/27/2018	2-Methylnaphthalene	*ND*	*400*	15		ug/L
OW-14	2/27/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-14	2/27/2018	1,2-Dichlorobenzene	ND	100	9	600	ug/L
OW-14	2/27/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-14	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-14	2/27/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-14	2/27/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-14	2/27/2018	Isopropylbenzene	12	100	5.1	447	ug/L
OW-14	2/27/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-14	2/27/2018	Ethylbenzene	610	100	9.3	700	ug/L
OW-14	2/27/2018	Styrene	ND	100	16	100	ug/L
OW-14	2/27/2018	n-Propylbenzene	32	100	7.4	660	ug/L
OW-14	2/27/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-14	2/27/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-14	2/27/2018	1,4-Dichlorobenzene	*ND*	*100*	40	75	ug/L
OW-14	2/27/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-14	2/27/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-14	2/27/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-14	2/27/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-14	2/27/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-14	2/27/2018	Toluene	6.5	100	6.4	1000	ug/L
OW-14	2/27/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-14	2/27/2018	1,2,4-Trichlorobenzene	*ND*	*100*	14	70	ug/L
OW-14	2/27/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-14	2/27/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-14	2/27/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-14	2/27/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-14	2/27/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-14	2/27/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-14	2/27/2018	1,3-Dichlorobenzene	ND	100	15	N/A	ug/L
OW-14	2/27/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-14	2/27/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-14	2/27/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-14	2/27/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-14	2/27/2018	Xylenes, Total	ND	150	32	620	ug/L
OW-14	2/27/2018	MTBE	**660**	100	24	143	ug/L
OW-14	2/27/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-14	2/27/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-14	5/15/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-14	5/15/2018	Acetone	ND	1000	82	14064	ug/L
OW-14	5/15/2018	Chloroform	ND	100	40	100	ug/L
OW-14	5/15/2018	Benzene	**15000**	1000	62	5	ug/L
OW-14	5/15/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-14	5/15/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-14	5/15/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-14	5/15/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-14	5/15/2018	Chloroethane	ND	200	23	20857	ug/L
OW-14	5/15/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-14	5/15/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-14	5/15/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-14	5/15/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-14	5/15/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-14	5/15/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-14	5/15/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-14	5/15/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-14	5/15/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-14	5/15/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-14	5/15/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-14	5/15/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-14	5/15/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-14	5/15/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-14	5/15/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-14	5/15/2018	Hexachlorobutadiene	*ND*	*100*	80	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/15/2018	1-Methylnaphthalene	ND	400	16	NA	ug/L
OW-14	5/15/2018	Naphthalene	*ND*	*200*	11	30	ug/L
OW-14	5/15/2018	2-Methylnaphthalene	*ND*	*400*	15		ug/L
OW-14	5/15/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-14	5/15/2018	1,2-Dichlorobenzene	ND	100	9	600	ug/L
OW-14	5/15/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-14	5/15/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-14	5/15/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-14	5/15/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-14	5/15/2018	Isopropylbenzene	ND	100	5.1	447	ug/L
OW-14	5/15/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-14	5/15/2018	Ethylbenzene	**710**	100	9.3	700	ug/L
OW-14	5/15/2018	Styrene	ND	100	16	100	ug/L
OW-14	5/15/2018	n-Propylbenzene	ND	100	7.4	660	ug/L
OW-14	5/15/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-14	5/15/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-14	5/15/2018	1,4-Dichlorobenzene	*ND*	*100*	40	75	ug/L
OW-14	5/15/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-14	5/15/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-14	5/15/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-14	5/15/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-14	5/15/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-14	5/15/2018	Toluene	ND	100	6.4	1000	ug/L
OW-14	5/15/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-14	5/15/2018	1,2,4-Trichlorobenzene	*ND*	*100*	14	70	ug/L
OW-14	5/15/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-14	5/15/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-14	5/15/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-14	5/15/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-14	5/15/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-14	5/15/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-14	5/15/2018	1,3-Dichlorobenzene	ND	100	15	N/A	ug/L
OW-14	5/15/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-14	5/15/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-14	5/15/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-14	5/15/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-14	5/15/2018	Xylenes, Total	ND	150	32	620	ug/L
OW-14	5/15/2018	MTBE	**670**	100	24	143	ug/L
OW-14	5/15/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-14	5/15/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-14	9/11/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
OW-14	9/11/2018	Acetone	ND	500	39	14064	ug/L
OW-14	9/11/2018	Chloroform	ND	50	20	100	ug/L
OW-14	9/11/2018	Benzene	**17000**	500	87	5	ug/L
OW-14	9/11/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
OW-14	9/11/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-14	9/11/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-14	9/11/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-14	9/11/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-14	9/11/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
OW-14	9/11/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-14	9/11/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-14	9/11/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-14	9/11/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-14	9/11/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-14	9/11/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-14	9/11/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
OW-14	9/11/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-14	9/11/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
OW-14	9/11/2018	2-Butanone	ND	500	63	5565	ug/L
OW-14	9/11/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-14	9/11/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-14	9/11/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-14	9/11/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-14	9/11/2018	Hexachlorobutadiene	*ND*	*50*	40	1.39	ug/L
OW-14	9/11/2018	1-Methylnaphthalene	26	200	17	NA	ug/L
OW-14	9/11/2018	Naphthalene	*27*	*100*	14	30	ug/L
OW-14	9/11/2018	2-Methylnaphthalene	*ND*	*200*	12		ug/L
OW-14	9/11/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-14	9/11/2018	1,2-Dichlorobenzene	ND	50	16	600	ug/L
OW-14	9/11/2018	1,2,4-Trimethylbenzene	ND	50	13	56	ug/L
OW-14	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-14	9/11/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-14	9/11/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-14	9/11/2018	Isopropylbenzene	17	50	11	447	ug/L
OW-14	9/11/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/11/2018	Ethylbenzene	660	50	11	700	ug/L
OW-14	9/11/2018	Styrene	ND	50	13	100	ug/L
OW-14	9/11/2018	n-Propylbenzene	30	50	12	660	ug/L
OW-14	9/11/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-14	9/11/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-14	9/11/2018	1,4-Dichlorobenzene	ND	50	20	75	ug/L
OW-14	9/11/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-14	9/11/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-14	9/11/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-14	9/11/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-14	9/11/2018	Bromobenzene	ND	50	16	62	ug/L
OW-14	9/11/2018	Toluene	ND	50	8.4	1000	ug/L
OW-14	9/11/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-14	9/11/2018	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OW-14	9/11/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-14	9/11/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	9/11/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-14	9/11/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-14	9/11/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-14	9/11/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-14	9/11/2018	1,3-Dichlorobenzene	ND	50	16	N/A	ug/L
OW-14	9/11/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-14	9/11/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-14	9/11/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
OW-14	9/11/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-14	9/11/2018	Xylenes, Total	42	75	32	620	ug/L
OW-14	9/11/2018	MTBE	**740**	50	16	143	ug/L
OW-14	9/11/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-14	9/11/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-14	11/6/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
OW-14	11/6/2018	Acetone	ND	500	38	14064	ug/L
OW-14	11/6/2018	Chloroform	ND	50	12	100	ug/L
OW-14	11/6/2018	Benzene	**13000**	500	87	5	ug/L
OW-14	11/6/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
OW-14	11/6/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
OW-14	11/6/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
OW-14	11/6/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-14	11/6/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-14	11/6/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
OW-14	11/6/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-14	11/6/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-14	11/6/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-14	11/6/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-14	11/6/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
OW-14	11/6/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-14	11/6/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
OW-14	11/6/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
OW-14	11/6/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
OW-14	11/6/2018	2-Butanone	ND	500	71	5565	ug/L
OW-14	11/6/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-14	11/6/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-14	11/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-14	11/6/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-14	11/6/2018	Hexachlorobutadiene	*ND*	*50*	20	1.39	ug/L
OW-14	11/6/2018	1-Methylnaphthalene	ND	200	17	NA	ug/L
OW-14	11/6/2018	Naphthalene	*ND*	*100*	14	30	ug/L
OW-14	11/6/2018	2-Methylnaphthalene	*ND*	*200*	17		ug/L
OW-14	11/6/2018	2-Chlorotoluene	ND	50	13	233	ug/L
OW-14	11/6/2018	1,2-Dichlorobenzene	ND	50	16	600	ug/L
OW-14	11/6/2018	1,2,4-Trimethylbenzene	ND	50	13	56	ug/L
OW-14	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-14	11/6/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-14	11/6/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-14	11/6/2018	Isopropylbenzene	ND	50	11	447	ug/L
OW-14	11/6/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-14	11/6/2018	Ethylbenzene	640	50	11	700	ug/L
OW-14	11/6/2018	Styrene	ND	50	13	100	ug/L
OW-14	11/6/2018	n-Propylbenzene	ND	50	12	660	ug/L
OW-14	11/6/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-14	11/6/2018	4-Chlorotoluene	ND	50	14	250	ug/L
OW-14	11/6/2018	1,4-Dichlorobenzene	ND	50	14	75	ug/L
OW-14	11/6/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-14	11/6/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L
OW-14	11/6/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-14	11/6/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-14	11/6/2018	Bromobenzene	ND	50	16	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/6/2018	Toluene	ND	50	8.4	1000	ug/L
OW-14	11/6/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-14	11/6/2018	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OW-14	11/6/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-14	11/6/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-14	11/6/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-14	11/6/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-14	11/6/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-14	11/6/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
OW-14	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-14	11/6/2018	1,3-Dichlorobenzene	ND	50	16	N/A	ug/L
OW-14	11/6/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-14	11/6/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-14	11/6/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-14	11/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-14	11/6/2018	Xylenes, Total	ND	75	32	620	ug/L
OW-14	11/6/2018	MTBE	**600**	50	23	143	ug/L
OW-14	11/6/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-14	11/6/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-14	2/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	12.619962	5.74	ug/L
OW-14	2/5/2019	1,1,1-Trichloroethane	ND	50	8.190791	200	ug/L
OW-14	2/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	16.414955	10	ug/L
OW-14	2/5/2019	1,1,2-Trichloroethane	*ND*	*50*	11.636162	5	ug/L
OW-14	2/5/2019	1,1-Dichloroethane	*ND*	*50*	8.759832	25	ug/L
OW-14	2/5/2019	1,1-Dichloroethene	*ND*	*50*	6.024391	7	ug/L
OW-14	2/5/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-14	2/5/2019	1,2,3-Trichlorobenzene	ND	50	14.015402	70	ug/L
OW-14	2/5/2019	1,2,3-Trichloropropane	*ND*	*100*	28.300223	0.0084	ug/L
OW-14	2/5/2019	1,2,4-Trichlorobenzene	ND	50	13.320508	70	ug/L
OW-14	2/5/2019	1,2,4-Trimethylbenzene	ND	50	12.665717	56	ug/L
OW-14	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	23.544858	0.0033	ug/L
OW-14	2/5/2019	1,2-Dibromoethane	*ND*	*50*	11.476427	0.05	ug/L
OW-14	2/5/2019	1,2-Dichlorobenzene	ND	50	15.573243	600	ug/L
OW-14	2/5/2019	1,2-Dichloroethane	*ND*	*50*	9.476269	5	ug/L
OW-14	2/5/2019	1,2-Dichloropropane	*ND*	*50*	8.261288	5	ug/L
OW-14	2/5/2019	1,3,5-Trimethylbenzene	ND	50	11.570703	60	ug/L
OW-14	2/5/2019	1,3-Dichlorobenzene	ND	50	15.631118	N/A	ug/L
OW-14	2/5/2019	1,3-Dichloropropane	ND	50	13.537814	370	ug/L
OW-14	2/5/2019	1,4-Dichlorobenzene	ND	50	14.385342	75	ug/L
OW-14	2/5/2019	1-Methylnaphthalene	28	200	16.790848	NA	ug/L
OW-14	2/5/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-14	2/5/2019	2-Butanone	ND	500	70.543444	5565	ug/L
OW-14	2/5/2019	2-Chlorotoluene	ND	50	12.50691	233	ug/L
OW-14	2/5/2019	2-Hexanone	*ND*	*500*	45.328722	38	ug/L
OW-14	2/5/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-14	2/5/2019	4-Chlorotoluene	ND	50	14.040044	250	ug/L
OW-14	2/5/2019	p-Isopropyltoluene	ND	50	12.016928	NA	ug/L
OW-14	2/5/2019	4-Methyl-2-Pentanone	ND	500	22.663868	1243	ug/L
OW-14	2/5/2019	Acetone	ND	500	37.853481	14064	ug/L
OW-14	2/5/2019	Benzene	**16000**	500	87.447859	5	ug/L
OW-14	2/5/2019	Bromobenzene	ND	50	15.895311	62	ug/L
OW-14	2/5/2019	Bromodichloromethane	*ND*	*50*	14.138349	1.34	ug/L
OW-14	2/5/2019	Bromoform	*ND*	*50*	16.165516	32.9	ug/L
OW-14	2/5/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-14	2/5/2019	Carbon Disulfide	ND	500	19.251554	810	ug/L
OW-14	2/5/2019	Carbon tetrachloride	*ND*	*50*	6.867418	5	ug/L
OW-14	2/5/2019	Chlorobenzene	ND	50	14.526376	77.6	ug/L
OW-14	2/5/2019	Chloroethane	ND	100	8.216855	20857	ug/L
OW-14	2/5/2019	Chloroform	ND	50	11.761188	100	ug/L
OW-14	2/5/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-14	2/5/2019	cis-1,2-Dichloroethene	ND	50	18.799057	70	ug/L
OW-14	2/5/2019	cis-1,3-Dichloropropene	ND	50	14.911401	NA	ug/L
OW-14	2/5/2019	Dibromochloromethane	*ND*	*50*	11.85062	1.68	ug/L
OW-14	2/5/2019	Dibromomethane	*ND*	*50*	16.107371	8	ug/L
OW-14	2/5/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-14	2/5/2019	Ethylbenzene	680	50	11.170112	700	ug/L
OW-14	2/5/2019	Hexachlorobutadiene	*ND*	*50*	19.559347	1.39	ug/L
OW-14	2/5/2019	Isopropylbenzene	18	50	11.05521	447	ug/L
OW-14	2/5/2019	MTBE	**730**	50	22.804749	143	ug/L
OW-14	2/5/2019	Methylene Chloride	*ND*	*150*	10.284739	5	ug/L
OW-14	2/5/2019	Naphthalene	*27*	*100*	14.481303	30	ug/L
OW-14	2/5/2019	n-Butylbenzene	ND	150	12.416523	1000	ug/L
OW-14	2/5/2019	n-Propylbenzene	37	50	12.129312	660	ug/L
OW-14	2/5/2019	sec-Butylbenzene	ND	50	10.112735	2000	ug/L
OW-14	2/5/2019	Styrene	ND	50	12.507286	100	ug/L
OW-14	2/5/2019	tert-Butylbenzene	ND	50	11.073487	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/5/2019	Tetrachloroethene	*ND*	*50*	7.572586	5	ug/L
OW-14	2/5/2019	Toluene	12	50	8.40697	1000	ug/L
OW-14	2/5/2019	trans-1,2-Dichloroethene	ND	50	9.11348	100	ug/L
OW-14	2/5/2019	trans-1,3-Dichloropropene	ND	50	13.773386	NA	ug/L
OW-14	2/5/2019	Trichloroethene	*ND*	*50*	12.877821	5	ug/L
OW-14	2/5/2019	Trichlorofluoromethane	ND	50	7.205808	1137	ug/L
OW-14	2/5/2019	Vinyl Chloride	*ND*	*50*	6.053716	2	ug/L
OW-14	2/5/2019	Xylenes, Total	56	75	32.064386	620	ug/L
OW-14	2/5/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-14	5/1/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-14	5/1/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-14	5/1/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-14	5/1/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-14	5/1/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-14	5/1/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-14	5/1/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-14	5/1/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-14	5/1/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-14	5/1/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-14	5/1/2019	1,2,4-Trimethylbenzene	14	50	10.659955	56	ug/L
OW-14	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-14	5/1/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-14	5/1/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-14	5/1/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-14	5/1/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-14	5/1/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-14	5/1/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-14	5/1/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-14	5/1/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-14	5/1/2019	1-Methylnaphthalene	32	200	15.747724	NA	ug/L
OW-14	5/1/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-14	5/1/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-14	5/1/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-14	5/1/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-14	5/1/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-14	5/1/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-14	5/1/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-14	5/1/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-14	5/1/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-14	5/1/2019	Benzene	**16000**	500	83.319528	5	ug/L
OW-14	5/1/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-14	5/1/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-14	5/1/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-14	5/1/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-14	5/1/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-14	5/1/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-14	5/1/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-14	5/1/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-14	5/1/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-14	5/1/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-14	5/1/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-14	5/1/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-14	5/1/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-14	5/1/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-14	5/1/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-14	5/1/2019	Ethylbenzene	**710**	50	6.61704	700	ug/L
OW-14	5/1/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-14	5/1/2019	Isopropylbenzene	14	50	9.576114	447	ug/L
OW-14	5/1/2019	MTBE	**730**	50	22.804749	143	ug/L
OW-14	5/1/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-14	5/1/2019	Naphthalene	*24*	*100*	13.753567	30	ug/L
OW-14	5/1/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-14	5/1/2019	n-Propylbenzene	32	50	10.7154	660	ug/L
OW-14	5/1/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-14	5/1/2019	Styrene	ND	50	9.566168	100	ug/L
OW-14	5/1/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-14	5/1/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-14	5/1/2019	Toluene	ND	50	17.521811	1000	ug/L
OW-14	5/1/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-14	5/1/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-14	5/1/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-14	5/1/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-14	5/1/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-14	5/1/2019	Xylenes, Total	ND	75	22.720747	620	ug/L
OW-14	5/1/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-29	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-29	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-29	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-29	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-29	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-29	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-29	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-29	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-29	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-29	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-29	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-29	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-29	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-29	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-29	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-29	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-29	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-29	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-29	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-29	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-29	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-29	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-29	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-29	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-29	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-29	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-29	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-29	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-29	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-29	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-29	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-29	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-29	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-29	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-29	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-29	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-29	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-29	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-29	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-29	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-29	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-29	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-29	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-29	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-29	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-29	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-29	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-29	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-29	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-29	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-29	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-29	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-29	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-29	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-29	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-29	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-29	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-29	3/21/2012	MTBE	**620**	10	5.2	143	ug/L
OW-29	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-29	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-29	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-29	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-29	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-29	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-29	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	6/13/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	6/13/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-29	6/13/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-29	6/13/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	6/13/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-29	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-29	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	6/13/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	6/13/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	6/13/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	6/13/2012	MTBE	**470**	10	9.6	143	ug/L
OW-29	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-29	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-29	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-29	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-29	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-29	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-29	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-29	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-29	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	8/23/2012	MTBE	**1000**	10	9.6	143	ug/L
OW-29	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-29	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-29	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-29	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-29	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-29	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-29	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-29	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-29	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-29	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-29	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-29	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-29	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-29	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-29	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-29	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-29	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-29	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-29	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-29	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-29	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-29	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-29	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-29	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-29	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-29	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-29	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-29	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-29	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-29	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-29	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-29	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-29	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-29	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-29	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-29	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-29	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-29	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-29	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-29	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-29	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-29	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-29	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-29	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-29	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-29	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-29	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-29	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-29	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-29	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-29	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-29	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-29	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-29	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-29	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-29	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-29	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-29	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-29	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-29	11/27/2012	MTBE	**900**	10	9.6	143	ug/L
OW-29	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-29	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-29	3/19/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	3/19/2013	Acetone	ND	10	2.3	14064	ug/L
OW-29	3/19/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	3/19/2013	Benzene	ND	1	0.52	5	ug/L
OW-29	3/19/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	3/19/2013	Bromomethane	ND	3	0.85	7.54	ug/L
OW-29	3/19/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	3/19/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	3/19/2013	Chloroethane	ND	2	0.57	20857	ug/L
OW-29	3/19/2013	Vinyl Chloride	ND	1	0.33	2	ug/L
OW-29	3/19/2013	Methylene Chloride	ND	3	0.42	5	ug/L
OW-29	3/19/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	3/19/2013	Bromoform	ND	1	0.43	32.9	ug/L
OW-29	3/19/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	3/19/2013	1,1-Dichloroethane	ND	1	0.48	25	ug/L
OW-29	3/19/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	3/19/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	3/19/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	3/19/2013	1,2-Dichloropropane	ND	1	0.55	5	ug/L
OW-29	3/19/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	3/19/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	3/19/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	3/19/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	3/19/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	3/19/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	3/19/2013	1-Methylnaphthalene	ND	4	0.61	NA	ug/L
OW-29	3/19/2013	Naphthalene	ND	2	0.34	30	ug/L
OW-29	3/19/2013	2-Methylnaphthalene	*ND*	*4*	0.57		ug/L
OW-29	3/19/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	3/19/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	3/19/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.73	0.0033	ug/L
OW-29	3/19/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	3/19/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	3/19/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	3/19/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	3/19/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	3/19/2013	Styrene	ND	1	5.6	100	ug/L
OW-29	3/19/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	3/19/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	3/19/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	3/19/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	3/19/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	3/19/2013	1,2-Dichloroethane	ND	1	0.38	5	ug/L
OW-29	3/19/2013	4-Methyl-2-Pentanone	ND	10	0.89	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/19/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	3/19/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	3/19/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	3/19/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	3/19/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	3/19/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	3/19/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	3/19/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	3/19/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	3/19/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	3/19/2013	trans-1,2-Dichloroethene	ND	1	0.37	100	ug/L
OW-29	3/19/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	3/19/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	3/19/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	3/19/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	3/19/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	3/19/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	3/19/2013	MTBE	**1100**	10	7.7	143	ug/L
OW-29	3/19/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	3/19/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	6/13/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	6/13/2013	Acetone	ND	10	1.7	14064	ug/L
OW-29	6/13/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	6/13/2013	Benzene	ND	1	0.46	5	ug/L
OW-29	6/13/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	6/13/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-29	6/13/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	6/13/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	6/13/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-29	6/13/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-29	6/13/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	6/13/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	6/13/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-29	6/13/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	6/13/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-29	6/13/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	6/13/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	6/13/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	6/13/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-29	6/13/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	6/13/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	6/13/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	6/13/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	6/13/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	6/13/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	6/13/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-29	6/13/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-29	6/13/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-29	6/13/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	6/13/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	6/13/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	6/13/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-29	6/13/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	6/13/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	6/13/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	6/13/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	6/13/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	6/13/2013	Styrene	ND	1	0.58	100	ug/L
OW-29	6/13/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	6/13/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	6/13/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	6/13/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	6/13/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	6/13/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-29	6/13/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-29	6/13/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	6/13/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	6/13/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	6/13/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	6/13/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	6/13/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	6/13/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	6/13/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	6/13/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	6/13/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	6/13/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/13/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	6/13/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	6/13/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	6/13/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	6/13/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	6/13/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	6/13/2013	MTBE	**1400**	10	7.7	143	ug/L
OW-29	6/13/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	6/13/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-29	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-29	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-29	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-29	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-29	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-29	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-29	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-29	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-29	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-29	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-29	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-29	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-29	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-29	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-29	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-29	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-29	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-29	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-29	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-29	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-29	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-29	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-29	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-29	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-29	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-29	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-29	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-29	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-29	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-29	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-29	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-29	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-29	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-29	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-29	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-29	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-29	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-29	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-29	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-29	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-29	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-29	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-29	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-29	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-29	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-29	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-29	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-29	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-29	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-29	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-29	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-29	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-29	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-29	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-29	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-29	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-29	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-29	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-29	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-29	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-29	9/4/2013	MTBE	**1300**	10	7.7	143	ug/L
OW-29	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-29	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-29	11/11/2013	Carbon tetrachloride	ND	2	0.92	5	ug/L
OW-29	11/11/2013	Acetone	ND	20	3.4	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2013	Chloroform	ND	2	0.94	100	ug/L
OW-29	11/11/2013	Benzene	ND	2	0.92	5	ug/L
OW-29	11/11/2013	1,1,1-Trichloroethane	ND	2	0.8	200	ug/L
OW-29	11/11/2013	Bromomethane	ND	6	0.99	7.54	ug/L
OW-29	11/11/2013	Chloromethane	ND	6	0.74	20.32	ug/L
OW-29	11/11/2013	Dibromomethane	ND	2	1	8	ug/L
OW-29	11/11/2013	Chloroethane	ND	4	0.61	20857	ug/L
OW-29	11/11/2013	Vinyl Chloride	ND	2	0.61	2	ug/L
OW-29	11/11/2013	Methylene Chloride	*ND*	*6*	0.7	5	ug/L
OW-29	11/11/2013	Carbon Disulfide	ND	20	1.6	810	ug/L
OW-29	11/11/2013	Bromoform	ND	2	0.74	32.9	ug/L
OW-29	11/11/2013	Bromodichloromethane	*ND*	*2*	0.97	1.34	ug/L
OW-29	11/11/2013	1,1-Dichloroethane	ND	2	0.67	25	ug/L
OW-29	11/11/2013	1,1-Dichloroethene	ND	2	0.95	7	ug/L
OW-29	11/11/2013	Trichlorofluoromethane	ND	2	0.94	1137	ug/L
OW-29	11/11/2013	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
OW-29	11/11/2013	1,2-Dichloropropane	ND	2	0.66	5	ug/L
OW-29	11/11/2013	2-Butanone	ND	20	2	5565	ug/L
OW-29	11/11/2013	1,1,2-Trichloroethane	ND	2	0.83	5	ug/L
OW-29	11/11/2013	Trichloroethene	ND	2	0.85	5	ug/L
OW-29	11/11/2013	1,1,2,2-Tetrachloroethane	ND	4	1	10	ug/L
OW-29	11/11/2013	1,2,3-Trichlorobenzene	ND	2	0.85	70	ug/L
OW-29	11/11/2013	Hexachlorobutadiene	*ND*	*2*	0.82	1.39	ug/L
OW-29	11/11/2013	1-Methylnaphthalene	ND	8	0.82	NA	ug/L
OW-29	11/11/2013	Naphthalene	ND	4	0.59	30	ug/L
OW-29	11/11/2013	2-Methylnaphthalene	*ND*	*8*	0.78		ug/L
OW-29	11/11/2013	2-Chlorotoluene	ND	2	1	233	ug/L
OW-29	11/11/2013	1,2-Dichlorobenzene	ND	2	0.86	600	ug/L
OW-29	11/11/2013	1,2,4-Trimethylbenzene	ND	2	1	56	ug/L
OW-29	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.71	0.0033	ug/L
OW-29	11/11/2013	1,2,3-Trichloropropane	*ND*	*4*	0.8	0.0084	ug/L
OW-29	11/11/2013	tert-Butylbenzene	ND	2	1	690	ug/L
OW-29	11/11/2013	Isopropylbenzene	ND	2	1	447	ug/L
OW-29	11/11/2013	p-Isopropyltoluene	ND	2	0.91	NA	ug/L
OW-29	11/11/2013	Ethylbenzene	ND	2	0.89	700	ug/L
OW-29	11/11/2013	Styrene	ND	2	1.2	100	ug/L
OW-29	11/11/2013	n-Propylbenzene	ND	2	0.82	660	ug/L
OW-29	11/11/2013	n-Butylbenzene	ND	6	0.82	1000	ug/L
OW-29	11/11/2013	4-Chlorotoluene	ND	2	0.87	250	ug/L
OW-29	11/11/2013	1,4-Dichlorobenzene	ND	2	0.91	75	ug/L
OW-29	11/11/2013	1,2-Dibromoethane	*ND*	*2*	0.9	0.05	ug/L
OW-29	11/11/2013	1,2-Dichloroethane	ND	2	0.65	5	ug/L
OW-29	11/11/2013	4-Methyl-2-Pentanone	ND	20	1.3	1243	ug/L
OW-29	11/11/2013	1,3,5-Trimethylbenzene	ND	2	0.8	60	ug/L
OW-29	11/11/2013	Bromobenzene	ND	2	1.1	62	ug/L
OW-29	11/11/2013	Toluene	ND	2	0.88	1000	ug/L
OW-29	11/11/2013	Chlorobenzene	ND	2	0.97	77.6	ug/L
OW-29	11/11/2013	1,2,4-Trichlorobenzene	ND	2	0.77	70	ug/L
OW-29	11/11/2013	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OW-29	11/11/2013	Tetrachloroethene	ND	2	0.98	5	ug/L
OW-29	11/11/2013	sec-Butylbenzene	ND	2	0.86	2000	ug/L
OW-29	11/11/2013	1,3-Dichloropropane	ND	2	0.86	370	ug/L
OW-29	11/11/2013	cis-1,2-Dichloroethene	ND	2	0.94	70	ug/L
OW-29	11/11/2013	trans-1,2-Dichloroethene	ND	2	0.96	100	ug/L
OW-29	11/11/2013	1,3-Dichlorobenzene	ND	2	0.96	N/A	ug/L
OW-29	11/11/2013	1,1-Dichloropropene	ND	2	0.87	NA	ug/L
OW-29	11/11/2013	2-Hexanone	ND	20	2.5	38	ug/L
OW-29	11/11/2013	2,2-Dichloropropane	ND	4	1.6	NA	ug/L
OW-29	11/11/2013	1,1,1,2-Tetrachloroethane	ND	2	1.1	5.74	ug/L
OW-29	11/11/2013	Xylenes, Total	ND	3	2.9	620	ug/L
OW-29	11/11/2013	MTBE	**1700**	20	15	143	ug/L
OW-29	11/11/2013	cis-1,3-Dichloropropene	ND	2	0.91	NA	ug/L
OW-29	11/11/2013	trans-1,3-Dichloropropene	ND	2	0.89	NA	ug/L
OW-29	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-29	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-29	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-29	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-29	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-29	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-29	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-29	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-29	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-29	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-29	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-29	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-29	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-29	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-29	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-29	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-29	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-29	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-29	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-29	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-29	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-29	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-29	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-29	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-29	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-29	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-29	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-29	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-29	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-29	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-29	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-29	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-29	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-29	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-29	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-29	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-29	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-29	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-29	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-29	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-29	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-29	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-29	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-29	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-29	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-29	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-29	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-29	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-29	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-29	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-29	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-29	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-29	3/7/2014	MTBE	**2100**	100	25	143	ug/L
OW-29	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-29	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	6/2/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-29	6/2/2014	Acetone	ND	10	4.9	14064	ug/L
OW-29	6/2/2014	Chloroform	ND	1	0.32	100	ug/L
OW-29	6/2/2014	Benzene	ND	1	0.15	5	ug/L
OW-29	6/2/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-29	6/2/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-29	6/2/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-29	6/2/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-29	6/2/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-29	6/2/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-29	6/2/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-29	6/2/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-29	6/2/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-29	6/2/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-29	6/2/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-29	6/2/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-29	6/2/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	6/2/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-29	6/2/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-29	6/2/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-29	6/2/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-29	6/2/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-29	6/2/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-29	6/2/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/2/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-29	6/2/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-29	6/2/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-29	6/2/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-29	6/2/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	6/2/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-29	6/2/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	6/2/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-29	6/2/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-29	6/2/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-29	6/2/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-29	6/2/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-29	6/2/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-29	6/2/2014	Styrene	ND	1	0.12	100	ug/L
OW-29	6/2/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-29	6/2/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-29	6/2/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-29	6/2/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-29	6/2/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-29	6/2/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-29	6/2/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	6/2/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-29	6/2/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-29	6/2/2014	Toluene	ND	1	0.17	1000	ug/L
OW-29	6/2/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	6/2/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-29	6/2/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-29	6/2/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-29	6/2/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-29	6/2/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	6/2/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-29	6/2/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-29	6/2/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-29	6/2/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-29	6/2/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-29	6/2/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-29	6/2/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-29	6/2/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-29	6/2/2014	MTBE	**2000**	50	13	143	ug/L
OW-29	6/2/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-29	6/2/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	9/15/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-29	9/15/2014	Acetone	ND	50	25	14064	ug/L
OW-29	9/15/2014	Chloroform	ND	5	1.6	100	ug/L
OW-29	9/15/2014	Benzene	ND	5	0.77	5	ug/L
OW-29	9/15/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-29	9/15/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-29	9/15/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-29	9/15/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-29	9/15/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-29	9/15/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-29	9/15/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-29	9/15/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-29	9/15/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-29	9/15/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-29	9/15/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	9/15/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-29	9/15/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	9/15/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-29	9/15/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-29	9/15/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	9/15/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-29	9/15/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-29	9/15/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-29	9/15/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-29	9/15/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-29	9/15/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-29	9/15/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-29	9/15/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-29	9/15/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-29	9/15/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-29	9/15/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-29	9/15/2014	Styrene	ND	5	0.58	100	ug/L
OW-29	9/15/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-29	9/15/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/15/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-29	9/15/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-29	9/15/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-29	9/15/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	9/15/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-29	9/15/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-29	9/15/2014	Toluene	ND	5	0.85	1000	ug/L
OW-29	9/15/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-29	9/15/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-29	9/15/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-29	9/15/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-29	9/15/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	9/15/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-29	9/15/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-29	9/15/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	9/15/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-29	9/15/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	9/15/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-29	9/15/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-29	9/15/2014	MTBE	**2500**	50	13	143	ug/L
OW-29	9/15/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-29	9/15/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-29	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-29	11/11/2014	Acetone	ND	50	25	14064	ug/L
OW-29	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OW-29	11/11/2014	Benzene	ND	5	0.77	5	ug/L
OW-29	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-29	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-29	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-29	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-29	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-29	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-29	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-29	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-29	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-29	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-29	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-29	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-29	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-29	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-29	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-29	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-29	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-29	11/11/2014	Hexachlorobutadiene	*ND*	*5*	1.4	1.39	ug/L
OW-29	11/11/2014	1-Methylnaphthalene	ND	20	2.2	NA	ug/L
OW-29	11/11/2014	Naphthalene	ND	10	0.68	30	ug/L
OW-29	11/11/2014	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L
OW-29	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-29	11/11/2014	1,2-Dichlorobenzene	ND	5	0.66	600	ug/L
OW-29	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-29	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-29	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-29	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-29	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-29	11/11/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-29	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OW-29	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-29	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OW-29	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-29	11/11/2014	1,4-Dichlorobenzene	ND	5	1.3	75	ug/L
OW-29	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-29	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-29	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-29	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-29	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OW-29	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-29	11/11/2014	1,2,4-Trichlorobenzene	ND	5	1.5	70	ug/L
OW-29	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-29	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-29	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-29	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-29	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-29	11/11/2014	1,3-Dichlorobenzene	ND	5	0.87	N/A	ug/L
OW-29	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-29	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-29	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-29	11/11/2014	MTBE	**3000**	100	25	143	ug/L
OW-29	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-29	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-29	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-29	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-29	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-29	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-29	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-29	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-29	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-29	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-29	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-29	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-29	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-29	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-29	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-29	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-29	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-29	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-29	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-29	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-29	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-29	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-29	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-29	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-29	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-29	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-29	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-29	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-29	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-29	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-29	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-29	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-29	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-29	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-29	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-29	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-29	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-29	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-29	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-29	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-29	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-29	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-29	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-29	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-29	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-29	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-29	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-29	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-29	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-29	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-29	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-29	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-29	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-29	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-29	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-29	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-29	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-29	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-29	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-29	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-29	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-29	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-29	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-29	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-29	3/9/2015	MTBE	**3200**	50	8.7	143	ug/L
OW-29	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-29	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/1/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	6/1/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	6/1/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	6/1/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	6/1/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	6/1/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	6/1/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	6/1/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	6/1/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	6/1/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	6/1/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-29	6/1/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	6/1/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	6/1/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	6/1/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	6/1/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	6/1/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	6/1/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	6/1/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	6/1/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	6/1/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	6/1/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-29	6/1/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	6/1/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	6/1/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	6/1/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	6/1/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	6/1/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	6/1/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	6/1/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	6/1/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	6/1/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	6/1/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	6/1/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	6/1/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	6/1/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	6/1/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	6/1/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	6/1/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	6/1/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	6/1/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	6/1/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	6/1/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	6/1/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	6/1/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	6/1/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	6/1/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	6/1/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	6/1/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	6/1/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	6/1/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	6/1/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	6/1/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	6/1/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	6/1/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	6/1/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	6/1/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	6/1/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	6/1/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	6/1/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	6/1/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	6/1/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	6/1/2015	MTBE	**2600**	100	17	143	ug/L
OW-29	6/1/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	6/1/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	8/11/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	8/11/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	8/11/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	8/11/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	8/11/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	8/11/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	8/11/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	8/11/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	8/11/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	8/11/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	8/11/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/11/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	8/11/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	8/11/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	8/11/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	8/11/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	8/11/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	8/11/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	8/11/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	8/11/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	8/11/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	8/11/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-29	8/11/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	8/11/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	8/11/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	8/11/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	8/11/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	8/11/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	8/11/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	8/11/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	8/11/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	8/11/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	8/11/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	8/11/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	8/11/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	8/11/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	8/11/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	8/11/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	8/11/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	8/11/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	8/11/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	8/11/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	8/11/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	8/11/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	8/11/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	8/11/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	8/11/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	8/11/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	8/11/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	8/11/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	8/11/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	8/11/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	8/11/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	8/11/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	8/11/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	8/11/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	8/11/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	8/11/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	8/11/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	8/11/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	8/11/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	8/11/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	8/11/2015	MTBE	**3100**	50	8.7	143	ug/L
OW-29	8/11/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	8/11/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	10/27/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-29	10/27/2015	Acetone	ND	50	4.7	14064	ug/L
OW-29	10/27/2015	Chloroform	ND	5	1.1	100	ug/L
OW-29	10/27/2015	Benzene	ND	5	0.33	5	ug/L
OW-29	10/27/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-29	10/27/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-29	10/27/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-29	10/27/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-29	10/27/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-29	10/27/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-29	10/27/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-29	10/27/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-29	10/27/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-29	10/27/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-29	10/27/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	10/27/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-29	10/27/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-29	10/27/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-29	10/27/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-29	10/27/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-29	10/27/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-29	10/27/2015	Trichloroethene	ND	5	0.82	5	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/27/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-29	10/27/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	10/27/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-29	10/27/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-29	10/27/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-29	10/27/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-29	10/27/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-29	10/27/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-29	10/27/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-29	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-29	10/27/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-29	10/27/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-29	10/27/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-29	10/27/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-29	10/27/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-29	10/27/2015	Styrene	ND	5	0.53	100	ug/L
OW-29	10/27/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-29	10/27/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	10/27/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-29	10/27/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-29	10/27/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-29	10/27/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-29	10/27/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-29	10/27/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-29	10/27/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-29	10/27/2015	Toluene	ND	5	0.54	1000	ug/L
OW-29	10/27/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-29	10/27/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	10/27/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-29	10/27/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-29	10/27/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-29	10/27/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-29	10/27/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-29	10/27/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-29	10/27/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-29	10/27/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-29	10/27/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-29	10/27/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-29	10/27/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-29	10/27/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-29	10/27/2015	MTBE	**3100**	50	8.7	143	ug/L
OW-29	10/27/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	10/27/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-29	3/4/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	3/4/2016	Acetone	ND	50	4.4	14064	ug/L
OW-29	3/4/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	3/4/2016	Benzene	ND	5	0.48	5	ug/L
OW-29	3/4/2016	1,1,1-Trichloroethane	ND	5	0.32	200	ug/L
OW-29	3/4/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	3/4/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	3/4/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	3/4/2016	Chloroethane	ND	10	0.73	20857	ug/L
OW-29	3/4/2016	Vinyl Chloride	*ND*	*5*	0.32	2	ug/L
OW-29	3/4/2016	Methylene Chloride	*ND*	*15*	0.31	5	ug/L
OW-29	3/4/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	3/4/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	3/4/2016	Bromodichloromethane	*ND*	*5*	0.49	1.34	ug/L
OW-29	3/4/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	3/4/2016	1,1-Dichloroethene	ND	5	0.38	7	ug/L
OW-29	3/4/2016	Trichlorofluoromethane	ND	5	0.44	1137	ug/L
OW-29	3/4/2016	Dichlorodifluoromethane	ND	5	1.6	197	ug/L
OW-29	3/4/2016	1,2-Dichloropropane	ND	5	0.24	5	ug/L
OW-29	3/4/2016	2-Butanone	ND	50	1.6	5565	ug/L
OW-29	3/4/2016	1,1,2-Trichloroethane	ND	5	0.38	5	ug/L
OW-29	3/4/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	3/4/2016	1,1,2,2-Tetrachloroethane	ND	10	0.53	10	ug/L
OW-29	3/4/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	3/4/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	3/4/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	3/4/2016	Naphthalene	ND	10	0.42	30	ug/L
OW-29	3/4/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	3/4/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	3/4/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	3/4/2016	1,2,4-Trimethylbenzene	ND	5	0.52	56	ug/L
OW-29	3/4/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.77	0.0033	ug/L
OW-29	3/4/2016	1,2,3-Trichloropropane	*ND*	*10*	0.56	0.0084	ug/L

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OW-29	3/4/2016	Isopropylbenzene	ND	5	0.49	447	ug/L
OW-29	3/4/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	3/4/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-29	3/4/2016	Styrene	ND	5	0.48	100	ug/L
OW-29	3/4/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	3/4/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	3/4/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	3/4/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	3/4/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	3/4/2016	1,2-Dichloroethane	ND	5	0.26	5	ug/L
OW-29	3/4/2016	4-Methyl-2-Pentanone	ND	50	0.75	1243	ug/L
OW-29	3/4/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	3/4/2016	Bromobenzene	ND	5	0.4	62	ug/L
OW-29	3/4/2016	Toluene	ND	5	0.45	1000	ug/L
OW-29	3/4/2016	Chlorobenzene	ND	5	0.52	77.6	ug/L
OW-29	3/4/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	3/4/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	3/4/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	3/4/2016	sec-Butylbenzene	ND	5	0.54	2000	ug/L
OW-29	3/4/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	3/4/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	3/4/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	3/4/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	3/4/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	3/4/2016	2-Hexanone	*ND*	*50*	1.8	38	ug/L
OW-29	3/4/2016	2,2-Dichloropropane	ND	10	0.6	NA	ug/L
OW-29	3/4/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	3/4/2016	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	3/4/2016	MTBE	**3200**	50	11	143	ug/L
OW-29	3/4/2016	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-29	3/4/2016	trans-1,3-Dichloropropene	ND	5	0.42	NA	ug/L
OW-29	6/6/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	6/6/2016	Acetone	ND	50	25	14064	ug/L
OW-29	6/6/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	6/6/2016	Benzene	ND	5	0.48	5	ug/L
OW-29	6/6/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-29	6/6/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	6/6/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	6/6/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	6/6/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-29	6/6/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	6/6/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-29	6/6/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	6/6/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	6/6/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-29	6/6/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	6/6/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-29	6/6/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-29	6/6/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-29	6/6/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-29	6/6/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-29	6/6/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-29	6/6/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	6/6/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-29	6/6/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	6/6/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	6/6/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	6/6/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-29	6/6/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	6/6/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	6/6/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	6/6/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-29	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-29	6/6/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-29	6/6/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-29	6/6/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-29	6/6/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	6/6/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-29	6/6/2016	Styrene	ND	5	0.55	100	ug/L
OW-29	6/6/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	6/6/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	6/6/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	6/6/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	6/6/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	6/6/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	6/6/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-29	6/6/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	6/6/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-29	6/6/2016	Toluene	ND	5	0.59	1000	ug/L
OW-29	6/6/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-29	6/6/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	6/6/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	6/6/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	6/6/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-29	6/6/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	6/6/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	6/6/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	6/6/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	6/6/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	6/6/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-29	6/6/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-29	6/6/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	6/6/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-29	6/6/2016	MTBE	**3100**	50	11	143	ug/L
OW-29	6/6/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-29	6/6/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-29	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-29	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-29	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-29	8/31/2016	Benzene	0.54	1	0.096	5	ug/L
OW-29	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-29	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-29	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-29	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-29	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-29	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-29	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-29	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-29	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-29	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-29	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-29	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-29	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-29	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-29	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-29	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-29	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-29	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-29	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-29	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-29	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-29	8/31/2016	1-Methylnaphthalene	0.26	4	0.2	NA	ug/L
OW-29	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-29	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-29	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-29	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-29	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-29	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-29	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-29	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-29	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-29	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-29	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-29	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-29	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-29	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-29	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-29	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-29	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-29	8/31/2016	1,2-Dichloroethane	0.65	1	0.12	5	ug/L
OW-29	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-29	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-29	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-29	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-29	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-29	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-29	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-29	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-29	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-29	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-29	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-29	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-29	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-29	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-29	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-29	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-29	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-29	8/31/2016	MTBE	**3000**	50	11	143	ug/L
OW-29	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-29	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-29	11/15/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-29	11/15/2016	Acetone	ND	50	25	14064	ug/L
OW-29	11/15/2016	Chloroform	ND	5	0.44	100	ug/L
OW-29	11/15/2016	Benzene	**7.9**	5	0.48	5	ug/L
OW-29	11/15/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-29	11/15/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-29	11/15/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-29	11/15/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-29	11/15/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-29	11/15/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	11/15/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-29	11/15/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-29	11/15/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-29	11/15/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-29	11/15/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-29	11/15/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-29	11/15/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-29	11/15/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-29	11/15/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-29	11/15/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-29	11/15/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-29	11/15/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-29	11/15/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-29	11/15/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-29	11/15/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-29	11/15/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-29	11/15/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-29	11/15/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-29	11/15/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	11/15/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-29	11/15/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-29	11/15/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-29	11/15/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-29	11/15/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-29	11/15/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-29	11/15/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-29	11/15/2016	Ethylbenzene	1.1	5	0.56	700	ug/L
OW-29	11/15/2016	Styrene	ND	5	0.55	100	ug/L
OW-29	11/15/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-29	11/15/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-29	11/15/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-29	11/15/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-29	11/15/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-29	11/15/2016	1,2-Dichloroethane	1.8	5	0.58	5	ug/L
OW-29	11/15/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-29	11/15/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-29	11/15/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-29	11/15/2016	Toluene	ND	5	0.59	1000	ug/L
OW-29	11/15/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-29	11/15/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-29	11/15/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-29	11/15/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	11/15/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-29	11/15/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-29	11/15/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-29	11/15/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-29	11/15/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-29	11/15/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-29	11/15/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-29	11/15/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-29	11/15/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-29	11/15/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-29	11/15/2016	MTBE	**3400**	50	11	143	ug/L
OW-29	11/15/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-29	11/15/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-29	2/27/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2017	Acetone	ND	100	49	14064	ug/L
OW-29	2/27/2017	Chloroform	ND	10	0.89	100	ug/L
OW-29	2/27/2017	Benzene	*ND*	*10*	0.96	5	ug/L
OW-29	2/27/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-29	2/27/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-29	2/27/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-29	2/27/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-29	2/27/2017	Chloroethane	ND	20	1.9	20857	ug/L
OW-29	2/27/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-29	2/27/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-29	2/27/2017	Carbon Disulfide	ND	100	6	810	ug/L
OW-29	2/27/2017	Bromoform	ND	10	1	32.9	ug/L
OW-29	2/27/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-29	2/27/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-29	2/27/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-29	2/27/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-29	2/27/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-29	2/27/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-29	2/27/2017	2-Butanone	ND	100	7.4	5565	ug/L
OW-29	2/27/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-29	2/27/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-29	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-29	2/27/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-29	2/27/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-29	2/27/2017	1-Methylnaphthalene	ND	40	2	NA	ug/L
OW-29	2/27/2017	Naphthalene	ND	20	0.93	30	ug/L
OW-29	2/27/2017	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-29	2/27/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	2/27/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-29	2/27/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-29	2/27/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-29	2/27/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-29	2/27/2017	Isopropylbenzene	ND	10	1	447	ug/L
OW-29	2/27/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-29	2/27/2017	Ethylbenzene	ND	10	1.1	700	ug/L
OW-29	2/27/2017	Styrene	ND	10	1.1	100	ug/L
OW-29	2/27/2017	n-Propylbenzene	ND	10	1.3	660	ug/L
OW-29	2/27/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-29	2/27/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-29	2/27/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-29	2/27/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-29	2/27/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-29	2/27/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-29	2/27/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-29	2/27/2017	Bromobenzene	ND	10	0.98	62	ug/L
OW-29	2/27/2017	Toluene	ND	10	1.2	1000	ug/L
OW-29	2/27/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	2/27/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-29	2/27/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-29	2/27/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-29	2/27/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OW-29	2/27/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-29	2/27/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-29	2/27/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-29	2/27/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-29	2/27/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-29	2/27/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-29	2/27/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-29	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-29	2/27/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OW-29	2/27/2017	MTBE	**4300**	100	21	143	ug/L
OW-29	2/27/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-29	2/27/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-29	5/30/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-29	5/30/2017	Acetone	14	100	8.2	14064	ug/L
OW-29	5/30/2017	Chloroform	ND	10	4	100	ug/L
OW-29	5/30/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-29	5/30/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-29	5/30/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-29	5/30/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-29	5/30/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-29	5/30/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-29	5/30/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-29	5/30/2017	Methylene Chloride	*1.6*	*30*	1.1	5	ug/L
OW-29	5/30/2017	Carbon Disulfide	ND	100	4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/30/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-29	5/30/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-29	5/30/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-29	5/30/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-29	5/30/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-29	5/30/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-29	5/30/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-29	5/30/2017	2-Butanone	ND	100	11	5565	ug/L
OW-29	5/30/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-29	5/30/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-29	5/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-29	5/30/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-29	5/30/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-29	5/30/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-29	5/30/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-29	5/30/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-29	5/30/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	5/30/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-29	5/30/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	5/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-29	5/30/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-29	5/30/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-29	5/30/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-29	5/30/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-29	5/30/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-29	5/30/2017	Styrene	ND	10	1.6	100	ug/L
OW-29	5/30/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-29	5/30/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-29	5/30/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-29	5/30/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-29	5/30/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-29	5/30/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-29	5/30/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-29	5/30/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-29	5/30/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-29	5/30/2017	Toluene	ND	10	0.64	1000	ug/L
OW-29	5/30/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	5/30/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-29	5/30/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-29	5/30/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-29	5/30/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-29	5/30/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-29	5/30/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-29	5/30/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-29	5/30/2017	Pentafluorobenzene	**100**	0	0		None
OW-29	5/30/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-29	5/30/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-29	5/30/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-29	5/30/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-29	5/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-29	5/30/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-29	5/30/2017	MTBE	**4000**	100	24	143	ug/L
OW-29	5/30/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-29	5/30/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-29	9/6/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-29	9/6/2017	Acetone	ND	100	8.2	14064	ug/L
OW-29	9/6/2017	Chloroform	ND	10	4	100	ug/L
OW-29	9/6/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-29	9/6/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-29	9/6/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-29	9/6/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-29	9/6/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-29	9/6/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-29	9/6/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-29	9/6/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-29	9/6/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-29	9/6/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-29	9/6/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-29	9/6/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-29	9/6/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-29	9/6/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-29	9/6/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-29	9/6/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-29	9/6/2017	2-Butanone	ND	100	11	5565	ug/L
OW-29	9/6/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-29	9/6/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-29	9/6/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-29	9/6/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-29	9/6/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-29	9/6/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-29	9/6/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-29	9/6/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-29	9/6/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-29	9/6/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-29	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-29	9/6/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-29	9/6/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-29	9/6/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-29	9/6/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-29	9/6/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-29	9/6/2017	Styrene	ND	10	1.6	100	ug/L
OW-29	9/6/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-29	9/6/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-29	9/6/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-29	9/6/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-29	9/6/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-29	9/6/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-29	9/6/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-29	9/6/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-29	9/6/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-29	9/6/2017	Toluene	ND	10	0.64	1000	ug/L
OW-29	9/6/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-29	9/6/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-29	9/6/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-29	9/6/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-29	9/6/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-29	9/6/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-29	9/6/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-29	9/6/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-29	9/6/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-29	9/6/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-29	9/6/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-29	9/6/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-29	9/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
OW-29	9/6/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-29	9/6/2017	MTBE	**3800**	100	24	143	ug/L
OW-29	9/6/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-29	9/6/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-29	12/11/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-29	12/11/2017	Acetone	14	50	4.1	14064	ug/L
OW-29	12/11/2017	Chloroform	ND	5	2	100	ug/L
OW-29	12/11/2017	Benzene	ND	5	0.31	5	ug/L
OW-29	12/11/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-29	12/11/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	12/11/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	12/11/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-29	12/11/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-29	12/11/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-29	12/11/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-29	12/11/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-29	12/11/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-29	12/11/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-29	12/11/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	12/11/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-29	12/11/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-29	12/11/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	12/11/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-29	12/11/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-29	12/11/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-29	12/11/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-29	12/11/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-29	12/11/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-29	12/11/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	12/11/2017	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-29	12/11/2017	Naphthalene	ND	10	0.57	30	ug/L
OW-29	12/11/2017	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-29	12/11/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	12/11/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-29	12/11/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-29	12/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-29	12/11/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/11/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-29	12/11/2017	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-29	12/11/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-29	12/11/2017	Ethylbenzene	ND	5	0.47	700	ug/L
OW-29	12/11/2017	Styrene	ND	5	0.78	100	ug/L
OW-29	12/11/2017	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-29	12/11/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-29	12/11/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	12/11/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	12/11/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-29	12/11/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-29	12/11/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-29	12/11/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-29	12/11/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-29	12/11/2017	Toluene	ND	5	0.32	1000	ug/L
OW-29	12/11/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-29	12/11/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-29	12/11/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-29	12/11/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-29	12/11/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-29	12/11/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-29	12/11/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-29	12/11/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	12/11/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-29	12/11/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-29	12/11/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-29	12/11/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-29	12/11/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-29	12/11/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	12/11/2017	MTBE	**3800**	50	12	143	ug/L
OW-29	12/11/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-29	12/11/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	2/27/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-29	2/27/2018	Acetone	ND	50	4.1	14064	ug/L
OW-29	2/27/2018	Chloroform	ND	5	2	100	ug/L
OW-29	2/27/2018	Benzene	ND	5	0.31	5	ug/L
OW-29	2/27/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-29	2/27/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	2/27/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	2/27/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-29	2/27/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-29	2/27/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-29	2/27/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-29	2/27/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-29	2/27/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-29	2/27/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-29	2/27/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	2/27/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-29	2/27/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-29	2/27/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	2/27/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-29	2/27/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-29	2/27/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-29	2/27/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-29	2/27/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-29	2/27/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-29	2/27/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	2/27/2018	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-29	2/27/2018	Naphthalene	ND	10	0.57	30	ug/L
OW-29	2/27/2018	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-29	2/27/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	2/27/2018	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-29	2/27/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-29	2/27/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-29	2/27/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-29	2/27/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-29	2/27/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-29	2/27/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-29	2/27/2018	Ethylbenzene	ND	5	0.47	700	ug/L
OW-29	2/27/2018	Styrene	ND	5	0.78	100	ug/L
OW-29	2/27/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-29	2/27/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-29	2/27/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	2/27/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	2/27/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-29	2/27/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-29	2/27/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-29	2/27/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-29	2/27/2018	Toluene	ND	5	0.32	1000	ug/L
OW-29	2/27/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-29	2/27/2018	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-29	2/27/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-29	2/27/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-29	2/27/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-29	2/27/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-29	2/27/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-29	2/27/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	2/27/2018	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-29	2/27/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-29	2/27/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-29	2/27/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-29	2/27/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-29	2/27/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-29	2/27/2018	MTBE	**3700**	50	12	143	ug/L
OW-29	2/27/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-29	2/27/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-29	5/16/2018	Carbon tetrachloride	ND	2	0.22	5	ug/L
OW-29	5/16/2018	Acetone	ND	20	1.6	14064	ug/L
OW-29	5/16/2018	Chloroform	ND	2	0.8	100	ug/L
OW-29	5/16/2018	Benzene	ND	2	0.12	5	ug/L
OW-29	5/16/2018	1,1,1-Trichloroethane	ND	2	0.15	200	ug/L
OW-29	5/16/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OW-29	5/16/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OW-29	5/16/2018	Dibromomethane	ND	2	0.18	8	ug/L
OW-29	5/16/2018	Chloroethane	ND	4	0.47	20857	ug/L
OW-29	5/16/2018	Vinyl Chloride	ND	2	0.36	2	ug/L
OW-29	5/16/2018	Methylene Chloride	*ND*	*6*	0.22	5	ug/L
OW-29	5/16/2018	Carbon Disulfide	ND	20	0.8	810	ug/L
OW-29	5/16/2018	Bromoform	ND	2	0.42	32.9	ug/L
OW-29	5/16/2018	Bromodichloromethane	*ND*	*2*	0.35	1.34	ug/L
OW-29	5/16/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-29	5/16/2018	1,1-Dichloroethene	ND	2	0.16	7	ug/L
OW-29	5/16/2018	Trichlorofluoromethane	ND	2	0.37	1137	ug/L
OW-29	5/16/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OW-29	5/16/2018	1,2-Dichloropropane	ND	2	0.2	5	ug/L
OW-29	5/16/2018	2-Butanone	ND	20	2.3	5565	ug/L
OW-29	5/16/2018	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
OW-29	5/16/2018	Trichloroethene	ND	2	0.22	5	ug/L
OW-29	5/16/2018	1,1,2,2-Tetrachloroethane	ND	4	0.27	10	ug/L
OW-29	5/16/2018	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OW-29	5/16/2018	Hexachlorobutadiene	*ND*	*2*	1.6	1.39	ug/L
OW-29	5/16/2018	1-Methylnaphthalene	ND	8	0.32	NA	ug/L
OW-29	5/16/2018	Naphthalene	ND	4	0.23	30	ug/L
OW-29	5/16/2018	2-Methylnaphthalene	*ND*	*8*	0.3		ug/L
OW-29	5/16/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-29	5/16/2018	1,2-Dichlorobenzene	ND	2	0.18	600	ug/L
OW-29	5/16/2018	1,2,4-Trimethylbenzene	ND	2	0.23	56	ug/L
OW-29	5/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	2.8	0.0033	ug/L
OW-29	5/16/2018	1,2,3-Trichloropropane	*ND*	*4*	0.78	0.0084	ug/L
OW-29	5/16/2018	tert-Butylbenzene	ND	2	0.21	690	ug/L
OW-29	5/16/2018	Isopropylbenzene	ND	2	0.1	447	ug/L
OW-29	5/16/2018	p-Isopropyltoluene	ND	2	0.19	NA	ug/L
OW-29	5/16/2018	Ethylbenzene	ND	2	0.19	700	ug/L
OW-29	5/16/2018	Styrene	ND	2	0.31	100	ug/L
OW-29	5/16/2018	n-Propylbenzene	ND	2	0.15	660	ug/L
OW-29	5/16/2018	n-Butylbenzene	ND	6	0.26	1000	ug/L
OW-29	5/16/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OW-29	5/16/2018	1,4-Dichlorobenzene	ND	2	0.8	75	ug/L
OW-29	5/16/2018	1,2-Dibromoethane	*ND*	*2*	0.26	0.05	ug/L
OW-29	5/16/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OW-29	5/16/2018	4-Methyl-2-Pentanone	ND	20	1.4	1243	ug/L
OW-29	5/16/2018	1,3,5-Trimethylbenzene	ND	2	0.17	60	ug/L
OW-29	5/16/2018	Bromobenzene	ND	2	0.28	62	ug/L
OW-29	5/16/2018	Toluene	ND	2	0.13	1000	ug/L
OW-29	5/16/2018	Chlorobenzene	ND	2	0.21	77.6	ug/L
OW-29	5/16/2018	1,2,4-Trichlorobenzene	ND	2	0.28	70	ug/L
OW-29	5/16/2018	Dibromochloromethane	*ND*	*2*	0.14	1.68	ug/L
OW-29	5/16/2018	Tetrachloroethene	ND	2	0.26	5	ug/L
OW-29	5/16/2018	sec-Butylbenzene	ND	2	0.22	2000	ug/L
OW-29	5/16/2018	1,3-Dichloropropane	ND	2	0.33	370	ug/L
OW-29	5/16/2018	cis-1,2-Dichloroethene	ND	2	0.41	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/16/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OW-29	5/16/2018	1,3-Dichlorobenzene	ND	2	0.3	N/A	ug/L
OW-29	5/16/2018	1,1-Dichloropropene	ND	2	0.19	NA	ug/L
OW-29	5/16/2018	2-Hexanone	ND	20	1.3	38	ug/L
OW-29	5/16/2018	2,2-Dichloropropane	ND	4	0.31	NA	ug/L
OW-29	5/16/2018	1,1,1,2-Tetrachloroethane	ND	2	0.21	5.74	ug/L
OW-29	5/16/2018	Xylenes, Total	ND	3	0.64	620	ug/L
OW-29	5/16/2018	MTBE	**3800**	100	24	143	ug/L
OW-29	5/16/2018	cis-1,3-Dichloropropene	ND	2	0.16	NA	ug/L
OW-29	5/16/2018	trans-1,3-Dichloropropene	ND	2	0.44	NA	ug/L
OW-29	9/11/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-29	9/11/2018	Acetone	11	50	3.9	14064	ug/L
OW-29	9/11/2018	Chloroform	ND	5	2	100	ug/L
OW-29	9/11/2018	Benzene	0.96	5	0.87	5	ug/L
OW-29	9/11/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-29	9/11/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-29	9/11/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-29	9/11/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-29	9/11/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-29	9/11/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-29	9/11/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-29	9/11/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-29	9/11/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	9/11/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-29	9/11/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-29	9/11/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-29	9/11/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-29	9/11/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-29	9/11/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-29	9/11/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-29	9/11/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-29	9/11/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-29	9/11/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-29	9/11/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	9/11/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-29	9/11/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-29	9/11/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-29	9/11/2018	2-Methylnaphthalene	*ND*	*20*	1.2		ug/L
OW-29	9/11/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-29	9/11/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-29	9/11/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-29	9/11/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-29	9/11/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-29	9/11/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-29	9/11/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-29	9/11/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-29	9/11/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	9/11/2018	Styrene	ND	5	1.3	100	ug/L
OW-29	9/11/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-29	9/11/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	9/11/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-29	9/11/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-29	9/11/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-29	9/11/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-29	9/11/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-29	9/11/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-29	9/11/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-29	9/11/2018	Toluene	ND	5	0.84	1000	ug/L
OW-29	9/11/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-29	9/11/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	9/11/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-29	9/11/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	9/11/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-29	9/11/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-29	9/11/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	9/11/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-29	9/11/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-29	9/11/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-29	9/11/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-29	9/11/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-29	9/11/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	9/11/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-29	9/11/2018	MTBE	**3900**	50	16	143	ug/L
OW-29	9/11/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-29	9/11/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-29	11/6/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/6/2018	Acetone	ND	50	3.8	14064	ug/L
OW-29	11/6/2018	Chloroform	ND	5	1.2	100	ug/L
OW-29	11/6/2018	Benzene	ND	5	0.87	5	ug/L
OW-29	11/6/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
OW-29	11/6/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
OW-29	11/6/2018	Chloromethane	ND	15	1.6	20.32	ug/L
OW-29	11/6/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-29	11/6/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-29	11/6/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
OW-29	11/6/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-29	11/6/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-29	11/6/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	11/6/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-29	11/6/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
OW-29	11/6/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-29	11/6/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
OW-29	11/6/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
OW-29	11/6/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
OW-29	11/6/2018	2-Butanone	ND	50	7.1	5565	ug/L
OW-29	11/6/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-29	11/6/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-29	11/6/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-29	11/6/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-29	11/6/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
OW-29	11/6/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-29	11/6/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-29	11/6/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
OW-29	11/6/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
OW-29	11/6/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-29	11/6/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-29	11/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-29	11/6/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-29	11/6/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-29	11/6/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-29	11/6/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-29	11/6/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	11/6/2018	Styrene	ND	5	1.3	100	ug/L
OW-29	11/6/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-29	11/6/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-29	11/6/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
OW-29	11/6/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
OW-29	11/6/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-29	11/6/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
OW-29	11/6/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-29	11/6/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-29	11/6/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-29	11/6/2018	Toluene	ND	5	0.84	1000	ug/L
OW-29	11/6/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-29	11/6/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-29	11/6/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-29	11/6/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-29	11/6/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-29	11/6/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-29	11/6/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	11/6/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
OW-29	11/6/2018	Pentafluorobenzene	ND	0	0		None
OW-29	11/6/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-29	11/6/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-29	11/6/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-29	11/6/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
OW-29	11/6/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	11/6/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-29	11/6/2018	MTBE	**3200**	50	23	143	ug/L
OW-29	11/6/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-29	11/6/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-29	2/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.261996	5.74	ug/L
OW-29	2/5/2019	1,1,1-Trichloroethane	ND	5	0.819079	200	ug/L
OW-29	2/5/2019	1,1,2,2-Tetrachloroethane	ND	10	1.641495	10	ug/L
OW-29	2/5/2019	1,1,2-Trichloroethane	ND	5	1.163616	5	ug/L
OW-29	2/5/2019	1,1-Dichloroethane	ND	5	0.875983	25	ug/L
OW-29	2/5/2019	1,1-Dichloroethene	ND	5	0.602439	7	ug/L
OW-29	2/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	2/5/2019	1,2,3-Trichlorobenzene	ND	5	1.40154	70	ug/L
OW-29	2/5/2019	1,2,3-Trichloropropane	*ND*	*10*	2.830022	0.0084	ug/L
OW-29	2/5/2019	1,2,4-Trichlorobenzene	ND	5	1.332051	70	ug/L
OW-29	2/5/2019	1,2,4-Trimethylbenzene	ND	5	1.266572	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.354486	0.0033	ug/L
OW-29	2/5/2019	1,2-Dibromoethane	*ND*	*5*	1.147643	0.05	ug/L
OW-29	2/5/2019	1,2-Dichlorobenzene	ND	5	1.557324	600	ug/L
OW-29	2/5/2019	1,2-Dichloroethane	ND	5	0.947627	5	ug/L
OW-29	2/5/2019	1,2-Dichloropropane	ND	5	0.826129	5	ug/L
OW-29	2/5/2019	1,3,5-Trimethylbenzene	ND	5	1.15707	60	ug/L
OW-29	2/5/2019	1,3-Dichlorobenzene	ND	5	1.563112	N/A	ug/L
OW-29	2/5/2019	1,3-Dichloropropane	ND	5	1.353781	370	ug/L
OW-29	2/5/2019	1,4-Dichlorobenzene	ND	5	1.438534	75	ug/L
OW-29	2/5/2019	1-Methylnaphthalene	ND	20	1.679085	NA	ug/L
OW-29	2/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	2/5/2019	2-Butanone	ND	50	7.054344	5565	ug/L
OW-29	2/5/2019	2-Chlorotoluene	ND	5	1.250691	233	ug/L
OW-29	2/5/2019	2-Hexanone	*ND*	*50*	4.532872	38	ug/L
OW-29	2/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	2/5/2019	4-Chlorotoluene	ND	5	1.404004	250	ug/L
OW-29	2/5/2019	p-Isopropyltoluene	ND	5	1.201693	NA	ug/L
OW-29	2/5/2019	4-Methyl-2-Pentanone	ND	50	2.266387	1243	ug/L
OW-29	2/5/2019	Acetone	ND	50	3.785348	14064	ug/L
OW-29	2/5/2019	Benzene	1.1	5	0.874479	5	ug/L
OW-29	2/5/2019	Bromobenzene	ND	5	1.589531	62	ug/L
OW-29	2/5/2019	Bromodichloromethane	*ND*	*5*	1.413835	1.34	ug/L
OW-29	2/5/2019	Bromoform	ND	5	1.616552	32.9	ug/L
OW-29	2/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	2/5/2019	Carbon Disulfide	ND	50	1.925155	810	ug/L
OW-29	2/5/2019	Carbon tetrachloride	ND	5	0.686742	5	ug/L
OW-29	2/5/2019	Chlorobenzene	ND	5	1.452638	77.6	ug/L
OW-29	2/5/2019	Chloroethane	ND	10	0.821686	20857	ug/L
OW-29	2/5/2019	Chloroform	ND	5	1.176119	100	ug/L
OW-29	2/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	2/5/2019	cis-1,2-Dichloroethene	ND	5	1.879906	70	ug/L
OW-29	2/5/2019	cis-1,3-Dichloropropene	ND	5	1.49114	NA	ug/L
OW-29	2/5/2019	Dibromochloromethane	*ND*	*5*	1.185062	1.68	ug/L
OW-29	2/5/2019	Dibromomethane	ND	5	1.610737	8	ug/L
OW-29	2/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	2/5/2019	Ethylbenzene	ND	5	1.117011	700	ug/L
OW-29	2/5/2019	Hexachlorobutadiene	*ND*	*5*	1.955935	1.39	ug/L
OW-29	2/5/2019	Isopropylbenzene	ND	5	1.105521	447	ug/L
OW-29	2/5/2019	MTBE	**4000**	50	22.804749	143	ug/L
OW-29	2/5/2019	Methylene Chloride	*ND*	*15*	1.028474	5	ug/L
OW-29	2/5/2019	Naphthalene	ND	10	1.44813	30	ug/L
OW-29	2/5/2019	n-Butylbenzene	ND	15	1.241652	1000	ug/L
OW-29	2/5/2019	n-Propylbenzene	ND	5	1.212931	660	ug/L
OW-29	2/5/2019	sec-Butylbenzene	ND	5	1.011273	2000	ug/L
OW-29	2/5/2019	Styrene	ND	5	1.250729	100	ug/L
OW-29	2/5/2019	tert-Butylbenzene	ND	5	1.107349	690	ug/L
OW-29	2/5/2019	Tetrachloroethene	ND	5	0.757259	5	ug/L
OW-29	2/5/2019	Toluene	ND	5	0.840697	1000	ug/L
OW-29	2/5/2019	trans-1,2-Dichloroethene	ND	5	0.911348	100	ug/L
OW-29	2/5/2019	trans-1,3-Dichloropropene	ND	5	1.377339	NA	ug/L
OW-29	2/5/2019	Trichloroethene	ND	5	1.287782	5	ug/L
OW-29	2/5/2019	Trichlorofluoromethane	ND	5	0.720581	1137	ug/L
OW-29	2/5/2019	Vinyl Chloride	*ND*	*5*	0.605372	2	ug/L
OW-29	2/5/2019	Xylenes, Total	ND	7.5	3.206439	620	ug/L
OW-29	2/5/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
OW-29	5/1/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	5/1/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	5/1/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	5/1/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	5/1/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	5/1/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	5/1/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	5/1/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	5/1/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	5/1/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	5/1/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	5/1/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	5/1/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	5/1/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	5/1/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	5/1/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	5/1/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	5/1/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	5/1/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	5/1/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	5/1/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	5/1/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	5/1/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	5/1/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	5/1/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	5/1/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	5/1/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	5/1/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	5/1/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	5/1/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	5/1/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	5/1/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	5/1/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	5/1/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	5/1/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	5/1/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	5/1/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	5/1/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	5/1/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	5/1/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	5/1/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	5/1/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	5/1/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	5/1/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	5/1/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	5/1/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	5/1/2019	MTBE	**3700**	50	22.804749	143	ug/L
OW-29	5/1/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	5/1/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	5/1/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	5/1/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	5/1/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	5/1/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	5/1/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	5/1/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	5/1/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	5/1/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	5/1/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	5/1/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	5/1/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	5/1/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	5/1/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	5/1/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	5/1/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	5/1/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	5/1/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	5/1/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	5/1/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	5/1/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	5/1/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	5/1/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	5/1/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	5/1/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	5/1/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	5/1/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	5/1/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	5/1/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	5/1/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	5/1/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	5/1/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	5/1/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	5/1/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	5/1/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	5/1/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	5/1/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	5/1/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	5/1/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	5/1/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	5/1/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	5/1/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	5/1/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	5/1/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	5/1/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	5/1/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	5/1/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	5/1/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	5/1/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	5/1/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	5/1/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	5/1/2019	MTBE	**3900**	50	22.804749	143	ug/L
OW-29	5/1/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	5/1/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	5/1/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	5/1/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	5/1/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	5/1/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	5/1/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	5/1/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	5/1/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	5/1/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	5/1/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	5/1/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	5/1/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	5/1/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	5/1/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	5/1/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	5/1/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	5/1/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	5/1/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	5/1/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	5/1/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	5/1/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	5/1/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	5/1/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	ND	0.00959	0.003342	0.05	ug/L
OW-29	5/1/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-29	8/12/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	8/12/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	8/12/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	8/12/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	8/12/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	8/12/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	8/12/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	8/12/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	8/12/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-29	8/12/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	8/12/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	8/12/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-29	8/12/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	8/12/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	8/12/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-29	8/12/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	8/12/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	8/12/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	8/12/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	8/12/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	8/12/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	8/12/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	8/12/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	8/12/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	8/12/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	8/12/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	8/12/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	8/12/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	8/12/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	8/12/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	8/12/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	8/12/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	8/12/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	8/12/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	8/12/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	8/12/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	8/12/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	8/12/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	8/12/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	8/12/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	8/12/2019	Chloromethane	ND	15	1.604937	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	8/12/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	8/12/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	8/12/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	8/12/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	8/12/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	8/12/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	8/12/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	8/12/2019	MTBE	**3800**	50	22.804749	143	ug/L
OW-29	8/12/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	8/12/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	8/12/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-29	8/12/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	8/12/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	8/12/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	8/12/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	8/12/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	8/12/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	8/12/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	8/12/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	8/12/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	8/12/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	8/12/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	8/12/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	8/12/2019	1,2-Dibromoethane	ND	0.00938	0.00327	0.05	ug/L
OW-29	10/14/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-29	10/14/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-29	10/14/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-29	10/14/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-29	10/14/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-29	10/14/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-29	10/14/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-29	10/14/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-29	10/14/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-29	10/14/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-29	10/14/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-29	10/14/2019	1,2-Dichloroethane	2.1	5	0.973189	5	ug/L
OW-29	10/14/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-29	10/14/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-29	10/14/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-29	10/14/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-29	10/14/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-29	10/14/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-29	10/14/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-29	10/14/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-29	10/14/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-29	10/14/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-29	10/14/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-29	10/14/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-29	10/14/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-29	10/14/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-29	10/14/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-29	10/14/2019	Benzene	ND	5	0.833195	5	ug/L
OW-29	10/14/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-29	10/14/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-29	10/14/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-29	10/14/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-29	10/14/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-29	10/14/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-29	10/14/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-29	10/14/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-29	10/14/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-29	10/14/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-29	10/14/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-29	10/14/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-29	10/14/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-29	10/14/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-29	10/14/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-29	10/14/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-29	10/14/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-29	10/14/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-29	10/14/2019	MTBE	**3100**	50	22.804749	143	ug/L
OW-29	10/14/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-29	10/14/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-29	10/14/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-29	10/14/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-29	10/14/2019	Styrene	ND	5	0.956617	100	ug/L
OW-29	10/14/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-29	10/14/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-29	10/14/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-29	10/14/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-29	10/14/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-29	10/14/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-29	10/14/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-29	10/14/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-29	10/14/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-29	10/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-29	10/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-29	10/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-29	10/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-29	10/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-29	10/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-29	10/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-29	10/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-29	10/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-29	10/14/2019	1,2,4-Trimethylbenzene	0.27	1	0.213199	56	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-29	10/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-29	10/14/2019	1,2-Dichloroethane	0.57	1	0.194638	5	ug/L
OW-29	10/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-29	10/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-29	10/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-29	10/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-29	10/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-29	10/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-29	10/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-29	10/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-29	10/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-29	10/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-29	10/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-29	10/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-29	10/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-29	10/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-29	10/14/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-29	10/14/2019	Benzene	ND	1	0.166639	5	ug/L
OW-29	10/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-29	10/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-29	10/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-29	10/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-29	10/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-29	10/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-29	10/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-29	10/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-29	10/14/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-29	10/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-29	10/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-29	10/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-29	10/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-29	10/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-29	10/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-29	10/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-29	10/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-29	10/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-29	10/14/2019	MTBE	**3200**	50	22.804749	143	ug/L
OW-29	10/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-29	10/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-29	10/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-29	10/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-29	10/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-29	10/14/2019	Styrene	ND	1	0.191323	100	ug/L
OW-29	10/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-29	10/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-29	10/14/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-29	10/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-29	10/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-29	10/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-29	10/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-29	10/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-29	10/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-29	10/14/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-29	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-29	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-29	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-29	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-29	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-29	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-29	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-29	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-29	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-29	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-29	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-29	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-29	10/15/2019	1,2-Dichloroethane	0.48	1	0.194638	5	ug/L
OW-29	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-29	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-29	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-29	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-29	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-29	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-29	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-29	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-29	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-29	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-29	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-29	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-29	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-29	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-29	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-29	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-29	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-29	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-29	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-29	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-29	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-29	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-29	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-29	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-29	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-29	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-29	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-29	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-29	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-29	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-29	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-29	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-29	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-29	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-29	10/15/2019	MTBE	2	1	0.456095	143	ug/L
OW-29	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-29	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-29	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-29	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-29	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-29	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-29	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-29	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-29	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-29	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-29	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-29	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-29	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-29	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-29	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-29	10/15/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-29	2/24/2020	MTBE	**3800**	50	20	143	ug/L
OW-29	2/24/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	2/24/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
OW-29	2/24/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
OW-29	2/24/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
OW-29	2/24/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	2/24/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
OW-29	2/24/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
OW-29	2/24/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
OW-29	2/24/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
OW-29	2/24/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/24/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	2/24/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
OW-29	2/24/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
OW-29	2/24/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
OW-29	2/24/2020	1,2-Dichloroethane	ND	5	1.1	5	ug/L
OW-29	2/24/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
OW-29	2/24/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
OW-29	2/24/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
OW-29	2/24/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	2/24/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-29	2/24/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
OW-29	2/24/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	2/24/2020	2-Butanone	ND	50	5.6	5565	ug/L
OW-29	2/24/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
OW-29	2/24/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
OW-29	2/24/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
OW-29	2/24/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
OW-29	2/24/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
OW-29	2/24/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	2/24/2020	Acetone	ND	50	12	14064	ug/L
OW-29	2/24/2020	Benzene	ND	5	1.1	5	ug/L
OW-29	2/24/2020	Bromobenzene	ND	5	1.4	62	ug/L
OW-29	2/24/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
OW-29	2/24/2020	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	2/24/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
OW-29	2/24/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
OW-29	2/24/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
OW-29	2/24/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
OW-29	2/24/2020	Chloroethane	ND	10	1.9	20857	ug/L
OW-29	2/24/2020	Chloroform	ND	5	0.67	100	ug/L
OW-29	2/24/2020	Chloromethane	ND	15	2	20.32	ug/L
OW-29	2/24/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	2/24/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
OW-29	2/24/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
OW-29	2/24/2020	Dibromomethane	ND	5	1.5	8	ug/L
OW-29	2/24/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
OW-29	2/24/2020	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	2/24/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
OW-29	2/24/2020	Isopropylbenzene	ND	5	0.91	447	ug/L
OW-29	2/24/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
OW-29	2/24/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
OW-29	2/24/2020	n-Propylbenzene	ND	5	0.91	660	ug/L
OW-29	2/24/2020	Naphthalene	ND	10	1.4	30	ug/L
OW-29	2/24/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
OW-29	2/24/2020	Styrene	ND	5	0.65	100	ug/L
OW-29	2/24/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
OW-29	2/24/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
OW-29	2/24/2020	Toluene	ND	5	1	1000	ug/L
OW-29	2/24/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-29	2/24/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
OW-29	2/24/2020	Trichloroethene	ND	5	1	5	ug/L
OW-29	2/24/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
OW-29	2/24/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	2/24/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
OW-29	2/24/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
OW-29	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-29	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-29	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-29	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-29	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-29	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-29	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-29	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-29	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-29	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-29	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-29	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-29	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-29	9/17/2020	1,2-Dichloroethane	0.43	1	0.22	5	ug/L
OW-29	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-29	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-29	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-29	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-29	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-29	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-29	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-29	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-29	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-29	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-29	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-29	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-29	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-29	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-29	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-29	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-29	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-29	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-29	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-29	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-29	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-29	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-29	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-29	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-29	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-29	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-29	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-29	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-29	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-29	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-29	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-29	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-29	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-29	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-29	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-29	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-29	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-29	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-29	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-29	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-29	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-29	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-29	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-29	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-29	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-29	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-29	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-29	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-29	9/17/2020	MTBE	**3900**	100	39	143	ug/L
OW-29	9/17/2020	MTBE	**3800**	50	20	143	ug/L
OW-29	9/17/2020	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-29	9/17/2020	1,1,1-Trichloroethane	ND	5	1.5	200	ug/L
OW-29	9/17/2020	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
OW-29	9/17/2020	1,1,2-Trichloroethane	ND	5	0.94	5	ug/L
OW-29	9/17/2020	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-29	9/17/2020	1,1-Dichloroethene	ND	5	0.65	7	ug/L
OW-29	9/17/2020	1,1-Dichloropropene	ND	5	0.9	NA	ug/L
OW-29	9/17/2020	1,2,3-Trichlorobenzene	ND	5	0.67	70	ug/L
OW-29	9/17/2020	1,2,3-Trichloropropane	*ND*	*10*	2.2	0.0084	ug/L
OW-29	9/17/2020	1,2,4-Trichlorobenzene	ND	5	1.2	70	ug/L
OW-29	9/17/2020	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-29	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.9	0.0033	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	*ND*	*5*	1.5	0.05	ug/L
OW-29	9/17/2020	1,2-Dichlorobenzene	ND	5	0.77	600	ug/L
OW-29	9/17/2020	1,2-Dichloroethane	1.3	5	1.1	5	ug/L
OW-29	9/17/2020	1,2-Dichloropropane	ND	5	0.67	5	ug/L
OW-29	9/17/2020	1,3,5-Trimethylbenzene	ND	5	0.91	60	ug/L
OW-29	9/17/2020	1,3-Dichlorobenzene	ND	5	0.81	N/A	ug/L
OW-29	9/17/2020	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-29	9/17/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-29	9/17/2020	1-Methylnaphthalene	ND	20	4.2	NA	ug/L
OW-29	9/17/2020	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-29	9/17/2020	2-Butanone	ND	50	5.6	5565	ug/L
OW-29	9/17/2020	2-Chlorotoluene	ND	5	0.66	233	ug/L
OW-29	9/17/2020	2-Hexanone	*ND*	*50*	9	38	ug/L
OW-29	9/17/2020	2-Methylnaphthalene	*ND*	*20*	3.5		ug/L
OW-29	9/17/2020	4-Chlorotoluene	ND	5	2.6	250	ug/L
OW-29	9/17/2020	p-Isopropyltoluene	ND	5	1	NA	ug/L
OW-29	9/17/2020	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-29	9/17/2020	Acetone	ND	50	12	14064	ug/L
OW-29	9/17/2020	Benzene	ND	5	1.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	Bromobenzene	ND	5	1.4	62	ug/L
OW-29	9/17/2020	Bromodichloromethane	*ND*	*5*	1	1.34	ug/L
OW-29	9/17/2020	Bromoform	ND	5	1.6	32.9	ug/L
OW-29	9/17/2020	Bromomethane	*ND*	*15*	7.8	7.54	ug/L
OW-29	9/17/2020	Carbon Disulfide	ND	50	2.2	810	ug/L
OW-29	9/17/2020	Carbon tetrachloride	ND	5	0.88	5	ug/L
OW-29	9/17/2020	Chlorobenzene	ND	5	0.68	77.6	ug/L
OW-29	9/17/2020	Chloroethane	ND	10	1.9	20857	ug/L
OW-29	9/17/2020	Chloroform	ND	5	0.67	100	ug/L
OW-29	9/17/2020	Chloromethane	ND	15	2	20.32	ug/L
OW-29	9/17/2020	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-29	9/17/2020	cis-1,3-Dichloropropene	ND	5	1.8	NA	ug/L
OW-29	9/17/2020	Dibromochloromethane	*ND*	*5*	1.4	1.68	ug/L
OW-29	9/17/2020	Dibromomethane	ND	5	1.5	8	ug/L
OW-29	9/17/2020	Dichlorodifluoromethane	ND	5	2.2	197	ug/L
OW-29	9/17/2020	Ethylbenzene	ND	5	1.1	700	ug/L
OW-29	9/17/2020	Hexachlorobutadiene	*ND*	*5*	1.6	1.39	ug/L
OW-29	9/17/2020	Isopropylbenzene	ND	5	0.91	447	ug/L
OW-29	9/17/2020	Methylene Chloride	*ND*	*15*	2	5	ug/L
OW-29	9/17/2020	n-Butylbenzene	ND	15	1.3	1000	ug/L
OW-29	9/17/2020	n-Propylbenzene	ND	5	0.91	660	ug/L
OW-29	9/17/2020	Naphthalene	ND	10	1.4	30	ug/L
OW-29	9/17/2020	sec-Butylbenzene	ND	5	3	2000	ug/L
OW-29	9/17/2020	Styrene	ND	5	0.65	100	ug/L
OW-29	9/17/2020	tert-Butylbenzene	ND	5	1.2	690	ug/L
OW-29	9/17/2020	Tetrachloroethene	ND	5	1.8	5	ug/L
OW-29	9/17/2020	Toluene	ND	5	1	1000	ug/L
OW-29	9/17/2020	trans-1,2-Dichloroethene	ND	5	2.4	100	ug/L
OW-29	9/17/2020	trans-1,3-Dichloropropene	ND	5	1.7	NA	ug/L
OW-29	9/17/2020	Trichloroethene	ND	5	1	5	ug/L
OW-29	9/17/2020	Trichlorofluoromethane	ND	5	0.46	1137	ug/L
OW-29	9/17/2020	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-29	9/17/2020	Xylenes, Total	ND	7.5	2.8	620	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-29	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-29	12/9/2020	Acetone	ND	500	200	14064	ug/L
OW-29	12/9/2020	Benzene	*ND*	*20*	7.6	5	ug/L
OW-29	12/9/2020	Bromodichloromethane	*ND*	*20*	10	1.34	ug/L
OW-29	12/9/2020	Bromoform	*ND*	*100*	14.2	32.9	ug/L
OW-29	12/9/2020	Bromomethane	*ND*	*20*	19.6	7.54	ug/L
OW-29	12/9/2020	2-Butanone	ND	500	52	5565	ug/L
OW-29	12/9/2020	Carbon Disulfide	ND	20	10	810	ug/L
OW-29	12/9/2020	Carbon tetrachloride	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	Chlorobenzene	ND	20	10	77.6	ug/L
OW-29	12/9/2020	Dibromochloromethane	*ND*	*20*	10	1.68	ug/L
OW-29	12/9/2020	Chloroethane	ND	20	15.2	20857	ug/L
OW-29	12/9/2020	Chloroform	ND	20	12	100	ug/L
OW-29	12/9/2020	Chloromethane	ND	20	16.6	20.32	ug/L
OW-29	12/9/2020	2-Chlorotoluene	ND	20	11.4	233	ug/L
OW-29	12/9/2020	4-Chlorotoluene	ND	20	11.2	250	ug/L
OW-29	12/9/2020	cis-1,2-Dichloroethene	ND	20	10	70	ug/L
OW-29	12/9/2020	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-29	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	30	0.0033	ug/L
OW-29	12/9/2020	1,2-Dibromoethane	*ND*	*20*	10	0.05	ug/L
OW-29	12/9/2020	Dibromomethane	*ND*	*100*	11.8	8	ug/L
OW-29	12/9/2020	1,2-Dichlorobenzene	ND	20	10	600	ug/L
OW-29	12/9/2020	1,3-Dichlorobenzene	ND	20	10.8	N/A	ug/L
OW-29	12/9/2020	1,4-Dichlorobenzene	ND	20	12.8	75	ug/L
OW-29	12/9/2020	Dichlorodifluoromethane	ND	20	17	197	ug/L
OW-29	12/9/2020	1,1-Dichloroethane	ND	20	10	25	ug/L
OW-29	12/9/2020	1,2-Dichloroethane	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	1,1-Dichloroethene	*ND*	*20*	10	7	ug/L
OW-29	12/9/2020	1,2-Dichloropropane	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	1,3-Dichloropropane	ND	20	10	370	ug/L
OW-29	12/9/2020	2,2-Dichloropropane	ND	20	10	NA	ug/L
OW-29	12/9/2020	1,1-Dichloropropene	ND	20	10	NA	ug/L
OW-29	12/9/2020	Ethylbenzene	ND	20	10	700	ug/L
OW-29	12/9/2020	Hexachlorobutadiene	*ND*	*100*	18	1.39	ug/L
OW-29	12/9/2020	2-Hexanone	*ND*	*500*	62	38	ug/L
OW-29	12/9/2020	Isopropylbenzene	ND	20	10.6	447	ug/L
OW-29	12/9/2020	Methylene Chloride	*ND*	*100*	60	5	ug/L
OW-29	12/9/2020	1-Methylnaphthalene	ND	100	84	NA	ug/L
OW-29	12/9/2020	2-Methylnaphthalene	*ND*	*200*	92		ug/L
OW-29	12/9/2020	4-Methyl-2-Pentanone	ND	500	36	1243	ug/L
OW-29	12/9/2020	MTBE	**3350**	20	14.8	143	ug/L
OW-29	12/9/2020	Naphthalene	ND	20	20	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/9/2020	n-Butylbenzene	ND	20	15.2	1000	ug/L
OW-29	12/9/2020	n-Propylbenzene	ND	20	13.8	660	ug/L
OW-29	12/9/2020	p-Isopropyltoluene	ND	20	14.2	NA	ug/L
OW-29	12/9/2020	sec-Butylbenzene	ND	20	14	2000	ug/L
OW-29	12/9/2020	Styrene	ND	20	20	100	ug/L
OW-29	12/9/2020	tert-Butylbenzene	ND	20	12.6	690	ug/L
OW-29	12/9/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	10.4	5.74	ug/L
OW-29	12/9/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	10	10	ug/L
OW-29	12/9/2020	Tetrachloroethene	*ND*	*20*	11.6	5	ug/L
OW-29	12/9/2020	Toluene	ND	20	8.2	1000	ug/L
OW-29	12/9/2020	trans-1,2-Dichloroethene	ND	20	10	100	ug/L
OW-29	12/9/2020	trans-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-29	12/9/2020	1,2,3-Trichlorobenzene	ND	20	14	70	ug/L
OW-29	12/9/2020	1,2,4-Trichlorobenzene	ND	20	16.4	70	ug/L
OW-29	12/9/2020	1,1,1-Trichloroethane	ND	20	10	200	ug/L
OW-29	12/9/2020	1,1,2-Trichloroethane	*ND*	*100*	10	5	ug/L
OW-29	12/9/2020	Trichloroethene	*ND*	*20*	10	5	ug/L
OW-29	12/9/2020	Trichlorofluoromethane	ND	20	10.4	1137	ug/L
OW-29	12/9/2020	1,2,3-Trichloropropane	*ND*	*100*	16.8	0.0084	ug/L
OW-29	12/9/2020	1,2,4-Trimethylbenzene	ND	20	16.4	56	ug/L
OW-29	12/9/2020	1,3,5-Trimethylbenzene	ND	20	11.2	60	ug/L
OW-29	12/9/2020	Vinyl Chloride	*ND*	*20*	10	2	ug/L
OW-29	12/9/2020	Xylenes, Total	ND	200	32	620	ug/L
OW-29	12/9/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-29	12/9/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-30	3/21/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-30	3/21/2012	Acetone	ND	10	2.1	14064	ug/L
OW-30	3/21/2012	Chloroform	ND	1	0.4	100	ug/L
OW-30	3/21/2012	Benzene	ND	1	0.23	5	ug/L
OW-30	3/21/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-30	3/21/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-30	3/21/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	3/21/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-30	3/21/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-30	3/21/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	3/21/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-30	3/21/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-30	3/21/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-30	3/21/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-30	3/21/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-30	3/21/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-30	3/21/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-30	3/21/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-30	3/21/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-30	3/21/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	3/21/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	3/21/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-30	3/21/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-30	3/21/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-30	3/21/2012	Hexachlorobutadiene	ND	1	0.24	1.39	ug/L
OW-30	3/21/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-30	3/21/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-30	3/21/2012	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	3/21/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-30	3/21/2012	1,2-Dichlorobenzene	ND	1	0.14	600	ug/L
OW-30	3/21/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-30	3/21/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-30	3/21/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-30	3/21/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-30	3/21/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-30	3/21/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-30	3/21/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-30	3/21/2012	Styrene	ND	1	0.15	100	ug/L
OW-30	3/21/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-30	3/21/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-30	3/21/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-30	3/21/2012	1,4-Dichlorobenzene	ND	1	0.22	75	ug/L
OW-30	3/21/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-30	3/21/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-30	3/21/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-30	3/21/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-30	3/21/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-30	3/21/2012	Toluene	ND	1	0.17	1000	ug/L
OW-30	3/21/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-30	3/21/2012	1,2,4-Trichlorobenzene	ND	1	0.23	70	ug/L
OW-30	3/21/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/21/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-30	3/21/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-30	3/21/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-30	3/21/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-30	3/21/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-30	3/21/2012	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-30	3/21/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-30	3/21/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-30	3/21/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-30	3/21/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-30	3/21/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-30	3/21/2012	MTBE	**1600**	20	10	143	ug/L
OW-30	3/21/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-30	3/21/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-30	6/14/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	6/14/2012	Acetone	ND	10	2.1	14064	ug/L
OW-30	6/14/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	6/14/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	6/14/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	6/14/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	6/14/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-30	6/14/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-30	6/14/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-30	6/14/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	6/14/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	6/14/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-30	6/14/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	6/14/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	6/14/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	6/14/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	6/14/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	6/14/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	6/14/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	6/14/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	6/14/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	6/14/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	6/14/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	6/14/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	6/14/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	6/14/2012	1-Methylnaphthalene	ND	4	2	NA	ug/L
OW-30	6/14/2012	Naphthalene	ND	2	0.53	30	ug/L
OW-30	6/14/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	6/14/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	6/14/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	6/14/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	6/14/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	6/14/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	6/14/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	6/14/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	6/14/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	6/14/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	6/14/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	6/14/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	6/14/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-30	6/14/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	6/14/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	6/14/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	6/14/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	6/14/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	6/14/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	6/14/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	6/14/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	6/14/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	6/14/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	6/14/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	6/14/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	6/14/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	6/14/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	6/14/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	6/14/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	6/14/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	6/14/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	6/14/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	6/14/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	6/14/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	6/14/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/14/2012	MTBE	**1500**	20	19	143	ug/L
OW-30	6/14/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	6/14/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-30	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-30	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-30	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-30	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-30	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	8/23/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	8/23/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-30	8/23/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-30	8/23/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	8/23/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-30	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	8/23/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	8/23/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	8/23/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-30	8/23/2012	MTBE	**2300**	50	48	143	ug/L
OW-30	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-30	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-30	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-30	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-30	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-30	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-30	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-30	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-30	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-30	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-30	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-30	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-30	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-30	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-30	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-30	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-30	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-30	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-30	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-30	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-30	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-30	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-30	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-30	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-30	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-30	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-30	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-30	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-30	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-30	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-30	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-30	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-30	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-30	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-30	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-30	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-30	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-30	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-30	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-30	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-30	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-30	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-30	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-30	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-30	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-30	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-30	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-30	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-30	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-30	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-30	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-30	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-30	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-30	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-30	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-30	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-30	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-30	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-30	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-30	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-30	11/27/2012	MTBE	**2200**	50	48	143	ug/L
OW-30	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-30	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-30	3/19/2013	Carbon tetrachloride	ND	5	2.3	5	ug/L
OW-30	3/19/2013	Acetone	ND	50	12	14064	ug/L
OW-30	3/19/2013	Chloroform	ND	5	2.3	100	ug/L
OW-30	3/19/2013	Benzene	ND	5	2.6	5	ug/L
OW-30	3/19/2013	1,1,1-Trichloroethane	ND	5	2	200	ug/L
OW-30	3/19/2013	Bromomethane	*ND*	*15*	4.2	7.54	ug/L
OW-30	3/19/2013	Chloromethane	ND	15	1.9	20.32	ug/L
OW-30	3/19/2013	Dibromomethane	ND	5	2.6	8	ug/L
OW-30	3/19/2013	Chloroethane	ND	10	2.9	20857	ug/L
OW-30	3/19/2013	Vinyl Chloride	*ND*	*5*	1.7	2	ug/L
OW-30	3/19/2013	Methylene Chloride	*ND*	*15*	2.1	5	ug/L
OW-30	3/19/2013	Carbon Disulfide	ND	50	4	810	ug/L
OW-30	3/19/2013	Bromoform	ND	5	2.2	32.9	ug/L
OW-30	3/19/2013	Bromodichloromethane	*ND*	*5*	2.4	1.34	ug/L
OW-30	3/19/2013	1,1-Dichloroethane	ND	5	2.4	25	ug/L
OW-30	3/19/2013	1,1-Dichloroethene	ND	5	2.4	7	ug/L
OW-30	3/19/2013	Trichlorofluoromethane	ND	5	2.4	1137	ug/L
OW-30	3/19/2013	Dichlorodifluoromethane	ND	5	3.4	197	ug/L
OW-30	3/19/2013	1,2-Dichloropropane	ND	5	2.7	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/19/2013	2-Butanone	ND	50	5	5565	ug/L
OW-30	3/19/2013	1,1,2-Trichloroethane	ND	5	2.1	5	ug/L
OW-30	3/19/2013	Trichloroethene	ND	5	2.1	5	ug/L
OW-30	3/19/2013	1,1,2,2-Tetrachloroethane	ND	10	2.6	10	ug/L
OW-30	3/19/2013	1,2,3-Trichlorobenzene	ND	5	2.1	70	ug/L
OW-30	3/19/2013	Hexachlorobutadiene	*ND*	*5*	2.1	1.39	ug/L
OW-30	3/19/2013	1-Methylnaphthalene	ND	20	3	NA	ug/L
OW-30	3/19/2013	Naphthalene	ND	10	1.7	30	ug/L
OW-30	3/19/2013	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L
OW-30	3/19/2013	2-Chlorotoluene	ND	5	2.5	233	ug/L
OW-30	3/19/2013	1,2-Dichlorobenzene	ND	5	2.1	600	ug/L
OW-30	3/19/2013	1,2,4-Trimethylbenzene	ND	5	2.5	56	ug/L
OW-30	3/19/2013	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3.6	0.0033	ug/L
OW-30	3/19/2013	1,2,3-Trichloropropane	*ND*	*10*	2	0.0084	ug/L
OW-30	3/19/2013	tert-Butylbenzene	ND	5	2.5	690	ug/L
OW-30	3/19/2013	Isopropylbenzene	ND	5	2.6	447	ug/L
OW-30	3/19/2013	p-Isopropyltoluene	ND	5	2.3	NA	ug/L
OW-30	3/19/2013	Ethylbenzene	ND	5	2.2	700	ug/L
OW-30	3/19/2013	Styrene	ND	5	28	100	ug/L
OW-30	3/19/2013	n-Propylbenzene	ND	5	2.1	660	ug/L
OW-30	3/19/2013	n-Butylbenzene	ND	15	2	1000	ug/L
OW-30	3/19/2013	4-Chlorotoluene	ND	5	2.2	250	ug/L
OW-30	3/19/2013	1,4-Dichlorobenzene	ND	5	2.3	75	ug/L
OW-30	3/19/2013	1,2-Dibromoethane	*ND*	*5*	2.3	0.05	ug/L
OW-30	3/19/2013	1,2-Dichloroethane	ND	5	1.9	5	ug/L
OW-30	3/19/2013	4-Methyl-2-Pentanone	ND	50	4.5	1243	ug/L
OW-30	3/19/2013	1,3,5-Trimethylbenzene	ND	5	2	60	ug/L
OW-30	3/19/2013	Bromobenzene	ND	5	2.9	62	ug/L
OW-30	3/19/2013	Toluene	ND	5	2.2	1000	ug/L
OW-30	3/19/2013	Chlorobenzene	ND	5	2.4	77.6	ug/L
OW-30	3/19/2013	1,2,4-Trichlorobenzene	ND	5	1.9	70	ug/L
OW-30	3/19/2013	Dibromochloromethane	*ND*	*5*	2.5	1.68	ug/L
OW-30	3/19/2013	Tetrachloroethene	ND	5	2.4	5	ug/L
OW-30	3/19/2013	sec-Butylbenzene	ND	5	2.1	2000	ug/L
OW-30	3/19/2013	1,3-Dichloropropane	ND	5	2.2	370	ug/L
OW-30	3/19/2013	cis-1,2-Dichloroethene	ND	5	2.3	70	ug/L
OW-30	3/19/2013	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
OW-30	3/19/2013	1,3-Dichlorobenzene	ND	5	2.4	N/A	ug/L
OW-30	3/19/2013	1,1-Dichloropropene	ND	5	2.2	NA	ug/L
OW-30	3/19/2013	2-Hexanone	*ND*	*50*	6.4	38	ug/L
OW-30	3/19/2013	2,2-Dichloropropane	ND	10	4.1	NA	ug/L
OW-30	3/19/2013	1,1,1,2-Tetrachloroethane	ND	5	2.7	5.74	ug/L
OW-30	3/19/2013	Xylenes, Total	ND	7.5	7.2	620	ug/L
OW-30	3/19/2013	MTBE	**2000**	50	38	143	ug/L
OW-30	3/19/2013	cis-1,3-Dichloropropene	ND	5	2.3	NA	ug/L
OW-30	3/19/2013	trans-1,3-Dichloropropene	ND	5	2.2	NA	ug/L
OW-30	6/17/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	6/17/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	6/17/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	6/17/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	6/17/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	6/17/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	6/17/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	6/17/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	6/17/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-30	6/17/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	6/17/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	6/17/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	6/17/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	6/17/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	6/17/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	6/17/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	6/17/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	6/17/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	6/17/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	6/17/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	6/17/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	6/17/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	6/17/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	6/17/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	6/17/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	6/17/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	6/17/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	6/17/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	6/17/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	6/17/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/17/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	6/17/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	6/17/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	6/17/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	6/17/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	6/17/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	6/17/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	6/17/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	6/17/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	6/17/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	6/17/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-30	6/17/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	6/17/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	6/17/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	6/17/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	6/17/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	6/17/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	6/17/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	6/17/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	6/17/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	6/17/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	6/17/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-30	6/17/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	6/17/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	6/17/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	6/17/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	6/17/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	6/17/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	6/17/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	6/17/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	6/17/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	6/17/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	6/17/2013	MTBE	**2500**	20	15	143	ug/L
OW-30	6/17/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	6/17/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-30	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	9/4/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	9/4/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	9/4/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	9/4/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	9/4/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-30	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/4/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	9/4/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-30	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	9/4/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	9/4/2013	MTBE	**2100**	20	15	143	ug/L
OW-30	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	11/11/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-30	11/11/2013	Acetone	ND	10	1.7	14064	ug/L
OW-30	11/11/2013	Chloroform	ND	1	0.47	100	ug/L
OW-30	11/11/2013	Benzene	ND	1	0.46	5	ug/L
OW-30	11/11/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-30	11/11/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-30	11/11/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-30	11/11/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-30	11/11/2013	Chloroethane	4.7	2	0.3	20857	ug/L
OW-30	11/11/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-30	11/11/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-30	11/11/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-30	11/11/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-30	11/11/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-30	11/11/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-30	11/11/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-30	11/11/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-30	11/11/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-30	11/11/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-30	11/11/2013	2-Butanone	ND	10	1	5565	ug/L
OW-30	11/11/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-30	11/11/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-30	11/11/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-30	11/11/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-30	11/11/2013	Hexachlorobutadiene	ND	1	0.41	1.39	ug/L
OW-30	11/11/2013	1-Methylnaphthalene	ND	4	0.41	NA	ug/L
OW-30	11/11/2013	Naphthalene	ND	2	0.29	30	ug/L
OW-30	11/11/2013	2-Methylnaphthalene	*ND*	*4*	0.39		ug/L
OW-30	11/11/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-30	11/11/2013	1,2-Dichlorobenzene	ND	1	0.43	600	ug/L
OW-30	11/11/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-30	11/11/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-30	11/11/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-30	11/11/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-30	11/11/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-30	11/11/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-30	11/11/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-30	11/11/2013	Styrene	ND	1	0.58	100	ug/L
OW-30	11/11/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-30	11/11/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-30	11/11/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-30	11/11/2013	1,4-Dichlorobenzene	ND	1	0.45	75	ug/L
OW-30	11/11/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-30	11/11/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-30	11/11/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-30	11/11/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-30	11/11/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-30	11/11/2013	Toluene	ND	1	0.44	1000	ug/L
OW-30	11/11/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-30	11/11/2013	1,2,4-Trichlorobenzene	ND	1	0.39	70	ug/L
OW-30	11/11/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-30	11/11/2013	Tetrachloroethene	ND	1	0.49	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/11/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-30	11/11/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-30	11/11/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-30	11/11/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-30	11/11/2013	1,3-Dichlorobenzene	ND	1	0.48	N/A	ug/L
OW-30	11/11/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	11/11/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-30	11/11/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-30	11/11/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-30	11/11/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-30	11/11/2013	MTBE	**2600**	20	15	143	ug/L
OW-30	11/11/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-30	11/11/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-30	3/7/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	3/7/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	3/7/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	3/7/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	3/7/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	3/7/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	3/7/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	3/7/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	3/7/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-30	3/7/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	3/7/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	3/7/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	3/7/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	3/7/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	3/7/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	3/7/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	3/7/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	3/7/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	3/7/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	3/7/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	3/7/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	3/7/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	3/7/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	3/7/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	3/7/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-30	3/7/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-30	3/7/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-30	3/7/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	3/7/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	3/7/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-30	3/7/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	3/7/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	3/7/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	3/7/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	3/7/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	3/7/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	3/7/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	3/7/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	3/7/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	3/7/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	3/7/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	3/7/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-30	3/7/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	3/7/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	3/7/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	3/7/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	3/7/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	3/7/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	3/7/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	3/7/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-30	3/7/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	3/7/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	3/7/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	3/7/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	3/7/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	3/7/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	3/7/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-30	3/7/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	3/7/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	3/7/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	3/7/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	3/7/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	3/7/2014	MTBE	**2900**	100	25	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/7/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	3/7/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	6/3/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	6/3/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	6/3/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	6/3/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	6/3/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	6/3/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	6/3/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	6/3/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	6/3/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-30	6/3/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	6/3/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	6/3/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	6/3/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	6/3/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	6/3/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	6/3/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	6/3/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	6/3/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	6/3/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	6/3/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	6/3/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	6/3/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	6/3/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	6/3/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	6/3/2014	Hexachlorobutadiene	ND	1	0.28	1.39	ug/L
OW-30	6/3/2014	1-Methylnaphthalene	ND	4	0.44	NA	ug/L
OW-30	6/3/2014	Naphthalene	ND	2	0.14	30	ug/L
OW-30	6/3/2014	2-Methylnaphthalene	*ND*	*4*	0.56		ug/L
OW-30	6/3/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	6/3/2014	1,2-Dichlorobenzene	ND	1	0.13	600	ug/L
OW-30	6/3/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	6/3/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	6/3/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	6/3/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	6/3/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	6/3/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	6/3/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	6/3/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	6/3/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	6/3/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	6/3/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	6/3/2014	1,4-Dichlorobenzene	ND	1	0.26	75	ug/L
OW-30	6/3/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	6/3/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	6/3/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	6/3/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	6/3/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	6/3/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	6/3/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	6/3/2014	1,2,4-Trichlorobenzene	ND	1	0.3	70	ug/L
OW-30	6/3/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	6/3/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	6/3/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	6/3/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	6/3/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	6/3/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	6/3/2014	1,3-Dichlorobenzene	ND	1	0.17	N/A	ug/L
OW-30	6/3/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	6/3/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	6/3/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	6/3/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	6/3/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	6/3/2014	MTBE	**2700**	50	13	143	ug/L
OW-30	6/3/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	6/3/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	9/17/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-30	9/17/2014	Acetone	ND	10	4.9	14064	ug/L
OW-30	9/17/2014	Chloroform	ND	1	0.32	100	ug/L
OW-30	9/17/2014	Benzene	ND	1	0.15	5	ug/L
OW-30	9/17/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-30	9/17/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-30	9/17/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-30	9/17/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-30	9/17/2014	Chloroethane	ND	2	0.48	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/17/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-30	9/17/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-30	9/17/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-30	9/17/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-30	9/17/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-30	9/17/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-30	9/17/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-30	9/17/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	9/17/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-30	9/17/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-30	9/17/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-30	9/17/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	9/17/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-30	9/17/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-30	9/17/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-30	9/17/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-30	9/17/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-30	9/17/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-30	9/17/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-30	9/17/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-30	9/17/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-30	9/17/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-30	9/17/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-30	9/17/2014	Styrene	ND	1	0.12	100	ug/L
OW-30	9/17/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-30	9/17/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-30	9/17/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-30	9/17/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-30	9/17/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-30	9/17/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-30	9/17/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-30	9/17/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-30	9/17/2014	Toluene	ND	1	0.17	1000	ug/L
OW-30	9/17/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-30	9/17/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-30	9/17/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-30	9/17/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-30	9/17/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-30	9/17/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	9/17/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-30	9/17/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-30	9/17/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-30	9/17/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-30	9/17/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-30	9/17/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-30	9/17/2014	MTBE	**2800**	50	13	143	ug/L
OW-30	9/17/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-30	9/17/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-30	11/11/2014	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-30	11/11/2014	Acetone	ND	50	25	14064	ug/L
OW-30	11/11/2014	Chloroform	ND	5	1.6	100	ug/L
OW-30	11/11/2014	Benzene	ND	5	0.77	5	ug/L
OW-30	11/11/2014	1,1,1-Trichloroethane	ND	5	0.61	200	ug/L
OW-30	11/11/2014	Bromomethane	*ND*	*15*	2.1	7.54	ug/L
OW-30	11/11/2014	Chloromethane	ND	15	2.6	20.32	ug/L
OW-30	11/11/2014	Dibromomethane	ND	5	0.94	8	ug/L
OW-30	11/11/2014	Chloroethane	ND	10	2.4	20857	ug/L
OW-30	11/11/2014	Vinyl Chloride	*ND*	*5*	2.3	2	ug/L
OW-30	11/11/2014	Methylene Chloride	*ND*	*15*	1.3	5	ug/L
OW-30	11/11/2014	Carbon Disulfide	ND	50	3.7	810	ug/L
OW-30	11/11/2014	Bromoform	ND	5	1.3	32.9	ug/L
OW-30	11/11/2014	Bromodichloromethane	*ND*	*5*	0.82	1.34	ug/L
OW-30	11/11/2014	1,1-Dichloroethane	ND	5	1.4	25	ug/L
OW-30	11/11/2014	1,1-Dichloroethene	ND	5	1.1	7	ug/L
OW-30	11/11/2014	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	11/11/2014	Dichlorodifluoromethane	ND	5	1.2	197	ug/L
OW-30	11/11/2014	1,2-Dichloropropane	ND	5	1	5	ug/L
OW-30	11/11/2014	2-Butanone	ND	50	7.1	5565	ug/L
OW-30	11/11/2014	1,1,2-Trichloroethane	ND	5	0.69	5	ug/L
OW-30	11/11/2014	Trichloroethene	ND	5	0.97	5	ug/L
OW-30	11/11/2014	1,1,2,2-Tetrachloroethane	ND	10	1.1	10	ug/L
OW-30	11/11/2014	1,2,3-Trichlorobenzene	ND	5	0.92	70	ug/L
OW-30	11/11/2014	Hexachlorobutadiene	*ND*	*5*	1.4	1.39	ug/L
OW-30	11/11/2014	1-Methylnaphthalene	ND	20	2.2	NA	ug/L
OW-30	11/11/2014	Naphthalene	ND	10	0.68	30	ug/L
OW-30	11/11/2014	2-Methylnaphthalene	*ND*	*20*	2.8		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/11/2014	2-Chlorotoluene	ND	5	0.64	233	ug/L
OW-30	11/11/2014	1,2-Dichlorobenzene	ND	5	0.66	600	ug/L
OW-30	11/11/2014	1,2,4-Trimethylbenzene	ND	5	0.61	56	ug/L
OW-30	11/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.1	0.0033	ug/L
OW-30	11/11/2014	1,2,3-Trichloropropane	*ND*	*10*	0.96	0.0084	ug/L
OW-30	11/11/2014	tert-Butylbenzene	ND	5	0.68	690	ug/L
OW-30	11/11/2014	Isopropylbenzene	ND	5	0.81	447	ug/L
OW-30	11/11/2014	p-Isopropyltoluene	ND	5	0.88	NA	ug/L
OW-30	11/11/2014	Ethylbenzene	ND	5	0.64	700	ug/L
OW-30	11/11/2014	Styrene	ND	5	0.58	100	ug/L
OW-30	11/11/2014	n-Propylbenzene	ND	5	0.7	660	ug/L
OW-30	11/11/2014	n-Butylbenzene	ND	15	1.1	1000	ug/L
OW-30	11/11/2014	4-Chlorotoluene	ND	5	4.3	250	ug/L
OW-30	11/11/2014	1,4-Dichlorobenzene	ND	5	1.3	75	ug/L
OW-30	11/11/2014	1,2-Dibromoethane	*ND*	*5*	0.5	0.05	ug/L
OW-30	11/11/2014	1,2-Dichloroethane	ND	5	1.3	5	ug/L
OW-30	11/11/2014	4-Methyl-2-Pentanone	ND	50	5.6	1243	ug/L
OW-30	11/11/2014	1,3,5-Trimethylbenzene	ND	5	0.66	60	ug/L
OW-30	11/11/2014	Bromobenzene	ND	5	0.91	62	ug/L
OW-30	11/11/2014	Toluene	ND	5	0.85	1000	ug/L
OW-30	11/11/2014	Chlorobenzene	ND	5	0.7	77.6	ug/L
OW-30	11/11/2014	1,2,4-Trichlorobenzene	ND	5	1.5	70	ug/L
OW-30	11/11/2014	Dibromochloromethane	*ND*	*5*	0.6	1.68	ug/L
OW-30	11/11/2014	Tetrachloroethene	ND	5	1	5	ug/L
OW-30	11/11/2014	sec-Butylbenzene	ND	5	0.77	2000	ug/L
OW-30	11/11/2014	1,3-Dichloropropane	ND	5	0.9	370	ug/L
OW-30	11/11/2014	cis-1,2-Dichloroethene	ND	5	0.61	70	ug/L
OW-30	11/11/2014	trans-1,2-Dichloroethene	ND	5	1.3	100	ug/L
OW-30	11/11/2014	1,3-Dichlorobenzene	ND	5	0.87	N/A	ug/L
OW-30	11/11/2014	1,1-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	11/11/2014	2-Hexanone	*ND*	*50*	4.3	38	ug/L
OW-30	11/11/2014	2,2-Dichloropropane	ND	10	1.3	NA	ug/L
OW-30	11/11/2014	1,1,1,2-Tetrachloroethane	ND	5	0.61	5.74	ug/L
OW-30	11/11/2014	Xylenes, Total	ND	7.5	1.9	620	ug/L
OW-30	11/11/2014	MTBE	**3600**	100	25	143	ug/L
OW-30	11/11/2014	cis-1,3-Dichloropropene	ND	5	0.84	NA	ug/L
OW-30	11/11/2014	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
OW-30	3/9/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-30	3/9/2015	Acetone	ND	10	0.94	14064	ug/L
OW-30	3/9/2015	Chloroform	ND	1	0.21	100	ug/L
OW-30	3/9/2015	Benzene	ND	1	0.065	5	ug/L
OW-30	3/9/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-30	3/9/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-30	3/9/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-30	3/9/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-30	3/9/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-30	3/9/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-30	3/9/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-30	3/9/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-30	3/9/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-30	3/9/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-30	3/9/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	3/9/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-30	3/9/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	3/9/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-30	3/9/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-30	3/9/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-30	3/9/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-30	3/9/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-30	3/9/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-30	3/9/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-30	3/9/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-30	3/9/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-30	3/9/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-30	3/9/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-30	3/9/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-30	3/9/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-30	3/9/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-30	3/9/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-30	3/9/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-30	3/9/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-30	3/9/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-30	3/9/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-30	3/9/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-30	3/9/2015	Styrene	ND	1	0.11	100	ug/L
OW-30	3/9/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/9/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-30	3/9/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-30	3/9/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-30	3/9/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	3/9/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-30	3/9/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-30	3/9/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	3/9/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-30	3/9/2015	Toluene	ND	1	0.11	1000	ug/L
OW-30	3/9/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-30	3/9/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-30	3/9/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-30	3/9/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-30	3/9/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-30	3/9/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	3/9/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-30	3/9/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-30	3/9/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-30	3/9/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-30	3/9/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-30	3/9/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-30	3/9/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-30	3/9/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-30	3/9/2015	MTBE	**4000**	50	8.7	143	ug/L
OW-30	3/9/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	3/9/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	6/2/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-30	6/2/2015	Acetone	ND	50	4.7	14064	ug/L
OW-30	6/2/2015	Chloroform	ND	5	1.1	100	ug/L
OW-30	6/2/2015	Benzene	ND	5	0.33	5	ug/L
OW-30	6/2/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-30	6/2/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-30	6/2/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-30	6/2/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-30	6/2/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-30	6/2/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-30	6/2/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-30	6/2/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-30	6/2/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-30	6/2/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-30	6/2/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	6/2/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-30	6/2/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	6/2/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-30	6/2/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-30	6/2/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-30	6/2/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-30	6/2/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-30	6/2/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-30	6/2/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	6/2/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-30	6/2/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-30	6/2/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-30	6/2/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-30	6/2/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-30	6/2/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-30	6/2/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-30	6/2/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-30	6/2/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-30	6/2/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-30	6/2/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-30	6/2/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-30	6/2/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-30	6/2/2015	Styrene	ND	5	0.53	100	ug/L
OW-30	6/2/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-30	6/2/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	6/2/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-30	6/2/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-30	6/2/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-30	6/2/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-30	6/2/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-30	6/2/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-30	6/2/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-30	6/2/2015	Toluene	ND	5	0.54	1000	ug/L
OW-30	6/2/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-30	6/2/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/2/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-30	6/2/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-30	6/2/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-30	6/2/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-30	6/2/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-30	6/2/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-30	6/2/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-30	6/2/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-30	6/2/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-30	6/2/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-30	6/2/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-30	6/2/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-30	6/2/2015	MTBE	**3100**	100	17	143	ug/L
OW-30	6/2/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	6/2/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-30	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-30	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-30	8/10/2015	Chloroform	ND	1	0.21	100	ug/L
OW-30	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-30	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-30	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-30	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-30	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-30	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-30	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-30	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-30	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-30	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-30	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-30	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-30	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-30	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-30	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-30	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-30	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-30	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-30	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-30	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-30	8/10/2015	Hexachlorobutadiene	ND	1	0.25	1.39	ug/L
OW-30	8/10/2015	1-Methylnaphthalene	ND	4	0.54	NA	ug/L
OW-30	8/10/2015	Naphthalene	ND	2	0.22	30	ug/L
OW-30	8/10/2015	2-Methylnaphthalene	*ND*	*4*	0.59		ug/L
OW-30	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-30	8/10/2015	1,2-Dichlorobenzene	ND	1	0.12	600	ug/L
OW-30	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-30	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-30	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-30	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-30	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-30	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-30	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-30	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-30	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-30	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-30	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-30	8/10/2015	1,4-Dichlorobenzene	ND	1	0.17	75	ug/L
OW-30	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-30	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-30	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-30	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-30	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-30	8/10/2015	1,2,4-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-30	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-30	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-30	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-30	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-30	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-30	8/10/2015	1,3-Dichlorobenzene	ND	1	0.093	N/A	ug/L
OW-30	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-30	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-30	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-30	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-30	8/10/2015	MTBE	**3800**	100	17	143	ug/L
OW-30	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	10/27/2015	Carbon tetrachloride	ND	5	0.39	5	ug/L
OW-30	10/27/2015	Acetone	ND	50	4.7	14064	ug/L
OW-30	10/27/2015	Chloroform	ND	5	1.1	100	ug/L
OW-30	10/27/2015	Benzene	ND	5	0.33	5	ug/L
OW-30	10/27/2015	1,1,1-Trichloroethane	ND	5	0.39	200	ug/L
OW-30	10/27/2015	Bromomethane	*ND*	*15*	5.8	7.54	ug/L
OW-30	10/27/2015	Chloromethane	ND	15	0.87	20.32	ug/L
OW-30	10/27/2015	Dibromomethane	ND	5	1.2	8	ug/L
OW-30	10/27/2015	Chloroethane	ND	10	0.52	20857	ug/L
OW-30	10/27/2015	Vinyl Chloride	*ND*	*5*	0.63	2	ug/L
OW-30	10/27/2015	Methylene Chloride	*ND*	*15*	1.8	5	ug/L
OW-30	10/27/2015	Carbon Disulfide	ND	50	3.4	810	ug/L
OW-30	10/27/2015	Bromoform	ND	5	0.81	32.9	ug/L
OW-30	10/27/2015	Bromodichloromethane	*ND*	*5*	0.45	1.34	ug/L
OW-30	10/27/2015	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	10/27/2015	1,1-Dichloroethene	ND	5	0.5	7	ug/L
OW-30	10/27/2015	Trichlorofluoromethane	ND	5	0.64	1137	ug/L
OW-30	10/27/2015	Dichlorodifluoromethane	ND	5	3.5	197	ug/L
OW-30	10/27/2015	1,2-Dichloropropane	ND	5	0.76	5	ug/L
OW-30	10/27/2015	2-Butanone	ND	50	1.8	5565	ug/L
OW-30	10/27/2015	1,1,2-Trichloroethane	ND	5	0.39	5	ug/L
OW-30	10/27/2015	Trichloroethene	ND	5	0.82	5	ug/L
OW-30	10/27/2015	1,1,2,2-Tetrachloroethane	ND	10	0.9	10	ug/L
OW-30	10/27/2015	1,2,3-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	10/27/2015	Hexachlorobutadiene	*ND*	*5*	1.3	1.39	ug/L
OW-30	10/27/2015	1-Methylnaphthalene	ND	20	2.7	NA	ug/L
OW-30	10/27/2015	Naphthalene	ND	10	1.1	30	ug/L
OW-30	10/27/2015	2-Methylnaphthalene	*ND*	*20*	3		ug/L
OW-30	10/27/2015	2-Chlorotoluene	ND	5	0.4	233	ug/L
OW-30	10/27/2015	1,2-Dichlorobenzene	ND	5	0.59	600	ug/L
OW-30	10/27/2015	1,2,4-Trimethylbenzene	ND	5	0.8	56	ug/L
OW-30	10/27/2015	1,2-Dibromo-3-Chloropropane	*ND*	*10*	0.68	0.0033	ug/L
OW-30	10/27/2015	1,2,3-Trichloropropane	*ND*	*10*	0.79	0.0084	ug/L
OW-30	10/27/2015	tert-Butylbenzene	ND	5	0.65	690	ug/L
OW-30	10/27/2015	Isopropylbenzene	ND	5	0.76	447	ug/L
OW-30	10/27/2015	p-Isopropyltoluene	ND	5	0.94	NA	ug/L
OW-30	10/27/2015	Ethylbenzene	ND	5	0.51	700	ug/L
OW-30	10/27/2015	Styrene	ND	5	0.53	100	ug/L
OW-30	10/27/2015	n-Propylbenzene	ND	5	0.82	660	ug/L
OW-30	10/27/2015	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	10/27/2015	4-Chlorotoluene	ND	5	0.75	250	ug/L
OW-30	10/27/2015	1,4-Dichlorobenzene	ND	5	0.83	75	ug/L
OW-30	10/27/2015	1,2-Dibromoethane	*ND*	*5*	0.67	0.05	ug/L
OW-30	10/27/2015	1,2-Dichloroethane	ND	5	0.88	5	ug/L
OW-30	10/27/2015	4-Methyl-2-Pentanone	ND	50	1.3	1243	ug/L
OW-30	10/27/2015	1,3,5-Trimethylbenzene	ND	5	0.61	60	ug/L
OW-30	10/27/2015	Bromobenzene	ND	5	0.54	62	ug/L
OW-30	10/27/2015	Toluene	ND	5	0.54	1000	ug/L
OW-30	10/27/2015	Chlorobenzene	ND	5	0.47	77.6	ug/L
OW-30	10/27/2015	1,2,4-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	10/27/2015	Dibromochloromethane	*ND*	*5*	0.48	1.68	ug/L
OW-30	10/27/2015	Tetrachloroethene	ND	5	0.8	5	ug/L
OW-30	10/27/2015	sec-Butylbenzene	ND	5	1.1	2000	ug/L
OW-30	10/27/2015	1,3-Dichloropropane	ND	5	0.86	370	ug/L
OW-30	10/27/2015	cis-1,2-Dichloroethene	ND	5	0.4	70	ug/L
OW-30	10/27/2015	trans-1,2-Dichloroethene	ND	5	0.47	100	ug/L
OW-30	10/27/2015	1,3-Dichlorobenzene	ND	5	0.47	N/A	ug/L
OW-30	10/27/2015	1,1-Dichloropropene	ND	5	0.58	NA	ug/L
OW-30	10/27/2015	2-Hexanone	*ND*	*50*	2.4	38	ug/L
OW-30	10/27/2015	2,2-Dichloropropane	ND	10	0.76	NA	ug/L
OW-30	10/27/2015	1,1,1,2-Tetrachloroethane	ND	5	0.55	5.74	ug/L
OW-30	10/27/2015	Xylenes, Total	ND	7.5	1.4	620	ug/L
OW-30	10/27/2015	MTBE	**3500**	50	8.7	143	ug/L
OW-30	10/27/2015	cis-1,3-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	10/27/2015	trans-1,3-Dichloropropene	ND	5	0.57	NA	ug/L
OW-30	3/8/2016	Carbon tetrachloride	ND	2	0.22	5	ug/L
OW-30	3/8/2016	Acetone	ND	20	1.8	14064	ug/L
OW-30	3/8/2016	Chloroform	ND	2	0.18	100	ug/L
OW-30	3/8/2016	Benzene	3.1	2	0.19	5	ug/L
OW-30	3/8/2016	1,1,1-Trichloroethane	ND	2	0.13	200	ug/L
OW-30	3/8/2016	Bromomethane	ND	6	1.6	7.54	ug/L
OW-30	3/8/2016	Chloromethane	ND	6	0.43	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/8/2016	Dibromomethane	ND	2	0.24	8	ug/L
OW-30	3/8/2016	Chloroethane	ND	4	0.29	20857	ug/L
OW-30	3/8/2016	Vinyl Chloride	ND	2	0.13	2	ug/L
OW-30	3/8/2016	Methylene Chloride	*ND*	*6*	0.13	5	ug/L
OW-30	3/8/2016	Carbon Disulfide	ND	20	1.2	810	ug/L
OW-30	3/8/2016	Bromoform	ND	2	0.2	32.9	ug/L
OW-30	3/8/2016	Bromodichloromethane	*ND*	*2*	0.2	1.34	ug/L
OW-30	3/8/2016	1,1-Dichloroethane	ND	2	0.22	25	ug/L
OW-30	3/8/2016	1,1-Dichloroethene	ND	2	0.15	7	ug/L
OW-30	3/8/2016	Trichlorofluoromethane	ND	2	0.18	1137	ug/L
OW-30	3/8/2016	Dichlorodifluoromethane	ND	2	0.65	197	ug/L
OW-30	3/8/2016	1,2-Dichloropropane	ND	2	0.094	5	ug/L
OW-30	3/8/2016	2-Butanone	ND	20	0.64	5565	ug/L
OW-30	3/8/2016	1,1,2-Trichloroethane	ND	2	0.15	5	ug/L
OW-30	3/8/2016	Trichloroethene	ND	2	0.35	5	ug/L
OW-30	3/8/2016	1,1,2,2-Tetrachloroethane	ND	4	0.21	10	ug/L
OW-30	3/8/2016	1,2,3-Trichlorobenzene	ND	2	0.23	70	ug/L
OW-30	3/8/2016	Hexachlorobutadiene	*ND*	*2*	0.4	1.39	ug/L
OW-30	3/8/2016	1-Methylnaphthalene	ND	8	0.41	NA	ug/L
OW-30	3/8/2016	Naphthalene	ND	4	0.17	30	ug/L
OW-30	3/8/2016	2-Methylnaphthalene	*ND*	*8*	0.32		ug/L
OW-30	3/8/2016	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-30	3/8/2016	1,2-Dichlorobenzene	ND	2	0.8	600	ug/L
OW-30	3/8/2016	1,2,4-Trimethylbenzene	ND	2	0.21	56	ug/L
OW-30	3/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.31	0.0033	ug/L
OW-30	3/8/2016	1,2,3-Trichloropropane	*ND*	*4*	0.22	0.0084	ug/L
OW-30	3/8/2016	tert-Butylbenzene	ND	2	0.19	690	ug/L
OW-30	3/8/2016	Isopropylbenzene	ND	2	0.2	447	ug/L
OW-30	3/8/2016	p-Isopropyltoluene	ND	2	0.28	NA	ug/L
OW-30	3/8/2016	Ethylbenzene	ND	2	0.22	700	ug/L
OW-30	3/8/2016	Styrene	ND	2	0.19	100	ug/L
OW-30	3/8/2016	n-Propylbenzene	ND	2	0.26	660	ug/L
OW-30	3/8/2016	n-Butylbenzene	ND	6	0.32	1000	ug/L
OW-30	3/8/2016	4-Chlorotoluene	ND	2	0.26	250	ug/L
OW-30	3/8/2016	1,4-Dichlorobenzene	ND	2	0.29	75	ug/L
OW-30	3/8/2016	1,2-Dibromoethane	*ND*	*2*	0.22	0.05	ug/L
OW-30	3/8/2016	1,2-Dichloroethane	ND	2	0.11	5	ug/L
OW-30	3/8/2016	4-Methyl-2-Pentanone	ND	20	0.3	1243	ug/L
OW-30	3/8/2016	1,3,5-Trimethylbenzene	ND	2	0.23	60	ug/L
OW-30	3/8/2016	Bromobenzene	ND	2	0.16	62	ug/L
OW-30	3/8/2016	Toluene	ND	2	0.18	1000	ug/L
OW-30	3/8/2016	Chlorobenzene	ND	2	0.21	77.6	ug/L
OW-30	3/8/2016	1,2,4-Trichlorobenzene	ND	2	0.27	70	ug/L
OW-30	3/8/2016	Dibromochloromethane	*ND*	*2*	0.17	1.68	ug/L
OW-30	3/8/2016	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-30	3/8/2016	sec-Butylbenzene	ND	2	0.22	2000	ug/L
OW-30	3/8/2016	1,3-Dichloropropane	ND	2	0.31	370	ug/L
OW-30	3/8/2016	cis-1,2-Dichloroethene	ND	2	0.25	70	ug/L
OW-30	3/8/2016	trans-1,2-Dichloroethene	ND	2	0.8	100	ug/L
OW-30	3/8/2016	1,3-Dichlorobenzene	ND	2	0.29	N/A	ug/L
OW-30	3/8/2016	1,1-Dichloropropene	ND	2	0.27	NA	ug/L
OW-30	3/8/2016	2-Hexanone	ND	20	0.72	38	ug/L
OW-30	3/8/2016	2,2-Dichloropropane	ND	4	0.24	NA	ug/L
OW-30	3/8/2016	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
OW-30	3/8/2016	Xylenes, Total	ND	3	0.65	620	ug/L
OW-30	3/8/2016	MTBE	**3500**	50	11	143	ug/L
OW-30	3/8/2016	cis-1,3-Dichloropropene	ND	2	0.2	NA	ug/L
OW-30	3/8/2016	trans-1,3-Dichloropropene	ND	2	0.17	NA	ug/L
OW-30	6/6/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-30	6/6/2016	Acetone	ND	50	25	14064	ug/L
OW-30	6/6/2016	Chloroform	ND	5	0.44	100	ug/L
OW-30	6/6/2016	Benzene	1.2	5	0.48	5	ug/L
OW-30	6/6/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-30	6/6/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-30	6/6/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-30	6/6/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-30	6/6/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-30	6/6/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-30	6/6/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-30	6/6/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-30	6/6/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-30	6/6/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-30	6/6/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-30	6/6/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-30	6/6/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-30	6/6/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/6/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-30	6/6/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-30	6/6/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-30	6/6/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-30	6/6/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-30	6/6/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-30	6/6/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-30	6/6/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-30	6/6/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-30	6/6/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-30	6/6/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	6/6/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-30	6/6/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-30	6/6/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-30	6/6/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-30	6/6/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-30	6/6/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-30	6/6/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-30	6/6/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-30	6/6/2016	Styrene	ND	5	0.55	100	ug/L
OW-30	6/6/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-30	6/6/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-30	6/6/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-30	6/6/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-30	6/6/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-30	6/6/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-30	6/6/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-30	6/6/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-30	6/6/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-30	6/6/2016	Toluene	ND	5	0.59	1000	ug/L
OW-30	6/6/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-30	6/6/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-30	6/6/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-30	6/6/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	6/6/2016	sec-Butylbenzene	0.64	5	0.62	2000	ug/L
OW-30	6/6/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-30	6/6/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-30	6/6/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-30	6/6/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-30	6/6/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	6/6/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-30	6/6/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-30	6/6/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-30	6/6/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-30	6/6/2016	MTBE	**3100**	50	11	143	ug/L
OW-30	6/6/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-30	6/6/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-30	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
OW-30	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
OW-30	8/31/2016	Benzene	ND	1	0.096	5	ug/L
OW-30	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-30	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-30	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-30	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-30	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-30	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-30	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-30	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-30	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-30	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-30	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-30	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-30	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-30	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-30	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-30	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-30	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-30	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-30	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-30	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-30	8/31/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-30	8/31/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-30	8/31/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-30	8/31/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-30	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/31/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-30	8/31/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
OW-30	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-30	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-30	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-30	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-30	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-30	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-30	8/31/2016	Styrene	ND	1	0.11	100	ug/L
OW-30	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-30	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-30	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-30	8/31/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-30	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-30	8/31/2016	1,2-Dichloroethane	0.32	1	0.12	5	ug/L
OW-30	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-30	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-30	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-30	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
OW-30	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	8/31/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-30	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-30	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-30	8/31/2016	sec-Butylbenzene	0.37	1	0.12	2000	ug/L
OW-30	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-30	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-30	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-30	8/31/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-30	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-30	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-30	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-30	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-30	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-30	8/31/2016	MTBE	**3000**	50	11	143	ug/L
OW-30	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-30	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-30	11/14/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-30	11/14/2016	Acetone	ND	50	25	14064	ug/L
OW-30	11/14/2016	Chloroform	ND	5	0.44	100	ug/L
OW-30	11/14/2016	Benzene	ND	5	0.48	5	ug/L
OW-30	11/14/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-30	11/14/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-30	11/14/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-30	11/14/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-30	11/14/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-30	11/14/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-30	11/14/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-30	11/14/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-30	11/14/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-30	11/14/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-30	11/14/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-30	11/14/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-30	11/14/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-30	11/14/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-30	11/14/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-30	11/14/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-30	11/14/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-30	11/14/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-30	11/14/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-30	11/14/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-30	11/14/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-30	11/14/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-30	11/14/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-30	11/14/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-30	11/14/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	11/14/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-30	11/14/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
OW-30	11/14/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-30	11/14/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-30	11/14/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-30	11/14/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
OW-30	11/14/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-30	11/14/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-30	11/14/2016	Styrene	ND	5	0.55	100	ug/L
OW-30	11/14/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-30	11/14/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	11/14/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-30	11/14/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-30	11/14/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-30	11/14/2016	1,2-Dichloroethane	1.6	5	0.58	5	ug/L
OW-30	11/14/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-30	11/14/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-30	11/14/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-30	11/14/2016	Toluene	ND	5	0.59	1000	ug/L
OW-30	11/14/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-30	11/14/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-30	11/14/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-30	11/14/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	11/14/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-30	11/14/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-30	11/14/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-30	11/14/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-30	11/14/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-30	11/14/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-30	11/14/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-30	11/14/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-30	11/14/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-30	11/14/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-30	11/14/2016	MTBE	**3500**	50	11	143	ug/L
OW-30	11/14/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-30	11/14/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-30	2/27/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-30	2/27/2017	Acetone	ND	100	49	14064	ug/L
OW-30	2/27/2017	Chloroform	ND	10	0.89	100	ug/L
OW-30	2/27/2017	Benzene	*0.97*	*10*	0.96	5	ug/L
OW-30	2/27/2017	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-30	2/27/2017	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-30	2/27/2017	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-30	2/27/2017	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-30	2/27/2017	Chloroethane	ND	20	1.9	20857	ug/L
OW-30	2/27/2017	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-30	2/27/2017	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-30	2/27/2017	Carbon Disulfide	ND	100	6	810	ug/L
OW-30	2/27/2017	Bromoform	ND	10	1	32.9	ug/L
OW-30	2/27/2017	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-30	2/27/2017	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-30	2/27/2017	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-30	2/27/2017	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-30	2/27/2017	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-30	2/27/2017	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-30	2/27/2017	2-Butanone	ND	100	7.4	5565	ug/L
OW-30	2/27/2017	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-30	2/27/2017	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-30	2/27/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-30	2/27/2017	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-30	2/27/2017	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-30	2/27/2017	1-Methylnaphthalene	ND	40	2	NA	ug/L
OW-30	2/27/2017	Naphthalene	ND	20	0.93	30	ug/L
OW-30	2/27/2017	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
OW-30	2/27/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-30	2/27/2017	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-30	2/27/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-30	2/27/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-30	2/27/2017	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-30	2/27/2017	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-30	2/27/2017	Isopropylbenzene	ND	10	1	447	ug/L
OW-30	2/27/2017	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
OW-30	2/27/2017	Ethylbenzene	ND	10	1.1	700	ug/L
OW-30	2/27/2017	Styrene	ND	10	1.1	100	ug/L
OW-30	2/27/2017	n-Propylbenzene	ND	10	1.3	660	ug/L
OW-30	2/27/2017	n-Butylbenzene	ND	30	1.6	1000	ug/L
OW-30	2/27/2017	4-Chlorotoluene	ND	10	1.3	250	ug/L
OW-30	2/27/2017	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-30	2/27/2017	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-30	2/27/2017	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
OW-30	2/27/2017	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-30	2/27/2017	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
OW-30	2/27/2017	Bromobenzene	ND	10	0.98	62	ug/L
OW-30	2/27/2017	Toluene	ND	10	1.2	1000	ug/L
OW-30	2/27/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-30	2/27/2017	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-30	2/27/2017	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	2/27/2017	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-30	2/27/2017	sec-Butylbenzene	ND	10	1.2	2000	ug/L
OW-30	2/27/2017	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-30	2/27/2017	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-30	2/27/2017	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-30	2/27/2017	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-30	2/27/2017	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-30	2/27/2017	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-30	2/27/2017	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-30	2/27/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-30	2/27/2017	Xylenes, Total	ND	15	3.7	620	ug/L
OW-30	2/27/2017	MTBE	**4000**	100	21	143	ug/L
OW-30	2/27/2017	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-30	2/27/2017	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-30	5/31/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-30	5/31/2017	Acetone	ND	100	8.2	14064	ug/L
OW-30	5/31/2017	Chloroform	ND	10	4	100	ug/L
OW-30	5/31/2017	Benzene	*ND*	*10*	0.62	5	ug/L
OW-30	5/31/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
OW-30	5/31/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
OW-30	5/31/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
OW-30	5/31/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
OW-30	5/31/2017	Chloroethane	ND	20	2.3	20857	ug/L
OW-30	5/31/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
OW-30	5/31/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
OW-30	5/31/2017	Carbon Disulfide	ND	100	4	810	ug/L
OW-30	5/31/2017	Bromoform	ND	10	2.1	32.9	ug/L
OW-30	5/31/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
OW-30	5/31/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
OW-30	5/31/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
OW-30	5/31/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
OW-30	5/31/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
OW-30	5/31/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
OW-30	5/31/2017	2-Butanone	ND	100	11	5565	ug/L
OW-30	5/31/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
OW-30	5/31/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
OW-30	5/31/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
OW-30	5/31/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
OW-30	5/31/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
OW-30	5/31/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
OW-30	5/31/2017	Naphthalene	ND	20	1.1	30	ug/L
OW-30	5/31/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
OW-30	5/31/2017	2-Chlorotoluene	ND	10	4	233	ug/L
OW-30	5/31/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
OW-30	5/31/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
OW-30	5/31/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
OW-30	5/31/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
OW-30	5/31/2017	tert-Butylbenzene	ND	10	1	690	ug/L
OW-30	5/31/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
OW-30	5/31/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
OW-30	5/31/2017	Ethylbenzene	ND	10	0.93	700	ug/L
OW-30	5/31/2017	Styrene	ND	10	1.6	100	ug/L
OW-30	5/31/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
OW-30	5/31/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
OW-30	5/31/2017	4-Chlorotoluene	ND	10	4	250	ug/L
OW-30	5/31/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
OW-30	5/31/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
OW-30	5/31/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
OW-30	5/31/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
OW-30	5/31/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
OW-30	5/31/2017	Bromobenzene	ND	10	1.4	62	ug/L
OW-30	5/31/2017	Toluene	ND	10	0.64	1000	ug/L
OW-30	5/31/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-30	5/31/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
OW-30	5/31/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
OW-30	5/31/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
OW-30	5/31/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
OW-30	5/31/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
OW-30	5/31/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
OW-30	5/31/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
OW-30	5/31/2017	Pentafluorobenzene	**100**	0	0		None
OW-30	5/31/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
OW-30	5/31/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
OW-30	5/31/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
OW-30	5/31/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
OW-30	5/31/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/31/2017	Xylenes, Total	ND	15	3.2	620	ug/L
OW-30	5/31/2017	MTBE	**3300**	100	24	143	ug/L
OW-30	5/31/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
OW-30	5/31/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
OW-30	9/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	9/6/2017	Acetone	1.5	10	0.82	14064	ug/L
OW-30	9/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-30	9/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-30	9/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-30	9/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-30	9/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-30	9/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-30	9/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-30	9/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-30	9/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-30	9/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-30	9/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-30	9/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-30	9/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	9/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-30	9/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-30	9/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-30	9/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-30	9/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	9/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	9/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-30	9/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-30	9/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-30	9/6/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-30	9/6/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-30	9/6/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-30	9/6/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-30	9/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-30	9/6/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-30	9/6/2017	1,2,4-Trimethylbenzene	0.34	1	0.11	56	ug/L
OW-30	9/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-30	9/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-30	9/6/2017	tert-Butylbenzene	0.14	1	0.1	690	ug/L
OW-30	9/6/2017	Isopropylbenzene	0.09	1	0.051	447	ug/L
OW-30	9/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-30	9/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-30	9/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-30	9/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-30	9/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-30	9/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-30	9/6/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-30	9/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	9/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-30	9/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-30	9/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-30	9/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-30	9/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-30	9/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	9/6/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-30	9/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-30	9/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-30	9/6/2017	sec-Butylbenzene	0.68	1	0.11	2000	ug/L
OW-30	9/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	9/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-30	9/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-30	9/6/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-30	9/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-30	9/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-30	9/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-30	9/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-30	9/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-30	9/6/2017	MTBE	**3200**	100	24	143	ug/L
OW-30	9/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-30	9/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-30	12/12/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-30	12/12/2017	Acetone	11	50	4.1	14064	ug/L
OW-30	12/12/2017	Chloroform	ND	5	2	100	ug/L
OW-30	12/12/2017	Benzene	**12**	5	0.31	5	ug/L
OW-30	12/12/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-30	12/12/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	12/12/2017	Chloromethane	ND	15	1.5	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/12/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-30	12/12/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-30	12/12/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-30	12/12/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-30	12/12/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-30	12/12/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-30	12/12/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-30	12/12/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	12/12/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-30	12/12/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-30	12/12/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-30	12/12/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-30	12/12/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-30	12/12/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-30	12/12/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-30	12/12/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-30	12/12/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-30	12/12/2017	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	12/12/2017	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-30	12/12/2017	Naphthalene	ND	10	0.57	30	ug/L
OW-30	12/12/2017	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-30	12/12/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	12/12/2017	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-30	12/12/2017	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-30	12/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-30	12/12/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-30	12/12/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-30	12/12/2017	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-30	12/12/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-30	12/12/2017	Ethylbenzene	ND	5	0.47	700	ug/L
OW-30	12/12/2017	Styrene	ND	5	0.78	100	ug/L
OW-30	12/12/2017	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-30	12/12/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-30	12/12/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	12/12/2017	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	12/12/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-30	12/12/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	12/12/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-30	12/12/2017	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-30	12/12/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-30	12/12/2017	Toluene	ND	5	0.32	1000	ug/L
OW-30	12/12/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-30	12/12/2017	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-30	12/12/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-30	12/12/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-30	12/12/2017	sec-Butylbenzene	1.1	5	0.55	2000	ug/L
OW-30	12/12/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-30	12/12/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-30	12/12/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	12/12/2017	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-30	12/12/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-30	12/12/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-30	12/12/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-30	12/12/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-30	12/12/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-30	12/12/2017	MTBE	**3100**	50	12	143	ug/L
OW-30	12/12/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-30	12/12/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	2/28/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-30	2/28/2018	Acetone	4.9	50	4.1	14064	ug/L
OW-30	2/28/2018	Chloroform	ND	5	2	100	ug/L
OW-30	2/28/2018	Benzene	**6.3**	5	0.31	5	ug/L
OW-30	2/28/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-30	2/28/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	2/28/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-30	2/28/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-30	2/28/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-30	2/28/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-30	2/28/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-30	2/28/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-30	2/28/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-30	2/28/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-30	2/28/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	2/28/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-30	2/28/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-30	2/28/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	2/28/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-30	2/28/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-30	2/28/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-30	2/28/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-30	2/28/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-30	2/28/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-30	2/28/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	2/28/2018	1-Methylnaphthalene	ND	20	0.8	NA	ug/L
OW-30	2/28/2018	Naphthalene	ND	10	0.57	30	ug/L
OW-30	2/28/2018	2-Methylnaphthalene	*ND*	*20*	0.76		ug/L
OW-30	2/28/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	2/28/2018	1,2-Dichlorobenzene	ND	5	0.45	600	ug/L
OW-30	2/28/2018	1,2,4-Trimethylbenzene	ND	5	0.56	56	ug/L
OW-30	2/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-30	2/28/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-30	2/28/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-30	2/28/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-30	2/28/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-30	2/28/2018	Ethylbenzene	ND	5	0.47	700	ug/L
OW-30	2/28/2018	Styrene	ND	5	0.78	100	ug/L
OW-30	2/28/2018	n-Propylbenzene	ND	5	0.37	660	ug/L
OW-30	2/28/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-30	2/28/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	2/28/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	2/28/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-30	2/28/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	2/28/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-30	2/28/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-30	2/28/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-30	2/28/2018	Toluene	ND	5	0.32	1000	ug/L
OW-30	2/28/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-30	2/28/2018	1,2,4-Trichlorobenzene	ND	5	0.71	70	ug/L
OW-30	2/28/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-30	2/28/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-30	2/28/2018	sec-Butylbenzene	1.1	5	0.55	2000	ug/L
OW-30	2/28/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-30	2/28/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-30	2/28/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	2/28/2018	1,3-Dichlorobenzene	ND	5	0.76	N/A	ug/L
OW-30	2/28/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-30	2/28/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-30	2/28/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-30	2/28/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-30	2/28/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-30	2/28/2018	MTBE	**2900**	50	12	143	ug/L
OW-30	2/28/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-30	2/28/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-30	5/16/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-30	5/16/2018	Acetone	ND	10	0.82	14064	ug/L
OW-30	5/16/2018	Chloroform	ND	1	0.4	100	ug/L
OW-30	5/16/2018	Benzene	ND	1	0.062	5	ug/L
OW-30	5/16/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-30	5/16/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-30	5/16/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-30	5/16/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-30	5/16/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-30	5/16/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-30	5/16/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-30	5/16/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-30	5/16/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-30	5/16/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-30	5/16/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-30	5/16/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-30	5/16/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-30	5/16/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-30	5/16/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-30	5/16/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-30	5/16/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-30	5/16/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-30	5/16/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-30	5/16/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-30	5/16/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-30	5/16/2018	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-30	5/16/2018	Naphthalene	ND	2	0.11	30	ug/L
OW-30	5/16/2018	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-30	5/16/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/16/2018	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-30	5/16/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-30	5/16/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-30	5/16/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-30	5/16/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-30	5/16/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-30	5/16/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-30	5/16/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-30	5/16/2018	Styrene	ND	1	0.16	100	ug/L
OW-30	5/16/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-30	5/16/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-30	5/16/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-30	5/16/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-30	5/16/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-30	5/16/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-30	5/16/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-30	5/16/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-30	5/16/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-30	5/16/2018	Toluene	ND	1	0.064	1000	ug/L
OW-30	5/16/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-30	5/16/2018	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-30	5/16/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-30	5/16/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-30	5/16/2018	sec-Butylbenzene	1.4	1	0.11	2000	ug/L
OW-30	5/16/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-30	5/16/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-30	5/16/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-30	5/16/2018	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-30	5/16/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-30	5/16/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-30	5/16/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-30	5/16/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-30	5/16/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-30	5/16/2018	MTBE	**3200**	100	24	143	ug/L
OW-30	5/16/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-30	5/16/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-30	9/19/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-30	9/19/2018	Acetone	ND	50	3.9	14064	ug/L
OW-30	9/19/2018	Chloroform	ND	5	2	100	ug/L
OW-30	9/19/2018	Benzene	ND	5	0.87	5	ug/L
OW-30	9/19/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-30	9/19/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-30	9/19/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-30	9/19/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-30	9/19/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-30	9/19/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-30	9/19/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-30	9/19/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-30	9/19/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-30	9/19/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-30	9/19/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-30	9/19/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-30	9/19/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-30	9/19/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-30	9/19/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-30	9/19/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-30	9/19/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-30	9/19/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-30	9/19/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-30	9/19/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	9/19/2018	Hexachlorobutadiene	*ND*	*5*	4	1.39	ug/L
OW-30	9/19/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-30	9/19/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-30	9/19/2018	2-Methylnaphthalene	*ND*	*20*	1.2		ug/L
OW-30	9/19/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-30	9/19/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-30	9/19/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-30	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-30	9/19/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-30	9/19/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-30	9/19/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-30	9/19/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-30	9/19/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-30	9/19/2018	Styrene	ND	5	1.3	100	ug/L
OW-30	9/19/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-30	9/19/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/19/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-30	9/19/2018	1,4-Dichlorobenzene	ND	5	2	75	ug/L
OW-30	9/19/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-30	9/19/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-30	9/19/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-30	9/19/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-30	9/19/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-30	9/19/2018	Toluene	ND	5	0.84	1000	ug/L
OW-30	9/19/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-30	9/19/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	9/19/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-30	9/19/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	9/19/2018	sec-Butylbenzene	1.2	5	1	2000	ug/L
OW-30	9/19/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-30	9/19/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-30	9/19/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-30	9/19/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-30	9/19/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-30	9/19/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-30	9/19/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-30	9/19/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-30	9/19/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-30	9/19/2018	MTBE	**2900**	50	16	143	ug/L
OW-30	9/19/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-30	9/19/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-30	12/3/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
OW-30	12/3/2018	Acetone	ND	50	3.8	14064	ug/L
OW-30	12/3/2018	Chloroform	ND	5	1.2	100	ug/L
OW-30	12/3/2018	Benzene	ND	5	0.87	5	ug/L
OW-30	12/3/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
OW-30	12/3/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
OW-30	12/3/2018	Chloromethane	ND	15	1.6	20.32	ug/L
OW-30	12/3/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-30	12/3/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-30	12/3/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
OW-30	12/3/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-30	12/3/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-30	12/3/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-30	12/3/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-30	12/3/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
OW-30	12/3/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-30	12/3/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
OW-30	12/3/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
OW-30	12/3/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
OW-30	12/3/2018	2-Butanone	ND	50	7.1	5565	ug/L
OW-30	12/3/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-30	12/3/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-30	12/3/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-30	12/3/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-30	12/3/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
OW-30	12/3/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
OW-30	12/3/2018	Naphthalene	ND	10	1.4	30	ug/L
OW-30	12/3/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
OW-30	12/3/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
OW-30	12/3/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
OW-30	12/3/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
OW-30	12/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-30	12/3/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-30	12/3/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
OW-30	12/3/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
OW-30	12/3/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
OW-30	12/3/2018	Ethylbenzene	ND	5	1.1	700	ug/L
OW-30	12/3/2018	Styrene	ND	5	1.3	100	ug/L
OW-30	12/3/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
OW-30	12/3/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
OW-30	12/3/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
OW-30	12/3/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
OW-30	12/3/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-30	12/3/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
OW-30	12/3/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-30	12/3/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
OW-30	12/3/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-30	12/3/2018	Toluene	ND	5	0.84	1000	ug/L
OW-30	12/3/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-30	12/3/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
OW-30	12/3/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/3/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-30	12/3/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
OW-30	12/3/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-30	12/3/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-30	12/3/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
OW-30	12/3/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
OW-30	12/3/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-30	12/3/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-30	12/3/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
OW-30	12/3/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-30	12/3/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
OW-30	12/3/2018	MTBE	**2700**	50	23	143	ug/L
OW-30	12/3/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-30	12/3/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
OW-30	3/27/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	3/27/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	3/27/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	3/27/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	3/27/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	3/27/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	3/27/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-30	3/27/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	3/27/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	3/27/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	3/27/2019	1,2,4-Trimethylbenzene	1.2	5	1.065995	56	ug/L
OW-30	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	3/27/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	3/27/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	3/27/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	3/27/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	3/27/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	3/27/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	3/27/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	3/27/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	3/27/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	3/27/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	3/27/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	3/27/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	3/27/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	3/27/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	3/27/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	3/27/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	3/27/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	3/27/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	3/27/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	3/27/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	3/27/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	3/27/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	3/27/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	3/27/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	3/27/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	3/27/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	3/27/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	3/27/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	3/27/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	3/27/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	3/27/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	3/27/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	3/27/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	3/27/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	3/27/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	3/27/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	3/27/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	3/27/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	3/27/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	3/27/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	3/27/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	3/27/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	3/27/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-30	3/27/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	3/27/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	3/27/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	3/27/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	3/27/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	3/27/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	3/27/2019	Trichloroethene	ND	5	0.831359	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/27/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	3/27/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	3/27/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	3/27/2019	1,2-Dibromoethane	ND	0.00954	0.003323	0.05	ug/L
OW-30	6/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	6/5/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	6/5/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	6/5/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	6/5/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	6/5/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	6/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-30	6/5/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	6/5/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	6/5/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	6/5/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-30	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	6/5/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	6/5/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	6/5/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	6/5/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	6/5/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	6/5/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	6/5/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	6/5/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	6/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	6/5/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	6/5/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	6/5/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	6/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	6/5/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	6/5/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	6/5/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	6/5/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	6/5/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	6/5/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	6/5/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	6/5/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	6/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	6/5/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	6/5/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	6/5/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	6/5/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	6/5/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	6/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	6/5/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	6/5/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	6/5/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	6/5/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	6/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	6/5/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	6/5/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	6/5/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	6/5/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	6/5/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	6/5/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	6/5/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	6/5/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	6/5/2019	sec-Butylbenzene	1.5	5	1.238656	2000	ug/L
OW-30	6/5/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	6/5/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	6/5/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	6/5/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	6/5/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	6/5/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	6/5/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-30	6/5/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	6/5/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	6/5/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	6/5/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-30	6/5/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-30	6/5/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-30	6/5/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-30	6/5/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-30	6/5/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-30	6/5/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/5/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-30	6/5/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-30	6/5/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-30	6/5/2019	1,2,4-Trimethylbenzene	ND	5	1.065995	56	ug/L
OW-30	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-30	6/5/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-30	6/5/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-30	6/5/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-30	6/5/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-30	6/5/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-30	6/5/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-30	6/5/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-30	6/5/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-30	6/5/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-30	6/5/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-30	6/5/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-30	6/5/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-30	6/5/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-30	6/5/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-30	6/5/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-30	6/5/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-30	6/5/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-30	6/5/2019	Benzene	ND	5	0.833195	5	ug/L
OW-30	6/5/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-30	6/5/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-30	6/5/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-30	6/5/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-30	6/5/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-30	6/5/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-30	6/5/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-30	6/5/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-30	6/5/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-30	6/5/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-30	6/5/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-30	6/5/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-30	6/5/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-30	6/5/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-30	6/5/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-30	6/5/2019	Ethylbenzene	ND	5	0.661704	700	ug/L
OW-30	6/5/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-30	6/5/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-30	6/5/2019	MTBE	**2300**	50	22.804749	143	ug/L
OW-30	6/5/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-30	6/5/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-30	6/5/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-30	6/5/2019	n-Propylbenzene	ND	5	1.07154	660	ug/L
OW-30	6/5/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-30	6/5/2019	Styrene	ND	5	0.956617	100	ug/L
OW-30	6/5/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-30	6/5/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-30	6/5/2019	Toluene	ND	5	1.752181	1000	ug/L
OW-30	6/5/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-30	6/5/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-30	6/5/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-30	6/5/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-30	6/5/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-30	6/5/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-30	6/5/2019	1,2-Dibromoethane	ND	0.00931	0.003244	0.05	ug/L
OW-50	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-50	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-50	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-50	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-50	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-50	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-50	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-50	3/22/2012	Dibromomethane	ND	1	0.15	8	ug/L
OW-50	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-50	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-50	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-50	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-50	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-50	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-50	3/22/2012	Dichlorodifluoromethane	ND	1	0.55	197	ug/L
OW-50	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-50	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-50	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	3/22/2012	1,2,3-Trichlorobenzene	ND	1	0.17	70	ug/L
OW-50	3/22/2012	2-Chlorotoluene	ND	1	0.17	233	ug/L
OW-50	3/22/2012	1,2,4-Trimethylbenzene	ND	1	0.34	56	ug/L
OW-50	3/22/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.58	0.0033	ug/L
OW-50	3/22/2012	1,2,3-Trichloropropane	*ND*	*2*	0.18	0.0084	ug/L
OW-50	3/22/2012	tert-Butylbenzene	ND	1	0.23	690	ug/L
OW-50	3/22/2012	Isopropylbenzene	ND	1	0.19	447	ug/L
OW-50	3/22/2012	p-Isopropyltoluene	ND	1	0.22	NA	ug/L
OW-50	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-50	3/22/2012	Styrene	ND	1	0.15	100	ug/L
OW-50	3/22/2012	n-Propylbenzene	ND	1	0.2	660	ug/L
OW-50	3/22/2012	n-Butylbenzene	ND	1	0.19	1000	ug/L
OW-50	3/22/2012	4-Chlorotoluene	ND	1	0.18	250	ug/L
OW-50	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-50	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-50	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-50	3/22/2012	1,3,5-Trimethylbenzene	ND	1	0.21	60	ug/L
OW-50	3/22/2012	Bromobenzene	ND	1	0.23	62	ug/L
OW-50	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-50	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-50	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-50	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-50	3/22/2012	sec-Butylbenzene	ND	1	0.22	2000	ug/L
OW-50	3/22/2012	1,3-Dichloropropane	ND	1	0.15	370	ug/L
OW-50	3/22/2012	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	3/22/2012	1,1-Dichloropropene	ND	1	0.27	NA	ug/L
OW-50	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-50	3/22/2012	2,2-Dichloropropane	ND	2	0.31	NA	ug/L
OW-50	3/22/2012	1,1,1,2-Tetrachloroethane	ND	1	0.071	5.74	ug/L
OW-50	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-50	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-50	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-50	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-50	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-50	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-50	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-50	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-50	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-50	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-50	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-50	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-50	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-50	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-50	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/23/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-50	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-50	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-50	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-50	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-50	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-50	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-50	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-50	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-50	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-50	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-50	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-50	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-50	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-50	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-50	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-50	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-50	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-50	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-50	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-50	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-50	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-50	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-50	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-50	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-50	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-50	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-50	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-50	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L
OW-50	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-50	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-50	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-50	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-50	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-50	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-50	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-50	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-50	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-50	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-50	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-50	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-50	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-50	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-50	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-50	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-50	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-50	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-50	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-50	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-50	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-50	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-50	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-50	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-50	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-50	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-50	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-50	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-50	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-50	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-50	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-50	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-50	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-50	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-50	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-50	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-50	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-50	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-50	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-50	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-50	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-50	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-50	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-50	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-50	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-50	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-50	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-50	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-50	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-50	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-50	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-50	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-50	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-50	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-50	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-50	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-50	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-50	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-50	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-50	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-50	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-50	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-50	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-50	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-50	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-50	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-50	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-50	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-50	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-50	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-50	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-50	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-50	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-50	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-50	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L
OW-50	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-50	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-50	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-50	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-50	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-50	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-50	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-50	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-50	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-50	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-50	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-50	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-50	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-50	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-50	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-50	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-50	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-50	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-50	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-50	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-50	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-50	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-50	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-50	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-50	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-50	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-50	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-50	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-50	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-50	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-50	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-50	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-50	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-50	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-50	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-50	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-50	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-50	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-50	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-50	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-50	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-50	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-50	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-50	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-50	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-50	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-50	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-50	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-50	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-50	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-50	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-50	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-50	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-50	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-50	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-50	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-50	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-50	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-50	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-50	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-50	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-50	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-50	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-50	9/15/2014	MTBE	ND	1	0.25	143	ug/L
OW-50	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-50	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-50	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-50	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-50	8/10/2015	Chloroform	ND	1	0.21	100	ug/L
OW-50	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-50	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-50	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-50	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-50	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-50	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-50	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-50	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-50	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-50	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-50	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-50	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-50	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-50	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-50	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-50	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-50	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-50	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-50	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-50	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-50	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-50	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-50	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-50	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-50	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-50	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-50	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-50	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-50	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-50	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-50	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-50	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-50	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-50	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-50	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-50	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-50	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-50	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-50	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-50	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-50	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-50	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-50	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-50	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-50	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-50	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-50	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-50	8/10/2015	MTBE	ND	1	0.17	143	ug/L
OW-50	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-50	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-50	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-50	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-50	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-50	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-50	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-50	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-50	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-50	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-50	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-50	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-50	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-50	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-50	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-50	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-50	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-50	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-50	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-50	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-50	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-50	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-50	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-50	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-50	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-50	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-50	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-50	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-50	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-50	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-50	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-50	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-50	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-50	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-50	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-50	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-50	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-50	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-50	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-50	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-50	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-50	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-50	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-50	9/9/2016	1,2-Dichloroethane	0.5	1	0.12	5	ug/L
OW-50	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-50	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-50	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-50	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-50	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-50	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-50	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-50	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-50	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-50	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-50	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-50	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-50	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-50	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-50	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-50	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-50	9/9/2016	MTBE	2.4	1	0.21	143	ug/L
OW-50	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-50	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-50	9/11/2017	Acetone	2.6	10	0.82	14064	ug/L
OW-50	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-50	9/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-50	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-50	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-50	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-50	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-50	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-50	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-50	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-50	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-50	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-50	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-50	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-50	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-50	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-50	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-50	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-50	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-50	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-50	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-50	9/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-50	9/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-50	9/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-50	9/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-50	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-50	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-50	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-50	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-50	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-50	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-50	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-50	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-50	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-50	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-50	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-50	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-50	9/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-50	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-50	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-50	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-50	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-50	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-50	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-50	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-50	9/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-50	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-50	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-50	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-50	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-50	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-50	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	9/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-50	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-50	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-50	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-50	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-50	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-50	9/11/2017	MTBE	5.9	1	0.24	143	ug/L
OW-50	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-50	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-50	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-50	9/17/2018	Acetone	1.9	10	0.79	14064	ug/L
OW-50	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
OW-50	9/17/2018	Benzene	ND	1	0.17	5	ug/L
OW-50	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-50	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-50	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-50	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-50	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-50	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-50	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-50	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-50	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-50	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-50	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-50	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-50	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-50	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-50	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-50	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-50	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-50	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-50	9/17/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-50	9/17/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-50	9/17/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-50	9/17/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-50	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-50	9/17/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-50	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-50	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-50	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-50	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-50	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-50	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-50	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-50	9/17/2018	Styrene	ND	1	0.25	100	ug/L
OW-50	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-50	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-50	9/17/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-50	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-50	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-50	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-50	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-50	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-50	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
OW-50	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-50	9/17/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
OW-50	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-50	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-50	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-50	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	9/17/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-50	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-50	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-50	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-50	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-50	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-50	9/17/2018	MTBE	10	1	0.32	143	ug/L
OW-50	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-50	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-50	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-50	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-50	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-50	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-50	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-50	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-50	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-50	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-50	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-50	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-50	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-50	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-50	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-50	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-50	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-50	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-50	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-50	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-50	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-50	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-50	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-50	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-50	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-50	11/7/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-50	11/7/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-50	11/7/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-50	11/7/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-50	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-50	11/7/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-50	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-50	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-50	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-50	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-50	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-50	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-50	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-50	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-50	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-50	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-50	11/7/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-50	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-50	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-50	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-50	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-50	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-50	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-50	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-50	11/7/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-50	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-50	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-50	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-50	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-50	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-50	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-50	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-50	11/7/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-50	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-50	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-50	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-50	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-50	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-50	11/7/2018	MTBE	10	1	0.46	143	ug/L
OW-50	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-50	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-50	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	3/27/2019	1,2-Dichloroethane	0.38	1	0.194638	5	ug/L
OW-50	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	3/27/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	3/27/2019	Benzene	ND	1	0.166639	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	3/27/2019	MTBE	13	1	0.456095	143	ug/L
OW-50	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	3/27/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-50	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	5/1/2019	1,2-Dichloroethane	0.34	1	0.194638	5	ug/L
OW-50	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	5/1/2019	Benzene	0.19	1	0.166639	5	ug/L
OW-50	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	5/1/2019	MTBE	18	1	0.456095	143	ug/L
OW-50	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	5/1/2019	1,2-Dibromoethane	ND	0.00956	0.003333	0.05	ug/L
OW-50	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-50	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-50	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-50	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	8/16/2019	Acetone	1.5	10	1.199396	14064	ug/L
OW-50	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-50	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	8/16/2019	MTBE	21	1	0.456095	143	ug/L
OW-50	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-50	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	8/16/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-50	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-50	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-50	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-50	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-50	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-50	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-50	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-50	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-50	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-50	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-50	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-50	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-50	10/15/2019	1,2-Dichloroethane	0.5	1	0.194638	5	ug/L
OW-50	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-50	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-50	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-50	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-50	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-50	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-50	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-50	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-50	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-50	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-50	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-50	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-50	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-50	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-50	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-50	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-50	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-50	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-50	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-50	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-50	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-50	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-50	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-50	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-50	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-50	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-50	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-50	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-50	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-50	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-50	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-50	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-50	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-50	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-50	10/15/2019	MTBE	20	1	0.456095	143	ug/L
OW-50	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-50	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-50	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-50	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-50	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-50	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-50	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-50	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-50	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-50	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-50	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-50	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-50	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-50	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-50	10/15/2019	1,2-Dibromoethane	ND	0.00936	0.003261	0.05	ug/L
OW-50	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-50	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-50	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-50	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-50	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-50	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-50	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-50	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-50	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-50	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-50	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-50	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-50	3/2/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-50	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-50	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-50	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-50	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-50	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-50	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-50	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-50	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-50	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-50	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-50	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	3/2/2020	Acetone	3.3	10	2.3	14064	ug/L
OW-50	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-50	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-50	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-50	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-50	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-50	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-50	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-50	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-50	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-50	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-50	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-50	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-50	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-50	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-50	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-50	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-50	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-50	3/2/2020	MTBE	26	1	0.39	143	ug/L
OW-50	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-50	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-50	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-50	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-50	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-50	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-50	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-50	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-50	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-50	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-50	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-50	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-50	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0062	0.05	ug/L
OW-50	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-50	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-50	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-50	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-50	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-50	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-50	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-50	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-50	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-50	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-50	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-50	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-50	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-50	9/17/2020	1,2-Dichloroethane	0.38	1	0.22	5	ug/L
OW-50	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-50	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-50	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-50	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-50	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-50	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-50	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-50	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-50	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-50	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-50	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-50	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-50	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-50	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-50	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-50	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-50	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-50	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-50	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-50	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-50	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-50	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-50	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-50	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-50	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-50	9/17/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-50	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-50	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-50	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-50	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-50	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-50	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-50	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-50	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-50	9/17/2020	MTBE	41	1	0.39	143	ug/L
OW-50	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-50	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-50	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-50	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-50	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-50	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-50	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-50	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-50	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-50	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-50	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-50	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-50	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-50	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-50	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-50	9/17/2020	1,2-Dibromoethane	ND	0.0095	0.0063	0.05	ug/L
OW-50	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-50	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-50	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-50	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-50	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-50	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-50	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-50	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-50	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-50	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-50	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-50	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-50	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-50	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-50	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-50	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-50	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-50	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-50	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-50	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-50	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-50	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-50	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-50	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-50	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-50	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-50	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-50	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-50	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-50	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-50	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-50	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-50	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-50	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-50	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-50	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-50	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-50	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-50	12/9/2020	MTBE	52	1	0.74	143	ug/L
OW-50	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-50	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-50	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-50	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-50	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-50	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-50	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-50	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-50	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-50	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-50	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-50	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-50	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-50	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-50	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-50	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-50	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-50	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-50	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-50	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-50	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-50	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-50	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-50	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-50	12/9/2020	1,2-Dibromoethane	ND	0.0195	0.00487	0.05	ug/L
OW-52	3/22/2012	Carbon tetrachloride	ND	1	0.27	5	ug/L
OW-52	3/22/2012	Acetone	ND	10	2.1	14064	ug/L
OW-52	3/22/2012	Chloroform	ND	1	0.4	100	ug/L
OW-52	3/22/2012	Benzene	ND	1	0.23	5	ug/L
OW-52	3/22/2012	1,1,1-Trichloroethane	ND	1	0.24	200	ug/L
OW-52	3/22/2012	Bromomethane	ND	3	0.98	7.54	ug/L
OW-52	3/22/2012	Chloromethane	ND	3	0.52	20.32	ug/L
OW-52	3/22/2012	Chloroethane	ND	2	0.7	20857	ug/L
OW-52	3/22/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	3/22/2012	Methylene Chloride	ND	3	0.3	5	ug/L
OW-52	3/22/2012	Carbon Disulfide	ND	10	0.54	810	ug/L
OW-52	3/22/2012	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	3/22/2012	Bromodichloromethane	ND	1	0.13	1.34	ug/L
OW-52	3/22/2012	1,1-Dichloroethane	ND	1	0.17	25	ug/L
OW-52	3/22/2012	1,1-Dichloroethene	ND	1	0.28	7	ug/L
OW-52	3/22/2012	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-52	3/22/2012	1,2-Dichloropropane	ND	1	0.32	5	ug/L
OW-52	3/22/2012	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	3/22/2012	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	3/22/2012	Trichloroethene	ND	1	0.37	5	ug/L
OW-52	3/22/2012	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	3/22/2012	Ethylbenzene	ND	1	0.11	700	ug/L
OW-52	3/22/2012	1,2-Dibromoethane	*ND*	*1*	0.17	0.05	ug/L
OW-52	3/22/2012	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-52	3/22/2012	4-Methyl-2-Pentanone	ND	10	0.55	1243	ug/L
OW-52	3/22/2012	Toluene	ND	1	0.17	1000	ug/L
OW-52	3/22/2012	Chlorobenzene	ND	1	0.12	77.6	ug/L
OW-52	3/22/2012	2-Chloroethyl vinyl ether	*ND*	*10*	0.78		ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/22/2012	Dibromochloromethane	ND	1	0.094	1.68	ug/L
OW-52	3/22/2012	Tetrachloroethene	ND	1	0.39	5	ug/L
OW-52	3/22/2012	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	3/22/2012	2-Hexanone	ND	10	0.78	38	ug/L
OW-52	3/22/2012	Xylenes, Total	ND	1.5	0.2	620	ug/L
OW-52	3/22/2012	MTBE	ND	1	0.52	143	ug/L
OW-52	3/22/2012	cis-1,3-Dichloropropene	ND	1	0.15	NA	ug/L
OW-52	3/22/2012	trans-1,3-Dichloropropene	ND	1	0.25	NA	ug/L
OW-52	6/13/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	6/13/2012	Acetone	ND	10	2.1	14064	ug/L
OW-52	6/13/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	6/13/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	6/13/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	6/13/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	6/13/2012	Chloromethane	ND	3	0.56	20.32	ug/L
OW-52	6/13/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	6/13/2012	Chloroethane	ND	2	0.47	20857	ug/L
OW-52	6/13/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	6/13/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	6/13/2012	Carbon Disulfide	ND	10	0.64	810	ug/L
OW-52	6/13/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	6/13/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	6/13/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	6/13/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	6/13/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	6/13/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	6/13/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	6/13/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	6/13/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	6/13/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	6/13/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	6/13/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	6/13/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	6/13/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	6/13/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	6/13/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	6/13/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	6/13/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	6/13/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	6/13/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	6/13/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	6/13/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	6/13/2012	n-Butylbenzene	ND	1	0.4	1000	ug/L
OW-52	6/13/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	6/13/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	6/13/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	6/13/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	6/13/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	6/13/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	6/13/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	6/13/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	6/13/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	6/13/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	6/13/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	6/13/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	6/13/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	6/13/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	6/13/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	6/13/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	6/13/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	6/13/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	6/13/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	6/13/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	6/13/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	6/13/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	8/23/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	8/23/2012	Acetone	ND	10	1.5	14064	ug/L
OW-52	8/23/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	8/23/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	8/23/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	8/23/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	8/23/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-52	8/23/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	8/23/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-52	8/23/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	8/23/2012	Methylene Chloride	ND	3	0.35	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-52	8/23/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	8/23/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	8/23/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	8/23/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	8/23/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	8/23/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	8/23/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	8/23/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	8/23/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	8/23/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	8/23/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	8/23/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	8/23/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	8/23/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	8/23/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	8/23/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	8/23/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	8/23/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	8/23/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	8/23/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	8/23/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	8/23/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-52	8/23/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	8/23/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	8/23/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	8/23/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	8/23/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	8/23/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	8/23/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	8/23/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	8/23/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	8/23/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	8/23/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	8/23/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	8/23/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	8/23/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	8/23/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	8/23/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	8/23/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	8/23/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	8/23/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	8/23/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	8/23/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	8/23/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	11/27/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
OW-52	11/27/2012	Acetone	ND	10	1.5	14064	ug/L
OW-52	11/27/2012	Chloroform	ND	1	0.35	100	ug/L
OW-52	11/27/2012	Benzene	ND	1	0.4	5	ug/L
OW-52	11/27/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
OW-52	11/27/2012	Bromomethane	ND	3	0.56	7.54	ug/L
OW-52	11/27/2012	Chloromethane	ND	3	0.65	20.32	ug/L
OW-52	11/27/2012	Dibromomethane	ND	1	0.65	8	ug/L
OW-52	11/27/2012	Chloroethane	ND	2	0.44	20857	ug/L
OW-52	11/27/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
OW-52	11/27/2012	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	11/27/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
OW-52	11/27/2012	Bromoform	ND	1	0.43	32.9	ug/L
OW-52	11/27/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
OW-52	11/27/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
OW-52	11/27/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
OW-52	11/27/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
OW-52	11/27/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
OW-52	11/27/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
OW-52	11/27/2012	2-Butanone	ND	10	2.2	5565	ug/L
OW-52	11/27/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
OW-52	11/27/2012	Trichloroethene	ND	1	0.3	5	ug/L
OW-52	11/27/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
OW-52	11/27/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
OW-52	11/27/2012	Hexachlorobutadiene	ND	1	0.55	1.39	ug/L
OW-52	11/27/2012	1-Methylnaphthalene	ND	4	0.72	NA	ug/L
OW-52	11/27/2012	Naphthalene	ND	2	0.37	30	ug/L
OW-52	11/27/2012	2-Methylnaphthalene	*ND*	*4*	0.6		ug/L
OW-52	11/27/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
OW-52	11/27/2012	1,2-Dichlorobenzene	ND	1	0.47	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	11/27/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
OW-52	11/27/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
OW-52	11/27/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
OW-52	11/27/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
OW-52	11/27/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
OW-52	11/27/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
OW-52	11/27/2012	Ethylbenzene	ND	1	0.38	700	ug/L
OW-52	11/27/2012	Styrene	ND	1	0.41	100	ug/L
OW-52	11/27/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
OW-52	11/27/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
OW-52	11/27/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
OW-52	11/27/2012	1,4-Dichlorobenzene	ND	1	0.43	75	ug/L
OW-52	11/27/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
OW-52	11/27/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
OW-52	11/27/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
OW-52	11/27/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
OW-52	11/27/2012	Bromobenzene	ND	1	0.63	62	ug/L
OW-52	11/27/2012	Toluene	ND	1	0.47	1000	ug/L
OW-52	11/27/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
OW-52	11/27/2012	1,2,4-Trichlorobenzene	ND	1	0.43	70	ug/L
OW-52	11/27/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
OW-52	11/27/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
OW-52	11/27/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
OW-52	11/27/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
OW-52	11/27/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
OW-52	11/27/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
OW-52	11/27/2012	1,3-Dichlorobenzene	ND	1	0.47	N/A	ug/L
OW-52	11/27/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
OW-52	11/27/2012	2-Hexanone	ND	10	0.89	38	ug/L
OW-52	11/27/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
OW-52	11/27/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
OW-52	11/27/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
OW-52	11/27/2012	MTBE	ND	1	0.96	143	ug/L
OW-52	11/27/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
OW-52	11/27/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
OW-52	9/4/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
OW-52	9/4/2013	Acetone	ND	10	1.7	14064	ug/L
OW-52	9/4/2013	Chloroform	ND	1	0.47	100	ug/L
OW-52	9/4/2013	Benzene	ND	1	0.46	5	ug/L
OW-52	9/4/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
OW-52	9/4/2013	Bromomethane	ND	3	0.49	7.54	ug/L
OW-52	9/4/2013	Chloromethane	ND	3	0.37	20.32	ug/L
OW-52	9/4/2013	Dibromomethane	ND	1	0.52	8	ug/L
OW-52	9/4/2013	Chloroethane	ND	2	0.3	20857	ug/L
OW-52	9/4/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
OW-52	9/4/2013	Methylene Chloride	ND	3	0.35	5	ug/L
OW-52	9/4/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
OW-52	9/4/2013	Bromoform	ND	1	0.37	32.9	ug/L
OW-52	9/4/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
OW-52	9/4/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
OW-52	9/4/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
OW-52	9/4/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
OW-52	9/4/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
OW-52	9/4/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
OW-52	9/4/2013	2-Butanone	ND	10	1	5565	ug/L
OW-52	9/4/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
OW-52	9/4/2013	Trichloroethene	ND	1	0.42	5	ug/L
OW-52	9/4/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
OW-52	9/4/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
OW-52	9/4/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
OW-52	9/4/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
OW-52	9/4/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
OW-52	9/4/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
OW-52	9/4/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
OW-52	9/4/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
OW-52	9/4/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
OW-52	9/4/2013	Ethylbenzene	ND	1	0.45	700	ug/L
OW-52	9/4/2013	Styrene	ND	1	0.58	100	ug/L
OW-52	9/4/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
OW-52	9/4/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
OW-52	9/4/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
OW-52	9/4/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
OW-52	9/4/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
OW-52	9/4/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
OW-52	9/4/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
OW-52	9/4/2013	Bromobenzene	ND	1	0.57	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/4/2013	Toluene	ND	1	0.44	1000	ug/L
OW-52	9/4/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
OW-52	9/4/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-52	9/4/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
OW-52	9/4/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
OW-52	9/4/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
OW-52	9/4/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
OW-52	9/4/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
OW-52	9/4/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
OW-52	9/4/2013	2-Hexanone	ND	10	1.3	38	ug/L
OW-52	9/4/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
OW-52	9/4/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
OW-52	9/4/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
OW-52	9/4/2013	MTBE	ND	1	0.77	143	ug/L
OW-52	9/4/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
OW-52	9/4/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
OW-52	9/15/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-52	9/15/2014	Acetone	ND	10	4.9	14064	ug/L
OW-52	9/15/2014	Chloroform	ND	1	0.32	100	ug/L
OW-52	9/15/2014	Benzene	ND	1	0.15	5	ug/L
OW-52	9/15/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
OW-52	9/15/2014	Bromomethane	ND	3	0.41	7.54	ug/L
OW-52	9/15/2014	Chloromethane	ND	3	0.52	20.32	ug/L
OW-52	9/15/2014	Dibromomethane	ND	1	0.19	8	ug/L
OW-52	9/15/2014	Chloroethane	ND	2	0.48	20857	ug/L
OW-52	9/15/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
OW-52	9/15/2014	Methylene Chloride	ND	3	0.27	5	ug/L
OW-52	9/15/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
OW-52	9/15/2014	Bromoform	ND	1	0.25	32.9	ug/L
OW-52	9/15/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
OW-52	9/15/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
OW-52	9/15/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
OW-52	9/15/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-52	9/15/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
OW-52	9/15/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
OW-52	9/15/2014	2-Butanone	ND	10	1.4	5565	ug/L
OW-52	9/15/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	9/15/2014	Trichloroethene	ND	1	0.19	5	ug/L
OW-52	9/15/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
OW-52	9/15/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
OW-52	9/15/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	9/15/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	9/15/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
OW-52	9/15/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
OW-52	9/15/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
OW-52	9/15/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
OW-52	9/15/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
OW-52	9/15/2014	Ethylbenzene	ND	1	0.13	700	ug/L
OW-52	9/15/2014	Styrene	ND	1	0.12	100	ug/L
OW-52	9/15/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
OW-52	9/15/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
OW-52	9/15/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
OW-52	9/15/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
OW-52	9/15/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
OW-52	9/15/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	9/15/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
OW-52	9/15/2014	Bromobenzene	ND	1	0.18	62	ug/L
OW-52	9/15/2014	Toluene	ND	1	0.17	1000	ug/L
OW-52	9/15/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	9/15/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
OW-52	9/15/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
OW-52	9/15/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
OW-52	9/15/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	9/15/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-52	9/15/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
OW-52	9/15/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
OW-52	9/15/2014	2-Hexanone	ND	10	0.86	38	ug/L
OW-52	9/15/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
OW-52	9/15/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
OW-52	9/15/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
OW-52	9/15/2014	MTBE	ND	1	0.25	143	ug/L
OW-52	9/15/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
OW-52	9/15/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	8/10/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
OW-52	8/10/2015	Acetone	ND	10	0.94	14064	ug/L
OW-52	8/10/2015	Chloroform	ND	1	0.21	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	Benzene	ND	1	0.065	5	ug/L
OW-52	8/10/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
OW-52	8/10/2015	Bromomethane	ND	3	1.2	7.54	ug/L
OW-52	8/10/2015	Chloromethane	ND	3	0.17	20.32	ug/L
OW-52	8/10/2015	Dibromomethane	ND	1	0.23	8	ug/L
OW-52	8/10/2015	Chloroethane	ND	2	0.1	20857	ug/L
OW-52	8/10/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
OW-52	8/10/2015	Methylene Chloride	ND	3	0.36	5	ug/L
OW-52	8/10/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
OW-52	8/10/2015	Bromoform	ND	1	0.16	32.9	ug/L
OW-52	8/10/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
OW-52	8/10/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	8/10/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
OW-52	8/10/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
OW-52	8/10/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
OW-52	8/10/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-52	8/10/2015	2-Butanone	ND	10	0.36	5565	ug/L
OW-52	8/10/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
OW-52	8/10/2015	Trichloroethene	ND	1	0.16	5	ug/L
OW-52	8/10/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
OW-52	8/10/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	8/10/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
OW-52	8/10/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
OW-52	8/10/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
OW-52	8/10/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
OW-52	8/10/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
OW-52	8/10/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
OW-52	8/10/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
OW-52	8/10/2015	Ethylbenzene	ND	1	0.1	700	ug/L
OW-52	8/10/2015	Styrene	ND	1	0.11	100	ug/L
OW-52	8/10/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
OW-52	8/10/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	8/10/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
OW-52	8/10/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-52	8/10/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
OW-52	8/10/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
OW-52	8/10/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-52	8/10/2015	Bromobenzene	ND	1	0.11	62	ug/L
OW-52	8/10/2015	Toluene	ND	1	0.11	1000	ug/L
OW-52	8/10/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
OW-52	8/10/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
OW-52	8/10/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
OW-52	8/10/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
OW-52	8/10/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-52	8/10/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
OW-52	8/10/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
OW-52	8/10/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
OW-52	8/10/2015	2-Hexanone	ND	10	0.48	38	ug/L
OW-52	8/10/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
OW-52	8/10/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-52	8/10/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
OW-52	8/10/2015	MTBE	ND	1	0.17	143	ug/L
OW-52	8/10/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
OW-52	8/10/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-52	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-52	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
OW-52	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-52	9/9/2016	Benzene	ND	1	0.096	5	ug/L
OW-52	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-52	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-52	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-52	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-52	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-52	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-52	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-52	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-52	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-52	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-52	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-52	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-52	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-52	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-52	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-52	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-52	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-52	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-52	9/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-52	9/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-52	9/9/2016	Naphthalene	ND	2	0.093	30	ug/L
OW-52	9/9/2016	2-Methylnaphthalene	*ND*	*4*	0.16		ug/L
OW-52	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-52	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-52	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-52	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-52	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-52	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
OW-52	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-52	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-52	9/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-52	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-52	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-52	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-52	9/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-52	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-52	9/9/2016	1,2-Dichloroethane	0.49	1	0.12	5	ug/L
OW-52	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-52	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-52	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-52	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-52	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-52	9/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-52	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-52	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-52	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-52	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-52	9/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-52	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-52	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-52	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-52	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-52	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-52	9/9/2016	MTBE	0.46	1	0.21	143	ug/L
OW-52	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-52	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-52	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-52	9/11/2017	Acetone	2.1	10	0.82	14064	ug/L
OW-52	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-52	9/11/2017	Benzene	ND	1	0.062	5	ug/L
OW-52	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-52	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-52	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-52	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-52	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-52	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-52	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-52	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-52	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-52	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-52	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-52	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-52	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-52	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-52	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-52	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-52	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-52	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-52	9/11/2017	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-52	9/11/2017	1-Methylnaphthalene	ND	4	0.16	NA	ug/L
OW-52	9/11/2017	Naphthalene	ND	2	0.11	30	ug/L
OW-52	9/11/2017	2-Methylnaphthalene	*ND*	*4*	0.15		ug/L
OW-52	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/11/2017	1,2-Dichlorobenzene	ND	1	0.09	600	ug/L
OW-52	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-52	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-52	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-52	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-52	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-52	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-52	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-52	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-52	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-52	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-52	9/11/2017	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-52	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-52	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-52	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-52	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-52	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-52	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-52	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-52	9/11/2017	1,2,4-Trichlorobenzene	ND	1	0.14	70	ug/L
OW-52	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-52	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-52	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-52	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-52	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-52	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	9/11/2017	1,3-Dichlorobenzene	ND	1	0.15	N/A	ug/L
OW-52	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-52	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-52	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-52	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-52	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-52	9/11/2017	MTBE	1	1	0.24	143	ug/L
OW-52	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-52	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-52	9/17/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-52	9/17/2018	Acetone	1	10	0.79	14064	ug/L
OW-52	9/17/2018	Chloroform	ND	1	0.4	100	ug/L
OW-52	9/17/2018	Benzene	ND	1	0.17	5	ug/L
OW-52	9/17/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-52	9/17/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-52	9/17/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-52	9/17/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-52	9/17/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-52	9/17/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-52	9/17/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-52	9/17/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-52	9/17/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-52	9/17/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-52	9/17/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-52	9/17/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-52	9/17/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-52	9/17/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-52	9/17/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-52	9/17/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-52	9/17/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-52	9/17/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-52	9/17/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	9/17/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-52	9/17/2018	Hexachlorobutadiene	ND	1	0.8	1.39	ug/L
OW-52	9/17/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-52	9/17/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-52	9/17/2018	2-Methylnaphthalene	*ND*	*4*	0.24		ug/L
OW-52	9/17/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-52	9/17/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-52	9/17/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-52	9/17/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-52	9/17/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-52	9/17/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-52	9/17/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-52	9/17/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-52	9/17/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-52	9/17/2018	Styrene	ND	1	0.25	100	ug/L
OW-52	9/17/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-52	9/17/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	9/17/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-52	9/17/2018	1,4-Dichlorobenzene	ND	1	0.4	75	ug/L
OW-52	9/17/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-52	9/17/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-52	9/17/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-52	9/17/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-52	9/17/2018	Toluene	ND	1	0.17	1000	ug/L
OW-52	9/17/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-52	9/17/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	9/17/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
OW-52	9/17/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-52	9/17/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	9/17/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-52	9/17/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-52	9/17/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-52	9/17/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	9/17/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-52	9/17/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-52	9/17/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-52	9/17/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-52	9/17/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-52	9/17/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-52	9/17/2018	MTBE	1.1	1	0.32	143	ug/L
OW-52	9/17/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-52	9/17/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-52	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-52	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-52	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-52	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-52	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-52	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-52	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-52	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-52	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-52	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-52	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-52	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-52	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-52	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-52	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-52	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-52	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-52	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-52	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-52	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-52	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-52	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-52	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-52	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-52	11/7/2018	Hexachlorobutadiene	ND	1	0.39	1.39	ug/L
OW-52	11/7/2018	1-Methylnaphthalene	ND	4	0.34	NA	ug/L
OW-52	11/7/2018	Naphthalene	ND	2	0.29	30	ug/L
OW-52	11/7/2018	2-Methylnaphthalene	*ND*	*4*	0.35		ug/L
OW-52	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-52	11/7/2018	1,2-Dichlorobenzene	ND	1	0.31	600	ug/L
OW-52	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-52	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-52	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-52	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-52	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-52	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-52	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-52	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-52	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-52	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-52	11/7/2018	1,4-Dichlorobenzene	ND	1	0.29	75	ug/L
OW-52	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-52	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-52	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-52	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-52	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-52	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-52	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-52	11/7/2018	1,2,4-Trichlorobenzene	ND	1	0.27	70	ug/L
OW-52	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-52	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-52	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-52	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-52	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-52	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-52	11/7/2018	1,3-Dichlorobenzene	ND	1	0.31	N/A	ug/L
OW-52	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-52	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-52	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-52	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-52	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-52	11/7/2018	MTBE	1.5	1	0.46	143	ug/L
OW-52	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-52	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-52	3/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	3/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	3/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	3/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	3/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	3/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	3/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	3/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	3/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	3/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	3/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	3/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	3/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	3/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	3/27/2019	1,2-Dichloroethane	0.35	1	0.194638	5	ug/L
OW-52	3/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	3/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	3/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	3/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	3/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	3/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	3/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	3/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	3/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	3/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	3/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	3/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	3/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	3/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	3/27/2019	Acetone	4.3	10	1.199396	14064	ug/L
OW-52	3/27/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	3/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	3/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	3/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	3/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	3/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	3/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	3/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	3/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	3/27/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	3/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	3/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	3/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	3/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	3/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	3/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	3/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	3/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	3/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	3/27/2019	MTBE	1.6	1	0.456095	143	ug/L
OW-52	3/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	3/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	3/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	3/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	3/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	3/27/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	3/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	3/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	3/27/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	3/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	3/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	3/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	3/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	3/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	3/27/2019	1,2-Dibromoethane	ND	0.00943	0.003288	0.05	ug/L
OW-52	5/1/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	5/1/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	5/1/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	5/1/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	5/1/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	5/1/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	5/1/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	5/1/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	5/1/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	5/1/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	5/1/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	5/1/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	5/1/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	5/1/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	5/1/2019	1,2-Dichloroethane	0.32	1	0.194638	5	ug/L
OW-52	5/1/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	5/1/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	5/1/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	5/1/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	5/1/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	5/1/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	5/1/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	5/1/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	5/1/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	5/1/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	5/1/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	5/1/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	5/1/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	5/1/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	5/1/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-52	5/1/2019	Benzene	0.19	1	0.166639	5	ug/L
OW-52	5/1/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	5/1/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	5/1/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	5/1/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	5/1/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	5/1/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	5/1/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	5/1/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	5/1/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	5/1/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	5/1/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	5/1/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	5/1/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	5/1/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	5/1/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	5/1/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	5/1/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	5/1/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	5/1/2019	MTBE	1.9	1	0.456095	143	ug/L
OW-52	5/1/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	5/1/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	5/1/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	5/1/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	5/1/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	5/1/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	5/1/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	5/1/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	5/1/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	5/1/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	5/1/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	5/1/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	5/1/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	5/1/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	5/1/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	5/1/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-52	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-52	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	8/16/2019	Acetone	1.4	10	1.199396	14064	ug/L
OW-52	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	8/16/2019	MTBE	2.2	1	0.456095	143	ug/L
OW-52	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	8/16/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	8/16/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	8/16/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	8/16/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	8/16/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	8/16/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	8/16/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	8/16/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	8/16/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-52	8/16/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	8/16/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	8/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	8/16/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	8/16/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-52	8/16/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	8/16/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	8/16/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	8/16/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	8/16/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	8/16/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	8/16/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	8/16/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	8/16/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	8/16/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	8/16/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	8/16/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	8/16/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	8/16/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-52	8/16/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	8/16/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	8/16/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	8/16/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	8/16/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	8/16/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	8/16/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	8/16/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	8/16/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	8/16/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	8/16/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	8/16/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	8/16/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	8/16/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	8/16/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	8/16/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	8/16/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	8/16/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	8/16/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	8/16/2019	MTBE	2.3	1	0.456095	143	ug/L
OW-52	8/16/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	8/16/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	8/16/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	8/16/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	8/16/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	8/16/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	8/16/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	8/16/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	8/16/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	8/16/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	8/16/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	8/16/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	8/16/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	8/16/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	8/16/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	ND	0.00949	0.003305	0.05	ug/L
OW-52	8/16/2019	1,2-Dibromoethane	ND	0.00941	0.003279	0.05	ug/L
OW-52	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-52	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-52	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-52	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-52	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-52	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-52	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-52	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-52	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-52	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-52	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-52	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-52	10/15/2019	1,2-Dichloroethane	0.47	1	0.194638	5	ug/L
OW-52	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-52	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-52	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-52	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-52	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-52	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-52	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-52	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-52	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-52	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-52	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-52	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-52	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-52	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-52	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-52	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-52	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-52	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-52	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-52	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-52	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-52	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-52	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-52	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-52	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-52	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-52	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-52	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-52	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-52	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-52	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-52	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-52	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-52	10/15/2019	MTBE	2	1	0.456095	143	ug/L
OW-52	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-52	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-52	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-52	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-52	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-52	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-52	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-52	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-52	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-52	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-52	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-52	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-52	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-52	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-52	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-52	10/15/2019	1,2-Dibromoethane	ND	0.00933	0.003253	0.05	ug/L
OW-52	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-52	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-52	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-52	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-52	3/2/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-52	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-52	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-52	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-52	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-52	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-52	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-52	3/2/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-52	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-52	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-52	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-52	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-52	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-52	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-52	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-52	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-52	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-52	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-52	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	3/2/2020	Acetone	2.9	10	2.3	14064	ug/L
OW-52	3/2/2020	Benzene	ND	1	0.23	5	ug/L
OW-52	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-52	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-52	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-52	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-52	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-52	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-52	3/2/2020	Chloroform	ND	1	0.13	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-52	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-52	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-52	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-52	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-52	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-52	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-52	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-52	3/2/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-52	3/2/2020	MTBE	2.3	1	0.39	143	ug/L
OW-52	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-52	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-52	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-52	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-52	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-52	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-52	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-52	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-52	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-52	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-52	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-52	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-52	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-52	9/17/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-52	9/17/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-52	9/17/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-52	9/17/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-52	9/17/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-52	9/17/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-52	9/17/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-52	9/17/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-52	9/17/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-52	9/17/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-52	9/17/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-52	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-52	9/17/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-52	9/17/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-52	9/17/2020	1,2-Dichloroethane	0.35	1	0.22	5	ug/L
OW-52	9/17/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-52	9/17/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-52	9/17/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-52	9/17/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-52	9/17/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-52	9/17/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-52	9/17/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-52	9/17/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-52	9/17/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-52	9/17/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-52	9/17/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-52	9/17/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-52	9/17/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-52	9/17/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-52	9/17/2020	Acetone	ND	10	2.3	14064	ug/L
OW-52	9/17/2020	Benzene	ND	1	0.23	5	ug/L
OW-52	9/17/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-52	9/17/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-52	9/17/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-52	9/17/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-52	9/17/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-52	9/17/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-52	9/17/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-52	9/17/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-52	9/17/2020	Chloroform	ND	1	0.13	100	ug/L
OW-52	9/17/2020	Chloromethane	0.58	3	0.4	20.32	ug/L
OW-52	9/17/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-52	9/17/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-52	9/17/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-52	9/17/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-52	9/17/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-52	9/17/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-52	9/17/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-52	9/17/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-52	9/17/2020	MTBE	2.9	1	0.39	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-52	9/17/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-52	9/17/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-52	9/17/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-52	9/17/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-52	9/17/2020	Styrene	ND	1	0.13	100	ug/L
OW-52	9/17/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-52	9/17/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-52	9/17/2020	Toluene	ND	1	0.2	1000	ug/L
OW-52	9/17/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-52	9/17/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-52	9/17/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-52	9/17/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-52	9/17/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-52	9/17/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-52	9/17/2020	1,2-Dibromoethane	ND	0.0094	0.0062	0.05	ug/L
OW-52	12/9/2020	1,2-Dibromoethane	ND	0.0197	0.00492	0.05	ug/L
OW-52	12/9/2020	Acetone	ND	25	10	14064	ug/L
OW-52	12/9/2020	Benzene	ND	1	0.38	5	ug/L
OW-52	12/9/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-52	12/9/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-52	12/9/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-52	12/9/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-52	12/9/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-52	12/9/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-52	12/9/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-52	12/9/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-52	12/9/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-52	12/9/2020	Chloroform	ND	1	0.6	100	ug/L
OW-52	12/9/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-52	12/9/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-52	12/9/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-52	12/9/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-52	12/9/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-52	12/9/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-52	12/9/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-52	12/9/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-52	12/9/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-52	12/9/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-52	12/9/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-52	12/9/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-52	12/9/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-52	12/9/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-52	12/9/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-52	12/9/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-52	12/9/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-52	12/9/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-52	12/9/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-52	12/9/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-52	12/9/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-52	12/9/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-52	12/9/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-52	12/9/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-52	12/9/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-52	12/9/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-52	12/9/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-52	12/9/2020	MTBE	2.69	1	0.74	143	ug/L
OW-52	12/9/2020	Naphthalene	ND	1	1	30	ug/L
OW-52	12/9/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-52	12/9/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-52	12/9/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-52	12/9/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-52	12/9/2020	Styrene	ND	1	1	100	ug/L
OW-52	12/9/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-52	12/9/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-52	12/9/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-52	12/9/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-52	12/9/2020	Toluene	ND	1	0.41	1000	ug/L
OW-52	12/9/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-52	12/9/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-52	12/9/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-52	12/9/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-52	12/9/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-52	12/9/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-52	12/9/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-52	12/9/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	12/9/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-52	12/9/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-52	12/9/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-52	12/9/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-52	12/9/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-54	6/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	6/1/2016	Acetone	21	10	4.9	14064	ug/L
OW-54	6/1/2016	Chloroform	ND	1	0.089	100	ug/L
OW-54	6/1/2016	Benzene	**160**	20	1.9	5	ug/L
OW-54	6/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-54	6/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-54	6/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-54	6/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-54	6/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-54	6/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-54	6/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-54	6/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-54	6/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-54	6/1/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-54	6/1/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
OW-54	6/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-54	6/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-54	6/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-54	6/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-54	6/1/2016	2-Butanone	5.4	10	0.74	5565	ug/L
OW-54	6/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-54	6/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-54	6/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-54	6/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-54	6/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	6/1/2016	1,2,4-Trimethylbenzene	36	1	0.11	56	ug/L
OW-54	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-54	6/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-54	6/1/2016	tert-Butylbenzene	0.12	1	0.12	690	ug/L
OW-54	6/1/2016	Isopropylbenzene	1.7	1	0.1	447	ug/L
OW-54	6/1/2016	p-Isopropyltoluene	0.47	1	0.14	NA	ug/L
OW-54	6/1/2016	Ethylbenzene	55	1	0.11	700	ug/L
OW-54	6/1/2016	Styrene	ND	1	0.11	100	ug/L
OW-54	6/1/2016	n-Propylbenzene	7.4	1	0.13	660	ug/L
OW-54	6/1/2016	n-Butylbenzene	1.6	3	0.16	1000	ug/L
OW-54	6/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-54	6/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-54	6/1/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
OW-54	6/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-54	6/1/2016	1,3,5-Trimethylbenzene	11	1	0.12	60	ug/L
OW-54	6/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-54	6/1/2016	Toluene	200	20	2.4	1000	ug/L
OW-54	6/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	6/1/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-54	6/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	6/1/2016	sec-Butylbenzene	1.2	1	0.12	2000	ug/L
OW-54	6/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-54	6/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-54	6/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-54	6/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-54	6/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-54	6/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-54	6/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-54	6/1/2016	Xylenes, Total	170	1.5	0.37	620	ug/L
OW-54	6/1/2016	MTBE	**2000**	20	4.2	143	ug/L
OW-54	6/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-54	6/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-54	9/16/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-54	9/16/2016	Acetone	ND	50	25	14064	ug/L
OW-54	9/16/2016	Chloroform	ND	5	0.44	100	ug/L
OW-54	9/16/2016	Benzene	**100**	5	0.48	5	ug/L
OW-54	9/16/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-54	9/16/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-54	9/16/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-54	9/16/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-54	9/16/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-54	9/16/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-54	9/16/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-54	9/16/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-54	9/16/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-54	9/16/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/16/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-54	9/16/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-54	9/16/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-54	9/16/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-54	9/16/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-54	9/16/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-54	9/16/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-54	9/16/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-54	9/16/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-54	9/16/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-54	9/16/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-54	9/16/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-54	9/16/2016	Naphthalene	4.2	10	0.46	30	ug/L
OW-54	9/16/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-54	9/16/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	9/16/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-54	9/16/2016	1,2,4-Trimethylbenzene	15	5	0.55	56	ug/L
OW-54	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-54	9/16/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-54	9/16/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-54	9/16/2016	Isopropylbenzene	1.2	5	0.52	447	ug/L
OW-54	9/16/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-54	9/16/2016	Ethylbenzene	29	5	0.56	700	ug/L
OW-54	9/16/2016	Styrene	ND	5	0.55	100	ug/L
OW-54	9/16/2016	n-Propylbenzene	3.7	5	0.66	660	ug/L
OW-54	9/16/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-54	9/16/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-54	9/16/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-54	9/16/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-54	9/16/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-54	9/16/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-54	9/16/2016	1,3,5-Trimethylbenzene	6.5	5	0.58	60	ug/L
OW-54	9/16/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-54	9/16/2016	Toluene	8	5	0.59	1000	ug/L
OW-54	9/16/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-54	9/16/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-54	9/16/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-54	9/16/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-54	9/16/2016	sec-Butylbenzene	1.7	5	0.62	2000	ug/L
OW-54	9/16/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-54	9/16/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-54	9/16/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-54	9/16/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-54	9/16/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-54	9/16/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-54	9/16/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-54	9/16/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-54	9/16/2016	Xylenes, Total	28	7.5	1.8	620	ug/L
OW-54	9/16/2016	MTBE	**2000**	50	11	143	ug/L
OW-54	9/16/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-54	9/16/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-54	11/9/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-54	11/9/2016	Acetone	ND	50	25	14064	ug/L
OW-54	11/9/2016	Chloroform	ND	5	0.44	100	ug/L
OW-54	11/9/2016	Benzene	**94**	5	0.48	5	ug/L
OW-54	11/9/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-54	11/9/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-54	11/9/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-54	11/9/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-54	11/9/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-54	11/9/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-54	11/9/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-54	11/9/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-54	11/9/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-54	11/9/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-54	11/9/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-54	11/9/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-54	11/9/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-54	11/9/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-54	11/9/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-54	11/9/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-54	11/9/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-54	11/9/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-54	11/9/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-54	11/9/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-54	11/9/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/9/2016	1-Methylnaphthalene	1.9	20	1	NA	ug/L
OW-54	11/9/2016	Naphthalene	3.7	10	0.46	30	ug/L
OW-54	11/9/2016	2-Methylnaphthalene	**2.1**	20	0.79		ug/L
OW-54	11/9/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	11/9/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-54	11/9/2016	1,2,4-Trimethylbenzene	16	5	0.55	56	ug/L
OW-54	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-54	11/9/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-54	11/9/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-54	11/9/2016	Isopropylbenzene	1.2	5	0.52	447	ug/L
OW-54	11/9/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-54	11/9/2016	Ethylbenzene	25	5	0.56	700	ug/L
OW-54	11/9/2016	Styrene	ND	5	0.55	100	ug/L
OW-54	11/9/2016	n-Propylbenzene	3.1	5	0.66	660	ug/L
OW-54	11/9/2016	n-Butylbenzene	1	15	0.8	1000	ug/L
OW-54	11/9/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-54	11/9/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-54	11/9/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-54	11/9/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-54	11/9/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-54	11/9/2016	1,3,5-Trimethylbenzene	4.8	5	0.58	60	ug/L
OW-54	11/9/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-54	11/9/2016	Toluene	6.5	5	0.59	1000	ug/L
OW-54	11/9/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-54	11/9/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-54	11/9/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-54	11/9/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-54	11/9/2016	sec-Butylbenzene	1.1	5	0.62	2000	ug/L
OW-54	11/9/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-54	11/9/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-54	11/9/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-54	11/9/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-54	11/9/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-54	11/9/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-54	11/9/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-54	11/9/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-54	11/9/2016	Xylenes, Total	20	7.5	1.8	620	ug/L
OW-54	11/9/2016	MTBE	**2100**	50	11	143	ug/L
OW-54	11/9/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-54	11/9/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-54	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
OW-54	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
OW-54	3/29/2017	Benzene	**150**	20	1.9	5	ug/L
OW-54	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-54	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-54	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-54	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-54	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-54	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-54	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-54	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-54	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-54	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-54	3/29/2017	1,1-Dichloroethane	ND	1	0.1	25	ug/L
OW-54	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-54	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-54	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-54	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-54	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-54	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-54	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-54	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-54	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-54	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	3/29/2017	1,2,4-Trimethylbenzene	20	1	0.1	56	ug/L
OW-54	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-54	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-54	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-54	3/29/2017	Isopropylbenzene	1.3	1	0.098	447	ug/L
OW-54	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-54	3/29/2017	Ethylbenzene	42	1	0.11	700	ug/L
OW-54	3/29/2017	Styrene	ND	1	0.16	100	ug/L
OW-54	3/29/2017	n-Propylbenzene	5.3	1	0.13	660	ug/L
OW-54	3/29/2017	n-Butylbenzene	0.49	3	0.16	1000	ug/L
OW-54	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-54	3/29/2017	1,2-Dichloroethane	0.64	1	0.12	5	ug/L
OW-54	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-54	3/29/2017	1,3,5-Trimethylbenzene	2.1	1	0.12	60	ug/L
OW-54	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-54	3/29/2017	Toluene	4.7	1	0.089	1000	ug/L
OW-54	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
OW-54	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	3/29/2017	sec-Butylbenzene	1.1	1	0.1	2000	ug/L
OW-54	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-54	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-54	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-54	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-54	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-54	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-54	3/29/2017	Xylenes, Total	3.9	1.5	0.32	620	ug/L
OW-54	3/29/2017	MTBE	**2200**	20	3	143	ug/L
OW-54	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-54	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
OW-54	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-54	6/21/2017	Acetone	18	10	0.82	14064	ug/L
OW-54	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-54	6/21/2017	Benzene	**170**	100	6.2	5	ug/L
OW-54	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-54	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-54	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-54	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-54	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-54	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-54	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-54	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-54	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-54	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-54	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-54	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-54	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-54	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-54	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-54	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-54	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-54	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-54	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-54	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-54	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-54	6/21/2017	1,2,4-Trimethylbenzene	21	1	0.11	56	ug/L
OW-54	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-54	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-54	6/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-54	6/21/2017	Isopropylbenzene	1.4	1	0.051	447	ug/L
OW-54	6/21/2017	p-Isopropyltoluene	0.16	1	0.096	NA	ug/L
OW-54	6/21/2017	Ethylbenzene	46	1	0.093	700	ug/L
OW-54	6/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-54	6/21/2017	n-Propylbenzene	5	1	0.074	660	ug/L
OW-54	6/21/2017	n-Butylbenzene	0.54	3	0.13	1000	ug/L
OW-54	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-54	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-54	6/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-54	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-54	6/21/2017	1,3,5-Trimethylbenzene	2.2	1	0.087	60	ug/L
OW-54	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-54	6/21/2017	Toluene	4.7	1	0.064	1000	ug/L
OW-54	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-54	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-54	6/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-54	6/21/2017	sec-Butylbenzene	0.94	1	0.11	2000	ug/L
OW-54	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-54	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-54	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	6/21/2017	Pentafluorobenzene	**10**	0	0		None
OW-54	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-54	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-54	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-54	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-54	6/21/2017	Xylenes, Total	3.8	1.5	0.32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/21/2017	MTBE	**2300**	100	24	143	ug/L
OW-54	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-54	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-54	9/11/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	9/11/2017	Acetone	ND	50	4.1	14064	ug/L
OW-54	9/11/2017	Chloroform	ND	5	2	100	ug/L
OW-54	9/11/2017	Benzene	**140**	5	0.31	5	ug/L
OW-54	9/11/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	9/11/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	9/11/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	9/11/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	9/11/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	9/11/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	9/11/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	9/11/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	9/11/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	9/11/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	9/11/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	9/11/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	9/11/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	9/11/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	9/11/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	9/11/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	9/11/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	9/11/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	9/11/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	9/11/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	9/11/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	9/11/2017	1,2,4-Trimethylbenzene	18	5	0.56	56	ug/L
OW-54	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	9/11/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	9/11/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	9/11/2017	Isopropylbenzene	0.82	5	0.26	447	ug/L
OW-54	9/11/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	9/11/2017	Ethylbenzene	37	5	0.47	700	ug/L
OW-54	9/11/2017	Styrene	ND	5	0.78	100	ug/L
OW-54	9/11/2017	n-Propylbenzene	4	5	0.37	660	ug/L
OW-54	9/11/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	9/11/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	9/11/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	9/11/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	9/11/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	9/11/2017	1,3,5-Trimethylbenzene	1.1	5	0.44	60	ug/L
OW-54	9/11/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	9/11/2017	Toluene	3.1	5	0.32	1000	ug/L
OW-54	9/11/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	9/11/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	9/11/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	9/11/2017	sec-Butylbenzene	0.68	5	0.55	2000	ug/L
OW-54	9/11/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	9/11/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	9/11/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	9/11/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	9/11/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	9/11/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	9/11/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	9/11/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	9/11/2017	MTBE	**1900**	50	12	143	ug/L
OW-54	9/11/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	9/11/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	12/6/2017	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	12/6/2017	Acetone	ND	50	4.1	14064	ug/L
OW-54	12/6/2017	Chloroform	ND	5	2	100	ug/L
OW-54	12/6/2017	Benzene	**55**	5	0.31	5	ug/L
OW-54	12/6/2017	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	12/6/2017	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	12/6/2017	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	12/6/2017	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	12/6/2017	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	12/6/2017	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	12/6/2017	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	12/6/2017	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	12/6/2017	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	12/6/2017	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	12/6/2017	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	12/6/2017	1,1-Dichloroethene	ND	5	0.4	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	12/6/2017	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	12/6/2017	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	12/6/2017	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	12/6/2017	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	12/6/2017	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	12/6/2017	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	12/6/2017	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	12/6/2017	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	12/6/2017	1,2,4-Trimethylbenzene	9.4	5	0.56	56	ug/L
OW-54	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	12/6/2017	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	12/6/2017	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	12/6/2017	Isopropylbenzene	0.41	5	0.26	447	ug/L
OW-54	12/6/2017	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	12/6/2017	Ethylbenzene	16	5	0.47	700	ug/L
OW-54	12/6/2017	Styrene	ND	5	0.78	100	ug/L
OW-54	12/6/2017	n-Propylbenzene	1.4	5	0.37	660	ug/L
OW-54	12/6/2017	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	12/6/2017	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	12/6/2017	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	12/6/2017	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	12/6/2017	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	12/6/2017	1,3,5-Trimethylbenzene	0.52	5	0.44	60	ug/L
OW-54	12/6/2017	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	12/6/2017	Toluene	0.93	5	0.32	1000	ug/L
OW-54	12/6/2017	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	12/6/2017	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	12/6/2017	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	12/6/2017	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-54	12/6/2017	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	12/6/2017	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	12/6/2017	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	12/6/2017	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	12/6/2017	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	12/6/2017	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	12/6/2017	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	12/6/2017	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	12/6/2017	MTBE	**1900**	50	12	143	ug/L
OW-54	12/6/2017	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	12/6/2017	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	2/22/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	2/22/2018	Acetone	ND	50	4.1	14064	ug/L
OW-54	2/22/2018	Chloroform	ND	5	2	100	ug/L
OW-54	2/22/2018	Benzene	**50**	5	0.31	5	ug/L
OW-54	2/22/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	2/22/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	2/22/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	2/22/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	2/22/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	2/22/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	2/22/2018	Methylene Chloride	*2.6*	*15*	0.54	5	ug/L
OW-54	2/22/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	2/22/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	2/22/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	2/22/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	2/22/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	2/22/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	2/22/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	2/22/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	2/22/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	2/22/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	2/22/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	2/22/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	2/22/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	2/22/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	2/22/2018	1,2,4-Trimethylbenzene	8.8	5	0.56	56	ug/L
OW-54	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	2/22/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	2/22/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	2/22/2018	Isopropylbenzene	0.28	5	0.26	447	ug/L
OW-54	2/22/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	2/22/2018	Ethylbenzene	13	5	0.47	700	ug/L
OW-54	2/22/2018	Styrene	ND	5	0.78	100	ug/L
OW-54	2/22/2018	n-Propylbenzene	1.8	5	0.37	660	ug/L
OW-54	2/22/2018	n-Butylbenzene	0.67	15	0.65	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/22/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	2/22/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	2/22/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	2/22/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	2/22/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-54	2/22/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	2/22/2018	Toluene	0.89	5	0.32	1000	ug/L
OW-54	2/22/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	2/22/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	2/22/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	2/22/2018	sec-Butylbenzene	0.78	5	0.55	2000	ug/L
OW-54	2/22/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	2/22/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	2/22/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	2/22/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	2/22/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	2/22/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	2/22/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	2/22/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L
OW-54	2/22/2018	MTBE	**1900**	50	12	143	ug/L
OW-54	2/22/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	2/22/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	5/8/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-54	5/8/2018	Acetone	ND	50	4.1	14064	ug/L
OW-54	5/8/2018	Chloroform	ND	5	2	100	ug/L
OW-54	5/8/2018	Benzene	**58**	5	0.31	5	ug/L
OW-54	5/8/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-54	5/8/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-54	5/8/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-54	5/8/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-54	5/8/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-54	5/8/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-54	5/8/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-54	5/8/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-54	5/8/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-54	5/8/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-54	5/8/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-54	5/8/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-54	5/8/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-54	5/8/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-54	5/8/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-54	5/8/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-54	5/8/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-54	5/8/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-54	5/8/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-54	5/8/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-54	5/8/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-54	5/8/2018	1,2,4-Trimethylbenzene	10	5	0.56	56	ug/L
OW-54	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-54	5/8/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-54	5/8/2018	tert-Butylbenzene	ND	5	0.52	690	ug/L
OW-54	5/8/2018	Isopropylbenzene	ND	5	0.26	447	ug/L
OW-54	5/8/2018	p-Isopropyltoluene	ND	5	0.48	NA	ug/L
OW-54	5/8/2018	Ethylbenzene	13	5	0.47	700	ug/L
OW-54	5/8/2018	Styrene	ND	5	0.78	100	ug/L
OW-54	5/8/2018	n-Propylbenzene	1.2	5	0.37	660	ug/L
OW-54	5/8/2018	n-Butylbenzene	ND	15	0.65	1000	ug/L
OW-54	5/8/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-54	5/8/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-54	5/8/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-54	5/8/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-54	5/8/2018	1,3,5-Trimethylbenzene	ND	5	0.44	60	ug/L
OW-54	5/8/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-54	5/8/2018	Toluene	0.88	5	0.32	1000	ug/L
OW-54	5/8/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-54	5/8/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-54	5/8/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-54	5/8/2018	sec-Butylbenzene	ND	5	0.55	2000	ug/L
OW-54	5/8/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-54	5/8/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-54	5/8/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-54	5/8/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-54	5/8/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-54	5/8/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-54	5/8/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-54	5/8/2018	Xylenes, Total	ND	7.5	1.6	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	MTBE	**1800**	50	12	143	ug/L
OW-54	5/8/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-54	5/8/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-54	8/28/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OW-54	8/28/2018	Acetone	ND	20	1.6	14064	ug/L
OW-54	8/28/2018	Chloroform	ND	2	0.8	100	ug/L
OW-54	8/28/2018	Benzene	**52**	2	0.35	5	ug/L
OW-54	8/28/2018	1,1,1-Trichloroethane	ND	2	0.31	200	ug/L
OW-54	8/28/2018	Bromomethane	ND	6	0.51	7.54	ug/L
OW-54	8/28/2018	Chloromethane	ND	6	0.59	20.32	ug/L
OW-54	8/28/2018	Dibromomethane	ND	2	0.64	8	ug/L
OW-54	8/28/2018	Chloroethane	ND	4	0.33	20857	ug/L
OW-54	8/28/2018	Vinyl Chloride	ND	2	0.22	2	ug/L
OW-54	8/28/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OW-54	8/28/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OW-54	8/28/2018	Bromoform	ND	2	0.65	32.9	ug/L
OW-54	8/28/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OW-54	8/28/2018	1,1-Dichloroethane	ND	2	0.8	25	ug/L
OW-54	8/28/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OW-54	8/28/2018	Trichlorofluoromethane	ND	2	0.34	1137	ug/L
OW-54	8/28/2018	Dichlorodifluoromethane	ND	2	2	197	ug/L
OW-54	8/28/2018	1,2-Dichloropropane	ND	2	0.31	5	ug/L
OW-54	8/28/2018	2-Butanone	ND	20	2.5	5565	ug/L
OW-54	8/28/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OW-54	8/28/2018	Trichloroethene	ND	2	0.52	5	ug/L
OW-54	8/28/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L
OW-54	8/28/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OW-54	8/28/2018	2-Chlorotoluene	ND	2	0.8	233	ug/L
OW-54	8/28/2018	1,2,4-Trimethylbenzene	7.9	2	0.51	56	ug/L
OW-54	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OW-54	8/28/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OW-54	8/28/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OW-54	8/28/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
OW-54	8/28/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OW-54	8/28/2018	Ethylbenzene	8.3	2	0.45	700	ug/L
OW-54	8/28/2018	Styrene	ND	2	0.5	100	ug/L
OW-54	8/28/2018	n-Propylbenzene	0.76	2	0.49	660	ug/L
OW-54	8/28/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OW-54	8/28/2018	4-Chlorotoluene	ND	2	0.8	250	ug/L
OW-54	8/28/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OW-54	8/28/2018	1,2-Dichloroethane	ND	2	0.8	5	ug/L
OW-54	8/28/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OW-54	8/28/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OW-54	8/28/2018	Bromobenzene	ND	2	0.64	62	ug/L
OW-54	8/28/2018	Toluene	1.1	2	0.34	1000	ug/L
OW-54	8/28/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OW-54	8/28/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OW-54	8/28/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-54	8/28/2018	sec-Butylbenzene	0.55	2	0.4	2000	ug/L
OW-54	8/28/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OW-54	8/28/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OW-54	8/28/2018	trans-1,2-Dichloroethene	ND	2	0.37	100	ug/L
OW-54	8/28/2018	1,1-Dichloropropene	ND	2	0.32	NA	ug/L
OW-54	8/28/2018	2-Hexanone	ND	20	1.8	38	ug/L
OW-54	8/28/2018	2,2-Dichloropropane	ND	4	0.37	NA	ug/L
OW-54	8/28/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OW-54	8/28/2018	Xylenes, Total	ND	3	1.3	620	ug/L
OW-54	8/28/2018	MTBE	**2000**	20	6.4	143	ug/L
OW-54	8/28/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OW-54	8/28/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OW-54	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-54	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-54	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-54	11/7/2018	Benzene	**52**	1	0.17	5	ug/L
OW-54	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-54	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-54	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-54	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-54	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-54	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-54	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-54	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-54	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-54	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-54	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-54	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-54	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-54	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-54	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-54	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-54	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-54	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-54	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-54	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-54	11/7/2018	1,2,4-Trimethylbenzene	10	1	0.25	56	ug/L
OW-54	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-54	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-54	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-54	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-54	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-54	11/7/2018	Ethylbenzene	15	1	0.22	700	ug/L
OW-54	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-54	11/7/2018	n-Propylbenzene	2.1	1	0.24	660	ug/L
OW-54	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-54	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-54	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-54	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-54	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-54	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-54	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-54	11/7/2018	Toluene	1.1	1	0.17	1000	ug/L
OW-54	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-54	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-54	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-54	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-54	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-54	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-54	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-54	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-54	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-54	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-54	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-54	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-54	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-54	11/7/2018	MTBE	**1500**	10	4.6	143	ug/L
OW-54	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-54	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-54	2/6/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
OW-54	2/6/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
OW-54	2/6/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
OW-54	2/6/2019	1,1,2-Trichloroethane	ND	2	0.465446	5	ug/L
OW-54	2/6/2019	1,1-Dichloroethane	ND	2	0.350393	25	ug/L
OW-54	2/6/2019	1,1-Dichloroethene	ND	2	0.240976	7	ug/L
OW-54	2/6/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-54	2/6/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
OW-54	2/6/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
OW-54	2/6/2019	1,2,4-Trimethylbenzene	14	2	0.506629	56	ug/L
OW-54	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
OW-54	2/6/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
OW-54	2/6/2019	1,2-Dichloroethane	0.67	2	0.379051	5	ug/L
OW-54	2/6/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
OW-54	2/6/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
OW-54	2/6/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
OW-54	2/6/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-54	2/6/2019	2-Butanone	ND	20	2.821738	5565	ug/L
OW-54	2/6/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
OW-54	2/6/2019	2-Hexanone	ND	20	1.813149	38	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-54	2/6/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
OW-54	2/6/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
OW-54	2/6/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
OW-54	2/6/2019	Acetone	ND	20	1.514139	14064	ug/L
OW-54	2/6/2019	Benzene	**70**	2	0.349791	5	ug/L
OW-54	2/6/2019	Bromobenzene	ND	2	0.635812	62	ug/L
OW-54	2/6/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
OW-54	2/6/2019	Bromoform	ND	2	0.646621	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-54	2/6/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
OW-54	2/6/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
OW-54	2/6/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
OW-54	2/6/2019	Chloroethane	ND	4	0.328674	20857	ug/L
OW-54	2/6/2019	Chloroform	ND	2	0.470448	100	ug/L
OW-54	2/6/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-54	2/6/2019	cis-1,2-Dichloroethene	ND	2	0.751962	70	ug/L
OW-54	2/6/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
OW-54	2/6/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
OW-54	2/6/2019	Dibromomethane	ND	2	0.644295	8	ug/L
OW-54	2/6/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-54	2/6/2019	Ethylbenzene	20	2	0.446804	700	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
OW-54	2/6/2019	Isopropylbenzene	0.57	2	0.442208	447	ug/L
OW-54	2/6/2019	MTBE	**1600**	20	9.1219	143	ug/L
OW-54	2/6/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
OW-54	2/6/2019	Naphthalene	ND	4	0.579252	30	ug/L
OW-54	2/6/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
OW-54	2/6/2019	n-Propylbenzene	2.2	2	0.485172	660	ug/L
OW-54	2/6/2019	sec-Butylbenzene	0.75	2	0.404509	2000	ug/L
OW-54	2/6/2019	Styrene	ND	2	0.500291	100	ug/L
OW-54	2/6/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
OW-54	2/6/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
OW-54	2/6/2019	Toluene	1.9	2	0.336279	1000	ug/L
OW-54	2/6/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
OW-54	2/6/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
OW-54	2/6/2019	Trichloroethene	ND	2	0.515113	5	ug/L
OW-54	2/6/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
OW-54	2/6/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
OW-54	2/6/2019	Xylenes, Total	1.3	3	1.282575	620	ug/L
OW-54	2/6/2019	1,1,1,2-Tetrachloroethane	ND	2	0.504798	5.74	ug/L
OW-54	2/6/2019	1,1,1-Trichloroethane	ND	2	0.327632	200	ug/L
OW-54	2/6/2019	1,1,2,2-Tetrachloroethane	ND	4	0.656598	10	ug/L
OW-54	2/6/2019	1,1,2-Trichloroethane	ND	2	0.465446	5	ug/L
OW-54	2/6/2019	1,1-Dichloroethane	ND	2	0.350393	25	ug/L
OW-54	2/6/2019	1,1-Dichloroethene	ND	2	0.240976	7	ug/L
OW-54	2/6/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-54	2/6/2019	1,2,3-Trichlorobenzene	ND	2	0.560616	70	ug/L
OW-54	2/6/2019	1,2,3-Trichloropropane	*ND*	*4*	1.132009	0.0084	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	2	0.53282	70	ug/L
OW-54	2/6/2019	1,2,4-Trimethylbenzene	15	2	0.506629	56	ug/L
OW-54	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.941794	0.0033	ug/L
OW-54	2/6/2019	1,2-Dibromoethane	*ND*	*2*	0.459057	0.05	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	2	0.62293	600	ug/L
OW-54	2/6/2019	1,2-Dichloroethane	0.67	2	0.379051	5	ug/L
OW-54	2/6/2019	1,2-Dichloropropane	ND	2	0.330452	5	ug/L
OW-54	2/6/2019	1,3,5-Trimethylbenzene	ND	2	0.462828	60	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	2	0.625245	N/A	ug/L
OW-54	2/6/2019	1,3-Dichloropropane	ND	2	0.541513	370	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	2	0.575414	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	8	0.671634	NA	ug/L
OW-54	2/6/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-54	2/6/2019	2-Butanone	ND	20	2.821738	5565	ug/L
OW-54	2/6/2019	2-Chlorotoluene	ND	2	0.500276	233	ug/L
OW-54	2/6/2019	2-Hexanone	ND	20	1.813149	38	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-54	2/6/2019	4-Chlorotoluene	ND	2	0.561602	250	ug/L
OW-54	2/6/2019	p-Isopropyltoluene	ND	2	0.480677	NA	ug/L
OW-54	2/6/2019	4-Methyl-2-Pentanone	ND	20	0.906555	1243	ug/L
OW-54	2/6/2019	Acetone	ND	20	1.514139	14064	ug/L
OW-54	2/6/2019	Benzene	**73**	2	0.349791	5	ug/L
OW-54	2/6/2019	Bromobenzene	ND	2	0.635812	62	ug/L
OW-54	2/6/2019	Bromodichloromethane	*ND*	*2*	0.565534	1.34	ug/L
OW-54	2/6/2019	Bromoform	ND	2	0.646621	32.9	ug/L
OW-54	2/6/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-54	2/6/2019	Carbon Disulfide	ND	20	0.770062	810	ug/L
OW-54	2/6/2019	Carbon tetrachloride	ND	2	0.274697	5	ug/L
OW-54	2/6/2019	Chlorobenzene	ND	2	0.581055	77.6	ug/L
OW-54	2/6/2019	Chloroethane	ND	4	0.328674	20857	ug/L
OW-54	2/6/2019	Chloroform	ND	2	0.470448	100	ug/L
OW-54	2/6/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-54	2/6/2019	cis-1,2-Dichloroethene	ND	2	0.751962	70	ug/L
OW-54	2/6/2019	cis-1,3-Dichloropropene	ND	2	0.596456	NA	ug/L
OW-54	2/6/2019	Dibromochloromethane	*ND*	*2*	0.474025	1.68	ug/L
OW-54	2/6/2019	Dibromomethane	ND	2	0.644295	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-54	2/6/2019	Ethylbenzene	20	2	0.446804	700	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*2*	0.782374	1.39	ug/L
OW-54	2/6/2019	Isopropylbenzene	0.55	2	0.442208	447	ug/L
OW-54	2/6/2019	MTBE	**1600**	20	9.1219	143	ug/L
OW-54	2/6/2019	Methylene Chloride	*ND*	*6*	0.41139	5	ug/L
OW-54	2/6/2019	Naphthalene	ND	4	0.579252	30	ug/L
OW-54	2/6/2019	n-Butylbenzene	ND	6	0.496661	1000	ug/L
OW-54	2/6/2019	n-Propylbenzene	2.3	2	0.485172	660	ug/L
OW-54	2/6/2019	sec-Butylbenzene	0.69	2	0.404509	2000	ug/L
OW-54	2/6/2019	Styrene	ND	2	0.500291	100	ug/L
OW-54	2/6/2019	tert-Butylbenzene	ND	2	0.442939	690	ug/L
OW-54	2/6/2019	Tetrachloroethene	ND	2	0.302903	5	ug/L
OW-54	2/6/2019	Toluene	1.8	2	0.336279	1000	ug/L
OW-54	2/6/2019	trans-1,2-Dichloroethene	ND	2	0.364539	100	ug/L
OW-54	2/6/2019	trans-1,3-Dichloropropene	ND	2	0.550935	NA	ug/L
OW-54	2/6/2019	Trichloroethene	ND	2	0.515113	5	ug/L
OW-54	2/6/2019	Trichlorofluoromethane	ND	2	0.288232	1137	ug/L
OW-54	2/6/2019	Vinyl Chloride	ND	2	0.242149	2	ug/L
OW-54	2/6/2019	Xylenes, Total	1.4	3	1.282575	620	ug/L
OW-54	5/2/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	5/2/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	5/2/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	5/2/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	5/2/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	5/2/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	5/2/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	5/2/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	5/2/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	5/2/2019	1,2,4-Trimethylbenzene	15	5	1.065995	56	ug/L
OW-54	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	5/2/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	5/2/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	5/2/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	5/2/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	5/2/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	5/2/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	5/2/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	5/2/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	5/2/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	5/2/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	5/2/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	5/2/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	5/2/2019	Benzene	**97**	5	0.833195	5	ug/L
OW-54	5/2/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	5/2/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	5/2/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	5/2/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	5/2/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	5/2/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	5/2/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	5/2/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	5/2/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	5/2/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	5/2/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	5/2/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	5/2/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	5/2/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	5/2/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	5/2/2019	Ethylbenzene	28	5	0.661704	700	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	5/2/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-54	5/2/2019	MTBE	**1700**	50	22.804749	143	ug/L
OW-54	5/2/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	5/2/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	5/2/2019	n-Propylbenzene	2.8	5	1.07154	660	ug/L
OW-54	5/2/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-54	5/2/2019	Styrene	ND	5	0.956617	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	5/2/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	5/2/2019	Toluene	3.1	5	1.752181	1000	ug/L
OW-54	5/2/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	5/2/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	5/2/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	5/2/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	5/2/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	5/2/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-54	5/2/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	5/2/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	5/2/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	5/2/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	5/2/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	5/2/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	5/2/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	5/2/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	5/2/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	5/2/2019	1,2,4-Trimethylbenzene	16	5	1.065995	56	ug/L
OW-54	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	5/2/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	5/2/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	5/2/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	5/2/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	5/2/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	5/2/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	5/2/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	5/2/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	5/2/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	5/2/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	5/2/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	5/2/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	5/2/2019	Benzene	**100**	5	0.833195	5	ug/L
OW-54	5/2/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	5/2/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	5/2/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	5/2/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	5/2/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	5/2/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	5/2/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	5/2/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	5/2/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	5/2/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	5/2/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	5/2/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	5/2/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	5/2/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	5/2/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	5/2/2019	Ethylbenzene	31	5	0.661704	700	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	5/2/2019	Isopropylbenzene	ND	5	0.957611	447	ug/L
OW-54	5/2/2019	MTBE	**1800**	50	22.804749	143	ug/L
OW-54	5/2/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	5/2/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	5/2/2019	n-Propylbenzene	3	5	1.07154	660	ug/L
OW-54	5/2/2019	sec-Butylbenzene	ND	5	1.238656	2000	ug/L
OW-54	5/2/2019	Styrene	ND	5	0.956617	100	ug/L
OW-54	5/2/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	5/2/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	5/2/2019	Toluene	3.4	5	1.752181	1000	ug/L
OW-54	5/2/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	5/2/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	5/2/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	5/2/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	5/2/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	5/2/2019	Xylenes, Total	ND	7.5	2.272075	620	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	ND	0.00951	0.003314	0.05	ug/L
OW-54	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-54	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-54	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-54	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-54	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-54	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-54	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-54	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-54	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-54	8/21/2019	1,2,4-Trimethylbenzene	13	1	0.213199	56	ug/L
OW-54	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-54	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-54	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-54	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-54	8/21/2019	1,3,5-Trimethylbenzene	0.33	1	0.18866	60	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-54	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-54	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-54	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-54	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-54	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-54	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-54	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-54	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-54	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-54	8/21/2019	Benzene	**78**	1	0.166639	5	ug/L
OW-54	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-54	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-54	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-54	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-54	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-54	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-54	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-54	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-54	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-54	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-54	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-54	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-54	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-54	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-54	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-54	8/21/2019	Ethylbenzene	23	1	0.132341	700	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-54	8/21/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
OW-54	8/21/2019	MTBE	**1600**	200	91.218997	143	ug/L
OW-54	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-54	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-54	8/21/2019	n-Butylbenzene	1.1	3	0.22757	1000	ug/L
OW-54	8/21/2019	n-Propylbenzene	2.5	1	0.214308	660	ug/L
OW-54	8/21/2019	sec-Butylbenzene	0.93	1	0.247731	2000	ug/L
OW-54	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-54	8/21/2019	tert-Butylbenzene	0.21	1	0.206985	690	ug/L
OW-54	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-54	8/21/2019	Toluene	1.7	1	0.350436	1000	ug/L
OW-54	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-54	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-54	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-54	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-54	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-54	8/21/2019	Xylenes, Total	2.6	1.5	0.454415	620	ug/L
OW-54	8/21/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-54	8/21/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-54	8/21/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-54	8/21/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-54	8/21/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-54	8/21/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-54	8/21/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-54	8/21/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-54	8/21/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-54	8/21/2019	1,2,4-Trimethylbenzene	12	5	1.065995	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-54	8/21/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-54	8/21/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-54	8/21/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-54	8/21/2019	1,3,5-Trimethylbenzene	ND	5	0.943299	60	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-54	8/21/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	20	1.574772	NA	ug/L
OW-54	8/21/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-54	8/21/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-54	8/21/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-54	8/21/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	*ND*	*20*	1.72688		ug/L
OW-54	8/21/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-54	8/21/2019	p-Isopropyltoluene	ND	5	1.086447	NA	ug/L
OW-54	8/21/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-54	8/21/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-54	8/21/2019	Benzene	**75**	5	0.833195	5	ug/L
OW-54	8/21/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-54	8/21/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-54	8/21/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-54	8/21/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-54	8/21/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-54	8/21/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-54	8/21/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-54	8/21/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-54	8/21/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-54	8/21/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-54	8/21/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-54	8/21/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-54	8/21/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-54	8/21/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-54	8/21/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-54	8/21/2019	Ethylbenzene	22	5	0.661704	700	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-54	8/21/2019	Isopropylbenzene	1.5	5	0.957611	447	ug/L
OW-54	8/21/2019	MTBE	**1700**	50	22.804749	143	ug/L
OW-54	8/21/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	1.375357	30	ug/L
OW-54	8/21/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-54	8/21/2019	n-Propylbenzene	3	5	1.07154	660	ug/L
OW-54	8/21/2019	sec-Butylbenzene	1.6	5	1.238656	2000	ug/L
OW-54	8/21/2019	Styrene	ND	5	0.956617	100	ug/L
OW-54	8/21/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-54	8/21/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-54	8/21/2019	Toluene	2	5	1.752181	1000	ug/L
OW-54	8/21/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-54	8/21/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-54	8/21/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-54	8/21/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-54	8/21/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-54	8/21/2019	Xylenes, Total	3.4	7.5	2.272075	620	ug/L
OW-55	6/1/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
OW-55	6/1/2016	Acetone	ND	200	98	14064	ug/L
OW-55	6/1/2016	Chloroform	ND	20	1.8	100	ug/L
OW-55	6/1/2016	Benzene	**24000**	500	48	5	ug/L
OW-55	6/1/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
OW-55	6/1/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
OW-55	6/1/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
OW-55	6/1/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
OW-55	6/1/2016	Chloroethane	ND	40	3.8	20857	ug/L
OW-55	6/1/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-55	6/1/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
OW-55	6/1/2016	Carbon Disulfide	ND	200	12	810	ug/L
OW-55	6/1/2016	Bromoform	ND	20	2	32.9	ug/L
OW-55	6/1/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
OW-55	6/1/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
OW-55	6/1/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
OW-55	6/1/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L
OW-55	6/1/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
OW-55	6/1/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
OW-55	6/1/2016	2-Butanone	ND	200	15	5565	ug/L
OW-55	6/1/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
OW-55	6/1/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
OW-55	6/1/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
OW-55	6/1/2016	2-Chlorotoluene	ND	20	8	233	ug/L
OW-55	6/1/2016	1,2,4-Trimethylbenzene	**1800**	500	55	56	ug/L
OW-55	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
OW-55	6/1/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
OW-55	6/1/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
OW-55	6/1/2016	Isopropylbenzene	68	20	2.1	447	ug/L
OW-55	6/1/2016	p-Isopropyltoluene	11	20	2.8	NA	ug/L
OW-55	6/1/2016	Ethylbenzene	**2800**	500	56	700	ug/L
OW-55	6/1/2016	Styrene	ND	20	2.2	100	ug/L
OW-55	6/1/2016	n-Propylbenzene	340	20	2.6	660	ug/L
OW-55	6/1/2016	n-Butylbenzene	75	60	3.2	1000	ug/L
OW-55	6/1/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
OW-55	6/1/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
OW-55	6/1/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
OW-55	6/1/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
OW-55	6/1/2016	1,3,5-Trimethylbenzene	**700**	20	2.3	60	ug/L
OW-55	6/1/2016	Bromobenzene	ND	20	2	62	ug/L
OW-55	6/1/2016	Toluene	**34000**	500	59	1000	ug/L
OW-55	6/1/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
OW-55	6/1/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
OW-55	6/1/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	6/1/2016	sec-Butylbenzene	18	20	2.5	2000	ug/L
OW-55	6/1/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
OW-55	6/1/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
OW-55	6/1/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
OW-55	6/1/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
OW-55	6/1/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-55	6/1/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
OW-55	6/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-55	6/1/2016	Xylenes, Total	**16000**	750	180	620	ug/L
OW-55	6/1/2016	MTBE	**2000**	20	4.2	143	ug/L
OW-55	6/1/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-55	6/1/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-55	9/16/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
OW-55	9/16/2016	Acetone	ND	100	49	14064	ug/L
OW-55	9/16/2016	Chloroform	ND	10	0.89	100	ug/L
OW-55	9/16/2016	Benzene	**12000**	1000	96	5	ug/L
OW-55	9/16/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
OW-55	9/16/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
OW-55	9/16/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
OW-55	9/16/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
OW-55	9/16/2016	Chloroethane	ND	20	1.9	20857	ug/L
OW-55	9/16/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
OW-55	9/16/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
OW-55	9/16/2016	Carbon Disulfide	ND	100	6	810	ug/L
OW-55	9/16/2016	Bromoform	ND	10	1	32.9	ug/L
OW-55	9/16/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
OW-55	9/16/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
OW-55	9/16/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
OW-55	9/16/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
OW-55	9/16/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
OW-55	9/16/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
OW-55	9/16/2016	2-Butanone	ND	100	7.4	5565	ug/L
OW-55	9/16/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
OW-55	9/16/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
OW-55	9/16/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
OW-55	9/16/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
OW-55	9/16/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
OW-55	9/16/2016	1-Methylnaphthalene	30	40	2	NA	ug/L
OW-55	9/16/2016	Naphthalene	**120**	20	0.93	30	ug/L
OW-55	9/16/2016	2-Methylnaphthalene	**45**	40	1.6		ug/L
OW-55	9/16/2016	2-Chlorotoluene	ND	10	4	233	ug/L
OW-55	9/16/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
OW-55	9/16/2016	1,2,4-Trimethylbenzene	**880**	10	1.1	56	ug/L
OW-55	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
OW-55	9/16/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
OW-55	9/16/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
OW-55	9/16/2016	Isopropylbenzene	35	10	1	447	ug/L
OW-55	9/16/2016	p-Isopropyltoluene	5.9	10	1.4	NA	ug/L
OW-55	9/16/2016	Ethylbenzene	**950**	10	1.1	700	ug/L
OW-55	9/16/2016	Styrene	4.1	10	1.1	100	ug/L
OW-55	9/16/2016	n-Propylbenzene	120	10	1.3	660	ug/L
OW-55	9/16/2016	n-Butylbenzene	17	30	1.6	1000	ug/L
OW-55	9/16/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/16/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
OW-55	9/16/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
OW-55	9/16/2016	1,2-Dichloroethane	**5.6**	10	1.2	5	ug/L
OW-55	9/16/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
OW-55	9/16/2016	1,3,5-Trimethylbenzene	**280**	10	1.2	60	ug/L
OW-55	9/16/2016	Bromobenzene	ND	10	0.98	62	ug/L
OW-55	9/16/2016	Toluene	**4600**	1000	120	1000	ug/L
OW-55	9/16/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
OW-55	9/16/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
OW-55	9/16/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
OW-55	9/16/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
OW-55	9/16/2016	sec-Butylbenzene	9.3	10	1.2	2000	ug/L
OW-55	9/16/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
OW-55	9/16/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
OW-55	9/16/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
OW-55	9/16/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
OW-55	9/16/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
OW-55	9/16/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
OW-55	9/16/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
OW-55	9/16/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
OW-55	9/16/2016	Xylenes, Total	**4500**	1500	370	620	ug/L
OW-55	9/16/2016	MTBE	**1200**	10	2.1	143	ug/L
OW-55	9/16/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
OW-55	9/16/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-55	11/9/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-55	11/9/2016	Acetone	ND	500	250	14064	ug/L
OW-55	11/9/2016	Chloroform	7.7	50	4.4	100	ug/L
OW-55	11/9/2016	Benzene	**11000**	500	48	5	ug/L
OW-55	11/9/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-55	11/9/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-55	11/9/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-55	11/9/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-55	11/9/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-55	11/9/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-55	11/9/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-55	11/9/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-55	11/9/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-55	11/9/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-55	11/9/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-55	11/9/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-55	11/9/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-55	11/9/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-55	11/9/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-55	11/9/2016	2-Butanone	ND	500	37	5565	ug/L
OW-55	11/9/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-55	11/9/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-55	11/9/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-55	11/9/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-55	11/9/2016	Hexachlorobutadiene	*ND*	*50*	9.9	1.39	ug/L
OW-55	11/9/2016	1-Methylnaphthalene	29	200	10	NA	ug/L
OW-55	11/9/2016	Naphthalene	**74**	100	4.6	30	ug/L
OW-55	11/9/2016	2-Methylnaphthalene	**32**	200	7.9		ug/L
OW-55	11/9/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	11/9/2016	1,2-Dichlorobenzene	ND	50	20	600	ug/L
OW-55	11/9/2016	1,2,4-Trimethylbenzene	**550**	50	5.5	56	ug/L
OW-55	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-55	11/9/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-55	11/9/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-55	11/9/2016	Isopropylbenzene	28	50	5.2	447	ug/L
OW-55	11/9/2016	p-Isopropyltoluene	7.7	50	7	NA	ug/L
OW-55	11/9/2016	Ethylbenzene	680	50	5.6	700	ug/L
OW-55	11/9/2016	Styrene	ND	50	5.5	100	ug/L
OW-55	11/9/2016	n-Propylbenzene	88	50	6.6	660	ug/L
OW-55	11/9/2016	n-Butylbenzene	20	150	8	1000	ug/L
OW-55	11/9/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-55	11/9/2016	1,4-Dichlorobenzene	ND	50	7.1	75	ug/L
OW-55	11/9/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-55	11/9/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-55	11/9/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-55	11/9/2016	1,3,5-Trimethylbenzene	**170**	50	5.8	60	ug/L
OW-55	11/9/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-55	11/9/2016	Toluene	**3200**	50	5.9	1000	ug/L
OW-55	11/9/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-55	11/9/2016	1,2,4-Trichlorobenzene	ND	50	6.6	70	ug/L
OW-55	11/9/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-55	11/9/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/9/2016	sec-Butylbenzene	11	50	6.2	2000	ug/L
OW-55	11/9/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-55	11/9/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-55	11/9/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-55	11/9/2016	1,3-Dichlorobenzene	ND	50	7.2	N/A	ug/L
OW-55	11/9/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-55	11/9/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-55	11/9/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-55	11/9/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-55	11/9/2016	Xylenes, Total	**2400**	75	18	620	ug/L
OW-55	11/9/2016	MTBE	**1800**	50	11	143	ug/L
OW-55	11/9/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-55	11/9/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-55	3/29/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	3/29/2017	Acetone	ND	500	44	14064	ug/L
OW-55	3/29/2017	Chloroform	ND	50	4.4	100	ug/L
OW-55	3/29/2017	Benzene	**14000**	500	48	5	ug/L
OW-55	3/29/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	3/29/2017	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-55	3/29/2017	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-55	3/29/2017	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-55	3/29/2017	Chloroethane	ND	100	12	20857	ug/L
OW-55	3/29/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	3/29/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	3/29/2017	Carbon Disulfide	ND	500	30	810	ug/L
OW-55	3/29/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	3/29/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	3/29/2017	1,1-Dichloroethane	*ND*	*50*	5.2	25	ug/L
OW-55	3/29/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	3/29/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	3/29/2017	Dichlorodifluoromethane	ND	50	16	197	ug/L
OW-55	3/29/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	3/29/2017	2-Butanone	ND	500	57	5565	ug/L
OW-55	3/29/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	3/29/2017	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-55	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	3/29/2017	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-55	3/29/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	3/29/2017	1,2,4-Trimethylbenzene	**390**	50	5.2	56	ug/L
OW-55	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	3/29/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	3/29/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	3/29/2017	Isopropylbenzene	20	50	4.9	447	ug/L
OW-55	3/29/2017	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-55	3/29/2017	Ethylbenzene	**740**	50	5.6	700	ug/L
OW-55	3/29/2017	Styrene	ND	50	7.8	100	ug/L
OW-55	3/29/2017	n-Propylbenzene	83	50	6.6	660	ug/L
OW-55	3/29/2017	n-Butylbenzene	ND	150	8	1000	ug/L
OW-55	3/29/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	3/29/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	3/29/2017	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-55	3/29/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	3/29/2017	1,3,5-Trimethylbenzene	**100**	50	5.8	60	ug/L
OW-55	3/29/2017	Bromobenzene	ND	50	7	62	ug/L
OW-55	3/29/2017	Toluene	**1100**	50	4.5	1000	ug/L
OW-55	3/29/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	3/29/2017	Dibromochloromethane	*ND*	*50*	3.9	1.68	ug/L
OW-55	3/29/2017	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-55	3/29/2017	sec-Butylbenzene	17	50	5.1	2000	ug/L
OW-55	3/29/2017	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-55	3/29/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	3/29/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	3/29/2017	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-55	3/29/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	3/29/2017	2,2-Dichloropropane	ND	100	6	NA	ug/L
OW-55	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-55	3/29/2017	Xylenes, Total	**1100**	75	16	620	ug/L
OW-55	3/29/2017	MTBE	**2000**	50	7.4	143	ug/L
OW-55	3/29/2017	cis-1,3-Dichloropropene	ND	50	5	NA	ug/L
OW-55	3/29/2017	trans-1,3-Dichloropropene	ND	50	4.5	NA	ug/L
OW-55	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	6/21/2017	Acetone	ND	500	41	14064	ug/L
OW-55	6/21/2017	Chloroform	ND	50	20	100	ug/L
OW-55	6/21/2017	Benzene	**13000**	500	31	5	ug/L
OW-55	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
OW-55	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
OW-55	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	6/21/2017	1,2,4-Trimethylbenzene	**330**	50	5.6	56	ug/L
OW-55	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	6/21/2017	Isopropylbenzene	24	50	2.6	447	ug/L
OW-55	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	6/21/2017	Ethylbenzene	**720**	50	4.7	700	ug/L
OW-55	6/21/2017	Styrene	ND	50	7.8	100	ug/L
OW-55	6/21/2017	n-Propylbenzene	70	50	3.7	660	ug/L
OW-55	6/21/2017	n-Butylbenzene	13	150	6.5	1000	ug/L
OW-55	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	6/21/2017	1,3,5-Trimethylbenzene	**93**	50	4.4	60	ug/L
OW-55	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
OW-55	6/21/2017	Toluene	900	50	3.2	1000	ug/L
OW-55	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	6/21/2017	sec-Butylbenzene	6.1	50	5.5	2000	ug/L
OW-55	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	6/21/2017	Pentafluorobenzene	**500**	0	0		None
OW-55	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	6/21/2017	Xylenes, Total	**760**	75	16	620	ug/L
OW-55	6/21/2017	MTBE	**2400**	50	12	143	ug/L
OW-55	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	9/11/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-55	9/11/2017	Acetone	ND	1000	82	14064	ug/L
OW-55	9/11/2017	Chloroform	ND	100	40	100	ug/L
OW-55	9/11/2017	Benzene	**12000**	1000	62	5	ug/L
OW-55	9/11/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-55	9/11/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-55	9/11/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-55	9/11/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-55	9/11/2017	Chloroethane	ND	200	23	20857	ug/L
OW-55	9/11/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-55	9/11/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-55	9/11/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-55	9/11/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-55	9/11/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-55	9/11/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-55	9/11/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-55	9/11/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-55	9/11/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-55	9/11/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-55	9/11/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-55	9/11/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-55	9/11/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-55	9/11/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-55	9/11/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-55	9/11/2017	1,2,4-Trimethylbenzene	**230**	100	11	56	ug/L
OW-55	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-55	9/11/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-55	9/11/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-55	9/11/2017	Isopropylbenzene	16	100	5.1	447	ug/L
OW-55	9/11/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-55	9/11/2017	Ethylbenzene	690	100	9.3	700	ug/L
OW-55	9/11/2017	Styrene	ND	100	16	100	ug/L
OW-55	9/11/2017	n-Propylbenzene	58	100	7.4	660	ug/L
OW-55	9/11/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-55	9/11/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-55	9/11/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-55	9/11/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-55	9/11/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-55	9/11/2017	1,3,5-Trimethylbenzene	*50*	*100*	8.7	60	ug/L
OW-55	9/11/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-55	9/11/2017	Toluene	900	100	6.4	1000	ug/L
OW-55	9/11/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-55	9/11/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-55	9/11/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-55	9/11/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-55	9/11/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-55	9/11/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-55	9/11/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-55	9/11/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-55	9/11/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-55	9/11/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-55	9/11/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-55	9/11/2017	Xylenes, Total	**660**	150	32	620	ug/L
OW-55	9/11/2017	MTBE	**2000**	100	24	143	ug/L
OW-55	9/11/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-55	9/11/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-55	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-55	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-55	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-55	12/6/2017	Benzene	**7100**	100	6.2	5	ug/L
OW-55	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-55	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-55	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-55	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-55	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-55	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-55	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-55	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-55	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-55	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-55	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-55	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-55	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-55	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-55	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-55	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-55	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-55	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-55	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-55	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-55	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-55	12/6/2017	1,2,4-Trimethylbenzene	**130**	100	11	56	ug/L
OW-55	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-55	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-55	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-55	12/6/2017	Isopropylbenzene	18	100	5.1	447	ug/L
OW-55	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-55	12/6/2017	Ethylbenzene	560	100	9.3	700	ug/L
OW-55	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-55	12/6/2017	n-Propylbenzene	41	100	7.4	660	ug/L
OW-55	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-55	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-55	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-55	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-55	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-55	12/6/2017	1,3,5-Trimethylbenzene	*27*	*100*	8.7	60	ug/L
OW-55	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-55	12/6/2017	Toluene	360	100	6.4	1000	ug/L
OW-55	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-55	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-55	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-55	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-55	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-55	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-55	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-55	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-55	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-55	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-55	12/6/2017	Xylenes, Total	290	150	32	620	ug/L
OW-55	12/6/2017	MTBE	**1700**	100	24	143	ug/L
OW-55	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-55	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-55	2/22/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	2/22/2018	Acetone	ND	500	41	14064	ug/L
OW-55	2/22/2018	Chloroform	ND	50	20	100	ug/L
OW-55	2/22/2018	Benzene	**7700**	500	31	5	ug/L
OW-55	2/22/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-55	2/22/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-55	2/22/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	2/22/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	2/22/2018	Chloroethane	ND	100	12	20857	ug/L
OW-55	2/22/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	2/22/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	2/22/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	2/22/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	2/22/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	2/22/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	2/22/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	2/22/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	2/22/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	2/22/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	2/22/2018	2-Butanone	ND	500	57	5565	ug/L
OW-55	2/22/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	2/22/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	2/22/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	2/22/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	2/22/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	2/22/2018	1,2,4-Trimethylbenzene	**130**	50	5.6	56	ug/L
OW-55	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	2/22/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	2/22/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	2/22/2018	Isopropylbenzene	21	50	2.6	447	ug/L
OW-55	2/22/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	2/22/2018	Ethylbenzene	620	50	4.7	700	ug/L
OW-55	2/22/2018	Styrene	ND	50	7.8	100	ug/L
OW-55	2/22/2018	n-Propylbenzene	52	50	3.7	660	ug/L
OW-55	2/22/2018	n-Butylbenzene	8.8	150	6.5	1000	ug/L
OW-55	2/22/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	2/22/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	2/22/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	2/22/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	2/22/2018	1,3,5-Trimethylbenzene	28	50	4.4	60	ug/L
OW-55	2/22/2018	Bromobenzene	ND	50	7	62	ug/L
OW-55	2/22/2018	Toluene	350	50	3.2	1000	ug/L
OW-55	2/22/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	2/22/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	2/22/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	2/22/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-55	2/22/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	2/22/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	2/22/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	2/22/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	2/22/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	2/22/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	2/22/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	2/22/2018	Xylenes, Total	300	75	16	620	ug/L
OW-55	2/22/2018	MTBE	**1600**	50	12	143	ug/L
OW-55	2/22/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	2/22/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	5/8/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-55	5/8/2018	Acetone	ND	500	41	14064	ug/L
OW-55	5/8/2018	Chloroform	ND	50	20	100	ug/L
OW-55	5/8/2018	Benzene	**7500**	500	31	5	ug/L
OW-55	5/8/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/8/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-55	5/8/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-55	5/8/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-55	5/8/2018	Chloroethane	ND	100	12	20857	ug/L
OW-55	5/8/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-55	5/8/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-55	5/8/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-55	5/8/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-55	5/8/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-55	5/8/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-55	5/8/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-55	5/8/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-55	5/8/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-55	5/8/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-55	5/8/2018	2-Butanone	ND	500	57	5565	ug/L
OW-55	5/8/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-55	5/8/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-55	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-55	5/8/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-55	5/8/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-55	5/8/2018	1,2,4-Trimethylbenzene	**150**	50	5.6	56	ug/L
OW-55	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-55	5/8/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-55	5/8/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-55	5/8/2018	Isopropylbenzene	19	50	2.6	447	ug/L
OW-55	5/8/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-55	5/8/2018	Ethylbenzene	590	50	4.7	700	ug/L
OW-55	5/8/2018	Styrene	ND	50	7.8	100	ug/L
OW-55	5/8/2018	n-Propylbenzene	50	50	3.7	660	ug/L
OW-55	5/8/2018	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-55	5/8/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-55	5/8/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-55	5/8/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-55	5/8/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-55	5/8/2018	1,3,5-Trimethylbenzene	29	50	4.4	60	ug/L
OW-55	5/8/2018	Bromobenzene	ND	50	7	62	ug/L
OW-55	5/8/2018	Toluene	400	50	3.2	1000	ug/L
OW-55	5/8/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-55	5/8/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-55	5/8/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-55	5/8/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-55	5/8/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-55	5/8/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-55	5/8/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-55	5/8/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-55	5/8/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-55	5/8/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-55	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-55	5/8/2018	Xylenes, Total	330	75	16	620	ug/L
OW-55	5/8/2018	MTBE	**1700**	50	12	143	ug/L
OW-55	5/8/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-55	5/8/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-55	8/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-55	8/28/2018	Acetone	ND	200	16	14064	ug/L
OW-55	8/28/2018	Chloroform	ND	20	8	100	ug/L
OW-55	8/28/2018	Benzene	**7900**	200	35	5	ug/L
OW-55	8/28/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-55	8/28/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-55	8/28/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-55	8/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-55	8/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-55	8/28/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-55	8/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-55	8/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-55	8/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-55	8/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-55	8/28/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-55	8/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-55	8/28/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-55	8/28/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-55	8/28/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-55	8/28/2018	2-Butanone	ND	200	25	5565	ug/L
OW-55	8/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-55	8/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-55	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-55	8/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	8/28/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-55	8/28/2018	1,2,4-Trimethylbenzene	**120**	20	5.1	56	ug/L
OW-55	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-55	8/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-55	8/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-55	8/28/2018	Isopropylbenzene	22	20	4.4	447	ug/L
OW-55	8/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-55	8/28/2018	Ethylbenzene	650	20	4.5	700	ug/L
OW-55	8/28/2018	Styrene	ND	20	5	100	ug/L
OW-55	8/28/2018	n-Propylbenzene	58	20	4.9	660	ug/L
OW-55	8/28/2018	n-Butylbenzene	6.7	60	5	1000	ug/L
OW-55	8/28/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-55	8/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-55	8/28/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-55	8/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-55	8/28/2018	1,3,5-Trimethylbenzene	24	20	4.6	60	ug/L
OW-55	8/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-55	8/28/2018	Toluene	330	20	3.4	1000	ug/L
OW-55	8/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-55	8/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-55	8/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	8/28/2018	sec-Butylbenzene	4.8	20	4	2000	ug/L
OW-55	8/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-55	8/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-55	8/28/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-55	8/28/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-55	8/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-55	8/28/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-55	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-55	8/28/2018	Xylenes, Total	290	30	13	620	ug/L
OW-55	8/28/2018	MTBE	**1700**	20	6.4	143	ug/L
OW-55	8/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-55	8/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-55	11/7/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-55	11/7/2018	Acetone	ND	200	15	14064	ug/L
OW-55	11/7/2018	Chloroform	ND	20	4.7	100	ug/L
OW-55	11/7/2018	Benzene	**7000**	200	35	5	ug/L
OW-55	11/7/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-55	11/7/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-55	11/7/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-55	11/7/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-55	11/7/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-55	11/7/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-55	11/7/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-55	11/7/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-55	11/7/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-55	11/7/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-55	11/7/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-55	11/7/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-55	11/7/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-55	11/7/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-55	11/7/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-55	11/7/2018	2-Butanone	ND	200	28	5565	ug/L
OW-55	11/7/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-55	11/7/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-55	11/7/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-55	11/7/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-55	11/7/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-55	11/7/2018	1,2,4-Trimethylbenzene	**130**	20	5.1	56	ug/L
OW-55	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-55	11/7/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-55	11/7/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-55	11/7/2018	Isopropylbenzene	28	20	4.4	447	ug/L
OW-55	11/7/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-55	11/7/2018	Ethylbenzene	**750**	20	4.5	700	ug/L
OW-55	11/7/2018	Styrene	ND	20	5	100	ug/L
OW-55	11/7/2018	n-Propylbenzene	70	20	4.9	660	ug/L
OW-55	11/7/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-55	11/7/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-55	11/7/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-55	11/7/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-55	11/7/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-55	11/7/2018	1,3,5-Trimethylbenzene	29	20	4.6	60	ug/L
OW-55	11/7/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-55	11/7/2018	Toluene	350	20	3.4	1000	ug/L
OW-55	11/7/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-55	11/7/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-55	11/7/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-55	11/7/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-55	11/7/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-55	11/7/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-55	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-55	11/7/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-55	11/7/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-55	11/7/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-55	11/7/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-55	11/7/2018	Xylenes, Total	380	30	13	620	ug/L
OW-55	11/7/2018	MTBE	**1300**	20	9.1	143	ug/L
OW-55	11/7/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-55	11/7/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-55	2/6/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	12.619962	5.74	ug/L
OW-55	2/6/2019	1,1,1-Trichloroethane	ND	50	8.190791	200	ug/L
OW-55	2/6/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	16.414955	10	ug/L
OW-55	2/6/2019	1,1,2-Trichloroethane	*ND*	*50*	11.636162	5	ug/L
OW-55	2/6/2019	1,1-Dichloroethane	*ND*	*50*	8.759832	25	ug/L
OW-55	2/6/2019	1,1-Dichloroethene	*ND*	*50*	6.024391	7	ug/L
OW-55	2/6/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-55	2/6/2019	1,2,3-Trichlorobenzene	ND	50	14.015402	70	ug/L
OW-55	2/6/2019	1,2,3-Trichloropropane	*ND*	*100*	28.300223	0.0084	ug/L
OW-55	2/6/2019	1,2,4-Trichlorobenzene	ND	50	13.320508	70	ug/L
OW-55	2/6/2019	1,2,4-Trimethylbenzene	**190**	50	12.665717	56	ug/L
OW-55	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	23.544858	0.0033	ug/L
OW-55	2/6/2019	1,2-Dibromoethane	*ND*	*50*	11.476427	0.05	ug/L
OW-55	2/6/2019	1,2-Dichlorobenzene	ND	50	15.573243	600	ug/L
OW-55	2/6/2019	1,2-Dichloroethane	*ND*	*50*	9.476269	5	ug/L
OW-55	2/6/2019	1,2-Dichloropropane	*ND*	*50*	8.261288	5	ug/L
OW-55	2/6/2019	1,3,5-Trimethylbenzene	30	50	11.570703	60	ug/L
OW-55	2/6/2019	1,3-Dichlorobenzene	ND	50	15.631118	N/A	ug/L
OW-55	2/6/2019	1,3-Dichloropropane	ND	50	13.537814	370	ug/L
OW-55	2/6/2019	1,4-Dichlorobenzene	ND	50	14.385342	75	ug/L
OW-55	2/6/2019	1-Methylnaphthalene	21	200	16.790848	NA	ug/L
OW-55	2/6/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-55	2/6/2019	2-Butanone	ND	500	70.543444	5565	ug/L
OW-55	2/6/2019	2-Chlorotoluene	ND	50	12.50691	233	ug/L
OW-55	2/6/2019	2-Hexanone	*ND*	*500*	45.328722	38	ug/L
OW-55	2/6/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-55	2/6/2019	4-Chlorotoluene	ND	50	14.040044	250	ug/L
OW-55	2/6/2019	p-Isopropyltoluene	ND	50	12.016928	NA	ug/L
OW-55	2/6/2019	4-Methyl-2-Pentanone	ND	500	22.663868	1243	ug/L
OW-55	2/6/2019	Acetone	ND	500	37.853481	14064	ug/L
OW-55	2/6/2019	Benzene	**8600**	500	87.447859	5	ug/L
OW-55	2/6/2019	Bromobenzene	ND	50	15.895311	62	ug/L
OW-55	2/6/2019	Bromodichloromethane	*ND*	*50*	14.138349	1.34	ug/L
OW-55	2/6/2019	Bromoform	*ND*	*50*	16.165516	32.9	ug/L
OW-55	2/6/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-55	2/6/2019	Carbon Disulfide	ND	500	19.251554	810	ug/L
OW-55	2/6/2019	Carbon tetrachloride	*ND*	*50*	6.867418	5	ug/L
OW-55	2/6/2019	Chlorobenzene	ND	50	14.526376	77.6	ug/L
OW-55	2/6/2019	Chloroethane	ND	100	8.216855	20857	ug/L
OW-55	2/6/2019	Chloroform	ND	50	11.761188	100	ug/L
OW-55	2/6/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-55	2/6/2019	cis-1,2-Dichloroethene	ND	50	18.799057	70	ug/L
OW-55	2/6/2019	cis-1,3-Dichloropropene	ND	50	14.911401	NA	ug/L
OW-55	2/6/2019	Dibromochloromethane	*ND*	*50*	11.85062	1.68	ug/L
OW-55	2/6/2019	Dibromomethane	*ND*	*50*	16.107371	8	ug/L
OW-55	2/6/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-55	2/6/2019	Ethylbenzene	660	50	11.170112	700	ug/L
OW-55	2/6/2019	Hexachlorobutadiene	*ND*	*50*	19.559347	1.39	ug/L
OW-55	2/6/2019	Isopropylbenzene	21	50	11.05521	447	ug/L
OW-55	2/6/2019	MTBE	**1400**	50	22.804749	143	ug/L
OW-55	2/6/2019	Methylene Chloride	*ND*	*150*	10.284739	5	ug/L
OW-55	2/6/2019	Naphthalene	**37**	100	14.481303	30	ug/L
OW-55	2/6/2019	n-Butylbenzene	ND	150	12.416523	1000	ug/L
OW-55	2/6/2019	n-Propylbenzene	61	50	12.129312	660	ug/L
OW-55	2/6/2019	sec-Butylbenzene	ND	50	10.112735	2000	ug/L
OW-55	2/6/2019	Styrene	ND	50	12.507286	100	ug/L
OW-55	2/6/2019	tert-Butylbenzene	ND	50	11.073487	690	ug/L
OW-55	2/6/2019	Tetrachloroethene	*ND*	*50*	7.572586	5	ug/L
OW-55	2/6/2019	Toluene	560	50	8.40697	1000	ug/L
OW-55	2/6/2019	trans-1,2-Dichloroethene	ND	50	9.11348	100	ug/L
OW-55	2/6/2019	trans-1,3-Dichloropropene	ND	50	13.773386	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Trichloroethene	*ND*	*50*	12.877821	5	ug/L
OW-55	2/6/2019	Trichlorofluoromethane	ND	50	7.205808	1137	ug/L
OW-55	2/6/2019	Vinyl Chloride	*ND*	*50*	6.053716	2	ug/L
OW-55	2/6/2019	Xylenes, Total	480	75	32.064386	620	ug/L
OW-55	5/2/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-55	5/2/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-55	5/2/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-55	5/2/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-55	5/2/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-55	5/2/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-55	5/2/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-55	5/2/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-55	5/2/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-55	5/2/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-55	5/2/2019	1,2,4-Trimethylbenzene	**150**	50	10.659955	56	ug/L
OW-55	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-55	5/2/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-55	5/2/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-55	5/2/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-55	5/2/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-55	5/2/2019	1,3,5-Trimethylbenzene	28	50	9.432992	60	ug/L
OW-55	5/2/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-55	5/2/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-55	5/2/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-55	5/2/2019	1-Methylnaphthalene	21	200	15.747724	NA	ug/L
OW-55	5/2/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-55	5/2/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-55	5/2/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-55	5/2/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-55	5/2/2019	2-Methylnaphthalene	*ND*	*200*	17.2688		ug/L
OW-55	5/2/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-55	5/2/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-55	5/2/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-55	5/2/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-55	5/2/2019	Benzene	**9000**	500	83.319528	5	ug/L
OW-55	5/2/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-55	5/2/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-55	5/2/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-55	5/2/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-55	5/2/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-55	5/2/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-55	5/2/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-55	5/2/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-55	5/2/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-55	5/2/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-55	5/2/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-55	5/2/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-55	5/2/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-55	5/2/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-55	5/2/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-55	5/2/2019	Ethylbenzene	660	50	6.61704	700	ug/L
OW-55	5/2/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-55	5/2/2019	Isopropylbenzene	18	50	9.576114	447	ug/L
OW-55	5/2/2019	MTBE	**1600**	50	22.804749	143	ug/L
OW-55	5/2/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-55	5/2/2019	Naphthalene	**34**	100	13.753567	30	ug/L
OW-55	5/2/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-55	5/2/2019	n-Propylbenzene	51	50	10.7154	660	ug/L
OW-55	5/2/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-55	5/2/2019	Styrene	ND	50	9.566168	100	ug/L
OW-55	5/2/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-55	5/2/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-55	5/2/2019	Toluene	700	50	17.521811	1000	ug/L
OW-55	5/2/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-55	5/2/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-55	5/2/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-55	5/2/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-55	5/2/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-55	5/2/2019	Xylenes, Total	560	75	22.720747	620	ug/L
OW-55	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-56	6/1/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	6/1/2016	Acetone	9.2	10	4.9	14064	ug/L
OW-56	6/1/2016	Chloroform	0.56	1	0.089	100	ug/L
OW-56	6/1/2016	Benzene	0.5	1	0.096	5	ug/L
OW-56	6/1/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-56	6/1/2016	Bromomethane	ND	3	0.78	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	6/1/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	6/1/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	6/1/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-56	6/1/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	6/1/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-56	6/1/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	6/1/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-56	6/1/2016	Bromodichloromethane	0.47	1	0.14	1.34	ug/L
OW-56	6/1/2016	1,1-Dichloroethane	0.76	1	0.11	25	ug/L
OW-56	6/1/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-56	6/1/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-56	6/1/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-56	6/1/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-56	6/1/2016	2-Butanone	ND	10	0.74	5565	ug/L
OW-56	6/1/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-56	6/1/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	6/1/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-56	6/1/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	6/1/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	6/1/2016	1,2,4-Trimethylbenzene	0.49	1	0.11	56	ug/L
OW-56	6/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-56	6/1/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-56	6/1/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-56	6/1/2016	Isopropylbenzene	0.27	1	0.1	447	ug/L
OW-56	6/1/2016	p-Isopropyltoluene	0.37	1	0.14	NA	ug/L
OW-56	6/1/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	6/1/2016	Styrene	ND	1	0.11	100	ug/L
OW-56	6/1/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	6/1/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-56	6/1/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-56	6/1/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-56	6/1/2016	1,2-Dichloroethane	**15**	1	0.12	5	ug/L
OW-56	6/1/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-56	6/1/2016	1,3,5-Trimethylbenzene	0.46	1	0.12	60	ug/L
OW-56	6/1/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-56	6/1/2016	Toluene	0.44	1	0.12	1000	ug/L
OW-56	6/1/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	6/1/2016	Dibromochloromethane	0.31	1	0.087	1.68	ug/L
OW-56	6/1/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	6/1/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
OW-56	6/1/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-56	6/1/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-56	6/1/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-56	6/1/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	6/1/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-56	6/1/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-56	6/1/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	6/1/2016	Xylenes, Total	1.4	1.5	0.37	620	ug/L
OW-56	6/1/2016	MTBE	**200**	1	0.21	143	ug/L
OW-56	6/1/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-56	6/1/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	9/16/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-56	9/16/2016	Acetone	ND	50	25	14064	ug/L
OW-56	9/16/2016	Chloroform	ND	5	0.44	100	ug/L
OW-56	9/16/2016	Benzene	2.5	5	0.48	5	ug/L
OW-56	9/16/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-56	9/16/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-56	9/16/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-56	9/16/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-56	9/16/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-56	9/16/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-56	9/16/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-56	9/16/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-56	9/16/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-56	9/16/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-56	9/16/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-56	9/16/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-56	9/16/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-56	9/16/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-56	9/16/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-56	9/16/2016	2-Butanone	ND	50	3.7	5565	ug/L
OW-56	9/16/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-56	9/16/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-56	9/16/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-56	9/16/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-56	9/16/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/16/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
OW-56	9/16/2016	Naphthalene	ND	10	0.46	30	ug/L
OW-56	9/16/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
OW-56	9/16/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-56	9/16/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-56	9/16/2016	1,2,4-Trimethylbenzene	1.1	5	0.55	56	ug/L
OW-56	9/16/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-56	9/16/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-56	9/16/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-56	9/16/2016	Isopropylbenzene	1.1	5	0.52	447	ug/L
OW-56	9/16/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
OW-56	9/16/2016	Ethylbenzene	ND	5	0.56	700	ug/L
OW-56	9/16/2016	Styrene	ND	5	0.55	100	ug/L
OW-56	9/16/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
OW-56	9/16/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
OW-56	9/16/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-56	9/16/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-56	9/16/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-56	9/16/2016	1,2-Dichloroethane	**16**	5	0.58	5	ug/L
OW-56	9/16/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-56	9/16/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
OW-56	9/16/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-56	9/16/2016	Toluene	0.92	5	0.59	1000	ug/L
OW-56	9/16/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-56	9/16/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-56	9/16/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-56	9/16/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-56	9/16/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
OW-56	9/16/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-56	9/16/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-56	9/16/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-56	9/16/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-56	9/16/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-56	9/16/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-56	9/16/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-56	9/16/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-56	9/16/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
OW-56	9/16/2016	MTBE	**150**	5	1.1	143	ug/L
OW-56	9/16/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-56	9/16/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-56	11/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	11/9/2016	Acetone	10	10	4.9	14064	ug/L
OW-56	11/9/2016	Chloroform	ND	1	0.089	100	ug/L
OW-56	11/9/2016	Benzene	1	1	0.096	5	ug/L
OW-56	11/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
OW-56	11/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
OW-56	11/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	11/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	11/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
OW-56	11/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	11/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
OW-56	11/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	11/9/2016	Bromoform	ND	1	0.1	32.9	ug/L
OW-56	11/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
OW-56	11/9/2016	1,1-Dichloroethane	0.95	1	0.11	25	ug/L
OW-56	11/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
OW-56	11/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
OW-56	11/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
OW-56	11/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
OW-56	11/9/2016	2-Butanone	0.79	10	0.74	5565	ug/L
OW-56	11/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
OW-56	11/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	11/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
OW-56	11/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	11/9/2016	Hexachlorobutadiene	ND	1	0.2	1.39	ug/L
OW-56	11/9/2016	1-Methylnaphthalene	ND	4	0.2	NA	ug/L
OW-56	11/9/2016	Naphthalene	0.12	2	0.093	30	ug/L
OW-56	11/9/2016	2-Methylnaphthalene	**0.19**	4	0.16		ug/L
OW-56	11/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	11/9/2016	1,2-Dichlorobenzene	ND	1	0.4	600	ug/L
OW-56	11/9/2016	1,2,4-Trimethylbenzene	0.18	1	0.11	56	ug/L
OW-56	11/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
OW-56	11/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
OW-56	11/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
OW-56	11/9/2016	Isopropylbenzene	0.67	1	0.1	447	ug/L
OW-56	11/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	11/9/2016	Styrene	ND	1	0.11	100	ug/L
OW-56	11/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	11/9/2016	n-Butylbenzene	0.21	3	0.16	1000	ug/L
OW-56	11/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
OW-56	11/9/2016	1,4-Dichlorobenzene	ND	1	0.14	75	ug/L
OW-56	11/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
OW-56	11/9/2016	1,2-Dichloroethane	**17**	1	0.12	5	ug/L
OW-56	11/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
OW-56	11/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-56	11/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
OW-56	11/9/2016	Toluene	ND	1	0.12	1000	ug/L
OW-56	11/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	11/9/2016	1,2,4-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	11/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
OW-56	11/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	11/9/2016	sec-Butylbenzene	0.19	1	0.12	2000	ug/L
OW-56	11/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
OW-56	11/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
OW-56	11/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
OW-56	11/9/2016	1,3-Dichlorobenzene	ND	1	0.14	N/A	ug/L
OW-56	11/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	11/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
OW-56	11/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
OW-56	11/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	11/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
OW-56	11/9/2016	MTBE	**160**	1	0.21	143	ug/L
OW-56	11/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
OW-56	11/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	3/29/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	3/29/2017	Acetone	ND	10	0.88	14064	ug/L
OW-56	3/29/2017	Chloroform	ND	1	0.089	100	ug/L
OW-56	3/29/2017	Benzene	0.24	1	0.096	5	ug/L
OW-56	3/29/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	3/29/2017	Bromomethane	ND	3	0.78	7.54	ug/L
OW-56	3/29/2017	Chloromethane	ND	3	0.21	20.32	ug/L
OW-56	3/29/2017	Dibromomethane	ND	1	0.12	8	ug/L
OW-56	3/29/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	3/29/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	3/29/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	3/29/2017	Carbon Disulfide	ND	10	0.6	810	ug/L
OW-56	3/29/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	3/29/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	3/29/2017	1,1-Dichloroethane	0.64	1	0.1	25	ug/L
OW-56	3/29/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	3/29/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	3/29/2017	Dichlorodifluoromethane	ND	1	0.32	197	ug/L
OW-56	3/29/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	3/29/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	3/29/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	3/29/2017	Trichloroethene	ND	1	0.18	5	ug/L
OW-56	3/29/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	3/29/2017	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
OW-56	3/29/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	3/29/2017	1,2,4-Trimethylbenzene	ND	1	0.1	56	ug/L
OW-56	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	3/29/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	3/29/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	3/29/2017	Isopropylbenzene	0.52	1	0.098	447	ug/L
OW-56	3/29/2017	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
OW-56	3/29/2017	Ethylbenzene	ND	1	0.11	700	ug/L
OW-56	3/29/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	3/29/2017	n-Propylbenzene	ND	1	0.13	660	ug/L
OW-56	3/29/2017	n-Butylbenzene	ND	3	0.16	1000	ug/L
OW-56	3/29/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	3/29/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	3/29/2017	1,2-Dichloroethane	4.7	1	0.12	5	ug/L
OW-56	3/29/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	3/29/2017	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
OW-56	3/29/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	3/29/2017	Toluene	ND	1	0.089	1000	ug/L
OW-56	3/29/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	3/29/2017	Dibromochloromethane	ND	1	0.078	1.68	ug/L
OW-56	3/29/2017	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	3/29/2017	sec-Butylbenzene	0.34	1	0.1	2000	ug/L
OW-56	3/29/2017	1,3-Dichloropropane	ND	1	0.16	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	3/29/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	3/29/2017	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
OW-56	3/29/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	3/29/2017	2,2-Dichloropropane	ND	2	0.12	NA	ug/L
OW-56	3/29/2017	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
OW-56	3/29/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	3/29/2017	MTBE	120	1	0.15	143	ug/L
OW-56	3/29/2017	cis-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
OW-56	3/29/2017	trans-1,3-Dichloropropene	ND	1	0.089	NA	ug/L
OW-56	6/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	6/21/2017	Acetone	16	10	0.82	14064	ug/L
OW-56	6/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	6/21/2017	Benzene	0.38	1	0.062	5	ug/L
OW-56	6/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	6/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	6/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	6/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	6/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	6/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	6/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	6/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	6/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	6/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	6/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-56	6/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	6/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	6/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	6/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	6/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	6/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	6/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	6/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	6/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	6/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	6/21/2017	1,2,4-Trimethylbenzene	0.12	1	0.11	56	ug/L
OW-56	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	6/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	6/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	6/21/2017	Isopropylbenzene	0.28	1	0.051	447	ug/L
OW-56	6/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	6/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	6/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	6/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	6/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	6/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	6/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	6/21/2017	1,2-Dichloroethane	3.9	1	0.4	5	ug/L
OW-56	6/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	6/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	6/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	6/21/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	6/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	6/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	6/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	6/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-56	6/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	6/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	6/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	6/21/2017	Pentafluorobenzene	**10**	0	0		None
OW-56	6/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	6/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	6/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	6/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	6/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	6/21/2017	MTBE	140	1	0.24	143	ug/L
OW-56	6/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	6/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	9/11/2017	Acetone	7.6	10	0.82	14064	ug/L
OW-56	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	9/11/2017	Benzene	1.1	1	0.062	5	ug/L
OW-56	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	9/11/2017	1,1-Dichloroethane	0.57	1	0.4	25	ug/L
OW-56	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	9/11/2017	Isopropylbenzene	0.91	1	0.051	447	ug/L
OW-56	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	9/11/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	9/11/2017	n-Butylbenzene	0.15	3	0.13	1000	ug/L
OW-56	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	9/11/2017	1,2-Dichloroethane	**8.9**	1	0.4	5	ug/L
OW-56	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	9/11/2017	sec-Butylbenzene	0.14	1	0.11	2000	ug/L
OW-56	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	9/11/2017	MTBE	110	1	0.24	143	ug/L
OW-56	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	12/6/2017	Acetone	5.9	10	0.82	14064	ug/L
OW-56	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-56	12/6/2017	Benzene	2.1	1	0.062	5	ug/L
OW-56	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	12/6/2017	1,1-Dichloroethane	0.67	1	0.4	25	ug/L
OW-56	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	12/6/2017	Isopropylbenzene	1.6	1	0.051	447	ug/L
OW-56	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-56	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	12/6/2017	1,2-Dichloroethane	**19**	1	0.4	5	ug/L
OW-56	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-56	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	12/6/2017	sec-Butylbenzene	0.27	1	0.11	2000	ug/L
OW-56	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	12/6/2017	MTBE	110	1	0.24	143	ug/L
OW-56	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	2/22/2018	Acetone	1.4	10	0.82	14064	ug/L
OW-56	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	2/22/2018	Benzene	0.22	1	0.062	5	ug/L
OW-56	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	2/22/2018	1,1-Dichloroethane	0.47	1	0.4	25	ug/L
OW-56	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	2/22/2018	Isopropylbenzene	2.5	1	0.051	447	ug/L
OW-56	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-56	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	2/22/2018	1,2-Dichloroethane	4.4	1	0.4	5	ug/L
OW-56	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	2/22/2018	Toluene	0.067	1	0.064	1000	ug/L
OW-56	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	2/22/2018	sec-Butylbenzene	0.23	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	2/22/2018	MTBE	100	1	0.24	143	ug/L
OW-56	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-56	5/8/2018	Acetone	4.3	10	0.82	14064	ug/L
OW-56	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	5/8/2018	Benzene	0.27	1	0.062	5	ug/L
OW-56	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-56	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-56	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-56	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-56	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-56	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-56	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-56	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-56	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-56	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-56	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-56	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-56	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-56	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-56	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-56	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-56	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-56	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-56	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-56	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-56	5/8/2018	Isopropylbenzene	1.2	1	0.051	447	ug/L
OW-56	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-56	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-56	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-56	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-56	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-56	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-56	5/8/2018	1,2-Dichloroethane	1.9	1	0.4	5	ug/L
OW-56	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-56	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-56	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-56	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-56	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-56	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-56	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-56	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-56	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-56	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-56	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-56	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-56	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-56	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-56	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-56	5/8/2018	MTBE	91	1	0.24	143	ug/L
OW-56	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-56	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-56	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-56	8/28/2018	Acetone	9.9	10	0.79	14064	ug/L
OW-56	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-56	8/28/2018	Benzene	1.1	1	0.17	5	ug/L
OW-56	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-56	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-56	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-56	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-56	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-56	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-56	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-56	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-56	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-56	8/28/2018	1,1-Dichloroethane	0.49	1	0.4	25	ug/L
OW-56	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-56	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-56	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-56	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-56	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-56	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-56	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-56	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-56	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-56	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-56	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-56	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-56	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-56	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-56	8/28/2018	Isopropylbenzene	0.48	1	0.22	447	ug/L
OW-56	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-56	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-56	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-56	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-56	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-56	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-56	8/28/2018	1,2-Dichloroethane	**12**	1	0.4	5	ug/L
OW-56	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-56	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-56	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-56	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-56	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-56	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-56	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-56	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-56	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-56	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-56	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-56	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-56	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-56	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-56	8/28/2018	MTBE	69	1	0.32	143	ug/L
OW-56	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-56	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-56	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-56	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-56	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-56	11/7/2018	Benzene	1.8	1	0.17	5	ug/L
OW-56	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-56	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-56	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-56	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-56	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-56	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-56	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-56	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-56	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-56	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-56	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-56	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-56	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-56	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-56	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
OW-56	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-56	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-56	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-56	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-56	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-56	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-56	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-56	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-56	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-56	11/7/2018	Isopropylbenzene	2.3	1	0.22	447	ug/L
OW-56	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-56	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-56	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-56	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-56	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-56	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-56	11/7/2018	1,2-Dichloroethane	**13**	1	0.19	5	ug/L
OW-56	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-56	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-56	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-56	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-56	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-56	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-56	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-56	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-56	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-56	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-56	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-56	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-56	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-56	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-56	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-56	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-56	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-56	11/7/2018	MTBE	62	1	0.46	143	ug/L
OW-56	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-56	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-56	2/6/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-56	2/6/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-56	2/6/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-56	2/6/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-56	2/6/2019	1,1-Dichloroethane	0.42	1	0.175197	25	ug/L
OW-56	2/6/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-56	2/6/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	2/6/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-56	2/6/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-56	2/6/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-56	2/6/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-56	2/6/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-56	2/6/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-56	2/6/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-56	2/6/2019	1,2-Dichloroethane	**8.2**	1	0.189525	5	ug/L
OW-56	2/6/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-56	2/6/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-56	2/6/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-56	2/6/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-56	2/6/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-56	2/6/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-56	2/6/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	2/6/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-56	2/6/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-56	2/6/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-56	2/6/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	2/6/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-56	2/6/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-56	2/6/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-56	2/6/2019	Acetone	6	10	0.75707	14064	ug/L
OW-56	2/6/2019	Benzene	0.94	1	0.174896	5	ug/L
OW-56	2/6/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-56	2/6/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-56	2/6/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-56	2/6/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	2/6/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-56	2/6/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-56	2/6/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-56	2/6/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-56	2/6/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-56	2/6/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	2/6/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-56	2/6/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-56	2/6/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-56	2/6/2019	Dibromomethane	ND	1	0.322147	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/6/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	2/6/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-56	2/6/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-56	2/6/2019	Isopropylbenzene	0.77	1	0.221104	447	ug/L
OW-56	2/6/2019	MTBE	58	1	0.456095	143	ug/L
OW-56	2/6/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-56	2/6/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-56	2/6/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-56	2/6/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-56	2/6/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-56	2/6/2019	Styrene	ND	1	0.250146	100	ug/L
OW-56	2/6/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-56	2/6/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-56	2/6/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-56	2/6/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-56	2/6/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-56	2/6/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-56	2/6/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-56	2/6/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-56	2/6/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-56	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-56	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-56	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	5/2/2019	1,2,4-Trimethylbenzene	0.25	1	0.213199	56	ug/L
OW-56	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-56	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	5/2/2019	1,2-Dichloroethane	4.1	1	0.194638	5	ug/L
OW-56	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-56	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	5/2/2019	Acetone	15	10	1.199396	14064	ug/L
OW-56	5/2/2019	Benzene	0.78	1	0.166639	5	ug/L
OW-56	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	5/2/2019	Isopropylbenzene	0.81	1	0.191522	447	ug/L
OW-56	5/2/2019	MTBE	46	1	0.456095	143	ug/L
OW-56	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-56	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-56	5/2/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	5/2/2019	1,2-Dibromoethane	ND	0.00946	0.003297	0.05	ug/L
OW-56	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-56	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-56	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-56	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-56	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	8/21/2019	1,2-Dichloroethane	**9.1**	1	0.194638	5	ug/L
OW-56	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	8/21/2019	1-Methylnaphthalene	0.77	4	0.314954	NA	ug/L
OW-56	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	8/21/2019	Acetone	5.3	10	1.199396	14064	ug/L
OW-56	8/21/2019	Benzene	1.5	1	0.166639	5	ug/L
OW-56	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	8/21/2019	Isopropylbenzene	1.5	1	0.191522	447	ug/L
OW-56	8/21/2019	MTBE	17	1	0.456095	143	ug/L
OW-56	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	8/21/2019	n-Butylbenzene	0.98	3	0.22757	1000	ug/L
OW-56	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	8/21/2019	sec-Butylbenzene	0.43	1	0.247731	2000	ug/L
OW-56	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-56	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-56	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-56	10/15/2019	1,2-Dichloroethane	**7.7**	1	0.194638	5	ug/L
OW-56	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-56	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-56	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-56	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-56	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-56	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-56	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-56	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-56	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-56	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-56	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-56	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-56	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-56	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-56	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-56	10/15/2019	Benzene	1.1	1	0.166639	5	ug/L
OW-56	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-56	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-56	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-56	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-56	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-56	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-56	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-56	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-56	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-56	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-56	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-56	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-56	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-56	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-56	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-56	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-56	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-56	10/15/2019	Isopropylbenzene	1.4	1	0.191522	447	ug/L
OW-56	10/15/2019	MTBE	11	1	0.456095	143	ug/L
OW-56	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-56	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-56	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-56	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-56	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-56	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-56	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-56	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-56	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-56	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-56	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-56	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-56	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-56	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-56	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-56	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-56	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-56	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-56	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-56	10/15/2019	1,1-Dichloroethane	0.58	1	0.140859	25	ug/L
OW-56	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-56	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-56	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-56	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-56	3/2/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-56	3/2/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-56	3/2/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-56	3/2/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-56	3/2/2020	1,1-Dichloroethane	0.49	1	0.27	25	ug/L
OW-56	3/2/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-56	3/2/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-56	3/2/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	3/2/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-56	3/2/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-56	3/2/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-56	3/2/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-56	3/2/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-56	3/2/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/2/2020	1,2-Dichloroethane	**5.1**	1	0.22	5	ug/L
OW-56	3/2/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-56	3/2/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-56	3/2/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-56	3/2/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-56	3/2/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-56	3/2/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-56	3/2/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-56	3/2/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-56	3/2/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-56	3/2/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-56	3/2/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-56	3/2/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-56	3/2/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-56	3/2/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-56	3/2/2020	Acetone	9.9	10	2.3	14064	ug/L
OW-56	3/2/2020	Benzene	0.64	1	0.23	5	ug/L
OW-56	3/2/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-56	3/2/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-56	3/2/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-56	3/2/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-56	3/2/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-56	3/2/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-56	3/2/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-56	3/2/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-56	3/2/2020	Chloroform	ND	1	0.13	100	ug/L
OW-56	3/2/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-56	3/2/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-56	3/2/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-56	3/2/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-56	3/2/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-56	3/2/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-56	3/2/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-56	3/2/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-56	3/2/2020	Isopropylbenzene	1.1	1	0.18	447	ug/L
OW-56	3/2/2020	MTBE	14	1	0.39	143	ug/L
OW-56	3/2/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-56	3/2/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	3/2/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-56	3/2/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-56	3/2/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-56	3/2/2020	Styrene	ND	1	0.13	100	ug/L
OW-56	3/2/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-56	3/2/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-56	3/2/2020	Toluene	ND	1	0.2	1000	ug/L
OW-56	3/2/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-56	3/2/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-56	3/2/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-56	3/2/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-56	3/2/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	3/2/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-56	3/2/2020	1,2-Dibromoethane	ND	0.0093	0.0061	0.05	ug/L
OW-56	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-56	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-56	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-56	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-56	9/21/2020	1,1-Dichloroethane	0.29	1	0.27	25	ug/L
OW-56	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-56	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-56	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-56	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-56	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-56	9/21/2020	1,2,4-Trimethylbenzene	1.2	1	0.12	56	ug/L
OW-56	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-56	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-56	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-56	9/21/2020	1,2-Dichloroethane	**10**	1	0.22	5	ug/L
OW-56	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-56	9/21/2020	1,3,5-Trimethylbenzene	1.6	1	0.18	60	ug/L
OW-56	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-56	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-56	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-56	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-56	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-56	9/21/2020	2-Butanone	1.5	10	1.1	5565	ug/L
OW-56	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-56	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-56	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-56	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-56	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-56	9/21/2020	Acetone	15	10	2.3	14064	ug/L
OW-56	9/21/2020	Benzene	**5.3**	1	0.23	5	ug/L
OW-56	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-56	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-56	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-56	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-56	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-56	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-56	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-56	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-56	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
OW-56	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-56	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-56	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-56	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-56	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-56	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-56	9/21/2020	Ethylbenzene	0.52	1	0.21	700	ug/L
OW-56	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-56	9/21/2020	Isopropylbenzene	0.25	1	0.18	447	ug/L
OW-56	9/21/2020	MTBE	32	1	0.39	143	ug/L
OW-56	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-56	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-56	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-56	9/21/2020	Naphthalene	0.48	2	0.28	30	ug/L
OW-56	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-56	9/21/2020	Styrene	ND	1	0.13	100	ug/L
OW-56	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-56	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-56	9/21/2020	Toluene	2.8	1	0.2	1000	ug/L
OW-56	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-56	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-56	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-56	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-56	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-56	9/21/2020	Xylenes, Total	45	1.5	0.55	620	ug/L
OW-56	9/21/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-56	12/23/2020	Acetone	ND	50	20	14064	ug/L
OW-56	12/23/2020	Benzene	**547**	2	0.76	5	ug/L
OW-56	12/23/2020	Bromodichloromethane	*ND*	*2*	1	1.34	ug/L
OW-56	12/23/2020	Bromoform	ND	10	1.42	32.9	ug/L
OW-56	12/23/2020	Bromomethane	ND	2	1.96	7.54	ug/L
OW-56	12/23/2020	2-Butanone	ND	50	5.2	5565	ug/L
OW-56	12/23/2020	Carbon Disulfide	ND	2	1	810	ug/L
OW-56	12/23/2020	Carbon tetrachloride	ND	2	1	5	ug/L
OW-56	12/23/2020	Chlorobenzene	ND	2	1	77.6	ug/L
OW-56	12/23/2020	Dibromochloromethane	*ND*	*2*	1	1.68	ug/L
OW-56	12/23/2020	Chloroethane	ND	2	1.52	20857	ug/L
OW-56	12/23/2020	Chloroform	ND	2	1.2	100	ug/L
OW-56	12/23/2020	Chloromethane	ND	2	1.66	20.32	ug/L
OW-56	12/23/2020	2-Chlorotoluene	ND	2	1.14	233	ug/L
OW-56	12/23/2020	4-Chlorotoluene	ND	2	1.12	250	ug/L
OW-56	12/23/2020	cis-1,2-Dichloroethene	ND	2	1	70	ug/L
OW-56	12/23/2020	cis-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-56	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*10*	3	0.0033	ug/L
OW-56	12/23/2020	1,2-Dibromoethane	*ND*	*2*	1	0.05	ug/L
OW-56	12/23/2020	Dibromomethane	*ND*	*10*	1.18	8	ug/L
OW-56	12/23/2020	1,2-Dichlorobenzene	ND	2	1	600	ug/L
OW-56	12/23/2020	1,3-Dichlorobenzene	ND	2	1.08	N/A	ug/L
OW-56	12/23/2020	1,4-Dichlorobenzene	ND	2	1.28	75	ug/L
OW-56	12/23/2020	Dichlorodifluoromethane	ND	2	1.7	197	ug/L
OW-56	12/23/2020	1,1-Dichloroethane	ND	2	1	25	ug/L
OW-56	12/23/2020	1,2-Dichloroethane	**22.9**	2	1	5	ug/L
OW-56	12/23/2020	1,1-Dichloroethene	ND	2	1	7	ug/L
OW-56	12/23/2020	1,2-Dichloropropane	ND	2	1	5	ug/L
OW-56	12/23/2020	1,3-Dichloropropane	ND	2	1	370	ug/L
OW-56	12/23/2020	2,2-Dichloropropane	ND	2	1	NA	ug/L
OW-56	12/23/2020	1,1-Dichloropropene	ND	2	1	NA	ug/L
OW-56	12/23/2020	Ethylbenzene	76.9	2	1	700	ug/L
OW-56	12/23/2020	Hexachlorobutadiene	*ND*	*10*	1.8	1.39	ug/L
OW-56	12/23/2020	2-Hexanone	*ND*	*50*	6.2	38	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/23/2020	Isopropylbenzene	7.02	2	1.06	447	ug/L
OW-56	12/23/2020	Methylene Chloride	*ND*	*10*	6	5	ug/L
OW-56	12/23/2020	1-Methylnaphthalene	ND	10	8.4	NA	ug/L
OW-56	12/23/2020	2-Methylnaphthalene	*ND*	*20*	9.2		ug/L
OW-56	12/23/2020	4-Methyl-2-Pentanone	ND	50	3.6	1243	ug/L
OW-56	12/23/2020	MTBE	70.8	2	1.48	143	ug/L
OW-56	12/23/2020	Naphthalene	19.5	2	2	30	ug/L
OW-56	12/23/2020	n-Butylbenzene	ND	2	1.52	1000	ug/L
OW-56	12/23/2020	n-Propylbenzene	4.44	2	1.38	660	ug/L
OW-56	12/23/2020	p-Isopropyltoluene	ND	2	1.42	NA	ug/L
OW-56	12/23/2020	sec-Butylbenzene	ND	2	1.4	2000	ug/L
OW-56	12/23/2020	Styrene	ND	2	2	100	ug/L
OW-56	12/23/2020	tert-Butylbenzene	ND	2	1.26	690	ug/L
OW-56	12/23/2020	1,1,1,2-Tetrachloroethane	ND	2	1.04	5.74	ug/L
OW-56	12/23/2020	1,1,2,2-Tetrachloroethane	ND	2	1	10	ug/L
OW-56	12/23/2020	Tetrachloroethene	ND	2	1.16	5	ug/L
OW-56	12/23/2020	Toluene	125	2	0.82	1000	ug/L
OW-56	12/23/2020	trans-1,2-Dichloroethene	ND	2	1	100	ug/L
OW-56	12/23/2020	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
OW-56	12/23/2020	1,2,3-Trichlorobenzene	ND	2	1.4	70	ug/L
OW-56	12/23/2020	1,2,4-Trichlorobenzene	ND	2	1.64	70	ug/L
OW-56	12/23/2020	1,1,1-Trichloroethane	ND	2	1	200	ug/L
OW-56	12/23/2020	1,1,2-Trichloroethane	*ND*	*10*	1	5	ug/L
OW-56	12/23/2020	Trichloroethene	ND	2	1	5	ug/L
OW-56	12/23/2020	Trichlorofluoromethane	ND	2	1.04	1137	ug/L
OW-56	12/23/2020	1,2,3-Trichloropropane	*ND*	*10*	1.68	0.0084	ug/L
OW-56	12/23/2020	1,2,4-Trimethylbenzene	**84.7**	2	1.64	56	ug/L
OW-56	12/23/2020	1,3,5-Trimethylbenzene	42.8	2	1.12	60	ug/L
OW-56	12/23/2020	Vinyl Chloride	ND	2	1	2	ug/L
OW-56	12/23/2020	Xylenes, Total	469	20	3.2	620	ug/L
OW-56	12/23/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
OW-56	12/23/2020	1,2-Dibromoethane	ND	0.0197	0.00493	0.05	ug/L
OW-57	10/1/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-57	10/1/2016	Acetone	ND	500	250	14064	ug/L
OW-57	10/1/2016	Chloroform	ND	50	4.4	100	ug/L
OW-57	10/1/2016	Benzene	**11000**	500	48	5	ug/L
OW-57	10/1/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-57	10/1/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-57	10/1/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-57	10/1/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-57	10/1/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-57	10/1/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-57	10/1/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-57	10/1/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-57	10/1/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-57	10/1/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-57	10/1/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-57	10/1/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-57	10/1/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-57	10/1/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-57	10/1/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-57	10/1/2016	2-Butanone	ND	500	37	5565	ug/L
OW-57	10/1/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-57	10/1/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-57	10/1/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-57	10/1/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-57	10/1/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	10/1/2016	1,2,4-Trimethylbenzene	7.3	50	5.5	56	ug/L
OW-57	10/1/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-57	10/1/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-57	10/1/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-57	10/1/2016	Isopropylbenzene	22	50	5.2	447	ug/L
OW-57	10/1/2016	p-Isopropyltoluene	ND	50	7	NA	ug/L
OW-57	10/1/2016	Ethylbenzene	570	50	5.6	700	ug/L
OW-57	10/1/2016	Styrene	ND	50	5.5	100	ug/L
OW-57	10/1/2016	n-Propylbenzene	48	50	6.6	660	ug/L
OW-57	10/1/2016	n-Butylbenzene	9.1	150	8	1000	ug/L
OW-57	10/1/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-57	10/1/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-57	10/1/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-57	10/1/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-57	10/1/2016	1,3,5-Trimethylbenzene	ND	50	5.8	60	ug/L
OW-57	10/1/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-57	10/1/2016	Toluene	54	50	5.9	1000	ug/L
OW-57	10/1/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-57	10/1/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-57	10/1/2016	sec-Butylbenzene	ND	50	6.2	2000	ug/L
OW-57	10/1/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-57	10/1/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-57	10/1/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-57	10/1/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-57	10/1/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-57	10/1/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-57	10/1/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-57	10/1/2016	Xylenes, Total	140	75	18	620	ug/L
OW-57	10/1/2016	MTBE	**180**	50	11	143	ug/L
OW-57	10/1/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-57	10/1/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-57	11/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
OW-57	11/8/2016	Acetone	54	50	25	14064	ug/L
OW-57	11/8/2016	Chloroform	ND	5	0.44	100	ug/L
OW-57	11/8/2016	Benzene	**10000**	500	48	5	ug/L
OW-57	11/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
OW-57	11/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
OW-57	11/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
OW-57	11/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
OW-57	11/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
OW-57	11/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
OW-57	11/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
OW-57	11/8/2016	Carbon Disulfide	ND	50	3	810	ug/L
OW-57	11/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
OW-57	11/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
OW-57	11/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L
OW-57	11/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
OW-57	11/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
OW-57	11/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
OW-57	11/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
OW-57	11/8/2016	2-Butanone	17	50	3.7	5565	ug/L
OW-57	11/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
OW-57	11/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
OW-57	11/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
OW-57	11/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
OW-57	11/8/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
OW-57	11/8/2016	1-Methylnaphthalene	170	20	1	NA	ug/L
OW-57	11/8/2016	Naphthalene	**210**	10	0.46	30	ug/L
OW-57	11/8/2016	2-Methylnaphthalene	**130**	20	0.79		ug/L
OW-57	11/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
OW-57	11/8/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
OW-57	11/8/2016	1,2,4-Trimethylbenzene	0.96	5	0.55	56	ug/L
OW-57	11/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
OW-57	11/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
OW-57	11/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
OW-57	11/8/2016	Isopropylbenzene	15	5	0.52	447	ug/L
OW-57	11/8/2016	p-Isopropyltoluene	1.8	5	0.7	NA	ug/L
OW-57	11/8/2016	Ethylbenzene	580	50	5.6	700	ug/L
OW-57	11/8/2016	Styrene	ND	5	0.55	100	ug/L
OW-57	11/8/2016	n-Propylbenzene	39	5	0.66	660	ug/L
OW-57	11/8/2016	n-Butylbenzene	3.3	15	0.8	1000	ug/L
OW-57	11/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
OW-57	11/8/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
OW-57	11/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
OW-57	11/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
OW-57	11/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
OW-57	11/8/2016	1,3,5-Trimethylbenzene	1.6	5	0.58	60	ug/L
OW-57	11/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
OW-57	11/8/2016	Toluene	35	5	0.59	1000	ug/L
OW-57	11/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
OW-57	11/8/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
OW-57	11/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
OW-57	11/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-57	11/8/2016	sec-Butylbenzene	1.9	5	0.62	2000	ug/L
OW-57	11/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
OW-57	11/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
OW-57	11/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
OW-57	11/8/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
OW-57	11/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
OW-57	11/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
OW-57	11/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
OW-57	11/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
OW-57	11/8/2016	Xylenes, Total	110	7.5	1.8	620	ug/L
OW-57	11/8/2016	MTBE	**160**	5	1.1	143	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
OW-57	11/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
OW-57	3/30/2017	Carbon tetrachloride	*ND*	*50*	11	5	ug/L
OW-57	3/30/2017	Acetone	ND	500	88	14064	ug/L
OW-57	3/30/2017	Chloroform	ND	50	8.9	100	ug/L
OW-57	3/30/2017	Benzene	**8600**	50	9.6	5	ug/L
OW-57	3/30/2017	1,1,1-Trichloroethane	ND	50	7.3	200	ug/L
OW-57	3/30/2017	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-57	3/30/2017	Chloromethane	*ND*	*150*	21	20.32	ug/L
OW-57	3/30/2017	Dibromomethane	*ND*	*50*	12	8	ug/L
OW-57	3/30/2017	Chloroethane	ND	100	23	20857	ug/L
OW-57	3/30/2017	Vinyl Chloride	*ND*	*50*	18	2	ug/L
OW-57	3/30/2017	Methylene Chloride	*ND*	*150*	11	5	ug/L
OW-57	3/30/2017	Carbon Disulfide	ND	500	60	810	ug/L
OW-57	3/30/2017	Bromoform	*ND*	*50*	21	32.9	ug/L
OW-57	3/30/2017	Bromodichloromethane	*ND*	*50*	18	1.34	ug/L
OW-57	3/30/2017	1,1-Dichloroethane	*ND*	*50*	10	25	ug/L
OW-57	3/30/2017	1,1-Dichloroethene	*ND*	*50*	8.1	7	ug/L
OW-57	3/30/2017	Trichlorofluoromethane	ND	50	18	1137	ug/L
OW-57	3/30/2017	Dichlorodifluoromethane	ND	50	32	197	ug/L
OW-57	3/30/2017	1,2-Dichloropropane	*ND*	*50*	10	5	ug/L
OW-57	3/30/2017	2-Butanone	ND	500	110	5565	ug/L
OW-57	3/30/2017	1,1,2-Trichloroethane	*ND*	*50*	14	5	ug/L
OW-57	3/30/2017	Trichloroethene	*ND*	*50*	18	5	ug/L
OW-57	3/30/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-57	3/30/2017	1,2,3-Trichlorobenzene	ND	50	11	70	ug/L
OW-57	3/30/2017	2-Chlorotoluene	ND	50	40	233	ug/L
OW-57	3/30/2017	1,2,4-Trimethylbenzene	ND	50	10	56	ug/L
OW-57	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	140	0.0033	ug/L
OW-57	3/30/2017	1,2,3-Trichloropropane	*ND*	*100*	39	0.0084	ug/L
OW-57	3/30/2017	tert-Butylbenzene	ND	50	10	690	ug/L
OW-57	3/30/2017	Isopropylbenzene	20	50	9.8	447	ug/L
OW-57	3/30/2017	p-Isopropyltoluene	ND	50	14	NA	ug/L
OW-57	3/30/2017	Ethylbenzene	380	50	11	700	ug/L
OW-57	3/30/2017	Styrene	ND	50	16	100	ug/L
OW-57	3/30/2017	n-Propylbenzene	45	50	13	660	ug/L
OW-57	3/30/2017	n-Butylbenzene	ND	150	16	1000	ug/L
OW-57	3/30/2017	4-Chlorotoluene	ND	50	40	250	ug/L
OW-57	3/30/2017	1,2-Dibromoethane	*ND*	*50*	13	0.05	ug/L
OW-57	3/30/2017	1,2-Dichloroethane	*ND*	*50*	12	5	ug/L
OW-57	3/30/2017	4-Methyl-2-Pentanone	ND	500	71	1243	ug/L
OW-57	3/30/2017	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-57	3/30/2017	Bromobenzene	ND	50	14	62	ug/L
OW-57	3/30/2017	Toluene	24	50	8.9	1000	ug/L
OW-57	3/30/2017	Chlorobenzene	ND	50	11	77.6	ug/L
OW-57	3/30/2017	Dibromochloromethane	*ND*	*50*	7.8	1.68	ug/L
OW-57	3/30/2017	Tetrachloroethene	*ND*	*50*	15	5	ug/L
OW-57	3/30/2017	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-57	3/30/2017	1,3-Dichloropropane	ND	50	16	370	ug/L
OW-57	3/30/2017	cis-1,2-Dichloroethene	ND	50	20	70	ug/L
OW-57	3/30/2017	trans-1,2-Dichloroethene	ND	50	18	100	ug/L
OW-57	3/30/2017	1,1-Dichloropropene	ND	50	13	NA	ug/L
OW-57	3/30/2017	2-Hexanone	*ND*	*500*	66	38	ug/L
OW-57	3/30/2017	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-57	3/30/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	11	5.74	ug/L
OW-57	3/30/2017	Xylenes, Total	100	*75*	32	620	ug/L
OW-57	3/30/2017	MTBE	100	50	15	143	ug/L
OW-57	3/30/2017	cis-1,3-Dichloropropene	ND	50	10	NA	ug/L
OW-57	3/30/2017	trans-1,3-Dichloropropene	ND	50	8.9	NA	ug/L
OW-57	6/21/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	6/21/2017	Acetone	ND	500	41	14064	ug/L
OW-57	6/21/2017	Chloroform	ND	50	20	100	ug/L
OW-57	6/21/2017	Benzene	**14000**	500	31	5	ug/L
OW-57	6/21/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	6/21/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	6/21/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	6/21/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	6/21/2017	Chloroethane	ND	100	12	20857	ug/L
OW-57	6/21/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	6/21/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	6/21/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	6/21/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	6/21/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	6/21/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	6/21/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	6/21/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	6/21/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	6/21/2017	2-Butanone	ND	500	57	5565	ug/L
OW-57	6/21/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	6/21/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	6/21/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	6/21/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	6/21/2017	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	6/21/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	6/21/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	6/21/2017	Isopropylbenzene	15	50	2.6	447	ug/L
OW-57	6/21/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	6/21/2017	Ethylbenzene	540	50	4.7	700	ug/L
OW-57	6/21/2017	Styrene	ND	50	7.8	100	ug/L
OW-57	6/21/2017	n-Propylbenzene	34	50	3.7	660	ug/L
OW-57	6/21/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L
OW-57	6/21/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	6/21/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	6/21/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	6/21/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	6/21/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	6/21/2017	Bromobenzene	ND	50	7	62	ug/L
OW-57	6/21/2017	Toluene	30	50	3.2	1000	ug/L
OW-57	6/21/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	6/21/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	6/21/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	6/21/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	6/21/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	6/21/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	6/21/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	6/21/2017	Pentafluorobenzene	**500**	0	0		None
OW-57	6/21/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	6/21/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	6/21/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	6/21/2017	Xylenes, Total	110	75	16	620	ug/L
OW-57	6/21/2017	MTBE	**150**	50	12	143	ug/L
OW-57	6/21/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	6/21/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	9/19/2017	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	9/19/2017	Acetone	ND	500	41	14064	ug/L
OW-57	9/19/2017	Chloroform	ND	50	20	100	ug/L
OW-57	9/19/2017	Benzene	**9400**	500	31	5	ug/L
OW-57	9/19/2017	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	9/19/2017	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	9/19/2017	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	9/19/2017	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	9/19/2017	Chloroethane	ND	100	12	20857	ug/L
OW-57	9/19/2017	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	9/19/2017	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	9/19/2017	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	9/19/2017	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	9/19/2017	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	9/19/2017	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	9/19/2017	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	9/19/2017	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-57	9/19/2017	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	9/19/2017	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	9/19/2017	2-Butanone	ND	500	57	5565	ug/L
OW-57	9/19/2017	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	9/19/2017	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	9/19/2017	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	9/19/2017	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	9/19/2017	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	9/19/2017	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	9/19/2017	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	9/19/2017	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	9/19/2017	Isopropylbenzene	14	50	2.6	447	ug/L
OW-57	9/19/2017	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	9/19/2017	Ethylbenzene	460	50	4.7	700	ug/L
OW-57	9/19/2017	Styrene	ND	50	7.8	100	ug/L
OW-57	9/19/2017	n-Propylbenzene	33	50	3.7	660	ug/L
OW-57	9/19/2017	n-Butylbenzene	ND	150	6.5	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/19/2017	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	9/19/2017	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	9/19/2017	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	9/19/2017	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	9/19/2017	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	9/19/2017	Bromobenzene	ND	50	7	62	ug/L
OW-57	9/19/2017	Toluene	25	50	3.2	1000	ug/L
OW-57	9/19/2017	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	9/19/2017	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	9/19/2017	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	9/19/2017	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	9/19/2017	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	9/19/2017	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	9/19/2017	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	9/19/2017	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	9/19/2017	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	9/19/2017	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	9/19/2017	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	9/19/2017	Xylenes, Total	96	75	16	620	ug/L
OW-57	9/19/2017	MTBE	120	50	12	143	ug/L
OW-57	9/19/2017	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	9/19/2017	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-57	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-57	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-57	12/6/2017	Benzene	**11000**	1000	62	5	ug/L
OW-57	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-57	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-57	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-57	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-57	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-57	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-57	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-57	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-57	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-57	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-57	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-57	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-57	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-57	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-57	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-57	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-57	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-57	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-57	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-57	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-57	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-57	12/6/2017	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-57	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-57	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-57	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-57	12/6/2017	Isopropylbenzene	12	100	5.1	447	ug/L
OW-57	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-57	12/6/2017	Ethylbenzene	520	100	9.3	700	ug/L
OW-57	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-57	12/6/2017	n-Propylbenzene	29	100	7.4	660	ug/L
OW-57	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-57	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-57	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-57	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-57	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-57	12/6/2017	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-57	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-57	12/6/2017	Toluene	24	100	6.4	1000	ug/L
OW-57	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-57	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-57	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-57	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-57	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-57	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-57	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-57	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-57	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-57	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-57	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-57	12/6/2017	Xylenes, Total	83	150	32	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/6/2017	MTBE	98	100	24	143	ug/L
OW-57	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-57	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-57	2/20/2018	Carbon tetrachloride	*ND*	*50*	5.5	5	ug/L
OW-57	2/20/2018	Acetone	97	500	41	14064	ug/L
OW-57	2/20/2018	Chloroform	ND	50	20	100	ug/L
OW-57	2/20/2018	Benzene	**12000**	500	31	5	ug/L
OW-57	2/20/2018	1,1,1-Trichloroethane	ND	50	3.6	200	ug/L
OW-57	2/20/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-57	2/20/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-57	2/20/2018	Dibromomethane	*ND*	*50*	4.5	8	ug/L
OW-57	2/20/2018	Chloroethane	ND	100	12	20857	ug/L
OW-57	2/20/2018	Vinyl Chloride	*ND*	*50*	8.9	2	ug/L
OW-57	2/20/2018	Methylene Chloride	*ND*	*150*	5.4	5	ug/L
OW-57	2/20/2018	Carbon Disulfide	ND	500	20	810	ug/L
OW-57	2/20/2018	Bromoform	*ND*	*50*	11	32.9	ug/L
OW-57	2/20/2018	Bromodichloromethane	*ND*	*50*	8.8	1.34	ug/L
OW-57	2/20/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-57	2/20/2018	1,1-Dichloroethene	*ND*	*50*	4	7	ug/L
OW-57	2/20/2018	Trichlorofluoromethane	ND	50	9.1	1137	ug/L
OW-57	2/20/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-57	2/20/2018	1,2-Dichloropropane	*ND*	*50*	5.1	5	ug/L
OW-57	2/20/2018	2-Butanone	ND	500	57	5565	ug/L
OW-57	2/20/2018	1,1,2-Trichloroethane	*ND*	*50*	7	5	ug/L
OW-57	2/20/2018	Trichloroethene	*ND*	*50*	5.6	5	ug/L
OW-57	2/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.8	10	ug/L
OW-57	2/20/2018	1,2,3-Trichlorobenzene	ND	50	5.9	70	ug/L
OW-57	2/20/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-57	2/20/2018	1,2,4-Trimethylbenzene	ND	50	5.6	56	ug/L
OW-57	2/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	69	0.0033	ug/L
OW-57	2/20/2018	1,2,3-Trichloropropane	*ND*	*100*	19	0.0084	ug/L
OW-57	2/20/2018	tert-Butylbenzene	ND	50	5.2	690	ug/L
OW-57	2/20/2018	Isopropylbenzene	15	50	2.6	447	ug/L
OW-57	2/20/2018	p-Isopropyltoluene	ND	50	4.8	NA	ug/L
OW-57	2/20/2018	Ethylbenzene	580	50	4.7	700	ug/L
OW-57	2/20/2018	Styrene	ND	50	7.8	100	ug/L
OW-57	2/20/2018	n-Propylbenzene	45	50	3.7	660	ug/L
OW-57	2/20/2018	n-Butylbenzene	7.6	150	6.5	1000	ug/L
OW-57	2/20/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-57	2/20/2018	1,2-Dibromoethane	*ND*	*50*	6.5	0.05	ug/L
OW-57	2/20/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-57	2/20/2018	4-Methyl-2-Pentanone	ND	500	35	1243	ug/L
OW-57	2/20/2018	1,3,5-Trimethylbenzene	ND	50	4.4	60	ug/L
OW-57	2/20/2018	Bromobenzene	ND	50	7	62	ug/L
OW-57	2/20/2018	Toluene	35	50	3.2	1000	ug/L
OW-57	2/20/2018	Chlorobenzene	ND	50	5.3	77.6	ug/L
OW-57	2/20/2018	Dibromochloromethane	*ND*	*50*	3.6	1.68	ug/L
OW-57	2/20/2018	Tetrachloroethene	*ND*	*50*	6.5	5	ug/L
OW-57	2/20/2018	sec-Butylbenzene	ND	50	5.5	2000	ug/L
OW-57	2/20/2018	1,3-Dichloropropane	ND	50	8.4	370	ug/L
OW-57	2/20/2018	cis-1,2-Dichloroethene	ND	50	10	70	ug/L
OW-57	2/20/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-57	2/20/2018	1,1-Dichloropropene	ND	50	4.6	NA	ug/L
OW-57	2/20/2018	2-Hexanone	*ND*	*500*	33	38	ug/L
OW-57	2/20/2018	2,2-Dichloropropane	ND	100	7.9	NA	ug/L
OW-57	2/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.2	5.74	ug/L
OW-57	2/20/2018	Xylenes, Total	110	75	16	620	ug/L
OW-57	2/20/2018	MTBE	120	50	12	143	ug/L
OW-57	2/20/2018	cis-1,3-Dichloropropene	ND	50	4.1	NA	ug/L
OW-57	2/20/2018	trans-1,3-Dichloropropene	ND	50	11	NA	ug/L
OW-57	5/8/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-57	5/8/2018	Acetone	ND	1000	82	14064	ug/L
OW-57	5/8/2018	Chloroform	ND	100	40	100	ug/L
OW-57	5/8/2018	Benzene	**12000**	1000	62	5	ug/L
OW-57	5/8/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-57	5/8/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-57	5/8/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-57	5/8/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-57	5/8/2018	Chloroethane	ND	200	23	20857	ug/L
OW-57	5/8/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-57	5/8/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-57	5/8/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-57	5/8/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-57	5/8/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-57	5/8/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-57	5/8/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/8/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-57	5/8/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-57	5/8/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-57	5/8/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-57	5/8/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-57	5/8/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-57	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-57	5/8/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-57	5/8/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-57	5/8/2018	1,2,4-Trimethylbenzene	*ND*	*100*	11	56	ug/L
OW-57	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-57	5/8/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-57	5/8/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-57	5/8/2018	Isopropylbenzene	11	100	5.1	447	ug/L
OW-57	5/8/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-57	5/8/2018	Ethylbenzene	560	100	9.3	700	ug/L
OW-57	5/8/2018	Styrene	ND	100	16	100	ug/L
OW-57	5/8/2018	n-Propylbenzene	31	100	7.4	660	ug/L
OW-57	5/8/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-57	5/8/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-57	5/8/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-57	5/8/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-57	5/8/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-57	5/8/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-57	5/8/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-57	5/8/2018	Toluene	30	100	6.4	1000	ug/L
OW-57	5/8/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-57	5/8/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-57	5/8/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-57	5/8/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-57	5/8/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-57	5/8/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-57	5/8/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-57	5/8/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-57	5/8/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-57	5/8/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-57	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-57	5/8/2018	Xylenes, Total	110	150	32	620	ug/L
OW-57	5/8/2018	MTBE	120	100	24	143	ug/L
OW-57	5/8/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-57	5/8/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-57	8/28/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-57	8/28/2018	Acetone	85	200	16	14064	ug/L
OW-57	8/28/2018	Chloroform	ND	20	8	100	ug/L
OW-57	8/28/2018	Benzene	**12000**	200	35	5	ug/L
OW-57	8/28/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-57	8/28/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-57	8/28/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-57	8/28/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-57	8/28/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-57	8/28/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-57	8/28/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-57	8/28/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-57	8/28/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-57	8/28/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-57	8/28/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-57	8/28/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-57	8/28/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-57	8/28/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-57	8/28/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-57	8/28/2018	2-Butanone	ND	200	25	5565	ug/L
OW-57	8/28/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-57	8/28/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-57	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-57	8/28/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-57	8/28/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-57	8/28/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-57	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-57	8/28/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-57	8/28/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-57	8/28/2018	Isopropylbenzene	15	20	4.4	447	ug/L
OW-57	8/28/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-57	8/28/2018	Ethylbenzene	570	20	4.5	700	ug/L
OW-57	8/28/2018	Styrene	ND	20	5	100	ug/L
OW-57	8/28/2018	n-Propylbenzene	45	20	4.9	660	ug/L
OW-57	8/28/2018	n-Butylbenzene	6.2	60	5	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/28/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-57	8/28/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-57	8/28/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-57	8/28/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-57	8/28/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
OW-57	8/28/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-57	8/28/2018	Toluene	41	20	3.4	1000	ug/L
OW-57	8/28/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-57	8/28/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-57	8/28/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-57	8/28/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-57	8/28/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-57	8/28/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-57	8/28/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-57	8/28/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-57	8/28/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-57	8/28/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-57	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-57	8/28/2018	Xylenes, Total	120	30	13	620	ug/L
OW-57	8/28/2018	MTBE	120	20	6.4	143	ug/L
OW-57	8/28/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-57	8/28/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-57	11/29/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-57	11/29/2018	Acetone	ND	200	15	14064	ug/L
OW-57	11/29/2018	Chloroform	ND	20	4.7	100	ug/L
OW-57	11/29/2018	Benzene	**11000**	200	35	5	ug/L
OW-57	11/29/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-57	11/29/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-57	11/29/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-57	11/29/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-57	11/29/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-57	11/29/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-57	11/29/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-57	11/29/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-57	11/29/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-57	11/29/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-57	11/29/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-57	11/29/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-57	11/29/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-57	11/29/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-57	11/29/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-57	11/29/2018	2-Butanone	ND	200	28	5565	ug/L
OW-57	11/29/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-57	11/29/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-57	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-57	11/29/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-57	11/29/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-57	11/29/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-57	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-57	11/29/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-57	11/29/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-57	11/29/2018	Isopropylbenzene	14	20	4.4	447	ug/L
OW-57	11/29/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-57	11/29/2018	Ethylbenzene	510	20	4.5	700	ug/L
OW-57	11/29/2018	Styrene	ND	20	5	100	ug/L
OW-57	11/29/2018	n-Propylbenzene	40	20	4.9	660	ug/L
OW-57	11/29/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-57	11/29/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-57	11/29/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-57	11/29/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-57	11/29/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-57	11/29/2018	1,3,5-Trimethylbenzene	ND	20	4.6	60	ug/L
OW-57	11/29/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-57	11/29/2018	Toluene	61	20	3.4	1000	ug/L
OW-57	11/29/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-57	11/29/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-57	11/29/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-57	11/29/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-57	11/29/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-57	11/29/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-57	11/29/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-57	11/29/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-57	11/29/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-57	11/29/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-57	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-57	11/29/2018	Xylenes, Total	110	30	13	620	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	MTBE	100	20	9.1	143	ug/L
OW-57	11/29/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-57	11/29/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-57	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
OW-57	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L
OW-57	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
OW-57	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
OW-57	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
OW-57	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
OW-57	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
OW-57	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
OW-57	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
OW-57	2/20/2019	1,2,4-Trimethylbenzene	ND	20	5.066287	56	ug/L
OW-57	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
OW-57	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
OW-57	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
OW-57	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
OW-57	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
OW-57	2/20/2019	1,3,5-Trimethylbenzene	ND	20	4.628281	60	ug/L
OW-57	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
OW-57	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
OW-57	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
OW-57	2/20/2019	1-Methylnaphthalene	120	80	6.716339	NA	ug/L
OW-57	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
OW-57	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
OW-57	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
OW-57	2/20/2019	2-Methylnaphthalene	**37**	80	6.90752		ug/L
OW-57	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
OW-57	2/20/2019	p-Isopropyltoluene	ND	20	4.806771	NA	ug/L
OW-57	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
OW-57	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
OW-57	2/20/2019	Benzene	**12000**	200	34.979144	5	ug/L
OW-57	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
OW-57	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
OW-57	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
OW-57	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
OW-57	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
OW-57	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
OW-57	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
OW-57	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
OW-57	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
OW-57	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
OW-57	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
OW-57	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
OW-57	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	2/20/2019	Ethylbenzene	560	20	4.468045	700	ug/L
OW-57	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
OW-57	2/20/2019	Isopropylbenzene	16	20	4.422084	447	ug/L
OW-57	2/20/2019	MTBE	110	20	9.1219	143	ug/L
OW-57	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
OW-57	2/20/2019	Naphthalene	**150**	40	5.792521	30	ug/L
OW-57	2/20/2019	n-Butylbenzene	5.8	60	4.966609	1000	ug/L
OW-57	2/20/2019	n-Propylbenzene	50	20	4.851725	660	ug/L
OW-57	2/20/2019	sec-Butylbenzene	ND	20	4.045094	2000	ug/L
OW-57	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
OW-57	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
OW-57	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
OW-57	2/20/2019	Toluene	89	20	3.362788	1000	ug/L
OW-57	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
OW-57	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
OW-57	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
OW-57	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
OW-57	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
OW-57	2/20/2019	Xylenes, Total	120	30	12.825754	620	ug/L
OW-57	5/16/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	5/16/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	5/16/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	5/16/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	5/16/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	5/16/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	5/16/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	5/16/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/16/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-57	5/16/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	5/16/2019	1,2,4-Trimethylbenzene	5	20	4.263982	56	ug/L
OW-57	5/16/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-57	5/16/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	5/16/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	5/16/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	5/16/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	5/16/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	5/16/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	5/16/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-57	5/16/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	5/16/2019	1-Methylnaphthalene	130	80	6.29909	NA	ug/L
OW-57	5/16/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	5/16/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	5/16/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	5/16/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	5/16/2019	2-Methylnaphthalene	**49**	80	6.90752		ug/L
OW-57	5/16/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	5/16/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	5/16/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	5/16/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-57	5/16/2019	Benzene	**11000**	200	33.327811	5	ug/L
OW-57	5/16/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-57	5/16/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	5/16/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	5/16/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	5/16/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	5/16/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	5/16/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	5/16/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	5/16/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	5/16/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	5/16/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	5/16/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	5/16/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	5/16/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	5/16/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	5/16/2019	Ethylbenzene	540	20	2.646816	700	ug/L
OW-57	5/16/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	5/16/2019	Isopropylbenzene	15	20	3.830445	447	ug/L
OW-57	5/16/2019	MTBE	95	20	9.1219	143	ug/L
OW-57	5/16/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	5/16/2019	Naphthalene	**130**	40	5.501427	30	ug/L
OW-57	5/16/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
OW-57	5/16/2019	n-Propylbenzene	39	20	4.28616	660	ug/L
OW-57	5/16/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
OW-57	5/16/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	5/16/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	5/16/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	5/16/2019	Toluene	89	20	7.008724	1000	ug/L
OW-57	5/16/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	5/16/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	5/16/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	5/16/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	5/16/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	5/16/2019	Xylenes, Total	110	30	9.088299	620	ug/L
OW-57	8/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	8/21/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	8/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	8/21/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	8/21/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	8/21/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	8/21/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	8/21/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-57	8/21/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-57	8/21/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	8/21/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
OW-57	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-57	8/21/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	8/21/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	8/21/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	8/21/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	8/21/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	8/21/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	8/21/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/21/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	8/21/2019	1-Methylnaphthalene	110	80	6.29909	NA	ug/L
OW-57	8/21/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	8/21/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	8/21/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	8/21/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	8/21/2019	2-Methylnaphthalene	**63**	80	6.90752		ug/L
OW-57	8/21/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	8/21/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	8/21/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	8/21/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-57	8/21/2019	Benzene	**12000**	200	33.327811	5	ug/L
OW-57	8/21/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-57	8/21/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	8/21/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	8/21/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	8/21/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	8/21/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	8/21/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	8/21/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	8/21/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	8/21/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	8/21/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	8/21/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	8/21/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	8/21/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	8/21/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	8/21/2019	Ethylbenzene	560	20	2.646816	700	ug/L
OW-57	8/21/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	8/21/2019	Isopropylbenzene	18	20	3.830445	447	ug/L
OW-57	8/21/2019	MTBE	100	20	9.1219	143	ug/L
OW-57	8/21/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	8/21/2019	Naphthalene	**150**	40	5.501427	30	ug/L
OW-57	8/21/2019	n-Butylbenzene	20	60	4.551391	1000	ug/L
OW-57	8/21/2019	n-Propylbenzene	44	20	4.28616	660	ug/L
OW-57	8/21/2019	sec-Butylbenzene	5.8	20	4.954626	2000	ug/L
OW-57	8/21/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	8/21/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	8/21/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	8/21/2019	Toluene	91	20	7.008724	1000	ug/L
OW-57	8/21/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	8/21/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	8/21/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	8/21/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	8/21/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	8/21/2019	Xylenes, Total	130	30	9.088299	620	ug/L
OW-57	11/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-57	11/5/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-57	11/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-57	11/5/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-57	11/5/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-57	11/5/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-57	11/5/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-57	11/5/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-57	11/5/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-57	11/5/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
OW-57	11/5/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-57	11/5/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-57	11/5/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-57	11/5/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-57	11/5/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
OW-57	11/5/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-57	11/5/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-57	11/5/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-57	11/5/2019	1-Methylnaphthalene	140	80	6.29909	NA	ug/L
OW-57	11/5/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-57	11/5/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-57	11/5/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-57	11/5/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-57	11/5/2019	2-Methylnaphthalene	**53**	80	6.90752		ug/L
OW-57	11/5/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-57	11/5/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-57	11/5/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-57	11/5/2019	Acetone	50	200	23.987928	14064	ug/L
OW-57	11/5/2019	Benzene	**11000**	200	33.327811	5	ug/L
OW-57	11/5/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-57	11/5/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-57	11/5/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-57	11/5/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-57	11/5/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-57	11/5/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-57	11/5/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-57	11/5/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-57	11/5/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-57	11/5/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-57	11/5/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-57	11/5/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-57	11/5/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-57	11/5/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-57	11/5/2019	Ethylbenzene	540	20	2.646816	700	ug/L
OW-57	11/5/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-57	11/5/2019	Isopropylbenzene	16	20	3.830445	447	ug/L
OW-57	11/5/2019	MTBE	92	20	9.1219	143	ug/L
OW-57	11/5/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-57	11/5/2019	Naphthalene	**160**	40	5.501427	30	ug/L
OW-57	11/5/2019	n-Butylbenzene	5.4	60	4.551391	1000	ug/L
OW-57	11/5/2019	n-Propylbenzene	42	20	4.28616	660	ug/L
OW-57	11/5/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
OW-57	11/5/2019	Styrene	ND	20	3.826467	100	ug/L
OW-57	11/5/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-57	11/5/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-57	11/5/2019	Toluene	76	20	7.008724	1000	ug/L
OW-57	11/5/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-57	11/5/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-57	11/5/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-57	11/5/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-57	11/5/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-57	11/5/2019	Xylenes, Total	130	30	9.088299	620	ug/L
OW-57	3/5/2020	Benzene	**13000**	200	45	5	ug/L
OW-57	3/5/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-57	3/5/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-57	3/5/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
OW-57	3/5/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-57	3/5/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-57	3/5/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-57	3/5/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-57	3/5/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-57	3/5/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-57	3/5/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-57	3/5/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
OW-57	3/5/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-57	3/5/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-57	3/5/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
OW-57	3/5/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-57	3/5/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-57	3/5/2020	1,3,5-Trimethylbenzene	ND	20	3.6	60	ug/L
OW-57	3/5/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-57	3/5/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-57	3/5/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-57	3/5/2020	1-Methylnaphthalene	120	80	17	NA	ug/L
OW-57	3/5/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-57	3/5/2020	2-Butanone	ND	200	22	5565	ug/L
OW-57	3/5/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-57	3/5/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-57	3/5/2020	2-Methylnaphthalene	**66**	80	14		ug/L
OW-57	3/5/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-57	3/5/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-57	3/5/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-57	3/5/2020	Acetone	94	200	47	14064	ug/L
OW-57	3/5/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-57	3/5/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-57	3/5/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-57	3/5/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-57	3/5/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-57	3/5/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-57	3/5/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-57	3/5/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-57	3/5/2020	Chloroform	ND	20	2.7	100	ug/L
OW-57	3/5/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-57	3/5/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-57	3/5/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-57	3/5/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-57	3/5/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-57	3/5/2020	Ethylbenzene	550	20	4.3	700	ug/L
OW-57	3/5/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-57	3/5/2020	Isopropylbenzene	15	20	3.7	447	ug/L
OW-57	3/5/2020	MTBE	89	20	7.9	143	ug/L
OW-57	3/5/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-57	3/5/2020	n-Butylbenzene	ND	60	5.1	1000	ug/L
OW-57	3/5/2020	n-Propylbenzene	41	20	3.6	660	ug/L
OW-57	3/5/2020	Naphthalene	**150**	40	5.6	30	ug/L
OW-57	3/5/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-57	3/5/2020	Styrene	ND	20	2.6	100	ug/L
OW-57	3/5/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-57	3/5/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-57	3/5/2020	Toluene	62	20	4	1000	ug/L
OW-57	3/5/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-57	3/5/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-57	3/5/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-57	3/5/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-57	3/5/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-57	3/5/2020	Xylenes, Total	130	30	11	620	ug/L
OW-57	3/5/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-57	9/18/2020	Benzene	**11000**	500	110	5	ug/L
OW-57	9/18/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-57	9/18/2020	Styrene	ND	50	6.5	100	ug/L
OW-57	9/18/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-57	9/18/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-57	9/18/2020	Toluene	54	50	10	1000	ug/L
OW-57	9/18/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-57	9/18/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-57	9/18/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-57	9/18/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-57	9/18/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-57	9/18/2020	Xylenes, Total	140	75	28	620	ug/L
OW-57	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-57	9/18/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-57	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-57	9/18/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-57	9/18/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-57	9/18/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-57	9/18/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-57	9/18/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-57	9/18/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-57	9/18/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-57	9/18/2020	1,2,4-Trimethylbenzene	ND	50	6.1	56	ug/L
OW-57	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-57	9/18/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-57	9/18/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-57	9/18/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-57	9/18/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-57	9/18/2020	1,3,5-Trimethylbenzene	ND	50	9.1	60	ug/L
OW-57	9/18/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-57	9/18/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-57	9/18/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-57	9/18/2020	1-Methylnaphthalene	93	200	42	NA	ug/L
OW-57	9/18/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-57	9/18/2020	2-Butanone	ND	500	56	5565	ug/L
OW-57	9/18/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-57	9/18/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-57	9/18/2020	2-Methylnaphthalene	**58**	200	35		ug/L
OW-57	9/18/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-57	9/18/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-57	9/18/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
OW-57	9/18/2020	Acetone	ND	500	120	14064	ug/L
OW-57	9/18/2020	Bromobenzene	ND	50	14	62	ug/L
OW-57	9/18/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-57	9/18/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-57	9/18/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-57	9/18/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-57	9/18/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-57	9/18/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-57	9/18/2020	Chloroethane	ND	100	19	20857	ug/L
OW-57	9/18/2020	Chloroform	ND	50	6.7	100	ug/L
OW-57	9/18/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
OW-57	9/18/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/18/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-57	9/18/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-57	9/18/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-57	9/18/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-57	9/18/2020	Ethylbenzene	550	50	11	700	ug/L
OW-57	9/18/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-57	9/18/2020	Isopropylbenzene	12	50	9.1	447	ug/L
OW-57	9/18/2020	MTBE	71	50	20	143	ug/L
OW-57	9/18/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-57	9/18/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-57	9/18/2020	n-Propylbenzene	34	50	9.1	660	ug/L
OW-57	9/18/2020	Naphthalene	**160**	100	14	30	ug/L
OW-57	9/18/2020	1,2-Dibromoethane	ND	0.009	0.006	0.05	ug/L
OW-57	12/23/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-57	12/23/2020	Acetone	ND	2500	1000	14064	ug/L
OW-57	12/23/2020	Benzene	**10400**	100	38	5	ug/L
OW-57	12/23/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
OW-57	12/23/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
OW-57	12/23/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
OW-57	12/23/2020	2-Butanone	ND	2500	260	5565	ug/L
OW-57	12/23/2020	Carbon Disulfide	ND	100	50	810	ug/L
OW-57	12/23/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
OW-57	12/23/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
OW-57	12/23/2020	Chloroethane	ND	100	76	20857	ug/L
OW-57	12/23/2020	Chloroform	ND	100	60	100	ug/L
OW-57	12/23/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
OW-57	12/23/2020	2-Chlorotoluene	ND	100	57	233	ug/L
OW-57	12/23/2020	4-Chlorotoluene	ND	100	56	250	ug/L
OW-57	12/23/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
OW-57	12/23/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-57	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
OW-57	12/23/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
OW-57	12/23/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
OW-57	12/23/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
OW-57	12/23/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
OW-57	12/23/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
OW-57	12/23/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
OW-57	12/23/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
OW-57	12/23/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
OW-57	12/23/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
OW-57	12/23/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
OW-57	12/23/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
OW-57	12/23/2020	Ethylbenzene	218	100	50	700	ug/L
OW-57	12/23/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
OW-57	12/23/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
OW-57	12/23/2020	Isopropylbenzene	ND	100	53	447	ug/L
OW-57	12/23/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
OW-57	12/23/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
OW-57	12/23/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
OW-57	12/23/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
OW-57	12/23/2020	MTBE	ND	100	74	143	ug/L
OW-57	12/23/2020	Naphthalene	**103**	100	100	30	ug/L
OW-57	12/23/2020	n-Butylbenzene	ND	100	76	1000	ug/L
OW-57	12/23/2020	n-Propylbenzene	ND	100	69	660	ug/L
OW-57	12/23/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
OW-57	12/23/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
OW-57	12/23/2020	Styrene	ND	100	100	100	ug/L
OW-57	12/23/2020	tert-Butylbenzene	ND	100	63	690	ug/L
OW-57	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
OW-57	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
OW-57	12/23/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
OW-57	12/23/2020	Toluene	ND	100	41	1000	ug/L
OW-57	12/23/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
OW-57	12/23/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-57	12/23/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
OW-57	12/23/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
OW-57	12/23/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
OW-57	12/23/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
OW-57	12/23/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
OW-57	12/23/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
OW-57	12/23/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
OW-57	12/23/2020	1,2,4-Trimethylbenzene	*ND*	*100*	82	56	ug/L
OW-57	12/23/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/23/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
OW-57	12/23/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
OW-58	9/30/2016	Carbon tetrachloride	*ND*	*50*	5.4	5	ug/L
OW-58	9/30/2016	Acetone	ND	500	250	14064	ug/L
OW-58	9/30/2016	Chloroform	ND	50	4.4	100	ug/L
OW-58	9/30/2016	Benzene	**32000**	500	48	5	ug/L
OW-58	9/30/2016	1,1,1-Trichloroethane	ND	50	4.6	200	ug/L
OW-58	9/30/2016	Bromomethane	*ND*	*150*	39	7.54	ug/L
OW-58	9/30/2016	Chloromethane	*ND*	*150*	11	20.32	ug/L
OW-58	9/30/2016	Dibromomethane	*ND*	*50*	6	8	ug/L
OW-58	9/30/2016	Chloroethane	ND	100	9.6	20857	ug/L
OW-58	9/30/2016	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58	9/30/2016	Methylene Chloride	*ND*	*150*	9.4	5	ug/L
OW-58	9/30/2016	Carbon Disulfide	ND	500	30	810	ug/L
OW-58	9/30/2016	Bromoform	*ND*	*50*	5.1	32.9	ug/L
OW-58	9/30/2016	Bromodichloromethane	*ND*	*50*	7	1.34	ug/L
OW-58	9/30/2016	1,1-Dichloroethane	*ND*	*50*	5.4	25	ug/L
OW-58	9/30/2016	1,1-Dichloroethene	*ND*	*50*	5.4	7	ug/L
OW-58	9/30/2016	Trichlorofluoromethane	ND	50	10	1137	ug/L
OW-58	9/30/2016	Dichlorodifluoromethane	ND	50	18	197	ug/L
OW-58	9/30/2016	1,2-Dichloropropane	*ND*	*50*	5.5	5	ug/L
OW-58	9/30/2016	2-Butanone	ND	500	37	5565	ug/L
OW-58	9/30/2016	1,1,2-Trichloroethane	*ND*	*50*	6.4	5	ug/L
OW-58	9/30/2016	Trichloroethene	*ND*	*50*	8.8	5	ug/L
OW-58	9/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*100*	6.4	10	ug/L
OW-58	9/30/2016	1,2,3-Trichlorobenzene	ND	50	5.6	70	ug/L
OW-58	9/30/2016	2-Chlorotoluene	ND	50	20	233	ug/L
OW-58	9/30/2016	1,2,4-Trimethylbenzene	**690**	50	5.5	56	ug/L
OW-58	9/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*100*	12	0.0033	ug/L
OW-58	9/30/2016	1,2,3-Trichloropropane	*ND*	*100*	10	0.0084	ug/L
OW-58	9/30/2016	tert-Butylbenzene	ND	50	5.8	690	ug/L
OW-58	9/30/2016	Isopropylbenzene	72	50	5.2	447	ug/L
OW-58	9/30/2016	p-Isopropyltoluene	15	50	7	NA	ug/L
OW-58	9/30/2016	Ethylbenzene	**1500**	50	5.6	700	ug/L
OW-58	9/30/2016	Styrene	ND	50	5.5	100	ug/L
OW-58	9/30/2016	n-Propylbenzene	150	50	6.6	660	ug/L
OW-58	9/30/2016	n-Butylbenzene	21	150	8	1000	ug/L
OW-58	9/30/2016	4-Chlorotoluene	ND	50	6.4	250	ug/L
OW-58	9/30/2016	1,2-Dibromoethane	*ND*	*50*	5.6	0.05	ug/L
OW-58	9/30/2016	1,2-Dichloroethane	*ND*	*50*	5.8	5	ug/L
OW-58	9/30/2016	4-Methyl-2-Pentanone	ND	500	21	1243	ug/L
OW-58	9/30/2016	1,3,5-Trimethylbenzene	**210**	50	5.8	60	ug/L
OW-58	9/30/2016	Bromobenzene	ND	50	4.9	62	ug/L
OW-58	9/30/2016	Toluene	**6600**	500	59	1000	ug/L
OW-58	9/30/2016	Chlorobenzene	ND	50	5.7	77.6	ug/L
OW-58	9/30/2016	Dibromochloromethane	*ND*	*50*	4.3	1.68	ug/L
OW-58	9/30/2016	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	9/30/2016	sec-Butylbenzene	18	50	6.2	2000	ug/L
OW-58	9/30/2016	1,3-Dichloropropane	ND	50	7.8	370	ug/L
OW-58	9/30/2016	cis-1,2-Dichloroethene	ND	50	6.2	70	ug/L
OW-58	9/30/2016	trans-1,2-Dichloroethene	ND	50	20	100	ug/L
OW-58	9/30/2016	1,1-Dichloropropene	ND	50	6.7	NA	ug/L
OW-58	9/30/2016	2-Hexanone	*ND*	*500*	42	38	ug/L
OW-58	9/30/2016	2,2-Dichloropropane	ND	100	8.3	NA	ug/L
OW-58	9/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*50*	5.6	5.74	ug/L
OW-58	9/30/2016	Xylenes, Total	**4400**	75	18	620	ug/L
OW-58	9/30/2016	MTBE	**3300**	50	11	143	ug/L
OW-58	9/30/2016	cis-1,3-Dichloropropene	ND	50	5.3	NA	ug/L
OW-58	9/30/2016	trans-1,3-Dichloropropene	ND	50	5.2	NA	ug/L
OW-58	11/7/2016	Carbon tetrachloride	*ND*	*20*	2.2	5	ug/L
OW-58	11/7/2016	Acetone	ND	200	98	14064	ug/L
OW-58	11/7/2016	Chloroform	ND	20	1.8	100	ug/L
OW-58	11/7/2016	Benzene	**34000**	1000	96	5	ug/L
OW-58	11/7/2016	1,1,1-Trichloroethane	ND	20	1.8	200	ug/L
OW-58	11/7/2016	Bromomethane	*ND*	*60*	16	7.54	ug/L
OW-58	11/7/2016	Chloromethane	*ND*	*60*	4.3	20.32	ug/L
OW-58	11/7/2016	Dibromomethane	*ND*	*20*	2.4	8	ug/L
OW-58	11/7/2016	Chloroethane	ND	40	3.8	20857	ug/L
OW-58	11/7/2016	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-58	11/7/2016	Methylene Chloride	*ND*	*60*	3.7	5	ug/L
OW-58	11/7/2016	Carbon Disulfide	ND	200	12	810	ug/L
OW-58	11/7/2016	Bromoform	ND	20	2	32.9	ug/L
OW-58	11/7/2016	Bromodichloromethane	*ND*	*20*	2.8	1.34	ug/L
OW-58	11/7/2016	1,1-Dichloroethane	ND	20	2.2	25	ug/L
OW-58	11/7/2016	1,1-Dichloroethene	*ND*	*20*	2.1	7	ug/L
OW-58	11/7/2016	Trichlorofluoromethane	ND	20	4.1	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	Dichlorodifluoromethane	ND	20	7.1	197	ug/L
OW-58	11/7/2016	1,2-Dichloropropane	*ND*	*20*	2.2	5	ug/L
OW-58	11/7/2016	2-Butanone	ND	200	15	5565	ug/L
OW-58	11/7/2016	1,1,2-Trichloroethane	*ND*	*20*	2.5	5	ug/L
OW-58	11/7/2016	Trichloroethene	*ND*	*20*	3.5	5	ug/L
OW-58	11/7/2016	1,1,2,2-Tetrachloroethane	*ND*	*40*	2.6	10	ug/L
OW-58	11/7/2016	1,2,3-Trichlorobenzene	ND	20	2.3	70	ug/L
OW-58	11/7/2016	Hexachlorobutadiene	*ND*	*20*	4	1.39	ug/L
OW-58	11/7/2016	1-Methylnaphthalene	77	80	4.1	NA	ug/L
OW-58	11/7/2016	Naphthalene	**190**	40	1.9	30	ug/L
OW-58	11/7/2016	2-Methylnaphthalene	**61**	80	3.2		ug/L
OW-58	11/7/2016	2-Chlorotoluene	ND	20	8	233	ug/L
OW-58	11/7/2016	1,2-Dichlorobenzene	ND	20	8	600	ug/L
OW-58	11/7/2016	1,2,4-Trimethylbenzene	**210**	20	2.2	56	ug/L
OW-58	11/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*40*	4.7	0.0033	ug/L
OW-58	11/7/2016	1,2,3-Trichloropropane	*ND*	*40*	4	0.0084	ug/L
OW-58	11/7/2016	tert-Butylbenzene	ND	20	2.3	690	ug/L
OW-58	11/7/2016	Isopropylbenzene	43	20	2.1	447	ug/L
OW-58	11/7/2016	p-Isopropyltoluene	7.5	20	2.8	NA	ug/L
OW-58	11/7/2016	Ethylbenzene	**1300**	20	2.2	700	ug/L
OW-58	11/7/2016	Styrene	ND	20	2.2	100	ug/L
OW-58	11/7/2016	n-Propylbenzene	110	20	2.6	660	ug/L
OW-58	11/7/2016	n-Butylbenzene	14	60	3.2	1000	ug/L
OW-58	11/7/2016	4-Chlorotoluene	ND	20	2.6	250	ug/L
OW-58	11/7/2016	1,4-Dichlorobenzene	ND	20	2.9	75	ug/L
OW-58	11/7/2016	1,2-Dibromoethane	*ND*	*20*	2.2	0.05	ug/L
OW-58	11/7/2016	1,2-Dichloroethane	*ND*	*20*	2.3	5	ug/L
OW-58	11/7/2016	4-Methyl-2-Pentanone	ND	200	8.6	1243	ug/L
OW-58	11/7/2016	1,3,5-Trimethylbenzene	**71**	20	2.3	60	ug/L
OW-58	11/7/2016	Bromobenzene	ND	20	2	62	ug/L
OW-58	11/7/2016	Toluene	**1100**	20	2.4	1000	ug/L
OW-58	11/7/2016	Chlorobenzene	ND	20	2.3	77.6	ug/L
OW-58	11/7/2016	1,2,4-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-58	11/7/2016	Dibromochloromethane	*ND*	*20*	1.7	1.68	ug/L
OW-58	11/7/2016	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-58	11/7/2016	sec-Butylbenzene	12	20	2.5	2000	ug/L
OW-58	11/7/2016	1,3-Dichloropropane	ND	20	3.1	370	ug/L
OW-58	11/7/2016	cis-1,2-Dichloroethene	ND	20	2.5	70	ug/L
OW-58	11/7/2016	trans-1,2-Dichloroethene	ND	20	8	100	ug/L
OW-58	11/7/2016	1,3-Dichlorobenzene	ND	20	2.9	N/A	ug/L
OW-58	11/7/2016	1,1-Dichloropropene	ND	20	2.7	NA	ug/L
OW-58	11/7/2016	2-Hexanone	*ND*	*200*	17	38	ug/L
OW-58	11/7/2016	2,2-Dichloropropane	ND	40	3.3	NA	ug/L
OW-58	11/7/2016	1,1,1,2-Tetrachloroethane	*ND*	*20*	2.2	5.74	ug/L
OW-58	11/7/2016	Xylenes, Total	**1200**	30	7.3	620	ug/L
OW-58	11/7/2016	MTBE	**2700**	20	4.2	143	ug/L
OW-58	11/7/2016	cis-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-58	11/7/2016	trans-1,3-Dichloropropene	ND	20	2.1	NA	ug/L
OW-58	3/29/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	3/29/2017	Acetone	ND	1000	88	14064	ug/L
OW-58	3/29/2017	Chloroform	ND	100	8.9	100	ug/L
OW-58	3/29/2017	Benzene	**31000**	1000	96	5	ug/L
OW-58	3/29/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	3/29/2017	Bromomethane	*ND*	*300*	78	7.54	ug/L
OW-58	3/29/2017	Chloromethane	*ND*	*300*	21	20.32	ug/L
OW-58	3/29/2017	Dibromomethane	*ND*	*100*	12	8	ug/L
OW-58	3/29/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	3/29/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	3/29/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	3/29/2017	Carbon Disulfide	*ND*	*1000*	60	810	ug/L
OW-58	3/29/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	3/29/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	3/29/2017	1,1-Dichloroethane	*ND*	*100*	10	25	ug/L
OW-58	3/29/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	3/29/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	3/29/2017	Dichlorodifluoromethane	ND	100	32	197	ug/L
OW-58	3/29/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	3/29/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	3/29/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	3/29/2017	Trichloroethene	*ND*	*100*	18	5	ug/L
OW-58	3/29/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	3/29/2017	1,2,3-Trichlorobenzene	*ND*	*100*	11	70	ug/L
OW-58	3/29/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	3/29/2017	1,2,4-Trimethylbenzene	**170**	100	10	56	ug/L
OW-58	3/29/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	3/29/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/29/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	3/29/2017	Isopropylbenzene	26	100	9.8	447	ug/L
OW-58	3/29/2017	p-Isopropyltoluene	ND	100	14	NA	ug/L
OW-58	3/29/2017	Ethylbenzene	**1100**	100	11	700	ug/L
OW-58	3/29/2017	Styrene	ND	100	16	100	ug/L
OW-58	3/29/2017	n-Propylbenzene	90	100	13	660	ug/L
OW-58	3/29/2017	n-Butylbenzene	ND	300	16	1000	ug/L
OW-58	3/29/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	3/29/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	3/29/2017	1,2-Dichloroethane	*ND*	*100*	12	5	ug/L
OW-58	3/29/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	3/29/2017	1,3,5-Trimethylbenzene	*44*	*100*	12	60	ug/L
OW-58	3/29/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	3/29/2017	Toluene	830	100	8.9	1000	ug/L
OW-58	3/29/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	3/29/2017	Dibromochloromethane	*ND*	*100*	7.8	1.68	ug/L
OW-58	3/29/2017	Tetrachloroethene	*ND*	*100*	15	5	ug/L
OW-58	3/29/2017	sec-Butylbenzene	ND	100	10	2000	ug/L
OW-58	3/29/2017	1,3-Dichloropropane	ND	100	16	370	ug/L
OW-58	3/29/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	3/29/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	3/29/2017	1,1-Dichloropropene	ND	100	13	NA	ug/L
OW-58	3/29/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	3/29/2017	2,2-Dichloropropane	ND	200	12	NA	ug/L
OW-58	3/29/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	11	5.74	ug/L
OW-58	3/29/2017	Xylenes, Total	**970**	150	32	620	ug/L
OW-58	3/29/2017	MTBE	**3000**	100	15	143	ug/L
OW-58	3/29/2017	cis-1,3-Dichloropropene	ND	100	10	NA	ug/L
OW-58	3/29/2017	trans-1,3-Dichloropropene	ND	100	8.9	NA	ug/L
OW-58	6/21/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	6/21/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	6/21/2017	Chloroform	ND	100	40	100	ug/L
OW-58	6/21/2017	Benzene	**38000**	1000	62	5	ug/L
OW-58	6/21/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	6/21/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	6/21/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	6/21/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	6/21/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	6/21/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	6/21/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	6/21/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	6/21/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	6/21/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	6/21/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	6/21/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	6/21/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	6/21/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	6/21/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	6/21/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	6/21/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	6/21/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	6/21/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	6/21/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	6/21/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	6/21/2017	1,2,4-Trimethylbenzene	**100**	100	11	56	ug/L
OW-58	6/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	6/21/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	6/21/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	6/21/2017	Isopropylbenzene	38	100	5.1	447	ug/L
OW-58	6/21/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	6/21/2017	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	6/21/2017	Styrene	ND	100	16	100	ug/L
OW-58	6/21/2017	n-Propylbenzene	98	100	7.4	660	ug/L
OW-58	6/21/2017	n-Butylbenzene	16	300	13	1000	ug/L
OW-58	6/21/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	6/21/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	6/21/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	6/21/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	6/21/2017	1,3,5-Trimethylbenzene	*38*	*100*	8.7	60	ug/L
OW-58	6/21/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	6/21/2017	Toluene	160	100	6.4	1000	ug/L
OW-58	6/21/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	6/21/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	6/21/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	6/21/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	6/21/2017	1,3-Dichloropropane	ND	100	17	370	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	6/21/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	6/21/2017	Pentafluorobenzene	**1000**	0	0		None
OW-58	6/21/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	6/21/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	6/21/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	6/21/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	6/21/2017	Xylenes, Total	360	150	32	620	ug/L
OW-58	6/21/2017	MTBE	**3700**	100	24	143	ug/L
OW-58	6/21/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	6/21/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	9/19/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	9/19/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	9/19/2017	Chloroform	ND	100	40	100	ug/L
OW-58	9/19/2017	Benzene	**29000**	1000	62	5	ug/L
OW-58	9/19/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	9/19/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	9/19/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	9/19/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	9/19/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	9/19/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	9/19/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	9/19/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	9/19/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	9/19/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	9/19/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	9/19/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	9/19/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	9/19/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	9/19/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	9/19/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	9/19/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	9/19/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	9/19/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	9/19/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	9/19/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	9/19/2017	1,2,4-Trimethylbenzene	**110**	100	11	56	ug/L
OW-58	9/19/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	9/19/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	9/19/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	9/19/2017	Isopropylbenzene	36	100	5.1	447	ug/L
OW-58	9/19/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	9/19/2017	Ethylbenzene	**1100**	100	9.3	700	ug/L
OW-58	9/19/2017	Styrene	ND	100	16	100	ug/L
OW-58	9/19/2017	n-Propylbenzene	92	100	7.4	660	ug/L
OW-58	9/19/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	9/19/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	9/19/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	9/19/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	9/19/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	9/19/2017	1,3,5-Trimethylbenzene	*39*	*100*	8.7	60	ug/L
OW-58	9/19/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	9/19/2017	Toluene	220	100	6.4	1000	ug/L
OW-58	9/19/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	9/19/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	9/19/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	9/19/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	9/19/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	9/19/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	9/19/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	9/19/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	9/19/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	9/19/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	9/19/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	9/19/2017	Xylenes, Total	370	150	32	620	ug/L
OW-58	9/19/2017	MTBE	**3100**	100	24	143	ug/L
OW-58	9/19/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	9/19/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	12/6/2017	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	12/6/2017	Acetone	ND	1000	82	14064	ug/L
OW-58	12/6/2017	Chloroform	ND	100	40	100	ug/L
OW-58	12/6/2017	Benzene	**32000**	1000	62	5	ug/L
OW-58	12/6/2017	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	12/6/2017	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	12/6/2017	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	12/6/2017	Dibromomethane	*ND*	*100*	9.1	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	Chloroethane	ND	200	23	20857	ug/L
OW-58	12/6/2017	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	12/6/2017	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	12/6/2017	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	12/6/2017	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	12/6/2017	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	12/6/2017	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	12/6/2017	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	12/6/2017	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	12/6/2017	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	12/6/2017	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	12/6/2017	2-Butanone	ND	1000	110	5565	ug/L
OW-58	12/6/2017	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	12/6/2017	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	12/6/2017	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	12/6/2017	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	12/6/2017	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	12/6/2017	1,2,4-Trimethylbenzene	*24*	*100*	11	56	ug/L
OW-58	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	12/6/2017	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	12/6/2017	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	12/6/2017	Isopropylbenzene	33	100	5.1	447	ug/L
OW-58	12/6/2017	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	12/6/2017	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	12/6/2017	Styrene	ND	100	16	100	ug/L
OW-58	12/6/2017	n-Propylbenzene	89	100	7.4	660	ug/L
OW-58	12/6/2017	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	12/6/2017	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	12/6/2017	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	12/6/2017	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	12/6/2017	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	12/6/2017	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	12/6/2017	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	12/6/2017	Toluene	40	100	6.4	1000	ug/L
OW-58	12/6/2017	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	12/6/2017	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	12/6/2017	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	12/6/2017	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	12/6/2017	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	12/6/2017	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	12/6/2017	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	12/6/2017	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	12/6/2017	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	12/6/2017	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	12/6/2017	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	12/6/2017	Xylenes, Total	120	150	32	620	ug/L
OW-58	12/6/2017	MTBE	**2900**	100	24	143	ug/L
OW-58	12/6/2017	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	12/6/2017	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	2/20/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	2/20/2018	Acetone	ND	1000	82	14064	ug/L
OW-58	2/20/2018	Chloroform	ND	100	40	100	ug/L
OW-58	2/20/2018	Benzene	**33000**	1000	62	5	ug/L
OW-58	2/20/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	2/20/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	2/20/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	2/20/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	2/20/2018	Chloroethane	ND	200	23	20857	ug/L
OW-58	2/20/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	2/20/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	2/20/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	2/20/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	2/20/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	2/20/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	2/20/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	2/20/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	2/20/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	2/20/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	2/20/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-58	2/20/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	2/20/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	2/20/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	2/20/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	2/20/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	2/20/2018	1,2,4-Trimethylbenzene	*23*	*100*	11	56	ug/L
OW-58	2/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	2/20/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	2/20/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	2/20/2018	Isopropylbenzene	29	100	5.1	447	ug/L
OW-58	2/20/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	2/20/2018	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	2/20/2018	Styrene	ND	100	16	100	ug/L
OW-58	2/20/2018	n-Propylbenzene	95	100	7.4	660	ug/L
OW-58	2/20/2018	n-Butylbenzene	16	300	13	1000	ug/L
OW-58	2/20/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	2/20/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	2/20/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	2/20/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	2/20/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	2/20/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	2/20/2018	Toluene	53	100	6.4	1000	ug/L
OW-58	2/20/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	2/20/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	2/20/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	2/20/2018	sec-Butylbenzene	ND	100	11	2000	ug/L
OW-58	2/20/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	2/20/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	2/20/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	2/20/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	2/20/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	2/20/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	2/20/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	2/20/2018	Xylenes, Total	130	150	32	620	ug/L
OW-58	2/20/2018	MTBE	**2900**	100	24	143	ug/L
OW-58	2/20/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	2/20/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	5/8/2018	Carbon tetrachloride	*ND*	*100*	11	5	ug/L
OW-58	5/8/2018	Acetone	ND	1000	82	14064	ug/L
OW-58	5/8/2018	Chloroform	ND	100	40	100	ug/L
OW-58	5/8/2018	Benzene	**38000**	1000	62	5	ug/L
OW-58	5/8/2018	1,1,1-Trichloroethane	ND	100	7.3	200	ug/L
OW-58	5/8/2018	Bromomethane	*ND*	*300*	26	7.54	ug/L
OW-58	5/8/2018	Chloromethane	*ND*	*300*	29	20.32	ug/L
OW-58	5/8/2018	Dibromomethane	*ND*	*100*	9.1	8	ug/L
OW-58	5/8/2018	Chloroethane	ND	200	23	20857	ug/L
OW-58	5/8/2018	Vinyl Chloride	*ND*	*100*	18	2	ug/L
OW-58	5/8/2018	Methylene Chloride	*ND*	*300*	11	5	ug/L
OW-58	5/8/2018	Carbon Disulfide	*ND*	*1000*	40	810	ug/L
OW-58	5/8/2018	Bromoform	*ND*	*100*	21	32.9	ug/L
OW-58	5/8/2018	Bromodichloromethane	*ND*	*100*	18	1.34	ug/L
OW-58	5/8/2018	1,1-Dichloroethane	*ND*	*100*	40	25	ug/L
OW-58	5/8/2018	1,1-Dichloroethene	*ND*	*100*	8.1	7	ug/L
OW-58	5/8/2018	Trichlorofluoromethane	ND	100	18	1137	ug/L
OW-58	5/8/2018	Dichlorodifluoromethane	ND	100	100	197	ug/L
OW-58	5/8/2018	1,2-Dichloropropane	*ND*	*100*	10	5	ug/L
OW-58	5/8/2018	2-Butanone	ND	1000	110	5565	ug/L
OW-58	5/8/2018	1,1,2-Trichloroethane	*ND*	*100*	14	5	ug/L
OW-58	5/8/2018	Trichloroethene	*ND*	*100*	11	5	ug/L
OW-58	5/8/2018	1,1,2,2-Tetrachloroethane	*ND*	*200*	14	10	ug/L
OW-58	5/8/2018	1,2,3-Trichlorobenzene	*ND*	*100*	12	70	ug/L
OW-58	5/8/2018	2-Chlorotoluene	ND	100	40	233	ug/L
OW-58	5/8/2018	1,2,4-Trimethylbenzene	*30*	*100*	11	56	ug/L
OW-58	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*200*	140	0.0033	ug/L
OW-58	5/8/2018	1,2,3-Trichloropropane	*ND*	*200*	39	0.0084	ug/L
OW-58	5/8/2018	tert-Butylbenzene	ND	100	10	690	ug/L
OW-58	5/8/2018	Isopropylbenzene	32	100	5.1	447	ug/L
OW-58	5/8/2018	p-Isopropyltoluene	ND	100	9.6	NA	ug/L
OW-58	5/8/2018	Ethylbenzene	**1200**	100	9.3	700	ug/L
OW-58	5/8/2018	Styrene	ND	100	16	100	ug/L
OW-58	5/8/2018	n-Propylbenzene	100	100	7.4	660	ug/L
OW-58	5/8/2018	n-Butylbenzene	ND	300	13	1000	ug/L
OW-58	5/8/2018	4-Chlorotoluene	ND	100	40	250	ug/L
OW-58	5/8/2018	1,2-Dibromoethane	*ND*	*100*	13	0.05	ug/L
OW-58	5/8/2018	1,2-Dichloroethane	*ND*	*100*	40	5	ug/L
OW-58	5/8/2018	4-Methyl-2-Pentanone	ND	1000	71	1243	ug/L
OW-58	5/8/2018	1,3,5-Trimethylbenzene	*ND*	*100*	8.7	60	ug/L
OW-58	5/8/2018	Bromobenzene	*ND*	*100*	14	62	ug/L
OW-58	5/8/2018	Toluene	84	100	6.4	1000	ug/L
OW-58	5/8/2018	Chlorobenzene	*ND*	*100*	11	77.6	ug/L
OW-58	5/8/2018	Dibromochloromethane	*ND*	*100*	7.2	1.68	ug/L
OW-58	5/8/2018	Tetrachloroethene	*ND*	*100*	13	5	ug/L
OW-58	5/8/2018	sec-Butylbenzene	ND	100	11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	5/8/2018	1,3-Dichloropropane	ND	100	17	370	ug/L
OW-58	5/8/2018	cis-1,2-Dichloroethene	*ND*	*100*	20	70	ug/L
OW-58	5/8/2018	trans-1,2-Dichloroethene	ND	100	18	100	ug/L
OW-58	5/8/2018	1,1-Dichloropropene	ND	100	9.3	NA	ug/L
OW-58	5/8/2018	2-Hexanone	*ND*	*1000*	66	38	ug/L
OW-58	5/8/2018	2,2-Dichloropropane	ND	200	16	NA	ug/L
OW-58	5/8/2018	1,1,1,2-Tetrachloroethane	*ND*	*100*	10	5.74	ug/L
OW-58	5/8/2018	Xylenes, Total	180	150	32	620	ug/L
OW-58	5/8/2018	MTBE	**2800**	100	24	143	ug/L
OW-58	5/8/2018	cis-1,3-Dichloropropene	ND	100	8.2	NA	ug/L
OW-58	5/8/2018	trans-1,3-Dichloropropene	ND	100	22	NA	ug/L
OW-58	8/28/2018	Carbon tetrachloride	*ND*	*50*	6.7	5	ug/L
OW-58	8/28/2018	Acetone	ND	500	39	14064	ug/L
OW-58	8/28/2018	Chloroform	ND	50	20	100	ug/L
OW-58	8/28/2018	Benzene	**38000**	500	87	5	ug/L
OW-58	8/28/2018	1,1,1-Trichloroethane	ND	50	7.7	200	ug/L
OW-58	8/28/2018	Bromomethane	*ND*	*150*	13	7.54	ug/L
OW-58	8/28/2018	Chloromethane	*ND*	*150*	15	20.32	ug/L
OW-58	8/28/2018	Dibromomethane	*ND*	*50*	16	8	ug/L
OW-58	8/28/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-58	8/28/2018	Vinyl Chloride	*ND*	*50*	5.5	2	ug/L
OW-58	8/28/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-58	8/28/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-58	8/28/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58	8/28/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-58	8/28/2018	1,1-Dichloroethane	*ND*	*50*	20	25	ug/L
OW-58	8/28/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-58	8/28/2018	Trichlorofluoromethane	ND	50	8.4	1137	ug/L
OW-58	8/28/2018	Dichlorodifluoromethane	ND	50	50	197	ug/L
OW-58	8/28/2018	1,2-Dichloropropane	*ND*	*50*	7.7	5	ug/L
OW-58	8/28/2018	2-Butanone	ND	500	63	5565	ug/L
OW-58	8/28/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-58	8/28/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-58	8/28/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-58	8/28/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-58	8/28/2018	2-Chlorotoluene	ND	50	20	233	ug/L
OW-58	8/28/2018	1,2,4-Trimethylbenzene	28	50	13	56	ug/L
OW-58	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-58	8/28/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-58	8/28/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-58	8/28/2018	Isopropylbenzene	32	50	11	447	ug/L
OW-58	8/28/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-58	8/28/2018	Ethylbenzene	**1200**	50	11	700	ug/L
OW-58	8/28/2018	Styrene	ND	50	13	100	ug/L
OW-58	8/28/2018	n-Propylbenzene	98	50	12	660	ug/L
OW-58	8/28/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-58	8/28/2018	4-Chlorotoluene	ND	50	20	250	ug/L
OW-58	8/28/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-58	8/28/2018	1,2-Dichloroethane	*ND*	*50*	20	5	ug/L
OW-58	8/28/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-58	8/28/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-58	8/28/2018	Bromobenzene	ND	50	16	62	ug/L
OW-58	8/28/2018	Toluene	97	50	8.4	1000	ug/L
OW-58	8/28/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-58	8/28/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-58	8/28/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	8/28/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-58	8/28/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-58	8/28/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58	8/28/2018	trans-1,2-Dichloroethene	ND	50	9.2	100	ug/L
OW-58	8/28/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-58	8/28/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-58	8/28/2018	2,2-Dichloropropane	ND	100	9.2	NA	ug/L
OW-58	8/28/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58	8/28/2018	Xylenes, Total	190	75	32	620	ug/L
OW-58	8/28/2018	MTBE	**2900**	50	16	143	ug/L
OW-58	8/28/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-58	8/28/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-58	11/29/2018	Carbon tetrachloride	*ND*	*50*	6.9	5	ug/L
OW-58	11/29/2018	Acetone	ND	500	38	14064	ug/L
OW-58	11/29/2018	Chloroform	ND	50	12	100	ug/L
OW-58	11/29/2018	Benzene	**35000**	500	87	5	ug/L
OW-58	11/29/2018	1,1,1-Trichloroethane	ND	50	8.2	200	ug/L
OW-58	11/29/2018	Bromomethane	*ND*	*150*	14	7.54	ug/L
OW-58	11/29/2018	Chloromethane	*ND*	*150*	16	20.32	ug/L
OW-58	11/29/2018	Dibromomethane	*ND*	*50*	16	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/29/2018	Chloroethane	ND	100	8.2	20857	ug/L
OW-58	11/29/2018	Vinyl Chloride	*ND*	*50*	6.1	2	ug/L
OW-58	11/29/2018	Methylene Chloride	*ND*	*150*	10	5	ug/L
OW-58	11/29/2018	Carbon Disulfide	ND	500	19	810	ug/L
OW-58	11/29/2018	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58	11/29/2018	Bromodichloromethane	*ND*	*50*	14	1.34	ug/L
OW-58	11/29/2018	1,1-Dichloroethane	*ND*	*50*	8.8	25	ug/L
OW-58	11/29/2018	1,1-Dichloroethene	*ND*	*50*	6	7	ug/L
OW-58	11/29/2018	Trichlorofluoromethane	ND	50	7.2	1137	ug/L
OW-58	11/29/2018	Dichlorodifluoromethane	ND	50	13	197	ug/L
OW-58	11/29/2018	1,2-Dichloropropane	*ND*	*50*	8.3	5	ug/L
OW-58	11/29/2018	2-Butanone	ND	500	71	5565	ug/L
OW-58	11/29/2018	1,1,2-Trichloroethane	*ND*	*50*	12	5	ug/L
OW-58	11/29/2018	Trichloroethene	*ND*	*50*	13	5	ug/L
OW-58	11/29/2018	1,1,2,2-Tetrachloroethane	*ND*	*100*	16	10	ug/L
OW-58	11/29/2018	1,2,3-Trichlorobenzene	ND	50	14	70	ug/L
OW-58	11/29/2018	2-Chlorotoluene	ND	50	13	233	ug/L
OW-58	11/29/2018	1,2,4-Trimethylbenzene	15	50	13	56	ug/L
OW-58	11/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*100*	24	0.0033	ug/L
OW-58	11/29/2018	1,2,3-Trichloropropane	*ND*	*100*	28	0.0084	ug/L
OW-58	11/29/2018	tert-Butylbenzene	ND	50	11	690	ug/L
OW-58	11/29/2018	Isopropylbenzene	30	50	11	447	ug/L
OW-58	11/29/2018	p-Isopropyltoluene	ND	50	12	NA	ug/L
OW-58	11/29/2018	Ethylbenzene	**1200**	50	11	700	ug/L
OW-58	11/29/2018	Styrene	ND	50	13	100	ug/L
OW-58	11/29/2018	n-Propylbenzene	97	50	12	660	ug/L
OW-58	11/29/2018	n-Butylbenzene	ND	150	12	1000	ug/L
OW-58	11/29/2018	4-Chlorotoluene	ND	50	14	250	ug/L
OW-58	11/29/2018	1,2-Dibromoethane	*ND*	*50*	11	0.05	ug/L
OW-58	11/29/2018	1,2-Dichloroethane	*ND*	*50*	9.5	5	ug/L
OW-58	11/29/2018	4-Methyl-2-Pentanone	ND	500	23	1243	ug/L
OW-58	11/29/2018	1,3,5-Trimethylbenzene	ND	50	12	60	ug/L
OW-58	11/29/2018	Bromobenzene	ND	50	16	62	ug/L
OW-58	11/29/2018	Toluene	110	50	8.4	1000	ug/L
OW-58	11/29/2018	Chlorobenzene	ND	50	15	77.6	ug/L
OW-58	11/29/2018	Dibromochloromethane	*ND*	*50*	12	1.68	ug/L
OW-58	11/29/2018	Tetrachloroethene	*ND*	*50*	7.6	5	ug/L
OW-58	11/29/2018	sec-Butylbenzene	ND	50	10	2000	ug/L
OW-58	11/29/2018	1,3-Dichloropropane	ND	50	14	370	ug/L
OW-58	11/29/2018	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58	11/29/2018	trans-1,2-Dichloroethene	ND	50	9.1	100	ug/L
OW-58	11/29/2018	1,1-Dichloropropene	ND	50	8.1	NA	ug/L
OW-58	11/29/2018	2-Hexanone	*ND*	*500*	45	38	ug/L
OW-58	11/29/2018	2,2-Dichloropropane	ND	100	12	NA	ug/L
OW-58	11/29/2018	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58	11/29/2018	Xylenes, Total	190	75	32	620	ug/L
OW-58	11/29/2018	MTBE	**2500**	50	23	143	ug/L
OW-58	11/29/2018	cis-1,3-Dichloropropene	ND	50	15	NA	ug/L
OW-58	11/29/2018	trans-1,3-Dichloropropene	ND	50	14	NA	ug/L
OW-58	3/28/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
OW-58	3/28/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
OW-58	3/28/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
OW-58	3/28/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
OW-58	3/28/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
OW-58	3/28/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
OW-58	3/28/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
OW-58	3/28/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
OW-58	3/28/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
OW-58	3/28/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
OW-58	3/28/2019	1,2,4-Trimethylbenzene	*37*	*100*	21.319909	56	ug/L
OW-58	3/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
OW-58	3/28/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
OW-58	3/28/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
OW-58	3/28/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
OW-58	3/28/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
OW-58	3/28/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
OW-58	3/28/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
OW-58	3/28/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
OW-58	3/28/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
OW-58	3/28/2019	1-Methylnaphthalene	93	400	31.495448	NA	ug/L
OW-58	3/28/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
OW-58	3/28/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
OW-58	3/28/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
OW-58	3/28/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
OW-58	3/28/2019	2-Methylnaphthalene	**67**	400	34.537601		ug/L
OW-58	3/28/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/28/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
OW-58	3/28/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
OW-58	3/28/2019	Acetone	ND	1000	119.939642	14064	ug/L
OW-58	3/28/2019	Benzene	**25000**	1000	166.639056	5	ug/L
OW-58	3/28/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
OW-58	3/28/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
OW-58	3/28/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
OW-58	3/28/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
OW-58	3/28/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
OW-58	3/28/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
OW-58	3/28/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L
OW-58	3/28/2019	Chloroethane	ND	200	17.780262	20857	ug/L
OW-58	3/28/2019	Chloroform	ND	100	12.189055	100	ug/L
OW-58	3/28/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
OW-58	3/28/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
OW-58	3/28/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
OW-58	3/28/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
OW-58	3/28/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
OW-58	3/28/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
OW-58	3/28/2019	Ethylbenzene	**1100**	100	13.23408	700	ug/L
OW-58	3/28/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
OW-58	3/28/2019	Isopropylbenzene	20	100	19.152227	447	ug/L
OW-58	3/28/2019	MTBE	**2300**	100	45.609498	143	ug/L
OW-58	3/28/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
OW-58	3/28/2019	Naphthalene	**170**	200	27.507134	30	ug/L
OW-58	3/28/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
OW-58	3/28/2019	n-Propylbenzene	83	100	21.4308	660	ug/L
OW-58	3/28/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
OW-58	3/28/2019	Styrene	ND	100	19.132336	100	ug/L
OW-58	3/28/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
OW-58	3/28/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
OW-58	3/28/2019	Toluene	100	100	35.043621	1000	ug/L
OW-58	3/28/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
OW-58	3/28/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
OW-58	3/28/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
OW-58	3/28/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
OW-58	3/28/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
OW-58	3/28/2019	Xylenes, Total	160	150	45.441493	620	ug/L
OW-58	6/5/2019	1,1,1,2-Tetrachloroethane	*ND*	*100*	20.606189	5.74	ug/L
OW-58	6/5/2019	1,1,1-Trichloroethane	ND	100	17.292157	200	ug/L
OW-58	6/5/2019	1,1,2,2-Tetrachloroethane	*ND*	*200*	54.843369	10	ug/L
OW-58	6/5/2019	1,1,2-Trichloroethane	*ND*	*100*	21.582998	5	ug/L
OW-58	6/5/2019	1,1-Dichloroethane	*ND*	*100*	14.08586	25	ug/L
OW-58	6/5/2019	1,1-Dichloroethene	*ND*	*100*	20.538818	7	ug/L
OW-58	6/5/2019	1,1-Dichloropropene	ND	100	16.259915	NA	ug/L
OW-58	6/5/2019	1,2,3-Trichlorobenzene	*ND*	*100*	29.89211	70	ug/L
OW-58	6/5/2019	1,2,3-Trichloropropane	*ND*	*200*	29.728665	0.0084	ug/L
OW-58	6/5/2019	1,2,4-Trichlorobenzene	*ND*	*100*	19.552012	70	ug/L
OW-58	6/5/2019	1,2,4-Trimethylbenzene	*ND*	*100*	21.319909	56	ug/L
OW-58	6/5/2019	1,2-Dibromo-3-Chloropropane	*ND*	*200*	32.729478	0.0033	ug/L
OW-58	6/5/2019	1,2-Dibromoethane	*ND*	*100*	16.537553	0.05	ug/L
OW-58	6/5/2019	1,2-Dichlorobenzene	ND	100	29.719805	600	ug/L
OW-58	6/5/2019	1,2-Dichloroethane	*ND*	*100*	19.463775	5	ug/L
OW-58	6/5/2019	1,2-Dichloropropane	*ND*	*100*	20.892977	5	ug/L
OW-58	6/5/2019	1,3,5-Trimethylbenzene	*ND*	*100*	18.865985	60	ug/L
OW-58	6/5/2019	1,3-Dichlorobenzene	ND	100	24.854249	N/A	ug/L
OW-58	6/5/2019	1,3-Dichloropropane	ND	100	20.072819	370	ug/L
OW-58	6/5/2019	1,4-Dichlorobenzene	*ND*	*100*	29.498067	75	ug/L
OW-58	6/5/2019	1-Methylnaphthalene	110	400	31.495448	NA	ug/L
OW-58	6/5/2019	2,2-Dichloropropane	ND	200	23.343402	NA	ug/L
OW-58	6/5/2019	2-Butanone	ND	1000	208.94166	5565	ug/L
OW-58	6/5/2019	2-Chlorotoluene	ND	100	24.547324	233	ug/L
OW-58	6/5/2019	2-Hexanone	*ND*	*1000*	154.719203	38	ug/L
OW-58	6/5/2019	2-Methylnaphthalene	**79**	400	34.537601		ug/L
OW-58	6/5/2019	4-Chlorotoluene	ND	100	23.483956	250	ug/L
OW-58	6/5/2019	p-Isopropyltoluene	ND	100	21.728936	NA	ug/L
OW-58	6/5/2019	4-Methyl-2-Pentanone	ND	1000	71.389548	1243	ug/L
OW-58	6/5/2019	Acetone	ND	1000	119.939642	14064	ug/L
OW-58	6/5/2019	Benzene	**34000**	1000	166.639056	5	ug/L
OW-58	6/5/2019	Bromobenzene	*ND*	*100*	24.472705	62	ug/L
OW-58	6/5/2019	Bromodichloromethane	*ND*	*100*	13.409186	1.34	ug/L
OW-58	6/5/2019	Bromoform	*ND*	*100*	28.866316	32.9	ug/L
OW-58	6/5/2019	Bromomethane	*ND*	*300*	27.308238	7.54	ug/L
OW-58	6/5/2019	Carbon Disulfide	*ND*	*1000*	45.255672	810	ug/L
OW-58	6/5/2019	Carbon tetrachloride	*ND*	*100*	14.040379	5	ug/L
OW-58	6/5/2019	Chlorobenzene	*ND*	*100*	19.385329	77.6	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	Chloroethane	ND	200	17.780262	20857	ug/L
OW-58	6/5/2019	Chloroform	ND	100	12.189055	100	ug/L
OW-58	6/5/2019	Chloromethane	*ND*	*300*	32.098734	20.32	ug/L
OW-58	6/5/2019	cis-1,2-Dichloroethene	*ND*	*100*	19.011505	70	ug/L
OW-58	6/5/2019	cis-1,3-Dichloropropene	ND	100	13.848812	NA	ug/L
OW-58	6/5/2019	Dibromochloromethane	*ND*	*100*	23.878372	1.68	ug/L
OW-58	6/5/2019	Dibromomethane	*ND*	*100*	20.920871	8	ug/L
OW-58	6/5/2019	Dichlorodifluoromethane	ND	100	25.992114	197	ug/L
OW-58	6/5/2019	Ethylbenzene	**1200**	100	13.23408	700	ug/L
OW-58	6/5/2019	Hexachlorobutadiene	*ND*	*100*	30.987533	1.39	ug/L
OW-58	6/5/2019	Isopropylbenzene	28	100	19.152227	447	ug/L
OW-58	6/5/2019	MTBE	**2300**	100	45.609498	143	ug/L
OW-58	6/5/2019	Methylene Chloride	*ND*	*300*	15.450147	5	ug/L
OW-58	6/5/2019	Naphthalene	**200**	200	27.507134	30	ug/L
OW-58	6/5/2019	n-Butylbenzene	ND	300	22.756954	1000	ug/L
OW-58	6/5/2019	n-Propylbenzene	86	100	21.4308	660	ug/L
OW-58	6/5/2019	sec-Butylbenzene	ND	100	24.773129	2000	ug/L
OW-58	6/5/2019	Styrene	ND	100	19.132336	100	ug/L
OW-58	6/5/2019	tert-Butylbenzene	ND	100	20.698485	690	ug/L
OW-58	6/5/2019	Tetrachloroethene	*ND*	*100*	14.952492	5	ug/L
OW-58	6/5/2019	Toluene	62	100	35.043621	1000	ug/L
OW-58	6/5/2019	trans-1,2-Dichloroethene	ND	100	17.952418	100	ug/L
OW-58	6/5/2019	trans-1,3-Dichloropropene	ND	100	16.664786	NA	ug/L
OW-58	6/5/2019	Trichloroethene	*ND*	*100*	16.627175	5	ug/L
OW-58	6/5/2019	Trichlorofluoromethane	ND	100	18.904833	1137	ug/L
OW-58	6/5/2019	Vinyl Chloride	*ND*	*100*	17.909928	2	ug/L
OW-58	6/5/2019	Xylenes, Total	130	150	45.441493	620	ug/L
OW-58	8/22/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-58	8/22/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-58	8/22/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-58	8/22/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-58	8/22/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-58	8/22/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-58	8/22/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-58	8/22/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-58	8/22/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-58	8/22/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-58	8/22/2019	1,2,4-Trimethylbenzene	24	50	10.659955	56	ug/L
OW-58	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-58	8/22/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-58	8/22/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-58	8/22/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-58	8/22/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-58	8/22/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-58	8/22/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-58	8/22/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-58	8/22/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-58	8/22/2019	1-Methylnaphthalene	83	200	15.747724	NA	ug/L
OW-58	8/22/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-58	8/22/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-58	8/22/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-58	8/22/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-58	8/22/2019	2-Methylnaphthalene	**80**	200	17.2688		ug/L
OW-58	8/22/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-58	8/22/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-58	8/22/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-58	8/22/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-58	8/22/2019	Benzene	**27000**	500	83.319528	5	ug/L
OW-58	8/22/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-58	8/22/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-58	8/22/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-58	8/22/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-58	8/22/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-58	8/22/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-58	8/22/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-58	8/22/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-58	8/22/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-58	8/22/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-58	8/22/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-58	8/22/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-58	8/22/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-58	8/22/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-58	8/22/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-58	8/22/2019	Ethylbenzene	**910**	50	6.61704	700	ug/L
OW-58	8/22/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-58	8/22/2019	Isopropylbenzene	31	50	9.576114	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/22/2019	MTBE	**2400**	50	22.804749	143	ug/L
OW-58	8/22/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-58	8/22/2019	Naphthalene	**150**	100	13.753567	30	ug/L
OW-58	8/22/2019	n-Butylbenzene	50	150	11.378477	1000	ug/L
OW-58	8/22/2019	n-Propylbenzene	70	50	10.7154	660	ug/L
OW-58	8/22/2019	sec-Butylbenzene	15	50	12.386564	2000	ug/L
OW-58	8/22/2019	Styrene	ND	50	9.566168	100	ug/L
OW-58	8/22/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-58	8/22/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-58	8/22/2019	Toluene	110	50	17.521811	1000	ug/L
OW-58	8/22/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-58	8/22/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-58	8/22/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-58	8/22/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-58	8/22/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-58	8/22/2019	Xylenes, Total	200	75	22.720747	620	ug/L
OW-58	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-58	11/18/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-58	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-58	11/18/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-58	11/18/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-58	11/18/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-58	11/18/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-58	11/18/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-58	11/18/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-58	11/18/2019	1,2,4-Trimethylbenzene	16	50	10.659955	56	ug/L
OW-58	11/18/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-58	11/18/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-58	11/18/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-58	11/18/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-58	11/18/2019	1,3,5-Trimethylbenzene	ND	50	9.432992	60	ug/L
OW-58	11/18/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-58	11/18/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-58	11/18/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-58	11/18/2019	1-Methylnaphthalene	78	200	15.747724	NA	ug/L
OW-58	11/18/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-58	11/18/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-58	11/18/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-58	11/18/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-58	11/18/2019	2-Methylnaphthalene	**53**	200	17.2688		ug/L
OW-58	11/18/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-58	11/18/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-58	11/18/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-58	11/18/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-58	11/18/2019	Benzene	**33000**	500	83.319528	5	ug/L
OW-58	11/18/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-58	11/18/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-58	11/18/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-58	11/18/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-58	11/18/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-58	11/18/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-58	11/18/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-58	11/18/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-58	11/18/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-58	11/18/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-58	11/18/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-58	11/18/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L
OW-58	11/18/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-58	11/18/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-58	11/18/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-58	11/18/2019	Ethylbenzene	**1200**	50	6.61704	700	ug/L
OW-58	11/18/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-58	11/18/2019	Isopropylbenzene	26	50	9.576114	447	ug/L
OW-58	11/18/2019	MTBE	**2100**	50	22.804749	143	ug/L
OW-58	11/18/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-58	11/18/2019	Naphthalene	**180**	100	13.753567	30	ug/L
OW-58	11/18/2019	n-Butylbenzene	ND	150	11.378477	1000	ug/L
OW-58	11/18/2019	n-Propylbenzene	90	50	10.7154	660	ug/L
OW-58	11/18/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-58	11/18/2019	Styrene	ND	50	9.566168	100	ug/L
OW-58	11/18/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-58	11/18/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-58	11/18/2019	Toluene	85	50	17.521811	1000	ug/L
OW-58	11/18/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-58	11/18/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-58	11/18/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/18/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-58	11/18/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-58	11/18/2019	Xylenes, Total	160	75	22.720747	620	ug/L
OW-58	9/17/2020	Benzene	**27000**	1000	230	5	ug/L
OW-58	9/17/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	27	5.74	ug/L
OW-58	9/17/2020	1,1,1-Trichloroethane	ND	100	30	200	ug/L
OW-58	9/17/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	27	10	ug/L
OW-58	9/17/2020	1,1,2-Trichloroethane	*ND*	*100*	19	5	ug/L
OW-58	9/17/2020	1,1-Dichloroethane	*ND*	*100*	27	25	ug/L
OW-58	9/17/2020	1,1-Dichloroethene	*ND*	*100*	13	7	ug/L
OW-58	9/17/2020	1,1-Dichloropropene	ND	100	18	NA	ug/L
OW-58	9/17/2020	1,2,3-Trichlorobenzene	*ND*	*100*	13	70	ug/L
OW-58	9/17/2020	1,2,3-Trichloropropane	*ND*	*200*	44	0.0084	ug/L
OW-58	9/17/2020	1,2,4-Trichlorobenzene	*ND*	*100*	24	70	ug/L
OW-58	9/17/2020	1,2,4-Trimethylbenzene	*ND*	*100*	12	56	ug/L
OW-58	9/17/2020	1,2-Dibromo-3-Chloropropane	*ND*	*200*	59	0.0033	ug/L
OW-58	9/17/2020	1,2-Dibromoethane	*ND*	*100*	30	0.05	ug/L
OW-58	9/17/2020	1,2-Dichlorobenzene	ND	100	15	600	ug/L
OW-58	9/17/2020	1,2-Dichloroethane	*ND*	*100*	22	5	ug/L
OW-58	9/17/2020	1,2-Dichloropropane	*ND*	*100*	13	5	ug/L
OW-58	9/17/2020	1,3,5-Trimethylbenzene	*ND*	*100*	18	60	ug/L
OW-58	9/17/2020	1,3-Dichlorobenzene	ND	100	16	N/A	ug/L
OW-58	9/17/2020	1,3-Dichloropropane	ND	100	18	370	ug/L
OW-58	9/17/2020	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
OW-58	9/17/2020	1-Methylnaphthalene	ND	400	84	NA	ug/L
OW-58	9/17/2020	2,2-Dichloropropane	ND	200	26	NA	ug/L
OW-58	9/17/2020	2-Butanone	ND	1000	110	5565	ug/L
OW-58	9/17/2020	2-Chlorotoluene	ND	100	13	233	ug/L
OW-58	9/17/2020	2-Hexanone	*ND*	*1000*	180	38	ug/L
OW-58	9/17/2020	2-Methylnaphthalene	*ND*	*400*	69		ug/L
OW-58	9/17/2020	4-Chlorotoluene	ND	100	51	250	ug/L
OW-58	9/17/2020	p-Isopropyltoluene	ND	100	20	NA	ug/L
OW-58	9/17/2020	4-Methyl-2-Pentanone	ND	1000	110	1243	ug/L
OW-58	9/17/2020	Acetone	ND	1000	230	14064	ug/L
OW-58	9/17/2020	Bromobenzene	*ND*	*100*	28	62	ug/L
OW-58	9/17/2020	Bromodichloromethane	*ND*	*100*	20	1.34	ug/L
OW-58	9/17/2020	Bromoform	*ND*	*100*	31	32.9	ug/L
OW-58	9/17/2020	Bromomethane	*ND*	*300*	160	7.54	ug/L
OW-58	9/17/2020	Carbon Disulfide	*ND*	*1000*	44	810	ug/L
OW-58	9/17/2020	Carbon tetrachloride	*ND*	*100*	18	5	ug/L
OW-58	9/17/2020	Chlorobenzene	*ND*	*100*	14	77.6	ug/L
OW-58	9/17/2020	Chloroethane	ND	200	38	20857	ug/L
OW-58	9/17/2020	Chloroform	ND	100	13	100	ug/L
OW-58	9/17/2020	Chloromethane	*ND*	*300*	40	20.32	ug/L
OW-58	9/17/2020	cis-1,2-Dichloroethene	*ND*	*100*	39	70	ug/L
OW-58	9/17/2020	cis-1,3-Dichloropropene	ND	100	36	NA	ug/L
OW-58	9/17/2020	Dibromochloromethane	*ND*	*100*	28	1.68	ug/L
OW-58	9/17/2020	Dibromomethane	*ND*	*100*	31	8	ug/L
OW-58	9/17/2020	Dichlorodifluoromethane	ND	100	44	197	ug/L
OW-58	9/17/2020	Ethylbenzene	**1300**	100	21	700	ug/L
OW-58	9/17/2020	Hexachlorobutadiene	*ND*	*100*	33	1.39	ug/L
OW-58	9/17/2020	Isopropylbenzene	24	100	18	447	ug/L
OW-58	9/17/2020	MTBE	**1900**	100	39	143	ug/L
OW-58	9/17/2020	Methylene Chloride	*ND*	*300*	40	5	ug/L
OW-58	9/17/2020	n-Butylbenzene	ND	300	25	1000	ug/L
OW-58	9/17/2020	n-Propylbenzene	93	100	18	660	ug/L
OW-58	9/17/2020	Naphthalene	**190**	200	28	30	ug/L
OW-58	9/17/2020	sec-Butylbenzene	ND	100	61	2000	ug/L
OW-58	9/17/2020	Styrene	ND	100	13	100	ug/L
OW-58	9/17/2020	tert-Butylbenzene	ND	100	24	690	ug/L
OW-58	9/17/2020	Tetrachloroethene	*ND*	*100*	36	5	ug/L
OW-58	9/17/2020	Toluene	110	100	20	1000	ug/L
OW-58	9/17/2020	trans-1,2-Dichloroethene	ND	100	49	100	ug/L
OW-58	9/17/2020	trans-1,3-Dichloropropene	ND	100	34	NA	ug/L
OW-58	9/17/2020	Trichloroethene	*ND*	*100*	20	5	ug/L
OW-58	9/17/2020	Trichlorofluoromethane	ND	100	9.2	1137	ug/L
OW-58	9/17/2020	Vinyl Chloride	*ND*	*100*	20	2	ug/L
OW-58	9/17/2020	Xylenes, Total	160	150	55	620	ug/L
OW-58	9/17/2020	1,2-Dibromoethane	ND	0.0092	0.0061	0.05	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	ND	0.0203	0.00507	0.05	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	ND	0.0208	0.00521	0.05	ug/L
OW-58	12/22/2020	Acetone	ND	5000	2000	14064	ug/L
OW-58	12/22/2020	Benzene	**33000**	200	76	5	ug/L
OW-58	12/22/2020	Bromodichloromethane	*ND*	*200*	100	1.34	ug/L
OW-58	12/22/2020	Bromoform	*ND*	*1000*	142	32.9	ug/L
OW-58	12/22/2020	Bromomethane	*ND*	*200*	196	7.54	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	2-Butanone	ND	5000	520	5565	ug/L
OW-58	12/22/2020	Carbon Disulfide	ND	200	100	810	ug/L
OW-58	12/22/2020	Carbon tetrachloride	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Chlorobenzene	*ND*	*200*	100	77.6	ug/L
OW-58	12/22/2020	Dibromochloromethane	*ND*	*200*	100	1.68	ug/L
OW-58	12/22/2020	Chloroethane	ND	200	152	20857	ug/L
OW-58	12/22/2020	Chloroform	*ND*	*200*	120	100	ug/L
OW-58	12/22/2020	Chloromethane	*ND*	*200*	166	20.32	ug/L
OW-58	12/22/2020	2-Chlorotoluene	ND	200	114	233	ug/L
OW-58	12/22/2020	4-Chlorotoluene	ND	200	112	250	ug/L
OW-58	12/22/2020	cis-1,2-Dichloroethene	*ND*	*200*	100	70	ug/L
OW-58	12/22/2020	cis-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*1000*	300	0.0033	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	*ND*	*200*	100	0.05	ug/L
OW-58	12/22/2020	Dibromomethane	*ND*	*1000*	118	8	ug/L
OW-58	12/22/2020	1,2-Dichlorobenzene	ND	200	100	600	ug/L
OW-58	12/22/2020	1,3-Dichlorobenzene	ND	200	108	N/A	ug/L
OW-58	12/22/2020	1,4-Dichlorobenzene	*ND*	*200*	128	75	ug/L
OW-58	12/22/2020	Dichlorodifluoromethane	*ND*	*200*	170	197	ug/L
OW-58	12/22/2020	1,1-Dichloroethane	*ND*	*200*	100	25	ug/L
OW-58	12/22/2020	1,2-Dichloroethane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,1-Dichloroethene	*ND*	*200*	100	7	ug/L
OW-58	12/22/2020	1,2-Dichloropropane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,3-Dichloropropane	ND	200	100	370	ug/L
OW-58	12/22/2020	2,2-Dichloropropane	ND	200	100	NA	ug/L
OW-58	12/22/2020	1,1-Dichloropropene	ND	200	100	NA	ug/L
OW-58	12/22/2020	Ethylbenzene	**1060**	200	100	700	ug/L
OW-58	12/22/2020	Hexachlorobutadiene	*ND*	*1000*	180	1.39	ug/L
OW-58	12/22/2020	2-Hexanone	*ND*	*5000*	620	38	ug/L
OW-58	12/22/2020	Isopropylbenzene	ND	200	106	447	ug/L
OW-58	12/22/2020	Methylene Chloride	*ND*	*1000*	600	5	ug/L
OW-58	12/22/2020	1-Methylnaphthalene	ND	1000	840	NA	ug/L
OW-58	12/22/2020	2-Methylnaphthalene	*ND*	*2000*	920		ug/L
OW-58	12/22/2020	4-Methyl-2-Pentanone	*ND*	*5000*	360	1243	ug/L
OW-58	12/22/2020	MTBE	**1830**	200	148	143	ug/L
OW-58	12/22/2020	Naphthalene	*ND*	*200*	200	30	ug/L
OW-58	12/22/2020	n-Butylbenzene	ND	200	152	1000	ug/L
OW-58	12/22/2020	n-Propylbenzene	ND	200	138	660	ug/L
OW-58	12/22/2020	p-Isopropyltoluene	ND	200	142	NA	ug/L
OW-58	12/22/2020	sec-Butylbenzene	ND	200	140	2000	ug/L
OW-58	12/22/2020	Styrene	*ND*	*200*	200	100	ug/L
OW-58	12/22/2020	tert-Butylbenzene	ND	200	126	690	ug/L
OW-58	12/22/2020	1,1,1,2-Tetrachloroethane	*ND*	*200*	104	5.74	ug/L
OW-58	12/22/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	100	10	ug/L
OW-58	12/22/2020	Tetrachloroethene	*ND*	*200*	116	5	ug/L
OW-58	12/22/2020	Toluene	ND	200	82	1000	ug/L
OW-58	12/22/2020	trans-1,2-Dichloroethene	*ND*	*200*	100	100	ug/L
OW-58	12/22/2020	trans-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2,3-Trichlorobenzene	*ND*	*200*	140	70	ug/L
OW-58	12/22/2020	1,2,4-Trichlorobenzene	*ND*	*200*	164	70	ug/L
OW-58	12/22/2020	1,1,1-Trichloroethane	ND	200	100	200	ug/L
OW-58	12/22/2020	1,1,2-Trichloroethane	*ND*	*1000*	100	5	ug/L
OW-58	12/22/2020	Trichloroethene	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Trichlorofluoromethane	ND	200	104	1137	ug/L
OW-58	12/22/2020	1,2,3-Trichloropropane	*ND*	*1000*	168	0.0084	ug/L
OW-58	12/22/2020	1,2,4-Trimethylbenzene	*ND*	*200*	164	56	ug/L
OW-58	12/22/2020	1,3,5-Trimethylbenzene	*ND*	*200*	112	60	ug/L
OW-58	12/22/2020	Vinyl Chloride	*ND*	*200*	100	2	ug/L
OW-58	12/22/2020	Xylenes, Total	*ND*	*2000*	320	620	ug/L
OW-58	12/22/2020	Acetone	ND	5000	2000	14064	ug/L
OW-58	12/22/2020	Benzene	**33200**	200	76	5	ug/L
OW-58	12/22/2020	Bromodichloromethane	*ND*	*200*	100	1.34	ug/L
OW-58	12/22/2020	Bromoform	*ND*	*1000*	142	32.9	ug/L
OW-58	12/22/2020	Bromomethane	*ND*	*200*	196	7.54	ug/L
OW-58	12/22/2020	2-Butanone	ND	5000	520	5565	ug/L
OW-58	12/22/2020	Carbon Disulfide	ND	200	100	810	ug/L
OW-58	12/22/2020	Carbon tetrachloride	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Chlorobenzene	*ND*	*200*	100	77.6	ug/L
OW-58	12/22/2020	Dibromochloromethane	*ND*	*200*	100	1.68	ug/L
OW-58	12/22/2020	Chloroethane	ND	200	152	20857	ug/L
OW-58	12/22/2020	Chloroform	*ND*	*200*	120	100	ug/L
OW-58	12/22/2020	Chloromethane	*ND*	*200*	166	20.32	ug/L
OW-58	12/22/2020	2-Chlorotoluene	ND	200	114	233	ug/L
OW-58	12/22/2020	4-Chlorotoluene	ND	200	112	250	ug/L
OW-58	12/22/2020	cis-1,2-Dichloroethene	*ND*	*200*	100	70	ug/L
OW-58	12/22/2020	cis-1,3-Dichloropropene	ND	1000	100	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*1000*	300	0.0033	ug/L
OW-58	12/22/2020	1,2-Dibromoethane	*ND*	*200*	100	0.05	ug/L
OW-58	12/22/2020	Dibromomethane	*ND*	*1000*	118	8	ug/L
OW-58	12/22/2020	1,2-Dichlorobenzene	ND	200	100	600	ug/L
OW-58	12/22/2020	1,3-Dichlorobenzene	ND	200	108	N/A	ug/L
OW-58	12/22/2020	1,4-Dichlorobenzene	*ND*	*200*	128	75	ug/L
OW-58	12/22/2020	Dichlorodifluoromethane	*ND*	*200*	170	197	ug/L
OW-58	12/22/2020	1,1-Dichloroethane	*ND*	*200*	100	25	ug/L
OW-58	12/22/2020	1,2-Dichloroethane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,1-Dichloroethene	*ND*	*200*	100	7	ug/L
OW-58	12/22/2020	1,2-Dichloropropane	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	1,3-Dichloropropane	ND	200	100	370	ug/L
OW-58	12/22/2020	2,2-Dichloropropane	ND	200	100	NA	ug/L
OW-58	12/22/2020	1,1-Dichloropropene	ND	200	100	NA	ug/L
OW-58	12/22/2020	Ethylbenzene	**1070**	200	100	700	ug/L
OW-58	12/22/2020	Hexachlorobutadiene	*ND*	*1000*	180	1.39	ug/L
OW-58	12/22/2020	2-Hexanone	*ND*	*5000*	620	38	ug/L
OW-58	12/22/2020	Isopropylbenzene	ND	200	106	447	ug/L
OW-58	12/22/2020	Methylene Chloride	*ND*	*1000*	600	5	ug/L
OW-58	12/22/2020	1-Methylnaphthalene	ND	1000	840	NA	ug/L
OW-58	12/22/2020	2-Methylnaphthalene	*ND*	*2000*	920		ug/L
OW-58	12/22/2020	4-Methyl-2-Pentanone	*ND*	*5000*	360	1243	ug/L
OW-58	12/22/2020	MTBE	**1820**	200	148	143	ug/L
OW-58	12/22/2020	Naphthalene	*ND*	*200*	200	30	ug/L
OW-58	12/22/2020	n-Butylbenzene	ND	200	152	1000	ug/L
OW-58	12/22/2020	n-Propylbenzene	ND	200	138	660	ug/L
OW-58	12/22/2020	p-Isopropyltoluene	ND	200	142	NA	ug/L
OW-58	12/22/2020	sec-Butylbenzene	ND	200	140	2000	ug/L
OW-58	12/22/2020	Styrene	*ND*	*200*	200	100	ug/L
OW-58	12/22/2020	tert-Butylbenzene	ND	200	126	690	ug/L
OW-58	12/22/2020	1,1,1,2-Tetrachloroethane	*ND*	*200*	104	5.74	ug/L
OW-58	12/22/2020	1,1,2,2-Tetrachloroethane	*ND*	*200*	100	10	ug/L
OW-58	12/22/2020	Tetrachloroethene	*ND*	*200*	116	5	ug/L
OW-58	12/22/2020	Toluene	ND	200	82	1000	ug/L
OW-58	12/22/2020	trans-1,2-Dichloroethene	*ND*	*200*	100	100	ug/L
OW-58	12/22/2020	trans-1,3-Dichloropropene	ND	1000	100	NA	ug/L
OW-58	12/22/2020	1,2,3-Trichlorobenzene	*ND*	*200*	140	70	ug/L
OW-58	12/22/2020	1,2,4-Trichlorobenzene	*ND*	*200*	164	70	ug/L
OW-58	12/22/2020	1,1,1-Trichloroethane	ND	200	100	200	ug/L
OW-58	12/22/2020	1,1,2-Trichloroethane	*ND*	*1000*	100	5	ug/L
OW-58	12/22/2020	Trichloroethene	*ND*	*200*	100	5	ug/L
OW-58	12/22/2020	Trichlorofluoromethane	ND	200	104	1137	ug/L
OW-58	12/22/2020	1,2,3-Trichloropropane	*ND*	*1000*	168	0.0084	ug/L
OW-58	12/22/2020	1,2,4-Trimethylbenzene	*ND*	*200*	164	56	ug/L
OW-58	12/22/2020	1,3,5-Trimethylbenzene	*ND*	*200*	112	60	ug/L
OW-58	12/22/2020	Vinyl Chloride	*ND*	*200*	100	2	ug/L
OW-58	12/22/2020	Xylenes, Total	*ND*	*2000*	320	620	ug/L
OW-58A	3/6/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58A	3/6/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-58A	3/6/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-58A	3/6/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-58A	3/6/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-58A	3/6/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-58A	3/6/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-58A	3/6/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-58A	3/6/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-58A	3/6/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-58A	3/6/2020	1,2,4-Trimethylbenzene	**440**	50	6.1	56	ug/L
OW-58A	3/6/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-58A	3/6/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-58A	3/6/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-58A	3/6/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-58A	3/6/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-58A	3/6/2020	1,3,5-Trimethylbenzene	**140**	50	9.1	60	ug/L
OW-58A	3/6/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-58A	3/6/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-58A	3/6/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-58A	3/6/2020	1-Methylnaphthalene	140	200	42	NA	ug/L
OW-58A	3/6/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-58A	3/6/2020	2-Butanone	ND	500	56	5565	ug/L
OW-58A	3/6/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-58A	3/6/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-58A	3/6/2020	2-Methylnaphthalene	**210**	200	35		ug/L
OW-58A	3/6/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-58A	3/6/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-58A	3/6/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	3/6/2020	Acetone	ND	500	120	14064	ug/L
OW-58A	3/6/2020	Bromobenzene	ND	50	14	62	ug/L
OW-58A	3/6/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-58A	3/6/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58A	3/6/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-58A	3/6/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-58A	3/6/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-58A	3/6/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-58A	3/6/2020	Chloroethane	ND	100	19	20857	ug/L
OW-58A	3/6/2020	Chloroform	ND	50	6.7	100	ug/L
OW-58A	3/6/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L
OW-58A	3/6/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58A	3/6/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-58A	3/6/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-58A	3/6/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-58A	3/6/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-58A	3/6/2020	Ethylbenzene	620	50	11	700	ug/L
OW-58A	3/6/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-58A	3/6/2020	Isopropylbenzene	35	50	9.1	447	ug/L
OW-58A	3/6/2020	MTBE	**2800**	50	20	143	ug/L
OW-58A	3/6/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-58A	3/6/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-58A	3/6/2020	n-Propylbenzene	89	50	9.1	660	ug/L
OW-58A	3/6/2020	Naphthalene	**250**	100	14	30	ug/L
OW-58A	3/6/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-58A	3/6/2020	Styrene	ND	50	6.5	100	ug/L
OW-58A	3/6/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-58A	3/6/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-58A	3/6/2020	Toluene	490	50	10	1000	ug/L
OW-58A	3/6/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-58A	3/6/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-58A	3/6/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-58A	3/6/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-58A	3/6/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58A	3/6/2020	Xylenes, Total	**1800**	75	28	620	ug/L
OW-58A	3/6/2020	Benzene	**9700**	100	23	5	ug/L
OW-58A	9/18/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	13	5.74	ug/L
OW-58A	9/18/2020	1,1,1-Trichloroethane	ND	50	15	200	ug/L
OW-58A	9/18/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	14	10	ug/L
OW-58A	9/18/2020	1,1,2-Trichloroethane	*ND*	*50*	9.4	5	ug/L
OW-58A	9/18/2020	1,1-Dichloroethane	*ND*	*50*	14	25	ug/L
OW-58A	9/18/2020	1,1-Dichloroethene	*ND*	*50*	6.5	7	ug/L
OW-58A	9/18/2020	1,1-Dichloropropene	ND	50	9	NA	ug/L
OW-58A	9/18/2020	1,2,3-Trichlorobenzene	ND	50	6.7	70	ug/L
OW-58A	9/18/2020	1,2,3-Trichloropropane	*ND*	*100*	22	0.0084	ug/L
OW-58A	9/18/2020	1,2,4-Trichlorobenzene	ND	50	12	70	ug/L
OW-58A	9/18/2020	1,2,4-Trimethylbenzene	**450**	50	6.1	56	ug/L
OW-58A	9/18/2020	1,2-Dibromo-3-Chloropropane	*ND*	*100*	29	0.0033	ug/L
OW-58A	9/18/2020	1,2-Dibromoethane	*ND*	*50*	15	0.05	ug/L
OW-58A	9/18/2020	1,2-Dichlorobenzene	ND	50	7.7	600	ug/L
OW-58A	9/18/2020	1,2-Dichloroethane	*ND*	*50*	11	5	ug/L
OW-58A	9/18/2020	1,2-Dichloropropane	*ND*	*50*	6.7	5	ug/L
OW-58A	9/18/2020	1,3,5-Trimethylbenzene	**150**	50	9.1	60	ug/L
OW-58A	9/18/2020	1,3-Dichlorobenzene	ND	50	8.1	N/A	ug/L
OW-58A	9/18/2020	1,3-Dichloropropane	ND	50	9	370	ug/L
OW-58A	9/18/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
OW-58A	9/18/2020	1-Methylnaphthalene	120	200	42	NA	ug/L
OW-58A	9/18/2020	2,2-Dichloropropane	ND	100	13	NA	ug/L
OW-58A	9/18/2020	2-Butanone	ND	500	56	5565	ug/L
OW-58A	9/18/2020	2-Chlorotoluene	ND	50	6.6	233	ug/L
OW-58A	9/18/2020	2-Hexanone	*ND*	*500*	90	38	ug/L
OW-58A	9/18/2020	2-Methylnaphthalene	**180**	200	35		ug/L
OW-58A	9/18/2020	4-Chlorotoluene	ND	50	26	250	ug/L
OW-58A	9/18/2020	p-Isopropyltoluene	ND	50	10	NA	ug/L
OW-58A	9/18/2020	4-Methyl-2-Pentanone	ND	500	56	1243	ug/L
OW-58A	9/18/2020	Acetone	ND	500	120	14064	ug/L
OW-58A	9/18/2020	Bromobenzene	ND	50	14	62	ug/L
OW-58A	9/18/2020	Bromodichloromethane	*ND*	*50*	10	1.34	ug/L
OW-58A	9/18/2020	Bromoform	*ND*	*50*	16	32.9	ug/L
OW-58A	9/18/2020	Bromomethane	*ND*	*150*	78	7.54	ug/L
OW-58A	9/18/2020	Carbon Disulfide	ND	500	22	810	ug/L
OW-58A	9/18/2020	Carbon tetrachloride	*ND*	*50*	8.8	5	ug/L
OW-58A	9/18/2020	Chlorobenzene	ND	50	6.8	77.6	ug/L
OW-58A	9/18/2020	Chloroethane	ND	100	19	20857	ug/L
OW-58A	9/18/2020	Chloroform	ND	50	6.7	100	ug/L
OW-58A	9/18/2020	Chloromethane	*ND*	*150*	20	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	9/18/2020	cis-1,2-Dichloroethene	ND	50	19	70	ug/L
OW-58A	9/18/2020	cis-1,3-Dichloropropene	ND	50	18	NA	ug/L
OW-58A	9/18/2020	Dibromochloromethane	*ND*	*50*	14	1.68	ug/L
OW-58A	9/18/2020	Dibromomethane	*ND*	*50*	15	8	ug/L
OW-58A	9/18/2020	Dichlorodifluoromethane	ND	50	22	197	ug/L
OW-58A	9/18/2020	Ethylbenzene	670	50	11	700	ug/L
OW-58A	9/18/2020	Hexachlorobutadiene	*ND*	*50*	16	1.39	ug/L
OW-58A	9/18/2020	Isopropylbenzene	36	50	9.1	447	ug/L
OW-58A	9/18/2020	MTBE	**2500**	50	20	143	ug/L
OW-58A	9/18/2020	Methylene Chloride	*ND*	*150*	20	5	ug/L
OW-58A	9/18/2020	n-Butylbenzene	ND	150	13	1000	ug/L
OW-58A	9/18/2020	n-Propylbenzene	97	50	9.1	660	ug/L
OW-58A	9/18/2020	Naphthalene	**280**	100	14	30	ug/L
OW-58A	9/18/2020	sec-Butylbenzene	ND	50	30	2000	ug/L
OW-58A	9/18/2020	Styrene	ND	50	6.5	100	ug/L
OW-58A	9/18/2020	tert-Butylbenzene	ND	50	12	690	ug/L
OW-58A	9/18/2020	Tetrachloroethene	*ND*	*50*	18	5	ug/L
OW-58A	9/18/2020	Toluene	140	50	10	1000	ug/L
OW-58A	9/18/2020	trans-1,2-Dichloroethene	ND	50	24	100	ug/L
OW-58A	9/18/2020	trans-1,3-Dichloropropene	ND	50	17	NA	ug/L
OW-58A	9/18/2020	Trichloroethene	*ND*	*50*	10	5	ug/L
OW-58A	9/18/2020	Trichlorofluoromethane	ND	50	4.6	1137	ug/L
OW-58A	9/18/2020	Vinyl Chloride	*ND*	*50*	9.8	2	ug/L
OW-58A	9/18/2020	Xylenes, Total	**1100**	75	28	620	ug/L
OW-58A	9/18/2020	Benzene	**6900**	500	110	5	ug/L
OW-58A	9/18/2020	1,2-Dibromoethane	ND	0.0091	0.006	0.05	ug/L
OW-58A	12/23/2020	Acetone	ND	1250	500	14064	ug/L
OW-58A	12/23/2020	Benzene	**6070**	50	19	5	ug/L
OW-58A	12/23/2020	Bromodichloromethane	*ND*	*50*	25	1.34	ug/L
OW-58A	12/23/2020	Bromoform	*ND*	*250*	35.5	32.9	ug/L
OW-58A	12/23/2020	Bromomethane	*ND*	*50*	49	7.54	ug/L
OW-58A	12/23/2020	2-Butanone	ND	1250	130	5565	ug/L
OW-58A	12/23/2020	Carbon Disulfide	ND	50	25	810	ug/L
OW-58A	12/23/2020	Carbon tetrachloride	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	Chlorobenzene	ND	50	25	77.6	ug/L
OW-58A	12/23/2020	Dibromochloromethane	*ND*	*50*	25	1.68	ug/L
OW-58A	12/23/2020	Chloroethane	ND	50	38	20857	ug/L
OW-58A	12/23/2020	Chloroform	ND	50	30	100	ug/L
OW-58A	12/23/2020	Chloromethane	*ND*	*50*	41.5	20.32	ug/L
OW-58A	12/23/2020	2-Chlorotoluene	ND	50	28.5	233	ug/L
OW-58A	12/23/2020	4-Chlorotoluene	ND	50	28	250	ug/L
OW-58A	12/23/2020	cis-1,2-Dichloroethene	ND	50	25	70	ug/L
OW-58A	12/23/2020	cis-1,3-Dichloropropene	ND	250	25	NA	ug/L
OW-58A	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*250*	75	0.0033	ug/L
OW-58A	12/23/2020	1,2-Dibromoethane	*ND*	*50*	25	0.05	ug/L
OW-58A	12/23/2020	Dibromomethane	*ND*	*250*	29.5	8	ug/L
OW-58A	12/23/2020	1,2-Dichlorobenzene	ND	50	25	600	ug/L
OW-58A	12/23/2020	1,3-Dichlorobenzene	ND	50	27	N/A	ug/L
OW-58A	12/23/2020	1,4-Dichlorobenzene	ND	50	32	75	ug/L
OW-58A	12/23/2020	Dichlorodifluoromethane	ND	50	42.5	197	ug/L
OW-58A	12/23/2020	1,1-Dichloroethane	*ND*	*50*	25	25	ug/L
OW-58A	12/23/2020	1,2-Dichloroethane	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	1,1-Dichloroethene	*ND*	*50*	25	7	ug/L
OW-58A	12/23/2020	1,2-Dichloropropane	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	1,3-Dichloropropane	ND	50	25	370	ug/L
OW-58A	12/23/2020	2,2-Dichloropropane	ND	50	25	NA	ug/L
OW-58A	12/23/2020	1,1-Dichloropropene	ND	50	25	NA	ug/L
OW-58A	12/23/2020	Ethylbenzene	203	50	25	700	ug/L
OW-58A	12/23/2020	Hexachlorobutadiene	*ND*	*250*	45	1.39	ug/L
OW-58A	12/23/2020	2-Hexanone	*ND*	*1250*	155	38	ug/L
OW-58A	12/23/2020	Isopropylbenzene	ND	50	26.5	447	ug/L
OW-58A	12/23/2020	Methylene Chloride	*ND*	*250*	150	5	ug/L
OW-58A	12/23/2020	1-Methylnaphthalene	ND	250	210	NA	ug/L
OW-58A	12/23/2020	2-Methylnaphthalene	*ND*	*500*	230		ug/L
OW-58A	12/23/2020	4-Methyl-2-Pentanone	*ND*	*1250*	90	1243	ug/L
OW-58A	12/23/2020	MTBE	**2430**	50	37	143	ug/L
OW-58A	12/23/2020	Naphthalene	**127**	50	50	30	ug/L
OW-58A	12/23/2020	n-Butylbenzene	ND	50	38	1000	ug/L
OW-58A	12/23/2020	n-Propylbenzene	ND	50	34.5	660	ug/L
OW-58A	12/23/2020	p-Isopropyltoluene	ND	50	35.5	NA	ug/L
OW-58A	12/23/2020	sec-Butylbenzene	ND	50	35	2000	ug/L
OW-58A	12/23/2020	Styrene	ND	50	50	100	ug/L
OW-58A	12/23/2020	tert-Butylbenzene	ND	50	31.5	690	ug/L
OW-58A	12/23/2020	1,1,1,2-Tetrachloroethane	*ND*	*50*	26	5.74	ug/L
OW-58A	12/23/2020	1,1,2,2-Tetrachloroethane	*ND*	*50*	25	10	ug/L
OW-58A	12/23/2020	Tetrachloroethene	*ND*	*50*	29	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Toluene	52.6	50	20.5	1000	ug/L
OW-58A	12/23/2020	trans-1,2-Dichloroethene	ND	50	25	100	ug/L
OW-58A	12/23/2020	trans-1,3-Dichloropropene	ND	250	25	NA	ug/L
OW-58A	12/23/2020	1,2,3-Trichlorobenzene	ND	50	35	70	ug/L
OW-58A	12/23/2020	1,2,4-Trichlorobenzene	ND	50	41	70	ug/L
OW-58A	12/23/2020	1,1,1-Trichloroethane	ND	50	25	200	ug/L
OW-58A	12/23/2020	1,1,2-Trichloroethane	*ND*	*250*	25	5	ug/L
OW-58A	12/23/2020	Trichloroethene	*ND*	*50*	25	5	ug/L
OW-58A	12/23/2020	Trichlorofluoromethane	ND	50	26	1137	ug/L
OW-58A	12/23/2020	1,2,3-Trichloropropane	*ND*	*250*	42	0.0084	ug/L
OW-58A	12/23/2020	1,2,4-Trimethylbenzene	**91.4**	50	41	56	ug/L
OW-58A	12/23/2020	1,3,5-Trimethylbenzene	ND	50	28	60	ug/L
OW-58A	12/23/2020	Vinyl Chloride	*ND*	*50*	25	2	ug/L
OW-58A	12/23/2020	Xylenes, Total	ND	500	80	620	ug/L
OW-58A	12/23/2020	1,2-Dibromoethane	ND	0.0198	0.00494	0.05	ug/L
OW-59	6/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	6/28/2017	Acetone	6	10	0.82	14064	ug/L
OW-59	6/28/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	6/28/2017	Benzene	ND	1	0.062	5	ug/L
OW-59	6/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	6/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	6/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	6/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	6/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	6/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	6/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	6/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	6/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	6/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	6/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	6/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	6/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	6/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	6/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	6/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	6/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	6/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	6/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	6/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	6/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	6/28/2017	1,2,4-Trimethylbenzene	0.13	1	0.11	56	ug/L
OW-59	6/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	6/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	6/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	6/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	6/28/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	6/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	6/28/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	6/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	6/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	6/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	6/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	6/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	6/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	6/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	6/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	6/28/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	6/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	6/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	6/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	6/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	6/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	6/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	6/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	6/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	6/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	6/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	6/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	6/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	6/28/2017	MTBE	6.8	1	0.24	143	ug/L
OW-59	6/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	6/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	9/21/2017	Acetone	8.1	10	0.82	14064	ug/L
OW-59	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	9/21/2017	Benzene	ND	1	0.062	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	9/21/2017	Isopropylbenzene	0.073	1	0.051	447	ug/L
OW-59	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	9/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	9/21/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	9/21/2017	MTBE	7.2	1	0.24	143	ug/L
OW-59	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	12/6/2017	Acetone	2.8	10	0.82	14064	ug/L
OW-59	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-59	12/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-59	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	12/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	12/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-59	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	12/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-59	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	12/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	12/6/2017	MTBE	9.4	1	0.24	143	ug/L
OW-59	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	2/22/2018	Acetone	3.3	10	0.82	14064	ug/L
OW-59	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	2/22/2018	Benzene	ND	1	0.062	5	ug/L
OW-59	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-59	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	2/22/2018	Toluene	ND	1	0.064	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	2/22/2018	MTBE	9.2	1	0.24	143	ug/L
OW-59	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-59	5/8/2018	Acetone	1.5	10	0.82	14064	ug/L
OW-59	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	5/8/2018	Benzene	ND	1	0.062	5	ug/L
OW-59	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-59	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-59	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-59	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-59	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-59	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-59	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-59	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-59	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-59	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-59	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-59	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-59	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-59	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-59	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-59	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-59	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-59	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-59	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-59	5/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-59	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-59	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-59	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-59	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-59	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-59	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-59	5/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-59	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-59	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-59	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-59	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-59	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-59	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-59	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-59	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-59	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-59	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-59	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-59	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-59	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-59	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-59	5/8/2018	MTBE	9.2	1	0.24	143	ug/L
OW-59	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-59	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-59	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-59	8/28/2018	Acetone	4.3	10	0.79	14064	ug/L
OW-59	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-59	8/28/2018	Benzene	ND	1	0.17	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-59	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-59	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-59	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-59	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-59	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-59	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-59	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-59	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-59	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-59	8/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-59	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-59	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-59	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-59	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-59	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-59	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-59	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-59	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-59	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-59	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-59	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-59	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-59	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-59	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-59	8/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-59	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-59	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-59	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-59	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-59	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-59	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-59	8/28/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-59	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-59	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-59	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-59	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-59	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-59	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-59	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-59	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-59	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-59	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-59	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-59	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-59	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-59	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-59	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-59	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-59	8/28/2018	MTBE	10	1	0.32	143	ug/L
OW-59	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-59	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-59	11/7/2018	Carbon tetrachloride	ND	2	0.27	5	ug/L
OW-59	11/7/2018	Acetone	ND	20	1.5	14064	ug/L
OW-59	11/7/2018	Chloroform	ND	2	0.47	100	ug/L
OW-59	11/7/2018	Benzene	ND	2	0.35	5	ug/L
OW-59	11/7/2018	1,1,1-Trichloroethane	ND	2	0.33	200	ug/L
OW-59	11/7/2018	Bromomethane	ND	6	0.55	7.54	ug/L
OW-59	11/7/2018	Chloromethane	ND	6	0.64	20.32	ug/L
OW-59	11/7/2018	Dibromomethane	ND	2	0.64	8	ug/L
OW-59	11/7/2018	Chloroethane	ND	4	0.33	20857	ug/L
OW-59	11/7/2018	Vinyl Chloride	ND	2	0.24	2	ug/L
OW-59	11/7/2018	Methylene Chloride	*ND*	*6*	0.41	5	ug/L
OW-59	11/7/2018	Carbon Disulfide	ND	20	0.77	810	ug/L
OW-59	11/7/2018	Bromoform	ND	2	0.65	32.9	ug/L
OW-59	11/7/2018	Bromodichloromethane	*ND*	*2*	0.57	1.34	ug/L
OW-59	11/7/2018	1,1-Dichloroethane	ND	2	0.35	25	ug/L
OW-59	11/7/2018	1,1-Dichloroethene	ND	2	0.24	7	ug/L
OW-59	11/7/2018	Trichlorofluoromethane	ND	2	0.29	1137	ug/L
OW-59	11/7/2018	Dichlorodifluoromethane	ND	2	0.52	197	ug/L
OW-59	11/7/2018	1,2-Dichloropropane	ND	2	0.33	5	ug/L
OW-59	11/7/2018	2-Butanone	ND	20	2.8	5565	ug/L
OW-59	11/7/2018	1,1,2-Trichloroethane	ND	2	0.47	5	ug/L
OW-59	11/7/2018	Trichloroethene	ND	2	0.52	5	ug/L
OW-59	11/7/2018	1,1,2,2-Tetrachloroethane	ND	4	0.66	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	11/7/2018	1,2,3-Trichlorobenzene	ND	2	0.56	70	ug/L
OW-59	11/7/2018	2-Chlorotoluene	ND	2	0.5	233	ug/L
OW-59	11/7/2018	1,2,4-Trimethylbenzene	ND	2	0.51	56	ug/L
OW-59	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.94	0.0033	ug/L
OW-59	11/7/2018	1,2,3-Trichloropropane	*ND*	*4*	1.1	0.0084	ug/L
OW-59	11/7/2018	tert-Butylbenzene	ND	2	0.44	690	ug/L
OW-59	11/7/2018	Isopropylbenzene	ND	2	0.44	447	ug/L
OW-59	11/7/2018	p-Isopropyltoluene	ND	2	0.48	NA	ug/L
OW-59	11/7/2018	Ethylbenzene	ND	2	0.45	700	ug/L
OW-59	11/7/2018	Styrene	ND	2	0.5	100	ug/L
OW-59	11/7/2018	n-Propylbenzene	ND	2	0.49	660	ug/L
OW-59	11/7/2018	n-Butylbenzene	ND	6	0.5	1000	ug/L
OW-59	11/7/2018	4-Chlorotoluene	ND	2	0.56	250	ug/L
OW-59	11/7/2018	1,2-Dibromoethane	*ND*	*2*	0.46	0.05	ug/L
OW-59	11/7/2018	1,2-Dichloroethane	ND	2	0.38	5	ug/L
OW-59	11/7/2018	4-Methyl-2-Pentanone	ND	20	0.91	1243	ug/L
OW-59	11/7/2018	1,3,5-Trimethylbenzene	ND	2	0.46	60	ug/L
OW-59	11/7/2018	Bromobenzene	ND	2	0.64	62	ug/L
OW-59	11/7/2018	Toluene	ND	2	0.34	1000	ug/L
OW-59	11/7/2018	Chlorobenzene	ND	2	0.58	77.6	ug/L
OW-59	11/7/2018	Dibromochloromethane	*ND*	*2*	0.47	1.68	ug/L
OW-59	11/7/2018	Tetrachloroethene	ND	2	0.3	5	ug/L
OW-59	11/7/2018	sec-Butylbenzene	ND	2	0.4	2000	ug/L
OW-59	11/7/2018	1,3-Dichloropropane	ND	2	0.54	370	ug/L
OW-59	11/7/2018	cis-1,2-Dichloroethene	ND	2	0.75	70	ug/L
OW-59	11/7/2018	trans-1,2-Dichloroethene	ND	2	0.36	100	ug/L
OW-59	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-59	11/7/2018	1,1-Dichloropropene	ND	2	0.33	NA	ug/L
OW-59	11/7/2018	2-Hexanone	ND	20	1.8	38	ug/L
OW-59	11/7/2018	2,2-Dichloropropane	ND	4	0.47	NA	ug/L
OW-59	11/7/2018	1,1,1,2-Tetrachloroethane	ND	2	0.5	5.74	ug/L
OW-59	11/7/2018	Xylenes, Total	ND	3	1.3	620	ug/L
OW-59	11/7/2018	MTBE	7.7	2	0.91	143	ug/L
OW-59	11/7/2018	cis-1,3-Dichloropropene	ND	2	0.6	NA	ug/L
OW-59	11/7/2018	trans-1,3-Dichloropropene	ND	2	0.55	NA	ug/L
OW-59	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-59	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-59	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-59	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-59	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-59	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-59	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-59	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-59	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-59	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-59	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-59	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-59	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-59	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
OW-59	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-59	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-59	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-59	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-59	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-59	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-59	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-59	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-59	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-59	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-59	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-59	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-59	2/13/2019	Acetone	2.8	10	0.75707	14064	ug/L
OW-59	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
OW-59	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-59	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-59	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-59	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-59	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
OW-59	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-59	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-59	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-59	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-59	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-59	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-59	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-59	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-59	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-59	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-59	2/13/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-59	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-59	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-59	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-59	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-59	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
OW-59	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-59	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-59	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-59	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-59	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-59	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-59	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-59	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-59	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-59	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-59	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	5/2/2019	1,2,4-Trimethylbenzene	0.3	1	0.213199	56	ug/L
OW-59	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-59	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	5/2/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-59	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	5/2/2019	Acetone	7.1	10	1.199396	14064	ug/L
OW-59	5/2/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	5/2/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	5/2/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	5/2/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-59	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-59	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-59	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-59	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-59	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	8/21/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	8/21/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	8/21/2019	Acetone	5.6	10	1.199396	14064	ug/L
OW-59	8/21/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	8/21/2019	MTBE	10	1	0.456095	143	ug/L
OW-59	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-59	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-59	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-59	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-59	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-59	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-59	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-59	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-59	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-59	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-59	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-59	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-59	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-59	10/15/2019	1,2-Dichloroethane	0.39	1	0.194638	5	ug/L
OW-59	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-59	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-59	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-59	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-59	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-59	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-59	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-59	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-59	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-59	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-59	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-59	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-59	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-59	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-59	10/15/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-59	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-59	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-59	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-59	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-59	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-59	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-59	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-59	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-59	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-59	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-59	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-59	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-59	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-59	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-59	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-59	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-59	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-59	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-59	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-59	10/15/2019	MTBE	9.2	1	0.456095	143	ug/L
OW-59	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-59	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-59	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-59	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-59	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-59	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-59	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-59	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-59	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-59	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-59	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-59	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-59	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-59	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-59	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-59	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-59	3/3/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-59	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-59	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-59	3/3/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-59	3/3/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-59	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-59	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-59	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-59	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-59	3/3/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-59	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-59	3/3/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-59	3/3/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-59	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-59	3/3/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-59	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-59	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-59	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-59	3/3/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-59	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-59	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-59	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-59	3/3/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-59	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-59	3/3/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-59	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-59	3/3/2020	Acetone	3.9	10	2.3	14064	ug/L
OW-59	3/3/2020	Benzene	ND	1	0.23	5	ug/L
OW-59	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-59	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-59	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-59	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-59	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-59	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-59	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-59	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-59	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
OW-59	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-59	3/3/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-59	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-59	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-59	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-59	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-59	3/3/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-59	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-59	3/3/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-59	3/3/2020	MTBE	11	1	0.39	143	ug/L
OW-59	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-59	3/3/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	3/3/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-59	3/3/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-59	3/3/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-59	3/3/2020	Styrene	ND	1	0.13	100	ug/L
OW-59	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-59	3/3/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-59	3/3/2020	Toluene	ND	1	0.2	1000	ug/L
OW-59	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-59	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-59	3/3/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-59	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-59	3/3/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-59	3/3/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-59	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-59	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-59	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-59	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-59	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-59	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-59	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-59	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-59	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-59	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-59	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-59	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-59	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-59	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-59	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-59	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-59	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-59	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-59	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-59	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-59	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-59	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-59	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-59	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-59	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-59	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-59	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-59	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-59	9/19/2020	Acetone	2.4	10	2.3	14064	ug/L
OW-59	9/19/2020	Benzene	ND	1	0.23	5	ug/L
OW-59	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-59	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-59	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-59	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-59	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-59	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-59	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-59	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-59	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
OW-59	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-59	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-59	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-59	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-59	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-59	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-59	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-59	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-59	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-59	9/19/2020	MTBE	12	1	0.39	143	ug/L
OW-59	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-59	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-59	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-59	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-59	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-59	9/19/2020	Styrene	ND	1	0.13	100	ug/L
OW-59	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-59	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-59	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
OW-59	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-59	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-59	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-59	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-59	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-59	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-59	12/23/2020	Acetone	ND	25	10	14064	ug/L
OW-59	12/23/2020	Benzene	ND	1	0.38	5	ug/L
OW-59	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-59	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-59	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-59	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-59	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-59	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-59	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-59	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-59	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
OW-59	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-59	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-59	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-59	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-59	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-59	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-59	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-59	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-59	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-59	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-59	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-59	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-59	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-59	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-59	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-59	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-59	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-59	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-59	12/23/2020	MTBE	9.99	1	0.74	143	ug/L
OW-59	12/23/2020	Naphthalene	ND	1	1	30	ug/L
OW-59	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-59	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-59	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-59	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-59	12/23/2020	Styrene	ND	1	1	100	ug/L
OW-59	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-59	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-59	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-59	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-59	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
OW-59	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-59	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-59	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-59	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-59	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-59	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-59	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-59	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-59	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-59	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-59	12/23/2020	Acetone	ND	25	10	14064	ug/L
OW-59	12/23/2020	Benzene	ND	1	0.38	5	ug/L
OW-59	12/23/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-59	12/23/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-59	12/23/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-59	12/23/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-59	12/23/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-59	12/23/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-59	12/23/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-59	12/23/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-59	12/23/2020	Chloroform	ND	1	0.6	100	ug/L
OW-59	12/23/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-59	12/23/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-59	12/23/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-59	12/23/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-59	12/23/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-59	12/23/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-59	12/23/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-59	12/23/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-59	12/23/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-59	12/23/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-59	12/23/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-59	12/23/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-59	12/23/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-59	12/23/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-59	12/23/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-59	12/23/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-59	12/23/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-59	12/23/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-59	12/23/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-59	12/23/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-59	12/23/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-59	12/23/2020	MTBE	10.1	1	0.74	143	ug/L
OW-59	12/23/2020	Naphthalene	ND	1	1	30	ug/L
OW-59	12/23/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-59	12/23/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-59	12/23/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-59	12/23/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	Styrene	ND	1	1	100	ug/L
OW-59	12/23/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-59	12/23/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-59	12/23/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-59	12/23/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-59	12/23/2020	Toluene	ND	1	0.41	1000	ug/L
OW-59	12/23/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-59	12/23/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-59	12/23/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-59	12/23/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-59	12/23/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-59	12/23/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-59	12/23/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-59	12/23/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-59	12/23/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-59	12/23/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-59	12/23/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-59	12/23/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-60	6/28/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	6/28/2017	Acetone	13	10	0.82	14064	ug/L
OW-60	6/28/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	6/28/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	6/28/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	6/28/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	6/28/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	6/28/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	6/28/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	6/28/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	6/28/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	6/28/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	6/28/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	6/28/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	6/28/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	6/28/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	6/28/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	6/28/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	6/28/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	6/28/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	6/28/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	6/28/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	6/28/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	6/28/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	6/28/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	6/28/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	6/28/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	6/28/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	6/28/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	6/28/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	6/28/2017	p-Isopropyltoluene	0.21	1	0.096	NA	ug/L
OW-60	6/28/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	6/28/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	6/28/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	6/28/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	6/28/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	6/28/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	6/28/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	6/28/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	6/28/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	6/28/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	6/28/2017	Toluene	0.24	1	0.064	1000	ug/L
OW-60	6/28/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	6/28/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	6/28/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	6/28/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	6/28/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	6/28/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	6/28/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	6/28/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	6/28/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	6/28/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	6/28/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	6/28/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	6/28/2017	MTBE	0.86	1	0.24	143	ug/L
OW-60	6/28/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	6/28/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	9/21/2017	Acetone	3.3	10	0.82	14064	ug/L
OW-60	9/21/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	9/21/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	9/21/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	9/21/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	9/21/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	9/21/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	9/21/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	9/21/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	9/21/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	9/21/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	9/21/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	9/21/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	9/21/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	9/21/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	9/21/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	9/21/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	9/21/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	9/21/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	9/21/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	9/21/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	9/21/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	9/21/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	9/21/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	9/21/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	9/21/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	9/21/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	9/21/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	9/21/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	9/21/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	9/21/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	9/21/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	9/21/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	9/21/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	9/21/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	9/21/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	9/21/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	9/21/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	9/21/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	9/21/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	9/21/2017	Toluene	0.068	1	0.064	1000	ug/L
OW-60	9/21/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	9/21/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	9/21/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	9/21/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	9/21/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	9/21/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	9/21/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	9/21/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	9/21/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	9/21/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	9/21/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	9/21/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	9/21/2017	MTBE	0.59	1	0.24	143	ug/L
OW-60	9/21/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	9/21/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	12/6/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	12/6/2017	Acetone	2.5	10	0.82	14064	ug/L
OW-60	12/6/2017	Chloroform	ND	1	0.4	100	ug/L
OW-60	12/6/2017	Benzene	ND	1	0.062	5	ug/L
OW-60	12/6/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	12/6/2017	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	12/6/2017	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	12/6/2017	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	12/6/2017	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	12/6/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	12/6/2017	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	12/6/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	12/6/2017	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	12/6/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	12/6/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	12/6/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	12/6/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	12/6/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	12/6/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/6/2017	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	12/6/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	12/6/2017	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	12/6/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	12/6/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	12/6/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	12/6/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	12/6/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	12/6/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	12/6/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	12/6/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	12/6/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	12/6/2017	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	12/6/2017	Styrene	ND	1	0.16	100	ug/L
OW-60	12/6/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	12/6/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	12/6/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	12/6/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	12/6/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	12/6/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	12/6/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	12/6/2017	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	12/6/2017	Toluene	ND	1	0.064	1000	ug/L
OW-60	12/6/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	12/6/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	12/6/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	12/6/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	12/6/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	12/6/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	12/6/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	12/6/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	12/6/2017	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	12/6/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	12/6/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	12/6/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	12/6/2017	MTBE	0.28	1	0.24	143	ug/L
OW-60	12/6/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	12/6/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	2/22/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	2/22/2018	Acetone	1.8	10	0.82	14064	ug/L
OW-60	2/22/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	2/22/2018	Benzene	ND	1	0.062	5	ug/L
OW-60	2/22/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	2/22/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	2/22/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	2/22/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	2/22/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	2/22/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	2/22/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	2/22/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	2/22/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	2/22/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	2/22/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	2/22/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	2/22/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	2/22/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	2/22/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	2/22/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	2/22/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	2/22/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	2/22/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	2/22/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	2/22/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	2/22/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	2/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	2/22/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	2/22/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	2/22/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	2/22/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	2/22/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	2/22/2018	Styrene	ND	1	0.16	100	ug/L
OW-60	2/22/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	2/22/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	2/22/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	2/22/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	2/22/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/22/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	2/22/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	2/22/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	2/22/2018	Toluene	ND	1	0.064	1000	ug/L
OW-60	2/22/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	2/22/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	2/22/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	2/22/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	2/22/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	2/22/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	2/22/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	2/22/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	2/22/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	2/22/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	2/22/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	2/22/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	2/22/2018	MTBE	0.46	1	0.24	143	ug/L
OW-60	2/22/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	2/22/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-60	5/8/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-60	5/8/2018	Acetone	ND	10	0.82	14064	ug/L
OW-60	5/8/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	5/8/2018	Benzene	ND	1	0.062	5	ug/L
OW-60	5/8/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-60	5/8/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	5/8/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	5/8/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-60	5/8/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-60	5/8/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-60	5/8/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-60	5/8/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-60	5/8/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-60	5/8/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-60	5/8/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	5/8/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-60	5/8/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-60	5/8/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	5/8/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-60	5/8/2018	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	5/8/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-60	5/8/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-60	5/8/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-60	5/8/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-60	5/8/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	5/8/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
OW-60	5/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-60	5/8/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-60	5/8/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
OW-60	5/8/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
OW-60	5/8/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
OW-60	5/8/2018	Ethylbenzene	ND	1	0.093	700	ug/L
OW-60	5/8/2018	Styrene	ND	1	0.16	100	ug/L
OW-60	5/8/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
OW-60	5/8/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
OW-60	5/8/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	5/8/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-60	5/8/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	5/8/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-60	5/8/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
OW-60	5/8/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-60	5/8/2018	Toluene	ND	1	0.064	1000	ug/L
OW-60	5/8/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-60	5/8/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-60	5/8/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-60	5/8/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
OW-60	5/8/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-60	5/8/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-60	5/8/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	5/8/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-60	5/8/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-60	5/8/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-60	5/8/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-60	5/8/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
OW-60	5/8/2018	MTBE	0.42	1	0.24	143	ug/L
OW-60	5/8/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-60	5/8/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/28/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
OW-60	8/28/2018	Acetone	3.2	10	0.79	14064	ug/L
OW-60	8/28/2018	Chloroform	ND	1	0.4	100	ug/L
OW-60	8/28/2018	Benzene	ND	1	0.17	5	ug/L
OW-60	8/28/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
OW-60	8/28/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-60	8/28/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-60	8/28/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-60	8/28/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-60	8/28/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
OW-60	8/28/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-60	8/28/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-60	8/28/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-60	8/28/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-60	8/28/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-60	8/28/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-60	8/28/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
OW-60	8/28/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-60	8/28/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
OW-60	8/28/2018	2-Butanone	ND	10	1.3	5565	ug/L
OW-60	8/28/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-60	8/28/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-60	8/28/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-60	8/28/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-60	8/28/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-60	8/28/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-60	8/28/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-60	8/28/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-60	8/28/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-60	8/28/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-60	8/28/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-60	8/28/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-60	8/28/2018	Styrene	ND	1	0.25	100	ug/L
OW-60	8/28/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-60	8/28/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	8/28/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-60	8/28/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-60	8/28/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-60	8/28/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-60	8/28/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-60	8/28/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-60	8/28/2018	Toluene	ND	1	0.17	1000	ug/L
OW-60	8/28/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-60	8/28/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-60	8/28/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-60	8/28/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-60	8/28/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-60	8/28/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-60	8/28/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	8/28/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-60	8/28/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-60	8/28/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
OW-60	8/28/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-60	8/28/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-60	8/28/2018	MTBE	0.54	1	0.32	143	ug/L
OW-60	8/28/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-60	8/28/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-60	11/7/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
OW-60	11/7/2018	Acetone	ND	10	0.76	14064	ug/L
OW-60	11/7/2018	Chloroform	ND	1	0.24	100	ug/L
OW-60	11/7/2018	Benzene	ND	1	0.17	5	ug/L
OW-60	11/7/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
OW-60	11/7/2018	Bromomethane	ND	3	0.27	7.54	ug/L
OW-60	11/7/2018	Chloromethane	ND	3	0.32	20.32	ug/L
OW-60	11/7/2018	Dibromomethane	ND	1	0.32	8	ug/L
OW-60	11/7/2018	Chloroethane	ND	2	0.16	20857	ug/L
OW-60	11/7/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
OW-60	11/7/2018	Methylene Chloride	ND	3	0.21	5	ug/L
OW-60	11/7/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
OW-60	11/7/2018	Bromoform	ND	1	0.32	32.9	ug/L
OW-60	11/7/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
OW-60	11/7/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
OW-60	11/7/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
OW-60	11/7/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
OW-60	11/7/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
OW-60	11/7/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	11/7/2018	2-Butanone	ND	10	1.4	5565	ug/L
OW-60	11/7/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
OW-60	11/7/2018	Trichloroethene	ND	1	0.26	5	ug/L
OW-60	11/7/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
OW-60	11/7/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
OW-60	11/7/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
OW-60	11/7/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
OW-60	11/7/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
OW-60	11/7/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
OW-60	11/7/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
OW-60	11/7/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
OW-60	11/7/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
OW-60	11/7/2018	Ethylbenzene	ND	1	0.22	700	ug/L
OW-60	11/7/2018	Styrene	ND	1	0.25	100	ug/L
OW-60	11/7/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
OW-60	11/7/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	11/7/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
OW-60	11/7/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
OW-60	11/7/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
OW-60	11/7/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
OW-60	11/7/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
OW-60	11/7/2018	Bromobenzene	ND	1	0.32	62	ug/L
OW-60	11/7/2018	Toluene	ND	1	0.17	1000	ug/L
OW-60	11/7/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
OW-60	11/7/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
OW-60	11/7/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
OW-60	11/7/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
OW-60	11/7/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
OW-60	11/7/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
OW-60	11/7/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-60	11/7/2018	Pentafluorobenzene	ND	0	0		None
OW-60	11/7/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
OW-60	11/7/2018	2-Hexanone	ND	10	0.91	38	ug/L
OW-60	11/7/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
OW-60	11/7/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
OW-60	11/7/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
OW-60	11/7/2018	MTBE	ND	1	0.46	143	ug/L
OW-60	11/7/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
OW-60	11/7/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
OW-60	2/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
OW-60	2/13/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
OW-60	2/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
OW-60	2/13/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
OW-60	2/13/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
OW-60	2/13/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
OW-60	2/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	2/13/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
OW-60	2/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
OW-60	2/13/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
OW-60	2/13/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
OW-60	2/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
OW-60	2/13/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
OW-60	2/13/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
OW-60	2/13/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
OW-60	2/13/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
OW-60	2/13/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
OW-60	2/13/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
OW-60	2/13/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
OW-60	2/13/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
OW-60	2/13/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
OW-60	2/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	2/13/2019	2-Butanone	ND	10	1.410869	5565	ug/L
OW-60	2/13/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
OW-60	2/13/2019	2-Hexanone	ND	10	0.906574	38	ug/L
OW-60	2/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	2/13/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
OW-60	2/13/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
OW-60	2/13/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
OW-60	2/13/2019	Acetone	1.7	10	0.75707	14064	ug/L
OW-60	2/13/2019	Benzene	ND	1	0.174896	5	ug/L
OW-60	2/13/2019	Bromobenzene	ND	1	0.317906	62	ug/L
OW-60	2/13/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
OW-60	2/13/2019	Bromoform	ND	1	0.32331	32.9	ug/L
OW-60	2/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	2/13/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
OW-60	2/13/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
OW-60	2/13/2019	Chloroethane	ND	2	0.164337	20857	ug/L
OW-60	2/13/2019	Chloroform	ND	1	0.235224	100	ug/L
OW-60	2/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	2/13/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
OW-60	2/13/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
OW-60	2/13/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
OW-60	2/13/2019	Dibromomethane	ND	1	0.322147	8	ug/L
OW-60	2/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	2/13/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
OW-60	2/13/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
OW-60	2/13/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
OW-60	2/13/2019	MTBE	0.46	1	0.456095	143	ug/L
OW-60	2/13/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
OW-60	2/13/2019	Naphthalene	ND	2	0.289626	30	ug/L
OW-60	2/13/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
OW-60	2/13/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
OW-60	2/13/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
OW-60	2/13/2019	Styrene	ND	1	0.250146	100	ug/L
OW-60	2/13/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
OW-60	2/13/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
OW-60	2/13/2019	Toluene	ND	1	0.168139	1000	ug/L
OW-60	2/13/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
OW-60	2/13/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
OW-60	2/13/2019	Trichloroethene	ND	1	0.257556	5	ug/L
OW-60	2/13/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
OW-60	2/13/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
OW-60	2/13/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
OW-60	5/2/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	5/2/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	5/2/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	5/2/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	5/2/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	5/2/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	5/2/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	5/2/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	5/2/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-60	5/2/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	5/2/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	5/2/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-60	5/2/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	5/2/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	5/2/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	5/2/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	5/2/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	5/2/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	5/2/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	5/2/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	5/2/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-60	5/2/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	5/2/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	5/2/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	5/2/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	5/2/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	5/2/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	5/2/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	5/2/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	5/2/2019	Acetone	9.4	10	1.199396	14064	ug/L
OW-60	5/2/2019	Benzene	ND	1	0.166639	5	ug/L
OW-60	5/2/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	5/2/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	5/2/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	5/2/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	5/2/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	5/2/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	5/2/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	5/2/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	5/2/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	5/2/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	5/2/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	5/2/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	5/2/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	5/2/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	5/2/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	5/2/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	5/2/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	5/2/2019	MTBE	0.58	1	0.456095	143	ug/L
OW-60	5/2/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	5/2/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	5/2/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	5/2/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	5/2/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	5/2/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	5/2/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	5/2/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	5/2/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-60	5/2/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	5/2/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	5/2/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	5/2/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	5/2/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	5/2/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	8/21/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	8/21/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	8/21/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	8/21/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	8/21/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	8/21/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	8/21/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	8/21/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	8/21/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
OW-60	8/21/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	8/21/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	8/21/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
OW-60	8/21/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	8/21/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	8/21/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	8/21/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	8/21/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	8/21/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	8/21/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	8/21/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	8/21/2019	1-Methylnaphthalene	0.93	4	0.314954	NA	ug/L
OW-60	8/21/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	8/21/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	8/21/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	8/21/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	8/21/2019	2-Methylnaphthalene	**1.1**	4	0.345376		ug/L
OW-60	8/21/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	8/21/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	8/21/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	8/21/2019	Acetone	ND	10	1.199396	14064	ug/L
OW-60	8/21/2019	Benzene	0.29	1	0.166639	5	ug/L
OW-60	8/21/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	8/21/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	8/21/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	8/21/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	8/21/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	8/21/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	8/21/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	8/21/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	8/21/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	8/21/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	8/21/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	8/21/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	8/21/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	8/21/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	8/21/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	8/21/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	8/21/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-60	8/21/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	8/21/2019	MTBE	0.74	1	0.456095	143	ug/L
OW-60	8/21/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	8/21/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	8/21/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	8/21/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	8/21/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	8/21/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	8/21/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	8/21/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	8/21/2019	Toluene	ND	1	0.350436	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	8/21/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	8/21/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	8/21/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	8/21/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	8/21/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	10/15/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
OW-60	10/15/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
OW-60	10/15/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
OW-60	10/15/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
OW-60	10/15/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
OW-60	10/15/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
OW-60	10/15/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
OW-60	10/15/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
OW-60	10/15/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
OW-60	10/15/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
OW-60	10/15/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
OW-60	10/15/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
OW-60	10/15/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
OW-60	10/15/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
OW-60	10/15/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
OW-60	10/15/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
OW-60	10/15/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
OW-60	10/15/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
OW-60	10/15/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
OW-60	10/15/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
OW-60	10/15/2019	2-Butanone	ND	10	2.089417	5565	ug/L
OW-60	10/15/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
OW-60	10/15/2019	2-Hexanone	ND	10	1.547192	38	ug/L
OW-60	10/15/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
OW-60	10/15/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
OW-60	10/15/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
OW-60	10/15/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
OW-60	10/15/2019	Acetone	3.8	10	1.199396	14064	ug/L
OW-60	10/15/2019	Benzene	ND	1	0.166639	5	ug/L
OW-60	10/15/2019	Bromobenzene	ND	1	0.244727	62	ug/L
OW-60	10/15/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
OW-60	10/15/2019	Bromoform	ND	1	0.288663	32.9	ug/L
OW-60	10/15/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
OW-60	10/15/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
OW-60	10/15/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
OW-60	10/15/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
OW-60	10/15/2019	Chloroethane	ND	2	0.177803	20857	ug/L
OW-60	10/15/2019	Chloroform	ND	1	0.121891	100	ug/L
OW-60	10/15/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
OW-60	10/15/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
OW-60	10/15/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
OW-60	10/15/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
OW-60	10/15/2019	Dibromomethane	ND	1	0.209209	8	ug/L
OW-60	10/15/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
OW-60	10/15/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
OW-60	10/15/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
OW-60	10/15/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
OW-60	10/15/2019	MTBE	0.75	1	0.456095	143	ug/L
OW-60	10/15/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
OW-60	10/15/2019	Naphthalene	ND	2	0.275071	30	ug/L
OW-60	10/15/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
OW-60	10/15/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
OW-60	10/15/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
OW-60	10/15/2019	Styrene	ND	1	0.191323	100	ug/L
OW-60	10/15/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
OW-60	10/15/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
OW-60	10/15/2019	Toluene	ND	1	0.350436	1000	ug/L
OW-60	10/15/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
OW-60	10/15/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
OW-60	10/15/2019	Trichloroethene	ND	1	0.166272	5	ug/L
OW-60	10/15/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
OW-60	10/15/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
OW-60	10/15/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
OW-60	3/3/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-60	3/3/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-60	3/3/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-60	3/3/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-60	3/3/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-60	3/3/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-60	3/3/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	3/3/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-60	3/3/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-60	3/3/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-60	3/3/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-60	3/3/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-60	3/3/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-60	3/3/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-60	3/3/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-60	3/3/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-60	3/3/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-60	3/3/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-60	3/3/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-60	3/3/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-60	3/3/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-60	3/3/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-60	3/3/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	3/3/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-60	3/3/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-60	3/3/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-60	3/3/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-60	3/3/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-60	3/3/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-60	3/3/2020	Acetone	3.6	10	2.3	14064	ug/L
OW-60	3/3/2020	Benzene	ND	1	0.23	5	ug/L
OW-60	3/3/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-60	3/3/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-60	3/3/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-60	3/3/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-60	3/3/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-60	3/3/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-60	3/3/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-60	3/3/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-60	3/3/2020	Chloroform	ND	1	0.13	100	ug/L
OW-60	3/3/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-60	3/3/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-60	3/3/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-60	3/3/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-60	3/3/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-60	3/3/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-60	3/3/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-60	3/3/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-60	3/3/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-60	3/3/2020	MTBE	ND	1	0.39	143	ug/L
OW-60	3/3/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-60	3/3/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	3/3/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-60	3/3/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-60	3/3/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-60	3/3/2020	Styrene	ND	1	0.13	100	ug/L
OW-60	3/3/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-60	3/3/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-60	3/3/2020	Toluene	ND	1	0.2	1000	ug/L
OW-60	3/3/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-60	3/3/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-60	3/3/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-60	3/3/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-60	3/3/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-60	3/3/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-60	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-60	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-60	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-60	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-60	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-60	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-60	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-60	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-60	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-60	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-60	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
OW-60	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-60	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-60	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-60	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-60	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-60	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
OW-60	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-60	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-60	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
OW-60	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-60	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-60	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-60	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-60	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
OW-60	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-60	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
OW-60	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-60	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
OW-60	9/21/2020	Benzene	ND	1	0.23	5	ug/L
OW-60	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-60	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-60	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-60	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-60	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-60	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-60	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-60	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-60	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
OW-60	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-60	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-60	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-60	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-60	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-60	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-60	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
OW-60	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-60	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
OW-60	9/21/2020	MTBE	ND	1	0.39	143	ug/L
OW-60	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-60	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-60	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
OW-60	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
OW-60	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
OW-60	9/21/2020	Styrene	ND	1	0.13	100	ug/L
OW-60	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
OW-60	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-60	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
OW-60	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-60	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-60	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-60	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-60	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-60	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
OW-60	12/11/2020	1,2-Dibromoethane	ND	0.0205	0.00513	0.05	ug/L
OW-60	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-60	12/11/2020	Benzene	ND	1	0.38	5	ug/L
OW-60	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-60	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-60	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-60	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-60	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-60	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-60	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-60	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-60	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-60	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-60	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-60	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-60	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-60	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-60	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-60	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-60	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-60	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-60	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-60	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-60	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-60	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-60	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-60	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-60	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-60	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-60	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-60	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-60	12/11/2020	Ethylbenzene	ND	1	0.5	700	ug/L
OW-60	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-60	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-60	12/11/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
OW-60	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-60	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-60	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-60	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-60	12/11/2020	MTBE	ND	1	0.74	143	ug/L
OW-60	12/11/2020	Naphthalene	ND	1	1	30	ug/L
OW-60	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-60	12/11/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
OW-60	12/11/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
OW-60	12/11/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
OW-60	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-60	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-60	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-60	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-60	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-60	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-60	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-60	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-60	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-60	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-60	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-60	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
OW-60	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-60	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-60	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-60	12/11/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
OW-60	12/11/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
OW-60	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-60	12/11/2020	Xylenes, Total	ND	10	1.6	620	ug/L
OW-63	4/29/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
OW-63	4/29/2018	Acetone	330	250	41	14064	ug/L
OW-63	4/29/2018	Chloroform	ND	1	0.4	100	ug/L
OW-63	4/29/2018	Benzene	**8900**	500	31	5	ug/L
OW-63	4/29/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
OW-63	4/29/2018	Bromomethane	ND	3	0.26	7.54	ug/L
OW-63	4/29/2018	Chloromethane	ND	3	0.29	20.32	ug/L
OW-63	4/29/2018	Dibromomethane	ND	1	0.091	8	ug/L
OW-63	4/29/2018	Chloroethane	ND	2	0.23	20857	ug/L
OW-63	4/29/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
OW-63	4/29/2018	Methylene Chloride	ND	3	0.11	5	ug/L
OW-63	4/29/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
OW-63	4/29/2018	Bromoform	ND	1	0.21	32.9	ug/L
OW-63	4/29/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
OW-63	4/29/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
OW-63	4/29/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
OW-63	4/29/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
OW-63	4/29/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
OW-63	4/29/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
OW-63	4/29/2018	2-Butanone	100	10	1.1	5565	ug/L
OW-63	4/29/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
OW-63	4/29/2018	Trichloroethene	ND	1	0.11	5	ug/L
OW-63	4/29/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
OW-63	4/29/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
OW-63	4/29/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
OW-63	4/29/2018	1,2,4-Trimethylbenzene	22	1	0.11	56	ug/L
OW-63	4/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
OW-63	4/29/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
OW-63	4/29/2018	tert-Butylbenzene	0.25	1	0.1	690	ug/L
OW-63	4/29/2018	Isopropylbenzene	58	1	0.051	447	ug/L
OW-63	4/29/2018	p-Isopropyltoluene	4.6	1	0.096	NA	ug/L
OW-63	4/29/2018	Ethylbenzene	**1400**	50	4.7	700	ug/L
OW-63	4/29/2018	Styrene	ND	1	0.16	100	ug/L
OW-63	4/29/2018	n-Propylbenzene	200	50	3.7	660	ug/L
OW-63	4/29/2018	n-Butylbenzene	24	3	0.13	1000	ug/L
OW-63	4/29/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
OW-63	4/29/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
OW-63	4/29/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
OW-63	4/29/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
OW-63	4/29/2018	1,3,5-Trimethylbenzene	43	1	0.087	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	4/29/2018	Bromobenzene	ND	1	0.14	62	ug/L
OW-63	4/29/2018	Toluene	120	50	3.2	1000	ug/L
OW-63	4/29/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
OW-63	4/29/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
OW-63	4/29/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
OW-63	4/29/2018	sec-Butylbenzene	10	1	0.11	2000	ug/L
OW-63	4/29/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
OW-63	4/29/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
OW-63	4/29/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
OW-63	4/29/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
OW-63	4/29/2018	2-Hexanone	ND	10	0.66	38	ug/L
OW-63	4/29/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
OW-63	4/29/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
OW-63	4/29/2018	Xylenes, Total	**680**	75	16	620	ug/L
OW-63	4/29/2018	MTBE	37	1	0.24	143	ug/L
OW-63	4/29/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
OW-63	4/29/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
OW-63	8/22/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-63	8/22/2018	Acetone	590	200	16	14064	ug/L
OW-63	8/22/2018	Chloroform	ND	20	8	100	ug/L
OW-63	8/22/2018	Benzene	**9000**	200	35	5	ug/L
OW-63	8/22/2018	1,1,1-Trichloroethane	ND	20	3.1	200	ug/L
OW-63	8/22/2018	Bromomethane	*ND*	*60*	5.1	7.54	ug/L
OW-63	8/22/2018	Chloromethane	*ND*	*60*	5.9	20.32	ug/L
OW-63	8/22/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-63	8/22/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-63	8/22/2018	Vinyl Chloride	*ND*	*20*	2.2	2	ug/L
OW-63	8/22/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-63	8/22/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-63	8/22/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-63	8/22/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-63	8/22/2018	1,1-Dichloroethane	ND	20	8	25	ug/L
OW-63	8/22/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-63	8/22/2018	Trichlorofluoromethane	ND	20	3.4	1137	ug/L
OW-63	8/22/2018	Dichlorodifluoromethane	ND	20	20	197	ug/L
OW-63	8/22/2018	1,2-Dichloropropane	*ND*	*20*	3.1	5	ug/L
OW-63	8/22/2018	2-Butanone	ND	200	25	5565	ug/L
OW-63	8/22/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-63	8/22/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-63	8/22/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-63	8/22/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-63	8/22/2018	2-Chlorotoluene	ND	20	8	233	ug/L
OW-63	8/22/2018	1,2,4-Trimethylbenzene	14	20	5.1	56	ug/L
OW-63	8/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-63	8/22/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-63	8/22/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-63	8/22/2018	Isopropylbenzene	54	20	4.4	447	ug/L
OW-63	8/22/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-63	8/22/2018	Ethylbenzene	**1100**	20	4.5	700	ug/L
OW-63	8/22/2018	Styrene	ND	20	5	100	ug/L
OW-63	8/22/2018	n-Propylbenzene	180	20	4.9	660	ug/L
OW-63	8/22/2018	n-Butylbenzene	22	60	5	1000	ug/L
OW-63	8/22/2018	4-Chlorotoluene	ND	20	8	250	ug/L
OW-63	8/22/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-63	8/22/2018	1,2-Dichloroethane	*ND*	*20*	8	5	ug/L
OW-63	8/22/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-63	8/22/2018	1,3,5-Trimethylbenzene	36	20	4.6	60	ug/L
OW-63	8/22/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-63	8/22/2018	Toluene	84	20	3.4	1000	ug/L
OW-63	8/22/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-63	8/22/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-63	8/22/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-63	8/22/2018	sec-Butylbenzene	7.2	20	4	2000	ug/L
OW-63	8/22/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-63	8/22/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-63	8/22/2018	trans-1,2-Dichloroethene	ND	20	3.7	100	ug/L
OW-63	8/22/2018	1,1-Dichloropropene	ND	20	3.2	NA	ug/L
OW-63	8/22/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-63	8/22/2018	2,2-Dichloropropane	ND	40	3.7	NA	ug/L
OW-63	8/22/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-63	8/22/2018	Xylenes, Total	520	30	13	620	ug/L
OW-63	8/22/2018	MTBE	48	20	6.4	143	ug/L
OW-63	8/22/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-63	8/22/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-63	12/3/2018	Carbon tetrachloride	*ND*	*20*	2.7	5	ug/L
OW-63	12/3/2018	Acetone	ND	200	15	14064	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/3/2018	Chloroform	ND	20	4.7	100	ug/L
OW-63	12/3/2018	Benzene	**8800**	200	35	5	ug/L
OW-63	12/3/2018	1,1,1-Trichloroethane	ND	20	3.3	200	ug/L
OW-63	12/3/2018	Bromomethane	*ND*	*60*	5.5	7.54	ug/L
OW-63	12/3/2018	Chloromethane	*ND*	*60*	6.4	20.32	ug/L
OW-63	12/3/2018	Dibromomethane	*ND*	*20*	6.4	8	ug/L
OW-63	12/3/2018	Chloroethane	ND	40	3.3	20857	ug/L
OW-63	12/3/2018	Vinyl Chloride	*ND*	*20*	2.4	2	ug/L
OW-63	12/3/2018	Methylene Chloride	*ND*	*60*	4.1	5	ug/L
OW-63	12/3/2018	Carbon Disulfide	ND	200	7.7	810	ug/L
OW-63	12/3/2018	Bromoform	ND	20	6.5	32.9	ug/L
OW-63	12/3/2018	Bromodichloromethane	*ND*	*20*	5.7	1.34	ug/L
OW-63	12/3/2018	1,1-Dichloroethane	ND	20	3.5	25	ug/L
OW-63	12/3/2018	1,1-Dichloroethene	*ND*	*20*	2.4	7	ug/L
OW-63	12/3/2018	Trichlorofluoromethane	ND	20	2.9	1137	ug/L
OW-63	12/3/2018	Dichlorodifluoromethane	ND	20	5.2	197	ug/L
OW-63	12/3/2018	1,2-Dichloropropane	*ND*	*20*	3.3	5	ug/L
OW-63	12/3/2018	2-Butanone	ND	200	28	5565	ug/L
OW-63	12/3/2018	1,1,2-Trichloroethane	*ND*	*20*	4.7	5	ug/L
OW-63	12/3/2018	Trichloroethene	*ND*	*20*	5.2	5	ug/L
OW-63	12/3/2018	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.6	10	ug/L
OW-63	12/3/2018	1,2,3-Trichlorobenzene	ND	20	5.6	70	ug/L
OW-63	12/3/2018	2-Chlorotoluene	ND	20	5	233	ug/L
OW-63	12/3/2018	1,2,4-Trimethylbenzene	ND	20	5.1	56	ug/L
OW-63	12/3/2018	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.4	0.0033	ug/L
OW-63	12/3/2018	1,2,3-Trichloropropane	*ND*	*40*	11	0.0084	ug/L
OW-63	12/3/2018	tert-Butylbenzene	ND	20	4.4	690	ug/L
OW-63	12/3/2018	Isopropylbenzene	50	20	4.4	447	ug/L
OW-63	12/3/2018	p-Isopropyltoluene	ND	20	4.8	NA	ug/L
OW-63	12/3/2018	Ethylbenzene	**1100**	20	4.5	700	ug/L
OW-63	12/3/2018	Styrene	ND	20	5	100	ug/L
OW-63	12/3/2018	n-Propylbenzene	160	20	4.9	660	ug/L
OW-63	12/3/2018	n-Butylbenzene	ND	60	5	1000	ug/L
OW-63	12/3/2018	4-Chlorotoluene	ND	20	5.6	250	ug/L
OW-63	12/3/2018	1,2-Dibromoethane	*ND*	*20*	4.6	0.05	ug/L
OW-63	12/3/2018	1,2-Dichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	12/3/2018	4-Methyl-2-Pentanone	ND	200	9.1	1243	ug/L
OW-63	12/3/2018	1,3,5-Trimethylbenzene	28	20	4.6	60	ug/L
OW-63	12/3/2018	Bromobenzene	ND	20	6.4	62	ug/L
OW-63	12/3/2018	Toluene	70	20	3.4	1000	ug/L
OW-63	12/3/2018	Chlorobenzene	ND	20	5.8	77.6	ug/L
OW-63	12/3/2018	Dibromochloromethane	*ND*	*20*	4.7	1.68	ug/L
OW-63	12/3/2018	Tetrachloroethene	*ND*	*20*	3	5	ug/L
OW-63	12/3/2018	sec-Butylbenzene	ND	20	4	2000	ug/L
OW-63	12/3/2018	1,3-Dichloropropane	ND	20	5.4	370	ug/L
OW-63	12/3/2018	cis-1,2-Dichloroethene	ND	20	7.5	70	ug/L
OW-63	12/3/2018	trans-1,2-Dichloroethene	ND	20	3.6	100	ug/L
OW-63	12/3/2018	1,1-Dichloropropene	ND	20	3.3	NA	ug/L
OW-63	12/3/2018	2-Hexanone	*ND*	*200*	18	38	ug/L
OW-63	12/3/2018	2,2-Dichloropropane	ND	40	4.7	NA	ug/L
OW-63	12/3/2018	1,1,1,2-Tetrachloroethane	*ND*	*20*	5	5.74	ug/L
OW-63	12/3/2018	Xylenes, Total	430	30	13	620	ug/L
OW-63	12/3/2018	MTBE	33	20	9.1	143	ug/L
OW-63	12/3/2018	cis-1,3-Dichloropropene	ND	20	6	NA	ug/L
OW-63	12/3/2018	trans-1,3-Dichloropropene	ND	20	5.5	NA	ug/L
OW-63	2/20/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.047985	5.74	ug/L
OW-63	2/20/2019	1,1,1-Trichloroethane	ND	20	3.276317	200	ug/L
OW-63	2/20/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	6.565982	10	ug/L
OW-63	2/20/2019	1,1,2-Trichloroethane	*ND*	*20*	4.654465	5	ug/L
OW-63	2/20/2019	1,1-Dichloroethane	ND	20	3.503933	25	ug/L
OW-63	2/20/2019	1,1-Dichloroethene	*ND*	*20*	2.409756	7	ug/L
OW-63	2/20/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	2/20/2019	1,2,3-Trichlorobenzene	ND	20	5.606161	70	ug/L
OW-63	2/20/2019	1,2,3-Trichloropropane	*ND*	*40*	11.320089	0.0084	ug/L
OW-63	2/20/2019	1,2,4-Trichlorobenzene	ND	20	5.328203	70	ug/L
OW-63	2/20/2019	1,2,4-Trimethylbenzene	8.6	20	5.066287	56	ug/L
OW-63	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	9.417943	0.0033	ug/L
OW-63	2/20/2019	1,2-Dibromoethane	*ND*	*20*	4.590571	0.05	ug/L
OW-63	2/20/2019	1,2-Dichlorobenzene	ND	20	6.229297	600	ug/L
OW-63	2/20/2019	1,2-Dichloroethane	*ND*	*20*	3.790508	5	ug/L
OW-63	2/20/2019	1,2-Dichloropropane	*ND*	*20*	3.304515	5	ug/L
OW-63	2/20/2019	1,3,5-Trimethylbenzene	22	20	4.628281	60	ug/L
OW-63	2/20/2019	1,3-Dichlorobenzene	ND	20	6.252447	N/A	ug/L
OW-63	2/20/2019	1,3-Dichloropropane	ND	20	5.415126	370	ug/L
OW-63	2/20/2019	1,4-Dichlorobenzene	ND	20	5.754137	75	ug/L
OW-63	2/20/2019	1-Methylnaphthalene	76	80	6.716339	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	2/20/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	2/20/2019	2-Butanone	ND	200	28.217377	5565	ug/L
OW-63	2/20/2019	2-Chlorotoluene	ND	20	5.002764	233	ug/L
OW-63	2/20/2019	2-Hexanone	*ND*	*200*	18.131489	38	ug/L
OW-63	2/20/2019	2-Methylnaphthalene	**87**	80	6.90752		ug/L
OW-63	2/20/2019	4-Chlorotoluene	ND	20	5.616018	250	ug/L
OW-63	2/20/2019	p-Isopropyltoluene	ND	20	4.806771	NA	ug/L
OW-63	2/20/2019	4-Methyl-2-Pentanone	ND	200	9.065547	1243	ug/L
OW-63	2/20/2019	Acetone	ND	200	15.141392	14064	ug/L
OW-63	2/20/2019	Benzene	**10000**	200	34.979144	5	ug/L
OW-63	2/20/2019	Bromobenzene	ND	20	6.358125	62	ug/L
OW-63	2/20/2019	Bromodichloromethane	*ND*	*20*	5.65534	1.34	ug/L
OW-63	2/20/2019	Bromoform	ND	20	6.466206	32.9	ug/L
OW-63	2/20/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	2/20/2019	Carbon Disulfide	ND	200	7.700622	810	ug/L
OW-63	2/20/2019	Carbon tetrachloride	*ND*	*20*	2.746967	5	ug/L
OW-63	2/20/2019	Chlorobenzene	ND	20	5.81055	77.6	ug/L
OW-63	2/20/2019	Chloroethane	ND	40	3.286742	20857	ug/L
OW-63	2/20/2019	Chloroform	ND	20	4.704475	100	ug/L
OW-63	2/20/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	2/20/2019	cis-1,2-Dichloroethene	ND	20	7.519623	70	ug/L
OW-63	2/20/2019	cis-1,3-Dichloropropene	ND	20	5.964561	NA	ug/L
OW-63	2/20/2019	Dibromochloromethane	*ND*	*20*	4.740248	1.68	ug/L
OW-63	2/20/2019	Dibromomethane	*ND*	*20*	6.442948	8	ug/L
OW-63	2/20/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	2/20/2019	Ethylbenzene	**1100**	20	4.468045	700	ug/L
OW-63	2/20/2019	Hexachlorobutadiene	*ND*	*20*	7.823739	1.39	ug/L
OW-63	2/20/2019	Isopropylbenzene	51	20	4.422084	447	ug/L
OW-63	2/20/2019	MTBE	41	20	9.1219	143	ug/L
OW-63	2/20/2019	Methylene Chloride	*ND*	*60*	4.113896	5	ug/L
OW-63	2/20/2019	Naphthalene	**320**	40	5.792521	30	ug/L
OW-63	2/20/2019	n-Butylbenzene	23	60	4.966609	1000	ug/L
OW-63	2/20/2019	n-Propylbenzene	170	20	4.851725	660	ug/L
OW-63	2/20/2019	sec-Butylbenzene	9.5	20	4.045094	2000	ug/L
OW-63	2/20/2019	Styrene	ND	20	5.002915	100	ug/L
OW-63	2/20/2019	tert-Butylbenzene	ND	20	4.429395	690	ug/L
OW-63	2/20/2019	Tetrachloroethene	*ND*	*20*	3.029034	5	ug/L
OW-63	2/20/2019	Toluene	65	20	3.362788	1000	ug/L
OW-63	2/20/2019	trans-1,2-Dichloroethene	ND	20	3.645392	100	ug/L
OW-63	2/20/2019	trans-1,3-Dichloropropene	ND	20	5.509354	NA	ug/L
OW-63	2/20/2019	Trichloroethene	*ND*	*20*	5.151128	5	ug/L
OW-63	2/20/2019	Trichlorofluoromethane	ND	20	2.882323	1137	ug/L
OW-63	2/20/2019	Vinyl Chloride	*ND*	*20*	2.421486	2	ug/L
OW-63	2/20/2019	Xylenes, Total	360	30	12.825754	620	ug/L
OW-63	5/15/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	5/15/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	5/15/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	5/15/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	5/15/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	5/15/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	5/15/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	5/15/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	5/15/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
OW-63	5/15/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	5/15/2019	1,2,4-Trimethylbenzene	9.9	20	4.263982	56	ug/L
OW-63	5/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
OW-63	5/15/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	5/15/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	5/15/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	5/15/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	5/15/2019	1,3,5-Trimethylbenzene	18	20	3.773197	60	ug/L
OW-63	5/15/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	5/15/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	5/15/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	5/15/2019	1-Methylnaphthalene	97	80	6.29909	NA	ug/L
OW-63	5/15/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	5/15/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	5/15/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	5/15/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	5/15/2019	2-Methylnaphthalene	**110**	80	6.90752		ug/L
OW-63	5/15/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	5/15/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	5/15/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	5/15/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	5/15/2019	Benzene	**8300**	200	33.327811	5	ug/L
OW-63	5/15/2019	Bromobenzene	ND	20	4.894541	62	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	5/15/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	5/15/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	5/15/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	5/15/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	5/15/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	5/15/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	5/15/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	5/15/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	5/15/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	5/15/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	5/15/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	5/15/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	5/15/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	5/15/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	5/15/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	5/15/2019	Isopropylbenzene	58	20	3.830445	447	ug/L
OW-63	5/15/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	5/15/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	5/15/2019	Naphthalene	**330**	40	5.501427	30	ug/L
OW-63	5/15/2019	n-Butylbenzene	18	60	4.551391	1000	ug/L
OW-63	5/15/2019	n-Propylbenzene	160	20	4.28616	660	ug/L
OW-63	5/15/2019	sec-Butylbenzene	8.5	20	4.954626	2000	ug/L
OW-63	5/15/2019	Styrene	ND	20	3.826467	100	ug/L
OW-63	5/15/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	5/15/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	5/15/2019	Toluene	59	20	7.008724	1000	ug/L
OW-63	5/15/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	5/15/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	5/15/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	5/15/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	5/15/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	5/15/2019	Xylenes, Total	300	30	9.088299	620	ug/L
OW-63	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*50*	10.303094	5.74	ug/L
OW-63	8/19/2019	1,1,1-Trichloroethane	ND	50	8.646079	200	ug/L
OW-63	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*100*	27.421685	10	ug/L
OW-63	8/19/2019	1,1,2-Trichloroethane	*ND*	*50*	10.791499	5	ug/L
OW-63	8/19/2019	1,1-Dichloroethane	*ND*	*50*	7.04293	25	ug/L
OW-63	8/19/2019	1,1-Dichloroethene	*ND*	*50*	10.269409	7	ug/L
OW-63	8/19/2019	1,1-Dichloropropene	ND	50	8.129957	NA	ug/L
OW-63	8/19/2019	1,2,3-Trichlorobenzene	ND	50	14.946055	70	ug/L
OW-63	8/19/2019	1,2,3-Trichloropropane	*ND*	*100*	14.864333	0.0084	ug/L
OW-63	8/19/2019	1,2,4-Trichlorobenzene	ND	50	9.776006	70	ug/L
OW-63	8/19/2019	1,2,4-Trimethylbenzene	17	50	10.659955	56	ug/L
OW-63	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*100*	16.364739	0.0033	ug/L
OW-63	8/19/2019	1,2-Dibromoethane	*ND*	*50*	8.268776	0.05	ug/L
OW-63	8/19/2019	1,2-Dichlorobenzene	ND	50	14.859903	600	ug/L
OW-63	8/19/2019	1,2-Dichloroethane	*ND*	*50*	9.731888	5	ug/L
OW-63	8/19/2019	1,2-Dichloropropane	*ND*	*50*	10.446489	5	ug/L
OW-63	8/19/2019	1,3,5-Trimethylbenzene	17	50	9.432992	60	ug/L
OW-63	8/19/2019	1,3-Dichlorobenzene	ND	50	12.427124	N/A	ug/L
OW-63	8/19/2019	1,3-Dichloropropane	ND	50	10.036409	370	ug/L
OW-63	8/19/2019	1,4-Dichlorobenzene	ND	50	14.749033	75	ug/L
OW-63	8/19/2019	1-Methylnaphthalene	90	200	15.747724	NA	ug/L
OW-63	8/19/2019	2,2-Dichloropropane	ND	100	11.671701	NA	ug/L
OW-63	8/19/2019	2-Butanone	ND	500	104.47083	5565	ug/L
OW-63	8/19/2019	2-Chlorotoluene	ND	50	12.273662	233	ug/L
OW-63	8/19/2019	2-Hexanone	*ND*	*500*	77.359601	38	ug/L
OW-63	8/19/2019	2-Methylnaphthalene	**100**	200	17.2688		ug/L
OW-63	8/19/2019	4-Chlorotoluene	ND	50	11.741978	250	ug/L
OW-63	8/19/2019	p-Isopropyltoluene	ND	50	10.864468	NA	ug/L
OW-63	8/19/2019	4-Methyl-2-Pentanone	ND	500	35.694774	1243	ug/L
OW-63	8/19/2019	Acetone	ND	500	59.969821	14064	ug/L
OW-63	8/19/2019	Benzene	**8700**	500	83.319528	5	ug/L
OW-63	8/19/2019	Bromobenzene	ND	50	12.236352	62	ug/L
OW-63	8/19/2019	Bromodichloromethane	*ND*	*50*	6.704593	1.34	ug/L
OW-63	8/19/2019	Bromoform	*ND*	*50*	14.433158	32.9	ug/L
OW-63	8/19/2019	Bromomethane	*ND*	*150*	13.654119	7.54	ug/L
OW-63	8/19/2019	Carbon Disulfide	ND	500	22.627836	810	ug/L
OW-63	8/19/2019	Carbon tetrachloride	*ND*	*50*	7.020189	5	ug/L
OW-63	8/19/2019	Chlorobenzene	ND	50	9.692664	77.6	ug/L
OW-63	8/19/2019	Chloroethane	ND	100	8.890131	20857	ug/L
OW-63	8/19/2019	Chloroform	ND	50	6.094528	100	ug/L
OW-63	8/19/2019	Chloromethane	*ND*	*150*	16.049367	20.32	ug/L
OW-63	8/19/2019	cis-1,2-Dichloroethene	ND	50	9.505753	70	ug/L
OW-63	8/19/2019	cis-1,3-Dichloropropene	ND	50	6.924406	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/19/2019	Dibromochloromethane	*ND*	*50*	11.939186	1.68	ug/L
OW-63	8/19/2019	Dibromomethane	*ND*	*50*	10.460436	8	ug/L
OW-63	8/19/2019	Dichlorodifluoromethane	ND	50	12.996057	197	ug/L
OW-63	8/19/2019	Ethylbenzene	**1200**	50	6.61704	700	ug/L
OW-63	8/19/2019	Hexachlorobutadiene	*ND*	*50*	15.493767	1.39	ug/L
OW-63	8/19/2019	Isopropylbenzene	56	50	9.576114	447	ug/L
OW-63	8/19/2019	MTBE	43	50	22.804749	143	ug/L
OW-63	8/19/2019	Methylene Chloride	*ND*	*150*	7.725073	5	ug/L
OW-63	8/19/2019	Naphthalene	**320**	100	13.753567	30	ug/L
OW-63	8/19/2019	n-Butylbenzene	17	150	11.378477	1000	ug/L
OW-63	8/19/2019	n-Propylbenzene	170	50	10.7154	660	ug/L
OW-63	8/19/2019	sec-Butylbenzene	ND	50	12.386564	2000	ug/L
OW-63	8/19/2019	Styrene	ND	50	9.566168	100	ug/L
OW-63	8/19/2019	tert-Butylbenzene	ND	50	10.349243	690	ug/L
OW-63	8/19/2019	Tetrachloroethene	*ND*	*50*	7.476246	5	ug/L
OW-63	8/19/2019	Toluene	67	50	17.521811	1000	ug/L
OW-63	8/19/2019	trans-1,2-Dichloroethene	ND	50	8.976209	100	ug/L
OW-63	8/19/2019	trans-1,3-Dichloropropene	ND	50	8.332393	NA	ug/L
OW-63	8/19/2019	Trichloroethene	*ND*	*50*	8.313588	5	ug/L
OW-63	8/19/2019	Trichlorofluoromethane	ND	50	9.452417	1137	ug/L
OW-63	8/19/2019	Vinyl Chloride	*ND*	*50*	8.954964	2	ug/L
OW-63	8/19/2019	Xylenes, Total	310	75	22.720747	620	ug/L
OW-63	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	11/18/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	11/18/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	11/18/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	11/18/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	11/18/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	11/18/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	11/18/2019	1,2,4-Trimethylbenzene	7.7	20	4.263982	56	ug/L
OW-63	11/18/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	11/18/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	11/18/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	11/18/2019	1,3,5-Trimethylbenzene	14	20	3.773197	60	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	11/18/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	77	80	6.29909	NA	ug/L
OW-63	11/18/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	11/18/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	11/18/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	11/18/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**94**	80	6.90752		ug/L
OW-63	11/18/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	11/18/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	11/18/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	11/18/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	11/18/2019	Benzene	**8600**	200	33.327811	5	ug/L
OW-63	11/18/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-63	11/18/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	11/18/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	11/18/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	11/18/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	11/18/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	11/18/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	11/18/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	11/18/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	11/18/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	11/18/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	11/18/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	11/18/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	11/18/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	11/18/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	11/18/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	11/18/2019	Isopropylbenzene	53	20	3.830445	447	ug/L
OW-63	11/18/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	11/18/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	11/18/2019	Naphthalene	**300**	40	5.501427	30	ug/L
OW-63	11/18/2019	n-Butylbenzene	17	60	4.551391	1000	ug/L
OW-63	11/18/2019	n-Propylbenzene	150	20	4.28616	660	ug/L
OW-63	11/18/2019	sec-Butylbenzene	7.9	20	4.954626	2000	ug/L
OW-63	11/18/2019	Styrene	ND	20	3.826467	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	11/18/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	11/18/2019	Toluene	63	20	7.008724	1000	ug/L
OW-63	11/18/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	11/18/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	11/18/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	11/18/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	11/18/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	11/18/2019	Xylenes, Total	260	30	9.088299	620	ug/L
OW-63	11/18/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
OW-63	11/18/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
OW-63	11/18/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
OW-63	11/18/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
OW-63	11/18/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
OW-63	11/18/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
OW-63	11/18/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
OW-63	11/18/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
OW-63	11/18/2019	1,2,4-Trimethylbenzene	7.7	20	4.263982	56	ug/L
OW-63	11/18/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
OW-63	11/18/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
OW-63	11/18/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
OW-63	11/18/2019	1,3,5-Trimethylbenzene	15	20	3.773197	60	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
OW-63	11/18/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	82	80	6.29909	NA	ug/L
OW-63	11/18/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
OW-63	11/18/2019	2-Butanone	ND	200	41.788332	5565	ug/L
OW-63	11/18/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
OW-63	11/18/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**97**	80	6.90752		ug/L
OW-63	11/18/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
OW-63	11/18/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
OW-63	11/18/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
OW-63	11/18/2019	Acetone	ND	200	23.987928	14064	ug/L
OW-63	11/18/2019	Benzene	**8500**	200	33.327811	5	ug/L
OW-63	11/18/2019	Bromobenzene	ND	20	4.894541	62	ug/L
OW-63	11/18/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
OW-63	11/18/2019	Bromoform	ND	20	5.773263	32.9	ug/L
OW-63	11/18/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
OW-63	11/18/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
OW-63	11/18/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
OW-63	11/18/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
OW-63	11/18/2019	Chloroethane	ND	40	3.556052	20857	ug/L
OW-63	11/18/2019	Chloroform	ND	20	2.437811	100	ug/L
OW-63	11/18/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
OW-63	11/18/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
OW-63	11/18/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
OW-63	11/18/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
OW-63	11/18/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
OW-63	11/18/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
OW-63	11/18/2019	Ethylbenzene	**1100**	20	2.646816	700	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
OW-63	11/18/2019	Isopropylbenzene	55	20	3.830445	447	ug/L
OW-63	11/18/2019	MTBE	32	20	9.1219	143	ug/L
OW-63	11/18/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
OW-63	11/18/2019	Naphthalene	**320**	40	5.501427	30	ug/L
OW-63	11/18/2019	n-Butylbenzene	19	60	4.551391	1000	ug/L
OW-63	11/18/2019	n-Propylbenzene	160	20	4.28616	660	ug/L
OW-63	11/18/2019	sec-Butylbenzene	8.7	20	4.954626	2000	ug/L
OW-63	11/18/2019	Styrene	ND	20	3.826467	100	ug/L
OW-63	11/18/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
OW-63	11/18/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
OW-63	11/18/2019	Toluene	62	20	7.008724	1000	ug/L
OW-63	11/18/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
OW-63	11/18/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
OW-63	11/18/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
OW-63	11/18/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
OW-63	11/18/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
OW-63	11/18/2019	Xylenes, Total	260	30	9.088299	620	ug/L
OW-63	3/4/2020	Benzene	**9100**	200	45	5	ug/L
OW-63	3/4/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-63	3/4/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-63	3/4/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	3/4/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	3/4/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-63	3/4/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-63	3/4/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-63	3/4/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-63	3/4/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-63	3/4/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-63	3/4/2020	1,2,4-Trimethylbenzene	3.9	20	2.4	56	ug/L
OW-63	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-63	3/4/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-63	3/4/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L
OW-63	3/4/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-63	3/4/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-63	3/4/2020	1,3,5-Trimethylbenzene	11	20	3.6	60	ug/L
OW-63	3/4/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-63	3/4/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-63	3/4/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-63	3/4/2020	1-Methylnaphthalene	76	80	17	NA	ug/L
OW-63	3/4/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-63	3/4/2020	2-Butanone	ND	200	22	5565	ug/L
OW-63	3/4/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-63	3/4/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-63	3/4/2020	2-Methylnaphthalene	**110**	80	14		ug/L
OW-63	3/4/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-63	3/4/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-63	3/4/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-63	3/4/2020	Acetone	67	200	47	14064	ug/L
OW-63	3/4/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-63	3/4/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-63	3/4/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-63	3/4/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-63	3/4/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-63	3/4/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-63	3/4/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-63	3/4/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-63	3/4/2020	Chloroform	ND	20	2.7	100	ug/L
OW-63	3/4/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-63	3/4/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-63	3/4/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
OW-63	3/4/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-63	3/4/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-63	3/4/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-63	3/4/2020	Ethylbenzene	**1100**	20	4.3	700	ug/L
OW-63	3/4/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-63	3/4/2020	Isopropylbenzene	54	20	3.7	447	ug/L
OW-63	3/4/2020	MTBE	33	20	7.9	143	ug/L
OW-63	3/4/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-63	3/4/2020	n-Butylbenzene	18	60	5.1	1000	ug/L
OW-63	3/4/2020	n-Propylbenzene	160	20	3.6	660	ug/L
OW-63	3/4/2020	Naphthalene	**280**	40	5.6	30	ug/L
OW-63	3/4/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-63	3/4/2020	Styrene	ND	20	2.6	100	ug/L
OW-63	3/4/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-63	3/4/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-63	3/4/2020	Toluene	61	20	4	1000	ug/L
OW-63	3/4/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-63	3/4/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-63	3/4/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-63	3/4/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-63	3/4/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-63	3/4/2020	Xylenes, Total	230	30	11	620	ug/L
OW-63	9/16/2020	Benzene	**8500**	200	45	5	ug/L
OW-63	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*20*	5.3	5.74	ug/L
OW-63	9/16/2020	1,1,1-Trichloroethane	ND	20	6	200	ug/L
OW-63	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*40*	5.5	10	ug/L
OW-63	9/16/2020	1,1,2-Trichloroethane	*ND*	*20*	3.8	5	ug/L
OW-63	9/16/2020	1,1-Dichloroethane	ND	20	5.5	25	ug/L
OW-63	9/16/2020	1,1-Dichloroethene	*ND*	*20*	2.6	7	ug/L
OW-63	9/16/2020	1,1-Dichloropropene	ND	20	3.6	NA	ug/L
OW-63	9/16/2020	1,2,3-Trichlorobenzene	ND	20	2.7	70	ug/L
OW-63	9/16/2020	1,2,3-Trichloropropane	*ND*	*40*	8.8	0.0084	ug/L
OW-63	9/16/2020	1,2,4-Trichlorobenzene	ND	20	4.8	70	ug/L
OW-63	9/16/2020	1,2,4-Trimethylbenzene	ND	20	2.4	56	ug/L
OW-63	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*40*	12	0.0033	ug/L
OW-63	9/16/2020	1,2-Dibromoethane	*ND*	*20*	6.1	0.05	ug/L
OW-63	9/16/2020	1,2-Dichlorobenzene	ND	20	3.1	600	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	1,2-Dichloroethane	*ND*	*20*	4.4	5	ug/L
OW-63	9/16/2020	1,2-Dichloropropane	*ND*	*20*	2.7	5	ug/L
OW-63	9/16/2020	1,3,5-Trimethylbenzene	8.6	20	3.6	60	ug/L
OW-63	9/16/2020	1,3-Dichlorobenzene	ND	20	3.2	N/A	ug/L
OW-63	9/16/2020	1,3-Dichloropropane	ND	20	3.6	370	ug/L
OW-63	9/16/2020	1,4-Dichlorobenzene	ND	20	4.2	75	ug/L
OW-63	9/16/2020	1-Methylnaphthalene	61	80	17	NA	ug/L
OW-63	9/16/2020	2,2-Dichloropropane	ND	40	5.2	NA	ug/L
OW-63	9/16/2020	2-Butanone	ND	200	22	5565	ug/L
OW-63	9/16/2020	2-Chlorotoluene	ND	20	2.6	233	ug/L
OW-63	9/16/2020	2-Hexanone	*ND*	*200*	36	38	ug/L
OW-63	9/16/2020	2-Methylnaphthalene	**92**	80	14		ug/L
OW-63	9/16/2020	4-Chlorotoluene	ND	20	10	250	ug/L
OW-63	9/16/2020	p-Isopropyltoluene	ND	20	4	NA	ug/L
OW-63	9/16/2020	4-Methyl-2-Pentanone	ND	200	23	1243	ug/L
OW-63	9/16/2020	Acetone	ND	200	47	14064	ug/L
OW-63	9/16/2020	Bromobenzene	ND	20	5.7	62	ug/L
OW-63	9/16/2020	Bromodichloromethane	*ND*	*20*	4.1	1.34	ug/L
OW-63	9/16/2020	Bromoform	ND	20	6.3	32.9	ug/L
OW-63	9/16/2020	Bromomethane	*ND*	*60*	31	7.54	ug/L
OW-63	9/16/2020	Carbon Disulfide	ND	200	8.9	810	ug/L
OW-63	9/16/2020	Carbon tetrachloride	*ND*	*20*	3.5	5	ug/L
OW-63	9/16/2020	Chlorobenzene	ND	20	2.7	77.6	ug/L
OW-63	9/16/2020	Chloroethane	ND	40	7.5	20857	ug/L
OW-63	9/16/2020	Chloroform	ND	20	2.7	100	ug/L
OW-63	9/16/2020	Chloromethane	*ND*	*60*	8	20.32	ug/L
OW-63	9/16/2020	cis-1,2-Dichloroethene	ND	20	7.8	70	ug/L
OW-63	9/16/2020	cis-1,3-Dichloropropene	ND	20	7.2	NA	ug/L
OW-63	9/16/2020	Dibromochloromethane	*ND*	*20*	5.7	1.68	ug/L
OW-63	9/16/2020	Dibromomethane	*ND*	*20*	6.2	8	ug/L
OW-63	9/16/2020	Dichlorodifluoromethane	ND	20	8.8	197	ug/L
OW-63	9/16/2020	Ethylbenzene	**1200**	20	4.3	700	ug/L
OW-63	9/16/2020	Hexachlorobutadiene	*ND*	*20*	6.6	1.39	ug/L
OW-63	9/16/2020	Isopropylbenzene	55	20	3.7	447	ug/L
OW-63	9/16/2020	MTBE	30	20	7.9	143	ug/L
OW-63	9/16/2020	Methylene Chloride	*ND*	*60*	8	5	ug/L
OW-63	9/16/2020	n-Butylbenzene	18	60	5.1	1000	ug/L
OW-63	9/16/2020	n-Propylbenzene	150	20	3.6	660	ug/L
OW-63	9/16/2020	Naphthalene	**290**	40	5.6	30	ug/L
OW-63	9/16/2020	sec-Butylbenzene	ND	20	12	2000	ug/L
OW-63	9/16/2020	Styrene	ND	20	2.6	100	ug/L
OW-63	9/16/2020	tert-Butylbenzene	ND	20	4.9	690	ug/L
OW-63	9/16/2020	Tetrachloroethene	*ND*	*20*	7.1	5	ug/L
OW-63	9/16/2020	Toluene	50	20	4	1000	ug/L
OW-63	9/16/2020	trans-1,2-Dichloroethene	ND	20	9.7	100	ug/L
OW-63	9/16/2020	trans-1,3-Dichloropropene	ND	20	6.8	NA	ug/L
OW-63	9/16/2020	Trichloroethene	*ND*	*20*	4.1	5	ug/L
OW-63	9/16/2020	Trichlorofluoromethane	ND	20	1.8	1137	ug/L
OW-63	9/16/2020	Vinyl Chloride	*ND*	*20*	3.9	2	ug/L
OW-63	9/16/2020	Xylenes, Total	210	30	11	620	ug/L
OW-63	12/11/2020	Acetone	ND	2500	1000	14064	ug/L
OW-63	12/11/2020	Benzene	**10000**	100	38	5	ug/L
OW-63	12/11/2020	Bromodichloromethane	*ND*	*100*	50	1.34	ug/L
OW-63	12/11/2020	Bromoform	*ND*	*500*	71	32.9	ug/L
OW-63	12/11/2020	Bromomethane	*ND*	*100*	98	7.54	ug/L
OW-63	12/11/2020	2-Butanone	ND	2500	260	5565	ug/L
OW-63	12/11/2020	Carbon Disulfide	ND	100	50	810	ug/L
OW-63	12/11/2020	Carbon tetrachloride	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	Chlorobenzene	*ND*	*100*	50	77.6	ug/L
OW-63	12/11/2020	Dibromochloromethane	*ND*	*100*	50	1.68	ug/L
OW-63	12/11/2020	Chloroethane	ND	100	76	20857	ug/L
OW-63	12/11/2020	Chloroform	ND	100	60	100	ug/L
OW-63	12/11/2020	Chloromethane	*ND*	*100*	83	20.32	ug/L
OW-63	12/11/2020	2-Chlorotoluene	ND	100	57	233	ug/L
OW-63	12/11/2020	4-Chlorotoluene	ND	100	56	250	ug/L
OW-63	12/11/2020	cis-1,2-Dichloroethene	*ND*	*100*	50	70	ug/L
OW-63	12/11/2020	cis-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-63	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*500*	150	0.0033	ug/L
OW-63	12/11/2020	1,2-Dibromoethane	*ND*	*100*	50	0.05	ug/L
OW-63	12/11/2020	Dibromomethane	*ND*	*500*	59	8	ug/L
OW-63	12/11/2020	1,2-Dichlorobenzene	ND	100	50	600	ug/L
OW-63	12/11/2020	1,3-Dichlorobenzene	ND	100	54	N/A	ug/L
OW-63	12/11/2020	1,4-Dichlorobenzene	*ND*	*100*	64	75	ug/L
OW-63	12/11/2020	Dichlorodifluoromethane	ND	100	85	197	ug/L
OW-63	12/11/2020	1,1-Dichloroethane	*ND*	*100*	50	25	ug/L
OW-63	12/11/2020	1,2-Dichloroethane	*ND*	*100*	50	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	1,1-Dichloroethene	*ND*	*100*	50	7	ug/L
OW-63	12/11/2020	1,2-Dichloropropane	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	1,3-Dichloropropane	ND	100	50	370	ug/L
OW-63	12/11/2020	2,2-Dichloropropane	ND	100	50	NA	ug/L
OW-63	12/11/2020	1,1-Dichloropropene	ND	100	50	NA	ug/L
OW-63	12/11/2020	Ethylbenzene	**1320**	100	50	700	ug/L
OW-63	12/11/2020	Hexachlorobutadiene	*ND*	*500*	90	1.39	ug/L
OW-63	12/11/2020	2-Hexanone	*ND*	*2500*	310	38	ug/L
OW-63	12/11/2020	Isopropylbenzene	ND	100	53	447	ug/L
OW-63	12/11/2020	Methylene Chloride	*ND*	*500*	300	5	ug/L
OW-63	12/11/2020	1-Methylnaphthalene	ND	500	420	NA	ug/L
OW-63	12/11/2020	2-Methylnaphthalene	*ND*	*1000*	460		ug/L
OW-63	12/11/2020	4-Methyl-2-Pentanone	*ND*	*2500*	180	1243	ug/L
OW-63	12/11/2020	MTBE	ND	100	74	143	ug/L
OW-63	12/11/2020	Naphthalene	**350**	100	100	30	ug/L
OW-63	12/11/2020	n-Butylbenzene	ND	100	76	1000	ug/L
OW-63	12/11/2020	n-Propylbenzene	170	100	69	660	ug/L
OW-63	12/11/2020	p-Isopropyltoluene	ND	100	71	NA	ug/L
OW-63	12/11/2020	sec-Butylbenzene	ND	100	70	2000	ug/L
OW-63	12/11/2020	Styrene	ND	100	100	100	ug/L
OW-63	12/11/2020	tert-Butylbenzene	ND	100	63	690	ug/L
OW-63	12/11/2020	1,1,1,2-Tetrachloroethane	*ND*	*100*	52	5.74	ug/L
OW-63	12/11/2020	1,1,2,2-Tetrachloroethane	*ND*	*100*	50	10	ug/L
OW-63	12/11/2020	Tetrachloroethene	*ND*	*100*	58	5	ug/L
OW-63	12/11/2020	Toluene	ND	100	41	1000	ug/L
OW-63	12/11/2020	trans-1,2-Dichloroethene	ND	100	50	100	ug/L
OW-63	12/11/2020	trans-1,3-Dichloropropene	ND	500	50	NA	ug/L
OW-63	12/11/2020	1,2,3-Trichlorobenzene	*ND*	*100*	70	70	ug/L
OW-63	12/11/2020	1,2,4-Trichlorobenzene	*ND*	*100*	82	70	ug/L
OW-63	12/11/2020	1,1,1-Trichloroethane	ND	100	50	200	ug/L
OW-63	12/11/2020	1,1,2-Trichloroethane	*ND*	*500*	50	5	ug/L
OW-63	12/11/2020	Trichloroethene	*ND*	*100*	50	5	ug/L
OW-63	12/11/2020	Trichlorofluoromethane	ND	100	52	1137	ug/L
OW-63	12/11/2020	1,2,3-Trichloropropane	*ND*	*500*	84	0.0084	ug/L
OW-63	12/11/2020	1,2,4-Trimethylbenzene	*ND*	*100*	82	56	ug/L
OW-63	12/11/2020	1,3,5-Trimethylbenzene	*ND*	*100*	56	60	ug/L
OW-63	12/11/2020	Vinyl Chloride	*ND*	*100*	50	2	ug/L
OW-63	12/11/2020	Xylenes, Total	*ND*	*1000*	160	620	ug/L
OW-64	4/29/2018	Carbon tetrachloride	ND	5	0.55	5	ug/L
OW-64	4/29/2018	Acetone	ND	50	4.1	14064	ug/L
OW-64	4/29/2018	Chloroform	ND	5	2	100	ug/L
OW-64	4/29/2018	Benzene	**590**	50	3.1	5	ug/L
OW-64	4/29/2018	1,1,1-Trichloroethane	ND	5	0.36	200	ug/L
OW-64	4/29/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-64	4/29/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-64	4/29/2018	Dibromomethane	ND	5	0.45	8	ug/L
OW-64	4/29/2018	Chloroethane	ND	10	1.2	20857	ug/L
OW-64	4/29/2018	Vinyl Chloride	*ND*	*5*	0.89	2	ug/L
OW-64	4/29/2018	Methylene Chloride	*ND*	*15*	0.54	5	ug/L
OW-64	4/29/2018	Carbon Disulfide	ND	50	2	810	ug/L
OW-64	4/29/2018	Bromoform	ND	5	1.1	32.9	ug/L
OW-64	4/29/2018	Bromodichloromethane	*ND*	*5*	0.88	1.34	ug/L
OW-64	4/29/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-64	4/29/2018	1,1-Dichloroethene	ND	5	0.4	7	ug/L
OW-64	4/29/2018	Trichlorofluoromethane	ND	5	0.91	1137	ug/L
OW-64	4/29/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-64	4/29/2018	1,2-Dichloropropane	ND	5	0.51	5	ug/L
OW-64	4/29/2018	2-Butanone	ND	50	5.7	5565	ug/L
OW-64	4/29/2018	1,1,2-Trichloroethane	ND	5	0.7	5	ug/L
OW-64	4/29/2018	Trichloroethene	ND	5	0.56	5	ug/L
OW-64	4/29/2018	1,1,2,2-Tetrachloroethane	ND	10	0.68	10	ug/L
OW-64	4/29/2018	1,2,3-Trichlorobenzene	ND	5	0.59	70	ug/L
OW-64	4/29/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-64	4/29/2018	1,2,4-Trimethylbenzene	**1200**	50	5.6	56	ug/L
OW-64	4/29/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	6.9	0.0033	ug/L
OW-64	4/29/2018	1,2,3-Trichloropropane	*ND*	*10*	1.9	0.0084	ug/L
OW-64	4/29/2018	tert-Butylbenzene	2.8	5	0.52	690	ug/L
OW-64	4/29/2018	Isopropylbenzene	180	5	0.26	447	ug/L
OW-64	4/29/2018	p-Isopropyltoluene	38	5	0.48	NA	ug/L
OW-64	4/29/2018	Ethylbenzene	360	5	0.47	700	ug/L
OW-64	4/29/2018	Styrene	ND	5	0.78	100	ug/L
OW-64	4/29/2018	n-Propylbenzene	170	5	0.37	660	ug/L
OW-64	4/29/2018	n-Butylbenzene	20	15	0.65	1000	ug/L
OW-64	4/29/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-64	4/29/2018	1,2-Dibromoethane	*ND*	*5*	0.65	0.05	ug/L
OW-64	4/29/2018	1,2-Dichloroethane	ND	5	2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	4-Methyl-2-Pentanone	ND	50	3.5	1243	ug/L
OW-64	4/29/2018	1,3,5-Trimethylbenzene	**280**	5	0.44	60	ug/L
OW-64	4/29/2018	Bromobenzene	ND	5	0.7	62	ug/L
OW-64	4/29/2018	Toluene	**1600**	50	3.2	1000	ug/L
OW-64	4/29/2018	Chlorobenzene	ND	5	0.53	77.6	ug/L
OW-64	4/29/2018	Dibromochloromethane	*ND*	*5*	0.36	1.68	ug/L
OW-64	4/29/2018	Tetrachloroethene	ND	5	0.65	5	ug/L
OW-64	4/29/2018	sec-Butylbenzene	58	5	0.55	2000	ug/L
OW-64	4/29/2018	1,3-Dichloropropane	ND	5	0.84	370	ug/L
OW-64	4/29/2018	cis-1,2-Dichloroethene	ND	5	1	70	ug/L
OW-64	4/29/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-64	4/29/2018	1,1-Dichloropropene	ND	5	0.46	NA	ug/L
OW-64	4/29/2018	2-Hexanone	*ND*	*50*	3.3	38	ug/L
OW-64	4/29/2018	2,2-Dichloropropane	ND	10	0.79	NA	ug/L
OW-64	4/29/2018	1,1,1,2-Tetrachloroethane	ND	5	0.52	5.74	ug/L
OW-64	4/29/2018	Xylenes, Total	**3200**	75	16	620	ug/L
OW-64	4/29/2018	MTBE	ND	5	1.2	143	ug/L
OW-64	4/29/2018	cis-1,3-Dichloropropene	ND	5	0.41	NA	ug/L
OW-64	4/29/2018	trans-1,3-Dichloropropene	ND	5	1.1	NA	ug/L
OW-64	8/22/2018	Carbon tetrachloride	ND	5	0.67	5	ug/L
OW-64	8/22/2018	Acetone	46	50	3.9	14064	ug/L
OW-64	8/22/2018	Chloroform	ND	5	2	100	ug/L
OW-64	8/22/2018	Benzene	**180**	5	0.87	5	ug/L
OW-64	8/22/2018	1,1,1-Trichloroethane	ND	5	0.77	200	ug/L
OW-64	8/22/2018	Bromomethane	*ND*	*15*	1.3	7.54	ug/L
OW-64	8/22/2018	Chloromethane	ND	15	1.5	20.32	ug/L
OW-64	8/22/2018	Dibromomethane	ND	5	1.6	8	ug/L
OW-64	8/22/2018	Chloroethane	ND	10	0.82	20857	ug/L
OW-64	8/22/2018	Vinyl Chloride	*ND*	*5*	0.55	2	ug/L
OW-64	8/22/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
OW-64	8/22/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
OW-64	8/22/2018	Bromoform	ND	5	1.6	32.9	ug/L
OW-64	8/22/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
OW-64	8/22/2018	1,1-Dichloroethane	ND	5	2	25	ug/L
OW-64	8/22/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
OW-64	8/22/2018	Trichlorofluoromethane	ND	5	0.84	1137	ug/L
OW-64	8/22/2018	Dichlorodifluoromethane	ND	5	5	197	ug/L
OW-64	8/22/2018	1,2-Dichloropropane	ND	5	0.77	5	ug/L
OW-64	8/22/2018	2-Butanone	ND	50	6.3	5565	ug/L
OW-64	8/22/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
OW-64	8/22/2018	Trichloroethene	ND	5	1.3	5	ug/L
OW-64	8/22/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
OW-64	8/22/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
OW-64	8/22/2018	2-Chlorotoluene	ND	5	2	233	ug/L
OW-64	8/22/2018	1,2,4-Trimethylbenzene	**440**	5	1.3	56	ug/L
OW-64	8/22/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
OW-64	8/22/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
OW-64	8/22/2018	tert-Butylbenzene	1.1	5	1.1	690	ug/L
OW-64	8/22/2018	Isopropylbenzene	110	5	1.1	447	ug/L
OW-64	8/22/2018	p-Isopropyltoluene	14	5	1.2	NA	ug/L
OW-64	8/22/2018	Ethylbenzene	400	5	1.1	700	ug/L
OW-64	8/22/2018	Styrene	ND	5	1.3	100	ug/L
OW-64	8/22/2018	n-Propylbenzene	110	5	1.2	660	ug/L
OW-64	8/22/2018	n-Butylbenzene	11	15	1.2	1000	ug/L
OW-64	8/22/2018	4-Chlorotoluene	ND	5	2	250	ug/L
OW-64	8/22/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
OW-64	8/22/2018	1,2-Dichloroethane	ND	5	2	5	ug/L
OW-64	8/22/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
OW-64	8/22/2018	1,3,5-Trimethylbenzene	**80**	5	1.2	60	ug/L
OW-64	8/22/2018	Bromobenzene	ND	5	1.6	62	ug/L
OW-64	8/22/2018	Toluene	550	50	8.4	1000	ug/L
OW-64	8/22/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
OW-64	8/22/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
OW-64	8/22/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
OW-64	8/22/2018	sec-Butylbenzene	27	5	1	2000	ug/L
OW-64	8/22/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
OW-64	8/22/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
OW-64	8/22/2018	trans-1,2-Dichloroethene	ND	5	0.92	100	ug/L
OW-64	8/22/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
OW-64	8/22/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
OW-64	8/22/2018	2,2-Dichloropropane	ND	10	0.92	NA	ug/L
OW-64	8/22/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
OW-64	8/22/2018	Xylenes, Total	**1500**	75	32	620	ug/L
OW-64	8/22/2018	MTBE	ND	5	1.6	143	ug/L
OW-64	8/22/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
OW-64	8/22/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	5/15/2019	1,1,1,2-Tetrachloroethane	ND	5	1.030309	5.74	ug/L
OW-64	5/15/2019	1,1,1-Trichloroethane	ND	5	0.864608	200	ug/L
OW-64	5/15/2019	1,1,2,2-Tetrachloroethane	ND	10	2.742168	10	ug/L
OW-64	5/15/2019	1,1,2-Trichloroethane	ND	5	1.07915	5	ug/L
OW-64	5/15/2019	1,1-Dichloroethane	ND	5	0.704293	25	ug/L
OW-64	5/15/2019	1,1-Dichloroethene	ND	5	1.026941	7	ug/L
OW-64	5/15/2019	1,1-Dichloropropene	ND	5	0.812996	NA	ug/L
OW-64	5/15/2019	1,2,3-Trichlorobenzene	ND	5	1.494605	70	ug/L
OW-64	5/15/2019	1,2,3-Trichloropropane	*ND*	*10*	1.486433	0.0084	ug/L
OW-64	5/15/2019	1,2,4-Trichlorobenzene	ND	5	0.977601	70	ug/L
OW-64	5/15/2019	1,2,4-Trimethylbenzene	**190**	5	1.065995	56	ug/L
OW-64	5/15/2019	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.636474	0.0033	ug/L
OW-64	5/15/2019	1,2-Dibromoethane	*ND*	*5*	0.826878	0.05	ug/L
OW-64	5/15/2019	1,2-Dichlorobenzene	ND	5	1.48599	600	ug/L
OW-64	5/15/2019	1,2-Dichloroethane	ND	5	0.973189	5	ug/L
OW-64	5/15/2019	1,2-Dichloropropane	ND	5	1.044649	5	ug/L
OW-64	5/15/2019	1,3,5-Trimethylbenzene	23	5	0.943299	60	ug/L
OW-64	5/15/2019	1,3-Dichlorobenzene	ND	5	1.242712	N/A	ug/L
OW-64	5/15/2019	1,3-Dichloropropane	ND	5	1.003641	370	ug/L
OW-64	5/15/2019	1,4-Dichlorobenzene	ND	5	1.474903	75	ug/L
OW-64	5/15/2019	1-Methylnaphthalene	4.9	20	1.574772	NA	ug/L
OW-64	5/15/2019	2,2-Dichloropropane	ND	10	1.16717	NA	ug/L
OW-64	5/15/2019	2-Butanone	ND	50	10.447083	5565	ug/L
OW-64	5/15/2019	2-Chlorotoluene	ND	5	1.227366	233	ug/L
OW-64	5/15/2019	2-Hexanone	*ND*	*50*	7.73596	38	ug/L
OW-64	5/15/2019	2-Methylnaphthalene	**3**	20	1.72688		ug/L
OW-64	5/15/2019	4-Chlorotoluene	ND	5	1.174198	250	ug/L
OW-64	5/15/2019	p-Isopropyltoluene	9.5	5	1.086447	NA	ug/L
OW-64	5/15/2019	4-Methyl-2-Pentanone	ND	50	3.569477	1243	ug/L
OW-64	5/15/2019	Acetone	ND	50	5.996982	14064	ug/L
OW-64	5/15/2019	Benzene	**68**	5	0.833195	5	ug/L
OW-64	5/15/2019	Bromobenzene	ND	5	1.223635	62	ug/L
OW-64	5/15/2019	Bromodichloromethane	*ND*	*5*	0.670459	1.34	ug/L
OW-64	5/15/2019	Bromoform	ND	5	1.443316	32.9	ug/L
OW-64	5/15/2019	Bromomethane	*ND*	*15*	1.365412	7.54	ug/L
OW-64	5/15/2019	Carbon Disulfide	ND	50	2.262784	810	ug/L
OW-64	5/15/2019	Carbon tetrachloride	ND	5	0.702019	5	ug/L
OW-64	5/15/2019	Chlorobenzene	ND	5	0.969266	77.6	ug/L
OW-64	5/15/2019	Chloroethane	ND	10	0.889013	20857	ug/L
OW-64	5/15/2019	Chloroform	ND	5	0.609453	100	ug/L
OW-64	5/15/2019	Chloromethane	ND	15	1.604937	20.32	ug/L
OW-64	5/15/2019	cis-1,2-Dichloroethene	ND	5	0.950575	70	ug/L
OW-64	5/15/2019	cis-1,3-Dichloropropene	ND	5	0.692441	NA	ug/L
OW-64	5/15/2019	Dibromochloromethane	*ND*	*5*	1.193919	1.68	ug/L
OW-64	5/15/2019	Dibromomethane	ND	5	1.046044	8	ug/L
OW-64	5/15/2019	Dichlorodifluoromethane	ND	5	1.299606	197	ug/L
OW-64	5/15/2019	Ethylbenzene	190	5	0.661704	700	ug/L
OW-64	5/15/2019	Hexachlorobutadiene	*ND*	*5*	1.549377	1.39	ug/L
OW-64	5/15/2019	Isopropylbenzene	72	5	0.957611	447	ug/L
OW-64	5/15/2019	MTBE	ND	5	2.280475	143	ug/L
OW-64	5/15/2019	Methylene Chloride	*ND*	*15*	0.772507	5	ug/L
OW-64	5/15/2019	Naphthalene	9.3	10	1.375357	30	ug/L
OW-64	5/15/2019	n-Butylbenzene	ND	15	1.137848	1000	ug/L
OW-64	5/15/2019	n-Propylbenzene	63	5	1.07154	660	ug/L
OW-64	5/15/2019	sec-Butylbenzene	19	5	1.238656	2000	ug/L
OW-64	5/15/2019	Styrene	ND	5	0.956617	100	ug/L
OW-64	5/15/2019	tert-Butylbenzene	ND	5	1.034924	690	ug/L
OW-64	5/15/2019	Tetrachloroethene	ND	5	0.747625	5	ug/L
OW-64	5/15/2019	Toluene	11	5	1.752181	1000	ug/L
OW-64	5/15/2019	trans-1,2-Dichloroethene	ND	5	0.897621	100	ug/L
OW-64	5/15/2019	trans-1,3-Dichloropropene	ND	5	0.833239	NA	ug/L
OW-64	5/15/2019	Trichloroethene	ND	5	0.831359	5	ug/L
OW-64	5/15/2019	Trichlorofluoromethane	ND	5	0.945242	1137	ug/L
OW-64	5/15/2019	Vinyl Chloride	*ND*	*5*	0.895496	2	ug/L
OW-64	5/15/2019	Xylenes, Total	440	7.5	2.272075	620	ug/L
OW-64	8/19/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
OW-64	8/19/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
OW-64	8/19/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
OW-64	8/19/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
OW-64	8/19/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
OW-64	8/19/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
OW-64	8/19/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
OW-64	8/19/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
OW-64	8/19/2019	1,2,3-Trichloropropane	*ND*	*20*	2.972867	0.0084	ug/L
OW-64	8/19/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
OW-64	8/19/2019	1,2,4-Trimethylbenzene	**110**	10	2.131991	56	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/19/2019	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.272948	0.0033	ug/L
OW-64	8/19/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
OW-64	8/19/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
OW-64	8/19/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
OW-64	8/19/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
OW-64	8/19/2019	1,3,5-Trimethylbenzene	6.6	10	1.886598	60	ug/L
OW-64	8/19/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
OW-64	8/19/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
OW-64	8/19/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
OW-64	8/19/2019	1-Methylnaphthalene	4.7	40	3.149545	NA	ug/L
OW-64	8/19/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
OW-64	8/19/2019	2-Butanone	ND	100	20.894166	5565	ug/L
OW-64	8/19/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
OW-64	8/19/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
OW-64	8/19/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
OW-64	8/19/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
OW-64	8/19/2019	p-Isopropyltoluene	6.6	10	2.172894	NA	ug/L
OW-64	8/19/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
OW-64	8/19/2019	Acetone	14	100	11.993964	14064	ug/L
OW-64	8/19/2019	Benzene	**63**	10	1.666391	5	ug/L
OW-64	8/19/2019	Bromobenzene	ND	10	2.44727	62	ug/L
OW-64	8/19/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
OW-64	8/19/2019	Bromoform	ND	10	2.886632	32.9	ug/L
OW-64	8/19/2019	Bromomethane	*ND*	*30*	2.730824	7.54	ug/L
OW-64	8/19/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
OW-64	8/19/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
OW-64	8/19/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
OW-64	8/19/2019	Chloroethane	ND	20	1.778026	20857	ug/L
OW-64	8/19/2019	Chloroform	ND	10	1.218906	100	ug/L
OW-64	8/19/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
OW-64	8/19/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
OW-64	8/19/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
OW-64	8/19/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
OW-64	8/19/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
OW-64	8/19/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
OW-64	8/19/2019	Ethylbenzene	110	10	1.323408	700	ug/L
OW-64	8/19/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
OW-64	8/19/2019	Isopropylbenzene	47	10	1.915223	447	ug/L
OW-64	8/19/2019	MTBE	ND	10	4.56095	143	ug/L
OW-64	8/19/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
OW-64	8/19/2019	Naphthalene	9.1	20	2.750713	30	ug/L
OW-64	8/19/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
OW-64	8/19/2019	n-Propylbenzene	37	10	2.14308	660	ug/L
OW-64	8/19/2019	sec-Butylbenzene	14	10	2.477313	2000	ug/L
OW-64	8/19/2019	Styrene	ND	10	1.913234	100	ug/L
OW-64	8/19/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
OW-64	8/19/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
OW-64	8/19/2019	Toluene	11	10	3.504362	1000	ug/L
OW-64	8/19/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
OW-64	8/19/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
OW-64	8/19/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
OW-64	8/19/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
OW-64	8/19/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
OW-64	8/19/2019	Xylenes, Total	170	15	4.544149	620	ug/L
OW-64	11/18/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
OW-64	11/18/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
OW-64	11/18/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
OW-64	11/18/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L
OW-64	11/18/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
OW-64	11/18/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
OW-64	11/18/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
OW-64	11/18/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
OW-64	11/18/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
OW-64	11/18/2019	1,2,4-Trimethylbenzene	55	2	0.426398	56	ug/L
OW-64	11/18/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
OW-64	11/18/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
OW-64	11/18/2019	1,2-Dichloroethane	ND	2	0.389276	5	ug/L
OW-64	11/18/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
OW-64	11/18/2019	1,3,5-Trimethylbenzene	3	2	0.37732	60	ug/L
OW-64	11/18/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
OW-64	11/18/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
OW-64	11/18/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
OW-64	11/18/2019	1-Methylnaphthalene	2.8	8	0.629909	NA	ug/L
OW-64	11/18/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
OW-64	11/18/2019	2-Butanone	ND	20	4.178833	5565	ug/L
OW-64	11/18/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	2-Hexanone	ND	20	3.094384	38	ug/L
OW-64	11/18/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
OW-64	11/18/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
OW-64	11/18/2019	p-Isopropyltoluene	7.1	2	0.434579	NA	ug/L
OW-64	11/18/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
OW-64	11/18/2019	Acetone	5	20	2.398793	14064	ug/L
OW-64	11/18/2019	Benzene	**13**	2	0.333278	5	ug/L
OW-64	11/18/2019	Bromobenzene	ND	2	0.489454	62	ug/L
OW-64	11/18/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
OW-64	11/18/2019	Bromoform	ND	2	0.577326	32.9	ug/L
OW-64	11/18/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
OW-64	11/18/2019	Carbon Disulfide	ND	20	0.905113	810	ug/L
OW-64	11/18/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
OW-64	11/18/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
OW-64	11/18/2019	Chloroethane	ND	4	0.355605	20857	ug/L
OW-64	11/18/2019	Chloroform	ND	2	0.243781	100	ug/L
OW-64	11/18/2019	Chloromethane	ND	6	0.641975	20.32	ug/L
OW-64	11/18/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
OW-64	11/18/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
OW-64	11/18/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
OW-64	11/18/2019	Dibromomethane	ND	2	0.418417	8	ug/L
OW-64	11/18/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
OW-64	11/18/2019	Ethylbenzene	39	2	0.264682	700	ug/L
OW-64	11/18/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
OW-64	11/18/2019	Isopropylbenzene	37	2	0.383045	447	ug/L
OW-64	11/18/2019	MTBE	ND	2	0.91219	143	ug/L
OW-64	11/18/2019	Methylene Chloride	*ND*	*6*	0.309003	5	ug/L
OW-64	11/18/2019	Naphthalene	3.3	4	0.550143	30	ug/L
OW-64	11/18/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
OW-64	11/18/2019	n-Propylbenzene	23	2	0.428616	660	ug/L
OW-64	11/18/2019	sec-Butylbenzene	12	2	0.495463	2000	ug/L
OW-64	11/18/2019	Styrene	ND	2	0.382647	100	ug/L
OW-64	11/18/2019	tert-Butylbenzene	0.97	2	0.41397	690	ug/L
OW-64	11/18/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
OW-64	11/18/2019	Toluene	ND	2	0.700872	1000	ug/L
OW-64	11/18/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
OW-64	11/18/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
OW-64	11/18/2019	Trichloroethene	ND	2	0.332544	5	ug/L
OW-64	11/18/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
OW-64	11/18/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
OW-64	11/18/2019	Xylenes, Total	50	3	0.90883	620	ug/L
OW-64	3/4/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-64	3/4/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-64	3/4/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-64	3/4/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-64	3/4/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-64	3/4/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-64	3/4/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-64	3/4/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-64	3/4/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-64	3/4/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-64	3/4/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-64	3/4/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-64	3/4/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-64	3/4/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-64	3/4/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-64	3/4/2020	1,3,5-Trimethylbenzene	7.1	1	0.18	60	ug/L
OW-64	3/4/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-64	3/4/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-64	3/4/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-64	3/4/2020	1-Methylnaphthalene	3.1	4	0.84	NA	ug/L
OW-64	3/4/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-64	3/4/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-64	3/4/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-64	3/4/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-64	3/4/2020	2-Methylnaphthalene	**1.5**	4	0.69		ug/L
OW-64	3/4/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-64	3/4/2020	p-Isopropyltoluene	5.5	1	0.2	NA	ug/L
OW-64	3/4/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-64	3/4/2020	Acetone	10	10	2.3	14064	ug/L
OW-64	3/4/2020	Benzene	**34**	1	0.23	5	ug/L
OW-64	3/4/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-64	3/4/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-64	3/4/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-64	3/4/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-64	3/4/2020	Carbon Disulfide	ND	10	0.44	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	3/4/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-64	3/4/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-64	3/4/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-64	3/4/2020	Chloroform	ND	1	0.13	100	ug/L
OW-64	3/4/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-64	3/4/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-64	3/4/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-64	3/4/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-64	3/4/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-64	3/4/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
OW-64	3/4/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-64	3/4/2020	Isopropylbenzene	39	1	0.18	447	ug/L
OW-64	3/4/2020	MTBE	ND	1	0.39	143	ug/L
OW-64	3/4/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-64	3/4/2020	n-Butylbenzene	0.45	3	0.25	1000	ug/L
OW-64	3/4/2020	n-Propylbenzene	34	1	0.18	660	ug/L
OW-64	3/4/2020	Naphthalene	6.3	2	0.28	30	ug/L
OW-64	3/4/2020	sec-Butylbenzene	12	1	0.61	2000	ug/L
OW-64	3/4/2020	Styrene	ND	1	0.13	100	ug/L
OW-64	3/4/2020	tert-Butylbenzene	1.5	1	0.24	690	ug/L
OW-64	3/4/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-64	3/4/2020	Toluene	0.73	1	0.2	1000	ug/L
OW-64	3/4/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-64	3/4/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-64	3/4/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-64	3/4/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-64	3/4/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-64	3/4/2020	Xylenes, Total	110	1.5	0.55	620	ug/L
OW-64	3/4/2020	1,2,4-Trimethylbenzene	**120**	10	1.2	56	ug/L
OW-64	3/4/2020	Ethylbenzene	110	10	2.1	700	ug/L
OW-64	9/22/2020	1,2,4-Trimethylbenzene	**100**	10	1.2	56	ug/L
OW-64	9/22/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
OW-64	9/22/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
OW-64	9/22/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
OW-64	9/22/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
OW-64	9/22/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
OW-64	9/22/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
OW-64	9/22/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
OW-64	9/22/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
OW-64	9/22/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
OW-64	9/22/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
OW-64	9/22/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
OW-64	9/22/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
OW-64	9/22/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
OW-64	9/22/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
OW-64	9/22/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
OW-64	9/22/2020	1,3,5-Trimethylbenzene	5.7	1	0.18	60	ug/L
OW-64	9/22/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
OW-64	9/22/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
OW-64	9/22/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
OW-64	9/22/2020	1-Methylnaphthalene	2.8	4	0.84	NA	ug/L
OW-64	9/22/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
OW-64	9/22/2020	2-Butanone	ND	10	1.1	5565	ug/L
OW-64	9/22/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
OW-64	9/22/2020	2-Hexanone	ND	10	1.8	38	ug/L
OW-64	9/22/2020	2-Methylnaphthalene	**1.7**	4	0.69		ug/L
OW-64	9/22/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
OW-64	9/22/2020	p-Isopropyltoluene	4.9	1	0.2	NA	ug/L
OW-64	9/22/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
OW-64	9/22/2020	Acetone	4	10	2.3	14064	ug/L
OW-64	9/22/2020	Benzene	**94**	1	0.23	5	ug/L
OW-64	9/22/2020	Bromobenzene	ND	1	0.28	62	ug/L
OW-64	9/22/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
OW-64	9/22/2020	Bromoform	ND	1	0.31	32.9	ug/L
OW-64	9/22/2020	Bromomethane	ND	3	1.6	7.54	ug/L
OW-64	9/22/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
OW-64	9/22/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
OW-64	9/22/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
OW-64	9/22/2020	Chloroethane	ND	2	0.38	20857	ug/L
OW-64	9/22/2020	Chloroform	ND	1	0.13	100	ug/L
OW-64	9/22/2020	Chloromethane	ND	3	0.4	20.32	ug/L
OW-64	9/22/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
OW-64	9/22/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
OW-64	9/22/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
OW-64	9/22/2020	Dibromomethane	ND	1	0.31	8	ug/L
OW-64	9/22/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	9/22/2020	Ethylbenzene	73	1	0.21	700	ug/L
OW-64	9/22/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
OW-64	9/22/2020	Isopropylbenzene	22	1	0.18	447	ug/L
OW-64	9/22/2020	MTBE	ND	1	0.39	143	ug/L
OW-64	9/22/2020	Methylene Chloride	ND	3	0.4	5	ug/L
OW-64	9/22/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
OW-64	9/22/2020	n-Propylbenzene	14	1	0.18	660	ug/L
OW-64	9/22/2020	Naphthalene	8.4	2	0.28	30	ug/L
OW-64	9/22/2020	sec-Butylbenzene	7.1	1	0.61	2000	ug/L
OW-64	9/22/2020	Styrene	ND	1	0.13	100	ug/L
OW-64	9/22/2020	tert-Butylbenzene	1.1	1	0.24	690	ug/L
OW-64	9/22/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
OW-64	9/22/2020	Toluene	31	1	0.2	1000	ug/L
OW-64	9/22/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
OW-64	9/22/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
OW-64	9/22/2020	Trichloroethene	ND	1	0.2	5	ug/L
OW-64	9/22/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
OW-64	9/22/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
OW-64	9/22/2020	Xylenes, Total	74	1.5	0.55	620	ug/L
OW-64	12/11/2020	Acetone	ND	25	10	14064	ug/L
OW-64	12/11/2020	Benzene	**13.5**	1	0.38	5	ug/L
OW-64	12/11/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
OW-64	12/11/2020	Bromoform	ND	5	0.71	32.9	ug/L
OW-64	12/11/2020	Bromomethane	ND	1	0.98	7.54	ug/L
OW-64	12/11/2020	2-Butanone	ND	25	2.6	5565	ug/L
OW-64	12/11/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
OW-64	12/11/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
OW-64	12/11/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
OW-64	12/11/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
OW-64	12/11/2020	Chloroethane	ND	1	0.76	20857	ug/L
OW-64	12/11/2020	Chloroform	ND	1	0.6	100	ug/L
OW-64	12/11/2020	Chloromethane	ND	1	0.83	20.32	ug/L
OW-64	12/11/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
OW-64	12/11/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
OW-64	12/11/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
OW-64	12/11/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-64	12/11/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
OW-64	12/11/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
OW-64	12/11/2020	Dibromomethane	ND	5	0.59	8	ug/L
OW-64	12/11/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
OW-64	12/11/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
OW-64	12/11/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
OW-64	12/11/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
OW-64	12/11/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
OW-64	12/11/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
OW-64	12/11/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
OW-64	12/11/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
OW-64	12/11/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
OW-64	12/11/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
OW-64	12/11/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
OW-64	12/11/2020	Ethylbenzene	40.5	1	0.5	700	ug/L
OW-64	12/11/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
OW-64	12/11/2020	2-Hexanone	ND	25	3.1	38	ug/L
OW-64	12/11/2020	Isopropylbenzene	15.7	1	0.53	447	ug/L
OW-64	12/11/2020	Methylene Chloride	ND	5	3	5	ug/L
OW-64	12/11/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
OW-64	12/11/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
OW-64	12/11/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
OW-64	12/11/2020	MTBE	ND	1	0.74	143	ug/L
OW-64	12/11/2020	Naphthalene	3.06	1	1	30	ug/L
OW-64	12/11/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
OW-64	12/11/2020	n-Propylbenzene	10	1	0.69	660	ug/L
OW-64	12/11/2020	p-Isopropyltoluene	3.79	1	0.71	NA	ug/L
OW-64	12/11/2020	sec-Butylbenzene	5.79	1	0.7	2000	ug/L
OW-64	12/11/2020	Styrene	ND	1	1	100	ug/L
OW-64	12/11/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
OW-64	12/11/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
OW-64	12/11/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
OW-64	12/11/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
OW-64	12/11/2020	Toluene	ND	1	0.41	1000	ug/L
OW-64	12/11/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
OW-64	12/11/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
OW-64	12/11/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
OW-64	12/11/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
OW-64	12/11/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
OW-64	12/11/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Trichloroethene	ND	1	0.5	5	ug/L
OW-64	12/11/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
OW-64	12/11/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
OW-64	12/11/2020	1,2,4-Trimethylbenzene	**67.5**	1	0.82	56	ug/L
OW-64	12/11/2020	1,3,5-Trimethylbenzene	5.68	1	0.56	60	ug/L
OW-64	12/11/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
OW-64	12/11/2020	Xylenes, Total	42.1	10	1.6	620	ug/L
PW-2	9/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-2	9/10/2014	Acetone	ND	10	4.9	14064	ug/L
PW-2	9/10/2014	Chloroform	ND	1	0.32	100	ug/L
PW-2	9/10/2014	Benzene	ND	1	0.15	5	ug/L
PW-2	9/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
PW-2	9/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
PW-2	9/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
PW-2	9/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
PW-2	9/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
PW-2	9/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
PW-2	9/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
PW-2	9/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
PW-2	9/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
PW-2	9/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
PW-2	9/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
PW-2	9/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
PW-2	9/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-2	9/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
PW-2	9/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
PW-2	9/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
PW-2	9/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-2	9/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
PW-2	9/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
PW-2	9/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
PW-2	9/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-2	9/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-2	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
PW-2	9/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
PW-2	9/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
PW-2	9/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
PW-2	9/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
PW-2	9/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
PW-2	9/10/2014	Styrene	ND	1	0.12	100	ug/L
PW-2	9/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
PW-2	9/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
PW-2	9/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
PW-2	9/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
PW-2	9/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
PW-2	9/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-2	9/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
PW-2	9/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
PW-2	9/10/2014	Toluene	ND	1	0.17	1000	ug/L
PW-2	9/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-2	9/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
PW-2	9/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
PW-2	9/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
PW-2	9/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-2	9/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-2	9/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
PW-2	9/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
PW-2	9/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
PW-2	9/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
PW-2	9/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
PW-2	9/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
PW-2	9/10/2014	MTBE	ND	1	0.25	143	ug/L
PW-2	9/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
PW-2	9/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
PW-2	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-2	9/18/2017	Acetone	24	10	0.82	14064	ug/L
PW-2	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-2	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-2	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-2	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-2	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-2	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-2	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-2	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-2	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-2	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-2	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-2	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-2	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-2	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-2	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-2	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-2	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-2	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-2	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-2	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-2	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-2	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-2	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-2	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-2	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-2	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-2	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-2	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-2	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-2	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-2	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-2	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-2	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-2	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-2	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-2	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-2	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-2	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-2	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-2	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-2	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-2	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-2	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-2	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-2	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-2	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-2	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-2	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-2	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-2	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-2	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-2	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-2	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-2	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-2	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-2	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
PW-2	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-2	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
PW-2	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-2	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-2	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-2	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-2	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-2	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-2	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-2	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-2	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-2	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-2	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-2	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-2	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-2	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-2	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-2	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-2	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-2	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-2	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-2	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-2	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-2	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-2	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-2	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-2	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-2	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-2	9/21/2020	Benzene	ND	1	0.23	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-2	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-2	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-2	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-2	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-2	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-2	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-2	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-2	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-2	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-2	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-2	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-2	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-2	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-2	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-2	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-2	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-2	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-2	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-2	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-2	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-2	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-2	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-2	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-2	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-2	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-2	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-2	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-2	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-2	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-2	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-2	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-2	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-2	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-2	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-2	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-2	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-2	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-2	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-2	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-2	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-2	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-2	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-2	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-2	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-2	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-2	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-2	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-2	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-2	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-2	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-2	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-2	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-2	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-2	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-2	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-2	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-2	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-2	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-2	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-2	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-2	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-2	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-2	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-2	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-2	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-2	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-2	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-2	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-2	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-2	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-2	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-2	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-2	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-2	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-2	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-2	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-2	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-2	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-2	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-2	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-2	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-2	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-2	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-2	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-2	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-2	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-2	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-2	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-2	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-2	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-2	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-2	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-2	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-2	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-2	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-2	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-2	12/28/2020	1,4-Dioxane	ND	1	0.3	4.59	ug/L
PW-3	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
PW-3	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
PW-3	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
PW-3	8/24/2012	Benzene	ND	1	0.4	5	ug/L
PW-3	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
PW-3	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
PW-3	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
PW-3	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
PW-3	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
PW-3	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
PW-3	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
PW-3	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
PW-3	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
PW-3	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
PW-3	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
PW-3	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
PW-3	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
PW-3	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
PW-3	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
PW-3	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
PW-3	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
PW-3	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
PW-3	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
PW-3	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
PW-3	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
PW-3	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
PW-3	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
PW-3	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
PW-3	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
PW-3	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L
PW-3	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
PW-3	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
PW-3	8/24/2012	Styrene	ND	1	0.41	100	ug/L
PW-3	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
PW-3	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
PW-3	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
PW-3	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
PW-3	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
PW-3	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
PW-3	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
PW-3	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
PW-3	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
PW-3	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
PW-3	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
PW-3	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
PW-3	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
PW-3	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
PW-3	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
PW-3	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
PW-3	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
PW-3	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
PW-3	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
PW-3	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
PW-3	8/24/2012	MTBE	ND	1	0.96	143	ug/L
PW-3	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
PW-3	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
PW-3	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
PW-3	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
PW-3	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
PW-3	9/10/2013	Benzene	ND	1	0.46	5	ug/L
PW-3	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
PW-3	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
PW-3	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
PW-3	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
PW-3	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
PW-3	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
PW-3	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
PW-3	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
PW-3	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
PW-3	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
PW-3	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
PW-3	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
PW-3	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
PW-3	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
PW-3	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
PW-3	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
PW-3	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
PW-3	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
PW-3	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
PW-3	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
PW-3	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
PW-3	9/10/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
PW-3	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
PW-3	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
PW-3	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
PW-3	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
PW-3	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
PW-3	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
PW-3	9/10/2013	Styrene	ND	1	0.58	100	ug/L
PW-3	9/10/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
PW-3	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
PW-3	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
PW-3	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
PW-3	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
PW-3	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
PW-3	9/10/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
PW-3	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
PW-3	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
PW-3	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
PW-3	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
PW-3	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
PW-3	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
PW-3	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
PW-3	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
PW-3	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
PW-3	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
PW-3	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
PW-3	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
PW-3	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
PW-3	9/10/2013	MTBE	ND	1	0.77	143	ug/L
PW-3	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
PW-3	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
PW-3	9/10/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-3	9/10/2014	Acetone	ND	10	4.9	14064	ug/L
PW-3	9/10/2014	Chloroform	ND	1	0.32	100	ug/L
PW-3	9/10/2014	Benzene	ND	1	0.15	5	ug/L
PW-3	9/10/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
PW-3	9/10/2014	Bromomethane	ND	3	0.41	7.54	ug/L
PW-3	9/10/2014	Chloromethane	ND	3	0.52	20.32	ug/L
PW-3	9/10/2014	Dibromomethane	ND	1	0.19	8	ug/L
PW-3	9/10/2014	Chloroethane	ND	2	0.48	20857	ug/L
PW-3	9/10/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
PW-3	9/10/2014	Methylene Chloride	ND	3	0.27	5	ug/L
PW-3	9/10/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
PW-3	9/10/2014	Bromoform	ND	1	0.25	32.9	ug/L
PW-3	9/10/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
PW-3	9/10/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/10/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
PW-3	9/10/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-3	9/10/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
PW-3	9/10/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
PW-3	9/10/2014	2-Butanone	ND	10	1.4	5565	ug/L
PW-3	9/10/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-3	9/10/2014	Trichloroethene	ND	1	0.19	5	ug/L
PW-3	9/10/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
PW-3	9/10/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
PW-3	9/10/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-3	9/10/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-3	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
PW-3	9/10/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
PW-3	9/10/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
PW-3	9/10/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
PW-3	9/10/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
PW-3	9/10/2014	Ethylbenzene	ND	1	0.13	700	ug/L
PW-3	9/10/2014	Styrene	ND	1	0.12	100	ug/L
PW-3	9/10/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
PW-3	9/10/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
PW-3	9/10/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
PW-3	9/10/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
PW-3	9/10/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
PW-3	9/10/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-3	9/10/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
PW-3	9/10/2014	Bromobenzene	ND	1	0.18	62	ug/L
PW-3	9/10/2014	Toluene	ND	1	0.17	1000	ug/L
PW-3	9/10/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-3	9/10/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
PW-3	9/10/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
PW-3	9/10/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
PW-3	9/10/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-3	9/10/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-3	9/10/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
PW-3	9/10/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
PW-3	9/10/2014	2-Hexanone	ND	10	0.86	38	ug/L
PW-3	9/10/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
PW-3	9/10/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
PW-3	9/10/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
PW-3	9/10/2014	MTBE	ND	1	0.25	143	ug/L
PW-3	9/10/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
PW-3	9/10/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
PW-3	8/23/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
PW-3	8/23/2015	Acetone	ND	10	0.94	14064	ug/L
PW-3	8/23/2015	Chloroform	ND	1	0.21	100	ug/L
PW-3	8/23/2015	Benzene	ND	1	0.065	5	ug/L
PW-3	8/23/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
PW-3	8/23/2015	Bromomethane	ND	3	1.2	7.54	ug/L
PW-3	8/23/2015	Chloromethane	ND	3	0.17	20.32	ug/L
PW-3	8/23/2015	Dibromomethane	ND	1	0.23	8	ug/L
PW-3	8/23/2015	Chloroethane	ND	2	0.1	20857	ug/L
PW-3	8/23/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
PW-3	8/23/2015	Methylene Chloride	ND	3	0.36	5	ug/L
PW-3	8/23/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
PW-3	8/23/2015	Bromoform	ND	1	0.16	32.9	ug/L
PW-3	8/23/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
PW-3	8/23/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-3	8/23/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
PW-3	8/23/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
PW-3	8/23/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
PW-3	8/23/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-3	8/23/2015	2-Butanone	ND	10	0.36	5565	ug/L
PW-3	8/23/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
PW-3	8/23/2015	Trichloroethene	ND	1	0.16	5	ug/L
PW-3	8/23/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
PW-3	8/23/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
PW-3	8/23/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
PW-3	8/23/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
PW-3	8/23/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
PW-3	8/23/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
PW-3	8/23/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
PW-3	8/23/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
PW-3	8/23/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
PW-3	8/23/2015	Ethylbenzene	ND	1	0.1	700	ug/L
PW-3	8/23/2015	Styrene	ND	1	0.11	100	ug/L
PW-3	8/23/2015	n-Propylbenzene	ND	1	0.16	660	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	8/23/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
PW-3	8/23/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-3	8/23/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
PW-3	8/23/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
PW-3	8/23/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-3	8/23/2015	Bromobenzene	ND	1	0.11	62	ug/L
PW-3	8/23/2015	Toluene	ND	1	0.11	1000	ug/L
PW-3	8/23/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
PW-3	8/23/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
PW-3	8/23/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
PW-3	8/23/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
PW-3	8/23/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-3	8/23/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
PW-3	8/23/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
PW-3	8/23/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
PW-3	8/23/2015	2-Hexanone	ND	10	0.48	38	ug/L
PW-3	8/23/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
PW-3	8/23/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-3	8/23/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
PW-3	8/23/2015	MTBE	ND	1	0.17	143	ug/L
PW-3	8/23/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
PW-3	8/23/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-3	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-3	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
PW-3	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
PW-3	8/31/2016	Benzene	ND	1	0.096	5	ug/L
PW-3	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-3	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-3	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-3	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-3	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-3	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-3	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-3	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-3	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-3	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-3	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-3	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-3	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-3	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-3	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-3	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-3	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-3	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-3	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-3	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-3	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-3	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-3	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-3	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-3	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-3	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-3	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-3	8/31/2016	Styrene	ND	1	0.11	100	ug/L
PW-3	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-3	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-3	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-3	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-3	8/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-3	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-3	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-3	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-3	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
PW-3	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-3	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-3	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-3	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-3	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-3	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-3	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-3	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-3	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-3	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-3	8/31/2016	MTBE	0.84	1	0.21	143	ug/L
PW-3	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-3	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-3	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-3	9/18/2017	Acetone	ND	10	0.82	14064	ug/L
PW-3	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-3	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-3	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-3	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-3	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-3	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-3	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-3	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-3	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-3	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-3	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-3	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-3	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-3	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-3	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-3	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-3	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-3	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-3	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-3	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-3	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-3	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-3	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-3	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-3	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-3	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-3	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-3	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-3	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-3	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-3	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-3	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-3	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-3	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-3	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-3	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-3	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-3	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-3	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-3	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-3	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-3	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-3	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-3	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-3	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-3	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-3	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-3	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-3	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-3	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-3	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-3	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-3	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-3	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
PW-3	9/19/2018	Acetone	5.1	10	0.79	14064	ug/L
PW-3	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
PW-3	9/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-3	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
PW-3	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-3	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-3	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-3	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-3	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
PW-3	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-3	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-3	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-3	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-3	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-3	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
PW-3	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-3	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-3	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
PW-3	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-3	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-3	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-3	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-3	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-3	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-3	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-3	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-3	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-3	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-3	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-3	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-3	9/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-3	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-3	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-3	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-3	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-3	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-3	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-3	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-3	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-3	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-3	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-3	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-3	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-3	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-3	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-3	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-3	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
PW-3	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-3	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-3	9/19/2018	MTBE	ND	1	0.32	143	ug/L
PW-3	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-3	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-3	11/20/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-3	11/20/2018	Acetone	27	10	0.76	14064	ug/L
PW-3	11/20/2018	Chloroform	ND	1	0.24	100	ug/L
PW-3	11/20/2018	Benzene	ND	1	0.17	5	ug/L
PW-3	11/20/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
PW-3	11/20/2018	Bromomethane	ND	3	0.27	7.54	ug/L
PW-3	11/20/2018	Chloromethane	ND	3	0.32	20.32	ug/L
PW-3	11/20/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-3	11/20/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-3	11/20/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
PW-3	11/20/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-3	11/20/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-3	11/20/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-3	11/20/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-3	11/20/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
PW-3	11/20/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-3	11/20/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
PW-3	11/20/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
PW-3	11/20/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
PW-3	11/20/2018	2-Butanone	ND	10	1.4	5565	ug/L
PW-3	11/20/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-3	11/20/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-3	11/20/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-3	11/20/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-3	11/20/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
PW-3	11/20/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-3	11/20/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	11/20/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-3	11/20/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-3	11/20/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-3	11/20/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-3	11/20/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-3	11/20/2018	Styrene	ND	1	0.25	100	ug/L
PW-3	11/20/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-3	11/20/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	11/20/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
PW-3	11/20/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-3	11/20/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
PW-3	11/20/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-3	11/20/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-3	11/20/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-3	11/20/2018	Toluene	ND	1	0.17	1000	ug/L
PW-3	11/20/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-3	11/20/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-3	11/20/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-3	11/20/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-3	11/20/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-3	11/20/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-3	11/20/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-3	11/20/2018	Pentafluorobenzene	**10**	0	0		None
PW-3	11/20/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-3	11/20/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-3	11/20/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
PW-3	11/20/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-3	11/20/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-3	11/20/2018	MTBE	ND	1	0.46	143	ug/L
PW-3	11/20/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-3	11/20/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-3	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
PW-3	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
PW-3	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
PW-3	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
PW-3	2/20/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
PW-3	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
PW-3	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
PW-3	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
PW-3	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
PW-3	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
PW-3	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
PW-3	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
PW-3	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
PW-3	2/20/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
PW-3	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
PW-3	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
PW-3	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
PW-3	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
PW-3	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
PW-3	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
PW-3	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
PW-3	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
PW-3	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
PW-3	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
PW-3	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
PW-3	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
PW-3	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
PW-3	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
PW-3	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
PW-3	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
PW-3	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
PW-3	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L
PW-3	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
PW-3	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
PW-3	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
PW-3	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
PW-3	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
PW-3	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
PW-3	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
PW-3	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
PW-3	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
PW-3	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
PW-3	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
PW-3	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
PW-3	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
PW-3	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
PW-3	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
PW-3	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
PW-3	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
PW-3	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
PW-3	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
PW-3	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
PW-3	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
PW-3	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
PW-3	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
PW-3	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
PW-3	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
PW-3	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-3	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-3	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-3	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-3	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-3	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-3	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-3	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-3	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-3	5/14/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-3	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-3	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-3	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-3	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-3	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-3	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-3	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-3	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-3	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-3	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-3	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-3	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-3	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-3	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-3	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-3	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-3	5/14/2019	Acetone	7	10	1.199396	14064	ug/L
PW-3	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
PW-3	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-3	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-3	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-3	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-3	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-3	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-3	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-3	5/14/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-3	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-3	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-3	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-3	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-3	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-3	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-3	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-3	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-3	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-3	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-3	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-3	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-3	5/14/2019	Styrene	ND	1	0.191323	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-3	5/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-3	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-3	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-3	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-3	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-3	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-3	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-3	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-3	8/28/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-3	8/28/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-3	8/28/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-3	8/28/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-3	8/28/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-3	8/28/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-3	8/28/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-3	8/28/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-3	8/28/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-3	8/28/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-3	8/28/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-3	8/28/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-3	8/28/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-3	8/28/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-3	8/28/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-3	8/28/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-3	8/28/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-3	8/28/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-3	8/28/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-3	8/28/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-3	8/28/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-3	8/28/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-3	8/28/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-3	8/28/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-3	8/28/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-3	8/28/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-3	8/28/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-3	8/28/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-3	8/28/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-3	8/28/2019	Acetone	2	10	1.199396	14064	ug/L
PW-3	8/28/2019	Benzene	ND	1	0.166639	5	ug/L
PW-3	8/28/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-3	8/28/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-3	8/28/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-3	8/28/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-3	8/28/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-3	8/28/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-3	8/28/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-3	8/28/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-3	8/28/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-3	8/28/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-3	8/28/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-3	8/28/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-3	8/28/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-3	8/28/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-3	8/28/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-3	8/28/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-3	8/28/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-3	8/28/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-3	8/28/2019	MTBE	ND	1	0.456095	143	ug/L
PW-3	8/28/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-3	8/28/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-3	8/28/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-3	8/28/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-3	8/28/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-3	8/28/2019	Styrene	ND	1	0.191323	100	ug/L
PW-3	8/28/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-3	8/28/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-3	8/28/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-3	8/28/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-3	8/28/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-3	8/28/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-3	8/28/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-3	8/28/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-3	8/28/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-3	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-3	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-3	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
PW-3	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-3	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-3	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-3	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-3	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-3	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-3	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-3	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-3	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-3	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-3	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-3	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-3	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-3	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-3	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-3	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-3	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-3	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-3	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-3	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-3	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-3	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-3	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-3	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-3	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-3	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-3	9/21/2020	Benzene	ND	1	0.23	5	ug/L
PW-3	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-3	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-3	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-3	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-3	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-3	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-3	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-3	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-3	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-3	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-3	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-3	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-3	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-3	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-3	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-3	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-3	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-3	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-3	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-3	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-3	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-3	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-3	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-3	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-3	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-3	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-3	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-3	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-3	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-3	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-3	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-3	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-3	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-3	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-3	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-3	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-3	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-3	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-3	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-3	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-3	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-3	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-3	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-3	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-3	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-3	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-3	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-3	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-3	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-3	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-3	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-3	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-3	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-3	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-3	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-3	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-3	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-3	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-3	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-3	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-3	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-3	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-3	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-3	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-3	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-3	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-3	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-3	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-3	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-3	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-3	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-3	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-3	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-3	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-3	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-3	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-3	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-3	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-3	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-3	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-3	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-3	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-3	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-3	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-3	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-3	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-3	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-3	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-3	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-3	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-3	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-3	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-3	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-3	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-3	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-3	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-3	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-3	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
PW-3	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-3	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-3	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-3	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-3	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-3	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-3	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-3	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-3	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-3	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-3	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-3	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-3	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-3	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-3	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-3	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-3	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-3	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-3	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-3	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-3	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-3	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-3	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-3	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-3	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-3	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-3	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-3	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-3	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-3	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-3	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-3	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-3	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-3	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-3	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-3	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-3	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-3	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-3	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-3	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-3	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
PW-4	9/10/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
PW-4	9/10/2013	Acetone	ND	10	1.7	14064	ug/L
PW-4	9/10/2013	Chloroform	ND	1	0.47	100	ug/L
PW-4	9/10/2013	Benzene	ND	1	0.46	5	ug/L
PW-4	9/10/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
PW-4	9/10/2013	Bromomethane	ND	3	0.49	7.54	ug/L
PW-4	9/10/2013	Chloromethane	ND	3	0.37	20.32	ug/L
PW-4	9/10/2013	Dibromomethane	ND	1	0.52	8	ug/L
PW-4	9/10/2013	Chloroethane	ND	2	0.3	20857	ug/L
PW-4	9/10/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
PW-4	9/10/2013	Methylene Chloride	ND	3	0.35	5	ug/L
PW-4	9/10/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
PW-4	9/10/2013	Bromoform	ND	1	0.37	32.9	ug/L
PW-4	9/10/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
PW-4	9/10/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
PW-4	9/10/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
PW-4	9/10/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
PW-4	9/10/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
PW-4	9/10/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
PW-4	9/10/2013	2-Butanone	ND	10	1	5565	ug/L
PW-4	9/10/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
PW-4	9/10/2013	Trichloroethene	ND	1	0.42	5	ug/L
PW-4	9/10/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
PW-4	9/10/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
PW-4	9/10/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
PW-4	9/10/2013	1,2,4-Trimethylbenzene	6.8	1	0.51	56	ug/L
PW-4	9/10/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
PW-4	9/10/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
PW-4	9/10/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
PW-4	9/10/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
PW-4	9/10/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
PW-4	9/10/2013	Ethylbenzene	ND	1	0.45	700	ug/L
PW-4	9/10/2013	Styrene	ND	1	0.58	100	ug/L
PW-4	9/10/2013	n-Propylbenzene	1.3	1	0.41	660	ug/L
PW-4	9/10/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
PW-4	9/10/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
PW-4	9/10/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/10/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
PW-4	9/10/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
PW-4	9/10/2013	1,3,5-Trimethylbenzene	2.3	1	0.4	60	ug/L
PW-4	9/10/2013	Bromobenzene	ND	1	0.57	62	ug/L
PW-4	9/10/2013	Toluene	ND	1	0.44	1000	ug/L
PW-4	9/10/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
PW-4	9/10/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-4	9/10/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
PW-4	9/10/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
PW-4	9/10/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
PW-4	9/10/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
PW-4	9/10/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
PW-4	9/10/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
PW-4	9/10/2013	2-Hexanone	ND	10	1.3	38	ug/L
PW-4	9/10/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
PW-4	9/10/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
PW-4	9/10/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
PW-4	9/10/2013	MTBE	ND	1	0.77	143	ug/L
PW-4	9/10/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
PW-4	9/10/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
PW-4	6/10/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	6/10/2016	Acetone	ND	10	4.9	14064	ug/L
PW-4	6/10/2016	Chloroform	ND	1	0.089	100	ug/L
PW-4	6/10/2016	Benzene	ND	1	0.096	5	ug/L
PW-4	6/10/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-4	6/10/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-4	6/10/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-4	6/10/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-4	6/10/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-4	6/10/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	6/10/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-4	6/10/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-4	6/10/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-4	6/10/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-4	6/10/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-4	6/10/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-4	6/10/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-4	6/10/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-4	6/10/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-4	6/10/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-4	6/10/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-4	6/10/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-4	6/10/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-4	6/10/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-4	6/10/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	6/10/2016	1,2,4-Trimethylbenzene	0.45	1	0.11	56	ug/L
PW-4	6/10/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-4	6/10/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-4	6/10/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-4	6/10/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-4	6/10/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-4	6/10/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-4	6/10/2016	Styrene	ND	1	0.11	100	ug/L
PW-4	6/10/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-4	6/10/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-4	6/10/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-4	6/10/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-4	6/10/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-4	6/10/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-4	6/10/2016	1,3,5-Trimethylbenzene	0.31	1	0.12	60	ug/L
PW-4	6/10/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-4	6/10/2016	Toluene	ND	1	0.12	1000	ug/L
PW-4	6/10/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	6/10/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-4	6/10/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	6/10/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-4	6/10/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-4	6/10/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-4	6/10/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-4	6/10/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-4	6/10/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-4	6/10/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-4	6/10/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-4	6/10/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-4	6/10/2016	MTBE	ND	1	0.21	143	ug/L
PW-4	6/10/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	6/10/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-4	8/31/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	8/31/2016	Acetone	ND	10	4.9	14064	ug/L
PW-4	8/31/2016	Chloroform	ND	1	0.089	100	ug/L
PW-4	8/31/2016	Benzene	ND	1	0.096	5	ug/L
PW-4	8/31/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
PW-4	8/31/2016	Bromomethane	ND	3	0.78	7.54	ug/L
PW-4	8/31/2016	Chloromethane	ND	3	0.21	20.32	ug/L
PW-4	8/31/2016	Dibromomethane	ND	1	0.12	8	ug/L
PW-4	8/31/2016	Chloroethane	ND	2	0.19	20857	ug/L
PW-4	8/31/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	8/31/2016	Methylene Chloride	ND	3	0.19	5	ug/L
PW-4	8/31/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
PW-4	8/31/2016	Bromoform	ND	1	0.1	32.9	ug/L
PW-4	8/31/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
PW-4	8/31/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
PW-4	8/31/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
PW-4	8/31/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
PW-4	8/31/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
PW-4	8/31/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
PW-4	8/31/2016	2-Butanone	ND	10	0.74	5565	ug/L
PW-4	8/31/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
PW-4	8/31/2016	Trichloroethene	ND	1	0.18	5	ug/L
PW-4	8/31/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
PW-4	8/31/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
PW-4	8/31/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	8/31/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	8/31/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
PW-4	8/31/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
PW-4	8/31/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
PW-4	8/31/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
PW-4	8/31/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
PW-4	8/31/2016	Ethylbenzene	ND	1	0.11	700	ug/L
PW-4	8/31/2016	Styrene	ND	1	0.11	100	ug/L
PW-4	8/31/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
PW-4	8/31/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
PW-4	8/31/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
PW-4	8/31/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
PW-4	8/31/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
PW-4	8/31/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
PW-4	8/31/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
PW-4	8/31/2016	Bromobenzene	ND	1	0.098	62	ug/L
PW-4	8/31/2016	Toluene	ND	1	0.12	1000	ug/L
PW-4	8/31/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	8/31/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
PW-4	8/31/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	8/31/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
PW-4	8/31/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
PW-4	8/31/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
PW-4	8/31/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
PW-4	8/31/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
PW-4	8/31/2016	2-Hexanone	ND	10	0.84	38	ug/L
PW-4	8/31/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
PW-4	8/31/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
PW-4	8/31/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
PW-4	8/31/2016	MTBE	ND	1	0.21	143	ug/L
PW-4	8/31/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
PW-4	8/31/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
PW-4	3/30/2017	Carbon tetrachloride	ND	0.5	0.11	5	ug/L
PW-4	3/30/2017	Acetone	1.2	5	0.88	14064	ug/L
PW-4	3/30/2017	Chloroform	ND	0.5	0.089	100	ug/L
PW-4	3/30/2017	Benzene	ND	0.5	0.096	5	ug/L
PW-4	3/30/2017	1,1,1-Trichloroethane	ND	0.5	0.073	200	ug/L
PW-4	3/30/2017	Bromomethane	ND	1.5	0.78	7.54	ug/L
PW-4	3/30/2017	Chloromethane	ND	1.5	0.21	20.32	ug/L
PW-4	3/30/2017	Dibromomethane	ND	0.5	0.12	8	ug/L
PW-4	3/30/2017	Chloroethane	ND	1	0.23	20857	ug/L
PW-4	3/30/2017	Vinyl Chloride	ND	0.5	0.18	2	ug/L
PW-4	3/30/2017	Methylene Chloride	ND	1.5	0.11	5	ug/L
PW-4	3/30/2017	Carbon Disulfide	ND	5	0.6	810	ug/L
PW-4	3/30/2017	Bromoform	ND	0.5	0.21	32.9	ug/L
PW-4	3/30/2017	Bromodichloromethane	ND	0.5	0.18	1.34	ug/L
PW-4	3/30/2017	1,1-Dichloroethane	ND	0.5	0.1	25	ug/L
PW-4	3/30/2017	1,1-Dichloroethene	ND	0.5	0.081	7	ug/L
PW-4	3/30/2017	Trichlorofluoromethane	ND	0.5	0.18	1137	ug/L
PW-4	3/30/2017	Dichlorodifluoromethane	ND	0.5	0.32	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/30/2017	1,2-Dichloropropane	ND	0.5	0.1	5	ug/L
PW-4	3/30/2017	2-Butanone	ND	5	1.1	5565	ug/L
PW-4	3/30/2017	1,1,2-Trichloroethane	ND	0.5	0.14	5	ug/L
PW-4	3/30/2017	Trichloroethene	ND	0.5	0.18	5	ug/L
PW-4	3/30/2017	1,1,2,2-Tetrachloroethane	ND	1	0.14	10	ug/L
PW-4	3/30/2017	1,2,3-Trichlorobenzene	ND	0.5	0.11	70	ug/L
PW-4	3/30/2017	2-Chlorotoluene	ND	0.5	0.4	233	ug/L
PW-4	3/30/2017	1,2,4-Trimethylbenzene	ND	0.5	0.1	56	ug/L
PW-4	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*1*	1.4	0.0033	ug/L
PW-4	3/30/2017	1,2,3-Trichloropropane	*ND*	*1*	0.39	0.0084	ug/L
PW-4	3/30/2017	tert-Butylbenzene	ND	0.5	0.1	690	ug/L
PW-4	3/30/2017	Isopropylbenzene	ND	0.5	0.098	447	ug/L
PW-4	3/30/2017	p-Isopropyltoluene	ND	0.5	0.14	NA	ug/L
PW-4	3/30/2017	Ethylbenzene	ND	0.5	0.11	700	ug/L
PW-4	3/30/2017	Styrene	ND	0.5	0.16	100	ug/L
PW-4	3/30/2017	n-Propylbenzene	ND	0.5	0.13	660	ug/L
PW-4	3/30/2017	n-Butylbenzene	ND	1.5	0.16	1000	ug/L
PW-4	3/30/2017	4-Chlorotoluene	ND	0.5	0.4	250	ug/L
PW-4	3/30/2017	1,2-Dibromoethane	*ND*	*0.5*	0.13	0.05	ug/L
PW-4	3/30/2017	1,2-Dichloroethane	ND	0.5	0.12	5	ug/L
PW-4	3/30/2017	4-Methyl-2-Pentanone	ND	5	0.71	1243	ug/L
PW-4	3/30/2017	1,3,5-Trimethylbenzene	ND	0.5	0.12	60	ug/L
PW-4	3/30/2017	Bromobenzene	ND	0.5	0.14	62	ug/L
PW-4	3/30/2017	Toluene	ND	0.5	0.089	1000	ug/L
PW-4	3/30/2017	Chlorobenzene	ND	0.5	0.11	77.6	ug/L
PW-4	3/30/2017	Dibromochloromethane	ND	0.5	0.078	1.68	ug/L
PW-4	3/30/2017	Tetrachloroethene	ND	0.5	0.15	5	ug/L
PW-4	3/30/2017	sec-Butylbenzene	ND	0.5	0.1	2000	ug/L
PW-4	3/30/2017	1,3-Dichloropropane	ND	0.5	0.16	370	ug/L
PW-4	3/30/2017	cis-1,2-Dichloroethene	ND	0.5	0.2	70	ug/L
PW-4	3/30/2017	trans-1,2-Dichloroethene	ND	0.5	0.18	100	ug/L
PW-4	3/30/2017	1,1-Dichloropropene	ND	0.5	0.13	NA	ug/L
PW-4	3/30/2017	2-Hexanone	ND	5	0.66	38	ug/L
PW-4	3/30/2017	2,2-Dichloropropane	ND	1	0.12	NA	ug/L
PW-4	3/30/2017	1,1,1,2-Tetrachloroethane	ND	0.5	0.11	5.74	ug/L
PW-4	3/30/2017	Xylenes, Total	ND	0.75	0.32	620	ug/L
PW-4	3/30/2017	MTBE	ND	0.5	0.15	143	ug/L
PW-4	3/30/2017	cis-1,3-Dichloropropene	ND	0.5	0.1	NA	ug/L
PW-4	3/30/2017	trans-1,3-Dichloropropene	ND	0.5	0.089	NA	ug/L
PW-4	9/18/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	9/18/2017	Acetone	ND	10	0.82	14064	ug/L
PW-4	9/18/2017	Chloroform	ND	1	0.4	100	ug/L
PW-4	9/18/2017	Benzene	ND	1	0.062	5	ug/L
PW-4	9/18/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-4	9/18/2017	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	9/18/2017	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	9/18/2017	Dibromomethane	ND	1	0.091	8	ug/L
PW-4	9/18/2017	Chloroethane	ND	2	0.23	20857	ug/L
PW-4	9/18/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-4	9/18/2017	Methylene Chloride	ND	3	0.11	5	ug/L
PW-4	9/18/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-4	9/18/2017	Bromoform	ND	1	0.21	32.9	ug/L
PW-4	9/18/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-4	9/18/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	9/18/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-4	9/18/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-4	9/18/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	9/18/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-4	9/18/2017	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	9/18/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-4	9/18/2017	Trichloroethene	ND	1	0.11	5	ug/L
PW-4	9/18/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-4	9/18/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-4	9/18/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	9/18/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	9/18/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-4	9/18/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-4	9/18/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-4	9/18/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-4	9/18/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-4	9/18/2017	Ethylbenzene	ND	1	0.093	700	ug/L
PW-4	9/18/2017	Styrene	ND	1	0.16	100	ug/L
PW-4	9/18/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-4	9/18/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-4	9/18/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	9/18/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/18/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	9/18/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-4	9/18/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-4	9/18/2017	Bromobenzene	ND	1	0.14	62	ug/L
PW-4	9/18/2017	Toluene	ND	1	0.064	1000	ug/L
PW-4	9/18/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	9/18/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-4	9/18/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-4	9/18/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-4	9/18/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-4	9/18/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-4	9/18/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	9/18/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-4	9/18/2017	2-Hexanone	ND	10	0.66	38	ug/L
PW-4	9/18/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-4	9/18/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-4	9/18/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-4	9/18/2017	MTBE	ND	1	0.24	143	ug/L
PW-4	9/18/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
PW-4	9/18/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-4	3/1/2018	Carbon tetrachloride	ND	1	0.11	5	ug/L
PW-4	3/1/2018	Acetone	ND	10	0.82	14064	ug/L
PW-4	3/1/2018	Chloroform	ND	1	0.4	100	ug/L
PW-4	3/1/2018	Benzene	ND	1	0.062	5	ug/L
PW-4	3/1/2018	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
PW-4	3/1/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	3/1/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	3/1/2018	Dibromomethane	ND	1	0.091	8	ug/L
PW-4	3/1/2018	Chloroethane	ND	2	0.23	20857	ug/L
PW-4	3/1/2018	Vinyl Chloride	ND	1	0.18	2	ug/L
PW-4	3/1/2018	Methylene Chloride	ND	3	0.11	5	ug/L
PW-4	3/1/2018	Carbon Disulfide	ND	10	0.4	810	ug/L
PW-4	3/1/2018	Bromoform	ND	1	0.21	32.9	ug/L
PW-4	3/1/2018	Bromodichloromethane	ND	1	0.18	1.34	ug/L
PW-4	3/1/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	3/1/2018	1,1-Dichloroethene	ND	1	0.081	7	ug/L
PW-4	3/1/2018	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
PW-4	3/1/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	3/1/2018	1,2-Dichloropropane	ND	1	0.1	5	ug/L
PW-4	3/1/2018	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	3/1/2018	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
PW-4	3/1/2018	Trichloroethene	ND	1	0.11	5	ug/L
PW-4	3/1/2018	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
PW-4	3/1/2018	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
PW-4	3/1/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	3/1/2018	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
PW-4	3/1/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
PW-4	3/1/2018	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
PW-4	3/1/2018	tert-Butylbenzene	ND	1	0.1	690	ug/L
PW-4	3/1/2018	Isopropylbenzene	ND	1	0.051	447	ug/L
PW-4	3/1/2018	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
PW-4	3/1/2018	Ethylbenzene	ND	1	0.093	700	ug/L
PW-4	3/1/2018	Styrene	ND	1	0.16	100	ug/L
PW-4	3/1/2018	n-Propylbenzene	ND	1	0.074	660	ug/L
PW-4	3/1/2018	n-Butylbenzene	ND	3	0.13	1000	ug/L
PW-4	3/1/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	3/1/2018	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
PW-4	3/1/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	3/1/2018	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
PW-4	3/1/2018	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
PW-4	3/1/2018	Bromobenzene	ND	1	0.14	62	ug/L
PW-4	3/1/2018	Toluene	ND	1	0.064	1000	ug/L
PW-4	3/1/2018	Chlorobenzene	ND	1	0.11	77.6	ug/L
PW-4	3/1/2018	Dibromochloromethane	ND	1	0.072	1.68	ug/L
PW-4	3/1/2018	Tetrachloroethene	ND	1	0.13	5	ug/L
PW-4	3/1/2018	sec-Butylbenzene	ND	1	0.11	2000	ug/L
PW-4	3/1/2018	1,3-Dichloropropane	ND	1	0.17	370	ug/L
PW-4	3/1/2018	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
PW-4	3/1/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	3/1/2018	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
PW-4	3/1/2018	2-Hexanone	ND	10	0.66	38	ug/L
PW-4	3/1/2018	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
PW-4	3/1/2018	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
PW-4	3/1/2018	Xylenes, Total	ND	1.5	0.32	620	ug/L
PW-4	3/1/2018	MTBE	ND	1	0.24	143	ug/L
PW-4	3/1/2018	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/1/2018	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
PW-4	9/19/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
PW-4	9/19/2018	Acetone	ND	10	0.79	14064	ug/L
PW-4	9/19/2018	Chloroform	ND	1	0.4	100	ug/L
PW-4	9/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-4	9/19/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
PW-4	9/19/2018	Bromomethane	ND	3	0.26	7.54	ug/L
PW-4	9/19/2018	Chloromethane	ND	3	0.29	20.32	ug/L
PW-4	9/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-4	9/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-4	9/19/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
PW-4	9/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-4	9/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-4	9/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-4	9/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-4	9/19/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
PW-4	9/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-4	9/19/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
PW-4	9/19/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
PW-4	9/19/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
PW-4	9/19/2018	2-Butanone	ND	10	1.3	5565	ug/L
PW-4	9/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-4	9/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-4	9/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-4	9/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-4	9/19/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
PW-4	9/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-4	9/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-4	9/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-4	9/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-4	9/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-4	9/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-4	9/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-4	9/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-4	9/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-4	9/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	9/19/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
PW-4	9/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-4	9/19/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
PW-4	9/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-4	9/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-4	9/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-4	9/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-4	9/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-4	9/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-4	9/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	9/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-4	9/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-4	9/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-4	9/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	9/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-4	9/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-4	9/19/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
PW-4	9/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-4	9/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-4	9/19/2018	MTBE	ND	1	0.32	143	ug/L
PW-4	9/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-4	9/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-4	11/19/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
PW-4	11/19/2018	Acetone	ND	10	0.76	14064	ug/L
PW-4	11/19/2018	Chloroform	ND	1	0.24	100	ug/L
PW-4	11/19/2018	Benzene	ND	1	0.17	5	ug/L
PW-4	11/19/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
PW-4	11/19/2018	Bromomethane	ND	3	0.27	7.54	ug/L
PW-4	11/19/2018	Chloromethane	ND	3	0.32	20.32	ug/L
PW-4	11/19/2018	Dibromomethane	ND	1	0.32	8	ug/L
PW-4	11/19/2018	Chloroethane	ND	2	0.16	20857	ug/L
PW-4	11/19/2018	Vinyl Chloride	ND	1	0.12	2	ug/L
PW-4	11/19/2018	Methylene Chloride	ND	3	0.21	5	ug/L
PW-4	11/19/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
PW-4	11/19/2018	Bromoform	ND	1	0.32	32.9	ug/L
PW-4	11/19/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
PW-4	11/19/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
PW-4	11/19/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
PW-4	11/19/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
PW-4	11/19/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	11/19/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
PW-4	11/19/2018	2-Butanone	ND	10	1.4	5565	ug/L
PW-4	11/19/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
PW-4	11/19/2018	Trichloroethene	ND	1	0.26	5	ug/L
PW-4	11/19/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
PW-4	11/19/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
PW-4	11/19/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
PW-4	11/19/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
PW-4	11/19/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
PW-4	11/19/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
PW-4	11/19/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
PW-4	11/19/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
PW-4	11/19/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
PW-4	11/19/2018	Ethylbenzene	ND	1	0.22	700	ug/L
PW-4	11/19/2018	Styrene	ND	1	0.25	100	ug/L
PW-4	11/19/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
PW-4	11/19/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	11/19/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
PW-4	11/19/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
PW-4	11/19/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
PW-4	11/19/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
PW-4	11/19/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
PW-4	11/19/2018	Bromobenzene	ND	1	0.32	62	ug/L
PW-4	11/19/2018	Toluene	ND	1	0.17	1000	ug/L
PW-4	11/19/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
PW-4	11/19/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
PW-4	11/19/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
PW-4	11/19/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
PW-4	11/19/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
PW-4	11/19/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
PW-4	11/19/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
PW-4	11/19/2018	Pentafluorobenzene	**10**	0	0		None
PW-4	11/19/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
PW-4	11/19/2018	2-Hexanone	ND	10	0.91	38	ug/L
PW-4	11/19/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
PW-4	11/19/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
PW-4	11/19/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
PW-4	11/19/2018	MTBE	ND	1	0.46	143	ug/L
PW-4	11/19/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
PW-4	11/19/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
PW-4	2/20/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
PW-4	2/20/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
PW-4	2/20/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
PW-4	2/20/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
PW-4	2/20/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
PW-4	2/20/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
PW-4	2/20/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	2/20/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
PW-4	2/20/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
PW-4	2/20/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
PW-4	2/20/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
PW-4	2/20/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
PW-4	2/20/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
PW-4	2/20/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
PW-4	2/20/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
PW-4	2/20/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
PW-4	2/20/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
PW-4	2/20/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
PW-4	2/20/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
PW-4	2/20/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
PW-4	2/20/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
PW-4	2/20/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	2/20/2019	2-Butanone	ND	10	1.410869	5565	ug/L
PW-4	2/20/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
PW-4	2/20/2019	2-Hexanone	ND	10	0.906574	38	ug/L
PW-4	2/20/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	2/20/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
PW-4	2/20/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
PW-4	2/20/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
PW-4	2/20/2019	Acetone	ND	10	0.75707	14064	ug/L
PW-4	2/20/2019	Benzene	ND	1	0.174896	5	ug/L
PW-4	2/20/2019	Bromobenzene	ND	1	0.317906	62	ug/L
PW-4	2/20/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
PW-4	2/20/2019	Bromoform	ND	1	0.32331	32.9	ug/L
PW-4	2/20/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	2/20/2019	Carbon Disulfide	ND	10	0.385031	810	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
PW-4	2/20/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
PW-4	2/20/2019	Chloroethane	ND	2	0.164337	20857	ug/L
PW-4	2/20/2019	Chloroform	ND	1	0.235224	100	ug/L
PW-4	2/20/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	2/20/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
PW-4	2/20/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
PW-4	2/20/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
PW-4	2/20/2019	Dibromomethane	ND	1	0.322147	8	ug/L
PW-4	2/20/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	2/20/2019	Ethylbenzene	ND	1	0.223402	700	ug/L
PW-4	2/20/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
PW-4	2/20/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
PW-4	2/20/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	2/20/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
PW-4	2/20/2019	Naphthalene	ND	2	0.289626	30	ug/L
PW-4	2/20/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
PW-4	2/20/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
PW-4	2/20/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
PW-4	2/20/2019	Styrene	ND	1	0.250146	100	ug/L
PW-4	2/20/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
PW-4	2/20/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L
PW-4	2/20/2019	Toluene	ND	1	0.168139	1000	ug/L
PW-4	2/20/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
PW-4	2/20/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
PW-4	2/20/2019	Trichloroethene	ND	1	0.257556	5	ug/L
PW-4	2/20/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
PW-4	2/20/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
PW-4	2/20/2019	Xylenes, Total	ND	1.5	0.641288	620	ug/L
PW-4	5/14/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	5/14/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	5/14/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	5/14/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	5/14/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	5/14/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	5/14/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	5/14/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	5/14/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	5/14/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	5/14/2019	1,2,4-Trimethylbenzene	0.23	1	0.213199	56	ug/L
PW-4	5/14/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	5/14/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	5/14/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	5/14/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	5/14/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	5/14/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	5/14/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	5/14/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	5/14/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	5/14/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	5/14/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	5/14/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	5/14/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	5/14/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	5/14/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	5/14/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	5/14/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	5/14/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	5/14/2019	Acetone	7.1	10	1.199396	14064	ug/L
PW-4	5/14/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	5/14/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	5/14/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	5/14/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	5/14/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	5/14/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	5/14/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	5/14/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	5/14/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	5/14/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	5/14/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	5/14/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	5/14/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	5/14/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	5/14/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	5/14/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	5/14/2019	Ethylbenzene	ND	1	0.132341	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	5/14/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	5/14/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	5/14/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	5/14/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	5/14/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	5/14/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	5/14/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	5/14/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	5/14/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	5/14/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	5/14/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-4	5/14/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	5/14/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	5/14/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	5/14/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	5/14/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	5/14/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	5/14/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	8/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	8/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	8/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	8/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	8/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	8/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	8/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	8/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	8/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	8/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-4	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	8/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	8/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	8/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	8/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	8/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	8/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	8/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	8/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	8/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	8/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	8/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	8/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	8/27/2019	Acetone	ND	10	1.199396	14064	ug/L
PW-4	8/27/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	8/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	8/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	8/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	8/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	8/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	8/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	8/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	8/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	8/27/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	8/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	8/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	8/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	8/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	8/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	8/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	8/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	8/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	8/27/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	8/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	8/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	8/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	8/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	8/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	8/27/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	8/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	8/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	8/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	8/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	8/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	8/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	8/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	8/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	8/27/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
PW-4	8/27/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
PW-4	8/27/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
PW-4	8/27/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
PW-4	8/27/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
PW-4	8/27/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
PW-4	8/27/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
PW-4	8/27/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
PW-4	8/27/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
PW-4	8/27/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
PW-4	8/27/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
PW-4	8/27/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
PW-4	8/27/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
PW-4	8/27/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
PW-4	8/27/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
PW-4	8/27/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
PW-4	8/27/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
PW-4	8/27/2019	2-Butanone	ND	10	2.089417	5565	ug/L
PW-4	8/27/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
PW-4	8/27/2019	2-Hexanone	ND	10	1.547192	38	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
PW-4	8/27/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
PW-4	8/27/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
PW-4	8/27/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
PW-4	8/27/2019	Acetone	ND	10	1.199396	14064	ug/L
PW-4	8/27/2019	Benzene	ND	1	0.166639	5	ug/L
PW-4	8/27/2019	Bromobenzene	ND	1	0.244727	62	ug/L
PW-4	8/27/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
PW-4	8/27/2019	Bromoform	ND	1	0.288663	32.9	ug/L
PW-4	8/27/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
PW-4	8/27/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
PW-4	8/27/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
PW-4	8/27/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
PW-4	8/27/2019	Chloroethane	ND	2	0.177803	20857	ug/L
PW-4	8/27/2019	Chloroform	ND	1	0.121891	100	ug/L
PW-4	8/27/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
PW-4	8/27/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
PW-4	8/27/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
PW-4	8/27/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
PW-4	8/27/2019	Dibromomethane	ND	1	0.209209	8	ug/L
PW-4	8/27/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
PW-4	8/27/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
PW-4	8/27/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
PW-4	8/27/2019	MTBE	ND	1	0.456095	143	ug/L
PW-4	8/27/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
PW-4	8/27/2019	Naphthalene	ND	2	0.275071	30	ug/L
PW-4	8/27/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
PW-4	8/27/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
PW-4	8/27/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
PW-4	8/27/2019	Styrene	ND	1	0.191323	100	ug/L
PW-4	8/27/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
PW-4	8/27/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
PW-4	8/27/2019	Toluene	ND	1	0.350436	1000	ug/L
PW-4	8/27/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
PW-4	8/27/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
PW-4	8/27/2019	Trichloroethene	ND	1	0.166272	5	ug/L
PW-4	8/27/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
PW-4	8/27/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
PW-4	8/27/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
PW-4	9/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
PW-4	9/21/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
PW-4	9/21/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
PW-4	9/21/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/21/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
PW-4	9/21/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
PW-4	9/21/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
PW-4	9/21/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
PW-4	9/21/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
PW-4	9/21/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
PW-4	9/21/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
PW-4	9/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
PW-4	9/21/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
PW-4	9/21/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
PW-4	9/21/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
PW-4	9/21/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
PW-4	9/21/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
PW-4	9/21/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
PW-4	9/21/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
PW-4	9/21/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
PW-4	9/21/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
PW-4	9/21/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
PW-4	9/21/2020	2-Butanone	ND	10	1.1	5565	ug/L
PW-4	9/21/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
PW-4	9/21/2020	2-Hexanone	ND	10	1.8	38	ug/L
PW-4	9/21/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
PW-4	9/21/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
PW-4	9/21/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
PW-4	9/21/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
PW-4	9/21/2020	Acetone	ND	10	2.3	14064	ug/L
PW-4	9/21/2020	Benzene	ND	1	0.23	5	ug/L
PW-4	9/21/2020	Bromobenzene	ND	1	0.28	62	ug/L
PW-4	9/21/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
PW-4	9/21/2020	Bromoform	ND	1	0.31	32.9	ug/L
PW-4	9/21/2020	Bromomethane	ND	3	1.6	7.54	ug/L
PW-4	9/21/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
PW-4	9/21/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
PW-4	9/21/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
PW-4	9/21/2020	Chloroethane	ND	2	0.38	20857	ug/L
PW-4	9/21/2020	Chloroform	ND	1	0.13	100	ug/L
PW-4	9/21/2020	Chloromethane	ND	3	0.4	20.32	ug/L
PW-4	9/21/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
PW-4	9/21/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
PW-4	9/21/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
PW-4	9/21/2020	Dibromomethane	ND	1	0.31	8	ug/L
PW-4	9/21/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
PW-4	9/21/2020	Ethylbenzene	ND	1	0.21	700	ug/L
PW-4	9/21/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
PW-4	9/21/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
PW-4	9/21/2020	MTBE	ND	1	0.39	143	ug/L
PW-4	9/21/2020	Methylene Chloride	ND	3	0.4	5	ug/L
PW-4	9/21/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
PW-4	9/21/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
PW-4	9/21/2020	Naphthalene	ND	2	0.28	30	ug/L
PW-4	9/21/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
PW-4	9/21/2020	Styrene	ND	1	0.13	100	ug/L
PW-4	9/21/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
PW-4	9/21/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
PW-4	9/21/2020	Toluene	ND	1	0.2	1000	ug/L
PW-4	9/21/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
PW-4	9/21/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
PW-4	9/21/2020	Trichloroethene	ND	1	0.2	5	ug/L
PW-4	9/21/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
PW-4	9/21/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
PW-4	9/21/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
PW-4	12/28/2020	Acetone	ND	25	10	14064	ug/L
PW-4	12/28/2020	Benzene	ND	1	0.38	5	ug/L
PW-4	12/28/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
PW-4	12/28/2020	Bromoform	ND	5	0.71	32.9	ug/L
PW-4	12/28/2020	Bromomethane	ND	1	0.98	7.54	ug/L
PW-4	12/28/2020	2-Butanone	ND	25	2.6	5565	ug/L
PW-4	12/28/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
PW-4	12/28/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
PW-4	12/28/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
PW-4	12/28/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
PW-4	12/28/2020	Chloroethane	ND	1	0.76	20857	ug/L
PW-4	12/28/2020	Chloroform	ND	1	0.6	100	ug/L
PW-4	12/28/2020	Chloromethane	ND	1	0.83	20.32	ug/L
PW-4	12/28/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
PW-4	12/28/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
PW-4	12/28/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-4	12/28/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
PW-4	12/28/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
PW-4	12/28/2020	Dibromomethane	ND	5	0.59	8	ug/L
PW-4	12/28/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
PW-4	12/28/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
PW-4	12/28/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
PW-4	12/28/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
PW-4	12/28/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
PW-4	12/28/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
PW-4	12/28/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
PW-4	12/28/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
PW-4	12/28/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
PW-4	12/28/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
PW-4	12/28/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
PW-4	12/28/2020	Ethylbenzene	ND	1	0.5	700	ug/L
PW-4	12/28/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
PW-4	12/28/2020	2-Hexanone	ND	25	3.1	38	ug/L
PW-4	12/28/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
PW-4	12/28/2020	Methylene Chloride	ND	5	3	5	ug/L
PW-4	12/28/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
PW-4	12/28/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
PW-4	12/28/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
PW-4	12/28/2020	MTBE	ND	1	0.74	143	ug/L
PW-4	12/28/2020	Naphthalene	ND	1	1	30	ug/L
PW-4	12/28/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
PW-4	12/28/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
PW-4	12/28/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
PW-4	12/28/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
PW-4	12/28/2020	Styrene	ND	1	1	100	ug/L
PW-4	12/28/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
PW-4	12/28/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
PW-4	12/28/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
PW-4	12/28/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
PW-4	12/28/2020	Toluene	ND	1	0.41	1000	ug/L
PW-4	12/28/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
PW-4	12/28/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
PW-4	12/28/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
PW-4	12/28/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
PW-4	12/28/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
PW-4	12/28/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
PW-4	12/28/2020	Trichloroethene	ND	1	0.5	5	ug/L
PW-4	12/28/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
PW-4	12/28/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
PW-4	12/28/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
PW-4	12/28/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
PW-4	12/28/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
PW-4	12/28/2020	Xylenes, Total	ND	10	1.6	620	ug/L
SMW-2	8/23/2012	Carbon tetrachloride	*ND*	*10*	3.7	5	ug/L
SMW-2	8/23/2012	Acetone	ND	100	15	14064	ug/L
SMW-2	8/23/2012	Chloroform	ND	10	3.5	100	ug/L
SMW-2	8/23/2012	Benzene	*ND*	*10*	4	5	ug/L
SMW-2	8/23/2012	1,1,1-Trichloroethane	ND	10	3.8	200	ug/L
SMW-2	8/23/2012	Bromomethane	*ND*	*30*	5.6	7.54	ug/L
SMW-2	8/23/2012	Chloromethane	*ND*	*30*	6.5	20.32	ug/L
SMW-2	8/23/2012	Dibromomethane	*ND*	*10*	6.5	8	ug/L
SMW-2	8/23/2012	Chloroethane	ND	20	4.4	20857	ug/L
SMW-2	8/23/2012	Vinyl Chloride	*ND*	*10*	4.8	2	ug/L
SMW-2	8/23/2012	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
SMW-2	8/23/2012	Carbon Disulfide	ND	100	8.4	810	ug/L
SMW-2	8/23/2012	Bromoform	ND	10	4.3	32.9	ug/L
SMW-2	8/23/2012	Bromodichloromethane	*ND*	*10*	3.4	1.34	ug/L
SMW-2	8/23/2012	1,1-Dichloroethane	ND	10	3	25	ug/L
SMW-2	8/23/2012	1,1-Dichloroethene	*ND*	*10*	3.8	7	ug/L
SMW-2	8/23/2012	Trichlorofluoromethane	ND	10	3.5	1137	ug/L
SMW-2	8/23/2012	Dichlorodifluoromethane	ND	10	9.8	197	ug/L
SMW-2	8/23/2012	1,2-Dichloropropane	*ND*	*10*	3.9	5	ug/L
SMW-2	8/23/2012	2-Butanone	ND	100	22	5565	ug/L
SMW-2	8/23/2012	1,1,2-Trichloroethane	*ND*	*10*	5.4	5	ug/L
SMW-2	8/23/2012	Trichloroethene	*ND*	*10*	3	5	ug/L
SMW-2	8/23/2012	1,1,2,2-Tetrachloroethane	*ND*	*20*	6.2	10	ug/L
SMW-2	8/23/2012	1,2,3-Trichlorobenzene	ND	10	5	70	ug/L
SMW-2	8/23/2012	2-Chlorotoluene	ND	10	5.3	233	ug/L
SMW-2	8/23/2012	1,2,4-Trimethylbenzene	ND	10	4.7	56	ug/L
SMW-2	8/23/2012	1,2-Dibromo-3-Chloropropane	*ND*	*20*	7.7	0.0033	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/23/2012	1,2,3-Trichloropropane	*ND*	*20*	6.1	0.0084	ug/L
SMW-2	8/23/2012	tert-Butylbenzene	ND	10	4.2	690	ug/L
SMW-2	8/23/2012	Isopropylbenzene	ND	10	4.6	447	ug/L
SMW-2	8/23/2012	p-Isopropyltoluene	ND	10	4.9	NA	ug/L
SMW-2	8/23/2012	Ethylbenzene	ND	10	3.8	700	ug/L
SMW-2	8/23/2012	Styrene	ND	10	4.1	100	ug/L
SMW-2	8/23/2012	n-Propylbenzene	ND	10	4	660	ug/L
SMW-2	8/23/2012	n-Butylbenzene	ND	30	4	1000	ug/L
SMW-2	8/23/2012	4-Chlorotoluene	ND	10	4.1	250	ug/L
SMW-2	8/23/2012	1,2-Dibromoethane	*ND*	*10*	3.8	0.05	ug/L
SMW-2	8/23/2012	1,2-Dichloroethane	*ND*	*10*	2.9	5	ug/L
SMW-2	8/23/2012	4-Methyl-2-Pentanone	ND	100	9.8	1243	ug/L
SMW-2	8/23/2012	1,3,5-Trimethylbenzene	ND	10	3.8	60	ug/L
SMW-2	8/23/2012	Bromobenzene	ND	10	6.3	62	ug/L
SMW-2	8/23/2012	Toluene	ND	10	4.7	1000	ug/L
SMW-2	8/23/2012	Chlorobenzene	ND	10	3.9	77.6	ug/L
SMW-2	8/23/2012	Dibromochloromethane	*ND*	*10*	3.2	1.68	ug/L
SMW-2	8/23/2012	Tetrachloroethene	*ND*	*10*	4.7	5	ug/L
SMW-2	8/23/2012	sec-Butylbenzene	ND	10	4.7	2000	ug/L
SMW-2	8/23/2012	1,3-Dichloropropane	ND	10	5.3	370	ug/L
SMW-2	8/23/2012	cis-1,2-Dichloroethene	ND	10	3.4	70	ug/L
SMW-2	8/23/2012	trans-1,2-Dichloroethene	ND	10	3.2	100	ug/L
SMW-2	8/23/2012	1,1-Dichloropropene	ND	10	3.7	NA	ug/L
SMW-2	8/23/2012	2-Hexanone	*ND*	*100*	8.9	38	ug/L
SMW-2	8/23/2012	2,2-Dichloropropane	ND	20	4.7	NA	ug/L
SMW-2	8/23/2012	1,1,1,2-Tetrachloroethane	*ND*	*10*	4.9	5.74	ug/L
SMW-2	8/23/2012	Xylenes, Total	ND	15	13	620	ug/L
SMW-2	8/23/2012	MTBE	12	10	9.6	143	ug/L
SMW-2	8/23/2012	cis-1,3-Dichloropropene	ND	10	5.7	NA	ug/L
SMW-2	8/23/2012	trans-1,3-Dichloropropene	ND	10	6.4	NA	ug/L
SMW-2	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
SMW-2	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
SMW-2	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
SMW-2	9/9/2013	Benzene	ND	1	0.46	5	ug/L
SMW-2	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
SMW-2	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
SMW-2	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
SMW-2	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
SMW-2	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
SMW-2	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
SMW-2	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-2	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
SMW-2	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
SMW-2	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
SMW-2	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
SMW-2	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
SMW-2	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
SMW-2	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
SMW-2	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
SMW-2	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
SMW-2	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
SMW-2	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
SMW-2	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
SMW-2	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
SMW-2	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
SMW-2	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
SMW-2	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
SMW-2	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
SMW-2	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
SMW-2	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
SMW-2	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
SMW-2	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
SMW-2	9/9/2013	Styrene	ND	1	0.58	100	ug/L
SMW-2	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
SMW-2	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
SMW-2	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
SMW-2	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
SMW-2	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
SMW-2	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
SMW-2	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
SMW-2	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
SMW-2	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
SMW-2	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
SMW-2	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
SMW-2	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
SMW-2	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
SMW-2	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
SMW-2	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L
SMW-2	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-2	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
SMW-2	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
SMW-2	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
SMW-2	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
SMW-2	9/9/2013	MTBE	9.7	1	0.77	143	ug/L
SMW-2	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
SMW-2	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-2	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-2	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
SMW-2	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
SMW-2	9/11/2014	Benzene	ND	1	0.15	5	ug/L
SMW-2	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
SMW-2	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
SMW-2	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
SMW-2	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
SMW-2	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
SMW-2	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
SMW-2	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
SMW-2	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
SMW-2	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
SMW-2	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
SMW-2	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
SMW-2	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
SMW-2	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-2	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
SMW-2	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
SMW-2	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
SMW-2	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-2	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
SMW-2	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
SMW-2	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
SMW-2	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-2	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-2	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
SMW-2	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
SMW-2	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
SMW-2	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
SMW-2	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
SMW-2	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
SMW-2	9/11/2014	Styrene	ND	1	0.12	100	ug/L
SMW-2	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
SMW-2	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
SMW-2	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
SMW-2	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
SMW-2	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
SMW-2	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-2	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
SMW-2	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
SMW-2	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
SMW-2	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-2	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
SMW-2	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
SMW-2	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
SMW-2	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-2	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-2	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
SMW-2	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
SMW-2	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
SMW-2	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
SMW-2	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
SMW-2	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
SMW-2	9/11/2014	MTBE	12	1	0.25	143	ug/L
SMW-2	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
SMW-2	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-2	8/17/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
SMW-2	8/17/2015	Acetone	ND	10	0.94	14064	ug/L
SMW-2	8/17/2015	Chloroform	ND	1	0.21	100	ug/L
SMW-2	8/17/2015	Benzene	ND	1	0.065	5	ug/L
SMW-2	8/17/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
SMW-2	8/17/2015	Bromomethane	ND	3	1.2	7.54	ug/L
SMW-2	8/17/2015	Chloromethane	ND	3	0.17	20.32	ug/L
SMW-2	8/17/2015	Dibromomethane	ND	1	0.23	8	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/17/2015	Chloroethane	ND	2	0.1	20857	ug/L
SMW-2	8/17/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
SMW-2	8/17/2015	Methylene Chloride	ND	3	0.36	5	ug/L
SMW-2	8/17/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
SMW-2	8/17/2015	Bromoform	ND	1	0.16	32.9	ug/L
SMW-2	8/17/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
SMW-2	8/17/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	8/17/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
SMW-2	8/17/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-2	8/17/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
SMW-2	8/17/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-2	8/17/2015	2-Butanone	ND	10	0.36	5565	ug/L
SMW-2	8/17/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
SMW-2	8/17/2015	Trichloroethene	ND	1	0.16	5	ug/L
SMW-2	8/17/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
SMW-2	8/17/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
SMW-2	8/17/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
SMW-2	8/17/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
SMW-2	8/17/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
SMW-2	8/17/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
SMW-2	8/17/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
SMW-2	8/17/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
SMW-2	8/17/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
SMW-2	8/17/2015	Ethylbenzene	ND	1	0.1	700	ug/L
SMW-2	8/17/2015	Styrene	ND	1	0.11	100	ug/L
SMW-2	8/17/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
SMW-2	8/17/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	8/17/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
SMW-2	8/17/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-2	8/17/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
SMW-2	8/17/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
SMW-2	8/17/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-2	8/17/2015	Bromobenzene	ND	1	0.11	62	ug/L
SMW-2	8/17/2015	Toluene	ND	1	0.11	1000	ug/L
SMW-2	8/17/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
SMW-2	8/17/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
SMW-2	8/17/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
SMW-2	8/17/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
SMW-2	8/17/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-2	8/17/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
SMW-2	8/17/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
SMW-2	8/17/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
SMW-2	8/17/2015	2-Hexanone	ND	10	0.48	38	ug/L
SMW-2	8/17/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
SMW-2	8/17/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-2	8/17/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
SMW-2	8/17/2015	MTBE	11	1	0.17	143	ug/L
SMW-2	8/17/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-2	8/17/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-2	9/9/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
SMW-2	9/9/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-2	9/9/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
SMW-2	9/9/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
SMW-2	9/9/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-2	9/9/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
SMW-2	9/9/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-2	9/9/2016	2-Hexanone	ND	10	0.84	38	ug/L
SMW-2	9/9/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
SMW-2	9/9/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-2	9/9/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
SMW-2	9/9/2016	MTBE	13	1	0.21	143	ug/L
SMW-2	9/9/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-2	9/9/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
SMW-2	9/9/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-2	9/9/2016	Acetone	ND	10	4.9	14064	ug/L
SMW-2	9/9/2016	Chloroform	ND	1	0.089	100	ug/L
SMW-2	9/9/2016	Benzene	ND	1	0.096	5	ug/L
SMW-2	9/9/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
SMW-2	9/9/2016	Bromomethane	ND	3	0.78	7.54	ug/L
SMW-2	9/9/2016	Chloromethane	ND	3	0.21	20.32	ug/L
SMW-2	9/9/2016	Dibromomethane	ND	1	0.12	8	ug/L
SMW-2	9/9/2016	Chloroethane	ND	2	0.19	20857	ug/L
SMW-2	9/9/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-2	9/9/2016	Methylene Chloride	ND	3	0.19	5	ug/L
SMW-2	9/9/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
SMW-2	9/9/2016	Bromoform	ND	1	0.1	32.9	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/9/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
SMW-2	9/9/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
SMW-2	9/9/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
SMW-2	9/9/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
SMW-2	9/9/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
SMW-2	9/9/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
SMW-2	9/9/2016	2-Butanone	ND	10	0.74	5565	ug/L
SMW-2	9/9/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
SMW-2	9/9/2016	Trichloroethene	ND	1	0.18	5	ug/L
SMW-2	9/9/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
SMW-2	9/9/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
SMW-2	9/9/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/9/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-2	9/9/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
SMW-2	9/9/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
SMW-2	9/9/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
SMW-2	9/9/2016	Isopropylbenzene	ND	1	0.1	447	ug/L
SMW-2	9/9/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
SMW-2	9/9/2016	Ethylbenzene	ND	1	0.11	700	ug/L
SMW-2	9/9/2016	Styrene	ND	1	0.11	100	ug/L
SMW-2	9/9/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
SMW-2	9/9/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
SMW-2	9/9/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
SMW-2	9/9/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
SMW-2	9/9/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
SMW-2	9/9/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
SMW-2	9/9/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-2	9/9/2016	Bromobenzene	ND	1	0.098	62	ug/L
SMW-2	9/9/2016	Toluene	ND	1	0.12	1000	ug/L
SMW-2	9/9/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-2	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-2	9/11/2017	Acetone	6.2	10	0.82	14064	ug/L
SMW-2	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
SMW-2	9/11/2017	Benzene	ND	1	0.062	5	ug/L
SMW-2	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
SMW-2	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-2	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-2	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
SMW-2	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
SMW-2	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
SMW-2	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
SMW-2	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
SMW-2	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
SMW-2	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
SMW-2	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
SMW-2	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
SMW-2	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-2	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
SMW-2	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
SMW-2	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-2	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
SMW-2	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
SMW-2	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
SMW-2	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-2	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
SMW-2	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
SMW-2	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
SMW-2	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
SMW-2	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
SMW-2	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
SMW-2	9/11/2017	Styrene	ND	1	0.16	100	ug/L
SMW-2	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
SMW-2	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
SMW-2	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-2	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-2	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-2	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
SMW-2	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
SMW-2	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
SMW-2	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
SMW-2	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-2	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
SMW-2	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
SMW-2	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-2	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
SMW-2	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-2	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
SMW-2	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
SMW-2	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
SMW-2	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
SMW-2	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
SMW-2	9/11/2017	MTBE	11	1	0.24	143	ug/L
SMW-2	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
SMW-2	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
SMW-2	9/18/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
SMW-2	9/18/2018	Acetone	6.7	10	0.79	14064	ug/L
SMW-2	9/18/2018	Chloroform	ND	1	0.4	100	ug/L
SMW-2	9/18/2018	Benzene	ND	1	0.17	5	ug/L
SMW-2	9/18/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
SMW-2	9/18/2018	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-2	9/18/2018	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-2	9/18/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-2	9/18/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-2	9/18/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
SMW-2	9/18/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-2	9/18/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-2	9/18/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-2	9/18/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-2	9/18/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-2	9/18/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-2	9/18/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
SMW-2	9/18/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-2	9/18/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-2	9/18/2018	2-Butanone	ND	10	1.3	5565	ug/L
SMW-2	9/18/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-2	9/18/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-2	9/18/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-2	9/18/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-2	9/18/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-2	9/18/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-2	9/18/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-2	9/18/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-2	9/18/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-2	9/18/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-2	9/18/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-2	9/18/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-2	9/18/2018	Styrene	ND	1	0.25	100	ug/L
SMW-2	9/18/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-2	9/18/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	9/18/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-2	9/18/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-2	9/18/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-2	9/18/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-2	9/18/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-2	9/18/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-2	9/18/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-2	9/18/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-2	9/18/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-2	9/18/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-2	9/18/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-2	9/18/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-2	9/18/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-2	9/18/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-2	9/18/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-2	9/18/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-2	9/18/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
SMW-2	9/18/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-2	9/18/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-2	9/18/2018	MTBE	11	1	0.32	143	ug/L
SMW-2	9/18/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-2	9/18/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-2	8/22/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
SMW-2	8/22/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
SMW-2	8/22/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
SMW-2	8/22/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
SMW-2	8/22/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
SMW-2	8/22/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
SMW-2	8/22/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
SMW-2	8/22/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/22/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
SMW-2	8/22/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
SMW-2	8/22/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
SMW-2	8/22/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
SMW-2	8/22/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
SMW-2	8/22/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
SMW-2	8/22/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
SMW-2	8/22/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
SMW-2	8/22/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
SMW-2	8/22/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
SMW-2	8/22/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
SMW-2	8/22/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
SMW-2	8/22/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
SMW-2	8/22/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
SMW-2	8/22/2019	2-Butanone	ND	10	2.089417	5565	ug/L
SMW-2	8/22/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
SMW-2	8/22/2019	2-Hexanone	ND	10	1.547192	38	ug/L
SMW-2	8/22/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
SMW-2	8/22/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
SMW-2	8/22/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L
SMW-2	8/22/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
SMW-2	8/22/2019	Acetone	ND	10	1.199396	14064	ug/L
SMW-2	8/22/2019	Benzene	0.23	1	0.166639	5	ug/L
SMW-2	8/22/2019	Bromobenzene	ND	1	0.244727	62	ug/L
SMW-2	8/22/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
SMW-2	8/22/2019	Bromoform	ND	1	0.288663	32.9	ug/L
SMW-2	8/22/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
SMW-2	8/22/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
SMW-2	8/22/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
SMW-2	8/22/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
SMW-2	8/22/2019	Chloroethane	ND	2	0.177803	20857	ug/L
SMW-2	8/22/2019	Chloroform	ND	1	0.121891	100	ug/L
SMW-2	8/22/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
SMW-2	8/22/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
SMW-2	8/22/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
SMW-2	8/22/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
SMW-2	8/22/2019	Dibromomethane	ND	1	0.209209	8	ug/L
SMW-2	8/22/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
SMW-2	8/22/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
SMW-2	8/22/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
SMW-2	8/22/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
SMW-2	8/22/2019	MTBE	12	1	0.456095	143	ug/L
SMW-2	8/22/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
SMW-2	8/22/2019	Naphthalene	ND	2	0.275071	30	ug/L
SMW-2	8/22/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
SMW-2	8/22/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
SMW-2	8/22/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
SMW-2	8/22/2019	Styrene	ND	1	0.191323	100	ug/L
SMW-2	8/22/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
SMW-2	8/22/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
SMW-2	8/22/2019	Toluene	ND	1	0.350436	1000	ug/L
SMW-2	8/22/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
SMW-2	8/22/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
SMW-2	8/22/2019	Trichloroethene	ND	1	0.166272	5	ug/L
SMW-2	8/22/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
SMW-2	8/22/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
SMW-2	8/22/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
SMW-2	9/19/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
SMW-2	9/19/2020	Dibromomethane	ND	1	0.31	8	ug/L
SMW-2	9/19/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
SMW-2	9/19/2020	Ethylbenzene	ND	1	0.21	700	ug/L
SMW-2	9/19/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
SMW-2	9/19/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
SMW-2	9/19/2020	MTBE	13	1	0.39	143	ug/L
SMW-2	9/19/2020	Methylene Chloride	ND	3	0.4	5	ug/L
SMW-2	9/19/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-2	9/19/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
SMW-2	9/19/2020	Naphthalene	ND	2	0.28	30	ug/L
SMW-2	9/19/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
SMW-2	9/19/2020	Styrene	ND	1	0.13	100	ug/L
SMW-2	9/19/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
SMW-2	9/19/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
SMW-2	9/19/2020	Toluene	ND	1	0.2	1000	ug/L
SMW-2	9/19/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
SMW-2	9/19/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
SMW-2	9/19/2020	Trichloroethene	ND	1	0.2	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
SMW-2	9/19/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-2	9/19/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
SMW-2	9/19/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
SMW-2	9/19/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
SMW-2	9/19/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
SMW-2	9/19/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
SMW-2	9/19/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
SMW-2	9/19/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
SMW-2	9/19/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-2	9/19/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
SMW-2	9/19/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
SMW-2	9/19/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
SMW-2	9/19/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-2	9/19/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
SMW-2	9/19/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
SMW-2	9/19/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
SMW-2	9/19/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
SMW-2	9/19/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
SMW-2	9/19/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
SMW-2	9/19/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
SMW-2	9/19/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-2	9/19/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
SMW-2	9/19/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
SMW-2	9/19/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
SMW-2	9/19/2020	2-Butanone	ND	10	1.1	5565	ug/L
SMW-2	9/19/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-2	9/19/2020	2-Hexanone	ND	10	1.8	38	ug/L
SMW-2	9/19/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
SMW-2	9/19/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
SMW-2	9/19/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
SMW-2	9/19/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-2	9/19/2020	Acetone	2.8	10	2.3	14064	ug/L
SMW-2	9/19/2020	Benzene	ND	1	0.23	5	ug/L
SMW-2	9/19/2020	Bromobenzene	ND	1	0.28	62	ug/L
SMW-2	9/19/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
SMW-2	9/19/2020	Bromoform	ND	1	0.31	32.9	ug/L
SMW-2	9/19/2020	Bromomethane	ND	3	1.6	7.54	ug/L
SMW-2	9/19/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
SMW-2	9/19/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
SMW-2	9/19/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-2	9/19/2020	Chloroethane	ND	2	0.38	20857	ug/L
SMW-2	9/19/2020	Chloroform	ND	1	0.13	100	ug/L
SMW-2	9/19/2020	Chloromethane	ND	3	0.4	20.32	ug/L
SMW-2	9/19/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
SMW-2	9/19/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
SMW-4	8/24/2012	Carbon tetrachloride	ND	1	0.37	5	ug/L
SMW-4	8/24/2012	Acetone	ND	10	1.5	14064	ug/L
SMW-4	8/24/2012	Chloroform	ND	1	0.35	100	ug/L
SMW-4	8/24/2012	Benzene	ND	1	0.4	5	ug/L
SMW-4	8/24/2012	1,1,1-Trichloroethane	ND	1	0.38	200	ug/L
SMW-4	8/24/2012	Bromomethane	ND	3	0.56	7.54	ug/L
SMW-4	8/24/2012	Chloromethane	ND	3	0.65	20.32	ug/L
SMW-4	8/24/2012	Dibromomethane	ND	1	0.65	8	ug/L
SMW-4	8/24/2012	Chloroethane	ND	2	0.44	20857	ug/L
SMW-4	8/24/2012	Vinyl Chloride	ND	1	0.48	2	ug/L
SMW-4	8/24/2012	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-4	8/24/2012	Carbon Disulfide	ND	10	0.84	810	ug/L
SMW-4	8/24/2012	Bromoform	ND	1	0.43	32.9	ug/L
SMW-4	8/24/2012	Bromodichloromethane	ND	1	0.34	1.34	ug/L
SMW-4	8/24/2012	1,1-Dichloroethane	ND	1	0.3	25	ug/L
SMW-4	8/24/2012	1,1-Dichloroethene	ND	1	0.38	7	ug/L
SMW-4	8/24/2012	Trichlorofluoromethane	ND	1	0.35	1137	ug/L
SMW-4	8/24/2012	Dichlorodifluoromethane	ND	1	0.98	197	ug/L
SMW-4	8/24/2012	1,2-Dichloropropane	ND	1	0.39	5	ug/L
SMW-4	8/24/2012	2-Butanone	ND	10	2.2	5565	ug/L
SMW-4	8/24/2012	1,1,2-Trichloroethane	ND	1	0.54	5	ug/L
SMW-4	8/24/2012	Trichloroethene	ND	1	0.3	5	ug/L
SMW-4	8/24/2012	1,1,2,2-Tetrachloroethane	ND	2	0.62	10	ug/L
SMW-4	8/24/2012	1,2,3-Trichlorobenzene	ND	1	0.5	70	ug/L
SMW-4	8/24/2012	2-Chlorotoluene	ND	1	0.53	233	ug/L
SMW-4	8/24/2012	1,2,4-Trimethylbenzene	ND	1	0.47	56	ug/L
SMW-4	8/24/2012	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.77	0.0033	ug/L
SMW-4	8/24/2012	1,2,3-Trichloropropane	*ND*	*2*	0.61	0.0084	ug/L
SMW-4	8/24/2012	tert-Butylbenzene	ND	1	0.42	690	ug/L
SMW-4	8/24/2012	Isopropylbenzene	ND	1	0.46	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/24/2012	p-Isopropyltoluene	ND	1	0.49	NA	ug/L
SMW-4	8/24/2012	Ethylbenzene	ND	1	0.38	700	ug/L
SMW-4	8/24/2012	Styrene	ND	1	0.41	100	ug/L
SMW-4	8/24/2012	n-Propylbenzene	ND	1	0.4	660	ug/L
SMW-4	8/24/2012	n-Butylbenzene	ND	3	0.4	1000	ug/L
SMW-4	8/24/2012	4-Chlorotoluene	ND	1	0.41	250	ug/L
SMW-4	8/24/2012	1,2-Dibromoethane	*ND*	*1*	0.38	0.05	ug/L
SMW-4	8/24/2012	1,2-Dichloroethane	ND	1	0.29	5	ug/L
SMW-4	8/24/2012	4-Methyl-2-Pentanone	ND	10	0.98	1243	ug/L
SMW-4	8/24/2012	1,3,5-Trimethylbenzene	ND	1	0.38	60	ug/L
SMW-4	8/24/2012	Bromobenzene	ND	1	0.63	62	ug/L
SMW-4	8/24/2012	Toluene	ND	1	0.47	1000	ug/L
SMW-4	8/24/2012	Chlorobenzene	ND	1	0.39	77.6	ug/L
SMW-4	8/24/2012	Dibromochloromethane	ND	1	0.32	1.68	ug/L
SMW-4	8/24/2012	Tetrachloroethene	ND	1	0.47	5	ug/L
SMW-4	8/24/2012	sec-Butylbenzene	ND	1	0.47	2000	ug/L
SMW-4	8/24/2012	1,3-Dichloropropane	ND	1	0.53	370	ug/L
SMW-4	8/24/2012	cis-1,2-Dichloroethene	ND	1	0.34	70	ug/L
SMW-4	8/24/2012	trans-1,2-Dichloroethene	ND	1	0.32	100	ug/L
SMW-4	8/24/2012	1,1-Dichloropropene	ND	1	0.37	NA	ug/L
SMW-4	8/24/2012	2-Hexanone	ND	10	0.89	38	ug/L
SMW-4	8/24/2012	2,2-Dichloropropane	ND	2	0.47	NA	ug/L
SMW-4	8/24/2012	1,1,1,2-Tetrachloroethane	ND	1	0.49	5.74	ug/L
SMW-4	8/24/2012	Xylenes, Total	ND	1.5	1.3	620	ug/L
SMW-4	8/24/2012	MTBE	ND	1	0.96	143	ug/L
SMW-4	8/24/2012	cis-1,3-Dichloropropene	ND	1	0.57	NA	ug/L
SMW-4	8/24/2012	trans-1,3-Dichloropropene	ND	1	0.64	NA	ug/L
SMW-4	9/9/2013	Carbon tetrachloride	ND	1	0.46	5	ug/L
SMW-4	9/9/2013	Acetone	ND	10	1.7	14064	ug/L
SMW-4	9/9/2013	Chloroform	ND	1	0.47	100	ug/L
SMW-4	9/9/2013	Benzene	ND	1	0.46	5	ug/L
SMW-4	9/9/2013	1,1,1-Trichloroethane	ND	1	0.4	200	ug/L
SMW-4	9/9/2013	Bromomethane	ND	3	0.49	7.54	ug/L
SMW-4	9/9/2013	Chloromethane	ND	3	0.37	20.32	ug/L
SMW-4	9/9/2013	Dibromomethane	ND	1	0.52	8	ug/L
SMW-4	9/9/2013	Chloroethane	ND	2	0.3	20857	ug/L
SMW-4	9/9/2013	Vinyl Chloride	ND	1	0.3	2	ug/L
SMW-4	9/9/2013	Methylene Chloride	ND	3	0.35	5	ug/L
SMW-4	9/9/2013	Carbon Disulfide	ND	10	0.8	810	ug/L
SMW-4	9/9/2013	Bromoform	ND	1	0.37	32.9	ug/L
SMW-4	9/9/2013	Bromodichloromethane	ND	1	0.49	1.34	ug/L
SMW-4	9/9/2013	1,1-Dichloroethane	ND	1	0.33	25	ug/L
SMW-4	9/9/2013	1,1-Dichloroethene	ND	1	0.48	7	ug/L
SMW-4	9/9/2013	Trichlorofluoromethane	ND	1	0.47	1137	ug/L
SMW-4	9/9/2013	Dichlorodifluoromethane	ND	1	0.68	197	ug/L
SMW-4	9/9/2013	1,2-Dichloropropane	ND	1	0.33	5	ug/L
SMW-4	9/9/2013	2-Butanone	ND	10	1	5565	ug/L
SMW-4	9/9/2013	1,1,2-Trichloroethane	ND	1	0.42	5	ug/L
SMW-4	9/9/2013	Trichloroethene	ND	1	0.42	5	ug/L
SMW-4	9/9/2013	1,1,2,2-Tetrachloroethane	ND	2	0.52	10	ug/L
SMW-4	9/9/2013	1,2,3-Trichlorobenzene	ND	1	0.42	70	ug/L
SMW-4	9/9/2013	2-Chlorotoluene	ND	1	0.5	233	ug/L
SMW-4	9/9/2013	1,2,4-Trimethylbenzene	ND	1	0.51	56	ug/L
SMW-4	9/9/2013	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.35	0.0033	ug/L
SMW-4	9/9/2013	1,2,3-Trichloropropane	*ND*	*2*	0.4	0.0084	ug/L
SMW-4	9/9/2013	tert-Butylbenzene	ND	1	0.51	690	ug/L
SMW-4	9/9/2013	Isopropylbenzene	ND	1	0.52	447	ug/L
SMW-4	9/9/2013	p-Isopropyltoluene	ND	1	0.45	NA	ug/L
SMW-4	9/9/2013	Ethylbenzene	ND	1	0.45	700	ug/L
SMW-4	9/9/2013	Styrene	ND	1	0.58	100	ug/L
SMW-4	9/9/2013	n-Propylbenzene	ND	1	0.41	660	ug/L
SMW-4	9/9/2013	n-Butylbenzene	ND	3	0.41	1000	ug/L
SMW-4	9/9/2013	4-Chlorotoluene	ND	1	0.43	250	ug/L
SMW-4	9/9/2013	1,2-Dibromoethane	*ND*	*1*	0.45	0.05	ug/L
SMW-4	9/9/2013	1,2-Dichloroethane	ND	1	0.33	5	ug/L
SMW-4	9/9/2013	4-Methyl-2-Pentanone	ND	10	0.66	1243	ug/L
SMW-4	9/9/2013	1,3,5-Trimethylbenzene	ND	1	0.4	60	ug/L
SMW-4	9/9/2013	Bromobenzene	ND	1	0.57	62	ug/L
SMW-4	9/9/2013	Toluene	ND	1	0.44	1000	ug/L
SMW-4	9/9/2013	Chlorobenzene	ND	1	0.49	77.6	ug/L
SMW-4	9/9/2013	Dibromochloromethane	ND	1	0.5	1.68	ug/L
SMW-4	9/9/2013	Tetrachloroethene	ND	1	0.49	5	ug/L
SMW-4	9/9/2013	sec-Butylbenzene	ND	1	0.43	2000	ug/L
SMW-4	9/9/2013	1,3-Dichloropropane	ND	1	0.43	370	ug/L
SMW-4	9/9/2013	cis-1,2-Dichloroethene	ND	1	0.47	70	ug/L
SMW-4	9/9/2013	trans-1,2-Dichloroethene	ND	1	0.48	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/9/2013	1,1-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-4	9/9/2013	2-Hexanone	ND	10	1.3	38	ug/L
SMW-4	9/9/2013	2,2-Dichloropropane	ND	2	0.82	NA	ug/L
SMW-4	9/9/2013	1,1,1,2-Tetrachloroethane	ND	1	0.55	5.74	ug/L
SMW-4	9/9/2013	Xylenes, Total	ND	1.5	1.4	620	ug/L
SMW-4	9/9/2013	MTBE	ND	1	0.77	143	ug/L
SMW-4	9/9/2013	cis-1,3-Dichloropropene	ND	1	0.45	NA	ug/L
SMW-4	9/9/2013	trans-1,3-Dichloropropene	ND	1	0.44	NA	ug/L
SMW-4	9/11/2014	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-4	9/11/2014	Acetone	ND	10	4.9	14064	ug/L
SMW-4	9/11/2014	Chloroform	ND	1	0.32	100	ug/L
SMW-4	9/11/2014	Benzene	ND	1	0.15	5	ug/L
SMW-4	9/11/2014	1,1,1-Trichloroethane	ND	1	0.12	200	ug/L
SMW-4	9/11/2014	Bromomethane	ND	3	0.41	7.54	ug/L
SMW-4	9/11/2014	Chloromethane	ND	3	0.52	20.32	ug/L
SMW-4	9/11/2014	Dibromomethane	ND	1	0.19	8	ug/L
SMW-4	9/11/2014	Chloroethane	ND	2	0.48	20857	ug/L
SMW-4	9/11/2014	Vinyl Chloride	ND	1	0.46	2	ug/L
SMW-4	9/11/2014	Methylene Chloride	ND	3	0.27	5	ug/L
SMW-4	9/11/2014	Carbon Disulfide	ND	10	0.74	810	ug/L
SMW-4	9/11/2014	Bromoform	ND	1	0.25	32.9	ug/L
SMW-4	9/11/2014	Bromodichloromethane	ND	1	0.16	1.34	ug/L
SMW-4	9/11/2014	1,1-Dichloroethane	ND	1	0.28	25	ug/L
SMW-4	9/11/2014	1,1-Dichloroethene	ND	1	0.21	7	ug/L
SMW-4	9/11/2014	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-4	9/11/2014	Dichlorodifluoromethane	ND	1	0.23	197	ug/L
SMW-4	9/11/2014	1,2-Dichloropropane	ND	1	0.21	5	ug/L
SMW-4	9/11/2014	2-Butanone	ND	10	1.4	5565	ug/L
SMW-4	9/11/2014	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-4	9/11/2014	Trichloroethene	ND	1	0.19	5	ug/L
SMW-4	9/11/2014	1,1,2,2-Tetrachloroethane	ND	2	0.22	10	ug/L
SMW-4	9/11/2014	1,2,3-Trichlorobenzene	ND	1	0.18	70	ug/L
SMW-4	9/11/2014	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-4	9/11/2014	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-4	9/11/2014	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.22	0.0033	ug/L
SMW-4	9/11/2014	1,2,3-Trichloropropane	*ND*	*2*	0.19	0.0084	ug/L
SMW-4	9/11/2014	tert-Butylbenzene	ND	1	0.14	690	ug/L
SMW-4	9/11/2014	Isopropylbenzene	ND	1	0.16	447	ug/L
SMW-4	9/11/2014	p-Isopropyltoluene	ND	1	0.18	NA	ug/L
SMW-4	9/11/2014	Ethylbenzene	ND	1	0.13	700	ug/L
SMW-4	9/11/2014	Styrene	ND	1	0.12	100	ug/L
SMW-4	9/11/2014	n-Propylbenzene	ND	1	0.14	660	ug/L
SMW-4	9/11/2014	n-Butylbenzene	ND	3	0.21	1000	ug/L
SMW-4	9/11/2014	4-Chlorotoluene	ND	1	0.87	250	ug/L
SMW-4	9/11/2014	1,2-Dibromoethane	*ND*	*1*	0.1	0.05	ug/L
SMW-4	9/11/2014	1,2-Dichloroethane	ND	1	0.26	5	ug/L
SMW-4	9/11/2014	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-4	9/11/2014	1,3,5-Trimethylbenzene	ND	1	0.13	60	ug/L
SMW-4	9/11/2014	Bromobenzene	ND	1	0.18	62	ug/L
SMW-4	9/11/2014	Toluene	ND	1	0.17	1000	ug/L
SMW-4	9/11/2014	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-4	9/11/2014	Dibromochloromethane	ND	1	0.12	1.68	ug/L
SMW-4	9/11/2014	Tetrachloroethene	ND	1	0.2	5	ug/L
SMW-4	9/11/2014	sec-Butylbenzene	ND	1	0.15	2000	ug/L
SMW-4	9/11/2014	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-4	9/11/2014	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-4	9/11/2014	trans-1,2-Dichloroethene	ND	1	0.25	100	ug/L
SMW-4	9/11/2014	1,1-Dichloropropene	ND	1	0.23	NA	ug/L
SMW-4	9/11/2014	2-Hexanone	ND	10	0.86	38	ug/L
SMW-4	9/11/2014	2,2-Dichloropropane	ND	2	0.27	NA	ug/L
SMW-4	9/11/2014	1,1,1,2-Tetrachloroethane	ND	1	0.12	5.74	ug/L
SMW-4	9/11/2014	Xylenes, Total	ND	1.5	0.38	620	ug/L
SMW-4	9/11/2014	MTBE	ND	1	0.25	143	ug/L
SMW-4	9/11/2014	cis-1,3-Dichloropropene	ND	1	0.17	NA	ug/L
SMW-4	9/11/2014	trans-1,3-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-4	8/14/2015	Carbon tetrachloride	ND	1	0.078	5	ug/L
SMW-4	8/14/2015	Acetone	ND	10	0.94	14064	ug/L
SMW-4	8/14/2015	Chloroform	ND	1	0.21	100	ug/L
SMW-4	8/14/2015	Benzene	ND	1	0.065	5	ug/L
SMW-4	8/14/2015	1,1,1-Trichloroethane	ND	1	0.078	200	ug/L
SMW-4	8/14/2015	Bromomethane	ND	3	1.2	7.54	ug/L
SMW-4	8/14/2015	Chloromethane	ND	3	0.17	20.32	ug/L
SMW-4	8/14/2015	Dibromomethane	ND	1	0.23	8	ug/L
SMW-4	8/14/2015	Chloroethane	ND	2	0.1	20857	ug/L
SMW-4	8/14/2015	Vinyl Chloride	ND	1	0.13	2	ug/L
SMW-4	8/14/2015	Methylene Chloride	ND	3	0.36	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/14/2015	Carbon Disulfide	ND	10	0.67	810	ug/L
SMW-4	8/14/2015	Bromoform	ND	1	0.16	32.9	ug/L
SMW-4	8/14/2015	Bromodichloromethane	ND	1	0.09	1.34	ug/L
SMW-4	8/14/2015	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	8/14/2015	1,1-Dichloroethene	ND	1	0.099	7	ug/L
SMW-4	8/14/2015	Trichlorofluoromethane	ND	1	0.13	1137	ug/L
SMW-4	8/14/2015	Dichlorodifluoromethane	ND	1	0.69	197	ug/L
SMW-4	8/14/2015	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-4	8/14/2015	2-Butanone	ND	10	0.36	5565	ug/L
SMW-4	8/14/2015	1,1,2-Trichloroethane	ND	1	0.079	5	ug/L
SMW-4	8/14/2015	Trichloroethene	ND	1	0.16	5	ug/L
SMW-4	8/14/2015	1,1,2,2-Tetrachloroethane	ND	2	0.18	10	ug/L
SMW-4	8/14/2015	1,2,3-Trichlorobenzene	ND	1	0.27	70	ug/L
SMW-4	8/14/2015	2-Chlorotoluene	ND	1	0.079	233	ug/L
SMW-4	8/14/2015	1,2,4-Trimethylbenzene	ND	1	0.16	56	ug/L
SMW-4	8/14/2015	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.14	0.0033	ug/L
SMW-4	8/14/2015	1,2,3-Trichloropropane	*ND*	*2*	0.16	0.0084	ug/L
SMW-4	8/14/2015	tert-Butylbenzene	ND	1	0.13	690	ug/L
SMW-4	8/14/2015	Isopropylbenzene	ND	1	0.15	447	ug/L
SMW-4	8/14/2015	p-Isopropyltoluene	ND	1	0.19	NA	ug/L
SMW-4	8/14/2015	Ethylbenzene	ND	1	0.1	700	ug/L
SMW-4	8/14/2015	Styrene	ND	1	0.11	100	ug/L
SMW-4	8/14/2015	n-Propylbenzene	ND	1	0.16	660	ug/L
SMW-4	8/14/2015	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	8/14/2015	4-Chlorotoluene	ND	1	0.15	250	ug/L
SMW-4	8/14/2015	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-4	8/14/2015	1,2-Dichloroethane	ND	1	0.18	5	ug/L
SMW-4	8/14/2015	4-Methyl-2-Pentanone	ND	10	0.26	1243	ug/L
SMW-4	8/14/2015	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-4	8/14/2015	Bromobenzene	ND	1	0.11	62	ug/L
SMW-4	8/14/2015	Toluene	ND	1	0.11	1000	ug/L
SMW-4	8/14/2015	Chlorobenzene	ND	1	0.093	77.6	ug/L
SMW-4	8/14/2015	Dibromochloromethane	ND	1	0.097	1.68	ug/L
SMW-4	8/14/2015	Tetrachloroethene	ND	1	0.16	5	ug/L
SMW-4	8/14/2015	sec-Butylbenzene	ND	1	0.23	2000	ug/L
SMW-4	8/14/2015	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-4	8/14/2015	cis-1,2-Dichloroethene	ND	1	0.081	70	ug/L
SMW-4	8/14/2015	trans-1,2-Dichloroethene	ND	1	0.094	100	ug/L
SMW-4	8/14/2015	1,1-Dichloropropene	ND	1	0.12	NA	ug/L
SMW-4	8/14/2015	2-Hexanone	ND	10	0.48	38	ug/L
SMW-4	8/14/2015	2,2-Dichloropropane	ND	2	0.15	NA	ug/L
SMW-4	8/14/2015	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-4	8/14/2015	Xylenes, Total	ND	1.5	0.28	620	ug/L
SMW-4	8/14/2015	MTBE	ND	1	0.17	143	ug/L
SMW-4	8/14/2015	cis-1,3-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-4	8/14/2015	trans-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-4	9/7/2016	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-4	9/7/2016	Acetone	ND	10	4.9	14064	ug/L
SMW-4	9/7/2016	Chloroform	ND	1	0.089	100	ug/L
SMW-4	9/7/2016	Benzene	ND	1	0.096	5	ug/L
SMW-4	9/7/2016	1,1,1-Trichloroethane	ND	1	0.091	200	ug/L
SMW-4	9/7/2016	Bromomethane	ND	3	0.78	7.54	ug/L
SMW-4	9/7/2016	Chloromethane	ND	3	0.21	20.32	ug/L
SMW-4	9/7/2016	Dibromomethane	ND	1	0.12	8	ug/L
SMW-4	9/7/2016	Chloroethane	ND	2	0.19	20857	ug/L
SMW-4	9/7/2016	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-4	9/7/2016	Methylene Chloride	ND	3	0.19	5	ug/L
SMW-4	9/7/2016	Carbon Disulfide	ND	10	0.6	810	ug/L
SMW-4	9/7/2016	Bromoform	ND	1	0.1	32.9	ug/L
SMW-4	9/7/2016	Bromodichloromethane	ND	1	0.14	1.34	ug/L
SMW-4	9/7/2016	1,1-Dichloroethane	ND	1	0.11	25	ug/L
SMW-4	9/7/2016	1,1-Dichloroethene	ND	1	0.11	7	ug/L
SMW-4	9/7/2016	Trichlorofluoromethane	ND	1	0.2	1137	ug/L
SMW-4	9/7/2016	Dichlorodifluoromethane	ND	1	0.36	197	ug/L
SMW-4	9/7/2016	1,2-Dichloropropane	ND	1	0.11	5	ug/L
SMW-4	9/7/2016	2-Butanone	ND	10	0.74	5565	ug/L
SMW-4	9/7/2016	1,1,2-Trichloroethane	ND	1	0.13	5	ug/L
SMW-4	9/7/2016	Trichloroethene	ND	1	0.18	5	ug/L
SMW-4	9/7/2016	1,1,2,2-Tetrachloroethane	ND	2	0.13	10	ug/L
SMW-4	9/7/2016	1,2,3-Trichlorobenzene	ND	1	0.11	70	ug/L
SMW-4	9/7/2016	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/7/2016	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-4	9/7/2016	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.23	0.0033	ug/L
SMW-4	9/7/2016	1,2,3-Trichloropropane	*ND*	*2*	0.2	0.0084	ug/L
SMW-4	9/7/2016	tert-Butylbenzene	ND	1	0.12	690	ug/L
SMW-4	9/7/2016	Isopropylbenzene	ND	1	0.1	447	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/7/2016	p-Isopropyltoluene	ND	1	0.14	NA	ug/L
SMW-4	9/7/2016	Ethylbenzene	ND	1	0.11	700	ug/L
SMW-4	9/7/2016	Styrene	ND	1	0.11	100	ug/L
SMW-4	9/7/2016	n-Propylbenzene	ND	1	0.13	660	ug/L
SMW-4	9/7/2016	n-Butylbenzene	ND	3	0.16	1000	ug/L
SMW-4	9/7/2016	4-Chlorotoluene	ND	1	0.13	250	ug/L
SMW-4	9/7/2016	1,2-Dibromoethane	*ND*	*1*	0.11	0.05	ug/L
SMW-4	9/7/2016	1,2-Dichloroethane	ND	1	0.12	5	ug/L
SMW-4	9/7/2016	4-Methyl-2-Pentanone	ND	10	0.43	1243	ug/L
SMW-4	9/7/2016	1,3,5-Trimethylbenzene	ND	1	0.12	60	ug/L
SMW-4	9/7/2016	Bromobenzene	ND	1	0.098	62	ug/L
SMW-4	9/7/2016	Toluene	ND	1	0.12	1000	ug/L
SMW-4	9/7/2016	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-4	9/7/2016	Dibromochloromethane	ND	1	0.087	1.68	ug/L
SMW-4	9/7/2016	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	9/7/2016	sec-Butylbenzene	ND	1	0.12	2000	ug/L
SMW-4	9/7/2016	1,3-Dichloropropane	ND	1	0.16	370	ug/L
SMW-4	9/7/2016	cis-1,2-Dichloroethene	ND	1	0.12	70	ug/L
SMW-4	9/7/2016	trans-1,2-Dichloroethene	ND	1	0.4	100	ug/L
SMW-4	9/7/2016	1,1-Dichloropropene	ND	1	0.13	NA	ug/L
SMW-4	9/7/2016	2-Hexanone	ND	10	0.84	38	ug/L
SMW-4	9/7/2016	2,2-Dichloropropane	ND	2	0.17	NA	ug/L
SMW-4	9/7/2016	1,1,1,2-Tetrachloroethane	ND	1	0.11	5.74	ug/L
SMW-4	9/7/2016	Xylenes, Total	ND	1.5	0.37	620	ug/L
SMW-4	9/7/2016	MTBE	ND	1	0.21	143	ug/L
SMW-4	9/7/2016	cis-1,3-Dichloropropene	ND	1	0.11	NA	ug/L
SMW-4	9/7/2016	trans-1,3-Dichloropropene	ND	1	0.1	NA	ug/L
SMW-4	9/11/2017	Carbon tetrachloride	ND	1	0.11	5	ug/L
SMW-4	9/11/2017	Acetone	3.9	10	0.82	14064	ug/L
SMW-4	9/11/2017	Chloroform	ND	1	0.4	100	ug/L
SMW-4	9/11/2017	Benzene	ND	1	0.062	5	ug/L
SMW-4	9/11/2017	1,1,1-Trichloroethane	ND	1	0.073	200	ug/L
SMW-4	9/11/2017	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-4	9/11/2017	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-4	9/11/2017	Dibromomethane	ND	1	0.091	8	ug/L
SMW-4	9/11/2017	Chloroethane	ND	2	0.23	20857	ug/L
SMW-4	9/11/2017	Vinyl Chloride	ND	1	0.18	2	ug/L
SMW-4	9/11/2017	Methylene Chloride	ND	3	0.11	5	ug/L
SMW-4	9/11/2017	Carbon Disulfide	ND	10	0.4	810	ug/L
SMW-4	9/11/2017	Bromoform	ND	1	0.21	32.9	ug/L
SMW-4	9/11/2017	Bromodichloromethane	ND	1	0.18	1.34	ug/L
SMW-4	9/11/2017	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	9/11/2017	1,1-Dichloroethene	ND	1	0.081	7	ug/L
SMW-4	9/11/2017	Trichlorofluoromethane	ND	1	0.18	1137	ug/L
SMW-4	9/11/2017	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-4	9/11/2017	1,2-Dichloropropane	ND	1	0.1	5	ug/L
SMW-4	9/11/2017	2-Butanone	ND	10	1.1	5565	ug/L
SMW-4	9/11/2017	1,1,2-Trichloroethane	ND	1	0.14	5	ug/L
SMW-4	9/11/2017	Trichloroethene	ND	1	0.11	5	ug/L
SMW-4	9/11/2017	1,1,2,2-Tetrachloroethane	ND	2	0.14	10	ug/L
SMW-4	9/11/2017	1,2,3-Trichlorobenzene	ND	1	0.12	70	ug/L
SMW-4	9/11/2017	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/11/2017	1,2,4-Trimethylbenzene	ND	1	0.11	56	ug/L
SMW-4	9/11/2017	1,2-Dibromo-3-Chloropropane	*ND*	*2*	1.4	0.0033	ug/L
SMW-4	9/11/2017	1,2,3-Trichloropropane	*ND*	*2*	0.39	0.0084	ug/L
SMW-4	9/11/2017	tert-Butylbenzene	ND	1	0.1	690	ug/L
SMW-4	9/11/2017	Isopropylbenzene	ND	1	0.051	447	ug/L
SMW-4	9/11/2017	p-Isopropyltoluene	ND	1	0.096	NA	ug/L
SMW-4	9/11/2017	Ethylbenzene	ND	1	0.093	700	ug/L
SMW-4	9/11/2017	Styrene	ND	1	0.16	100	ug/L
SMW-4	9/11/2017	n-Propylbenzene	ND	1	0.074	660	ug/L
SMW-4	9/11/2017	n-Butylbenzene	ND	3	0.13	1000	ug/L
SMW-4	9/11/2017	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-4	9/11/2017	1,2-Dibromoethane	*ND*	*1*	0.13	0.05	ug/L
SMW-4	9/11/2017	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-4	9/11/2017	4-Methyl-2-Pentanone	ND	10	0.71	1243	ug/L
SMW-4	9/11/2017	1,3,5-Trimethylbenzene	ND	1	0.087	60	ug/L
SMW-4	9/11/2017	Bromobenzene	ND	1	0.14	62	ug/L
SMW-4	9/11/2017	Toluene	ND	1	0.064	1000	ug/L
SMW-4	9/11/2017	Chlorobenzene	ND	1	0.11	77.6	ug/L
SMW-4	9/11/2017	Dibromochloromethane	ND	1	0.072	1.68	ug/L
SMW-4	9/11/2017	Tetrachloroethene	ND	1	0.13	5	ug/L
SMW-4	9/11/2017	sec-Butylbenzene	ND	1	0.11	2000	ug/L
SMW-4	9/11/2017	1,3-Dichloropropane	ND	1	0.17	370	ug/L
SMW-4	9/11/2017	cis-1,2-Dichloroethene	ND	1	0.2	70	ug/L
SMW-4	9/11/2017	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	1,1-Dichloropropene	ND	1	0.093	NA	ug/L
SMW-4	9/11/2017	2-Hexanone	ND	10	0.66	38	ug/L
SMW-4	9/11/2017	2,2-Dichloropropane	ND	2	0.16	NA	ug/L
SMW-4	9/11/2017	1,1,1,2-Tetrachloroethane	ND	1	0.1	5.74	ug/L
SMW-4	9/11/2017	Xylenes, Total	ND	1.5	0.32	620	ug/L
SMW-4	9/11/2017	MTBE	ND	1	0.24	143	ug/L
SMW-4	9/11/2017	cis-1,3-Dichloropropene	ND	1	0.082	NA	ug/L
SMW-4	9/11/2017	trans-1,3-Dichloropropene	ND	1	0.22	NA	ug/L
SMW-4	9/12/2018	Carbon tetrachloride	ND	1	0.13	5	ug/L
SMW-4	9/12/2018	Acetone	4.5	10	0.79	14064	ug/L
SMW-4	9/12/2018	Chloroform	ND	1	0.4	100	ug/L
SMW-4	9/12/2018	Benzene	ND	1	0.17	5	ug/L
SMW-4	9/12/2018	1,1,1-Trichloroethane	ND	1	0.15	200	ug/L
SMW-4	9/12/2018	Bromomethane	ND	3	0.26	7.54	ug/L
SMW-4	9/12/2018	Chloromethane	ND	3	0.29	20.32	ug/L
SMW-4	9/12/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-4	9/12/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-4	9/12/2018	Vinyl Chloride	ND	1	0.11	2	ug/L
SMW-4	9/12/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-4	9/12/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-4	9/12/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-4	9/12/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-4	9/12/2018	1,1-Dichloroethane	ND	1	0.4	25	ug/L
SMW-4	9/12/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-4	9/12/2018	Trichlorofluoromethane	ND	1	0.17	1137	ug/L
SMW-4	9/12/2018	Dichlorodifluoromethane	ND	1	1	197	ug/L
SMW-4	9/12/2018	1,2-Dichloropropane	ND	1	0.15	5	ug/L
SMW-4	9/12/2018	2-Butanone	ND	10	1.3	5565	ug/L
SMW-4	9/12/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-4	9/12/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-4	9/12/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-4	9/12/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-4	9/12/2018	2-Chlorotoluene	ND	1	0.4	233	ug/L
SMW-4	9/12/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-4	9/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-4	9/12/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-4	9/12/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-4	9/12/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-4	9/12/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-4	9/12/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-4	9/12/2018	Styrene	ND	1	0.25	100	ug/L
SMW-4	9/12/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-4	9/12/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	9/12/2018	4-Chlorotoluene	ND	1	0.4	250	ug/L
SMW-4	9/12/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-4	9/12/2018	1,2-Dichloroethane	ND	1	0.4	5	ug/L
SMW-4	9/12/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-4	9/12/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-4	9/12/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-4	9/12/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-4	9/12/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-4	9/12/2018	1,4-Dioxane	*ND*	*10*	4.1	4.59	ug/L
SMW-4	9/12/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-4	9/12/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	9/12/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-4	9/12/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-4	9/12/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-4	9/12/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-4	9/12/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-4	9/12/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-4	9/12/2018	2,2-Dichloropropane	ND	2	0.18	NA	ug/L
SMW-4	9/12/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-4	9/12/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-4	9/12/2018	MTBE	ND	1	0.32	143	ug/L
SMW-4	9/12/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-4	9/12/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-4	12/6/2018	Carbon tetrachloride	ND	1	0.14	5	ug/L
SMW-4	12/6/2018	Acetone	ND	10	0.76	14064	ug/L
SMW-4	12/6/2018	Chloroform	ND	1	0.24	100	ug/L
SMW-4	12/6/2018	Benzene	ND	1	0.17	5	ug/L
SMW-4	12/6/2018	1,1,1-Trichloroethane	ND	1	0.16	200	ug/L
SMW-4	12/6/2018	Bromomethane	ND	3	0.27	7.54	ug/L
SMW-4	12/6/2018	Chloromethane	ND	3	0.32	20.32	ug/L
SMW-4	12/6/2018	Dibromomethane	ND	1	0.32	8	ug/L
SMW-4	12/6/2018	Chloroethane	ND	2	0.16	20857	ug/L
SMW-4	12/6/2018	Vinyl Chloride	ND	1	0.12	2	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	12/6/2018	Methylene Chloride	ND	3	0.21	5	ug/L
SMW-4	12/6/2018	Carbon Disulfide	ND	10	0.39	810	ug/L
SMW-4	12/6/2018	Bromoform	ND	1	0.32	32.9	ug/L
SMW-4	12/6/2018	Bromodichloromethane	ND	1	0.28	1.34	ug/L
SMW-4	12/6/2018	1,1-Dichloroethane	ND	1	0.18	25	ug/L
SMW-4	12/6/2018	1,1-Dichloroethene	ND	1	0.12	7	ug/L
SMW-4	12/6/2018	Trichlorofluoromethane	ND	1	0.14	1137	ug/L
SMW-4	12/6/2018	Dichlorodifluoromethane	ND	1	0.26	197	ug/L
SMW-4	12/6/2018	1,2-Dichloropropane	ND	1	0.17	5	ug/L
SMW-4	12/6/2018	2-Butanone	ND	10	1.4	5565	ug/L
SMW-4	12/6/2018	1,1,2-Trichloroethane	ND	1	0.23	5	ug/L
SMW-4	12/6/2018	Trichloroethene	ND	1	0.26	5	ug/L
SMW-4	12/6/2018	1,1,2,2-Tetrachloroethane	ND	2	0.33	10	ug/L
SMW-4	12/6/2018	1,2,3-Trichlorobenzene	ND	1	0.28	70	ug/L
SMW-4	12/6/2018	2-Chlorotoluene	ND	1	0.25	233	ug/L
SMW-4	12/6/2018	1,2,4-Trimethylbenzene	ND	1	0.25	56	ug/L
SMW-4	12/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.47	0.0033	ug/L
SMW-4	12/6/2018	1,2,3-Trichloropropane	*ND*	*2*	0.57	0.0084	ug/L
SMW-4	12/6/2018	tert-Butylbenzene	ND	1	0.22	690	ug/L
SMW-4	12/6/2018	Isopropylbenzene	ND	1	0.22	447	ug/L
SMW-4	12/6/2018	p-Isopropyltoluene	ND	1	0.24	NA	ug/L
SMW-4	12/6/2018	Ethylbenzene	ND	1	0.22	700	ug/L
SMW-4	12/6/2018	Styrene	ND	1	0.25	100	ug/L
SMW-4	12/6/2018	n-Propylbenzene	ND	1	0.24	660	ug/L
SMW-4	12/6/2018	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	12/6/2018	4-Chlorotoluene	ND	1	0.28	250	ug/L
SMW-4	12/6/2018	1,2-Dibromoethane	*ND*	*1*	0.23	0.05	ug/L
SMW-4	12/6/2018	1,2-Dichloroethane	ND	1	0.19	5	ug/L
SMW-4	12/6/2018	4-Methyl-2-Pentanone	ND	10	0.45	1243	ug/L
SMW-4	12/6/2018	1,3,5-Trimethylbenzene	ND	1	0.23	60	ug/L
SMW-4	12/6/2018	Bromobenzene	ND	1	0.32	62	ug/L
SMW-4	12/6/2018	Toluene	ND	1	0.17	1000	ug/L
SMW-4	12/6/2018	Chlorobenzene	ND	1	0.29	77.6	ug/L
SMW-4	12/6/2018	1,4-Dioxane	*ND*	*50*	40	4.59	ug/L
SMW-4	12/6/2018	Dibromochloromethane	ND	1	0.24	1.68	ug/L
SMW-4	12/6/2018	Tetrachloroethene	ND	1	0.15	5	ug/L
SMW-4	12/6/2018	sec-Butylbenzene	ND	1	0.2	2000	ug/L
SMW-4	12/6/2018	1,3-Dichloropropane	ND	1	0.27	370	ug/L
SMW-4	12/6/2018	cis-1,2-Dichloroethene	ND	1	0.38	70	ug/L
SMW-4	12/6/2018	trans-1,2-Dichloroethene	ND	1	0.18	100	ug/L
SMW-4	12/6/2018	1,1-Dichloropropene	ND	1	0.16	NA	ug/L
SMW-4	12/6/2018	2-Hexanone	ND	10	0.91	38	ug/L
SMW-4	12/6/2018	2,2-Dichloropropane	ND	2	0.23	NA	ug/L
SMW-4	12/6/2018	1,1,1,2-Tetrachloroethane	ND	1	0.25	5.74	ug/L
SMW-4	12/6/2018	Xylenes, Total	ND	1.5	0.64	620	ug/L
SMW-4	12/6/2018	MTBE	ND	1	0.46	143	ug/L
SMW-4	12/6/2018	cis-1,3-Dichloropropene	ND	1	0.3	NA	ug/L
SMW-4	12/6/2018	trans-1,3-Dichloropropene	ND	1	0.28	NA	ug/L
SMW-4	8/13/2019	1,1,1,2-Tetrachloroethane	ND	1	0.206062	5.74	ug/L
SMW-4	8/13/2019	1,1,1-Trichloroethane	ND	1	0.172922	200	ug/L
SMW-4	8/13/2019	1,1,2,2-Tetrachloroethane	ND	2	0.548434	10	ug/L
SMW-4	8/13/2019	1,1,2-Trichloroethane	ND	1	0.21583	5	ug/L
SMW-4	8/13/2019	1,1-Dichloroethane	ND	1	0.140859	25	ug/L
SMW-4	8/13/2019	1,1-Dichloroethene	ND	1	0.205388	7	ug/L
SMW-4	8/13/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
SMW-4	8/13/2019	1,2,3-Trichlorobenzene	ND	1	0.298921	70	ug/L
SMW-4	8/13/2019	1,2,3-Trichloropropane	*ND*	*2*	0.297287	0.0084	ug/L
SMW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	1	0.19552	70	ug/L
SMW-4	8/13/2019	1,2,4-Trimethylbenzene	ND	1	0.213199	56	ug/L
SMW-4	8/13/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.327295	0.0033	ug/L
SMW-4	8/13/2019	1,2-Dibromoethane	*ND*	*1*	0.165376	0.05	ug/L
SMW-4	8/13/2019	1,2-Dichlorobenzene	ND	1	0.297198	600	ug/L
SMW-4	8/13/2019	1,2-Dichloroethane	ND	1	0.194638	5	ug/L
SMW-4	8/13/2019	1,2-Dichloropropane	ND	1	0.20893	5	ug/L
SMW-4	8/13/2019	1,3,5-Trimethylbenzene	ND	1	0.18866	60	ug/L
SMW-4	8/13/2019	1,3-Dichlorobenzene	ND	1	0.248542	N/A	ug/L
SMW-4	8/13/2019	1,3-Dichloropropane	ND	1	0.200728	370	ug/L
SMW-4	8/13/2019	1,4-Dichlorobenzene	ND	1	0.294981	75	ug/L
SMW-4	8/13/2019	1-Methylnaphthalene	ND	4	0.314954	NA	ug/L
SMW-4	8/13/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
SMW-4	8/13/2019	2-Butanone	ND	10	2.089417	5565	ug/L
SMW-4	8/13/2019	2-Chlorotoluene	ND	1	0.245473	233	ug/L
SMW-4	8/13/2019	2-Hexanone	ND	10	1.547192	38	ug/L
SMW-4	8/13/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
SMW-4	8/13/2019	4-Chlorotoluene	ND	1	0.23484	250	ug/L
SMW-4	8/13/2019	p-Isopropyltoluene	ND	1	0.217289	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/13/2019	4-Methyl-2-Pentanone	ND	10	0.713895	1243	ug/L
SMW-4	8/13/2019	Acetone	ND	10	1.199396	14064	ug/L
SMW-4	8/13/2019	Benzene	ND	1	0.166639	5	ug/L
SMW-4	8/13/2019	Bromobenzene	ND	1	0.244727	62	ug/L
SMW-4	8/13/2019	Bromodichloromethane	ND	1	0.134092	1.34	ug/L
SMW-4	8/13/2019	Bromoform	ND	1	0.288663	32.9	ug/L
SMW-4	8/13/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
SMW-4	8/13/2019	Carbon Disulfide	ND	10	0.452557	810	ug/L
SMW-4	8/13/2019	Carbon tetrachloride	ND	1	0.140404	5	ug/L
SMW-4	8/13/2019	Chlorobenzene	ND	1	0.193853	77.6	ug/L
SMW-4	8/13/2019	Chloroethane	ND	2	0.177803	20857	ug/L
SMW-4	8/13/2019	Chloroform	ND	1	0.121891	100	ug/L
SMW-4	8/13/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
SMW-4	8/13/2019	cis-1,2-Dichloroethene	ND	1	0.190115	70	ug/L
SMW-4	8/13/2019	cis-1,3-Dichloropropene	ND	1	0.138488	NA	ug/L
SMW-4	8/13/2019	Dibromochloromethane	ND	1	0.238784	1.68	ug/L
SMW-4	8/13/2019	Dibromomethane	ND	1	0.209209	8	ug/L
SMW-4	8/13/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
SMW-4	8/13/2019	Ethylbenzene	ND	1	0.132341	700	ug/L
SMW-4	8/13/2019	Hexachlorobutadiene	ND	1	0.309875	1.39	ug/L
SMW-4	8/13/2019	Isopropylbenzene	ND	1	0.191522	447	ug/L
SMW-4	8/13/2019	MTBE	ND	1	0.456095	143	ug/L
SMW-4	8/13/2019	Methylene Chloride	ND	3	0.154501	5	ug/L
SMW-4	8/13/2019	Naphthalene	ND	2	0.275071	30	ug/L
SMW-4	8/13/2019	n-Butylbenzene	ND	3	0.22757	1000	ug/L
SMW-4	8/13/2019	n-Propylbenzene	ND	1	0.214308	660	ug/L
SMW-4	8/13/2019	sec-Butylbenzene	ND	1	0.247731	2000	ug/L
SMW-4	8/13/2019	Styrene	ND	1	0.191323	100	ug/L
SMW-4	8/13/2019	tert-Butylbenzene	ND	1	0.206985	690	ug/L
SMW-4	8/13/2019	Tetrachloroethene	ND	1	0.149525	5	ug/L
SMW-4	8/13/2019	Toluene	ND	1	0.350436	1000	ug/L
SMW-4	8/13/2019	trans-1,2-Dichloroethene	ND	1	0.179524	100	ug/L
SMW-4	8/13/2019	trans-1,3-Dichloropropene	ND	1	0.166648	NA	ug/L
SMW-4	8/13/2019	Trichloroethene	ND	1	0.166272	5	ug/L
SMW-4	8/13/2019	Trichlorofluoromethane	ND	1	0.189048	1137	ug/L
SMW-4	8/13/2019	Vinyl Chloride	ND	1	0.179099	2	ug/L
SMW-4	8/13/2019	Xylenes, Total	ND	1.5	0.454415	620	ug/L
SMW-4	9/20/2020	1,1,1,2-Tetrachloroethane	ND	1	0.27	5.74	ug/L
SMW-4	9/20/2020	1,1,1-Trichloroethane	ND	1	0.3	200	ug/L
SMW-4	9/20/2020	1,1,2,2-Tetrachloroethane	ND	2	0.27	10	ug/L
SMW-4	9/20/2020	1,1,2-Trichloroethane	ND	1	0.19	5	ug/L
SMW-4	9/20/2020	1,1-Dichloroethane	ND	1	0.27	25	ug/L
SMW-4	9/20/2020	1,1-Dichloroethene	ND	1	0.13	7	ug/L
SMW-4	9/20/2020	1,1-Dichloropropene	ND	1	0.18	NA	ug/L
SMW-4	9/20/2020	1,2,3-Trichlorobenzene	ND	1	0.13	70	ug/L
SMW-4	9/20/2020	1,2,3-Trichloropropane	*ND*	*2*	0.44	0.0084	ug/L
SMW-4	9/20/2020	1,2,4-Trichlorobenzene	ND	1	0.24	70	ug/L
SMW-4	9/20/2020	1,2,4-Trimethylbenzene	ND	1	0.12	56	ug/L
SMW-4	9/20/2020	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.59	0.0033	ug/L
SMW-4	9/20/2020	1,2-Dibromoethane	*ND*	*1*	0.3	0.05	ug/L
SMW-4	9/20/2020	1,2-Dichlorobenzene	ND	1	0.15	600	ug/L
SMW-4	9/20/2020	1,2-Dichloroethane	ND	1	0.22	5	ug/L
SMW-4	9/20/2020	1,2-Dichloropropane	ND	1	0.13	5	ug/L
SMW-4	9/20/2020	1,3,5-Trimethylbenzene	ND	1	0.18	60	ug/L
SMW-4	9/20/2020	1,3-Dichlorobenzene	ND	1	0.16	N/A	ug/L
SMW-4	9/20/2020	1,3-Dichloropropane	ND	1	0.18	370	ug/L
SMW-4	9/20/2020	1,4-Dichlorobenzene	ND	1	0.21	75	ug/L
SMW-4	9/20/2020	1-Methylnaphthalene	ND	4	0.84	NA	ug/L
SMW-4	9/20/2020	2,2-Dichloropropane	ND	2	0.26	NA	ug/L
SMW-4	9/20/2020	2-Butanone	ND	10	1.1	5565	ug/L
SMW-4	9/20/2020	2-Chlorotoluene	ND	1	0.13	233	ug/L
SMW-4	9/20/2020	2-Hexanone	ND	10	1.8	38	ug/L
SMW-4	9/20/2020	2-Methylnaphthalene	*ND*	*4*	0.69		ug/L
SMW-4	9/20/2020	4-Chlorotoluene	ND	1	0.51	250	ug/L
SMW-4	9/20/2020	p-Isopropyltoluene	ND	1	0.2	NA	ug/L
SMW-4	9/20/2020	4-Methyl-2-Pentanone	ND	10	1.1	1243	ug/L
SMW-4	9/20/2020	Acetone	ND	10	2.3	14064	ug/L
SMW-4	9/20/2020	Benzene	ND	1	0.23	5	ug/L
SMW-4	9/20/2020	Bromobenzene	ND	1	0.28	62	ug/L
SMW-4	9/20/2020	Bromodichloromethane	ND	1	0.2	1.34	ug/L
SMW-4	9/20/2020	Bromoform	ND	1	0.31	32.9	ug/L
SMW-4	9/20/2020	Bromomethane	ND	3	1.6	7.54	ug/L
SMW-4	9/20/2020	Carbon Disulfide	ND	10	0.44	810	ug/L
SMW-4	9/20/2020	Carbon tetrachloride	ND	1	0.18	5	ug/L
SMW-4	9/20/2020	Chlorobenzene	ND	1	0.14	77.6	ug/L
SMW-4	9/20/2020	Chloroethane	ND	2	0.38	20857	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/20/2020	Chloroform	ND	1	0.13	100	ug/L
SMW-4	9/20/2020	Chloromethane	ND	3	0.4	20.32	ug/L
SMW-4	9/20/2020	cis-1,2-Dichloroethene	ND	1	0.39	70	ug/L
SMW-4	9/20/2020	cis-1,3-Dichloropropene	ND	1	0.36	NA	ug/L
SMW-4	9/20/2020	Dibromochloromethane	ND	1	0.28	1.68	ug/L
SMW-4	9/20/2020	Dibromomethane	ND	1	0.31	8	ug/L
SMW-4	9/20/2020	Dichlorodifluoromethane	ND	1	0.44	197	ug/L
SMW-4	9/20/2020	Ethylbenzene	ND	1	0.21	700	ug/L
SMW-4	9/20/2020	Hexachlorobutadiene	ND	1	0.33	1.39	ug/L
SMW-4	9/20/2020	Isopropylbenzene	ND	1	0.18	447	ug/L
SMW-4	9/20/2020	MTBE	ND	1	0.39	143	ug/L
SMW-4	9/20/2020	Methylene Chloride	ND	3	0.4	5	ug/L
SMW-4	9/20/2020	n-Butylbenzene	ND	3	0.25	1000	ug/L
SMW-4	9/20/2020	n-Propylbenzene	ND	1	0.18	660	ug/L
SMW-4	9/20/2020	Naphthalene	ND	2	0.28	30	ug/L
SMW-4	9/20/2020	sec-Butylbenzene	ND	1	0.61	2000	ug/L
SMW-4	9/20/2020	Styrene	ND	1	0.13	100	ug/L
SMW-4	9/20/2020	tert-Butylbenzene	ND	1	0.24	690	ug/L
SMW-4	9/20/2020	Tetrachloroethene	ND	1	0.36	5	ug/L
SMW-4	9/20/2020	Toluene	ND	1	0.2	1000	ug/L
SMW-4	9/20/2020	trans-1,2-Dichloroethene	ND	1	0.49	100	ug/L
SMW-4	9/20/2020	trans-1,3-Dichloropropene	ND	1	0.34	NA	ug/L
SMW-4	9/20/2020	Trichloroethene	ND	1	0.2	5	ug/L
SMW-4	9/20/2020	Trichlorofluoromethane	ND	1	0.092	1137	ug/L
SMW-4	9/20/2020	Vinyl Chloride	ND	1	0.2	2	ug/L
SMW-4	9/20/2020	Xylenes, Total	ND	1.5	0.55	620	ug/L
STP-1 to EP-2	9/5/2013	Carbon tetrachloride	*ND*	*10*	4.6	5	ug/L
STP-1 to EP-2	9/5/2013	Acetone	2200	500	86	14064	ug/L
STP-1 to EP-2	9/5/2013	Chloroform	ND	10	4.7	100	ug/L
STP-1 to EP-2	9/5/2013	Benzene	**33**	10	4.6	5	ug/L
STP-1 to EP-2	9/5/2013	1,1,1-Trichloroethane	ND	10	4	200	ug/L
STP-1 to EP-2	9/5/2013	Bromomethane	*ND*	*30*	4.9	7.54	ug/L
STP-1 to EP-2	9/5/2013	Chloromethane	*ND*	*30*	3.7	20.32	ug/L
STP-1 to EP-2	9/5/2013	Dibromomethane	*ND*	*10*	5.2	8	ug/L
STP-1 to EP-2	9/5/2013	Chloroethane	ND	20	3	20857	ug/L
STP-1 to EP-2	9/5/2013	Vinyl Chloride	*ND*	*10*	3	2	ug/L
STP-1 to EP-2	9/5/2013	Methylene Chloride	*ND*	*30*	3.5	5	ug/L
STP-1 to EP-2	9/5/2013	Carbon Disulfide	ND	100	8	810	ug/L
STP-1 to EP-2	9/5/2013	Bromoform	ND	10	3.7	32.9	ug/L
STP-1 to EP-2	9/5/2013	Bromodichloromethane	*ND*	*10*	4.9	1.34	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloroethane	ND	10	3.3	25	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloroethene	*ND*	*10*	4.8	7	ug/L
STP-1 to EP-2	9/5/2013	Trichlorofluoromethane	ND	10	4.7	1137	ug/L
STP-1 to EP-2	9/5/2013	Dichlorodifluoromethane	ND	10	6.8	197	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichloropropane	*ND*	*10*	3.3	5	ug/L
STP-1 to EP-2	9/5/2013	2-Butanone	260	100	10	5565	ug/L
STP-1 to EP-2	9/5/2013	1,1,2-Trichloroethane	*ND*	*10*	4.2	5	ug/L
STP-1 to EP-2	9/5/2013	Trichloroethene	*ND*	*10*	4.2	5	ug/L
STP-1 to EP-2	9/5/2013	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.2	10	ug/L
STP-1 to EP-2	9/5/2013	1,2,3-Trichlorobenzene	ND	10	4.2	70	ug/L
STP-1 to EP-2	9/5/2013	Hexachlorobutadiene	*ND*	*10*	4.1	1.39	ug/L
STP-1 to EP-2	9/5/2013	1-Methylnaphthalene	ND	40	4.1	NA	ug/L
STP-1 to EP-2	9/5/2013	Naphthalene	ND	20	2.9	30	ug/L
STP-1 to EP-2	9/5/2013	2-Methylnaphthalene	*ND*	*40*	3.9		ug/L
STP-1 to EP-2	9/5/2013	2-Chlorotoluene	ND	10	5	233	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichlorobenzene	ND	10	4.3	600	ug/L
STP-1 to EP-2	9/5/2013	1,2,4-Trimethylbenzene	ND	10	5.1	56	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dibromo-3-Chloropropane	*ND*	*20*	3.5	0.0033	ug/L
STP-1 to EP-2	9/5/2013	1,2,3-Trichloropropane	*ND*	*20*	4	0.0084	ug/L
STP-1 to EP-2	9/5/2013	tert-Butylbenzene	ND	10	5.1	690	ug/L
STP-1 to EP-2	9/5/2013	Isopropylbenzene	ND	10	5.2	447	ug/L
STP-1 to EP-2	9/5/2013	p-Isopropyltoluene	ND	10	4.5	NA	ug/L
STP-1 to EP-2	9/5/2013	Ethylbenzene	ND	10	4.5	700	ug/L
STP-1 to EP-2	9/5/2013	Styrene	ND	10	5.8	100	ug/L
STP-1 to EP-2	9/5/2013	n-Propylbenzene	ND	10	4.1	660	ug/L
STP-1 to EP-2	9/5/2013	n-Butylbenzene	ND	30	4.1	1000	ug/L
STP-1 to EP-2	9/5/2013	4-Chlorotoluene	ND	10	4.3	250	ug/L
STP-1 to EP-2	9/5/2013	1,4-Dichlorobenzene	ND	10	4.5	75	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dibromoethane	*ND*	*10*	4.5	0.05	ug/L
STP-1 to EP-2	9/5/2013	1,2-Dichloroethane	*ND*	*10*	3.3	5	ug/L
STP-1 to EP-2	9/5/2013	4-Methyl-2-Pentanone	ND	100	6.6	1243	ug/L
STP-1 to EP-2	9/5/2013	1,3,5-Trimethylbenzene	ND	10	4	60	ug/L
STP-1 to EP-2	9/5/2013	Bromobenzene	ND	10	5.7	62	ug/L
STP-1 to EP-2	9/5/2013	Toluene	13	10	4.4	1000	ug/L
STP-1 to EP-2	9/5/2013	Chlorobenzene	ND	10	4.9	77.6	ug/L
STP-1 to EP-2	9/5/2013	1,2,4-Trichlorobenzene	ND	10	3.9	70	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/5/2013	Dibromochloromethane	*ND*	*10*	5	1.68	ug/L
STP-1 to EP-2	9/5/2013	Tetrachloroethene	*ND*	*10*	4.9	5	ug/L
STP-1 to EP-2	9/5/2013	sec-Butylbenzene	ND	10	4.3	2000	ug/L
STP-1 to EP-2	9/5/2013	1,3-Dichloropropane	ND	10	4.3	370	ug/L
STP-1 to EP-2	9/5/2013	cis-1,2-Dichloroethene	ND	10	4.7	70	ug/L
STP-1 to EP-2	9/5/2013	trans-1,2-Dichloroethene	ND	10	4.8	100	ug/L
STP-1 to EP-2	9/5/2013	1,3-Dichlorobenzene	ND	10	4.8	N/A	ug/L
STP-1 to EP-2	9/5/2013	1,1-Dichloropropene	ND	10	4.4	NA	ug/L
STP-1 to EP-2	9/5/2013	2-Hexanone	*ND*	*100*	13	38	ug/L
STP-1 to EP-2	9/5/2013	2,2-Dichloropropane	ND	20	8.2	NA	ug/L
STP-1 to EP-2	9/5/2013	1,1,1,2-Tetrachloroethane	*ND*	*10*	5.5	5.74	ug/L
STP-1 to EP-2	9/5/2013	Xylenes, Total	ND	15	14	620	ug/L
STP-1 to EP-2	9/5/2013	MTBE	ND	10	7.7	143	ug/L
STP-1 to EP-2	9/5/2013	cis-1,3-Dichloropropene	ND	10	4.5	NA	ug/L
STP-1 to EP-2	9/5/2013	trans-1,3-Dichloropropene	ND	10	4.4	NA	ug/L
STP-1 to EP-2	9/10/2014	Carbon tetrachloride	ND	2	0.28	5	ug/L
STP-1 to EP-2	9/10/2014	Acetone	1300	200	99	14064	ug/L
STP-1 to EP-2	9/10/2014	Chloroform	ND	2	0.63	100	ug/L
STP-1 to EP-2	9/10/2014	Benzene	**18**	2	0.31	5	ug/L
STP-1 to EP-2	9/10/2014	1,1,1-Trichloroethane	ND	2	0.24	200	ug/L
STP-1 to EP-2	9/10/2014	Bromomethane	ND	6	0.83	7.54	ug/L
STP-1 to EP-2	9/10/2014	Chloromethane	ND	6	1	20.32	ug/L
STP-1 to EP-2	9/10/2014	Dibromomethane	ND	2	0.38	8	ug/L
STP-1 to EP-2	9/10/2014	Chloroethane	ND	4	0.95	20857	ug/L
STP-1 to EP-2	9/10/2014	Vinyl Chloride	ND	2	0.91	2	ug/L
STP-1 to EP-2	9/10/2014	Methylene Chloride	*ND*	*6*	0.53	5	ug/L
STP-1 to EP-2	9/10/2014	Carbon Disulfide	58	20	1.5	810	ug/L
STP-1 to EP-2	9/10/2014	Bromoform	ND	2	0.5	32.9	ug/L
STP-1 to EP-2	9/10/2014	Bromodichloromethane	*ND*	*2*	0.33	1.34	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloroethane	ND	2	0.57	25	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloroethene	ND	2	0.43	7	ug/L
STP-1 to EP-2	9/10/2014	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
STP-1 to EP-2	9/10/2014	Dichlorodifluoromethane	ND	2	0.47	197	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichloropropane	ND	2	0.42	5	ug/L
STP-1 to EP-2	9/10/2014	2-Butanone	160	20	2.8	5565	ug/L
STP-1 to EP-2	9/10/2014	1,1,2-Trichloroethane	ND	2	0.28	5	ug/L
STP-1 to EP-2	9/10/2014	Trichloroethene	ND	2	0.39	5	ug/L
STP-1 to EP-2	9/10/2014	1,1,2,2-Tetrachloroethane	ND	4	0.45	10	ug/L
STP-1 to EP-2	9/10/2014	1,2,3-Trichlorobenzene	ND	2	0.37	70	ug/L
STP-1 to EP-2	9/10/2014	2-Chlorotoluene	ND	2	0.26	233	ug/L
STP-1 to EP-2	9/10/2014	1,2,4-Trimethylbenzene	ND	2	0.25	56	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.43	0.0033	ug/L
STP-1 to EP-2	9/10/2014	1,2,3-Trichloropropane	*ND*	*4*	0.38	0.0084	ug/L
STP-1 to EP-2	9/10/2014	tert-Butylbenzene	ND	2	0.27	690	ug/L
STP-1 to EP-2	9/10/2014	Isopropylbenzene	ND	2	0.32	447	ug/L
STP-1 to EP-2	9/10/2014	p-Isopropyltoluene	ND	2	0.35	NA	ug/L
STP-1 to EP-2	9/10/2014	Ethylbenzene	ND	2	0.25	700	ug/L
STP-1 to EP-2	9/10/2014	Styrene	ND	2	0.23	100	ug/L
STP-1 to EP-2	9/10/2014	n-Propylbenzene	ND	2	0.28	660	ug/L
STP-1 to EP-2	9/10/2014	n-Butylbenzene	ND	6	0.43	1000	ug/L
STP-1 to EP-2	9/10/2014	4-Chlorotoluene	ND	2	1.7	250	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dibromoethane	*ND*	*2*	0.2	0.05	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichloroethane	ND	2	0.53	5	ug/L
STP-1 to EP-2	9/10/2014	4-Methyl-2-Pentanone	ND	20	2.2	1243	ug/L
STP-1 to EP-2	9/10/2014	1,3,5-Trimethylbenzene	ND	2	0.26	60	ug/L
STP-1 to EP-2	9/10/2014	Bromobenzene	ND	2	0.36	62	ug/L
STP-1 to EP-2	9/10/2014	Toluene	ND	2	0.34	1000	ug/L
STP-1 to EP-2	9/10/2014	Chlorobenzene	ND	2	0.28	77.6	ug/L
STP-1 to EP-2	9/10/2014	Dibromochloromethane	*ND*	*2*	0.24	1.68	ug/L
STP-1 to EP-2	9/10/2014	Tetrachloroethene	ND	2	0.4	5	ug/L
STP-1 to EP-2	9/10/2014	sec-Butylbenzene	ND	2	0.31	2000	ug/L
STP-1 to EP-2	9/10/2014	1,3-Dichloropropane	ND	2	0.36	370	ug/L
STP-1 to EP-2	9/10/2014	cis-1,2-Dichloroethene	ND	2	0.24	70	ug/L
STP-1 to EP-2	9/10/2014	trans-1,2-Dichloroethene	ND	2	0.5	100	ug/L
STP-1 to EP-2	9/10/2014	1,1-Dichloropropene	ND	2	0.46	NA	ug/L
STP-1 to EP-2	9/10/2014	2-Hexanone	ND	20	1.7	38	ug/L
STP-1 to EP-2	9/10/2014	2,2-Dichloropropane	ND	4	0.53	NA	ug/L
STP-1 to EP-2	9/10/2014	1,1,1,2-Tetrachloroethane	ND	2	0.24	5.74	ug/L
STP-1 to EP-2	9/10/2014	Xylenes, Total	ND	3	0.75	620	ug/L
STP-1 to EP-2	9/10/2014	MTBE	ND	2	0.5	143	ug/L
STP-1 to EP-2	9/10/2014	cis-1,3-Dichloropropene	ND	2	0.34	NA	ug/L
STP-1 to EP-2	9/10/2014	trans-1,3-Dichloropropene	ND	2	0.36	NA	ug/L
STP-1 to EP-2	8/24/2015	Carbon tetrachloride	ND	2	0.16	5	ug/L
STP-1 to EP-2	8/24/2015	Acetone	250	200	19	14064	ug/L
STP-1 to EP-2	8/24/2015	Chloroform	ND	2	0.43	100	ug/L
STP-1 to EP-2	8/24/2015	Benzene	ND	2	0.13	5	ug/L

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APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/24/2015	1,1,1-Trichloroethane	ND	2	0.16	200	ug/L
STP-1 to EP-2	8/24/2015	Bromomethane	ND	6	2.3	7.54	ug/L
STP-1 to EP-2	8/24/2015	Chloromethane	ND	6	0.35	20.32	ug/L
STP-1 to EP-2	8/24/2015	Dibromomethane	ND	2	0.47	8	ug/L
STP-1 to EP-2	8/24/2015	Chloroethane	ND	4	0.21	20857	ug/L
STP-1 to EP-2	8/24/2015	Vinyl Chloride	ND	2	0.25	2	ug/L
STP-1 to EP-2	8/24/2015	Methylene Chloride	*ND*	*6*	0.72	5	ug/L
STP-1 to EP-2	8/24/2015	Carbon Disulfide	ND	20	1.3	810	ug/L
STP-1 to EP-2	8/24/2015	Bromoform	ND	2	0.32	32.9	ug/L
STP-1 to EP-2	8/24/2015	Bromodichloromethane	*ND*	*2*	0.18	1.34	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloroethane	ND	2	0.8	25	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloroethene	ND	2	0.2	7	ug/L
STP-1 to EP-2	8/24/2015	Trichlorofluoromethane	ND	2	0.25	1137	ug/L
STP-1 to EP-2	8/24/2015	Dichlorodifluoromethane	ND	2	1.4	197	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichloropropane	ND	2	0.3	5	ug/L
STP-1 to EP-2	8/24/2015	2-Butanone	ND	20	0.73	5565	ug/L
STP-1 to EP-2	8/24/2015	1,1,2-Trichloroethane	ND	2	0.16	5	ug/L
STP-1 to EP-2	8/24/2015	Trichloroethene	ND	2	0.33	5	ug/L
STP-1 to EP-2	8/24/2015	1,1,2,2-Tetrachloroethane	ND	4	0.36	10	ug/L
STP-1 to EP-2	8/24/2015	1,2,3-Trichlorobenzene	ND	2	0.53	70	ug/L
STP-1 to EP-2	8/24/2015	Hexachlorobutadiene	*ND*	*2*	0.5	1.39	ug/L
STP-1 to EP-2	8/24/2015	1-Methylnaphthalene	ND	8	1.1	NA	ug/L
STP-1 to EP-2	8/24/2015	Naphthalene	ND	4	0.44	30	ug/L
STP-1 to EP-2	8/24/2015	2-Methylnaphthalene	*ND*	*8*	1.2		ug/L
STP-1 to EP-2	8/24/2015	2-Chlorotoluene	ND	2	0.16	233	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichlorobenzene	ND	2	0.24	600	ug/L
STP-1 to EP-2	8/24/2015	1,2,4-Trimethylbenzene	ND	2	0.32	56	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.27	0.0033	ug/L
STP-1 to EP-2	8/24/2015	1,2,3-Trichloropropane	*ND*	*4*	0.32	0.0084	ug/L
STP-1 to EP-2	8/24/2015	tert-Butylbenzene	ND	2	0.26	690	ug/L
STP-1 to EP-2	8/24/2015	Isopropylbenzene	ND	2	0.3	447	ug/L
STP-1 to EP-2	8/24/2015	p-Isopropyltoluene	ND	2	0.38	NA	ug/L
STP-1 to EP-2	8/24/2015	Ethylbenzene	ND	2	0.2	700	ug/L
STP-1 to EP-2	8/24/2015	Styrene	ND	2	0.21	100	ug/L
STP-1 to EP-2	8/24/2015	n-Propylbenzene	ND	2	0.33	660	ug/L
STP-1 to EP-2	8/24/2015	n-Butylbenzene	ND	6	0.49	1000	ug/L
STP-1 to EP-2	8/24/2015	4-Chlorotoluene	ND	2	0.3	250	ug/L
STP-1 to EP-2	8/24/2015	1,4-Dichlorobenzene	ND	2	0.33	75	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dibromoethane	*ND*	*2*	0.27	0.05	ug/L
STP-1 to EP-2	8/24/2015	1,2-Dichloroethane	ND	2	0.35	5	ug/L
STP-1 to EP-2	8/24/2015	4-Methyl-2-Pentanone	ND	20	0.51	1243	ug/L
STP-1 to EP-2	8/24/2015	1,3,5-Trimethylbenzene	ND	2	0.25	60	ug/L
STP-1 to EP-2	8/24/2015	Bromobenzene	ND	2	0.22	62	ug/L
STP-1 to EP-2	8/24/2015	Toluene	ND	2	0.22	1000	ug/L
STP-1 to EP-2	8/24/2015	Chlorobenzene	ND	2	0.19	77.6	ug/L
STP-1 to EP-2	8/24/2015	1,2,4-Trichlorobenzene	ND	2	0.57	70	ug/L
STP-1 to EP-2	8/24/2015	Dibromochloromethane	*ND*	*2*	0.19	1.68	ug/L
STP-1 to EP-2	8/24/2015	Tetrachloroethene	ND	2	0.32	5	ug/L
STP-1 to EP-2	8/24/2015	sec-Butylbenzene	ND	2	0.46	2000	ug/L
STP-1 to EP-2	8/24/2015	1,3-Dichloropropane	ND	2	0.34	370	ug/L
STP-1 to EP-2	8/24/2015	cis-1,2-Dichloroethene	ND	2	0.16	70	ug/L
STP-1 to EP-2	8/24/2015	trans-1,2-Dichloroethene	ND	2	0.19	100	ug/L
STP-1 to EP-2	8/24/2015	1,3-Dichlorobenzene	ND	2	0.19	N/A	ug/L
STP-1 to EP-2	8/24/2015	1,1-Dichloropropene	ND	2	0.23	NA	ug/L
STP-1 to EP-2	8/24/2015	2-Hexanone	ND	20	0.95	38	ug/L
STP-1 to EP-2	8/24/2015	2,2-Dichloropropane	ND	4	0.3	NA	ug/L
STP-1 to EP-2	8/24/2015	1,1,1,2-Tetrachloroethane	ND	2	0.22	5.74	ug/L
STP-1 to EP-2	8/24/2015	Xylenes, Total	ND	3	0.56	620	ug/L
STP-1 to EP-2	8/24/2015	MTBE	ND	2	0.35	143	ug/L
STP-1 to EP-2	8/24/2015	cis-1,3-Dichloropropene	ND	2	0.27	NA	ug/L
STP-1 to EP-2	8/24/2015	trans-1,3-Dichloropropene	ND	2	0.23	NA	ug/L
STP-1 to EP-2	6/8/2016	Carbon tetrachloride	ND	5	0.54	5	ug/L
STP-1 to EP-2	6/8/2016	Acetone	870	50	25	14064	ug/L
STP-1 to EP-2	6/8/2016	Chloroform	ND	5	0.44	100	ug/L
STP-1 to EP-2	6/8/2016	Benzene	ND	5	0.48	5	ug/L
STP-1 to EP-2	6/8/2016	1,1,1-Trichloroethane	ND	5	0.46	200	ug/L
STP-1 to EP-2	6/8/2016	Bromomethane	*ND*	*15*	3.9	7.54	ug/L
STP-1 to EP-2	6/8/2016	Chloromethane	ND	15	1.1	20.32	ug/L
STP-1 to EP-2	6/8/2016	Dibromomethane	ND	5	0.6	8	ug/L
STP-1 to EP-2	6/8/2016	Chloroethane	ND	10	0.96	20857	ug/L
STP-1 to EP-2	6/8/2016	Vinyl Chloride	*ND*	*5*	0.98	2	ug/L
STP-1 to EP-2	6/8/2016	Methylene Chloride	*ND*	*15*	0.94	5	ug/L
STP-1 to EP-2	6/8/2016	Carbon Disulfide	39	50	3	810	ug/L
STP-1 to EP-2	6/8/2016	Bromoform	ND	5	0.51	32.9	ug/L
STP-1 to EP-2	6/8/2016	Bromodichloromethane	*ND*	*5*	0.7	1.34	ug/L
STP-1 to EP-2	6/8/2016	1,1-Dichloroethane	ND	5	0.54	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	6/8/2016	1,1-Dichloroethene	ND	5	0.54	7	ug/L
STP-1 to EP-2	6/8/2016	Trichlorofluoromethane	ND	5	1	1137	ug/L
STP-1 to EP-2	6/8/2016	Dichlorodifluoromethane	ND	5	1.8	197	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichloropropane	ND	5	0.55	5	ug/L
STP-1 to EP-2	6/8/2016	2-Butanone	24	50	3.7	5565	ug/L
STP-1 to EP-2	6/8/2016	1,1,2-Trichloroethane	ND	5	0.64	5	ug/L
STP-1 to EP-2	6/8/2016	Trichloroethene	ND	5	0.88	5	ug/L
STP-1 to EP-2	6/8/2016	1,1,2,2-Tetrachloroethane	ND	10	0.64	10	ug/L
STP-1 to EP-2	6/8/2016	1,2,3-Trichlorobenzene	ND	5	0.56	70	ug/L
STP-1 to EP-2	6/8/2016	Hexachlorobutadiene	*ND*	*5*	0.99	1.39	ug/L
STP-1 to EP-2	6/8/2016	1-Methylnaphthalene	ND	20	1	NA	ug/L
STP-1 to EP-2	6/8/2016	Naphthalene	ND	10	0.46	30	ug/L
STP-1 to EP-2	6/8/2016	2-Methylnaphthalene	*ND*	*20*	0.79		ug/L
STP-1 to EP-2	6/8/2016	2-Chlorotoluene	ND	5	2	233	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichlorobenzene	ND	5	2	600	ug/L
STP-1 to EP-2	6/8/2016	1,2,4-Trimethylbenzene	ND	5	0.55	56	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dibromo-3-Chloropropane	*ND*	*10*	1.2	0.0033	ug/L
STP-1 to EP-2	6/8/2016	1,2,3-Trichloropropane	*ND*	*10*	1	0.0084	ug/L
STP-1 to EP-2	6/8/2016	tert-Butylbenzene	ND	5	0.58	690	ug/L
STP-1 to EP-2	6/8/2016	Isopropylbenzene	ND	5	0.52	447	ug/L
STP-1 to EP-2	6/8/2016	p-Isopropyltoluene	ND	5	0.7	NA	ug/L
STP-1 to EP-2	6/8/2016	Ethylbenzene	ND	5	0.56	700	ug/L
STP-1 to EP-2	6/8/2016	Styrene	ND	5	0.55	100	ug/L
STP-1 to EP-2	6/8/2016	n-Propylbenzene	ND	5	0.66	660	ug/L
STP-1 to EP-2	6/8/2016	n-Butylbenzene	ND	15	0.8	1000	ug/L
STP-1 to EP-2	6/8/2016	4-Chlorotoluene	ND	5	0.64	250	ug/L
STP-1 to EP-2	6/8/2016	1,4-Dichlorobenzene	ND	5	0.71	75	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dibromoethane	*ND*	*5*	0.56	0.05	ug/L
STP-1 to EP-2	6/8/2016	1,2-Dichloroethane	ND	5	0.58	5	ug/L
STP-1 to EP-2	6/8/2016	4-Methyl-2-Pentanone	ND	50	2.1	1243	ug/L
STP-1 to EP-2	6/8/2016	1,3,5-Trimethylbenzene	ND	5	0.58	60	ug/L
STP-1 to EP-2	6/8/2016	Bromobenzene	ND	5	0.49	62	ug/L
STP-1 to EP-2	6/8/2016	Toluene	ND	5	0.59	1000	ug/L
STP-1 to EP-2	6/8/2016	Chlorobenzene	ND	5	0.57	77.6	ug/L
STP-1 to EP-2	6/8/2016	1,2,4-Trichlorobenzene	ND	5	0.66	70	ug/L
STP-1 to EP-2	6/8/2016	Dibromochloromethane	*ND*	*5*	0.43	1.68	ug/L
STP-1 to EP-2	6/8/2016	Tetrachloroethene	ND	5	0.76	5	ug/L
STP-1 to EP-2	6/8/2016	sec-Butylbenzene	ND	5	0.62	2000	ug/L
STP-1 to EP-2	6/8/2016	1,3-Dichloropropane	ND	5	0.78	370	ug/L
STP-1 to EP-2	6/8/2016	cis-1,2-Dichloroethene	ND	5	0.62	70	ug/L
STP-1 to EP-2	6/8/2016	trans-1,2-Dichloroethene	ND	5	2	100	ug/L
STP-1 to EP-2	6/8/2016	1,3-Dichlorobenzene	ND	5	0.72	N/A	ug/L
STP-1 to EP-2	6/8/2016	1,1-Dichloropropene	ND	5	0.67	NA	ug/L
STP-1 to EP-2	6/8/2016	2-Hexanone	*ND*	*50*	4.2	38	ug/L
STP-1 to EP-2	6/8/2016	2,2-Dichloropropane	ND	10	0.83	NA	ug/L
STP-1 to EP-2	6/8/2016	1,1,1,2-Tetrachloroethane	ND	5	0.56	5.74	ug/L
STP-1 to EP-2	6/8/2016	Xylenes, Total	ND	7.5	1.8	620	ug/L
STP-1 to EP-2	6/8/2016	MTBE	ND	5	1.1	143	ug/L
STP-1 to EP-2	6/8/2016	cis-1,3-Dichloropropene	ND	5	0.53	NA	ug/L
STP-1 to EP-2	6/8/2016	trans-1,3-Dichloropropene	ND	5	0.52	NA	ug/L
STP-1 to EP-2	8/30/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	8/30/2016	Acetone	1100	100	49	14064	ug/L
STP-1 to EP-2	8/30/2016	Chloroform	ND	10	0.89	100	ug/L
STP-1 to EP-2	8/30/2016	Benzene	*ND*	*10*	0.96	5	ug/L
STP-1 to EP-2	8/30/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
STP-1 to EP-2	8/30/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
STP-1 to EP-2	8/30/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
STP-1 to EP-2	8/30/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
STP-1 to EP-2	8/30/2016	Chloroethane	ND	20	1.9	20857	ug/L
STP-1 to EP-2	8/30/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	8/30/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
STP-1 to EP-2	8/30/2016	Carbon Disulfide	ND	100	6	810	ug/L
STP-1 to EP-2	8/30/2016	Bromoform	ND	10	1	32.9	ug/L
STP-1 to EP-2	8/30/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
STP-1 to EP-2	8/30/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
STP-1 to EP-2	8/30/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	8/30/2016	2-Butanone	ND	100	7.4	5565	ug/L
STP-1 to EP-2	8/30/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	8/30/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	8/30/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
STP-1 to EP-2	8/30/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
STP-1 to EP-2	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
STP-1 to EP-2	8/30/2016	1-Methylnaphthalene	ND	40	2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/30/2016	Naphthalene	ND	20	0.93	30	ug/L
STP-1 to EP-2	8/30/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
STP-1 to EP-2	8/30/2016	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
STP-1 to EP-2	8/30/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
STP-1 to EP-2	8/30/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
STP-1 to EP-2	8/30/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
STP-1 to EP-2	8/30/2016	Isopropylbenzene	ND	10	1	447	ug/L
STP-1 to EP-2	8/30/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
STP-1 to EP-2	8/30/2016	Ethylbenzene	ND	10	1.1	700	ug/L
STP-1 to EP-2	8/30/2016	Styrene	ND	10	1.1	100	ug/L
STP-1 to EP-2	8/30/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
STP-1 to EP-2	8/30/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
STP-1 to EP-2	8/30/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
STP-1 to EP-2	8/30/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
STP-1 to EP-2	8/30/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
STP-1 to EP-2	8/30/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
STP-1 to EP-2	8/30/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
STP-1 to EP-2	8/30/2016	Bromobenzene	ND	10	0.98	62	ug/L
STP-1 to EP-2	8/30/2016	Toluene	ND	10	1.2	1000	ug/L
STP-1 to EP-2	8/30/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	8/30/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	8/30/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
STP-1 to EP-2	8/30/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/30/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
STP-1 to EP-2	8/30/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
STP-1 to EP-2	8/30/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
STP-1 to EP-2	8/30/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
STP-1 to EP-2	8/30/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
STP-1 to EP-2	8/30/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
STP-1 to EP-2	8/30/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
STP-1 to EP-2	8/30/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
STP-1 to EP-2	8/30/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
STP-1 to EP-2	8/30/2016	Xylenes, Total	ND	15	3.7	620	ug/L
STP-1 to EP-2	8/30/2016	MTBE	ND	10	2.1	143	ug/L
STP-1 to EP-2	8/30/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
STP-1 to EP-2	8/30/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
STP-1 to EP-2	11/17/2016	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	11/17/2016	Acetone	2400	1000	490	14064	ug/L
STP-1 to EP-2	11/17/2016	Chloroform	ND	10	0.89	100	ug/L
STP-1 to EP-2	11/17/2016	Benzene	*ND*	*10*	0.96	5	ug/L
STP-1 to EP-2	11/17/2016	1,1,1-Trichloroethane	ND	10	0.91	200	ug/L
STP-1 to EP-2	11/17/2016	Bromomethane	*ND*	*30*	7.8	7.54	ug/L
STP-1 to EP-2	11/17/2016	Chloromethane	*ND*	*30*	2.1	20.32	ug/L
STP-1 to EP-2	11/17/2016	Dibromomethane	*ND*	*10*	1.2	8	ug/L
STP-1 to EP-2	11/17/2016	Chloroethane	ND	20	1.9	20857	ug/L
STP-1 to EP-2	11/17/2016	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	11/17/2016	Methylene Chloride	*ND*	*30*	1.9	5	ug/L
STP-1 to EP-2	11/17/2016	Carbon Disulfide	13	100	6	810	ug/L
STP-1 to EP-2	11/17/2016	Bromoform	ND	10	1	32.9	ug/L
STP-1 to EP-2	11/17/2016	Bromodichloromethane	*ND*	*10*	1.4	1.34	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloroethane	ND	10	1.1	25	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloroethene	*ND*	*10*	1.1	7	ug/L
STP-1 to EP-2	11/17/2016	Trichlorofluoromethane	ND	10	2	1137	ug/L
STP-1 to EP-2	11/17/2016	Dichlorodifluoromethane	ND	10	3.6	197	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichloropropane	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	11/17/2016	2-Butanone	76	100	7.4	5565	ug/L
STP-1 to EP-2	11/17/2016	1,1,2-Trichloroethane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	11/17/2016	Trichloroethene	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	11/17/2016	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.3	10	ug/L
STP-1 to EP-2	11/17/2016	1,2,3-Trichlorobenzene	ND	10	1.1	70	ug/L
STP-1 to EP-2	11/17/2016	Hexachlorobutadiene	*ND*	*10*	2	1.39	ug/L
STP-1 to EP-2	11/17/2016	1-Methylnaphthalene	ND	40	2	NA	ug/L
STP-1 to EP-2	11/17/2016	Naphthalene	ND	20	0.93	30	ug/L
STP-1 to EP-2	11/17/2016	2-Methylnaphthalene	*ND*	*40*	1.6		ug/L
STP-1 to EP-2	11/17/2016	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichlorobenzene	ND	10	4	600	ug/L
STP-1 to EP-2	11/17/2016	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dibromo-3-Chloropropane	*ND*	*20*	2.3	0.0033	ug/L
STP-1 to EP-2	11/17/2016	1,2,3-Trichloropropane	*ND*	*20*	2	0.0084	ug/L
STP-1 to EP-2	11/17/2016	tert-Butylbenzene	ND	10	1.2	690	ug/L
STP-1 to EP-2	11/17/2016	Isopropylbenzene	ND	10	1	447	ug/L
STP-1 to EP-2	11/17/2016	p-Isopropyltoluene	ND	10	1.4	NA	ug/L
STP-1 to EP-2	11/17/2016	Ethylbenzene	ND	10	1.1	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/17/2016	Styrene	ND	10	1.1	100	ug/L
STP-1 to EP-2	11/17/2016	n-Propylbenzene	ND	10	1.3	660	ug/L
STP-1 to EP-2	11/17/2016	n-Butylbenzene	ND	30	1.6	1000	ug/L
STP-1 to EP-2	11/17/2016	4-Chlorotoluene	ND	10	1.3	250	ug/L
STP-1 to EP-2	11/17/2016	1,4-Dichlorobenzene	ND	10	1.4	75	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dibromoethane	*ND*	*10*	1.1	0.05	ug/L
STP-1 to EP-2	11/17/2016	1,2-Dichloroethane	*ND*	*10*	1.2	5	ug/L
STP-1 to EP-2	11/17/2016	4-Methyl-2-Pentanone	ND	100	4.3	1243	ug/L
STP-1 to EP-2	11/17/2016	1,3,5-Trimethylbenzene	ND	10	1.2	60	ug/L
STP-1 to EP-2	11/17/2016	Bromobenzene	ND	10	0.98	62	ug/L
STP-1 to EP-2	11/17/2016	Toluene	ND	10	1.2	1000	ug/L
STP-1 to EP-2	11/17/2016	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	11/17/2016	1,2,4-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	11/17/2016	Dibromochloromethane	*ND*	*10*	0.87	1.68	ug/L
STP-1 to EP-2	11/17/2016	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	11/17/2016	sec-Butylbenzene	ND	10	1.2	2000	ug/L
STP-1 to EP-2	11/17/2016	1,3-Dichloropropane	ND	10	1.6	370	ug/L
STP-1 to EP-2	11/17/2016	cis-1,2-Dichloroethene	ND	10	1.2	70	ug/L
STP-1 to EP-2	11/17/2016	trans-1,2-Dichloroethene	ND	10	4	100	ug/L
STP-1 to EP-2	11/17/2016	1,3-Dichlorobenzene	ND	10	1.4	N/A	ug/L
STP-1 to EP-2	11/17/2016	1,1-Dichloropropene	ND	10	1.3	NA	ug/L
STP-1 to EP-2	11/17/2016	2-Hexanone	*ND*	*100*	8.4	38	ug/L
STP-1 to EP-2	11/17/2016	2,2-Dichloropropane	ND	20	1.7	NA	ug/L
STP-1 to EP-2	11/17/2016	1,1,1,2-Tetrachloroethane	*ND*	*10*	1.1	5.74	ug/L
STP-1 to EP-2	11/17/2016	Xylenes, Total	ND	15	3.7	620	ug/L
STP-1 to EP-2	11/17/2016	MTBE	ND	10	2.1	143	ug/L
STP-1 to EP-2	11/17/2016	cis-1,3-Dichloropropene	ND	10	1.1	NA	ug/L
STP-1 to EP-2	11/17/2016	trans-1,3-Dichloropropene	ND	10	1	NA	ug/L
STP-1 to EP-2	3/30/2017	Carbon tetrachloride	ND	5	1.1	5	ug/L
STP-1 to EP-2	3/30/2017	Acetone	1200	1000	88	14064	ug/L
STP-1 to EP-2	3/30/2017	Chloroform	ND	5	0.89	100	ug/L
STP-1 to EP-2	3/30/2017	Benzene	1.9	5	0.96	5	ug/L
STP-1 to EP-2	3/30/2017	1,1,1-Trichloroethane	ND	5	0.73	200	ug/L
STP-1 to EP-2	3/30/2017	Bromomethane	**11**	15	7.8	7.54	ug/L
STP-1 to EP-2	3/30/2017	Chloromethane	ND	15	2.1	20.32	ug/L
STP-1 to EP-2	3/30/2017	Dibromomethane	ND	5	1.2	8	ug/L
STP-1 to EP-2	3/30/2017	Chloroethane	ND	10	2.3	20857	ug/L
STP-1 to EP-2	3/30/2017	Vinyl Chloride	*ND*	*5*	1.8	2	ug/L
STP-1 to EP-2	3/30/2017	Methylene Chloride	*ND*	*15*	1.1	5	ug/L
STP-1 to EP-2	3/30/2017	Carbon Disulfide	20	50	6	810	ug/L
STP-1 to EP-2	3/30/2017	Bromoform	ND	5	2.1	32.9	ug/L
STP-1 to EP-2	3/30/2017	Bromodichloromethane	*ND*	*5*	1.8	1.34	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloroethane	ND	5	1	25	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloroethene	ND	5	0.81	7	ug/L
STP-1 to EP-2	3/30/2017	Trichlorofluoromethane	ND	5	1.8	1137	ug/L
STP-1 to EP-2	3/30/2017	Dichlorodifluoromethane	ND	5	3.2	197	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichloropropane	ND	5	1	5	ug/L
STP-1 to EP-2	3/30/2017	2-Butanone	58	50	11	5565	ug/L
STP-1 to EP-2	3/30/2017	1,1,2-Trichloroethane	ND	5	1.4	5	ug/L
STP-1 to EP-2	3/30/2017	Trichloroethene	ND	5	1.8	5	ug/L
STP-1 to EP-2	3/30/2017	1,1,2,2-Tetrachloroethane	ND	10	1.4	10	ug/L
STP-1 to EP-2	3/30/2017	1,2,3-Trichlorobenzene	ND	5	1.1	70	ug/L
STP-1 to EP-2	3/30/2017	Hexachlorobutadiene	*ND*	*5*	3.7	1.39	ug/L
STP-1 to EP-2	3/30/2017	1-Methylnaphthalene	9.9	20	1.6	NA	ug/L
STP-1 to EP-2	3/30/2017	Naphthalene	ND	10	0.83	30	ug/L
STP-1 to EP-2	3/30/2017	2-Methylnaphthalene	**12**	20	1.5		ug/L
STP-1 to EP-2	3/30/2017	2-Chlorotoluene	ND	5	4	233	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichlorobenzene	ND	5	1.2	600	ug/L
STP-1 to EP-2	3/30/2017	1,2,4-Trimethylbenzene	2.8	5	1	56	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dibromo-3-Chloropropane	*ND*	*10*	14	0.0033	ug/L
STP-1 to EP-2	3/30/2017	1,2,3-Trichloropropane	*ND*	*10*	3.9	0.0084	ug/L
STP-1 to EP-2	3/30/2017	tert-Butylbenzene	ND	5	1	690	ug/L
STP-1 to EP-2	3/30/2017	Isopropylbenzene	ND	5	0.98	447	ug/L
STP-1 to EP-2	3/30/2017	p-Isopropyltoluene	ND	5	1.4	NA	ug/L
STP-1 to EP-2	3/30/2017	Ethylbenzene	ND	5	1.1	700	ug/L
STP-1 to EP-2	3/30/2017	Styrene	ND	5	1.6	100	ug/L
STP-1 to EP-2	3/30/2017	n-Propylbenzene	ND	5	1.3	660	ug/L
STP-1 to EP-2	3/30/2017	n-Butylbenzene	3.2	15	1.6	1000	ug/L
STP-1 to EP-2	3/30/2017	4-Chlorotoluene	ND	5	4	250	ug/L
STP-1 to EP-2	3/30/2017	1,4-Dichlorobenzene	ND	5	4	75	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dibromoethane	*ND*	*5*	1.3	0.05	ug/L
STP-1 to EP-2	3/30/2017	1,2-Dichloroethane	ND	5	1.2	5	ug/L
STP-1 to EP-2	3/30/2017	4-Methyl-2-Pentanone	ND	50	7.1	1243	ug/L
STP-1 to EP-2	3/30/2017	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
STP-1 to EP-2	3/30/2017	Bromobenzene	ND	5	1.4	62	ug/L
STP-1 to EP-2	3/30/2017	Toluene	2.2	5	0.89	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	3/30/2017	Chlorobenzene	2	5	1.1	77.6	ug/L
STP-1 to EP-2	3/30/2017	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
STP-1 to EP-2	3/30/2017	Dibromochloromethane	*ND*	*5*	0.78	1.68	ug/L
STP-1 to EP-2	3/30/2017	Tetrachloroethene	ND	5	1.5	5	ug/L
STP-1 to EP-2	3/30/2017	sec-Butylbenzene	ND	5	1	2000	ug/L
STP-1 to EP-2	3/30/2017	1,3-Dichloropropane	ND	5	1.6	370	ug/L
STP-1 to EP-2	3/30/2017	cis-1,2-Dichloroethene	ND	5	2	70	ug/L
STP-1 to EP-2	3/30/2017	trans-1,2-Dichloroethene	ND	5	1.8	100	ug/L
STP-1 to EP-2	3/30/2017	1,3-Dichlorobenzene	ND	5	1.4	N/A	ug/L
STP-1 to EP-2	3/30/2017	1,1-Dichloropropene	ND	5	1.3	NA	ug/L
STP-1 to EP-2	3/30/2017	2-Hexanone	*ND*	*50*	6.6	38	ug/L
STP-1 to EP-2	3/30/2017	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
STP-1 to EP-2	3/30/2017	1,1,1,2-Tetrachloroethane	ND	5	1.1	5.74	ug/L
STP-1 to EP-2	3/30/2017	Xylenes, Total	3.5	7.5	3.2	620	ug/L
STP-1 to EP-2	3/30/2017	MTBE	ND	5	1.5	143	ug/L
STP-1 to EP-2	3/30/2017	cis-1,3-Dichloropropene	ND	5	1	NA	ug/L
STP-1 to EP-2	3/30/2017	trans-1,3-Dichloropropene	ND	5	0.89	NA	ug/L
STP-1 to EP-2	6/2/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	Acetone	1600	100	8.2	14064	ug/L
STP-1 to EP-2	6/2/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	6/2/2017	Benzene	*0.71*	*10*	0.62	5	ug/L
STP-1 to EP-2	6/2/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	6/2/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	6/2/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	6/2/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	6/2/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	6/2/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	6/2/2017	Methylene Chloride	*1.9*	*30*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	Carbon Disulfide	12	100	4	810	ug/L
STP-1 to EP-2	6/2/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	6/2/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	6/2/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	6/2/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	6/2/2017	2-Butanone	140	100	11	5565	ug/L
STP-1 to EP-2	6/2/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	6/2/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	6/2/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	6/2/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	6/2/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	6/2/2017	1-Methylnaphthalene	5.7	40	1.6	NA	ug/L
STP-1 to EP-2	6/2/2017	Naphthalene	1.8	20	1.1	30	ug/L
STP-1 to EP-2	6/2/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	6/2/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	6/2/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	6/2/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	6/2/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	6/2/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	6/2/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	6/2/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	6/2/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	6/2/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	6/2/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	6/2/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	6/2/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	6/2/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	6/2/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	6/2/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	6/2/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	6/2/2017	Toluene	ND	10	0.64	1000	ug/L
STP-1 to EP-2	6/2/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	6/2/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	6/2/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	6/2/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	6/2/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	6/2/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	6/2/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	6/2/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	6/2/2017	Pentafluorobenzene	ND	0	0		None
STP-1 to EP-2	6/2/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	6/2/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	6/2/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	6/2/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	6/2/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	6/2/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	6/2/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	6/2/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	6/2/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	9/7/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	Acetone	1100	100	8.2	14064	ug/L
STP-1 to EP-2	9/7/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	9/7/2017	Benzene	*2.6*	*10*	0.62	5	ug/L
STP-1 to EP-2	9/7/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	9/7/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	9/7/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	9/7/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	9/7/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	9/7/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	9/7/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	9/7/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	9/7/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	9/7/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	9/7/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	9/7/2017	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	9/7/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	9/7/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	9/7/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	9/7/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	9/7/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	9/7/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
STP-1 to EP-2	9/7/2017	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	9/7/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	9/7/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	9/7/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	9/7/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	9/7/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	9/7/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	9/7/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	9/7/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	9/7/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	9/7/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	9/7/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	9/7/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	9/7/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	9/7/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	9/7/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	9/7/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	9/7/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	9/7/2017	Toluene	1.4	10	0.64	1000	ug/L
STP-1 to EP-2	9/7/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	9/7/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	9/7/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	9/7/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	9/7/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	9/7/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	9/7/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	9/7/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	9/7/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	9/7/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	9/7/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	9/7/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	9/7/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	9/7/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	9/7/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	9/7/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	9/7/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	12/12/2017	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	Acetone	1600	100	8.2	14064	ug/L
STP-1 to EP-2	12/12/2017	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	12/12/2017	Benzene	**7.1**	10	0.62	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/12/2017	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	12/12/2017	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	12/12/2017	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	12/12/2017	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	12/12/2017	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	12/12/2017	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	12/12/2017	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	12/12/2017	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	12/12/2017	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	12/12/2017	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	12/12/2017	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	12/12/2017	2-Butanone	54	100	11	5565	ug/L
STP-1 to EP-2	12/12/2017	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	12/12/2017	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	12/12/2017	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	12/12/2017	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	12/12/2017	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	12/12/2017	1-Methylnaphthalene	ND	40	1.6	NA	ug/L
STP-1 to EP-2	12/12/2017	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	12/12/2017	2-Methylnaphthalene	*ND*	*40*	1.5		ug/L
STP-1 to EP-2	12/12/2017	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	12/12/2017	1,2,4-Trimethylbenzene	ND	10	1.1	56	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	12/12/2017	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	12/12/2017	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	12/12/2017	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	12/12/2017	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	12/12/2017	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	12/12/2017	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	12/12/2017	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	12/12/2017	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	12/12/2017	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	12/12/2017	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	12/12/2017	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	12/12/2017	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	12/12/2017	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	12/12/2017	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	12/12/2017	Toluene	2	10	0.64	1000	ug/L
STP-1 to EP-2	12/12/2017	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	12/12/2017	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	12/12/2017	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	12/12/2017	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	12/12/2017	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	12/12/2017	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	12/12/2017	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	12/12/2017	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	12/12/2017	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	12/12/2017	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	12/12/2017	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	12/12/2017	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	12/12/2017	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	12/12/2017	Xylenes, Total	ND	15	3.2	620	ug/L
STP-1 to EP-2	12/12/2017	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	12/12/2017	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	12/12/2017	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	2/12/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	Acetone	1100	100	8.2	14064	ug/L
STP-1 to EP-2	2/12/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	2/12/2018	Benzene	*ND*	*10*	0.62	5	ug/L
STP-1 to EP-2	2/12/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	2/12/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	2/12/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	2/12/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	2/12/2018	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	2/12/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	2/12/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	2/12/2018	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	2/12/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	2/12/2018	1,1-Dichloroethane	ND	10	4	25	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	2/12/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	2/12/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	2/12/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	2/12/2018	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	2/12/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	2/12/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	2/12/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	2/12/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	2/12/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	2/12/2018	1-Methylnaphthalene	28	40	1.6	NA	ug/L
STP-1 to EP-2	2/12/2018	Naphthalene	6.2	20	1.1	30	ug/L
STP-1 to EP-2	2/12/2018	2-Methylnaphthalene	**25**	40	1.5		ug/L
STP-1 to EP-2	2/12/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	2/12/2018	1,2,4-Trimethylbenzene	2.9	10	1.1	56	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	2/12/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	2/12/2018	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	2/12/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	2/12/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	2/12/2018	Ethylbenzene	1.3	10	0.93	700	ug/L
STP-1 to EP-2	2/12/2018	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	2/12/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	2/12/2018	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	2/12/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	2/12/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	2/12/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	2/12/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	2/12/2018	1,3,5-Trimethylbenzene	1.3	10	0.87	60	ug/L
STP-1 to EP-2	2/12/2018	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	2/12/2018	Toluene	2.3	10	0.64	1000	ug/L
STP-1 to EP-2	2/12/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	2/12/2018	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	2/12/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	2/12/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	2/12/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	2/12/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	2/12/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	2/12/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	2/12/2018	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	2/12/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	2/12/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	2/12/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	2/12/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	2/12/2018	Xylenes, Total	7.1	15	3.2	620	ug/L
STP-1 to EP-2	2/12/2018	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	2/12/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	2/12/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	5/6/2018	Carbon tetrachloride	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	Acetone	1400	100	8.2	14064	ug/L
STP-1 to EP-2	5/6/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	5/6/2018	Benzene	*2.6*	*10*	0.62	5	ug/L
STP-1 to EP-2	5/6/2018	1,1,1-Trichloroethane	ND	10	0.73	200	ug/L
STP-1 to EP-2	5/6/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	5/6/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	5/6/2018	Dibromomethane	*ND*	*10*	0.91	8	ug/L
STP-1 to EP-2	5/6/2018	Chloroethane	ND	20	2.3	20857	ug/L
STP-1 to EP-2	5/6/2018	Vinyl Chloride	*ND*	*10*	1.8	2	ug/L
STP-1 to EP-2	5/6/2018	Methylene Chloride	*ND*	*30*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	Carbon Disulfide	ND	100	4	810	ug/L
STP-1 to EP-2	5/6/2018	Bromoform	ND	10	2.1	32.9	ug/L
STP-1 to EP-2	5/6/2018	Bromodichloromethane	*ND*	*10*	1.8	1.34	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloroethene	*ND*	*10*	0.81	7	ug/L
STP-1 to EP-2	5/6/2018	Trichlorofluoromethane	ND	10	1.8	1137	ug/L
STP-1 to EP-2	5/6/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichloropropane	*ND*	*10*	1	5	ug/L
STP-1 to EP-2	5/6/2018	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	5/6/2018	1,1,2-Trichloroethane	*ND*	*10*	1.4	5	ug/L
STP-1 to EP-2	5/6/2018	Trichloroethene	*ND*	*10*	1.1	5	ug/L
STP-1 to EP-2	5/6/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	1.4	10	ug/L
STP-1 to EP-2	5/6/2018	1,2,3-Trichlorobenzene	ND	10	1.2	70	ug/L
STP-1 to EP-2	5/6/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	5/6/2018	1-Methylnaphthalene	5.3	40	1.6	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	5/6/2018	Naphthalene	ND	20	1.1	30	ug/L
STP-1 to EP-2	5/6/2018	2-Methylnaphthalene	**5.7**	40	1.5		ug/L
STP-1 to EP-2	5/6/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichlorobenzene	ND	10	0.9	600	ug/L
STP-1 to EP-2	5/6/2018	1,2,4-Trimethylbenzene	3.1	10	1.1	56	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	14	0.0033	ug/L
STP-1 to EP-2	5/6/2018	1,2,3-Trichloropropane	*ND*	*20*	3.9	0.0084	ug/L
STP-1 to EP-2	5/6/2018	tert-Butylbenzene	ND	10	1	690	ug/L
STP-1 to EP-2	5/6/2018	Isopropylbenzene	ND	10	0.51	447	ug/L
STP-1 to EP-2	5/6/2018	p-Isopropyltoluene	ND	10	0.96	NA	ug/L
STP-1 to EP-2	5/6/2018	Ethylbenzene	ND	10	0.93	700	ug/L
STP-1 to EP-2	5/6/2018	Styrene	ND	10	1.6	100	ug/L
STP-1 to EP-2	5/6/2018	n-Propylbenzene	ND	10	0.74	660	ug/L
STP-1 to EP-2	5/6/2018	n-Butylbenzene	ND	30	1.3	1000	ug/L
STP-1 to EP-2	5/6/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	5/6/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dibromoethane	*ND*	*10*	1.3	0.05	ug/L
STP-1 to EP-2	5/6/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	5/6/2018	4-Methyl-2-Pentanone	ND	100	7.1	1243	ug/L
STP-1 to EP-2	5/6/2018	1,3,5-Trimethylbenzene	ND	10	0.87	60	ug/L
STP-1 to EP-2	5/6/2018	Bromobenzene	ND	10	1.4	62	ug/L
STP-1 to EP-2	5/6/2018	Toluene	1.8	10	0.64	1000	ug/L
STP-1 to EP-2	5/6/2018	Chlorobenzene	ND	10	1.1	77.6	ug/L
STP-1 to EP-2	5/6/2018	1,2,4-Trichlorobenzene	ND	10	1.4	70	ug/L
STP-1 to EP-2	5/6/2018	Dibromochloromethane	*ND*	*10*	0.72	1.68	ug/L
STP-1 to EP-2	5/6/2018	Tetrachloroethene	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	5/6/2018	sec-Butylbenzene	ND	10	1.1	2000	ug/L
STP-1 to EP-2	5/6/2018	1,3-Dichloropropane	ND	10	1.7	370	ug/L
STP-1 to EP-2	5/6/2018	cis-1,2-Dichloroethene	ND	10	2	70	ug/L
STP-1 to EP-2	5/6/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	5/6/2018	1,3-Dichlorobenzene	ND	10	1.5	N/A	ug/L
STP-1 to EP-2	5/6/2018	1,1-Dichloropropene	ND	10	0.93	NA	ug/L
STP-1 to EP-2	5/6/2018	2-Hexanone	*ND*	*100*	6.6	38	ug/L
STP-1 to EP-2	5/6/2018	2,2-Dichloropropane	ND	20	1.6	NA	ug/L
STP-1 to EP-2	5/6/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	1	5.74	ug/L
STP-1 to EP-2	5/6/2018	Xylenes, Total	5.8	15	3.2	620	ug/L
STP-1 to EP-2	5/6/2018	MTBE	ND	10	2.4	143	ug/L
STP-1 to EP-2	5/6/2018	cis-1,3-Dichloropropene	ND	10	0.82	NA	ug/L
STP-1 to EP-2	5/6/2018	trans-1,3-Dichloropropene	ND	10	2.2	NA	ug/L
STP-1 to EP-2	8/31/2018	Carbon tetrachloride	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	8/31/2018	Acetone	1200	100	7.9	14064	ug/L
STP-1 to EP-2	8/31/2018	Chloroform	ND	10	4	100	ug/L
STP-1 to EP-2	8/31/2018	Benzene	*ND*	*10*	1.7	5	ug/L
STP-1 to EP-2	8/31/2018	1,1,1-Trichloroethane	ND	10	1.5	200	ug/L
STP-1 to EP-2	8/31/2018	Bromomethane	*ND*	*30*	2.6	7.54	ug/L
STP-1 to EP-2	8/31/2018	Chloromethane	*ND*	*30*	2.9	20.32	ug/L
STP-1 to EP-2	8/31/2018	Dibromomethane	*ND*	*10*	3.2	8	ug/L
STP-1 to EP-2	8/31/2018	Chloroethane	ND	20	1.6	20857	ug/L
STP-1 to EP-2	8/31/2018	Vinyl Chloride	*ND*	*10*	1.1	2	ug/L
STP-1 to EP-2	8/31/2018	Methylene Chloride	*ND*	*30*	2.1	5	ug/L
STP-1 to EP-2	8/31/2018	Carbon Disulfide	ND	100	3.9	810	ug/L
STP-1 to EP-2	8/31/2018	Bromoform	ND	10	3.2	32.9	ug/L
STP-1 to EP-2	8/31/2018	Bromodichloromethane	*ND*	*10*	2.8	1.34	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloroethane	ND	10	4	25	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloroethene	*ND*	*10*	1.2	7	ug/L
STP-1 to EP-2	8/31/2018	Trichlorofluoromethane	ND	10	1.7	1137	ug/L
STP-1 to EP-2	8/31/2018	Dichlorodifluoromethane	ND	10	10	197	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichloropropane	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/31/2018	2-Butanone	170	100	13	5565	ug/L
STP-1 to EP-2	8/31/2018	1,1,2-Trichloroethane	*ND*	*10*	2.3	5	ug/L
STP-1 to EP-2	8/31/2018	Trichloroethene	*ND*	*10*	2.6	5	ug/L
STP-1 to EP-2	8/31/2018	1,1,2,2-Tetrachloroethane	*ND*	*20*	3.3	10	ug/L
STP-1 to EP-2	8/31/2018	1,2,3-Trichlorobenzene	ND	10	2.8	70	ug/L
STP-1 to EP-2	8/31/2018	Hexachlorobutadiene	*ND*	*10*	8	1.39	ug/L
STP-1 to EP-2	8/31/2018	1-Methylnaphthalene	ND	40	3.4	NA	ug/L
STP-1 to EP-2	8/31/2018	Naphthalene	ND	20	2.9	30	ug/L
STP-1 to EP-2	8/31/2018	2-Methylnaphthalene	*ND*	*40*	2.4		ug/L
STP-1 to EP-2	8/31/2018	2-Chlorotoluene	ND	10	4	233	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichlorobenzene	ND	10	3.1	600	ug/L
STP-1 to EP-2	8/31/2018	1,2,4-Trimethylbenzene	ND	10	2.5	56	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dibromo-3-Chloropropane	*ND*	*20*	4.7	0.0033	ug/L
STP-1 to EP-2	8/31/2018	1,2,3-Trichloropropane	*ND*	*20*	5.7	0.0084	ug/L
STP-1 to EP-2	8/31/2018	tert-Butylbenzene	ND	10	2.2	690	ug/L
STP-1 to EP-2	8/31/2018	Isopropylbenzene	ND	10	2.2	447	ug/L
STP-1 to EP-2	8/31/2018	p-Isopropyltoluene	ND	10	2.4	NA	ug/L
STP-1 to EP-2	8/31/2018	Ethylbenzene	ND	10	2.2	700	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/31/2018	Styrene	ND	10	2.5	100	ug/L
STP-1 to EP-2	8/31/2018	n-Propylbenzene	ND	10	2.4	660	ug/L
STP-1 to EP-2	8/31/2018	n-Butylbenzene	ND	30	2.5	1000	ug/L
STP-1 to EP-2	8/31/2018	4-Chlorotoluene	ND	10	4	250	ug/L
STP-1 to EP-2	8/31/2018	1,4-Dichlorobenzene	ND	10	4	75	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dibromoethane	*ND*	*10*	2.3	0.05	ug/L
STP-1 to EP-2	8/31/2018	1,2-Dichloroethane	*ND*	*10*	4	5	ug/L
STP-1 to EP-2	8/31/2018	4-Methyl-2-Pentanone	ND	100	4.5	1243	ug/L
STP-1 to EP-2	8/31/2018	1,3,5-Trimethylbenzene	ND	10	2.3	60	ug/L
STP-1 to EP-2	8/31/2018	Bromobenzene	ND	10	3.2	62	ug/L
STP-1 to EP-2	8/31/2018	Toluene	ND	10	1.7	1000	ug/L
STP-1 to EP-2	8/31/2018	Chlorobenzene	ND	10	2.9	77.6	ug/L
STP-1 to EP-2	8/31/2018	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
STP-1 to EP-2	8/31/2018	Dibromochloromethane	*ND*	*10*	2.4	1.68	ug/L
STP-1 to EP-2	8/31/2018	Tetrachloroethene	*ND*	*10*	1.5	5	ug/L
STP-1 to EP-2	8/31/2018	sec-Butylbenzene	ND	10	2	2000	ug/L
STP-1 to EP-2	8/31/2018	1,3-Dichloropropane	ND	10	2.7	370	ug/L
STP-1 to EP-2	8/31/2018	cis-1,2-Dichloroethene	ND	10	3.8	70	ug/L
STP-1 to EP-2	8/31/2018	trans-1,2-Dichloroethene	ND	10	1.8	100	ug/L
STP-1 to EP-2	8/31/2018	1,3-Dichlorobenzene	ND	10	3.1	N/A	ug/L
STP-1 to EP-2	8/31/2018	1,1-Dichloropropene	ND	10	1.6	NA	ug/L
STP-1 to EP-2	8/31/2018	2-Hexanone	*ND*	*100*	9.1	38	ug/L
STP-1 to EP-2	8/31/2018	2,2-Dichloropropane	ND	20	1.8	NA	ug/L
STP-1 to EP-2	8/31/2018	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.5	5.74	ug/L
STP-1 to EP-2	8/31/2018	Xylenes, Total	ND	15	6.4	620	ug/L
STP-1 to EP-2	8/31/2018	MTBE	ND	10	3.2	143	ug/L
STP-1 to EP-2	8/31/2018	cis-1,3-Dichloropropene	ND	10	3	NA	ug/L
STP-1 to EP-2	8/31/2018	trans-1,3-Dichloropropene	ND	10	2.8	NA	ug/L
STP-1 to EP-2	11/8/2018	Carbon tetrachloride	ND	5	0.69	5	ug/L
STP-1 to EP-2	11/8/2018	Acetone	ND	50	3.8	14064	ug/L
STP-1 to EP-2	11/8/2018	Chloroform	ND	5	1.2	100	ug/L
STP-1 to EP-2	11/8/2018	Benzene	ND	5	0.87	5	ug/L
STP-1 to EP-2	11/8/2018	1,1,1-Trichloroethane	ND	5	0.82	200	ug/L
STP-1 to EP-2	11/8/2018	Bromomethane	*ND*	*15*	1.4	7.54	ug/L
STP-1 to EP-2	11/8/2018	Chloromethane	ND	15	1.6	20.32	ug/L
STP-1 to EP-2	11/8/2018	Dibromomethane	ND	5	1.6	8	ug/L
STP-1 to EP-2	11/8/2018	Chloroethane	ND	10	0.82	20857	ug/L
STP-1 to EP-2	11/8/2018	Vinyl Chloride	*ND*	*5*	0.61	2	ug/L
STP-1 to EP-2	11/8/2018	Methylene Chloride	*ND*	*15*	1	5	ug/L
STP-1 to EP-2	11/8/2018	Carbon Disulfide	ND	50	1.9	810	ug/L
STP-1 to EP-2	11/8/2018	Bromoform	ND	5	1.6	32.9	ug/L
STP-1 to EP-2	11/8/2018	Bromodichloromethane	*ND*	*5*	1.4	1.34	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloroethane	ND	5	0.88	25	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloroethene	ND	5	0.6	7	ug/L
STP-1 to EP-2	11/8/2018	Trichlorofluoromethane	ND	5	0.72	1137	ug/L
STP-1 to EP-2	11/8/2018	Dichlorodifluoromethane	ND	5	1.3	197	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichloropropane	ND	5	0.83	5	ug/L
STP-1 to EP-2	11/8/2018	2-Butanone	920	500	71	5565	ug/L
STP-1 to EP-2	11/8/2018	1,1,2-Trichloroethane	ND	5	1.2	5	ug/L
STP-1 to EP-2	11/8/2018	Trichloroethene	ND	5	1.3	5	ug/L
STP-1 to EP-2	11/8/2018	1,1,2,2-Tetrachloroethane	ND	10	1.6	10	ug/L
STP-1 to EP-2	11/8/2018	1,2,3-Trichlorobenzene	ND	5	1.4	70	ug/L
STP-1 to EP-2	11/8/2018	Hexachlorobutadiene	*ND*	*5*	2	1.39	ug/L
STP-1 to EP-2	11/8/2018	1-Methylnaphthalene	ND	20	1.7	NA	ug/L
STP-1 to EP-2	11/8/2018	Naphthalene	ND	10	1.4	30	ug/L
STP-1 to EP-2	11/8/2018	2-Methylnaphthalene	*ND*	*20*	1.7		ug/L
STP-1 to EP-2	11/8/2018	2-Chlorotoluene	ND	5	1.3	233	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichlorobenzene	ND	5	1.6	600	ug/L
STP-1 to EP-2	11/8/2018	1,2,4-Trimethylbenzene	ND	5	1.3	56	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dibromo-3-Chloropropane	*ND*	*10*	2.4	0.0033	ug/L
STP-1 to EP-2	11/8/2018	1,2,3-Trichloropropane	*ND*	*10*	2.8	0.0084	ug/L
STP-1 to EP-2	11/8/2018	tert-Butylbenzene	ND	5	1.1	690	ug/L
STP-1 to EP-2	11/8/2018	Isopropylbenzene	ND	5	1.1	447	ug/L
STP-1 to EP-2	11/8/2018	p-Isopropyltoluene	ND	5	1.2	NA	ug/L
STP-1 to EP-2	11/8/2018	Ethylbenzene	ND	5	1.1	700	ug/L
STP-1 to EP-2	11/8/2018	Styrene	ND	5	1.3	100	ug/L
STP-1 to EP-2	11/8/2018	n-Propylbenzene	ND	5	1.2	660	ug/L
STP-1 to EP-2	11/8/2018	n-Butylbenzene	ND	15	1.2	1000	ug/L
STP-1 to EP-2	11/8/2018	4-Chlorotoluene	ND	5	1.4	250	ug/L
STP-1 to EP-2	11/8/2018	1,4-Dichlorobenzene	ND	5	1.4	75	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dibromoethane	*ND*	*5*	1.1	0.05	ug/L
STP-1 to EP-2	11/8/2018	1,2-Dichloroethane	ND	5	0.95	5	ug/L
STP-1 to EP-2	11/8/2018	4-Methyl-2-Pentanone	ND	50	2.3	1243	ug/L
STP-1 to EP-2	11/8/2018	1,3,5-Trimethylbenzene	ND	5	1.2	60	ug/L
STP-1 to EP-2	11/8/2018	Bromobenzene	ND	5	1.6	62	ug/L
STP-1 to EP-2	11/8/2018	Toluene	ND	5	0.84	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/8/2018	Chlorobenzene	ND	5	1.5	77.6	ug/L
STP-1 to EP-2	11/8/2018	1,2,4-Trichlorobenzene	ND	5	1.3	70	ug/L
STP-1 to EP-2	11/8/2018	Dibromochloromethane	*ND*	*5*	1.2	1.68	ug/L
STP-1 to EP-2	11/8/2018	Tetrachloroethene	ND	5	0.76	5	ug/L
STP-1 to EP-2	11/8/2018	sec-Butylbenzene	ND	5	1	2000	ug/L
STP-1 to EP-2	11/8/2018	1,3-Dichloropropane	ND	5	1.4	370	ug/L
STP-1 to EP-2	11/8/2018	cis-1,2-Dichloroethene	ND	5	1.9	70	ug/L
STP-1 to EP-2	11/8/2018	trans-1,2-Dichloroethene	ND	5	0.91	100	ug/L
STP-1 to EP-2	11/8/2018	Pentafluorobenzene	ND	0	0		None
STP-1 to EP-2	11/8/2018	1,3-Dichlorobenzene	ND	5	1.6	N/A	ug/L
STP-1 to EP-2	11/8/2018	1,1-Dichloropropene	ND	5	0.81	NA	ug/L
STP-1 to EP-2	11/8/2018	2-Hexanone	*ND*	*50*	4.5	38	ug/L
STP-1 to EP-2	11/8/2018	2,2-Dichloropropane	ND	10	1.2	NA	ug/L
STP-1 to EP-2	11/8/2018	1,1,1,2-Tetrachloroethane	ND	5	1.3	5.74	ug/L
STP-1 to EP-2	11/8/2018	Xylenes, Total	ND	7.5	3.2	620	ug/L
STP-1 to EP-2	11/8/2018	MTBE	ND	5	2.3	143	ug/L
STP-1 to EP-2	11/8/2018	cis-1,3-Dichloropropene	ND	5	1.5	NA	ug/L
STP-1 to EP-2	11/8/2018	trans-1,3-Dichloropropene	ND	5	1.4	NA	ug/L
STP-1 to EP-2	2/7/2019	1,1,1,2-Tetrachloroethane	ND	1	0.252399	5.74	ug/L
STP-1 to EP-2	2/7/2019	1,1,1-Trichloroethane	ND	1	0.163816	200	ug/L
STP-1 to EP-2	2/7/2019	1,1,2,2-Tetrachloroethane	ND	2	0.328299	10	ug/L
STP-1 to EP-2	2/7/2019	1,1,2-Trichloroethane	ND	1	0.232723	5	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloroethane	ND	1	0.175197	25	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloroethene	ND	1	0.120488	7	ug/L
STP-1 to EP-2	2/7/2019	1,1-Dichloropropene	ND	1	0.162599	NA	ug/L
STP-1 to EP-2	2/7/2019	1,2,3-Trichlorobenzene	ND	1	0.280308	70	ug/L
STP-1 to EP-2	2/7/2019	1,2,3-Trichloropropane	*ND*	*2*	0.566004	0.0084	ug/L
STP-1 to EP-2	2/7/2019	1,2,4-Trichlorobenzene	ND	1	0.26641	70	ug/L
STP-1 to EP-2	2/7/2019	1,2,4-Trimethylbenzene	ND	1	0.253314	56	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dibromo-3-Chloropropane	*ND*	*2*	0.470897	0.0033	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dibromoethane	*ND*	*1*	0.229529	0.05	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichlorobenzene	ND	1	0.311465	600	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichloroethane	ND	1	0.189525	5	ug/L
STP-1 to EP-2	2/7/2019	1,2-Dichloropropane	ND	1	0.165226	5	ug/L
STP-1 to EP-2	2/7/2019	1,3,5-Trimethylbenzene	ND	1	0.231414	60	ug/L
STP-1 to EP-2	2/7/2019	1,3-Dichlorobenzene	ND	1	0.312622	N/A	ug/L
STP-1 to EP-2	2/7/2019	1,3-Dichloropropane	ND	1	0.270756	370	ug/L
STP-1 to EP-2	2/7/2019	1,4-Dichlorobenzene	ND	1	0.287707	75	ug/L
STP-1 to EP-2	2/7/2019	1-Methylnaphthalene	ND	4	0.335817	NA	ug/L
STP-1 to EP-2	2/7/2019	2,2-Dichloropropane	ND	2	0.233434	NA	ug/L
STP-1 to EP-2	2/7/2019	2-Butanone	16	10	1.410869	5565	ug/L
STP-1 to EP-2	2/7/2019	2-Chlorotoluene	ND	1	0.250138	233	ug/L
STP-1 to EP-2	2/7/2019	2-Hexanone	ND	10	0.906574	38	ug/L
STP-1 to EP-2	2/7/2019	2-Methylnaphthalene	*ND*	*4*	0.345376		ug/L
STP-1 to EP-2	2/7/2019	4-Chlorotoluene	ND	1	0.280801	250	ug/L
STP-1 to EP-2	2/7/2019	p-Isopropyltoluene	ND	1	0.240339	NA	ug/L
STP-1 to EP-2	2/7/2019	4-Methyl-2-Pentanone	ND	10	0.453277	1243	ug/L
STP-1 to EP-2	2/7/2019	Acetone	530	50	3.785348	14064	ug/L
STP-1 to EP-2	2/7/2019	Benzene	**15**	1	0.174896	5	ug/L
STP-1 to EP-2	2/7/2019	Bromobenzene	ND	1	0.317906	62	ug/L
STP-1 to EP-2	2/7/2019	Bromodichloromethane	ND	1	0.282767	1.34	ug/L
STP-1 to EP-2	2/7/2019	Bromoform	ND	1	0.32331	32.9	ug/L
STP-1 to EP-2	2/7/2019	Bromomethane	ND	3	0.273082	7.54	ug/L
STP-1 to EP-2	2/7/2019	Carbon Disulfide	1.2	10	0.385031	810	ug/L
STP-1 to EP-2	2/7/2019	Carbon tetrachloride	ND	1	0.137348	5	ug/L
STP-1 to EP-2	2/7/2019	Chlorobenzene	ND	1	0.290528	77.6	ug/L
STP-1 to EP-2	2/7/2019	Chloroethane	ND	2	0.164337	20857	ug/L
STP-1 to EP-2	2/7/2019	Chloroform	ND	1	0.235224	100	ug/L
STP-1 to EP-2	2/7/2019	Chloromethane	ND	3	0.320987	20.32	ug/L
STP-1 to EP-2	2/7/2019	cis-1,2-Dichloroethene	ND	1	0.375981	70	ug/L
STP-1 to EP-2	2/7/2019	cis-1,3-Dichloropropene	ND	1	0.298228	NA	ug/L
STP-1 to EP-2	2/7/2019	Dibromochloromethane	ND	1	0.237012	1.68	ug/L
STP-1 to EP-2	2/7/2019	Dibromomethane	ND	1	0.322147	8	ug/L
STP-1 to EP-2	2/7/2019	Dichlorodifluoromethane	ND	1	0.259921	197	ug/L
STP-1 to EP-2	2/7/2019	Ethylbenzene	0.28	1	0.223402	700	ug/L
STP-1 to EP-2	2/7/2019	Hexachlorobutadiene	ND	1	0.391187	1.39	ug/L
STP-1 to EP-2	2/7/2019	Isopropylbenzene	ND	1	0.221104	447	ug/L
STP-1 to EP-2	2/7/2019	MTBE	ND	1	0.456095	143	ug/L
STP-1 to EP-2	2/7/2019	Methylene Chloride	ND	3	0.205695	5	ug/L
STP-1 to EP-2	2/7/2019	Naphthalene	ND	2	0.289626	30	ug/L
STP-1 to EP-2	2/7/2019	n-Butylbenzene	ND	3	0.24833	1000	ug/L
STP-1 to EP-2	2/7/2019	n-Propylbenzene	ND	1	0.242586	660	ug/L
STP-1 to EP-2	2/7/2019	sec-Butylbenzene	ND	1	0.202255	2000	ug/L
STP-1 to EP-2	2/7/2019	Styrene	ND	1	0.250146	100	ug/L
STP-1 to EP-2	2/7/2019	tert-Butylbenzene	ND	1	0.22147	690	ug/L
STP-1 to EP-2	2/7/2019	Tetrachloroethene	ND	1	0.151452	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	2/7/2019	Toluene	8.9	1	0.168139	1000	ug/L
STP-1 to EP-2	2/7/2019	trans-1,2-Dichloroethene	ND	1	0.18227	100	ug/L
STP-1 to EP-2	2/7/2019	trans-1,3-Dichloropropene	ND	1	0.275468	NA	ug/L
STP-1 to EP-2	2/7/2019	Trichloroethene	ND	1	0.257556	5	ug/L
STP-1 to EP-2	2/7/2019	Trichlorofluoromethane	ND	1	0.144116	1137	ug/L
STP-1 to EP-2	2/7/2019	Vinyl Chloride	ND	1	0.121074	2	ug/L
STP-1 to EP-2	2/7/2019	Xylenes, Total	1.7	1.5	0.641288	620	ug/L
STP-1 to EP-2	5/29/2019	1,1,1,2-Tetrachloroethane	*ND*	*20*	4.121238	5.74	ug/L
STP-1 to EP-2	5/29/2019	1,1,1-Trichloroethane	ND	20	3.458431	200	ug/L
STP-1 to EP-2	5/29/2019	1,1,2,2-Tetrachloroethane	*ND*	*40*	10.968674	10	ug/L
STP-1 to EP-2	5/29/2019	1,1,2-Trichloroethane	*ND*	*20*	4.3166	5	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloroethane	ND	20	2.817172	25	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloroethene	*ND*	*20*	4.107764	7	ug/L
STP-1 to EP-2	5/29/2019	1,1-Dichloropropene	ND	20	3.251983	NA	ug/L
STP-1 to EP-2	5/29/2019	1,2,3-Trichlorobenzene	ND	20	5.978422	70	ug/L
STP-1 to EP-2	5/29/2019	1,2,3-Trichloropropane	*ND*	*40*	5.945733	0.0084	ug/L
STP-1 to EP-2	5/29/2019	1,2,4-Trichlorobenzene	ND	20	3.910402	70	ug/L
STP-1 to EP-2	5/29/2019	1,2,4-Trimethylbenzene	ND	20	4.263982	56	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dibromo-3-Chloropropane	*ND*	*40*	6.545896	0.0033	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dibromoethane	*ND*	*20*	3.307511	0.05	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichlorobenzene	ND	20	5.943961	600	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichloroethane	*ND*	*20*	3.892755	5	ug/L
STP-1 to EP-2	5/29/2019	1,2-Dichloropropane	*ND*	*20*	4.178595	5	ug/L
STP-1 to EP-2	5/29/2019	1,3,5-Trimethylbenzene	ND	20	3.773197	60	ug/L
STP-1 to EP-2	5/29/2019	1,3-Dichlorobenzene	ND	20	4.97085	N/A	ug/L
STP-1 to EP-2	5/29/2019	1,3-Dichloropropane	ND	20	4.014564	370	ug/L
STP-1 to EP-2	5/29/2019	1,4-Dichlorobenzene	ND	20	5.899613	75	ug/L
STP-1 to EP-2	5/29/2019	1-Methylnaphthalene	ND	80	6.29909	NA	ug/L
STP-1 to EP-2	5/29/2019	2,2-Dichloropropane	ND	40	4.66868	NA	ug/L
STP-1 to EP-2	5/29/2019	2-Butanone	46	200	41.788332	5565	ug/L
STP-1 to EP-2	5/29/2019	2-Chlorotoluene	ND	20	4.909465	233	ug/L
STP-1 to EP-2	5/29/2019	2-Hexanone	*ND*	*200*	30.943841	38	ug/L
STP-1 to EP-2	5/29/2019	2-Methylnaphthalene	*ND*	*80*	6.90752		ug/L
STP-1 to EP-2	5/29/2019	4-Chlorotoluene	ND	20	4.696791	250	ug/L
STP-1 to EP-2	5/29/2019	p-Isopropyltoluene	ND	20	4.345787	NA	ug/L
STP-1 to EP-2	5/29/2019	4-Methyl-2-Pentanone	ND	200	14.27791	1243	ug/L
STP-1 to EP-2	5/29/2019	Acetone	760	200	23.987928	14064	ug/L
STP-1 to EP-2	5/29/2019	Benzene	*ND*	*20*	3.332781	5	ug/L
STP-1 to EP-2	5/29/2019	Bromobenzene	ND	20	4.894541	62	ug/L
STP-1 to EP-2	5/29/2019	Bromodichloromethane	*ND*	*20*	2.681837	1.34	ug/L
STP-1 to EP-2	5/29/2019	Bromoform	ND	20	5.773263	32.9	ug/L
STP-1 to EP-2	5/29/2019	Bromomethane	*ND*	*60*	5.461648	7.54	ug/L
STP-1 to EP-2	5/29/2019	Carbon Disulfide	ND	200	9.051134	810	ug/L
STP-1 to EP-2	5/29/2019	Carbon tetrachloride	*ND*	*20*	2.808076	5	ug/L
STP-1 to EP-2	5/29/2019	Chlorobenzene	ND	20	3.877066	77.6	ug/L
STP-1 to EP-2	5/29/2019	Chloroethane	ND	40	3.556052	20857	ug/L
STP-1 to EP-2	5/29/2019	Chloroform	ND	20	2.437811	100	ug/L
STP-1 to EP-2	5/29/2019	Chloromethane	*ND*	*60*	6.419747	20.32	ug/L
STP-1 to EP-2	5/29/2019	cis-1,2-Dichloroethene	ND	20	3.802301	70	ug/L
STP-1 to EP-2	5/29/2019	cis-1,3-Dichloropropene	ND	20	2.769762	NA	ug/L
STP-1 to EP-2	5/29/2019	Dibromochloromethane	*ND*	*20*	4.775674	1.68	ug/L
STP-1 to EP-2	5/29/2019	Dibromomethane	*ND*	*20*	4.184174	8	ug/L
STP-1 to EP-2	5/29/2019	Dichlorodifluoromethane	ND	20	5.198423	197	ug/L
STP-1 to EP-2	5/29/2019	Ethylbenzene	ND	20	2.646816	700	ug/L
STP-1 to EP-2	5/29/2019	Hexachlorobutadiene	*ND*	*20*	6.197507	1.39	ug/L
STP-1 to EP-2	5/29/2019	Isopropylbenzene	ND	20	3.830445	447	ug/L
STP-1 to EP-2	5/29/2019	MTBE	ND	20	9.1219	143	ug/L
STP-1 to EP-2	5/29/2019	Methylene Chloride	*ND*	*60*	3.090029	5	ug/L
STP-1 to EP-2	5/29/2019	Naphthalene	*ND*	*40*	5.501427	30	ug/L
STP-1 to EP-2	5/29/2019	n-Butylbenzene	ND	60	4.551391	1000	ug/L
STP-1 to EP-2	5/29/2019	n-Propylbenzene	ND	20	4.28616	660	ug/L
STP-1 to EP-2	5/29/2019	sec-Butylbenzene	ND	20	4.954626	2000	ug/L
STP-1 to EP-2	5/29/2019	Styrene	ND	20	3.826467	100	ug/L
STP-1 to EP-2	5/29/2019	tert-Butylbenzene	ND	20	4.139697	690	ug/L
STP-1 to EP-2	5/29/2019	Tetrachloroethene	*ND*	*20*	2.990498	5	ug/L
STP-1 to EP-2	5/29/2019	Toluene	ND	20	7.008724	1000	ug/L
STP-1 to EP-2	5/29/2019	trans-1,2-Dichloroethene	ND	20	3.590484	100	ug/L
STP-1 to EP-2	5/29/2019	trans-1,3-Dichloropropene	ND	20	3.332957	NA	ug/L
STP-1 to EP-2	5/29/2019	Trichloroethene	*ND*	*20*	3.325435	5	ug/L
STP-1 to EP-2	5/29/2019	Trichlorofluoromethane	ND	20	3.780967	1137	ug/L
STP-1 to EP-2	5/29/2019	Vinyl Chloride	*ND*	*20*	3.581986	2	ug/L
STP-1 to EP-2	5/29/2019	Xylenes, Total	ND	30	9.088299	620	ug/L
STP-1 to EP-2	10/9/2019	1,1,1,2-Tetrachloroethane	ND	2	0.412124	5.74	ug/L
STP-1 to EP-2	10/9/2019	1,1,1-Trichloroethane	ND	2	0.345843	200	ug/L
STP-1 to EP-2	10/9/2019	1,1,2,2-Tetrachloroethane	ND	4	1.096867	10	ug/L
STP-1 to EP-2	10/9/2019	1,1,2-Trichloroethane	ND	2	0.43166	5	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	10/9/2019	1,1-Dichloroethane	ND	2	0.281717	25	ug/L
STP-1 to EP-2	10/9/2019	1,1-Dichloroethene	ND	2	0.410776	7	ug/L
STP-1 to EP-2	10/9/2019	1,1-Dichloropropene	ND	2	0.325198	NA	ug/L
STP-1 to EP-2	10/9/2019	1,2,3-Trichlorobenzene	ND	2	0.597842	70	ug/L
STP-1 to EP-2	10/9/2019	1,2,3-Trichloropropane	*ND*	*4*	0.594573	0.0084	ug/L
STP-1 to EP-2	10/9/2019	1,2,4-Trichlorobenzene	ND	2	0.39104	70	ug/L
STP-1 to EP-2	10/9/2019	1,2,4-Trimethylbenzene	0.59	2	0.426398	56	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dibromo-3-Chloropropane	*ND*	*4*	0.65459	0.0033	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dibromoethane	*ND*	*2*	0.330751	0.05	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichlorobenzene	ND	2	0.594396	600	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichloroethane	0.77	2	0.389276	5	ug/L
STP-1 to EP-2	10/9/2019	1,2-Dichloropropane	ND	2	0.41786	5	ug/L
STP-1 to EP-2	10/9/2019	1,3,5-Trimethylbenzene	ND	2	0.37732	60	ug/L
STP-1 to EP-2	10/9/2019	1,3-Dichlorobenzene	ND	2	0.497085	N/A	ug/L
STP-1 to EP-2	10/9/2019	1,3-Dichloropropane	ND	2	0.401456	370	ug/L
STP-1 to EP-2	10/9/2019	1,4-Dichlorobenzene	ND	2	0.589961	75	ug/L
STP-1 to EP-2	10/9/2019	1-Methylnaphthalene	ND	8	0.629909	NA	ug/L
STP-1 to EP-2	10/9/2019	2,2-Dichloropropane	ND	4	0.466868	NA	ug/L
STP-1 to EP-2	10/9/2019	2-Butanone	12	20	4.178833	5565	ug/L
STP-1 to EP-2	10/9/2019	2-Chlorotoluene	ND	2	0.490946	233	ug/L
STP-1 to EP-2	10/9/2019	2-Hexanone	ND	20	3.094384	38	ug/L
STP-1 to EP-2	10/9/2019	2-Methylnaphthalene	*ND*	*8*	0.690752		ug/L
STP-1 to EP-2	10/9/2019	4-Chlorotoluene	ND	2	0.469679	250	ug/L
STP-1 to EP-2	10/9/2019	p-Isopropyltoluene	ND	2	0.434579	NA	ug/L
STP-1 to EP-2	10/9/2019	4-Methyl-2-Pentanone	ND	20	1.427791	1243	ug/L
STP-1 to EP-2	10/9/2019	Acetone	760	200	23.987928	14064	ug/L
STP-1 to EP-2	10/9/2019	Benzene	3.9	2	0.333278	5	ug/L
STP-1 to EP-2	10/9/2019	Bromobenzene	ND	2	0.489454	62	ug/L
STP-1 to EP-2	10/9/2019	Bromodichloromethane	*ND*	*2*	0.268184	1.34	ug/L
STP-1 to EP-2	10/9/2019	Bromoform	ND	2	0.577326	32.9	ug/L
STP-1 to EP-2	10/9/2019	Bromomethane	ND	6	0.546165	7.54	ug/L
STP-1 to EP-2	10/9/2019	Carbon Disulfide	3.3	20	0.905113	810	ug/L
STP-1 to EP-2	10/9/2019	Carbon tetrachloride	ND	2	0.280808	5	ug/L
STP-1 to EP-2	10/9/2019	Chlorobenzene	ND	2	0.387707	77.6	ug/L
STP-1 to EP-2	10/9/2019	Chloroethane	2.5	4	0.355605	20857	ug/L
STP-1 to EP-2	10/9/2019	Chloroform	ND	2	0.243781	100	ug/L
STP-1 to EP-2	10/9/2019	Chloromethane	2.7	6	0.641975	20.32	ug/L
STP-1 to EP-2	10/9/2019	cis-1,2-Dichloroethene	ND	2	0.38023	70	ug/L
STP-1 to EP-2	10/9/2019	cis-1,3-Dichloropropene	ND	2	0.276976	NA	ug/L
STP-1 to EP-2	10/9/2019	Dibromochloromethane	*ND*	*2*	0.477567	1.68	ug/L
STP-1 to EP-2	10/9/2019	Dibromomethane	ND	2	0.418417	8	ug/L
STP-1 to EP-2	10/9/2019	Dichlorodifluoromethane	ND	2	0.519842	197	ug/L
STP-1 to EP-2	10/9/2019	Ethylbenzene	ND	2	0.264682	700	ug/L
STP-1 to EP-2	10/9/2019	Hexachlorobutadiene	*ND*	*2*	0.619751	1.39	ug/L
STP-1 to EP-2	10/9/2019	Isopropylbenzene	ND	2	0.383045	447	ug/L
STP-1 to EP-2	10/9/2019	MTBE	ND	2	0.91219	143	ug/L
STP-1 to EP-2	10/9/2019	Methylene Chloride	*0.45*	*6*	0.309003	5	ug/L
STP-1 to EP-2	10/9/2019	Naphthalene	ND	4	0.550143	30	ug/L
STP-1 to EP-2	10/9/2019	n-Butylbenzene	ND	6	0.455139	1000	ug/L
STP-1 to EP-2	10/9/2019	n-Propylbenzene	ND	2	0.428616	660	ug/L
STP-1 to EP-2	10/9/2019	sec-Butylbenzene	ND	2	0.495463	2000	ug/L
STP-1 to EP-2	10/9/2019	Styrene	ND	2	0.382647	100	ug/L
STP-1 to EP-2	10/9/2019	tert-Butylbenzene	ND	2	0.41397	690	ug/L
STP-1 to EP-2	10/9/2019	Tetrachloroethene	ND	2	0.29905	5	ug/L
STP-1 to EP-2	10/9/2019	Toluene	1.1	2	0.700872	1000	ug/L
STP-1 to EP-2	10/9/2019	trans-1,2-Dichloroethene	ND	2	0.359048	100	ug/L
STP-1 to EP-2	10/9/2019	trans-1,3-Dichloropropene	ND	2	0.333296	NA	ug/L
STP-1 to EP-2	10/9/2019	Trichloroethene	ND	2	0.332544	5	ug/L
STP-1 to EP-2	10/9/2019	Trichlorofluoromethane	ND	2	0.378097	1137	ug/L
STP-1 to EP-2	10/9/2019	Vinyl Chloride	ND	2	0.358199	2	ug/L
STP-1 to EP-2	10/9/2019	Xylenes, Total	ND	3	0.90883	620	ug/L
STP-1 to EP-2	11/21/2019	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.060619	5.74	ug/L
STP-1 to EP-2	11/21/2019	1,1,1-Trichloroethane	ND	10	1.729216	200	ug/L
STP-1 to EP-2	11/21/2019	1,1,2,2-Tetrachloroethane	*ND*	*20*	5.484337	10	ug/L
STP-1 to EP-2	11/21/2019	1,1,2-Trichloroethane	*ND*	*10*	2.1583	5	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloroethane	ND	10	1.408586	25	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloroethene	*ND*	*10*	2.053882	7	ug/L
STP-1 to EP-2	11/21/2019	1,1-Dichloropropene	ND	10	1.625991	NA	ug/L
STP-1 to EP-2	11/21/2019	1,2,3-Trichlorobenzene	ND	10	2.989211	70	ug/L
STP-1 to EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	10	1.955201	70	ug/L
STP-1 to EP-2	11/21/2019	1,2,4-Trimethylbenzene	ND	10	2.131991	56	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dibromoethane	*ND*	*10*	1.653755	0.05	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichlorobenzene	ND	10	2.971981	600	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichloroethane	*ND*	*10*	1.946378	5	ug/L
STP-1 to EP-2	11/21/2019	1,2-Dichloropropane	*ND*	*10*	2.089298	5	ug/L
STP-1 to EP-2	11/21/2019	1,3,5-Trimethylbenzene	ND	10	1.886598	60	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/21/2019	1,3-Dichlorobenzene	ND	10	2.485425	N/A	ug/L
STP-1 to EP-2	11/21/2019	1,3-Dichloropropane	ND	10	2.007282	370	ug/L
STP-1 to EP-2	11/21/2019	1,4-Dichlorobenzene	ND	10	2.949807	75	ug/L
STP-1 to EP-2	11/21/2019	1-Methylnaphthalene	ND	40	3.149545	NA	ug/L
STP-1 to EP-2	11/21/2019	2,2-Dichloropropane	ND	20	2.33434	NA	ug/L
STP-1 to EP-2	11/21/2019	2-Butanone	47	100	20.894166	5565	ug/L
STP-1 to EP-2	11/21/2019	2-Chlorotoluene	ND	10	2.454732	233	ug/L
STP-1 to EP-2	11/21/2019	2-Hexanone	*ND*	*100*	15.47192	38	ug/L
STP-1 to EP-2	11/21/2019	2-Methylnaphthalene	*ND*	*40*	3.45376		ug/L
STP-1 to EP-2	11/21/2019	4-Chlorotoluene	ND	10	2.348396	250	ug/L
STP-1 to EP-2	11/21/2019	p-Isopropyltoluene	ND	10	2.172894	NA	ug/L
STP-1 to EP-2	11/21/2019	4-Methyl-2-Pentanone	ND	100	7.138955	1243	ug/L
STP-1 to EP-2	11/21/2019	Acetone	ND	100	11.993964	14064	ug/L
STP-1 to EP-2	11/21/2019	Benzene	**22**	10	1.666391	5	ug/L
STP-1 to EP-2	11/21/2019	Bromobenzene	ND	10	2.44727	62	ug/L
STP-1 to EP-2	11/21/2019	Bromodichloromethane	*ND*	*10*	1.340919	1.34	ug/L
STP-1 to EP-2	11/21/2019	Bromoform	ND	10	2.886632	32.9	ug/L
STP-1 to EP-2	11/21/2019	Bromomethane	**16**	30	2.730824	7.54	ug/L
STP-1 to EP-2	11/21/2019	Carbon Disulfide	ND	100	4.525567	810	ug/L
STP-1 to EP-2	11/21/2019	Carbon tetrachloride	*ND*	*10*	1.404038	5	ug/L
STP-1 to EP-2	11/21/2019	Chlorobenzene	ND	10	1.938533	77.6	ug/L
STP-1 to EP-2	11/21/2019	Chloroethane	ND	20	1.778026	20857	ug/L
STP-1 to EP-2	11/21/2019	Chloroform	ND	10	1.218906	100	ug/L
STP-1 to EP-2	11/21/2019	Chloromethane	*ND*	*30*	3.209873	20.32	ug/L
STP-1 to EP-2	11/21/2019	cis-1,2-Dichloroethene	ND	10	1.901151	70	ug/L
STP-1 to EP-2	11/21/2019	cis-1,3-Dichloropropene	ND	10	1.384881	NA	ug/L
STP-1 to EP-2	11/21/2019	Dibromochloromethane	*ND*	*10*	2.387837	1.68	ug/L
STP-1 to EP-2	11/21/2019	Dibromomethane	*ND*	*10*	2.092087	8	ug/L
STP-1 to EP-2	11/21/2019	Dichlorodifluoromethane	ND	10	2.599211	197	ug/L
STP-1 to EP-2	11/21/2019	Ethylbenzene	ND	10	1.323408	700	ug/L
STP-1 to EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*10*	3.098753	1.39	ug/L
STP-1 to EP-2	11/21/2019	Isopropylbenzene	ND	10	1.915223	447	ug/L
STP-1 to EP-2	11/21/2019	MTBE	ND	10	4.56095	143	ug/L
STP-1 to EP-2	11/21/2019	Methylene Chloride	*ND*	*30*	1.545015	5	ug/L
STP-1 to EP-2	11/21/2019	Naphthalene	ND	20	2.750713	30	ug/L
STP-1 to EP-2	11/21/2019	n-Butylbenzene	ND	30	2.275695	1000	ug/L
STP-1 to EP-2	11/21/2019	n-Propylbenzene	ND	10	2.14308	660	ug/L
STP-1 to EP-2	11/21/2019	sec-Butylbenzene	ND	10	2.477313	2000	ug/L
STP-1 to EP-2	11/21/2019	Styrene	ND	10	1.913234	100	ug/L
STP-1 to EP-2	11/21/2019	tert-Butylbenzene	ND	10	2.069849	690	ug/L
STP-1 to EP-2	11/21/2019	Tetrachloroethene	*ND*	*10*	1.495249	5	ug/L
STP-1 to EP-2	11/21/2019	Toluene	13	10	3.504362	1000	ug/L
STP-1 to EP-2	11/21/2019	trans-1,2-Dichloroethene	ND	10	1.795242	100	ug/L
STP-1 to EP-2	11/21/2019	trans-1,3-Dichloropropene	ND	10	1.666479	NA	ug/L
STP-1 to EP-2	11/21/2019	Trichloroethene	*ND*	*10*	1.662718	5	ug/L
STP-1 to EP-2	11/21/2019	Trichlorofluoromethane	ND	10	1.890483	1137	ug/L
STP-1 to EP-2	11/21/2019	Vinyl Chloride	*ND*	*10*	1.790993	2	ug/L
STP-1 to EP-2	11/21/2019	Xylenes, Total	ND	15	4.544149	620	ug/L
STP-1 to EP-2	9/16/2020	1,1,1,2-Tetrachloroethane	*ND*	*10*	2.7	5.74	ug/L
STP-1 to EP-2	9/16/2020	1,1,1-Trichloroethane	ND	10	3	200	ug/L
STP-1 to EP-2	9/16/2020	1,1,2,2-Tetrachloroethane	*ND*	*20*	2.7	10	ug/L
STP-1 to EP-2	9/16/2020	1,1,2-Trichloroethane	*ND*	*10*	1.9	5	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloroethane	ND	10	2.7	25	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloroethene	*ND*	*10*	1.3	7	ug/L
STP-1 to EP-2	9/16/2020	1,1-Dichloropropene	ND	10	1.8	NA	ug/L
STP-1 to EP-2	9/16/2020	1,2,3-Trichlorobenzene	ND	10	1.3	70	ug/L
STP-1 to EP-2	9/16/2020	1,2,3-Trichloropropane	*ND*	*20*	4.4	0.0084	ug/L
STP-1 to EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	10	2.4	70	ug/L
STP-1 to EP-2	9/16/2020	1,2,4-Trimethylbenzene	ND	10	1.2	56	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dibromo-3-Chloropropane	*ND*	*20*	5.9	0.0033	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dibromoethane	*ND*	*10*	3	0.05	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichlorobenzene	ND	10	1.5	600	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichloroethane	ND	5	2.2	5	ug/L
STP-1 to EP-2	9/16/2020	1,2-Dichloropropane	*ND*	*10*	1.3	5	ug/L
STP-1 to EP-2	9/16/2020	1,3,5-Trimethylbenzene	ND	10	1.8	60	ug/L
STP-1 to EP-2	9/16/2020	1,3-Dichlorobenzene	ND	10	1.6	N/A	ug/L
STP-1 to EP-2	9/16/2020	1,3-Dichloropropane	ND	10	1.8	370	ug/L
STP-1 to EP-2	9/16/2020	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
STP-1 to EP-2	9/16/2020	1-Methylnaphthalene	ND	40	8.4	NA	ug/L
STP-1 to EP-2	9/16/2020	2,2-Dichloropropane	ND	20	2.6	NA	ug/L
STP-1 to EP-2	9/16/2020	2-Butanone	ND	100	11	5565	ug/L
STP-1 to EP-2	9/16/2020	2-Chlorotoluene	ND	10	1.3	233	ug/L
STP-1 to EP-2	9/16/2020	2-Hexanone	*ND*	*100*	18	38	ug/L
STP-1 to EP-2	9/16/2020	2-Methylnaphthalene	*ND*	*40*	6.9		ug/L
STP-1 to EP-2	9/16/2020	4-Chlorotoluene	ND	10	5.1	250	ug/L
STP-1 to EP-2	9/16/2020	p-Isopropyltoluene	ND	10	2	NA	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/16/2020	4-Methyl-2-Pentanone	ND	100	11	1243	ug/L
STP-1 to EP-2	9/16/2020	Benzene	ND	5	2.3	5	ug/L
STP-1 to EP-2	9/16/2020	Bromobenzene	ND	10	2.8	62	ug/L
STP-1 to EP-2	9/16/2020	Bromodichloromethane	*ND*	*10*	2	1.34	ug/L
STP-1 to EP-2	9/16/2020	Bromoform	ND	10	3.1	32.9	ug/L
STP-1 to EP-2	9/16/2020	Bromomethane	*ND*	*30*	16	7.54	ug/L
STP-1 to EP-2	9/16/2020	Carbon Disulfide	ND	100	4.4	810	ug/L
STP-1 to EP-2	9/16/2020	Carbon tetrachloride	*ND*	*10*	1.8	5	ug/L
STP-1 to EP-2	9/16/2020	Chlorobenzene	ND	10	1.4	77.6	ug/L
STP-1 to EP-2	9/16/2020	Chloroethane	ND	20	3.8	20857	ug/L
STP-1 to EP-2	9/16/2020	Chloroform	ND	10	1.3	100	ug/L
STP-1 to EP-2	9/16/2020	Chloromethane	*ND*	*30*	4	20.32	ug/L
STP-1 to EP-2	9/16/2020	cis-1,2-Dichloroethene	ND	10	3.9	70	ug/L
STP-1 to EP-2	9/16/2020	cis-1,3-Dichloropropene	ND	10	3.6	NA	ug/L
STP-1 to EP-2	9/16/2020	Dibromochloromethane	*ND*	*10*	2.8	1.68	ug/L
STP-1 to EP-2	9/16/2020	Dibromomethane	*ND*	*10*	3.1	8	ug/L
STP-1 to EP-2	9/16/2020	Dichlorodifluoromethane	ND	10	4.4	197	ug/L
STP-1 to EP-2	9/16/2020	Ethylbenzene	ND	10	2.1	700	ug/L
STP-1 to EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*10*	3.3	1.39	ug/L
STP-1 to EP-2	9/16/2020	Isopropylbenzene	ND	10	1.8	447	ug/L
STP-1 to EP-2	9/16/2020	MTBE	ND	10	3.9	143	ug/L
STP-1 to EP-2	9/16/2020	Methylene Chloride	*ND*	*30*	4	5	ug/L
STP-1 to EP-2	9/16/2020	n-Butylbenzene	ND	30	2.5	1000	ug/L
STP-1 to EP-2	9/16/2020	n-Propylbenzene	ND	10	1.8	660	ug/L
STP-1 to EP-2	9/16/2020	Naphthalene	ND	20	2.8	30	ug/L
STP-1 to EP-2	9/16/2020	sec-Butylbenzene	ND	10	6.1	2000	ug/L
STP-1 to EP-2	9/16/2020	Styrene	ND	10	1.3	100	ug/L
STP-1 to EP-2	9/16/2020	tert-Butylbenzene	ND	10	2.4	690	ug/L
STP-1 to EP-2	9/16/2020	Tetrachloroethene	*ND*	*10*	3.6	5	ug/L
STP-1 to EP-2	9/16/2020	Toluene	ND	10	2	1000	ug/L
STP-1 to EP-2	9/16/2020	trans-1,2-Dichloroethene	ND	10	4.9	100	ug/L
STP-1 to EP-2	9/16/2020	trans-1,3-Dichloropropene	ND	10	3.4	NA	ug/L
STP-1 to EP-2	9/16/2020	Trichloroethene	*ND*	*10*	2	5	ug/L
STP-1 to EP-2	9/16/2020	Trichlorofluoromethane	ND	10	0.92	1137	ug/L
STP-1 to EP-2	9/16/2020	Vinyl Chloride	*ND*	*10*	2	2	ug/L
STP-1 to EP-2	9/16/2020	Xylenes, Total	ND	15	5.5	620	ug/L
STP-1 to EP-2	9/16/2020	Acetone	12000	50	230	14064	ug/L
STP-1 to EP-2	12/21/2020	Acetone	104	25	10	14064	ug/L
STP-1 to EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
STP-1 to EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
STP-1 to EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
STP-1 to EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
STP-1 to EP-2	12/21/2020	2-Butanone	31	25	2.6	5565	ug/L
STP-1 to EP-2	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
STP-1 to EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
STP-1 to EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
STP-1 to EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
STP-1 to EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
STP-1 to EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
STP-1 to EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
STP-1 to EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
STP-1 to EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
STP-1 to EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
STP-1 to EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
STP-1 to EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
STP-1 to EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
STP-1 to EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
STP-1 to EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
STP-1 to EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
STP-1 to EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
STP-1 to EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
STP-1 to EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
STP-1 to EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
STP-1 to EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
STP-1 to EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
STP-1 to EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
STP-1 to EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
STP-1 to EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
STP-1 to EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
STP-1 to EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L
STP-1 to EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
STP-1 to EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
STP-1 to EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
STP-1 to EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
STP-1 to EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L
STP-1 to EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
STP-1 to EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
STP-1 to EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
STP-1 to EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
STP-1 to EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
STP-1 to EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
STP-1 to EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L
STP-1 to EP-2	12/21/2020	Acetone	99.8	25	10	14064	ug/L
STP-1 to EP-2	12/21/2020	Benzene	ND	1	0.38	5	ug/L
STP-1 to EP-2	12/21/2020	Bromodichloromethane	ND	1	0.5	1.34	ug/L
STP-1 to EP-2	12/21/2020	Bromoform	ND	5	0.71	32.9	ug/L
STP-1 to EP-2	12/21/2020	Bromomethane	ND	1	0.98	7.54	ug/L
STP-1 to EP-2	12/21/2020	2-Butanone	32.9	25	2.6	5565	ug/L
STP-1 to EP-2	12/21/2020	Carbon Disulfide	ND	1	0.5	810	ug/L
STP-1 to EP-2	12/21/2020	Carbon tetrachloride	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Chlorobenzene	ND	1	0.5	77.6	ug/L
STP-1 to EP-2	12/21/2020	Dibromochloromethane	ND	1	0.5	1.68	ug/L
STP-1 to EP-2	12/21/2020	Chloroethane	ND	1	0.76	20857	ug/L
STP-1 to EP-2	12/21/2020	Chloroform	ND	1	0.6	100	ug/L
STP-1 to EP-2	12/21/2020	Chloromethane	ND	1	0.83	20.32	ug/L
STP-1 to EP-2	12/21/2020	2-Chlorotoluene	ND	1	0.57	233	ug/L
STP-1 to EP-2	12/21/2020	4-Chlorotoluene	ND	1	0.56	250	ug/L
STP-1 to EP-2	12/21/2020	cis-1,2-Dichloroethene	ND	1	0.5	70	ug/L
STP-1 to EP-2	12/21/2020	cis-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromo-3-Chloropropane	*ND*	*5*	1.5	0.0033	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dibromoethane	*ND*	*1*	0.5	0.05	ug/L
STP-1 to EP-2	12/21/2020	Dibromomethane	ND	5	0.59	8	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichlorobenzene	ND	1	0.5	600	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichlorobenzene	ND	1	0.54	N/A	ug/L
STP-1 to EP-2	12/21/2020	1,4-Dichlorobenzene	ND	1	0.64	75	ug/L
STP-1 to EP-2	12/21/2020	Dichlorodifluoromethane	ND	1	0.85	197	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethane	ND	1	0.5	25	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloroethane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloroethene	ND	1	0.5	7	ug/L
STP-1 to EP-2	12/21/2020	1,2-Dichloropropane	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	1,3-Dichloropropane	ND	1	0.5	370	ug/L
STP-1 to EP-2	12/21/2020	2,2-Dichloropropane	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,1-Dichloropropene	ND	1	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	Ethylbenzene	ND	1	0.5	700	ug/L
STP-1 to EP-2	12/21/2020	Hexachlorobutadiene	*ND*	*5*	0.9	1.39	ug/L
STP-1 to EP-2	12/21/2020	2-Hexanone	ND	25	3.1	38	ug/L
STP-1 to EP-2	12/21/2020	Isopropylbenzene	ND	1	0.53	447	ug/L
STP-1 to EP-2	12/21/2020	Methylene Chloride	ND	5	3	5	ug/L
STP-1 to EP-2	12/21/2020	1-Methylnaphthalene	ND	5	4.2	NA	ug/L
STP-1 to EP-2	12/21/2020	2-Methylnaphthalene	*ND*	*10*	4.6		ug/L
STP-1 to EP-2	12/21/2020	4-Methyl-2-Pentanone	ND	25	1.8	1243	ug/L
STP-1 to EP-2	12/21/2020	MTBE	ND	1	0.74	143	ug/L
STP-1 to EP-2	12/21/2020	Naphthalene	ND	1	1	30	ug/L
STP-1 to EP-2	12/21/2020	n-Butylbenzene	ND	1	0.76	1000	ug/L
STP-1 to EP-2	12/21/2020	n-Propylbenzene	ND	1	0.69	660	ug/L
STP-1 to EP-2	12/21/2020	p-Isopropyltoluene	ND	1	0.71	NA	ug/L
STP-1 to EP-2	12/21/2020	sec-Butylbenzene	ND	1	0.7	2000	ug/L
STP-1 to EP-2	12/21/2020	Styrene	ND	1	1	100	ug/L
STP-1 to EP-2	12/21/2020	tert-Butylbenzene	ND	1	0.63	690	ug/L
STP-1 to EP-2	12/21/2020	1,1,1,2-Tetrachloroethane	ND	1	0.52	5.74	ug/L
STP-1 to EP-2	12/21/2020	1,1,2,2-Tetrachloroethane	ND	1	0.5	10	ug/L
STP-1 to EP-2	12/21/2020	Tetrachloroethene	ND	1	0.58	5	ug/L
STP-1 to EP-2	12/21/2020	Toluene	ND	1	0.41	1000	ug/L

APPENDIX C-1a. VOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	trans-1,2-Dichloroethene	ND	1	0.5	100	ug/L
STP-1 to EP-2	12/21/2020	trans-1,3-Dichloropropene	ND	5	0.5	NA	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichlorobenzene	ND	1	0.7	70	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	1	0.82	70	ug/L
STP-1 to EP-2	12/21/2020	1,1,1-Trichloroethane	ND	1	0.5	200	ug/L
STP-1 to EP-2	12/21/2020	1,1,2-Trichloroethane	ND	5	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichloroethene	ND	1	0.5	5	ug/L
STP-1 to EP-2	12/21/2020	Trichlorofluoromethane	ND	1	0.52	1137	ug/L
STP-1 to EP-2	12/21/2020	1,2,3-Trichloropropane	*ND*	*5*	0.84	0.0084	ug/L
STP-1 to EP-2	12/21/2020	1,2,4-Trimethylbenzene	ND	1	0.82	56	ug/L
STP-1 to EP-2	12/21/2020	1,3,5-Trimethylbenzene	ND	1	0.56	60	ug/L
STP-1 to EP-2	12/21/2020	Vinyl Chloride	ND	1	0.5	2	ug/L
STP-1 to EP-2	12/21/2020	Xylenes, Total	ND	10	1.6	620	ug/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-11	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-11	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-11	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-11	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-11	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-11	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-11	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-11	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-11	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-11	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-11	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-11	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-11	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-11	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-11	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-11	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-11	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-11	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-11	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-11	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-11	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-11	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-11	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-11	5/29/2012	2-Methylphenol	ND	50	14	190	ug/L
EP-11	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-11	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-11	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-11	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-11	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-11	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-11	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-11	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-11	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-11	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-11	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-11	5/29/2012	Phenol	ND	50	13	5761	ug/L
EP-11	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-11	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-11	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-11	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-11	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-11	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-11	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-11	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-11	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-11	5/29/2012	Dimethylphthalate	*ND*	*50*	13		ug/L
EP-11	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-11	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-11	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-11	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-11	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-11	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-11	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-11	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-11	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-11	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-11	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-11	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-11	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-11	5/29/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-11	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-11	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-11	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-11	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-11	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-11	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-11	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-11	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-11	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-11	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-11	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-11	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-11	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-11	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-11	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-11	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-11	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-11	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-11	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-11	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-11	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-11	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-11	11/6/2012	2-Methylphenol	200	50	14	NA	ug/L
EP-11	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-11	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-11	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-11	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-11	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-11	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-11	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-11	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-11	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-11	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-11	11/6/2012	Phenol	680	50	13	5761	ug/L
EP-11	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-11	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-11	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-11	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-11	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-11	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-11	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-11	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-11	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-11	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-11	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-11	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-11	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-11	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-11	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-11	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-11	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-11	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-11	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-11	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-11	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-11	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-11	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-11	11/6/2012	3,4-Methylphenol	330	50	14	NA	ug/L
EP-11	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-11	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-11	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-11	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-11	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-11	5/28/2013	Aniline	*ND*	*20*	4.4	13	ug/L
EP-11	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-11	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-11	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-11	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-11	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-11	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-11	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-11	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-11	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-11	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-11	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-11	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-11	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-11	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-11	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-11	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-11	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-11	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-11	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-11	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-11	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-11	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-11	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-11	5/28/2013	2-Methylphenol	ND	20	5.4	NA	ug/L
EP-11	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-11	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-11	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-11	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-11	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-11	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-11	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-11	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-11	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-11	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-11	5/28/2013	2,4-Dimethylphenol	ND	20	5.9	354	ug/L
EP-11	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-11	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-11	5/28/2013	Phenol	ND	20	4.4	5761	ug/L
EP-11	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-11	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-11	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-11	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-11	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-11	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-11	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-11	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-11	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-11	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-11	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-11	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-11	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-11	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-11	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-11	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-11	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-11	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-11	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-11	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-11	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-11	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-11	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-11	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-11	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-11	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-11	5/28/2013	3,4-Methylphenol	ND	20	7.5	NA	ug/L
EP-11	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-11	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-11	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-11	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-11	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-11	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-11	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-11	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-11	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-11	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-11	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-11	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-11	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-11	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-11	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-11	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-11	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-11	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-11	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-11	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-11	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-11	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-11	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-11	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-11	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-11	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-11	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-11	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-11	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-11	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-11	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-11	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-11	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-11	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-11	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-11	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-11	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-11	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-11	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-11	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-11	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-11	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-11	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-11	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-11	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-11	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-11	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-11	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-11	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-11	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-11	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-11	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-11	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-11	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-11	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-11	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-11	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-11	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-11	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-11	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-11	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-11	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-11	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-11	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-11	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-11	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-11	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-11	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-11	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-11	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-11	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-11	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-11	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-11	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-11	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-11	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-11	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-11	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-11	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-11	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-11	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-11	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-11	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-11	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-11	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-11	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-11	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-11	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-11	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-11	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-11	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-11	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-11	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-11	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-11	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-11	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-11	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-11	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-11	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-11	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-11	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-11	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-11	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-11	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-11	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-11	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-11	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-11	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-11	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-11	3/5/2014	Phenol	ND	50	7.9	5761	ug/L
EP-11	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-11	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-11	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-11	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-11	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-11	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-11	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-11	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-11	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-11	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-11	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-11	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-11	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-11	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-11	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-11	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-11	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-11	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-11	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-11	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-11	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-11	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-11	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-11	3/5/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-11	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-11	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-11	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-11	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-11	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-11	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-11	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-11	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-11	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-11	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-11	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-11	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-11	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-11	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-11	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-11	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-11	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-11	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-11	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-11	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-11	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-11	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-11	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-11	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-11	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-11	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-11	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-11	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-11	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-11	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-11	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-11	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-11	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-11	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-11	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-11	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-11	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-11	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-11	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-11	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-11	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-11	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-11	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-11	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-11	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-11	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-11	11/12/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
EP-11	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-11	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-11	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-11	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-11	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-11	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-11	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-11	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-11	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-11	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-11	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-11	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-11	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-11	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-11	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-11	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-11	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-11	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-11	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-11	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-11	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-11	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-11	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-11	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-11	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-11	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-11	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-11	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-11	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-11	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-11	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-11	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-11	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-11	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-11	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-11	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-11	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-11	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-11	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-11	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-11	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-11	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-11	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-11	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-11	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-11	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-11	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-11	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-11	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-11	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-11	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-11	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-11	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-11	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-11	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-11	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-11	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-11	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-11	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-11	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-11	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-11	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-11	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-11	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-11	3/25/2015	Bis(2-ethylhexyl)phthalate	11	10	3.3	55.64	ug/L
EP-11	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-11	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-11	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-11	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-11	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-11	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-11	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-11	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-11	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-11	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-11	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-11	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-11	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-11	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-11	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-11	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-11	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-11	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-11	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-11	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-11	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-11	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-11	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-11	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-11	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-11	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-11	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-11	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-11	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-11	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-11	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-11	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-11	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-11	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-11	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-11	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-11	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-11	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-11	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-11	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-11	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-11	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-11	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-11	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-11	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-11	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-11	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-11	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-11	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-11	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-11	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-11	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-11	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-11	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-11	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-11	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-11	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-11	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-11	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-11	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-11	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-11	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-11	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-11	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-11	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-11	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-11	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-11	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-11	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-11	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-11	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-11	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-11	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-11	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-11	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-11	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-11	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-11	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-11	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-11	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-11	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-11	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-11	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-11	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-11	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-11	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-11	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-11	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-11	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-11	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-11	8/30/2016	Benzoic Acid	7.6	20	2.6	75000	ug/L
EP-11	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-11	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-11	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-11	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-11	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-11	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-11	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-11	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-11	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-11	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-11	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-11	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-11	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-11	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-11	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-11	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-11	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-11	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-11	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-11	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-11	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-11	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-11	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-11	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-11	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-11	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-11	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-11	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-11	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-11	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-11	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-11	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-11	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-11	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-11	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-11	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-11	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-11	8/30/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
EP-11	8/30/2016	Di-n-octylphthalate	5.2	10	2	200	ug/L
EP-11	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-11	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-11	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-11	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-11	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-11	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-11	8/30/2016	Dimethylphthalate	4.4	10	2.4	612	ug/L
EP-11	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-11	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-11	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-11	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-11	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-11	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-11	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-11	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-11	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-11	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-11	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-11	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-11	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-11	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-11	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-11	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-11	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-11	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-11	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-11	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-11	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-11	3/30/2017	Benzoic Acid	33	100	20	75000	ug/L
EP-11	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-11	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-11	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-11	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-11	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-11	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-11	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-11	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-11	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-11	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-11	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-11	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-11	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-11	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-11	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-11	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-11	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-11	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-11	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-11	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-11	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-11	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-11	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-11	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-11	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-11	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-11	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-11	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-11	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-11	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-11	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-11	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-11	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-11	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-11	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-11	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-11	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-11	3/30/2017	Bis(2-ethylhexyl)phthalate	30	50	24	55.64	ug/L
EP-11	3/30/2017	Di-n-octylphthalate	31	50	23	200	ug/L
EP-11	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-11	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-11	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-11	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-11	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-11	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-11	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-11	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-11	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-11	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-11	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-11	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-11	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-11	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-11	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-11	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-11	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-11	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-11	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-11	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-11	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-11	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-11	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-11	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-11	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-11	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-11	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-11	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-11	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-11	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-11	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-11	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-11	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-11	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-11	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-11	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-11	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-11	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-11	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-11	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-11	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-11	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-11	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-11	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-11	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-11	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-11	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-11	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-11	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-11	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-11	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-11	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-11	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-11	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-11	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-11	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-11	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-11	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-11	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-11	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-11	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-11	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-11	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-11	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-11	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-11	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-11	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-11	10/24/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-11	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-11	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-11	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-11	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-11	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-11	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-11	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-11	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-11	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-11	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-11	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-11	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-11	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-11	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-11	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-11	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-11	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-11	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-11	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-11	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-11	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-11	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-11	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-11	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-11	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-11	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-11	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-11	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-11	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-11	2/23/2018	Benzoic Acid	41	100	20	75000	ug/L
EP-11	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-11	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-11	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-11	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-11	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-11	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-11	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-11	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-11	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-11	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-11	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-11	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-11	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-11	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-11	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-11	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-11	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-11	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-11	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-11	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-11	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-11	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-11	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-11	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-11	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-11	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-11	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-11	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-11	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-11	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-11	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-11	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-11	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-11	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-11	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-11	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-11	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-11	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-11	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-11	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-11	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-11	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-11	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-11	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-11	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-11	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-11	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-11	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-11	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-11	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-11	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-11	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-11	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-11	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-11	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-11	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-11	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-11	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-11	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-11	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-11	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-11	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-11	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-11	9/7/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-11	9/7/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-11	9/7/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-11	9/7/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-11	9/7/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-11	9/7/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-11	9/7/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-11	9/7/2018	Benzoic Acid	72	200	63	75000	ug/L
EP-11	9/7/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-11	9/7/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-11	9/7/2018	Isophorone	ND	100	62	781	ug/L
EP-11	9/7/2018	Acenaphthene	ND	100	58	535	ug/L
EP-11	9/7/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-11	9/7/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-11	9/7/2018	Phenanthrene	ND	100	60	170	ug/L
EP-11	9/7/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-11	9/7/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-11	9/7/2018	Fluorene	ND	100	63	288	ug/L
EP-11	9/7/2018	Carbazole	ND	100	63	NA	ug/L
EP-11	9/7/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-11	9/7/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-11	9/7/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-11	9/7/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-11	9/7/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-11	9/7/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-11	9/7/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-11	9/7/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-11	9/7/2018	2-Chloronaphthalene	ND	100	61	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-11	9/7/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-11	9/7/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-11	9/7/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-11	9/7/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-11	9/7/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-11	9/7/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-11	9/7/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-11	9/7/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-11	9/7/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-11	9/7/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-11	9/7/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-11	9/7/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-11	9/7/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-11	9/7/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-11	9/7/2018	Phenol	ND	100	60	5761	ug/L
EP-11	9/7/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-11	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-11	9/7/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-11	9/7/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-11	9/7/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-11	9/7/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-11	9/7/2018	Anthracene	ND	100	57	1721	ug/L
EP-11	9/7/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-11	9/7/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-11	9/7/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-11	9/7/2018	Pyrene	ND	100	65	117	ug/L
EP-11	9/7/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-11	9/7/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-11	9/7/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-11	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-11	9/7/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-11	9/7/2018	Fluoranthene	ND	100	58	802	ug/L
EP-11	9/7/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-11	9/7/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-11	9/7/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-11	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-11	9/7/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-11	9/7/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-11	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-11	9/7/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-11	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-11	9/7/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-11	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-11	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-11	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-11	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-11	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-11	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-11	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-11	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-11	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-11	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-11	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-11	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-11	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-11	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-11	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-11	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-11	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-11	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-11	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-11	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-11	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-11	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-11	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-11	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-11	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-11	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-11	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-11	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-11	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-11	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-11	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-11	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-11	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-11	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-11	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-11	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-11	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-11	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-11	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-11	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-11	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-11	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-11	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-11	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-11	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-11	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-11	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-11	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-11	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-11	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-11	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-11	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-11	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-11	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-11	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-11	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-11	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-11	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-11	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-11	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-11	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-11	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-11	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-11	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-11	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-11	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-11	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-11	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-11	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-11	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-11	12/22/2020	Acenaphthene	ND	20.9	0.334	535	ug/L
EP-11	12/22/2020	Acenaphthylene	ND	20.9	0.355	NA	ug/L
EP-11	12/22/2020	Anthracene	ND	20.9	0.376	1721	ug/L
EP-11	12/22/2020	Benzo(a)anthracene	*ND*	*20.9*	0.376	0.12	ug/L
EP-11	12/22/2020	Benzo(a)pyrene	*ND*	*20.9*	0.25	0.2	ug/L
EP-11	12/22/2020	Benzo(b)fluoranthene	*ND*	*20.9*	0.313	0.34	ug/L
EP-11	12/22/2020	Benzo(g,h,i)perylene	ND	20.9	0.48	NA	ug/L
EP-11	12/22/2020	Benzo(k)fluoranthene	*ND*	*20.9*	0.334	3.43	ug/L
EP-11	12/22/2020	Bis(2-chloroethoxy)methane	ND	20.9	0.334	59	ug/L
EP-11	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*20.9*	5.63	0.137	ug/L
EP-11	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	20.9	10.4	55.64	ug/L
EP-11	12/22/2020	4-Bromophenyl-phenylether	ND	20.9	0.417	NA	ug/L
EP-11	12/22/2020	Butylbenzylphthalate	*ND*	*20.9*	0.396	16	ug/L
EP-11	12/22/2020	Carbazole	ND	20.9	0.48	NA	ug/L
EP-11	12/22/2020	4-Chloroaniline	*ND*	*20.9*	7.1	0.37	ug/L
EP-11	12/22/2020	4-Chloro-3-Methylphenol	ND	20.9	7.93	NA	ug/L
EP-11	12/22/2020	2-Chloronaphthalene	ND	20.9	0.292	733	ug/L
EP-11	12/22/2020	2-Chlorophenol	ND	20.9	4.59	91	ug/L
EP-11	12/22/2020	4-Chlorophenyl-phenylether	ND	20.9	4.17	NA	ug/L
EP-11	12/22/2020	1,3-Dichlorobenzene	ND	20.9	0.376	NA	ug/L
EP-11	12/22/2020	Chrysene	ND	20.9	0.396	34.3	ug/L
EP-11	12/22/2020	Dibenzo(a,h)anthracene	ND	20.9	0.501	NA	ug/L
EP-11	12/22/2020	1,4-Dichlorobenzene	ND	20.9	0.334	75	ug/L
EP-11	12/22/2020	Dibenzofuran	ND	20.9	0.355	NA	ug/L
EP-11	12/22/2020	3,3-Dichlorobenzidine	*ND*	*20.9*	5.43	1.25	ug/L
EP-11	12/22/2020	2,4-Dichlorophenol	ND	20.9	6.26	45.3	ug/L
EP-11	12/22/2020	Diethylphthalate	ND	20.9	0.501	14801	ug/L
EP-11	12/22/2020	2,4-Dimethylphenol	ND	20.9	7.3	354	ug/L
EP-11	12/22/2020	Di-n-butylphthalate	ND	20.9	5.63	885	ug/L
EP-11	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*20.9*	3.34	1.52	ug/L
EP-11	12/22/2020	2,4-Dinitrophenol	*ND*	*62.6*	7.1	38.7	ug/L
EP-11	12/22/2020	2,4-Dinitrotoluene	ND	20.9	3.96	45.3	ug/L
EP-11	12/22/2020	2,6-Dinitrotoluene	*ND*	*20.9*	3.96	0.485	ug/L
EP-11	12/22/2020	Di-n-octylphthalate	ND	20.9	0.355	200	ug/L
EP-11	12/22/2020	Fluoranthene	ND	20.9	0.376	802	ug/L
EP-11	12/22/2020	Fluorene	ND	20.9	0.376	288	ug/L
EP-11	12/22/2020	Hexachlorobenzene	*ND*	*20.9*	0.355	0.0976	ug/L
EP-11	12/22/2020	Hexachlorocyclopentadiene	*ND*	*41.7*	5.43	0.41	ug/L
EP-11	12/22/2020	Hexachloroethane	*ND*	*20.9*	8.76	3.28	ug/L
EP-11	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*20.9*	0.459	0.343	ug/L
EP-11	12/22/2020	Isophorone	ND	20.9	0.292	781	ug/L
EP-11	12/22/2020	2-Methylphenol	ND	20.9	3.76	NA	ug/L
EP-11	12/22/2020	Naphthalene	ND	20.9	0.355	30	ug/L
EP-11	12/22/2020	2-Nitroaniline	ND	20.9	4.59	190	ug/L
EP-11	12/22/2020	3-Nitroaniline	ND	20.9	3.76	NA	ug/L
EP-11	12/22/2020	4-Nitroaniline	*ND*	*20.9*	3.13	3.8	ug/L
EP-11	12/22/2020	Nitrobenzene	*ND*	*20.9*	0.271	1.4	ug/L
EP-11	12/22/2020	2-Nitrophenol	ND	20.9	10.9	NA	ug/L
EP-11	12/22/2020	4-Nitrophenol	ND	20.9	4.38	NA	ug/L
EP-11	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*20.9*	6.89	0.011	ug/L
EP-11	12/22/2020	N-Nitrosodiphenylamine	ND	20.9	0.376	122	ug/L
EP-11	12/22/2020	Pentachlorophenol	*ND*	*41.7*	2.92	1	ug/L
EP-11	12/22/2020	Phenanthrene	ND	20.9	0.376	170	ug/L
EP-11	12/22/2020	Phenol	ND	20.9	5.43	5761	ug/L
EP-11	12/22/2020	Pyrene	ND	20.9	0.438	117	ug/L
EP-11	12/22/2020	2,4,5-Trichlorophenol	ND	20.9	7.72	1166	ug/L
EP-11	12/22/2020	2,4,6-Trichlorophenol	ND	20.9	7.3	11.9*	ug/L
EP-11	12/22/2020	Dimethylphthalate	ND	20.9	0.355	612	ug/L
EP-11	12/22/2020	Aniline	*ND*	*20.9*	7.93	13	ug/L
EP-11	12/22/2020	Benzoic Acid	ND	62.6	15.2	75000	ug/L
EP-11	12/22/2020	Benzyl Alcohol	ND	20.9	4.17	2000	ug/L
EP-11	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*20.9*	0.334	9.81	ug/L
EP-11	12/22/2020	N-Nitrosodimethylamine	*ND*	*20.9*	7.3	0.0049	ug/L
EP-11	12/22/2020	Pyridine	*ND*	*20.9*	6.68	20	ug/L
EP-11	12/22/2020	1,2,4-Trichlorobenzene	ND	20.9	0.376	70	ug/L
EP-11	12/22/2020	1,2-Dichlorobenzene	ND	20.9	0.355	600	ug/L
EP-11	12/22/2020	Azobenzene	*ND*	*20.9*	2.09	0.12	ug/L
EP-12A	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12A	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12A	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12A	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12A	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-12A	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12A	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12A	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12A	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12A	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-12A	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12A	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12A	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12A	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12A	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12A	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-12A	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-12A	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12A	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12A	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12A	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12A	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12A	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12A	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12A	5/29/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-12A	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12A	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12A	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12A	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12A	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-12A	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12A	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12A	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12A	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12A	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12A	5/29/2012	Phenol	ND	50	13	5761	ug/L
EP-12A	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12A	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12A	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12A	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12A	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12A	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-12A	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12A	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-12A	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12A	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12A	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12A	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12A	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12A	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12A	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12A	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12A	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12A	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12A	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12A	5/29/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12A	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12A	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12A	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-12A	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12A	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12A	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12A	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12A	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-12A	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12A	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12A	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12A	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12A	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12A	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-12A	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-12A	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12A	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12A	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12A	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12A	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12A	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12A	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12A	11/6/2012	2-Methylphenol	150	50	14	NA	ug/L
EP-12A	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12A	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12A	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12A	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12A	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-12A	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12A	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12A	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-12A	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12A	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12A	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12A	11/6/2012	Phenol	460	50	13	5761	ug/L
EP-12A	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12A	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12A	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12A	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-12A	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12A	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-12A	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12A	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-12A	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12A	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12A	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12A	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12A	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12A	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12A	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12A	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12A	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12A	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12A	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12A	11/6/2012	3,4-Methylphenol	210	50	14	NA	ug/L
EP-12A	5/28/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-12A	5/28/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12A	5/28/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-12A	5/28/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-12A	5/28/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-12A	5/28/2013	Aniline	**31**	10	2.2	13	ug/L
EP-12A	5/28/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	5/28/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-12A	5/28/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-12A	5/28/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-12A	5/28/2013	Isophorone	ND	10	1.8	781	ug/L
EP-12A	5/28/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-12A	5/28/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-12A	5/28/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-12A	5/28/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-12A	5/28/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-12A	5/28/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-12A	5/28/2013	Fluorene	ND	10	2.5	288	ug/L
EP-12A	5/28/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-12A	5/28/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-12A	5/28/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-12A	5/28/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-12A	5/28/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-12A	5/28/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-12A	5/28/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-12A	5/28/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-12A	5/28/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-12A	5/28/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-12A	5/28/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-12A	5/28/2013	2-Methylphenol	560	200	54	NA	ug/L
EP-12A	5/28/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-12A	5/28/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-12A	5/28/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-12A	5/28/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-12A	5/28/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-12A	5/28/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-12A	5/28/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-12A	5/28/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-12A	5/28/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-12A	5/28/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-12A	5/28/2013	2,4-Dimethylphenol	110	10	2.9	354	ug/L
EP-12A	5/28/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-12A	5/28/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-12A	5/28/2013	Phenol	2000	200	44	5761	ug/L
EP-12A	5/28/2013	Pyridine	ND	10	3.5	20	ug/L
EP-12A	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-12A	5/28/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-12A	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-12A	5/28/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-12A	5/28/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-12A	5/28/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-12A	5/28/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-12A	5/28/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-12A	5/28/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-12A	5/28/2013	Pyrene	ND	10	2.1	117	ug/L
EP-12A	5/28/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-12A	5/28/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-12A	5/28/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-12A	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-12A	5/28/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-12A	5/28/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-12A	5/28/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-12A	5/28/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-12A	5/28/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-12A	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12A	5/28/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-12A	5/28/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-12A	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-12A	5/28/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-12A	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-12A	5/28/2013	3,4-Methylphenol	1300	200	75	NA	ug/L
EP-12A	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-12A	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-12A	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12A	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-12A	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-12A	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-12A	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-12A	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-12A	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-12A	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-12A	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-12A	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12A	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-12A	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-12A	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12A	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-12A	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-12A	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-12A	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-12A	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-12A	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-12A	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12A	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-12A	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12A	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-12A	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-12A	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-12A	10/15/2013	2-Methylphenol	100	50	14	NA	ug/L
EP-12A	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-12A	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-12A	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-12A	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-12A	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-12A	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12A	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-12A	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-12A	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-12A	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-12A	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-12A	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-12A	10/15/2013	Phenol	350	50	11	5761	ug/L
EP-12A	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-12A	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-12A	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-12A	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-12A	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12A	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-12A	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12A	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-12A	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12A	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-12A	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-12A	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-12A	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-12A	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12A	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-12A	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-12A	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-12A	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-12A	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-12A	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12A	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12A	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12A	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12A	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-12A	10/15/2013	3,4-Methylphenol	160	50	19	NA	ug/L
EP-12A	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-12A	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12A	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-12A	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-12A	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-12A	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-12A	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-12A	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-12A	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-12A	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-12A	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-12A	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-12A	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-12A	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-12A	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-12A	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-12A	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12A	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-12A	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-12A	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12A	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12A	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-12A	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-12A	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-12A	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-12A	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12A	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12A	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-12A	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12A	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-12A	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-12A	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-12A	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-12A	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12A	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-12A	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-12A	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-12A	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-12A	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-12A	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12A	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12A	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12A	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-12A	3/5/2014	Phenol	200	50	7.9	5761	ug/L
EP-12A	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-12A	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-12A	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12A	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12A	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12A	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-12A	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-12A	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-12A	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12A	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-12A	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-12A	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-12A	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-12A	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-12A	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-12A	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12A	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-12A	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12A	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-12A	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12A	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-12A	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-12A	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-12A	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-12A	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-12A	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-12A	3/5/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-12A	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-12A	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12A	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-12A	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-12A	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-12A	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-12A	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-12A	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-12A	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-12A	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-12A	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-12A	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-12A	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-12A	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-12A	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-12A	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-12A	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-12A	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-12A	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-12A	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-12A	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-12A	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-12A	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-12A	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-12A	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-12A	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-12A	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-12A	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-12A	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-12A	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-12A	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-12A	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-12A	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-12A	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-12A	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-12A	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-12A	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-12A	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-12A	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-12A	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-12A	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-12A	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-12A	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-12A	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-12A	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12A	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-12A	11/12/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
EP-12A	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-12A	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-12A	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-12A	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12A	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-12A	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-12A	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-12A	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-12A	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-12A	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-12A	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-12A	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-12A	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-12A	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-12A	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-12A	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-12A	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-12A	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-12A	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-12A	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-12A	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-12A	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-12A	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-12A	3/25/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-12A	3/25/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-12A	3/25/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-12A	3/25/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-12A	3/25/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-12A	3/25/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-12A	3/25/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-12A	3/25/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-12A	3/25/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-12A	3/25/2015	Isophorone	ND	100	20	781	ug/L
EP-12A	3/25/2015	Acenaphthene	ND	100	19	535	ug/L
EP-12A	3/25/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-12A	3/25/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-12A	3/25/2015	Phenanthrene	ND	100	20	170	ug/L
EP-12A	3/25/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-12A	3/25/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-12A	3/25/2015	Fluorene	ND	100	17	288	ug/L
EP-12A	3/25/2015	Carbazole	ND	100	15	NA	ug/L
EP-12A	3/25/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-12A	3/25/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-12A	3/25/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-12A	3/25/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-12A	3/25/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-12A	3/25/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-12A	3/25/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-12A	3/25/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-12A	3/25/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-12A	3/25/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-12A	3/25/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-12A	3/25/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-12A	3/25/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-12A	3/25/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-12A	3/25/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-12A	3/25/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-12A	3/25/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-12A	3/25/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-12A	3/25/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-12A	3/25/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-12A	3/25/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-12A	3/25/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-12A	3/25/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-12A	3/25/2015	Phenol	ND	100	11	5761	ug/L
EP-12A	3/25/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-12A	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-12A	3/25/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-12A	3/25/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-12A	3/25/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-12A	3/25/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-12A	3/25/2015	Anthracene	ND	100	16	1721	ug/L
EP-12A	3/25/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-12A	3/25/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/25/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-12A	3/25/2015	Pyrene	ND	100	23	117	ug/L
EP-12A	3/25/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-12A	3/25/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-12A	3/25/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-12A	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-12A	3/25/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-12A	3/25/2015	Fluoranthene	ND	100	15	802	ug/L
EP-12A	3/25/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-12A	3/25/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-12A	3/25/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-12A	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-12A	3/25/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-12A	3/25/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-12A	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-12A	3/25/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-12A	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-12A	3/25/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-12A	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12A	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12A	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12A	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12A	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-12A	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12A	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12A	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12A	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12A	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-12A	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12A	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12A	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12A	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12A	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12A	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12A	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12A	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-12A	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12A	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12A	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12A	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12A	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12A	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12A	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12A	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12A	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12A	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12A	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12A	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12A	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12A	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12A	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12A	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12A	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12A	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12A	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12A	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12A	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12A	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12A	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-12A	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12A	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12A	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12A	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12A	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12A	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12A	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12A	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12A	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12A	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12A	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12A	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12A	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-12A	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12A	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12A	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12A	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12A	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12A	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12A	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12A	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12A	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12A	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12A	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12A	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12A	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-12A	8/30/2016	Benzo(a)pyrene	*ND*	*20*	5.4	0.2	ug/L
EP-12A	8/30/2016	2,4-Dinitrophenol	*ND*	*40*	5.5	38.7	ug/L
EP-12A	8/30/2016	Dibenzo(a,h)anthracene	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Benzo(a)anthracene	*ND*	*20*	5.3	0.12	ug/L
EP-12A	8/30/2016	4-Chloro-3-Methylphenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Aniline	*ND*	*20*	4.9	13	ug/L
EP-12A	8/30/2016	N-Nitrosodimethylamine	*ND*	*20*	4.3	0.0049	ug/L
EP-12A	8/30/2016	Benzoic Acid	ND	40	5.2	75000	ug/L
EP-12A	8/30/2016	Hexachloroethane	*ND*	*20*	4.7	3.28	ug/L
EP-12A	8/30/2016	Hexachlorocyclopentadiene	*ND*	*20*	4.6	0.41	ug/L
EP-12A	8/30/2016	Isophorone	ND	20	5.2	781	ug/L
EP-12A	8/30/2016	Acenaphthene	ND	20	5.1	535	ug/L
EP-12A	8/30/2016	Diethylphthalate	ND	20	5.4	14801	ug/L
EP-12A	8/30/2016	Di-n-butylphthalate	ND	20	4.9	885	ug/L
EP-12A	8/30/2016	Phenanthrene	ND	20	5.2	170	ug/L
EP-12A	8/30/2016	Butylbenzylphthalate	*ND*	*20*	5	16	ug/L
EP-12A	8/30/2016	N-Nitrosodiphenylamine	ND	20	4.6	122	ug/L
EP-12A	8/30/2016	Fluorene	ND	20	5.4	288	ug/L
EP-12A	8/30/2016	Carbazole	ND	20	4.6	NA	ug/L
EP-12A	8/30/2016	Hexachlorobutadiene	*ND*	*20*	4.4	0.14	ug/L
EP-12A	8/30/2016	Pentachlorophenol	*ND*	*40*	4.7	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	2,4,6-Trichlorophenol	ND	20	4.9	11.9*	ug/L
EP-12A	8/30/2016	2-Nitroaniline	ND	20	5.5	190	ug/L
EP-12A	8/30/2016	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-12A	8/30/2016	1-Methylnaphthalene	ND	20	5.8	11.38	ug/L
EP-12A	8/30/2016	Naphthalene	ND	20	5.2	30	ug/L
EP-12A	8/30/2016	2-Methylnaphthalene	ND	20	5.8	35.1	ug/L
EP-12A	8/30/2016	2-Chloronaphthalene	ND	20	4.5	733	ug/L
EP-12A	8/30/2016	3,3-Dichlorobenzidine	ND	20	4.8	1.25	ug/L
EP-12A	8/30/2016	2-Methylphenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	1,2-Dichlorobenzene	ND	20	4.6	600	ug/L
EP-12A	8/30/2016	2-Chlorophenol	ND	20	4.4	91	ug/L
EP-12A	8/30/2016	2,4,5-Trichlorophenol	ND	20	4.4	1166	ug/L
EP-12A	8/30/2016	Nitrobenzene	ND	20	5.5	1.4	ug/L
EP-12A	8/30/2016	3-Nitroaniline	ND	20	5.9	NA	ug/L
EP-12A	8/30/2016	4-Nitroaniline	ND	20	5.1	3.8	ug/L
EP-12A	8/30/2016	4-Nitrophenol	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Benzyl Alcohol	ND	20	6	2000	ug/L
EP-12A	8/30/2016	4-Bromophenyl-phenylether	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Azobenzene	ND	20	5.3	0.12	ug/L
EP-12A	8/30/2016	2,4-Dimethylphenol	ND	20	6	354	ug/L
EP-12A	8/30/2016	1,4-Dichlorobenzene	ND	20	4.8	75	ug/L
EP-12A	8/30/2016	4-Chloroaniline	ND	20	5.4	0.37	ug/L
EP-12A	8/30/2016	Phenol	ND	20	4	5761	ug/L
EP-12A	8/30/2016	Pyridine	ND	20	4.3	20	ug/L
EP-12A	8/30/2016	Bis(2-chloroethyl)ether	ND	20	5.3	0.137	ug/L
EP-12A	8/30/2016	Bis(2-chloroethoxy)methane	ND	20	5.6	59	ug/L
EP-12A	8/30/2016	Bis(2-ethylhexyl)phthalate	6.2	20	5.2	55.64	ug/L
EP-12A	8/30/2016	Di-n-octylphthalate	7	20	4	200	ug/L
EP-12A	8/30/2016	Hexachlorobenzene	ND	20	5.3	0.0976	ug/L
EP-12A	8/30/2016	Anthracene	ND	20	5	1721	ug/L
EP-12A	8/30/2016	1,2,4-Trichlorobenzene	ND	20	5.2	70	ug/L
EP-12A	8/30/2016	2,4-Dichlorophenol	ND	40	4.7	45.3	ug/L
EP-12A	8/30/2016	2,4-Dinitrotoluene	ND	20	6.3	45.3	ug/L
EP-12A	8/30/2016	Pyrene	ND	20	6.2	117	ug/L
EP-12A	8/30/2016	Dimethylphthalate	8.4	20	4.9	612	ug/L
EP-12A	8/30/2016	Dibenzofuran	ND	20	5	NA	ug/L
EP-12A	8/30/2016	Benzo(g,h,i)perylene	ND	20	5.3	NA	ug/L
EP-12A	8/30/2016	Indeno(1,2,3-cd)pyrene	ND	20	5.9	0.343	ug/L
EP-12A	8/30/2016	Benzo(b)fluoranthene	ND	20	5.8	0.34	ug/L
EP-12A	8/30/2016	Fluoranthene	ND	20	5.2	802	ug/L
EP-12A	8/30/2016	Benzo(k)fluoranthene	ND	20	6	3.43	ug/L
EP-12A	8/30/2016	Acenaphthylene	ND	20	4.7	NA	ug/L
EP-12A	8/30/2016	Chrysene	ND	20	5.6	34.3	ug/L
EP-12A	8/30/2016	4,6-Dinitro-2-methylphenol	ND	40	3.6	1.52	ug/L
EP-12A	8/30/2016	1,3-Dichlorobenzene	ND	20	4.5	NA	ug/L
EP-12A	8/30/2016	2,6-Dinitrotoluene	ND	20	5.5	0.485	ug/L
EP-12A	8/30/2016	N-Nitrosodi-n-propylamine	ND	20	4.8	0.011	ug/L
EP-12A	8/30/2016	4-Chlorophenyl-phenylether	ND	20	5.1	NA	ug/L
EP-12A	8/30/2016	Bis(2-chloroisopropyl)ether	ND	20	3.8	9.81	ug/L
EP-12A	8/30/2016	3,4-Methylphenol	ND	20	4.6	NA	ug/L
EP-12A	3/30/2017	Benzo(a)pyrene	ND	50	20	0.2	ug/L
EP-12A	3/30/2017	2,4-Dinitrophenol	ND	100	13	38.7	ug/L
EP-12A	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Benzo(a)anthracene	ND	50	19	0.12	ug/L
EP-12A	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12A	3/30/2017	Aniline	ND	50	15	13	ug/L
EP-12A	3/30/2017	N-Nitrosodimethylamine	ND	50	18	0.0049	ug/L
EP-12A	3/30/2017	Benzoic Acid	32	100	20	75000	ug/L
EP-12A	3/30/2017	Hexachloroethane	ND	50	6	3.28	ug/L
EP-12A	3/30/2017	Hexachlorocyclopentadiene	ND	50	6.4	0.41	ug/L
EP-12A	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-12A	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12A	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12A	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12A	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12A	3/30/2017	Butylbenzylphthalate	ND	50	23	16	ug/L
EP-12A	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12A	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-12A	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Hexachlorobutadiene	ND	50	6.7	0.14	ug/L
EP-12A	3/30/2017	Pentachlorophenol	ND	100	25	1	ug/L
EP-12A	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12A	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12A	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12A	3/30/2017	1-Methylnaphthalene	ND	50	17	11.38	ug/L
EP-12A	3/30/2017	Naphthalene	ND	50	14	30	ug/L
EP-12A	3/30/2017	2-Methylnaphthalene	ND	50	16	35.1	ug/L
EP-12A	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12A	3/30/2017	3,3-Dichlorobenzidine	ND	50	20	1.25	ug/L
EP-12A	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12A	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12A	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12A	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12A	3/30/2017	Nitrobenzene	ND	50	18	1.4	ug/L
EP-12A	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12A	3/30/2017	4-Nitroaniline	ND	50	20	3.8	ug/L
EP-12A	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12A	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12A	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12A	3/30/2017	Azobenzene	ND	50	23	0.12	ug/L
EP-12A	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12A	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12A	3/30/2017	4-Chloroaniline	ND	50	18	0.37	ug/L
EP-12A	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-12A	3/30/2017	Pyridine	ND	50	11	20	ug/L
EP-12A	3/30/2017	Bis(2-chloroethyl)ether	ND	50	22	0.137	ug/L
EP-12A	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12A	3/30/2017	Bis(2-ethylhexyl)phthalate	27	50	24	55.64	ug/L
EP-12A	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12A	3/30/2017	Hexachlorobenzene	ND	50	19	0.0976	ug/L
EP-12A	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-12A	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12A	3/30/2017	2,4-Dichlorophenol	ND	100	28	45.3	ug/L
EP-12A	3/30/2017	2,4-Dinitrotoluene	ND	50	20	45.3	ug/L
EP-12A	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-12A	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12A	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12A	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12A	3/30/2017	Indeno(1,2,3-cd)pyrene	ND	50	21	0.343	ug/L
EP-12A	3/30/2017	Benzo(b)fluoranthene	ND	50	20	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12A	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12A	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12A	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12A	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-12A	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12A	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12A	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12A	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12A	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12A	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-12A	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-12A	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-12A	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-12A	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-12A	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-12A	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-12A	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-12A	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-12A	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12A	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-12A	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-12A	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-12A	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-12A	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-12A	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-12A	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-12A	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-12A	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-12A	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-12A	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-12A	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-12A	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-12A	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-12A	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12A	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-12A	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-12A	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-12A	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-12A	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-12A	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-12A	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-12A	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-12A	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-12A	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-12A	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-12A	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-12A	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-12A	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-12A	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-12A	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-12A	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-12A	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-12A	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-12A	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-12A	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-12A	10/24/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-12A	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-12A	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-12A	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-12A	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-12A	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-12A	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-12A	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-12A	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-12A	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-12A	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-12A	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-12A	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-12A	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-12A	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-12A	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-12A	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-12A	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-12A	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-12A	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-12A	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-12A	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-12A	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-12A	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-12A	9/7/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-12A	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-12A	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-12A	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-12A	9/7/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-12A	9/7/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-12A	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-12A	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-12A	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-12A	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-12A	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-12A	9/7/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-12A	9/7/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-12A	9/7/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-12A	9/7/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-12A	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-12A	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-12A	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-12A	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-12A	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-12A	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-12A	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-12A	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-12A	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-12A	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-12A	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-12A	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-12A	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-12A	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-12A	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-12A	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-12A	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-12A	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-12A	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-12A	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-12A	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-12A	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-12A	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-12A	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-12A	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-12A	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-12A	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-12A	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-12A	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-12A	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-12A	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-12A	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-12A	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-12A	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-12A	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-12A	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-12A	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-12A	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-12A	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-12A	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-12A	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-12A	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-12A	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-12A	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-12A	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-12A	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-12A	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-12A	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-12A	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-12A	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-12A	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-12A	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-12A	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-12A	9/7/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-12A	9/7/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-12A	9/7/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-12A	9/7/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-12A	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-12A	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-12A	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-12A	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-12A	9/7/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-12A	9/7/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-12A	9/7/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-12A	9/7/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-12A	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-12A	9/7/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-12A	9/7/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-12A	9/7/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-12A	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-12A	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-12A	11/21/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-12A	11/21/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-12A	11/21/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-12A	11/21/2019	1,4-Dioxane	**5.3**	1	1	4.59	ug/L
EP-12A	11/21/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-12A	11/21/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-12A	11/21/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-12A	11/21/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-12A	11/21/2019	2,4-Dimethylphenol	12	2.5	2.5	354	ug/L
EP-12A	11/21/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-12A	11/21/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-12A	11/21/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-12A	11/21/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-12A	11/21/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-12A	11/21/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-12A	11/21/2019	2-Methylphenol	90	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-12A	11/21/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-12A	11/21/2019	3,4-Methylphenol	93	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-12A	11/21/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-12A	11/21/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-12A	11/21/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-12A	11/21/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-12A	11/21/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-12A	11/21/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-12A	11/21/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-12A	11/21/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-12A	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-12A	11/21/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-12A	11/21/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-12A	11/21/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-12A	11/21/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
EP-12A	11/21/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-12A	11/21/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-12A	11/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-12A	11/21/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-12A	11/21/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-12A	11/21/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-12A	11/21/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-12A	11/21/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
EP-12A	11/21/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-12A	11/21/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-12A	11/21/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-12A	11/21/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-12A	11/21/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-12A	11/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-12A	11/21/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-12A	11/21/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-12A	11/21/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-12A	11/21/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-12A	11/21/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-12A	11/21/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-12A	11/21/2019	Phenol	220	2.5	2.5	5761	ug/L
EP-12A	11/21/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-12A	11/21/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-12A	11/21/2019	4,4-DDD	*ND*	*1*	0.8031	0.317	ug/L
EP-12A	11/21/2019	4,4-DDE	*ND*	*1*	0.8571	0.462	ug/L
EP-12A	11/21/2019	4,4-DDT	ND	1.25	1.0222	2.29	ug/L
EP-12A	11/21/2019	Aldrin	*ND*	*1*	0.8311	0.002	ug/L
EP-12A	11/21/2019	a-BHC	*ND*	*1*	0.8282	0.069	ug/L
EP-12A	11/21/2019	b-BHC	*ND*	*1*	0.9317	0.243	ug/L
EP-12A	11/21/2019	Chlordane	*ND*	*10*	5	0.448	ug/L
EP-12A	11/21/2019	d-BHC	ND	1	0.8642	NA	ug/L
EP-12A	11/21/2019	Dieldrin	*ND*	*1*	0.8413	0.018	ug/L
EP-12A	11/21/2019	Endosulfan I	ND	1	0.8485	98.7	ug/L
EP-12A	11/21/2019	Endosulfan II	ND	1	0.8724	98.7	ug/L
EP-12A	11/21/2019	Endosulfan sulfate	ND	1	0.9031	110	ug/L
EP-12A	11/21/2019	Endrin	ND	1.25	1.1342	2.23	ug/L
EP-12A	11/21/2019	Endrin aldehyde	ND	1	0.8155	NA	ug/L
EP-12A	11/21/2019	g-BHC (Lindane)	*ND*	*1*	0.8487	0.415	ug/L
EP-12A	11/21/2019	Heptachlor	*ND*	*1*	0.8575	0.0221	ug/L
EP-12A	11/21/2019	Heptachlor epoxide	*ND*	*1*	0.8738	0.0014	ug/L
EP-12A	11/21/2019	Methoxychlor	ND	1.25	1.124	37	ug/L
EP-12A	11/21/2019	Toxaphene	ND	10	5		ug/L
EP-12A	12/22/2020	Acenaphthene	ND	11.5	0.185	535	ug/L
EP-12A	12/22/2020	Acenaphthylene	ND	11.5	0.196	NA	ug/L
EP-12A	12/22/2020	Anthracene	ND	11.5	0.208	1721	ug/L
EP-12A	12/22/2020	Benzo(a)anthracene	*ND*	*11.5*	0.208	0.12	ug/L
EP-12A	12/22/2020	Benzo(a)pyrene	*ND*	*11.5*	0.139	0.2	ug/L
EP-12A	12/22/2020	Benzo(b)fluoranthene	*ND*	*11.5*	0.173	0.34	ug/L
EP-12A	12/22/2020	Benzo(g,h,i)perylene	ND	11.5	0.265	NA	ug/L
EP-12A	12/22/2020	Benzo(k)fluoranthene	*ND*	*11.5*	0.185	3.43	ug/L
EP-12A	12/22/2020	Bis(2-chloroethoxy)methane	ND	11.5	0.185	59	ug/L
EP-12A	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*11.5*	3.12	0.137	ug/L
EP-12A	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	11.5	5.77	55.64	ug/L
EP-12A	12/22/2020	4-Bromophenyl-phenylether	ND	11.5	0.231	NA	ug/L
EP-12A	12/22/2020	Butylbenzylphthalate	ND	11.5	0.219	16	ug/L
EP-12A	12/22/2020	Carbazole	ND	11.5	0.265	NA	ug/L
EP-12A	12/22/2020	4-Chloroaniline	*ND*	*11.5*	3.92	0.37	ug/L
EP-12A	12/22/2020	4-Chloro-3-Methylphenol	ND	11.5	4.39	NA	ug/L
EP-12A	12/22/2020	2-Chloronaphthalene	ND	11.5	0.162	733	ug/L
EP-12A	12/22/2020	2-Chlorophenol	ND	11.5	2.54	91	ug/L
EP-12A	12/22/2020	4-Chlorophenyl-phenylether	ND	11.5	2.31	NA	ug/L
EP-12A	12/22/2020	1,3-Dichlorobenzene	ND	11.5	0.208	NA	ug/L
EP-12A	12/22/2020	Chrysene	ND	11.5	0.219	34.3	ug/L
EP-12A	12/22/2020	Dibenzo(a,h)anthracene	ND	11.5	0.277	NA	ug/L
EP-12A	12/22/2020	1,4-Dichlorobenzene	ND	11.5	0.185	75	ug/L
EP-12A	12/22/2020	Dibenzofuran	ND	11.5	0.196	NA	ug/L
EP-12A	12/22/2020	3,3-Dichlorobenzidine	*ND*	*11.5*	3	1.25	ug/L
EP-12A	12/22/2020	2,4-Dichlorophenol	ND	11.5	3.46	45.3	ug/L
EP-12A	12/22/2020	Diethylphthalate	ND	11.5	0.277	14801	ug/L
EP-12A	12/22/2020	2,4-Dimethylphenol	ND	11.5	4.04	354	ug/L
EP-12A	12/22/2020	Di-n-butylphthalate	ND	11.5	3.12	885	ug/L
EP-12A	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.5*	1.85	1.52	ug/L
EP-12A	12/22/2020	2,4-Dinitrophenol	ND	34.6	3.92	38.7	ug/L
EP-12A	12/22/2020	2,4-Dinitrotoluene	ND	11.5	2.19	45.3	ug/L
EP-12A	12/22/2020	2,6-Dinitrotoluene	*ND*	*11.5*	2.19	0.485	ug/L
EP-12A	12/22/2020	Di-n-octylphthalate	ND	11.5	0.196	200	ug/L
EP-12A	12/22/2020	Fluoranthene	ND	11.5	0.208	802	ug/L
EP-12A	12/22/2020	Fluorene	ND	11.5	0.208	288	ug/L
EP-12A	12/22/2020	Hexachlorobenzene	*ND*	*11.5*	0.196	0.0976	ug/L
EP-12A	12/22/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	3	0.41	ug/L
EP-12A	12/22/2020	Hexachloroethane	*ND*	*11.5*	4.85	3.28	ug/L
EP-12A	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.5*	0.254	0.343	ug/L
EP-12A	12/22/2020	Isophorone	ND	11.5	0.162	781	ug/L
EP-12A	12/22/2020	2-Methylphenol	ND	11.5	2.08	NA	ug/L
EP-12A	12/22/2020	Naphthalene	ND	11.5	0.196	30	ug/L
EP-12A	12/22/2020	2-Nitroaniline	ND	11.5	2.54	190	ug/L
EP-12A	12/22/2020	3-Nitroaniline	ND	11.5	2.08	NA	ug/L
EP-12A	12/22/2020	4-Nitroaniline	*ND*	*11.5*	1.73	3.8	ug/L
EP-12A	12/22/2020	Nitrobenzene	*ND*	*11.5*	0.15	1.4	ug/L
EP-12A	12/22/2020	2-Nitrophenol	ND	11.5	6	NA	ug/L
EP-12A	12/22/2020	4-Nitrophenol	ND	11.5	2.42	NA	ug/L
EP-12A	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*11.5*	3.81	0.011	ug/L
EP-12A	12/22/2020	N-Nitrosodiphenylamine	ND	11.5	0.208	122	ug/L
EP-12A	12/22/2020	Pentachlorophenol	*ND*	*23.1*	1.62	1	ug/L
EP-12A	12/22/2020	Phenanthrene	ND	11.5	0.208	170	ug/L
EP-12A	12/22/2020	Phenol	ND	11.5	3	5761	ug/L
EP-12A	12/22/2020	Pyrene	ND	11.5	0.242	117	ug/L
EP-12A	12/22/2020	2,4,5-Trichlorophenol	ND	11.5	4.27	1166	ug/L
EP-12A	12/22/2020	2,4,6-Trichlorophenol	ND	11.5	4.04	11.9*	ug/L
EP-12A	12/22/2020	Dimethylphthalate	ND	11.5	0.196	612	ug/L
EP-12A	12/22/2020	Aniline	ND	11.5	4.39	13	ug/L
EP-12A	12/22/2020	Benzoic Acid	ND	34.6	8.43	75000	ug/L
EP-12A	12/22/2020	Benzyl Alcohol	ND	11.5	2.31	2000	ug/L
EP-12A	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.5*	0.185	9.81	ug/L
EP-12A	12/22/2020	N-Nitrosodimethylamine	*ND*	*11.5*	4.04	0.0049	ug/L
EP-12A	12/22/2020	Pyridine	ND	11.5	3.69	20	ug/L
EP-12A	12/22/2020	1,2,4-Trichlorobenzene	ND	11.5	0.208	70	ug/L
EP-12A	12/22/2020	1,2-Dichlorobenzene	ND	11.5	0.196	600	ug/L
EP-12A	12/22/2020	Azobenzene	*ND*	*11.5*	1.15	0.12	ug/L
EP-12B	5/29/2012	Benzo(a)pyrene	*ND*	*100*	26	0.2	ug/L
EP-12B	5/29/2012	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-12B	5/29/2012	Dibenzo(a,h)anthracene	ND	100	28	NA	ug/L
EP-12B	5/29/2012	Benzo(a)anthracene	*ND*	*100*	28	0.12	ug/L
EP-12B	5/29/2012	4-Chloro-3-Methylphenol	ND	100	23	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/29/2012	Aniline	*ND*	*100*	20	13	ug/L
EP-12B	5/29/2012	N-Nitrosodimethylamine	*ND*	*100*	28	0.0049	ug/L
EP-12B	5/29/2012	Benzoic Acid	ND	200	57	75000	ug/L
EP-12B	5/29/2012	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-12B	5/29/2012	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12B	5/29/2012	Isophorone	ND	100	24	781	ug/L
EP-12B	5/29/2012	Acenaphthene	ND	100	27	535	ug/L
EP-12B	5/29/2012	Diethylphthalate	ND	100	23	14801	ug/L
EP-12B	5/29/2012	Di-n-butylphthalate	ND	100	32	885	ug/L
EP-12B	5/29/2012	Phenanthrene	ND	100	21	170	ug/L
EP-12B	5/29/2012	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-12B	5/29/2012	N-Nitrosodiphenylamine	ND	100	27	122	ug/L
EP-12B	5/29/2012	Fluorene	ND	100	23	288	ug/L
EP-12B	5/29/2012	Carbazole	ND	100	26	NA	ug/L
EP-12B	5/29/2012	Hexachlorobutadiene	*ND*	*100*	30	0.14	ug/L
EP-12B	5/29/2012	Pentachlorophenol	*ND*	*200*	16	1	ug/L
EP-12B	5/29/2012	2,4,6-Trichlorophenol	ND	100	22	11.9*	ug/L
EP-12B	5/29/2012	2-Nitroaniline	ND	100	26	190	ug/L
EP-12B	5/29/2012	2-Nitrophenol	ND	100	24	NA	ug/L
EP-12B	5/29/2012	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-12B	5/29/2012	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12B	5/29/2012	2-Methylnaphthalene	*ND*	*100*	25	35.1	ug/L
EP-12B	5/29/2012	2-Chloronaphthalene	ND	100	27	733	ug/L
EP-12B	5/29/2012	3,3-Dichlorobenzidine	*ND*	*100*	43	1.25	ug/L
EP-12B	5/29/2012	2-Methylphenol	330	100	28	NA	ug/L
EP-12B	5/29/2012	1,2-Dichlorobenzene	ND	100	27	600	ug/L
EP-12B	5/29/2012	2-Chlorophenol	*ND*	*100*	28	91	ug/L
EP-12B	5/29/2012	2,4,5-Trichlorophenol	ND	100	25	1166	ug/L
EP-12B	5/29/2012	Nitrobenzene	*ND*	*100*	26	1.4	ug/L
EP-12B	5/29/2012	3-Nitroaniline	ND	100	25	NA	ug/L
EP-12B	5/29/2012	4-Nitroaniline	*ND*	*200*	27	3.8	ug/L
EP-12B	5/29/2012	4-Nitrophenol	ND	100	35	NA	ug/L
EP-12B	5/29/2012	Benzyl Alcohol	ND	100	21	2000	ug/L
EP-12B	5/29/2012	4-Bromophenyl-phenylether	ND	100	34	NA	ug/L
EP-12B	5/29/2012	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-12B	5/29/2012	2,4-Dimethylphenol	ND	100	32	354	ug/L
EP-12B	5/29/2012	1,4-Dichlorobenzene	*ND*	*100*	29	75	ug/L
EP-12B	5/29/2012	4-Chloroaniline	*ND*	*100*	34	0.37	ug/L
EP-12B	5/29/2012	Phenol	1100	100	25	5761	ug/L
EP-12B	5/29/2012	Pyridine	*ND*	*100*	24	20	ug/L
EP-12B	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*100*	21	0.137	ug/L
EP-12B	5/29/2012	Bis(2-chloroethoxy)methane	*ND*	*100*	36	59	ug/L
EP-12B	5/29/2012	Bis(2-ethylhexyl)phthalate	*ND*	*100*	30	55.64	ug/L
EP-12B	5/29/2012	Di-n-octylphthalate	ND	100	28	200	ug/L
EP-12B	5/29/2012	Hexachlorobenzene	*ND*	*100*	29	0.0976	ug/L
EP-12B	5/29/2012	Anthracene	ND	100	28	1721	ug/L
EP-12B	5/29/2012	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-12B	5/29/2012	2,4-Dichlorophenol	*ND*	*200*	31	45.3	ug/L
EP-12B	5/29/2012	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-12B	5/29/2012	Pyrene	ND	100	29	117	ug/L
EP-12B	5/29/2012	Dimethylphthalate	ND	100	25	612	ug/L
EP-12B	5/29/2012	Dibenzofuran	ND	100	28	NA	ug/L
EP-12B	5/29/2012	Benzo(g,h,i)perylene	ND	100	30	NA	ug/L
EP-12B	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*100*	31	0.343	ug/L
EP-12B	5/29/2012	Benzo(b)fluoranthene	*ND*	*100*	30	0.34	ug/L
EP-12B	5/29/2012	Fluoranthene	ND	100	27	802	ug/L
EP-12B	5/29/2012	Benzo(k)fluoranthene	*ND*	*100*	37	3.43	ug/L
EP-12B	5/29/2012	Acenaphthylene	ND	100	26	NA	ug/L
EP-12B	5/29/2012	Chrysene	*ND*	*100*	30	34.3	ug/L
EP-12B	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*200*	22	1.52	ug/L
EP-12B	5/29/2012	1,3-Dichlorobenzene	ND	100	30	NA	ug/L
EP-12B	5/29/2012	2,6-Dinitrotoluene	*ND*	*100*	26	0.485	ug/L
EP-12B	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*100*	33	0.011	ug/L
EP-12B	5/29/2012	4-Chlorophenyl-phenylether	ND	100	25	NA	ug/L
EP-12B	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*100*	25	9.81	ug/L
EP-12B	5/29/2012	3,4-Methylphenol	560	100	29	NA	ug/L
EP-12B	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-12B	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-12B	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-12B	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-12B	11/6/2012	Aniline	**93**	50	9.9	13	ug/L
EP-12B	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-12B	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-12B	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-12B	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-12B	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-12B	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-12B	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-12B	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-12B	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12B	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12B	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-12B	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-12B	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12B	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-12B	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-12B	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-12B	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12B	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-12B	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12B	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-12B	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-12B	11/6/2012	2-Methylphenol	460	50	14	NA	ug/L
EP-12B	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-12B	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-12B	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-12B	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12B	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-12B	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-12B	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-12B	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-12B	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-12B	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-12B	11/6/2012	2,4-Dimethylphenol	89	50	16	354	ug/L
EP-12B	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-12B	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-12B	11/6/2012	Phenol	1800	250	63	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-12B	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-12B	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-12B	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12B	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-12B	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-12B	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-12B	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12B	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12B	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12B	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-12B	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-12B	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-12B	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-12B	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12B	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12B	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-12B	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12B	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-12B	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-12B	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-12B	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12B	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-12B	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12B	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-12B	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-12B	11/6/2012	3,4-Methylphenol	960	50	14	NA	ug/L
EP-12B	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-12B	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-12B	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-12B	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-12B	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-12B	5/28/2013	Aniline	**110**	20	4.4	13	ug/L
EP-12B	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-12B	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-12B	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-12B	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-12B	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-12B	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-12B	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-12B	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-12B	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-12B	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-12B	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-12B	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-12B	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-12B	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-12B	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-12B	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-12B	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-12B	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-12B	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-12B	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-12B	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-12B	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-12B	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-12B	5/28/2013	2-Methylphenol	1400	400	110	NA	ug/L
EP-12B	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-12B	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-12B	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-12B	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-12B	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-12B	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-12B	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-12B	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-12B	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-12B	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-12B	5/28/2013	2,4-Dimethylphenol	200	20	5.9	354	ug/L
EP-12B	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-12B	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-12B	5/28/2013	Phenol	5500	400	88	5761	ug/L
EP-12B	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-12B	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-12B	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-12B	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-12B	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-12B	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-12B	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-12B	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-12B	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-12B	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-12B	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-12B	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-12B	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-12B	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-12B	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-12B	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-12B	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-12B	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-12B	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-12B	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-12B	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-12B	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-12B	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-12B	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-12B	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-12B	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-12B	5/28/2013	3,4-Methylphenol	3500	400	150	NA	ug/L
EP-12B	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-12B	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-12B	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12B	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-12B	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-12B	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-12B	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-12B	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-12B	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-12B	10/15/2013	Acenaphthene	ND	50	13	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-12B	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12B	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-12B	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-12B	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12B	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-12B	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-12B	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-12B	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-12B	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-12B	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-12B	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12B	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-12B	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-12B	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-12B	10/15/2013	2-Methylphenol	340	50	14	NA	ug/L
EP-12B	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-12B	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-12B	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-12B	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-12B	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-12B	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12B	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-12B	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-12B	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-12B	10/15/2013	2,4-Dimethylphenol	68	50	15	354	ug/L
EP-12B	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-12B	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-12B	10/15/2013	Phenol	1500	250	55	5761	ug/L
EP-12B	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-12B	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-12B	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-12B	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-12B	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-12B	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12B	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-12B	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-12B	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-12B	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-12B	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-12B	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-12B	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-12B	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-12B	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-12B	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-12B	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-12B	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-12B	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-12B	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-12B	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12B	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-12B	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-12B	10/15/2013	3,4-Methylphenol	730	50	19	NA	ug/L
EP-12B	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-12B	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-12B	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-12B	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-12B	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-12B	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-12B	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-12B	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-12B	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-12B	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-12B	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-12B	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-12B	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-12B	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-12B	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-12B	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-12B	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-12B	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-12B	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-12B	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-12B	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12B	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-12B	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-12B	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-12B	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-12B	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-12B	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-12B	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12B	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-12B	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-12B	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-12B	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-12B	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-12B	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-12B	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-12B	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-12B	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-12B	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-12B	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12B	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-12B	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12B	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-12B	3/5/2014	Phenol	600	50	7.9	5761	ug/L
EP-12B	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-12B	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-12B	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12B	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-12B	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-12B	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-12B	3/5/2014	Anthracene	ND	50	12	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-12B	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-12B	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-12B	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-12B	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-12B	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-12B	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-12B	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-12B	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-12B	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-12B	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12B	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-12B	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-12B	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-12B	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-12B	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-12B	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-12B	3/5/2014	3,4-Methylphenol	79	50	9.1	NA	ug/L
EP-12B	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-12B	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-12B	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-12B	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-12B	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-12B	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-12B	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-12B	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-12B	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-12B	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-12B	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-12B	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-12B	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-12B	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-12B	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-12B	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-12B	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-12B	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-12B	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-12B	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-12B	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-12B	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-12B	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-12B	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-12B	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-12B	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-12B	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-12B	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-12B	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-12B	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-12B	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-12B	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-12B	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-12B	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-12B	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-12B	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-12B	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-12B	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-12B	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-12B	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-12B	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-12B	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-12B	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-12B	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-12B	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-12B	11/12/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
EP-12B	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-12B	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-12B	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-12B	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-12B	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-12B	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-12B	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-12B	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-12B	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-12B	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-12B	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-12B	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-12B	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-12B	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-12B	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-12B	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-12B	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-12B	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-12B	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-12B	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-12B	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-12B	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-12B	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-12B	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12B	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12B	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12B	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-12B	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12B	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12B	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12B	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12B	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-12B	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12B	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12B	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12B	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12B	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12B	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12B	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12B	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12B	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12B	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12B	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12B	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12B	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12B	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12B	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12B	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12B	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12B	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12B	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12B	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12B	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12B	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12B	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12B	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12B	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12B	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12B	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12B	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12B	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12B	3/25/2015	Phenol	210	10	1.1	5761	ug/L
EP-12B	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12B	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12B	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12B	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12B	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12B	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12B	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12B	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12B	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12B	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12B	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12B	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-12B	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12B	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12B	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12B	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12B	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12B	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12B	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12B	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12B	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12B	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12B	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12B	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12B	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-12B	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-12B	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-12B	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-12B	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-12B	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-12B	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-12B	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-12B	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-12B	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-12B	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-12B	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-12B	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-12B	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-12B	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-12B	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-12B	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-12B	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-12B	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-12B	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-12B	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-12B	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-12B	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-12B	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-12B	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-12B	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-12B	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-12B	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-12B	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-12B	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-12B	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-12B	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-12B	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-12B	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-12B	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-12B	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-12B	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-12B	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-12B	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-12B	9/1/2015	Phenol	86	10	1.1	5761	ug/L
EP-12B	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-12B	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-12B	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-12B	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-12B	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-12B	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-12B	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-12B	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-12B	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-12B	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-12B	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-12B	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-12B	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-12B	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-12B	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-12B	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-12B	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-12B	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-12B	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-12B	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-12B	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-12B	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-12B	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-12B	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-12B	9/1/2015	3,4-Methylphenol	34	10	1.5	NA	ug/L
EP-12B	8/30/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-12B	8/30/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-12B	8/30/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-12B	8/30/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-12B	8/30/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-12B	8/30/2016	Benzoic Acid	31	100	13	75000	ug/L
EP-12B	8/30/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-12B	8/30/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-12B	8/30/2016	Isophorone	ND	50	13	781	ug/L
EP-12B	8/30/2016	Acenaphthene	ND	50	13	535	ug/L
EP-12B	8/30/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-12B	8/30/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-12B	8/30/2016	Phenanthrene	ND	50	13	170	ug/L
EP-12B	8/30/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-12B	8/30/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-12B	8/30/2016	Fluorene	ND	50	14	288	ug/L
EP-12B	8/30/2016	Carbazole	ND	50	11	NA	ug/L
EP-12B	8/30/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-12B	8/30/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-12B	8/30/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-12B	8/30/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-12B	8/30/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-12B	8/30/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-12B	8/30/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-12B	8/30/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-12B	8/30/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-12B	8/30/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-12B	8/30/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-12B	8/30/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-12B	8/30/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-12B	8/30/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-12B	8/30/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-12B	8/30/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-12B	8/30/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-12B	8/30/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-12B	8/30/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-12B	8/30/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-12B	8/30/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-12B	8/30/2016	Phenol	ND	50	9.9	5761	ug/L
EP-12B	8/30/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-12B	8/30/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-12B	8/30/2016	Bis(2-ethylhexyl)phthalate	17	50	13	55.64	ug/L
EP-12B	8/30/2016	Di-n-octylphthalate	19	50	9.9	200	ug/L
EP-12B	8/30/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-12B	8/30/2016	Anthracene	ND	50	12	1721	ug/L
EP-12B	8/30/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-12B	8/30/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-12B	8/30/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-12B	8/30/2016	Pyrene	ND	50	15	117	ug/L
EP-12B	8/30/2016	Dimethylphthalate	21	50	12	612	ug/L
EP-12B	8/30/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-12B	8/30/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-12B	8/30/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-12B	8/30/2016	Fluoranthene	ND	50	13	802	ug/L
EP-12B	8/30/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-12B	8/30/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-12B	8/30/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-12B	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-12B	8/30/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-12B	8/30/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-12B	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-12B	8/30/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-12B	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-12B	8/30/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-12B	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-12B	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-12B	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-12B	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12B	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-12B	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-12B	3/30/2017	Benzoic Acid	44	100	20	75000	ug/L
EP-12B	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-12B	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-12B	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12B	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12B	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12B	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12B	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-12B	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12B	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-12B	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-12B	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-12B	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12B	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12B	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12B	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-12B	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-12B	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12B	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-12B	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12B	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12B	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12B	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12B	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-12B	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12B	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-12B	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12B	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12B	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12B	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-12B	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12B	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12B	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-12B	3/30/2017	Phenol	45	50	16	5761	ug/L
EP-12B	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-12B	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12B	3/30/2017	Bis(2-ethylhexyl)phthalate	31	50	24	55.64	ug/L
EP-12B	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12B	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-12B	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-12B	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-12B	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-12B	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-12B	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12B	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12B	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-12B	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12B	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12B	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12B	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12B	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-12B	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12B	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12B	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12B	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12B	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12B	3/30/2017	3,4-Methylphenol	41	50	16	NA	ug/L
EP-12B	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-12B	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-12B	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-12B	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-12B	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-12B	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-12B	10/24/2017	Benzoic Acid	41	100	20	75000	ug/L
EP-12B	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-12B	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-12B	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-12B	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-12B	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-12B	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-12B	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-12B	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-12B	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-12B	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-12B	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-12B	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-12B	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-12B	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-12B	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-12B	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-12B	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-12B	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-12B	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-12B	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-12B	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-12B	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-12B	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-12B	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-12B	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-12B	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-12B	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-12B	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-12B	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-12B	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-12B	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-12B	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-12B	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-12B	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-12B	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-12B	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-12B	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-12B	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-12B	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-12B	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-12B	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-12B	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-12B	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-12B	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-12B	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-12B	10/24/2017	Pyrene	26	50	22	117	ug/L
EP-12B	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-12B	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-12B	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-12B	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-12B	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-12B	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-12B	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-12B	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-12B	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-12B	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-12B	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-12B	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-12B	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-12B	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-12B	10/24/2017	3,4-Methylphenol	26	50	16	NA	ug/L
EP-12B	2/22/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-12B	2/22/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-12B	2/22/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-12B	2/22/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-12B	2/22/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-12B	2/22/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-12B	2/22/2018	Benzoic Acid	110	200	39	75000	ug/L
EP-12B	2/22/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-12B	2/22/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-12B	2/22/2018	Isophorone	ND	100	44	781	ug/L
EP-12B	2/22/2018	Acenaphthene	ND	100	36	535	ug/L
EP-12B	2/22/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-12B	2/22/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-12B	2/22/2018	Phenanthrene	ND	100	43	170	ug/L
EP-12B	2/22/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-12B	2/22/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-12B	2/22/2018	Fluorene	ND	100	40	288	ug/L
EP-12B	2/22/2018	Carbazole	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-12B	2/22/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-12B	2/22/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-12B	2/22/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-12B	2/22/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-12B	2/22/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-12B	2/22/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-12B	2/22/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-12B	2/22/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-12B	2/22/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-12B	2/22/2018	2-Methylphenol	89	100	33	NA	ug/L
EP-12B	2/22/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-12B	2/22/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-12B	2/22/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-12B	2/22/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-12B	2/22/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-12B	2/22/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-12B	2/22/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-12B	2/22/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-12B	2/22/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-12B	2/22/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-12B	2/22/2018	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-12B	2/22/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-12B	2/22/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-12B	2/22/2018	Phenol	360	100	31	5761	ug/L
EP-12B	2/22/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-12B	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-12B	2/22/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-12B	2/22/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-12B	2/22/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-12B	2/22/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-12B	2/22/2018	Anthracene	ND	100	35	1721	ug/L
EP-12B	2/22/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-12B	2/22/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-12B	2/22/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-12B	2/22/2018	Pyrene	ND	100	44	117	ug/L
EP-12B	2/22/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-12B	2/22/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-12B	2/22/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-12B	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-12B	2/22/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-12B	2/22/2018	Fluoranthene	ND	100	43	802	ug/L
EP-12B	2/22/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-12B	2/22/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-12B	2/22/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-12B	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-12B	2/22/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-12B	2/22/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-12B	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-12B	2/22/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-12B	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-12B	2/22/2018	3,4-Methylphenol	180	100	32	NA	ug/L
EP-12B	9/7/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-12B	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-12B	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-12B	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-12B	9/7/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-12B	9/7/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-12B	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-12B	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-12B	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-12B	9/7/2018	Benzoic Acid	32	100	32	75000	ug/L
EP-12B	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-12B	9/7/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-12B	9/7/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-12B	9/7/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-12B	9/7/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-12B	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-12B	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-12B	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-12B	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-12B	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-12B	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-12B	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-12B	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-12B	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-12B	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-12B	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-12B	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-12B	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-12B	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-12B	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-12B	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-12B	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-12B	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-12B	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-12B	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-12B	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-12B	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-12B	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-12B	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-12B	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-12B	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-12B	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-12B	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-12B	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-12B	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-12B	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-12B	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-12B	9/7/2018	Phenol	*37*	50	30	5761	ug/L
EP-12B	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-12B	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-12B	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-12B	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-12B	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-12B	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-12B	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-12B	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-12B	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-12B	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-12B	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-12B	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-12B	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-12B	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-12B	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-12B	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-12B	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-12B	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-12B	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-12B	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-12B	9/7/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-12B	9/7/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-12B	9/7/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-12B	9/7/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-12B	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	*27*	1.52	ug/L
EP-12B	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-12B	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-12B	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-12B	9/7/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-12B	9/7/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-12B	9/7/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-12B	9/7/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-12B	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-12B	9/7/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-12B	9/7/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-12B	9/7/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-12B	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-12B	9/7/2018	3,4-Methylphenol	41	50	27	NA	ug/L
EP-12B	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-12B	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-12B	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-12B	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-12B	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-12B	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-12B	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-12B	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-12B	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-12B	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-12B	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-12B	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-12B	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-12B	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-12B	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-12B	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-12B	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-12B	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-12B	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-12B	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-12B	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-12B	4/29/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-12B	4/29/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-12B	4/29/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-12B	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-12B	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-12B	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-12B	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-12B	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-12B	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-12B	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-12B	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-12B	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-12B	4/29/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-12B	4/29/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-12B	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-12B	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-12B	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-12B	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-12B	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-12B	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-12B	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-12B	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-12B	4/29/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-12B	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-12B	4/29/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-12B	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-12B	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-12B	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-12B	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-12B	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-12B	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-12B	4/29/2019	Chlordane	*ND*	*50*	25	0.448	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-12B	4/29/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-12B	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-12B	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-12B	4/29/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-12B	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-12B	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-12B	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-12B	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-12B	4/29/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-12B	4/29/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-12B	4/29/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-12B	4/29/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-12B	4/29/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-12B	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-12B	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-12B	4/29/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-12B	4/29/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-12B	4/29/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-12B	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-12B	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-12B	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-12B	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-12B	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-12B	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-12B	4/29/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-12B	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-12B	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-12B	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-12B	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-12B	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-12B	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-12B	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-12B	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-12B	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-12B	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-12B	4/29/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-12B	11/21/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-12B	11/21/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-12B	11/21/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-12B	11/21/2019	1,4-Dioxane	**6.9**	1	1	4.59	ug/L
EP-12B	11/21/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-12B	11/21/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-12B	11/21/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-12B	11/21/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-12B	11/21/2019	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
EP-12B	11/21/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-12B	11/21/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-12B	11/21/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-12B	11/21/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-12B	11/21/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-12B	11/21/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-12B	11/21/2019	2-Methylphenol	94	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-12B	11/21/2019	2-Nitrophenol	5.6	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-12B	11/21/2019	3,4-Methylphenol	160	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-12B	11/21/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-12B	11/21/2019	4-Nitrophenol	6.4	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-12B	11/21/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-12B	11/21/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-12B	11/21/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-12B	11/21/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-12B	11/21/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-12B	11/21/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-12B	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-12B	11/21/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-12B	11/21/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-12B	11/21/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-12B	11/21/2019	Bis(2-ethylhexyl)phthalate	27	2.5	2.5	55.64	ug/L
EP-12B	11/21/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-12B	11/21/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-12B	11/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-12B	11/21/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-12B	11/21/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
EP-12B	11/21/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-12B	11/21/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-12B	11/21/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-12B	11/21/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
EP-12B	11/21/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-12B	11/21/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-12B	11/21/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-12B	11/21/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-12B	11/21/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-12B	11/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-12B	11/21/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-12B	11/21/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-12B	11/21/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-12B	11/21/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-12B	11/21/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-12B	11/21/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-12B	11/21/2019	Phenol	560	2.5	2.5	5761	ug/L
EP-12B	11/21/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-12B	11/21/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-12B	11/21/2019	4,4-DDD	*ND*	*0.45455*	0.365045	0.317	ug/L
EP-12B	11/21/2019	4,4-DDE	ND	0.45455	0.389591	0.462	ug/L
EP-12B	11/21/2019	4,4-DDT	ND	0.56818	0.464636	2.29	ug/L
EP-12B	11/21/2019	Aldrin	*ND*	*0.45455*	0.377773	0.002	ug/L
EP-12B	11/21/2019	a-BHC	*ND*	*0.45455*	0.376455	0.069	ug/L
EP-12B	11/21/2019	b-BHC	*ND*	*0.45455*	0.4235	0.243	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	Chlordane	*ND*	*4.54545*	2.272727	0.448	ug/L
EP-12B	11/21/2019	d-BHC	ND	0.45455	0.392818	NA	ug/L
EP-12B	11/21/2019	Dieldrin	*ND*	*0.45455*	0.382409	0.018	ug/L
EP-12B	11/21/2019	Endosulfan I	ND	0.45455	0.385682	98.7	ug/L
EP-12B	11/21/2019	Endosulfan II	ND	0.45455	0.396545	98.7	ug/L
EP-12B	11/21/2019	Endosulfan sulfate	ND	0.45455	0.4105	110	ug/L
EP-12B	11/21/2019	Endrin	ND	0.56818	0.515545	2.23	ug/L
EP-12B	11/21/2019	Endrin aldehyde	ND	0.45455	0.370682	NA	ug/L
EP-12B	11/21/2019	g-BHC (Lindane)	*ND*	*0.45455*	0.385773	0.415	ug/L
EP-12B	11/21/2019	Heptachlor	*ND*	*0.45455*	0.389773	0.0221	ug/L
EP-12B	11/21/2019	Heptachlor epoxide	*ND*	*0.45455*	0.397182	0.0014	ug/L
EP-12B	11/21/2019	Methoxychlor	ND	0.56818	0.510909	37	ug/L
EP-12B	11/21/2019	Toxaphene	*ND*	*4.54545*	2.272727	0.158	ug/L
EP-12B	9/18/2020	1,2,4-Trichlorobenzene	ND	2.3	0.46	70	ug/L
EP-12B	9/18/2020	1,2-Dichlorobenzene	ND	2.3	0.46	600	ug/L
EP-12B	9/18/2020	1,3-Dichlorobenzene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	1,4-Dichlorobenzene	ND	2.3	0.46	75	ug/L
EP-12B	9/18/2020	1,4-Dioxane	ND	2.3	0.46	4.59	ug/L
EP-12B	9/18/2020	1-Methylnaphthalene	ND	2.3	0.46	11.38	ug/L
EP-12B	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	2.3	0.46	240	ug/L
EP-12B	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	2,4,5-Trichlorophenol	ND	2.3	0.46	1166	ug/L
EP-12B	9/18/2020	2,4,6-Trichlorophenol	ND	2.3	0.46	11.9*	ug/L
EP-12B	9/18/2020	2,4-Dichlorophenol	ND	2.3	0.46	45.3	ug/L
EP-12B	9/18/2020	2,4-Dimethylphenol	ND	2.3	0.46	354	ug/L
EP-12B	9/18/2020	2,4-Dinitrophenol	ND	2.3	0.46	38.7	ug/L
EP-12B	9/18/2020	2,4-Dinitrotoluene	ND	2.3	0.46	45.3	ug/L
EP-12B	9/18/2020	2,6-Dinitrotoluene	*ND*	*0.91*	0.46	0.485	ug/L
EP-12B	9/18/2020	2-Chloronaphthalene	ND	2.3	0.46	733	ug/L
EP-12B	9/18/2020	2-Chlorophenol	ND	2.3	0.46	91	ug/L
EP-12B	9/18/2020	2-Methylnaphthalene	ND	2.3	0.46	35.1	ug/L
EP-12B	9/18/2020	2-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	2-Nitroaniline	ND	2.3	0.46	190	ug/L
EP-12B	9/18/2020	2-Nitrophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	3,4-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	3,3-Dichlorobenzidine	*ND*	*2.3*	0.46	1.25	ug/L
EP-12B	9/18/2020	3-Nitroaniline	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.3*	0.46	1.52	ug/L
EP-12B	9/18/2020	4-Bromophenyl-phenylether	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Chloro-3-Methylphenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Chloroaniline	*ND*	*2.3*	0.46	0.37	ug/L
EP-12B	9/18/2020	4-Chlorophenyl-phenylether	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	4-Nitroaniline	ND	2.3	0.46	3.8	ug/L
EP-12B	9/18/2020	4-Nitrophenol	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Acenaphthene	ND	2.3	0.46	535	ug/L
EP-12B	9/18/2020	Acenaphthylene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Aniline	ND	2.3	0.46	13	ug/L
EP-12B	9/18/2020	Anthracene	ND	2.3	0.46	1721	ug/L
EP-12B	9/18/2020	Benzo(a)anthracene	*ND*	*0.46*	0.23	0.12	ug/L
EP-12B	9/18/2020	Benzidine	*ND*	*2.3*	1.1	0.0011	ug/L
EP-12B	9/18/2020	Benzo(a)pyrene	*ND*	*0.46*	0.23	0.2	ug/L
EP-12B	9/18/2020	Benzo(b)fluoranthene	*ND*	*0.46*	0.23	0.34	ug/L
EP-12B	9/18/2020	Benzo(g,h,i)perylene	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Benzo(k)fluoranthene	ND	2.3	0.46	3.43	ug/L
EP-12B	9/18/2020	Benzoic Acid	ND	2.3	0.91	75000	ug/L
EP-12B	9/18/2020	Benzyl Alcohol	ND	2.3	0.91	2000	ug/L
EP-12B	9/18/2020	Bis(2-chloroethoxy)methane	ND	2.3	0.46	59	ug/L
EP-12B	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*2.3*	0.46	0.137	ug/L
EP-12B	9/18/2020	Bis(2-chloroisopropyl)ether	ND	2.3	0.46	9.81	ug/L
EP-12B	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	2.3	0.91	55.64	ug/L
EP-12B	9/18/2020	Butylbenzylphthalate	ND	2.3	0.91	16	ug/L
EP-12B	9/18/2020	Carbazole	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Chrysene	ND	2.3	0.46	34.3	ug/L
EP-12B	9/18/2020	Di-n-butylphthalate	ND	2.3	0.91	885	ug/L
EP-12B	9/18/2020	Di-n-octylphthalate	ND	2.3	0.91	200	ug/L
EP-12B	9/18/2020	Dibenzo(a,h)anthracene	ND	0.14	0.091	NA	ug/L
EP-12B	9/18/2020	Dibenzofuran	ND	2.3	0.46	NA	ug/L
EP-12B	9/18/2020	Diethylphthalate	ND	2.3	0.91	14801	ug/L
EP-12B	9/18/2020	Dimethylphthalate	ND	2.3	0.91	612	ug/L
EP-12B	9/18/2020	Fluoranthene	ND	2.3	0.46	802	ug/L
EP-12B	9/18/2020	Fluorene	ND	2.3	0.46	288	ug/L
EP-12B	9/18/2020	Hexachlorobenzene	*ND*	*2.3*	0.46	0.0976	ug/L
EP-12B	9/18/2020	Hexachlorobutadiene	*ND*	*2.3*	0.46	0.14	ug/L
EP-12B	9/18/2020	Hexachlorocyclopentadiene	*ND*	*2.3*	1.1	0.41	ug/L
EP-12B	9/18/2020	Hexachloroethane	ND	2.3	0.46	3.28	ug/L
EP-12B	9/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.91*	0.46	0.343	ug/L
EP-12B	9/18/2020	Isophorone	ND	2.3	0.46	781	ug/L
EP-12B	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*2.3*	0.46	0.011	ug/L
EP-12B	9/18/2020	N-Nitrosodimethylamine	*ND*	*2.3*	0.46	0.0049	ug/L
EP-12B	9/18/2020	N-Nitrosodiphenylamine	ND	2.3	0.46	122	ug/L
EP-12B	9/18/2020	Naphthalene	ND	2.3	0.46	30	ug/L
EP-12B	9/18/2020	Nitrobenzene	*ND*	*2.3*	0.46	1.4	ug/L
EP-12B	9/18/2020	Pentachlorophenol	*ND*	*2.3*	0.91	1	ug/L
EP-12B	9/18/2020	Phenanthrene	ND	2.3	0.46	170	ug/L
EP-12B	9/18/2020	Phenol	ND	2.3	0.46	5761	ug/L
EP-12B	9/18/2020	Pyrene	ND	2.3	0.46	117	ug/L
EP-12B	9/18/2020	Pyridine	ND	2.3	0.91	20	ug/L
EP-12B	12/22/2020	Acenaphthene	ND	23.3	0.373	535	ug/L
EP-12B	12/22/2020	Acenaphthylene	ND	23.3	0.396	NA	ug/L
EP-12B	12/22/2020	Anthracene	ND	23.3	0.42	1721	ug/L
EP-12B	12/22/2020	Benzo(a)anthracene	*ND*	*23.3*	0.42	0.12	ug/L
EP-12B	12/22/2020	Benzo(a)pyrene	*ND*	*23.3*	0.28	0.2	ug/L
EP-12B	12/22/2020	Benzo(b)fluoranthene	*ND*	*23.3*	0.35	0.34	ug/L
EP-12B	12/22/2020	Benzo(g,h,i)perylene	ND	23.3	0.536	NA	ug/L
EP-12B	12/22/2020	Benzo(k)fluoranthene	*ND*	*23.3*	0.373	3.43	ug/L
EP-12B	12/22/2020	Bis(2-chloroethoxy)methane	ND	23.3	0.373	59	ug/L
EP-12B	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*23.3*	6.3	0.137	ug/L
EP-12B	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	23.3	11.7	55.64	ug/L
EP-12B	12/22/2020	4-Bromophenyl-phenylether	ND	23.3	0.466	NA	ug/L
EP-12B	12/22/2020	Butylbenzylphthalate	*ND*	*23.3*	0.443	16	ug/L
EP-12B	12/22/2020	Carbazole	ND	23.3	0.536	NA	ug/L
EP-12B	12/22/2020	4-Chloroaniline	*ND*	*23.3*	7.93	0.37	ug/L
EP-12B	12/22/2020	4-Chloro-3-Methylphenol	ND	23.3	8.86	NA	ug/L
EP-12B	12/22/2020	2-Chloronaphthalene	ND	23.3	0.326	733	ug/L
EP-12B	12/22/2020	2-Chlorophenol	ND	23.3	5.13	91	ug/L
EP-12B	12/22/2020	4-Chlorophenyl-phenylether	ND	23.3	4.66	NA	ug/L
EP-12B	12/22/2020	1,3-Dichlorobenzene	ND	23.3	0.42	NA	ug/L
EP-12B	12/22/2020	Chrysene	ND	23.3	0.443	34.3	ug/L
EP-12B	12/22/2020	Dibenzo(a,h)anthracene	ND	23.3	0.56	NA	ug/L
EP-12B	12/22/2020	1,4-Dichlorobenzene	ND	23.3	0.373	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	12/22/2020	Dibenzofuran	ND	23.3	0.396	NA	ug/L
EP-12B	12/22/2020	3,3-Dichlorobenzidine	*ND*	*23.3*	6.06	1.25	ug/L
EP-12B	12/22/2020	2,4-Dichlorophenol	ND	23.3	7	45.3	ug/L
EP-12B	12/22/2020	Diethylphthalate	ND	23.3	0.56	14801	ug/L
EP-12B	12/22/2020	2,4-Dimethylphenol	ND	23.3	8.16	354	ug/L
EP-12B	12/22/2020	Di-n-butylphthalate	ND	23.3	6.3	885	ug/L
EP-12B	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*23.3*	3.73	1.52	ug/L
EP-12B	12/22/2020	2,4-Dinitrophenol	*ND*	*70*	7.93	38.7	ug/L
EP-12B	12/22/2020	2,4-Dinitrotoluene	ND	23.3	4.43	45.3	ug/L
EP-12B	12/22/2020	2,6-Dinitrotoluene	*ND*	*23.3*	4.43	0.485	ug/L
EP-12B	12/22/2020	Di-n-octylphthalate	ND	23.3	0.396	200	ug/L
EP-12B	12/22/2020	Fluoranthene	ND	23.3	0.42	802	ug/L
EP-12B	12/22/2020	Fluorene	ND	23.3	0.42	288	ug/L
EP-12B	12/22/2020	Hexachlorobenzene	*ND*	*23.3*	0.396	0.0976	ug/L
EP-12B	12/22/2020	Hexachlorocyclopentadiene	*ND*	*46.6*	6.06	0.41	ug/L
EP-12B	12/22/2020	Hexachloroethane	*ND*	*23.3*	9.79	3.28	ug/L
EP-12B	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*23.3*	0.513	0.343	ug/L
EP-12B	12/22/2020	Isophorone	ND	23.3	0.326	781	ug/L
EP-12B	12/22/2020	2-Methylphenol	ND	23.3	4.2	NA	ug/L
EP-12B	12/22/2020	Naphthalene	ND	23.3	0.396	30	ug/L
EP-12B	12/22/2020	2-Nitroaniline	ND	23.3	5.13	190	ug/L
EP-12B	12/22/2020	3-Nitroaniline	ND	23.3	4.2	NA	ug/L
EP-12B	12/22/2020	4-Nitroaniline	*ND*	*23.3*	3.5	3.8	ug/L
EP-12B	12/22/2020	Nitrobenzene	*ND*	*23.3*	0.303	1.4	ug/L
EP-12B	12/22/2020	2-Nitrophenol	ND	23.3	12.1	NA	ug/L
EP-12B	12/22/2020	4-Nitrophenol	ND	23.3	4.9	NA	ug/L
EP-12B	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*23.3*	7.7	0.011	ug/L
EP-12B	12/22/2020	N-Nitrosodiphenylamine	ND	23.3	0.42	122	ug/L
EP-12B	12/22/2020	Pentachlorophenol	*ND*	*46.6*	3.26	1	ug/L
EP-12B	12/22/2020	Phenanthrene	ND	23.3	0.42	170	ug/L
EP-12B	12/22/2020	Phenol	ND	23.3	6.06	5761	ug/L
EP-12B	12/22/2020	Pyrene	ND	23.3	0.49	117	ug/L
EP-12B	12/22/2020	2,4,5-Trichlorophenol	ND	23.3	8.63	1166	ug/L
EP-12B	12/22/2020	2,4,6-Trichlorophenol	ND	23.3	8.16	11.9*	ug/L
EP-12B	12/22/2020	Dimethylphthalate	ND	23.3	0.396	612	ug/L
EP-12B	12/22/2020	Aniline	*ND*	*23.3*	8.86	13	ug/L
EP-12B	12/22/2020	Benzoic Acid	ND	70	17	75000	ug/L
EP-12B	12/22/2020	Benzyl Alcohol	ND	23.3	4.66	2000	ug/L
EP-12B	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*23.3*	0.373	9.81	ug/L
EP-12B	12/22/2020	N-Nitrosodimethylamine	*ND*	*23.3*	8.16	0.0049	ug/L
EP-12B	12/22/2020	Pyridine	*ND*	*23.3*	7.46	20	ug/L
EP-12B	12/22/2020	1,2,4-Trichlorobenzene	ND	23.3	0.42	70	ug/L
EP-12B	12/22/2020	1,2-Dichlorobenzene	ND	23.3	0.396	600	ug/L
EP-12B	12/22/2020	Azobenzene	*ND*	*23.3*	2.33	0.12	ug/L
EP-2	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-2	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-2	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-2	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-2	5/29/2012	Aniline	**110**	50	9.9	13	ug/L
EP-2	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-2	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-2	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-2	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-2	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-2	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-2	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-2	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-2	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-2	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-2	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-2	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-2	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-2	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-2	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-2	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-2	5/29/2012	2-Methylphenol	580	50	14	NA	ug/L
EP-2	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-2	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-2	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-2	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-2	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-2	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-2	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-2	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-2	5/29/2012	2,4-Dimethylphenol	110	50	16	354	ug/L
EP-2	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-2	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-2	5/29/2012	Phenol	1700	250	63	5761	ug/L
EP-2	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-2	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-2	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-2	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-2	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-2	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-2	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-2	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-2	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-2	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-2	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-2	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-2	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-2	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-2	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-2	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-2	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-2	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-2	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-2	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-2	5/29/2012	3,4-Methylphenol	810	250	72	NA	ug/L
EP-2	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-2	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-2	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-2	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-2	11/6/2012	Aniline	**110**	50	9.9	13	ug/L
EP-2	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-2	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-2	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-2	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-2	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-2	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-2	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-2	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-2	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-2	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-2	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-2	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-2	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-2	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-2	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-2	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-2	11/6/2012	2-Methylphenol	920	50	14	NA	ug/L
EP-2	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-2	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-2	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-2	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-2	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-2	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-2	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-2	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-2	11/6/2012	2,4-Dimethylphenol	160	50	16	354	ug/L
EP-2	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-2	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-2	11/6/2012	Phenol	2300	250	63	5761	ug/L
EP-2	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-2	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-2	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-2	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-2	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-2	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-2	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-2	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-2	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-2	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-2	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-2	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-2	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-2	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-2	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-2	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-2	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-2	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-2	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-2	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-2	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-2	11/6/2012	3,4-Methylphenol	1300	250	72	NA	ug/L
EP-2	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-2	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-2	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-2	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-2	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-2	5/28/2013	Aniline	**160**	20	4.4	13	ug/L
EP-2	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-2	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-2	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-2	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-2	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-2	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-2	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-2	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-2	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-2	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-2	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-2	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-2	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-2	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-2	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-2	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-2	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-2	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-2	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-2	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-2	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-2	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-2	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-2	5/28/2013	2-Methylphenol	2200	1000	270	NA	ug/L
EP-2	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-2	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-2	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-2	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-2	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-2	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-2	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-2	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-2	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-2	5/28/2013	2,4-Dimethylphenol	**380**	20	5.9	354	ug/L
EP-2	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-2	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-2	5/28/2013	Phenol	**7400**	1000	220	5761	ug/L
EP-2	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-2	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-2	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-2	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-2	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-2	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-2	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-2	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-2	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-2	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-2	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-2	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-2	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-2	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-2	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-2	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-2	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-2	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-2	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-2	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-2	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-2	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-2	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-2	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-2	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-2	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-2	5/28/2013	3,4-Methylphenol	4300	1000	370	NA	ug/L
EP-2	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-2	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-2	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-2	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-2	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-2	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-2	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-2	10/15/2013	Benzoic Acid	57	40	5.7	75000	ug/L
EP-2	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-2	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-2	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-2	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-2	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-2	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-2	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-2	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-2	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-2	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-2	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-2	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-2	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-2	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-2	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-2	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-2	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-2	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-2	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-2	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-2	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-2	10/15/2013	2-Methylphenol	82	10	2.7	NA	ug/L
EP-2	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-2	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-2	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-2	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-2	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-2	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-2	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-2	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-2	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-2	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-2	10/15/2013	2,4-Dimethylphenol	15	10	2.9	354	ug/L
EP-2	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-2	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-2	10/15/2013	Phenol	420	50	11	5761	ug/L
EP-2	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-2	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-2	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-2	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-2	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-2	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-2	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-2	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-2	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-2	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-2	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-2	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-2	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-2	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-2	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-2	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-2	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-2	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-2	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-2	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-2	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-2	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-2	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-2	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-2	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-2	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-2	10/15/2013	3,4-Methylphenol	200	10	3.7	NA	ug/L
EP-2	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-2	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-2	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-2	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-2	3/5/2014	Aniline	**44**	10	2.4	13	ug/L
EP-2	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-2	3/5/2014	Benzoic Acid	97	20	2.2	75000	ug/L
EP-2	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-2	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-2	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-2	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-2	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-2	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-2	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-2	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-2	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-2	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-2	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-2	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-2	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-2	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-2	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-2	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-2	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-2	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-2	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-2	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-2	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-2	3/5/2014	2-Methylphenol	140	10	2.8	NA	ug/L
EP-2	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-2	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-2	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-2	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-2	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-2	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-2	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-2	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-2	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-2	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-2	3/5/2014	2,4-Dimethylphenol	29	10	3.1	354	ug/L
EP-2	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-2	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-2	3/5/2014	Phenol	870	100	16	5761	ug/L
EP-2	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-2	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-2	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-2	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-2	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-2	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-2	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-2	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-2	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-2	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-2	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-2	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-2	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-2	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-2	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-2	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-2	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-2	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-2	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-2	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-2	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-2	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-2	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-2	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-2	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-2	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-2	3/5/2014	3,4-Methylphenol	350	100	18	NA	ug/L
EP-2	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-2	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-2	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-2	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-2	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-2	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-2	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-2	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-2	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-2	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-2	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-2	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-2	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-2	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-2	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-2	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-2	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-2	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-2	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-2	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-2	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-2	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-2	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-2	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-2	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-2	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-2	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-2	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-2	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-2	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-2	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-2	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-2	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-2	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-2	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-2	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-2	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-2	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-2	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-2	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-2	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-2	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-2	11/12/2014	Phenol	58	50	7.9	5761	ug/L
EP-2	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-2	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-2	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-2	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-2	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-2	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-2	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-2	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-2	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-2	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-2	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-2	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-2	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-2	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-2	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-2	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-2	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-2	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-2	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-2	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-2	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-2	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-2	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-2	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-2	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-2	3/24/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-2	3/24/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-2	3/24/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-2	3/24/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-2	3/24/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-2	3/24/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-2	3/24/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-2	3/24/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-2	3/24/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-2	3/24/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-2	3/24/2015	Isophorone	ND	100	20	781	ug/L
EP-2	3/24/2015	Acenaphthene	ND	100	19	535	ug/L
EP-2	3/24/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-2	3/24/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-2	3/24/2015	Phenanthrene	ND	100	20	170	ug/L
EP-2	3/24/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-2	3/24/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-2	3/24/2015	Fluorene	ND	100	17	288	ug/L
EP-2	3/24/2015	Carbazole	ND	100	15	NA	ug/L
EP-2	3/24/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-2	3/24/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-2	3/24/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-2	3/24/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-2	3/24/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-2	3/24/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-2	3/24/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-2	3/24/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-2	3/24/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-2	3/24/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-2	3/24/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-2	3/24/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-2	3/24/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-2	3/24/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-2	3/24/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-2	3/24/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-2	3/24/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-2	3/24/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-2	3/24/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-2	3/24/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-2	3/24/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-2	3/24/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-2	3/24/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-2	3/24/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-2	3/24/2015	Phenol	ND	100	11	5761	ug/L
EP-2	3/24/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-2	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-2	3/24/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-2	3/24/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-2	3/24/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-2	3/24/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-2	3/24/2015	Anthracene	ND	100	16	1721	ug/L
EP-2	3/24/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-2	3/24/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-2	3/24/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-2	3/24/2015	Pyrene	ND	100	23	117	ug/L
EP-2	3/24/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-2	3/24/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-2	3/24/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-2	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-2	3/24/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-2	3/24/2015	Fluoranthene	ND	100	15	802	ug/L
EP-2	3/24/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-2	3/24/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-2	3/24/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-2	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-2	3/24/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-2	3/24/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-2	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-2	3/24/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-2	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-2	3/24/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-2	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-2	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-2	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-2	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-2	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-2	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-2	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-2	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-2	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-2	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-2	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-2	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-2	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-2	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-2	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-2	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-2	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-2	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-2	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-2	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-2	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-2	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-2	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-2	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-2	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-2	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-2	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-2	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-2	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-2	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-2	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-2	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-2	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-2	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-2	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-2	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-2	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-2	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-2	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-2	9/1/2015	Phenol	220	10	1.1	5761	ug/L
EP-2	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-2	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-2	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-2	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-2	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-2	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-2	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-2	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-2	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-2	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-2	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-2	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-2	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-2	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-2	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-2	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-2	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-2	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-2	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-2	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-2	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-2	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-2	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-2	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-2	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-2	9/1/2015	3,4-Methylphenol	68	10	1.5	NA	ug/L
EP-2	8/29/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-2	8/29/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-2	8/29/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-2	8/29/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-2	8/29/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-2	8/29/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-2	8/29/2016	Benzoic Acid	41	100	13	75000	ug/L
EP-2	8/29/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-2	8/29/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-2	8/29/2016	Isophorone	ND	50	13	781	ug/L
EP-2	8/29/2016	Acenaphthene	ND	50	13	535	ug/L
EP-2	8/29/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-2	8/29/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-2	8/29/2016	Phenanthrene	ND	50	13	170	ug/L
EP-2	8/29/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-2	8/29/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-2	8/29/2016	Fluorene	ND	50	14	288	ug/L
EP-2	8/29/2016	Carbazole	ND	50	11	NA	ug/L
EP-2	8/29/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-2	8/29/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-2	8/29/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-2	8/29/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-2	8/29/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-2	8/29/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-2	8/29/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-2	8/29/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-2	8/29/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-2	8/29/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-2	8/29/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-2	8/29/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-2	8/29/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-2	8/29/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-2	8/29/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-2	8/29/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-2	8/29/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-2	8/29/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-2	8/29/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-2	8/29/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-2	8/29/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-2	8/29/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-2	8/29/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-2	8/29/2016	Phenol	ND	50	9.9	5761	ug/L
EP-2	8/29/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-2	8/29/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-2	8/29/2016	Bis(2-ethylhexyl)phthalate	15	50	13	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	8/29/2016	Di-n-octylphthalate	19	50	9.9	200	ug/L
EP-2	8/29/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-2	8/29/2016	Anthracene	ND	50	12	1721	ug/L
EP-2	8/29/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-2	8/29/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-2	8/29/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-2	8/29/2016	Pyrene	ND	50	15	117	ug/L
EP-2	8/29/2016	Dimethylphthalate	23	50	12	612	ug/L
EP-2	8/29/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-2	8/29/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-2	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-2	8/29/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-2	8/29/2016	Fluoranthene	ND	50	13	802	ug/L
EP-2	8/29/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-2	8/29/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-2	8/29/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-2	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-2	8/29/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-2	8/29/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-2	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-2	8/29/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-2	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-2	8/29/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-2	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-2	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-2	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-2	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-2	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-2	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-2	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-2	3/30/2017	Benzoic Acid	51	100	20	75000	ug/L
EP-2	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-2	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-2	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-2	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-2	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-2	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-2	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-2	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-2	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-2	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-2	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-2	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-2	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-2	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-2	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-2	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-2	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-2	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-2	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-2	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-2	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-2	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-2	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-2	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-2	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-2	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-2	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-2	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-2	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-2	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-2	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-2	3/30/2017	2,4-Dimethylphenol	26	50	14	354	ug/L
EP-2	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-2	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-2	3/30/2017	Phenol	50	50	16	5761	ug/L
EP-2	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-2	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-2	3/30/2017	Bis(2-ethylhexyl)phthalate	39	50	24	55.64	ug/L
EP-2	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-2	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-2	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-2	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-2	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-2	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-2	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-2	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-2	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-2	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-2	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-2	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-2	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-2	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-2	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-2	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-2	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-2	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-2	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-2	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-2	3/30/2017	3,4-Methylphenol	36	50	16	NA	ug/L
EP-2	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-2	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-2	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-2	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-2	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-2	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-2	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-2	10/24/2017	Benzoic Acid	44	100	20	75000	ug/L
EP-2	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-2	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-2	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-2	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-2	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-2	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-2	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-2	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-2	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-2	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-2	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-2	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-2	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-2	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-2	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-2	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-2	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-2	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-2	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-2	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-2	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-2	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-2	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-2	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-2	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-2	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-2	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-2	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-2	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-2	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-2	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-2	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-2	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-2	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-2	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-2	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-2	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-2	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-2	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-2	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-2	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-2	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-2	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-2	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-2	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-2	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-2	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-2	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-2	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-2	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-2	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-2	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-2	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-2	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-2	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-2	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-2	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-2	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-2	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-2	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-2	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-2	10/24/2017	3,4-Methylphenol	31	50	16	NA	ug/L
EP-2	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-2	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-2	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-2	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-2	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-2	2/21/2018	Aniline	**40**	100	31	13	ug/L
EP-2	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-2	2/21/2018	Benzoic Acid	72	200	39	75000	ug/L
EP-2	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-2	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-2	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-2	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-2	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-2	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-2	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-2	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-2	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-2	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-2	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-2	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-2	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-2	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-2	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-2	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-2	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-2	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-2	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-2	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-2	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-2	2/21/2018	2-Methylphenol	110	100	33	NA	ug/L
EP-2	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-2	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-2	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-2	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-2	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-2	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-2	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-2	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-2	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-2	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-2	2/21/2018	2,4-Dimethylphenol	38	100	28	354	ug/L
EP-2	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-2	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-2	2/21/2018	Phenol	460	100	31	5761	ug/L
EP-2	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-2	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-2	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-2	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-2	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-2	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-2	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-2	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-2	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-2	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-2	2/21/2018	Pyrene	ND	100	44	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-2	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-2	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-2	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-2	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-2	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-2	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-2	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-2	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-2	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-2	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-2	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-2	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-2	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-2	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-2	2/21/2018	3,4-Methylphenol	290	100	32	NA	ug/L
EP-2	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-2	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-2	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-2	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-2	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-2	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-2	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-2	9/6/2018	Benzoic Acid	62	100	32	75000	ug/L
EP-2	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-2	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-2	9/6/2018	Isophorone	ND	50	31	781	ug/L
EP-2	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
EP-2	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-2	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-2	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
EP-2	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-2	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-2	9/6/2018	Fluorene	ND	50	32	288	ug/L
EP-2	9/6/2018	Carbazole	ND	50	31	NA	ug/L
EP-2	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-2	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-2	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-2	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-2	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-2	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-2	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-2	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-2	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-2	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-2	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-2	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-2	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-2	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-2	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-2	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-2	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-2	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-2	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-2	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-2	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-2	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-2	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-2	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-2	9/6/2018	Phenol	120	50	30	5761	ug/L
EP-2	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-2	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-2	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-2	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-2	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-2	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-2	9/6/2018	Anthracene	ND	50	29	1721	ug/L
EP-2	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-2	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-2	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-2	9/6/2018	Pyrene	ND	50	33	117	ug/L
EP-2	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-2	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-2	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-2	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-2	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-2	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
EP-2	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-2	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-2	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-2	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-2	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-2	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-2	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-2	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-2	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-2	9/6/2018	3,4-Methylphenol	140	50	27	NA	ug/L
EP-2	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-2	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-2	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-2	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-2	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-2	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-2	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-2	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-2	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-2	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-2	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-2	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-2	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-2	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-2	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-2	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-2	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-2	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-2	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-2	4/30/2019	3,4-Methylphenol	59	50	26.818372	NA	ug/L
EP-2	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-2	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-2	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-2	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-2	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-2	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-2	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-2	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-2	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-2	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-2	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-2	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-2	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-2	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-2	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-2	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-2	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-2	4/30/2019	Benzoic Acid	110	100	31.557804	75000	ug/L
EP-2	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-2	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-2	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-2	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-2	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-2	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-2	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-2	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-2	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-2	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-2	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-2	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-2	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-2	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-2	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-2	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-2	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-2	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-2	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-2	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-2	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-2	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-2	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-2	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-2	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-2	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-2	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-2	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-2	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-2	4/30/2019	Phenol	64	50	29.88676	5761	ug/L
EP-2	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-2	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-2	11/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-2	11/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-2	11/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-2	11/21/2019	1,4-Dioxane	**9.5**	1	1	4.59	ug/L
EP-2	11/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-2	11/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-2	11/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-2	11/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-2	11/21/2019	2,4-Dimethylphenol	2.7	0.5	0.5	354	ug/L
EP-2	11/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-2	11/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-2	11/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-2	11/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-2	11/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-2	11/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-2	11/21/2019	2-Methylphenol	29	0.5	0.5	NA	ug/L
EP-2	11/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-2	11/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-2	11/21/2019	3,4-Methylphenol	39	0.5	0.5	NA	ug/L
EP-2	11/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-2	11/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-2	11/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-2	11/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-2	11/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-2	11/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-2	11/21/2019	Benzo(a)pyrene	ND	0.05	0.05	0.2	ug/L
EP-2	11/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-2	11/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-2	11/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-2	11/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-2	11/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-2	11/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-2	11/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-2	11/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-2	11/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-2	11/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-2	11/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-2	11/21/2019	Diethylphthalate	0.69	0.5	0.5	14801	ug/L
EP-2	11/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-2	11/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-2	11/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-2	11/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-2	11/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-2	11/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-2	11/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-2	11/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-2	11/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-2	11/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-2	11/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-2	11/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-2	11/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-2	11/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-2	11/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-2	11/21/2019	Phenol	190	0.5	0.5	5761	ug/L
EP-2	11/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-2	11/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-2	9/16/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
EP-2	9/16/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
EP-2	9/16/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
EP-2	9/16/2020	1,4-Dioxane	1.3	2.5	0.5	4.59	ug/L
EP-2	9/16/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
EP-2	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
EP-2	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
EP-2	9/16/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
EP-2	9/16/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
EP-2	9/16/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
EP-2	9/16/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
EP-2	9/16/2020	2,4-Dinitrotoluene	ND	1	0.5	45.3	ug/L
EP-2	9/16/2020	2,6-Dinitrotoluene	*ND*	*2.5*	0.5	0.485	ug/L
EP-2	9/16/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
EP-2	9/16/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
EP-2	9/16/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
EP-2	9/16/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
EP-2	9/16/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	3,4-Methylphenol	360	2.5	0.5	NA	ug/L
EP-2	9/16/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
EP-2	9/16/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
EP-2	9/16/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
EP-2	9/16/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
EP-2	9/16/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
EP-2	9/16/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Aniline	ND	2.5	0.5	13	ug/L
EP-2	9/16/2020	Anthracene	ND	2.5	0.5	1721	ug/L
EP-2	9/16/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
EP-2	9/16/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
EP-2	9/16/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
EP-2	9/16/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
EP-2	9/16/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
EP-2	9/16/2020	Benzoic Acid	8.8	2.5	1	75000	ug/L
EP-2	9/16/2020	Benzyl Alcohol	ND	2.5	1	2000	ug/L
EP-2	9/16/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
EP-2	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
EP-2	9/16/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
EP-2	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	0.5	55.64	ug/L
EP-2	9/16/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
EP-2	9/16/2020	Carbazole	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
EP-2	9/16/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
EP-2	9/16/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
EP-2	9/16/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
EP-2	9/16/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
EP-2	9/16/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
EP-2	9/16/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
EP-2	9/16/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
EP-2	9/16/2020	Fluorene	ND	2.5	0.5	288	ug/L
EP-2	9/16/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
EP-2	9/16/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
EP-2	9/16/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
EP-2	9/16/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
EP-2	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
EP-2	9/16/2020	Isophorone	ND	2.5	0.5	781	ug/L
EP-2	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
EP-2	9/16/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
EP-2	9/16/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
EP-2	9/16/2020	Naphthalene	ND	2.5	0.5	30	ug/L
EP-2	9/16/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
EP-2	9/16/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
EP-2	9/16/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
EP-2	9/16/2020	Phenol	4.6	2.5	0.5	5761	ug/L
EP-2	9/16/2020	Pyrene	ND	2.5	0.5	117	ug/L
EP-2	9/16/2020	Pyridine	ND	2.5	1	20	ug/L
EP-2	12/21/2020	Benzo(a)anthracene	*ND*	*53.9*	0.971	0.12	ug/L
EP-2	12/21/2020	Benzo(a)pyrene	*ND*	*53.9*	0.647	0.2	ug/L
EP-2	12/21/2020	Benzo(b)fluoranthene	*ND*	*53.9*	0.809	0.34	ug/L
EP-2	12/21/2020	Benzo(g,h,i)perylene	ND	53.9	1.24	NA	ug/L
EP-2	12/21/2020	Benzo(k)fluoranthene	*ND*	*53.9*	0.863	3.43	ug/L
EP-2	12/21/2020	Bis(2-chloroethoxy)methane	ND	53.9	0.863	59	ug/L
EP-2	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*53.9*	14.6	0.137	ug/L
EP-2	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	53.9	27	55.64	ug/L
EP-2	12/21/2020	Butylbenzylphthalate	*ND*	*53.9*	1.02	16	ug/L
EP-2	12/21/2020	Carbazole	ND	53.9	1.24	NA	ug/L
EP-2	12/21/2020	4-Chloroaniline	*ND*	*53.9*	18.3	0.37	ug/L
EP-2	12/21/2020	4-Chloro-3-Methylphenol	ND	53.9	20.5	NA	ug/L
EP-2	12/21/2020	2-Chlorophenol	ND	53.9	11.9	91	ug/L
EP-2	12/21/2020	Chrysene	*ND*	*53.9*	1.02	34.3	ug/L
EP-2	12/21/2020	Dibenzo(a,h)anthracene	ND	53.9	1.29	NA	ug/L
EP-2	12/21/2020	1,4-Dichlorobenzene	ND	53.9	0.863	75	ug/L
EP-2	12/21/2020	3,3-Dichlorobenzidine	*ND*	*53.9*	14	1.25	ug/L
EP-2	12/21/2020	Diethylphthalate	ND	53.9	1.29	14801	ug/L
EP-2	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*53.9*	8.63	1.52	ug/L
EP-2	12/21/2020	2,4-Dinitrophenol	*ND*	*162*	18.3	38.7	ug/L
EP-2	12/21/2020	Fluorene	ND	53.9	0.971	288	ug/L
EP-2	12/21/2020	Hexachloroethane	*ND*	*53.9*	22.6	3.28	ug/L
EP-2	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*53.9*	1.19	0.343	ug/L
EP-2	12/21/2020	Isophorone	ND	53.9	0.755	781	ug/L
EP-2	12/21/2020	Naphthalene	*ND*	*53.9*	0.917	30	ug/L
EP-2	12/21/2020	2-Nitroaniline	ND	53.9	11.9	190	ug/L
EP-2	12/21/2020	3-Nitroaniline	ND	53.9	9.71	NA	ug/L
EP-2	12/21/2020	4-Nitroaniline	*ND*	*53.9*	8.09	3.8	ug/L
EP-2	12/21/2020	4-Nitrophenol	ND	53.9	11.3	NA	ug/L
EP-2	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*53.9*	17.8	0.011	ug/L
EP-2	12/21/2020	N-Nitrosodiphenylamine	ND	53.9	0.971	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	Pentachlorophenol	*ND*	*108*	7.55	1	ug/L
EP-2	12/21/2020	Phenanthrene	ND	53.9	0.971	170	ug/L
EP-2	12/21/2020	Phenol	ND	53.9	14	5761	ug/L
EP-2	12/21/2020	Pyrene	ND	53.9	1.13	117	ug/L
EP-2	12/21/2020	Benzoic Acid	ND	162	39.4	75000	ug/L
EP-2	12/21/2020	Benzyl Alcohol	ND	53.9	10.8	2000	ug/L
EP-2	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*53.9*	0.863	9.81	ug/L
EP-2	12/21/2020	N-Nitrosodimethylamine	*ND*	*53.9*	18.9	0.0049	ug/L
EP-2	12/21/2020	Pyridine	*ND*	*53.9*	17.3	20	ug/L
EP-2	12/21/2020	Azobenzene	*ND*	*53.9*	5.39	0.12	ug/L
EP-2	12/21/2020	Acenaphthene	ND	53.9	0.863	535	ug/L
EP-2	12/21/2020	Acenaphthylene	ND	53.9	0.917	NA	ug/L
EP-2	12/21/2020	Anthracene	ND	53.9	0.971	1721	ug/L
EP-2	12/21/2020	4-Bromophenyl-phenylether	ND	53.9	1.08	NA	ug/L
EP-2	12/21/2020	2-Chloronaphthalene	ND	53.9	0.755	733	ug/L
EP-2	12/21/2020	4-Chlorophenyl-phenylether	ND	53.9	10.8	NA	ug/L
EP-2	12/21/2020	1,3-Dichlorobenzene	ND	53.9	0.971	NA	ug/L
EP-2	12/21/2020	Dibenzofuran	ND	53.9	0.917	NA	ug/L
EP-2	12/21/2020	2,4-Dichlorophenol	*ND*	*53.9*	16.2	45.3	ug/L
EP-2	12/21/2020	2,4-Dimethylphenol	ND	53.9	18.9	354	ug/L
EP-2	12/21/2020	Di-n-butylphthalate	ND	53.9	14.6	885	ug/L
EP-2	12/21/2020	2,4-Dinitrotoluene	*ND*	*53.9*	10.2	45.3	ug/L
EP-2	12/21/2020	2,6-Dinitrotoluene	*ND*	*53.9*	10.2	0.485	ug/L
EP-2	12/21/2020	Di-n-octylphthalate	ND	53.9	0.917	200	ug/L
EP-2	12/21/2020	Fluoranthene	ND	53.9	0.971	802	ug/L
EP-2	12/21/2020	Hexachlorobenzene	*ND*	*53.9*	0.917	0.0976	ug/L
EP-2	12/21/2020	Hexachlorocyclopentadiene	*ND*	*108*	14	0.41	ug/L
EP-2	12/21/2020	2-Methylphenol	ND	53.9	9.71	NA	ug/L
EP-2	12/21/2020	Nitrobenzene	*ND*	*53.9*	0.701	1.4	ug/L
EP-2	12/21/2020	2-Nitrophenol	ND	53.9	28	NA	ug/L
EP-2	12/21/2020	2,4,5-Trichlorophenol	ND	53.9	20	1166	ug/L
EP-2	12/21/2020	2,4,6-Trichlorophenol	ND	53.9	18.9	11.9*	ug/L
EP-2	12/21/2020	Dimethylphthalate	ND	53.9	0.917	612	ug/L
EP-2	12/21/2020	Aniline	*ND*	*53.9*	20.5	13	ug/L
EP-2	12/21/2020	1,2,4-Trichlorobenzene	ND	53.9	0.971	70	ug/L
EP-2	12/21/2020	1,2-Dichlorobenzene	ND	53.9	0.917	600	ug/L
EP-3	5/29/2012	Benzo(a)pyrene	*ND*	*100*	26	0.2	ug/L
EP-3	5/29/2012	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-3	5/29/2012	Dibenzo(a,h)anthracene	ND	100	28	NA	ug/L
EP-3	5/29/2012	Benzo(a)anthracene	*ND*	*100*	28	0.12	ug/L
EP-3	5/29/2012	4-Chloro-3-Methylphenol	ND	100	23	NA	ug/L
EP-3	5/29/2012	Aniline	*ND*	*100*	20	13	ug/L
EP-3	5/29/2012	N-Nitrosodimethylamine	*ND*	*100*	28	0.0049	ug/L
EP-3	5/29/2012	Benzoic Acid	ND	200	57	75000	ug/L
EP-3	5/29/2012	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-3	5/29/2012	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-3	5/29/2012	Isophorone	ND	100	24	781	ug/L
EP-3	5/29/2012	Acenaphthene	ND	100	27	535	ug/L
EP-3	5/29/2012	Diethylphthalate	ND	100	23	14801	ug/L
EP-3	5/29/2012	Di-n-butylphthalate	ND	100	32	885	ug/L
EP-3	5/29/2012	Phenanthrene	ND	100	21	170	ug/L
EP-3	5/29/2012	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-3	5/29/2012	N-Nitrosodiphenylamine	ND	100	27	122	ug/L
EP-3	5/29/2012	Fluorene	ND	100	23	288	ug/L
EP-3	5/29/2012	Carbazole	ND	100	26	NA	ug/L
EP-3	5/29/2012	Hexachlorobutadiene	*ND*	*100*	30	0.14	ug/L
EP-3	5/29/2012	Pentachlorophenol	*ND*	*200*	16	1	ug/L
EP-3	5/29/2012	2,4,6-Trichlorophenol	ND	100	22	11.9*	ug/L
EP-3	5/29/2012	2-Nitroaniline	ND	100	26	190	ug/L
EP-3	5/29/2012	2-Nitrophenol	ND	100	24	NA	ug/L
EP-3	5/29/2012	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-3	5/29/2012	Naphthalene	*ND*	*100*	29	30	ug/L
EP-3	5/29/2012	2-Methylnaphthalene	*ND*	*100*	25	35.1	ug/L
EP-3	5/29/2012	2-Chloronaphthalene	ND	100	27	733	ug/L
EP-3	5/29/2012	3,3-Dichlorobenzidine	*ND*	*100*	43	1.25	ug/L
EP-3	5/29/2012	2-Methylphenol	870	100	28	NA	ug/L
EP-3	5/29/2012	1,2-Dichlorobenzene	ND	100	27	600	ug/L
EP-3	5/29/2012	2-Chlorophenol	*ND*	*100*	28	91	ug/L
EP-3	5/29/2012	2,4,5-Trichlorophenol	ND	100	25	1166	ug/L
EP-3	5/29/2012	Nitrobenzene	*ND*	*100*	26	1.4	ug/L
EP-3	5/29/2012	3-Nitroaniline	ND	100	25	NA	ug/L
EP-3	5/29/2012	4-Nitroaniline	*ND*	*200*	27	3.8	ug/L
EP-3	5/29/2012	4-Nitrophenol	ND	100	35	NA	ug/L
EP-3	5/29/2012	Benzyl Alcohol	ND	100	21	2000	ug/L
EP-3	5/29/2012	4-Bromophenyl-phenylether	ND	100	34	NA	ug/L
EP-3	5/29/2012	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-3	5/29/2012	2,4-Dimethylphenol	130	100	32	354	ug/L
EP-3	5/29/2012	1,4-Dichlorobenzene	*ND*	*100*	29	75	ug/L
EP-3	5/29/2012	4-Chloroaniline	*ND*	*100*	34	0.37	ug/L
EP-3	5/29/2012	Phenol	3300	200	50	5761	ug/L
EP-3	5/29/2012	Pyridine	*ND*	*100*	24	20	ug/L
EP-3	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*100*	21	0.137	ug/L
EP-3	5/29/2012	Bis(2-chloroethoxy)methane	*ND*	*100*	36	59	ug/L
EP-3	5/29/2012	Bis(2-ethylhexyl)phthalate	*ND*	*100*	30	55.64	ug/L
EP-3	5/29/2012	Di-n-octylphthalate	ND	100	28	200	ug/L
EP-3	5/29/2012	Hexachlorobenzene	*ND*	*100*	29	0.0976	ug/L
EP-3	5/29/2012	Anthracene	ND	100	28	1721	ug/L
EP-3	5/29/2012	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-3	5/29/2012	2,4-Dichlorophenol	*ND*	*200*	31	45.3	ug/L
EP-3	5/29/2012	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-3	5/29/2012	Pyrene	ND	100	29	117	ug/L
EP-3	5/29/2012	Dimethylphthalate	ND	100	25	612	ug/L
EP-3	5/29/2012	Dibenzofuran	ND	100	28	NA	ug/L
EP-3	5/29/2012	Benzo(g,h,i)perylene	ND	100	30	NA	ug/L
EP-3	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*100*	31	0.343	ug/L
EP-3	5/29/2012	Benzo(b)fluoranthene	*ND*	*100*	30	0.34	ug/L
EP-3	5/29/2012	Fluoranthene	ND	100	27	802	ug/L
EP-3	5/29/2012	Benzo(k)fluoranthene	*ND*	*100*	37	3.43	ug/L
EP-3	5/29/2012	Acenaphthylene	ND	100	26	NA	ug/L
EP-3	5/29/2012	Chrysene	*ND*	*100*	30	34.3	ug/L
EP-3	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*200*	22	1.52	ug/L
EP-3	5/29/2012	1,3-Dichlorobenzene	ND	100	30	NA	ug/L
EP-3	5/29/2012	2,6-Dinitrotoluene	*ND*	*100*	26	0.485	ug/L
EP-3	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*100*	33	0.011	ug/L
EP-3	5/29/2012	4-Chlorophenyl-phenylether	ND	100	25	NA	ug/L
EP-3	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*100*	25	9.81	ug/L
EP-3	5/29/2012	3,4-Methylphenol	1600	100	29	NA	ug/L
EP-3	11/6/2012	Benzo(a)pyrene	*ND*	*20*	5.3	0.2	ug/L
EP-3	11/6/2012	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-3	11/6/2012	Dibenzo(a,h)anthracene	ND	20	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/6/2012	Benzo(a)anthracene	*ND*	*20*	5.7	0.12	ug/L
EP-3	11/6/2012	4-Chloro-3-Methylphenol	ND	20	4.6	NA	ug/L
EP-3	11/6/2012	Aniline	**120**	20	4	13	ug/L
EP-3	11/6/2012	N-Nitrosodimethylamine	*ND*	*20*	5.6	0.0049	ug/L
EP-3	11/6/2012	Benzoic Acid	ND	40	11	75000	ug/L
EP-3	11/6/2012	Hexachloroethane	*ND*	*20*	5.7	3.28	ug/L
EP-3	11/6/2012	Hexachlorocyclopentadiene	*ND*	*20*	2.5	0.41	ug/L
EP-3	11/6/2012	Isophorone	ND	20	4.8	781	ug/L
EP-3	11/6/2012	Acenaphthene	ND	20	5.3	535	ug/L
EP-3	11/6/2012	Diethylphthalate	ND	20	4.6	14801	ug/L
EP-3	11/6/2012	Di-n-butylphthalate	ND	20	6.3	885	ug/L
EP-3	11/6/2012	Phenanthrene	ND	20	4.2	170	ug/L
EP-3	11/6/2012	Butylbenzylphthalate	*ND*	*20*	4.8	16	ug/L
EP-3	11/6/2012	N-Nitrosodiphenylamine	ND	20	5.4	122	ug/L
EP-3	11/6/2012	Fluorene	ND	20	4.7	288	ug/L
EP-3	11/6/2012	Carbazole	ND	20	5.2	NA	ug/L
EP-3	11/6/2012	Hexachlorobutadiene	*ND*	*20*	6	0.14	ug/L
EP-3	11/6/2012	Pentachlorophenol	*ND*	*40*	3.3	1	ug/L
EP-3	11/6/2012	2,4,6-Trichlorophenol	ND	20	4.5	11.9*	ug/L
EP-3	11/6/2012	2-Nitroaniline	ND	20	5.2	190	ug/L
EP-3	11/6/2012	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-3	11/6/2012	1-Methylnaphthalene	*ND*	*20*	5.9	11.38	ug/L
EP-3	11/6/2012	Naphthalene	ND	20	5.8	30	ug/L
EP-3	11/6/2012	2-Methylnaphthalene	ND	20	5.1	35.1	ug/L
EP-3	11/6/2012	2-Chloronaphthalene	ND	20	5.4	733	ug/L
EP-3	11/6/2012	3,3-Dichlorobenzidine	*ND*	*20*	8.6	1.25	ug/L
EP-3	11/6/2012	2-Methylphenol	520	200	56	NA	ug/L
EP-3	11/6/2012	1,2-Dichlorobenzene	ND	20	5.4	600	ug/L
EP-3	11/6/2012	2-Chlorophenol	ND	20	5.6	91	ug/L
EP-3	11/6/2012	2,4,5-Trichlorophenol	ND	20	5	1166	ug/L
EP-3	11/6/2012	Nitrobenzene	*ND*	*20*	5.2	1.4	ug/L
EP-3	11/6/2012	3-Nitroaniline	ND	20	4.9	NA	ug/L
EP-3	11/6/2012	4-Nitroaniline	*ND*	*20*	5.4	3.8	ug/L
EP-3	11/6/2012	4-Nitrophenol	ND	20	7.1	NA	ug/L
EP-3	11/6/2012	Benzyl Alcohol	26	20	4.2	2000	ug/L
EP-3	11/6/2012	4-Bromophenyl-phenylether	ND	20	6.8	NA	ug/L
EP-3	11/6/2012	Azobenzene	*ND*	*20*	5.5	0.12	ug/L
EP-3	11/6/2012	2,4-Dimethylphenol	100	20	6.4	354	ug/L
EP-3	11/6/2012	1,4-Dichlorobenzene	ND	20	5.7	75	ug/L
EP-3	11/6/2012	4-Chloroaniline	*ND*	*20*	6.7	0.37	ug/L
EP-3	11/6/2012	Phenol	2000	200	50	5761	ug/L
EP-3	11/6/2012	Pyridine	ND	20	4.8	20	ug/L
EP-3	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*20*	4.3	0.137	ug/L
EP-3	11/6/2012	Bis(2-chloroethoxy)methane	ND	20	7.3	59	ug/L
EP-3	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	20	6.1	55.64	ug/L
EP-3	11/6/2012	Di-n-octylphthalate	ND	40	5.7	200	ug/L
EP-3	11/6/2012	Hexachlorobenzene	*ND*	*20*	5.8	0.0976	ug/L
EP-3	11/6/2012	Anthracene	ND	20	5.6	1721	ug/L
EP-3	11/6/2012	1,2,4-Trichlorobenzene	ND	20	5.1	70	ug/L
EP-3	11/6/2012	2,4-Dichlorophenol	ND	40	6.1	45.3	ug/L
EP-3	11/6/2012	2,4-Dinitrotoluene	ND	20	5.6	45.3	ug/L
EP-3	11/6/2012	Pyrene	ND	20	5.8	117	ug/L
EP-3	11/6/2012	Dimethylphthalate	ND	20	5.1	612	ug/L
EP-3	11/6/2012	Dibenzofuran	ND	20	5.6	NA	ug/L
EP-3	11/6/2012	Benzo(g,h,i)perylene	ND	20	6	NA	ug/L
EP-3	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.1	0.343	ug/L
EP-3	11/6/2012	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-3	11/6/2012	Fluoranthene	ND	20	5.5	802	ug/L
EP-3	11/6/2012	Benzo(k)fluoranthene	*ND*	*20*	7.4	3.43	ug/L
EP-3	11/6/2012	Acenaphthylene	ND	20	5.2	NA	ug/L
EP-3	11/6/2012	Chrysene	ND	20	6	34.3	ug/L
EP-3	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*40*	4.3	1.52	ug/L
EP-3	11/6/2012	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-3	11/6/2012	2,6-Dinitrotoluene	*ND*	*20*	5.3	0.485	ug/L
EP-3	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*20*	6.5	0.011	ug/L
EP-3	11/6/2012	4-Chlorophenyl-phenylether	ND	20	4.9	NA	ug/L
EP-3	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*20*	5.1	9.81	ug/L
EP-3	11/6/2012	3,4-Methylphenol	960	200	58	NA	ug/L
EP-3	5/28/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-3	5/28/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	5/28/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-3	5/28/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	5/28/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	5/28/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-3	5/28/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-3	5/28/2013	Benzoic Acid	ND	100	29	75000	ug/L
EP-3	5/28/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-3	5/28/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-3	5/28/2013	Isophorone	ND	50	8.9	781	ug/L
EP-3	5/28/2013	Acenaphthene	ND	50	13	535	ug/L
EP-3	5/28/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-3	5/28/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	5/28/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-3	5/28/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-3	5/28/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	5/28/2013	Fluorene	ND	50	12	288	ug/L
EP-3	5/28/2013	Carbazole	ND	50	11	NA	ug/L
EP-3	5/28/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-3	5/28/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-3	5/28/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-3	5/28/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	5/28/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	5/28/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-3	5/28/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	5/28/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-3	5/28/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-3	5/28/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-3	5/28/2013	2-Methylphenol	960	50	14	NA	ug/L
EP-3	5/28/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-3	5/28/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-3	5/28/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-3	5/28/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-3	5/28/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-3	5/28/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	5/28/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-3	5/28/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-3	5/28/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	5/28/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-3	5/28/2013	2,4-Dimethylphenol	110	50	15	354	ug/L
EP-3	5/28/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-3	5/28/2013	Phenol	3700	500	110	5761	ug/L
EP-3	5/28/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-3	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-3	5/28/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-3	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-3	5/28/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-3	5/28/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	5/28/2013	Anthracene	ND	50	11	1721	ug/L
EP-3	5/28/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	5/28/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-3	5/28/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-3	5/28/2013	Pyrene	ND	50	11	117	ug/L
EP-3	5/28/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-3	5/28/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-3	5/28/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-3	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-3	5/28/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-3	5/28/2013	Fluoranthene	ND	50	12	802	ug/L
EP-3	5/28/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-3	5/28/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-3	5/28/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-3	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-3	5/28/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-3	5/28/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-3	5/28/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-3	5/28/2013	3,4-Methylphenol	1900	500	190	NA	ug/L
EP-3	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-3	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-3	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-3	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-3	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-3	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-3	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-3	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-3	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-3	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-3	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-3	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-3	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-3	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-3	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-3	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-3	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-3	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-3	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-3	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-3	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-3	10/15/2013	2-Methylphenol	250	50	14	NA	ug/L
EP-3	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-3	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-3	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-3	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-3	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-3	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-3	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-3	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-3	10/15/2013	2,4-Dimethylphenol	59	50	15	354	ug/L
EP-3	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-3	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-3	10/15/2013	Phenol	1000	50	11	5761	ug/L
EP-3	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-3	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-3	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-3	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-3	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-3	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-3	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-3	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-3	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-3	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-3	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-3	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-3	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-3	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-3	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-3	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-3	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-3	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-3	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-3	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-3	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-3	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-3	10/15/2013	3,4-Methylphenol	450	50	19	NA	ug/L
EP-3	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-3	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-3	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-3	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-3	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-3	3/5/2014	Aniline	**45**	10	2.4	13	ug/L
EP-3	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-3	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-3	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-3	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-3	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-3	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-3	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-3	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-3	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-3	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-3	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-3	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-3	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-3	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-3	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-3	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-3	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-3	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-3	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-3	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-3	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-3	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-3	3/5/2014	2-Methylphenol	110	10	2.8	NA	ug/L
EP-3	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-3	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-3	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-3	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-3	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-3	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-3	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-3	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-3	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-3	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-3	3/5/2014	2,4-Dimethylphenol	26	10	3.1	354	ug/L
EP-3	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-3	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-3	3/5/2014	Phenol	790	100	16	5761	ug/L
EP-3	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-3	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-3	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-3	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-3	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-3	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-3	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-3	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-3	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-3	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-3	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-3	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-3	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-3	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-3	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-3	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-3	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-3	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-3	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-3	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-3	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-3	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-3	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-3	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-3	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-3	3/5/2014	3,4-Methylphenol	290	100	18	NA	ug/L
EP-3	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-3	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-3	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-3	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-3	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-3	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-3	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-3	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-3	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-3	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-3	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-3	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-3	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-3	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-3	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-3	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-3	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-3	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-3	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-3	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-3	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-3	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-3	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-3	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-3	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-3	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-3	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-3	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-3	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-3	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-3	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-3	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-3	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-3	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-3	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-3	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-3	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-3	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-3	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-3	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-3	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-3	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-3	11/12/2014	Phenol	ND	50	7.9	5761	ug/L
EP-3	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-3	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-3	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-3	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-3	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-3	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-3	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-3	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-3	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-3	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-3	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-3	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-3	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-3	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-3	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-3	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-3	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-3	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-3	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-3	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-3	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-3	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-3	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-3	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-3	3/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-3	3/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-3	3/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-3	3/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-3	3/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Aniline	ND	10	1.5	13	ug/L
EP-3	3/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-3	3/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-3	3/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-3	3/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-3	3/24/2015	Isophorone	ND	10	2	781	ug/L
EP-3	3/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-3	3/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-3	3/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-3	3/24/2015	Phenanthrene	ND	10	2	170	ug/L
EP-3	3/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-3	3/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-3	3/24/2015	Fluorene	ND	10	1.7	288	ug/L
EP-3	3/24/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-3	3/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-3	3/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-3	3/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-3	3/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-3	3/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-3	3/24/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-3	3/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-3	3/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-3	3/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-3	3/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-3	3/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-3	3/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-3	3/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-3	3/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-3	3/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-3	3/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-3	3/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-3	3/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-3	3/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-3	3/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-3	3/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-3	3/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-3	3/24/2015	Phenol	340	50	5.4	5761	ug/L
EP-3	3/24/2015	Pyridine	ND	10	1.7	20	ug/L
EP-3	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	3/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-3	3/24/2015	Bis(2-ethylhexyl)phthalate	19	10	3.3	55.64	ug/L
EP-3	3/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-3	3/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-3	3/24/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-3	3/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-3	3/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-3	3/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-3	3/24/2015	Pyrene	ND	10	2.3	117	ug/L
EP-3	3/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-3	3/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-3	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-3	3/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-3	3/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-3	3/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-3	3/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-3	3/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-3	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-3	3/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-3	3/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-3	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-3	3/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-3	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-3	3/24/2015	3,4-Methylphenol	12	10	1.5	NA	ug/L
EP-3	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-3	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-3	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-3	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-3	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-3	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-3	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-3	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-3	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-3	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-3	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-3	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-3	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-3	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-3	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-3	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-3	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-3	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-3	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-3	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-3	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-3	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-3	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-3	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-3	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-3	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-3	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-3	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-3	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-3	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-3	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-3	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-3	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-3	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-3	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-3	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-3	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-3	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-3	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-3	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-3	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-3	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-3	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-3	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-3	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-3	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-3	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-3	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-3	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-3	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-3	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-3	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-3	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-3	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-3	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-3	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-3	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-3	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-3	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-3	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-3	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-3	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-3	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-3	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-3	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-3	9/1/2015	3,4-Methylphenol	36	10	1.5	NA	ug/L
EP-3	8/29/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
EP-3	8/29/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
EP-3	8/29/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
EP-3	8/29/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-3	8/29/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	Aniline	*ND*	*50*	12	13	ug/L
EP-3	8/29/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
EP-3	8/29/2016	Benzoic Acid	36	100	13	75000	ug/L
EP-3	8/29/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
EP-3	8/29/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
EP-3	8/29/2016	Isophorone	ND	50	13	781	ug/L
EP-3	8/29/2016	Acenaphthene	ND	50	13	535	ug/L
EP-3	8/29/2016	Diethylphthalate	ND	50	14	14801	ug/L
EP-3	8/29/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-3	8/29/2016	Phenanthrene	ND	50	13	170	ug/L
EP-3	8/29/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-3	8/29/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-3	8/29/2016	Fluorene	ND	50	14	288	ug/L
EP-3	8/29/2016	Carbazole	ND	50	11	NA	ug/L
EP-3	8/29/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
EP-3	8/29/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-3	8/29/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
EP-3	8/29/2016	2-Nitroaniline	ND	50	14	190	ug/L
EP-3	8/29/2016	2-Nitrophenol	ND	50	12	NA	ug/L
EP-3	8/29/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-3	8/29/2016	Naphthalene	*ND*	*50*	13	30	ug/L
EP-3	8/29/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
EP-3	8/29/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
EP-3	8/29/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-3	8/29/2016	2-Methylphenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
EP-3	8/29/2016	2-Chlorophenol	ND	50	11	91	ug/L
EP-3	8/29/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
EP-3	8/29/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
EP-3	8/29/2016	3-Nitroaniline	ND	50	15	NA	ug/L
EP-3	8/29/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-3	8/29/2016	4-Nitrophenol	ND	50	13	NA	ug/L
EP-3	8/29/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
EP-3	8/29/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	8/29/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-3	8/29/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-3	8/29/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-3	8/29/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
EP-3	8/29/2016	Phenol	ND	50	9.9	5761	ug/L
EP-3	8/29/2016	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
EP-3	8/29/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-3	8/29/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
EP-3	8/29/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
EP-3	8/29/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-3	8/29/2016	Anthracene	ND	50	12	1721	ug/L
EP-3	8/29/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-3	8/29/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
EP-3	8/29/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
EP-3	8/29/2016	Pyrene	ND	50	15	117	ug/L
EP-3	8/29/2016	Dimethylphthalate	23	50	12	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	8/29/2016	Dibenzofuran	ND	50	12	NA	ug/L
EP-3	8/29/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
EP-3	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-3	8/29/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
EP-3	8/29/2016	Fluoranthene	ND	50	13	802	ug/L
EP-3	8/29/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
EP-3	8/29/2016	Acenaphthylene	ND	50	12	NA	ug/L
EP-3	8/29/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-3	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
EP-3	8/29/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
EP-3	8/29/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-3	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
EP-3	8/29/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-3	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
EP-3	8/29/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
EP-3	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-3	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-3	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-3	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-3	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-3	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-3	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-3	3/30/2017	Benzoic Acid	37	100	20	75000	ug/L
EP-3	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-3	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-3	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-3	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-3	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-3	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-3	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-3	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-3	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-3	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-3	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-3	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-3	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-3	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-3	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-3	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-3	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-3	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-3	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-3	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-3	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-3	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-3	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-3	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-3	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-3	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-3	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-3	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-3	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-3	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-3	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-3	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-3	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-3	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-3	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-3	3/30/2017	Phenol	22	50	16	5761	ug/L
EP-3	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-3	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-3	3/30/2017	Bis(2-ethylhexyl)phthalate	32	50	24	55.64	ug/L
EP-3	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-3	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-3	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-3	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-3	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-3	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-3	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-3	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-3	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-3	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-3	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-3	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-3	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-3	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-3	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-3	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-3	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-3	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-3	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-3	3/30/2017	3,4-Methylphenol	34	50	16	NA	ug/L
EP-3	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-3	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-3	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-3	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-3	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-3	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-3	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-3	10/24/2017	Benzoic Acid	37	100	20	75000	ug/L
EP-3	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-3	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-3	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-3	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-3	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-3	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-3	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-3	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-3	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-3	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-3	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-3	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-3	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-3	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-3	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-3	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-3	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-3	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-3	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-3	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-3	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-3	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-3	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-3	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-3	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-3	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-3	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-3	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-3	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-3	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-3	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-3	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-3	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-3	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-3	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-3	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-3	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-3	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-3	10/24/2017	Bis(2-ethylhexyl)phthalate	47	50	24	55.64	ug/L
EP-3	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-3	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-3	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-3	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-3	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-3	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-3	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-3	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-3	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-3	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-3	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-3	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-3	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-3	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-3	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-3	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-3	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-3	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-3	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-3	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-3	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-3	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-3	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-3	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-3	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-3	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-3	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-3	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-3	2/21/2018	Aniline	**41**	100	31	13	ug/L
EP-3	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-3	2/21/2018	Benzoic Acid	72	200	39	75000	ug/L
EP-3	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-3	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-3	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-3	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-3	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-3	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-3	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-3	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-3	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-3	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-3	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-3	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-3	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-3	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-3	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-3	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-3	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-3	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-3	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-3	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-3	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-3	2/21/2018	2-Methylphenol	110	100	33	NA	ug/L
EP-3	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-3	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-3	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-3	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-3	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-3	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-3	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-3	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-3	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-3	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-3	2/21/2018	2,4-Dimethylphenol	39	100	28	354	ug/L
EP-3	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-3	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-3	2/21/2018	Phenol	450	100	31	5761	ug/L
EP-3	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-3	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-3	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-3	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-3	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-3	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-3	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-3	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-3	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-3	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-3	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-3	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-3	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-3	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-3	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-3	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-3	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-3	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-3	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-3	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-3	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-3	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-3	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-3	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-3	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-3	2/21/2018	3,4-Methylphenol	350	100	32	NA	ug/L
EP-3	9/6/2018	4,4-DDT	ND	0.5	0.45	2.29	ug/L
EP-3	9/6/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-3	9/6/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-3	9/6/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-3	9/6/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-3	9/6/2018	Chlordane	*ND*	*10*	9.5	0.448	ug/L
EP-3	9/6/2018	g-BHC (Lindane)	*ND*	*0.75*	0.5	0.415	ug/L
EP-3	9/6/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-3	9/6/2018	Dieldrin	*ND*	*0.5*	0.48	0.018	ug/L
EP-3	9/6/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-3	9/6/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-3	9/6/2018	Benzoic Acid	71	200	63	75000	ug/L
EP-3	9/6/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-3	9/6/2018	Endrin	ND	0.5	0.47	2.23	ug/L
EP-3	9/6/2018	Methoxychlor	ND	0.8	0.79	37	ug/L
EP-3	9/6/2018	4,4-DDD	*ND*	*0.5*	0.45	0.317	ug/L
EP-3	9/6/2018	Heptachlor	*ND*	*0.75*	0.55	0.0221	ug/L
EP-3	9/6/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-3	9/6/2018	Isophorone	ND	100	62	781	ug/L
EP-3	9/6/2018	Acenaphthene	ND	100	58	535	ug/L
EP-3	9/6/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-3	9/6/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-3	9/6/2018	Phenanthrene	ND	100	60	170	ug/L
EP-3	9/6/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-3	9/6/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-3	9/6/2018	Fluorene	ND	100	63	288	ug/L
EP-3	9/6/2018	Carbazole	ND	100	63	NA	ug/L
EP-3	9/6/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-3	9/6/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-3	9/6/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-3	9/6/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-3	9/6/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-3	9/6/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-3	9/6/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-3	9/6/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-3	9/6/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-3	9/6/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-3	9/6/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-3	9/6/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-3	9/6/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-3	9/6/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-3	9/6/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-3	9/6/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-3	9/6/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-3	9/6/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-3	9/6/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-3	9/6/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-3	9/6/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-3	9/6/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-3	9/6/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-3	9/6/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-3	9/6/2018	Phenol	ND	100	60	5761	ug/L
EP-3	9/6/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-3	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-3	9/6/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-3	9/6/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-3	9/6/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-3	9/6/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-3	9/6/2018	Anthracene	ND	100	57	1721	ug/L
EP-3	9/6/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-3	9/6/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-3	9/6/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-3	9/6/2018	Pyrene	ND	100	65	117	ug/L
EP-3	9/6/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-3	9/6/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-3	9/6/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-3	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-3	9/6/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-3	9/6/2018	Fluoranthene	ND	100	58	802	ug/L
EP-3	9/6/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-3	9/6/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-3	9/6/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-3	9/6/2018	Aldrin	*ND*	*0.75*	0.57	0.002	ug/L
EP-3	9/6/2018	a-BHC	*ND*	*0.75*	0.52	0.069	ug/L
EP-3	9/6/2018	b-BHC	*ND*	*0.5*	0.49	0.243	ug/L
EP-3	9/6/2018	d-BHC	ND	0.75	0.51	NA	ug/L
EP-3	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-3	9/6/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-3	9/6/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-3	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-3	9/6/2018	Endosulfan I	ND	0.5	0.38	98.7	ug/L
EP-3	9/6/2018	Heptachlor epoxide	*ND*	*0.5*	0.48	0.0014	ug/L
EP-3	9/6/2018	Endosulfan sulfate	ND	0.75	0.59	110	ug/L
EP-3	9/6/2018	2,4-DDE	*ND*	*0.5*	0.45	0.462	ug/L
EP-3	9/6/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-3	9/6/2018	Endrin aldehyde	ND	0.75	0.66	NA	ug/L
EP-3	9/6/2018	Toxaphene	*ND*	*10*	8.9	0.158	ug/L
EP-3	9/6/2018	Endosulfan II	ND	0.5	0.4	98.7	ug/L
EP-3	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-3	9/6/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-3	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-3	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-3	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-3	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-3	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-3	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-3	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-3	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-3	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-3	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-3	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-3	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-3	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-3	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-3	4/30/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-3	4/30/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-3	4/30/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-3	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-3	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-3	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-3	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-3	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-3	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-3	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-3	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-3	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-3	4/30/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-3	4/30/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-3	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-3	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-3	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-3	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-3	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-3	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-3	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-3	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-3	4/30/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-3	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-3	4/30/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-3	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-3	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-3	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-3	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-3	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-3	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-3	4/30/2019	Chlordane	*ND*	*50*	25	0.448	ug/L
EP-3	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-3	4/30/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-3	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-3	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-3	4/30/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-3	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-3	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-3	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-3	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-3	4/30/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-3	4/30/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-3	4/30/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-3	4/30/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-3	4/30/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-3	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-3	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-3	4/30/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-3	4/30/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-3	4/30/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-3	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-3	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-3	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-3	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-3	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-3	4/30/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-3	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-3	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-3	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-3	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-3	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-3	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-3	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-3	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-3	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-3	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-3	4/30/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-3	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-3	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-3	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-3	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-3	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-3	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-3	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-3	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-3	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-3	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-3	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-3	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-3	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-3	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-3	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-3	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-3	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-3	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-3	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-3	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-3	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-3	4/30/2019	4,4-DDD	*ND*	*5*	4.0155	0.317	ug/L
EP-3	4/30/2019	4,4-DDE	*ND*	*5*	4.2855	0.462	ug/L
EP-3	4/30/2019	4,4-DDT	*ND*	*6.25*	5.111	2.29	ug/L
EP-3	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-3	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-3	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-3	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-3	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-3	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-3	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-3	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-3	4/30/2019	Aldrin	*ND*	*5*	4.1555	0.002	ug/L
EP-3	4/30/2019	a-BHC	*ND*	*5*	4.141	0.069	ug/L
EP-3	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-3	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-3	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-3	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-3	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-3	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-3	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-3	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-3	4/30/2019	Benzoic Acid	55	100	31.557804	75000	ug/L
EP-3	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-3	4/30/2019	b-BHC	*ND*	*5*	4.6585	0.243	ug/L
EP-3	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-3	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-3	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-3	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-3	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-3	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-3	4/30/2019	Chlordane	*ND*	*50*	25	0.448	ug/L
EP-3	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-3	4/30/2019	d-BHC	ND	5	4.321	NA	ug/L
EP-3	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-3	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-3	4/30/2019	Dieldrin	*ND*	*5*	4.2065	0.018	ug/L
EP-3	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-3	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-3	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-3	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-3	4/30/2019	Endosulfan I	ND	5	4.2425	98.7	ug/L
EP-3	4/30/2019	Endosulfan II	ND	5	4.362	98.7	ug/L
EP-3	4/30/2019	Endosulfan sulfate	ND	5	4.5155	110	ug/L
EP-3	4/30/2019	Endrin	*ND*	*6.25*	5.671	2.23	ug/L
EP-3	4/30/2019	Endrin aldehyde	ND	5	4.0775	NA	ug/L
EP-3	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-3	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-3	4/30/2019	g-BHC (Lindane)	*ND*	*5*	4.2435	0.415	ug/L
EP-3	4/30/2019	Heptachlor	*ND*	*5*	4.2875	0.0221	ug/L
EP-3	4/30/2019	Heptachlor epoxide	*ND*	*5*	4.369	0.0014	ug/L
EP-3	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-3	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-3	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-3	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-3	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-3	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-3	4/30/2019	Methoxychlor	ND	6.25	5.62	37	ug/L
EP-3	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-3	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-3	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-3	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-3	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-3	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-3	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-3	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-3	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-3	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-3	4/30/2019	Toxaphene	*ND*	*50*	25	0.158	ug/L
EP-3	11/20/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
EP-3	11/20/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
EP-3	11/20/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
EP-3	11/20/2019	1,4-Dioxane	**8.9**	1	1	4.59	ug/L
EP-3	11/20/2019	1-Methylnaphthalene	ND	2.5	2.5	11.38	ug/L
EP-3	11/20/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
EP-3	11/20/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
EP-3	11/20/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
EP-3	11/20/2019	2,4-Dimethylphenol	22	2.5	2.5	354	ug/L
EP-3	11/20/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
EP-3	11/20/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
EP-3	11/20/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
EP-3	11/20/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
EP-3	11/20/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
EP-3	11/20/2019	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
EP-3	11/20/2019	2-Methylphenol	150	2.5	2.5	NA	ug/L
EP-3	11/20/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
EP-3	11/20/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
EP-3	11/20/2019	3,4-Methylphenol	210	2.5	2.5	NA	ug/L
EP-3	11/20/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
EP-3	11/20/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
EP-3	11/20/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
EP-3	11/20/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Aniline	ND	2.5	2.5	13	ug/L
EP-3	11/20/2019	Anthracene	ND	2.5	2.5	1721	ug/L
EP-3	11/20/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
EP-3	11/20/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
EP-3	11/20/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
EP-3	11/20/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
EP-3	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-3	11/20/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
EP-3	11/20/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
EP-3	11/20/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
EP-3	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
EP-3	11/20/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
EP-3	11/20/2019	Carbazole	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
EP-3	11/20/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
EP-3	11/20/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
EP-3	11/20/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
EP-3	11/20/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
EP-3	11/20/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
EP-3	11/20/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
EP-3	11/20/2019	Fluoranthene	ND	2.5	2.5	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	11/20/2019	Fluorene	ND	2.5	2.5	288	ug/L
EP-3	11/20/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
EP-3	11/20/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
EP-3	11/20/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
EP-3	11/20/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
EP-3	11/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
EP-3	11/20/2019	Isophorone	ND	2.5	2.5	781	ug/L
EP-3	11/20/2019	Naphthalene	ND	2.5	2.5	30	ug/L
EP-3	11/20/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
EP-3	11/20/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
EP-3	11/20/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
EP-3	11/20/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
EP-3	11/20/2019	Phenol	700	2.5	2.5	5761	ug/L
EP-3	11/20/2019	Pyrene	ND	2.5	2.5	117	ug/L
EP-3	11/20/2019	Pyridine	ND	2.5	2.5	20	ug/L
EP-3	11/21/2019	4,4-DDD	*ND*	*0.4*	0.32124	0.317	ug/L
EP-3	11/21/2019	4,4-DDE	ND	0.4	0.34284	0.462	ug/L
EP-3	11/21/2019	4,4-DDT	ND	0.5	0.40888	2.29	ug/L
EP-3	11/21/2019	Aldrin	*ND*	*0.4*	0.33244	0.002	ug/L
EP-3	11/21/2019	a-BHC	*ND*	*0.4*	0.33128	0.069	ug/L
EP-3	11/21/2019	b-BHC	*ND*	*0.4*	0.37268	0.243	ug/L
EP-3	11/21/2019	Chlordane	*ND*	*4*	2	0.448	ug/L
EP-3	11/21/2019	d-BHC	ND	0.4	0.34568	NA	ug/L
EP-3	11/21/2019	Dieldrin	*ND*	*0.4*	0.33652	0.018	ug/L
EP-3	11/21/2019	Endosulfan I	ND	0.4	0.3394	98.7	ug/L
EP-3	11/21/2019	Endosulfan II	ND	0.4	0.34896	98.7	ug/L
EP-3	11/21/2019	Endosulfan sulfate	ND	0.4	0.36124	110	ug/L
EP-3	11/21/2019	Endrin	ND	0.5	0.45368	2.23	ug/L
EP-3	11/21/2019	Endrin aldehyde	ND	0.4	0.3262	NA	ug/L
EP-3	11/21/2019	g-BHC (Lindane)	ND	0.4	0.33948	0.415	ug/L
EP-3	11/21/2019	Heptachlor	*ND*	*0.4*	0.343	0.0221	ug/L
EP-3	11/21/2019	Heptachlor epoxide	*ND*	*0.4*	0.34952	0.0014	ug/L
EP-3	11/21/2019	Methoxychlor	ND	0.5	0.4496	37	ug/L
EP-3	11/21/2019	Toxaphene	*ND*	*4*	2	0.158	ug/L
EP-3	9/16/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
EP-3	9/16/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
EP-3	9/16/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
EP-3	9/16/2020	1,4-Dioxane	1.3	2.5	0.5	4.59	ug/L
EP-3	9/16/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
EP-3	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
EP-3	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
EP-3	9/16/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
EP-3	9/16/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
EP-3	9/16/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
EP-3	9/16/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
EP-3	9/16/2020	2,4-Dinitrotoluene	ND	1	0.5	45.3	ug/L
EP-3	9/16/2020	2,6-Dinitrotoluene	*ND*	*2.5*	0.5	0.485	ug/L
EP-3	9/16/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
EP-3	9/16/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
EP-3	9/16/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
EP-3	9/16/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
EP-3	9/16/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	3,4-Methylphenol	260	2.5	0.5	NA	ug/L
EP-3	9/16/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
EP-3	9/16/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
EP-3	9/16/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
EP-3	9/16/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
EP-3	9/16/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
EP-3	9/16/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Aniline	ND	2.5	0.5	13	ug/L
EP-3	9/16/2020	Anthracene	ND	2.5	0.5	1721	ug/L
EP-3	9/16/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
EP-3	9/16/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
EP-3	9/16/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
EP-3	9/16/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
EP-3	9/16/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
EP-3	9/16/2020	Benzoic Acid	40	2.5	1	75000	ug/L
EP-3	9/16/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
EP-3	9/16/2020	Bis(2-chloroethoxy)methane	ND	2.5	1	59	ug/L
EP-3	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
EP-3	9/16/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
EP-3	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	0.5	55.64	ug/L
EP-3	9/16/2020	Butylbenzylphthalate	ND	2.5	0.5	16	ug/L
EP-3	9/16/2020	Carbazole	ND	2.5	1	NA	ug/L
EP-3	9/16/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
EP-3	9/16/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
EP-3	9/16/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
EP-3	9/16/2020	Dibenzo(a,h)anthracene	ND	2.5	0.5	NA	ug/L
EP-3	9/16/2020	Dibenzofuran	ND	0.15	0.1	NA	ug/L
EP-3	9/16/2020	Diethylphthalate	ND	2.5	0.5	14801	ug/L
EP-3	9/16/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
EP-3	9/16/2020	Fluoranthene	ND	2.5	1	802	ug/L
EP-3	9/16/2020	Fluorene	ND	2.5	0.5	288	ug/L
EP-3	9/16/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
EP-3	9/16/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
EP-3	9/16/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
EP-3	9/16/2020	Hexachloroethane	ND	2.5	1.2	3.28	ug/L
EP-3	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2.5*	0.5	0.343	ug/L
EP-3	9/16/2020	Isophorone	ND	1	0.5	781	ug/L
EP-3	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
EP-3	9/16/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
EP-3	9/16/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
EP-3	9/16/2020	Naphthalene	ND	2.5	0.5	30	ug/L
EP-3	9/16/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
EP-3	9/16/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
EP-3	9/16/2020	Phenanthrene	ND	2.5	1	170	ug/L
EP-3	9/16/2020	Phenol	ND	2.5	0.5	5761	ug/L
EP-3	9/16/2020	Pyrene	ND	2.5	0.5	117	ug/L
EP-3	9/16/2020	Pyridine	ND	2.5	0.5	20	ug/L
EP-3	12/21/2020	Benzo(a)anthracene	*ND*	*10.5*	0.188	0.12	ug/L
EP-3	12/21/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.157	0.34	ug/L
EP-3	12/21/2020	Benzo(g,h,i)perylene	ND	10.5	0.241	NA	ug/L
EP-3	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.167	3.43	ug/L
EP-3	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.167	59	ug/L
EP-3	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.82	0.137	ug/L
EP-3	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.23	55.64	ug/L
EP-3	12/21/2020	Butylbenzylphthalate	ND	10.5	0.199	16	ug/L
EP-3	12/21/2020	Carbazole	ND	10.5	0.241	NA	ug/L
EP-3	12/21/2020	4-Chloroaniline	*ND*	*10.5*	3.56	0.37	ug/L
EP-3	12/21/2020	4-Chloro-3-Methylphenol	ND	10.5	3.97	NA	ug/L
EP-3	12/21/2020	2-Chlorophenol	ND	10.5	2.3	91	ug/L
EP-3	12/21/2020	Chrysene	ND	10.5	0.199	34.3	ug/L
EP-3	12/21/2020	Dibenzo(a,h)anthracene	ND	10.5	0.251	NA	ug/L
EP-3	12/21/2020	1,4-Dichlorobenzene	ND	10.5	0.167	75	ug/L
EP-3	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.72	1.25	ug/L
EP-3	12/21/2020	Diethylphthalate	ND	10.5	0.251	14801	ug/L
EP-3	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.67	1.52	ug/L
EP-3	12/21/2020	2,4-Dinitrophenol	ND	31.4	3.56	38.7	ug/L
EP-3	12/21/2020	Fluorene	ND	10.5	0.188	288	ug/L
EP-3	12/21/2020	Hexachloroethane	*ND*	*10.5*	4.39	3.28	ug/L
EP-3	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.23	0.343	ug/L
EP-3	12/21/2020	Isophorone	ND	10.5	0.146	781	ug/L
EP-3	12/21/2020	Naphthalene	ND	10.5	0.178	30	ug/L
EP-3	12/21/2020	2-Nitroaniline	ND	10.5	2.3	190	ug/L
EP-3	12/21/2020	3-Nitroaniline	ND	10.5	1.88	NA	ug/L
EP-3	12/21/2020	4-Nitroaniline	*ND*	*10.5*	1.57	3.8	ug/L
EP-3	12/21/2020	4-Nitrophenol	ND	10.5	2.2	NA	ug/L
EP-3	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.45	0.011	ug/L
EP-3	12/21/2020	N-Nitrosodiphenylamine	ND	10.5	0.188	122	ug/L
EP-3	12/21/2020	Pentachlorophenol	*ND*	*20.9*	1.46	1	ug/L
EP-3	12/21/2020	Phenanthrene	ND	10.5	0.188	170	ug/L
EP-3	12/21/2020	Phenol	ND	10.5	2.72	5761	ug/L
EP-3	12/21/2020	Pyrene	ND	10.5	0.22	117	ug/L
EP-3	12/21/2020	Benzoic Acid	ND	31.4	7.64	75000	ug/L
EP-3	12/21/2020	Benzyl Alcohol	ND	10.5	2.09	2000	ug/L
EP-3	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.167	9.81	ug/L
EP-3	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.66	0.0049	ug/L
EP-3	12/21/2020	Pyridine	ND	10.5	3.35	20	ug/L
EP-3	12/21/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
EP-3	12/21/2020	Acenaphthene	ND	10.5	0.167	535	ug/L
EP-3	12/21/2020	Acenaphthylene	ND	10.5	0.178	NA	ug/L
EP-3	12/21/2020	Anthracene	ND	10.5	0.188	1721	ug/L
EP-3	12/21/2020	4-Bromophenyl-phenylether	ND	10.5	0.209	NA	ug/L
EP-3	12/21/2020	2-Chloronaphthalene	ND	10.5	0.146	733	ug/L
EP-3	12/21/2020	4-Chlorophenyl-phenylether	ND	10.5	2.09	NA	ug/L
EP-3	12/21/2020	1,3-Dichlorobenzene	ND	10.5	0.188	NA	ug/L
EP-3	12/21/2020	Dibenzofuran	ND	10.5	0.178	NA	ug/L
EP-3	12/21/2020	2,4-Dichlorophenol	ND	10.5	3.14	45.3	ug/L
EP-3	12/21/2020	2,4-Dimethylphenol	ND	10.5	3.66	354	ug/L
EP-3	12/21/2020	Di-n-butylphthalate	ND	10.5	2.82	885	ug/L
EP-3	12/21/2020	2,4-Dinitrotoluene	ND	10.5	1.99	45.3	ug/L
EP-3	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.5*	1.99	0.485	ug/L
EP-3	12/21/2020	Di-n-octylphthalate	ND	10.5	0.178	200	ug/L
EP-3	12/21/2020	Fluoranthene	ND	10.5	0.188	802	ug/L
EP-3	12/21/2020	Hexachlorobenzene	*ND*	*10.5*	0.178	0.0976	ug/L
EP-3	12/21/2020	Hexachlorocyclopentadiene	*ND*	*20.9*	2.72	0.41	ug/L
EP-3	12/21/2020	2-Methylphenol	ND	10.5	1.88	NA	ug/L
EP-3	12/21/2020	Nitrobenzene	*ND*	*10.5*	0.136	1.4	ug/L
EP-3	12/21/2020	2-Nitrophenol	ND	10.5	5.44	NA	ug/L
EP-3	12/21/2020	2,4,5-Trichlorophenol	ND	10.5	3.87	1166	ug/L
EP-3	12/21/2020	2,4,6-Trichlorophenol	ND	10.5	3.66	11.9*	ug/L
EP-3	12/21/2020	Dimethylphthalate	ND	10.5	0.178	612	ug/L
EP-3	12/21/2020	Aniline	ND	10.5	3.97	13	ug/L
EP-3	12/21/2020	1,2,4-Trichlorobenzene	ND	10.5	0.188	70	ug/L
EP-3	12/21/2020	1,2-Dichlorobenzene	ND	10.5	0.178	600	ug/L
EP-4	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-4	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-4	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-4	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-4	5/29/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-4	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-4	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-4	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-4	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-4	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-4	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-4	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-4	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-4	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-4	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-4	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-4	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-4	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-4	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-4	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-4	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-4	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-4	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-4	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-4	5/29/2012	2-Methylphenol	780	50	14	NA	ug/L
EP-4	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-4	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-4	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-4	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-4	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-4	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-4	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-4	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-4	5/29/2012	2,4-Dimethylphenol	110	50	16	354	ug/L
EP-4	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-4	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-4	5/29/2012	Phenol	2900	250	63	5761	ug/L
EP-4	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-4	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-4	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-4	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-4	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-4	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-4	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-4	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-4	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-4	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-4	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-4	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-4	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-4	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-4	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-4	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-4	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-4	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-4	5/29/2012	3,4-Methylphenol	1200	250	72	NA	ug/L
EP-4	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-4	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-4	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-4	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-4	11/6/2012	Aniline	**60**	50	9.9	13	ug/L
EP-4	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-4	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-4	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-4	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-4	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-4	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-4	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-4	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-4	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-4	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-4	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-4	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-4	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-4	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-4	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-4	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-4	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-4	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-4	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-4	11/6/2012	2-Methylphenol	290	50	14	NA	ug/L
EP-4	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-4	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-4	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-4	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-4	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-4	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-4	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-4	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-4	11/6/2012	2,4-Dimethylphenol	72	50	16	354	ug/L
EP-4	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-4	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-4	11/6/2012	Phenol	1100	50	13	5761	ug/L
EP-4	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-4	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-4	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-4	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-4	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-4	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-4	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-4	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-4	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-4	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-4	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-4	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-4	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-4	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-4	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-4	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-4	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-4	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-4	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-4	11/6/2012	3,4-Methylphenol	530	50	14	NA	ug/L
EP-4	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-4	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-4	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-4	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-4	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-4	5/28/2013	Aniline	**29**	20	4.4	13	ug/L
EP-4	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-4	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-4	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-4	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-4	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-4	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-4	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-4	5/28/2013	Phenanthrene	ND	*20*	3.3	170	ug/L
EP-4	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-4	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-4	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-4	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-4	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-4	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-4	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-4	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-4	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-4	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-4	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-4	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-4	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-4	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-4	5/28/2013	2-Methylphenol	480	200	54	NA	ug/L
EP-4	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-4	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-4	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-4	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-4	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-4	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-4	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-4	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-4	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-4	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-4	5/28/2013	2,4-Dimethylphenol	71	20	5.9	354	ug/L
EP-4	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-4	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-4	5/28/2013	Phenol	1400	200	44	5761	ug/L
EP-4	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-4	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-4	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-4	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-4	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-4	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-4	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-4	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-4	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-4	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-4	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-4	5/28/2013	Dimethylphthalate	ND	*20*	5.6	612	ug/L
EP-4	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-4	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-4	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-4	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-4	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-4	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-4	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-4	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-4	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-4	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-4	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-4	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-4	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-4	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-4	5/28/2013	3,4-Methylphenol	1000	200	75	NA	ug/L
EP-4	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-4	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-4	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-4	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-4	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-4	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-4	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-4	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-4	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-4	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-4	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-4	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-4	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-4	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-4	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-4	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
EP-4	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-4	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-4	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-4	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-4	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-4	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-4	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-4	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-4	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-4	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-4	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-4	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-4	10/15/2013	2-Methylphenol	180	50	14	NA	ug/L
EP-4	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-4	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-4	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-4	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-4	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-4	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-4	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-4	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-4	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-4	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-4	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-4	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-4	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-4	10/15/2013	Phenol	670	50	11	5761	ug/L
EP-4	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-4	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-4	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-4	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-4	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-4	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-4	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-4	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-4	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-4	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-4	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-4	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-4	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-4	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-4	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-4	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-4	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-4	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-4	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-4	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-4	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-4	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-4	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-4	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-4	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-4	10/15/2013	3,4-Methylphenol	340	50	19	NA	ug/L
EP-4	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-4	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-4	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-4	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-4	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-4	3/5/2014	Aniline	**40**	10	2.4	13	ug/L
EP-4	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-4	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-4	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-4	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-4	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-4	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-4	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-4	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-4	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-4	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-4	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-4	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-4	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-4	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-4	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-4	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-4	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-4	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-4	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-4	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-4	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-4	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-4	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-4	3/5/2014	2-Methylphenol	80	10	2.8	NA	ug/L
EP-4	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-4	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-4	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-4	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-4	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-4	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-4	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-4	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-4	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-4	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-4	3/5/2014	2,4-Dimethylphenol	22	10	3.1	354	ug/L
EP-4	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-4	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-4	3/5/2014	Phenol	420	50	7.9	5761	ug/L
EP-4	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-4	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-4	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-4	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-4	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-4	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-4	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-4	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-4	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-4	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-4	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-4	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-4	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-4	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-4	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-4	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-4	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-4	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-4	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-4	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-4	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-4	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-4	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-4	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-4	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-4	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-4	3/5/2014	3,4-Methylphenol	210	50	9.1	NA	ug/L
EP-4	11/12/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-4	11/12/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-4	11/12/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-4	11/12/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-4	11/12/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-4	11/12/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-4	11/12/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-4	11/12/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-4	11/12/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-4	11/12/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-4	11/12/2014	Isophorone	ND	50	15	781	ug/L
EP-4	11/12/2014	Acenaphthene	ND	50	15	535	ug/L
EP-4	11/12/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-4	11/12/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-4	11/12/2014	Phenanthrene	ND	50	13	170	ug/L
EP-4	11/12/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-4	11/12/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-4	11/12/2014	Fluorene	ND	50	15	288	ug/L
EP-4	11/12/2014	Carbazole	ND	50	14	NA	ug/L
EP-4	11/12/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	11/12/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
EP-4	11/12/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-4	11/12/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-4	11/12/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-4	11/12/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-4	11/12/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-4	11/12/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-4	11/12/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-4	11/12/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-4	11/12/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-4	11/12/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-4	11/12/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-4	11/12/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-4	11/12/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-4	11/12/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-4	11/12/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-4	11/12/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-4	11/12/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-4	11/12/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-4	11/12/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-4	11/12/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-4	11/12/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-4	11/12/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-4	11/12/2014	Phenol	ND	50	7.9	5761	ug/L
EP-4	11/12/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-4	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-4	11/12/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-4	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-4	11/12/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-4	11/12/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-4	11/12/2014	Anthracene	ND	50	12	1721	ug/L
EP-4	11/12/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-4	11/12/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-4	11/12/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-4	11/12/2014	Pyrene	ND	50	20	117	ug/L
EP-4	11/12/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	11/12/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-4	11/12/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-4	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-4	11/12/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	11/12/2014	Fluoranthene	ND	50	15	802	ug/L
EP-4	11/12/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-4	11/12/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-4	11/12/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-4	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-4	11/12/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-4	11/12/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-4	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-4	11/12/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-4	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-4	11/12/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
EP-4	3/24/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-4	3/24/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-4	3/24/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-4	3/24/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-4	3/24/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-4	3/24/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-4	3/24/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-4	3/24/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-4	3/24/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-4	3/24/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-4	3/24/2015	Isophorone	ND	100	20	781	ug/L
EP-4	3/24/2015	Acenaphthene	ND	100	19	535	ug/L
EP-4	3/24/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-4	3/24/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-4	3/24/2015	Phenanthrene	ND	100	20	170	ug/L
EP-4	3/24/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-4	3/24/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-4	3/24/2015	Fluorene	ND	100	17	288	ug/L
EP-4	3/24/2015	Carbazole	ND	100	15	NA	ug/L
EP-4	3/24/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-4	3/24/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-4	3/24/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-4	3/24/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-4	3/24/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-4	3/24/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-4	3/24/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-4	3/24/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-4	3/24/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-4	3/24/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-4	3/24/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-4	3/24/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-4	3/24/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-4	3/24/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-4	3/24/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-4	3/24/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-4	3/24/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-4	3/24/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-4	3/24/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-4	3/24/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-4	3/24/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-4	3/24/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-4	3/24/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-4	3/24/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-4	3/24/2015	Phenol	ND	100	11	5761	ug/L
EP-4	3/24/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-4	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-4	3/24/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-4	3/24/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-4	3/24/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-4	3/24/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-4	3/24/2015	Anthracene	ND	100	16	1721	ug/L
EP-4	3/24/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-4	3/24/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-4	3/24/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-4	3/24/2015	Pyrene	ND	100	23	117	ug/L
EP-4	3/24/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-4	3/24/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-4	3/24/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-4	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-4	3/24/2015	Fluoranthene	ND	100	15	802	ug/L
EP-4	3/24/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-4	3/24/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-4	3/24/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-4	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-4	3/24/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-4	3/24/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-4	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-4	3/24/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-4	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-4	3/24/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-4	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-4	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-4	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-4	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-4	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-4	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-4	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-4	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-4	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-4	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-4	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-4	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-4	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-4	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-4	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-4	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-4	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-4	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-4	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-4	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-4	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-4	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-4	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-4	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-4	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-4	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-4	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-4	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-4	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-4	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-4	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-4	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-4	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-4	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-4	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-4	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-4	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-4	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-4	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-4	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-4	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-4	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-4	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-4	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-4	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-4	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-4	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-4	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-4	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-4	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-4	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-4	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-4	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-4	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-4	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-4	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-4	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-4	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-4	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-4	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-4	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-4	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-4	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-4	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-4	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-4	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-4	9/1/2015	3,4-Methylphenol	45	10	1.5	NA	ug/L
EP-4	8/29/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-4	8/29/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
EP-4	8/29/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
EP-4	8/29/2016	Benzo(a)anthracene	**30**	100	26	0.12	ug/L
EP-4	8/29/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
EP-4	8/29/2016	Aniline	*ND*	*100*	24	13	ug/L
EP-4	8/29/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
EP-4	8/29/2016	Benzoic Acid	78	200	26	75000	ug/L
EP-4	8/29/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
EP-4	8/29/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
EP-4	8/29/2016	Isophorone	ND	100	26	781	ug/L
EP-4	8/29/2016	Acenaphthene	ND	100	26	535	ug/L
EP-4	8/29/2016	Diethylphthalate	ND	100	27	14801	ug/L
EP-4	8/29/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
EP-4	8/29/2016	Phenanthrene	ND	100	26	170	ug/L
EP-4	8/29/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
EP-4	8/29/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
EP-4	8/29/2016	Fluorene	ND	100	27	288	ug/L
EP-4	8/29/2016	Carbazole	ND	100	23	NA	ug/L
EP-4	8/29/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
EP-4	8/29/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
EP-4	8/29/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
EP-4	8/29/2016	2-Nitroaniline	ND	100	28	190	ug/L
EP-4	8/29/2016	2-Nitrophenol	ND	100	24	NA	ug/L
EP-4	8/29/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
EP-4	8/29/2016	Naphthalene	*ND*	*100*	26	30	ug/L
EP-4	8/29/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	8/29/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
EP-4	8/29/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
EP-4	8/29/2016	2-Methylphenol	ND	100	25	NA	ug/L
EP-4	8/29/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
EP-4	8/29/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
EP-4	8/29/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
EP-4	8/29/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
EP-4	8/29/2016	3-Nitroaniline	ND	100	29	NA	ug/L
EP-4	8/29/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
EP-4	8/29/2016	4-Nitrophenol	ND	100	26	NA	ug/L
EP-4	8/29/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
EP-4	8/29/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
EP-4	8/29/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
EP-4	8/29/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
EP-4	8/29/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
EP-4	8/29/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
EP-4	8/29/2016	Phenol	ND	100	20	5761	ug/L
EP-4	8/29/2016	Pyridine	*ND*	*100*	22	20	ug/L
EP-4	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
EP-4	8/29/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
EP-4	8/29/2016	Bis(2-ethylhexyl)phthalate	*31*	*100*	26	55.64	ug/L
EP-4	8/29/2016	Di-n-octylphthalate	36	100	20	200	ug/L
EP-4	8/29/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
EP-4	8/29/2016	Anthracene	ND	100	25	1721	ug/L
EP-4	8/29/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
EP-4	8/29/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
EP-4	8/29/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
EP-4	8/29/2016	Pyrene	41	100	31	117	ug/L
EP-4	8/29/2016	Dimethylphthalate	45	100	24	612	ug/L
EP-4	8/29/2016	Dibenzofuran	ND	100	25	NA	ug/L
EP-4	8/29/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
EP-4	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
EP-4	8/29/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
EP-4	8/29/2016	Fluoranthene	30	100	26	802	ug/L
EP-4	8/29/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
EP-4	8/29/2016	Acenaphthylene	ND	100	24	NA	ug/L
EP-4	8/29/2016	Chrysene	*29*	*100*	28	34.3	ug/L
EP-4	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
EP-4	8/29/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
EP-4	8/29/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
EP-4	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
EP-4	8/29/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
EP-4	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
EP-4	8/29/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
EP-4	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-4	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-4	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-4	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-4	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-4	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-4	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-4	3/30/2017	Benzoic Acid	40	100	20	75000	ug/L
EP-4	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-4	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-4	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-4	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-4	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-4	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-4	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-4	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-4	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-4	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-4	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-4	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-4	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-4	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-4	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-4	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-4	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-4	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-4	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-4	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-4	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-4	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-4	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-4	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-4	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-4	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-4	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-4	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-4	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-4	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-4	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-4	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-4	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-4	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-4	3/30/2017	Phenol	32	50	16	5761	ug/L
EP-4	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-4	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-4	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-4	3/30/2017	Bis(2-ethylhexyl)phthalate	31	50	24	55.64	ug/L
EP-4	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-4	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-4	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-4	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-4	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-4	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-4	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-4	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-4	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-4	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-4	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-4	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-4	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-4	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-4	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-4	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-4	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-4	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-4	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-4	3/30/2017	3,4-Methylphenol	36	50	16	NA	ug/L
EP-4	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-4	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-4	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-4	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-4	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-4	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-4	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-4	10/24/2017	Benzoic Acid	39	100	20	75000	ug/L
EP-4	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-4	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-4	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-4	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-4	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-4	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-4	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-4	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-4	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-4	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-4	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-4	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-4	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-4	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-4	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-4	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-4	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-4	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-4	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-4	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-4	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-4	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-4	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-4	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-4	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-4	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-4	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-4	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-4	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-4	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-4	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-4	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-4	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-4	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-4	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-4	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-4	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-4	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-4	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-4	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-4	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-4	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-4	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-4	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-4	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-4	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-4	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-4	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-4	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-4	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-4	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-4	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-4	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-4	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-4	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-4	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-4	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-4	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-4	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-4	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-4	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-4	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-4	10/24/2017	3,4-Methylphenol	26	50	16	NA	ug/L
EP-4	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-4	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-4	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-4	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-4	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-4	2/21/2018	Aniline	**36**	100	31	13	ug/L
EP-4	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-4	2/21/2018	Benzoic Acid	71	200	39	75000	ug/L
EP-4	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-4	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-4	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-4	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-4	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-4	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-4	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-4	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-4	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-4	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-4	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-4	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-4	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-4	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-4	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-4	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-4	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-4	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-4	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-4	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-4	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-4	2/21/2018	2-Methylphenol	87	100	33	NA	ug/L
EP-4	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-4	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-4	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-4	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-4	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-4	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-4	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-4	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-4	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-4	2/21/2018	2,4-Dimethylphenol	37	100	28	354	ug/L
EP-4	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-4	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-4	2/21/2018	Phenol	380	100	31	5761	ug/L
EP-4	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-4	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-4	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-4	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-4	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-4	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-4	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-4	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-4	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-4	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-4	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-4	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-4	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-4	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-4	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-4	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-4	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-4	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-4	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-4	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-4	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-4	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-4	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-4	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-4	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-4	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-4	2/21/2018	3,4-Methylphenol	310	100	32	NA	ug/L
EP-4	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-4	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-4	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-4	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-4	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-4	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-4	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-4	9/6/2018	Benzoic Acid	33	100	32	75000	ug/L
EP-4	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-4	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-4	9/6/2018	Isophorone	ND	50	31	781	ug/L
EP-4	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
EP-4	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-4	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-4	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
EP-4	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-4	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-4	9/6/2018	Fluorene	ND	50	32	288	ug/L
EP-4	9/6/2018	Carbazole	ND	50	31	NA	ug/L
EP-4	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-4	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-4	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-4	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-4	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-4	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-4	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-4	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-4	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-4	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-4	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-4	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-4	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-4	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-4	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-4	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-4	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-4	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-4	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-4	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-4	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-4	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-4	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-4	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-4	9/6/2018	Phenol	ND	50	30	5761	ug/L
EP-4	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-4	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-4	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-4	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-4	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-4	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-4	9/6/2018	Anthracene	ND	50	29	1721	ug/L
EP-4	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-4	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-4	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-4	9/6/2018	Pyrene	ND	50	33	117	ug/L
EP-4	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-4	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-4	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-4	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-4	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-4	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
EP-4	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-4	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-4	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-4	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-4	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-4	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-4	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-4	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-4	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-4	9/6/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-4	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-4	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-4	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-4	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-4	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-4	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-4	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-4	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-4	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-4	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-4	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-4	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-4	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-4	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-4	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-4	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-4	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-4	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-4	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-4	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-4	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-4	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-4	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-4	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-4	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-4	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-4	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-4	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-4	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-4	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-4	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-4	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-4	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-4	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-4	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-4	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-4	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-4	4/30/2019	Benzoic Acid	37	100	31.557804	75000	ug/L
EP-4	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-4	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-4	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-4	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-4	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-4	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-4	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-4	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-4	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-4	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-4	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-4	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-4	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-4	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-4	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-4	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-4	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-4	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-4	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-4	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-4	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-4	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-4	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-4	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-4	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-4	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-4	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-4	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-4	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-4	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-4	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-4	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-4	9/17/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
EP-4	9/17/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
EP-4	9/17/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
EP-4	9/17/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
EP-4	9/17/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
EP-4	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
EP-4	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
EP-4	9/17/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
EP-4	9/17/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
EP-4	9/17/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
EP-4	9/17/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
EP-4	9/17/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
EP-4	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.52*	0.1	0.485	ug/L
EP-4	9/17/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
EP-4	9/17/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
EP-4	9/17/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
EP-4	9/17/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
EP-4	9/17/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
EP-4	9/17/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
EP-4	9/17/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
EP-4	9/17/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
EP-4	9/17/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
EP-4	9/17/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Aniline	ND	0.52	0.1	13	ug/L
EP-4	9/17/2020	Anthracene	ND	0.52	0.1	1721	ug/L
EP-4	9/17/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
EP-4	9/17/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
EP-4	9/17/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
EP-4	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
EP-4	9/17/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
EP-4	9/17/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
EP-4	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
EP-4	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
EP-4	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
EP-4	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
EP-4	9/17/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
EP-4	9/17/2020	Carbazole	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
EP-4	9/17/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
EP-4	9/17/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
EP-4	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
EP-4	9/17/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
EP-4	9/17/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
EP-4	9/17/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
EP-4	9/17/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
EP-4	9/17/2020	Fluorene	ND	0.52	0.1	288	ug/L
EP-4	9/17/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
EP-4	9/17/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
EP-4	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
EP-4	9/17/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
EP-4	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
EP-4	9/17/2020	Isophorone	ND	0.52	0.1	781	ug/L
EP-4	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
EP-4	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
EP-4	9/17/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
EP-4	9/17/2020	Naphthalene	ND	0.52	0.1	30	ug/L
EP-4	9/17/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
EP-4	9/17/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
EP-4	9/17/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
EP-4	9/17/2020	Phenol	ND	0.52	0.1	5761	ug/L
EP-4	9/17/2020	Pyrene	ND	0.52	0.1	117	ug/L
EP-4	9/17/2020	Pyridine	ND	0.52	0.21	20	ug/L
EP-4	12/21/2020	Benzo(a)anthracene	*ND*	*10.7*	0.193	0.12	ug/L
EP-4	12/21/2020	Benzo(a)pyrene	*ND*	*10.7*	0.129	0.2	ug/L
EP-4	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.7*	0.161	0.34	ug/L
EP-4	12/21/2020	Benzo(g,h,i)perylene	ND	10.7	0.247	NA	ug/L
EP-4	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.7*	0.172	3.43	ug/L
EP-4	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.7	0.172	59	ug/L
EP-4	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.7*	2.89	0.137	ug/L
EP-4	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.7	5.36	55.64	ug/L
EP-4	12/21/2020	Butylbenzylphthalate	ND	10.7	0.204	16	ug/L
EP-4	12/21/2020	Carbazole	ND	10.7	0.247	NA	ug/L
EP-4	12/21/2020	4-Chloroaniline	*ND*	*10.7*	3.64	0.37	ug/L
EP-4	12/21/2020	4-Chloro-3-Methylphenol	ND	10.7	4.07	NA	ug/L
EP-4	12/21/2020	2-Chlorophenol	ND	10.7	2.36	91	ug/L
EP-4	12/21/2020	Chrysene	ND	10.7	0.204	34.3	ug/L
EP-4	12/21/2020	Dibenzo(a,h)anthracene	ND	10.7	0.257	NA	ug/L
EP-4	12/21/2020	1,4-Dichlorobenzene	ND	10.7	0.172	75	ug/L
EP-4	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.7*	2.79	1.25	ug/L
EP-4	12/21/2020	Diethylphthalate	ND	10.7	0.257	14801	ug/L
EP-4	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.7*	1.72	1.52	ug/L
EP-4	12/21/2020	2,4-Dinitrophenol	ND	32.2	3.64	38.7	ug/L
EP-4	12/21/2020	Fluorene	ND	10.7	0.193	288	ug/L
EP-4	12/21/2020	Hexachloroethane	*ND*	*10.7*	4.5	3.28	ug/L
EP-4	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.7*	0.236	0.343	ug/L
EP-4	12/21/2020	Isophorone	ND	10.7	0.15	781	ug/L
EP-4	12/21/2020	Naphthalene	ND	10.7	0.182	30	ug/L
EP-4	12/21/2020	2-Nitroaniline	ND	10.7	2.36	190	ug/L
EP-4	12/21/2020	3-Nitroaniline	ND	10.7	1.93	NA	ug/L
EP-4	12/21/2020	4-Nitroaniline	*ND*	*10.7*	1.61	3.8	ug/L
EP-4	12/21/2020	4-Nitrophenol	ND	10.7	2.25	NA	ug/L
EP-4	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.7*	3.54	0.011	ug/L
EP-4	12/21/2020	N-Nitrosodiphenylamine	ND	10.7	0.193	122	ug/L
EP-4	12/21/2020	Pentachlorophenol	*ND*	*21.4*	1.5	1	ug/L
EP-4	12/21/2020	Phenanthrene	ND	10.7	0.193	170	ug/L
EP-4	12/21/2020	Phenol	ND	10.7	2.79	5761	ug/L
EP-4	12/21/2020	Pyrene	ND	10.7	0.225	117	ug/L
EP-4	12/21/2020	Benzoic Acid	ND	32.2	7.83	75000	ug/L
EP-4	12/21/2020	Benzyl Alcohol	ND	10.7	2.14	2000	ug/L
EP-4	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.7*	0.172	9.81	ug/L
EP-4	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.7*	3.75	0.0049	ug/L
EP-4	12/21/2020	Pyridine	ND	10.7	3.43	20	ug/L
EP-4	12/21/2020	Azobenzene	*ND*	*10.7*	1.07	0.12	ug/L
EP-4	12/21/2020	Acenaphthene	ND	10.7	0.172	535	ug/L
EP-4	12/21/2020	Acenaphthylene	ND	10.7	0.182	NA	ug/L
EP-4	12/21/2020	Anthracene	ND	10.7	0.193	1721	ug/L
EP-4	12/21/2020	4-Bromophenyl-phenylether	ND	10.7	0.214	NA	ug/L
EP-4	12/21/2020	2-Chloronaphthalene	ND	10.7	0.15	733	ug/L
EP-4	12/21/2020	4-Chlorophenyl-phenylether	ND	10.7	2.14	NA	ug/L
EP-4	12/21/2020	1,3-Dichlorobenzene	ND	10.7	0.193	NA	ug/L
EP-4	12/21/2020	Dibenzofuran	ND	10.7	0.182	NA	ug/L
EP-4	12/21/2020	2,4-Dichlorophenol	ND	10.7	3.22	45.3	ug/L
EP-4	12/21/2020	2,4-Dimethylphenol	ND	10.7	3.75	354	ug/L
EP-4	12/21/2020	Di-n-butylphthalate	ND	10.7	2.89	885	ug/L
EP-4	12/21/2020	2,4-Dinitrotoluene	ND	10.7	2.04	45.3	ug/L
EP-4	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.7*	2.04	0.485	ug/L
EP-4	12/21/2020	Di-n-octylphthalate	ND	10.7	0.182	200	ug/L
EP-4	12/21/2020	Fluoranthene	ND	10.7	0.193	802	ug/L
EP-4	12/21/2020	Hexachlorobenzene	*ND*	*10.7*	0.182	0.0976	ug/L
EP-4	12/21/2020	Hexachlorocyclopentadiene	*ND*	*21.4*	2.79	0.41	ug/L
EP-4	12/21/2020	2-Methylphenol	ND	10.7	1.93	NA	ug/L
EP-4	12/21/2020	Nitrobenzene	*ND*	*10.7*	0.139	1.4	ug/L
EP-4	12/21/2020	2-Nitrophenol	ND	10.7	5.57	NA	ug/L
EP-4	12/21/2020	2,4,5-Trichlorophenol	ND	10.7	3.97	1166	ug/L
EP-4	12/21/2020	2,4,6-Trichlorophenol	ND	10.7	3.75	11.9*	ug/L
EP-4	12/21/2020	Dimethylphthalate	ND	10.7	0.182	612	ug/L
EP-4	12/21/2020	Aniline	ND	10.7	4.07	13	ug/L
EP-4	12/21/2020	1,2,4-Trichlorobenzene	ND	10.7	0.193	70	ug/L
EP-4	12/21/2020	1,2-Dichlorobenzene	ND	10.7	0.182	600	ug/L
EP-5	5/29/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-5	5/29/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	5/29/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-5	5/29/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-5	5/29/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-5	5/29/2012	Aniline	***57***	50	9.9	13	ug/L
EP-5	5/29/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-5	5/29/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-5	5/29/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-5	5/29/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	Isophorone	ND	50	12	781	ug/L
EP-5	5/29/2012	Acenaphthene	ND	50	13	535	ug/L
EP-5	5/29/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-5	5/29/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-5	5/29/2012	Phenanthrene	ND	50	11	170	ug/L
EP-5	5/29/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-5	5/29/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-5	5/29/2012	Fluorene	ND	50	12	288	ug/L
EP-5	5/29/2012	Carbazole	ND	50	13	NA	ug/L
EP-5	5/29/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-5	5/29/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-5	5/29/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-5	5/29/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-5	5/29/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	5/29/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-5	5/29/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-5	5/29/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-5	5/29/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-5	5/29/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-5	5/29/2012	2-Methylphenol	820	50	14	NA	ug/L
EP-5	5/29/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-5	5/29/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-5	5/29/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-5	5/29/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-5	5/29/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-5	5/29/2012	4-Nitroaniline	*ND*	*100*	14	3.8	ug/L
EP-5	5/29/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-5	5/29/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-5	5/29/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-5	5/29/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-5	5/29/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-5	5/29/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-5	5/29/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-5	5/29/2012	Phenol	2700	250	63	5761	ug/L
EP-5	5/29/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-5	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-5	5/29/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-5	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-5	5/29/2012	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-5	5/29/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-5	5/29/2012	Anthracene	ND	50	14	1721	ug/L
EP-5	5/29/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-5	5/29/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-5	5/29/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	5/29/2012	Pyrene	ND	50	14	117	ug/L
EP-5	5/29/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-5	5/29/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-5	5/29/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-5	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-5	5/29/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	5/29/2012	Fluoranthene	ND	50	14	802	ug/L
EP-5	5/29/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-5	5/29/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-5	5/29/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-5	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-5	5/29/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	5/29/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-5	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	5/29/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-5	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-5	5/29/2012	3,4-Methylphenol	1100	250	72	NA	ug/L
EP-5	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-5	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-5	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-5	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-5	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-5	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-5	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-5	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-5	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-5	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-5	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-5	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-5	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-5	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-5	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-5	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-5	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-5	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-5	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-5	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-5	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-5	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-5	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-5	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-5	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-5	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-5	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-5	11/6/2012	2-Methylphenol	270	50	14	NA	ug/L
EP-5	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-5	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-5	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-5	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-5	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-5	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-5	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-5	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-5	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-5	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-5	11/6/2012	2,4-Dimethylphenol	74	50	16	354	ug/L
EP-5	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-5	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-5	11/6/2012	Phenol	900	50	13	5761	ug/L
EP-5	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-5	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-5	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-5	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-5	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-5	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-5	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-5	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-5	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-5	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-5	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-5	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-5	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-5	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-5	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-5	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-5	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-5	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-5	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-5	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-5	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-5	11/6/2012	3,4-Methylphenol	400	50	14	NA	ug/L
EP-5	5/28/2013	Benzo(a)pyrene	*ND*	*20*	5	0.2	ug/L
EP-5	5/28/2013	2,4-Dinitrophenol	*ND*	*40*	6.4	38.7	ug/L
EP-5	5/28/2013	Dibenzo(a,h)anthracene	ND	20	8.1	NA	ug/L
EP-5	5/28/2013	Benzo(a)anthracene	*ND*	*20*	5.2	0.12	ug/L
EP-5	5/28/2013	4-Chloro-3-Methylphenol	ND	20	5.3	NA	ug/L
EP-5	5/28/2013	Aniline	**32**	20	4.4	13	ug/L
EP-5	5/28/2013	N-Nitrosodimethylamine	*ND*	*20*	9.6	0.0049	ug/L
EP-5	5/28/2013	Benzoic Acid	ND	40	11	75000	ug/L
EP-5	5/28/2013	Hexachloroethane	*ND*	*20*	5.8	3.28	ug/L
EP-5	5/28/2013	Hexachlorocyclopentadiene	*ND*	*20*	4.2	0.41	ug/L
EP-5	5/28/2013	Isophorone	ND	20	3.6	781	ug/L
EP-5	5/28/2013	Acenaphthene	ND	20	5.1	535	ug/L
EP-5	5/28/2013	Diethylphthalate	ND	20	6	14801	ug/L
EP-5	5/28/2013	Di-n-butylphthalate	ND	20	4.8	885	ug/L
EP-5	5/28/2013	Phenanthrene	ND	20	3.3	170	ug/L
EP-5	5/28/2013	Butylbenzylphthalate	*ND*	*20*	5.5	16	ug/L
EP-5	5/28/2013	N-Nitrosodiphenylamine	ND	20	4.7	122	ug/L
EP-5	5/28/2013	Fluorene	ND	20	5	288	ug/L
EP-5	5/28/2013	Carbazole	ND	20	4.6	NA	ug/L
EP-5	5/28/2013	Hexachlorobutadiene	*ND*	*20*	5.5	0.14	ug/L
EP-5	5/28/2013	Pentachlorophenol	*ND*	*40*	2.9	1	ug/L
EP-5	5/28/2013	2,4,6-Trichlorophenol	ND	20	5.2	11.9*	ug/L
EP-5	5/28/2013	2-Nitroaniline	ND	20	5.8	190	ug/L
EP-5	5/28/2013	2-Nitrophenol	ND	20	4.7	NA	ug/L
EP-5	5/28/2013	1-Methylnaphthalene	*ND*	*20*	4.5	11.38	ug/L
EP-5	5/28/2013	Naphthalene	ND	20	4.9	30	ug/L
EP-5	5/28/2013	2-Methylnaphthalene	ND	20	4.8	35.1	ug/L
EP-5	5/28/2013	2-Chloronaphthalene	ND	20	4.9	733	ug/L
EP-5	5/28/2013	3,3-Dichlorobenzidine	*ND*	*20*	7.5	1.25	ug/L
EP-5	5/28/2013	2-Methylphenol	460	200	54	NA	ug/L
EP-5	5/28/2013	1,2-Dichlorobenzene	ND	20	6	600	ug/L
EP-5	5/28/2013	2-Chlorophenol	ND	20	5.3	91	ug/L
EP-5	5/28/2013	2,4,5-Trichlorophenol	ND	20	4.8	1166	ug/L
EP-5	5/28/2013	Nitrobenzene	*ND*	*20*	5.8	1.4	ug/L
EP-5	5/28/2013	3-Nitroaniline	ND	20	5.3	NA	ug/L
EP-5	5/28/2013	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-5	5/28/2013	4-Nitrophenol	ND	20	4.3	NA	ug/L
EP-5	5/28/2013	Benzyl Alcohol	ND	20	4.9	2000	ug/L
EP-5	5/28/2013	4-Bromophenyl-phenylether	ND	20	5	NA	ug/L
EP-5	5/28/2013	Azobenzene	*ND*	*20*	4.6	0.12	ug/L
EP-5	5/28/2013	2,4-Dimethylphenol	84	20	5.9	354	ug/L
EP-5	5/28/2013	1,4-Dichlorobenzene	ND	20	7.1	75	ug/L
EP-5	5/28/2013	4-Chloroaniline	*ND*	*20*	4.4	0.37	ug/L
EP-5	5/28/2013	Phenol	1200	200	44	5761	ug/L
EP-5	5/28/2013	Pyridine	ND	20	7.1	20	ug/L
EP-5	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*20*	8	0.137	ug/L
EP-5	5/28/2013	Bis(2-chloroethoxy)methane	ND	20	4.9	59	ug/L
EP-5	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	20	5.5	55.64	ug/L
EP-5	5/28/2013	Di-n-octylphthalate	ND	20	6.7	200	ug/L
EP-5	5/28/2013	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-5	5/28/2013	Anthracene	ND	20	4.4	1721	ug/L
EP-5	5/28/2013	1,2,4-Trichlorobenzene	ND	20	4.4	70	ug/L
EP-5	5/28/2013	2,4-Dichlorophenol	ND	40	4.4	45.3	ug/L
EP-5	5/28/2013	2,4-Dinitrotoluene	ND	20	5.7	45.3	ug/L
EP-5	5/28/2013	Pyrene	ND	20	4.2	117	ug/L
EP-5	5/28/2013	Dimethylphthalate	ND	20	5.6	612	ug/L
EP-5	5/28/2013	Dibenzofuran	ND	20	5.1	NA	ug/L
EP-5	5/28/2013	Benzo(g,h,i)perylene	ND	20	5.6	NA	ug/L
EP-5	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*20*	6.3	0.343	ug/L
EP-5	5/28/2013	Benzo(b)fluoranthene	*ND*	*20*	5.9	0.34	ug/L
EP-5	5/28/2013	Fluoranthene	ND	20	4.8	802	ug/L
EP-5	5/28/2013	Benzo(k)fluoranthene	*ND*	*20*	5.2	3.43	ug/L
EP-5	5/28/2013	Acenaphthylene	ND	20	5.6	NA	ug/L
EP-5	5/28/2013	Chrysene	ND	20	5.3	34.3	ug/L
EP-5	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*40*	2.8	1.52	ug/L
EP-5	5/28/2013	1,3-Dichlorobenzene	ND	20	6.1	NA	ug/L
EP-5	5/28/2013	2,6-Dinitrotoluene	*ND*	*20*	5.7	0.485	ug/L
EP-5	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*20*	6.4	0.011	ug/L
EP-5	5/28/2013	4-Chlorophenyl-phenylether	ND	20	5.2	NA	ug/L
EP-5	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*20*	6.6	9.81	ug/L
EP-5	5/28/2013	3,4-Methylphenol	930	200	75	NA	ug/L
EP-5	10/15/2013	Benzo(a)pyrene	*ND*	*50*	12	0.2	ug/L
EP-5	10/15/2013	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-5	10/15/2013	Dibenzo(a,h)anthracene	ND	50	20	NA	ug/L
EP-5	10/15/2013	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
EP-5	10/15/2013	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
EP-5	10/15/2013	Aniline	*ND*	*50*	11	13	ug/L
EP-5	10/15/2013	N-Nitrosodimethylamine	*ND*	*50*	24	0.0049	ug/L
EP-5	10/15/2013	Benzoic Acid	ND	200	29	75000	ug/L
EP-5	10/15/2013	Hexachloroethane	*ND*	*50*	15	3.28	ug/L
EP-5	10/15/2013	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
EP-5	10/15/2013	Isophorone	ND	50	8.9	781	ug/L
EP-5	10/15/2013	Acenaphthene	ND	50	13	535	ug/L
EP-5	10/15/2013	Diethylphthalate	ND	50	15	14801	ug/L
EP-5	10/15/2013	Di-n-butylphthalate	ND	50	12	885	ug/L
EP-5	10/15/2013	Phenanthrene	ND	50	8.2	170	ug/L
EP-5	10/15/2013	Butylbenzylphthalate	*ND*	*50*	14	16	ug/L
EP-5	10/15/2013	N-Nitrosodiphenylamine	ND	50	12	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/15/2013	Fluorene	ND	50	12	288	ug/L
EP-5	10/15/2013	Carbazole	ND	50	11	NA	ug/L
EP-5	10/15/2013	Hexachlorobutadiene	*ND*	*50*	14	0.14	ug/L
EP-5	10/15/2013	Pentachlorophenol	*ND*	*100*	7.2	1	ug/L
EP-5	10/15/2013	2,4,6-Trichlorophenol	ND	50	13	11.9*	ug/L
EP-5	10/15/2013	2-Nitroaniline	ND	50	14	190	ug/L
EP-5	10/15/2013	2-Nitrophenol	ND	50	12	NA	ug/L
EP-5	10/15/2013	1-Methylnaphthalene	*ND*	*50*	11	11.38	ug/L
EP-5	10/15/2013	Naphthalene	*ND*	*50*	12	30	ug/L
EP-5	10/15/2013	2-Methylnaphthalene	*ND*	*50*	12	35.1	ug/L
EP-5	10/15/2013	2-Chloronaphthalene	ND	50	12	733	ug/L
EP-5	10/15/2013	3,3-Dichlorobenzidine	*ND*	*50*	19	1.25	ug/L
EP-5	10/15/2013	2-Methylphenol	160	50	14	NA	ug/L
EP-5	10/15/2013	1,2-Dichlorobenzene	ND	50	15	600	ug/L
EP-5	10/15/2013	2-Chlorophenol	ND	50	13	91	ug/L
EP-5	10/15/2013	2,4,5-Trichlorophenol	ND	50	12	1166	ug/L
EP-5	10/15/2013	Nitrobenzene	*ND*	*50*	15	1.4	ug/L
EP-5	10/15/2013	3-Nitroaniline	ND	50	13	NA	ug/L
EP-5	10/15/2013	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
EP-5	10/15/2013	4-Nitrophenol	ND	50	11	NA	ug/L
EP-5	10/15/2013	Benzyl Alcohol	ND	50	12	2000	ug/L
EP-5	10/15/2013	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
EP-5	10/15/2013	Azobenzene	*ND*	*50*	11	0.12	ug/L
EP-5	10/15/2013	2,4-Dimethylphenol	ND	50	15	354	ug/L
EP-5	10/15/2013	1,4-Dichlorobenzene	ND	50	18	75	ug/L
EP-5	10/15/2013	4-Chloroaniline	*ND*	*50*	11	0.37	ug/L
EP-5	10/15/2013	Phenol	540	50	11	5761	ug/L
EP-5	10/15/2013	Pyridine	*ND*	*50*	18	20	ug/L
EP-5	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*50*	20	0.137	ug/L
EP-5	10/15/2013	Bis(2-chloroethoxy)methane	ND	50	12	59	ug/L
EP-5	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	50	14	55.64	ug/L
EP-5	10/15/2013	Di-n-octylphthalate	ND	50	17	200	ug/L
EP-5	10/15/2013	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
EP-5	10/15/2013	Anthracene	ND	50	11	1721	ug/L
EP-5	10/15/2013	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-5	10/15/2013	2,4-Dichlorophenol	*ND*	*100*	11	45.3	ug/L
EP-5	10/15/2013	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-5	10/15/2013	Pyrene	ND	50	11	117	ug/L
EP-5	10/15/2013	Dimethylphthalate	ND	50	14	612	ug/L
EP-5	10/15/2013	Dibenzofuran	ND	50	13	NA	ug/L
EP-5	10/15/2013	Benzo(g,h,i)perylene	ND	50	14	NA	ug/L
EP-5	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*50*	16	0.343	ug/L
EP-5	10/15/2013	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-5	10/15/2013	Fluoranthene	ND	50	12	802	ug/L
EP-5	10/15/2013	Benzo(k)fluoranthene	*ND*	*50*	13	3.43	ug/L
EP-5	10/15/2013	Acenaphthylene	ND	50	14	NA	ug/L
EP-5	10/15/2013	Chrysene	*ND*	*50*	13	34.3	ug/L
EP-5	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*100*	7	1.52	ug/L
EP-5	10/15/2013	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-5	10/15/2013	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
EP-5	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-5	10/15/2013	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
EP-5	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*50*	16	9.81	ug/L
EP-5	10/15/2013	3,4-Methylphenol	260	50	19	NA	ug/L
EP-5	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-5	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-5	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-5	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-5	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-5	3/5/2014	Aniline	**23**	10	2.4	13	ug/L
EP-5	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-5	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-5	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-5	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-5	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-5	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-5	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-5	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-5	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-5	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-5	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-5	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-5	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-5	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-5	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-5	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-5	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-5	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-5	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-5	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-5	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-5	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-5	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-5	3/5/2014	2-Methylphenol	82	10	2.8	NA	ug/L
EP-5	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-5	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-5	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-5	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-5	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-5	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-5	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-5	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-5	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-5	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-5	3/5/2014	2,4-Dimethylphenol	18	10	3.1	354	ug/L
EP-5	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-5	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-5	3/5/2014	Phenol	260	20	3.2	5761	ug/L
EP-5	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-5	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-5	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-5	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-5	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-5	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-5	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-5	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-5	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-5	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-5	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-5	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-5	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-5	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-5	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-5	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-5	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-5	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-5	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-5	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-5	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-5	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-5	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-5	3/5/2014	3,4-Methylphenol	200	20	3.7	NA	ug/L
EP-5	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-5	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-5	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-5	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-5	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-5	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-5	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-5	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-5	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-5	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-5	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-5	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-5	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-5	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-5	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-5	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-5	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-5	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-5	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-5	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-5	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-5	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-5	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-5	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-5	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-5	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-5	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-5	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-5	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-5	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-5	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-5	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-5	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-5	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-5	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-5	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-5	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-5	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-5	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-5	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-5	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-5	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-5	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-5	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-5	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-5	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-5	11/12/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
EP-5	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-5	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-5	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-5	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-5	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-5	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-5	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-5	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-5	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-5	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-5	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-5	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-5	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-5	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-5	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-5	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-5	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-5	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-5	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-5	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-5	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-5	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-5	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-5	3/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-5	3/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-5	3/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-5	3/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-5	3/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Aniline	ND	10	1.5	13	ug/L
EP-5	3/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-5	3/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-5	3/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-5	3/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-5	3/24/2015	Isophorone	ND	10	2	781	ug/L
EP-5	3/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-5	3/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-5	3/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-5	3/24/2015	Phenanthrene	ND	10	2	170	ug/L
EP-5	3/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-5	3/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-5	3/24/2015	Fluorene	ND	10	1.7	288	ug/L
EP-5	3/24/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-5	3/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-5	3/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-5	3/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-5	3/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-5	3/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-5	3/24/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-5	3/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-5	3/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-5	3/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-5	3/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-5	3/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-5	3/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-5	3/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-5	3/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-5	3/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-5	3/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-5	3/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-5	3/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-5	3/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-5	3/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-5	3/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-5	3/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-5	3/24/2015	Phenol	ND	10	1.1	5761	ug/L
EP-5	3/24/2015	Pyridine	ND	10	1.7	20	ug/L
EP-5	3/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-5	3/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-5	3/24/2015	Bis(2-ethylhexyl)phthalate	16	10	3.3	55.64	ug/L
EP-5	3/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-5	3/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-5	3/24/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-5	3/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-5	3/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-5	3/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-5	3/24/2015	Pyrene	ND	10	2.3	117	ug/L
EP-5	3/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-5	3/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-5	3/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-5	3/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-5	3/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-5	3/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-5	3/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-5	3/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-5	3/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-5	3/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-5	3/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-5	3/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-5	3/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-5	3/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-5	3/24/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-5	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-5	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-5	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-5	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-5	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-5	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-5	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-5	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-5	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-5	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-5	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-5	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-5	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-5	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-5	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
EP-5	9/1/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
EP-5	9/1/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
EP-5	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-5	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-5	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-5	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-5	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-5	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-5	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-5	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-5	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-5	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-5	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
EP-5	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-5	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-5	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-5	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-5	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-5	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-5	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
EP-5	9/1/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-5	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-5	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-5	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-5	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-5	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-5	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-5	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-5	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-5	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-5	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-5	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-5	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-5	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-5	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-5	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-5	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-5	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-5	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-5	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-5	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-5	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-5	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-5	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-5	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-5	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-5	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-5	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-5	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-5	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-5	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-5	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-5	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-5	8/29/2016	Benzo(a)pyrene	*ND*	*20*	5.4	0.2	ug/L
EP-5	8/29/2016	2,4-Dinitrophenol	*ND*	*40*	5.5	38.7	ug/L
EP-5	8/29/2016	Dibenzo(a,h)anthracene	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Benzo(a)anthracene	*ND*	*20*	5.3	0.12	ug/L
EP-5	8/29/2016	4-Chloro-3-Methylphenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Aniline	*ND*	*20*	4.9	13	ug/L
EP-5	8/29/2016	N-Nitrosodimethylamine	*ND*	*20*	4.3	0.0049	ug/L
EP-5	8/29/2016	Benzoic Acid	12	40	5.2	75000	ug/L
EP-5	8/29/2016	Hexachloroethane	*ND*	*20*	4.7	3.28	ug/L
EP-5	8/29/2016	Hexachlorocyclopentadiene	*ND*	*20*	4.6	0.41	ug/L
EP-5	8/29/2016	Isophorone	ND	20	5.2	781	ug/L
EP-5	8/29/2016	Acenaphthene	ND	20	5.1	535	ug/L
EP-5	8/29/2016	Diethylphthalate	ND	20	5.4	14801	ug/L
EP-5	8/29/2016	Di-n-butylphthalate	ND	20	4.9	885	ug/L
EP-5	8/29/2016	Phenanthrene	ND	20	5.2	170	ug/L
EP-5	8/29/2016	Butylbenzylphthalate	*ND*	*20*	5	16	ug/L
EP-5	8/29/2016	N-Nitrosodiphenylamine	ND	20	4.6	122	ug/L
EP-5	8/29/2016	Fluorene	ND	20	5.4	288	ug/L
EP-5	8/29/2016	Carbazole	ND	20	4.6	NA	ug/L
EP-5	8/29/2016	Hexachlorobutadiene	*ND*	*20*	4.4	0.14	ug/L
EP-5	8/29/2016	Pentachlorophenol	*ND*	*40*	4.7	1	ug/L
EP-5	8/29/2016	2,4,6-Trichlorophenol	ND	20	4.9	11.9*	ug/L
EP-5	8/29/2016	2-Nitroaniline	ND	20	5.5	190	ug/L
EP-5	8/29/2016	2-Nitrophenol	ND	20	4.8	NA	ug/L
EP-5	8/29/2016	1-Methylnaphthalene	*ND*	*20*	5.8	11.38	ug/L
EP-5	8/29/2016	Naphthalene	ND	20	5.2	30	ug/L
EP-5	8/29/2016	2-Methylnaphthalene	ND	20	5.8	35.1	ug/L
EP-5	8/29/2016	2-Chloronaphthalene	ND	20	4.5	733	ug/L
EP-5	8/29/2016	3,3-Dichlorobenzidine	*ND*	*20*	4.8	1.25	ug/L
EP-5	8/29/2016	2-Methylphenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	1,2-Dichlorobenzene	ND	20	4.6	600	ug/L
EP-5	8/29/2016	2-Chlorophenol	ND	20	4.4	91	ug/L
EP-5	8/29/2016	2,4,5-Trichlorophenol	ND	20	4.4	1166	ug/L
EP-5	8/29/2016	Nitrobenzene	*ND*	*20*	5.5	1.4	ug/L
EP-5	8/29/2016	3-Nitroaniline	ND	20	5.9	NA	ug/L
EP-5	8/29/2016	4-Nitroaniline	*ND*	*20*	5.1	3.8	ug/L
EP-5	8/29/2016	4-Nitrophenol	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Benzyl Alcohol	ND	20	6	2000	ug/L
EP-5	8/29/2016	4-Bromophenyl-phenylether	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Azobenzene	*ND*	*20*	5.3	0.12	ug/L
EP-5	8/29/2016	2,4-Dimethylphenol	ND	20	6	354	ug/L
EP-5	8/29/2016	1,4-Dichlorobenzene	ND	20	4.8	75	ug/L
EP-5	8/29/2016	4-Chloroaniline	*ND*	*20*	5.4	0.37	ug/L
EP-5	8/29/2016	Phenol	ND	20	4	5761	ug/L
EP-5	8/29/2016	Pyridine	ND	20	4.3	20	ug/L
EP-5	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*20*	5.3	0.137	ug/L
EP-5	8/29/2016	Bis(2-chloroethoxy)methane	ND	20	5.6	59	ug/L
EP-5	8/29/2016	Bis(2-ethylhexyl)phthalate	5.9	20	5.2	55.64	ug/L
EP-5	8/29/2016	Di-n-octylphthalate	6.8	20	4	200	ug/L
EP-5	8/29/2016	Hexachlorobenzene	*ND*	*20*	5.3	0.0976	ug/L
EP-5	8/29/2016	Anthracene	ND	20	5	1721	ug/L
EP-5	8/29/2016	1,2,4-Trichlorobenzene	ND	20	5.2	70	ug/L
EP-5	8/29/2016	2,4-Dichlorophenol	ND	40	4.7	45.3	ug/L
EP-5	8/29/2016	2,4-Dinitrotoluene	ND	20	6.3	45.3	ug/L
EP-5	8/29/2016	Pyrene	ND	20	6.2	117	ug/L
EP-5	8/29/2016	Dimethylphthalate	8.9	20	4.9	612	ug/L
EP-5	8/29/2016	Dibenzofuran	ND	20	5	NA	ug/L
EP-5	8/29/2016	Benzo(g,h,i)perylene	ND	20	5.3	NA	ug/L
EP-5	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.9	0.343	ug/L
EP-5	8/29/2016	Benzo(b)fluoranthene	*ND*	*20*	5.8	0.34	ug/L
EP-5	8/29/2016	Fluoranthene	ND	20	5.2	802	ug/L
EP-5	8/29/2016	Benzo(k)fluoranthene	*ND*	*20*	6	3.43	ug/L
EP-5	8/29/2016	Acenaphthylene	ND	20	4.7	NA	ug/L
EP-5	8/29/2016	Chrysene	ND	20	5.6	34.3	ug/L
EP-5	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*40*	3.6	1.52	ug/L
EP-5	8/29/2016	1,3-Dichlorobenzene	ND	20	4.5	NA	ug/L
EP-5	8/29/2016	2,6-Dinitrotoluene	*ND*	*20*	5.5	0.485	ug/L
EP-5	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*20*	4.8	0.011	ug/L
EP-5	8/29/2016	4-Chlorophenyl-phenylether	ND	20	5.1	NA	ug/L
EP-5	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*20*	3.8	9.81	ug/L
EP-5	8/29/2016	3,4-Methylphenol	ND	20	4.6	NA	ug/L
EP-5	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-5	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-5	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-5	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-5	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-5	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-5	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-5	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-5	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-5	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-5	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-5	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-5	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-5	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-5	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-5	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-5	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-5	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-5	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-5	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-5	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-5	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-5	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-5	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-5	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-5	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-5	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-5	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-5	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-5	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-5	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-5	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-5	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-5	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-5	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-5	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-5	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-5	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-5	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-5	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-5	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-5	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-5	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-5	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-5	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-5	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-5	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-5	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-5	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-5	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-5	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-5	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-5	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-5	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-5	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-5	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-5	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-5	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-5	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-5	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-5	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-5	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-5	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-5	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-5	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-5	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-5	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-5	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-5	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-5	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-5	10/24/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-5	10/24/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-5	10/24/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-5	10/24/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-5	10/24/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-5	10/24/2017	Aniline	*ND*	*100*	31	13	ug/L
EP-5	10/24/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-5	10/24/2017	Benzoic Acid	ND	200	39	75000	ug/L
EP-5	10/24/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-5	10/24/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-5	10/24/2017	Isophorone	ND	100	44	781	ug/L
EP-5	10/24/2017	Acenaphthene	ND	100	36	535	ug/L
EP-5	10/24/2017	Diethylphthalate	ND	100	40	14801	ug/L
EP-5	10/24/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-5	10/24/2017	Phenanthrene	ND	100	43	170	ug/L
EP-5	10/24/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-5	10/24/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-5	10/24/2017	Fluorene	ND	100	40	288	ug/L
EP-5	10/24/2017	Carbazole	ND	100	46	NA	ug/L
EP-5	10/24/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-5	10/24/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-5	10/24/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-5	10/24/2017	2-Nitroaniline	ND	100	49	190	ug/L
EP-5	10/24/2017	2-Nitrophenol	ND	100	52	NA	ug/L
EP-5	10/24/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-5	10/24/2017	Naphthalene	*ND*	*100*	29	30	ug/L
EP-5	10/24/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-5	10/24/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-5	10/24/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-5	10/24/2017	2-Methylphenol	ND	100	33	NA	ug/L
EP-5	10/24/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-5	10/24/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-5	10/24/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-5	10/24/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-5	10/24/2017	3-Nitroaniline	ND	100	43	NA	ug/L
EP-5	10/24/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-5	10/24/2017	4-Nitrophenol	ND	100	55	NA	ug/L
EP-5	10/24/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-5	10/24/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-5	10/24/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-5	10/24/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-5	10/24/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-5	10/24/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-5	10/24/2017	Phenol	ND	100	31	5761	ug/L
EP-5	10/24/2017	Pyridine	*ND*	*100*	23	20	ug/L
EP-5	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-5	10/24/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-5	10/24/2017	Bis(2-ethylhexyl)phthalate	**4800**	1000	480	55.64	ug/L
EP-5	10/24/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-5	10/24/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-5	10/24/2017	Anthracene	ND	100	35	1721	ug/L
EP-5	10/24/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-5	10/24/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-5	10/24/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-5	10/24/2017	Pyrene	ND	100	44	117	ug/L
EP-5	10/24/2017	Dimethylphthalate	ND	100	36	612	ug/L
EP-5	10/24/2017	Dibenzofuran	ND	100	41	NA	ug/L
EP-5	10/24/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-5	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-5	10/24/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-5	10/24/2017	Fluoranthene	ND	100	43	802	ug/L
EP-5	10/24/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-5	10/24/2017	Acenaphthylene	ND	100	35	NA	ug/L
EP-5	10/24/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-5	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-5	10/24/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-5	10/24/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-5	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-5	10/24/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-5	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	10/24/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
EP-5	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-5	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-5	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-5	2/21/2018	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
EP-5	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-5	2/21/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-5	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-5	2/21/2018	Benzoic Acid	ND	200	39	75000	ug/L
EP-5	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-5	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-5	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-5	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-5	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-5	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-5	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-5	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-5	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-5	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-5	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-5	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-5	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-5	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-5	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-5	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-5	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-5	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-5	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-5	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-5	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-5	2/21/2018	2-Methylphenol	68	100	33	NA	ug/L
EP-5	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-5	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-5	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-5	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-5	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-5	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-5	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-5	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-5	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-5	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-5	2/21/2018	2,4-Dimethylphenol	32	100	28	354	ug/L
EP-5	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-5	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-5	2/21/2018	Phenol	290	100	31	5761	ug/L
EP-5	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-5	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-5	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-5	2/21/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
EP-5	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-5	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-5	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-5	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-5	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-5	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-5	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-5	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-5	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-5	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-5	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-5	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-5	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-5	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-5	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-5	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-5	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-5	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-5	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-5	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-5	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-5	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-5	2/21/2018	3,4-Methylphenol	220	100	32	NA	ug/L
EP-5	9/6/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-5	9/6/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-5	9/6/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
EP-5	9/6/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-5	9/6/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-5	9/6/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-5	9/6/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-5	9/6/2018	Benzoic Acid	69	200	63	75000	ug/L
EP-5	9/6/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-5	9/6/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-5	9/6/2018	Isophorone	ND	100	62	781	ug/L
EP-5	9/6/2018	Acenaphthene	ND	100	58	535	ug/L
EP-5	9/6/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-5	9/6/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-5	9/6/2018	Phenanthrene	ND	100	60	170	ug/L
EP-5	9/6/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-5	9/6/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-5	9/6/2018	Fluorene	ND	100	63	288	ug/L
EP-5	9/6/2018	Carbazole	ND	100	63	NA	ug/L
EP-5	9/6/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-5	9/6/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-5	9/6/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-5	9/6/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-5	9/6/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-5	9/6/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-5	9/6/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-5	9/6/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-5	9/6/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-5	9/6/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-5	9/6/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-5	9/6/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-5	9/6/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-5	9/6/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-5	9/6/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-5	9/6/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-5	9/6/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-5	9/6/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-5	9/6/2018	Benzyl Alcohol	ND	100	63	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/6/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-5	9/6/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-5	9/6/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-5	9/6/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-5	9/6/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-5	9/6/2018	Phenol	ND	100	60	5761	ug/L
EP-5	9/6/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-5	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-5	9/6/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-5	9/6/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-5	9/6/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-5	9/6/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-5	9/6/2018	Anthracene	ND	100	57	1721	ug/L
EP-5	9/6/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-5	9/6/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-5	9/6/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-5	9/6/2018	Pyrene	ND	100	65	117	ug/L
EP-5	9/6/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-5	9/6/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-5	9/6/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-5	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-5	9/6/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-5	9/6/2018	Fluoranthene	ND	100	58	802	ug/L
EP-5	9/6/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-5	9/6/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-5	9/6/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-5	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-5	9/6/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-5	9/6/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-5	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-5	9/6/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-5	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-5	9/6/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-5	4/30/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-5	4/30/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-5	4/30/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-5	4/30/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-5	4/30/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-5	4/30/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-5	4/30/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-5	4/30/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-5	4/30/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-5	4/30/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-5	4/30/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-5	4/30/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-5	4/30/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-5	4/30/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-5	4/30/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-5	4/30/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-5	4/30/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-5	4/30/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-5	4/30/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-5	4/30/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-5	4/30/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-5	4/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-5	4/30/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-5	4/30/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-5	4/30/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-5	4/30/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-5	4/30/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-5	4/30/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-5	4/30/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-5	4/30/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-5	4/30/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-5	4/30/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-5	4/30/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-5	4/30/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-5	4/30/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-5	4/30/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-5	4/30/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-5	4/30/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-5	4/30/2019	Benzoic Acid	36	100	31.557804	75000	ug/L
EP-5	4/30/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-5	4/30/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-5	4/30/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-5	4/30/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-5	4/30/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-5	4/30/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-5	4/30/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-5	4/30/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-5	4/30/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-5	4/30/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-5	4/30/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-5	4/30/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-5	4/30/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-5	4/30/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-5	4/30/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-5	4/30/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-5	4/30/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-5	4/30/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-5	4/30/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-5	4/30/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-5	4/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-5	4/30/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-5	4/30/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-5	4/30/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-5	4/30/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-5	4/30/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-5	4/30/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-5	4/30/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-5	4/30/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-5	4/30/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-5	4/30/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-5	4/30/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-5	9/17/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
EP-5	9/17/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
EP-5	9/17/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
EP-5	9/17/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
EP-5	9/17/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
EP-5	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
EP-5	9/17/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
EP-5	9/17/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
EP-5	9/17/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
EP-5	9/17/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
EP-5	9/17/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
EP-5	9/17/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
EP-5	9/17/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
EP-5	9/17/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
EP-5	9/17/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
EP-5	9/17/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
EP-5	9/17/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
EP-5	9/17/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
EP-5	9/17/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
EP-5	9/17/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
EP-5	9/17/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
EP-5	9/17/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Aniline	ND	0.52	0.1	13	ug/L
EP-5	9/17/2020	Anthracene	ND	0.52	0.1	1721	ug/L
EP-5	9/17/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
EP-5	9/17/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
EP-5	9/17/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
EP-5	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
EP-5	9/17/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
EP-5	9/17/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
EP-5	9/17/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
EP-5	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
EP-5	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
EP-5	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
EP-5	9/17/2020	Bis(2-ethylhexyl)phthalate	0.89	0.52	0.21	55.64	ug/L
EP-5	9/17/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
EP-5	9/17/2020	Carbazole	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
EP-5	9/17/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
EP-5	9/17/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
EP-5	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
EP-5	9/17/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
EP-5	9/17/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
EP-5	9/17/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
EP-5	9/17/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
EP-5	9/17/2020	Fluorene	ND	0.52	0.1	288	ug/L
EP-5	9/17/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
EP-5	9/17/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
EP-5	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
EP-5	9/17/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
EP-5	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
EP-5	9/17/2020	Isophorone	ND	0.52	0.1	781	ug/L
EP-5	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
EP-5	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
EP-5	9/17/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
EP-5	9/17/2020	Naphthalene	ND	0.52	0.1	30	ug/L
EP-5	9/17/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
EP-5	9/17/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
EP-5	9/17/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
EP-5	9/17/2020	Phenol	ND	0.52	0.1	5761	ug/L
EP-5	9/17/2020	Pyrene	ND	0.52	0.1	117	ug/L
EP-5	9/17/2020	Pyridine	ND	0.52	0.21	20	ug/L
EP-5	12/21/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
EP-5	12/21/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
EP-5	12/21/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
EP-5	12/21/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
EP-5	12/21/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.179	3.43	ug/L
EP-5	12/21/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.179	59	ug/L
EP-5	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
EP-5	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.61	55.64	ug/L
EP-5	12/21/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
EP-5	12/21/2020	Carbazole	ND	11.2	0.258	NA	ug/L
EP-5	12/21/2020	4-Chloroaniline	*ND*	*11.2*	3.81	0.37	ug/L
EP-5	12/21/2020	4-Chloro-3-Methylphenol	ND	11.2	4.26	NA	ug/L
EP-5	12/21/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
EP-5	12/21/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
EP-5	12/21/2020	Dibenzo(a,h)anthracene	ND	11.2	0.269	NA	ug/L
EP-5	12/21/2020	1,4-Dichlorobenzene	ND	11.2	0.179	75	ug/L
EP-5	12/21/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.91	1.25	ug/L
EP-5	12/21/2020	Diethylphthalate	ND	11.2	0.269	14801	ug/L
EP-5	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.79	1.52	ug/L
EP-5	12/21/2020	2,4-Dinitrophenol	ND	33.6	3.81	38.7	ug/L
EP-5	12/21/2020	Fluorene	ND	11.2	0.202	288	ug/L
EP-5	12/21/2020	Hexachloroethane	*ND*	*11.2*	4.71	3.28	ug/L
EP-5	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
EP-5	12/21/2020	Isophorone	ND	11.2	0.157	781	ug/L
EP-5	12/21/2020	Naphthalene	ND	11.2	0.191	30	ug/L
EP-5	12/21/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
EP-5	12/21/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
EP-5	12/21/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
EP-5	12/21/2020	4-Nitrophenol	ND	11.2	2.35	NA	ug/L
EP-5	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.7	0.011	ug/L
EP-5	12/21/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
EP-5	12/21/2020	Pentachlorophenol	*ND*	*22.4*	1.57	1	ug/L
EP-5	12/21/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
EP-5	12/21/2020	Phenol	ND	11.2	2.91	5761	ug/L
EP-5	12/21/2020	Pyrene	ND	11.2	0.235	117	ug/L
EP-5	12/21/2020	Benzoic Acid	ND	33.6	8.18	75000	ug/L
EP-5	12/21/2020	Benzyl Alcohol	ND	11.2	2.24	2000	ug/L
EP-5	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.179	9.81	ug/L
EP-5	12/21/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.92	0.0049	ug/L
EP-5	12/21/2020	Pyridine	ND	11.2	3.59	20	ug/L
EP-5	12/21/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
EP-5	12/21/2020	Acenaphthene	ND	11.2	0.179	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
EP-5	12/21/2020	Anthracene	ND	11.2	0.202	1721	ug/L
EP-5	12/21/2020	4-Bromophenyl-phenylether	ND	11.2	0.224	NA	ug/L
EP-5	12/21/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
EP-5	12/21/2020	4-Chlorophenyl-phenylether	ND	11.2	2.24	NA	ug/L
EP-5	12/21/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
EP-5	12/21/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
EP-5	12/21/2020	2,4-Dichlorophenol	ND	11.2	3.36	45.3	ug/L
EP-5	12/21/2020	2,4-Dimethylphenol	ND	11.2	3.92	354	ug/L
EP-5	12/21/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
EP-5	12/21/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
EP-5	12/21/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
EP-5	12/21/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
EP-5	12/21/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
EP-5	12/21/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
EP-5	12/21/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.91	0.41	ug/L
EP-5	12/21/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
EP-5	12/21/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
EP-5	12/21/2020	2-Nitrophenol	ND	11.2	5.83	NA	ug/L
EP-5	12/21/2020	2,4,5-Trichlorophenol	ND	11.2	4.15	1166	ug/L
EP-5	12/21/2020	2,4,6-Trichlorophenol	ND	11.2	3.92	11.9*	ug/L
EP-5	12/21/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
EP-5	12/21/2020	Aniline	ND	11.2	4.26	13	ug/L
EP-5	12/21/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
EP-5	12/21/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
EP-6	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-6	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-6	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-6	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-6	5/29/2012	Aniline	**36**	10	2	13	ug/L
EP-6	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-6	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-6	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-6	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-6	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-6	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-6	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-6	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-6	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-6	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-6	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-6	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-6	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-6	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-6	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-6	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-6	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-6	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-6	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-6	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-6	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-6	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-6	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-6	5/29/2012	2-Methylphenol	430	100	28	NA	ug/L
EP-6	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-6	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-6	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-6	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-6	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-6	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-6	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-6	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-6	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-6	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-6	5/29/2012	2,4-Dimethylphenol	34	10	3.2	354	ug/L
EP-6	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-6	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-6	5/29/2012	Phenol	720	100	25	5761	ug/L
EP-6	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-6	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-6	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-6	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-6	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-6	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-6	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-6	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-6	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-6	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-6	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-6	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-6	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-6	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-6	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-6	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-6	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-6	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-6	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-6	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-6	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-6	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-6	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-6	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-6	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-6	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-6	5/29/2012	3,4-Methylphenol	410	100	29	NA	ug/L
EP-6	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-6	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-6	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-6	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-6	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-6	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-6	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-6	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-6	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-6	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-6	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-6	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-6	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-6	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-6	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-6	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-6	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-6	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-6	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-6	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-6	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-6	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-6	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-6	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-6	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-6	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-6	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-6	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-6	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-6	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-6	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-6	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-6	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-6	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-6	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-6	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-6	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-6	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-6	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-6	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-6	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-6	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-6	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-6	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-6	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-6	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-6	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-6	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-6	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-6	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-6	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-6	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-6	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-6	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-6	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-6	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-6	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-6	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-6	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-6	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-6	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-6	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-6	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-6	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-6	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-6	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-6	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-6	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-6	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-6	5/28/2013	Benzo(a)pyrene	*ND*	*100*	25	0.2	ug/L
EP-6	5/28/2013	2,4-Dinitrophenol	*ND*	*200*	32	38.7	ug/L
EP-6	5/28/2013	Dibenzo(a,h)anthracene	ND	100	40	NA	ug/L
EP-6	5/28/2013	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
EP-6	5/28/2013	4-Chloro-3-Methylphenol	ND	100	27	NA	ug/L
EP-6	5/28/2013	Aniline	*ND*	*100*	22	13	ug/L
EP-6	5/28/2013	N-Nitrosodimethylamine	*ND*	*100*	48	0.0049	ug/L
EP-6	5/28/2013	Benzoic Acid	ND	200	57	75000	ug/L
EP-6	5/28/2013	Hexachloroethane	*ND*	*100*	29	3.28	ug/L
EP-6	5/28/2013	Hexachlorocyclopentadiene	*ND*	*100*	21	0.41	ug/L
EP-6	5/28/2013	Isophorone	ND	100	18	781	ug/L
EP-6	5/28/2013	Acenaphthene	ND	100	26	535	ug/L
EP-6	5/28/2013	Diethylphthalate	ND	100	30	14801	ug/L
EP-6	5/28/2013	Di-n-butylphthalate	ND	100	24	885	ug/L
EP-6	5/28/2013	Phenanthrene	ND	100	16	170	ug/L
EP-6	5/28/2013	Butylbenzylphthalate	*ND*	*100*	27	16	ug/L
EP-6	5/28/2013	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
EP-6	5/28/2013	Fluorene	ND	100	25	288	ug/L
EP-6	5/28/2013	Carbazole	ND	100	23	NA	ug/L
EP-6	5/28/2013	Hexachlorobutadiene	*ND*	*100*	27	0.14	ug/L
EP-6	5/28/2013	Pentachlorophenol	*ND*	*200*	14	1	ug/L
EP-6	5/28/2013	2,4,6-Trichlorophenol	ND	100	26	11.9*	ug/L
EP-6	5/28/2013	2-Nitroaniline	ND	100	29	190	ug/L
EP-6	5/28/2013	2-Nitrophenol	ND	100	23	NA	ug/L
EP-6	5/28/2013	1-Methylnaphthalene	*ND*	*100*	22	11.38	ug/L
EP-6	5/28/2013	Naphthalene	*ND*	*100*	24	30	ug/L
EP-6	5/28/2013	2-Methylnaphthalene	*ND*	*100*	24	35.1	ug/L
EP-6	5/28/2013	2-Chloronaphthalene	ND	100	24	733	ug/L
EP-6	5/28/2013	3,3-Dichlorobenzidine	*ND*	*100*	37	1.25	ug/L
EP-6	5/28/2013	2-Methylphenol	260	100	27	NA	ug/L
EP-6	5/28/2013	1,2-Dichlorobenzene	ND	100	30	600	ug/L
EP-6	5/28/2013	2-Chlorophenol	*ND*	*100*	27	91	ug/L
EP-6	5/28/2013	2,4,5-Trichlorophenol	ND	100	24	1166	ug/L
EP-6	5/28/2013	Nitrobenzene	*ND*	*100*	29	1.4	ug/L
EP-6	5/28/2013	3-Nitroaniline	ND	100	27	NA	ug/L
EP-6	5/28/2013	4-Nitroaniline	*ND*	*100*	25	3.8	ug/L
EP-6	5/28/2013	4-Nitrophenol	ND	100	21	NA	ug/L
EP-6	5/28/2013	Benzyl Alcohol	ND	100	25	2000	ug/L
EP-6	5/28/2013	4-Bromophenyl-phenylether	ND	100	25	NA	ug/L
EP-6	5/28/2013	Azobenzene	*ND*	*100*	23	0.12	ug/L
EP-6	5/28/2013	2,4-Dimethylphenol	ND	100	29	354	ug/L
EP-6	5/28/2013	1,4-Dichlorobenzene	*ND*	*100*	36	75	ug/L
EP-6	5/28/2013	4-Chloroaniline	*ND*	*100*	22	0.37	ug/L
EP-6	5/28/2013	Phenol	140	100	22	5761	ug/L
EP-6	5/28/2013	Pyridine	*ND*	*100*	35	20	ug/L
EP-6	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*100*	40	0.137	ug/L
EP-6	5/28/2013	Bis(2-chloroethoxy)methane	*ND*	*100*	24	59	ug/L
EP-6	5/28/2013	Bis(2-ethylhexyl)phthalate	*ND*	*100*	28	55.64	ug/L
EP-6	5/28/2013	Di-n-octylphthalate	ND	100	34	200	ug/L
EP-6	5/28/2013	Hexachlorobenzene	*ND*	*100*	27	0.0976	ug/L
EP-6	5/28/2013	Anthracene	ND	100	22	1721	ug/L
EP-6	5/28/2013	1,2,4-Trichlorobenzene	*ND*	*100*	22	70	ug/L
EP-6	5/28/2013	2,4-Dichlorophenol	*ND*	*200*	22	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	5/28/2013	2,4-Dinitrotoluene	*ND*	*100*	28	45.3	ug/L
EP-6	5/28/2013	Pyrene	ND	100	21	117	ug/L
EP-6	5/28/2013	Dimethylphthalate	ND	100	28	612	ug/L
EP-6	5/28/2013	Dibenzofuran	ND	100	26	NA	ug/L
EP-6	5/28/2013	Benzo(g,h,i)perylene	ND	100	28	NA	ug/L
EP-6	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*100*	32	0.343	ug/L
EP-6	5/28/2013	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
EP-6	5/28/2013	Fluoranthene	ND	100	24	802	ug/L
EP-6	5/28/2013	Benzo(k)fluoranthene	*ND*	*100*	26	3.43	ug/L
EP-6	5/28/2013	Acenaphthylene	ND	100	28	NA	ug/L
EP-6	5/28/2013	Chrysene	*ND*	*100*	27	34.3	ug/L
EP-6	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-6	5/28/2013	1,3-Dichlorobenzene	ND	100	31	NA	ug/L
EP-6	5/28/2013	2,6-Dinitrotoluene	*ND*	*100*	28	0.485	ug/L
EP-6	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*100*	32	0.011	ug/L
EP-6	5/28/2013	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
EP-6	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*100*	33	9.81	ug/L
EP-6	5/28/2013	3,4-Methylphenol	230	100	37	NA	ug/L
EP-6	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-6	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-6	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-6	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-6	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-6	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-6	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-6	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-6	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-6	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-6	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-6	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-6	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-6	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-6	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-6	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-6	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-6	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-6	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-6	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-6	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-6	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-6	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-6	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-6	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-6	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-6	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-6	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-6	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-6	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-6	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-6	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-6	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-6	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-6	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-6	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-6	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-6	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-6	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-6	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-6	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-6	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-6	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-6	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-6	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-6	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-6	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-6	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-6	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-6	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-6	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-6	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-6	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-6	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-6	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-6	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-6	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-6	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-6	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-6	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-6	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-6	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-6	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-6	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-6	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-6	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-6	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-6	3/5/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
EP-6	3/5/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-6	3/5/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
EP-6	3/5/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
EP-6	3/5/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
EP-6	3/5/2014	Aniline	*ND*	*50*	12	13	ug/L
EP-6	3/5/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
EP-6	3/5/2014	Benzoic Acid	ND	100	11	75000	ug/L
EP-6	3/5/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
EP-6	3/5/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
EP-6	3/5/2014	Isophorone	ND	50	15	781	ug/L
EP-6	3/5/2014	Acenaphthene	ND	50	15	535	ug/L
EP-6	3/5/2014	Diethylphthalate	ND	50	21	14801	ug/L
EP-6	3/5/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
EP-6	3/5/2014	Phenanthrene	ND	50	13	170	ug/L
EP-6	3/5/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
EP-6	3/5/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-6	3/5/2014	Fluorene	ND	50	15	288	ug/L
EP-6	3/5/2014	Carbazole	ND	50	14	NA	ug/L
EP-6	3/5/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-6	3/5/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/5/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
EP-6	3/5/2014	2-Nitroaniline	ND	50	14	190	ug/L
EP-6	3/5/2014	2-Nitrophenol	ND	50	16	NA	ug/L
EP-6	3/5/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
EP-6	3/5/2014	Naphthalene	*ND*	*50*	12	30	ug/L
EP-6	3/5/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-6	3/5/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
EP-6	3/5/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
EP-6	3/5/2014	2-Methylphenol	ND	50	14	NA	ug/L
EP-6	3/5/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
EP-6	3/5/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
EP-6	3/5/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
EP-6	3/5/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-6	3/5/2014	3-Nitroaniline	ND	50	18	NA	ug/L
EP-6	3/5/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
EP-6	3/5/2014	4-Nitrophenol	ND	50	21	NA	ug/L
EP-6	3/5/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
EP-6	3/5/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
EP-6	3/5/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
EP-6	3/5/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-6	3/5/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
EP-6	3/5/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
EP-6	3/5/2014	Phenol	280	50	7.9	5761	ug/L
EP-6	3/5/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
EP-6	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
EP-6	3/5/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
EP-6	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-6	3/5/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
EP-6	3/5/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
EP-6	3/5/2014	Anthracene	ND	50	12	1721	ug/L
EP-6	3/5/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
EP-6	3/5/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-6	3/5/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
EP-6	3/5/2014	Pyrene	ND	50	20	117	ug/L
EP-6	3/5/2014	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	3/5/2014	Dibenzofuran	ND	50	19	NA	ug/L
EP-6	3/5/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
EP-6	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
EP-6	3/5/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	3/5/2014	Fluoranthene	ND	50	15	802	ug/L
EP-6	3/5/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-6	3/5/2014	Acenaphthylene	ND	50	12	NA	ug/L
EP-6	3/5/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
EP-6	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
EP-6	3/5/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
EP-6	3/5/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
EP-6	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
EP-6	3/5/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
EP-6	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
EP-6	3/5/2014	3,4-Methylphenol	88	50	9.1	NA	ug/L
EP-6	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-6	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-6	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-6	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-6	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-6	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-6	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-6	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-6	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-6	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-6	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-6	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-6	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-6	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-6	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-6	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-6	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-6	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-6	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-6	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-6	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-6	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-6	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-6	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-6	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-6	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-6	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-6	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-6	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-6	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-6	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-6	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-6	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-6	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-6	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-6	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-6	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-6	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-6	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-6	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-6	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-6	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-6	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-6	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-6	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-6	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-6	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-6	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-6	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-6	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-6	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-6	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-6	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-6	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-6	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-6	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-6	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-6	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-6	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-6	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-6	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-6	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-6	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-6	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-6	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-6	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-6	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-6	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-6	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-6	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-6	3/25/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
EP-6	3/25/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
EP-6	3/25/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
EP-6	3/25/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
EP-6	3/25/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
EP-6	3/25/2015	Aniline	*ND*	*100*	15	13	ug/L
EP-6	3/25/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
EP-6	3/25/2015	Benzoic Acid	ND	200	10	75000	ug/L
EP-6	3/25/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
EP-6	3/25/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
EP-6	3/25/2015	Isophorone	ND	100	20	781	ug/L
EP-6	3/25/2015	Acenaphthene	ND	100	19	535	ug/L
EP-6	3/25/2015	Diethylphthalate	ND	100	17	14801	ug/L
EP-6	3/25/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
EP-6	3/25/2015	Phenanthrene	ND	100	20	170	ug/L
EP-6	3/25/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
EP-6	3/25/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
EP-6	3/25/2015	Fluorene	ND	100	17	288	ug/L
EP-6	3/25/2015	Carbazole	ND	100	15	NA	ug/L
EP-6	3/25/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
EP-6	3/25/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
EP-6	3/25/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
EP-6	3/25/2015	2-Nitroaniline	ND	100	18	190	ug/L
EP-6	3/25/2015	2-Nitrophenol	ND	100	12	NA	ug/L
EP-6	3/25/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
EP-6	3/25/2015	Naphthalene	*ND*	*100*	18	30	ug/L
EP-6	3/25/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
EP-6	3/25/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
EP-6	3/25/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
EP-6	3/25/2015	2-Methylphenol	ND	100	12	NA	ug/L
EP-6	3/25/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
EP-6	3/25/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
EP-6	3/25/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
EP-6	3/25/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
EP-6	3/25/2015	3-Nitroaniline	ND	100	15	NA	ug/L
EP-6	3/25/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
EP-6	3/25/2015	4-Nitrophenol	ND	100	14	NA	ug/L
EP-6	3/25/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
EP-6	3/25/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
EP-6	3/25/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
EP-6	3/25/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
EP-6	3/25/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
EP-6	3/25/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
EP-6	3/25/2015	Phenol	ND	100	11	5761	ug/L
EP-6	3/25/2015	Pyridine	*ND*	*100*	17	20	ug/L
EP-6	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
EP-6	3/25/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
EP-6	3/25/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
EP-6	3/25/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
EP-6	3/25/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
EP-6	3/25/2015	Anthracene	ND	100	16	1721	ug/L
EP-6	3/25/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
EP-6	3/25/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
EP-6	3/25/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
EP-6	3/25/2015	Pyrene	ND	100	23	117	ug/L
EP-6	3/25/2015	Dimethylphthalate	ND	100	20	612	ug/L
EP-6	3/25/2015	Dibenzofuran	ND	100	19	NA	ug/L
EP-6	3/25/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
EP-6	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
EP-6	3/25/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
EP-6	3/25/2015	Fluoranthene	ND	100	15	802	ug/L
EP-6	3/25/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
EP-6	3/25/2015	Acenaphthylene	ND	100	19	NA	ug/L
EP-6	3/25/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
EP-6	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
EP-6	3/25/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
EP-6	3/25/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
EP-6	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
EP-6	3/25/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
EP-6	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
EP-6	3/25/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
EP-6	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-6	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-6	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-6	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-6	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-6	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-6	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-6	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-6	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-6	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-6	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-6	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-6	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-6	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-6	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
EP-6	9/1/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
EP-6	9/1/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
EP-6	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-6	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-6	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-6	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-6	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-6	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-6	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-6	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-6	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-6	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-6	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-6	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-6	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-6	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-6	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-6	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-6	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
EP-6	9/1/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-6	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-6	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-6	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-6	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-6	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-6	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-6	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-6	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-6	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-6	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-6	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-6	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-6	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-6	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-6	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-6	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-6	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-6	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-6	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-6	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-6	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-6	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-6	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-6	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-6	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
EP-6	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-6	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-6	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-6	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-6	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-6	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-6	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-6	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-6	8/29/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-6	8/29/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-6	8/29/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-6	8/29/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-6	8/29/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Aniline	ND	10	2.4	13	ug/L
EP-6	8/29/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-6	8/29/2016	Benzoic Acid	6.2	20	2.6	75000	ug/L
EP-6	8/29/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-6	8/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-6	8/29/2016	Isophorone	ND	10	2.6	781	ug/L
EP-6	8/29/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-6	8/29/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-6	8/29/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-6	8/29/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-6	8/29/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-6	8/29/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-6	8/29/2016	Fluorene	ND	10	2.7	288	ug/L
EP-6	8/29/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-6	8/29/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-6	8/29/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-6	8/29/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-6	8/29/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-6	8/29/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-6	8/29/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-6	8/29/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-6	8/29/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-6	8/29/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-6	8/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-6	8/29/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-6	8/29/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-6	8/29/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-6	8/29/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-6	8/29/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-6	8/29/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-6	8/29/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-6	8/29/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-6	8/29/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-6	8/29/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-6	8/29/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-6	8/29/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-6	8/29/2016	Phenol	ND	10	2	5761	ug/L
EP-6	8/29/2016	Pyridine	ND	10	2.2	20	ug/L
EP-6	8/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-6	8/29/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-6	8/29/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
EP-6	8/29/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
EP-6	8/29/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-6	8/29/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-6	8/29/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-6	8/29/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-6	8/29/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-6	8/29/2016	Pyrene	ND	10	3.1	117	ug/L
EP-6	8/29/2016	Dimethylphthalate	4.3	10	2.4	612	ug/L
EP-6	8/29/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-6	8/29/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-6	8/29/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-6	8/29/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-6	8/29/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-6	8/29/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-6	8/29/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-6	8/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-6	8/29/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-6	8/29/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	8/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-6	8/29/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-6	8/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-6	8/29/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-6	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-6	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-6	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-6	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-6	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-6	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-6	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-6	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-6	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-6	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-6	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-6	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-6	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-6	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-6	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-6	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-6	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-6	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-6	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-6	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-6	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-6	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-6	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-6	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-6	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-6	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-6	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-6	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-6	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-6	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-6	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-6	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-6	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-6	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-6	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-6	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-6	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-6	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-6	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-6	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-6	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-6	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-6	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-6	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-6	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-6	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-6	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-6	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-6	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-6	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-6	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-6	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-6	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-6	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-6	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-6	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-6	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-6	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-6	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-6	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-6	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-6	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-6	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-6	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-6	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-6	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-6	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-6	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-6	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-6	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-6	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-6	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-6	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-6	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-6	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-6	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-6	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-6	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-6	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-6	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-6	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-6	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-6	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-6	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-6	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-6	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-6	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-6	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-6	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-6	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-6	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-6	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-6	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-6	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-6	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-6	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-6	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-6	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-6	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-6	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-6	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-6	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-6	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-6	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-6	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-6	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-6	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-6	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-6	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-6	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-6	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-6	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-6	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-6	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-6	10/24/2017	Bis(2-ethylhexyl)phthalate	**1100**	100	48	55.64	ug/L
EP-6	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-6	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-6	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-6	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-6	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-6	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-6	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-6	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-6	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-6	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-6	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-6	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-6	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-6	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-6	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-6	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-6	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-6	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-6	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-6	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-6	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-6	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-6	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-6	2/21/2018	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
EP-6	2/21/2018	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
EP-6	2/21/2018	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
EP-6	2/21/2018	Benzo(a)anthracene	**51**	100	39	0.12	ug/L
EP-6	2/21/2018	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
EP-6	2/21/2018	Aniline	*ND*	*100*	31	13	ug/L
EP-6	2/21/2018	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
EP-6	2/21/2018	Benzoic Acid	71	200	39	75000	ug/L
EP-6	2/21/2018	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
EP-6	2/21/2018	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
EP-6	2/21/2018	Isophorone	ND	100	44	781	ug/L
EP-6	2/21/2018	Acenaphthene	ND	100	36	535	ug/L
EP-6	2/21/2018	Diethylphthalate	ND	100	40	14801	ug/L
EP-6	2/21/2018	Di-n-butylphthalate	ND	100	50	885	ug/L
EP-6	2/21/2018	Phenanthrene	ND	100	43	170	ug/L
EP-6	2/21/2018	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
EP-6	2/21/2018	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
EP-6	2/21/2018	Fluorene	ND	100	40	288	ug/L
EP-6	2/21/2018	Carbazole	ND	100	46	NA	ug/L
EP-6	2/21/2018	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
EP-6	2/21/2018	Pentachlorophenol	*ND*	*200*	49	1	ug/L
EP-6	2/21/2018	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
EP-6	2/21/2018	2-Nitroaniline	ND	100	49	190	ug/L
EP-6	2/21/2018	2-Nitrophenol	ND	100	52	NA	ug/L
EP-6	2/21/2018	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
EP-6	2/21/2018	Naphthalene	*ND*	*100*	29	30	ug/L
EP-6	2/21/2018	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
EP-6	2/21/2018	2-Chloronaphthalene	ND	100	37	733	ug/L
EP-6	2/21/2018	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
EP-6	2/21/2018	2-Methylphenol	34	100	33	NA	ug/L
EP-6	2/21/2018	1,2-Dichlorobenzene	ND	100	20	600	ug/L
EP-6	2/21/2018	2-Chlorophenol	*ND*	*100*	75	91	ug/L
EP-6	2/21/2018	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
EP-6	2/21/2018	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
EP-6	2/21/2018	3-Nitroaniline	ND	100	43	NA	ug/L
EP-6	2/21/2018	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
EP-6	2/21/2018	4-Nitrophenol	ND	100	55	NA	ug/L
EP-6	2/21/2018	Benzyl Alcohol	ND	100	46	2000	ug/L
EP-6	2/21/2018	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
EP-6	2/21/2018	Azobenzene	*ND*	*100*	45	0.12	ug/L
EP-6	2/21/2018	2,4-Dimethylphenol	ND	100	28	354	ug/L
EP-6	2/21/2018	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
EP-6	2/21/2018	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
EP-6	2/21/2018	Phenol	130	100	31	5761	ug/L
EP-6	2/21/2018	Pyridine	*ND*	*100*	23	20	ug/L
EP-6	2/21/2018	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
EP-6	2/21/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
EP-6	2/21/2018	Bis(2-ethylhexyl)phthalate	**63**	100	48	55.64	ug/L
EP-6	2/21/2018	Di-n-octylphthalate	ND	100	47	200	ug/L
EP-6	2/21/2018	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
EP-6	2/21/2018	Anthracene	ND	100	35	1721	ug/L
EP-6	2/21/2018	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
EP-6	2/21/2018	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
EP-6	2/21/2018	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
EP-6	2/21/2018	Pyrene	ND	100	44	117	ug/L
EP-6	2/21/2018	Dimethylphthalate	ND	100	36	612	ug/L
EP-6	2/21/2018	Dibenzofuran	ND	100	41	NA	ug/L
EP-6	2/21/2018	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
EP-6	2/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
EP-6	2/21/2018	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
EP-6	2/21/2018	Fluoranthene	ND	100	43	802	ug/L
EP-6	2/21/2018	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
EP-6	2/21/2018	Acenaphthylene	ND	100	35	NA	ug/L
EP-6	2/21/2018	Chrysene	*ND*	*100*	38	34.3	ug/L
EP-6	2/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
EP-6	2/21/2018	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
EP-6	2/21/2018	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
EP-6	2/21/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
EP-6	2/21/2018	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
EP-6	2/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
EP-6	2/21/2018	3,4-Methylphenol	85	100	32	NA	ug/L
EP-6	9/7/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
EP-6	9/7/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
EP-6	9/7/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/7/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
EP-6	9/7/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
EP-6	9/7/2018	Aniline	*ND*	*100*	62	13	ug/L
EP-6	9/7/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
EP-6	9/7/2018	Benzoic Acid	65	200	63	75000	ug/L
EP-6	9/7/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
EP-6	9/7/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
EP-6	9/7/2018	Isophorone	ND	100	62	781	ug/L
EP-6	9/7/2018	Acenaphthene	ND	100	58	535	ug/L
EP-6	9/7/2018	Diethylphthalate	ND	100	63	14801	ug/L
EP-6	9/7/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
EP-6	9/7/2018	Phenanthrene	ND	100	60	170	ug/L
EP-6	9/7/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
EP-6	9/7/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
EP-6	9/7/2018	Fluorene	ND	100	63	288	ug/L
EP-6	9/7/2018	Carbazole	ND	100	63	NA	ug/L
EP-6	9/7/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
EP-6	9/7/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
EP-6	9/7/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
EP-6	9/7/2018	2-Nitroaniline	ND	100	59	190	ug/L
EP-6	9/7/2018	2-Nitrophenol	ND	100	60	NA	ug/L
EP-6	9/7/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
EP-6	9/7/2018	Naphthalene	*ND*	*100*	50	30	ug/L
EP-6	9/7/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
EP-6	9/7/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
EP-6	9/7/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
EP-6	9/7/2018	2-Methylphenol	ND	100	63	NA	ug/L
EP-6	9/7/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
EP-6	9/7/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
EP-6	9/7/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
EP-6	9/7/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
EP-6	9/7/2018	3-Nitroaniline	ND	100	68	NA	ug/L
EP-6	9/7/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
EP-6	9/7/2018	4-Nitrophenol	ND	100	56	NA	ug/L
EP-6	9/7/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
EP-6	9/7/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
EP-6	9/7/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
EP-6	9/7/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
EP-6	9/7/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
EP-6	9/7/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
EP-6	9/7/2018	Phenol	ND	100	60	5761	ug/L
EP-6	9/7/2018	Pyridine	*ND*	*100*	54	20	ug/L
EP-6	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
EP-6	9/7/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
EP-6	9/7/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
EP-6	9/7/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
EP-6	9/7/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
EP-6	9/7/2018	Anthracene	ND	100	57	1721	ug/L
EP-6	9/7/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
EP-6	9/7/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
EP-6	9/7/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
EP-6	9/7/2018	Pyrene	ND	100	65	117	ug/L
EP-6	9/7/2018	Dimethylphthalate	ND	100	60	612	ug/L
EP-6	9/7/2018	Dibenzofuran	ND	100	69	NA	ug/L
EP-6	9/7/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
EP-6	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
EP-6	9/7/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
EP-6	9/7/2018	Fluoranthene	ND	100	58	802	ug/L
EP-6	9/7/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
EP-6	9/7/2018	Acenaphthylene	ND	100	62	NA	ug/L
EP-6	9/7/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
EP-6	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
EP-6	9/7/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
EP-6	9/7/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
EP-6	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
EP-6	9/7/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
EP-6	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
EP-6	9/7/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
EP-6	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-6	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-6	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-6	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-6	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-6	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-6	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-6	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-6	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-6	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-6	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-6	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-6	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-6	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-6	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-6	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-6	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-6	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-6	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-6	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-6	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-6	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-6	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-6	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-6	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-6	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-6	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-6	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-6	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-6	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-6	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-6	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-6	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-6	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-6	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-6	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-6	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-6	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-6	4/29/2019	Benzoic Acid	37	100	31.557804	75000	ug/L
EP-6	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-6	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-6	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-6	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-6	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-6	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-6	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-6	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-6	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-6	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-6	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-6	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-6	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-6	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-6	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-6	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-6	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-6	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-6	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-6	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-6	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-6	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-6	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-6	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-6	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-6	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-6	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-6	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-6	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-6	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-6	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-6	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-6	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-6	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-6	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-6	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-6	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-6	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-6	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-6	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-6	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-6	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-6	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-6	9/17/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
EP-6	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-6	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-6	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-6	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-6	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-6	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-6	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-6	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-6	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-6	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-6	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-6	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-6	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
EP-6	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-6	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-6	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-6	9/17/2020	Benzoic Acid	1.5	0.51	0.2	75000	ug/L
EP-6	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-6	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-6	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.1	0.137	ug/L
EP-6	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-6	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-6	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-6	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-6	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-6	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-6	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
EP-6	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-6	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-6	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-6	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-6	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-6	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-6	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-6	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
EP-6	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-6	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-6	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-6	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-6	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-6	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-6	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-6	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-6	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-6	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-6	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-6	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-6	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-6	12/21/2020	Benzo(a)anthracene	*ND*	*10.5*	0.19	0.12	ug/L
EP-6	12/21/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L
EP-6	12/21/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.158	0.34	ug/L
EP-6	12/21/2020	Benzo(g,h,i)perylene	ND	10.5	0.242	NA	ug/L
EP-6	12/21/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.168	3.43	ug/L
EP-6	12/21/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.168	59	ug/L
EP-6	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.84	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.27	55.64	ug/L
EP-6	12/21/2020	Butylbenzylphthalate	ND	10.5	0.2	16	ug/L
EP-6	12/21/2020	Carbazole	ND	10.5	0.242	NA	ug/L
EP-6	12/21/2020	4-Chloroaniline	*ND*	*10.5*	3.58	0.37	ug/L
EP-6	12/21/2020	4-Chloro-3-Methylphenol	ND	10.5	4	NA	ug/L
EP-6	12/21/2020	2-Chlorophenol	ND	10.5	2.32	91	ug/L
EP-6	12/21/2020	Chrysene	ND	10.5	0.2	34.3	ug/L
EP-6	12/21/2020	Dibenzo(a,h)anthracene	ND	10.5	0.253	NA	ug/L
EP-6	12/21/2020	1,4-Dichlorobenzene	ND	10.5	0.168	75	ug/L
EP-6	12/21/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.74	1.25	ug/L
EP-6	12/21/2020	Diethylphthalate	ND	10.5	0.253	14801	ug/L
EP-6	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.68	1.52	ug/L
EP-6	12/21/2020	2,4-Dinitrophenol	ND	31.6	3.58	38.7	ug/L
EP-6	12/21/2020	Fluorene	ND	10.5	0.19	288	ug/L
EP-6	12/21/2020	Hexachloroethane	*ND*	*10.5*	4.42	3.28	ug/L
EP-6	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.232	0.343	ug/L
EP-6	12/21/2020	Isophorone	ND	10.5	0.147	781	ug/L
EP-6	12/21/2020	Naphthalene	ND	10.5	0.179	30	ug/L
EP-6	12/21/2020	2-Nitroaniline	ND	10.5	2.32	190	ug/L
EP-6	12/21/2020	3-Nitroaniline	ND	10.5	1.9	NA	ug/L
EP-6	12/21/2020	4-Nitroaniline	*ND*	*10.5*	1.58	3.8	ug/L
EP-6	12/21/2020	4-Nitrophenol	ND	10.5	2.21	NA	ug/L
EP-6	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.48	0.011	ug/L
EP-6	12/21/2020	N-Nitrosodiphenylamine	ND	10.5	0.19	122	ug/L
EP-6	12/21/2020	Pentachlorophenol	*ND*	*21.1*	1.47	1	ug/L
EP-6	12/21/2020	Phenanthrene	ND	10.5	0.19	170	ug/L
EP-6	12/21/2020	Phenol	ND	10.5	2.74	5761	ug/L
EP-6	12/21/2020	Pyrene	ND	10.5	0.221	117	ug/L
EP-6	12/21/2020	Benzoic Acid	ND	31.6	7.69	75000	ug/L
EP-6	12/21/2020	Benzyl Alcohol	ND	10.5	2.11	2000	ug/L
EP-6	12/21/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.168	9.81	ug/L
EP-6	12/21/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.69	0.0049	ug/L
EP-6	12/21/2020	Pyridine	ND	10.5	3.37	20	ug/L
EP-6	12/21/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
EP-6	12/21/2020	Acenaphthene	ND	10.5	0.168	535	ug/L
EP-6	12/21/2020	Acenaphthylene	ND	10.5	0.179	NA	ug/L
EP-6	12/21/2020	Anthracene	ND	10.5	0.19	1721	ug/L
EP-6	12/21/2020	4-Bromophenyl-phenylether	ND	10.5	0.211	NA	ug/L
EP-6	12/21/2020	2-Chloronaphthalene	ND	10.5	0.147	733	ug/L
EP-6	12/21/2020	4-Chlorophenyl-phenylether	ND	10.5	2.11	NA	ug/L
EP-6	12/21/2020	1,3-Dichlorobenzene	ND	10.5	0.19	NA	ug/L
EP-6	12/21/2020	Dibenzofuran	ND	10.5	0.179	NA	ug/L
EP-6	12/21/2020	2,4-Dichlorophenol	ND	10.5	3.16	45.3	ug/L
EP-6	12/21/2020	2,4-Dimethylphenol	ND	10.5	3.69	354	ug/L
EP-6	12/21/2020	Di-n-butylphthalate	ND	10.5	2.84	885	ug/L
EP-6	12/21/2020	2,4-Dinitrotoluene	ND	10.5	2	45.3	ug/L
EP-6	12/21/2020	2,6-Dinitrotoluene	*ND*	*10.5*	2	0.485	ug/L
EP-6	12/21/2020	Di-n-octylphthalate	ND	10.5	0.179	200	ug/L
EP-6	12/21/2020	Fluoranthene	ND	10.5	0.19	802	ug/L
EP-6	12/21/2020	Hexachlorobenzene	*ND*	*10.5*	0.179	0.0976	ug/L
EP-6	12/21/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.74	0.41	ug/L
EP-6	12/21/2020	2-Methylphenol	ND	10.5	1.9	NA	ug/L
EP-6	12/21/2020	Nitrobenzene	*ND*	*10.5*	0.137	1.4	ug/L
EP-6	12/21/2020	2-Nitrophenol	ND	10.5	5.48	NA	ug/L
EP-6	12/21/2020	2,4,5-Trichlorophenol	ND	10.5	3.9	1166	ug/L
EP-6	12/21/2020	2,4,6-Trichlorophenol	ND	10.5	3.69	11.9*	ug/L
EP-6	12/21/2020	Dimethylphthalate	ND	10.5	0.179	612	ug/L
EP-6	12/21/2020	Aniline	ND	10.5	4	13	ug/L
EP-6	12/21/2020	1,2,4-Trichlorobenzene	ND	10.5	0.19	70	ug/L
EP-6	12/21/2020	1,2-Dichlorobenzene	ND	10.5	0.179	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6 (Pond 4 & 5)	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Phenol	ND	0.5	0.5	5761	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-6 (Pond 4 & 5)	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-7	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-7	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-7	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-7	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-7	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-7	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-7	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-7	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-7	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-7	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-7	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-7	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-7	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-7	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-7	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-7	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-7	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-7	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-7	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-7	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-7	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-7	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-7	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-7	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-7	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-7	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-7	5/29/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-7	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-7	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-7	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-7	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-7	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-7	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-7	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-7	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-7	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-7	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-7	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-7	5/29/2012	Phenol	ND	10	2.5	5761	ug/L
EP-7	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-7	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-7	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-7	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-7	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-7	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-7	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-7	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-7	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-7	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-7	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-7	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-7	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-7	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-7	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-7	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-7	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-7	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-7	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-7	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-7	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-7	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-7	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-7	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-7	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-7	5/29/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
EP-7	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-7	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-7	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-7	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-7	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-7	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-7	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-7	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-7	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-7	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-7	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-7	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-7	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-7	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-7	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-7	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-7	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-7	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-7	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-7	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-7	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-7	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-7	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-7	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-7	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-7	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-7	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-7	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-7	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-7	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-7	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-7	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-7	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-7	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-7	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-7	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-7	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-7	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-7	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-7	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-7	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-7	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-7	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-7	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-7	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-7	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-7	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-7	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-7	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-7	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-7	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-7	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-7	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-7	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-7	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-7	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-7	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-7	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-7	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-7	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-7	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-7	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-7	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-7	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-7	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-7	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-7	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-7	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-7	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-7	5/28/2013	Benzo(a)pyrene	*ND*	*30*	7.5	0.2	ug/L
EP-7	5/28/2013	2,4-Dinitrophenol	*ND*	*60*	9.6	38.7	ug/L
EP-7	5/28/2013	Dibenzo(a,h)anthracene	ND	30	12	NA	ug/L
EP-7	5/28/2013	Benzo(a)anthracene	*ND*	*30*	7.8	0.12	ug/L
EP-7	5/28/2013	4-Chloro-3-Methylphenol	ND	30	8	NA	ug/L
EP-7	5/28/2013	Aniline	*ND*	*30*	6.6	13	ug/L
EP-7	5/28/2013	N-Nitrosodimethylamine	*ND*	*30*	14	0.0049	ug/L
EP-7	5/28/2013	Benzoic Acid	ND	60	17	75000	ug/L
EP-7	5/28/2013	Hexachloroethane	*ND*	*30*	8.7	3.28	ug/L
EP-7	5/28/2013	Hexachlorocyclopentadiene	*ND*	*30*	6.2	0.41	ug/L
EP-7	5/28/2013	Isophorone	ND	30	5.3	781	ug/L
EP-7	5/28/2013	Acenaphthene	ND	30	7.7	535	ug/L
EP-7	5/28/2013	Diethylphthalate	ND	30	9	14801	ug/L
EP-7	5/28/2013	Di-n-butylphthalate	ND	30	7.2	885	ug/L
EP-7	5/28/2013	Phenanthrene	ND	30	4.9	170	ug/L
EP-7	5/28/2013	Butylbenzylphthalate	*ND*	*30*	8.2	16	ug/L
EP-7	5/28/2013	N-Nitrosodiphenylamine	ND	30	7	122	ug/L
EP-7	5/28/2013	Fluorene	ND	30	7.4	288	ug/L
EP-7	5/28/2013	Carbazole	ND	30	6.9	NA	ug/L
EP-7	5/28/2013	Hexachlorobutadiene	*ND*	*30*	8.2	0.14	ug/L
EP-7	5/28/2013	Pentachlorophenol	*ND*	*60*	4.3	1	ug/L
EP-7	5/28/2013	2,4,6-Trichlorophenol	ND	30	7.9	11.9*	ug/L
EP-7	5/28/2013	2-Nitroaniline	ND	30	8.6	190	ug/L
EP-7	5/28/2013	2-Nitrophenol	ND	30	7	NA	ug/L
EP-7	5/28/2013	1-Methylnaphthalene	*ND*	*30*	6.7	11.38	ug/L
EP-7	5/28/2013	Naphthalene	ND	30	7.3	30	ug/L
EP-7	5/28/2013	2-Methylnaphthalene	ND	30	7.2	35.1	ug/L
EP-7	5/28/2013	2-Chloronaphthalene	ND	30	7.3	733	ug/L
EP-7	5/28/2013	3,3-Dichlorobenzidine	*ND*	*30*	11	1.25	ug/L
EP-7	5/28/2013	2-Methylphenol	ND	30	8.1	NA	ug/L
EP-7	5/28/2013	1,2-Dichlorobenzene	ND	30	9	600	ug/L
EP-7	5/28/2013	2-Chlorophenol	ND	30	8	91	ug/L
EP-7	5/28/2013	2,4,5-Trichlorophenol	ND	30	7.2	1166	ug/L
EP-7	5/28/2013	Nitrobenzene	*ND*	*30*	8.7	1.4	ug/L
EP-7	5/28/2013	3-Nitroaniline	ND	30	8	NA	ug/L
EP-7	5/28/2013	4-Nitroaniline	*ND*	*30*	7.6	3.8	ug/L
EP-7	5/28/2013	4-Nitrophenol	ND	30	6.4	NA	ug/L
EP-7	5/28/2013	Benzyl Alcohol	ND	30	7.4	2000	ug/L
EP-7	5/28/2013	4-Bromophenyl-phenylether	ND	30	7.5	NA	ug/L
EP-7	5/28/2013	Azobenzene	*ND*	*30*	6.9	0.12	ug/L
EP-7	5/28/2013	2,4-Dimethylphenol	ND	30	8.8	354	ug/L
EP-7	5/28/2013	1,4-Dichlorobenzene	ND	30	11	75	ug/L
EP-7	5/28/2013	4-Chloroaniline	*ND*	*30*	6.7	0.37	ug/L
EP-7	5/28/2013	Phenol	ND	30	6.6	5761	ug/L
EP-7	5/28/2013	Pyridine	*ND*	*30*	11	20	ug/L
EP-7	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*30*	12	0.137	ug/L
EP-7	5/28/2013	Bis(2-chloroethoxy)methane	ND	30	7.3	59	ug/L
EP-7	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	30	8.3	55.64	ug/L
EP-7	5/28/2013	Di-n-octylphthalate	ND	30	10	200	ug/L
EP-7	5/28/2013	Hexachlorobenzene	*ND*	*30*	8	0.0976	ug/L
EP-7	5/28/2013	Anthracene	ND	30	6.5	1721	ug/L
EP-7	5/28/2013	1,2,4-Trichlorobenzene	ND	30	6.7	70	ug/L
EP-7	5/28/2013	2,4-Dichlorophenol	*ND*	*60*	6.5	45.3	ug/L
EP-7	5/28/2013	2,4-Dinitrotoluene	ND	30	8.5	45.3	ug/L
EP-7	5/28/2013	Pyrene	ND	30	6.4	117	ug/L
EP-7	5/28/2013	Dimethylphthalate	ND	30	8.3	612	ug/L
EP-7	5/28/2013	Dibenzofuran	ND	30	7.7	NA	ug/L
EP-7	5/28/2013	Benzo(g,h,i)perylene	ND	30	8.3	NA	ug/L
EP-7	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*30*	9.5	0.343	ug/L
EP-7	5/28/2013	Benzo(b)fluoranthene	*ND*	*30*	8.8	0.34	ug/L
EP-7	5/28/2013	Fluoranthene	ND	30	7.2	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	5/28/2013	Benzo(k)fluoranthene	*ND*	*30*	7.8	3.43	ug/L
EP-7	5/28/2013	Acenaphthylene	ND	30	8.4	NA	ug/L
EP-7	5/28/2013	Chrysene	ND	30	8	34.3	ug/L
EP-7	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*60*	4.2	1.52	ug/L
EP-7	5/28/2013	1,3-Dichlorobenzene	ND	30	9.2	NA	ug/L
EP-7	5/28/2013	2,6-Dinitrotoluene	*ND*	*30*	8.5	0.485	ug/L
EP-7	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*30*	9.6	0.011	ug/L
EP-7	5/28/2013	4-Chlorophenyl-phenylether	ND	30	7.9	NA	ug/L
EP-7	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*30*	9.9	9.81	ug/L
EP-7	5/28/2013	3,4-Methylphenol	ND	30	11	NA	ug/L
EP-7	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-7	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-7	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-7	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-7	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-7	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-7	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-7	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-7	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-7	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-7	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-7	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-7	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-7	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-7	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-7	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-7	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-7	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-7	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-7	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-7	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-7	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-7	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-7	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-7	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-7	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-7	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-7	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-7	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-7	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-7	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-7	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-7	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-7	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-7	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-7	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-7	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-7	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-7	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-7	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-7	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-7	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-7	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-7	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-7	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-7	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-7	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-7	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-7	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-7	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-7	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-7	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-7	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-7	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-7	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-7	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-7	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-7	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-7	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-7	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-7	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-7	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-7	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-7	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-7	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-7	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-7	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-7	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-7	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-7	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-7	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-7	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-7	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-7	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-7	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-7	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-7	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-7	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-7	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-7	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-7	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-7	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-7	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-7	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-7	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-7	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-7	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-7	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-7	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-7	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-7	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-7	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-7	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-7	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-7	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-7	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-7	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-7	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-7	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-7	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-7	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-7	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-7	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-7	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-7	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-7	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-7	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-7	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-7	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-7	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-7	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-7	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-7	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-7	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-7	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-7	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-7	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-7	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-7	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-7	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-7	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-7	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-7	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-7	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-7	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-7	11/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-7	11/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-7	11/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-7	11/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-7	11/12/2014	Aniline	ND	10	2.4	13	ug/L
EP-7	11/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-7	11/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-7	11/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-7	11/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-7	11/12/2014	Isophorone	ND	10	3.1	781	ug/L
EP-7	11/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-7	11/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-7	11/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-7	11/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-7	11/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-7	11/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-7	11/12/2014	Fluorene	ND	10	2.9	288	ug/L
EP-7	11/12/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-7	11/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-7	11/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-7	11/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-7	11/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	11/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-7	11/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-7	11/12/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-7	11/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-7	11/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-7	11/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-7	11/12/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-7	11/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-7	11/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-7	11/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-7	11/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-7	11/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-7	11/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-7	11/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-7	11/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-7	11/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-7	11/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-7	11/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-7	11/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	11/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-7	11/12/2014	Phenol	ND	10	1.6	5761	ug/L
EP-7	11/12/2014	Pyridine	ND	10	1.6	20	ug/L
EP-7	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	11/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	11/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-7	11/12/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-7	11/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-7	11/12/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-7	11/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-7	11/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-7	11/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-7	11/12/2014	Pyrene	ND	10	4	117	ug/L
EP-7	11/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-7	11/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-7	11/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-7	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-7	11/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-7	11/12/2014	Fluoranthene	ND	10	3	802	ug/L
EP-7	11/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-7	11/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-7	11/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-7	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-7	11/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-7	11/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-7	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	11/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-7	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-7	11/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-7	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-7	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-7	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-7	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-7	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-7	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-7	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-7	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-7	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-7	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-7	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-7	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-7	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-7	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-7	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-7	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-7	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-7	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-7	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-7	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-7	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-7	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-7	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-7	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-7	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-7	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-7	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-7	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-7	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-7	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-7	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-7	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-7	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-7	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-7	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-7	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-7	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-7	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-7	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-7	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-7	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-7	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-7	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-7	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-7	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-7	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-7	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-7	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-7	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-7	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-7	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-7	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-7	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-7	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-7	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-7	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-7	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-7	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-7	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-7	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-7	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-7	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-7	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-7	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-7	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-7	9/1/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
EP-7	9/1/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
EP-7	9/1/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
EP-7	9/1/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
EP-7	9/1/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
EP-7	9/1/2015	Aniline	ND	12	1.8	13	ug/L
EP-7	9/1/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
EP-7	9/1/2015	Benzoic Acid	ND	24	1.2	75000	ug/L
EP-7	9/1/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
EP-7	9/1/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
EP-7	9/1/2015	Isophorone	ND	12	2.3	781	ug/L
EP-7	9/1/2015	Acenaphthene	ND	12	2.2	535	ug/L
EP-7	9/1/2015	Diethylphthalate	ND	12	2	14801	ug/L
EP-7	9/1/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
EP-7	9/1/2015	Phenanthrene	ND	12	2.3	170	ug/L
EP-7	9/1/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
EP-7	9/1/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
EP-7	9/1/2015	Fluorene	ND	12	2	288	ug/L
EP-7	9/1/2015	Carbazole	ND	12	1.8	NA	ug/L
EP-7	9/1/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
EP-7	9/1/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
EP-7	9/1/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
EP-7	9/1/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
EP-7	9/1/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
EP-7	9/1/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
EP-7	9/1/2015	Naphthalene	ND	12	2.2	30	ug/L
EP-7	9/1/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
EP-7	9/1/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
EP-7	9/1/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
EP-7	9/1/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
EP-7	9/1/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
EP-7	9/1/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
EP-7	9/1/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
EP-7	9/1/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
EP-7	9/1/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
EP-7	9/1/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/1/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
EP-7	9/1/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
EP-7	9/1/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
EP-7	9/1/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
EP-7	9/1/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
EP-7	9/1/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
EP-7	9/1/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
EP-7	9/1/2015	Phenol	ND	12	1.3	5761	ug/L
EP-7	9/1/2015	Pyridine	ND	12	2	20	ug/L
EP-7	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
EP-7	9/1/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
EP-7	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
EP-7	9/1/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
EP-7	9/1/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
EP-7	9/1/2015	Anthracene	ND	12	1.9	1721	ug/L
EP-7	9/1/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
EP-7	9/1/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
EP-7	9/1/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
EP-7	9/1/2015	Pyrene	ND	12	2.7	117	ug/L
EP-7	9/1/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
EP-7	9/1/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
EP-7	9/1/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
EP-7	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
EP-7	9/1/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
EP-7	9/1/2015	Fluoranthene	ND	12	1.7	802	ug/L
EP-7	9/1/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
EP-7	9/1/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
EP-7	9/1/2015	Chrysene	ND	12	2.5	34.3	ug/L
EP-7	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
EP-7	9/1/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
EP-7	9/1/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
EP-7	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
EP-7	9/1/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
EP-7	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
EP-7	9/1/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
EP-7	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-7	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-7	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-7	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-7	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-7	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-7	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-7	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-7	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-7	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-7	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-7	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-7	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-7	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-7	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-7	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-7	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-7	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-7	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-7	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-7	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-7	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-7	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-7	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-7	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-7	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-7	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-7	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-7	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-7	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-7	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-7	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-7	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-7	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-7	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-7	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-7	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-7	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-7	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-7	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-7	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-7	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-7	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-7	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-7	8/30/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
EP-7	8/30/2016	Di-n-octylphthalate	4.6	10	2	200	ug/L
EP-7	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-7	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-7	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-7	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-7	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-7	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-7	8/30/2016	Dimethylphthalate	4.1	10	2.4	612	ug/L
EP-7	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-7	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-7	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-7	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-7	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-7	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-7	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-7	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-7	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-7	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-7	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-7	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-7	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-7	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-7	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-7	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	3/30/2017	Benzoic Acid	36	100	20	75000	ug/L
EP-7	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-7	3/30/2017	Acenaphthene	ND	50	18	535	ug/L
EP-7	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-7	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-7	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-7	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-7	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-7	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	3/30/2017	Bis(2-ethylhexyl)phthalate	28	50	24	55.64	ug/L
EP-7	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-7	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-7	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-7	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-7	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-7	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-7	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-7	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-7	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-7	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-7	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-7	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-7	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-7	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-7	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-7	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-7	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-7	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-7	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-7	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-7	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-7	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-7	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-7	2/23/2018	Benzoic Acid	46	100	20	75000	ug/L
EP-7	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-7	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-7	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-7	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-7	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-7	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-7	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-7	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-7	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-7	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-7	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-7	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-7	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-7	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-7	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-7	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-7	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-7	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-7	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-7	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-7	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-7	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-7	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-7	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-7	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-7	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-7	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-7	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-7	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-7	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-7	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-7	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-7	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-7	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-7	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-7	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-7	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-7	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-7	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-7	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-7	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-7	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-7	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-7	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-7	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-7	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-7	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-7	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-7	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-7	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-7	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-7	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-7	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-7	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-7	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-7	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-7	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-7	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-7	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-7	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-7	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-7	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-7	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-7	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-7	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-7	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-7	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-7	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-7	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-7	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-7	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-7	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-7	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-7	9/7/2018	Isophorone	ND	50	31	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-7	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-7	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-7	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-7	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-7	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-7	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-7	9/7/2018	Carbazole	ND	50	31	NA	ug/L
EP-7	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-7	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-7	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-7	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-7	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-7	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-7	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-7	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-7	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-7	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-7	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-7	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-7	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-7	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-7	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-7	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-7	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-7	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-7	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-7	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-7	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-7	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-7	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-7	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-7	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-7	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-7	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-7	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-7	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-7	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-7	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-7	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-7	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-7	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-7	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-7	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-7	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-7	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-7	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-7	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-7	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-7	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-7	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-7	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-7	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-7	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-7	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-7	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-7	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-7	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-7	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-7	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-7	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-7	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-7	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-7	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-7	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-7	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-7	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-7	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-7	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-7	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-7	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-7	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-7	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-7	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-7	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-7	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-7	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-7	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-7	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-7	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-7	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-7	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-7	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-7	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-7	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-7	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-7	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-7	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-7	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-7	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-7	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-7	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-7	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-7	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-7	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-7	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-7	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-7	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-7	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-7	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-7	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-7	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-7	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-7	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-7	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-7	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-7	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-7	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-7	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-7	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-7	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-7	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-7	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-7	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-7	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-7	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-7	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-7	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-7	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-7	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-7	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-7	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-7	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-7	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-7	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-7	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-7	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-7	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-7	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-7	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-7	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-7	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-7	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-7	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-7	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-7	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-7	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-7	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-7	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-7	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-7	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-7	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-7	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-7	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-7	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-7	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-7	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-7	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-7	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-7	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-7	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-7	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-7	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-7	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-7	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-7	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-7	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-7	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-7	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-7	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-7	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-7	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-7	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-7	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-7	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-7	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-7	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-7	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-7	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-7	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-7	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-7	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-7	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-7	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-7	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-7	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-7	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-7	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-7	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-7	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-7	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-7	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-7	11/20/2019	Phenol	ND	0.5	0.5	5761	ug/L
EP-7	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-7	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-7	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-7	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-7	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-7	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-7	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-7	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-7	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-7	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-7	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-7	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-7	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-7	9/17/2020	2,4-Dinitrotoluene	ND	0.2	0.1	45.3	ug/L
EP-7	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.51*	0.1	0.485	ug/L
EP-7	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-7	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-7	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-7	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-7	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-7	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-7	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-7	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-7	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-7	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-7	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-7	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-7	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
EP-7	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-7	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-7	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-7	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-7	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-7	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-7	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-7	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-7	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.1	55.64	ug/L
EP-7	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-7	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-7	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-7	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-7	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
EP-7	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-7	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-7	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-7	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-7	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-7	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-7	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-7	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
EP-7	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-7	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-7	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-7	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-7	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-7	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-7	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-7	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-7	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-7	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-7	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-7	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-7	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-7	12/21/2020	Benzo(a)anthracene	*ND*	*9.65*	0.174	0.12	ug/L
EP-7	12/21/2020	Benzo(a)pyrene	*ND*	*9.65*	0.116	0.2	ug/L
EP-7	12/21/2020	Benzo(b)fluoranthene	*ND*	*9.65*	0.145	0.34	ug/L
EP-7	12/21/2020	Benzo(g,h,i)perylene	ND	9.65	0.222	NA	ug/L
EP-7	12/21/2020	Benzo(k)fluoranthene	*ND*	*9.65*	0.154	3.43	ug/L
EP-7	12/21/2020	Bis(2-chloroethoxy)methane	ND	9.65	0.154	59	ug/L
EP-7	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*9.65*	2.61	0.137	ug/L
EP-7	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	9.65	4.83	55.64	ug/L
EP-7	12/21/2020	Butylbenzylphthalate	ND	9.65	0.183	16	ug/L
EP-7	12/21/2020	Carbazole	ND	9.65	0.222	NA	ug/L
EP-7	12/21/2020	4-Chloroaniline	*ND*	*9.65*	3.28	0.37	ug/L
EP-7	12/21/2020	4-Chloro-3-Methylphenol	ND	9.65	3.67	NA	ug/L
EP-7	12/21/2020	2-Chlorophenol	ND	9.65	2.12	91	ug/L
EP-7	12/21/2020	Chrysene	ND	9.65	0.183	34.3	ug/L
EP-7	12/21/2020	Dibenzo(a,h)anthracene	ND	9.65	0.232	NA	ug/L
EP-7	12/21/2020	1,4-Dichlorobenzene	ND	9.65	0.154	75	ug/L
EP-7	12/21/2020	3,3-Dichlorobenzidine	*ND*	*9.65*	2.51	1.25	ug/L
EP-7	12/21/2020	Diethylphthalate	ND	9.65	0.232	14801	ug/L
EP-7	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.65*	1.54	1.52	ug/L
EP-7	12/21/2020	2,4-Dinitrophenol	ND	29	3.28	38.7	ug/L
EP-7	12/21/2020	Fluorene	ND	9.65	0.174	288	ug/L
EP-7	12/21/2020	Hexachloroethane	*ND*	*9.65*	4.05	3.28	ug/L
EP-7	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.65*	0.212	0.343	ug/L
EP-7	12/21/2020	Isophorone	ND	9.65	0.135	781	ug/L
EP-7	12/21/2020	Naphthalene	ND	9.65	0.164	30	ug/L
EP-7	12/21/2020	2-Nitroaniline	ND	9.65	2.12	190	ug/L
EP-7	12/21/2020	3-Nitroaniline	ND	9.65	1.74	NA	ug/L
EP-7	12/21/2020	4-Nitroaniline	*ND*	*9.65*	1.45	3.8	ug/L
EP-7	12/21/2020	4-Nitrophenol	ND	9.65	2.03	NA	ug/L
EP-7	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*9.65*	3.19	0.011	ug/L
EP-7	12/21/2020	N-Nitrosodiphenylamine	ND	9.65	0.174	122	ug/L
EP-7	12/21/2020	Pentachlorophenol	*ND*	*19.3*	1.35	1	ug/L
EP-7	12/21/2020	Phenanthrene	ND	9.65	0.174	170	ug/L
EP-7	12/21/2020	Phenol	ND	9.65	2.51	5761	ug/L
EP-7	12/21/2020	Pyrene	ND	9.65	0.203	117	ug/L
EP-7	12/21/2020	Benzoic Acid	ND	29	7.05	75000	ug/L
EP-7	12/21/2020	Benzyl Alcohol	ND	9.65	1.93	2000	ug/L
EP-7	12/21/2020	Bis(2-chloroisopropyl)ether	ND	9.65	0.154	9.81	ug/L
EP-7	12/21/2020	N-Nitrosodimethylamine	*ND*	*9.65*	3.38	0.0049	ug/L
EP-7	12/21/2020	Pyridine	ND	9.65	3.09	20	ug/L
EP-7	12/21/2020	Azobenzene	*ND*	*9.65*	0.965	0.12	ug/L
EP-7	12/21/2020	Acenaphthene	ND	9.65	0.154	535	ug/L
EP-7	12/21/2020	Acenaphthylene	ND	9.65	0.164	NA	ug/L
EP-7	12/21/2020	Anthracene	ND	9.65	0.174	1721	ug/L
EP-7	12/21/2020	4-Bromophenyl-phenylether	ND	9.65	0.193	NA	ug/L
EP-7	12/21/2020	2-Chloronaphthalene	ND	9.65	0.135	733	ug/L
EP-7	12/21/2020	4-Chlorophenyl-phenylether	ND	9.65	1.93	NA	ug/L
EP-7	12/21/2020	1,3-Dichlorobenzene	ND	9.65	0.174	NA	ug/L
EP-7	12/21/2020	Dibenzofuran	ND	9.65	0.164	NA	ug/L
EP-7	12/21/2020	2,4-Dichlorophenol	ND	9.65	2.9	45.3	ug/L
EP-7	12/21/2020	2,4-Dimethylphenol	ND	9.65	3.38	354	ug/L
EP-7	12/21/2020	Di-n-butylphthalate	ND	9.65	2.61	885	ug/L
EP-7	12/21/2020	2,4-Dinitrotoluene	ND	9.65	1.83	45.3	ug/L
EP-7	12/21/2020	2,6-Dinitrotoluene	*ND*	*9.65*	1.83	0.485	ug/L
EP-7	12/21/2020	Di-n-octylphthalate	ND	9.65	0.164	200	ug/L
EP-7	12/21/2020	Fluoranthene	ND	9.65	0.174	802	ug/L
EP-7	12/21/2020	Hexachlorobenzene	*ND*	*9.65*	0.164	0.0976	ug/L
EP-7	12/21/2020	Hexachlorocyclopentadiene	*ND*	*19.3*	2.51	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	2-Methylphenol	ND	9.65	1.74	NA	ug/L
EP-7	12/21/2020	Nitrobenzene	*ND*	*9.65*	0.125	1.4	ug/L
EP-7	12/21/2020	2-Nitrophenol	ND	9.65	5.02	NA	ug/L
EP-7	12/21/2020	2,4,5-Trichlorophenol	ND	9.65	3.57	1166	ug/L
EP-7	12/21/2020	2,4,6-Trichlorophenol	ND	9.65	3.38	11.9*	ug/L
EP-7	12/21/2020	Dimethylphthalate	ND	9.65	0.164	612	ug/L
EP-7	12/21/2020	Aniline	ND	9.65	3.67	13	ug/L
EP-7	12/21/2020	1,2,4-Trichlorobenzene	ND	9.65	0.174	70	ug/L
EP-7	12/21/2020	1,2-Dichlorobenzene	ND	9.65	0.164	600	ug/L
EP-8	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-8	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-8	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-8	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-8	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-8	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-8	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-8	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-8	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-8	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-8	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-8	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-8	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-8	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-8	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-8	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-8	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-8	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-8	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-8	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-8	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-8	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-8	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-8	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-8	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-8	5/29/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-8	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-8	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-8	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-8	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-8	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-8	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-8	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
EP-8	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-8	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-8	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-8	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-8	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-8	5/29/2012	Phenol	ND	10	2.5	5761	ug/L
EP-8	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-8	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-8	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-8	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-8	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-8	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-8	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-8	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-8	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-8	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-8	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-8	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-8	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-8	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-8	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-8	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-8	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-8	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-8	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-8	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-8	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-8	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-8	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-8	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-8	5/29/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
EP-8	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-8	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-8	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-8	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-8	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-8	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-8	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-8	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-8	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-8	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-8	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-8	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-8	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-8	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-8	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-8	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-8	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-8	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-8	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-8	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-8	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-8	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-8	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-8	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-8	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-8	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-8	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-8	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-8	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-8	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-8	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-8	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-8	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-8	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-8	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-8	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-8	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-8	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-8	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-8	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-8	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-8	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-8	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-8	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-8	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-8	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-8	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-8	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-8	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-8	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-8	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-8	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-8	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-8	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-8	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-8	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-8	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-8	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-8	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-8	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-8	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-8	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-8	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-8	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-8	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-8	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-8	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-8	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-8	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-8	5/28/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-8	5/28/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	5/28/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-8	5/28/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-8	5/28/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	Aniline	ND	10	2.2	13	ug/L
EP-8	5/28/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-8	5/28/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-8	5/28/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	5/28/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-8	5/28/2013	Isophorone	ND	10	1.8	781	ug/L
EP-8	5/28/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	5/28/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-8	5/28/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	5/28/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-8	5/28/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-8	5/28/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	5/28/2013	Fluorene	ND	10	2.5	288	ug/L
EP-8	5/28/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-8	5/28/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-8	5/28/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-8	5/28/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-8	5/28/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-8	5/28/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-8	5/28/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-8	5/28/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-8	5/28/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-8	5/28/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-8	5/28/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-8	5/28/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-8	5/28/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-8	5/28/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-8	5/28/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-8	5/28/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-8	5/28/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-8	5/28/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-8	5/28/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-8	5/28/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	5/28/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-8	5/28/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-8	5/28/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-8	5/28/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-8	5/28/2013	Phenol	ND	10	2.2	5761	ug/L
EP-8	5/28/2013	Pyridine	ND	10	3.5	20	ug/L
EP-8	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-8	5/28/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-8	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-8	5/28/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-8	5/28/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-8	5/28/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-8	5/28/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-8	5/28/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-8	5/28/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	5/28/2013	Pyrene	ND	10	2.1	117	ug/L
EP-8	5/28/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-8	5/28/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-8	5/28/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-8	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-8	5/28/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-8	5/28/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-8	5/28/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-8	5/28/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-8	5/28/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-8	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	5/28/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-8	5/28/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-8	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-8	5/28/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-8	5/28/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-8	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-8	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-8	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-8	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-8	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-8	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-8	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-8	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-8	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-8	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-8	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-8	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-8	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-8	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-8	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-8	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-8	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-8	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-8	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-8	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-8	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-8	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-8	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-8	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-8	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-8	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-8	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-8	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-8	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-8	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-8	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-8	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-8	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-8	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-8	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-8	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-8	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-8	10/15/2013	Pyridine	ND	10	3.5	20	ug/L
EP-8	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-8	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-8	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-8	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-8	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-8	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-8	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-8	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-8	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-8	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-8	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-8	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-8	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-8	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-8	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-8	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-8	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-8	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-8	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-8	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-8	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-8	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-8	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-8	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-8	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-8	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-8	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-8	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-8	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-8	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-8	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-8	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-8	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-8	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-8	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-8	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-8	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-8	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-8	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-8	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-8	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-8	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-8	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-8	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-8	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-8	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-8	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-8	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-8	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-8	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-8	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-8	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-8	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-8	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-8	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-8	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-8	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-8	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-8	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-8	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-8	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-8	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-8	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-8	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-8	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-8	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-8	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-8	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-8	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-8	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-8	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-8	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-8	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-8	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-8	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-8	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-8	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-8	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-8	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-8	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-8	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-8	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-8	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-8	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-8	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-8	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-8	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-8	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-8	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-8	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-8	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-8	11/12/2014	Benzo(a)pyrene	*ND*	*11*	3.6	0.2	ug/L
EP-8	11/12/2014	2,4-Dinitrophenol	ND	22	3.5	38.7	ug/L
EP-8	11/12/2014	Dibenzo(a,h)anthracene	ND	11	3.3	NA	ug/L
EP-8	11/12/2014	Benzo(a)anthracene	*ND*	*11*	3.4	0.12	ug/L
EP-8	11/12/2014	4-Chloro-3-Methylphenol	ND	11	4.1	NA	ug/L
EP-8	11/12/2014	Aniline	ND	11	2.7	13	ug/L
EP-8	11/12/2014	N-Nitrosodimethylamine	*ND*	*11*	2.7	0.0049	ug/L
EP-8	11/12/2014	Benzoic Acid	ND	22	2.4	75000	ug/L
EP-8	11/12/2014	Hexachloroethane	*ND*	*11*	2.1	3.28	ug/L
EP-8	11/12/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.4	0.41	ug/L
EP-8	11/12/2014	Isophorone	ND	11	3.4	781	ug/L
EP-8	11/12/2014	Acenaphthene	ND	11	3.2	535	ug/L
EP-8	11/12/2014	Diethylphthalate	ND	11	4.7	14801	ug/L
EP-8	11/12/2014	Di-n-butylphthalate	ND	11	4	885	ug/L
EP-8	11/12/2014	Phenanthrene	ND	11	2.8	170	ug/L
EP-8	11/12/2014	Butylbenzylphthalate	ND	11	3.5	16	ug/L
EP-8	11/12/2014	N-Nitrosodiphenylamine	ND	11	3.2	122	ug/L
EP-8	11/12/2014	Fluorene	ND	11	3.3	288	ug/L
EP-8	11/12/2014	Carbazole	ND	11	3.2	NA	ug/L
EP-8	11/12/2014	Hexachlorobutadiene	*ND*	*11*	3.4	0.14	ug/L
EP-8	11/12/2014	Pentachlorophenol	*ND*	*22*	2.8	1	ug/L
EP-8	11/12/2014	2,4,6-Trichlorophenol	ND	11	2	11.9*	ug/L
EP-8	11/12/2014	2-Nitroaniline	ND	11	3.1	190	ug/L
EP-8	11/12/2014	2-Nitrophenol	ND	11	3.5	NA	ug/L
EP-8	11/12/2014	1-Methylnaphthalene	ND	11	4	11.38	ug/L
EP-8	11/12/2014	Naphthalene	ND	11	2.6	30	ug/L
EP-8	11/12/2014	2-Methylnaphthalene	ND	11	2.9	35.1	ug/L
EP-8	11/12/2014	2-Chloronaphthalene	ND	11	3.4	733	ug/L
EP-8	11/12/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.6	1.25	ug/L
EP-8	11/12/2014	2-Methylphenol	ND	11	3.1	NA	ug/L
EP-8	11/12/2014	1,2-Dichlorobenzene	ND	11	1.9	600	ug/L
EP-8	11/12/2014	2-Chlorophenol	ND	11	2	91	ug/L
EP-8	11/12/2014	2,4,5-Trichlorophenol	ND	11	3.6	1166	ug/L
EP-8	11/12/2014	Nitrobenzene	*ND*	*11*	2.9	1.4	ug/L
EP-8	11/12/2014	3-Nitroaniline	ND	11	4	NA	ug/L
EP-8	11/12/2014	4-Nitroaniline	*ND*	*11*	4.6	3.8	ug/L
EP-8	11/12/2014	4-Nitrophenol	ND	11	4.8	NA	ug/L
EP-8	11/12/2014	Benzyl Alcohol	ND	11	2	2000	ug/L
EP-8	11/12/2014	4-Bromophenyl-phenylether	ND	11	3.3	NA	ug/L
EP-8	11/12/2014	Azobenzene	*ND*	*11*	2.8	0.12	ug/L
EP-8	11/12/2014	2,4-Dimethylphenol	ND	11	3.5	354	ug/L
EP-8	11/12/2014	1,4-Dichlorobenzene	ND	11	2.7	75	ug/L
EP-8	11/12/2014	4-Chloroaniline	*ND*	*11*	2.9	0.37	ug/L
EP-8	11/12/2014	Phenol	ND	11	1.8	5761	ug/L
EP-8	11/12/2014	Pyridine	ND	11	1.7	20	ug/L
EP-8	11/12/2014	Bis(2-chloroethyl)ether	*ND*	*11*	2	0.137	ug/L
EP-8	11/12/2014	Bis(2-chloroethoxy)methane	ND	11	3.1	59	ug/L
EP-8	11/12/2014	Bis(2-ethylhexyl)phthalate	18	11	3.3	55.64	ug/L
EP-8	11/12/2014	Di-n-octylphthalate	ND	11	3	200	ug/L
EP-8	11/12/2014	Hexachlorobenzene	*ND*	*11*	3.5	0.0976	ug/L
EP-8	11/12/2014	Anthracene	ND	11	2.8	1721	ug/L
EP-8	11/12/2014	1,2,4-Trichlorobenzene	ND	11	3	70	ug/L
EP-8	11/12/2014	2,4-Dichlorophenol	ND	22	3.3	45.3	ug/L
EP-8	11/12/2014	2,4-Dinitrotoluene	ND	11	5	45.3	ug/L
EP-8	11/12/2014	Pyrene	ND	11	4.5	117	ug/L
EP-8	11/12/2014	Dimethylphthalate	ND	11	4.1	612	ug/L
EP-8	11/12/2014	Dibenzofuran	ND	11	4.2	NA	ug/L
EP-8	11/12/2014	Benzo(g,h,i)perylene	ND	11	3.7	NA	ug/L
EP-8	11/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.8	0.343	ug/L
EP-8	11/12/2014	Benzo(b)fluoranthene	*ND*	*11*	4.5	0.34	ug/L
EP-8	11/12/2014	Fluoranthene	ND	11	3.3	802	ug/L
EP-8	11/12/2014	Benzo(k)fluoranthene	*ND*	*11*	3.9	3.43	ug/L
EP-8	11/12/2014	Acenaphthylene	ND	11	2.7	NA	ug/L
EP-8	11/12/2014	Chrysene	ND	11	3.2	34.3	ug/L
EP-8	11/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*22*	2.7	1.52	ug/L
EP-8	11/12/2014	1,3-Dichlorobenzene	ND	11	2	NA	ug/L
EP-8	11/12/2014	2,6-Dinitrotoluene	*ND*	*11*	3.8	0.485	ug/L
EP-8	11/12/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2.2	0.011	ug/L
EP-8	11/12/2014	4-Chlorophenyl-phenylether	ND	11	3.9	NA	ug/L
EP-8	11/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.7	9.81	ug/L
EP-8	11/12/2014	3,4-Methylphenol	ND	11	2	NA	ug/L
EP-8	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-8	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-8	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-8	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-8	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-8	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-8	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-8	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-8	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-8	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-8	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-8	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-8	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-8	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-8	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-8	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-8	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-8	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-8	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-8	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-8	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-8	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-8	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-8	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-8	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-8	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-8	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-8	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-8	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-8	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-8	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-8	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-8	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-8	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-8	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-8	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-8	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-8	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-8	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-8	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-8	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-8	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-8	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-8	3/25/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-8	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-8	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-8	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-8	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-8	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-8	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-8	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-8	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-8	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-8	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-8	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-8	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-8	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-8	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-8	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-8	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-8	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-8	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-8	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-8	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-8	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-8	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-8	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-8	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-8	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-8	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-8	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-8	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-8	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-8	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-8	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-8	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-8	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-8	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-8	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-8	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-8	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-8	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-8	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-8	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-8	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-8	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-8	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-8	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-8	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-8	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-8	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-8	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-8	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-8	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-8	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-8	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-8	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-8	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-8	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-8	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-8	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-8	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-8	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-8	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-8	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-8	9/1/2015	Phenol	ND	10	1.1	5761	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-8	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-8	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-8	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-8	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-8	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-8	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-8	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-8	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-8	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-8	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-8	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-8	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-8	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-8	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-8	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-8	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-8	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-8	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-8	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-8	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-8	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-8	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-8	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-8	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-8	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-8	8/30/2016	Benzo(a)pyrene	**4**	10	2.7	0.2	ug/L
EP-8	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-8	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-8	8/30/2016	Benzo(a)anthracene	**6.8**	10	2.6	0.12	ug/L
EP-8	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-8	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-8	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-8	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-8	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-8	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-8	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-8	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-8	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-8	8/30/2016	Phenanthrene	4.4	10	2.6	170	ug/L
EP-8	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-8	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-8	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-8	8/30/2016	Carbazole	2.8	10	2.3	NA	ug/L
EP-8	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
EP-8	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-8	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-8	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-8	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-8	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-8	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-8	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-8	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-8	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-8	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-8	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-8	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-8	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-8	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-8	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-8	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-8	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-8	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-8	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-8	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-8	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-8	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-8	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-8	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-8	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-8	8/30/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
EP-8	8/30/2016	Di-n-octylphthalate	3.6	10	2	200	ug/L
EP-8	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-8	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-8	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-8	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-8	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-8	8/30/2016	Pyrene	12	10	3.1	117	ug/L
EP-8	8/30/2016	Dimethylphthalate	4	10	2.4	612	ug/L
EP-8	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-8	8/30/2016	Benzo(g,h,i)perylene	3.8	10	2.6	NA	ug/L
EP-8	8/30/2016	Indeno(1,2,3-cd)pyrene	**3.3**	10	3	0.343	ug/L
EP-8	8/30/2016	Benzo(b)fluoranthene	**7.8**	10	2.9	0.34	ug/L
EP-8	8/30/2016	Fluoranthene	13	10	2.6	802	ug/L
EP-8	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-8	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-8	8/30/2016	Chrysene	7.1	10	2.8	34.3	ug/L
EP-8	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-8	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-8	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-8	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-8	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-8	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-8	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-8	3/30/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	3/30/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	3/30/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	3/30/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	3/30/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	3/30/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-8	3/30/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	3/30/2017	Benzoic Acid	31	100	20	75000	ug/L
EP-8	3/30/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	3/30/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	3/30/2017	Isophorone	ND	50	22	781	ug/L
EP-8	3/30/2017	Acenaphthene	ND	50	18	535	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	3/30/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	3/30/2017	Phenanthrene	ND	50	22	170	ug/L
EP-8	3/30/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	3/30/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	3/30/2017	Fluorene	ND	50	20	288	ug/L
EP-8	3/30/2017	Carbazole	ND	50	23	NA	ug/L
EP-8	3/30/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	3/30/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	3/30/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	3/30/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	3/30/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	3/30/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	3/30/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	3/30/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	3/30/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	3/30/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	3/30/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	3/30/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	3/30/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	3/30/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	3/30/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	3/30/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	3/30/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	3/30/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	3/30/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	3/30/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	3/30/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	3/30/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	3/30/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	3/30/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	3/30/2017	Phenol	ND	50	16	5761	ug/L
EP-8	3/30/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	3/30/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	3/30/2017	Bis(2-ethylhexyl)phthalate	33	50	24	55.64	ug/L
EP-8	3/30/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	3/30/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	3/30/2017	Anthracene	ND	50	18	1721	ug/L
EP-8	3/30/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	3/30/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	3/30/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	3/30/2017	Pyrene	ND	50	22	117	ug/L
EP-8	3/30/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	3/30/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	3/30/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	3/30/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	3/30/2017	Fluoranthene	ND	50	21	802	ug/L
EP-8	3/30/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	3/30/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	3/30/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	3/30/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	3/30/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	3/30/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	3/30/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-8	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-8	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-8	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-8	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-8	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-8	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-8	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-8	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-8	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	10/24/2017	Anthracene	ND	50	18	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-8	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-8	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	2/23/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-8	2/23/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-8	2/23/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-8	2/23/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-8	2/23/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-8	2/23/2018	Aniline	*ND*	*50*	15	13	ug/L
EP-8	2/23/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-8	2/23/2018	Benzoic Acid	46	100	20	75000	ug/L
EP-8	2/23/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-8	2/23/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-8	2/23/2018	Isophorone	ND	50	22	781	ug/L
EP-8	2/23/2018	Acenaphthene	ND	50	18	535	ug/L
EP-8	2/23/2018	Diethylphthalate	ND	50	20	14801	ug/L
EP-8	2/23/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-8	2/23/2018	Phenanthrene	ND	50	22	170	ug/L
EP-8	2/23/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-8	2/23/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-8	2/23/2018	Fluorene	ND	50	20	288	ug/L
EP-8	2/23/2018	Carbazole	ND	50	23	NA	ug/L
EP-8	2/23/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-8	2/23/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-8	2/23/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-8	2/23/2018	2-Nitroaniline	ND	50	25	190	ug/L
EP-8	2/23/2018	2-Nitrophenol	ND	50	26	NA	ug/L
EP-8	2/23/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-8	2/23/2018	Naphthalene	*ND*	*50*	14	30	ug/L
EP-8	2/23/2018	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-8	2/23/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-8	2/23/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-8	2/23/2018	2-Methylphenol	ND	50	17	NA	ug/L
EP-8	2/23/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-8	2/23/2018	2-Chlorophenol	ND	50	38	91	ug/L
EP-8	2/23/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-8	2/23/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-8	2/23/2018	3-Nitroaniline	ND	50	22	NA	ug/L
EP-8	2/23/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-8	2/23/2018	4-Nitrophenol	ND	50	27	NA	ug/L
EP-8	2/23/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-8	2/23/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-8	2/23/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-8	2/23/2018	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-8	2/23/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-8	2/23/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-8	2/23/2018	Phenol	ND	50	16	5761	ug/L
EP-8	2/23/2018	Pyridine	*ND*	*50*	11	20	ug/L
EP-8	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-8	2/23/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-8	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-8	2/23/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-8	2/23/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-8	2/23/2018	Anthracene	ND	50	18	1721	ug/L
EP-8	2/23/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-8	2/23/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-8	2/23/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-8	2/23/2018	Pyrene	ND	50	22	117	ug/L
EP-8	2/23/2018	Dimethylphthalate	ND	50	18	612	ug/L
EP-8	2/23/2018	Dibenzofuran	ND	50	20	NA	ug/L
EP-8	2/23/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-8	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-8	2/23/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-8	2/23/2018	Fluoranthene	ND	50	21	802	ug/L
EP-8	2/23/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-8	2/23/2018	Acenaphthylene	ND	50	18	NA	ug/L
EP-8	2/23/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-8	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-8	2/23/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-8	2/23/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-8	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-8	2/23/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-8	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-8	2/23/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-8	9/7/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
EP-8	9/7/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
EP-8	9/7/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
EP-8	9/7/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
EP-8	9/7/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
EP-8	9/7/2018	Aniline	*ND*	*50*	31	13	ug/L
EP-8	9/7/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
EP-8	9/7/2018	Benzoic Acid	ND	100	32	75000	ug/L
EP-8	9/7/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
EP-8	9/7/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
EP-8	9/7/2018	Isophorone	ND	50	31	781	ug/L
EP-8	9/7/2018	Acenaphthene	ND	50	29	535	ug/L
EP-8	9/7/2018	Diethylphthalate	ND	50	31	14801	ug/L
EP-8	9/7/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
EP-8	9/7/2018	Phenanthrene	ND	50	30	170	ug/L
EP-8	9/7/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
EP-8	9/7/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
EP-8	9/7/2018	Fluorene	ND	50	32	288	ug/L
EP-8	9/7/2018	Carbazole	ND	50	31	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/7/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
EP-8	9/7/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
EP-8	9/7/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
EP-8	9/7/2018	2-Nitroaniline	ND	50	29	190	ug/L
EP-8	9/7/2018	2-Nitrophenol	ND	50	30	NA	ug/L
EP-8	9/7/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
EP-8	9/7/2018	Naphthalene	*ND*	*50*	25	30	ug/L
EP-8	9/7/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
EP-8	9/7/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
EP-8	9/7/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
EP-8	9/7/2018	2-Methylphenol	ND	50	32	NA	ug/L
EP-8	9/7/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
EP-8	9/7/2018	2-Chlorophenol	ND	50	29	91	ug/L
EP-8	9/7/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
EP-8	9/7/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
EP-8	9/7/2018	3-Nitroaniline	ND	50	34	NA	ug/L
EP-8	9/7/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
EP-8	9/7/2018	4-Nitrophenol	ND	50	28	NA	ug/L
EP-8	9/7/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
EP-8	9/7/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
EP-8	9/7/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
EP-8	9/7/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
EP-8	9/7/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
EP-8	9/7/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
EP-8	9/7/2018	Phenol	ND	50	30	5761	ug/L
EP-8	9/7/2018	Pyridine	*ND*	*50*	27	20	ug/L
EP-8	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
EP-8	9/7/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
EP-8	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
EP-8	9/7/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
EP-8	9/7/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
EP-8	9/7/2018	Anthracene	ND	50	29	1721	ug/L
EP-8	9/7/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
EP-8	9/7/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
EP-8	9/7/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
EP-8	9/7/2018	Pyrene	ND	50	33	117	ug/L
EP-8	9/7/2018	Dimethylphthalate	ND	50	30	612	ug/L
EP-8	9/7/2018	Dibenzofuran	ND	50	34	NA	ug/L
EP-8	9/7/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
EP-8	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
EP-8	9/7/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
EP-8	9/7/2018	Fluoranthene	ND	50	29	802	ug/L
EP-8	9/7/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
EP-8	9/7/2018	Acenaphthylene	ND	50	31	NA	ug/L
EP-8	9/7/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
EP-8	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
EP-8	9/7/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
EP-8	9/7/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
EP-8	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
EP-8	9/7/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
EP-8	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
EP-8	9/7/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
EP-8	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-8	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-8	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-8	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-8	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-8	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-8	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-8	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-8	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-8	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-8	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-8	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-8	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-8	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-8	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-8	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-8	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-8	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-8	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-8	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-8	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-8	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-8	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-8	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-8	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-8	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-8	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-8	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-8	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-8	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-8	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-8	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-8	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-8	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-8	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-8	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-8	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-8	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-8	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-8	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-8	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-8	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-8	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-8	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-8	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-8	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-8	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-8	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-8	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-8	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-8	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-8	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-8	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-8	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-8	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-8	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-8	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-8	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-8	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-8	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-8	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-8	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-8	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-8	4/29/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
EP-8	4/29/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
EP-8	4/29/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
EP-8	4/29/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
EP-8	4/29/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
EP-8	4/29/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
EP-8	4/29/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
EP-8	4/29/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
EP-8	4/29/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
EP-8	4/29/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
EP-8	4/29/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
EP-8	4/29/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
EP-8	4/29/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
EP-8	4/29/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
EP-8	4/29/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
EP-8	4/29/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
EP-8	4/29/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
EP-8	4/29/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
EP-8	4/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
EP-8	4/29/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
EP-8	4/29/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
EP-8	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
EP-8	4/29/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
EP-8	4/29/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
EP-8	4/29/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
EP-8	4/29/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
EP-8	4/29/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
EP-8	4/29/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
EP-8	4/29/2019	Acenaphthene	ND	10	5.83902	535	ug/L
EP-8	4/29/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
EP-8	4/29/2019	Aniline	ND	10	6.210394	13	ug/L
EP-8	4/29/2019	Anthracene	ND	10	5.739652	1721	ug/L
EP-8	4/29/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
EP-8	4/29/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
EP-8	4/29/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
EP-8	4/29/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
EP-8	4/29/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
EP-8	4/29/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
EP-8	4/29/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
EP-8	4/29/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
EP-8	4/29/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
EP-8	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
EP-8	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
EP-8	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
EP-8	4/29/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
EP-8	4/29/2019	Carbazole	ND	10	6.275002	NA	ug/L
EP-8	4/29/2019	Chrysene	ND	10	6.777819	34.3	ug/L
EP-8	4/29/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
EP-8	4/29/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
EP-8	4/29/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
EP-8	4/29/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
EP-8	4/29/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
EP-8	4/29/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
EP-8	4/29/2019	Fluoranthene	ND	10	5.81225	802	ug/L
EP-8	4/29/2019	Fluorene	ND	10	6.311889	288	ug/L
EP-8	4/29/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
EP-8	4/29/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
EP-8	4/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
EP-8	4/29/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
EP-8	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
EP-8	4/29/2019	Isophorone	ND	10	6.242104	781	ug/L
EP-8	4/29/2019	Naphthalene	ND	10	5.041403	30	ug/L
EP-8	4/29/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
EP-8	4/29/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
EP-8	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
EP-8	4/29/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
EP-8	4/29/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
EP-8	4/29/2019	Phenanthrene	ND	10	6.043051	170	ug/L
EP-8	4/29/2019	Phenol	ND	10	5.977352	5761	ug/L
EP-8	4/29/2019	Pyrene	ND	10	6.527145	117	ug/L
EP-8	4/29/2019	Pyridine	ND	10	5.420525	20	ug/L
EP-8	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-8	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-8	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-8	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-8	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-8	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-8	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-8	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-8	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-8	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-8	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-8	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-8	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-8	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-8	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-8	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-8	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-8	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-8	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-8	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-8	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-8	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-8	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-8	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
EP-8	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-8	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-8	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-8	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-8	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-8	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-8	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-8	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-8	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-8	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-8	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-8	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-8	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-8	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-8	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-8	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-8	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-8	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-8	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-8	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-8	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-8	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-8	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-8	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-8	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-8	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-8	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-8	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-8	11/20/2019	Phenol	11	0.5	0.5	5761	ug/L
EP-8	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-8	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-8	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-8	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-8	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-8	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-8	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-8	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-8	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-8	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-8	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-8	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-8	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-8	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-8	9/17/2020	2,6-Dinitrotoluene	*ND*	*0.51*	0.1	0.485	ug/L
EP-8	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-8	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-8	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-8	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-8	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-8	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-8	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-8	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-8	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-8	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-8	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-8	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-8	9/17/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
EP-8	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-8	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-8	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-8	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-8	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-8	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-8	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-8	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-8	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-8	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-8	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-8	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-8	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-8	9/17/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
EP-8	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-8	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-8	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-8	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-8	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-8	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-8	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-8	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
EP-8	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-8	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-8	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-8	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-8	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-8	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-8	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-8	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-8	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-8	9/17/2020	Phenol	0.64	0.51	0.1	5761	ug/L
EP-8	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-8	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-8	12/22/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
EP-8	12/22/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
EP-8	12/22/2020	Anthracene	ND	11.3	0.204	1721	ug/L
EP-8	12/22/2020	Benzo(a)anthracene	*ND*	*11.3*	0.204	0.12	ug/L
EP-8	12/22/2020	Benzo(a)pyrene	*ND*	*11.3*	0.136	0.2	ug/L
EP-8	12/22/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.17	0.34	ug/L
EP-8	12/22/2020	Benzo(g,h,i)perylene	ND	11.3	0.26	NA	ug/L
EP-8	12/22/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
EP-8	12/22/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
EP-8	12/22/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
EP-8	12/22/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.66	55.64	ug/L
EP-8	12/22/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
EP-8	12/22/2020	Butylbenzylphthalate	ND	11.3	0.215	16	ug/L
EP-8	12/22/2020	Carbazole	ND	11.3	0.26	NA	ug/L
EP-8	12/22/2020	4-Chloroaniline	*ND*	*11.3*	3.85	0.37	ug/L
EP-8	12/22/2020	4-Chloro-3-Methylphenol	ND	11.3	4.3	NA	ug/L
EP-8	12/22/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
EP-8	12/22/2020	2-Chlorophenol	ND	11.3	2.49	91	ug/L
EP-8	12/22/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
EP-8	12/22/2020	1,3-Dichlorobenzene	ND	11.3	0.204	NA	ug/L
EP-8	12/22/2020	Chrysene	ND	11.3	0.215	34.3	ug/L
EP-8	12/22/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
EP-8	12/22/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
EP-8	12/22/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
EP-8	12/22/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.94	1.25	ug/L
EP-8	12/22/2020	2,4-Dichlorophenol	ND	11.3	3.39	45.3	ug/L
EP-8	12/22/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
EP-8	12/22/2020	2,4-Dimethylphenol	ND	11.3	3.96	354	ug/L
EP-8	12/22/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
EP-8	12/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
EP-8	12/22/2020	2,4-Dinitrophenol	ND	33.9	3.85	38.7	ug/L
EP-8	12/22/2020	2,4-Dinitrotoluene	ND	11.3	2.15	45.3	ug/L
EP-8	12/22/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.15	0.485	ug/L
EP-8	12/22/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
EP-8	12/22/2020	Fluoranthene	ND	11.3	0.204	802	ug/L
EP-8	12/22/2020	Fluorene	ND	11.3	0.204	288	ug/L
EP-8	12/22/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
EP-8	12/22/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.94	0.41	ug/L
EP-8	12/22/2020	Hexachloroethane	*ND*	*11.3*	4.75	3.28	ug/L
EP-8	12/22/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.249	0.343	ug/L
EP-8	12/22/2020	Isophorone	ND	11.3	0.158	781	ug/L
EP-8	12/22/2020	2-Methylphenol	ND	11.3	2.04	NA	ug/L
EP-8	12/22/2020	Naphthalene	ND	11.3	0.192	30	ug/L
EP-8	12/22/2020	2-Nitroaniline	ND	11.3	2.49	190	ug/L
EP-8	12/22/2020	3-Nitroaniline	ND	11.3	2.04	NA	ug/L
EP-8	12/22/2020	4-Nitroaniline	*ND*	*11.3*	1.7	3.8	ug/L
EP-8	12/22/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
EP-8	12/22/2020	2-Nitrophenol	ND	11.3	5.88	NA	ug/L
EP-8	12/22/2020	4-Nitrophenol	ND	11.3	2.38	NA	ug/L
EP-8	12/22/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.73	0.011	ug/L
EP-8	12/22/2020	N-Nitrosodiphenylamine	ND	11.3	0.204	122	ug/L
EP-8	12/22/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
EP-8	12/22/2020	Phenanthrene	ND	11.3	0.204	170	ug/L
EP-8	12/22/2020	Phenol	ND	11.3	2.94	5761	ug/L
EP-8	12/22/2020	Pyrene	ND	11.3	0.238	117	ug/L
EP-8	12/22/2020	2,4,5-Trichlorophenol	ND	11.3	4.19	1166	ug/L
EP-8	12/22/2020	2,4,6-Trichlorophenol	ND	11.3	3.96	11.9*	ug/L
EP-8	12/22/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
EP-8	12/22/2020	Aniline	ND	11.3	4.3	13	ug/L
EP-8	12/22/2020	Benzoic Acid	ND	33.9	8.26	75000	ug/L
EP-8	12/22/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
EP-8	12/22/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
EP-8	12/22/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.96	0.0049	ug/L
EP-8	12/22/2020	Pyridine	ND	11.3	3.62	20	ug/L
EP-8	12/22/2020	1,2,4-Trichlorobenzene	ND	11.3	0.204	70	ug/L
EP-8	12/22/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
EP-8	12/22/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
EP-9	5/29/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
EP-9	5/29/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	5/29/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
EP-9	5/29/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
EP-9	5/29/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
EP-9	5/29/2012	Aniline	ND	10	2	13	ug/L
EP-9	5/29/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
EP-9	5/29/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
EP-9	5/29/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-9	5/29/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	5/29/2012	Isophorone	ND	10	2.4	781	ug/L
EP-9	5/29/2012	Acenaphthene	ND	10	2.7	535	ug/L
EP-9	5/29/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
EP-9	5/29/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
EP-9	5/29/2012	Phenanthrene	ND	10	2.1	170	ug/L
EP-9	5/29/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	5/29/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
EP-9	5/29/2012	Fluorene	ND	10	2.3	288	ug/L
EP-9	5/29/2012	Carbazole	ND	10	2.6	NA	ug/L
EP-9	5/29/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	5/29/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
EP-9	5/29/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
EP-9	5/29/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
EP-9	5/29/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-9	5/29/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-9	5/29/2012	Naphthalene	ND	10	2.9	30	ug/L
EP-9	5/29/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
EP-9	5/29/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
EP-9	5/29/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
EP-9	5/29/2012	2-Methylphenol	70	10	2.8	NA	ug/L
EP-9	5/29/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
EP-9	5/29/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
EP-9	5/29/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
EP-9	5/29/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	5/29/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
EP-9	5/29/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
EP-9	5/29/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
EP-9	5/29/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/29/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
EP-9	5/29/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-9	5/29/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
EP-9	5/29/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
EP-9	5/29/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
EP-9	5/29/2012	Phenol	230	20	5	5761	ug/L
EP-9	5/29/2012	Pyridine	ND	10	2.4	20	ug/L
EP-9	5/29/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
EP-9	5/29/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
EP-9	5/29/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-9	5/29/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
EP-9	5/29/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
EP-9	5/29/2012	Anthracene	ND	10	2.8	1721	ug/L
EP-9	5/29/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-9	5/29/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
EP-9	5/29/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-9	5/29/2012	Pyrene	ND	10	2.9	117	ug/L
EP-9	5/29/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
EP-9	5/29/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
EP-9	5/29/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
EP-9	5/29/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
EP-9	5/29/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
EP-9	5/29/2012	Fluoranthene	ND	10	2.7	802	ug/L
EP-9	5/29/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
EP-9	5/29/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
EP-9	5/29/2012	Chrysene	ND	10	3	34.3	ug/L
EP-9	5/29/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
EP-9	5/29/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
EP-9	5/29/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
EP-9	5/29/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
EP-9	5/29/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-9	5/29/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
EP-9	5/29/2012	3,4-Methylphenol	120	10	2.9	NA	ug/L
EP-9	11/6/2012	Benzo(a)pyrene	*ND*	*50*	13	0.2	ug/L
EP-9	11/6/2012	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
EP-9	11/6/2012	Dibenzo(a,h)anthracene	ND	50	14	NA	ug/L
EP-9	11/6/2012	Benzo(a)anthracene	*ND*	*50*	14	0.12	ug/L
EP-9	11/6/2012	4-Chloro-3-Methylphenol	ND	50	11	NA	ug/L
EP-9	11/6/2012	Aniline	*ND*	*50*	9.9	13	ug/L
EP-9	11/6/2012	N-Nitrosodimethylamine	*ND*	*50*	14	0.0049	ug/L
EP-9	11/6/2012	Benzoic Acid	ND	100	29	75000	ug/L
EP-9	11/6/2012	Hexachloroethane	*ND*	*50*	14	3.28	ug/L
EP-9	11/6/2012	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-9	11/6/2012	Isophorone	ND	50	12	781	ug/L
EP-9	11/6/2012	Acenaphthene	ND	50	13	535	ug/L
EP-9	11/6/2012	Diethylphthalate	ND	50	11	14801	ug/L
EP-9	11/6/2012	Di-n-butylphthalate	ND	50	16	885	ug/L
EP-9	11/6/2012	Phenanthrene	ND	50	11	170	ug/L
EP-9	11/6/2012	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
EP-9	11/6/2012	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
EP-9	11/6/2012	Fluorene	ND	50	12	288	ug/L
EP-9	11/6/2012	Carbazole	ND	50	13	NA	ug/L
EP-9	11/6/2012	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
EP-9	11/6/2012	Pentachlorophenol	*ND*	*100*	8.2	1	ug/L
EP-9	11/6/2012	2,4,6-Trichlorophenol	ND	50	11	11.9*	ug/L
EP-9	11/6/2012	2-Nitroaniline	ND	50	13	190	ug/L
EP-9	11/6/2012	2-Nitrophenol	ND	50	12	NA	ug/L
EP-9	11/6/2012	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
EP-9	11/6/2012	Naphthalene	*ND*	*50*	15	30	ug/L
EP-9	11/6/2012	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
EP-9	11/6/2012	2-Chloronaphthalene	ND	50	14	733	ug/L
EP-9	11/6/2012	3,3-Dichlorobenzidine	*ND*	*50*	22	1.25	ug/L
EP-9	11/6/2012	2-Methylphenol	ND	50	14	NA	ug/L
EP-9	11/6/2012	1,2-Dichlorobenzene	ND	50	13	600	ug/L
EP-9	11/6/2012	2-Chlorophenol	ND	50	14	91	ug/L
EP-9	11/6/2012	2,4,5-Trichlorophenol	ND	50	13	1166	ug/L
EP-9	11/6/2012	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
EP-9	11/6/2012	3-Nitroaniline	ND	50	12	NA	ug/L
EP-9	11/6/2012	4-Nitroaniline	*ND*	*50*	14	3.8	ug/L
EP-9	11/6/2012	4-Nitrophenol	ND	50	18	NA	ug/L
EP-9	11/6/2012	Benzyl Alcohol	ND	50	10	2000	ug/L
EP-9	11/6/2012	4-Bromophenyl-phenylether	ND	50	17	NA	ug/L
EP-9	11/6/2012	Azobenzene	*ND*	*50*	14	0.12	ug/L
EP-9	11/6/2012	2,4-Dimethylphenol	ND	50	16	354	ug/L
EP-9	11/6/2012	1,4-Dichlorobenzene	ND	50	14	75	ug/L
EP-9	11/6/2012	4-Chloroaniline	*ND*	*50*	17	0.37	ug/L
EP-9	11/6/2012	Phenol	ND	50	13	5761	ug/L
EP-9	11/6/2012	Pyridine	*ND*	*50*	12	20	ug/L
EP-9	11/6/2012	Bis(2-chloroethyl)ether	*ND*	*50*	11	0.137	ug/L
EP-9	11/6/2012	Bis(2-chloroethoxy)methane	ND	50	18	59	ug/L
EP-9	11/6/2012	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
EP-9	11/6/2012	Di-n-octylphthalate	ND	100	14	200	ug/L
EP-9	11/6/2012	Hexachlorobenzene	*ND*	*50*	15	0.0976	ug/L
EP-9	11/6/2012	Anthracene	ND	50	14	1721	ug/L
EP-9	11/6/2012	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
EP-9	11/6/2012	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
EP-9	11/6/2012	2,4-Dinitrotoluene	*ND*	*50*	14	45.3	ug/L
EP-9	11/6/2012	Pyrene	ND	50	14	117	ug/L
EP-9	11/6/2012	Dimethylphthalate	ND	50	13	612	ug/L
EP-9	11/6/2012	Dibenzofuran	ND	50	14	NA	ug/L
EP-9	11/6/2012	Benzo(g,h,i)perylene	ND	50	15	NA	ug/L
EP-9	11/6/2012	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
EP-9	11/6/2012	Benzo(b)fluoranthene	*ND*	*50*	15	0.34	ug/L
EP-9	11/6/2012	Fluoranthene	ND	50	14	802	ug/L
EP-9	11/6/2012	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
EP-9	11/6/2012	Acenaphthylene	ND	50	13	NA	ug/L
EP-9	11/6/2012	Chrysene	*ND*	*50*	15	34.3	ug/L
EP-9	11/6/2012	4,6-Dinitro-2-methylphenol	*ND*	*100*	11	1.52	ug/L
EP-9	11/6/2012	1,3-Dichlorobenzene	ND	50	15	NA	ug/L
EP-9	11/6/2012	2,6-Dinitrotoluene	*ND*	*50*	13	0.485	ug/L
EP-9	11/6/2012	N-Nitrosodi-n-propylamine	*ND*	*50*	16	0.011	ug/L
EP-9	11/6/2012	4-Chlorophenyl-phenylether	ND	50	12	NA	ug/L
EP-9	11/6/2012	Bis(2-chloroisopropyl)ether	*ND*	*50*	13	9.81	ug/L
EP-9	11/6/2012	3,4-Methylphenol	ND	50	14	NA	ug/L
EP-9	5/28/2013	Benzo(a)pyrene	*ND*	*30*	7.5	0.2	ug/L
EP-9	5/28/2013	2,4-Dinitrophenol	*ND*	*60*	9.6	38.7	ug/L
EP-9	5/28/2013	Dibenzo(a,h)anthracene	ND	30	12	NA	ug/L
EP-9	5/28/2013	Benzo(a)anthracene	*ND*	*30*	7.8	0.12	ug/L
EP-9	5/28/2013	4-Chloro-3-Methylphenol	ND	30	8	NA	ug/L
EP-9	5/28/2013	Aniline	*ND*	*30*	6.6	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	N-Nitrosodimethylamine	*ND*	*30*	14	0.0049	ug/L
EP-9	5/28/2013	Benzoic Acid	ND	60	17	75000	ug/L
EP-9	5/28/2013	Hexachloroethane	*ND*	*30*	8.7	3.28	ug/L
EP-9	5/28/2013	Hexachlorocyclopentadiene	*ND*	*30*	6.2	0.41	ug/L
EP-9	5/28/2013	Isophorone	ND	30	5.3	781	ug/L
EP-9	5/28/2013	Acenaphthene	ND	30	7.7	535	ug/L
EP-9	5/28/2013	Diethylphthalate	ND	30	9	14801	ug/L
EP-9	5/28/2013	Di-n-butylphthalate	ND	30	7.2	885	ug/L
EP-9	5/28/2013	Phenanthrene	ND	30	4.9	170	ug/L
EP-9	5/28/2013	Butylbenzylphthalate	*ND*	*30*	8.2	16	ug/L
EP-9	5/28/2013	N-Nitrosodiphenylamine	ND	30	7	122	ug/L
EP-9	5/28/2013	Fluorene	ND	30	7.4	288	ug/L
EP-9	5/28/2013	Carbazole	ND	30	6.9	NA	ug/L
EP-9	5/28/2013	Hexachlorobutadiene	*ND*	*30*	8.2	0.14	ug/L
EP-9	5/28/2013	Pentachlorophenol	*ND*	*60*	4.3	1	ug/L
EP-9	5/28/2013	2,4,6-Trichlorophenol	ND	30	7.9	11.9*	ug/L
EP-9	5/28/2013	2-Nitroaniline	ND	30	8.6	190	ug/L
EP-9	5/28/2013	2-Nitrophenol	ND	30	7	NA	ug/L
EP-9	5/28/2013	1-Methylnaphthalene	*ND*	*30*	6.7	11.38	ug/L
EP-9	5/28/2013	Naphthalene	ND	30	7.3	30	ug/L
EP-9	5/28/2013	2-Methylnaphthalene	ND	30	7.2	35.1	ug/L
EP-9	5/28/2013	2-Chloronaphthalene	ND	30	7.3	733	ug/L
EP-9	5/28/2013	3,3-Dichlorobenzidine	*ND*	*30*	11	1.25	ug/L
EP-9	5/28/2013	2-Methylphenol	ND	30	8.1	NA	ug/L
EP-9	5/28/2013	1,2-Dichlorobenzene	ND	30	9	600	ug/L
EP-9	5/28/2013	2-Chlorophenol	ND	30	8	91	ug/L
EP-9	5/28/2013	2,4,5-Trichlorophenol	ND	30	7.2	1166	ug/L
EP-9	5/28/2013	Nitrobenzene	*ND*	*30*	8.7	1.4	ug/L
EP-9	5/28/2013	3-Nitroaniline	ND	30	8	NA	ug/L
EP-9	5/28/2013	4-Nitroaniline	*ND*	*30*	7.6	3.8	ug/L
EP-9	5/28/2013	4-Nitrophenol	ND	30	6.4	NA	ug/L
EP-9	5/28/2013	Benzyl Alcohol	ND	30	7.4	2000	ug/L
EP-9	5/28/2013	4-Bromophenyl-phenylether	ND	30	7.5	NA	ug/L
EP-9	5/28/2013	Azobenzene	*ND*	*30*	6.9	0.12	ug/L
EP-9	5/28/2013	2,4-Dimethylphenol	ND	30	8.8	354	ug/L
EP-9	5/28/2013	1,4-Dichlorobenzene	ND	30	11	75	ug/L
EP-9	5/28/2013	4-Chloroaniline	*ND*	*30*	6.7	0.37	ug/L
EP-9	5/28/2013	Phenol	ND	30	6.6	5761	ug/L
EP-9	5/28/2013	Pyridine	*ND*	*30*	11	20	ug/L
EP-9	5/28/2013	Bis(2-chloroethyl)ether	*ND*	*30*	12	0.137	ug/L
EP-9	5/28/2013	Bis(2-chloroethoxy)methane	ND	30	7.3	59	ug/L
EP-9	5/28/2013	Bis(2-ethylhexyl)phthalate	ND	30	8.3	55.64	ug/L
EP-9	5/28/2013	Di-n-octylphthalate	ND	30	10	200	ug/L
EP-9	5/28/2013	Hexachlorobenzene	*ND*	*30*	8	0.0976	ug/L
EP-9	5/28/2013	Anthracene	ND	30	6.5	1721	ug/L
EP-9	5/28/2013	1,2,4-Trichlorobenzene	ND	30	6.7	70	ug/L
EP-9	5/28/2013	2,4-Dichlorophenol	*ND*	*60*	6.5	45.3	ug/L
EP-9	5/28/2013	2,4-Dinitrotoluene	ND	30	8.5	45.3	ug/L
EP-9	5/28/2013	Pyrene	ND	30	6.4	117	ug/L
EP-9	5/28/2013	Dimethylphthalate	ND	30	8.3	612	ug/L
EP-9	5/28/2013	Dibenzofuran	ND	30	7.7	NA	ug/L
EP-9	5/28/2013	Benzo(g,h,i)perylene	ND	30	8.3	NA	ug/L
EP-9	5/28/2013	Indeno(1,2,3-cd)pyrene	*ND*	*30*	9.5	0.343	ug/L
EP-9	5/28/2013	Benzo(b)fluoranthene	*ND*	*30*	8.8	0.34	ug/L
EP-9	5/28/2013	Fluoranthene	ND	30	7.2	802	ug/L
EP-9	5/28/2013	Benzo(k)fluoranthene	*ND*	*30*	7.8	3.43	ug/L
EP-9	5/28/2013	Acenaphthylene	ND	30	8.4	NA	ug/L
EP-9	5/28/2013	Chrysene	ND	30	8	34.3	ug/L
EP-9	5/28/2013	4,6-Dinitro-2-methylphenol	*ND*	*60*	4.2	1.52	ug/L
EP-9	5/28/2013	1,3-Dichlorobenzene	ND	30	9.2	NA	ug/L
EP-9	5/28/2013	2,6-Dinitrotoluene	*ND*	*30*	8.5	0.485	ug/L
EP-9	5/28/2013	N-Nitrosodi-n-propylamine	*ND*	*30*	9.6	0.011	ug/L
EP-9	5/28/2013	4-Chlorophenyl-phenylether	ND	30	7.9	NA	ug/L
EP-9	5/28/2013	Bis(2-chloroisopropyl)ether	*ND*	*30*	9.9	9.81	ug/L
EP-9	5/28/2013	3,4-Methylphenol	ND	30	11	NA	ug/L
EP-9	10/15/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
EP-9	10/15/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	10/15/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
EP-9	10/15/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-9	10/15/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	Aniline	ND	10	2.2	13	ug/L
EP-9	10/15/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
EP-9	10/15/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
EP-9	10/15/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
EP-9	10/15/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
EP-9	10/15/2013	Isophorone	ND	10	1.8	781	ug/L
EP-9	10/15/2013	Acenaphthene	ND	10	2.6	535	ug/L
EP-9	10/15/2013	Diethylphthalate	ND	10	3	14801	ug/L
EP-9	10/15/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-9	10/15/2013	Phenanthrene	ND	10	1.6	170	ug/L
EP-9	10/15/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
EP-9	10/15/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-9	10/15/2013	Fluorene	ND	10	2.5	288	ug/L
EP-9	10/15/2013	Carbazole	ND	10	2.3	NA	ug/L
EP-9	10/15/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
EP-9	10/15/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
EP-9	10/15/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
EP-9	10/15/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
EP-9	10/15/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
EP-9	10/15/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
EP-9	10/15/2013	Naphthalene	ND	10	2.4	30	ug/L
EP-9	10/15/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
EP-9	10/15/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
EP-9	10/15/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
EP-9	10/15/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
EP-9	10/15/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
EP-9	10/15/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
EP-9	10/15/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
EP-9	10/15/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
EP-9	10/15/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
EP-9	10/15/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
EP-9	10/15/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
EP-9	10/15/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
EP-9	10/15/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
EP-9	10/15/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
EP-9	10/15/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
EP-9	10/15/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
EP-9	10/15/2013	Phenol	ND	10	2.2	5761	ug/L
EP-9	10/15/2013	Pyridine	ND	10	3.5	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
EP-9	10/15/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
EP-9	10/15/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
EP-9	10/15/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
EP-9	10/15/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
EP-9	10/15/2013	Anthracene	ND	10	2.2	1721	ug/L
EP-9	10/15/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
EP-9	10/15/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
EP-9	10/15/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
EP-9	10/15/2013	Pyrene	ND	10	2.1	117	ug/L
EP-9	10/15/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
EP-9	10/15/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
EP-9	10/15/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
EP-9	10/15/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
EP-9	10/15/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-9	10/15/2013	Fluoranthene	ND	10	2.4	802	ug/L
EP-9	10/15/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
EP-9	10/15/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
EP-9	10/15/2013	Chrysene	ND	10	2.7	34.3	ug/L
EP-9	10/15/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	10/15/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
EP-9	10/15/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
EP-9	10/15/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
EP-9	10/15/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	10/15/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
EP-9	10/15/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-9	3/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	3/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-9	3/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-9	3/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Aniline	ND	10	2.4	13	ug/L
EP-9	3/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-9	3/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-9	3/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-9	3/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-9	3/5/2014	Isophorone	ND	10	3.1	781	ug/L
EP-9	3/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-9	3/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
EP-9	3/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-9	3/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-9	3/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-9	3/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-9	3/5/2014	Fluorene	ND	10	2.9	288	ug/L
EP-9	3/5/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-9	3/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	3/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-9	3/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-9	3/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	3/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-9	3/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-9	3/5/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-9	3/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-9	3/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-9	3/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	3/5/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-9	3/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-9	3/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-9	3/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-9	3/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	3/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-9	3/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-9	3/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-9	3/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-9	3/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-9	3/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-9	3/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-9	3/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	3/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-9	3/5/2014	Phenol	ND	10	1.6	5761	ug/L
EP-9	3/5/2014	Pyridine	ND	10	1.6	20	ug/L
EP-9	3/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	3/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	3/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
EP-9	3/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-9	3/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-9	3/5/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-9	3/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	3/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-9	3/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-9	3/5/2014	Pyrene	ND	10	4	117	ug/L
EP-9	3/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-9	3/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-9	3/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-9	3/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-9	3/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-9	3/5/2014	Fluoranthene	ND	10	3	802	ug/L
EP-9	3/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-9	3/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-9	3/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-9	3/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-9	3/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	3/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-9	3/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-9	3/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-9	3/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-9	3/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
EP-9	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
EP-9	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
EP-9	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
EP-9	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
EP-9	11/13/2014	Aniline	ND	10	2.4	13	ug/L
EP-9	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
EP-9	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
EP-9	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
EP-9	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
EP-9	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
EP-9	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
EP-9	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
EP-9	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
EP-9	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
EP-9	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
EP-9	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
EP-9	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
EP-9	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
EP-9	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
EP-9	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
EP-9	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
EP-9	11/13/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
EP-9	11/13/2014	Naphthalene	ND	10	2.3	30	ug/L
EP-9	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
EP-9	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
EP-9	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
EP-9	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
EP-9	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
EP-9	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
EP-9	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
EP-9	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
EP-9	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
EP-9	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
EP-9	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
EP-9	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
EP-9	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
EP-9	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
EP-9	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
EP-9	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
EP-9	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
EP-9	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	11/13/2014	Bis(2-ethylhexyl)phthalate	18	10	3	55.64	ug/L
EP-9	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
EP-9	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
EP-9	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
EP-9	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
EP-9	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
EP-9	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
EP-9	11/13/2014	Pyrene	ND	10	4	117	ug/L
EP-9	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
EP-9	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
EP-9	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
EP-9	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
EP-9	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
EP-9	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
EP-9	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
EP-9	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
EP-9	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
EP-9	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
EP-9	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
EP-9	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
EP-9	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
EP-9	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
EP-9	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
EP-9	3/25/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	3/25/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-9	3/25/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-9	3/25/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-9	3/25/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Aniline	ND	10	1.5	13	ug/L
EP-9	3/25/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-9	3/25/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-9	3/25/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-9	3/25/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-9	3/25/2015	Isophorone	ND	10	2	781	ug/L
EP-9	3/25/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-9	3/25/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-9	3/25/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-9	3/25/2015	Phenanthrene	ND	10	2	170	ug/L
EP-9	3/25/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	3/25/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-9	3/25/2015	Fluorene	ND	10	1.7	288	ug/L
EP-9	3/25/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-9	3/25/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-9	3/25/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-9	3/25/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-9	3/25/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-9	3/25/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-9	3/25/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-9	3/25/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-9	3/25/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-9	3/25/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-9	3/25/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-9	3/25/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-9	3/25/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-9	3/25/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-9	3/25/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-9	3/25/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-9	3/25/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-9	3/25/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-9	3/25/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-9	3/25/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-9	3/25/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-9	3/25/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-9	3/25/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-9	3/25/2015	Phenol	ND	10	1.1	5761	ug/L
EP-9	3/25/2015	Pyridine	ND	10	1.7	20	ug/L
EP-9	3/25/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	3/25/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-9	3/25/2015	Bis(2-ethylhexyl)phthalate	14	10	3.3	55.64	ug/L
EP-9	3/25/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-9	3/25/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-9	3/25/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-9	3/25/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/25/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-9	3/25/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-9	3/25/2015	Pyrene	ND	10	2.3	117	ug/L
EP-9	3/25/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-9	3/25/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-9	3/25/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-9	3/25/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-9	3/25/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-9	3/25/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-9	3/25/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-9	3/25/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-9	3/25/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	3/25/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-9	3/25/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-9	3/25/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-9	3/25/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-9	3/25/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-9	3/25/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	9/1/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
EP-9	9/1/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
EP-9	9/1/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
EP-9	9/1/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Aniline	ND	10	1.5	13	ug/L
EP-9	9/1/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
EP-9	9/1/2015	Benzoic Acid	ND	20	1	75000	ug/L
EP-9	9/1/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
EP-9	9/1/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
EP-9	9/1/2015	Isophorone	ND	10	2	781	ug/L
EP-9	9/1/2015	Acenaphthene	ND	10	1.9	535	ug/L
EP-9	9/1/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
EP-9	9/1/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
EP-9	9/1/2015	Phenanthrene	ND	10	2	170	ug/L
EP-9	9/1/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
EP-9	9/1/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
EP-9	9/1/2015	Fluorene	ND	10	1.7	288	ug/L
EP-9	9/1/2015	Carbazole	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
EP-9	9/1/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
EP-9	9/1/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
EP-9	9/1/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
EP-9	9/1/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
EP-9	9/1/2015	Naphthalene	ND	10	1.8	30	ug/L
EP-9	9/1/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
EP-9	9/1/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
EP-9	9/1/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
EP-9	9/1/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
EP-9	9/1/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
EP-9	9/1/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
EP-9	9/1/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
EP-9	9/1/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
EP-9	9/1/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
EP-9	9/1/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
EP-9	9/1/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
EP-9	9/1/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
EP-9	9/1/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
EP-9	9/1/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
EP-9	9/1/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
EP-9	9/1/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
EP-9	9/1/2015	Phenol	ND	10	1.1	5761	ug/L
EP-9	9/1/2015	Pyridine	ND	10	1.7	20	ug/L
EP-9	9/1/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
EP-9	9/1/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
EP-9	9/1/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
EP-9	9/1/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
EP-9	9/1/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
EP-9	9/1/2015	Anthracene	ND	10	1.6	1721	ug/L
EP-9	9/1/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
EP-9	9/1/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
EP-9	9/1/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
EP-9	9/1/2015	Pyrene	ND	10	2.3	117	ug/L
EP-9	9/1/2015	Dimethylphthalate	ND	10	2	612	ug/L
EP-9	9/1/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
EP-9	9/1/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
EP-9	9/1/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
EP-9	9/1/2015	Fluoranthene	ND	10	1.5	802	ug/L
EP-9	9/1/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
EP-9	9/1/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
EP-9	9/1/2015	Chrysene	ND	10	2.2	34.3	ug/L
EP-9	9/1/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
EP-9	9/1/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
EP-9	9/1/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
EP-9	9/1/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
EP-9	9/1/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
EP-9	9/1/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
EP-9	9/1/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
EP-9	8/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
EP-9	8/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
EP-9	8/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
EP-9	8/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
EP-9	8/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Aniline	ND	10	2.4	13	ug/L
EP-9	8/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
EP-9	8/30/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
EP-9	8/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
EP-9	8/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
EP-9	8/30/2016	Isophorone	ND	10	2.6	781	ug/L
EP-9	8/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
EP-9	8/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
EP-9	8/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
EP-9	8/30/2016	Phenanthrene	ND	10	2.6	170	ug/L
EP-9	8/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
EP-9	8/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
EP-9	8/30/2016	Fluorene	ND	10	2.7	288	ug/L
EP-9	8/30/2016	Carbazole	ND	10	2.3	NA	ug/L
EP-9	8/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	8/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
EP-9	8/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
EP-9	8/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
EP-9	8/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
EP-9	8/30/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
EP-9	8/30/2016	Naphthalene	ND	10	2.6	30	ug/L
EP-9	8/30/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
EP-9	8/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
EP-9	8/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
EP-9	8/30/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
EP-9	8/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
EP-9	8/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
EP-9	8/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
EP-9	8/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
EP-9	8/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
EP-9	8/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
EP-9	8/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
EP-9	8/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
EP-9	8/30/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
EP-9	8/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
EP-9	8/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
EP-9	8/30/2016	Phenol	ND	10	2	5761	ug/L
EP-9	8/30/2016	Pyridine	ND	10	2.2	20	ug/L
EP-9	8/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
EP-9	8/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
EP-9	8/30/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
EP-9	8/30/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
EP-9	8/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
EP-9	8/30/2016	Anthracene	ND	10	2.5	1721	ug/L
EP-9	8/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
EP-9	8/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
EP-9	8/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
EP-9	8/30/2016	Pyrene	ND	10	3.1	117	ug/L
EP-9	8/30/2016	Dimethylphthalate	4.2	10	2.4	612	ug/L
EP-9	8/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
EP-9	8/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
EP-9	8/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
EP-9	8/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
EP-9	8/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
EP-9	8/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
EP-9	8/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
EP-9	8/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
EP-9	8/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
EP-9	8/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
EP-9	8/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
EP-9	8/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
EP-9	8/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
EP-9	8/30/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
EP-9	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
EP-9	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
EP-9	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
EP-9	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	3/30/2017	Aniline	ND	10	3.1	13	ug/L
EP-9	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
EP-9	3/30/2017	Benzoic Acid	6.1	20	3.9	75000	ug/L
EP-9	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
EP-9	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
EP-9	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
EP-9	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
EP-9	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
EP-9	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
EP-9	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
EP-9	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
EP-9	3/30/2017	Fluorene	ND	10	4	288	ug/L
EP-9	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
EP-9	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
EP-9	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
EP-9	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
EP-9	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
EP-9	3/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
EP-9	3/30/2017	Naphthalene	ND	10	2.9	30	ug/L
EP-9	3/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
EP-9	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
EP-9	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
EP-9	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
EP-9	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
EP-9	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
EP-9	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
EP-9	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
EP-9	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
EP-9	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
EP-9	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
EP-9	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
EP-9	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
EP-9	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
EP-9	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
EP-9	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-9	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
EP-9	3/30/2017	Phenol	ND	10	3.1	5761	ug/L
EP-9	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
EP-9	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
EP-9	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
EP-9	3/30/2017	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
EP-9	3/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
EP-9	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
EP-9	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
EP-9	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
EP-9	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
EP-9	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
EP-9	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
EP-9	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
EP-9	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
EP-9	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
EP-9	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
EP-9	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
EP-9	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
EP-9	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
EP-9	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
EP-9	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
EP-9	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
EP-9	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
EP-9	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
EP-9	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
EP-9	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
EP-9	10/24/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
EP-9	10/24/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
EP-9	10/24/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
EP-9	10/24/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
EP-9	10/24/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
EP-9	10/24/2017	Aniline	*ND*	*50*	15	13	ug/L
EP-9	10/24/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
EP-9	10/24/2017	Benzoic Acid	ND	100	20	75000	ug/L
EP-9	10/24/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
EP-9	10/24/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
EP-9	10/24/2017	Isophorone	ND	50	22	781	ug/L
EP-9	10/24/2017	Acenaphthene	ND	50	18	535	ug/L
EP-9	10/24/2017	Diethylphthalate	ND	50	20	14801	ug/L
EP-9	10/24/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
EP-9	10/24/2017	Phenanthrene	ND	50	22	170	ug/L
EP-9	10/24/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
EP-9	10/24/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
EP-9	10/24/2017	Fluorene	ND	50	20	288	ug/L
EP-9	10/24/2017	Carbazole	ND	50	23	NA	ug/L
EP-9	10/24/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
EP-9	10/24/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
EP-9	10/24/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
EP-9	10/24/2017	2-Nitroaniline	ND	50	25	190	ug/L
EP-9	10/24/2017	2-Nitrophenol	ND	50	26	NA	ug/L
EP-9	10/24/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
EP-9	10/24/2017	Naphthalene	*ND*	*50*	14	30	ug/L
EP-9	10/24/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
EP-9	10/24/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
EP-9	10/24/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
EP-9	10/24/2017	2-Methylphenol	ND	50	17	NA	ug/L
EP-9	10/24/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
EP-9	10/24/2017	2-Chlorophenol	ND	50	38	91	ug/L
EP-9	10/24/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
EP-9	10/24/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
EP-9	10/24/2017	3-Nitroaniline	ND	50	22	NA	ug/L
EP-9	10/24/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
EP-9	10/24/2017	4-Nitrophenol	ND	50	27	NA	ug/L
EP-9	10/24/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
EP-9	10/24/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
EP-9	10/24/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
EP-9	10/24/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
EP-9	10/24/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
EP-9	10/24/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
EP-9	10/24/2017	Phenol	ND	50	16	5761	ug/L
EP-9	10/24/2017	Pyridine	*ND*	*50*	11	20	ug/L
EP-9	10/24/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
EP-9	10/24/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
EP-9	10/24/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
EP-9	10/24/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
EP-9	10/24/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
EP-9	10/24/2017	Anthracene	ND	50	18	1721	ug/L
EP-9	10/24/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
EP-9	10/24/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
EP-9	10/24/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
EP-9	10/24/2017	Pyrene	ND	50	22	117	ug/L
EP-9	10/24/2017	Dimethylphthalate	ND	50	18	612	ug/L
EP-9	10/24/2017	Dibenzofuran	ND	50	20	NA	ug/L
EP-9	10/24/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
EP-9	10/24/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
EP-9	10/24/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
EP-9	10/24/2017	Fluoranthene	ND	50	21	802	ug/L
EP-9	10/24/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
EP-9	10/24/2017	Acenaphthylene	ND	50	18	NA	ug/L
EP-9	10/24/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
EP-9	10/24/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
EP-9	10/24/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
EP-9	10/24/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
EP-9	10/24/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
EP-9	10/24/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
EP-9	10/24/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
EP-9	10/24/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
EP-9	2/23/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
EP-9	2/23/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
EP-9	2/23/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
EP-9	2/23/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	2/23/2018	Aniline	ND	10	3.1	13	ug/L
EP-9	2/23/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
EP-9	2/23/2018	Benzoic Acid	7.4	20	3.9	75000	ug/L
EP-9	2/23/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
EP-9	2/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
EP-9	2/23/2018	Isophorone	ND	10	4.4	781	ug/L
EP-9	2/23/2018	Acenaphthene	ND	10	3.6	535	ug/L
EP-9	2/23/2018	Diethylphthalate	ND	10	4	14801	ug/L
EP-9	2/23/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
EP-9	2/23/2018	Phenanthrene	ND	10	4.3	170	ug/L
EP-9	2/23/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
EP-9	2/23/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
EP-9	2/23/2018	Fluorene	ND	10	4	288	ug/L
EP-9	2/23/2018	Carbazole	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
EP-9	2/23/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
EP-9	2/23/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
EP-9	2/23/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
EP-9	2/23/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
EP-9	2/23/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
EP-9	2/23/2018	Naphthalene	ND	10	2.9	30	ug/L
EP-9	2/23/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	2/23/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
EP-9	2/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
EP-9	2/23/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
EP-9	2/23/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
EP-9	2/23/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
EP-9	2/23/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
EP-9	2/23/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
EP-9	2/23/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
EP-9	2/23/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
EP-9	2/23/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
EP-9	2/23/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
EP-9	2/23/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
EP-9	2/23/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
EP-9	2/23/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
EP-9	2/23/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
EP-9	2/23/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
EP-9	2/23/2018	Phenol	ND	10	3.1	5761	ug/L
EP-9	2/23/2018	Pyridine	ND	10	2.3	20	ug/L
EP-9	2/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
EP-9	2/23/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
EP-9	2/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
EP-9	2/23/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
EP-9	2/23/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
EP-9	2/23/2018	Anthracene	ND	10	3.5	1721	ug/L
EP-9	2/23/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
EP-9	2/23/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
EP-9	2/23/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
EP-9	2/23/2018	Pyrene	ND	10	4.4	117	ug/L
EP-9	2/23/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
EP-9	2/23/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
EP-9	2/23/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
EP-9	2/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
EP-9	2/23/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
EP-9	2/23/2018	Fluoranthene	ND	10	4.3	802	ug/L
EP-9	2/23/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
EP-9	2/23/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
EP-9	2/23/2018	Chrysene	ND	10	3.8	34.3	ug/L
EP-9	2/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
EP-9	2/23/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
EP-9	2/23/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
EP-9	2/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
EP-9	2/23/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
EP-9	2/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
EP-9	2/23/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
EP-9	9/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
EP-9	9/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
EP-9	9/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
EP-9	9/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Aniline	ND	10	6.2	13	ug/L
EP-9	9/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
EP-9	9/7/2018	Benzoic Acid	6.3	20	6.3	75000	ug/L
EP-9	9/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
EP-9	9/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
EP-9	9/7/2018	Isophorone	ND	10	6.2	781	ug/L
EP-9	9/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
EP-9	9/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
EP-9	9/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
EP-9	9/7/2018	Phenanthrene	ND	10	6	170	ug/L
EP-9	9/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
EP-9	9/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
EP-9	9/7/2018	Fluorene	ND	10	6.3	288	ug/L
EP-9	9/7/2018	Carbazole	ND	10	6.3	NA	ug/L
EP-9	9/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
EP-9	9/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
EP-9	9/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
EP-9	9/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
EP-9	9/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
EP-9	9/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
EP-9	9/7/2018	Naphthalene	ND	10	5	30	ug/L
EP-9	9/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
EP-9	9/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
EP-9	9/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
EP-9	9/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
EP-9	9/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
EP-9	9/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
EP-9	9/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
EP-9	9/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
EP-9	9/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
EP-9	9/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
EP-9	9/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
EP-9	9/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
EP-9	9/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
EP-9	9/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
EP-9	9/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
EP-9	9/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
EP-9	9/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
EP-9	9/7/2018	Phenol	ND	10	6	5761	ug/L
EP-9	9/7/2018	Pyridine	ND	10	5.4	20	ug/L
EP-9	9/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
EP-9	9/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
EP-9	9/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
EP-9	9/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
EP-9	9/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
EP-9	9/7/2018	Anthracene	ND	10	5.7	1721	ug/L
EP-9	9/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
EP-9	9/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
EP-9	9/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
EP-9	9/7/2018	Pyrene	ND	10	6.5	117	ug/L
EP-9	9/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
EP-9	9/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
EP-9	9/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
EP-9	9/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
EP-9	9/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
EP-9	9/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
EP-9	9/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
EP-9	9/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
EP-9	9/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
EP-9	9/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
EP-9	9/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
EP-9	9/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
EP-9	9/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
EP-9	9/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
EP-9	9/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
EP-9	4/29/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
EP-9	4/29/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
EP-9	4/29/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
EP-9	4/29/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
EP-9	4/29/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
EP-9	4/29/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
EP-9	4/29/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
EP-9	4/29/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
EP-9	4/29/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
EP-9	4/29/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
EP-9	4/29/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
EP-9	4/29/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
EP-9	4/29/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
EP-9	4/29/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
EP-9	4/29/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
EP-9	4/29/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
EP-9	4/29/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
EP-9	4/29/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
EP-9	4/29/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
EP-9	4/29/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
EP-9	4/29/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
EP-9	4/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
EP-9	4/29/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
EP-9	4/29/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
EP-9	4/29/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
EP-9	4/29/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
EP-9	4/29/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
EP-9	4/29/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
EP-9	4/29/2019	Acenaphthene	ND	50	29.195099	535	ug/L
EP-9	4/29/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
EP-9	4/29/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
EP-9	4/29/2019	Anthracene	ND	50	28.698259	1721	ug/L
EP-9	4/29/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
EP-9	4/29/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
EP-9	4/29/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
EP-9	4/29/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
EP-9	4/29/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
EP-9	4/29/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
EP-9	4/29/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
EP-9	4/29/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
EP-9	4/29/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
EP-9	4/29/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
EP-9	4/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
EP-9	4/29/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
EP-9	4/29/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
EP-9	4/29/2019	Carbazole	ND	50	31.375012	NA	ug/L
EP-9	4/29/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
EP-9	4/29/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
EP-9	4/29/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
EP-9	4/29/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
EP-9	4/29/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
EP-9	4/29/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
EP-9	4/29/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
EP-9	4/29/2019	Fluoranthene	ND	50	29.061248	802	ug/L
EP-9	4/29/2019	Fluorene	ND	50	31.559443	288	ug/L
EP-9	4/29/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
EP-9	4/29/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
EP-9	4/29/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
EP-9	4/29/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
EP-9	4/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
EP-9	4/29/2019	Isophorone	ND	50	31.210518	781	ug/L
EP-9	4/29/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
EP-9	4/29/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
EP-9	4/29/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
EP-9	4/29/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
EP-9	4/29/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
EP-9	4/29/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
EP-9	4/29/2019	Phenanthrene	ND	50	30.215257	170	ug/L
EP-9	4/29/2019	Phenol	ND	50	29.88676	5761	ug/L
EP-9	4/29/2019	Pyrene	ND	50	32.635727	117	ug/L
EP-9	4/29/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
EP-9	11/20/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
EP-9	11/20/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
EP-9	11/20/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
EP-9	11/20/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
EP-9	11/20/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
EP-9	11/20/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
EP-9	11/20/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
EP-9	11/20/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
EP-9	11/20/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
EP-9	11/20/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
EP-9	11/20/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
EP-9	11/20/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
EP-9	11/20/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
EP-9	11/20/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
EP-9	11/20/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
EP-9	11/20/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
EP-9	11/20/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
EP-9	11/20/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
EP-9	11/20/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
EP-9	11/20/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
EP-9	11/20/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Aniline	ND	0.5	0.5	13	ug/L
EP-9	11/20/2019	Anthracene	ND	0.5	0.5	1721	ug/L
EP-9	11/20/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
EP-9	11/20/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
EP-9	11/20/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
EP-9	11/20/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
EP-9	11/20/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
EP-9	11/20/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
EP-9	11/20/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
EP-9	11/20/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
EP-9	11/20/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
EP-9	11/20/2019	Carbazole	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
EP-9	11/20/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
EP-9	11/20/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
EP-9	11/20/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
EP-9	11/20/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
EP-9	11/20/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
EP-9	11/20/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
EP-9	11/20/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
EP-9	11/20/2019	Fluorene	ND	0.5	0.5	288	ug/L
EP-9	11/20/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
EP-9	11/20/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
EP-9	11/20/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
EP-9	11/20/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
EP-9	11/20/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
EP-9	11/20/2019	Isophorone	ND	0.5	0.5	781	ug/L
EP-9	11/20/2019	Naphthalene	ND	0.5	0.5	30	ug/L
EP-9	11/20/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
EP-9	11/20/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
EP-9	11/20/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
EP-9	11/20/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
EP-9	11/20/2019	Phenol	0.62	0.5	0.5	5761	ug/L
EP-9	11/20/2019	Pyrene	ND	0.5	0.5	117	ug/L
EP-9	11/20/2019	Pyridine	ND	0.5	0.5	20	ug/L
EP-9	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
EP-9	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
EP-9	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
EP-9	9/17/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
EP-9	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
EP-9	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
EP-9	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
EP-9	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
EP-9	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
EP-9	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
EP-9	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
EP-9	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
EP-9	9/17/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
EP-9	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
EP-9	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
EP-9	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
EP-9	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
EP-9	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
EP-9	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
EP-9	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
EP-9	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
EP-9	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
EP-9	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
EP-9	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
EP-9	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
EP-9	9/17/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
EP-9	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
EP-9	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
EP-9	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
EP-9	9/17/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
EP-9	9/17/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
EP-9	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
EP-9	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
EP-9	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
EP-9	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
EP-9	9/17/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
EP-9	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
EP-9	9/17/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
EP-9	9/17/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
EP-9	9/17/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
EP-9	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
EP-9	9/17/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
EP-9	9/17/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
EP-9	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
EP-9	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
EP-9	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
EP-9	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
EP-9	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
EP-9	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
EP-9	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
EP-9	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
EP-9	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
EP-9	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
EP-9	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
EP-9	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
EP-9	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
EP-9	9/17/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
EP-9	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
EP-9	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
EP-9	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
EP-9	9/17/2020	Pyridine	ND	0.51	0.2	20	ug/L
EP-9	12/21/2020	Benzo(a)anthracene	*ND*	*9.75*	0.176	0.12	ug/L
EP-9	12/21/2020	Benzo(a)pyrene	*ND*	*9.75*	0.117	0.2	ug/L
EP-9	12/21/2020	Benzo(b)fluoranthene	*ND*	*9.75*	0.146	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	Benzo(g,h,i)perylene	ND	9.75	0.224	NA	ug/L
EP-9	12/21/2020	Benzo(k)fluoranthene	*ND*	*9.75*	0.156	3.43	ug/L
EP-9	12/21/2020	Bis(2-chloroethoxy)methane	ND	9.75	0.156	59	ug/L
EP-9	12/21/2020	Bis(2-chloroethyl)ether	*ND*	*9.75*	2.63	0.137	ug/L
EP-9	12/21/2020	Bis(2-ethylhexyl)phthalate	ND	9.75	4.88	55.64	ug/L
EP-9	12/21/2020	Butylbenzylphthalate	ND	9.75	0.185	16	ug/L
EP-9	12/21/2020	Carbazole	ND	9.75	0.224	NA	ug/L
EP-9	12/21/2020	4-Chloroaniline	*ND*	*9.75*	3.32	0.37	ug/L
EP-9	12/21/2020	4-Chloro-3-Methylphenol	ND	9.75	3.71	NA	ug/L
EP-9	12/21/2020	2-Chlorophenol	ND	9.75	2.15	91	ug/L
EP-9	12/21/2020	Chrysene	ND	9.75	0.185	34.3	ug/L
EP-9	12/21/2020	Dibenzo(a,h)anthracene	ND	9.75	0.234	NA	ug/L
EP-9	12/21/2020	1,4-Dichlorobenzene	ND	9.75	0.156	75	ug/L
EP-9	12/21/2020	3,3-Dichlorobenzidine	*ND*	*9.75*	2.54	1.25	ug/L
EP-9	12/21/2020	Diethylphthalate	ND	9.75	0.234	14801	ug/L
EP-9	12/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.75*	1.56	1.52	ug/L
EP-9	12/21/2020	2,4-Dinitrophenol	ND	29.3	3.32	38.7	ug/L
EP-9	12/21/2020	Fluorene	ND	9.75	0.176	288	ug/L
EP-9	12/21/2020	Hexachloroethane	*ND*	*9.75*	4.1	3.28	ug/L
EP-9	12/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.75*	0.215	0.343	ug/L
EP-9	12/21/2020	Isophorone	ND	9.75	0.137	781	ug/L
EP-9	12/21/2020	Naphthalene	ND	9.75	0.166	30	ug/L
EP-9	12/21/2020	2-Nitroaniline	ND	9.75	2.15	190	ug/L
EP-9	12/21/2020	3-Nitroaniline	ND	9.75	1.76	NA	ug/L
EP-9	12/21/2020	4-Nitroaniline	*ND*	*9.75*	1.46	3.8	ug/L
EP-9	12/21/2020	4-Nitrophenol	ND	9.75	2.05	NA	ug/L
EP-9	12/21/2020	N-Nitrosodi-n-propylamine	*ND*	*9.75*	3.22	0.011	ug/L
EP-9	12/21/2020	N-Nitrosodiphenylamine	ND	9.75	0.176	122	ug/L
EP-9	12/21/2020	Pentachlorophenol	*ND*	*19.5*	1.37	1	ug/L
EP-9	12/21/2020	Phenanthrene	ND	9.75	0.176	170	ug/L
EP-9	12/21/2020	Phenol	ND	9.75	2.54	5761	ug/L
EP-9	12/21/2020	Pyrene	ND	9.75	0.205	117	ug/L
EP-9	12/21/2020	Benzoic Acid	ND	29.3	7.12	75000	ug/L
EP-9	12/21/2020	Benzyl Alcohol	ND	9.75	1.95	2000	ug/L
EP-9	12/21/2020	Bis(2-chloroisopropyl)ether	ND	9.75	0.156	9.81	ug/L
EP-9	12/21/2020	N-Nitrosodimethylamine	*ND*	*9.75*	3.41	0.0049	ug/L
EP-9	12/21/2020	Pyridine	ND	9.75	3.12	20	ug/L
EP-9	12/21/2020	Azobenzene	*ND*	*9.75*	0.975	0.12	ug/L
EP-9	12/21/2020	Acenaphthene	ND	9.75	0.156	535	ug/L
EP-9	12/21/2020	Acenaphthylene	ND	9.75	0.166	NA	ug/L
EP-9	12/21/2020	Anthracene	ND	9.75	0.176	1721	ug/L
EP-9	12/21/2020	4-Bromophenyl-phenylether	ND	9.75	0.195	NA	ug/L
EP-9	12/21/2020	2-Chloronaphthalene	ND	9.75	0.137	733	ug/L
EP-9	12/21/2020	4-Chlorophenyl-phenylether	ND	9.75	1.95	NA	ug/L
EP-9	12/21/2020	1,3-Dichlorobenzene	ND	9.75	0.176	NA	ug/L
EP-9	12/21/2020	Dibenzofuran	ND	9.75	0.166	NA	ug/L
EP-9	12/21/2020	2,4-Dichlorophenol	ND	9.75	2.93	45.3	ug/L
EP-9	12/21/2020	2,4-Dimethylphenol	ND	9.75	3.41	354	ug/L
EP-9	12/21/2020	Di-n-butylphthalate	ND	9.75	2.63	885	ug/L
EP-9	12/21/2020	2,4-Dinitrotoluene	ND	9.75	1.85	45.3	ug/L
EP-9	12/21/2020	2,6-Dinitrotoluene	*ND*	*9.75*	1.85	0.485	ug/L
EP-9	12/21/2020	Di-n-octylphthalate	ND	9.75	0.166	200	ug/L
EP-9	12/21/2020	Fluoranthene	ND	9.75	0.176	802	ug/L
EP-9	12/21/2020	Hexachlorobenzene	*ND*	*9.75*	0.166	0.0976	ug/L
EP-9	12/21/2020	Hexachlorocyclopentadiene	*ND*	*19.5*	2.54	0.41	ug/L
EP-9	12/21/2020	2-Methylphenol	ND	9.75	1.76	NA	ug/L
EP-9	12/21/2020	Nitrobenzene	*ND*	*9.75*	0.127	1.4	ug/L
EP-9	12/21/2020	2-Nitrophenol	ND	9.75	5.07	NA	ug/L
EP-9	12/21/2020	2,4,5-Trichlorophenol	ND	9.75	3.61	1166	ug/L
EP-9	12/21/2020	2,4,6-Trichlorophenol	ND	9.75	3.41	11.9*	ug/L
EP-9	12/21/2020	Dimethylphthalate	ND	9.75	0.166	612	ug/L
EP-9	12/21/2020	Aniline	ND	9.75	3.71	13	ug/L
EP-9	12/21/2020	1,2,4-Trichlorobenzene	ND	9.75	0.176	70	ug/L
EP-9	12/21/2020	1,2-Dichlorobenzene	ND	9.75	0.166	600	ug/L
KA-3	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	3/20/2012	Aniline	ND	10	2	13	ug/L
KA-3	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	3/20/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	3/20/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	3/20/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	3/20/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	6/12/2012	Aniline	ND	10	2	13	ug/L
KA-3	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	6/12/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
KA-3	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	8/21/2012	Aniline	ND	10	2	13	ug/L
KA-3	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
KA-3	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
KA-3	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
KA-3	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
KA-3	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	12/5/2012	Aniline	ND	10	2	13	ug/L
KA-3	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
KA-3	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
KA-3	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
KA-3	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
KA-3	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
KA-3	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
KA-3	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
KA-3	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
KA-3	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
KA-3	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
KA-3	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
KA-3	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
KA-3	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
KA-3	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
KA-3	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
KA-3	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
KA-3	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
KA-3	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
KA-3	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
KA-3	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
KA-3	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
KA-3	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
KA-3	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
KA-3	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
KA-3	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
KA-3	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
KA-3	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
KA-3	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
KA-3	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
KA-3	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
KA-3	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
KA-3	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
KA-3	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
KA-3	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
KA-3	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
KA-3	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
KA-3	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
KA-3	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
KA-3	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
KA-3	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
KA-3	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
KA-3	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
KA-3	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
KA-3	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
KA-3	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
KA-3	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
KA-3	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
KA-3	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
KA-3	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
KA-3	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
KA-3	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
KA-3	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
KA-3	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
KA-3	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
KA-3	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	Aniline	ND	10	2.2	13	ug/L
KA-3	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
KA-3	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
KA-3	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
KA-3	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
KA-3	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
KA-3	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
KA-3	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
KA-3	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
KA-3	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
KA-3	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
KA-3	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
KA-3	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
KA-3	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
KA-3	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
KA-3	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
KA-3	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
KA-3	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
KA-3	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
KA-3	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
KA-3	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
KA-3	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
KA-3	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
KA-3	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
KA-3	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
KA-3	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
KA-3	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
KA-3	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
KA-3	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
KA-3	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
KA-3	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
KA-3	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
KA-3	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
KA-3	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
KA-3	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
KA-3	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
KA-3	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
KA-3	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
KA-3	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
KA-3	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
KA-3	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
KA-3	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
KA-3	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
KA-3	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
KA-3	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
KA-3	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
KA-3	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
KA-3	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
KA-3	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
KA-3	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
KA-3	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
KA-3	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
KA-3	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
KA-3	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
KA-3	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
KA-3	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
KA-3	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	3/10/2014	Pyrene	ND	10	4	117	ug/L
KA-3	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	6/5/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
KA-3	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	6/5/2014	Pyrene	ND	10	4	117	ug/L
KA-3	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	9/11/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
KA-3	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
KA-3	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
KA-3	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	9/11/2014	Pyrene	ND	10	4	117	ug/L
KA-3	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	11/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
KA-3	11/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
KA-3	11/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
KA-3	11/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
KA-3	11/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	11/11/2014	Aniline	ND	10	2.4	13	ug/L
KA-3	11/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
KA-3	11/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
KA-3	11/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
KA-3	11/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
KA-3	11/11/2014	Isophorone	ND	10	3.1	781	ug/L
KA-3	11/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
KA-3	11/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
KA-3	11/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
KA-3	11/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
KA-3	11/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
KA-3	11/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
KA-3	11/11/2014	Fluorene	ND	10	2.9	288	ug/L
KA-3	11/11/2014	Carbazole	ND	10	2.9	NA	ug/L
KA-3	11/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
KA-3	11/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
KA-3	11/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
KA-3	11/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	11/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
KA-3	11/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
KA-3	11/11/2014	Naphthalene	ND	10	2.3	30	ug/L
KA-3	11/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
KA-3	11/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
KA-3	11/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	11/11/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
KA-3	11/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
KA-3	11/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
KA-3	11/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
KA-3	11/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
KA-3	11/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
KA-3	11/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
KA-3	11/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
KA-3	11/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
KA-3	11/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
KA-3	11/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
KA-3	11/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	11/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
KA-3	11/11/2014	Phenol	ND	10	1.6	5761	ug/L
KA-3	11/11/2014	Pyridine	ND	10	1.6	20	ug/L
KA-3	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	11/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
KA-3	11/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
KA-3	11/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
KA-3	11/11/2014	Anthracene	ND	10	2.5	1721	ug/L
KA-3	11/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
KA-3	11/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
KA-3	11/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
KA-3	11/11/2014	Pyrene	ND	10	4	117	ug/L
KA-3	11/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
KA-3	11/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
KA-3	11/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
KA-3	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
KA-3	11/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
KA-3	11/11/2014	Fluoranthene	ND	10	3	802	ug/L
KA-3	11/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
KA-3	11/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
KA-3	11/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
KA-3	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
KA-3	11/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	11/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
KA-3	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
KA-3	11/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
KA-3	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
KA-3	11/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
KA-3	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
KA-3	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
KA-3	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
KA-3	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
KA-3	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
KA-3	3/10/2015	Aniline	ND	10	4.2	13	ug/L
KA-3	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
KA-3	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
KA-3	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
KA-3	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
KA-3	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
KA-3	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
KA-3	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
KA-3	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
KA-3	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
KA-3	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
KA-3	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
KA-3	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
KA-3	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
KA-3	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
KA-3	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
KA-3	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
KA-3	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
KA-3	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
KA-3	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
KA-3	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
KA-3	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
KA-3	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
KA-3	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
KA-3	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
KA-3	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
KA-3	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
KA-3	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
KA-3	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
KA-3	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
KA-3	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
KA-3	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
KA-3	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
KA-3	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
KA-3	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
KA-3	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
KA-3	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
KA-3	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
KA-3	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
KA-3	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
KA-3	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
KA-3	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
KA-3	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
KA-3	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
KA-3	3/10/2015	Anthracene	ND	10	4	1721	ug/L
KA-3	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
KA-3	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
KA-3	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
KA-3	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
KA-3	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
KA-3	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
KA-3	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
KA-3	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
KA-3	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
KA-3	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
KA-3	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
KA-3	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
KA-3	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
KA-3	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
KA-3	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
KA-3	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
KA-3	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
KA-3	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
KA-3	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
KA-3	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
KA-3	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Aniline	ND	10	1.5	13	ug/L
KA-3	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
KA-3	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
KA-3	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
KA-3	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
KA-3	6/2/2015	Isophorone	ND	10	2	781	ug/L
KA-3	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
KA-3	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
KA-3	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
KA-3	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
KA-3	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
KA-3	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
KA-3	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
KA-3	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
KA-3	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
KA-3	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
KA-3	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
KA-3	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
KA-3	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
KA-3	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
KA-3	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
KA-3	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
KA-3	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
KA-3	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
KA-3	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
KA-3	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
KA-3	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
KA-3	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
KA-3	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
KA-3	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
KA-3	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
KA-3	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
KA-3	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
KA-3	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
KA-3	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
KA-3	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
KA-3	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
KA-3	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
KA-3	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
KA-3	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
KA-3	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
KA-3	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
KA-3	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
KA-3	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
KA-3	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
KA-3	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
KA-3	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
KA-3	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
KA-3	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
KA-3	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
KA-3	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
KA-3	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
KA-3	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
KA-3	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
KA-3	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
KA-3	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
KA-3	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
KA-3	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
KA-3	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
KA-3	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
KA-3	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
KA-3	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
KA-3	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
KA-3	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Aniline	ND	10	1.5	13	ug/L
KA-3	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
KA-3	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
KA-3	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
KA-3	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
KA-3	8/11/2015	Isophorone	ND	10	2	781	ug/L
KA-3	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
KA-3	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
KA-3	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
KA-3	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
KA-3	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
KA-3	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
KA-3	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
KA-3	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
KA-3	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
KA-3	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
KA-3	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
KA-3	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
KA-3	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
KA-3	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
KA-3	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
KA-3	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
KA-3	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
KA-3	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
KA-3	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
KA-3	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
KA-3	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
KA-3	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
KA-3	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
KA-3	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
KA-3	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
KA-3	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
KA-3	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
KA-3	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
KA-3	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
KA-3	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
KA-3	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
KA-3	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
KA-3	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
KA-3	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
KA-3	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
KA-3	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
KA-3	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
KA-3	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
KA-3	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
KA-3	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
KA-3	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
KA-3	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
KA-3	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
KA-3	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
KA-3	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
KA-3	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
KA-3	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
KA-3	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
KA-3	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
KA-3	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
KA-3	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
KA-3	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
KA-3	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
KA-3	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
KA-3	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
KA-3	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
KA-3	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
KA-3	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
KA-3	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
KA-3	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
KA-3	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
KA-3	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Aniline	ND	10	2.4	13	ug/L
KA-3	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
KA-3	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
KA-3	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
KA-3	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
KA-3	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
KA-3	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
KA-3	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
KA-3	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
KA-3	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
KA-3	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
KA-3	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
KA-3	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
KA-3	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
KA-3	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
KA-3	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
KA-3	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
KA-3	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
KA-3	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
KA-3	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
KA-3	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
KA-3	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
KA-3	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
KA-3	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
KA-3	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
KA-3	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
KA-3	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
KA-3	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
KA-3	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
KA-3	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
KA-3	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
KA-3	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
KA-3	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
KA-3	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
KA-3	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
KA-3	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
KA-3	2/21/2017	Phenol	ND	10	2	5761	ug/L
KA-3	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
KA-3	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
KA-3	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
KA-3	2/21/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
KA-3	2/21/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
KA-3	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
KA-3	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
KA-3	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
KA-3	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
KA-3	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
KA-3	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
KA-3	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
KA-3	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
KA-3	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
KA-3	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
KA-3	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
KA-3	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
KA-3	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
KA-3	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
KA-3	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
KA-3	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
KA-3	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
KA-3	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
KA-3	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
KA-3	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
KA-3	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
KA-3	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
KA-3	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
KA-3	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
KA-3	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
KA-3	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
KA-3	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
KA-3	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
KA-3	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
KA-3	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/1/2017	Aniline	ND	10	3.1	13	ug/L
KA-3	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
KA-3	6/1/2017	Benzoic Acid	9.6	20	3.9	75000	ug/L
KA-3	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
KA-3	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
KA-3	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
KA-3	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
KA-3	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
KA-3	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
KA-3	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
KA-3	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
KA-3	6/1/2017	Fluorene	ND	10	4	288	ug/L
KA-3	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
KA-3	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
KA-3	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
KA-3	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
KA-3	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
KA-3	6/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
KA-3	6/1/2017	Naphthalene	ND	10	2.9	30	ug/L
KA-3	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
KA-3	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
KA-3	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
KA-3	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
KA-3	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
KA-3	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
KA-3	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
KA-3	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
KA-3	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
KA-3	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
KA-3	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
KA-3	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
KA-3	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
KA-3	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
KA-3	6/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
KA-3	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
KA-3	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
KA-3	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
KA-3	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
KA-3	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
KA-3	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
KA-3	6/1/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
KA-3	6/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
KA-3	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
KA-3	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
KA-3	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
KA-3	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
KA-3	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
KA-3	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
KA-3	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
KA-3	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
KA-3	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
KA-3	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
KA-3	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
KA-3	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
KA-3	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
KA-3	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
KA-3	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
KA-3	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
KA-3	9/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
KA-3	9/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
KA-3	9/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
KA-3	9/5/2017	Aniline	ND	10	3.1	13	ug/L
KA-3	9/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
KA-3	9/5/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
KA-3	9/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
KA-3	9/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
KA-3	9/5/2017	Isophorone	ND	10	4.4	781	ug/L
KA-3	9/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
KA-3	9/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
KA-3	9/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
KA-3	9/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
KA-3	9/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
KA-3	9/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
KA-3	9/5/2017	Fluorene	ND	10	4	288	ug/L
KA-3	9/5/2017	Carbazole	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
KA-3	9/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
KA-3	9/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
KA-3	9/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
KA-3	9/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
KA-3	9/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
KA-3	9/5/2017	Naphthalene	ND	10	2.9	30	ug/L
KA-3	9/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
KA-3	9/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
KA-3	9/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
KA-3	9/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
KA-3	9/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
KA-3	9/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
KA-3	9/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
KA-3	9/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
KA-3	9/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
KA-3	9/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
KA-3	9/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
KA-3	9/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
KA-3	9/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
KA-3	9/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
KA-3	9/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
KA-3	9/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
KA-3	9/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
KA-3	9/5/2017	Phenol	ND	10	3.1	5761	ug/L
KA-3	9/5/2017	Pyridine	ND	10	2.3	20	ug/L
KA-3	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
KA-3	9/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
KA-3	9/5/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
KA-3	9/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
KA-3	9/5/2017	Anthracene	ND	10	3.5	1721	ug/L
KA-3	9/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
KA-3	9/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
KA-3	9/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
KA-3	9/5/2017	Pyrene	ND	10	4.4	117	ug/L
KA-3	9/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
KA-3	9/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
KA-3	9/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
KA-3	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
KA-3	9/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
KA-3	9/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
KA-3	9/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
KA-3	9/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
KA-3	9/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
KA-3	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
KA-3	9/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
KA-3	9/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
KA-3	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
KA-3	9/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
KA-3	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
KA-3	9/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
KA-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
KA-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
KA-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
KA-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
KA-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
KA-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
KA-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
KA-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
KA-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
KA-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
KA-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
KA-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
KA-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
KA-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
KA-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
KA-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
KA-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
KA-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
KA-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
KA-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
KA-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
KA-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
KA-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
KA-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
KA-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
KA-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
KA-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
KA-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
KA-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
KA-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
KA-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
KA-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
KA-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
KA-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
KA-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
KA-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
KA-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
KA-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
KA-3	4/9/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
KA-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
KA-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
KA-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
KA-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
KA-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
KA-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
KA-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
KA-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
KA-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
KA-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
KA-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
KA-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
KA-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
KA-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
KA-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
KA-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
KA-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
KA-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
KA-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
KA-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
KA-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
KA-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
KA-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
KA-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
KA-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
KA-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
KA-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
KA-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
KA-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
KA-3	4/9/2019	Phenol	11	10	5.977352	5761	ug/L
KA-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
KA-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
KA-3	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
KA-3	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
KA-3	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
KA-3	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
KA-3	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
KA-3	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
KA-3	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
KA-3	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
KA-3	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
KA-3	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
KA-3	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
KA-3	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
KA-3	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
KA-3	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
KA-3	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
KA-3	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
KA-3	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
KA-3	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
KA-3	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
KA-3	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
KA-3	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
KA-3	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
KA-3	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
KA-3	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
KA-3	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
KA-3	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
KA-3	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
KA-3	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
KA-3	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
KA-3	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
KA-3	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
KA-3	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
KA-3	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
KA-3	5/28/2019	1-Methylnaphthalene	3.5	10	3.069076	11.38	ug/L
KA-3	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
KA-3	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
KA-3	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
KA-3	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
KA-3	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
KA-3	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
KA-3	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
KA-3	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
KA-3	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
KA-3	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
KA-3	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
KA-3	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
KA-3	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
KA-3	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
KA-3	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
KA-3	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
KA-3	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
KA-3	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
KA-3	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
KA-3	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
KA-3	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
KA-3	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
KA-3	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
KA-3	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
KA-3	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
KA-3	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
KA-3	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
KA-3	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
KA-3	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
KA-3	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
KA-3	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
KA-3	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
KA-3	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
KA-3	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
KA-3	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
KA-3	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
KA-3	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
KA-3	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
KA-3	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
KA-3	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
KA-3	8/22/2019	1-Methylnaphthalene	**14**	10	3.069076	11.38	ug/L
KA-3	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
KA-3	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
KA-3	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
KA-3	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
KA-3	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
KA-3	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
KA-3	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
KA-3	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
KA-3	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
KA-3	8/22/2019	2-Methylnaphthalene	7.1	10	3.018863	35.1	ug/L
KA-3	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
KA-3	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
KA-3	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
KA-3	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
KA-3	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
KA-3	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
KA-3	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
KA-3	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
KA-3	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
KA-3	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
KA-3	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
KA-3	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
KA-3	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
KA-3	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
KA-3	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
KA-3	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
KA-3	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
KA-3	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
KA-3	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
KA-3	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
KA-3	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
KA-3	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
KA-3	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
KA-3	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
KA-3	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
KA-3	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
KA-3	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
KA-3	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
KA-3	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
KA-3	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
KA-3	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
KA-3	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
KA-3	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
KA-3	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
KA-3	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
KA-3	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
KA-3	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
KA-3	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
KA-3	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
KA-3	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
KA-3	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
KA-3	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
KA-3	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
KA-3	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
KA-3	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
KA-3	8/22/2019	Naphthalene	12	10	4.12221	30	ug/L
KA-3	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
KA-3	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
KA-3	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
KA-3	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
KA-3	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
KA-3	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
KA-3	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
KA-3	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
KA-3	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	8.7	3	1.234	11.38	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	1.6	3	1.229	35.1	ug/L
KA-3	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
KA-3	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
KA-3	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
KA-3	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
KA-3	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
KA-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
KA-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
KA-3	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
KA-3	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
KA-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
KA-3	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
KA-3	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
KA-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
KA-3	10/21/2019	Naphthalene	5.7	3	1.159	30	ug/L
KA-3	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
KA-3	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
KA-3	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
KA-3	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
KA-3	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
KA-3	10/21/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
KA-3	10/21/2019	1-Methylnaphthalene	2.2	0.5	0.5	11.38	ug/L
KA-3	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
KA-3	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
KA-3	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
KA-3	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
KA-3	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
KA-3	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
KA-3	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
KA-3	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
KA-3	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
KA-3	10/21/2019	2-Methylnaphthalene	1	0.5	0.5	35.1	ug/L
KA-3	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
KA-3	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
KA-3	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
KA-3	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
KA-3	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Acenaphthene	0.78	0.5	0.5	535	ug/L
KA-3	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
KA-3	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
KA-3	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
KA-3	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
KA-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
KA-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
KA-3	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
KA-3	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
KA-3	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
KA-3	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
KA-3	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
KA-3	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
KA-3	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
KA-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
KA-3	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
KA-3	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
KA-3	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
KA-3	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
KA-3	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
KA-3	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
KA-3	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
KA-3	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
KA-3	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
KA-3	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
KA-3	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
KA-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
KA-3	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
KA-3	10/21/2019	Naphthalene	2	0.5	0.5	30	ug/L
KA-3	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
KA-3	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
KA-3	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
KA-3	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
KA-3	10/21/2019	Phenol	1.1	0.5	0.5	5761	ug/L
KA-3	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
KA-3	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
KA-3	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
KA-3	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
KA-3	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
KA-3	3/4/2020	1,4-Dioxane		*5*	1	4.59	ug/L
KA-3	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
KA-3	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
KA-3	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
KA-3	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
KA-3	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
KA-3	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
KA-3	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
KA-3	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
KA-3	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
KA-3	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
KA-3	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
KA-3	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
KA-3	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
KA-3	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
KA-3	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
KA-3	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
KA-3	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
KA-3	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
KA-3	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
KA-3	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
KA-3	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
KA-3	3/4/2020	Benzoic Acid	4.4	2.5	0.5	75000	ug/L
KA-3	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
KA-3	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
KA-3	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
KA-3	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
KA-3	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
KA-3	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
KA-3	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
KA-3	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
KA-3	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
KA-3	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
KA-3	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
KA-3	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
KA-3	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
KA-3	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
KA-3	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
KA-3	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
KA-3	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
KA-3	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
KA-3	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
KA-3	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
KA-3	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
KA-3	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
KA-3	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
KA-3	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
KA-3	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
KA-3	3/4/2020	Phenol	22	2.5	0.5	5761	ug/L
KA-3	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
KA-3	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
KA-3	9/22/2020	1,2,4-Trichlorobenzene	ND	0.56	0.11	70	ug/L
KA-3	9/22/2020	1,2-Dichlorobenzene	ND	0.56	0.11	600	ug/L
KA-3	9/22/2020	1,3-Dichlorobenzene	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	1,4-Dichlorobenzene	ND	0.56	0.11	75	ug/L
KA-3	9/22/2020	1,4-Dioxane	2.8	0.56	0.11	4.59	ug/L
KA-3	9/22/2020	1-Methylnaphthalene	**24**	0.56	0.11	11.38	ug/L
KA-3	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.56	0.11	240	ug/L
KA-3	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	2,4,5-Trichlorophenol	ND	0.56	0.11	1166	ug/L
KA-3	9/22/2020	2,4,6-Trichlorophenol	ND	0.56	0.11	11.9*	ug/L
KA-3	9/22/2020	2,4-Dichlorophenol	ND	0.56	0.11	45.3	ug/L
KA-3	9/22/2020	2,4-Dimethylphenol	ND	0.56	0.11	354	ug/L
KA-3	9/22/2020	2,4-Dinitrophenol	ND	0.56	0.11	38.7	ug/L
KA-3	9/22/2020	2,4-Dinitrotoluene	ND	0.56	0.11	45.3	ug/L
KA-3	9/22/2020	2,6-Dinitrotoluene	ND	0.22	0.11	0.485	ug/L
KA-3	9/22/2020	2-Chloronaphthalene	ND	0.56	0.11	733	ug/L
KA-3	9/22/2020	2-Chlorophenol	ND	0.56	0.11	91	ug/L
KA-3	9/22/2020	2-Methylnaphthalene	10	0.56	0.11	35.1	ug/L
KA-3	9/22/2020	2-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	2-Nitroaniline	ND	0.56	0.11	190	ug/L
KA-3	9/22/2020	2-Nitrophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	3,4-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	3,3-Dichlorobenzidine	ND	0.56	0.11	1.25	ug/L
KA-3	9/22/2020	3-Nitroaniline	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.56	0.11	1.52	ug/L
KA-3	9/22/2020	4-Bromophenyl-phenylether	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Chloro-3-Methylphenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Chloroaniline	*ND*	*0.56*	0.11	0.37	ug/L
KA-3	9/22/2020	4-Chlorophenyl-phenylether	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	4-Nitroaniline	ND	0.56	0.11	3.8	ug/L
KA-3	9/22/2020	4-Nitrophenol	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Acenaphthene	2.3	0.56	0.11	535	ug/L
KA-3	9/22/2020	Acenaphthylene	0.45	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Aniline	ND	0.56	0.11	13	ug/L
KA-3	9/22/2020	Anthracene	0.13	0.56	0.11	1721	ug/L
KA-3	9/22/2020	Benzo(a)anthracene	ND	0.11	0.056	0.12	ug/L
KA-3	9/22/2020	Benzidine	*ND*	*0.56*	0.28	0.0011	ug/L
KA-3	9/22/2020	Benzo(a)pyrene	ND	0.11	0.056	0.2	ug/L
KA-3	9/22/2020	Benzo(b)fluoranthene	ND	0.11	0.056	0.34	ug/L
KA-3	9/22/2020	Benzo(g,h,i)perylene	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Benzo(k)fluoranthene	ND	0.56	0.11	3.43	ug/L
KA-3	9/22/2020	Benzoic Acid	ND	0.56	0.22	75000	ug/L
KA-3	9/22/2020	Benzyl Alcohol	0.93	0.56	0.22	2000	ug/L
KA-3	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.56	0.11	59	ug/L
KA-3	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.56*	0.11	0.137	ug/L
KA-3	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.56	0.11	9.81	ug/L
KA-3	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.56	0.22	55.64	ug/L
KA-3	9/22/2020	Butylbenzylphthalate	ND	0.56	0.22	16	ug/L
KA-3	9/22/2020	Carbazole	0.34	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Chrysene	ND	0.56	0.11	34.3	ug/L
KA-3	9/22/2020	Di-n-butylphthalate	ND	0.56	0.22	885	ug/L
KA-3	9/22/2020	Di-n-octylphthalate	ND	0.56	0.22	200	ug/L
KA-3	9/22/2020	Dibenzo(a,h)anthracene	ND	0.034	0.022	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/22/2020	Dibenzofuran	ND	0.56	0.11	NA	ug/L
KA-3	9/22/2020	Diethylphthalate	ND	0.56	0.22	14801	ug/L
KA-3	9/22/2020	Dimethylphthalate	ND	0.56	0.22	612	ug/L
KA-3	9/22/2020	Fluoranthene	ND	0.56	0.11	802	ug/L
KA-3	9/22/2020	Fluorene	2.5	0.56	0.11	288	ug/L
KA-3	9/22/2020	Hexachlorobenzene	*ND*	*0.56*	0.11	0.0976	ug/L
KA-3	9/22/2020	Hexachlorobutadiene	*ND*	*0.56*	0.11	0.14	ug/L
KA-3	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.56*	0.28	0.41	ug/L
KA-3	9/22/2020	Hexachloroethane	ND	0.56	0.11	3.28	ug/L
KA-3	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.22	0.11	0.343	ug/L
KA-3	9/22/2020	Isophorone	ND	0.56	0.11	781	ug/L
KA-3	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.56*	0.11	0.011	ug/L
KA-3	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.56*	0.11	0.0049	ug/L
KA-3	9/22/2020	N-Nitrosodiphenylamine	ND	0.56	0.11	122	ug/L
KA-3	9/22/2020	Naphthalene	13	0.56	0.11	30	ug/L
KA-3	9/22/2020	Nitrobenzene	ND	0.56	0.11	1.4	ug/L
KA-3	9/22/2020	Pentachlorophenol	ND	0.56	0.22	1	ug/L
KA-3	9/22/2020	Phenanthrene	0.7	0.56	0.11	170	ug/L
KA-3	9/22/2020	Phenol	28	0.56	0.11	5761	ug/L
KA-3	9/22/2020	Pyrene	0.15	0.56	0.11	117	ug/L
KA-3	9/22/2020	Pyridine	ND	0.56	0.22	20	ug/L
KA-3	12/17/2020	Acenaphthene	ND	11	0.175	535	ug/L
KA-3	12/17/2020	Acenaphthylene	ND	11	0.186	NA	ug/L
KA-3	12/17/2020	Anthracene	ND	11	0.197	1721	ug/L
KA-3	12/17/2020	Benzo(a)anthracene	*ND*	*11*	0.197	0.12	ug/L
KA-3	12/17/2020	Benzo(a)pyrene	*ND*	*11*	0.132	0.2	ug/L
KA-3	12/17/2020	Benzo(b)fluoranthene	*ND*	*11*	0.164	0.34	ug/L
KA-3	12/17/2020	Benzo(g,h,i)perylene	ND	11	0.252	NA	ug/L
KA-3	12/17/2020	Benzo(k)fluoranthene	*ND*	*11*	0.175	3.43	ug/L
KA-3	12/17/2020	Bis(2-chloroethoxy)methane	ND	11	0.175	59	ug/L
KA-3	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11*	2.96	0.137	ug/L
KA-3	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11	5.48	55.64	ug/L
KA-3	12/17/2020	4-Bromophenyl-phenylether	ND	11	0.219	NA	ug/L
KA-3	12/17/2020	Butylbenzylphthalate	ND	11	0.208	16	ug/L
KA-3	12/17/2020	Carbazole	ND	11	0.252	NA	ug/L
KA-3	12/17/2020	4-Chloroaniline	*ND*	*11*	3.73	0.37	ug/L
KA-3	12/17/2020	4-Chloro-3-Methylphenol	ND	11	4.17	NA	ug/L
KA-3	12/17/2020	2-Chloronaphthalene	ND	11	0.154	733	ug/L
KA-3	12/17/2020	2-Chlorophenol	ND	11	2.41	91	ug/L
KA-3	12/17/2020	4-Chlorophenyl-phenylether	ND	11	2.19	NA	ug/L
KA-3	12/17/2020	1,3-Dichlorobenzene	ND	11	0.197	NA	ug/L
KA-3	12/17/2020	Chrysene	ND	11	0.208	34.3	ug/L
KA-3	12/17/2020	Dibenzo(a,h)anthracene	ND	11	0.263	NA	ug/L
KA-3	12/17/2020	1,4-Dichlorobenzene	ND	11	0.175	75	ug/L
KA-3	12/17/2020	Dibenzofuran	ND	11	0.186	NA	ug/L
KA-3	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11*	2.85	1.25	ug/L
KA-3	12/17/2020	2,4-Dichlorophenol	ND	11	3.29	45.3	ug/L
KA-3	12/17/2020	Diethylphthalate	ND	11	0.263	14801	ug/L
KA-3	12/17/2020	2,4-Dimethylphenol	ND	11	3.84	354	ug/L
KA-3	12/17/2020	Di-n-butylphthalate	ND	11	2.96	885	ug/L
KA-3	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11*	1.75	1.52	ug/L
KA-3	12/17/2020	2,4-Dinitrophenol	ND	32.9	3.73	38.7	ug/L
KA-3	12/17/2020	2,4-Dinitrotoluene	ND	11	2.08	45.3	ug/L
KA-3	12/17/2020	2,6-Dinitrotoluene	*ND*	*11*	2.08	0.485	ug/L
KA-3	12/17/2020	Di-n-octylphthalate	ND	11	0.186	200	ug/L
KA-3	12/17/2020	Fluoranthene	ND	11	0.197	802	ug/L
KA-3	12/17/2020	Fluorene	ND	11	0.197	288	ug/L
KA-3	12/17/2020	Hexachlorobenzene	*ND*	*11*	0.186	0.0976	ug/L
KA-3	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.9*	2.85	0.41	ug/L
KA-3	12/17/2020	Hexachloroethane	*ND*	*11*	4.61	3.28	ug/L
KA-3	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11*	0.241	0.343	ug/L
KA-3	12/17/2020	Isophorone	ND	11	0.154	781	ug/L
KA-3	12/17/2020	2-Methylphenol	ND	11	1.97	NA	ug/L
KA-3	12/17/2020	Naphthalene	ND	11	0.186	30	ug/L
KA-3	12/17/2020	2-Nitroaniline	ND	11	2.41	190	ug/L
KA-3	12/17/2020	3-Nitroaniline	ND	11	1.97	NA	ug/L
KA-3	12/17/2020	4-Nitroaniline	*ND*	*11*	1.64	3.8	ug/L
KA-3	12/17/2020	Nitrobenzene	*ND*	*11*	0.143	1.4	ug/L
KA-3	12/17/2020	2-Nitrophenol	ND	11	5.7	NA	ug/L
KA-3	12/17/2020	4-Nitrophenol	ND	11	2.3	NA	ug/L
KA-3	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11*	3.62	0.011	ug/L
KA-3	12/17/2020	N-Nitrosodiphenylamine	ND	11	0.197	122	ug/L
KA-3	12/17/2020	Pentachlorophenol	*ND*	*21.9*	1.54	1	ug/L
KA-3	12/17/2020	Phenanthrene	ND	11	0.197	170	ug/L
KA-3	12/17/2020	Phenol	ND	11	2.85	5761	ug/L
KA-3	12/17/2020	Pyrene	ND	11	0.23	117	ug/L
KA-3	12/17/2020	2,4,5-Trichlorophenol	ND	11	4.06	1166	ug/L
KA-3	12/17/2020	2,4,6-Trichlorophenol	ND	11	3.84	11.9*	ug/L
KA-3	12/17/2020	Dimethylphthalate	ND	11	0.186	612	ug/L
KA-3	12/17/2020	Aniline	ND	11	4.17	13	ug/L
KA-3	12/17/2020	Benzoic Acid	ND	32.9	8	75000	ug/L
KA-3	12/17/2020	Benzyl Alcohol	ND	11	2.19	2000	ug/L
KA-3	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11*	0.175	9.81	ug/L
KA-3	12/17/2020	N-Nitrosodimethylamine	*ND*	*11*	3.84	0.0049	ug/L
KA-3	12/17/2020	Pyridine	ND	11	3.51	20	ug/L
KA-3	12/17/2020	1,2,4-Trichlorobenzene	ND	11	0.197	70	ug/L
KA-3	12/17/2020	1,2-Dichlorobenzene	ND	11	0.186	600	ug/L
KA-3	12/17/2020	Azobenzene	*ND*	*11*	1.1	0.12	ug/L
MKTF-02	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	6/6/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	6/6/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	6/6/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	6/6/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	6/6/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	6/6/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	6/6/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	6/6/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	6/6/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	6/6/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	6/6/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	6/6/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	6/6/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	6/6/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	6/6/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	6/6/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	6/6/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	6/6/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	6/6/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	6/6/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	6/6/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	6/6/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	6/6/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	6/6/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	6/6/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	6/6/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	6/6/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	6/6/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	6/6/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	6/6/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	6/6/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	6/6/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	6/6/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	6/6/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	6/6/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	6/6/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	6/6/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	6/6/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	6/6/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	6/6/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	6/6/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	6/6/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	6/6/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	6/6/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	6/6/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	6/6/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	6/6/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	6/6/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	6/6/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	6/6/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	6/6/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	6/6/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	6/6/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	6/6/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	6/6/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	6/6/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	6/6/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	6/6/2014	Fluoranthene	ND	10	3	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	6/6/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	6/6/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	6/6/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	6/6/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	6/6/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	6/6/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	9/18/2014	1-Methylnaphthalene	**23**	10	3.6	11.38	ug/L
MKTF-02	9/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-02	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-02	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-02	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-02	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-02	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-02	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-02	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-02	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-02	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-02	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-02	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-02	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-02	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-02	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-02	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-02	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-02	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-02	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-02	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-02	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-02	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-02	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-02	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-02	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-02	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-02	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-02	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-02	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-02	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-02	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-02	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-02	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-02	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-02	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-02	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-02	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-02	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-02	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-02	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-02	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-02	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-02	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-02	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-02	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-02	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-02	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-02	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-02	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-02	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-02	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-02	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-02	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-02	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-02	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-02	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-02	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-02	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-02	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-02	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-02	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-02	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-02	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-02	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-02	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-02	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-02	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-02	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-02	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-02	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-02	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-02	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-02	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-02	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-02	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-02	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-02	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-02	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-02	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-02	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-02	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-02	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-02	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-02	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-02	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-02	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-02	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-02	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-02	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-02	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-02	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-02	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-02	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-02	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-02	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-02	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-02	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-02	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-02	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-02	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-02	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-02	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-02	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-02	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-02	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-02	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-02	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-02	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-02	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-02	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-02	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-02	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-02	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-02	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-02	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-02	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-02	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-02	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-02	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-02	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-02	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-02	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-02	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-02	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-02	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-02	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-02	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-02	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-02	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-02	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-02	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-02	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-02	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-02	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-02	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-02	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-02	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-02	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-02	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-02	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-02	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-02	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-02	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-02	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-02	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-02	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-02	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-02	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-02	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-02	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-02	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-02	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-02	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-02	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-02	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-02	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-02	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-02	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-02	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-02	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-02	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-02	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-02	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-02	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-02	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-02	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-02	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-02	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-02	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-02	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-02	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-02	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-02	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-02	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-02	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-02	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-02	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-02	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-02	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-02	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-02	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-02	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-02	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-02	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-02	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-02	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-02	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-02	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-02	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-02	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-02	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-02	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-02	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-02	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-02	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-02	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-02	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-02	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-02	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-02	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-02	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-02	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-02	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-02	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-02	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-02	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-02	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-02	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-02	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-02	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-02	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-02	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-02	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-02	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-02	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-02	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-02	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-02	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-02	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-02	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-02	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-02	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-02	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-02	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-02	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-02	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-02	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-02	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-02	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-02	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-02	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-02	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-02	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-02	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-02	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-02	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-02	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-02	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-02	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-02	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-02	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-02	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-02	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-02	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-02	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-02	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-02	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-02	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-02	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-02	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-02	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-02	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-02	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-02	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-02	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-02	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-02	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-02	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-02	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-02	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-02	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-02	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-02	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-02	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-02	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-02	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-02	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-02	6/10/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-02	6/10/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-02	6/10/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-02	6/10/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-02	6/10/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-02	6/10/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-02	6/10/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-02	6/10/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-02	6/10/2016	Isophorone	ND	50	13	781	ug/L
MKTF-02	6/10/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-02	6/10/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-02	6/10/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-02	6/10/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-02	6/10/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-02	6/10/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-02	6/10/2016	Fluorene	ND	50	14	288	ug/L
MKTF-02	6/10/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-02	6/10/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-02	6/10/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-02	6/10/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-02	6/10/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-02	6/10/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-02	6/10/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-02	6/10/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-02	6/10/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-02	6/10/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-02	6/10/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-02	6/10/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-02	6/10/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-02	6/10/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-02	6/10/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-02	6/10/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-02	6/10/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-02	6/10/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-02	6/10/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-02	6/10/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-02	6/10/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/10/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-02	6/10/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-02	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-02	6/10/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-02	6/10/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-02	6/10/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-02	6/10/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-02	6/10/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-02	6/10/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-02	6/10/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-02	6/10/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-02	6/10/2016	Pyrene	ND	50	15	117	ug/L
MKTF-02	6/10/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-02	6/10/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-02	6/10/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-02	6/10/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-02	6/10/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-02	6/10/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-02	6/10/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-02	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-02	6/10/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-02	6/10/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-02	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-02	6/10/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-02	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-02	6/10/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-02	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	9/7/2016	Benzo(a)anthracene	**2.8**	10	2.6	0.12	ug/L
MKTF-02	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-02	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	9/7/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-02	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-02	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-02	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	9/7/2016	1-Methylnaphthalene	8.2	10	2.9	11.38	ug/L
MKTF-02	9/7/2016	Naphthalene	5.1	10	2.6	30	ug/L
MKTF-02	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-02	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-02	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	9/7/2016	Phenol	6.7	10	2	5761	ug/L
MKTF-02	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	9/7/2016	Bis(2-ethylhexyl)phthalate	4.3	10	2.6	55.64	ug/L
MKTF-02	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-02	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-02	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	9/7/2016	Dimethylphthalate	5.4	10	2.4	612	ug/L
MKTF-02	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-02	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-02	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	10/28/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-02	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	10/28/2016	Isophorone	ND	10	2.6	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-02	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	10/28/2016	1-Methylnaphthalene	6	10	2.9	11.38	ug/L
MKTF-02	10/28/2016	Naphthalene	4.6	10	2.6	30	ug/L
MKTF-02	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-02	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-02	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-02	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	10/28/2016	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-02	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-02	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-02	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-02	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-02	3/16/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-02	3/16/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-02	3/16/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-02	3/16/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-02	3/16/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-02	3/16/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-02	3/16/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-02	3/16/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-02	3/16/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-02	3/16/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-02	3/16/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-02	3/16/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-02	3/16/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-02	3/16/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-02	3/16/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-02	3/16/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-02	3/16/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-02	3/16/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-02	3/16/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-02	3/16/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-02	3/16/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-02	3/16/2017	1-Methylnaphthalene	**30**	10	2.9	11.38	ug/L
MKTF-02	3/16/2017	Naphthalene	**38**	10	2.6	30	ug/L
MKTF-02	3/16/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-02	3/16/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-02	3/16/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-02	3/16/2017	2-Methylphenol	13	10	2.5	NA	ug/L
MKTF-02	3/16/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-02	3/16/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-02	3/16/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-02	3/16/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-02	3/16/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-02	3/16/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-02	3/16/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-02	3/16/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-02	3/16/2017	2,4-Dimethylphenol	11	10	3	354	ug/L
MKTF-02	3/16/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-02	3/16/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-02	3/16/2017	Phenol	16	10	2	5761	ug/L
MKTF-02	3/16/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-02	3/16/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-02	3/16/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-02	3/16/2017	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-02	3/16/2017	Di-n-octylphthalate	3.3	10	2	200	ug/L
MKTF-02	3/16/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-02	3/16/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-02	3/16/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-02	3/16/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-02	3/16/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-02	3/16/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-02	3/16/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-02	3/16/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-02	3/16/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-02	3/16/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-02	3/16/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-02	3/16/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-02	3/16/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-02	3/16/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-02	3/16/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-02	3/16/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-02	3/16/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-02	3/16/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-02	3/16/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-02	3/16/2017	3,4-Methylphenol	13	10	2.3	NA	ug/L
MKTF-02	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-02	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	10/3/2017	Benzoic Acid	13	20	3.9	75000	ug/L
MKTF-02	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-02	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	10/3/2017	1-Methylnaphthalene	9.7	10	3.3	11.38	ug/L
MKTF-02	10/3/2017	Naphthalene	5	10	2.9	30	ug/L
MKTF-02	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-02	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	10/3/2017	2,4-Dimethylphenol	3	10	2.8	354	ug/L
MKTF-02	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	10/3/2017	Phenol	19	10	3.1	5761	ug/L
MKTF-02	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-02	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-02	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-02	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	11/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-02	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	11/20/2017	Fluorene	ND	10	4	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	11/20/2017	1-Methylnaphthalene	**30**	10	3.3	11.38	ug/L
MKTF-02	11/20/2017	Naphthalene	17	10	2.9	30	ug/L
MKTF-02	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	11/20/2017	2-Methylphenol	6.4	10	3.3	NA	ug/L
MKTF-02	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	11/20/2017	2,4-Dimethylphenol	9.3	10	2.8	354	ug/L
MKTF-02	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	11/20/2017	Phenol	14	10	3.1	5761	ug/L
MKTF-02	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	11/20/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-02	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-02	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	11/20/2017	3,4-Methylphenol	11	10	3.2	NA	ug/L
MKTF-02	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-02	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-02	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-02	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-02	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-02	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-02	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-02	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-02	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-02	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-02	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-02	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-02	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-02	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-02	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-02	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-02	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-02	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-02	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-02	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-02	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-02	2/6/2018	1-Methylnaphthalene	**31**	10	3.3	11.38	ug/L
MKTF-02	2/6/2018	Naphthalene	20	10	2.9	30	ug/L
MKTF-02	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-02	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-02	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-02	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-02	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-02	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-02	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-02	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-02	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-02	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-02	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-02	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-02	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-02	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-02	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-02	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-02	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-02	2/6/2018	Phenol	16	10	3.1	5761	ug/L
MKTF-02	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-02	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-02	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-02	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-02	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-02	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-02	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-02	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-02	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-02	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-02	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-02	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-02	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-02	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-02	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-02	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-02	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-02	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-02	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-02	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-02	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-02	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-02	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-02	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-02	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-02	2/6/2018	3,4-Methylphenol	12	10	3.2	NA	ug/L
MKTF-02	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	5/1/2018	1-Methylnaphthalene	**22**	10	7	11.38	ug/L
MKTF-02	5/1/2018	Naphthalene	16	10	5	30	ug/L
MKTF-02	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-02	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-02	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	5/1/2018	Phenol	8.8	10	6	5761	ug/L
MKTF-02	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-02	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	5/1/2018	3,4-Methylphenol	9	10	5.4	NA	ug/L
MKTF-02	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	8/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	8/20/2018	1-Methylnaphthalene	9	10	7	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	Naphthalene	6.9	10	5	30	ug/L
MKTF-02	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	8/20/2018	2-Methylphenol	12	10	6.3	NA	ug/L
MKTF-02	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	8/20/2018	2,4-Dimethylphenol	9.9	10	5.9	354	ug/L
MKTF-02	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	8/20/2018	Phenol	15	10	6	5761	ug/L
MKTF-02	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-02	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	8/20/2018	3,4-Methylphenol	10	10	5.4	NA	ug/L
MKTF-02	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-02	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-02	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-02	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-02	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-02	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-02	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-02	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-02	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-02	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-02	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-02	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-02	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-02	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-02	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-02	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-02	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-02	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-02	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-02	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-02	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-02	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-02	11/28/2018	1-Methylnaphthalene	**34**	10	7	11.38	ug/L
MKTF-02	11/28/2018	Naphthalene	**35**	10	5	30	ug/L
MKTF-02	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-02	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-02	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-02	11/28/2018	2-Methylphenol	22	10	6.3	NA	ug/L
MKTF-02	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-02	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-02	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-02	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-02	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-02	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-02	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-02	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-02	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-02	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-02	11/28/2018	2,4-Dimethylphenol	30	10	5.9	354	ug/L
MKTF-02	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-02	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-02	11/28/2018	Phenol	14	10	6	5761	ug/L
MKTF-02	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-02	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-02	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-02	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-02	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-02	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-02	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-02	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-02	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-02	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-02	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-02	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-02	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-02	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-02	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-02	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-02	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-02	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-02	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-02	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-02	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-02	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-02	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-02	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-02	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-02	11/28/2018	3,4-Methylphenol	17	10	5.4	NA	ug/L
MKTF-02	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-02	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-02	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-02	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-02	3/28/2019	1-Methylnaphthalene	8.9	10	6.999122	11.38	ug/L
MKTF-02	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-02	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-02	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-02	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-02	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-02	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-02	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-02	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-02	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-02	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-02	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-02	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-02	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-02	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-02	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-02	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-02	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-02	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-02	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-02	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-02	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-02	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-02	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-02	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-02	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-02	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-02	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-02	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-02	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-02	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-02	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-02	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-02	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-02	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
MKTF-02	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-02	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-02	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-02	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-02	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-02	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-02	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-02	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-02	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-02	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-02	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-02	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-02	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-02	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-02	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-02	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-02	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-02	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-02	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-02	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-02	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-02	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-02	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-02	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-02	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-02	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-02	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-02	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-02	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-02	3/28/2019	Phenol	8.3	10	5.977352	5761	ug/L
MKTF-02	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-02	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-02	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-02	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-02	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-02	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-02	5/6/2019	1-Methylnaphthalene	**19**	10	3.069076	11.38	ug/L
MKTF-02	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-02	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-02	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-02	5/6/2019	2,4-Dimethylphenol	5.2	10	2.965993	354	ug/L
MKTF-02	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-02	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-02	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-02	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-02	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-02	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-02	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-02	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-02	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-02	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-02	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-02	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-02	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-02	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-02	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-02	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-02	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-02	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-02	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-02	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-02	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-02	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-02	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-02	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-02	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-02	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-02	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-02	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-02	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-02	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-02	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-02	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-02	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-02	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-02	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-02	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-02	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-02	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-02	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-02	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-02	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-02	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-02	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-02	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-02	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-02	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-02	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-02	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-02	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-02	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-02	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-02	5/6/2019	Naphthalene	7.5	10	4.12221	30	ug/L
MKTF-02	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-02	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-02	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-02	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-02	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-02	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-02	5/6/2019	Phenol	8.7	10	8.036586	5761	ug/L
MKTF-02	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-02	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-02	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-02	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-02	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-02	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-02	8/23/2019	1-Methylnaphthalene	**17**	10	3.069076	11.38	ug/L
MKTF-02	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-02	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-02	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-02	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-02	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-02	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-02	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-02	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-02	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-02	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-02	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-02	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-02	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-02	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-02	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-02	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-02	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-02	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-02	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-02	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-02	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-02	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-02	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-02	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-02	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-02	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-02	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-02	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-02	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-02	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-02	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-02	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-02	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-02	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-02	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-02	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-02	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-02	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-02	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-02	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-02	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-02	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-02	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-02	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-02	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-02	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-02	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-02	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-02	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-02	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-02	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-02	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-02	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-02	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-02	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-02	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-02	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-02	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-02	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-02	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-02	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-02	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-02	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-02	8/23/2019	Phenol	27	10	8.036586	5761	ug/L
MKTF-02	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-02	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-02	11/19/2019	1,4-Dioxane	**39**	1	1	4.59	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	4.8	0.5	0.5	11.38	ug/L
MKTF-02	11/19/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-02	11/19/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-02	11/19/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-02	11/19/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-02	11/19/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-02	11/19/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-02	11/19/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-02	11/19/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-02	11/19/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-02	11/19/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-02	11/19/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-02	11/19/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-02	11/19/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-02	11/19/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-02	11/19/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-02	11/19/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-02	11/19/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-02	11/19/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-02	11/19/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-02	11/19/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-02	11/19/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-02	11/19/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-02	11/19/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-02	11/19/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-02	11/19/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-02	11/19/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-02	11/19/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-02	11/19/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-02	11/19/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-02	11/19/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-02	11/19/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-02	11/19/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-02	11/19/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-02	11/19/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-02	11/19/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-02	11/19/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-02	11/19/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-02	11/19/2019	Naphthalene	0.65	0.5	0.5	30	ug/L
MKTF-02	11/19/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-02	11/19/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-02	11/19/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-02	11/19/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-02	11/19/2019	Phenol	5.8	0.5	0.5	5761	ug/L
MKTF-02	11/19/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-02	11/19/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-02	11/19/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-02	11/19/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-02	11/19/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-02	11/19/2019	1,4-Dioxane	**40**	1	1	4.59	ug/L
MKTF-02	11/19/2019	1-Methylnaphthalene	6.1	0.5	0.5	11.38	ug/L
MKTF-02	11/19/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-02	11/19/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-02	11/19/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-02	11/19/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-02	11/19/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-02	11/19/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-02	11/19/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-02	11/19/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-02	11/19/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-02	11/19/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-02	11/19/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-02	11/19/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-02	11/19/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-02	11/19/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-02	11/19/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-02	11/19/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-02	11/19/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-02	11/19/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-02	11/19/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-02	11/19/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-02	11/19/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-02	11/19/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-02	11/19/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-02	11/19/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-02	11/19/2019	Bis(2-ethylhexyl)phthalate	1.8	0.5	0.5	55.64	ug/L
MKTF-02	11/19/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-02	11/19/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-02	11/19/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-02	11/19/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-02	11/19/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-02	11/19/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-02	11/19/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-02	11/19/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-02	11/19/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-02	11/19/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-02	11/19/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-02	11/19/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-02	11/19/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-02	11/19/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-02	11/19/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-02	11/19/2019	Naphthalene	0.66	0.5	0.5	30	ug/L
MKTF-02	11/19/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-02	11/19/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-02	11/19/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-02	11/19/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-02	11/19/2019	Phenol	4.9	0.5	0.5	5761	ug/L
MKTF-02	11/19/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-02	11/19/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-02	2/25/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-02	2/25/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-02	2/25/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
MKTF-02	2/25/2020	1,4-Dioxane	**5.9**	5	5	4.59	ug/L
MKTF-02	2/25/2020	1-Methylnaphthalene	**48**	2.5	2.5	11.38	ug/L
MKTF-02	2/25/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-02	2/25/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-02	2/25/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-02	2/25/2020	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
MKTF-02	2/25/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-02	2/25/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-02	2/25/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-02	2/25/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-02	2/25/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-02	2/25/2020	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
MKTF-02	2/25/2020	2-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-02	2/25/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-02	2/25/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-02	2/25/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-02	2/25/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Acenaphthene	ND	2.5	2.5	535	ug/L
MKTF-02	2/25/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-02	2/25/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-02	2/25/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-02	2/25/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-02	2/25/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-02	2/25/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-02	2/25/2020	Benzoic Acid	ND	2.5	2.5	75000	ug/L
MKTF-02	2/25/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-02	2/25/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-02	2/25/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-02	2/25/2020	Bis(2-ethylhexyl)phthalate	1.26	2.5	2.5	55.64	ug/L
MKTF-02	2/25/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-02	2/25/2020	Carbazole	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-02	2/25/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-02	2/25/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-02	2/25/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-02	2/25/2020	Dibenzofuran	ND	2.5	2.5	NA	ug/L
MKTF-02	2/25/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-02	2/25/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-02	2/25/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-02	2/25/2020	Fluorene	ND	2.5	2.5	288	ug/L
MKTF-02	2/25/2020	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
MKTF-02	2/25/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-02	2/25/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-02	2/25/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-02	2/25/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-02	2/25/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-02	2/25/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-02	2/25/2020	Naphthalene	15	2.5	2.5	30	ug/L
MKTF-02	2/25/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-02	2/25/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-02	2/25/2020	Phenanthrene	ND	2.5	2.5	170	ug/L
MKTF-02	2/25/2020	Phenol	7.7	2.5	2.5	5761	ug/L
MKTF-02	2/25/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-02	2/25/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-02	9/21/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-02	9/21/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-02	9/21/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-02	9/21/2020	1,4-Dioxane	**11**	2.5	0.5	4.59	ug/L
MKTF-02	9/21/2020	1-Methylnaphthalene	**34**	2.5	0.5	11.38	ug/L
MKTF-02	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
MKTF-02	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-02	9/21/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-02	9/21/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-02	9/21/2020	2,4-Dimethylphenol	4.6	2.5	0.5	354	ug/L
MKTF-02	9/21/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-02	9/21/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-02	9/21/2020	2,6-Dinitrotoluene	*ND*	*1*	0.5	0.485	ug/L
MKTF-02	9/21/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-02	9/21/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-02	9/21/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-02	9/21/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-02	9/21/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	3,4-Methylphenol	3.4	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-02	9/21/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-02	9/21/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
MKTF-02	9/21/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-02	9/21/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Acenaphthene	0.75	2.5	0.5	535	ug/L
MKTF-02	9/21/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-02	9/21/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-02	9/21/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
MKTF-02	9/21/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
MKTF-02	9/21/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
MKTF-02	9/21/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
MKTF-02	9/21/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-02	9/21/2020	Benzoic Acid	ND	2.5	1	75000	ug/L
MKTF-02	9/21/2020	Benzyl Alcohol	ND	2.5	1	2000	ug/L
MKTF-02	9/21/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-02	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
MKTF-02	9/21/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-02	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-02	9/21/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-02	9/21/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-02	9/21/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-02	9/21/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-02	9/21/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
MKTF-02	9/21/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-02	9/21/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-02	9/21/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-02	9/21/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-02	9/21/2020	Fluorene	0.65	2.5	0.5	288	ug/L
MKTF-02	9/21/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-02	9/21/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-02	9/21/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
MKTF-02	9/21/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-02	9/21/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
MKTF-02	9/21/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-02	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
MKTF-02	9/21/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
MKTF-02	9/21/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-02	9/21/2020	Naphthalene	4	2.5	0.5	30	ug/L
MKTF-02	9/21/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-02	9/21/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
MKTF-02	9/21/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-02	9/21/2020	Phenol	20	2.5	0.5	5761	ug/L
MKTF-02	9/21/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-02	9/21/2020	Pyridine	ND	2.5	1	20	ug/L
MKTF-02	12/18/2020	1,3-Dichlorobenzene	ND	11.4	2.16	NA	ug/L
MKTF-02	12/18/2020	1,4-Dichlorobenzene	ND	11.4	2.16	75	ug/L
MKTF-02	12/18/2020	2,4,5-Trichlorophenol	ND	11.4	1.25	1166	ug/L
MKTF-02	12/18/2020	2,4,6-Trichlorophenol	ND	11.4	1.82	11.9*	ug/L
MKTF-02	12/18/2020	2,4-Dichlorophenol	ND	11.4	1.71	45.3	ug/L
MKTF-02	12/18/2020	2,4-Dimethylphenol	ND	11.4	1.48	354	ug/L
MKTF-02	12/18/2020	2,4-Dinitrophenol	ND	34.1	5.23	38.7	ug/L
MKTF-02	12/18/2020	2-Chloronaphthalene	ND	11.4	1.71	733	ug/L
MKTF-02	12/18/2020	2-Chlorophenol	ND	11.4	1.93	91	ug/L
MKTF-02	12/18/2020	2-Methylphenol	ND	11.4	1.71	NA	ug/L
MKTF-02	12/18/2020	2-Nitroaniline	ND	11.4	2.05	190	ug/L
MKTF-02	12/18/2020	2-Nitrophenol	ND	11.4	2.27	NA	ug/L
MKTF-02	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	4.55	1.25	ug/L
MKTF-02	12/18/2020	3-Nitroaniline	ND	11.4	2.5	NA	ug/L
MKTF-02	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	4.55	1.52	ug/L
MKTF-02	12/18/2020	4-Bromophenyl-phenylether	ND	11.4	1.48	NA	ug/L
MKTF-02	12/18/2020	4-Chloro-3-Methylphenol	ND	11.4	1.59	NA	ug/L
MKTF-02	12/18/2020	4-Chloroaniline	*ND*	*11.4*	2.05	0.37	ug/L
MKTF-02	12/18/2020	4-Chlorophenyl-phenylether	ND	11.4	1.48	NA	ug/L
MKTF-02	12/18/2020	4-Nitroaniline	*ND*	*11.4*	4.66	3.8	ug/L
MKTF-02	12/18/2020	4-Nitrophenol	ND	11.4	3.75	NA	ug/L
MKTF-02	12/18/2020	Acenaphthene	ND	11.4	1.48	535	ug/L
MKTF-02	12/18/2020	Acenaphthylene	ND	11.4	1.59	NA	ug/L
MKTF-02	12/18/2020	Aniline	ND	11.4	3.98	13	ug/L
MKTF-02	12/18/2020	Anthracene	ND	11.4	1.48	1721	ug/L
MKTF-02	12/18/2020	Benzo(a)anthracene	*ND*	*11.4*	2.05	0.12	ug/L
MKTF-02	12/18/2020	Benzo(a)pyrene	*ND*	*11.4*	1.93	0.2	ug/L
MKTF-02	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.4*	1.93	0.34	ug/L
MKTF-02	12/18/2020	Benzo(g,h,i)perylene	ND	11.4	3.53	NA	ug/L
MKTF-02	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.4*	1.93	3.43	ug/L
MKTF-02	12/18/2020	Benzoic Acid	ND	34.1	6.48	75000	ug/L
MKTF-02	12/18/2020	Benzyl Alcohol	ND	11.4	2.5	2000	ug/L
MKTF-02	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.4	1.59	59	ug/L
MKTF-02	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	1.36	0.137	ug/L
MKTF-02	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	3.07	55.64	ug/L
MKTF-02	12/18/2020	Butylbenzylphthalate	ND	11.4	2.62	16	ug/L
MKTF-02	12/18/2020	Carbazole	ND	11.4	2.16	NA	ug/L
MKTF-02	12/18/2020	Chrysene	ND	11.4	2.05	34.3	ug/L
MKTF-02	12/18/2020	Di-n-butylphthalate	ND	11.4	1.93	885	ug/L
MKTF-02	12/18/2020	Di-n-octylphthalate	ND	11.4	1.82	200	ug/L
MKTF-02	12/18/2020	Dibenzo(a,h)anthracene	ND	11.4	3.07	NA	ug/L
MKTF-02	12/18/2020	Dibenzofuran	ND	11.4	1.71	NA	ug/L
MKTF-02	12/18/2020	Diethylphthalate	ND	11.4	1.25	14801	ug/L
MKTF-02	12/18/2020	Dimethylphthalate	ND	11.4	1.36	612	ug/L
MKTF-02	12/18/2020	Fluoranthene	ND	11.4	1.48	802	ug/L
MKTF-02	12/18/2020	Fluorene	ND	11.4	1.48	288	ug/L
MKTF-02	12/18/2020	Hexachlorobenzene	*ND*	*11.4*	1.36	0.0976	ug/L
MKTF-02	12/18/2020	Hexachlorocyclopentadiene	*ND*	*22.7*	2.16	0.41	ug/L
MKTF-02	12/18/2020	Hexachloroethane	*ND*	*11.4*	2.73	3.28	ug/L
MKTF-02	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	3.3	0.343	ug/L
MKTF-02	12/18/2020	Isophorone	ND	11.4	1.93	781	ug/L
MKTF-02	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	2.27	0.011	ug/L
MKTF-02	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.4*	2.5	0.0049	ug/L
MKTF-02	12/18/2020	N-Nitrosodiphenylamine	ND	11.4	1.25	122	ug/L
MKTF-02	12/18/2020	Naphthalene	ND	11.4	1.93	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	12/18/2020	Nitrobenzene	*ND*	*11.4*	1.82	1.4	ug/L
MKTF-02	12/18/2020	Pentachlorophenol	*ND*	*22.7*	4.21	1	ug/L
MKTF-02	12/18/2020	Phenanthrene	ND	11.4	1.59	170	ug/L
MKTF-02	12/18/2020	Phenol	20.1	11.4	1.48	5761	ug/L
MKTF-02	12/18/2020	Pyrene	ND	11.4	1.71	117	ug/L
MKTF-02	12/18/2020	Pyridine	ND	11.4	5	20	ug/L
MKTF-02	12/18/2020	1,2,4-Trichlorobenzene	ND	11.4	2.05	70	ug/L
MKTF-02	12/18/2020	1,2-Dichlorobenzene	ND	11.4	2.05	600	ug/L
MKTF-02	12/18/2020	2,4-Dinitrotoluene	ND	11.4	1.59	45.3	ug/L
MKTF-02	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.4*	1.48	0.485	ug/L
MKTF-02	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	1.93	9.81	ug/L
MKTF-02	12/18/2020	Azobenzene	*ND*	*11.4*	1.48	0.12	ug/L
MKTF-04	4/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	4/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	4/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	4/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	4/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	4/11/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	4/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	4/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	4/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	4/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	4/11/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	4/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	4/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	4/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	4/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	4/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	4/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	4/11/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	4/11/2014	Carbazole	17	10	2.9	NA	ug/L
MKTF-04	4/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	4/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	4/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	4/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	4/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	4/11/2014	1-Methylnaphthalene	**120**	10	3.6	11.38	ug/L
MKTF-04	4/11/2014	Naphthalene	**230**	20	4.6	30	ug/L
MKTF-04	4/11/2014	2-Methylnaphthalene	**160**	10	2.6	35.1	ug/L
MKTF-04	4/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	4/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	4/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	4/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	4/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	4/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	4/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	4/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	4/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	4/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	4/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	4/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	4/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	4/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	4/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	4/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	4/11/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	4/11/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	4/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	4/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	4/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	4/11/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	4/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	4/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	4/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	4/11/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	4/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	4/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	4/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	4/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	4/11/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	4/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	4/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	4/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	4/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	4/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	4/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	4/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	6/4/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	6/4/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	6/4/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	6/4/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	6/4/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	6/4/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	6/4/2014	Benzoic Acid	21	20	2.2	75000	ug/L
MKTF-04	6/4/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	6/4/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	6/4/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	6/4/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	6/4/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	6/4/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	6/4/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	6/4/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	6/4/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	6/4/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	6/4/2014	Carbazole	11	10	2.9	NA	ug/L
MKTF-04	6/4/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	6/4/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	6/4/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	6/4/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	6/4/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	6/4/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-04	6/4/2014	Naphthalene	**240**	20	4.6	30	ug/L
MKTF-04	6/4/2014	2-Methylnaphthalene	**140**	10	2.6	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	6/4/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	6/4/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	6/4/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	6/4/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	6/4/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	6/4/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	6/4/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	6/4/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	6/4/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	6/4/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	6/4/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	6/4/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	6/4/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	6/4/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	6/4/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	6/4/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	6/4/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	6/4/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	6/4/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	6/4/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	6/4/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	6/4/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	6/4/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	6/4/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	6/4/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	6/4/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	6/4/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	6/4/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	6/4/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	6/4/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	6/4/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	6/4/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	6/4/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	6/4/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	6/4/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	6/4/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	6/4/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	6/4/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	6/4/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	6/4/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	6/4/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	6/4/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	6/4/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	9/15/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	9/15/2014	Carbazole	15	10	2.9	NA	ug/L
MKTF-04	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	9/15/2014	1-Methylnaphthalene	**89**	10	3.6	11.38	ug/L
MKTF-04	9/15/2014	Naphthalene	**150**	10	2.3	30	ug/L
MKTF-04	9/15/2014	2-Methylnaphthalene	**97**	10	2.6	35.1	ug/L
MKTF-04	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-04	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	9/15/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-04	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	9/24/2014	1-Methylnaphthalene	**130**	10	3.6	11.38	ug/L
MKTF-04	9/24/2014	Naphthalene	**190**	10	2.3	30	ug/L
MKTF-04	9/24/2014	2-Methylnaphthalene	**160**	10	2.6	35.1	ug/L
MKTF-04	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-04	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-04	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-04	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-04	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-04	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-04	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-04	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-04	11/13/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-04	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-04	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-04	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-04	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-04	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-04	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-04	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-04	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-04	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-04	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-04	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-04	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-04	11/13/2014	Carbazole	17	10	2.9	NA	ug/L
MKTF-04	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-04	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-04	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-04	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-04	11/13/2014	1-Methylnaphthalene	**61**	10	3.6	11.38	ug/L
MKTF-04	11/13/2014	Naphthalene	**80**	10	2.3	30	ug/L
MKTF-04	11/13/2014	2-Methylnaphthalene	**47**	10	2.6	35.1	ug/L
MKTF-04	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-04	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-04	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-04	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-04	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-04	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-04	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-04	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-04	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-04	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-04	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-04	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-04	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-04	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-04	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	11/13/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-04	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-04	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-04	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-04	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-04	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-04	11/13/2014	Pyrene	ND	10	4	117	ug/L
MKTF-04	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-04	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-04	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-04	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-04	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-04	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-04	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-04	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-04	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-04	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-04	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-04	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-04	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-04	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-04	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-04	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	3/16/2015	Carbazole	14	10	1.5	NA	ug/L
MKTF-04	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	1-Methylnaphthalene	**51**	10	1.8	11.38	ug/L
MKTF-04	3/16/2015	Naphthalene	**59**	10	1.8	30	ug/L
MKTF-04	3/16/2015	2-Methylnaphthalene	25	10	2.2	35.1	ug/L
MKTF-04	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	6/4/2015	Carbazole	15	10	1.5	NA	ug/L
MKTF-04	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	1-Methylnaphthalene	**120**	10	1.8	11.38	ug/L
MKTF-04	6/4/2015	Naphthalene	**190**	10	1.8	30	ug/L
MKTF-04	6/4/2015	2-Methylnaphthalene	**76**	10	2.2	35.1	ug/L
MKTF-04	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	8/18/2015	Carbazole	21	10	1.5	NA	ug/L
MKTF-04	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	8/18/2015	1-Methylnaphthalene	**150**	10	1.8	11.38	ug/L
MKTF-04	8/18/2015	Naphthalene	**260**	20	3.7	30	ug/L
MKTF-04	8/18/2015	2-Methylnaphthalene	**96**	10	2.2	35.1	ug/L
MKTF-04	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-04	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-04	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-04	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-04	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-04	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-04	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-04	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-04	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-04	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-04	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-04	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-04	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-04	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-04	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-04	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-04	11/3/2015	Carbazole	19	10	1.5	NA	ug/L
MKTF-04	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-04	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-04	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-04	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-04	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	1-Methylnaphthalene	**150**	10	1.8	11.38	ug/L
MKTF-04	11/3/2015	Naphthalene	**270**	20	3.7	30	ug/L
MKTF-04	11/3/2015	2-Methylnaphthalene	**160**	10	2.2	35.1	ug/L
MKTF-04	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-04	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-04	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-04	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-04	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-04	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-04	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-04	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-04	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-04	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-04	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-04	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-04	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-04	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-04	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-04	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-04	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-04	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-04	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-04	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-04	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-04	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-04	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-04	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-04	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-04	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-04	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-04	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-04	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-04	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-04	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-04	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-04	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-04	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-04	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-04	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-04	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-04	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-04	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-04	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-04	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-04	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-04	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-04	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-04	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-04	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-04	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-04	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-04	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-04	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-04	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-04	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-04	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-04	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-04	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-04	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-04	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-04	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-04	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-04	2/29/2016	Carbazole	26	10	7.2	NA	ug/L
MKTF-04	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-04	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-04	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-04	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-04	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-04	2/29/2016	1-Methylnaphthalene	**170**	10	6.8	11.38	ug/L
MKTF-04	2/29/2016	Naphthalene	**330**	50	30	30	ug/L
MKTF-04	2/29/2016	2-Methylnaphthalene	**190**	10	7	35.1	ug/L
MKTF-04	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-04	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-04	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-04	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-04	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-04	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-04	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-04	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-04	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-04	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-04	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-04	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-04	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-04	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-04	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-04	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-04	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-04	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-04	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-04	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-04	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-04	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-04	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-04	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-04	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-04	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-04	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-04	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-04	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-04	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-04	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-04	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-04	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-04	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-04	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-04	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-04	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-04	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-04	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-04	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-04	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-04	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-04	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-04	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-04	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-04	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-04	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-04	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-04	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-04	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-04	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-04	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-04	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-04	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-04	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-04	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-04	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-04	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-04	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-04	6/9/2016	Carbazole	18	50	11	NA	ug/L
MKTF-04	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-04	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-04	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-04	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-04	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	1-Methylnaphthalene	**130**	50	15	11.38	ug/L
MKTF-04	6/9/2016	Naphthalene	**180**	50	13	30	ug/L
MKTF-04	6/9/2016	2-Methylnaphthalene	**130**	50	14	35.1	ug/L
MKTF-04	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-04	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-04	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-04	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-04	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-04	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-04	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-04	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-04	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-04	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-04	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-04	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-04	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-04	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-04	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-04	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-04	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-04	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/9/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-04	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-04	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-04	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-04	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-04	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-04	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-04	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-04	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-04	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-04	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-04	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-04	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-04	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-04	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-04	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-04	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-04	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-04	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-04	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-04	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-04	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-04	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	9/11/2016	Acenaphthene	4.9	10	2.6	535	ug/L
MKTF-04	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	9/11/2016	Phenanthrene	7.1	10	2.6	170	ug/L
MKTF-04	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-04	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	9/11/2016	Fluorene	5.2	10	2.7	288	ug/L
MKTF-04	9/11/2016	Carbazole	17	10	2.3	NA	ug/L
MKTF-04	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	9/11/2016	1-Methylnaphthalene	**140**	10	2.9	11.38	ug/L
MKTF-04	9/11/2016	Naphthalene	**220**	10	2.6	30	ug/L
MKTF-04	9/11/2016	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-04	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	9/11/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	9/11/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-04	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	9/11/2016	Phenol	3.7	10	2	5761	ug/L
MKTF-04	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	9/11/2016	Bis(2-ethylhexyl)phthalate	3.6	10	2.6	55.64	ug/L
MKTF-04	9/11/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-04	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	9/11/2016	Pyrene	3.3	10	3.1	117	ug/L
MKTF-04	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	9/11/2016	Dibenzofuran	2.5	10	2.5	NA	ug/L
MKTF-04	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	9/11/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-04	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	11/2/2016	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-04	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	11/2/2016	Phenanthrene	8	10	2.6	170	ug/L
MKTF-04	11/2/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	11/2/2016	Fluorene	8.2	10	2.7	288	ug/L
MKTF-04	11/2/2016	Carbazole	20	10	2.3	NA	ug/L
MKTF-04	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	11/2/2016	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-04	11/2/2016	Naphthalene	**250**	20	5.2	30	ug/L
MKTF-04	11/2/2016	2-Methylnaphthalene	**170**	10	2.9	35.1	ug/L
MKTF-04	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	11/2/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	11/2/2016	2,4-Dimethylphenol	4.3	10	3	354	ug/L
MKTF-04	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	11/2/2016	Phenol	2.6	10	2	5761	ug/L
MKTF-04	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	11/2/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-04	11/2/2016	Di-n-octylphthalate	7.3	10	2	200	ug/L
MKTF-04	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-04	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-04	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	11/2/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-04	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-04	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-04	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-04	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-04	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-04	3/2/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-04	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-04	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-04	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-04	3/2/2017	Acenaphthene	6.1	10	2.6	535	ug/L
MKTF-04	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-04	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-04	3/2/2017	Phenanthrene	6.1	10	2.6	170	ug/L
MKTF-04	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-04	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-04	3/2/2017	Fluorene	6.1	10	2.7	288	ug/L
MKTF-04	3/2/2017	Carbazole	20	10	2.3	NA	ug/L
MKTF-04	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-04	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-04	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-04	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-04	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-04	3/2/2017	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-04	3/2/2017	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-04	3/2/2017	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-04	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-04	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-04	3/2/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-04	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-04	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-04	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-04	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-04	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-04	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-04	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-04	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-04	3/2/2017	2,4-Dimethylphenol	3.8	10	3	354	ug/L
MKTF-04	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-04	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-04	3/2/2017	Phenol	5.2	10	2	5761	ug/L
MKTF-04	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-04	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-04	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-04	3/2/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-04	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-04	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-04	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-04	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-04	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-04	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-04	3/2/2017	Pyrene	ND	10	3.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-04	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-04	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-04	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-04	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-04	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-04	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-04	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-04	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-04	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-04	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-04	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-04	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-04	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-04	3/2/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-04	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	6/8/2017	Acenaphthene	5.2	10	3.6	535	ug/L
MKTF-04	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	6/8/2017	Phenanthrene	6.4	10	4.3	170	ug/L
MKTF-04	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	6/8/2017	Fluorene	4.8	10	4	288	ug/L
MKTF-04	6/8/2017	Carbazole	11	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	6/8/2017	1-Methylnaphthalene	**140**	10	3.3	11.38	ug/L
MKTF-04	6/8/2017	Naphthalene	**240**	20	5.7	30	ug/L
MKTF-04	6/8/2017	2-Methylnaphthalene	**150**	10	3.3	35.1	ug/L
MKTF-04	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	6/8/2017	2,4-Dimethylphenol	5.4	10	2.8	354	ug/L
MKTF-04	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	6/8/2017	Phenol	5.8	10	3.1	5761	ug/L
MKTF-04	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	6/8/2017	Bis(2-ethylhexyl)phthalate	55	10	4.8	55.64	ug/L
MKTF-04	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	9/26/2017	Acenaphthene	4.8	10	3.6	535	ug/L
MKTF-04	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	9/26/2017	Phenanthrene	6.3	10	4.3	170	ug/L
MKTF-04	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	9/26/2017	Fluorene	7.4	10	4	288	ug/L
MKTF-04	9/26/2017	Carbazole	19	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	9/26/2017	1-Methylnaphthalene	**180**	10	3.3	11.38	ug/L
MKTF-04	9/26/2017	Naphthalene	**300**	20	5.7	30	ug/L
MKTF-04	9/26/2017	2-Methylnaphthalene	**220**	10	3.3	35.1	ug/L
MKTF-04	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	9/26/2017	2,4-Dimethylphenol	4.9	10	2.8	354	ug/L
MKTF-04	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-04	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-04	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	11/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	11/28/2017	Acenaphthene	6.8	10	3.6	535	ug/L
MKTF-04	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	11/28/2017	Phenanthrene	6.8	10	4.3	170	ug/L
MKTF-04	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	11/28/2017	Fluorene	8.1	10	4	288	ug/L
MKTF-04	11/28/2017	Carbazole	21	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	11/28/2017	1-Methylnaphthalene	**160**	10	3.3	11.38	ug/L
MKTF-04	11/28/2017	Naphthalene	**270**	20	5.7	30	ug/L
MKTF-04	11/28/2017	2-Methylnaphthalene	**190**	10	3.3	35.1	ug/L
MKTF-04	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	11/28/2017	2,4-Dimethylphenol	5.4	10	2.8	354	ug/L
MKTF-04	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	11/28/2017	Phenol	4.3	10	3.1	5761	ug/L
MKTF-04	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-04	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-04	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-04	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-04	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-04	2/14/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-04	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-04	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-04	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-04	2/14/2018	Acenaphthene	5.8	10	3.6	535	ug/L
MKTF-04	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-04	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-04	2/14/2018	Phenanthrene	4.7	10	4.3	170	ug/L
MKTF-04	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-04	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-04	2/14/2018	Fluorene	6.9	10	4	288	ug/L
MKTF-04	2/14/2018	Carbazole	15	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-04	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-04	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-04	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-04	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-04	2/14/2018	1-Methylnaphthalene	**150**	10	3.3	11.38	ug/L
MKTF-04	2/14/2018	Naphthalene	**220**	10	2.9	30	ug/L
MKTF-04	2/14/2018	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-04	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-04	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-04	2/14/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-04	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-04	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-04	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-04	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-04	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-04	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-04	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-04	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-04	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-04	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-04	2/14/2018	2,4-Dimethylphenol	3.6	10	2.8	354	ug/L
MKTF-04	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-04	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-04	2/14/2018	Phenol	6.6	10	3.1	5761	ug/L
MKTF-04	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-04	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-04	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-04	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-04	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-04	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-04	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-04	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-04	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-04	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-04	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-04	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-04	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-04	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-04	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-04	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-04	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-04	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-04	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-04	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-04	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-04	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-04	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-04	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-04	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-04	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-04	2/14/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-04	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	5/2/2018	Carbazole	12	10	6.3	NA	ug/L
MKTF-04	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	5/2/2018	1-Methylnaphthalene	**94**	10	7	11.38	ug/L
MKTF-04	5/2/2018	Naphthalene	**150**	10	5	30	ug/L
MKTF-04	5/2/2018	2-Methylnaphthalene	**97**	10	6.3	35.1	ug/L
MKTF-04	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	5/2/2018	2-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	5/2/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-04	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	5/2/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-04	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	5/2/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	9/4/2018	Carbazole	19	10	6.3	NA	ug/L
MKTF-04	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	9/4/2018	1-Methylnaphthalene	**130**	10	7	11.38	ug/L
MKTF-04	9/4/2018	Naphthalene	**240**	20	10	30	ug/L
MKTF-04	9/4/2018	2-Methylnaphthalene	**160**	10	6.3	35.1	ug/L
MKTF-04	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	9/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	9/4/2018	2,4-Dimethylphenol	7.1	10	5.9	354	ug/L
MKTF-04	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	9/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	9/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-04	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-04	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-04	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-04	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-04	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-04	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-04	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-04	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-04	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-04	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-04	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-04	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-04	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-04	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-04	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-04	11/20/2018	Carbazole	15	10	6.3	NA	ug/L
MKTF-04	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-04	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-04	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-04	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-04	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-04	11/20/2018	1-Methylnaphthalene	**100**	10	7	11.38	ug/L
MKTF-04	11/20/2018	Naphthalene	**200**	10	5	30	ug/L
MKTF-04	11/20/2018	2-Methylnaphthalene	**110**	10	6.3	35.1	ug/L
MKTF-04	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-04	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-04	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-04	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-04	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-04	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-04	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-04	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-04	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-04	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-04	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-04	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-04	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-04	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-04	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-04	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-04	11/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-04	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-04	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-04	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-04	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-04	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-04	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-04	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-04	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-04	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-04	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-04	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-04	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-04	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-04	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-04	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-04	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-04	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-04	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-04	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-04	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-04	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-04	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-04	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-04	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-04	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-04	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-04	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
MKTF-04	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	5/13/2019	2,4-Dimethylphenol	3.5	10	2.965993	354	ug/L
MKTF-04	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**130**	10	3.018863	35.1	ug/L
MKTF-04	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	5/13/2019	Acenaphthene	4.4	10	2.955891	535	ug/L
MKTF-04	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	5/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-04	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	5/13/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-04	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	5/13/2019	Fluorene	7	10	2.888488	288	ug/L
MKTF-04	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	5/13/2019	Naphthalene	**220**	10	4.12221	30	ug/L
MKTF-04	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	5/13/2019	Phenanthrene	4.4	10	2.777122	170	ug/L
MKTF-04	5/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	5/13/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L
MKTF-04	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	5/13/2019	2,4-Dimethylphenol	4.4	10	2.965993	354	ug/L
MKTF-04	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	5/13/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	5/13/2019	Acenaphthene	5.7	10	2.955891	535	ug/L
MKTF-04	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	5/13/2019	Benzyl Alcohol	2.4	10	2.360341	2000	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	5/13/2019	Bis(2-ethylhexyl)phthalate	4.9	10	4.302128	55.64	ug/L
MKTF-04	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	5/13/2019	Carbazole	17	10	2.890507	NA	ug/L
MKTF-04	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	5/13/2019	Fluorene	8.2	10	2.888488	288	ug/L
MKTF-04	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	5/13/2019	Naphthalene	**250**	50	20.61105	30	ug/L
MKTF-04	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	5/13/2019	Phenanthrene	5.5	10	2.777122	170	ug/L
MKTF-04	5/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-04	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	8/21/2019	Acenaphthene	5.2	10	2.955891	535	ug/L
MKTF-04	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-04	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	8/21/2019	Carbazole	20	10	2.890507	NA	ug/L
MKTF-04	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	8/21/2019	Fluorene	6.5	10	2.888488	288	ug/L
MKTF-04	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	8/21/2019	Naphthalene	**340**	100	41.222099	30	ug/L
MKTF-04	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	8/21/2019	Phenanthrene	4.9	10	2.777122	170	ug/L
MKTF-04	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-04	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-04	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-04	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-04	8/21/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-04	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-04	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-04	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-04	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-04	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-04	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-04	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-04	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-04	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-04	8/21/2019	2-Methylnaphthalene	**170**	10	3.018863	35.1	ug/L
MKTF-04	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-04	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-04	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-04	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-04	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-04	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-04	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-04	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-04	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-04	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-04	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-04	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-04	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-04	8/21/2019	Acenaphthene	5.6	10	2.955891	535	ug/L
MKTF-04	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-04	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-04	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-04	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-04	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-04	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-04	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-04	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-04	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-04	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-04	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-04	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-04	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-04	8/21/2019	Carbazole	20	10	2.890507	NA	ug/L
MKTF-04	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-04	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-04	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-04	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-04	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-04	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-04	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-04	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-04	8/21/2019	Fluorene	7.6	10	2.888488	288	ug/L
MKTF-04	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-04	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-04	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-04	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-04	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-04	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-04	8/21/2019	Naphthalene	**440**	100	41.222099	30	ug/L
MKTF-04	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-04	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-04	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-04	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-04	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-04	8/21/2019	Phenanthrene	7.5	10	2.777122	170	ug/L
MKTF-04	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-04	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-04	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-04	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	**150**	5	5	11.38	ug/L
MKTF-04	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-04	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-04	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-04	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-04	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-04	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-04	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**160**	5	5	35.1	ug/L
MKTF-04	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-04	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-04	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-04	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-04	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Acenaphthene	5.2	5	5	535	ug/L
MKTF-04	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-04	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-04	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-04	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-04	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-04	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-04	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-04	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-04	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-04	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-04	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-04	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-04	10/30/2019	Carbazole	19	5	5	NA	ug/L
MKTF-04	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-04	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-04	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-04	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-04	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-04	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-04	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-04	10/30/2019	Fluorene	6.9	5	5	288	ug/L
MKTF-04	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-04	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-04	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-04	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-04	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-04	10/30/2019	Naphthalene	**230**	5	5	30	ug/L
MKTF-04	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-04	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-04	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-04	10/30/2019	Phenanthrene	5.7	5	5	170	ug/L
MKTF-04	10/30/2019	Phenol	ND	5	5	5761	ug/L
MKTF-04	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-04	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-04	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-04	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-04	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-04	10/30/2019	1,4-Dioxane	**11**	10	10	4.59	ug/L
MKTF-04	10/30/2019	1-Methylnaphthalene	**130**	5	5	11.38	ug/L
MKTF-04	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-04	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-04	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-04	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-04	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-04	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-04	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-04	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-04	10/30/2019	2-Methylnaphthalene	**140**	5	5	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-04	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-04	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-04	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-04	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-04	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-04	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-04	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-04	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-04	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-04	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-04	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-04	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-04	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-04	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-04	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-04	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-04	10/30/2019	Carbazole	18	5	5	NA	ug/L
MKTF-04	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-04	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-04	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-04	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-04	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-04	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-04	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-04	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-04	10/30/2019	Fluorene	6.2	5	5	288	ug/L
MKTF-04	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-04	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-04	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-04	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-04	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-04	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-04	10/30/2019	Naphthalene	**220**	5	5	30	ug/L
MKTF-04	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-04	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-04	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-04	10/30/2019	Phenanthrene	5.9	5	5	170	ug/L
MKTF-04	10/30/2019	Phenol	ND	5	5	5761	ug/L
MKTF-04	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-04	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-04	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-04	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-04	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-04	3/3/2020	1,4-Dioxane	**18**	5	1	4.59	ug/L
MKTF-04	3/3/2020	1-Methylnaphthalene	**130**	2.5	0.5	11.38	ug/L
MKTF-04	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-04	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-04	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-04	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-04	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-04	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-04	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-04	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-04	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-04	3/3/2020	2-Methylnaphthalene	**120**	2.5	0.5	35.1	ug/L
MKTF-04	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-04	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	3,3-Dichlorobenzidine	*ND*	2.5	0.5	1.25	ug/L
MKTF-04	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-04	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-04	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Acenaphthene	4.5	2.5	0.5	535	ug/L
MKTF-04	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-04	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-04	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-04	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-04	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-04	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-04	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-04	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-04	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-04	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-04	3/3/2020	Bis(2-ethylhexyl)phthalate	8.7	2.5	1	55.64	ug/L
MKTF-04	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-04	3/3/2020	Carbazole	12	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-04	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-04	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-04	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-04	3/3/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-04	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-04	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-04	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-04	3/3/2020	Fluorene	5.4	2.5	0.5	288	ug/L
MKTF-04	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-04	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-04	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-04	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-04	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-04	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-04	3/3/2020	Naphthalene	**200**	2.5	0.5	30	ug/L
MKTF-04	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-04	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-04	3/3/2020	Phenanthrene	4	2.5	0.5	170	ug/L
MKTF-04	3/3/2020	Phenol	10	2.5	0.5	5761	ug/L
MKTF-04	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-04	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-09	4/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	4/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	4/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	4/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	4/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	4/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	4/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	4/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	4/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	4/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	4/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	4/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	4/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	4/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	4/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	4/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	4/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	4/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	4/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	4/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	4/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	4/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	4/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	4/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	4/14/2014	1-Methylnaphthalene	**46**	10	3.6	11.38	ug/L
MKTF-09	4/14/2014	Naphthalene	**31**	10	2.3	30	ug/L
MKTF-09	4/14/2014	2-Methylnaphthalene	10	10	2.6	35.1	ug/L
MKTF-09	4/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	4/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	4/14/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	4/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	4/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	4/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	4/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	4/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	4/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	4/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	4/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	4/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	4/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	4/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	4/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	4/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	4/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	4/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	4/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	4/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	4/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	4/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	4/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	4/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	4/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	4/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	4/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	4/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	4/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	4/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	4/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	4/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	4/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	4/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	4/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	4/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	4/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	4/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	4/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	4/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	4/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	4/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	4/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	4/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	6/5/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	6/5/2014	Carbazole	10	10	2.9	NA	ug/L
MKTF-09	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	6/5/2014	1-Methylnaphthalene	**58**	10	3.6	11.38	ug/L
MKTF-09	6/5/2014	Naphthalene	**41**	10	2.3	30	ug/L
MKTF-09	6/5/2014	2-Methylnaphthalene	14	10	2.6	35.1	ug/L
MKTF-09	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	9/18/2014	1-Methylnaphthalene	**31**	10	3.6	11.38	ug/L
MKTF-09	9/18/2014	Naphthalene	18	10	2.3	30	ug/L
MKTF-09	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-09	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-09	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-09	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-09	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-09	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-09	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-09	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-09	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-09	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-09	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-09	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-09	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-09	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-09	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-09	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-09	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-09	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-09	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-09	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-09	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-09	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-09	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-09	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-09	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-09	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-09	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-09	11/14/2014	1-Methylnaphthalene	**49**	10	3.6	11.38	ug/L
MKTF-09	11/14/2014	Naphthalene	21	10	2.3	30	ug/L
MKTF-09	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-09	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-09	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-09	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-09	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-09	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-09	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-09	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-09	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-09	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-09	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-09	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-09	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-09	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-09	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-09	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-09	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-09	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-09	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-09	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-09	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-09	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-09	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-09	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-09	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-09	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-09	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-09	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-09	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-09	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-09	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-09	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-09	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-09	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-09	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-09	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-09	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-09	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-09	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-09	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	3/16/2015	1-Methylnaphthalene	**27**	10	1.8	11.38	ug/L
MKTF-09	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-09	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	6/4/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-09	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	6/4/2015	1-Methylnaphthalene	**36**	10	1.8	11.38	ug/L
MKTF-09	6/4/2015	Naphthalene	12	10	1.8	30	ug/L
MKTF-09	6/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Aniline	ND	10	1.5	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	8/18/2015	Phenanthrene	11	10	2	170	ug/L
MKTF-09	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	8/18/2015	Carbazole	16	10	1.5	NA	ug/L
MKTF-09	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	8/18/2015	1-Methylnaphthalene	**80**	10	1.8	11.38	ug/L
MKTF-09	8/18/2015	Naphthalene	23	10	1.8	30	ug/L
MKTF-09	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-09	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-09	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-09	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-09	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-09	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-09	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-09	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-09	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-09	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-09	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-09	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-09	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-09	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-09	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-09	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-09	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-09	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-09	11/3/2015	Carbazole	13	10	1.5	NA	ug/L
MKTF-09	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-09	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-09	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-09	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-09	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-09	11/3/2015	1-Methylnaphthalene	**85**	10	1.8	11.38	ug/L
MKTF-09	11/3/2015	Naphthalene	**34**	10	1.8	30	ug/L
MKTF-09	11/3/2015	2-Methylnaphthalene	11	10	2.2	35.1	ug/L
MKTF-09	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-09	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-09	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-09	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-09	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-09	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-09	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-09	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-09	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-09	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-09	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-09	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-09	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-09	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-09	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-09	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-09	11/3/2015	Pyridine	ND	10	1.7	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-09	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-09	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-09	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-09	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-09	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-09	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-09	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-09	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-09	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-09	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-09	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-09	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-09	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-09	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-09	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-09	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-09	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-09	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-09	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-09	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-09	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-09	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-09	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-09	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-09	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-09	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-09	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-09	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-09	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-09	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-09	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-09	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-09	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-09	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-09	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-09	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-09	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-09	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-09	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-09	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-09	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-09	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-09	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-09	2/29/2016	Carbazole	12	10	7.2	NA	ug/L
MKTF-09	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-09	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-09	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-09	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-09	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-09	2/29/2016	1-Methylnaphthalene	**69**	10	6.8	11.38	ug/L
MKTF-09	2/29/2016	Naphthalene	**32**	10	5.9	30	ug/L
MKTF-09	2/29/2016	2-Methylnaphthalene	10	10	7	35.1	ug/L
MKTF-09	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-09	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-09	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-09	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-09	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-09	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-09	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-09	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-09	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-09	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-09	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-09	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-09	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-09	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-09	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-09	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-09	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-09	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-09	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-09	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-09	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-09	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-09	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-09	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-09	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-09	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-09	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-09	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-09	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-09	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-09	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-09	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-09	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-09	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-09	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-09	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-09	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-09	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-09	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-09	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-09	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-09	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-09	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-09	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	6/9/2016	Acenaphthene	3.4	10	2.6	535	ug/L
MKTF-09	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	6/9/2016	Phenanthrene	5.1	10	2.6	170	ug/L
MKTF-09	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-09	6/9/2016	Carbazole	8.8	10	2.3	NA	ug/L
MKTF-09	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	6/9/2016	1-Methylnaphthalene	**46**	10	2.9	11.38	ug/L
MKTF-09	6/9/2016	Naphthalene	18	10	2.6	30	ug/L
MKTF-09	6/9/2016	2-Methylnaphthalene	5.1	10	2.9	35.1	ug/L
MKTF-09	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	6/9/2016	Phenol	6.4	10	2	5761	ug/L
MKTF-09	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	6/9/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-09	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-09	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	9/11/2016	Acenaphthene	4.6	10	2.6	535	ug/L
MKTF-09	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	9/11/2016	Phenanthrene	6.5	10	2.6	170	ug/L
MKTF-09	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	9/11/2016	Fluorene	4.4	10	2.7	288	ug/L
MKTF-09	9/11/2016	Carbazole	11	10	2.3	NA	ug/L
MKTF-09	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	9/11/2016	Pentachlorophenol	**9.4**	20	2.3	1	ug/L
MKTF-09	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	9/11/2016	1-Methylnaphthalene	**64**	10	2.9	11.38	ug/L
MKTF-09	9/11/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-09	9/11/2016	2-Methylnaphthalene	5.2	10	2.9	35.1	ug/L
MKTF-09	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	9/11/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	9/11/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	9/11/2016	Phenol	12	10	2	5761	ug/L
MKTF-09	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	9/11/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-09	9/11/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-09	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	9/11/2016	Pyrene	7.1	10	3.1	117	ug/L
MKTF-09	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	9/11/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-09	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	11/2/2016	Acenaphthene	3.8	10	2.6	535	ug/L
MKTF-09	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	11/2/2016	Phenanthrene	6.6	10	2.6	170	ug/L
MKTF-09	11/2/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	11/2/2016	Fluorene	6.1	10	2.7	288	ug/L
MKTF-09	11/2/2016	Carbazole	10	10	2.3	NA	ug/L
MKTF-09	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-09	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	11/2/2016	1-Methylnaphthalene	**48**	10	2.9	11.38	ug/L
MKTF-09	11/2/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-09	11/2/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-09	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	11/2/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	11/2/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	11/2/2016	Phenol	2.5	10	2	5761	ug/L
MKTF-09	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	11/2/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-09	11/2/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-09	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	11/2/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-09	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-09	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-09	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-09	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-09	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-09	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-09	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-09	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-09	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-09	3/15/2017	Acenaphthene	4	10	2.6	535	ug/L
MKTF-09	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-09	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-09	3/15/2017	Phenanthrene	5.3	10	2.6	170	ug/L
MKTF-09	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-09	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-09	3/15/2017	Fluorene	4.9	10	2.7	288	ug/L
MKTF-09	3/15/2017	Carbazole	11	10	2.3	NA	ug/L
MKTF-09	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-09	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-09	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-09	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-09	3/15/2017	1-Methylnaphthalene	**48**	10	2.9	11.38	ug/L
MKTF-09	3/15/2017	Naphthalene	**32**	10	2.6	30	ug/L
MKTF-09	3/15/2017	2-Methylnaphthalene	4.7	10	2.9	35.1	ug/L
MKTF-09	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-09	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-09	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-09	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-09	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-09	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-09	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-09	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-09	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-09	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-09	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-09	3/15/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-09	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-09	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-09	3/15/2017	Phenol	5	10	2	5761	ug/L
MKTF-09	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-09	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-09	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-09	3/15/2017	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-09	3/15/2017	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-09	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-09	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-09	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-09	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-09	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-09	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-09	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-09	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-09	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-09	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-09	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-09	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-09	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-09	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-09	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-09	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-09	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-09	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-09	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-09	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-09	3/15/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-09	6/12/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	6/12/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	6/12/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	6/12/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	6/12/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	6/12/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	6/12/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	6/12/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	6/12/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	6/12/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	6/12/2017	Acenaphthene	5.3	10	3.6	535	ug/L
MKTF-09	6/12/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	6/12/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	6/12/2017	Phenanthrene	7.2	10	4.3	170	ug/L
MKTF-09	6/12/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	6/12/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	6/12/2017	Fluorene	6.1	10	4	288	ug/L
MKTF-09	6/12/2017	Carbazole	12	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	6/12/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	6/12/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	6/12/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	6/12/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	6/12/2017	1-Methylnaphthalene	**59**	10	3.3	11.38	ug/L
MKTF-09	6/12/2017	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	6/12/2017	2-Methylnaphthalene	7.9	10	3.3	35.1	ug/L
MKTF-09	6/12/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	6/12/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	6/12/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	6/12/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	6/12/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	6/12/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	6/12/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	6/12/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	6/12/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	6/12/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	6/12/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	6/12/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	6/12/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	6/12/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	6/12/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	6/12/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	6/12/2017	Phenol	13	10	3.1	5761	ug/L
MKTF-09	6/12/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	6/12/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	6/12/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	6/12/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-09	6/12/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	6/12/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	6/12/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	6/12/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	6/12/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	6/12/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	6/12/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	6/12/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	6/12/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	6/12/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	6/12/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	6/12/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	6/12/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	6/12/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	6/12/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	6/12/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	6/12/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	6/12/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	6/12/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	6/12/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	6/12/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	6/12/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	9/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	9/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	9/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	9/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	9/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	9/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	9/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	9/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	9/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	9/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	9/28/2017	Acenaphthene	5.5	10	3.6	535	ug/L
MKTF-09	9/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	9/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	9/28/2017	Phenanthrene	8.6	10	4.3	170	ug/L
MKTF-09	9/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	9/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	9/28/2017	Fluorene	8.5	10	4	288	ug/L
MKTF-09	9/28/2017	Carbazole	15	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	9/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	9/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	9/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	9/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	9/28/2017	1-Methylnaphthalene	**89**	10	3.3	11.38	ug/L
MKTF-09	9/28/2017	Naphthalene	**43**	10	2.9	30	ug/L
MKTF-09	9/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-09	9/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	9/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	9/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	9/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	9/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	9/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	9/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	9/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	9/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	9/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	9/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	9/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	9/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	9/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	9/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	9/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	9/28/2017	Phenol	12	10	3.1	5761	ug/L
MKTF-09	9/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	9/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	9/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	9/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	9/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	9/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	9/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	9/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	9/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	9/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	9/28/2017	Dimethylphthalate	4.9	10	3.6	612	ug/L
MKTF-09	9/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	9/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	9/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	9/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	9/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	9/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	9/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	9/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	9/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	9/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	9/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-09	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	11/28/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MKTF-09	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	11/28/2017	Acenaphthene	5.9	10	3.6	535	ug/L
MKTF-09	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	11/28/2017	Phenanthrene	8.8	10	4.3	170	ug/L
MKTF-09	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	11/28/2017	Fluorene	8	10	4	288	ug/L
MKTF-09	11/28/2017	Carbazole	15	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	11/28/2017	1-Methylnaphthalene	**77**	10	3.3	11.38	ug/L
MKTF-09	11/28/2017	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	11/28/2017	2-Methylnaphthalene	12	10	3.3	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	11/28/2017	Phenol	18	10	3.1	5761	ug/L
MKTF-09	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-09	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-09	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-09	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-09	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-09	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-09	2/14/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-09	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-09	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-09	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-09	2/14/2018	Acenaphthene	5.8	10	3.6	535	ug/L
MKTF-09	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-09	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-09	2/14/2018	Phenanthrene	7.3	10	4.3	170	ug/L
MKTF-09	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-09	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-09	2/14/2018	Fluorene	8.1	10	4	288	ug/L
MKTF-09	2/14/2018	Carbazole	13	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-09	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-09	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-09	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-09	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-09	2/14/2018	1-Methylnaphthalene	**70**	10	3.3	11.38	ug/L
MKTF-09	2/14/2018	Naphthalene	**42**	10	2.9	30	ug/L
MKTF-09	2/14/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-09	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-09	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-09	2/14/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-09	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-09	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-09	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-09	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-09	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-09	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-09	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-09	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-09	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-09	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-09	2/14/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-09	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-09	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-09	2/14/2018	Phenol	14	10	3.1	5761	ug/L
MKTF-09	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-09	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-09	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-09	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-09	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-09	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-09	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-09	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-09	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-09	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-09	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-09	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-09	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-09	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-09	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-09	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-09	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-09	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-09	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-09	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-09	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-09	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-09	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-09	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-09	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-09	2/14/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-09	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	5/2/2018	Carbazole	10	10	6.3	NA	ug/L
MKTF-09	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	5/2/2018	1-Methylnaphthalene	**54**	10	7	11.38	ug/L
MKTF-09	5/2/2018	Naphthalene	**35**	10	5	30	ug/L
MKTF-09	5/2/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-09	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	5/2/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-09	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	5/2/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	5/2/2018	Phenol	13	10	6	5761	ug/L
MKTF-09	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	5/2/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	9/4/2018	Carbazole	9.6	10	6.3	NA	ug/L
MKTF-09	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	9/4/2018	1-Methylnaphthalene	**36**	10	7	11.38	ug/L
MKTF-09	9/4/2018	Naphthalene	29	10	5	30	ug/L
MKTF-09	9/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-09	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	9/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	9/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	9/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-09	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	9/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-09	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-09	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-09	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-09	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-09	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-09	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-09	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-09	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-09	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-09	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-09	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-09	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-09	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-09	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-09	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-09	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-09	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-09	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-09	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-09	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-09	11/28/2018	1-Methylnaphthalene	**65**	10	7	11.38	ug/L
MKTF-09	11/28/2018	Naphthalene	**46**	10	5	30	ug/L
MKTF-09	11/28/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
MKTF-09	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-09	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-09	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-09	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-09	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-09	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-09	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-09	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-09	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-09	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-09	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-09	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-09	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-09	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-09	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-09	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-09	11/28/2018	Phenol	14	10	6	5761	ug/L
MKTF-09	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-09	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-09	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-09	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-09	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-09	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-09	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-09	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-09	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-09	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-09	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-09	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-09	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-09	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-09	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-09	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-09	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-09	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-09	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-09	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-09	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-09	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-09	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-09	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-09	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-09	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-09	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-09	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-09	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-09	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-09	5/13/2019	1-Methylnaphthalene	**73**	10	3.069076	11.38	ug/L
MKTF-09	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-09	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-09	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-09	5/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-09	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-09	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-09	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-09	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-09	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-09	5/13/2019	2-Methylnaphthalene	10	10	3.018863	35.1	ug/L
MKTF-09	5/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-09	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-09	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-09	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-09	5/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-09	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-09	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-09	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-09	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-09	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-09	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-09	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-09	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-09	5/13/2019	Acenaphthene	5.4	10	2.955891	535	ug/L
MKTF-09	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-09	5/13/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-09	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-09	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-09	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-09	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-09	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-09	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-09	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-09	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-09	5/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-09	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-09	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-09	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-09	5/13/2019	Bis(2-ethylhexyl)phthalate	5.1	10	4.302128	55.64	ug/L
MKTF-09	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-09	5/13/2019	Carbazole	11	10	2.890507	NA	ug/L
MKTF-09	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-09	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-09	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-09	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-09	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-09	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-09	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-09	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-09	5/13/2019	Fluorene	8.9	10	2.888488	288	ug/L
MKTF-09	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-09	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-09	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-09	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-09	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-09	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-09	5/13/2019	Naphthalene	**56**	10	4.12221	30	ug/L
MKTF-09	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-09	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-09	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-09	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-09	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-09	5/13/2019	Phenanthrene	6.6	10	2.777122	170	ug/L
MKTF-09	5/13/2019	Phenol	13	10	8.036586	5761	ug/L
MKTF-09	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-09	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-09	8/28/2019	Acenaphthene	5.3	10	2.955891	535	ug/L
MKTF-09	8/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-09	8/28/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-09	8/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-09	8/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-09	8/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-09	8/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-09	8/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-09	8/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-09	8/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-09	8/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-09	8/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-09	8/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-09	8/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-09	8/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-09	8/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-09	8/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-09	8/28/2019	Carbazole	14	10	2.890507	NA	ug/L
MKTF-09	8/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-09	8/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-09	8/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-09	8/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-09	8/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-09	8/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-09	8/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-09	8/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-09	8/28/2019	Fluorene	7.8	10	2.888488	288	ug/L
MKTF-09	8/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-09	8/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-09	8/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-09	8/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-09	8/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-09	8/28/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-09	8/28/2019	Naphthalene	**54**	10	4.12221	30	ug/L
MKTF-09	8/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-09	8/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-09	8/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-09	8/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-09	8/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-09	8/28/2019	Phenanthrene	8.6	10	2.777122	170	ug/L
MKTF-09	8/28/2019	Phenol	14	10	8.036586	5761	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-09	8/28/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-09	8/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-09	8/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-09	8/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-09	8/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-09	8/28/2019	1-Methylnaphthalene	**81**	10	3.069076	11.38	ug/L
MKTF-09	8/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-09	8/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-09	8/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-09	8/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-09	8/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-09	8/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-09	8/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-09	8/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-09	8/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-09	8/28/2019	2-Methylnaphthalene	11	10	3.018863	35.1	ug/L
MKTF-09	8/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-09	8/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-09	8/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-09	8/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-09	8/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-09	8/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-09	8/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-09	8/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-09	8/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-09	8/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-09	8/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-09	8/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-09	8/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-09	11/18/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-09	11/18/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-09	11/18/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-09	11/18/2019	1,4-Dioxane	**12**	2	2	4.59	ug/L
MKTF-09	11/18/2019	1-Methylnaphthalene	**110**	1	1	11.38	ug/L
MKTF-09	11/18/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-09	11/18/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-09	11/18/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-09	11/18/2019	2,4-Dimethylphenol	1.1	1	1	354	ug/L
MKTF-09	11/18/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-09	11/18/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-09	11/18/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-09	11/18/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-09	11/18/2019	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-09	11/18/2019	2-Methylnaphthalene	19	1	1	35.1	ug/L
MKTF-09	11/18/2019	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-09	11/18/2019	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-09	11/18/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-09	11/18/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-09	11/18/2019	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Acenaphthene	6.6	1	1	535	ug/L
MKTF-09	11/18/2019	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Aniline	ND	1	1	13	ug/L
MKTF-09	11/18/2019	Anthracene	ND	1	1	1721	ug/L
MKTF-09	11/18/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-09	11/18/2019	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
MKTF-09	11/18/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-09	11/18/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-09	11/18/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-09	11/18/2019	Benzoic Acid	ND	1	1	75000	ug/L
MKTF-09	11/18/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-09	11/18/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-09	11/18/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-09	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-09	11/18/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-09	11/18/2019	Carbazole	18	1	1	NA	ug/L
MKTF-09	11/18/2019	Chrysene	ND	1	1	34.3	ug/L
MKTF-09	11/18/2019	Dibenzo(a,h)anthracene	ND	0.05	0.05	NA	ug/L
MKTF-09	11/18/2019	Dibenzofuran	3	1	1	NA	ug/L
MKTF-09	11/18/2019	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-09	11/18/2019	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-09	11/18/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-09	11/18/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-09	11/18/2019	Fluoranthene	ND	1	1	802	ug/L
MKTF-09	11/18/2019	Fluorene	9.2	1	1	288	ug/L
MKTF-09	11/18/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-09	11/18/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-09	11/18/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-09	11/18/2019	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-09	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-09	11/18/2019	Isophorone	ND	1	1	781	ug/L
MKTF-09	11/18/2019	Naphthalene	**75**	1	1	30	ug/L
MKTF-09	11/18/2019	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-09	11/18/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-09	11/18/2019	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-09	11/18/2019	Phenanthrene	11	1	1	170	ug/L
MKTF-09	11/18/2019	Phenol	26	1	1	5761	ug/L
MKTF-09	11/18/2019	Pyrene	ND	1	1	117	ug/L
MKTF-09	11/18/2019	Pyridine	ND	1	1	20	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-09	3/3/2020	1,4-Dioxane	**9.1**	5	1	4.59	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	**58**	2.5	0.5	11.38	ug/L
MKTF-09	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-09	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-09	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-09	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-09	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-09	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	7.5	2.5	0.5	35.1	ug/L
MKTF-09	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-09	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-09	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-09	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-09	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Acenaphthene	4.4	2.5	0.5	535	ug/L
MKTF-09	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-09	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-09	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-09	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-09	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-09	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-09	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-09	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-09	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-09	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-09	3/3/2020	Bis(2-ethylhexyl)phthalate	1.1	2.5	1	55.64	ug/L
MKTF-09	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-09	3/3/2020	Carbazole	5.6	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-09	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-09	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-09	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-09	3/3/2020	Dibenzofuran	2	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-09	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-09	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-09	3/3/2020	Fluorene	6.2	2.5	0.5	288	ug/L
MKTF-09	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-09	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-09	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-09	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-09	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-09	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-09	3/3/2020	Naphthalene	**34**	2.5	0.5	30	ug/L
MKTF-09	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-09	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-09	3/3/2020	Phenanthrene	6.9	2.5	0.5	170	ug/L
MKTF-09	3/3/2020	Phenol	43	2.5	0.5	5761	ug/L
MKTF-09	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-09	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-09	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-09	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-09	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-09	3/3/2020	1,4-Dioxane	**8.3**	5	1	4.59	ug/L
MKTF-09	3/3/2020	1-Methylnaphthalene	**53**	2.5	0.5	11.38	ug/L
MKTF-09	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-09	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-09	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-09	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-09	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-09	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-09	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-09	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-09	3/3/2020	2-Methylnaphthalene	7.5	2.5	0.5	35.1	ug/L
MKTF-09	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-09	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-09	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-09	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-09	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Acenaphthene	5.1	2.5	0.5	535	ug/L
MKTF-09	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-09	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-09	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-09	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-09	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-09	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-09	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-09	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-09	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-09	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-09	3/3/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-09	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-09	3/3/2020	Carbazole	4.3	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-09	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-09	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-09	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-09	3/3/2020	Dibenzofuran	2.01	2.5	0.5	NA	ug/L
MKTF-09	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-09	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-09	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-09	3/3/2020	Fluorene	6.1	2.5	0.5	288	ug/L
MKTF-09	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-09	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-09	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-09	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-09	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-09	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-09	3/3/2020	Naphthalene	**35**	2.5	0.5	30	ug/L
MKTF-09	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-09	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-09	3/3/2020	Phenanthrene	6.4	2.5	0.5	170	ug/L
MKTF-09	3/3/2020	Phenol	44	2.5	0.5	5761	ug/L
MKTF-09	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-09	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-10	4/11/2014	Benzo(a)pyrene	*ND*	*12*	3.8	0.2	ug/L
MKTF-10	4/11/2014	2,4-Dinitrophenol	ND	23	3.7	38.7	ug/L
MKTF-10	4/11/2014	Dibenzo(a,h)anthracene	ND	12	3.5	NA	ug/L
MKTF-10	4/11/2014	Benzo(a)anthracene	*ND*	*12*	3.6	0.12	ug/L
MKTF-10	4/11/2014	4-Chloro-3-Methylphenol	ND	12	4.3	NA	ug/L
MKTF-10	4/11/2014	Aniline	**75**	12	2.8	13	ug/L
MKTF-10	4/11/2014	N-Nitrosodimethylamine	*ND*	*12*	2.8	0.0049	ug/L
MKTF-10	4/11/2014	Benzoic Acid	ND	23	2.5	75000	ug/L
MKTF-10	4/11/2014	Hexachloroethane	*ND*	*12*	2.2	3.28	ug/L
MKTF-10	4/11/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.5	0.41	ug/L
MKTF-10	4/11/2014	Isophorone	ND	12	3.6	781	ug/L
MKTF-10	4/11/2014	Acenaphthene	ND	12	3.4	535	ug/L
MKTF-10	4/11/2014	Diethylphthalate	ND	12	4.9	14801	ug/L
MKTF-10	4/11/2014	Di-n-butylphthalate	ND	12	4.2	885	ug/L
MKTF-10	4/11/2014	Phenanthrene	ND	12	2.9	170	ug/L
MKTF-10	4/11/2014	Butylbenzylphthalate	ND	12	3.6	16	ug/L
MKTF-10	4/11/2014	N-Nitrosodiphenylamine	ND	12	3.3	122	ug/L
MKTF-10	4/11/2014	Fluorene	ND	12	3.4	288	ug/L
MKTF-10	4/11/2014	Carbazole	ND	12	3.3	NA	ug/L
MKTF-10	4/11/2014	Hexachlorobutadiene	*ND*	*12*	3.5	0.14	ug/L
MKTF-10	4/11/2014	Pentachlorophenol	*ND*	*23*	2.9	1	ug/L
MKTF-10	4/11/2014	2,4,6-Trichlorophenol	ND	12	2.1	11.9*	ug/L
MKTF-10	4/11/2014	2-Nitroaniline	ND	12	3.3	190	ug/L
MKTF-10	4/11/2014	2-Nitrophenol	ND	12	3.6	NA	ug/L
MKTF-10	4/11/2014	1-Methylnaphthalene	**42**	12	4.2	11.38	ug/L
MKTF-10	4/11/2014	Naphthalene	**140**	12	2.7	30	ug/L
MKTF-10	4/11/2014	2-Methylnaphthalene	**56**	12	3.1	35.1	ug/L
MKTF-10	4/11/2014	2-Chloronaphthalene	ND	12	3.5	733	ug/L
MKTF-10	4/11/2014	3,3-Dichlorobenzidine	*ND*	*12*	2.7	1.25	ug/L
MKTF-10	4/11/2014	2-Methylphenol	300	100	14	NA	ug/L
MKTF-10	4/11/2014	1,2-Dichlorobenzene	ND	12	2	600	ug/L
MKTF-10	4/11/2014	2-Chlorophenol	ND	12	2.1	91	ug/L
MKTF-10	4/11/2014	2,4,5-Trichlorophenol	ND	12	3.8	1166	ug/L
MKTF-10	4/11/2014	Nitrobenzene	*ND*	*12*	3	1.4	ug/L
MKTF-10	4/11/2014	3-Nitroaniline	ND	12	4.2	NA	ug/L
MKTF-10	4/11/2014	4-Nitroaniline	*ND*	*12*	4.8	3.8	ug/L
MKTF-10	4/11/2014	4-Nitrophenol	ND	12	5	NA	ug/L
MKTF-10	4/11/2014	Benzyl Alcohol	ND	12	2.1	2000	ug/L
MKTF-10	4/11/2014	4-Bromophenyl-phenylether	ND	12	3.4	NA	ug/L
MKTF-10	4/11/2014	Azobenzene	*ND*	*12*	3	0.12	ug/L
MKTF-10	4/11/2014	2,4-Dimethylphenol	120	12	3.6	354	ug/L
MKTF-10	4/11/2014	1,4-Dichlorobenzene	ND	12	2.8	75	ug/L
MKTF-10	4/11/2014	4-Chloroaniline	*ND*	*12*	3	0.37	ug/L
MKTF-10	4/11/2014	Phenol	61	12	1.8	5761	ug/L
MKTF-10	4/11/2014	Pyridine	ND	12	1.8	20	ug/L
MKTF-10	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
MKTF-10	4/11/2014	Bis(2-chloroethoxy)methane	ND	12	3.3	59	ug/L
MKTF-10	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.5	55.64	ug/L
MKTF-10	4/11/2014	Di-n-octylphthalate	ND	12	3.2	200	ug/L
MKTF-10	4/11/2014	Hexachlorobenzene	*ND*	*12*	3.7	0.0976	ug/L
MKTF-10	4/11/2014	Anthracene	ND	12	2.9	1721	ug/L
MKTF-10	4/11/2014	1,2,4-Trichlorobenzene	ND	12	3.2	70	ug/L
MKTF-10	4/11/2014	2,4-Dichlorophenol	ND	23	3.5	45.3	ug/L
MKTF-10	4/11/2014	2,4-Dinitrotoluene	ND	12	5.2	45.3	ug/L
MKTF-10	4/11/2014	Pyrene	ND	12	4.7	117	ug/L
MKTF-10	4/11/2014	Dimethylphthalate	ND	12	4.3	612	ug/L
MKTF-10	4/11/2014	Dibenzofuran	ND	12	4.3	NA	ug/L
MKTF-10	4/11/2014	Benzo(g,h,i)perylene	ND	12	3.8	NA	ug/L
MKTF-10	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4	0.343	ug/L
MKTF-10	4/11/2014	Benzo(b)fluoranthene	*ND*	*12*	4.8	0.34	ug/L
MKTF-10	4/11/2014	Fluoranthene	ND	12	3.4	802	ug/L
MKTF-10	4/11/2014	Benzo(k)fluoranthene	*ND*	*12*	4.1	3.43	ug/L
MKTF-10	4/11/2014	Acenaphthylene	ND	12	2.9	NA	ug/L
MKTF-10	4/11/2014	Chrysene	ND	12	3.4	34.3	ug/L
MKTF-10	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*23*	2.8	1.52	ug/L
MKTF-10	4/11/2014	1,3-Dichlorobenzene	ND	12	2.1	NA	ug/L
MKTF-10	4/11/2014	2,6-Dinitrotoluene	*ND*	*12*	4	0.485	ug/L
MKTF-10	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.3	0.011	ug/L
MKTF-10	4/11/2014	4-Chlorophenyl-phenylether	ND	12	4.1	NA	ug/L
MKTF-10	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.8	9.81	ug/L
MKTF-10	4/11/2014	3,4-Methylphenol	260	50	9.1	NA	ug/L
MKTF-10	6/6/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	6/6/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	6/6/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	6/6/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	6/6/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	6/6/2014	Aniline	**75**	10	2.4	13	ug/L
MKTF-10	6/6/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	6/6/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	6/6/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	6/6/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	6/6/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	6/6/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	6/6/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	6/6/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	6/6/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	6/6/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	6/6/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	6/6/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	6/6/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	6/6/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	6/6/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	6/6/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	6/6/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	6/6/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	6/6/2014	1-Methylnaphthalene	**40**	10	3.6	11.38	ug/L
MKTF-10	6/6/2014	Naphthalene	**140**	10	2.3	30	ug/L
MKTF-10	6/6/2014	2-Methylnaphthalene	**53**	10	2.6	35.1	ug/L
MKTF-10	6/6/2014	2-Chloronaphthalene	ND	10	3	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/6/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	6/6/2014	2-Methylphenol	490	80	11	NA	ug/L
MKTF-10	6/6/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	6/6/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	6/6/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	6/6/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	6/6/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	6/6/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	6/6/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	6/6/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	6/6/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	6/6/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	6/6/2014	2,4-Dimethylphenol	110	10	3.1	354	ug/L
MKTF-10	6/6/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	6/6/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	6/6/2014	Phenol	370	40	6.3	5761	ug/L
MKTF-10	6/6/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	6/6/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-10	6/6/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-10	6/6/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	6/6/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	6/6/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	6/6/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	6/6/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	6/6/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	6/6/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	6/6/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	6/6/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	6/6/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	6/6/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	6/6/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	6/6/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	6/6/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	6/6/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	6/6/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-10	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	6/6/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	6/6/2014	3,4-Methylphenol	610	40	7.3	NA	ug/L
MKTF-10	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	9/18/2014	Aniline	**73**	10	2.4	13	ug/L
MKTF-10	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	9/18/2014	1-Methylnaphthalene	**36**	10	3.6	11.38	ug/L
MKTF-10	9/18/2014	Naphthalene	**98**	10	2.3	30	ug/L
MKTF-10	9/18/2014	2-Methylnaphthalene	**42**	10	2.6	35.1	ug/L
MKTF-10	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-10	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	9/18/2014	2-Methylphenol	320	100	14	NA	ug/L
MKTF-10	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	9/18/2014	2,4-Dimethylphenol	90	10	3.1	354	ug/L
MKTF-10	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	9/18/2014	Phenol	250	50	7.9	5761	ug/L
MKTF-10	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-10	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-10	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	9/18/2014	3,4-Methylphenol	380	50	9.1	NA	ug/L
MKTF-10	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-10	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-10	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-10	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-10	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-10	11/14/2014	Aniline	**54**	10	2.4	13	ug/L
MKTF-10	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-10	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-10	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-10	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-10	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-10	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-10	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-10	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-10	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-10	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-10	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-10	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-10	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-10	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-10	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-10	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-10	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-10	11/14/2014	1-Methylnaphthalene	**46**	10	3.6	11.38	ug/L
MKTF-10	11/14/2014	Naphthalene	**99**	10	2.3	30	ug/L
MKTF-10	11/14/2014	2-Methylnaphthalene	**51**	10	2.6	35.1	ug/L
MKTF-10	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-10	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	11/14/2014	2-Methylphenol	330	50	14	NA	ug/L
MKTF-10	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-10	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-10	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-10	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-10	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-10	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-10	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-10	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-10	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-10	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	11/14/2014	2,4-Dimethylphenol	63	10	3.1	354	ug/L
MKTF-10	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-10	11/14/2014	Phenol	290	50	7.9	5761	ug/L
MKTF-10	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-10	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	11/14/2014	Bis(2-ethylhexyl)phthalate	10	10	3	55.64	ug/L
MKTF-10	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-10	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-10	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-10	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-10	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-10	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-10	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-10	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-10	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-10	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-10	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-10	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-10	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-10	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-10	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-10	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-10	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-10	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-10	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-10	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-10	11/14/2014	3,4-Methylphenol	400	50	9.1	NA	ug/L
MKTF-10	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Aniline	**67**	10	1.5	13	ug/L
MKTF-10	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-10	3/16/2015	Naphthalene	**170**	10	1.8	30	ug/L
MKTF-10	3/16/2015	2-Methylnaphthalene	**88**	10	2.2	35.1	ug/L
MKTF-10	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	3/16/2015	2-Methylphenol	530	50	6.2	NA	ug/L
MKTF-10	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	3/16/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-10	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	3/16/2015	Phenol	420	50	5.4	5761	ug/L
MKTF-10	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	3/16/2015	3,4-Methylphenol	630	50	7.4	NA	ug/L
MKTF-10	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-10	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	6/4/2015	1-Methylnaphthalene	**66**	10	1.8	11.38	ug/L
MKTF-10	6/4/2015	Naphthalene	**180**	10	1.8	30	ug/L
MKTF-10	6/4/2015	2-Methylnaphthalene	**84**	10	2.2	35.1	ug/L
MKTF-10	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	6/4/2015	2-Methylphenol	350	50	6.2	NA	ug/L
MKTF-10	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	6/4/2015	2,4-Dimethylphenol	100	10	1.9	354	ug/L
MKTF-10	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	6/4/2015	Phenol	280	50	5.4	5761	ug/L
MKTF-10	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	6/4/2015	3,4-Methylphenol	540	50	7.4	NA	ug/L
MKTF-10	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Aniline	**60**	10	1.5	13	ug/L
MKTF-10	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	8/18/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-10	8/18/2015	Naphthalene	**250**	40	7.3	30	ug/L
MKTF-10	8/18/2015	2-Methylnaphthalene	**130**	10	2.2	35.1	ug/L
MKTF-10	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	8/18/2015	2-Methylphenol	450	40	5	NA	ug/L
MKTF-10	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	8/18/2015	2,4-Dimethylphenol	85	10	1.9	354	ug/L
MKTF-10	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-10	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	8/18/2015	Phenol	410	40	4.3	5761	ug/L
MKTF-10	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	8/18/2015	3,4-Methylphenol	650	40	5.9	NA	ug/L
MKTF-10	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-10	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-10	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-10	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Aniline	**29**	10	1.5	13	ug/L
MKTF-10	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-10	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-10	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-10	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-10	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-10	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-10	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-10	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-10	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-10	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-10	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-10	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-10	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-10	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-10	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-10	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-10	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-10	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-10	11/3/2015	1-Methylnaphthalene	**60**	10	1.8	11.38	ug/L
MKTF-10	11/3/2015	Naphthalene	**140**	10	1.8	30	ug/L
MKTF-10	11/3/2015	2-Methylnaphthalene	**69**	10	2.2	35.1	ug/L
MKTF-10	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-10	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-10	11/3/2015	2-Methylphenol	280	50	6.2	NA	ug/L
MKTF-10	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-10	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-10	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-10	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-10	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-10	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-10	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-10	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-10	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-10	11/3/2015	2,4-Dimethylphenol	93	10	1.9	354	ug/L
MKTF-10	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-10	11/3/2015	Phenol	240	50	5.4	5761	ug/L
MKTF-10	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-10	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-10	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-10	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-10	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-10	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-10	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-10	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-10	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-10	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-10	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-10	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-10	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-10	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-10	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-10	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-10	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-10	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-10	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-10	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-10	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-10	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-10	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-10	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-10	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-10	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-10	11/3/2015	3,4-Methylphenol	420	50	7.4	NA	ug/L
MKTF-10	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-10	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-10	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-10	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-10	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-10	2/29/2016	Aniline	**42**	10	9.8	13	ug/L
MKTF-10	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-10	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-10	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-10	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-10	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-10	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-10	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-10	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-10	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-10	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-10	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-10	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-10	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-10	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-10	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-10	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-10	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-10	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-10	2/29/2016	1-Methylnaphthalene	**57**	10	6.8	11.38	ug/L
MKTF-10	2/29/2016	Naphthalene	**200**	10	5.9	30	ug/L
MKTF-10	2/29/2016	2-Methylnaphthalene	**80**	10	7	35.1	ug/L
MKTF-10	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-10	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-10	2/29/2016	2-Methylphenol	770	100	82	NA	ug/L
MKTF-10	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-10	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-10	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-10	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-10	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-10	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-10	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-10	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-10	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-10	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-10	2/29/2016	2,4-Dimethylphenol	170	10	4.7	354	ug/L
MKTF-10	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-10	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-10	2/29/2016	Phenol	670	100	51	5761	ug/L
MKTF-10	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-10	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-10	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-10	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-10	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-10	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-10	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-10	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-10	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-10	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-10	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-10	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-10	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-10	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-10	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-10	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-10	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-10	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-10	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-10	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-10	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-10	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-10	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-10	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-10	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-10	2/29/2016	3,4-Methylphenol	1000	100	71	NA	ug/L
MKTF-10	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-10	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-10	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-10	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-10	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-10	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-10	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-10	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-10	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-10	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-10	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-10	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-10	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-10	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-10	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-10	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-10	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-10	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-10	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-10	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-10	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	1-Methylnaphthalene	**56**	50	15	11.38	ug/L
MKTF-10	6/9/2016	Naphthalene	**150**	50	13	30	ug/L
MKTF-10	6/9/2016	2-Methylnaphthalene	**72**	50	14	35.1	ug/L
MKTF-10	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-10	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-10	6/9/2016	2-Methylphenol	820	50	13	NA	ug/L
MKTF-10	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-10	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-10	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-10	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-10	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-10	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-10	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-10	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-10	6/9/2016	2,4-Dimethylphenol	210	50	15	354	ug/L
MKTF-10	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-10	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-10	6/9/2016	Phenol	360	50	9.9	5761	ug/L
MKTF-10	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-10	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-10	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-10	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-10	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-10	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-10	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-10	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-10	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-10	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-10	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-10	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-10	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-10	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-10	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-10	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-10	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-10	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-10	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-10	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-10	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-10	6/9/2016	3,4-Methylphenol	920	50	11	NA	ug/L
MKTF-10	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-10	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-10	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-10	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Aniline	**60**	10	2.4	13	ug/L
MKTF-10	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-10	9/11/2016	Benzoic Acid	50	20	2.6	75000	ug/L
MKTF-10	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-10	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-10	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-10	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-10	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-10	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-10	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-10	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-10	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-10	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-10	9/11/2016	Carbazole	4.4	10	2.3	NA	ug/L
MKTF-10	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-10	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-10	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-10	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-10	9/11/2016	1-Methylnaphthalene	**51**	10	2.9	11.38	ug/L
MKTF-10	9/11/2016	Naphthalene	**150**	10	2.6	30	ug/L
MKTF-10	9/11/2016	2-Methylnaphthalene	**77**	10	2.9	35.1	ug/L
MKTF-10	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-10	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	9/11/2016	2-Methylphenol	690	50	13	NA	ug/L
MKTF-10	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-10	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-10	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-10	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-10	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-10	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-10	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Benzyl Alcohol	6.2	10	3	2000	ug/L
MKTF-10	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-10	9/11/2016	2,4-Dimethylphenol	200	10	3	354	ug/L
MKTF-10	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-10	9/11/2016	Phenol	260	50	9.9	5761	ug/L
MKTF-10	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-10	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-10	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	9/11/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-10	9/11/2016	Di-n-octylphthalate	5	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-10	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-10	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-10	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-10	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-10	9/11/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-10	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-10	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-10	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-10	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-10	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-10	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-10	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-10	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-10	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-10	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-10	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-10	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-10	9/11/2016	3,4-Methylphenol	1100	50	11	NA	ug/L
MKTF-10	11/2/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-10	11/2/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-10	11/2/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-10	11/2/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-10	11/2/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-10	11/2/2016	Benzoic Acid	56	100	13	75000	ug/L
MKTF-10	11/2/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-10	11/2/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-10	11/2/2016	Isophorone	ND	50	13	781	ug/L
MKTF-10	11/2/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-10	11/2/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-10	11/2/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-10	11/2/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-10	11/2/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-10	11/2/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-10	11/2/2016	Fluorene	ND	50	14	288	ug/L
MKTF-10	11/2/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-10	11/2/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-10	11/2/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-10	11/2/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-10	11/2/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-10	11/2/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	1-Methylnaphthalene	**47**	50	15	11.38	ug/L
MKTF-10	11/2/2016	Naphthalene	**150**	50	13	30	ug/L
MKTF-10	11/2/2016	2-Methylnaphthalene	**70**	50	14	35.1	ug/L
MKTF-10	11/2/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-10	11/2/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-10	11/2/2016	2-Methylphenol	130	50	13	NA	ug/L
MKTF-10	11/2/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-10	11/2/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-10	11/2/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-10	11/2/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-10	11/2/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-10	11/2/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-10	11/2/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-10	11/2/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-10	11/2/2016	2,4-Dimethylphenol	39	50	15	354	ug/L
MKTF-10	11/2/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-10	11/2/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-10	11/2/2016	Phenol	79	50	9.9	5761	ug/L
MKTF-10	11/2/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-10	11/2/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-10	11/2/2016	Bis(2-ethylhexyl)phthalate	34	50	13	55.64	ug/L
MKTF-10	11/2/2016	Di-n-octylphthalate	*37*	50	9.9	200	ug/L
MKTF-10	11/2/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-10	11/2/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-10	11/2/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-10	11/2/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-10	11/2/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-10	11/2/2016	Pyrene	ND	50	15	117	ug/L
MKTF-10	11/2/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-10	11/2/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-10	11/2/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-10	11/2/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-10	11/2/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-10	11/2/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-10	11/2/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-10	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-10	11/2/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-10	11/2/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-10	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-10	11/2/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-10	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-10	11/2/2016	3,4-Methylphenol	180	50	11	NA	ug/L
MKTF-10	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-10	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-10	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-10	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-10	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Aniline	6.7	10	2.4	13	ug/L
MKTF-10	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-10	3/2/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-10	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-10	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-10	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-10	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-10	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-10	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-10	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-10	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-10	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-10	3/2/2017	Carbazole	3.2	10	2.3	NA	ug/L
MKTF-10	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-10	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-10	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-10	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-10	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-10	3/2/2017	1-Methylnaphthalene	**37**	10	2.9	11.38	ug/L
MKTF-10	3/2/2017	Naphthalene	**120**	10	2.6	30	ug/L
MKTF-10	3/2/2017	2-Methylnaphthalene	**49**	10	2.9	35.1	ug/L
MKTF-10	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-10	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-10	3/2/2017	2-Methylphenol	83	10	2.5	NA	ug/L
MKTF-10	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-10	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-10	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-10	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-10	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-10	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-10	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Benzyl Alcohol	4.5	10	3	2000	ug/L
MKTF-10	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-10	3/2/2017	2,4-Dimethylphenol	31	10	3	354	ug/L
MKTF-10	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-10	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-10	3/2/2017	Phenol	50	10	2	5761	ug/L
MKTF-10	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-10	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-10	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-10	3/2/2017	Bis(2-ethylhexyl)phthalate	6.7	10	2.6	55.64	ug/L
MKTF-10	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-10	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-10	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-10	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-10	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-10	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-10	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-10	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-10	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-10	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-10	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-10	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-10	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-10	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-10	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-10	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-10	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-10	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-10	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-10	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-10	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-10	3/2/2017	3,4-Methylphenol	130	10	2.3	NA	ug/L
MKTF-10	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-10	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-10	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-10	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	6/8/2017	Aniline	4.9	10	3.1	13	ug/L
MKTF-10	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-10	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-10	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-10	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-10	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-10	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-10	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-10	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-10	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-10	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-10	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-10	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-10	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-10	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-10	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-10	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-10	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-10	6/8/2017	1-Methylnaphthalene	**52**	10	3.3	11.38	ug/L
MKTF-10	6/8/2017	Naphthalene	**160**	10	2.9	30	ug/L
MKTF-10	6/8/2017	2-Methylnaphthalene	**66**	10	3.3	35.1	ug/L
MKTF-10	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-10	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-10	6/8/2017	2-Methylphenol	73	10	3.3	NA	ug/L
MKTF-10	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-10	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-10	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-10	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-10	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-10	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-10	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-10	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-10	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-10	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-10	6/8/2017	2,4-Dimethylphenol	29	10	2.8	354	ug/L
MKTF-10	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-10	6/8/2017	Phenol	49	10	3.1	5761	ug/L
MKTF-10	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-10	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-10	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-10	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-10	6/8/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
MKTF-10	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-10	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-10	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-10	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-10	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-10	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-10	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-10	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-10	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-10	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-10	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-10	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-10	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-10	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-10	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-10	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-10	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-10	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-10	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-10	6/8/2017	3,4-Methylphenol	98	10	3.2	NA	ug/L
MKTF-10	9/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-10	9/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-10	9/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-10	9/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-10	9/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-10	9/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-10	9/28/2017	Benzoic Acid	65	200	39	75000	ug/L
MKTF-10	9/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-10	9/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-10	9/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-10	9/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-10	9/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-10	9/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-10	9/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-10	9/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-10	9/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-10	9/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-10	9/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-10	9/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-10	9/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-10	9/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-10	9/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-10	9/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-10	9/28/2017	Naphthalene	**110**	100	29	30	ug/L
MKTF-10	9/28/2017	2-Methylnaphthalene	**42**	100	33	35.1	ug/L
MKTF-10	9/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-10	9/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-10	9/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-10	9/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-10	9/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-10	9/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-10	9/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-10	9/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-10	9/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-10	9/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-10	9/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-10	9/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-10	9/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-10	9/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-10	9/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-10	9/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-10	9/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-10	9/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-10	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-10	9/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-10	9/28/2017	Bis(2-ethylhexyl)phthalate	**82**	100	48	55.64	ug/L
MKTF-10	9/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-10	9/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-10	9/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-10	9/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-10	9/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-10	9/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-10	9/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-10	9/28/2017	Dimethylphthalate	61	100	36	612	ug/L
MKTF-10	9/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-10	9/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-10	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-10	9/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-10	9/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-10	9/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-10	9/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-10	9/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-10	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-10	9/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-10	9/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-10	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-10	9/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-10	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-10	9/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-10	11/28/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-10	11/28/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-10	11/28/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-10	11/28/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-10	11/28/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-10	11/28/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-10	11/28/2017	Benzoic Acid	60	100	20	75000	ug/L
MKTF-10	11/28/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-10	11/28/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-10	11/28/2017	Isophorone	ND	50	22	781	ug/L
MKTF-10	11/28/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-10	11/28/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-10	11/28/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-10	11/28/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-10	11/28/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-10	11/28/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-10	11/28/2017	Fluorene	ND	50	20	288	ug/L
MKTF-10	11/28/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-10	11/28/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-10	11/28/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-10	11/28/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-10	11/28/2017	2-Nitrophenol	ND	50	26	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/28/2017	1-Methylnaphthalene	**47**	50	17	11.38	ug/L
MKTF-10	11/28/2017	Naphthalene	**140**	50	14	30	ug/L
MKTF-10	11/28/2017	2-Methylnaphthalene	**79**	50	16	35.1	ug/L
MKTF-10	11/28/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-10	11/28/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-10	11/28/2017	2-Methylphenol	24	50	17	NA	ug/L
MKTF-10	11/28/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-10	11/28/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-10	11/28/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-10	11/28/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-10	11/28/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-10	11/28/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-10	11/28/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-10	11/28/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-10	11/28/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-10	11/28/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-10	11/28/2017	2,4-Dimethylphenol	16	50	14	354	ug/L
MKTF-10	11/28/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-10	11/28/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-10	11/28/2017	Phenol	31	50	16	5761	ug/L
MKTF-10	11/28/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-10	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-10	11/28/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-10	11/28/2017	Bis(2-ethylhexyl)phthalate	**1000**	50	24	55.64	ug/L
MKTF-10	11/28/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-10	11/28/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-10	11/28/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-10	11/28/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-10	11/28/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-10	11/28/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-10	11/28/2017	Pyrene	ND	50	22	117	ug/L
MKTF-10	11/28/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-10	11/28/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-10	11/28/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-10	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-10	11/28/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-10	11/28/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-10	11/28/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-10	11/28/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-10	11/28/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-10	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-10	11/28/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-10	11/28/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-10	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-10	11/28/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-10	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-10	11/28/2017	3,4-Methylphenol	28	50	16	NA	ug/L
MKTF-10	2/14/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-10	2/14/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-10	2/14/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-10	2/14/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	2/14/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-10	2/14/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-10	2/14/2018	Benzoic Acid	22	20	3.9	75000	ug/L
MKTF-10	2/14/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-10	2/14/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-10	2/14/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-10	2/14/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-10	2/14/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-10	2/14/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-10	2/14/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-10	2/14/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-10	2/14/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-10	2/14/2018	Fluorene	ND	10	4	288	ug/L
MKTF-10	2/14/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-10	2/14/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-10	2/14/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-10	2/14/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-10	2/14/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-10	2/14/2018	1-Methylnaphthalene	**53**	10	3.3	11.38	ug/L
MKTF-10	2/14/2018	Naphthalene	**150**	10	2.9	30	ug/L
MKTF-10	2/14/2018	2-Methylnaphthalene	**82**	10	3.3	35.1	ug/L
MKTF-10	2/14/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-10	2/14/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-10	2/14/2018	2-Methylphenol	36	10	3.3	NA	ug/L
MKTF-10	2/14/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-10	2/14/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-10	2/14/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-10	2/14/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-10	2/14/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-10	2/14/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-10	2/14/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-10	2/14/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-10	2/14/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-10	2/14/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-10	2/14/2018	2,4-Dimethylphenol	25	10	2.8	354	ug/L
MKTF-10	2/14/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-10	2/14/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-10	2/14/2018	Phenol	42	10	3.1	5761	ug/L
MKTF-10	2/14/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-10	2/14/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-10	2/14/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-10	2/14/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-10	2/14/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-10	2/14/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-10	2/14/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-10	2/14/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-10	2/14/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-10	2/14/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-10	2/14/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-10	2/14/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-10	2/14/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-10	2/14/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-10	2/14/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-10	2/14/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-10	2/14/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-10	2/14/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-10	2/14/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-10	2/14/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-10	2/14/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-10	2/14/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-10	2/14/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-10	2/14/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-10	2/14/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-10	2/14/2018	3,4-Methylphenol	37	10	3.2	NA	ug/L
MKTF-10	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	5/2/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	5/2/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	5/2/2018	1-Methylnaphthalene	**42**	10	7	11.38	ug/L
MKTF-10	5/2/2018	Naphthalene	**110**	10	5	30	ug/L
MKTF-10	5/2/2018	2-Methylnaphthalene	**55**	10	6.3	35.1	ug/L
MKTF-10	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	5/2/2018	2-Methylphenol	21	10	6.3	NA	ug/L
MKTF-10	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-10	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	5/2/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
MKTF-10	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	5/2/2018	Phenol	36	10	6	5761	ug/L
MKTF-10	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-10	5/2/2018	3,4-Methylphenol	22	10	5.4	NA	ug/L
MKTF-10	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	9/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	9/4/2018	1-Methylnaphthalene	**50**	10	7	11.38	ug/L
MKTF-10	9/4/2018	Naphthalene	**130**	10	5	30	ug/L
MKTF-10	9/4/2018	2-Methylnaphthalene	**64**	10	6.3	35.1	ug/L
MKTF-10	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	9/4/2018	2-Methylphenol	10	10	6.3	NA	ug/L
MKTF-10	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	9/4/2018	2,4-Dimethylphenol	13	10	5.9	354	ug/L
MKTF-10	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	9/4/2018	Phenol	30	10	6	5761	ug/L
MKTF-10	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-10	9/4/2018	3,4-Methylphenol	10	10	5.4	NA	ug/L
MKTF-10	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-10	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-10	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-10	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-10	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-10	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-10	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-10	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-10	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-10	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-10	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-10	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-10	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-10	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-10	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-10	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-10	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-10	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-10	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-10	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-10	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-10	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-10	11/20/2018	1-Methylnaphthalene	**34**	10	7	11.38	ug/L
MKTF-10	11/20/2018	Naphthalene	**98**	10	5	30	ug/L
MKTF-10	11/20/2018	2-Methylnaphthalene	**51**	10	6.3	35.1	ug/L
MKTF-10	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-10	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-10	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-10	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-10	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-10	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-10	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-10	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-10	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-10	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-10	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-10	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-10	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-10	11/20/2018	2,4-Dimethylphenol	14	10	5.9	354	ug/L
MKTF-10	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-10	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-10	11/20/2018	Phenol	28	10	6	5761	ug/L
MKTF-10	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-10	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-10	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-10	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-10	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-10	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-10	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-10	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-10	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-10	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-10	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-10	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-10	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-10	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-10	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-10	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-10	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-10	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-10	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-10	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-10	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-10	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-10	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-10	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-10	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-10	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-10	5/13/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-10	5/13/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-10	5/13/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-10	5/13/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-10	5/13/2019	1-Methylnaphthalene	**68**	50	15.345382	11.38	ug/L
MKTF-10	5/13/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-10	5/13/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-10	5/13/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-10	5/13/2019	2,4-Dimethylphenol	17	50	14.829964	354	ug/L
MKTF-10	5/13/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-10	5/13/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-10	5/13/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-10	5/13/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-10	5/13/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-10	5/13/2019	2-Methylnaphthalene	**93**	50	15.094314	35.1	ug/L
MKTF-10	5/13/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-10	5/13/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-10	5/13/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-10	5/13/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-10	5/13/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-10	5/13/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-10	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-10	5/13/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-10	5/13/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-10	5/13/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-10	5/13/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-10	5/13/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-10	5/13/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-10	5/13/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-10	5/13/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-10	5/13/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-10	5/13/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-10	5/13/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-10	5/13/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-10	5/13/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-10	5/13/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-10	5/13/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-10	5/13/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-10	5/13/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-10	5/13/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-10	5/13/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-10	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-10	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-10	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-10	5/13/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-10	5/13/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-10	5/13/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-10	5/13/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-10	5/13/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-10	5/13/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-10	5/13/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-10	5/13/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-10	5/13/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-10	5/13/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-10	5/13/2019	Fluorene	15	50	14.442442	288	ug/L
MKTF-10	5/13/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-10	5/13/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-10	5/13/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-10	5/13/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-10	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-10	5/13/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-10	5/13/2019	Naphthalene	**170**	50	20.61105	30	ug/L
MKTF-10	5/13/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-10	5/13/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-10	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-10	5/13/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-10	5/13/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-10	5/13/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-10	5/13/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-10	5/13/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-10	5/13/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-10	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-10	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-10	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-10	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-10	8/22/2019	1-Methylnaphthalene	**54**	10	3.069076	11.38	ug/L
MKTF-10	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-10	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-10	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-10	8/22/2019	2,4-Dimethylphenol	23	10	2.965993	354	ug/L
MKTF-10	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-10	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-10	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-10	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-10	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-10	8/22/2019	2-Methylnaphthalene	**76**	10	3.018863	35.1	ug/L
MKTF-10	8/22/2019	2-Methylphenol	9.2	10	2.858438	NA	ug/L
MKTF-10	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-10	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-10	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-10	8/22/2019	3,4-Methylphenol	4.7	10	3.584453	NA	ug/L
MKTF-10	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-10	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-10	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-10	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-10	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-10	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-10	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-10	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-10	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-10	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-10	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-10	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-10	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-10	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-10	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-10	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-10	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-10	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-10	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-10	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-10	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-10	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-10	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-10	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-10	8/22/2019	Carbazole	3.1	10	2.890507	NA	ug/L
MKTF-10	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-10	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-10	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-10	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-10	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-10	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-10	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-10	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-10	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-10	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-10	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-10	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-10	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-10	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-10	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-10	8/22/2019	Naphthalene	**160**	10	4.12221	30	ug/L
MKTF-10	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-10	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-10	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-10	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-10	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-10	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-10	8/22/2019	Phenol	26	10	8.036586	5761	ug/L
MKTF-10	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-10	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-10	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-10	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-10	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-10	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-10	10/30/2019	1-Methylnaphthalene	**57**	5	5	11.38	ug/L
MKTF-10	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-10	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-10	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-10	10/30/2019	2,4-Dimethylphenol	14	5	5	354	ug/L
MKTF-10	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-10	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-10	10/30/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-10	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-10	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-10	10/30/2019	2-Methylnaphthalene	**84**	5	5	35.1	ug/L
MKTF-10	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-10	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-10	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-10	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-10	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-10	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-10	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-10	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-10	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-10	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-10	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-10	10/30/2019	Benzoic Acid	45	5	5	75000	ug/L
MKTF-10	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-10	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-10	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-10	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-10	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-10	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-10	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-10	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-10	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-10	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-10	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-10	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-10	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-10	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-10	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-10	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-10	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-10	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-10	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-10	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-10	10/30/2019	Naphthalene	**140**	5	5	30	ug/L
MKTF-10	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-10	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-10	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-10	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-10	10/30/2019	Phenol	5.4	5	5	5761	ug/L
MKTF-10	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-10	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-10	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-10	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-10	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-10	3/3/2020	1,4-Dioxane	**6.6**	5	1	4.59	ug/L
MKTF-10	3/3/2020	1-Methylnaphthalene	**54**	2.5	0.5	11.38	ug/L
MKTF-10	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-10	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-10	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-10	3/3/2020	2,4-Dimethylphenol	3.2	2.5	0.5	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-10	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-10	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-10	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-10	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-10	3/3/2020	2-Methylnaphthalene	**84**	2.5	0.5	35.1	ug/L
MKTF-10	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-10	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	3,4-Methylphenol	4.3	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-10	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-10	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-10	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Acenaphthene	0.9	2.5	0.5	535	ug/L
MKTF-10	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-10	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-10	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-10	3/3/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-10	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-10	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-10	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-10	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-10	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-10	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-10	3/3/2020	Bis(2-ethylhexyl)phthalate	1.21	2.5	1	55.64	ug/L
MKTF-10	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-10	3/3/2020	Carbazole	2.8	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-10	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-10	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-10	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-10	3/3/2020	Dibenzofuran	1.33	2.5	0.5	NA	ug/L
MKTF-10	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-10	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-10	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-10	3/3/2020	Fluorene	2.12	2.5	0.5	288	ug/L
MKTF-10	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-10	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-10	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-10	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-10	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-10	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-10	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-10	3/3/2020	Naphthalene	**150**	2.5	0.5	30	ug/L
MKTF-10	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-10	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-10	3/3/2020	Phenanthrene	1.72	2.5	0.5	170	ug/L
MKTF-10	3/3/2020	Phenol	64	2.5	0.5	5761	ug/L
MKTF-10	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-10	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-10	12/18/2020	1,3-Dichlorobenzene	ND	10.2	1.93	NA	ug/L
MKTF-10	12/18/2020	1,4-Dichlorobenzene	ND	10.2	1.93	75	ug/L
MKTF-10	12/18/2020	2,4,5-Trichlorophenol	ND	10.2	1.12	1166	ug/L
MKTF-10	12/18/2020	2,4,6-Trichlorophenol	ND	10.2	1.62	11.9*	ug/L
MKTF-10	12/18/2020	2,4-Dichlorophenol	ND	10.2	1.52	45.3	ug/L
MKTF-10	12/18/2020	2,4-Dimethylphenol	26.6	10.2	1.32	354	ug/L
MKTF-10	12/18/2020	2,4-Dinitrophenol	ND	30.5	4.67	38.7	ug/L
MKTF-10	12/18/2020	2-Chloronaphthalene	ND	10.2	1.52	733	ug/L
MKTF-10	12/18/2020	2-Chlorophenol	ND	10.2	1.73	91	ug/L
MKTF-10	12/18/2020	2-Methylphenol	ND	10.2	1.52	NA	ug/L
MKTF-10	12/18/2020	2-Nitroaniline	ND	10.2	1.83	190	ug/L
MKTF-10	12/18/2020	2-Nitrophenol	ND	10.2	2.03	NA	ug/L
MKTF-10	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10.2*	4.06	1.25	ug/L
MKTF-10	12/18/2020	3-Nitroaniline	ND	10.2	2.23	NA	ug/L
MKTF-10	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.2*	4.06	1.52	ug/L
MKTF-10	12/18/2020	4-Bromophenyl-phenylether	ND	10.2	1.32	NA	ug/L
MKTF-10	12/18/2020	4-Chloro-3-Methylphenol	ND	10.2	1.42	NA	ug/L
MKTF-10	12/18/2020	4-Chloroaniline	*ND*	*10.2*	1.83	0.37	ug/L
MKTF-10	12/18/2020	4-Chlorophenyl-phenylether	ND	10.2	1.32	NA	ug/L
MKTF-10	12/18/2020	4-Nitroaniline	*ND*	*10.2*	4.16	3.8	ug/L
MKTF-10	12/18/2020	4-Nitrophenol	ND	10.2	3.35	NA	ug/L
MKTF-10	12/18/2020	Acenaphthene	ND	10.2	1.32	535	ug/L
MKTF-10	12/18/2020	Acenaphthylene	ND	10.2	1.42	NA	ug/L
MKTF-10	12/18/2020	Aniline	ND	10.2	3.55	13	ug/L
MKTF-10	12/18/2020	Anthracene	ND	10.2	1.32	1721	ug/L
MKTF-10	12/18/2020	Benzo(a)anthracene	*ND*	*10.2*	1.83	0.12	ug/L
MKTF-10	12/18/2020	Benzo(a)pyrene	*ND*	*10.2*	1.73	0.2	ug/L
MKTF-10	12/18/2020	Benzo(b)fluoranthene	*ND*	*10.2*	1.73	0.34	ug/L
MKTF-10	12/18/2020	Benzo(g,h,i)perylene	ND	10.2	3.15	NA	ug/L
MKTF-10	12/18/2020	Benzo(k)fluoranthene	*ND*	*10.2*	1.73	3.43	ug/L
MKTF-10	12/18/2020	Benzoic Acid	ND	30.5	5.79	75000	ug/L
MKTF-10	12/18/2020	Benzyl Alcohol	ND	10.2	2.23	2000	ug/L
MKTF-10	12/18/2020	Bis(2-chloroethoxy)methane	ND	10.2	1.42	59	ug/L
MKTF-10	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10.2*	1.22	0.137	ug/L
MKTF-10	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10.2	2.74	55.64	ug/L
MKTF-10	12/18/2020	Butylbenzylphthalate	ND	10.2	2.34	16	ug/L
MKTF-10	12/18/2020	Carbazole	ND	10.2	1.93	NA	ug/L
MKTF-10	12/18/2020	Chrysene	ND	10.2	1.83	34.3	ug/L
MKTF-10	12/18/2020	Di-n-butylphthalate	ND	10.2	1.73	885	ug/L
MKTF-10	12/18/2020	Di-n-octylphthalate	ND	10.2	1.62	200	ug/L
MKTF-10	12/18/2020	Dibenzo(a,h)anthracene	ND	10.2	2.74	NA	ug/L
MKTF-10	12/18/2020	Dibenzofuran	ND	10.2	1.52	NA	ug/L
MKTF-10	12/18/2020	Diethylphthalate	ND	10.2	1.12	14801	ug/L
MKTF-10	12/18/2020	Dimethylphthalate	ND	10.2	1.22	612	ug/L
MKTF-10	12/18/2020	Fluoranthene	ND	10.2	1.32	802	ug/L
MKTF-10	12/18/2020	Fluorene	ND	10.2	1.32	288	ug/L
MKTF-10	12/18/2020	Hexachlorobenzene	*ND*	*10.2*	1.22	0.0976	ug/L
MKTF-10	12/18/2020	Hexachlorocyclopentadiene	*ND*	*20.3*	1.93	0.41	ug/L
MKTF-10	12/18/2020	Hexachloroethane	*ND*	*10.2*	2.44	3.28	ug/L
MKTF-10	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.2*	2.94	0.343	ug/L
MKTF-10	12/18/2020	Isophorone	ND	10.2	1.73	781	ug/L
MKTF-10	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10.2*	2.03	0.011	ug/L
MKTF-10	12/18/2020	N-Nitrosodimethylamine	*ND*	*10.2*	2.23	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	N-Nitrosodiphenylamine	ND	10.2	1.12	122	ug/L
MKTF-10	12/18/2020	Naphthalene	**104**	10.2	1.73	30	ug/L
MKTF-10	12/18/2020	Nitrobenzene	*ND*	*10.2*	1.62	1.4	ug/L
MKTF-10	12/18/2020	Pentachlorophenol	*ND*	*20.3*	3.76	1	ug/L
MKTF-10	12/18/2020	Phenanthrene	ND	10.2	1.42	170	ug/L
MKTF-10	12/18/2020	Phenol	30.1	10.2	1.32	5761	ug/L
MKTF-10	12/18/2020	Pyrene	ND	10.2	1.52	117	ug/L
MKTF-10	12/18/2020	Pyridine	ND	10.2	4.47	20	ug/L
MKTF-10	12/18/2020	1,2,4-Trichlorobenzene	ND	10.2	1.83	70	ug/L
MKTF-10	12/18/2020	1,2-Dichlorobenzene	ND	10.2	1.83	600	ug/L
MKTF-10	12/18/2020	2,4-Dinitrotoluene	ND	10.2	1.42	45.3	ug/L
MKTF-10	12/18/2020	2,6-Dinitrotoluene	*ND*	*10.2*	1.32	0.485	ug/L
MKTF-10	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.2*	1.73	9.81	ug/L
MKTF-10	12/18/2020	Azobenzene	*ND*	*10.2*	1.32	0.12	ug/L
MKTF-11	4/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	4/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	4/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	4/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	4/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	4/11/2014	Aniline	**23**	10	2.4	13	ug/L
MKTF-11	4/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	4/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	4/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	4/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	4/11/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	4/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	4/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	4/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	4/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	4/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	4/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	4/11/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	4/11/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	4/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	4/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	4/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	4/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	4/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	4/11/2014	1-Methylnaphthalene	**12**	10	3.6	11.38	ug/L
MKTF-11	4/11/2014	Naphthalene	**38**	10	2.3	30	ug/L
MKTF-11	4/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	4/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	4/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	4/11/2014	2-Methylphenol	160	20	2.8	NA	ug/L
MKTF-11	4/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	4/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	4/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	4/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	4/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	4/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	4/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	4/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	4/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	4/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	4/11/2014	2,4-Dimethylphenol	78	10	3.1	354	ug/L
MKTF-11	4/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	4/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	4/11/2014	Phenol	21	10	1.6	5761	ug/L
MKTF-11	4/11/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	4/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	4/11/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	4/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	4/11/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	4/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	4/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	4/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	4/11/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	4/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	4/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	4/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	4/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	4/11/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	4/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	4/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	4/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	4/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	4/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	4/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	4/11/2014	3,4-Methylphenol	110	10	1.8	NA	ug/L
MKTF-11	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	6/5/2014	Aniline	**25**	10	2.4	13	ug/L
MKTF-11	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	6/5/2014	1-Methylnaphthalene	11	10	3.6	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/5/2014	Naphthalene	**46**	10	2.3	30	ug/L
MKTF-11	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	6/5/2014	2-Methylphenol	180	20	2.8	NA	ug/L
MKTF-11	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	6/5/2014	2,4-Dimethylphenol	92	10	3.1	354	ug/L
MKTF-11	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	6/5/2014	Phenol	32	10	1.6	5761	ug/L
MKTF-11	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	6/5/2014	3,4-Methylphenol	130	10	1.8	NA	ug/L
MKTF-11	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	9/15/2014	Aniline	**24**	10	2.4	13	ug/L
MKTF-11	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	9/15/2014	1-Methylnaphthalene	**14**	10	3.6	11.38	ug/L
MKTF-11	9/15/2014	Naphthalene	**39**	10	2.3	30	ug/L
MKTF-11	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/15/2014	2-Methylphenol	150	20	2.8	NA	ug/L
MKTF-11	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	9/15/2014	2,4-Dimethylphenol	59	10	3.1	354	ug/L
MKTF-11	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	9/15/2014	Phenol	31	10	1.6	5761	ug/L
MKTF-11	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-11	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	9/15/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	9/15/2014	3,4-Methylphenol	110	10	1.8	NA	ug/L
MKTF-11	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	9/24/2014	Aniline	**27**	10	2.4	13	ug/L
MKTF-11	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	9/24/2014	1-Methylnaphthalene	**24**	10	3.6	11.38	ug/L
MKTF-11	9/24/2014	Naphthalene	**67**	10	2.3	30	ug/L
MKTF-11	9/24/2014	2-Methylnaphthalene	22	10	2.6	35.1	ug/L
MKTF-11	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/24/2014	2-Methylphenol	350	40	5.5	NA	ug/L
MKTF-11	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-11	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	9/24/2014	2,4-Dimethylphenol	190	10	3.1	354	ug/L
MKTF-11	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	9/24/2014	Phenol	78	10	1.6	5761	ug/L
MKTF-11	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-11	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-11	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	9/24/2014	3,4-Methylphenol	240	20	3.7	NA	ug/L
MKTF-11	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-11	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-11	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-11	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-11	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-11	11/13/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-11	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-11	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-11	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-11	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-11	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-11	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-11	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-11	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-11	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-11	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-11	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-11	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-11	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-11	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-11	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-11	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-11	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-11	11/13/2014	1-Methylnaphthalene	**15**	10	3.6	11.38	ug/L
MKTF-11	11/13/2014	Naphthalene	**31**	10	2.3	30	ug/L
MKTF-11	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-11	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-11	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	11/13/2014	2-Methylphenol	70	10	2.8	NA	ug/L
MKTF-11	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-11	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-11	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-11	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-11	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-11	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-11	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-11	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-11	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	11/13/2014	2,4-Dimethylphenol	12	10	3.1	354	ug/L
MKTF-11	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-11	11/13/2014	Phenol	20	10	1.6	5761	ug/L
MKTF-11	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-11	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	11/13/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-11	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-11	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-11	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-11	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-11	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-11	11/13/2014	Pyrene	ND	10	4	117	ug/L
MKTF-11	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-11	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-11	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-11	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-11	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-11	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-11	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-11	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-11	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-11	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-11	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-11	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-11	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-11	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-11	11/13/2014	3,4-Methylphenol	46	10	1.8	NA	ug/L
MKTF-11	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Aniline	**44**	10	1.5	13	ug/L
MKTF-11	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	3/16/2015	1-Methylnaphthalene	**25**	10	1.8	11.38	ug/L
MKTF-11	3/16/2015	Naphthalene	**69**	10	1.8	30	ug/L
MKTF-11	3/16/2015	2-Methylnaphthalene	20	10	2.2	35.1	ug/L
MKTF-11	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	3/16/2015	2-Methylphenol	270	20	2.5	NA	ug/L
MKTF-11	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	3/16/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-11	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	3/16/2015	Phenol	52	10	1.1	5761	ug/L
MKTF-11	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	3/16/2015	3,4-Methylphenol	240	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Aniline	**46**	10	1.5	13	ug/L
MKTF-11	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	6/4/2015	1-Methylnaphthalene	**20**	10	1.8	11.38	ug/L
MKTF-11	6/4/2015	Naphthalene	**70**	10	1.8	30	ug/L
MKTF-11	6/4/2015	2-Methylnaphthalene	21	10	2.2	35.1	ug/L
MKTF-11	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	6/4/2015	2-Methylphenol	300	50	6.2	NA	ug/L
MKTF-11	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	6/4/2015	2,4-Dimethylphenol	140	10	1.9	354	ug/L
MKTF-11	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	6/4/2015	Phenol	53	10	1.1	5761	ug/L
MKTF-11	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	6/4/2015	3,4-Methylphenol	230	50	7.4	NA	ug/L
MKTF-11	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	8/18/2015	2,4-Dinitrophenol	ND	29	1.5	38.7	ug/L
MKTF-11	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	8/18/2015	4-Chloro-3-Methylphenol	ND	14	1.9	NA	ug/L
MKTF-11	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-11	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	8/18/2015	Benzoic Acid	ND	29	1.5	75000	ug/L
MKTF-11	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	8/18/2015	Pentachlorophenol	*ND*	*29*	1.6	1	ug/L
MKTF-11	8/18/2015	2,4,6-Trichlorophenol	ND	14	1.8	11.9*	ug/L
MKTF-11	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	8/18/2015	2-Nitrophenol	ND	14	1.8	NA	ug/L
MKTF-11	8/18/2015	1-Methylnaphthalene	10	10	1.8	11.38	ug/L
MKTF-11	8/18/2015	Naphthalene	17	10	1.8	30	ug/L
MKTF-11	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-11	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	8/18/2015	2-Methylphenol	49	14	1.8	NA	ug/L
MKTF-11	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	8/18/2015	2-Chlorophenol	ND	14	1.7	91	ug/L
MKTF-11	8/18/2015	2,4,5-Trichlorophenol	ND	14	2.3	1166	ug/L
MKTF-11	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	8/18/2015	4-Nitrophenol	ND	14	2	NA	ug/L
MKTF-11	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	8/18/2015	2,4-Dimethylphenol	15	14	2.6	354	ug/L
MKTF-11	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	8/18/2015	Phenol	27	14	1.6	5761	ug/L
MKTF-11	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	8/18/2015	2,4-Dichlorophenol	ND	29	2	45.3	ug/L
MKTF-11	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*29*	2	1.52	ug/L
MKTF-11	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	8/18/2015	3,4-Methylphenol	29	14	2.1	NA	ug/L
MKTF-11	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-11	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-11	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-11	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Aniline	**38**	10	1.5	13	ug/L
MKTF-11	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-11	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-11	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-11	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-11	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-11	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-11	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-11	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-11	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-11	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-11	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-11	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-11	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-11	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-11	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-11	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-11	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-11	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-11	11/3/2015	1-Methylnaphthalene	**22**	10	1.8	11.38	ug/L
MKTF-11	11/3/2015	Naphthalene	**73**	10	1.8	30	ug/L
MKTF-11	11/3/2015	2-Methylnaphthalene	23	10	2.2	35.1	ug/L
MKTF-11	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-11	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-11	11/3/2015	2-Methylphenol	300	50	6.2	NA	ug/L
MKTF-11	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-11	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-11	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-11	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-11	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-11	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-11	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-11	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-11	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-11	11/3/2015	2,4-Dimethylphenol	110	10	1.9	354	ug/L
MKTF-11	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-11	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-11	11/3/2015	Phenol	90	10	1.1	5761	ug/L
MKTF-11	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-11	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-11	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-11	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-11	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-11	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-11	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-11	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-11	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-11	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-11	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-11	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-11	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-11	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-11	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-11	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-11	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-11	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-11	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-11	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-11	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-11	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-11	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-11	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-11	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-11	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-11	11/3/2015	3,4-Methylphenol	270	50	7.4	NA	ug/L
MKTF-11	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-11	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-11	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-11	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-11	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-11	2/29/2016	Aniline	11	10	9.8	13	ug/L
MKTF-11	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-11	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-11	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-11	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-11	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-11	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-11	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-11	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-11	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-11	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-11	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-11	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-11	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-11	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-11	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-11	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-11	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-11	2/29/2016	1-Methylnaphthalene	**14**	10	6.8	11.38	ug/L
MKTF-11	2/29/2016	Naphthalene	**38**	10	5.9	30	ug/L
MKTF-11	2/29/2016	2-Methylnaphthalene	11	10	7	35.1	ug/L
MKTF-11	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-11	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-11	2/29/2016	2-Methylphenol	84	10	8.2	NA	ug/L
MKTF-11	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-11	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-11	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-11	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-11	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-11	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-11	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-11	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-11	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-11	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-11	2/29/2016	2,4-Dimethylphenol	18	10	4.7	354	ug/L
MKTF-11	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-11	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-11	2/29/2016	Phenol	29	10	5.1	5761	ug/L
MKTF-11	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-11	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-11	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-11	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-11	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-11	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-11	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-11	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-11	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-11	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-11	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-11	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-11	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-11	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-11	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-11	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-11	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-11	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-11	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-11	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-11	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-11	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-11	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-11	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-11	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-11	2/29/2016	3,4-Methylphenol	49	10	7.1	NA	ug/L
MKTF-11	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Aniline	3.7	10	2.4	13	ug/L
MKTF-11	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	6/9/2016	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
MKTF-11	6/9/2016	Naphthalene	**33**	10	2.6	30	ug/L
MKTF-11	6/9/2016	2-Methylnaphthalene	10	10	2.9	35.1	ug/L
MKTF-11	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	6/9/2016	2-Methylphenol	88	10	2.5	NA	ug/L
MKTF-11	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	6/9/2016	2,4-Dimethylphenol	22	10	3	354	ug/L
MKTF-11	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	6/9/2016	Phenol	45	10	2	5761	ug/L
MKTF-11	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	6/9/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-11	6/9/2016	Di-n-octylphthalate	4.8	10	2	200	ug/L
MKTF-11	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	6/9/2016	3,4-Methylphenol	63	10	2.3	NA	ug/L
MKTF-11	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Aniline	9.3	10	2.4	13	ug/L
MKTF-11	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	9/11/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	9/11/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	9/11/2016	1-Methylnaphthalene	**12**	10	2.9	11.38	ug/L
MKTF-11	9/11/2016	Naphthalene	30	10	2.6	30	ug/L
MKTF-11	9/11/2016	2-Methylnaphthalene	9	10	2.9	35.1	ug/L
MKTF-11	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	9/11/2016	2-Methylphenol	130	10	2.5	NA	ug/L
MKTF-11	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	9/11/2016	2,4-Dimethylphenol	42	10	3	354	ug/L
MKTF-11	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	9/11/2016	Phenol	49	10	2	5761	ug/L
MKTF-11	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	9/11/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-11	9/11/2016	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-11	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	9/11/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-11	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	9/11/2016	3,4-Methylphenol	120	10	2.3	NA	ug/L
MKTF-11	11/2/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	11/2/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	11/2/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	11/2/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	11/2/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Aniline	7	10	2.4	13	ug/L
MKTF-11	11/2/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	11/2/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-11	11/2/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	11/2/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	11/2/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	11/2/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	11/2/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	11/2/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	11/2/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-11	11/2/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	11/2/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	11/2/2016	Carbazole	2.4	10	2.3	NA	ug/L
MKTF-11	11/2/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	11/2/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	11/2/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	11/2/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	11/2/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	11/2/2016	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
MKTF-11	11/2/2016	Naphthalene	**34**	10	2.6	30	ug/L
MKTF-11	11/2/2016	2-Methylnaphthalene	9.5	10	2.9	35.1	ug/L
MKTF-11	11/2/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	11/2/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	11/2/2016	2-Methylphenol	96	10	2.5	NA	ug/L
MKTF-11	11/2/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	11/2/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	11/2/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	11/2/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	11/2/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	11/2/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	11/2/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	11/2/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	11/2/2016	2,4-Dimethylphenol	13	10	3	354	ug/L
MKTF-11	11/2/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	11/2/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	11/2/2016	Phenol	40	10	2	5761	ug/L
MKTF-11	11/2/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	11/2/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	11/2/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-11	11/2/2016	Di-n-octylphthalate	7.2	10	2	200	ug/L
MKTF-11	11/2/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	11/2/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	11/2/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	11/2/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-11	11/2/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	11/2/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	11/2/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	11/2/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	11/2/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	11/2/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	11/2/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	11/2/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	11/2/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	11/2/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	11/2/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	11/2/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	11/2/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	11/2/2016	3,4-Methylphenol	89	10	2.3	NA	ug/L
MKTF-11	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-11	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-11	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-11	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-11	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-11	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-11	3/2/2017	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-11	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-11	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-11	3/2/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-11	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-11	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-11	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-11	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-11	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-11	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-11	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-11	3/2/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-11	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-11	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-11	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-11	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-11	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-11	3/2/2017	1-Methylnaphthalene	9.2	10	2.9	11.38	ug/L
MKTF-11	3/2/2017	Naphthalene	24	10	2.6	30	ug/L
MKTF-11	3/2/2017	2-Methylnaphthalene	6.9	10	2.9	35.1	ug/L
MKTF-11	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-11	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-11	3/2/2017	2-Methylphenol	40	10	2.5	NA	ug/L
MKTF-11	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-11	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-11	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-11	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-11	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-11	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-11	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-11	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-11	3/2/2017	2,4-Dimethylphenol	13	10	3	354	ug/L
MKTF-11	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-11	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-11	3/2/2017	Phenol	15	10	2	5761	ug/L
MKTF-11	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-11	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-11	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-11	3/2/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-11	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-11	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-11	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-11	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-11	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-11	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-11	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-11	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-11	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-11	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-11	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-11	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-11	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-11	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-11	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-11	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-11	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-11	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-11	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-11	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-11	3/2/2017	3,4-Methylphenol	31	10	2.3	NA	ug/L
MKTF-11	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	6/8/2017	Aniline	**14**	10	3.1	13	ug/L
MKTF-11	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	6/8/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	6/8/2017	1-Methylnaphthalene	11	10	3.3	11.38	ug/L
MKTF-11	6/8/2017	Naphthalene	**31**	10	2.9	30	ug/L
MKTF-11	6/8/2017	2-Methylnaphthalene	8.4	10	3.3	35.1	ug/L
MKTF-11	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	6/8/2017	2-Methylphenol	210	10	3.3	NA	ug/L
MKTF-11	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	6/8/2017	2,4-Dimethylphenol	62	10	2.8	354	ug/L
MKTF-11	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	6/8/2017	Phenol	73	10	3.1	5761	ug/L
MKTF-11	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	6/8/2017	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
MKTF-11	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	6/8/2017	3,4-Methylphenol	230	10	3.2	NA	ug/L
MKTF-11	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	9/26/2017	Aniline	**26**	10	3.1	13	ug/L
MKTF-11	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	9/26/2017	1-Methylnaphthalene	**13**	10	3.3	11.38	ug/L
MKTF-11	9/26/2017	Naphthalene	**44**	10	2.9	30	ug/L
MKTF-11	9/26/2017	2-Methylnaphthalene	13	10	3.3	35.1	ug/L
MKTF-11	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	9/26/2017	2-Methylphenol	330	20	6.6	NA	ug/L
MKTF-11	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	9/26/2017	2,4-Dimethylphenol	86	10	2.8	354	ug/L
MKTF-11	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	9/26/2017	Phenol	94	10	3.1	5761	ug/L
MKTF-11	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	9/26/2017	3,4-Methylphenol	390	20	6.4	NA	ug/L
MKTF-11	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	11/28/2017	Aniline	**21**	10	3.1	13	ug/L
MKTF-11	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	11/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-11	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	11/28/2017	1-Methylnaphthalene	**14**	10	3.3	11.38	ug/L
MKTF-11	11/28/2017	Naphthalene	**45**	10	2.9	30	ug/L
MKTF-11	11/28/2017	2-Methylnaphthalene	12	10	3.3	35.1	ug/L
MKTF-11	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	11/28/2017	2-Methylphenol	220	10	3.3	NA	ug/L
MKTF-11	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	11/28/2017	2,4-Dimethylphenol	55	10	2.8	354	ug/L
MKTF-11	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	11/28/2017	Phenol	88	10	3.1	5761	ug/L
MKTF-11	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	11/28/2017	3,4-Methylphenol	270	20	6.4	NA	ug/L
MKTF-11	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-11	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-11	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-11	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-11	2/8/2018	Aniline	**20**	10	3.1	13	ug/L
MKTF-11	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-11	2/8/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-11	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-11	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-11	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-11	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-11	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-11	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-11	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-11	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-11	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-11	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-11	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-11	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-11	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-11	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-11	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-11	2/8/2018	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
MKTF-11	2/8/2018	Naphthalene	**54**	10	2.9	30	ug/L
MKTF-11	2/8/2018	2-Methylnaphthalene	12	10	3.3	35.1	ug/L
MKTF-11	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-11	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-11	2/8/2018	2-Methylphenol	200	10	3.3	NA	ug/L
MKTF-11	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-11	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-11	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-11	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-11	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-11	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-11	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-11	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-11	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-11	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-11	2/8/2018	2,4-Dimethylphenol	54	10	2.8	354	ug/L
MKTF-11	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-11	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-11	2/8/2018	Phenol	80	10	3.1	5761	ug/L
MKTF-11	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-11	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-11	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-11	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-11	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-11	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-11	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-11	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-11	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-11	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-11	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-11	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-11	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-11	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-11	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-11	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-11	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-11	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-11	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-11	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-11	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-11	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-11	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-11	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-11	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-11	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-11	2/8/2018	3,4-Methylphenol	260	100	32	NA	ug/L
MKTF-11	5/2/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	5/2/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	5/2/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	5/2/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Aniline	12	10	6.2	13	ug/L
MKTF-11	5/2/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	5/2/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-11	5/2/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	5/2/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	5/2/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	5/2/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	5/2/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	5/2/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	5/2/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	5/2/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	5/2/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	5/2/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	5/2/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	5/2/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	5/2/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	5/2/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	5/2/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	5/2/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	5/2/2018	1-Methylnaphthalene	9.9	10	7	11.38	ug/L
MKTF-11	5/2/2018	Naphthalene	**39**	10	5	30	ug/L
MKTF-11	5/2/2018	2-Methylnaphthalene	9.1	10	6.3	35.1	ug/L
MKTF-11	5/2/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/2/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	5/2/2018	2-Methylphenol	120	10	6.3	NA	ug/L
MKTF-11	5/2/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	5/2/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	5/2/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	5/2/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	5/2/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	5/2/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	5/2/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	5/2/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	5/2/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	5/2/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	5/2/2018	2,4-Dimethylphenol	33	10	5.9	354	ug/L
MKTF-11	5/2/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	5/2/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	5/2/2018	Phenol	52	10	6	5761	ug/L
MKTF-11	5/2/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	5/2/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	5/2/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	5/2/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	5/2/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	5/2/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	5/2/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	5/2/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	5/2/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	5/2/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	5/2/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	5/2/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	5/2/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	5/2/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	5/2/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	5/2/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	5/2/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	5/2/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	5/2/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-11	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	5/2/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	5/2/2018	3,4-Methylphenol	150	10	5.4	NA	ug/L
MKTF-11	9/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	9/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	9/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	9/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Aniline	11	10	6.2	13	ug/L
MKTF-11	9/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	9/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-11	9/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	9/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	9/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	9/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	9/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	9/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	9/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	9/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	9/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	9/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	9/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	9/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	9/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	9/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	9/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	9/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	9/4/2018	1-Methylnaphthalene	9.9	10	7	11.38	ug/L
MKTF-11	9/4/2018	Naphthalene	**47**	10	5	30	ug/L
MKTF-11	9/4/2018	2-Methylnaphthalene	11	10	6.3	35.1	ug/L
MKTF-11	9/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-11	9/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	9/4/2018	2-Methylphenol	110	10	6.3	NA	ug/L
MKTF-11	9/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	9/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	9/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	9/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	9/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	9/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	9/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	9/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	9/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	9/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	9/4/2018	2,4-Dimethylphenol	38	10	5.9	354	ug/L
MKTF-11	9/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	9/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	9/4/2018	Phenol	56	10	6	5761	ug/L
MKTF-11	9/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	9/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	9/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	9/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	9/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	9/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	9/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	9/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	9/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	9/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	9/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	9/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	9/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	9/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	9/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	9/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	9/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	9/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	9/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	9/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	9/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	9/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	9/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	9/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	9/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	9/4/2018	3,4-Methylphenol	120	10	5.4	NA	ug/L
MKTF-11	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-11	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-11	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-11	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-11	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-11	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-11	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-11	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-11	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-11	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-11	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-11	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-11	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-11	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-11	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-11	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-11	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-11	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-11	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-11	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-11	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-11	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-11	11/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-11	11/20/2018	Naphthalene	**38**	10	5	30	ug/L
MKTF-11	11/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-11	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-11	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-11	11/20/2018	2-Methylphenol	98	10	6.3	NA	ug/L
MKTF-11	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-11	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-11	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-11	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-11	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-11	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-11	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-11	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-11	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-11	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-11	11/20/2018	2,4-Dimethylphenol	28	10	5.9	354	ug/L
MKTF-11	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-11	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-11	11/20/2018	Phenol	92	10	6	5761	ug/L
MKTF-11	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-11	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-11	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-11	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-11	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-11	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-11	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-11	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-11	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-11	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-11	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-11	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-11	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-11	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-11	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-11	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-11	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-11	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-11	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-11	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-11	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-11	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-11	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-11	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-11	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-11	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-11	11/20/2018	3,4-Methylphenol	100	10	5.4	NA	ug/L
MKTF-11	5/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-11	5/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-11	5/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-11	5/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-11	5/13/2019	1-Methylnaphthalene	11	10	3.069076	11.38	ug/L
MKTF-11	5/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-11	5/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-11	5/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-11	5/13/2019	2,4-Dimethylphenol	15	10	2.965993	354	ug/L
MKTF-11	5/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-11	5/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-11	5/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-11	5/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-11	5/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-11	5/13/2019	2-Methylnaphthalene	8.3	10	3.018863	35.1	ug/L
MKTF-11	5/13/2019	2-Methylphenol	40	10	2.858438	NA	ug/L
MKTF-11	5/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-11	5/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-11	5/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-11	5/13/2019	3,4-Methylphenol	46	10	3.584453	NA	ug/L
MKTF-11	5/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-11	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-11	5/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-11	5/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-11	5/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-11	5/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-11	5/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-11	5/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-11	5/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-11	5/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-11	5/13/2019	Aniline	4.9	10	3.579516	13	ug/L
MKTF-11	5/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-11	5/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-11	5/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-11	5/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-11	5/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-11	5/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-11	5/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-11	5/13/2019	Benzyl Alcohol	2.6	10	2.360341	2000	ug/L
MKTF-11	5/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-11	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-11	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-11	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-11	5/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-11	5/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-11	5/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-11	5/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-11	5/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-11	5/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-11	5/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-11	5/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-11	5/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-11	5/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-11	5/13/2019	Fluorene	3.1	10	2.888488	288	ug/L
MKTF-11	5/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-11	5/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-11	5/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-11	5/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-11	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-11	5/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-11	5/13/2019	Naphthalene	**32**	10	4.12221	30	ug/L
MKTF-11	5/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-11	5/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-11	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-11	5/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-11	5/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-11	5/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-11	5/13/2019	Phenol	24	10	8.036586	5761	ug/L
MKTF-11	5/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-11	5/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-11	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-11	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-11	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-11	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-11	8/21/2019	1-Methylnaphthalene	9.8	10	3.069076	11.38	ug/L
MKTF-11	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-11	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-11	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-11	8/21/2019	2,4-Dimethylphenol	6.1	10	2.965993	354	ug/L
MKTF-11	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-11	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-11	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-11	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-11	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-11	8/21/2019	2-Methylnaphthalene	7.3	10	3.018863	35.1	ug/L
MKTF-11	8/21/2019	2-Methylphenol	31	10	2.858438	NA	ug/L
MKTF-11	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-11	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-11	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-11	8/21/2019	3,4-Methylphenol	24	10	3.584453	NA	ug/L
MKTF-11	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-11	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-11	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-11	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-11	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-11	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-11	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-11	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-11	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-11	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-11	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-11	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-11	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-11	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-11	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-11	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-11	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-11	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-11	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-11	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-11	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-11	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-11	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-11	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-11	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-11	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-11	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-11	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-11	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-11	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-11	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-11	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-11	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-11	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-11	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-11	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-11	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-11	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-11	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-11	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-11	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-11	8/21/2019	Naphthalene	**36**	10	4.12221	30	ug/L
MKTF-11	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-11	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-11	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-11	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-11	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-11	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-11	8/21/2019	Phenol	23	10	8.036586	5761	ug/L
MKTF-11	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-11	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-11	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-11	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-11	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-11	10/30/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-11	10/30/2019	1-Methylnaphthalene	11	5	5	11.38	ug/L
MKTF-11	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-11	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-11	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-11	10/30/2019	2,4-Dimethylphenol	19	5	5	354	ug/L
MKTF-11	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-11	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-11	10/30/2019	2,6-Dinitrotoluene	*ND*	*2*	2	0.485	ug/L
MKTF-11	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-11	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-11	10/30/2019	2-Methylnaphthalene	11	5	5	35.1	ug/L
MKTF-11	10/30/2019	2-Methylphenol	21	5	5	NA	ug/L
MKTF-11	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-11	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-11	10/30/2019	3,4-Methylphenol	17	5	5	NA	ug/L
MKTF-11	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-11	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-11	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-11	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-11	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-11	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-11	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-11	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-11	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-11	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-11	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-11	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-11	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-11	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-11	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-11	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-11	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-11	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-11	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-11	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-11	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-11	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-11	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-11	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-11	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-11	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-11	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-11	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-11	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-11	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-11	10/30/2019	Naphthalene	**49**	5	5	30	ug/L
MKTF-11	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-11	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-11	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-11	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-11	10/30/2019	Phenol	18	5	5	5761	ug/L
MKTF-11	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-11	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-11	3/3/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-11	3/3/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-11	3/3/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-11	3/3/2020	1,4-Dioxane	**20**	5	1	4.59	ug/L
MKTF-11	3/3/2020	1-Methylnaphthalene	7.8	2.5	0.5	11.38	ug/L
MKTF-11	3/3/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-11	3/3/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-11	3/3/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-11	3/3/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-11	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-11	3/3/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-11	3/3/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-11	3/3/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-11	3/3/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-11	3/3/2020	2-Methylnaphthalene	7.4	2.5	0.5	35.1	ug/L
MKTF-11	3/3/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-11	3/3/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	3,4-Methylphenol	28	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-11	3/3/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-11	3/3/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-11	3/3/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-11	3/3/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-11	3/3/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-11	3/3/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-11	3/3/2020	Benzo(a)pyrene	*ND*	*2.5*	0.5	0.2	ug/L
MKTF-11	3/3/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-11	3/3/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-11	3/3/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-11	3/3/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-11	3/3/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-11	3/3/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-11	3/3/2020	Bis(2-ethylhexyl)phthalate	4.3	2.5	1	55.64	ug/L
MKTF-11	3/3/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-11	3/3/2020	Carbazole	1.25	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-11	3/3/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-11	3/3/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-11	3/3/2020	Dibenzofuran	0.67	2.5	0.5	NA	ug/L
MKTF-11	3/3/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-11	3/3/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-11	3/3/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-11	3/3/2020	Fluorene	0.68	2.5	0.5	288	ug/L
MKTF-11	3/3/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-11	3/3/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-11	3/3/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-11	3/3/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-11	3/3/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-11	3/3/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-11	3/3/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-11	3/3/2020	Naphthalene	27	2.5	0.5	30	ug/L
MKTF-11	3/3/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-11	3/3/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-11	3/3/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-11	3/3/2020	Phenol	99	2.5	0.5	5761	ug/L
MKTF-11	3/3/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-11	3/3/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-13	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-13	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-13	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-13	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-13	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-13	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-13	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-13	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-13	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-13	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-13	3/15/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-13	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-13	3/15/2017	Di-n-butylphthalate	2.8	10	2.4	885	ug/L
MKTF-13	3/15/2017	Phenanthrene	3	10	2.6	170	ug/L
MKTF-13	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-13	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-13	3/15/2017	Fluorene	3.4	10	2.7	288	ug/L
MKTF-13	3/15/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-13	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-13	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-13	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-13	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-13	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-13	3/15/2017	1-Methylnaphthalene	**45**	10	2.9	11.38	ug/L
MKTF-13	3/15/2017	Naphthalene	**84**	10	2.6	30	ug/L
MKTF-13	3/15/2017	2-Methylnaphthalene	**63**	10	2.9	35.1	ug/L
MKTF-13	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-13	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-13	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-13	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-13	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-13	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-13	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-13	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-13	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-13	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-13	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-13	3/15/2017	2,4-Dimethylphenol	6.7	10	3	354	ug/L
MKTF-13	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-13	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-13	3/15/2017	Phenol	8.2	10	2	5761	ug/L
MKTF-13	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-13	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-13	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-13	3/15/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-13	3/15/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-13	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-13	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-13	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-13	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-13	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-13	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-13	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-13	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-13	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-13	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-13	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-13	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-13	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-13	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-13	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-13	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-13	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-13	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-13	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-13	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-13	3/15/2017	3,4-Methylphenol	3.4	10	2.3	NA	ug/L
MKTF-13	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-13	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-13	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-13	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-13	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-13	5/10/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-13	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-13	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-13	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-13	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-13	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-13	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-13	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-13	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-13	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-13	5/10/2018	Fluorene	ND	10	6.3	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-13	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-13	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-13	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-13	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-13	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-13	5/10/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
MKTF-13	5/10/2018	Naphthalene	**120**	10	5	30	ug/L
MKTF-13	5/10/2018	2-Methylnaphthalene	**85**	10	6.3	35.1	ug/L
MKTF-13	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-13	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-13	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-13	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-13	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-13	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-13	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-13	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-13	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-13	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-13	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-13	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-13	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-13	5/10/2018	2,4-Dimethylphenol	14	10	5.9	354	ug/L
MKTF-13	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-13	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-13	5/10/2018	Phenol	30	10	6	5761	ug/L
MKTF-13	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-13	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-13	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-13	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-13	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-13	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-13	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-13	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-13	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-13	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-13	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-13	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-13	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-13	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-13	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-13	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-13	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-13	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-13	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-13	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-13	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-13	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-13	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-13	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-13	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-13	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-13	5/10/2018	3,4-Methylphenol	6	10	5.4	NA	ug/L
MKTF-13	8/30/2018	Benzo(a)pyrene	*ND*	*20*	12	0.2	ug/L
MKTF-13	8/30/2018	2,4-Dinitrophenol	*ND*	*40*	7.4	38.7	ug/L
MKTF-13	8/30/2018	Dibenzo(a,h)anthracene	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Benzo(a)anthracene	*ND*	*20*	11	0.12	ug/L
MKTF-13	8/30/2018	4-Chloro-3-Methylphenol	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Aniline	*ND*	*20*	12	13	ug/L
MKTF-13	8/30/2018	N-Nitrosodimethylamine	*ND*	*20*	14	0.0049	ug/L
MKTF-13	8/30/2018	Benzoic Acid	ND	40	13	75000	ug/L
MKTF-13	8/30/2018	Hexachloroethane	*ND*	*20*	12	3.28	ug/L
MKTF-13	8/30/2018	Hexachlorocyclopentadiene	*ND*	*20*	7.9	0.41	ug/L
MKTF-13	8/30/2018	Isophorone	ND	20	12	781	ug/L
MKTF-13	8/30/2018	Acenaphthene	ND	20	12	535	ug/L
MKTF-13	8/30/2018	Diethylphthalate	ND	20	13	14801	ug/L
MKTF-13	8/30/2018	Di-n-butylphthalate	ND	20	14	885	ug/L
MKTF-13	8/30/2018	Phenanthrene	ND	20	12	170	ug/L
MKTF-13	8/30/2018	Butylbenzylphthalate	*ND*	*20*	13	16	ug/L
MKTF-13	8/30/2018	N-Nitrosodiphenylamine	ND	20	13	122	ug/L
MKTF-13	8/30/2018	Fluorene	ND	20	13	288	ug/L
MKTF-13	8/30/2018	Carbazole	ND	20	13	NA	ug/L
MKTF-13	8/30/2018	Hexachlorobutadiene	*ND*	*20*	13	0.14	ug/L
MKTF-13	8/30/2018	Pentachlorophenol	*ND*	*40*	11	1	ug/L
MKTF-13	8/30/2018	2,4,6-Trichlorophenol	ND	20	13	11.9*	ug/L
MKTF-13	8/30/2018	2-Nitroaniline	ND	20	12	190	ug/L
MKTF-13	8/30/2018	2-Nitrophenol	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	1-Methylnaphthalene	**41**	12	8.2	11.38	ug/L
MKTF-13	8/30/2018	Naphthalene	**57**	12	5.9	30	ug/L
MKTF-13	8/30/2018	2-Methylnaphthalene	**46**	12	7.4	35.1	ug/L
MKTF-13	8/30/2018	2-Chloronaphthalene	ND	20	12	733	ug/L
MKTF-13	8/30/2018	3,3-Dichlorobenzidine	*ND*	*20*	14	1.25	ug/L
MKTF-13	8/30/2018	2-Methylphenol	ND	20	13	NA	ug/L
MKTF-13	8/30/2018	1,2-Dichlorobenzene	ND	20	12	600	ug/L
MKTF-13	8/30/2018	2-Chlorophenol	ND	20	12	91	ug/L
MKTF-13	8/30/2018	2,4,5-Trichlorophenol	ND	20	12	1166	ug/L
MKTF-13	8/30/2018	Nitrobenzene	*ND*	*20*	12	1.4	ug/L
MKTF-13	8/30/2018	3-Nitroaniline	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	4-Nitroaniline	*ND*	*20*	12	3.8	ug/L
MKTF-13	8/30/2018	4-Nitrophenol	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Benzyl Alcohol	ND	20	13	2000	ug/L
MKTF-13	8/30/2018	4-Bromophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	Azobenzene	*ND*	*20*	13	0.12	ug/L
MKTF-13	8/30/2018	2,4-Dimethylphenol	ND	20	12	354	ug/L
MKTF-13	8/30/2018	1,4-Dichlorobenzene	ND	20	12	75	ug/L
MKTF-13	8/30/2018	4-Chloroaniline	*ND*	*20*	12	0.37	ug/L
MKTF-13	8/30/2018	Phenol	ND	20	12	5761	ug/L
MKTF-13	8/30/2018	Pyridine	ND	20	11	20	ug/L
MKTF-13	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*20*	13	0.137	ug/L
MKTF-13	8/30/2018	Bis(2-chloroethoxy)methane	ND	20	12	59	ug/L
MKTF-13	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	20	16	55.64	ug/L
MKTF-13	8/30/2018	Di-n-octylphthalate	ND	20	13	200	ug/L
MKTF-13	8/30/2018	Hexachlorobenzene	*ND*	*20*	12	0.0976	ug/L
MKTF-13	8/30/2018	Anthracene	ND	20	11	1721	ug/L
MKTF-13	8/30/2018	1,2,4-Trichlorobenzene	ND	20	13	70	ug/L
MKTF-13	8/30/2018	2,4-Dichlorophenol	ND	40	12	45.3	ug/L
MKTF-13	8/30/2018	2,4-Dinitrotoluene	ND	20	12	45.3	ug/L
MKTF-13	8/30/2018	Pyrene	ND	20	13	117	ug/L
MKTF-13	8/30/2018	Dimethylphthalate	ND	20	12	612	ug/L
MKTF-13	8/30/2018	Dibenzofuran	ND	20	14	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	8/30/2018	Benzo(g,h,i)perylene	ND	20	11	NA	ug/L
MKTF-13	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*20*	14	0.343	ug/L
MKTF-13	8/30/2018	Benzo(b)fluoranthene	*ND*	*20*	14	0.34	ug/L
MKTF-13	8/30/2018	Fluoranthene	ND	20	12	802	ug/L
MKTF-13	8/30/2018	Benzo(k)fluoranthene	*ND*	*20*	13	3.43	ug/L
MKTF-13	8/30/2018	Acenaphthylene	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	Chrysene	ND	20	14	34.3	ug/L
MKTF-13	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*40*	11	1.52	ug/L
MKTF-13	8/30/2018	1,3-Dichlorobenzene	ND	20	12	NA	ug/L
MKTF-13	8/30/2018	2,6-Dinitrotoluene	*ND*	*20*	12	0.485	ug/L
MKTF-13	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*20*	12	0.011	ug/L
MKTF-13	8/30/2018	4-Chlorophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-13	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*20*	9.8	9.81	ug/L
MKTF-13	8/30/2018	3,4-Methylphenol	ND	20	11	NA	ug/L
MKTF-13	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-13	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-13	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-13	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-13	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-13	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-13	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-13	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-13	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-13	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-13	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-13	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-13	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-13	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-13	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-13	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-13	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-13	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-13	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-13	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-13	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-13	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-13	11/28/2018	1-Methylnaphthalene	**91**	10	7	11.38	ug/L
MKTF-13	11/28/2018	Naphthalene	**150**	10	5	30	ug/L
MKTF-13	11/28/2018	2-Methylnaphthalene	**100**	10	6.3	35.1	ug/L
MKTF-13	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-13	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-13	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-13	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-13	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-13	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-13	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-13	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-13	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-13	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-13	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-13	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-13	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-13	11/28/2018	2,4-Dimethylphenol	21	10	5.9	354	ug/L
MKTF-13	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-13	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-13	11/28/2018	Phenol	45	10	6	5761	ug/L
MKTF-13	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-13	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-13	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-13	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-13	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-13	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-13	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-13	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-13	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-13	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-13	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-13	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-13	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-13	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-13	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-13	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-13	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-13	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-13	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-13	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-13	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-13	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-13	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-13	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-13	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-13	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-13	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-13	3/26/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-13	3/26/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-13	3/26/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-13	3/26/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-13	3/26/2019	1-Methylnaphthalene	**72**	50	34.99561	11.38	ug/L
MKTF-13	3/26/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-13	3/26/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-13	3/26/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-13	3/26/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-13	3/26/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-13	3/26/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-13	3/26/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-13	3/26/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-13	3/26/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-13	3/26/2019	2-Methylnaphthalene	**80**	50	31.661952	35.1	ug/L
MKTF-13	3/26/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-13	3/26/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
MKTF-13	3/26/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-13	3/26/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-13	3/26/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
MKTF-13	3/26/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-13	3/26/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-13	3/26/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-13	3/26/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-13	3/26/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-13	3/26/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-13	3/26/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-13	3/26/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-13	3/26/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-13	3/26/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-13	3/26/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-13	3/26/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-13	3/26/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-13	3/26/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-13	3/26/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-13	3/26/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-13	3/26/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-13	3/26/2019	Benzoic Acid	73	100	31.557804	75000	ug/L
MKTF-13	3/26/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-13	3/26/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-13	3/26/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-13	3/26/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-13	3/26/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
MKTF-13	3/26/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-13	3/26/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-13	3/26/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-13	3/26/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-13	3/26/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-13	3/26/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-13	3/26/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-13	3/26/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-13	3/26/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-13	3/26/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-13	3/26/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-13	3/26/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-13	3/26/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-13	3/26/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-13	3/26/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-13	3/26/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-13	3/26/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-13	3/26/2019	Naphthalene	**96**	50	25.207014	30	ug/L
MKTF-13	3/26/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-13	3/26/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-13	3/26/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-13	3/26/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-13	3/26/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-13	3/26/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-13	3/26/2019	Phenol	38	50	29.88676	5761	ug/L
MKTF-13	3/26/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-13	3/26/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-13	5/9/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-13	5/9/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-13	5/9/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-13	5/9/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-13	5/9/2019	1-Methylnaphthalene	**230**	50	15.345382	11.38	ug/L
MKTF-13	5/9/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-13	5/9/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-13	5/9/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-13	5/9/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-13	5/9/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-13	5/9/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-13	5/9/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-13	5/9/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-13	5/9/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-13	5/9/2019	2-Methylnaphthalene	**180**	50	15.094314	35.1	ug/L
MKTF-13	5/9/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-13	5/9/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-13	5/9/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-13	5/9/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-13	5/9/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-13	5/9/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-13	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-13	5/9/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-13	5/9/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-13	5/9/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-13	5/9/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-13	5/9/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-13	5/9/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-13	5/9/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-13	5/9/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-13	5/9/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-13	5/9/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-13	5/9/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-13	5/9/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-13	5/9/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-13	5/9/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-13	5/9/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-13	5/9/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-13	5/9/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-13	5/9/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-13	5/9/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-13	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-13	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-13	5/9/2019	Bis(2-ethylhexyl)phthalate	25	50	21.510641	55.64	ug/L
MKTF-13	5/9/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-13	5/9/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-13	5/9/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-13	5/9/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-13	5/9/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-13	5/9/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-13	5/9/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-13	5/9/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-13	5/9/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-13	5/9/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-13	5/9/2019	Fluorene	44	50	14.442442	288	ug/L
MKTF-13	5/9/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-13	5/9/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-13	5/9/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-13	5/9/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-13	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-13	5/9/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-13	5/9/2019	Naphthalene	**140**	50	20.61105	30	ug/L
MKTF-13	5/9/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-13	5/9/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-13	5/9/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-13	5/9/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-13	5/9/2019	Phenanthrene	48	50	13.88561	170	ug/L
MKTF-13	5/9/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-13	5/9/2019	Pyrene	19	50	12.517998	117	ug/L
MKTF-13	5/9/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-13	10/29/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-13	10/29/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-13	10/29/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-13	10/29/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-13	10/29/2019	1-Methylnaphthalene	**73**	5	5	11.38	ug/L
MKTF-13	10/29/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-13	10/29/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-13	10/29/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-13	10/29/2019	2,4-Dimethylphenol	15	5	5	354	ug/L
MKTF-13	10/29/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-13	10/29/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-13	10/29/2019	2,6-Dinitrotoluene	*ND*	*4*	4	0.485	ug/L
MKTF-13	10/29/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-13	10/29/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-13	10/29/2019	2-Methylnaphthalene	**99**	5	5	35.1	ug/L
MKTF-13	10/29/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-13	10/29/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-13	10/29/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-13	10/29/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-13	10/29/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-13	10/29/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Aniline	ND	5	5	13	ug/L
MKTF-13	10/29/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-13	10/29/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-13	10/29/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-13	10/29/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-13	10/29/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-13	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-13	10/29/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-13	10/29/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-13	10/29/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-13	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-13	10/29/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-13	10/29/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-13	10/29/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-13	10/29/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-13	10/29/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-13	10/29/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-13	10/29/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-13	10/29/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-13	10/29/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-13	10/29/2019	Fluorene	7.2	5	5	288	ug/L
MKTF-13	10/29/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-13	10/29/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-13	10/29/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-13	10/29/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-13	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-13	10/29/2019	Isophorone	ND	5	5	781	ug/L
MKTF-13	10/29/2019	Naphthalene	**130**	5	5	30	ug/L
MKTF-13	10/29/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-13	10/29/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-13	10/29/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-13	10/29/2019	Phenanthrene	7.8	5	5	170	ug/L
MKTF-13	10/29/2019	Phenol	38	5	5	5761	ug/L
MKTF-13	10/29/2019	Pyrene	ND	5	5	117	ug/L
MKTF-13	10/29/2019	Pyridine	ND	5	5	20	ug/L
MKTF-15	4/10/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-15	4/10/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-15	4/10/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-15	4/10/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-15	4/10/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-15	4/10/2014	Aniline	ND	12	3	13	ug/L
MKTF-15	4/10/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-15	4/10/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-15	4/10/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-15	4/10/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-15	4/10/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-15	4/10/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-15	4/10/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-15	4/10/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-15	4/10/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-15	4/10/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-15	4/10/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-15	4/10/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-15	4/10/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-15	4/10/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-15	4/10/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L
MKTF-15	4/10/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-15	4/10/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-15	4/10/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-15	4/10/2014	1-Methylnaphthalene	**20**	12	4.5	11.38	ug/L
MKTF-15	4/10/2014	Naphthalene	**48**	12	2.9	30	ug/L
MKTF-15	4/10/2014	2-Methylnaphthalene	21	12	3.3	35.1	ug/L
MKTF-15	4/10/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-15	4/10/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-15	4/10/2014	2-Methylphenol	43	25	3.4	NA	ug/L
MKTF-15	4/10/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-15	4/10/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-15	4/10/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-15	4/10/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-15	4/10/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-15	4/10/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	4/10/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-15	4/10/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-15	4/10/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-15	4/10/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-15	4/10/2014	2,4-Dimethylphenol	16	12	3.9	354	ug/L
MKTF-15	4/10/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-15	4/10/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-15	4/10/2014	Phenol	15	12	2	5761	ug/L
MKTF-15	4/10/2014	Pyridine	ND	12	2	20	ug/L
MKTF-15	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-15	4/10/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-15	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-15	4/10/2014	Di-n-octylphthalate	ND	12	3.4	200	ug/L
MKTF-15	4/10/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-15	4/10/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-15	4/10/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-15	4/10/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-15	4/10/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-15	4/10/2014	Pyrene	ND	12	5	117	ug/L
MKTF-15	4/10/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-15	4/10/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-15	4/10/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-15	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-15	4/10/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-15	4/10/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-15	4/10/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-15	4/10/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-15	4/10/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-15	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-15	4/10/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-15	4/10/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-15	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-15	4/10/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-15	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-15	4/10/2014	3,4-Methylphenol	ND	12	2.3	NA	ug/L
MKTF-15	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-15	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-15	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-15	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-15	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-15	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-15	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-15	6/5/2014	1-Methylnaphthalene	**21**	10	3.6	11.38	ug/L
MKTF-15	6/5/2014	Naphthalene	**50**	10	2.3	30	ug/L
MKTF-15	6/5/2014	2-Methylnaphthalene	21	10	2.6	35.1	ug/L
MKTF-15	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-15	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	6/5/2014	2-Methylphenol	28	20	2.8	NA	ug/L
MKTF-15	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-15	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-15	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-15	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-15	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-15	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-15	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-15	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-15	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-15	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-15	6/5/2014	2,4-Dimethylphenol	13	10	3.1	354	ug/L
MKTF-15	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-15	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-15	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-15	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-15	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-15	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-15	6/5/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-15	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-15	6/5/2014	Benzoic Acid	23	20	2.2	75000	ug/L
MKTF-15	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-15	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-15	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-15	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-15	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-15	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-15	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-15	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-15	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-15	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-15	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-15	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-15	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-15	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-15	6/5/2014	Pyrene	ND	10	4	117	ug/L
MKTF-15	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-15	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-15	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-15	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-15	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-15	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-15	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-15	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-15	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-15	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-15	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-15	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-15	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-15	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-15	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-15	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-15	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-15	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-15	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-15	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-15	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-15	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-15	9/17/2014	2,4-Dimethylphenol	13	10	3.1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-15	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-15	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-15	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-15	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-15	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-15	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-15	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-15	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-15	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-15	9/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-15	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-15	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-15	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-15	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-15	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-15	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-15	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-15	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-15	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-15	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-15	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-15	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-15	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-15	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-15	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-15	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-15	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-15	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-15	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-15	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-15	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-15	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-15	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-15	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-15	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-15	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-15	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-15	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-15	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-15	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-15	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-15	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-15	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-15	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-15	9/17/2014	1-Methylnaphthalene	**35**	10	3.6	11.38	ug/L
MKTF-15	9/17/2014	Naphthalene	**48**	10	2.3	30	ug/L
MKTF-15	9/17/2014	2-Methylnaphthalene	33	10	2.6	35.1	ug/L
MKTF-15	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-15	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	9/17/2014	2-Methylphenol	24	20	2.8	NA	ug/L
MKTF-15	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-15	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-15	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-15	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-15	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-15	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-15	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-15	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-15	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-15	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-15	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-15	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-15	9/11/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-15	9/11/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-15	9/11/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-15	9/11/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-15	9/11/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-15	9/11/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-15	9/11/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-15	9/11/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-15	9/11/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-15	9/11/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-15	9/11/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-15	9/11/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-15	9/11/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-15	9/11/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-15	9/11/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-15	9/11/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-15	9/11/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-15	9/11/2016	Carbazole	4	10	2.3	NA	ug/L
MKTF-15	9/11/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-15	9/11/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-15	9/11/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-15	9/11/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	9/11/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-15	9/11/2016	1-Methylnaphthalene	**13**	10	2.9	11.38	ug/L
MKTF-15	9/11/2016	Naphthalene	**53**	10	2.6	30	ug/L
MKTF-15	9/11/2016	2-Methylnaphthalene	14	10	2.9	35.1	ug/L
MKTF-15	9/11/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-15	9/11/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	9/11/2016	2-Methylphenol	1800	500	130	NA	ug/L
MKTF-15	9/11/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-15	9/11/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-15	9/11/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-15	9/11/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-15	9/11/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-15	9/11/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-15	9/11/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-15	9/11/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-15	9/11/2016	2,4-Dimethylphenol	230	10	3	354	ug/L
MKTF-15	9/11/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	9/11/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	9/11/2016	Phenol	**5800**	500	99	5761	ug/L
MKTF-15	9/11/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-15	9/11/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-15	9/11/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	9/11/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-15	9/11/2016	Di-n-octylphthalate	4.5	10	2	200	ug/L
MKTF-15	9/11/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-15	9/11/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	9/11/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-15	9/11/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-15	9/11/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-15	9/11/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-15	9/11/2016	Dimethylphthalate	17	10	2.4	612	ug/L
MKTF-15	9/11/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-15	9/11/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-15	9/11/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-15	9/11/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-15	9/11/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-15	9/11/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-15	9/11/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-15	9/11/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-15	9/11/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-15	9/11/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-15	9/11/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-15	9/11/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	9/11/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-15	9/11/2016	3,4-Methylphenol	2600	500	110	NA	ug/L
MKTF-15	11/2/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-15	11/2/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-15	11/2/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-15	11/2/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-15	11/2/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-15	11/2/2016	Benzoic Acid	65	100	13	75000	ug/L
MKTF-15	11/2/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-15	11/2/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-15	11/2/2016	Isophorone	ND	50	13	781	ug/L
MKTF-15	11/2/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-15	11/2/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-15	11/2/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-15	11/2/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-15	11/2/2016	Butylbenzylphthalate	*13*	*50*	12	16	ug/L
MKTF-15	11/2/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-15	11/2/2016	Fluorene	ND	50	14	288	ug/L
MKTF-15	11/2/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-15	11/2/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-15	11/2/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-15	11/2/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-15	11/2/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-15	11/2/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-15	11/2/2016	Naphthalene	**59**	50	13	30	ug/L
MKTF-15	11/2/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-15	11/2/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-15	11/2/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-15	11/2/2016	2-Methylphenol	460	50	13	NA	ug/L
MKTF-15	11/2/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-15	11/2/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-15	11/2/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-15	11/2/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-15	11/2/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-15	11/2/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-15	11/2/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-15	11/2/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-15	11/2/2016	2,4-Dimethylphenol	79	50	15	354	ug/L
MKTF-15	11/2/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-15	11/2/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-15	11/2/2016	Phenol	2000	250	50	5761	ug/L
MKTF-15	11/2/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-15	11/2/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-15	11/2/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-15	11/2/2016	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-15	11/2/2016	Di-n-octylphthalate	36	50	9.9	200	ug/L
MKTF-15	11/2/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-15	11/2/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-15	11/2/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-15	11/2/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-15	11/2/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-15	11/2/2016	Pyrene	ND	50	15	117	ug/L
MKTF-15	11/2/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-15	11/2/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-15	11/2/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-15	11/2/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-15	11/2/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-15	11/2/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-15	11/2/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-15	11/2/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-15	11/2/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-15	11/2/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-15	11/2/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-15	11/2/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-15	11/2/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-15	11/2/2016	3,4-Methylphenol	550	50	11	NA	ug/L
MKTF-15	3/2/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-15	3/2/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-15	3/2/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-15	3/2/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-15	3/2/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-15	3/2/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-15	3/2/2017	Benzoic Acid	21	20	2.6	75000	ug/L
MKTF-15	3/2/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-15	3/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-15	3/2/2017	Isophorone	ND	10	2.6	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-15	3/2/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-15	3/2/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-15	3/2/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-15	3/2/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-15	3/2/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-15	3/2/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-15	3/2/2017	Carbazole	3.2	10	2.3	NA	ug/L
MKTF-15	3/2/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-15	3/2/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-15	3/2/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-15	3/2/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-15	3/2/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-15	3/2/2017	1-Methylnaphthalene	**16**	10	2.9	11.38	ug/L
MKTF-15	3/2/2017	Naphthalene	**60**	10	2.6	30	ug/L
MKTF-15	3/2/2017	2-Methylnaphthalene	17	10	2.9	35.1	ug/L
MKTF-15	3/2/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-15	3/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-15	3/2/2017	2-Methylphenol	280	50	13	NA	ug/L
MKTF-15	3/2/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-15	3/2/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-15	3/2/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-15	3/2/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-15	3/2/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-15	3/2/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-15	3/2/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Benzyl Alcohol	4.9	10	3	2000	ug/L
MKTF-15	3/2/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-15	3/2/2017	2,4-Dimethylphenol	55	10	3	354	ug/L
MKTF-15	3/2/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-15	3/2/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-15	3/2/2017	Phenol	ND	10	2	5761	ug/L
MKTF-15	3/2/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-15	3/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-15	3/2/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-15	3/2/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-15	3/2/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-15	3/2/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-15	3/2/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-15	3/2/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-15	3/2/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-15	3/2/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-15	3/2/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-15	3/2/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-15	3/2/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-15	3/2/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-15	3/2/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-15	3/2/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-15	3/2/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-15	3/2/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-15	3/2/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-15	3/2/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-15	3/2/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-15	3/2/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-15	3/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-15	3/2/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-15	3/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-15	3/2/2017	3,4-Methylphenol	290	50	11	NA	ug/L
MKTF-15	6/8/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-15	6/8/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-15	6/8/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-15	6/8/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-15	6/8/2017	Aniline	**52**	50	15	13	ug/L
MKTF-15	6/8/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-15	6/8/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-15	6/8/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-15	6/8/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-15	6/8/2017	Isophorone	ND	50	22	781	ug/L
MKTF-15	6/8/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-15	6/8/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-15	6/8/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-15	6/8/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-15	6/8/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-15	6/8/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-15	6/8/2017	Fluorene	ND	50	20	288	ug/L
MKTF-15	6/8/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-15	6/8/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-15	6/8/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-15	6/8/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-15	6/8/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-15	6/8/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-15	6/8/2017	Naphthalene	**42**	50	14	30	ug/L
MKTF-15	6/8/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
MKTF-15	6/8/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-15	6/8/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-15	6/8/2017	2-Methylphenol	250	50	17	NA	ug/L
MKTF-15	6/8/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-15	6/8/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-15	6/8/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-15	6/8/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-15	6/8/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-15	6/8/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-15	6/8/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-15	6/8/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-15	6/8/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-15	6/8/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-15	6/8/2017	2,4-Dimethylphenol	88	50	14	354	ug/L
MKTF-15	6/8/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-15	6/8/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-15	6/8/2017	Phenol	140	50	16	5761	ug/L
MKTF-15	6/8/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-15	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-15	6/8/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-15	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-15	6/8/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-15	6/8/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/8/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-15	6/8/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-15	6/8/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-15	6/8/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-15	6/8/2017	Pyrene	ND	50	22	117	ug/L
MKTF-15	6/8/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-15	6/8/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-15	6/8/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-15	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-15	6/8/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-15	6/8/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-15	6/8/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-15	6/8/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-15	6/8/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-15	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-15	6/8/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-15	6/8/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-15	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-15	6/8/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-15	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-15	6/8/2017	3,4-Methylphenol	190	50	16	NA	ug/L
MKTF-15	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-15	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-15	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Benzo(a)anthracene	**54**	100	39	0.12	ug/L
MKTF-15	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-15	11/28/2017	Aniline	**41**	100	31	13	ug/L
MKTF-15	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-15	11/28/2017	Benzoic Acid	51	200	39	75000	ug/L
MKTF-15	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-15	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-15	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-15	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-15	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-15	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-15	11/28/2017	Phenanthrene	54	100	43	170	ug/L
MKTF-15	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-15	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-15	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-15	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-15	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-15	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-15	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-15	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-15	11/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-15	11/28/2017	Naphthalene	**72**	100	29	30	ug/L
MKTF-15	11/28/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
MKTF-15	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-15	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-15	11/28/2017	2-Methylphenol	380	100	33	NA	ug/L
MKTF-15	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-15	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-15	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-15	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-15	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-15	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-15	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-15	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-15	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-15	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-15	11/28/2017	2,4-Dimethylphenol	67	100	28	354	ug/L
MKTF-15	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-15	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-15	11/28/2017	Phenol	710	100	31	5761	ug/L
MKTF-15	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-15	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-15	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-15	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-15	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-15	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-15	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-15	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-15	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-15	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-15	11/28/2017	Pyrene	62	100	44	117	ug/L
MKTF-15	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-15	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-15	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-15	11/28/2017	Indeno(1,2,3-cd)pyrene	**43**	100	42	0.343	ug/L
MKTF-15	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-15	11/28/2017	Fluoranthene	60	100	43	802	ug/L
MKTF-15	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-15	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-15	11/28/2017	Chrysene	**53**	100	38	34.3	ug/L
MKTF-15	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-15	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-15	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-15	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-15	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-15	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-15	11/28/2017	3,4-Methylphenol	340	100	32	NA	ug/L
MKTF-15	5/2/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-15	5/2/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-15	5/2/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-15	5/2/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-15	5/2/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-15	5/2/2018	Benzoic Acid	130	100	32	75000	ug/L
MKTF-15	5/2/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-15	5/2/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-15	5/2/2018	Isophorone	ND	50	31	781	ug/L
MKTF-15	5/2/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-15	5/2/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-15	5/2/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-15	5/2/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-15	5/2/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-15	5/2/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-15	5/2/2018	Fluorene	ND	50	32	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	5/2/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-15	5/2/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-15	5/2/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-15	5/2/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-15	5/2/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-15	5/2/2018	2-Nitrophenol	ND	50	30	NA	ug/L
MKTF-15	5/2/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
MKTF-15	5/2/2018	Naphthalene	**44**	50	25	30	ug/L
MKTF-15	5/2/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-15	5/2/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-15	5/2/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-15	5/2/2018	2-Methylphenol	350	50	32	NA	ug/L
MKTF-15	5/2/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-15	5/2/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-15	5/2/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-15	5/2/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-15	5/2/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-15	5/2/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-15	5/2/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-15	5/2/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-15	5/2/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-15	5/2/2018	2,4-Dimethylphenol	70	50	30	354	ug/L
MKTF-15	5/2/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-15	5/2/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-15	5/2/2018	Phenol	660	50	30	5761	ug/L
MKTF-15	5/2/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-15	5/2/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-15	5/2/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-15	5/2/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-15	5/2/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-15	5/2/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-15	5/2/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-15	5/2/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-15	5/2/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-15	5/2/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-15	5/2/2018	Pyrene	ND	50	33	117	ug/L
MKTF-15	5/2/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-15	5/2/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-15	5/2/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-15	5/2/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-15	5/2/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-15	5/2/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-15	5/2/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-15	5/2/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-15	5/2/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-15	5/2/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-15	5/2/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-15	5/2/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-15	5/2/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-15	5/2/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-15	5/2/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-15	5/2/2018	3,4-Methylphenol	230	50	27	NA	ug/L
MKTF-15	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-15	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-15	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-15	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-15	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-15	8/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-15	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-15	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-15	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-15	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-15	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-15	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-15	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-15	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-15	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-15	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-15	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-15	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-15	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-15	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-15	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-15	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-15	8/28/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
MKTF-15	8/28/2018	Naphthalene	**50**	10	5	30	ug/L
MKTF-15	8/28/2018	2-Methylnaphthalene	14	10	6.3	35.1	ug/L
MKTF-15	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-15	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-15	8/28/2018	2-Methylphenol	370	20	13	NA	ug/L
MKTF-15	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-15	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-15	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-15	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-15	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-15	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-15	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-15	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-15	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-15	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-15	8/28/2018	2,4-Dimethylphenol	59	10	5.9	354	ug/L
MKTF-15	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-15	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-15	8/28/2018	Phenol	440	20	12	5761	ug/L
MKTF-15	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-15	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-15	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-15	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-15	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-15	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-15	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-15	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-15	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-15	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-15	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-15	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-15	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-15	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-15	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-15	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-15	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-15	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-15	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-15	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-15	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-15	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-15	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-15	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-15	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-15	8/28/2018	3,4-Methylphenol	170	10	5.4	NA	ug/L
MKTF-15	5/13/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-15	5/13/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-15	5/13/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-15	5/13/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-15	5/13/2019	1-Methylnaphthalene	**16**	50	15.345382	11.38	ug/L
MKTF-15	5/13/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-15	5/13/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-15	5/13/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-15	5/13/2019	2,4-Dimethylphenol	40	50	14.829964	354	ug/L
MKTF-15	5/13/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-15	5/13/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-15	5/13/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-15	5/13/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-15	5/13/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-15	5/13/2019	2-Methylnaphthalene	*16*	*50*	15.094314	35.1	ug/L
MKTF-15	5/13/2019	2-Methylphenol	180	50	14.292191	NA	ug/L
MKTF-15	5/13/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-15	5/13/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-15	5/13/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-15	5/13/2019	3,4-Methylphenol	26	50	17.922265	NA	ug/L
MKTF-15	5/13/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-15	5/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-15	5/13/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-15	5/13/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-15	5/13/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-15	5/13/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-15	5/13/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-15	5/13/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-15	5/13/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-15	5/13/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-15	5/13/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-15	5/13/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-15	5/13/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-15	5/13/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-15	5/13/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-15	5/13/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-15	5/13/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-15	5/13/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-15	5/13/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-15	5/13/2019	Benzyl Alcohol	14	50	11.801706	2000	ug/L
MKTF-15	5/13/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-15	5/13/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-15	5/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-15	5/13/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-15	5/13/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-15	5/13/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-15	5/13/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-15	5/13/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-15	5/13/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-15	5/13/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-15	5/13/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-15	5/13/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-15	5/13/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-15	5/13/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-15	5/13/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-15	5/13/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-15	5/13/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-15	5/13/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-15	5/13/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-15	5/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-15	5/13/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-15	5/13/2019	Naphthalene	**58**	50	20.61105	30	ug/L
MKTF-15	5/13/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-15	5/13/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-15	5/13/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-15	5/13/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-15	5/13/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-15	5/13/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-15	5/13/2019	Phenol	67	50	40.182932	5761	ug/L
MKTF-15	5/13/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-15	5/13/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-16	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	4/10/2014	Aniline	**15**	10	2.4	13	ug/L
MKTF-16	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	4/10/2014	1-Methylnaphthalene	**35**	10	3.6	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	4/10/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-16	4/10/2014	2-Methylnaphthalene	**44**	10	2.6	35.1	ug/L
MKTF-16	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	4/10/2014	2-Methylphenol	160	20	2.8	NA	ug/L
MKTF-16	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	4/10/2014	2,4-Dimethylphenol	200	10	3.1	354	ug/L
MKTF-16	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	4/10/2014	Phenol	90	10	1.6	5761	ug/L
MKTF-16	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	4/10/2014	3,4-Methylphenol	91	10	1.8	NA	ug/L
MKTF-16	6/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	6/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	6/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	6/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	6/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	6/16/2014	Aniline	11	10	2.4	13	ug/L
MKTF-16	6/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	6/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	6/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	6/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	6/16/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	6/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	6/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	6/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	6/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	6/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	6/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	6/16/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	6/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	6/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	6/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	6/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	6/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	6/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	6/16/2014	1-Methylnaphthalene	**37**	10	3.6	11.38	ug/L
MKTF-16	6/16/2014	Naphthalene	**140**	10	2.3	30	ug/L
MKTF-16	6/16/2014	2-Methylnaphthalene	**42**	10	2.6	35.1	ug/L
MKTF-16	6/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	6/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	6/16/2014	2-Methylphenol	220	20	2.8	NA	ug/L
MKTF-16	6/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	6/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	6/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	6/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	6/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	6/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	6/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	6/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	6/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	6/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	6/16/2014	2,4-Dimethylphenol	170	10	3.1	354	ug/L
MKTF-16	6/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	6/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	6/16/2014	Phenol	420	50	7.9	5761	ug/L
MKTF-16	6/16/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	6/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	6/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	6/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	6/16/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	6/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	6/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	6/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	6/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	6/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	6/16/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	6/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	6/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	6/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	6/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	6/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	6/16/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	6/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	6/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	6/16/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	6/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	6/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	6/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	6/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	6/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	6/16/2014	3,4-Methylphenol	160	10	1.8	NA	ug/L
MKTF-16	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	9/17/2014	Aniline	**24**	10	2.4	13	ug/L
MKTF-16	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	9/17/2014	1-Methylnaphthalene	**53**	10	3.6	11.38	ug/L
MKTF-16	9/17/2014	Naphthalene	**180**	10	2.3	30	ug/L
MKTF-16	9/17/2014	2-Methylnaphthalene	**62**	10	2.6	35.1	ug/L
MKTF-16	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	9/17/2014	2-Methylphenol	150	20	2.8	NA	ug/L
MKTF-16	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-16	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	9/17/2014	2,4-Dimethylphenol	180	10	3.1	354	ug/L
MKTF-16	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	9/17/2014	Phenol	31	10	1.6	5761	ug/L
MKTF-16	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-16	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-16	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	9/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	9/17/2014	3,4-Methylphenol	30	10	1.8	NA	ug/L
MKTF-16	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-16	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-16	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-16	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-16	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-16	11/18/2014	Aniline	**18**	10	2.4	13	ug/L
MKTF-16	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-16	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-16	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-16	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-16	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-16	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-16	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-16	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-16	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-16	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-16	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-16	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-16	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-16	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-16	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-16	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-16	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-16	11/18/2014	1-Methylnaphthalene	**47**	10	3.6	11.38	ug/L
MKTF-16	11/18/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-16	11/18/2014	2-Methylnaphthalene	**51**	10	2.6	35.1	ug/L
MKTF-16	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-16	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	11/18/2014	2-Methylphenol	140	10	2.8	NA	ug/L
MKTF-16	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-16	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-16	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-16	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-16	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-16	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-16	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-16	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-16	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	11/18/2014	2,4-Dimethylphenol	80	10	3.1	354	ug/L
MKTF-16	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-16	11/18/2014	Phenol	38	10	1.6	5761	ug/L
MKTF-16	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-16	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-16	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-16	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-16	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-16	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-16	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-16	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-16	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-16	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-16	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-16	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-16	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-16	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-16	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-16	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-16	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-16	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-16	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-16	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-16	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-16	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-16	11/18/2014	3,4-Methylphenol	16	10	1.8	NA	ug/L
MKTF-16	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Aniline	**20**	10	1.5	13	ug/L
MKTF-16	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	3/16/2015	1-Methylnaphthalene	**45**	10	1.8	11.38	ug/L
MKTF-16	3/16/2015	Naphthalene	**150**	10	1.8	30	ug/L
MKTF-16	3/16/2015	2-Methylnaphthalene	**53**	10	2.2	35.1	ug/L
MKTF-16	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	3/16/2015	2-Methylphenol	150	10	1.2	NA	ug/L
MKTF-16	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	3/16/2015	2,4-Dimethylphenol	190	10	1.9	354	ug/L
MKTF-16	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	3/16/2015	Phenol	31	10	1.1	5761	ug/L
MKTF-16	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Aniline	**21**	10	1.5	13	ug/L
MKTF-16	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	6/8/2015	1-Methylnaphthalene	**42**	10	1.8	11.38	ug/L
MKTF-16	6/8/2015	Naphthalene	**140**	10	1.8	30	ug/L
MKTF-16	6/8/2015	2-Methylnaphthalene	**46**	10	2.2	35.1	ug/L
MKTF-16	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	6/8/2015	2-Methylphenol	120	10	1.2	NA	ug/L
MKTF-16	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	6/8/2015	2,4-Dimethylphenol	180	10	1.9	354	ug/L
MKTF-16	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	6/8/2015	Phenol	48	10	1.1	5761	ug/L
MKTF-16	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	8/23/2015	Aniline	**25**	10	1.5	13	ug/L
MKTF-16	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	8/23/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	8/23/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	8/23/2015	1-Methylnaphthalene	**44**	10	1.8	11.38	ug/L
MKTF-16	8/23/2015	Naphthalene	**160**	10	1.8	30	ug/L
MKTF-16	8/23/2015	2-Methylnaphthalene	**55**	10	2.2	35.1	ug/L
MKTF-16	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	8/23/2015	2-Methylphenol	100	10	1.2	NA	ug/L
MKTF-16	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	8/23/2015	2,4-Dimethylphenol	130	10	1.9	354	ug/L
MKTF-16	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	8/23/2015	Phenol	42	10	1.1	5761	ug/L
MKTF-16	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	8/23/2015	3,4-Methylphenol	15	10	1.5	NA	ug/L
MKTF-16	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-16	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-16	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-16	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Aniline	**20**	10	1.5	13	ug/L
MKTF-16	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-16	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-16	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-16	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-16	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-16	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-16	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-16	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-16	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-16	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-16	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-16	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-16	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-16	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-16	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-16	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-16	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-16	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-16	11/3/2015	1-Methylnaphthalene	**35**	10	1.8	11.38	ug/L
MKTF-16	11/3/2015	Naphthalene	**130**	10	1.8	30	ug/L
MKTF-16	11/3/2015	2-Methylnaphthalene	**46**	10	2.2	35.1	ug/L
MKTF-16	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-16	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-16	11/3/2015	2-Methylphenol	81	10	1.2	NA	ug/L
MKTF-16	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-16	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-16	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-16	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-16	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-16	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-16	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-16	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-16	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-16	11/3/2015	2,4-Dimethylphenol	120	10	1.9	354	ug/L
MKTF-16	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-16	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-16	11/3/2015	Phenol	57	10	1.1	5761	ug/L
MKTF-16	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-16	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-16	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-16	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-16	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-16	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-16	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-16	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-16	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-16	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-16	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-16	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-16	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-16	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-16	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-16	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-16	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-16	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-16	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-16	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-16	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-16	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-16	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-16	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-16	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-16	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-16	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-16	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-16	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-16	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-16	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-16	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-16	2/29/2016	Aniline	11	10	9.8	13	ug/L
MKTF-16	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-16	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-16	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-16	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-16	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-16	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-16	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-16	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-16	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-16	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-16	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-16	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-16	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-16	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-16	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-16	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-16	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-16	2/29/2016	1-Methylnaphthalene	**33**	10	6.8	11.38	ug/L
MKTF-16	2/29/2016	Naphthalene	**110**	10	5.9	30	ug/L
MKTF-16	2/29/2016	2-Methylnaphthalene	**42**	10	7	35.1	ug/L
MKTF-16	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-16	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-16	2/29/2016	2-Methylphenol	79	10	8.2	NA	ug/L
MKTF-16	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-16	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-16	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-16	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-16	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-16	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-16	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-16	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-16	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-16	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-16	2/29/2016	2,4-Dimethylphenol	91	10	4.7	354	ug/L
MKTF-16	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-16	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-16	2/29/2016	Phenol	30	10	5.1	5761	ug/L
MKTF-16	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-16	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-16	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-16	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-16	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-16	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-16	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-16	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-16	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-16	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-16	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-16	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-16	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-16	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-16	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-16	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-16	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-16	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-16	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-16	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-16	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-16	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-16	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-16	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-16	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-16	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-16	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-16	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-16	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-16	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-16	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-16	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-16	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-16	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-16	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-16	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-16	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-16	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-16	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-16	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-16	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-16	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-16	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-16	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-16	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-16	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-16	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-16	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	1-Methylnaphthalene	**35**	50	15	11.38	ug/L
MKTF-16	6/9/2016	Naphthalene	**100**	50	13	30	ug/L
MKTF-16	6/9/2016	2-Methylnaphthalene	**38**	50	14	35.1	ug/L
MKTF-16	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-16	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-16	6/9/2016	2-Methylphenol	61	50	13	NA	ug/L
MKTF-16	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-16	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-16	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-16	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-16	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-16	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-16	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-16	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-16	6/9/2016	2,4-Dimethylphenol	83	50	15	354	ug/L
MKTF-16	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-16	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-16	6/9/2016	Phenol	170	50	9.9	5761	ug/L
MKTF-16	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-16	6/9/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
MKTF-16	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-16	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-16	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-16	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-16	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-16	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-16	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-16	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-16	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-16	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-16	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-16	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-16	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-16	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-16	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-16	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-16	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-16	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-16	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-16	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-16	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-16	9/12/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	9/12/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	9/12/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	9/12/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	9/12/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Aniline	5.6	10	2.4	13	ug/L
MKTF-16	9/12/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	9/12/2016	Benzoic Acid	24	20	2.6	75000	ug/L
MKTF-16	9/12/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	9/12/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	9/12/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	9/12/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	9/12/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	9/12/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-16	9/12/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	9/12/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-16	9/12/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	9/12/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-16	9/12/2016	Carbazole	3.6	10	2.3	NA	ug/L
MKTF-16	9/12/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	9/12/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	9/12/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	9/12/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	9/12/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	9/12/2016	1-Methylnaphthalene	**46**	10	2.9	11.38	ug/L
MKTF-16	9/12/2016	Naphthalene	**130**	10	2.6	30	ug/L
MKTF-16	9/12/2016	2-Methylnaphthalene	**51**	10	2.9	35.1	ug/L
MKTF-16	9/12/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	9/12/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	9/12/2016	2-Methylphenol	71	10	2.5	NA	ug/L
MKTF-16	9/12/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	9/12/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	9/12/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	9/12/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	9/12/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	9/12/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	9/12/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	9/12/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	9/12/2016	2,4-Dimethylphenol	84	10	3	354	ug/L
MKTF-16	9/12/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	9/12/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	9/12/2016	Phenol	140	10	2	5761	ug/L
MKTF-16	9/12/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	9/12/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	9/12/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-16	9/12/2016	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-16	9/12/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	9/12/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	9/12/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	9/12/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-16	9/12/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	9/12/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	9/12/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	9/12/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	9/12/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	9/12/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	9/12/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	9/12/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	9/12/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	9/12/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	9/12/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	9/12/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	9/12/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	9/12/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-16	11/3/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	11/3/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	11/3/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	11/3/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	11/3/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-16	11/3/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	11/3/2016	Benzoic Acid	38	20	2.6	75000	ug/L
MKTF-16	11/3/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	11/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	11/3/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	11/3/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	11/3/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	11/3/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/3/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	11/3/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-16	11/3/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	11/3/2016	Fluorene	3.5	10	2.7	288	ug/L
MKTF-16	11/3/2016	Carbazole	3.5	10	2.3	NA	ug/L
MKTF-16	11/3/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	11/3/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	11/3/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	11/3/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	11/3/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	11/3/2016	1-Methylnaphthalene	**40**	10	2.9	11.38	ug/L
MKTF-16	11/3/2016	Naphthalene	**130**	10	2.6	30	ug/L
MKTF-16	11/3/2016	2-Methylnaphthalene	**37**	10	2.9	35.1	ug/L
MKTF-16	11/3/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	11/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	11/3/2016	2-Methylphenol	26	10	2.5	NA	ug/L
MKTF-16	11/3/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	11/3/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	11/3/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	11/3/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	11/3/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	11/3/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	11/3/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	11/3/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	11/3/2016	2,4-Dimethylphenol	59	10	3	354	ug/L
MKTF-16	11/3/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	11/3/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	11/3/2016	Phenol	180	10	2	5761	ug/L
MKTF-16	11/3/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	11/3/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	11/3/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-16	11/3/2016	Di-n-octylphthalate	7.4	10	2	200	ug/L
MKTF-16	11/3/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	11/3/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	11/3/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	11/3/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-16	11/3/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	11/3/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	11/3/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	11/3/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	11/3/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	11/3/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	11/3/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	11/3/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	11/3/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	11/3/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	11/3/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	11/3/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	11/3/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	11/3/2016	3,4-Methylphenol	3	10	2.3	NA	ug/L
MKTF-16	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-16	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-16	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-16	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-16	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Aniline	3.8	10	2.4	13	ug/L
MKTF-16	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-16	3/14/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-16	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-16	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-16	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-16	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-16	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-16	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-16	3/14/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-16	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-16	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-16	3/14/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-16	3/14/2017	Carbazole	3	10	2.3	NA	ug/L
MKTF-16	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-16	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-16	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-16	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-16	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-16	3/14/2017	1-Methylnaphthalene	**26**	10	2.9	11.38	ug/L
MKTF-16	3/14/2017	Naphthalene	**98**	10	2.6	30	ug/L
MKTF-16	3/14/2017	2-Methylnaphthalene	28	10	2.9	35.1	ug/L
MKTF-16	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-16	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-16	3/14/2017	2-Methylphenol	35	10	2.5	NA	ug/L
MKTF-16	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-16	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-16	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-16	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-16	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-16	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-16	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-16	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-16	3/14/2017	2,4-Dimethylphenol	34	10	3	354	ug/L
MKTF-16	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-16	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-16	3/14/2017	Phenol	29	10	2	5761	ug/L
MKTF-16	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-16	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-16	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-16	3/14/2017	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-16	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-16	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-16	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-16	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-16	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-16	3/14/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-16	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-16	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-16	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-16	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-16	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-16	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-16	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-16	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-16	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-16	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-16	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-16	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-16	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-16	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-16	3/14/2017	3,4-Methylphenol	2.8	10	2.3	NA	ug/L
MKTF-16	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-16	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-16	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-16	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-16	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-16	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-16	6/8/2017	Benzoic Acid	16	20	3.9	75000	ug/L
MKTF-16	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-16	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-16	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-16	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-16	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-16	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-16	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-16	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-16	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-16	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-16	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-16	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-16	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-16	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-16	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-16	6/8/2017	1-Methylnaphthalene	**34**	10	3.3	11.38	ug/L
MKTF-16	6/8/2017	Naphthalene	**94**	10	2.9	30	ug/L
MKTF-16	6/8/2017	2-Methylnaphthalene	25	10	3.3	35.1	ug/L
MKTF-16	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-16	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-16	6/8/2017	2-Methylphenol	24	10	3.3	NA	ug/L
MKTF-16	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-16	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-16	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-16	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-16	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-16	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-16	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-16	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-16	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-16	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-16	6/8/2017	2,4-Dimethylphenol	110	10	2.8	354	ug/L
MKTF-16	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-16	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-16	6/8/2017	Phenol	450	50	16	5761	ug/L
MKTF-16	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-16	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-16	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-16	6/8/2017	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
MKTF-16	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-16	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-16	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-16	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-16	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-16	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-16	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-16	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-16	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-16	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-16	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-16	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-16	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-16	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-16	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-16	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-16	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-16	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-16	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-16	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-16	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-16	6/8/2017	3,4-Methylphenol	8.1	10	3.2	NA	ug/L
MKTF-16	9/26/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-16	9/26/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-16	9/26/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-16	9/26/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-16	9/26/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-16	9/26/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-16	9/26/2017	Benzoic Acid	51	100	20	75000	ug/L
MKTF-16	9/26/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-16	9/26/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-16	9/26/2017	Isophorone	ND	50	22	781	ug/L
MKTF-16	9/26/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-16	9/26/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-16	9/26/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-16	9/26/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-16	9/26/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-16	9/26/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-16	9/26/2017	Fluorene	ND	50	20	288	ug/L
MKTF-16	9/26/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-16	9/26/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-16	9/26/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-16	9/26/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-16	9/26/2017	1-Methylnaphthalene	**18**	50	17	11.38	ug/L
MKTF-16	9/26/2017	Naphthalene	**100**	50	14	30	ug/L
MKTF-16	9/26/2017	2-Methylnaphthalene	*26*	*50*	16	35.1	ug/L
MKTF-16	9/26/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-16	9/26/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-16	9/26/2017	2-Methylphenol	36	50	17	NA	ug/L
MKTF-16	9/26/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-16	9/26/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-16	9/26/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-16	9/26/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-16	9/26/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-16	9/26/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-16	9/26/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-16	9/26/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-16	9/26/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-16	9/26/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-16	9/26/2017	2,4-Dimethylphenol	50	50	14	354	ug/L
MKTF-16	9/26/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-16	9/26/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-16	9/26/2017	Phenol	110	50	16	5761	ug/L
MKTF-16	9/26/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-16	9/26/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-16	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-16	9/26/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-16	9/26/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-16	9/26/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-16	9/26/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-16	9/26/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-16	9/26/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-16	9/26/2017	Pyrene	ND	50	22	117	ug/L
MKTF-16	9/26/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-16	9/26/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-16	9/26/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-16	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-16	9/26/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-16	9/26/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-16	9/26/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-16	9/26/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-16	9/26/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-16	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-16	9/26/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-16	9/26/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-16	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-16	9/26/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-16	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-16	9/26/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-16	11/29/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-16	11/29/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-16	11/29/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-16	11/29/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-16	11/29/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-16	11/29/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-16	11/29/2017	Benzoic Acid	50	100	20	75000	ug/L
MKTF-16	11/29/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-16	11/29/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-16	11/29/2017	Isophorone	ND	50	22	781	ug/L
MKTF-16	11/29/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-16	11/29/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-16	11/29/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-16	11/29/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-16	11/29/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-16	11/29/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-16	11/29/2017	Fluorene	ND	50	20	288	ug/L
MKTF-16	11/29/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-16	11/29/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-16	11/29/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-16	11/29/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-16	11/29/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-16	11/29/2017	1-Methylnaphthalene	**26**	50	17	11.38	ug/L
MKTF-16	11/29/2017	Naphthalene	**90**	50	14	30	ug/L
MKTF-16	11/29/2017	2-Methylnaphthalene	*23*	*50*	16	35.1	ug/L
MKTF-16	11/29/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-16	11/29/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-16	11/29/2017	2-Methylphenol	29	50	17	NA	ug/L
MKTF-16	11/29/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-16	11/29/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-16	11/29/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-16	11/29/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-16	11/29/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-16	11/29/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-16	11/29/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-16	11/29/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-16	11/29/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-16	11/29/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-16	11/29/2017	2,4-Dimethylphenol	59	50	14	354	ug/L
MKTF-16	11/29/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-16	11/29/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-16	11/29/2017	Phenol	490	50	16	5761	ug/L
MKTF-16	11/29/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-16	11/29/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-16	11/29/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-16	11/29/2017	Bis(2-ethylhexyl)phthalate	35	50	24	55.64	ug/L
MKTF-16	11/29/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-16	11/29/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-16	11/29/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-16	11/29/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-16	11/29/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-16	11/29/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-16	11/29/2017	Pyrene	ND	50	22	117	ug/L
MKTF-16	11/29/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-16	11/29/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-16	11/29/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-16	11/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-16	11/29/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-16	11/29/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-16	11/29/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-16	11/29/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-16	11/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-16	11/29/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-16	11/29/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-16	11/29/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-16	11/29/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-16	11/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-16	11/29/2017	3,4-Methylphenol	16	50	16	NA	ug/L
MKTF-16	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-16	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-16	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-16	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-16	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-16	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-16	2/15/2018	Benzoic Acid	7.7	20	3.9	75000	ug/L
MKTF-16	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-16	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-16	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-16	2/15/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-16	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-16	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-16	2/15/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-16	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-16	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-16	2/15/2018	Fluorene	ND	10	4	288	ug/L
MKTF-16	2/15/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-16	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-16	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-16	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-16	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-16	2/15/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-16	2/15/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-16	2/15/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-16	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-16	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-16	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-16	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-16	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-16	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-16	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-16	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-16	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-16	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-16	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-16	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-16	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-16	2/15/2018	2,4-Dimethylphenol	3.6	10	2.8	354	ug/L
MKTF-16	2/15/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-16	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-16	2/15/2018	Phenol	62	10	3.1	5761	ug/L
MKTF-16	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-16	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-16	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-16	2/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-16	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-16	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-16	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-16	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-16	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-16	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-16	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-16	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-16	2/15/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-16	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-16	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-16	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-16	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-16	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-16	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-16	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-16	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-16	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-16	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-16	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-16	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-16	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-16	2/15/2018	3,4-Methylphenol	6.3	10	3.2	NA	ug/L
MKTF-16	5/11/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	5/11/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	5/11/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	5/11/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	5/11/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	5/11/2018	Benzoic Acid	41	20	6.3	75000	ug/L
MKTF-16	5/11/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	5/11/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	5/11/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	5/11/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	5/11/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	5/11/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	5/11/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	5/11/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	5/11/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	5/11/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	5/11/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	5/11/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	5/11/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	5/11/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	5/11/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	5/11/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	5/11/2018	1-Methylnaphthalene	**22**	10	7	11.38	ug/L
MKTF-16	5/11/2018	Naphthalene	**63**	10	5	30	ug/L
MKTF-16	5/11/2018	2-Methylnaphthalene	16	10	6.3	35.1	ug/L
MKTF-16	5/11/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	5/11/2018	2-Methylphenol	12	10	6.3	NA	ug/L
MKTF-16	5/11/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	5/11/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	5/11/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	5/11/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	5/11/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	5/11/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	5/11/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	5/11/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	5/11/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	5/11/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	5/11/2018	2,4-Dimethylphenol	37	10	5.9	354	ug/L
MKTF-16	5/11/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	5/11/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	5/11/2018	Phenol	290	20	12	5761	ug/L
MKTF-16	5/11/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	5/11/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	5/11/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	5/11/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	5/11/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	5/11/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	5/11/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	5/11/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	5/11/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	5/11/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	5/11/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	5/11/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	5/11/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	5/11/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	5/11/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	5/11/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	5/11/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	5/11/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	5/11/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	5/11/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-16	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	5/11/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	5/11/2018	3,4-Methylphenol	5.8	10	5.4	NA	ug/L
MKTF-16	8/31/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	8/31/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	8/31/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	8/31/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	8/31/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	8/31/2018	Benzoic Acid	25	20	6.3	75000	ug/L
MKTF-16	8/31/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	8/31/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	8/31/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	8/31/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	8/31/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	8/31/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	8/31/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	8/31/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	8/31/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	8/31/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	8/31/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	8/31/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	8/31/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	8/31/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	8/31/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	8/31/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	8/31/2018	1-Methylnaphthalene	**17**	10	7	11.38	ug/L
MKTF-16	8/31/2018	Naphthalene	**72**	10	5	30	ug/L
MKTF-16	8/31/2018	2-Methylnaphthalene	11	10	6.3	35.1	ug/L
MKTF-16	8/31/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-16	8/31/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	8/31/2018	2-Methylphenol	15	10	6.3	NA	ug/L
MKTF-16	8/31/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	8/31/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	8/31/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	8/31/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	8/31/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	8/31/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	8/31/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	8/31/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	8/31/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	8/31/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	8/31/2018	2,4-Dimethylphenol	43	10	5.9	354	ug/L
MKTF-16	8/31/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	8/31/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	8/31/2018	Phenol	330	20	12	5761	ug/L
MKTF-16	8/31/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	8/31/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	8/31/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	8/31/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	8/31/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	8/31/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	8/31/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	8/31/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	8/31/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	8/31/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	8/31/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	8/31/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	8/31/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	8/31/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	8/31/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	8/31/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	8/31/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	8/31/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	8/31/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	8/31/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	8/31/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-16	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-16	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-16	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-16	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-16	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-16	11/29/2018	Benzoic Acid	32	20	6.3	75000	ug/L
MKTF-16	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-16	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-16	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-16	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-16	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-16	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-16	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-16	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-16	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-16	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-16	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-16	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-16	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-16	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-16	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-16	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-16	11/29/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
MKTF-16	11/29/2018	Naphthalene	**62**	10	5	30	ug/L
MKTF-16	11/29/2018	2-Methylnaphthalene	18	10	6.3	35.1	ug/L
MKTF-16	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-16	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-16	11/29/2018	2-Methylphenol	13	10	6.3	NA	ug/L
MKTF-16	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-16	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-16	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-16	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-16	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-16	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-16	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-16	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-16	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-16	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-16	11/29/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
MKTF-16	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-16	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-16	11/29/2018	Phenol	150	10	6	5761	ug/L
MKTF-16	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-16	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-16	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-16	11/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-16	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-16	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-16	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-16	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-16	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-16	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-16	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-16	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-16	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-16	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-16	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-16	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-16	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-16	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-16	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-16	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-16	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-16	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-16	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-16	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-16	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-16	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-16	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-16	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-16	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-16	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-16	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-16	2/20/2019	1-Methylnaphthalene	**28**	10	6.999122	11.38	ug/L
MKTF-16	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-16	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-16	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-16	2/20/2019	2,4-Dimethylphenol	12	10	5.912084	354	ug/L
MKTF-16	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-16	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-16	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-16	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-16	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-16	2/20/2019	2-Methylnaphthalene	25	10	6.33239	35.1	ug/L
MKTF-16	2/20/2019	2-Methylphenol	9.4	10	6.316864	NA	ug/L
MKTF-16	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-16	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-16	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-16	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-16	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-16	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-16	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-16	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-16	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-16	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-16	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-16	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-16	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-16	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-16	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-16	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-16	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-16	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-16	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-16	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-16	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-16	2/20/2019	Benzoic Acid	20	20	6.311561	75000	ug/L
MKTF-16	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-16	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-16	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-16	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-16	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-16	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-16	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-16	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-16	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-16	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-16	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-16	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-16	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-16	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-16	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-16	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-16	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-16	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-16	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-16	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-16	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-16	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-16	2/20/2019	Naphthalene	**100**	10	5.041403	30	ug/L
MKTF-16	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-16	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-16	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-16	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-16	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-16	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-16	2/20/2019	Phenol	64	10	5.977352	5761	ug/L
MKTF-16	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-16	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-16	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-16	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-16	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-16	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-16	5/14/2019	1-Methylnaphthalene	**19**	10	3.069076	11.38	ug/L
MKTF-16	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-16	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-16	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-16	5/14/2019	2,4-Dimethylphenol	13	10	2.965993	354	ug/L
MKTF-16	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-16	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-16	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-16	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-16	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-16	5/14/2019	2-Methylnaphthalene	15	10	3.018863	35.1	ug/L
MKTF-16	5/14/2019	2-Methylphenol	6.4	10	2.858438	NA	ug/L
MKTF-16	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-16	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-16	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-16	5/14/2019	3,4-Methylphenol	4.3	10	3.584453	NA	ug/L
MKTF-16	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-16	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-16	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-16	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-16	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-16	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-16	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-16	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-16	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-16	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-16	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-16	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-16	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-16	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-16	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-16	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-16	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-16	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-16	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-16	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-16	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-16	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-16	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-16	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-16	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-16	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-16	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-16	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-16	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-16	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-16	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-16	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-16	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-16	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-16	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-16	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-16	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-16	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-16	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-16	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-16	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-16	5/14/2019	Naphthalene	**58**	10	4.12221	30	ug/L
MKTF-16	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-16	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-16	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-16	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-16	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-16	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-16	5/14/2019	Phenol	130	10	8.036586	5761	ug/L
MKTF-16	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-16	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-16	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-16	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-16	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-16	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-16	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-16	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-16	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-16	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-16	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-16	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-16	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-16	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-16	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-16	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-16	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-16	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-16	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-16	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-16	8/22/2019	3,4-Methylphenol	5.8	10	3.584453	NA	ug/L
MKTF-16	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-16	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-16	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-16	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-16	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-16	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-16	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-16	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-16	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-16	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-16	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-16	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-16	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-16	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-16	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-16	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-16	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-16	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-16	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-16	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-16	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-16	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-16	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-16	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-16	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-16	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-16	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-16	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-16	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-16	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-16	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-16	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-16	8/22/2019	Di-n-octylphthalate	4.7	10	3.516366	200	ug/L
MKTF-16	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-16	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-16	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-16	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-16	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-16	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-16	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-16	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-16	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-16	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-16	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-16	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-16	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-16	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-16	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-16	8/22/2019	Phenol	34	10	8.036586	5761	ug/L
MKTF-16	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-16	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-16	10/30/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-16	10/30/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-16	10/30/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-16	10/30/2019	1,4-Dioxane	**53**	10	10	4.59	ug/L
MKTF-16	10/30/2019	1-Methylnaphthalene	**25**	5	5	11.38	ug/L
MKTF-16	10/30/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-16	10/30/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-16	10/30/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-16	10/30/2019	2,4-Dimethylphenol	13	5	5	354	ug/L
MKTF-16	10/30/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-16	10/30/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-16	10/30/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-16	10/30/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-16	10/30/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-16	10/30/2019	2-Methylnaphthalene	31	5	5	35.1	ug/L
MKTF-16	10/30/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-16	10/30/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-16	10/30/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-16	10/30/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-16	10/30/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-16	10/30/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Aniline	ND	5	5	13	ug/L
MKTF-16	10/30/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-16	10/30/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-16	10/30/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-16	10/30/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-16	10/30/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-16	10/30/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-16	10/30/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-16	10/30/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-16	10/30/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-16	10/30/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-16	10/30/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-16	10/30/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-16	10/30/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-16	10/30/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-16	10/30/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-16	10/30/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-16	10/30/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-16	10/30/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-16	10/30/2019	Fluorene	ND	5	5	288	ug/L
MKTF-16	10/30/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-16	10/30/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-16	10/30/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-16	10/30/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-16	10/30/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-16	10/30/2019	Isophorone	ND	5	5	781	ug/L
MKTF-16	10/30/2019	Naphthalene	**120**	5	5	30	ug/L
MKTF-16	10/30/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-16	10/30/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-16	10/30/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-16	10/30/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-16	10/30/2019	Phenol	44	5	5	5761	ug/L
MKTF-16	10/30/2019	Pyrene	ND	5	5	117	ug/L
MKTF-16	10/30/2019	Pyridine	ND	5	5	20	ug/L
MKTF-17	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	4/9/2014	Naphthalene	24	10	2.3	30	ug/L
MKTF-17	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	6/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	6/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	6/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	6/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	6/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	6/16/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	6/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	6/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	6/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	6/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	6/16/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	6/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	6/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	6/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	6/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	6/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	6/16/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	6/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	6/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	6/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	6/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	6/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	6/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	6/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	6/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	6/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	6/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	6/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	6/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	6/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	6/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	6/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	6/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	6/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	6/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	6/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	6/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	6/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	6/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	6/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	6/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	6/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	6/16/2014	Phenol	39	10	1.6	5761	ug/L
MKTF-17	6/16/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	6/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	6/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	6/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	6/16/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	6/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	6/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	6/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	6/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	6/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	6/16/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	6/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	6/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	6/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	6/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	6/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	6/16/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	6/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	6/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	6/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	6/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	6/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	6/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	6/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	6/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	6/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	6/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	9/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	9/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	9/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-17	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-17	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-17	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-17	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-17	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-17	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-17	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-17	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-17	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-17	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-17	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-17	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-17	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-17	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-17	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-17	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-17	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-17	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-17	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-17	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-17	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-17	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-17	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-17	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-17	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-17	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-17	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-17	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-17	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-17	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-17	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-17	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-17	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-17	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-17	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-17	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-17	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-17	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-17	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-17	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-17	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-17	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-17	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	11/18/2014	Bis(2-ethylhexyl)phthalate	10	10	3	55.64	ug/L
MKTF-17	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-17	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-17	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-17	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-17	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-17	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-17	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-17	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-17	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-17	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-17	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-17	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-17	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-17	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-17	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-17	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-17	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-17	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-17	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-17	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-17	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-17	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-17	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-17	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-17	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-17	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-17	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-17	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-17	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-17	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-17	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-17	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-17	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-17	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-17	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-17	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-17	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-17	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-17	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-17	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-17	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-17	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-17	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-17	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-17	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-17	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-17	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-17	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-17	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-17	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-17	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-17	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-17	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-17	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-17	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-17	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-17	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-17	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-17	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-17	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-17	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-17	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-17	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-17	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-17	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-17	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-17	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-17	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-17	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-17	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-17	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-17	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-17	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-17	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-17	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-17	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-17	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-17	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-17	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-17	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-17	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-17	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-17	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-17	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-17	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-17	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-17	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	6/8/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	6/8/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	6/8/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-17	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-17	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-17	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-17	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-17	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-17	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-17	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-17	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-17	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-17	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-17	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-17	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-17	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-17	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-17	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-17	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-17	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-17	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-17	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-17	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-17	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-17	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-17	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-17	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-17	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-17	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-17	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-17	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-17	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-17	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-17	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-17	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-17	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-17	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-17	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-17	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-17	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-17	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-17	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-17	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-17	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-17	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-17	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-17	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-17	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-17	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-17	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-17	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-17	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-17	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-17	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-17	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-17	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-17	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-17	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-17	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-17	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-17	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-17	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-17	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-17	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-17	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-17	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-17	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-17	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-17	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-17	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-17	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-17	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-17	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-17	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-17	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-17	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-17	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-17	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-17	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-17	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-17	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-17	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-17	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-17	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-17	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-17	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-17	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-17	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-17	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-17	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-17	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-17	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-17	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-17	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-17	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-17	2/26/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-17	2/26/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-17	2/26/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-17	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-17	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-17	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-17	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-17	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-17	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-17	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-17	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-17	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-17	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-17	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-17	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-17	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-17	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-17	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-17	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-17	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-17	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-17	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-17	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-17	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-17	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-17	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-17	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-17	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-17	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-17	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-17	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-17	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-17	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-17	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-17	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-17	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-17	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-17	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-17	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-17	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-17	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-17	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-17	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-17	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-17	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-17	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	6/10/2016	1-Methylnaphthalene	**26**	10	2.9	11.38	ug/L
MKTF-17	6/10/2016	Naphthalene	**62**	10	2.6	30	ug/L
MKTF-17	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	6/10/2016	2,4-Dimethylphenol	4.4	10	3	354	ug/L
MKTF-17	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	6/10/2016	Phenol	9.8	10	2	5761	ug/L
MKTF-17	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	6/10/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-17	6/10/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-17	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	9/13/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	9/13/2016	1-Methylnaphthalene	6.3	10	2.9	11.38	ug/L
MKTF-17	9/13/2016	Naphthalene	6.4	10	2.6	30	ug/L
MKTF-17	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	9/13/2016	Phenol	2.9	10	2	5761	ug/L
MKTF-17	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	9/13/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MKTF-17	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-17	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-17	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-17	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	11/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	11/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	11/8/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-17	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	11/8/2016	Fluorene	3	10	2.7	288	ug/L
MKTF-17	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	11/8/2016	1-Methylnaphthalene	11	10	2.9	11.38	ug/L
MKTF-17	11/8/2016	Naphthalene	7.7	10	2.6	30	ug/L
MKTF-17	11/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	11/8/2016	Phenol	3.5	10	2	5761	ug/L
MKTF-17	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	11/8/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-17	11/8/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-17	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-17	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-17	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-17	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-17	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-17	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-17	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-17	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-17	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-17	3/15/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-17	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-17	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-17	3/15/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-17	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-17	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-17	3/15/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-17	3/15/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-17	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-17	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-17	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-17	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-17	3/15/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-17	3/15/2017	Naphthalene	4.9	10	2.6	30	ug/L
MKTF-17	3/15/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-17	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-17	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-17	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-17	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-17	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-17	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-17	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-17	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-17	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-17	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-17	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-17	3/15/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-17	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-17	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-17	3/15/2017	Phenol	5	10	2	5761	ug/L
MKTF-17	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-17	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-17	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-17	3/15/2017	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
MKTF-17	3/15/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-17	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-17	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-17	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-17	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-17	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-17	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-17	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-17	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-17	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-17	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-17	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-17	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-17	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-17	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-17	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-17	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-17	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-17	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-17	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-17	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-17	3/15/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-17	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-17	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	6/14/2017	1-Methylnaphthalene	**18**	10	3.3	11.38	ug/L
MKTF-17	6/14/2017	Naphthalene	27	10	2.9	30	ug/L
MKTF-17	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	6/14/2017	Phenol	5.5	10	3.1	5761	ug/L
MKTF-17	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	6/14/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-17	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	9/26/2017	Fluorene	4.6	10	4	288	ug/L
MKTF-17	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	9/26/2017	1-Methylnaphthalene	10	10	3.3	11.38	ug/L
MKTF-17	9/26/2017	Naphthalene	8	10	2.9	30	ug/L
MKTF-17	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	9/26/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-17	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	9/26/2017	Bis(2-ethylhexyl)phthalate	**310**	20	9.6	55.64	ug/L
MKTF-17	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-17	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	12/1/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-17	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	12/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-17	12/1/2017	Naphthalene	3.3	10	2.9	30	ug/L
MKTF-17	12/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-17	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-17	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-17	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-17	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-17	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-17	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-17	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-17	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-17	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-17	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-17	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-17	2/16/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-17	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-17	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-17	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-17	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-17	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-17	2/16/2018	Fluorene	ND	10	4	288	ug/L
MKTF-17	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-17	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-17	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-17	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-17	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-17	2/16/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-17	2/16/2018	Naphthalene	6.1	10	2.9	30	ug/L
MKTF-17	2/16/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-17	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-17	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-17	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-17	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-17	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-17	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-17	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-17	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-17	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-17	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-17	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-17	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-17	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-17	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-17	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-17	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-17	2/16/2018	Phenol	7.1	10	3.1	5761	ug/L
MKTF-17	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-17	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-17	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-17	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-17	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-17	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-17	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-17	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-17	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-17	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-17	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-17	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-17	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-17	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-17	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-17	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-17	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-17	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-17	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-17	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-17	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-17	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-17	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-17	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-17	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-17	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-17	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	5/4/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-17	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-17	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	5/4/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	5/4/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	5/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-17	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	8/24/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-17	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	8/24/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	8/24/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	8/24/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-17	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-17	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-17	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-17	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-17	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-17	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-17	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-17	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-17	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-17	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-17	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-17	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-17	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-17	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-17	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-17	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-17	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-17	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-17	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-17	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-17	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-17	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-17	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-17	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-17	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-17	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-17	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-17	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-17	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-17	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-17	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-17	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-17	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-17	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-17	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-17	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-17	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-17	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-17	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-17	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-17	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-17	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-17	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-17	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-17	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-17	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-17	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-17	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-17	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-17	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-17	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-17	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-17	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-17	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-17	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-17	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-17	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-17	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-17	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-17	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-17	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-17	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-17	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-17	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-17	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-17	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-17	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-17	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-17	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-17	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-17	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-17	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-17	5/9/2019	1-Methylnaphthalene	**37**	10	3.069076	11.38	ug/L
MKTF-17	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-17	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-17	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-17	5/9/2019	2,4-Dimethylphenol	7.6	10	2.965993	354	ug/L
MKTF-17	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-17	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-17	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-17	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-17	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-17	5/9/2019	2-Methylnaphthalene	21	10	3.018863	35.1	ug/L
MKTF-17	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-17	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-17	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-17	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-17	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-17	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-17	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-17	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-17	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-17	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-17	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-17	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-17	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-17	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-17	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-17	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-17	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-17	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-17	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-17	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-17	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-17	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-17	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-17	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-17	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-17	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-17	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-17	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-17	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-17	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-17	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-17	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-17	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-17	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-17	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-17	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-17	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-17	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-17	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-17	5/9/2019	Fluorene	4.5	10	2.888488	288	ug/L
MKTF-17	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-17	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-17	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-17	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-17	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-17	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-17	5/9/2019	Naphthalene	**110**	10	4.12221	30	ug/L
MKTF-17	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-17	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-17	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-17	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-17	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-17	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-17	5/9/2019	Phenol	21	10	8.036586	5761	ug/L
MKTF-17	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-17	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-17	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-17	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-17	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-17	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-17	8/20/2019	1-Methylnaphthalene	**17**	10	3.069076	11.38	ug/L
MKTF-17	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-17	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-17	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-17	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-17	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-17	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-17	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-17	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-17	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-17	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-17	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-17	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-17	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-17	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-17	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-17	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-17	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-17	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-17	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-17	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-17	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-17	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-17	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-17	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-17	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-17	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-17	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-17	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-17	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-17	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-17	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-17	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-17	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-17	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-17	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-17	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-17	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-17	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-17	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-17	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-17	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-17	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-17	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-17	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-17	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-17	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-17	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-17	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-17	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-17	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-17	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-17	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-17	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-17	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-17	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-17	8/20/2019	Naphthalene	22	10	4.12221	30	ug/L
MKTF-17	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-17	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-17	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-17	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-17	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-17	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-17	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-17	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-17	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-17	10/29/2019	1,2,4-Trichlorobenzene	ND	10	10	70	ug/L
MKTF-17	10/29/2019	1,2-Dichlorobenzene	ND	10	10	600	ug/L
MKTF-17	10/29/2019	1,3-Dichlorobenzene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	1,4-Dichlorobenzene	ND	10	10	75	ug/L
MKTF-17	10/29/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-17	10/29/2019	1-Methylnaphthalene	**22**	10	10	11.38	ug/L
MKTF-17	10/29/2019	2,4,5-Trichlorophenol	ND	10	10	1166	ug/L
MKTF-17	10/29/2019	2,4,6-Trichlorophenol	ND	10	10	11.9*	ug/L
MKTF-17	10/29/2019	2,4-Dichlorophenol	ND	10	10	45.3	ug/L
MKTF-17	10/29/2019	2,4-Dimethylphenol	300	10	10	354	ug/L
MKTF-17	10/29/2019	2,4-Dinitrophenol	ND	10	10	38.7	ug/L
MKTF-17	10/29/2019	2,4-Dinitrotoluene	ND	10	10	45.3	ug/L
MKTF-17	10/29/2019	2,6-Dinitrotoluene	*ND*	*8*	8	0.485	ug/L
MKTF-17	10/29/2019	2-Chloronaphthalene	ND	10	10	733	ug/L
MKTF-17	10/29/2019	2-Chlorophenol	ND	10	10	91	ug/L
MKTF-17	10/29/2019	2-Methylnaphthalene	ND	10	10	35.1	ug/L
MKTF-17	10/29/2019	2-Methylphenol	710	10	10	NA	ug/L
MKTF-17	10/29/2019	2-Nitroaniline	ND	10	10	190	ug/L
MKTF-17	10/29/2019	2-Nitrophenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	3,3-Dichlorobenzidine	*ND*	*10*	10	1.25	ug/L
MKTF-17	10/29/2019	3,4-Methylphenol	680	10	10	NA	ug/L
MKTF-17	10/29/2019	3-Nitroaniline	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*10*	10	1.52	ug/L
MKTF-17	10/29/2019	4-Bromophenyl-phenylether	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Chloro-3-Methylphenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Chlorophenyl-phenylether	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	4-Nitroaniline	*ND*	*10*	10	3.8	ug/L
MKTF-17	10/29/2019	4-Nitrophenol	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Acenaphthene	ND	10	10	535	ug/L
MKTF-17	10/29/2019	Acenaphthylene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Aniline	ND	10	10	13	ug/L
MKTF-17	10/29/2019	Anthracene	ND	10	10	1721	ug/L
MKTF-17	10/29/2019	Benzo(a)anthracene	*ND*	*2*	2	0.12	ug/L
MKTF-17	10/29/2019	Benzo(a)pyrene	*ND*	*2*	2	0.2	ug/L
MKTF-17	10/29/2019	Benzo(b)fluoranthene	*ND*	*2*	2	0.34	ug/L
MKTF-17	10/29/2019	Benzo(g,h,i)perylene	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Benzo(k)fluoranthene	*ND*	*10*	10	3.43	ug/L
MKTF-17	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-17	10/29/2019	Benzyl Alcohol	ND	10	10	2000	ug/L
MKTF-17	10/29/2019	Bis(2-chloroethoxy)methane	ND	10	10	59	ug/L
MKTF-17	10/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	10	9.81	ug/L
MKTF-17	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	10	10	55.64	ug/L
MKTF-17	10/29/2019	Butylbenzylphthalate	ND	10	10	16	ug/L
MKTF-17	10/29/2019	Carbazole	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Chrysene	ND	10	10	34.3	ug/L
MKTF-17	10/29/2019	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MKTF-17	10/29/2019	Dibenzofuran	ND	10	10	NA	ug/L
MKTF-17	10/29/2019	Diethylphthalate	ND	10	10	14801	ug/L
MKTF-17	10/29/2019	Dimethylphthalate	ND	10	10	612	ug/L
MKTF-17	10/29/2019	Di-n-butylphthalate	ND	10	10	885	ug/L
MKTF-17	10/29/2019	Di-n-octylphthalate	ND	10	10	200	ug/L
MKTF-17	10/29/2019	Fluoranthene	ND	10	10	802	ug/L
MKTF-17	10/29/2019	Fluorene	ND	10	10	288	ug/L
MKTF-17	10/29/2019	Hexachlorobenzene	*ND*	*10*	10	0.0976	ug/L
MKTF-17	10/29/2019	Hexachlorobutadiene	*ND*	*10*	10	0.14	ug/L
MKTF-17	10/29/2019	Hexachlorocyclopentadiene	*ND*	*10*	10	0.41	ug/L
MKTF-17	10/29/2019	Hexachloroethane	*ND*	*10*	10	3.28	ug/L
MKTF-17	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*4*	4	0.343	ug/L
MKTF-17	10/29/2019	Isophorone	ND	10	10	781	ug/L
MKTF-17	10/29/2019	Naphthalene	**66**	10	10	30	ug/L
MKTF-17	10/29/2019	Nitrobenzene	*ND*	*10*	10	1.4	ug/L
MKTF-17	10/29/2019	N-Nitrosodiphenylamine	ND	10	10	122	ug/L
MKTF-17	10/29/2019	Pentachlorophenol	*ND*	*10*	10	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	Phenanthrene	ND	10	10	170	ug/L
MKTF-17	10/29/2019	Phenol	100	10	10	5761	ug/L
MKTF-17	10/29/2019	Pyrene	ND	10	10	117	ug/L
MKTF-17	10/29/2019	Pyridine	ND	10	10	20	ug/L
MKTF-18	4/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	4/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	4/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-18	4/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	4/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	4/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	4/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	4/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	4/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	4/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	4/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	4/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	4/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	4/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	4/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	4/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	4/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	4/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	4/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	4/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	4/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	4/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	4/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	4/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	4/14/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-18	4/14/2014	Naphthalene	**61**	10	2.3	30	ug/L
MKTF-18	4/14/2014	2-Methylnaphthalene	35	10	2.6	35.1	ug/L
MKTF-18	4/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	4/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	4/14/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-18	4/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	4/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	4/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	4/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	4/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	4/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	4/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	4/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	4/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	4/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	4/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	4/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	4/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	4/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	4/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	4/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	4/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	4/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-18	4/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-18	4/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	4/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	4/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	4/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	4/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	4/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	4/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	4/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	4/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	4/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	4/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	4/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	4/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	4/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	4/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	4/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	4/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	4/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	4/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	4/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	4/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	4/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	6/6/2014	Benzo(a)pyrene	*ND*	*14*	4.6	0.2	ug/L
MKTF-18	6/6/2014	2,4-Dinitrophenol	ND	29	4.5	38.7	ug/L
MKTF-18	6/6/2014	Dibenzo(a,h)anthracene	ND	14	4.3	NA	ug/L
MKTF-18	6/6/2014	Benzo(a)anthracene	*ND*	*14*	4.4	0.12	ug/L
MKTF-18	6/6/2014	4-Chloro-3-Methylphenol	ND	14	5.2	NA	ug/L
MKTF-18	6/6/2014	Aniline	*ND*	*14*	3.5	13	ug/L
MKTF-18	6/6/2014	N-Nitrosodimethylamine	*ND*	*14*	3.4	0.0049	ug/L
MKTF-18	6/6/2014	Benzoic Acid	ND	29	3.1	75000	ug/L
MKTF-18	6/6/2014	Hexachloroethane	*ND*	*14*	2.7	3.28	ug/L
MKTF-18	6/6/2014	Hexachlorocyclopentadiene	*ND*	*14*	4.3	0.41	ug/L
MKTF-18	6/6/2014	Isophorone	ND	14	4.4	781	ug/L
MKTF-18	6/6/2014	Acenaphthene	ND	14	4.2	535	ug/L
MKTF-18	6/6/2014	Diethylphthalate	ND	14	6	14801	ug/L
MKTF-18	6/6/2014	Di-n-butylphthalate	ND	14	5.2	885	ug/L
MKTF-18	6/6/2014	Phenanthrene	ND	14	3.6	170	ug/L
MKTF-18	6/6/2014	Butylbenzylphthalate	ND	14	4.5	16	ug/L
MKTF-18	6/6/2014	N-Nitrosodiphenylamine	ND	14	4.1	122	ug/L
MKTF-18	6/6/2014	Fluorene	ND	14	4.2	288	ug/L
MKTF-18	6/6/2014	Carbazole	ND	14	4.1	NA	ug/L
MKTF-18	6/6/2014	Hexachlorobutadiene	*ND*	*14*	4.3	0.14	ug/L
MKTF-18	6/6/2014	Pentachlorophenol	*ND*	*29*	3.5	1	ug/L
MKTF-18	6/6/2014	2,4,6-Trichlorophenol	ND	14	2.6	11.9*	ug/L
MKTF-18	6/6/2014	2-Nitroaniline	ND	14	4	190	ug/L
MKTF-18	6/6/2014	2-Nitrophenol	ND	14	4.5	NA	ug/L
MKTF-18	6/6/2014	1-Methylnaphthalene	**64**	14	5.2	11.38	ug/L
MKTF-18	6/6/2014	Naphthalene	26	14	3.3	30	ug/L
MKTF-18	6/6/2014	2-Methylnaphthalene	ND	14	3.8	35.1	ug/L
MKTF-18	6/6/2014	2-Chloronaphthalene	ND	14	4.3	733	ug/L
MKTF-18	6/6/2014	3,3-Dichlorobenzidine	*ND*	*14*	3.4	1.25	ug/L
MKTF-18	6/6/2014	2-Methylphenol	ND	29	3.9	NA	ug/L
MKTF-18	6/6/2014	1,2-Dichlorobenzene	ND	14	2.4	600	ug/L
MKTF-18	6/6/2014	2-Chlorophenol	ND	14	2.5	91	ug/L
MKTF-18	6/6/2014	2,4,5-Trichlorophenol	ND	14	4.7	1166	ug/L
MKTF-18	6/6/2014	Nitrobenzene	*ND*	*14*	3.7	1.4	ug/L
MKTF-18	6/6/2014	3-Nitroaniline	ND	14	5.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	4-Nitroaniline	*ND*	*14*	5.9	3.8	ug/L
MKTF-18	6/6/2014	4-Nitrophenol	ND	14	6.1	NA	ug/L
MKTF-18	6/6/2014	Benzyl Alcohol	ND	14	2.6	2000	ug/L
MKTF-18	6/6/2014	4-Bromophenyl-phenylether	ND	14	4.2	NA	ug/L
MKTF-18	6/6/2014	Azobenzene	*ND*	*14*	3.6	0.12	ug/L
MKTF-18	6/6/2014	2,4-Dimethylphenol	ND	14	4.5	354	ug/L
MKTF-18	6/6/2014	1,4-Dichlorobenzene	ND	14	3.4	75	ug/L
MKTF-18	6/6/2014	4-Chloroaniline	*ND*	*14*	3.7	0.37	ug/L
MKTF-18	6/6/2014	Phenol	ND	14	2.3	5761	ug/L
MKTF-18	6/6/2014	Pyridine	ND	14	2.2	20	ug/L
MKTF-18	6/6/2014	Bis(2-chloroethyl)ether	*ND*	*14*	2.5	0.137	ug/L
MKTF-18	6/6/2014	Bis(2-chloroethoxy)methane	ND	14	4	59	ug/L
MKTF-18	6/6/2014	Bis(2-ethylhexyl)phthalate	ND	14	4.2	55.64	ug/L
MKTF-18	6/6/2014	Di-n-octylphthalate	ND	14	3.9	200	ug/L
MKTF-18	6/6/2014	Hexachlorobenzene	*ND*	*14*	4.5	0.0976	ug/L
MKTF-18	6/6/2014	Anthracene	ND	14	3.6	1721	ug/L
MKTF-18	6/6/2014	1,2,4-Trichlorobenzene	ND	14	3.9	70	ug/L
MKTF-18	6/6/2014	2,4-Dichlorophenol	ND	29	4.3	45.3	ug/L
MKTF-18	6/6/2014	2,4-Dinitrotoluene	ND	14	6.4	45.3	ug/L
MKTF-18	6/6/2014	Pyrene	ND	14	5.7	117	ug/L
MKTF-18	6/6/2014	Dimethylphthalate	ND	14	5.2	612	ug/L
MKTF-18	6/6/2014	Dibenzofuran	ND	14	5.3	NA	ug/L
MKTF-18	6/6/2014	Benzo(g,h,i)perylene	ND	14	4.7	NA	ug/L
MKTF-18	6/6/2014	Indeno(1,2,3-cd)pyrene	*ND*	*14*	4.9	0.343	ug/L
MKTF-18	6/6/2014	Benzo(b)fluoranthene	*ND*	*14*	5.8	0.34	ug/L
MKTF-18	6/6/2014	Fluoranthene	ND	14	4.2	802	ug/L
MKTF-18	6/6/2014	Benzo(k)fluoranthene	*ND*	*14*	5	3.43	ug/L
MKTF-18	6/6/2014	Acenaphthylene	ND	14	3.5	NA	ug/L
MKTF-18	6/6/2014	Chrysene	ND	14	4.1	34.3	ug/L
MKTF-18	6/6/2014	4,6-Dinitro-2-methylphenol	*ND*	*29*	3.4	1.52	ug/L
MKTF-18	6/6/2014	1,3-Dichlorobenzene	ND	14	2.5	NA	ug/L
MKTF-18	6/6/2014	2,6-Dinitrotoluene	*ND*	*14*	4.9	0.485	ug/L
MKTF-18	6/6/2014	N-Nitrosodi-n-propylamine	*ND*	*14*	2.8	0.011	ug/L
MKTF-18	6/6/2014	4-Chlorophenyl-phenylether	ND	14	5	NA	ug/L
MKTF-18	6/6/2014	Bis(2-chloroisopropyl)ether	*ND*	*14*	3.4	9.81	ug/L
MKTF-18	6/6/2014	3,4-Methylphenol	ND	14	2.6	NA	ug/L
MKTF-18	9/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	9/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	9/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-18	9/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	9/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	9/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	9/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	9/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	9/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	9/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	9/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	9/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	9/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	9/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	9/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	9/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	9/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	9/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	9/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	9/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	9/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	9/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	9/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	9/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	9/18/2014	1-Methylnaphthalene	**120**	10	3.6	11.38	ug/L
MKTF-18	9/18/2014	Naphthalene	**59**	10	2.3	30	ug/L
MKTF-18	9/18/2014	2-Methylnaphthalene	23	10	2.6	35.1	ug/L
MKTF-18	9/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	9/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	9/18/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-18	9/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	9/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	9/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	9/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	9/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	9/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	9/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	9/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	9/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	9/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	9/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	9/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	9/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	9/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	9/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	9/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	9/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	9/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-18	9/18/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-18	9/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	9/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	9/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	9/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	9/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	9/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	9/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	9/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	9/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	9/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	9/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	9/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	9/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	9/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	9/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	9/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	9/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	9/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	9/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	9/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	9/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	9/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-18	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-18	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-18	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-18	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-18	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-18	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-18	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-18	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-18	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-18	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-18	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-18	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-18	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-18	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-18	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-18	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-18	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-18	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-18	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-18	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-18	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-18	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-18	11/18/2014	Naphthalene	**55**	10	2.3	30	ug/L
MKTF-18	11/18/2014	2-Methylnaphthalene	**36**	10	2.6	35.1	ug/L
MKTF-18	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-18	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-18	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-18	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-18	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-18	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-18	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-18	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-18	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-18	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-18	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-18	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-18	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-18	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-18	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-18	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	11/18/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-18	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-18	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-18	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-18	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-18	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-18	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-18	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-18	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-18	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-18	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-18	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-18	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-18	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-18	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-18	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-18	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-18	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-18	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-18	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-18	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-18	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-18	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	3/17/2015	1-Methylnaphthalene	**100**	10	1.8	11.38	ug/L
MKTF-18	3/17/2015	Naphthalene	**32**	10	1.8	30	ug/L
MKTF-18	3/17/2015	2-Methylnaphthalene	28	10	2.2	35.1	ug/L
MKTF-18	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	6/8/2015	1-Methylnaphthalene	**77**	10	1.8	11.38	ug/L
MKTF-18	6/8/2015	Naphthalene	29	10	1.8	30	ug/L
MKTF-18	6/8/2015	2-Methylnaphthalene	13	10	2.2	35.1	ug/L
MKTF-18	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	8/18/2015	Phenanthrene	12	10	2	170	ug/L
MKTF-18	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	8/18/2015	Fluorene	11	10	1.7	288	ug/L
MKTF-18	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	8/18/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-18	8/18/2015	Naphthalene	**42**	10	1.8	30	ug/L
MKTF-18	8/18/2015	2-Methylnaphthalene	**42**	10	2.2	35.1	ug/L
MKTF-18	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-18	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-18	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-18	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-18	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-18	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-18	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-18	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-18	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-18	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-18	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-18	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-18	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-18	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-18	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-18	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-18	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-18	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-18	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-18	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-18	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-18	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-18	11/3/2015	1-Methylnaphthalene	**79**	10	1.8	11.38	ug/L
MKTF-18	11/3/2015	Naphthalene	23	10	1.8	30	ug/L
MKTF-18	11/3/2015	2-Methylnaphthalene	17	10	2.2	35.1	ug/L
MKTF-18	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-18	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-18	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-18	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-18	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-18	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-18	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-18	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-18	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-18	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-18	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-18	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-18	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-18	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-18	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-18	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-18	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-18	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-18	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-18	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-18	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-18	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-18	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-18	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-18	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-18	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-18	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-18	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-18	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-18	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-18	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-18	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-18	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-18	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-18	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-18	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-18	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-18	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-18	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-18	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-18	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-18	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-18	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-18	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-18	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-18	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-18	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-18	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-18	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-18	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-18	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-18	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-18	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-18	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-18	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-18	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-18	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-18	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-18	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-18	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-18	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-18	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-18	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-18	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-18	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-18	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-18	2/26/2016	1-Methylnaphthalene	**60**	10	6.8	11.38	ug/L
MKTF-18	2/26/2016	Naphthalene	16	10	5.9	30	ug/L
MKTF-18	2/26/2016	2-Methylnaphthalene	17	10	7	35.1	ug/L
MKTF-18	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-18	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-18	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-18	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-18	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-18	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-18	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-18	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-18	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-18	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-18	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-18	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-18	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-18	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-18	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-18	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-18	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-18	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-18	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-18	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-18	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-18	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-18	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-18	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-18	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-18	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-18	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-18	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-18	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-18	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-18	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-18	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-18	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-18	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-18	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-18	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-18	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-18	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-18	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-18	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-18	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-18	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-18	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-18	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	6/10/2016	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-18	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	6/10/2016	Phenanthrene	3.7	10	2.6	170	ug/L
MKTF-18	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/10/2016	Fluorene	4.1	10	2.7	288	ug/L
MKTF-18	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	6/10/2016	1-Methylnaphthalene	**54**	10	2.9	11.38	ug/L
MKTF-18	6/10/2016	Naphthalene	13	10	2.6	30	ug/L
MKTF-18	6/10/2016	2-Methylnaphthalene	14	10	2.9	35.1	ug/L
MKTF-18	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	6/10/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-18	6/10/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-18	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-18	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	9/13/2016	Benzoic Acid	6.4	20	2.6	75000	ug/L
MKTF-18	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	9/13/2016	Acenaphthene	4.3	10	2.6	535	ug/L
MKTF-18	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	9/13/2016	Phenanthrene	3.6	10	2.6	170	ug/L
MKTF-18	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	9/13/2016	Fluorene	6	10	2.7	288	ug/L
MKTF-18	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	9/13/2016	1-Methylnaphthalene	**49**	10	2.9	11.38	ug/L
MKTF-18	9/13/2016	Naphthalene	14	10	2.6	30	ug/L
MKTF-18	9/13/2016	2-Methylnaphthalene	20	10	2.9	35.1	ug/L
MKTF-18	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-18	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-18	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-18	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	11/8/2016	Acenaphthene	5.6	10	2.6	535	ug/L
MKTF-18	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-18	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	11/8/2016	Phenanthrene	3.7	10	2.6	170	ug/L
MKTF-18	11/8/2016	Butylbenzylphthalate	2.6	10	2.5	16	ug/L
MKTF-18	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	11/8/2016	Fluorene	7.1	10	2.7	288	ug/L
MKTF-18	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-18	11/8/2016	1-Methylnaphthalene	**57**	10	2.9	11.38	ug/L
MKTF-18	11/8/2016	Naphthalene	18	10	2.6	30	ug/L
MKTF-18	11/8/2016	2-Methylnaphthalene	20	10	2.9	35.1	ug/L
MKTF-18	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	11/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-18	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	11/8/2016	Bis(2-ethylhexyl)phthalate	6.5	10	2.6	55.64	ug/L
MKTF-18	11/8/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-18	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-18	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-18	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-18	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-18	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-18	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-18	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-18	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-18	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-18	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-18	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-18	3/1/2017	Acenaphthene	5.5	10	2.6	535	ug/L
MKTF-18	3/1/2017	Diethylphthalate	2.8	10	2.7	14801	ug/L
MKTF-18	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-18	3/1/2017	Phenanthrene	4.9	10	2.6	170	ug/L
MKTF-18	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-18	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-18	3/1/2017	Fluorene	6.2	10	2.7	288	ug/L
MKTF-18	3/1/2017	Carbazole	2.6	10	2.3	NA	ug/L
MKTF-18	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-18	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-18	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-18	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-18	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	1-Methylnaphthalene	**63**	10	2.9	11.38	ug/L
MKTF-18	3/1/2017	Naphthalene	17	10	2.6	30	ug/L
MKTF-18	3/1/2017	2-Methylnaphthalene	24	10	2.9	35.1	ug/L
MKTF-18	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-18	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-18	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-18	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-18	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-18	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-18	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-18	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-18	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-18	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-18	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-18	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-18	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-18	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-18	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-18	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-18	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-18	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-18	3/1/2017	Bis(2-ethylhexyl)phthalate	7.5	10	2.6	55.64	ug/L
MKTF-18	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-18	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-18	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-18	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-18	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-18	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-18	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-18	3/1/2017	Dimethylphthalate	3.2	10	2.4	612	ug/L
MKTF-18	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-18	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-18	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-18	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-18	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-18	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-18	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-18	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-18	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-18	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-18	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-18	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-18	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-18	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-18	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-18	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-18	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-18	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-18	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-18	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-18	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-18	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-18	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-18	6/14/2017	Acenaphthene	8.5	10	3.6	535	ug/L
MKTF-18	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-18	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-18	6/14/2017	Phenanthrene	8	10	4.3	170	ug/L
MKTF-18	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-18	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-18	6/14/2017	Fluorene	7	10	4	288	ug/L
MKTF-18	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-18	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-18	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-18	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-18	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-18	6/14/2017	1-Methylnaphthalene	**79**	10	3.3	11.38	ug/L
MKTF-18	6/14/2017	Naphthalene	19	10	2.9	30	ug/L
MKTF-18	6/14/2017	2-Methylnaphthalene	23	10	3.3	35.1	ug/L
MKTF-18	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-18	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-18	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-18	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-18	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-18	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-18	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-18	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-18	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-18	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-18	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-18	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-18	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-18	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-18	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-18	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-18	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-18	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-18	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-18	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-18	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-18	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-18	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-18	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-18	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-18	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-18	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-18	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-18	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-18	6/14/2017	Dibenzofuran	5.1	10	4.1	NA	ug/L
MKTF-18	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-18	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-18	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-18	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-18	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-18	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-18	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-18	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-18	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-18	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-18	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-18	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-18	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-18	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-18	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-18	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-18	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-18	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-18	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-18	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-18	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-18	2/16/2018	Acenaphthene	7.8	10	3.6	535	ug/L
MKTF-18	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-18	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-18	2/16/2018	Phenanthrene	5	10	4.3	170	ug/L
MKTF-18	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-18	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-18	2/16/2018	Fluorene	8.2	10	4	288	ug/L
MKTF-18	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-18	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-18	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-18	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-18	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-18	2/16/2018	1-Methylnaphthalene	**87**	10	3.3	11.38	ug/L
MKTF-18	2/16/2018	Naphthalene	20	10	2.9	30	ug/L
MKTF-18	2/16/2018	2-Methylnaphthalene	25	10	3.3	35.1	ug/L
MKTF-18	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-18	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-18	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-18	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-18	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-18	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-18	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-18	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-18	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-18	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-18	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-18	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-18	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-18	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-18	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-18	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-18	2/16/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-18	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-18	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-18	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-18	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-18	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-18	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-18	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-18	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-18	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-18	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-18	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-18	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-18	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-18	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-18	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-18	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-18	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-18	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-18	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-18	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-18	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-18	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-18	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-18	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-18	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-18	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-18	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-18	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	5/4/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-18	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	5/4/2018	1-Methylnaphthalene	**43**	10	7	11.38	ug/L
MKTF-18	5/4/2018	Naphthalene	10	10	5	30	ug/L
MKTF-18	5/4/2018	2-Methylnaphthalene	14	10	6.3	35.1	ug/L
MKTF-18	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-18	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	8/24/2018	Benzoic Acid	12	20	6.3	75000	ug/L
MKTF-18	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	8/24/2018	1-Methylnaphthalene	**80**	10	7	11.38	ug/L
MKTF-18	8/24/2018	Naphthalene	20	10	5	30	ug/L
MKTF-18	8/24/2018	2-Methylnaphthalene	25	10	6.3	35.1	ug/L
MKTF-18	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-18	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-18	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-18	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-18	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-18	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-18	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-18	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-18	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-18	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-18	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-18	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-18	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-18	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-18	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-18	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-18	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-18	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-18	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-18	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-18	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-18	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-18	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-18	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-18	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-18	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-18	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-18	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-18	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-18	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-18	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-18	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-18	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-18	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-18	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-18	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-18	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-18	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-18	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-18	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-18	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-18	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-18	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-18	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-18	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-18	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-18	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-18	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-18	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-18	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-18	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-18	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-18	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-18	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-18	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-18	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-18	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-18	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-18	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-18	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-18	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-18	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-18	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-18	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-18	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-18	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-18	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-18	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-18	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-18	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-18	5/16/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
MKTF-18	5/16/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
MKTF-18	5/16/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
MKTF-18	5/16/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
MKTF-18	5/16/2019	1-Methylnaphthalene	**80**	20	6.138153	11.38	ug/L
MKTF-18	5/16/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
MKTF-18	5/16/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
MKTF-18	5/16/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
MKTF-18	5/16/2019	2,4-Dimethylphenol	ND	20	5.931986	354	ug/L
MKTF-18	5/16/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
MKTF-18	5/16/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
MKTF-18	5/16/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
MKTF-18	5/16/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
MKTF-18	5/16/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
MKTF-18	5/16/2019	2-Methylnaphthalene	20	20	6.037726	35.1	ug/L
MKTF-18	5/16/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
MKTF-18	5/16/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
MKTF-18	5/16/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
MKTF-18	5/16/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
MKTF-18	5/16/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
MKTF-18	5/16/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
MKTF-18	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
MKTF-18	5/16/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
MKTF-18	5/16/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
MKTF-18	5/16/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
MKTF-18	5/16/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
MKTF-18	5/16/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
MKTF-18	5/16/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
MKTF-18	5/16/2019	Acenaphthene	7.2	20	5.911782	535	ug/L
MKTF-18	5/16/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
MKTF-18	5/16/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
MKTF-18	5/16/2019	Anthracene	ND	20	5.314345	1721	ug/L
MKTF-18	5/16/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
MKTF-18	5/16/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
MKTF-18	5/16/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
MKTF-18	5/16/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
MKTF-18	5/16/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
MKTF-18	5/16/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/16/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
MKTF-18	5/16/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
MKTF-18	5/16/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
MKTF-18	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
MKTF-18	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
MKTF-18	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
MKTF-18	5/16/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
MKTF-18	5/16/2019	Carbazole	ND	20	5.781013	NA	ug/L
MKTF-18	5/16/2019	Chrysene	ND	20	5.573246	34.3	ug/L
MKTF-18	5/16/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
MKTF-18	5/16/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
MKTF-18	5/16/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
MKTF-18	5/16/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
MKTF-18	5/16/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
MKTF-18	5/16/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
MKTF-18	5/16/2019	Fluoranthene	ND	20	4.824429	802	ug/L
MKTF-18	5/16/2019	Fluorene	11	20	5.776977	288	ug/L
MKTF-18	5/16/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
MKTF-18	5/16/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
MKTF-18	5/16/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
MKTF-18	5/16/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
MKTF-18	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L
MKTF-18	5/16/2019	Isophorone	ND	20	6.092069	781	ug/L
MKTF-18	5/16/2019	Naphthalene	12	20	8.24442	30	ug/L
MKTF-18	5/16/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
MKTF-18	5/16/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
MKTF-18	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
MKTF-18	5/16/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
MKTF-18	5/16/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
MKTF-18	5/16/2019	Phenanthrene	ND	20	5.554244	170	ug/L
MKTF-18	5/16/2019	Phenol	ND	20	16.073173	5761	ug/L
MKTF-18	5/16/2019	Pyrene	ND	20	5.007199	117	ug/L
MKTF-18	5/16/2019	Pyridine	ND	20	19.206273	20	ug/L
MKTF-18	10/29/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-18	10/29/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-18	10/29/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-18	10/29/2019	1,4-Dioxane	**10**	10	10	4.59	ug/L
MKTF-18	10/29/2019	1-Methylnaphthalene	**81**	1	1	11.38	ug/L
MKTF-18	10/29/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-18	10/29/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-18	10/29/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-18	10/29/2019	2,4-Dimethylphenol	ND	1	1	354	ug/L
MKTF-18	10/29/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-18	10/29/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-18	10/29/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-18	10/29/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-18	10/29/2019	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-18	10/29/2019	2-Methylnaphthalene	26	1	1	35.1	ug/L
MKTF-18	10/29/2019	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-18	10/29/2019	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-18	10/29/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-18	10/29/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-18	10/29/2019	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Acenaphthene	6.9	1	1	535	ug/L
MKTF-18	10/29/2019	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Aniline	ND	1	1	13	ug/L
MKTF-18	10/29/2019	Anthracene	ND	1	1	1721	ug/L
MKTF-18	10/29/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-18	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-18	10/29/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-18	10/29/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-18	10/29/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-18	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-18	10/29/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-18	10/29/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-18	10/29/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-18	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-18	10/29/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-18	10/29/2019	Carbazole	1.8	1	1	NA	ug/L
MKTF-18	10/29/2019	Chrysene	ND	1	1	34.3	ug/L
MKTF-18	10/29/2019	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-18	10/29/2019	Dibenzofuran	2.7	1	1	NA	ug/L
MKTF-18	10/29/2019	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-18	10/29/2019	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-18	10/29/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-18	10/29/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-18	10/29/2019	Fluoranthene	ND	1	1	802	ug/L
MKTF-18	10/29/2019	Fluorene	6.9	1	1	288	ug/L
MKTF-18	10/29/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-18	10/29/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-18	10/29/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-18	10/29/2019	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-18	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-18	10/29/2019	Isophorone	ND	1	1	781	ug/L
MKTF-18	10/29/2019	Naphthalene	18	1	1	30	ug/L
MKTF-18	10/29/2019	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-18	10/29/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-18	10/29/2019	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-18	10/29/2019	Phenanthrene	4.4	1	1	170	ug/L
MKTF-18	10/29/2019	Phenol	1.8	1	1	5761	ug/L
MKTF-18	10/29/2019	Pyrene	ND	1	1	117	ug/L
MKTF-18	10/29/2019	Pyridine	ND	1	1	20	ug/L
MKTF-18	2/6/2020	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
MKTF-18	2/6/2020	1,2-Dichlorobenzene	ND	1	1	600	ug/L
MKTF-18	2/6/2020	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	1,4-Dichlorobenzene	ND	1	1	75	ug/L
MKTF-18	2/6/2020	1,4-Dioxane	**11**	1	1	4.59	ug/L
MKTF-18	2/6/2020	1-Methylnaphthalene	**55**	1	1	11.38	ug/L
MKTF-18	2/6/2020	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
MKTF-18	2/6/2020	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
MKTF-18	2/6/2020	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
MKTF-18	2/6/2020	2,4-Dimethylphenol	ND	1	1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/6/2020	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
MKTF-18	2/6/2020	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
MKTF-18	2/6/2020	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
MKTF-18	2/6/2020	2-Chloronaphthalene	ND	1	1	733	ug/L
MKTF-18	2/6/2020	2-Chlorophenol	ND	1	1	91	ug/L
MKTF-18	2/6/2020	2-Methylnaphthalene	8.3	1	1	35.1	ug/L
MKTF-18	2/6/2020	2-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	2-Nitroaniline	ND	1	1	190	ug/L
MKTF-18	2/6/2020	2-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	3,4-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
MKTF-18	2/6/2020	3-Nitroaniline	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
MKTF-18	2/6/2020	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	4-Nitroaniline	ND	1	1	3.8	ug/L
MKTF-18	2/6/2020	4-Nitrophenol	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Acenaphthene	7	1	1	535	ug/L
MKTF-18	2/6/2020	Acenaphthylene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Aniline	ND	1	1	13	ug/L
MKTF-18	2/6/2020	Anthracene	ND	1	1	1721	ug/L
MKTF-18	2/6/2020	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
MKTF-18	2/6/2020	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
MKTF-18	2/6/2020	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
MKTF-18	2/6/2020	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
MKTF-18	2/6/2020	Benzoic Acid	ND	1	1	75000	ug/L
MKTF-18	2/6/2020	Benzyl Alcohol	ND	1	1	2000	ug/L
MKTF-18	2/6/2020	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
MKTF-18	2/6/2020	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
MKTF-18	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
MKTF-18	2/6/2020	Butylbenzylphthalate	ND	1	1	16	ug/L
MKTF-18	2/6/2020	Carbazole	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Chrysene	ND	1	1	34.3	ug/L
MKTF-18	2/6/2020	Di-n-butylphthalate	ND	1	1	885	ug/L
MKTF-18	2/6/2020	Di-n-octylphthalate	ND	1	1	200	ug/L
MKTF-18	2/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-18	2/6/2020	Dibenzofuran	ND	1	1	NA	ug/L
MKTF-18	2/6/2020	Diethylphthalate	ND	1	1	14801	ug/L
MKTF-18	2/6/2020	Dimethylphthalate	ND	1	1	612	ug/L
MKTF-18	2/6/2020	Fluoranthene	ND	1	1	802	ug/L
MKTF-18	2/6/2020	Fluorene	6.8	1	1	288	ug/L
MKTF-18	2/6/2020	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
MKTF-18	2/6/2020	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
MKTF-18	2/6/2020	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
MKTF-18	2/6/2020	Hexachloroethane	ND	1	1	3.28	ug/L
MKTF-18	2/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
MKTF-18	2/6/2020	Isophorone	ND	1	1	781	ug/L
MKTF-18	2/6/2020	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
MKTF-18	2/6/2020	Naphthalene	11	1	1	30	ug/L
MKTF-18	2/6/2020	Nitrobenzene	ND	1	1	1.4	ug/L
MKTF-18	2/6/2020	Pentachlorophenol	ND	1	1	1	ug/L
MKTF-18	2/6/2020	Phenanthrene	2.5	1	1	170	ug/L
MKTF-18	2/6/2020	Phenol	1.9	1	1	5761	ug/L
MKTF-18	2/6/2020	Pyrene	ND	1	1	117	ug/L
MKTF-18	2/6/2020	Pyridine	ND	1	1	20	ug/L
MKTF-18	12/16/2020	Acenaphthene	ND	10.9	0.174	535	ug/L
MKTF-18	12/16/2020	Acenaphthylene	ND	10.9	0.185	NA	ug/L
MKTF-18	12/16/2020	Anthracene	ND	10.9	0.196	1721	ug/L
MKTF-18	12/16/2020	Benzo(a)anthracene	*ND*	*10.9*	0.196	0.12	ug/L
MKTF-18	12/16/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-18	12/16/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.163	0.34	ug/L
MKTF-18	12/16/2020	Benzo(g,h,i)perylene	ND	10.9	0.25	NA	ug/L
MKTF-18	12/16/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.174	3.43	ug/L
MKTF-18	12/16/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.174	59	ug/L
MKTF-18	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.94	0.137	ug/L
MKTF-18	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.44	55.64	ug/L
MKTF-18	12/16/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-18	12/16/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-18	12/16/2020	Carbazole	ND	10.9	0.25	NA	ug/L
MKTF-18	12/16/2020	4-Chloroaniline	*ND*	*10.9*	3.7	0.37	ug/L
MKTF-18	12/16/2020	4-Chloro-3-Methylphenol	ND	10.9	4.13	NA	ug/L
MKTF-18	12/16/2020	2-Chloronaphthalene	ND	10.9	0.152	733	ug/L
MKTF-18	12/16/2020	2-Chlorophenol	ND	10.9	2.39	91	ug/L
MKTF-18	12/16/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-18	12/16/2020	1,3-Dichlorobenzene	ND	10.9	0.196	NA	ug/L
MKTF-18	12/16/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-18	12/16/2020	Dibenzo(a,h)anthracene	ND	10.9	0.261	NA	ug/L
MKTF-18	12/16/2020	1,4-Dichlorobenzene	ND	10.9	0.174	75	ug/L
MKTF-18	12/16/2020	Dibenzofuran	ND	10.9	0.185	NA	ug/L
MKTF-18	12/16/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.83	1.25	ug/L
MKTF-18	12/16/2020	2,4-Dichlorophenol	ND	10.9	3.26	45.3	ug/L
MKTF-18	12/16/2020	Diethylphthalate	ND	10.9	0.261	14801	ug/L
MKTF-18	12/16/2020	2,4-Dimethylphenol	ND	10.9	3.81	354	ug/L
MKTF-18	12/16/2020	Di-n-butylphthalate	ND	10.9	2.94	885	ug/L
MKTF-18	12/16/2020	2,4-Dinitrophenol	ND	32.6	3.7	38.7	ug/L
MKTF-18	12/16/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-18	12/16/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-18	12/16/2020	Fluoranthene	ND	10.9	0.196	802	ug/L
MKTF-18	12/16/2020	Fluorene	ND	10.9	0.196	288	ug/L
MKTF-18	12/16/2020	Hexachlorobenzene	*ND*	*10.9*	0.185	0.0976	ug/L
MKTF-18	12/16/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.83	0.41	ug/L
MKTF-18	12/16/2020	Hexachloroethane	*ND*	*10.9*	4.57	3.28	ug/L
MKTF-18	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.239	0.343	ug/L
MKTF-18	12/16/2020	Isophorone	ND	10.9	0.152	781	ug/L
MKTF-18	12/16/2020	2-Methylphenol	ND	10.9	1.96	NA	ug/L
MKTF-18	12/16/2020	Naphthalene	12.5	10.9	0.185	30	ug/L
MKTF-18	12/16/2020	2-Nitroaniline	ND	10.9	2.39	190	ug/L
MKTF-18	12/16/2020	3-Nitroaniline	ND	10.9	1.96	NA	ug/L
MKTF-18	12/16/2020	4-Nitroaniline	*ND*	*10.9*	1.63	3.8	ug/L
MKTF-18	12/16/2020	Nitrobenzene	*ND*	*10.9*	0.141	1.4	ug/L
MKTF-18	12/16/2020	2-Nitrophenol	ND	10.9	5.66	NA	ug/L
MKTF-18	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.59	0.011	ug/L
MKTF-18	12/16/2020	N-Nitrosodiphenylamine	ND	10.9	0.196	122	ug/L
MKTF-18	12/16/2020	Pentachlorophenol	*ND*	*21.8*	1.52	1	ug/L
MKTF-18	12/16/2020	Phenanthrene	ND	10.9	0.196	170	ug/L
MKTF-18	12/16/2020	Phenol	ND	10.9	2.83	5761	ug/L
MKTF-18	12/16/2020	Pyrene	ND	10.9	0.228	117	ug/L
MKTF-18	12/16/2020	2,4,5-Trichlorophenol	ND	10.9	4.03	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	2,4,6-Trichlorophenol	ND	10.9	3.81	11.9*	ug/L
MKTF-18	12/16/2020	Dimethylphthalate	ND	10.9	0.185	612	ug/L
MKTF-18	12/16/2020	Aniline	ND	10.9	4.13	13	ug/L
MKTF-18	12/16/2020	Benzoic Acid	ND	32.6	7.94	75000	ug/L
MKTF-18	12/16/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-18	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.174	9.81	ug/L
MKTF-18	12/16/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.81	0.0049	ug/L
MKTF-18	12/16/2020	Pyridine	ND	10.9	3.48	20	ug/L
MKTF-18	12/16/2020	1,2,4-Trichlorobenzene	ND	10.9	0.196	70	ug/L
MKTF-18	12/16/2020	1,2-Dichlorobenzene	ND	10.9	0.185	600	ug/L
MKTF-18	12/16/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-18	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.74	1.52	ug/L
MKTF-18	12/16/2020	Di-n-octylphthalate	ND	10.9	0.185	200	ug/L
MKTF-18	12/16/2020	4-Nitrophenol	ND	10.9	2.28	NA	ug/L
MKTF-19	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-19	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	4/9/2014	1-Methylnaphthalene	**160**	10	3.6	11.38	ug/L
MKTF-19	4/9/2014	Naphthalene	**320**	20	4.6	30	ug/L
MKTF-19	4/9/2014	2-Methylnaphthalene	**250**	20	5.3	35.1	ug/L
MKTF-19	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-19	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	4/9/2014	Phenol	12	10	1.6	5761	ug/L
MKTF-19	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-19	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-19	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-19	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	9/24/2014	Carbazole	10	10	2.9	NA	ug/L
MKTF-19	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	9/24/2014	1-Methylnaphthalene	**180**	10	3.6	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/24/2014	Naphthalene	**310**	20	4.6	30	ug/L
MKTF-19	9/24/2014	2-Methylnaphthalene	**290**	20	5.3	35.1	ug/L
MKTF-19	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-19	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	9/24/2014	Phenol	11	10	1.6	5761	ug/L
MKTF-19	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-19	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-19	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-19	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-19	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-19	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-19	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-19	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-19	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-19	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-19	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-19	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-19	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-19	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-19	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-19	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-19	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-19	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-19	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-19	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-19	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-19	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-19	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-19	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-19	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-19	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-19	11/18/2014	Naphthalene	**54**	10	2.3	30	ug/L
MKTF-19	11/18/2014	2-Methylnaphthalene	33	10	2.6	35.1	ug/L
MKTF-19	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-19	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-19	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-19	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-19	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-19	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-19	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-19	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-19	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-19	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-19	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-19	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-19	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-19	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-19	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-19	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	11/18/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-19	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-19	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-19	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-19	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-19	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-19	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-19	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-19	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-19	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-19	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-19	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-19	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-19	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-19	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-19	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-19	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-19	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-19	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-19	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-19	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-19	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-19	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-19	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-19	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-19	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-19	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-19	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-19	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-19	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-19	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-19	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-19	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-19	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-19	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-19	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-19	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-19	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-19	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-19	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-19	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-19	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-19	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-19	3/12/2015	1-Methylnaphthalene	**170**	10	3.8	11.38	ug/L
MKTF-19	3/12/2015	Naphthalene	**340**	50	9.2	30	ug/L
MKTF-19	3/12/2015	2-Methylnaphthalene	**270**	50	11	35.1	ug/L
MKTF-19	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-19	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-19	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-19	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-19	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-19	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-19	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-19	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-19	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-19	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-19	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-19	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-19	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-19	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-19	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-19	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-19	3/12/2015	Phenol	15	10	4.2	5761	ug/L
MKTF-19	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-19	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-19	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-19	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-19	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-19	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-19	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-19	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-19	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-19	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-19	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-19	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-19	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-19	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-19	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-19	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-19	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-19	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-19	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-19	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-19	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-19	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-19	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-19	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-19	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-19	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-19	6/8/2015	Naphthalene	**310**	50	9.2	30	ug/L
MKTF-19	6/8/2015	2-Methylnaphthalene	**210**	10	2.2	35.1	ug/L
MKTF-19	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	6/8/2015	Phenol	13	10	1.1	5761	ug/L
MKTF-19	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-19	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	8/18/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-19	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	1-Methylnaphthalene	**180**	10	1.8	11.38	ug/L
MKTF-19	8/18/2015	Naphthalene	**400**	40	7.3	30	ug/L
MKTF-19	8/18/2015	2-Methylnaphthalene	**300**	40	9	35.1	ug/L
MKTF-19	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-19	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-19	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-19	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-19	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-19	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-19	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-19	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-19	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-19	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-19	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-19	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-19	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-19	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-19	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-19	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-19	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-19	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-19	11/3/2015	Carbazole	10	10	1.5	NA	ug/L
MKTF-19	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-19	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-19	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-19	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-19	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	1-Methylnaphthalene	**160**	10	1.8	11.38	ug/L
MKTF-19	11/3/2015	Naphthalene	**370**	50	9.2	30	ug/L
MKTF-19	11/3/2015	2-Methylnaphthalene	**290**	50	11	35.1	ug/L
MKTF-19	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-19	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-19	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-19	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-19	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-19	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-19	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-19	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-19	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-19	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-19	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-19	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-19	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-19	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-19	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-19	11/3/2015	Phenol	21	10	1.1	5761	ug/L
MKTF-19	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-19	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-19	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-19	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-19	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-19	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-19	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-19	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-19	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-19	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-19	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-19	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-19	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-19	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-19	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-19	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-19	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-19	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-19	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-19	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-19	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-19	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-19	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-19	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-19	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-19	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-19	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-19	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-19	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-19	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-19	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-19	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-19	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-19	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-19	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-19	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-19	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-19	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-19	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-19	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-19	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-19	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-19	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-19	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-19	2/25/2016	Carbazole	10	10	7.2	NA	ug/L
MKTF-19	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-19	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-19	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-19	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-19	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-19	2/25/2016	1-Methylnaphthalene	**150**	10	6.8	11.38	ug/L
MKTF-19	2/25/2016	Naphthalene	**350**	100	59	30	ug/L
MKTF-19	2/25/2016	2-Methylnaphthalene	**240**	10	7	35.1	ug/L
MKTF-19	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-19	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-19	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-19	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-19	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-19	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-19	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-19	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-19	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-19	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-19	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-19	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-19	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-19	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-19	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-19	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-19	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-19	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-19	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-19	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-19	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-19	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-19	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-19	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-19	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-19	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-19	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-19	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-19	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-19	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-19	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-19	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-19	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-19	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-19	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-19	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-19	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-19	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-19	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-19	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-19	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-19	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-19	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	6/10/2016	Acenaphthene	5.8	10	2.6	535	ug/L
MKTF-19	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	6/10/2016	Phenanthrene	4.6	10	2.6	170	ug/L
MKTF-19	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	6/10/2016	Fluorene	4.4	10	2.7	288	ug/L
MKTF-19	6/10/2016	Carbazole	7.2	10	2.3	NA	ug/L
MKTF-19	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	6/10/2016	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-19	6/10/2016	Naphthalene	**240**	20	5.2	30	ug/L
MKTF-19	6/10/2016	2-Methylnaphthalene	**160**	10	2.9	35.1	ug/L
MKTF-19	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-19	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	6/10/2016	Phenol	7	10	2	5761	ug/L
MKTF-19	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	6/10/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-19	6/10/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-19	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	9/13/2016	Acenaphthene	4.8	10	2.6	535	ug/L
MKTF-19	9/13/2016	Diethylphthalate	5.9	10	2.7	14801	ug/L
MKTF-19	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	9/13/2016	Phenanthrene	4.3	10	2.6	170	ug/L
MKTF-19	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	9/13/2016	Fluorene	6.9	10	2.7	288	ug/L
MKTF-19	9/13/2016	Carbazole	5.2	10	2.3	NA	ug/L
MKTF-19	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	9/13/2016	1-Methylnaphthalene	**110**	10	2.9	11.38	ug/L
MKTF-19	9/13/2016	Naphthalene	**240**	10	2.6	30	ug/L
MKTF-19	9/13/2016	2-Methylnaphthalene	**140**	10	2.9	35.1	ug/L
MKTF-19	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	9/13/2016	2,4-Dimethylphenol	4.3	10	3	354	ug/L
MKTF-19	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	9/13/2016	Phenol	6.2	10	2	5761	ug/L
MKTF-19	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-19	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-19	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-19	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	11/8/2016	Acenaphthene	5	10	2.6	535	ug/L
MKTF-19	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	11/8/2016	Phenanthrene	5.5	10	2.6	170	ug/L
MKTF-19	11/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	11/8/2016	Fluorene	7.3	10	2.7	288	ug/L
MKTF-19	11/8/2016	Carbazole	6	10	2.3	NA	ug/L
MKTF-19	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	11/8/2016	1-Methylnaphthalene	**120**	10	2.9	11.38	ug/L
MKTF-19	11/8/2016	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-19	11/8/2016	2-Methylnaphthalene	**180**	10	2.9	35.1	ug/L
MKTF-19	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	11/8/2016	2,4-Dimethylphenol	5.6	10	3	354	ug/L
MKTF-19	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	11/8/2016	Phenol	6.6	10	2	5761	ug/L
MKTF-19	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	11/8/2016	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-19	11/8/2016	Di-n-octylphthalate	8	10	2	200	ug/L
MKTF-19	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	11/8/2016	Pyrene	4.4	10	3.1	117	ug/L
MKTF-19	11/8/2016	Dimethylphthalate	3.5	10	2.4	612	ug/L
MKTF-19	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-19	3/15/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-19	3/15/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-19	3/15/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-19	3/15/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-19	3/15/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-19	3/15/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-19	3/15/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-19	3/15/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-19	3/15/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-19	3/15/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-19	3/15/2017	Acenaphthene	3.6	10	2.6	535	ug/L
MKTF-19	3/15/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-19	3/15/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-19	3/15/2017	Phenanthrene	3.1	10	2.6	170	ug/L
MKTF-19	3/15/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-19	3/15/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-19	3/15/2017	Fluorene	3.9	10	2.7	288	ug/L
MKTF-19	3/15/2017	Carbazole	4.6	10	2.3	NA	ug/L
MKTF-19	3/15/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-19	3/15/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-19	3/15/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-19	3/15/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-19	3/15/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-19	3/15/2017	1-Methylnaphthalene	**88**	10	2.9	11.38	ug/L
MKTF-19	3/15/2017	Naphthalene	**210**	10	2.6	30	ug/L
MKTF-19	3/15/2017	2-Methylnaphthalene	**120**	10	2.9	35.1	ug/L
MKTF-19	3/15/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-19	3/15/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-19	3/15/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-19	3/15/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-19	3/15/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-19	3/15/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-19	3/15/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-19	3/15/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-19	3/15/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-19	3/15/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-19	3/15/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-19	3/15/2017	2,4-Dimethylphenol	5.2	10	3	354	ug/L
MKTF-19	3/15/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-19	3/15/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-19	3/15/2017	Phenol	7.9	10	2	5761	ug/L
MKTF-19	3/15/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-19	3/15/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-19	3/15/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-19	3/15/2017	Bis(2-ethylhexyl)phthalate	7.3	10	2.6	55.64	ug/L
MKTF-19	3/15/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-19	3/15/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-19	3/15/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-19	3/15/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-19	3/15/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-19	3/15/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-19	3/15/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-19	3/15/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-19	3/15/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-19	3/15/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-19	3/15/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-19	3/15/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-19	3/15/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-19	3/15/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-19	3/15/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-19	3/15/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-19	3/15/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-19	3/15/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-19	3/15/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-19	3/15/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-19	3/15/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-19	3/15/2017	3,4-Methylphenol	2.4	10	2.3	NA	ug/L
MKTF-19	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	6/14/2017	Acenaphthene	4.2	10	3.6	535	ug/L
MKTF-19	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	6/14/2017	Phenanthrene	5.5	10	4.3	170	ug/L
MKTF-19	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	6/14/2017	Fluorene	4.5	10	4	288	ug/L
MKTF-19	6/14/2017	Carbazole	6.2	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	6/14/2017	1-Methylnaphthalene	**110**	10	3.3	11.38	ug/L
MKTF-19	6/14/2017	Naphthalene	**280**	20	5.7	30	ug/L
MKTF-19	6/14/2017	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-19	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	6/14/2017	2,4-Dimethylphenol	6	10	2.8	354	ug/L
MKTF-19	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	6/14/2017	Phenol	15	10	3.1	5761	ug/L
MKTF-19	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	6/14/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
MKTF-19	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	9/26/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-19	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	9/26/2017	Fluorene	4.3	10	4	288	ug/L
MKTF-19	9/26/2017	Carbazole	5.5	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	9/26/2017	1-Methylnaphthalene	**100**	10	3.3	11.38	ug/L
MKTF-19	9/26/2017	Naphthalene	**210**	10	2.9	30	ug/L
MKTF-19	9/26/2017	2-Methylnaphthalene	**160**	10	3.3	35.1	ug/L
MKTF-19	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	9/26/2017	2,4-Dimethylphenol	3	10	2.8	354	ug/L
MKTF-19	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	9/26/2017	Phenol	9.1	10	3.1	5761	ug/L
MKTF-19	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	9/26/2017	Bis(2-ethylhexyl)phthalate	9.7	10	4.8	55.64	ug/L
MKTF-19	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-19	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	12/1/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-19	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-19	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-19	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	12/1/2017	1-Methylnaphthalene	**18**	10	3.3	11.38	ug/L
MKTF-19	12/1/2017	Naphthalene	**34**	10	2.9	30	ug/L
MKTF-19	12/1/2017	2-Methylnaphthalene	27	10	3.3	35.1	ug/L
MKTF-19	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-19	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-19	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-19	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-19	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-19	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-19	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-19	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-19	2/16/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-19	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-19	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-19	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-19	2/16/2018	Acenaphthene	4.9	10	3.6	535	ug/L
MKTF-19	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-19	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-19	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-19	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-19	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-19	2/16/2018	Fluorene	6.5	10	4	288	ug/L
MKTF-19	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-19	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-19	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-19	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-19	2/16/2018	1-Methylnaphthalene	**120**	10	3.3	11.38	ug/L
MKTF-19	2/16/2018	Naphthalene	**310**	50	14	30	ug/L
MKTF-19	2/16/2018	2-Methylnaphthalene	**220**	10	3.3	35.1	ug/L
MKTF-19	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-19	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-19	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-19	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-19	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-19	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-19	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-19	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-19	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-19	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-19	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-19	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-19	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-19	2/16/2018	2,4-Dimethylphenol	4.1	10	2.8	354	ug/L
MKTF-19	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-19	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-19	2/16/2018	Phenol	14	10	3.1	5761	ug/L
MKTF-19	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-19	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-19	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-19	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-19	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-19	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-19	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-19	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-19	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-19	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-19	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-19	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-19	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-19	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-19	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-19	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-19	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-19	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-19	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-19	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-19	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-19	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-19	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-19	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-19	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-19	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-19	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-19	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	5/4/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-19	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	5/4/2018	1-Methylnaphthalene	**91**	10	7	11.38	ug/L
MKTF-19	5/4/2018	Naphthalene	**240**	20	10	30	ug/L
MKTF-19	5/4/2018	2-Methylnaphthalene	**170**	10	6.3	35.1	ug/L
MKTF-19	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-19	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-19	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	5/4/2018	Phenol	13	10	6	5761	ug/L
MKTF-19	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	8/24/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	8/24/2018	Carbazole	7.8	10	6.3	NA	ug/L
MKTF-19	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	8/24/2018	1-Methylnaphthalene	**140**	10	7	11.38	ug/L
MKTF-19	8/24/2018	Naphthalene	**310**	20	10	30	ug/L
MKTF-19	8/24/2018	2-Methylnaphthalene	**230**	10	6.3	35.1	ug/L
MKTF-19	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-19	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	8/24/2018	2,4-Dimethylphenol	7.4	10	5.9	354	ug/L
MKTF-19	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	8/24/2018	Phenol	15	10	6	5761	ug/L
MKTF-19	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-19	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-19	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-19	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-19	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-19	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-19	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-19	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-19	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-19	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-19	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-19	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-19	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-19	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-19	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-19	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-19	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-19	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-19	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-19	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-19	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-19	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-19	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-19	11/28/2018	1-Methylnaphthalene	**120**	10	7	11.38	ug/L
MKTF-19	11/28/2018	Naphthalene	**400**	100	50	30	ug/L
MKTF-19	11/28/2018	2-Methylnaphthalene	**210**	10	6.3	35.1	ug/L
MKTF-19	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-19	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-19	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-19	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-19	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-19	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-19	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-19	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-19	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-19	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-19	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-19	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-19	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-19	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-19	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-19	11/28/2018	Phenol	11	10	6	5761	ug/L
MKTF-19	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-19	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-19	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-19	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-19	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-19	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-19	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-19	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-19	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-19	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-19	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-19	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-19	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-19	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-19	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-19	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-19	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-19	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-19	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-19	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-19	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-19	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-19	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-19	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-19	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-19	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-19	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-19	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	5/9/2019	1-Methylnaphthalene	**150**	10	3.069076	11.38	ug/L
MKTF-19	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	5/9/2019	2-Methylnaphthalene	**230**	10	3.018863	35.1	ug/L
MKTF-19	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-19	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-19	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-19	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-19	5/9/2019	Acenaphthene	5.7	10	2.955891	535	ug/L
MKTF-19	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-19	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-19	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-19	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-19	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	5/9/2019	Bis(2-ethylhexyl)phthalate	4.9	10	4.302128	55.64	ug/L
MKTF-19	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	5/9/2019	Carbazole	10	10	2.890507	NA	ug/L
MKTF-19	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-19	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-19	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	5/9/2019	Fluorene	8.8	10	2.888488	288	ug/L
MKTF-19	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	5/9/2019	Naphthalene	**320**	50	20.61105	30	ug/L
MKTF-19	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Phenanthrene	5.5	10	2.777122	170	ug/L
MKTF-19	5/9/2019	Phenol	11	10	8.036586	5761	ug/L
MKTF-19	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-19	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**310**	100	30.188629	35.1	ug/L
MKTF-19	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-19	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-19	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-19	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-19	8/19/2019	Acenaphthene	5.5	10	2.955891	535	ug/L
MKTF-19	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-19	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-19	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-19	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-19	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-19	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	8/19/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-19	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	8/19/2019	Diethylphthalate	5.7	10	2.872488	14801	ug/L
MKTF-19	8/19/2019	Dimethylphthalate	3.5	10	3.238016	612	ug/L
MKTF-19	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	8/19/2019	Fluorene	7.3	10	2.888488	288	ug/L
MKTF-19	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	8/19/2019	Naphthalene	**440**	100	41.222099	30	ug/L
MKTF-19	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-19	8/19/2019	Phenanthrene	6.6	10	2.777122	170	ug/L
MKTF-19	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-19	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-19	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-19	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-19	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-19	8/19/2019	1-Methylnaphthalene	**160**	10	3.069076	11.38	ug/L
MKTF-19	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-19	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-19	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-19	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-19	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-19	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-19	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-19	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-19	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-19	8/19/2019	2-Methylnaphthalene	**320**	100	30.188629	35.1	ug/L
MKTF-19	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-19	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-19	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-19	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-19	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-19	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-19	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-19	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-19	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-19	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
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MKTF-19	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-19	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-19	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-19	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-19	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-19	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-19	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-19	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-19	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-19	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-19	8/19/2019	Carbazole	11	10	2.890507	NA	ug/L
MKTF-19	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-19	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-19	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-19	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-19	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-19	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-19	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-19	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-19	8/19/2019	Fluorene	7.1	10	2.888488	288	ug/L
MKTF-19	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-19	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-19	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-19	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-19	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-19	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-19	8/19/2019	Naphthalene	**450**	100	41.222099	30	ug/L
MKTF-19	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-19	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-19	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-19	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-19	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-19	8/19/2019	Phenanthrene	5.9	10	2.777122	170	ug/L
MKTF-19	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-19	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-19	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-19	10/29/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-19	10/29/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-19	10/29/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-19	10/29/2019	1,4-Dioxane	**43**	10	10	4.59	ug/L
MKTF-19	10/29/2019	1-Methylnaphthalene	**150**	5	5	11.38	ug/L
MKTF-19	10/29/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-19	10/29/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-19	10/29/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-19	10/29/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-19	10/29/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-19	10/29/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-19	10/29/2019	2,6-Dinitrotoluene	*ND*	*4*	4	0.485	ug/L
MKTF-19	10/29/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-19	10/29/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-19	10/29/2019	2-Methylnaphthalene	**230**	5	5	35.1	ug/L
MKTF-19	10/29/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-19	10/29/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-19	10/29/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-19	10/29/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-19	10/29/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-19	10/29/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Aniline	ND	5	5	13	ug/L
MKTF-19	10/29/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-19	10/29/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-19	10/29/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-19	10/29/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-19	10/29/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-19	10/29/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-19	10/29/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-19	10/29/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-19	10/29/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-19	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-19	10/29/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-19	10/29/2019	Carbazole	8.6	5	5	NA	ug/L
MKTF-19	10/29/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-19	10/29/2019	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MKTF-19	10/29/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-19	10/29/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-19	10/29/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-19	10/29/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-19	10/29/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-19	10/29/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-19	10/29/2019	Fluorene	6.7	5	5	288	ug/L
MKTF-19	10/29/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-19	10/29/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-19	10/29/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-19	10/29/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-19	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-19	10/29/2019	Isophorone	ND	5	5	781	ug/L
MKTF-19	10/29/2019	Naphthalene	8	5	5	30	ug/L
MKTF-19	10/29/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-19	10/29/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-19	10/29/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-19	10/29/2019	Phenanthrene	5.8	5	5	170	ug/L
MKTF-19	10/29/2019	Phenol	27	5	5	5761	ug/L
MKTF-19	10/29/2019	Pyrene	ND	5	5	117	ug/L
MKTF-19	10/29/2019	Pyridine	ND	5	5	20	ug/L
MKTF-20	4/11/2014	Benzo(a)pyrene	*ND*	*13*	4.3	0.2	ug/L
MKTF-20	4/11/2014	2,4-Dinitrophenol	ND	26	4.2	38.7	ug/L
MKTF-20	4/11/2014	Dibenzo(a,h)anthracene	ND	13	4	NA	ug/L
MKTF-20	4/11/2014	Benzo(a)anthracene	*ND*	*13*	4.1	0.12	ug/L
MKTF-20	4/11/2014	4-Chloro-3-Methylphenol	ND	13	4.8	NA	ug/L
MKTF-20	4/11/2014	Aniline	**22**	13	3.2	13	ug/L
MKTF-20	4/11/2014	N-Nitrosodimethylamine	*ND*	*13*	3.2	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	4/11/2014	Benzoic Acid	ND	26	2.9	75000	ug/L
MKTF-20	4/11/2014	Hexachloroethane	*ND*	*13*	2.5	3.28	ug/L
MKTF-20	4/11/2014	Hexachlorocyclopentadiene	*ND*	*13*	4	0.41	ug/L
MKTF-20	4/11/2014	Isophorone	ND	13	4.1	781	ug/L
MKTF-20	4/11/2014	Acenaphthene	ND	13	3.8	535	ug/L
MKTF-20	4/11/2014	Diethylphthalate	ND	13	5.5	14801	ug/L
MKTF-20	4/11/2014	Di-n-butylphthalate	ND	13	4.7	885	ug/L
MKTF-20	4/11/2014	Phenanthrene	ND	13	3.3	170	ug/L
MKTF-20	4/11/2014	Butylbenzylphthalate	ND	13	4.1	16	ug/L
MKTF-20	4/11/2014	N-Nitrosodiphenylamine	ND	13	3.8	122	ug/L
MKTF-20	4/11/2014	Fluorene	ND	13	3.9	288	ug/L
MKTF-20	4/11/2014	Carbazole	ND	13	3.8	NA	ug/L
MKTF-20	4/11/2014	Hexachlorobutadiene	*ND*	*13*	4	0.14	ug/L
MKTF-20	4/11/2014	Pentachlorophenol	*ND*	*26*	3.3	1	ug/L
MKTF-20	4/11/2014	2,4,6-Trichlorophenol	ND	13	2.4	11.9*	ug/L
MKTF-20	4/11/2014	2-Nitroaniline	ND	13	3.7	190	ug/L
MKTF-20	4/11/2014	2-Nitrophenol	ND	13	4.1	NA	ug/L
MKTF-20	4/11/2014	1-Methylnaphthalene	**88**	13	4.8	11.38	ug/L
MKTF-20	4/11/2014	Naphthalene	**250**	13	3.1	30	ug/L
MKTF-20	4/11/2014	2-Methylnaphthalene	**120**	13	3.5	35.1	ug/L
MKTF-20	4/11/2014	2-Chloronaphthalene	ND	13	4	733	ug/L
MKTF-20	4/11/2014	3,3-Dichlorobenzidine	*ND*	*13*	3.1	1.25	ug/L
MKTF-20	4/11/2014	2-Methylphenol	120	26	3.6	NA	ug/L
MKTF-20	4/11/2014	1,2-Dichlorobenzene	ND	13	2.2	600	ug/L
MKTF-20	4/11/2014	2-Chlorophenol	ND	13	2.3	91	ug/L
MKTF-20	4/11/2014	2,4,5-Trichlorophenol	ND	13	4.3	1166	ug/L
MKTF-20	4/11/2014	Nitrobenzene	*ND*	*13*	3.4	1.4	ug/L
MKTF-20	4/11/2014	3-Nitroaniline	ND	13	4.7	NA	ug/L
MKTF-20	4/11/2014	4-Nitroaniline	*ND*	*13*	5.4	3.8	ug/L
MKTF-20	4/11/2014	4-Nitrophenol	ND	13	5.7	NA	ug/L
MKTF-20	4/11/2014	Benzyl Alcohol	ND	13	2.4	2000	ug/L
MKTF-20	4/11/2014	4-Bromophenyl-phenylether	ND	13	3.9	NA	ug/L
MKTF-20	4/11/2014	Azobenzene	*ND*	*13*	3.3	0.12	ug/L
MKTF-20	4/11/2014	2,4-Dimethylphenol	130	13	4.1	354	ug/L
MKTF-20	4/11/2014	1,4-Dichlorobenzene	ND	13	3.2	75	ug/L
MKTF-20	4/11/2014	4-Chloroaniline	*ND*	*13*	3.4	0.37	ug/L
MKTF-20	4/11/2014	Phenol	ND	13	2.1	5761	ug/L
MKTF-20	4/11/2014	Pyridine	ND	13	2.1	20	ug/L
MKTF-20	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*13*	2.3	0.137	ug/L
MKTF-20	4/11/2014	Bis(2-chloroethoxy)methane	ND	13	3.7	59	ug/L
MKTF-20	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	13	3.9	55.64	ug/L
MKTF-20	4/11/2014	Di-n-octylphthalate	ND	13	3.6	200	ug/L
MKTF-20	4/11/2014	Hexachlorobenzene	*ND*	*13*	4.2	0.0976	ug/L
MKTF-20	4/11/2014	Anthracene	ND	13	3.3	1721	ug/L
MKTF-20	4/11/2014	1,2,4-Trichlorobenzene	ND	13	3.6	70	ug/L
MKTF-20	4/11/2014	2,4-Dichlorophenol	ND	26	3.9	45.3	ug/L
MKTF-20	4/11/2014	2,4-Dinitrotoluene	ND	13	5.9	45.3	ug/L
MKTF-20	4/11/2014	Pyrene	ND	13	5.3	117	ug/L
MKTF-20	4/11/2014	Dimethylphthalate	ND	13	4.8	612	ug/L
MKTF-20	4/11/2014	Dibenzofuran	ND	13	4.9	NA	ug/L
MKTF-20	4/11/2014	Benzo(g,h,i)perylene	ND	13	4.4	NA	ug/L
MKTF-20	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*13*	4.5	0.343	ug/L
MKTF-20	4/11/2014	Benzo(b)fluoranthene	*ND*	*13*	5.4	0.34	ug/L
MKTF-20	4/11/2014	Fluoranthene	ND	13	3.9	802	ug/L
MKTF-20	4/11/2014	Benzo(k)fluoranthene	*ND*	*13*	4.6	3.43	ug/L
MKTF-20	4/11/2014	Acenaphthylene	ND	13	3.2	NA	ug/L
MKTF-20	4/11/2014	Chrysene	ND	13	3.8	34.3	ug/L
MKTF-20	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*26*	3.1	1.52	ug/L
MKTF-20	4/11/2014	1,3-Dichlorobenzene	ND	13	2.3	NA	ug/L
MKTF-20	4/11/2014	2,6-Dinitrotoluene	*ND*	*13*	4.5	0.485	ug/L
MKTF-20	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*13*	2.6	0.011	ug/L
MKTF-20	4/11/2014	4-Chlorophenyl-phenylether	ND	13	4.6	NA	ug/L
MKTF-20	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*13*	3.2	9.81	ug/L
MKTF-20	4/11/2014	3,4-Methylphenol	76	13	2.4	NA	ug/L
MKTF-20	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-20	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-20	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-20	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-20	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-20	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-20	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-20	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-20	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-20	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-20	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-20	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-20	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-20	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-20	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-20	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-20	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-20	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-20	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-20	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-20	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-20	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-20	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-20	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-20	11/18/2014	1-Methylnaphthalene	**110**	10	3.6	11.38	ug/L
MKTF-20	11/18/2014	Naphthalene	**100**	10	2.3	30	ug/L
MKTF-20	11/18/2014	2-Methylnaphthalene	**66**	10	2.6	35.1	ug/L
MKTF-20	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-20	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-20	11/18/2014	2-Methylphenol	120	10	2.8	NA	ug/L
MKTF-20	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-20	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-20	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-20	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-20	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-20	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-20	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-20	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-20	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-20	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	11/18/2014	2,4-Dimethylphenol	**610**	100	31	354	ug/L
MKTF-20	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-20	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-20	11/18/2014	Phenol	37	10	1.6	5761	ug/L
MKTF-20	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-20	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-20	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-20	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-20	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-20	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-20	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-20	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-20	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-20	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-20	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-20	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-20	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-20	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-20	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-20	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-20	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-20	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-20	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-20	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-20	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-20	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-20	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-20	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-20	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-20	11/18/2014	3,4-Methylphenol	51	10	1.8	NA	ug/L
MKTF-20	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-20	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-20	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-20	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-20	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-20	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-20	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-20	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-20	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-20	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-20	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-20	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-20	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-20	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-20	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-20	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-20	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-20	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-20	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-20	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-20	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-20	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-20	3/16/2015	1-Methylnaphthalene	**45**	10	1.8	11.38	ug/L
MKTF-20	3/16/2015	Naphthalene	**130**	10	1.8	30	ug/L
MKTF-20	3/16/2015	2-Methylnaphthalene	**37**	10	2.2	35.1	ug/L
MKTF-20	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-20	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-20	3/16/2015	2-Methylphenol	210	10	1.2	NA	ug/L
MKTF-20	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-20	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-20	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-20	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-20	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-20	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-20	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-20	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-20	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-20	3/16/2015	2,4-Dimethylphenol	320	20	3.7	354	ug/L
MKTF-20	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-20	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-20	3/16/2015	Phenol	210	10	1.1	5761	ug/L
MKTF-20	3/16/2015	Pyridine	16	10	1.7	20	ug/L
MKTF-20	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-20	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-20	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-20	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-20	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-20	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-20	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-20	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-20	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-20	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-20	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-20	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-20	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-20	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-20	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-20	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-20	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-20	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-20	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-20	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-20	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-20	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-20	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-20	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-20	3/16/2015	3,4-Methylphenol	360	20	3	NA	ug/L
MKTF-20	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-20	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-20	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-20	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-20	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-20	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-20	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-20	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-20	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-20	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-20	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-20	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-20	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-20	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-20	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-20	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-20	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-20	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-20	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-20	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-20	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-20	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-20	6/8/2015	1-Methylnaphthalene	**37**	10	1.8	11.38	ug/L
MKTF-20	6/8/2015	Naphthalene	**56**	10	1.8	30	ug/L
MKTF-20	6/8/2015	2-Methylnaphthalene	**36**	10	2.2	35.1	ug/L
MKTF-20	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-20	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-20	6/8/2015	2-Methylphenol	49	10	1.2	NA	ug/L
MKTF-20	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-20	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-20	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-20	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-20	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-20	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-20	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-20	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-20	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-20	6/8/2015	2,4-Dimethylphenol	230	10	1.9	354	ug/L
MKTF-20	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-20	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-20	6/8/2015	Phenol	50	10	1.1	5761	ug/L
MKTF-20	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-20	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-20	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-20	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-20	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-20	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-20	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-20	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-20	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-20	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-20	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-20	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-20	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-20	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-20	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-20	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-20	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-20	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-20	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-20	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-20	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-20	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-20	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-20	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-20	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-20	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-20	6/8/2015	3,4-Methylphenol	130	10	1.5	NA	ug/L
MKTF-20	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-20	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-20	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-20	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-20	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-20	3/1/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-20	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-20	3/1/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-20	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-20	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-20	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-20	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-20	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-20	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-20	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-20	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-20	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-20	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-20	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-20	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-20	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-20	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-20	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-20	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-20	3/1/2016	1-Methylnaphthalene	**36**	10	6.8	11.38	ug/L
MKTF-20	3/1/2016	Naphthalene	**50**	10	5.9	30	ug/L
MKTF-20	3/1/2016	2-Methylnaphthalene	23	10	7	35.1	ug/L
MKTF-20	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-20	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-20	3/1/2016	2-Methylphenol	96	10	8.2	NA	ug/L
MKTF-20	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-20	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-20	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-20	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-20	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-20	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-20	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-20	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-20	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-20	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-20	3/1/2016	2,4-Dimethylphenol	280	50	23	354	ug/L
MKTF-20	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-20	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-20	3/1/2016	Phenol	11	10	5.1	5761	ug/L
MKTF-20	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-20	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-20	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-20	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-20	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-20	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-20	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-20	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-20	3/1/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-20	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-20	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-20	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-20	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-20	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-20	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-20	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-20	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-20	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-20	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-20	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-20	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-20	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-20	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-20	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-20	3/1/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-20	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-20	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-20	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-20	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-20	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-20	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	1-Methylnaphthalene	**51**	50	15	11.38	ug/L
MKTF-20	6/9/2016	Naphthalene	**77**	50	13	30	ug/L
MKTF-20	6/9/2016	2-Methylnaphthalene	*29*	*50*	14	35.1	ug/L
MKTF-20	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	6/9/2016	2-Methylphenol	250	50	13	NA	ug/L
MKTF-20	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	6/9/2016	2,4-Dimethylphenol	230	50	15	354	ug/L
MKTF-20	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	6/9/2016	Phenol	240	50	9.9	5761	ug/L
MKTF-20	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	6/9/2016	Bis(2-ethylhexyl)phthalate	18	50	13	55.64	ug/L
MKTF-20	6/9/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-20	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-20	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-20	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-20	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	6/9/2016	3,4-Methylphenol	280	50	11	NA	ug/L
MKTF-20	9/12/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-20	9/12/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-20	9/12/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-20	9/12/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-20	9/12/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-20	9/12/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-20	9/12/2016	Benzoic Acid	130	200	26	75000	ug/L
MKTF-20	9/12/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-20	9/12/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-20	9/12/2016	Isophorone	ND	100	26	781	ug/L
MKTF-20	9/12/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-20	9/12/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-20	9/12/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-20	9/12/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-20	9/12/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-20	9/12/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-20	9/12/2016	Fluorene	ND	100	27	288	ug/L
MKTF-20	9/12/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-20	9/12/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-20	9/12/2016	Pentachlorophenol	**25**	200	23	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-20	9/12/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-20	9/12/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-20	9/12/2016	1-Methylnaphthalene	**48**	100	29	11.38	ug/L
MKTF-20	9/12/2016	Naphthalene	**110**	100	26	30	ug/L
MKTF-20	9/12/2016	2-Methylnaphthalene	**43**	100	29	35.1	ug/L
MKTF-20	9/12/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-20	9/12/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-20	9/12/2016	2-Methylphenol	190	100	25	NA	ug/L
MKTF-20	9/12/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-20	9/12/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-20	9/12/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-20	9/12/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-20	9/12/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-20	9/12/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-20	9/12/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-20	9/12/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-20	9/12/2016	2,4-Dimethylphenol	**390**	100	30	354	ug/L
MKTF-20	9/12/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-20	9/12/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-20	9/12/2016	Phenol	61	100	20	5761	ug/L
MKTF-20	9/12/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-20	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-20	9/12/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-20	9/12/2016	Bis(2-ethylhexyl)phthalate	*36*	*100*	26	55.64	ug/L
MKTF-20	9/12/2016	Di-n-octylphthalate	38	100	20	200	ug/L
MKTF-20	9/12/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-20	9/12/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-20	9/12/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-20	9/12/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-20	9/12/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-20	9/12/2016	Pyrene	ND	100	31	117	ug/L
MKTF-20	9/12/2016	Dimethylphthalate	29	100	24	612	ug/L
MKTF-20	9/12/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-20	9/12/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-20	9/12/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-20	9/12/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-20	9/12/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-20	9/12/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-20	9/12/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-20	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-20	9/12/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-20	9/12/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-20	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-20	9/12/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-20	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-20	9/12/2016	3,4-Methylphenol	61	100	23	NA	ug/L
MKTF-20	11/3/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	11/3/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	11/3/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	11/3/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	11/3/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	11/3/2016	Benzoic Acid	61	100	13	75000	ug/L
MKTF-20	11/3/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	11/3/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	11/3/2016	Isophorone	ND	50	13	781	ug/L
MKTF-20	11/3/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	11/3/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	11/3/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	11/3/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	11/3/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-20	11/3/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	11/3/2016	Fluorene	ND	50	14	288	ug/L
MKTF-20	11/3/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-20	11/3/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	11/3/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	11/3/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	11/3/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	11/3/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	1-Methylnaphthalene	**50**	50	15	11.38	ug/L
MKTF-20	11/3/2016	Naphthalene	**110**	50	13	30	ug/L
MKTF-20	11/3/2016	2-Methylnaphthalene	**38**	50	14	35.1	ug/L
MKTF-20	11/3/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	11/3/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	11/3/2016	2-Methylphenol	160	50	13	NA	ug/L
MKTF-20	11/3/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	11/3/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	11/3/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	11/3/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	11/3/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	11/3/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	11/3/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	11/3/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	11/3/2016	2,4-Dimethylphenol	**430**	50	15	354	ug/L
MKTF-20	11/3/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	11/3/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	11/3/2016	Phenol	130	50	9.9	5761	ug/L
MKTF-20	11/3/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	11/3/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	11/3/2016	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-20	11/3/2016	Di-n-octylphthalate	36	50	9.9	200	ug/L
MKTF-20	11/3/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	11/3/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-20	11/3/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	11/3/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	11/3/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	11/3/2016	Pyrene	ND	50	15	117	ug/L
MKTF-20	11/3/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	11/3/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	11/3/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	11/3/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	11/3/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	11/3/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	11/3/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	11/3/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	11/3/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	11/3/2016	3,4-Methylphenol	89	50	11	NA	ug/L
MKTF-20	3/14/2017	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-20	3/14/2017	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-20	3/14/2017	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-20	3/14/2017	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Aniline	*ND*	*50*	12	13	ug/L
MKTF-20	3/14/2017	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-20	3/14/2017	Benzoic Acid	67	100	13	75000	ug/L
MKTF-20	3/14/2017	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-20	3/14/2017	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-20	3/14/2017	Isophorone	ND	50	13	781	ug/L
MKTF-20	3/14/2017	Acenaphthene	ND	50	13	535	ug/L
MKTF-20	3/14/2017	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-20	3/14/2017	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-20	3/14/2017	Phenanthrene	ND	50	13	170	ug/L
MKTF-20	3/14/2017	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-20	3/14/2017	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-20	3/14/2017	Fluorene	ND	50	14	288	ug/L
MKTF-20	3/14/2017	Carbazole	ND	50	11	NA	ug/L
MKTF-20	3/14/2017	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-20	3/14/2017	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-20	3/14/2017	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-20	3/14/2017	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-20	3/14/2017	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	1-Methylnaphthalene	**29**	50	15	11.38	ug/L
MKTF-20	3/14/2017	Naphthalene	**72**	50	13	30	ug/L
MKTF-20	3/14/2017	2-Methylnaphthalene	*28*	*50*	14	35.1	ug/L
MKTF-20	3/14/2017	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-20	3/14/2017	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-20	3/14/2017	2-Methylphenol	340	50	13	NA	ug/L
MKTF-20	3/14/2017	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-20	3/14/2017	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-20	3/14/2017	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-20	3/14/2017	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-20	3/14/2017	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-20	3/14/2017	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-20	3/14/2017	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-20	3/14/2017	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-20	3/14/2017	2,4-Dimethylphenol	340	50	15	354	ug/L
MKTF-20	3/14/2017	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-20	3/14/2017	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-20	3/14/2017	Phenol	310	50	9.9	5761	ug/L
MKTF-20	3/14/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-20	3/14/2017	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-20	3/14/2017	Bis(2-ethylhexyl)phthalate	36	50	13	55.64	ug/L
MKTF-20	3/14/2017	Di-n-octylphthalate	18	50	9.9	200	ug/L
MKTF-20	3/14/2017	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-20	3/14/2017	Anthracene	ND	50	12	1721	ug/L
MKTF-20	3/14/2017	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-20	3/14/2017	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-20	3/14/2017	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-20	3/14/2017	Pyrene	ND	50	15	117	ug/L
MKTF-20	3/14/2017	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-20	3/14/2017	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-20	3/14/2017	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-20	3/14/2017	Fluoranthene	ND	50	13	802	ug/L
MKTF-20	3/14/2017	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-20	3/14/2017	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-20	3/14/2017	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-20	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-20	3/14/2017	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-20	3/14/2017	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-20	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-20	3/14/2017	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-20	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-20	3/14/2017	3,4-Methylphenol	190	50	11	NA	ug/L
MKTF-20	6/12/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	6/12/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	6/12/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	6/12/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	6/12/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	6/12/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	6/12/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-20	6/12/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	6/12/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	6/12/2017	Isophorone	ND	50	22	781	ug/L
MKTF-20	6/12/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	6/12/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	6/12/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	6/12/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	6/12/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	6/12/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	6/12/2017	Fluorene	ND	50	20	288	ug/L
MKTF-20	6/12/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	6/12/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	6/12/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	6/12/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	6/12/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	6/12/2017	1-Methylnaphthalene	**28**	50	17	11.38	ug/L
MKTF-20	6/12/2017	Naphthalene	**180**	50	14	30	ug/L
MKTF-20	6/12/2017	2-Methylnaphthalene	**37**	50	16	35.1	ug/L
MKTF-20	6/12/2017	2-Chloronaphthalene	ND	50	18	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	6/12/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	6/12/2017	2-Methylphenol	130	50	17	NA	ug/L
MKTF-20	6/12/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	6/12/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	6/12/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	6/12/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	6/12/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-20	6/12/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	6/12/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	6/12/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	6/12/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	6/12/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	6/12/2017	2,4-Dimethylphenol	110	50	14	354	ug/L
MKTF-20	6/12/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	6/12/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	6/12/2017	Phenol	73	50	16	5761	ug/L
MKTF-20	6/12/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	6/12/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	6/12/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	6/12/2017	Bis(2-ethylhexyl)phthalate	25	50	24	55.64	ug/L
MKTF-20	6/12/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	6/12/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	6/12/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-20	6/12/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	6/12/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	6/12/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	6/12/2017	Pyrene	ND	50	22	117	ug/L
MKTF-20	6/12/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	6/12/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	6/12/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	6/12/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	6/12/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	6/12/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	6/12/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	6/12/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	6/12/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	6/12/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	6/12/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	6/12/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	6/12/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	6/12/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	6/12/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	6/12/2017	3,4-Methylphenol	130	50	16	NA	ug/L
MKTF-20	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-20	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-20	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-20	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-20	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-20	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-20	9/26/2017	Benzoic Acid	25	20	3.9	75000	ug/L
MKTF-20	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-20	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-20	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-20	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-20	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-20	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-20	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-20	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-20	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-20	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-20	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-20	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-20	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-20	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-20	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-20	9/26/2017	1-Methylnaphthalene	**37**	10	3.3	11.38	ug/L
MKTF-20	9/26/2017	Naphthalene	**160**	10	2.9	30	ug/L
MKTF-20	9/26/2017	2-Methylnaphthalene	**41**	10	3.3	35.1	ug/L
MKTF-20	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-20	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-20	9/26/2017	2-Methylphenol	75	10	3.3	NA	ug/L
MKTF-20	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-20	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-20	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-20	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-20	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-20	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-20	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-20	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-20	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-20	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-20	9/26/2017	2,4-Dimethylphenol	66	10	2.8	354	ug/L
MKTF-20	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-20	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-20	9/26/2017	Phenol	78	10	3.1	5761	ug/L
MKTF-20	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-20	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-20	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-20	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-20	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-20	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-20	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-20	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-20	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-20	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-20	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-20	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-20	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-20	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-20	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-20	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-20	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-20	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-20	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-20	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-20	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-20	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-20	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-20	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-20	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-20	9/26/2017	3,4-Methylphenol	22	10	3.2	NA	ug/L
MKTF-20	11/29/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	11/29/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	11/29/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	11/29/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	11/29/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	11/29/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	11/29/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-20	11/29/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	11/29/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	11/29/2017	Isophorone	ND	50	22	781	ug/L
MKTF-20	11/29/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	11/29/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	11/29/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	11/29/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	11/29/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	11/29/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	11/29/2017	Fluorene	ND	50	20	288	ug/L
MKTF-20	11/29/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	11/29/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	11/29/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	11/29/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	11/29/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	11/29/2017	1-Methylnaphthalene	**59**	50	17	11.38	ug/L
MKTF-20	11/29/2017	Naphthalene	**200**	50	14	30	ug/L
MKTF-20	11/29/2017	2-Methylnaphthalene	**61**	50	16	35.1	ug/L
MKTF-20	11/29/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-20	11/29/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	11/29/2017	2-Methylphenol	28	50	17	NA	ug/L
MKTF-20	11/29/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	11/29/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	11/29/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	11/29/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	11/29/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-20	11/29/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	11/29/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	11/29/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	11/29/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	11/29/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	11/29/2017	2,4-Dimethylphenol	44	50	14	354	ug/L
MKTF-20	11/29/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	11/29/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	11/29/2017	Phenol	85	50	16	5761	ug/L
MKTF-20	11/29/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	11/29/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	11/29/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	11/29/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-20	11/29/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	11/29/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	11/29/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-20	11/29/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	11/29/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	11/29/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	11/29/2017	Pyrene	ND	50	22	117	ug/L
MKTF-20	11/29/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	11/29/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	11/29/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	11/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	11/29/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	11/29/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	11/29/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	11/29/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	11/29/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	11/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	11/29/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	11/29/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	11/29/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	11/29/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	11/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	11/29/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-20	2/15/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-20	2/15/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-20	2/15/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-20	2/15/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-20	2/15/2018	Aniline	*ND*	*50*	15	13	ug/L
MKTF-20	2/15/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-20	2/15/2018	Benzoic Acid	71	100	20	75000	ug/L
MKTF-20	2/15/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-20	2/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-20	2/15/2018	Isophorone	ND	50	22	781	ug/L
MKTF-20	2/15/2018	Acenaphthene	ND	50	18	535	ug/L
MKTF-20	2/15/2018	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-20	2/15/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-20	2/15/2018	Phenanthrene	ND	50	22	170	ug/L
MKTF-20	2/15/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-20	2/15/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-20	2/15/2018	Fluorene	ND	50	20	288	ug/L
MKTF-20	2/15/2018	Carbazole	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-20	2/15/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-20	2/15/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-20	2/15/2018	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-20	2/15/2018	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-20	2/15/2018	1-Methylnaphthalene	**65**	50	17	11.38	ug/L
MKTF-20	2/15/2018	Naphthalene	**310**	50	14	30	ug/L
MKTF-20	2/15/2018	2-Methylnaphthalene	**77**	50	16	35.1	ug/L
MKTF-20	2/15/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-20	2/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-20	2/15/2018	2-Methylphenol	27	50	17	NA	ug/L
MKTF-20	2/15/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-20	2/15/2018	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-20	2/15/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-20	2/15/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-20	2/15/2018	3-Nitroaniline	ND	50	22	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/15/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-20	2/15/2018	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-20	2/15/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-20	2/15/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-20	2/15/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-20	2/15/2018	2,4-Dimethylphenol	**400**	50	14	354	ug/L
MKTF-20	2/15/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-20	2/15/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-20	2/15/2018	Phenol	230	50	16	5761	ug/L
MKTF-20	2/15/2018	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-20	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-20	2/15/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-20	2/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-20	2/15/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-20	2/15/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-20	2/15/2018	Anthracene	ND	50	18	1721	ug/L
MKTF-20	2/15/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-20	2/15/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-20	2/15/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-20	2/15/2018	Pyrene	ND	50	22	117	ug/L
MKTF-20	2/15/2018	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-20	2/15/2018	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-20	2/15/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-20	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-20	2/15/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-20	2/15/2018	Fluoranthene	ND	50	21	802	ug/L
MKTF-20	2/15/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-20	2/15/2018	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-20	2/15/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-20	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-20	2/15/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-20	2/15/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-20	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-20	2/15/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-20	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-20	2/15/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-20	5/11/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-20	5/11/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-20	5/11/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-20	5/11/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-20	5/11/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-20	5/11/2018	Benzoic Acid	160	200	63	75000	ug/L
MKTF-20	5/11/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-20	5/11/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-20	5/11/2018	Isophorone	ND	100	62	781	ug/L
MKTF-20	5/11/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-20	5/11/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-20	5/11/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-20	5/11/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-20	5/11/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-20	5/11/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-20	5/11/2018	Fluorene	ND	100	63	288	ug/L
MKTF-20	5/11/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-20	5/11/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-20	5/11/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-20	5/11/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-20	5/11/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-20	5/11/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-20	5/11/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-20	5/11/2018	Naphthalene	**150**	100	50	30	ug/L
MKTF-20	5/11/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-20	5/11/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-20	5/11/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-20	5/11/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-20	5/11/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-20	5/11/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-20	5/11/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-20	5/11/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-20	5/11/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-20	5/11/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-20	5/11/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-20	5/11/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-20	5/11/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-20	5/11/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-20	5/11/2018	2,4-Dimethylphenol	240	100	59	354	ug/L
MKTF-20	5/11/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-20	5/11/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-20	5/11/2018	Phenol	73	100	60	5761	ug/L
MKTF-20	5/11/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-20	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-20	5/11/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-20	5/11/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-20	5/11/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-20	5/11/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-20	5/11/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-20	5/11/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-20	5/11/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-20	5/11/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-20	5/11/2018	Pyrene	ND	100	65	117	ug/L
MKTF-20	5/11/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-20	5/11/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-20	5/11/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-20	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-20	5/11/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-20	5/11/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-20	5/11/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-20	5/11/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-20	5/11/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-20	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-20	5/11/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-20	5/11/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-20	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-20	5/11/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-20	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-20	5/11/2018	3,4-Methylphenol	54	100	54	NA	ug/L
MKTF-20	8/31/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-20	8/31/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-20	8/31/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/31/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-20	8/31/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-20	8/31/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-20	8/31/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-20	8/31/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-20	8/31/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-20	8/31/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-20	8/31/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-20	8/31/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-20	8/31/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-20	8/31/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-20	8/31/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-20	8/31/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-20	8/31/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-20	8/31/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-20	8/31/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-20	8/31/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-20	8/31/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-20	8/31/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-20	8/31/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-20	8/31/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-20	8/31/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-20	8/31/2018	Naphthalene	16	10	5	30	ug/L
MKTF-20	8/31/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-20	8/31/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-20	8/31/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-20	8/31/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-20	8/31/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-20	8/31/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-20	8/31/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-20	8/31/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-20	8/31/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-20	8/31/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-20	8/31/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-20	8/31/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-20	8/31/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-20	8/31/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-20	8/31/2018	2,4-Dimethylphenol	35	10	5.9	354	ug/L
MKTF-20	8/31/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-20	8/31/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-20	8/31/2018	Phenol	ND	10	6	5761	ug/L
MKTF-20	8/31/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-20	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-20	8/31/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-20	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-20	8/31/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	8/31/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-20	8/31/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-20	8/31/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-20	8/31/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-20	8/31/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-20	8/31/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-20	8/31/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-20	8/31/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-20	8/31/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-20	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-20	8/31/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-20	8/31/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-20	8/31/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-20	8/31/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-20	8/31/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-20	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-20	8/31/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-20	8/31/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-20	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-20	8/31/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-20	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-20	8/31/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-20	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-20	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-20	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-20	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-20	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-20	11/29/2018	Benzoic Acid	23	20	6.3	75000	ug/L
MKTF-20	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-20	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-20	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-20	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-20	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-20	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-20	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-20	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-20	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-20	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-20	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-20	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-20	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-20	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-20	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-20	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-20	11/29/2018	1-Methylnaphthalene	11	10	7	11.38	ug/L
MKTF-20	11/29/2018	Naphthalene	**31**	10	5	30	ug/L
MKTF-20	11/29/2018	2-Methylnaphthalene	6.3	10	6.3	35.1	ug/L
MKTF-20	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-20	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-20	11/29/2018	2-Methylphenol	9.5	10	6.3	NA	ug/L
MKTF-20	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-20	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-20	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-20	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-20	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-20	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-20	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-20	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-20	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-20	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-20	11/29/2018	2,4-Dimethylphenol	240	10	5.9	354	ug/L
MKTF-20	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-20	11/29/2018	Phenol	28	10	6	5761	ug/L
MKTF-20	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-20	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-20	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-20	11/29/2018	Bis(2-ethylhexyl)phthalate	12	10	8.1	55.64	ug/L
MKTF-20	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-20	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-20	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-20	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-20	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-20	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-20	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-20	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-20	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-20	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-20	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-20	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-20	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-20	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-20	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-20	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-20	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-20	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-20	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-20	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-20	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-20	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-20	11/29/2018	3,4-Methylphenol	16	10	5.4	NA	ug/L
MKTF-20	2/20/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-20	2/20/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-20	2/20/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-20	2/20/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-20	2/20/2019	1-Methylnaphthalene	*ND*	*50*	34.99561	11.38	ug/L
MKTF-20	2/20/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-20	2/20/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-20	2/20/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-20	2/20/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-20	2/20/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-20	2/20/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-20	2/20/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-20	2/20/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-20	2/20/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-20	2/20/2019	2-Methylnaphthalene	*ND*	*50*	31.661952	35.1	ug/L
MKTF-20	2/20/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-20	2/20/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L
MKTF-20	2/20/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-20	2/20/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-20	2/20/2019	3,4-Methylphenol	670	50	26.818372	NA	ug/L
MKTF-20	2/20/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-20	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-20	2/20/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-20	2/20/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-20	2/20/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
MKTF-20	2/20/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-20	2/20/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-20	2/20/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-20	2/20/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-20	2/20/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-20	2/20/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-20	2/20/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-20	2/20/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-20	2/20/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-20	2/20/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-20	2/20/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-20	2/20/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-20	2/20/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-20	2/20/2019	Benzoic Acid	44	100	31.557804	75000	ug/L
MKTF-20	2/20/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-20	2/20/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-20	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-20	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-20	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	50	40.28171	55.64	ug/L
MKTF-20	2/20/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-20	2/20/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-20	2/20/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-20	2/20/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-20	2/20/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-20	2/20/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-20	2/20/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-20	2/20/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-20	2/20/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-20	2/20/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-20	2/20/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-20	2/20/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-20	2/20/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-20	2/20/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-20	2/20/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-20	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-20	2/20/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-20	2/20/2019	Naphthalene	*ND*	*50*	25.207014	30	ug/L
MKTF-20	2/20/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-20	2/20/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-20	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-20	2/20/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-20	2/20/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-20	2/20/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-20	2/20/2019	Phenol	ND	50	29.88676	5761	ug/L
MKTF-20	2/20/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-20	2/20/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-20	5/14/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-20	5/14/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-20	5/14/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-20	5/14/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-20	5/14/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-20	5/14/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-20	5/14/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-20	5/14/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-20	5/14/2019	2,4-Dimethylphenol	39	50	14.829964	354	ug/L
MKTF-20	5/14/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/14/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-20	5/14/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-20	5/14/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-20	5/14/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-20	5/14/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-20	5/14/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-20	5/14/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-20	5/14/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-20	5/14/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-20	5/14/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-20	5/14/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-20	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-20	5/14/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-20	5/14/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-20	5/14/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-20	5/14/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-20	5/14/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-20	5/14/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-20	5/14/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-20	5/14/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-20	5/14/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-20	5/14/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-20	5/14/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-20	5/14/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-20	5/14/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-20	5/14/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-20	5/14/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-20	5/14/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-20	5/14/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-20	5/14/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-20	5/14/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-20	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-20	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-20	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-20	5/14/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-20	5/14/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-20	5/14/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-20	5/14/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-20	5/14/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-20	5/14/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-20	5/14/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-20	5/14/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-20	5/14/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-20	5/14/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-20	5/14/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-20	5/14/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-20	5/14/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-20	5/14/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-20	5/14/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-20	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-20	5/14/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-20	5/14/2019	Naphthalene	**65**	50	20.61105	30	ug/L
MKTF-20	5/14/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-20	5/14/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-20	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-20	5/14/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-20	5/14/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-20	5/14/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-20	5/14/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-20	5/14/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-20	5/14/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-20	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-20	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-20	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-20	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-20	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-20	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-20	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-20	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-20	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-20	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-20	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-20	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-20	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-20	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-20	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-20	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-20	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-20	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-20	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-20	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-20	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-20	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-20	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-20	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-20	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-20	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-20	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-20	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-20	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-20	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-20	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-20	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-20	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-20	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-20	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-20	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-20	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-20	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-20	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-20	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-20	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-20	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-20	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-20	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-20	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-20	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-20	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-20	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-20	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-20	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-20	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-20	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-20	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-20	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-20	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-20	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-20	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-20	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-20	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-20	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-20	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-20	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-20	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-20	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-20	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-20	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-20	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-20	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-20	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-20	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-20	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-20	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-20	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-20	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-20	11/5/2019	1-Methylnaphthalene	8.6	5	5	11.38	ug/L
MKTF-20	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-20	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-20	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-20	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-20	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-20	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-20	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-20	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-20	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-20	11/5/2019	2-Methylnaphthalene	11	5	5	35.1	ug/L
MKTF-20	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-20	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-20	11/5/2019	3,4-Methylphenol	28	5	5	NA	ug/L
MKTF-20	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-20	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-20	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-20	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-20	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-20	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-20	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-20	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-20	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-20	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-20	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-20	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-20	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-20	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-20	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-20	11/5/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-20	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-20	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-20	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-20	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-20	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-20	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-20	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-20	11/5/2019	Fluorene	ND	5	5	288	ug/L
MKTF-20	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-20	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-20	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-20	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-20	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-20	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-20	11/5/2019	Naphthalene	**35**	5	5	30	ug/L
MKTF-20	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-20	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-20	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-20	11/5/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-20	11/5/2019	Phenol	30	5	5	5761	ug/L
MKTF-20	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-20	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-21	4/11/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-21	4/11/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-21	4/11/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-21	4/11/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-21	4/11/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-21	4/11/2014	Aniline	ND	12	3	13	ug/L
MKTF-21	4/11/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-21	4/11/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-21	4/11/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-21	4/11/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-21	4/11/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-21	4/11/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-21	4/11/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-21	4/11/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-21	4/11/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-21	4/11/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-21	4/11/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-21	4/11/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-21	4/11/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-21	4/11/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-21	4/11/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	4/11/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-21	4/11/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-21	4/11/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-21	4/11/2014	1-Methylnaphthalene	**69**	12	4.5	11.38	ug/L
MKTF-21	4/11/2014	Naphthalene	**270**	20	4.6	30	ug/L
MKTF-21	4/11/2014	2-Methylnaphthalene	**110**	12	3.3	35.1	ug/L
MKTF-21	4/11/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-21	4/11/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-21	4/11/2014	2-Methylphenol	140	25	3.4	NA	ug/L
MKTF-21	4/11/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-21	4/11/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-21	4/11/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-21	4/11/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-21	4/11/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-21	4/11/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L
MKTF-21	4/11/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-21	4/11/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-21	4/11/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-21	4/11/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-21	4/11/2014	2,4-Dimethylphenol	100	12	3.9	354	ug/L
MKTF-21	4/11/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-21	4/11/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-21	4/11/2014	Phenol	13	12	2	5761	ug/L
MKTF-21	4/11/2014	Pyridine	ND	12	2	20	ug/L
MKTF-21	4/11/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-21	4/11/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-21	4/11/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-21	4/11/2014	Di-n-octylphthalate	ND	12	3.4	200	ug/L
MKTF-21	4/11/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-21	4/11/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-21	4/11/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-21	4/11/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-21	4/11/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-21	4/11/2014	Pyrene	ND	12	5	117	ug/L
MKTF-21	4/11/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-21	4/11/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-21	4/11/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-21	4/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-21	4/11/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-21	4/11/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-21	4/11/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-21	4/11/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-21	4/11/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-21	4/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-21	4/11/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-21	4/11/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-21	4/11/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-21	4/11/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-21	4/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-21	4/11/2014	3,4-Methylphenol	100	12	2.3	NA	ug/L
MKTF-21	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-21	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-21	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-21	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-21	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-21	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-21	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-21	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-21	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-21	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-21	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-21	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-21	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-21	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-21	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-21	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-21	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-21	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-21	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-21	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-21	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-21	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-21	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-21	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-21	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-21	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-21	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-21	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-21	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-21	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-21	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-21	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-21	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-21	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-21	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-21	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-21	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-21	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-21	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-21	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-21	3/16/2015	Phenol	38	10	1.1	5761	ug/L
MKTF-21	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-21	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-21	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-21	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-21	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-21	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-21	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-21	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-21	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-21	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-21	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-21	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-21	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-21	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-21	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-21	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-21	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-21	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-21	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-21	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-21	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-21	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-21	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-21	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-21	3/16/2015	3,4-Methylphenol	69	10	1.5	NA	ug/L
MKTF-21	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-21	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-21	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-21	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-21	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-21	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-21	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-21	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-21	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-21	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-21	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-21	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-21	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-21	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-21	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-21	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-21	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-21	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-21	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-21	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-21	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-21	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-21	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-21	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-21	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-21	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-21	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-21	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-21	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-21	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-21	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-21	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-21	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-21	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-21	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-21	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-21	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-21	6/10/2015	2,4-Dimethylphenol	11	10	1.9	354	ug/L
MKTF-21	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-21	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-21	6/10/2015	Phenol	35	10	1.1	5761	ug/L
MKTF-21	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-21	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-21	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-21	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-21	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-21	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-21	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-21	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-21	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-21	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-21	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-21	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-21	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-21	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-21	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-21	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-21	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-21	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-21	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-21	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-21	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-21	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-21	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-21	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-21	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-21	6/10/2015	3,4-Methylphenol	110	10	1.5	NA	ug/L
MKTF-21	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-21	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-21	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-21	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-21	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-21	3/1/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-21	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-21	3/1/2016	Benzoic Acid	36	20	9.8	75000	ug/L
MKTF-21	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-21	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-21	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-21	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-21	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-21	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-21	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-21	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-21	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-21	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-21	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-21	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-21	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-21	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-21	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-21	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-21	3/1/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-21	3/1/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-21	3/1/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-21	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-21	3/1/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-21	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-21	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-21	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-21	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-21	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-21	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-21	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-21	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-21	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-21	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-21	3/1/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-21	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-21	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-21	3/1/2016	Phenol	37	10	5.1	5761	ug/L
MKTF-21	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-21	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-21	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-21	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-21	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-21	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-21	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-21	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-21	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-21	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-21	3/1/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-21	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-21	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-21	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-21	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-21	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-21	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-21	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-21	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-21	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-21	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-21	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-21	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-21	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-21	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-21	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-21	3/1/2016	3,4-Methylphenol	120	10	7.1	NA	ug/L
MKTF-21	9/12/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-21	9/12/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-21	9/12/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-21	9/12/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-21	9/12/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-21	9/12/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-21	9/12/2016	Benzoic Acid	63	200	26	75000	ug/L
MKTF-21	9/12/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-21	9/12/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-21	9/12/2016	Isophorone	ND	100	26	781	ug/L
MKTF-21	9/12/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-21	9/12/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-21	9/12/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-21	9/12/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-21	9/12/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-21	9/12/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-21	9/12/2016	Fluorene	ND	100	27	288	ug/L
MKTF-21	9/12/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-21	9/12/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-21	9/12/2016	Pentachlorophenol	**24**	200	23	1	ug/L
MKTF-21	9/12/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-21	9/12/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-21	9/12/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-21	9/12/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-21	9/12/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-21	9/12/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-21	9/12/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-21	9/12/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-21	9/12/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-21	9/12/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-21	9/12/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-21	9/12/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-21	9/12/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-21	9/12/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-21	9/12/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-21	9/12/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-21	9/12/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-21	9/12/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-21	9/12/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-21	9/12/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-21	9/12/2016	Phenol	80	100	20	5761	ug/L
MKTF-21	9/12/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-21	9/12/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-21	9/12/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-21	9/12/2016	Bis(2-ethylhexyl)phthalate	**56**	100	26	55.64	ug/L
MKTF-21	9/12/2016	Di-n-octylphthalate	35	100	20	200	ug/L
MKTF-21	9/12/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-21	9/12/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-21	9/12/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-21	9/12/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-21	9/12/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-21	9/12/2016	Pyrene	ND	100	31	117	ug/L
MKTF-21	9/12/2016	Dimethylphthalate	29	100	24	612	ug/L
MKTF-21	9/12/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-21	9/12/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-21	9/12/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-21	9/12/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-21	9/12/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-21	9/12/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-21	9/12/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-21	9/12/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-21	9/12/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-21	9/12/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/12/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-21	9/12/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	9/12/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-21	9/12/2016	3,4-Methylphenol	420	100	23	NA	ug/L
MKTF-21	11/3/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-21	11/3/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-21	11/3/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-21	11/3/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-21	11/3/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-21	11/3/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-21	11/3/2016	Benzoic Acid	110	200	26	75000	ug/L
MKTF-21	11/3/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-21	11/3/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-21	11/3/2016	Isophorone	ND	100	26	781	ug/L
MKTF-21	11/3/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-21	11/3/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-21	11/3/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-21	11/3/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-21	11/3/2016	Butylbenzylphthalate	**27**	100	25	16	ug/L
MKTF-21	11/3/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-21	11/3/2016	Fluorene	ND	100	27	288	ug/L
MKTF-21	11/3/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-21	11/3/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-21	11/3/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-21	11/3/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-21	11/3/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-21	11/3/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-21	11/3/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-21	11/3/2016	Naphthalene	**49**	100	26	30	ug/L
MKTF-21	11/3/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-21	11/3/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-21	11/3/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-21	11/3/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-21	11/3/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-21	11/3/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-21	11/3/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-21	11/3/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-21	11/3/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-21	11/3/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-21	11/3/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-21	11/3/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-21	11/3/2016	2,4-Dimethylphenol	30	100	30	354	ug/L
MKTF-21	11/3/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-21	11/3/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-21	11/3/2016	Phenol	30	100	20	5761	ug/L
MKTF-21	11/3/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-21	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-21	11/3/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-21	11/3/2016	Bis(2-ethylhexyl)phthalate	**64**	100	26	55.64	ug/L
MKTF-21	11/3/2016	Di-n-octylphthalate	81	100	20	200	ug/L
MKTF-21	11/3/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-21	11/3/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-21	11/3/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-21	11/3/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-21	11/3/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-21	11/3/2016	Pyrene	ND	100	31	117	ug/L
MKTF-21	11/3/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-21	11/3/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-21	11/3/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-21	11/3/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-21	11/3/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-21	11/3/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-21	11/3/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-21	11/3/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-21	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-21	11/3/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-21	11/3/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-21	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-21	11/3/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-21	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-21	11/3/2016	3,4-Methylphenol	30	100	23	NA	ug/L
MKTF-21	3/14/2017	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-21	3/14/2017	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-21	3/14/2017	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-21	3/14/2017	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Aniline	*ND*	*50*	12	13	ug/L
MKTF-21	3/14/2017	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-21	3/14/2017	Benzoic Acid	33	100	13	75000	ug/L
MKTF-21	3/14/2017	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-21	3/14/2017	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-21	3/14/2017	Isophorone	ND	50	13	781	ug/L
MKTF-21	3/14/2017	Acenaphthene	ND	50	13	535	ug/L
MKTF-21	3/14/2017	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-21	3/14/2017	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-21	3/14/2017	Phenanthrene	ND	50	13	170	ug/L
MKTF-21	3/14/2017	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-21	3/14/2017	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-21	3/14/2017	Fluorene	ND	50	14	288	ug/L
MKTF-21	3/14/2017	Carbazole	ND	50	11	NA	ug/L
MKTF-21	3/14/2017	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-21	3/14/2017	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-21	3/14/2017	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-21	3/14/2017	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-21	3/14/2017	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-21	3/14/2017	Naphthalene	*20*	*50*	13	30	ug/L
MKTF-21	3/14/2017	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-21	3/14/2017	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-21	3/14/2017	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-21	3/14/2017	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-21	3/14/2017	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-21	3/14/2017	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-21	3/14/2017	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-21	3/14/2017	3-Nitroaniline	ND	50	15	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-21	3/14/2017	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-21	3/14/2017	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-21	3/14/2017	2,4-Dimethylphenol	21	50	15	354	ug/L
MKTF-21	3/14/2017	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-21	3/14/2017	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-21	3/14/2017	Phenol	36	50	9.9	5761	ug/L
MKTF-21	3/14/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-21	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-21	3/14/2017	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-21	3/14/2017	Bis(2-ethylhexyl)phthalate	35	50	13	55.64	ug/L
MKTF-21	3/14/2017	Di-n-octylphthalate	17	50	9.9	200	ug/L
MKTF-21	3/14/2017	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-21	3/14/2017	Anthracene	ND	50	12	1721	ug/L
MKTF-21	3/14/2017	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-21	3/14/2017	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-21	3/14/2017	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-21	3/14/2017	Pyrene	ND	50	15	117	ug/L
MKTF-21	3/14/2017	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-21	3/14/2017	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-21	3/14/2017	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-21	3/14/2017	Fluoranthene	ND	50	13	802	ug/L
MKTF-21	3/14/2017	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-21	3/14/2017	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-21	3/14/2017	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-21	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-21	3/14/2017	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-21	3/14/2017	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-21	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-21	3/14/2017	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-21	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-21	3/14/2017	3,4-Methylphenol	30	50	11	NA	ug/L
MKTF-21	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-21	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-21	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-21	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	6/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-21	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-21	6/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-21	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-21	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-21	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-21	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-21	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-21	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-21	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-21	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-21	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-21	6/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-21	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-21	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-21	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-21	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-21	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-21	6/21/2017	1-Methylnaphthalene	8	10	3.3	11.38	ug/L
MKTF-21	6/21/2017	Naphthalene	28	10	2.9	30	ug/L
MKTF-21	6/21/2017	2-Methylnaphthalene	4.9	10	3.3	35.1	ug/L
MKTF-21	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-21	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-21	6/21/2017	2-Methylphenol	21	10	3.3	NA	ug/L
MKTF-21	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-21	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-21	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-21	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-21	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-21	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-21	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-21	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-21	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-21	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-21	6/21/2017	2,4-Dimethylphenol	38	10	2.8	354	ug/L
MKTF-21	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-21	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-21	6/21/2017	Phenol	60	10	3.1	5761	ug/L
MKTF-21	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-21	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-21	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-21	6/21/2017	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
MKTF-21	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-21	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-21	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-21	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-21	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-21	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-21	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-21	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-21	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-21	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-21	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-21	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-21	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-21	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-21	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-21	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-21	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-21	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-21	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-21	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-21	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-21	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-21	6/21/2017	3,4-Methylphenol	150	10	3.2	NA	ug/L
MKTF-21	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-21	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-21	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-21	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-21	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-21	9/26/2017	Benzoic Acid	12	20	3.9	75000	ug/L
MKTF-21	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-21	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-21	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-21	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-21	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-21	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-21	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-21	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-21	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-21	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-21	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-21	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-21	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-21	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-21	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-21	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-21	9/26/2017	1-Methylnaphthalene	7.1	10	3.3	11.38	ug/L
MKTF-21	9/26/2017	Naphthalene	17	10	2.9	30	ug/L
MKTF-21	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-21	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-21	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-21	9/26/2017	2-Methylphenol	9.3	10	3.3	NA	ug/L
MKTF-21	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-21	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-21	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-21	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-21	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-21	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-21	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-21	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-21	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-21	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-21	9/26/2017	2,4-Dimethylphenol	15	10	2.8	354	ug/L
MKTF-21	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-21	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-21	9/26/2017	Phenol	31	10	3.1	5761	ug/L
MKTF-21	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-21	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-21	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-21	9/26/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-21	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-21	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-21	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-21	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-21	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-21	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-21	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-21	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-21	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-21	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-21	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-21	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-21	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-21	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-21	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-21	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-21	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-21	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-21	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-21	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-21	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-21	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-21	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-21	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-21	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-21	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-21	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-21	11/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-21	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-21	11/28/2017	Benzoic Acid	70	200	39	75000	ug/L
MKTF-21	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-21	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-21	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-21	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-21	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-21	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-21	11/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-21	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-21	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-21	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-21	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-21	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-21	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-21	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-21	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-21	11/28/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
MKTF-21	11/28/2017	Naphthalene	**47**	100	29	30	ug/L
MKTF-21	11/28/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
MKTF-21	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-21	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-21	11/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-21	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-21	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-21	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-21	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-21	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-21	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-21	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-21	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-21	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-21	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-21	11/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-21	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-21	11/28/2017	Phenol	120	100	31	5761	ug/L
MKTF-21	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-21	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-21	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-21	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-21	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-21	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-21	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-21	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-21	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-21	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-21	11/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-21	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-21	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-21	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-21	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-21	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-21	11/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-21	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-21	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-21	11/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-21	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-21	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-21	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-21	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-21	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-21	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-21	11/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-21	2/15/2018	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-21	2/15/2018	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-21	2/15/2018	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-21	2/15/2018	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-21	2/15/2018	Aniline	*ND*	*50*	15	13	ug/L
MKTF-21	2/15/2018	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-21	2/15/2018	Benzoic Acid	48	100	20	75000	ug/L
MKTF-21	2/15/2018	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-21	2/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-21	2/15/2018	Isophorone	ND	50	22	781	ug/L
MKTF-21	2/15/2018	Acenaphthene	ND	50	18	535	ug/L
MKTF-21	2/15/2018	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-21	2/15/2018	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-21	2/15/2018	Phenanthrene	ND	50	22	170	ug/L
MKTF-21	2/15/2018	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-21	2/15/2018	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-21	2/15/2018	Fluorene	ND	50	20	288	ug/L
MKTF-21	2/15/2018	Carbazole	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-21	2/15/2018	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-21	2/15/2018	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-21	2/15/2018	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-21	2/15/2018	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-21	2/15/2018	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-21	2/15/2018	Naphthalene	**40**	50	14	30	ug/L
MKTF-21	2/15/2018	2-Methylnaphthalene	*26*	*50*	16	35.1	ug/L
MKTF-21	2/15/2018	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-21	2/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-21	2/15/2018	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-21	2/15/2018	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-21	2/15/2018	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-21	2/15/2018	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-21	2/15/2018	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-21	2/15/2018	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-21	2/15/2018	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-21	2/15/2018	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-21	2/15/2018	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-21	2/15/2018	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-21	2/15/2018	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-21	2/15/2018	2,4-Dimethylphenol	17	50	14	354	ug/L
MKTF-21	2/15/2018	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-21	2/15/2018	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-21	2/15/2018	Phenol	35	50	16	5761	ug/L
MKTF-21	2/15/2018	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-21	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-21	2/15/2018	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-21	2/15/2018	Bis(2-ethylhexyl)phthalate	**110**	50	24	55.64	ug/L
MKTF-21	2/15/2018	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-21	2/15/2018	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-21	2/15/2018	Anthracene	ND	50	18	1721	ug/L
MKTF-21	2/15/2018	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-21	2/15/2018	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-21	2/15/2018	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-21	2/15/2018	Pyrene	ND	50	22	117	ug/L
MKTF-21	2/15/2018	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-21	2/15/2018	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-21	2/15/2018	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-21	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-21	2/15/2018	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-21	2/15/2018	Fluoranthene	ND	50	21	802	ug/L
MKTF-21	2/15/2018	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-21	2/15/2018	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-21	2/15/2018	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-21	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-21	2/15/2018	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-21	2/15/2018	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-21	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-21	2/15/2018	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-21	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-21	2/15/2018	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-21	5/11/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-21	5/11/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-21	5/11/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-21	5/11/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-21	5/11/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-21	5/11/2018	Benzoic Acid	160	200	63	75000	ug/L
MKTF-21	5/11/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-21	5/11/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/11/2018	Isophorone	ND	100	62	781	ug/L
MKTF-21	5/11/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-21	5/11/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-21	5/11/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-21	5/11/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-21	5/11/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-21	5/11/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-21	5/11/2018	Fluorene	ND	100	63	288	ug/L
MKTF-21	5/11/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-21	5/11/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-21	5/11/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-21	5/11/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-21	5/11/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-21	5/11/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-21	5/11/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-21	5/11/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-21	5/11/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-21	5/11/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-21	5/11/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-21	5/11/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-21	5/11/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-21	5/11/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-21	5/11/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-21	5/11/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-21	5/11/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-21	5/11/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-21	5/11/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-21	5/11/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-21	5/11/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-21	5/11/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-21	5/11/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-21	5/11/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-21	5/11/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-21	5/11/2018	Phenol	ND	100	60	5761	ug/L
MKTF-21	5/11/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-21	5/11/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-21	5/11/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-21	5/11/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-21	5/11/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-21	5/11/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-21	5/11/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-21	5/11/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-21	5/11/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-21	5/11/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-21	5/11/2018	Pyrene	ND	100	65	117	ug/L
MKTF-21	5/11/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-21	5/11/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-21	5/11/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-21	5/11/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-21	5/11/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-21	5/11/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-21	5/11/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-21	5/11/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-21	5/11/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-21	5/11/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-21	5/11/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-21	5/11/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-21	5/11/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-21	5/11/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-21	5/11/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-21	5/11/2018	3,4-Methylphenol	71	100	54	NA	ug/L
MKTF-21	8/31/2018	Benzo(a)pyrene	*ND*	*20*	12	0.2	ug/L
MKTF-21	8/31/2018	2,4-Dinitrophenol	*ND*	*40*	7.4	38.7	ug/L
MKTF-21	8/31/2018	Dibenzo(a,h)anthracene	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Benzo(a)anthracene	*ND*	*20*	11	0.12	ug/L
MKTF-21	8/31/2018	4-Chloro-3-Methylphenol	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Aniline	*ND*	*20*	12	13	ug/L
MKTF-21	8/31/2018	N-Nitrosodimethylamine	*ND*	*20*	14	0.0049	ug/L
MKTF-21	8/31/2018	Benzoic Acid	13	40	13	75000	ug/L
MKTF-21	8/31/2018	Hexachloroethane	*ND*	*20*	12	3.28	ug/L
MKTF-21	8/31/2018	Hexachlorocyclopentadiene	*ND*	*20*	7.9	0.41	ug/L
MKTF-21	8/31/2018	Isophorone	ND	20	12	781	ug/L
MKTF-21	8/31/2018	Acenaphthene	ND	20	12	535	ug/L
MKTF-21	8/31/2018	Diethylphthalate	ND	20	13	14801	ug/L
MKTF-21	8/31/2018	Di-n-butylphthalate	ND	20	14	885	ug/L
MKTF-21	8/31/2018	Phenanthrene	ND	20	12	170	ug/L
MKTF-21	8/31/2018	Butylbenzylphthalate	*ND*	*20*	13	16	ug/L
MKTF-21	8/31/2018	N-Nitrosodiphenylamine	ND	20	13	122	ug/L
MKTF-21	8/31/2018	Fluorene	ND	20	13	288	ug/L
MKTF-21	8/31/2018	Carbazole	ND	20	13	NA	ug/L
MKTF-21	8/31/2018	Hexachlorobutadiene	*ND*	*20*	13	0.14	ug/L
MKTF-21	8/31/2018	Pentachlorophenol	*ND*	*40*	11	1	ug/L
MKTF-21	8/31/2018	2,4,6-Trichlorophenol	ND	20	13	11.9*	ug/L
MKTF-21	8/31/2018	2-Nitroaniline	ND	20	12	190	ug/L
MKTF-21	8/31/2018	2-Nitrophenol	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	1-Methylnaphthalene	*ND*	*20*	14	11.38	ug/L
MKTF-21	8/31/2018	Naphthalene	ND	20	10	30	ug/L
MKTF-21	8/31/2018	2-Methylnaphthalene	ND	20	13	35.1	ug/L
MKTF-21	8/31/2018	2-Chloronaphthalene	ND	20	12	733	ug/L
MKTF-21	8/31/2018	3,3-Dichlorobenzidine	*ND*	*20*	14	1.25	ug/L
MKTF-21	8/31/2018	2-Methylphenol	ND	20	13	NA	ug/L
MKTF-21	8/31/2018	1,2-Dichlorobenzene	ND	20	12	600	ug/L
MKTF-21	8/31/2018	2-Chlorophenol	ND	20	12	91	ug/L
MKTF-21	8/31/2018	2,4,5-Trichlorophenol	ND	20	12	1166	ug/L
MKTF-21	8/31/2018	Nitrobenzene	*ND*	*20*	12	1.4	ug/L
MKTF-21	8/31/2018	3-Nitroaniline	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	4-Nitroaniline	*ND*	*20*	12	3.8	ug/L
MKTF-21	8/31/2018	4-Nitrophenol	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Benzyl Alcohol	ND	20	13	2000	ug/L
MKTF-21	8/31/2018	4-Bromophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Azobenzene	*ND*	*20*	13	0.12	ug/L
MKTF-21	8/31/2018	2,4-Dimethylphenol	ND	20	12	354	ug/L
MKTF-21	8/31/2018	1,4-Dichlorobenzene	ND	20	12	75	ug/L
MKTF-21	8/31/2018	4-Chloroaniline	*ND*	*20*	12	0.37	ug/L
MKTF-21	8/31/2018	Phenol	ND	20	12	5761	ug/L
MKTF-21	8/31/2018	Pyridine	ND	20	11	20	ug/L
MKTF-21	8/31/2018	Bis(2-chloroethyl)ether	*ND*	*20*	13	0.137	ug/L
MKTF-21	8/31/2018	Bis(2-chloroethoxy)methane	ND	20	12	59	ug/L
MKTF-21	8/31/2018	Bis(2-ethylhexyl)phthalate	ND	20	16	55.64	ug/L
MKTF-21	8/31/2018	Di-n-octylphthalate	ND	20	13	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	8/31/2018	Hexachlorobenzene	*ND*	*20*	12	0.0976	ug/L
MKTF-21	8/31/2018	Anthracene	ND	20	11	1721	ug/L
MKTF-21	8/31/2018	1,2,4-Trichlorobenzene	ND	20	13	70	ug/L
MKTF-21	8/31/2018	2,4-Dichlorophenol	ND	40	12	45.3	ug/L
MKTF-21	8/31/2018	2,4-Dinitrotoluene	ND	20	12	45.3	ug/L
MKTF-21	8/31/2018	Pyrene	ND	20	13	117	ug/L
MKTF-21	8/31/2018	Dimethylphthalate	ND	20	12	612	ug/L
MKTF-21	8/31/2018	Dibenzofuran	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Benzo(g,h,i)perylene	ND	20	11	NA	ug/L
MKTF-21	8/31/2018	Indeno(1,2,3-cd)pyrene	*ND*	*20*	14	0.343	ug/L
MKTF-21	8/31/2018	Benzo(b)fluoranthene	*ND*	*20*	14	0.34	ug/L
MKTF-21	8/31/2018	Fluoranthene	ND	20	12	802	ug/L
MKTF-21	8/31/2018	Benzo(k)fluoranthene	*ND*	*20*	13	3.43	ug/L
MKTF-21	8/31/2018	Acenaphthylene	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	Chrysene	ND	20	14	34.3	ug/L
MKTF-21	8/31/2018	4,6-Dinitro-2-methylphenol	*ND*	*40*	11	1.52	ug/L
MKTF-21	8/31/2018	1,3-Dichlorobenzene	ND	20	12	NA	ug/L
MKTF-21	8/31/2018	2,6-Dinitrotoluene	*ND*	*20*	12	0.485	ug/L
MKTF-21	8/31/2018	N-Nitrosodi-n-propylamine	*ND*	*20*	12	0.011	ug/L
MKTF-21	8/31/2018	4-Chlorophenyl-phenylether	ND	20	14	NA	ug/L
MKTF-21	8/31/2018	Bis(2-chloroisopropyl)ether	*ND*	*20*	9.8	9.81	ug/L
MKTF-21	8/31/2018	3,4-Methylphenol	16	20	11	NA	ug/L
MKTF-21	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-21	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-21	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-21	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-21	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-21	11/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-21	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-21	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-21	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-21	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-21	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-21	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-21	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-21	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-21	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-21	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-21	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-21	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-21	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-21	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-21	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-21	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-21	11/29/2018	1-Methylnaphthalene	**12**	10	7	11.38	ug/L
MKTF-21	11/29/2018	Naphthalene	7.7	10	5	30	ug/L
MKTF-21	11/29/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-21	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-21	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-21	11/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-21	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-21	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-21	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-21	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-21	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-21	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-21	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-21	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-21	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-21	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-21	11/29/2018	2,4-Dimethylphenol	27	10	5.9	354	ug/L
MKTF-21	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-21	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-21	11/29/2018	Phenol	210	100	60	5761	ug/L
MKTF-21	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-21	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-21	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-21	11/29/2018	Bis(2-ethylhexyl)phthalate	47	10	8.1	55.64	ug/L
MKTF-21	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-21	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-21	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-21	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-21	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-21	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-21	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-21	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-21	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-21	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-21	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-21	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-21	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-21	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-21	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-21	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-21	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-21	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-21	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-21	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-21	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-21	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-21	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-21	2/20/2019	1,2,4-Trichlorobenzene	ND	50	32.096638	70	ug/L
MKTF-21	2/20/2019	1,2-Dichlorobenzene	ND	50	29.828558	600	ug/L
MKTF-21	2/20/2019	1,3-Dichlorobenzene	ND	50	29.209191	NA	ug/L
MKTF-21	2/20/2019	1,4-Dichlorobenzene	ND	50	29.012983	75	ug/L
MKTF-21	2/20/2019	1-Methylnaphthalene	**79**	50	34.99561	11.38	ug/L
MKTF-21	2/20/2019	2,4,5-Trichlorophenol	ND	50	29.017521	1166	ug/L
MKTF-21	2/20/2019	2,4,6-Trichlorophenol	ND	50	32.01793	11.9*	ug/L
MKTF-21	2/20/2019	2,4-Dichlorophenol	*ND*	*100*	28.943683	45.3	ug/L
MKTF-21	2/20/2019	2,4-Dimethylphenol	ND	50	29.56042	354	ug/L
MKTF-21	2/20/2019	2,4-Dinitrophenol	*ND*	*100*	18.510519	38.7	ug/L
MKTF-21	2/20/2019	2,4-Dinitrotoluene	*ND*	*50*	28.883174	45.3	ug/L
MKTF-21	2/20/2019	2,6-Dinitrotoluene	*ND*	*50*	29.750331	0.485	ug/L
MKTF-21	2/20/2019	2-Chloronaphthalene	ND	50	30.278929	733	ug/L
MKTF-21	2/20/2019	2-Chlorophenol	ND	50	29.199045	91	ug/L
MKTF-21	2/20/2019	2-Methylnaphthalene	**69**	50	31.661952	35.1	ug/L
MKTF-21	2/20/2019	2-Methylphenol	ND	50	31.58432	NA	ug/L
MKTF-21	2/20/2019	2-Nitroaniline	ND	50	29.480205	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	2-Nitrophenol	ND	50	29.972792	NA	ug/L
MKTF-21	2/20/2019	3,3-Dichlorobenzidine	*ND*	*50*	33.905813	1.25	ug/L
MKTF-21	2/20/2019	3,4-Methylphenol	ND	50	26.818372	NA	ug/L
MKTF-21	2/20/2019	3-Nitroaniline	ND	50	34.210848	NA	ug/L
MKTF-21	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	26.837393	1.52	ug/L
MKTF-21	2/20/2019	4-Bromophenyl-phenylether	ND	50	34.63758	NA	ug/L
MKTF-21	2/20/2019	4-Chloro-3-Methylphenol	ND	50	28.119838	NA	ug/L
MKTF-21	2/20/2019	4-Chloroaniline	*ND*	*50*	29.891008	0.37	ug/L
MKTF-21	2/20/2019	4-Chlorophenyl-phenylether	ND	50	35.884199	NA	ug/L
MKTF-21	2/20/2019	4-Nitroaniline	*ND*	*50*	29.770874	3.8	ug/L
MKTF-21	2/20/2019	4-Nitrophenol	ND	50	28.046571	NA	ug/L
MKTF-21	2/20/2019	Acenaphthene	ND	50	29.195099	535	ug/L
MKTF-21	2/20/2019	Acenaphthylene	ND	50	31.234845	NA	ug/L
MKTF-21	2/20/2019	Aniline	*ND*	*50*	31.051969	13	ug/L
MKTF-21	2/20/2019	Anthracene	ND	50	28.698259	1721	ug/L
MKTF-21	2/20/2019	Azobenzene	*ND*	*50*	33.51574	0.12	ug/L
MKTF-21	2/20/2019	Benzo(a)anthracene	*ND*	*50*	26.349555	0.12	ug/L
MKTF-21	2/20/2019	Benzo(a)pyrene	*ND*	*50*	29.956469	0.2	ug/L
MKTF-21	2/20/2019	Benzo(b)fluoranthene	*ND*	*50*	35.6725	0.34	ug/L
MKTF-21	2/20/2019	Benzo(g,h,i)perylene	ND	50	28.371178	NA	ug/L
MKTF-21	2/20/2019	Benzo(k)fluoranthene	*ND*	*50*	32.112606	3.43	ug/L
MKTF-21	2/20/2019	Benzoic Acid	ND	100	31.557804	75000	ug/L
MKTF-21	2/20/2019	Benzyl Alcohol	ND	50	31.374113	2000	ug/L
MKTF-21	2/20/2019	Bis(2-chloroethoxy)methane	ND	50	30.518808	59	ug/L
MKTF-21	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*50*	31.717457	0.137	ug/L
MKTF-21	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	24.47787	9.81	ug/L
MKTF-21	2/20/2019	Bis(2-ethylhexyl)phthalate	43	50	40.28171	55.64	ug/L
MKTF-21	2/20/2019	Butylbenzylphthalate	*ND*	*50*	31.615723	16	ug/L
MKTF-21	2/20/2019	Carbazole	ND	50	31.375012	NA	ug/L
MKTF-21	2/20/2019	Chrysene	*ND*	*50*	33.889094	34.3	ug/L
MKTF-21	2/20/2019	Dibenzo(a,h)anthracene	ND	50	27.886307	NA	ug/L
MKTF-21	2/20/2019	Dibenzofuran	ND	50	34.454748	NA	ug/L
MKTF-21	2/20/2019	Diethylphthalate	ND	50	31.450245	14801	ug/L
MKTF-21	2/20/2019	Dimethylphthalate	ND	50	30.240695	612	ug/L
MKTF-21	2/20/2019	Di-n-butylphthalate	ND	50	33.995923	885	ug/L
MKTF-21	2/20/2019	Di-n-octylphthalate	ND	50	31.290431	200	ug/L
MKTF-21	2/20/2019	Fluoranthene	ND	50	29.061248	802	ug/L
MKTF-21	2/20/2019	Fluorene	ND	50	31.559443	288	ug/L
MKTF-21	2/20/2019	Hexachlorobenzene	*ND*	*50*	30.787383	0.0976	ug/L
MKTF-21	2/20/2019	Hexachlorobutadiene	*ND*	*50*	31.937629	0.14	ug/L
MKTF-21	2/20/2019	Hexachlorocyclopentadiene	*ND*	*50*	19.654214	0.41	ug/L
MKTF-21	2/20/2019	Hexachloroethane	*ND*	*50*	29.949874	3.28	ug/L
MKTF-21	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35.232676	0.343	ug/L
MKTF-21	2/20/2019	Isophorone	ND	50	31.210518	781	ug/L
MKTF-21	2/20/2019	Naphthalene	**160**	50	25.207014	30	ug/L
MKTF-21	2/20/2019	Nitrobenzene	*ND*	*50*	30.212144	1.4	ug/L
MKTF-21	2/20/2019	N-Nitrosodimethylamine	*ND*	*50*	34.430374	0.0049	ug/L
MKTF-21	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	30.582924	0.011	ug/L
MKTF-21	2/20/2019	N-Nitrosodiphenylamine	ND	50	33.416595	122	ug/L
MKTF-21	2/20/2019	Pentachlorophenol	*ND*	*100*	26.387099	1	ug/L
MKTF-21	2/20/2019	Phenanthrene	ND	50	30.215257	170	ug/L
MKTF-21	2/20/2019	Phenol	ND	50	29.88676	5761	ug/L
MKTF-21	2/20/2019	Pyrene	ND	50	32.635727	117	ug/L
MKTF-21	2/20/2019	Pyridine	*ND*	*50*	27.102625	20	ug/L
MKTF-21	5/14/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-21	5/14/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-21	5/14/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-21	5/14/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-21	5/14/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-21	5/14/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-21	5/14/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-21	5/14/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-21	5/14/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-21	5/14/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-21	5/14/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-21	5/14/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-21	5/14/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-21	5/14/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-21	5/14/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-21	5/14/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-21	5/14/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-21	5/14/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-21	5/14/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-21	5/14/2019	3,4-Methylphenol	410	50	17.922265	NA	ug/L
MKTF-21	5/14/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-21	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-21	5/14/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-21	5/14/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-21	5/14/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-21	5/14/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-21	5/14/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-21	5/14/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-21	5/14/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-21	5/14/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-21	5/14/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-21	5/14/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-21	5/14/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-21	5/14/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-21	5/14/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-21	5/14/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-21	5/14/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-21	5/14/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-21	5/14/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-21	5/14/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-21	5/14/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-21	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-21	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-21	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-21	5/14/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-21	5/14/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-21	5/14/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-21	5/14/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-21	5/14/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-21	5/14/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-21	5/14/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-21	5/14/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-21	5/14/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-21	5/14/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-21	5/14/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-21	5/14/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-21	5/14/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-21	5/14/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-21	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-21	5/14/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-21	5/14/2019	Naphthalene	*22*	*50*	20.61105	30	ug/L
MKTF-21	5/14/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-21	5/14/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-21	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-21	5/14/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-21	5/14/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-21	5/14/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-21	5/14/2019	Phenol	42	50	40.182932	5761	ug/L
MKTF-21	5/14/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-21	5/14/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-21	8/22/2019	1,2,4-Trichlorobenzene	ND	10.75269	4.348888	70	ug/L
MKTF-21	8/22/2019	1,2-Dichlorobenzene	ND	10.75269	5.133799	600	ug/L
MKTF-21	8/22/2019	1,3-Dichlorobenzene	ND	10.75269	5.661694	NA	ug/L
MKTF-21	8/22/2019	1,4-Dichlorobenzene	ND	10.75269	4.756164	75	ug/L
MKTF-21	8/22/2019	1-Methylnaphthalene	9.3	10.75269	3.300082	11.38	ug/L
MKTF-21	8/22/2019	2,4,5-Trichlorophenol	ND	10.75269	3.191012	1166	ug/L
MKTF-21	8/22/2019	2,4,6-Trichlorophenol	ND	10.75269	2.509388	11.9*	ug/L
MKTF-21	8/22/2019	2,4-Dichlorophenol	ND	21.50538	3.140652	45.3	ug/L
MKTF-21	8/22/2019	2,4-Dimethylphenol	ND	10.75269	3.18924	354	ug/L
MKTF-21	8/22/2019	2,4-Dinitrophenol	ND	21.50538	2.787585	38.7	ug/L
MKTF-21	8/22/2019	2,4-Dinitrotoluene	ND	10.75269	4.131468	45.3	ug/L
MKTF-21	8/22/2019	2,6-Dinitrotoluene	*ND*	*10.75269*	2.611704	0.485	ug/L
MKTF-21	8/22/2019	2-Chloronaphthalene	ND	10.75269	3.301202	733	ug/L
MKTF-21	8/22/2019	2-Chlorophenol	ND	10.75269	2.888105	91	ug/L
MKTF-21	8/22/2019	2-Methylnaphthalene	6.4	10.75269	3.246089	35.1	ug/L
MKTF-21	8/22/2019	2-Methylphenol	ND	10.75269	3.07359	NA	ug/L
MKTF-21	8/22/2019	2-Nitroaniline	ND	10.75269	3.412583	190	ug/L
MKTF-21	8/22/2019	2-Nitrophenol	ND	10.75269	3.195678	NA	ug/L
MKTF-21	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10.75269*	2.991829	1.25	ug/L
MKTF-21	8/22/2019	3,4-Methylphenol	ND	10.75269	3.854251	NA	ug/L
MKTF-21	8/22/2019	3-Nitroaniline	ND	10.75269	3.487948	NA	ug/L
MKTF-21	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*21.50538*	3.111044	1.52	ug/L
MKTF-21	8/22/2019	4-Bromophenyl-phenylether	ND	10.75269	3.222788	NA	ug/L
MKTF-21	8/22/2019	4-Chloro-3-Methylphenol	ND	10.75269	3.664924	NA	ug/L
MKTF-21	8/22/2019	4-Chloroaniline	*ND*	*10.75269*	2.426454	0.37	ug/L
MKTF-21	8/22/2019	4-Chlorophenyl-phenylether	ND	10.75269	2.622425	NA	ug/L
MKTF-21	8/22/2019	4-Nitroaniline	*ND*	*10.75269*	2.89495	3.8	ug/L
MKTF-21	8/22/2019	4-Nitrophenol	ND	10.75269	8.141577	NA	ug/L
MKTF-21	8/22/2019	Acenaphthene	ND	10.75269	3.178377	535	ug/L
MKTF-21	8/22/2019	Acenaphthylene	ND	10.75269	2.575813	NA	ug/L
MKTF-21	8/22/2019	Aniline	ND	10.75269	3.848942	13	ug/L
MKTF-21	8/22/2019	Anthracene	ND	10.75269	2.857175	1721	ug/L
MKTF-21	8/22/2019	Azobenzene	*ND*	*10.75269*	3.49959	0.12	ug/L
MKTF-21	8/22/2019	Benzo(a)anthracene	*ND*	*10.75269*	3.872885	0.12	ug/L
MKTF-21	8/22/2019	Benzo(a)pyrene	*ND*	*10.75269*	3.815341	0.2	ug/L
MKTF-21	8/22/2019	Benzo(b)fluoranthene	*ND*	*10.75269*	3.621641	0.34	ug/L
MKTF-21	8/22/2019	Benzo(g,h,i)perylene	ND	10.75269	2.402401	NA	ug/L
MKTF-21	8/22/2019	Benzo(k)fluoranthene	*ND*	*10.75269*	3.100539	3.43	ug/L
MKTF-21	8/22/2019	Benzoic Acid	38	21.50538	11.530455	75000	ug/L
MKTF-21	8/22/2019	Benzyl Alcohol	ND	10.75269	2.538001	2000	ug/L
MKTF-21	8/22/2019	Bis(2-chloroethoxy)methane	ND	10.75269	2.799886	59	ug/L
MKTF-21	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10.75269*	3.476862	0.137	ug/L
MKTF-21	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10.75269*	4.148752	9.81	ug/L
MKTF-21	8/22/2019	Bis(2-ethylhexyl)phthalate	5.4	10.75269	4.625944	55.64	ug/L
MKTF-21	8/22/2019	Butylbenzylphthalate	ND	10.75269	3.578868	16	ug/L
MKTF-21	8/22/2019	Carbazole	ND	10.75269	3.108072	NA	ug/L
MKTF-21	8/22/2019	Chrysene	ND	10.75269	2.996369	34.3	ug/L
MKTF-21	8/22/2019	Dibenzo(a,h)anthracene	ND	10.75269	3.182651	NA	ug/L
MKTF-21	8/22/2019	Dibenzofuran	ND	10.75269	3.425688	NA	ug/L
MKTF-21	8/22/2019	Diethylphthalate	ND	10.75269	3.088696	14801	ug/L
MKTF-21	8/22/2019	Dimethylphthalate	ND	10.75269	3.481738	612	ug/L
MKTF-21	8/22/2019	Di-n-butylphthalate	ND	10.75269	2.910685	885	ug/L
MKTF-21	8/22/2019	Di-n-octylphthalate	ND	10.75269	3.781039	200	ug/L
MKTF-21	8/22/2019	Fluoranthene	ND	10.75269	2.593779	802	ug/L
MKTF-21	8/22/2019	Fluorene	ND	10.75269	3.105901	288	ug/L
MKTF-21	8/22/2019	Hexachlorobenzene	*ND*	*10.75269*	3.31501	0.0976	ug/L
MKTF-21	8/22/2019	Hexachlorobutadiene	*ND*	*10.75269*	5.088457	0.14	ug/L
MKTF-21	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10.75269*	3.847501	0.41	ug/L
MKTF-21	8/22/2019	Hexachloroethane	*ND*	*10.75269*	5.148163	3.28	ug/L
MKTF-21	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10.75269*	2.908144	0.343	ug/L
MKTF-21	8/22/2019	Isophorone	ND	10.75269	3.275306	781	ug/L
MKTF-21	8/22/2019	Naphthalene	**37**	10.75269	4.432484	30	ug/L
MKTF-21	8/22/2019	Nitrobenzene	*ND*	*10.75269*	2.999307	1.4	ug/L
MKTF-21	8/22/2019	N-Nitrosodimethylamine	*ND*	*10.75269*	5.42317	0.0049	ug/L
MKTF-21	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10.75269*	6.981132	0.011	ug/L
MKTF-21	8/22/2019	N-Nitrosodiphenylamine	ND	10.75269	2.559549	122	ug/L
MKTF-21	8/22/2019	Pentachlorophenol	*ND*	*21.50538*	2.952125	1	ug/L
MKTF-21	8/22/2019	Phenanthrene	ND	10.75269	2.986153	170	ug/L
MKTF-21	8/22/2019	Phenol	69	10.75269	8.641491	5761	ug/L
MKTF-21	8/22/2019	Pyrene	ND	10.75269	2.692043	117	ug/L
MKTF-21	8/22/2019	Pyridine	ND	10.75269	10.325953	20	ug/L
MKTF-21	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-21	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-21	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-21	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-21	11/5/2019	1-Methylnaphthalene	**49**	5	5	11.38	ug/L
MKTF-21	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-21	11/5/2019	2,4,6-Trichlorophenol	19	5	5	11.9*	ug/L
MKTF-21	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-21	11/5/2019	2,4-Dimethylphenol	260	5	5	354	ug/L
MKTF-21	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-21	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-21	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-21	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-21	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-21	11/5/2019	2-Methylnaphthalene	**57**	5	5	35.1	ug/L
MKTF-21	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-21	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-21	11/5/2019	3,4-Methylphenol	30	5	5	NA	ug/L
MKTF-21	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-21	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-21	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-21	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-21	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-21	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-21	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-21	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-21	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-21	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-21	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-21	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-21	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-21	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-21	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-21	11/5/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-21	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-21	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-21	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-21	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-21	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-21	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-21	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-21	11/5/2019	Fluorene	ND	5	5	288	ug/L
MKTF-21	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-21	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-21	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-21	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-21	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-21	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-21	11/5/2019	Naphthalene	**220**	5	5	30	ug/L
MKTF-21	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-21	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-21	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-21	11/5/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-21	11/5/2019	Phenol	95	5	5	5761	ug/L
MKTF-21	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-21	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-22	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-22	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-22	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-22	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-22	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	4/10/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-22	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-22	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-22	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-22	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-22	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-22	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-22	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-22	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-22	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-22	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-22	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-22	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-22	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-22	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-22	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-22	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-22	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-22	4/10/2014	1-Methylnaphthalene	**45**	10	3.6	11.38	ug/L
MKTF-22	4/10/2014	Naphthalene	13	10	2.3	30	ug/L
MKTF-22	4/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-22	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-22	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	4/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-22	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-22	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-22	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-22	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-22	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-22	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-22	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-22	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-22	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-22	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	4/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-22	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-22	4/10/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-22	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-22	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-22	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-22	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-22	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-22	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-22	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-22	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-22	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-22	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-22	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-22	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-22	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-22	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-22	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-22	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-22	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-22	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-22	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-22	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-22	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-22	4/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-22	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-22	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-22	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-22	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-22	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-22	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-22	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-22	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-22	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-22	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-22	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-22	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-22	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-22	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-22	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-22	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-22	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-22	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-22	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-22	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-22	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-22	11/17/2014	1-Methylnaphthalene	**45**	10	3.6	11.38	ug/L
MKTF-22	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-22	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-22	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-22	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-22	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-22	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-22	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-22	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-22	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-22	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-22	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-22	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-22	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-22	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-22	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-22	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-22	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-22	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	11/17/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-22	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-22	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-22	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-22	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-22	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-22	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-22	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-22	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-22	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-22	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-22	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-22	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-22	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-22	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-22	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-22	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-22	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-22	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-22	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-22	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-22	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-22	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-22	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-22	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-22	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-22	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-22	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-22	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-22	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-22	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-22	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-22	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-22	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-22	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-22	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-22	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-22	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-22	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-22	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-22	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-22	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-22	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-22	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-22	3/12/2015	1-Methylnaphthalene	**66**	10	3.8	11.38	ug/L
MKTF-22	3/12/2015	Naphthalene	16	10	3.6	30	ug/L
MKTF-22	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-22	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-22	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-22	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-22	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-22	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-22	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-22	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-22	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-22	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-22	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-22	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-22	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-22	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-22	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-22	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-22	3/12/2015	Phenol	14	10	4.2	5761	ug/L
MKTF-22	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-22	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-22	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-22	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-22	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-22	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-22	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-22	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-22	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-22	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-22	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-22	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-22	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-22	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-22	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-22	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-22	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-22	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-22	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-22	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-22	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-22	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-22	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-22	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-22	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-22	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	6/9/2015	1-Methylnaphthalene	**62**	10	1.8	11.38	ug/L
MKTF-22	6/9/2015	Naphthalene	13	10	1.8	30	ug/L
MKTF-22	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-22	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	6/9/2015	Phenol	18	10	1.1	5761	ug/L
MKTF-22	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	8/20/2015	1-Methylnaphthalene	**18**	10	1.8	11.38	ug/L
MKTF-22	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-22	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-22	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	8/20/2015	Phenol	14	10	1.1	5761	ug/L
MKTF-22	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-22	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-22	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-22	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-22	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-22	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-22	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-22	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-22	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-22	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-22	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-22	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-22	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-22	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-22	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-22	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-22	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-22	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-22	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-22	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-22	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-22	11/9/2015	1-Methylnaphthalene	**40**	10	1.8	11.38	ug/L
MKTF-22	11/9/2015	Naphthalene	11	10	1.8	30	ug/L
MKTF-22	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-22	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-22	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-22	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-22	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-22	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-22	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-22	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-22	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-22	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-22	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-22	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-22	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-22	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-22	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-22	11/9/2015	Phenol	10	10	1.1	5761	ug/L
MKTF-22	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-22	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-22	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-22	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-22	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-22	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-22	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-22	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-22	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-22	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-22	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-22	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-22	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-22	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-22	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-22	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-22	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-22	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-22	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-22	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-22	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-22	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-22	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-22	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-22	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-22	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-22	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-22	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-22	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-22	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-22	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-22	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-22	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-22	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-22	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-22	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-22	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-22	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-22	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-22	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-22	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-22	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-22	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-22	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-22	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-22	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-22	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-22	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-22	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-22	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-22	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-22	2/25/2016	1-Methylnaphthalene	**42**	10	6.8	11.38	ug/L
MKTF-22	2/25/2016	Naphthalene	29	10	5.9	30	ug/L
MKTF-22	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-22	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-22	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-22	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-22	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-22	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-22	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-22	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-22	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-22	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-22	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-22	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-22	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-22	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-22	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-22	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-22	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-22	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-22	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-22	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-22	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-22	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-22	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-22	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-22	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-22	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-22	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-22	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-22	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-22	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-22	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-22	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-22	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-22	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-22	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-22	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-22	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-22	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-22	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-22	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-22	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-22	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-22	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-22	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-22	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-22	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	6/10/2016	Acenaphthene	3.9	10	2.6	535	ug/L
MKTF-22	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-22	6/10/2016	Carbazole	5.3	10	2.3	NA	ug/L
MKTF-22	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	6/10/2016	1-Methylnaphthalene	**67**	10	2.9	11.38	ug/L
MKTF-22	6/10/2016	Naphthalene	**46**	10	2.6	30	ug/L
MKTF-22	6/10/2016	2-Methylnaphthalene	11	10	2.9	35.1	ug/L
MKTF-22	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	6/10/2016	Phenol	19	10	2	5761	ug/L
MKTF-22	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	6/10/2016	Bis(2-ethylhexyl)phthalate	4.6	10	2.6	55.64	ug/L
MKTF-22	6/10/2016	Di-n-octylphthalate	9.1	10	2	200	ug/L
MKTF-22	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	9/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	9/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	9/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	9/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	9/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	9/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	9/10/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-22	9/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	9/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	9/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	9/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-22	9/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	9/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	9/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	9/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	9/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	9/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-22	9/10/2016	Carbazole	2.4	10	2.3	NA	ug/L
MKTF-22	9/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	9/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	9/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	9/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	9/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	9/10/2016	1-Methylnaphthalene	**39**	10	2.9	11.38	ug/L
MKTF-22	9/10/2016	Naphthalene	23	10	2.6	30	ug/L
MKTF-22	9/10/2016	2-Methylnaphthalene	5	10	2.9	35.1	ug/L
MKTF-22	9/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	9/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	9/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	9/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	9/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	9/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	9/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	9/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	9/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	9/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	9/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	9/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	9/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	9/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	9/10/2016	Phenol	7.7	10	2	5761	ug/L
MKTF-22	9/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	9/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	9/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	9/10/2016	Bis(2-ethylhexyl)phthalate	3	10	2.6	55.64	ug/L
MKTF-22	9/10/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	9/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	9/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	9/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	9/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	9/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	9/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	9/10/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-22	9/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	9/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	9/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	9/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	9/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	9/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	9/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	9/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	9/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	9/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	9/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	9/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	9/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	9/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-22	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	11/1/2016	Benzoic Acid	18	20	2.6	75000	ug/L
MKTF-22	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	11/1/2016	Acenaphthene	3.8	10	2.6	535	ug/L
MKTF-22	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	11/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-22	11/1/2016	Fluorene	5.7	10	2.7	288	ug/L
MKTF-22	11/1/2016	Carbazole	4.9	10	2.3	NA	ug/L
MKTF-22	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	11/1/2016	1-Methylnaphthalene	**70**	10	2.9	11.38	ug/L
MKTF-22	11/1/2016	Naphthalene	**52**	10	2.6	30	ug/L
MKTF-22	11/1/2016	2-Methylnaphthalene	13	10	2.9	35.1	ug/L
MKTF-22	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	11/1/2016	2,4-Dimethylphenol	3.7	10	3	354	ug/L
MKTF-22	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	11/1/2016	Phenol	23	10	2	5761	ug/L
MKTF-22	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	11/1/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-22	11/1/2016	Di-n-octylphthalate	7.3	10	2	200	ug/L
MKTF-22	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-22	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-22	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-22	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-22	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-22	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-22	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-22	3/8/2017	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-22	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-22	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-22	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-22	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-22	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-22	3/8/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-22	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-22	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-22	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Fluorene	3	10	2.7	288	ug/L
MKTF-22	3/8/2017	Carbazole	4.6	10	2.3	NA	ug/L
MKTF-22	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-22	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-22	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-22	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-22	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-22	3/8/2017	1-Methylnaphthalene	**44**	10	2.9	11.38	ug/L
MKTF-22	3/8/2017	Naphthalene	**31**	10	2.6	30	ug/L
MKTF-22	3/8/2017	2-Methylnaphthalene	8.6	10	2.9	35.1	ug/L
MKTF-22	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-22	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-22	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-22	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-22	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-22	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-22	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-22	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-22	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-22	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-22	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-22	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-22	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-22	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-22	3/8/2017	Phenol	9.5	10	2	5761	ug/L
MKTF-22	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-22	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-22	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-22	3/8/2017	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-22	3/8/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-22	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-22	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-22	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-22	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-22	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-22	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-22	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-22	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-22	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-22	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-22	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-22	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-22	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-22	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-22	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-22	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-22	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-22	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-22	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-22	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-22	3/8/2017	3,4-Methylphenol	2.5	10	2.3	NA	ug/L
MKTF-22	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	6/8/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MKTF-22	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-22	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	6/8/2017	1-Methylnaphthalene	**47**	10	3.3	11.38	ug/L
MKTF-22	6/8/2017	Naphthalene	27	10	2.9	30	ug/L
MKTF-22	6/8/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	6/8/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	6/8/2017	Phenol	20	10	3.1	5761	ug/L
MKTF-22	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	6/8/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-22	6/8/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
MKTF-22	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	10/3/2017	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-22	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-22	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	10/3/2017	1-Methylnaphthalene	**75**	10	3.3	11.38	ug/L
MKTF-22	10/3/2017	Naphthalene	28	10	2.9	30	ug/L
MKTF-22	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	10/3/2017	Phenol	14	10	3.1	5761	ug/L
MKTF-22	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-22	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-22	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	11/28/2017	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-22	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	11/28/2017	Fluorene	5.3	10	4	288	ug/L
MKTF-22	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	1-Methylnaphthalene	**58**	10	3.3	11.38	ug/L
MKTF-22	11/28/2017	Naphthalene	22	10	2.9	30	ug/L
MKTF-22	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	11/28/2017	Phenol	22	10	3.1	5761	ug/L
MKTF-22	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	11/28/2017	Bis(2-ethylhexyl)phthalate	**100**	10	4.8	55.64	ug/L
MKTF-22	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-22	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-22	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-22	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-22	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-22	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-22	2/8/2018	Benzoic Acid	17	20	3.9	75000	ug/L
MKTF-22	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-22	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-22	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-22	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-22	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-22	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-22	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-22	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-22	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-22	2/8/2018	Fluorene	5	10	4	288	ug/L
MKTF-22	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-22	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-22	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-22	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-22	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-22	2/8/2018	1-Methylnaphthalene	**53**	10	3.3	11.38	ug/L
MKTF-22	2/8/2018	Naphthalene	18	10	2.9	30	ug/L
MKTF-22	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-22	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-22	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-22	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-22	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-22	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-22	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-22	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-22	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-22	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-22	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-22	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-22	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-22	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-22	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-22	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-22	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-22	2/8/2018	Phenol	24	10	3.1	5761	ug/L
MKTF-22	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-22	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-22	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-22	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-22	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-22	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-22	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-22	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-22	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-22	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-22	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-22	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-22	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-22	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-22	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-22	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-22	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-22	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-22	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-22	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-22	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-22	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-22	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-22	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-22	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-22	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-22	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	5/10/2018	Benzoic Acid	17	20	6.3	75000	ug/L
MKTF-22	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	5/10/2018	1-Methylnaphthalene	**33**	10	7	11.38	ug/L
MKTF-22	5/10/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-22	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-22	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	5/10/2018	Phenol	17	10	6	5761	ug/L
MKTF-22	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-22	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	8/30/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-22	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	8/30/2018	1-Methylnaphthalene	**36**	10	7	11.38	ug/L
MKTF-22	8/30/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	8/30/2018	2,4-Dimethylphenol	6.9	10	5.9	354	ug/L
MKTF-22	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	8/30/2018	Phenol	19	10	6	5761	ug/L
MKTF-22	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-22	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-22	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-22	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-22	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-22	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-22	11/28/2018	Benzoic Acid	25	20	6.3	75000	ug/L
MKTF-22	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-22	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-22	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-22	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-22	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-22	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-22	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-22	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-22	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-22	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-22	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-22	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-22	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-22	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-22	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-22	11/28/2018	1-Methylnaphthalene	**32**	10	7	11.38	ug/L
MKTF-22	11/28/2018	Naphthalene	12	10	5	30	ug/L
MKTF-22	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-22	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-22	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-22	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-22	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-22	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-22	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-22	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-22	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-22	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-22	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-22	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-22	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-22	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-22	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-22	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-22	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-22	11/28/2018	Phenol	23	10	6	5761	ug/L
MKTF-22	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-22	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-22	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-22	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-22	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-22	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-22	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-22	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-22	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-22	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-22	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-22	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-22	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-22	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-22	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-22	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-22	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-22	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-22	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-22	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-22	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-22	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-22	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-22	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-22	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-22	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-22	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-22	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-22	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-22	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-22	5/9/2019	1-Methylnaphthalene	**40**	10	3.069076	11.38	ug/L
MKTF-22	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-22	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-22	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-22	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-22	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-22	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-22	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-22	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-22	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-22	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-22	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-22	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-22	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-22	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-22	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-22	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-22	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-22	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-22	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-22	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-22	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-22	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-22	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-22	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-22	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-22	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-22	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-22	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-22	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-22	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-22	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-22	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-22	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-22	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-22	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-22	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-22	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-22	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-22	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-22	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-22	5/9/2019	Carbazole	4.7	10	2.890507	NA	ug/L
MKTF-22	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-22	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-22	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-22	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-22	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-22	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-22	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-22	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-22	5/9/2019	Fluorene	6	10	2.888488	288	ug/L
MKTF-22	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-22	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-22	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-22	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-22	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-22	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-22	5/9/2019	Naphthalene	8.6	10	4.12221	30	ug/L
MKTF-22	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-22	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-22	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-22	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-22	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-22	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-22	5/9/2019	Phenol	22	10	8.036586	5761	ug/L
MKTF-22	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-22	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-22	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-22	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-22	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-22	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-22	8/20/2019	1-Methylnaphthalene	**35**	10	3.069076	11.38	ug/L
MKTF-22	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-22	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-22	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-22	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-22	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-22	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-22	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-22	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-22	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-22	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-22	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-22	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-22	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-22	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-22	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-22	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-22	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-22	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-22	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-22	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-22	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-22	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-22	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-22	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-22	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-22	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-22	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-22	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-22	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-22	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-22	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-22	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-22	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-22	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-22	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-22	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-22	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-22	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-22	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-22	8/20/2019	Carbazole	6.9	10	2.890507	NA	ug/L
MKTF-22	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-22	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-22	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-22	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-22	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-22	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-22	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-22	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-22	8/20/2019	Fluorene	3.6	10	2.888488	288	ug/L
MKTF-22	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-22	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-22	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-22	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-22	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-22	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-22	8/20/2019	Naphthalene	11	10	4.12221	30	ug/L
MKTF-22	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-22	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-22	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-22	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-22	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-22	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-22	8/20/2019	Phenol	22	10	8.036586	5761	ug/L
MKTF-22	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-22	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	**33**	3	1.234	11.38	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-22	10/24/2019	Acenaphthene	1.2	3	1.14	535	ug/L
MKTF-22	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-22	10/24/2019	Anthracene	0.2	0.6	0.161	1721	ug/L
MKTF-22	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-22	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-22	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-22	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-22	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-22	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-22	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-22	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-22	10/24/2019	Fluorene	2.2	0.8	0.338	288	ug/L
MKTF-22	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-22	10/24/2019	Naphthalene	**33**	3	1.159	30	ug/L
MKTF-22	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-22	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-22	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-22	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-22	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-22	10/24/2019	1,4-Dioxane	**15**	1	1	4.59	ug/L
MKTF-22	10/24/2019	1-Methylnaphthalene	**41**	0.5	0.5	11.38	ug/L
MKTF-22	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-22	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-22	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-22	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-22	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-22	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-22	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-22	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-22	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-22	10/24/2019	2-Methylnaphthalene	1.5	0.5	0.5	35.1	ug/L
MKTF-22	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-22	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-22	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-22	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-22	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Acenaphthene	3.6	0.5	0.5	535	ug/L
MKTF-22	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-22	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-22	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-22	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-22	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-22	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-22	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-22	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-22	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-22	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-22	10/24/2019	Bis(2-ethylhexyl)phthalate	2.3	0.5	0.5	55.64	ug/L
MKTF-22	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-22	10/24/2019	Carbazole	12	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-22	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-22	10/24/2019	Dibenzofuran	2.4	0.5	0.5	NA	ug/L
MKTF-22	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-22	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-22	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-22	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-22	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-22	10/24/2019	Fluorene	5	0.5	0.5	288	ug/L
MKTF-22	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-22	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-22	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-22	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-22	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-22	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	Naphthalene	11	0.5	0.5	30	ug/L
MKTF-22	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-22	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-22	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-22	10/24/2019	Phenanthrene	0.59	0.5	0.5	170	ug/L
MKTF-22	10/24/2019	Phenol	36	0.5	0.5	5761	ug/L
MKTF-22	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-22	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-23	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-23	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-23	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-23	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-23	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-23	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-23	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-23	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-23	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-23	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-23	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-23	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-23	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-23	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-23	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-23	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-23	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-23	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-23	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-23	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-23	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-23	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-23	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-23	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-23	9/23/2014	1-Methylnaphthalene	**75**	10	3.6	11.38	ug/L
MKTF-23	9/23/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-23	9/23/2014	2-Methylnaphthalene	**79**	10	2.6	35.1	ug/L
MKTF-23	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-23	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-23	9/23/2014	2-Methylphenol	34	20	2.8	NA	ug/L
MKTF-23	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-23	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-23	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-23	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-23	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-23	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-23	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-23	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-23	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-23	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	9/23/2014	2,4-Dimethylphenol	27	10	3.1	354	ug/L
MKTF-23	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-23	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-23	9/23/2014	Phenol	22	10	1.6	5761	ug/L
MKTF-23	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-23	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-23	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-23	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-23	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-23	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-23	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-23	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-23	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-23	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-23	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-23	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-23	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-23	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-23	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-23	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-23	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-23	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-23	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-23	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-23	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-23	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-23	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-23	9/23/2014	3,4-Methylphenol	25	10	1.8	NA	ug/L
MKTF-23	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-23	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-23	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-23	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-23	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-23	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-23	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-23	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-23	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-23	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-23	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-23	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-23	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-23	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-23	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-23	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-23	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-23	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-23	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-23	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-23	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-23	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-23	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-23	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-23	11/17/2014	1-Methylnaphthalene	**84**	10	3.6	11.38	ug/L
MKTF-23	11/17/2014	Naphthalene	**130**	10	2.3	30	ug/L
MKTF-23	11/17/2014	2-Methylnaphthalene	**92**	10	2.6	35.1	ug/L
MKTF-23	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-23	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-23	11/17/2014	2-Methylphenol	58	10	2.8	NA	ug/L
MKTF-23	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-23	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-23	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-23	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-23	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-23	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-23	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-23	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-23	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	11/17/2014	2,4-Dimethylphenol	31	10	3.1	354	ug/L
MKTF-23	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-23	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-23	11/17/2014	Phenol	27	10	1.6	5761	ug/L
MKTF-23	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-23	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	11/17/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-23	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-23	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-23	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-23	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-23	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-23	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-23	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-23	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-23	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-23	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-23	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-23	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-23	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-23	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-23	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-23	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-23	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-23	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-23	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-23	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-23	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-23	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-23	11/17/2014	3,4-Methylphenol	53	10	1.8	NA	ug/L
MKTF-23	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-23	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-23	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-23	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-23	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-23	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-23	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-23	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-23	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-23	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-23	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-23	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-23	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-23	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-23	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-23	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-23	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-23	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-23	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-23	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-23	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-23	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-23	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-23	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-23	3/12/2015	1-Methylnaphthalene	**79**	10	3.8	11.38	ug/L
MKTF-23	3/12/2015	Naphthalene	**150**	10	3.6	30	ug/L
MKTF-23	3/12/2015	2-Methylnaphthalene	**82**	10	3.7	35.1	ug/L
MKTF-23	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-23	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-23	3/12/2015	2-Methylphenol	42	10	3.7	NA	ug/L
MKTF-23	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-23	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-23	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-23	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-23	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-23	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-23	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-23	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-23	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-23	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-23	3/12/2015	2,4-Dimethylphenol	94	10	4.3	354	ug/L
MKTF-23	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-23	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-23	3/12/2015	Phenol	21	10	4.2	5761	ug/L
MKTF-23	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-23	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-23	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-23	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-23	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-23	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-23	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-23	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-23	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-23	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-23	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-23	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-23	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-23	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-23	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-23	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-23	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-23	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-23	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-23	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-23	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-23	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-23	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-23	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-23	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	3/12/2015	3,4-Methylphenol	63	10	4.7	NA	ug/L
MKTF-23	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-23	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-23	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	6/9/2015	1-Methylnaphthalene	**110**	10	1.8	11.38	ug/L
MKTF-23	6/9/2015	Naphthalene	**200**	10	1.8	30	ug/L
MKTF-23	6/9/2015	2-Methylnaphthalene	**140**	10	2.2	35.1	ug/L
MKTF-23	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	6/9/2015	2-Methylphenol	71	10	1.2	NA	ug/L
MKTF-23	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-23	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	6/9/2015	2,4-Dimethylphenol	120	10	1.9	354	ug/L
MKTF-23	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	6/9/2015	Phenol	34	10	1.1	5761	ug/L
MKTF-23	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	6/9/2015	3,4-Methylphenol	64	10	1.5	NA	ug/L
MKTF-23	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	8/21/2015	Phenanthrene	16	10	2	170	ug/L
MKTF-23	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-23	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	8/21/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-23	8/21/2015	Naphthalene	**270**	20	3.7	30	ug/L
MKTF-23	8/21/2015	2-Methylnaphthalene	**190**	10	2.2	35.1	ug/L
MKTF-23	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	8/21/2015	2-Methylphenol	61	10	1.2	NA	ug/L
MKTF-23	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	8/21/2015	2,4-Dimethylphenol	100	10	1.9	354	ug/L
MKTF-23	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-23	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	8/21/2015	3,4-Methylphenol	47	10	1.5	NA	ug/L
MKTF-23	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-23	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-23	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-23	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-23	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-23	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-23	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-23	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-23	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-23	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-23	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-23	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-23	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-23	11/9/2015	Phenanthrene	22	10	2	170	ug/L
MKTF-23	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-23	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-23	11/9/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-23	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-23	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-23	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-23	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-23	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-23	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-23	11/9/2015	1-Methylnaphthalene	**170**	10	1.8	11.38	ug/L
MKTF-23	11/9/2015	Naphthalene	**230**	10	1.8	30	ug/L
MKTF-23	11/9/2015	2-Methylnaphthalene	**210**	10	2.2	35.1	ug/L
MKTF-23	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-23	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-23	11/9/2015	2-Methylphenol	60	10	1.2	NA	ug/L
MKTF-23	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-23	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-23	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-23	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-23	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-23	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-23	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-23	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-23	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-23	11/9/2015	2,4-Dimethylphenol	65	10	1.9	354	ug/L
MKTF-23	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-23	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-23	11/9/2015	Phenol	36	10	1.1	5761	ug/L
MKTF-23	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-23	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-23	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-23	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-23	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-23	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-23	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-23	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-23	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-23	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-23	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-23	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-23	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-23	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-23	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-23	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-23	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-23	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-23	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-23	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-23	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-23	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-23	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-23	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-23	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-23	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-23	11/9/2015	3,4-Methylphenol	54	10	1.5	NA	ug/L
MKTF-23	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-23	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-23	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-23	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-23	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-23	2/25/2016	Aniline	ND	10	9.8	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-23	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-23	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-23	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-23	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-23	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-23	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-23	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-23	2/25/2016	Phenanthrene	29	10	6.8	170	ug/L
MKTF-23	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-23	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-23	2/25/2016	Fluorene	11	10	7.2	288	ug/L
MKTF-23	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-23	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-23	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-23	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-23	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-23	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-23	2/25/2016	1-Methylnaphthalene	**220**	10	6.8	11.38	ug/L
MKTF-23	2/25/2016	Naphthalene	**230**	200	120	30	ug/L
MKTF-23	2/25/2016	2-Methylnaphthalene	**230**	10	7	35.1	ug/L
MKTF-23	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-23	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-23	2/25/2016	2-Methylphenol	37	10	8.2	NA	ug/L
MKTF-23	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-23	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-23	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-23	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-23	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-23	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-23	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-23	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-23	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-23	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-23	2/25/2016	2,4-Dimethylphenol	110	10	4.7	354	ug/L
MKTF-23	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-23	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-23	2/25/2016	Phenol	17	10	5.1	5761	ug/L
MKTF-23	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-23	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-23	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-23	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-23	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-23	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-23	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-23	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-23	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-23	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-23	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-23	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-23	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-23	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-23	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-23	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-23	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-23	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-23	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-23	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-23	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-23	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-23	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-23	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-23	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-23	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-23	2/25/2016	3,4-Methylphenol	24	10	7.1	NA	ug/L
MKTF-23	6/10/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-23	6/10/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-23	6/10/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-23	6/10/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-23	6/10/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-23	6/10/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-23	6/10/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-23	6/10/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-23	6/10/2016	Isophorone	ND	50	13	781	ug/L
MKTF-23	6/10/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-23	6/10/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-23	6/10/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-23	6/10/2016	Phenanthrene	**720**	50	13	170	ug/L
MKTF-23	6/10/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-23	6/10/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-23	6/10/2016	Fluorene	**380**	50	14	288	ug/L
MKTF-23	6/10/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-23	6/10/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-23	6/10/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-23	6/10/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-23	6/10/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-23	6/10/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	1-Methylnaphthalene	**7800**	500	150	11.38	ug/L
MKTF-23	6/10/2016	Naphthalene	**2300**	500	130	30	ug/L
MKTF-23	6/10/2016	2-Methylnaphthalene	**5600**	500	140	35.1	ug/L
MKTF-23	6/10/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-23	6/10/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-23	6/10/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-23	6/10/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-23	6/10/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-23	6/10/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-23	6/10/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-23	6/10/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-23	6/10/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-23	6/10/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-23	6/10/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-23	6/10/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-23	6/10/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-23	6/10/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-23	6/10/2016	Pyridine	*ND*	*50*	11	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-23	6/10/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-23	6/10/2016	Bis(2-ethylhexyl)phthalate	**70**	50	13	55.64	ug/L
MKTF-23	6/10/2016	Di-n-octylphthalate	30	50	9.9	200	ug/L
MKTF-23	6/10/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-23	6/10/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-23	6/10/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-23	6/10/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-23	6/10/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-23	6/10/2016	Pyrene	**190**	50	15	117	ug/L
MKTF-23	6/10/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-23	6/10/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-23	6/10/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-23	6/10/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-23	6/10/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-23	6/10/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-23	6/10/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-23	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-23	6/10/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-23	6/10/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-23	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-23	6/10/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-23	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-23	6/10/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-23	10/29/2019	1,2,4-Trichlorobenzene	ND	30	30	70	ug/L
MKTF-23	10/29/2019	1,2-Dichlorobenzene	ND	30	30	600	ug/L
MKTF-23	10/29/2019	1,3-Dichlorobenzene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	1,4-Dichlorobenzene	ND	30	30	75	ug/L
MKTF-23	10/29/2019	1,4-Dioxane	*ND*	*50*	50	4.59	ug/L
MKTF-23	10/29/2019	1-Methylnaphthalene	**2400**	30	30	11.38	ug/L
MKTF-23	10/29/2019	2,4,5-Trichlorophenol	ND	30	30	1166	ug/L
MKTF-23	10/29/2019	2,4,6-Trichlorophenol	ND	30	30	11.9*	ug/L
MKTF-23	10/29/2019	2,4-Dichlorophenol	ND	30	30	45.3	ug/L
MKTF-23	10/29/2019	2,4-Dimethylphenol	ND	30	30	354	ug/L
MKTF-23	10/29/2019	2,4-Dinitrophenol	ND	30	30	38.7	ug/L
MKTF-23	10/29/2019	2,4-Dinitrotoluene	ND	30	30	45.3	ug/L
MKTF-23	10/29/2019	2,6-Dinitrotoluene	*ND*	*30*	30	0.485	ug/L
MKTF-23	10/29/2019	2-Chloronaphthalene	ND	30	30	733	ug/L
MKTF-23	10/29/2019	2-Chlorophenol	ND	30	30	91	ug/L
MKTF-23	10/29/2019	2-Methylnaphthalene	**3500**	30	30	35.1	ug/L
MKTF-23	10/29/2019	2-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	2-Nitroaniline	ND	30	30	190	ug/L
MKTF-23	10/29/2019	2-Nitrophenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	3,3-Dichlorobenzidine	*ND*	*30*	30	1.25	ug/L
MKTF-23	10/29/2019	3,4-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	3-Nitroaniline	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4,6-Dinitro-2-methylphenol	*ND*	*30*	30	1.52	ug/L
MKTF-23	10/29/2019	4-Bromophenyl-phenylether	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Chloro-3-Methylphenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Chlorophenyl-phenylether	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	4-Nitroaniline	*ND*	*30*	30	3.8	ug/L
MKTF-23	10/29/2019	4-Nitrophenol	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Acenaphthene	80	30	30	535	ug/L
MKTF-23	10/29/2019	Acenaphthylene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Aniline	*ND*	*30*	30	13	ug/L
MKTF-23	10/29/2019	Anthracene	ND	30	30	1721	ug/L
MKTF-23	10/29/2019	Benzo(a)anthracene	*ND*	*30*	30	0.12	ug/L
MKTF-23	10/29/2019	Benzo(a)pyrene	*ND*	*30*	30	0.2	ug/L
MKTF-23	10/29/2019	Benzo(b)fluoranthene	*ND*	*30*	30	0.34	ug/L
MKTF-23	10/29/2019	Benzo(g,h,i)perylene	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Benzo(k)fluoranthene	*ND*	*30*	30	3.43	ug/L
MKTF-23	10/29/2019	Benzoic Acid	ND	25	25	75000	ug/L
MKTF-23	10/29/2019	Benzyl Alcohol	ND	30	30	2000	ug/L
MKTF-23	10/29/2019	Bis(2-chloroethoxy)methane	ND	30	30	59	ug/L
MKTF-23	10/29/2019	Bis(2-chloroisopropyl)ether	*ND*	*30*	30	9.81	ug/L
MKTF-23	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	30	30	55.64	ug/L
MKTF-23	10/29/2019	Butylbenzylphthalate	*ND*	*30*	30	16	ug/L
MKTF-23	10/29/2019	Carbazole	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Chrysene	ND	30	30	34.3	ug/L
MKTF-23	10/29/2019	Dibenzo(a,h)anthracene	ND	1	1	NA	ug/L
MKTF-23	10/29/2019	Dibenzofuran	ND	30	30	NA	ug/L
MKTF-23	10/29/2019	Diethylphthalate	ND	30	30	14801	ug/L
MKTF-23	10/29/2019	Dimethylphthalate	ND	30	30	612	ug/L
MKTF-23	10/29/2019	Di-n-butylphthalate	ND	30	30	885	ug/L
MKTF-23	10/29/2019	Di-n-octylphthalate	ND	30	30	200	ug/L
MKTF-23	10/29/2019	Fluoranthene	ND	30	30	802	ug/L
MKTF-23	10/29/2019	Fluorene	200	30	30	288	ug/L
MKTF-23	10/29/2019	Hexachlorobenzene	*ND*	*30*	30	0.0976	ug/L
MKTF-23	10/29/2019	Hexachlorobutadiene	*ND*	*30*	30	0.14	ug/L
MKTF-23	10/29/2019	Hexachlorocyclopentadiene	*ND*	*30*	30	0.41	ug/L
MKTF-23	10/29/2019	Hexachloroethane	*ND*	*30*	30	3.28	ug/L
MKTF-23	10/29/2019	Indeno(1,2,3-cd)pyrene	*ND*	*30*	30	0.343	ug/L
MKTF-23	10/29/2019	Isophorone	ND	30	30	781	ug/L
MKTF-23	10/29/2019	Naphthalene	**1200**	30	30	30	ug/L
MKTF-23	10/29/2019	Nitrobenzene	*ND*	*30*	30	1.4	ug/L
MKTF-23	10/29/2019	N-Nitrosodiphenylamine	ND	30	30	122	ug/L
MKTF-23	10/29/2019	Pentachlorophenol	*ND*	*30*	30	1	ug/L
MKTF-23	10/29/2019	Phenanthrene	**340**	30	30	170	ug/L
MKTF-23	10/29/2019	Phenol	ND	30	30	5761	ug/L
MKTF-23	10/29/2019	Pyrene	61	30	30	117	ug/L
MKTF-23	10/29/2019	Pyridine	*ND*	*30*	30	20	ug/L
MKTF-24	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-24	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-24	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-24	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-24	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-24	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-24	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-24	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-24	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-24	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-24	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-24	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-24	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-24	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-24	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-24	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-24	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-24	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-24	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-24	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-24	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-24	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-24	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-24	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-24	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-24	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-24	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-24	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-24	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-24	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-24	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-24	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-24	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-24	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-24	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-24	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-24	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-24	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-24	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-24	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-24	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-24	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-24	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-24	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-24	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-24	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-24	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-24	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-24	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	11/14/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-24	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-24	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-24	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-24	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-24	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-24	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-24	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-24	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-24	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-24	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-24	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-24	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-24	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-24	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-24	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-24	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-24	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-24	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-24	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-24	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-24	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-24	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-24	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-24	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-24	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-24	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-24	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-24	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-24	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-24	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-24	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-24	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-24	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-24	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-24	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-24	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-24	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-24	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-24	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-24	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-24	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-24	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-24	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-24	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-24	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-24	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-24	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-24	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-24	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-24	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-24	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-24	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-24	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-24	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-24	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-24	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-24	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-24	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-24	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-24	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-24	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-24	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-24	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-24	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-24	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-24	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-24	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-24	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-24	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-24	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-24	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-24	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-24	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-24	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-24	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-24	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-24	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-24	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-24	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-24	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-24	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-24	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-24	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-24	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-24	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-24	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-24	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-24	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-24	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-24	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-24	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-24	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-24	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-24	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-24	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-24	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-24	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-24	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-24	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-24	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-24	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-24	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-24	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-24	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-24	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-24	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-24	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-24	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-24	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-24	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-24	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-24	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-24	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-24	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-24	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-24	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-24	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-24	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-24	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-24	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-24	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-24	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-24	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-24	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-24	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-24	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-24	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-24	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-24	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-24	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-24	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-24	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-24	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-24	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-24	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-24	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-24	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-24	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-24	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-24	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-24	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-24	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-24	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-24	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-24	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-24	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-24	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-24	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-24	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-24	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-24	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-24	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-24	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-24	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-24	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-24	2/22/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-24	2/22/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-24	2/22/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-24	2/22/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-24	2/22/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-24	2/22/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-24	2/22/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-24	2/22/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-24	2/22/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-24	2/22/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-24	2/22/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-24	2/22/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-24	2/22/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-24	2/22/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-24	2/22/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-24	2/22/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-24	2/22/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-24	2/22/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-24	2/22/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-24	2/22/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-24	2/22/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-24	2/22/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-24	2/22/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-24	2/22/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-24	2/22/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-24	2/22/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-24	2/22/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-24	2/22/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-24	2/22/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-24	2/22/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-24	2/22/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-24	2/22/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-24	2/22/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-24	2/22/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-24	2/22/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-24	2/22/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-24	2/22/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-24	2/22/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-24	2/22/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-24	2/22/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-24	2/22/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-24	2/22/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-24	2/22/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-24	2/22/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-24	2/22/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-24	2/22/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-24	2/22/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-24	2/22/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-24	2/22/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	2/22/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-24	2/22/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-24	2/22/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-24	2/22/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-24	2/22/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-24	2/22/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-24	2/22/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-24	2/22/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-24	2/22/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-24	2/22/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-24	2/22/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-24	2/22/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-24	2/22/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-24	2/22/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-24	2/22/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-24	2/22/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-24	2/22/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-24	2/22/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-24	2/22/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-24	2/22/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-24	2/22/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/22/2016	3,4-Methylphenol	12	10	7.1	NA	ug/L
MKTF-24	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-24	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-24	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	6/8/2016	1-Methylnaphthalene	3.4	10	2.9	11.38	ug/L
MKTF-24	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-24	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-24	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	6/8/2016	Phenol	5.6	10	2	5761	ug/L
MKTF-24	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	6/8/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-24	6/8/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-24	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-24	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	6/8/2016	3,4-Methylphenol	4.5	10	2.3	NA	ug/L
MKTF-24	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	9/7/2016	Benzoic Acid	10	20	2.6	75000	ug/L
MKTF-24	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-24	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	9/7/2016	1-Methylnaphthalene	4.2	10	2.9	11.38	ug/L
MKTF-24	9/7/2016	Naphthalene	2.9	10	2.6	30	ug/L
MKTF-24	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-24	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	9/7/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-24	9/7/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-24	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	9/7/2016	Dimethylphthalate	7.3	10	2.4	612	ug/L
MKTF-24	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-24	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-24	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-24	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-24	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-24	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-24	10/28/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-24	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-24	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-24	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-24	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-24	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-24	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-24	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-24	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-24	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-24	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-24	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-24	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-24	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-24	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-24	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-24	10/28/2016	1-Methylnaphthalene	7.3	10	2.9	11.38	ug/L
MKTF-24	10/28/2016	Naphthalene	5.5	10	2.6	30	ug/L
MKTF-24	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-24	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-24	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-24	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-24	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-24	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-24	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-24	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-24	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-24	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-24	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-24	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-24	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-24	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-24	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-24	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-24	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-24	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-24	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-24	10/28/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-24	10/28/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-24	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-24	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-24	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-24	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-24	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-24	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-24	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-24	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-24	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-24	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-24	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-24	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-24	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-24	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-24	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-24	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-24	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-24	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-24	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-24	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-24	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-24	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	3/29/2017	Aniline	ND	10	3.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	3/29/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-24	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	3/29/2017	Phenol	4.7	10	3.1	5761	ug/L
MKTF-24	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	3/29/2017	Bis(2-ethylhexyl)phthalate	7.6	10	4.8	55.64	ug/L
MKTF-24	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	6/5/2017	Benzoic Acid	10	20	3.9	75000	ug/L
MKTF-24	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	6/5/2017	1-Methylnaphthalene	6.3	10	3.3	11.38	ug/L
MKTF-24	6/5/2017	Naphthalene	7.2	10	2.9	30	ug/L
MKTF-24	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	6/5/2017	Phenol	3.6	10	3.1	5761	ug/L
MKTF-24	6/5/2017	Pyridine	ND	10	2.3	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	6/5/2017	Bis(2-ethylhexyl)phthalate	6	10	4.8	55.64	ug/L
MKTF-24	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	10/3/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-24	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	10/3/2017	Phenol	10	10	3.1	5761	ug/L
MKTF-24	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-24	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	11/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-24	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	11/20/2017	1-Methylnaphthalene	9	10	3.3	11.38	ug/L
MKTF-24	11/20/2017	Naphthalene	5.8	10	2.9	30	ug/L
MKTF-24	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	11/20/2017	Phenol	3.2	10	3.1	5761	ug/L
MKTF-24	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-24	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-24	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-24	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-24	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-24	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-24	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-24	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-24	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-24	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-24	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-24	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-24	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-24	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-24	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-24	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-24	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-24	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-24	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-24	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-24	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-24	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-24	2/6/2018	1-Methylnaphthalene	10	10	3.3	11.38	ug/L
MKTF-24	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-24	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-24	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-24	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-24	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-24	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-24	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-24	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-24	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-24	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-24	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-24	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-24	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-24	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-24	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-24	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-24	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-24	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-24	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-24	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-24	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-24	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-24	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-24	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-24	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-24	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-24	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-24	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-24	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-24	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-24	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-24	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-24	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-24	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-24	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-24	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-24	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-24	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-24	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-24	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-24	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-24	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-24	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-24	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-24	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-24	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	5/1/2018	Benzoic Acid	34	20	6.3	75000	ug/L
MKTF-24	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-24	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-24	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	8/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-24	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-24	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-24	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-24	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-24	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-24	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-24	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-24	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-24	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-24	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-24	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-24	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-24	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-24	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-24	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-24	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-24	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-24	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-24	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-24	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-24	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-24	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-24	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-24	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-24	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-24	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-24	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-24	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-24	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-24	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-24	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-24	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-24	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-24	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-24	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-24	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-24	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-24	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-24	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-24	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-24	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-24	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-24	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-24	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-24	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-24	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-24	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-24	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-24	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-24	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-24	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-24	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-24	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-24	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-24	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-24	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-24	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-24	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-24	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-24	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-24	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-24	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-24	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-24	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-24	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-24	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-24	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-24	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-24	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-24	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-24	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-24	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-24	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-24	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-24	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-24	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-24	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-24	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-24	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-24	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-24	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-24	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-24	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-24	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-24	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-24	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-24	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-24	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-24	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-24	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-24	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-24	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-24	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-24	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-24	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-24	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-24	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-24	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-24	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-24	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-24	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-24	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-24	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-24	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-24	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-24	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-24	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-24	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-24	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-24	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-24	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-24	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-24	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-24	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-24	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-24	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-24	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-24	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-24	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-24	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-24	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-24	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-24	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-24	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-24	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-24	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-24	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-24	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-24	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-24	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-24	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-24	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-24	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-24	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-24	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-24	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-24	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-24	5/6/2019	Phenol	16	10	8.036586	5761	ug/L
MKTF-24	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-24	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-24	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-24	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-24	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-24	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-24	8/23/2019	1-Methylnaphthalene	5.3	10	3.069076	11.38	ug/L
MKTF-24	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-24	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-24	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-24	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-24	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-24	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-24	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-24	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-24	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-24	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-24	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-24	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-24	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-24	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-24	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-24	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-24	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-24	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-24	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-24	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-24	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-24	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-24	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-24	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-24	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-24	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-24	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-24	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-24	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-24	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-24	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-24	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-24	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-24	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-24	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-24	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-24	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-24	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-24	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-24	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-24	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-24	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-24	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-24	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-24	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-24	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-24	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-24	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-24	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-24	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-24	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-24	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-24	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-24	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-24	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-24	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-24	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-24	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-24	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-24	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-24	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-24	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-24	8/23/2019	Phenol	11	10	8.036586	5761	ug/L
MKTF-24	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-24	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	5.1	3	1.234	11.38	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-24	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-24	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-24	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-24	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-24	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-24	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-24	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-24	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-24	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-24	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-24	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-24	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-24	10/23/2019	Indeno(1,2,3-cd)pyrene	0.11	0.25	0.07	0.343	ug/L
MKTF-24	10/23/2019	Naphthalene	2.5	3	1.159	30	ug/L
MKTF-24	10/23/2019	Phenanthrene	0.19	0.6	0.152	170	ug/L
MKTF-24	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-24	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-24	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-24	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-24	10/23/2019	1,4-Dioxane	**31**	1	1	4.59	ug/L
MKTF-24	10/23/2019	1-Methylnaphthalene	5.4	0.5	0.5	11.38	ug/L
MKTF-24	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-24	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-24	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-24	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-24	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-24	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-24	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-24	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-24	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-24	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-24	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-24	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-24	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-24	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-24	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Acenaphthene	0.55	0.5	0.5	535	ug/L
MKTF-24	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-24	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-24	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-24	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-24	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-24	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-24	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-24	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-24	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-24	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-24	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-24	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-24	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-24	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-24	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-24	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-24	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-24	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-24	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-24	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-24	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-24	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-24	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-24	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-24	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-24	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-24	10/23/2019	Naphthalene	1	0.5	0.5	30	ug/L
MKTF-24	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-24	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-24	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-24	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-24	10/23/2019	Phenol	21	0.5	0.5	5761	ug/L
MKTF-24	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-24	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-24	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-24	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-24	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-24	2/25/2020	1,4-Dioxane	**40**	1	1	4.59	ug/L
MKTF-24	2/25/2020	1-Methylnaphthalene	8.1	0.5	0.5	11.38	ug/L
MKTF-24	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-24	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-24	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-24	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-24	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-24	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-24	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-24	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-24	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-24	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-24	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-24	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-24	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-24	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-24	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-24	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-24	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-24	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-24	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-24	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-24	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-24	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-24	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-24	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-24	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-24	2/25/2020	Bis(2-ethylhexyl)phthalate	1.8	0.5	0.5	55.64	ug/L
MKTF-24	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-24	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-24	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-24	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-24	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-24	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-24	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-24	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-24	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-24	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-24	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-24	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-24	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-24	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-24	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-24	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-24	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-24	2/25/2020	Naphthalene	1.6	0.5	0.5	30	ug/L
MKTF-24	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-24	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-24	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-24	2/25/2020	Phenol	31	0.5	0.5	5761	ug/L
MKTF-24	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-24	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-24	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-24	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-24	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-24	9/19/2020	1,4-Dioxane	**31**	0.51	0.1	4.59	ug/L
MKTF-24	9/19/2020	1-Methylnaphthalene	3.6	0.51	0.1	11.38	ug/L
MKTF-24	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-24	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-24	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-24	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-24	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-24	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-24	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-24	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-24	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-24	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-24	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-24	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-24	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-24	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-24	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-24	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-24	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Acenaphthene	0.31	0.51	0.1	535	ug/L
MKTF-24	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-24	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-24	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-24	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-24	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-24	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-24	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-24	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-24	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-24	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-24	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-24	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-24	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-24	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-24	9/19/2020	Carbazole	0.22	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-24	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-24	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-24	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-24	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-24	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-24	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-24	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-24	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-24	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-24	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-24	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-24	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-24	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-24	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-24	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-24	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-24	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-24	9/19/2020	Naphthalene	0.78	0.51	0.1	30	ug/L
MKTF-24	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-24	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-24	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-24	9/19/2020	Phenol	72	1.5	0.31	5761	ug/L
MKTF-24	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-24	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-24	12/18/2020	1,3-Dichlorobenzene	ND	10	1.91	NA	ug/L
MKTF-24	12/18/2020	1,4-Dichlorobenzene	ND	10	1.91	75	ug/L
MKTF-24	12/18/2020	2,4,5-Trichlorophenol	ND	10	1.1	1166	ug/L
MKTF-24	12/18/2020	2,4,6-Trichlorophenol	ND	10	1.61	11.9*	ug/L
MKTF-24	12/18/2020	2,4-Dichlorophenol	ND	10	1.51	45.3	ug/L
MKTF-24	12/18/2020	2,4-Dimethylphenol	ND	10	1.31	354	ug/L
MKTF-24	12/18/2020	2,4-Dinitrophenol	ND	30.1	4.62	38.7	ug/L
MKTF-24	12/18/2020	2-Chloronaphthalene	ND	10	1.51	733	ug/L
MKTF-24	12/18/2020	2-Chlorophenol	ND	10	1.71	91	ug/L
MKTF-24	12/18/2020	2-Methylphenol	ND	10	1.51	NA	ug/L
MKTF-24	12/18/2020	2-Nitroaniline	ND	10	1.81	190	ug/L
MKTF-24	12/18/2020	2-Nitrophenol	ND	10	2.01	NA	ug/L
MKTF-24	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10*	4.02	1.25	ug/L
MKTF-24	12/18/2020	3-Nitroaniline	ND	10	2.21	NA	ug/L
MKTF-24	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10*	4.02	1.52	ug/L
MKTF-24	12/18/2020	4-Bromophenyl-phenylether	ND	10	1.31	NA	ug/L
MKTF-24	12/18/2020	4-Chloro-3-Methylphenol	ND	10	1.41	NA	ug/L
MKTF-24	12/18/2020	4-Chloroaniline	*ND*	*10*	1.81	0.37	ug/L
MKTF-24	12/18/2020	4-Chlorophenyl-phenylether	ND	10	1.31	NA	ug/L
MKTF-24	12/18/2020	4-Nitroaniline	*ND*	*10*	4.12	3.8	ug/L
MKTF-24	12/18/2020	4-Nitrophenol	ND	10	3.31	NA	ug/L
MKTF-24	12/18/2020	Acenaphthene	ND	10	1.31	535	ug/L
MKTF-24	12/18/2020	Acenaphthylene	ND	10	1.41	NA	ug/L
MKTF-24	12/18/2020	Aniline	ND	10	3.51	13	ug/L
MKTF-24	12/18/2020	Anthracene	ND	10	1.31	1721	ug/L
MKTF-24	12/18/2020	Benzo(a)anthracene	*ND*	*10*	1.81	0.12	ug/L
MKTF-24	12/18/2020	Benzo(a)pyrene	*ND*	*10*	1.71	0.2	ug/L
MKTF-24	12/18/2020	Benzo(b)fluoranthene	*ND*	*10*	1.71	0.34	ug/L
MKTF-24	12/18/2020	Benzo(g,h,i)perylene	ND	10	3.11	NA	ug/L
MKTF-24	12/18/2020	Benzo(k)fluoranthene	*ND*	*10*	1.71	3.43	ug/L
MKTF-24	12/18/2020	Benzoic Acid	ND	30.1	5.72	75000	ug/L
MKTF-24	12/18/2020	Benzyl Alcohol	ND	10	2.21	2000	ug/L
MKTF-24	12/18/2020	Bis(2-chloroethoxy)methane	ND	10	1.41	59	ug/L
MKTF-24	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10*	1.2	0.137	ug/L
MKTF-24	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10	2.71	55.64	ug/L
MKTF-24	12/18/2020	Butylbenzylphthalate	ND	10	2.31	16	ug/L
MKTF-24	12/18/2020	Carbazole	ND	10	1.91	NA	ug/L
MKTF-24	12/18/2020	Chrysene	ND	10	1.81	34.3	ug/L
MKTF-24	12/18/2020	Di-n-butylphthalate	ND	10	1.71	885	ug/L
MKTF-24	12/18/2020	Di-n-octylphthalate	ND	10	1.61	200	ug/L
MKTF-24	12/18/2020	Dibenzo(a,h)anthracene	ND	10	2.71	NA	ug/L
MKTF-24	12/18/2020	Dibenzofuran	ND	10	1.51	NA	ug/L
MKTF-24	12/18/2020	Diethylphthalate	ND	10	1.1	14801	ug/L
MKTF-24	12/18/2020	Dimethylphthalate	ND	10	1.2	612	ug/L
MKTF-24	12/18/2020	Fluoranthene	ND	10	1.31	802	ug/L
MKTF-24	12/18/2020	Fluorene	ND	10	1.31	288	ug/L
MKTF-24	12/18/2020	Hexachlorobenzene	*ND*	*10*	1.2	0.0976	ug/L
MKTF-24	12/18/2020	Hexachlorocyclopentadiene	*ND*	*20.1*	1.91	0.41	ug/L
MKTF-24	12/18/2020	Hexachloroethane	*ND*	*10*	2.41	3.28	ug/L
MKTF-24	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.91	0.343	ug/L
MKTF-24	12/18/2020	Isophorone	ND	10	1.71	781	ug/L
MKTF-24	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10*	2.01	0.011	ug/L
MKTF-24	12/18/2020	N-Nitrosodimethylamine	*ND*	*10*	2.21	0.0049	ug/L
MKTF-24	12/18/2020	N-Nitrosodiphenylamine	ND	10	1.1	122	ug/L
MKTF-24	12/18/2020	Naphthalene	ND	10	1.71	30	ug/L
MKTF-24	12/18/2020	Nitrobenzene	*ND*	*10*	1.61	1.4	ug/L
MKTF-24	12/18/2020	Pentachlorophenol	*ND*	*20.1*	3.71	1	ug/L
MKTF-24	12/18/2020	Phenanthrene	ND	10	1.41	170	ug/L
MKTF-24	12/18/2020	Phenol	54.8	10	1.31	5761	ug/L
MKTF-24	12/18/2020	Pyrene	ND	10	1.51	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	Pyridine	ND	10	4.42	20	ug/L
MKTF-24	12/18/2020	1,2,4-Trichlorobenzene	ND	10	1.81	70	ug/L
MKTF-24	12/18/2020	1,2-Dichlorobenzene	ND	10	1.81	600	ug/L
MKTF-24	12/18/2020	2,4-Dinitrotoluene	ND	10	1.41	45.3	ug/L
MKTF-24	12/18/2020	2,6-Dinitrotoluene	*ND*	*10*	1.31	0.485	ug/L
MKTF-24	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.71	9.81	ug/L
MKTF-24	12/18/2020	Azobenzene	*ND*	*10*	1.31	0.12	ug/L
MKTF-25	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	4/8/2014	Naphthalene	21	10	2.3	30	ug/L
MKTF-25	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-25	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-25	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	4/8/2014	Phenol	13	10	1.6	5761	ug/L
MKTF-25	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-25	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-25	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-25	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-25	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-25	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-25	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-25	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-25	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-25	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-25	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-25	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-25	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-25	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-25	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-25	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-25	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-25	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-25	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-25	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-25	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-25	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-25	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-25	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-25	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-25	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-25	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-25	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-25	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-25	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-25	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-25	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-25	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-25	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-25	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-25	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-25	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-25	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-25	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-25	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-25	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-25	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-25	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-25	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-25	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-25	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-25	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-25	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-25	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-25	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-25	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-25	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-25	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-25	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-25	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-25	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-25	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-25	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-25	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-25	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-25	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-25	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-25	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-25	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-25	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-25	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-25	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-25	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-25	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-25	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-25	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-25	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-25	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-25	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-25	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-25	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-25	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-25	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-25	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-25	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-25	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-25	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-25	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-25	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-25	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-25	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-25	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-25	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-25	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-25	3/11/2015	Naphthalene	17	10	3.6	30	ug/L
MKTF-25	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-25	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-25	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-25	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-25	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-25	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-25	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-25	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-25	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-25	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-25	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-25	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-25	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-25	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-25	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-25	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-25	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-25	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-25	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-25	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-25	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-25	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-25	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-25	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-25	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-25	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-25	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-25	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-25	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-25	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-25	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-25	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-25	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-25	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-25	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-25	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-25	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-25	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-25	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-25	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-25	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-25	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-25	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-25	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-25	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-25	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-25	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-25	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-25	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-25	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-25	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-25	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-25	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-25	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-25	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-25	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-25	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-25	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-25	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-25	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-25	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-25	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-25	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-25	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-25	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-25	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-25	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-25	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-25	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-25	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-25	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-25	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-25	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-25	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-25	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-25	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-25	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-25	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-25	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-25	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-25	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-25	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-25	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-25	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-25	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-25	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-25	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-25	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-25	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-25	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-25	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-25	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-25	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-25	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-25	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-25	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-25	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-25	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-25	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-25	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-25	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-25	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-25	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-25	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-25	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-25	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-25	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-25	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-25	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-25	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-25	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-25	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-25	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-25	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-25	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-25	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-25	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-25	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-25	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-25	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-25	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-25	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-25	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-25	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-25	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-25	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-25	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-25	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-25	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-25	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-25	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-25	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-25	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-25	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-25	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-25	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-25	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-25	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-25	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-25	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-25	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-25	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-25	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-25	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-25	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-25	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-25	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-25	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-25	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-25	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-25	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-25	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-25	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-25	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-25	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-25	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-25	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-25	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-25	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-25	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-25	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-25	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-25	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-25	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-25	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-25	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-25	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-25	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-25	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-25	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-25	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-25	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-25	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-25	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-25	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-25	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-25	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-25	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-25	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-25	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-25	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-25	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-25	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-25	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	6/9/2016	1-Methylnaphthalene	3.8	10	2.9	11.38	ug/L
MKTF-25	6/9/2016	Naphthalene	3.7	10	2.6	30	ug/L
MKTF-25	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	6/9/2016	Phenol	7.9	10	2	5761	ug/L
MKTF-25	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	6/9/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-25	6/9/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-25	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-25	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-25	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	9/9/2016	Benzoic Acid	9.9	20	2.6	75000	ug/L
MKTF-25	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-25	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	9/9/2016	1-Methylnaphthalene	4.1	10	2.9	11.38	ug/L
MKTF-25	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-25	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	9/9/2016	Phenol	12	10	2	5761	ug/L
MKTF-25	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	9/9/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MKTF-25	9/9/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
MKTF-25	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-25	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	9/9/2016	Dimethylphthalate	3.1	10	2.4	612	ug/L
MKTF-25	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-25	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-25	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-25	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-25	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-25	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-25	11/1/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-25	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-25	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-25	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-25	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-25	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-25	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-25	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-25	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-25	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-25	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-25	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-25	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-25	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-25	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-25	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-25	11/1/2016	1-Methylnaphthalene	5.5	10	2.9	11.38	ug/L
MKTF-25	11/1/2016	Naphthalene	3.7	10	2.6	30	ug/L
MKTF-25	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-25	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-25	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-25	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-25	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-25	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-25	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-25	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-25	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-25	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-25	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-25	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-25	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-25	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-25	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-25	11/1/2016	Phenol	6.8	10	2	5761	ug/L
MKTF-25	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-25	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-25	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-25	11/1/2016	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-25	11/1/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-25	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-25	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-25	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-25	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-25	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-25	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-25	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-25	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-25	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-25	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-25	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-25	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-25	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-25	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-25	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-25	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-25	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-25	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-25	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-25	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-25	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	3/29/2017	Benzoic Acid	8	20	3.9	75000	ug/L
MKTF-25	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	3/29/2017	1-Methylnaphthalene	3.5	10	3.3	11.38	ug/L
MKTF-25	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	3/29/2017	Phenol	5.3	10	3.1	5761	ug/L
MKTF-25	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-25	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	6/5/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
MKTF-25	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-25	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	6/5/2017	Phenol	7.6	10	3.1	5761	ug/L
MKTF-25	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	6/5/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-25	6/5/2017	Di-n-octylphthalate	4.9	10	4.7	200	ug/L
MKTF-25	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	9/25/2017	1-Methylnaphthalene	7.5	10	3.3	11.38	ug/L
MKTF-25	9/25/2017	Naphthalene	7	10	2.9	30	ug/L
MKTF-25	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	9/25/2017	Phenol	12	10	3.1	5761	ug/L
MKTF-25	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-25	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	11/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-25	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	11/21/2017	1-Methylnaphthalene	5.9	10	3.3	11.38	ug/L
MKTF-25	11/21/2017	Naphthalene	4.5	10	2.9	30	ug/L
MKTF-25	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-25	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	11/21/2017	Phenol	4.4	10	3.1	5761	ug/L
MKTF-25	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	11/21/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-25	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-25	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-25	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-25	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-25	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-25	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-25	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-25	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-25	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-25	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-25	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-25	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-25	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-25	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-25	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-25	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-25	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-25	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-25	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-25	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-25	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-25	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-25	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-25	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-25	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-25	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-25	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-25	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-25	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-25	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-25	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-25	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-25	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-25	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-25	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-25	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-25	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-25	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-25	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-25	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-25	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-25	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-25	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-25	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-25	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-25	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-25	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-25	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-25	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-25	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-25	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-25	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-25	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-25	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-25	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-25	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-25	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-25	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-25	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-25	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-25	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-25	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-25	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-25	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-25	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-25	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-25	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-25	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	5/6/2018	Benzoic Acid	21	20	6.3	75000	ug/L
MKTF-25	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-25	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	5/6/2018	Phenol	8.9	10	6	5761	ug/L
MKTF-25	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-25	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	8/17/2018	Benzoic Acid	9.9	20	6.3	75000	ug/L
MKTF-25	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	8/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-25	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	8/17/2018	Phenol	23	10	6	5761	ug/L
MKTF-25	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-25	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-25	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-25	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-25	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-25	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-25	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-25	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-25	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-25	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-25	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-25	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-25	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-25	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-25	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-25	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-25	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-25	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-25	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-25	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-25	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-25	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-25	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-25	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-25	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-25	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-25	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-25	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-25	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-25	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-25	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-25	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-25	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-25	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-25	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-25	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-25	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-25	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-25	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-25	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-25	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-25	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-25	11/15/2018	Phenol	40	10	6	5761	ug/L
MKTF-25	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-25	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-25	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-25	11/15/2018	Bis(2-ethylhexyl)phthalate	**110**	10	8.1	55.64	ug/L
MKTF-25	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-25	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-25	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-25	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-25	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-25	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-25	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-25	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-25	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-25	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-25	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-25	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-25	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-25	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-25	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-25	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-25	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-25	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-25	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-25	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-25	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-25	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-25	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-25	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-25	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-25	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-25	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-25	5/6/2019	1-Methylnaphthalene	3.3	10	3.069076	11.38	ug/L
MKTF-25	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-25	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-25	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-25	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-25	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-25	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-25	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-25	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-25	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-25	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-25	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-25	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-25	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-25	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-25	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-25	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-25	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-25	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-25	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-25	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-25	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-25	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-25	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-25	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-25	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-25	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-25	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-25	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-25	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-25	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-25	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-25	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-25	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-25	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-25	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-25	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-25	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-25	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-25	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-25	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-25	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-25	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-25	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-25	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-25	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-25	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-25	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-25	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-25	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-25	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-25	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-25	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-25	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-25	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-25	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-25	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-25	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-25	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-25	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-25	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-25	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-25	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-25	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-25	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-25	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-25	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-25	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-25	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-25	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-25	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-25	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-25	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-25	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-25	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-25	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-25	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-25	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-25	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-25	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-25	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-25	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-25	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-25	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-25	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-25	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-25	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-25	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-25	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-25	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-25	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-25	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-25	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-25	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-25	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-25	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-25	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-25	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-25	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-25	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-25	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-25	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-25	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-25	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-25	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-25	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-25	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-25	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-25	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-25	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-25	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-25	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-25	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-25	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-25	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-25	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-25	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-25	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-25	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-25	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-25	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-25	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-25	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-25	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-25	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-25	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-25	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-25	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-25	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-25	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-25	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-25	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-25	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-25	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-25	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-25	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-25	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-25	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-25	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-25	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-25	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-25	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-25	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-25	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-25	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-25	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-25	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-25	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-25	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-25	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-25	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-25	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-25	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-25	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-25	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-25	10/23/2019	1,4-Dioxane	**100**	1	1	4.59	ug/L
MKTF-25	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-25	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-25	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-25	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-25	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-25	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-25	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-25	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-25	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-25	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-25	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-25	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-25	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-25	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-25	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-25	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-25	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-25	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-25	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-25	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-25	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-25	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-25	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-25	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-25	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-25	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-25	10/23/2019	Bis(2-ethylhexyl)phthalate	1.4	0.5	0.5	55.64	ug/L
MKTF-25	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-25	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-25	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-25	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-25	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-25	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-25	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-25	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-25	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-25	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-25	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-25	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-25	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-25	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-25	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-25	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-25	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-25	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-25	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-25	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-25	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-25	10/23/2019	Phenol	21	0.5	0.5	5761	ug/L
MKTF-25	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-25	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-25	2/27/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-25	2/27/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-25	2/27/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-25	2/27/2020	1,4-Dioxane	**100**	5	1	4.59	ug/L
MKTF-25	2/27/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
MKTF-25	2/27/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-25	2/27/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-25	2/27/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-25	2/27/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-25	2/27/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-25	2/27/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-25	2/27/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-25	2/27/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-25	2/27/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-25	2/27/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-25	2/27/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-25	2/27/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-25	2/27/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-25	2/27/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-25	2/27/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-25	2/27/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-25	2/27/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-25	2/27/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-25	2/27/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-25	2/27/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-25	2/27/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-25	2/27/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-25	2/27/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-25	2/27/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-25	2/27/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-25	2/27/2020	Bis(2-ethylhexyl)phthalate	1.42	2.5	1	55.64	ug/L
MKTF-25	2/27/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-25	2/27/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-25	2/27/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-25	2/27/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-25	2/27/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-25	2/27/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-25	2/27/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-25	2/27/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-25	2/27/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-25	2/27/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-25	2/27/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-25	2/27/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-25	2/27/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-25	2/27/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-25	2/27/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-25	2/27/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-25	2/27/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-25	2/27/2020	Naphthalene	ND	2.5	0.5	30	ug/L
MKTF-25	2/27/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-25	2/27/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-25	2/27/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-25	2/27/2020	Phenol	17	2.5	0.5	5761	ug/L
MKTF-25	2/27/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-25	2/27/2020	Pyridine	ND	2.5	0.5	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	12/18/2020	1,3-Dichlorobenzene	ND	11.2	2.13	NA	ug/L
MKTF-25	12/18/2020	1,4-Dichlorobenzene	ND	11.2	2.13	75	ug/L
MKTF-25	12/18/2020	2,4,5-Trichlorophenol	ND	11.2	1.23	1166	ug/L
MKTF-25	12/18/2020	2,4,6-Trichlorophenol	ND	11.2	1.79	11.9*	ug/L
MKTF-25	12/18/2020	2,4-Dichlorophenol	ND	11.2	1.68	45.3	ug/L
MKTF-25	12/18/2020	2,4-Dimethylphenol	ND	11.2	1.46	354	ug/L
MKTF-25	12/18/2020	2,4-Dinitrophenol	ND	33.6	5.16	38.7	ug/L
MKTF-25	12/18/2020	2-Chloronaphthalene	ND	11.2	1.68	733	ug/L
MKTF-25	12/18/2020	2-Chlorophenol	ND	11.2	1.91	91	ug/L
MKTF-25	12/18/2020	2-Methylphenol	ND	11.2	1.68	NA	ug/L
MKTF-25	12/18/2020	2-Nitroaniline	ND	11.2	2.02	190	ug/L
MKTF-25	12/18/2020	2-Nitrophenol	ND	11.2	2.24	NA	ug/L
MKTF-25	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	4.48	1.25	ug/L
MKTF-25	12/18/2020	3-Nitroaniline	ND	11.2	2.47	NA	ug/L
MKTF-25	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	4.48	1.52	ug/L
MKTF-25	12/18/2020	4-Bromophenyl-phenylether	ND	11.2	1.46	NA	ug/L
MKTF-25	12/18/2020	4-Chloro-3-Methylphenol	ND	11.2	1.57	NA	ug/L
MKTF-25	12/18/2020	4-Chloroaniline	*ND*	*11.2*	2.02	0.37	ug/L
MKTF-25	12/18/2020	4-Chlorophenyl-phenylether	ND	11.2	1.46	NA	ug/L
MKTF-25	12/18/2020	4-Nitroaniline	*ND*	*11.2*	4.6	3.8	ug/L
MKTF-25	12/18/2020	4-Nitrophenol	ND	11.2	3.7	NA	ug/L
MKTF-25	12/18/2020	Acenaphthene	ND	11.2	1.46	535	ug/L
MKTF-25	12/18/2020	Acenaphthylene	ND	11.2	1.57	NA	ug/L
MKTF-25	12/18/2020	Aniline	ND	11.2	3.92	13	ug/L
MKTF-25	12/18/2020	Anthracene	ND	11.2	1.46	1721	ug/L
MKTF-25	12/18/2020	Benzo(a)anthracene	*ND*	*11.2*	2.02	0.12	ug/L
MKTF-25	12/18/2020	Benzo(a)pyrene	*ND*	*11.2*	1.91	0.2	ug/L
MKTF-25	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.2*	1.91	0.34	ug/L
MKTF-25	12/18/2020	Benzo(g,h,i)perylene	ND	11.2	3.48	NA	ug/L
MKTF-25	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.2*	1.91	3.43	ug/L
MKTF-25	12/18/2020	Benzoic Acid	ND	33.6	6.39	75000	ug/L
MKTF-25	12/18/2020	Benzyl Alcohol	ND	11.2	2.47	2000	ug/L
MKTF-25	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.2	1.57	59	ug/L
MKTF-25	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	1.35	0.137	ug/L
MKTF-25	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	3.03	55.64	ug/L
MKTF-25	12/18/2020	Butylbenzylphthalate	ND	11.2	2.58	16	ug/L
MKTF-25	12/18/2020	Carbazole	ND	11.2	2.13	NA	ug/L
MKTF-25	12/18/2020	Chrysene	ND	11.2	2.02	34.3	ug/L
MKTF-25	12/18/2020	Di-n-butylphthalate	ND	11.2	1.91	885	ug/L
MKTF-25	12/18/2020	Di-n-octylphthalate	ND	11.2	1.79	200	ug/L
MKTF-25	12/18/2020	Dibenzo(a,h)anthracene	ND	11.2	3.03	NA	ug/L
MKTF-25	12/18/2020	Dibenzofuran	ND	11.2	1.68	NA	ug/L
MKTF-25	12/18/2020	Diethylphthalate	ND	11.2	1.23	14801	ug/L
MKTF-25	12/18/2020	Dimethylphthalate	ND	11.2	1.35	612	ug/L
MKTF-25	12/18/2020	Fluoranthene	ND	11.2	1.46	802	ug/L
MKTF-25	12/18/2020	Fluorene	ND	11.2	1.46	288	ug/L
MKTF-25	12/18/2020	Hexachlorobenzene	*ND*	*11.2*	1.35	0.0976	ug/L
MKTF-25	12/18/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.13	0.41	ug/L
MKTF-25	12/18/2020	Hexachloroethane	*ND*	*11.2*	2.69	3.28	ug/L
MKTF-25	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	3.25	0.343	ug/L
MKTF-25	12/18/2020	Isophorone	ND	11.2	1.91	781	ug/L
MKTF-25	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	2.24	0.011	ug/L
MKTF-25	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.2*	2.47	0.0049	ug/L
MKTF-25	12/18/2020	N-Nitrosodiphenylamine	ND	11.2	1.23	122	ug/L
MKTF-25	12/18/2020	Naphthalene	ND	11.2	1.91	30	ug/L
MKTF-25	12/18/2020	Nitrobenzene	*ND*	*11.2*	1.79	1.4	ug/L
MKTF-25	12/18/2020	Pentachlorophenol	*ND*	*22.4*	4.15	1	ug/L
MKTF-25	12/18/2020	Phenanthrene	ND	11.2	1.57	170	ug/L
MKTF-25	12/18/2020	Phenol	21.4	11.2	1.46	5761	ug/L
MKTF-25	12/18/2020	Pyrene	ND	11.2	1.68	117	ug/L
MKTF-25	12/18/2020	Pyridine	ND	11.2	4.93	20	ug/L
MKTF-25	12/18/2020	1,2,4-Trichlorobenzene	ND	11.2	2.02	70	ug/L
MKTF-25	12/18/2020	1,2-Dichlorobenzene	ND	11.2	2.02	600	ug/L
MKTF-25	12/18/2020	2,4-Dinitrotoluene	ND	11.2	1.57	45.3	ug/L
MKTF-25	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.2*	1.46	0.485	ug/L
MKTF-25	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	1.91	9.81	ug/L
MKTF-25	12/18/2020	Azobenzene	*ND*	*11.2*	1.46	0.12	ug/L
MKTF-27	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-27	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-27	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-27	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-27	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-27	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-27	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-27	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-27	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-27	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-27	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-27	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-27	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-27	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-27	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-27	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-27	11/14/2014	Isophorone	ND	10	3.1	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-27	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-27	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-27	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-27	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-27	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-27	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-27	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-27	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-27	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-27	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-27	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-27	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-27	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-27	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-27	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-27	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-27	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-27	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-27	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-27	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-27	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-27	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-27	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-27	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-27	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-27	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-27	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-27	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-27	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-27	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-27	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-27	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-27	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-27	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-27	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-27	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-27	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-27	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-27	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-27	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-27	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-27	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-27	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-27	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-27	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-27	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-27	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-27	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-27	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-27	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-27	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-27	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-27	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-27	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-27	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-27	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-27	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-27	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-27	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-27	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-27	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-27	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-27	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-27	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-27	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-27	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-27	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-27	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-27	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-27	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-27	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-27	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-27	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-27	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-27	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-27	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-27	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-27	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-27	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-27	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-27	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-27	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-27	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-27	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-27	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-27	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-27	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-27	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-27	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-27	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-27	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-27	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-27	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-27	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-27	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-27	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-27	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-27	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-27	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-27	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-27	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-27	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-27	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-27	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-27	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-27	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-27	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-27	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-27	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-27	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-27	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-27	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-27	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-27	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-27	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-27	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-27	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-27	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-27	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	8/20/2015	Fluorene	ND	10	1.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-27	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-27	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-27	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-27	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-27	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-27	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-27	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-27	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-27	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-27	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-27	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-27	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-27	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-27	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-27	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-27	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-27	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-27	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-27	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-27	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-27	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-27	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-27	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-27	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-27	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-27	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-27	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-27	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-27	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-27	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-27	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-27	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-27	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-27	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-27	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-27	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-27	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-27	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-27	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-27	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-27	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-27	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-27	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-27	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-27	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-27	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-27	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-27	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-27	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-27	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-27	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-27	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-27	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-27	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-27	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-27	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-27	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-27	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-27	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-27	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-27	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-27	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-27	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-27	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-27	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-27	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-27	2/22/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-27	2/22/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-27	2/22/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-27	2/22/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-27	2/22/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-27	2/22/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-27	2/22/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-27	2/22/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-27	2/22/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-27	2/22/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-27	2/22/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-27	2/22/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-27	2/22/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-27	2/22/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-27	2/22/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-27	2/22/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-27	2/22/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-27	2/22/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-27	2/22/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-27	2/22/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-27	2/22/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-27	2/22/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-27	2/22/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-27	2/22/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-27	2/22/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-27	2/22/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-27	2/22/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-27	2/22/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-27	2/22/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-27	2/22/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-27	2/22/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-27	2/22/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-27	2/22/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-27	2/22/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-27	2/22/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-27	2/22/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-27	2/22/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-27	2/22/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-27	2/22/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-27	2/22/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-27	2/22/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-27	2/22/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-27	2/22/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-27	2/22/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-27	2/22/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-27	2/22/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-27	2/22/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-27	2/22/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-27	2/22/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	2/22/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-27	2/22/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-27	2/22/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-27	2/22/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-27	2/22/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-27	2/22/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-27	2/22/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-27	2/22/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-27	2/22/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-27	2/22/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-27	2/22/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-27	2/22/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-27	2/22/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-27	2/22/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-27	2/22/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-27	2/22/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-27	2/22/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-27	2/22/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-27	2/22/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-27	2/22/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-27	2/22/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-27	2/22/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-27	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-27	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-27	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	6/8/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-27	6/8/2016	Di-n-octylphthalate	5.3	10	2	200	ug/L
MKTF-27	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-27	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-27	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	9/7/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MKTF-27	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-27	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-27	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	9/7/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-27	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-27	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	9/7/2016	Dimethylphthalate	6.4	10	2.4	612	ug/L
MKTF-27	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-27	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-27	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-27	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-27	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-27	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-27	10/28/2016	Benzoic Acid	8.4	20	2.6	75000	ug/L
MKTF-27	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-27	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-27	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-27	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-27	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-27	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-27	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-27	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-27	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-27	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-27	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-27	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-27	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-27	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-27	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-27	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-27	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-27	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-27	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-27	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-27	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-27	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-27	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-27	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-27	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-27	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-27	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-27	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-27	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-27	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-27	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-27	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-27	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-27	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-27	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-27	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-27	10/28/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-27	10/28/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-27	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-27	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-27	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-27	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-27	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-27	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-27	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-27	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-27	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-27	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-27	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-27	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-27	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-27	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-27	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-27	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-27	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-27	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-27	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-27	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-27	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-27	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	3/29/2017	Benzoic Acid	6.4	20	3.9	75000	ug/L
MKTF-27	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	3/29/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L
MKTF-27	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	6/5/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-27	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	6/5/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
MKTF-27	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	10/3/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-27	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-27	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	11/20/2017	Benzoic Acid	10	20	3.9	75000	ug/L
MKTF-27	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-27	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-27	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-27	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-27	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-27	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-27	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-27	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-27	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-27	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-27	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-27	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-27	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-27	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-27	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-27	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-27	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-27	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-27	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-27	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-27	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-27	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-27	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-27	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-27	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-27	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-27	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-27	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-27	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-27	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-27	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-27	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-27	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-27	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-27	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-27	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-27	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-27	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-27	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-27	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-27	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-27	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-27	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-27	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-27	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-27	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-27	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-27	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-27	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-27	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-27	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-27	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-27	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-27	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-27	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-27	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-27	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-27	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-27	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-27	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-27	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-27	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-27	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-27	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-27	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-27	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-27	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-27	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-27	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-27	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-27	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-27	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-27	8/20/2018	Benzoic Acid	8	20	6.3	75000	ug/L
MKTF-27	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-27	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-27	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-27	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-27	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-27	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-27	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-27	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-27	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-27	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-27	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-27	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-27	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-27	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-27	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-27	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-27	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-27	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-27	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-27	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-27	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-27	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-27	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-27	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-27	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-27	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-27	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-27	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-27	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-27	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-27	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-27	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-27	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-27	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-27	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-27	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-27	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-27	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-27	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-27	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-27	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-27	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-27	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-27	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-27	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-27	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-27	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-27	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-27	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-27	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-27	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-27	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-27	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-27	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-27	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-27	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-27	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-27	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-27	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-27	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-27	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-27	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-27	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-27	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-27	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-27	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-27	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-27	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-27	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-27	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-27	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-27	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-27	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-27	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-27	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-27	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-27	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-27	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-27	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-27	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-27	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-27	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-27	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-27	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-27	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-27	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-27	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-27	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-27	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-27	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-27	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-27	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-27	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-27	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-27	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-27	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-27	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-27	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-27	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-27	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-27	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-27	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-27	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-27	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-27	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-27	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-27	3/28/2019	Benzoic Acid	7.6	20	6.311561	75000	ug/L
MKTF-27	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-27	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-27	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-27	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-27	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-27	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-27	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-27	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-27	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-27	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-27	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-27	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-27	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-27	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-27	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-27	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-27	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-27	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-27	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-27	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-27	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-27	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-27	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-27	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-27	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-27	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-27	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-27	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-27	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-27	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-27	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-27	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-27	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-27	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-27	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-27	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-27	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-27	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-27	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-27	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-27	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-27	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-27	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-27	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-27	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-27	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-27	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-27	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-27	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-27	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-27	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-27	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-27	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-27	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-27	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-27	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-27	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-27	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-27	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-27	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-27	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-27	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-27	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-27	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-27	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-27	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-27	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-27	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-27	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-27	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-27	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-27	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-27	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-27	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-27	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-27	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-27	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-27	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-27	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-27	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-27	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-27	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-27	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-27	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-27	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-27	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-27	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-27	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-27	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-27	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-27	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-27	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-27	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-27	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-27	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-27	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-27	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-27	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-27	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-27	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-27	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-27	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-27	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-27	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-27	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-27	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-27	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-27	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-27	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-27	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-27	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-27	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-27	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-27	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-27	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-27	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-27	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-27	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-27	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-27	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-27	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-27	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-27	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-27	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-27	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-27	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-27	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-27	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-27	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-27	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-27	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-27	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-27	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-27	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-27	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-27	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-27	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-27	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-27	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-27	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-27	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-27	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-27	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-27	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-27	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-27	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-27	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-27	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-27	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-27	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-27	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-27	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-27	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-27	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-27	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-27	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-27	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-27	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-27	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-27	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-27	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-27	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-27	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-27	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-27	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-27	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-27	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-27	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-27	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-27	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-27	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-27	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-27	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-27	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-27	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-27	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-27	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-27	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-27	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-27	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-27	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-27	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-27	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-27	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-27	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-27	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-27	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-27	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-27	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-27	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-27	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-27	10/23/2019	1,4-Dioxane	**6.8**	1	1	4.59	ug/L
MKTF-27	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-27	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-27	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-27	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-27	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-27	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-27	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-27	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-27	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-27	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-27	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-27	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-27	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-27	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-27	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-27	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-27	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-27	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-27	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-27	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-27	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-27	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-27	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-27	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-27	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-27	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-27	10/23/2019	Bis(2-ethylhexyl)phthalate	2.4	0.5	0.5	55.64	ug/L
MKTF-27	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-27	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-27	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-27	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-27	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-27	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-27	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-27	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-27	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-27	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-27	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-27	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-27	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-27	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-27	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-27	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-27	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-27	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-27	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-27	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-27	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-27	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-27	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-27	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-27	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-27	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-27	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-27	2/25/2020	1,4-Dioxane	2.1	1	1	4.59	ug/L
MKTF-27	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-27	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-27	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-27	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-27	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-27	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-27	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-27	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-27	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-27	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-27	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-27	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-27	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-27	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-27	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-27	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-27	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-27	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-27	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-27	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-27	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-27	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-27	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-27	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-27	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-27	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-27	2/25/2020	Bis(2-ethylhexyl)phthalate	0.36	0.5	0.5	55.64	ug/L
MKTF-27	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-27	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-27	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-27	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-27	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-27	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-27	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-27	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-27	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-27	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-27	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-27	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-27	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-27	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-27	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-27	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-27	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-27	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-27	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-27	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-27	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-27	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-27	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-27	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-27	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-27	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-27	9/20/2020	1,4-Dioxane	4.1	0.51	0.1	4.59	ug/L
MKTF-27	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-27	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-27	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-27	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-27	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-27	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-27	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-27	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-27	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-27	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-27	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-27	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-27	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-27	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-27	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-27	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-27	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-27	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-27	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-27	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-27	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-27	9/20/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-27	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-27	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-27	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-27	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-27	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-27	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-27	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-27	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-27	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-27	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-27	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-27	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-27	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-27	9/20/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-27	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-27	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-27	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-27	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-27	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-27	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-27	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.25	0.14	ug/L
MKTF-27	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.1	0.41	ug/L
MKTF-27	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-27	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-27	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-27	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-27	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-27	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-27	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-27	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-27	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-27	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-27	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-27	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-27	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-27	12/18/2020	1,3-Dichlorobenzene	ND	12.3	2.34	NA	ug/L
MKTF-27	12/18/2020	1,4-Dichlorobenzene	ND	12.3	2.34	75	ug/L
MKTF-27	12/18/2020	2,4,5-Trichlorophenol	ND	12.3	1.36	1166	ug/L
MKTF-27	12/18/2020	2,4,6-Trichlorophenol	ND	12.3	1.97	11.9*	ug/L
MKTF-27	12/18/2020	2,4-Dichlorophenol	ND	12.3	1.85	45.3	ug/L
MKTF-27	12/18/2020	2,4-Dimethylphenol	ND	12.3	1.6	354	ug/L
MKTF-27	12/18/2020	2,4-Dinitrophenol	ND	37	5.67	38.7	ug/L
MKTF-27	12/18/2020	2-Chloronaphthalene	ND	12.3	1.85	733	ug/L
MKTF-27	12/18/2020	2-Chlorophenol	ND	12.3	2.1	91	ug/L
MKTF-27	12/18/2020	2-Methylphenol	ND	12.3	1.85	NA	ug/L
MKTF-27	12/18/2020	2-Nitroaniline	ND	12.3	2.22	190	ug/L
MKTF-27	12/18/2020	2-Nitrophenol	ND	12.3	2.47	NA	ug/L
MKTF-27	12/18/2020	3,3-Dichlorobenzidine	*ND*	*12.3*	4.93	1.25	ug/L
MKTF-27	12/18/2020	3-Nitroaniline	ND	12.3	2.71	NA	ug/L
MKTF-27	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.3*	4.93	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	4-Bromophenyl-phenylether	ND	12.3	1.6	NA	ug/L
MKTF-27	12/18/2020	4-Chloro-3-Methylphenol	ND	12.3	1.73	NA	ug/L
MKTF-27	12/18/2020	4-Chloroaniline	*ND*	*12.3*	2.22	0.37	ug/L
MKTF-27	12/18/2020	4-Chlorophenyl-phenylether	ND	12.3	1.6	NA	ug/L
MKTF-27	12/18/2020	4-Nitroaniline	*ND*	*12.3*	5.05	3.8	ug/L
MKTF-27	12/18/2020	4-Nitrophenol	ND	12.3	4.07	NA	ug/L
MKTF-27	12/18/2020	Acenaphthene	ND	12.3	1.6	535	ug/L
MKTF-27	12/18/2020	Acenaphthylene	ND	12.3	1.73	NA	ug/L
MKTF-27	12/18/2020	Aniline	ND	12.3	4.31	13	ug/L
MKTF-27	12/18/2020	Anthracene	ND	12.3	1.6	1721	ug/L
MKTF-27	12/18/2020	Benzo(a)anthracene	*ND*	*12.3*	2.22	0.12	ug/L
MKTF-27	12/18/2020	Benzo(a)pyrene	*ND*	*12.3*	2.1	0.2	ug/L
MKTF-27	12/18/2020	Benzo(b)fluoranthene	*ND*	*12.3*	2.1	0.34	ug/L
MKTF-27	12/18/2020	Benzo(g,h,i)perylene	ND	12.3	3.82	NA	ug/L
MKTF-27	12/18/2020	Benzo(k)fluoranthene	*ND*	*12.3*	2.1	3.43	ug/L
MKTF-27	12/18/2020	Benzoic Acid	ND	37	7.03	75000	ug/L
MKTF-27	12/18/2020	Benzyl Alcohol	ND	12.3	2.71	2000	ug/L
MKTF-27	12/18/2020	Bis(2-chloroethoxy)methane	ND	12.3	1.73	59	ug/L
MKTF-27	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*12.3*	1.48	0.137	ug/L
MKTF-27	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	12.3	3.33	55.64	ug/L
MKTF-27	12/18/2020	Butylbenzylphthalate	ND	12.3	2.84	16	ug/L
MKTF-27	12/18/2020	Carbazole	ND	12.3	2.34	NA	ug/L
MKTF-27	12/18/2020	Chrysene	ND	12.3	2.22	34.3	ug/L
MKTF-27	12/18/2020	Di-n-butylphthalate	ND	12.3	2.1	885	ug/L
MKTF-27	12/18/2020	Di-n-octylphthalate	ND	12.3	1.97	200	ug/L
MKTF-27	12/18/2020	Dibenzo(a,h)anthracene	ND	12.3	3.33	NA	ug/L
MKTF-27	12/18/2020	Dibenzofuran	ND	12.3	1.85	NA	ug/L
MKTF-27	12/18/2020	Diethylphthalate	ND	12.3	1.36	14801	ug/L
MKTF-27	12/18/2020	Dimethylphthalate	ND	12.3	1.48	612	ug/L
MKTF-27	12/18/2020	Fluoranthene	ND	12.3	1.6	802	ug/L
MKTF-27	12/18/2020	Fluorene	ND	12.3	1.6	288	ug/L
MKTF-27	12/18/2020	Hexachlorobenzene	*ND*	*12.3*	1.48	0.0976	ug/L
MKTF-27	12/18/2020	Hexachlorocyclopentadiene	*ND*	*24.7*	2.34	0.41	ug/L
MKTF-27	12/18/2020	Hexachloroethane	*ND*	*12.3*	2.96	3.28	ug/L
MKTF-27	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.3*	3.57	0.343	ug/L
MKTF-27	12/18/2020	Isophorone	ND	12.3	2.1	781	ug/L
MKTF-27	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*12.3*	2.47	0.011	ug/L
MKTF-27	12/18/2020	N-Nitrosodimethylamine	*ND*	*12.3*	2.71	0.0049	ug/L
MKTF-27	12/18/2020	N-Nitrosodiphenylamine	ND	12.3	1.36	122	ug/L
MKTF-27	12/18/2020	Naphthalene	ND	12.3	2.1	30	ug/L
MKTF-27	12/18/2020	Nitrobenzene	*ND*	*12.3*	1.97	1.4	ug/L
MKTF-27	12/18/2020	Pentachlorophenol	*ND*	*24.7*	4.56	1	ug/L
MKTF-27	12/18/2020	Phenanthrene	ND	12.3	1.73	170	ug/L
MKTF-27	12/18/2020	Phenol	ND	12.3	1.6	5761	ug/L
MKTF-27	12/18/2020	Pyrene	ND	12.3	1.85	117	ug/L
MKTF-27	12/18/2020	Pyridine	ND	12.3	5.42	20	ug/L
MKTF-27	12/18/2020	1,2,4-Trichlorobenzene	ND	12.3	2.22	70	ug/L
MKTF-27	12/18/2020	1,2-Dichlorobenzene	ND	12.3	2.22	600	ug/L
MKTF-27	12/18/2020	2,4-Dinitrotoluene	ND	12.3	1.73	45.3	ug/L
MKTF-27	12/18/2020	2,6-Dinitrotoluene	*ND*	*12.3*	1.6	0.485	ug/L
MKTF-27	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.3*	2.1	9.81	ug/L
MKTF-27	12/18/2020	Azobenzene	*ND*	*12.3*	1.6	0.12	ug/L
MKTF-28	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-28	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-28	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-28	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-28	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-28	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-28	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-28	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-28	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-28	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-28	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-28	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-28	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-28	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-28	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-28	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-28	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-28	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-28	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-28	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-28	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-28	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-28	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-28	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-28	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-28	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-28	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-28	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-28	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-28	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-28	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-28	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-28	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-28	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-28	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-28	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-28	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-28	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-28	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-28	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-28	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-28	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-28	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-28	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-28	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-28	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-28	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-28	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-28	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-28	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-28	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-28	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-28	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-28	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-28	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-28	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-28	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-28	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-28	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-28	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-28	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-28	11/14/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-28	11/14/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-28	11/14/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-28	11/14/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-28	11/14/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	11/14/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-28	11/14/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-28	11/14/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-28	11/14/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-28	11/14/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-28	11/14/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-28	11/14/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-28	11/14/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-28	11/14/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-28	11/14/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-28	11/14/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-28	11/14/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-28	11/14/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-28	11/14/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-28	11/14/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-28	11/14/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-28	11/14/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-28	11/14/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	11/14/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-28	11/14/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-28	11/14/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-28	11/14/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-28	11/14/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-28	11/14/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	11/14/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-28	11/14/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-28	11/14/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-28	11/14/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-28	11/14/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-28	11/14/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-28	11/14/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-28	11/14/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-28	11/14/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-28	11/14/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-28	11/14/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	11/14/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-28	11/14/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	11/14/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-28	11/14/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-28	11/14/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-28	11/14/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	11/14/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	11/14/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-28	11/14/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-28	11/14/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-28	11/14/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	11/14/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-28	11/14/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-28	11/14/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-28	11/14/2014	Pyrene	ND	10	4	117	ug/L
MKTF-28	11/14/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-28	11/14/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-28	11/14/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-28	11/14/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-28	11/14/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-28	11/14/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-28	11/14/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-28	11/14/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-28	11/14/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-28	11/14/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-28	11/14/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	11/14/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-28	11/14/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-28	11/14/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-28	11/14/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-28	11/14/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-28	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-28	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-28	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-28	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-28	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-28	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-28	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-28	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-28	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-28	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-28	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-28	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-28	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-28	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-28	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-28	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-28	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-28	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-28	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-28	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-28	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-28	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-28	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-28	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-28	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-28	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-28	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-28	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-28	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-28	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-28	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-28	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-28	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-28	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-28	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-28	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-28	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-28	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-28	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-28	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-28	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-28	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-28	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-28	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-28	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-28	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-28	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-28	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-28	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-28	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-28	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-28	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-28	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-28	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-28	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-28	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-28	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-28	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-28	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-28	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-28	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-28	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-28	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-28	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-28	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-28	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-28	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-28	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-28	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-28	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-28	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-28	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-28	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-28	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-28	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-28	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-28	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-28	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-28	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-28	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-28	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-28	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-28	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-28	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-28	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-28	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-28	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-28	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-28	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-28	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-28	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-28	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-28	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-28	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-28	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-28	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-28	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-28	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-28	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-28	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-28	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-28	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-28	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-28	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-28	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-28	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-28	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-28	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-28	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-28	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-28	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-28	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-28	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-28	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-28	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-28	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-28	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-28	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-28	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-28	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-28	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-28	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-28	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-28	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-28	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-28	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-28	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-28	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-28	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-28	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-28	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-28	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-28	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-28	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-28	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-28	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-28	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-28	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-28	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-28	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-28	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-28	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-28	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-28	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-28	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-28	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-28	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-28	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-28	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-28	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-28	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-28	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-28	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-28	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-28	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-28	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-28	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-28	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-28	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-28	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-28	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-28	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-28	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-28	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-28	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-28	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-28	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-28	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-28	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-28	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-28	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-28	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-28	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-28	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-28	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-28	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-28	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-28	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-28	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-28	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-28	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-28	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-28	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-28	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-28	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-28	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-28	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-28	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-28	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-28	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-28	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-28	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-28	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-28	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-28	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-28	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-28	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-28	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-28	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-28	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-28	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-28	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-28	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-28	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-28	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-28	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-28	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-28	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	6/8/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
MKTF-28	6/8/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-28	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-28	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	9/8/2016	Benzoic Acid	7.3	20	2.6	75000	ug/L
MKTF-28	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-28	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	9/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-28	9/8/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-28	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	9/8/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-28	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-28	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-28	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-28	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-28	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-28	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-28	10/28/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-28	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-28	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-28	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-28	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-28	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-28	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-28	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-28	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-28	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-28	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-28	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-28	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-28	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-28	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-28	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-28	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-28	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-28	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-28	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-28	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-28	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-28	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-28	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-28	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-28	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-28	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-28	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-28	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-28	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-28	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-28	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-28	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-28	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-28	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-28	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-28	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-28	10/28/2016	Bis(2-ethylhexyl)phthalate	9	10	2.6	55.64	ug/L
MKTF-28	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-28	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-28	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-28	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-28	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-28	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-28	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-28	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-28	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-28	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-28	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-28	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-28	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-28	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-28	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-28	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-28	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-28	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-28	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-28	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-28	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-28	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-28	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	3/29/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	3/29/2017	Bis(2-ethylhexyl)phthalate	6.6	10	4.8	55.64	ug/L
MKTF-28	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	6/5/2017	Benzoic Acid	7	20	3.9	75000	ug/L
MKTF-28	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/5/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
MKTF-28	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	10/3/2017	Benzoic Acid	6.7	20	3.9	75000	ug/L
MKTF-28	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-28	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-28	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	11/20/2017	Benzoic Acid	5.2	20	3.9	75000	ug/L
MKTF-28	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-28	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	11/20/2017	Bis(2-ethylhexyl)phthalate	12	10	4.8	55.64	ug/L
MKTF-28	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-28	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-28	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-28	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-28	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-28	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-28	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-28	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-28	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-28	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-28	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-28	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-28	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-28	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-28	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-28	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-28	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-28	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-28	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-28	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-28	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-28	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-28	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-28	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-28	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-28	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-28	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-28	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-28	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-28	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-28	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-28	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-28	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-28	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-28	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-28	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-28	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-28	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-28	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-28	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-28	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-28	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-28	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-28	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-28	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-28	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-28	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-28	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-28	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-28	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-28	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-28	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L

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MKTF-28	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-28	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-28	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-28	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-28	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-28	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-28	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-28	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-28	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-28	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-28	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-28	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-28	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-28	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-28	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-28	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-28	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-28	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	5/1/2018	Benzoic Acid	20	20	6.3	75000	ug/L
MKTF-28	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-28	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-28	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-28	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-28	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-28	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-28	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	8/20/2018	Benzoic Acid	7.9	20	6.3	75000	ug/L
MKTF-28	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
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MKTF-28	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-28	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-28	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-28	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-28	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-28	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-28	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-28	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-28	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-28	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-28	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-28	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-28	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-28	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-28	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-28	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-28	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-28	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-28	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-28	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-28	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-28	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-28	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-28	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-28	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-28	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-28	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-28	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-28	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-28	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-28	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-28	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-28	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-28	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-28	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-28	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-28	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-28	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-28	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-28	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-28	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-28	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-28	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-28	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-28	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-28	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-28	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-28	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-28	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-28	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-28	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-28	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-28	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-28	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-28	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-28	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-28	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-28	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-28	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-28	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-28	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-28	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-28	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-28	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-28	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-28	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-28	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-28	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-28	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-28	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-28	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-28	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-28	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-28	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-28	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-28	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-28	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-28	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-28	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-28	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-28	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-28	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-28	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-28	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-28	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-28	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-28	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-28	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-28	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-28	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-28	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-28	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-28	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-28	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-28	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-28	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-28	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-28	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-28	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-28	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-28	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-28	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-28	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-28	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-28	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-28	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-28	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-28	3/28/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
MKTF-28	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-28	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-28	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-28	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-28	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-28	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-28	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-28	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-28	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-28	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-28	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-28	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-28	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-28	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-28	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-28	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-28	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-28	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-28	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-28	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-28	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-28	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-28	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-28	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-28	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-28	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-28	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-28	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-28	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-28	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-28	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-28	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-28	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-28	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-28	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-28	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-28	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-28	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-28	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-28	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-28	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-28	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-28	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-28	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-28	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-28	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-28	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-28	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-28	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-28	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-28	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-28	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-28	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-28	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-28	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-28	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-28	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-28	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-28	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-28	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-28	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-28	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-28	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-28	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-28	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-28	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-28	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-28	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-28	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-28	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-28	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-28	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-28	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-28	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-28	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-28	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-28	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-28	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-28	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-28	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-28	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-28	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-28	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-28	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-28	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-28	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-28	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-28	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-28	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-28	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-28	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-28	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-28	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-28	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-28	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-28	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-28	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-28	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-28	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-28	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-28	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-28	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-28	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-28	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-28	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-28	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-28	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-28	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-28	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-28	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-28	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-28	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-28	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-28	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-28	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-28	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-28	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-28	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-28	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-28	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-28	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-28	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-28	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-28	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-28	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-28	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-28	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-28	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-28	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-28	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-28	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-28	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-28	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-28	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-28	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-28	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-28	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-28	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-28	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-28	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-28	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-28	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-28	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-28	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-28	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-28	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-28	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-28	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-28	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-28	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-28	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-28	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-28	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-28	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-28	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-28	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-28	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-28	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-28	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-28	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-28	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-28	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-28	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-28	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-28	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-28	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-28	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-28	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-28	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-28	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-28	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-28	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-28	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/21/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/21/2019	1,4-Dioxane	3.2	1	1	4.59	ug/L
MKTF-28	10/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/22/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	10/22/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-28	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-28	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-28	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-28	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-28	2/25/2020	1,4-Dioxane	0.42	1	1	4.59	ug/L
MKTF-28	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-28	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-28	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-28	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-28	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-28	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-28	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-28	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-28	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-28	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-28	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-28	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-28	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-28	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-28	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-28	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-28	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-28	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-28	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-28	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-28	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-28	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-28	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-28	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-28	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-28	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-28	2/25/2020	Bis(2-ethylhexyl)phthalate	0.37	0.5	0.5	55.64	ug/L
MKTF-28	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-28	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-28	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-28	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-28	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-28	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-28	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-28	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-28	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-28	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-28	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-28	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-28	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-28	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-28	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-28	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-28	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-28	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-28	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-28	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-28	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-28	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-28	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-28	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-28	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-28	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-28	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-28	9/20/2020	1,4-Dioxane	0.27	0.51	0.1	4.59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-28	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-28	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-28	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-28	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-28	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-28	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-28	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-28	9/20/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-28	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-28	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-28	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-28	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-28	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-28	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-28	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-28	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-28	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-28	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-28	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-28	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-28	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-28	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-28	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-28	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-28	9/20/2020	Benzoic Acid	ND	0.51	0.21	75000	ug/L
MKTF-28	9/20/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
MKTF-28	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-28	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-28	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-28	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-28	9/20/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
MKTF-28	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-28	9/20/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
MKTF-28	9/20/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
MKTF-28	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-28	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-28	9/20/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
MKTF-28	9/20/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
MKTF-28	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-28	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-28	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-28	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-28	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-28	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-28	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-28	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-28	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-28	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-28	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-28	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-28	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-28	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-28	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-28	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-28	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-28	9/20/2020	Pyridine	ND	0.51	0.21	20	ug/L
MKTF-28	12/18/2020	1,3-Dichlorobenzene	ND	12.1	2.3	NA	ug/L
MKTF-28	12/18/2020	1,4-Dichlorobenzene	ND	12.1	2.3	75	ug/L
MKTF-28	12/18/2020	2,4,5-Trichlorophenol	ND	12.1	1.33	1166	ug/L
MKTF-28	12/18/2020	2,4,6-Trichlorophenol	ND	12.1	1.94	11.9*	ug/L
MKTF-28	12/18/2020	2,4-Dichlorophenol	ND	12.1	1.82	45.3	ug/L
MKTF-28	12/18/2020	2,4-Dimethylphenol	ND	12.1	1.57	354	ug/L
MKTF-28	12/18/2020	2,4-Dinitrophenol	ND	36.3	5.57	38.7	ug/L
MKTF-28	12/18/2020	2-Chloronaphthalene	ND	12.1	1.82	733	ug/L
MKTF-28	12/18/2020	2-Chlorophenol	ND	12.1	2.06	91	ug/L
MKTF-28	12/18/2020	2-Methylphenol	ND	12.1	1.82	NA	ug/L
MKTF-28	12/18/2020	2-Nitroaniline	ND	12.1	2.18	190	ug/L
MKTF-28	12/18/2020	2-Nitrophenol	ND	12.1	2.42	NA	ug/L
MKTF-28	12/18/2020	3,3-Dichlorobenzidine	*ND*	*12.1*	4.84	1.25	ug/L
MKTF-28	12/18/2020	3-Nitroaniline	ND	12.1	2.66	NA	ug/L
MKTF-28	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.1*	4.84	1.52	ug/L
MKTF-28	12/18/2020	4-Bromophenyl-phenylether	ND	12.1	1.57	NA	ug/L
MKTF-28	12/18/2020	4-Chloro-3-Methylphenol	ND	12.1	1.69	NA	ug/L
MKTF-28	12/18/2020	4-Chloroaniline	*ND*	*12.1*	2.18	0.37	ug/L
MKTF-28	12/18/2020	4-Chlorophenyl-phenylether	ND	12.1	1.57	NA	ug/L
MKTF-28	12/18/2020	4-Nitroaniline	*ND*	*12.1*	4.96	3.8	ug/L
MKTF-28	12/18/2020	4-Nitrophenol	ND	12.1	3.99	NA	ug/L
MKTF-28	12/18/2020	Acenaphthene	ND	12.1	1.57	535	ug/L
MKTF-28	12/18/2020	Acenaphthylene	ND	12.1	1.69	NA	ug/L
MKTF-28	12/18/2020	Aniline	ND	12.1	4.24	13	ug/L
MKTF-28	12/18/2020	Anthracene	ND	12.1	1.57	1721	ug/L
MKTF-28	12/18/2020	Benzo(a)anthracene	*ND*	*12.1*	2.18	0.12	ug/L
MKTF-28	12/18/2020	Benzo(a)pyrene	*ND*	*12.1*	2.06	0.2	ug/L
MKTF-28	12/18/2020	Benzo(b)fluoranthene	*ND*	*12.1*	2.06	0.34	ug/L
MKTF-28	12/18/2020	Benzo(g,h,i)perylene	ND	12.1	3.75	NA	ug/L
MKTF-28	12/18/2020	Benzo(k)fluoranthene	*ND*	*12.1*	2.06	3.43	ug/L
MKTF-28	12/18/2020	Benzoic Acid	ND	36.3	6.9	75000	ug/L
MKTF-28	12/18/2020	Benzyl Alcohol	ND	12.1	2.66	2000	ug/L
MKTF-28	12/18/2020	Bis(2-chloroethoxy)methane	ND	12.1	1.69	59	ug/L
MKTF-28	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*12.1*	1.45	0.137	ug/L
MKTF-28	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	12.1	3.27	55.64	ug/L
MKTF-28	12/18/2020	Butylbenzylphthalate	ND	12.1	2.78	16	ug/L
MKTF-28	12/18/2020	Carbazole	ND	12.1	2.3	NA	ug/L
MKTF-28	12/18/2020	Chrysene	ND	12.1	2.18	34.3	ug/L
MKTF-28	12/18/2020	Di-n-butylphthalate	ND	12.1	2.06	885	ug/L
MKTF-28	12/18/2020	Di-n-octylphthalate	ND	12.1	1.94	200	ug/L
MKTF-28	12/18/2020	Dibenzo(a,h)anthracene	ND	12.1	3.27	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	Dibenzofuran	ND	12.1	1.82	NA	ug/L
MKTF-28	12/18/2020	Diethylphthalate	ND	12.1	1.33	14801	ug/L
MKTF-28	12/18/2020	Dimethylphthalate	ND	12.1	1.45	612	ug/L
MKTF-28	12/18/2020	Fluoranthene	ND	12.1	1.57	802	ug/L
MKTF-28	12/18/2020	Fluorene	ND	12.1	1.57	288	ug/L
MKTF-28	12/18/2020	Hexachlorobenzene	*ND*	*12.1*	1.45	0.0976	ug/L
MKTF-28	12/18/2020	Hexachlorocyclopentadiene	*ND*	*24.2*	2.3	0.41	ug/L
MKTF-28	12/18/2020	Hexachloroethane	*ND*	*12.1*	2.9	3.28	ug/L
MKTF-28	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.1*	3.51	0.343	ug/L
MKTF-28	12/18/2020	Isophorone	ND	12.1	2.06	781	ug/L
MKTF-28	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*12.1*	2.42	0.011	ug/L
MKTF-28	12/18/2020	N-Nitrosodimethylamine	*ND*	*12.1*	2.66	0.0049	ug/L
MKTF-28	12/18/2020	N-Nitrosodiphenylamine	ND	12.1	1.33	122	ug/L
MKTF-28	12/18/2020	Naphthalene	ND	12.1	2.06	30	ug/L
MKTF-28	12/18/2020	Nitrobenzene	*ND*	*12.1*	1.94	1.4	ug/L
MKTF-28	12/18/2020	Pentachlorophenol	*ND*	*24.2*	4.48	1	ug/L
MKTF-28	12/18/2020	Phenanthrene	ND	12.1	1.69	170	ug/L
MKTF-28	12/18/2020	Phenol	ND	12.1	1.57	5761	ug/L
MKTF-28	12/18/2020	Pyrene	ND	12.1	1.82	117	ug/L
MKTF-28	12/18/2020	Pyridine	ND	12.1	5.32	20	ug/L
MKTF-28	12/18/2020	1,2,4-Trichlorobenzene	ND	12.1	2.18	70	ug/L
MKTF-28	12/18/2020	1,2-Dichlorobenzene	ND	12.1	2.18	600	ug/L
MKTF-28	12/18/2020	2,4-Dinitrotoluene	ND	12.1	1.69	45.3	ug/L
MKTF-28	12/18/2020	2,6-Dinitrotoluene	*ND*	*12.1*	1.57	0.485	ug/L
MKTF-28	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.1*	2.06	9.81	ug/L
MKTF-28	12/18/2020	Azobenzene	*ND*	*12.1*	1.57	0.12	ug/L
MKTF-29	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-29	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-29	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-29	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-29	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-29	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-29	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-29	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-29	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-29	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-29	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-29	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-29	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-29	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-29	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-29	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-29	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-29	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-29	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-29	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-29	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-29	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-29	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-29	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-29	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-29	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-29	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-29	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-29	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-29	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-29	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-29	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-29	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-29	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-29	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-29	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-29	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-29	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-29	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-29	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-29	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-29	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-29	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-29	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-29	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-29	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-29	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-29	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-29	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-29	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-29	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-29	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-29	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-29	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-29	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-29	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-29	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-29	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-29	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-29	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-29	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-29	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-29	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-29	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-29	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-29	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-29	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-29	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-29	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-29	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-29	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-29	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-29	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-29	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-29	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-29	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-29	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-29	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-29	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-29	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-29	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-29	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-29	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-29	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-29	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-29	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-29	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-29	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-29	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-29	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-29	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-29	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-29	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-29	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-29	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-29	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-29	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-29	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-29	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-29	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-29	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-29	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-29	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-29	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-29	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-29	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-29	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-29	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-29	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-29	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-29	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-29	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-29	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-29	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-29	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-29	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-29	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-29	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-29	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-29	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-29	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-29	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-29	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-29	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-29	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-29	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-29	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-29	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-29	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-29	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-29	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-29	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-29	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-29	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-29	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-29	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-29	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-29	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-29	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-29	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-29	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-29	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-29	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-29	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-29	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-29	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-29	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-29	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-29	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-29	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-29	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-29	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-29	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-29	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-29	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-29	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-29	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-29	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-29	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-29	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-29	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-29	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-29	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-29	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-29	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-29	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-29	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-29	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-29	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-29	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-29	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-29	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-29	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-29	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-29	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-29	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-29	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-29	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-29	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-29	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-29	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-29	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-29	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-29	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-29	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-29	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-29	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-29	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-29	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-29	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-29	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-29	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-29	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-29	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-29	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-29	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-29	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-29	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-29	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-29	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-29	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-29	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-29	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-29	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-29	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-29	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-29	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-29	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-29	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-29	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-29	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-29	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-29	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-29	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-29	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-29	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-29	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-29	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-29	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-29	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-29	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-29	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-29	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-29	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-29	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-29	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-29	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-29	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-29	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-29	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-29	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-29	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-29	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-29	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-29	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-29	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-29	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-29	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-29	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-29	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-29	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-29	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-29	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-29	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-29	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-29	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-29	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-29	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-29	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-29	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-29	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-29	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-29	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-29	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-29	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-29	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-29	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-29	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-29	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-29	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-29	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-29	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-29	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-29	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-29	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-29	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-29	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-29	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-29	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-29	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-29	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-29	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-29	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-29	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-29	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-29	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-29	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-29	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-29	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-29	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-29	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-29	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-29	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-29	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-29	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-29	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-29	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-29	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-29	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-29	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-29	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-29	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-29	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-29	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-29	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-29	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-29	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-29	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-29	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-29	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-29	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-29	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-29	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-29	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-29	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-29	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-29	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-29	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-29	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-29	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-29	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-29	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-29	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-29	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-29	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-29	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-29	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-29	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-29	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-29	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-29	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-29	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-29	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-29	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-29	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-29	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-29	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-29	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-29	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-29	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	6/9/2016	Bis(2-ethylhexyl)phthalate	4.2	10	2.6	55.64	ug/L
MKTF-29	6/9/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-29	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-29	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-29	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	9/7/2016	Benzo(a)anthracene	**2.9**	10	2.6	0.12	ug/L
MKTF-29	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	9/7/2016	Benzoic Acid	11	20	2.6	75000	ug/L
MKTF-29	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-29	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	9/7/2016	Bis(2-ethylhexyl)phthalate	3.7	10	2.6	55.64	ug/L
MKTF-29	9/7/2016	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-29	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	9/7/2016	Dimethylphthalate	6.5	10	2.4	612	ug/L
MKTF-29	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-29	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-29	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-29	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-29	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-29	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-29	10/28/2016	Benzoic Acid	15	20	2.6	75000	ug/L
MKTF-29	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-29	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-29	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-29	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-29	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-29	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-29	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-29	10/28/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-29	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-29	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-29	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-29	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-29	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-29	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-29	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-29	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-29	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-29	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-29	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-29	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-29	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-29	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-29	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-29	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-29	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-29	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-29	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-29	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-29	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-29	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-29	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-29	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-29	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-29	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-29	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-29	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-29	10/28/2016	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
MKTF-29	10/28/2016	Di-n-octylphthalate	6.8	10	2	200	ug/L
MKTF-29	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-29	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-29	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-29	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-29	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-29	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-29	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-29	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-29	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-29	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-29	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-29	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-29	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-29	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-29	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-29	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-29	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-29	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-29	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-29	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-29	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-29	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	3/29/2017	Benzoic Acid	6.2	20	3.9	75000	ug/L
MKTF-29	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-29	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	6/5/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-29	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	6/5/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-29	6/5/2017	Di-n-octylphthalate	5.6	10	4.7	200	ug/L
MKTF-29	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	10/3/2017	Benzoic Acid	8.7	20	3.9	75000	ug/L
MKTF-29	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-29	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	11/20/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-29	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-29	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-29	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-29	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-29	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-29	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-29	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-29	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-29	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-29	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-29	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-29	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-29	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-29	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-29	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-29	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-29	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-29	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-29	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-29	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-29	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-29	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-29	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-29	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-29	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-29	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-29	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-29	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-29	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-29	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-29	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-29	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-29	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-29	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-29	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-29	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-29	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-29	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-29	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-29	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-29	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-29	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-29	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-29	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-29	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-29	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-29	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-29	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-29	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-29	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-29	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-29	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-29	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-29	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-29	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-29	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-29	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-29	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-29	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-29	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-29	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-29	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-29	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-29	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-29	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-29	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-29	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-29	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-29	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-29	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	5/1/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-29	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-29	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	8/20/2018	Benzoic Acid	8.4	20	6.3	75000	ug/L
MKTF-29	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-29	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-29	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-29	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-29	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-29	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-29	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-29	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-29	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-29	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-29	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-29	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-29	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-29	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-29	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-29	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-29	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-29	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-29	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-29	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-29	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-29	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-29	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-29	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-29	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-29	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-29	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-29	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-29	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-29	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-29	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-29	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-29	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-29	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-29	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-29	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-29	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-29	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-29	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-29	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-29	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-29	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-29	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-29	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-29	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-29	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-29	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-29	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-29	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-29	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-29	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-29	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-29	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-29	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-29	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-29	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-29	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-29	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-29	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-29	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-29	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-29	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-29	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-29	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-29	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-29	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-29	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-29	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-29	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-29	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-29	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-29	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-29	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-29	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-29	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-29	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-29	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-29	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-29	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-29	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-29	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-29	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-29	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-29	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-29	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-29	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-29	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-29	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-29	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-29	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-29	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-29	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-29	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-29	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-29	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-29	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-29	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-29	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-29	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-29	3/28/2019	Benzoic Acid	6.8	20	6.311561	75000	ug/L
MKTF-29	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-29	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-29	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-29	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-29	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-29	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-29	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-29	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-29	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-29	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-29	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-29	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-29	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-29	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-29	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-29	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-29	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-29	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-29	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-29	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-29	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-29	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-29	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-29	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-29	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-29	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-29	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-29	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-29	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-29	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-29	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-29	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-29	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-29	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-29	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-29	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-29	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-29	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-29	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-29	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-29	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-29	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-29	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-29	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-29	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-29	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-29	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-29	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-29	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-29	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-29	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-29	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-29	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-29	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-29	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-29	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-29	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-29	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-29	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-29	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-29	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-29	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-29	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-29	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-29	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-29	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
MKTF-29	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-29	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-29	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-29	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-29	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-29	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-29	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-29	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-29	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-29	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-29	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-29	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-29	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-29	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-29	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-29	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-29	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-29	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-29	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-29	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-29	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-29	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-29	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-29	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-29	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-29	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-29	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-29	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-29	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-29	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-29	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-29	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-29	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-29	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-29	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-29	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-29	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-29	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-29	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-29	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-29	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-29	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-29	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-29	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-29	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-29	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-29	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-29	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-29	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-29	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-29	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-29	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-29	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-29	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-29	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-29	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-29	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-29	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-29	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-29	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-29	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-29	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-29	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-29	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-29	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-29	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-29	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-29	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-29	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-29	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-29	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-29	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-29	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-29	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-29	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-29	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-29	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-29	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-29	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-29	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-29	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-29	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-29	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-29	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-29	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-29	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-29	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-29	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-29	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-29	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-29	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-29	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-29	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-29	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-29	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-29	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-29	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-29	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-29	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-29	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-29	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-29	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-29	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-29	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-29	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-29	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-29	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-29	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-29	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-29	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-29	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-29	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-29	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-29	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-29	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-29	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-29	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-29	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-29	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-29	10/22/2019	1,4-Dioxane	2.2	1	1	4.59	ug/L
MKTF-29	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-29	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-29	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-29	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-29	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-29	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-29	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-29	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-29	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-29	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-29	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-29	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-29	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-29	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-29	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-29	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-29	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-29	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-29	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-29	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-29	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-29	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-29	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-29	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-29	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-29	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-29	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-29	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-29	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-29	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-29	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-29	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-29	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-29	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-29	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-29	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-29	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-29	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-29	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-29	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-29	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-29	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-29	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-29	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-29	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-29	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-29	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-29	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-29	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-29	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-29	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-29	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-29	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-29	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-29	2/25/2020	1,4-Dioxane	3.1	1	1	4.59	ug/L
MKTF-29	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-29	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-29	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-29	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-29	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-29	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-29	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-29	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-29	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-29	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-29	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-29	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-29	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-29	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-29	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-29	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-29	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-29	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-29	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-29	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-29	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-29	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-29	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-29	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-29	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-29	2/25/2020	Bis(2-ethylhexyl)phthalate	0.54	0.5	0.5	55.64	ug/L
MKTF-29	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-29	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-29	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-29	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-29	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-29	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-29	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-29	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-29	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-29	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-29	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-29	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-29	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-29	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-29	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-29	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-29	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-29	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-29	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-29	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-29	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-29	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-29	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-29	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-29	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-29	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-29	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-29	9/20/2020	1,4-Dioxane	2.6	0.51	0.1	4.59	ug/L
MKTF-29	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-29	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-29	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-29	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-29	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-29	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-29	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-29	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-29	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-29	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-29	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-29	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-29	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-29	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-29	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-29	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-29	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-29	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-29	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-29	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-29	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-29	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-29	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-29	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-29	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-29	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-29	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-29	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-29	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-29	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-29	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-29	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-29	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-29	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-29	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-29	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-29	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-29	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-29	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-29	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-29	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-29	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-29	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-29	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-29	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-29	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-29	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-29	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-29	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-29	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-29	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-29	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-29	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-29	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-29	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-29	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-29	12/15/2020	Acenaphthene	ND	11	0.176	535	ug/L
MKTF-29	12/15/2020	Acenaphthylene	ND	11	0.187	NA	ug/L
MKTF-29	12/15/2020	Anthracene	ND	11	0.198	1721	ug/L
MKTF-29	12/15/2020	Benzo(a)anthracene	*ND*	*11*	0.198	0.12	ug/L
MKTF-29	12/15/2020	Benzo(a)pyrene	*ND*	*11*	0.132	0.2	ug/L
MKTF-29	12/15/2020	Benzo(b)fluoranthene	*ND*	*11*	0.165	0.34	ug/L
MKTF-29	12/15/2020	Benzo(g,h,i)perylene	ND	11	0.254	NA	ug/L
MKTF-29	12/15/2020	Benzo(k)fluoranthene	*ND*	*11*	0.176	3.43	ug/L
MKTF-29	12/15/2020	Bis(2-chloroethoxy)methane	ND	11	0.176	59	ug/L
MKTF-29	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11*	2.98	0.137	ug/L
MKTF-29	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11	5.51	55.64	ug/L
MKTF-29	12/15/2020	4-Bromophenyl-phenylether	ND	11	0.22	NA	ug/L
MKTF-29	12/15/2020	Butylbenzylphthalate	ND	11	0.209	16	ug/L
MKTF-29	12/15/2020	Carbazole	ND	11	0.254	NA	ug/L
MKTF-29	12/15/2020	4-Chloroaniline	*ND*	*11*	3.75	0.37	ug/L
MKTF-29	12/15/2020	4-Chloro-3-Methylphenol	ND	11	4.19	NA	ug/L
MKTF-29	12/15/2020	2-Chloronaphthalene	ND	11	0.154	733	ug/L
MKTF-29	12/15/2020	2-Chlorophenol	ND	11	2.43	91	ug/L
MKTF-29	12/15/2020	4-Chlorophenyl-phenylether	ND	11	2.2	NA	ug/L
MKTF-29	12/15/2020	1,3-Dichlorobenzene	ND	11	0.198	NA	ug/L
MKTF-29	12/15/2020	Chrysene	ND	11	0.209	34.3	ug/L
MKTF-29	12/15/2020	Dibenzo(a,h)anthracene	ND	11	0.265	NA	ug/L
MKTF-29	12/15/2020	1,4-Dichlorobenzene	ND	11	0.176	75	ug/L
MKTF-29	12/15/2020	Dibenzofuran	ND	11	0.187	NA	ug/L
MKTF-29	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11*	2.87	1.25	ug/L
MKTF-29	12/15/2020	2,4-Dichlorophenol	ND	11	3.31	45.3	ug/L
MKTF-29	12/15/2020	Diethylphthalate	ND	11	0.265	14801	ug/L
MKTF-29	12/15/2020	2,4-Dimethylphenol	ND	11	3.86	354	ug/L
MKTF-29	12/15/2020	Di-n-butylphthalate	ND	11	2.98	885	ug/L
MKTF-29	12/15/2020	2,4-Dinitrophenol	ND	33.1	3.75	38.7	ug/L
MKTF-29	12/15/2020	2,4-Dinitrotoluene	ND	11	2.09	45.3	ug/L
MKTF-29	12/15/2020	2,6-Dinitrotoluene	*ND*	*11*	2.09	0.485	ug/L
MKTF-29	12/15/2020	Fluoranthene	ND	11	0.198	802	ug/L
MKTF-29	12/15/2020	Fluorene	ND	11	0.198	288	ug/L
MKTF-29	12/15/2020	Hexachlorobenzene	*ND*	*11*	0.187	0.0976	ug/L
MKTF-29	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22*	2.87	0.41	ug/L
MKTF-29	12/15/2020	Hexachloroethane	*ND*	*11*	4.63	3.28	ug/L
MKTF-29	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11*	0.243	0.343	ug/L
MKTF-29	12/15/2020	Isophorone	ND	11	0.154	781	ug/L
MKTF-29	12/15/2020	2-Methylphenol	ND	11	1.98	NA	ug/L
MKTF-29	12/15/2020	Naphthalene	ND	11	0.187	30	ug/L
MKTF-29	12/15/2020	2-Nitroaniline	ND	11	2.43	190	ug/L
MKTF-29	12/15/2020	3-Nitroaniline	ND	11	1.98	NA	ug/L
MKTF-29	12/15/2020	4-Nitroaniline	*ND*	*11*	1.65	3.8	ug/L
MKTF-29	12/15/2020	Nitrobenzene	*ND*	*11*	0.143	1.4	ug/L
MKTF-29	12/15/2020	2-Nitrophenol	ND	11	5.73	NA	ug/L
MKTF-29	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11*	3.64	0.011	ug/L
MKTF-29	12/15/2020	N-Nitrosodiphenylamine	ND	11	0.198	122	ug/L
MKTF-29	12/15/2020	Pentachlorophenol	*ND*	*22*	1.54	1	ug/L
MKTF-29	12/15/2020	Phenanthrene	ND	11	0.198	170	ug/L
MKTF-29	12/15/2020	Phenol	ND	11	2.87	5761	ug/L
MKTF-29	12/15/2020	Pyrene	ND	11	0.231	117	ug/L
MKTF-29	12/15/2020	2,4,5-Trichlorophenol	ND	11	4.08	1166	ug/L
MKTF-29	12/15/2020	2,4,6-Trichlorophenol	ND	11	3.86	11.9*	ug/L
MKTF-29	12/15/2020	Dimethylphthalate	ND	11	0.187	612	ug/L
MKTF-29	12/15/2020	Aniline	ND	11	4.19	13	ug/L
MKTF-29	12/15/2020	Benzoic Acid	ND	33.1	8.05	75000	ug/L
MKTF-29	12/15/2020	Benzyl Alcohol	ND	11	2.2	2000	ug/L
MKTF-29	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11*	0.176	9.81	ug/L
MKTF-29	12/15/2020	N-Nitrosodimethylamine	*ND*	*11*	3.86	0.0049	ug/L
MKTF-29	12/15/2020	Pyridine	ND	11	3.53	20	ug/L
MKTF-29	12/15/2020	1,2,4-Trichlorobenzene	ND	11	0.198	70	ug/L
MKTF-29	12/15/2020	1,2-Dichlorobenzene	ND	11	0.187	600	ug/L
MKTF-29	12/15/2020	Azobenzene	*ND*	*11*	1.1	0.12	ug/L
MKTF-29	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11*	1.76	1.52	ug/L
MKTF-29	12/15/2020	Di-n-octylphthalate	ND	11	0.187	200	ug/L
MKTF-29	12/15/2020	4-Nitrophenol	ND	11	2.31	NA	ug/L
MKTF-30	4/9/2014	Benzo(a)pyrene	*ND*	*11*	3.4	0.2	ug/L
MKTF-30	4/9/2014	2,4-Dinitrophenol	ND	21	3.3	38.7	ug/L
MKTF-30	4/9/2014	Dibenzo(a,h)anthracene	ND	11	3.2	NA	ug/L
MKTF-30	4/9/2014	Benzo(a)anthracene	*ND*	*11*	3.2	0.12	ug/L
MKTF-30	4/9/2014	4-Chloro-3-Methylphenol	ND	11	3.8	NA	ug/L
MKTF-30	4/9/2014	Aniline	ND	11	2.5	13	ug/L
MKTF-30	4/9/2014	N-Nitrosodimethylamine	*ND*	*11*	2.5	0.0049	ug/L
MKTF-30	4/9/2014	Benzoic Acid	ND	21	2.3	75000	ug/L
MKTF-30	4/9/2014	Hexachloroethane	*ND*	*11*	2	3.28	ug/L
MKTF-30	4/9/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.2	0.41	ug/L
MKTF-30	4/9/2014	Isophorone	ND	11	3.3	781	ug/L
MKTF-30	4/9/2014	Acenaphthene	ND	11	3.1	535	ug/L
MKTF-30	4/9/2014	Diethylphthalate	ND	11	4.4	14801	ug/L
MKTF-30	4/9/2014	Di-n-butylphthalate	ND	11	3.8	885	ug/L
MKTF-30	4/9/2014	Phenanthrene	ND	11	2.6	170	ug/L
MKTF-30	4/9/2014	Butylbenzylphthalate	ND	11	3.3	16	ug/L
MKTF-30	4/9/2014	N-Nitrosodiphenylamine	ND	11	3	122	ug/L
MKTF-30	4/9/2014	Fluorene	ND	11	3.1	288	ug/L
MKTF-30	4/9/2014	Carbazole	ND	11	3	NA	ug/L
MKTF-30	4/9/2014	Hexachlorobutadiene	*ND*	*11*	3.2	0.14	ug/L
MKTF-30	4/9/2014	Pentachlorophenol	*ND*	*21*	2.6	1	ug/L
MKTF-30	4/9/2014	2,4,6-Trichlorophenol	ND	11	1.9	11.9*	ug/L
MKTF-30	4/9/2014	2-Nitroaniline	ND	11	3	190	ug/L
MKTF-30	4/9/2014	2-Nitrophenol	ND	11	3.3	NA	ug/L
MKTF-30	4/9/2014	1-Methylnaphthalene	ND	11	3.8	11.38	ug/L
MKTF-30	4/9/2014	Naphthalene	ND	11	2.4	30	ug/L
MKTF-30	4/9/2014	2-Methylnaphthalene	ND	11	2.8	35.1	ug/L
MKTF-30	4/9/2014	2-Chloronaphthalene	ND	11	3.2	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	4/9/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.5	1.25	ug/L
MKTF-30	4/9/2014	2-Methylphenol	ND	21	2.9	NA	ug/L
MKTF-30	4/9/2014	1,2-Dichlorobenzene	ND	11	1.8	600	ug/L
MKTF-30	4/9/2014	2-Chlorophenol	ND	11	1.9	91	ug/L
MKTF-30	4/9/2014	2,4,5-Trichlorophenol	ND	11	3.4	1166	ug/L
MKTF-30	4/9/2014	Nitrobenzene	*ND*	*11*	2.7	1.4	ug/L
MKTF-30	4/9/2014	3-Nitroaniline	ND	11	3.8	NA	ug/L
MKTF-30	4/9/2014	4-Nitroaniline	*ND*	*11*	4.3	3.8	ug/L
MKTF-30	4/9/2014	4-Nitrophenol	ND	11	4.5	NA	ug/L
MKTF-30	4/9/2014	Benzyl Alcohol	ND	11	1.9	2000	ug/L
MKTF-30	4/9/2014	4-Bromophenyl-phenylether	ND	11	3.1	NA	ug/L
MKTF-30	4/9/2014	Azobenzene	*ND*	*11*	2.7	0.12	ug/L
MKTF-30	4/9/2014	2,4-Dimethylphenol	ND	11	3.3	354	ug/L
MKTF-30	4/9/2014	1,4-Dichlorobenzene	ND	11	2.5	75	ug/L
MKTF-30	4/9/2014	4-Chloroaniline	*ND*	*11*	2.7	0.37	ug/L
MKTF-30	4/9/2014	Phenol	ND	11	1.7	5761	ug/L
MKTF-30	4/9/2014	Pyridine	ND	11	1.6	20	ug/L
MKTF-30	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*11*	1.9	0.137	ug/L
MKTF-30	4/9/2014	Bis(2-chloroethoxy)methane	ND	11	3	59	ug/L
MKTF-30	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	11	3.1	55.64	ug/L
MKTF-30	4/9/2014	Di-n-octylphthalate	ND	11	2.9	200	ug/L
MKTF-30	4/9/2014	Hexachlorobenzene	*ND*	*11*	3.3	0.0976	ug/L
MKTF-30	4/9/2014	Anthracene	ND	11	2.6	1721	ug/L
MKTF-30	4/9/2014	1,2,4-Trichlorobenzene	ND	11	2.9	70	ug/L
MKTF-30	4/9/2014	2,4-Dichlorophenol	ND	21	3.2	45.3	ug/L
MKTF-30	4/9/2014	2,4-Dinitrotoluene	ND	11	4.7	45.3	ug/L
MKTF-30	4/9/2014	Pyrene	ND	11	4.2	117	ug/L
MKTF-30	4/9/2014	Dimethylphthalate	ND	11	3.9	612	ug/L
MKTF-30	4/9/2014	Dibenzofuran	ND	11	3.9	NA	ug/L
MKTF-30	4/9/2014	Benzo(g,h,i)perylene	ND	11	3.5	NA	ug/L
MKTF-30	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.6	0.343	ug/L
MKTF-30	4/9/2014	Benzo(b)fluoranthene	*ND*	*11*	4.3	0.34	ug/L
MKTF-30	4/9/2014	Fluoranthene	ND	11	3.1	802	ug/L
MKTF-30	4/9/2014	Benzo(k)fluoranthene	*ND*	*11*	3.7	3.43	ug/L
MKTF-30	4/9/2014	Acenaphthylene	ND	11	2.6	NA	ug/L
MKTF-30	4/9/2014	Chrysene	ND	11	3	34.3	ug/L
MKTF-30	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*21*	2.5	1.52	ug/L
MKTF-30	4/9/2014	1,3-Dichlorobenzene	ND	11	1.9	NA	ug/L
MKTF-30	4/9/2014	2,6-Dinitrotoluene	*ND*	*11*	3.6	0.485	ug/L
MKTF-30	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2	0.011	ug/L
MKTF-30	4/9/2014	4-Chlorophenyl-phenylether	ND	11	3.7	NA	ug/L
MKTF-30	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.5	9.81	ug/L
MKTF-30	4/9/2014	3,4-Methylphenol	ND	11	1.9	NA	ug/L
MKTF-30	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-30	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-30	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-30	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-30	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-30	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-30	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-30	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-30	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-30	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-30	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-30	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-30	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-30	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-30	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-30	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-30	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-30	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-30	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-30	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-30	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-30	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-30	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-30	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-30	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-30	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-30	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-30	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-30	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-30	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-30	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-30	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-30	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-30	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-30	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-30	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-30	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-30	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-30	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-30	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-30	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-30	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-30	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-30	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-30	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-30	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-30	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-30	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-30	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-30	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-30	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-30	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-30	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-30	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-30	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-30	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-30	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-30	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-30	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-30	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-30	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-30	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-30	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-30	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-30	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-30	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-30	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-30	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-30	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-30	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-30	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-30	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-30	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-30	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-30	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-30	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-30	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-30	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-30	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-30	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-30	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-30	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-30	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-30	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-30	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-30	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-30	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-30	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-30	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-30	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-30	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-30	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-30	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-30	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-30	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-30	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-30	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-30	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-30	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-30	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-30	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-30	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	11/17/2014	Bis(2-ethylhexyl)phthalate	11	10	3	55.64	ug/L
MKTF-30	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-30	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-30	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-30	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-30	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-30	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-30	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-30	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-30	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-30	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-30	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-30	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-30	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-30	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-30	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-30	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-30	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-30	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-30	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-30	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-30	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-30	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-30	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-30	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-30	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-30	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-30	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-30	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-30	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-30	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-30	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-30	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-30	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-30	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-30	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-30	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-30	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-30	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-30	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-30	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-30	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-30	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-30	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-30	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-30	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-30	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-30	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-30	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-30	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-30	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-30	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-30	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-30	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-30	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-30	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-30	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-30	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-30	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-30	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-30	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-30	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-30	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-30	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-30	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-30	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-30	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-30	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-30	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-30	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-30	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-30	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-30	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-30	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-30	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-30	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-30	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-30	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-30	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-30	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-30	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-30	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-30	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-30	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-30	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-30	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-30	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-30	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-30	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-30	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	8/20/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	8/20/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	8/20/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	8/20/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	8/20/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	8/20/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	8/20/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	8/20/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	8/20/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	8/20/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	8/20/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	8/20/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	8/20/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	8/20/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	8/20/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	8/20/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	8/20/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	8/20/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	8/20/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	8/20/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	8/20/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	8/20/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	8/20/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	8/20/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	8/20/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	8/20/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	8/20/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	8/20/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	8/20/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	8/20/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	8/20/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	8/20/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	8/20/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	8/20/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	8/20/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	8/20/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	8/20/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-30	8/20/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	8/20/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	8/20/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	8/20/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	8/20/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	8/20/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	8/20/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	8/20/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	8/20/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	8/20/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	8/20/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	8/20/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	8/20/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	8/20/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	8/20/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	8/20/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	8/20/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	8/20/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	8/20/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	8/20/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	8/20/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	8/20/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	8/20/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	8/20/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	8/20/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	8/20/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	8/20/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	8/20/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	8/20/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-30	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-30	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-30	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-30	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-30	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-30	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-30	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-30	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-30	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-30	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-30	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-30	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-30	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-30	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-30	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-30	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-30	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-30	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-30	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-30	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-30	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-30	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-30	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-30	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-30	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-30	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-30	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-30	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-30	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-30	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-30	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-30	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-30	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-30	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-30	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-30	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-30	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-30	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-30	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-30	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-30	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-30	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-30	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-30	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-30	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-30	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-30	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-30	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-30	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-30	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-30	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-30	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-30	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-30	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-30	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-30	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-30	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-30	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-30	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-30	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-30	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-30	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-30	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-30	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-30	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-30	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-30	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-30	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-30	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-30	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-30	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-30	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-30	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-30	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-30	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-30	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-30	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-30	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-30	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-30	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-30	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-30	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-30	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-30	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-30	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-30	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-30	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-30	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-30	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-30	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-30	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-30	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-30	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-30	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-30	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-30	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-30	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-30	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-30	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-30	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-30	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-30	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-30	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-30	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-30	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-30	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-30	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-30	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-30	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-30	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-30	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-30	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-30	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-30	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-30	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-30	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-30	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-30	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-30	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-30	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-30	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-30	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-30	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-30	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-30	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-30	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-30	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-30	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-30	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-30	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-30	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-30	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-30	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-30	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-30	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-30	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-30	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-30	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	6/9/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-30	6/9/2016	Di-n-octylphthalate	5.5	10	2	200	ug/L
MKTF-30	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-30	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	9/7/2016	Benzoic Acid	7.2	20	2.6	75000	ug/L
MKTF-30	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-30	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-30	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	9/7/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	9/7/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-30	9/7/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	9/7/2016	Dimethylphthalate	5.9	10	2.4	612	ug/L
MKTF-30	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-30	10/28/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-30	10/28/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-30	10/28/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-30	10/28/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-30	10/28/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-30	10/28/2016	Benzoic Acid	8.6	20	2.6	75000	ug/L
MKTF-30	10/28/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-30	10/28/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-30	10/28/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-30	10/28/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-30	10/28/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-30	10/28/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-30	10/28/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-30	10/28/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-30	10/28/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-30	10/28/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-30	10/28/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-30	10/28/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-30	10/28/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-30	10/28/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-30	10/28/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-30	10/28/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-30	10/28/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-30	10/28/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-30	10/28/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-30	10/28/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-30	10/28/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-30	10/28/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-30	10/28/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-30	10/28/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-30	10/28/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-30	10/28/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-30	10/28/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-30	10/28/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-30	10/28/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-30	10/28/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-30	10/28/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-30	10/28/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-30	10/28/2016	Phenol	ND	10	2	5761	ug/L
MKTF-30	10/28/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-30	10/28/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-30	10/28/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-30	10/28/2016	Bis(2-ethylhexyl)phthalate	6.9	10	2.6	55.64	ug/L
MKTF-30	10/28/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-30	10/28/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-30	10/28/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-30	10/28/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-30	10/28/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-30	10/28/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-30	10/28/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-30	10/28/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-30	10/28/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-30	10/28/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-30	10/28/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-30	10/28/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-30	10/28/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-30	10/28/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-30	10/28/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-30	10/28/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-30	10/28/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-30	10/28/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-30	10/28/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-30	10/28/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-30	10/28/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-30	10/28/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-30	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	3/29/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	3/29/2017	Benzoic Acid	6.3	20	3.9	75000	ug/L
MKTF-30	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/29/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	3/29/2017	Bis(2-ethylhexyl)phthalate	6.1	10	4.8	55.64	ug/L
MKTF-30	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	6/5/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
MKTF-30	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	6/5/2017	Bis(2-ethylhexyl)phthalate	13	10	4.8	55.64	ug/L
MKTF-30	6/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	10/3/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	10/3/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	10/3/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	10/3/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	10/3/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	10/3/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	10/3/2017	Benzoic Acid	8.5	20	3.9	75000	ug/L
MKTF-30	10/3/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	10/3/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	10/3/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	10/3/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	10/3/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	10/3/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	10/3/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	10/3/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	10/3/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	10/3/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	10/3/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	10/3/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	10/3/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	10/3/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	10/3/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	10/3/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	10/3/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	10/3/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	10/3/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	10/3/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	10/3/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	10/3/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	10/3/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	10/3/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	10/3/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	10/3/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	10/3/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	10/3/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	10/3/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	10/3/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	10/3/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	10/3/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	10/3/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	10/3/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	10/3/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	10/3/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	10/3/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	10/3/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	10/3/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	10/3/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	10/3/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	10/3/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	10/3/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	10/3/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	10/3/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	10/3/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	10/3/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	10/3/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	10/3/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	10/3/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	10/3/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	10/3/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	10/3/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	10/3/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	10/3/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	10/3/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	10/3/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	10/3/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	10/3/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	10/3/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	10/3/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	10/3/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	11/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	11/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	11/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	11/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	11/20/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-30	11/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	11/20/2017	Benzoic Acid	7.9	20	3.9	75000	ug/L
MKTF-30	11/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	11/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	11/20/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	11/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	11/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	11/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	11/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	11/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	11/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	11/20/2017	Fluorene	ND	10	4	288	ug/L
MKTF-30	11/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	11/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	11/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	11/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	11/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	11/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	11/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	11/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	11/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	11/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	11/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	11/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	11/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	11/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	11/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	11/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	11/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	11/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	11/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	11/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	11/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	11/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	11/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	11/20/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	11/20/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	11/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	11/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	11/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	11/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	11/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	11/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	11/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	11/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	11/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	11/20/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	11/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	11/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	11/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	11/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	11/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	11/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	11/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	11/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-30	11/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	11/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	11/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	11/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	11/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	11/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	11/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	11/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	2/6/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-30	2/6/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-30	2/6/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-30	2/6/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	2/6/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-30	2/6/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-30	2/6/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-30	2/6/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-30	2/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-30	2/6/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-30	2/6/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-30	2/6/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-30	2/6/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-30	2/6/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-30	2/6/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-30	2/6/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-30	2/6/2018	Fluorene	ND	10	4	288	ug/L
MKTF-30	2/6/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-30	2/6/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-30	2/6/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-30	2/6/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-30	2/6/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-30	2/6/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-30	2/6/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-30	2/6/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-30	2/6/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-30	2/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-30	2/6/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-30	2/6/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-30	2/6/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-30	2/6/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-30	2/6/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-30	2/6/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-30	2/6/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-30	2/6/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-30	2/6/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-30	2/6/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-30	2/6/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-30	2/6/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-30	2/6/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-30	2/6/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-30	2/6/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-30	2/6/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-30	2/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-30	2/6/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-30	2/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-30	2/6/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-30	2/6/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-30	2/6/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-30	2/6/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-30	2/6/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-30	2/6/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-30	2/6/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-30	2/6/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-30	2/6/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-30	2/6/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-30	2/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-30	2/6/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-30	2/6/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-30	2/6/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-30	2/6/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/6/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-30	2/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-30	2/6/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-30	2/6/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-30	2/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-30	2/6/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-30	2/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-30	2/6/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-30	5/1/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	5/1/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	5/1/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	5/1/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	5/1/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	5/1/2018	Benzoic Acid	15	20	6.3	75000	ug/L
MKTF-30	5/1/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	5/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	5/1/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	5/1/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	5/1/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	5/1/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	5/1/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	5/1/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	5/1/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	5/1/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	5/1/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	5/1/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	5/1/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	5/1/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	5/1/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	5/1/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	5/1/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	5/1/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	5/1/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	5/1/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	5/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	5/1/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	5/1/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-30	5/1/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	5/1/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	5/1/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	5/1/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	5/1/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	5/1/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	5/1/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	5/1/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	5/1/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	5/1/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	5/1/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	5/1/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	5/1/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	5/1/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	5/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	5/1/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	5/1/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	5/1/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	5/1/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	5/1/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	5/1/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	5/1/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	5/1/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	5/1/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	5/1/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	5/1/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	5/1/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	5/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	5/1/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	5/1/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	5/1/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	5/1/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	5/1/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	5/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	5/1/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	5/1/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	5/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	5/1/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	5/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-30	5/1/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	8/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	8/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	8/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	8/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	8/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	8/20/2018	Benzoic Acid	8.3	20	6.3	75000	ug/L
MKTF-30	8/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	8/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	8/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	8/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	8/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	8/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	8/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	8/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	8/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	8/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	8/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	8/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	8/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	8/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	8/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	8/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	8/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	8/20/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	8/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	8/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	8/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	8/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	8/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	8/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	8/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	8/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	8/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	8/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	8/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	8/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	8/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	8/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	8/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	8/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	8/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	8/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	8/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	8/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	8/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	8/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	8/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	8/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	8/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	8/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	8/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	8/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	8/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	8/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	8/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	8/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	8/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	8/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	8/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	8/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	8/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	8/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	8/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	8/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	8/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	8/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	8/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-30	8/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-30	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-30	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-30	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-30	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-30	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-30	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-30	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-30	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-30	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-30	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-30	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-30	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-30	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-30	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-30	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-30	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-30	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-30	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-30	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-30	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-30	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-30	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-30	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-30	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-30	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-30	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-30	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-30	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-30	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-30	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-30	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-30	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-30	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-30	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-30	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-30	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-30	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-30	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-30	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-30	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-30	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-30	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-30	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-30	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-30	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-30	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-30	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-30	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-30	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-30	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-30	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-30	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-30	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-30	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-30	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-30	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-30	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-30	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-30	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-30	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-30	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-30	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-30	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-30	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-30	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-30	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-30	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-30	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-30	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-30	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-30	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-30	3/28/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-30	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-30	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-30	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-30	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-30	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-30	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-30	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-30	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-30	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-30	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-30	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-30	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-30	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-30	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-30	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-30	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-30	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-30	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-30	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-30	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-30	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-30	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-30	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-30	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-30	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-30	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-30	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-30	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-30	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-30	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-30	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-30	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-30	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-30	3/28/2019	Benzoic Acid	7.4	20	6.311561	75000	ug/L
MKTF-30	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-30	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-30	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-30	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-30	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-30	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-30	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-30	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-30	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-30	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-30	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-30	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-30	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-30	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-30	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-30	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-30	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-30	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-30	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-30	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-30	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-30	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-30	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-30	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-30	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-30	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-30	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-30	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-30	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-30	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-30	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-30	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-30	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-30	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-30	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-30	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-30	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-30	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-30	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-30	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-30	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-30	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-30	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-30	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-30	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-30	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-30	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-30	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-30	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-30	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-30	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-30	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-30	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-30	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-30	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-30	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-30	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-30	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-30	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-30	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-30	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-30	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-30	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-30	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-30	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-30	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-30	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-30	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-30	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-30	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-30	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-30	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-30	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-30	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-30	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-30	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-30	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-30	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-30	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-30	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-30	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-30	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-30	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-30	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-30	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-30	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-30	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-30	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-30	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-30	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-30	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-30	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-30	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-30	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-30	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-30	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-30	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-30	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-30	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-30	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-30	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-30	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-30	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-30	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-30	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-30	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-30	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-30	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-30	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-30	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-30	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-30	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-30	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-30	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-30	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-30	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-30	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-30	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-30	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-30	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-30	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-30	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-30	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-30	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-30	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-30	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-30	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-30	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-30	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-30	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-30	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-30	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-30	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-30	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-30	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-30	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-30	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-30	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-30	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-30	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-30	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-30	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-30	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-30	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-30	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-30	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-30	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-30	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-30	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-30	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-30	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-30	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-30	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-30	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-30	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-30	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-30	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-30	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-30	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-30	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-30	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-30	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-30	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-30	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-30	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-30	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-30	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-30	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-30	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-30	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-30	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-30	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-30	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-30	10/23/2019	1,4-Dioxane	**43**	1	1	4.59	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-30	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-30	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-30	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-30	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-30	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-30	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-30	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-30	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-30	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-30	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-30	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-30	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-30	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-30	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-30	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-30	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-30	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-30	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-30	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-30	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-30	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-30	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-30	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-30	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-30	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-30	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-30	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-30	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-30	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-30	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-30	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-30	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-30	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-30	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-30	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-30	10/23/2019	1,4-Dioxane	**39**	1	1	4.59	ug/L
MKTF-30	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-30	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-30	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-30	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-30	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-30	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-30	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-30	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-30	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-30	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-30	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-30	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-30	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-30	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-30	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-30	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-30	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-30	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-30	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-30	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-30	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-30	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-30	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-30	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-30	10/23/2019	Bis(2-ethylhexyl)phthalate	6.2	0.5	0.5	55.64	ug/L
MKTF-30	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-30	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-30	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-30	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-30	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-30	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-30	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-30	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-30	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-30	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-30	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-30	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-30	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-30	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-30	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-30	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-30	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-30	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-30	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-30	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-30	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-30	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-30	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-30	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-30	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-30	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-30	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-30	2/27/2020	1,4-Dioxane	**35**	1	0.2	4.59	ug/L
MKTF-30	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-30	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-30	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-30	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-30	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-30	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-30	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-30	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-30	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-30	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-30	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-30	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-30	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-30	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-30	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-30	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-30	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-30	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-30	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-30	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-30	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-30	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-30	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-30	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-30	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-30	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-30	2/27/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-30	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-30	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-30	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-30	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-30	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-30	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-30	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-30	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-30	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-30	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-30	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-30	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-30	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-30	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-30	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-30	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-30	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-30	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-30	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-30	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-30	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-30	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-30	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-30	9/20/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-30	9/20/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-30	9/20/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-30	9/20/2020	1,4-Dioxane	**35**	0.51	0.1	4.59	ug/L
MKTF-30	9/20/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-30	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-30	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-30	9/20/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-30	9/20/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-30	9/20/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-30	9/20/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-30	9/20/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-30	9/20/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-30	9/20/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-30	9/20/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-30	9/20/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-30	9/20/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-30	9/20/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-30	9/20/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-30	9/20/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-30	9/20/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-30	9/20/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-30	9/20/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-30	9/20/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-30	9/20/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-30	9/20/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-30	9/20/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-30	9/20/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-30	9/20/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-30	9/20/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-30	9/20/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-30	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-30	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-30	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-30	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-30	9/20/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-30	9/20/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-30	9/20/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-30	9/20/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-30	9/20/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-30	9/20/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-30	9/20/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-30	9/20/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-30	9/20/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-30	9/20/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-30	9/20/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-30	9/20/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-30	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-30	9/20/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-30	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-30	9/20/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-30	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-30	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-30	9/20/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-30	9/20/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-30	9/20/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-30	9/20/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-30	9/20/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-30	9/20/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-30	9/20/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-30	9/20/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-30	12/15/2020	Acenaphthene	ND	11.2	0.18	535	ug/L
MKTF-30	12/15/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
MKTF-30	12/15/2020	Anthracene	ND	11.2	0.202	1721	ug/L
MKTF-30	12/15/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
MKTF-30	12/15/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
MKTF-30	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
MKTF-30	12/15/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
MKTF-30	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.18	3.43	ug/L
MKTF-30	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.18	59	ug/L
MKTF-30	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
MKTF-30	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.61	55.64	ug/L
MKTF-30	12/15/2020	4-Bromophenyl-phenylether	ND	11.2	0.224	NA	ug/L
MKTF-30	12/15/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
MKTF-30	12/15/2020	Carbazole	ND	11.2	0.258	NA	ug/L
MKTF-30	12/15/2020	4-Chloroaniline	*ND*	*11.2*	3.82	0.37	ug/L
MKTF-30	12/15/2020	4-Chloro-3-Methylphenol	ND	11.2	4.26	NA	ug/L
MKTF-30	12/15/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
MKTF-30	12/15/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
MKTF-30	12/15/2020	4-Chlorophenyl-phenylether	ND	11.2	2.24	NA	ug/L
MKTF-30	12/15/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
MKTF-30	12/15/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
MKTF-30	12/15/2020	Dibenzo(a,h)anthracene	ND	11.2	0.269	NA	ug/L
MKTF-30	12/15/2020	1,4-Dichlorobenzene	ND	11.2	0.18	75	ug/L
MKTF-30	12/15/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
MKTF-30	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.92	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	12/15/2020	2,4-Dichlorophenol	ND	11.2	3.37	45.3	ug/L
MKTF-30	12/15/2020	Diethylphthalate	ND	11.2	0.269	14801	ug/L
MKTF-30	12/15/2020	2,4-Dimethylphenol	ND	11.2	3.93	354	ug/L
MKTF-30	12/15/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
MKTF-30	12/15/2020	2,4-Dinitrophenol	ND	33.7	3.82	38.7	ug/L
MKTF-30	12/15/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
MKTF-30	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
MKTF-30	12/15/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
MKTF-30	12/15/2020	Fluorene	ND	11.2	0.202	288	ug/L
MKTF-30	12/15/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
MKTF-30	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.4*	2.92	0.41	ug/L
MKTF-30	12/15/2020	Hexachloroethane	*ND*	*11.2*	4.71	3.28	ug/L
MKTF-30	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
MKTF-30	12/15/2020	Isophorone	ND	11.2	0.157	781	ug/L
MKTF-30	12/15/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
MKTF-30	12/15/2020	Naphthalene	ND	11.2	0.191	30	ug/L
MKTF-30	12/15/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
MKTF-30	12/15/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
MKTF-30	12/15/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
MKTF-30	12/15/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
MKTF-30	12/15/2020	2-Nitrophenol	ND	11.2	5.83	NA	ug/L
MKTF-30	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.7	0.011	ug/L
MKTF-30	12/15/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
MKTF-30	12/15/2020	Pentachlorophenol	*ND*	*22.4*	1.57	1	ug/L
MKTF-30	12/15/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
MKTF-30	12/15/2020	Phenol	ND	11.2	2.92	5761	ug/L
MKTF-30	12/15/2020	Pyrene	ND	11.2	0.236	117	ug/L
MKTF-30	12/15/2020	2,4,5-Trichlorophenol	ND	11.2	4.15	1166	ug/L
MKTF-30	12/15/2020	2,4,6-Trichlorophenol	ND	11.2	3.93	11.9*	ug/L
MKTF-30	12/15/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
MKTF-30	12/15/2020	Aniline	ND	11.2	4.26	13	ug/L
MKTF-30	12/15/2020	Benzoic Acid	ND	33.7	8.19	75000	ug/L
MKTF-30	12/15/2020	Benzyl Alcohol	ND	11.2	2.24	2000	ug/L
MKTF-30	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.18	9.81	ug/L
MKTF-30	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.93	0.0049	ug/L
MKTF-30	12/15/2020	Pyridine	ND	11.2	3.59	20	ug/L
MKTF-30	12/15/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
MKTF-30	12/15/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
MKTF-30	12/15/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
MKTF-30	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.8	1.52	ug/L
MKTF-30	12/15/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
MKTF-30	12/15/2020	4-Nitrophenol	ND	11.2	2.36	NA	ug/L
MKTF-31	4/8/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-31	4/8/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-31	4/8/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-31	4/8/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-31	4/8/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	4/8/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-31	4/8/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-31	4/8/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-31	4/8/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-31	4/8/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-31	4/8/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-31	4/8/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-31	4/8/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-31	4/8/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-31	4/8/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-31	4/8/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-31	4/8/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-31	4/8/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-31	4/8/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-31	4/8/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-31	4/8/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-31	4/8/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-31	4/8/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	4/8/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-31	4/8/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-31	4/8/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-31	4/8/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-31	4/8/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-31	4/8/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	4/8/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-31	4/8/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-31	4/8/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-31	4/8/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-31	4/8/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-31	4/8/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-31	4/8/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-31	4/8/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-31	4/8/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-31	4/8/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-31	4/8/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	4/8/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-31	4/8/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	4/8/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-31	4/8/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-31	4/8/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-31	4/8/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	4/8/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	4/8/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-31	4/8/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-31	4/8/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-31	4/8/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	4/8/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-31	4/8/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-31	4/8/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-31	4/8/2014	Pyrene	ND	10	4	117	ug/L
MKTF-31	4/8/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-31	4/8/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-31	4/8/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-31	4/8/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-31	4/8/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-31	4/8/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-31	4/8/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-31	4/8/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-31	4/8/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-31	4/8/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-31	4/8/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	4/8/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-31	4/8/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	4/8/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-31	4/8/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-31	4/8/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-31	9/23/2014	Benzo(a)pyrene	*ND*	*12*	4	0.2	ug/L
MKTF-31	9/23/2014	2,4-Dinitrophenol	ND	25	4	38.7	ug/L
MKTF-31	9/23/2014	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-31	9/23/2014	Benzo(a)anthracene	*ND*	*12*	3.9	0.12	ug/L
MKTF-31	9/23/2014	4-Chloro-3-Methylphenol	ND	12	4.6	NA	ug/L
MKTF-31	9/23/2014	Aniline	ND	12	3	13	ug/L
MKTF-31	9/23/2014	N-Nitrosodimethylamine	*ND*	*12*	3	0.0049	ug/L
MKTF-31	9/23/2014	Benzoic Acid	ND	25	2.7	75000	ug/L
MKTF-31	9/23/2014	Hexachloroethane	*ND*	*12*	2.4	3.28	ug/L
MKTF-31	9/23/2014	Hexachlorocyclopentadiene	*ND*	*12*	3.8	0.41	ug/L
MKTF-31	9/23/2014	Isophorone	ND	12	3.9	781	ug/L
MKTF-31	9/23/2014	Acenaphthene	ND	12	3.7	535	ug/L
MKTF-31	9/23/2014	Diethylphthalate	ND	12	5.2	14801	ug/L
MKTF-31	9/23/2014	Di-n-butylphthalate	ND	12	4.5	885	ug/L
MKTF-31	9/23/2014	Phenanthrene	ND	12	3.1	170	ug/L
MKTF-31	9/23/2014	Butylbenzylphthalate	ND	12	3.9	16	ug/L
MKTF-31	9/23/2014	N-Nitrosodiphenylamine	ND	12	3.6	122	ug/L
MKTF-31	9/23/2014	Fluorene	ND	12	3.7	288	ug/L
MKTF-31	9/23/2014	Carbazole	ND	12	3.6	NA	ug/L
MKTF-31	9/23/2014	Hexachlorobutadiene	*ND*	*12*	3.8	0.14	ug/L
MKTF-31	9/23/2014	Pentachlorophenol	*ND*	*25*	3.1	1	ug/L
MKTF-31	9/23/2014	2,4,6-Trichlorophenol	ND	12	2.3	11.9*	ug/L
MKTF-31	9/23/2014	2-Nitroaniline	ND	12	3.5	190	ug/L
MKTF-31	9/23/2014	2-Nitrophenol	ND	12	3.9	NA	ug/L
MKTF-31	9/23/2014	1-Methylnaphthalene	*ND*	*12*	4.5	11.38	ug/L
MKTF-31	9/23/2014	Naphthalene	ND	12	2.9	30	ug/L
MKTF-31	9/23/2014	2-Methylnaphthalene	ND	12	3.3	35.1	ug/L
MKTF-31	9/23/2014	2-Chloronaphthalene	ND	12	3.8	733	ug/L
MKTF-31	9/23/2014	3,3-Dichlorobenzidine	*ND*	*12*	3	1.25	ug/L
MKTF-31	9/23/2014	2-Methylphenol	ND	25	3.4	NA	ug/L
MKTF-31	9/23/2014	1,2-Dichlorobenzene	ND	12	2.1	600	ug/L
MKTF-31	9/23/2014	2-Chlorophenol	ND	12	2.2	91	ug/L
MKTF-31	9/23/2014	2,4,5-Trichlorophenol	ND	12	4.1	1166	ug/L
MKTF-31	9/23/2014	Nitrobenzene	*ND*	*12*	3.2	1.4	ug/L
MKTF-31	9/23/2014	3-Nitroaniline	ND	12	4.5	NA	ug/L
MKTF-31	9/23/2014	4-Nitroaniline	*ND*	*12*	5.1	3.8	ug/L
MKTF-31	9/23/2014	4-Nitrophenol	ND	12	5.4	NA	ug/L
MKTF-31	9/23/2014	Benzyl Alcohol	ND	12	2.2	2000	ug/L
MKTF-31	9/23/2014	4-Bromophenyl-phenylether	ND	12	3.7	NA	ug/L
MKTF-31	9/23/2014	Azobenzene	*ND*	*12*	3.2	0.12	ug/L
MKTF-31	9/23/2014	2,4-Dimethylphenol	ND	12	3.9	354	ug/L
MKTF-31	9/23/2014	1,4-Dichlorobenzene	ND	12	3	75	ug/L
MKTF-31	9/23/2014	4-Chloroaniline	*ND*	*12*	3.2	0.37	ug/L
MKTF-31	9/23/2014	Phenol	ND	12	2	5761	ug/L
MKTF-31	9/23/2014	Pyridine	ND	12	2	20	ug/L
MKTF-31	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*12*	2.2	0.137	ug/L
MKTF-31	9/23/2014	Bis(2-chloroethoxy)methane	ND	12	3.5	59	ug/L
MKTF-31	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	12	3.7	55.64	ug/L
MKTF-31	9/23/2014	Di-n-octylphthalate	ND	25	3.4	200	ug/L
MKTF-31	9/23/2014	Hexachlorobenzene	*ND*	*12*	4	0.0976	ug/L
MKTF-31	9/23/2014	Anthracene	ND	12	3.1	1721	ug/L
MKTF-31	9/23/2014	1,2,4-Trichlorobenzene	ND	12	3.4	70	ug/L
MKTF-31	9/23/2014	2,4-Dichlorophenol	ND	25	3.7	45.3	ug/L
MKTF-31	9/23/2014	2,4-Dinitrotoluene	ND	12	5.6	45.3	ug/L
MKTF-31	9/23/2014	Pyrene	ND	12	5	117	ug/L
MKTF-31	9/23/2014	Dimethylphthalate	ND	12	4.6	612	ug/L
MKTF-31	9/23/2014	Dibenzofuran	ND	12	4.7	NA	ug/L
MKTF-31	9/23/2014	Benzo(g,h,i)perylene	ND	12	4.1	NA	ug/L
MKTF-31	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*12*	4.3	0.343	ug/L
MKTF-31	9/23/2014	Benzo(b)fluoranthene	*ND*	*12*	5.1	0.34	ug/L
MKTF-31	9/23/2014	Fluoranthene	ND	12	3.7	802	ug/L
MKTF-31	9/23/2014	Benzo(k)fluoranthene	*ND*	*12*	4.4	3.43	ug/L
MKTF-31	9/23/2014	Acenaphthylene	ND	12	3.1	NA	ug/L
MKTF-31	9/23/2014	Chrysene	ND	12	3.6	34.3	ug/L
MKTF-31	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*25*	3	1.52	ug/L
MKTF-31	9/23/2014	1,3-Dichlorobenzene	ND	12	2.2	NA	ug/L
MKTF-31	9/23/2014	2,6-Dinitrotoluene	*ND*	*12*	4.3	0.485	ug/L
MKTF-31	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-31	9/23/2014	4-Chlorophenyl-phenylether	ND	12	4.4	NA	ug/L
MKTF-31	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*12*	3	9.81	ug/L
MKTF-31	9/23/2014	3,4-Methylphenol	ND	12	2.3	NA	ug/L
MKTF-31	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-31	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-31	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-31	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-31	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-31	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-31	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-31	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-31	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-31	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-31	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-31	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-31	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-31	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-31	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-31	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-31	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-31	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-31	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-31	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-31	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-31	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-31	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-31	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-31	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-31	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-31	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-31	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-31	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-31	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-31	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-31	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-31	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-31	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-31	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-31	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-31	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-31	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-31	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-31	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	11/17/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-31	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-31	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-31	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-31	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-31	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-31	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-31	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-31	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-31	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-31	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-31	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-31	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-31	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-31	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-31	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-31	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-31	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-31	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-31	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-31	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-31	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-31	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-31	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-31	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-31	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-31	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-31	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-31	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-31	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-31	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-31	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-31	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-31	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-31	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-31	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-31	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-31	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-31	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-31	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-31	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-31	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-31	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-31	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-31	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-31	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-31	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-31	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-31	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-31	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-31	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-31	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-31	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-31	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-31	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-31	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-31	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-31	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-31	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-31	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-31	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-31	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-31	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-31	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-31	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-31	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-31	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-31	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-31	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-31	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-31	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-31	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-31	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-31	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-31	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-31	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-31	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-31	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-31	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-31	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-31	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-31	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-31	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-31	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-31	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-31	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-31	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-31	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-31	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-31	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-31	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-31	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-31	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-31	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-31	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-31	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-31	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-31	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-31	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-31	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-31	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-31	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-31	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-31	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-31	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-31	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-31	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-31	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-31	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-31	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-31	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-31	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-31	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-31	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-31	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-31	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-31	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-31	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-31	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-31	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-31	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-31	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-31	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-31	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-31	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-31	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-31	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-31	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-31	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-31	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-31	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-31	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-31	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-31	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-31	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-31	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-31	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-31	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-31	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-31	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-31	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-31	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-31	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-31	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-31	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-31	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-31	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-31	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-31	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-31	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-31	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-31	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-31	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-31	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-31	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-31	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-31	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-31	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-31	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-31	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-31	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-31	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-31	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-31	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-31	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-31	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-31	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-31	2/23/2016	Isophorone	ND	10	8.1	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-31	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-31	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-31	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-31	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-31	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-31	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-31	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-31	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-31	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-31	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-31	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-31	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-31	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-31	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-31	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-31	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-31	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-31	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-31	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-31	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-31	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-31	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-31	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-31	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-31	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-31	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-31	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-31	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-31	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-31	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-31	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-31	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-31	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-31	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-31	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-31	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-31	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-31	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-31	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-31	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-31	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-31	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-31	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-31	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-31	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-31	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-31	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-31	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-31	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-31	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-31	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-31	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-31	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-31	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-31	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-31	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-31	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-31	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-31	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-31	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	6/9/2016	Bis(2-ethylhexyl)phthalate	3.9	10	2.6	55.64	ug/L
MKTF-31	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-31	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	9/8/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
MKTF-31	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	9/8/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-31	9/8/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-31	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	9/8/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-31	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-31	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	10/31/2016	Benzoic Acid	9.3	20	2.6	75000	ug/L
MKTF-31	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	10/31/2016	Butylbenzylphthalate	2.9	10	2.5	16	ug/L
MKTF-31	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	10/31/2016	Fluorene	ND	10	2.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-31	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	10/31/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-31	10/31/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-31	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-31	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-31	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-31	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-31	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-31	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-31	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-31	3/7/2017	Benzoic Acid	6.8	20	2.6	75000	ug/L
MKTF-31	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-31	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-31	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-31	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-31	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-31	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-31	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-31	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-31	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-31	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-31	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-31	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-31	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-31	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-31	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-31	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-31	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-31	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-31	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-31	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-31	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-31	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-31	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-31	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-31	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-31	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-31	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-31	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-31	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-31	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-31	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-31	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-31	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-31	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-31	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-31	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-31	3/7/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-31	3/7/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-31	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-31	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-31	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-31	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-31	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-31	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-31	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-31	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-31	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-31	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-31	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-31	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-31	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-31	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-31	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-31	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-31	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-31	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-31	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-31	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-31	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	6/5/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
MKTF-31	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	6/5/2017	Bis(2-ethylhexyl)phthalate	7.5	10	4.8	55.64	ug/L
MKTF-31	6/5/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-31	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-31	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	9/25/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
MKTF-31	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-31	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	11/21/2017	Benzoic Acid	6.2	20	3.9	75000	ug/L
MKTF-31	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-31	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	11/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	11/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	11/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-31	11/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-31	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-31	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-31	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-31	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-31	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-31	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-31	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-31	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-31	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-31	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-31	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-31	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-31	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-31	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-31	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-31	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-31	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-31	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-31	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-31	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-31	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-31	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-31	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-31	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-31	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-31	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-31	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-31	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-31	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-31	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-31	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-31	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-31	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-31	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-31	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-31	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-31	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-31	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-31	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-31	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-31	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-31	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-31	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-31	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-31	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-31	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-31	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-31	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-31	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-31	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-31	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-31	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-31	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-31	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-31	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-31	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-31	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-31	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-31	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-31	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-31	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-31	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-31	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-31	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-31	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-31	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-31	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-31	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-31	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-31	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-31	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-31	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-31	5/6/2018	Benzoic Acid	12	20	6.3	75000	ug/L
MKTF-31	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-31	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-31	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-31	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-31	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-31	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-31	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-31	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-31	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-31	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-31	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-31	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-31	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-31	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-31	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-31	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-31	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-31	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-31	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-31	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-31	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-31	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-31	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-31	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-31	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-31	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-31	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-31	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-31	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-31	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-31	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-31	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-31	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-31	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-31	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-31	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-31	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-31	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-31	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-31	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-31	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-31	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-31	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-31	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-31	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-31	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-31	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-31	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-31	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-31	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-31	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-31	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-31	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-31	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-31	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-31	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-31	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-31	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-31	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-31	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-31	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-31	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-31	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-31	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-31	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-31	8/17/2018	Benzoic Acid	6.5	20	6.3	75000	ug/L
MKTF-31	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-31	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-31	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-31	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-31	8/17/2018	Diethylphthalate	6.8	10	6.3	14801	ug/L
MKTF-31	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-31	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-31	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-31	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-31	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-31	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-31	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-31	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-31	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-31	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-31	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-31	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-31	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-31	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-31	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-31	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-31	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-31	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-31	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-31	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-31	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-31	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-31	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-31	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-31	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-31	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-31	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-31	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-31	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-31	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-31	8/17/2018	Phenol	ND	10	6	5761	ug/L
MKTF-31	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-31	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-31	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-31	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-31	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-31	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-31	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-31	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-31	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-31	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-31	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-31	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-31	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-31	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-31	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-31	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-31	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-31	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-31	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-31	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-31	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-31	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-31	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-31	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-31	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-31	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-31	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Benzo(a)pyrene	*ND*	*1000*	600	0.2	ug/L
MKTF-31	11/15/2018	2,4-Dinitrophenol	*ND*	*2000*	370	38.7	ug/L
MKTF-31	11/15/2018	Dibenzo(a,h)anthracene	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Benzo(a)anthracene	*ND*	*1000*	530	0.12	ug/L
MKTF-31	11/15/2018	4-Chloro-3-Methylphenol	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Aniline	*ND*	*1000*	620	13	ug/L
MKTF-31	11/15/2018	N-Nitrosodimethylamine	*ND*	*1000*	690	0.0049	ug/L
MKTF-31	11/15/2018	Benzoic Acid	ND	2000	630	75000	ug/L
MKTF-31	11/15/2018	Hexachloroethane	*ND*	*1000*	600	3.28	ug/L
MKTF-31	11/15/2018	Hexachlorocyclopentadiene	*ND*	*1000*	390	0.41	ug/L
MKTF-31	11/15/2018	Isophorone	*ND*	*1000*	620	781	ug/L
MKTF-31	11/15/2018	Acenaphthene	*ND*	*1000*	580	535	ug/L
MKTF-31	11/15/2018	Diethylphthalate	ND	1000	630	14801	ug/L
MKTF-31	11/15/2018	Di-n-butylphthalate	*ND*	*1000*	680	885	ug/L
MKTF-31	11/15/2018	Phenanthrene	*ND*	*1000*	600	170	ug/L
MKTF-31	11/15/2018	Butylbenzylphthalate	*ND*	*1000*	630	16	ug/L
MKTF-31	11/15/2018	N-Nitrosodiphenylamine	*ND*	*1000*	670	122	ug/L
MKTF-31	11/15/2018	Fluorene	*ND*	*1000*	630	288	ug/L
MKTF-31	11/15/2018	Carbazole	ND	1000	630	NA	ug/L
MKTF-31	11/15/2018	Hexachlorobutadiene	*ND*	*1000*	640	0.14	ug/L
MKTF-31	11/15/2018	Pentachlorophenol	*ND*	*2000*	530	1	ug/L
MKTF-31	11/15/2018	2,4,6-Trichlorophenol	ND	1000	640	11.9*	ug/L
MKTF-31	11/15/2018	2-Nitroaniline	*ND*	*1000*	590	190	ug/L
MKTF-31	11/15/2018	2-Nitrophenol	ND	1000	600	NA	ug/L
MKTF-31	11/15/2018	1-Methylnaphthalene	*ND*	*1000*	700	11.38	ug/L
MKTF-31	11/15/2018	Naphthalene	*ND*	*1000*	500	30	ug/L
MKTF-31	11/15/2018	2-Methylnaphthalene	*ND*	*1000*	630	35.1	ug/L
MKTF-31	11/15/2018	2-Chloronaphthalene	*ND*	*1000*	610	733	ug/L
MKTF-31	11/15/2018	3,3-Dichlorobenzidine	*ND*	*1000*	680	1.25	ug/L
MKTF-31	11/15/2018	2-Methylphenol	ND	1000	630	NA	ug/L
MKTF-31	11/15/2018	1,2-Dichlorobenzene	*ND*	*1000*	600	600	ug/L
MKTF-31	11/15/2018	2-Chlorophenol	*ND*	*1000*	580	91	ug/L
MKTF-31	11/15/2018	2,4,5-Trichlorophenol	ND	1000	580	1166	ug/L
MKTF-31	11/15/2018	Nitrobenzene	*ND*	*1000*	600	1.4	ug/L
MKTF-31	11/15/2018	3-Nitroaniline	ND	1000	680	NA	ug/L
MKTF-31	11/15/2018	4-Nitroaniline	*ND*	*1000*	600	3.8	ug/L
MKTF-31	11/15/2018	4-Nitrophenol	ND	1000	560	NA	ug/L
MKTF-31	11/15/2018	Benzyl Alcohol	ND	1000	630	2000	ug/L
MKTF-31	11/15/2018	4-Bromophenyl-phenylether	ND	1000	690	NA	ug/L
MKTF-31	11/15/2018	Azobenzene	*ND*	*1000*	670	0.12	ug/L
MKTF-31	11/15/2018	2,4-Dimethylphenol	*ND*	*1000*	590	354	ug/L
MKTF-31	11/15/2018	1,4-Dichlorobenzene	*ND*	*1000*	580	75	ug/L
MKTF-31	11/15/2018	4-Chloroaniline	*ND*	*1000*	600	0.37	ug/L
MKTF-31	11/15/2018	Phenol	ND	1000	600	5761	ug/L
MKTF-31	11/15/2018	Pyridine	*ND*	*1000*	540	20	ug/L
MKTF-31	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*1000*	630	0.137	ug/L
MKTF-31	11/15/2018	Bis(2-chloroethoxy)methane	*ND*	*1000*	610	59	ug/L
MKTF-31	11/15/2018	Bis(2-ethylhexyl)phthalate	*ND*	*1000*	810	55.64	ug/L
MKTF-31	11/15/2018	Di-n-octylphthalate	*ND*	*1000*	630	200	ug/L
MKTF-31	11/15/2018	Hexachlorobenzene	*ND*	*1000*	620	0.0976	ug/L
MKTF-31	11/15/2018	Anthracene	ND	1000	570	1721	ug/L
MKTF-31	11/15/2018	1,2,4-Trichlorobenzene	*ND*	*1000*	640	70	ug/L
MKTF-31	11/15/2018	2,4-Dichlorophenol	*ND*	*2000*	580	45.3	ug/L
MKTF-31	11/15/2018	2,4-Dinitrotoluene	*ND*	*1000*	580	45.3	ug/L
MKTF-31	11/15/2018	Pyrene	*ND*	*1000*	650	117	ug/L
MKTF-31	11/15/2018	Dimethylphthalate	*ND*	*1000*	600	612	ug/L
MKTF-31	11/15/2018	Dibenzofuran	ND	1000	690	NA	ug/L
MKTF-31	11/15/2018	Benzo(g,h,i)perylene	ND	1000	570	NA	ug/L
MKTF-31	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*1000*	700	0.343	ug/L
MKTF-31	11/15/2018	Benzo(b)fluoranthene	*ND*	*1000*	710	0.34	ug/L
MKTF-31	11/15/2018	Fluoranthene	*ND*	*1000*	580	802	ug/L
MKTF-31	11/15/2018	Benzo(k)fluoranthene	*ND*	*1000*	640	3.43	ug/L
MKTF-31	11/15/2018	Acenaphthylene	ND	1000	620	NA	ug/L
MKTF-31	11/15/2018	Chrysene	*ND*	*1000*	680	34.3	ug/L
MKTF-31	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*2000*	540	1.52	ug/L
MKTF-31	11/15/2018	1,3-Dichlorobenzene	ND	1000	580	NA	ug/L
MKTF-31	11/15/2018	2,6-Dinitrotoluene	*ND*	*1000*	600	0.485	ug/L
MKTF-31	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*1000*	610	0.011	ug/L
MKTF-31	11/15/2018	4-Chlorophenyl-phenylether	ND	1000	720	NA	ug/L
MKTF-31	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*1000*	490	9.81	ug/L
MKTF-31	11/15/2018	3,4-Methylphenol	ND	1000	540	NA	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-31	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-31	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-31	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-31	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-31	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-31	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-31	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-31	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-31	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-31	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-31	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-31	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-31	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-31	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-31	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-31	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-31	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-31	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-31	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-31	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-31	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-31	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-31	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-31	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-31	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-31	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-31	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-31	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-31	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-31	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-31	2/20/2019	Benzoic Acid	7.1	20	6.311561	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-31	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-31	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-31	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-31	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-31	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-31	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-31	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-31	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-31	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-31	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-31	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-31	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-31	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-31	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-31	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-31	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-31	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-31	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-31	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-31	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-31	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-31	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-31	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-31	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-31	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-31	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-31	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-31	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-31	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-31	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-31	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-31	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-31	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-31	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-31	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-31	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-31	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-31	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-31	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-31	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-31	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-31	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-31	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-31	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-31	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-31	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-31	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-31	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-31	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-31	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-31	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-31	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-31	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-31	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-31	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-31	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-31	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-31	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-31	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-31	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-31	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-31	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-31	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-31	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-31	2/20/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
MKTF-31	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-31	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-31	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-31	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-31	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-31	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-31	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-31	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-31	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-31	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-31	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-31	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-31	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-31	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-31	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-31	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-31	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-31	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-31	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-31	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-31	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-31	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-31	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-31	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-31	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-31	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-31	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-31	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-31	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-31	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-31	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-31	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-31	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	8/23/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-31	8/23/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-31	8/23/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-31	8/23/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-31	8/23/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-31	8/23/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-31	8/23/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-31	8/23/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-31	8/23/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-31	8/23/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-31	8/23/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-31	8/23/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-31	8/23/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-31	8/23/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-31	8/23/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-31	8/23/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-31	8/23/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-31	8/23/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-31	8/23/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-31	8/23/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-31	8/23/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-31	8/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-31	8/23/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-31	8/23/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-31	8/23/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-31	8/23/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-31	8/23/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-31	8/23/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-31	8/23/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-31	8/23/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-31	8/23/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-31	8/23/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-31	8/23/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-31	8/23/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-31	8/23/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-31	8/23/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-31	8/23/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-31	8/23/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-31	8/23/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-31	8/23/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-31	8/23/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-31	8/23/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-31	8/23/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-31	8/23/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-31	8/23/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-31	8/23/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-31	8/23/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-31	8/23/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-31	8/23/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-31	8/23/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-31	8/23/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-31	8/23/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-31	8/23/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-31	8/23/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-31	8/23/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-31	8/23/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-31	8/23/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-31	8/23/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-31	8/23/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-31	8/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-31	8/23/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-31	8/23/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-31	8/23/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-31	8/23/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-31	8/23/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-31	8/23/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-31	8/23/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-31	8/23/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-31	8/23/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-31	8/23/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-31	8/23/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-31	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-31	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-31	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-31	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-31	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-31	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-31	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-31	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-31	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-31	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-31	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-31	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-31	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-31	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-31	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-31	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-31	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-31	10/22/2019	1,4-Dioxane	**140**	1	1	4.59	ug/L
MKTF-31	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-31	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-31	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-31	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-31	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-31	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-31	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-31	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-31	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-31	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-31	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-31	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-31	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-31	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-31	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-31	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-31	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-31	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-31	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-31	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-31	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-31	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-31	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-31	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-31	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-31	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-31	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-31	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-31	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-31	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-31	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-31	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-31	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-31	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-31	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-31	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-31	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-31	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-31	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-31	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-31	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-31	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-31	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-31	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-31	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-31	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-31	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-31	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-31	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-31	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-31	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-31	2/25/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-31	2/25/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-31	2/25/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-31	2/25/2020	1,4-Dioxane	**210**	1	1	4.59	ug/L
MKTF-31	2/25/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-31	2/25/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-31	2/25/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-31	2/25/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-31	2/25/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-31	2/25/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-31	2/25/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-31	2/25/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-31	2/25/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-31	2/25/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-31	2/25/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-31	2/25/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-31	2/25/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-31	2/25/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-31	2/25/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-31	2/25/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-31	2/25/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-31	2/25/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-31	2/25/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-31	2/25/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-31	2/25/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-31	2/25/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-31	2/25/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-31	2/25/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/25/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-31	2/25/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-31	2/25/2020	Bis(2-ethylhexyl)phthalate	0.36	0.5	0.5	55.64	ug/L
MKTF-31	2/25/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-31	2/25/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-31	2/25/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-31	2/25/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-31	2/25/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-31	2/25/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-31	2/25/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-31	2/25/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-31	2/25/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-31	2/25/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-31	2/25/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-31	2/25/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-31	2/25/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-31	2/25/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-31	2/25/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-31	2/25/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-31	2/25/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-31	2/25/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-31	2/25/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-31	2/25/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-31	2/25/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-31	2/25/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-31	2/25/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-31	2/25/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-31	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-31	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-31	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-31	9/19/2020	1,4-Dioxane	**150**	0.51	0.1	4.59	ug/L
MKTF-31	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-31	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-31	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-31	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-31	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-31	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-31	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-31	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-31	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-31	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-31	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-31	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-31	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-31	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-31	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-31	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-31	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-31	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-31	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-31	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-31	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-31	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-31	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-31	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-31	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-31	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-31	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-31	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-31	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-31	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-31	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-31	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-31	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-31	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-31	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-31	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-31	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-31	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-31	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-31	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-31	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-31	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-31	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-31	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-31	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-31	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-31	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-31	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-31	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-31	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-31	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-31	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-31	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-31	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-31	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-31	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-31	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	10.5	2	NA	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	10.5	2	75	ug/L
MKTF-31	12/18/2020	2,4,5-Trichlorophenol	ND	10.5	1.16	1166	ug/L
MKTF-31	12/18/2020	2,4,6-Trichlorophenol	ND	10.5	1.69	11.9*	ug/L
MKTF-31	12/18/2020	2,4-Dichlorophenol	ND	10.5	1.58	45.3	ug/L
MKTF-31	12/18/2020	2,4-Dimethylphenol	ND	10.5	1.37	354	ug/L
MKTF-31	12/18/2020	2,4-Dinitrophenol	ND	31.6	4.85	38.7	ug/L
MKTF-31	12/18/2020	2-Chloronaphthalene	ND	10.5	1.58	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	2-Chlorophenol	ND	10.5	1.79	91	ug/L
MKTF-31	12/18/2020	2-Methylphenol	ND	10.5	1.58	NA	ug/L
MKTF-31	12/18/2020	2-Nitroaniline	ND	10.5	1.9	190	ug/L
MKTF-31	12/18/2020	2-Nitrophenol	ND	10.5	2.11	NA	ug/L
MKTF-31	12/18/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	4.22	1.25	ug/L
MKTF-31	12/18/2020	3-Nitroaniline	ND	10.5	2.32	NA	ug/L
MKTF-31	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	4.22	1.52	ug/L
MKTF-31	12/18/2020	4-Bromophenyl-phenylether	ND	10.5	1.37	NA	ug/L
MKTF-31	12/18/2020	4-Chloro-3-Methylphenol	ND	10.5	1.48	NA	ug/L
MKTF-31	12/18/2020	4-Chloroaniline	*ND*	*10.5*	1.9	0.37	ug/L
MKTF-31	12/18/2020	4-Chlorophenyl-phenylether	ND	10.5	1.37	NA	ug/L
MKTF-31	12/18/2020	4-Nitroaniline	*ND*	*10.5*	4.32	3.8	ug/L
MKTF-31	12/18/2020	4-Nitrophenol	ND	10.5	3.48	NA	ug/L
MKTF-31	12/18/2020	Acenaphthene	ND	10.5	1.37	535	ug/L
MKTF-31	12/18/2020	Acenaphthylene	ND	10.5	1.48	NA	ug/L
MKTF-31	12/18/2020	Aniline	ND	10.5	3.69	13	ug/L
MKTF-31	12/18/2020	Anthracene	ND	10.5	1.37	1721	ug/L
MKTF-31	12/18/2020	Benzo(a)anthracene	*ND*	*10.5*	1.9	0.12	ug/L
MKTF-31	12/18/2020	Benzo(a)pyrene	*ND*	*10.5*	1.79	0.2	ug/L
MKTF-31	12/18/2020	Benzo(b)fluoranthene	*ND*	*10.5*	1.79	0.34	ug/L
MKTF-31	12/18/2020	Benzo(g,h,i)perylene	ND	10.5	3.27	NA	ug/L
MKTF-31	12/18/2020	Benzo(k)fluoranthene	*ND*	*10.5*	1.79	3.43	ug/L
MKTF-31	12/18/2020	Benzoic Acid	ND	31.6	6.01	75000	ug/L
MKTF-31	12/18/2020	Benzyl Alcohol	ND	10.5	2.32	2000	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethoxy)methane	ND	10.5	1.48	59	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	1.27	0.137	ug/L
MKTF-31	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	2.85	55.64	ug/L
MKTF-31	12/18/2020	Butylbenzylphthalate	ND	10.5	2.43	16	ug/L
MKTF-31	12/18/2020	Carbazole	ND	10.5	2	NA	ug/L
MKTF-31	12/18/2020	Chrysene	ND	10.5	1.9	34.3	ug/L
MKTF-31	12/18/2020	Di-n-butylphthalate	ND	10.5	1.79	885	ug/L
MKTF-31	12/18/2020	Di-n-octylphthalate	ND	10.5	1.69	200	ug/L
MKTF-31	12/18/2020	Dibenzo(a,h)anthracene	ND	10.5	2.85	NA	ug/L
MKTF-31	12/18/2020	Dibenzofuran	ND	10.5	1.58	NA	ug/L
MKTF-31	12/18/2020	Diethylphthalate	ND	10.5	1.16	14801	ug/L
MKTF-31	12/18/2020	Dimethylphthalate	ND	10.5	1.27	612	ug/L
MKTF-31	12/18/2020	Fluoranthene	ND	10.5	1.37	802	ug/L
MKTF-31	12/18/2020	Fluorene	ND	10.5	1.37	288	ug/L
MKTF-31	12/18/2020	Hexachlorobenzene	*ND*	*10.5*	1.27	0.0976	ug/L
MKTF-31	12/18/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2	0.41	ug/L
MKTF-31	12/18/2020	Hexachloroethane	*ND*	*10.5*	2.53	3.28	ug/L
MKTF-31	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	3.06	0.343	ug/L
MKTF-31	12/18/2020	Isophorone	ND	10.5	1.79	781	ug/L
MKTF-31	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	2.11	0.011	ug/L
MKTF-31	12/18/2020	N-Nitrosodimethylamine	*ND*	*10.5*	2.32	0.0049	ug/L
MKTF-31	12/18/2020	N-Nitrosodiphenylamine	ND	10.5	1.16	122	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	10.5	1.79	30	ug/L
MKTF-31	12/18/2020	Nitrobenzene	*ND*	*10.5*	1.69	1.4	ug/L
MKTF-31	12/18/2020	Pentachlorophenol	*ND*	*21.1*	3.9	1	ug/L
MKTF-31	12/18/2020	Phenanthrene	ND	10.5	1.48	170	ug/L
MKTF-31	12/18/2020	Phenol	ND	10.5	1.37	5761	ug/L
MKTF-31	12/18/2020	Pyrene	ND	10.5	1.58	117	ug/L
MKTF-31	12/18/2020	Pyridine	ND	10.5	4.64	20	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	10.5	1.9	70	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	10.5	1.9	600	ug/L
MKTF-31	12/18/2020	2,4-Dinitrotoluene	ND	10.5	1.48	45.3	ug/L
MKTF-31	12/18/2020	2,6-Dinitrotoluene	*ND*	*10.5*	1.37	0.485	ug/L
MKTF-31	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	1.79	9.81	ug/L
MKTF-31	12/18/2020	Azobenzene	*ND*	*10.5*	1.37	0.12	ug/L
MKTF-31	12/18/2020	1,3-Dichlorobenzene	ND	11.6	2.2	NA	ug/L
MKTF-31	12/18/2020	1,4-Dichlorobenzene	ND	11.6	2.2	75	ug/L
MKTF-31	12/18/2020	2,4,5-Trichlorophenol	ND	11.6	1.27	1166	ug/L
MKTF-31	12/18/2020	2,4,6-Trichlorophenol	ND	11.6	1.85	11.9*	ug/L
MKTF-31	12/18/2020	2,4-Dichlorophenol	ND	11.6	1.74	45.3	ug/L
MKTF-31	12/18/2020	2,4-Dimethylphenol	ND	11.6	1.5	354	ug/L
MKTF-31	12/18/2020	2,4-Dinitrophenol	ND	34.7	5.32	38.7	ug/L
MKTF-31	12/18/2020	2-Chloronaphthalene	ND	11.6	1.74	733	ug/L
MKTF-31	12/18/2020	2-Chlorophenol	ND	11.6	1.97	91	ug/L
MKTF-31	12/18/2020	2-Methylphenol	ND	11.6	1.74	NA	ug/L
MKTF-31	12/18/2020	2-Nitroaniline	ND	11.6	2.08	190	ug/L
MKTF-31	12/18/2020	2-Nitrophenol	ND	11.6	2.31	NA	ug/L
MKTF-31	12/18/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	4.63	1.25	ug/L
MKTF-31	12/18/2020	3-Nitroaniline	ND	11.6	2.55	NA	ug/L
MKTF-31	12/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	4.63	1.52	ug/L
MKTF-31	12/18/2020	4-Bromophenyl-phenylether	ND	11.6	1.5	NA	ug/L
MKTF-31	12/18/2020	4-Chloro-3-Methylphenol	ND	11.6	1.62	NA	ug/L
MKTF-31	12/18/2020	4-Chloroaniline	*ND*	*11.6*	2.08	0.37	ug/L
MKTF-31	12/18/2020	4-Chlorophenyl-phenylether	ND	11.6	1.5	NA	ug/L
MKTF-31	12/18/2020	4-Nitroaniline	*ND*	*11.6*	4.75	3.8	ug/L
MKTF-31	12/18/2020	4-Nitrophenol	ND	11.6	3.82	NA	ug/L
MKTF-31	12/18/2020	Acenaphthene	ND	11.6	1.5	535	ug/L
MKTF-31	12/18/2020	Acenaphthylene	ND	11.6	1.62	NA	ug/L
MKTF-31	12/18/2020	Aniline	ND	11.6	4.05	13	ug/L
MKTF-31	12/18/2020	Anthracene	ND	11.6	1.5	1721	ug/L
MKTF-31	12/18/2020	Benzo(a)anthracene	*ND*	*11.6*	2.08	0.12	ug/L
MKTF-31	12/18/2020	Benzo(a)pyrene	*ND*	*11.6*	1.97	0.2	ug/L
MKTF-31	12/18/2020	Benzo(b)fluoranthene	*ND*	*11.6*	1.97	0.34	ug/L
MKTF-31	12/18/2020	Benzo(g,h,i)perylene	ND	11.6	3.59	NA	ug/L
MKTF-31	12/18/2020	Benzo(k)fluoranthene	*ND*	*11.6*	1.97	3.43	ug/L
MKTF-31	12/18/2020	Benzoic Acid	ND	34.7	6.6	75000	ug/L
MKTF-31	12/18/2020	Benzyl Alcohol	ND	11.6	2.55	2000	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethoxy)methane	ND	11.6	1.62	59	ug/L
MKTF-31	12/18/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	1.39	0.137	ug/L
MKTF-31	12/18/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	3.13	55.64	ug/L
MKTF-31	12/18/2020	Butylbenzylphthalate	ND	11.6	2.66	16	ug/L
MKTF-31	12/18/2020	Carbazole	ND	11.6	2.2	NA	ug/L
MKTF-31	12/18/2020	Chrysene	ND	11.6	2.08	34.3	ug/L
MKTF-31	12/18/2020	Di-n-butylphthalate	ND	11.6	1.97	885	ug/L
MKTF-31	12/18/2020	Di-n-octylphthalate	ND	11.6	1.85	200	ug/L
MKTF-31	12/18/2020	Dibenzo(a,h)anthracene	ND	11.6	3.13	NA	ug/L
MKTF-31	12/18/2020	Dibenzofuran	ND	11.6	1.74	NA	ug/L
MKTF-31	12/18/2020	Diethylphthalate	ND	11.6	1.27	14801	ug/L
MKTF-31	12/18/2020	Dimethylphthalate	ND	11.6	1.39	612	ug/L
MKTF-31	12/18/2020	Fluoranthene	ND	11.6	1.5	802	ug/L
MKTF-31	12/18/2020	Fluorene	ND	11.6	1.5	288	ug/L
MKTF-31	12/18/2020	Hexachlorobenzene	*ND*	*11.6*	1.39	0.0976	ug/L
MKTF-31	12/18/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	2.2	0.41	ug/L
MKTF-31	12/18/2020	Hexachloroethane	*ND*	*11.6*	2.78	3.28	ug/L
MKTF-31	12/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	3.36	0.343	ug/L
MKTF-31	12/18/2020	Isophorone	ND	11.6	1.97	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	2.31	0.011	ug/L
MKTF-31	12/18/2020	N-Nitrosodimethylamine	*ND*	*11.6*	2.55	0.0049	ug/L
MKTF-31	12/18/2020	N-Nitrosodiphenylamine	ND	11.6	1.27	122	ug/L
MKTF-31	12/18/2020	Naphthalene	ND	11.6	1.97	30	ug/L
MKTF-31	12/18/2020	Nitrobenzene	*ND*	*11.6*	1.85	1.4	ug/L
MKTF-31	12/18/2020	Pentachlorophenol	*ND*	*23.1*	4.28	1	ug/L
MKTF-31	12/18/2020	Phenanthrene	ND	11.6	1.62	170	ug/L
MKTF-31	12/18/2020	Phenol	ND	11.6	1.5	5761	ug/L
MKTF-31	12/18/2020	Pyrene	ND	11.6	1.74	117	ug/L
MKTF-31	12/18/2020	Pyridine	ND	11.6	5.09	20	ug/L
MKTF-31	12/18/2020	1,2,4-Trichlorobenzene	ND	11.6	2.08	70	ug/L
MKTF-31	12/18/2020	1,2-Dichlorobenzene	ND	11.6	2.08	600	ug/L
MKTF-31	12/18/2020	2,4-Dinitrotoluene	ND	11.6	1.62	45.3	ug/L
MKTF-31	12/18/2020	2,6-Dinitrotoluene	*ND*	*11.6*	1.5	0.485	ug/L
MKTF-31	12/18/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	1.97	9.81	ug/L
MKTF-31	12/18/2020	Azobenzene	*ND*	*11.6*	1.5	0.12	ug/L
MKTF-32	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	4/9/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-32	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	4/9/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-32	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-32	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-32	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-32	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-32	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-32	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-32	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-32	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-32	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-32	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-32	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-32	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-32	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-32	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-32	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-32	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-32	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-32	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-32	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-32	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-32	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-32	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-32	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-32	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-32	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-32	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-32	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-32	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-32	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-32	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-32	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-32	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-32	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-32	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-32	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-32	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-32	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-32	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-32	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-32	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-32	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-32	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-32	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-32	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-32	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-32	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	11/17/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-32	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-32	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-32	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-32	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-32	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-32	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-32	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-32	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-32	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-32	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-32	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-32	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-32	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-32	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-32	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-32	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-32	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-32	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-32	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-32	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-32	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-32	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-32	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-32	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-32	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-32	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-32	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-32	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-32	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-32	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-32	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-32	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-32	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-32	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-32	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-32	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-32	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-32	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-32	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-32	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-32	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-32	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-32	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-32	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-32	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-32	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-32	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-32	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-32	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-32	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-32	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-32	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-32	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-32	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-32	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-32	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-32	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-32	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-32	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-32	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-32	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-32	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-32	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-32	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-32	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-32	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-32	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-32	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-32	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-32	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-32	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-32	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-32	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-32	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-32	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-32	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-32	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-32	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-32	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-32	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-32	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-32	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-32	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-32	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-32	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-32	6/9/2015	Benzo(a)pyrene	*ND*	*10*	5.4	0.2	ug/L
MKTF-32	6/9/2015	2,4-Dinitrophenol	ND	20	2.1	38.7	ug/L
MKTF-32	6/9/2015	Dibenzo(a,h)anthracene	ND	10	6.5	NA	ug/L
MKTF-32	6/9/2015	Benzo(a)anthracene	*ND*	*10*	5	0.12	ug/L
MKTF-32	6/9/2015	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MKTF-32	6/9/2015	Aniline	ND	10	3.1	13	ug/L
MKTF-32	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MKTF-32	6/9/2015	Benzoic Acid	ND	20	2.1	75000	ug/L
MKTF-32	6/9/2015	Hexachloroethane	*ND*	*10*	3.2	3.28	ug/L
MKTF-32	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-32	6/9/2015	Isophorone	ND	10	3.9	781	ug/L
MKTF-32	6/9/2015	Acenaphthene	ND	10	3.8	535	ug/L
MKTF-32	6/9/2015	Diethylphthalate	ND	10	3.3	14801	ug/L
MKTF-32	6/9/2015	Di-n-butylphthalate	ND	10	4.2	885	ug/L
MKTF-32	6/9/2015	Phenanthrene	ND	10	4	170	ug/L
MKTF-32	6/9/2015	Butylbenzylphthalate	ND	10	4.7	16	ug/L
MKTF-32	6/9/2015	N-Nitrosodiphenylamine	ND	10	4.9	122	ug/L
MKTF-32	6/9/2015	Fluorene	ND	10	3.3	288	ug/L
MKTF-32	6/9/2015	Carbazole	ND	10	3	NA	ug/L
MKTF-32	6/9/2015	Hexachlorobutadiene	*ND*	*10*	3.9	0.14	ug/L
MKTF-32	6/9/2015	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	6/9/2015	2,4,6-Trichlorophenol	ND	10	2.5	11.9*	ug/L
MKTF-32	6/9/2015	2-Nitroaniline	ND	10	3.6	190	ug/L
MKTF-32	6/9/2015	2-Nitrophenol	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2015	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-32	6/9/2015	Naphthalene	ND	10	3.7	30	ug/L
MKTF-32	6/9/2015	2-Methylnaphthalene	ND	10	4.5	35.1	ug/L
MKTF-32	6/9/2015	2-Chloronaphthalene	ND	10	3.4	733	ug/L
MKTF-32	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	5.2	1.25	ug/L
MKTF-32	6/9/2015	2-Methylphenol	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/9/2015	1,2-Dichlorobenzene	ND	10	3.8	600	ug/L
MKTF-32	6/9/2015	2-Chlorophenol	ND	10	2.4	91	ug/L
MKTF-32	6/9/2015	2,4,5-Trichlorophenol	ND	10	3.2	1166	ug/L
MKTF-32	6/9/2015	Nitrobenzene	*ND*	*10*	3	1.4	ug/L
MKTF-32	6/9/2015	3-Nitroaniline	ND	10	3	NA	ug/L
MKTF-32	6/9/2015	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MKTF-32	6/9/2015	4-Nitrophenol	ND	10	2.8	NA	ug/L
MKTF-32	6/9/2015	Benzyl Alcohol	ND	10	2.3	2000	ug/L
MKTF-32	6/9/2015	4-Bromophenyl-phenylether	ND	10	2.8	NA	ug/L
MKTF-32	6/9/2015	Azobenzene	*ND*	*10*	4	0.12	ug/L
MKTF-32	6/9/2015	2,4-Dimethylphenol	ND	10	3.7	354	ug/L
MKTF-32	6/9/2015	1,4-Dichlorobenzene	ND	10	2.5	75	ug/L
MKTF-32	6/9/2015	4-Chloroaniline	*ND*	*10*	3.7	0.37	ug/L
MKTF-32	6/9/2015	Phenol	ND	10	2.2	5761	ug/L
MKTF-32	6/9/2015	Pyridine	ND	10	3.3	20	ug/L
MKTF-32	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	3.5	0.137	ug/L
MKTF-32	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MKTF-32	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	6.7	55.64	ug/L
MKTF-32	6/9/2015	Di-n-octylphthalate	ND	10	3.9	200	ug/L
MKTF-32	6/9/2015	Hexachlorobenzene	*ND*	*10*	4	0.0976	ug/L
MKTF-32	6/9/2015	Anthracene	ND	10	3.2	1721	ug/L
MKTF-32	6/9/2015	1,2,4-Trichlorobenzene	ND	10	4	70	ug/L
MKTF-32	6/9/2015	2,4-Dichlorophenol	ND	20	2.8	45.3	ug/L
MKTF-32	6/9/2015	2,4-Dinitrotoluene	ND	10	2.9	45.3	ug/L
MKTF-32	6/9/2015	Pyrene	ND	10	4.6	117	ug/L
MKTF-32	6/9/2015	Dimethylphthalate	ND	10	4	612	ug/L
MKTF-32	6/9/2015	Dibenzofuran	ND	10	3.8	NA	ug/L
MKTF-32	6/9/2015	Benzo(g,h,i)perylene	ND	10	6.3	NA	ug/L
MKTF-32	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.9	0.343	ug/L
MKTF-32	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	4.8	0.34	ug/L
MKTF-32	6/9/2015	Fluoranthene	ND	10	3	802	ug/L
MKTF-32	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	5	3.43	ug/L
MKTF-32	6/9/2015	Acenaphthylene	ND	10	3.7	NA	ug/L
MKTF-32	6/9/2015	Chrysene	ND	10	4.3	34.3	ug/L
MKTF-32	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.7	1.52	ug/L
MKTF-32	6/9/2015	1,3-Dichlorobenzene	ND	10	3.4	NA	ug/L
MKTF-32	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	3	0.485	ug/L
MKTF-32	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	4.1	0.011	ug/L
MKTF-32	6/9/2015	4-Chlorophenyl-phenylether	ND	10	4	NA	ug/L
MKTF-32	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.1	9.81	ug/L
MKTF-32	6/9/2015	3,4-Methylphenol	ND	10	3	NA	ug/L
MKTF-32	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-32	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-32	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-32	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-32	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-32	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-32	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-32	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-32	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-32	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-32	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-32	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-32	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-32	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-32	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-32	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-32	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-32	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-32	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-32	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-32	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-32	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-32	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-32	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-32	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-32	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-32	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-32	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-32	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-32	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-32	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-32	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-32	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-32	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-32	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-32	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-32	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-32	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-32	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-32	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-32	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-32	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-32	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-32	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-32	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-32	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-32	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-32	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-32	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-32	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-32	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-32	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-32	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-32	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-32	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-32	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-32	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-32	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-32	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-32	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-32	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-32	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-32	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-32	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-32	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-32	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-32	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-32	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-32	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-32	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-32	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-32	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-32	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-32	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-32	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-32	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-32	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-32	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-32	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-32	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-32	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-32	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-32	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-32	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-32	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-32	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-32	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-32	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-32	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-32	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-32	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-32	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-32	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-32	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-32	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-32	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-32	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-32	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-32	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-32	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-32	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-32	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-32	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-32	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-32	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-32	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-32	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-32	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-32	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-32	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-32	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-32	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-32	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-32	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-32	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-32	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-32	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-32	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-32	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-32	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-32	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-32	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-32	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-32	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-32	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-32	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-32	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-32	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-32	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-32	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-32	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-32	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-32	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-32	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-32	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-32	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-32	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-32	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-32	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-32	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-32	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-32	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-32	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-32	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-32	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-32	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-32	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-32	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-32	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-32	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-32	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-32	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-32	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-32	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-32	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-32	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-32	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-32	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-32	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-32	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-32	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-32	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-32	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-32	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-32	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-32	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-32	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-32	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-32	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-32	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-32	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-32	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-32	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-32	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-32	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-32	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-32	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-32	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-32	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-32	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-32	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-32	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-32	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-32	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-32	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-32	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-32	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-32	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-32	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-32	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-32	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-32	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-32	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-32	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-32	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-32	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-32	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-32	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-32	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-32	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-32	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-32	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	6/9/2016	Bis(2-ethylhexyl)phthalate	5.6	10	2.6	55.64	ug/L
MKTF-32	6/9/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-32	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	9/9/2016	Benzoic Acid	12	20	2.6	75000	ug/L
MKTF-32	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-32	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	9/9/2016	Bis(2-ethylhexyl)phthalate	4.6	10	2.6	55.64	ug/L
MKTF-32	9/9/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
MKTF-32	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-32	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-32	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	10/31/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
MKTF-32	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-32	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-32	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	10/31/2016	Phenol	ND	10	2	5761	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	10/31/2016	Bis(2-ethylhexyl)phthalate	6.8	10	2.6	55.64	ug/L
MKTF-32	10/31/2016	Di-n-octylphthalate	7.6	10	2	200	ug/L
MKTF-32	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-32	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-32	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-32	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-32	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-32	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-32	3/7/2017	Benzoic Acid	26	20	2.6	75000	ug/L
MKTF-32	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-32	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-32	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-32	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-32	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-32	3/7/2017	Di-n-butylphthalate	2.5	10	2.4	885	ug/L
MKTF-32	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-32	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-32	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-32	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-32	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-32	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-32	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-32	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-32	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-32	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-32	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-32	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-32	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-32	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-32	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-32	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-32	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-32	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-32	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-32	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-32	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-32	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-32	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-32	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-32	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-32	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-32	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-32	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-32	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-32	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-32	3/7/2017	Bis(2-ethylhexyl)phthalate	7.7	10	2.6	55.64	ug/L
MKTF-32	3/7/2017	Di-n-octylphthalate	4	10	2	200	ug/L
MKTF-32	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-32	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-32	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-32	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-32	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-32	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-32	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-32	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-32	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-32	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-32	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-32	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-32	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-32	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-32	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-32	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-32	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-32	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-32	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-32	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-32	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-32	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	6/6/2017	Benzoic Acid	8.1	20	3.9	75000	ug/L
MKTF-32	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	6/6/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
MKTF-32	6/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-32	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	11/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-32	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	11/27/2017	Benzoic Acid	5.3	20	3.9	75000	ug/L
MKTF-32	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-32	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-32	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-32	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-32	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-32	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-32	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-32	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-32	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-32	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-32	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-32	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-32	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-32	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-32	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-32	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-32	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-32	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-32	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-32	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-32	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-32	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-32	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-32	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-32	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-32	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-32	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-32	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-32	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-32	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-32	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-32	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-32	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-32	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-32	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-32	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-32	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-32	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-32	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-32	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-32	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-32	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-32	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-32	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-32	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-32	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-32	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-32	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-32	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-32	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-32	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-32	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-32	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-32	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-32	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-32	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-32	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-32	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-32	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-32	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-32	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-32	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-32	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-32	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-32	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-32	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-32	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-32	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-32	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-32	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-32	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	5/9/2018	Benzoic Acid	28	20	6.3	75000	ug/L
MKTF-32	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-32	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	8/28/2018	Benzoic Acid	8.4	20	6.3	75000	ug/L
MKTF-32	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	8/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-32	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	8/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-32	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-32	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-32	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-32	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-32	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-32	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-32	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-32	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-32	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-32	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-32	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-32	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-32	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-32	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-32	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-32	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-32	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-32	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-32	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-32	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-32	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-32	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-32	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-32	11/15/2018	Naphthalene	ND	10	5	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-32	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-32	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-32	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-32	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-32	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-32	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-32	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-32	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-32	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-32	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-32	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-32	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-32	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-32	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-32	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-32	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-32	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-32	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-32	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-32	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-32	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-32	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-32	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-32	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-32	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-32	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-32	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-32	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-32	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-32	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-32	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-32	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-32	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-32	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-32	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-32	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-32	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-32	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-32	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-32	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-32	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-32	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-32	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-32	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-32	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-32	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-32	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-32	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-32	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-32	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-32	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-32	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-32	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-32	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-32	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-32	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-32	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-32	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-32	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-32	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-32	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-32	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-32	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-32	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-32	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-32	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-32	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-32	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-32	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-32	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-32	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-32	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-32	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-32	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-32	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-32	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-32	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-32	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-32	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-32	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-32	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-32	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-32	2/13/2019	Benzoic Acid	11	20	6.311561	75000	ug/L
MKTF-32	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-32	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-32	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-32	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-32	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-32	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-32	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-32	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-32	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-32	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-32	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-32	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-32	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-32	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-32	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-32	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-32	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-32	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-32	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-32	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-32	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-32	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-32	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-32	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-32	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-32	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-32	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-32	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-32	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-32	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-32	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-32	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-32	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-32	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-32	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-32	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-32	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-32	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-32	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-32	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-32	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-32	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-32	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-32	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-32	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-32	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-32	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-32	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-32	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-32	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-32	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-32	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-32	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-32	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-32	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-32	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-32	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-32	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-32	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-32	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-32	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-32	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-32	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-32	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-32	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-32	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-32	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-32	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-32	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-32	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-32	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-32	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-32	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-32	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-32	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-32	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-32	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-32	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-32	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-32	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-32	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-32	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-32	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-32	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-32	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-32	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-32	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-32	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-32	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-32	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-32	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-32	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-32	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-32	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-32	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-32	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-32	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-32	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-32	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-32	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-32	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-32	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-32	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-32	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-32	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-32	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-32	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-32	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-32	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-32	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-32	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-32	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-32	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-32	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-32	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-32	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-32	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-32	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-32	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-32	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-32	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-32	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-32	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-32	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-32	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-32	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-32	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-32	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-32	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-32	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-32	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-32	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-32	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-32	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-32	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-32	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-32	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-32	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-32	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-32	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-32	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-32	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-32	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-32	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-32	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-32	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-32	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-32	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-32	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-32	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-32	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-32	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-32	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-32	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-32	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-32	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-32	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-32	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-32	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-32	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-32	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-32	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-32	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-32	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-32	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-32	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-32	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-32	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-32	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-32	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-32	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-32	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-32	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-32	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-32	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-32	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-32	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-32	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-32	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-32	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-32	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-32	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-32	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-32	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-32	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-32	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-32	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-32	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-32	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-32	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-32	10/23/2019	1,4-Dioxane	**97**	1	1	4.59	ug/L
MKTF-32	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-32	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-32	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-32	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-32	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-32	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-32	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-32	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-32	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-32	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-32	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-32	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-32	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-32	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-32	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-32	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-32	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-32	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-32	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-32	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-32	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-32	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-32	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-32	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-32	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-32	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-32	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-32	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-32	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-32	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-32	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-32	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-32	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-32	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-32	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-32	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-32	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-32	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-32	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-32	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-32	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-32	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-32	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-32	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-32	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-32	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-32	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-32	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-32	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-32	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-32	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-32	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-32	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-32	2/27/2020	1,4-Dioxane	**87**	1	0.2	4.59	ug/L
MKTF-32	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-32	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-32	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-32	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-32	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-32	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-32	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-32	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-32	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-32	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-32	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-32	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-32	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-32	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-32	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-32	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-32	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-32	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-32	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-32	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-32	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-32	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-32	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-32	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-32	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-32	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-32	2/27/2020	Bis(2-ethylhexyl)phthalate	0.32	0.5	0.2	55.64	ug/L
MKTF-32	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-32	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-32	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-32	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-32	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-32	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-32	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-32	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-32	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-32	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-32	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-32	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-32	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-32	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-32	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-32	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-32	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-32	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-32	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-32	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-32	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-32	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-32	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-32	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-32	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-32	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-32	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-32	9/21/2020	1,4-Dioxane	**68**	0.52	0.1	4.59	ug/L
MKTF-32	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
MKTF-32	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-32	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-32	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-32	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-32	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-32	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-32	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-32	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-32	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-32	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-32	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
MKTF-32	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-32	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-32	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-32	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
MKTF-32	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-32	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-32	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-32	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-32	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-32	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-32	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-32	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-32	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
MKTF-32	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
MKTF-32	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-32	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-32	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-32	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-32	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-32	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-32	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-32	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-32	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-32	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-32	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-32	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-32	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-32	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-32	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-32	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-32	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-32	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-32	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-32	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-32	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-32	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-32	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-32	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
MKTF-32	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-32	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-32	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-32	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-32	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-32	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-32	12/15/2020	Acenaphthene	ND	10.9	0.175	535	ug/L
MKTF-32	12/15/2020	Acenaphthylene	ND	10.9	0.186	NA	ug/L
MKTF-32	12/15/2020	Anthracene	ND	10.9	0.197	1721	ug/L
MKTF-32	12/15/2020	Benzo(a)anthracene	*ND*	*10.9*	0.197	0.12	ug/L
MKTF-32	12/15/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-32	12/15/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.164	0.34	ug/L
MKTF-32	12/15/2020	Benzo(g,h,i)perylene	ND	10.9	0.251	NA	ug/L
MKTF-32	12/15/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.175	3.43	ug/L
MKTF-32	12/15/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.175	59	ug/L
MKTF-32	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.95	0.137	ug/L
MKTF-32	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.46	55.64	ug/L
MKTF-32	12/15/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-32	12/15/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-32	12/15/2020	Carbazole	ND	10.9	0.251	NA	ug/L
MKTF-32	12/15/2020	4-Chloroaniline	*ND*	*10.9*	3.71	0.37	ug/L
MKTF-32	12/15/2020	4-Chloro-3-Methylphenol	ND	10.9	4.15	NA	ug/L
MKTF-32	12/15/2020	2-Chloronaphthalene	ND	10.9	0.153	733	ug/L
MKTF-32	12/15/2020	2-Chlorophenol	ND	10.9	2.4	91	ug/L
MKTF-32	12/15/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-32	12/15/2020	1,3-Dichlorobenzene	ND	10.9	0.197	NA	ug/L
MKTF-32	12/15/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-32	12/15/2020	Dibenzo(a,h)anthracene	ND	10.9	0.262	NA	ug/L
MKTF-32	12/15/2020	1,4-Dichlorobenzene	ND	10.9	0.175	75	ug/L
MKTF-32	12/15/2020	Dibenzofuran	ND	10.9	0.186	NA	ug/L
MKTF-32	12/15/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.84	1.25	ug/L
MKTF-32	12/15/2020	2,4-Dichlorophenol	ND	10.9	3.28	45.3	ug/L
MKTF-32	12/15/2020	Diethylphthalate	ND	10.9	0.262	14801	ug/L
MKTF-32	12/15/2020	2,4-Dimethylphenol	ND	10.9	3.82	354	ug/L
MKTF-32	12/15/2020	Di-n-butylphthalate	ND	10.9	2.95	885	ug/L
MKTF-32	12/15/2020	2,4-Dinitrophenol	ND	32.8	3.71	38.7	ug/L
MKTF-32	12/15/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-32	12/15/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-32	12/15/2020	Fluoranthene	ND	10.9	0.197	802	ug/L
MKTF-32	12/15/2020	Fluorene	ND	10.9	0.197	288	ug/L
MKTF-32	12/15/2020	Hexachlorobenzene	*ND*	*10.9*	0.186	0.0976	ug/L
MKTF-32	12/15/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.84	0.41	ug/L
MKTF-32	12/15/2020	Hexachloroethane	*ND*	*10.9*	4.59	3.28	ug/L
MKTF-32	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.24	0.343	ug/L
MKTF-32	12/15/2020	Isophorone	ND	10.9	0.153	781	ug/L
MKTF-32	12/15/2020	2-Methylphenol	ND	10.9	1.97	NA	ug/L
MKTF-32	12/15/2020	Naphthalene	ND	10.9	0.186	30	ug/L
MKTF-32	12/15/2020	2-Nitroaniline	ND	10.9	2.4	190	ug/L
MKTF-32	12/15/2020	3-Nitroaniline	ND	10.9	1.97	NA	ug/L
MKTF-32	12/15/2020	4-Nitroaniline	*ND*	*10.9*	1.64	3.8	ug/L
MKTF-32	12/15/2020	Nitrobenzene	*ND*	*10.9*	0.142	1.4	ug/L
MKTF-32	12/15/2020	2-Nitrophenol	ND	10.9	5.68	NA	ug/L
MKTF-32	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.6	0.011	ug/L
MKTF-32	12/15/2020	N-Nitrosodiphenylamine	ND	10.9	0.197	122	ug/L
MKTF-32	12/15/2020	Pentachlorophenol	*ND*	*21.8*	1.53	1	ug/L
MKTF-32	12/15/2020	Phenanthrene	ND	10.9	0.197	170	ug/L
MKTF-32	12/15/2020	Phenol	ND	10.9	2.84	5761	ug/L
MKTF-32	12/15/2020	Pyrene	ND	10.9	0.229	117	ug/L
MKTF-32	12/15/2020	2,4,5-Trichlorophenol	ND	10.9	4.04	1166	ug/L
MKTF-32	12/15/2020	2,4,6-Trichlorophenol	ND	10.9	3.82	11.9*	ug/L
MKTF-32	12/15/2020	Dimethylphthalate	ND	10.9	0.186	612	ug/L
MKTF-32	12/15/2020	Aniline	ND	10.9	4.15	13	ug/L
MKTF-32	12/15/2020	Benzoic Acid	ND	32.8	7.97	75000	ug/L
MKTF-32	12/15/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-32	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.175	9.81	ug/L
MKTF-32	12/15/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.82	0.0049	ug/L
MKTF-32	12/15/2020	Pyridine	ND	10.9	3.49	20	ug/L
MKTF-32	12/15/2020	1,2,4-Trichlorobenzene	ND	10.9	0.197	70	ug/L
MKTF-32	12/15/2020	1,2-Dichlorobenzene	ND	10.9	0.186	600	ug/L
MKTF-32	12/15/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-32	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.75	1.52	ug/L
MKTF-32	12/15/2020	Di-n-octylphthalate	ND	10.9	0.186	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	12/15/2020	4-Nitrophenol	ND	10.9	2.29	NA	ug/L
MKTF-33	4/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	4/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	4/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	4/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	4/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	4/10/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	4/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	4/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	4/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	4/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	4/10/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	4/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	4/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	4/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	4/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	4/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	4/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	4/10/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	4/10/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	4/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	4/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	4/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	4/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	4/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	4/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	4/10/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	4/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	4/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	4/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	4/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-33	4/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	4/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	4/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	4/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	4/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	4/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	4/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	4/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-33	4/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	4/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	4/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	4/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	4/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	4/10/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	4/10/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	4/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	4/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	4/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-33	4/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-33	4/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	4/10/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	4/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	4/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	4/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	4/10/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	4/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	4/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	4/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	4/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	4/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	4/10/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	4/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	4/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	4/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	4/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	4/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	4/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	4/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	4/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	4/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	4/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	9/23/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	9/23/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	9/23/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	9/23/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	9/23/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	9/23/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	9/23/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	9/23/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	9/23/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	9/23/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	9/23/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	9/23/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	9/23/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	9/23/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	9/23/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	9/23/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	9/23/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	9/23/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	9/23/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	9/23/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	9/23/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	9/23/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	9/23/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	9/23/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	9/23/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	9/23/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	9/23/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	9/23/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	9/23/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	9/23/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-33	9/23/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	9/23/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	9/23/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	9/23/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	9/23/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	9/23/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	9/23/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	9/23/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/23/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	9/23/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	9/23/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	9/23/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	9/23/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	9/23/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	9/23/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	9/23/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	9/23/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	9/23/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-33	9/23/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-33	9/23/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	9/23/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	9/23/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	9/23/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	9/23/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	9/23/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	9/23/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	9/23/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	9/23/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	9/23/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	9/23/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	9/23/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	9/23/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	9/23/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	9/23/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	9/23/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	9/23/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	9/23/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	9/23/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	9/23/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	9/23/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	9/23/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-33	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-33	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-33	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-33	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-33	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-33	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-33	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-33	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-33	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-33	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-33	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-33	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-33	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-33	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-33	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-33	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-33	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-33	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-33	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-33	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-33	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-33	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-33	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-33	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-33	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-33	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-33	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-33	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-33	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-33	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-33	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-33	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-33	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-33	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-33	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-33	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-33	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-33	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-33	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	11/17/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-33	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-33	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-33	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-33	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-33	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-33	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-33	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-33	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-33	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-33	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-33	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-33	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-33	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-33	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-33	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-33	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-33	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-33	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-33	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-33	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-33	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-33	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-33	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-33	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-33	3/12/2015	Aniline	ND	10	4.2	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-33	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-33	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-33	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-33	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-33	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-33	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-33	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-33	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-33	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-33	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-33	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-33	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-33	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-33	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-33	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-33	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-33	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-33	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-33	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-33	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-33	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-33	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-33	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-33	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-33	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-33	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-33	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-33	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-33	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-33	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-33	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-33	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-33	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-33	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-33	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-33	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-33	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-33	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-33	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-33	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-33	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-33	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-33	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-33	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-33	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-33	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-33	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-33	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-33	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-33	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-33	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-33	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-33	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-33	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-33	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-33	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-33	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-33	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-33	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-33	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-33	6/9/2015	Benzo(a)pyrene	*ND*	*10*	5.4	0.2	ug/L
MKTF-33	6/9/2015	2,4-Dinitrophenol	ND	20	2.1	38.7	ug/L
MKTF-33	6/9/2015	Dibenzo(a,h)anthracene	ND	10	6.5	NA	ug/L
MKTF-33	6/9/2015	Benzo(a)anthracene	*ND*	*10*	5	0.12	ug/L
MKTF-33	6/9/2015	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MKTF-33	6/9/2015	Aniline	ND	10	3.1	13	ug/L
MKTF-33	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MKTF-33	6/9/2015	Benzoic Acid	ND	20	2.1	75000	ug/L
MKTF-33	6/9/2015	Hexachloroethane	*ND*	*10*	3.2	3.28	ug/L
MKTF-33	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-33	6/9/2015	Isophorone	ND	10	3.9	781	ug/L
MKTF-33	6/9/2015	Acenaphthene	ND	10	3.8	535	ug/L
MKTF-33	6/9/2015	Diethylphthalate	ND	10	3.3	14801	ug/L
MKTF-33	6/9/2015	Di-n-butylphthalate	ND	10	4.2	885	ug/L
MKTF-33	6/9/2015	Phenanthrene	ND	10	4	170	ug/L
MKTF-33	6/9/2015	Butylbenzylphthalate	ND	10	4.7	16	ug/L
MKTF-33	6/9/2015	N-Nitrosodiphenylamine	ND	10	4.9	122	ug/L
MKTF-33	6/9/2015	Fluorene	ND	10	3.3	288	ug/L
MKTF-33	6/9/2015	Carbazole	ND	10	3	NA	ug/L
MKTF-33	6/9/2015	Hexachlorobutadiene	*ND*	*10*	3.9	0.14	ug/L
MKTF-33	6/9/2015	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	6/9/2015	2,4,6-Trichlorophenol	ND	10	2.5	11.9*	ug/L
MKTF-33	6/9/2015	2-Nitroaniline	ND	10	3.6	190	ug/L
MKTF-33	6/9/2015	2-Nitrophenol	ND	10	2.5	NA	ug/L
MKTF-33	6/9/2015	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-33	6/9/2015	Naphthalene	ND	10	3.7	30	ug/L
MKTF-33	6/9/2015	2-Methylnaphthalene	ND	10	4.5	35.1	ug/L
MKTF-33	6/9/2015	2-Chloronaphthalene	ND	10	3.4	733	ug/L
MKTF-33	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	5.2	1.25	ug/L
MKTF-33	6/9/2015	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	6/9/2015	1,2-Dichlorobenzene	ND	10	3.8	600	ug/L
MKTF-33	6/9/2015	2-Chlorophenol	ND	10	2.4	91	ug/L
MKTF-33	6/9/2015	2,4,5-Trichlorophenol	ND	10	3.2	1166	ug/L
MKTF-33	6/9/2015	Nitrobenzene	*ND*	*10*	3	1.4	ug/L
MKTF-33	6/9/2015	3-Nitroaniline	ND	10	3	NA	ug/L
MKTF-33	6/9/2015	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MKTF-33	6/9/2015	4-Nitrophenol	ND	10	2.8	NA	ug/L
MKTF-33	6/9/2015	Benzyl Alcohol	ND	10	2.3	2000	ug/L
MKTF-33	6/9/2015	4-Bromophenyl-phenylether	ND	10	2.8	NA	ug/L
MKTF-33	6/9/2015	Azobenzene	*ND*	*10*	4	0.12	ug/L
MKTF-33	6/9/2015	2,4-Dimethylphenol	ND	10	3.7	354	ug/L
MKTF-33	6/9/2015	1,4-Dichlorobenzene	ND	10	2.5	75	ug/L
MKTF-33	6/9/2015	4-Chloroaniline	*ND*	*10*	3.7	0.37	ug/L
MKTF-33	6/9/2015	Phenol	ND	10	2.2	5761	ug/L
MKTF-33	6/9/2015	Pyridine	ND	10	3.3	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	3.5	0.137	ug/L
MKTF-33	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MKTF-33	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	6.7	55.64	ug/L
MKTF-33	6/9/2015	Di-n-octylphthalate	ND	10	3.9	200	ug/L
MKTF-33	6/9/2015	Hexachlorobenzene	*ND*	*10*	4	0.0976	ug/L
MKTF-33	6/9/2015	Anthracene	ND	10	3.2	1721	ug/L
MKTF-33	6/9/2015	1,2,4-Trichlorobenzene	ND	10	4	70	ug/L
MKTF-33	6/9/2015	2,4-Dichlorophenol	ND	20	2.8	45.3	ug/L
MKTF-33	6/9/2015	2,4-Dinitrotoluene	ND	10	2.9	45.3	ug/L
MKTF-33	6/9/2015	Pyrene	ND	10	4.6	117	ug/L
MKTF-33	6/9/2015	Dimethylphthalate	ND	10	4	612	ug/L
MKTF-33	6/9/2015	Dibenzofuran	ND	10	3.8	NA	ug/L
MKTF-33	6/9/2015	Benzo(g,h,i)perylene	ND	10	6.3	NA	ug/L
MKTF-33	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.9	0.343	ug/L
MKTF-33	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	4.8	0.34	ug/L
MKTF-33	6/9/2015	Fluoranthene	ND	10	3	802	ug/L
MKTF-33	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	5	3.43	ug/L
MKTF-33	6/9/2015	Acenaphthylene	ND	10	3.7	NA	ug/L
MKTF-33	6/9/2015	Chrysene	ND	10	4.3	34.3	ug/L
MKTF-33	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.7	1.52	ug/L
MKTF-33	6/9/2015	1,3-Dichlorobenzene	ND	10	3.4	NA	ug/L
MKTF-33	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	3	0.485	ug/L
MKTF-33	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	4.1	0.011	ug/L
MKTF-33	6/9/2015	4-Chlorophenyl-phenylether	ND	10	4	NA	ug/L
MKTF-33	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.1	9.81	ug/L
MKTF-33	6/9/2015	3,4-Methylphenol	ND	10	3	NA	ug/L
MKTF-33	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-33	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-33	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-33	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-33	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-33	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-33	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-33	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-33	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-33	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-33	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-33	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-33	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-33	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-33	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-33	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-33	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-33	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-33	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-33	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-33	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-33	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-33	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-33	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-33	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-33	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-33	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-33	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-33	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-33	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-33	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-33	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-33	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-33	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-33	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-33	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-33	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-33	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-33	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-33	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-33	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-33	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-33	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-33	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-33	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-33	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-33	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-33	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-33	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-33	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-33	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-33	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-33	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-33	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-33	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-33	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-33	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-33	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-33	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-33	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-33	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-33	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-33	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-33	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-33	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-33	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-33	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-33	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-33	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-33	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-33	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-33	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-33	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-33	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-33	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-33	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-33	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-33	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-33	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-33	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-33	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-33	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-33	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-33	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-33	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-33	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-33	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-33	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-33	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-33	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-33	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-33	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-33	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-33	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-33	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-33	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-33	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-33	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-33	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-33	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-33	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-33	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-33	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-33	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-33	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-33	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-33	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-33	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-33	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-33	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-33	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-33	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-33	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-33	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-33	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-33	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-33	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-33	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-33	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-33	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-33	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-33	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-33	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-33	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-33	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-33	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-33	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-33	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-33	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-33	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-33	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-33	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-33	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-33	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-33	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-33	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-33	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-33	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-33	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-33	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-33	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-33	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-33	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-33	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-33	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-33	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-33	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-33	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-33	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-33	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-33	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-33	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-33	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-33	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-33	2/25/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-33	2/25/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-33	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-33	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-33	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-33	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-33	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-33	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-33	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-33	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-33	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-33	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-33	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-33	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-33	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-33	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-33	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-33	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-33	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-33	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-33	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-33	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-33	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-33	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-33	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-33	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-33	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-33	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-33	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-33	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-33	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-33	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-33	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-33	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-33	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-33	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-33	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-33	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-33	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-33	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-33	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-33	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-33	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-33	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-33	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-33	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-33	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	6/10/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-33	6/10/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-33	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	9/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	9/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	9/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	9/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	9/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	9/10/2016	Benzoic Acid	7.1	20	2.6	75000	ug/L
MKTF-33	9/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	9/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	9/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	9/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	9/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	9/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	9/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	9/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	9/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	9/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	9/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	9/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	9/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	9/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	9/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	9/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	9/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	9/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	9/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	9/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	9/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	9/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	9/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	9/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	9/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	9/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	9/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	9/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	9/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	9/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	9/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	9/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	9/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	9/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	9/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	9/10/2016	Bis(2-ethylhexyl)phthalate	3.6	10	2.6	55.64	ug/L
MKTF-33	9/10/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-33	9/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	9/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	9/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	9/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	9/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	9/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	9/10/2016	Dimethylphthalate	2.9	10	2.4	612	ug/L
MKTF-33	9/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	9/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	9/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	9/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	9/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	9/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	9/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	9/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	9/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	9/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	9/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	9/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	9/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	9/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-33	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	11/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	11/1/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-33	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	11/1/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-33	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-33	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	11/1/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-33	11/1/2016	Di-n-octylphthalate	7.8	10	2	200	ug/L
MKTF-33	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-33	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-33	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-33	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-33	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-33	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-33	3/8/2017	Benzoic Acid	7.7	20	2.6	75000	ug/L
MKTF-33	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-33	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-33	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-33	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-33	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-33	3/8/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-33	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-33	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-33	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-33	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-33	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-33	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-33	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-33	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-33	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-33	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-33	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-33	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-33	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-33	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-33	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-33	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-33	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-33	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-33	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-33	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-33	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-33	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-33	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-33	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-33	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-33	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-33	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-33	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-33	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-33	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-33	3/8/2017	Bis(2-ethylhexyl)phthalate	8.3	10	2.6	55.64	ug/L
MKTF-33	3/8/2017	Di-n-octylphthalate	3.7	10	2	200	ug/L
MKTF-33	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-33	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-33	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-33	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-33	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-33	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-33	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-33	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-33	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-33	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-33	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-33	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-33	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-33	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-33	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-33	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-33	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-33	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-33	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-33	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-33	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-33	6/8/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	6/8/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	6/8/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	6/8/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	6/8/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	6/8/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	6/8/2017	Benzoic Acid	6.8	20	3.9	75000	ug/L
MKTF-33	6/8/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	6/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	6/8/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	6/8/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	6/8/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	6/8/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	6/8/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	6/8/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	6/8/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	6/8/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	6/8/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	6/8/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	6/8/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	6/8/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	6/8/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	6/8/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	6/8/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	6/8/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/8/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	6/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	6/8/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	6/8/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	6/8/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	6/8/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	6/8/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	6/8/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	6/8/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	6/8/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	6/8/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	6/8/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	6/8/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	6/8/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	6/8/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	6/8/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	6/8/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	6/8/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	6/8/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	6/8/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	6/8/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	6/8/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	6/8/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	6/8/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	6/8/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	6/8/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	6/8/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	6/8/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	6/8/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	6/8/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	6/8/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	6/8/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	6/8/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	6/8/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	6/8/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	6/8/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	6/8/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	6/8/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-33	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-33	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	11/28/2017	Benzoic Acid	4.5	20	3.9	75000	ug/L
MKTF-33	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-33	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	11/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	11/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-33	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	11/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	11/28/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
MKTF-33	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-33	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-33	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-33	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-33	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-33	2/8/2018	Benzoic Acid	7.2	20	3.9	75000	ug/L
MKTF-33	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-33	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-33	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-33	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-33	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-33	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-33	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-33	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-33	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-33	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-33	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-33	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-33	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-33	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-33	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-33	2/8/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-33	2/8/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-33	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-33	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-33	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-33	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-33	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-33	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-33	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-33	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-33	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-33	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-33	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-33	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-33	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-33	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-33	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-33	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-33	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-33	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-33	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-33	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-33	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-33	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-33	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-33	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-33	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-33	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-33	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-33	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-33	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-33	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-33	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-33	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-33	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-33	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-33	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-33	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-33	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-33	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-33	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-33	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-33	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-33	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-33	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-33	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-33	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-33	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-33	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-33	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-33	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-33	5/10/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-33	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-33	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-33	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-33	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-33	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-33	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-33	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-33	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-33	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-33	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-33	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-33	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-33	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-33	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-33	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-33	5/10/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-33	5/10/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-33	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-33	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-33	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-33	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-33	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-33	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-33	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-33	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-33	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-33	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-33	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-33	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-33	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-33	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-33	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-33	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-33	5/10/2018	Phenol	ND	10	6	5761	ug/L
MKTF-33	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-33	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-33	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-33	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-33	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-33	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-33	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-33	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-33	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-33	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-33	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-33	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-33	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-33	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-33	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-33	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-33	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-33	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-33	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-33	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-33	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-33	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-33	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-33	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-33	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-33	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-33	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-33	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-33	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-33	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-33	8/30/2018	Benzoic Acid	6.9	20	6.3	75000	ug/L
MKTF-33	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-33	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-33	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-33	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-33	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-33	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-33	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-33	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-33	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-33	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-33	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-33	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-33	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-33	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-33	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-33	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-33	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-33	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-33	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-33	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-33	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-33	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-33	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-33	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-33	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-33	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-33	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-33	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-33	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-33	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-33	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-33	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-33	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-33	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-33	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-33	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-33	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-33	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-33	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-33	8/30/2018	Bis(2-ethylhexyl)phthalate	14	10	8.1	55.64	ug/L
MKTF-33	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-33	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-33	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-33	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-33	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-33	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-33	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-33	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-33	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-33	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-33	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-33	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-33	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-33	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-33	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-33	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-33	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-33	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-33	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-33	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-33	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-33	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-33	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-33	11/28/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-33	11/28/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-33	11/28/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-33	11/28/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-33	11/28/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-33	11/28/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-33	11/28/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-33	11/28/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-33	11/28/2018	Isophorone	ND	100	62	781	ug/L
MKTF-33	11/28/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-33	11/28/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-33	11/28/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-33	11/28/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-33	11/28/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-33	11/28/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-33	11/28/2018	Fluorene	ND	100	63	288	ug/L
MKTF-33	11/28/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-33	11/28/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-33	11/28/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-33	11/28/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-33	11/28/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-33	11/28/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-33	11/28/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-33	11/28/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-33	11/28/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-33	11/28/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-33	11/28/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-33	11/28/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-33	11/28/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-33	11/28/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-33	11/28/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-33	11/28/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-33	11/28/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-33	11/28/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-33	11/28/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-33	11/28/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-33	11/28/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-33	11/28/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-33	11/28/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	11/28/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-33	11/28/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-33	11/28/2018	Phenol	ND	100	60	5761	ug/L
MKTF-33	11/28/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-33	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-33	11/28/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-33	11/28/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-33	11/28/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-33	11/28/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-33	11/28/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-33	11/28/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-33	11/28/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-33	11/28/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-33	11/28/2018	Pyrene	ND	100	65	117	ug/L
MKTF-33	11/28/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-33	11/28/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-33	11/28/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-33	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-33	11/28/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-33	11/28/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-33	11/28/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-33	11/28/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-33	11/28/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-33	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-33	11/28/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-33	11/28/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-33	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-33	11/28/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-33	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-33	11/28/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-33	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-33	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-33	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-33	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-33	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-33	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-33	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-33	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-33	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-33	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-33	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-33	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-33	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-33	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-33	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-33	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-33	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-33	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-33	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-33	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-33	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-33	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-33	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-33	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-33	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-33	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-33	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-33	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-33	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-33	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-33	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-33	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-33	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-33	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-33	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-33	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-33	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-33	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-33	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-33	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-33	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-33	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-33	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-33	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-33	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-33	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-33	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-33	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-33	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-33	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-33	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-33	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-33	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-33	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-33	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-33	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-33	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-33	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-33	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-33	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-33	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-33	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-33	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-33	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-33	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-33	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-33	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-33	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-33	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-33	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-33	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-33	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-33	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-33	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-33	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-33	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-33	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-33	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-33	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-33	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-33	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-33	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-33	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-33	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-33	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-33	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-33	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-33	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-33	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-33	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-33	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-33	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-33	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-33	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-33	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-33	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-33	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-33	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-33	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-33	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-33	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-33	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-33	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-33	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-33	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-33	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-33	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-33	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-33	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-33	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-33	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-33	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-33	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-33	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-33	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-33	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-33	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-33	10/24/2019	Bis(2-ethylhexyl)phthalate	1.9	0.5	0.5	55.64	ug/L
MKTF-33	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-33	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-33	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-33	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-33	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-33	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-33	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-33	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-33	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-33	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-33	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-33	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-33	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-33	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-33	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-33	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-33	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-33	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-33	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-33	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-33	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-33	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-33	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-33	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-33	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-33	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-33	2/28/2020	1,4-Dioxane	3.4	1	0.2	4.59	ug/L
MKTF-33	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-33	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-33	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-33	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-33	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-33	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-33	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-33	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-33	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-33	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-33	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-33	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-33	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-33	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-33	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-33	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-33	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-33	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-33	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-33	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-33	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-33	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-33	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-33	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-33	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-33	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-33	2/28/2020	Bis(2-ethylhexyl)phthalate	0.48	0.5	0.2	55.64	ug/L
MKTF-33	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-33	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-33	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-33	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-33	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-33	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-33	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-33	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-33	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-33	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-33	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-33	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-33	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-33	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-33	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-33	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-33	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-33	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-33	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-33	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-33	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-33	2/28/2020	Phenol	2.6	0.5	0.1	5761	ug/L
MKTF-33	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-33	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	4/9/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	4/9/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	4/9/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	4/9/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	4/9/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	4/9/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	4/9/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	4/9/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	4/9/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	4/9/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	4/9/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	4/9/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	4/9/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-34	4/9/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	4/9/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	4/9/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	4/9/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	4/9/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	4/9/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	4/9/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	4/9/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	4/9/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	4/9/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	4/9/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	4/9/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	4/9/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	4/9/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	4/9/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	4/9/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	4/9/2014	2-Methylphenol	ND	25	2.8	NA	ug/L
MKTF-34	4/9/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	4/9/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	4/9/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	4/9/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	4/9/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	4/9/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	4/9/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	4/9/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	4/9/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	4/9/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	4/9/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	4/9/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	4/9/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	4/9/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	4/9/2014	Pyridine	ND	10	1.6	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	4/9/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	4/9/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	4/9/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-34	4/9/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-34	4/9/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	4/9/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	4/9/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	4/9/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	4/9/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	4/9/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	4/9/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	4/9/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	4/9/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	4/9/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	4/9/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	4/9/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	4/9/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	4/9/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	4/9/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	4/9/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	4/9/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	4/9/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	4/9/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	4/9/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	4/9/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	4/9/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	9/24/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	9/24/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	9/24/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	9/24/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	9/24/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	9/24/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	9/24/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	9/24/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	9/24/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	9/24/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	9/24/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	9/24/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	9/24/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-34	9/24/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	9/24/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	9/24/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	9/24/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	9/24/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	9/24/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	9/24/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	9/24/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	9/24/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	9/24/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	9/24/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	9/24/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	9/24/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	9/24/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	9/24/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	9/24/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	9/24/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MKTF-34	9/24/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	9/24/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	9/24/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	9/24/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	9/24/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	9/24/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	9/24/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	9/24/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	9/24/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	9/24/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	9/24/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	9/24/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	9/24/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	9/24/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	9/24/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-34	9/24/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	9/24/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	9/24/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-34	9/24/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MKTF-34	9/24/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	9/24/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	9/24/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	9/24/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	9/24/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	9/24/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	9/24/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	9/24/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	9/24/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	9/24/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	9/24/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	9/24/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	9/24/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	9/24/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	9/24/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	9/24/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	9/24/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	9/24/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	9/24/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	9/24/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	9/24/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	9/24/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	11/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-34	11/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-34	11/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-34	11/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-34	11/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	11/17/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-34	11/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-34	11/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-34	11/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-34	11/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-34	11/17/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-34	11/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-34	11/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-34	11/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-34	11/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-34	11/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-34	11/17/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-34	11/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-34	11/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-34	11/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-34	11/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-34	11/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	11/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-34	11/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-34	11/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-34	11/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-34	11/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-34	11/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	11/17/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-34	11/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-34	11/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-34	11/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-34	11/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-34	11/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-34	11/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-34	11/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-34	11/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-34	11/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-34	11/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	11/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-34	11/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	11/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-34	11/17/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-34	11/17/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-34	11/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	11/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	11/17/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-34	11/17/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-34	11/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-34	11/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	11/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-34	11/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-34	11/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-34	11/17/2014	Pyrene	ND	10	4	117	ug/L
MKTF-34	11/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-34	11/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-34	11/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-34	11/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-34	11/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-34	11/17/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-34	11/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-34	11/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-34	11/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-34	11/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-34	11/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	11/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-34	11/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-34	11/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-34	11/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-34	11/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-34	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-34	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-34	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-34	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-34	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-34	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-34	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-34	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-34	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-34	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-34	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-34	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-34	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-34	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-34	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-34	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-34	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-34	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-34	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-34	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-34	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-34	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-34	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-34	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-34	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-34	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-34	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-34	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-34	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-34	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-34	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-34	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-34	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-34	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-34	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-34	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-34	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-34	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-34	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-34	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-34	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-34	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-34	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-34	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-34	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-34	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-34	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-34	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-34	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-34	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-34	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-34	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-34	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-34	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-34	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-34	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-34	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-34	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-34	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-34	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-34	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-34	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-34	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-34	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-34	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-34	6/8/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	6/8/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	6/8/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	6/8/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	6/8/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	6/8/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	6/8/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	6/8/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	6/8/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	6/8/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	6/8/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	6/8/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	6/8/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	6/8/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	6/8/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	6/8/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	6/8/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	6/8/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	6/8/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-34	6/8/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	6/8/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	6/8/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	6/8/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	6/8/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	6/8/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	6/8/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	6/8/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	6/8/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	6/8/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	6/8/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	6/8/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	6/8/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	6/8/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	6/8/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	6/8/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	6/8/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	6/8/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	6/8/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	6/8/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	6/8/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	6/8/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	6/8/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	6/8/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	6/8/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	6/8/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	6/8/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	6/8/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	6/8/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	6/8/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	6/8/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	6/8/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	6/8/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	6/8/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	6/8/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	6/8/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	6/8/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	6/8/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-34	6/8/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	6/8/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	6/8/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	6/8/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	6/8/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	6/8/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	6/8/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	6/8/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	6/8/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	6/8/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	6/8/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	6/8/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-34	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-34	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-34	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-34	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-34	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-34	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-34	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-34	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-34	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-34	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-34	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-34	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-34	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-34	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-34	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-34	11/3/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-34	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-34	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-34	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-34	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-34	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-34	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-34	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-34	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-34	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-34	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-34	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-34	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-34	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-34	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-34	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-34	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-34	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-34	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-34	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-34	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-34	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-34	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-34	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-34	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-34	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-34	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-34	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-34	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-34	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-34	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-34	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-34	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-34	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-34	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-34	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-34	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-34	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-34	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-34	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-34	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-34	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-34	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-34	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-34	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-34	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-34	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-34	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-34	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-34	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-34	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-34	2/25/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-34	2/25/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-34	2/25/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-34	2/25/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-34	2/25/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-34	2/25/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-34	2/25/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-34	2/25/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-34	2/25/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-34	2/25/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-34	2/25/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-34	2/25/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-34	2/25/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-34	2/25/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-34	2/25/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-34	2/25/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-34	2/25/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-34	2/25/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-34	2/25/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-34	2/25/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-34	2/25/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-34	2/25/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-34	2/25/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-34	2/25/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-34	2/25/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-34	2/25/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-34	2/25/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-34	2/25/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-34	2/25/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-34	2/25/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-34	2/25/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-34	2/25/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-34	2/25/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-34	2/25/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-34	2/25/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-34	2/25/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-34	2/25/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-34	2/25/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-34	2/25/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-34	2/25/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-34	2/25/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-34	2/25/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-34	2/25/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-34	2/25/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-34	2/25/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-34	2/25/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-34	2/25/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-34	2/25/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-34	2/25/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	2/25/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-34	2/25/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-34	2/25/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-34	2/25/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-34	2/25/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-34	2/25/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-34	2/25/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-34	2/25/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-34	2/25/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-34	2/25/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-34	2/25/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-34	2/25/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-34	2/25/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-34	2/25/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-34	2/25/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-34	2/25/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-34	2/25/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-34	2/25/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-34	2/25/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-34	2/25/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-34	2/25/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-34	2/25/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-34	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-34	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	6/10/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
MKTF-34	6/10/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
MKTF-34	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	9/13/2016	Benzoic Acid	8.4	20	2.6	75000	ug/L
MKTF-34	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	9/13/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-34	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-34	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-34	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	11/8/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-34	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	11/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-34	11/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	11/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	11/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	11/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	11/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	11/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	11/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-34	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	11/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-34	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	11/8/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-34	11/8/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-34	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-34	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-34	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-34	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-34	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-34	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-34	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-34	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-34	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-34	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-34	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-34	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-34	3/1/2017	Di-n-butylphthalate	2.7	10	2.4	885	ug/L
MKTF-34	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-34	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-34	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-34	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-34	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-34	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-34	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-34	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-34	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-34	3/1/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-34	3/1/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-34	3/1/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-34	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-34	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-34	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-34	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-34	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-34	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-34	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-34	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-34	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-34	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-34	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-34	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-34	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-34	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-34	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-34	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-34	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-34	3/1/2017	Bis(2-ethylhexyl)phthalate	7.8	10	2.6	55.64	ug/L
MKTF-34	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-34	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-34	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-34	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-34	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-34	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-34	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-34	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-34	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-34	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-34	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-34	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-34	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-34	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-34	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-34	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-34	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-34	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-34	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-34	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-34	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-34	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-34	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	6/14/2017	Benzoic Acid	9	20	3.9	75000	ug/L
MKTF-34	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	6/14/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	6/14/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	6/14/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
MKTF-34	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	9/26/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	9/26/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/26/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	9/26/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	9/26/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	9/26/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	9/26/2017	Benzoic Acid	6	20	3.9	75000	ug/L
MKTF-34	9/26/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	9/26/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	9/26/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	9/26/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	9/26/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	9/26/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	9/26/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	9/26/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	9/26/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	9/26/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	9/26/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	9/26/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	9/26/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	9/26/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	9/26/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	9/26/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	9/26/2017	Naphthalene	4.8	10	2.9	30	ug/L
MKTF-34	9/26/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	9/26/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	9/26/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	9/26/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	9/26/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	9/26/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	9/26/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	9/26/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	9/26/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	9/26/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	9/26/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	9/26/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	9/26/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	9/26/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	9/26/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	9/26/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	9/26/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	9/26/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	9/26/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	9/26/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	9/26/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	9/26/2017	Bis(2-ethylhexyl)phthalate	**210**	10	4.8	55.64	ug/L
MKTF-34	9/26/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	9/26/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	9/26/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	9/26/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	9/26/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	9/26/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	9/26/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	9/26/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	9/26/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	9/26/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	9/26/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	9/26/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	9/26/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	9/26/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	9/26/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	9/26/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	9/26/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	9/26/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	9/26/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	9/26/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	9/26/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	9/26/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	9/26/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	12/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	12/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	12/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	12/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	12/1/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-34	12/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	12/1/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
MKTF-34	12/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	12/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	12/1/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	12/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	12/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	12/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	12/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	12/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	12/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	12/1/2017	Fluorene	ND	10	4	288	ug/L
MKTF-34	12/1/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	12/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	12/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	12/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	12/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	12/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	12/1/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	12/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	12/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	12/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	12/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	12/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	12/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	12/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	12/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	12/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	12/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	12/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	12/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	12/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	12/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	12/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	12/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	12/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	12/1/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	12/1/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	12/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	12/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	12/1/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-34	12/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	12/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	12/1/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	12/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	12/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	12/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	12/1/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	12/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	12/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	12/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	12/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	12/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	12/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	12/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	12/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	12/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	12/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	12/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	12/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	12/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	12/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	12/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	12/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	2/16/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-34	2/16/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-34	2/16/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-34	2/16/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	2/16/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-34	2/16/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-34	2/16/2018	Benzoic Acid	8.9	20	3.9	75000	ug/L
MKTF-34	2/16/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-34	2/16/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-34	2/16/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-34	2/16/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-34	2/16/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-34	2/16/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-34	2/16/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-34	2/16/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-34	2/16/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-34	2/16/2018	Fluorene	ND	10	4	288	ug/L
MKTF-34	2/16/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-34	2/16/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-34	2/16/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-34	2/16/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-34	2/16/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-34	2/16/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-34	2/16/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-34	2/16/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-34	2/16/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-34	2/16/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-34	2/16/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-34	2/16/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-34	2/16/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-34	2/16/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-34	2/16/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-34	2/16/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-34	2/16/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-34	2/16/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-34	2/16/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-34	2/16/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-34	2/16/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-34	2/16/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-34	2/16/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-34	2/16/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-34	2/16/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-34	2/16/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-34	2/16/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-34	2/16/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-34	2/16/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-34	2/16/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-34	2/16/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-34	2/16/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-34	2/16/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-34	2/16/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-34	2/16/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-34	2/16/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-34	2/16/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-34	2/16/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-34	2/16/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-34	2/16/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-34	2/16/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-34	2/16/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-34	2/16/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-34	2/16/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-34	2/16/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-34	2/16/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-34	2/16/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-34	2/16/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-34	2/16/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-34	2/16/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-34	2/16/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-34	2/16/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-34	5/4/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-34	5/4/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-34	5/4/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-34	5/4/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-34	5/4/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-34	5/4/2018	Benzoic Acid	11	20	6.3	75000	ug/L
MKTF-34	5/4/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-34	5/4/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-34	5/4/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-34	5/4/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	5/4/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-34	5/4/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-34	5/4/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-34	5/4/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-34	5/4/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-34	5/4/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-34	5/4/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-34	5/4/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-34	5/4/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-34	5/4/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-34	5/4/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-34	5/4/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-34	5/4/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-34	5/4/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-34	5/4/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-34	5/4/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-34	5/4/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	5/4/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-34	5/4/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-34	5/4/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-34	5/4/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-34	5/4/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-34	5/4/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-34	5/4/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-34	5/4/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-34	5/4/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-34	5/4/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-34	5/4/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-34	5/4/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-34	5/4/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-34	5/4/2018	Phenol	ND	10	6	5761	ug/L
MKTF-34	5/4/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-34	5/4/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-34	5/4/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-34	5/4/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-34	5/4/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	5/4/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-34	5/4/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-34	5/4/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-34	5/4/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-34	5/4/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-34	5/4/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-34	5/4/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-34	5/4/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-34	5/4/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-34	5/4/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-34	5/4/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-34	5/4/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-34	5/4/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-34	5/4/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-34	5/4/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-34	5/4/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-34	5/4/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-34	5/4/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-34	5/4/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-34	5/4/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-34	5/4/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-34	5/4/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-34	8/24/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-34	8/24/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-34	8/24/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-34	8/24/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-34	8/24/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-34	8/24/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
MKTF-34	8/24/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-34	8/24/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-34	8/24/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-34	8/24/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-34	8/24/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-34	8/24/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-34	8/24/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-34	8/24/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-34	8/24/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-34	8/24/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-34	8/24/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-34	8/24/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-34	8/24/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-34	8/24/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-34	8/24/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-34	8/24/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-34	8/24/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-34	8/24/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-34	8/24/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-34	8/24/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-34	8/24/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-34	8/24/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-34	8/24/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-34	8/24/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-34	8/24/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-34	8/24/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-34	8/24/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-34	8/24/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-34	8/24/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-34	8/24/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-34	8/24/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-34	8/24/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-34	8/24/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-34	8/24/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-34	8/24/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-34	8/24/2018	Phenol	ND	10	6	5761	ug/L
MKTF-34	8/24/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-34	8/24/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-34	8/24/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-34	8/24/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-34	8/24/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-34	8/24/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-34	8/24/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-34	8/24/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-34	8/24/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-34	8/24/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-34	8/24/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-34	8/24/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-34	8/24/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-34	8/24/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-34	8/24/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-34	8/24/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-34	8/24/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-34	8/24/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-34	8/24/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-34	8/24/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-34	8/24/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-34	8/24/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-34	8/24/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-34	8/24/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-34	8/24/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-34	8/24/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-34	11/28/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-34	11/28/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-34	11/28/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-34	11/28/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-34	11/28/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-34	11/28/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-34	11/28/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-34	11/28/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-34	11/28/2018	Isophorone	ND	100	62	781	ug/L
MKTF-34	11/28/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-34	11/28/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-34	11/28/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-34	11/28/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-34	11/28/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-34	11/28/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-34	11/28/2018	Fluorene	ND	100	63	288	ug/L
MKTF-34	11/28/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-34	11/28/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-34	11/28/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-34	11/28/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-34	11/28/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-34	11/28/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-34	11/28/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-34	11/28/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-34	11/28/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-34	11/28/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-34	11/28/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-34	11/28/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-34	11/28/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-34	11/28/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-34	11/28/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-34	11/28/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-34	11/28/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-34	11/28/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-34	11/28/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-34	11/28/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-34	11/28/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-34	11/28/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-34	11/28/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-34	11/28/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-34	11/28/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-34	11/28/2018	Phenol	ND	100	60	5761	ug/L
MKTF-34	11/28/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-34	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-34	11/28/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-34	11/28/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-34	11/28/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-34	11/28/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-34	11/28/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-34	11/28/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-34	11/28/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-34	11/28/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-34	11/28/2018	Pyrene	ND	100	65	117	ug/L
MKTF-34	11/28/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-34	11/28/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-34	11/28/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-34	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-34	11/28/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-34	11/28/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-34	11/28/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-34	11/28/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-34	11/28/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-34	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-34	11/28/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-34	11/28/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-34	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-34	11/28/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-34	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-34	11/28/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-34	5/9/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-34	5/9/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-34	5/9/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-34	5/9/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-34	5/9/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-34	5/9/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-34	5/9/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-34	5/9/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-34	5/9/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-34	5/9/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-34	5/9/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-34	5/9/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-34	5/9/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-34	5/9/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-34	5/9/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-34	5/9/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-34	5/9/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-34	5/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-34	5/9/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-34	5/9/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-34	5/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-34	5/9/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-34	5/9/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-34	5/9/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-34	5/9/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-34	5/9/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-34	5/9/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-34	5/9/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-34	5/9/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-34	5/9/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-34	5/9/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-34	5/9/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-34	5/9/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-34	5/9/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-34	5/9/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-34	5/9/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-34	5/9/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-34	5/9/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-34	5/9/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-34	5/9/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-34	5/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-34	5/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-34	5/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-34	5/9/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-34	5/9/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-34	5/9/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-34	5/9/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-34	5/9/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-34	5/9/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-34	5/9/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-34	5/9/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-34	5/9/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-34	5/9/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-34	5/9/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-34	5/9/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-34	5/9/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-34	5/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-34	5/9/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-34	5/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-34	5/9/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-34	5/9/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-34	5/9/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-34	5/9/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-34	5/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-34	5/9/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-34	5/9/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-34	5/9/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-34	5/9/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-34	5/9/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-34	5/9/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-34	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-34	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-34	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-34	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-34	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-34	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-34	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-34	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-34	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-34	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-34	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-34	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-34	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-34	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-34	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-34	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-34	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-34	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-34	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-34	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-34	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-34	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-34	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-34	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-34	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-34	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-34	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-34	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-34	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-34	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-34	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-34	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-34	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-34	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-34	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-34	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-34	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-34	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-34	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-34	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-34	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-34	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-34	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-34	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-34	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-34	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-34	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-34	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-34	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-34	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-34	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-34	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-34	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-34	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-34	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-34	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-34	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-34	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-34	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-34	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-34	8/19/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-34	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-34	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-34	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-34	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-34	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-34	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-34	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-34	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-34	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-34	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-34	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-34	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-34	10/29/2019	1,4-Dioxane	3	1	1	4.59	ug/L
MKTF-34	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-34	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-34	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-34	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-34	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-34	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-34	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-34	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-34	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-34	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-34	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-34	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-34	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-34	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-34	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-34	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-34	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-34	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-34	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-34	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-34	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-34	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-34	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-34	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-34	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-34	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-34	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-34	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-34	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-34	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-34	10/29/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-34	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-34	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-34	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-34	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-34	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-34	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-34	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-34	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-34	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-34	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-34	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-34	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-34	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-34	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-34	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-34	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-34	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-34	10/29/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-34	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-34	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-34	2/5/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-34	2/5/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-34	2/5/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-34	2/5/2020	1,4-Dioxane	0.7	1	1	4.59	ug/L
MKTF-34	2/5/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-34	2/5/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-34	2/5/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-34	2/5/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-34	2/5/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-34	2/5/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-34	2/5/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-34	2/5/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-34	2/5/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-34	2/5/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-34	2/5/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-34	2/5/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-34	2/5/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-34	2/5/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-34	2/5/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-34	2/5/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-34	2/5/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-34	2/5/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-34	2/5/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-34	2/5/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-34	2/5/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-34	2/5/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-34	2/5/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-34	2/5/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-34	2/5/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-34	2/5/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-34	2/5/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-34	2/5/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-34	2/5/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-34	2/5/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-34	2/5/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-34	2/5/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-34	2/5/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-34	2/5/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-34	2/5/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-34	2/5/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-34	2/5/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-34	2/5/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-34	2/5/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-34	2/5/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-34	2/5/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-34	2/5/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-34	2/5/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-34	2/5/2020	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-34	2/5/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-34	2/5/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-34	2/5/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-34	2/5/2020	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-34	2/5/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-34	2/5/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-34	2/28/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-34	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-34	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-34	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-34	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-34	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-34	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-34	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-34	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-34	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-34	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-34	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-34	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-34	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-34	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-34	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-34	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-34	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-34	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-34	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-34	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-34	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-34	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-34	2/28/2020	Bis(2-ethylhexyl)phthalate	0.32	0.5	0.2	55.64	ug/L
MKTF-34	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-34	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-34	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-34	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-34	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-34	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-34	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-34	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-34	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-34	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-34	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-34	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-34	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-34	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-34	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-34	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-34	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-34	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-34	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-34	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-34	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-34	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-34	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-34	2/28/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-34	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-34	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-34	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-34	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-34	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-34	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-34	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-34	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-34	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-34	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-34	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-34	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-34	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-34	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-34	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-34	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-34	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-34	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-34	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-34	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-34	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-34	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-34	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-34	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-34	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-34	2/28/2020	Bis(2-ethylhexyl)phthalate	0.24	0.5	0.2	55.64	ug/L
MKTF-34	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-34	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-34	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-34	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-34	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-34	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-34	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-34	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-34	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-34	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-34	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-34	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-34	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-34	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-34	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-34	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-34	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-34	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-34	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-34	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-34	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-34	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-34	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-34	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-34	9/16/2020	1,2,4-Trichlorobenzene	ND	1	0.2	70	ug/L
MKTF-34	9/16/2020	1,2-Dichlorobenzene	ND	1	0.2	600	ug/L
MKTF-34	9/16/2020	1,3-Dichlorobenzene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	1,4-Dichlorobenzene	ND	1	0.2	75	ug/L
MKTF-34	9/16/2020	1,4-Dioxane	2	1	0.2	4.59	ug/L
MKTF-34	9/16/2020	1-Methylnaphthalene	ND	1	0.2	11.38	ug/L
MKTF-34	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	1	0.2	240	ug/L
MKTF-34	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	2,4,5-Trichlorophenol	ND	1	0.2	1166	ug/L
MKTF-34	9/16/2020	2,4,6-Trichlorophenol	ND	1	0.2	11.9*	ug/L
MKTF-34	9/16/2020	2,4-Dichlorophenol	ND	1	0.2	45.3	ug/L
MKTF-34	9/16/2020	2,4-Dimethylphenol	ND	1	0.2	354	ug/L
MKTF-34	9/16/2020	2,4-Dinitrophenol	ND	1	0.2	38.7	ug/L
MKTF-34	9/16/2020	2,4-Dinitrotoluene	ND	1	0.2	45.3	ug/L
MKTF-34	9/16/2020	2,6-Dinitrotoluene	ND	0.4	0.2	0.485	ug/L
MKTF-34	9/16/2020	2-Chloronaphthalene	ND	1	0.2	733	ug/L
MKTF-34	9/16/2020	2-Chlorophenol	ND	1	0.2	91	ug/L
MKTF-34	9/16/2020	2-Methylnaphthalene	ND	1	0.2	35.1	ug/L
MKTF-34	9/16/2020	2-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	2-Nitroaniline	ND	1	0.2	190	ug/L
MKTF-34	9/16/2020	2-Nitrophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	3,4-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	3,3-Dichlorobenzidine	ND	1	0.2	1.25	ug/L
MKTF-34	9/16/2020	3-Nitroaniline	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4,6-Dinitro-2-methylphenol	ND	1	0.2	1.52	ug/L
MKTF-34	9/16/2020	4-Bromophenyl-phenylether	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Chloro-3-Methylphenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Chloroaniline	*ND*	*1*	0.2	0.37	ug/L
MKTF-34	9/16/2020	4-Chlorophenyl-phenylether	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	4-Nitroaniline	ND	1	0.2	3.8	ug/L
MKTF-34	9/16/2020	4-Nitrophenol	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Acenaphthene	ND	1	0.2	535	ug/L
MKTF-34	9/16/2020	Acenaphthylene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Aniline	ND	1	0.2	13	ug/L
MKTF-34	9/16/2020	Anthracene	ND	1	0.2	1721	ug/L
MKTF-34	9/16/2020	Benzo(a)anthracene	*ND*	*0.2*	0.1	0.12	ug/L
MKTF-34	9/16/2020	Benzidine	*ND*	*1*	0.5	0.0011	ug/L
MKTF-34	9/16/2020	Benzo(a)pyrene	ND	0.2	0.1	0.2	ug/L
MKTF-34	9/16/2020	Benzo(b)fluoranthene	ND	0.2	0.1	0.34	ug/L
MKTF-34	9/16/2020	Benzo(g,h,i)perylene	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Benzo(k)fluoranthene	ND	1	0.2	3.43	ug/L
MKTF-34	9/16/2020	Benzoic Acid	ND	1	0.4	75000	ug/L
MKTF-34	9/16/2020	Benzyl Alcohol	ND	1	0.4	2000	ug/L
MKTF-34	9/16/2020	Bis(2-chloroethoxy)methane	ND	1	0.2	59	ug/L
MKTF-34	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*1*	0.2	0.137	ug/L
MKTF-34	9/16/2020	Bis(2-chloroisopropyl)ether	ND	1	0.2	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	1	0.4	55.64	ug/L
MKTF-34	9/16/2020	Butylbenzylphthalate	ND	1	0.4	16	ug/L
MKTF-34	9/16/2020	Carbazole	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Chrysene	ND	1	0.2	34.3	ug/L
MKTF-34	9/16/2020	Di-n-butylphthalate	ND	1	0.4	885	ug/L
MKTF-34	9/16/2020	Di-n-octylphthalate	ND	1	0.4	200	ug/L
MKTF-34	9/16/2020	Dibenzo(a,h)anthracene	ND	0.06	0.04	NA	ug/L
MKTF-34	9/16/2020	Dibenzofuran	ND	1	0.2	NA	ug/L
MKTF-34	9/16/2020	Diethylphthalate	ND	1	0.4	14801	ug/L
MKTF-34	9/16/2020	Dimethylphthalate	ND	1	0.4	612	ug/L
MKTF-34	9/16/2020	Fluoranthene	ND	1	0.2	802	ug/L
MKTF-34	9/16/2020	Fluorene	ND	1	0.2	288	ug/L
MKTF-34	9/16/2020	Hexachlorobenzene	*ND*	*1*	0.2	0.0976	ug/L
MKTF-34	9/16/2020	Hexachlorobutadiene	*ND*	*1*	0.2	0.14	ug/L
MKTF-34	9/16/2020	Hexachlorocyclopentadiene	*ND*	*1*	0.5	0.41	ug/L
MKTF-34	9/16/2020	Hexachloroethane	ND	1	0.2	3.28	ug/L
MKTF-34	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.2	0.343	ug/L
MKTF-34	9/16/2020	Isophorone	ND	1	0.2	781	ug/L
MKTF-34	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*1*	0.2	0.011	ug/L
MKTF-34	9/16/2020	N-Nitrosodimethylamine	*ND*	*1*	0.2	0.0049	ug/L
MKTF-34	9/16/2020	N-Nitrosodiphenylamine	ND	1	0.2	122	ug/L
MKTF-34	9/16/2020	Naphthalene	ND	1	0.2	30	ug/L
MKTF-34	9/16/2020	Nitrobenzene	ND	1	0.2	1.4	ug/L
MKTF-34	9/16/2020	Pentachlorophenol	ND	1	0.4	1	ug/L
MKTF-34	9/16/2020	Phenanthrene	ND	1	0.2	170	ug/L
MKTF-34	9/16/2020	Phenol	ND	1	0.2	5761	ug/L
MKTF-34	9/16/2020	Pyrene	ND	1	0.2	117	ug/L
MKTF-34	9/16/2020	Pyridine	ND	1	0.4	20	ug/L
MKTF-35	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-35	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-35	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-35	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-35	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-35	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-35	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-35	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-35	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-35	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-35	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-35	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-35	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-35	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-35	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-35	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-35	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-35	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-35	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-35	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-35	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-35	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-35	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-35	11/21/2014	1-Methylnaphthalene	**34**	10	3.6	11.38	ug/L
MKTF-35	11/21/2014	Naphthalene	**36**	10	2.3	30	ug/L
MKTF-35	11/21/2014	2-Methylnaphthalene	**45**	10	2.6	35.1	ug/L
MKTF-35	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-35	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-35	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-35	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-35	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-35	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-35	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-35	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-35	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-35	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-35	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-35	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-35	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-35	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-35	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-35	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-35	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-35	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-35	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-35	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-35	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-35	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-35	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-35	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-35	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-35	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-35	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-35	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-35	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-35	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-35	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-35	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-35	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-35	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-35	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-35	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-35	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-35	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	3/17/2015	Isophorone	ND	10	2	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	3/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	3/17/2015	Naphthalene	28	10	1.8	30	ug/L
MKTF-35	3/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	6/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	6/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	6/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-35	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	8/18/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	8/18/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	8/18/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	11/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-35	11/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-35	11/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-35	11/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-35	11/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-35	11/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-35	11/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-35	11/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-35	11/3/2015	Isophorone	ND	10	2	781	ug/L
MKTF-35	11/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-35	11/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-35	11/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-35	11/3/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-35	11/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-35	11/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-35	11/3/2015	Fluorene	ND	10	1.7	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/3/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-35	11/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-35	11/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-35	11/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-35	11/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-35	11/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-35	11/3/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-35	11/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-35	11/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-35	11/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-35	11/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-35	11/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-35	11/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-35	11/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-35	11/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-35	11/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-35	11/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-35	11/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-35	11/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-35	11/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-35	11/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-35	11/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-35	11/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-35	11/3/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-35	11/3/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-35	11/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-35	11/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-35	11/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-35	11/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-35	11/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-35	11/3/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-35	11/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-35	11/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-35	11/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-35	11/3/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-35	11/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-35	11/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-35	11/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-35	11/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-35	11/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-35	11/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-35	11/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-35	11/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-35	11/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-35	11/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-35	11/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-35	11/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-35	11/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-35	11/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-35	11/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-35	11/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-35	2/26/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-35	2/26/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-35	2/26/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-35	2/26/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-35	2/26/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-35	2/26/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-35	2/26/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-35	2/26/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-35	2/26/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-35	2/26/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-35	2/26/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-35	2/26/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-35	2/26/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-35	2/26/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-35	2/26/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-35	2/26/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-35	2/26/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-35	2/26/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-35	2/26/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-35	2/26/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-35	2/26/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-35	2/26/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-35	2/26/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-35	2/26/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-35	2/26/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-35	2/26/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-35	2/26/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-35	2/26/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-35	2/26/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-35	2/26/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-35	2/26/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-35	2/26/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-35	2/26/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-35	2/26/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-35	2/26/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-35	2/26/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-35	2/26/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-35	2/26/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-35	2/26/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-35	2/26/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-35	2/26/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-35	2/26/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-35	2/26/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-35	2/26/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-35	2/26/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-35	2/26/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-35	2/26/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-35	2/26/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-35	2/26/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	2/26/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-35	2/26/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-35	2/26/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-35	2/26/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-35	2/26/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-35	2/26/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-35	2/26/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-35	2/26/2016	Dibenzofuran	ND	10	8.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/26/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-35	2/26/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-35	2/26/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-35	2/26/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-35	2/26/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-35	2/26/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-35	2/26/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-35	2/26/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-35	2/26/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-35	2/26/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-35	2/26/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-35	2/26/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-35	2/26/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-35	2/26/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-35	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-35	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-35	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-35	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	6/10/2016	Phenol	ND	10	2	5761	ug/L
MKTF-35	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	6/10/2016	Bis(2-ethylhexyl)phthalate	3.2	10	2.6	55.64	ug/L
MKTF-35	6/10/2016	Di-n-octylphthalate	5.9	10	2	200	ug/L
MKTF-35	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-35	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	9/13/2016	Benzoic Acid	5	20	2.6	75000	ug/L
MKTF-35	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	9/13/2016	Phenol	2.9	10	2	5761	ug/L
MKTF-35	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	9/13/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-35	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-35	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	11/3/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-35	11/3/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-35	11/3/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-35	11/3/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-35	11/3/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-35	11/3/2016	Benzoic Acid	55	100	13	75000	ug/L
MKTF-35	11/3/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-35	11/3/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-35	11/3/2016	Isophorone	ND	50	13	781	ug/L
MKTF-35	11/3/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-35	11/3/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-35	11/3/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-35	11/3/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-35	11/3/2016	Butylbenzylphthalate	*14*	*50*	12	16	ug/L
MKTF-35	11/3/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-35	11/3/2016	Fluorene	ND	50	14	288	ug/L
MKTF-35	11/3/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-35	11/3/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-35	11/3/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-35	11/3/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-35	11/3/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-35	11/3/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-35	11/3/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-35	11/3/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-35	11/3/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-35	11/3/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-35	11/3/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-35	11/3/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-35	11/3/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-35	11/3/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-35	11/3/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-35	11/3/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-35	11/3/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-35	11/3/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-35	11/3/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-35	11/3/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-35	11/3/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-35	11/3/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-35	11/3/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-35	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-35	11/3/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-35	11/3/2016	Bis(2-ethylhexyl)phthalate	34	50	13	55.64	ug/L
MKTF-35	11/3/2016	Di-n-octylphthalate	34	50	9.9	200	ug/L
MKTF-35	11/3/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-35	11/3/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-35	11/3/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-35	11/3/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-35	11/3/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-35	11/3/2016	Pyrene	ND	50	15	117	ug/L
MKTF-35	11/3/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-35	11/3/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-35	11/3/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-35	11/3/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-35	11/3/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-35	11/3/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-35	11/3/2016	Chrysene	*ND*	*50*	14	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-35	11/3/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-35	11/3/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-35	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-35	11/3/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-35	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-35	11/3/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-35	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-35	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-35	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-35	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-35	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-35	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-35	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-35	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-35	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-35	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-35	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-35	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-35	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-35	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-35	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-35	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-35	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-35	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-35	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-35	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-35	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-35	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-35	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-35	3/1/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-35	3/1/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-35	3/1/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-35	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-35	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-35	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-35	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-35	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-35	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-35	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-35	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-35	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-35	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-35	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-35	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-35	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-35	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-35	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-35	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-35	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-35	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-35	3/1/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-35	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-35	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-35	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-35	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-35	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-35	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-35	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-35	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-35	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-35	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-35	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-35	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-35	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-35	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-35	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-35	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-35	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-35	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-35	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-35	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-35	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-35	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-35	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	6/14/2017	Benzoic Acid	13	20	3.9	75000	ug/L
MKTF-35	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	6/14/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	6/14/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	6/14/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	6/14/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	6/14/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	6/14/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	6/14/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	6/14/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-35	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	6/14/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	9/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	9/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	9/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	9/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	9/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	9/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	9/27/2017	Benzoic Acid	7.5	20	3.9	75000	ug/L
MKTF-35	9/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	9/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	9/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	9/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	9/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	9/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	9/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	9/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	9/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	9/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	9/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	9/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	9/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	9/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	9/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	9/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	9/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	9/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	9/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	9/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	9/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	9/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	9/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	9/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	9/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	9/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	9/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	9/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	9/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	9/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	9/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	9/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	9/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	9/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	9/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	9/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	9/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	9/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	9/27/2017	Bis(2-ethylhexyl)phthalate	5.7	10	4.8	55.64	ug/L
MKTF-35	9/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	9/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	9/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	9/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	9/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	9/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	9/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	9/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	9/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	9/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	9/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	9/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	9/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	9/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	9/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	9/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	9/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	9/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	9/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	9/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	9/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	9/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	9/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	11/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	11/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	11/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	11/30/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-35	11/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	11/30/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
MKTF-35	11/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	11/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	11/30/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	11/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	11/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	11/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	11/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	11/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	11/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	11/30/2017	Fluorene	ND	10	4	288	ug/L
MKTF-35	11/30/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	11/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	11/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	11/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	11/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	11/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	11/30/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	11/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	11/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	11/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	11/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	11/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	11/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	11/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	11/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	11/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	11/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	11/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	11/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	11/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-35	11/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	11/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	11/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-35	11/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	11/30/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	11/30/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	11/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	11/30/2017	Bis(2-ethylhexyl)phthalate	11	10	4.8	55.64	ug/L
MKTF-35	11/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	11/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	11/30/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	11/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	11/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	11/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	11/30/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	11/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	11/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	11/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	11/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	11/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	11/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	11/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	11/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	11/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	11/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	11/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	11/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-35	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-35	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-35	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-35	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-35	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-35	2/15/2018	Benzoic Acid	8	20	3.9	75000	ug/L
MKTF-35	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-35	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-35	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-35	2/15/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-35	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-35	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-35	2/15/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-35	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-35	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-35	2/15/2018	Fluorene	ND	10	4	288	ug/L
MKTF-35	2/15/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-35	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-35	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-35	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-35	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-35	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-35	2/15/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-35	2/15/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-35	2/15/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-35	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-35	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-35	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-35	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-35	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-35	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-35	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-35	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-35	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-35	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-35	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-35	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-35	2/15/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-35	2/15/2018	1,4-Dichlorobenzene	3.1	10	2.1	75	ug/L
MKTF-35	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-35	2/15/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-35	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-35	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-35	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-35	2/15/2018	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
MKTF-35	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-35	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-35	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-35	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-35	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-35	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-35	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-35	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-35	2/15/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-35	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-35	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-35	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-35	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-35	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-35	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-35	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-35	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-35	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-35	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-35	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-35	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-35	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-35	2/15/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-35	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-35	5/3/2018	Benzoic Acid	14	20	6.3	75000	ug/L
MKTF-35	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	5/3/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	5/3/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	5/3/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	5/3/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-35	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	8/23/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	8/23/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	8/23/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	8/23/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	8/23/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/23/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
MKTF-35	8/23/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	8/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	8/23/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	8/23/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	8/23/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	8/23/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	8/23/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	8/23/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	8/23/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	8/23/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	8/23/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	8/23/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	8/23/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	8/23/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	8/23/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	8/23/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	8/23/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	8/23/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	8/23/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	8/23/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	8/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	8/23/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	8/23/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	8/23/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	8/23/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	8/23/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	8/23/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	8/23/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	8/23/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	8/23/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	8/23/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	8/23/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	8/23/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	8/23/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	8/23/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	8/23/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	8/23/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	8/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-35	8/23/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	8/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	8/23/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	8/23/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	8/23/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	8/23/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	8/23/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	8/23/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	8/23/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	8/23/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	8/23/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	8/23/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	8/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	8/23/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	8/23/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	8/23/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	8/23/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	8/23/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	8/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	8/23/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	8/23/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	8/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	8/23/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	8/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	8/23/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	11/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-35	11/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-35	11/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-35	11/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-35	11/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-35	11/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-35	11/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-35	11/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-35	11/28/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-35	11/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-35	11/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-35	11/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-35	11/28/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-35	11/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-35	11/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-35	11/28/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-35	11/28/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-35	11/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-35	11/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-35	11/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-35	11/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-35	11/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-35	11/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-35	11/28/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-35	11/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-35	11/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-35	11/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-35	11/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-35	11/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-35	11/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-35	11/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-35	11/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-35	11/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-35	11/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-35	11/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-35	11/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-35	11/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-35	11/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-35	11/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-35	11/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-35	11/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-35	11/28/2018	Phenol	ND	10	6	5761	ug/L
MKTF-35	11/28/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-35	11/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-35	11/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-35	11/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-35	11/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-35	11/28/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-35	11/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-35	11/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-35	11/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-35	11/28/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-35	11/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-35	11/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-35	11/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-35	11/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-35	11/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-35	11/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-35	11/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-35	11/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-35	11/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-35	11/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-35	11/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-35	11/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-35	11/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-35	11/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-35	11/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-35	11/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	5/16/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	5/16/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	5/16/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	5/16/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	5/16/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	5/16/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	5/16/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	5/16/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	5/16/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-35	5/16/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	5/16/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	5/16/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	5/16/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	5/16/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	5/16/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	5/16/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	5/16/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	5/16/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	5/16/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	5/16/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	5/16/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	5/16/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	5/16/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	5/16/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	5/16/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	5/16/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	5/16/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	5/16/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	5/16/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	5/16/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	5/16/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	5/16/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-35	5/16/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	5/16/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	5/16/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	5/16/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	5/16/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	5/16/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	5/16/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	5/16/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	5/16/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-35	5/16/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	5/16/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	5/16/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	5/16/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	5/16/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	5/16/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	5/16/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	5/16/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	5/16/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	5/16/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	5/16/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	5/16/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	5/16/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	5/16/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	5/16/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	5/16/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	5/16/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	5/16/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	5/16/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	5/16/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	5/16/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	5/16/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	5/16/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	5/16/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	5/16/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	5/16/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	5/16/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	5/16/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	5/16/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	5/16/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	5/16/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	5/16/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	5/16/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	5/16/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	5/16/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	5/16/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	5/16/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	5/16/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	5/16/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	5/16/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	5/16/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	5/16/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	5/16/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	5/16/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	5/16/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	5/16/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	5/16/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	5/16/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	5/16/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	5/16/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	5/16/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	5/16/2019	Bis(2-ethylhexyl)phthalate	4.3	10	4.302128	55.64	ug/L
MKTF-35	5/16/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	5/16/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	5/16/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	5/16/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	5/16/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	5/16/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	5/16/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	5/16/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	5/16/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-35	5/16/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	5/16/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	5/16/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	5/16/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	5/16/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	5/16/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	5/16/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	5/16/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	5/16/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	5/16/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	5/16/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	5/16/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	5/16/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	5/16/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	5/16/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	5/16/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-35	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-35	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-35	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-35	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-35	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-35	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-35	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-35	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-35	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-35	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-35	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-35	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-35	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-35	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-35	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-35	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-35	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-35	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-35	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-35	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-35	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-35	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-35	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-35	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-35	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-35	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-35	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-35	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-35	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-35	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-35	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-35	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-35	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-35	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-35	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-35	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-35	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-35	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-35	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-35	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-35	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-35	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-35	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-35	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-35	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-35	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-35	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-35	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-35	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-35	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-35	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-35	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-35	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-35	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-35	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-35	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-35	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-35	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-35	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-35	8/19/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-35	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-35	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-35	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-35	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-35	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-35	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-35	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-35	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-35	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	3.2	0.5	0.5	75	ug/L
MKTF-35	10/29/2019	1,4-Dioxane	2.6	1	1	4.59	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-35	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-35	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-35	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Acenaphthene	1.2	0.5	0.5	535	ug/L
MKTF-35	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-35	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-35	10/29/2019	Dibenzofuran	1.1	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-35	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	10/29/2019	Phenol	3.2	0.5	0.5	5761	ug/L
MKTF-35	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	10/29/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-35	10/29/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	10/29/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	1,4-Dichlorobenzene	3.7	0.5	0.5	75	ug/L
MKTF-35	10/29/2019	1,4-Dioxane	**6.5**	1	1	4.59	ug/L
MKTF-35	10/29/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-35	10/29/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	10/29/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	10/29/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-35	10/29/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	10/29/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	10/29/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	10/29/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	10/29/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	10/29/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-35	10/29/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	10/29/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	10/29/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	10/29/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	10/29/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Acenaphthene	1.3	0.5	0.5	535	ug/L
MKTF-35	10/29/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	10/29/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	10/29/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	10/29/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	10/29/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	10/29/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	10/29/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-35	10/29/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	10/29/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	10/29/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	10/29/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	10/29/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	10/29/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	10/29/2019	Dibenzo(a,h)anthracene	ND	0.01	0.01	NA	ug/L
MKTF-35	10/29/2019	Dibenzofuran	1.2	0.5	0.5	NA	ug/L
MKTF-35	10/29/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	10/29/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	10/29/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	10/29/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	10/29/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	10/29/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	10/29/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	10/29/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	10/29/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	10/29/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	10/29/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	10/29/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	10/29/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-35	10/29/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	10/29/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	10/29/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	10/29/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	10/29/2019	Phenol	2.2	0.5	0.5	5761	ug/L
MKTF-35	10/29/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	10/29/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	4.7	2.5	2.5	75	ug/L
MKTF-35	2/6/2020	1,4-Dioxane	*3.3*	*5*	5	4.59	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	5.5	2.5	2.5	11.38	ug/L
MKTF-35	2/6/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-35	2/6/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-35	2/6/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-35	2/6/2020	2,4-Dimethylphenol	25	2.5	2.5	354	ug/L
MKTF-35	2/6/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-35	2/6/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-35	2/6/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-35	2/6/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-35	2/6/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	5	2.5	2.5	35.1	ug/L
MKTF-35	2/6/2020	2-Methylphenol	30	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-35	2/6/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	3,4-Methylphenol	13	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-35	2/6/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-35	2/6/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-35	2/6/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Acenaphthene	1.57	2.5	2.5	535	ug/L
MKTF-35	2/6/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-35	2/6/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-35	2/6/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-35	2/6/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-35	2/6/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-35	2/6/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-35	2/6/2020	Benzoic Acid	2.3	2.5	2.5	75000	ug/L
MKTF-35	2/6/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-35	2/6/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-35	2/6/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-35	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
MKTF-35	2/6/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-35	2/6/2020	Carbazole	ND	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-35	2/6/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-35	2/6/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-35	2/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-35	2/6/2020	Dibenzofuran	1.67	2.5	2.5	NA	ug/L
MKTF-35	2/6/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-35	2/6/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-35	2/6/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-35	2/6/2020	Fluorene	ND	2.5	2.5	288	ug/L
MKTF-35	2/6/2020	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-35	2/6/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-35	2/6/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-35	2/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-35	2/6/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-35	2/6/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-35	2/6/2020	Naphthalene	**93**	2.5	2.5	30	ug/L
MKTF-35	2/6/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-35	2/6/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-35	2/6/2020	Phenanthrene	ND	2.5	2.5	170	ug/L
MKTF-35	2/6/2020	Phenol	25	2.5	2.5	5761	ug/L
MKTF-35	2/6/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-35	2/6/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-35	2/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-35	2/6/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	1,4-Dichlorobenzene	4.3	0.5	0.5	75	ug/L
MKTF-35	2/6/2020	1,4-Dioxane	*3.29*	*5*	5	4.59	ug/L
MKTF-35	2/6/2020	1-Methylnaphthalene	5	0.5	0.5	11.38	ug/L
MKTF-35	2/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-35	2/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-35	2/6/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-35	2/6/2020	2,4-Dimethylphenol	24	0.5	0.5	354	ug/L
MKTF-35	2/6/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-35	2/6/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-35	2/6/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-35	2/6/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-35	2/6/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-35	2/6/2020	2-Methylnaphthalene	5.7	0.5	0.5	35.1	ug/L
MKTF-35	2/6/2020	2-Methylphenol	39	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-35	2/6/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	3,4-Methylphenol	15	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-35	2/6/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-35	2/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-35	2/6/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-35	2/6/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Aniline	ND	0.5	0.5	13	ug/L
MKTF-35	2/6/2020	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-35	2/6/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-35	2/6/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-35	2/6/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-35	2/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-35	2/6/2020	Benzoic Acid	3.2	0.5	0.5	75000	ug/L
MKTF-35	2/6/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-35	2/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-35	2/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-35	2/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-35	2/6/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-35	2/6/2020	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-35	2/6/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-35	2/6/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-35	2/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-35	2/6/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-35	2/6/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-35	2/6/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-35	2/6/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-35	2/6/2020	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-35	2/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-35	2/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-35	2/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-35	2/6/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-35	2/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-35	2/6/2020	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-35	2/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-35	2/6/2020	Naphthalene	**93**	0.5	0.5	30	ug/L
MKTF-35	2/6/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-35	2/6/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-35	2/6/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-35	2/6/2020	Phenol	33	0.5	0.5	5761	ug/L
MKTF-35	2/6/2020	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-35	2/6/2020	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-35	9/16/2020	1,4-Dioxane	*2*	*5*	1	4.59	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	7.1	5	1	11.38	ug/L
MKTF-35	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-35	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-35	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-35	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,4-Dimethylphenol	ND	5	1	354	ug/L
MKTF-35	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-35	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,6-Dinitrotoluene	*ND*	*2*	1	0.485	ug/L
MKTF-35	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-35	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	6.7	5	1	35.1	ug/L
MKTF-35	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-35	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-35	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-35	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-35	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-35	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-35	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Aniline	ND	5	1	13	ug/L
MKTF-35	9/16/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-35	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-35	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-35	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-35	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-35	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-35	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-35	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-35	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-35	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-35	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-35	9/16/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-35	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-35	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-35	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-35	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-35	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-35	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-35	9/16/2020	Fluorene	ND	5	1	288	ug/L
MKTF-35	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-35	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-35	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-35	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-35	9/16/2020	Isophorone	ND	5	1	781	ug/L
MKTF-35	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-35	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-35	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-35	9/16/2020	Naphthalene	**53**	5	1	30	ug/L
MKTF-35	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-35	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-35	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-35	9/16/2020	Phenol	25	5	1	5761	ug/L
MKTF-35	9/16/2020	Pyrene	ND	5	1	117	ug/L
MKTF-35	9/16/2020	Pyridine	ND	5	2	20	ug/L
MKTF-35	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-35	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-35	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-35	9/16/2020	1,4-Dioxane	2.2	*5*	1	4.59	ug/L
MKTF-35	9/16/2020	1-Methylnaphthalene	7.1	5	1	11.38	ug/L
MKTF-35	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-35	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-35	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-35	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,4-Dimethylphenol	5.3	5	1	354	ug/L
MKTF-35	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-35	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-35	9/16/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-35	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-35	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-35	9/16/2020	2-Methylnaphthalene	6.8	5	1	35.1	ug/L
MKTF-35	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-35	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-35	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-35	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-35	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-35	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-35	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Aniline	ND	5	1	13	ug/L
MKTF-35	9/16/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-35	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-35	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-35	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-35	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-35	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-35	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-35	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-35	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-35	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-35	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-35	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-35	9/16/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-35	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-35	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-35	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-35	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-35	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-35	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-35	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-35	9/16/2020	Fluorene	ND	5	1	288	ug/L
MKTF-35	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-35	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-35	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-35	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-35	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-35	9/16/2020	Isophorone	ND	5	1	781	ug/L
MKTF-35	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-35	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-35	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-35	9/16/2020	Naphthalene	**54**	5	1	30	ug/L
MKTF-35	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-35	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-35	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-35	9/16/2020	Phenol	34	5	1	5761	ug/L
MKTF-35	9/16/2020	Pyrene	ND	5	1	117	ug/L
MKTF-35	9/16/2020	Pyridine	ND	5	2	20	ug/L
MKTF-36	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-36	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-36	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-36	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-36	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-36	11/21/2014	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-36	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-36	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-36	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-36	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-36	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-36	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-36	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-36	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-36	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-36	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-36	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-36	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-36	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-36	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-36	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-36	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-36	11/21/2014	1-Methylnaphthalene	**160**	10	3.6	11.38	ug/L
MKTF-36	11/21/2014	Naphthalene	**280**	20	4.6	30	ug/L
MKTF-36	11/21/2014	2-Methylnaphthalene	**230**	10	2.6	35.1	ug/L
MKTF-36	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-36	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-36	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-36	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-36	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-36	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-36	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-36	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-36	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-36	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-36	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-36	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-36	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-36	11/21/2014	Phenol	15	10	1.6	5761	ug/L
MKTF-36	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-36	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-36	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-36	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-36	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-36	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-36	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-36	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-36	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-36	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-36	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-36	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-36	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-36	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-36	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-36	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-36	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-36	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-36	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-36	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-36	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-36	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-36	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-36	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-36	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	3/17/2015	Fluorene	10	10	1.7	288	ug/L
MKTF-36	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	3/17/2015	1-Methylnaphthalene	**240**	10	1.8	11.38	ug/L
MKTF-36	3/17/2015	Naphthalene	**470**	50	9.2	30	ug/L
MKTF-36	3/17/2015	2-Methylnaphthalene	**390**	50	11	35.1	ug/L
MKTF-36	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	3/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	3/17/2015	Phenol	44	10	1.1	5761	ug/L
MKTF-36	3/17/2015	Pyridine	ND	10	1.7	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-36	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	6/4/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-36	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	6/4/2015	1-Methylnaphthalene	**330**	50	9	11.38	ug/L
MKTF-36	6/4/2015	Naphthalene	**490**	50	9.2	30	ug/L
MKTF-36	6/4/2015	2-Methylnaphthalene	**510**	50	11	35.1	ug/L
MKTF-36	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	6/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	6/4/2015	Phenol	56	10	1.1	5761	ug/L
MKTF-36	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-36	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-36	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-36	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-36	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-36	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-36	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-36	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-36	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-36	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-36	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-36	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-36	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-36	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-36	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-36	8/18/2015	Fluorene	12	10	1.7	288	ug/L
MKTF-36	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-36	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-36	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-36	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-36	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	1-Methylnaphthalene	**340**	40	7.2	11.38	ug/L
MKTF-36	8/18/2015	Naphthalene	**520**	40	7.3	30	ug/L
MKTF-36	8/18/2015	2-Methylnaphthalene	**510**	40	9	35.1	ug/L
MKTF-36	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-36	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-36	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-36	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-36	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-36	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-36	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-36	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-36	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-36	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-36	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-36	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-36	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-36	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-36	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-36	8/18/2015	Phenol	48	10	1.1	5761	ug/L
MKTF-36	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-36	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-36	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-36	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-36	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-36	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-36	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-36	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-36	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-36	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-36	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-36	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-36	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-36	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-36	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-36	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-36	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-36	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-36	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-36	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-36	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-36	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-36	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-36	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-36	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-36	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-36	11/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	11/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-36	11/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-36	11/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-36	11/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-36	11/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-36	11/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-36	11/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-36	11/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-36	11/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-36	11/8/2016	Acenaphthene	5.1	10	2.6	535	ug/L
MKTF-36	11/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-36	11/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-36	11/8/2016	Phenanthrene	4.4	10	2.6	170	ug/L
MKTF-36	11/8/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-36	11/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-36	11/8/2016	Fluorene	8	10	2.7	288	ug/L
MKTF-36	11/8/2016	Carbazole	6	10	2.3	NA	ug/L
MKTF-36	11/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-36	11/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-36	11/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-36	11/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	11/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-36	11/8/2016	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-36	11/8/2016	Naphthalene	**270**	20	5.2	30	ug/L
MKTF-36	11/8/2016	2-Methylnaphthalene	**230**	10	2.9	35.1	ug/L
MKTF-36	11/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-36	11/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	11/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-36	11/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-36	11/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-36	11/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-36	11/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-36	11/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-36	11/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-36	11/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-36	11/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-36	11/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-36	11/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	11/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-36	11/8/2016	Phenol	28	10	2	5761	ug/L
MKTF-36	11/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-36	11/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-36	11/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	11/8/2016	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-36	11/8/2016	Di-n-octylphthalate	8	10	2	200	ug/L
MKTF-36	11/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-36	11/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	11/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-36	11/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-36	11/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-36	11/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-36	11/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-36	11/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-36	11/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-36	11/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-36	11/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-36	11/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-36	11/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-36	11/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-36	11/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-36	11/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-36	11/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-36	11/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	11/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-36	11/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-36	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-36	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-36	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-36	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-36	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-36	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-36	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-36	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-36	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-36	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-36	3/1/2017	Acenaphthene	6.7	10	2.6	535	ug/L
MKTF-36	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-36	3/1/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-36	3/1/2017	Phenanthrene	5.7	10	2.6	170	ug/L
MKTF-36	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-36	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-36	3/1/2017	Fluorene	8.6	10	2.7	288	ug/L
MKTF-36	3/1/2017	Carbazole	6.4	10	2.3	NA	ug/L
MKTF-36	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-36	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-36	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-36	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-36	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-36	3/1/2017	1-Methylnaphthalene	**190**	10	2.9	11.38	ug/L
MKTF-36	3/1/2017	Naphthalene	**280**	50	13	30	ug/L
MKTF-36	3/1/2017	2-Methylnaphthalene	**320**	50	14	35.1	ug/L
MKTF-36	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-36	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-36	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-36	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-36	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-36	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-36	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-36	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-36	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-36	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-36	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-36	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-36	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-36	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-36	3/1/2017	Phenol	29	10	2	5761	ug/L
MKTF-36	3/1/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-36	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-36	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-36	3/1/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-36	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-36	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-36	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-36	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-36	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-36	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-36	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-36	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-36	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-36	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-36	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-36	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-36	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-36	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-36	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-36	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-36	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-36	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-36	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-36	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-36	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-36	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-36	6/14/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-36	6/14/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-36	6/14/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-36	6/14/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	6/14/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-36	6/14/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-36	6/14/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-36	6/14/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-36	6/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-36	6/14/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-36	6/14/2017	Acenaphthene	9.9	10	3.6	535	ug/L
MKTF-36	6/14/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-36	6/14/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-36	6/14/2017	Phenanthrene	8.7	10	4.3	170	ug/L
MKTF-36	6/14/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-36	6/14/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-36	6/14/2017	Fluorene	12	10	4	288	ug/L
MKTF-36	6/14/2017	Carbazole	9.9	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	6/14/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-36	6/14/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-36	6/14/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-36	6/14/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-36	6/14/2017	1-Methylnaphthalene	**350**	50	17	11.38	ug/L
MKTF-36	6/14/2017	Naphthalene	**520**	50	14	30	ug/L
MKTF-36	6/14/2017	2-Methylnaphthalene	**540**	50	16	35.1	ug/L
MKTF-36	6/14/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-36	6/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-36	6/14/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-36	6/14/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-36	6/14/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-36	6/14/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-36	6/14/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-36	6/14/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-36	6/14/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-36	6/14/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-36	6/14/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-36	6/14/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-36	6/14/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-36	6/14/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-36	6/14/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-36	6/14/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-36	6/14/2017	Phenol	80	10	3.1	5761	ug/L
MKTF-36	6/14/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-36	6/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-36	6/14/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-36	6/14/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-36	6/14/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-36	6/14/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-36	6/14/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-36	6/14/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-36	6/14/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-36	6/14/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-36	6/14/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-36	6/14/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-36	6/14/2017	Dibenzofuran	4.8	10	4.1	NA	ug/L
MKTF-36	6/14/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-36	6/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-36	6/14/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-36	6/14/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-36	6/14/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-36	6/14/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-36	6/14/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-36	6/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-36	6/14/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	6/14/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-36	6/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-36	6/14/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-36	6/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-36	6/14/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-36	9/27/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-36	9/27/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-36	9/27/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-36	9/27/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-36	9/27/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-36	9/27/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-36	9/27/2017	Benzoic Acid	64	200	39	75000	ug/L
MKTF-36	9/27/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-36	9/27/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-36	9/27/2017	Isophorone	ND	100	44	781	ug/L
MKTF-36	9/27/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-36	9/27/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-36	9/27/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-36	9/27/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-36	9/27/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-36	9/27/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-36	9/27/2017	Fluorene	ND	100	40	288	ug/L
MKTF-36	9/27/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-36	9/27/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-36	9/27/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-36	9/27/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-36	9/27/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-36	9/27/2017	1-Methylnaphthalene	**270**	100	33	11.38	ug/L
MKTF-36	9/27/2017	Naphthalene	**360**	100	29	30	ug/L
MKTF-36	9/27/2017	2-Methylnaphthalene	**440**	100	33	35.1	ug/L
MKTF-36	9/27/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-36	9/27/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-36	9/27/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-36	9/27/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-36	9/27/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-36	9/27/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-36	9/27/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-36	9/27/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-36	9/27/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-36	9/27/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-36	9/27/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-36	9/27/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-36	9/27/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-36	9/27/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-36	9/27/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-36	9/27/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-36	9/27/2017	Phenol	ND	100	31	5761	ug/L
MKTF-36	9/27/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-36	9/27/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-36	9/27/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-36	9/27/2017	Bis(2-ethylhexyl)phthalate	**210**	100	48	55.64	ug/L
MKTF-36	9/27/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-36	9/27/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-36	9/27/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-36	9/27/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-36	9/27/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-36	9/27/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-36	9/27/2017	Pyrene	ND	100	44	117	ug/L
MKTF-36	9/27/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-36	9/27/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-36	9/27/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-36	9/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/27/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-36	9/27/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-36	9/27/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-36	9/27/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-36	9/27/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-36	9/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-36	9/27/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-36	9/27/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-36	9/27/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-36	9/27/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-36	9/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-36	9/27/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-36	11/30/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-36	11/30/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-36	11/30/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-36	11/30/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-36	11/30/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-36	11/30/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-36	11/30/2017	Benzoic Acid	ND	200	39	75000	ug/L
MKTF-36	11/30/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-36	11/30/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-36	11/30/2017	Isophorone	ND	100	44	781	ug/L
MKTF-36	11/30/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-36	11/30/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-36	11/30/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-36	11/30/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-36	11/30/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-36	11/30/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-36	11/30/2017	Fluorene	ND	100	40	288	ug/L
MKTF-36	11/30/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-36	11/30/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-36	11/30/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-36	11/30/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-36	11/30/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-36	11/30/2017	1-Methylnaphthalene	**290**	100	33	11.38	ug/L
MKTF-36	11/30/2017	Naphthalene	**420**	100	29	30	ug/L
MKTF-36	11/30/2017	2-Methylnaphthalene	**440**	100	33	35.1	ug/L
MKTF-36	11/30/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-36	11/30/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-36	11/30/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-36	11/30/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-36	11/30/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-36	11/30/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-36	11/30/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-36	11/30/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-36	11/30/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-36	11/30/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-36	11/30/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-36	11/30/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-36	11/30/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-36	11/30/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-36	11/30/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-36	11/30/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-36	11/30/2017	Phenol	62	100	31	5761	ug/L
MKTF-36	11/30/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-36	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-36	11/30/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-36	11/30/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-36	11/30/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-36	11/30/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-36	11/30/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-36	11/30/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-36	11/30/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-36	11/30/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-36	11/30/2017	Pyrene	ND	100	44	117	ug/L
MKTF-36	11/30/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-36	11/30/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-36	11/30/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-36	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-36	11/30/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-36	11/30/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-36	11/30/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-36	11/30/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-36	11/30/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-36	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-36	11/30/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-36	11/30/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-36	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-36	11/30/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-36	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-36	11/30/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-36	2/15/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-36	2/15/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-36	2/15/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-36	2/15/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	2/15/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-36	2/15/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-36	2/15/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-36	2/15/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-36	2/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-36	2/15/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-36	2/15/2018	Acenaphthene	9.7	10	3.6	535	ug/L
MKTF-36	2/15/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-36	2/15/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-36	2/15/2018	Phenanthrene	8.6	10	4.3	170	ug/L
MKTF-36	2/15/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-36	2/15/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-36	2/15/2018	Fluorene	14	10	4	288	ug/L
MKTF-36	2/15/2018	Carbazole	8.3	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-36	2/15/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-36	2/15/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-36	2/15/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-36	2/15/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-36	2/15/2018	1-Methylnaphthalene	**310**	100	33	11.38	ug/L
MKTF-36	2/15/2018	Naphthalene	**440**	100	29	30	ug/L
MKTF-36	2/15/2018	2-Methylnaphthalene	**450**	100	33	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-36	2/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-36	2/15/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-36	2/15/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-36	2/15/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-36	2/15/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-36	2/15/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-36	2/15/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-36	2/15/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-36	2/15/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-36	2/15/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-36	2/15/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-36	2/15/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-36	2/15/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-36	2/15/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-36	2/15/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-36	2/15/2018	Phenol	*67*	10	3.1	5761	ug/L
MKTF-36	2/15/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-36	2/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-36	2/15/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-36	2/15/2018	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
MKTF-36	2/15/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-36	2/15/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-36	2/15/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-36	2/15/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-36	2/15/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-36	2/15/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-36	2/15/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-36	2/15/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-36	2/15/2018	Dibenzofuran	4.5	10	4.1	NA	ug/L
MKTF-36	2/15/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-36	2/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-36	2/15/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-36	2/15/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-36	2/15/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-36	2/15/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-36	2/15/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-36	2/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-36	2/15/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-36	2/15/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-36	2/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-36	2/15/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-36	2/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-36	2/15/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-36	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-36	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-36	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-36	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-36	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-36	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-36	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-36	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-36	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-36	5/3/2018	Acenaphthene	7.8	10	5.8	535	ug/L
MKTF-36	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-36	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-36	5/3/2018	Phenanthrene	6.3	10	6	170	ug/L
MKTF-36	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-36	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-36	5/3/2018	Fluorene	10	10	6.3	288	ug/L
MKTF-36	5/3/2018	Carbazole	7.4	10	6.3	NA	ug/L
MKTF-36	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-36	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-36	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-36	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-36	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-36	5/3/2018	1-Methylnaphthalene	**190**	10	7	11.38	ug/L
MKTF-36	5/3/2018	Naphthalene	**330**	20	10	30	ug/L
MKTF-36	5/3/2018	2-Methylnaphthalene	**320**	20	13	35.1	ug/L
MKTF-36	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-36	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-36	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-36	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-36	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-36	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-36	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-36	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-36	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-36	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-36	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-36	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-36	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-36	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-36	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-36	5/3/2018	Phenol	48	10	6	5761	ug/L
MKTF-36	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-36	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-36	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-36	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-36	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-36	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-36	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-36	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-36	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-36	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-36	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-36	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-36	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-36	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-36	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-36	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-36	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-36	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-36	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-36	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-36	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-36	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-36	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-36	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-36	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-36	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-36	9/5/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-36	9/5/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-36	9/5/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-36	9/5/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-36	9/5/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-36	9/5/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-36	9/5/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-36	9/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-36	9/5/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-36	9/5/2018	Acenaphthene	11	10	5.8	535	ug/L
MKTF-36	9/5/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-36	9/5/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-36	9/5/2018	Phenanthrene	10	10	6	170	ug/L
MKTF-36	9/5/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-36	9/5/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-36	9/5/2018	Fluorene	14	10	6.3	288	ug/L
MKTF-36	9/5/2018	Carbazole	8.9	10	6.3	NA	ug/L
MKTF-36	9/5/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-36	9/5/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-36	9/5/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-36	9/5/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-36	9/5/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-36	9/5/2018	1-Methylnaphthalene	**270**	20	14	11.38	ug/L
MKTF-36	9/5/2018	Naphthalene	**420**	20	10	30	ug/L
MKTF-36	9/5/2018	2-Methylnaphthalene	**410**	20	13	35.1	ug/L
MKTF-36	9/5/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-36	9/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-36	9/5/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-36	9/5/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-36	9/5/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-36	9/5/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-36	9/5/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-36	9/5/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-36	9/5/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-36	9/5/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-36	9/5/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-36	9/5/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-36	9/5/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-36	9/5/2018	2,4-Dimethylphenol	9.2	10	5.9	354	ug/L
MKTF-36	9/5/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-36	9/5/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-36	9/5/2018	Phenol	48	10	6	5761	ug/L
MKTF-36	9/5/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-36	9/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-36	9/5/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-36	9/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-36	9/5/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-36	9/5/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-36	9/5/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-36	9/5/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-36	9/5/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-36	9/5/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-36	9/5/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-36	9/5/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-36	9/5/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-36	9/5/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-36	9/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-36	9/5/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-36	9/5/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-36	9/5/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-36	9/5/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-36	9/5/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-36	9/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-36	9/5/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-36	9/5/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-36	9/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-36	9/5/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-36	9/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-36	9/5/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-36	9/18/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-36	9/18/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-36	9/18/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-36	9/18/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-36	9/18/2020	1-Methylnaphthalene	**440**	5	1	11.38	ug/L
MKTF-36	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-36	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-36	9/18/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-36	9/18/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-36	9/18/2020	2,4-Dimethylphenol	100	5	1	354	ug/L
MKTF-36	9/18/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-36	9/18/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-36	9/18/2020	2,6-Dinitrotoluene	*ND*	*2*	1	0.485	ug/L
MKTF-36	9/18/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-36	9/18/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-36	9/18/2020	2-Methylnaphthalene	**780**	5	1	35.1	ug/L
MKTF-36	9/18/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-36	9/18/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	3,4-Methylphenol	240	5	1	NA	ug/L
MKTF-36	9/18/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-36	9/18/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-36	9/18/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-36	9/18/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-36	9/18/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Acenaphthene	12	5	1	535	ug/L
MKTF-36	9/18/2020	Acenaphthylene	3.6	5	1	NA	ug/L
MKTF-36	9/18/2020	Aniline	ND	5	1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-36	9/18/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-36	9/18/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-36	9/18/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-36	9/18/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-36	9/18/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-36	9/18/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-36	9/18/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-36	9/18/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-36	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-36	9/18/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-36	9/18/2020	Bis(2-ethylhexyl)phthalate	4.7	5	2	55.64	ug/L
MKTF-36	9/18/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-36	9/18/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-36	9/18/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-36	9/18/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-36	9/18/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-36	9/18/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-36	9/18/2020	Diethylphthalate	3.1	5	2	14801	ug/L
MKTF-36	9/18/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-36	9/18/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-36	9/18/2020	Fluorene	24	5	1	288	ug/L
MKTF-36	9/18/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-36	9/18/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-36	9/18/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-36	9/18/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-36	9/18/2020	Indeno(1,2,3-cd)pyrene	*ND*	2	1	0.343	ug/L
MKTF-36	9/18/2020	Isophorone	ND	5	1	781	ug/L
MKTF-36	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-36	9/18/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-36	9/18/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-36	9/18/2020	Naphthalene	**810**	5	1	30	ug/L
MKTF-36	9/18/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-36	9/18/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-36	9/18/2020	Phenanthrene	23	5	1	170	ug/L
MKTF-36	9/18/2020	Phenol	770	5	1	5761	ug/L
MKTF-36	9/18/2020	Pyrene	ND	5	1	117	ug/L
MKTF-36	9/18/2020	Pyridine	ND	5	2	20	ug/L
MKTF-37	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-37	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-37	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-37	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-37	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-37	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-37	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-37	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-37	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-37	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-37	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-37	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-37	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-37	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-37	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-37	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-37	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-37	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-37	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-37	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-37	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-37	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-37	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-37	11/21/2014	1-Methylnaphthalene	**50**	10	3.6	11.38	ug/L
MKTF-37	11/21/2014	Naphthalene	**270**	20	4.6	30	ug/L
MKTF-37	11/21/2014	2-Methylnaphthalene	**56**	10	2.6	35.1	ug/L
MKTF-37	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-37	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-37	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-37	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-37	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-37	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-37	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-37	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-37	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-37	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-37	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-37	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-37	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-37	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-37	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-37	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-37	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-37	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-37	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-37	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-37	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-37	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-37	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-37	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-37	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-37	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-37	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-37	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-37	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-37	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-37	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-37	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-37	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-37	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-37	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-37	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-37	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-37	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-37	3/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	3/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	3/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	3/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	3/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	3/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	3/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	3/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	3/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	3/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	3/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	3/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	3/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	3/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	3/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	3/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	3/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	3/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	3/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	3/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	3/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	3/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	3/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	3/17/2015	1-Methylnaphthalene	**72**	10	1.8	11.38	ug/L
MKTF-37	3/17/2015	Naphthalene	**160**	10	1.8	30	ug/L
MKTF-37	3/17/2015	2-Methylnaphthalene	**96**	10	2.2	35.1	ug/L
MKTF-37	3/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	3/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	3/17/2015	2-Methylphenol	33	10	1.2	NA	ug/L
MKTF-37	3/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	3/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	3/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	3/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	3/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	3/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	3/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-37	3/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	3/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	3/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	3/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	3/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	3/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	3/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	3/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	3/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	3/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	3/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	3/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	3/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	3/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	3/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	3/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	3/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	3/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	3/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	3/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	3/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	3/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	3/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	3/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	3/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	3/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	3/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	3/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	3/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	3/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	3/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	3/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	3/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	6/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	6/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	6/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	6/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	6/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	6/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	6/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	6/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	6/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	6/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	6/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	6/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	6/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	6/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	6/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	6/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	6/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	6/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	6/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	6/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	6/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	6/4/2015	1-Methylnaphthalene	**74**	10	1.8	11.38	ug/L
MKTF-37	6/4/2015	Naphthalene	**230**	10	1.8	30	ug/L
MKTF-37	6/4/2015	2-Methylnaphthalene	**110**	10	2.2	35.1	ug/L
MKTF-37	6/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	6/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	6/4/2015	2-Methylphenol	28	10	1.2	NA	ug/L
MKTF-37	6/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	6/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	6/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	6/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	6/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	6/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	6/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	6/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	6/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	6/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	6/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	6/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	6/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	6/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	6/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	6/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	6/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	6/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	6/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	6/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	6/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	6/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	6/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	6/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	6/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	6/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	6/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	6/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	6/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	6/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	6/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	6/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	6/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	6/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	6/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	6/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	6/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	6/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	6/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	8/18/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-37	8/18/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-37	8/18/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-37	8/18/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-37	8/18/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-37	8/18/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-37	8/18/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-37	8/18/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-37	8/18/2015	Isophorone	ND	10	2	781	ug/L
MKTF-37	8/18/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-37	8/18/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-37	8/18/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-37	8/18/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-37	8/18/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-37	8/18/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-37	8/18/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-37	8/18/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-37	8/18/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-37	8/18/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-37	8/18/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-37	8/18/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	1-Methylnaphthalene	**830**	100	18	11.38	ug/L
MKTF-37	8/18/2015	Naphthalene	**1700**	100	18	30	ug/L
MKTF-37	8/18/2015	2-Methylnaphthalene	**1400**	100	22	35.1	ug/L
MKTF-37	8/18/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-37	8/18/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-37	8/18/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-37	8/18/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-37	8/18/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-37	8/18/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-37	8/18/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-37	8/18/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-37	8/18/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-37	8/18/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-37	8/18/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-37	8/18/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-37	8/18/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-37	8/18/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-37	8/18/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-37	8/18/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-37	8/18/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-37	8/18/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-37	8/18/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-37	8/18/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-37	8/18/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-37	8/18/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-37	8/18/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-37	8/18/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-37	8/18/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-37	8/18/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-37	8/18/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-37	8/18/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-37	8/18/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-37	8/18/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-37	8/18/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-37	8/18/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-37	8/18/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-37	8/18/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-37	8/18/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-37	8/18/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-37	8/18/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-37	8/18/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-37	8/18/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-37	8/18/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-37	8/18/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-37	8/18/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-37	11/3/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	11/3/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-37	11/3/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-37	11/3/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-37	11/3/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Aniline	ND	10	2.4	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	11/3/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-37	11/3/2016	Benzoic Acid	19	20	2.6	75000	ug/L
MKTF-37	11/3/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-37	11/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-37	11/3/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-37	11/3/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-37	11/3/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-37	11/3/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-37	11/3/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-37	11/3/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-37	11/3/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-37	11/3/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-37	11/3/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-37	11/3/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-37	11/3/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-37	11/3/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-37	11/3/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	11/3/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-37	11/3/2016	1-Methylnaphthalene	**51**	10	2.9	11.38	ug/L
MKTF-37	11/3/2016	Naphthalene	**200**	10	2.6	30	ug/L
MKTF-37	11/3/2016	2-Methylnaphthalene	**64**	10	2.9	35.1	ug/L
MKTF-37	11/3/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-37	11/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	11/3/2016	2-Methylphenol	12	10	2.5	NA	ug/L
MKTF-37	11/3/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-37	11/3/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-37	11/3/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-37	11/3/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-37	11/3/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-37	11/3/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-37	11/3/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-37	11/3/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-37	11/3/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-37	11/3/2016	1,4-Dichlorobenzene	3.2	10	2.4	75	ug/L
MKTF-37	11/3/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-37	11/3/2016	Phenol	7.4	10	2	5761	ug/L
MKTF-37	11/3/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-37	11/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-37	11/3/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	11/3/2016	Bis(2-ethylhexyl)phthalate	8.4	10	2.6	55.64	ug/L
MKTF-37	11/3/2016	Di-n-octylphthalate	6.9	10	2	200	ug/L
MKTF-37	11/3/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-37	11/3/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	11/3/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-37	11/3/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-37	11/3/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-37	11/3/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-37	11/3/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-37	11/3/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-37	11/3/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-37	11/3/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-37	11/3/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-37	11/3/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-37	11/3/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-37	11/3/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-37	11/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-37	11/3/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-37	11/3/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-37	11/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-37	11/3/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	11/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-37	11/3/2016	3,4-Methylphenol	3.5	10	2.3	NA	ug/L
MKTF-37	3/1/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-37	3/1/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-37	3/1/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-37	3/1/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-37	3/1/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-37	3/1/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-37	3/1/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-37	3/1/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-37	3/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-37	3/1/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-37	3/1/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-37	3/1/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-37	3/1/2017	Di-n-butylphthalate	3.6	10	2.4	885	ug/L
MKTF-37	3/1/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-37	3/1/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-37	3/1/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-37	3/1/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-37	3/1/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-37	3/1/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-37	3/1/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-37	3/1/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-37	3/1/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-37	3/1/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-37	3/1/2017	1-Methylnaphthalene	**420**	50	15	11.38	ug/L
MKTF-37	3/1/2017	Naphthalene	**890**	50	13	30	ug/L
MKTF-37	3/1/2017	2-Methylnaphthalene	**690**	50	14	35.1	ug/L
MKTF-37	3/1/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-37	3/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-37	3/1/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-37	3/1/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-37	3/1/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-37	3/1/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-37	3/1/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-37	3/1/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-37	3/1/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-37	3/1/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-37	3/1/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-37	3/1/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-37	3/1/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-37	3/1/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-37	3/1/2017	Phenol	ND	10	2	5761	ug/L
MKTF-37	3/1/2017	Pyridine	ND	10	2.2	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	3/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-37	3/1/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-37	3/1/2017	Bis(2-ethylhexyl)phthalate	20	10	2.6	55.64	ug/L
MKTF-37	3/1/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-37	3/1/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-37	3/1/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-37	3/1/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-37	3/1/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-37	3/1/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-37	3/1/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-37	3/1/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-37	3/1/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-37	3/1/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-37	3/1/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-37	3/1/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-37	3/1/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-37	3/1/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-37	3/1/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-37	3/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-37	3/1/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-37	3/1/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-37	3/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-37	3/1/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-37	3/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-37	3/1/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-37	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-37	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-37	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-37	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-37	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-37	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-37	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-37	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-37	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-37	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-37	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-37	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-37	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-37	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-37	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-37	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-37	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-37	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-37	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-37	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-37	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-37	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-37	5/3/2018	1-Methylnaphthalene	**88**	10	7	11.38	ug/L
MKTF-37	5/3/2018	Naphthalene	**280**	20	10	30	ug/L
MKTF-37	5/3/2018	2-Methylnaphthalene	**100**	10	6.3	35.1	ug/L
MKTF-37	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-37	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-37	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-37	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-37	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-37	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-37	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-37	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-37	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-37	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-37	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-37	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-37	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-37	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-37	5/3/2018	1,4-Dichlorobenzene	7	10	5.8	75	ug/L
MKTF-37	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-37	5/3/2018	Phenol	23	10	6	5761	ug/L
MKTF-37	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-37	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-37	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-37	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-37	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-37	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-37	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-37	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-37	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-37	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-37	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-37	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-37	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-37	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-37	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-37	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-37	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-37	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-37	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-37	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-37	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-37	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-37	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-37	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-37	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-37	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-37	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-37	8/23/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-37	8/23/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-37	8/23/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-37	8/23/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-37	8/23/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-37	8/23/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-37	8/23/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-37	8/23/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-37	8/23/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-37	8/23/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-37	8/23/2018	Diethylphthalate	ND	10	6.3	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/23/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-37	8/23/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-37	8/23/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-37	8/23/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-37	8/23/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-37	8/23/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-37	8/23/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-37	8/23/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-37	8/23/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-37	8/23/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-37	8/23/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-37	8/23/2018	1-Methylnaphthalene	**68**	10	7	11.38	ug/L
MKTF-37	8/23/2018	Naphthalene	**280**	20	10	30	ug/L
MKTF-37	8/23/2018	2-Methylnaphthalene	**84**	10	6.3	35.1	ug/L
MKTF-37	8/23/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-37	8/23/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-37	8/23/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-37	8/23/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-37	8/23/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-37	8/23/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-37	8/23/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-37	8/23/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-37	8/23/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-37	8/23/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-37	8/23/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-37	8/23/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-37	8/23/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-37	8/23/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-37	8/23/2018	1,4-Dichlorobenzene	6.2	10	5.8	75	ug/L
MKTF-37	8/23/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-37	8/23/2018	Phenol	18	10	6	5761	ug/L
MKTF-37	8/23/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-37	8/23/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-37	8/23/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-37	8/23/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-37	8/23/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-37	8/23/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-37	8/23/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-37	8/23/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-37	8/23/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-37	8/23/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-37	8/23/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-37	8/23/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-37	8/23/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-37	8/23/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-37	8/23/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-37	8/23/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-37	8/23/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-37	8/23/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-37	8/23/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-37	8/23/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-37	8/23/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-37	8/23/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-37	8/23/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-37	8/23/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-37	8/23/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-37	8/23/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-37	8/23/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-37	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-37	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-37	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-37	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-37	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-37	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-37	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-37	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-37	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-37	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-37	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-37	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-37	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-37	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-37	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-37	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-37	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-37	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-37	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-37	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-37	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-37	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-37	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-37	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-37	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-37	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-37	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-37	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-37	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-37	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-37	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-37	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-37	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-37	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-37	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-37	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-37	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-37	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-37	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-37	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-37	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-37	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-37	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-37	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-37	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-37	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-37	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-37	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-37	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-37	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-37	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-37	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-37	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-37	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-37	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-37	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-37	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-37	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-37	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-37	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-37	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-37	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-37	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-37	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-37	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-37	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-37	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-37	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-37	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-37	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-37	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-37	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-37	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-37	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-37	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-37	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-37	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-37	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-37	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-37	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-37	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-37	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-37	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-37	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-37	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-37	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-37	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-37	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-37	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-37	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-37	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-37	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-37	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-37	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-37	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-37	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-37	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-37	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-37	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-37	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-37	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-37	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-37	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-37	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-37	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-37	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-37	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-37	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-37	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-37	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-37	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-37	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-37	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-37	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-37	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-37	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-37	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-37	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-37	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-37	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-37	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-37	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-37	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-37	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-37	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-37	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-37	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-37	9/17/2020	1,2,4-Trichlorobenzene	ND	4.2	0.83	70	ug/L
MKTF-37	9/17/2020	1,2-Dichlorobenzene	ND	4.2	0.83	600	ug/L
MKTF-37	9/17/2020	1,3-Dichlorobenzene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	1,4-Dichlorobenzene	ND	4.2	0.83	75	ug/L
MKTF-37	9/17/2020	1,4-Dioxane	**46**	4.2	0.83	4.59	ug/L
MKTF-37	9/17/2020	1-Methylnaphthalene	**79**	4.2	0.83	11.38	ug/L
MKTF-37	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	4.2	0.83	240	ug/L
MKTF-37	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	2,4,5-Trichlorophenol	ND	4.2	0.83	1166	ug/L
MKTF-37	9/17/2020	2,4,6-Trichlorophenol	ND	4.2	0.83	11.9*	ug/L
MKTF-37	9/17/2020	2,4-Dichlorophenol	ND	4.2	0.83	45.3	ug/L
MKTF-37	9/17/2020	2,4-Dimethylphenol	ND	4.2	0.83	354	ug/L
MKTF-37	9/17/2020	2,4-Dinitrophenol	ND	4.2	0.83	38.7	ug/L
MKTF-37	9/17/2020	2,4-Dinitrotoluene	ND	4.2	0.83	45.3	ug/L
MKTF-37	9/17/2020	2,6-Dinitrotoluene	*ND*	*1.7*	0.83	0.485	ug/L
MKTF-37	9/17/2020	2-Chloronaphthalene	ND	4.2	0.83	733	ug/L
MKTF-37	9/17/2020	2-Chlorophenol	ND	4.2	0.83	91	ug/L
MKTF-37	9/17/2020	2-Methylnaphthalene	**100**	4.2	0.83	35.1	ug/L
MKTF-37	9/17/2020	2-Methylphenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	2-Nitroaniline	ND	4.2	0.83	190	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	2-Nitrophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	3,4-Methylphenol	10	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	3,3-Dichlorobenzidine	*ND*	*4.2*	0.83	1.25	ug/L
MKTF-37	9/17/2020	3-Nitroaniline	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*4.2*	0.83	1.52	ug/L
MKTF-37	9/17/2020	4-Bromophenyl-phenylether	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Chloro-3-Methylphenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Chloroaniline	*ND*	*4.2*	0.83	0.37	ug/L
MKTF-37	9/17/2020	4-Chlorophenyl-phenylether	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	4-Nitroaniline	*ND*	*4.2*	0.83	3.8	ug/L
MKTF-37	9/17/2020	4-Nitrophenol	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Acenaphthene	ND	4.2	0.83	535	ug/L
MKTF-37	9/17/2020	Acenaphthylene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Aniline	ND	4.2	0.83	13	ug/L
MKTF-37	9/17/2020	Anthracene	ND	4.2	0.83	1721	ug/L
MKTF-37	9/17/2020	Benzo(a)anthracene	*ND*	*0.83*	0.42	0.12	ug/L
MKTF-37	9/17/2020	Benzidine	*ND*	*4.2*	2.1	0.0011	ug/L
MKTF-37	9/17/2020	Benzo(a)pyrene	*ND*	*0.83*	0.42	0.2	ug/L
MKTF-37	9/17/2020	Benzo(b)fluoranthene	*ND*	*0.83*	0.42	0.34	ug/L
MKTF-37	9/17/2020	Benzo(g,h,i)perylene	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Benzo(k)fluoranthene	*ND*	*4.2*	0.83	3.43	ug/L
MKTF-37	9/17/2020	Benzoic Acid	ND	4.2	1.7	75000	ug/L
MKTF-37	9/17/2020	Benzyl Alcohol	ND	4.2	1.7	2000	ug/L
MKTF-37	9/17/2020	Bis(2-chloroethoxy)methane	ND	4.2	0.83	59	ug/L
MKTF-37	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*4.2*	0.83	0.137	ug/L
MKTF-37	9/17/2020	Bis(2-chloroisopropyl)ether	ND	4.2	0.83	9.81	ug/L
MKTF-37	9/17/2020	Bis(2-ethylhexyl)phthalate	40	4.2	1.7	55.64	ug/L
MKTF-37	9/17/2020	Butylbenzylphthalate	ND	4.2	0.83	16	ug/L
MKTF-37	9/17/2020	Carbazole	ND	4.2	0.83	NA	ug/L
MKTF-37	9/17/2020	Chrysene	ND	4.2	0.83	34.3	ug/L
MKTF-37	9/17/2020	Di-n-butylphthalate	ND	4.2	1.7	885	ug/L
MKTF-37	9/17/2020	Di-n-octylphthalate	ND	4.2	1.7	200	ug/L
MKTF-37	9/17/2020	Dibenzo(a,h)anthracene	ND	4.2	0.17	NA	ug/L
MKTF-37	9/17/2020	Dibenzofuran	ND	0.25	0.83	NA	ug/L
MKTF-37	9/17/2020	Diethylphthalate	2.2	4.2	1.7	14801	ug/L
MKTF-37	9/17/2020	Dimethylphthalate	ND	4.2	1.7	612	ug/L
MKTF-37	9/17/2020	Fluoranthene	ND	4.2	0.83	802	ug/L
MKTF-37	9/17/2020	Fluorene	ND	4.2	0.83	288	ug/L
MKTF-37	9/17/2020	Hexachlorobenzene	*ND*	*4.2*	0.83	0.0976	ug/L
MKTF-37	9/17/2020	Hexachlorobutadiene	*ND*	*4.2*	0.83	0.14	ug/L
MKTF-37	9/17/2020	Hexachlorocyclopentadiene	*ND*	*4.2*	2.1	0.41	ug/L
MKTF-37	9/17/2020	Hexachloroethane	*ND*	*4.2*	0.83	3.28	ug/L
MKTF-37	9/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1.7*	0.83	0.343	ug/L
MKTF-37	9/17/2020	Isophorone	ND	4.2	0.83	781	ug/L
MKTF-37	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*4.2*	0.83	0.011	ug/L
MKTF-37	9/17/2020	N-Nitrosodimethylamine	*ND*	*4.2*	0.83	0.0049	ug/L
MKTF-37	9/17/2020	N-Nitrosodiphenylamine	ND	4.2	0.83	122	ug/L
MKTF-37	9/17/2020	Naphthalene	**290**	4.2	0.83	30	ug/L
MKTF-37	9/17/2020	Nitrobenzene	*ND*	*4.2*	0.83	1.4	ug/L
MKTF-37	9/17/2020	Pentachlorophenol	*ND*	*4.2*	1.7	1	ug/L
MKTF-37	9/17/2020	Phenanthrene	ND	4.2	0.83	170	ug/L
MKTF-37	9/17/2020	Phenol	21	4.2	0.83	5761	ug/L
MKTF-37	9/17/2020	Pyrene	ND	4.2	0.83	117	ug/L
MKTF-37	9/17/2020	Pyridine	ND	4.2	1.7	20	ug/L
MKTF-38	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-38	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-38	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-38	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-38	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-38	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-38	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-38	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-38	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-38	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-38	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-38	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-38	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-38	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-38	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-38	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-38	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-38	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-38	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-38	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-38	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-38	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-38	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-38	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-38	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-38	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-38	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-38	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-38	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-38	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-38	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-38	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-38	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-38	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-38	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-38	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-38	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-38	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-38	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-38	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-38	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-38	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-38	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-38	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-38	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-38	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-38	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-38	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-38	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-38	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-38	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-38	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-38	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-38	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-38	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-38	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-38	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-38	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-38	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-38	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-38	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-38	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-38	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	3/16/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	3/16/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	3/16/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	8/24/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	8/24/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	8/24/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	8/24/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	8/24/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	8/24/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	8/24/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	8/24/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	8/24/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	8/24/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	8/24/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	8/24/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	8/24/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	8/24/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	8/24/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	8/24/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	8/24/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	8/24/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	8/24/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	8/24/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	8/24/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	8/24/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	8/24/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	8/24/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	8/24/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	8/24/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	8/24/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	8/24/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	8/24/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	8/24/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	8/24/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	8/24/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	8/24/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	8/24/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	8/24/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	8/24/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	8/24/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	8/24/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	8/24/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	8/24/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	8/24/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	8/24/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	8/24/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	8/24/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	8/24/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	8/24/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	8/24/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	8/24/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	8/24/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	8/24/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	8/24/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	8/24/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	8/24/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	8/24/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	8/24/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	8/24/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	8/24/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	8/24/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	8/24/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/24/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	8/24/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	8/24/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	8/24/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	8/24/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	8/24/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	8/24/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	8/24/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-38	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-38	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-38	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-38	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-38	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-38	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-38	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-38	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-38	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-38	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-38	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-38	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-38	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-38	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-38	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-38	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-38	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-38	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-38	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-38	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-38	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-38	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-38	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-38	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-38	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-38	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-38	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-38	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-38	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-38	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-38	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-38	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-38	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-38	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-38	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-38	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-38	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-38	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-38	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-38	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-38	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-38	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-38	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-38	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-38	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-38	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-38	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-38	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-38	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-38	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-38	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-38	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-38	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-38	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-38	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-38	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-38	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-38	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-38	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-38	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-38	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-38	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-38	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-38	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-38	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-38	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-38	2/29/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-38	2/29/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-38	2/29/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-38	2/29/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-38	2/29/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-38	2/29/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-38	2/29/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-38	2/29/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-38	2/29/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-38	2/29/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-38	2/29/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-38	2/29/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-38	2/29/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-38	2/29/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-38	2/29/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-38	2/29/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-38	2/29/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-38	2/29/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-38	2/29/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-38	2/29/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-38	2/29/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-38	2/29/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-38	2/29/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-38	2/29/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-38	2/29/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-38	2/29/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-38	2/29/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-38	2/29/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-38	2/29/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-38	2/29/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-38	2/29/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-38	2/29/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-38	2/29/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-38	2/29/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-38	2/29/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-38	2/29/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-38	2/29/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-38	2/29/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-38	2/29/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-38	2/29/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-38	2/29/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-38	2/29/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-38	2/29/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-38	2/29/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-38	2/29/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-38	2/29/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-38	2/29/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-38	2/29/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	2/29/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-38	2/29/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-38	2/29/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-38	2/29/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-38	2/29/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-38	2/29/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-38	2/29/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-38	2/29/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-38	2/29/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-38	2/29/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-38	2/29/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-38	2/29/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-38	2/29/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-38	2/29/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-38	2/29/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-38	2/29/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-38	2/29/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-38	2/29/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-38	2/29/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-38	2/29/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-38	2/29/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-38	2/29/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-38	6/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	6/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	6/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	6/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	6/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	6/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	6/8/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-38	6/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	6/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	6/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	6/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	6/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	6/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	6/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	6/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	6/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	6/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	6/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	6/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	6/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	6/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	6/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	6/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	6/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	6/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	6/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	6/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	6/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	6/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	6/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	6/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	6/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	6/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	6/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	6/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	6/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	6/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	6/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	6/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	6/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	6/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	6/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	6/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	6/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-38	6/8/2016	Di-n-octylphthalate	5	10	2	200	ug/L
MKTF-38	6/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	6/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	6/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	6/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	6/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	6/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	6/8/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	6/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	6/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	6/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	6/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	6/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	6/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	6/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	6/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	6/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	6/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	9/13/2016	Benzoic Acid	4.6	20	2.6	75000	ug/L
MKTF-38	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	9/13/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	9/13/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	9/13/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	9/13/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	9/13/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	9/13/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	9/13/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-38	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-38	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	9/13/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-38	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	11/1/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
MKTF-38	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	11/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	11/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	11/1/2016	Butylbenzylphthalate	2.7	10	2.5	16	ug/L
MKTF-38	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	11/1/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	11/1/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	11/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	11/1/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	11/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-38	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	11/1/2016	Bis(2-ethylhexyl)phthalate	6.4	10	2.6	55.64	ug/L
MKTF-38	11/1/2016	Di-n-octylphthalate	7.8	10	2	200	ug/L
MKTF-38	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	11/1/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	11/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-38	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-38	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-38	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-38	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-38	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-38	3/14/2017	Benzoic Acid	7.5	20	2.6	75000	ug/L
MKTF-38	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-38	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-38	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-38	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-38	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-38	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-38	3/14/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-38	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-38	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-38	3/14/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-38	3/14/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-38	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-38	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-38	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-38	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-38	3/14/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-38	3/14/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-38	3/14/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-38	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-38	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-38	3/14/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-38	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-38	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-38	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-38	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-38	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-38	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-38	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-38	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-38	3/14/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-38	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-38	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-38	3/14/2017	Phenol	ND	10	2	5761	ug/L
MKTF-38	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-38	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-38	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-38	3/14/2017	Bis(2-ethylhexyl)phthalate	7.4	10	2.6	55.64	ug/L
MKTF-38	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-38	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-38	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-38	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-38	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-38	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-38	3/14/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-38	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-38	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-38	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-38	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-38	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-38	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-38	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-38	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-38	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-38	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-38	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-38	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-38	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-38	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-38	3/14/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-38	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	6/21/2017	Aniline	ND	10	3.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	6/21/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
MKTF-38	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	6/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	6/21/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
MKTF-38	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	9/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	9/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	9/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	9/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	9/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-38	9/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	9/28/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-38	9/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	9/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	9/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	9/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	9/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	9/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	9/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	9/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	9/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	9/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	9/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	9/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	9/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	9/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	9/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	9/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	9/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	9/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	9/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	9/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	9/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	9/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	9/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	9/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	9/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	9/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	9/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	9/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	9/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	9/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	9/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	9/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	9/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	9/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	9/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	9/28/2017	Pyridine	ND	10	2.3	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	9/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	9/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	9/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	9/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	9/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	9/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	9/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	9/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	9/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	9/28/2017	Dimethylphthalate	6.2	10	3.6	612	ug/L
MKTF-38	9/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	9/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	9/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	9/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	9/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	9/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	9/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	9/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	9/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	9/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	9/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	11/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	11/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	11/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	11/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	11/30/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-38	11/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	11/30/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-38	11/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	11/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	11/30/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	11/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	11/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-38	11/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	11/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	11/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	11/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	11/30/2017	Fluorene	ND	10	4	288	ug/L
MKTF-38	11/30/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	11/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	11/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	11/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	11/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	11/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	11/30/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	11/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	11/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	11/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	11/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	11/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	11/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	11/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	11/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	11/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	11/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	11/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	11/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	11/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	11/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	11/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	11/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	11/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	11/30/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	11/30/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	11/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	11/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	11/30/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	11/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	11/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	11/30/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	11/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	11/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	11/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	11/30/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	11/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	11/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	11/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	11/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	11/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	11/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	11/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	11/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	11/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	11/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	11/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	11/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	11/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	11/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	11/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	11/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	2/12/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-38	2/12/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-38	2/12/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-38	2/12/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	2/12/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-38	2/12/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-38	2/12/2018	Benzoic Acid	8.1	20	3.9	75000	ug/L
MKTF-38	2/12/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-38	2/12/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-38	2/12/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-38	2/12/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-38	2/12/2018	Diethylphthalate	ND	10	4	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/12/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-38	2/12/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-38	2/12/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-38	2/12/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-38	2/12/2018	Fluorene	ND	10	4	288	ug/L
MKTF-38	2/12/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-38	2/12/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-38	2/12/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-38	2/12/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-38	2/12/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-38	2/12/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-38	2/12/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-38	2/12/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-38	2/12/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-38	2/12/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-38	2/12/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-38	2/12/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-38	2/12/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-38	2/12/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-38	2/12/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-38	2/12/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-38	2/12/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-38	2/12/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-38	2/12/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-38	2/12/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-38	2/12/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-38	2/12/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-38	2/12/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-38	2/12/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-38	2/12/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-38	2/12/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-38	2/12/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-38	2/12/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-38	2/12/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-38	2/12/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-38	2/12/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-38	2/12/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-38	2/12/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-38	2/12/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-38	2/12/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-38	2/12/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-38	2/12/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-38	2/12/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-38	2/12/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-38	2/12/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-38	2/12/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-38	2/12/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-38	2/12/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-38	2/12/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-38	2/12/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-38	2/12/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-38	2/12/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-38	2/12/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-38	2/12/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-38	2/12/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-38	2/12/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-38	2/12/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-38	5/3/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-38	5/3/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-38	5/3/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-38	5/3/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-38	5/3/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-38	5/3/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-38	5/3/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-38	5/3/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-38	5/3/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-38	5/3/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-38	5/3/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-38	5/3/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-38	5/3/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-38	5/3/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-38	5/3/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-38	5/3/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-38	5/3/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-38	5/3/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-38	5/3/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-38	5/3/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-38	5/3/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-38	5/3/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-38	5/3/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-38	5/3/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-38	5/3/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-38	5/3/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-38	5/3/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-38	5/3/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	5/3/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-38	5/3/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-38	5/3/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-38	5/3/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-38	5/3/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-38	5/3/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-38	5/3/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-38	5/3/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-38	5/3/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-38	5/3/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-38	5/3/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-38	5/3/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-38	5/3/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-38	5/3/2018	Phenol	ND	10	6	5761	ug/L
MKTF-38	5/3/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-38	5/3/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-38	5/3/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-38	5/3/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-38	5/3/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	5/3/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-38	5/3/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-38	5/3/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-38	5/3/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-38	5/3/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-38	5/3/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-38	5/3/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-38	5/3/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-38	5/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-38	5/3/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-38	5/3/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-38	5/3/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-38	5/3/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-38	5/3/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-38	5/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-38	5/3/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-38	5/3/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-38	5/3/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-38	5/3/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-38	5/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-38	5/3/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-38	8/21/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-38	8/21/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-38	8/21/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-38	8/21/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-38	8/21/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-38	8/21/2018	Benzoic Acid	8.6	20	6.3	75000	ug/L
MKTF-38	8/21/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-38	8/21/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-38	8/21/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-38	8/21/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-38	8/21/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-38	8/21/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-38	8/21/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-38	8/21/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-38	8/21/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-38	8/21/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-38	8/21/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-38	8/21/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-38	8/21/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-38	8/21/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-38	8/21/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-38	8/21/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-38	8/21/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-38	8/21/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-38	8/21/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-38	8/21/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-38	8/21/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-38	8/21/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-38	8/21/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-38	8/21/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-38	8/21/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-38	8/21/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-38	8/21/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-38	8/21/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-38	8/21/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-38	8/21/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-38	8/21/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-38	8/21/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-38	8/21/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-38	8/21/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-38	8/21/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-38	8/21/2018	Phenol	ND	10	6	5761	ug/L
MKTF-38	8/21/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-38	8/21/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-38	8/21/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-38	8/21/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-38	8/21/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-38	8/21/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-38	8/21/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-38	8/21/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-38	8/21/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-38	8/21/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-38	8/21/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-38	8/21/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-38	8/21/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-38	8/21/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-38	8/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-38	8/21/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-38	8/21/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-38	8/21/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-38	8/21/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-38	8/21/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-38	8/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-38	8/21/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-38	8/21/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-38	8/21/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-38	8/21/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-38	8/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-38	8/21/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-38	11/20/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-38	11/20/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-38	11/20/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-38	11/20/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-38	11/20/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-38	11/20/2018	Benzoic Acid	ND	200	63	75000	ug/L
MKTF-38	11/20/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-38	11/20/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-38	11/20/2018	Isophorone	ND	100	62	781	ug/L
MKTF-38	11/20/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-38	11/20/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-38	11/20/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-38	11/20/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-38	11/20/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-38	11/20/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-38	11/20/2018	Fluorene	ND	100	63	288	ug/L
MKTF-38	11/20/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-38	11/20/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/20/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-38	11/20/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-38	11/20/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-38	11/20/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-38	11/20/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
MKTF-38	11/20/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-38	11/20/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
MKTF-38	11/20/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-38	11/20/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-38	11/20/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-38	11/20/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-38	11/20/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-38	11/20/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-38	11/20/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-38	11/20/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-38	11/20/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-38	11/20/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-38	11/20/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-38	11/20/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-38	11/20/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-38	11/20/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-38	11/20/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-38	11/20/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-38	11/20/2018	Phenol	ND	100	60	5761	ug/L
MKTF-38	11/20/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-38	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-38	11/20/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-38	11/20/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-38	11/20/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-38	11/20/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-38	11/20/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-38	11/20/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-38	11/20/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-38	11/20/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-38	11/20/2018	Pyrene	ND	100	65	117	ug/L
MKTF-38	11/20/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-38	11/20/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-38	11/20/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-38	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-38	11/20/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-38	11/20/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-38	11/20/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-38	11/20/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-38	11/20/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-38	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-38	11/20/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-38	11/20/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-38	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-38	11/20/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-38	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-38	11/20/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-38	6/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-38	6/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-38	6/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-38	6/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-38	6/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-38	6/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-38	6/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-38	6/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-38	6/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-38	6/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-38	6/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-38	6/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-38	6/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-38	6/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-38	6/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-38	6/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-38	6/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-38	6/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-38	6/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-38	6/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-38	6/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-38	6/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-38	6/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-38	6/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-38	6/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-38	6/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-38	6/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-38	6/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-38	6/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-38	6/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-38	6/27/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-38	6/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-38	6/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-38	6/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-38	6/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-38	6/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-38	6/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-38	6/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-38	6/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-38	6/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-38	6/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-38	6/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-38	6/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-38	6/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-38	6/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-38	6/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-38	6/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-38	6/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-38	6/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-38	6/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-38	6/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-38	6/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-38	6/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-38	6/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-38	6/27/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-38	6/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-38	6/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-38	6/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-38	6/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-38	6/27/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-38	6/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-38	6/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-38	6/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-38	6/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-38	6/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-38	6/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-38	6/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-38	6/27/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-38	6/27/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-38	6/27/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-38	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-38	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-38	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-38	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-38	8/20/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-38	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-38	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-38	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-38	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-38	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-38	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-38	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-38	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-38	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-38	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-38	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-38	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-38	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-38	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-38	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-38	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-38	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-38	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-38	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-38	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-38	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-38	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-38	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-38	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-38	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-38	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-38	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-38	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-38	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-38	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-38	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-38	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-38	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-38	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-38	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-38	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-38	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-38	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-38	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-38	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-38	8/20/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-38	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-38	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-38	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-38	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-38	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-38	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-38	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-38	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-38	8/20/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-38	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-38	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-38	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-38	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-38	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-38	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-38	8/20/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-38	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-38	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-38	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-38	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-38	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-38	8/20/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-38	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-38	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-38	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-38	3/5/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-38	3/5/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-38	3/5/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-38	3/5/2020	1,4-Dioxane	1.1	1	0.2	4.59	ug/L
MKTF-38	3/5/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-38	3/5/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-38	3/5/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-38	3/5/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-38	3/5/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-38	3/5/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-38	3/5/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-38	3/5/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-38	3/5/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-38	3/5/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-38	3/5/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-38	3/5/2020	2-Methylphenol	120	10	2	NA	ug/L
MKTF-38	3/5/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-38	3/5/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	3,4-Methylphenol	8.8	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-38	3/5/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-38	3/5/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	3/5/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-38	3/5/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-38	3/5/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-38	3/5/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-38	3/5/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-38	3/5/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-38	3/5/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-38	3/5/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-38	3/5/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-38	3/5/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-38	3/5/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-38	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-38	3/5/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-38	3/5/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-38	3/5/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-38	3/5/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-38	3/5/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-38	3/5/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-38	3/5/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-38	3/5/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-38	3/5/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-38	3/5/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-38	3/5/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-38	3/5/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-38	3/5/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-38	3/5/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-38	3/5/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-38	3/5/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-38	3/5/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-38	3/5/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-38	3/5/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-38	3/5/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-38	3/5/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-38	3/5/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-38	3/5/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-38	3/5/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-38	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-38	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-38	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-38	9/19/2020	1,4-Dioxane	1.2	0.51	0.1	4.59	ug/L
MKTF-38	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-38	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-38	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-38	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-38	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-38	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-38	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-38	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-38	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-38	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-38	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-38	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-38	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-38	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-38	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-38	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-38	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-38	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-38	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-38	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-38	9/19/2020	Benzo(a)anthracene	*ND*	*0.51*	0.1	0.12	ug/L
MKTF-38	9/19/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-38	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-38	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-38	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Benzo(k)fluoranthene	ND	0.1	0.051	3.43	ug/L
MKTF-38	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-38	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-38	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-38	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-38	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-38	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-38	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-38	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-38	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-38	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-38	9/19/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-38	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-38	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-38	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-38	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-38	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-38	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-38	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-38	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MKTF-38	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-38	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-38	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-38	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-38	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-38	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-38	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-38	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-38	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-38	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-38	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-38	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-39	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-39	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-39	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-39	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-39	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-39	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-39	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-39	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-39	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-39	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-39	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-39	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-39	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-39	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-39	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-39	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-39	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-39	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-39	11/18/2014	Carbazole	21	10	2.9	NA	ug/L
MKTF-39	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-39	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-39	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-39	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-39	11/18/2014	1-Methylnaphthalene	**79**	10	3.6	11.38	ug/L
MKTF-39	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-39	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-39	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-39	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-39	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-39	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-39	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-39	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-39	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-39	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-39	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-39	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-39	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-39	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-39	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-39	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-39	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-39	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	11/18/2014	Bis(2-ethylhexyl)phthalate	12	10	3	55.64	ug/L
MKTF-39	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-39	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-39	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-39	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-39	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-39	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-39	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-39	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-39	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-39	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-39	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-39	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-39	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-39	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-39	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-39	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-39	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-39	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-39	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-39	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-39	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-39	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-39	3/16/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	3/16/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	3/16/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	3/16/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	3/16/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	3/16/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	3/16/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	3/16/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	3/16/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	3/16/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	3/16/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	3/16/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	3/16/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	3/16/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	3/16/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	3/16/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	3/16/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	3/16/2015	Carbazole	11	10	1.5	NA	ug/L
MKTF-39	3/16/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	3/16/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	3/16/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	3/16/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	3/16/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	3/16/2015	1-Methylnaphthalene	**56**	10	1.8	11.38	ug/L
MKTF-39	3/16/2015	Naphthalene	20	10	1.8	30	ug/L
MKTF-39	3/16/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-39	3/16/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	3/16/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	3/16/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	3/16/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	3/16/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	3/16/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	3/16/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	3/16/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/16/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	3/16/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	3/16/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	3/16/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	3/16/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	3/16/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	3/16/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	3/16/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	3/16/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	3/16/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	3/16/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	3/16/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	3/16/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	3/16/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	3/16/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	3/16/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	3/16/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	3/16/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	3/16/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	3/16/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	3/16/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	3/16/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	3/16/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	3/16/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	3/16/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	3/16/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	3/16/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	3/16/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	3/16/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	3/16/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	3/16/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	3/16/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	3/16/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	3/16/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	3/16/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	6/10/2015	Phenanthrene	14	10	2	170	ug/L
MKTF-39	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	6/10/2015	Fluorene	13	10	1.7	288	ug/L
MKTF-39	6/10/2015	Carbazole	26	10	1.5	NA	ug/L
MKTF-39	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	6/10/2015	1-Methylnaphthalene	**140**	10	1.8	11.38	ug/L
MKTF-39	6/10/2015	Naphthalene	**64**	10	1.8	30	ug/L
MKTF-39	6/10/2015	2-Methylnaphthalene	**43**	10	2.2	35.1	ug/L
MKTF-39	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	8/23/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	8/23/2015	Carbazole	25	10	1.5	NA	ug/L
MKTF-39	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	8/23/2015	1-Methylnaphthalene	**84**	10	1.8	11.38	ug/L
MKTF-39	8/23/2015	Naphthalene	**51**	10	1.8	30	ug/L
MKTF-39	8/23/2015	2-Methylnaphthalene	21	10	2.2	35.1	ug/L
MKTF-39	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	8/23/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	8/23/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-39	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	8/23/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	8/23/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-39	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-39	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-39	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-39	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-39	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-39	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-39	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-39	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-39	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-39	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-39	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-39	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-39	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-39	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-39	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-39	11/9/2015	Carbazole	21	10	1.5	NA	ug/L
MKTF-39	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-39	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-39	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-39	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-39	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-39	11/9/2015	1-Methylnaphthalene	**89**	10	1.8	11.38	ug/L
MKTF-39	11/9/2015	Naphthalene	**62**	10	1.8	30	ug/L
MKTF-39	11/9/2015	2-Methylnaphthalene	32	10	2.2	35.1	ug/L
MKTF-39	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-39	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-39	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-39	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-39	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-39	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-39	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-39	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-39	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-39	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-39	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-39	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-39	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-39	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-39	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-39	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-39	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-39	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-39	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-39	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-39	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-39	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-39	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-39	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-39	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-39	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-39	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-39	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-39	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-39	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-39	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-39	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-39	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-39	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-39	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-39	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-39	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-39	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-39	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-39	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-39	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-39	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-39	3/3/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-39	3/3/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-39	3/3/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-39	3/3/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-39	3/3/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-39	3/3/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-39	3/3/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-39	3/3/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-39	3/3/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-39	3/3/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-39	3/3/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-39	3/3/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-39	3/3/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-39	3/3/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-39	3/3/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-39	3/3/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-39	3/3/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-39	3/3/2016	Fluorene	10	10	7.2	288	ug/L
MKTF-39	3/3/2016	Carbazole	28	10	7.2	NA	ug/L
MKTF-39	3/3/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-39	3/3/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-39	3/3/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-39	3/3/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-39	3/3/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-39	3/3/2016	1-Methylnaphthalene	**110**	10	6.8	11.38	ug/L
MKTF-39	3/3/2016	Naphthalene	**45**	10	5.9	30	ug/L
MKTF-39	3/3/2016	2-Methylnaphthalene	**37**	10	7	35.1	ug/L
MKTF-39	3/3/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-39	3/3/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-39	3/3/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-39	3/3/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-39	3/3/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-39	3/3/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-39	3/3/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-39	3/3/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-39	3/3/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-39	3/3/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-39	3/3/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-39	3/3/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-39	3/3/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-39	3/3/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-39	3/3/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-39	3/3/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-39	3/3/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-39	3/3/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-39	3/3/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-39	3/3/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-39	3/3/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-39	3/3/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	3/3/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-39	3/3/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-39	3/3/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-39	3/3/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-39	3/3/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-39	3/3/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-39	3/3/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-39	3/3/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-39	3/3/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-39	3/3/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-39	3/3/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-39	3/3/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-39	3/3/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-39	3/3/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-39	3/3/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-39	3/3/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-39	3/3/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-39	3/3/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-39	3/3/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-39	3/3/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-39	3/3/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-39	3/3/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-39	6/8/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-39	6/8/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-39	6/8/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-39	6/8/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-39	6/8/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-39	6/8/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-39	6/8/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-39	6/8/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2016	Isophorone	ND	50	13	781	ug/L
MKTF-39	6/8/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-39	6/8/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-39	6/8/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-39	6/8/2016	Phenanthrene	13	50	13	170	ug/L
MKTF-39	6/8/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-39	6/8/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-39	6/8/2016	Fluorene	ND	50	14	288	ug/L
MKTF-39	6/8/2016	Carbazole	26	50	11	NA	ug/L
MKTF-39	6/8/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-39	6/8/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-39	6/8/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-39	6/8/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-39	6/8/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	1-Methylnaphthalene	**110**	50	15	11.38	ug/L
MKTF-39	6/8/2016	Naphthalene	**49**	50	13	30	ug/L
MKTF-39	6/8/2016	2-Methylnaphthalene	**42**	50	14	35.1	ug/L
MKTF-39	6/8/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-39	6/8/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-39	6/8/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-39	6/8/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-39	6/8/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-39	6/8/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-39	6/8/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-39	6/8/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-39	6/8/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-39	6/8/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-39	6/8/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-39	6/8/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-39	6/8/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-39	6/8/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-39	6/8/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-39	6/8/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-39	6/8/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-39	6/8/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
MKTF-39	6/8/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
MKTF-39	6/8/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-39	6/8/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-39	6/8/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-39	6/8/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-39	6/8/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-39	6/8/2016	Pyrene	ND	50	15	117	ug/L
MKTF-39	6/8/2016	Dimethylphthalate	14	50	12	612	ug/L
MKTF-39	6/8/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-39	6/8/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-39	6/8/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-39	6/8/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-39	6/8/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-39	6/8/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-39	6/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-39	6/8/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-39	6/8/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-39	6/8/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-39	6/8/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-39	6/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-39	6/8/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-39	9/13/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	9/13/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	9/13/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	9/13/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	9/13/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-39	9/13/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	9/13/2016	Benzoic Acid	12	20	2.6	75000	ug/L
MKTF-39	9/13/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	9/13/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	9/13/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	9/13/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-39	9/13/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	9/13/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	9/13/2016	Phenanthrene	6.7	10	2.6	170	ug/L
MKTF-39	9/13/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	9/13/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-39	9/13/2016	Fluorene	7.8	10	2.7	288	ug/L
MKTF-39	9/13/2016	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	9/13/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	9/13/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	9/13/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	9/13/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	9/13/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	9/13/2016	1-Methylnaphthalene	**77**	10	2.9	11.38	ug/L
MKTF-39	9/13/2016	Naphthalene	**44**	10	2.6	30	ug/L
MKTF-39	9/13/2016	2-Methylnaphthalene	28	10	2.9	35.1	ug/L
MKTF-39	9/13/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	9/13/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	9/13/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	9/13/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	9/13/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	9/13/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	9/13/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	9/13/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	9/13/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	9/13/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	9/13/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	9/13/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	9/13/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	9/13/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	9/13/2016	Phenol	ND	10	2	5761	ug/L
MKTF-39	9/13/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	9/13/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	9/13/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	9/13/2016	Bis(2-ethylhexyl)phthalate	2.6	10	2.6	55.64	ug/L
MKTF-39	9/13/2016	Di-n-octylphthalate	ND	10	2	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/13/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	9/13/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	9/13/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	9/13/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	9/13/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	9/13/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-39	9/13/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	9/13/2016	Dibenzofuran	2.6	10	2.5	NA	ug/L
MKTF-39	9/13/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	9/13/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	9/13/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	9/13/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	9/13/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	9/13/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	9/13/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	9/13/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	9/13/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	9/13/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	9/13/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	9/13/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	9/13/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	11/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	11/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	11/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	11/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	11/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-39	11/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	11/1/2016	Benzoic Acid	16	20	2.6	75000	ug/L
MKTF-39	11/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	11/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	11/1/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	11/1/2016	Acenaphthene	2.6	10	2.6	535	ug/L
MKTF-39	11/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	11/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	11/1/2016	Phenanthrene	7.4	10	2.6	170	ug/L
MKTF-39	11/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	11/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-39	11/1/2016	Fluorene	8.6	10	2.7	288	ug/L
MKTF-39	11/1/2016	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	11/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	11/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	11/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	11/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	11/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	11/1/2016	1-Methylnaphthalene	**98**	10	2.9	11.38	ug/L
MKTF-39	11/1/2016	Naphthalene	**54**	10	2.6	30	ug/L
MKTF-39	11/1/2016	2-Methylnaphthalene	**39**	10	2.9	35.1	ug/L
MKTF-39	11/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	11/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	11/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	11/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	11/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	11/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	11/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	11/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	11/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	11/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	11/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	11/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	11/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	11/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	11/1/2016	Phenol	ND	10	2	5761	ug/L
MKTF-39	11/1/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	11/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	11/1/2016	Bis(2-ethylhexyl)phthalate	6.7	10	2.6	55.64	ug/L
MKTF-39	11/1/2016	Di-n-octylphthalate	7	10	2	200	ug/L
MKTF-39	11/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	11/1/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	11/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	11/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	11/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	11/1/2016	Pyrene	4.8	10	3.1	117	ug/L
MKTF-39	11/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	11/1/2016	Dibenzofuran	3.2	10	2.5	NA	ug/L
MKTF-39	11/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	11/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	11/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	11/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	11/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	11/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	11/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	11/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	11/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	11/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	3/14/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-39	3/14/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-39	3/14/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-39	3/14/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-39	3/14/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-39	3/14/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-39	3/14/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-39	3/14/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-39	3/14/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-39	3/14/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-39	3/14/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-39	3/14/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-39	3/14/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-39	3/14/2017	Phenanthrene	14	10	2.6	170	ug/L
MKTF-39	3/14/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-39	3/14/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/14/2017	Fluorene	10	10	2.7	288	ug/L
MKTF-39	3/14/2017	Carbazole	16	10	2.3	NA	ug/L
MKTF-39	3/14/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-39	3/14/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-39	3/14/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-39	3/14/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-39	3/14/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-39	3/14/2017	1-Methylnaphthalene	**130**	10	2.9	11.38	ug/L
MKTF-39	3/14/2017	Naphthalene	**65**	10	2.6	30	ug/L
MKTF-39	3/14/2017	2-Methylnaphthalene	**59**	10	2.9	35.1	ug/L
MKTF-39	3/14/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-39	3/14/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-39	3/14/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-39	3/14/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-39	3/14/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-39	3/14/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-39	3/14/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-39	3/14/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-39	3/14/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-39	3/14/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-39	3/14/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-39	3/14/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-39	3/14/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-39	3/14/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-39	3/14/2017	Phenol	ND	10	2	5761	ug/L
MKTF-39	3/14/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-39	3/14/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-39	3/14/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-39	3/14/2017	Bis(2-ethylhexyl)phthalate	7.2	10	2.6	55.64	ug/L
MKTF-39	3/14/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-39	3/14/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-39	3/14/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-39	3/14/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-39	3/14/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-39	3/14/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-39	3/14/2017	Pyrene	4	10	3.1	117	ug/L
MKTF-39	3/14/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-39	3/14/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-39	3/14/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-39	3/14/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-39	3/14/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-39	3/14/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-39	3/14/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-39	3/14/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-39	3/14/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-39	3/14/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-39	3/14/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-39	3/14/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-39	3/14/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-39	3/14/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-39	3/14/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-39	6/8/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-39	6/8/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-39	6/8/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-39	6/8/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-39	6/8/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-39	6/8/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-39	6/8/2017	Benzoic Acid	ND	100	20	75000	ug/L
MKTF-39	6/8/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-39	6/8/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-39	6/8/2017	Isophorone	ND	50	22	781	ug/L
MKTF-39	6/8/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-39	6/8/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-39	6/8/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-39	6/8/2017	Phenanthrene	74	50	22	170	ug/L
MKTF-39	6/8/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-39	6/8/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-39	6/8/2017	Fluorene	41	50	20	288	ug/L
MKTF-39	6/8/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-39	6/8/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-39	6/8/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-39	6/8/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-39	6/8/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-39	6/8/2017	1-Methylnaphthalene	**360**	50	17	11.38	ug/L
MKTF-39	6/8/2017	Naphthalene	**98**	50	14	30	ug/L
MKTF-39	6/8/2017	2-Methylnaphthalene	**110**	50	16	35.1	ug/L
MKTF-39	6/8/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-39	6/8/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-39	6/8/2017	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-39	6/8/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-39	6/8/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-39	6/8/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-39	6/8/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-39	6/8/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-39	6/8/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-39	6/8/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-39	6/8/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-39	6/8/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-39	6/8/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-39	6/8/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
MKTF-39	6/8/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-39	6/8/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-39	6/8/2017	Phenol	ND	50	16	5761	ug/L
MKTF-39	6/8/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-39	6/8/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-39	6/8/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-39	6/8/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-39	6/8/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
MKTF-39	6/8/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-39	6/8/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-39	6/8/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-39	6/8/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-39	6/8/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-39	6/8/2017	Pyrene	ND	50	22	117	ug/L
MKTF-39	6/8/2017	Dimethylphthalate	ND	50	18	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-39	6/8/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-39	6/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-39	6/8/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-39	6/8/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-39	6/8/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-39	6/8/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-39	6/8/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-39	6/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-39	6/8/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-39	6/8/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-39	6/8/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-39	6/8/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-39	6/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-39	6/8/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-39	9/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-39	9/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-39	9/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-39	9/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-39	9/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-39	9/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-39	9/28/2017	Benzoic Acid	69	200	39	75000	ug/L
MKTF-39	9/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-39	9/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-39	9/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-39	9/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-39	9/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-39	9/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-39	9/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-39	9/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-39	9/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-39	9/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-39	9/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-39	9/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-39	9/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-39	9/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-39	9/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L
MKTF-39	9/28/2017	1-Methylnaphthalene	**170**	100	33	11.38	ug/L
MKTF-39	9/28/2017	Naphthalene	**51**	100	29	30	ug/L
MKTF-39	9/28/2017	2-Methylnaphthalene	**48**	100	33	35.1	ug/L
MKTF-39	9/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-39	9/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-39	9/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-39	9/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-39	9/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-39	9/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-39	9/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-39	9/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-39	9/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-39	9/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-39	9/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-39	9/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-39	9/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-39	9/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-39	9/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-39	9/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-39	9/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-39	9/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-39	9/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-39	9/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-39	9/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-39	9/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-39	9/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-39	9/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-39	9/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-39	9/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-39	9/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-39	9/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-39	9/28/2017	Dimethylphthalate	51	100	36	612	ug/L
MKTF-39	9/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-39	9/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-39	9/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-39	9/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-39	9/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-39	9/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-39	9/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-39	9/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-39	9/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-39	9/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-39	9/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-39	9/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-39	9/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-39	9/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-39	9/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-39	11/28/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
MKTF-39	11/28/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
MKTF-39	11/28/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
MKTF-39	11/28/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
MKTF-39	11/28/2017	Aniline	*ND*	*100*	31	13	ug/L
MKTF-39	11/28/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
MKTF-39	11/28/2017	Benzoic Acid	60	200	39	75000	ug/L
MKTF-39	11/28/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
MKTF-39	11/28/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
MKTF-39	11/28/2017	Isophorone	ND	100	44	781	ug/L
MKTF-39	11/28/2017	Acenaphthene	ND	100	36	535	ug/L
MKTF-39	11/28/2017	Diethylphthalate	ND	100	40	14801	ug/L
MKTF-39	11/28/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
MKTF-39	11/28/2017	Phenanthrene	ND	100	43	170	ug/L
MKTF-39	11/28/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
MKTF-39	11/28/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
MKTF-39	11/28/2017	Fluorene	ND	100	40	288	ug/L
MKTF-39	11/28/2017	Carbazole	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
MKTF-39	11/28/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
MKTF-39	11/28/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
MKTF-39	11/28/2017	2-Nitroaniline	ND	100	49	190	ug/L
MKTF-39	11/28/2017	2-Nitrophenol	ND	100	52	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/28/2017	1-Methylnaphthalene	**120**	100	33	11.38	ug/L
MKTF-39	11/28/2017	Naphthalene	**64**	100	29	30	ug/L
MKTF-39	11/28/2017	2-Methylnaphthalene	**52**	100	33	35.1	ug/L
MKTF-39	11/28/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
MKTF-39	11/28/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
MKTF-39	11/28/2017	2-Methylphenol	ND	100	33	NA	ug/L
MKTF-39	11/28/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
MKTF-39	11/28/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
MKTF-39	11/28/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
MKTF-39	11/28/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
MKTF-39	11/28/2017	3-Nitroaniline	ND	100	43	NA	ug/L
MKTF-39	11/28/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
MKTF-39	11/28/2017	4-Nitrophenol	ND	100	55	NA	ug/L
MKTF-39	11/28/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
MKTF-39	11/28/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
MKTF-39	11/28/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
MKTF-39	11/28/2017	2,4-Dimethylphenol	ND	100	28	354	ug/L
MKTF-39	11/28/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
MKTF-39	11/28/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
MKTF-39	11/28/2017	Phenol	ND	100	31	5761	ug/L
MKTF-39	11/28/2017	Pyridine	*ND*	*100*	23	20	ug/L
MKTF-39	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
MKTF-39	11/28/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
MKTF-39	11/28/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
MKTF-39	11/28/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
MKTF-39	11/28/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
MKTF-39	11/28/2017	Anthracene	ND	100	35	1721	ug/L
MKTF-39	11/28/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
MKTF-39	11/28/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
MKTF-39	11/28/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
MKTF-39	11/28/2017	Pyrene	ND	100	44	117	ug/L
MKTF-39	11/28/2017	Dimethylphthalate	ND	100	36	612	ug/L
MKTF-39	11/28/2017	Dibenzofuran	ND	100	41	NA	ug/L
MKTF-39	11/28/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
MKTF-39	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
MKTF-39	11/28/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
MKTF-39	11/28/2017	Fluoranthene	ND	100	43	802	ug/L
MKTF-39	11/28/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
MKTF-39	11/28/2017	Acenaphthylene	ND	100	35	NA	ug/L
MKTF-39	11/28/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
MKTF-39	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
MKTF-39	11/28/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
MKTF-39	11/28/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
MKTF-39	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
MKTF-39	11/28/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L
MKTF-39	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
MKTF-39	11/28/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
MKTF-39	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-39	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-39	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-39	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-39	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-39	2/8/2018	Benzoic Acid	15	20	3.9	75000	ug/L
MKTF-39	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-39	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-39	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-39	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-39	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-39	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-39	2/8/2018	Phenanthrene	6.4	10	4.3	170	ug/L
MKTF-39	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-39	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-39	2/8/2018	Fluorene	7.7	10	4	288	ug/L
MKTF-39	2/8/2018	Carbazole	6.8	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-39	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-39	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-39	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-39	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-39	2/8/2018	1-Methylnaphthalene	**81**	10	3.3	11.38	ug/L
MKTF-39	2/8/2018	Naphthalene	**38**	10	2.9	30	ug/L
MKTF-39	2/8/2018	2-Methylnaphthalene	34	10	3.3	35.1	ug/L
MKTF-39	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-39	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-39	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-39	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-39	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-39	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-39	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-39	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-39	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-39	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-39	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-39	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-39	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-39	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-39	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-39	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-39	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-39	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-39	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-39	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-39	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-39	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-39	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-39	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-39	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-39	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-39	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-39	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-39	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-39	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-39	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-39	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-39	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-39	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-39	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-39	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-39	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-39	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-39	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-39	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-39	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-39	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-39	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-39	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	5/6/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	5/6/2018	Phenanthrene	24	10	6	170	ug/L
MKTF-39	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	5/6/2018	Fluorene	21	10	6.3	288	ug/L
MKTF-39	5/6/2018	Carbazole	14	10	6.3	NA	ug/L
MKTF-39	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	5/6/2018	1-Methylnaphthalene	**160**	10	7	11.38	ug/L
MKTF-39	5/6/2018	Naphthalene	**58**	10	5	30	ug/L
MKTF-39	5/6/2018	2-Methylnaphthalene	**61**	10	6.3	35.1	ug/L
MKTF-39	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-39	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	5/6/2018	Dibenzofuran	8.3	10	6.9	NA	ug/L
MKTF-39	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-39	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	8/21/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	8/21/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	8/21/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	8/21/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	8/21/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	8/21/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	8/21/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	8/21/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	8/21/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	8/21/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	8/21/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	8/21/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	8/21/2018	Phenanthrene	9.6	10	6	170	ug/L
MKTF-39	8/21/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	8/21/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	8/21/2018	Fluorene	9.9	10	6.3	288	ug/L
MKTF-39	8/21/2018	Carbazole	10	10	6.3	NA	ug/L
MKTF-39	8/21/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	8/21/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	8/21/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	8/21/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	8/21/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	8/21/2018	1-Methylnaphthalene	**120**	10	7	11.38	ug/L
MKTF-39	8/21/2018	Naphthalene	**57**	10	5	30	ug/L
MKTF-39	8/21/2018	2-Methylnaphthalene	**53**	10	6.3	35.1	ug/L
MKTF-39	8/21/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	8/21/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	8/21/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	8/21/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	8/21/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	8/21/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	8/21/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	8/21/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	8/21/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	8/21/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	8/21/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	8/21/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	8/21/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	8/21/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	8/21/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	8/21/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	8/21/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	8/21/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	8/21/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	8/21/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	8/21/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	8/21/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	8/21/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	8/21/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	8/21/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	8/21/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	8/21/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	8/21/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	8/21/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-39	8/21/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	8/21/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	8/21/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	8/21/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	8/21/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	8/21/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	8/21/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	8/21/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	8/21/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	8/21/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	8/21/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	8/21/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	8/21/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-39	8/21/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-39	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-39	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-39	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-39	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-39	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-39	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-39	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-39	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-39	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-39	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-39	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-39	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-39	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-39	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-39	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-39	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-39	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-39	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-39	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-39	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-39	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-39	11/20/2018	1-Methylnaphthalene	**39**	10	7	11.38	ug/L
MKTF-39	11/20/2018	Naphthalene	20	10	5	30	ug/L
MKTF-39	11/20/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
MKTF-39	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-39	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-39	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-39	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-39	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-39	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-39	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-39	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-39	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-39	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-39	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-39	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-39	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-39	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-39	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-39	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-39	11/20/2018	Phenol	ND	10	6	5761	ug/L
MKTF-39	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-39	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-39	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-39	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-39	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-39	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-39	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-39	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-39	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-39	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-39	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-39	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-39	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-39	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-39	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-39	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-39	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-39	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-39	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-39	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-39	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-39	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-39	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-39	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-39	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-39	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-39	6/5/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	6/5/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	6/5/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	6/5/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	6/5/2019	1-Methylnaphthalene	**340**	50	15.345382	11.38	ug/L
MKTF-39	6/5/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	6/5/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	6/5/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	6/5/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	6/5/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	6/5/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	6/5/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	6/5/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	6/5/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	6/5/2019	2-Methylnaphthalene	**230**	10	3.018863	35.1	ug/L
MKTF-39	6/5/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	6/5/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	6/5/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	6/5/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	6/5/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	6/5/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	6/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	6/5/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	6/5/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	6/5/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	6/5/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	6/5/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	6/5/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	6/5/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-39	6/5/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	6/5/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	6/5/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	6/5/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	6/5/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	6/5/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	6/5/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	6/5/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	6/5/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-39	6/5/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	6/5/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	6/5/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	6/5/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	6/5/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	6/5/2019	Bis(2-ethylhexyl)phthalate	9.9	10	4.302128	55.64	ug/L
MKTF-39	6/5/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	6/5/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-39	6/5/2019	Chrysene	4.6	10	2.786623	34.3	ug/L
MKTF-39	6/5/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	6/5/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	6/5/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	6/5/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	6/5/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	6/5/2019	Di-n-octylphthalate	4.5	10	3.516366	200	ug/L
MKTF-39	6/5/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	6/5/2019	Fluorene	47	10	2.888488	288	ug/L
MKTF-39	6/5/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	6/5/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	6/5/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	6/5/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	6/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	6/5/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	6/5/2019	Naphthalene	**57**	10	4.12221	30	ug/L
MKTF-39	6/5/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	6/5/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	6/5/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	6/5/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	6/5/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	6/5/2019	Phenanthrene	86	10	2.777122	170	ug/L
MKTF-39	6/5/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	6/5/2019	Pyrene	15	10	2.5036	117	ug/L
MKTF-39	6/5/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	**120**	10	3.069076	11.38	ug/L
MKTF-39	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-39	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	8/20/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-39	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-39	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	8/20/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-39	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-39	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-39	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	8/20/2019	Fluorene	14	10	2.888488	288	ug/L
MKTF-39	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	8/20/2019	Naphthalene	15	10	4.12221	30	ug/L
MKTF-39	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	8/20/2019	Phenanthrene	17	10	2.777122	170	ug/L
MKTF-39	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-39	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	8/20/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-39	8/20/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-39	8/20/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-39	8/20/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-39	8/20/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
MKTF-39	8/20/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-39	8/20/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-39	8/20/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-39	8/20/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-39	8/20/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-39	8/20/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-39	8/20/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-39	8/20/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-39	8/20/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-39	8/20/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-39	8/20/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-39	8/20/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-39	8/20/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-39	8/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-39	8/20/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-39	8/20/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-39	8/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-39	8/20/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-39	8/20/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-39	8/20/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-39	8/20/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-39	8/20/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-39	8/20/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-39	8/20/2019	Acenaphthene	3.9	10	2.955891	535	ug/L
MKTF-39	8/20/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-39	8/20/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-39	8/20/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-39	8/20/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-39	8/20/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-39	8/20/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-39	8/20/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-39	8/20/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-39	8/20/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-39	8/20/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-39	8/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-39	8/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-39	8/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-39	8/20/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-39	8/20/2019	Carbazole	12	10	2.890507	NA	ug/L
MKTF-39	8/20/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-39	8/20/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-39	8/20/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-39	8/20/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-39	8/20/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-39	8/20/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-39	8/20/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-39	8/20/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-39	8/20/2019	Fluorene	16	10	2.888488	288	ug/L
MKTF-39	8/20/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-39	8/20/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-39	8/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-39	8/20/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-39	8/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-39	8/20/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-39	8/20/2019	Naphthalene	17	10	4.12221	30	ug/L
MKTF-39	8/20/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-39	8/20/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-39	8/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-39	8/20/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-39	8/20/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-39	8/20/2019	Phenanthrene	18	10	2.777122	170	ug/L
MKTF-39	8/20/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-39	8/20/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-39	8/20/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-39	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-39	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-39	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-39	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-39	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-39	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	10	5	5	35.1	ug/L
MKTF-39	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-39	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-39	11/5/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-39	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-39	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-39	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-39	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-39	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-39	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-39	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-39	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-39	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-39	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-39	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-39	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-39	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-39	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-39	11/5/2019	Carbazole	14	5	5	NA	ug/L
MKTF-39	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-39	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-39	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-39	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-39	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-39	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-39	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-39	11/5/2019	Fluorene	27	5	5	288	ug/L
MKTF-39	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-39	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-39	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-39	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	2	2	0.343	ug/L
MKTF-39	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-39	11/5/2019	Naphthalene	20	5	5	30	ug/L
MKTF-39	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-39	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-39	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-39	11/5/2019	Phenanthrene	37	5	5	170	ug/L
MKTF-39	11/5/2019	Phenol	ND	5	5	5761	ug/L
MKTF-39	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-39	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-39	11/5/2019	1,4-Dioxane	**11**	10	10	4.59	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	ND	5	5	11.38	ug/L
MKTF-39	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-39	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-39	11/5/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-39	11/5/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-39	11/5/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-39	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-39	11/5/2019	1-Methylnaphthalene	**120**	5	5	11.38	ug/L
MKTF-39	11/5/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-39	11/5/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-39	11/5/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-39	11/5/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-39	11/5/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-39	11/5/2019	2,4-Dinitrotoluene	ND	2	2	45.3	ug/L
MKTF-39	11/5/2019	2,6-Dinitrotoluene	*ND*	*5*	5	0.485	ug/L
MKTF-39	11/5/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-39	11/5/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-39	11/5/2019	2-Methylnaphthalene	ND	5	5	35.1	ug/L
MKTF-39	11/5/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-39	11/5/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-39	11/5/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-39	11/5/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-39	11/5/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-39	11/5/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Aniline	ND	5	5	13	ug/L
MKTF-39	11/5/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-39	11/5/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-39	11/5/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-39	11/5/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-39	11/5/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Benzo(k)fluoranthene	*ND*	5	5	3.43	ug/L
MKTF-39	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
MKTF-39	11/5/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-39	11/5/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-39	11/5/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-39	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-39	11/5/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-39	11/5/2019	Carbazole	12	5	5	NA	ug/L
MKTF-39	11/5/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-39	11/5/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-39	11/5/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-39	11/5/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-39	11/5/2019	Dimethylphthalate	ND	5	5	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-39	11/5/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-39	11/5/2019	Fluoranthene	ND	5	5	802	ug/L
MKTF-39	11/5/2019	Fluorene	19	5	5	288	ug/L
MKTF-39	11/5/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-39	11/5/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-39	11/5/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-39	11/5/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-39	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-39	11/5/2019	Isophorone	ND	5	5	781	ug/L
MKTF-39	11/5/2019	Naphthalene	17	5	5	30	ug/L
MKTF-39	11/5/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-39	11/5/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-39	11/5/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-39	11/5/2019	Phenanthrene	28	5	5	170	ug/L
MKTF-39	11/5/2019	Phenol	ND	5	5	5761	ug/L
MKTF-39	11/5/2019	Pyrene	ND	5	5	117	ug/L
MKTF-39	11/5/2019	Pyridine	ND	5	5	20	ug/L
MKTF-39	2/5/2020	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
MKTF-39	2/5/2020	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
MKTF-39	2/5/2020	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
MKTF-39	2/5/2020	1,4-Dioxane	**19**	5	5	4.59	ug/L
MKTF-39	2/5/2020	1-Methylnaphthalene	**87**	2.5	2.5	11.38	ug/L
MKTF-39	2/5/2020	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
MKTF-39	2/5/2020	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
MKTF-39	2/5/2020	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
MKTF-39	2/5/2020	2,4-Dimethylphenol	ND	2.5	2.5	354	ug/L
MKTF-39	2/5/2020	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
MKTF-39	2/5/2020	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
MKTF-39	2/5/2020	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
MKTF-39	2/5/2020	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
MKTF-39	2/5/2020	2-Chlorophenol	ND	2.5	2.5	91	ug/L
MKTF-39	2/5/2020	2-Methylnaphthalene	ND	2.5	2.5	35.1	ug/L
MKTF-39	2/5/2020	2-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	2-Nitroaniline	ND	2.5	2.5	190	ug/L
MKTF-39	2/5/2020	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
MKTF-39	2/5/2020	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
MKTF-39	2/5/2020	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
MKTF-39	2/5/2020	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Acenaphthene	2.15	2.5	2.5	535	ug/L
MKTF-39	2/5/2020	Acenaphthylene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Aniline	ND	2.5	2.5	13	ug/L
MKTF-39	2/5/2020	Anthracene	ND	2.5	2.5	1721	ug/L
MKTF-39	2/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MKTF-39	2/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MKTF-39	2/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MKTF-39	2/5/2020	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
MKTF-39	2/5/2020	Benzoic Acid	10	2.5	2.5	75000	ug/L
MKTF-39	2/5/2020	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
MKTF-39	2/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
MKTF-39	2/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
MKTF-39	2/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
MKTF-39	2/5/2020	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
MKTF-39	2/5/2020	Carbazole	16	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Chrysene	ND	2.5	2.5	34.3	ug/L
MKTF-39	2/5/2020	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
MKTF-39	2/5/2020	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
MKTF-39	2/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.12	NA	ug/L
MKTF-39	2/5/2020	Dibenzofuran	5.4	2.5	2.5	NA	ug/L
MKTF-39	2/5/2020	Diethylphthalate	ND	2.5	2.5	14801	ug/L
MKTF-39	2/5/2020	Dimethylphthalate	ND	2.5	2.5	612	ug/L
MKTF-39	2/5/2020	Fluoranthene	ND	2.5	2.5	802	ug/L
MKTF-39	2/5/2020	Fluorene	10	2.5	2.5	288	ug/L
MKTF-39	2/5/2020	Hexachlorobenzene	*ND*	2.5	2.5	0.0976	ug/L
MKTF-39	2/5/2020	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
MKTF-39	2/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
MKTF-39	2/5/2020	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
MKTF-39	2/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
MKTF-39	2/5/2020	Isophorone	ND	2.5	2.5	781	ug/L
MKTF-39	2/5/2020	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
MKTF-39	2/5/2020	Naphthalene	23	2.5	2.5	30	ug/L
MKTF-39	2/5/2020	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
MKTF-39	2/5/2020	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
MKTF-39	2/5/2020	Phenanthrene	8.9	2.5	2.5	170	ug/L
MKTF-39	2/5/2020	Phenol	2.01	2.5	2.5	5761	ug/L
MKTF-39	2/5/2020	Pyrene	ND	2.5	2.5	117	ug/L
MKTF-39	2/5/2020	Pyridine	ND	2.5	2.5	20	ug/L
MKTF-39	9/19/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-39	9/19/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-39	9/19/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-39	9/19/2020	1,4-Dioxane	**13**	5	1	4.59	ug/L
MKTF-39	9/19/2020	1-Methylnaphthalene	**160**	5	1	11.38	ug/L
MKTF-39	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-39	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-39	9/19/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-39	9/19/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-39	9/19/2020	2,4-Dimethylphenol	ND	5	1	354	ug/L
MKTF-39	9/19/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-39	9/19/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-39	9/19/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-39	9/19/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-39	9/19/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-39	9/19/2020	2-Methylnaphthalene	20	5	1	35.1	ug/L
MKTF-39	9/19/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-39	9/19/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-39	9/19/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/19/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
MKTF-39	9/19/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-39	9/19/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Acenaphthene	3.4	5	1	535	ug/L
MKTF-39	9/19/2020	Acenaphthylene	1.9	5	1	NA	ug/L
MKTF-39	9/19/2020	Aniline	ND	5	1	13	ug/L
MKTF-39	9/19/2020	Anthracene	1	5	1	1721	ug/L
MKTF-39	9/19/2020	Benzo(a)anthracene	**1.5**	1	0.5	0.12	ug/L
MKTF-39	9/19/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-39	9/19/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-39	9/19/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-39	9/19/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-39	9/19/2020	Benzoic Acid	ND	5	2	75000	ug/L
MKTF-39	9/19/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-39	9/19/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-39	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-39	9/19/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-39	9/19/2020	Bis(2-ethylhexyl)phthalate	2.9	5	2	55.64	ug/L
MKTF-39	9/19/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-39	9/19/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Chrysene	1.2	5	1	34.3	ug/L
MKTF-39	9/19/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-39	9/19/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-39	9/19/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-39	9/19/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-39	9/19/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-39	9/19/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-39	9/19/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-39	9/19/2020	Fluorene	22	5	1	288	ug/L
MKTF-39	9/19/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-39	9/19/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-39	9/19/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-39	9/19/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-39	9/19/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-39	9/19/2020	Isophorone	ND	5	1	781	ug/L
MKTF-39	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-39	9/19/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-39	9/19/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-39	9/19/2020	Naphthalene	**32**	5	1	30	ug/L
MKTF-39	9/19/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-39	9/19/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-39	9/19/2020	Phenanthrene	38	5	1	170	ug/L
MKTF-39	9/19/2020	Phenol	ND	5	1	5761	ug/L
MKTF-39	9/19/2020	Pyrene	5.2	5	1	117	ug/L
MKTF-39	9/19/2020	Pyridine	ND	5	2	20	ug/L
MKTF-39	12/16/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
MKTF-39	12/16/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
MKTF-39	12/16/2020	Anthracene	ND	11.3	0.203	1721	ug/L
MKTF-39	12/16/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
MKTF-39	12/16/2020	Benzo(a)pyrene	*ND*	*11.3*	0.136	0.2	ug/L
MKTF-39	12/16/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.17	0.34	ug/L
MKTF-39	12/16/2020	Benzo(g,h,i)perylene	ND	11.3	0.26	NA	ug/L
MKTF-39	12/16/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
MKTF-39	12/16/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
MKTF-39	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
MKTF-39	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.65	55.64	ug/L
MKTF-39	12/16/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
MKTF-39	12/16/2020	Butylbenzylphthalate	ND	11.3	0.215	16	ug/L
MKTF-39	12/16/2020	Carbazole	24.6	11.3	0.26	NA	ug/L
MKTF-39	12/16/2020	4-Chloroaniline	*ND*	*11.3*	3.84	0.37	ug/L
MKTF-39	12/16/2020	4-Chloro-3-Methylphenol	ND	11.3	4.29	NA	ug/L
MKTF-39	12/16/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
MKTF-39	12/16/2020	2-Chlorophenol	ND	11.3	2.49	91	ug/L
MKTF-39	12/16/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
MKTF-39	12/16/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
MKTF-39	12/16/2020	Chrysene	ND	11.3	0.215	34.3	ug/L
MKTF-39	12/16/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
MKTF-39	12/16/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
MKTF-39	12/16/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
MKTF-39	12/16/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.94	1.25	ug/L
MKTF-39	12/16/2020	2,4-Dichlorophenol	ND	11.3	3.39	45.3	ug/L
MKTF-39	12/16/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
MKTF-39	12/16/2020	2,4-Dimethylphenol	ND	11.3	3.96	354	ug/L
MKTF-39	12/16/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
MKTF-39	12/16/2020	2,4-Dinitrophenol	ND	33.9	3.84	38.7	ug/L
MKTF-39	12/16/2020	2,4-Dinitrotoluene	ND	11.3	2.15	45.3	ug/L
MKTF-39	12/16/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.15	0.485	ug/L
MKTF-39	12/16/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
MKTF-39	12/16/2020	Fluorene	16.7	11.3	0.203	288	ug/L
MKTF-39	12/16/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
MKTF-39	12/16/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.94	0.41	ug/L
MKTF-39	12/16/2020	Hexachloroethane	*ND*	*11.3*	4.75	3.28	ug/L
MKTF-39	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.249	0.343	ug/L
MKTF-39	12/16/2020	Isophorone	ND	11.3	0.158	781	ug/L
MKTF-39	12/16/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
MKTF-39	12/16/2020	Naphthalene	**31.5**	11.3	0.192	30	ug/L
MKTF-39	12/16/2020	2-Nitroaniline	ND	11.3	2.49	190	ug/L
MKTF-39	12/16/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
MKTF-39	12/16/2020	4-Nitroaniline	*ND*	*11.3*	1.7	3.8	ug/L
MKTF-39	12/16/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
MKTF-39	12/16/2020	2-Nitrophenol	ND	11.3	5.88	NA	ug/L
MKTF-39	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.73	0.011	ug/L
MKTF-39	12/16/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
MKTF-39	12/16/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
MKTF-39	12/16/2020	Phenanthrene	21.2	11.3	0.203	170	ug/L
MKTF-39	12/16/2020	Phenol	ND	11.3	2.94	5761	ug/L
MKTF-39	12/16/2020	Pyrene	ND	11.3	0.237	117	ug/L
MKTF-39	12/16/2020	2,4,5-Trichlorophenol	ND	11.3	4.18	1166	ug/L
MKTF-39	12/16/2020	2,4,6-Trichlorophenol	ND	11.3	3.96	11.9*	ug/L
MKTF-39	12/16/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
MKTF-39	12/16/2020	Aniline	ND	11.3	4.29	13	ug/L
MKTF-39	12/16/2020	Benzoic Acid	ND	33.9	8.25	75000	ug/L
MKTF-39	12/16/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
MKTF-39	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
MKTF-39	12/16/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.96	0.0049	ug/L
MKTF-39	12/16/2020	Pyridine	ND	11.3	3.62	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
MKTF-39	12/16/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
MKTF-39	12/16/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
MKTF-39	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
MKTF-39	12/16/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
MKTF-39	12/16/2020	4-Nitrophenol	ND	11.3	2.37	NA	ug/L
MKTF-40	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-40	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-40	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-40	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-40	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-40	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-40	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-40	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-40	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-40	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-40	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-40	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-40	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-40	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-40	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-40	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-40	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-40	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-40	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-40	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-40	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-40	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-40	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-40	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-40	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-40	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-40	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-40	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-40	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-40	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-40	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-40	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-40	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-40	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-40	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-40	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-40	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-40	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-40	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-40	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-40	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-40	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-40	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-40	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-40	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-40	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-40	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-40	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-40	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-40	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-40	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-40	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-40	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-40	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-40	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-40	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-40	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-40	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-40	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-40	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-40	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-40	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-40	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-40	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-40	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-40	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-40	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-40	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-40	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-40	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-40	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-40	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-40	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-40	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-40	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-40	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-40	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-40	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-40	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-40	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-40	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-40	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-40	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-40	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-40	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-40	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-40	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-40	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-40	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-40	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-40	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-40	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-40	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-40	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-40	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-40	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-40	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-40	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-40	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-40	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-40	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-40	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-40	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-40	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-40	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-40	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-40	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-40	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-40	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-40	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-40	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-40	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-40	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-40	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-40	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-40	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-40	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-40	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-40	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-40	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-40	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-40	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-40	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-40	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-40	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-40	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-40	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-40	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-40	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-40	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-40	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	11/4/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-40	11/4/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-40	11/4/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-40	11/4/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-40	11/4/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-40	11/4/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-40	11/4/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-40	11/4/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-40	11/4/2015	Isophorone	ND	10	2	781	ug/L
MKTF-40	11/4/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-40	11/4/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-40	11/4/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-40	11/4/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-40	11/4/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-40	11/4/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-40	11/4/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-40	11/4/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-40	11/4/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-40	11/4/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-40	11/4/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-40	11/4/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-40	11/4/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-40	11/4/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-40	11/4/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-40	11/4/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-40	11/4/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-40	11/4/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-40	11/4/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-40	11/4/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-40	11/4/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-40	11/4/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-40	11/4/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-40	11/4/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-40	11/4/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-40	11/4/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-40	11/4/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/4/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-40	11/4/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-40	11/4/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-40	11/4/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-40	11/4/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-40	11/4/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-40	11/4/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-40	11/4/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-40	11/4/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-40	11/4/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-40	11/4/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-40	11/4/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-40	11/4/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-40	11/4/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-40	11/4/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-40	11/4/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-40	11/4/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-40	11/4/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-40	11/4/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-40	11/4/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-40	11/4/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-40	11/4/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-40	11/4/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-40	11/4/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-40	11/4/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-40	11/4/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-40	11/4/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-40	11/4/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-40	11/4/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-40	11/4/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-40	11/4/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-40	2/23/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-40	2/23/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-40	2/23/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-40	2/23/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-40	2/23/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-40	2/23/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-40	2/23/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-40	2/23/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-40	2/23/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-40	2/23/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-40	2/23/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-40	2/23/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-40	2/23/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-40	2/23/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-40	2/23/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-40	2/23/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-40	2/23/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-40	2/23/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-40	2/23/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-40	2/23/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-40	2/23/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-40	2/23/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-40	2/23/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-40	2/23/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-40	2/23/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-40	2/23/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-40	2/23/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-40	2/23/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-40	2/23/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-40	2/23/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-40	2/23/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-40	2/23/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-40	2/23/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-40	2/23/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-40	2/23/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-40	2/23/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-40	2/23/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-40	2/23/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-40	2/23/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-40	2/23/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-40	2/23/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-40	2/23/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-40	2/23/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-40	2/23/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-40	2/23/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-40	2/23/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-40	2/23/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-40	2/23/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-40	2/23/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	2/23/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-40	2/23/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-40	2/23/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-40	2/23/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-40	2/23/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-40	2/23/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-40	2/23/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-40	2/23/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-40	2/23/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-40	2/23/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-40	2/23/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-40	2/23/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-40	2/23/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-40	2/23/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-40	2/23/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-40	2/23/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-40	2/23/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-40	2/23/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-40	2/23/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-40	2/23/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-40	2/23/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-40	2/23/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-40	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	6/9/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-40	6/9/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
MKTF-40	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	9/8/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	9/8/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	9/8/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	9/8/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	9/8/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	9/8/2016	Benzoic Acid	8.6	20	2.6	75000	ug/L
MKTF-40	9/8/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	9/8/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	9/8/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	9/8/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	9/8/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	9/8/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	9/8/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	9/8/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	9/8/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	9/8/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	9/8/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	9/8/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	9/8/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	9/8/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	9/8/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	9/8/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	9/8/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	9/8/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	9/8/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	9/8/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	9/8/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	9/8/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	9/8/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	9/8/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	9/8/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	9/8/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	9/8/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	9/8/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	9/8/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	9/8/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	9/8/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	9/8/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	9/8/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	9/8/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	9/8/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	9/8/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/8/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MKTF-40	9/8/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
MKTF-40	9/8/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	9/8/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	9/8/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	9/8/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	9/8/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	9/8/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	9/8/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-40	9/8/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	9/8/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	9/8/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	9/8/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	9/8/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	9/8/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	9/8/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	9/8/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	9/8/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	9/8/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	9/8/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	9/8/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	9/8/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	9/8/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-40	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	10/31/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
MKTF-40	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-40	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-40	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-40	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	10/31/2016	Bis(2-ethylhexyl)phthalate	6.6	10	2.6	55.64	ug/L
MKTF-40	10/31/2016	Di-n-octylphthalate	8.4	10	2	200	ug/L
MKTF-40	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-40	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-40	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-40	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-40	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-40	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-40	3/7/2017	Benzoic Acid	10	20	2.6	75000	ug/L
MKTF-40	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-40	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-40	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-40	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-40	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-40	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-40	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-40	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-40	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-40	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-40	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-40	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-40	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-40	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-40	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-40	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-40	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-40	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-40	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-40	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-40	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-40	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-40	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-40	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-40	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-40	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-40	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-40	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-40	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-40	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-40	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-40	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-40	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-40	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-40	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-40	3/7/2017	Bis(2-ethylhexyl)phthalate	7.6	10	2.6	55.64	ug/L
MKTF-40	3/7/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-40	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-40	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-40	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-40	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-40	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-40	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-40	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-40	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-40	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-40	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-40	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-40	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-40	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-40	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-40	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-40	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-40	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-40	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-40	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-40	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-40	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-40	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	6/5/2017	Benzoic Acid	8.5	20	3.9	75000	ug/L
MKTF-40	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	6/5/2017	Bis(2-ethylhexyl)phthalate	8.2	10	4.8	55.64	ug/L
MKTF-40	6/5/2017	Di-n-octylphthalate	5.3	10	4.7	200	ug/L
MKTF-40	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	9/25/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
MKTF-40	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	9/25/2017	Bis(2-ethylhexyl)phthalate	26	10	4.8	55.64	ug/L
MKTF-40	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	11/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	11/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	11/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	11/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	11/21/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-40	11/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	11/21/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
MKTF-40	11/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	11/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	11/21/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	11/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	11/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	11/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	11/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	11/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	11/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	11/21/2017	Fluorene	ND	10	4	288	ug/L
MKTF-40	11/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	11/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	11/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	11/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	11/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	11/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	11/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	11/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	11/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	11/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	11/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	11/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	11/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	11/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	11/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	11/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	11/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	11/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	11/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	11/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	11/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	11/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	11/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	11/21/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	11/21/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	11/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	11/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	11/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-40	11/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	11/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	11/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	11/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	11/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	11/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	11/21/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	11/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	11/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	11/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	11/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	11/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	11/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-40	11/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	11/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	11/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	11/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	11/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	11/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	11/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	11/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	11/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	11/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	2/5/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-40	2/5/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-40	2/5/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-40	2/5/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	2/5/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-40	2/5/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-40	2/5/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-40	2/5/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-40	2/5/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-40	2/5/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-40	2/5/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-40	2/5/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-40	2/5/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-40	2/5/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-40	2/5/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-40	2/5/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-40	2/5/2018	Fluorene	ND	10	4	288	ug/L
MKTF-40	2/5/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-40	2/5/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-40	2/5/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-40	2/5/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-40	2/5/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-40	2/5/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-40	2/5/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-40	2/5/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-40	2/5/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-40	2/5/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-40	2/5/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-40	2/5/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-40	2/5/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-40	2/5/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-40	2/5/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-40	2/5/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-40	2/5/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-40	2/5/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-40	2/5/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-40	2/5/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-40	2/5/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-40	2/5/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-40	2/5/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-40	2/5/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-40	2/5/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-40	2/5/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-40	2/5/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-40	2/5/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-40	2/5/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-40	2/5/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-40	2/5/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-40	2/5/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-40	2/5/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-40	2/5/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-40	2/5/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-40	2/5/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-40	2/5/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-40	2/5/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-40	2/5/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-40	2/5/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-40	2/5/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-40	2/5/2018	Fluoranthene	ND	10	4.3	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/5/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-40	2/5/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-40	2/5/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-40	2/5/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-40	2/5/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-40	2/5/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-40	2/5/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-40	2/5/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-40	2/5/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-40	2/5/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-40	5/6/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	5/6/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	5/6/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	5/6/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	5/6/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	5/6/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-40	5/6/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	5/6/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	5/6/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	5/6/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	5/6/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	5/6/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	5/6/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	5/6/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	5/6/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	5/6/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	5/6/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	5/6/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	5/6/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	5/6/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	5/6/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	5/6/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	5/6/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	5/6/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	5/6/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	5/6/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	5/6/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-40	5/6/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	5/6/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	5/6/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	5/6/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	5/6/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	5/6/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	5/6/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	5/6/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	5/6/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	5/6/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	5/6/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	5/6/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	5/6/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	5/6/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	5/6/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	5/6/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	5/6/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	5/6/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	5/6/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	5/6/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	5/6/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	5/6/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	5/6/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	5/6/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	5/6/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	5/6/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	5/6/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	5/6/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	5/6/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	5/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	5/6/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	5/6/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	5/6/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	5/6/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	5/6/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	5/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	5/6/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	5/6/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	5/6/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-40	5/6/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	5/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	5/6/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	8/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	8/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	8/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	8/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	8/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	8/17/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
MKTF-40	8/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	8/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	8/17/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	8/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	8/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	8/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	8/17/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	8/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	8/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	8/17/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	8/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	8/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	8/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	8/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	8/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	8/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	8/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	8/17/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	8/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	8/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	8/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	8/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	8/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	8/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	8/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	8/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	8/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	8/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	8/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	8/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	8/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	8/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	8/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	8/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	8/17/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	8/17/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	8/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	8/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	8/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	8/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	8/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	8/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	8/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	8/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	8/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	8/17/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	8/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	8/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	8/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	8/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	8/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	8/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	8/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	8/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	8/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	8/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	8/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	8/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	8/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-40	8/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	8/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	8/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-40	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-40	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-40	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-40	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-40	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-40	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-40	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-40	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-40	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-40	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-40	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-40	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-40	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-40	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-40	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-40	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-40	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-40	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-40	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-40	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-40	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-40	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-40	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-40	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-40	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-40	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-40	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-40	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-40	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-40	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-40	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-40	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-40	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-40	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-40	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-40	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-40	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-40	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-40	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-40	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-40	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-40	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-40	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-40	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-40	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-40	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-40	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-40	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-40	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-40	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-40	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-40	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-40	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-40	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-40	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-40	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-40	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-40	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-40	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-40	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-40	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-40	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-40	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-40	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-40	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-40	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-40	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-40	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-40	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-40	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-40	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-40	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-40	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-40	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-40	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-40	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-40	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-40	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-40	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-40	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-40	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-40	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-40	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-40	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-40	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-40	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-40	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-40	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-40	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-40	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-40	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-40	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-40	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-40	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-40	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-40	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-40	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-40	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-40	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-40	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-40	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-40	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-40	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-40	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-40	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-40	2/20/2019	Benzoic Acid	8.2	20	6.311561	75000	ug/L
MKTF-40	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-40	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-40	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-40	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-40	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-40	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-40	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-40	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-40	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-40	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-40	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-40	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-40	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-40	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-40	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-40	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-40	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-40	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-40	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-40	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-40	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-40	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-40	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-40	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-40	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-40	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-40	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-40	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-40	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-40	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-40	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-40	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-40	5/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-40	5/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-40	5/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-40	5/6/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-40	5/6/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-40	5/6/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-40	5/6/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-40	5/6/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-40	5/6/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-40	5/6/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-40	5/6/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-40	5/6/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-40	5/6/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-40	5/6/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-40	5/6/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-40	5/6/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-40	5/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-40	5/6/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-40	5/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-40	5/6/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-40	5/6/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-40	5/6/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-40	5/6/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-40	5/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-40	5/6/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-40	5/6/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-40	5/6/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-40	5/6/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-40	5/6/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-40	5/6/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-40	5/6/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-40	5/6/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-40	5/6/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-40	5/6/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-40	5/6/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-40	5/6/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-40	5/6/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-40	5/6/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-40	5/6/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-40	5/6/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-40	5/6/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-40	5/6/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-40	5/6/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-40	5/6/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-40	5/6/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-40	5/6/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-40	5/6/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-40	5/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-40	5/6/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-40	5/6/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-40	5/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-40	5/6/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-40	5/6/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-40	5/6/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-40	5/6/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-40	5/6/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-40	5/6/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-40	5/6/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-40	5/6/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-40	5/6/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-40	5/6/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-40	5/6/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-40	5/6/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-40	5/6/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-40	5/6/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-40	5/6/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-40	5/6/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-40	5/6/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-40	5/6/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-40	5/6/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-40	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-40	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-40	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-40	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-40	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-40	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-40	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-40	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-40	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-40	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-40	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-40	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-40	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-40	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-40	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-40	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-40	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-40	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-40	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-40	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-40	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-40	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-40	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-40	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-40	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-40	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-40	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-40	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-40	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-40	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-40	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-40	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-40	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-40	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-40	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-40	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-40	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-40	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-40	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-40	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-40	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-40	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-40	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-40	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-40	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-40	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-40	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-40	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-40	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-40	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-40	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-40	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-40	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-40	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-40	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-40	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-40	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-40	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-40	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-40	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-40	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-40	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-40	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-40	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-40	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-40	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-40	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-40	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-40	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-40	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-40	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-40	10/22/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-40	10/22/2019	Acenaphthylene	ND	3	1.257	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	10/22/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-40	10/22/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-40	10/22/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-40	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-40	10/22/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-40	10/22/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-40	10/22/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-40	10/22/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-40	10/22/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-40	10/22/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-40	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-40	10/22/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-40	10/22/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-40	10/22/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-40	10/22/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-40	10/22/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-40	10/22/2019	1,4-Dioxane	**8.7**	1	1	4.59	ug/L
MKTF-40	10/22/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-40	10/22/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-40	10/22/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-40	10/22/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-40	10/22/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-40	10/22/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-40	10/22/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-40	10/22/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-40	10/22/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-40	10/22/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-40	10/22/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-40	10/22/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-40	10/22/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-40	10/22/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-40	10/22/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-40	10/22/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-40	10/22/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-40	10/22/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-40	10/22/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-40	10/22/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-40	10/22/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-40	10/22/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-40	10/22/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-40	10/22/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-40	10/22/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-40	10/22/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-40	10/22/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-40	10/22/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-40	10/22/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-40	10/22/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-40	10/22/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-40	10/22/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-40	10/22/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-40	10/22/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-40	10/22/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-40	10/22/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-40	10/22/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-40	10/22/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-40	10/22/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-40	10/22/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-40	10/22/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-40	10/22/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-40	10/22/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-40	10/22/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-40	10/22/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-40	10/22/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-40	10/22/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-40	10/22/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-40	10/22/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-40	10/22/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-40	10/22/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-40	2/28/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-40	2/28/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-40	2/28/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-40	2/28/2020	1,4-Dioxane	**8.2**	1	0.2	4.59	ug/L
MKTF-40	2/28/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-40	2/28/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-40	2/28/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-40	2/28/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-40	2/28/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-40	2/28/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-40	2/28/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-40	2/28/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-40	2/28/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-40	2/28/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-40	2/28/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-40	2/28/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-40	2/28/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-40	2/28/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-40	2/28/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-40	2/28/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Acenaphthene	ND	0.5	0.1	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-40	2/28/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-40	2/28/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-40	2/28/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-40	2/28/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-40	2/28/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-40	2/28/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-40	2/28/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-40	2/28/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-40	2/28/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-40	2/28/2020	Bis(2-ethylhexyl)phthalate	0.39	0.5	0.2	55.64	ug/L
MKTF-40	2/28/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-40	2/28/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-40	2/28/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-40	2/28/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-40	2/28/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-40	2/28/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-40	2/28/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-40	2/28/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-40	2/28/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-40	2/28/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-40	2/28/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-40	2/28/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-40	2/28/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-40	2/28/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-40	2/28/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-40	2/28/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-40	2/28/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-40	2/28/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-40	2/28/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-40	2/28/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-40	2/28/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-40	2/28/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-40	2/28/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-40	2/28/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-40	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-40	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-40	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-40	9/19/2020	1,4-Dioxane	**10**	0.51	0.1	4.59	ug/L
MKTF-40	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-40	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-40	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-40	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-40	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-40	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-40	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-40	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-40	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-40	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-40	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-40	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-40	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-40	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-40	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-40	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-40	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-40	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-40	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-40	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-40	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-40	9/19/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MKTF-40	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-40	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-40	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-40	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-40	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MKTF-40	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-40	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-40	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-40	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-40	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-40	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-40	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-40	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-40	9/19/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MKTF-40	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-40	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-40	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-40	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-40	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-40	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-40	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-40	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MKTF-40	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-40	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-40	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-40	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-40	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-40	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-40	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-40	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-40	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-40	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-40	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-40	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-40	12/17/2020	Acenaphthene	ND	11.3	0.18	535	ug/L
MKTF-40	12/17/2020	Acenaphthylene	ND	11.3	0.191	NA	ug/L
MKTF-40	12/17/2020	Anthracene	ND	11.3	0.203	1721	ug/L
MKTF-40	12/17/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
MKTF-40	12/17/2020	Benzo(a)pyrene	*ND*	*11.3*	0.135	0.2	ug/L
MKTF-40	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.169	0.34	ug/L
MKTF-40	12/17/2020	Benzo(g,h,i)perylene	ND	11.3	0.259	NA	ug/L
MKTF-40	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.18	3.43	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.18	59	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.04	0.137	ug/L
MKTF-40	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.63	55.64	ug/L
MKTF-40	12/17/2020	4-Bromophenyl-phenylether	ND	11.3	0.225	NA	ug/L
MKTF-40	12/17/2020	Butylbenzylphthalate	ND	11.3	0.214	16	ug/L
MKTF-40	12/17/2020	Carbazole	ND	11.3	0.259	NA	ug/L
MKTF-40	12/17/2020	4-Chloroaniline	*ND*	*11.3*	3.83	0.37	ug/L
MKTF-40	12/17/2020	4-Chloro-3-Methylphenol	ND	11.3	4.28	NA	ug/L
MKTF-40	12/17/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
MKTF-40	12/17/2020	2-Chlorophenol	ND	11.3	2.48	91	ug/L
MKTF-40	12/17/2020	4-Chlorophenyl-phenylether	ND	11.3	2.25	NA	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
MKTF-40	12/17/2020	Chrysene	ND	11.3	0.214	34.3	ug/L
MKTF-40	12/17/2020	Dibenzo(a,h)anthracene	ND	11.3	0.27	NA	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	11.3	0.18	75	ug/L
MKTF-40	12/17/2020	Dibenzofuran	ND	11.3	0.191	NA	ug/L
MKTF-40	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.93	1.25	ug/L
MKTF-40	12/17/2020	2,4-Dichlorophenol	ND	11.3	3.38	45.3	ug/L
MKTF-40	12/17/2020	Diethylphthalate	ND	11.3	0.27	14801	ug/L
MKTF-40	12/17/2020	2,4-Dimethylphenol	ND	11.3	3.94	354	ug/L
MKTF-40	12/17/2020	Di-n-butylphthalate	ND	11.3	3.04	885	ug/L
MKTF-40	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.8	1.52	ug/L
MKTF-40	12/17/2020	2,4-Dinitrophenol	ND	33.8	3.83	38.7	ug/L
MKTF-40	12/17/2020	2,4-Dinitrotoluene	ND	11.3	2.14	45.3	ug/L
MKTF-40	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.14	0.485	ug/L
MKTF-40	12/17/2020	Di-n-octylphthalate	ND	11.3	0.191	200	ug/L
MKTF-40	12/17/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
MKTF-40	12/17/2020	Fluorene	ND	11.3	0.203	288	ug/L
MKTF-40	12/17/2020	Hexachlorobenzene	*ND*	*11.3*	0.191	0.0976	ug/L
MKTF-40	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.5*	2.93	0.41	ug/L
MKTF-40	12/17/2020	Hexachloroethane	*ND*	*11.3*	4.73	3.28	ug/L
MKTF-40	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.248	0.343	ug/L
MKTF-40	12/17/2020	Isophorone	ND	11.3	0.158	781	ug/L
MKTF-40	12/17/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	11.3	0.191	30	ug/L
MKTF-40	12/17/2020	2-Nitroaniline	ND	11.3	2.48	190	ug/L
MKTF-40	12/17/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
MKTF-40	12/17/2020	4-Nitroaniline	*ND*	*11.3*	1.69	3.8	ug/L
MKTF-40	12/17/2020	Nitrobenzene	*ND*	*11.3*	0.146	1.4	ug/L
MKTF-40	12/17/2020	2-Nitrophenol	ND	11.3	5.86	NA	ug/L
MKTF-40	12/17/2020	4-Nitrophenol	ND	11.3	2.36	NA	ug/L
MKTF-40	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.72	0.011	ug/L
MKTF-40	12/17/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
MKTF-40	12/17/2020	Pentachlorophenol	*ND*	*22.5*	1.58	1	ug/L
MKTF-40	12/17/2020	Phenanthrene	ND	11.3	0.203	170	ug/L
MKTF-40	12/17/2020	Phenol	ND	11.3	2.93	5761	ug/L
MKTF-40	12/17/2020	Pyrene	ND	11.3	0.236	117	ug/L
MKTF-40	12/17/2020	2,4,5-Trichlorophenol	ND	11.3	4.17	1166	ug/L
MKTF-40	12/17/2020	2,4,6-Trichlorophenol	ND	11.3	3.94	11.9*	ug/L
MKTF-40	12/17/2020	Dimethylphthalate	ND	11.3	0.191	612	ug/L
MKTF-40	12/17/2020	Aniline	ND	11.3	4.28	13	ug/L
MKTF-40	12/17/2020	Benzoic Acid	ND	33.8	8.22	75000	ug/L
MKTF-40	12/17/2020	Benzyl Alcohol	ND	11.3	2.25	2000	ug/L
MKTF-40	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.18	9.81	ug/L
MKTF-40	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.94	0.0049	ug/L
MKTF-40	12/17/2020	Pyridine	ND	11.3	3.6	20	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	11.3	0.191	600	ug/L
MKTF-40	12/17/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
MKTF-40	12/17/2020	Acenaphthene	ND	11.4	0.183	535	ug/L
MKTF-40	12/17/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-40	12/17/2020	Anthracene	ND	11.4	0.206	1721	ug/L
MKTF-40	12/17/2020	Benzo(a)anthracene	*ND*	*11.4*	0.206	0.12	ug/L
MKTF-40	12/17/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-40	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-40	12/17/2020	Benzo(g,h,i)perylene	ND	11.4	0.263	NA	ug/L
MKTF-40	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.183	3.43	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.183	59	ug/L
MKTF-40	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.09	0.137	ug/L
MKTF-40	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.71	55.64	ug/L
MKTF-40	12/17/2020	4-Bromophenyl-phenylether	ND	11.4	0.229	NA	ug/L
MKTF-40	12/17/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-40	12/17/2020	Carbazole	ND	11.4	0.263	NA	ug/L
MKTF-40	12/17/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-40	12/17/2020	4-Chloro-3-Methylphenol	ND	11.4	4.34	NA	ug/L
MKTF-40	12/17/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-40	12/17/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-40	12/17/2020	4-Chlorophenyl-phenylether	ND	11.4	2.29	NA	ug/L
MKTF-40	12/17/2020	1,3-Dichlorobenzene	ND	11.4	0.206	NA	ug/L
MKTF-40	12/17/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-40	12/17/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-40	12/17/2020	1,4-Dichlorobenzene	ND	11.4	0.183	75	ug/L
MKTF-40	12/17/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-40	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-40	12/17/2020	2,4-Dichlorophenol	ND	11.4	3.43	45.3	ug/L
MKTF-40	12/17/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-40	12/17/2020	2,4-Dimethylphenol	ND	11.4	4	354	ug/L
MKTF-40	12/17/2020	Di-n-butylphthalate	ND	11.4	3.09	885	ug/L
MKTF-40	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.83	1.52	ug/L
MKTF-40	12/17/2020	2,4-Dinitrophenol	ND	34.3	3.88	38.7	ug/L
MKTF-40	12/17/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-40	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-40	12/17/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-40	12/17/2020	Fluoranthene	ND	11.4	0.206	802	ug/L
MKTF-40	12/17/2020	Fluorene	ND	11.4	0.206	288	ug/L
MKTF-40	12/17/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-40	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.9*	2.97	0.41	ug/L
MKTF-40	12/17/2020	Hexachloroethane	*ND*	*11.4*	4.8	3.28	ug/L
MKTF-40	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-40	12/17/2020	Isophorone	ND	11.4	0.16	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	2-Methylphenol	ND	11.4	2.06	NA	ug/L
MKTF-40	12/17/2020	Naphthalene	ND	11.4	0.194	30	ug/L
MKTF-40	12/17/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-40	12/17/2020	3-Nitroaniline	ND	11.4	2.06	NA	ug/L
MKTF-40	12/17/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-40	12/17/2020	Nitrobenzene	*ND*	*11.4*	0.149	1.4	ug/L
MKTF-40	12/17/2020	2-Nitrophenol	ND	11.4	5.94	NA	ug/L
MKTF-40	12/17/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-40	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.77	0.011	ug/L
MKTF-40	12/17/2020	N-Nitrosodiphenylamine	ND	11.4	0.206	122	ug/L
MKTF-40	12/17/2020	Pentachlorophenol	*ND*	*22.9*	1.6	1	ug/L
MKTF-40	12/17/2020	Phenanthrene	ND	11.4	0.206	170	ug/L
MKTF-40	12/17/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-40	12/17/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-40	12/17/2020	2,4,5-Trichlorophenol	ND	11.4	4.23	1166	ug/L
MKTF-40	12/17/2020	2,4,6-Trichlorophenol	ND	11.4	4	11.9*	ug/L
MKTF-40	12/17/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-40	12/17/2020	Aniline	ND	11.4	4.34	13	ug/L
MKTF-40	12/17/2020	Benzoic Acid	ND	34.3	8.34	75000	ug/L
MKTF-40	12/17/2020	Benzyl Alcohol	ND	11.4	2.29	2000	ug/L
MKTF-40	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.183	9.81	ug/L
MKTF-40	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.4*	4	0.0049	ug/L
MKTF-40	12/17/2020	Pyridine	ND	11.4	3.66	20	ug/L
MKTF-40	12/17/2020	1,2,4-Trichlorobenzene	ND	11.4	0.206	70	ug/L
MKTF-40	12/17/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-40	12/17/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-41	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-41	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-41	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-41	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-41	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-41	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-41	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-41	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-41	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-41	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-41	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-41	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-41	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-41	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-41	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-41	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-41	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-41	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-41	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-41	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-41	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-41	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-41	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-41	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-41	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-41	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-41	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-41	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-41	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-41	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-41	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-41	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-41	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-41	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-41	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-41	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-41	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-41	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-41	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-41	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-41	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-41	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	11/18/2014	Bis(2-ethylhexyl)phthalate	14	10	3	55.64	ug/L
MKTF-41	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-41	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-41	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-41	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-41	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-41	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-41	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-41	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-41	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-41	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-41	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-41	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-41	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-41	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-41	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-41	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-41	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-41	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-41	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-41	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-41	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-41	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-41	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-41	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-41	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-41	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-41	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-41	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-41	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-41	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-41	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-41	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-41	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-41	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-41	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-41	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-41	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-41	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-41	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-41	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-41	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-41	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-41	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-41	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-41	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-41	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-41	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-41	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-41	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-41	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-41	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-41	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-41	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-41	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-41	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-41	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-41	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-41	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-41	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-41	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-41	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-41	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-41	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-41	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-41	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-41	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-41	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-41	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-41	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-41	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-41	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-41	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-41	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-41	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-41	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-41	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-41	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-41	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-41	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-41	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-41	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-41	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-41	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-41	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-41	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-41	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-41	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-41	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-41	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-41	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-41	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-41	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-41	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-41	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-41	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-41	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-41	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-41	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-41	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-41	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-41	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-41	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-41	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-41	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-41	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-41	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-41	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-41	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-41	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-41	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-41	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-41	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-41	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-41	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-41	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-41	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-41	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-41	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-41	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-41	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-41	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-41	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-41	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-41	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-41	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-41	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-41	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-41	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-41	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-41	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-41	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-41	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-41	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-41	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-41	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-41	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-41	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-41	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-41	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-41	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-41	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-41	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-41	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-41	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-41	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-41	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-41	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-41	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-41	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-41	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-41	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-41	8/21/2015	Benzo(a)pyrene	*ND*	*14*	3.9	0.2	ug/L
MKTF-41	8/21/2015	2,4-Dinitrophenol	ND	29	1.5	38.7	ug/L
MKTF-41	8/21/2015	Dibenzo(a,h)anthracene	ND	14	4.7	NA	ug/L
MKTF-41	8/21/2015	Benzo(a)anthracene	*ND*	*14*	3.6	0.12	ug/L
MKTF-41	8/21/2015	4-Chloro-3-Methylphenol	ND	14	1.9	NA	ug/L
MKTF-41	8/21/2015	Aniline	*ND*	*14*	2.2	13	ug/L
MKTF-41	8/21/2015	N-Nitrosodimethylamine	*ND*	*14*	2	0.0049	ug/L
MKTF-41	8/21/2015	Benzoic Acid	ND	29	1.5	75000	ug/L
MKTF-41	8/21/2015	Hexachloroethane	*ND*	*14*	2.3	3.28	ug/L
MKTF-41	8/21/2015	Hexachlorocyclopentadiene	*ND*	*14*	2.1	0.41	ug/L
MKTF-41	8/21/2015	Isophorone	ND	14	2.8	781	ug/L
MKTF-41	8/21/2015	Acenaphthene	ND	14	2.7	535	ug/L
MKTF-41	8/21/2015	Diethylphthalate	ND	14	2.4	14801	ug/L
MKTF-41	8/21/2015	Di-n-butylphthalate	ND	14	3	885	ug/L
MKTF-41	8/21/2015	Phenanthrene	ND	14	2.9	170	ug/L
MKTF-41	8/21/2015	Butylbenzylphthalate	ND	14	3.4	16	ug/L
MKTF-41	8/21/2015	N-Nitrosodiphenylamine	ND	14	3.5	122	ug/L
MKTF-41	8/21/2015	Fluorene	ND	14	2.4	288	ug/L
MKTF-41	8/21/2015	Carbazole	ND	14	2.1	NA	ug/L
MKTF-41	8/21/2015	Hexachlorobutadiene	*ND*	*14*	2.8	0.14	ug/L
MKTF-41	8/21/2015	Pentachlorophenol	*ND*	*29*	1.6	1	ug/L
MKTF-41	8/21/2015	2,4,6-Trichlorophenol	ND	14	1.8	11.9*	ug/L
MKTF-41	8/21/2015	2-Nitroaniline	ND	14	2.6	190	ug/L
MKTF-41	8/21/2015	2-Nitrophenol	ND	14	1.8	NA	ug/L
MKTF-41	8/21/2015	1-Methylnaphthalene	*ND*	*14*	2.6	11.38	ug/L
MKTF-41	8/21/2015	Naphthalene	ND	14	2.6	30	ug/L
MKTF-41	8/21/2015	2-Methylnaphthalene	ND	14	3.2	35.1	ug/L
MKTF-41	8/21/2015	2-Chloronaphthalene	ND	14	2.5	733	ug/L
MKTF-41	8/21/2015	3,3-Dichlorobenzidine	*ND*	*14*	3.7	1.25	ug/L
MKTF-41	8/21/2015	2-Methylphenol	ND	14	1.8	NA	ug/L
MKTF-41	8/21/2015	1,2-Dichlorobenzene	ND	14	2.7	600	ug/L
MKTF-41	8/21/2015	2-Chlorophenol	ND	14	1.7	91	ug/L
MKTF-41	8/21/2015	2,4,5-Trichlorophenol	ND	14	2.3	1166	ug/L
MKTF-41	8/21/2015	Nitrobenzene	*ND*	*14*	2.1	1.4	ug/L
MKTF-41	8/21/2015	3-Nitroaniline	ND	14	2.1	NA	ug/L
MKTF-41	8/21/2015	4-Nitroaniline	*ND*	*14*	1.8	3.8	ug/L
MKTF-41	8/21/2015	4-Nitrophenol	ND	14	2	NA	ug/L
MKTF-41	8/21/2015	Benzyl Alcohol	ND	14	1.7	2000	ug/L
MKTF-41	8/21/2015	4-Bromophenyl-phenylether	ND	14	2	NA	ug/L
MKTF-41	8/21/2015	Azobenzene	*ND*	*14*	2.9	0.12	ug/L
MKTF-41	8/21/2015	2,4-Dimethylphenol	ND	14	2.6	354	ug/L
MKTF-41	8/21/2015	1,4-Dichlorobenzene	ND	14	1.8	75	ug/L
MKTF-41	8/21/2015	4-Chloroaniline	*ND*	*14*	2.7	0.37	ug/L
MKTF-41	8/21/2015	Phenol	ND	14	1.6	5761	ug/L
MKTF-41	8/21/2015	Pyridine	ND	14	2.4	20	ug/L
MKTF-41	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*14*	2.5	0.137	ug/L
MKTF-41	8/21/2015	Bis(2-chloroethoxy)methane	ND	14	2.6	59	ug/L
MKTF-41	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	14	4.8	55.64	ug/L
MKTF-41	8/21/2015	Di-n-octylphthalate	ND	14	2.8	200	ug/L
MKTF-41	8/21/2015	Hexachlorobenzene	*ND*	*14*	2.9	0.0976	ug/L
MKTF-41	8/21/2015	Anthracene	ND	14	2.3	1721	ug/L
MKTF-41	8/21/2015	1,2,4-Trichlorobenzene	ND	14	2.8	70	ug/L
MKTF-41	8/21/2015	2,4-Dichlorophenol	ND	29	2	45.3	ug/L
MKTF-41	8/21/2015	2,4-Dinitrotoluene	ND	14	2	45.3	ug/L
MKTF-41	8/21/2015	Pyrene	ND	14	3.3	117	ug/L
MKTF-41	8/21/2015	Dimethylphthalate	ND	14	2.8	612	ug/L
MKTF-41	8/21/2015	Dibenzofuran	ND	14	2.7	NA	ug/L
MKTF-41	8/21/2015	Benzo(g,h,i)perylene	ND	14	4.5	NA	ug/L
MKTF-41	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*14*	3.5	0.343	ug/L
MKTF-41	8/21/2015	Benzo(b)fluoranthene	*ND*	*14*	3.4	0.34	ug/L
MKTF-41	8/21/2015	Fluoranthene	ND	14	2.1	802	ug/L
MKTF-41	8/21/2015	Benzo(k)fluoranthene	*ND*	*14*	3.6	3.43	ug/L
MKTF-41	8/21/2015	Acenaphthylene	ND	14	2.7	NA	ug/L
MKTF-41	8/21/2015	Chrysene	ND	14	3.1	34.3	ug/L
MKTF-41	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*29*	2	1.52	ug/L
MKTF-41	8/21/2015	1,3-Dichlorobenzene	ND	14	2.4	NA	ug/L
MKTF-41	8/21/2015	2,6-Dinitrotoluene	*ND*	*14*	2.1	0.485	ug/L
MKTF-41	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*14*	2.9	0.011	ug/L
MKTF-41	8/21/2015	4-Chlorophenyl-phenylether	ND	14	2.9	NA	ug/L
MKTF-41	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*14*	2.9	9.81	ug/L
MKTF-41	8/21/2015	3,4-Methylphenol	ND	14	2.1	NA	ug/L
MKTF-41	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-41	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-41	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-41	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-41	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-41	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-41	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-41	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-41	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-41	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-41	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-41	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-41	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-41	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-41	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-41	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-41	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-41	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-41	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-41	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-41	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-41	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-41	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-41	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-41	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-41	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-41	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-41	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-41	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-41	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-41	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-41	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-41	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-41	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-41	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-41	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-41	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-41	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-41	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-41	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-41	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-41	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-41	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-41	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-41	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-41	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-41	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-41	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-41	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-41	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-41	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-41	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-41	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-41	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-41	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-41	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-41	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-41	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-41	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-41	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-41	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-41	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-41	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-41	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-41	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-41	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-41	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-41	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-41	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-41	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-41	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-41	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-41	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-41	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-41	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-41	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-41	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-41	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-41	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-41	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-41	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-41	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-41	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-41	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-41	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-41	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-41	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-41	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-41	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-41	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-41	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-41	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-41	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-41	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-41	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-41	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-41	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-41	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-41	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-41	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-41	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-41	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-41	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-41	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-41	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-41	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-41	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-41	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-41	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-41	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-41	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-41	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-41	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-41	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-41	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-41	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-41	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-41	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-41	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-41	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-41	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-41	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-41	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-41	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-41	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-41	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-41	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-41	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-41	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-41	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-41	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-41	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-41	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-41	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-41	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-41	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-41	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-41	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-41	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-41	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-41	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-41	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-41	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-41	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-41	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-41	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-41	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-41	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-41	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-41	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-41	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-41	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-41	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-41	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-41	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-41	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-41	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-41	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-41	6/9/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-41	6/9/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-41	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-41	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-41	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-41	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-41	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-41	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-41	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-41	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-41	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-41	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-41	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-41	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-41	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-41	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-41	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-41	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-41	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-41	6/9/2016	Bis(2-ethylhexyl)phthalate	24	50	13	55.64	ug/L
MKTF-41	6/9/2016	Di-n-octylphthalate	28	50	9.9	200	ug/L
MKTF-41	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-41	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-41	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-41	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-41	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-41	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-41	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-41	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-41	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-41	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-41	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-41	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-41	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-41	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-41	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-41	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-41	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-41	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-41	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-41	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-41	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-41	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	9/9/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MKTF-41	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-41	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-41	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	9/9/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
MKTF-41	9/9/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MKTF-41	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-41	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-41	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-41	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	10/31/2016	Benzoic Acid	13	20	2.6	75000	ug/L
MKTF-41	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-41	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	10/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-41	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-41	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	10/31/2016	Bis(2-ethylhexyl)phthalate	6.5	10	2.6	55.64	ug/L
MKTF-41	10/31/2016	Di-n-octylphthalate	6.7	10	2	200	ug/L
MKTF-41	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-41	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-41	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-41	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-41	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-41	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-41	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-41	3/7/2017	Benzoic Acid	8.2	20	2.6	75000	ug/L
MKTF-41	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-41	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-41	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-41	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-41	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-41	3/7/2017	Di-n-butylphthalate	2.5	10	2.4	885	ug/L
MKTF-41	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-41	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-41	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-41	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-41	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-41	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-41	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-41	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-41	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-41	3/7/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-41	3/7/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-41	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-41	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-41	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-41	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-41	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-41	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-41	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-41	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-41	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-41	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-41	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-41	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-41	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-41	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-41	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-41	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-41	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-41	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-41	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-41	3/7/2017	Bis(2-ethylhexyl)phthalate	7.7	10	2.6	55.64	ug/L
MKTF-41	3/7/2017	Di-n-octylphthalate	4.2	10	2	200	ug/L
MKTF-41	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-41	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-41	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-41	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-41	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-41	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-41	3/7/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-41	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-41	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-41	3/7/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-41	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-41	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-41	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-41	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-41	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-41	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-41	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-41	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-41	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-41	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-41	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-41	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-41	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	6/6/2017	Benzoic Acid	8.8	20	3.9	75000	ug/L
MKTF-41	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	6/6/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L
MKTF-41	6/6/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
MKTF-41	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-41	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-41	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	11/27/2017	Aniline	ND	10	3.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	11/27/2017	Benzoic Acid	4.7	20	3.9	75000	ug/L
MKTF-41	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-41	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-41	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-41	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-41	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-41	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-41	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-41	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-41	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-41	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-41	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-41	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-41	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-41	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-41	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-41	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-41	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-41	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-41	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-41	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-41	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-41	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-41	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-41	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-41	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-41	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-41	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-41	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-41	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-41	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-41	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-41	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-41	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-41	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-41	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-41	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-41	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-41	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-41	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-41	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-41	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-41	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-41	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-41	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-41	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-41	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-41	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-41	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-41	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-41	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-41	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-41	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-41	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-41	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-41	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-41	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-41	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-41	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-41	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-41	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-41	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-41	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-41	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-41	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-41	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-41	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-41	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-41	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-41	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-41	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	5/9/2018	Benzoic Acid	16	20	6.3	75000	ug/L
MKTF-41	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-41	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-41	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	8/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	8/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	8/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	8/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	8/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	8/29/2018	Benzoic Acid	6.6	20	6.3	75000	ug/L
MKTF-41	8/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	8/29/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	8/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	8/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	8/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	8/29/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	8/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	8/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	8/29/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	8/29/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	8/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	8/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	8/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	8/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	8/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	8/29/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	8/29/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	8/29/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	8/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	8/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	8/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	8/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	8/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	8/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	8/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	8/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	8/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	8/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	8/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	8/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	8/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	8/29/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	8/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	8/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	8/29/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	8/29/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	8/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	8/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	8/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-41	8/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	8/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	8/29/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	8/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	8/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	8/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	8/29/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	8/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	8/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	8/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	8/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	8/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	8/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	8/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	8/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	8/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	8/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	8/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	8/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	8/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	8/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	8/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	8/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-41	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-41	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-41	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-41	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-41	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-41	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-41	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-41	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-41	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-41	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-41	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-41	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-41	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-41	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-41	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-41	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-41	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-41	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-41	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-41	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-41	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-41	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-41	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-41	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-41	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-41	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-41	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-41	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-41	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-41	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-41	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-41	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-41	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-41	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-41	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-41	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-41	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-41	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-41	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-41	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-41	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-41	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-41	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-41	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-41	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-41	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-41	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-41	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-41	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-41	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-41	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-41	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-41	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-41	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-41	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-41	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-41	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-41	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-41	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-41	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-41	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-41	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-41	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-41	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-41	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-41	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-41	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-41	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-41	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-41	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-41	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-41	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-41	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-41	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-41	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-41	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-41	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-41	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-41	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-41	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-41	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-41	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-41	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-41	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-41	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-41	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-41	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-41	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-41	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-41	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-41	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-41	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-41	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-41	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-41	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-41	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-41	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-41	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-41	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-41	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-41	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-41	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-41	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-41	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-41	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-41	2/13/2019	Benzoic Acid	8.3	20	6.311561	75000	ug/L
MKTF-41	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-41	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-41	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-41	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-41	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-41	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-41	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-41	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-41	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-41	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-41	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-41	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-41	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-41	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-41	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-41	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-41	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-41	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-41	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-41	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-41	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-41	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-41	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-41	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-41	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-41	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-41	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-41	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-41	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-41	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-41	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-41	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-41	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	5/7/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	5/7/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	5/7/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	5/7/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	5/7/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	5/7/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	5/7/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	5/7/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	5/7/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	5/7/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	5/7/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	5/7/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	5/7/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	5/7/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	5/7/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	5/7/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-41	5/7/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	5/7/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	5/7/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	5/7/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	5/7/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	5/7/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	5/7/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	5/7/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-41	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	5/7/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	5/7/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	5/7/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	5/7/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	5/7/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	5/7/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	5/7/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	5/7/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	5/7/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	5/7/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	5/7/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	5/7/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	5/7/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	5/7/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	5/7/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	5/7/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	5/7/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	5/7/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	5/7/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	5/7/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	5/7/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	5/7/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	5/7/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	5/7/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	5/7/2019	Fluorene	ND	10	2.888488	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	5/7/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	5/7/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	5/7/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	5/7/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	5/7/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	5/7/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	5/7/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	5/7/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	5/7/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	5/7/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	5/7/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	5/7/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	5/7/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-41	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-41	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-41	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-41	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-41	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-41	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-41	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-41	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-41	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-41	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-41	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-41	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-41	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-41	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-41	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-41	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-41	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-41	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-41	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-41	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-41	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-41	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-41	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-41	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-41	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-41	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-41	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-41	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-41	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-41	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-41	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-41	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-41	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-41	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-41	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-41	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-41	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-41	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-41	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-41	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-41	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-41	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-41	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-41	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-41	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-41	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-41	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-41	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-41	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-41	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-41	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-41	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-41	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-41	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-41	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-41	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-41	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-41	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-41	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-41	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-41	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-41	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-41	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-41	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-41	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-41	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-41	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-41	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-41	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-41	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-41	10/23/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-41	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-41	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-41	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-41	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-41	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-41	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-41	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-41	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-41	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-41	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-41	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-41	10/23/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-41	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-41	10/23/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-41	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-41	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-41	10/23/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-41	10/23/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-41	10/23/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-41	10/23/2019	1,4-Dioxane	4	1	1	4.59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-41	10/23/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-41	10/23/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-41	10/23/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-41	10/23/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-41	10/23/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-41	10/23/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-41	10/23/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-41	10/23/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-41	10/23/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-41	10/23/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-41	10/23/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-41	10/23/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-41	10/23/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-41	10/23/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-41	10/23/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-41	10/23/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-41	10/23/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-41	10/23/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-41	10/23/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-41	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-41	10/23/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-41	10/23/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-41	10/23/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-41	10/23/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-41	10/23/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-41	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-41	10/23/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-41	10/23/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-41	10/23/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-41	10/23/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-41	10/23/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-41	10/23/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-41	10/23/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-41	10/23/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-41	10/23/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-41	10/23/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-41	10/23/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-41	10/23/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-41	10/23/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-41	10/23/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-41	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-41	10/23/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-41	10/23/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-41	10/23/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-41	10/23/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-41	10/23/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-41	10/23/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-41	10/23/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-41	10/23/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-41	10/23/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-41	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-41	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-41	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-41	2/27/2020	1,4-Dioxane	3.5	1	0.2	4.59	ug/L
MKTF-41	2/27/2020	1-Methylnaphthalene	1.9	0.5	0.1	11.38	ug/L
MKTF-41	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-41	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-41	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-41	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-41	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-41	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-41	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-41	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-41	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-41	2/27/2020	2-Methylnaphthalene	2.1	0.5	0.1	35.1	ug/L
MKTF-41	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-41	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-41	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-41	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-41	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-41	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-41	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-41	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-41	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-41	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-41	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-41	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-41	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-41	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-41	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-41	2/27/2020	Bis(2-ethylhexyl)phthalate	0.75	0.5	0.2	55.64	ug/L
MKTF-41	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-41	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-41	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-41	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-41	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-41	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-41	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-41	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-41	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-41	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-41	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-41	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-41	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-41	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-41	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-41	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-41	2/27/2020	Naphthalene	1.6	0.5	0.1	30	ug/L
MKTF-41	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-41	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-41	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-41	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-41	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-41	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-41	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-41	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-41	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-41	9/21/2020	1,4-Dioxane	3	0.52	0.1	4.59	ug/L
MKTF-41	9/21/2020	1-Methylnaphthalene	1.9	0.52	0.1	11.38	ug/L
MKTF-41	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-41	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-41	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-41	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-41	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-41	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-41	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-41	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-41	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-41	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-41	9/21/2020	2-Methylnaphthalene	2.1	0.52	0.1	35.1	ug/L
MKTF-41	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-41	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-41	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-41	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
MKTF-41	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
MKTF-41	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-41	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-41	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-41	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-41	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-41	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-41	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-41	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-41	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
MKTF-41	9/21/2020	Benzyl Alcohol	0.74	0.52	0.21	2000	ug/L
MKTF-41	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-41	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-41	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-41	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-41	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-41	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-41	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-41	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-41	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-41	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-41	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-41	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-41	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-41	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-41	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-41	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-41	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-41	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-41	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-41	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-41	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-41	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-41	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-41	9/21/2020	Naphthalene	1.6	0.52	0.1	30	ug/L
MKTF-41	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-41	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-41	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-41	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-41	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-41	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-41	12/15/2020	Acenaphthene	ND	10.9	0.174	535	ug/L
MKTF-41	12/15/2020	Acenaphthylene	ND	10.9	0.185	NA	ug/L
MKTF-41	12/15/2020	Anthracene	ND	10.9	0.196	1721	ug/L
MKTF-41	12/15/2020	Benzo(a)anthracene	*ND*	*10.9*	0.196	0.12	ug/L
MKTF-41	12/15/2020	Benzo(a)pyrene	*ND*	*10.9*	0.131	0.2	ug/L
MKTF-41	12/15/2020	Benzo(b)fluoranthene	*ND*	*10.9*	0.163	0.34	ug/L
MKTF-41	12/15/2020	Benzo(g,h,i)perylene	ND	10.9	0.25	NA	ug/L
MKTF-41	12/15/2020	Benzo(k)fluoranthene	*ND*	*10.9*	0.174	3.43	ug/L
MKTF-41	12/15/2020	Bis(2-chloroethoxy)methane	ND	10.9	0.174	59	ug/L
MKTF-41	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*10.9*	2.94	0.137	ug/L
MKTF-41	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	10.9	5.44	55.64	ug/L
MKTF-41	12/15/2020	4-Bromophenyl-phenylether	ND	10.9	0.218	NA	ug/L
MKTF-41	12/15/2020	Butylbenzylphthalate	ND	10.9	0.207	16	ug/L
MKTF-41	12/15/2020	Carbazole	ND	10.9	0.25	NA	ug/L
MKTF-41	12/15/2020	4-Chloroaniline	*ND*	*10.9*	3.7	0.37	ug/L
MKTF-41	12/15/2020	4-Chloro-3-Methylphenol	ND	10.9	4.13	NA	ug/L
MKTF-41	12/15/2020	2-Chloronaphthalene	ND	10.9	0.152	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	2-Chlorophenol	ND	10.9	2.39	91	ug/L
MKTF-41	12/15/2020	4-Chlorophenyl-phenylether	ND	10.9	2.18	NA	ug/L
MKTF-41	12/15/2020	1,3-Dichlorobenzene	ND	10.9	0.196	NA	ug/L
MKTF-41	12/15/2020	Chrysene	ND	10.9	0.207	34.3	ug/L
MKTF-41	12/15/2020	Dibenzo(a,h)anthracene	ND	10.9	0.261	NA	ug/L
MKTF-41	12/15/2020	1,4-Dichlorobenzene	ND	10.9	0.174	75	ug/L
MKTF-41	12/15/2020	Dibenzofuran	ND	10.9	0.185	NA	ug/L
MKTF-41	12/15/2020	3,3-Dichlorobenzidine	*ND*	*10.9*	2.83	1.25	ug/L
MKTF-41	12/15/2020	2,4-Dichlorophenol	ND	10.9	3.26	45.3	ug/L
MKTF-41	12/15/2020	Diethylphthalate	ND	10.9	0.261	14801	ug/L
MKTF-41	12/15/2020	2,4-Dimethylphenol	ND	10.9	3.81	354	ug/L
MKTF-41	12/15/2020	Di-n-butylphthalate	ND	10.9	2.94	885	ug/L
MKTF-41	12/15/2020	2,4-Dinitrophenol	ND	32.6	3.7	38.7	ug/L
MKTF-41	12/15/2020	2,4-Dinitrotoluene	ND	10.9	2.07	45.3	ug/L
MKTF-41	12/15/2020	2,6-Dinitrotoluene	*ND*	*10.9*	2.07	0.485	ug/L
MKTF-41	12/15/2020	Fluoranthene	ND	10.9	0.196	802	ug/L
MKTF-41	12/15/2020	Fluorene	ND	10.9	0.196	288	ug/L
MKTF-41	12/15/2020	Hexachlorobenzene	*ND*	*10.9*	0.185	0.0976	ug/L
MKTF-41	12/15/2020	Hexachlorocyclopentadiene	*ND*	*21.8*	2.83	0.41	ug/L
MKTF-41	12/15/2020	Hexachloroethane	*ND*	*10.9*	4.57	3.28	ug/L
MKTF-41	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.9*	0.239	0.343	ug/L
MKTF-41	12/15/2020	Isophorone	ND	10.9	0.152	781	ug/L
MKTF-41	12/15/2020	2-Methylphenol	ND	10.9	1.96	NA	ug/L
MKTF-41	12/15/2020	Naphthalene	ND	10.9	0.185	30	ug/L
MKTF-41	12/15/2020	2-Nitroaniline	ND	10.9	2.39	190	ug/L
MKTF-41	12/15/2020	3-Nitroaniline	ND	10.9	1.96	NA	ug/L
MKTF-41	12/15/2020	4-Nitroaniline	*ND*	*10.9*	1.63	3.8	ug/L
MKTF-41	12/15/2020	Nitrobenzene	*ND*	*10.9*	0.141	1.4	ug/L
MKTF-41	12/15/2020	2-Nitrophenol	ND	10.9	5.66	NA	ug/L
MKTF-41	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*10.9*	3.59	0.011	ug/L
MKTF-41	12/15/2020	N-Nitrosodiphenylamine	ND	10.9	0.196	122	ug/L
MKTF-41	12/15/2020	Pentachlorophenol	*ND*	*21.8*	1.52	1	ug/L
MKTF-41	12/15/2020	Phenanthrene	ND	10.9	0.196	170	ug/L
MKTF-41	12/15/2020	Phenol	ND	10.9	2.83	5761	ug/L
MKTF-41	12/15/2020	Pyrene	ND	10.9	0.228	117	ug/L
MKTF-41	12/15/2020	2,4,5-Trichlorophenol	ND	10.9	4.03	1166	ug/L
MKTF-41	12/15/2020	2,4,6-Trichlorophenol	ND	10.9	3.81	11.9*	ug/L
MKTF-41	12/15/2020	Dimethylphthalate	ND	10.9	0.185	612	ug/L
MKTF-41	12/15/2020	Aniline	ND	10.9	4.13	13	ug/L
MKTF-41	12/15/2020	Benzoic Acid	ND	32.6	7.94	75000	ug/L
MKTF-41	12/15/2020	Benzyl Alcohol	ND	10.9	2.18	2000	ug/L
MKTF-41	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.9*	0.174	9.81	ug/L
MKTF-41	12/15/2020	N-Nitrosodimethylamine	*ND*	*10.9*	3.81	0.0049	ug/L
MKTF-41	12/15/2020	Pyridine	ND	10.9	3.48	20	ug/L
MKTF-41	12/15/2020	1,2,4-Trichlorobenzene	ND	10.9	0.196	70	ug/L
MKTF-41	12/15/2020	1,2-Dichlorobenzene	ND	10.9	0.185	600	ug/L
MKTF-41	12/15/2020	Azobenzene	*ND*	*10.9*	1.09	0.12	ug/L
MKTF-41	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.9*	1.74	1.52	ug/L
MKTF-41	12/15/2020	Di-n-octylphthalate	ND	10.9	0.185	200	ug/L
MKTF-41	12/15/2020	4-Nitrophenol	ND	10.9	2.28	NA	ug/L
MKTF-42	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-42	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-42	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-42	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-42	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-42	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-42	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-42	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-42	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-42	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-42	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-42	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-42	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-42	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-42	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-42	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-42	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-42	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-42	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-42	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-42	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-42	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-42	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-42	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-42	11/18/2014	1-Methylnaphthalene	**72**	10	3.6	11.38	ug/L
MKTF-42	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-42	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-42	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-42	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-42	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-42	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-42	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-42	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-42	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-42	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-42	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-42	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-42	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-42	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-42	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-42	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-42	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-42	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-42	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-42	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	11/18/2014	Bis(2-ethylhexyl)phthalate	13	10	3	55.64	ug/L
MKTF-42	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-42	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-42	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-42	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-42	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-42	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-42	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-42	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-42	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-42	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-42	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-42	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-42	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-42	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-42	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-42	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-42	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-42	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-42	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-42	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-42	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-42	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-42	3/11/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-42	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-42	3/11/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-42	3/11/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-42	3/11/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-42	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-42	3/11/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-42	3/11/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-42	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-42	3/11/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-42	3/11/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-42	3/11/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-42	3/11/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-42	3/11/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-42	3/11/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-42	3/11/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-42	3/11/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-42	3/11/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-42	3/11/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-42	3/11/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-42	3/11/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-42	3/11/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-42	3/11/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-42	3/11/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-42	3/11/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-42	3/11/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-42	3/11/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-42	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-42	3/11/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-42	3/11/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-42	3/11/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-42	3/11/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-42	3/11/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-42	3/11/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-42	3/11/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-42	3/11/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-42	3/11/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-42	3/11/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-42	3/11/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-42	3/11/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-42	3/11/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-42	3/11/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-42	3/11/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-42	3/11/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-42	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-42	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-42	3/11/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-42	3/11/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-42	3/11/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-42	3/11/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-42	3/11/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-42	3/11/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-42	3/11/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-42	3/11/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-42	3/11/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-42	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-42	3/11/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-42	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-42	3/11/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-42	3/11/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-42	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-42	3/11/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-42	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-42	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-42	3/11/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-42	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-42	3/11/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-42	6/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	6/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-42	6/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-42	6/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	6/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-42	6/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-42	6/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-42	6/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-42	6/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-42	6/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-42	6/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-42	6/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-42	6/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-42	6/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-42	6/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-42	6/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-42	6/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-42	6/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-42	6/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-42	6/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-42	6/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-42	6/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-42	6/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-42	6/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-42	6/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-42	6/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-42	6/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-42	6/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-42	6/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-42	6/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-42	6/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-42	6/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-42	6/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-42	6/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-42	6/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-42	6/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-42	6/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-42	6/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-42	6/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-42	6/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-42	6/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-42	6/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-42	6/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	6/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-42	6/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-42	6/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-42	6/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-42	6/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-42	6/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-42	6/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-42	6/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-42	6/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-42	6/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-42	6/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-42	6/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	6/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-42	6/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-42	6/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-42	6/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-42	6/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-42	6/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-42	6/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-42	6/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-42	6/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-42	6/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-42	6/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-42	6/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-42	6/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	8/21/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-42	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-42	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-42	8/21/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-42	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-42	8/21/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-42	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-42	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-42	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-42	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-42	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-42	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-42	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-42	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-42	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-42	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-42	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-42	8/21/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-42	8/21/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-42	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-42	8/21/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-42	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-42	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-42	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-42	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-42	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-42	8/21/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-42	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-42	8/21/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-42	8/21/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-42	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-42	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-42	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-42	8/21/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-42	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-42	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-42	8/21/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-42	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-42	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-42	8/21/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-42	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-42	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-42	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-42	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-42	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-42	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-42	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-42	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-42	8/21/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-42	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-42	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-42	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-42	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-42	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-42	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-42	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-42	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-42	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-42	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-42	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-42	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-42	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-42	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-42	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-42	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-42	8/21/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-42	11/5/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-42	11/5/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
MKTF-42	11/5/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
MKTF-42	11/5/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
MKTF-42	11/5/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Aniline	*ND*	*100*	15	13	ug/L
MKTF-42	11/5/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
MKTF-42	11/5/2015	Benzoic Acid	ND	200	10	75000	ug/L
MKTF-42	11/5/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
MKTF-42	11/5/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
MKTF-42	11/5/2015	Isophorone	ND	100	20	781	ug/L
MKTF-42	11/5/2015	Acenaphthene	ND	100	19	535	ug/L
MKTF-42	11/5/2015	Diethylphthalate	ND	100	17	14801	ug/L
MKTF-42	11/5/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
MKTF-42	11/5/2015	Phenanthrene	ND	100	20	170	ug/L
MKTF-42	11/5/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L
MKTF-42	11/5/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
MKTF-42	11/5/2015	Fluorene	ND	100	17	288	ug/L
MKTF-42	11/5/2015	Carbazole	ND	100	15	NA	ug/L
MKTF-42	11/5/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
MKTF-42	11/5/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
MKTF-42	11/5/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
MKTF-42	11/5/2015	2-Nitroaniline	ND	100	18	190	ug/L
MKTF-42	11/5/2015	2-Nitrophenol	ND	100	12	NA	ug/L
MKTF-42	11/5/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
MKTF-42	11/5/2015	Naphthalene	*ND*	*100*	18	30	ug/L
MKTF-42	11/5/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
MKTF-42	11/5/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
MKTF-42	11/5/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
MKTF-42	11/5/2015	2-Methylphenol	ND	100	12	NA	ug/L
MKTF-42	11/5/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
MKTF-42	11/5/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
MKTF-42	11/5/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
MKTF-42	11/5/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
MKTF-42	11/5/2015	3-Nitroaniline	ND	100	15	NA	ug/L
MKTF-42	11/5/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
MKTF-42	11/5/2015	4-Nitrophenol	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
MKTF-42	11/5/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
MKTF-42	11/5/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
MKTF-42	11/5/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
MKTF-42	11/5/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
MKTF-42	11/5/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
MKTF-42	11/5/2015	Phenol	ND	100	11	5761	ug/L
MKTF-42	11/5/2015	Pyridine	*ND*	*100*	17	20	ug/L
MKTF-42	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
MKTF-42	11/5/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
MKTF-42	11/5/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
MKTF-42	11/5/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
MKTF-42	11/5/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
MKTF-42	11/5/2015	Anthracene	ND	100	16	1721	ug/L
MKTF-42	11/5/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
MKTF-42	11/5/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
MKTF-42	11/5/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
MKTF-42	11/5/2015	Pyrene	ND	100	23	117	ug/L
MKTF-42	11/5/2015	Dimethylphthalate	ND	100	20	612	ug/L
MKTF-42	11/5/2015	Dibenzofuran	ND	100	19	NA	ug/L
MKTF-42	11/5/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
MKTF-42	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
MKTF-42	11/5/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
MKTF-42	11/5/2015	Fluoranthene	ND	100	15	802	ug/L
MKTF-42	11/5/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
MKTF-42	11/5/2015	Acenaphthylene	ND	100	19	NA	ug/L
MKTF-42	11/5/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
MKTF-42	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
MKTF-42	11/5/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
MKTF-42	11/5/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
MKTF-42	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
MKTF-42	11/5/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
MKTF-42	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
MKTF-42	11/5/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
MKTF-42	2/24/2016	Benzo(a)pyrene	*ND*	*100*	63	0.2	ug/L
MKTF-42	2/24/2016	2,4-Dinitrophenol	*ND*	*200*	99	38.7	ug/L
MKTF-42	2/24/2016	Dibenzo(a,h)anthracene	ND	100	68	NA	ug/L
MKTF-42	2/24/2016	Benzo(a)anthracene	*ND*	*100*	61	0.12	ug/L
MKTF-42	2/24/2016	4-Chloro-3-Methylphenol	ND	100	80	NA	ug/L
MKTF-42	2/24/2016	Aniline	*ND*	*100*	98	13	ug/L
MKTF-42	2/24/2016	N-Nitrosodimethylamine	*ND*	*100*	91	0.0049	ug/L
MKTF-42	2/24/2016	Benzoic Acid	ND	200	98	75000	ug/L
MKTF-42	2/24/2016	Hexachloroethane	*ND*	*100*	58	3.28	ug/L
MKTF-42	2/24/2016	Hexachlorocyclopentadiene	*ND*	*100*	52	0.41	ug/L
MKTF-42	2/24/2016	Isophorone	ND	100	81	781	ug/L
MKTF-42	2/24/2016	Acenaphthene	ND	100	80	535	ug/L
MKTF-42	2/24/2016	Diethylphthalate	ND	100	82	14801	ug/L
MKTF-42	2/24/2016	Di-n-butylphthalate	ND	100	81	885	ug/L
MKTF-42	2/24/2016	Phenanthrene	ND	100	68	170	ug/L
MKTF-42	2/24/2016	Butylbenzylphthalate	*ND*	*100*	78	16	ug/L
MKTF-42	2/24/2016	N-Nitrosodiphenylamine	ND	100	62	122	ug/L
MKTF-42	2/24/2016	Fluorene	ND	100	72	288	ug/L
MKTF-42	2/24/2016	Carbazole	ND	100	72	NA	ug/L
MKTF-42	2/24/2016	Hexachlorobutadiene	*ND*	*100*	52	0.14	ug/L
MKTF-42	2/24/2016	Pentachlorophenol	*ND*	*200*	76	1	ug/L
MKTF-42	2/24/2016	2,4,6-Trichlorophenol	ND	100	88	11.9*	ug/L
MKTF-42	2/24/2016	2-Nitroaniline	ND	100	90	190	ug/L
MKTF-42	2/24/2016	2-Nitrophenol	ND	100	76	NA	ug/L
MKTF-42	2/24/2016	1-Methylnaphthalene	**270**	100	68	11.38	ug/L
MKTF-42	2/24/2016	Naphthalene	*ND*	*100*	59	30	ug/L
MKTF-42	2/24/2016	2-Methylnaphthalene	*ND*	*100*	70	35.1	ug/L
MKTF-42	2/24/2016	2-Chloronaphthalene	ND	100	72	733	ug/L
MKTF-42	2/24/2016	3,3-Dichlorobenzidine	*ND*	*100*	47	1.25	ug/L
MKTF-42	2/24/2016	2-Methylphenol	ND	100	82	NA	ug/L
MKTF-42	2/24/2016	1,2-Dichlorobenzene	ND	100	64	600	ug/L
MKTF-42	2/24/2016	2-Chlorophenol	*ND*	*100*	87	91	ug/L
MKTF-42	2/24/2016	2,4,5-Trichlorophenol	ND	100	84	1166	ug/L
MKTF-42	2/24/2016	Nitrobenzene	*ND*	*100*	78	1.4	ug/L
MKTF-42	2/24/2016	3-Nitroaniline	ND	100	88	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/24/2016	4-Nitroaniline	*ND*	*100*	91	3.8	ug/L
MKTF-42	2/24/2016	4-Nitrophenol	ND	100	67	NA	ug/L
MKTF-42	2/24/2016	Benzyl Alcohol	ND	100	80	2000	ug/L
MKTF-42	2/24/2016	4-Bromophenyl-phenylether	ND	100	86	NA	ug/L
MKTF-42	2/24/2016	Azobenzene	*ND*	*100*	93	0.12	ug/L
MKTF-42	2/24/2016	2,4-Dimethylphenol	ND	100	47	354	ug/L
MKTF-42	2/24/2016	1,4-Dichlorobenzene	*ND*	*100*	63	75	ug/L
MKTF-42	2/24/2016	4-Chloroaniline	*ND*	*100*	71	0.37	ug/L
MKTF-42	2/24/2016	Phenol	ND	100	51	5761	ug/L
MKTF-42	2/24/2016	Pyridine	*ND*	*100*	67	20	ug/L
MKTF-42	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*100*	83	0.137	ug/L
MKTF-42	2/24/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	73	59	ug/L
MKTF-42	2/24/2016	Bis(2-ethylhexyl)phthalate	*ND*	*100*	75	55.64	ug/L
MKTF-42	2/24/2016	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-42	2/24/2016	Hexachlorobenzene	*ND*	*100*	71	0.0976	ug/L
MKTF-42	2/24/2016	Anthracene	ND	100	66	1721	ug/L
MKTF-42	2/24/2016	1,2,4-Trichlorobenzene	*ND*	*100*	62	70	ug/L
MKTF-42	2/24/2016	2,4-Dichlorophenol	*ND*	*200*	76	45.3	ug/L
MKTF-42	2/24/2016	2,4-Dinitrotoluene	*ND*	*100*	85	45.3	ug/L
MKTF-42	2/24/2016	Pyrene	ND	100	55	117	ug/L
MKTF-42	2/24/2016	Dimethylphthalate	ND	100	75	612	ug/L
MKTF-42	2/24/2016	Dibenzofuran	ND	100	86	NA	ug/L
MKTF-42	2/24/2016	Benzo(g,h,i)perylene	ND	100	68	NA	ug/L
MKTF-42	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	56	0.343	ug/L
MKTF-42	2/24/2016	Benzo(b)fluoranthene	*ND*	*100*	66	0.34	ug/L
MKTF-42	2/24/2016	Fluoranthene	ND	100	61	802	ug/L
MKTF-42	2/24/2016	Benzo(k)fluoranthene	*ND*	*100*	72	3.43	ug/L
MKTF-42	2/24/2016	Acenaphthylene	ND	100	72	NA	ug/L
MKTF-42	2/24/2016	Chrysene	*ND*	*100*	66	34.3	ug/L
MKTF-42	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	73	1.52	ug/L
MKTF-42	2/24/2016	1,3-Dichlorobenzene	ND	100	61	NA	ug/L
MKTF-42	2/24/2016	2,6-Dinitrotoluene	*ND*	*100*	75	0.485	ug/L
MKTF-42	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	78	0.011	ug/L
MKTF-42	2/24/2016	4-Chlorophenyl-phenylether	ND	100	82	NA	ug/L
MKTF-42	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	91	9.81	ug/L
MKTF-42	2/24/2016	3,4-Methylphenol	ND	100	71	NA	ug/L
MKTF-42	6/9/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-42	6/9/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-42	6/9/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-42	6/9/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-42	6/9/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-42	6/9/2016	Benzoic Acid	ND	100	13	75000	ug/L
MKTF-42	6/9/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-42	6/9/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-42	6/9/2016	Isophorone	ND	50	13	781	ug/L
MKTF-42	6/9/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-42	6/9/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-42	6/9/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-42	6/9/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-42	6/9/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-42	6/9/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-42	6/9/2016	Fluorene	ND	50	14	288	ug/L
MKTF-42	6/9/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-42	6/9/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-42	6/9/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-42	6/9/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-42	6/9/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-42	6/9/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	1-Methylnaphthalene	*ND*	*50*	15	11.38	ug/L
MKTF-42	6/9/2016	Naphthalene	*ND*	*50*	13	30	ug/L
MKTF-42	6/9/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-42	6/9/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-42	6/9/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-42	6/9/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-42	6/9/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-42	6/9/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-42	6/9/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-42	6/9/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-42	6/9/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-42	6/9/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-42	6/9/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-42	6/9/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-42	6/9/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
MKTF-42	6/9/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-42	6/9/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-42	6/9/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-42	6/9/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-42	6/9/2016	Bis(2-ethylhexyl)phthalate	21	50	13	55.64	ug/L
MKTF-42	6/9/2016	Di-n-octylphthalate	ND	50	9.9	200	ug/L
MKTF-42	6/9/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-42	6/9/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-42	6/9/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-42	6/9/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-42	6/9/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-42	6/9/2016	Pyrene	ND	50	15	117	ug/L
MKTF-42	6/9/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-42	6/9/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-42	6/9/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-42	6/9/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-42	6/9/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-42	6/9/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-42	6/9/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-42	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-42	6/9/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-42	6/9/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-42	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-42	6/9/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-42	6/9/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-42	9/9/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-42	9/9/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-42	9/9/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/9/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-42	9/9/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-42	9/9/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-42	9/9/2016	Benzoic Acid	72	200	26	75000	ug/L
MKTF-42	9/9/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-42	9/9/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-42	9/9/2016	Isophorone	ND	100	26	781	ug/L
MKTF-42	9/9/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-42	9/9/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-42	9/9/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-42	9/9/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-42	9/9/2016	Butylbenzylphthalate	*ND*	*100*	25	16	ug/L
MKTF-42	9/9/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-42	9/9/2016	Fluorene	ND	100	27	288	ug/L
MKTF-42	9/9/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-42	9/9/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-42	9/9/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-42	9/9/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-42	9/9/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-42	9/9/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-42	9/9/2016	1-Methylnaphthalene	**170**	100	29	11.38	ug/L
MKTF-42	9/9/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-42	9/9/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-42	9/9/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-42	9/9/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-42	9/9/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-42	9/9/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-42	9/9/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-42	9/9/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-42	9/9/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-42	9/9/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-42	9/9/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-42	9/9/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-42	9/9/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-42	9/9/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-42	9/9/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L
MKTF-42	9/9/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-42	9/9/2016	Phenol	ND	100	20	5761	ug/L
MKTF-42	9/9/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-42	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-42	9/9/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-42	9/9/2016	Bis(2-ethylhexyl)phthalate	*ND*	*100*	26	55.64	ug/L
MKTF-42	9/9/2016	Di-n-octylphthalate	ND	100	20	200	ug/L
MKTF-42	9/9/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-42	9/9/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-42	9/9/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-42	9/9/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-42	9/9/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-42	9/9/2016	Pyrene	ND	100	31	117	ug/L
MKTF-42	9/9/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-42	9/9/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-42	9/9/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-42	9/9/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-42	9/9/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-42	9/9/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-42	9/9/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-42	9/9/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-42	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-42	9/9/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-42	9/9/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-42	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-42	9/9/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-42	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-42	9/9/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
MKTF-42	10/31/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
MKTF-42	10/31/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
MKTF-42	10/31/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
MKTF-42	10/31/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Aniline	*ND*	*50*	12	13	ug/L
MKTF-42	10/31/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
MKTF-42	10/31/2016	Benzoic Acid	56	100	13	75000	ug/L
MKTF-42	10/31/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
MKTF-42	10/31/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
MKTF-42	10/31/2016	Isophorone	ND	50	13	781	ug/L
MKTF-42	10/31/2016	Acenaphthene	ND	50	13	535	ug/L
MKTF-42	10/31/2016	Diethylphthalate	ND	50	14	14801	ug/L
MKTF-42	10/31/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
MKTF-42	10/31/2016	Phenanthrene	ND	50	13	170	ug/L
MKTF-42	10/31/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
MKTF-42	10/31/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
MKTF-42	10/31/2016	Fluorene	ND	50	14	288	ug/L
MKTF-42	10/31/2016	Carbazole	ND	50	11	NA	ug/L
MKTF-42	10/31/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
MKTF-42	10/31/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
MKTF-42	10/31/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
MKTF-42	10/31/2016	2-Nitroaniline	ND	50	14	190	ug/L
MKTF-42	10/31/2016	2-Nitrophenol	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	1-Methylnaphthalene	**190**	50	15	11.38	ug/L
MKTF-42	10/31/2016	Naphthalene	*16*	*50*	13	30	ug/L
MKTF-42	10/31/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
MKTF-42	10/31/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
MKTF-42	10/31/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
MKTF-42	10/31/2016	2-Methylphenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
MKTF-42	10/31/2016	2-Chlorophenol	ND	50	11	91	ug/L
MKTF-42	10/31/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
MKTF-42	10/31/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
MKTF-42	10/31/2016	3-Nitroaniline	ND	50	15	NA	ug/L
MKTF-42	10/31/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
MKTF-42	10/31/2016	4-Nitrophenol	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
MKTF-42	10/31/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
MKTF-42	10/31/2016	2,4-Dimethylphenol	ND	50	15	354	ug/L
MKTF-42	10/31/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/31/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
MKTF-42	10/31/2016	Phenol	ND	50	9.9	5761	ug/L
MKTF-42	10/31/2016	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
MKTF-42	10/31/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
MKTF-42	10/31/2016	Bis(2-ethylhexyl)phthalate	33	50	13	55.64	ug/L
MKTF-42	10/31/2016	Di-n-octylphthalate	37	50	9.9	200	ug/L
MKTF-42	10/31/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
MKTF-42	10/31/2016	Anthracene	ND	50	12	1721	ug/L
MKTF-42	10/31/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
MKTF-42	10/31/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
MKTF-42	10/31/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
MKTF-42	10/31/2016	Pyrene	ND	50	15	117	ug/L
MKTF-42	10/31/2016	Dimethylphthalate	ND	50	12	612	ug/L
MKTF-42	10/31/2016	Dibenzofuran	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
MKTF-42	10/31/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
MKTF-42	10/31/2016	Fluoranthene	ND	50	13	802	ug/L
MKTF-42	10/31/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
MKTF-42	10/31/2016	Acenaphthylene	ND	50	12	NA	ug/L
MKTF-42	10/31/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
MKTF-42	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
MKTF-42	10/31/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
MKTF-42	10/31/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
MKTF-42	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
MKTF-42	10/31/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
MKTF-42	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
MKTF-42	10/31/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
MKTF-42	3/7/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-42	3/7/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-42	3/7/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-42	3/7/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-42	3/7/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-42	3/7/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-42	3/7/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-42	3/7/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-42	3/7/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-42	3/7/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-42	3/7/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-42	3/7/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-42	3/7/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-42	3/7/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-42	3/7/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-42	3/7/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-42	3/7/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-42	3/7/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-42	3/7/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-42	3/7/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-42	3/7/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-42	3/7/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-42	3/7/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-42	3/7/2017	1-Methylnaphthalene	**150**	10	2.9	11.38	ug/L
MKTF-42	3/7/2017	Naphthalene	14	10	2.6	30	ug/L
MKTF-42	3/7/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-42	3/7/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-42	3/7/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-42	3/7/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-42	3/7/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-42	3/7/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-42	3/7/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-42	3/7/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-42	3/7/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-42	3/7/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-42	3/7/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-42	3/7/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-42	3/7/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-42	3/7/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-42	3/7/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-42	3/7/2017	Phenol	ND	10	2	5761	ug/L
MKTF-42	3/7/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-42	3/7/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-42	3/7/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-42	3/7/2017	Bis(2-ethylhexyl)phthalate	9.6	10	2.6	55.64	ug/L
MKTF-42	3/7/2017	Di-n-octylphthalate	4.4	10	2	200	ug/L
MKTF-42	3/7/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-42	3/7/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-42	3/7/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-42	3/7/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-42	3/7/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-42	3/7/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-42	3/7/2017	Dimethylphthalate	22	10	2.4	612	ug/L
MKTF-42	3/7/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-42	3/7/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Indeno(1,2,3-cd)pyrene	**3.3**	10	3	0.343	ug/L
MKTF-42	3/7/2017	Benzo(b)fluoranthene	**3.5**	10	2.9	0.34	ug/L
MKTF-42	3/7/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-42	3/7/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-42	3/7/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-42	3/7/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-42	3/7/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-42	3/7/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-42	3/7/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-42	3/7/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-42	3/7/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-42	3/7/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-42	3/7/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-42	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-42	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-42	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-42	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-42	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-42	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-42	6/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-42	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-42	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-42	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-42	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-42	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-42	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-42	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-42	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-42	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-42	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-42	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-42	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-42	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-42	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-42	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-42	6/6/2017	Naphthalene	12	10	2.9	30	ug/L
MKTF-42	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-42	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-42	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-42	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-42	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-42	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-42	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-42	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-42	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-42	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-42	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-42	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-42	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-42	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-42	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-42	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-42	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-42	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-42	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-42	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-42	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-42	6/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-42	6/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-42	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-42	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-42	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-42	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-42	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-42	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-42	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-42	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-42	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-42	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-42	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-42	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-42	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-42	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-42	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-42	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-42	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-42	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-42	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-42	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-42	9/25/2017	Benzo(a)pyrene	*ND*	*200*	80	0.2	ug/L
MKTF-42	9/25/2017	2,4-Dinitrophenol	*ND*	*400*	52	38.7	ug/L
MKTF-42	9/25/2017	Dibenzo(a,h)anthracene	ND	200	93	NA	ug/L
MKTF-42	9/25/2017	Benzo(a)anthracene	*ND*	*200*	77	0.12	ug/L
MKTF-42	9/25/2017	4-Chloro-3-Methylphenol	ND	200	130	NA	ug/L
MKTF-42	9/25/2017	Aniline	*ND*	*200*	61	13	ug/L
MKTF-42	9/25/2017	N-Nitrosodimethylamine	*ND*	*200*	70	0.0049	ug/L
MKTF-42	9/25/2017	Benzoic Acid	ND	400	79	75000	ug/L
MKTF-42	9/25/2017	Hexachloroethane	*ND*	*200*	24	3.28	ug/L
MKTF-42	9/25/2017	Hexachlorocyclopentadiene	*ND*	*200*	25	0.41	ug/L
MKTF-42	9/25/2017	Isophorone	ND	200	87	781	ug/L
MKTF-42	9/25/2017	Acenaphthene	ND	200	72	535	ug/L
MKTF-42	9/25/2017	Diethylphthalate	ND	200	81	14801	ug/L
MKTF-42	9/25/2017	Di-n-butylphthalate	ND	200	100	885	ug/L
MKTF-42	9/25/2017	Phenanthrene	*ND*	*200*	87	170	ug/L
MKTF-42	9/25/2017	Butylbenzylphthalate	*ND*	*200*	93	16	ug/L
MKTF-42	9/25/2017	N-Nitrosodiphenylamine	*ND*	*200*	78	122	ug/L
MKTF-42	9/25/2017	Fluorene	ND	200	80	288	ug/L
MKTF-42	9/25/2017	Carbazole	ND	200	92	NA	ug/L
MKTF-42	9/25/2017	Hexachlorobutadiene	*ND*	*200*	27	0.14	ug/L
MKTF-42	9/25/2017	Pentachlorophenol	*ND*	*400*	98	1	ug/L
MKTF-42	9/25/2017	2,4,6-Trichlorophenol	ND	200	110	11.9*	ug/L
MKTF-42	9/25/2017	2-Nitroaniline	*ND*	*200*	99	190	ug/L
MKTF-42	9/25/2017	2-Nitrophenol	ND	200	100	NA	ug/L
MKTF-42	9/25/2017	1-Methylnaphthalene	**270**	200	66	11.38	ug/L
MKTF-42	9/25/2017	Naphthalene	*ND*	*200*	57	30	ug/L
MKTF-42	9/25/2017	2-Methylnaphthalene	*ND*	*200*	65	35.1	ug/L
MKTF-42	9/25/2017	2-Chloronaphthalene	ND	200	74	733	ug/L
MKTF-42	9/25/2017	3,3-Dichlorobenzidine	*ND*	*200*	78	1.25	ug/L
MKTF-42	9/25/2017	2-Methylphenol	ND	200	66	NA	ug/L
MKTF-42	9/25/2017	1,2-Dichlorobenzene	ND	200	40	600	ug/L
MKTF-42	9/25/2017	2-Chlorophenol	*ND*	*200*	150	91	ug/L
MKTF-42	9/25/2017	2,4,5-Trichlorophenol	ND	200	100	1166	ug/L
MKTF-42	9/25/2017	Nitrobenzene	*ND*	*200*	72	1.4	ug/L
MKTF-42	9/25/2017	3-Nitroaniline	ND	200	87	NA	ug/L
MKTF-42	9/25/2017	4-Nitroaniline	*ND*	*200*	81	3.8	ug/L
MKTF-42	9/25/2017	4-Nitrophenol	ND	200	110	NA	ug/L
MKTF-42	9/25/2017	Benzyl Alcohol	ND	200	92	2000	ug/L
MKTF-42	9/25/2017	4-Bromophenyl-phenylether	ND	200	92	NA	ug/L
MKTF-42	9/25/2017	Azobenzene	*ND*	*200*	91	0.12	ug/L
MKTF-42	9/25/2017	2,4-Dimethylphenol	ND	200	57	354	ug/L
MKTF-42	9/25/2017	1,4-Dichlorobenzene	*ND*	*200*	43	75	ug/L
MKTF-42	9/25/2017	4-Chloroaniline	*ND*	*200*	70	0.37	ug/L
MKTF-42	9/25/2017	Phenol	ND	200	62	5761	ug/L
MKTF-42	9/25/2017	Pyridine	*ND*	*200*	46	20	ug/L
MKTF-42	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*200*	87	0.137	ug/L
MKTF-42	9/25/2017	Bis(2-chloroethoxy)methane	*ND*	*200*	86	59	ug/L
MKTF-42	9/25/2017	Bis(2-ethylhexyl)phthalate	*ND*	*200*	96	55.64	ug/L
MKTF-42	9/25/2017	Di-n-octylphthalate	ND	200	94	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Hexachlorobenzene	*ND*	*200*	77	0.0976	ug/L
MKTF-42	9/25/2017	Anthracene	ND	200	71	1721	ug/L
MKTF-42	9/25/2017	1,2,4-Trichlorobenzene	*ND*	*200*	43	70	ug/L
MKTF-42	9/25/2017	2,4-Dichlorophenol	*ND*	*400*	110	45.3	ug/L
MKTF-42	9/25/2017	2,4-Dinitrotoluene	*ND*	*200*	79	45.3	ug/L
MKTF-42	9/25/2017	Pyrene	*ND*	*200*	89	117	ug/L
MKTF-42	9/25/2017	Dimethylphthalate	ND	200	72	612	ug/L
MKTF-42	9/25/2017	Dibenzofuran	ND	200	82	NA	ug/L
MKTF-42	9/25/2017	Benzo(g,h,i)perylene	ND	200	81	NA	ug/L
MKTF-42	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*200*	83	0.343	ug/L
MKTF-42	9/25/2017	Benzo(b)fluoranthene	*ND*	*200*	79	0.34	ug/L
MKTF-42	9/25/2017	Fluoranthene	ND	200	85	802	ug/L
MKTF-42	9/25/2017	Benzo(k)fluoranthene	*ND*	*200*	88	3.43	ug/L
MKTF-42	9/25/2017	Acenaphthylene	ND	200	71	NA	ug/L
MKTF-42	9/25/2017	Chrysene	*ND*	*200*	76	34.3	ug/L
MKTF-42	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*400*	77	1.52	ug/L
MKTF-42	9/25/2017	1,3-Dichlorobenzene	ND	200	37	NA	ug/L
MKTF-42	9/25/2017	2,6-Dinitrotoluene	*ND*	*200*	90	0.485	ug/L
MKTF-42	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*200*	91	0.011	ug/L
MKTF-42	9/25/2017	4-Chlorophenyl-phenylether	ND	200	72	NA	ug/L
MKTF-42	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*200*	77	9.81	ug/L
MKTF-42	9/25/2017	3,4-Methylphenol	ND	200	64	NA	ug/L
MKTF-42	11/27/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
MKTF-42	11/27/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
MKTF-42	11/27/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
MKTF-42	11/27/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	11/27/2017	Aniline	*ND*	*50*	15	13	ug/L
MKTF-42	11/27/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
MKTF-42	11/27/2017	Benzoic Acid	52	100	20	75000	ug/L
MKTF-42	11/27/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
MKTF-42	11/27/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
MKTF-42	11/27/2017	Isophorone	ND	50	22	781	ug/L
MKTF-42	11/27/2017	Acenaphthene	ND	50	18	535	ug/L
MKTF-42	11/27/2017	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-42	11/27/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
MKTF-42	11/27/2017	Phenanthrene	ND	50	22	170	ug/L
MKTF-42	11/27/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
MKTF-42	11/27/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
MKTF-42	11/27/2017	Fluorene	ND	50	20	288	ug/L
MKTF-42	11/27/2017	Carbazole	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
MKTF-42	11/27/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
MKTF-42	11/27/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
MKTF-42	11/27/2017	2-Nitroaniline	ND	50	25	190	ug/L
MKTF-42	11/27/2017	2-Nitrophenol	ND	50	26	NA	ug/L
MKTF-42	11/27/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
MKTF-42	11/27/2017	Naphthalene	**34**	50	14	30	ug/L
MKTF-42	11/27/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
MKTF-42	11/27/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
MKTF-42	11/27/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
MKTF-42	11/27/2017	2-Methylphenol	ND	50	17	NA	ug/L
MKTF-42	11/27/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-42	11/27/2017	2-Chlorophenol	ND	50	38	91	ug/L
MKTF-42	11/27/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
MKTF-42	11/27/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
MKTF-42	11/27/2017	3-Nitroaniline	ND	50	22	NA	ug/L
MKTF-42	11/27/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
MKTF-42	11/27/2017	4-Nitrophenol	ND	50	27	NA	ug/L
MKTF-42	11/27/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
MKTF-42	11/27/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
MKTF-42	11/27/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
MKTF-42	11/27/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
MKTF-42	11/27/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
MKTF-42	11/27/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
MKTF-42	11/27/2017	Phenol	ND	50	16	5761	ug/L
MKTF-42	11/27/2017	Pyridine	*ND*	*50*	11	20	ug/L
MKTF-42	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
MKTF-42	11/27/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
MKTF-42	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	50	24	55.64	ug/L
MKTF-42	11/27/2017	Di-n-octylphthalate	25	50	23	200	ug/L
MKTF-42	11/27/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
MKTF-42	11/27/2017	Anthracene	ND	50	18	1721	ug/L
MKTF-42	11/27/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
MKTF-42	11/27/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
MKTF-42	11/27/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
MKTF-42	11/27/2017	Pyrene	ND	50	22	117	ug/L
MKTF-42	11/27/2017	Dimethylphthalate	ND	50	18	612	ug/L
MKTF-42	11/27/2017	Dibenzofuran	ND	50	20	NA	ug/L
MKTF-42	11/27/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
MKTF-42	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
MKTF-42	11/27/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
MKTF-42	11/27/2017	Fluoranthene	ND	50	21	802	ug/L
MKTF-42	11/27/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
MKTF-42	11/27/2017	Acenaphthylene	ND	50	18	NA	ug/L
MKTF-42	11/27/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
MKTF-42	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
MKTF-42	11/27/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
MKTF-42	11/27/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
MKTF-42	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
MKTF-42	11/27/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
MKTF-42	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
MKTF-42	11/27/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
MKTF-42	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-42	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-42	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-42	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-42	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-42	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-42	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-42	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-42	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-42	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-42	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-42	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-42	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-42	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-42	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-42	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-42	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-42	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-42	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-42	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-42	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-42	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-42	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-42	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-42	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-42	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-42	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-42	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-42	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-42	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-42	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-42	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-42	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-42	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-42	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-42	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-42	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-42	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-42	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-42	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-42	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-42	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-42	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-42	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-42	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-42	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-42	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-42	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-42	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-42	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-42	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-42	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-42	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-42	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-42	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-42	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-42	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-42	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-42	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-42	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-42	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-42	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-42	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-42	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-42	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-42	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-42	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-42	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-42	5/9/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-42	5/9/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-42	5/9/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-42	5/9/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-42	5/9/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-42	5/9/2018	Benzoic Acid	69	100	32	75000	ug/L
MKTF-42	5/9/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-42	5/9/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-42	5/9/2018	Isophorone	ND	50	31	781	ug/L
MKTF-42	5/9/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-42	5/9/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-42	5/9/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-42	5/9/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-42	5/9/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-42	5/9/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-42	5/9/2018	Fluorene	ND	50	32	288	ug/L
MKTF-42	5/9/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-42	5/9/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-42	5/9/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-42	5/9/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-42	5/9/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-42	5/9/2018	2-Nitrophenol	ND	50	30	NA	ug/L
MKTF-42	5/9/2018	1-Methylnaphthalene	**340**	50	35	11.38	ug/L
MKTF-42	5/9/2018	Naphthalene	*ND*	*50*	25	30	ug/L
MKTF-42	5/9/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-42	5/9/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-42	5/9/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-42	5/9/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	5/9/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-42	5/9/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-42	5/9/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-42	5/9/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-42	5/9/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-42	5/9/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-42	5/9/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-42	5/9/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-42	5/9/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-42	5/9/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-42	5/9/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-42	5/9/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-42	5/9/2018	Phenol	ND	50	30	5761	ug/L
MKTF-42	5/9/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-42	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-42	5/9/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-42	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-42	5/9/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-42	5/9/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-42	5/9/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-42	5/9/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-42	5/9/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-42	5/9/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-42	5/9/2018	Pyrene	ND	50	33	117	ug/L
MKTF-42	5/9/2018	Dimethylphthalate	ND	50	30	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/9/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-42	5/9/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-42	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-42	5/9/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-42	5/9/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-42	5/9/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-42	5/9/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-42	5/9/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-42	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-42	5/9/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-42	5/9/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-42	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-42	5/9/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-42	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-42	5/9/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-42	8/29/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
MKTF-42	8/29/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
MKTF-42	8/29/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
MKTF-42	8/29/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Aniline	*ND*	*100*	62	13	ug/L
MKTF-42	8/29/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
MKTF-42	8/29/2018	Benzoic Acid	91	200	63	75000	ug/L
MKTF-42	8/29/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
MKTF-42	8/29/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
MKTF-42	8/29/2018	Isophorone	ND	100	62	781	ug/L
MKTF-42	8/29/2018	Acenaphthene	ND	100	58	535	ug/L
MKTF-42	8/29/2018	Diethylphthalate	ND	100	63	14801	ug/L
MKTF-42	8/29/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
MKTF-42	8/29/2018	Phenanthrene	ND	100	60	170	ug/L
MKTF-42	8/29/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
MKTF-42	8/29/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
MKTF-42	8/29/2018	Fluorene	ND	100	63	288	ug/L
MKTF-42	8/29/2018	Carbazole	ND	100	63	NA	ug/L
MKTF-42	8/29/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
MKTF-42	8/29/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
MKTF-42	8/29/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
MKTF-42	8/29/2018	2-Nitroaniline	ND	100	59	190	ug/L
MKTF-42	8/29/2018	2-Nitrophenol	ND	100	60	NA	ug/L
MKTF-42	8/29/2018	1-Methylnaphthalene	**200**	100	70	11.38	ug/L
MKTF-42	8/29/2018	Naphthalene	*ND*	*100*	50	30	ug/L
MKTF-42	8/29/2018	2-Methylnaphthalene	**300**	100	63	35.1	ug/L
MKTF-42	8/29/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
MKTF-42	8/29/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
MKTF-42	8/29/2018	2-Methylphenol	ND	100	63	NA	ug/L
MKTF-42	8/29/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
MKTF-42	8/29/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
MKTF-42	8/29/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
MKTF-42	8/29/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
MKTF-42	8/29/2018	3-Nitroaniline	ND	100	68	NA	ug/L
MKTF-42	8/29/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
MKTF-42	8/29/2018	4-Nitrophenol	ND	100	56	NA	ug/L
MKTF-42	8/29/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
MKTF-42	8/29/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
MKTF-42	8/29/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
MKTF-42	8/29/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
MKTF-42	8/29/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
MKTF-42	8/29/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
MKTF-42	8/29/2018	Phenol	ND	100	60	5761	ug/L
MKTF-42	8/29/2018	Pyridine	*ND*	*100*	54	20	ug/L
MKTF-42	8/29/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
MKTF-42	8/29/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
MKTF-42	8/29/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
MKTF-42	8/29/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
MKTF-42	8/29/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
MKTF-42	8/29/2018	Anthracene	ND	100	57	1721	ug/L
MKTF-42	8/29/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
MKTF-42	8/29/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
MKTF-42	8/29/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
MKTF-42	8/29/2018	Pyrene	ND	100	65	117	ug/L
MKTF-42	8/29/2018	Dimethylphthalate	ND	100	60	612	ug/L
MKTF-42	8/29/2018	Dibenzofuran	ND	100	69	NA	ug/L
MKTF-42	8/29/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
MKTF-42	8/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
MKTF-42	8/29/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
MKTF-42	8/29/2018	Fluoranthene	ND	100	58	802	ug/L
MKTF-42	8/29/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
MKTF-42	8/29/2018	Acenaphthylene	ND	100	62	NA	ug/L
MKTF-42	8/29/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
MKTF-42	8/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
MKTF-42	8/29/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
MKTF-42	8/29/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
MKTF-42	8/29/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
MKTF-42	8/29/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
MKTF-42	8/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
MKTF-42	8/29/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
MKTF-42	11/15/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-42	11/15/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-42	11/15/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-42	11/15/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-42	11/15/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-42	11/15/2018	Benzoic Acid	110	100	32	75000	ug/L
MKTF-42	11/15/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-42	11/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-42	11/15/2018	Isophorone	ND	50	31	781	ug/L
MKTF-42	11/15/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-42	11/15/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-42	11/15/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-42	11/15/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-42	11/15/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-42	11/15/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-42	11/15/2018	Fluorene	ND	50	32	288	ug/L
MKTF-42	11/15/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-42	11/15/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-42	11/15/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-42	11/15/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-42	11/15/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-42	11/15/2018	2-Nitrophenol	ND	50	30	NA	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/15/2018	1-Methylnaphthalene	**290**	50	35	11.38	ug/L
MKTF-42	11/15/2018	Naphthalene	**160**	50	25	30	ug/L
MKTF-42	11/15/2018	2-Methylnaphthalene	**130**	50	32	35.1	ug/L
MKTF-42	11/15/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-42	11/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-42	11/15/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-42	11/15/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-42	11/15/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-42	11/15/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-42	11/15/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-42	11/15/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-42	11/15/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-42	11/15/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-42	11/15/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-42	11/15/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-42	11/15/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-42	11/15/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-42	11/15/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-42	11/15/2018	Phenol	ND	50	30	5761	ug/L
MKTF-42	11/15/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-42	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-42	11/15/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-42	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-42	11/15/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-42	11/15/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-42	11/15/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-42	11/15/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-42	11/15/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-42	11/15/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-42	11/15/2018	Pyrene	ND	50	33	117	ug/L
MKTF-42	11/15/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-42	11/15/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-42	11/15/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-42	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-42	11/15/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-42	11/15/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-42	11/15/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-42	11/15/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-42	11/15/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-42	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-42	11/15/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-42	11/15/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-42	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-42	11/15/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-42	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-42	11/15/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-42	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-42	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-42	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-42	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-42	2/13/2019	1-Methylnaphthalene	**41**	10	6.999122	11.38	ug/L
MKTF-42	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-42	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-42	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-42	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-42	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-42	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-42	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-42	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-42	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-42	2/13/2019	2-Methylnaphthalene	**48**	10	6.33239	35.1	ug/L
MKTF-42	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-42	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-42	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-42	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-42	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-42	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-42	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-42	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-42	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-42	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-42	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-42	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-42	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-42	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-42	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-42	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-42	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-42	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-42	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-42	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-42	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-42	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-42	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-42	2/13/2019	Benzoic Acid	16	20	6.311561	75000	ug/L
MKTF-42	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-42	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-42	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-42	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-42	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-42	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-42	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-42	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-42	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-42	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-42	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-42	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-42	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-42	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-42	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-42	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-42	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-42	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-42	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-42	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-42	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-42	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-42	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-42	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-42	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-42	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-42	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-42	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-42	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-42	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-42	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-42	5/7/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
MKTF-42	5/7/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
MKTF-42	5/7/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
MKTF-42	5/7/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
MKTF-42	5/7/2019	1-Methylnaphthalene	*ND*	*50*	15.345382	11.38	ug/L
MKTF-42	5/7/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
MKTF-42	5/7/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
MKTF-42	5/7/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
MKTF-42	5/7/2019	2,4-Dimethylphenol	ND	50	14.829964	354	ug/L
MKTF-42	5/7/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
MKTF-42	5/7/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
MKTF-42	5/7/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
MKTF-42	5/7/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
MKTF-42	5/7/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
MKTF-42	5/7/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
MKTF-42	5/7/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
MKTF-42	5/7/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
MKTF-42	5/7/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
MKTF-42	5/7/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
MKTF-42	5/7/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
MKTF-42	5/7/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
MKTF-42	5/7/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
MKTF-42	5/7/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
MKTF-42	5/7/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
MKTF-42	5/7/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
MKTF-42	5/7/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
MKTF-42	5/7/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
MKTF-42	5/7/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
MKTF-42	5/7/2019	Acenaphthene	ND	50	14.779454	535	ug/L
MKTF-42	5/7/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
MKTF-42	5/7/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
MKTF-42	5/7/2019	Anthracene	ND	50	13.285863	1721	ug/L
MKTF-42	5/7/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
MKTF-42	5/7/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
MKTF-42	5/7/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
MKTF-42	5/7/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
MKTF-42	5/7/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
MKTF-42	5/7/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
MKTF-42	5/7/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
MKTF-42	5/7/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
MKTF-42	5/7/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
MKTF-42	5/7/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
MKTF-42	5/7/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
MKTF-42	5/7/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
MKTF-42	5/7/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
MKTF-42	5/7/2019	Carbazole	ND	50	14.452533	NA	ug/L
MKTF-42	5/7/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
MKTF-42	5/7/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
MKTF-42	5/7/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
MKTF-42	5/7/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
MKTF-42	5/7/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
MKTF-42	5/7/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
MKTF-42	5/7/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
MKTF-42	5/7/2019	Fluoranthene	ND	50	12.061072	802	ug/L
MKTF-42	5/7/2019	Fluorene	ND	50	14.442442	288	ug/L
MKTF-42	5/7/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
MKTF-42	5/7/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
MKTF-42	5/7/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
MKTF-42	5/7/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
MKTF-42	5/7/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
MKTF-42	5/7/2019	Isophorone	ND	50	15.230173	781	ug/L
MKTF-42	5/7/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
MKTF-42	5/7/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
MKTF-42	5/7/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
MKTF-42	5/7/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
MKTF-42	5/7/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
MKTF-42	5/7/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
MKTF-42	5/7/2019	Phenanthrene	ND	50	13.88561	170	ug/L
MKTF-42	5/7/2019	Phenol	ND	50	40.182932	5761	ug/L
MKTF-42	5/7/2019	Pyrene	ND	50	12.517998	117	ug/L
MKTF-42	5/7/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
MKTF-42	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-42	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-42	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-42	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-42	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-42	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-42	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-42	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-42	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-42	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-42	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-42	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-42	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-42	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-42	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-42	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-42	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-42	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-42	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-42	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-42	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-42	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-42	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-42	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-42	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-42	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-42	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-42	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-42	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-42	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-42	8/22/2019	Aniline	ND	10	3.579516	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-42	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-42	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-42	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-42	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-42	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-42	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-42	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-42	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-42	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-42	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-42	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-42	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-42	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-42	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-42	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-42	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-42	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-42	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-42	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-42	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-42	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-42	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-42	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-42	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-42	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-42	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-42	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-42	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-42	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-42	8/22/2019	Naphthalene	11	10	4.12221	30	ug/L
MKTF-42	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-42	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-42	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-42	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-42	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-42	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-42	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-42	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-42	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	3	3	1.234	11.38	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	2.3	3	1.229	35.1	ug/L
MKTF-42	10/23/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-42	10/23/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-42	10/23/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-42	10/23/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-42	10/23/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-42	10/23/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-42	10/23/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-42	10/23/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-42	10/23/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-42	10/23/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-42	10/23/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-42	10/23/2019	Fluorene	1.8	0.8	0.338	288	ug/L
MKTF-42	10/23/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-42	10/23/2019	Naphthalene	11	3	1.159	30	ug/L
MKTF-42	10/23/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-42	10/23/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-42	10/23/2019	1,2,4-Trichlorobenzene	ND	5	5	70	ug/L
MKTF-42	10/23/2019	1,2-Dichlorobenzene	ND	5	5	600	ug/L
MKTF-42	10/23/2019	1,3-Dichlorobenzene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	1,4-Dichlorobenzene	ND	5	5	75	ug/L
MKTF-42	10/23/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
MKTF-42	10/23/2019	1-Methylnaphthalene	ND	5	5	11.38	ug/L
MKTF-42	10/23/2019	2,4,5-Trichlorophenol	ND	5	5	1166	ug/L
MKTF-42	10/23/2019	2,4,6-Trichlorophenol	ND	5	5	11.9*	ug/L
MKTF-42	10/23/2019	2,4-Dichlorophenol	ND	5	5	45.3	ug/L
MKTF-42	10/23/2019	2,4-Dimethylphenol	ND	5	5	354	ug/L
MKTF-42	10/23/2019	2,4-Dinitrophenol	ND	5	5	38.7	ug/L
MKTF-42	10/23/2019	2,4-Dinitrotoluene	ND	5	5	45.3	ug/L
MKTF-42	10/23/2019	2,6-Dinitrotoluene	*ND*	2	2	0.485	ug/L
MKTF-42	10/23/2019	2-Chloronaphthalene	ND	5	5	733	ug/L
MKTF-42	10/23/2019	2-Chlorophenol	ND	5	5	91	ug/L
MKTF-42	10/23/2019	2-Methylnaphthalene	ND	5	5	35.1	ug/L
MKTF-42	10/23/2019	2-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	2-Nitroaniline	ND	5	5	190	ug/L
MKTF-42	10/23/2019	2-Nitrophenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	3,3-Dichlorobenzidine	*ND*	*5*	5	1.25	ug/L
MKTF-42	10/23/2019	3,4-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	3-Nitroaniline	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4,6-Dinitro-2-methylphenol	*ND*	*5*	5	1.52	ug/L
MKTF-42	10/23/2019	4-Bromophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Chloro-3-Methylphenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Chlorophenyl-phenylether	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	4-Nitroaniline	*ND*	*5*	5	3.8	ug/L
MKTF-42	10/23/2019	4-Nitrophenol	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Acenaphthene	ND	5	5	535	ug/L
MKTF-42	10/23/2019	Acenaphthylene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Aniline	ND	5	5	13	ug/L
MKTF-42	10/23/2019	Anthracene	ND	5	5	1721	ug/L
MKTF-42	10/23/2019	Benzo(a)anthracene	*ND*	*1*	1	0.12	ug/L
MKTF-42	10/23/2019	Benzo(a)pyrene	*ND*	*1*	1	0.2	ug/L
MKTF-42	10/23/2019	Benzo(b)fluoranthene	*ND*	*1*	1	0.34	ug/L
MKTF-42	10/23/2019	Benzo(g,h,i)perylene	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Benzo(k)fluoranthene	*ND*	*5*	5	3.43	ug/L
MKTF-42	10/23/2019	Benzoic Acid	ND	5	5	75000	ug/L
MKTF-42	10/23/2019	Benzyl Alcohol	ND	5	5	2000	ug/L
MKTF-42	10/23/2019	Bis(2-chloroethoxy)methane	ND	5	5	59	ug/L
MKTF-42	10/23/2019	Bis(2-chloroisopropyl)ether	ND	5	5	9.81	ug/L
MKTF-42	10/23/2019	Bis(2-ethylhexyl)phthalate	ND	5	5	55.64	ug/L
MKTF-42	10/23/2019	Butylbenzylphthalate	ND	5	5	16	ug/L
MKTF-42	10/23/2019	Carbazole	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Chrysene	ND	5	5	34.3	ug/L
MKTF-42	10/23/2019	Dibenzo(a,h)anthracene	ND	0.25	0.25	NA	ug/L
MKTF-42	10/23/2019	Dibenzofuran	ND	5	5	NA	ug/L
MKTF-42	10/23/2019	Diethylphthalate	ND	5	5	14801	ug/L
MKTF-42	10/23/2019	Dimethylphthalate	ND	5	5	612	ug/L
MKTF-42	10/23/2019	Di-n-butylphthalate	ND	5	5	885	ug/L
MKTF-42	10/23/2019	Di-n-octylphthalate	ND	5	5	200	ug/L
MKTF-42	10/23/2019	Fluoranthene	ND	5	5	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Fluorene	ND	5	5	288	ug/L
MKTF-42	10/23/2019	Hexachlorobenzene	*ND*	*5*	5	0.0976	ug/L
MKTF-42	10/23/2019	Hexachlorobutadiene	*ND*	*5*	5	0.14	ug/L
MKTF-42	10/23/2019	Hexachlorocyclopentadiene	*ND*	*5*	5	0.41	ug/L
MKTF-42	10/23/2019	Hexachloroethane	*ND*	*5*	5	3.28	ug/L
MKTF-42	10/23/2019	Indeno(1,2,3-cd)pyrene	*ND*	*2*	2	0.343	ug/L
MKTF-42	10/23/2019	Isophorone	ND	5	5	781	ug/L
MKTF-42	10/23/2019	Naphthalene	ND	5	5	30	ug/L
MKTF-42	10/23/2019	Nitrobenzene	*ND*	*5*	5	1.4	ug/L
MKTF-42	10/23/2019	N-Nitrosodiphenylamine	ND	5	5	122	ug/L
MKTF-42	10/23/2019	Pentachlorophenol	*ND*	*5*	5	1	ug/L
MKTF-42	10/23/2019	Phenanthrene	ND	5	5	170	ug/L
MKTF-42	10/23/2019	Phenol	ND	5	5	5761	ug/L
MKTF-42	10/23/2019	Pyrene	ND	5	5	117	ug/L
MKTF-42	10/23/2019	Pyridine	ND	5	5	20	ug/L
MKTF-42	2/27/2020	1,2,4-Trichlorobenzene	ND	50	10	70	ug/L
MKTF-42	2/27/2020	1,2-Dichlorobenzene	ND	50	10	600	ug/L
MKTF-42	2/27/2020	1,3-Dichlorobenzene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	1,4-Dichlorobenzene	ND	50	10	75	ug/L
MKTF-42	2/27/2020	1,4-Dioxane	*ND*	*50*	10	4.59	ug/L
MKTF-42	2/27/2020	1-Methylnaphthalene	**81**	50	10	11.38	ug/L
MKTF-42	2/27/2020	2,4,5-Trichlorophenol	ND	50	10	1166	ug/L
MKTF-42	2/27/2020	2,4,6-Trichlorophenol	ND	50	10	11.9*	ug/L
MKTF-42	2/27/2020	2,4-Dichlorophenol	*ND*	*50*	10	45.3	ug/L
MKTF-42	2/27/2020	2,4-Dimethylphenol	ND	50	10	354	ug/L
MKTF-42	2/27/2020	2,4-Dinitrophenol	*ND*	*50*	10	38.7	ug/L
MKTF-42	2/27/2020	2,4-Dinitrotoluene	*ND*	*50*	10	45.3	ug/L
MKTF-42	2/27/2020	2,6-Dinitrotoluene	*ND*	*20*	4	0.485	ug/L
MKTF-42	2/27/2020	2-Chloronaphthalene	ND	50	10	733	ug/L
MKTF-42	2/27/2020	2-Chlorophenol	ND	50	10	91	ug/L
MKTF-42	2/27/2020	2-Methylnaphthalene	**73**	50	10	35.1	ug/L
MKTF-42	2/27/2020	2-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	2-Nitroaniline	ND	50	10	190	ug/L
MKTF-42	2/27/2020	2-Nitrophenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	3,4-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	3,3-Dichlorobenzidine	*ND*	*50*	10	1.25	ug/L
MKTF-42	2/27/2020	3-Nitroaniline	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4,6-Dinitro-2-methylphenol	*ND*	*50*	10	1.52	ug/L
MKTF-42	2/27/2020	4-Bromophenyl-phenylether	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Chloro-3-Methylphenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Chlorophenyl-phenylether	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	4-Nitroaniline	*ND*	*50*	10	3.8	ug/L
MKTF-42	2/27/2020	4-Nitrophenol	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Acenaphthene	ND	50	10	535	ug/L
MKTF-42	2/27/2020	Acenaphthylene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Aniline	*ND*	*50*	10	13	ug/L
MKTF-42	2/27/2020	Anthracene	ND	50	10	1721	ug/L
MKTF-42	2/27/2020	Benzo(a)anthracene	*ND*	*10*	2	0.12	ug/L
MKTF-42	2/27/2020	Benzo(a)pyrene	*ND*	*10*	2	0.2	ug/L
MKTF-42	2/27/2020	Benzo(b)fluoranthene	*ND*	*10*	2	0.34	ug/L
MKTF-42	2/27/2020	Benzo(g,h,i)perylene	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Benzo(k)fluoranthene	*ND*	*50*	10	3.43	ug/L
MKTF-42	2/27/2020	Benzoic Acid	ND	25	5	75000	ug/L
MKTF-42	2/27/2020	Benzyl Alcohol	ND	50	10	2000	ug/L
MKTF-42	2/27/2020	Bis(2-chloroethoxy)methane	ND	50	10	59	ug/L
MKTF-42	2/27/2020	Bis(2-chloroisopropyl)ether	*ND*	*50*	10	9.81	ug/L
MKTF-42	2/27/2020	Bis(2-ethylhexyl)phthalate	21	50	20	55.64	ug/L
MKTF-42	2/27/2020	Butylbenzylphthalate	*ND*	*50*	20	16	ug/L
MKTF-42	2/27/2020	Carbazole	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Chrysene	*ND*	*50*	10	34.3	ug/L
MKTF-42	2/27/2020	Di-n-butylphthalate	ND	50	20	885	ug/L
MKTF-42	2/27/2020	Di-n-octylphthalate	ND	50	20	200	ug/L
MKTF-42	2/27/2020	Dibenzo(a,h)anthracene	ND	1.2	0.25	NA	ug/L
MKTF-42	2/27/2020	Dibenzofuran	ND	50	10	NA	ug/L
MKTF-42	2/27/2020	Diethylphthalate	ND	50	20	14801	ug/L
MKTF-42	2/27/2020	Dimethylphthalate	ND	50	20	612	ug/L
MKTF-42	2/27/2020	Fluoranthene	ND	50	10	802	ug/L
MKTF-42	2/27/2020	Fluorene	ND	50	10	288	ug/L
MKTF-42	2/27/2020	Hexachlorobenzene	*ND*	*50*	10	0.0976	ug/L
MKTF-42	2/27/2020	Hexachlorobutadiene	*ND*	*50*	10	0.14	ug/L
MKTF-42	2/27/2020	Hexachlorocyclopentadiene	*ND*	*50*	10	0.41	ug/L
MKTF-42	2/27/2020	Hexachloroethane	*ND*	*50*	10	3.28	ug/L
MKTF-42	2/27/2020	Indeno(1,2,3-cd)pyrene	*ND*	*20*	4	0.343	ug/L
MKTF-42	2/27/2020	Isophorone	ND	50	10	781	ug/L
MKTF-42	2/27/2020	N-Nitrosodiphenylamine	ND	50	10	122	ug/L
MKTF-42	2/27/2020	Naphthalene	**150**	50	10	30	ug/L
MKTF-42	2/27/2020	Nitrobenzene	*ND*	*50*	10	1.4	ug/L
MKTF-42	2/27/2020	Pentachlorophenol	*ND*	*50*	10	1	ug/L
MKTF-42	2/27/2020	Phenanthrene	ND	50	10	170	ug/L
MKTF-42	2/27/2020	Phenol	ND	50	10	5761	ug/L
MKTF-42	2/27/2020	Pyrene	ND	50	10	117	ug/L
MKTF-42	2/27/2020	Pyridine	*ND*	*50*	10	20	ug/L
MKTF-42	9/21/2020	1,2,4-Trichlorobenzene	ND	2.1	0.41	70	ug/L
MKTF-42	9/21/2020	1,2-Dichlorobenzene	ND	2.1	0.41	600	ug/L
MKTF-42	9/21/2020	1,3-Dichlorobenzene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	1,4-Dichlorobenzene	ND	2.1	0.41	75	ug/L
MKTF-42	9/21/2020	1,4-Dioxane	**4.7**	2.1	0.41	4.59	ug/L
MKTF-42	9/21/2020	1-Methylnaphthalene	**27**	2.1	0.41	11.38	ug/L
MKTF-42	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	2.1	0.41	240	ug/L
MKTF-42	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	2,4,5-Trichlorophenol	ND	2.1	0.41	1166	ug/L
MKTF-42	9/21/2020	2,4,6-Trichlorophenol	ND	2.1	0.41	11.9*	ug/L
MKTF-42	9/21/2020	2,4-Dichlorophenol	ND	2.1	0.41	45.3	ug/L
MKTF-42	9/21/2020	2,4-Dimethylphenol	ND	2.1	0.41	354	ug/L
MKTF-42	9/21/2020	2,4-Dinitrophenol	ND	2.1	0.41	38.7	ug/L
MKTF-42	9/21/2020	2,4-Dinitrotoluene	ND	2.1	0.41	45.3	ug/L
MKTF-42	9/21/2020	2,6-Dinitrotoluene	*ND*	*0.82*	0.41	0.485	ug/L
MKTF-42	9/21/2020	2-Chloronaphthalene	ND	2.1	0.41	733	ug/L
MKTF-42	9/21/2020	2-Chlorophenol	ND	2.1	0.41	91	ug/L
MKTF-42	9/21/2020	2-Methylnaphthalene	22	2.1	0.41	35.1	ug/L
MKTF-42	9/21/2020	2-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	2-Nitroaniline	ND	2.1	0.41	190	ug/L
MKTF-42	9/21/2020	2-Nitrophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	3,4-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	3,3-Dichlorobenzidine	*ND*	*2.1*	0.41	1.25	ug/L
MKTF-42	9/21/2020	3-Nitroaniline	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.1*	0.41	1.52	ug/L
MKTF-42	9/21/2020	4-Bromophenyl-phenylether	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Chloro-3-Methylphenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Chloroaniline	*ND*	*2.1*	0.41	0.37	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/21/2020	4-Chlorophenyl-phenylether	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	4-Nitroaniline	ND	2.1	0.41	3.8	ug/L
MKTF-42	9/21/2020	4-Nitrophenol	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Acenaphthene	0.78	2.1	0.41	535	ug/L
MKTF-42	9/21/2020	Acenaphthylene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Aniline	ND	2.1	0.41	13	ug/L
MKTF-42	9/21/2020	Anthracene	ND	2.1	0.41	1721	ug/L
MKTF-42	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-42	9/21/2020	Benzidine	*ND*	*2.1*	1	0.0011	ug/L
MKTF-42	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-42	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-42	9/21/2020	Benzo(g,h,i)perylene	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Benzo(k)fluoranthene	ND	2.1	0.41	3.43	ug/L
MKTF-42	9/21/2020	Benzoic Acid	ND	2.1	0.82	75000	ug/L
MKTF-42	9/21/2020	Benzyl Alcohol	ND	2.1	0.82	2000	ug/L
MKTF-42	9/21/2020	Bis(2-chloroethoxy)methane	ND	2.1	0.41	59	ug/L
MKTF-42	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*2.1*	0.41	0.137	ug/L
MKTF-42	9/21/2020	Bis(2-chloroisopropyl)ether	ND	2.1	0.41	9.81	ug/L
MKTF-42	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	2.1	0.82	55.64	ug/L
MKTF-42	9/21/2020	Butylbenzylphthalate	ND	2.1	0.82	16	ug/L
MKTF-42	9/21/2020	Carbazole	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Chrysene	ND	2.1	0.41	34.3	ug/L
MKTF-42	9/21/2020	Di-n-butylphthalate	ND	2.1	0.82	885	ug/L
MKTF-42	9/21/2020	Di-n-octylphthalate	ND	2.1	0.82	200	ug/L
MKTF-42	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-42	9/21/2020	Dibenzofuran	ND	2.1	0.41	NA	ug/L
MKTF-42	9/21/2020	Diethylphthalate	ND	2.1	0.82	14801	ug/L
MKTF-42	9/21/2020	Dimethylphthalate	ND	2.1	0.82	612	ug/L
MKTF-42	9/21/2020	Fluoranthene	ND	2.1	0.41	802	ug/L
MKTF-42	9/21/2020	Fluorene	ND	2.1	0.41	288	ug/L
MKTF-42	9/21/2020	Hexachlorobenzene	*ND*	*2.1*	0.41	0.0976	ug/L
MKTF-42	9/21/2020	Hexachlorobutadiene	*ND*	*2.1*	0.41	0.14	ug/L
MKTF-42	9/21/2020	Hexachlorocyclopentadiene	*ND*	*2.1*	1	0.41	ug/L
MKTF-42	9/21/2020	Hexachloroethane	ND	2.1	0.41	3.28	ug/L
MKTF-42	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.41	0.343	ug/L
MKTF-42	9/21/2020	Isophorone	ND	2.1	0.41	781	ug/L
MKTF-42	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*2.1*	0.41	0.011	ug/L
MKTF-42	9/21/2020	N-Nitrosodimethylamine	*ND*	*2.1*	0.41	0.0049	ug/L
MKTF-42	9/21/2020	N-Nitrosodiphenylamine	ND	2.1	0.41	122	ug/L
MKTF-42	9/21/2020	Naphthalene	**46**	2.1	0.41	30	ug/L
MKTF-42	9/21/2020	Nitrobenzene	*ND*	*2.1*	0.41	1.4	ug/L
MKTF-42	9/21/2020	Pentachlorophenol	*ND*	*2.1*	0.82	1	ug/L
MKTF-42	9/21/2020	Phenanthrene	ND	2.1	0.41	170	ug/L
MKTF-42	9/21/2020	Phenol	ND	2.1	0.41	5761	ug/L
MKTF-42	9/21/2020	Pyrene	ND	2.1	0.41	117	ug/L
MKTF-42	9/21/2020	Pyridine	ND	2.1	0.82	20	ug/L
MKTF-42	12/16/2020	Acenaphthene	ND	59.9	0.959	535	ug/L
MKTF-42	12/16/2020	Acenaphthylene	ND	59.9	1.02	NA	ug/L
MKTF-42	12/16/2020	Anthracene	ND	59.9	1.08	1721	ug/L
MKTF-42	12/16/2020	Benzo(a)anthracene	*ND*	*59.9*	1.08	0.12	ug/L
MKTF-42	12/16/2020	Benzo(a)pyrene	*ND*	*59.9*	0.719	0.2	ug/L
MKTF-42	12/16/2020	Benzo(b)fluoranthene	*ND*	*59.9*	0.899	0.34	ug/L
MKTF-42	12/16/2020	Benzo(g,h,i)perylene	ND	59.9	1.38	NA	ug/L
MKTF-42	12/16/2020	Benzo(k)fluoranthene	*ND*	*59.9*	0.959	3.43	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethoxy)methane	*ND*	*59.9*	0.959	59	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*59.9*	16.2	0.137	ug/L
MKTF-42	12/16/2020	Bis(2-ethylhexyl)phthalate	*ND*	*59.9*	30	55.64	ug/L
MKTF-42	12/16/2020	4-Bromophenyl-phenylether	ND	59.9	1.2	NA	ug/L
MKTF-42	12/16/2020	Butylbenzylphthalate	*ND*	*59.9*	1.14	16	ug/L
MKTF-42	12/16/2020	Carbazole	ND	59.9	1.38	NA	ug/L
MKTF-42	12/16/2020	4-Chloroaniline	*ND*	*59.9*	20.4	0.37	ug/L
MKTF-42	12/16/2020	4-Chloro-3-Methylphenol	ND	59.9	22.8	NA	ug/L
MKTF-42	12/16/2020	2-Chloronaphthalene	ND	59.9	0.839	733	ug/L
MKTF-42	12/16/2020	2-Chlorophenol	ND	59.9	13.2	91	ug/L
MKTF-42	12/16/2020	4-Chlorophenyl-phenylether	ND	59.9	12	NA	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	59.9	1.08	NA	ug/L
MKTF-42	12/16/2020	Chrysene	*ND*	*59.9*	1.14	34.3	ug/L
MKTF-42	12/16/2020	Dibenzo(a,h)anthracene	ND	59.9	1.44	NA	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	59.9	0.959	75	ug/L
MKTF-42	12/16/2020	Dibenzofuran	ND	59.9	1.02	NA	ug/L
MKTF-42	12/16/2020	3,3-Dichlorobenzidine	*ND*	*59.9*	15.6	1.25	ug/L
MKTF-42	12/16/2020	2,4-Dichlorophenol	*ND*	*59.9*	18	45.3	ug/L
MKTF-42	12/16/2020	Diethylphthalate	ND	59.9	1.44	14801	ug/L
MKTF-42	12/16/2020	2,4-Dimethylphenol	ND	59.9	21	354	ug/L
MKTF-42	12/16/2020	Di-n-butylphthalate	ND	59.9	16.2	885	ug/L
MKTF-42	12/16/2020	2,4-Dinitrophenol	*ND*	*180*	20.4	38.7	ug/L
MKTF-42	12/16/2020	2,4-Dinitrotoluene	*ND*	*59.9*	11.4	45.3	ug/L
MKTF-42	12/16/2020	2,6-Dinitrotoluene	*ND*	*59.9*	11.4	0.485	ug/L
MKTF-42	12/16/2020	Fluoranthene	ND	59.9	1.08	802	ug/L
MKTF-42	12/16/2020	Fluorene	ND	59.9	1.08	288	ug/L
MKTF-42	12/16/2020	Hexachlorobenzene	*ND*	*59.9*	1.02	0.0976	ug/L
MKTF-42	12/16/2020	Hexachlorocyclopentadiene	*ND*	*120*	15.6	0.41	ug/L
MKTF-42	12/16/2020	Hexachloroethane	*ND*	*59.9*	25.2	3.28	ug/L
MKTF-42	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*59.9*	1.32	0.343	ug/L
MKTF-42	12/16/2020	Isophorone	ND	59.9	0.839	781	ug/L
MKTF-42	12/16/2020	2-Methylphenol	ND	59.9	10.8	NA	ug/L
MKTF-42	12/16/2020	Naphthalene	*ND*	*59.9*	1.02	30	ug/L
MKTF-42	12/16/2020	2-Nitroaniline	ND	59.9	13.2	190	ug/L
MKTF-42	12/16/2020	3-Nitroaniline	ND	59.9	10.8	NA	ug/L
MKTF-42	12/16/2020	4-Nitroaniline	*ND*	*59.9*	8.99	3.8	ug/L
MKTF-42	12/16/2020	Nitrobenzene	*ND*	*59.9*	0.779	1.4	ug/L
MKTF-42	12/16/2020	2-Nitrophenol	ND	59.9	31.2	NA	ug/L
MKTF-42	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*59.9*	19.8	0.011	ug/L
MKTF-42	12/16/2020	N-Nitrosodiphenylamine	ND	59.9	1.08	122	ug/L
MKTF-42	12/16/2020	Pentachlorophenol	*ND*	*120*	8.39	1	ug/L
MKTF-42	12/16/2020	Phenanthrene	ND	59.9	1.08	170	ug/L
MKTF-42	12/16/2020	Phenol	ND	59.9	15.6	5761	ug/L
MKTF-42	12/16/2020	Pyrene	ND	59.9	1.26	117	ug/L
MKTF-42	12/16/2020	2,4,5-Trichlorophenol	ND	59.9	22.2	1166	ug/L
MKTF-42	12/16/2020	2,4,6-Trichlorophenol	ND	59.9	21	11.9*	ug/L
MKTF-42	12/16/2020	Dimethylphthalate	ND	59.9	1.02	612	ug/L
MKTF-42	12/16/2020	Aniline	*ND*	*59.9*	22.8	13	ug/L
MKTF-42	12/16/2020	Benzoic Acid	ND	180	43.7	75000	ug/L
MKTF-42	12/16/2020	Benzyl Alcohol	ND	59.9	12	2000	ug/L
MKTF-42	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*59.9*	0.959	9.81	ug/L
MKTF-42	12/16/2020	N-Nitrosodimethylamine	*ND*	*59.9*	21	0.0049	ug/L
MKTF-42	12/16/2020	Pyridine	*ND*	*59.9*	19.2	20	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	59.9	1.08	70	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	59.9	1.02	600	ug/L
MKTF-42	12/16/2020	Azobenzene	*ND*	*59.9*	5.99	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*59.9*	9.59	1.52	ug/L
MKTF-42	12/16/2020	Di-n-octylphthalate	ND	59.9	1.02	200	ug/L
MKTF-42	12/16/2020	4-Nitrophenol	ND	59.9	12.6	NA	ug/L
MKTF-42	12/16/2020	Acenaphthene	ND	55.1	0.882	535	ug/L
MKTF-42	12/16/2020	Acenaphthylene	ND	55.1	0.937	NA	ug/L
MKTF-42	12/16/2020	Anthracene	ND	55.1	0.992	1721	ug/L
MKTF-42	12/16/2020	Benzo(a)anthracene	*ND*	*55.1*	0.992	0.12	ug/L
MKTF-42	12/16/2020	Benzo(a)pyrene	*ND*	*55.1*	0.661	0.2	ug/L
MKTF-42	12/16/2020	Benzo(b)fluoranthene	*ND*	*55.1*	0.827	0.34	ug/L
MKTF-42	12/16/2020	Benzo(g,h,i)perylene	ND	55.1	1.27	NA	ug/L
MKTF-42	12/16/2020	Benzo(k)fluoranthene	*ND*	*55.1*	0.882	3.43	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethoxy)methane	ND	55.1	0.882	59	ug/L
MKTF-42	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*55.1*	14.9	0.137	ug/L
MKTF-42	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	55.1	27.6	55.64	ug/L
MKTF-42	12/16/2020	4-Bromophenyl-phenylether	ND	55.1	1.1	NA	ug/L
MKTF-42	12/16/2020	Butylbenzylphthalate	*ND*	*55.1*	1.05	16	ug/L
MKTF-42	12/16/2020	Carbazole	ND	55.1	1.27	NA	ug/L
MKTF-42	12/16/2020	4-Chloroaniline	*ND*	*55.1*	18.7	0.37	ug/L
MKTF-42	12/16/2020	4-Chloro-3-Methylphenol	ND	55.1	20.9	NA	ug/L
MKTF-42	12/16/2020	2-Chloronaphthalene	ND	55.1	0.772	733	ug/L
MKTF-42	12/16/2020	2-Chlorophenol	ND	55.1	12.1	91	ug/L
MKTF-42	12/16/2020	4-Chlorophenyl-phenylether	ND	55.1	11	NA	ug/L
MKTF-42	12/16/2020	1,3-Dichlorobenzene	ND	55.1	0.992	NA	ug/L
MKTF-42	12/16/2020	Chrysene	*ND*	*55.1*	1.05	34.3	ug/L
MKTF-42	12/16/2020	Dibenzo(a,h)anthracene	ND	55.1	1.32	NA	ug/L
MKTF-42	12/16/2020	1,4-Dichlorobenzene	ND	55.1	0.882	75	ug/L
MKTF-42	12/16/2020	Dibenzofuran	ND	55.1	0.937	NA	ug/L
MKTF-42	12/16/2020	3,3-Dichlorobenzidine	*ND*	*55.1*	14.3	1.25	ug/L
MKTF-42	12/16/2020	2,4-Dichlorophenol	*ND*	*55.1*	16.5	45.3	ug/L
MKTF-42	12/16/2020	Diethylphthalate	ND	55.1	1.32	14801	ug/L
MKTF-42	12/16/2020	2,4-Dimethylphenol	ND	55.1	19.3	354	ug/L
MKTF-42	12/16/2020	Di-n-butylphthalate	ND	55.1	14.9	885	ug/L
MKTF-42	12/16/2020	2,4-Dinitrophenol	*ND*	*165*	18.7	38.7	ug/L
MKTF-42	12/16/2020	2,4-Dinitrotoluene	*ND*	*55.1*	10.5	45.3	ug/L
MKTF-42	12/16/2020	2,6-Dinitrotoluene	*ND*	*55.1*	10.5	0.485	ug/L
MKTF-42	12/16/2020	Fluoranthene	ND	55.1	0.992	802	ug/L
MKTF-42	12/16/2020	Fluorene	ND	55.1	0.992	288	ug/L
MKTF-42	12/16/2020	Hexachlorobenzene	*ND*	*55.1*	0.937	0.0976	ug/L
MKTF-42	12/16/2020	Hexachlorocyclopentadiene	*ND*	*110*	14.3	0.41	ug/L
MKTF-42	12/16/2020	Hexachloroethane	*ND*	*55.1*	23.1	3.28	ug/L
MKTF-42	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*55.1*	1.21	0.343	ug/L
MKTF-42	12/16/2020	Isophorone	ND	55.1	0.772	781	ug/L
MKTF-42	12/16/2020	2-Methylphenol	ND	55.1	9.92	NA	ug/L
MKTF-42	12/16/2020	Naphthalene	*ND*	*55.1*	0.937	30	ug/L
MKTF-42	12/16/2020	2-Nitroaniline	ND	55.1	12.1	190	ug/L
MKTF-42	12/16/2020	3-Nitroaniline	ND	55.1	9.92	NA	ug/L
MKTF-42	12/16/2020	4-Nitroaniline	*ND*	*55.1*	8.27	3.8	ug/L
MKTF-42	12/16/2020	Nitrobenzene	*ND*	*55.1*	0.716	1.4	ug/L
MKTF-42	12/16/2020	2-Nitrophenol	ND	55.1	28.7	NA	ug/L
MKTF-42	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*55.1*	18.2	0.011	ug/L
MKTF-42	12/16/2020	N-Nitrosodiphenylamine	ND	55.1	0.992	122	ug/L
MKTF-42	12/16/2020	Pentachlorophenol	*ND*	*110*	7.72	1	ug/L
MKTF-42	12/16/2020	Phenanthrene	ND	55.1	0.992	170	ug/L
MKTF-42	12/16/2020	Phenol	ND	55.1	14.3	5761	ug/L
MKTF-42	12/16/2020	Pyrene	ND	55.1	1.16	117	ug/L
MKTF-42	12/16/2020	2,4,5-Trichlorophenol	ND	55.1	20.4	1166	ug/L
MKTF-42	12/16/2020	2,4,6-Trichlorophenol	ND	55.1	19.3	11.9*	ug/L
MKTF-42	12/16/2020	Dimethylphthalate	ND	55.1	0.937	612	ug/L
MKTF-42	12/16/2020	Aniline	*ND*	*55.1*	20.9	13	ug/L
MKTF-42	12/16/2020	Benzoic Acid	ND	165	40.2	75000	ug/L
MKTF-42	12/16/2020	Benzyl Alcohol	ND	55.1	11	2000	ug/L
MKTF-42	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*55.1*	0.882	9.81	ug/L
MKTF-42	12/16/2020	N-Nitrosodimethylamine	*ND*	*55.1*	19.3	0.0049	ug/L
MKTF-42	12/16/2020	Pyridine	*ND*	*55.1*	17.6	20	ug/L
MKTF-42	12/16/2020	1,2,4-Trichlorobenzene	ND	55.1	0.992	70	ug/L
MKTF-42	12/16/2020	1,2-Dichlorobenzene	ND	55.1	0.937	600	ug/L
MKTF-42	12/16/2020	Azobenzene	*ND*	*55.1*	5.51	0.12	ug/L
MKTF-42	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*55.1*	8.82	1.52	ug/L
MKTF-42	12/16/2020	Di-n-octylphthalate	ND	55.1	0.937	200	ug/L
MKTF-42	12/16/2020	4-Nitrophenol	ND	55.1	11.6	NA	ug/L
MKTF-43	11/18/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-43	11/18/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-43	11/18/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-43	11/18/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-43	11/18/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-43	11/18/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-43	11/18/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-43	11/18/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-43	11/18/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-43	11/18/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-43	11/18/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-43	11/18/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-43	11/18/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-43	11/18/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-43	11/18/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-43	11/18/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-43	11/18/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-43	11/18/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-43	11/18/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-43	11/18/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-43	11/18/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-43	11/18/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-43	11/18/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	11/18/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-43	11/18/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-43	11/18/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-43	11/18/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-43	11/18/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-43	11/18/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	11/18/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-43	11/18/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-43	11/18/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-43	11/18/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-43	11/18/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-43	11/18/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-43	11/18/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-43	11/18/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-43	11/18/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-43	11/18/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-43	11/18/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/18/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-43	11/18/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	11/18/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-43	11/18/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-43	11/18/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-43	11/18/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	11/18/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	11/18/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-43	11/18/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-43	11/18/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-43	11/18/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	11/18/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-43	11/18/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-43	11/18/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-43	11/18/2014	Pyrene	ND	10	4	117	ug/L
MKTF-43	11/18/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-43	11/18/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-43	11/18/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-43	11/18/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-43	11/18/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MKTF-43	11/18/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-43	11/18/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-43	11/18/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-43	11/18/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-43	11/18/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-43	11/18/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	11/18/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-43	11/18/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-43	11/18/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-43	11/18/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-43	11/18/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-43	3/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	3/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-43	3/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	3/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	3/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	3/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	3/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-43	3/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	3/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	3/11/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	3/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	3/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	3/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	3/11/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	3/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	3/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	3/11/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	3/11/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	3/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	3/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-43	3/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-43	3/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	3/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-43	3/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	3/11/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	3/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	3/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	3/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	3/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-43	3/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	3/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-43	3/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-43	3/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	3/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	3/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	3/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	3/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	3/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	3/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-43	3/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	3/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	3/11/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-43	3/11/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	3/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	3/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-43	3/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	3/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	3/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	3/11/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	3/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	3/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-43	3/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	3/11/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	3/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	3/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	3/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	3/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	3/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	3/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	3/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	3/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	3/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	3/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-43	3/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	3/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	3/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	3/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	3/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	3/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-43	6/10/2015	Benzo(a)pyrene	*ND*	*12*	3.2	0.2	ug/L
MKTF-43	6/10/2015	2,4-Dinitrophenol	ND	24	1.3	38.7	ug/L
MKTF-43	6/10/2015	Dibenzo(a,h)anthracene	ND	12	3.8	NA	ug/L
MKTF-43	6/10/2015	Benzo(a)anthracene	*ND*	*12*	2.9	0.12	ug/L
MKTF-43	6/10/2015	4-Chloro-3-Methylphenol	ND	12	1.6	NA	ug/L
MKTF-43	6/10/2015	Aniline	ND	12	1.8	13	ug/L
MKTF-43	6/10/2015	N-Nitrosodimethylamine	*ND*	*12*	1.7	0.0049	ug/L
MKTF-43	6/10/2015	Benzoic Acid	ND	24	1.2	75000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	Hexachloroethane	*ND*	*12*	1.9	3.28	ug/L
MKTF-43	6/10/2015	Hexachlorocyclopentadiene	*ND*	*12*	1.7	0.41	ug/L
MKTF-43	6/10/2015	Isophorone	ND	12	2.3	781	ug/L
MKTF-43	6/10/2015	Acenaphthene	ND	12	2.2	535	ug/L
MKTF-43	6/10/2015	Diethylphthalate	ND	12	2	14801	ug/L
MKTF-43	6/10/2015	Di-n-butylphthalate	ND	12	2.5	885	ug/L
MKTF-43	6/10/2015	Phenanthrene	ND	12	2.3	170	ug/L
MKTF-43	6/10/2015	Butylbenzylphthalate	ND	12	2.8	16	ug/L
MKTF-43	6/10/2015	N-Nitrosodiphenylamine	ND	12	2.9	122	ug/L
MKTF-43	6/10/2015	Fluorene	ND	12	2	288	ug/L
MKTF-43	6/10/2015	Carbazole	ND	12	1.8	NA	ug/L
MKTF-43	6/10/2015	Hexachlorobutadiene	*ND*	*12*	2.3	0.14	ug/L
MKTF-43	6/10/2015	Pentachlorophenol	*ND*	*24*	1.3	1	ug/L
MKTF-43	6/10/2015	2,4,6-Trichlorophenol	ND	12	1.5	11.9*	ug/L
MKTF-43	6/10/2015	2-Nitroaniline	ND	12	2.1	190	ug/L
MKTF-43	6/10/2015	2-Nitrophenol	ND	12	1.4	NA	ug/L
MKTF-43	6/10/2015	1-Methylnaphthalene	*ND*	*12*	2.1	11.38	ug/L
MKTF-43	6/10/2015	Naphthalene	ND	12	2.2	30	ug/L
MKTF-43	6/10/2015	2-Methylnaphthalene	ND	12	2.6	35.1	ug/L
MKTF-43	6/10/2015	2-Chloronaphthalene	ND	12	2	733	ug/L
MKTF-43	6/10/2015	3,3-Dichlorobenzidine	*ND*	*12*	3.1	1.25	ug/L
MKTF-43	6/10/2015	2-Methylphenol	ND	12	1.5	NA	ug/L
MKTF-43	6/10/2015	1,2-Dichlorobenzene	ND	12	2.2	600	ug/L
MKTF-43	6/10/2015	2-Chlorophenol	ND	12	1.4	91	ug/L
MKTF-43	6/10/2015	2,4,5-Trichlorophenol	ND	12	1.9	1166	ug/L
MKTF-43	6/10/2015	Nitrobenzene	*ND*	*12*	1.8	1.4	ug/L
MKTF-43	6/10/2015	3-Nitroaniline	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	4-Nitroaniline	*ND*	*12*	1.5	3.8	ug/L
MKTF-43	6/10/2015	4-Nitrophenol	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	Benzyl Alcohol	ND	12	1.4	2000	ug/L
MKTF-43	6/10/2015	4-Bromophenyl-phenylether	ND	12	1.7	NA	ug/L
MKTF-43	6/10/2015	Azobenzene	*ND*	*12*	2.4	0.12	ug/L
MKTF-43	6/10/2015	2,4-Dimethylphenol	ND	12	2.2	354	ug/L
MKTF-43	6/10/2015	1,4-Dichlorobenzene	ND	12	1.5	75	ug/L
MKTF-43	6/10/2015	4-Chloroaniline	*ND*	*12*	2.2	0.37	ug/L
MKTF-43	6/10/2015	Phenol	ND	12	1.3	5761	ug/L
MKTF-43	6/10/2015	Pyridine	ND	12	2	20	ug/L
MKTF-43	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*12*	2.1	0.137	ug/L
MKTF-43	6/10/2015	Bis(2-chloroethoxy)methane	ND	12	2.1	59	ug/L
MKTF-43	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	12	3.9	55.64	ug/L
MKTF-43	6/10/2015	Di-n-octylphthalate	ND	12	2.3	200	ug/L
MKTF-43	6/10/2015	Hexachlorobenzene	*ND*	*12*	2.4	0.0976	ug/L
MKTF-43	6/10/2015	Anthracene	ND	12	1.9	1721	ug/L
MKTF-43	6/10/2015	1,2,4-Trichlorobenzene	ND	12	2.3	70	ug/L
MKTF-43	6/10/2015	2,4-Dichlorophenol	ND	24	1.6	45.3	ug/L
MKTF-43	6/10/2015	2,4-Dinitrotoluene	ND	12	1.7	45.3	ug/L
MKTF-43	6/10/2015	Pyrene	ND	12	2.7	117	ug/L
MKTF-43	6/10/2015	Dimethylphthalate	ND	12	2.3	612	ug/L
MKTF-43	6/10/2015	Dibenzofuran	ND	12	2.2	NA	ug/L
MKTF-43	6/10/2015	Benzo(g,h,i)perylene	ND	12	3.7	NA	ug/L
MKTF-43	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*12*	2.9	0.343	ug/L
MKTF-43	6/10/2015	Benzo(b)fluoranthene	*ND*	*12*	2.8	0.34	ug/L
MKTF-43	6/10/2015	Fluoranthene	ND	12	1.7	802	ug/L
MKTF-43	6/10/2015	Benzo(k)fluoranthene	*ND*	*12*	3	3.43	ug/L
MKTF-43	6/10/2015	Acenaphthylene	ND	12	2.2	NA	ug/L
MKTF-43	6/10/2015	Chrysene	ND	12	2.5	34.3	ug/L
MKTF-43	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*24*	1.6	1.52	ug/L
MKTF-43	6/10/2015	1,3-Dichlorobenzene	ND	12	2	NA	ug/L
MKTF-43	6/10/2015	2,6-Dinitrotoluene	*ND*	*12*	1.8	0.485	ug/L
MKTF-43	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*12*	2.4	0.011	ug/L
MKTF-43	6/10/2015	4-Chlorophenyl-phenylether	ND	12	2.4	NA	ug/L
MKTF-43	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*12*	2.4	9.81	ug/L
MKTF-43	6/10/2015	3,4-Methylphenol	ND	12	1.7	NA	ug/L
MKTF-43	8/21/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	8/21/2015	2,4-Dinitrophenol	ND	25	1.3	38.7	ug/L
MKTF-43	8/21/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	8/21/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	8/21/2015	4-Chloro-3-Methylphenol	ND	12	1.7	NA	ug/L
MKTF-43	8/21/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	8/21/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	8/21/2015	Benzoic Acid	ND	25	1.3	75000	ug/L
MKTF-43	8/21/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	8/21/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	8/21/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	8/21/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	8/21/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	8/21/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	8/21/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	8/21/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	8/21/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	8/21/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	8/21/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	8/21/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	8/21/2015	Pentachlorophenol	*ND*	*25*	1.4	1	ug/L
MKTF-43	8/21/2015	2,4,6-Trichlorophenol	ND	12	1.6	11.9*	ug/L
MKTF-43	8/21/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	8/21/2015	2-Nitrophenol	ND	12	1.5	NA	ug/L
MKTF-43	8/21/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	8/21/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	8/21/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	8/21/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	8/21/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	8/21/2015	2-Methylphenol	ND	12	1.6	NA	ug/L
MKTF-43	8/21/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	8/21/2015	2-Chlorophenol	ND	12	1.5	91	ug/L
MKTF-43	8/21/2015	2,4,5-Trichlorophenol	ND	12	2	1166	ug/L
MKTF-43	8/21/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	8/21/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	8/21/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	8/21/2015	4-Nitrophenol	ND	12	1.8	NA	ug/L
MKTF-43	8/21/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	8/21/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	8/21/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	8/21/2015	2,4-Dimethylphenol	ND	12	2.3	354	ug/L
MKTF-43	8/21/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	8/21/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	8/21/2015	Phenol	ND	12	1.4	5761	ug/L
MKTF-43	8/21/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	8/21/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	8/21/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/21/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	8/21/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	8/21/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	8/21/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	8/21/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	8/21/2015	2,4-Dichlorophenol	ND	25	1.7	45.3	ug/L
MKTF-43	8/21/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	8/21/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	8/21/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	8/21/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	8/21/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	8/21/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	8/21/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	8/21/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	8/21/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	8/21/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	8/21/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	8/21/2015	4,6-Dinitro-2-methylphenol	*ND*	*25*	1.7	1.52	ug/L
MKTF-43	8/21/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	8/21/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	8/21/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	8/21/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	8/21/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	8/21/2015	3,4-Methylphenol	ND	12	1.8	NA	ug/L
MKTF-43	11/5/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	11/5/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-43	11/5/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-43	11/5/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-43	11/5/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-43	11/5/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-43	11/5/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-43	11/5/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-43	11/5/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-43	11/5/2015	Isophorone	ND	10	2	781	ug/L
MKTF-43	11/5/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-43	11/5/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-43	11/5/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-43	11/5/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-43	11/5/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-43	11/5/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-43	11/5/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-43	11/5/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-43	11/5/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-43	11/5/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-43	11/5/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-43	11/5/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-43	11/5/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-43	11/5/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-43	11/5/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-43	11/5/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-43	11/5/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-43	11/5/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-43	11/5/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-43	11/5/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-43	11/5/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-43	11/5/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-43	11/5/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-43	11/5/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-43	11/5/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-43	11/5/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-43	11/5/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-43	11/5/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-43	11/5/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-43	11/5/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-43	11/5/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-43	11/5/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-43	11/5/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-43	11/5/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-43	11/5/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-43	11/5/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-43	11/5/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-43	11/5/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-43	11/5/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-43	11/5/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-43	11/5/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-43	11/5/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-43	11/5/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-43	11/5/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-43	11/5/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-43	11/5/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-43	11/5/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-43	11/5/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-43	11/5/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-43	11/5/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-43	11/5/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-43	11/5/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-43	11/5/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-43	11/5/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-43	11/5/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-43	11/5/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-43	11/5/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-43	11/5/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-43	11/5/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-43	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-43	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-43	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-43	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-43	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-43	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-43	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-43	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-43	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-43	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-43	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-43	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-43	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-43	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-43	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-43	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-43	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-43	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-43	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-43	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-43	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-43	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-43	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-43	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-43	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-43	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-43	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-43	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-43	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-43	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-43	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-43	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-43	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-43	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
MKTF-43	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-43	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-43	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-43	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-43	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-43	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-43	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-43	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-43	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-43	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-43	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-43	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-43	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-43	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-43	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-43	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-43	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-43	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-43	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-43	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-43	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-43	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-43	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-43	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-43	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-43	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-43	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-43	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-43	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-43	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-43	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-43	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-43	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-43	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-43	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-43	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-43	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	6/9/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MKTF-43	6/9/2016	Di-n-octylphthalate	5.6	10	2	200	ug/L
MKTF-43	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	6/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-43	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	9/9/2016	Benzoic Acid	17	20	2.6	75000	ug/L
MKTF-43	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	9/9/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
MKTF-43	9/9/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-43	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-43	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	10/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	10/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	10/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	10/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-43	10/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	10/31/2016	Benzoic Acid	8.3	20	2.6	75000	ug/L
MKTF-43	10/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	10/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	10/31/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	10/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	10/31/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	10/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-43	10/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	10/31/2016	Butylbenzylphthalate	2.8	10	2.5	16	ug/L
MKTF-43	10/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	10/31/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	10/31/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	10/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	10/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	10/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	10/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	10/31/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	10/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	10/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	10/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	10/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	10/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	10/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	10/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	10/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	10/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	10/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	10/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	10/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	10/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	10/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	10/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	10/31/2016	Phenol	ND	10	2	5761	ug/L
MKTF-43	10/31/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	10/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	10/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	10/31/2016	Bis(2-ethylhexyl)phthalate	6.3	10	2.6	55.64	ug/L
MKTF-43	10/31/2016	Di-n-octylphthalate	8.3	10	2	200	ug/L
MKTF-43	10/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	10/31/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	10/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	10/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	10/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	10/31/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	10/31/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-43	10/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	10/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	10/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	10/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-43	10/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	10/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	10/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	10/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	10/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	10/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	10/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	10/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	10/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	10/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-43	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-43	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-43	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-43	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-43	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-43	3/8/2017	Benzoic Acid	6.3	20	2.6	75000	ug/L
MKTF-43	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-43	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-43	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-43	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-43	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-43	3/8/2017	Di-n-butylphthalate	2.6	10	2.4	885	ug/L
MKTF-43	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-43	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-43	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-43	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-43	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-43	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-43	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-43	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-43	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-43	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-43	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-43	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-43	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-43	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-43	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-43	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-43	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-43	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-43	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-43	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-43	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-43	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-43	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-43	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-43	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-43	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-43	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-43	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-43	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-43	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-43	3/8/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
MKTF-43	3/8/2017	Di-n-octylphthalate	3.4	10	2	200	ug/L
MKTF-43	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-43	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-43	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-43	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-43	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-43	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-43	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-43	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-43	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-43	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-43	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-43	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-43	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-43	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-43	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-43	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-43	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-43	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-43	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-43	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-43	6/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	6/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	6/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	6/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	6/6/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	6/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	6/6/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-43	6/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	6/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	6/6/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	6/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	6/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	6/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	6/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	6/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	6/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	6/6/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	6/6/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	6/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	6/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	6/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	6/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	6/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	6/6/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	6/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	6/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	6/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	6/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	6/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	6/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	6/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	6/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	6/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	6/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	6/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	6/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	6/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	6/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	6/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	6/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	6/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	6/6/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	6/6/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	6/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	6/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	6/6/2017	Bis(2-ethylhexyl)phthalate	9.1	10	4.8	55.64	ug/L
MKTF-43	6/6/2017	Di-n-octylphthalate	5	10	4.7	200	ug/L
MKTF-43	6/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	6/6/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	6/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	6/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	6/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	6/6/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	6/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	6/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	6/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	6/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	6/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	6/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	6/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	6/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	6/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	6/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	6/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	6/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	6/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	6/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	6/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	6/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-43	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	9/25/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	11/27/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	11/27/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	11/27/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	11/27/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	11/27/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-43	11/27/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	11/27/2017	Benzoic Acid	8.6	20	3.9	75000	ug/L
MKTF-43	11/27/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	11/27/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	11/27/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	11/27/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	11/27/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	11/27/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	11/27/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	11/27/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	11/27/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	11/27/2017	Fluorene	ND	10	4	288	ug/L
MKTF-43	11/27/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	11/27/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	11/27/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	11/27/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	11/27/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	11/27/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	11/27/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	11/27/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	11/27/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	11/27/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	11/27/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	11/27/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	11/27/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	11/27/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	11/27/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	11/27/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	11/27/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	11/27/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	11/27/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	11/27/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	11/27/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	11/27/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	11/27/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	11/27/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	11/27/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	11/27/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	11/27/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	11/27/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	11/27/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	11/27/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	11/27/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	11/27/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	11/27/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	11/27/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	11/27/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	11/27/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	11/27/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	11/27/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	11/27/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	11/27/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	11/27/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	11/27/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	11/27/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	11/27/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	11/27/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	11/27/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	11/27/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	11/27/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	11/27/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/27/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	11/27/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	11/27/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	2/7/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-43	2/7/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-43	2/7/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-43	2/7/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	2/7/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-43	2/7/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-43	2/7/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-43	2/7/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-43	2/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-43	2/7/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-43	2/7/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-43	2/7/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-43	2/7/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-43	2/7/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-43	2/7/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-43	2/7/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-43	2/7/2018	Fluorene	ND	10	4	288	ug/L
MKTF-43	2/7/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-43	2/7/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-43	2/7/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-43	2/7/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-43	2/7/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-43	2/7/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-43	2/7/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-43	2/7/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-43	2/7/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-43	2/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-43	2/7/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-43	2/7/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-43	2/7/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-43	2/7/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-43	2/7/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-43	2/7/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-43	2/7/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-43	2/7/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-43	2/7/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-43	2/7/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-43	2/7/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-43	2/7/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-43	2/7/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-43	2/7/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-43	2/7/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-43	2/7/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-43	2/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-43	2/7/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-43	2/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-43	2/7/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-43	2/7/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-43	2/7/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-43	2/7/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-43	2/7/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-43	2/7/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-43	2/7/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-43	2/7/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-43	2/7/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-43	2/7/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-43	2/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-43	2/7/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-43	2/7/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-43	2/7/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-43	2/7/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-43	2/7/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-43	2/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-43	2/7/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-43	2/7/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-43	2/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-43	2/7/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-43	2/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-43	2/7/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-43	5/9/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	5/9/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	5/9/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-43	5/9/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	5/9/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	5/9/2018	Benzoic Acid	10	20	6.3	75000	ug/L
MKTF-43	5/9/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	5/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	5/9/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	5/9/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	5/9/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	5/9/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	5/9/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	5/9/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	5/9/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	5/9/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	5/9/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	5/9/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	5/9/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	5/9/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	5/9/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	5/9/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	5/9/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	5/9/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	5/9/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	5/9/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	5/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	5/9/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	5/9/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	5/9/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	5/9/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	5/9/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	5/9/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	5/9/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/9/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	5/9/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	5/9/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	5/9/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	5/9/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	5/9/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	5/9/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	5/9/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	5/9/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	5/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	5/9/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	5/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	5/9/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	5/9/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	5/9/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	5/9/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	5/9/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	5/9/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	5/9/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	5/9/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	5/9/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	5/9/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	5/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	5/9/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	5/9/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	5/9/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	5/9/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	5/9/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	5/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	5/9/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	5/9/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	5/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	5/9/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	5/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	5/9/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-43	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	8/30/2018	Benzoic Acid	6.4	20	6.3	75000	ug/L
MKTF-43	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-43	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	11/15/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-43	11/15/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-43	11/15/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-43	11/15/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-43	11/15/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-43	11/15/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-43	11/15/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-43	11/15/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-43	11/15/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-43	11/15/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-43	11/15/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-43	11/15/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-43	11/15/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-43	11/15/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-43	11/15/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-43	11/15/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-43	11/15/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-43	11/15/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-43	11/15/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-43	11/15/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-43	11/15/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-43	11/15/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-43	11/15/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-43	11/15/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-43	11/15/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-43	11/15/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-43	11/15/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-43	11/15/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-43	11/15/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-43	11/15/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-43	11/15/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-43	11/15/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-43	11/15/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-43	11/15/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-43	11/15/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-43	11/15/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-43	11/15/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-43	11/15/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-43	11/15/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-43	11/15/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-43	11/15/2018	Phenol	ND	10	6	5761	ug/L
MKTF-43	11/15/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-43	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-43	11/15/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-43	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-43	11/15/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-43	11/15/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-43	11/15/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-43	11/15/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-43	11/15/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-43	11/15/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-43	11/15/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-43	11/15/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-43	11/15/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-43	11/15/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-43	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-43	11/15/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-43	11/15/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-43	11/15/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-43	11/15/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-43	11/15/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-43	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-43	11/15/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-43	11/15/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-43	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-43	11/15/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-43	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-43	11/15/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-43	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-43	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-43	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-43	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-43	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-43	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-43	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-43	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-43	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-43	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-43	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-43	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-43	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-43	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-43	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-43	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-43	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-43	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-43	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-43	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-43	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-43	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-43	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-43	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-43	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-43	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-43	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-43	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-43	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-43	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-43	2/13/2019	Benzoic Acid	13	20	6.311561	75000	ug/L
MKTF-43	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-43	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Bis(2-ethylhexyl)phthalate	8.3	10	8.056342	55.64	ug/L
MKTF-43	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-43	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-43	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-43	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-43	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-43	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-43	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-43	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-43	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-43	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-43	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-43	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-43	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-43	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-43	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-43	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-43	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-43	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-43	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-43	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-43	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-43	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-43	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-43	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-43	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-43	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-43	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
MKTF-43	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-43	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-43	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-43	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-43	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-43	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-43	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-43	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-43	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-43	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-43	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-43	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-43	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-43	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-43	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-43	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-43	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-43	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-43	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-43	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-43	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-43	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-43	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-43	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-43	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-43	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-43	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-43	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-43	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-43	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-43	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-43	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-43	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-43	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-43	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-43	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-43	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-43	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-43	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-43	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-43	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-43	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-43	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-43	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-43	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-43	2/13/2019	Benzoic Acid	8.5	20	6.311561	75000	ug/L
MKTF-43	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-43	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-43	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-43	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-43	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-43	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-43	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-43	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-43	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-43	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-43	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-43	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-43	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-43	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-43	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-43	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-43	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-43	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-43	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-43	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-43	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-43	5/8/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-43	5/8/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-43	5/8/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-43	5/8/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-43	5/8/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-43	5/8/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-43	5/8/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-43	5/8/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-43	5/8/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-43	5/8/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-43	5/8/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-43	5/8/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-43	5/8/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-43	5/8/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-43	5/8/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-43	5/8/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-43	5/8/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-43	5/8/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-43	5/8/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-43	5/8/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-43	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-43	5/8/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-43	5/8/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-43	5/8/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-43	5/8/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-43	5/8/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-43	5/8/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-43	5/8/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-43	5/8/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-43	5/8/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-43	5/8/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-43	5/8/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-43	5/8/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-43	5/8/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-43	5/8/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-43	5/8/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-43	5/8/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-43	5/8/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-43	5/8/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-43	5/8/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-43	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-43	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-43	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-43	5/8/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-43	5/8/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-43	5/8/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-43	5/8/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-43	5/8/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-43	5/8/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-43	5/8/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-43	5/8/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-43	5/8/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-43	5/8/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-43	5/8/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-43	5/8/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-43	5/8/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-43	5/8/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-43	5/8/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-43	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-43	5/8/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-43	5/8/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-43	5/8/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-43	5/8/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-43	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-43	5/8/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-43	5/8/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-43	5/8/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-43	5/8/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-43	5/8/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-43	5/8/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-43	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-43	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-43	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-43	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-43	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-43	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-43	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-43	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-43	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-43	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-43	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-43	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-43	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-43	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-43	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-43	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-43	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-43	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-43	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-43	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-43	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-43	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-43	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-43	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-43	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-43	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-43	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-43	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-43	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-43	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-43	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-43	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-43	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-43	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-43	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-43	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-43	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-43	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-43	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-43	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-43	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-43	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-43	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-43	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-43	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-43	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-43	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-43	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-43	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-43	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-43	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-43	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-43	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-43	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-43	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-43	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-43	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-43	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-43	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-43	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-43	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-43	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-43	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-43	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-43	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-43	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-43	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-43	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-43	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-43	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-43	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-43	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-43	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-43	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-43	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-43	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-43	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-43	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-43	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-43	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-43	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-43	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-43	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-43	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-43	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-43	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-43	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-43	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-43	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-43	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-43	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-43	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-43	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-43	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-43	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-43	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-43	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-43	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-43	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-43	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-43	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-43	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-43	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-43	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-43	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-43	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-43	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-43	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-43	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-43	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-43	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-43	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-43	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-43	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-43	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-43	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-43	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-43	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-43	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-43	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-43	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-43	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-43	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-43	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-43	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-43	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-43	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-43	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-43	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-43	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-43	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-43	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-43	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-43	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-43	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-43	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-43	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-43	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-43	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-43	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-43	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-43	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-43	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-43	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-43	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-43	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-43	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-43	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-43	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-43	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-43	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-43	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-43	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-43	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-43	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-43	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-43	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-43	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-43	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-43	2/27/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-43	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-43	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-43	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-43	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-43	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-43	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-43	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-43	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-43	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-43	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-43	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-43	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-43	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-43	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-43	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-43	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-43	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-43	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-43	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-43	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-43	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-43	2/27/2020	Bis(2-ethylhexyl)phthalate	0.23	0.5	0.2	55.64	ug/L
MKTF-43	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-43	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-43	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-43	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-43	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-43	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-43	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-43	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-43	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-43	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-43	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-43	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-43	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-43	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-43	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-43	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-43	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-43	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-43	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-43	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-43	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-43	2/27/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-43	2/27/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-43	2/27/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-43	2/27/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-43	2/27/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-43	2/27/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-43	2/27/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-43	2/27/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-43	2/27/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-43	2/27/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
MKTF-43	2/27/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
MKTF-43	2/27/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-43	2/27/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-43	2/27/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-43	2/27/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-43	2/27/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-43	2/27/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-43	2/27/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-43	2/27/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-43	2/27/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-43	2/27/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-43	2/27/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-43	2/27/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-43	2/27/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-43	2/27/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-43	2/27/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-43	2/27/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-43	2/27/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-43	2/27/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-43	2/27/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-43	2/27/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-43	2/27/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-43	2/27/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-43	2/27/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-43	2/27/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-43	2/27/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-43	2/27/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-43	2/27/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-43	2/27/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-43	2/27/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-43	2/27/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-43	2/27/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-43	2/27/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-43	2/27/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-43	2/27/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-43	2/27/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-43	2/27/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-43	2/27/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-43	2/27/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-43	2/27/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-43	2/27/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-43	2/27/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-43	2/27/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-43	2/27/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-43	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-43	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-43	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-43	9/21/2020	1,4-Dioxane	0.26	0.51	0.1	4.59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-43	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-43	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-43	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-43	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-43	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-43	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-43	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-43	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MKTF-43	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-43	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-43	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-43	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-43	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-43	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-43	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-43	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-43	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-43	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-43	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-43	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-43	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-43	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-43	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-43	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-43	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MKTF-43	9/21/2020	Benzyl Alcohol	0.92	0.51	0.2	2000	ug/L
MKTF-43	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-43	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-43	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-43	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MKTF-43	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MKTF-43	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-43	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MKTF-43	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MKTF-43	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MKTF-43	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-43	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MKTF-43	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MKTF-43	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-43	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-43	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-43	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-43	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-43	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-43	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MKTF-43	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-43	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-43	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-43	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-43	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-43	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-43	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MKTF-43	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-43	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-43	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-43	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.4	0.182	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.4	0.205	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.182	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.182	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.7	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.4	4.33	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.4	0.182	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.4	3.99	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.4	0.205	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.4	0.16	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.4	0.194	30	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.4	5.93	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.76	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.4	3.99	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.4	4.33	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.182	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.4*	3.99	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.4	3.65	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.82	1.52	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.4	0.182	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.4	0.205	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.182	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.182	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.7	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.4	0.262	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.4	4.33	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.4	0.182	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.4	3.99	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.82	1.52	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.4	0.205	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.4	0.16	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.4	0.194	30	ug/L
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.4	5.93	NA	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.76	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.4	2.97	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.4	0.24	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.4	3.99	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.4	4.33	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.182	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.4*	3.99	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.4	3.65	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
MKTF-43	12/15/2020	Acenaphthene	ND	11.1	0.177	535	ug/L
MKTF-43	12/15/2020	Acenaphthylene	ND	11.1	0.188	NA	ug/L
MKTF-43	12/15/2020	Anthracene	ND	11.1	0.199	1721	ug/L
MKTF-43	12/15/2020	Benzo(a)anthracene	*ND*	*11.1*	0.199	0.12	ug/L
MKTF-43	12/15/2020	Benzo(a)pyrene	*ND*	*11.1*	0.133	0.2	ug/L
MKTF-43	12/15/2020	Benzo(b)fluoranthene	*ND*	*11.1*	0.166	0.34	ug/L
MKTF-43	12/15/2020	Benzo(g,h,i)perylene	ND	11.1	0.254	NA	ug/L
MKTF-43	12/15/2020	Benzo(k)fluoranthene	*ND*	*11.1*	0.177	3.43	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethoxy)methane	ND	11.1	0.177	59	ug/L
MKTF-43	12/15/2020	Bis(2-chloroethyl)ether	*ND*	*11.1*	2.98	0.137	ug/L
MKTF-43	12/15/2020	Bis(2-ethylhexyl)phthalate	ND	11.1	5.53	55.64	ug/L
MKTF-43	12/15/2020	4-Bromophenyl-phenylether	ND	11.1	0.221	NA	ug/L
MKTF-43	12/15/2020	Butylbenzylphthalate	ND	11.1	0.21	16	ug/L
MKTF-43	12/15/2020	Carbazole	ND	11.1	0.254	NA	ug/L
MKTF-43	12/15/2020	4-Chloroaniline	*ND*	*11.1*	3.76	0.37	ug/L
MKTF-43	12/15/2020	4-Chloro-3-Methylphenol	ND	11.1	4.2	NA	ug/L
MKTF-43	12/15/2020	2-Chloronaphthalene	ND	11.1	0.155	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	2-Chlorophenol	ND	11.1	2.43	91	ug/L
MKTF-43	12/15/2020	4-Chlorophenyl-phenylether	ND	11.1	2.21	NA	ug/L
MKTF-43	12/15/2020	1,3-Dichlorobenzene	ND	11.1	0.199	NA	ug/L
MKTF-43	12/15/2020	Chrysene	ND	11.1	0.21	34.3	ug/L
MKTF-43	12/15/2020	Dibenzo(a,h)anthracene	ND	11.1	0.265	NA	ug/L
MKTF-43	12/15/2020	1,4-Dichlorobenzene	ND	11.1	0.177	75	ug/L
MKTF-43	12/15/2020	Dibenzofuran	ND	11.1	0.188	NA	ug/L
MKTF-43	12/15/2020	3,3-Dichlorobenzidine	*ND*	*11.1*	2.87	1.25	ug/L
MKTF-43	12/15/2020	2,4-Dichlorophenol	ND	11.1	3.32	45.3	ug/L
MKTF-43	12/15/2020	Diethylphthalate	ND	11.1	0.265	14801	ug/L
MKTF-43	12/15/2020	2,4-Dimethylphenol	ND	11.1	3.87	354	ug/L
MKTF-43	12/15/2020	Di-n-butylphthalate	ND	11.1	2.98	885	ug/L
MKTF-43	12/15/2020	2,4-Dinitrophenol	ND	33.2	3.76	38.7	ug/L
MKTF-43	12/15/2020	2,4-Dinitrotoluene	ND	11.1	2.1	45.3	ug/L
MKTF-43	12/15/2020	2,6-Dinitrotoluene	*ND*	*11.1*	2.1	0.485	ug/L
MKTF-43	12/15/2020	Fluoranthene	ND	11.1	0.199	802	ug/L
MKTF-43	12/15/2020	Fluorene	ND	11.1	0.199	288	ug/L
MKTF-43	12/15/2020	Hexachlorobenzene	*ND*	*11.1*	0.188	0.0976	ug/L
MKTF-43	12/15/2020	Hexachlorocyclopentadiene	*ND*	*22.1*	2.87	0.41	ug/L
MKTF-43	12/15/2020	Hexachloroethane	*ND*	*11.1*	4.64	3.28	ug/L
MKTF-43	12/15/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.1*	0.243	0.343	ug/L
MKTF-43	12/15/2020	Isophorone	ND	11.1	0.155	781	ug/L
MKTF-43	12/15/2020	2-Methylphenol	ND	11.1	1.99	NA	ug/L
MKTF-43	12/15/2020	Naphthalene	ND	11.1	0.188	30	ug/L
MKTF-43	12/15/2020	2-Nitroaniline	ND	11.1	2.43	190	ug/L
MKTF-43	12/15/2020	3-Nitroaniline	ND	11.1	1.99	NA	ug/L
MKTF-43	12/15/2020	4-Nitroaniline	*ND*	*11.1*	1.66	3.8	ug/L
MKTF-43	12/15/2020	Nitrobenzene	*ND*	*11.1*	0.144	1.4	ug/L
MKTF-43	12/15/2020	2-Nitrophenol	ND	11.1	5.75	NA	ug/L
MKTF-43	12/15/2020	N-Nitrosodi-n-propylamine	*ND*	*11.1*	3.65	0.011	ug/L
MKTF-43	12/15/2020	N-Nitrosodiphenylamine	ND	11.1	0.199	122	ug/L
MKTF-43	12/15/2020	Pentachlorophenol	*ND*	*22.1*	1.55	1	ug/L
MKTF-43	12/15/2020	Phenanthrene	ND	11.1	0.199	170	ug/L
MKTF-43	12/15/2020	Phenol	ND	11.1	2.87	5761	ug/L
MKTF-43	12/15/2020	Pyrene	ND	11.1	0.232	117	ug/L
MKTF-43	12/15/2020	2,4,5-Trichlorophenol	ND	11.1	4.09	1166	ug/L
MKTF-43	12/15/2020	2,4,6-Trichlorophenol	ND	11.1	3.87	11.9*	ug/L
MKTF-43	12/15/2020	Dimethylphthalate	ND	11.1	0.188	612	ug/L
MKTF-43	12/15/2020	Aniline	ND	11.1	4.2	13	ug/L
MKTF-43	12/15/2020	Benzoic Acid	ND	33.2	8.07	75000	ug/L
MKTF-43	12/15/2020	Benzyl Alcohol	ND	11.1	2.21	2000	ug/L
MKTF-43	12/15/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.1*	0.177	9.81	ug/L
MKTF-43	12/15/2020	N-Nitrosodimethylamine	*ND*	*11.1*	3.87	0.0049	ug/L
MKTF-43	12/15/2020	Pyridine	ND	11.1	3.54	20	ug/L
MKTF-43	12/15/2020	1,2,4-Trichlorobenzene	ND	11.1	0.199	70	ug/L
MKTF-43	12/15/2020	1,2-Dichlorobenzene	ND	11.1	0.188	600	ug/L
MKTF-43	12/15/2020	Azobenzene	*ND*	*11.1*	1.11	0.12	ug/L
MKTF-43	12/15/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.1*	1.77	1.52	ug/L
MKTF-43	12/15/2020	Di-n-octylphthalate	ND	11.1	0.188	200	ug/L
MKTF-43	12/15/2020	4-Nitrophenol	ND	11.1	2.32	NA	ug/L
MKTF-44	11/21/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MKTF-44	11/21/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MKTF-44	11/21/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MKTF-44	11/21/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MKTF-44	11/21/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-44	11/21/2014	Aniline	ND	10	2.4	13	ug/L
MKTF-44	11/21/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MKTF-44	11/21/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MKTF-44	11/21/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MKTF-44	11/21/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MKTF-44	11/21/2014	Isophorone	ND	10	3.1	781	ug/L
MKTF-44	11/21/2014	Acenaphthene	ND	10	2.9	535	ug/L
MKTF-44	11/21/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MKTF-44	11/21/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MKTF-44	11/21/2014	Phenanthrene	ND	10	2.5	170	ug/L
MKTF-44	11/21/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MKTF-44	11/21/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MKTF-44	11/21/2014	Fluorene	ND	10	2.9	288	ug/L
MKTF-44	11/21/2014	Carbazole	ND	10	2.9	NA	ug/L
MKTF-44	11/21/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MKTF-44	11/21/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MKTF-44	11/21/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MKTF-44	11/21/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	11/21/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MKTF-44	11/21/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MKTF-44	11/21/2014	Naphthalene	ND	10	2.3	30	ug/L
MKTF-44	11/21/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MKTF-44	11/21/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MKTF-44	11/21/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	11/21/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
MKTF-44	11/21/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MKTF-44	11/21/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MKTF-44	11/21/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MKTF-44	11/21/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MKTF-44	11/21/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MKTF-44	11/21/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MKTF-44	11/21/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MKTF-44	11/21/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MKTF-44	11/21/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MKTF-44	11/21/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	11/21/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MKTF-44	11/21/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	11/21/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MKTF-44	11/21/2014	Phenol	ND	10	1.6	5761	ug/L
MKTF-44	11/21/2014	Pyridine	ND	10	1.6	20	ug/L
MKTF-44	11/21/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	11/21/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	11/21/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MKTF-44	11/21/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
MKTF-44	11/21/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MKTF-44	11/21/2014	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	11/21/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MKTF-44	11/21/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MKTF-44	11/21/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MKTF-44	11/21/2014	Pyrene	ND	10	4	117	ug/L
MKTF-44	11/21/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MKTF-44	11/21/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MKTF-44	11/21/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MKTF-44	11/21/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MKTF-44	11/21/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/21/2014	Fluoranthene	ND	10	3	802	ug/L
MKTF-44	11/21/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MKTF-44	11/21/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MKTF-44	11/21/2014	Chrysene	ND	10	2.9	34.3	ug/L
MKTF-44	11/21/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MKTF-44	11/21/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	11/21/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MKTF-44	11/21/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MKTF-44	11/21/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MKTF-44	11/21/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MKTF-44	11/21/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MKTF-44	3/12/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MKTF-44	3/12/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	3/12/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
MKTF-44	3/12/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
MKTF-44	3/12/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
MKTF-44	3/12/2015	Aniline	ND	10	4.2	13	ug/L
MKTF-44	3/12/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
MKTF-44	3/12/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
MKTF-44	3/12/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
MKTF-44	3/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
MKTF-44	3/12/2015	Isophorone	ND	10	3.7	781	ug/L
MKTF-44	3/12/2015	Acenaphthene	ND	10	4.8	535	ug/L
MKTF-44	3/12/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	3/12/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
MKTF-44	3/12/2015	Phenanthrene	ND	10	3.5	170	ug/L
MKTF-44	3/12/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
MKTF-44	3/12/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
MKTF-44	3/12/2015	Fluorene	ND	10	4.4	288	ug/L
MKTF-44	3/12/2015	Carbazole	ND	10	4.9	NA	ug/L
MKTF-44	3/12/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
MKTF-44	3/12/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
MKTF-44	3/12/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
MKTF-44	3/12/2015	2-Nitroaniline	ND	10	5	190	ug/L
MKTF-44	3/12/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
MKTF-44	3/12/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
MKTF-44	3/12/2015	Naphthalene	ND	10	3.6	30	ug/L
MKTF-44	3/12/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
MKTF-44	3/12/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
MKTF-44	3/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MKTF-44	3/12/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
MKTF-44	3/12/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
MKTF-44	3/12/2015	2-Chlorophenol	ND	10	4	91	ug/L
MKTF-44	3/12/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
MKTF-44	3/12/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
MKTF-44	3/12/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
MKTF-44	3/12/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
MKTF-44	3/12/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
MKTF-44	3/12/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
MKTF-44	3/12/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
MKTF-44	3/12/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
MKTF-44	3/12/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
MKTF-44	3/12/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
MKTF-44	3/12/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
MKTF-44	3/12/2015	Phenol	ND	10	4.2	5761	ug/L
MKTF-44	3/12/2015	Pyridine	ND	10	4.2	20	ug/L
MKTF-44	3/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
MKTF-44	3/12/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	3/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
MKTF-44	3/12/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
MKTF-44	3/12/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
MKTF-44	3/12/2015	Anthracene	ND	10	4	1721	ug/L
MKTF-44	3/12/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
MKTF-44	3/12/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
MKTF-44	3/12/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
MKTF-44	3/12/2015	Pyrene	ND	10	3.3	117	ug/L
MKTF-44	3/12/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
MKTF-44	3/12/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	3/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	3/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
MKTF-44	3/12/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
MKTF-44	3/12/2015	Fluoranthene	ND	10	4.6	802	ug/L
MKTF-44	3/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MKTF-44	3/12/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
MKTF-44	3/12/2015	Chrysene	ND	10	3.9	34.3	ug/L
MKTF-44	3/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
MKTF-44	3/12/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
MKTF-44	3/12/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
MKTF-44	3/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
MKTF-44	3/12/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
MKTF-44	3/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
MKTF-44	3/12/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
MKTF-44	6/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	6/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	6/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	6/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	6/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	6/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	6/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	6/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	6/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	6/10/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	6/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	6/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	6/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	6/10/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	6/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	6/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	6/10/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	6/10/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	6/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	6/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	6/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	6/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	6/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	6/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	6/10/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	6/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	6/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	6/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	6/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	6/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	6/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	6/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	6/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	6/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	6/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	6/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	6/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	6/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	6/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	6/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	6/10/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	6/10/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	6/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	6/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	6/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	6/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	6/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	6/10/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	6/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	6/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	6/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	6/10/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	6/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	6/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	6/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	6/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	6/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	6/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	6/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	6/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	6/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	6/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	6/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	6/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-44	6/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	6/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	6/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	6/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	8/17/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	8/17/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-44	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	11/9/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MKTF-44	11/9/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MKTF-44	11/9/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MKTF-44	11/9/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Aniline	ND	10	1.5	13	ug/L
MKTF-44	11/9/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MKTF-44	11/9/2015	Benzoic Acid	ND	20	1	75000	ug/L
MKTF-44	11/9/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MKTF-44	11/9/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MKTF-44	11/9/2015	Isophorone	ND	10	2	781	ug/L
MKTF-44	11/9/2015	Acenaphthene	ND	10	1.9	535	ug/L
MKTF-44	11/9/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MKTF-44	11/9/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MKTF-44	11/9/2015	Phenanthrene	ND	10	2	170	ug/L
MKTF-44	11/9/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MKTF-44	11/9/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MKTF-44	11/9/2015	Fluorene	ND	10	1.7	288	ug/L
MKTF-44	11/9/2015	Carbazole	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MKTF-44	11/9/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MKTF-44	11/9/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MKTF-44	11/9/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MKTF-44	11/9/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MKTF-44	11/9/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MKTF-44	11/9/2015	Naphthalene	ND	10	1.8	30	ug/L
MKTF-44	11/9/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MKTF-44	11/9/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MKTF-44	11/9/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MKTF-44	11/9/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MKTF-44	11/9/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MKTF-44	11/9/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MKTF-44	11/9/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MKTF-44	11/9/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MKTF-44	11/9/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MKTF-44	11/9/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MKTF-44	11/9/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MKTF-44	11/9/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MKTF-44	11/9/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MKTF-44	11/9/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MKTF-44	11/9/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MKTF-44	11/9/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MKTF-44	11/9/2015	Phenol	ND	10	1.1	5761	ug/L
MKTF-44	11/9/2015	Pyridine	ND	10	1.7	20	ug/L
MKTF-44	11/9/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MKTF-44	11/9/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MKTF-44	11/9/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MKTF-44	11/9/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MKTF-44	11/9/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MKTF-44	11/9/2015	Anthracene	ND	10	1.6	1721	ug/L
MKTF-44	11/9/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MKTF-44	11/9/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MKTF-44	11/9/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MKTF-44	11/9/2015	Pyrene	ND	10	2.3	117	ug/L
MKTF-44	11/9/2015	Dimethylphthalate	ND	10	2	612	ug/L
MKTF-44	11/9/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MKTF-44	11/9/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MKTF-44	11/9/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MKTF-44	11/9/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MKTF-44	11/9/2015	Fluoranthene	ND	10	1.5	802	ug/L
MKTF-44	11/9/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MKTF-44	11/9/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MKTF-44	11/9/2015	Chrysene	ND	10	2.2	34.3	ug/L
MKTF-44	11/9/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MKTF-44	11/9/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MKTF-44	11/9/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MKTF-44	11/9/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MKTF-44	11/9/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MKTF-44	11/9/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MKTF-44	11/9/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MKTF-44	2/24/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
MKTF-44	2/24/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
MKTF-44	2/24/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
MKTF-44	2/24/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
MKTF-44	2/24/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
MKTF-44	2/24/2016	Aniline	ND	10	9.8	13	ug/L
MKTF-44	2/24/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
MKTF-44	2/24/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
MKTF-44	2/24/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
MKTF-44	2/24/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
MKTF-44	2/24/2016	Isophorone	ND	10	8.1	781	ug/L
MKTF-44	2/24/2016	Acenaphthene	ND	10	8	535	ug/L
MKTF-44	2/24/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
MKTF-44	2/24/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
MKTF-44	2/24/2016	Phenanthrene	ND	10	6.8	170	ug/L
MKTF-44	2/24/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
MKTF-44	2/24/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
MKTF-44	2/24/2016	Fluorene	ND	10	7.2	288	ug/L
MKTF-44	2/24/2016	Carbazole	ND	10	7.2	NA	ug/L
MKTF-44	2/24/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
MKTF-44	2/24/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
MKTF-44	2/24/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
MKTF-44	2/24/2016	2-Nitroaniline	ND	10	9	190	ug/L
MKTF-44	2/24/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
MKTF-44	2/24/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
MKTF-44	2/24/2016	Naphthalene	ND	10	5.9	30	ug/L
MKTF-44	2/24/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
MKTF-44	2/24/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
MKTF-44	2/24/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
MKTF-44	2/24/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
MKTF-44	2/24/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
MKTF-44	2/24/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
MKTF-44	2/24/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
MKTF-44	2/24/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
MKTF-44	2/24/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/24/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
MKTF-44	2/24/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
MKTF-44	2/24/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
MKTF-44	2/24/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
MKTF-44	2/24/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
MKTF-44	2/24/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
MKTF-44	2/24/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
MKTF-44	2/24/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
MKTF-44	2/24/2016	Phenol	ND	10	5.1	5761	ug/L
MKTF-44	2/24/2016	Pyridine	ND	10	6.7	20	ug/L
MKTF-44	2/24/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
MKTF-44	2/24/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
MKTF-44	2/24/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
MKTF-44	2/24/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	2/24/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
MKTF-44	2/24/2016	Anthracene	ND	10	6.6	1721	ug/L
MKTF-44	2/24/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
MKTF-44	2/24/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
MKTF-44	2/24/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
MKTF-44	2/24/2016	Pyrene	ND	10	5.5	117	ug/L
MKTF-44	2/24/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
MKTF-44	2/24/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
MKTF-44	2/24/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
MKTF-44	2/24/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
MKTF-44	2/24/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
MKTF-44	2/24/2016	Fluoranthene	ND	10	6.1	802	ug/L
MKTF-44	2/24/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
MKTF-44	2/24/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
MKTF-44	2/24/2016	Chrysene	ND	10	6.6	34.3	ug/L
MKTF-44	2/24/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
MKTF-44	2/24/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
MKTF-44	2/24/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
MKTF-44	2/24/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
MKTF-44	2/24/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
MKTF-44	2/24/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
MKTF-44	2/24/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
MKTF-44	6/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	6/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	6/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-44	6/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	6/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-44	6/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	6/9/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
MKTF-44	6/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	6/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	6/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	6/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	6/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	6/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-44	6/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	6/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	6/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	6/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	6/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	6/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	6/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	6/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	6/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	6/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	6/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	6/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	6/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	6/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	6/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	6/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	6/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	6/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	6/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	6/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	6/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	6/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	6/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	6/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	6/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	6/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	6/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	6/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-44	6/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	6/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	6/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	6/9/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
MKTF-44	6/9/2016	Di-n-octylphthalate	5.1	10	2	200	ug/L
MKTF-44	6/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	6/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	6/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	6/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	6/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	6/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	6/9/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-44	6/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	6/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	6/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	6/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	6/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	6/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	6/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	6/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	6/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	6/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	6/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	6/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	6/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	6/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Aniline	ND	10	2.4	13	ug/L
MKTF-44	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	9/9/2016	Benzoic Acid	6.5	20	2.6	75000	ug/L
MKTF-44	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MKTF-44	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	9/9/2016	Phenol	ND	10	2	5761	ug/L
MKTF-44	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	9/9/2016	Bis(2-ethylhexyl)phthalate	3.5	10	2.6	55.64	ug/L
MKTF-44	9/9/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
MKTF-44	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	9/9/2016	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
MKTF-44	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	11/1/2016	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
MKTF-44	11/1/2016	2,4-Dinitrophenol	*ND*	*200*	28	38.7	ug/L
MKTF-44	11/1/2016	Dibenzo(a,h)anthracene	ND	100	27	NA	ug/L
MKTF-44	11/1/2016	Benzo(a)anthracene	*ND*	*100*	26	0.12	ug/L
MKTF-44	11/1/2016	4-Chloro-3-Methylphenol	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Aniline	*ND*	*100*	24	13	ug/L
MKTF-44	11/1/2016	N-Nitrosodimethylamine	*ND*	*100*	22	0.0049	ug/L
MKTF-44	11/1/2016	Benzoic Acid	110	200	26	75000	ug/L
MKTF-44	11/1/2016	Hexachloroethane	*ND*	*100*	24	3.28	ug/L
MKTF-44	11/1/2016	Hexachlorocyclopentadiene	*ND*	*100*	23	0.41	ug/L
MKTF-44	11/1/2016	Isophorone	ND	100	26	781	ug/L
MKTF-44	11/1/2016	Acenaphthene	ND	100	26	535	ug/L
MKTF-44	11/1/2016	Diethylphthalate	ND	100	27	14801	ug/L
MKTF-44	11/1/2016	Di-n-butylphthalate	ND	100	24	885	ug/L
MKTF-44	11/1/2016	Phenanthrene	ND	100	26	170	ug/L
MKTF-44	11/1/2016	Butylbenzylphthalate	**27**	100	25	16	ug/L
MKTF-44	11/1/2016	N-Nitrosodiphenylamine	ND	100	23	122	ug/L
MKTF-44	11/1/2016	Fluorene	ND	100	27	288	ug/L
MKTF-44	11/1/2016	Carbazole	ND	100	23	NA	ug/L
MKTF-44	11/1/2016	Hexachlorobutadiene	*ND*	*100*	22	0.14	ug/L
MKTF-44	11/1/2016	Pentachlorophenol	*ND*	*200*	23	1	ug/L
MKTF-44	11/1/2016	2,4,6-Trichlorophenol	ND	100	24	11.9*	ug/L
MKTF-44	11/1/2016	2-Nitroaniline	ND	100	28	190	ug/L
MKTF-44	11/1/2016	2-Nitrophenol	ND	100	24	NA	ug/L
MKTF-44	11/1/2016	1-Methylnaphthalene	*ND*	*100*	29	11.38	ug/L
MKTF-44	11/1/2016	Naphthalene	*ND*	*100*	26	30	ug/L
MKTF-44	11/1/2016	2-Methylnaphthalene	*ND*	*100*	29	35.1	ug/L
MKTF-44	11/1/2016	2-Chloronaphthalene	ND	100	23	733	ug/L
MKTF-44	11/1/2016	3,3-Dichlorobenzidine	*ND*	*100*	24	1.25	ug/L
MKTF-44	11/1/2016	2-Methylphenol	ND	100	25	NA	ug/L
MKTF-44	11/1/2016	1,2-Dichlorobenzene	ND	100	23	600	ug/L
MKTF-44	11/1/2016	2-Chlorophenol	*ND*	*100*	22	91	ug/L
MKTF-44	11/1/2016	2,4,5-Trichlorophenol	ND	100	22	1166	ug/L
MKTF-44	11/1/2016	Nitrobenzene	*ND*	*100*	28	1.4	ug/L
MKTF-44	11/1/2016	3-Nitroaniline	ND	100	29	NA	ug/L
MKTF-44	11/1/2016	4-Nitroaniline	*ND*	*100*	26	3.8	ug/L
MKTF-44	11/1/2016	4-Nitrophenol	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Benzyl Alcohol	ND	100	30	2000	ug/L
MKTF-44	11/1/2016	4-Bromophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Azobenzene	*ND*	*100*	27	0.12	ug/L
MKTF-44	11/1/2016	2,4-Dimethylphenol	ND	100	30	354	ug/L
MKTF-44	11/1/2016	1,4-Dichlorobenzene	*ND*	*100*	24	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	4-Chloroaniline	*ND*	*100*	27	0.37	ug/L
MKTF-44	11/1/2016	Phenol	ND	100	20	5761	ug/L
MKTF-44	11/1/2016	Pyridine	*ND*	*100*	22	20	ug/L
MKTF-44	11/1/2016	Bis(2-chloroethyl)ether	*ND*	*100*	27	0.137	ug/L
MKTF-44	11/1/2016	Bis(2-chloroethoxy)methane	*ND*	*100*	28	59	ug/L
MKTF-44	11/1/2016	Bis(2-ethylhexyl)phthalate	**66**	100	26	55.64	ug/L
MKTF-44	11/1/2016	Di-n-octylphthalate	75	100	20	200	ug/L
MKTF-44	11/1/2016	Hexachlorobenzene	*ND*	*100*	26	0.0976	ug/L
MKTF-44	11/1/2016	Anthracene	ND	100	25	1721	ug/L
MKTF-44	11/1/2016	1,2,4-Trichlorobenzene	*ND*	*100*	26	70	ug/L
MKTF-44	11/1/2016	2,4-Dichlorophenol	*ND*	*200*	23	45.3	ug/L
MKTF-44	11/1/2016	2,4-Dinitrotoluene	*ND*	*100*	31	45.3	ug/L
MKTF-44	11/1/2016	Pyrene	ND	100	31	117	ug/L
MKTF-44	11/1/2016	Dimethylphthalate	ND	100	24	612	ug/L
MKTF-44	11/1/2016	Dibenzofuran	ND	100	25	NA	ug/L
MKTF-44	11/1/2016	Benzo(g,h,i)perylene	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*100*	30	0.343	ug/L
MKTF-44	11/1/2016	Benzo(b)fluoranthene	*ND*	*100*	29	0.34	ug/L
MKTF-44	11/1/2016	Fluoranthene	ND	100	26	802	ug/L
MKTF-44	11/1/2016	Benzo(k)fluoranthene	*ND*	*100*	30	3.43	ug/L
MKTF-44	11/1/2016	Acenaphthylene	ND	100	24	NA	ug/L
MKTF-44	11/1/2016	Chrysene	*ND*	*100*	28	34.3	ug/L
MKTF-44	11/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*200*	18	1.52	ug/L
MKTF-44	11/1/2016	1,3-Dichlorobenzene	ND	100	23	NA	ug/L
MKTF-44	11/1/2016	2,6-Dinitrotoluene	*ND*	*100*	27	0.485	ug/L
MKTF-44	11/1/2016	N-Nitrosodi-n-propylamine	*ND*	*100*	24	0.011	ug/L
MKTF-44	11/1/2016	4-Chlorophenyl-phenylether	ND	100	26	NA	ug/L
MKTF-44	11/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*100*	19	9.81	ug/L
MKTF-44	11/1/2016	3,4-Methylphenol	ND	100	23	NA	ug/L
MKTF-44	3/8/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MKTF-44	3/8/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MKTF-44	3/8/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MKTF-44	3/8/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MKTF-44	3/8/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Aniline	ND	10	2.4	13	ug/L
MKTF-44	3/8/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MKTF-44	3/8/2017	Benzoic Acid	6.2	20	2.6	75000	ug/L
MKTF-44	3/8/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MKTF-44	3/8/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MKTF-44	3/8/2017	Isophorone	ND	10	2.6	781	ug/L
MKTF-44	3/8/2017	Acenaphthene	ND	10	2.6	535	ug/L
MKTF-44	3/8/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
MKTF-44	3/8/2017	Di-n-butylphthalate	2.6	10	2.4	885	ug/L
MKTF-44	3/8/2017	Phenanthrene	ND	10	2.6	170	ug/L
MKTF-44	3/8/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MKTF-44	3/8/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MKTF-44	3/8/2017	Fluorene	ND	10	2.7	288	ug/L
MKTF-44	3/8/2017	Carbazole	ND	10	2.3	NA	ug/L
MKTF-44	3/8/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MKTF-44	3/8/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MKTF-44	3/8/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MKTF-44	3/8/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
MKTF-44	3/8/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
MKTF-44	3/8/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MKTF-44	3/8/2017	Naphthalene	ND	10	2.6	30	ug/L
MKTF-44	3/8/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MKTF-44	3/8/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MKTF-44	3/8/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MKTF-44	3/8/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
MKTF-44	3/8/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MKTF-44	3/8/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
MKTF-44	3/8/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MKTF-44	3/8/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MKTF-44	3/8/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
MKTF-44	3/8/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MKTF-44	3/8/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
MKTF-44	3/8/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MKTF-44	3/8/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
MKTF-44	3/8/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MKTF-44	3/8/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MKTF-44	3/8/2017	Phenol	ND	10	2	5761	ug/L
MKTF-44	3/8/2017	Pyridine	ND	10	2.2	20	ug/L
MKTF-44	3/8/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MKTF-44	3/8/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MKTF-44	3/8/2017	Bis(2-ethylhexyl)phthalate	8	10	2.6	55.64	ug/L
MKTF-44	3/8/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
MKTF-44	3/8/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MKTF-44	3/8/2017	Anthracene	ND	10	2.5	1721	ug/L
MKTF-44	3/8/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MKTF-44	3/8/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MKTF-44	3/8/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MKTF-44	3/8/2017	Pyrene	ND	10	3.1	117	ug/L
MKTF-44	3/8/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
MKTF-44	3/8/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
MKTF-44	3/8/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MKTF-44	3/8/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MKTF-44	3/8/2017	Fluoranthene	ND	10	2.6	802	ug/L
MKTF-44	3/8/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MKTF-44	3/8/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
MKTF-44	3/8/2017	Chrysene	ND	10	2.8	34.3	ug/L
MKTF-44	3/8/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MKTF-44	3/8/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MKTF-44	3/8/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MKTF-44	3/8/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MKTF-44	3/8/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MKTF-44	3/8/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MKTF-44	3/8/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MKTF-44	6/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	6/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	6/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	6/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	6/5/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	6/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	6/5/2017	Benzoic Acid	7	20	3.9	75000	ug/L
MKTF-44	6/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	6/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/5/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	6/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	6/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	6/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	6/5/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	6/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	6/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	6/5/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	6/5/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	6/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	6/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	6/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	6/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	6/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	6/5/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	6/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	6/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	6/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	6/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	6/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	6/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	6/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	6/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	6/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	6/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	6/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	6/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	6/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	6/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	6/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	6/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	6/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	6/5/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	6/5/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	6/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	6/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	6/5/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
MKTF-44	6/5/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
MKTF-44	6/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	6/5/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	6/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	6/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	6/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	6/5/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	6/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	6/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	6/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	6/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	6/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	6/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	6/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	6/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	6/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	6/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	6/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	6/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	6/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	6/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	6/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	6/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	9/25/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	9/25/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	9/25/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	9/25/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	9/25/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	9/25/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	9/25/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MKTF-44	9/25/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	9/25/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	9/25/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	9/25/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	9/25/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	9/25/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	9/25/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	9/25/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	9/25/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	9/25/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	9/25/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	9/25/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	9/25/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	9/25/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	9/25/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	9/25/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	9/25/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	9/25/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	9/25/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	9/25/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	9/25/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	9/25/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	9/25/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	9/25/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	9/25/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	9/25/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	9/25/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	9/25/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	9/25/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	9/25/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	9/25/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	9/25/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	9/25/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	9/25/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	9/25/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	9/25/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	9/25/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	9/25/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	9/25/2017	Bis(2-ethylhexyl)phthalate	24	10	4.8	55.64	ug/L
MKTF-44	9/25/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/25/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	9/25/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	9/25/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	9/25/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	9/25/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	9/25/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	9/25/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	9/25/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	9/25/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	9/25/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	9/25/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	9/25/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	9/25/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	9/25/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	9/25/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	9/25/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	9/25/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	9/25/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	9/25/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	9/25/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	9/25/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	9/25/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	11/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	11/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	11/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	11/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	11/28/2017	Aniline	ND	10	3.1	13	ug/L
MKTF-44	11/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	11/28/2017	Benzoic Acid	11	20	3.9	75000	ug/L
MKTF-44	11/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	11/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	11/28/2017	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	11/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	11/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	11/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	11/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	11/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	11/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MKTF-44	11/28/2017	Fluorene	ND	10	4	288	ug/L
MKTF-44	11/28/2017	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	11/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	11/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	11/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	11/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	11/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	11/28/2017	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	11/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	11/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	11/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	11/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	11/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	11/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	11/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	11/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	11/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	11/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	11/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	11/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	11/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	11/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	11/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	11/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	11/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	11/28/2017	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	11/28/2017	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	11/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	11/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	11/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-44	11/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-44	11/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	11/28/2017	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	11/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	11/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	11/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	11/28/2017	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	11/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	11/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	11/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	11/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	11/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	11/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	11/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	11/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	11/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	11/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	11/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	11/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	11/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	11/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	11/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	11/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	2/8/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MKTF-44	2/8/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MKTF-44	2/8/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MKTF-44	2/8/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	2/8/2018	Aniline	ND	10	3.1	13	ug/L
MKTF-44	2/8/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MKTF-44	2/8/2018	Benzoic Acid	12	20	3.9	75000	ug/L
MKTF-44	2/8/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MKTF-44	2/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MKTF-44	2/8/2018	Isophorone	ND	10	4.4	781	ug/L
MKTF-44	2/8/2018	Acenaphthene	ND	10	3.6	535	ug/L
MKTF-44	2/8/2018	Diethylphthalate	ND	10	4	14801	ug/L
MKTF-44	2/8/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
MKTF-44	2/8/2018	Phenanthrene	ND	10	4.3	170	ug/L
MKTF-44	2/8/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MKTF-44	2/8/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/8/2018	Fluorene	ND	10	4	288	ug/L
MKTF-44	2/8/2018	Carbazole	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MKTF-44	2/8/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MKTF-44	2/8/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MKTF-44	2/8/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
MKTF-44	2/8/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
MKTF-44	2/8/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MKTF-44	2/8/2018	Naphthalene	ND	10	2.9	30	ug/L
MKTF-44	2/8/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MKTF-44	2/8/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MKTF-44	2/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MKTF-44	2/8/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
MKTF-44	2/8/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MKTF-44	2/8/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
MKTF-44	2/8/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MKTF-44	2/8/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MKTF-44	2/8/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
MKTF-44	2/8/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MKTF-44	2/8/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
MKTF-44	2/8/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MKTF-44	2/8/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MKTF-44	2/8/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MKTF-44	2/8/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MKTF-44	2/8/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MKTF-44	2/8/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MKTF-44	2/8/2018	Phenol	ND	10	3.1	5761	ug/L
MKTF-44	2/8/2018	Pyridine	ND	10	2.3	20	ug/L
MKTF-44	2/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MKTF-44	2/8/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MKTF-44	2/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MKTF-44	2/8/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MKTF-44	2/8/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MKTF-44	2/8/2018	Anthracene	ND	10	3.5	1721	ug/L
MKTF-44	2/8/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MKTF-44	2/8/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MKTF-44	2/8/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MKTF-44	2/8/2018	Pyrene	ND	10	4.4	117	ug/L
MKTF-44	2/8/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
MKTF-44	2/8/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
MKTF-44	2/8/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MKTF-44	2/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MKTF-44	2/8/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MKTF-44	2/8/2018	Fluoranthene	ND	10	4.3	802	ug/L
MKTF-44	2/8/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MKTF-44	2/8/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
MKTF-44	2/8/2018	Chrysene	ND	10	3.8	34.3	ug/L
MKTF-44	2/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MKTF-44	2/8/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MKTF-44	2/8/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MKTF-44	2/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MKTF-44	2/8/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MKTF-44	2/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MKTF-44	2/8/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MKTF-44	5/10/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-44	5/10/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-44	5/10/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-44	5/10/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-44	5/10/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-44	5/10/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-44	5/10/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-44	5/10/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-44	5/10/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-44	5/10/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-44	5/10/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	5/10/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-44	5/10/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-44	5/10/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-44	5/10/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-44	5/10/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-44	5/10/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-44	5/10/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-44	5/10/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-44	5/10/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-44	5/10/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-44	5/10/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-44	5/10/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-44	5/10/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-44	5/10/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-44	5/10/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-44	5/10/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-44	5/10/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	5/10/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-44	5/10/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-44	5/10/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-44	5/10/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-44	5/10/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-44	5/10/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-44	5/10/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-44	5/10/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-44	5/10/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-44	5/10/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-44	5/10/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-44	5/10/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-44	5/10/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-44	5/10/2018	Phenol	ND	10	6	5761	ug/L
MKTF-44	5/10/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-44	5/10/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-44	5/10/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-44	5/10/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-44	5/10/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	5/10/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-44	5/10/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-44	5/10/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-44	5/10/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-44	5/10/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-44	5/10/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-44	5/10/2018	Dimethylphthalate	ND	10	6	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-44	5/10/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-44	5/10/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-44	5/10/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-44	5/10/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-44	5/10/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-44	5/10/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-44	5/10/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-44	5/10/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-44	5/10/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-44	5/10/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-44	5/10/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-44	5/10/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-44	5/10/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-44	5/10/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-44	8/30/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MKTF-44	8/30/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MKTF-44	8/30/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MKTF-44	8/30/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Aniline	ND	10	6.2	13	ug/L
MKTF-44	8/30/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MKTF-44	8/30/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
MKTF-44	8/30/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MKTF-44	8/30/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MKTF-44	8/30/2018	Isophorone	ND	10	6.2	781	ug/L
MKTF-44	8/30/2018	Acenaphthene	ND	10	5.8	535	ug/L
MKTF-44	8/30/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MKTF-44	8/30/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MKTF-44	8/30/2018	Phenanthrene	ND	10	6	170	ug/L
MKTF-44	8/30/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MKTF-44	8/30/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MKTF-44	8/30/2018	Fluorene	ND	10	6.3	288	ug/L
MKTF-44	8/30/2018	Carbazole	ND	10	6.3	NA	ug/L
MKTF-44	8/30/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MKTF-44	8/30/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MKTF-44	8/30/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MKTF-44	8/30/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MKTF-44	8/30/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MKTF-44	8/30/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MKTF-44	8/30/2018	Naphthalene	ND	10	5	30	ug/L
MKTF-44	8/30/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MKTF-44	8/30/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MKTF-44	8/30/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MKTF-44	8/30/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MKTF-44	8/30/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MKTF-44	8/30/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MKTF-44	8/30/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MKTF-44	8/30/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MKTF-44	8/30/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MKTF-44	8/30/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MKTF-44	8/30/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MKTF-44	8/30/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MKTF-44	8/30/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MKTF-44	8/30/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MKTF-44	8/30/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MKTF-44	8/30/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MKTF-44	8/30/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MKTF-44	8/30/2018	Phenol	ND	10	6	5761	ug/L
MKTF-44	8/30/2018	Pyridine	ND	10	5.4	20	ug/L
MKTF-44	8/30/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MKTF-44	8/30/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MKTF-44	8/30/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MKTF-44	8/30/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MKTF-44	8/30/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MKTF-44	8/30/2018	Anthracene	ND	10	5.7	1721	ug/L
MKTF-44	8/30/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MKTF-44	8/30/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MKTF-44	8/30/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MKTF-44	8/30/2018	Pyrene	ND	10	6.5	117	ug/L
MKTF-44	8/30/2018	Dimethylphthalate	ND	10	6	612	ug/L
MKTF-44	8/30/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MKTF-44	8/30/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MKTF-44	8/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MKTF-44	8/30/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MKTF-44	8/30/2018	Fluoranthene	ND	10	5.8	802	ug/L
MKTF-44	8/30/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MKTF-44	8/30/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MKTF-44	8/30/2018	Chrysene	ND	10	6.8	34.3	ug/L
MKTF-44	8/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MKTF-44	8/30/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MKTF-44	8/30/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MKTF-44	8/30/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MKTF-44	8/30/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MKTF-44	8/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MKTF-44	8/30/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MKTF-44	11/15/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
MKTF-44	11/15/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
MKTF-44	11/15/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
MKTF-44	11/15/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Aniline	*ND*	*50*	31	13	ug/L
MKTF-44	11/15/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
MKTF-44	11/15/2018	Benzoic Acid	ND	100	32	75000	ug/L
MKTF-44	11/15/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
MKTF-44	11/15/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
MKTF-44	11/15/2018	Isophorone	ND	50	31	781	ug/L
MKTF-44	11/15/2018	Acenaphthene	ND	50	29	535	ug/L
MKTF-44	11/15/2018	Diethylphthalate	ND	50	31	14801	ug/L
MKTF-44	11/15/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
MKTF-44	11/15/2018	Phenanthrene	ND	50	30	170	ug/L
MKTF-44	11/15/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
MKTF-44	11/15/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
MKTF-44	11/15/2018	Fluorene	ND	50	32	288	ug/L
MKTF-44	11/15/2018	Carbazole	ND	50	31	NA	ug/L
MKTF-44	11/15/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
MKTF-44	11/15/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
MKTF-44	11/15/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
MKTF-44	11/15/2018	2-Nitroaniline	ND	50	29	190	ug/L
MKTF-44	11/15/2018	2-Nitrophenol	ND	50	30	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
MKTF-44	11/15/2018	Naphthalene	*ND*	*50*	25	30	ug/L
MKTF-44	11/15/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
MKTF-44	11/15/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
MKTF-44	11/15/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
MKTF-44	11/15/2018	2-Methylphenol	ND	50	32	NA	ug/L
MKTF-44	11/15/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
MKTF-44	11/15/2018	2-Chlorophenol	ND	50	29	91	ug/L
MKTF-44	11/15/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
MKTF-44	11/15/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
MKTF-44	11/15/2018	3-Nitroaniline	ND	50	34	NA	ug/L
MKTF-44	11/15/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
MKTF-44	11/15/2018	4-Nitrophenol	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
MKTF-44	11/15/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
MKTF-44	11/15/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
MKTF-44	11/15/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
MKTF-44	11/15/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
MKTF-44	11/15/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
MKTF-44	11/15/2018	Phenol	ND	50	30	5761	ug/L
MKTF-44	11/15/2018	Pyridine	*ND*	*50*	27	20	ug/L
MKTF-44	11/15/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
MKTF-44	11/15/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
MKTF-44	11/15/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
MKTF-44	11/15/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
MKTF-44	11/15/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
MKTF-44	11/15/2018	Anthracene	ND	50	29	1721	ug/L
MKTF-44	11/15/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
MKTF-44	11/15/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
MKTF-44	11/15/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
MKTF-44	11/15/2018	Pyrene	ND	50	33	117	ug/L
MKTF-44	11/15/2018	Dimethylphthalate	ND	50	30	612	ug/L
MKTF-44	11/15/2018	Dibenzofuran	ND	50	34	NA	ug/L
MKTF-44	11/15/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
MKTF-44	11/15/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
MKTF-44	11/15/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
MKTF-44	11/15/2018	Fluoranthene	ND	50	29	802	ug/L
MKTF-44	11/15/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
MKTF-44	11/15/2018	Acenaphthylene	ND	50	31	NA	ug/L
MKTF-44	11/15/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
MKTF-44	11/15/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
MKTF-44	11/15/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
MKTF-44	11/15/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
MKTF-44	11/15/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
MKTF-44	11/15/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
MKTF-44	11/15/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
MKTF-44	11/15/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
MKTF-44	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
MKTF-44	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
MKTF-44	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
MKTF-44	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
MKTF-44	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
MKTF-44	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
MKTF-44	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
MKTF-44	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
MKTF-44	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
MKTF-44	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
MKTF-44	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
MKTF-44	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
MKTF-44	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
MKTF-44	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
MKTF-44	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
MKTF-44	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
MKTF-44	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
MKTF-44	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
MKTF-44	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
MKTF-44	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
MKTF-44	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
MKTF-44	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
MKTF-44	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
MKTF-44	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
MKTF-44	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
MKTF-44	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
MKTF-44	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
MKTF-44	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
MKTF-44	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
MKTF-44	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
MKTF-44	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
MKTF-44	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
MKTF-44	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
MKTF-44	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
MKTF-44	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
MKTF-44	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
MKTF-44	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
MKTF-44	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
MKTF-44	2/13/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
MKTF-44	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
MKTF-44	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
MKTF-44	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
MKTF-44	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
MKTF-44	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
MKTF-44	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
MKTF-44	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
MKTF-44	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
MKTF-44	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
MKTF-44	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
MKTF-44	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
MKTF-44	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
MKTF-44	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
MKTF-44	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
MKTF-44	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
MKTF-44	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
MKTF-44	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
MKTF-44	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
MKTF-44	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
MKTF-44	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
MKTF-44	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
MKTF-44	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
MKTF-44	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
MKTF-44	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
MKTF-44	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
MKTF-44	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
MKTF-44	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
MKTF-44	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
MKTF-44	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
MKTF-44	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
MKTF-44	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
MKTF-44	5/8/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-44	5/8/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-44	5/8/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-44	5/8/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-44	5/8/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-44	5/8/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-44	5/8/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-44	5/8/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-44	5/8/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-44	5/8/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-44	5/8/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-44	5/8/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-44	5/8/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-44	5/8/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-44	5/8/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-44	5/8/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-44	5/8/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-44	5/8/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-44	5/8/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-44	5/8/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-44	5/8/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-44	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-44	5/8/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-44	5/8/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-44	5/8/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-44	5/8/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-44	5/8/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-44	5/8/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-44	5/8/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-44	5/8/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-44	5/8/2019	Aniline	ND	10	3.579516	13	ug/L
MKTF-44	5/8/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-44	5/8/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-44	5/8/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-44	5/8/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-44	5/8/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-44	5/8/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-44	5/8/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-44	5/8/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-44	5/8/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-44	5/8/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-44	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-44	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-44	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-44	5/8/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-44	5/8/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-44	5/8/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-44	5/8/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-44	5/8/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-44	5/8/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-44	5/8/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-44	5/8/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-44	5/8/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-44	5/8/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-44	5/8/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-44	5/8/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-44	5/8/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-44	5/8/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-44	5/8/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-44	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-44	5/8/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-44	5/8/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-44	5/8/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-44	5/8/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-44	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-44	5/8/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-44	5/8/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-44	5/8/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-44	5/8/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-44	5/8/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-44	5/8/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-44	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MKTF-44	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MKTF-44	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MKTF-44	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MKTF-44	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MKTF-44	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MKTF-44	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MKTF-44	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MKTF-44	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MKTF-44	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MKTF-44	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MKTF-44	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MKTF-44	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MKTF-44	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MKTF-44	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MKTF-44	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MKTF-44	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MKTF-44	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MKTF-44	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MKTF-44	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MKTF-44	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MKTF-44	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MKTF-44	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MKTF-44	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MKTF-44	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MKTF-44	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MKTF-44	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MKTF-44	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MKTF-44	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MKTF-44	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MKTF-44	8/22/2019	Aniline	ND	10	3.579516	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
MKTF-44	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MKTF-44	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MKTF-44	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MKTF-44	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MKTF-44	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MKTF-44	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MKTF-44	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MKTF-44	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MKTF-44	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MKTF-44	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MKTF-44	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MKTF-44	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MKTF-44	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MKTF-44	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
MKTF-44	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MKTF-44	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MKTF-44	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MKTF-44	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MKTF-44	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MKTF-44	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MKTF-44	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MKTF-44	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MKTF-44	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
MKTF-44	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MKTF-44	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MKTF-44	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MKTF-44	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MKTF-44	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MKTF-44	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
MKTF-44	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
MKTF-44	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MKTF-44	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MKTF-44	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MKTF-44	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MKTF-44	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MKTF-44	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MKTF-44	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
MKTF-44	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
MKTF-44	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
MKTF-44	10/24/2019	Acenaphthene	ND	3	1.14	535	ug/L
MKTF-44	10/24/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
MKTF-44	10/24/2019	Anthracene	ND	0.6	0.161	1721	ug/L
MKTF-44	10/24/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
MKTF-44	10/24/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
MKTF-44	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
MKTF-44	10/24/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
MKTF-44	10/24/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
MKTF-44	10/24/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
MKTF-44	10/24/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
MKTF-44	10/24/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
MKTF-44	10/24/2019	Fluorene	ND	0.8	0.338	288	ug/L
MKTF-44	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	3	1.159	30	ug/L
MKTF-44	10/24/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
MKTF-44	10/24/2019	Pyrene	ND	0.4	0.276	117	ug/L
MKTF-44	10/24/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MKTF-44	10/24/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MKTF-44	10/24/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MKTF-44	10/24/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
MKTF-44	10/24/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MKTF-44	10/24/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MKTF-44	10/24/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MKTF-44	10/24/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MKTF-44	10/24/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MKTF-44	10/24/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MKTF-44	10/24/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MKTF-44	10/24/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
MKTF-44	10/24/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MKTF-44	10/24/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MKTF-44	10/24/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MKTF-44	10/24/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MKTF-44	10/24/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MKTF-44	10/24/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MKTF-44	10/24/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MKTF-44	10/24/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
MKTF-44	10/24/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Aniline	ND	0.5	0.5	13	ug/L
MKTF-44	10/24/2019	Anthracene	ND	0.5	0.5	1721	ug/L
MKTF-44	10/24/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
MKTF-44	10/24/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
MKTF-44	10/24/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
MKTF-44	10/24/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MKTF-44	10/24/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
MKTF-44	10/24/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MKTF-44	10/24/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MKTF-44	10/24/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MKTF-44	10/24/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MKTF-44	10/24/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MKTF-44	10/24/2019	Carbazole	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
MKTF-44	10/24/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
MKTF-44	10/24/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MKTF-44	10/24/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MKTF-44	10/24/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MKTF-44	10/24/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MKTF-44	10/24/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MKTF-44	10/24/2019	Fluoranthene	ND	0.5	0.5	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Fluorene	ND	0.5	0.5	288	ug/L
MKTF-44	10/24/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MKTF-44	10/24/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MKTF-44	10/24/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MKTF-44	10/24/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MKTF-44	10/24/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
MKTF-44	10/24/2019	Isophorone	ND	0.5	0.5	781	ug/L
MKTF-44	10/24/2019	Naphthalene	ND	0.5	0.5	30	ug/L
MKTF-44	10/24/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MKTF-44	10/24/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MKTF-44	10/24/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MKTF-44	10/24/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
MKTF-44	10/24/2019	Phenol	ND	0.5	0.5	5761	ug/L
MKTF-44	10/24/2019	Pyrene	ND	0.5	0.5	117	ug/L
MKTF-44	10/24/2019	Pyridine	ND	0.5	0.5	20	ug/L
MKTF-44	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-44	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-44	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-44	3/5/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
MKTF-44	3/5/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
MKTF-44	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-44	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-44	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-44	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-44	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-44	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-44	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-44	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-44	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-44	3/5/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
MKTF-44	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-44	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-44	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-44	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-44	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-44	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-44	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-44	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-44	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-44	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-44	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-44	3/5/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-44	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-44	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-44	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-44	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-44	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-44	3/5/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-44	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-44	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-44	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-44	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-44	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-44	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-44	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-44	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-44	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-44	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-44	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-44	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-44	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-44	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-44	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-44	3/5/2020	Naphthalene	ND	2.5	0.5	30	ug/L
MKTF-44	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-44	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-44	3/5/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-44	3/5/2020	Phenol	ND	2.5	0.5	5761	ug/L
MKTF-44	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-44	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-44	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
MKTF-44	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
MKTF-44	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
MKTF-44	9/21/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
MKTF-44	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
MKTF-44	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
MKTF-44	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
MKTF-44	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
MKTF-44	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
MKTF-44	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
MKTF-44	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
MKTF-44	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
MKTF-44	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-44	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
MKTF-44	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
MKTF-44	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
MKTF-44	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
MKTF-44	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
MKTF-44	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
MKTF-44	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
MKTF-44	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
MKTF-44	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
MKTF-44	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
MKTF-44	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
MKTF-44	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
MKTF-44	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
MKTF-44	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
MKTF-44	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
MKTF-44	9/21/2020	Benzoic Acid	0.21	0.52	0.21	75000	ug/L
MKTF-44	9/21/2020	Benzyl Alcohol	1.7	0.52	0.21	2000	ug/L
MKTF-44	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
MKTF-44	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
MKTF-44	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
MKTF-44	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
MKTF-44	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
MKTF-44	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
MKTF-44	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
MKTF-44	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
MKTF-44	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-44	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
MKTF-44	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
MKTF-44	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
MKTF-44	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
MKTF-44	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
MKTF-44	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
MKTF-44	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
MKTF-44	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
MKTF-44	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
MKTF-44	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-44	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
MKTF-44	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
MKTF-44	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
MKTF-44	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
MKTF-44	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
MKTF-44	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
MKTF-44	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
MKTF-44	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
MKTF-44	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
MKTF-44	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
MKTF-44	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
MKTF-44	12/23/2020	Acenaphthene	ND	12.2	0.195	535	ug/L
MKTF-44	12/23/2020	Acenaphthylene	ND	12.2	0.207	NA	ug/L
MKTF-44	12/23/2020	Anthracene	ND	12.2	0.219	1721	ug/L
MKTF-44	12/23/2020	Benzo(a)anthracene	*ND*	*12.2*	0.219	0.12	ug/L
MKTF-44	12/23/2020	Benzo(a)pyrene	*ND*	*12.2*	0.146	0.2	ug/L
MKTF-44	12/23/2020	Benzo(b)fluoranthene	*ND*	*12.2*	0.183	0.34	ug/L
MKTF-44	12/23/2020	Benzo(g,h,i)perylene	ND	12.2	0.28	NA	ug/L
MKTF-44	12/23/2020	Benzo(k)fluoranthene	*ND*	*12.2*	0.195	3.43	ug/L
MKTF-44	12/23/2020	Bis(2-chloroethoxy)methane	ND	12.2	0.195	59	ug/L
MKTF-44	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*12.2*	3.29	0.137	ug/L
MKTF-44	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	12.2	6.09	55.64	ug/L
MKTF-44	12/23/2020	4-Bromophenyl-phenylether	ND	12.2	0.244	NA	ug/L
MKTF-44	12/23/2020	Butylbenzylphthalate	ND	12.2	0.231	16	ug/L
MKTF-44	12/23/2020	Carbazole	ND	12.2	0.28	NA	ug/L
MKTF-44	12/23/2020	4-Chloroaniline	*ND*	*12.2*	4.14	0.37	ug/L
MKTF-44	12/23/2020	4-Chloro-3-Methylphenol	ND	12.2	4.63	NA	ug/L
MKTF-44	12/23/2020	2-Chloronaphthalene	ND	12.2	0.171	733	ug/L
MKTF-44	12/23/2020	2-Chlorophenol	ND	12.2	2.68	91	ug/L
MKTF-44	12/23/2020	4-Chlorophenyl-phenylether	ND	12.2	2.44	NA	ug/L
MKTF-44	12/23/2020	1,3-Dichlorobenzene	ND	12.2	0.219	NA	ug/L
MKTF-44	12/23/2020	Chrysene	ND	12.2	0.231	34.3	ug/L
MKTF-44	12/23/2020	Dibenzo(a,h)anthracene	ND	12.2	0.292	NA	ug/L
MKTF-44	12/23/2020	1,4-Dichlorobenzene	ND	12.2	0.195	75	ug/L
MKTF-44	12/23/2020	Dibenzofuran	ND	12.2	0.207	NA	ug/L
MKTF-44	12/23/2020	3,3-Dichlorobenzidine	*ND*	*12.2*	3.17	1.25	ug/L
MKTF-44	12/23/2020	2,4-Dichlorophenol	ND	12.2	3.65	45.3	ug/L
MKTF-44	12/23/2020	Diethylphthalate	ND	12.2	0.292	14801	ug/L
MKTF-44	12/23/2020	2,4-Dimethylphenol	ND	12.2	4.26	354	ug/L
MKTF-44	12/23/2020	Di-n-butylphthalate	ND	12.2	3.29	885	ug/L
MKTF-44	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*12.2*	1.95	1.52	ug/L
MKTF-44	12/23/2020	2,4-Dinitrophenol	ND	36.5	4.14	38.7	ug/L
MKTF-44	12/23/2020	2,4-Dinitrotoluene	ND	12.2	2.31	45.3	ug/L
MKTF-44	12/23/2020	2,6-Dinitrotoluene	*ND*	*12.2*	2.31	0.485	ug/L
MKTF-44	12/23/2020	Di-n-octylphthalate	ND	12.2	0.207	200	ug/L
MKTF-44	12/23/2020	Fluoranthene	ND	12.2	0.219	802	ug/L
MKTF-44	12/23/2020	Fluorene	ND	12.2	0.219	288	ug/L
MKTF-44	12/23/2020	Hexachlorobenzene	*ND*	*12.2*	0.207	0.0976	ug/L
MKTF-44	12/23/2020	Hexachlorocyclopentadiene	*ND*	*24.4*	3.17	0.41	ug/L
MKTF-44	12/23/2020	Hexachloroethane	*ND*	*12.2*	5.12	3.28	ug/L
MKTF-44	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*12.2*	0.268	0.343	ug/L
MKTF-44	12/23/2020	Isophorone	ND	12.2	0.171	781	ug/L
MKTF-44	12/23/2020	2-Methylphenol	ND	12.2	2.19	NA	ug/L
MKTF-44	12/23/2020	Naphthalene	ND	12.2	0.207	30	ug/L
MKTF-44	12/23/2020	2-Nitroaniline	ND	12.2	2.68	190	ug/L
MKTF-44	12/23/2020	3-Nitroaniline	ND	12.2	2.19	NA	ug/L
MKTF-44	12/23/2020	4-Nitroaniline	*ND*	*12.2*	1.83	3.8	ug/L
MKTF-44	12/23/2020	Nitrobenzene	*ND*	*12.2*	0.158	1.4	ug/L
MKTF-44	12/23/2020	2-Nitrophenol	ND	12.2	6.34	NA	ug/L
MKTF-44	12/23/2020	4-Nitrophenol	ND	12.2	2.56	NA	ug/L
MKTF-44	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*12.2*	4.02	0.011	ug/L
MKTF-44	12/23/2020	N-Nitrosodiphenylamine	ND	12.2	0.219	122	ug/L
MKTF-44	12/23/2020	Pentachlorophenol	*ND*	*24.4*	1.71	1	ug/L
MKTF-44	12/23/2020	Phenanthrene	ND	12.2	0.219	170	ug/L
MKTF-44	12/23/2020	Phenol	ND	12.2	3.17	5761	ug/L
MKTF-44	12/23/2020	Pyrene	ND	12.2	0.256	117	ug/L
MKTF-44	12/23/2020	2,4,5-Trichlorophenol	ND	12.2	4.51	1166	ug/L
MKTF-44	12/23/2020	2,4,6-Trichlorophenol	ND	12.2	4.26	11.9*	ug/L
MKTF-44	12/23/2020	Dimethylphthalate	ND	12.2	0.207	612	ug/L
MKTF-44	12/23/2020	Aniline	ND	12.2	4.63	13	ug/L
MKTF-44	12/23/2020	Benzoic Acid	ND	36.5	8.89	75000	ug/L
MKTF-44	12/23/2020	Benzyl Alcohol	ND	12.2	2.44	2000	ug/L
MKTF-44	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*12.2*	0.195	9.81	ug/L
MKTF-44	12/23/2020	N-Nitrosodimethylamine	*ND*	*12.2*	4.26	0.0049	ug/L
MKTF-44	12/23/2020	Pyridine	ND	12.2	3.9	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	1,2,4-Trichlorobenzene	ND	12.2	0.219	70	ug/L
MKTF-44	12/23/2020	1,2-Dichlorobenzene	ND	12.2	0.207	600	ug/L
MKTF-44	12/23/2020	Azobenzene	*ND*	*12.2*	1.22	0.12	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-46	3/6/2020	1,4-Dioxane	1.5	1	0.2	4.59	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-46	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-46	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-46	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-46	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-46	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-46	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-46	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-46	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-46	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-46	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-46	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-46	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-46	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-46	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-46	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-46	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-46	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-46	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-46	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-46	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-46	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-46	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-46	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-46	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-46	3/6/2020	Bis(2-ethylhexyl)phthalate	0.33	0.5	0.2	55.64	ug/L
MKTF-46	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-46	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-46	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-46	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-46	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-46	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-46	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-46	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-46	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-46	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-46	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-46	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-46	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-46	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-46	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-46	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-46	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-46	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-46	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-46	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-46	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-46	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-46	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-46	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-46	3/6/2020	1,4-Dioxane	1.4	1	0.2	4.59	ug/L
MKTF-46	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-46	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-46	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-46	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-46	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-46	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-46	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-46	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-46	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-46	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-46	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-46	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-46	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-46	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-46	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-46	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-46	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-46	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-46	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-46	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-46	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-46	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-46	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-46	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-46	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-46	3/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-46	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-46	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-46	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-46	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-46	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-46	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-46	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-46	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-46	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
MKTF-46	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-46	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-46	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-46	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-46	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-46	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-46	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-46	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-46	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-46	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-46	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-46	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-46	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-46	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-46	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-46	9/17/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MKTF-46	9/17/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MKTF-46	9/17/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MKTF-46	9/17/2020	1,4-Dioxane	1.7	0.51	0.1	4.59	ug/L
MKTF-46	9/17/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MKTF-46	9/17/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MKTF-46	9/17/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MKTF-46	9/17/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MKTF-46	9/17/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MKTF-46	9/17/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MKTF-46	9/17/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MKTF-46	9/17/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MKTF-46	9/17/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
MKTF-46	9/17/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MKTF-46	9/17/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MKTF-46	9/17/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MKTF-46	9/17/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MKTF-46	9/17/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MKTF-46	9/17/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MKTF-46	9/17/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MKTF-46	9/17/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MKTF-46	9/17/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MKTF-46	9/17/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Aniline	ND	0.51	0.1	13	ug/L
MKTF-46	9/17/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MKTF-46	9/17/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MKTF-46	9/17/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MKTF-46	9/17/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MKTF-46	9/17/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MKTF-46	9/17/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MKTF-46	9/17/2020	Benzoic Acid	0.8	0.51	0.21	75000	ug/L
MKTF-46	9/17/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
MKTF-46	9/17/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MKTF-46	9/17/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MKTF-46	9/17/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MKTF-46	9/17/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.21	55.64	ug/L
MKTF-46	9/17/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
MKTF-46	9/17/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MKTF-46	9/17/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
MKTF-46	9/17/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
MKTF-46	9/17/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
MKTF-46	9/17/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MKTF-46	9/17/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
MKTF-46	9/17/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
MKTF-46	9/17/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MKTF-46	9/17/2020	Fluorene	ND	0.51	0.1	288	ug/L
MKTF-46	9/17/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MKTF-46	9/17/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MKTF-46	9/17/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MKTF-46	9/17/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MKTF-46	9/17/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
MKTF-46	9/17/2020	Isophorone	ND	0.51	0.1	781	ug/L
MKTF-46	9/17/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MKTF-46	9/17/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MKTF-46	9/17/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MKTF-46	9/17/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MKTF-46	9/17/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MKTF-46	9/17/2020	Pentachlorophenol	ND	0.51	0.21	1	ug/L
MKTF-46	9/17/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MKTF-46	9/17/2020	Phenol	ND	0.51	0.1	5761	ug/L
MKTF-46	9/17/2020	Pyrene	ND	0.51	0.1	117	ug/L
MKTF-46	9/17/2020	Pyridine	ND	0.51	0.21	20	ug/L
MKTF-46	12/16/2020	Acenaphthene	ND	9.68	0.155	535	ug/L
MKTF-46	12/16/2020	Acenaphthylene	ND	9.68	0.165	NA	ug/L
MKTF-46	12/16/2020	Anthracene	ND	9.68	0.174	1721	ug/L
MKTF-46	12/16/2020	Benzo(a)anthracene	*ND*	*9.68*	0.174	0.12	ug/L
MKTF-46	12/16/2020	Benzo(a)pyrene	*ND*	*9.68*	0.116	0.2	ug/L
MKTF-46	12/16/2020	Benzo(b)fluoranthene	*ND*	*9.68*	0.145	0.34	ug/L
MKTF-46	12/16/2020	Benzo(g,h,i)perylene	ND	9.68	0.223	NA	ug/L
MKTF-46	12/16/2020	Benzo(k)fluoranthene	*ND*	*9.68*	0.155	3.43	ug/L
MKTF-46	12/16/2020	Bis(2-chloroethoxy)methane	ND	9.68	0.155	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*9.68*	2.61	0.137	ug/L
MKTF-46	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	9.68	4.84	55.64	ug/L
MKTF-46	12/16/2020	4-Bromophenyl-phenylether	ND	9.68	0.194	NA	ug/L
MKTF-46	12/16/2020	Butylbenzylphthalate	ND	9.68	0.184	16	ug/L
MKTF-46	12/16/2020	Carbazole	ND	9.68	0.223	NA	ug/L
MKTF-46	12/16/2020	4-Chloroaniline	*ND*	*9.68*	3.29	0.37	ug/L
MKTF-46	12/16/2020	4-Chloro-3-Methylphenol	ND	9.68	3.68	NA	ug/L
MKTF-46	12/16/2020	2-Chloronaphthalene	ND	9.68	0.136	733	ug/L
MKTF-46	12/16/2020	2-Chlorophenol	ND	9.68	2.13	91	ug/L
MKTF-46	12/16/2020	4-Chlorophenyl-phenylether	ND	9.68	1.94	NA	ug/L
MKTF-46	12/16/2020	1,3-Dichlorobenzene	ND	9.68	0.174	NA	ug/L
MKTF-46	12/16/2020	Chrysene	ND	9.68	0.184	34.3	ug/L
MKTF-46	12/16/2020	Dibenzo(a,h)anthracene	ND	9.68	0.232	NA	ug/L
MKTF-46	12/16/2020	1,4-Dichlorobenzene	ND	9.68	0.155	75	ug/L
MKTF-46	12/16/2020	Dibenzofuran	ND	9.68	0.165	NA	ug/L
MKTF-46	12/16/2020	3,3-Dichlorobenzidine	*ND*	*9.68*	2.52	1.25	ug/L
MKTF-46	12/16/2020	2,4-Dichlorophenol	ND	9.68	2.9	45.3	ug/L
MKTF-46	12/16/2020	Diethylphthalate	ND	9.68	0.232	14801	ug/L
MKTF-46	12/16/2020	2,4-Dimethylphenol	ND	9.68	3.39	354	ug/L
MKTF-46	12/16/2020	Di-n-butylphthalate	ND	9.68	2.61	885	ug/L
MKTF-46	12/16/2020	2,4-Dinitrophenol	ND	29	3.29	38.7	ug/L
MKTF-46	12/16/2020	2,4-Dinitrotoluene	ND	9.68	1.84	45.3	ug/L
MKTF-46	12/16/2020	2,6-Dinitrotoluene	*ND*	*9.68*	1.84	0.485	ug/L
MKTF-46	12/16/2020	Fluoranthene	ND	9.68	0.174	802	ug/L
MKTF-46	12/16/2020	Fluorene	ND	9.68	0.174	288	ug/L
MKTF-46	12/16/2020	Hexachlorobenzene	*ND*	*9.68*	0.165	0.0976	ug/L
MKTF-46	12/16/2020	Hexachlorocyclopentadiene	*ND*	*19.4*	2.52	0.41	ug/L
MKTF-46	12/16/2020	Hexachloroethane	*ND*	*9.68*	4.07	3.28	ug/L
MKTF-46	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.68*	0.213	0.343	ug/L
MKTF-46	12/16/2020	Isophorone	ND	9.68	0.136	781	ug/L
MKTF-46	12/16/2020	2-Methylphenol	ND	9.68	1.74	NA	ug/L
MKTF-46	12/16/2020	Naphthalene	ND	9.68	0.165	30	ug/L
MKTF-46	12/16/2020	2-Nitroaniline	ND	9.68	2.13	190	ug/L
MKTF-46	12/16/2020	3-Nitroaniline	ND	9.68	1.74	NA	ug/L
MKTF-46	12/16/2020	4-Nitroaniline	*ND*	*9.68*	1.45	3.8	ug/L
MKTF-46	12/16/2020	Nitrobenzene	*ND*	*9.68*	0.126	1.4	ug/L
MKTF-46	12/16/2020	2-Nitrophenol	ND	9.68	5.03	NA	ug/L
MKTF-46	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*9.68*	3.2	0.011	ug/L
MKTF-46	12/16/2020	N-Nitrosodiphenylamine	ND	9.68	0.174	122	ug/L
MKTF-46	12/16/2020	Pentachlorophenol	*ND*	*19.4*	1.36	1	ug/L
MKTF-46	12/16/2020	Phenanthrene	ND	9.68	0.174	170	ug/L
MKTF-46	12/16/2020	Phenol	ND	9.68	2.52	5761	ug/L
MKTF-46	12/16/2020	Pyrene	ND	9.68	0.203	117	ug/L
MKTF-46	12/16/2020	2,4,5-Trichlorophenol	ND	9.68	3.58	1166	ug/L
MKTF-46	12/16/2020	2,4,6-Trichlorophenol	ND	9.68	3.39	11.9*	ug/L
MKTF-46	12/16/2020	Dimethylphthalate	ND	9.68	0.165	612	ug/L
MKTF-46	12/16/2020	Aniline	ND	9.68	3.68	13	ug/L
MKTF-46	12/16/2020	Benzoic Acid	ND	29	7.07	75000	ug/L
MKTF-46	12/16/2020	Benzyl Alcohol	ND	9.68	1.94	2000	ug/L
MKTF-46	12/16/2020	Bis(2-chloroisopropyl)ether	ND	9.68	0.155	9.81	ug/L
MKTF-46	12/16/2020	N-Nitrosodimethylamine	*ND*	*9.68*	3.39	0.0049	ug/L
MKTF-46	12/16/2020	Pyridine	ND	9.68	3.1	20	ug/L
MKTF-46	12/16/2020	1,2,4-Trichlorobenzene	ND	9.68	0.174	70	ug/L
MKTF-46	12/16/2020	1,2-Dichlorobenzene	ND	9.68	0.165	600	ug/L
MKTF-46	12/16/2020	Azobenzene	*ND*	*9.68*	0.968	0.12	ug/L
MKTF-46	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.68*	1.55	1.52	ug/L
MKTF-46	12/16/2020	Di-n-octylphthalate	ND	9.68	0.165	200	ug/L
MKTF-46	12/16/2020	4-Nitrophenol	ND	9.68	2.03	NA	ug/L
MKTF-47	3/6/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
MKTF-47	3/6/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
MKTF-47	3/6/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
MKTF-47	3/6/2020	1,4-Dioxane	2.4	1	0.2	4.59	ug/L
MKTF-47	3/6/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
MKTF-47	3/6/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
MKTF-47	3/6/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
MKTF-47	3/6/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
MKTF-47	3/6/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
MKTF-47	3/6/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
MKTF-47	3/6/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
MKTF-47	3/6/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
MKTF-47	3/6/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
MKTF-47	3/6/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
MKTF-47	3/6/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
MKTF-47	3/6/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
MKTF-47	3/6/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
MKTF-47	3/6/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
MKTF-47	3/6/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
MKTF-47	3/6/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
MKTF-47	3/6/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Aniline	ND	0.5	0.1	13	ug/L
MKTF-47	3/6/2020	Anthracene	ND	0.5	0.1	1721	ug/L
MKTF-47	3/6/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
MKTF-47	3/6/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
MKTF-47	3/6/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
MKTF-47	3/6/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
MKTF-47	3/6/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
MKTF-47	3/6/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
MKTF-47	3/6/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
MKTF-47	3/6/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
MKTF-47	3/6/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
MKTF-47	3/6/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
MKTF-47	3/6/2020	Carbazole	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
MKTF-47	3/6/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
MKTF-47	3/6/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
MKTF-47	3/6/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
MKTF-47	3/6/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
MKTF-47	3/6/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
MKTF-47	3/6/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
MKTF-47	3/6/2020	Fluoranthene	ND	0.5	0.1	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-47	3/6/2020	Fluorene	ND	0.5	0.1	288	ug/L
MKTF-47	3/6/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
MKTF-47	3/6/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
MKTF-47	3/6/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
MKTF-47	3/6/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
MKTF-47	3/6/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
MKTF-47	3/6/2020	Isophorone	ND	0.5	0.1	781	ug/L
MKTF-47	3/6/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
MKTF-47	3/6/2020	Naphthalene	ND	0.5	0.1	30	ug/L
MKTF-47	3/6/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
MKTF-47	3/6/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
MKTF-47	3/6/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
MKTF-47	3/6/2020	Phenol	ND	0.5	0.1	5761	ug/L
MKTF-47	3/6/2020	Pyrene	ND	0.5	0.1	117	ug/L
MKTF-47	3/6/2020	Pyridine	ND	0.5	0.1	20	ug/L
MKTF-49	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-49	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-49	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-49	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-49	3/5/2020	1-Methylnaphthalene	5.5	2.5	0.5	11.38	ug/L
MKTF-49	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-49	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-49	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-49	3/5/2020	2,4-Dimethylphenol	24	2.5	0.5	354	ug/L
MKTF-49	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-49	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-49	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-49	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-49	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-49	3/5/2020	2-Methylnaphthalene	7	2.5	0.5	35.1	ug/L
MKTF-49	3/5/2020	2-Methylphenol	21	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-49	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	3,4-Methylphenol	25	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-49	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-49	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-49	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-49	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-49	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-49	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-49	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-49	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-49	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-49	3/5/2020	Benzoic Acid	120	2.5	0.5	75000	ug/L
MKTF-49	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-49	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-49	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-49	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-49	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-49	3/5/2020	Carbazole	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-49	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-49	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-49	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-49	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-49	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-49	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-49	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-49	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-49	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-49	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-49	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-49	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-49	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-49	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-49	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-49	3/5/2020	Naphthalene	**42**	2.5	0.5	30	ug/L
MKTF-49	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-49	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-49	3/5/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
MKTF-49	3/5/2020	Phenol	130	2.5	0.5	5761	ug/L
MKTF-49	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-49	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-49	9/20/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
MKTF-49	9/20/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
MKTF-49	9/20/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
MKTF-49	9/20/2020	1,4-Dioxane	*1.8*	*5*	1	4.59	ug/L
MKTF-49	9/20/2020	1-Methylnaphthalene	5.2	5	1	11.38	ug/L
MKTF-49	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
MKTF-49	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
MKTF-49	9/20/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
MKTF-49	9/20/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
MKTF-49	9/20/2020	2,4-Dimethylphenol	12	5	1	354	ug/L
MKTF-49	9/20/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
MKTF-49	9/20/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
MKTF-49	9/20/2020	2,6-Dinitrotoluene	*ND*	2	1	0.485	ug/L
MKTF-49	9/20/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
MKTF-49	9/20/2020	2-Chlorophenol	ND	5	1	91	ug/L
MKTF-49	9/20/2020	2-Methylnaphthalene	6.2	5	1	35.1	ug/L
MKTF-49	9/20/2020	2-Methylphenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	2-Nitroaniline	ND	5	1	190	ug/L
MKTF-49	9/20/2020	2-Nitrophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	3,4-Methylphenol	26	5	1	NA	ug/L
MKTF-49	9/20/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
MKTF-49	9/20/2020	3-Nitroaniline	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
MKTF-49	9/20/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	9/20/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
MKTF-49	9/20/2020	4-Nitrophenol	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Acenaphthene	ND	5	1	535	ug/L
MKTF-49	9/20/2020	Acenaphthylene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Aniline	ND	5	1	13	ug/L
MKTF-49	9/20/2020	Anthracene	ND	5	1	1721	ug/L
MKTF-49	9/20/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
MKTF-49	9/20/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
MKTF-49	9/20/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
MKTF-49	9/20/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
MKTF-49	9/20/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
MKTF-49	9/20/2020	Benzoic Acid	190	5	2	75000	ug/L
MKTF-49	9/20/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
MKTF-49	9/20/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
MKTF-49	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
MKTF-49	9/20/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
MKTF-49	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	5	2	55.64	ug/L
MKTF-49	9/20/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
MKTF-49	9/20/2020	Carbazole	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Chrysene	ND	5	1	34.3	ug/L
MKTF-49	9/20/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
MKTF-49	9/20/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
MKTF-49	9/20/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
MKTF-49	9/20/2020	Dibenzofuran	ND	5	1	NA	ug/L
MKTF-49	9/20/2020	Diethylphthalate	ND	5	2	14801	ug/L
MKTF-49	9/20/2020	Dimethylphthalate	ND	5	2	612	ug/L
MKTF-49	9/20/2020	Fluoranthene	ND	5	1	802	ug/L
MKTF-49	9/20/2020	Fluorene	ND	5	1	288	ug/L
MKTF-49	9/20/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
MKTF-49	9/20/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
MKTF-49	9/20/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
MKTF-49	9/20/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
MKTF-49	9/20/2020	Indeno(1,2,3-cd)pyrene	*ND*	*2*	1	0.343	ug/L
MKTF-49	9/20/2020	Isophorone	ND	5	1	781	ug/L
MKTF-49	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
MKTF-49	9/20/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
MKTF-49	9/20/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
MKTF-49	9/20/2020	Naphthalene	**36**	5	1	30	ug/L
MKTF-49	9/20/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
MKTF-49	9/20/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
MKTF-49	9/20/2020	Phenanthrene	ND	5	1	170	ug/L
MKTF-49	9/20/2020	Phenol	120	5	1	5761	ug/L
MKTF-49	9/20/2020	Pyrene	ND	5	1	117	ug/L
MKTF-49	9/20/2020	Pyridine	ND	5	2	20	ug/L
MKTF-49	12/23/2020	Acenaphthene	ND	10.6	0.169	535	ug/L
MKTF-49	12/23/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
MKTF-49	12/23/2020	Anthracene	ND	10.6	0.19	1721	ug/L
MKTF-49	12/23/2020	Benzo(a)anthracene	*ND*	*10.6*	0.19	0.12	ug/L
MKTF-49	12/23/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
MKTF-49	12/23/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.158	0.34	ug/L
MKTF-49	12/23/2020	Benzo(g,h,i)perylene	ND	10.6	0.243	NA	ug/L
MKTF-49	12/23/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.169	3.43	ug/L
MKTF-49	12/23/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.169	59	ug/L
MKTF-49	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.85	0.137	ug/L
MKTF-49	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.28	55.64	ug/L
MKTF-49	12/23/2020	4-Bromophenyl-phenylether	ND	10.6	0.211	NA	ug/L
MKTF-49	12/23/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
MKTF-49	12/23/2020	Carbazole	ND	10.6	0.243	NA	ug/L
MKTF-49	12/23/2020	4-Chloroaniline	*ND*	*10.6*	3.59	0.37	ug/L
MKTF-49	12/23/2020	4-Chloro-3-Methylphenol	ND	10.6	4.02	NA	ug/L
MKTF-49	12/23/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
MKTF-49	12/23/2020	2-Chlorophenol	ND	10.6	2.32	91	ug/L
MKTF-49	12/23/2020	4-Chlorophenyl-phenylether	ND	10.6	2.11	NA	ug/L
MKTF-49	12/23/2020	1,3-Dichlorobenzene	ND	10.6	0.19	NA	ug/L
MKTF-49	12/23/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
MKTF-49	12/23/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
MKTF-49	12/23/2020	1,4-Dichlorobenzene	ND	10.6	0.169	75	ug/L
MKTF-49	12/23/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
MKTF-49	12/23/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.75	1.25	ug/L
MKTF-49	12/23/2020	2,4-Dichlorophenol	ND	10.6	3.17	45.3	ug/L
MKTF-49	12/23/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
MKTF-49	12/23/2020	2,4-Dimethylphenol	19.2	10.6	3.7	354	ug/L
MKTF-49	12/23/2020	Di-n-butylphthalate	ND	10.6	2.85	885	ug/L
MKTF-49	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.69	1.52	ug/L
MKTF-49	12/23/2020	2,4-Dinitrophenol	ND	31.7	3.59	38.7	ug/L
MKTF-49	12/23/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
MKTF-49	12/23/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
MKTF-49	12/23/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
MKTF-49	12/23/2020	Fluoranthene	ND	10.6	0.19	802	ug/L
MKTF-49	12/23/2020	Fluorene	ND	10.6	0.19	288	ug/L
MKTF-49	12/23/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
MKTF-49	12/23/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.75	0.41	ug/L
MKTF-49	12/23/2020	Hexachloroethane	*ND*	*10.6*	4.44	3.28	ug/L
MKTF-49	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.232	0.343	ug/L
MKTF-49	12/23/2020	Isophorone	ND	10.6	0.148	781	ug/L
MKTF-49	12/23/2020	2-Methylphenol	25.1	10.6	1.9	NA	ug/L
MKTF-49	12/23/2020	Naphthalene	**44**	10.6	0.18	30	ug/L
MKTF-49	12/23/2020	2-Nitroaniline	ND	10.6	2.32	190	ug/L
MKTF-49	12/23/2020	3-Nitroaniline	ND	10.6	1.9	NA	ug/L
MKTF-49	12/23/2020	4-Nitroaniline	*ND*	*10.6*	1.58	3.8	ug/L
MKTF-49	12/23/2020	Nitrobenzene	*ND*	*10.6*	0.137	1.4	ug/L
MKTF-49	12/23/2020	2-Nitrophenol	ND	10.6	5.49	NA	ug/L
MKTF-49	12/23/2020	4-Nitrophenol	ND	10.6	2.22	NA	ug/L
MKTF-49	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.49	0.011	ug/L
MKTF-49	12/23/2020	N-Nitrosodiphenylamine	ND	10.6	0.19	122	ug/L
MKTF-49	12/23/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
MKTF-49	12/23/2020	Phenanthrene	ND	10.6	0.19	170	ug/L
MKTF-49	12/23/2020	Phenol	135	10.6	2.75	5761	ug/L
MKTF-49	12/23/2020	Pyrene	ND	10.6	0.222	117	ug/L
MKTF-49	12/23/2020	2,4,5-Trichlorophenol	ND	10.6	3.91	1166	ug/L
MKTF-49	12/23/2020	2,4,6-Trichlorophenol	ND	10.6	3.7	11.9*	ug/L
MKTF-49	12/23/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
MKTF-49	12/23/2020	Aniline	ND	10.6	4.02	13	ug/L
MKTF-49	12/23/2020	Benzoic Acid	163	31.7	7.71	75000	ug/L
MKTF-49	12/23/2020	Benzyl Alcohol	ND	10.6	2.11	2000	ug/L
MKTF-49	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.169	9.81	ug/L
MKTF-49	12/23/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.7	0.0049	ug/L
MKTF-49	12/23/2020	Pyridine	ND	10.6	3.38	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	1,2,4-Trichlorobenzene	ND	10.6	0.19	70	ug/L
MKTF-49	12/23/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
MKTF-49	12/23/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-50	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	**45**	2.5	0.5	11.38	ug/L
MKTF-50	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-50	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-50	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-50	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-50	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-50	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-50	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**51**	2.5	0.5	35.1	ug/L
MKTF-50	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-50	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-50	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-50	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-50	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
MKTF-50	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-50	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-50	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-50	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-50	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-50	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-50	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-50	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-50	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
MKTF-50	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-50	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
MKTF-50	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-50	3/5/2020	Carbazole	1.78	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-50	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-50	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-50	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-50	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-50	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-50	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-50	3/5/2020	Fluorene	ND	2.5	0.5	288	ug/L
MKTF-50	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-50	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-50	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-50	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-50	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-50	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-50	3/5/2020	Naphthalene	**120**	2.5	0.5	30	ug/L
MKTF-50	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-50	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-50	3/5/2020	Phenanthrene	2.6	2.5	0.5	170	ug/L
MKTF-50	3/5/2020	Phenol	51	2.5	0.5	5761	ug/L
MKTF-50	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-50	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-50	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
MKTF-50	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
MKTF-50	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
MKTF-50	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
MKTF-50	3/5/2020	1-Methylnaphthalene	**62**	2.5	0.5	11.38	ug/L
MKTF-50	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
MKTF-50	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
MKTF-50	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
MKTF-50	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
MKTF-50	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
MKTF-50	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
MKTF-50	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
MKTF-50	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
MKTF-50	3/5/2020	2-Methylnaphthalene	**76**	2.5	0.5	35.1	ug/L
MKTF-50	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
MKTF-50	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
MKTF-50	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
MKTF-50	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
MKTF-50	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Acenaphthene	1.21	2.5	0.5	535	ug/L
MKTF-50	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
MKTF-50	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
MKTF-50	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
MKTF-50	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
MKTF-50	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
MKTF-50	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
MKTF-50	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
MKTF-50	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
MKTF-50	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
MKTF-50	3/5/2020	Bis(2-ethylhexyl)phthalate	1.1	2.5	1	55.64	ug/L
MKTF-50	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
MKTF-50	3/5/2020	Carbazole	1.69	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
MKTF-50	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
MKTF-50	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
MKTF-50	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
MKTF-50	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
MKTF-50	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
MKTF-50	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
MKTF-50	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
MKTF-50	3/5/2020	Fluorene	2.8	2.5	0.5	288	ug/L
MKTF-50	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
MKTF-50	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
MKTF-50	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
MKTF-50	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
MKTF-50	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
MKTF-50	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
MKTF-50	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
MKTF-50	3/5/2020	Naphthalene	**150**	2.5	0.5	30	ug/L
MKTF-50	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
MKTF-50	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
MKTF-50	3/5/2020	Phenanthrene	4.5	2.5	0.5	170	ug/L
MKTF-50	3/5/2020	Phenol	120	2.5	0.5	5761	ug/L
MKTF-50	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
MKTF-50	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
MKTF-50	12/16/2020	Acenaphthene	ND	11.6	0.186	535	ug/L
MKTF-50	12/16/2020	Acenaphthylene	ND	11.6	0.197	NA	ug/L
MKTF-50	12/16/2020	Anthracene	ND	11.6	0.209	1721	ug/L
MKTF-50	12/16/2020	Benzo(a)anthracene	*ND*	*11.6*	0.209	0.12	ug/L
MKTF-50	12/16/2020	Benzo(a)pyrene	*ND*	*11.6*	0.139	0.2	ug/L
MKTF-50	12/16/2020	Benzo(b)fluoranthene	*ND*	*11.6*	0.174	0.34	ug/L
MKTF-50	12/16/2020	Benzo(g,h,i)perylene	ND	11.6	0.267	NA	ug/L
MKTF-50	12/16/2020	Benzo(k)fluoranthene	*ND*	*11.6*	0.186	3.43	ug/L
MKTF-50	12/16/2020	Bis(2-chloroethoxy)methane	ND	11.6	0.186	59	ug/L
MKTF-50	12/16/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	3.14	0.137	ug/L
MKTF-50	12/16/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	5.81	55.64	ug/L
MKTF-50	12/16/2020	4-Bromophenyl-phenylether	ND	11.6	0.232	NA	ug/L
MKTF-50	12/16/2020	Butylbenzylphthalate	ND	11.6	0.221	16	ug/L
MKTF-50	12/16/2020	Carbazole	ND	11.6	0.267	NA	ug/L
MKTF-50	12/16/2020	4-Chloroaniline	*ND*	*11.6*	3.95	0.37	ug/L
MKTF-50	12/16/2020	4-Chloro-3-Methylphenol	ND	11.6	4.41	NA	ug/L
MKTF-50	12/16/2020	2-Chloronaphthalene	ND	11.6	0.163	733	ug/L
MKTF-50	12/16/2020	2-Chlorophenol	ND	11.6	2.56	91	ug/L
MKTF-50	12/16/2020	4-Chlorophenyl-phenylether	ND	11.6	2.32	NA	ug/L
MKTF-50	12/16/2020	1,3-Dichlorobenzene	ND	11.6	0.209	NA	ug/L
MKTF-50	12/16/2020	Chrysene	ND	11.6	0.221	34.3	ug/L
MKTF-50	12/16/2020	Dibenzo(a,h)anthracene	ND	11.6	0.279	NA	ug/L
MKTF-50	12/16/2020	1,4-Dichlorobenzene	ND	11.6	0.186	75	ug/L
MKTF-50	12/16/2020	Dibenzofuran	ND	11.6	0.197	NA	ug/L
MKTF-50	12/16/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	3.02	1.25	ug/L
MKTF-50	12/16/2020	2,4-Dichlorophenol	ND	11.6	3.49	45.3	ug/L
MKTF-50	12/16/2020	Diethylphthalate	ND	11.6	0.279	14801	ug/L
MKTF-50	12/16/2020	2,4-Dimethylphenol	ND	11.6	4.07	354	ug/L
MKTF-50	12/16/2020	Di-n-butylphthalate	ND	11.6	3.14	885	ug/L
MKTF-50	12/16/2020	2,4-Dinitrophenol	ND	34.9	3.95	38.7	ug/L
MKTF-50	12/16/2020	2,4-Dinitrotoluene	ND	11.6	2.21	45.3	ug/L
MKTF-50	12/16/2020	2,6-Dinitrotoluene	*ND*	*11.6*	2.21	0.485	ug/L
MKTF-50	12/16/2020	Fluoranthene	ND	11.6	0.209	802	ug/L
MKTF-50	12/16/2020	Fluorene	ND	11.6	0.209	288	ug/L
MKTF-50	12/16/2020	Hexachlorobenzene	*ND*	*11.6*	0.197	0.0976	ug/L
MKTF-50	12/16/2020	Hexachlorocyclopentadiene	*ND*	*23.2*	3.02	0.41	ug/L
MKTF-50	12/16/2020	Hexachloroethane	*ND*	*11.6*	4.88	3.28	ug/L
MKTF-50	12/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	0.256	0.343	ug/L
MKTF-50	12/16/2020	Isophorone	ND	11.6	0.163	781	ug/L
MKTF-50	12/16/2020	2-Methylphenol	ND	11.6	2.09	NA	ug/L
MKTF-50	12/16/2020	Naphthalene	**120**	11.6	0.197	30	ug/L
MKTF-50	12/16/2020	2-Nitroaniline	ND	11.6	2.56	190	ug/L
MKTF-50	12/16/2020	3-Nitroaniline	ND	11.6	2.09	NA	ug/L
MKTF-50	12/16/2020	4-Nitroaniline	*ND*	*11.6*	1.74	3.8	ug/L
MKTF-50	12/16/2020	Nitrobenzene	*ND*	*11.6*	0.151	1.4	ug/L
MKTF-50	12/16/2020	2-Nitrophenol	ND	11.6	6.04	NA	ug/L
MKTF-50	12/16/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	3.83	0.011	ug/L
MKTF-50	12/16/2020	N-Nitrosodiphenylamine	ND	11.6	0.209	122	ug/L
MKTF-50	12/16/2020	Pentachlorophenol	*ND*	*23.2*	1.63	1	ug/L
MKTF-50	12/16/2020	Phenanthrene	ND	11.6	0.209	170	ug/L
MKTF-50	12/16/2020	Pyrene	ND	11.6	0.244	117	ug/L
MKTF-50	12/16/2020	2,4,5-Trichlorophenol	ND	11.6	4.3	1166	ug/L
MKTF-50	12/16/2020	2,4,6-Trichlorophenol	ND	11.6	4.07	11.9*	ug/L
MKTF-50	12/16/2020	Dimethylphthalate	ND	11.6	0.197	612	ug/L
MKTF-50	12/16/2020	Aniline	ND	11.6	4.41	13	ug/L
MKTF-50	12/16/2020	Benzoic Acid	ND	34.9	8.48	75000	ug/L
MKTF-50	12/16/2020	Benzyl Alcohol	ND	11.6	2.32	2000	ug/L
MKTF-50	12/16/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	0.186	9.81	ug/L
MKTF-50	12/16/2020	N-Nitrosodimethylamine	*ND*	*11.6*	4.07	0.0049	ug/L
MKTF-50	12/16/2020	Pyridine	ND	11.6	3.72	20	ug/L
MKTF-50	12/16/2020	1,2,4-Trichlorobenzene	ND	11.6	0.209	70	ug/L
MKTF-50	12/16/2020	1,2-Dichlorobenzene	ND	11.6	0.197	600	ug/L
MKTF-50	12/16/2020	Azobenzene	*ND*	*11.6*	1.16	0.12	ug/L
MKTF-50	12/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	1.86	1.52	ug/L
MKTF-50	12/16/2020	Di-n-octylphthalate	ND	11.6	0.197	200	ug/L
MKTF-50	12/16/2020	4-Nitrophenol	ND	11.6	2.44	NA	ug/L
MKTF-50	12/16/2020	Phenol	25.8	11.6	3.02	5761	ug/L
MW-1	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-1	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-1	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-1	8/24/2012	Aniline	ND	10	2	13	ug/L
MW-1	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-1	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-1	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-1	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-1	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
MW-1	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-1	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-1	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-1	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-1	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-1	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
MW-1	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-1	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-1	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-1	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-1	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-1	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-1	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-1	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-1	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-1	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-1	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-1	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-1	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-1	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-1	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-1	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-1	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-1	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-1	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-1	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-1	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-1	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-1	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-1	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-1	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
MW-1	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
MW-1	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-1	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-1	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-1	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-1	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-1	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-1	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-1	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-1	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-1	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
MW-1	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-1	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-1	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-1	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-1	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-1	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-1	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-1	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-1	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
MW-1	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-1	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-1	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-1	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-1	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-1	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-1	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-1	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-1	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-1	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-1	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	Aniline	ND	10	2.2	13	ug/L
MW-1	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-1	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-1	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-1	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-1	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
MW-1	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-1	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-1	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-1	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-1	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-1	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-1	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
MW-1	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-1	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-1	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-1	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-1	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-1	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-1	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-1	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-1	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-1	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-1	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-1	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-1	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-1	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-1	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-1	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-1	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-1	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-1	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-1	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-1	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-1	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-1	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-1	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-1	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
MW-1	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
MW-1	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-1	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-1	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-1	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-1	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-1	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-1	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-1	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-1	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-1	9/9/2013	Pyrene	ND	10	2.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-1	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-1	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-1	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-1	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-1	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-1	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-1	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-1	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-1	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-1	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-1	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-1	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-1	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-1	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-1	9/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-1	9/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-1	9/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-1	9/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Aniline	ND	10	2.4	13	ug/L
MW-1	9/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-1	9/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-1	9/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-1	9/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-1	9/16/2014	Isophorone	ND	10	3.1	781	ug/L
MW-1	9/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-1	9/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-1	9/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-1	9/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-1	9/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-1	9/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-1	9/16/2014	Fluorene	ND	10	2.9	288	ug/L
MW-1	9/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-1	9/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-1	9/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-1	9/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-1	9/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-1	9/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-1	9/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-1	9/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-1	9/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-1	9/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-1	9/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-1	9/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-1	9/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-1	9/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-1	9/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-1	9/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-1	9/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-1	9/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-1	9/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-1	9/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-1	9/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-1	9/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-1	9/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-1	9/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-1	9/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-1	9/16/2014	Phenol	ND	10	1.6	5761	ug/L
MW-1	9/16/2014	Pyridine	ND	10	1.6	20	ug/L
MW-1	9/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-1	9/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-1	9/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-1	9/16/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-1	9/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-1	9/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-1	9/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-1	9/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-1	9/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-1	9/16/2014	Pyrene	ND	10	4	117	ug/L
MW-1	9/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-1	9/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-1	9/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-1	9/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-1	9/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-1	9/16/2014	Fluoranthene	ND	10	3	802	ug/L
MW-1	9/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-1	9/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-1	9/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-1	9/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-1	9/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-1	9/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-1	9/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-1	9/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-1	9/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-1	9/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-1	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-1	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-1	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-1	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-1	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-1	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-1	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-1	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-1	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-1	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-1	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-1	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-1	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-1	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-1	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-1	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-1	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-1	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-1	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-1	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-1	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-1	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-1	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-1	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-1	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-1	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-1	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-1	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-1	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-1	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-1	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-1	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-1	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-1	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-1	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-1	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-1	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-1	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-1	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-1	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-1	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-1	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-1	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-1	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-1	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-1	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-1	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-1	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-1	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-1	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-1	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-1	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-1	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-1	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-1	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-1	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-1	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-1	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-1	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-1	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-1	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-1	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-1	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-1	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-1	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-1	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-1	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-1	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-1	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-1	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-1	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-1	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-1	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-1	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-1	9/7/2016	Benzoic Acid	9.8	20	2.6	75000	ug/L
MW-1	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-1	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-1	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-1	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-1	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-1	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-1	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-1	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-1	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-1	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-1	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-1	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-1	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-1	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-1	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-1	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-1	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-1	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-1	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-1	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-1	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-1	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-1	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MW-1	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-1	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-1	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-1	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-1	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-1	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-1	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-1	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-1	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-1	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-1	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-1	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-1	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-1	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-1	9/7/2016	Bis(2-ethylhexyl)phthalate	4	10	2.6	55.64	ug/L
MW-1	9/7/2016	Di-n-octylphthalate	4.4	10	2	200	ug/L
MW-1	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-1	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-1	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-1	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-1	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-1	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MW-1	9/7/2016	Dimethylphthalate	5.1	10	2.4	612	ug/L
MW-1	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-1	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-1	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-1	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-1	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-1	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-1	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-1	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-1	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-1	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-1	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-1	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-1	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-1	9/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-1	9/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-1	9/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-1	9/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-1	9/20/2017	Aniline	ND	10	3.1	13	ug/L
MW-1	9/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-1	9/20/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MW-1	9/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-1	9/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-1	9/20/2017	Isophorone	ND	10	4.4	781	ug/L
MW-1	9/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-1	9/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-1	9/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-1	9/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-1	9/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-1	9/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-1	9/20/2017	Fluorene	ND	10	4	288	ug/L
MW-1	9/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-1	9/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-1	9/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-1	9/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-1	9/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-1	9/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-1	9/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-1	9/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-1	9/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-1	9/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-1	9/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-1	9/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-1	9/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-1	9/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-1	9/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-1	9/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-1	9/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-1	9/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-1	9/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-1	9/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-1	9/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-1	9/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-1	9/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-1	9/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-1	9/20/2017	Phenol	ND	10	3.1	5761	ug/L
MW-1	9/20/2017	Pyridine	ND	10	2.3	20	ug/L
MW-1	9/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-1	9/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-1	9/20/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
MW-1	9/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-1	9/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-1	9/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-1	9/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-1	9/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-1	9/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-1	9/20/2017	Pyrene	ND	10	4.4	117	ug/L
MW-1	9/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-1	9/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-1	9/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-1	9/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-1	9/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-1	9/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-1	9/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-1	9/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-1	9/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-1	9/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-1	9/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-1	9/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-1	9/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-1	9/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-1	9/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-1	9/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-1	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-1	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-1	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-1	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-1	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-1	9/13/2018	Benzoic Acid	6.6	20	6.3	75000	ug/L
MW-1	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-1	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-1	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-1	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-1	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-1	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-1	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-1	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-1	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-1	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-1	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-1	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-1	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-1	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-1	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-1	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-1	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-1	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-1	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-1	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-1	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-1	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-1	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-1	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-1	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-1	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-1	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-1	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-1	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-1	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-1	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-1	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-1	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-1	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-1	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-1	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-1	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-1	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-1	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-1	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-1	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-1	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-1	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-1	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-1	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-1	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-1	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-1	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-1	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-1	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-1	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-1	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-1	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-1	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-1	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-1	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-1	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-1	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-1	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-1	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-1	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-1	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-1	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-1	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-1	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-1	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-1	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-1	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-1	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-1	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-1	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-1	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-1	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-1	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-1	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-1	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-1	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-1	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-1	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-1	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-1	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-1	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-1	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-1	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-1	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-1	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-1	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-1	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-1	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-1	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-1	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-1	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-1	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-1	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-1	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-1	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-1	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-1	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-1	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-1	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-1	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-1	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-1	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-1	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-1	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-1	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-1	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-1	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-1	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-1	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-1	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-1	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-1	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-1	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-1	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-1	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-1	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-1	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-1	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-1	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-1	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-1	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-1	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-1	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-1	8/12/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-1	8/12/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-1	8/12/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-1	8/12/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-1	8/12/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-1	8/12/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-1	8/12/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-1	8/12/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-1	8/12/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-1	8/12/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-1	8/12/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-1	8/12/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-1	8/12/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-1	8/12/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-1	8/12/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-1	8/12/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-1	8/12/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-1	8/12/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-1	8/12/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-1	8/12/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-1	8/12/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-1	8/12/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-1	8/12/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-1	8/12/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-1	8/12/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-1	8/12/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-1	8/12/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-1	8/12/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-1	8/12/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-1	8/12/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-1	8/12/2019	Aniline	ND	10	3.579516	13	ug/L
MW-1	8/12/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-1	8/12/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-1	8/12/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-1	8/12/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-1	8/12/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-1	8/12/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-1	8/12/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-1	8/12/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-1	8/12/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-1	8/12/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-1	8/12/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-1	8/12/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-1	8/12/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-1	8/12/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-1	8/12/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-1	8/12/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-1	8/12/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-1	8/12/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-1	8/12/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-1	8/12/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-1	8/12/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-1	8/12/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-1	8/12/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-1	8/12/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-1	8/12/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-1	8/12/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-1	8/12/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-1	8/12/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-1	8/12/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-1	8/12/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-1	8/12/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-1	8/12/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-1	8/12/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-1	8/12/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-1	8/12/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-1	8/12/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-1	8/12/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-1	8/12/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-1	8/12/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-1	8/12/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-1	9/22/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-1	9/22/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-1	9/22/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-1	9/22/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-1	9/22/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-1	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-1	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-1	9/22/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-1	9/22/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-1	9/22/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-1	9/22/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-1	9/22/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-1	9/22/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-1	9/22/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-1	9/22/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-1	9/22/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-1	9/22/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-1	9/22/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-1	9/22/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-1	9/22/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-1	9/22/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-1	9/22/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-1	9/22/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-1	9/22/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-1	9/22/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-1	9/22/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MW-1	9/22/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-1	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-1	9/22/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-1	9/22/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-1	9/22/2020	Benzyl Alcohol	0.77	0.51	0.2	2000	ug/L
MW-1	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-1	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-1	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-1	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-1	9/22/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-1	9/22/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-1	9/22/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-1	9/22/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-1	9/22/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-1	9/22/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-1	9/22/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-1	9/22/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-1	9/22/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-1	9/22/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-1	9/22/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-1	9/22/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-1	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-1	9/22/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-1	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-1	9/22/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-1	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-1	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-1	9/22/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-1	9/22/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-1	9/22/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-1	9/22/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-1	9/22/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-1	9/22/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-1	9/22/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-1	9/22/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-2	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-2	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-2	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-2	8/24/2012	Aniline	ND	10	2	13	ug/L
MW-2	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-2	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-2	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-2	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-2	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
MW-2	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-2	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-2	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-2	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-2	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-2	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-2	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
MW-2	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-2	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-2	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-2	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-2	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-2	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-2	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-2	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-2	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-2	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-2	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-2	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-2	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-2	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-2	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-2	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-2	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-2	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-2	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-2	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-2	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-2	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-2	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-2	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-2	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
MW-2	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
MW-2	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-2	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-2	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-2	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-2	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-2	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-2	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-2	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-2	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-2	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
MW-2	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-2	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-2	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-2	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-2	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-2	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-2	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-2	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-2	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
MW-2	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-2	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-2	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-2	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-2	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-2	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-2	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-2	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-2	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-2	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-2	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-2	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-2	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-2	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-2	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-2	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-2	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-2	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-2	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-2	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-2	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-2	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-2	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-2	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-2	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-2	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-2	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-2	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-2	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-2	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-2	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-2	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-2	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-2	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-2	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-2	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-2	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-2	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-2	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-2	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-2	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-2	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-2	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-2	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-2	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-2	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-2	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-2	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-2	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-2	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-2	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-2	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-2	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-2	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-2	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-2	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-2	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-2	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-2	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-2	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-2	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-2	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-2	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-2	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-2	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-2	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-2	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-2	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-2	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-2	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-2	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-2	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-2	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-2	9/16/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-2	9/16/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-2	9/16/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-2	9/16/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Aniline	ND	10	2.4	13	ug/L
MW-2	9/16/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-2	9/16/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-2	9/16/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-2	9/16/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-2	9/16/2014	Isophorone	ND	10	3.1	781	ug/L
MW-2	9/16/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-2	9/16/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-2	9/16/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-2	9/16/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-2	9/16/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-2	9/16/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-2	9/16/2014	Fluorene	ND	10	2.9	288	ug/L
MW-2	9/16/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-2	9/16/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-2	9/16/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-2	9/16/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-2	9/16/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-2	9/16/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-2	9/16/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-2	9/16/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-2	9/16/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-2	9/16/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-2	9/16/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-2	9/16/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-2	9/16/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-2	9/16/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-2	9/16/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-2	9/16/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-2	9/16/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/16/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-2	9/16/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-2	9/16/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-2	9/16/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-2	9/16/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-2	9/16/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-2	9/16/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-2	9/16/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-2	9/16/2014	Phenol	ND	10	1.6	5761	ug/L
MW-2	9/16/2014	Pyridine	ND	10	1.6	20	ug/L
MW-2	9/16/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-2	9/16/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-2	9/16/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-2	9/16/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-2	9/16/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-2	9/16/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-2	9/16/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-2	9/16/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-2	9/16/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-2	9/16/2014	Pyrene	ND	10	4	117	ug/L
MW-2	9/16/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-2	9/16/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-2	9/16/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-2	9/16/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-2	9/16/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-2	9/16/2014	Fluoranthene	ND	10	3	802	ug/L
MW-2	9/16/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-2	9/16/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-2	9/16/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-2	9/16/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-2	9/16/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-2	9/16/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-2	9/16/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-2	9/16/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-2	9/16/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-2	9/16/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-2	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-2	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-2	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-2	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-2	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-2	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-2	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-2	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-2	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-2	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-2	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-2	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-2	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-2	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-2	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-2	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-2	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-2	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-2	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-2	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-2	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-2	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-2	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-2	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-2	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-2	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-2	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-2	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-2	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-2	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-2	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-2	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-2	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-2	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-2	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-2	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-2	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-2	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-2	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-2	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-2	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-2	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-2	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-2	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-2	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-2	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-2	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-2	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-2	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-2	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-2	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-2	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-2	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-2	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-2	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-2	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-2	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-2	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-2	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-2	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-2	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-2	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-2	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-2	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-2	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-2	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-2	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-2	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-2	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-2	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-2	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-2	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-2	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-2	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-2	9/7/2016	Benzoic Acid	18	20	2.6	75000	ug/L
MW-2	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-2	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-2	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-2	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-2	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-2	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-2	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-2	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-2	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-2	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-2	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-2	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-2	9/7/2016	Pentachlorophenol	**3.9**	20	2.3	1	ug/L
MW-2	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-2	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-2	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-2	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-2	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-2	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-2	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-2	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-2	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-2	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
MW-2	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-2	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-2	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-2	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-2	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-2	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-2	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-2	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-2	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-2	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-2	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-2	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-2	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-2	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-2	9/7/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
MW-2	9/7/2016	Di-n-octylphthalate	3.5	10	2	200	ug/L
MW-2	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-2	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-2	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-2	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-2	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-2	9/7/2016	Pyrene	5.2	10	3.1	117	ug/L
MW-2	9/7/2016	Dimethylphthalate	5	10	2.4	612	ug/L
MW-2	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-2	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-2	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-2	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-2	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-2	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-2	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-2	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-2	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-2	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-2	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-2	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-2	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-2	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-2	9/20/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-2	9/20/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-2	9/20/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-2	9/20/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-2	9/20/2017	Aniline	ND	10	3.1	13	ug/L
MW-2	9/20/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-2	9/20/2017	Benzoic Acid	7.3	20	3.9	75000	ug/L
MW-2	9/20/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-2	9/20/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-2	9/20/2017	Isophorone	ND	10	4.4	781	ug/L
MW-2	9/20/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-2	9/20/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-2	9/20/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-2	9/20/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-2	9/20/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-2	9/20/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-2	9/20/2017	Fluorene	ND	10	4	288	ug/L
MW-2	9/20/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-2	9/20/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-2	9/20/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-2	9/20/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-2	9/20/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-2	9/20/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-2	9/20/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-2	9/20/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-2	9/20/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-2	9/20/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-2	9/20/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-2	9/20/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-2	9/20/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-2	9/20/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-2	9/20/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-2	9/20/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-2	9/20/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-2	9/20/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-2	9/20/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-2	9/20/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-2	9/20/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-2	9/20/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-2	9/20/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-2	9/20/2017	Phenol	ND	10	3.1	5761	ug/L
MW-2	9/20/2017	Pyridine	ND	10	2.3	20	ug/L
MW-2	9/20/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-2	9/20/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-2	9/20/2017	Bis(2-ethylhexyl)phthalate	6	10	4.8	55.64	ug/L
MW-2	9/20/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-2	9/20/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-2	9/20/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-2	9/20/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-2	9/20/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-2	9/20/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-2	9/20/2017	Pyrene	ND	10	4.4	117	ug/L
MW-2	9/20/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-2	9/20/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-2	9/20/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-2	9/20/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-2	9/20/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-2	9/20/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-2	9/20/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-2	9/20/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-2	9/20/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-2	9/20/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-2	9/20/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-2	9/20/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-2	9/20/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-2	9/20/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-2	9/20/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-2	9/20/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-2	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-2	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-2	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-2	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-2	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-2	9/13/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
MW-2	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-2	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-2	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-2	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-2	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-2	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-2	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-2	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-2	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-2	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-2	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-2	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-2	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-2	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-2	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-2	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-2	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-2	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-2	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-2	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-2	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-2	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-2	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-2	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-2	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-2	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-2	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-2	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-2	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-2	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-2	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-2	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-2	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-2	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-2	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-2	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-2	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-2	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-2	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-2	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-2	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-2	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-2	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-2	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-2	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-2	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-2	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-2	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-2	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-2	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-2	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-2	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-2	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-2	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-2	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-2	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-2	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-2	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-2	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-2	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-2	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-2	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-2	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-2	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-2	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-2	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-2	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-2	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-2	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-2	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-2	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-2	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-2	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-2	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-2	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-2	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-2	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-2	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-2	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-2	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-2	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-2	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-2	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-2	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-2	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-2	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-2	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-2	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-2	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-2	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-2	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-2	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-2	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-2	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-2	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-2	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-2	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-2	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-2	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-2	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-2	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-2	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-2	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-2	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-2	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-2	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-2	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-2	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-2	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-2	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-2	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-2	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-2	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-2	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-2	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-2	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-2	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-2	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-2	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-2	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-2	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-2	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-2	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-2	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-2	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-2	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-2	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-2	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-2	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-2	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-2	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-2	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-2	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-2	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-2	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-2	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-2	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-2	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-2	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-2	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-2	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-2	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-2	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-2	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-2	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-2	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-2	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-2	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-2	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-2	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-2	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-2	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-2	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-2	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-2	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
MW-2	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-2	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-2	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-2	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-2	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-2	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-2	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-2	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-2	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-2	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-2	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-2	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-2	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-2	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-2	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-2	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-2	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-2	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-2	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-2	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-2	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-2	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-2	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-2	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-2	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-2	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-2	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-2	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-2	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-2	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-2	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-2	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-2	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-2	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-2	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-2	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-2	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-2	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-2	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-2	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-2	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-2	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-2	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-2	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-2	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-2	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-2	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-2	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-2	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-2	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-2	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-2	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-2	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-2	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-2	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-2	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-2	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-2	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-2	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-2	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-2	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-2	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-2	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-2	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-2	9/18/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-2	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-2	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-2	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-2	9/18/2020	Benzoic Acid	1.1	0.51	0.2	75000	ug/L
MW-2	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-2	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-2	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-2	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-2	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-2	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-2	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-2	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-2	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-2	9/18/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-2	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-2	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-2	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-2	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-2	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-2	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-2	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-2	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MW-2	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-2	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-2	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-2	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-2	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-2	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-2	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-2	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-2	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-2	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-2	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-2	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-2	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-4	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-4	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-4	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-4	8/21/2012	Aniline	ND	10	2	13	ug/L
MW-4	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-4	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-4	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-4	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
MW-4	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-4	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-4	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-4	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-4	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-4	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-4	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
MW-4	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-4	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-4	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-4	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-4	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-4	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-4	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-4	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-4	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-4	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-4	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-4	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-4	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-4	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-4	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-4	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-4	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-4	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-4	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-4	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-4	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-4	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-4	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-4	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-4	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
MW-4	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
MW-4	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-4	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-4	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-4	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-4	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-4	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-4	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-4	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-4	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-4	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
MW-4	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-4	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-4	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-4	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-4	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-4	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-4	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-4	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-4	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
MW-4	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-4	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-4	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-4	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-4	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-4	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-4	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-4	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-4	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-4	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-4	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-4	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-4	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-4	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-4	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-4	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-4	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-4	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-4	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-4	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-4	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-4	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-4	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-4	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-4	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-4	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-4	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-4	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-4	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
MW-4	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-4	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-4	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-4	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-4	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-4	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-4	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-4	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-4	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-4	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-4	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-4	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-4	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-4	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-4	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-4	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-4	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-4	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-4	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-4	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-4	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-4	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-4	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-4	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-4	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-4	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-4	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-4	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-4	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-4	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-4	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-4	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-4	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-4	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-4	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-4	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-4	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-4	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-4	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-4	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-4	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-4	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-4	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-4	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-4	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-4	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-4	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-4	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-4	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MW-4	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-4	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-4	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-4	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-4	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MW-4	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-4	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-4	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-4	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-4	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-4	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-4	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MW-4	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-4	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-4	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-4	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-4	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-4	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-4	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-4	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-4	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-4	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-4	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-4	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-4	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-4	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-4	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-4	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-4	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-4	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-4	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-4	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-4	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-4	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-4	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-4	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-4	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-4	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MW-4	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MW-4	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-4	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-4	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-4	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-4	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-4	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-4	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-4	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-4	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-4	9/17/2014	Pyrene	ND	10	4	117	ug/L
MW-4	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-4	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-4	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-4	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-4	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-4	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MW-4	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-4	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
MW-4	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-4	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-4	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-4	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-4	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-4	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-4	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-4	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-4	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-4	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-4	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-4	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-4	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Aniline	ND	10	1.5	13	ug/L
MW-4	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-4	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-4	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-4	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-4	8/17/2015	Isophorone	ND	10	2	781	ug/L
MW-4	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-4	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-4	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-4	8/17/2015	Phenanthrene	ND	10	2	170	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-4	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-4	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
MW-4	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-4	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-4	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-4	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-4	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-4	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-4	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-4	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-4	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-4	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-4	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-4	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-4	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-4	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-4	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-4	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-4	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-4	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-4	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-4	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-4	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-4	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-4	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-4	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-4	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
MW-4	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
MW-4	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-4	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-4	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-4	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-4	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-4	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-4	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-4	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-4	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-4	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
MW-4	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-4	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-4	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-4	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-4	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-4	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-4	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-4	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-4	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-4	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-4	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-4	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-4	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-4	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-4	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-4	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-4	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-4	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-4	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-4	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-4	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-4	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-4	9/7/2016	Benzoic Acid	9.3	20	2.6	75000	ug/L
MW-4	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-4	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-4	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
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MW-4	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-4	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-4	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-4	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
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MW-4	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-4	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-4	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-4	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-4	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
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MW-4	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-4	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-4	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-4	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
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MW-4	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-4	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-4	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
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MW-4	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
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MW-4	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-4	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-4	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-4	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L

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MW-4	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-4	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-4	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-4	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-4	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-4	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-4	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-4	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-4	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-4	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-4	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-4	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-4	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-4	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-4	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-4	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-4	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-4	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-4	9/21/2017	Aniline	ND	10	3.1	13	ug/L
MW-4	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-4	9/21/2017	Benzoic Acid	14	20	3.9	75000	ug/L
MW-4	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-4	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-4	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
MW-4	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-4	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-4	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-4	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-4	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-4	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-4	9/21/2017	Fluorene	ND	10	4	288	ug/L
MW-4	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-4	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-4	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-4	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-4	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-4	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-4	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-4	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-4	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-4	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-4	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-4	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-4	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-4	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-4	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-4	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-4	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-4	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-4	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-4	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-4	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-4	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-4	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-4	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-4	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
MW-4	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
MW-4	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-4	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-4	9/21/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
MW-4	9/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-4	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-4	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-4	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-4	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-4	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-4	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
MW-4	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-4	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-4	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-4	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-4	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-4	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-4	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-4	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-4	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-4	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-4	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-4	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-4	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-4	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-4	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
MW-4	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-4	9/13/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-4	9/13/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-4	9/13/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-4	9/13/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Aniline	ND	10	6.2	13	ug/L
MW-4	9/13/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-4	9/13/2018	Benzoic Acid	6.5	20	6.3	75000	ug/L
MW-4	9/13/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-4	9/13/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-4	9/13/2018	Isophorone	ND	10	6.2	781	ug/L
MW-4	9/13/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-4	9/13/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-4	9/13/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-4	9/13/2018	Phenanthrene	ND	10	6	170	ug/L
MW-4	9/13/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-4	9/13/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-4	9/13/2018	Fluorene	ND	10	6.3	288	ug/L
MW-4	9/13/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-4	9/13/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-4	9/13/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-4	9/13/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-4	9/13/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-4	9/13/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-4	9/13/2018	Naphthalene	ND	10	5	30	ug/L
MW-4	9/13/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-4	9/13/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-4	9/13/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-4	9/13/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-4	9/13/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-4	9/13/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-4	9/13/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-4	9/13/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-4	9/13/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-4	9/13/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-4	9/13/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-4	9/13/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-4	9/13/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-4	9/13/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-4	9/13/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-4	9/13/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-4	9/13/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-4	9/13/2018	Phenol	ND	10	6	5761	ug/L
MW-4	9/13/2018	Pyridine	ND	10	5.4	20	ug/L
MW-4	9/13/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-4	9/13/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-4	9/13/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-4	9/13/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-4	9/13/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-4	9/13/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-4	9/13/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-4	9/13/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-4	9/13/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-4	9/13/2018	Pyrene	ND	10	6.5	117	ug/L
MW-4	9/13/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-4	9/13/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-4	9/13/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-4	9/13/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-4	9/13/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-4	9/13/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-4	9/13/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-4	9/13/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-4	9/13/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-4	9/13/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-4	9/13/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-4	9/13/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-4	9/13/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-4	9/13/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-4	9/13/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-4	9/13/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-4	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-4	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-4	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-4	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-4	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-4	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-4	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-4	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-4	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-4	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-4	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-4	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-4	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-4	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-4	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-4	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-4	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-4	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-4	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-4	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-4	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-4	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-4	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-4	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-4	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-4	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-4	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-4	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-4	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-4	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-4	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-4	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-4	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-4	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-4	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-4	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-4	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-4	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-4	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-4	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-4	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-4	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
MW-4	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-4	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-4	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-4	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-4	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-4	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-4	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-4	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-4	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-4	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-4	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-4	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-4	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-4	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-4	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-4	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-4	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-4	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-4	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-4	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-4	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-4	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-4	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-4	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-4	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-4	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-4	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-4	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-4	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-4	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-4	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-4	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-4	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-4	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-4	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-4	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-4	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-4	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-4	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-4	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-4	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-4	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-4	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-4	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-4	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-4	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-4	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-4	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-4	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-4	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
MW-4	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-4	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-4	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-4	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-4	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-4	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-4	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-4	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-4	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-4	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-4	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-4	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-4	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
MW-4	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-4	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-4	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-4	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-4	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-4	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-4	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-4	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-4	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-4	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-4	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-4	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-4	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-4	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-4	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-4	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-4	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-4	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-4	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-4	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-4	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-4	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-4	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-4	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-4	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-4	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-4	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
MW-4	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-4	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-4	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-4	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-4	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-4	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-4	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-4	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-4	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-4	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-4	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-4	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-4	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-4	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-4	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-4	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-4	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-4	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-4	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-4	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-4	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-4	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-4	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-4	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-4	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-4	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-4	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-4	9/18/2020	Benzidine	*ND*	*0.51*	0.25	0.0011	ug/L
MW-4	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-4	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-4	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-4	9/18/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-4	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-4	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-4	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-4	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-4	9/18/2020	Bis(2-ethylhexyl)phthalate	0.28	0.51	0.2	55.64	ug/L
MW-4	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-4	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-4	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-4	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-4	9/18/2020	Dibenzo(a,h)anthracene	ND	0.03	0.02	NA	ug/L
MW-4	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-4	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-4	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-4	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-4	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-4	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-4	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-4	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-4	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-4	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-4	9/18/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-4	9/18/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-4	9/18/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-4	9/18/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-4	9/18/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-4	9/18/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-4	9/18/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-4	9/18/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-4	9/18/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-4	9/18/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-4	9/18/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-4	9/18/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-4	9/18/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-4	9/18/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-4	9/18/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-4	9/18/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-4	9/18/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-4	9/18/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-4	9/18/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-4	9/18/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-4	9/18/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-4	9/18/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-4	9/18/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-4	9/18/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-4	9/18/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-4	9/18/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-4	9/18/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-4	9/18/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-4	9/18/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
MW-4	9/18/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-4	9/18/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-4	9/18/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-4	9/18/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-4	9/18/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-4	9/18/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-4	9/18/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-4	9/18/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-4	9/18/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-4	9/18/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MW-4	9/18/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-4	9/18/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-4	9/18/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-4	9/18/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-4	9/18/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-4	9/18/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-4	9/18/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.25	0.41	ug/L
MW-4	9/18/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-4	9/18/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-4	9/18/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-4	9/18/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-4	9/18/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-4	9/18/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-4	9/18/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-4	9/18/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-4	9/18/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-4	9/18/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-4	9/18/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-4	9/18/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-4	9/18/2020	Pyridine	ND	0.51	0.2	20	ug/L
MW-5	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
MW-5	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
MW-5	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
MW-5	8/23/2012	Aniline	ND	10	2	13	ug/L
MW-5	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
MW-5	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
MW-5	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-5	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-5	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
MW-5	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
MW-5	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
MW-5	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
MW-5	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
MW-5	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-5	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
MW-5	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
MW-5	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
MW-5	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-5	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
MW-5	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
MW-5	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
MW-5	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-5	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-5	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
MW-5	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
MW-5	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
MW-5	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
MW-5	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
MW-5	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
MW-5	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
MW-5	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-5	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
MW-5	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
MW-5	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
MW-5	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
MW-5	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
MW-5	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-5	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
MW-5	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
MW-5	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
MW-5	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
MW-5	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
MW-5	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
MW-5	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
MW-5	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-5	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
MW-5	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
MW-5	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
MW-5	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-5	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
MW-5	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-5	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
MW-5	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
MW-5	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
MW-5	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
MW-5	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
MW-5	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
MW-5	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
MW-5	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
MW-5	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
MW-5	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
MW-5	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
MW-5	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
MW-5	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
MW-5	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
MW-5	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-5	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
MW-5	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
MW-5	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
MW-5	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
MW-5	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-5	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	Aniline	ND	10	2.2	13	ug/L
MW-5	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
MW-5	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
MW-5	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
MW-5	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
MW-5	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
MW-5	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
MW-5	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
MW-5	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-5	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
MW-5	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
MW-5	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-5	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
MW-5	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
MW-5	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
MW-5	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
MW-5	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
MW-5	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
MW-5	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
MW-5	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
MW-5	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
MW-5	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
MW-5	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
MW-5	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
MW-5	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
MW-5	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
MW-5	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
MW-5	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
MW-5	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
MW-5	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
MW-5	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
MW-5	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
MW-5	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
MW-5	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
MW-5	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
MW-5	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
MW-5	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
MW-5	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
MW-5	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
MW-5	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
MW-5	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
MW-5	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
MW-5	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
MW-5	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
MW-5	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
MW-5	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
MW-5	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
MW-5	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
MW-5	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
MW-5	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
MW-5	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
MW-5	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
MW-5	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-5	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
MW-5	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
MW-5	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
MW-5	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
MW-5	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-5	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
MW-5	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
MW-5	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
MW-5	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
MW-5	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
MW-5	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
MW-5	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
MW-5	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
MW-5	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Aniline	ND	10	2.4	13	ug/L
MW-5	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
MW-5	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
MW-5	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
MW-5	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
MW-5	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
MW-5	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
MW-5	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
MW-5	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
MW-5	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
MW-5	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
MW-5	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
MW-5	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
MW-5	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
MW-5	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
MW-5	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
MW-5	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
MW-5	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-5	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
MW-5	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
MW-5	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
MW-5	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
MW-5	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
MW-5	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-5	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
MW-5	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
MW-5	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
MW-5	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
MW-5	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
MW-5	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
MW-5	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
MW-5	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
MW-5	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
MW-5	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
MW-5	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
MW-5	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
MW-5	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-5	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
MW-5	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
MW-5	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
MW-5	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-5	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-5	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
MW-5	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
MW-5	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
MW-5	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
MW-5	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
MW-5	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
MW-5	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
MW-5	9/17/2014	Pyrene	ND	10	4	117	ug/L
MW-5	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
MW-5	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
MW-5	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
MW-5	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
MW-5	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
MW-5	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
MW-5	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
MW-5	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
MW-5	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
MW-5	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-5	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
MW-5	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
MW-5	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
MW-5	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
MW-5	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
MW-5	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-5	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
MW-5	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
MW-5	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
MW-5	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Aniline	ND	10	1.5	13	ug/L
MW-5	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
MW-5	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
MW-5	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
MW-5	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
MW-5	8/14/2015	Isophorone	ND	10	2	781	ug/L
MW-5	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
MW-5	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
MW-5	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
MW-5	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
MW-5	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
MW-5	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
MW-5	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
MW-5	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
MW-5	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
MW-5	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
MW-5	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
MW-5	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
MW-5	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
MW-5	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
MW-5	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
MW-5	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
MW-5	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
MW-5	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
MW-5	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
MW-5	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
MW-5	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
MW-5	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
MW-5	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
MW-5	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
MW-5	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
MW-5	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
MW-5	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
MW-5	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
MW-5	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
MW-5	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
MW-5	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
MW-5	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
MW-5	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
MW-5	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
MW-5	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
MW-5	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
MW-5	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
MW-5	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
MW-5	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
MW-5	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
MW-5	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
MW-5	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
MW-5	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
MW-5	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
MW-5	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
MW-5	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
MW-5	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
MW-5	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
MW-5	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
MW-5	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
MW-5	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
MW-5	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
MW-5	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
MW-5	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
MW-5	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
MW-5	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
MW-5	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
MW-5	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
MW-5	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
MW-5	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
MW-5	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
MW-5	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
MW-5	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
MW-5	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Aniline	ND	10	2.4	13	ug/L
MW-5	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
MW-5	9/7/2016	Benzoic Acid	6.5	20	2.6	75000	ug/L
MW-5	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
MW-5	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
MW-5	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
MW-5	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
MW-5	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
MW-5	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
MW-5	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
MW-5	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
MW-5	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
MW-5	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
MW-5	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
MW-5	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
MW-5	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
MW-5	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
MW-5	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
MW-5	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
MW-5	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
MW-5	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
MW-5	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
MW-5	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
MW-5	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
MW-5	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
MW-5	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
MW-5	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
MW-5	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
MW-5	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
MW-5	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
MW-5	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
MW-5	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
MW-5	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
MW-5	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
MW-5	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
MW-5	9/7/2016	Phenol	ND	10	2	5761	ug/L
MW-5	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
MW-5	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
MW-5	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
MW-5	9/7/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
MW-5	9/7/2016	Di-n-octylphthalate	3.4	10	2	200	ug/L
MW-5	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
MW-5	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
MW-5	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
MW-5	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
MW-5	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
MW-5	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
MW-5	9/7/2016	Dimethylphthalate	5.1	10	2.4	612	ug/L
MW-5	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
MW-5	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
MW-5	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
MW-5	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
MW-5	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
MW-5	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
MW-5	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
MW-5	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
MW-5	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
MW-5	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
MW-5	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
MW-5	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
MW-5	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
MW-5	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
MW-5	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
MW-5	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
MW-5	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
MW-5	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
MW-5	9/11/2017	Aniline	ND	10	3.1	13	ug/L
MW-5	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
MW-5	9/11/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
MW-5	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
MW-5	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
MW-5	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
MW-5	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
MW-5	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
MW-5	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
MW-5	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
MW-5	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
MW-5	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
MW-5	9/11/2017	Fluorene	ND	10	4	288	ug/L
MW-5	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
MW-5	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
MW-5	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
MW-5	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
MW-5	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
MW-5	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
MW-5	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
MW-5	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
MW-5	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
MW-5	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
MW-5	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
MW-5	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
MW-5	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
MW-5	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
MW-5	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
MW-5	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
MW-5	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
MW-5	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
MW-5	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
MW-5	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
MW-5	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
MW-5	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
MW-5	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
MW-5	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
MW-5	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
MW-5	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
MW-5	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
MW-5	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
MW-5	9/11/2017	Bis(2-ethylhexyl)phthalate	5.7	10	4.8	55.64	ug/L
MW-5	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
MW-5	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
MW-5	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
MW-5	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
MW-5	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
MW-5	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
MW-5	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
MW-5	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
MW-5	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
MW-5	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
MW-5	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
MW-5	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
MW-5	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
MW-5	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
MW-5	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
MW-5	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
MW-5	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
MW-5	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
MW-5	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
MW-5	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
MW-5	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
MW-5	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
MW-5	9/17/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
MW-5	9/17/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
MW-5	9/17/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
MW-5	9/17/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Aniline	ND	10	6.2	13	ug/L
MW-5	9/17/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
MW-5	9/17/2018	Benzoic Acid	7	20	6.3	75000	ug/L
MW-5	9/17/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
MW-5	9/17/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
MW-5	9/17/2018	Isophorone	ND	10	6.2	781	ug/L
MW-5	9/17/2018	Acenaphthene	ND	10	5.8	535	ug/L
MW-5	9/17/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
MW-5	9/17/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
MW-5	9/17/2018	Phenanthrene	ND	10	6	170	ug/L
MW-5	9/17/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
MW-5	9/17/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
MW-5	9/17/2018	Fluorene	ND	10	6.3	288	ug/L
MW-5	9/17/2018	Carbazole	ND	10	6.3	NA	ug/L
MW-5	9/17/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
MW-5	9/17/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
MW-5	9/17/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
MW-5	9/17/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
MW-5	9/17/2018	2-Nitrophenol	ND	10	6	NA	ug/L
MW-5	9/17/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
MW-5	9/17/2018	Naphthalene	ND	10	5	30	ug/L
MW-5	9/17/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
MW-5	9/17/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
MW-5	9/17/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
MW-5	9/17/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
MW-5	9/17/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
MW-5	9/17/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
MW-5	9/17/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
MW-5	9/17/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
MW-5	9/17/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
MW-5	9/17/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
MW-5	9/17/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
MW-5	9/17/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
MW-5	9/17/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
MW-5	9/17/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
MW-5	9/17/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
MW-5	9/17/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
MW-5	9/17/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
MW-5	9/17/2018	Phenol	ND	10	6	5761	ug/L
MW-5	9/17/2018	Pyridine	ND	10	5.4	20	ug/L
MW-5	9/17/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
MW-5	9/17/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
MW-5	9/17/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
MW-5	9/17/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
MW-5	9/17/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
MW-5	9/17/2018	Anthracene	ND	10	5.7	1721	ug/L
MW-5	9/17/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
MW-5	9/17/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
MW-5	9/17/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
MW-5	9/17/2018	Pyrene	ND	10	6.5	117	ug/L
MW-5	9/17/2018	Dimethylphthalate	ND	10	6	612	ug/L
MW-5	9/17/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
MW-5	9/17/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
MW-5	9/17/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
MW-5	9/17/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
MW-5	9/17/2018	Fluoranthene	ND	10	5.8	802	ug/L
MW-5	9/17/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
MW-5	9/17/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
MW-5	9/17/2018	Chrysene	ND	10	6.8	34.3	ug/L
MW-5	9/17/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
MW-5	9/17/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
MW-5	9/17/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
MW-5	9/17/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
MW-5	9/17/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
MW-5	9/17/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
MW-5	9/17/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
MW-5	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
MW-5	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
MW-5	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
MW-5	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
MW-5	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
MW-5	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
MW-5	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
MW-5	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
MW-5	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
MW-5	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
MW-5	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L
MW-5	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
MW-5	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
MW-5	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
MW-5	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
MW-5	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
MW-5	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
MW-5	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
MW-5	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
MW-5	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
MW-5	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
MW-5	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
MW-5	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
MW-5	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
MW-5	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
MW-5	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
MW-5	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
MW-5	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
MW-5	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
MW-5	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
MW-5	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
MW-5	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
MW-5	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
MW-5	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
MW-5	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
MW-5	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
MW-5	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
MW-5	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
MW-5	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
MW-5	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
MW-5	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
MW-5	12/6/2018	Bis(2-ethylhexyl)phthalate	1.1	0.5	0.5	55.64	ug/L
MW-5	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
MW-5	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
MW-5	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
MW-5	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
MW-5	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
MW-5	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
MW-5	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
MW-5	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
MW-5	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
MW-5	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
MW-5	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
MW-5	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
MW-5	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
MW-5	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
MW-5	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
MW-5	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
MW-5	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
MW-5	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
MW-5	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
MW-5	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
MW-5	8/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
MW-5	8/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
MW-5	8/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
MW-5	8/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
MW-5	8/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
MW-5	8/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
MW-5	8/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
MW-5	8/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
MW-5	8/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
MW-5	8/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
MW-5	8/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
MW-5	8/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
MW-5	8/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
MW-5	8/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
MW-5	8/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
MW-5	8/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
MW-5	8/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
MW-5	8/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
MW-5	8/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
MW-5	8/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
MW-5	8/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
MW-5	8/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
MW-5	8/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
MW-5	8/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
MW-5	8/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
MW-5	8/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
MW-5	8/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
MW-5	8/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
MW-5	8/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
MW-5	8/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
MW-5	8/14/2019	Aniline	ND	10	3.579516	13	ug/L
MW-5	8/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
MW-5	8/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
MW-5	8/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
MW-5	8/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
MW-5	8/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
MW-5	8/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
MW-5	8/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
MW-5	8/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
MW-5	8/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
MW-5	8/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
MW-5	8/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
MW-5	8/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
MW-5	8/14/2019	Bis(2-ethylhexyl)phthalate	18	10	4.302128	55.64	ug/L
MW-5	8/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
MW-5	8/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
MW-5	8/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
MW-5	8/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
MW-5	8/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
MW-5	8/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
MW-5	8/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
MW-5	8/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
MW-5	8/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
MW-5	8/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
MW-5	8/14/2019	Fluorene	ND	10	2.888488	288	ug/L
MW-5	8/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
MW-5	8/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
MW-5	8/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
MW-5	8/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
MW-5	8/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
MW-5	8/14/2019	Isophorone	ND	10	3.046035	781	ug/L
MW-5	8/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
MW-5	8/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
MW-5	8/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
MW-5	8/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
MW-5	8/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
MW-5	8/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
MW-5	8/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
MW-5	8/14/2019	Phenol	ND	10	8.036586	5761	ug/L
MW-5	8/14/2019	Pyrene	ND	10	2.5036	117	ug/L
MW-5	8/14/2019	Pyridine	ND	10	9.603136	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
MW-5	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
MW-5	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
MW-5	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
MW-5	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
MW-5	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
MW-5	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
MW-5	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
MW-5	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
MW-5	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
MW-5	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
MW-5	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
MW-5	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
MW-5	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
MW-5	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
MW-5	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
MW-5	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
MW-5	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
MW-5	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
MW-5	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
MW-5	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
MW-5	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
MW-5	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
MW-5	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
MW-5	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
MW-5	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
MW-5	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
MW-5	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
MW-5	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
MW-5	9/21/2020	Benzoic Acid	3.3	0.51	0.2	75000	ug/L
MW-5	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
MW-5	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
MW-5	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
MW-5	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
MW-5	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
MW-5	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
MW-5	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
MW-5	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
MW-5	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
MW-5	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
MW-5	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
MW-5	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
MW-5	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
MW-5	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
MW-5	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
MW-5	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
MW-5	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
MW-5	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
MW-5	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
MW-5	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
MW-5	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
MW-5	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
MW-5	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
MW-5	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
MW-5	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
MW-5	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
MW-5	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
MW-5	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
MW-5	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
MW-5	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
MW-5	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
NAPIS-2	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	3/20/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	3/20/2012	1-Methylnaphthalene	**15**	10	2.9	11.38	ug/L
NAPIS-2	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	3/20/2012	2-Methylphenol	15	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	3/20/2012	Phenol	78	10	2.5	5761	ug/L
NAPIS-2	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	3/20/2012	3,4-Methylphenol	34	10	2.9	NA	ug/L
NAPIS-2	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-2	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	6/12/2012	Phenol	16	10	2.5	5761	ug/L
NAPIS-2	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
NAPIS-2	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	8/21/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	8/21/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	8/21/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/21/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	8/21/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	8/21/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	8/21/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	8/21/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	8/21/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	8/21/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	8/21/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	8/21/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	8/21/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	8/21/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	8/21/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	8/21/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	8/21/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	8/21/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	8/21/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	8/21/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	8/21/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	8/21/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	8/21/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	8/21/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	8/21/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	8/21/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	8/21/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	8/21/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	8/21/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	8/21/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	8/21/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	8/21/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	8/21/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	8/21/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-2	8/21/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	8/21/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	8/21/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	8/21/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	8/21/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	8/21/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	8/21/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-2	8/21/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-2	8/21/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	8/21/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	8/21/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-2	8/21/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	8/21/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	8/21/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	8/21/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	8/21/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	8/21/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	8/21/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	8/21/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	8/21/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	8/21/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	8/21/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	8/21/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	8/21/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	8/21/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	8/21/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	8/21/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	8/21/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	8/21/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	8/21/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	8/21/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	8/21/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	8/21/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-2	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-2	12/5/2012	Aniline	ND	10	2	13	ug/L
NAPIS-2	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-2	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-2	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-2	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-2	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-2	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-2	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-2	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-2	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-2	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-2	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-2	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-2	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-2	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-2	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-2	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-2	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-2	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-2	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-2	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-2	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-2	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-2	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-2	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-2	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-2	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-2	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-2	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-2	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
NAPIS-2	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-2	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-2	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-2	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-2	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-2	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-2	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-2	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-2	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-2	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-2	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-2	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-2	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-2	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-2	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-2	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-2	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-2	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-2	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-2	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-2	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	6/12/2013	Isophorone	ND	10	1.8	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-2	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-2	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-2	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-2	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-2	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-2	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-2	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-2	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-2	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-2	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-2	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-2	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-2	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-2	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-2	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-2	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-2	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-2	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-2	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-2	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-2	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-2	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-2	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-2	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-2	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-2	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-2	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-2	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-2	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-2	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-2	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-2	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-2	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-2	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-2	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-2	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-2	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-2	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-2	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-2	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-2	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-2	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-2	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-2	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-2	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-2	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-2	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-2	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-2	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-2	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-2	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-2	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-2	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-2	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-2	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-2	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-2	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	3/10/2014	Fluorene	ND	10	2.9	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-2	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-2	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	3/10/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	6/5/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-2	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-2	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-2	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	6/5/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-2	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-2	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-2	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-2	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	9/11/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-2	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-2	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-2	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-2	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-2	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-2	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-2	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-2	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-2	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-2	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-2	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-2	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-2	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-2	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-2	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-2	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-2	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-2	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-2	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-2	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-2	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-2	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-2	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-2	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-2	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-2	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-2	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-2	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-2	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-2	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-2	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-2	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-2	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-2	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-2	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
NAPIS-2	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-2	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-2	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-2	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-2	9/11/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-2	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-2	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-2	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-2	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-2	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-2	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-2	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-2	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-2	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-2	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-2	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-2	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-2	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-2	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-2	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-2	11/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
NAPIS-2	11/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
NAPIS-2	11/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
NAPIS-2	11/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
NAPIS-2	11/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
NAPIS-2	11/11/2014	Aniline	*ND*	*50*	12	13	ug/L
NAPIS-2	11/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
NAPIS-2	11/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
NAPIS-2	11/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
NAPIS-2	11/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
NAPIS-2	11/11/2014	Isophorone	ND	50	15	781	ug/L
NAPIS-2	11/11/2014	Acenaphthene	ND	50	15	535	ug/L
NAPIS-2	11/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
NAPIS-2	11/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
NAPIS-2	11/11/2014	Phenanthrene	ND	50	13	170	ug/L
NAPIS-2	11/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
NAPIS-2	11/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
NAPIS-2	11/11/2014	Fluorene	ND	50	15	288	ug/L
NAPIS-2	11/11/2014	Carbazole	ND	50	14	NA	ug/L
NAPIS-2	11/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
NAPIS-2	11/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
NAPIS-2	11/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
NAPIS-2	11/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
NAPIS-2	11/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L
NAPIS-2	11/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	11/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
NAPIS-2	11/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
NAPIS-2	11/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
NAPIS-2	11/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
NAPIS-2	11/11/2014	2-Methylphenol	ND	50	14	NA	ug/L
NAPIS-2	11/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
NAPIS-2	11/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
NAPIS-2	11/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
NAPIS-2	11/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
NAPIS-2	11/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
NAPIS-2	11/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
NAPIS-2	11/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
NAPIS-2	11/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
NAPIS-2	11/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
NAPIS-2	11/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
NAPIS-2	11/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
NAPIS-2	11/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
NAPIS-2	11/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
NAPIS-2	11/11/2014	Phenol	ND	50	7.9	5761	ug/L
NAPIS-2	11/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
NAPIS-2	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
NAPIS-2	11/11/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
NAPIS-2	11/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
NAPIS-2	11/11/2014	Anthracene	ND	50	12	1721	ug/L
NAPIS-2	11/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
NAPIS-2	11/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
NAPIS-2	11/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
NAPIS-2	11/11/2014	Pyrene	ND	50	20	117	ug/L
NAPIS-2	11/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
NAPIS-2	11/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
NAPIS-2	11/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
NAPIS-2	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
NAPIS-2	11/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
NAPIS-2	11/11/2014	Fluoranthene	ND	50	15	802	ug/L
NAPIS-2	11/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
NAPIS-2	11/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
NAPIS-2	11/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
NAPIS-2	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
NAPIS-2	11/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
NAPIS-2	11/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
NAPIS-2	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
NAPIS-2	11/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
NAPIS-2	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
NAPIS-2	11/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-2	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-2	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
NAPIS-2	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
NAPIS-2	3/10/2015	Aniline	ND	10	4.2	13	ug/L
NAPIS-2	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
NAPIS-2	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
NAPIS-2	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
NAPIS-2	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
NAPIS-2	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
NAPIS-2	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
NAPIS-2	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
NAPIS-2	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
NAPIS-2	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
NAPIS-2	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
NAPIS-2	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
NAPIS-2	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
NAPIS-2	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
NAPIS-2	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
NAPIS-2	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
NAPIS-2	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
NAPIS-2	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
NAPIS-2	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
NAPIS-2	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
NAPIS-2	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
NAPIS-2	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
NAPIS-2	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
NAPIS-2	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-2	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-2	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
NAPIS-2	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
NAPIS-2	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
NAPIS-2	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
NAPIS-2	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
NAPIS-2	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
NAPIS-2	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
NAPIS-2	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
NAPIS-2	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
NAPIS-2	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
NAPIS-2	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
NAPIS-2	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
NAPIS-2	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
NAPIS-2	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
NAPIS-2	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
NAPIS-2	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
NAPIS-2	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
NAPIS-2	3/10/2015	Anthracene	ND	10	4	1721	ug/L
NAPIS-2	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
NAPIS-2	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
NAPIS-2	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
NAPIS-2	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
NAPIS-2	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
NAPIS-2	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-2	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
NAPIS-2	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
NAPIS-2	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
NAPIS-2	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-2	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
NAPIS-2	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
NAPIS-2	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
NAPIS-2	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
NAPIS-2	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
NAPIS-2	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
NAPIS-2	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
NAPIS-2	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
NAPIS-2	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-2	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-2	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-2	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-2	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-2	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-2	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-2	6/2/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-2	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-2	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-2	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-2	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-2	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-2	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-2	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-2	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-2	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-2	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-2	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-2	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-2	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-2	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-2	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-2	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-2	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-2	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-2	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-2	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-2	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-2	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-2	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-2	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-2	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-2	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-2	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-2	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-2	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-2	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-2	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-2	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-2	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-2	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-2	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-2	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-2	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-2	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-2	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-2	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-2	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-2	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-2	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-2	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-2	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-2	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-2	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-2	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-2	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-2	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-2	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-2	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-2	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-2	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-2	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-2	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-2	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-2	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-2	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-2	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-2	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-2	8/11/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-2	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-2	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-2	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-2	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-2	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-2	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-2	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-2	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-2	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-2	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-2	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-2	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-2	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-2	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-2	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-2	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-2	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-2	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-2	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-2	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-2	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-2	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-2	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-2	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-2	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-2	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-2	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-2	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-2	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-2	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-2	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-2	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-2	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-2	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-2	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-2	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-2	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-2	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-2	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-2	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-2	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-2	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-2	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-2	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-2	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-2	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-2	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-2	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-2	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-2	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-2	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-2	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-2	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-2	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-2	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-2	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-2	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-2	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
NAPIS-2	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-2	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Aniline	ND	10	2.4	13	ug/L
NAPIS-2	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
NAPIS-2	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
NAPIS-2	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
NAPIS-2	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
NAPIS-2	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
NAPIS-2	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-2	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
NAPIS-2	2/21/2017	Di-n-butylphthalate	3.4	10	2.4	885	ug/L
NAPIS-2	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
NAPIS-2	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
NAPIS-2	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-2	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
NAPIS-2	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-2	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
NAPIS-2	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
NAPIS-2	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
NAPIS-2	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-2	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-2	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-2	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
NAPIS-2	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
NAPIS-2	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
NAPIS-2	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-2	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
NAPIS-2	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
NAPIS-2	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
NAPIS-2	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
NAPIS-2	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
NAPIS-2	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
NAPIS-2	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
NAPIS-2	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
NAPIS-2	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-2	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
NAPIS-2	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-2	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
NAPIS-2	2/21/2017	Phenol	ND	10	2	5761	ug/L
NAPIS-2	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-2	2/21/2017	Bis(2-ethylhexyl)phthalate	8	10	2.6	55.64	ug/L
NAPIS-2	2/21/2017	Di-n-octylphthalate	3.5	10	2	200	ug/L
NAPIS-2	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
NAPIS-2	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-2	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-2	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
NAPIS-2	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
NAPIS-2	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
NAPIS-2	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
NAPIS-2	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
NAPIS-2	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
NAPIS-2	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-2	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
NAPIS-2	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
NAPIS-2	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
NAPIS-2	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
NAPIS-2	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
NAPIS-2	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
NAPIS-2	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
NAPIS-2	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
NAPIS-2	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-2	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
NAPIS-2	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-2	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-2	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-2	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-2	6/1/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-2	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-2	6/1/2017	Benzoic Acid	8.2	20	3.9	75000	ug/L
NAPIS-2	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-2	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-2	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-2	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-2	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-2	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-2	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
NAPIS-2	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-2	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-2	6/1/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-2	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-2	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-2	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-2	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-2	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-2	6/1/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-2	6/1/2017	Naphthalene	3.3	10	2.9	30	ug/L
NAPIS-2	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-2	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-2	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-2	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-2	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-2	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-2	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-2	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-2	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-2	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-2	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-2	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-2	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-2	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-2	6/1/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-2	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-2	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-2	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-2	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-2	6/1/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
NAPIS-2	6/1/2017	Di-n-octylphthalate	4.9	10	4.7	200	ug/L
NAPIS-2	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-2	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-2	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-2	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-2	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-2	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-2	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-2	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-2	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-2	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-2	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-2	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-2	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-2	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-2	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-2	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
NAPIS-2	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-2	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-2	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-2	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-2	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-2	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-2	9/5/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
NAPIS-2	9/5/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
NAPIS-2	9/5/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
NAPIS-2	9/5/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
NAPIS-2	9/5/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
NAPIS-2	9/5/2017	Aniline	*ND*	*50*	15	13	ug/L
NAPIS-2	9/5/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
NAPIS-2	9/5/2017	Benzoic Acid	40	100	20	75000	ug/L
NAPIS-2	9/5/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
NAPIS-2	9/5/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
NAPIS-2	9/5/2017	Isophorone	ND	50	22	781	ug/L
NAPIS-2	9/5/2017	Acenaphthene	ND	50	18	535	ug/L
NAPIS-2	9/5/2017	Diethylphthalate	ND	50	20	14801	ug/L
NAPIS-2	9/5/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
NAPIS-2	9/5/2017	Phenanthrene	ND	50	22	170	ug/L
NAPIS-2	9/5/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
NAPIS-2	9/5/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
NAPIS-2	9/5/2017	Fluorene	ND	50	20	288	ug/L
NAPIS-2	9/5/2017	Carbazole	ND	50	23	NA	ug/L
NAPIS-2	9/5/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
NAPIS-2	9/5/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
NAPIS-2	9/5/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
NAPIS-2	9/5/2017	2-Nitroaniline	ND	50	25	190	ug/L
NAPIS-2	9/5/2017	2-Nitrophenol	ND	50	26	NA	ug/L
NAPIS-2	9/5/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
NAPIS-2	9/5/2017	Naphthalene	*ND*	*50*	14	30	ug/L
NAPIS-2	9/5/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
NAPIS-2	9/5/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
NAPIS-2	9/5/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
NAPIS-2	9/5/2017	2-Methylphenol	ND	50	17	NA	ug/L
NAPIS-2	9/5/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
NAPIS-2	9/5/2017	2-Chlorophenol	ND	50	38	91	ug/L
NAPIS-2	9/5/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
NAPIS-2	9/5/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
NAPIS-2	9/5/2017	3-Nitroaniline	ND	50	22	NA	ug/L
NAPIS-2	9/5/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
NAPIS-2	9/5/2017	4-Nitrophenol	ND	50	27	NA	ug/L
NAPIS-2	9/5/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
NAPIS-2	9/5/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
NAPIS-2	9/5/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
NAPIS-2	9/5/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
NAPIS-2	9/5/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
NAPIS-2	9/5/2017	Phenol	ND	50	16	5761	ug/L
NAPIS-2	9/5/2017	Pyridine	*ND*	*50*	11	20	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
NAPIS-2	9/5/2017	Bis(2-ethylhexyl)phthalate	25	50	24	55.64	ug/L
NAPIS-2	9/5/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
NAPIS-2	9/5/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
NAPIS-2	9/5/2017	Anthracene	ND	50	18	1721	ug/L
NAPIS-2	9/5/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
NAPIS-2	9/5/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
NAPIS-2	9/5/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
NAPIS-2	9/5/2017	Pyrene	ND	50	22	117	ug/L
NAPIS-2	9/5/2017	Dimethylphthalate	ND	50	18	612	ug/L
NAPIS-2	9/5/2017	Dibenzofuran	ND	50	20	NA	ug/L
NAPIS-2	9/5/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
NAPIS-2	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
NAPIS-2	9/5/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
NAPIS-2	9/5/2017	Fluoranthene	ND	50	21	802	ug/L
NAPIS-2	9/5/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
NAPIS-2	9/5/2017	Acenaphthylene	ND	50	18	NA	ug/L
NAPIS-2	9/5/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
NAPIS-2	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
NAPIS-2	9/5/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
NAPIS-2	9/5/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
NAPIS-2	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
NAPIS-2	9/5/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
NAPIS-2	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
NAPIS-2	9/5/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
NAPIS-2	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-2	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-2	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-2	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-2	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-2	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-2	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-2	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-2	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-2	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-2	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-2	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-2	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-2	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-2	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-2	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-2	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-2	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-2	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-2	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-2	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-2	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-2	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-2	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-2	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-2	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-2	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-2	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-2	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-2	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-2	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-2	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-2	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-2	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-2	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-2	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-2	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-2	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-2	4/9/2019	Benzoic Acid	6.5	20	6.311561	75000	ug/L
NAPIS-2	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-2	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-2	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-2	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-2	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-2	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-2	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-2	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-2	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-2	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-2	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-2	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-2	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
NAPIS-2	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-2	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-2	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-2	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-2	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-2	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-2	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-2	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-2	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-2	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-2	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-2	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-2	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-2	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-2	4/9/2019	Phenol	29	10	5.977352	5761	ug/L
NAPIS-2	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-2	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-2	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-2	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-2	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-2	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-2	5/28/2019	1-Methylnaphthalene	**20**	10	3.069076	11.38	ug/L
NAPIS-2	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-2	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-2	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-2	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-2	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-2	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-2	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-2	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-2	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-2	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-2	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-2	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-2	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-2	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-2	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-2	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-2	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-2	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-2	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-2	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-2	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-2	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-2	5/28/2019	Acenaphthene	4.9	10	2.955891	535	ug/L
NAPIS-2	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-2	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-2	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-2	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-2	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-2	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-2	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-2	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-2	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-2	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-2	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-2	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-2	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-2	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-2	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-2	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-2	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-2	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-2	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-2	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-2	5/28/2019	Fluorene	4	10	2.888488	288	ug/L
NAPIS-2	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-2	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-2	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-2	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-2	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-2	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-2	5/28/2019	Naphthalene	9.4	10	4.12221	30	ug/L
NAPIS-2	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-2	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-2	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-2	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-2	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-2	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-2	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-2	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-2	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-2	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-2	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-2	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-2	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-2	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-2	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-2	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-2	8/22/2019	1-Methylnaphthalene	**16**	10	3.069076	11.38	ug/L
NAPIS-2	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-2	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-2	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-2	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-2	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-2	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-2	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-2	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-2	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-2	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-2	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-2	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-2	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-2	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-2	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-2	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-2	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-2	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-2	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-2	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-2	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-2	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-2	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-2	8/22/2019	Acenaphthene	4.8	10	2.955891	535	ug/L
NAPIS-2	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-2	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-2	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-2	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-2	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-2	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-2	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-2	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-2	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-2	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-2	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-2	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-2	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-2	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-2	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-2	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-2	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-2	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-2	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-2	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-2	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-2	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-2	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-2	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-2	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-2	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-2	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-2	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-2	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-2	8/22/2019	Naphthalene	13	10	4.12221	30	ug/L
NAPIS-2	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-2	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-2	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-2	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-2	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-2	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-2	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-2	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-2	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	**44**	3	1.234	11.38	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	2	3	1.229	35.1	ug/L
NAPIS-2	10/21/2019	Acenaphthene	2.6	3	1.14	535	ug/L
NAPIS-2	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
NAPIS-2	10/21/2019	Anthracene	0.78	0.6	0.161	1721	ug/L
NAPIS-2	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
NAPIS-2	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
NAPIS-2	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
NAPIS-2	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
NAPIS-2	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
NAPIS-2	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
NAPIS-2	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
NAPIS-2	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
NAPIS-2	10/21/2019	Fluorene	1.3	0.8	0.338	288	ug/L
NAPIS-2	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
NAPIS-2	10/21/2019	Naphthalene	**51**	3	1.159	30	ug/L
NAPIS-2	10/21/2019	Phenanthrene	1.4	0.6	0.152	170	ug/L
NAPIS-2	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
NAPIS-2	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
NAPIS-2	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
NAPIS-2	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
NAPIS-2	10/21/2019	1,4-Dioxane	2.3	1	1	4.59	ug/L
NAPIS-2	10/21/2019	1-Methylnaphthalene	**23**	0.5	0.5	11.38	ug/L
NAPIS-2	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
NAPIS-2	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
NAPIS-2	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
NAPIS-2	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
NAPIS-2	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
NAPIS-2	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
NAPIS-2	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
NAPIS-2	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
NAPIS-2	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
NAPIS-2	10/21/2019	2-Methylnaphthalene	3.8	0.5	0.5	35.1	ug/L
NAPIS-2	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
NAPIS-2	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
NAPIS-2	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
NAPIS-2	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
NAPIS-2	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Acenaphthene	6	0.5	0.5	535	ug/L
NAPIS-2	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
NAPIS-2	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
NAPIS-2	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
NAPIS-2	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
NAPIS-2	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
NAPIS-2	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
NAPIS-2	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
NAPIS-2	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
NAPIS-2	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
NAPIS-2	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
NAPIS-2	10/21/2019	Bis(2-ethylhexyl)phthalate	0.73	0.5	0.5	55.64	ug/L
NAPIS-2	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
NAPIS-2	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
NAPIS-2	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
NAPIS-2	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
NAPIS-2	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
NAPIS-2	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
NAPIS-2	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
NAPIS-2	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
NAPIS-2	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
NAPIS-2	10/21/2019	Fluorene	2.6	0.5	0.5	288	ug/L
NAPIS-2	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
NAPIS-2	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
NAPIS-2	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
NAPIS-2	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
NAPIS-2	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
NAPIS-2	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
NAPIS-2	10/21/2019	Naphthalene	18	0.5	0.5	30	ug/L
NAPIS-2	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
NAPIS-2	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
NAPIS-2	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
NAPIS-2	10/21/2019	Phenanthrene	0.7	0.5	0.5	170	ug/L
NAPIS-2	10/21/2019	Phenol	2.4	0.5	0.5	5761	ug/L
NAPIS-2	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
NAPIS-2	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
NAPIS-2	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
NAPIS-2	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
NAPIS-2	3/4/2020	1,4-Dioxane	*2.81*	*5*	1	4.59	ug/L
NAPIS-2	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
NAPIS-2	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
NAPIS-2	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
NAPIS-2	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
NAPIS-2	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
NAPIS-2	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
NAPIS-2	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
NAPIS-2	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
NAPIS-2	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
NAPIS-2	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
NAPIS-2	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
NAPIS-2	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
NAPIS-2	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
NAPIS-2	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
NAPIS-2	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
NAPIS-2	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
NAPIS-2	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
NAPIS-2	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
NAPIS-2	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
NAPIS-2	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
NAPIS-2	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
NAPIS-2	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
NAPIS-2	3/4/2020	Benzoic Acid	2.39	2.5	0.5	75000	ug/L
NAPIS-2	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
NAPIS-2	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
NAPIS-2	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
NAPIS-2	3/4/2020	Bis(2-ethylhexyl)phthalate	5.2	2.5	1	55.64	ug/L
NAPIS-2	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
NAPIS-2	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
NAPIS-2	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
NAPIS-2	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
NAPIS-2	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
NAPIS-2	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
NAPIS-2	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
NAPIS-2	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
NAPIS-2	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
NAPIS-2	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
NAPIS-2	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
NAPIS-2	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
NAPIS-2	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
NAPIS-2	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
NAPIS-2	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
NAPIS-2	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
NAPIS-2	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
NAPIS-2	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
NAPIS-2	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
NAPIS-2	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
NAPIS-2	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
NAPIS-2	3/4/2020	Phenol	65	2.5	0.5	5761	ug/L
NAPIS-2	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
NAPIS-2	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
NAPIS-2	9/22/2020	1,2,4-Trichlorobenzene	ND	0.67	0.13	70	ug/L
NAPIS-2	9/22/2020	1,2-Dichlorobenzene	ND	0.67	0.13	600	ug/L
NAPIS-2	9/22/2020	1,3-Dichlorobenzene	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	1,4-Dichlorobenzene	ND	0.67	0.13	75	ug/L
NAPIS-2	9/22/2020	1,4-Dioxane	4.2	0.67	0.13	4.59	ug/L
NAPIS-2	9/22/2020	1-Methylnaphthalene	**19**	0.67	0.13	11.38	ug/L
NAPIS-2	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.67	0.13	240	ug/L
NAPIS-2	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	2,4,5-Trichlorophenol	ND	0.67	0.13	1166	ug/L
NAPIS-2	9/22/2020	2,4,6-Trichlorophenol	ND	0.67	0.13	11.9*	ug/L
NAPIS-2	9/22/2020	2,4-Dichlorophenol	ND	0.67	0.13	45.3	ug/L
NAPIS-2	9/22/2020	2,4-Dimethylphenol	ND	0.67	0.13	354	ug/L
NAPIS-2	9/22/2020	2,4-Dinitrophenol	ND	0.67	0.13	38.7	ug/L
NAPIS-2	9/22/2020	2,4-Dinitrotoluene	ND	0.67	0.13	45.3	ug/L
NAPIS-2	9/22/2020	2,6-Dinitrotoluene	ND	0.27	0.13	0.485	ug/L
NAPIS-2	9/22/2020	2-Chloronaphthalene	ND	0.67	0.13	733	ug/L
NAPIS-2	9/22/2020	2-Chlorophenol	ND	0.67	0.13	91	ug/L
NAPIS-2	9/22/2020	2-Methylnaphthalene	2	0.67	0.13	35.1	ug/L
NAPIS-2	9/22/2020	2-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	2-Nitroaniline	ND	0.67	0.13	190	ug/L
NAPIS-2	9/22/2020	2-Nitrophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	3,4-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	3,3-Dichlorobenzidine	ND	0.67	0.13	1.25	ug/L
NAPIS-2	9/22/2020	3-Nitroaniline	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.67	0.13	1.52	ug/L
NAPIS-2	9/22/2020	4-Bromophenyl-phenylether	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Chloro-3-Methylphenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Chloroaniline	*ND*	*0.67*	0.13	0.37	ug/L
NAPIS-2	9/22/2020	4-Chlorophenyl-phenylether	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	4-Nitroaniline	ND	0.67	0.13	3.8	ug/L
NAPIS-2	9/22/2020	4-Nitrophenol	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Acenaphthene	4.1	0.67	0.13	535	ug/L
NAPIS-2	9/22/2020	Acenaphthylene	0.39	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Aniline	ND	0.67	0.13	13	ug/L
NAPIS-2	9/22/2020	Anthracene	ND	0.67	0.13	1721	ug/L
NAPIS-2	9/22/2020	Benzo(a)anthracene	*ND*	*0.13*	0.067	0.12	ug/L
NAPIS-2	9/22/2020	Benzidine	*ND*	*0.67*	0.33	0.0011	ug/L
NAPIS-2	9/22/2020	Benzo(a)pyrene	ND	0.13	0.067	0.2	ug/L
NAPIS-2	9/22/2020	Benzo(b)fluoranthene	ND	0.13	0.067	0.34	ug/L
NAPIS-2	9/22/2020	Benzo(g,h,i)perylene	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Benzo(k)fluoranthene	ND	0.67	0.13	3.43	ug/L
NAPIS-2	9/22/2020	Benzoic Acid	ND	0.67	0.27	75000	ug/L
NAPIS-2	9/22/2020	Benzyl Alcohol	ND	0.67	0.27	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.67	0.13	59	ug/L
NAPIS-2	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.67*	0.13	0.137	ug/L
NAPIS-2	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.67	0.13	9.81	ug/L
NAPIS-2	9/22/2020	Bis(2-ethylhexyl)phthalate	1	0.67	0.27	55.64	ug/L
NAPIS-2	9/22/2020	Butylbenzylphthalate	ND	0.67	0.27	16	ug/L
NAPIS-2	9/22/2020	Carbazole	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Chrysene	ND	0.67	0.13	34.3	ug/L
NAPIS-2	9/22/2020	Di-n-butylphthalate	ND	0.67	0.27	885	ug/L
NAPIS-2	9/22/2020	Di-n-octylphthalate	ND	0.67	0.27	200	ug/L
NAPIS-2	9/22/2020	Dibenzo(a,h)anthracene	ND	0.04	0.027	NA	ug/L
NAPIS-2	9/22/2020	Dibenzofuran	ND	0.67	0.13	NA	ug/L
NAPIS-2	9/22/2020	Diethylphthalate	ND	0.67	0.27	14801	ug/L
NAPIS-2	9/22/2020	Dimethylphthalate	ND	0.67	0.27	612	ug/L
NAPIS-2	9/22/2020	Fluoranthene	ND	0.67	0.13	802	ug/L
NAPIS-2	9/22/2020	Fluorene	1.5	0.67	0.13	288	ug/L
NAPIS-2	9/22/2020	Hexachlorobenzene	*ND*	*0.67*	0.13	0.0976	ug/L
NAPIS-2	9/22/2020	Hexachlorobutadiene	*ND*	*0.67*	0.13	0.14	ug/L
NAPIS-2	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.67*	0.33	0.41	ug/L
NAPIS-2	9/22/2020	Hexachloroethane	ND	0.67	0.13	3.28	ug/L
NAPIS-2	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.27	0.13	0.343	ug/L
NAPIS-2	9/22/2020	Isophorone	ND	0.67	0.13	781	ug/L
NAPIS-2	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.67*	0.13	0.011	ug/L
NAPIS-2	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.67*	0.13	0.0049	ug/L
NAPIS-2	9/22/2020	N-Nitrosodiphenylamine	ND	0.67	0.13	122	ug/L
NAPIS-2	9/22/2020	Naphthalene	13	0.67	0.13	30	ug/L
NAPIS-2	9/22/2020	Nitrobenzene	ND	0.67	0.13	1.4	ug/L
NAPIS-2	9/22/2020	Pentachlorophenol	ND	0.67	0.27	1	ug/L
NAPIS-2	9/22/2020	Phenanthrene	ND	0.67	0.13	170	ug/L
NAPIS-2	9/22/2020	Phenol	40	0.67	0.13	5761	ug/L
NAPIS-2	9/22/2020	Pyrene	ND	0.67	0.13	117	ug/L
NAPIS-2	9/22/2020	Pyridine	ND	0.67	0.27	20	ug/L
NAPIS-2	12/17/2020	Acenaphthene	ND	10.6	0.169	535	ug/L
NAPIS-2	12/17/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
NAPIS-2	12/17/2020	Anthracene	ND	10.6	0.19	1721	ug/L
NAPIS-2	12/17/2020	Benzo(a)anthracene	*ND*	*10.6*	0.19	0.12	ug/L
NAPIS-2	12/17/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
NAPIS-2	12/17/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.158	0.34	ug/L
NAPIS-2	12/17/2020	Benzo(g,h,i)perylene	ND	10.6	0.243	NA	ug/L
NAPIS-2	12/17/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.169	3.43	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.169	59	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.85	0.137	ug/L
NAPIS-2	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.28	55.64	ug/L
NAPIS-2	12/17/2020	4-Bromophenyl-phenylether	ND	10.6	0.211	NA	ug/L
NAPIS-2	12/17/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
NAPIS-2	12/17/2020	Carbazole	ND	10.6	0.243	NA	ug/L
NAPIS-2	12/17/2020	4-Chloroaniline	*ND*	*10.6*	3.59	0.37	ug/L
NAPIS-2	12/17/2020	4-Chloro-3-Methylphenol	ND	10.6	4.02	NA	ug/L
NAPIS-2	12/17/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
NAPIS-2	12/17/2020	2-Chlorophenol	ND	10.6	2.32	91	ug/L
NAPIS-2	12/17/2020	4-Chlorophenyl-phenylether	ND	10.6	2.11	NA	ug/L
NAPIS-2	12/17/2020	1,3-Dichlorobenzene	ND	10.6	0.19	NA	ug/L
NAPIS-2	12/17/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
NAPIS-2	12/17/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
NAPIS-2	12/17/2020	1,4-Dichlorobenzene	ND	10.6	0.169	75	ug/L
NAPIS-2	12/17/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
NAPIS-2	12/17/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.75	1.25	ug/L
NAPIS-2	12/17/2020	2,4-Dichlorophenol	ND	10.6	3.17	45.3	ug/L
NAPIS-2	12/17/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
NAPIS-2	12/17/2020	2,4-Dimethylphenol	ND	10.6	3.7	354	ug/L
NAPIS-2	12/17/2020	Di-n-butylphthalate	ND	10.6	2.85	885	ug/L
NAPIS-2	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.69	1.52	ug/L
NAPIS-2	12/17/2020	2,4-Dinitrophenol	ND	31.7	3.59	38.7	ug/L
NAPIS-2	12/17/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
NAPIS-2	12/17/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
NAPIS-2	12/17/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
NAPIS-2	12/17/2020	Fluoranthene	ND	10.6	0.19	802	ug/L
NAPIS-2	12/17/2020	Fluorene	ND	10.6	0.19	288	ug/L
NAPIS-2	12/17/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
NAPIS-2	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.75	0.41	ug/L
NAPIS-2	12/17/2020	Hexachloroethane	*ND*	*10.6*	4.44	3.28	ug/L
NAPIS-2	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.232	0.343	ug/L
NAPIS-2	12/17/2020	Isophorone	ND	10.6	0.148	781	ug/L
NAPIS-2	12/17/2020	2-Methylphenol	ND	10.6	1.9	NA	ug/L
NAPIS-2	12/17/2020	Naphthalene	ND	10.6	0.18	30	ug/L
NAPIS-2	12/17/2020	2-Nitroaniline	ND	10.6	2.32	190	ug/L
NAPIS-2	12/17/2020	3-Nitroaniline	ND	10.6	1.9	NA	ug/L
NAPIS-2	12/17/2020	4-Nitroaniline	*ND*	*10.6*	1.58	3.8	ug/L
NAPIS-2	12/17/2020	Nitrobenzene	*ND*	*10.6*	0.137	1.4	ug/L
NAPIS-2	12/17/2020	2-Nitrophenol	ND	10.6	5.49	NA	ug/L
NAPIS-2	12/17/2020	4-Nitrophenol	ND	10.6	2.22	NA	ug/L
NAPIS-2	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.49	0.011	ug/L
NAPIS-2	12/17/2020	N-Nitrosodiphenylamine	ND	10.6	0.19	122	ug/L
NAPIS-2	12/17/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
NAPIS-2	12/17/2020	Phenanthrene	ND	10.6	0.19	170	ug/L
NAPIS-2	12/17/2020	Phenol	23	10.6	2.75	5761	ug/L
NAPIS-2	12/17/2020	Pyrene	ND	10.6	0.222	117	ug/L
NAPIS-2	12/17/2020	2,4,5-Trichlorophenol	ND	10.6	3.91	1166	ug/L
NAPIS-2	12/17/2020	2,4,6-Trichlorophenol	ND	10.6	3.7	11.9*	ug/L
NAPIS-2	12/17/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
NAPIS-2	12/17/2020	Aniline	ND	10.6	4.02	13	ug/L
NAPIS-2	12/17/2020	Benzoic Acid	ND	31.7	7.71	75000	ug/L
NAPIS-2	12/17/2020	Benzyl Alcohol	ND	10.6	2.11	2000	ug/L
NAPIS-2	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.169	9.81	ug/L
NAPIS-2	12/17/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.7	0.0049	ug/L
NAPIS-2	12/17/2020	Pyridine	ND	10.6	3.38	20	ug/L
NAPIS-2	12/17/2020	1,2,4-Trichlorobenzene	ND	10.6	0.19	70	ug/L
NAPIS-2	12/17/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
NAPIS-2	12/17/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
NAPIS-3	3/20/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	3/20/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/20/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	3/20/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	3/20/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	3/20/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	3/20/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	3/20/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	3/20/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	3/20/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	3/20/2012	Acenaphthene	ND	10	2.7	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/20/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	3/20/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	3/20/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	3/20/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	3/20/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	3/20/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	3/20/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	3/20/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	3/20/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	3/20/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	3/20/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	3/20/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	3/20/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	3/20/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	3/20/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	3/20/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	3/20/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	3/20/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	3/20/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	3/20/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	3/20/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	3/20/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	3/20/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-3	3/20/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	3/20/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	3/20/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	3/20/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	3/20/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	3/20/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	3/20/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	3/20/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	3/20/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	3/20/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	3/20/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	3/20/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	3/20/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	3/20/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	3/20/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	3/20/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	3/20/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	3/20/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	3/20/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	3/20/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	3/20/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	3/20/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	3/20/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	3/20/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	3/20/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	3/20/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	3/20/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	3/20/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	3/20/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	3/20/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	3/20/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	3/20/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	3/20/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	6/12/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	6/12/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/12/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	6/12/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	6/12/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	6/12/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	6/12/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	6/12/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	6/12/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	6/12/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	6/12/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	6/12/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	6/12/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	6/12/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	6/12/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	6/12/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	6/12/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	6/12/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	6/12/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	6/12/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	6/12/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	6/12/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	6/12/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	6/12/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	6/12/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	6/12/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	6/12/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	6/12/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	6/12/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	6/12/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	6/12/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
NAPIS-3	6/12/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	6/12/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	6/12/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	6/12/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	6/12/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	6/12/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	6/12/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	6/12/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	6/12/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	6/12/2012	Bis(2-ethylhexyl)phthalate	ND	35	3	55.64	ug/L
NAPIS-3	6/12/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	6/12/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	6/12/2012	Anthracene	ND	10	2.8	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	6/12/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	6/12/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	6/12/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	6/12/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	6/12/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	6/12/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	6/12/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	6/12/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	6/12/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	6/12/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	6/12/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	6/12/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	6/12/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	6/12/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	6/12/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	6/12/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	10/2/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	10/2/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	10/2/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	10/2/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	10/2/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	10/2/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	10/2/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	10/2/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	10/2/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	10/2/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	10/2/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	10/2/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	10/2/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	10/2/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	10/2/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	10/2/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	10/2/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	10/2/2012	Carbazole	ND	10	2.6	NA	ug/L
NAPIS-3	10/2/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	10/2/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	10/2/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	10/2/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	10/2/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	10/2/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	10/2/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	10/2/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	10/2/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	10/2/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	10/2/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	10/2/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	10/2/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	10/2/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	10/2/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	10/2/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-3	10/2/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	10/2/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	10/2/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	10/2/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	10/2/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	10/2/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	10/2/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	10/2/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	10/2/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	10/2/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	10/2/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
NAPIS-3	10/2/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	10/2/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	10/2/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	10/2/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	10/2/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	10/2/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	10/2/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	10/2/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	10/2/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	10/2/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	10/2/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	10/2/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	10/2/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	10/2/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	10/2/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	10/2/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	10/2/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	10/2/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	10/2/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	10/2/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	10/2/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	10/2/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
NAPIS-3	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	12/5/2012	Aniline	ND	10	2	13	ug/L
NAPIS-3	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
NAPIS-3	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
NAPIS-3	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
NAPIS-3	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
NAPIS-3	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
NAPIS-3	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
NAPIS-3	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
NAPIS-3	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
NAPIS-3	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
NAPIS-3	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
NAPIS-3	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
NAPIS-3	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
NAPIS-3	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
NAPIS-3	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
NAPIS-3	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
NAPIS-3	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
NAPIS-3	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
NAPIS-3	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
NAPIS-3	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
NAPIS-3	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
NAPIS-3	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
NAPIS-3	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
NAPIS-3	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
NAPIS-3	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
NAPIS-3	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
NAPIS-3	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
NAPIS-3	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
NAPIS-3	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
NAPIS-3	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
NAPIS-3	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
NAPIS-3	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
NAPIS-3	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
NAPIS-3	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
NAPIS-3	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
NAPIS-3	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
NAPIS-3	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
NAPIS-3	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
NAPIS-3	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
NAPIS-3	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
NAPIS-3	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
NAPIS-3	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
NAPIS-3	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
NAPIS-3	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
NAPIS-3	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
NAPIS-3	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
NAPIS-3	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
NAPIS-3	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
NAPIS-3	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	3/18/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
NAPIS-3	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	6/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-3	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	9/3/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	11/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
NAPIS-3	11/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	11/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
NAPIS-3	11/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	11/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	Aniline	ND	10	2.2	13	ug/L
NAPIS-3	11/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
NAPIS-3	11/12/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
NAPIS-3	11/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
NAPIS-3	11/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
NAPIS-3	11/12/2013	Isophorone	ND	10	1.8	781	ug/L
NAPIS-3	11/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	11/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
NAPIS-3	11/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	11/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
NAPIS-3	11/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
NAPIS-3	11/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	11/12/2013	Fluorene	ND	10	2.5	288	ug/L
NAPIS-3	11/12/2013	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	11/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
NAPIS-3	11/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
NAPIS-3	11/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
NAPIS-3	11/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
NAPIS-3	11/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
NAPIS-3	11/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
NAPIS-3	11/12/2013	Naphthalene	ND	10	2.4	30	ug/L
NAPIS-3	11/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
NAPIS-3	11/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
NAPIS-3	11/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	11/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
NAPIS-3	11/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
NAPIS-3	11/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
NAPIS-3	11/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
NAPIS-3	11/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
NAPIS-3	11/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
NAPIS-3	11/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
NAPIS-3	11/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
NAPIS-3	11/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
NAPIS-3	11/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
NAPIS-3	11/12/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
NAPIS-3	11/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
NAPIS-3	11/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
NAPIS-3	11/12/2013	Phenol	ND	10	2.2	5761	ug/L
NAPIS-3	11/12/2013	Pyridine	ND	10	3.5	20	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
NAPIS-3	11/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
NAPIS-3	11/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
NAPIS-3	11/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
NAPIS-3	11/12/2013	Anthracene	ND	10	2.2	1721	ug/L
NAPIS-3	11/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
NAPIS-3	11/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
NAPIS-3	11/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
NAPIS-3	11/12/2013	Pyrene	ND	10	2.1	117	ug/L
NAPIS-3	11/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
NAPIS-3	11/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
NAPIS-3	11/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
NAPIS-3	11/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
NAPIS-3	11/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	11/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
NAPIS-3	11/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	11/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
NAPIS-3	11/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
NAPIS-3	11/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
NAPIS-3	11/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
NAPIS-3	11/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
NAPIS-3	11/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	11/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
NAPIS-3	11/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	3/10/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	6/5/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-3	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	6/5/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	6/5/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	9/11/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
NAPIS-3	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
NAPIS-3	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	9/11/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
NAPIS-3	11/13/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	11/13/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
NAPIS-3	11/13/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
NAPIS-3	11/13/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
NAPIS-3	11/13/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
NAPIS-3	11/13/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	11/13/2014	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	11/13/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
NAPIS-3	11/13/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
NAPIS-3	11/13/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
NAPIS-3	11/13/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
NAPIS-3	11/13/2014	Isophorone	ND	10	3.1	781	ug/L
NAPIS-3	11/13/2014	Acenaphthene	ND	10	2.9	535	ug/L
NAPIS-3	11/13/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
NAPIS-3	11/13/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
NAPIS-3	11/13/2014	Phenanthrene	ND	10	2.5	170	ug/L
NAPIS-3	11/13/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
NAPIS-3	11/13/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
NAPIS-3	11/13/2014	Fluorene	ND	10	2.9	288	ug/L
NAPIS-3	11/13/2014	Carbazole	ND	10	2.9	NA	ug/L
NAPIS-3	11/13/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
NAPIS-3	11/13/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
NAPIS-3	11/13/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
NAPIS-3	11/13/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	11/13/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
NAPIS-3	11/13/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
NAPIS-3	11/13/2014	Naphthalene	ND	10	2.3	30	ug/L
NAPIS-3	11/13/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
NAPIS-3	11/13/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
NAPIS-3	11/13/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	11/13/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
NAPIS-3	11/13/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
NAPIS-3	11/13/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
NAPIS-3	11/13/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
NAPIS-3	11/13/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
NAPIS-3	11/13/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
NAPIS-3	11/13/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
NAPIS-3	11/13/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
NAPIS-3	11/13/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
NAPIS-3	11/13/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
NAPIS-3	11/13/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	11/13/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
NAPIS-3	11/13/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	11/13/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
NAPIS-3	11/13/2014	Phenol	ND	10	1.6	5761	ug/L
NAPIS-3	11/13/2014	Pyridine	ND	10	1.6	20	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	11/13/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
NAPIS-3	11/13/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
NAPIS-3	11/13/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
NAPIS-3	11/13/2014	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	11/13/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
NAPIS-3	11/13/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
NAPIS-3	11/13/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
NAPIS-3	11/13/2014	Pyrene	ND	10	4	117	ug/L
NAPIS-3	11/13/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
NAPIS-3	11/13/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
NAPIS-3	11/13/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
NAPIS-3	11/13/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
NAPIS-3	11/13/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
NAPIS-3	11/13/2014	Fluoranthene	ND	10	3	802	ug/L
NAPIS-3	11/13/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
NAPIS-3	11/13/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
NAPIS-3	11/13/2014	Chrysene	ND	10	2.9	34.3	ug/L
NAPIS-3	11/13/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
NAPIS-3	11/13/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	11/13/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
NAPIS-3	11/13/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
NAPIS-3	11/13/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
NAPIS-3	11/13/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
NAPIS-3	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
NAPIS-3	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-3	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
NAPIS-3	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
NAPIS-3	3/10/2015	Aniline	ND	10	4.2	13	ug/L
NAPIS-3	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
NAPIS-3	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
NAPIS-3	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L
NAPIS-3	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
NAPIS-3	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
NAPIS-3	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
NAPIS-3	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
NAPIS-3	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
NAPIS-3	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
NAPIS-3	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
NAPIS-3	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
NAPIS-3	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
NAPIS-3	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
NAPIS-3	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
NAPIS-3	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
NAPIS-3	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
NAPIS-3	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
NAPIS-3	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
NAPIS-3	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
NAPIS-3	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
NAPIS-3	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
NAPIS-3	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
NAPIS-3	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
NAPIS-3	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
NAPIS-3	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
NAPIS-3	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
NAPIS-3	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
NAPIS-3	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
NAPIS-3	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
NAPIS-3	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
NAPIS-3	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
NAPIS-3	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
NAPIS-3	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
NAPIS-3	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
NAPIS-3	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
NAPIS-3	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
NAPIS-3	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
NAPIS-3	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
NAPIS-3	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
NAPIS-3	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
NAPIS-3	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
NAPIS-3	3/10/2015	Anthracene	ND	10	4	1721	ug/L
NAPIS-3	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
NAPIS-3	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
NAPIS-3	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
NAPIS-3	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
NAPIS-3	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
NAPIS-3	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
NAPIS-3	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
NAPIS-3	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
NAPIS-3	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
NAPIS-3	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
NAPIS-3	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
NAPIS-3	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
NAPIS-3	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
NAPIS-3	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
NAPIS-3	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
NAPIS-3	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
NAPIS-3	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
NAPIS-3	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
NAPIS-3	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-3	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-3	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-3	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-3	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
NAPIS-3	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-3	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-3	6/2/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-3	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-3	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-3	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-3	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-3	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-3	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-3	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-3	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-3	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-3	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-3	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-3	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-3	6/2/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-3	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-3	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-3	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-3	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-3	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-3	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-3	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-3	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-3	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-3	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-3	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-3	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-3	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-3	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-3	6/2/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-3	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-3	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-3	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-3	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-3	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-3	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-3	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-3	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-3	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-3	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-3	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-3	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-3	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-3	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-3	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-3	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-3	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-3	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-3	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-3	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-3	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-3	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-3	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-3	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-3	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-3	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
NAPIS-3	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
NAPIS-3	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
NAPIS-3	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Aniline	ND	10	1.5	13	ug/L
NAPIS-3	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
NAPIS-3	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
NAPIS-3	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
NAPIS-3	8/11/2015	Isophorone	ND	10	2	781	ug/L
NAPIS-3	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
NAPIS-3	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
NAPIS-3	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
NAPIS-3	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
NAPIS-3	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
NAPIS-3	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
NAPIS-3	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
NAPIS-3	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
NAPIS-3	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
NAPIS-3	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
NAPIS-3	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
NAPIS-3	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
NAPIS-3	8/11/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
NAPIS-3	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
NAPIS-3	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
NAPIS-3	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
NAPIS-3	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
NAPIS-3	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
NAPIS-3	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
NAPIS-3	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
NAPIS-3	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
NAPIS-3	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
NAPIS-3	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
NAPIS-3	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
NAPIS-3	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
NAPIS-3	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
NAPIS-3	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
NAPIS-3	8/11/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
NAPIS-3	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
NAPIS-3	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
NAPIS-3	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
NAPIS-3	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
NAPIS-3	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
NAPIS-3	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
NAPIS-3	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
NAPIS-3	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
NAPIS-3	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
NAPIS-3	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
NAPIS-3	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
NAPIS-3	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
NAPIS-3	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
NAPIS-3	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
NAPIS-3	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
NAPIS-3	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
NAPIS-3	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
NAPIS-3	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
NAPIS-3	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
NAPIS-3	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
NAPIS-3	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
NAPIS-3	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
NAPIS-3	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
NAPIS-3	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
NAPIS-3	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
NAPIS-3	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
NAPIS-3	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
NAPIS-3	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
NAPIS-3	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
NAPIS-3	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
NAPIS-3	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
NAPIS-3	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
NAPIS-3	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Aniline	ND	10	2.4	13	ug/L
NAPIS-3	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
NAPIS-3	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
NAPIS-3	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
NAPIS-3	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
NAPIS-3	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
NAPIS-3	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
NAPIS-3	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
NAPIS-3	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
NAPIS-3	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
NAPIS-3	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
NAPIS-3	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
NAPIS-3	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
NAPIS-3	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
NAPIS-3	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
NAPIS-3	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
NAPIS-3	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
NAPIS-3	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
NAPIS-3	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
NAPIS-3	2/21/2017	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
NAPIS-3	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
NAPIS-3	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
NAPIS-3	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
NAPIS-3	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
NAPIS-3	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
NAPIS-3	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
NAPIS-3	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
NAPIS-3	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
NAPIS-3	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
NAPIS-3	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
NAPIS-3	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
NAPIS-3	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
NAPIS-3	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
NAPIS-3	2/21/2017	2,4-Dimethylphenol	ND	10	3	354	ug/L
NAPIS-3	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
NAPIS-3	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
NAPIS-3	2/21/2017	Phenol	ND	10	2	5761	ug/L
NAPIS-3	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	Bis(2-ethylhexyl)phthalate	7.1	10	2.6	55.64	ug/L
NAPIS-3	2/21/2017	Di-n-octylphthalate	3.6	10	2	200	ug/L
NAPIS-3	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
NAPIS-3	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
NAPIS-3	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
NAPIS-3	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
NAPIS-3	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
NAPIS-3	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
NAPIS-3	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
NAPIS-3	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
NAPIS-3	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
NAPIS-3	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
NAPIS-3	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
NAPIS-3	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
NAPIS-3	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
NAPIS-3	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
NAPIS-3	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
NAPIS-3	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
NAPIS-3	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
NAPIS-3	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
NAPIS-3	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
NAPIS-3	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
NAPIS-3	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
NAPIS-3	6/2/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-3	6/2/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-3	6/2/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-3	6/2/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-3	6/2/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-3	6/2/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-3	6/2/2017	Benzoic Acid	6.7	20	3.9	75000	ug/L
NAPIS-3	6/2/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-3	6/2/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	6/2/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-3	6/2/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-3	6/2/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-3	6/2/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-3	6/2/2017	Phenanthrene	ND	10	4.3	170	ug/L
NAPIS-3	6/2/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-3	6/2/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-3	6/2/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-3	6/2/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-3	6/2/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-3	6/2/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-3	6/2/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-3	6/2/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-3	6/2/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-3	6/2/2017	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	6/2/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-3	6/2/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-3	6/2/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-3	6/2/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-3	6/2/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-3	6/2/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-3	6/2/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-3	6/2/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-3	6/2/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-3	6/2/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-3	6/2/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-3	6/2/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-3	6/2/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-3	6/2/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-3	6/2/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-3	6/2/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-3	6/2/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-3	6/2/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-3	6/2/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-3	6/2/2017	Bis(2-ethylhexyl)phthalate	5.4	10	4.8	55.64	ug/L
NAPIS-3	6/2/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
NAPIS-3	6/2/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-3	6/2/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-3	6/2/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-3	6/2/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-3	6/2/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-3	6/2/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-3	6/2/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-3	6/2/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	6/2/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-3	6/2/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-3	6/2/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-3	6/2/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-3	6/2/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-3	6/2/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-3	6/2/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-3	6/2/2017	4,6-Dinitro-2-methylphenol	**5**	20	3.9	1.52	ug/L
NAPIS-3	6/2/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	6/2/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-3	6/2/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-3	6/2/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-3	6/2/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-3	6/2/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-3	9/5/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
NAPIS-3	9/5/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
NAPIS-3	9/5/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
NAPIS-3	9/5/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
NAPIS-3	9/5/2017	Aniline	ND	10	3.1	13	ug/L
NAPIS-3	9/5/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
NAPIS-3	9/5/2017	Benzoic Acid	7.7	20	3.9	75000	ug/L
NAPIS-3	9/5/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
NAPIS-3	9/5/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
NAPIS-3	9/5/2017	Isophorone	ND	10	4.4	781	ug/L
NAPIS-3	9/5/2017	Acenaphthene	ND	10	3.6	535	ug/L
NAPIS-3	9/5/2017	Diethylphthalate	ND	10	4	14801	ug/L
NAPIS-3	9/5/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
NAPIS-3	9/5/2017	Phenanthrene	ND	10	4.3	170	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/5/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
NAPIS-3	9/5/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
NAPIS-3	9/5/2017	Fluorene	ND	10	4	288	ug/L
NAPIS-3	9/5/2017	Carbazole	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
NAPIS-3	9/5/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
NAPIS-3	9/5/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
NAPIS-3	9/5/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
NAPIS-3	9/5/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
NAPIS-3	9/5/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
NAPIS-3	9/5/2017	Naphthalene	ND	10	2.9	30	ug/L
NAPIS-3	9/5/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
NAPIS-3	9/5/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
NAPIS-3	9/5/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
NAPIS-3	9/5/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
NAPIS-3	9/5/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
NAPIS-3	9/5/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
NAPIS-3	9/5/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
NAPIS-3	9/5/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
NAPIS-3	9/5/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
NAPIS-3	9/5/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
NAPIS-3	9/5/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
NAPIS-3	9/5/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
NAPIS-3	9/5/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
NAPIS-3	9/5/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
NAPIS-3	9/5/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
NAPIS-3	9/5/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
NAPIS-3	9/5/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
NAPIS-3	9/5/2017	Phenol	ND	10	3.1	5761	ug/L
NAPIS-3	9/5/2017	Pyridine	ND	10	2.3	20	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
NAPIS-3	9/5/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
NAPIS-3	9/5/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
NAPIS-3	9/5/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
NAPIS-3	9/5/2017	Anthracene	ND	10	3.5	1721	ug/L
NAPIS-3	9/5/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
NAPIS-3	9/5/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
NAPIS-3	9/5/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
NAPIS-3	9/5/2017	Pyrene	ND	10	4.4	117	ug/L
NAPIS-3	9/5/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
NAPIS-3	9/5/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
NAPIS-3	9/5/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
NAPIS-3	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
NAPIS-3	9/5/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
NAPIS-3	9/5/2017	Fluoranthene	ND	10	4.3	802	ug/L
NAPIS-3	9/5/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
NAPIS-3	9/5/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
NAPIS-3	9/5/2017	Chrysene	ND	10	3.8	34.3	ug/L
NAPIS-3	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
NAPIS-3	9/5/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
NAPIS-3	9/5/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
NAPIS-3	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
NAPIS-3	9/5/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
NAPIS-3	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
NAPIS-3	9/5/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
NAPIS-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-3	4/9/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
NAPIS-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-3	4/9/2019	Phenol	ND	10	5.977352	5761	ug/L
NAPIS-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-3	4/9/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
NAPIS-3	4/9/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
NAPIS-3	4/9/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
NAPIS-3	4/9/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
NAPIS-3	4/9/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
NAPIS-3	4/9/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
NAPIS-3	4/9/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
NAPIS-3	4/9/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
NAPIS-3	4/9/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
NAPIS-3	4/9/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
NAPIS-3	4/9/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
NAPIS-3	4/9/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
NAPIS-3	4/9/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
NAPIS-3	4/9/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
NAPIS-3	4/9/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
NAPIS-3	4/9/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
NAPIS-3	4/9/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
NAPIS-3	4/9/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
NAPIS-3	4/9/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
NAPIS-3	4/9/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
NAPIS-3	4/9/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
NAPIS-3	4/9/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
NAPIS-3	4/9/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
NAPIS-3	4/9/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
NAPIS-3	4/9/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
NAPIS-3	4/9/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
NAPIS-3	4/9/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
NAPIS-3	4/9/2019	Acenaphthene	ND	10	5.83902	535	ug/L
NAPIS-3	4/9/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
NAPIS-3	4/9/2019	Aniline	ND	10	6.210394	13	ug/L
NAPIS-3	4/9/2019	Anthracene	ND	10	5.739652	1721	ug/L
NAPIS-3	4/9/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
NAPIS-3	4/9/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
NAPIS-3	4/9/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
NAPIS-3	4/9/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
NAPIS-3	4/9/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
NAPIS-3	4/9/2019	Benzoic Acid	6.6	20	6.311561	75000	ug/L
NAPIS-3	4/9/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
NAPIS-3	4/9/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
NAPIS-3	4/9/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
NAPIS-3	4/9/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
NAPIS-3	4/9/2019	Carbazole	ND	10	6.275002	NA	ug/L
NAPIS-3	4/9/2019	Chrysene	ND	10	6.777819	34.3	ug/L
NAPIS-3	4/9/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
NAPIS-3	4/9/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
NAPIS-3	4/9/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
NAPIS-3	4/9/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
NAPIS-3	4/9/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
NAPIS-3	4/9/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
NAPIS-3	4/9/2019	Fluoranthene	ND	10	5.81225	802	ug/L
NAPIS-3	4/9/2019	Fluorene	ND	10	6.311889	288	ug/L
NAPIS-3	4/9/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
NAPIS-3	4/9/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
NAPIS-3	4/9/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
NAPIS-3	4/9/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
NAPIS-3	4/9/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
NAPIS-3	4/9/2019	Isophorone	ND	10	6.242104	781	ug/L
NAPIS-3	4/9/2019	Naphthalene	ND	10	5.041403	30	ug/L
NAPIS-3	4/9/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
NAPIS-3	4/9/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
NAPIS-3	4/9/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
NAPIS-3	4/9/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
NAPIS-3	4/9/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
NAPIS-3	4/9/2019	Phenanthrene	ND	10	6.043051	170	ug/L
NAPIS-3	4/9/2019	Phenol	ND	10	5.977352	5761	ug/L
NAPIS-3	4/9/2019	Pyrene	ND	10	6.527145	117	ug/L
NAPIS-3	4/9/2019	Pyridine	ND	10	5.420525	20	ug/L
NAPIS-3	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-3	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-3	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-3	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
NAPIS-3	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-3	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-3	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-3	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-3	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-3	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-3	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-3	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-3	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-3	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-3	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-3	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-3	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-3	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-3	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-3	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-3	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-3	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-3	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-3	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-3	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-3	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-3	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
NAPIS-3	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-3	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-3	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-3	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-3	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-3	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-3	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-3	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-3	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-3	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-3	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-3	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-3	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-3	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-3	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-3	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-3	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-3	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-3	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-3	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-3	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-3	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-3	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-3	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-3	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-3	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-3	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-3	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-3	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-3	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
NAPIS-3	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
NAPIS-3	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-3	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-3	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-3	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-3	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-3	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-3	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-3	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-3	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-3	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-3	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
NAPIS-3	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
NAPIS-3	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
NAPIS-3	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
NAPIS-3	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
NAPIS-3	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
NAPIS-3	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
NAPIS-3	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
NAPIS-3	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
NAPIS-3	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
NAPIS-3	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
NAPIS-3	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
NAPIS-3	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
NAPIS-3	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
NAPIS-3	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
NAPIS-3	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
NAPIS-3	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
NAPIS-3	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
NAPIS-3	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
NAPIS-3	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
NAPIS-3	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
NAPIS-3	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
NAPIS-3	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
NAPIS-3	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
NAPIS-3	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
NAPIS-3	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
NAPIS-3	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
NAPIS-3	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
NAPIS-3	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
NAPIS-3	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
NAPIS-3	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
NAPIS-3	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
NAPIS-3	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
NAPIS-3	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
NAPIS-3	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
NAPIS-3	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
NAPIS-3	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
NAPIS-3	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
NAPIS-3	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
NAPIS-3	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
NAPIS-3	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
NAPIS-3	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
NAPIS-3	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
NAPIS-3	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
NAPIS-3	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
NAPIS-3	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
NAPIS-3	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
NAPIS-3	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
NAPIS-3	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
NAPIS-3	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
NAPIS-3	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
NAPIS-3	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
NAPIS-3	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
NAPIS-3	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
NAPIS-3	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
NAPIS-3	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
NAPIS-3	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
NAPIS-3	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
NAPIS-3	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
NAPIS-3	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
NAPIS-3	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
NAPIS-3	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
NAPIS-3	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
NAPIS-3	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
NAPIS-3	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
NAPIS-3	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
NAPIS-3	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
NAPIS-3	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	3	1.234	11.38	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
NAPIS-3	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
NAPIS-3	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
NAPIS-3	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
NAPIS-3	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
NAPIS-3	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
NAPIS-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
NAPIS-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
NAPIS-3	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
NAPIS-3	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
NAPIS-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
NAPIS-3	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
NAPIS-3	10/21/2019	Fluorene	ND	0.8	0.338	288	ug/L
NAPIS-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	3	1.159	30	ug/L
NAPIS-3	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
NAPIS-3	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
NAPIS-3	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
NAPIS-3	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
NAPIS-3	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
NAPIS-3	10/21/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
NAPIS-3	10/21/2019	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
NAPIS-3	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
NAPIS-3	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
NAPIS-3	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
NAPIS-3	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
NAPIS-3	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
NAPIS-3	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
NAPIS-3	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
NAPIS-3	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
NAPIS-3	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
NAPIS-3	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
NAPIS-3	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
NAPIS-3	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
NAPIS-3	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
NAPIS-3	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
NAPIS-3	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
NAPIS-3	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
NAPIS-3	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
NAPIS-3	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
NAPIS-3	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
NAPIS-3	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
NAPIS-3	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
NAPIS-3	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
NAPIS-3	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
NAPIS-3	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
NAPIS-3	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
NAPIS-3	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
NAPIS-3	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
NAPIS-3	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
NAPIS-3	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
NAPIS-3	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
NAPIS-3	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
NAPIS-3	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
NAPIS-3	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
NAPIS-3	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
NAPIS-3	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
NAPIS-3	10/21/2019	Fluorene	ND	0.5	0.5	288	ug/L
NAPIS-3	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
NAPIS-3	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
NAPIS-3	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
NAPIS-3	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
NAPIS-3	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
NAPIS-3	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
NAPIS-3	10/21/2019	Naphthalene	ND	0.5	0.5	30	ug/L
NAPIS-3	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
NAPIS-3	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
NAPIS-3	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
NAPIS-3	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
NAPIS-3	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
NAPIS-3	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
NAPIS-3	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
NAPIS-3	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
NAPIS-3	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
NAPIS-3	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
NAPIS-3	3/4/2020	1,4-Dioxane	0.75	1	0.2	4.59	ug/L
NAPIS-3	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
NAPIS-3	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
NAPIS-3	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
NAPIS-3	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
NAPIS-3	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
NAPIS-3	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
NAPIS-3	3/4/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
NAPIS-3	3/4/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
NAPIS-3	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
NAPIS-3	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
NAPIS-3	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
NAPIS-3	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
NAPIS-3	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
NAPIS-3	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
NAPIS-3	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
NAPIS-3	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
NAPIS-3	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
NAPIS-3	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
NAPIS-3	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
NAPIS-3	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
NAPIS-3	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
NAPIS-3	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
NAPIS-3	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
NAPIS-3	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
NAPIS-3	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
NAPIS-3	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
NAPIS-3	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
NAPIS-3	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
NAPIS-3	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
NAPIS-3	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
NAPIS-3	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
NAPIS-3	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
NAPIS-3	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
NAPIS-3	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
NAPIS-3	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
NAPIS-3	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
NAPIS-3	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
NAPIS-3	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
NAPIS-3	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
NAPIS-3	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
NAPIS-3	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
NAPIS-3	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
NAPIS-3	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
NAPIS-3	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
NAPIS-3	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
NAPIS-3	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
NAPIS-3	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
NAPIS-3	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
NAPIS-3	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L
NAPIS-3	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
NAPIS-3	9/22/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
NAPIS-3	9/22/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
NAPIS-3	9/22/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
NAPIS-3	9/22/2020	1,4-Dioxane	1.7	0.52	0.1	4.59	ug/L
NAPIS-3	9/22/2020	1-Methylnaphthalene	0.11	0.52	0.1	11.38	ug/L
NAPIS-3	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
NAPIS-3	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
NAPIS-3	9/22/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
NAPIS-3	9/22/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
NAPIS-3	9/22/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
NAPIS-3	9/22/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
NAPIS-3	9/22/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
NAPIS-3	9/22/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
NAPIS-3	9/22/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
NAPIS-3	9/22/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
NAPIS-3	9/22/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
NAPIS-3	9/22/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
NAPIS-3	9/22/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
NAPIS-3	9/22/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
NAPIS-3	9/22/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
NAPIS-3	9/22/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
NAPIS-3	9/22/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Acenaphthene	0.37	0.52	0.1	535	ug/L
NAPIS-3	9/22/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Aniline	ND	0.52	0.1	13	ug/L
NAPIS-3	9/22/2020	Anthracene	ND	0.52	0.1	1721	ug/L
NAPIS-3	9/22/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
NAPIS-3	9/22/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
NAPIS-3	9/22/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
NAPIS-3	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
NAPIS-3	9/22/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
NAPIS-3	9/22/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
NAPIS-3	9/22/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
NAPIS-3	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
NAPIS-3	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
NAPIS-3	9/22/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
NAPIS-3	9/22/2020	Carbazole	ND	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
NAPIS-3	9/22/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
NAPIS-3	9/22/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
NAPIS-3	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
NAPIS-3	9/22/2020	Dibenzofuran	0.2	0.52	0.1	NA	ug/L
NAPIS-3	9/22/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
NAPIS-3	9/22/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
NAPIS-3	9/22/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
NAPIS-3	9/22/2020	Fluorene	ND	0.52	0.1	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/22/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
NAPIS-3	9/22/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
NAPIS-3	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
NAPIS-3	9/22/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
NAPIS-3	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
NAPIS-3	9/22/2020	Isophorone	ND	0.52	0.1	781	ug/L
NAPIS-3	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
NAPIS-3	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
NAPIS-3	9/22/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
NAPIS-3	9/22/2020	Naphthalene	0.21	0.52	0.1	30	ug/L
NAPIS-3	9/22/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
NAPIS-3	9/22/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
NAPIS-3	9/22/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
NAPIS-3	9/22/2020	Phenol	ND	0.52	0.1	5761	ug/L
NAPIS-3	9/22/2020	Pyrene	ND	0.52	0.1	117	ug/L
NAPIS-3	9/22/2020	Pyridine	0.5	0.52	0.21	20	ug/L
NAPIS-3	12/17/2020	Acenaphthene	ND	11.2	0.18	535	ug/L
NAPIS-3	12/17/2020	Acenaphthylene	ND	11.2	0.191	NA	ug/L
NAPIS-3	12/17/2020	Anthracene	ND	11.2	0.202	1721	ug/L
NAPIS-3	12/17/2020	Benzo(a)anthracene	*ND*	*11.2*	0.202	0.12	ug/L
NAPIS-3	12/17/2020	Benzo(a)pyrene	*ND*	*11.2*	0.135	0.2	ug/L
NAPIS-3	12/17/2020	Benzo(b)fluoranthene	*ND*	*11.2*	0.168	0.34	ug/L
NAPIS-3	12/17/2020	Benzo(g,h,i)perylene	ND	11.2	0.258	NA	ug/L
NAPIS-3	12/17/2020	Benzo(k)fluoranthene	*ND*	*11.2*	0.18	3.43	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroethoxy)methane	ND	11.2	0.18	59	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*11.2*	3.03	0.137	ug/L
NAPIS-3	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	11.2	5.62	55.64	ug/L
NAPIS-3	12/17/2020	4-Bromophenyl-phenylether	ND	11.2	0.225	NA	ug/L
NAPIS-3	12/17/2020	Butylbenzylphthalate	ND	11.2	0.213	16	ug/L
NAPIS-3	12/17/2020	Carbazole	ND	11.2	0.258	NA	ug/L
NAPIS-3	12/17/2020	4-Chloroaniline	*ND*	*11.2*	3.82	0.37	ug/L
NAPIS-3	12/17/2020	4-Chloro-3-Methylphenol	ND	11.2	4.27	NA	ug/L
NAPIS-3	12/17/2020	2-Chloronaphthalene	ND	11.2	0.157	733	ug/L
NAPIS-3	12/17/2020	2-Chlorophenol	ND	11.2	2.47	91	ug/L
NAPIS-3	12/17/2020	4-Chlorophenyl-phenylether	ND	11.2	2.25	NA	ug/L
NAPIS-3	12/17/2020	1,3-Dichlorobenzene	ND	11.2	0.202	NA	ug/L
NAPIS-3	12/17/2020	Chrysene	ND	11.2	0.213	34.3	ug/L
NAPIS-3	12/17/2020	Dibenzo(a,h)anthracene	ND	11.2	0.27	NA	ug/L
NAPIS-3	12/17/2020	1,4-Dichlorobenzene	ND	11.2	0.18	75	ug/L
NAPIS-3	12/17/2020	Dibenzofuran	ND	11.2	0.191	NA	ug/L
NAPIS-3	12/17/2020	3,3-Dichlorobenzidine	*ND*	*11.2*	2.92	1.25	ug/L
NAPIS-3	12/17/2020	2,4-Dichlorophenol	ND	11.2	3.37	45.3	ug/L
NAPIS-3	12/17/2020	Diethylphthalate	ND	11.2	0.27	14801	ug/L
NAPIS-3	12/17/2020	2,4-Dimethylphenol	ND	11.2	3.93	354	ug/L
NAPIS-3	12/17/2020	Di-n-butylphthalate	ND	11.2	3.03	885	ug/L
NAPIS-3	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.2*	1.8	1.52	ug/L
NAPIS-3	12/17/2020	2,4-Dinitrophenol	ND	33.7	3.82	38.7	ug/L
NAPIS-3	12/17/2020	2,4-Dinitrotoluene	ND	11.2	2.13	45.3	ug/L
NAPIS-3	12/17/2020	2,6-Dinitrotoluene	*ND*	*11.2*	2.13	0.485	ug/L
NAPIS-3	12/17/2020	Di-n-octylphthalate	ND	11.2	0.191	200	ug/L
NAPIS-3	12/17/2020	Fluoranthene	ND	11.2	0.202	802	ug/L
NAPIS-3	12/17/2020	Fluorene	ND	11.2	0.202	288	ug/L
NAPIS-3	12/17/2020	Hexachlorobenzene	*ND*	*11.2*	0.191	0.0976	ug/L
NAPIS-3	12/17/2020	Hexachlorocyclopentadiene	*ND*	*22.5*	2.92	0.41	ug/L
NAPIS-3	12/17/2020	Hexachloroethane	*ND*	*11.2*	4.72	3.28	ug/L
NAPIS-3	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.2*	0.247	0.343	ug/L
NAPIS-3	12/17/2020	Isophorone	ND	11.2	0.157	781	ug/L
NAPIS-3	12/17/2020	2-Methylphenol	ND	11.2	2.02	NA	ug/L
NAPIS-3	12/17/2020	Naphthalene	ND	11.2	0.191	30	ug/L
NAPIS-3	12/17/2020	2-Nitroaniline	ND	11.2	2.47	190	ug/L
NAPIS-3	12/17/2020	3-Nitroaniline	ND	11.2	2.02	NA	ug/L
NAPIS-3	12/17/2020	4-Nitroaniline	*ND*	*11.2*	1.68	3.8	ug/L
NAPIS-3	12/17/2020	Nitrobenzene	*ND*	*11.2*	0.146	1.4	ug/L
NAPIS-3	12/17/2020	2-Nitrophenol	ND	11.2	5.84	NA	ug/L
NAPIS-3	12/17/2020	4-Nitrophenol	ND	11.2	2.36	NA	ug/L
NAPIS-3	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*11.2*	3.71	0.011	ug/L
NAPIS-3	12/17/2020	N-Nitrosodiphenylamine	ND	11.2	0.202	122	ug/L
NAPIS-3	12/17/2020	Pentachlorophenol	*ND*	*22.5*	1.57	1	ug/L
NAPIS-3	12/17/2020	Phenanthrene	ND	11.2	0.202	170	ug/L
NAPIS-3	12/17/2020	Phenol	ND	11.2	2.92	5761	ug/L
NAPIS-3	12/17/2020	Pyrene	ND	11.2	0.236	117	ug/L
NAPIS-3	12/17/2020	2,4,5-Trichlorophenol	ND	11.2	4.16	1166	ug/L
NAPIS-3	12/17/2020	2,4,6-Trichlorophenol	ND	11.2	3.93	11.9*	ug/L
NAPIS-3	12/17/2020	Dimethylphthalate	ND	11.2	0.191	612	ug/L
NAPIS-3	12/17/2020	Aniline	ND	11.2	4.27	13	ug/L
NAPIS-3	12/17/2020	Benzoic Acid	ND	33.7	8.2	75000	ug/L
NAPIS-3	12/17/2020	Benzyl Alcohol	ND	11.2	2.25	2000	ug/L
NAPIS-3	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.2*	0.18	9.81	ug/L
NAPIS-3	12/17/2020	N-Nitrosodimethylamine	*ND*	*11.2*	3.93	0.0049	ug/L
NAPIS-3	12/17/2020	Pyridine	ND	11.2	3.59	20	ug/L
NAPIS-3	12/17/2020	1,2,4-Trichlorobenzene	ND	11.2	0.202	70	ug/L
NAPIS-3	12/17/2020	1,2-Dichlorobenzene	ND	11.2	0.191	600	ug/L
NAPIS-3	12/17/2020	Azobenzene	*ND*	*11.2*	1.12	0.12	ug/L
OAPIS-1	3/18/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	3/18/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	3/18/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	3/18/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	3/18/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	3/18/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	3/18/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
OAPIS-1	3/18/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	3/18/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	3/18/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	3/18/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	3/18/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	3/18/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	3/18/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	3/18/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	3/18/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	3/18/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	3/18/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	3/18/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	3/18/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	3/18/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	3/18/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	3/18/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	3/18/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	3/18/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	3/18/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/18/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	3/18/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	3/18/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	3/18/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	3/18/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	3/18/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	3/18/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	3/18/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	3/18/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	3/18/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	3/18/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	3/18/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	3/18/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OAPIS-1	3/18/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	3/18/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	3/18/2013	Phenol	10	10	2.2	5761	ug/L
OAPIS-1	3/18/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	3/18/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	3/18/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	3/18/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	3/18/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	3/18/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	3/18/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	3/18/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	3/18/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	3/18/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	3/18/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	3/18/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	3/18/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	3/18/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	3/18/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	3/18/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	3/18/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	3/18/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	3/18/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	3/18/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	3/18/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	3/18/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	3/18/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	3/18/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	3/18/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	6/12/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	6/12/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	6/12/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	6/12/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	6/12/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	6/12/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	6/12/2013	Benzoic Acid	ND	20	5.7	75000	ug/L
OAPIS-1	6/12/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	6/12/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	6/12/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	6/12/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	6/12/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	6/12/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	6/12/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	6/12/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	6/12/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	6/12/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	6/12/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	6/12/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	6/12/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	6/12/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	6/12/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	6/12/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	6/12/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	6/12/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	6/12/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	6/12/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	6/12/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	6/12/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	6/12/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	6/12/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	6/12/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	6/12/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	6/12/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	6/12/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	6/12/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	6/12/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	6/12/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	6/12/2013	2,4-Dimethylphenol	23	10	2.9	354	ug/L
OAPIS-1	6/12/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	6/12/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	6/12/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	6/12/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	6/12/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	6/12/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	6/12/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	6/12/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	6/12/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	6/12/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	6/12/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	6/12/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	6/12/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	6/12/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	6/12/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	6/12/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	6/12/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	6/12/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	6/12/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	6/12/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	6/12/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	6/12/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	6/12/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/12/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	6/12/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	6/12/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	6/12/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	6/12/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	9/3/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	9/3/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	9/3/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	9/3/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	9/3/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	9/3/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	9/3/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OAPIS-1	9/3/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	9/3/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	9/3/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	9/3/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	9/3/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	9/3/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	9/3/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	9/3/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	9/3/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	9/3/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	9/3/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	9/3/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	9/3/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	9/3/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	9/3/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	9/3/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	9/3/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	9/3/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	9/3/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	9/3/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	9/3/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	9/3/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	9/3/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	9/3/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	9/3/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OAPIS-1	9/3/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	9/3/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	9/3/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	9/3/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	9/3/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	9/3/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	9/3/2013	2,4-Dimethylphenol	22	10	2.9	354	ug/L
OAPIS-1	9/3/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	9/3/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	9/3/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	9/3/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	9/3/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	9/3/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	9/3/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	9/3/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	9/3/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	9/3/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	9/3/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	9/3/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	9/3/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	9/3/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	9/3/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	9/3/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	9/3/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	9/3/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	9/3/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	9/3/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	9/3/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	9/3/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	9/3/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	9/3/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	9/3/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	9/3/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/3/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	9/3/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	11/11/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OAPIS-1	11/11/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	11/11/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OAPIS-1	11/11/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	11/11/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	Aniline	ND	10	2.2	13	ug/L
OAPIS-1	11/11/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OAPIS-1	11/11/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OAPIS-1	11/11/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OAPIS-1	11/11/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OAPIS-1	11/11/2013	Isophorone	ND	10	1.8	781	ug/L
OAPIS-1	11/11/2013	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	11/11/2013	Diethylphthalate	ND	10	3	14801	ug/L
OAPIS-1	11/11/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	11/11/2013	Phenanthrene	ND	10	1.6	170	ug/L
OAPIS-1	11/11/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OAPIS-1	11/11/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	11/11/2013	Fluorene	ND	10	2.5	288	ug/L
OAPIS-1	11/11/2013	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	11/11/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OAPIS-1	11/11/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OAPIS-1	11/11/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OAPIS-1	11/11/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OAPIS-1	11/11/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OAPIS-1	11/11/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OAPIS-1	11/11/2013	Naphthalene	ND	10	2.4	30	ug/L
OAPIS-1	11/11/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OAPIS-1	11/11/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OAPIS-1	11/11/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	11/11/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OAPIS-1	11/11/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OAPIS-1	11/11/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OAPIS-1	11/11/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/11/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OAPIS-1	11/11/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OAPIS-1	11/11/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OAPIS-1	11/11/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OAPIS-1	11/11/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OAPIS-1	11/11/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OAPIS-1	11/11/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OAPIS-1	11/11/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OAPIS-1	11/11/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OAPIS-1	11/11/2013	Phenol	ND	10	2.2	5761	ug/L
OAPIS-1	11/11/2013	Pyridine	ND	10	3.5	20	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OAPIS-1	11/11/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OAPIS-1	11/11/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OAPIS-1	11/11/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OAPIS-1	11/11/2013	Anthracene	ND	10	2.2	1721	ug/L
OAPIS-1	11/11/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OAPIS-1	11/11/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OAPIS-1	11/11/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OAPIS-1	11/11/2013	Pyrene	ND	10	2.1	117	ug/L
OAPIS-1	11/11/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OAPIS-1	11/11/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OAPIS-1	11/11/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OAPIS-1	11/11/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OAPIS-1	11/11/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	11/11/2013	Fluoranthene	ND	10	2.4	802	ug/L
OAPIS-1	11/11/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	11/11/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OAPIS-1	11/11/2013	Chrysene	ND	10	2.7	34.3	ug/L
OAPIS-1	11/11/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	11/11/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OAPIS-1	11/11/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OAPIS-1	11/11/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OAPIS-1	11/11/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/11/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OAPIS-1	11/11/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	3/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	3/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	3/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	3/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	3/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	3/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	3/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	3/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	3/10/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	3/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	3/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	3/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	3/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	3/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	3/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	3/10/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	3/10/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	3/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	3/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	3/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	3/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	3/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OAPIS-1	3/10/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	3/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	3/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	3/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	3/10/2014	2-Methylphenol	ND	10	2.8	NA	ug/L
OAPIS-1	3/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	3/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	3/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	3/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	3/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	3/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	3/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	3/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	3/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	3/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	3/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OAPIS-1	3/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	3/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	3/10/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	3/10/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	3/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	3/10/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
OAPIS-1	3/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	3/10/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	3/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	3/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	3/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	3/10/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	3/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	3/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	3/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	3/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	3/10/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	3/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	3/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	3/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	3/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	3/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	3/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	3/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	3/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	3/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	3/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	6/5/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	6/5/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	6/5/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	6/5/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	6/5/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	6/5/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	6/5/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	6/5/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	6/5/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	6/5/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	6/5/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	6/5/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	6/5/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	6/5/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	6/5/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	6/5/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	6/5/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	6/5/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	6/5/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	6/5/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	6/5/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	6/5/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	6/5/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	6/5/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OAPIS-1	6/5/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	6/5/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	6/5/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	6/5/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	6/5/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OAPIS-1	6/5/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	6/5/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	6/5/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	6/5/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	6/5/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	6/5/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	6/5/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	6/5/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	6/5/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	6/5/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	6/5/2014	2,4-Dimethylphenol	32	10	3.1	354	ug/L
OAPIS-1	6/5/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	6/5/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	6/5/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	6/5/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	6/5/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	6/5/2014	Di-n-octylphthalate	ND	10	2.7	200	ug/L
OAPIS-1	6/5/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	6/5/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	6/5/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	6/5/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	6/5/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	6/5/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	6/5/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	6/5/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	6/5/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	6/5/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	6/5/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	6/5/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	6/5/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	6/5/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	6/5/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	6/5/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	6/5/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	6/5/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	6/5/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	6/5/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	6/5/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	6/5/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OAPIS-1	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OAPIS-1	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OAPIS-1	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OAPIS-1	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OAPIS-1	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OAPIS-1	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OAPIS-1	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OAPIS-1	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OAPIS-1	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OAPIS-1	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OAPIS-1	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OAPIS-1	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OAPIS-1	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OAPIS-1	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OAPIS-1	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OAPIS-1	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OAPIS-1	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OAPIS-1	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OAPIS-1	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OAPIS-1	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OAPIS-1	9/12/2014	1-Methylnaphthalene	**16**	10	3.6	11.38	ug/L
OAPIS-1	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OAPIS-1	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OAPIS-1	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OAPIS-1	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OAPIS-1	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OAPIS-1	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OAPIS-1	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OAPIS-1	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OAPIS-1	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OAPIS-1	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OAPIS-1	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OAPIS-1	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OAPIS-1	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OAPIS-1	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	9/12/2014	2,4-Dimethylphenol	28	10	3.1	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OAPIS-1	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OAPIS-1	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OAPIS-1	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OAPIS-1	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OAPIS-1	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OAPIS-1	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OAPIS-1	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OAPIS-1	9/12/2014	Pyrene	ND	10	4	117	ug/L
OAPIS-1	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OAPIS-1	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OAPIS-1	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OAPIS-1	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OAPIS-1	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OAPIS-1	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OAPIS-1	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OAPIS-1	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OAPIS-1	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OAPIS-1	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OAPIS-1	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OAPIS-1	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OAPIS-1	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OAPIS-1	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OAPIS-1	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OAPIS-1	11/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
OAPIS-1	11/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
OAPIS-1	11/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
OAPIS-1	11/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
OAPIS-1	11/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
OAPIS-1	11/11/2014	Aniline	*ND*	*50*	12	13	ug/L
OAPIS-1	11/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
OAPIS-1	11/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
OAPIS-1	11/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
OAPIS-1	11/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
OAPIS-1	11/11/2014	Isophorone	ND	50	15	781	ug/L
OAPIS-1	11/11/2014	Acenaphthene	ND	50	15	535	ug/L
OAPIS-1	11/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
OAPIS-1	11/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
OAPIS-1	11/11/2014	Phenanthrene	ND	50	13	170	ug/L
OAPIS-1	11/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
OAPIS-1	11/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
OAPIS-1	11/11/2014	Fluorene	ND	50	15	288	ug/L
OAPIS-1	11/11/2014	Carbazole	ND	50	14	NA	ug/L
OAPIS-1	11/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
OAPIS-1	11/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OAPIS-1	11/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
OAPIS-1	11/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
OAPIS-1	11/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L
OAPIS-1	11/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
OAPIS-1	11/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
OAPIS-1	11/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
OAPIS-1	11/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
OAPIS-1	11/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OAPIS-1	11/11/2014	2-Methylphenol	ND	50	14	NA	ug/L
OAPIS-1	11/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
OAPIS-1	11/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
OAPIS-1	11/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
OAPIS-1	11/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
OAPIS-1	11/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
OAPIS-1	11/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
OAPIS-1	11/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
OAPIS-1	11/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
OAPIS-1	11/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
OAPIS-1	11/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	11/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
OAPIS-1	11/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OAPIS-1	11/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
OAPIS-1	11/11/2014	Phenol	ND	50	7.9	5761	ug/L
OAPIS-1	11/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OAPIS-1	11/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
OAPIS-1	11/11/2014	Di-n-octylphthalate	ND	50	14	200	ug/L
OAPIS-1	11/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
OAPIS-1	11/11/2014	Anthracene	ND	50	12	1721	ug/L
OAPIS-1	11/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
OAPIS-1	11/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
OAPIS-1	11/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
OAPIS-1	11/11/2014	Pyrene	ND	50	20	117	ug/L
OAPIS-1	11/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
OAPIS-1	11/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
OAPIS-1	11/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
OAPIS-1	11/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
OAPIS-1	11/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OAPIS-1	11/11/2014	Fluoranthene	ND	50	15	802	ug/L
OAPIS-1	11/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
OAPIS-1	11/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
OAPIS-1	11/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
OAPIS-1	11/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
OAPIS-1	11/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
OAPIS-1	11/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
OAPIS-1	11/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
OAPIS-1	11/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
OAPIS-1	11/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
OAPIS-1	11/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OAPIS-1	3/10/2015	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	3/10/2015	Dibenzo(a,h)anthracene	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(a)anthracene	*ND*	*10*	4.2	0.12	ug/L
OAPIS-1	3/10/2015	4-Chloro-3-Methylphenol	ND	10	3	NA	ug/L
OAPIS-1	3/10/2015	Aniline	ND	10	4.2	13	ug/L
OAPIS-1	3/10/2015	N-Nitrosodimethylamine	*ND*	*10*	4.5	0.0049	ug/L
OAPIS-1	3/10/2015	Benzoic Acid	ND	20	2.8	75000	ug/L
OAPIS-1	3/10/2015	Hexachloroethane	*ND*	*10*	4.9	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	2.9	0.41	ug/L
OAPIS-1	3/10/2015	Isophorone	ND	10	3.7	781	ug/L
OAPIS-1	3/10/2015	Acenaphthene	ND	10	4.8	535	ug/L
OAPIS-1	3/10/2015	Diethylphthalate	ND	10	6.3	14801	ug/L
OAPIS-1	3/10/2015	Di-n-butylphthalate	ND	10	4.8	885	ug/L
OAPIS-1	3/10/2015	Phenanthrene	ND	10	3.5	170	ug/L
OAPIS-1	3/10/2015	Butylbenzylphthalate	ND	10	3.2	16	ug/L
OAPIS-1	3/10/2015	N-Nitrosodiphenylamine	ND	10	3.4	122	ug/L
OAPIS-1	3/10/2015	Fluorene	ND	10	4.4	288	ug/L
OAPIS-1	3/10/2015	Carbazole	ND	10	4.9	NA	ug/L
OAPIS-1	3/10/2015	Hexachlorobutadiene	*ND*	*10*	3.8	0.14	ug/L
OAPIS-1	3/10/2015	Pentachlorophenol	*ND*	*20*	3.6	1	ug/L
OAPIS-1	3/10/2015	2,4,6-Trichlorophenol	ND	10	4.1	11.9*	ug/L
OAPIS-1	3/10/2015	2-Nitroaniline	ND	10	5	190	ug/L
OAPIS-1	3/10/2015	2-Nitrophenol	ND	10	3.8	NA	ug/L
OAPIS-1	3/10/2015	1-Methylnaphthalene	ND	10	3.8	11.38	ug/L
OAPIS-1	3/10/2015	Naphthalene	ND	10	3.6	30	ug/L
OAPIS-1	3/10/2015	2-Methylnaphthalene	ND	10	3.7	35.1	ug/L
OAPIS-1	3/10/2015	2-Chloronaphthalene	ND	10	4.3	733	ug/L
OAPIS-1	3/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OAPIS-1	3/10/2015	2-Methylphenol	ND	10	3.7	NA	ug/L
OAPIS-1	3/10/2015	1,2-Dichlorobenzene	ND	10	3.6	600	ug/L
OAPIS-1	3/10/2015	2-Chlorophenol	ND	10	4	91	ug/L
OAPIS-1	3/10/2015	2,4,5-Trichlorophenol	ND	10	3.4	1166	ug/L
OAPIS-1	3/10/2015	Nitrobenzene	*ND*	*10*	3.3	1.4	ug/L
OAPIS-1	3/10/2015	3-Nitroaniline	ND	10	5.7	NA	ug/L
OAPIS-1	3/10/2015	4-Nitroaniline	*ND*	*10*	6.6	3.8	ug/L
OAPIS-1	3/10/2015	4-Nitrophenol	ND	10	6.3	NA	ug/L
OAPIS-1	3/10/2015	Benzyl Alcohol	ND	10	4.8	2000	ug/L
OAPIS-1	3/10/2015	4-Bromophenyl-phenylether	ND	10	4.4	NA	ug/L
OAPIS-1	3/10/2015	Azobenzene	*ND*	*10*	3.3	0.12	ug/L
OAPIS-1	3/10/2015	2,4-Dimethylphenol	ND	10	4.3	354	ug/L
OAPIS-1	3/10/2015	1,4-Dichlorobenzene	ND	10	5.3	75	ug/L
OAPIS-1	3/10/2015	4-Chloroaniline	*ND*	*10*	3.2	0.37	ug/L
OAPIS-1	3/10/2015	Phenol	ND	10	4.2	5761	ug/L
OAPIS-1	3/10/2015	Pyridine	ND	10	4.2	20	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	4.4	0.137	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	3/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.5	55.64	ug/L
OAPIS-1	3/10/2015	Di-n-octylphthalate	ND	10	3.5	200	ug/L
OAPIS-1	3/10/2015	Hexachlorobenzene	*ND*	*10*	3.9	0.0976	ug/L
OAPIS-1	3/10/2015	Anthracene	ND	10	4	1721	ug/L
OAPIS-1	3/10/2015	1,2,4-Trichlorobenzene	ND	10	3.8	70	ug/L
OAPIS-1	3/10/2015	2,4-Dichlorophenol	ND	20	4.3	45.3	ug/L
OAPIS-1	3/10/2015	2,4-Dinitrotoluene	ND	10	4.8	45.3	ug/L
OAPIS-1	3/10/2015	Pyrene	ND	10	3.3	117	ug/L
OAPIS-1	3/10/2015	Dimethylphthalate	ND	10	4.7	612	ug/L
OAPIS-1	3/10/2015	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	3/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	3/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.6	0.343	ug/L
OAPIS-1	3/10/2015	Benzo(b)fluoranthene	*ND*	*10*	3.3	0.34	ug/L
OAPIS-1	3/10/2015	Fluoranthene	ND	10	4.6	802	ug/L
OAPIS-1	3/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OAPIS-1	3/10/2015	Acenaphthylene	ND	10	4.5	NA	ug/L
OAPIS-1	3/10/2015	Chrysene	ND	10	3.9	34.3	ug/L
OAPIS-1	3/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	4.1	1.52	ug/L
OAPIS-1	3/10/2015	1,3-Dichlorobenzene	ND	10	4.7	NA	ug/L
OAPIS-1	3/10/2015	2,6-Dinitrotoluene	*ND*	*10*	4.7	0.485	ug/L
OAPIS-1	3/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	5.4	0.011	ug/L
OAPIS-1	3/10/2015	4-Chlorophenyl-phenylether	ND	10	4.5	NA	ug/L
OAPIS-1	3/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.4	9.81	ug/L
OAPIS-1	3/10/2015	3,4-Methylphenol	ND	10	4.7	NA	ug/L
OAPIS-1	6/2/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	6/2/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OAPIS-1	6/2/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OAPIS-1	6/2/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	6/2/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Aniline	ND	10	1.5	13	ug/L
OAPIS-1	6/2/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OAPIS-1	6/2/2015	Benzoic Acid	ND	20	1	75000	ug/L
OAPIS-1	6/2/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OAPIS-1	6/2/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OAPIS-1	6/2/2015	Isophorone	ND	10	2	781	ug/L
OAPIS-1	6/2/2015	Acenaphthene	ND	10	1.9	535	ug/L
OAPIS-1	6/2/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OAPIS-1	6/2/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OAPIS-1	6/2/2015	Phenanthrene	ND	10	2	170	ug/L
OAPIS-1	6/2/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OAPIS-1	6/2/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OAPIS-1	6/2/2015	Fluorene	ND	10	1.7	288	ug/L
OAPIS-1	6/2/2015	Carbazole	ND	10	1.5	NA	ug/L
OAPIS-1	6/2/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OAPIS-1	6/2/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OAPIS-1	6/2/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OAPIS-1	6/2/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OAPIS-1	6/2/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OAPIS-1	6/2/2015	1-Methylnaphthalene	**23**	10	1.8	11.38	ug/L
OAPIS-1	6/2/2015	Naphthalene	ND	10	1.8	30	ug/L
OAPIS-1	6/2/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OAPIS-1	6/2/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OAPIS-1	6/2/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OAPIS-1	6/2/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OAPIS-1	6/2/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OAPIS-1	6/2/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OAPIS-1	6/2/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OAPIS-1	6/2/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OAPIS-1	6/2/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OAPIS-1	6/2/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OAPIS-1	6/2/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OAPIS-1	6/2/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OAPIS-1	6/2/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OAPIS-1	6/2/2015	2,4-Dimethylphenol	29	10	1.9	354	ug/L
OAPIS-1	6/2/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OAPIS-1	6/2/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OAPIS-1	6/2/2015	Phenol	ND	10	1.1	5761	ug/L
OAPIS-1	6/2/2015	Pyridine	ND	10	1.7	20	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OAPIS-1	6/2/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/2/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OAPIS-1	6/2/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OAPIS-1	6/2/2015	Anthracene	ND	10	1.6	1721	ug/L
OAPIS-1	6/2/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OAPIS-1	6/2/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OAPIS-1	6/2/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OAPIS-1	6/2/2015	Pyrene	ND	10	2.3	117	ug/L
OAPIS-1	6/2/2015	Dimethylphthalate	ND	10	2	612	ug/L
OAPIS-1	6/2/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OAPIS-1	6/2/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	6/2/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OAPIS-1	6/2/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OAPIS-1	6/2/2015	Fluoranthene	ND	10	1.5	802	ug/L
OAPIS-1	6/2/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OAPIS-1	6/2/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OAPIS-1	6/2/2015	Chrysene	ND	10	2.2	34.3	ug/L
OAPIS-1	6/2/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	6/2/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OAPIS-1	6/2/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OAPIS-1	6/2/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OAPIS-1	6/2/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OAPIS-1	6/2/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OAPIS-1	6/2/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	8/11/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OAPIS-1	8/11/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OAPIS-1	8/11/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OAPIS-1	8/11/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Aniline	ND	10	1.5	13	ug/L
OAPIS-1	8/11/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OAPIS-1	8/11/2015	Benzoic Acid	ND	20	1	75000	ug/L
OAPIS-1	8/11/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OAPIS-1	8/11/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OAPIS-1	8/11/2015	Isophorone	ND	10	2	781	ug/L
OAPIS-1	8/11/2015	Acenaphthene	ND	10	1.9	535	ug/L
OAPIS-1	8/11/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OAPIS-1	8/11/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OAPIS-1	8/11/2015	Phenanthrene	ND	10	2	170	ug/L
OAPIS-1	8/11/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OAPIS-1	8/11/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OAPIS-1	8/11/2015	Fluorene	ND	10	1.7	288	ug/L
OAPIS-1	8/11/2015	Carbazole	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OAPIS-1	8/11/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OAPIS-1	8/11/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OAPIS-1	8/11/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OAPIS-1	8/11/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OAPIS-1	8/11/2015	1-Methylnaphthalene	**21**	10	1.8	11.38	ug/L
OAPIS-1	8/11/2015	Naphthalene	ND	10	1.8	30	ug/L
OAPIS-1	8/11/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OAPIS-1	8/11/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OAPIS-1	8/11/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OAPIS-1	8/11/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OAPIS-1	8/11/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OAPIS-1	8/11/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OAPIS-1	8/11/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OAPIS-1	8/11/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OAPIS-1	8/11/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OAPIS-1	8/11/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OAPIS-1	8/11/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OAPIS-1	8/11/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OAPIS-1	8/11/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OAPIS-1	8/11/2015	2,4-Dimethylphenol	24	10	1.9	354	ug/L
OAPIS-1	8/11/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OAPIS-1	8/11/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OAPIS-1	8/11/2015	Phenol	ND	10	1.1	5761	ug/L
OAPIS-1	8/11/2015	Pyridine	ND	10	1.7	20	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OAPIS-1	8/11/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OAPIS-1	8/11/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OAPIS-1	8/11/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OAPIS-1	8/11/2015	Anthracene	ND	10	1.6	1721	ug/L
OAPIS-1	8/11/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OAPIS-1	8/11/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OAPIS-1	8/11/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OAPIS-1	8/11/2015	Pyrene	ND	10	2.3	117	ug/L
OAPIS-1	8/11/2015	Dimethylphthalate	ND	10	2	612	ug/L
OAPIS-1	8/11/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OAPIS-1	8/11/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OAPIS-1	8/11/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OAPIS-1	8/11/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OAPIS-1	8/11/2015	Fluoranthene	ND	10	1.5	802	ug/L
OAPIS-1	8/11/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OAPIS-1	8/11/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OAPIS-1	8/11/2015	Chrysene	ND	10	2.2	34.3	ug/L
OAPIS-1	8/11/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OAPIS-1	8/11/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OAPIS-1	8/11/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OAPIS-1	8/11/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OAPIS-1	8/11/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OAPIS-1	8/11/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OAPIS-1	8/11/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OAPIS-1	10/29/2015	Benzo(a)pyrene	*ND*	*100*	27	0.2	ug/L
OAPIS-1	10/29/2015	2,4-Dinitrophenol	*ND*	*200*	11	38.7	ug/L
OAPIS-1	10/29/2015	Dibenzo(a,h)anthracene	ND	100	33	NA	ug/L
OAPIS-1	10/29/2015	Benzo(a)anthracene	*ND*	*100*	25	0.12	ug/L
OAPIS-1	10/29/2015	4-Chloro-3-Methylphenol	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Aniline	*ND*	*100*	15	13	ug/L
OAPIS-1	10/29/2015	N-Nitrosodimethylamine	*ND*	*100*	14	0.0049	ug/L
OAPIS-1	10/29/2015	Benzoic Acid	ND	200	10	75000	ug/L
OAPIS-1	10/29/2015	Hexachloroethane	*ND*	*100*	16	3.28	ug/L
OAPIS-1	10/29/2015	Hexachlorocyclopentadiene	*ND*	*100*	15	0.41	ug/L
OAPIS-1	10/29/2015	Isophorone	ND	100	20	781	ug/L
OAPIS-1	10/29/2015	Acenaphthene	ND	100	19	535	ug/L
OAPIS-1	10/29/2015	Diethylphthalate	ND	100	17	14801	ug/L
OAPIS-1	10/29/2015	Di-n-butylphthalate	ND	100	21	885	ug/L
OAPIS-1	10/29/2015	Phenanthrene	ND	100	20	170	ug/L
OAPIS-1	10/29/2015	Butylbenzylphthalate	*ND*	*100*	24	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/29/2015	N-Nitrosodiphenylamine	ND	100	25	122	ug/L
OAPIS-1	10/29/2015	Fluorene	ND	100	17	288	ug/L
OAPIS-1	10/29/2015	Carbazole	ND	100	15	NA	ug/L
OAPIS-1	10/29/2015	Hexachlorobutadiene	*ND*	*100*	19	0.14	ug/L
OAPIS-1	10/29/2015	Pentachlorophenol	*ND*	*200*	11	1	ug/L
OAPIS-1	10/29/2015	2,4,6-Trichlorophenol	ND	100	13	11.9*	ug/L
OAPIS-1	10/29/2015	2-Nitroaniline	ND	100	18	190	ug/L
OAPIS-1	10/29/2015	2-Nitrophenol	ND	100	12	NA	ug/L
OAPIS-1	10/29/2015	1-Methylnaphthalene	*ND*	*100*	18	11.38	ug/L
OAPIS-1	10/29/2015	Naphthalene	*ND*	*100*	18	30	ug/L
OAPIS-1	10/29/2015	2-Methylnaphthalene	*ND*	*100*	22	35.1	ug/L
OAPIS-1	10/29/2015	2-Chloronaphthalene	ND	100	17	733	ug/L
OAPIS-1	10/29/2015	3,3-Dichlorobenzidine	*ND*	*100*	26	1.25	ug/L
OAPIS-1	10/29/2015	2-Methylphenol	ND	100	12	NA	ug/L
OAPIS-1	10/29/2015	1,2-Dichlorobenzene	ND	100	19	600	ug/L
OAPIS-1	10/29/2015	2-Chlorophenol	*ND*	*100*	12	91	ug/L
OAPIS-1	10/29/2015	2,4,5-Trichlorophenol	ND	100	16	1166	ug/L
OAPIS-1	10/29/2015	Nitrobenzene	*ND*	*100*	15	1.4	ug/L
OAPIS-1	10/29/2015	3-Nitroaniline	ND	100	15	NA	ug/L
OAPIS-1	10/29/2015	4-Nitroaniline	*ND*	*100*	12	3.8	ug/L
OAPIS-1	10/29/2015	4-Nitrophenol	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Benzyl Alcohol	ND	100	12	2000	ug/L
OAPIS-1	10/29/2015	4-Bromophenyl-phenylether	ND	100	14	NA	ug/L
OAPIS-1	10/29/2015	Azobenzene	*ND*	*100*	20	0.12	ug/L
OAPIS-1	10/29/2015	2,4-Dimethylphenol	ND	100	19	354	ug/L
OAPIS-1	10/29/2015	1,4-Dichlorobenzene	*ND*	*100*	12	75	ug/L
OAPIS-1	10/29/2015	4-Chloroaniline	*ND*	*100*	19	0.37	ug/L
OAPIS-1	10/29/2015	Phenol	ND	100	11	5761	ug/L
OAPIS-1	10/29/2015	Pyridine	*ND*	*100*	17	20	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroethyl)ether	*ND*	*100*	18	0.137	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroethoxy)methane	*ND*	*100*	18	59	ug/L
OAPIS-1	10/29/2015	Bis(2-ethylhexyl)phthalate	*ND*	*100*	33	55.64	ug/L
OAPIS-1	10/29/2015	Di-n-octylphthalate	ND	100	19	200	ug/L
OAPIS-1	10/29/2015	Hexachlorobenzene	*ND*	*100*	20	0.0976	ug/L
OAPIS-1	10/29/2015	Anthracene	ND	100	16	1721	ug/L
OAPIS-1	10/29/2015	1,2,4-Trichlorobenzene	*ND*	*100*	20	70	ug/L
OAPIS-1	10/29/2015	2,4-Dichlorophenol	*ND*	*200*	14	45.3	ug/L
OAPIS-1	10/29/2015	2,4-Dinitrotoluene	*ND*	*100*	14	45.3	ug/L
OAPIS-1	10/29/2015	Pyrene	ND	100	23	117	ug/L
OAPIS-1	10/29/2015	Dimethylphthalate	ND	100	20	612	ug/L
OAPIS-1	10/29/2015	Dibenzofuran	ND	100	19	NA	ug/L
OAPIS-1	10/29/2015	Benzo(g,h,i)perylene	ND	100	31	NA	ug/L
OAPIS-1	10/29/2015	Indeno(1,2,3-cd)pyrene	*ND*	*100*	25	0.343	ug/L
OAPIS-1	10/29/2015	Benzo(b)fluoranthene	*ND*	*100*	24	0.34	ug/L
OAPIS-1	10/29/2015	Fluoranthene	ND	100	15	802	ug/L
OAPIS-1	10/29/2015	Benzo(k)fluoranthene	*ND*	*100*	25	3.43	ug/L
OAPIS-1	10/29/2015	Acenaphthylene	ND	100	19	NA	ug/L
OAPIS-1	10/29/2015	Chrysene	*ND*	*100*	22	34.3	ug/L
OAPIS-1	10/29/2015	4,6-Dinitro-2-methylphenol	*ND*	*200*	14	1.52	ug/L
OAPIS-1	10/29/2015	1,3-Dichlorobenzene	ND	100	17	NA	ug/L
OAPIS-1	10/29/2015	2,6-Dinitrotoluene	*ND*	*100*	15	0.485	ug/L
OAPIS-1	10/29/2015	N-Nitrosodi-n-propylamine	*ND*	*100*	20	0.011	ug/L
OAPIS-1	10/29/2015	4-Chlorophenyl-phenylether	ND	100	20	NA	ug/L
OAPIS-1	10/29/2015	Bis(2-chloroisopropyl)ether	*ND*	*100*	21	9.81	ug/L
OAPIS-1	10/29/2015	3,4-Methylphenol	ND	100	15	NA	ug/L
OAPIS-1	3/1/2016	Benzo(a)pyrene	*ND*	*10*	6.3	0.2	ug/L
OAPIS-1	3/1/2016	2,4-Dinitrophenol	ND	20	9.9	38.7	ug/L
OAPIS-1	3/1/2016	Dibenzo(a,h)anthracene	ND	10	6.8	NA	ug/L
OAPIS-1	3/1/2016	Benzo(a)anthracene	*ND*	*10*	6.1	0.12	ug/L
OAPIS-1	3/1/2016	4-Chloro-3-Methylphenol	ND	10	8	NA	ug/L
OAPIS-1	3/1/2016	Aniline	ND	10	9.8	13	ug/L
OAPIS-1	3/1/2016	N-Nitrosodimethylamine	*ND*	*10*	9.1	0.0049	ug/L
OAPIS-1	3/1/2016	Benzoic Acid	ND	20	9.8	75000	ug/L
OAPIS-1	3/1/2016	Hexachloroethane	*ND*	*10*	5.8	3.28	ug/L
OAPIS-1	3/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	5.2	0.41	ug/L
OAPIS-1	3/1/2016	Isophorone	ND	10	8.1	781	ug/L
OAPIS-1	3/1/2016	Acenaphthene	ND	10	8	535	ug/L
OAPIS-1	3/1/2016	Diethylphthalate	ND	10	8.2	14801	ug/L
OAPIS-1	3/1/2016	Di-n-butylphthalate	ND	10	8.1	885	ug/L
OAPIS-1	3/1/2016	Phenanthrene	ND	10	6.8	170	ug/L
OAPIS-1	3/1/2016	Butylbenzylphthalate	ND	10	7.8	16	ug/L
OAPIS-1	3/1/2016	N-Nitrosodiphenylamine	ND	10	6.2	122	ug/L
OAPIS-1	3/1/2016	Fluorene	ND	10	7.2	288	ug/L
OAPIS-1	3/1/2016	Carbazole	ND	10	7.2	NA	ug/L
OAPIS-1	3/1/2016	Hexachlorobutadiene	*ND*	*10*	5.2	0.14	ug/L
OAPIS-1	3/1/2016	Pentachlorophenol	*ND*	*20*	7.6	1	ug/L
OAPIS-1	3/1/2016	2,4,6-Trichlorophenol	ND	10	8.8	11.9*	ug/L
OAPIS-1	3/1/2016	2-Nitroaniline	ND	10	9	190	ug/L
OAPIS-1	3/1/2016	2-Nitrophenol	ND	10	7.6	NA	ug/L
OAPIS-1	3/1/2016	1-Methylnaphthalene	ND	10	6.8	11.38	ug/L
OAPIS-1	3/1/2016	Naphthalene	ND	10	5.9	30	ug/L
OAPIS-1	3/1/2016	2-Methylnaphthalene	ND	10	7	35.1	ug/L
OAPIS-1	3/1/2016	2-Chloronaphthalene	ND	10	7.2	733	ug/L
OAPIS-1	3/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	4.7	1.25	ug/L
OAPIS-1	3/1/2016	2-Methylphenol	ND	10	8.2	NA	ug/L
OAPIS-1	3/1/2016	1,2-Dichlorobenzene	ND	10	6.4	600	ug/L
OAPIS-1	3/1/2016	2-Chlorophenol	ND	10	8.7	91	ug/L
OAPIS-1	3/1/2016	2,4,5-Trichlorophenol	ND	10	8.4	1166	ug/L
OAPIS-1	3/1/2016	Nitrobenzene	*ND*	*10*	7.8	1.4	ug/L
OAPIS-1	3/1/2016	3-Nitroaniline	ND	10	8.8	NA	ug/L
OAPIS-1	3/1/2016	4-Nitroaniline	*ND*	*10*	9.1	3.8	ug/L
OAPIS-1	3/1/2016	4-Nitrophenol	ND	10	6.7	NA	ug/L
OAPIS-1	3/1/2016	Benzyl Alcohol	ND	10	8	2000	ug/L
OAPIS-1	3/1/2016	4-Bromophenyl-phenylether	ND	10	8.6	NA	ug/L
OAPIS-1	3/1/2016	Azobenzene	*ND*	*10*	9.3	0.12	ug/L
OAPIS-1	3/1/2016	2,4-Dimethylphenol	ND	10	4.7	354	ug/L
OAPIS-1	3/1/2016	1,4-Dichlorobenzene	ND	10	6.3	75	ug/L
OAPIS-1	3/1/2016	4-Chloroaniline	*ND*	*10*	7.1	0.37	ug/L
OAPIS-1	3/1/2016	Phenol	ND	10	5.1	5761	ug/L
OAPIS-1	3/1/2016	Pyridine	ND	10	6.7	20	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	8.3	0.137	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroethoxy)methane	ND	10	7.3	59	ug/L
OAPIS-1	3/1/2016	Bis(2-ethylhexyl)phthalate	ND	10	7.5	55.64	ug/L
OAPIS-1	3/1/2016	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OAPIS-1	3/1/2016	Hexachlorobenzene	*ND*	*10*	7.1	0.0976	ug/L
OAPIS-1	3/1/2016	Anthracene	ND	10	6.6	1721	ug/L
OAPIS-1	3/1/2016	1,2,4-Trichlorobenzene	ND	10	6.2	70	ug/L
OAPIS-1	3/1/2016	2,4-Dichlorophenol	ND	20	7.6	45.3	ug/L
OAPIS-1	3/1/2016	2,4-Dinitrotoluene	ND	10	8.5	45.3	ug/L
OAPIS-1	3/1/2016	Pyrene	ND	10	5.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Dimethylphthalate	ND	10	7.5	612	ug/L
OAPIS-1	3/1/2016	Dibenzofuran	ND	10	8.6	NA	ug/L
OAPIS-1	3/1/2016	Benzo(g,h,i)perylene	ND	10	6.8	NA	ug/L
OAPIS-1	3/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	5.6	0.343	ug/L
OAPIS-1	3/1/2016	Benzo(b)fluoranthene	*ND*	*10*	6.6	0.34	ug/L
OAPIS-1	3/1/2016	Fluoranthene	ND	10	6.1	802	ug/L
OAPIS-1	3/1/2016	Benzo(k)fluoranthene	*ND*	*10*	7.2	3.43	ug/L
OAPIS-1	3/1/2016	Acenaphthylene	ND	10	7.2	NA	ug/L
OAPIS-1	3/1/2016	Chrysene	ND	10	6.6	34.3	ug/L
OAPIS-1	3/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	7.3	1.52	ug/L
OAPIS-1	3/1/2016	1,3-Dichlorobenzene	ND	10	6.1	NA	ug/L
OAPIS-1	3/1/2016	2,6-Dinitrotoluene	*ND*	*10*	7.5	0.485	ug/L
OAPIS-1	3/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	7.8	0.011	ug/L
OAPIS-1	3/1/2016	4-Chlorophenyl-phenylether	ND	10	8.2	NA	ug/L
OAPIS-1	3/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	9.1	9.81	ug/L
OAPIS-1	3/1/2016	3,4-Methylphenol	ND	10	7.1	NA	ug/L
OAPIS-1	6/7/2016	Benzo(a)pyrene	*ND*	*50*	14	0.2	ug/L
OAPIS-1	6/7/2016	2,4-Dinitrophenol	*ND*	*100*	14	38.7	ug/L
OAPIS-1	6/7/2016	Dibenzo(a,h)anthracene	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Benzo(a)anthracene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	6/7/2016	4-Chloro-3-Methylphenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Aniline	*ND*	*50*	12	13	ug/L
OAPIS-1	6/7/2016	N-Nitrosodimethylamine	*ND*	*50*	11	0.0049	ug/L
OAPIS-1	6/7/2016	Benzoic Acid	ND	100	13	75000	ug/L
OAPIS-1	6/7/2016	Hexachloroethane	*ND*	*50*	12	3.28	ug/L
OAPIS-1	6/7/2016	Hexachlorocyclopentadiene	*ND*	*50*	11	0.41	ug/L
OAPIS-1	6/7/2016	Isophorone	ND	50	13	781	ug/L
OAPIS-1	6/7/2016	Acenaphthene	ND	50	13	535	ug/L
OAPIS-1	6/7/2016	Diethylphthalate	ND	50	14	14801	ug/L
OAPIS-1	6/7/2016	Di-n-butylphthalate	ND	50	12	885	ug/L
OAPIS-1	6/7/2016	Phenanthrene	ND	50	13	170	ug/L
OAPIS-1	6/7/2016	Butylbenzylphthalate	*ND*	*50*	12	16	ug/L
OAPIS-1	6/7/2016	N-Nitrosodiphenylamine	ND	50	12	122	ug/L
OAPIS-1	6/7/2016	Fluorene	ND	50	14	288	ug/L
OAPIS-1	6/7/2016	Carbazole	ND	50	11	NA	ug/L
OAPIS-1	6/7/2016	Hexachlorobutadiene	*ND*	*50*	11	0.14	ug/L
OAPIS-1	6/7/2016	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OAPIS-1	6/7/2016	2,4,6-Trichlorophenol	ND	50	12	11.9*	ug/L
OAPIS-1	6/7/2016	2-Nitroaniline	ND	50	14	190	ug/L
OAPIS-1	6/7/2016	2-Nitrophenol	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	1-Methylnaphthalene	**21**	50	15	11.38	ug/L
OAPIS-1	6/7/2016	Naphthalene	*ND*	*50*	13	30	ug/L
OAPIS-1	6/7/2016	2-Methylnaphthalene	*ND*	*50*	14	35.1	ug/L
OAPIS-1	6/7/2016	2-Chloronaphthalene	ND	50	11	733	ug/L
OAPIS-1	6/7/2016	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OAPIS-1	6/7/2016	2-Methylphenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	1,2-Dichlorobenzene	ND	50	11	600	ug/L
OAPIS-1	6/7/2016	2-Chlorophenol	ND	50	11	91	ug/L
OAPIS-1	6/7/2016	2,4,5-Trichlorophenol	ND	50	11	1166	ug/L
OAPIS-1	6/7/2016	Nitrobenzene	*ND*	*50*	14	1.4	ug/L
OAPIS-1	6/7/2016	3-Nitroaniline	ND	50	15	NA	ug/L
OAPIS-1	6/7/2016	4-Nitroaniline	*ND*	*50*	13	3.8	ug/L
OAPIS-1	6/7/2016	4-Nitrophenol	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Benzyl Alcohol	ND	50	15	2000	ug/L
OAPIS-1	6/7/2016	4-Bromophenyl-phenylether	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Azobenzene	*ND*	*50*	13	0.12	ug/L
OAPIS-1	6/7/2016	2,4-Dimethylphenol	28	50	15	354	ug/L
OAPIS-1	6/7/2016	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OAPIS-1	6/7/2016	4-Chloroaniline	*ND*	*50*	14	0.37	ug/L
OAPIS-1	6/7/2016	Phenol	ND	50	9.9	5761	ug/L
OAPIS-1	6/7/2016	Pyridine	*ND*	*50*	11	20	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroethyl)ether	*ND*	*50*	13	0.137	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OAPIS-1	6/7/2016	Bis(2-ethylhexyl)phthalate	19	50	13	55.64	ug/L
OAPIS-1	6/7/2016	Di-n-octylphthalate	25	50	9.9	200	ug/L
OAPIS-1	6/7/2016	Hexachlorobenzene	*ND*	*50*	13	0.0976	ug/L
OAPIS-1	6/7/2016	Anthracene	ND	50	12	1721	ug/L
OAPIS-1	6/7/2016	1,2,4-Trichlorobenzene	ND	50	13	70	ug/L
OAPIS-1	6/7/2016	2,4-Dichlorophenol	*ND*	*100*	12	45.3	ug/L
OAPIS-1	6/7/2016	2,4-Dinitrotoluene	*ND*	*50*	16	45.3	ug/L
OAPIS-1	6/7/2016	Pyrene	ND	50	15	117	ug/L
OAPIS-1	6/7/2016	Dimethylphthalate	ND	50	12	612	ug/L
OAPIS-1	6/7/2016	Dibenzofuran	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	Benzo(g,h,i)perylene	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*50*	15	0.343	ug/L
OAPIS-1	6/7/2016	Benzo(b)fluoranthene	*ND*	*50*	14	0.34	ug/L
OAPIS-1	6/7/2016	Fluoranthene	ND	50	13	802	ug/L
OAPIS-1	6/7/2016	Benzo(k)fluoranthene	*ND*	*50*	15	3.43	ug/L
OAPIS-1	6/7/2016	Acenaphthylene	ND	50	12	NA	ug/L
OAPIS-1	6/7/2016	Chrysene	*ND*	*50*	14	34.3	ug/L
OAPIS-1	6/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*100*	9	1.52	ug/L
OAPIS-1	6/7/2016	1,3-Dichlorobenzene	ND	50	11	NA	ug/L
OAPIS-1	6/7/2016	2,6-Dinitrotoluene	*ND*	*50*	14	0.485	ug/L
OAPIS-1	6/7/2016	N-Nitrosodi-n-propylamine	*ND*	*50*	12	0.011	ug/L
OAPIS-1	6/7/2016	4-Chlorophenyl-phenylether	ND	50	13	NA	ug/L
OAPIS-1	6/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*50*	9.5	9.81	ug/L
OAPIS-1	6/7/2016	3,4-Methylphenol	ND	50	11	NA	ug/L
OAPIS-1	9/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	9/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	9/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	9/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	9/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	9/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	9/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OAPIS-1	9/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	9/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	9/1/2016	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	9/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	9/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	9/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	9/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	9/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	9/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	9/1/2016	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	9/1/2016	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	9/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	9/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	9/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	9/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	9/1/2016	1-Methylnaphthalene	**23**	10	2.9	11.38	ug/L
OAPIS-1	9/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OAPIS-1	9/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	9/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	9/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	9/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	9/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	9/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	9/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	9/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	9/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	9/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	9/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	9/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	9/1/2016	2,4-Dimethylphenol	11	10	3	354	ug/L
OAPIS-1	9/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	9/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	9/1/2016	Phenol	ND	10	2	5761	ug/L
OAPIS-1	9/1/2016	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	9/1/2016	Bis(2-ethylhexyl)phthalate	3.3	10	2.6	55.64	ug/L
OAPIS-1	9/1/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
OAPIS-1	9/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	9/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	9/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	9/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	9/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	9/1/2016	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	9/1/2016	Dimethylphthalate	6	10	2.4	612	ug/L
OAPIS-1	9/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	9/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	9/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	9/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	9/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OAPIS-1	9/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	9/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	9/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	9/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	9/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	9/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	9/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	9/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	9/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	11/14/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	11/14/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	11/14/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	11/14/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	11/14/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	11/14/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
OAPIS-1	11/14/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	11/14/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	11/14/2016	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	11/14/2016	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	11/14/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	11/14/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	11/14/2016	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	11/14/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	11/14/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	11/14/2016	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	11/14/2016	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	11/14/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	11/14/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	11/14/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	11/14/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	11/14/2016	1-Methylnaphthalene	**19**	10	2.9	11.38	ug/L
OAPIS-1	11/14/2016	Naphthalene	3.3	10	2.6	30	ug/L
OAPIS-1	11/14/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	11/14/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	11/14/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	11/14/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	11/14/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	11/14/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	11/14/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	11/14/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	11/14/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	11/14/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	11/14/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	11/14/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	11/14/2016	2,4-Dimethylphenol	19	10	3	354	ug/L
OAPIS-1	11/14/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	11/14/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	11/14/2016	Phenol	ND	10	2	5761	ug/L
OAPIS-1	11/14/2016	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	11/14/2016	Bis(2-ethylhexyl)phthalate	ND	10	2.6	55.64	ug/L
OAPIS-1	11/14/2016	Di-n-octylphthalate	7.1	10	2	200	ug/L
OAPIS-1	11/14/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	11/14/2016	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	11/14/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	11/14/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	11/14/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	11/14/2016	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	11/14/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OAPIS-1	11/14/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	11/14/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	11/14/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	11/14/2016	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	11/14/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/14/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	11/14/2016	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	11/14/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	11/14/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	11/14/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	11/14/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	11/14/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	11/14/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	11/14/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OAPIS-1	2/21/2017	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OAPIS-1	2/21/2017	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OAPIS-1	2/21/2017	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OAPIS-1	2/21/2017	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Aniline	ND	10	2.4	13	ug/L
OAPIS-1	2/21/2017	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OAPIS-1	2/21/2017	Benzoic Acid	ND	20	2.6	75000	ug/L
OAPIS-1	2/21/2017	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OAPIS-1	2/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OAPIS-1	2/21/2017	Isophorone	ND	10	2.6	781	ug/L
OAPIS-1	2/21/2017	Acenaphthene	ND	10	2.6	535	ug/L
OAPIS-1	2/21/2017	Diethylphthalate	ND	10	2.7	14801	ug/L
OAPIS-1	2/21/2017	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OAPIS-1	2/21/2017	Phenanthrene	ND	10	2.6	170	ug/L
OAPIS-1	2/21/2017	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OAPIS-1	2/21/2017	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OAPIS-1	2/21/2017	Fluorene	ND	10	2.7	288	ug/L
OAPIS-1	2/21/2017	Carbazole	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OAPIS-1	2/21/2017	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OAPIS-1	2/21/2017	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OAPIS-1	2/21/2017	2-Nitroaniline	ND	10	2.8	190	ug/L
OAPIS-1	2/21/2017	2-Nitrophenol	ND	10	2.4	NA	ug/L
OAPIS-1	2/21/2017	1-Methylnaphthalene	10	10	2.9	11.38	ug/L
OAPIS-1	2/21/2017	Naphthalene	ND	10	2.6	30	ug/L
OAPIS-1	2/21/2017	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OAPIS-1	2/21/2017	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OAPIS-1	2/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OAPIS-1	2/21/2017	2-Methylphenol	ND	10	2.5	NA	ug/L
OAPIS-1	2/21/2017	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OAPIS-1	2/21/2017	2-Chlorophenol	ND	10	2.2	91	ug/L
OAPIS-1	2/21/2017	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OAPIS-1	2/21/2017	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OAPIS-1	2/21/2017	3-Nitroaniline	ND	10	2.9	NA	ug/L
OAPIS-1	2/21/2017	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OAPIS-1	2/21/2017	4-Nitrophenol	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Benzyl Alcohol	ND	10	3	2000	ug/L
OAPIS-1	2/21/2017	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OAPIS-1	2/21/2017	2,4-Dimethylphenol	13	10	3	354	ug/L
OAPIS-1	2/21/2017	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OAPIS-1	2/21/2017	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OAPIS-1	2/21/2017	Phenol	ND	10	2	5761	ug/L
OAPIS-1	2/21/2017	Pyridine	ND	10	2.2	20	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OAPIS-1	2/21/2017	Bis(2-ethylhexyl)phthalate	7.8	10	2.6	55.64	ug/L
OAPIS-1	2/21/2017	Di-n-octylphthalate	ND	10	2	200	ug/L
OAPIS-1	2/21/2017	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OAPIS-1	2/21/2017	Anthracene	ND	10	2.5	1721	ug/L
OAPIS-1	2/21/2017	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OAPIS-1	2/21/2017	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OAPIS-1	2/21/2017	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OAPIS-1	2/21/2017	Pyrene	ND	10	3.1	117	ug/L
OAPIS-1	2/21/2017	Dimethylphthalate	ND	10	2.4	612	ug/L
OAPIS-1	2/21/2017	Dibenzofuran	ND	10	2.5	NA	ug/L
OAPIS-1	2/21/2017	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OAPIS-1	2/21/2017	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OAPIS-1	2/21/2017	Fluoranthene	ND	10	2.6	802	ug/L
OAPIS-1	2/21/2017	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OAPIS-1	2/21/2017	Acenaphthylene	ND	10	2.4	NA	ug/L
OAPIS-1	2/21/2017	Chrysene	ND	10	2.8	34.3	ug/L
OAPIS-1	2/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OAPIS-1	2/21/2017	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OAPIS-1	2/21/2017	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OAPIS-1	2/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OAPIS-1	2/21/2017	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OAPIS-1	2/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OAPIS-1	2/21/2017	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OAPIS-1	6/1/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OAPIS-1	6/1/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OAPIS-1	6/1/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OAPIS-1	6/1/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OAPIS-1	6/1/2017	Aniline	ND	10	3.1	13	ug/L
OAPIS-1	6/1/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OAPIS-1	6/1/2017	Benzoic Acid	6.9	20	3.9	75000	ug/L
OAPIS-1	6/1/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OAPIS-1	6/1/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OAPIS-1	6/1/2017	Isophorone	ND	10	4.4	781	ug/L
OAPIS-1	6/1/2017	Acenaphthene	ND	10	3.6	535	ug/L
OAPIS-1	6/1/2017	Diethylphthalate	ND	10	4	14801	ug/L
OAPIS-1	6/1/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OAPIS-1	6/1/2017	Phenanthrene	ND	10	4.3	170	ug/L
OAPIS-1	6/1/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OAPIS-1	6/1/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OAPIS-1	6/1/2017	Fluorene	ND	10	4	288	ug/L
OAPIS-1	6/1/2017	Carbazole	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OAPIS-1	6/1/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OAPIS-1	6/1/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OAPIS-1	6/1/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OAPIS-1	6/1/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OAPIS-1	6/1/2017	1-Methylnaphthalene	5.3	10	3.3	11.38	ug/L
OAPIS-1	6/1/2017	Naphthalene	ND	10	2.9	30	ug/L
OAPIS-1	6/1/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OAPIS-1	6/1/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OAPIS-1	6/1/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OAPIS-1	6/1/2017	2-Methylphenol	ND	10	3.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OAPIS-1	6/1/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OAPIS-1	6/1/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OAPIS-1	6/1/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OAPIS-1	6/1/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OAPIS-1	6/1/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OAPIS-1	6/1/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OAPIS-1	6/1/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OAPIS-1	6/1/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OAPIS-1	6/1/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OAPIS-1	6/1/2017	2,4-Dimethylphenol	7.3	10	2.8	354	ug/L
OAPIS-1	6/1/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OAPIS-1	6/1/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OAPIS-1	6/1/2017	Phenol	ND	10	3.1	5761	ug/L
OAPIS-1	6/1/2017	Pyridine	ND	10	2.3	20	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OAPIS-1	6/1/2017	Bis(2-ethylhexyl)phthalate	10	10	4.8	55.64	ug/L
OAPIS-1	6/1/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OAPIS-1	6/1/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OAPIS-1	6/1/2017	Anthracene	ND	10	3.5	1721	ug/L
OAPIS-1	6/1/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OAPIS-1	6/1/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OAPIS-1	6/1/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OAPIS-1	6/1/2017	Pyrene	ND	10	4.4	117	ug/L
OAPIS-1	6/1/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OAPIS-1	6/1/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	6/1/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OAPIS-1	6/1/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OAPIS-1	6/1/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OAPIS-1	6/1/2017	Fluoranthene	ND	10	4.3	802	ug/L
OAPIS-1	6/1/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OAPIS-1	6/1/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OAPIS-1	6/1/2017	Chrysene	ND	10	3.8	34.3	ug/L
OAPIS-1	6/1/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OAPIS-1	6/1/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	6/1/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OAPIS-1	6/1/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OAPIS-1	6/1/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OAPIS-1	6/1/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OAPIS-1	6/1/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OAPIS-1	9/5/2017	Benzo(a)pyrene	*ND*	*100*	40	0.2	ug/L
OAPIS-1	9/5/2017	2,4-Dinitrophenol	*ND*	*200*	26	38.7	ug/L
OAPIS-1	9/5/2017	Dibenzo(a,h)anthracene	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Benzo(a)anthracene	*ND*	*100*	39	0.12	ug/L
OAPIS-1	9/5/2017	4-Chloro-3-Methylphenol	ND	100	63	NA	ug/L
OAPIS-1	9/5/2017	Aniline	*ND*	*100*	31	13	ug/L
OAPIS-1	9/5/2017	N-Nitrosodimethylamine	*ND*	*100*	35	0.0049	ug/L
OAPIS-1	9/5/2017	Benzoic Acid	ND	200	39	75000	ug/L
OAPIS-1	9/5/2017	Hexachloroethane	*ND*	*100*	12	3.28	ug/L
OAPIS-1	9/5/2017	Hexachlorocyclopentadiene	*ND*	*100*	13	0.41	ug/L
OAPIS-1	9/5/2017	Isophorone	ND	100	44	781	ug/L
OAPIS-1	9/5/2017	Acenaphthene	ND	100	36	535	ug/L
OAPIS-1	9/5/2017	Diethylphthalate	ND	100	40	14801	ug/L
OAPIS-1	9/5/2017	Di-n-butylphthalate	ND	100	50	885	ug/L
OAPIS-1	9/5/2017	Phenanthrene	ND	100	43	170	ug/L
OAPIS-1	9/5/2017	Butylbenzylphthalate	*ND*	*100*	46	16	ug/L
OAPIS-1	9/5/2017	N-Nitrosodiphenylamine	ND	100	39	122	ug/L
OAPIS-1	9/5/2017	Fluorene	ND	100	40	288	ug/L
OAPIS-1	9/5/2017	Carbazole	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Hexachlorobutadiene	*ND*	*100*	13	0.14	ug/L
OAPIS-1	9/5/2017	Pentachlorophenol	*ND*	*200*	49	1	ug/L
OAPIS-1	9/5/2017	2,4,6-Trichlorophenol	ND	100	55	11.9*	ug/L
OAPIS-1	9/5/2017	2-Nitroaniline	ND	100	49	190	ug/L
OAPIS-1	9/5/2017	2-Nitrophenol	ND	100	52	NA	ug/L
OAPIS-1	9/5/2017	1-Methylnaphthalene	*ND*	*100*	33	11.38	ug/L
OAPIS-1	9/5/2017	Naphthalene	*ND*	*100*	29	30	ug/L
OAPIS-1	9/5/2017	2-Methylnaphthalene	*ND*	*100*	33	35.1	ug/L
OAPIS-1	9/5/2017	2-Chloronaphthalene	ND	100	37	733	ug/L
OAPIS-1	9/5/2017	3,3-Dichlorobenzidine	*ND*	*100*	39	1.25	ug/L
OAPIS-1	9/5/2017	2-Methylphenol	ND	100	33	NA	ug/L
OAPIS-1	9/5/2017	1,2-Dichlorobenzene	ND	100	20	600	ug/L
OAPIS-1	9/5/2017	2-Chlorophenol	*ND*	*100*	75	91	ug/L
OAPIS-1	9/5/2017	2,4,5-Trichlorophenol	ND	100	51	1166	ug/L
OAPIS-1	9/5/2017	Nitrobenzene	*ND*	*100*	36	1.4	ug/L
OAPIS-1	9/5/2017	3-Nitroaniline	ND	100	43	NA	ug/L
OAPIS-1	9/5/2017	4-Nitroaniline	*ND*	*100*	40	3.8	ug/L
OAPIS-1	9/5/2017	4-Nitrophenol	ND	100	55	NA	ug/L
OAPIS-1	9/5/2017	Benzyl Alcohol	ND	100	46	2000	ug/L
OAPIS-1	9/5/2017	4-Bromophenyl-phenylether	ND	100	46	NA	ug/L
OAPIS-1	9/5/2017	Azobenzene	*ND*	*100*	45	0.12	ug/L
OAPIS-1	9/5/2017	2,4-Dimethylphenol	32	100	28	354	ug/L
OAPIS-1	9/5/2017	1,4-Dichlorobenzene	*ND*	*100*	21	75	ug/L
OAPIS-1	9/5/2017	4-Chloroaniline	*ND*	*100*	35	0.37	ug/L
OAPIS-1	9/5/2017	Phenol	ND	100	31	5761	ug/L
OAPIS-1	9/5/2017	Pyridine	*ND*	*100*	23	20	ug/L
OAPIS-1	9/5/2017	Bis(2-chloroethyl)ether	*ND*	*100*	43	0.137	ug/L
OAPIS-1	9/5/2017	Bis(2-chloroethoxy)methane	*ND*	*100*	43	59	ug/L
OAPIS-1	9/5/2017	Bis(2-ethylhexyl)phthalate	*ND*	*100*	48	55.64	ug/L
OAPIS-1	9/5/2017	Di-n-octylphthalate	ND	100	47	200	ug/L
OAPIS-1	9/5/2017	Hexachlorobenzene	*ND*	*100*	38	0.0976	ug/L
OAPIS-1	9/5/2017	Anthracene	ND	100	35	1721	ug/L
OAPIS-1	9/5/2017	1,2,4-Trichlorobenzene	*ND*	*100*	21	70	ug/L
OAPIS-1	9/5/2017	2,4-Dichlorophenol	*ND*	*200*	57	45.3	ug/L
OAPIS-1	9/5/2017	2,4-Dinitrotoluene	*ND*	*100*	40	45.3	ug/L
OAPIS-1	9/5/2017	Pyrene	ND	100	44	117	ug/L
OAPIS-1	9/5/2017	Dimethylphthalate	ND	100	36	612	ug/L
OAPIS-1	9/5/2017	Dibenzofuran	ND	100	41	NA	ug/L
OAPIS-1	9/5/2017	Benzo(g,h,i)perylene	ND	100	40	NA	ug/L
OAPIS-1	9/5/2017	Indeno(1,2,3-cd)pyrene	*ND*	*100*	42	0.343	ug/L
OAPIS-1	9/5/2017	Benzo(b)fluoranthene	*ND*	*100*	40	0.34	ug/L
OAPIS-1	9/5/2017	Fluoranthene	ND	100	43	802	ug/L
OAPIS-1	9/5/2017	Benzo(k)fluoranthene	*ND*	*100*	44	3.43	ug/L
OAPIS-1	9/5/2017	Acenaphthylene	ND	100	35	NA	ug/L
OAPIS-1	9/5/2017	Chrysene	*ND*	*100*	38	34.3	ug/L
OAPIS-1	9/5/2017	4,6-Dinitro-2-methylphenol	*ND*	*200*	39	1.52	ug/L
OAPIS-1	9/5/2017	1,3-Dichlorobenzene	ND	100	18	NA	ug/L
OAPIS-1	9/5/2017	2,6-Dinitrotoluene	*ND*	*100*	45	0.485	ug/L
OAPIS-1	9/5/2017	N-Nitrosodi-n-propylamine	*ND*	*100*	46	0.011	ug/L
OAPIS-1	9/5/2017	4-Chlorophenyl-phenylether	ND	100	36	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/5/2017	Bis(2-chloroisopropyl)ether	*ND*	*100*	39	9.81	ug/L
OAPIS-1	9/5/2017	3,4-Methylphenol	ND	100	32	NA	ug/L
OAPIS-1	12/4/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
OAPIS-1	12/4/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
OAPIS-1	12/4/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
OAPIS-1	12/4/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	12/4/2017	Aniline	*ND*	*50*	15	13	ug/L
OAPIS-1	12/4/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
OAPIS-1	12/4/2017	Benzoic Acid	24	100	20	75000	ug/L
OAPIS-1	12/4/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
OAPIS-1	12/4/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
OAPIS-1	12/4/2017	Isophorone	ND	50	22	781	ug/L
OAPIS-1	12/4/2017	Acenaphthene	ND	50	18	535	ug/L
OAPIS-1	12/4/2017	Diethylphthalate	ND	50	20	14801	ug/L
OAPIS-1	12/4/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
OAPIS-1	12/4/2017	Phenanthrene	ND	50	22	170	ug/L
OAPIS-1	12/4/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
OAPIS-1	12/4/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
OAPIS-1	12/4/2017	Fluorene	ND	50	20	288	ug/L
OAPIS-1	12/4/2017	Carbazole	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
OAPIS-1	12/4/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
OAPIS-1	12/4/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
OAPIS-1	12/4/2017	2-Nitroaniline	ND	50	25	190	ug/L
OAPIS-1	12/4/2017	2-Nitrophenol	ND	50	26	NA	ug/L
OAPIS-1	12/4/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
OAPIS-1	12/4/2017	Naphthalene	*ND*	*50*	14	30	ug/L
OAPIS-1	12/4/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
OAPIS-1	12/4/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
OAPIS-1	12/4/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
OAPIS-1	12/4/2017	2-Methylphenol	ND	50	17	NA	ug/L
OAPIS-1	12/4/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
OAPIS-1	12/4/2017	2-Chlorophenol	ND	50	38	91	ug/L
OAPIS-1	12/4/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
OAPIS-1	12/4/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
OAPIS-1	12/4/2017	3-Nitroaniline	ND	50	22	NA	ug/L
OAPIS-1	12/4/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
OAPIS-1	12/4/2017	4-Nitrophenol	ND	50	27	NA	ug/L
OAPIS-1	12/4/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
OAPIS-1	12/4/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
OAPIS-1	12/4/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
OAPIS-1	12/4/2017	2,4-Dimethylphenol	34	50	14	354	ug/L
OAPIS-1	12/4/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
OAPIS-1	12/4/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
OAPIS-1	12/4/2017	Phenol	ND	50	16	5761	ug/L
OAPIS-1	12/4/2017	Pyridine	*ND*	*50*	11	20	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
OAPIS-1	12/4/2017	Bis(2-ethylhexyl)phthalate	44	50	24	55.64	ug/L
OAPIS-1	12/4/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
OAPIS-1	12/4/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
OAPIS-1	12/4/2017	Anthracene	ND	50	18	1721	ug/L
OAPIS-1	12/4/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
OAPIS-1	12/4/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
OAPIS-1	12/4/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
OAPIS-1	12/4/2017	Pyrene	ND	50	22	117	ug/L
OAPIS-1	12/4/2017	Dimethylphthalate	ND	50	18	612	ug/L
OAPIS-1	12/4/2017	Dibenzofuran	ND	50	20	NA	ug/L
OAPIS-1	12/4/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
OAPIS-1	12/4/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
OAPIS-1	12/4/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OAPIS-1	12/4/2017	Fluoranthene	ND	50	21	802	ug/L
OAPIS-1	12/4/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
OAPIS-1	12/4/2017	Acenaphthylene	ND	50	18	NA	ug/L
OAPIS-1	12/4/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
OAPIS-1	12/4/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
OAPIS-1	12/4/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
OAPIS-1	12/4/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
OAPIS-1	12/4/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
OAPIS-1	12/4/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
OAPIS-1	12/4/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
OAPIS-1	12/4/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
OAPIS-1	2/9/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OAPIS-1	2/9/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OAPIS-1	2/9/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OAPIS-1	2/9/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OAPIS-1	2/9/2018	Aniline	ND	10	3.1	13	ug/L
OAPIS-1	2/9/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OAPIS-1	2/9/2018	Benzoic Acid	8.3	20	3.9	75000	ug/L
OAPIS-1	2/9/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OAPIS-1	2/9/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OAPIS-1	2/9/2018	Isophorone	ND	10	4.4	781	ug/L
OAPIS-1	2/9/2018	Acenaphthene	ND	10	3.6	535	ug/L
OAPIS-1	2/9/2018	Diethylphthalate	ND	10	4	14801	ug/L
OAPIS-1	2/9/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OAPIS-1	2/9/2018	Phenanthrene	ND	10	4.3	170	ug/L
OAPIS-1	2/9/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OAPIS-1	2/9/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OAPIS-1	2/9/2018	Fluorene	ND	10	4	288	ug/L
OAPIS-1	2/9/2018	Carbazole	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OAPIS-1	2/9/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OAPIS-1	2/9/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OAPIS-1	2/9/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OAPIS-1	2/9/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OAPIS-1	2/9/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OAPIS-1	2/9/2018	Naphthalene	ND	10	2.9	30	ug/L
OAPIS-1	2/9/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OAPIS-1	2/9/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OAPIS-1	2/9/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OAPIS-1	2/9/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OAPIS-1	2/9/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OAPIS-1	2/9/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OAPIS-1	2/9/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OAPIS-1	2/9/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OAPIS-1	2/9/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OAPIS-1	2/9/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OAPIS-1	2/9/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OAPIS-1	2/9/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OAPIS-1	2/9/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OAPIS-1	2/9/2018	2,4-Dimethylphenol	12	10	2.8	354	ug/L
OAPIS-1	2/9/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OAPIS-1	2/9/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OAPIS-1	2/9/2018	Phenol	4.1	10	3.1	5761	ug/L
OAPIS-1	2/9/2018	Pyridine	ND	10	2.3	20	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OAPIS-1	2/9/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OAPIS-1	2/9/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OAPIS-1	2/9/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OAPIS-1	2/9/2018	Anthracene	ND	10	3.5	1721	ug/L
OAPIS-1	2/9/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OAPIS-1	2/9/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OAPIS-1	2/9/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OAPIS-1	2/9/2018	Pyrene	ND	10	4.4	117	ug/L
OAPIS-1	2/9/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OAPIS-1	2/9/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OAPIS-1	2/9/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OAPIS-1	2/9/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OAPIS-1	2/9/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OAPIS-1	2/9/2018	Fluoranthene	ND	10	4.3	802	ug/L
OAPIS-1	2/9/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OAPIS-1	2/9/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OAPIS-1	2/9/2018	Chrysene	ND	10	3.8	34.3	ug/L
OAPIS-1	2/9/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OAPIS-1	2/9/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OAPIS-1	2/9/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OAPIS-1	2/9/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OAPIS-1	2/9/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OAPIS-1	2/9/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OAPIS-1	2/9/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OAPIS-1	4/30/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	4/30/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	4/30/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	4/30/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	4/30/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	4/30/2018	Benzoic Acid	92	100	32	75000	ug/L
OAPIS-1	4/30/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	4/30/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	4/30/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	4/30/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	4/30/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	4/30/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	4/30/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	4/30/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	4/30/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	4/30/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	4/30/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	4/30/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	4/30/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	4/30/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	4/30/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	4/30/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	4/30/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	4/30/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	4/30/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	4/30/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	4/30/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	4/30/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	4/30/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	4/30/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	4/30/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	4/30/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	4/30/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	4/30/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	4/30/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	4/30/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	4/30/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	4/30/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	4/30/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	4/30/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	4/30/2018	Phenol	ND	50	30	5761	ug/L
OAPIS-1	4/30/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	4/30/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OAPIS-1	4/30/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	4/30/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	4/30/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	4/30/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	4/30/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	4/30/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	4/30/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	4/30/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	4/30/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	4/30/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	4/30/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	4/30/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	4/30/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	4/30/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	4/30/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	4/30/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	4/30/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	4/30/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	4/30/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	4/30/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	4/30/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	4/30/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	4/30/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	9/6/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	9/6/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	9/6/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	9/6/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	9/6/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	9/6/2018	Benzoic Acid	34	100	32	75000	ug/L
OAPIS-1	9/6/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	9/6/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	9/6/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	9/6/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	9/6/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	9/6/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	9/6/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	9/6/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	9/6/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	9/6/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	9/6/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	9/6/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	9/6/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	9/6/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	9/6/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	9/6/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	9/6/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	9/6/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	9/6/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	9/6/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	9/6/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	9/6/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	9/6/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	9/6/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	9/6/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	9/6/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	9/6/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	9/6/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	9/6/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	9/6/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	9/6/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	9/6/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	9/6/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	9/6/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	9/6/2018	Phenol	ND	50	30	5761	ug/L
OAPIS-1	9/6/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	9/6/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OAPIS-1	9/6/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	9/6/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	9/6/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	9/6/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	9/6/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	9/6/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	9/6/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	9/6/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	9/6/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	9/6/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	9/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	9/6/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	9/6/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	9/6/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	9/6/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	9/6/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	9/6/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	9/6/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	9/6/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	9/6/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	9/6/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	9/6/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	9/6/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	11/19/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OAPIS-1	11/19/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OAPIS-1	11/19/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OAPIS-1	11/19/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Aniline	*ND*	*50*	31	13	ug/L
OAPIS-1	11/19/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OAPIS-1	11/19/2018	Benzoic Acid	ND	100	32	75000	ug/L
OAPIS-1	11/19/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OAPIS-1	11/19/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OAPIS-1	11/19/2018	Isophorone	ND	50	31	781	ug/L
OAPIS-1	11/19/2018	Acenaphthene	ND	50	29	535	ug/L
OAPIS-1	11/19/2018	Diethylphthalate	ND	50	31	14801	ug/L
OAPIS-1	11/19/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OAPIS-1	11/19/2018	Phenanthrene	ND	50	30	170	ug/L
OAPIS-1	11/19/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OAPIS-1	11/19/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OAPIS-1	11/19/2018	Fluorene	ND	50	32	288	ug/L
OAPIS-1	11/19/2018	Carbazole	ND	50	31	NA	ug/L
OAPIS-1	11/19/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OAPIS-1	11/19/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OAPIS-1	11/19/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OAPIS-1	11/19/2018	2-Nitroaniline	ND	50	29	190	ug/L
OAPIS-1	11/19/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OAPIS-1	11/19/2018	1-Methylnaphthalene	*ND*	*50*	35	11.38	ug/L
OAPIS-1	11/19/2018	Naphthalene	*ND*	*50*	25	30	ug/L
OAPIS-1	11/19/2018	2-Methylnaphthalene	*ND*	*50*	32	35.1	ug/L
OAPIS-1	11/19/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OAPIS-1	11/19/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OAPIS-1	11/19/2018	2-Methylphenol	ND	50	32	NA	ug/L
OAPIS-1	11/19/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OAPIS-1	11/19/2018	2-Chlorophenol	ND	50	29	91	ug/L
OAPIS-1	11/19/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OAPIS-1	11/19/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OAPIS-1	11/19/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OAPIS-1	11/19/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OAPIS-1	11/19/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OAPIS-1	11/19/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OAPIS-1	11/19/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OAPIS-1	11/19/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OAPIS-1	11/19/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OAPIS-1	11/19/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OAPIS-1	11/19/2018	Phenol	ND	50	30	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/19/2018	Pyridine	*ND*	*50*	27	20	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OAPIS-1	11/19/2018	Bis(2-ethylhexyl)phthalate	**90**	50	40	55.64	ug/L
OAPIS-1	11/19/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OAPIS-1	11/19/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OAPIS-1	11/19/2018	Anthracene	ND	50	29	1721	ug/L
OAPIS-1	11/19/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OAPIS-1	11/19/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OAPIS-1	11/19/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OAPIS-1	11/19/2018	Pyrene	ND	50	33	117	ug/L
OAPIS-1	11/19/2018	Dimethylphthalate	ND	50	30	612	ug/L
OAPIS-1	11/19/2018	Dibenzofuran	ND	50	34	NA	ug/L
OAPIS-1	11/19/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OAPIS-1	11/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OAPIS-1	11/19/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OAPIS-1	11/19/2018	Fluoranthene	ND	50	29	802	ug/L
OAPIS-1	11/19/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OAPIS-1	11/19/2018	Acenaphthylene	ND	50	31	NA	ug/L
OAPIS-1	11/19/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OAPIS-1	11/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OAPIS-1	11/19/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OAPIS-1	11/19/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OAPIS-1	11/19/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OAPIS-1	11/19/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OAPIS-1	11/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OAPIS-1	11/19/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OAPIS-1	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OAPIS-1	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OAPIS-1	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OAPIS-1	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OAPIS-1	3/28/2019	1-Methylnaphthalene	11	10	6.999122	11.38	ug/L
OAPIS-1	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OAPIS-1	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OAPIS-1	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OAPIS-1	3/28/2019	2,4-Dimethylphenol	14	10	5.912084	354	ug/L
OAPIS-1	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OAPIS-1	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OAPIS-1	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OAPIS-1	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OAPIS-1	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OAPIS-1	3/28/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OAPIS-1	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OAPIS-1	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OAPIS-1	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OAPIS-1	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OAPIS-1	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OAPIS-1	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OAPIS-1	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OAPIS-1	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OAPIS-1	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OAPIS-1	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OAPIS-1	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OAPIS-1	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OAPIS-1	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OAPIS-1	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OAPIS-1	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OAPIS-1	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
OAPIS-1	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
OAPIS-1	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OAPIS-1	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OAPIS-1	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OAPIS-1	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OAPIS-1	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OAPIS-1	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OAPIS-1	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OAPIS-1	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OAPIS-1	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OAPIS-1	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OAPIS-1	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OAPIS-1	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
OAPIS-1	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OAPIS-1	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OAPIS-1	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OAPIS-1	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OAPIS-1	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OAPIS-1	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OAPIS-1	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OAPIS-1	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OAPIS-1	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
OAPIS-1	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OAPIS-1	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OAPIS-1	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OAPIS-1	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OAPIS-1	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OAPIS-1	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
OAPIS-1	3/28/2019	Naphthalene	ND	10	5.041403	30	ug/L
OAPIS-1	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OAPIS-1	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OAPIS-1	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OAPIS-1	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OAPIS-1	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OAPIS-1	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OAPIS-1	3/28/2019	Phenol	ND	10	5.977352	5761	ug/L
OAPIS-1	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
OAPIS-1	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	**30**	50	15.345382	11.38	ug/L
OAPIS-1	5/8/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
OAPIS-1	5/8/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
OAPIS-1	5/8/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
OAPIS-1	5/8/2019	2,4-Dimethylphenol	27	50	14.829964	354	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
OAPIS-1	5/8/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
OAPIS-1	5/8/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
OAPIS-1	5/8/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
OAPIS-1	5/8/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
OAPIS-1	5/8/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
OAPIS-1	5/8/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
OAPIS-1	5/8/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
OAPIS-1	5/8/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
OAPIS-1	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
OAPIS-1	5/8/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
OAPIS-1	5/8/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
OAPIS-1	5/8/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
OAPIS-1	5/8/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
OAPIS-1	5/8/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
OAPIS-1	5/8/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
OAPIS-1	5/8/2019	Acenaphthene	ND	50	14.779454	535	ug/L
OAPIS-1	5/8/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
OAPIS-1	5/8/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
OAPIS-1	5/8/2019	Anthracene	ND	50	13.285863	1721	ug/L
OAPIS-1	5/8/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
OAPIS-1	5/8/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
OAPIS-1	5/8/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
OAPIS-1	5/8/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
OAPIS-1	5/8/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
OAPIS-1	5/8/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
OAPIS-1	5/8/2019	Bis(2-ethylhexyl)phthalate	31	50	21.510641	55.64	ug/L
OAPIS-1	5/8/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
OAPIS-1	5/8/2019	Carbazole	ND	50	14.452533	NA	ug/L
OAPIS-1	5/8/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
OAPIS-1	5/8/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
OAPIS-1	5/8/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
OAPIS-1	5/8/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
OAPIS-1	5/8/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L
OAPIS-1	5/8/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
OAPIS-1	5/8/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
OAPIS-1	5/8/2019	Fluoranthene	ND	50	12.061072	802	ug/L
OAPIS-1	5/8/2019	Fluorene	ND	50	14.442442	288	ug/L
OAPIS-1	5/8/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
OAPIS-1	5/8/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
OAPIS-1	5/8/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
OAPIS-1	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
OAPIS-1	5/8/2019	Isophorone	ND	50	15.230173	781	ug/L
OAPIS-1	5/8/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
OAPIS-1	5/8/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
OAPIS-1	5/8/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
OAPIS-1	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
OAPIS-1	5/8/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
OAPIS-1	5/8/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
OAPIS-1	5/8/2019	Phenanthrene	ND	50	13.88561	170	ug/L
OAPIS-1	5/8/2019	Phenol	ND	50	40.182932	5761	ug/L
OAPIS-1	5/8/2019	Pyrene	ND	50	12.517998	117	ug/L
OAPIS-1	5/8/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
OAPIS-1	5/8/2019	1,2,4-Trichlorobenzene	ND	50	20.22233	70	ug/L
OAPIS-1	5/8/2019	1,2-Dichlorobenzene	ND	50	23.872167	600	ug/L
OAPIS-1	5/8/2019	1,3-Dichlorobenzene	ND	50	26.326877	NA	ug/L
OAPIS-1	5/8/2019	1,4-Dichlorobenzene	ND	50	22.116162	75	ug/L
OAPIS-1	5/8/2019	1-Methylnaphthalene	**30**	50	15.345382	11.38	ug/L
OAPIS-1	5/8/2019	2,4,5-Trichlorophenol	ND	50	14.838207	1166	ug/L
OAPIS-1	5/8/2019	2,4,6-Trichlorophenol	ND	50	11.668652	11.9*	ug/L
OAPIS-1	5/8/2019	2,4-Dichlorophenol	*ND*	*100*	14.604032	45.3	ug/L
OAPIS-1	5/8/2019	2,4-Dimethylphenol	24	50	14.829964	354	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrophenol	*ND*	*100*	12.962271	38.7	ug/L
OAPIS-1	5/8/2019	2,4-Dinitrotoluene	*ND*	*50*	19.211326	45.3	ug/L
OAPIS-1	5/8/2019	2,6-Dinitrotoluene	*ND*	*50*	12.144424	0.485	ug/L
OAPIS-1	5/8/2019	2-Chloronaphthalene	ND	50	15.350591	733	ug/L
OAPIS-1	5/8/2019	2-Chlorophenol	ND	50	13.429688	91	ug/L
OAPIS-1	5/8/2019	2-Methylnaphthalene	*ND*	*50*	15.094314	35.1	ug/L
OAPIS-1	5/8/2019	2-Methylphenol	ND	50	14.292191	NA	ug/L
OAPIS-1	5/8/2019	2-Nitroaniline	ND	50	15.868512	190	ug/L
OAPIS-1	5/8/2019	2-Nitrophenol	ND	50	14.859903	NA	ug/L
OAPIS-1	5/8/2019	3,3-Dichlorobenzidine	*ND*	*50*	13.912003	1.25	ug/L
OAPIS-1	5/8/2019	3,4-Methylphenol	ND	50	17.922265	NA	ug/L
OAPIS-1	5/8/2019	3-Nitroaniline	ND	50	16.218959	NA	ug/L
OAPIS-1	5/8/2019	4,6-Dinitro-2-methylphenol	*ND*	*100*	14.466356	1.52	ug/L
OAPIS-1	5/8/2019	4-Bromophenyl-phenylether	ND	50	14.985964	NA	ug/L
OAPIS-1	5/8/2019	4-Chloro-3-Methylphenol	ND	50	17.041897	NA	ug/L
OAPIS-1	5/8/2019	4-Chloroaniline	*ND*	*50*	11.283011	0.37	ug/L
OAPIS-1	5/8/2019	4-Chlorophenyl-phenylether	ND	50	12.194278	NA	ug/L
OAPIS-1	5/8/2019	4-Nitroaniline	*ND*	*50*	13.461518	3.8	ug/L
OAPIS-1	5/8/2019	4-Nitrophenol	ND	50	37.858333	NA	ug/L
OAPIS-1	5/8/2019	Acenaphthene	ND	50	14.779454	535	ug/L
OAPIS-1	5/8/2019	Acenaphthylene	ND	50	11.977531	NA	ug/L
OAPIS-1	5/8/2019	Aniline	*ND*	*50*	17.897582	13	ug/L
OAPIS-1	5/8/2019	Anthracene	ND	50	13.285863	1721	ug/L
OAPIS-1	5/8/2019	Azobenzene	*ND*	*50*	16.273093	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)anthracene	*ND*	*50*	18.008915	0.12	ug/L
OAPIS-1	5/8/2019	Benzo(a)pyrene	*ND*	*50*	17.741337	0.2	ug/L
OAPIS-1	5/8/2019	Benzo(b)fluoranthene	*ND*	*50*	16.840631	0.34	ug/L
OAPIS-1	5/8/2019	Benzo(g,h,i)perylene	ND	50	11.171165	NA	ug/L
OAPIS-1	5/8/2019	Benzo(k)fluoranthene	*ND*	*50*	14.417509	3.43	ug/L
OAPIS-1	5/8/2019	Benzoic Acid	ND	100	53.616618	75000	ug/L
OAPIS-1	5/8/2019	Benzyl Alcohol	ND	50	11.801706	2000	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethoxy)methane	ND	50	13.019471	59	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroethyl)ether	*ND*	*50*	16.167407	0.137	ug/L
OAPIS-1	5/8/2019	Bis(2-chloroisopropyl)ether	*ND*	*50*	19.291699	9.81	ug/L
OAPIS-1	5/8/2019	Bis(2-ethylhexyl)phthalate	ND	50	21.510641	55.64	ug/L
OAPIS-1	5/8/2019	Butylbenzylphthalate	*ND*	*50*	16.641736	16	ug/L
OAPIS-1	5/8/2019	Carbazole	ND	50	14.452533	NA	ug/L
OAPIS-1	5/8/2019	Chrysene	*ND*	*50*	13.933115	34.3	ug/L
OAPIS-1	5/8/2019	Dibenzo(a,h)anthracene	ND	50	14.799329	NA	ug/L
OAPIS-1	5/8/2019	Dibenzofuran	ND	50	15.929448	NA	ug/L
OAPIS-1	5/8/2019	Diethylphthalate	ND	50	14.362438	14801	ug/L
OAPIS-1	5/8/2019	Dimethylphthalate	ND	50	16.190081	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Di-n-butylphthalate	ND	50	13.534687	885	ug/L
OAPIS-1	5/8/2019	Di-n-octylphthalate	ND	50	17.581832	200	ug/L
OAPIS-1	5/8/2019	Fluoranthene	ND	50	12.061072	802	ug/L
OAPIS-1	5/8/2019	Fluorene	ND	50	14.442442	288	ug/L
OAPIS-1	5/8/2019	Hexachlorobenzene	*ND*	*50*	15.414796	0.0976	ug/L
OAPIS-1	5/8/2019	Hexachlorobutadiene	*ND*	*50*	23.661323	0.14	ug/L
OAPIS-1	5/8/2019	Hexachlorocyclopentadiene	*ND*	*50*	17.89088	0.41	ug/L
OAPIS-1	5/8/2019	Hexachloroethane	*ND*	*50*	23.938958	3.28	ug/L
OAPIS-1	5/8/2019	Indeno(1,2,3-cd)pyrene	*ND*	*50*	13.522868	0.343	ug/L
OAPIS-1	5/8/2019	Isophorone	ND	50	15.230173	781	ug/L
OAPIS-1	5/8/2019	Naphthalene	*ND*	*50*	20.61105	30	ug/L
OAPIS-1	5/8/2019	Nitrobenzene	*ND*	*50*	13.946779	1.4	ug/L
OAPIS-1	5/8/2019	N-Nitrosodimethylamine	*ND*	*50*	25.21774	0.0049	ug/L
OAPIS-1	5/8/2019	N-Nitrosodi-n-propylamine	*ND*	*50*	32.462266	0.011	ug/L
OAPIS-1	5/8/2019	N-Nitrosodiphenylamine	ND	50	11.901903	122	ug/L
OAPIS-1	5/8/2019	Pentachlorophenol	*ND*	*100*	13.727383	1	ug/L
OAPIS-1	5/8/2019	Phenanthrene	ND	50	13.88561	170	ug/L
OAPIS-1	5/8/2019	Phenol	ND	50	40.182932	5761	ug/L
OAPIS-1	5/8/2019	Pyrene	ND	50	12.517998	117	ug/L
OAPIS-1	5/8/2019	Pyridine	*ND*	*50*	48.015681	20	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	**73**	10	3.069076	11.38	ug/L
OAPIS-1	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OAPIS-1	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OAPIS-1	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OAPIS-1	8/22/2019	2,4-Dimethylphenol	23	10	2.965993	354	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OAPIS-1	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OAPIS-1	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OAPIS-1	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OAPIS-1	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OAPIS-1	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OAPIS-1	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OAPIS-1	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OAPIS-1	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OAPIS-1	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OAPIS-1	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OAPIS-1	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OAPIS-1	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OAPIS-1	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OAPIS-1	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OAPIS-1	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OAPIS-1	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OAPIS-1	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OAPIS-1	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OAPIS-1	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OAPIS-1	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OAPIS-1	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OAPIS-1	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OAPIS-1	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OAPIS-1	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OAPIS-1	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OAPIS-1	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OAPIS-1	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OAPIS-1	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OAPIS-1	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OAPIS-1	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OAPIS-1	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OAPIS-1	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OAPIS-1	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OAPIS-1	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OAPIS-1	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OAPIS-1	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OAPIS-1	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OAPIS-1	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
OAPIS-1	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OAPIS-1	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OAPIS-1	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OAPIS-1	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OAPIS-1	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OAPIS-1	8/22/2019	Naphthalene	5.6	10	4.12221	30	ug/L
OAPIS-1	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OAPIS-1	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OAPIS-1	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OAPIS-1	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OAPIS-1	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OAPIS-1	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OAPIS-1	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
OAPIS-1	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OAPIS-1	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OAPIS-1	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OAPIS-1	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OAPIS-1	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OAPIS-1	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OAPIS-1	8/22/2019	1-Methylnaphthalene	**89**	10	3.069076	11.38	ug/L
OAPIS-1	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OAPIS-1	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OAPIS-1	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OAPIS-1	8/22/2019	2,4-Dimethylphenol	24	10	2.965993	354	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OAPIS-1	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OAPIS-1	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OAPIS-1	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OAPIS-1	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OAPIS-1	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OAPIS-1	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OAPIS-1	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OAPIS-1	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OAPIS-1	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OAPIS-1	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OAPIS-1	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OAPIS-1	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OAPIS-1	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OAPIS-1	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OAPIS-1	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OAPIS-1	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OAPIS-1	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OAPIS-1	8/22/2019	Acenaphthene	3.7	10	2.955891	535	ug/L
OAPIS-1	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OAPIS-1	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OAPIS-1	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OAPIS-1	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OAPIS-1	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OAPIS-1	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OAPIS-1	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OAPIS-1	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OAPIS-1	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OAPIS-1	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OAPIS-1	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OAPIS-1	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OAPIS-1	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OAPIS-1	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OAPIS-1	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OAPIS-1	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OAPIS-1	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OAPIS-1	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OAPIS-1	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OAPIS-1	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OAPIS-1	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OAPIS-1	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OAPIS-1	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
OAPIS-1	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OAPIS-1	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OAPIS-1	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OAPIS-1	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OAPIS-1	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OAPIS-1	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OAPIS-1	8/22/2019	Naphthalene	*7*	10	4.12221	30	ug/L
OAPIS-1	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OAPIS-1	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OAPIS-1	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OAPIS-1	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OAPIS-1	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OAPIS-1	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OAPIS-1	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
OAPIS-1	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OAPIS-1	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	**32**	3	1.234	11.38	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	ND	3	1.229	35.1	ug/L
OAPIS-1	10/21/2019	Acenaphthene	ND	3	1.14	535	ug/L
OAPIS-1	10/21/2019	Acenaphthylene	ND	3	1.257	NA	ug/L
OAPIS-1	10/21/2019	Anthracene	ND	0.6	0.161	1721	ug/L
OAPIS-1	10/21/2019	Benzo(a)anthracene	ND	0.07	0.038	0.12	ug/L
OAPIS-1	10/21/2019	Benzo(a)pyrene	ND	0.07	0.022	0.2	ug/L
OAPIS-1	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.068	0.34	ug/L
OAPIS-1	10/21/2019	Benzo(g,h,i)perylene	ND	0.125	0.041	NA	ug/L
OAPIS-1	10/21/2019	Benzo(k)fluoranthene	ND	0.07	0.03	3.43	ug/L
OAPIS-1	10/21/2019	Chrysene	ND	0.2	0.162	34.3	ug/L
OAPIS-1	10/21/2019	Dibenzo(a,h)anthracene	ND	0.125	0.038	NA	ug/L
OAPIS-1	10/21/2019	Fluoranthene	ND	0.4	0.298	802	ug/L
OAPIS-1	10/21/2019	Fluorene	0.91	0.8	0.338	288	ug/L
OAPIS-1	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.25	0.07	0.343	ug/L
OAPIS-1	10/21/2019	Naphthalene	4.1	3	1.159	30	ug/L
OAPIS-1	10/21/2019	Phenanthrene	ND	0.6	0.152	170	ug/L
OAPIS-1	10/21/2019	Pyrene	ND	0.4	0.276	117	ug/L
OAPIS-1	10/21/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OAPIS-1	10/21/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OAPIS-1	10/21/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OAPIS-1	10/21/2019	1,4-Dioxane	3.5	1	1	4.59	ug/L
OAPIS-1	10/21/2019	1-Methylnaphthalene	**58**	0.5	0.5	11.38	ug/L
OAPIS-1	10/21/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OAPIS-1	10/21/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OAPIS-1	10/21/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OAPIS-1	10/21/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OAPIS-1	10/21/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OAPIS-1	10/21/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OAPIS-1	10/21/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OAPIS-1	10/21/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OAPIS-1	10/21/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OAPIS-1	10/21/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OAPIS-1	10/21/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OAPIS-1	10/21/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OAPIS-1	10/21/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OAPIS-1	10/21/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OAPIS-1	10/21/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Acenaphthene	2.5	0.5	0.5	535	ug/L
OAPIS-1	10/21/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Aniline	ND	0.5	0.5	13	ug/L
OAPIS-1	10/21/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OAPIS-1	10/21/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OAPIS-1	10/21/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OAPIS-1	10/21/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OAPIS-1	10/21/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OAPIS-1	10/21/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OAPIS-1	10/21/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OAPIS-1	10/21/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OAPIS-1	10/21/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OAPIS-1	10/21/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OAPIS-1	10/21/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OAPIS-1	10/21/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OAPIS-1	10/21/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OAPIS-1	10/21/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OAPIS-1	10/21/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OAPIS-1	10/21/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OAPIS-1	10/21/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OAPIS-1	10/21/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OAPIS-1	10/21/2019	Fluorene	2.4	0.5	0.5	288	ug/L
OAPIS-1	10/21/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OAPIS-1	10/21/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OAPIS-1	10/21/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OAPIS-1	10/21/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OAPIS-1	10/21/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OAPIS-1	10/21/2019	Isophorone	ND	0.5	0.5	781	ug/L
OAPIS-1	10/21/2019	Naphthalene	3.3	0.5	0.5	30	ug/L
OAPIS-1	10/21/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OAPIS-1	10/21/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
OAPIS-1	10/21/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OAPIS-1	10/21/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
OAPIS-1	10/21/2019	Phenol	ND	0.5	0.5	5761	ug/L
OAPIS-1	10/21/2019	Pyrene	ND	0.5	0.5	117	ug/L
OAPIS-1	10/21/2019	Pyridine	ND	0.5	0.5	20	ug/L
OAPIS-1	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OAPIS-1	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OAPIS-1	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OAPIS-1	3/4/2020	1,4-Dioxane	*3.88*	*5*	1	4.59	ug/L
OAPIS-1	3/4/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
OAPIS-1	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OAPIS-1	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OAPIS-1	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OAPIS-1	3/4/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OAPIS-1	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OAPIS-1	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OAPIS-1	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OAPIS-1	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OAPIS-1	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OAPIS-1	3/4/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
OAPIS-1	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OAPIS-1	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OAPIS-1	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OAPIS-1	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OAPIS-1	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OAPIS-1	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
OAPIS-1	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OAPIS-1	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OAPIS-1	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OAPIS-1	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OAPIS-1	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OAPIS-1	3/4/2020	Benzoic Acid	5.2	2.5	0.5	75000	ug/L
OAPIS-1	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OAPIS-1	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OAPIS-1	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OAPIS-1	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OAPIS-1	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OAPIS-1	3/4/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OAPIS-1	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OAPIS-1	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OAPIS-1	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OAPIS-1	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OAPIS-1	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OAPIS-1	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OAPIS-1	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OAPIS-1	3/4/2020	Fluorene	ND	2.5	0.5	288	ug/L
OAPIS-1	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OAPIS-1	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OAPIS-1	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OAPIS-1	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OAPIS-1	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OAPIS-1	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
OAPIS-1	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OAPIS-1	3/4/2020	Naphthalene	ND	2.5	0.5	30	ug/L
OAPIS-1	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OAPIS-1	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OAPIS-1	3/4/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
OAPIS-1	3/4/2020	Phenol	2.5	2.5	0.5	5761	ug/L
OAPIS-1	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
OAPIS-1	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
OAPIS-1	9/22/2020	1,2,4-Trichlorobenzene	ND	2.1	0.41	70	ug/L
OAPIS-1	9/22/2020	1,2-Dichlorobenzene	ND	2.1	0.41	600	ug/L
OAPIS-1	9/22/2020	1,3-Dichlorobenzene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	1,4-Dichlorobenzene	ND	2.1	0.41	75	ug/L
OAPIS-1	9/22/2020	1,4-Dioxane	2.4	2.1	0.41	4.59	ug/L
OAPIS-1	9/22/2020	1-Methylnaphthalene	ND	2.1	0.41	11.38	ug/L
OAPIS-1	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	2.1	0.41	240	ug/L
OAPIS-1	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	2,4,5-Trichlorophenol	ND	2.1	0.41	1166	ug/L
OAPIS-1	9/22/2020	2,4,6-Trichlorophenol	ND	2.1	0.41	11.9*	ug/L
OAPIS-1	9/22/2020	2,4-Dichlorophenol	ND	2.1	0.41	45.3	ug/L
OAPIS-1	9/22/2020	2,4-Dimethylphenol	ND	2.1	0.41	354	ug/L
OAPIS-1	9/22/2020	2,4-Dinitrophenol	ND	2.1	0.41	38.7	ug/L
OAPIS-1	9/22/2020	2,4-Dinitrotoluene	ND	2.1	0.41	45.3	ug/L
OAPIS-1	9/22/2020	2,6-Dinitrotoluene	*ND*	*0.82*	0.41	0.485	ug/L
OAPIS-1	9/22/2020	2-Chloronaphthalene	ND	2.1	0.41	733	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	2-Chlorophenol	ND	2.1	0.41	91	ug/L
OAPIS-1	9/22/2020	2-Methylnaphthalene	ND	2.1	0.41	35.1	ug/L
OAPIS-1	9/22/2020	2-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	2-Nitroaniline	ND	2.1	0.41	190	ug/L
OAPIS-1	9/22/2020	2-Nitrophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	3,4-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	3,3-Dichlorobenzidine	*ND*	*2.1*	0.41	1.25	ug/L
OAPIS-1	9/22/2020	3-Nitroaniline	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.1*	0.41	1.52	ug/L
OAPIS-1	9/22/2020	4-Bromophenyl-phenylether	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Chloro-3-Methylphenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Chloroaniline	*ND*	*2.1*	0.41	0.37	ug/L
OAPIS-1	9/22/2020	4-Chlorophenyl-phenylether	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	4-Nitroaniline	ND	2.1	0.41	3.8	ug/L
OAPIS-1	9/22/2020	4-Nitrophenol	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Acenaphthene	ND	2.1	0.41	535	ug/L
OAPIS-1	9/22/2020	Acenaphthylene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Aniline	ND	2.1	0.41	13	ug/L
OAPIS-1	9/22/2020	Anthracene	ND	2.1	0.41	1721	ug/L
OAPIS-1	9/22/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
OAPIS-1	9/22/2020	Benzidine	*ND*	*2.1*	1	0.0011	ug/L
OAPIS-1	9/22/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
OAPIS-1	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
OAPIS-1	9/22/2020	Benzo(g,h,i)perylene	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Benzo(k)fluoranthene	ND	2.1	0.41	3.43	ug/L
OAPIS-1	9/22/2020	Benzoic Acid	ND	2.1	0.82	75000	ug/L
OAPIS-1	9/22/2020	Benzyl Alcohol	ND	2.1	0.82	2000	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroethoxy)methane	ND	2.1	0.41	59	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*2.1*	0.41	0.137	ug/L
OAPIS-1	9/22/2020	Bis(2-chloroisopropyl)ether	ND	2.1	0.41	9.81	ug/L
OAPIS-1	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	2.1	0.82	55.64	ug/L
OAPIS-1	9/22/2020	Butylbenzylphthalate	ND	2.1	0.82	16	ug/L
OAPIS-1	9/22/2020	Carbazole	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Chrysene	ND	2.1	0.41	34.3	ug/L
OAPIS-1	9/22/2020	Di-n-butylphthalate	ND	2.1	0.82	885	ug/L
OAPIS-1	9/22/2020	Di-n-octylphthalate	ND	2.1	0.82	200	ug/L
OAPIS-1	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OAPIS-1	9/22/2020	Dibenzofuran	ND	2.1	0.41	NA	ug/L
OAPIS-1	9/22/2020	Diethylphthalate	ND	2.1	0.82	14801	ug/L
OAPIS-1	9/22/2020	Dimethylphthalate	ND	2.1	0.82	612	ug/L
OAPIS-1	9/22/2020	Fluoranthene	ND	2.1	0.41	802	ug/L
OAPIS-1	9/22/2020	Fluorene	ND	2.1	0.41	288	ug/L
OAPIS-1	9/22/2020	Hexachlorobenzene	*ND*	*2.1*	0.41	0.0976	ug/L
OAPIS-1	9/22/2020	Hexachlorobutadiene	*ND*	*2.1*	0.41	0.14	ug/L
OAPIS-1	9/22/2020	Hexachlorocyclopentadiene	*ND*	*2.1*	1	0.41	ug/L
OAPIS-1	9/22/2020	Hexachloroethane	ND	2.1	0.41	3.28	ug/L
OAPIS-1	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OAPIS-1	9/22/2020	Isophorone	ND	2.1	0.41	781	ug/L
OAPIS-1	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*2.1*	0.41	0.011	ug/L
OAPIS-1	9/22/2020	N-Nitrosodimethylamine	*ND*	*2.1*	0.41	0.0049	ug/L
OAPIS-1	9/22/2020	N-Nitrosodiphenylamine	ND	2.1	0.41	122	ug/L
OAPIS-1	9/22/2020	Naphthalene	ND	2.1	0.41	30	ug/L
OAPIS-1	9/22/2020	Nitrobenzene	*ND*	*2.1*	0.41	1.4	ug/L
OAPIS-1	9/22/2020	Pentachlorophenol	*ND*	*2.1*	0.82	1	ug/L
OAPIS-1	9/22/2020	Phenanthrene	ND	2.1	0.41	170	ug/L
OAPIS-1	9/22/2020	Phenol	3.9	2.1	0.41	5761	ug/L
OAPIS-1	9/22/2020	Pyrene	ND	2.1	0.41	117	ug/L
OAPIS-1	9/22/2020	Pyridine	ND	2.1	0.82	20	ug/L
OAPIS-1	12/17/2020	Acenaphthene	ND	10.6	0.17	535	ug/L
OAPIS-1	12/17/2020	Acenaphthylene	ND	10.6	0.18	NA	ug/L
OAPIS-1	12/17/2020	Anthracene	ND	10.6	0.191	1721	ug/L
OAPIS-1	12/17/2020	Benzo(a)anthracene	*ND*	*10.6*	0.191	0.12	ug/L
OAPIS-1	12/17/2020	Benzo(a)pyrene	*ND*	*10.6*	0.127	0.2	ug/L
OAPIS-1	12/17/2020	Benzo(b)fluoranthene	*ND*	*10.6*	0.159	0.34	ug/L
OAPIS-1	12/17/2020	Benzo(g,h,i)perylene	ND	10.6	0.244	NA	ug/L
OAPIS-1	12/17/2020	Benzo(k)fluoranthene	*ND*	*10.6*	0.17	3.43	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroethoxy)methane	ND	10.6	0.17	59	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroethyl)ether	*ND*	*10.6*	2.86	0.137	ug/L
OAPIS-1	12/17/2020	Bis(2-ethylhexyl)phthalate	ND	10.6	5.3	55.64	ug/L
OAPIS-1	12/17/2020	4-Bromophenyl-phenylether	ND	10.6	0.212	NA	ug/L
OAPIS-1	12/17/2020	Butylbenzylphthalate	ND	10.6	0.201	16	ug/L
OAPIS-1	12/17/2020	Carbazole	ND	10.6	0.244	NA	ug/L
OAPIS-1	12/17/2020	4-Chloroaniline	*ND*	*10.6*	3.6	0.37	ug/L
OAPIS-1	12/17/2020	4-Chloro-3-Methylphenol	ND	10.6	4.03	NA	ug/L
OAPIS-1	12/17/2020	2-Chloronaphthalene	ND	10.6	0.148	733	ug/L
OAPIS-1	12/17/2020	2-Chlorophenol	ND	10.6	2.33	91	ug/L
OAPIS-1	12/17/2020	4-Chlorophenyl-phenylether	ND	10.6	2.12	NA	ug/L
OAPIS-1	12/17/2020	1,3-Dichlorobenzene	ND	10.6	0.191	NA	ug/L
OAPIS-1	12/17/2020	Chrysene	ND	10.6	0.201	34.3	ug/L
OAPIS-1	12/17/2020	Dibenzo(a,h)anthracene	ND	10.6	0.254	NA	ug/L
OAPIS-1	12/17/2020	1,4-Dichlorobenzene	ND	10.6	0.17	75	ug/L
OAPIS-1	12/17/2020	Dibenzofuran	ND	10.6	0.18	NA	ug/L
OAPIS-1	12/17/2020	3,3-Dichlorobenzidine	*ND*	*10.6*	2.76	1.25	ug/L
OAPIS-1	12/17/2020	2,4-Dichlorophenol	ND	10.6	3.18	45.3	ug/L
OAPIS-1	12/17/2020	Diethylphthalate	ND	10.6	0.254	14801	ug/L
OAPIS-1	12/17/2020	2,4-Dimethylphenol	ND	10.6	3.71	354	ug/L
OAPIS-1	12/17/2020	Di-n-butylphthalate	ND	10.6	2.86	885	ug/L
OAPIS-1	12/17/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.6*	1.7	1.52	ug/L
OAPIS-1	12/17/2020	2,4-Dinitrophenol	ND	31.8	3.6	38.7	ug/L
OAPIS-1	12/17/2020	2,4-Dinitrotoluene	ND	10.6	2.01	45.3	ug/L
OAPIS-1	12/17/2020	2,6-Dinitrotoluene	*ND*	*10.6*	2.01	0.485	ug/L
OAPIS-1	12/17/2020	Di-n-octylphthalate	ND	10.6	0.18	200	ug/L
OAPIS-1	12/17/2020	Fluoranthene	ND	10.6	0.191	802	ug/L
OAPIS-1	12/17/2020	Fluorene	ND	10.6	0.191	288	ug/L
OAPIS-1	12/17/2020	Hexachlorobenzene	*ND*	*10.6*	0.18	0.0976	ug/L
OAPIS-1	12/17/2020	Hexachlorocyclopentadiene	*ND*	*21.2*	2.76	0.41	ug/L
OAPIS-1	12/17/2020	Hexachloroethane	*ND*	*10.6*	4.45	3.28	ug/L
OAPIS-1	12/17/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.6*	0.233	0.343	ug/L
OAPIS-1	12/17/2020	Isophorone	ND	10.6	0.148	781	ug/L
OAPIS-1	12/17/2020	2-Methylphenol	ND	10.6	1.91	NA	ug/L
OAPIS-1	12/17/2020	Naphthalene	ND	10.6	0.18	30	ug/L
OAPIS-1	12/17/2020	2-Nitroaniline	ND	10.6	2.33	190	ug/L
OAPIS-1	12/17/2020	3-Nitroaniline	ND	10.6	1.91	NA	ug/L
OAPIS-1	12/17/2020	4-Nitroaniline	*ND*	*10.6*	1.59	3.8	ug/L
OAPIS-1	12/17/2020	Nitrobenzene	*ND*	*10.6*	0.138	1.4	ug/L
OAPIS-1	12/17/2020	2-Nitrophenol	ND	10.6	5.51	NA	ug/L
OAPIS-1	12/17/2020	4-Nitrophenol	ND	10.6	2.23	NA	ug/L
OAPIS-1	12/17/2020	N-Nitrosodi-n-propylamine	*ND*	*10.6*	3.5	0.011	ug/L
OAPIS-1	12/17/2020	N-Nitrosodiphenylamine	ND	10.6	0.191	122	ug/L
OAPIS-1	12/17/2020	Pentachlorophenol	*ND*	*21.2*	1.48	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	12/17/2020	Phenanthrene	ND	10.6	0.191	170	ug/L
OAPIS-1	12/17/2020	Phenol	ND	10.6	2.76	5761	ug/L
OAPIS-1	12/17/2020	Pyrene	ND	10.6	0.223	117	ug/L
OAPIS-1	12/17/2020	2,4,5-Trichlorophenol	ND	10.6	3.92	1166	ug/L
OAPIS-1	12/17/2020	2,4,6-Trichlorophenol	ND	10.6	3.71	11.9*	ug/L
OAPIS-1	12/17/2020	Dimethylphthalate	ND	10.6	0.18	612	ug/L
OAPIS-1	12/17/2020	Aniline	ND	10.6	4.03	13	ug/L
OAPIS-1	12/17/2020	Benzoic Acid	ND	31.8	7.74	75000	ug/L
OAPIS-1	12/17/2020	Benzyl Alcohol	ND	10.6	2.12	2000	ug/L
OAPIS-1	12/17/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.6*	0.17	9.81	ug/L
OAPIS-1	12/17/2020	N-Nitrosodimethylamine	*ND*	*10.6*	3.71	0.0049	ug/L
OAPIS-1	12/17/2020	Pyridine	ND	10.6	3.39	20	ug/L
OAPIS-1	12/17/2020	1,2,4-Trichlorobenzene	ND	10.6	0.191	70	ug/L
OAPIS-1	12/17/2020	1,2-Dichlorobenzene	ND	10.6	0.18	600	ug/L
OAPIS-1	12/17/2020	Azobenzene	*ND*	*10.6*	1.06	0.12	ug/L
OW-01	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-01	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-01	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-01	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-01	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-01	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-01	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-01	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-01	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-01	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-01	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-01	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-01	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-01	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-01	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-01	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-01	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-01	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-01	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-01	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-01	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-01	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-01	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-01	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-01	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-01	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-01	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-01	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-01	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-01	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-01	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-01	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-01	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-01	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-01	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-01	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-01	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-01	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-01	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-01	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-01	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-01	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-01	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-01	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-01	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-01	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-01	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-01	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-01	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-01	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-01	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-01	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-01	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-01	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-01	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-01	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-01	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-01	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-01	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-01	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-01	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-01	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-01	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-01	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-01	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-01	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-01	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-01	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-01	9/11/2014	Benzo(a)pyrene	*ND*	*50*	16	0.2	ug/L
OW-01	9/11/2014	2,4-Dinitrophenol	*ND*	*100*	16	38.7	ug/L
OW-01	9/11/2014	Dibenzo(a,h)anthracene	ND	50	15	NA	ug/L
OW-01	9/11/2014	Benzo(a)anthracene	*ND*	*50*	15	0.12	ug/L
OW-01	9/11/2014	4-Chloro-3-Methylphenol	ND	50	18	NA	ug/L
OW-01	9/11/2014	Aniline	*ND*	*50*	12	13	ug/L
OW-01	9/11/2014	N-Nitrosodimethylamine	*ND*	*50*	12	0.0049	ug/L
OW-01	9/11/2014	Benzoic Acid	ND	100	11	75000	ug/L
OW-01	9/11/2014	Hexachloroethane	*ND*	*50*	9.5	3.28	ug/L
OW-01	9/11/2014	Hexachlorocyclopentadiene	*ND*	*50*	15	0.41	ug/L
OW-01	9/11/2014	Isophorone	ND	50	15	781	ug/L
OW-01	9/11/2014	Acenaphthene	ND	50	15	535	ug/L
OW-01	9/11/2014	Diethylphthalate	ND	50	21	14801	ug/L
OW-01	9/11/2014	Di-n-butylphthalate	ND	50	18	885	ug/L
OW-01	9/11/2014	Phenanthrene	ND	50	13	170	ug/L
OW-01	9/11/2014	Butylbenzylphthalate	*ND*	*50*	16	16	ug/L
OW-01	9/11/2014	N-Nitrosodiphenylamine	ND	50	14	122	ug/L
OW-01	9/11/2014	Fluorene	ND	50	15	288	ug/L
OW-01	9/11/2014	Carbazole	ND	50	14	NA	ug/L
OW-01	9/11/2014	Hexachlorobutadiene	*ND*	*50*	15	0.14	ug/L
OW-01	9/11/2014	Pentachlorophenol	*ND*	*100*	12	1	ug/L
OW-01	9/11/2014	2,4,6-Trichlorophenol	ND	50	9.1	11.9*	ug/L
OW-01	9/11/2014	2-Nitroaniline	ND	50	14	190	ug/L
OW-01	9/11/2014	2-Nitrophenol	ND	50	16	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2014	1-Methylnaphthalene	*ND*	*50*	18	11.38	ug/L
OW-01	9/11/2014	Naphthalene	*ND*	*50*	12	30	ug/L
OW-01	9/11/2014	2-Methylnaphthalene	*ND*	*50*	13	35.1	ug/L
OW-01	9/11/2014	2-Chloronaphthalene	ND	50	15	733	ug/L
OW-01	9/11/2014	3,3-Dichlorobenzidine	*ND*	*50*	12	1.25	ug/L
OW-01	9/11/2014	2-Methylphenol	ND	100	14	NA	ug/L
OW-01	9/11/2014	1,2-Dichlorobenzene	ND	50	8.5	600	ug/L
OW-01	9/11/2014	2-Chlorophenol	ND	50	8.9	91	ug/L
OW-01	9/11/2014	2,4,5-Trichlorophenol	ND	50	16	1166	ug/L
OW-01	9/11/2014	Nitrobenzene	*ND*	*50*	13	1.4	ug/L
OW-01	9/11/2014	3-Nitroaniline	ND	50	18	NA	ug/L
OW-01	9/11/2014	4-Nitroaniline	*ND*	*50*	21	3.8	ug/L
OW-01	9/11/2014	4-Nitrophenol	ND	50	21	NA	ug/L
OW-01	9/11/2014	Benzyl Alcohol	ND	50	9	2000	ug/L
OW-01	9/11/2014	4-Bromophenyl-phenylether	ND	50	15	NA	ug/L
OW-01	9/11/2014	Azobenzene	*ND*	*50*	13	0.12	ug/L
OW-01	9/11/2014	2,4-Dimethylphenol	ND	50	16	354	ug/L
OW-01	9/11/2014	1,4-Dichlorobenzene	ND	50	12	75	ug/L
OW-01	9/11/2014	4-Chloroaniline	*ND*	*50*	13	0.37	ug/L
OW-01	9/11/2014	Phenol	ND	50	7.9	5761	ug/L
OW-01	9/11/2014	Pyridine	*ND*	*50*	7.8	20	ug/L
OW-01	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*50*	8.8	0.137	ug/L
OW-01	9/11/2014	Bis(2-chloroethoxy)methane	ND	50	14	59	ug/L
OW-01	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	50	15	55.64	ug/L
OW-01	9/11/2014	Di-n-octylphthalate	ND	100	14	200	ug/L
OW-01	9/11/2014	Hexachlorobenzene	*ND*	*50*	16	0.0976	ug/L
OW-01	9/11/2014	Anthracene	ND	50	12	1721	ug/L
OW-01	9/11/2014	1,2,4-Trichlorobenzene	ND	50	14	70	ug/L
OW-01	9/11/2014	2,4-Dichlorophenol	*ND*	*100*	15	45.3	ug/L
OW-01	9/11/2014	2,4-Dinitrotoluene	*ND*	*50*	22	45.3	ug/L
OW-01	9/11/2014	Pyrene	ND	50	20	117	ug/L
OW-01	9/11/2014	Dimethylphthalate	ND	50	18	612	ug/L
OW-01	9/11/2014	Dibenzofuran	ND	50	19	NA	ug/L
OW-01	9/11/2014	Benzo(g,h,i)perylene	ND	50	17	NA	ug/L
OW-01	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*50*	17	0.343	ug/L
OW-01	9/11/2014	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OW-01	9/11/2014	Fluoranthene	ND	50	15	802	ug/L
OW-01	9/11/2014	Benzo(k)fluoranthene	*ND*	*50*	18	3.43	ug/L
OW-01	9/11/2014	Acenaphthylene	ND	50	12	NA	ug/L
OW-01	9/11/2014	Chrysene	*ND*	*50*	14	34.3	ug/L
OW-01	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*100*	12	1.52	ug/L
OW-01	9/11/2014	1,3-Dichlorobenzene	ND	50	8.8	NA	ug/L
OW-01	9/11/2014	2,6-Dinitrotoluene	*ND*	*50*	17	0.485	ug/L
OW-01	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*50*	9.7	0.011	ug/L
OW-01	9/11/2014	4-Chlorophenyl-phenylether	ND	50	17	NA	ug/L
OW-01	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*50*	12	9.81	ug/L
OW-01	9/11/2014	3,4-Methylphenol	ND	50	9.1	NA	ug/L
OW-01	6/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-01	6/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-01	6/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-01	6/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-01	6/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Aniline	ND	10	1.5	13	ug/L
OW-01	6/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-01	6/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-01	6/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-01	6/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-01	6/3/2015	Isophorone	ND	10	2	781	ug/L
OW-01	6/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-01	6/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-01	6/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-01	6/3/2015	Phenanthrene	ND	10	2	170	ug/L
OW-01	6/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	6/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-01	6/3/2015	Fluorene	ND	10	1.7	288	ug/L
OW-01	6/3/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-01	6/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-01	6/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-01	6/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-01	6/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-01	6/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-01	6/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-01	6/3/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-01	6/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-01	6/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-01	6/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-01	6/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-01	6/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-01	6/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-01	6/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-01	6/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-01	6/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-01	6/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-01	6/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-01	6/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-01	6/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-01	6/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-01	6/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-01	6/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-01	6/3/2015	Phenol	ND	10	1.1	5761	ug/L
OW-01	6/3/2015	Pyridine	ND	10	1.7	20	ug/L
OW-01	6/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-01	6/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-01	6/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-01	6/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-01	6/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-01	6/3/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-01	6/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-01	6/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-01	6/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-01	6/3/2015	Pyrene	ND	10	2.3	117	ug/L
OW-01	6/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-01	6/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-01	6/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-01	6/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-01	6/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-01	6/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-01	6/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-01	6/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	6/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-01	6/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-01	6/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-01	6/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-01	6/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-01	6/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-01	6/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-01	6/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-01	8/12/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-01	8/12/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-01	8/12/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-01	8/12/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Aniline	ND	10	1.5	13	ug/L
OW-01	8/12/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-01	8/12/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-01	8/12/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-01	8/12/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-01	8/12/2015	Isophorone	ND	10	2	781	ug/L
OW-01	8/12/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-01	8/12/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-01	8/12/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-01	8/12/2015	Phenanthrene	ND	10	2	170	ug/L
OW-01	8/12/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-01	8/12/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-01	8/12/2015	Fluorene	ND	10	1.7	288	ug/L
OW-01	8/12/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-01	8/12/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-01	8/12/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-01	8/12/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-01	8/12/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-01	8/12/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-01	8/12/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-01	8/12/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-01	8/12/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-01	8/12/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-01	8/12/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-01	8/12/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-01	8/12/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-01	8/12/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-01	8/12/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-01	8/12/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-01	8/12/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-01	8/12/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-01	8/12/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-01	8/12/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-01	8/12/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-01	8/12/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-01	8/12/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-01	8/12/2015	Phenol	ND	10	1.1	5761	ug/L
OW-01	8/12/2015	Pyridine	ND	10	1.7	20	ug/L
OW-01	8/12/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-01	8/12/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-01	8/12/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-01	8/12/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-01	8/12/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-01	8/12/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-01	8/12/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-01	8/12/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-01	8/12/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-01	8/12/2015	Pyrene	ND	10	2.3	117	ug/L
OW-01	8/12/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-01	8/12/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-01	8/12/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-01	8/12/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-01	8/12/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-01	8/12/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-01	8/12/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-01	8/12/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-01	8/12/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-01	8/12/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-01	8/12/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-01	8/12/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-01	8/12/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-01	8/12/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-01	8/12/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-01	8/12/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-01	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-01	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-01	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-01	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-01	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-01	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-01	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-01	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-01	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-01	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-01	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-01	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-01	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-01	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-01	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-01	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-01	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-01	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-01	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-01	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-01	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-01	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-01	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-01	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-01	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-01	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-01	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-01	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-01	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-01	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-01	3/27/2019	Aniline	ND	10	6.210394	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-01	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-01	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-01	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-01	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-01	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-01	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-01	3/27/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-01	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-01	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-01	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-01	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-01	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-01	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-01	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-01	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-01	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-01	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-01	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-01	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-01	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-01	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-01	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-01	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-01	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-01	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-01	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-01	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-01	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-01	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-01	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-01	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-01	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-01	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-01	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-01	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-01	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-01	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-01	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-01	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-01	5/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-01	5/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-01	5/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-01	5/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-01	5/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-01	5/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-01	5/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-01	5/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-01	5/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-01	5/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-01	5/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-01	5/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-01	5/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-01	5/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-01	5/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-01	5/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-01	5/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-01	5/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-01	5/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-01	5/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-01	5/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-01	5/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-01	5/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-01	5/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-01	5/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-01	5/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-01	5/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-01	5/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-01	5/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-01	5/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-01	5/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-01	5/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-01	5/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-01	5/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-01	5/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-01	5/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-01	5/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-01	5/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-01	5/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-01	5/21/2019	Benzyl Alcohol	2.4	10	2.360341	2000	ug/L
OW-01	5/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-01	5/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-01	5/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-01	5/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-01	5/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-01	5/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-01	5/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-01	5/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-01	5/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-01	5/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-01	5/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-01	5/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-01	5/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-01	5/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-01	5/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-01	5/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-01	5/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-01	5/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-01	5/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-01	5/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-01	5/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-01	5/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-01	5/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-01	5/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-01	5/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-01	5/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-01	5/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-01	5/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-01	5/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-01	5/21/2019	Pyrene	ND	10	2.5036	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-01	3/9/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-01	3/9/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-01	3/9/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-01	3/9/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-01	3/9/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-01	3/9/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-01	3/9/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-01	3/9/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-01	3/9/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-01	3/9/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-01	3/9/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-01	3/9/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-01	3/9/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-01	3/9/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-01	3/9/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-01	3/9/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-01	3/9/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-01	3/9/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-01	3/9/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-01	3/9/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-01	3/9/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-01	3/9/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-01	3/9/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-01	3/9/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-01	3/9/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-01	3/9/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-01	3/9/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-01	3/9/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-01	3/9/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-01	3/9/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-01	3/9/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-01	3/9/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-01	3/9/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-01	3/9/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-01	3/9/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-01	3/9/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-01	3/9/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-01	3/9/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-01	3/9/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-01	3/9/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-01	3/9/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-01	3/9/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-01	3/9/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-01	3/9/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-01	3/9/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-01	3/9/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-01	3/9/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-01	3/9/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-01	3/9/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-01	3/9/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-01	3/9/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-01	3/9/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-01	3/9/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-01	3/9/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-01	3/9/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-01	9/20/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
OW-10	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-10	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-10	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-10	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-10	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-10	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-10	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-10	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-10	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-10	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-10	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-10	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-10	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-10	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-10	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-10	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-10	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-10	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-10	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-10	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-10	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-10	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-10	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-10	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-10	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-10	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-10	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-10	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-10	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-10	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-10	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-10	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-10	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-10	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-10	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-10	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-10	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-10	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-10	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-10	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-10	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-10	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-10	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-10	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-10	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-10	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-10	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-10	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-10	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-10	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-10	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-10	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-10	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-10	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-10	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-10	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-10	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-10	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-10	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-10	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-10	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-10	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-10	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-10	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-10	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-10	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-10	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-10	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-10	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-10	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-10	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-10	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-10	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-10	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-10	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-10	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-10	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-10	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-10	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-10	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-10	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-10	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-10	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-10	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-10	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-10	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-10	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-10	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-10	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-10	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-10	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-10	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-10	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-10	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-10	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-10	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-10	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-10	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-10	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-10	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-10	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-10	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-10	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-10	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-10	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-10	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-10	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-10	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-10	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-10	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-10	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-10	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-10	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-10	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-10	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-10	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-10	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-10	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-10	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-10	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-10	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-10	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-10	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-10	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-10	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-10	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-10	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-10	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-10	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-10	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-10	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-10	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-10	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-10	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-10	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-10	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-10	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-10	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-10	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-10	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-10	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-10	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-10	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-10	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-10	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-10	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-10	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-10	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-10	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-10	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-10	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-10	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-10	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-10	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-10	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-10	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-10	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-10	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-10	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-10	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-10	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-10	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-10	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-10	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-10	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-10	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-10	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-10	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-10	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-10	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-10	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-10	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-10	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-10	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-10	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-10	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-10	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-10	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-10	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-10	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-10	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-10	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-10	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-10	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-10	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-10	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-10	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-10	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-10	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-10	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-10	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-10	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-10	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-10	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-10	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-10	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-10	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-10	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-10	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-10	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-10	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-10	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-10	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-10	6/3/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-10	6/3/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-10	6/3/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-10	6/3/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-10	6/3/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Aniline	ND	10	1.5	13	ug/L
OW-10	6/3/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-10	6/3/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-10	6/3/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-10	6/3/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-10	6/3/2015	Isophorone	ND	10	2	781	ug/L
OW-10	6/3/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-10	6/3/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-10	6/3/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-10	6/3/2015	Phenanthrene	ND	10	2	170	ug/L
OW-10	6/3/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-10	6/3/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-10	6/3/2015	Fluorene	ND	10	1.7	288	ug/L
OW-10	6/3/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-10	6/3/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-10	6/3/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-10	6/3/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-10	6/3/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-10	6/3/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-10	6/3/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-10	6/3/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-10	6/3/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-10	6/3/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-10	6/3/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-10	6/3/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-10	6/3/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-10	6/3/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-10	6/3/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-10	6/3/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-10	6/3/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-10	6/3/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-10	6/3/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-10	6/3/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-10	6/3/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-10	6/3/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-10	6/3/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-10	6/3/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-10	6/3/2015	Phenol	ND	10	1.1	5761	ug/L
OW-10	6/3/2015	Pyridine	ND	10	1.7	20	ug/L
OW-10	6/3/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-10	6/3/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-10	6/3/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-10	6/3/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-10	6/3/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-10	6/3/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-10	6/3/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-10	6/3/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-10	6/3/2015	Pyrene	ND	10	2.3	117	ug/L
OW-10	6/3/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-10	6/3/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-10	6/3/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-10	6/3/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-10	6/3/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-10	6/3/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-10	6/3/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-10	6/3/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-10	6/3/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-10	6/3/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-10	6/3/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-10	6/3/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-10	6/3/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-10	6/3/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-10	6/3/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-10	6/3/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-10	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-10	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-10	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-10	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-10	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-10	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-10	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-10	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-10	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-10	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-10	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-10	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-10	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-10	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-10	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-10	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-10	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-10	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-10	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-10	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-10	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-10	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-10	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-10	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-10	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-10	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-10	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-10	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-10	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-10	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-10	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-10	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-10	3/27/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-10	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-10	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-10	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-10	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-10	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-10	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-10	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-10	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-10	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-10	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-10	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-10	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-10	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-10	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-10	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-10	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-10	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-10	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-10	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-10	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-10	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-10	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-10	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-10	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-10	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-10	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-10	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-10	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-10	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-10	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-10	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-10	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-10	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-10	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-10	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-10	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-10	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-10	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-10	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-10	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-10	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-10	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-10	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-10	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-10	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-10	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-10	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-10	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-10	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-10	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-10	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-10	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-10	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-10	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-10	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-10	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-10	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-10	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-10	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-10	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-10	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-10	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-10	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-10	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-10	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-10	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-10	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-10	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-10	3/27/2019	Benzoic Acid	6.4	20	6.311561	75000	ug/L
OW-10	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-10	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-10	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-10	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-10	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-10	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-10	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-10	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-10	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-10	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-10	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-10	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-10	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-10	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-10	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-10	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-10	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-10	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-10	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-10	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-10	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-10	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-10	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-10	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-10	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-10	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-10	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-10	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-10	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-10	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-10	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-10	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-10	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-10	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-10	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-10	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-10	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-10	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-10	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-10	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-10	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-10	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-10	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-10	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-10	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-10	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-10	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-10	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-10	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-10	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-10	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-10	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-10	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-10	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-10	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-10	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-10	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
OW-10	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-10	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-10	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-10	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-10	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-10	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-10	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-10	5/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-10	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-10	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-10	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-10	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-10	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-10	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-10	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-10	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-10	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-10	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-10	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-10	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-10	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-10	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-10	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-10	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-10	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-10	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-10	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-10	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-10	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-10	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-10	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-10	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-10	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-10	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-10	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-10	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-10	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-10	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-10	5/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-10	5/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-10	5/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-10	5/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-10	5/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-10	5/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-10	5/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-10	5/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-10	5/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-10	5/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-10	5/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-10	5/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-10	5/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-10	5/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-10	5/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-10	5/28/2019	Aniline	ND	10	3.579516	13	ug/L
OW-10	5/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-10	5/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-10	5/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-10	5/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-10	5/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-10	5/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-10	5/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-10	5/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-10	5/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-10	5/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-10	5/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-10	5/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-10	5/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-10	5/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-10	5/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-10	5/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-10	5/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-10	5/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-10	5/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-10	5/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-10	5/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-10	5/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-10	5/28/2019	Benzoic Acid	12	20	10.723324	75000	ug/L
OW-10	5/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-10	5/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-10	5/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-10	5/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-10	5/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-10	5/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-10	5/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-10	5/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-10	5/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-10	5/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-10	5/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-10	5/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-10	5/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-10	5/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-10	5/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-10	5/28/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-10	5/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-10	5/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-10	5/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-10	5/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-10	5/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-10	5/28/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-10	5/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-10	5/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-10	5/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-10	5/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-10	5/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-10	5/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-10	5/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-10	5/28/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-10	5/28/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-10	5/28/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-10	3/4/2020	1,4-Dioxane	3.4	1	0.2	4.59	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-10	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-10	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-10	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-10	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-10	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-10	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-10	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-10	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-10	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-10	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-10	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-10	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-10	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-10	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-10	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-10	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-10	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-10	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-10	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-10	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-10	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-10	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-10	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-10	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-10	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-10	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-10	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-10	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-10	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-10	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-10	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-10	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-10	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-10	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-10	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-10	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-10	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-10	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-10	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-10	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-10	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-10	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-10	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-10	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-10	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-10	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-10	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-10	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-10	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-10	3/4/2020	1,4-Dioxane	2.6	1	0.2	4.59	ug/L
OW-10	3/4/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-10	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-10	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-10	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-10	3/4/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-10	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-10	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-10	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-10	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-10	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-10	3/4/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-10	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-10	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-10	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-10	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-10	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-10	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-10	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-10	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-10	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-10	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-10	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-10	3/4/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-10	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-10	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-10	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-10	3/4/2020	Bis(2-ethylhexyl)phthalate	3.1	0.5	0.2	55.64	ug/L
OW-10	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-10	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-10	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-10	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-10	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-10	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-10	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-10	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-10	3/4/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-10	3/4/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-10	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-10	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-10	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-10	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-10	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-10	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-10	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-10	3/4/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-10	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-10	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-10	3/4/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-10	3/4/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-10	3/4/2020	Pyrene	ND	0.5	0.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-10	9/20/2020	1,4-Dioxane	0.58	1	0.094	4.59	ug/L
OW-11	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-11	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-11	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-11	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-11	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-11	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-11	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-11	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-11	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-11	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-11	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-11	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-11	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-11	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-11	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-11	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-11	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-11	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-11	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-11	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-11	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-11	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-11	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-11	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-11	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-11	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-11	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-11	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-11	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-11	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-11	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-11	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-11	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-11	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-11	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-11	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-11	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-11	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-11	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-11	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-11	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-11	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-11	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-11	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-11	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-11	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-11	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-11	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-11	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-11	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-11	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-11	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-11	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-11	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-11	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-11	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-11	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-11	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-11	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-11	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-11	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-11	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-11	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-11	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-11	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-11	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-11	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-11	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-11	9/16/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-11	9/16/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	9/16/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-11	9/16/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-11	9/16/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	Aniline	ND	10	2.2	13	ug/L
OW-11	9/16/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-11	9/16/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-11	9/16/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-11	9/16/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-11	9/16/2013	Isophorone	ND	10	1.8	781	ug/L
OW-11	9/16/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-11	9/16/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-11	9/16/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-11	9/16/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-11	9/16/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-11	9/16/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-11	9/16/2013	Fluorene	ND	10	2.5	288	ug/L
OW-11	9/16/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-11	9/16/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-11	9/16/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-11	9/16/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-11	9/16/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-11	9/16/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-11	9/16/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-11	9/16/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-11	9/16/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-11	9/16/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-11	9/16/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-11	9/16/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-11	9/16/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-11	9/16/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-11	9/16/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-11	9/16/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-11	9/16/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-11	9/16/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-11	9/16/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-11	9/16/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-11	9/16/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-11	9/16/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-11	9/16/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-11	9/16/2013	Phenol	ND	10	2.2	5761	ug/L
OW-11	9/16/2013	Pyridine	ND	10	3.5	20	ug/L
OW-11	9/16/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-11	9/16/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-11	9/16/2013	Bis(2-ethylhexyl)phthalate	11	10	2.8	55.64	ug/L
OW-11	9/16/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-11	9/16/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-11	9/16/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-11	9/16/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-11	9/16/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-11	9/16/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-11	9/16/2013	Pyrene	ND	10	2.1	117	ug/L
OW-11	9/16/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-11	9/16/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-11	9/16/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-11	9/16/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-11	9/16/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-11	9/16/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-11	9/16/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-11	9/16/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-11	9/16/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-11	9/16/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-11	9/16/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-11	9/16/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-11	9/16/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-11	9/16/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-11	9/16/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-11	9/16/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-11	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-11	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-11	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-11	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-11	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-11	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-11	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-11	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-11	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-11	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-11	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-11	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-11	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-11	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-11	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-11	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-11	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-11	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-11	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-11	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-11	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-11	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-11	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-11	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-11	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-11	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-11	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-11	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-11	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-11	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-11	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-11	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-11	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-11	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-11	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-11	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-11	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-11	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-11	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-11	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-11	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-11	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-11	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-11	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-11	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-11	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-11	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-11	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-11	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-11	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-11	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-11	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-11	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-11	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-11	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-11	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-11	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-11	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-11	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-11	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-11	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-11	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-11	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-11	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-11	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-11	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-11	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-11	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-11	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-12	8/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-12	8/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	8/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-12	8/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/22/2012	Aniline	ND	10	2	13	ug/L
OW-12	8/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-12	8/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-12	8/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-12	8/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-12	8/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-12	8/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-12	8/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-12	8/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-12	8/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-12	8/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-12	8/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-12	8/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-12	8/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-12	8/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-12	8/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-12	8/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-12	8/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-12	8/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-12	8/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-12	8/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-12	8/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-12	8/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-12	8/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-12	8/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-12	8/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-12	8/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-12	8/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-12	8/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-12	8/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-12	8/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-12	8/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-12	8/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-12	8/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-12	8/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-12	8/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-12	8/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-12	8/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-12	8/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-12	8/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-12	8/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-12	8/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-12	8/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-12	8/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-12	8/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-12	8/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-12	8/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-12	8/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-12	8/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-12	8/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-12	8/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-12	8/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-12	8/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-12	8/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-12	8/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-12	8/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-12	8/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-12	8/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-12	8/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-12	8/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-12	8/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-12	8/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-12	8/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-12	8/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-12	8/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-12	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-12	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-12	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-12	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	Aniline	ND	10	2.2	13	ug/L
OW-12	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-12	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-12	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-12	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-12	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
OW-12	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-12	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-12	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-12	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-12	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-12	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-12	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
OW-12	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-12	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-12	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-12	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-12	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-12	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-12	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-12	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-12	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-12	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-12	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-12	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-12	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-12	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-12	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-12	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-12	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-12	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-12	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-12	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-12	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-12	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-12	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-12	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-12	9/10/2013	Phenol	ND	10	2.2	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
OW-12	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-12	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-12	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-12	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-12	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-12	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-12	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-12	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-12	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-12	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
OW-12	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-12	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-12	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-12	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-12	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-12	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-12	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-12	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-12	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-12	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-12	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-12	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-12	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-12	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-12	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-12	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-12	9/12/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-12	9/12/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-12	9/12/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-12	9/12/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Aniline	ND	10	2.4	13	ug/L
OW-12	9/12/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-12	9/12/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-12	9/12/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-12	9/12/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-12	9/12/2014	Isophorone	ND	10	3.1	781	ug/L
OW-12	9/12/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-12	9/12/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-12	9/12/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-12	9/12/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-12	9/12/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-12	9/12/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-12	9/12/2014	Fluorene	ND	10	2.9	288	ug/L
OW-12	9/12/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-12	9/12/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-12	9/12/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-12	9/12/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-12	9/12/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-12	9/12/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-12	9/12/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-12	9/12/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-12	9/12/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-12	9/12/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-12	9/12/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-12	9/12/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-12	9/12/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-12	9/12/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-12	9/12/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-12	9/12/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-12	9/12/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-12	9/12/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-12	9/12/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-12	9/12/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-12	9/12/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-12	9/12/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-12	9/12/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-12	9/12/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-12	9/12/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-12	9/12/2014	Phenol	ND	10	1.6	5761	ug/L
OW-12	9/12/2014	Pyridine	ND	10	1.6	20	ug/L
OW-12	9/12/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-12	9/12/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-12	9/12/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-12	9/12/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-12	9/12/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-12	9/12/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-12	9/12/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-12	9/12/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-12	9/12/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-12	9/12/2014	Pyrene	ND	10	4	117	ug/L
OW-12	9/12/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-12	9/12/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-12	9/12/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-12	9/12/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-12	9/12/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-12	9/12/2014	Fluoranthene	ND	10	3	802	ug/L
OW-12	9/12/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-12	9/12/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-12	9/12/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-12	9/12/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-12	9/12/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-12	9/12/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-12	9/12/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-12	9/12/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-12	9/12/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-12	9/12/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-12	8/13/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-12	8/13/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-12	8/13/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-12	8/13/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-12	8/13/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Aniline	ND	10	1.5	13	ug/L
OW-12	8/13/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-12	8/13/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-12	8/13/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-12	8/13/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-12	8/13/2015	Isophorone	ND	10	2	781	ug/L
OW-12	8/13/2015	Acenaphthene	ND	10	1.9	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	8/13/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-12	8/13/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-12	8/13/2015	Phenanthrene	ND	10	2	170	ug/L
OW-12	8/13/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-12	8/13/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-12	8/13/2015	Fluorene	ND	10	1.7	288	ug/L
OW-12	8/13/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-12	8/13/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-12	8/13/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-12	8/13/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-12	8/13/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-12	8/13/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-12	8/13/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-12	8/13/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-12	8/13/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-12	8/13/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-12	8/13/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-12	8/13/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-12	8/13/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-12	8/13/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-12	8/13/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-12	8/13/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-12	8/13/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-12	8/13/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-12	8/13/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-12	8/13/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-12	8/13/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-12	8/13/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-12	8/13/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-12	8/13/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-12	8/13/2015	Phenol	ND	10	1.1	5761	ug/L
OW-12	8/13/2015	Pyridine	ND	10	1.7	20	ug/L
OW-12	8/13/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-12	8/13/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-12	8/13/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-12	8/13/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-12	8/13/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-12	8/13/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-12	8/13/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-12	8/13/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-12	8/13/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-12	8/13/2015	Pyrene	ND	10	2.3	117	ug/L
OW-12	8/13/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-12	8/13/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-12	8/13/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-12	8/13/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-12	8/13/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-12	8/13/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-12	8/13/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-12	8/13/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-12	8/13/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-12	8/13/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-12	8/13/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-12	8/13/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-12	8/13/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-12	8/13/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-12	8/13/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-12	8/13/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-13	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-13	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-13	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-13	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-13	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-13	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-13	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-13	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-13	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-13	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-13	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-13	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-13	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-13	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-13	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-13	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-13	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-13	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-13	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-13	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-13	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-13	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-13	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-13	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-13	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-13	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-13	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-13	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-13	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-13	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-13	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-13	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-13	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-13	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-13	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-13	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-13	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-13	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-13	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-13	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-13	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-13	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-13	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-13	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-13	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-13	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-13	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-13	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-13	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-13	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-13	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-13	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-13	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-13	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-13	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-13	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-13	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-13	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-13	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-13	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-13	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-13	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-13	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-13	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-13	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-13	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-13	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-13	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-13	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-13	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-13	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-13	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-13	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-13	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-13	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-13	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-13	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-13	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-13	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-13	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-13	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-13	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-13	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-13	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-13	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-13	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-13	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-13	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-13	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-13	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-13	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-13	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-13	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-13	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-13	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-13	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-13	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-13	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-13	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-13	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-13	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
OW-13	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-13	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-13	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-13	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-13	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-13	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-13	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-13	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-13	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-13	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-13	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-13	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-13	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-13	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-13	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-13	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-13	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-13	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-13	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-13	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-13	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-13	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-13	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-13	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-13	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-13	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-13	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-13	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-13	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-13	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-13	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-13	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-13	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-13	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-13	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-13	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-13	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-13	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-13	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-13	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-13	3/2/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-13	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-13	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-13	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-13	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-13	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-13	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-13	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-13	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-13	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-13	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-13	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-13	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-13	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-13	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-13	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-13	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-13	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-13	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-13	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-13	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-13	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-13	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-13	3/2/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-13	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-13	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-13	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-13	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-13	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-13	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-13	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-13	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-13	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-13	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-13	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-13	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-13	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-13	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-13	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-13	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-13	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-13	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-13	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-13	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-13	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-13	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-13	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-13	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-13	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-13	3/2/2020	1,4-Dioxane	ND	1	0.2	4.59	ug/L
OW-13	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-13	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-13	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-13	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-13	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-13	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-13	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-13	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-13	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-13	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-13	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-13	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-13	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-13	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-13	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-13	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-13	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-13	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-13	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-13	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-13	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-13	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-13	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-13	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-13	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-13	3/2/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-13	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-13	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-13	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-13	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-13	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-13	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-13	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-13	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-13	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-13	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-13	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-13	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-13	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-13	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-13	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-13	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-13	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-13	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-13	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-13	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-13	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-13	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-13	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-13	9/17/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
OW-14	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-14	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-14	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-14	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-14	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-14	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-14	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-14	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-14	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-14	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-14	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-14	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-14	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-14	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-14	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-14	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-14	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-14	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-14	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-14	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-14	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-14	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-14	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-14	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-14	9/15/2014	1-Methylnaphthalene	**16**	10	3.6	11.38	ug/L
OW-14	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-14	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-14	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-14	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-14	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-14	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-14	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-14	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-14	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-14	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-14	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-14	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-14	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-14	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-14	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-14	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-14	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-14	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-14	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-14	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-14	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-14	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-14	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-14	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-14	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-14	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-14	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-14	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-14	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-14	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-14	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-14	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-14	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-14	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-14	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-14	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-14	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-14	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-14	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-14	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-14	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-14	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-14	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-14	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-14	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-14	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-29	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-29	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-29	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-29	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-29	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-29	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-29	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-29	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-29	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-29	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-29	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-29	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-29	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-29	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-29	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-29	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-29	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-29	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-29	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-29	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-29	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-29	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-29	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-29	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-29	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-29	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-29	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-29	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-29	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-29	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-29	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-29	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-29	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-29	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-29	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-29	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-29	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-29	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-29	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-29	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-29	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-29	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-29	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-29	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-29	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-29	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-29	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-29	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-29	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-29	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-29	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-29	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-29	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-29	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-29	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-29	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-29	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-29	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-29	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-29	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-29	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-29	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-29	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-29	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-29	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-29	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-29	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-29	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-29	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-29	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-29	2/24/2020	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-29	2/24/2020	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-29	2/24/2020	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-29	2/24/2020	1,4-Dioxane	1.3	1	1	4.59	ug/L
OW-29	2/24/2020	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
OW-29	2/24/2020	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-29	2/24/2020	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-29	2/24/2020	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-29	2/24/2020	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OW-29	2/24/2020	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-29	2/24/2020	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-29	2/24/2020	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OW-29	2/24/2020	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-29	2/24/2020	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-29	2/24/2020	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OW-29	2/24/2020	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-29	2/24/2020	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-29	2/24/2020	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-29	2/24/2020	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-29	2/24/2020	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-29	2/24/2020	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Aniline	ND	0.5	0.5	13	ug/L
OW-29	2/24/2020	Anthracene	ND	0.5	0.5	1721	ug/L
OW-29	2/24/2020	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OW-29	2/24/2020	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OW-29	2/24/2020	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OW-29	2/24/2020	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-29	2/24/2020	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OW-29	2/24/2020	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-29	2/24/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-29	2/24/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-29	2/24/2020	Bis(2-ethylhexyl)phthalate	0.4	0.5	0.5	55.64	ug/L
OW-29	2/24/2020	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-29	2/24/2020	Carbazole	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-29	2/24/2020	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-29	2/24/2020	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-29	2/24/2020	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-29	2/24/2020	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-29	2/24/2020	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-29	2/24/2020	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-29	2/24/2020	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-29	2/24/2020	Fluorene	ND	0.5	0.5	288	ug/L
OW-29	2/24/2020	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-29	2/24/2020	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-29	2/24/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-29	2/24/2020	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-29	2/24/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OW-29	2/24/2020	Isophorone	ND	0.5	0.5	781	ug/L
OW-29	2/24/2020	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
OW-29	2/24/2020	Naphthalene	ND	0.5	0.5	30	ug/L
OW-29	2/24/2020	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-29	2/24/2020	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-29	2/24/2020	Phenanthrene	ND	0.5	0.5	170	ug/L
OW-29	2/24/2020	Phenol	ND	0.5	0.5	5761	ug/L
OW-29	2/24/2020	Pyrene	ND	0.5	0.5	117	ug/L
OW-29	2/24/2020	Pyridine	ND	0.5	0.5	20	ug/L
OW-29	9/17/2020	1,4-Dioxane	0.3	1	0.094	4.59	ug/L
OW-29	9/17/2020	1,4-Dioxane	0.26	1	0.094	4.59	ug/L
OW-30	9/17/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-30	9/17/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-30	9/17/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/17/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-30	9/17/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-30	9/17/2014	Aniline	ND	10	2.4	13	ug/L
OW-30	9/17/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-30	9/17/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-30	9/17/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-30	9/17/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-30	9/17/2014	Isophorone	ND	10	3.1	781	ug/L
OW-30	9/17/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-30	9/17/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-30	9/17/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-30	9/17/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-30	9/17/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-30	9/17/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-30	9/17/2014	Fluorene	ND	10	2.9	288	ug/L
OW-30	9/17/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-30	9/17/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-30	9/17/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-30	9/17/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-30	9/17/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-30	9/17/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-30	9/17/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-30	9/17/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-30	9/17/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-30	9/17/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-30	9/17/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-30	9/17/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-30	9/17/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-30	9/17/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-30	9/17/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-30	9/17/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-30	9/17/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-30	9/17/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-30	9/17/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-30	9/17/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-30	9/17/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-30	9/17/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-30	9/17/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-30	9/17/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-30	9/17/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-30	9/17/2014	Phenol	ND	10	1.6	5761	ug/L
OW-30	9/17/2014	Pyridine	ND	10	1.6	20	ug/L
OW-30	9/17/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-30	9/17/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-30	9/17/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-30	9/17/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-30	9/17/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-30	9/17/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-30	9/17/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-30	9/17/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-30	9/17/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-30	9/17/2014	Pyrene	ND	10	4	117	ug/L
OW-30	9/17/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-30	9/17/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-30	9/17/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-30	9/17/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-30	9/17/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-30	9/17/2014	Fluoranthene	ND	10	3	802	ug/L
OW-30	9/17/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-30	9/17/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-30	9/17/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-30	9/17/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-30	9/17/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-30	9/17/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-30	9/17/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-30	9/17/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-30	9/17/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-30	9/17/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-50	3/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	3/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	3/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	3/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	3/22/2012	Aniline	ND	10	2	13	ug/L
OW-50	3/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	3/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	3/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	3/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	3/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	3/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	3/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	3/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	3/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	3/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	3/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	3/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	3/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	3/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	3/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	3/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	3/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	3/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	3/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	3/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	3/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	3/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	3/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	3/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	3/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	3/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	3/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	3/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	3/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	3/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	3/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	3/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	3/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	3/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	3/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	3/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	3/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	3/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	3/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	3/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	3/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	3/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	3/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	3/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	3/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	3/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	3/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	3/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	3/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	3/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	3/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	3/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	3/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	3/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	3/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	3/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	3/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	3/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	3/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	3/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	3/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	3/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	3/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	6/13/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	6/13/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	6/13/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	6/13/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	6/13/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	6/13/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	6/13/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	6/13/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	6/13/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	6/13/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	6/13/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	6/13/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	6/13/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	6/13/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	6/13/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	6/13/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	6/13/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	6/13/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	6/13/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	6/13/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	6/13/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	6/13/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	6/13/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	6/13/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	6/13/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	6/13/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	6/13/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	6/13/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	6/13/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	6/13/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	6/13/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	6/13/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	6/13/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	6/13/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	6/13/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	6/13/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	6/13/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	6/13/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	6/13/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	6/13/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	6/13/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	6/13/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	6/13/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	6/13/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	6/13/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	6/13/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	6/13/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	6/13/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	6/13/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	6/13/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	6/13/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	6/13/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	6/13/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	6/13/2012	Aniline	ND	10	2	13	ug/L
OW-50	6/13/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	6/13/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	6/13/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	6/13/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	6/13/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	6/13/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	6/13/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	6/13/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	6/13/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	6/13/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	6/13/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	6/13/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	6/13/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	6/13/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	6/13/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	8/23/2012	Aniline	ND	10	2	13	ug/L
OW-50	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-50	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-50	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-50	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-50	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-50	12/5/2012	Aniline	ND	10	2	13	ug/L
OW-50	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-50	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-50	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-50	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
OW-50	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-50	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-50	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-50	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-50	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-50	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
OW-50	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-50	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-50	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-50	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-50	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-50	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-50	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-50	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-50	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-50	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-50	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-50	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-50	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-50	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-50	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
OW-50	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-50	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-50	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-50	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-50	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-50	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-50	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-50	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
OW-50	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
OW-50	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-50	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-50	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-50	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-50	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-50	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-50	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
OW-50	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-50	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-50	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-50	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-50	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-50	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-50	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-50	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-50	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
OW-50	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-50	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-50	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-50	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-50	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-50	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-50	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-50	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-50	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-50	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-50	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-50	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-50	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-50	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-50	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-50	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-50	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-50	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-50	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-50	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-50	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-50	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-50	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-50	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-50	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-50	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-50	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-50	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-50	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-50	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-50	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-50	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-50	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-50	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-50	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-50	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-50	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-50	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-50	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-50	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-50	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-50	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-50	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-50	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-50	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-50	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-50	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-50	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-50	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-50	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-50	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-50	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-50	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-50	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-50	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-50	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-50	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-50	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-50	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-50	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-50	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-50	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-50	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-50	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-50	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-50	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-50	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-50	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-50	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-50	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-50	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-50	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-50	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
OW-50	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-50	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-50	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-50	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-50	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-50	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-50	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-50	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-50	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-50	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-50	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-50	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-50	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-50	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-50	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-50	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-50	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-50	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-50	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-50	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-50	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-50	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-50	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-50	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-50	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-50	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-50	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-50	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-50	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-50	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-50	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-50	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-50	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-50	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-50	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-50	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-50	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-50	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-50	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-50	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-50	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-50	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-50	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-50	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-50	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-50	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-50	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-50	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-50	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-50	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-50	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-50	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-50	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-50	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-50	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-50	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-50	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-50	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-50	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-50	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-50	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-50	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-50	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-50	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-50	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-50	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-50	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-50	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-50	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-50	8/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-50	8/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-50	8/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-50	8/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-50	8/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Aniline	ND	10	1.5	13	ug/L
OW-50	8/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-50	8/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-50	8/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-50	8/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-50	8/10/2015	Isophorone	ND	10	2	781	ug/L
OW-50	8/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-50	8/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-50	8/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-50	8/10/2015	Phenanthrene	ND	10	2	170	ug/L
OW-50	8/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-50	8/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-50	8/10/2015	Fluorene	ND	10	1.7	288	ug/L
OW-50	8/10/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-50	8/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-50	8/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-50	8/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-50	8/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-50	8/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-50	8/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-50	8/10/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-50	8/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-50	8/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-50	8/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-50	8/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-50	8/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-50	8/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-50	8/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-50	8/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-50	8/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-50	8/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-50	8/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
OW-50	8/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-50	8/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-50	8/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-50	8/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-50	8/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-50	8/10/2015	Phenol	ND	10	1.1	5761	ug/L
OW-50	8/10/2015	Pyridine	ND	10	1.7	20	ug/L
OW-50	8/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-50	8/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-50	8/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-50	8/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-50	8/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-50	8/10/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-50	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-50	8/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-50	8/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-50	8/10/2015	Pyrene	ND	10	2.3	117	ug/L
OW-50	8/10/2015	Dimethylphthalate	ND	10	2	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-50	8/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-50	8/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-50	8/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-50	8/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-50	8/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-50	8/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-50	8/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-50	8/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-50	8/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-50	8/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-50	8/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-50	8/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-50	8/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-50	8/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-50	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-50	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-50	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-50	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-50	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-50	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-50	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-50	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-50	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-50	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-50	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-50	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-50	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-50	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-50	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-50	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-50	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-50	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-50	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-50	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-50	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-50	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-50	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-50	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-50	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-50	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-50	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-50	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-50	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-50	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-50	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-50	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-50	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-50	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-50	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-50	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-50	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-50	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-50	3/27/2019	Benzoic Acid	6.7	20	6.311561	75000	ug/L
OW-50	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-50	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-50	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-50	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-50	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-50	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-50	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-50	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-50	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-50	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-50	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-50	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-50	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-50	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-50	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-50	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-50	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-50	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-50	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-50	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-50	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-50	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-50	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-50	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-50	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-50	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-50	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-50	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-50	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-50	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-50	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-50	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-52	3/22/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	3/22/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	3/22/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	3/22/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	3/22/2012	Aniline	ND	10	2	13	ug/L
OW-52	3/22/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	3/22/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	3/22/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	3/22/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	3/22/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	3/22/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	3/22/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	3/22/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	3/22/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	3/22/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	3/22/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	3/22/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	3/22/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	3/22/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	3/22/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	3/22/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	3/22/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	3/22/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	3/22/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	3/22/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	3/22/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	3/22/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	3/22/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	3/22/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	3/22/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	3/22/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	3/22/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	3/22/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	3/22/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	3/22/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	3/22/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	3/22/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	3/22/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	3/22/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	3/22/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	3/22/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	3/22/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	3/22/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	3/22/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	3/22/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	3/22/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	3/22/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	3/22/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	3/22/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	3/22/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	3/22/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	3/22/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	3/22/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	3/22/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	3/22/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	3/22/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	3/22/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	3/22/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	3/22/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	3/22/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	3/22/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	3/22/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	3/22/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	3/22/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	3/22/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	3/22/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	3/22/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	3/22/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	3/22/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	6/13/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	6/13/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	6/13/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	6/13/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	6/13/2012	Aniline	ND	10	2	13	ug/L
OW-52	6/13/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	6/13/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	6/13/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	6/13/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	6/13/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	6/13/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	6/13/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	6/13/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	6/13/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	6/13/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	6/13/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	6/13/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	6/13/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	6/13/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	6/13/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	6/13/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	6/13/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	6/13/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	6/13/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	6/13/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	6/13/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	6/13/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	6/13/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	6/13/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	6/13/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	6/13/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	6/13/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	6/13/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	6/13/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	6/13/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	6/13/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	6/13/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	6/13/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	6/13/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	6/13/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	6/13/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	6/13/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	6/13/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	6/13/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	6/13/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	6/13/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	6/13/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	6/13/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	6/13/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	6/13/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	6/13/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	6/13/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	6/13/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	6/13/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	6/13/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	6/13/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	6/13/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	6/13/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	6/13/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	6/13/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	6/13/2012	Acenaphthylene	ND	10	2.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	6/13/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	6/13/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	6/13/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	6/13/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	6/13/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	6/13/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	6/13/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	6/13/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	8/23/2012	Aniline	ND	10	2	13	ug/L
OW-52	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
OW-52	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
OW-52	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
OW-52	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	12/5/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
OW-52	12/5/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	12/5/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
OW-52	12/5/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
OW-52	12/5/2012	Aniline	ND	10	2	13	ug/L
OW-52	12/5/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
OW-52	12/5/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
OW-52	12/5/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	12/5/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-52	12/5/2012	Isophorone	ND	10	2.4	781	ug/L
OW-52	12/5/2012	Acenaphthene	ND	10	2.7	535	ug/L
OW-52	12/5/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
OW-52	12/5/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
OW-52	12/5/2012	Phenanthrene	ND	10	2.1	170	ug/L
OW-52	12/5/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	12/5/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
OW-52	12/5/2012	Fluorene	ND	10	2.3	288	ug/L
OW-52	12/5/2012	Carbazole	ND	10	2.6	NA	ug/L
OW-52	12/5/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	12/5/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
OW-52	12/5/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
OW-52	12/5/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
OW-52	12/5/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-52	12/5/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-52	12/5/2012	Naphthalene	ND	10	2.9	30	ug/L
OW-52	12/5/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
OW-52	12/5/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
OW-52	12/5/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
OW-52	12/5/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	12/5/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
OW-52	12/5/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
OW-52	12/5/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	12/5/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
OW-52	12/5/2012	4-Nitroaniline	*ND*	*10*	2.7	3.8	ug/L
OW-52	12/5/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
OW-52	12/5/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
OW-52	12/5/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
OW-52	12/5/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-52	12/5/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
OW-52	12/5/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
OW-52	12/5/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
OW-52	12/5/2012	Phenol	ND	10	2.5	5761	ug/L
OW-52	12/5/2012	Pyridine	ND	10	2.4	20	ug/L
OW-52	12/5/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
OW-52	12/5/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
OW-52	12/5/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	12/5/2012	Di-n-octylphthalate	ND	20	2.8	200	ug/L
OW-52	12/5/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
OW-52	12/5/2012	Anthracene	ND	10	2.8	1721	ug/L
OW-52	12/5/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-52	12/5/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
OW-52	12/5/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	12/5/2012	Pyrene	ND	10	2.9	117	ug/L
OW-52	12/5/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
OW-52	12/5/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
OW-52	12/5/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
OW-52	12/5/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
OW-52	12/5/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
OW-52	12/5/2012	Fluoranthene	ND	10	2.7	802	ug/L
OW-52	12/5/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
OW-52	12/5/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
OW-52	12/5/2012	Chrysene	ND	10	3	34.3	ug/L
OW-52	12/5/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
OW-52	12/5/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
OW-52	12/5/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
OW-52	12/5/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
OW-52	12/5/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	12/5/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
OW-52	12/5/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
OW-52	9/4/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
OW-52	9/4/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	9/4/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
OW-52	9/4/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-52	9/4/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	Aniline	ND	10	2.2	13	ug/L
OW-52	9/4/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
OW-52	9/4/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
OW-52	9/4/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
OW-52	9/4/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
OW-52	9/4/2013	Isophorone	ND	10	1.8	781	ug/L
OW-52	9/4/2013	Acenaphthene	ND	10	2.6	535	ug/L
OW-52	9/4/2013	Diethylphthalate	ND	10	3	14801	ug/L
OW-52	9/4/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-52	9/4/2013	Phenanthrene	ND	10	1.6	170	ug/L
OW-52	9/4/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
OW-52	9/4/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-52	9/4/2013	Fluorene	ND	10	2.5	288	ug/L
OW-52	9/4/2013	Carbazole	ND	10	2.3	NA	ug/L
OW-52	9/4/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
OW-52	9/4/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
OW-52	9/4/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
OW-52	9/4/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
OW-52	9/4/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
OW-52	9/4/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
OW-52	9/4/2013	Naphthalene	ND	10	2.4	30	ug/L
OW-52	9/4/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
OW-52	9/4/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
OW-52	9/4/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
OW-52	9/4/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
OW-52	9/4/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
OW-52	9/4/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
OW-52	9/4/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
OW-52	9/4/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
OW-52	9/4/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
OW-52	9/4/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
OW-52	9/4/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
OW-52	9/4/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
OW-52	9/4/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
OW-52	9/4/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
OW-52	9/4/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
OW-52	9/4/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
OW-52	9/4/2013	Phenol	ND	10	2.2	5761	ug/L
OW-52	9/4/2013	Pyridine	ND	10	3.5	20	ug/L
OW-52	9/4/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
OW-52	9/4/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
OW-52	9/4/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
OW-52	9/4/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
OW-52	9/4/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
OW-52	9/4/2013	Anthracene	ND	10	2.2	1721	ug/L
OW-52	9/4/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
OW-52	9/4/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
OW-52	9/4/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
OW-52	9/4/2013	Pyrene	ND	10	2.1	117	ug/L
OW-52	9/4/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
OW-52	9/4/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
OW-52	9/4/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
OW-52	9/4/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
OW-52	9/4/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-52	9/4/2013	Fluoranthene	ND	10	2.4	802	ug/L
OW-52	9/4/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
OW-52	9/4/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
OW-52	9/4/2013	Chrysene	ND	10	2.7	34.3	ug/L
OW-52	9/4/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-52	9/4/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
OW-52	9/4/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
OW-52	9/4/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
OW-52	9/4/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-52	9/4/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/4/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
OW-52	9/15/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
OW-52	9/15/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
OW-52	9/15/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
OW-52	9/15/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Aniline	ND	10	2.4	13	ug/L
OW-52	9/15/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
OW-52	9/15/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
OW-52	9/15/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
OW-52	9/15/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
OW-52	9/15/2014	Isophorone	ND	10	3.1	781	ug/L
OW-52	9/15/2014	Acenaphthene	ND	10	2.9	535	ug/L
OW-52	9/15/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
OW-52	9/15/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
OW-52	9/15/2014	Phenanthrene	ND	10	2.5	170	ug/L
OW-52	9/15/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
OW-52	9/15/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
OW-52	9/15/2014	Fluorene	ND	10	2.9	288	ug/L
OW-52	9/15/2014	Carbazole	ND	10	2.9	NA	ug/L
OW-52	9/15/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
OW-52	9/15/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
OW-52	9/15/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
OW-52	9/15/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-52	9/15/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
OW-52	9/15/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
OW-52	9/15/2014	Naphthalene	ND	10	2.3	30	ug/L
OW-52	9/15/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
OW-52	9/15/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
OW-52	9/15/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-52	9/15/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
OW-52	9/15/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
OW-52	9/15/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
OW-52	9/15/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
OW-52	9/15/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
OW-52	9/15/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
OW-52	9/15/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
OW-52	9/15/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
OW-52	9/15/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
OW-52	9/15/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
OW-52	9/15/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
OW-52	9/15/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
OW-52	9/15/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-52	9/15/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
OW-52	9/15/2014	Phenol	ND	10	1.6	5761	ug/L
OW-52	9/15/2014	Pyridine	ND	10	1.6	20	ug/L
OW-52	9/15/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-52	9/15/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-52	9/15/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
OW-52	9/15/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
OW-52	9/15/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
OW-52	9/15/2014	Anthracene	ND	10	2.5	1721	ug/L
OW-52	9/15/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
OW-52	9/15/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
OW-52	9/15/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
OW-52	9/15/2014	Pyrene	ND	10	4	117	ug/L
OW-52	9/15/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
OW-52	9/15/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
OW-52	9/15/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
OW-52	9/15/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
OW-52	9/15/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
OW-52	9/15/2014	Fluoranthene	ND	10	3	802	ug/L
OW-52	9/15/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
OW-52	9/15/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
OW-52	9/15/2014	Chrysene	ND	10	2.9	34.3	ug/L
OW-52	9/15/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
OW-52	9/15/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-52	9/15/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
OW-52	9/15/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
OW-52	9/15/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
OW-52	9/15/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
OW-52	9/15/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
OW-52	8/10/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-52	8/10/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
OW-52	8/10/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
OW-52	8/10/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
OW-52	8/10/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Aniline	ND	10	1.5	13	ug/L
OW-52	8/10/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
OW-52	8/10/2015	Benzoic Acid	ND	20	1	75000	ug/L
OW-52	8/10/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
OW-52	8/10/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
OW-52	8/10/2015	Isophorone	ND	10	2	781	ug/L
OW-52	8/10/2015	Acenaphthene	ND	10	1.9	535	ug/L
OW-52	8/10/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
OW-52	8/10/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
OW-52	8/10/2015	Phenanthrene	ND	10	2	170	ug/L
OW-52	8/10/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
OW-52	8/10/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
OW-52	8/10/2015	Fluorene	ND	10	1.7	288	ug/L
OW-52	8/10/2015	Carbazole	ND	10	1.5	NA	ug/L
OW-52	8/10/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
OW-52	8/10/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
OW-52	8/10/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
OW-52	8/10/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
OW-52	8/10/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
OW-52	8/10/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
OW-52	8/10/2015	Naphthalene	ND	10	1.8	30	ug/L
OW-52	8/10/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
OW-52	8/10/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
OW-52	8/10/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
OW-52	8/10/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
OW-52	8/10/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
OW-52	8/10/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
OW-52	8/10/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
OW-52	8/10/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
OW-52	8/10/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
OW-52	8/10/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
OW-52	8/10/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
OW-52	8/10/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
OW-52	8/10/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
OW-52	8/10/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
OW-52	8/10/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
OW-52	8/10/2015	Phenol	ND	10	1.1	5761	ug/L
OW-52	8/10/2015	Pyridine	ND	10	1.7	20	ug/L
OW-52	8/10/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
OW-52	8/10/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
OW-52	8/10/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
OW-52	8/10/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
OW-52	8/10/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
OW-52	8/10/2015	Anthracene	ND	10	1.6	1721	ug/L
OW-52	8/10/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
OW-52	8/10/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
OW-52	8/10/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
OW-52	8/10/2015	Pyrene	ND	10	2.3	117	ug/L
OW-52	8/10/2015	Dimethylphthalate	ND	10	2	612	ug/L
OW-52	8/10/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
OW-52	8/10/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
OW-52	8/10/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
OW-52	8/10/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
OW-52	8/10/2015	Fluoranthene	ND	10	1.5	802	ug/L
OW-52	8/10/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
OW-52	8/10/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
OW-52	8/10/2015	Chrysene	ND	10	2.2	34.3	ug/L
OW-52	8/10/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
OW-52	8/10/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
OW-52	8/10/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
OW-52	8/10/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
OW-52	8/10/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
OW-52	8/10/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
OW-52	8/10/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
OW-52	3/27/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-52	3/27/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-52	3/27/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-52	3/27/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-52	3/27/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-52	3/27/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-52	3/27/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-52	3/27/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-52	3/27/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-52	3/27/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-52	3/27/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-52	3/27/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-52	3/27/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-52	3/27/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-52	3/27/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-52	3/27/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-52	3/27/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-52	3/27/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-52	3/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-52	3/27/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-52	3/27/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-52	3/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-52	3/27/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-52	3/27/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-52	3/27/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-52	3/27/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-52	3/27/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-52	3/27/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-52	3/27/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-52	3/27/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-52	3/27/2019	Aniline	ND	10	6.210394	13	ug/L
OW-52	3/27/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-52	3/27/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-52	3/27/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-52	3/27/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-52	3/27/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-52	3/27/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-52	3/27/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-52	3/27/2019	Benzoic Acid	6.6	20	6.311561	75000	ug/L
OW-52	3/27/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-52	3/27/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-52	3/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-52	3/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-52	3/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-52	3/27/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-52	3/27/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-52	3/27/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-52	3/27/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-52	3/27/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-52	3/27/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-52	3/27/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-52	3/27/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-52	3/27/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-52	3/27/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-52	3/27/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-52	3/27/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-52	3/27/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-52	3/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-52	3/27/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-52	3/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-52	3/27/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-52	3/27/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-52	3/27/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-52	3/27/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-52	3/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-52	3/27/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-52	3/27/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-52	3/27/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-52	3/27/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-52	3/27/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-52	3/27/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-54	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-54	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-54	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-54	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-54	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-54	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-54	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-54	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-54	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-54	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-54	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-54	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-54	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-54	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-54	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-54	6/1/2016	Carbazole	ND	10	2.3	NA	ug/L
OW-54	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-54	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-54	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-54	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-54	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-54	6/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-54	6/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OW-54	6/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OW-54	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-54	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-54	6/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OW-54	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-54	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-54	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-54	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-54	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-54	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-54	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Benzyl Alcohol	5.8	10	3	2000	ug/L
OW-54	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-54	6/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
OW-54	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-54	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-54	6/1/2016	Phenol	ND	10	2	5761	ug/L
OW-54	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-54	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-54	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-54	6/1/2016	Bis(2-ethylhexyl)phthalate	3.4	10	2.6	55.64	ug/L
OW-54	6/1/2016	Di-n-octylphthalate	5	10	2	200	ug/L
OW-54	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-54	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-54	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-54	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-54	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-54	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-54	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-54	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-54	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-54	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-54	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-54	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-54	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-54	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-54	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-54	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-54	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-54	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-54	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-54	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-54	6/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-54	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	3/29/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
OW-54	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-54	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	3/29/2017	Pyridine	ND	10	2.3	20	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	3/29/2017	Bis(2-ethylhexyl)phthalate	5.5	10	4.8	55.64	ug/L
OW-54	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	6/21/2017	Benzoic Acid	9.6	20	3.9	75000	ug/L
OW-54	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-54	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	9/11/2017	Benzoic Acid	7.5	20	3.9	75000	ug/L
OW-54	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-54	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-54	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-54	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-54	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-54	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-54	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-54	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-54	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-54	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-54	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-54	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-54	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-54	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-54	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-54	2/22/2018	Benzoic Acid	9.4	20	3.9	75000	ug/L
OW-54	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-54	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-54	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-54	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-54	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-54	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-54	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-54	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-54	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-54	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-54	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-54	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-54	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-54	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-54	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-54	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-54	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-54	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-54	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-54	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-54	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-54	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-54	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-54	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-54	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-54	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-54	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-54	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-54	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-54	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-54	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-54	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-54	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-54	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-54	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-54	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-54	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-54	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-54	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-54	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-54	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-54	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-54	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-54	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-54	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-54	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-54	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-54	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-54	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-54	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-54	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-54	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-54	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-54	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-54	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-54	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-54	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-54	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-54	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-54	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-54	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-54	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-54	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	5/8/2018	Benzoic Acid	16	20	6.3	75000	ug/L
OW-54	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-54	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-54	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-54	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-54	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	8/28/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-54	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-54	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-54	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-54	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L

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OW-54	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-54	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-54	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-54	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-54	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-54	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-54	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-54	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-54	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-54	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-54	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-54	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-54	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-54	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-54	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-54	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-54	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-54	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-54	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-54	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-54	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-54	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-54	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-54	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-54	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-54	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-54	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-54	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-54	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-54	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-54	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-54	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-54	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-54	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-54	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-54	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-54	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-54	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-54	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-54	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-54	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-54	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-54	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-54	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-54	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-54	11/7/2018	Bis(2-ethylhexyl)phthalate	10	10	8.1	55.64	ug/L
OW-54	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-54	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-54	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-54	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-54	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-54	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-54	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-54	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-54	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-54	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-54	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-54	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-54	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-54	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-54	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-54	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-54	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-54	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-54	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-54	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-54	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-54	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-54	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	2/6/2019	2,4-Dinitrophenol	6.8	20	3.702104	38.7	ug/L
OW-54	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	2/6/2019	Benzoic Acid	7	20	6.311561	75000	ug/L
OW-54	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	2/6/2019	2,4-Dinitrophenol	6.9	20	3.702104	38.7	ug/L
OW-54	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	2/6/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-54	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	2/6/2019	Bis(2-ethylhexyl)phthalate	8.9	10	8.056342	55.64	ug/L
OW-54	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-54	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-54	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	5/2/2019	Benzoic Acid	8.9	20	6.311561	75000	ug/L
OW-54	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-54	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-54	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-54	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-54	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-54	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-54	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-54	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-54	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-54	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-54	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-54	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-54	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-54	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-54	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-54	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-54	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-54	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-54	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-54	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-54	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-54	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-54	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-54	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-54	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-54	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-54	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-54	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-54	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-54	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-54	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-54	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-54	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-54	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L

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Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-54	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-54	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-54	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-54	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-54	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-54	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-54	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-54	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-54	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-54	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-54	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-54	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-54	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-54	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-54	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-54	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-54	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-54	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-54	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-54	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-54	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-54	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-54	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-54	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-54	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-54	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-54	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-54	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-54	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-54	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-54	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-54	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-54	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-54	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-54	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-54	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-54	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-54	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-54	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-54	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-54	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-54	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-54	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-54	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-54	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-54	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-54	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-54	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-54	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-54	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-54	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-54	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-54	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-54	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-54	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-54	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-54	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-54	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-54	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-54	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-54	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-54	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-54	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-54	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-54	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-54	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-54	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-54	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-54	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-54	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-54	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-54	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-54	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-54	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-54	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-54	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-54	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-54	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-54	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-54	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-54	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-54	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-54	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-54	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-54	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-54	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-54	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-54	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-54	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-54	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-54	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-54	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-54	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-54	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-54	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-54	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-54	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-54	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-54	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-54	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-54	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-54	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-54	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-54	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-54	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-54	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-54	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-54	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-54	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-54	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-54	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-54	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-54	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-54	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-54	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-54	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-54	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-54	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-54	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-54	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-54	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-54	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-54	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-54	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-54	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-54	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-54	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-54	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-54	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-54	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-54	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-54	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-54	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-54	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-54	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-54	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-54	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-54	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-54	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-54	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-54	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-54	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-54	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-54	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-54	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-54	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-54	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-54	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-54	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-54	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-54	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-54	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-54	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-54	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-54	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-54	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-54	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-54	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-54	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-54	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-54	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-54	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-54	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-54	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-54	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-54	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-54	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-54	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-54	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-55	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-55	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-55	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-55	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-55	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-55	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-55	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-55	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-55	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-55	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-55	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-55	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-55	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-55	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-55	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-55	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-55	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-55	6/1/2016	Carbazole	2.4	10	2.3	NA	ug/L
OW-55	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-55	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-55	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-55	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-55	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-55	6/1/2016	1-Methylnaphthalene	**41**	10	2.9	11.38	ug/L
OW-55	6/1/2016	Naphthalene	**220**	10	2.6	30	ug/L
OW-55	6/1/2016	2-Methylnaphthalene	**69**	10	2.9	35.1	ug/L
OW-55	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-55	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-55	6/1/2016	2-Methylphenol	19	10	2.5	NA	ug/L
OW-55	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-55	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-55	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-55	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-55	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-55	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-55	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-55	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-55	6/1/2016	2,4-Dimethylphenol	6.6	10	3	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-55	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-55	6/1/2016	Phenol	*27*	10	2	5761	ug/L
OW-55	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-55	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-55	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-55	6/1/2016	Bis(2-ethylhexyl)phthalate	10	10	2.6	55.64	ug/L
OW-55	6/1/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
OW-55	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-55	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-55	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-55	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-55	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-55	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-55	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-55	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-55	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-55	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-55	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-55	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-55	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-55	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-55	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-55	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-55	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-55	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-55	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-55	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-55	6/1/2016	3,4-Methylphenol	28	10	2.3	NA	ug/L
OW-55	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	3/29/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-55	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	3/29/2017	1-Methylnaphthalene	11	10	3.3	11.38	ug/L
OW-55	3/29/2017	Naphthalene	**35**	10	2.9	30	ug/L
OW-55	3/29/2017	2-Methylnaphthalene	15	10	3.3	35.1	ug/L
OW-55	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	3/29/2017	Phenol	26	10	3.1	5761	ug/L
OW-55	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	3/29/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
OW-55	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	3/29/2017	3,4-Methylphenol	3.9	10	3.2	NA	ug/L
OW-55	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	6/21/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-55	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	6/21/2017	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
OW-55	6/21/2017	Naphthalene	**33**	10	2.9	30	ug/L
OW-55	6/21/2017	2-Methylnaphthalene	15	10	3.3	35.1	ug/L
OW-55	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	6/21/2017	Phenol	42	10	3.1	5761	ug/L
OW-55	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	6/21/2017	Bis(2-ethylhexyl)phthalate	6.6	10	4.8	55.64	ug/L
OW-55	6/21/2017	Di-n-octylphthalate	5.2	10	4.7	200	ug/L
OW-55	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	9/11/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-55	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	9/11/2017	1-Methylnaphthalene	**20**	10	3.3	11.38	ug/L
OW-55	9/11/2017	Naphthalene	**41**	10	2.9	30	ug/L
OW-55	9/11/2017	2-Methylnaphthalene	16	10	3.3	35.1	ug/L
OW-55	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	9/11/2017	Phenol	35	10	3.1	5761	ug/L
OW-55	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	9/11/2017	Bis(2-ethylhexyl)phthalate	6.3	10	4.8	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-55	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-55	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-55	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-55	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	12/6/2017	1-Methylnaphthalene	**17**	10	3.3	11.38	ug/L
OW-55	12/6/2017	Naphthalene	17	10	2.9	30	ug/L
OW-55	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-55	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	12/6/2017	Phenol	26	10	3.1	5761	ug/L
OW-55	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-55	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	12/6/2017	Bis(2-ethylhexyl)phthalate	13	10	4.8	55.64	ug/L
OW-55	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-55	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-55	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-55	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-55	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-55	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-55	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-55	2/22/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-55	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-55	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-55	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-55	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-55	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-55	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-55	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-55	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-55	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-55	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-55	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-55	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-55	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-55	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-55	2/22/2018	1-Methylnaphthalene	**19**	10	3.3	11.38	ug/L
OW-55	2/22/2018	Naphthalene	21	10	2.9	30	ug/L
OW-55	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-55	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-55	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-55	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-55	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-55	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-55	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-55	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-55	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-55	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-55	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-55	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-55	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-55	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-55	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-55	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-55	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-55	2/22/2018	Phenol	37	10	3.1	5761	ug/L
OW-55	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-55	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-55	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-55	2/22/2018	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
OW-55	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-55	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-55	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-55	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-55	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-55	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-55	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-55	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-55	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-55	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-55	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-55	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-55	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-55	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-55	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-55	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-55	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-55	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-55	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-55	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-55	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-55	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-55	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-55	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	5/8/2018	Benzoic Acid	17	20	6.3	75000	ug/L
OW-55	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-55	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	5/8/2018	1-Methylnaphthalene	**14**	10	7	11.38	ug/L
OW-55	5/8/2018	Naphthalene	17	10	5	30	ug/L
OW-55	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	5/8/2018	Phenol	20	10	6	5761	ug/L
OW-55	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	5/8/2018	Pyrene	ND	10	6.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	8/28/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-55	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-55	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	8/28/2018	1-Methylnaphthalene	8	10	7	11.38	ug/L
OW-55	8/28/2018	Naphthalene	11	10	5	30	ug/L
OW-55	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	8/28/2018	Phenol	15	10	6	5761	ug/L
OW-55	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-55	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-55	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-55	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-55	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-55	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-55	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-55	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-55	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-55	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-55	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-55	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-55	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-55	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-55	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-55	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-55	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-55	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-55	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-55	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-55	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-55	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-55	11/7/2018	1-Methylnaphthalene	**15**	10	7	11.38	ug/L
OW-55	11/7/2018	Naphthalene	16	10	5	30	ug/L
OW-55	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-55	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-55	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-55	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-55	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-55	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-55	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-55	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-55	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-55	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-55	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-55	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-55	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-55	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-55	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-55	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-55	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-55	11/7/2018	Phenol	19	10	6	5761	ug/L
OW-55	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-55	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-55	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-55	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-55	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-55	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-55	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-55	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-55	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-55	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-55	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-55	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-55	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-55	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-55	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-55	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-55	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-55	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-55	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-55	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-55	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-55	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-55	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-55	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-55	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-55	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-55	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-55	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-55	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-55	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-55	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-55	2/6/2019	1-Methylnaphthalene	**16**	10	6.999122	11.38	ug/L
OW-55	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-55	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-55	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-55	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-55	2/6/2019	2,4-Dinitrophenol	7.9	20	3.702104	38.7	ug/L
OW-55	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-55	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-55	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-55	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-55	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-55	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-55	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-55	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-55	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-55	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-55	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-55	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-55	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-55	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-55	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-55	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-55	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-55	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-55	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-55	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-55	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-55	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-55	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-55	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-55	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-55	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-55	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-55	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-55	2/6/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-55	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-55	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-55	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-55	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-55	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-55	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-55	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-55	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-55	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-55	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-55	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-55	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-55	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-55	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-55	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-55	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-55	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-55	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-55	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-55	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-55	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-55	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-55	2/6/2019	Naphthalene	20	10	5.041403	30	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-55	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-55	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-55	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-55	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-55	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-55	2/6/2019	Phenol	26	10	5.977352	5761	ug/L
OW-55	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-55	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-55	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-55	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-55	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-55	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-55	5/2/2019	1-Methylnaphthalene	**17**	10	6.999122	11.38	ug/L
OW-55	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-55	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-55	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-55	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-55	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-55	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-55	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-55	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-55	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-55	5/2/2019	2-Methylnaphthalene	6.9	10	6.33239	35.1	ug/L
OW-55	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-55	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-55	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-55	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-55	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-55	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-55	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-55	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-55	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-55	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-55	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-55	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-55	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-55	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-55	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-55	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-55	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-55	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-55	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-55	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-55	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-55	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-55	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-55	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-55	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-55	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-55	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-55	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-55	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-55	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-55	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-55	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-55	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-55	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-55	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-55	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-55	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-55	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-55	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-55	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-55	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-55	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-55	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-55	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-55	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-55	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-55	5/2/2019	Naphthalene	26	10	5.041403	30	ug/L
OW-55	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-55	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-55	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-55	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-55	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-55	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-55	5/2/2019	Phenol	34	10	5.977352	5761	ug/L
OW-55	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-55	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	6/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-56	6/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-56	6/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-56	6/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-56	6/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-56	6/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-56	6/1/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
OW-56	6/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-56	6/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-56	6/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-56	6/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-56	6/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-56	6/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-56	6/1/2016	Phenanthrene	ND	10	2.6	170	ug/L
OW-56	6/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-56	6/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-56	6/1/2016	Fluorene	ND	10	2.7	288	ug/L
OW-56	6/1/2016	Carbazole	2.8	10	2.3	NA	ug/L
OW-56	6/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-56	6/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-56	6/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-56	6/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-56	6/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-56	6/1/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
OW-56	6/1/2016	Naphthalene	ND	10	2.6	30	ug/L
OW-56	6/1/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
OW-56	6/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-56	6/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-56	6/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	6/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-56	6/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-56	6/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-56	6/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-56	6/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-56	6/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-56	6/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-56	6/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-56	6/1/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
OW-56	6/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-56	6/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-56	6/1/2016	Phenol	ND	10	2	5761	ug/L
OW-56	6/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-56	6/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-56	6/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-56	6/1/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
OW-56	6/1/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
OW-56	6/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-56	6/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-56	6/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-56	6/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-56	6/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-56	6/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-56	6/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-56	6/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-56	6/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-56	6/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-56	6/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-56	6/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-56	6/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-56	6/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-56	6/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-56	6/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-56	6/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-56	6/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-56	6/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-56	6/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-56	6/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-56	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	3/29/2017	Benzoic Acid	7.7	20	3.9	75000	ug/L
OW-56	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-56	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	3/29/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	3/29/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	3/29/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	3/29/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	3/29/2017	Bis(2-ethylhexyl)phthalate	5.6	10	4.8	55.64	ug/L
OW-56	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	3/29/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	6/21/2017	Benzoic Acid	8.2	20	3.9	75000	ug/L
OW-56	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-56	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	6/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	6/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	6/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	6/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	6/21/2017	Di-n-octylphthalate	5.7	10	4.7	200	ug/L
OW-56	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	9/11/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	9/11/2017	Benzoic Acid	7.9	20	3.9	75000	ug/L
OW-56	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	9/11/2017	Fluorene	ND	10	4	288	ug/L
OW-56	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-56	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-56	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-56	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-56	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-56	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-56	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-56	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-56	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-56	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-56	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-56	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-56	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-56	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-56	2/22/2018	Benzoic Acid	8.6	20	3.9	75000	ug/L
OW-56	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-56	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-56	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-56	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-56	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-56	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-56	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-56	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-56	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-56	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-56	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-56	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-56	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-56	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-56	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-56	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-56	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-56	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-56	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-56	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-56	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-56	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-56	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-56	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-56	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-56	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-56	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-56	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-56	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-56	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-56	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-56	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-56	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-56	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-56	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-56	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-56	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-56	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-56	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-56	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-56	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-56	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-56	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-56	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-56	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-56	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-56	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-56	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-56	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-56	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-56	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-56	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-56	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-56	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-56	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-56	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-56	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-56	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-56	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-56	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-56	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-56	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-56	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	5/8/2018	Benzoic Acid	14	20	6.3	75000	ug/L
OW-56	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-56	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	5/8/2018	Phenol	ND	10	6	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	8/28/2018	Benzoic Acid	6.8	20	6.3	75000	ug/L
OW-56	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-56	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-56	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-56	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-56	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-56	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-56	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-56	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-56	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-56	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-56	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-56	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-56	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-56	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-56	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-56	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-56	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-56	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-56	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-56	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-56	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-56	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-56	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-56	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-56	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-56	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-56	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-56	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-56	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-56	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-56	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-56	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-56	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-56	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-56	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-56	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-56	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-56	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-56	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-56	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-56	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-56	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-56	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-56	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-56	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-56	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-56	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-56	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-56	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-56	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-56	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-56	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-56	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-56	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-56	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-56	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-56	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-56	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-56	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-56	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-56	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-56	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-56	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-56	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-56	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-56	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-56	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-56	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-56	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-56	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-56	2/6/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-56	2/6/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-56	2/6/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-56	2/6/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-56	2/6/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-56	2/6/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-56	2/6/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-56	2/6/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-56	2/6/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-56	2/6/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-56	2/6/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-56	2/6/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-56	2/6/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-56	2/6/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-56	2/6/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-56	2/6/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-56	2/6/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-56	2/6/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-56	2/6/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-56	2/6/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-56	2/6/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-56	2/6/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-56	2/6/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-56	2/6/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-56	2/6/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-56	2/6/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-56	2/6/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-56	2/6/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-56	2/6/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-56	2/6/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-56	2/6/2019	Aniline	ND	10	6.210394	13	ug/L
OW-56	2/6/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-56	2/6/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-56	2/6/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-56	2/6/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-56	2/6/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-56	2/6/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-56	2/6/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-56	2/6/2019	Benzoic Acid	7.3	20	6.311561	75000	ug/L
OW-56	2/6/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-56	2/6/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-56	2/6/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-56	2/6/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-56	2/6/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-56	2/6/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-56	2/6/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-56	2/6/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-56	2/6/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-56	2/6/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-56	2/6/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-56	2/6/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/6/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-56	2/6/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-56	2/6/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-56	2/6/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-56	2/6/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-56	2/6/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-56	2/6/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-56	2/6/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-56	2/6/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-56	2/6/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-56	2/6/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-56	2/6/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-56	2/6/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-56	2/6/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-56	2/6/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-56	2/6/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-56	2/6/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-56	2/6/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-56	2/6/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-56	2/6/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-56	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-56	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-56	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-56	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-56	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-56	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-56	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-56	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-56	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-56	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-56	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-56	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-56	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-56	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-56	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-56	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-56	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-56	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-56	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-56	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-56	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-56	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-56	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-56	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-56	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-56	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-56	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-56	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-56	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-56	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-56	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-56	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-56	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-56	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-56	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-56	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-56	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-56	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-56	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-56	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-56	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-56	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-56	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-56	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-56	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-56	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-56	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-56	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-56	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-56	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-56	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-56	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-56	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-56	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-56	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-56	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-56	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-56	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-56	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-56	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-56	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-56	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-56	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-56	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-56	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-56	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-56	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-56	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-56	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-56	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-56	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-56	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-56	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-56	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-56	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-56	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-56	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-56	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-56	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-56	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-56	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-56	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-56	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-56	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-56	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-56	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-56	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-56	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-56	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-56	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-56	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-56	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-56	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-56	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-56	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-56	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-56	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-56	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-56	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-56	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-56	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-56	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-56	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-56	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-56	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-56	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-56	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-56	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-56	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-56	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-56	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-56	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-56	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-56	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-56	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-56	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-56	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-56	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-56	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-56	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-56	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-56	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-56	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-56	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-56	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-56	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-56	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-56	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-56	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-56	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-56	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-56	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-56	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-56	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-56	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-56	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-56	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-56	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-56	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-56	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-56	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-56	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-56	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-56	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-56	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-56	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-56	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-56	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-56	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-56	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-56	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-56	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-56	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-56	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-56	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-56	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-56	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-56	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-56	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-56	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-56	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-56	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-56	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-56	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-56	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-56	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-56	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-56	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-56	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-56	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-56	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-56	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-56	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-56	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-56	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-56	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-56	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-56	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-56	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-56	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-56	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-56	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-56	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-56	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-56	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-56	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-56	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-56	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-56	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-56	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-56	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-56	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-56	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-56	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-56	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-56	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-56	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-56	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-56	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-56	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-56	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-56	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-56	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-56	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-56	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-56	3/2/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-56	3/2/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-56	3/2/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-56	3/2/2020	1,4-Dioxane	0.8	1	0.2	4.59	ug/L
OW-56	3/2/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-56	3/2/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-56	3/2/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-56	3/2/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-56	3/2/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-56	3/2/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-56	3/2/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-56	3/2/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-56	3/2/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-56	3/2/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-56	3/2/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-56	3/2/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-56	3/2/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-56	3/2/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-56	3/2/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-56	3/2/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-56	3/2/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-56	3/2/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-56	3/2/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-56	3/2/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-56	3/2/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-56	3/2/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-56	3/2/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-56	3/2/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-56	3/2/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-56	3/2/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-56	3/2/2020	Bis(2-ethylhexyl)phthalate	0.84	0.5	0.2	55.64	ug/L
OW-56	3/2/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-56	3/2/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-56	3/2/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-56	3/2/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-56	3/2/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-56	3/2/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-56	3/2/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-56	3/2/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-56	3/2/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-56	3/2/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-56	3/2/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-56	3/2/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-56	3/2/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-56	3/2/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-56	3/2/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-56	3/2/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-56	3/2/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-56	3/2/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-56	3/2/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-56	3/2/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-56	3/2/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-56	3/2/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-56	3/2/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-56	3/2/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-56	9/21/2020	1,4-Dioxane	**6.1**	1	0.094	4.59	ug/L
OW-57	10/1/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-57	10/1/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-57	10/1/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-57	10/1/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-57	10/1/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Aniline	ND	10	2.4	13	ug/L
OW-57	10/1/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-57	10/1/2016	Benzoic Acid	32	20	2.6	75000	ug/L
OW-57	10/1/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-57	10/1/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-57	10/1/2016	Isophorone	ND	10	2.6	781	ug/L
OW-57	10/1/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-57	10/1/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-57	10/1/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-57	10/1/2016	Phenanthrene	7.6	10	2.6	170	ug/L
OW-57	10/1/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-57	10/1/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-57	10/1/2016	Fluorene	7.2	10	2.7	288	ug/L
OW-57	10/1/2016	Carbazole	4.2	10	2.3	NA	ug/L
OW-57	10/1/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-57	10/1/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-57	10/1/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-57	10/1/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-57	10/1/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-57	10/1/2016	1-Methylnaphthalene	**110**	10	2.9	11.38	ug/L
OW-57	10/1/2016	Naphthalene	**140**	10	2.6	30	ug/L
OW-57	10/1/2016	2-Methylnaphthalene	**98**	10	2.9	35.1	ug/L
OW-57	10/1/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-57	10/1/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-57	10/1/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
OW-57	10/1/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-57	10/1/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-57	10/1/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-57	10/1/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-57	10/1/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-57	10/1/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-57	10/1/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-57	10/1/2016	2,4-Dimethylphenol	8.4	10	3	354	ug/L
OW-57	10/1/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-57	10/1/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-57	10/1/2016	Phenol	88	10	2	5761	ug/L
OW-57	10/1/2016	Pyridine	ND	10	2.2	20	ug/L
OW-57	10/1/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-57	10/1/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-57	10/1/2016	Bis(2-ethylhexyl)phthalate	4.2	10	2.6	55.64	ug/L
OW-57	10/1/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
OW-57	10/1/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-57	10/1/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-57	10/1/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-57	10/1/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-57	10/1/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-57	10/1/2016	Pyrene	ND	10	3.1	117	ug/L
OW-57	10/1/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-57	10/1/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-57	10/1/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-57	10/1/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-57	10/1/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-57	10/1/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-57	10/1/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-57	10/1/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-57	10/1/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
OW-57	10/1/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-57	10/1/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-57	10/1/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-57	10/1/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-57	10/1/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-57	10/1/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
OW-57	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	3/30/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	3/30/2017	Benzoic Acid	19	20	3.9	75000	ug/L
OW-57	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-57	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	3/30/2017	Fluorene	ND	10	4	288	ug/L
OW-57	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	3/30/2017	1-Methylnaphthalene	**45**	10	3.3	11.38	ug/L
OW-57	3/30/2017	Naphthalene	**58**	10	2.9	30	ug/L
OW-57	3/30/2017	2-Methylnaphthalene	28	10	3.3	35.1	ug/L
OW-57	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	3/30/2017	Phenol	7.1	10	3.1	5761	ug/L
OW-57	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	3/30/2017	Bis(2-ethylhexyl)phthalate	6.7	10	4.8	55.64	ug/L
OW-57	3/30/2017	Di-n-octylphthalate	5.1	10	4.7	200	ug/L
OW-57	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	6/21/2017	Benzoic Acid	36	20	3.9	75000	ug/L
OW-57	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-57	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	6/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-57	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	6/21/2017	1-Methylnaphthalene	**51**	10	3.3	11.38	ug/L
OW-57	6/21/2017	Naphthalene	**43**	10	2.9	30	ug/L
OW-57	6/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-57	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	6/21/2017	Phenol	210	10	3.1	5761	ug/L
OW-57	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	6/21/2017	Bis(2-ethylhexyl)phthalate	5.8	10	4.8	55.64	ug/L
OW-57	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	6/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	9/19/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
OW-57	9/19/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
OW-57	9/19/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
OW-57	9/19/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
OW-57	9/19/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
OW-57	9/19/2017	Aniline	*ND*	*50*	15	13	ug/L
OW-57	9/19/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
OW-57	9/19/2017	Benzoic Acid	69	100	20	75000	ug/L
OW-57	9/19/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
OW-57	9/19/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
OW-57	9/19/2017	Isophorone	ND	50	22	781	ug/L
OW-57	9/19/2017	Acenaphthene	ND	50	18	535	ug/L
OW-57	9/19/2017	Diethylphthalate	ND	50	20	14801	ug/L
OW-57	9/19/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
OW-57	9/19/2017	Phenanthrene	ND	50	22	170	ug/L
OW-57	9/19/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
OW-57	9/19/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
OW-57	9/19/2017	Fluorene	ND	50	20	288	ug/L
OW-57	9/19/2017	Carbazole	ND	50	23	NA	ug/L
OW-57	9/19/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
OW-57	9/19/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
OW-57	9/19/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
OW-57	9/19/2017	2-Nitroaniline	ND	50	25	190	ug/L
OW-57	9/19/2017	2-Nitrophenol	ND	50	26	NA	ug/L
OW-57	9/19/2017	1-Methylnaphthalene	**100**	50	17	11.38	ug/L
OW-57	9/19/2017	Naphthalene	**75**	50	14	30	ug/L
OW-57	9/19/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
OW-57	9/19/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
OW-57	9/19/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
OW-57	9/19/2017	2-Methylphenol	ND	50	17	NA	ug/L
OW-57	9/19/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
OW-57	9/19/2017	2-Chlorophenol	ND	50	38	91	ug/L
OW-57	9/19/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
OW-57	9/19/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
OW-57	9/19/2017	3-Nitroaniline	ND	50	22	NA	ug/L
OW-57	9/19/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
OW-57	9/19/2017	4-Nitrophenol	ND	50	27	NA	ug/L
OW-57	9/19/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
OW-57	9/19/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
OW-57	9/19/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
OW-57	9/19/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/19/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
OW-57	9/19/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
OW-57	9/19/2017	Phenol	290	50	16	5761	ug/L
OW-57	9/19/2017	Pyridine	*ND*	*50*	11	20	ug/L
OW-57	9/19/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
OW-57	9/19/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
OW-57	9/19/2017	Bis(2-ethylhexyl)phthalate	30	50	24	55.64	ug/L
OW-57	9/19/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
OW-57	9/19/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
OW-57	9/19/2017	Anthracene	ND	50	18	1721	ug/L
OW-57	9/19/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
OW-57	9/19/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
OW-57	9/19/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
OW-57	9/19/2017	Pyrene	ND	50	22	117	ug/L
OW-57	9/19/2017	Dimethylphthalate	ND	50	18	612	ug/L
OW-57	9/19/2017	Dibenzofuran	ND	50	20	NA	ug/L
OW-57	9/19/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
OW-57	9/19/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
OW-57	9/19/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
OW-57	9/19/2017	Fluoranthene	ND	50	21	802	ug/L
OW-57	9/19/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
OW-57	9/19/2017	Acenaphthylene	ND	50	18	NA	ug/L
OW-57	9/19/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
OW-57	9/19/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
OW-57	9/19/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
OW-57	9/19/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
OW-57	9/19/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
OW-57	9/19/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
OW-57	9/19/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
OW-57	9/19/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
OW-57	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-57	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	12/6/2017	Benzoic Acid	39	20	3.9	75000	ug/L
OW-57	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-57	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-57	12/6/2017	Acenaphthene	4.2	10	3.6	535	ug/L
OW-57	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-57	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	12/6/2017	Fluorene	5.4	10	4	288	ug/L
OW-57	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	12/6/2017	1-Methylnaphthalene	**92**	10	3.3	11.38	ug/L
OW-57	12/6/2017	Naphthalene	**64**	10	2.9	30	ug/L
OW-57	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-57	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	12/6/2017	Phenol	130	10	3.1	5761	ug/L
OW-57	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-57	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-57	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-57	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-57	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	2/20/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-57	2/20/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-57	2/20/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-57	2/20/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	2/20/2018	Aniline	ND	10	3.1	13	ug/L
OW-57	2/20/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-57	2/20/2018	Benzoic Acid	43	20	3.9	75000	ug/L
OW-57	2/20/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-57	2/20/2018	Isophorone	ND	10	4.4	781	ug/L
OW-57	2/20/2018	Acenaphthene	5.3	10	3.6	535	ug/L
OW-57	2/20/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-57	2/20/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-57	2/20/2018	Phenanthrene	6.3	10	4.3	170	ug/L
OW-57	2/20/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-57	2/20/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-57	2/20/2018	Fluorene	6	10	4	288	ug/L
OW-57	2/20/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-57	2/20/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-57	2/20/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-57	2/20/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-57	2/20/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-57	2/20/2018	1-Methylnaphthalene	**98**	10	3.3	11.38	ug/L
OW-57	2/20/2018	Naphthalene	**73**	10	2.9	30	ug/L
OW-57	2/20/2018	2-Methylnaphthalene	29	10	3.3	35.1	ug/L
OW-57	2/20/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-57	2/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-57	2/20/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-57	2/20/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-57	2/20/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-57	2/20/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-57	2/20/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-57	2/20/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-57	2/20/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-57	2/20/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-57	2/20/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-57	2/20/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-57	2/20/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-57	2/20/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-57	2/20/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-57	2/20/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-57	2/20/2018	Phenol	67	10	3.1	5761	ug/L
OW-57	2/20/2018	Pyridine	ND	10	2.3	20	ug/L
OW-57	2/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-57	2/20/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-57	2/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-57	2/20/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-57	2/20/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-57	2/20/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-57	2/20/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-57	2/20/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-57	2/20/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-57	2/20/2018	Pyrene	ND	10	4.4	117	ug/L
OW-57	2/20/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-57	2/20/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-57	2/20/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-57	2/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-57	2/20/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-57	2/20/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-57	2/20/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-57	2/20/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-57	2/20/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-57	2/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-57	2/20/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-57	2/20/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-57	2/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-57	2/20/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-57	2/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-57	2/20/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-57	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	5/8/2018	Benzoic Acid	19	20	6.3	75000	ug/L
OW-57	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-57	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	5/8/2018	1-Methylnaphthalene	**38**	10	7	11.38	ug/L
OW-57	5/8/2018	Naphthalene	25	10	5	30	ug/L
OW-57	5/8/2018	2-Methylnaphthalene	10	10	6.3	35.1	ug/L
OW-57	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	5/8/2018	Phenol	27	10	6	5761	ug/L
OW-57	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	8/28/2018	Benzoic Acid	38	20	6.3	75000	ug/L
OW-57	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-57	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	8/28/2018	1-Methylnaphthalene	**89**	10	7	11.38	ug/L
OW-57	8/28/2018	Naphthalene	**73**	10	5	30	ug/L
OW-57	8/28/2018	2-Methylnaphthalene	16	10	6.3	35.1	ug/L
OW-57	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	8/28/2018	Phenol	68	10	6	5761	ug/L
OW-57	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-57	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	11/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-57	11/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-57	11/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-57	11/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-57	11/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-57	11/29/2018	Benzoic Acid	37	20	6.3	75000	ug/L
OW-57	11/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-57	11/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-57	11/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-57	11/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-57	11/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-57	11/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-57	11/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-57	11/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-57	11/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-57	11/29/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-57	11/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-57	11/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-57	11/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-57	11/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-57	11/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-57	11/29/2018	1-Methylnaphthalene	**54**	10	7	11.38	ug/L
OW-57	11/29/2018	Naphthalene	**51**	10	5	30	ug/L
OW-57	11/29/2018	2-Methylnaphthalene	13	10	6.3	35.1	ug/L
OW-57	11/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-57	11/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-57	11/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-57	11/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-57	11/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-57	11/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-57	11/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-57	11/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-57	11/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-57	11/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-57	11/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-57	11/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-57	11/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-57	11/29/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-57	11/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-57	11/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-57	11/29/2018	Phenol	24	10	6	5761	ug/L
OW-57	11/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-57	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-57	11/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-57	11/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-57	11/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-57	11/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-57	11/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-57	11/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-57	11/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-57	11/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-57	11/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-57	11/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-57	11/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-57	11/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-57	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-57	11/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-57	11/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-57	11/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-57	11/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-57	11/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-57	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-57	11/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-57	11/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-57	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-57	11/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-57	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-57	11/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-57	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-57	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-57	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-57	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-57	2/20/2019	1-Methylnaphthalene	**97**	10	6.999122	11.38	ug/L
OW-57	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-57	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-57	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-57	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-57	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-57	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-57	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-57	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-57	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-57	2/20/2019	2-Methylnaphthalene	30	10	6.33239	35.1	ug/L
OW-57	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-57	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-57	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-57	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-57	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-57	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-57	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-57	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-57	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-57	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-57	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-57	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-57	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-57	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-57	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-57	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
OW-57	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-57	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-57	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-57	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-57	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-57	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-57	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-57	2/20/2019	Benzoic Acid	36	20	6.311561	75000	ug/L
OW-57	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-57	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-57	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-57	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-57	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-57	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-57	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-57	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-57	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-57	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-57	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-57	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-57	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-57	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-57	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-57	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-57	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-57	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-57	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-57	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-57	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-57	2/20/2019	Naphthalene	**89**	10	5.041403	30	ug/L
OW-57	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-57	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-57	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-57	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-57	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-57	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-57	2/20/2019	Phenol	58	10	5.977352	5761	ug/L
OW-57	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-57	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-57	5/16/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
OW-57	5/16/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
OW-57	5/16/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
OW-57	5/16/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
OW-57	5/16/2019	1-Methylnaphthalene	**79**	20	6.138153	11.38	ug/L
OW-57	5/16/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
OW-57	5/16/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
OW-57	5/16/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
OW-57	5/16/2019	2,4-Dimethylphenol	ND	20	5.931986	354	ug/L
OW-57	5/16/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
OW-57	5/16/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
OW-57	5/16/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
OW-57	5/16/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
OW-57	5/16/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
OW-57	5/16/2019	2-Methylnaphthalene	**38**	20	6.037726	35.1	ug/L
OW-57	5/16/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
OW-57	5/16/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
OW-57	5/16/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
OW-57	5/16/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
OW-57	5/16/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
OW-57	5/16/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
OW-57	5/16/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
OW-57	5/16/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
OW-57	5/16/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
OW-57	5/16/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
OW-57	5/16/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
OW-57	5/16/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
OW-57	5/16/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
OW-57	5/16/2019	Acenaphthene	ND	20	5.911782	535	ug/L
OW-57	5/16/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
OW-57	5/16/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
OW-57	5/16/2019	Anthracene	ND	20	5.314345	1721	ug/L
OW-57	5/16/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
OW-57	5/16/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
OW-57	5/16/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
OW-57	5/16/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
OW-57	5/16/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
OW-57	5/16/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L
OW-57	5/16/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
OW-57	5/16/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
OW-57	5/16/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
OW-57	5/16/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
OW-57	5/16/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
OW-57	5/16/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
OW-57	5/16/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
OW-57	5/16/2019	Carbazole	ND	20	5.781013	NA	ug/L
OW-57	5/16/2019	Chrysene	ND	20	5.573246	34.3	ug/L
OW-57	5/16/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
OW-57	5/16/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
OW-57	5/16/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
OW-57	5/16/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
OW-57	5/16/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
OW-57	5/16/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
OW-57	5/16/2019	Fluoranthene	ND	20	4.824429	802	ug/L
OW-57	5/16/2019	Fluorene	8.4	20	5.776977	288	ug/L
OW-57	5/16/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
OW-57	5/16/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
OW-57	5/16/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
OW-57	5/16/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
OW-57	5/16/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L
OW-57	5/16/2019	Isophorone	ND	20	6.092069	781	ug/L
OW-57	5/16/2019	Naphthalene	**80**	20	8.24442	30	ug/L
OW-57	5/16/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
OW-57	5/16/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
OW-57	5/16/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
OW-57	5/16/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
OW-57	5/16/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
OW-57	5/16/2019	Phenanthrene	ND	20	5.554244	170	ug/L
OW-57	5/16/2019	Phenol	36	20	16.073173	5761	ug/L
OW-57	5/16/2019	Pyrene	ND	20	5.007199	117	ug/L
OW-57	5/16/2019	Pyridine	ND	20	19.206273	20	ug/L
OW-57	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-57	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-57	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-57	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-57	8/21/2019	1-Methylnaphthalene	**110**	10	3.069076	11.38	ug/L
OW-57	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-57	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-57	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-57	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-57	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-57	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-57	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-57	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-57	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-57	8/21/2019	2-Methylnaphthalene	**47**	10	3.018863	35.1	ug/L
OW-57	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-57	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-57	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-57	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-57	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-57	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-57	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-57	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-57	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-57	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-57	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-57	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-57	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-57	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-57	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-57	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-57	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-57	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-57	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-57	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-57	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-57	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-57	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-57	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-57	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-57	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-57	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-57	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-57	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-57	8/21/2019	Carbazole	5	10	2.890507	NA	ug/L
OW-57	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-57	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-57	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-57	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-57	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-57	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-57	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-57	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-57	8/21/2019	Fluorene	3.9	10	2.888488	288	ug/L
OW-57	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-57	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-57	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-57	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-57	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-57	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-57	8/21/2019	Naphthalene	**110**	10	4.12221	30	ug/L
OW-57	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-57	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-57	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-57	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-57	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-57	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-57	8/21/2019	Phenol	29	10	8.036586	5761	ug/L
OW-57	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-57	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-57	11/5/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-57	11/5/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-57	11/5/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-57	11/5/2019	1,4-Dioxane	*ND*	*10*	10	4.59	ug/L
OW-57	11/5/2019	1-Methylnaphthalene	**120**	0.5	0.5	11.38	ug/L
OW-57	11/5/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-57	11/5/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-57	11/5/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-57	11/5/2019	2,4-Dimethylphenol	6.9	0.5	0.5	354	ug/L
OW-57	11/5/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-57	11/5/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-57	11/5/2019	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
OW-57	11/5/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-57	11/5/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-57	11/5/2019	2-Methylnaphthalene	**62**	0.5	0.5	35.1	ug/L
OW-57	11/5/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-57	11/5/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-57	11/5/2019	3,4-Methylphenol	1	0.5	0.5	NA	ug/L
OW-57	11/5/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-57	11/5/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-57	11/5/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-57	11/5/2019	Acenaphthylene	1.5	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Aniline	ND	0.5	0.5	13	ug/L
OW-57	11/5/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OW-57	11/5/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-57	11/5/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-57	11/5/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-57	11/5/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-57	11/5/2019	Benzoic Acid	ND	10	10	75000	ug/L
OW-57	11/5/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-57	11/5/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-57	11/5/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-57	11/5/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OW-57	11/5/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-57	11/5/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-57	11/5/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-57	11/5/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-57	11/5/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-57	11/5/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-57	11/5/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-57	11/5/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-57	11/5/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-57	11/5/2019	Fluorene	2.4	0.5	0.5	288	ug/L
OW-57	11/5/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-57	11/5/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-57	11/5/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-57	11/5/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-57	11/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
OW-57	11/5/2019	Isophorone	ND	0.5	0.5	781	ug/L
OW-57	11/5/2019	Naphthalene	**140**	0.5	0.5	30	ug/L
OW-57	11/5/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-57	11/5/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-57	11/5/2019	Phenanthrene	7.5	0.5	0.5	170	ug/L
OW-57	11/5/2019	Phenol	91	0.5	0.5	5761	ug/L
OW-57	11/5/2019	Pyrene	ND	0.5	0.5	117	ug/L
OW-57	11/5/2019	Pyridine	ND	0.5	0.5	20	ug/L
OW-57	3/5/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-57	3/5/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-57	3/5/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-57	3/5/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-57	3/5/2020	1-Methylnaphthalene	**120**	2.5	0.5	11.38	ug/L
OW-57	3/5/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-57	3/5/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-57	3/5/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-57	3/5/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OW-57	3/5/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-57	3/5/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-57	3/5/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-57	3/5/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-57	3/5/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-57	3/5/2020	2-Methylnaphthalene	**58**	2.5	0.5	35.1	ug/L
OW-57	3/5/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-57	3/5/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-57	3/5/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	4,6-Dinitro-2-methylphenol	*ND*	2.5	0.5	1.52	ug/L
OW-57	3/5/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-57	3/5/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Acenaphthene	1.48	2.5	0.5	535	ug/L
OW-57	3/5/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-57	3/5/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-57	3/5/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-57	3/5/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-57	3/5/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-57	3/5/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-57	3/5/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-57	3/5/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-57	3/5/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-57	3/5/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-57	3/5/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-57	3/5/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-57	3/5/2020	Carbazole	6.4	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-57	3/5/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-57	3/5/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-57	3/5/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-57	3/5/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-57	3/5/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-57	3/5/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-57	3/5/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-57	3/5/2020	Fluorene	3.3	2.5	0.5	288	ug/L
OW-57	3/5/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-57	3/5/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-57	3/5/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-57	3/5/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-57	3/5/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-57	3/5/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-57	3/5/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-57	3/5/2020	Naphthalene	**130**	2.5	0.5	30	ug/L
OW-57	3/5/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-57	3/5/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-57	3/5/2020	Phenanthrene	8	2.5	0.5	170	ug/L
OW-57	3/5/2020	Phenol	89	2.5	0.5	5761	ug/L
OW-57	3/5/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-57	3/5/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-58	9/30/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
OW-58	9/30/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
OW-58	9/30/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
OW-58	9/30/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
OW-58	9/30/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Aniline	ND	10	2.4	13	ug/L
OW-58	9/30/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
OW-58	9/30/2016	Benzoic Acid	16	20	2.6	75000	ug/L
OW-58	9/30/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
OW-58	9/30/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
OW-58	9/30/2016	Isophorone	ND	10	2.6	781	ug/L
OW-58	9/30/2016	Acenaphthene	ND	10	2.6	535	ug/L
OW-58	9/30/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
OW-58	9/30/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
OW-58	9/30/2016	Phenanthrene	2.9	10	2.6	170	ug/L
OW-58	9/30/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
OW-58	9/30/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
OW-58	9/30/2016	Fluorene	3.8	10	2.7	288	ug/L
OW-58	9/30/2016	Carbazole	2.8	10	2.3	NA	ug/L
OW-58	9/30/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
OW-58	9/30/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
OW-58	9/30/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
OW-58	9/30/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
OW-58	9/30/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
OW-58	9/30/2016	1-Methylnaphthalene	**65**	10	2.9	11.38	ug/L
OW-58	9/30/2016	Naphthalene	**160**	10	2.6	30	ug/L
OW-58	9/30/2016	2-Methylnaphthalene	**71**	10	2.9	35.1	ug/L
OW-58	9/30/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
OW-58	9/30/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
OW-58	9/30/2016	2-Methylphenol	5.2	10	2.5	NA	ug/L
OW-58	9/30/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
OW-58	9/30/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
OW-58	9/30/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
OW-58	9/30/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
OW-58	9/30/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
OW-58	9/30/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
OW-58	9/30/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
OW-58	9/30/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
OW-58	9/30/2016	2,4-Dimethylphenol	3.9	10	3	354	ug/L
OW-58	9/30/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
OW-58	9/30/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
OW-58	9/30/2016	Phenol	51	10	2	5761	ug/L
OW-58	9/30/2016	Pyridine	ND	10	2.2	20	ug/L
OW-58	9/30/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
OW-58	9/30/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
OW-58	9/30/2016	Bis(2-ethylhexyl)phthalate	2.8	10	2.6	55.64	ug/L
OW-58	9/30/2016	Di-n-octylphthalate	ND	10	2	200	ug/L
OW-58	9/30/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
OW-58	9/30/2016	Anthracene	ND	10	2.5	1721	ug/L
OW-58	9/30/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
OW-58	9/30/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
OW-58	9/30/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
OW-58	9/30/2016	Pyrene	ND	10	3.1	117	ug/L
OW-58	9/30/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
OW-58	9/30/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
OW-58	9/30/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
OW-58	9/30/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
OW-58	9/30/2016	Fluoranthene	ND	10	2.6	802	ug/L
OW-58	9/30/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
OW-58	9/30/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
OW-58	9/30/2016	Chrysene	ND	10	2.8	34.3	ug/L
OW-58	9/30/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	9/30/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
OW-58	9/30/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
OW-58	9/30/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
OW-58	9/30/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
OW-58	9/30/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
OW-58	9/30/2016	3,4-Methylphenol	7.9	10	2.3	NA	ug/L
OW-58	3/29/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	3/29/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	3/29/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	3/29/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	3/29/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	3/29/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	3/29/2017	Benzoic Acid	14	20	3.9	75000	ug/L
OW-58	3/29/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	3/29/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	3/29/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	3/29/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	3/29/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	3/29/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	3/29/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-58	3/29/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	3/29/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	3/29/2017	Fluorene	ND	10	4	288	ug/L
OW-58	3/29/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	3/29/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	3/29/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	3/29/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	3/29/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	3/29/2017	1-Methylnaphthalene	**57**	10	3.3	11.38	ug/L
OW-58	3/29/2017	Naphthalene	**99**	10	2.9	30	ug/L
OW-58	3/29/2017	2-Methylnaphthalene	**45**	10	3.3	35.1	ug/L
OW-58	3/29/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	3/29/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	3/29/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	3/29/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	3/29/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	3/29/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	3/29/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	3/29/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	3/29/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	3/29/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	3/29/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	3/29/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	3/29/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	3/29/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	3/29/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	3/29/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	3/29/2017	Phenol	24	10	3.1	5761	ug/L
OW-58	3/29/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	3/29/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	3/29/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	3/29/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
OW-58	3/29/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	3/29/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	3/29/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	3/29/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	3/29/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	3/29/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	3/29/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	3/29/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	3/29/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	3/29/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	3/29/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	3/29/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	3/29/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	3/29/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	3/29/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	3/29/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	3/29/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	3/29/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	3/29/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	3/29/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	3/29/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	3/29/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	3/29/2017	3,4-Methylphenol	5.4	10	3.2	NA	ug/L
OW-58	6/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	6/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	6/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	6/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	6/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	6/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	6/21/2017	Benzoic Acid	20	20	3.9	75000	ug/L
OW-58	6/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	6/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	6/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	6/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	6/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	6/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	6/21/2017	Phenanthrene	5	10	4.3	170	ug/L
OW-58	6/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	6/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	6/21/2017	Fluorene	ND	10	4	288	ug/L
OW-58	6/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	6/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	6/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	6/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	6/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	6/21/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	6/21/2017	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	6/21/2017	2-Methylnaphthalene	**60**	10	3.3	35.1	ug/L
OW-58	6/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	6/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	6/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	6/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	6/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	6/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	6/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	6/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	6/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	6/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	6/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	6/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	6/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	6/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	6/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	6/21/2017	Phenol	58	10	3.1	5761	ug/L
OW-58	6/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	6/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	6/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	6/21/2017	Bis(2-ethylhexyl)phthalate	5	10	4.8	55.64	ug/L
OW-58	6/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	6/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	6/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	6/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	6/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	6/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	6/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	6/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	6/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	6/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	6/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	6/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	6/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	6/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	6/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	6/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	6/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	6/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	6/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	6/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	6/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	6/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	6/21/2017	3,4-Methylphenol	8	10	3.2	NA	ug/L
OW-58	9/19/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	9/19/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	9/19/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	9/19/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	9/19/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	9/19/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	9/19/2017	Benzoic Acid	21	20	3.9	75000	ug/L
OW-58	9/19/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	9/19/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	9/19/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	9/19/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	9/19/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	9/19/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	9/19/2017	Phenanthrene	4.9	10	4.3	170	ug/L
OW-58	9/19/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	9/19/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	9/19/2017	Fluorene	ND	10	4	288	ug/L
OW-58	9/19/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	9/19/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	9/19/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	9/19/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	9/19/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	9/19/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	9/19/2017	Naphthalene	**110**	10	2.9	30	ug/L
OW-58	9/19/2017	2-Methylnaphthalene	**56**	10	3.3	35.1	ug/L
OW-58	9/19/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	9/19/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	9/19/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	9/19/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	9/19/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	9/19/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	9/19/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	9/19/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	9/19/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	9/19/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	9/19/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	9/19/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	9/19/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	9/19/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	9/19/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	9/19/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	9/19/2017	Phenol	47	10	3.1	5761	ug/L
OW-58	9/19/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	9/19/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	9/19/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	9/19/2017	Bis(2-ethylhexyl)phthalate	4.9	10	4.8	55.64	ug/L
OW-58	9/19/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	9/19/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	9/19/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	9/19/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	9/19/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	9/19/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	9/19/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	9/19/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	9/19/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	9/19/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	9/19/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	9/19/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	9/19/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	9/19/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	9/19/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	9/19/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	9/19/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	9/19/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	9/19/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	9/19/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	9/19/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	9/19/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	9/19/2017	3,4-Methylphenol	4.7	10	3.2	NA	ug/L
OW-58	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-58	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	12/6/2017	Benzoic Acid	22	20	3.9	75000	ug/L
OW-58	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-58	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-58	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-58	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	12/6/2017	1-Methylnaphthalene	**82**	10	3.3	11.38	ug/L
OW-58	12/6/2017	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	12/6/2017	2-Methylnaphthalene	**53**	10	3.3	35.1	ug/L
OW-58	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-58	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	12/6/2017	Phenol	50	10	3.1	5761	ug/L
OW-58	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-58	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-58	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-58	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-58	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-58	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-58	2/20/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-58	2/20/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-58	2/20/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-58	2/20/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	2/20/2018	Aniline	ND	10	3.1	13	ug/L
OW-58	2/20/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-58	2/20/2018	Benzoic Acid	23	20	3.9	75000	ug/L
OW-58	2/20/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-58	2/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-58	2/20/2018	Isophorone	ND	10	4.4	781	ug/L
OW-58	2/20/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-58	2/20/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-58	2/20/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-58	2/20/2018	Phenanthrene	4.8	10	4.3	170	ug/L
OW-58	2/20/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-58	2/20/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-58	2/20/2018	Fluorene	4.9	10	4	288	ug/L
OW-58	2/20/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-58	2/20/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-58	2/20/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-58	2/20/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-58	2/20/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-58	2/20/2018	1-Methylnaphthalene	**90**	10	3.3	11.38	ug/L
OW-58	2/20/2018	Naphthalene	**120**	10	2.9	30	ug/L
OW-58	2/20/2018	2-Methylnaphthalene	**68**	10	3.3	35.1	ug/L
OW-58	2/20/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-58	2/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-58	2/20/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-58	2/20/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-58	2/20/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-58	2/20/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-58	2/20/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-58	2/20/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-58	2/20/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-58	2/20/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-58	2/20/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-58	2/20/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-58	2/20/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	2/20/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-58	2/20/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-58	2/20/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-58	2/20/2018	Phenol	52	10	3.1	5761	ug/L
OW-58	2/20/2018	Pyridine	ND	10	2.3	20	ug/L
OW-58	2/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-58	2/20/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-58	2/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-58	2/20/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-58	2/20/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-58	2/20/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-58	2/20/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-58	2/20/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-58	2/20/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-58	2/20/2018	Pyrene	ND	10	4.4	117	ug/L
OW-58	2/20/2018	Dimethylphthalate	3.7	10	3.6	612	ug/L
OW-58	2/20/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-58	2/20/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-58	2/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-58	2/20/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-58	2/20/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-58	2/20/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-58	2/20/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-58	2/20/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-58	2/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-58	2/20/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-58	2/20/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-58	2/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-58	2/20/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-58	2/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-58	2/20/2018	3,4-Methylphenol	5.7	10	3.2	NA	ug/L
OW-58	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-58	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-58	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-58	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-58	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-58	5/8/2018	Benzoic Acid	25	20	6.3	75000	ug/L
OW-58	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-58	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-58	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-58	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-58	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-58	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-58	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-58	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-58	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-58	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-58	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-58	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-58	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-58	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-58	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-58	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-58	5/8/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
OW-58	5/8/2018	Naphthalene	**99**	10	5	30	ug/L
OW-58	5/8/2018	2-Methylnaphthalene	**42**	10	6.3	35.1	ug/L
OW-58	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-58	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-58	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-58	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-58	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-58	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-58	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-58	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-58	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-58	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-58	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-58	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-58	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-58	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-58	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-58	5/8/2018	Phenol	50	10	6	5761	ug/L
OW-58	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-58	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-58	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-58	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-58	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-58	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-58	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-58	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-58	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-58	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-58	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-58	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-58	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-58	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-58	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-58	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-58	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-58	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-58	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-58	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-58	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-58	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-58	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-58	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-58	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-58	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-58	5/8/2018	3,4-Methylphenol	7.1	10	5.4	NA	ug/L
OW-58	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-58	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-58	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-58	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-58	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-58	8/28/2018	Benzoic Acid	23	20	6.3	75000	ug/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-58	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-58	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-58	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-58	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-58	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-58	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-58	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-58	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-58	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-58	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-58	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-58	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-58	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-58	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-58	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-58	8/28/2018	1-Methylnaphthalene	**74**	10	7	11.38	ug/L
OW-58	8/28/2018	Naphthalene	**110**	10	5	30	ug/L
OW-58	8/28/2018	2-Methylnaphthalene	**53**	10	6.3	35.1	ug/L
OW-58	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-58	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-58	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-58	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-58	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-58	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-58	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-58	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-58	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-58	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-58	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-58	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-58	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-58	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-58	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-58	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-58	8/28/2018	Phenol	52	10	6	5761	ug/L
OW-58	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-58	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-58	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-58	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-58	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-58	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-58	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-58	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-58	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-58	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-58	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-58	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-58	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-58	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-58	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-58	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-58	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-58	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-58	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-58	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-58	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-58	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-58	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-58	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-58	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-58	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-58	8/28/2018	3,4-Methylphenol	5.4	10	5.4	NA	ug/L
OW-58	11/29/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
OW-58	11/29/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
OW-58	11/29/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
OW-58	11/29/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
OW-58	11/29/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
OW-58	11/29/2018	Aniline	*ND*	*100*	62	13	ug/L
OW-58	11/29/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
OW-58	11/29/2018	Benzoic Acid	170	200	63	75000	ug/L
OW-58	11/29/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
OW-58	11/29/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
OW-58	11/29/2018	Isophorone	ND	100	62	781	ug/L
OW-58	11/29/2018	Acenaphthene	ND	100	58	535	ug/L
OW-58	11/29/2018	Diethylphthalate	ND	100	63	14801	ug/L
OW-58	11/29/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
OW-58	11/29/2018	Phenanthrene	ND	100	60	170	ug/L
OW-58	11/29/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
OW-58	11/29/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
OW-58	11/29/2018	Fluorene	ND	100	63	288	ug/L
OW-58	11/29/2018	Carbazole	ND	100	63	NA	ug/L
OW-58	11/29/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
OW-58	11/29/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
OW-58	11/29/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
OW-58	11/29/2018	2-Nitroaniline	ND	100	59	190	ug/L
OW-58	11/29/2018	2-Nitrophenol	ND	100	60	NA	ug/L
OW-58	11/29/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
OW-58	11/29/2018	Naphthalene	*ND*	*100*	50	30	ug/L
OW-58	11/29/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
OW-58	11/29/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
OW-58	11/29/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
OW-58	11/29/2018	2-Methylphenol	ND	100	63	NA	ug/L
OW-58	11/29/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
OW-58	11/29/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
OW-58	11/29/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
OW-58	11/29/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
OW-58	11/29/2018	3-Nitroaniline	ND	100	68	NA	ug/L
OW-58	11/29/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
OW-58	11/29/2018	4-Nitrophenol	ND	100	56	NA	ug/L
OW-58	11/29/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
OW-58	11/29/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
OW-58	11/29/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
OW-58	11/29/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
OW-58	11/29/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
OW-58	11/29/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
OW-58	11/29/2018	Phenol	ND	100	60	5761	ug/L
OW-58	11/29/2018	Pyridine	*ND*	*100*	54	20	ug/L
OW-58	11/29/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
OW-58	11/29/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/29/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
OW-58	11/29/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
OW-58	11/29/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
OW-58	11/29/2018	Anthracene	ND	100	57	1721	ug/L
OW-58	11/29/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
OW-58	11/29/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
OW-58	11/29/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
OW-58	11/29/2018	Pyrene	ND	100	65	117	ug/L
OW-58	11/29/2018	Dimethylphthalate	ND	100	60	612	ug/L
OW-58	11/29/2018	Dibenzofuran	ND	100	69	NA	ug/L
OW-58	11/29/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
OW-58	11/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
OW-58	11/29/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
OW-58	11/29/2018	Fluoranthene	ND	100	58	802	ug/L
OW-58	11/29/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
OW-58	11/29/2018	Acenaphthylene	ND	100	62	NA	ug/L
OW-58	11/29/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
OW-58	11/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
OW-58	11/29/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
OW-58	11/29/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
OW-58	11/29/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
OW-58	11/29/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
OW-58	11/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
OW-58	11/29/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
OW-58	3/28/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-58	3/28/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-58	3/28/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-58	3/28/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-58	3/28/2019	1-Methylnaphthalene	**69**	10	6.999122	11.38	ug/L
OW-58	3/28/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-58	3/28/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-58	3/28/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-58	3/28/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-58	3/28/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-58	3/28/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-58	3/28/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-58	3/28/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-58	3/28/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-58	3/28/2019	2-Methylnaphthalene	**51**	10	6.33239	35.1	ug/L
OW-58	3/28/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-58	3/28/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-58	3/28/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-58	3/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-58	3/28/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-58	3/28/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-58	3/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-58	3/28/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-58	3/28/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-58	3/28/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-58	3/28/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-58	3/28/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-58	3/28/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-58	3/28/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-58	3/28/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-58	3/28/2019	Aniline	ND	10	6.210394	13	ug/L
OW-58	3/28/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-58	3/28/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-58	3/28/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-58	3/28/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-58	3/28/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-58	3/28/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-58	3/28/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-58	3/28/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-58	3/28/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-58	3/28/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-58	3/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-58	3/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-58	3/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-58	3/28/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-58	3/28/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-58	3/28/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-58	3/28/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-58	3/28/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-58	3/28/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-58	3/28/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-58	3/28/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-58	3/28/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-58	3/28/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-58	3/28/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-58	3/28/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-58	3/28/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-58	3/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-58	3/28/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-58	3/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-58	3/28/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-58	3/28/2019	Naphthalene	**110**	10	5.041403	30	ug/L
OW-58	3/28/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-58	3/28/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-58	3/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-58	3/28/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-58	3/28/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-58	3/28/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-58	3/28/2019	Phenol	51	10	5.977352	5761	ug/L
OW-58	3/28/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-58	3/28/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-58	6/5/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-58	6/5/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-58	6/5/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-58	6/5/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-58	6/5/2019	1-Methylnaphthalene	**85**	10	3.069076	11.38	ug/L
OW-58	6/5/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-58	6/5/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-58	6/5/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-58	6/5/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-58	6/5/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-58	6/5/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-58	6/5/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-58	6/5/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-58	6/5/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-58	6/5/2019	2-Methylnaphthalene	**61**	10	3.018863	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-58	6/5/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-58	6/5/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-58	6/5/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-58	6/5/2019	3,4-Methylphenol	6.8	10	3.584453	NA	ug/L
OW-58	6/5/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-58	6/5/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-58	6/5/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-58	6/5/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-58	6/5/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-58	6/5/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-58	6/5/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-58	6/5/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-58	6/5/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-58	6/5/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-58	6/5/2019	Aniline	ND	10	3.579516	13	ug/L
OW-58	6/5/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-58	6/5/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-58	6/5/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-58	6/5/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-58	6/5/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-58	6/5/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-58	6/5/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-58	6/5/2019	Benzoic Acid	25	20	10.723324	75000	ug/L
OW-58	6/5/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-58	6/5/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-58	6/5/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-58	6/5/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-58	6/5/2019	Bis(2-ethylhexyl)phthalate	5.6	10	4.302128	55.64	ug/L
OW-58	6/5/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-58	6/5/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-58	6/5/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-58	6/5/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-58	6/5/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-58	6/5/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-58	6/5/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-58	6/5/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-58	6/5/2019	Di-n-octylphthalate	5.2	10	3.516366	200	ug/L
OW-58	6/5/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-58	6/5/2019	Fluorene	4.9	10	2.888488	288	ug/L
OW-58	6/5/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-58	6/5/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-58	6/5/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-58	6/5/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-58	6/5/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-58	6/5/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-58	6/5/2019	Naphthalene	**140**	10	4.12221	30	ug/L
OW-58	6/5/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-58	6/5/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-58	6/5/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-58	6/5/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-58	6/5/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-58	6/5/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-58	6/5/2019	Phenol	62	10	8.036586	5761	ug/L
OW-58	6/5/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-58	6/5/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-58	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-58	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-58	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-58	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-58	8/22/2019	1-Methylnaphthalene	**87**	10	3.069076	11.38	ug/L
OW-58	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-58	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-58	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-58	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-58	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-58	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-58	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-58	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-58	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-58	8/22/2019	2-Methylnaphthalene	**53**	10	3.018863	35.1	ug/L
OW-58	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-58	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-58	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-58	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-58	8/22/2019	3,4-Methylphenol	5.2	10	3.584453	NA	ug/L
OW-58	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-58	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-58	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-58	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-58	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-58	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-58	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-58	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-58	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-58	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-58	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
OW-58	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-58	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-58	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-58	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-58	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-58	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-58	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-58	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-58	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-58	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-58	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-58	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-58	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-58	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-58	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-58	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-58	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-58	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-58	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-58	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-58	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-58	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-58	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/22/2019	Fluorene	3	10	2.888488	288	ug/L
OW-58	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-58	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-58	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-58	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-58	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-58	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-58	8/22/2019	Naphthalene	**140**	10	4.12221	30	ug/L
OW-58	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-58	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-58	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-58	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-58	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-58	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-58	8/22/2019	Phenol	83	10	8.036586	5761	ug/L
OW-58	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-58	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-58	11/18/2019	1,2,4-Trichlorobenzene	ND	1	1	70	ug/L
OW-58	11/18/2019	1,2-Dichlorobenzene	ND	1	1	600	ug/L
OW-58	11/18/2019	1,3-Dichlorobenzene	ND	1	1	NA	ug/L
OW-58	11/18/2019	1,4-Dichlorobenzene	ND	1	1	75	ug/L
OW-58	11/18/2019	1,4-Dioxane	3.3	2	2	4.59	ug/L
OW-58	11/18/2019	1-Methylnaphthalene	**86**	1	1	11.38	ug/L
OW-58	11/18/2019	2,4,5-Trichlorophenol	ND	1	1	1166	ug/L
OW-58	11/18/2019	2,4,6-Trichlorophenol	ND	1	1	11.9*	ug/L
OW-58	11/18/2019	2,4-Dichlorophenol	ND	1	1	45.3	ug/L
OW-58	11/18/2019	2,4-Dimethylphenol	12	1	1	354	ug/L
OW-58	11/18/2019	2,4-Dinitrophenol	ND	1	1	38.7	ug/L
OW-58	11/18/2019	2,4-Dinitrotoluene	ND	1	1	45.3	ug/L
OW-58	11/18/2019	2,6-Dinitrotoluene	ND	0.4	0.4	0.485	ug/L
OW-58	11/18/2019	2-Chloronaphthalene	ND	1	1	733	ug/L
OW-58	11/18/2019	2-Chlorophenol	ND	1	1	91	ug/L
OW-58	11/18/2019	2-Methylnaphthalene	**72**	1	1	35.1	ug/L
OW-58	11/18/2019	2-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	2-Nitroaniline	ND	1	1	190	ug/L
OW-58	11/18/2019	2-Nitrophenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	3,3-Dichlorobenzidine	ND	1	1	1.25	ug/L
OW-58	11/18/2019	3,4-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	3-Nitroaniline	ND	1	1	NA	ug/L
OW-58	11/18/2019	4,6-Dinitro-2-methylphenol	ND	1	1	1.52	ug/L
OW-58	11/18/2019	4-Bromophenyl-phenylether	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Chloro-3-Methylphenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Chlorophenyl-phenylether	ND	1	1	NA	ug/L
OW-58	11/18/2019	4-Nitroaniline	ND	1	1	3.8	ug/L
OW-58	11/18/2019	4-Nitrophenol	ND	1	1	NA	ug/L
OW-58	11/18/2019	Acenaphthene	2.3	1	1	535	ug/L
OW-58	11/18/2019	Acenaphthylene	ND	1	1	NA	ug/L
OW-58	11/18/2019	Aniline	ND	1	1	13	ug/L
OW-58	11/18/2019	Anthracene	ND	1	1	1721	ug/L
OW-58	11/18/2019	Benzo(a)anthracene	*ND*	*0.2*	0.2	0.12	ug/L
OW-58	11/18/2019	Benzo(a)pyrene	ND	0.2	0.2	0.2	ug/L
OW-58	11/18/2019	Benzo(b)fluoranthene	ND	0.2	0.2	0.34	ug/L
OW-58	11/18/2019	Benzo(g,h,i)perylene	ND	1	1	NA	ug/L
OW-58	11/18/2019	Benzo(k)fluoranthene	ND	1	1	3.43	ug/L
OW-58	11/18/2019	Benzoic Acid	ND	1	1	75000	ug/L
OW-58	11/18/2019	Benzyl Alcohol	ND	1	1	2000	ug/L
OW-58	11/18/2019	Bis(2-chloroethoxy)methane	ND	1	1	59	ug/L
OW-58	11/18/2019	Bis(2-chloroisopropyl)ether	ND	1	1	9.81	ug/L
OW-58	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	1	1	55.64	ug/L
OW-58	11/18/2019	Butylbenzylphthalate	ND	1	1	16	ug/L
OW-58	11/18/2019	Carbazole	3.2	1	1	NA	ug/L
OW-58	11/18/2019	Chrysene	ND	1	1	34.3	ug/L
OW-58	11/18/2019	Dibenzo(a,h)anthracene	ND	0.05	0.05	NA	ug/L
OW-58	11/18/2019	Dibenzofuran	1.4	1	1	NA	ug/L
OW-58	11/18/2019	Diethylphthalate	ND	1	1	14801	ug/L
OW-58	11/18/2019	Dimethylphthalate	ND	1	1	612	ug/L
OW-58	11/18/2019	Di-n-butylphthalate	ND	1	1	885	ug/L
OW-58	11/18/2019	Di-n-octylphthalate	ND	1	1	200	ug/L
OW-58	11/18/2019	Fluoranthene	ND	1	1	802	ug/L
OW-58	11/18/2019	Fluorene	3.6	1	1	288	ug/L
OW-58	11/18/2019	Hexachlorobenzene	*ND*	*1*	1	0.0976	ug/L
OW-58	11/18/2019	Hexachlorobutadiene	*ND*	*1*	1	0.14	ug/L
OW-58	11/18/2019	Hexachlorocyclopentadiene	*ND*	*1*	1	0.41	ug/L
OW-58	11/18/2019	Hexachloroethane	ND	1	1	3.28	ug/L
OW-58	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*0.4*	0.4	0.343	ug/L
OW-58	11/18/2019	Isophorone	ND	1	1	781	ug/L
OW-58	11/18/2019	Naphthalene	**180**	1	1	30	ug/L
OW-58	11/18/2019	Nitrobenzene	ND	1	1	1.4	ug/L
OW-58	11/18/2019	N-Nitrosodiphenylamine	ND	1	1	122	ug/L
OW-58	11/18/2019	Pentachlorophenol	ND	1	1	1	ug/L
OW-58	11/18/2019	Phenanthrene	3.6	1	1	170	ug/L
OW-58	11/18/2019	Phenol	97	1	1	5761	ug/L
OW-58	11/18/2019	Pyrene	ND	1	1	117	ug/L
OW-58	11/18/2019	Pyridine	ND	1	1	20	ug/L
OW-58A	3/6/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-58A	3/6/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-58A	3/6/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-58A	3/6/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-58A	3/6/2020	1-Methylnaphthalene	**130**	2.5	0.5	11.38	ug/L
OW-58A	3/6/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-58A	3/6/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-58A	3/6/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-58A	3/6/2020	2,4-Dimethylphenol	14	2.5	0.5	354	ug/L
OW-58A	3/6/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-58A	3/6/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-58A	3/6/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-58A	3/6/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-58A	3/6/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-58A	3/6/2020	2-Methylnaphthalene	**190**	2.5	0.5	35.1	ug/L
OW-58A	3/6/2020	2-Methylphenol	19	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-58A	3/6/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	3,4-Methylphenol	17	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-58A	3/6/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-58A	3/6/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	3/6/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-58A	3/6/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Acenaphthene	5.3	2.5	0.5	535	ug/L
OW-58A	3/6/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-58A	3/6/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-58A	3/6/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-58A	3/6/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-58A	3/6/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-58A	3/6/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-58A	3/6/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-58A	3/6/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-58A	3/6/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-58A	3/6/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-58A	3/6/2020	Bis(2-ethylhexyl)phthalate	1.5	2.5	1	55.64	ug/L
OW-58A	3/6/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-58A	3/6/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-58A	3/6/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-58A	3/6/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-58A	3/6/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-58A	3/6/2020	Dibenzofuran	2.49	2.5	0.5	NA	ug/L
OW-58A	3/6/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-58A	3/6/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-58A	3/6/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-58A	3/6/2020	Fluorene	6.9	2.5	0.5	288	ug/L
OW-58A	3/6/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-58A	3/6/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-58A	3/6/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-58A	3/6/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-58A	3/6/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-58A	3/6/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-58A	3/6/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-58A	3/6/2020	Naphthalene	**250**	2.5	0.5	30	ug/L
OW-58A	3/6/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-58A	3/6/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-58A	3/6/2020	Phenanthrene	6.1	2.5	0.5	170	ug/L
OW-58A	3/6/2020	Phenol	58	2.5	0.5	5761	ug/L
OW-58A	3/6/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-58A	3/6/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-59	6/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	6/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	6/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	6/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	6/28/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	6/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	6/28/2017	Benzoic Acid	8.3	20	3.9	75000	ug/L
OW-59	6/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	6/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	6/28/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	6/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	6/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	6/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	6/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	6/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	6/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	6/28/2017	Fluorene	ND	10	4	288	ug/L
OW-59	6/28/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	6/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	6/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	6/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	6/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	6/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	6/28/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	6/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	6/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	6/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	6/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	6/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	6/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	6/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	6/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	6/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	6/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	6/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	6/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	6/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	6/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	6/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	6/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	6/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	6/28/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	6/28/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	6/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	6/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	6/28/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	6/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	6/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	6/28/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	6/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	6/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	6/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	6/28/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	6/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	6/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	6/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	6/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	6/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	6/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	6/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	6/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	6/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	6/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	6/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	6/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	6/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	6/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	6/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	6/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	9/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	9/21/2017	Benzoic Acid	6.6	20	3.9	75000	ug/L
OW-59	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	9/21/2017	Fluorene	ND	10	4	288	ug/L
OW-59	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	9/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	9/21/2017	Di-n-octylphthalate	4.7	10	4.7	200	ug/L
OW-59	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-59	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	12/6/2017	Benzoic Acid	4.5	20	3.9	75000	ug/L
OW-59	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-59	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-59	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-59	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-59	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-59	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	12/6/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-59	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-59	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-59	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-59	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-59	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-59	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-59	2/22/2018	Benzoic Acid	14	20	3.9	75000	ug/L
OW-59	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-59	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-59	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-59	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-59	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-59	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-59	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L
OW-59	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-59	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-59	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-59	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-59	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-59	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-59	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-59	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-59	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-59	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-59	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-59	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-59	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-59	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-59	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-59	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-59	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-59	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-59	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-59	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-59	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-59	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-59	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-59	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-59	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-59	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-59	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-59	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-59	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-59	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-59	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-59	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-59	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-59	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-59	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-59	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-59	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-59	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-59	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-59	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-59	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-59	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-59	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-59	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-59	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-59	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-59	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-59	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-59	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-59	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-59	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-59	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-59	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-59	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-59	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-59	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	5/8/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-59	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	8/28/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	8/28/2018	Phenol	ND	10	6	5761	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-59	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-59	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-59	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-59	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-59	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-59	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-59	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-59	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-59	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-59	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-59	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-59	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-59	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-59	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-59	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-59	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-59	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-59	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-59	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-59	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-59	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-59	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-59	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-59	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-59	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-59	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-59	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-59	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-59	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-59	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-59	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-59	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-59	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-59	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-59	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-59	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-59	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-59	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-59	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-59	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-59	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-59	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-59	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-59	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-59	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-59	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-59	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-59	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-59	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-59	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-59	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-59	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-59	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-59	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-59	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-59	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-59	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-59	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-59	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-59	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-59	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-59	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-59	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-59	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-59	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-59	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-59	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-59	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-59	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-59	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-59	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-59	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-59	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-59	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-59	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-59	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-59	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-59	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-59	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-59	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-59	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-59	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-59	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-59	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-59	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-59	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-59	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-59	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-59	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-59	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-59	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-59	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-59	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-59	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-59	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-59	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-59	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-59	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
OW-59	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-59	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-59	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-59	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-59	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-59	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-59	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-59	2/13/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-59	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-59	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-59	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-59	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-59	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-59	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-59	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-59	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-59	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-59	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-59	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-59	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-59	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-59	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-59	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-59	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-59	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-59	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-59	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-59	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-59	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-59	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-59	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-59	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-59	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-59	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-59	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-59	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-59	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-59	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-59	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-59	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-59	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-59	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-59	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-59	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-59	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-59	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-59	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-59	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-59	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-59	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-59	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-59	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-59	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-59	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-59	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-59	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-59	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-59	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-59	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-59	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-59	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-59	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-59	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-59	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-59	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-59	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-59	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-59	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-59	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-59	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-59	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-59	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-59	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-59	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-59	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-59	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-59	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-59	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-59	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-59	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-59	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-59	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-59	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-59	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-59	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-59	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-59	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-59	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-59	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-59	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-59	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-59	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-59	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-59	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-59	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-59	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-59	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-59	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-59	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-59	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-59	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-59	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-59	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-59	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-59	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-59	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-59	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-59	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-59	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-59	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-59	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-59	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-59	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-59	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-59	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-59	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-59	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-59	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-59	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-59	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-59	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-59	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-59	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-59	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-59	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-59	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-59	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-59	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-59	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-59	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-59	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-59	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-59	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-59	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-59	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-59	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-59	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-59	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-59	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-59	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-59	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-59	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-59	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-59	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-59	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-59	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-59	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-59	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-59	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-59	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-59	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-59	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-59	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-59	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-59	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-59	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-59	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-59	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-59	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-59	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-59	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-59	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-59	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-59	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-59	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-59	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-59	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-59	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-59	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-59	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-59	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-59	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-59	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-59	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-59	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-59	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-59	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-59	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-59	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-59	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-59	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-59	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-59	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-59	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-59	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-59	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-59	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-59	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-59	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-59	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-59	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-59	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-59	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-59	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-59	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-59	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-59	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-59	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-59	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-59	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-59	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-59	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-59	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-59	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-59	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-59	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-59	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-59	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-59	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-59	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-59	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-59	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-59	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-59	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-59	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-59	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-59	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-59	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-59	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-59	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-59	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-59	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-59	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-59	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-59	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-59	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-59	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-59	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-59	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-59	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-59	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-59	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-59	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-59	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-59	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-59	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-59	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-59	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-59	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-59	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-59	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-59	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-59	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-59	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-59	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-59	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-59	3/3/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-59	3/3/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-59	3/3/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-59	3/3/2020	1,4-Dioxane	**6.2**	1	0.2	4.59	ug/L
OW-59	3/3/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-59	3/3/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-59	3/3/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-59	3/3/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-59	3/3/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-59	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-59	3/3/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-59	3/3/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-59	3/3/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-59	3/3/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-59	3/3/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-59	3/3/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-59	3/3/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-59	3/3/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-59	3/3/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-59	3/3/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-59	3/3/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-59	3/3/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-59	3/3/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-59	3/3/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-59	3/3/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-59	3/3/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-59	3/3/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-59	3/3/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-59	3/3/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-59	3/3/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-59	3/3/2020	Bis(2-ethylhexyl)phthalate	0.52	0.5	0.2	55.64	ug/L
OW-59	3/3/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-59	3/3/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-59	3/3/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-59	3/3/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-59	3/3/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-59	3/3/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-59	3/3/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-59	3/3/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-59	3/3/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-59	3/3/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-59	3/3/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-59	3/3/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-59	3/3/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-59	3/3/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-59	3/3/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-59	3/3/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-59	3/3/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-59	3/3/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-59	3/3/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-59	3/3/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-59	3/3/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-59	3/3/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-59	3/3/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-59	9/19/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-59	9/19/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-59	9/19/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L
OW-59	9/19/2020	1,4-Dioxane	**8.8**	2.5	0.5	4.59	ug/L
OW-59	9/19/2020	1-Methylnaphthalene	ND	2.5	0.5	11.38	ug/L
OW-59	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	2.5	0.5	240	ug/L
OW-59	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-59	9/19/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-59	9/19/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-59	9/19/2020	2,4-Dimethylphenol	ND	2.5	0.5	354	ug/L
OW-59	9/19/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-59	9/19/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-59	9/19/2020	2,6-Dinitrotoluene	*ND*	*1*	0.5	0.485	ug/L
OW-59	9/19/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-59	9/19/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-59	9/19/2020	2-Methylnaphthalene	ND	2.5	0.5	35.1	ug/L
OW-59	9/19/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-59	9/19/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-59	9/19/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-59	9/19/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Chloroaniline	*ND*	*2.5*	0.5	0.37	ug/L
OW-59	9/19/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-59	9/19/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OW-59	9/19/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-59	9/19/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-59	9/19/2020	Benzo(a)anthracene	*ND*	*0.5*	0.25	0.12	ug/L
OW-59	9/19/2020	Benzidine	*ND*	*2.5*	1.2	0.0011	ug/L
OW-59	9/19/2020	Benzo(a)pyrene	*ND*	*0.5*	0.25	0.2	ug/L
OW-59	9/19/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.25	0.34	ug/L
OW-59	9/19/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-59	9/19/2020	Benzoic Acid	4.8	2.5	1	75000	ug/L
OW-59	9/19/2020	Benzyl Alcohol	1.8	2.5	1	2000	ug/L
OW-59	9/19/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-59	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*2.5*	0.5	0.137	ug/L
OW-59	9/19/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-59	9/19/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-59	9/19/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-59	9/19/2020	Carbazole	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-59	9/19/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-59	9/19/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-59	9/19/2020	Dibenzo(a,h)anthracene	ND	0.15	0.1	NA	ug/L
OW-59	9/19/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-59	9/19/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-59	9/19/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-59	9/19/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-59	9/19/2020	Fluorene	ND	2.5	0.5	288	ug/L
OW-59	9/19/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-59	9/19/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-59	9/19/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	1.2	0.41	ug/L
OW-59	9/19/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-59	9/19/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.5	0.343	ug/L
OW-59	9/19/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-59	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*2.5*	0.5	0.011	ug/L
OW-59	9/19/2020	N-Nitrosodimethylamine	*ND*	*2.5*	0.5	0.0049	ug/L
OW-59	9/19/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-59	9/19/2020	Naphthalene	ND	2.5	0.5	30	ug/L
OW-59	9/19/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-59	9/19/2020	Pentachlorophenol	*ND*	*2.5*	1	1	ug/L
OW-59	9/19/2020	Phenanthrene	ND	2.5	0.5	170	ug/L
OW-59	9/19/2020	Phenol	ND	2.5	0.5	5761	ug/L
OW-59	9/19/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-59	9/19/2020	Pyridine	ND	2.5	1	20	ug/L
OW-59	12/23/2020	Acenaphthene	ND	11.6	0.185	535	ug/L
OW-59	12/23/2020	Acenaphthylene	ND	11.6	0.197	NA	ug/L
OW-59	12/23/2020	Anthracene	ND	11.6	0.208	1721	ug/L
OW-59	12/23/2020	Benzo(a)anthracene	*ND*	*11.6*	0.208	0.12	ug/L
OW-59	12/23/2020	Benzo(a)pyrene	*ND*	*11.6*	0.139	0.2	ug/L
OW-59	12/23/2020	Benzo(b)fluoranthene	*ND*	*11.6*	0.174	0.34	ug/L
OW-59	12/23/2020	Benzo(g,h,i)perylene	ND	11.6	0.266	NA	ug/L
OW-59	12/23/2020	Benzo(k)fluoranthene	*ND*	*11.6*	0.185	3.43	ug/L
OW-59	12/23/2020	Bis(2-chloroethoxy)methane	ND	11.6	0.185	59	ug/L
OW-59	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*11.6*	3.13	0.137	ug/L
OW-59	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	11.6	5.79	55.64	ug/L
OW-59	12/23/2020	4-Bromophenyl-phenylether	ND	11.6	0.231	NA	ug/L
OW-59	12/23/2020	Butylbenzylphthalate	ND	11.6	0.22	16	ug/L
OW-59	12/23/2020	Carbazole	ND	11.6	0.266	NA	ug/L
OW-59	12/23/2020	4-Chloroaniline	*ND*	*11.6*	3.94	0.37	ug/L
OW-59	12/23/2020	4-Chloro-3-Methylphenol	ND	11.6	4.4	NA	ug/L
OW-59	12/23/2020	2-Chloronaphthalene	ND	11.6	0.162	733	ug/L
OW-59	12/23/2020	2-Chlorophenol	ND	11.6	2.55	91	ug/L
OW-59	12/23/2020	4-Chlorophenyl-phenylether	ND	11.6	2.31	NA	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	11.6	0.208	NA	ug/L
OW-59	12/23/2020	Chrysene	ND	11.6	0.22	34.3	ug/L
OW-59	12/23/2020	Dibenzo(a,h)anthracene	ND	11.6	0.278	NA	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	11.6	0.185	75	ug/L
OW-59	12/23/2020	Dibenzofuran	ND	11.6	0.197	NA	ug/L
OW-59	12/23/2020	3,3-Dichlorobenzidine	*ND*	*11.6*	3.01	1.25	ug/L
OW-59	12/23/2020	2,4-Dichlorophenol	ND	11.6	3.47	45.3	ug/L
OW-59	12/23/2020	Diethylphthalate	ND	11.6	0.278	14801	ug/L
OW-59	12/23/2020	2,4-Dimethylphenol	ND	11.6	4.05	354	ug/L
OW-59	12/23/2020	Di-n-butylphthalate	ND	11.6	3.13	885	ug/L
OW-59	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.6*	1.85	1.52	ug/L
OW-59	12/23/2020	2,4-Dinitrophenol	ND	34.7	3.94	38.7	ug/L
OW-59	12/23/2020	2,4-Dinitrotoluene	ND	11.6	2.2	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	2,6-Dinitrotoluene	*ND*	*11.6*	2.2	0.485	ug/L
OW-59	12/23/2020	Di-n-octylphthalate	ND	11.6	0.197	200	ug/L
OW-59	12/23/2020	Fluoranthene	ND	11.6	0.208	802	ug/L
OW-59	12/23/2020	Fluorene	ND	11.6	0.208	288	ug/L
OW-59	12/23/2020	Hexachlorobenzene	*ND*	*11.6*	0.197	0.0976	ug/L
OW-59	12/23/2020	Hexachlorocyclopentadiene	*ND*	*23.1*	3.01	0.41	ug/L
OW-59	12/23/2020	Hexachloroethane	*ND*	*11.6*	4.86	3.28	ug/L
OW-59	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.6*	0.255	0.343	ug/L
OW-59	12/23/2020	Isophorone	ND	11.6	0.162	781	ug/L
OW-59	12/23/2020	2-Methylphenol	ND	11.6	2.08	NA	ug/L
OW-59	12/23/2020	Naphthalene	ND	11.6	0.197	30	ug/L
OW-59	12/23/2020	2-Nitroaniline	ND	11.6	2.55	190	ug/L
OW-59	12/23/2020	3-Nitroaniline	ND	11.6	2.08	NA	ug/L
OW-59	12/23/2020	4-Nitroaniline	*ND*	*11.6*	1.74	3.8	ug/L
OW-59	12/23/2020	Nitrobenzene	*ND*	*11.6*	0.15	1.4	ug/L
OW-59	12/23/2020	2-Nitrophenol	ND	11.6	6.02	NA	ug/L
OW-59	12/23/2020	4-Nitrophenol	ND	11.6	2.43	NA	ug/L
OW-59	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*11.6*	3.82	0.011	ug/L
OW-59	12/23/2020	N-Nitrosodiphenylamine	ND	11.6	0.208	122	ug/L
OW-59	12/23/2020	Pentachlorophenol	*ND*	*23.1*	1.62	1	ug/L
OW-59	12/23/2020	Phenanthrene	ND	11.6	0.208	170	ug/L
OW-59	12/23/2020	Phenol	ND	11.6	3.01	5761	ug/L
OW-59	12/23/2020	Pyrene	ND	11.6	0.243	117	ug/L
OW-59	12/23/2020	2,4,5-Trichlorophenol	ND	11.6	4.28	1166	ug/L
OW-59	12/23/2020	2,4,6-Trichlorophenol	ND	11.6	4.05	11.9*	ug/L
OW-59	12/23/2020	Dimethylphthalate	ND	11.6	0.197	612	ug/L
OW-59	12/23/2020	Aniline	ND	11.6	4.4	13	ug/L
OW-59	12/23/2020	Benzoic Acid	ND	34.7	8.45	75000	ug/L
OW-59	12/23/2020	Benzyl Alcohol	ND	11.6	2.31	2000	ug/L
OW-59	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.6*	0.185	9.81	ug/L
OW-59	12/23/2020	N-Nitrosodimethylamine	*ND*	*11.6*	4.05	0.0049	ug/L
OW-59	12/23/2020	Pyridine	ND	11.6	3.7	20	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	11.6	0.208	70	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	11.6	0.197	600	ug/L
OW-59	12/23/2020	Azobenzene	*ND*	*11.6*	1.16	0.12	ug/L
OW-59	12/23/2020	Acenaphthene	ND	11.3	0.181	535	ug/L
OW-59	12/23/2020	Acenaphthylene	ND	11.3	0.192	NA	ug/L
OW-59	12/23/2020	Anthracene	ND	11.3	0.203	1721	ug/L
OW-59	12/23/2020	Benzo(a)anthracene	*ND*	*11.3*	0.203	0.12	ug/L
OW-59	12/23/2020	Benzo(a)pyrene	*ND*	*11.3*	0.135	0.2	ug/L
OW-59	12/23/2020	Benzo(b)fluoranthene	*ND*	*11.3*	0.169	0.34	ug/L
OW-59	12/23/2020	Benzo(g,h,i)perylene	ND	11.3	0.259	NA	ug/L
OW-59	12/23/2020	Benzo(k)fluoranthene	*ND*	*11.3*	0.181	3.43	ug/L
OW-59	12/23/2020	Bis(2-chloroethoxy)methane	ND	11.3	0.181	59	ug/L
OW-59	12/23/2020	Bis(2-chloroethyl)ether	*ND*	*11.3*	3.05	0.137	ug/L
OW-59	12/23/2020	Bis(2-ethylhexyl)phthalate	ND	11.3	5.64	55.64	ug/L
OW-59	12/23/2020	4-Bromophenyl-phenylether	ND	11.3	0.226	NA	ug/L
OW-59	12/23/2020	Butylbenzylphthalate	ND	11.3	0.214	16	ug/L
OW-59	12/23/2020	Carbazole	ND	11.3	0.259	NA	ug/L
OW-59	12/23/2020	4-Chloroaniline	*ND*	*11.3*	3.84	0.37	ug/L
OW-59	12/23/2020	4-Chloro-3-Methylphenol	ND	11.3	4.29	NA	ug/L
OW-59	12/23/2020	2-Chloronaphthalene	ND	11.3	0.158	733	ug/L
OW-59	12/23/2020	2-Chlorophenol	ND	11.3	2.48	91	ug/L
OW-59	12/23/2020	4-Chlorophenyl-phenylether	ND	11.3	2.26	NA	ug/L
OW-59	12/23/2020	1,3-Dichlorobenzene	ND	11.3	0.203	NA	ug/L
OW-59	12/23/2020	Chrysene	ND	11.3	0.214	34.3	ug/L
OW-59	12/23/2020	Dibenzo(a,h)anthracene	ND	11.3	0.271	NA	ug/L
OW-59	12/23/2020	1,4-Dichlorobenzene	ND	11.3	0.181	75	ug/L
OW-59	12/23/2020	Dibenzofuran	ND	11.3	0.192	NA	ug/L
OW-59	12/23/2020	3,3-Dichlorobenzidine	*ND*	*11.3*	2.93	1.25	ug/L
OW-59	12/23/2020	2,4-Dichlorophenol	ND	11.3	3.38	45.3	ug/L
OW-59	12/23/2020	Diethylphthalate	ND	11.3	0.271	14801	ug/L
OW-59	12/23/2020	2,4-Dimethylphenol	ND	11.3	3.95	354	ug/L
OW-59	12/23/2020	Di-n-butylphthalate	ND	11.3	3.05	885	ug/L
OW-59	12/23/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.3*	1.81	1.52	ug/L
OW-59	12/23/2020	2,4-Dinitrophenol	ND	33.8	3.84	38.7	ug/L
OW-59	12/23/2020	2,4-Dinitrotoluene	ND	11.3	2.14	45.3	ug/L
OW-59	12/23/2020	2,6-Dinitrotoluene	*ND*	*11.3*	2.14	0.485	ug/L
OW-59	12/23/2020	Di-n-octylphthalate	ND	11.3	0.192	200	ug/L
OW-59	12/23/2020	Fluoranthene	ND	11.3	0.203	802	ug/L
OW-59	12/23/2020	Fluorene	ND	11.3	0.203	288	ug/L
OW-59	12/23/2020	Hexachlorobenzene	*ND*	*11.3*	0.192	0.0976	ug/L
OW-59	12/23/2020	Hexachlorocyclopentadiene	*ND*	*22.6*	2.93	0.41	ug/L
OW-59	12/23/2020	Hexachloroethane	*ND*	*11.3*	4.74	3.28	ug/L
OW-59	12/23/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.3*	0.248	0.343	ug/L
OW-59	12/23/2020	Isophorone	ND	11.3	0.158	781	ug/L
OW-59	12/23/2020	2-Methylphenol	ND	11.3	2.03	NA	ug/L
OW-59	12/23/2020	Naphthalene	ND	11.3	0.192	30	ug/L
OW-59	12/23/2020	2-Nitroaniline	ND	11.3	2.48	190	ug/L
OW-59	12/23/2020	3-Nitroaniline	ND	11.3	2.03	NA	ug/L
OW-59	12/23/2020	4-Nitroaniline	*ND*	*11.3*	1.69	3.8	ug/L
OW-59	12/23/2020	Nitrobenzene	*ND*	*11.3*	0.147	1.4	ug/L
OW-59	12/23/2020	2-Nitrophenol	ND	11.3	5.87	NA	ug/L
OW-59	12/23/2020	4-Nitrophenol	ND	11.3	2.37	NA	ug/L
OW-59	12/23/2020	N-Nitrosodi-n-propylamine	*ND*	*11.3*	3.72	0.011	ug/L
OW-59	12/23/2020	N-Nitrosodiphenylamine	ND	11.3	0.203	122	ug/L
OW-59	12/23/2020	Pentachlorophenol	*ND*	*22.6*	1.58	1	ug/L
OW-59	12/23/2020	Phenanthrene	ND	11.3	0.203	170	ug/L
OW-59	12/23/2020	Phenol	ND	11.3	2.93	5761	ug/L
OW-59	12/23/2020	Pyrene	ND	11.3	0.237	117	ug/L
OW-59	12/23/2020	2,4,5-Trichlorophenol	ND	11.3	4.17	1166	ug/L
OW-59	12/23/2020	2,4,6-Trichlorophenol	ND	11.3	3.95	11.9*	ug/L
OW-59	12/23/2020	Dimethylphthalate	ND	11.3	0.192	612	ug/L
OW-59	12/23/2020	Aniline	ND	11.3	4.29	13	ug/L
OW-59	12/23/2020	Benzoic Acid	ND	33.8	8.24	75000	ug/L
OW-59	12/23/2020	Benzyl Alcohol	ND	11.3	2.26	2000	ug/L
OW-59	12/23/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.3*	0.181	9.81	ug/L
OW-59	12/23/2020	N-Nitrosodimethylamine	*ND*	*11.3*	3.95	0.0049	ug/L
OW-59	12/23/2020	Pyridine	ND	11.3	3.61	20	ug/L
OW-59	12/23/2020	1,2,4-Trichlorobenzene	ND	11.3	0.203	70	ug/L
OW-59	12/23/2020	1,2-Dichlorobenzene	ND	11.3	0.192	600	ug/L
OW-59	12/23/2020	Azobenzene	*ND*	*11.3*	1.13	0.12	ug/L
OW-60	6/28/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	6/28/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	6/28/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	6/28/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	6/28/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	6/28/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	6/28/2017	Benzoic Acid	7.8	20	3.9	75000	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	6/28/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	6/28/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	6/28/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	6/28/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	6/28/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	6/28/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	6/28/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	6/28/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	6/28/2017	Fluorene	ND	10	4	288	ug/L
OW-60	6/28/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	6/28/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	6/28/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	6/28/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	6/28/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	6/28/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	6/28/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	6/28/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	6/28/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	6/28/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	6/28/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	6/28/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	6/28/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	6/28/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	6/28/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	6/28/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	6/28/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	6/28/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	6/28/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	6/28/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	6/28/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	6/28/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	6/28/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	6/28/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	6/28/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	6/28/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	6/28/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	6/28/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	6/28/2017	Bis(2-ethylhexyl)phthalate	5.1	10	4.8	55.64	ug/L
OW-60	6/28/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	6/28/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	6/28/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	6/28/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	6/28/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	6/28/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	6/28/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	6/28/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	6/28/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	6/28/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	6/28/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	6/28/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	6/28/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	6/28/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	6/28/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	6/28/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	6/28/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	6/28/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	6/28/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	6/28/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	6/28/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	6/28/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	6/28/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	9/21/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	9/21/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	9/21/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	9/21/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	9/21/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	9/21/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	9/21/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
OW-60	9/21/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	9/21/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	9/21/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	9/21/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	9/21/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	9/21/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	9/21/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	9/21/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	9/21/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	9/21/2017	Fluorene	ND	10	4	288	ug/L
OW-60	9/21/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	9/21/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	9/21/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	9/21/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	9/21/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	9/21/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	9/21/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	9/21/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	9/21/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	9/21/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	9/21/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	9/21/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	9/21/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	9/21/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	9/21/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	9/21/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	9/21/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	9/21/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	9/21/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	9/21/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	9/21/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	9/21/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	9/21/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	9/21/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	9/21/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	9/21/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	9/21/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	9/21/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-60	9/21/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	9/21/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	9/21/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	9/21/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	9/21/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	9/21/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	9/21/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	9/21/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	9/21/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	9/21/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	9/21/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	9/21/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	9/21/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	9/21/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	9/21/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	9/21/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	9/21/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	9/21/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	9/21/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	9/21/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	9/21/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	9/21/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	9/21/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	12/6/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	12/6/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	12/6/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	12/6/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	12/6/2017	Aniline	ND	10	3.1	13	ug/L
OW-60	12/6/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	12/6/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
OW-60	12/6/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	12/6/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	12/6/2017	Isophorone	ND	10	4.4	781	ug/L
OW-60	12/6/2017	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	12/6/2017	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	12/6/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	12/6/2017	Phenanthrene	ND	10	4.3	170	ug/L
OW-60	12/6/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	12/6/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	12/6/2017	Fluorene	ND	10	4	288	ug/L
OW-60	12/6/2017	Carbazole	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	12/6/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	12/6/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	12/6/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	12/6/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	12/6/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	12/6/2017	Naphthalene	ND	10	2.9	30	ug/L
OW-60	12/6/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	12/6/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	12/6/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	12/6/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	12/6/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	12/6/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	12/6/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	12/6/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	12/6/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	12/6/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	12/6/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	12/6/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	12/6/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	12/6/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	12/6/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	12/6/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	12/6/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	12/6/2017	Phenol	ND	10	3.1	5761	ug/L
OW-60	12/6/2017	Pyridine	ND	10	2.3	20	ug/L
OW-60	12/6/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	12/6/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	12/6/2017	Bis(2-ethylhexyl)phthalate	45	10	4.8	55.64	ug/L
OW-60	12/6/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	12/6/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	12/6/2017	Anthracene	ND	10	3.5	1721	ug/L
OW-60	12/6/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	12/6/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	12/6/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	12/6/2017	Pyrene	ND	10	4.4	117	ug/L
OW-60	12/6/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	12/6/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	12/6/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	12/6/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	12/6/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	12/6/2017	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	12/6/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	12/6/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	12/6/2017	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	12/6/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	12/6/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	12/6/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	12/6/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	12/6/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	12/6/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	12/6/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	2/22/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
OW-60	2/22/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
OW-60	2/22/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
OW-60	2/22/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	2/22/2018	Aniline	ND	10	3.1	13	ug/L
OW-60	2/22/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
OW-60	2/22/2018	Benzoic Acid	5.7	20	3.9	75000	ug/L
OW-60	2/22/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
OW-60	2/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
OW-60	2/22/2018	Isophorone	ND	10	4.4	781	ug/L
OW-60	2/22/2018	Acenaphthene	ND	10	3.6	535	ug/L
OW-60	2/22/2018	Diethylphthalate	ND	10	4	14801	ug/L
OW-60	2/22/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
OW-60	2/22/2018	Phenanthrene	ND	10	4.3	170	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/22/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
OW-60	2/22/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
OW-60	2/22/2018	Fluorene	ND	10	4	288	ug/L
OW-60	2/22/2018	Carbazole	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
OW-60	2/22/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
OW-60	2/22/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
OW-60	2/22/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
OW-60	2/22/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
OW-60	2/22/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
OW-60	2/22/2018	Naphthalene	ND	10	2.9	30	ug/L
OW-60	2/22/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
OW-60	2/22/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
OW-60	2/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
OW-60	2/22/2018	2-Methylphenol	ND	10	3.3	NA	ug/L
OW-60	2/22/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
OW-60	2/22/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
OW-60	2/22/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
OW-60	2/22/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
OW-60	2/22/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
OW-60	2/22/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
OW-60	2/22/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
OW-60	2/22/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
OW-60	2/22/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
OW-60	2/22/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
OW-60	2/22/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
OW-60	2/22/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
OW-60	2/22/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
OW-60	2/22/2018	Phenol	ND	10	3.1	5761	ug/L
OW-60	2/22/2018	Pyridine	ND	10	2.3	20	ug/L
OW-60	2/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
OW-60	2/22/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
OW-60	2/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
OW-60	2/22/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
OW-60	2/22/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
OW-60	2/22/2018	Anthracene	ND	10	3.5	1721	ug/L
OW-60	2/22/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
OW-60	2/22/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
OW-60	2/22/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
OW-60	2/22/2018	Pyrene	ND	10	4.4	117	ug/L
OW-60	2/22/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
OW-60	2/22/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
OW-60	2/22/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
OW-60	2/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
OW-60	2/22/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
OW-60	2/22/2018	Fluoranthene	ND	10	4.3	802	ug/L
OW-60	2/22/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
OW-60	2/22/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
OW-60	2/22/2018	Chrysene	ND	10	3.8	34.3	ug/L
OW-60	2/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
OW-60	2/22/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
OW-60	2/22/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
OW-60	2/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
OW-60	2/22/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
OW-60	2/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
OW-60	2/22/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
OW-60	5/8/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	5/8/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	5/8/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	5/8/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	5/8/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	5/8/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-60	5/8/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	5/8/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	5/8/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	5/8/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	5/8/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	5/8/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	5/8/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	5/8/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	5/8/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	5/8/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	5/8/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	5/8/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	5/8/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	5/8/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-60	5/8/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	5/8/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	5/8/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	5/8/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	5/8/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	5/8/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	5/8/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	5/8/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	5/8/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	5/8/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	5/8/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	5/8/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	5/8/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	5/8/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	5/8/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	5/8/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	5/8/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	5/8/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	5/8/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	5/8/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	5/8/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	5/8/2018	Phenol	ND	10	6	5761	ug/L
OW-60	5/8/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	5/8/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	5/8/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	5/8/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	5/8/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	5/8/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	5/8/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	5/8/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	5/8/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	5/8/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/8/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	5/8/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	5/8/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	5/8/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	5/8/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	5/8/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	5/8/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	5/8/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	5/8/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	5/8/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	5/8/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	5/8/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	5/8/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	5/8/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	5/8/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	5/8/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	5/8/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	8/28/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	8/28/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	8/28/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	8/28/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	8/28/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	8/28/2018	Benzoic Acid	7.1	20	6.3	75000	ug/L
OW-60	8/28/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	8/28/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	8/28/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	8/28/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	8/28/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	8/28/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	8/28/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	8/28/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	8/28/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	8/28/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	8/28/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	8/28/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	8/28/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	8/28/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-60	8/28/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	8/28/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	8/28/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	8/28/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	8/28/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	8/28/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	8/28/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	8/28/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	8/28/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	8/28/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	8/28/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	8/28/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	8/28/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	8/28/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	8/28/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	8/28/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	8/28/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	8/28/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	8/28/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	8/28/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	8/28/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	8/28/2018	Phenol	ND	10	6	5761	ug/L
OW-60	8/28/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	8/28/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	8/28/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	8/28/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	8/28/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	8/28/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	8/28/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	8/28/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	8/28/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	8/28/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-60	8/28/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	8/28/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	8/28/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	8/28/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	8/28/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	8/28/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	8/28/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	8/28/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	8/28/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	8/28/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	8/28/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	8/28/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	8/28/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	8/28/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	8/28/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	8/28/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	8/28/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	11/7/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-60	11/7/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-60	11/7/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-60	11/7/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Aniline	ND	10	6.2	13	ug/L
OW-60	11/7/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-60	11/7/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-60	11/7/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-60	11/7/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-60	11/7/2018	Isophorone	ND	10	6.2	781	ug/L
OW-60	11/7/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-60	11/7/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-60	11/7/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-60	11/7/2018	Phenanthrene	ND	10	6	170	ug/L
OW-60	11/7/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-60	11/7/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-60	11/7/2018	Fluorene	ND	10	6.3	288	ug/L
OW-60	11/7/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-60	11/7/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-60	11/7/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-60	11/7/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	11/7/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-60	11/7/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-60	11/7/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-60	11/7/2018	Naphthalene	ND	10	5	30	ug/L
OW-60	11/7/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-60	11/7/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-60	11/7/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-60	11/7/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-60	11/7/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-60	11/7/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-60	11/7/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-60	11/7/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-60	11/7/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-60	11/7/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-60	11/7/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-60	11/7/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-60	11/7/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-60	11/7/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-60	11/7/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
OW-60	11/7/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-60	11/7/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-60	11/7/2018	Phenol	ND	10	6	5761	ug/L
OW-60	11/7/2018	Pyridine	ND	10	5.4	20	ug/L
OW-60	11/7/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-60	11/7/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-60	11/7/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-60	11/7/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-60	11/7/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-60	11/7/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-60	11/7/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-60	11/7/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-60	11/7/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-60	11/7/2018	Pyrene	ND	10	6.5	117	ug/L
OW-60	11/7/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-60	11/7/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-60	11/7/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-60	11/7/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-60	11/7/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-60	11/7/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-60	11/7/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-60	11/7/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-60	11/7/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-60	11/7/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-60	11/7/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-60	11/7/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-60	11/7/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-60	11/7/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-60	11/7/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-60	11/7/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-60	2/13/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-60	2/13/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-60	2/13/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-60	2/13/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-60	2/13/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-60	2/13/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-60	2/13/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-60	2/13/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-60	2/13/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-60	2/13/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-60	2/13/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-60	2/13/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-60	2/13/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-60	2/13/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-60	2/13/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-60	2/13/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-60	2/13/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-60	2/13/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-60	2/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-60	2/13/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-60	2/13/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-60	2/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-60	2/13/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-60	2/13/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-60	2/13/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-60	2/13/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-60	2/13/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-60	2/13/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-60	2/13/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-60	2/13/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-60	2/13/2019	Aniline	ND	10	6.210394	13	ug/L
OW-60	2/13/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-60	2/13/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-60	2/13/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-60	2/13/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-60	2/13/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-60	2/13/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-60	2/13/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-60	2/13/2019	Benzoic Acid	8.4	20	6.311561	75000	ug/L
OW-60	2/13/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-60	2/13/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-60	2/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-60	2/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-60	2/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-60	2/13/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-60	2/13/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-60	2/13/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-60	2/13/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-60	2/13/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-60	2/13/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-60	2/13/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-60	2/13/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-60	2/13/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-60	2/13/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-60	2/13/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-60	2/13/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-60	2/13/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-60	2/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-60	2/13/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-60	2/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-60	2/13/2019	Isophorone	ND	10	6.242104	781	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-60	2/13/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-60	2/13/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-60	2/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-60	2/13/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-60	2/13/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-60	2/13/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-60	2/13/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-60	2/13/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-60	2/13/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-60	5/2/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-60	5/2/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-60	5/2/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-60	5/2/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-60	5/2/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
OW-60	5/2/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-60	5/2/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-60	5/2/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-60	5/2/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
OW-60	5/2/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-60	5/2/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-60	5/2/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-60	5/2/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-60	5/2/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-60	5/2/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
OW-60	5/2/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-60	5/2/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-60	5/2/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-60	5/2/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-60	5/2/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-60	5/2/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
OW-60	5/2/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-60	5/2/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-60	5/2/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-60	5/2/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-60	5/2/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-60	5/2/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-60	5/2/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-60	5/2/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-60	5/2/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-60	5/2/2019	Aniline	ND	10	6.210394	13	ug/L
OW-60	5/2/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-60	5/2/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-60	5/2/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-60	5/2/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-60	5/2/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-60	5/2/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-60	5/2/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-60	5/2/2019	Benzoic Acid	ND	20	6.311561	75000	ug/L
OW-60	5/2/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-60	5/2/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-60	5/2/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-60	5/2/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-60	5/2/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-60	5/2/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-60	5/2/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-60	5/2/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-60	5/2/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-60	5/2/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-60	5/2/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-60	5/2/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-60	5/2/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-60	5/2/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-60	5/2/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-60	5/2/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-60	5/2/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-60	5/2/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-60	5/2/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-60	5/2/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-60	5/2/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-60	5/2/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-60	5/2/2019	Naphthalene	ND	10	5.041403	30	ug/L
OW-60	5/2/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-60	5/2/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-60	5/2/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-60	5/2/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-60	5/2/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-60	5/2/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-60	5/2/2019	Phenol	ND	10	5.977352	5761	ug/L
OW-60	5/2/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-60	5/2/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-60	8/21/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-60	8/21/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-60	8/21/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-60	8/21/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-60	8/21/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-60	8/21/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-60	8/21/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-60	8/21/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-60	8/21/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-60	8/21/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-60	8/21/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-60	8/21/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-60	8/21/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-60	8/21/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-60	8/21/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-60	8/21/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-60	8/21/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-60	8/21/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-60	8/21/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-60	8/21/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-60	8/21/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-60	8/21/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-60	8/21/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-60	8/21/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-60	8/21/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-60	8/21/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-60	8/21/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-60	8/21/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-60	8/21/2019	Acenaphthene	ND	10	2.955891	535	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-60	8/21/2019	Aniline	ND	10	3.579516	13	ug/L
OW-60	8/21/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-60	8/21/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-60	8/21/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-60	8/21/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-60	8/21/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-60	8/21/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-60	8/21/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-60	8/21/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-60	8/21/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-60	8/21/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-60	8/21/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-60	8/21/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-60	8/21/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-60	8/21/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-60	8/21/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-60	8/21/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-60	8/21/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-60	8/21/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-60	8/21/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-60	8/21/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-60	8/21/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-60	8/21/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-60	8/21/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-60	8/21/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-60	8/21/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-60	8/21/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-60	8/21/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-60	8/21/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-60	8/21/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-60	8/21/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-60	8/21/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-60	8/21/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-60	8/21/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-60	8/21/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-60	8/21/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-60	8/21/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-60	8/21/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-60	8/21/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-60	8/21/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-60	8/21/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-60	10/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-60	10/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-60	10/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-60	10/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-60	10/15/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-60	10/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-60	10/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-60	10/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-60	10/15/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-60	10/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-60	10/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-60	10/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-60	10/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-60	10/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-60	10/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-60	10/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-60	10/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-60	10/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-60	10/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-60	10/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-60	10/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-60	10/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-60	10/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-60	10/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-60	10/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-60	10/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-60	10/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-60	10/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-60	10/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-60	10/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-60	10/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-60	10/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-60	10/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-60	10/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-60	10/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-60	10/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-60	10/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-60	10/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-60	10/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-60	10/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-60	10/15/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-60	10/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-60	10/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-60	10/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-60	10/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-60	10/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-60	10/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-60	10/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-60	10/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-60	10/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-60	10/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-60	10/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-60	10/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-60	10/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-60	10/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-60	10/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-60	10/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-60	10/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-60	10/15/2019	Naphthalene	ND	10	4.12221	30	ug/L
OW-60	10/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-60	10/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-60	10/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-60	10/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-60	10/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-60	10/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-60	10/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-60	3/3/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-60	3/3/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	3/3/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-60	3/3/2020	1,4-Dioxane	0.51	1	0.2	4.59	ug/L
OW-60	3/3/2020	1-Methylnaphthalene	ND	0.5	0.1	11.38	ug/L
OW-60	3/3/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-60	3/3/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-60	3/3/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-60	3/3/2020	2,4-Dimethylphenol	ND	0.5	0.1	354	ug/L
OW-60	3/3/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-60	3/3/2020	2,4-Dinitrotoluene	ND	0.5	0.1	45.3	ug/L
OW-60	3/3/2020	2,6-Dinitrotoluene	ND	0.2	0.04	0.485	ug/L
OW-60	3/3/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-60	3/3/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-60	3/3/2020	2-Methylnaphthalene	ND	0.5	0.1	35.1	ug/L
OW-60	3/3/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-60	3/3/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	3,4-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-60	3/3/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-60	3/3/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-60	3/3/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-60	3/3/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-60	3/3/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-60	3/3/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-60	3/3/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-60	3/3/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-60	3/3/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-60	3/3/2020	Benzoic Acid	ND	0.5	0.1	75000	ug/L
OW-60	3/3/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-60	3/3/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-60	3/3/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-60	3/3/2020	Bis(2-ethylhexyl)phthalate	0.47	0.5	0.2	55.64	ug/L
OW-60	3/3/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-60	3/3/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-60	3/3/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-60	3/3/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-60	3/3/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-60	3/3/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-60	3/3/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-60	3/3/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-60	3/3/2020	Fluoranthene	ND	0.5	0.1	802	ug/L
OW-60	3/3/2020	Fluorene	ND	0.5	0.1	288	ug/L
OW-60	3/3/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-60	3/3/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-60	3/3/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-60	3/3/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-60	3/3/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-60	3/3/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-60	3/3/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-60	3/3/2020	Naphthalene	ND	0.5	0.1	30	ug/L
OW-60	3/3/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-60	3/3/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-60	3/3/2020	Phenanthrene	ND	0.5	0.1	170	ug/L
OW-60	3/3/2020	Phenol	ND	0.5	0.1	5761	ug/L
OW-60	3/3/2020	Pyrene	ND	0.5	0.1	117	ug/L
OW-60	3/3/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-60	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
OW-60	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
OW-60	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
OW-60	9/21/2020	1,4-Dioxane	0.37	0.52	0.1	4.59	ug/L
OW-60	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
OW-60	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
OW-60	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
OW-60	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
OW-60	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
OW-60	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
OW-60	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
OW-60	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
OW-60	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
OW-60	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
OW-60	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
OW-60	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
OW-60	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
OW-60	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
OW-60	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
OW-60	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
OW-60	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
OW-60	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
OW-60	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
OW-60	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
OW-60	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
OW-60	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
OW-60	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
OW-60	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
OW-60	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
OW-60	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
OW-60	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
OW-60	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
OW-60	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
OW-60	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
OW-60	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
OW-60	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
OW-60	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
OW-60	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
OW-60	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OW-60	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
OW-60	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
OW-60	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
OW-60	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
OW-60	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
OW-60	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
OW-60	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
OW-60	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
OW-60	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
OW-60	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OW-60	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
OW-60	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
OW-60	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
OW-60	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
OW-60	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
OW-60	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
OW-60	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
OW-60	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
OW-60	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
OW-60	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
OW-60	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
OW-60	12/11/2020	Acenaphthene	ND	9.88	0.158	535	ug/L
OW-60	12/11/2020	Acenaphthylene	ND	9.88	0.168	NA	ug/L
OW-60	12/11/2020	Anthracene	ND	9.88	0.178	1721	ug/L
OW-60	12/11/2020	Benzo(a)pyrene	*ND*	*9.88*	0.119	0.2	ug/L
OW-60	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.88*	0.148	0.34	ug/L
OW-60	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.88*	0.158	3.43	ug/L
OW-60	12/11/2020	4-Chloroaniline	*ND*	*9.88*	3.36	0.37	ug/L
OW-60	12/11/2020	2-Chloronaphthalene	ND	9.88	0.138	733	ug/L
OW-60	12/11/2020	4-Chlorophenyl-phenylether	ND	9.88	1.98	NA	ug/L
OW-60	12/11/2020	1,3-Dichlorobenzene	ND	9.88	0.178	NA	ug/L
OW-60	12/11/2020	1,4-Dichlorobenzene	ND	9.88	0.158	75	ug/L
OW-60	12/11/2020	Dibenzofuran	ND	9.88	0.168	NA	ug/L
OW-60	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.88*	2.57	1.25	ug/L
OW-60	12/11/2020	2,4-Dichlorophenol	ND	9.88	2.96	45.3	ug/L
OW-60	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.88*	1.58	1.52	ug/L
OW-60	12/11/2020	2,4-Dinitrophenol	ND	29.6	3.36	38.7	ug/L
OW-60	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.88*	1.88	0.485	ug/L
OW-60	12/11/2020	Fluorene	ND	9.88	0.178	288	ug/L
OW-60	12/11/2020	Hexachlorocyclopentadiene	*ND*	*19.8*	2.57	0.41	ug/L
OW-60	12/11/2020	2-Methylphenol	ND	9.88	1.78	NA	ug/L
OW-60	12/11/2020	Naphthalene	ND	9.88	0.168	30	ug/L
OW-60	12/11/2020	Pentachlorophenol	*ND*	*19.8*	1.38	1	ug/L
OW-60	12/11/2020	Phenol	ND	9.88	2.57	5761	ug/L
OW-60	12/11/2020	Pyrene	ND	9.88	0.208	117	ug/L
OW-60	12/11/2020	2,4,5-Trichlorophenol	ND	9.88	3.66	1166	ug/L
OW-60	12/11/2020	2,4,6-Trichlorophenol	ND	9.88	3.46	11.9*	ug/L
OW-60	12/11/2020	Aniline	ND	9.88	3.75	13	ug/L
OW-60	12/11/2020	Benzoic Acid	ND	29.6	7.21	75000	ug/L
OW-60	12/11/2020	Pyridine	ND	9.88	3.16	20	ug/L
OW-60	12/11/2020	1,2,4-Trichlorobenzene	ND	9.88	0.178	70	ug/L
OW-60	12/11/2020	1,2-Dichlorobenzene	ND	9.88	0.168	600	ug/L
OW-60	12/11/2020	Benzo(a)anthracene	*ND*	*9.88*	0.178	0.12	ug/L
OW-60	12/11/2020	Benzo(g,h,i)perylene	ND	9.88	0.227	NA	ug/L
OW-60	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.88	0.158	59	ug/L
OW-60	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.88*	2.67	0.137	ug/L
OW-60	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.88	4.94	55.64	ug/L
OW-60	12/11/2020	4-Bromophenyl-phenylether	ND	9.88	0.198	NA	ug/L
OW-60	12/11/2020	Butylbenzylphthalate	ND	9.88	0.188	16	ug/L
OW-60	12/11/2020	Carbazole	ND	9.88	0.227	NA	ug/L
OW-60	12/11/2020	4-Chloro-3-Methylphenol	ND	9.88	3.75	NA	ug/L
OW-60	12/11/2020	2-Chlorophenol	ND	9.88	2.17	91	ug/L
OW-60	12/11/2020	Chrysene	ND	9.88	0.188	34.3	ug/L
OW-60	12/11/2020	Dibenzo(a,h)anthracene	ND	9.88	0.237	NA	ug/L
OW-60	12/11/2020	Diethylphthalate	ND	9.88	0.237	14801	ug/L
OW-60	12/11/2020	2,4-Dimethylphenol	ND	9.88	3.46	354	ug/L
OW-60	12/11/2020	Di-n-butylphthalate	ND	9.88	2.67	885	ug/L
OW-60	12/11/2020	2,4-Dinitrotoluene	ND	9.88	1.88	45.3	ug/L
OW-60	12/11/2020	Di-n-octylphthalate	ND	9.88	0.168	200	ug/L
OW-60	12/11/2020	Fluoranthene	ND	9.88	0.178	802	ug/L
OW-60	12/11/2020	Hexachlorobenzene	*ND*	*9.88*	0.168	0.0976	ug/L
OW-60	12/11/2020	Hexachloroethane	*ND*	*9.88*	4.15	3.28	ug/L
OW-60	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.88*	0.217	0.343	ug/L
OW-60	12/11/2020	Isophorone	ND	9.88	0.138	781	ug/L
OW-60	12/11/2020	2-Nitroaniline	ND	9.88	2.17	190	ug/L
OW-60	12/11/2020	3-Nitroaniline	ND	9.88	1.78	NA	ug/L
OW-60	12/11/2020	4-Nitroaniline	*ND*	*9.88*	1.48	3.8	ug/L
OW-60	12/11/2020	Nitrobenzene	*ND*	*9.88*	0.128	1.4	ug/L
OW-60	12/11/2020	2-Nitrophenol	ND	9.88	5.14	NA	ug/L
OW-60	12/11/2020	4-Nitrophenol	ND	9.88	2.08	NA	ug/L
OW-60	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.88*	3.26	0.011	ug/L
OW-60	12/11/2020	N-Nitrosodiphenylamine	ND	9.88	0.178	122	ug/L
OW-60	12/11/2020	Phenanthrene	ND	9.88	0.178	170	ug/L
OW-60	12/11/2020	Dimethylphthalate	ND	9.88	0.168	612	ug/L
OW-60	12/11/2020	Benzyl Alcohol	ND	9.88	1.98	2000	ug/L
OW-60	12/11/2020	Bis(2-chloroisopropyl)ether	*ND*	*9.88*	0.158	9.81	ug/L
OW-60	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.88*	3.46	0.0049	ug/L
OW-60	12/11/2020	Azobenzene	*ND*	*9.88*	0.988	0.12	ug/L
OW-63	4/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-63	4/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-63	4/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-63	4/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-63	4/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-63	4/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-63	4/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-63	4/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-63	4/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-63	4/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-63	4/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-63	4/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	4/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-63	4/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-63	4/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-63	4/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-63	4/29/2018	Carbazole	7.2	10	6.3	NA	ug/L
OW-63	4/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-63	4/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-63	4/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-63	4/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-63	4/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-63	4/29/2018	1-Methylnaphthalene	**57**	10	7	11.38	ug/L
OW-63	4/29/2018	Naphthalene	**190**	10	5	30	ug/L
OW-63	4/29/2018	2-Methylnaphthalene	**69**	10	6.3	35.1	ug/L
OW-63	4/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-63	4/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-63	4/29/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-63	4/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-63	4/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-63	4/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-63	4/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-63	4/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-63	4/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-63	4/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-63	4/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-63	4/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-63	4/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-63	4/29/2018	2,4-Dimethylphenol	13	10	5.9	354	ug/L
OW-63	4/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-63	4/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-63	4/29/2018	Phenol	17	10	6	5761	ug/L
OW-63	4/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-63	4/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-63	4/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-63	4/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-63	4/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-63	4/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-63	4/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-63	4/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-63	4/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-63	4/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-63	4/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-63	4/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-63	4/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-63	4/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-63	4/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-63	4/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-63	4/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-63	4/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-63	4/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-63	4/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-63	4/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-63	4/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-63	4/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-63	4/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-63	4/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-63	4/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-63	4/29/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-63	8/22/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-63	8/22/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-63	8/22/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-63	8/22/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Aniline	ND	10	6.2	13	ug/L
OW-63	8/22/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-63	8/22/2018	Benzoic Acid	39	20	6.3	75000	ug/L
OW-63	8/22/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-63	8/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-63	8/22/2018	Isophorone	ND	10	6.2	781	ug/L
OW-63	8/22/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-63	8/22/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-63	8/22/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-63	8/22/2018	Phenanthrene	ND	10	6	170	ug/L
OW-63	8/22/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-63	8/22/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-63	8/22/2018	Fluorene	ND	10	6.3	288	ug/L
OW-63	8/22/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-63	8/22/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-63	8/22/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-63	8/22/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-63	8/22/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-63	8/22/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-63	8/22/2018	1-Methylnaphthalene	**77**	10	7	11.38	ug/L
OW-63	8/22/2018	Naphthalene	**210**	10	5	30	ug/L
OW-63	8/22/2018	2-Methylnaphthalene	**91**	10	6.3	35.1	ug/L
OW-63	8/22/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-63	8/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-63	8/22/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
OW-63	8/22/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-63	8/22/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-63	8/22/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-63	8/22/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-63	8/22/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-63	8/22/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-63	8/22/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-63	8/22/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-63	8/22/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-63	8/22/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-63	8/22/2018	2,4-Dimethylphenol	17	10	5.9	354	ug/L
OW-63	8/22/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-63	8/22/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-63	8/22/2018	Phenol	25	10	6	5761	ug/L
OW-63	8/22/2018	Pyridine	ND	10	5.4	20	ug/L
OW-63	8/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-63	8/22/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-63	8/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-63	8/22/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-63	8/22/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-63	8/22/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-63	8/22/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-63	8/22/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/22/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-63	8/22/2018	Pyrene	ND	10	6.5	117	ug/L
OW-63	8/22/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-63	8/22/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-63	8/22/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-63	8/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-63	8/22/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-63	8/22/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-63	8/22/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-63	8/22/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-63	8/22/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-63	8/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-63	8/22/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-63	8/22/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-63	8/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-63	8/22/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-63	8/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-63	8/22/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-63	12/3/2018	Benzo(a)pyrene	*ND*	*50*	30	0.2	ug/L
OW-63	12/3/2018	2,4-Dinitrophenol	*ND*	*100*	19	38.7	ug/L
OW-63	12/3/2018	Dibenzo(a,h)anthracene	ND	50	28	NA	ug/L
OW-63	12/3/2018	Benzo(a)anthracene	*ND*	*50*	26	0.12	ug/L
OW-63	12/3/2018	4-Chloro-3-Methylphenol	ND	50	28	NA	ug/L
OW-63	12/3/2018	Aniline	*ND*	*50*	31	13	ug/L
OW-63	12/3/2018	N-Nitrosodimethylamine	*ND*	*50*	34	0.0049	ug/L
OW-63	12/3/2018	Benzoic Acid	120	100	32	75000	ug/L
OW-63	12/3/2018	Hexachloroethane	*ND*	*50*	30	3.28	ug/L
OW-63	12/3/2018	Hexachlorocyclopentadiene	*ND*	*50*	20	0.41	ug/L
OW-63	12/3/2018	Isophorone	ND	50	31	781	ug/L
OW-63	12/3/2018	Acenaphthene	ND	50	29	535	ug/L
OW-63	12/3/2018	Diethylphthalate	ND	50	31	14801	ug/L
OW-63	12/3/2018	Di-n-butylphthalate	ND	50	34	885	ug/L
OW-63	12/3/2018	Phenanthrene	ND	50	30	170	ug/L
OW-63	12/3/2018	Butylbenzylphthalate	*ND*	*50*	32	16	ug/L
OW-63	12/3/2018	N-Nitrosodiphenylamine	ND	50	33	122	ug/L
OW-63	12/3/2018	Fluorene	ND	50	32	288	ug/L
OW-63	12/3/2018	Carbazole	ND	50	31	NA	ug/L
OW-63	12/3/2018	Hexachlorobutadiene	*ND*	*50*	32	0.14	ug/L
OW-63	12/3/2018	Pentachlorophenol	*ND*	*100*	26	1	ug/L
OW-63	12/3/2018	2,4,6-Trichlorophenol	ND	50	32	11.9*	ug/L
OW-63	12/3/2018	2-Nitroaniline	ND	50	29	190	ug/L
OW-63	12/3/2018	2-Nitrophenol	ND	50	30	NA	ug/L
OW-63	12/3/2018	1-Methylnaphthalene	**75**	50	35	11.38	ug/L
OW-63	12/3/2018	Naphthalene	**230**	50	25	30	ug/L
OW-63	12/3/2018	2-Methylnaphthalene	**88**	50	32	35.1	ug/L
OW-63	12/3/2018	2-Chloronaphthalene	ND	50	30	733	ug/L
OW-63	12/3/2018	3,3-Dichlorobenzidine	*ND*	*50*	34	1.25	ug/L
OW-63	12/3/2018	2-Methylphenol	ND	50	32	NA	ug/L
OW-63	12/3/2018	1,2-Dichlorobenzene	ND	50	30	600	ug/L
OW-63	12/3/2018	2-Chlorophenol	ND	50	29	91	ug/L
OW-63	12/3/2018	2,4,5-Trichlorophenol	ND	50	29	1166	ug/L
OW-63	12/3/2018	Nitrobenzene	*ND*	*50*	30	1.4	ug/L
OW-63	12/3/2018	3-Nitroaniline	ND	50	34	NA	ug/L
OW-63	12/3/2018	4-Nitroaniline	*ND*	*50*	30	3.8	ug/L
OW-63	12/3/2018	4-Nitrophenol	ND	50	28	NA	ug/L
OW-63	12/3/2018	Benzyl Alcohol	ND	50	31	2000	ug/L
OW-63	12/3/2018	4-Bromophenyl-phenylether	ND	50	35	NA	ug/L
OW-63	12/3/2018	Azobenzene	*ND*	*50*	34	0.12	ug/L
OW-63	12/3/2018	2,4-Dimethylphenol	ND	50	30	354	ug/L
OW-63	12/3/2018	1,4-Dichlorobenzene	ND	50	29	75	ug/L
OW-63	12/3/2018	4-Chloroaniline	*ND*	*50*	30	0.37	ug/L
OW-63	12/3/2018	Phenol	ND	50	30	5761	ug/L
OW-63	12/3/2018	Pyridine	*ND*	*50*	27	20	ug/L
OW-63	12/3/2018	Bis(2-chloroethyl)ether	*ND*	*50*	32	0.137	ug/L
OW-63	12/3/2018	Bis(2-chloroethoxy)methane	ND	50	31	59	ug/L
OW-63	12/3/2018	Bis(2-ethylhexyl)phthalate	ND	50	40	55.64	ug/L
OW-63	12/3/2018	Di-n-octylphthalate	ND	50	31	200	ug/L
OW-63	12/3/2018	Hexachlorobenzene	*ND*	*50*	31	0.0976	ug/L
OW-63	12/3/2018	Anthracene	ND	50	29	1721	ug/L
OW-63	12/3/2018	1,2,4-Trichlorobenzene	ND	50	32	70	ug/L
OW-63	12/3/2018	2,4-Dichlorophenol	*ND*	*100*	29	45.3	ug/L
OW-63	12/3/2018	2,4-Dinitrotoluene	*ND*	*50*	29	45.3	ug/L
OW-63	12/3/2018	Pyrene	ND	50	33	117	ug/L
OW-63	12/3/2018	Dimethylphthalate	ND	50	30	612	ug/L
OW-63	12/3/2018	Dibenzofuran	ND	50	34	NA	ug/L
OW-63	12/3/2018	Benzo(g,h,i)perylene	ND	50	28	NA	ug/L
OW-63	12/3/2018	Indeno(1,2,3-cd)pyrene	*ND*	*50*	35	0.343	ug/L
OW-63	12/3/2018	Benzo(b)fluoranthene	*ND*	*50*	36	0.34	ug/L
OW-63	12/3/2018	Fluoranthene	ND	50	29	802	ug/L
OW-63	12/3/2018	Benzo(k)fluoranthene	*ND*	*50*	32	3.43	ug/L
OW-63	12/3/2018	Acenaphthylene	ND	50	31	NA	ug/L
OW-63	12/3/2018	Chrysene	*ND*	*50*	34	34.3	ug/L
OW-63	12/3/2018	4,6-Dinitro-2-methylphenol	*ND*	*100*	27	1.52	ug/L
OW-63	12/3/2018	1,3-Dichlorobenzene	ND	50	29	NA	ug/L
OW-63	12/3/2018	2,6-Dinitrotoluene	*ND*	*50*	30	0.485	ug/L
OW-63	12/3/2018	N-Nitrosodi-n-propylamine	*ND*	*50*	31	0.011	ug/L
OW-63	12/3/2018	4-Chlorophenyl-phenylether	ND	50	36	NA	ug/L
OW-63	12/3/2018	Bis(2-chloroisopropyl)ether	*ND*	*50*	24	9.81	ug/L
OW-63	12/3/2018	3,4-Methylphenol	ND	50	27	NA	ug/L
OW-63	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
OW-63	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
OW-63	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
OW-63	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
OW-63	2/20/2019	1-Methylnaphthalene	**64**	10	6.999122	11.38	ug/L
OW-63	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
OW-63	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
OW-63	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
OW-63	2/20/2019	2,4-Dimethylphenol	11	10	5.912084	354	ug/L
OW-63	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
OW-63	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
OW-63	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
OW-63	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
OW-63	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
OW-63	2/20/2019	2-Methylnaphthalene	**70**	10	6.33239	35.1	ug/L
OW-63	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
OW-63	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
OW-63	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
OW-63	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
OW-63	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
OW-63	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
OW-63	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
OW-63	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
OW-63	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
OW-63	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
OW-63	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
OW-63	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
OW-63	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
OW-63	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
OW-63	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
OW-63	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
OW-63	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
OW-63	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
OW-63	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
OW-63	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
OW-63	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
OW-63	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
OW-63	2/20/2019	Benzoic Acid	37	20	6.311561	75000	ug/L
OW-63	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
OW-63	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
OW-63	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
OW-63	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
OW-63	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
OW-63	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
OW-63	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
OW-63	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
OW-63	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
OW-63	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
OW-63	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
OW-63	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
OW-63	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
OW-63	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
OW-63	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
OW-63	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
OW-63	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
OW-63	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
OW-63	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
OW-63	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
OW-63	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
OW-63	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
OW-63	2/20/2019	Naphthalene	**180**	10	5.041403	30	ug/L
OW-63	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
OW-63	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
OW-63	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
OW-63	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
OW-63	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
OW-63	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
OW-63	2/20/2019	Phenol	23	10	5.977352	5761	ug/L
OW-63	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
OW-63	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
OW-63	5/15/2019	1,2,4-Trichlorobenzene	ND	20	8.088932	70	ug/L
OW-63	5/15/2019	1,2-Dichlorobenzene	ND	20	9.548867	600	ug/L
OW-63	5/15/2019	1,3-Dichlorobenzene	ND	20	10.530751	NA	ug/L
OW-63	5/15/2019	1,4-Dichlorobenzene	ND	20	8.846465	75	ug/L
OW-63	5/15/2019	1-Methylnaphthalene	**84**	20	6.138153	11.38	ug/L
OW-63	5/15/2019	2,4,5-Trichlorophenol	ND	20	5.935283	1166	ug/L
OW-63	5/15/2019	2,4,6-Trichlorophenol	ND	20	4.667461	11.9*	ug/L
OW-63	5/15/2019	2,4-Dichlorophenol	ND	40	5.841613	45.3	ug/L
OW-63	5/15/2019	2,4-Dimethylphenol	16	20	5.931986	354	ug/L
OW-63	5/15/2019	2,4-Dinitrophenol	*ND*	*40*	5.184909	38.7	ug/L
OW-63	5/15/2019	2,4-Dinitrotoluene	ND	20	7.68453	45.3	ug/L
OW-63	5/15/2019	2,6-Dinitrotoluene	*ND*	*20*	4.85777	0.485	ug/L
OW-63	5/15/2019	2-Chloronaphthalene	ND	20	6.140237	733	ug/L
OW-63	5/15/2019	2-Chlorophenol	ND	20	5.371875	91	ug/L
OW-63	5/15/2019	2-Methylnaphthalene	**93**	20	6.037726	35.1	ug/L
OW-63	5/15/2019	2-Methylphenol	ND	20	5.716877	NA	ug/L
OW-63	5/15/2019	2-Nitroaniline	ND	20	6.347405	190	ug/L
OW-63	5/15/2019	2-Nitrophenol	ND	20	5.943961	NA	ug/L
OW-63	5/15/2019	3,3-Dichlorobenzidine	*ND*	*20*	5.564801	1.25	ug/L
OW-63	5/15/2019	3,4-Methylphenol	ND	20	7.168906	NA	ug/L
OW-63	5/15/2019	3-Nitroaniline	ND	20	6.487583	NA	ug/L
OW-63	5/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*40*	5.786543	1.52	ug/L
OW-63	5/15/2019	4-Bromophenyl-phenylether	ND	20	5.994386	NA	ug/L
OW-63	5/15/2019	4-Chloro-3-Methylphenol	ND	20	6.816759	NA	ug/L
OW-63	5/15/2019	4-Chloroaniline	*ND*	*20*	4.513204	0.37	ug/L
OW-63	5/15/2019	4-Chlorophenyl-phenylether	ND	20	4.877711	NA	ug/L
OW-63	5/15/2019	4-Nitroaniline	*ND*	*20*	5.384607	3.8	ug/L
OW-63	5/15/2019	4-Nitrophenol	ND	20	15.143333	NA	ug/L
OW-63	5/15/2019	Acenaphthene	ND	20	5.911782	535	ug/L
OW-63	5/15/2019	Acenaphthylene	ND	20	4.791012	NA	ug/L
OW-63	5/15/2019	Aniline	*ND*	*20*	7.159033	13	ug/L
OW-63	5/15/2019	Anthracene	ND	20	5.314345	1721	ug/L
OW-63	5/15/2019	Azobenzene	*ND*	*20*	6.509237	0.12	ug/L
OW-63	5/15/2019	Benzo(a)anthracene	*ND*	*20*	7.203566	0.12	ug/L
OW-63	5/15/2019	Benzo(a)pyrene	*ND*	*20*	7.096535	0.2	ug/L
OW-63	5/15/2019	Benzo(b)fluoranthene	*ND*	*20*	6.736253	0.34	ug/L
OW-63	5/15/2019	Benzo(g,h,i)perylene	ND	20	4.468466	NA	ug/L
OW-63	5/15/2019	Benzo(k)fluoranthene	*ND*	*20*	5.767003	3.43	ug/L
OW-63	5/15/2019	Benzoic Acid	ND	40	21.446647	75000	ug/L
OW-63	5/15/2019	Benzyl Alcohol	ND	20	4.720682	2000	ug/L
OW-63	5/15/2019	Bis(2-chloroethoxy)methane	ND	20	5.207789	59	ug/L
OW-63	5/15/2019	Bis(2-chloroethyl)ether	*ND*	*20*	6.466963	0.137	ug/L
OW-63	5/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*20*	7.716679	9.81	ug/L
OW-63	5/15/2019	Bis(2-ethylhexyl)phthalate	ND	20	8.604256	55.64	ug/L
OW-63	5/15/2019	Butylbenzylphthalate	*ND*	*20*	6.656694	16	ug/L
OW-63	5/15/2019	Carbazole	6.4	20	5.781013	NA	ug/L
OW-63	5/15/2019	Chrysene	ND	20	5.573246	34.3	ug/L
OW-63	5/15/2019	Dibenzo(a,h)anthracene	ND	20	5.919732	NA	ug/L
OW-63	5/15/2019	Dibenzofuran	ND	20	6.371779	NA	ug/L
OW-63	5/15/2019	Diethylphthalate	ND	20	5.744975	14801	ug/L
OW-63	5/15/2019	Dimethylphthalate	ND	20	6.476032	612	ug/L
OW-63	5/15/2019	Di-n-butylphthalate	ND	20	5.413875	885	ug/L
OW-63	5/15/2019	Di-n-octylphthalate	ND	20	7.032733	200	ug/L
OW-63	5/15/2019	Fluoranthene	ND	20	4.824429	802	ug/L
OW-63	5/15/2019	Fluorene	6.5	20	5.776977	288	ug/L
OW-63	5/15/2019	Hexachlorobenzene	*ND*	*20*	6.165918	0.0976	ug/L
OW-63	5/15/2019	Hexachlorobutadiene	*ND*	*20*	9.464529	0.14	ug/L
OW-63	5/15/2019	Hexachlorocyclopentadiene	*ND*	*20*	7.156352	0.41	ug/L
OW-63	5/15/2019	Hexachloroethane	*ND*	*20*	9.575583	3.28	ug/L
OW-63	5/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*20*	5.409147	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Isophorone	ND	20	6.092069	781	ug/L
OW-63	5/15/2019	Naphthalene	**260**	20	8.24442	30	ug/L
OW-63	5/15/2019	Nitrobenzene	*ND*	*20*	5.578712	1.4	ug/L
OW-63	5/15/2019	N-Nitrosodimethylamine	*ND*	*20*	10.087096	0.0049	ug/L
OW-63	5/15/2019	N-Nitrosodi-n-propylamine	*ND*	*20*	12.984906	0.011	ug/L
OW-63	5/15/2019	N-Nitrosodiphenylamine	ND	20	4.760761	122	ug/L
OW-63	5/15/2019	Pentachlorophenol	*ND*	*40*	5.490953	1	ug/L
OW-63	5/15/2019	Phenanthrene	ND	20	5.554244	170	ug/L
OW-63	5/15/2019	Phenol	25	20	16.073173	5761	ug/L
OW-63	5/15/2019	Pyrene	ND	20	5.007199	117	ug/L
OW-63	5/15/2019	Pyridine	ND	20	19.206273	20	ug/L
OW-63	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-63	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-63	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-63	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-63	8/19/2019	1-Methylnaphthalene	**50**	10	3.069076	11.38	ug/L
OW-63	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-63	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-63	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-63	8/19/2019	2,4-Dimethylphenol	8.9	10	2.965993	354	ug/L
OW-63	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-63	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-63	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-63	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-63	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-63	8/19/2019	2-Methylnaphthalene	**61**	10	3.018863	35.1	ug/L
OW-63	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-63	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-63	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-63	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-63	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-63	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-63	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-63	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-63	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-63	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-63	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-63	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-63	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-63	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-63	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-63	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
OW-63	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-63	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-63	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-63	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-63	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-63	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-63	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-63	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-63	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-63	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-63	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-63	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-63	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-63	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-63	8/19/2019	Carbazole	4.2	10	2.890507	NA	ug/L
OW-63	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-63	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-63	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-63	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-63	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-63	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-63	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-63	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-63	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-63	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-63	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-63	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-63	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-63	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-63	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-63	8/19/2019	Naphthalene	**180**	10	4.12221	30	ug/L
OW-63	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-63	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-63	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-63	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-63	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-63	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-63	8/19/2019	Phenol	18	10	8.036586	5761	ug/L
OW-63	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-63	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
OW-63	11/18/2019	1,4-Dioxane	*ND*	*5*	5	4.59	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	**77**	2.5	2.5	11.38	ug/L
OW-63	11/18/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
OW-63	11/18/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
OW-63	11/18/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,4-Dimethylphenol	19	2.5	2.5	354	ug/L
OW-63	11/18/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
OW-63	11/18/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
OW-63	11/18/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
OW-63	11/18/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**120**	2.5	2.5	35.1	ug/L
OW-63	11/18/2019	2-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
OW-63	11/18/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
OW-63	11/18/2019	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
OW-63	11/18/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
OW-63	11/18/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
OW-63	11/18/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Aniline	ND	2.5	2.5	13	ug/L
OW-63	11/18/2019	Anthracene	ND	2.5	2.5	1721	ug/L
OW-63	11/18/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-63	11/18/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-63	11/18/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-63	11/18/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
OW-63	11/18/2019	Benzoic Acid	ND	2.5	2.5	75000	ug/L
OW-63	11/18/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
OW-63	11/18/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
OW-63	11/18/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
OW-63	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
OW-63	11/18/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
OW-63	11/18/2019	Carbazole	7.2	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
OW-63	11/18/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
OW-63	11/18/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
OW-63	11/18/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
OW-63	11/18/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
OW-63	11/18/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
OW-63	11/18/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
OW-63	11/18/2019	Fluorene	ND	2.5	2.5	288	ug/L
OW-63	11/18/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
OW-63	11/18/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
OW-63	11/18/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
OW-63	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
OW-63	11/18/2019	Isophorone	ND	2.5	2.5	781	ug/L
OW-63	11/18/2019	Naphthalene	**320**	2.5	2.5	30	ug/L
OW-63	11/18/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
OW-63	11/18/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
OW-63	11/18/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
OW-63	11/18/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
OW-63	11/18/2019	Phenol	44	2.5	2.5	5761	ug/L
OW-63	11/18/2019	Pyrene	ND	2.5	2.5	117	ug/L
OW-63	11/18/2019	Pyridine	ND	2.5	2.5	20	ug/L
OW-63	11/18/2019	1,2,4-Trichlorobenzene	ND	2.5	2.5	70	ug/L
OW-63	11/18/2019	1,2-Dichlorobenzene	ND	2.5	2.5	600	ug/L
OW-63	11/18/2019	1,3-Dichlorobenzene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	1,4-Dichlorobenzene	ND	2.5	2.5	75	ug/L
OW-63	11/18/2019	1,4-Dioxane	*ND*	*5*	5	4.59	ug/L
OW-63	11/18/2019	1-Methylnaphthalene	**78**	2.5	2.5	11.38	ug/L
OW-63	11/18/2019	2,4,5-Trichlorophenol	ND	2.5	2.5	1166	ug/L
OW-63	11/18/2019	2,4,6-Trichlorophenol	ND	2.5	2.5	11.9*	ug/L
OW-63	11/18/2019	2,4-Dichlorophenol	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,4-Dimethylphenol	13	2.5	2.5	354	ug/L
OW-63	11/18/2019	2,4-Dinitrophenol	ND	2.5	2.5	38.7	ug/L
OW-63	11/18/2019	2,4-Dinitrotoluene	ND	2.5	2.5	45.3	ug/L
OW-63	11/18/2019	2,6-Dinitrotoluene	*ND*	*1*	1	0.485	ug/L
OW-63	11/18/2019	2-Chloronaphthalene	ND	2.5	2.5	733	ug/L
OW-63	11/18/2019	2-Chlorophenol	ND	2.5	2.5	91	ug/L
OW-63	11/18/2019	2-Methylnaphthalene	**130**	2.5	2.5	35.1	ug/L
OW-63	11/18/2019	2-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	2-Nitroaniline	ND	2.5	2.5	190	ug/L
OW-63	11/18/2019	2-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3,3-Dichlorobenzidine	*ND*	*2.5*	2.5	1.25	ug/L
OW-63	11/18/2019	3,4-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	3-Nitroaniline	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	2.5	1.52	ug/L
OW-63	11/18/2019	4-Bromophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chloro-3-Methylphenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Chlorophenyl-phenylether	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	4-Nitroaniline	ND	2.5	2.5	3.8	ug/L
OW-63	11/18/2019	4-Nitrophenol	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Acenaphthene	ND	2.5	2.5	535	ug/L
OW-63	11/18/2019	Acenaphthylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Aniline	ND	2.5	2.5	13	ug/L
OW-63	11/18/2019	Anthracene	ND	2.5	2.5	1721	ug/L
OW-63	11/18/2019	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
OW-63	11/18/2019	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
OW-63	11/18/2019	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
OW-63	11/18/2019	Benzo(g,h,i)perylene	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Benzo(k)fluoranthene	ND	2.5	2.5	3.43	ug/L
OW-63	11/18/2019	Benzoic Acid	ND	2.5	2.5	75000	ug/L
OW-63	11/18/2019	Benzyl Alcohol	ND	2.5	2.5	2000	ug/L
OW-63	11/18/2019	Bis(2-chloroethoxy)methane	ND	2.5	2.5	59	ug/L
OW-63	11/18/2019	Bis(2-chloroisopropyl)ether	ND	2.5	2.5	9.81	ug/L
OW-63	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	2.5	2.5	55.64	ug/L
OW-63	11/18/2019	Butylbenzylphthalate	ND	2.5	2.5	16	ug/L
OW-63	11/18/2019	Carbazole	6.6	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Chrysene	ND	2.5	2.5	34.3	ug/L
OW-63	11/18/2019	Dibenzo(a,h)anthracene	ND	0.125	0.125	NA	ug/L
OW-63	11/18/2019	Dibenzofuran	ND	2.5	2.5	NA	ug/L
OW-63	11/18/2019	Diethylphthalate	ND	2.5	2.5	14801	ug/L
OW-63	11/18/2019	Dimethylphthalate	ND	2.5	2.5	612	ug/L
OW-63	11/18/2019	Di-n-butylphthalate	ND	2.5	2.5	885	ug/L
OW-63	11/18/2019	Di-n-octylphthalate	ND	2.5	2.5	200	ug/L
OW-63	11/18/2019	Fluoranthene	ND	2.5	2.5	802	ug/L
OW-63	11/18/2019	Fluorene	ND	2.5	2.5	288	ug/L
OW-63	11/18/2019	Hexachlorobenzene	*ND*	*2.5*	2.5	0.0976	ug/L
OW-63	11/18/2019	Hexachlorobutadiene	*ND*	*2.5*	2.5	0.14	ug/L
OW-63	11/18/2019	Hexachlorocyclopentadiene	*ND*	*2.5*	2.5	0.41	ug/L
OW-63	11/18/2019	Hexachloroethane	ND	2.5	2.5	3.28	ug/L
OW-63	11/18/2019	Indeno(1,2,3-cd)pyrene	*ND*	*1*	1	0.343	ug/L
OW-63	11/18/2019	Isophorone	ND	2.5	2.5	781	ug/L
OW-63	11/18/2019	Naphthalene	**350**	2.5	2.5	30	ug/L
OW-63	11/18/2019	Nitrobenzene	*ND*	*2.5*	2.5	1.4	ug/L
OW-63	11/18/2019	N-Nitrosodiphenylamine	ND	2.5	2.5	122	ug/L
OW-63	11/18/2019	Pentachlorophenol	*ND*	*2.5*	2.5	1	ug/L
OW-63	11/18/2019	Phenanthrene	ND	2.5	2.5	170	ug/L
OW-63	11/18/2019	Phenol	44	2.5	2.5	5761	ug/L
OW-63	11/18/2019	Pyrene	ND	2.5	2.5	117	ug/L
OW-63	11/18/2019	Pyridine	ND	2.5	2.5	20	ug/L
OW-63	3/4/2020	1,2,4-Trichlorobenzene	ND	2.5	0.5	70	ug/L
OW-63	3/4/2020	1,2-Dichlorobenzene	ND	2.5	0.5	600	ug/L
OW-63	3/4/2020	1,3-Dichlorobenzene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	1,4-Dichlorobenzene	ND	2.5	0.5	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	3/4/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-63	3/4/2020	1-Methylnaphthalene	**66**	2.5	0.5	11.38	ug/L
OW-63	3/4/2020	2,4,5-Trichlorophenol	ND	2.5	0.5	1166	ug/L
OW-63	3/4/2020	2,4,6-Trichlorophenol	ND	2.5	0.5	11.9*	ug/L
OW-63	3/4/2020	2,4-Dichlorophenol	ND	2.5	0.5	45.3	ug/L
OW-63	3/4/2020	2,4-Dimethylphenol	19	2.5	0.5	354	ug/L
OW-63	3/4/2020	2,4-Dinitrophenol	ND	2.5	0.5	38.7	ug/L
OW-63	3/4/2020	2,4-Dinitrotoluene	ND	2.5	0.5	45.3	ug/L
OW-63	3/4/2020	2,6-Dinitrotoluene	*ND*	*1*	0.2	0.485	ug/L
OW-63	3/4/2020	2-Chloronaphthalene	ND	2.5	0.5	733	ug/L
OW-63	3/4/2020	2-Chlorophenol	ND	2.5	0.5	91	ug/L
OW-63	3/4/2020	2-Methylnaphthalene	**90**	2.5	0.5	35.1	ug/L
OW-63	3/4/2020	2-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	2-Nitroaniline	ND	2.5	0.5	190	ug/L
OW-63	3/4/2020	2-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	3,4-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	3,3-Dichlorobenzidine	*ND*	*2.5*	0.5	1.25	ug/L
OW-63	3/4/2020	3-Nitroaniline	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4,6-Dinitro-2-methylphenol	*ND*	*2.5*	0.5	1.52	ug/L
OW-63	3/4/2020	4-Bromophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Chloro-3-Methylphenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Chlorophenyl-phenylether	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	4-Nitroaniline	ND	2.5	0.5	3.8	ug/L
OW-63	3/4/2020	4-Nitrophenol	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Acenaphthene	ND	2.5	0.5	535	ug/L
OW-63	3/4/2020	Acenaphthylene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Aniline	ND	2.5	0.5	13	ug/L
OW-63	3/4/2020	Anthracene	ND	2.5	0.5	1721	ug/L
OW-63	3/4/2020	Benzo(a)anthracene	*ND*	*0.5*	0.1	0.12	ug/L
OW-63	3/4/2020	Benzo(a)pyrene	*ND*	*0.5*	0.1	0.2	ug/L
OW-63	3/4/2020	Benzo(b)fluoranthene	*ND*	*0.5*	0.1	0.34	ug/L
OW-63	3/4/2020	Benzo(g,h,i)perylene	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Benzo(k)fluoranthene	ND	2.5	0.5	3.43	ug/L
OW-63	3/4/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-63	3/4/2020	Benzyl Alcohol	ND	2.5	0.5	2000	ug/L
OW-63	3/4/2020	Bis(2-chloroethoxy)methane	ND	2.5	0.5	59	ug/L
OW-63	3/4/2020	Bis(2-chloroisopropyl)ether	ND	2.5	0.5	9.81	ug/L
OW-63	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	2.5	1	55.64	ug/L
OW-63	3/4/2020	Butylbenzylphthalate	ND	2.5	1	16	ug/L
OW-63	3/4/2020	Carbazole	7.1	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Chrysene	ND	2.5	0.5	34.3	ug/L
OW-63	3/4/2020	Di-n-butylphthalate	ND	2.5	1	885	ug/L
OW-63	3/4/2020	Di-n-octylphthalate	ND	2.5	1	200	ug/L
OW-63	3/4/2020	Dibenzo(a,h)anthracene	ND	0.12	0.025	NA	ug/L
OW-63	3/4/2020	Dibenzofuran	ND	2.5	0.5	NA	ug/L
OW-63	3/4/2020	Diethylphthalate	ND	2.5	1	14801	ug/L
OW-63	3/4/2020	Dimethylphthalate	ND	2.5	1	612	ug/L
OW-63	3/4/2020	Fluoranthene	ND	2.5	0.5	802	ug/L
OW-63	3/4/2020	Fluorene	1.44	2.5	0.5	288	ug/L
OW-63	3/4/2020	Hexachlorobenzene	*ND*	*2.5*	0.5	0.0976	ug/L
OW-63	3/4/2020	Hexachlorobutadiene	*ND*	*2.5*	0.5	0.14	ug/L
OW-63	3/4/2020	Hexachlorocyclopentadiene	*ND*	*2.5*	0.5	0.41	ug/L
OW-63	3/4/2020	Hexachloroethane	ND	2.5	0.5	3.28	ug/L
OW-63	3/4/2020	Indeno(1,2,3-cd)pyrene	*ND*	*1*	0.2	0.343	ug/L
OW-63	3/4/2020	Isophorone	ND	2.5	0.5	781	ug/L
OW-63	3/4/2020	N-Nitrosodiphenylamine	ND	2.5	0.5	122	ug/L
OW-63	3/4/2020	Naphthalene	**250**	2.5	0.5	30	ug/L
OW-63	3/4/2020	Nitrobenzene	*ND*	*2.5*	0.5	1.4	ug/L
OW-63	3/4/2020	Pentachlorophenol	*ND*	*2.5*	0.5	1	ug/L
OW-63	3/4/2020	Phenanthrene	1.4	2.5	0.5	170	ug/L
OW-63	3/4/2020	Phenol	50	2.5	0.5	5761	ug/L
OW-63	3/4/2020	Pyrene	ND	2.5	0.5	117	ug/L
OW-63	3/4/2020	Pyridine	ND	2.5	0.5	20	ug/L
OW-63	9/16/2020	1,2,4-Trichlorobenzene	ND	5	1	70	ug/L
OW-63	9/16/2020	1,2-Dichlorobenzene	ND	5	1	600	ug/L
OW-63	9/16/2020	1,3-Dichlorobenzene	ND	5	1	NA	ug/L
OW-63	9/16/2020	1,4-Dichlorobenzene	ND	5	1	75	ug/L
OW-63	9/16/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-63	9/16/2020	1-Methylnaphthalene	**70**	5	1	11.38	ug/L
OW-63	9/16/2020	2,3,4,6-Tetrachlorophenol	ND	5	1	240	ug/L
OW-63	9/16/2020	2,3,5,6-Tetrachlorophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	2,4,5-Trichlorophenol	ND	5	1	1166	ug/L
OW-63	9/16/2020	2,4,6-Trichlorophenol	ND	5	1	11.9*	ug/L
OW-63	9/16/2020	2,4-Dichlorophenol	ND	5	1	45.3	ug/L
OW-63	9/16/2020	2,4-Dimethylphenol	17	5	1	354	ug/L
OW-63	9/16/2020	2,4-Dinitrophenol	ND	5	1	38.7	ug/L
OW-63	9/16/2020	2,4-Dinitrotoluene	ND	5	1	45.3	ug/L
OW-63	9/16/2020	2,6-Dinitrotoluene	ND	0.2	1	0.485	ug/L
OW-63	9/16/2020	2-Chloronaphthalene	ND	5	1	733	ug/L
OW-63	9/16/2020	2-Chlorophenol	ND	5	1	91	ug/L
OW-63	9/16/2020	2-Methylnaphthalene	**100**	5	1	35.1	ug/L
OW-63	9/16/2020	2-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	2-Nitroaniline	ND	5	1	190	ug/L
OW-63	9/16/2020	2-Nitrophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	3,4-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	3,3-Dichlorobenzidine	*ND*	*5*	1	1.25	ug/L
OW-63	9/16/2020	3-Nitroaniline	ND	5	1	NA	ug/L
OW-63	9/16/2020	4,6-Dinitro-2-methylphenol	*ND*	*5*	1	1.52	ug/L
OW-63	9/16/2020	4-Bromophenyl-phenylether	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Chloro-3-Methylphenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Chloroaniline	*ND*	*5*	1	0.37	ug/L
OW-63	9/16/2020	4-Chlorophenyl-phenylether	ND	5	1	NA	ug/L
OW-63	9/16/2020	4-Nitroaniline	*ND*	*5*	1	3.8	ug/L
OW-63	9/16/2020	4-Nitrophenol	ND	5	1	NA	ug/L
OW-63	9/16/2020	Acenaphthene	ND	5	1	535	ug/L
OW-63	9/16/2020	Acenaphthylene	ND	5	1	NA	ug/L
OW-63	9/16/2020	Aniline	ND	5	1	13	ug/L
OW-63	9/16/2020	Anthracene	ND	5	1	1721	ug/L
OW-63	9/16/2020	Benzo(a)anthracene	*ND*	*1*	0.5	0.12	ug/L
OW-63	9/16/2020	Benzidine	*ND*	*5*	2.5	0.0011	ug/L
OW-63	9/16/2020	Benzo(a)pyrene	*ND*	*1*	0.5	0.2	ug/L
OW-63	9/16/2020	Benzo(b)fluoranthene	*ND*	*1*	0.5	0.34	ug/L
OW-63	9/16/2020	Benzo(g,h,i)perylene	ND	5	1	NA	ug/L
OW-63	9/16/2020	Benzo(k)fluoranthene	*ND*	*5*	1	3.43	ug/L
OW-63	9/16/2020	Benzoic Acid	ND	5	2	75000	ug/L
OW-63	9/16/2020	Benzyl Alcohol	ND	5	2	2000	ug/L
OW-63	9/16/2020	Bis(2-chloroethoxy)methane	ND	5	1	59	ug/L
OW-63	9/16/2020	Bis(2-chloroethyl)ether	*ND*	*5*	1	0.137	ug/L
OW-63	9/16/2020	Bis(2-chloroisopropyl)ether	ND	5	1	9.81	ug/L
OW-63	9/16/2020	Bis(2-ethylhexyl)phthalate	ND	5	1	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	Butylbenzylphthalate	ND	5	2	16	ug/L
OW-63	9/16/2020	Carbazole	5.6	5	1	NA	ug/L
OW-63	9/16/2020	Chrysene	ND	5	1	34.3	ug/L
OW-63	9/16/2020	Di-n-butylphthalate	ND	5	2	885	ug/L
OW-63	9/16/2020	Di-n-octylphthalate	ND	5	2	200	ug/L
OW-63	9/16/2020	Dibenzo(a,h)anthracene	ND	0.3	0.2	NA	ug/L
OW-63	9/16/2020	Dibenzofuran	ND	5	1	NA	ug/L
OW-63	9/16/2020	Diethylphthalate	ND	5	2	14801	ug/L
OW-63	9/16/2020	Dimethylphthalate	ND	5	2	612	ug/L
OW-63	9/16/2020	Fluoranthene	ND	5	1	802	ug/L
OW-63	9/16/2020	Fluorene	ND	5	1	288	ug/L
OW-63	9/16/2020	Hexachlorobenzene	*ND*	*5*	1	0.0976	ug/L
OW-63	9/16/2020	Hexachlorobutadiene	*ND*	*5*	1	0.14	ug/L
OW-63	9/16/2020	Hexachlorocyclopentadiene	*ND*	*5*	2.5	0.41	ug/L
OW-63	9/16/2020	Hexachloroethane	*ND*	*5*	1	3.28	ug/L
OW-63	9/16/2020	Indeno(1,2,3-cd)pyrene	*ND*	2	1	0.343	ug/L
OW-63	9/16/2020	Isophorone	ND	5	1	781	ug/L
OW-63	9/16/2020	N-Nitrosodi-n-propylamine	*ND*	*5*	1	0.011	ug/L
OW-63	9/16/2020	N-Nitrosodimethylamine	*ND*	*5*	1	0.0049	ug/L
OW-63	9/16/2020	N-Nitrosodiphenylamine	ND	5	1	122	ug/L
OW-63	9/16/2020	Naphthalene	**260**	5	1	30	ug/L
OW-63	9/16/2020	Nitrobenzene	*ND*	*5*	1	1.4	ug/L
OW-63	9/16/2020	Pentachlorophenol	*ND*	*5*	2	1	ug/L
OW-63	9/16/2020	Phenanthrene	ND	5	1	170	ug/L
OW-63	9/16/2020	Phenol	46	5	1	5761	ug/L
OW-63	9/16/2020	Pyrene	ND	5	2	117	ug/L
OW-63	9/16/2020	Pyridine	ND	5	1	20	ug/L
OW-63	12/11/2020	Acenaphthene	ND	9.24	0.148	535	ug/L
OW-63	12/11/2020	Acenaphthylene	ND	9.24	0.157	NA	ug/L
OW-63	12/11/2020	Anthracene	ND	9.24	0.166	1721	ug/L
OW-63	12/11/2020	Benzo(a)pyrene	*ND*	*9.24*	0.111	0.2	ug/L
OW-63	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.24*	0.139	0.34	ug/L
OW-63	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.24*	0.148	3.43	ug/L
OW-63	12/11/2020	4-Chloroaniline	*ND*	*9.24*	3.14	0.37	ug/L
OW-63	12/11/2020	2-Chloronaphthalene	ND	9.24	0.129	733	ug/L
OW-63	12/11/2020	4-Chlorophenyl-phenylether	ND	9.24	1.85	NA	ug/L
OW-63	12/11/2020	1,3-Dichlorobenzene	ND	9.24	0.166	NA	ug/L
OW-63	12/11/2020	1,4-Dichlorobenzene	ND	9.24	0.148	75	ug/L
OW-63	12/11/2020	Dibenzofuran	ND	9.24	0.157	NA	ug/L
OW-63	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.24*	2.4	1.25	ug/L
OW-63	12/11/2020	2,4-Dichlorophenol	ND	9.24	2.77	45.3	ug/L
OW-63	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.24*	1.48	1.52	ug/L
OW-63	12/11/2020	2,4-Dinitrophenol	ND	27.7	3.14	38.7	ug/L
OW-63	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.24*	1.76	0.485	ug/L
OW-63	12/11/2020	Fluorene	ND	9.24	0.166	288	ug/L
OW-63	12/11/2020	Hexachlorocyclopentadiene	*ND*	*18.5*	2.4	0.41	ug/L
OW-63	12/11/2020	2-Methylphenol	ND	9.24	1.66	NA	ug/L
OW-63	12/11/2020	Pentachlorophenol	*ND*	*18.5*	1.29	1	ug/L
OW-63	12/11/2020	Phenol	53.9	9.24	2.4	5761	ug/L
OW-63	12/11/2020	Pyrene	ND	9.24	0.194	117	ug/L
OW-63	12/11/2020	2,4,5-Trichlorophenol	ND	9.24	3.42	1166	ug/L
OW-63	12/11/2020	2,4,6-Trichlorophenol	ND	9.24	3.23	11.9*	ug/L
OW-63	12/11/2020	Aniline	ND	9.24	3.51	13	ug/L
OW-63	12/11/2020	Benzoic Acid	ND	27.7	6.74	75000	ug/L
OW-63	12/11/2020	Pyridine	ND	9.24	2.96	20	ug/L
OW-63	12/11/2020	1,2,4-Trichlorobenzene	ND	9.24	0.166	70	ug/L
OW-63	12/11/2020	1,2-Dichlorobenzene	ND	9.24	0.157	600	ug/L
OW-63	12/11/2020	Benzo(a)anthracene	*ND*	*9.24*	0.166	0.12	ug/L
OW-63	12/11/2020	Benzo(g,h,i)perylene	ND	9.24	0.212	NA	ug/L
OW-63	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.24	0.148	59	ug/L
OW-63	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.24*	2.49	0.137	ug/L
OW-63	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.24	4.62	55.64	ug/L
OW-63	12/11/2020	4-Bromophenyl-phenylether	ND	9.24	0.185	NA	ug/L
OW-63	12/11/2020	Butylbenzylphthalate	ND	9.24	0.176	16	ug/L
OW-63	12/11/2020	Carbazole	11.4	9.24	0.212	NA	ug/L
OW-63	12/11/2020	4-Chloro-3-Methylphenol	ND	9.24	3.51	NA	ug/L
OW-63	12/11/2020	2-Chlorophenol	ND	9.24	2.03	91	ug/L
OW-63	12/11/2020	Chrysene	ND	9.24	0.176	34.3	ug/L
OW-63	12/11/2020	Dibenzo(a,h)anthracene	ND	9.24	0.222	NA	ug/L
OW-63	12/11/2020	Diethylphthalate	ND	9.24	0.222	14801	ug/L
OW-63	12/11/2020	2,4-Dimethylphenol	15.5	9.24	3.23	354	ug/L
OW-63	12/11/2020	Di-n-butylphthalate	ND	9.24	2.49	885	ug/L
OW-63	12/11/2020	2,4-Dinitrotoluene	ND	9.24	1.76	45.3	ug/L
OW-63	12/11/2020	Di-n-octylphthalate	ND	9.24	0.157	200	ug/L
OW-63	12/11/2020	Fluoranthene	ND	9.24	0.166	802	ug/L
OW-63	12/11/2020	Hexachlorobenzene	*ND*	*9.24*	0.157	0.0976	ug/L
OW-63	12/11/2020	Hexachloroethane	*ND*	*9.24*	3.88	3.28	ug/L
OW-63	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.24*	0.203	0.343	ug/L
OW-63	12/11/2020	Isophorone	ND	9.24	0.129	781	ug/L
OW-63	12/11/2020	Naphthalene	**256**	9.24	0.157	30	ug/L
OW-63	12/11/2020	2-Nitroaniline	ND	9.24	2.03	190	ug/L
OW-63	12/11/2020	3-Nitroaniline	ND	9.24	1.66	NA	ug/L
OW-63	12/11/2020	4-Nitroaniline	*ND*	*9.24*	1.39	3.8	ug/L
OW-63	12/11/2020	Nitrobenzene	*ND*	*9.24*	0.12	1.4	ug/L
OW-63	12/11/2020	2-Nitrophenol	ND	9.24	4.8	NA	ug/L
OW-63	12/11/2020	4-Nitrophenol	ND	9.24	1.94	NA	ug/L
OW-63	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.24*	3.05	0.011	ug/L
OW-63	12/11/2020	N-Nitrosodiphenylamine	ND	9.24	0.166	122	ug/L
OW-63	12/11/2020	Phenanthrene	ND	9.24	0.166	170	ug/L
OW-63	12/11/2020	Dimethylphthalate	ND	9.24	0.157	612	ug/L
OW-63	12/11/2020	Benzyl Alcohol	ND	9.24	1.85	2000	ug/L
OW-63	12/11/2020	Bis(2-chloroisopropyl)ether	ND	9.24	0.148	9.81	ug/L
OW-63	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.24*	3.23	0.0049	ug/L
OW-63	12/11/2020	Azobenzene	*ND*	*9.24*	0.924	0.12	ug/L
OW-64	4/29/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-64	4/29/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-64	4/29/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-64	4/29/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Aniline	ND	10	6.2	13	ug/L
OW-64	4/29/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-64	4/29/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
OW-64	4/29/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-64	4/29/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-64	4/29/2018	Isophorone	ND	10	6.2	781	ug/L
OW-64	4/29/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-64	4/29/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-64	4/29/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-64	4/29/2018	Phenanthrene	ND	10	6	170	ug/L
OW-64	4/29/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-64	4/29/2018	Fluorene	ND	10	6.3	288	ug/L
OW-64	4/29/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-64	4/29/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-64	4/29/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-64	4/29/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-64	4/29/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-64	4/29/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-64	4/29/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
OW-64	4/29/2018	Naphthalene	18	10	5	30	ug/L
OW-64	4/29/2018	2-Methylnaphthalene	7.2	10	6.3	35.1	ug/L
OW-64	4/29/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-64	4/29/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-64	4/29/2018	2-Methylphenol	31	10	6.3	NA	ug/L
OW-64	4/29/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-64	4/29/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-64	4/29/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-64	4/29/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-64	4/29/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-64	4/29/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-64	4/29/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-64	4/29/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-64	4/29/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-64	4/29/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-64	4/29/2018	2,4-Dimethylphenol	7.6	10	5.9	354	ug/L
OW-64	4/29/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-64	4/29/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-64	4/29/2018	Phenol	6.9	10	6	5761	ug/L
OW-64	4/29/2018	Pyridine	ND	10	5.4	20	ug/L
OW-64	4/29/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-64	4/29/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-64	4/29/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-64	4/29/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-64	4/29/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-64	4/29/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-64	4/29/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-64	4/29/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-64	4/29/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-64	4/29/2018	Pyrene	ND	10	6.5	117	ug/L
OW-64	4/29/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-64	4/29/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-64	4/29/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-64	4/29/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-64	4/29/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-64	4/29/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-64	4/29/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-64	4/29/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-64	4/29/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-64	4/29/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-64	4/29/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-64	4/29/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-64	4/29/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-64	4/29/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-64	4/29/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-64	4/29/2018	3,4-Methylphenol	5.8	10	5.4	NA	ug/L
OW-64	8/22/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
OW-64	8/22/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
OW-64	8/22/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
OW-64	8/22/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Aniline	ND	10	6.2	13	ug/L
OW-64	8/22/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
OW-64	8/22/2018	Benzoic Acid	11	20	6.3	75000	ug/L
OW-64	8/22/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
OW-64	8/22/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
OW-64	8/22/2018	Isophorone	ND	10	6.2	781	ug/L
OW-64	8/22/2018	Acenaphthene	ND	10	5.8	535	ug/L
OW-64	8/22/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
OW-64	8/22/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
OW-64	8/22/2018	Phenanthrene	ND	10	6	170	ug/L
OW-64	8/22/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
OW-64	8/22/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
OW-64	8/22/2018	Fluorene	ND	10	6.3	288	ug/L
OW-64	8/22/2018	Carbazole	ND	10	6.3	NA	ug/L
OW-64	8/22/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
OW-64	8/22/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
OW-64	8/22/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
OW-64	8/22/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
OW-64	8/22/2018	2-Nitrophenol	ND	10	6	NA	ug/L
OW-64	8/22/2018	1-Methylnaphthalene	9.1	10	7	11.38	ug/L
OW-64	8/22/2018	Naphthalene	17	10	5	30	ug/L
OW-64	8/22/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
OW-64	8/22/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
OW-64	8/22/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
OW-64	8/22/2018	2-Methylphenol	9.9	10	6.3	NA	ug/L
OW-64	8/22/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
OW-64	8/22/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
OW-64	8/22/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
OW-64	8/22/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
OW-64	8/22/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
OW-64	8/22/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
OW-64	8/22/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
OW-64	8/22/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
OW-64	8/22/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
OW-64	8/22/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
OW-64	8/22/2018	2,4-Dimethylphenol	24	10	5.9	354	ug/L
OW-64	8/22/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
OW-64	8/22/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
OW-64	8/22/2018	Phenol	ND	10	6	5761	ug/L
OW-64	8/22/2018	Pyridine	ND	10	5.4	20	ug/L
OW-64	8/22/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
OW-64	8/22/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
OW-64	8/22/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
OW-64	8/22/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
OW-64	8/22/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
OW-64	8/22/2018	Anthracene	ND	10	5.7	1721	ug/L
OW-64	8/22/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
OW-64	8/22/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
OW-64	8/22/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
OW-64	8/22/2018	Pyrene	ND	10	6.5	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/22/2018	Dimethylphthalate	ND	10	6	612	ug/L
OW-64	8/22/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
OW-64	8/22/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
OW-64	8/22/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
OW-64	8/22/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
OW-64	8/22/2018	Fluoranthene	ND	10	5.8	802	ug/L
OW-64	8/22/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
OW-64	8/22/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
OW-64	8/22/2018	Chrysene	ND	10	6.8	34.3	ug/L
OW-64	8/22/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
OW-64	8/22/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
OW-64	8/22/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
OW-64	8/22/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
OW-64	8/22/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
OW-64	8/22/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
OW-64	8/22/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
OW-64	5/15/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-64	5/15/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-64	5/15/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-64	5/15/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-64	5/15/2019	1-Methylnaphthalene	4.6	10	3.069076	11.38	ug/L
OW-64	5/15/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-64	5/15/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-64	5/15/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-64	5/15/2019	2,4-Dimethylphenol	9.4	10	2.965993	354	ug/L
OW-64	5/15/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-64	5/15/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-64	5/15/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-64	5/15/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-64	5/15/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-64	5/15/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-64	5/15/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-64	5/15/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-64	5/15/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-64	5/15/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-64	5/15/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-64	5/15/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-64	5/15/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-64	5/15/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
OW-64	5/15/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-64	5/15/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-64	5/15/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-64	5/15/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-64	5/15/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-64	5/15/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-64	5/15/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-64	5/15/2019	Aniline	ND	10	3.579516	13	ug/L
OW-64	5/15/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-64	5/15/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-64	5/15/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-64	5/15/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-64	5/15/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-64	5/15/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-64	5/15/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-64	5/15/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-64	5/15/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-64	5/15/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-64	5/15/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-64	5/15/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-64	5/15/2019	Bis(2-ethylhexyl)phthalate	4.3	10	4.302128	55.64	ug/L
OW-64	5/15/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-64	5/15/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-64	5/15/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-64	5/15/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-64	5/15/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-64	5/15/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-64	5/15/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-64	5/15/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-64	5/15/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-64	5/15/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-64	5/15/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-64	5/15/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-64	5/15/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-64	5/15/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-64	5/15/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-64	5/15/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-64	5/15/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-64	5/15/2019	Naphthalene	5.3	10	4.12221	30	ug/L
OW-64	5/15/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-64	5/15/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-64	5/15/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-64	5/15/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-64	5/15/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-64	5/15/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-64	5/15/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-64	5/15/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-64	5/15/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-64	8/19/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
OW-64	8/19/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
OW-64	8/19/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
OW-64	8/19/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
OW-64	8/19/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
OW-64	8/19/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
OW-64	8/19/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
OW-64	8/19/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
OW-64	8/19/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
OW-64	8/19/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
OW-64	8/19/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
OW-64	8/19/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
OW-64	8/19/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
OW-64	8/19/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
OW-64	8/19/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
OW-64	8/19/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
OW-64	8/19/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
OW-64	8/19/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
OW-64	8/19/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
OW-64	8/19/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
OW-64	8/19/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
OW-64	8/19/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
OW-64	8/19/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	8/19/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
OW-64	8/19/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
OW-64	8/19/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
OW-64	8/19/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
OW-64	8/19/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
OW-64	8/19/2019	Acenaphthene	ND	10	2.955891	535	ug/L
OW-64	8/19/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
OW-64	8/19/2019	Aniline	ND	10	3.579516	13	ug/L
OW-64	8/19/2019	Anthracene	ND	10	2.657173	1721	ug/L
OW-64	8/19/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
OW-64	8/19/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
OW-64	8/19/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
OW-64	8/19/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
OW-64	8/19/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
OW-64	8/19/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
OW-64	8/19/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
OW-64	8/19/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
OW-64	8/19/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
OW-64	8/19/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
OW-64	8/19/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
OW-64	8/19/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
OW-64	8/19/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
OW-64	8/19/2019	Carbazole	ND	10	2.890507	NA	ug/L
OW-64	8/19/2019	Chrysene	ND	10	2.786623	34.3	ug/L
OW-64	8/19/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
OW-64	8/19/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
OW-64	8/19/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
OW-64	8/19/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
OW-64	8/19/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
OW-64	8/19/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
OW-64	8/19/2019	Fluoranthene	ND	10	2.412214	802	ug/L
OW-64	8/19/2019	Fluorene	ND	10	2.888488	288	ug/L
OW-64	8/19/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
OW-64	8/19/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
OW-64	8/19/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
OW-64	8/19/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
OW-64	8/19/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
OW-64	8/19/2019	Isophorone	ND	10	3.046035	781	ug/L
OW-64	8/19/2019	Naphthalene	4.3	10	4.12221	30	ug/L
OW-64	8/19/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
OW-64	8/19/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
OW-64	8/19/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
OW-64	8/19/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
OW-64	8/19/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
OW-64	8/19/2019	Phenanthrene	ND	10	2.777122	170	ug/L
OW-64	8/19/2019	Phenol	ND	10	8.036586	5761	ug/L
OW-64	8/19/2019	Pyrene	ND	10	2.5036	117	ug/L
OW-64	8/19/2019	Pyridine	ND	10	9.603136	20	ug/L
OW-64	11/18/2019	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
OW-64	11/18/2019	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
OW-64	11/18/2019	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
OW-64	11/18/2019	1,4-Dioxane	ND	1	1	4.59	ug/L
OW-64	11/18/2019	1-Methylnaphthalene	1.9	0.5	0.5	11.38	ug/L
OW-64	11/18/2019	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
OW-64	11/18/2019	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
OW-64	11/18/2019	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
OW-64	11/18/2019	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
OW-64	11/18/2019	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
OW-64	11/18/2019	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
OW-64	11/18/2019	2,6-Dinitrotoluene	ND	0.2	0.2	0.485	ug/L
OW-64	11/18/2019	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
OW-64	11/18/2019	2-Chlorophenol	ND	0.5	0.5	91	ug/L
OW-64	11/18/2019	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
OW-64	11/18/2019	2-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	2-Nitroaniline	ND	0.5	0.5	190	ug/L
OW-64	11/18/2019	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
OW-64	11/18/2019	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
OW-64	11/18/2019	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
OW-64	11/18/2019	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Acenaphthene	ND	0.5	0.5	535	ug/L
OW-64	11/18/2019	Acenaphthylene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Aniline	ND	0.5	0.5	13	ug/L
OW-64	11/18/2019	Anthracene	ND	0.5	0.5	1721	ug/L
OW-64	11/18/2019	Benzo(a)anthracene	ND	0.1	0.1	0.12	ug/L
OW-64	11/18/2019	Benzo(a)pyrene	ND	0.1	0.1	0.2	ug/L
OW-64	11/18/2019	Benzo(b)fluoranthene	ND	0.1	0.1	0.34	ug/L
OW-64	11/18/2019	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
OW-64	11/18/2019	Benzoic Acid	ND	0.5	0.5	75000	ug/L
OW-64	11/18/2019	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
OW-64	11/18/2019	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
OW-64	11/18/2019	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
OW-64	11/18/2019	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
OW-64	11/18/2019	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
OW-64	11/18/2019	Carbazole	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Chrysene	ND	0.5	0.5	34.3	ug/L
OW-64	11/18/2019	Dibenzo(a,h)anthracene	ND	0.025	0.025	NA	ug/L
OW-64	11/18/2019	Dibenzofuran	ND	0.5	0.5	NA	ug/L
OW-64	11/18/2019	Diethylphthalate	ND	0.5	0.5	14801	ug/L
OW-64	11/18/2019	Dimethylphthalate	ND	0.5	0.5	612	ug/L
OW-64	11/18/2019	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
OW-64	11/18/2019	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
OW-64	11/18/2019	Fluoranthene	ND	0.5	0.5	802	ug/L
OW-64	11/18/2019	Fluorene	ND	0.5	0.5	288	ug/L
OW-64	11/18/2019	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
OW-64	11/18/2019	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
OW-64	11/18/2019	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
OW-64	11/18/2019	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
OW-64	11/18/2019	Indeno(1,2,3-cd)pyrene	ND	0.2	0.2	0.343	ug/L
OW-64	11/18/2019	Isophorone	ND	0.5	0.5	781	ug/L
OW-64	11/18/2019	Naphthalene	2.3	0.5	0.5	30	ug/L
OW-64	11/18/2019	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
OW-64	11/18/2019	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	Pentachlorophenol	ND	0.5	0.5	1	ug/L
OW-64	11/18/2019	Phenanthrene	ND	0.5	0.5	170	ug/L
OW-64	11/18/2019	Phenol	ND	0.5	0.5	5761	ug/L
OW-64	11/18/2019	Pyrene	ND	0.5	0.5	117	ug/L
OW-64	11/18/2019	Pyridine	ND	0.5	0.5	20	ug/L
OW-64	3/4/2020	1,2,4-Trichlorobenzene	ND	0.5	0.1	70	ug/L
OW-64	3/4/2020	1,2-Dichlorobenzene	ND	0.5	0.1	600	ug/L
OW-64	3/4/2020	1,3-Dichlorobenzene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	1,4-Dichlorobenzene	ND	0.5	0.1	75	ug/L
OW-64	3/4/2020	1,4-Dioxane	*ND*	*5*	1	4.59	ug/L
OW-64	3/4/2020	1-Methylnaphthalene	2.1	0.5	0.1	11.38	ug/L
OW-64	3/4/2020	2,4,5-Trichlorophenol	ND	0.5	0.1	1166	ug/L
OW-64	3/4/2020	2,4,6-Trichlorophenol	ND	0.5	0.1	11.9*	ug/L
OW-64	3/4/2020	2,4-Dichlorophenol	ND	0.5	0.1	45.3	ug/L
OW-64	3/4/2020	2,4-Dimethylphenol	1.8	0.5	0.1	354	ug/L
OW-64	3/4/2020	2,4-Dinitrophenol	ND	0.5	0.1	38.7	ug/L
OW-64	3/4/2020	2,4-Dinitrotoluene	ND	0.2	0.04	45.3	ug/L
OW-64	3/4/2020	2,6-Dinitrotoluene	*ND*	*0.5*	0.1	0.485	ug/L
OW-64	3/4/2020	2-Chloronaphthalene	ND	0.5	0.1	733	ug/L
OW-64	3/4/2020	2-Chlorophenol	ND	0.5	0.1	91	ug/L
OW-64	3/4/2020	2-Methylnaphthalene	0.94	0.5	0.1	35.1	ug/L
OW-64	3/4/2020	2-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	2-Nitroaniline	ND	0.5	0.1	190	ug/L
OW-64	3/4/2020	2-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	3,4-Methylphenol	0.28	0.5	0.1	NA	ug/L
OW-64	3/4/2020	3,3-Dichlorobenzidine	ND	0.5	0.1	1.25	ug/L
OW-64	3/4/2020	3-Nitroaniline	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4,6-Dinitro-2-methylphenol	ND	0.5	0.1	1.52	ug/L
OW-64	3/4/2020	4-Bromophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Chloro-3-Methylphenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Chlorophenyl-phenylether	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	4-Nitroaniline	ND	0.5	0.1	3.8	ug/L
OW-64	3/4/2020	4-Nitrophenol	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Acenaphthene	ND	0.5	0.1	535	ug/L
OW-64	3/4/2020	Acenaphthylene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Aniline	ND	0.5	0.1	13	ug/L
OW-64	3/4/2020	Anthracene	ND	0.5	0.1	1721	ug/L
OW-64	3/4/2020	Benzo(a)anthracene	ND	0.1	0.02	0.12	ug/L
OW-64	3/4/2020	Benzo(a)pyrene	ND	0.1	0.02	0.2	ug/L
OW-64	3/4/2020	Benzo(b)fluoranthene	ND	0.1	0.02	0.34	ug/L
OW-64	3/4/2020	Benzo(g,h,i)perylene	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Benzo(k)fluoranthene	ND	0.5	0.1	3.43	ug/L
OW-64	3/4/2020	Benzoic Acid	ND	2.5	0.5	75000	ug/L
OW-64	3/4/2020	Benzyl Alcohol	ND	0.5	0.1	2000	ug/L
OW-64	3/4/2020	Bis(2-chloroethoxy)methane	ND	0.5	0.1	59	ug/L
OW-64	3/4/2020	Bis(2-chloroisopropyl)ether	ND	0.5	0.1	9.81	ug/L
OW-64	3/4/2020	Bis(2-ethylhexyl)phthalate	ND	0.5	0.2	55.64	ug/L
OW-64	3/4/2020	Butylbenzylphthalate	ND	0.5	0.2	16	ug/L
OW-64	3/4/2020	Carbazole	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Chrysene	ND	0.5	0.1	34.3	ug/L
OW-64	3/4/2020	Di-n-butylphthalate	ND	0.5	0.2	885	ug/L
OW-64	3/4/2020	Di-n-octylphthalate	ND	0.5	0.2	200	ug/L
OW-64	3/4/2020	Dibenzo(a,h)anthracene	ND	0.025	0.005	NA	ug/L
OW-64	3/4/2020	Dibenzofuran	ND	0.5	0.1	NA	ug/L
OW-64	3/4/2020	Diethylphthalate	ND	0.5	0.2	14801	ug/L
OW-64	3/4/2020	Dimethylphthalate	ND	0.5	0.2	612	ug/L
OW-64	3/4/2020	Fluoranthene	0.28	0.5	0.1	802	ug/L
OW-64	3/4/2020	Fluorene	0.25	0.5	0.1	288	ug/L
OW-64	3/4/2020	Hexachlorobenzene	*ND*	*0.5*	0.1	0.0976	ug/L
OW-64	3/4/2020	Hexachlorobutadiene	*ND*	*0.5*	0.1	0.14	ug/L
OW-64	3/4/2020	Hexachlorocyclopentadiene	*ND*	*0.5*	0.1	0.41	ug/L
OW-64	3/4/2020	Hexachloroethane	ND	0.5	0.1	3.28	ug/L
OW-64	3/4/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.04	0.343	ug/L
OW-64	3/4/2020	Isophorone	ND	0.5	0.1	781	ug/L
OW-64	3/4/2020	N-Nitrosodiphenylamine	ND	0.5	0.1	122	ug/L
OW-64	3/4/2020	Naphthalene	4.6	0.5	0.1	30	ug/L
OW-64	3/4/2020	Nitrobenzene	ND	0.5	0.1	1.4	ug/L
OW-64	3/4/2020	Pentachlorophenol	ND	0.5	0.1	1	ug/L
OW-64	3/4/2020	Phenanthrene	1.3	0.5	0.1	170	ug/L
OW-64	3/4/2020	Phenol	0.62	0.5	0.1	5761	ug/L
OW-64	3/4/2020	Pyrene	0.21	0.5	0.1	117	ug/L
OW-64	3/4/2020	Pyridine	ND	0.5	0.1	20	ug/L
OW-64	9/22/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
OW-64	9/22/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
OW-64	9/22/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
OW-64	9/22/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
OW-64	9/22/2020	1-Methylnaphthalene	1.7	0.51	0.1	11.38	ug/L
OW-64	9/22/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
OW-64	9/22/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
OW-64	9/22/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
OW-64	9/22/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
OW-64	9/22/2020	2,4-Dimethylphenol	1.6	0.51	0.1	354	ug/L
OW-64	9/22/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
OW-64	9/22/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
OW-64	9/22/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
OW-64	9/22/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
OW-64	9/22/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
OW-64	9/22/2020	2-Methylnaphthalene	0.86	0.51	0.1	35.1	ug/L
OW-64	9/22/2020	2-Methylphenol	1.1	0.51	0.1	NA	ug/L
OW-64	9/22/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
OW-64	9/22/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	3,4-Methylphenol	3.7	0.51	0.1	NA	ug/L
OW-64	9/22/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
OW-64	9/22/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
OW-64	9/22/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
OW-64	9/22/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
OW-64	9/22/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Acenaphthene	0.14	0.51	0.1	535	ug/L
OW-64	9/22/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Aniline	ND	0.51	0.1	13	ug/L
OW-64	9/22/2020	Anthracene	ND	0.51	0.1	1721	ug/L
OW-64	9/22/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
OW-64	9/22/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
OW-64	9/22/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	9/22/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
OW-64	9/22/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
OW-64	9/22/2020	Benzoic Acid	ND	0.51	0.21	75000	ug/L
OW-64	9/22/2020	Benzyl Alcohol	ND	0.51	0.21	2000	ug/L
OW-64	9/22/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
OW-64	9/22/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
OW-64	9/22/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
OW-64	9/22/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.21	55.64	ug/L
OW-64	9/22/2020	Butylbenzylphthalate	ND	0.51	0.21	16	ug/L
OW-64	9/22/2020	Carbazole	ND	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
OW-64	9/22/2020	Di-n-butylphthalate	ND	0.51	0.21	885	ug/L
OW-64	9/22/2020	Di-n-octylphthalate	ND	0.51	0.21	200	ug/L
OW-64	9/22/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
OW-64	9/22/2020	Dibenzofuran	0.12	0.51	0.1	NA	ug/L
OW-64	9/22/2020	Diethylphthalate	ND	0.51	0.21	14801	ug/L
OW-64	9/22/2020	Dimethylphthalate	ND	0.51	0.21	612	ug/L
OW-64	9/22/2020	Fluoranthene	0.27	0.51	0.1	802	ug/L
OW-64	9/22/2020	Fluorene	0.27	0.51	0.1	288	ug/L
OW-64	9/22/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
OW-64	9/22/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
OW-64	9/22/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
OW-64	9/22/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
OW-64	9/22/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
OW-64	9/22/2020	Isophorone	ND	0.51	0.1	781	ug/L
OW-64	9/22/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
OW-64	9/22/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
OW-64	9/22/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
OW-64	9/22/2020	Naphthalene	6	0.51	0.1	30	ug/L
OW-64	9/22/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
OW-64	9/22/2020	Pentachlorophenol	ND	0.51	0.21	1	ug/L
OW-64	9/22/2020	Phenanthrene	0.88	0.51	0.1	170	ug/L
OW-64	9/22/2020	Phenol	3.1	0.51	0.1	5761	ug/L
OW-64	9/22/2020	Pyrene	0.18	0.51	0.1	117	ug/L
OW-64	9/22/2020	Pyridine	ND	0.51	0.21	20	ug/L
OW-64	12/11/2020	Acenaphthene	ND	9.41	0.151	535	ug/L
OW-64	12/11/2020	Acenaphthylene	ND	9.41	0.16	NA	ug/L
OW-64	12/11/2020	Anthracene	ND	9.41	0.169	1721	ug/L
OW-64	12/11/2020	Benzo(a)pyrene	*ND*	*9.41*	0.113	0.2	ug/L
OW-64	12/11/2020	Benzo(b)fluoranthene	*ND*	*9.41*	0.141	0.34	ug/L
OW-64	12/11/2020	Benzo(k)fluoranthene	*ND*	*9.41*	0.151	3.43	ug/L
OW-64	12/11/2020	4-Chloroaniline	*ND*	*9.41*	3.2	0.37	ug/L
OW-64	12/11/2020	2-Chloronaphthalene	ND	9.41	0.132	733	ug/L
OW-64	12/11/2020	4-Chlorophenyl-phenylether	ND	9.41	1.88	NA	ug/L
OW-64	12/11/2020	1,3-Dichlorobenzene	ND	9.41	0.169	NA	ug/L
OW-64	12/11/2020	1,4-Dichlorobenzene	ND	9.41	0.151	75	ug/L
OW-64	12/11/2020	Dibenzofuran	ND	9.41	0.16	NA	ug/L
OW-64	12/11/2020	3,3-Dichlorobenzidine	*ND*	*9.41*	2.45	1.25	ug/L
OW-64	12/11/2020	2,4-Dichlorophenol	ND	9.41	2.82	45.3	ug/L
OW-64	12/11/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.41*	1.51	1.52	ug/L
OW-64	12/11/2020	2,4-Dinitrophenol	ND	28.2	3.2	38.7	ug/L
OW-64	12/11/2020	2,6-Dinitrotoluene	*ND*	*9.41*	1.79	0.485	ug/L
OW-64	12/11/2020	Fluorene	ND	9.41	0.169	288	ug/L
OW-64	12/11/2020	Hexachlorocyclopentadiene	*ND*	*18.8*	2.45	0.41	ug/L
OW-64	12/11/2020	2-Methylphenol	ND	9.41	1.69	NA	ug/L
OW-64	12/11/2020	Naphthalene	ND	9.41	0.16	30	ug/L
OW-64	12/11/2020	Pentachlorophenol	*ND*	*18.8*	1.32	1	ug/L
OW-64	12/11/2020	Phenol	ND	9.41	2.45	5761	ug/L
OW-64	12/11/2020	Pyrene	ND	9.41	0.198	117	ug/L
OW-64	12/11/2020	2,4,5-Trichlorophenol	ND	9.41	3.48	1166	ug/L
OW-64	12/11/2020	2,4,6-Trichlorophenol	ND	9.41	3.29	11.9*	ug/L
OW-64	12/11/2020	Aniline	ND	9.41	3.58	13	ug/L
OW-64	12/11/2020	Benzoic Acid	ND	28.2	6.87	75000	ug/L
OW-64	12/11/2020	Pyridine	ND	9.41	3.01	20	ug/L
OW-64	12/11/2020	1,2,4-Trichlorobenzene	ND	9.41	0.169	70	ug/L
OW-64	12/11/2020	1,2-Dichlorobenzene	ND	9.41	0.16	600	ug/L
OW-64	12/11/2020	Benzo(a)anthracene	*ND*	*9.41*	0.169	0.12	ug/L
OW-64	12/11/2020	Benzo(g,h,i)perylene	ND	9.41	0.216	NA	ug/L
OW-64	12/11/2020	Bis(2-chloroethoxy)methane	ND	9.41	0.151	59	ug/L
OW-64	12/11/2020	Bis(2-chloroethyl)ether	*ND*	*9.41*	2.54	0.137	ug/L
OW-64	12/11/2020	Bis(2-ethylhexyl)phthalate	ND	9.41	4.71	55.64	ug/L
OW-64	12/11/2020	4-Bromophenyl-phenylether	ND	9.41	0.188	NA	ug/L
OW-64	12/11/2020	Butylbenzylphthalate	ND	9.41	0.179	16	ug/L
OW-64	12/11/2020	Carbazole	ND	9.41	0.216	NA	ug/L
OW-64	12/11/2020	4-Chloro-3-Methylphenol	ND	9.41	3.58	NA	ug/L
OW-64	12/11/2020	2-Chlorophenol	ND	9.41	2.07	91	ug/L
OW-64	12/11/2020	Chrysene	ND	9.41	0.179	34.3	ug/L
OW-64	12/11/2020	Dibenzo(a,h)anthracene	ND	9.41	0.226	NA	ug/L
OW-64	12/11/2020	Diethylphthalate	ND	9.41	0.226	14801	ug/L
OW-64	12/11/2020	2,4-Dimethylphenol	ND	9.41	3.29	354	ug/L
OW-64	12/11/2020	Di-n-butylphthalate	ND	9.41	2.54	885	ug/L
OW-64	12/11/2020	2,4-Dinitrotoluene	ND	9.41	1.79	45.3	ug/L
OW-64	12/11/2020	Di-n-octylphthalate	ND	9.41	0.16	200	ug/L
OW-64	12/11/2020	Fluoranthene	ND	9.41	0.169	802	ug/L
OW-64	12/11/2020	Hexachlorobenzene	*ND*	*9.41*	0.16	0.0976	ug/L
OW-64	12/11/2020	Hexachloroethane	*ND*	*9.41*	3.95	3.28	ug/L
OW-64	12/11/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.41*	0.207	0.343	ug/L
OW-64	12/11/2020	Isophorone	ND	9.41	0.132	781	ug/L
OW-64	12/11/2020	2-Nitroaniline	ND	9.41	2.07	190	ug/L
OW-64	12/11/2020	3-Nitroaniline	ND	9.41	1.69	NA	ug/L
OW-64	12/11/2020	4-Nitroaniline	*ND*	*9.41*	1.41	3.8	ug/L
OW-64	12/11/2020	Nitrobenzene	*ND*	*9.41*	0.122	1.4	ug/L
OW-64	12/11/2020	2-Nitrophenol	ND	9.41	4.89	NA	ug/L
OW-64	12/11/2020	4-Nitrophenol	ND	9.41	1.98	NA	ug/L
OW-64	12/11/2020	N-Nitrosodi-n-propylamine	*ND*	*9.41*	3.11	0.011	ug/L
OW-64	12/11/2020	N-Nitrosodiphenylamine	ND	9.41	0.169	122	ug/L
OW-64	12/11/2020	Phenanthrene	ND	9.41	0.169	170	ug/L
OW-64	12/11/2020	Dimethylphthalate	ND	9.41	0.16	612	ug/L
OW-64	12/11/2020	Benzyl Alcohol	ND	9.41	1.88	2000	ug/L
OW-64	12/11/2020	Bis(2-chloroisopropyl)ether	ND	9.41	0.151	9.81	ug/L
OW-64	12/11/2020	N-Nitrosodimethylamine	*ND*	*9.41*	3.29	0.0049	ug/L
OW-64	12/11/2020	Azobenzene	*ND*	*9.41*	0.941	0.12	ug/L
PW-2	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
PW-2	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-2	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
PW-2	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
PW-2	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
PW-2	9/10/2014	Aniline	ND	10	2.4	13	ug/L
PW-2	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
PW-2	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
PW-2	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
PW-2	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
PW-2	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
PW-2	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
PW-2	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
PW-2	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
PW-2	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
PW-2	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
PW-2	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
PW-2	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
PW-2	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-2	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
PW-2	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
PW-2	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-2	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
PW-2	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
PW-2	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
PW-2	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
PW-2	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
PW-2	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-2	9/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
PW-2	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
PW-2	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
PW-2	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
PW-2	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-2	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
PW-2	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
PW-2	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
PW-2	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
PW-2	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
PW-2	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
PW-2	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
PW-2	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-2	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
PW-2	9/10/2014	Phenol	ND	10	1.6	5761	ug/L
PW-2	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
PW-2	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-2	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-2	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-2	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
PW-2	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
PW-2	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
PW-2	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
PW-2	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
PW-2	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
PW-2	9/10/2014	Pyrene	ND	10	4	117	ug/L
PW-2	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
PW-2	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
PW-2	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
PW-2	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
PW-2	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
PW-2	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
PW-2	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
PW-2	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
PW-2	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
PW-2	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
PW-2	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-2	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
PW-2	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
PW-2	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
PW-2	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
PW-2	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
PW-2	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-2	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-2	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-2	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-2	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-2	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-2	9/18/2017	Benzoic Acid	10	20	3.9	75000	ug/L
PW-2	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-2	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-2	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-2	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-2	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-2	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-2	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-2	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-2	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-2	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-2	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-2	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-2	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-2	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-2	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-2	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-2	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-2	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-2	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-2	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-2	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-2	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-2	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-2	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-2	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-2	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-2	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-2	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-2	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-2	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-2	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-2	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-2	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-2	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-2	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-2	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-2	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-2	9/18/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
PW-2	9/18/2017	Di-n-octylphthalate	5.1	10	4.7	200	ug/L
PW-2	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-2	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-2	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-2	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-2	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-2	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-2	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-2	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-2	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-2	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-2	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-2	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-2	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-2	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-2	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-2	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-2	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-2	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-2	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-2	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-2	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-2	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-2	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
PW-2	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
PW-2	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
PW-2	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
PW-2	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
PW-2	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
PW-2	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
PW-2	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
PW-2	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
PW-2	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
PW-2	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
PW-2	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
PW-2	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
PW-2	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
PW-2	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
PW-2	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
PW-2	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
PW-2	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
PW-2	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
PW-2	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
PW-2	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
PW-2	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
PW-2	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
PW-2	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
PW-2	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
PW-2	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
PW-2	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
PW-2	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
PW-2	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
PW-2	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
PW-2	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
PW-2	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
PW-2	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
PW-2	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
PW-2	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.51	0.2	55.64	ug/L
PW-2	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
PW-2	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
PW-2	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
PW-2	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
PW-2	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
PW-2	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
PW-2	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
PW-2	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
PW-2	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
PW-2	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
PW-2	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
PW-2	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
PW-2	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
PW-2	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
PW-2	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
PW-2	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
PW-2	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
PW-2	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
PW-2	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
PW-2	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
PW-2	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
PW-2	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
PW-2	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
PW-2	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
PW-2	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
PW-2	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
PW-2	12/28/2020	Acenaphthene	ND	11.4	0.183	535	ug/L
PW-2	12/28/2020	Acenaphthylene	ND	11.4	0.194	NA	ug/L
PW-2	12/28/2020	Anthracene	ND	11.4	0.205	1721	ug/L
PW-2	12/28/2020	Benzo(a)anthracene	*ND*	*11.4*	0.205	0.12	ug/L
PW-2	12/28/2020	Benzo(a)pyrene	*ND*	*11.4*	0.137	0.2	ug/L
PW-2	12/28/2020	Benzo(b)fluoranthene	*ND*	*11.4*	0.171	0.34	ug/L
PW-2	12/28/2020	Benzo(g,h,i)perylene	ND	11.4	0.263	NA	ug/L
PW-2	12/28/2020	Benzo(k)fluoranthene	*ND*	*11.4*	0.183	3.43	ug/L
PW-2	12/28/2020	Bis(2-chloroethoxy)methane	ND	11.4	0.183	59	ug/L
PW-2	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*11.4*	3.08	0.137	ug/L
PW-2	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	11.4	5.71	55.64	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	12/28/2020	4-Bromophenyl-phenylether	ND	11.4	0.228	NA	ug/L
PW-2	12/28/2020	Butylbenzylphthalate	ND	11.4	0.217	16	ug/L
PW-2	12/28/2020	Carbazole	ND	11.4	0.263	NA	ug/L
PW-2	12/28/2020	4-Chloroaniline	*ND*	*11.4*	3.88	0.37	ug/L
PW-2	12/28/2020	4-Chloro-3-Methylphenol	ND	11.4	4.34	NA	ug/L
PW-2	12/28/2020	2-Chloronaphthalene	ND	11.4	0.16	733	ug/L
PW-2	12/28/2020	2-Chlorophenol	ND	11.4	2.51	91	ug/L
PW-2	12/28/2020	4-Chlorophenyl-phenylether	ND	11.4	2.28	NA	ug/L
PW-2	12/28/2020	1,3-Dichlorobenzene	ND	11.4	0.205	NA	ug/L
PW-2	12/28/2020	Chrysene	ND	11.4	0.217	34.3	ug/L
PW-2	12/28/2020	Dibenzo(a,h)anthracene	ND	11.4	0.274	NA	ug/L
PW-2	12/28/2020	1,4-Dichlorobenzene	ND	11.4	0.183	75	ug/L
PW-2	12/28/2020	Dibenzofuran	ND	11.4	0.194	NA	ug/L
PW-2	12/28/2020	3,3-Dichlorobenzidine	*ND*	*11.4*	2.97	1.25	ug/L
PW-2	12/28/2020	2,4-Dichlorophenol	ND	11.4	3.42	45.3	ug/L
PW-2	12/28/2020	Diethylphthalate	ND	11.4	0.274	14801	ug/L
PW-2	12/28/2020	2,4-Dimethylphenol	ND	11.4	4	354	ug/L
PW-2	12/28/2020	Di-n-butylphthalate	ND	11.4	3.08	885	ug/L
PW-2	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*11.4*	1.83	1.52	ug/L
PW-2	12/28/2020	2,4-Dinitrophenol	ND	34.2	3.88	38.7	ug/L
PW-2	12/28/2020	2,4-Dinitrotoluene	ND	11.4	2.17	45.3	ug/L
PW-2	12/28/2020	2,6-Dinitrotoluene	*ND*	*11.4*	2.17	0.485	ug/L
PW-2	12/28/2020	Di-n-octylphthalate	ND	11.4	0.194	200	ug/L
PW-2	12/28/2020	Fluoranthene	ND	11.4	0.205	802	ug/L
PW-2	12/28/2020	Fluorene	ND	11.4	0.205	288	ug/L
PW-2	12/28/2020	Hexachlorobenzene	*ND*	*11.4*	0.194	0.0976	ug/L
PW-2	12/28/2020	Hexachlorocyclopentadiene	*ND*	*22.8*	2.97	0.41	ug/L
PW-2	12/28/2020	Hexachloroethane	*ND*	*11.4*	4.79	3.28	ug/L
PW-2	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*11.4*	0.251	0.343	ug/L
PW-2	12/28/2020	Isophorone	ND	11.4	0.16	781	ug/L
PW-2	12/28/2020	2-Methylphenol	ND	11.4	2.05	NA	ug/L
PW-2	12/28/2020	Naphthalene	ND	11.4	0.194	30	ug/L
PW-2	12/28/2020	2-Nitroaniline	ND	11.4	2.51	190	ug/L
PW-2	12/28/2020	3-Nitroaniline	ND	11.4	2.05	NA	ug/L
PW-2	12/28/2020	4-Nitroaniline	*ND*	*11.4*	1.71	3.8	ug/L
PW-2	12/28/2020	Nitrobenzene	*ND*	*11.4*	0.148	1.4	ug/L
PW-2	12/28/2020	2-Nitrophenol	ND	11.4	5.94	NA	ug/L
PW-2	12/28/2020	4-Nitrophenol	ND	11.4	2.4	NA	ug/L
PW-2	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*11.4*	3.77	0.011	ug/L
PW-2	12/28/2020	N-Nitrosodiphenylamine	ND	11.4	0.205	122	ug/L
PW-2	12/28/2020	Pentachlorophenol	*ND*	*22.8*	1.6	1	ug/L
PW-2	12/28/2020	Phenanthrene	ND	11.4	0.205	170	ug/L
PW-2	12/28/2020	Phenol	ND	11.4	2.97	5761	ug/L
PW-2	12/28/2020	Pyrene	ND	11.4	0.24	117	ug/L
PW-2	12/28/2020	2,4,5-Trichlorophenol	ND	11.4	4.22	1166	ug/L
PW-2	12/28/2020	2,4,6-Trichlorophenol	ND	11.4	4	11.9*	ug/L
PW-2	12/28/2020	Dimethylphthalate	ND	11.4	0.194	612	ug/L
PW-2	12/28/2020	Aniline	ND	11.4	4.34	13	ug/L
PW-2	12/28/2020	Benzyl Alcohol	ND	11.4	2.28	2000	ug/L
PW-2	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*11.4*	0.183	9.81	ug/L
PW-2	12/28/2020	N-Nitrosodimethylamine	*ND*	*11.4*	4	0.0049	ug/L
PW-2	12/28/2020	Pyridine	ND	11.4	3.65	20	ug/L
PW-2	12/28/2020	1,2,4-Trichlorobenzene	ND	11.4	0.205	70	ug/L
PW-2	12/28/2020	1,2-Dichlorobenzene	ND	11.4	0.194	600	ug/L
PW-2	12/28/2020	Azobenzene	*ND*	*11.4*	1.14	0.12	ug/L
PW-2	12/28/2020	Benzoic Acid	ND	34.2	8.33	75000	ug/L
PW-3	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
PW-3	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
PW-3	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
PW-3	8/24/2012	Aniline	ND	10	2	13	ug/L
PW-3	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
PW-3	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
PW-3	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-3	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-3	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
PW-3	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
PW-3	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
PW-3	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
PW-3	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
PW-3	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
PW-3	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
PW-3	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
PW-3	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
PW-3	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-3	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
PW-3	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
PW-3	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
PW-3	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-3	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-3	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
PW-3	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
PW-3	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
PW-3	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
PW-3	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
PW-3	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
PW-3	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
PW-3	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-3	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
PW-3	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
PW-3	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
PW-3	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
PW-3	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
PW-3	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-3	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
PW-3	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
PW-3	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
PW-3	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
PW-3	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
PW-3	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
PW-3	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
PW-3	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-3	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
PW-3	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
PW-3	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
PW-3	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-3	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
PW-3	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
PW-3	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
PW-3	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
PW-3	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
PW-3	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
PW-3	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
PW-3	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
PW-3	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
PW-3	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
PW-3	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
PW-3	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
PW-3	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
PW-3	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
PW-3	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
PW-3	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-3	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
PW-3	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
PW-3	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
PW-3	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
PW-3	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-3	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	Aniline	ND	10	2.2	13	ug/L
PW-3	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
PW-3	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
PW-3	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-3	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
PW-3	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
PW-3	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
PW-3	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
PW-3	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-3	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
PW-3	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
PW-3	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-3	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
PW-3	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
PW-3	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
PW-3	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
PW-3	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
PW-3	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
PW-3	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
PW-3	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
PW-3	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
PW-3	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
PW-3	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
PW-3	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
PW-3	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
PW-3	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
PW-3	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
PW-3	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
PW-3	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
PW-3	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
PW-3	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
PW-3	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
PW-3	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-3	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
PW-3	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
PW-3	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
PW-3	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
PW-3	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
PW-3	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
PW-3	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
PW-3	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
PW-3	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
PW-3	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
PW-3	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
PW-3	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
PW-3	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
PW-3	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
PW-3	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
PW-3	9/10/2013	Pyrene	ND	10	2.1	117	ug/L
PW-3	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
PW-3	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
PW-3	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
PW-3	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
PW-3	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-3	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
PW-3	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
PW-3	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
PW-3	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
PW-3	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-3	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
PW-3	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
PW-3	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
PW-3	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
PW-3	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
PW-3	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-3	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
PW-3	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
PW-3	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Aniline	ND	10	2.4	13	ug/L
PW-3	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
PW-3	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
PW-3	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
PW-3	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
PW-3	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
PW-3	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
PW-3	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
PW-3	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
PW-3	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
PW-3	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
PW-3	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
PW-3	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
PW-3	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
PW-3	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
PW-3	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
PW-3	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-3	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
PW-3	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
PW-3	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
PW-3	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
PW-3	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
PW-3	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-3	9/10/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
PW-3	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
PW-3	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
PW-3	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
PW-3	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
PW-3	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
PW-3	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
PW-3	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
PW-3	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
PW-3	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
PW-3	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
PW-3	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
PW-3	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-3	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
PW-3	9/10/2014	Phenol	ND	10	1.6	5761	ug/L
PW-3	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
PW-3	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-3	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-3	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
PW-3	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
PW-3	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
PW-3	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
PW-3	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
PW-3	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
PW-3	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
PW-3	9/10/2014	Pyrene	ND	10	4	117	ug/L
PW-3	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
PW-3	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
PW-3	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
PW-3	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
PW-3	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
PW-3	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
PW-3	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
PW-3	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
PW-3	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
PW-3	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
PW-3	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-3	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
PW-3	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
PW-3	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
PW-3	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
PW-3	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
PW-3	8/23/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-3	8/23/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
PW-3	8/23/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
PW-3	8/23/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
PW-3	8/23/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Aniline	ND	10	1.5	13	ug/L
PW-3	8/23/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
PW-3	8/23/2015	Benzoic Acid	ND	20	1	75000	ug/L
PW-3	8/23/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
PW-3	8/23/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
PW-3	8/23/2015	Isophorone	ND	10	2	781	ug/L
PW-3	8/23/2015	Acenaphthene	ND	10	1.9	535	ug/L
PW-3	8/23/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
PW-3	8/23/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
PW-3	8/23/2015	Phenanthrene	ND	10	2	170	ug/L
PW-3	8/23/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
PW-3	8/23/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
PW-3	8/23/2015	Fluorene	ND	10	1.7	288	ug/L
PW-3	8/23/2015	Carbazole	ND	10	1.5	NA	ug/L
PW-3	8/23/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
PW-3	8/23/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
PW-3	8/23/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
PW-3	8/23/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
PW-3	8/23/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
PW-3	8/23/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
PW-3	8/23/2015	Naphthalene	ND	10	1.8	30	ug/L
PW-3	8/23/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
PW-3	8/23/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
PW-3	8/23/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
PW-3	8/23/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
PW-3	8/23/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
PW-3	8/23/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
PW-3	8/23/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
PW-3	8/23/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
PW-3	8/23/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
PW-3	8/23/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
PW-3	8/23/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
PW-3	8/23/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
PW-3	8/23/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
PW-3	8/23/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
PW-3	8/23/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
PW-3	8/23/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
PW-3	8/23/2015	Phenol	ND	10	1.1	5761	ug/L
PW-3	8/23/2015	Pyridine	ND	10	1.7	20	ug/L
PW-3	8/23/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
PW-3	8/23/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
PW-3	8/23/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
PW-3	8/23/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
PW-3	8/23/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
PW-3	8/23/2015	Anthracene	ND	10	1.6	1721	ug/L
PW-3	8/23/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
PW-3	8/23/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
PW-3	8/23/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
PW-3	8/23/2015	Pyrene	ND	10	2.3	117	ug/L
PW-3	8/23/2015	Dimethylphthalate	ND	10	2	612	ug/L
PW-3	8/23/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
PW-3	8/23/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
PW-3	8/23/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
PW-3	8/23/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
PW-3	8/23/2015	Fluoranthene	ND	10	1.5	802	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
PW-3	8/23/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
PW-3	8/23/2015	Chrysene	ND	10	2.2	34.3	ug/L
PW-3	8/23/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-3	8/23/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
PW-3	8/23/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
PW-3	8/23/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
PW-3	8/23/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
PW-3	8/23/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
PW-3	8/23/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
PW-3	8/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-3	8/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-3	8/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-3	8/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-3	8/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Aniline	ND	10	2.4	13	ug/L
PW-3	8/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-3	8/31/2016	Benzoic Acid	8.5	20	2.6	75000	ug/L
PW-3	8/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-3	8/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-3	8/31/2016	Isophorone	ND	10	2.6	781	ug/L
PW-3	8/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-3	8/31/2016	Diethylphthalate	3.7	10	2.7	14801	ug/L
PW-3	8/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-3	8/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-3	8/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-3	8/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-3	8/31/2016	Fluorene	ND	10	2.7	288	ug/L
PW-3	8/31/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-3	8/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-3	8/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-3	8/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-3	8/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-3	8/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-3	8/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-3	8/31/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-3	8/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-3	8/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-3	8/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-3	8/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-3	8/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-3	8/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-3	8/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-3	8/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-3	8/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-3	8/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-3	8/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-3	8/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-3	8/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-3	8/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-3	8/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-3	8/31/2016	Phenol	ND	10	2	5761	ug/L
PW-3	8/31/2016	Pyridine	ND	10	2.2	20	ug/L
PW-3	8/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-3	8/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-3	8/31/2016	Bis(2-ethylhexyl)phthalate	4.1	10	2.6	55.64	ug/L
PW-3	8/31/2016	Di-n-octylphthalate	4.3	10	2	200	ug/L
PW-3	8/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-3	8/31/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-3	8/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-3	8/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-3	8/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-3	8/31/2016	Pyrene	ND	10	3.1	117	ug/L
PW-3	8/31/2016	Dimethylphthalate	7.9	10	2.4	612	ug/L
PW-3	8/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-3	8/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-3	8/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-3	8/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-3	8/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-3	8/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-3	8/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-3	8/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-3	8/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-3	8/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-3	8/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-3	8/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-3	8/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-3	8/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-3	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-3	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-3	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-3	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-3	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-3	9/18/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-3	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-3	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-3	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-3	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-3	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-3	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-3	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-3	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-3	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-3	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-3	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-3	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-3	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-3	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-3	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-3	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-3	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-3	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-3	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-3	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-3	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-3	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-3	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-3	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-3	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-3	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-3	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-3	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-3	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-3	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-3	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-3	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-3	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-3	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-3	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-3	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-3	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-3	9/18/2017	Bis(2-ethylhexyl)phthalate	5.2	10	4.8	55.64	ug/L
PW-3	9/18/2017	Di-n-octylphthalate	4.8	10	4.7	200	ug/L
PW-3	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-3	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-3	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-3	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-3	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-3	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-3	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-3	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-3	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-3	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-3	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-3	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-3	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-3	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-3	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-3	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-3	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-3	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-3	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-3	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-3	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-3	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-3	9/19/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
PW-3	9/19/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
PW-3	9/19/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
PW-3	9/19/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Aniline	ND	10	6.2	13	ug/L
PW-3	9/19/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
PW-3	9/19/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
PW-3	9/19/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
PW-3	9/19/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
PW-3	9/19/2018	Isophorone	ND	10	6.2	781	ug/L
PW-3	9/19/2018	Acenaphthene	ND	10	5.8	535	ug/L
PW-3	9/19/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
PW-3	9/19/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
PW-3	9/19/2018	Phenanthrene	ND	10	6	170	ug/L
PW-3	9/19/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
PW-3	9/19/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
PW-3	9/19/2018	Fluorene	ND	10	6.3	288	ug/L
PW-3	9/19/2018	Carbazole	ND	10	6.3	NA	ug/L
PW-3	9/19/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
PW-3	9/19/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
PW-3	9/19/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
PW-3	9/19/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
PW-3	9/19/2018	2-Nitrophenol	ND	10	6	NA	ug/L
PW-3	9/19/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
PW-3	9/19/2018	Naphthalene	ND	10	5	30	ug/L
PW-3	9/19/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
PW-3	9/19/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
PW-3	9/19/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
PW-3	9/19/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	9/19/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
PW-3	9/19/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
PW-3	9/19/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
PW-3	9/19/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
PW-3	9/19/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
PW-3	9/19/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
PW-3	9/19/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
PW-3	9/19/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
PW-3	9/19/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
PW-3	9/19/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
PW-3	9/19/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
PW-3	9/19/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
PW-3	9/19/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
PW-3	9/19/2018	Phenol	ND	10	6	5761	ug/L
PW-3	9/19/2018	Pyridine	ND	10	5.4	20	ug/L
PW-3	9/19/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
PW-3	9/19/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
PW-3	9/19/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
PW-3	9/19/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
PW-3	9/19/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
PW-3	9/19/2018	Anthracene	ND	10	5.7	1721	ug/L
PW-3	9/19/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
PW-3	9/19/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
PW-3	9/19/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
PW-3	9/19/2018	Pyrene	ND	10	6.5	117	ug/L
PW-3	9/19/2018	Dimethylphthalate	ND	10	6	612	ug/L
PW-3	9/19/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
PW-3	9/19/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
PW-3	9/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
PW-3	9/19/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
PW-3	9/19/2018	Fluoranthene	ND	10	5.8	802	ug/L
PW-3	9/19/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
PW-3	9/19/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
PW-3	9/19/2018	Chrysene	ND	10	6.8	34.3	ug/L
PW-3	9/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
PW-3	9/19/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
PW-3	9/19/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
PW-3	9/19/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
PW-3	9/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
PW-3	9/19/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
PW-3	11/20/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
PW-3	11/20/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
PW-3	11/20/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
PW-3	11/20/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Aniline	ND	10	6.2	13	ug/L
PW-3	11/20/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
PW-3	11/20/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
PW-3	11/20/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
PW-3	11/20/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
PW-3	11/20/2018	Isophorone	ND	10	6.2	781	ug/L
PW-3	11/20/2018	Acenaphthene	ND	10	5.8	535	ug/L
PW-3	11/20/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
PW-3	11/20/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
PW-3	11/20/2018	Phenanthrene	ND	10	6	170	ug/L
PW-3	11/20/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
PW-3	11/20/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
PW-3	11/20/2018	Fluorene	ND	10	6.3	288	ug/L
PW-3	11/20/2018	Carbazole	ND	10	6.3	NA	ug/L
PW-3	11/20/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
PW-3	11/20/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
PW-3	11/20/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
PW-3	11/20/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
PW-3	11/20/2018	2-Nitrophenol	ND	10	6	NA	ug/L
PW-3	11/20/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
PW-3	11/20/2018	Naphthalene	ND	10	5	30	ug/L
PW-3	11/20/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
PW-3	11/20/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
PW-3	11/20/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
PW-3	11/20/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
PW-3	11/20/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
PW-3	11/20/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
PW-3	11/20/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
PW-3	11/20/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
PW-3	11/20/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
PW-3	11/20/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
PW-3	11/20/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
PW-3	11/20/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
PW-3	11/20/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
PW-3	11/20/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
PW-3	11/20/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
PW-3	11/20/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
PW-3	11/20/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
PW-3	11/20/2018	Phenol	ND	10	6	5761	ug/L
PW-3	11/20/2018	Pyridine	ND	10	5.4	20	ug/L
PW-3	11/20/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
PW-3	11/20/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
PW-3	11/20/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
PW-3	11/20/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
PW-3	11/20/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
PW-3	11/20/2018	Anthracene	ND	10	5.7	1721	ug/L
PW-3	11/20/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
PW-3	11/20/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
PW-3	11/20/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
PW-3	11/20/2018	Pyrene	ND	10	6.5	117	ug/L
PW-3	11/20/2018	Dimethylphthalate	ND	10	6	612	ug/L
PW-3	11/20/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
PW-3	11/20/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
PW-3	11/20/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
PW-3	11/20/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
PW-3	11/20/2018	Fluoranthene	ND	10	5.8	802	ug/L
PW-3	11/20/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
PW-3	11/20/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
PW-3	11/20/2018	Chrysene	ND	10	6.8	34.3	ug/L
PW-3	11/20/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
PW-3	11/20/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
PW-3	11/20/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
PW-3	11/20/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
PW-3	11/20/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
PW-3	11/20/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
PW-3	11/20/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
PW-3	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
PW-3	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
PW-3	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
PW-3	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
PW-3	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
PW-3	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
PW-3	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
PW-3	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
PW-3	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
PW-3	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
PW-3	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
PW-3	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
PW-3	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
PW-3	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
PW-3	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
PW-3	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
PW-3	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
PW-3	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
PW-3	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
PW-3	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
PW-3	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
PW-3	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
PW-3	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
PW-3	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
PW-3	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
PW-3	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
PW-3	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
PW-3	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
PW-3	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
PW-3	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
PW-3	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
PW-3	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
PW-3	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
PW-3	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
PW-3	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
PW-3	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L
PW-3	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
PW-3	2/20/2019	Benzoic Acid	14	20	6.311561	75000	ug/L
PW-3	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
PW-3	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
PW-3	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
PW-3	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
PW-3	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
PW-3	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
PW-3	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
PW-3	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
PW-3	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
PW-3	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
PW-3	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
PW-3	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
PW-3	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
PW-3	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
PW-3	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
PW-3	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
PW-3	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
PW-3	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
PW-3	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
PW-3	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
PW-3	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
PW-3	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
PW-3	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
PW-3	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
PW-3	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
PW-3	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
PW-3	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
PW-3	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
PW-3	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
PW-3	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
PW-3	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
PW-3	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
PW-3	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-3	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-3	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-3	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-3	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-3	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-3	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-3	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-3	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-3	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-3	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-3	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-3	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-3	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-3	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-3	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-3	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-3	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-3	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-3	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-3	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-3	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-3	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-3	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-3	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-3	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-3	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-3	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-3	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-3	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-3	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
PW-3	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-3	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-3	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-3	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-3	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-3	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-3	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-3	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-3	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-3	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-3	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-3	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-3	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-3	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-3	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-3	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-3	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-3	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-3	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-3	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-3	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-3	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-3	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-3	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-3	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-3	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-3	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-3	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-3	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-3	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-3	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-3	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-3	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-3	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-3	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-3	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-3	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-3	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-3	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-3	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-3	8/28/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-3	8/28/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-3	8/28/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-3	8/28/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/28/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-3	8/28/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-3	8/28/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-3	8/28/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-3	8/28/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-3	8/28/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-3	8/28/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-3	8/28/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-3	8/28/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-3	8/28/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-3	8/28/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-3	8/28/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-3	8/28/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-3	8/28/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-3	8/28/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-3	8/28/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-3	8/28/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-3	8/28/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-3	8/28/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-3	8/28/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-3	8/28/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-3	8/28/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-3	8/28/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-3	8/28/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-3	8/28/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-3	8/28/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-3	8/28/2019	Aniline	ND	10	3.579516	13	ug/L
PW-3	8/28/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-3	8/28/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-3	8/28/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-3	8/28/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-3	8/28/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-3	8/28/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-3	8/28/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-3	8/28/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-3	8/28/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-3	8/28/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-3	8/28/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-3	8/28/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-3	8/28/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-3	8/28/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-3	8/28/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-3	8/28/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-3	8/28/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-3	8/28/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-3	8/28/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-3	8/28/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-3	8/28/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-3	8/28/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-3	8/28/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-3	8/28/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-3	8/28/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-3	8/28/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-3	8/28/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-3	8/28/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-3	8/28/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-3	8/28/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-3	8/28/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-3	8/28/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-3	8/28/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-3	8/28/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-3	8/28/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-3	8/28/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-3	8/28/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-3	8/28/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-3	8/28/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-3	8/28/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-3	9/21/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
PW-3	9/21/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
PW-3	9/21/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
PW-3	9/21/2020	1,4-Dioxane	ND	0.51	0.1	4.59	ug/L
PW-3	9/21/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
PW-3	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
PW-3	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
PW-3	9/21/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
PW-3	9/21/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
PW-3	9/21/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
PW-3	9/21/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
PW-3	9/21/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
PW-3	9/21/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
PW-3	9/21/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
PW-3	9/21/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
PW-3	9/21/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
PW-3	9/21/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
PW-3	9/21/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
PW-3	9/21/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
PW-3	9/21/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
PW-3	9/21/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
PW-3	9/21/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
PW-3	9/21/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Aniline	ND	0.51	0.1	13	ug/L
PW-3	9/21/2020	Anthracene	ND	0.51	0.1	1721	ug/L
PW-3	9/21/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
PW-3	9/21/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
PW-3	9/21/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
PW-3	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
PW-3	9/21/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
PW-3	9/21/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
PW-3	9/21/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
PW-3	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
PW-3	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
PW-3	9/21/2020	Bis(2-ethylhexyl)phthalate	0.41	0.51	0.2	55.64	ug/L
PW-3	9/21/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
PW-3	9/21/2020	Carbazole	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
PW-3	9/21/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
PW-3	9/21/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
PW-3	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
PW-3	9/21/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
PW-3	9/21/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
PW-3	9/21/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
PW-3	9/21/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
PW-3	9/21/2020	Fluorene	ND	0.51	0.1	288	ug/L
PW-3	9/21/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
PW-3	9/21/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
PW-3	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
PW-3	9/21/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
PW-3	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
PW-3	9/21/2020	Isophorone	ND	0.51	0.1	781	ug/L
PW-3	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
PW-3	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
PW-3	9/21/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
PW-3	9/21/2020	Naphthalene	ND	0.51	0.1	30	ug/L
PW-3	9/21/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
PW-3	9/21/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
PW-3	9/21/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
PW-3	9/21/2020	Phenol	ND	0.51	0.1	5761	ug/L
PW-3	9/21/2020	Pyrene	ND	0.51	0.1	117	ug/L
PW-3	9/21/2020	Pyridine	ND	0.51	0.2	20	ug/L
PW-3	12/28/2020	Acenaphthene	ND	10.5	0.169	535	ug/L
PW-3	12/28/2020	Acenaphthylene	ND	10.5	0.179	NA	ug/L
PW-3	12/28/2020	Anthracene	ND	10.5	0.19	1721	ug/L
PW-3	12/28/2020	Benzo(a)anthracene	*ND*	*10.5*	0.19	0.12	ug/L
PW-3	12/28/2020	Benzo(a)pyrene	*ND*	*10.5*	0.126	0.2	ug/L
PW-3	12/28/2020	Benzo(b)fluoranthene	*ND*	*10.5*	0.158	0.34	ug/L
PW-3	12/28/2020	Benzo(g,h,i)perylene	ND	10.5	0.242	NA	ug/L
PW-3	12/28/2020	Benzo(k)fluoranthene	*ND*	*10.5*	0.169	3.43	ug/L
PW-3	12/28/2020	Bis(2-chloroethoxy)methane	ND	10.5	0.169	59	ug/L
PW-3	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*10.5*	2.85	0.137	ug/L
PW-3	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	10.5	5.27	55.64	ug/L
PW-3	12/28/2020	4-Bromophenyl-phenylether	ND	10.5	0.211	NA	ug/L
PW-3	12/28/2020	Butylbenzylphthalate	ND	10.5	0.2	16	ug/L
PW-3	12/28/2020	Carbazole	ND	10.5	0.242	NA	ug/L
PW-3	12/28/2020	4-Chloroaniline	*ND*	*10.5*	3.58	0.37	ug/L
PW-3	12/28/2020	4-Chloro-3-Methylphenol	ND	10.5	4.01	NA	ug/L
PW-3	12/28/2020	2-Chloronaphthalene	ND	10.5	0.148	733	ug/L
PW-3	12/28/2020	2-Chlorophenol	ND	10.5	2.32	91	ug/L
PW-3	12/28/2020	4-Chlorophenyl-phenylether	ND	10.5	2.11	NA	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	10.5	0.19	NA	ug/L
PW-3	12/28/2020	Chrysene	ND	10.5	0.2	34.3	ug/L
PW-3	12/28/2020	Dibenzo(a,h)anthracene	ND	10.5	0.253	NA	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	10.5	0.169	75	ug/L
PW-3	12/28/2020	Dibenzofuran	ND	10.5	0.179	NA	ug/L
PW-3	12/28/2020	3,3-Dichlorobenzidine	*ND*	*10.5*	2.74	1.25	ug/L
PW-3	12/28/2020	2,4-Dichlorophenol	ND	10.5	3.16	45.3	ug/L
PW-3	12/28/2020	Diethylphthalate	ND	10.5	0.253	14801	ug/L
PW-3	12/28/2020	2,4-Dimethylphenol	ND	10.5	3.69	354	ug/L
PW-3	12/28/2020	Di-n-butylphthalate	ND	10.5	2.85	885	ug/L
PW-3	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.5*	1.69	1.52	ug/L
PW-3	12/28/2020	2,4-Dinitrophenol	ND	31.6	3.58	38.7	ug/L
PW-3	12/28/2020	2,4-Dinitrotoluene	ND	10.5	2	45.3	ug/L
PW-3	12/28/2020	2,6-Dinitrotoluene	*ND*	*10.5*	2	0.485	ug/L
PW-3	12/28/2020	Di-n-octylphthalate	ND	10.5	0.179	200	ug/L
PW-3	12/28/2020	Fluoranthene	ND	10.5	0.19	802	ug/L
PW-3	12/28/2020	Fluorene	ND	10.5	0.19	288	ug/L
PW-3	12/28/2020	Hexachlorobenzene	*ND*	*10.5*	0.179	0.0976	ug/L
PW-3	12/28/2020	Hexachlorocyclopentadiene	*ND*	*21.1*	2.74	0.41	ug/L
PW-3	12/28/2020	Hexachloroethane	*ND*	*10.5*	4.43	3.28	ug/L
PW-3	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.5*	0.232	0.343	ug/L
PW-3	12/28/2020	Isophorone	ND	10.5	0.148	781	ug/L
PW-3	12/28/2020	2-Methylphenol	ND	10.5	1.9	NA	ug/L
PW-3	12/28/2020	Naphthalene	ND	10.5	0.179	30	ug/L
PW-3	12/28/2020	2-Nitroaniline	ND	10.5	2.32	190	ug/L
PW-3	12/28/2020	3-Nitroaniline	ND	10.5	1.9	NA	ug/L
PW-3	12/28/2020	4-Nitroaniline	*ND*	*10.5*	1.58	3.8	ug/L
PW-3	12/28/2020	Nitrobenzene	*ND*	*10.5*	0.137	1.4	ug/L
PW-3	12/28/2020	2-Nitrophenol	ND	10.5	5.48	NA	ug/L
PW-3	12/28/2020	4-Nitrophenol	ND	10.5	2.21	NA	ug/L
PW-3	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*10.5*	3.48	0.011	ug/L
PW-3	12/28/2020	N-Nitrosodiphenylamine	ND	10.5	0.19	122	ug/L
PW-3	12/28/2020	Pentachlorophenol	*ND*	*21.1*	1.48	1	ug/L
PW-3	12/28/2020	Phenanthrene	ND	10.5	0.19	170	ug/L
PW-3	12/28/2020	Phenol	ND	10.5	2.74	5761	ug/L
PW-3	12/28/2020	Pyrene	ND	10.5	0.221	117	ug/L
PW-3	12/28/2020	2,4,5-Trichlorophenol	ND	10.5	3.9	1166	ug/L
PW-3	12/28/2020	2,4,6-Trichlorophenol	ND	10.5	3.69	11.9*	ug/L
PW-3	12/28/2020	Dimethylphthalate	ND	10.5	0.179	612	ug/L
PW-3	12/28/2020	Aniline	ND	10.5	4.01	13	ug/L
PW-3	12/28/2020	Benzyl Alcohol	ND	10.5	2.11	2000	ug/L
PW-3	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.5*	0.169	9.81	ug/L
PW-3	12/28/2020	N-Nitrosodimethylamine	*ND*	*10.5*	3.69	0.0049	ug/L
PW-3	12/28/2020	Pyridine	ND	10.5	3.37	20	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	10.5	0.19	70	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	10.5	0.179	600	ug/L
PW-3	12/28/2020	Azobenzene	*ND*	*10.5*	1.05	0.12	ug/L
PW-3	12/28/2020	Benzoic Acid	ND	31.6	7.69	75000	ug/L
PW-3	12/28/2020	Acenaphthene	ND	10.7	0.171	535	ug/L
PW-3	12/28/2020	Acenaphthylene	ND	10.7	0.182	NA	ug/L
PW-3	12/28/2020	Anthracene	ND	10.7	0.192	1721	ug/L
PW-3	12/28/2020	Benzo(a)anthracene	*ND*	*10.7*	0.192	0.12	ug/L
PW-3	12/28/2020	Benzo(a)pyrene	*ND*	*10.7*	0.128	0.2	ug/L
PW-3	12/28/2020	Benzo(b)fluoranthene	*ND*	*10.7*	0.16	0.34	ug/L
PW-3	12/28/2020	Benzo(g,h,i)perylene	ND	10.7	0.246	NA	ug/L
PW-3	12/28/2020	Benzo(k)fluoranthene	*ND*	*10.7*	0.171	3.43	ug/L
PW-3	12/28/2020	Bis(2-chloroethoxy)methane	ND	10.7	0.171	59	ug/L
PW-3	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*10.7*	2.88	0.137	ug/L
PW-3	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	10.7	5.34	55.64	ug/L
PW-3	12/28/2020	4-Bromophenyl-phenylether	ND	10.7	0.214	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	Butylbenzylphthalate	ND	10.7	0.203	16	ug/L
PW-3	12/28/2020	Carbazole	ND	10.7	0.246	NA	ug/L
PW-3	12/28/2020	4-Chloroaniline	*ND*	*10.7*	3.63	0.37	ug/L
PW-3	12/28/2020	4-Chloro-3-Methylphenol	ND	10.7	4.06	NA	ug/L
PW-3	12/28/2020	2-Chloronaphthalene	ND	10.7	0.15	733	ug/L
PW-3	12/28/2020	2-Chlorophenol	ND	10.7	2.35	91	ug/L
PW-3	12/28/2020	4-Chlorophenyl-phenylether	ND	10.7	2.14	NA	ug/L
PW-3	12/28/2020	1,3-Dichlorobenzene	ND	10.7	0.192	NA	ug/L
PW-3	12/28/2020	Chrysene	ND	10.7	0.203	34.3	ug/L
PW-3	12/28/2020	Dibenzo(a,h)anthracene	ND	10.7	0.256	NA	ug/L
PW-3	12/28/2020	1,4-Dichlorobenzene	ND	10.7	0.171	75	ug/L
PW-3	12/28/2020	Dibenzofuran	ND	10.7	0.182	NA	ug/L
PW-3	12/28/2020	3,3-Dichlorobenzidine	*ND*	*10.7*	2.78	1.25	ug/L
PW-3	12/28/2020	2,4-Dichlorophenol	ND	10.7	3.21	45.3	ug/L
PW-3	12/28/2020	Diethylphthalate	ND	10.7	0.256	14801	ug/L
PW-3	12/28/2020	2,4-Dimethylphenol	ND	10.7	3.74	354	ug/L
PW-3	12/28/2020	Di-n-butylphthalate	ND	10.7	2.88	885	ug/L
PW-3	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*10.7*	1.71	1.52	ug/L
PW-3	12/28/2020	2,4-Dinitrophenol	ND	32.1	3.63	38.7	ug/L
PW-3	12/28/2020	2,4-Dinitrotoluene	ND	10.7	2.03	45.3	ug/L
PW-3	12/28/2020	2,6-Dinitrotoluene	*ND*	*10.7*	2.03	0.485	ug/L
PW-3	12/28/2020	Di-n-octylphthalate	ND	10.7	0.182	200	ug/L
PW-3	12/28/2020	Fluoranthene	ND	10.7	0.192	802	ug/L
PW-3	12/28/2020	Fluorene	ND	10.7	0.192	288	ug/L
PW-3	12/28/2020	Hexachlorobenzene	*ND*	*10.7*	0.182	0.0976	ug/L
PW-3	12/28/2020	Hexachlorocyclopentadiene	*ND*	*21.4*	2.78	0.41	ug/L
PW-3	12/28/2020	Hexachloroethane	*ND*	*10.7*	4.49	3.28	ug/L
PW-3	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*10.7*	0.235	0.343	ug/L
PW-3	12/28/2020	Isophorone	ND	10.7	0.15	781	ug/L
PW-3	12/28/2020	2-Methylphenol	ND	10.7	1.92	NA	ug/L
PW-3	12/28/2020	Naphthalene	ND	10.7	0.182	30	ug/L
PW-3	12/28/2020	2-Nitroaniline	ND	10.7	2.35	190	ug/L
PW-3	12/28/2020	3-Nitroaniline	ND	10.7	1.92	NA	ug/L
PW-3	12/28/2020	4-Nitroaniline	*ND*	*10.7*	1.6	3.8	ug/L
PW-3	12/28/2020	Nitrobenzene	*ND*	*10.7*	0.139	1.4	ug/L
PW-3	12/28/2020	2-Nitrophenol	ND	10.7	5.56	NA	ug/L
PW-3	12/28/2020	4-Nitrophenol	ND	10.7	2.24	NA	ug/L
PW-3	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*10.7*	3.53	0.011	ug/L
PW-3	12/28/2020	N-Nitrosodiphenylamine	ND	10.7	0.192	122	ug/L
PW-3	12/28/2020	Pentachlorophenol	*ND*	*21.4*	1.5	1	ug/L
PW-3	12/28/2020	Phenanthrene	ND	10.7	0.192	170	ug/L
PW-3	12/28/2020	Phenol	ND	10.7	2.78	5761	ug/L
PW-3	12/28/2020	Pyrene	ND	10.7	0.224	117	ug/L
PW-3	12/28/2020	2,4,5-Trichlorophenol	ND	10.7	3.95	1166	ug/L
PW-3	12/28/2020	2,4,6-Trichlorophenol	ND	10.7	3.74	11.9*	ug/L
PW-3	12/28/2020	Dimethylphthalate	ND	10.7	0.182	612	ug/L
PW-3	12/28/2020	Aniline	ND	10.7	4.06	13	ug/L
PW-3	12/28/2020	Benzyl Alcohol	ND	10.7	2.14	2000	ug/L
PW-3	12/28/2020	Bis(2-chloroisopropyl)ether	*ND*	*10.7*	0.171	9.81	ug/L
PW-3	12/28/2020	N-Nitrosodimethylamine	*ND*	*10.7*	3.74	0.0049	ug/L
PW-3	12/28/2020	Pyridine	ND	10.7	3.42	20	ug/L
PW-3	12/28/2020	1,2,4-Trichlorobenzene	ND	10.7	0.192	70	ug/L
PW-3	12/28/2020	1,2-Dichlorobenzene	ND	10.7	0.182	600	ug/L
PW-3	12/28/2020	Azobenzene	*ND*	*10.7*	1.07	0.12	ug/L
PW-3	12/28/2020	Benzoic Acid	ND	32.1	7.8	75000	ug/L
PW-4	9/10/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
PW-4	9/10/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
PW-4	9/10/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
PW-4	9/10/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	9/10/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	Aniline	ND	10	2.2	13	ug/L
PW-4	9/10/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
PW-4	9/10/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
PW-4	9/10/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
PW-4	9/10/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
PW-4	9/10/2013	Isophorone	ND	10	1.8	781	ug/L
PW-4	9/10/2013	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	9/10/2013	Diethylphthalate	ND	10	3	14801	ug/L
PW-4	9/10/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	9/10/2013	Phenanthrene	ND	10	1.6	170	ug/L
PW-4	9/10/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
PW-4	9/10/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	9/10/2013	Fluorene	ND	10	2.5	288	ug/L
PW-4	9/10/2013	Carbazole	ND	10	2.3	NA	ug/L
PW-4	9/10/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
PW-4	9/10/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
PW-4	9/10/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
PW-4	9/10/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
PW-4	9/10/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
PW-4	9/10/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
PW-4	9/10/2013	Naphthalene	ND	10	2.4	30	ug/L
PW-4	9/10/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
PW-4	9/10/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
PW-4	9/10/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
PW-4	9/10/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
PW-4	9/10/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
PW-4	9/10/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
PW-4	9/10/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
PW-4	9/10/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
PW-4	9/10/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
PW-4	9/10/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
PW-4	9/10/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
PW-4	9/10/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
PW-4	9/10/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
PW-4	9/10/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
PW-4	9/10/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
PW-4	9/10/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
PW-4	9/10/2013	Phenol	ND	10	2.2	5761	ug/L
PW-4	9/10/2013	Pyridine	ND	10	3.5	20	ug/L
PW-4	9/10/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
PW-4	9/10/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
PW-4	9/10/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
PW-4	9/10/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
PW-4	9/10/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
PW-4	9/10/2013	Anthracene	ND	10	2.2	1721	ug/L
PW-4	9/10/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
PW-4	9/10/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
PW-4	9/10/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
PW-4	9/10/2013	Pyrene	ND	10	2.1	117	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/10/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
PW-4	9/10/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
PW-4	9/10/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
PW-4	9/10/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
PW-4	9/10/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	9/10/2013	Fluoranthene	ND	10	2.4	802	ug/L
PW-4	9/10/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
PW-4	9/10/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
PW-4	9/10/2013	Chrysene	ND	10	2.7	34.3	ug/L
PW-4	9/10/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
PW-4	9/10/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
PW-4	9/10/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
PW-4	9/10/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
PW-4	9/10/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	9/10/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
PW-4	9/10/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
PW-4	6/10/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-4	6/10/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-4	6/10/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-4	6/10/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	6/10/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Aniline	ND	10	2.4	13	ug/L
PW-4	6/10/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-4	6/10/2016	Benzoic Acid	ND	20	2.6	75000	ug/L
PW-4	6/10/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-4	6/10/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-4	6/10/2016	Isophorone	ND	10	2.6	781	ug/L
PW-4	6/10/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	6/10/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
PW-4	6/10/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	6/10/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-4	6/10/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-4	6/10/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	6/10/2016	Fluorene	ND	10	2.7	288	ug/L
PW-4	6/10/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-4	6/10/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-4	6/10/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-4	6/10/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-4	6/10/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
PW-4	6/10/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-4	6/10/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-4	6/10/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-4	6/10/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-4	6/10/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-4	6/10/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-4	6/10/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-4	6/10/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-4	6/10/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-4	6/10/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-4	6/10/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-4	6/10/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-4	6/10/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-4	6/10/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-4	6/10/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-4	6/10/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-4	6/10/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-4	6/10/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-4	6/10/2016	Phenol	ND	10	2	5761	ug/L
PW-4	6/10/2016	Pyridine	ND	10	2.2	20	ug/L
PW-4	6/10/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-4	6/10/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-4	6/10/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
PW-4	6/10/2016	Di-n-octylphthalate	5.4	10	2	200	ug/L
PW-4	6/10/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-4	6/10/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-4	6/10/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-4	6/10/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-4	6/10/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-4	6/10/2016	Pyrene	ND	10	3.1	117	ug/L
PW-4	6/10/2016	Dimethylphthalate	ND	10	2.4	612	ug/L
PW-4	6/10/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-4	6/10/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-4	6/10/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	6/10/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-4	6/10/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-4	6/10/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-4	6/10/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-4	6/10/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-4	6/10/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-4	6/10/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-4	6/10/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-4	6/10/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	6/10/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-4	6/10/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
PW-4	8/31/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
PW-4	8/31/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
PW-4	8/31/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
PW-4	8/31/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Aniline	ND	10	2.4	13	ug/L
PW-4	8/31/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
PW-4	8/31/2016	Benzoic Acid	8.7	20	2.6	75000	ug/L
PW-4	8/31/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
PW-4	8/31/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
PW-4	8/31/2016	Isophorone	ND	10	2.6	781	ug/L
PW-4	8/31/2016	Acenaphthene	ND	10	2.6	535	ug/L
PW-4	8/31/2016	Diethylphthalate	2.9	10	2.7	14801	ug/L
PW-4	8/31/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
PW-4	8/31/2016	Phenanthrene	ND	10	2.6	170	ug/L
PW-4	8/31/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
PW-4	8/31/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
PW-4	8/31/2016	Fluorene	ND	10	2.7	288	ug/L
PW-4	8/31/2016	Carbazole	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
PW-4	8/31/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
PW-4	8/31/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
PW-4	8/31/2016	2-Nitroaniline	ND	10	2.8	190	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/31/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
PW-4	8/31/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
PW-4	8/31/2016	Naphthalene	ND	10	2.6	30	ug/L
PW-4	8/31/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
PW-4	8/31/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
PW-4	8/31/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
PW-4	8/31/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
PW-4	8/31/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
PW-4	8/31/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
PW-4	8/31/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
PW-4	8/31/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
PW-4	8/31/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
PW-4	8/31/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
PW-4	8/31/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
PW-4	8/31/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
PW-4	8/31/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
PW-4	8/31/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
PW-4	8/31/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
PW-4	8/31/2016	Phenol	ND	10	2	5761	ug/L
PW-4	8/31/2016	Pyridine	ND	10	2.2	20	ug/L
PW-4	8/31/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
PW-4	8/31/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
PW-4	8/31/2016	Bis(2-ethylhexyl)phthalate	3.1	10	2.6	55.64	ug/L
PW-4	8/31/2016	Di-n-octylphthalate	3.8	10	2	200	ug/L
PW-4	8/31/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
PW-4	8/31/2016	Anthracene	ND	10	2.5	1721	ug/L
PW-4	8/31/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
PW-4	8/31/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
PW-4	8/31/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
PW-4	8/31/2016	Pyrene	ND	10	3.1	117	ug/L
PW-4	8/31/2016	Dimethylphthalate	6.4	10	2.4	612	ug/L
PW-4	8/31/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
PW-4	8/31/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
PW-4	8/31/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
PW-4	8/31/2016	Fluoranthene	ND	10	2.6	802	ug/L
PW-4	8/31/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
PW-4	8/31/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
PW-4	8/31/2016	Chrysene	ND	10	2.8	34.3	ug/L
PW-4	8/31/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
PW-4	8/31/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
PW-4	8/31/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
PW-4	8/31/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
PW-4	8/31/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
PW-4	8/31/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
PW-4	8/31/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
PW-4	3/30/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	3/30/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	3/30/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	3/30/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	3/30/2017	Aniline	ND	10	3.1	13	ug/L
PW-4	3/30/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	3/30/2017	Benzoic Acid	7.4	20	3.9	75000	ug/L
PW-4	3/30/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	3/30/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	3/30/2017	Isophorone	ND	10	4.4	781	ug/L
PW-4	3/30/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	3/30/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	3/30/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	3/30/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	3/30/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	3/30/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	3/30/2017	Fluorene	ND	10	4	288	ug/L
PW-4	3/30/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	3/30/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	3/30/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	3/30/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	3/30/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	3/30/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	3/30/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-4	3/30/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	3/30/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	3/30/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	3/30/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-4	3/30/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	3/30/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	3/30/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	3/30/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	3/30/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	3/30/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	3/30/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	3/30/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	3/30/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	3/30/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	3/30/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	3/30/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	3/30/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	3/30/2017	Phenol	ND	10	3.1	5761	ug/L
PW-4	3/30/2017	Pyridine	ND	10	2.3	20	ug/L
PW-4	3/30/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	3/30/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	3/30/2017	Bis(2-ethylhexyl)phthalate	6.9	10	4.8	55.64	ug/L
PW-4	3/30/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	3/30/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	3/30/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-4	3/30/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	3/30/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	3/30/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	3/30/2017	Pyrene	ND	10	4.4	117	ug/L
PW-4	3/30/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	3/30/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	3/30/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	3/30/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	3/30/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	3/30/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	3/30/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/30/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	3/30/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	3/30/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	3/30/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	3/30/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	3/30/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	3/30/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	3/30/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	3/30/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	9/18/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	9/18/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	9/18/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	9/18/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	9/18/2017	Aniline	ND	10	3.1	13	ug/L
PW-4	9/18/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	9/18/2017	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-4	9/18/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	9/18/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	9/18/2017	Isophorone	ND	10	4.4	781	ug/L
PW-4	9/18/2017	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	9/18/2017	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	9/18/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	9/18/2017	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	9/18/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	9/18/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	9/18/2017	Fluorene	ND	10	4	288	ug/L
PW-4	9/18/2017	Carbazole	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	9/18/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	9/18/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	9/18/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	9/18/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	9/18/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	9/18/2017	Naphthalene	ND	10	2.9	30	ug/L
PW-4	9/18/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	9/18/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	9/18/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	9/18/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
PW-4	9/18/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	9/18/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	9/18/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	9/18/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	9/18/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	9/18/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	9/18/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	9/18/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	9/18/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	9/18/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	9/18/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	9/18/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	9/18/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	9/18/2017	Phenol	ND	10	3.1	5761	ug/L
PW-4	9/18/2017	Pyridine	ND	10	2.3	20	ug/L
PW-4	9/18/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	9/18/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	9/18/2017	Bis(2-ethylhexyl)phthalate	5.3	10	4.8	55.64	ug/L
PW-4	9/18/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	9/18/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	9/18/2017	Anthracene	ND	10	3.5	1721	ug/L
PW-4	9/18/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	9/18/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	9/18/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	9/18/2017	Pyrene	ND	10	4.4	117	ug/L
PW-4	9/18/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	9/18/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	9/18/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	9/18/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	9/18/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	9/18/2017	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	9/18/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-4	9/18/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	9/18/2017	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	9/18/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	9/18/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	9/18/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	9/18/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	9/18/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	9/18/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	9/18/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	3/1/2018	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
PW-4	3/1/2018	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
PW-4	3/1/2018	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
PW-4	3/1/2018	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
PW-4	3/1/2018	Aniline	ND	10	3.1	13	ug/L
PW-4	3/1/2018	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
PW-4	3/1/2018	Benzoic Acid	ND	20	3.9	75000	ug/L
PW-4	3/1/2018	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
PW-4	3/1/2018	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
PW-4	3/1/2018	Isophorone	ND	10	4.4	781	ug/L
PW-4	3/1/2018	Acenaphthene	ND	10	3.6	535	ug/L
PW-4	3/1/2018	Diethylphthalate	ND	10	4	14801	ug/L
PW-4	3/1/2018	Di-n-butylphthalate	ND	10	5	885	ug/L
PW-4	3/1/2018	Phenanthrene	ND	10	4.3	170	ug/L
PW-4	3/1/2018	Butylbenzylphthalate	ND	10	4.6	16	ug/L
PW-4	3/1/2018	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
PW-4	3/1/2018	Fluorene	ND	10	4	288	ug/L
PW-4	3/1/2018	Carbazole	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
PW-4	3/1/2018	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
PW-4	3/1/2018	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
PW-4	3/1/2018	2-Nitroaniline	ND	10	4.9	190	ug/L
PW-4	3/1/2018	2-Nitrophenol	ND	10	5.2	NA	ug/L
PW-4	3/1/2018	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
PW-4	3/1/2018	Naphthalene	ND	10	2.9	30	ug/L
PW-4	3/1/2018	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L
PW-4	3/1/2018	2-Chloronaphthalene	ND	10	3.7	733	ug/L
PW-4	3/1/2018	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
PW-4	3/1/2018	2-Methylphenol	ND	10	3.3	NA	ug/L

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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	3/1/2018	1,2-Dichlorobenzene	ND	10	2	600	ug/L
PW-4	3/1/2018	2-Chlorophenol	ND	10	7.5	91	ug/L
PW-4	3/1/2018	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
PW-4	3/1/2018	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
PW-4	3/1/2018	3-Nitroaniline	ND	10	4.3	NA	ug/L
PW-4	3/1/2018	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
PW-4	3/1/2018	4-Nitrophenol	ND	10	5.5	NA	ug/L
PW-4	3/1/2018	Benzyl Alcohol	ND	10	4.6	2000	ug/L
PW-4	3/1/2018	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
PW-4	3/1/2018	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
PW-4	3/1/2018	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
PW-4	3/1/2018	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
PW-4	3/1/2018	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
PW-4	3/1/2018	Phenol	ND	10	3.1	5761	ug/L
PW-4	3/1/2018	Pyridine	ND	10	2.3	20	ug/L
PW-4	3/1/2018	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
PW-4	3/1/2018	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
PW-4	3/1/2018	Bis(2-ethylhexyl)phthalate	6.2	10	4.8	55.64	ug/L
PW-4	3/1/2018	Di-n-octylphthalate	ND	10	4.7	200	ug/L
PW-4	3/1/2018	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
PW-4	3/1/2018	Anthracene	ND	10	3.5	1721	ug/L
PW-4	3/1/2018	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
PW-4	3/1/2018	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
PW-4	3/1/2018	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
PW-4	3/1/2018	Pyrene	ND	10	4.4	117	ug/L
PW-4	3/1/2018	Dimethylphthalate	ND	10	3.6	612	ug/L
PW-4	3/1/2018	Dibenzofuran	ND	10	4.1	NA	ug/L
PW-4	3/1/2018	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
PW-4	3/1/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
PW-4	3/1/2018	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
PW-4	3/1/2018	Fluoranthene	ND	10	4.3	802	ug/L
PW-4	3/1/2018	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
PW-4	3/1/2018	Acenaphthylene	ND	10	3.5	NA	ug/L
PW-4	3/1/2018	Chrysene	ND	10	3.8	34.3	ug/L
PW-4	3/1/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
PW-4	3/1/2018	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
PW-4	3/1/2018	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
PW-4	3/1/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
PW-4	3/1/2018	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
PW-4	3/1/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
PW-4	3/1/2018	3,4-Methylphenol	ND	10	3.2	NA	ug/L
PW-4	9/19/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
PW-4	9/19/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
PW-4	9/19/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
PW-4	9/19/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
PW-4	9/19/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
PW-4	9/19/2018	Aniline	*ND*	*100*	62	13	ug/L
PW-4	9/19/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
PW-4	9/19/2018	Benzoic Acid	ND	200	63	75000	ug/L
PW-4	9/19/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
PW-4	9/19/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
PW-4	9/19/2018	Isophorone	ND	100	62	781	ug/L
PW-4	9/19/2018	Acenaphthene	ND	100	58	535	ug/L
PW-4	9/19/2018	Diethylphthalate	ND	100	63	14801	ug/L
PW-4	9/19/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
PW-4	9/19/2018	Phenanthrene	ND	100	60	170	ug/L
PW-4	9/19/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
PW-4	9/19/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
PW-4	9/19/2018	Fluorene	ND	100	63	288	ug/L
PW-4	9/19/2018	Carbazole	ND	100	63	NA	ug/L
PW-4	9/19/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
PW-4	9/19/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
PW-4	9/19/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
PW-4	9/19/2018	2-Nitroaniline	ND	100	59	190	ug/L
PW-4	9/19/2018	2-Nitrophenol	ND	100	60	NA	ug/L
PW-4	9/19/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
PW-4	9/19/2018	Naphthalene	*ND*	*100*	50	30	ug/L
PW-4	9/19/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
PW-4	9/19/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
PW-4	9/19/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
PW-4	9/19/2018	2-Methylphenol	ND	100	63	NA	ug/L
PW-4	9/19/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
PW-4	9/19/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
PW-4	9/19/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
PW-4	9/19/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
PW-4	9/19/2018	3-Nitroaniline	ND	100	68	NA	ug/L
PW-4	9/19/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
PW-4	9/19/2018	4-Nitrophenol	ND	100	56	NA	ug/L
PW-4	9/19/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
PW-4	9/19/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
PW-4	9/19/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
PW-4	9/19/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
PW-4	9/19/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
PW-4	9/19/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
PW-4	9/19/2018	Phenol	ND	100	60	5761	ug/L
PW-4	9/19/2018	Pyridine	*ND*	*100*	54	20	ug/L
PW-4	9/19/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
PW-4	9/19/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
PW-4	9/19/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
PW-4	9/19/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
PW-4	9/19/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
PW-4	9/19/2018	Anthracene	ND	100	57	1721	ug/L
PW-4	9/19/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
PW-4	9/19/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
PW-4	9/19/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
PW-4	9/19/2018	Pyrene	ND	100	65	117	ug/L
PW-4	9/19/2018	Dimethylphthalate	ND	100	60	612	ug/L
PW-4	9/19/2018	Dibenzofuran	ND	100	69	NA	ug/L
PW-4	9/19/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
PW-4	9/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
PW-4	9/19/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
PW-4	9/19/2018	Fluoranthene	ND	100	58	802	ug/L
PW-4	9/19/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
PW-4	9/19/2018	Acenaphthylene	ND	100	62	NA	ug/L
PW-4	9/19/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
PW-4	9/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
PW-4	9/19/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
PW-4	9/19/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
PW-4	9/19/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
PW-4	9/19/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
PW-4	9/19/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
PW-4	11/19/2018	Benzo(a)pyrene	*ND*	*100*	60	0.2	ug/L
PW-4	11/19/2018	2,4-Dinitrophenol	*ND*	*200*	37	38.7	ug/L
PW-4	11/19/2018	Dibenzo(a,h)anthracene	ND	100	56	NA	ug/L
PW-4	11/19/2018	Benzo(a)anthracene	*ND*	*100*	53	0.12	ug/L
PW-4	11/19/2018	4-Chloro-3-Methylphenol	ND	100	56	NA	ug/L
PW-4	11/19/2018	Aniline	*ND*	*100*	62	13	ug/L
PW-4	11/19/2018	N-Nitrosodimethylamine	*ND*	*100*	69	0.0049	ug/L
PW-4	11/19/2018	Benzoic Acid	ND	200	63	75000	ug/L
PW-4	11/19/2018	Hexachloroethane	*ND*	*100*	60	3.28	ug/L
PW-4	11/19/2018	Hexachlorocyclopentadiene	*ND*	*100*	39	0.41	ug/L
PW-4	11/19/2018	Isophorone	ND	100	62	781	ug/L
PW-4	11/19/2018	Acenaphthene	ND	100	58	535	ug/L
PW-4	11/19/2018	Diethylphthalate	ND	100	63	14801	ug/L
PW-4	11/19/2018	Di-n-butylphthalate	ND	100	68	885	ug/L
PW-4	11/19/2018	Phenanthrene	ND	100	60	170	ug/L
PW-4	11/19/2018	Butylbenzylphthalate	*ND*	*100*	63	16	ug/L
PW-4	11/19/2018	N-Nitrosodiphenylamine	ND	100	67	122	ug/L
PW-4	11/19/2018	Fluorene	ND	100	63	288	ug/L
PW-4	11/19/2018	Carbazole	ND	100	63	NA	ug/L
PW-4	11/19/2018	Hexachlorobutadiene	*ND*	*100*	64	0.14	ug/L
PW-4	11/19/2018	Pentachlorophenol	*ND*	*200*	53	1	ug/L
PW-4	11/19/2018	2,4,6-Trichlorophenol	ND	100	64	11.9*	ug/L
PW-4	11/19/2018	2-Nitroaniline	ND	100	59	190	ug/L
PW-4	11/19/2018	2-Nitrophenol	ND	100	60	NA	ug/L
PW-4	11/19/2018	1-Methylnaphthalene	*ND*	*100*	70	11.38	ug/L
PW-4	11/19/2018	Naphthalene	*ND*	*100*	50	30	ug/L
PW-4	11/19/2018	2-Methylnaphthalene	*ND*	*100*	63	35.1	ug/L
PW-4	11/19/2018	2-Chloronaphthalene	ND	100	61	733	ug/L
PW-4	11/19/2018	3,3-Dichlorobenzidine	*ND*	*100*	68	1.25	ug/L
PW-4	11/19/2018	2-Methylphenol	ND	100	63	NA	ug/L
PW-4	11/19/2018	1,2-Dichlorobenzene	ND	100	60	600	ug/L
PW-4	11/19/2018	2-Chlorophenol	*ND*	*100*	58	91	ug/L
PW-4	11/19/2018	2,4,5-Trichlorophenol	ND	100	58	1166	ug/L
PW-4	11/19/2018	Nitrobenzene	*ND*	*100*	60	1.4	ug/L
PW-4	11/19/2018	3-Nitroaniline	ND	100	68	NA	ug/L
PW-4	11/19/2018	4-Nitroaniline	*ND*	*100*	60	3.8	ug/L
PW-4	11/19/2018	4-Nitrophenol	ND	100	56	NA	ug/L
PW-4	11/19/2018	Benzyl Alcohol	ND	100	63	2000	ug/L
PW-4	11/19/2018	4-Bromophenyl-phenylether	ND	100	69	NA	ug/L
PW-4	11/19/2018	Azobenzene	*ND*	*100*	67	0.12	ug/L
PW-4	11/19/2018	2,4-Dimethylphenol	ND	100	59	354	ug/L
PW-4	11/19/2018	1,4-Dichlorobenzene	*ND*	*100*	58	75	ug/L
PW-4	11/19/2018	4-Chloroaniline	*ND*	*100*	60	0.37	ug/L
PW-4	11/19/2018	Phenol	ND	100	60	5761	ug/L
PW-4	11/19/2018	Pyridine	*ND*	*100*	54	20	ug/L
PW-4	11/19/2018	Bis(2-chloroethyl)ether	*ND*	*100*	63	0.137	ug/L
PW-4	11/19/2018	Bis(2-chloroethoxy)methane	*ND*	*100*	61	59	ug/L
PW-4	11/19/2018	Bis(2-ethylhexyl)phthalate	*ND*	*100*	81	55.64	ug/L
PW-4	11/19/2018	Di-n-octylphthalate	ND	100	63	200	ug/L
PW-4	11/19/2018	Hexachlorobenzene	*ND*	*100*	62	0.0976	ug/L
PW-4	11/19/2018	Anthracene	ND	100	57	1721	ug/L
PW-4	11/19/2018	1,2,4-Trichlorobenzene	*ND*	*100*	64	70	ug/L
PW-4	11/19/2018	2,4-Dichlorophenol	*ND*	*200*	58	45.3	ug/L
PW-4	11/19/2018	2,4-Dinitrotoluene	*ND*	*100*	58	45.3	ug/L
PW-4	11/19/2018	Pyrene	ND	100	65	117	ug/L
PW-4	11/19/2018	Dimethylphthalate	ND	100	60	612	ug/L
PW-4	11/19/2018	Dibenzofuran	ND	100	69	NA	ug/L
PW-4	11/19/2018	Benzo(g,h,i)perylene	ND	100	57	NA	ug/L
PW-4	11/19/2018	Indeno(1,2,3-cd)pyrene	*ND*	*100*	70	0.343	ug/L
PW-4	11/19/2018	Benzo(b)fluoranthene	*ND*	*100*	71	0.34	ug/L
PW-4	11/19/2018	Fluoranthene	ND	100	58	802	ug/L
PW-4	11/19/2018	Benzo(k)fluoranthene	*ND*	*100*	64	3.43	ug/L
PW-4	11/19/2018	Acenaphthylene	ND	100	62	NA	ug/L
PW-4	11/19/2018	Chrysene	*ND*	*100*	68	34.3	ug/L
PW-4	11/19/2018	4,6-Dinitro-2-methylphenol	*ND*	*200*	54	1.52	ug/L
PW-4	11/19/2018	1,3-Dichlorobenzene	ND	100	58	NA	ug/L
PW-4	11/19/2018	2,6-Dinitrotoluene	*ND*	*100*	60	0.485	ug/L
PW-4	11/19/2018	N-Nitrosodi-n-propylamine	*ND*	*100*	61	0.011	ug/L
PW-4	11/19/2018	4-Chlorophenyl-phenylether	ND	100	72	NA	ug/L
PW-4	11/19/2018	Bis(2-chloroisopropyl)ether	*ND*	*100*	49	9.81	ug/L
PW-4	11/19/2018	3,4-Methylphenol	ND	100	54	NA	ug/L
PW-4	2/20/2019	1,2,4-Trichlorobenzene	ND	10	6.419328	70	ug/L
PW-4	2/20/2019	1,2-Dichlorobenzene	ND	10	5.965712	600	ug/L
PW-4	2/20/2019	1,3-Dichlorobenzene	ND	10	5.841838	NA	ug/L
PW-4	2/20/2019	1,4-Dichlorobenzene	ND	10	5.802597	75	ug/L
PW-4	2/20/2019	1-Methylnaphthalene	ND	10	6.999122	11.38	ug/L
PW-4	2/20/2019	2,4,5-Trichlorophenol	ND	10	5.803504	1166	ug/L
PW-4	2/20/2019	2,4,6-Trichlorophenol	ND	10	6.403586	11.9*	ug/L
PW-4	2/20/2019	2,4-Dichlorophenol	ND	20	5.788737	45.3	ug/L
PW-4	2/20/2019	2,4-Dimethylphenol	ND	10	5.912084	354	ug/L
PW-4	2/20/2019	2,4-Dinitrophenol	ND	20	3.702104	38.7	ug/L
PW-4	2/20/2019	2,4-Dinitrotoluene	ND	10	5.776635	45.3	ug/L
PW-4	2/20/2019	2,6-Dinitrotoluene	*ND*	*10*	5.950066	0.485	ug/L
PW-4	2/20/2019	2-Chloronaphthalene	ND	10	6.055786	733	ug/L
PW-4	2/20/2019	2-Chlorophenol	ND	10	5.839809	91	ug/L
PW-4	2/20/2019	2-Methylnaphthalene	ND	10	6.33239	35.1	ug/L
PW-4	2/20/2019	2-Methylphenol	ND	10	6.316864	NA	ug/L
PW-4	2/20/2019	2-Nitroaniline	ND	10	5.896041	190	ug/L
PW-4	2/20/2019	2-Nitrophenol	ND	10	5.994558	NA	ug/L
PW-4	2/20/2019	3,3-Dichlorobenzidine	*ND*	*10*	6.781163	1.25	ug/L
PW-4	2/20/2019	3,4-Methylphenol	ND	10	5.363674	NA	ug/L
PW-4	2/20/2019	3-Nitroaniline	ND	10	6.84217	NA	ug/L
PW-4	2/20/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.367479	1.52	ug/L
PW-4	2/20/2019	4-Bromophenyl-phenylether	ND	10	6.927516	NA	ug/L
PW-4	2/20/2019	4-Chloro-3-Methylphenol	ND	10	5.623968	NA	ug/L
PW-4	2/20/2019	4-Chloroaniline	*ND*	*10*	5.978202	0.37	ug/L
PW-4	2/20/2019	4-Chlorophenyl-phenylether	ND	10	7.17684	NA	ug/L
PW-4	2/20/2019	4-Nitroaniline	*ND*	*10*	5.954175	3.8	ug/L
PW-4	2/20/2019	4-Nitrophenol	ND	10	5.609314	NA	ug/L
PW-4	2/20/2019	Acenaphthene	ND	10	5.83902	535	ug/L
PW-4	2/20/2019	Acenaphthylene	ND	10	6.246969	NA	ug/L
PW-4	2/20/2019	Aniline	ND	10	6.210394	13	ug/L
PW-4	2/20/2019	Anthracene	ND	10	5.739652	1721	ug/L
PW-4	2/20/2019	Azobenzene	*ND*	*10*	6.703148	0.12	ug/L
PW-4	2/20/2019	Benzo(a)anthracene	*ND*	*10*	5.269911	0.12	ug/L
PW-4	2/20/2019	Benzo(a)pyrene	*ND*	*10*	5.991294	0.2	ug/L
PW-4	2/20/2019	Benzo(b)fluoranthene	*ND*	*10*	7.1345	0.34	ug/L
PW-4	2/20/2019	Benzo(g,h,i)perylene	ND	10	5.674236	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Benzo(k)fluoranthene	*ND*	*10*	6.422521	3.43	ug/L
PW-4	2/20/2019	Benzoic Acid	7.5	20	6.311561	75000	ug/L
PW-4	2/20/2019	Benzyl Alcohol	ND	10	6.274823	2000	ug/L
PW-4	2/20/2019	Bis(2-chloroethoxy)methane	ND	10	6.103762	59	ug/L
PW-4	2/20/2019	Bis(2-chloroethyl)ether	*ND*	*10*	6.343491	0.137	ug/L
PW-4	2/20/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.895574	9.81	ug/L
PW-4	2/20/2019	Bis(2-ethylhexyl)phthalate	ND	10	8.056342	55.64	ug/L
PW-4	2/20/2019	Butylbenzylphthalate	ND	10	6.323145	16	ug/L
PW-4	2/20/2019	Carbazole	ND	10	6.275002	NA	ug/L
PW-4	2/20/2019	Chrysene	ND	10	6.777819	34.3	ug/L
PW-4	2/20/2019	Dibenzo(a,h)anthracene	ND	10	5.577261	NA	ug/L
PW-4	2/20/2019	Dibenzofuran	ND	10	6.89095	NA	ug/L
PW-4	2/20/2019	Diethylphthalate	ND	10	6.290049	14801	ug/L
PW-4	2/20/2019	Dimethylphthalate	ND	10	6.048139	612	ug/L
PW-4	2/20/2019	Di-n-butylphthalate	ND	10	6.799185	885	ug/L
PW-4	2/20/2019	Di-n-octylphthalate	ND	10	6.258086	200	ug/L
PW-4	2/20/2019	Fluoranthene	ND	10	5.81225	802	ug/L
PW-4	2/20/2019	Fluorene	ND	10	6.311889	288	ug/L
PW-4	2/20/2019	Hexachlorobenzene	*ND*	*10*	6.157477	0.0976	ug/L
PW-4	2/20/2019	Hexachlorobutadiene	*ND*	*10*	6.387526	0.14	ug/L
PW-4	2/20/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.930843	0.41	ug/L
PW-4	2/20/2019	Hexachloroethane	*ND*	*10*	5.989975	3.28	ug/L
PW-4	2/20/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7.046535	0.343	ug/L
PW-4	2/20/2019	Isophorone	ND	10	6.242104	781	ug/L
PW-4	2/20/2019	Naphthalene	ND	10	5.041403	30	ug/L
PW-4	2/20/2019	Nitrobenzene	*ND*	*10*	6.042429	1.4	ug/L
PW-4	2/20/2019	N-Nitrosodimethylamine	*ND*	*10*	6.886075	0.0049	ug/L
PW-4	2/20/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.116585	0.011	ug/L
PW-4	2/20/2019	N-Nitrosodiphenylamine	ND	10	6.683319	122	ug/L
PW-4	2/20/2019	Pentachlorophenol	*ND*	*20*	5.27742	1	ug/L
PW-4	2/20/2019	Phenanthrene	ND	10	6.043051	170	ug/L
PW-4	2/20/2019	Phenol	ND	10	5.977352	5761	ug/L
PW-4	2/20/2019	Pyrene	ND	10	6.527145	117	ug/L
PW-4	2/20/2019	Pyridine	ND	10	5.420525	20	ug/L
PW-4	5/14/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	5/14/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	5/14/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	5/14/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	5/14/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-4	5/14/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	5/14/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	5/14/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	5/14/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	5/14/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	5/14/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	5/14/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	5/14/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	5/14/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	5/14/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	5/14/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	5/14/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	5/14/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	5/14/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	5/14/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	5/14/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	5/14/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	5/14/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	5/14/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	5/14/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	5/14/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	5/14/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	5/14/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	5/14/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	5/14/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	5/14/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	5/14/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	5/14/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	5/14/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	5/14/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	5/14/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	5/14/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	5/14/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	5/14/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	5/14/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	5/14/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	5/14/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	5/14/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	5/14/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-4	5/14/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	5/14/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	5/14/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	5/14/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	5/14/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	5/14/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	5/14/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	5/14/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	5/14/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	5/14/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	5/14/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	5/14/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	5/14/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	5/14/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	5/14/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	5/14/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	5/14/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	5/14/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	5/14/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	5/14/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	5/14/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	5/14/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	5/14/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	5/14/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	5/14/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	5/14/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	5/14/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
PW-4	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	8/27/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
PW-4	8/27/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
PW-4	8/27/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
PW-4	8/27/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
PW-4	8/27/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
PW-4	8/27/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
PW-4	8/27/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
PW-4	8/27/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
PW-4	8/27/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
PW-4	8/27/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
PW-4	8/27/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
PW-4	8/27/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
PW-4	8/27/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
PW-4	8/27/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
PW-4	8/27/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
PW-4	8/27/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
PW-4	8/27/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
PW-4	8/27/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
PW-4	8/27/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
PW-4	8/27/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
PW-4	8/27/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
PW-4	8/27/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
PW-4	8/27/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
PW-4	8/27/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
PW-4	8/27/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
PW-4	8/27/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
PW-4	8/27/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
PW-4	8/27/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
PW-4	8/27/2019	Acenaphthene	ND	10	2.955891	535	ug/L
PW-4	8/27/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
PW-4	8/27/2019	Aniline	ND	10	3.579516	13	ug/L
PW-4	8/27/2019	Anthracene	ND	10	2.657173	1721	ug/L
PW-4	8/27/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
PW-4	8/27/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
PW-4	8/27/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
PW-4	8/27/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
PW-4	8/27/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
PW-4	8/27/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
PW-4	8/27/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
PW-4	8/27/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
PW-4	8/27/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
PW-4	8/27/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
PW-4	8/27/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
PW-4	8/27/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	8/27/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
PW-4	8/27/2019	Carbazole	ND	10	2.890507	NA	ug/L
PW-4	8/27/2019	Chrysene	ND	10	2.786623	34.3	ug/L
PW-4	8/27/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
PW-4	8/27/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
PW-4	8/27/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
PW-4	8/27/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
PW-4	8/27/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
PW-4	8/27/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
PW-4	8/27/2019	Fluoranthene	ND	10	2.412214	802	ug/L
PW-4	8/27/2019	Fluorene	ND	10	2.888488	288	ug/L
PW-4	8/27/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
PW-4	8/27/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
PW-4	8/27/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
PW-4	8/27/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
PW-4	8/27/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
PW-4	8/27/2019	Isophorone	ND	10	3.046035	781	ug/L
PW-4	8/27/2019	Naphthalene	ND	10	4.12221	30	ug/L
PW-4	8/27/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
PW-4	8/27/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
PW-4	8/27/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
PW-4	8/27/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
PW-4	8/27/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
PW-4	8/27/2019	Phenanthrene	ND	10	2.777122	170	ug/L
PW-4	8/27/2019	Phenol	ND	10	8.036586	5761	ug/L
PW-4	8/27/2019	Pyrene	ND	10	2.5036	117	ug/L
PW-4	8/27/2019	Pyridine	ND	10	9.603136	20	ug/L
PW-4	9/21/2020	1,2,4-Trichlorobenzene	ND	0.52	0.1	70	ug/L
PW-4	9/21/2020	1,2-Dichlorobenzene	ND	0.52	0.1	600	ug/L
PW-4	9/21/2020	1,3-Dichlorobenzene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	1,4-Dichlorobenzene	ND	0.52	0.1	75	ug/L
PW-4	9/21/2020	1,4-Dioxane	ND	0.52	0.1	4.59	ug/L
PW-4	9/21/2020	1-Methylnaphthalene	ND	0.52	0.1	11.38	ug/L
PW-4	9/21/2020	2,3,4,6-Tetrachlorophenol	ND	0.52	0.1	240	ug/L
PW-4	9/21/2020	2,3,5,6-Tetrachlorophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	2,4,5-Trichlorophenol	ND	0.52	0.1	1166	ug/L
PW-4	9/21/2020	2,4,6-Trichlorophenol	ND	0.52	0.1	11.9*	ug/L
PW-4	9/21/2020	2,4-Dichlorophenol	ND	0.52	0.1	45.3	ug/L
PW-4	9/21/2020	2,4-Dimethylphenol	ND	0.52	0.1	354	ug/L
PW-4	9/21/2020	2,4-Dinitrophenol	ND	0.52	0.1	38.7	ug/L
PW-4	9/21/2020	2,4-Dinitrotoluene	ND	0.52	0.1	45.3	ug/L
PW-4	9/21/2020	2,6-Dinitrotoluene	ND	0.21	0.1	0.485	ug/L
PW-4	9/21/2020	2-Chloronaphthalene	ND	0.52	0.1	733	ug/L
PW-4	9/21/2020	2-Chlorophenol	ND	0.52	0.1	91	ug/L
PW-4	9/21/2020	2-Methylnaphthalene	ND	0.52	0.1	35.1	ug/L
PW-4	9/21/2020	2-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	2-Nitroaniline	ND	0.52	0.1	190	ug/L
PW-4	9/21/2020	2-Nitrophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	3,4-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	3,3-Dichlorobenzidine	ND	0.52	0.1	1.25	ug/L
PW-4	9/21/2020	3-Nitroaniline	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4,6-Dinitro-2-methylphenol	ND	0.52	0.1	1.52	ug/L
PW-4	9/21/2020	4-Bromophenyl-phenylether	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Chloro-3-Methylphenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Chloroaniline	*ND*	*0.52*	0.1	0.37	ug/L
PW-4	9/21/2020	4-Chlorophenyl-phenylether	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	4-Nitroaniline	ND	0.52	0.1	3.8	ug/L
PW-4	9/21/2020	4-Nitrophenol	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Acenaphthene	ND	0.52	0.1	535	ug/L
PW-4	9/21/2020	Acenaphthylene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Aniline	ND	0.52	0.1	13	ug/L
PW-4	9/21/2020	Anthracene	ND	0.52	0.1	1721	ug/L
PW-4	9/21/2020	Benzo(a)anthracene	ND	0.1	0.052	0.12	ug/L
PW-4	9/21/2020	Benzidine	*ND*	*0.52*	0.26	0.0011	ug/L
PW-4	9/21/2020	Benzo(a)pyrene	ND	0.1	0.052	0.2	ug/L
PW-4	9/21/2020	Benzo(b)fluoranthene	ND	0.1	0.052	0.34	ug/L
PW-4	9/21/2020	Benzo(g,h,i)perylene	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Benzo(k)fluoranthene	ND	0.52	0.1	3.43	ug/L
PW-4	9/21/2020	Benzoic Acid	ND	0.52	0.21	75000	ug/L
PW-4	9/21/2020	Benzyl Alcohol	ND	0.52	0.21	2000	ug/L
PW-4	9/21/2020	Bis(2-chloroethoxy)methane	ND	0.52	0.1	59	ug/L
PW-4	9/21/2020	Bis(2-chloroethyl)ether	*ND*	*0.52*	0.1	0.137	ug/L
PW-4	9/21/2020	Bis(2-chloroisopropyl)ether	ND	0.52	0.1	9.81	ug/L
PW-4	9/21/2020	Bis(2-ethylhexyl)phthalate	ND	0.52	0.21	55.64	ug/L
PW-4	9/21/2020	Butylbenzylphthalate	ND	0.52	0.21	16	ug/L
PW-4	9/21/2020	Carbazole	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Chrysene	ND	0.52	0.1	34.3	ug/L
PW-4	9/21/2020	Di-n-butylphthalate	ND	0.52	0.21	885	ug/L
PW-4	9/21/2020	Di-n-octylphthalate	ND	0.52	0.21	200	ug/L
PW-4	9/21/2020	Dibenzo(a,h)anthracene	ND	0.031	0.021	NA	ug/L
PW-4	9/21/2020	Dibenzofuran	ND	0.52	0.1	NA	ug/L
PW-4	9/21/2020	Diethylphthalate	ND	0.52	0.21	14801	ug/L
PW-4	9/21/2020	Dimethylphthalate	ND	0.52	0.21	612	ug/L
PW-4	9/21/2020	Fluoranthene	ND	0.52	0.1	802	ug/L
PW-4	9/21/2020	Fluorene	ND	0.52	0.1	288	ug/L
PW-4	9/21/2020	Hexachlorobenzene	*ND*	*0.52*	0.1	0.0976	ug/L
PW-4	9/21/2020	Hexachlorobutadiene	*ND*	*0.52*	0.1	0.14	ug/L
PW-4	9/21/2020	Hexachlorocyclopentadiene	*ND*	*0.52*	0.26	0.41	ug/L
PW-4	9/21/2020	Hexachloroethane	ND	0.52	0.1	3.28	ug/L
PW-4	9/21/2020	Indeno(1,2,3-cd)pyrene	ND	0.21	0.1	0.343	ug/L
PW-4	9/21/2020	Isophorone	ND	0.52	0.1	781	ug/L
PW-4	9/21/2020	N-Nitrosodi-n-propylamine	*ND*	*0.52*	0.1	0.011	ug/L
PW-4	9/21/2020	N-Nitrosodimethylamine	*ND*	*0.52*	0.1	0.0049	ug/L
PW-4	9/21/2020	N-Nitrosodiphenylamine	ND	0.52	0.1	122	ug/L
PW-4	9/21/2020	Naphthalene	ND	0.52	0.1	30	ug/L
PW-4	9/21/2020	Nitrobenzene	ND	0.52	0.1	1.4	ug/L
PW-4	9/21/2020	Pentachlorophenol	ND	0.52	0.21	1	ug/L
PW-4	9/21/2020	Phenanthrene	ND	0.52	0.1	170	ug/L
PW-4	9/21/2020	Phenol	ND	0.52	0.1	5761	ug/L
PW-4	9/21/2020	Pyrene	ND	0.52	0.1	117	ug/L
PW-4	9/21/2020	Pyridine	ND	0.52	0.21	20	ug/L
PW-4	12/28/2020	Acenaphthene	ND	9.3	0.149	535	ug/L
PW-4	12/28/2020	Acenaphthylene	ND	9.3	0.158	NA	ug/L
PW-4	12/28/2020	Anthracene	ND	9.3	0.167	1721	ug/L
PW-4	12/28/2020	Benzo(a)anthracene	*ND*	*9.3*	0.167	0.12	ug/L
PW-4	12/28/2020	Benzo(a)pyrene	*ND*	*9.3*	0.112	0.2	ug/L
PW-4	12/28/2020	Benzo(b)fluoranthene	*ND*	*9.3*	0.14	0.34	ug/L
PW-4	12/28/2020	Benzo(g,h,i)perylene	ND	9.3	0.214	NA	ug/L
PW-4	12/28/2020	Benzo(k)fluoranthene	*ND*	*9.3*	0.149	3.43	ug/L
PW-4	12/28/2020	Bis(2-chloroethoxy)methane	ND	9.3	0.149	59	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	Bis(2-chloroethyl)ether	*ND*	*9.3*	2.51	0.137	ug/L
PW-4	12/28/2020	Bis(2-ethylhexyl)phthalate	ND	9.3	4.65	55.64	ug/L
PW-4	12/28/2020	4-Bromophenyl-phenylether	ND	9.3	0.186	NA	ug/L
PW-4	12/28/2020	Butylbenzylphthalate	ND	9.3	0.177	16	ug/L
PW-4	12/28/2020	Carbazole	ND	9.3	0.214	NA	ug/L
PW-4	12/28/2020	4-Chloroaniline	*ND*	*9.3*	3.16	0.37	ug/L
PW-4	12/28/2020	4-Chloro-3-Methylphenol	ND	9.3	3.53	NA	ug/L
PW-4	12/28/2020	2-Chloronaphthalene	ND	9.3	0.13	733	ug/L
PW-4	12/28/2020	2-Chlorophenol	ND	9.3	2.05	91	ug/L
PW-4	12/28/2020	4-Chlorophenyl-phenylether	ND	9.3	1.86	NA	ug/L
PW-4	12/28/2020	1,3-Dichlorobenzene	ND	9.3	0.167	NA	ug/L
PW-4	12/28/2020	Chrysene	ND	9.3	0.177	34.3	ug/L
PW-4	12/28/2020	Dibenzo(a,h)anthracene	ND	9.3	0.223	NA	ug/L
PW-4	12/28/2020	1,4-Dichlorobenzene	ND	9.3	0.149	75	ug/L
PW-4	12/28/2020	Dibenzofuran	ND	9.3	0.158	NA	ug/L
PW-4	12/28/2020	3,3-Dichlorobenzidine	*ND*	*9.3*	2.42	1.25	ug/L
PW-4	12/28/2020	2,4-Dichlorophenol	ND	9.3	2.79	45.3	ug/L
PW-4	12/28/2020	Diethylphthalate	ND	9.3	0.223	14801	ug/L
PW-4	12/28/2020	2,4-Dimethylphenol	ND	9.3	3.26	354	ug/L
PW-4	12/28/2020	Di-n-butylphthalate	ND	9.3	2.51	885	ug/L
PW-4	12/28/2020	4,6-Dinitro-2-methylphenol	*ND*	*9.3*	1.49	1.52	ug/L
PW-4	12/28/2020	2,4-Dinitrophenol	ND	27.9	3.16	38.7	ug/L
PW-4	12/28/2020	2,4-Dinitrotoluene	ND	9.3	1.77	45.3	ug/L
PW-4	12/28/2020	2,6-Dinitrotoluene	*ND*	*9.3*	1.77	0.485	ug/L
PW-4	12/28/2020	Di-n-octylphthalate	ND	9.3	0.158	200	ug/L
PW-4	12/28/2020	Fluoranthene	ND	9.3	0.167	802	ug/L
PW-4	12/28/2020	Fluorene	ND	9.3	0.167	288	ug/L
PW-4	12/28/2020	Hexachlorobenzene	*ND*	*9.3*	0.158	0.0976	ug/L
PW-4	12/28/2020	Hexachlorocyclopentadiene	*ND*	*18.6*	2.42	0.41	ug/L
PW-4	12/28/2020	Hexachloroethane	*ND*	*9.3*	3.91	3.28	ug/L
PW-4	12/28/2020	Indeno(1,2,3-cd)pyrene	*ND*	*9.3*	0.205	0.343	ug/L
PW-4	12/28/2020	Isophorone	ND	9.3	0.13	781	ug/L
PW-4	12/28/2020	2-Methylphenol	ND	9.3	1.67	NA	ug/L
PW-4	12/28/2020	Naphthalene	ND	9.3	0.158	30	ug/L
PW-4	12/28/2020	2-Nitroaniline	ND	9.3	2.05	190	ug/L
PW-4	12/28/2020	3-Nitroaniline	ND	9.3	1.67	NA	ug/L
PW-4	12/28/2020	4-Nitroaniline	*ND*	*9.3*	1.4	3.8	ug/L
PW-4	12/28/2020	Nitrobenzene	*ND*	*9.3*	0.121	1.4	ug/L
PW-4	12/28/2020	2-Nitrophenol	ND	9.3	4.84	NA	ug/L
PW-4	12/28/2020	4-Nitrophenol	ND	9.3	1.95	NA	ug/L
PW-4	12/28/2020	N-Nitrosodi-n-propylamine	*ND*	*9.3*	3.07	0.011	ug/L
PW-4	12/28/2020	N-Nitrosodiphenylamine	ND	9.3	0.167	122	ug/L
PW-4	12/28/2020	Pentachlorophenol	*ND*	*18.6*	1.3	1	ug/L
PW-4	12/28/2020	Phenanthrene	ND	9.3	0.167	170	ug/L
PW-4	12/28/2020	Phenol	ND	9.3	2.42	5761	ug/L
PW-4	12/28/2020	Pyrene	ND	9.3	0.195	117	ug/L
PW-4	12/28/2020	2,4,5-Trichlorophenol	ND	9.3	3.44	1166	ug/L
PW-4	12/28/2020	2,4,6-Trichlorophenol	ND	9.3	3.26	11.9*	ug/L
PW-4	12/28/2020	Dimethylphthalate	ND	9.3	0.158	612	ug/L
PW-4	12/28/2020	Aniline	ND	9.3	3.53	13	ug/L
PW-4	12/28/2020	Benzyl Alcohol	ND	9.3	1.86	2000	ug/L
PW-4	12/28/2020	Bis(2-chloroisopropyl)ether	ND	9.3	0.149	9.81	ug/L
PW-4	12/28/2020	N-Nitrosodimethylamine	*ND*	*9.3*	3.26	0.0049	ug/L
PW-4	12/28/2020	Pyridine	ND	9.3	2.98	20	ug/L
PW-4	12/28/2020	1,2,4-Trichlorobenzene	ND	9.3	0.167	70	ug/L
PW-4	12/28/2020	1,2-Dichlorobenzene	ND	9.3	0.158	600	ug/L
PW-4	12/28/2020	Azobenzene	*ND*	*9.3*	0.93	0.12	ug/L
PW-4	12/28/2020	Benzoic Acid	ND	27.9	6.79	75000	ug/L
SMW-2	8/23/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
SMW-2	8/23/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-2	8/23/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
SMW-2	8/23/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
SMW-2	8/23/2012	Aniline	ND	10	2	13	ug/L
SMW-2	8/23/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
SMW-2	8/23/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
SMW-2	8/23/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-2	8/23/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-2	8/23/2012	Isophorone	ND	10	2.4	781	ug/L
SMW-2	8/23/2012	Acenaphthene	ND	10	2.7	535	ug/L
SMW-2	8/23/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
SMW-2	8/23/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
SMW-2	8/23/2012	Phenanthrene	ND	10	2.1	170	ug/L
SMW-2	8/23/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-2	8/23/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
SMW-2	8/23/2012	Fluorene	ND	10	2.3	288	ug/L
SMW-2	8/23/2012	Carbazole	ND	10	2.6	NA	ug/L
SMW-2	8/23/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-2	8/23/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
SMW-2	8/23/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
SMW-2	8/23/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
SMW-2	8/23/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-2	8/23/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-2	8/23/2012	Naphthalene	ND	10	2.9	30	ug/L
SMW-2	8/23/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
SMW-2	8/23/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
SMW-2	8/23/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
SMW-2	8/23/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
SMW-2	8/23/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
SMW-2	8/23/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
SMW-2	8/23/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-2	8/23/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
SMW-2	8/23/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
SMW-2	8/23/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
SMW-2	8/23/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
SMW-2	8/23/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
SMW-2	8/23/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-2	8/23/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
SMW-2	8/23/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
SMW-2	8/23/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
SMW-2	8/23/2012	Phenol	ND	10	2.5	5761	ug/L
SMW-2	8/23/2012	Pyridine	ND	10	2.4	20	ug/L
SMW-2	8/23/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
SMW-2	8/23/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
SMW-2	8/23/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-2	8/23/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
SMW-2	8/23/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
SMW-2	8/23/2012	Anthracene	ND	10	2.8	1721	ug/L
SMW-2	8/23/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/23/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
SMW-2	8/23/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-2	8/23/2012	Pyrene	ND	10	2.9	117	ug/L
SMW-2	8/23/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
SMW-2	8/23/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
SMW-2	8/23/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
SMW-2	8/23/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
SMW-2	8/23/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
SMW-2	8/23/2012	Fluoranthene	ND	10	2.7	802	ug/L
SMW-2	8/23/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
SMW-2	8/23/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
SMW-2	8/23/2012	Chrysene	ND	10	3	34.3	ug/L
SMW-2	8/23/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
SMW-2	8/23/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
SMW-2	8/23/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
SMW-2	8/23/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
SMW-2	8/23/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-2	8/23/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L
SMW-2	8/23/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
SMW-2	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
SMW-2	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-2	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
SMW-2	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-2	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	Aniline	ND	10	2.2	13	ug/L
SMW-2	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
SMW-2	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
SMW-2	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-2	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
SMW-2	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
SMW-2	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
SMW-2	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
SMW-2	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-2	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
SMW-2	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
SMW-2	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-2	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
SMW-2	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
SMW-2	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
SMW-2	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
SMW-2	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
SMW-2	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
SMW-2	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
SMW-2	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
SMW-2	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
SMW-2	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
SMW-2	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
SMW-2	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
SMW-2	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
SMW-2	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
SMW-2	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
SMW-2	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
SMW-2	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
SMW-2	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
SMW-2	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
SMW-2	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
SMW-2	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-2	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
SMW-2	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
SMW-2	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
SMW-2	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
SMW-2	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
SMW-2	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
SMW-2	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
SMW-2	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
SMW-2	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
SMW-2	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
SMW-2	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
SMW-2	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
SMW-2	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
SMW-2	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
SMW-2	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-2	9/9/2013	Pyrene	ND	10	2.1	117	ug/L
SMW-2	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
SMW-2	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
SMW-2	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
SMW-2	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
SMW-2	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-2	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
SMW-2	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
SMW-2	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
SMW-2	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
SMW-2	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-2	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
SMW-2	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
SMW-2	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
SMW-2	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
SMW-2	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
SMW-2	9/11/2014	Benzo(a)pyrene	*ND*	*11*	3.6	0.2	ug/L
SMW-2	9/11/2014	2,4-Dinitrophenol	ND	22	3.5	38.7	ug/L
SMW-2	9/11/2014	Dibenzo(a,h)anthracene	ND	11	3.3	NA	ug/L
SMW-2	9/11/2014	Benzo(a)anthracene	*ND*	*11*	3.4	0.12	ug/L
SMW-2	9/11/2014	4-Chloro-3-Methylphenol	ND	11	4.1	NA	ug/L
SMW-2	9/11/2014	Aniline	ND	11	2.7	13	ug/L
SMW-2	9/11/2014	N-Nitrosodimethylamine	*ND*	*11*	2.7	0.0049	ug/L
SMW-2	9/11/2014	Benzoic Acid	ND	22	2.4	75000	ug/L
SMW-2	9/11/2014	Hexachloroethane	*ND*	*11*	2.1	3.28	ug/L
SMW-2	9/11/2014	Hexachlorocyclopentadiene	*ND*	*11*	3.4	0.41	ug/L
SMW-2	9/11/2014	Isophorone	ND	11	3.4	781	ug/L
SMW-2	9/11/2014	Acenaphthene	ND	11	3.2	535	ug/L
SMW-2	9/11/2014	Diethylphthalate	ND	11	4.7	14801	ug/L
SMW-2	9/11/2014	Di-n-butylphthalate	ND	11	4	885	ug/L
SMW-2	9/11/2014	Phenanthrene	ND	11	2.8	170	ug/L
SMW-2	9/11/2014	Butylbenzylphthalate	ND	11	3.5	16	ug/L
SMW-2	9/11/2014	N-Nitrosodiphenylamine	ND	11	3.2	122	ug/L
SMW-2	9/11/2014	Fluorene	ND	11	3.3	288	ug/L
SMW-2	9/11/2014	Carbazole	ND	11	3.2	NA	ug/L
SMW-2	9/11/2014	Hexachlorobutadiene	*ND*	*11*	3.4	0.14	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2014	Pentachlorophenol	*ND*	*22*	2.8	1	ug/L
SMW-2	9/11/2014	2,4,6-Trichlorophenol	ND	11	2	11.9*	ug/L
SMW-2	9/11/2014	2-Nitroaniline	ND	11	3.1	190	ug/L
SMW-2	9/11/2014	2-Nitrophenol	ND	11	3.5	NA	ug/L
SMW-2	9/11/2014	1-Methylnaphthalene	ND	11	4	11.38	ug/L
SMW-2	9/11/2014	Naphthalene	ND	11	2.6	30	ug/L
SMW-2	9/11/2014	2-Methylnaphthalene	ND	11	2.9	35.1	ug/L
SMW-2	9/11/2014	2-Chloronaphthalene	ND	11	3.4	733	ug/L
SMW-2	9/11/2014	3,3-Dichlorobenzidine	*ND*	*11*	2.6	1.25	ug/L
SMW-2	9/11/2014	2-Methylphenol	ND	22	3.1	NA	ug/L
SMW-2	9/11/2014	1,2-Dichlorobenzene	ND	11	1.9	600	ug/L
SMW-2	9/11/2014	2-Chlorophenol	ND	11	2	91	ug/L
SMW-2	9/11/2014	2,4,5-Trichlorophenol	ND	11	3.6	1166	ug/L
SMW-2	9/11/2014	Nitrobenzene	*ND*	*11*	2.9	1.4	ug/L
SMW-2	9/11/2014	3-Nitroaniline	ND	11	4	NA	ug/L
SMW-2	9/11/2014	4-Nitroaniline	*ND*	*11*	4.6	3.8	ug/L
SMW-2	9/11/2014	4-Nitrophenol	ND	11	4.8	NA	ug/L
SMW-2	9/11/2014	Benzyl Alcohol	ND	11	2	2000	ug/L
SMW-2	9/11/2014	4-Bromophenyl-phenylether	ND	11	3.3	NA	ug/L
SMW-2	9/11/2014	Azobenzene	*ND*	*11*	2.8	0.12	ug/L
SMW-2	9/11/2014	2,4-Dimethylphenol	ND	11	3.5	354	ug/L
SMW-2	9/11/2014	1,4-Dichlorobenzene	ND	11	2.7	75	ug/L
SMW-2	9/11/2014	4-Chloroaniline	*ND*	*11*	2.9	0.37	ug/L
SMW-2	9/11/2014	Phenol	ND	11	1.8	5761	ug/L
SMW-2	9/11/2014	Pyridine	ND	11	1.7	20	ug/L
SMW-2	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*11*	2	0.137	ug/L
SMW-2	9/11/2014	Bis(2-chloroethoxy)methane	ND	11	3.1	59	ug/L
SMW-2	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	11	3.3	55.64	ug/L
SMW-2	9/11/2014	Di-n-octylphthalate	ND	22	3	200	ug/L
SMW-2	9/11/2014	Hexachlorobenzene	*ND*	*11*	3.5	0.0976	ug/L
SMW-2	9/11/2014	Anthracene	ND	11	2.8	1721	ug/L
SMW-2	9/11/2014	1,2,4-Trichlorobenzene	ND	11	3	70	ug/L
SMW-2	9/11/2014	2,4-Dichlorophenol	ND	22	3.3	45.3	ug/L
SMW-2	9/11/2014	2,4-Dinitrotoluene	ND	11	5	45.3	ug/L
SMW-2	9/11/2014	Pyrene	ND	11	4.5	117	ug/L
SMW-2	9/11/2014	Dimethylphthalate	ND	11	4.1	612	ug/L
SMW-2	9/11/2014	Dibenzofuran	ND	11	4.2	NA	ug/L
SMW-2	9/11/2014	Benzo(g,h,i)perylene	ND	11	3.7	NA	ug/L
SMW-2	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*11*	3.8	0.343	ug/L
SMW-2	9/11/2014	Benzo(b)fluoranthene	*ND*	*11*	4.5	0.34	ug/L
SMW-2	9/11/2014	Fluoranthene	ND	11	3.3	802	ug/L
SMW-2	9/11/2014	Benzo(k)fluoranthene	*ND*	*11*	3.9	3.43	ug/L
SMW-2	9/11/2014	Acenaphthylene	ND	11	2.7	NA	ug/L
SMW-2	9/11/2014	Chrysene	ND	11	3.2	34.3	ug/L
SMW-2	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*22*	2.7	1.52	ug/L
SMW-2	9/11/2014	1,3-Dichlorobenzene	ND	11	2	NA	ug/L
SMW-2	9/11/2014	2,6-Dinitrotoluene	*ND*	*11*	3.8	0.485	ug/L
SMW-2	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*11*	2.2	0.011	ug/L
SMW-2	9/11/2014	4-Chlorophenyl-phenylether	ND	11	3.9	NA	ug/L
SMW-2	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*11*	2.7	9.81	ug/L
SMW-2	9/11/2014	3,4-Methylphenol	ND	11	2	NA	ug/L
SMW-2	8/17/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-2	8/17/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
SMW-2	8/17/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
SMW-2	8/17/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
SMW-2	8/17/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Aniline	ND	10	1.5	13	ug/L
SMW-2	8/17/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
SMW-2	8/17/2015	Benzoic Acid	ND	20	1	75000	ug/L
SMW-2	8/17/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
SMW-2	8/17/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
SMW-2	8/17/2015	Isophorone	ND	10	2	781	ug/L
SMW-2	8/17/2015	Acenaphthene	ND	10	1.9	535	ug/L
SMW-2	8/17/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
SMW-2	8/17/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
SMW-2	8/17/2015	Phenanthrene	ND	10	2	170	ug/L
SMW-2	8/17/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-2	8/17/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
SMW-2	8/17/2015	Fluorene	ND	10	1.7	288	ug/L
SMW-2	8/17/2015	Carbazole	ND	10	1.5	NA	ug/L
SMW-2	8/17/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
SMW-2	8/17/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
SMW-2	8/17/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
SMW-2	8/17/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
SMW-2	8/17/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
SMW-2	8/17/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
SMW-2	8/17/2015	Naphthalene	ND	10	1.8	30	ug/L
SMW-2	8/17/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
SMW-2	8/17/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
SMW-2	8/17/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
SMW-2	8/17/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
SMW-2	8/17/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
SMW-2	8/17/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
SMW-2	8/17/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
SMW-2	8/17/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
SMW-2	8/17/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
SMW-2	8/17/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
SMW-2	8/17/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
SMW-2	8/17/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
SMW-2	8/17/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
SMW-2	8/17/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
SMW-2	8/17/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
SMW-2	8/17/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
SMW-2	8/17/2015	Phenol	ND	10	1.1	5761	ug/L
SMW-2	8/17/2015	Pyridine	ND	10	1.7	20	ug/L
SMW-2	8/17/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-2	8/17/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
SMW-2	8/17/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
SMW-2	8/17/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
SMW-2	8/17/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
SMW-2	8/17/2015	Anthracene	ND	10	1.6	1721	ug/L
SMW-2	8/17/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
SMW-2	8/17/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
SMW-2	8/17/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
SMW-2	8/17/2015	Pyrene	ND	10	2.3	117	ug/L
SMW-2	8/17/2015	Dimethylphthalate	ND	10	2	612	ug/L
SMW-2	8/17/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
SMW-2	8/17/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
SMW-2	8/17/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/17/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
SMW-2	8/17/2015	Fluoranthene	ND	10	1.5	802	ug/L
SMW-2	8/17/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
SMW-2	8/17/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
SMW-2	8/17/2015	Chrysene	ND	10	2.2	34.3	ug/L
SMW-2	8/17/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-2	8/17/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
SMW-2	8/17/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
SMW-2	8/17/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
SMW-2	8/17/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
SMW-2	8/17/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
SMW-2	8/17/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
SMW-2	9/9/2016	Anthracene	ND	10	2.5	1721	ug/L
SMW-2	9/9/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-2	9/9/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
SMW-2	9/9/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
SMW-2	9/9/2016	Pyrene	4.6	10	3.1	117	ug/L
SMW-2	9/9/2016	Dimethylphthalate	3	10	2.4	612	ug/L
SMW-2	9/9/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
SMW-2	9/9/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
SMW-2	9/9/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-2	9/9/2016	Fluoranthene	ND	10	2.6	802	ug/L
SMW-2	9/9/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
SMW-2	9/9/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
SMW-2	9/9/2016	Chrysene	ND	10	2.8	34.3	ug/L
SMW-2	9/9/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
SMW-2	9/9/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
SMW-2	9/9/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
SMW-2	9/9/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
SMW-2	9/9/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-2	9/9/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
SMW-2	9/9/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
SMW-2	9/9/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-2	9/9/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Aniline	ND	10	2.4	13	ug/L
SMW-2	9/9/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
SMW-2	9/9/2016	Benzoic Acid	6.9	20	2.6	75000	ug/L
SMW-2	9/9/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
SMW-2	9/9/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
SMW-2	9/9/2016	Isophorone	ND	10	2.6	781	ug/L
SMW-2	9/9/2016	Acenaphthene	ND	10	2.6	535	ug/L
SMW-2	9/9/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
SMW-2	9/9/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-2	9/9/2016	Phenanthrene	ND	10	2.6	170	ug/L
SMW-2	9/9/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
SMW-2	9/9/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-2	9/9/2016	Fluorene	ND	10	2.7	288	ug/L
SMW-2	9/9/2016	Carbazole	ND	10	2.3	NA	ug/L
SMW-2	9/9/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
SMW-2	9/9/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
SMW-2	9/9/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
SMW-2	9/9/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-2	9/9/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-2	9/9/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-2	9/9/2016	Naphthalene	ND	10	2.6	30	ug/L
SMW-2	9/9/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
SMW-2	9/9/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
SMW-2	9/9/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-2	9/9/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
SMW-2	9/9/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
SMW-2	9/9/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
SMW-2	9/9/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
SMW-2	9/9/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
SMW-2	9/9/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
SMW-2	9/9/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
SMW-2	9/9/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
SMW-2	9/9/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-2	9/9/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-2	9/9/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
SMW-2	9/9/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-2	9/9/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
SMW-2	9/9/2016	Phenol	ND	10	2	5761	ug/L
SMW-2	9/9/2016	Pyridine	ND	10	2.2	20	ug/L
SMW-2	9/9/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
SMW-2	9/9/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-2	9/9/2016	Bis(2-ethylhexyl)phthalate	7	10	2.6	55.64	ug/L
SMW-2	9/9/2016	Di-n-octylphthalate	3.3	10	2	200	ug/L
SMW-2	9/9/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
SMW-2	9/11/2017	Benzo(a)pyrene	*ND*	*10*	4	0.2	ug/L
SMW-2	9/11/2017	2,4-Dinitrophenol	ND	20	2.6	38.7	ug/L
SMW-2	9/11/2017	Dibenzo(a,h)anthracene	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Benzo(a)anthracene	*ND*	*10*	3.9	0.12	ug/L
SMW-2	9/11/2017	4-Chloro-3-Methylphenol	ND	10	6.3	NA	ug/L
SMW-2	9/11/2017	Aniline	ND	10	3.1	13	ug/L
SMW-2	9/11/2017	N-Nitrosodimethylamine	*ND*	*10*	3.5	0.0049	ug/L
SMW-2	9/11/2017	Benzoic Acid	6.5	20	3.9	75000	ug/L
SMW-2	9/11/2017	Hexachloroethane	*ND*	*10*	1.2	3.28	ug/L
SMW-2	9/11/2017	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-2	9/11/2017	Isophorone	ND	10	4.4	781	ug/L
SMW-2	9/11/2017	Acenaphthene	ND	10	3.6	535	ug/L
SMW-2	9/11/2017	Diethylphthalate	ND	10	4	14801	ug/L
SMW-2	9/11/2017	Di-n-butylphthalate	ND	10	5	885	ug/L
SMW-2	9/11/2017	Phenanthrene	ND	10	4.3	170	ug/L
SMW-2	9/11/2017	Butylbenzylphthalate	ND	10	4.6	16	ug/L
SMW-2	9/11/2017	N-Nitrosodiphenylamine	ND	10	3.9	122	ug/L
SMW-2	9/11/2017	Fluorene	ND	10	4	288	ug/L
SMW-2	9/11/2017	Carbazole	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Hexachlorobutadiene	*ND*	*10*	1.3	0.14	ug/L
SMW-2	9/11/2017	Pentachlorophenol	*ND*	*20*	4.9	1	ug/L
SMW-2	9/11/2017	2,4,6-Trichlorophenol	ND	10	5.5	11.9*	ug/L
SMW-2	9/11/2017	2-Nitroaniline	ND	10	4.9	190	ug/L
SMW-2	9/11/2017	2-Nitrophenol	ND	10	5.2	NA	ug/L
SMW-2	9/11/2017	1-Methylnaphthalene	ND	10	3.3	11.38	ug/L
SMW-2	9/11/2017	Naphthalene	ND	10	2.9	30	ug/L
SMW-2	9/11/2017	2-Methylnaphthalene	ND	10	3.3	35.1	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	2-Chloronaphthalene	ND	10	3.7	733	ug/L
SMW-2	9/11/2017	3,3-Dichlorobenzidine	*ND*	*10*	3.9	1.25	ug/L
SMW-2	9/11/2017	2-Methylphenol	ND	10	3.3	NA	ug/L
SMW-2	9/11/2017	1,2-Dichlorobenzene	ND	10	2	600	ug/L
SMW-2	9/11/2017	2-Chlorophenol	ND	10	7.5	91	ug/L
SMW-2	9/11/2017	2,4,5-Trichlorophenol	ND	10	5.1	1166	ug/L
SMW-2	9/11/2017	Nitrobenzene	*ND*	*10*	3.6	1.4	ug/L
SMW-2	9/11/2017	3-Nitroaniline	ND	10	4.3	NA	ug/L
SMW-2	9/11/2017	4-Nitroaniline	*ND*	*10*	4	3.8	ug/L
SMW-2	9/11/2017	4-Nitrophenol	ND	10	5.5	NA	ug/L
SMW-2	9/11/2017	Benzyl Alcohol	ND	10	4.6	2000	ug/L
SMW-2	9/11/2017	4-Bromophenyl-phenylether	ND	10	4.6	NA	ug/L
SMW-2	9/11/2017	Azobenzene	*ND*	*10*	4.5	0.12	ug/L
SMW-2	9/11/2017	2,4-Dimethylphenol	ND	10	2.8	354	ug/L
SMW-2	9/11/2017	1,4-Dichlorobenzene	ND	10	2.1	75	ug/L
SMW-2	9/11/2017	4-Chloroaniline	*ND*	*10*	3.5	0.37	ug/L
SMW-2	9/11/2017	Phenol	ND	10	3.1	5761	ug/L
SMW-2	9/11/2017	Pyridine	ND	10	2.3	20	ug/L
SMW-2	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*10*	4.3	0.137	ug/L
SMW-2	9/11/2017	Bis(2-chloroethoxy)methane	ND	10	4.3	59	ug/L
SMW-2	9/11/2017	Bis(2-ethylhexyl)phthalate	ND	10	4.8	55.64	ug/L
SMW-2	9/11/2017	Di-n-octylphthalate	ND	10	4.7	200	ug/L
SMW-2	9/11/2017	Hexachlorobenzene	*ND*	*10*	3.8	0.0976	ug/L
SMW-2	9/11/2017	Anthracene	ND	10	3.5	1721	ug/L
SMW-2	9/11/2017	1,2,4-Trichlorobenzene	ND	10	2.1	70	ug/L
SMW-2	9/11/2017	2,4-Dichlorophenol	ND	20	5.7	45.3	ug/L
SMW-2	9/11/2017	2,4-Dinitrotoluene	ND	10	4	45.3	ug/L
SMW-2	9/11/2017	Pyrene	ND	10	4.4	117	ug/L
SMW-2	9/11/2017	Dimethylphthalate	ND	10	3.6	612	ug/L
SMW-2	9/11/2017	Dibenzofuran	ND	10	4.1	NA	ug/L
SMW-2	9/11/2017	Benzo(g,h,i)perylene	ND	10	4	NA	ug/L
SMW-2	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*10*	4.2	0.343	ug/L
SMW-2	9/11/2017	Benzo(b)fluoranthene	*ND*	*10*	4	0.34	ug/L
SMW-2	9/11/2017	Fluoranthene	ND	10	4.3	802	ug/L
SMW-2	9/11/2017	Benzo(k)fluoranthene	*ND*	*10*	4.4	3.43	ug/L
SMW-2	9/11/2017	Acenaphthylene	ND	10	3.5	NA	ug/L
SMW-2	9/11/2017	Chrysene	ND	10	3.8	34.3	ug/L
SMW-2	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*20*	3.9	1.52	ug/L
SMW-2	9/11/2017	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
SMW-2	9/11/2017	2,6-Dinitrotoluene	*ND*	*10*	4.5	0.485	ug/L
SMW-2	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*10*	4.6	0.011	ug/L
SMW-2	9/11/2017	4-Chlorophenyl-phenylether	ND	10	3.6	NA	ug/L
SMW-2	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.9	9.81	ug/L
SMW-2	9/11/2017	3,4-Methylphenol	ND	10	3.2	NA	ug/L
SMW-2	9/18/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
SMW-2	9/18/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
SMW-2	9/18/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
SMW-2	9/18/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Aniline	ND	10	6.2	13	ug/L
SMW-2	9/18/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
SMW-2	9/18/2018	Benzoic Acid	ND	20	6.3	75000	ug/L
SMW-2	9/18/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
SMW-2	9/18/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
SMW-2	9/18/2018	Isophorone	ND	10	6.2	781	ug/L
SMW-2	9/18/2018	Acenaphthene	ND	10	5.8	535	ug/L
SMW-2	9/18/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
SMW-2	9/18/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
SMW-2	9/18/2018	Phenanthrene	ND	10	6	170	ug/L
SMW-2	9/18/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
SMW-2	9/18/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
SMW-2	9/18/2018	Fluorene	ND	10	6.3	288	ug/L
SMW-2	9/18/2018	Carbazole	ND	10	6.3	NA	ug/L
SMW-2	9/18/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
SMW-2	9/18/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
SMW-2	9/18/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
SMW-2	9/18/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
SMW-2	9/18/2018	2-Nitrophenol	ND	10	6	NA	ug/L
SMW-2	9/18/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
SMW-2	9/18/2018	Naphthalene	ND	10	5	30	ug/L
SMW-2	9/18/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
SMW-2	9/18/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
SMW-2	9/18/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
SMW-2	9/18/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
SMW-2	9/18/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
SMW-2	9/18/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
SMW-2	9/18/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
SMW-2	9/18/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
SMW-2	9/18/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
SMW-2	9/18/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
SMW-2	9/18/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
SMW-2	9/18/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
SMW-2	9/18/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
SMW-2	9/18/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
SMW-2	9/18/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
SMW-2	9/18/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
SMW-2	9/18/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
SMW-2	9/18/2018	Phenol	ND	10	6	5761	ug/L
SMW-2	9/18/2018	Pyridine	ND	10	5.4	20	ug/L
SMW-2	9/18/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
SMW-2	9/18/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
SMW-2	9/18/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
SMW-2	9/18/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
SMW-2	9/18/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
SMW-2	9/18/2018	Anthracene	ND	10	5.7	1721	ug/L
SMW-2	9/18/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
SMW-2	9/18/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
SMW-2	9/18/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
SMW-2	9/18/2018	Pyrene	ND	10	6.5	117	ug/L
SMW-2	9/18/2018	Dimethylphthalate	ND	10	6	612	ug/L
SMW-2	9/18/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
SMW-2	9/18/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
SMW-2	9/18/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
SMW-2	9/18/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
SMW-2	9/18/2018	Fluoranthene	ND	10	5.8	802	ug/L
SMW-2	9/18/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
SMW-2	9/18/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
SMW-2	9/18/2018	Chrysene	ND	10	6.8	34.3	ug/L
SMW-2	9/18/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
SMW-2	9/18/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/18/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
SMW-2	9/18/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
SMW-2	9/18/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
SMW-2	9/18/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
SMW-2	9/18/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
SMW-2	8/22/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
SMW-2	8/22/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
SMW-2	8/22/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
SMW-2	8/22/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
SMW-2	8/22/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
SMW-2	8/22/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
SMW-2	8/22/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
SMW-2	8/22/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
SMW-2	8/22/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
SMW-2	8/22/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
SMW-2	8/22/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
SMW-2	8/22/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
SMW-2	8/22/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
SMW-2	8/22/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
SMW-2	8/22/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
SMW-2	8/22/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
SMW-2	8/22/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
SMW-2	8/22/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
SMW-2	8/22/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
SMW-2	8/22/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
SMW-2	8/22/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
SMW-2	8/22/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
SMW-2	8/22/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
SMW-2	8/22/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
SMW-2	8/22/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
SMW-2	8/22/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
SMW-2	8/22/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
SMW-2	8/22/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
SMW-2	8/22/2019	Acenaphthene	ND	10	2.955891	535	ug/L
SMW-2	8/22/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
SMW-2	8/22/2019	Aniline	ND	10	3.579516	13	ug/L
SMW-2	8/22/2019	Anthracene	ND	10	2.657173	1721	ug/L
SMW-2	8/22/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
SMW-2	8/22/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
SMW-2	8/22/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
SMW-2	8/22/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
SMW-2	8/22/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
SMW-2	8/22/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
SMW-2	8/22/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
SMW-2	8/22/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
SMW-2	8/22/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
SMW-2	8/22/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
SMW-2	8/22/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
SMW-2	8/22/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
SMW-2	8/22/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
SMW-2	8/22/2019	Carbazole	ND	10	2.890507	NA	ug/L
SMW-2	8/22/2019	Chrysene	ND	10	2.786623	34.3	ug/L
SMW-2	8/22/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
SMW-2	8/22/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
SMW-2	8/22/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
SMW-2	8/22/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
SMW-2	8/22/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
SMW-2	8/22/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
SMW-2	8/22/2019	Fluoranthene	ND	10	2.412214	802	ug/L
SMW-2	8/22/2019	Fluorene	ND	10	2.888488	288	ug/L
SMW-2	8/22/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
SMW-2	8/22/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
SMW-2	8/22/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
SMW-2	8/22/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
SMW-2	8/22/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
SMW-2	8/22/2019	Isophorone	ND	10	3.046035	781	ug/L
SMW-2	8/22/2019	Naphthalene	ND	10	4.12221	30	ug/L
SMW-2	8/22/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
SMW-2	8/22/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
SMW-2	8/22/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
SMW-2	8/22/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
SMW-2	8/22/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
SMW-2	8/22/2019	Phenanthrene	ND	10	2.777122	170	ug/L
SMW-2	8/22/2019	Phenol	ND	10	8.036586	5761	ug/L
SMW-2	8/22/2019	Pyrene	ND	10	2.5036	117	ug/L
SMW-2	8/22/2019	Pyridine	ND	10	9.603136	20	ug/L
SMW-2	9/19/2020	1,2,4-Trichlorobenzene	ND	0.51	0.1	70	ug/L
SMW-2	9/19/2020	1,2-Dichlorobenzene	ND	0.51	0.1	600	ug/L
SMW-2	9/19/2020	1,3-Dichlorobenzene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	1,4-Dichlorobenzene	ND	0.51	0.1	75	ug/L
SMW-2	9/19/2020	1,4-Dioxane	**9.1**	0.51	0.1	4.59	ug/L
SMW-2	9/19/2020	1-Methylnaphthalene	ND	0.51	0.1	11.38	ug/L
SMW-2	9/19/2020	2,3,4,6-Tetrachlorophenol	ND	0.51	0.1	240	ug/L
SMW-2	9/19/2020	2,3,5,6-Tetrachlorophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	2,4,5-Trichlorophenol	ND	0.51	0.1	1166	ug/L
SMW-2	9/19/2020	2,4,6-Trichlorophenol	ND	0.51	0.1	11.9*	ug/L
SMW-2	9/19/2020	2,4-Dichlorophenol	ND	0.51	0.1	45.3	ug/L
SMW-2	9/19/2020	2,4-Dimethylphenol	ND	0.51	0.1	354	ug/L
SMW-2	9/19/2020	2,4-Dinitrophenol	ND	0.51	0.1	38.7	ug/L
SMW-2	9/19/2020	2,4-Dinitrotoluene	ND	0.51	0.1	45.3	ug/L
SMW-2	9/19/2020	2,6-Dinitrotoluene	ND	0.2	0.1	0.485	ug/L
SMW-2	9/19/2020	2-Chloronaphthalene	ND	0.51	0.1	733	ug/L
SMW-2	9/19/2020	2-Chlorophenol	ND	0.51	0.1	91	ug/L
SMW-2	9/19/2020	2-Methylnaphthalene	ND	0.51	0.1	35.1	ug/L
SMW-2	9/19/2020	2-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	2-Nitroaniline	ND	0.51	0.1	190	ug/L
SMW-2	9/19/2020	2-Nitrophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	3,4-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	3,3-Dichlorobenzidine	ND	0.51	0.1	1.25	ug/L
SMW-2	9/19/2020	3-Nitroaniline	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4,6-Dinitro-2-methylphenol	ND	0.51	0.1	1.52	ug/L
SMW-2	9/19/2020	4-Bromophenyl-phenylether	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Chloro-3-Methylphenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Chloroaniline	*ND*	*0.51*	0.1	0.37	ug/L
SMW-2	9/19/2020	4-Chlorophenyl-phenylether	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	4-Nitroaniline	ND	0.51	0.1	3.8	ug/L
SMW-2	9/19/2020	4-Nitrophenol	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Acenaphthene	ND	0.51	0.1	535	ug/L
SMW-2	9/19/2020	Acenaphthylene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Aniline	ND	0.51	0.1	13	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Anthracene	ND	0.51	0.1	1721	ug/L
SMW-2	9/19/2020	Benzo(a)anthracene	ND	0.1	0.051	0.12	ug/L
SMW-2	9/19/2020	Benzidine	*ND*	*0.51*	0.26	0.0011	ug/L
SMW-2	9/19/2020	Benzo(a)pyrene	ND	0.1	0.051	0.2	ug/L
SMW-2	9/19/2020	Benzo(b)fluoranthene	ND	0.1	0.051	0.34	ug/L
SMW-2	9/19/2020	Benzo(g,h,i)perylene	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Benzo(k)fluoranthene	ND	0.51	0.1	3.43	ug/L
SMW-2	9/19/2020	Benzoic Acid	ND	0.51	0.2	75000	ug/L
SMW-2	9/19/2020	Benzyl Alcohol	ND	0.51	0.2	2000	ug/L
SMW-2	9/19/2020	Bis(2-chloroethoxy)methane	ND	0.51	0.1	59	ug/L
SMW-2	9/19/2020	Bis(2-chloroethyl)ether	*ND*	*0.51*	0.1	0.137	ug/L
SMW-2	9/19/2020	Bis(2-chloroisopropyl)ether	ND	0.51	0.1	9.81	ug/L
SMW-2	9/19/2020	Bis(2-ethylhexyl)phthalate	0.23	0.51	0.2	55.64	ug/L
SMW-2	9/19/2020	Butylbenzylphthalate	ND	0.51	0.2	16	ug/L
SMW-2	9/19/2020	Carbazole	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Chrysene	ND	0.51	0.1	34.3	ug/L
SMW-2	9/19/2020	Di-n-butylphthalate	ND	0.51	0.2	885	ug/L
SMW-2	9/19/2020	Di-n-octylphthalate	ND	0.51	0.2	200	ug/L
SMW-2	9/19/2020	Dibenzo(a,h)anthracene	ND	0.031	0.02	NA	ug/L
SMW-2	9/19/2020	Dibenzofuran	ND	0.51	0.1	NA	ug/L
SMW-2	9/19/2020	Diethylphthalate	ND	0.51	0.2	14801	ug/L
SMW-2	9/19/2020	Dimethylphthalate	ND	0.51	0.2	612	ug/L
SMW-2	9/19/2020	Fluoranthene	ND	0.51	0.1	802	ug/L
SMW-2	9/19/2020	Fluorene	ND	0.51	0.1	288	ug/L
SMW-2	9/19/2020	Hexachlorobenzene	*ND*	*0.51*	0.1	0.0976	ug/L
SMW-2	9/19/2020	Hexachlorobutadiene	*ND*	*0.51*	0.1	0.14	ug/L
SMW-2	9/19/2020	Hexachlorocyclopentadiene	*ND*	*0.51*	0.26	0.41	ug/L
SMW-2	9/19/2020	Hexachloroethane	ND	0.51	0.1	3.28	ug/L
SMW-2	9/19/2020	Indeno(1,2,3-cd)pyrene	ND	0.2	0.1	0.343	ug/L
SMW-2	9/19/2020	Isophorone	ND	0.51	0.1	781	ug/L
SMW-2	9/19/2020	N-Nitrosodi-n-propylamine	*ND*	*0.51*	0.1	0.011	ug/L
SMW-2	9/19/2020	N-Nitrosodimethylamine	*ND*	*0.51*	0.1	0.0049	ug/L
SMW-2	9/19/2020	N-Nitrosodiphenylamine	ND	0.51	0.1	122	ug/L
SMW-2	9/19/2020	Naphthalene	ND	0.51	0.1	30	ug/L
SMW-2	9/19/2020	Nitrobenzene	ND	0.51	0.1	1.4	ug/L
SMW-2	9/19/2020	Pentachlorophenol	ND	0.51	0.2	1	ug/L
SMW-2	9/19/2020	Phenanthrene	ND	0.51	0.1	170	ug/L
SMW-2	9/19/2020	Phenol	ND	0.51	0.1	5761	ug/L
SMW-2	9/19/2020	Pyrene	ND	0.51	0.1	117	ug/L
SMW-2	9/19/2020	Pyridine	ND	0.51	0.2	20	ug/L
SMW-4	8/24/2012	Benzo(a)pyrene	*ND*	*10*	2.6	0.2	ug/L
SMW-4	8/24/2012	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	8/24/2012	Dibenzo(a,h)anthracene	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	Benzo(a)anthracene	*ND*	*10*	2.8	0.12	ug/L
SMW-4	8/24/2012	4-Chloro-3-Methylphenol	ND	10	2.3	NA	ug/L
SMW-4	8/24/2012	Aniline	ND	10	2	13	ug/L
SMW-4	8/24/2012	N-Nitrosodimethylamine	*ND*	*10*	2.8	0.0049	ug/L
SMW-4	8/24/2012	Benzoic Acid	ND	20	5.7	75000	ug/L
SMW-4	8/24/2012	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-4	8/24/2012	Hexachlorocyclopentadiene	*ND*	*10*	1.3	0.41	ug/L
SMW-4	8/24/2012	Isophorone	ND	10	2.4	781	ug/L
SMW-4	8/24/2012	Acenaphthene	ND	10	2.7	535	ug/L
SMW-4	8/24/2012	Diethylphthalate	ND	10	2.3	14801	ug/L
SMW-4	8/24/2012	Di-n-butylphthalate	ND	10	3.2	885	ug/L
SMW-4	8/24/2012	Phenanthrene	ND	10	2.1	170	ug/L
SMW-4	8/24/2012	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-4	8/24/2012	N-Nitrosodiphenylamine	ND	10	2.7	122	ug/L
SMW-4	8/24/2012	Fluorene	ND	10	2.3	288	ug/L
SMW-4	8/24/2012	Carbazole	ND	10	2.6	NA	ug/L
SMW-4	8/24/2012	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-4	8/24/2012	Pentachlorophenol	*ND*	*20*	1.6	1	ug/L
SMW-4	8/24/2012	2,4,6-Trichlorophenol	ND	10	2.2	11.9*	ug/L
SMW-4	8/24/2012	2-Nitroaniline	ND	10	2.6	190	ug/L
SMW-4	8/24/2012	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-4	8/24/2012	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-4	8/24/2012	Naphthalene	ND	10	2.9	30	ug/L
SMW-4	8/24/2012	2-Methylnaphthalene	ND	10	2.5	35.1	ug/L
SMW-4	8/24/2012	2-Chloronaphthalene	ND	10	2.7	733	ug/L
SMW-4	8/24/2012	3,3-Dichlorobenzidine	*ND*	*10*	4.3	1.25	ug/L
SMW-4	8/24/2012	2-Methylphenol	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	1,2-Dichlorobenzene	ND	10	2.7	600	ug/L
SMW-4	8/24/2012	2-Chlorophenol	ND	10	2.8	91	ug/L
SMW-4	8/24/2012	2,4,5-Trichlorophenol	ND	10	2.5	1166	ug/L
SMW-4	8/24/2012	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-4	8/24/2012	3-Nitroaniline	ND	10	2.5	NA	ug/L
SMW-4	8/24/2012	4-Nitroaniline	*ND*	*20*	2.7	3.8	ug/L
SMW-4	8/24/2012	4-Nitrophenol	ND	10	3.5	NA	ug/L
SMW-4	8/24/2012	Benzyl Alcohol	ND	10	2.1	2000	ug/L
SMW-4	8/24/2012	4-Bromophenyl-phenylether	ND	10	3.4	NA	ug/L
SMW-4	8/24/2012	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-4	8/24/2012	2,4-Dimethylphenol	ND	10	3.2	354	ug/L
SMW-4	8/24/2012	1,4-Dichlorobenzene	ND	10	2.9	75	ug/L
SMW-4	8/24/2012	4-Chloroaniline	*ND*	*10*	3.4	0.37	ug/L
SMW-4	8/24/2012	Phenol	ND	10	2.5	5761	ug/L
SMW-4	8/24/2012	Pyridine	ND	10	2.4	20	ug/L
SMW-4	8/24/2012	Bis(2-chloroethyl)ether	*ND*	*10*	2.1	0.137	ug/L
SMW-4	8/24/2012	Bis(2-chloroethoxy)methane	ND	10	3.6	59	ug/L
SMW-4	8/24/2012	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-4	8/24/2012	Di-n-octylphthalate	ND	10	2.8	200	ug/L
SMW-4	8/24/2012	Hexachlorobenzene	*ND*	*10*	2.9	0.0976	ug/L
SMW-4	8/24/2012	Anthracene	ND	10	2.8	1721	ug/L
SMW-4	8/24/2012	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-4	8/24/2012	2,4-Dichlorophenol	ND	20	3.1	45.3	ug/L
SMW-4	8/24/2012	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-4	8/24/2012	Pyrene	ND	10	2.9	117	ug/L
SMW-4	8/24/2012	Dimethylphthalate	ND	10	2.5	612	ug/L
SMW-4	8/24/2012	Dibenzofuran	ND	10	2.8	NA	ug/L
SMW-4	8/24/2012	Benzo(g,h,i)perylene	ND	10	3	NA	ug/L
SMW-4	8/24/2012	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.1	0.343	ug/L
SMW-4	8/24/2012	Benzo(b)fluoranthene	*ND*	*10*	3	0.34	ug/L
SMW-4	8/24/2012	Fluoranthene	ND	10	2.7	802	ug/L
SMW-4	8/24/2012	Benzo(k)fluoranthene	*ND*	*10*	3.7	3.43	ug/L
SMW-4	8/24/2012	Acenaphthylene	ND	10	2.6	NA	ug/L
SMW-4	8/24/2012	Chrysene	ND	10	3	34.3	ug/L
SMW-4	8/24/2012	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.2	1.52	ug/L
SMW-4	8/24/2012	1,3-Dichlorobenzene	ND	10	3	NA	ug/L
SMW-4	8/24/2012	2,6-Dinitrotoluene	*ND*	*10*	2.6	0.485	ug/L
SMW-4	8/24/2012	N-Nitrosodi-n-propylamine	*ND*	*10*	3.3	0.011	ug/L
SMW-4	8/24/2012	4-Chlorophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-4	8/24/2012	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.5	9.81	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/24/2012	3,4-Methylphenol	ND	10	2.9	NA	ug/L
SMW-4	9/9/2013	Benzo(a)pyrene	*ND*	*10*	2.5	0.2	ug/L
SMW-4	9/9/2013	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	9/9/2013	Dibenzo(a,h)anthracene	ND	10	4	NA	ug/L
SMW-4	9/9/2013	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-4	9/9/2013	4-Chloro-3-Methylphenol	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	Aniline	ND	10	2.2	13	ug/L
SMW-4	9/9/2013	N-Nitrosodimethylamine	*ND*	*10*	4.8	0.0049	ug/L
SMW-4	9/9/2013	Benzoic Acid	ND	40	5.7	75000	ug/L
SMW-4	9/9/2013	Hexachloroethane	*ND*	*10*	2.9	3.28	ug/L
SMW-4	9/9/2013	Hexachlorocyclopentadiene	*ND*	*10*	2.1	0.41	ug/L
SMW-4	9/9/2013	Isophorone	ND	10	1.8	781	ug/L
SMW-4	9/9/2013	Acenaphthene	ND	10	2.6	535	ug/L
SMW-4	9/9/2013	Diethylphthalate	ND	10	3	14801	ug/L
SMW-4	9/9/2013	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-4	9/9/2013	Phenanthrene	ND	10	1.6	170	ug/L
SMW-4	9/9/2013	Butylbenzylphthalate	ND	10	2.7	16	ug/L
SMW-4	9/9/2013	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-4	9/9/2013	Fluorene	ND	10	2.5	288	ug/L
SMW-4	9/9/2013	Carbazole	ND	10	2.3	NA	ug/L
SMW-4	9/9/2013	Hexachlorobutadiene	*ND*	*10*	2.7	0.14	ug/L
SMW-4	9/9/2013	Pentachlorophenol	*ND*	*20*	1.4	1	ug/L
SMW-4	9/9/2013	2,4,6-Trichlorophenol	ND	10	2.6	11.9*	ug/L
SMW-4	9/9/2013	2-Nitroaniline	ND	10	2.9	190	ug/L
SMW-4	9/9/2013	2-Nitrophenol	ND	10	2.3	NA	ug/L
SMW-4	9/9/2013	1-Methylnaphthalene	ND	10	2.2	11.38	ug/L
SMW-4	9/9/2013	Naphthalene	ND	10	2.4	30	ug/L
SMW-4	9/9/2013	2-Methylnaphthalene	ND	10	2.4	35.1	ug/L
SMW-4	9/9/2013	2-Chloronaphthalene	ND	10	2.4	733	ug/L
SMW-4	9/9/2013	3,3-Dichlorobenzidine	*ND*	*10*	3.7	1.25	ug/L
SMW-4	9/9/2013	2-Methylphenol	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	1,2-Dichlorobenzene	ND	10	3	600	ug/L
SMW-4	9/9/2013	2-Chlorophenol	ND	10	2.7	91	ug/L
SMW-4	9/9/2013	2,4,5-Trichlorophenol	ND	10	2.4	1166	ug/L
SMW-4	9/9/2013	Nitrobenzene	*ND*	*10*	2.9	1.4	ug/L
SMW-4	9/9/2013	3-Nitroaniline	ND	10	2.7	NA	ug/L
SMW-4	9/9/2013	4-Nitroaniline	*ND*	*10*	2.5	3.8	ug/L
SMW-4	9/9/2013	4-Nitrophenol	ND	10	2.1	NA	ug/L
SMW-4	9/9/2013	Benzyl Alcohol	ND	10	2.5	2000	ug/L
SMW-4	9/9/2013	4-Bromophenyl-phenylether	ND	10	2.5	NA	ug/L
SMW-4	9/9/2013	Azobenzene	*ND*	*10*	2.3	0.12	ug/L
SMW-4	9/9/2013	2,4-Dimethylphenol	ND	10	2.9	354	ug/L
SMW-4	9/9/2013	1,4-Dichlorobenzene	ND	10	3.6	75	ug/L
SMW-4	9/9/2013	4-Chloroaniline	*ND*	*10*	2.2	0.37	ug/L
SMW-4	9/9/2013	Phenol	ND	10	2.2	5761	ug/L
SMW-4	9/9/2013	Pyridine	ND	10	3.5	20	ug/L
SMW-4	9/9/2013	Bis(2-chloroethyl)ether	*ND*	*10*	4	0.137	ug/L
SMW-4	9/9/2013	Bis(2-chloroethoxy)methane	ND	10	2.4	59	ug/L
SMW-4	9/9/2013	Bis(2-ethylhexyl)phthalate	ND	10	2.8	55.64	ug/L
SMW-4	9/9/2013	Di-n-octylphthalate	ND	10	3.4	200	ug/L
SMW-4	9/9/2013	Hexachlorobenzene	*ND*	*10*	2.7	0.0976	ug/L
SMW-4	9/9/2013	Anthracene	ND	10	2.2	1721	ug/L
SMW-4	9/9/2013	1,2,4-Trichlorobenzene	ND	10	2.2	70	ug/L
SMW-4	9/9/2013	2,4-Dichlorophenol	ND	20	2.2	45.3	ug/L
SMW-4	9/9/2013	2,4-Dinitrotoluene	ND	10	2.8	45.3	ug/L
SMW-4	9/9/2013	Pyrene	ND	10	2.1	117	ug/L
SMW-4	9/9/2013	Dimethylphthalate	ND	10	2.8	612	ug/L
SMW-4	9/9/2013	Dibenzofuran	ND	10	2.6	NA	ug/L
SMW-4	9/9/2013	Benzo(g,h,i)perylene	ND	10	2.8	NA	ug/L
SMW-4	9/9/2013	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.2	0.343	ug/L
SMW-4	9/9/2013	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-4	9/9/2013	Fluoranthene	ND	10	2.4	802	ug/L
SMW-4	9/9/2013	Benzo(k)fluoranthene	*ND*	*10*	2.6	3.43	ug/L
SMW-4	9/9/2013	Acenaphthylene	ND	10	2.8	NA	ug/L
SMW-4	9/9/2013	Chrysene	ND	10	2.7	34.3	ug/L
SMW-4	9/9/2013	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-4	9/9/2013	1,3-Dichlorobenzene	ND	10	3.1	NA	ug/L
SMW-4	9/9/2013	2,6-Dinitrotoluene	*ND*	*10*	2.8	0.485	ug/L
SMW-4	9/9/2013	N-Nitrosodi-n-propylamine	*ND*	*10*	3.2	0.011	ug/L
SMW-4	9/9/2013	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/9/2013	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.3	9.81	ug/L
SMW-4	9/9/2013	3,4-Methylphenol	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
SMW-4	9/11/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
SMW-4	9/11/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
SMW-4	9/11/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
SMW-4	9/11/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Aniline	ND	10	2.4	13	ug/L
SMW-4	9/11/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
SMW-4	9/11/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
SMW-4	9/11/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
SMW-4	9/11/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L
SMW-4	9/11/2014	Isophorone	ND	10	3.1	781	ug/L
SMW-4	9/11/2014	Acenaphthene	ND	10	2.9	535	ug/L
SMW-4	9/11/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
SMW-4	9/11/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
SMW-4	9/11/2014	Phenanthrene	ND	10	2.5	170	ug/L
SMW-4	9/11/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
SMW-4	9/11/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
SMW-4	9/11/2014	Fluorene	ND	10	2.9	288	ug/L
SMW-4	9/11/2014	Carbazole	ND	10	2.9	NA	ug/L
SMW-4	9/11/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
SMW-4	9/11/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
SMW-4	9/11/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
SMW-4	9/11/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-4	9/11/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
SMW-4	9/11/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
SMW-4	9/11/2014	Naphthalene	ND	10	2.3	30	ug/L
SMW-4	9/11/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
SMW-4	9/11/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
SMW-4	9/11/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-4	9/11/2014	2-Methylphenol	ND	20	2.8	NA	ug/L
SMW-4	9/11/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
SMW-4	9/11/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
SMW-4	9/11/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
SMW-4	9/11/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
SMW-4	9/11/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
SMW-4	9/11/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
SMW-4	9/11/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
SMW-4	9/11/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
SMW-4	9/11/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
SMW-4	9/11/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
SMW-4	9/11/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-4	9/11/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
SMW-4	9/11/2014	Phenol	ND	10	1.6	5761	ug/L
SMW-4	9/11/2014	Pyridine	ND	10	1.6	20	ug/L
SMW-4	9/11/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-4	9/11/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-4	9/11/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
SMW-4	9/11/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
SMW-4	9/11/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
SMW-4	9/11/2014	Anthracene	ND	10	2.5	1721	ug/L
SMW-4	9/11/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
SMW-4	9/11/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
SMW-4	9/11/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
SMW-4	9/11/2014	Pyrene	ND	10	4	117	ug/L
SMW-4	9/11/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
SMW-4	9/11/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
SMW-4	9/11/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
SMW-4	9/11/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
SMW-4	9/11/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
SMW-4	9/11/2014	Fluoranthene	ND	10	3	802	ug/L
SMW-4	9/11/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
SMW-4	9/11/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
SMW-4	9/11/2014	Chrysene	ND	10	2.9	34.3	ug/L
SMW-4	9/11/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
SMW-4	9/11/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
SMW-4	9/11/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
SMW-4	9/11/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
SMW-4	9/11/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
SMW-4	9/11/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
SMW-4	9/11/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L
SMW-4	8/14/2015	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-4	8/14/2015	2,4-Dinitrophenol	ND	20	1.1	38.7	ug/L
SMW-4	8/14/2015	Dibenzo(a,h)anthracene	ND	10	3.3	NA	ug/L
SMW-4	8/14/2015	Benzo(a)anthracene	*ND*	*10*	2.5	0.12	ug/L
SMW-4	8/14/2015	4-Chloro-3-Methylphenol	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Aniline	ND	10	1.5	13	ug/L
SMW-4	8/14/2015	N-Nitrosodimethylamine	*ND*	*10*	1.4	0.0049	ug/L
SMW-4	8/14/2015	Benzoic Acid	ND	20	1	75000	ug/L
SMW-4	8/14/2015	Hexachloroethane	*ND*	*10*	1.6	3.28	ug/L
SMW-4	8/14/2015	Hexachlorocyclopentadiene	*ND*	*10*	1.5	0.41	ug/L
SMW-4	8/14/2015	Isophorone	ND	10	2	781	ug/L
SMW-4	8/14/2015	Acenaphthene	ND	10	1.9	535	ug/L
SMW-4	8/14/2015	Diethylphthalate	ND	10	1.7	14801	ug/L
SMW-4	8/14/2015	Di-n-butylphthalate	ND	10	2.1	885	ug/L
SMW-4	8/14/2015	Phenanthrene	ND	10	2	170	ug/L
SMW-4	8/14/2015	Butylbenzylphthalate	ND	10	2.4	16	ug/L
SMW-4	8/14/2015	N-Nitrosodiphenylamine	ND	10	2.5	122	ug/L
SMW-4	8/14/2015	Fluorene	ND	10	1.7	288	ug/L
SMW-4	8/14/2015	Carbazole	ND	10	1.5	NA	ug/L
SMW-4	8/14/2015	Hexachlorobutadiene	*ND*	*10*	1.9	0.14	ug/L
SMW-4	8/14/2015	Pentachlorophenol	*ND*	*20*	1.1	1	ug/L
SMW-4	8/14/2015	2,4,6-Trichlorophenol	ND	10	1.3	11.9*	ug/L
SMW-4	8/14/2015	2-Nitroaniline	ND	10	1.8	190	ug/L
SMW-4	8/14/2015	2-Nitrophenol	ND	10	1.2	NA	ug/L
SMW-4	8/14/2015	1-Methylnaphthalene	ND	10	1.8	11.38	ug/L
SMW-4	8/14/2015	Naphthalene	ND	10	1.8	30	ug/L
SMW-4	8/14/2015	2-Methylnaphthalene	ND	10	2.2	35.1	ug/L
SMW-4	8/14/2015	2-Chloronaphthalene	ND	10	1.7	733	ug/L
SMW-4	8/14/2015	3,3-Dichlorobenzidine	*ND*	*10*	2.6	1.25	ug/L
SMW-4	8/14/2015	2-Methylphenol	ND	10	1.2	NA	ug/L
SMW-4	8/14/2015	1,2-Dichlorobenzene	ND	10	1.9	600	ug/L
SMW-4	8/14/2015	2-Chlorophenol	ND	10	1.2	91	ug/L
SMW-4	8/14/2015	2,4,5-Trichlorophenol	ND	10	1.6	1166	ug/L
SMW-4	8/14/2015	Nitrobenzene	*ND*	*10*	1.5	1.4	ug/L
SMW-4	8/14/2015	3-Nitroaniline	ND	10	1.5	NA	ug/L
SMW-4	8/14/2015	4-Nitroaniline	*ND*	*10*	1.2	3.8	ug/L
SMW-4	8/14/2015	4-Nitrophenol	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Benzyl Alcohol	ND	10	1.2	2000	ug/L
SMW-4	8/14/2015	4-Bromophenyl-phenylether	ND	10	1.4	NA	ug/L
SMW-4	8/14/2015	Azobenzene	*ND*	*10*	2	0.12	ug/L
SMW-4	8/14/2015	2,4-Dimethylphenol	ND	10	1.9	354	ug/L
SMW-4	8/14/2015	1,4-Dichlorobenzene	ND	10	1.2	75	ug/L
SMW-4	8/14/2015	4-Chloroaniline	*ND*	*10*	1.9	0.37	ug/L
SMW-4	8/14/2015	Phenol	ND	10	1.1	5761	ug/L
SMW-4	8/14/2015	Pyridine	ND	10	1.7	20	ug/L
SMW-4	8/14/2015	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
SMW-4	8/14/2015	Bis(2-chloroethoxy)methane	ND	10	1.8	59	ug/L
SMW-4	8/14/2015	Bis(2-ethylhexyl)phthalate	ND	10	3.3	55.64	ug/L
SMW-4	8/14/2015	Di-n-octylphthalate	ND	10	1.9	200	ug/L
SMW-4	8/14/2015	Hexachlorobenzene	*ND*	*10*	2	0.0976	ug/L
SMW-4	8/14/2015	Anthracene	ND	10	1.6	1721	ug/L
SMW-4	8/14/2015	1,2,4-Trichlorobenzene	ND	10	2	70	ug/L
SMW-4	8/14/2015	2,4-Dichlorophenol	ND	20	1.4	45.3	ug/L
SMW-4	8/14/2015	2,4-Dinitrotoluene	ND	10	1.4	45.3	ug/L
SMW-4	8/14/2015	Pyrene	ND	10	2.3	117	ug/L
SMW-4	8/14/2015	Dimethylphthalate	ND	10	2	612	ug/L
SMW-4	8/14/2015	Dibenzofuran	ND	10	1.9	NA	ug/L
SMW-4	8/14/2015	Benzo(g,h,i)perylene	ND	10	3.1	NA	ug/L
SMW-4	8/14/2015	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.5	0.343	ug/L
SMW-4	8/14/2015	Benzo(b)fluoranthene	*ND*	*10*	2.4	0.34	ug/L
SMW-4	8/14/2015	Fluoranthene	ND	10	1.5	802	ug/L
SMW-4	8/14/2015	Benzo(k)fluoranthene	*ND*	*10*	2.5	3.43	ug/L
SMW-4	8/14/2015	Acenaphthylene	ND	10	1.9	NA	ug/L
SMW-4	8/14/2015	Chrysene	ND	10	2.2	34.3	ug/L
SMW-4	8/14/2015	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.4	1.52	ug/L
SMW-4	8/14/2015	1,3-Dichlorobenzene	ND	10	1.7	NA	ug/L
SMW-4	8/14/2015	2,6-Dinitrotoluene	*ND*	*10*	1.5	0.485	ug/L
SMW-4	8/14/2015	N-Nitrosodi-n-propylamine	*ND*	*10*	2	0.011	ug/L
SMW-4	8/14/2015	4-Chlorophenyl-phenylether	ND	10	2	NA	ug/L
SMW-4	8/14/2015	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.1	9.81	ug/L
SMW-4	8/14/2015	3,4-Methylphenol	ND	10	1.5	NA	ug/L
SMW-4	9/7/2016	Benzo(a)pyrene	*ND*	*10*	2.7	0.2	ug/L
SMW-4	9/7/2016	2,4-Dinitrophenol	ND	20	2.8	38.7	ug/L
SMW-4	9/7/2016	Dibenzo(a,h)anthracene	ND	10	2.7	NA	ug/L
SMW-4	9/7/2016	Benzo(a)anthracene	*ND*	*10*	2.6	0.12	ug/L
SMW-4	9/7/2016	4-Chloro-3-Methylphenol	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Aniline	ND	10	2.4	13	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/7/2016	N-Nitrosodimethylamine	*ND*	*10*	2.2	0.0049	ug/L
SMW-4	9/7/2016	Benzoic Acid	9.9	20	2.6	75000	ug/L
SMW-4	9/7/2016	Hexachloroethane	*ND*	*10*	2.4	3.28	ug/L
SMW-4	9/7/2016	Hexachlorocyclopentadiene	*ND*	*10*	2.3	0.41	ug/L
SMW-4	9/7/2016	Isophorone	ND	10	2.6	781	ug/L
SMW-4	9/7/2016	Acenaphthene	ND	10	2.6	535	ug/L
SMW-4	9/7/2016	Diethylphthalate	ND	10	2.7	14801	ug/L
SMW-4	9/7/2016	Di-n-butylphthalate	ND	10	2.4	885	ug/L
SMW-4	9/7/2016	Phenanthrene	ND	10	2.6	170	ug/L
SMW-4	9/7/2016	Butylbenzylphthalate	ND	10	2.5	16	ug/L
SMW-4	9/7/2016	N-Nitrosodiphenylamine	ND	10	2.3	122	ug/L
SMW-4	9/7/2016	Fluorene	ND	10	2.7	288	ug/L
SMW-4	9/7/2016	Carbazole	ND	10	2.3	NA	ug/L
SMW-4	9/7/2016	Hexachlorobutadiene	*ND*	*10*	2.2	0.14	ug/L
SMW-4	9/7/2016	Pentachlorophenol	*ND*	*20*	2.3	1	ug/L
SMW-4	9/7/2016	2,4,6-Trichlorophenol	ND	10	2.4	11.9*	ug/L
SMW-4	9/7/2016	2-Nitroaniline	ND	10	2.8	190	ug/L
SMW-4	9/7/2016	2-Nitrophenol	ND	10	2.4	NA	ug/L
SMW-4	9/7/2016	1-Methylnaphthalene	ND	10	2.9	11.38	ug/L
SMW-4	9/7/2016	Naphthalene	ND	10	2.6	30	ug/L
SMW-4	9/7/2016	2-Methylnaphthalene	ND	10	2.9	35.1	ug/L
SMW-4	9/7/2016	2-Chloronaphthalene	ND	10	2.3	733	ug/L
SMW-4	9/7/2016	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
SMW-4	9/7/2016	2-Methylphenol	ND	10	2.5	NA	ug/L
SMW-4	9/7/2016	1,2-Dichlorobenzene	ND	10	2.3	600	ug/L
SMW-4	9/7/2016	2-Chlorophenol	ND	10	2.2	91	ug/L
SMW-4	9/7/2016	2,4,5-Trichlorophenol	ND	10	2.2	1166	ug/L
SMW-4	9/7/2016	Nitrobenzene	*ND*	*10*	2.8	1.4	ug/L
SMW-4	9/7/2016	3-Nitroaniline	ND	10	2.9	NA	ug/L
SMW-4	9/7/2016	4-Nitroaniline	*ND*	*10*	2.6	3.8	ug/L
SMW-4	9/7/2016	4-Nitrophenol	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Benzyl Alcohol	ND	10	3	2000	ug/L
SMW-4	9/7/2016	4-Bromophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Azobenzene	*ND*	*10*	2.7	0.12	ug/L
SMW-4	9/7/2016	2,4-Dimethylphenol	ND	10	3	354	ug/L
SMW-4	9/7/2016	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
SMW-4	9/7/2016	4-Chloroaniline	*ND*	*10*	2.7	0.37	ug/L
SMW-4	9/7/2016	Phenol	ND	10	2	5761	ug/L
SMW-4	9/7/2016	Pyridine	ND	10	2.2	20	ug/L
SMW-4	9/7/2016	Bis(2-chloroethyl)ether	*ND*	*10*	2.7	0.137	ug/L
SMW-4	9/7/2016	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
SMW-4	9/7/2016	Bis(2-ethylhexyl)phthalate	3.8	10	2.6	55.64	ug/L
SMW-4	9/7/2016	Di-n-octylphthalate	4.9	10	2	200	ug/L
SMW-4	9/7/2016	Hexachlorobenzene	*ND*	*10*	2.6	0.0976	ug/L
SMW-4	9/7/2016	Anthracene	ND	10	2.5	1721	ug/L
SMW-4	9/7/2016	1,2,4-Trichlorobenzene	ND	10	2.6	70	ug/L
SMW-4	9/7/2016	2,4-Dichlorophenol	ND	20	2.3	45.3	ug/L
SMW-4	9/7/2016	2,4-Dinitrotoluene	ND	10	3.1	45.3	ug/L
SMW-4	9/7/2016	Pyrene	ND	10	3.1	117	ug/L
SMW-4	9/7/2016	Dimethylphthalate	5.4	10	2.4	612	ug/L
SMW-4	9/7/2016	Dibenzofuran	ND	10	2.5	NA	ug/L
SMW-4	9/7/2016	Benzo(g,h,i)perylene	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3	0.343	ug/L
SMW-4	9/7/2016	Benzo(b)fluoranthene	*ND*	*10*	2.9	0.34	ug/L
SMW-4	9/7/2016	Fluoranthene	ND	10	2.6	802	ug/L
SMW-4	9/7/2016	Benzo(k)fluoranthene	*ND*	*10*	3	3.43	ug/L
SMW-4	9/7/2016	Acenaphthylene	ND	10	2.4	NA	ug/L
SMW-4	9/7/2016	Chrysene	ND	10	2.8	34.3	ug/L
SMW-4	9/7/2016	4,6-Dinitro-2-methylphenol	*ND*	*20*	1.8	1.52	ug/L
SMW-4	9/7/2016	1,3-Dichlorobenzene	ND	10	2.3	NA	ug/L
SMW-4	9/7/2016	2,6-Dinitrotoluene	*ND*	*10*	2.7	0.485	ug/L
SMW-4	9/7/2016	N-Nitrosodi-n-propylamine	*ND*	*10*	2.4	0.011	ug/L
SMW-4	9/7/2016	4-Chlorophenyl-phenylether	ND	10	2.6	NA	ug/L
SMW-4	9/7/2016	Bis(2-chloroisopropyl)ether	*ND*	*10*	1.9	9.81	ug/L
SMW-4	9/7/2016	3,4-Methylphenol	ND	10	2.3	NA	ug/L
SMW-4	9/11/2017	Benzo(a)pyrene	*ND*	*50*	20	0.2	ug/L
SMW-4	9/11/2017	2,4-Dinitrophenol	*ND*	*100*	13	38.7	ug/L
SMW-4	9/11/2017	Dibenzo(a,h)anthracene	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Benzo(a)anthracene	*ND*	*50*	19	0.12	ug/L
SMW-4	9/11/2017	4-Chloro-3-Methylphenol	ND	50	32	NA	ug/L
SMW-4	9/11/2017	Aniline	*ND*	*50*	15	13	ug/L
SMW-4	9/11/2017	N-Nitrosodimethylamine	*ND*	*50*	18	0.0049	ug/L
SMW-4	9/11/2017	Benzoic Acid	33	100	20	75000	ug/L
SMW-4	9/11/2017	Hexachloroethane	*ND*	*50*	6	3.28	ug/L
SMW-4	9/11/2017	Hexachlorocyclopentadiene	*ND*	*50*	6.4	0.41	ug/L
SMW-4	9/11/2017	Isophorone	ND	50	22	781	ug/L
SMW-4	9/11/2017	Acenaphthene	ND	50	18	535	ug/L
SMW-4	9/11/2017	Diethylphthalate	ND	50	20	14801	ug/L
SMW-4	9/11/2017	Di-n-butylphthalate	ND	50	25	885	ug/L
SMW-4	9/11/2017	Phenanthrene	ND	50	22	170	ug/L
SMW-4	9/11/2017	Butylbenzylphthalate	*ND*	*50*	23	16	ug/L
SMW-4	9/11/2017	N-Nitrosodiphenylamine	ND	50	19	122	ug/L
SMW-4	9/11/2017	Fluorene	ND	50	20	288	ug/L
SMW-4	9/11/2017	Carbazole	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Hexachlorobutadiene	*ND*	*50*	6.7	0.14	ug/L
SMW-4	9/11/2017	Pentachlorophenol	*ND*	*100*	25	1	ug/L
SMW-4	9/11/2017	2,4,6-Trichlorophenol	ND	50	27	11.9*	ug/L
SMW-4	9/11/2017	2-Nitroaniline	ND	50	25	190	ug/L
SMW-4	9/11/2017	2-Nitrophenol	ND	50	26	NA	ug/L
SMW-4	9/11/2017	1-Methylnaphthalene	*ND*	*50*	17	11.38	ug/L
SMW-4	9/11/2017	Naphthalene	*ND*	*50*	14	30	ug/L
SMW-4	9/11/2017	2-Methylnaphthalene	*ND*	*50*	16	35.1	ug/L
SMW-4	9/11/2017	2-Chloronaphthalene	ND	50	18	733	ug/L
SMW-4	9/11/2017	3,3-Dichlorobenzidine	*ND*	*50*	20	1.25	ug/L
SMW-4	9/11/2017	2-Methylphenol	ND	50	17	NA	ug/L
SMW-4	9/11/2017	1,2-Dichlorobenzene	ND	50	10	600	ug/L
SMW-4	9/11/2017	2-Chlorophenol	ND	50	38	91	ug/L
SMW-4	9/11/2017	2,4,5-Trichlorophenol	ND	50	26	1166	ug/L
SMW-4	9/11/2017	Nitrobenzene	*ND*	*50*	18	1.4	ug/L
SMW-4	9/11/2017	3-Nitroaniline	ND	50	22	NA	ug/L
SMW-4	9/11/2017	4-Nitroaniline	*ND*	*50*	20	3.8	ug/L
SMW-4	9/11/2017	4-Nitrophenol	ND	50	27	NA	ug/L
SMW-4	9/11/2017	Benzyl Alcohol	ND	50	23	2000	ug/L
SMW-4	9/11/2017	4-Bromophenyl-phenylether	ND	50	23	NA	ug/L
SMW-4	9/11/2017	Azobenzene	*ND*	*50*	23	0.12	ug/L
SMW-4	9/11/2017	2,4-Dimethylphenol	ND	50	14	354	ug/L
SMW-4	9/11/2017	1,4-Dichlorobenzene	ND	50	11	75	ug/L
SMW-4	9/11/2017	4-Chloroaniline	*ND*	*50*	18	0.37	ug/L
SMW-4	9/11/2017	Phenol	ND	50	16	5761	ug/L
SMW-4	9/11/2017	Pyridine	*ND*	*50*	11	20	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	Bis(2-chloroethyl)ether	*ND*	*50*	22	0.137	ug/L
SMW-4	9/11/2017	Bis(2-chloroethoxy)methane	ND	50	22	59	ug/L
SMW-4	9/11/2017	Bis(2-ethylhexyl)phthalate	34	50	24	55.64	ug/L
SMW-4	9/11/2017	Di-n-octylphthalate	ND	50	23	200	ug/L
SMW-4	9/11/2017	Hexachlorobenzene	*ND*	*50*	19	0.0976	ug/L
SMW-4	9/11/2017	Anthracene	ND	50	18	1721	ug/L
SMW-4	9/11/2017	1,2,4-Trichlorobenzene	ND	50	11	70	ug/L
SMW-4	9/11/2017	2,4-Dichlorophenol	*ND*	*100*	28	45.3	ug/L
SMW-4	9/11/2017	2,4-Dinitrotoluene	*ND*	*50*	20	45.3	ug/L
SMW-4	9/11/2017	Pyrene	ND	50	22	117	ug/L
SMW-4	9/11/2017	Dimethylphthalate	ND	50	18	612	ug/L
SMW-4	9/11/2017	Dibenzofuran	ND	50	20	NA	ug/L
SMW-4	9/11/2017	Benzo(g,h,i)perylene	ND	50	20	NA	ug/L
SMW-4	9/11/2017	Indeno(1,2,3-cd)pyrene	*ND*	*50*	21	0.343	ug/L
SMW-4	9/11/2017	Benzo(b)fluoranthene	*ND*	*50*	20	0.34	ug/L
SMW-4	9/11/2017	Fluoranthene	ND	50	21	802	ug/L
SMW-4	9/11/2017	Benzo(k)fluoranthene	*ND*	*50*	22	3.43	ug/L
SMW-4	9/11/2017	Acenaphthylene	ND	50	18	NA	ug/L
SMW-4	9/11/2017	Chrysene	*ND*	*50*	19	34.3	ug/L
SMW-4	9/11/2017	4,6-Dinitro-2-methylphenol	*ND*	*100*	19	1.52	ug/L
SMW-4	9/11/2017	1,3-Dichlorobenzene	ND	50	9.1	NA	ug/L
SMW-4	9/11/2017	2,6-Dinitrotoluene	*ND*	*50*	22	0.485	ug/L
SMW-4	9/11/2017	N-Nitrosodi-n-propylamine	*ND*	*50*	23	0.011	ug/L
SMW-4	9/11/2017	4-Chlorophenyl-phenylether	ND	50	18	NA	ug/L
SMW-4	9/11/2017	Bis(2-chloroisopropyl)ether	*ND*	*50*	19	9.81	ug/L
SMW-4	9/11/2017	3,4-Methylphenol	ND	50	16	NA	ug/L
SMW-4	9/12/2018	Benzo(a)pyrene	*ND*	*10*	6	0.2	ug/L
SMW-4	9/12/2018	2,4-Dinitrophenol	ND	20	3.7	38.7	ug/L
SMW-4	9/12/2018	Dibenzo(a,h)anthracene	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Benzo(a)anthracene	*ND*	*10*	5.3	0.12	ug/L
SMW-4	9/12/2018	4-Chloro-3-Methylphenol	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Aniline	ND	10	6.2	13	ug/L
SMW-4	9/12/2018	N-Nitrosodimethylamine	*ND*	*10*	6.9	0.0049	ug/L
SMW-4	9/12/2018	Benzoic Acid	6.4	20	6.3	75000	ug/L
SMW-4	9/12/2018	Hexachloroethane	*ND*	*10*	6	3.28	ug/L
SMW-4	9/12/2018	Hexachlorocyclopentadiene	*ND*	*10*	3.9	0.41	ug/L
SMW-4	9/12/2018	Isophorone	ND	10	6.2	781	ug/L
SMW-4	9/12/2018	Acenaphthene	ND	10	5.8	535	ug/L
SMW-4	9/12/2018	Diethylphthalate	ND	10	6.3	14801	ug/L
SMW-4	9/12/2018	Di-n-butylphthalate	ND	10	6.8	885	ug/L
SMW-4	9/12/2018	Phenanthrene	ND	10	6	170	ug/L
SMW-4	9/12/2018	Butylbenzylphthalate	ND	10	6.3	16	ug/L
SMW-4	9/12/2018	N-Nitrosodiphenylamine	ND	10	6.7	122	ug/L
SMW-4	9/12/2018	Fluorene	ND	10	6.3	288	ug/L
SMW-4	9/12/2018	Carbazole	ND	10	6.3	NA	ug/L
SMW-4	9/12/2018	Hexachlorobutadiene	*ND*	*10*	6.4	0.14	ug/L
SMW-4	9/12/2018	Pentachlorophenol	*ND*	*20*	5.3	1	ug/L
SMW-4	9/12/2018	2,4,6-Trichlorophenol	ND	10	6.4	11.9*	ug/L
SMW-4	9/12/2018	2-Nitroaniline	ND	10	5.9	190	ug/L
SMW-4	9/12/2018	2-Nitrophenol	ND	10	6	NA	ug/L
SMW-4	9/12/2018	1-Methylnaphthalene	ND	10	7	11.38	ug/L
SMW-4	9/12/2018	Naphthalene	ND	10	5	30	ug/L
SMW-4	9/12/2018	2-Methylnaphthalene	ND	10	6.3	35.1	ug/L
SMW-4	9/12/2018	2-Chloronaphthalene	ND	10	6.1	733	ug/L
SMW-4	9/12/2018	3,3-Dichlorobenzidine	*ND*	*10*	6.8	1.25	ug/L
SMW-4	9/12/2018	2-Methylphenol	ND	10	6.3	NA	ug/L
SMW-4	9/12/2018	1,2-Dichlorobenzene	ND	10	6	600	ug/L
SMW-4	9/12/2018	2-Chlorophenol	ND	10	5.8	91	ug/L
SMW-4	9/12/2018	2,4,5-Trichlorophenol	ND	10	5.8	1166	ug/L
SMW-4	9/12/2018	Nitrobenzene	*ND*	*10*	6	1.4	ug/L
SMW-4	9/12/2018	3-Nitroaniline	ND	10	6.8	NA	ug/L
SMW-4	9/12/2018	4-Nitroaniline	*ND*	*10*	6	3.8	ug/L
SMW-4	9/12/2018	4-Nitrophenol	ND	10	5.6	NA	ug/L
SMW-4	9/12/2018	Benzyl Alcohol	ND	10	6.3	2000	ug/L
SMW-4	9/12/2018	4-Bromophenyl-phenylether	ND	10	6.9	NA	ug/L
SMW-4	9/12/2018	Azobenzene	*ND*	*10*	6.7	0.12	ug/L
SMW-4	9/12/2018	2,4-Dimethylphenol	ND	10	5.9	354	ug/L
SMW-4	9/12/2018	1,4-Dichlorobenzene	ND	10	5.8	75	ug/L
SMW-4	9/12/2018	4-Chloroaniline	*ND*	*10*	6	0.37	ug/L
SMW-4	9/12/2018	Phenol	ND	10	6	5761	ug/L
SMW-4	9/12/2018	Pyridine	ND	10	5.4	20	ug/L
SMW-4	9/12/2018	Bis(2-chloroethyl)ether	*ND*	*10*	6.3	0.137	ug/L
SMW-4	9/12/2018	Bis(2-chloroethoxy)methane	ND	10	6.1	59	ug/L
SMW-4	9/12/2018	Bis(2-ethylhexyl)phthalate	ND	10	8.1	55.64	ug/L
SMW-4	9/12/2018	Di-n-octylphthalate	ND	10	6.3	200	ug/L
SMW-4	9/12/2018	Hexachlorobenzene	*ND*	*10*	6.2	0.0976	ug/L
SMW-4	9/12/2018	Anthracene	ND	10	5.7	1721	ug/L
SMW-4	9/12/2018	1,2,4-Trichlorobenzene	ND	10	6.4	70	ug/L
SMW-4	9/12/2018	2,4-Dichlorophenol	ND	20	5.8	45.3	ug/L
SMW-4	9/12/2018	2,4-Dinitrotoluene	ND	10	5.8	45.3	ug/L
SMW-4	9/12/2018	Pyrene	ND	10	6.5	117	ug/L
SMW-4	9/12/2018	Dimethylphthalate	ND	10	6	612	ug/L
SMW-4	9/12/2018	Dibenzofuran	ND	10	6.9	NA	ug/L
SMW-4	9/12/2018	Benzo(g,h,i)perylene	ND	10	5.7	NA	ug/L
SMW-4	9/12/2018	Indeno(1,2,3-cd)pyrene	*ND*	*10*	7	0.343	ug/L
SMW-4	9/12/2018	Benzo(b)fluoranthene	*ND*	*10*	7.1	0.34	ug/L
SMW-4	9/12/2018	Fluoranthene	ND	10	5.8	802	ug/L
SMW-4	9/12/2018	Benzo(k)fluoranthene	*ND*	*10*	6.4	3.43	ug/L
SMW-4	9/12/2018	Acenaphthylene	ND	10	6.2	NA	ug/L
SMW-4	9/12/2018	Chrysene	ND	10	6.8	34.3	ug/L
SMW-4	9/12/2018	4,6-Dinitro-2-methylphenol	*ND*	*20*	5.4	1.52	ug/L
SMW-4	9/12/2018	1,3-Dichlorobenzene	ND	10	5.8	NA	ug/L
SMW-4	9/12/2018	2,6-Dinitrotoluene	*ND*	*10*	6	0.485	ug/L
SMW-4	9/12/2018	N-Nitrosodi-n-propylamine	*ND*	*10*	6.1	0.011	ug/L
SMW-4	9/12/2018	4-Chlorophenyl-phenylether	ND	10	7.2	NA	ug/L
SMW-4	9/12/2018	Bis(2-chloroisopropyl)ether	*ND*	*10*	4.9	9.81	ug/L
SMW-4	9/12/2018	3,4-Methylphenol	ND	10	5.4	NA	ug/L
SMW-4	12/6/2018	Benzo(a)pyrene	*ND*	*0.5*	0.5	0.2	ug/L
SMW-4	12/6/2018	2,4-Dinitrophenol	ND	0.5	0.5	38.7	ug/L
SMW-4	12/6/2018	Dibenzo(a,h)anthracene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzo(a)anthracene	*ND*	*0.5*	0.5	0.12	ug/L
SMW-4	12/6/2018	7,12-Dimethylbenz(a)anthracene	*ND*	*0.5*	0.5	0.0001	ug/L
SMW-4	12/6/2018	2,3,4,6-Tetrachlorophenol	ND	0.5	0.5	240	ug/L
SMW-4	12/6/2018	4-Chloro-3-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Aniline	ND	0.5	0.5	13	ug/L
SMW-4	12/6/2018	N-Nitrosodimethylamine	*ND*	*0.5*	0.5	0.0049	ug/L
SMW-4	12/6/2018	Hexachloroethane	ND	0.5	0.5	3.28	ug/L
SMW-4	12/6/2018	Hexachlorocyclopentadiene	*ND*	*0.5*	0.5	0.41	ug/L
SMW-4	12/6/2018	Isophorone	ND	0.5	0.5	781	ug/L
SMW-4	12/6/2018	Acenaphthene	ND	0.5	0.5	535	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	12/6/2018	Diethylphthalate	ND	0.5	0.5	14801	ug/L
SMW-4	12/6/2018	Di-n-butylphthalate	ND	0.5	0.5	885	ug/L
SMW-4	12/6/2018	Phenanthrene	ND	0.5	0.5	170	ug/L
SMW-4	12/6/2018	Butylbenzylphthalate	ND	0.5	0.5	16	ug/L
SMW-4	12/6/2018	N-Nitrosodiphenylamine	ND	0.5	0.5	122	ug/L
SMW-4	12/6/2018	Fluorene	ND	0.5	0.5	288	ug/L
SMW-4	12/6/2018	Carbazole	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Hexachlorobutadiene	*ND*	*0.5*	0.5	0.14	ug/L
SMW-4	12/6/2018	Pentachlorophenol	ND	0.5	0.5	1	ug/L
SMW-4	12/6/2018	2,4,6-Trichlorophenol	ND	0.5	0.5	11.9*	ug/L
SMW-4	12/6/2018	2-Nitroaniline	ND	0.5	0.5	190	ug/L
SMW-4	12/6/2018	2-Nitrophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	1-Methylnaphthalene	ND	0.5	0.5	11.38	ug/L
SMW-4	12/6/2018	Naphthalene	ND	0.5	0.5	30	ug/L
SMW-4	12/6/2018	Quinoline	*ND*	*0.5*	0.5	0.024	ug/L
SMW-4	12/6/2018	2-Methylnaphthalene	ND	0.5	0.5	35.1	ug/L
SMW-4	12/6/2018	2-Chloronaphthalene	ND	0.5	0.5	733	ug/L
SMW-4	12/6/2018	3,3-Dichlorobenzidine	ND	0.5	0.5	1.25	ug/L
SMW-4	12/6/2018	Benzidine	*ND*	*0.5*	0.5	0.0011	ug/L
SMW-4	12/6/2018	2-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	1,2-Dichlorobenzene	ND	0.5	0.5	600	ug/L
SMW-4	12/6/2018	2-Chlorophenol	ND	0.5	0.5	91	ug/L
SMW-4	12/6/2018	2,4,5-Trichlorophenol	ND	0.5	0.5	1166	ug/L
SMW-4	12/6/2018	Nitrobenzene	ND	0.5	0.5	1.4	ug/L
SMW-4	12/6/2018	3-Nitroaniline	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4-Nitroaniline	ND	0.5	0.5	3.8	ug/L
SMW-4	12/6/2018	4-Nitrophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzyl Alcohol	ND	0.5	0.5	2000	ug/L
SMW-4	12/6/2018	4-Bromophenyl-phenylether	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	2,4-Dimethylphenol	ND	0.5	0.5	354	ug/L
SMW-4	12/6/2018	1,4-Dichlorobenzene	ND	0.5	0.5	75	ug/L
SMW-4	12/6/2018	4-Chloroaniline	*ND*	*0.5*	0.5	0.37	ug/L
SMW-4	12/6/2018	Phenol	ND	0.5	0.5	5761	ug/L
SMW-4	12/6/2018	Thiophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Pyridine	ND	0.5	0.5	20	ug/L
SMW-4	12/6/2018	Bis(2-chloroethyl)ether	*ND*	*0.5*	0.5	0.137	ug/L
SMW-4	12/6/2018	Bis(2-chloroethoxy)methane	ND	0.5	0.5	59	ug/L
SMW-4	12/6/2018	Bis(2-ethylhexyl)phthalate	ND	0.5	0.5	55.64	ug/L
SMW-4	12/6/2018	Di-n-octylphthalate	ND	0.5	0.5	200	ug/L
SMW-4	12/6/2018	Hexachlorobenzene	*ND*	*0.5*	0.5	0.0976	ug/L
SMW-4	12/6/2018	Anthracene	ND	0.5	0.5	1721	ug/L
SMW-4	12/6/2018	1,2,4-Trichlorobenzene	ND	0.5	0.5	70	ug/L
SMW-4	12/6/2018	2,4-Dichlorophenol	ND	0.5	0.5	45.3	ug/L
SMW-4	12/6/2018	2,4-Dinitrotoluene	ND	0.5	0.5	45.3	ug/L
SMW-4	12/6/2018	1,2-Diphenylhydrazine	ND	0.5	0.5	0.78	ug/L
SMW-4	12/6/2018	Pyrene	ND	0.5	0.5	117	ug/L
SMW-4	12/6/2018	Dimethylphthalate	ND	0.5	0.5	612	ug/L
SMW-4	12/6/2018	Dibenzofuran	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Benzo(g,h,i)perylene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Indeno(1,2,3-cd)pyrene	*ND*	*0.5*	0.5	0.343	ug/L
SMW-4	12/6/2018	Benzo(b)fluoranthene	*ND*	*0.5*	0.5	0.34	ug/L
SMW-4	12/6/2018	Fluoranthene	ND	0.5	0.5	802	ug/L
SMW-4	12/6/2018	Benzo(k)fluoranthene	ND	0.5	0.5	3.43	ug/L
SMW-4	12/6/2018	Acenaphthylene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Chrysene	ND	0.5	0.5	34.3	ug/L
SMW-4	12/6/2018	Dibenz(a,h)acridine	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4,6-Dinitro-2-methylphenol	ND	0.5	0.5	1.52	ug/L
SMW-4	12/6/2018	1,3-Dichlorobenzene	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	2,6-Dinitrotoluene	*ND*	*0.5*	0.5	0.485	ug/L
SMW-4	12/6/2018	N-Nitrosodi-n-propylamine	*ND*	*0.5*	0.5	0.011	ug/L
SMW-4	12/6/2018	2,3,5,6-Tetrachlorophenol	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	4-Chlorophenyl-phenylether	ND	0.5	0.5	NA	ug/L
SMW-4	12/6/2018	Bis(2-chloroisopropyl)ether	ND	0.5	0.5	9.81	ug/L
SMW-4	12/6/2018	3,4-Methylphenol	ND	0.5	0.5	NA	ug/L
SMW-4	8/13/2019	1,2,4-Trichlorobenzene	ND	10	4.044466	70	ug/L
SMW-4	8/13/2019	1,2-Dichlorobenzene	ND	10	4.774433	600	ug/L
SMW-4	8/13/2019	1,3-Dichlorobenzene	ND	10	5.265375	NA	ug/L
SMW-4	8/13/2019	1,4-Dichlorobenzene	ND	10	4.423232	75	ug/L
SMW-4	8/13/2019	1-Methylnaphthalene	ND	10	3.069076	11.38	ug/L
SMW-4	8/13/2019	2,4,5-Trichlorophenol	ND	10	2.967641	1166	ug/L
SMW-4	8/13/2019	2,4,6-Trichlorophenol	ND	10	2.33373	11.9*	ug/L
SMW-4	8/13/2019	2,4-Dichlorophenol	ND	20	2.920806	45.3	ug/L
SMW-4	8/13/2019	2,4-Dimethylphenol	ND	10	2.965993	354	ug/L
SMW-4	8/13/2019	2,4-Dinitrophenol	ND	20	2.592454	38.7	ug/L
SMW-4	8/13/2019	2,4-Dinitrotoluene	ND	10	3.842265	45.3	ug/L
SMW-4	8/13/2019	2,6-Dinitrotoluene	*ND*	*10*	2.428885	0.485	ug/L
SMW-4	8/13/2019	2-Chloronaphthalene	ND	10	3.070118	733	ug/L
SMW-4	8/13/2019	2-Chlorophenol	ND	10	2.685938	91	ug/L
SMW-4	8/13/2019	2-Methylnaphthalene	ND	10	3.018863	35.1	ug/L
SMW-4	8/13/2019	2-Methylphenol	ND	10	2.858438	NA	ug/L
SMW-4	8/13/2019	2-Nitroaniline	ND	10	3.173702	190	ug/L
SMW-4	8/13/2019	2-Nitrophenol	ND	10	2.971981	NA	ug/L
SMW-4	8/13/2019	3,3-Dichlorobenzidine	*ND*	*10*	2.782401	1.25	ug/L
SMW-4	8/13/2019	3,4-Methylphenol	ND	10	3.584453	NA	ug/L
SMW-4	8/13/2019	3-Nitroaniline	ND	10	3.243792	NA	ug/L
SMW-4	8/13/2019	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.893271	1.52	ug/L
SMW-4	8/13/2019	4-Bromophenyl-phenylether	ND	10	2.997193	NA	ug/L
SMW-4	8/13/2019	4-Chloro-3-Methylphenol	ND	10	3.408379	NA	ug/L
SMW-4	8/13/2019	4-Chloroaniline	*ND*	*10*	2.256602	0.37	ug/L
SMW-4	8/13/2019	4-Chlorophenyl-phenylether	ND	10	2.438856	NA	ug/L
SMW-4	8/13/2019	4-Nitroaniline	*ND*	*10*	2.692304	3.8	ug/L
SMW-4	8/13/2019	4-Nitrophenol	ND	10	7.571667	NA	ug/L
SMW-4	8/13/2019	Acenaphthene	ND	10	2.955891	535	ug/L
SMW-4	8/13/2019	Acenaphthylene	ND	10	2.395506	NA	ug/L
SMW-4	8/13/2019	Aniline	ND	10	3.579516	13	ug/L
SMW-4	8/13/2019	Anthracene	ND	10	2.657173	1721	ug/L
SMW-4	8/13/2019	Azobenzene	*ND*	*10*	3.254619	0.12	ug/L
SMW-4	8/13/2019	Benzo(a)anthracene	*ND*	*10*	3.601783	0.12	ug/L
SMW-4	8/13/2019	Benzo(a)pyrene	*ND*	*10*	3.548267	0.2	ug/L
SMW-4	8/13/2019	Benzo(b)fluoranthene	*ND*	*10*	3.368126	0.34	ug/L
SMW-4	8/13/2019	Benzo(g,h,i)perylene	ND	10	2.234233	NA	ug/L
SMW-4	8/13/2019	Benzo(k)fluoranthene	*ND*	*10*	2.883502	3.43	ug/L
SMW-4	8/13/2019	Benzoic Acid	ND	20	10.723324	75000	ug/L
SMW-4	8/13/2019	Benzyl Alcohol	ND	10	2.360341	2000	ug/L
SMW-4	8/13/2019	Bis(2-chloroethoxy)methane	ND	10	2.603894	59	ug/L
SMW-4	8/13/2019	Bis(2-chloroethyl)ether	*ND*	*10*	3.233481	0.137	ug/L
SMW-4	8/13/2019	Bis(2-chloroisopropyl)ether	*ND*	*10*	3.85834	9.81	ug/L
SMW-4	8/13/2019	Bis(2-ethylhexyl)phthalate	ND	10	4.302128	55.64	ug/L
SMW-4	8/13/2019	Butylbenzylphthalate	ND	10	3.328347	16	ug/L
SMW-4	8/13/2019	Carbazole	ND	10	2.890507	NA	ug/L

Released to Imaging: 3/31/2023 10:34:47 AM

Received by OCD: 3/31/2023 9:53:59 AM

APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	8/13/2019	Chrysene	ND	10	2.786623	34.3	ug/L
SMW-4	8/13/2019	Dibenzo(a,h)anthracene	ND	10	2.959866	NA	ug/L
SMW-4	8/13/2019	Dibenzofuran	ND	10	3.18589	NA	ug/L
SMW-4	8/13/2019	Diethylphthalate	ND	10	2.872488	14801	ug/L
SMW-4	8/13/2019	Dimethylphthalate	ND	10	3.238016	612	ug/L
SMW-4	8/13/2019	Di-n-butylphthalate	ND	10	2.706937	885	ug/L
SMW-4	8/13/2019	Di-n-octylphthalate	ND	10	3.516366	200	ug/L
SMW-4	8/13/2019	Fluoranthene	ND	10	2.412214	802	ug/L
SMW-4	8/13/2019	Fluorene	ND	10	2.888488	288	ug/L
SMW-4	8/13/2019	Hexachlorobenzene	*ND*	*10*	3.082959	0.0976	ug/L
SMW-4	8/13/2019	Hexachlorobutadiene	*ND*	*10*	4.732265	0.14	ug/L
SMW-4	8/13/2019	Hexachlorocyclopentadiene	*ND*	*10*	3.578176	0.41	ug/L
SMW-4	8/13/2019	Hexachloroethane	*ND*	*10*	4.787792	3.28	ug/L
SMW-4	8/13/2019	Indeno(1,2,3-cd)pyrene	*ND*	*10*	2.704574	0.343	ug/L
SMW-4	8/13/2019	Isophorone	ND	10	3.046035	781	ug/L
SMW-4	8/13/2019	Naphthalene	ND	10	4.12221	30	ug/L
SMW-4	8/13/2019	Nitrobenzene	*ND*	*10*	2.789356	1.4	ug/L
SMW-4	8/13/2019	N-Nitrosodimethylamine	*ND*	*10*	5.043548	0.0049	ug/L
SMW-4	8/13/2019	N-Nitrosodi-n-propylamine	*ND*	*10*	6.492453	0.011	ug/L
SMW-4	8/13/2019	N-Nitrosodiphenylamine	ND	10	2.380381	122	ug/L
SMW-4	8/13/2019	Pentachlorophenol	*ND*	*20*	2.745477	1	ug/L
SMW-4	8/13/2019	Phenanthrene	ND	10	2.777122	170	ug/L
SMW-4	8/13/2019	Phenol	ND	10	8.036586	5761	ug/L
SMW-4	8/13/2019	Pyrene	ND	10	2.5036	117	ug/L
SMW-4	8/13/2019	Pyridine	ND	10	9.603136	20	ug/L
SMW-4	9/20/2020	1,4-Dioxane	ND	1	0.094	4.59	ug/L
SMW-4	9/20/2020	1,2,4-Trichlorobenzene	ND	0.57	0.11	70	ug/L
SMW-4	9/20/2020	1,2-Dichlorobenzene	ND	0.57	0.11	600	ug/L
SMW-4	9/20/2020	1,3-Dichlorobenzene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	1,4-Dichlorobenzene	ND	0.57	0.11	75	ug/L
SMW-4	9/20/2020	1,4-Dioxane	ND	0.57	0.11	4.59	ug/L
SMW-4	9/20/2020	1-Methylnaphthalene	ND	0.57	0.11	11.38	ug/L
SMW-4	9/20/2020	2,3,4,6-Tetrachlorophenol	ND	0.57	0.11	240	ug/L
SMW-4	9/20/2020	2,3,5,6-Tetrachlorophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	2,4,5-Trichlorophenol	ND	0.57	0.11	1166	ug/L
SMW-4	9/20/2020	2,4,6-Trichlorophenol	ND	0.57	0.11	11.9*	ug/L
SMW-4	9/20/2020	2,4-Dichlorophenol	ND	0.57	0.11	45.3	ug/L
SMW-4	9/20/2020	2,4-Dimethylphenol	ND	0.57	0.11	354	ug/L
SMW-4	9/20/2020	2,4-Dinitrophenol	ND	0.57	0.11	38.7	ug/L
SMW-4	9/20/2020	2,4-Dinitrotoluene	ND	0.57	0.11	45.3	ug/L
SMW-4	9/20/2020	2,6-Dinitrotoluene	ND	0.23	0.11	0.485	ug/L
SMW-4	9/20/2020	2-Chloronaphthalene	ND	0.57	0.11	733	ug/L
SMW-4	9/20/2020	2-Chlorophenol	ND	0.57	0.11	91	ug/L
SMW-4	9/20/2020	2-Methylnaphthalene	ND	0.57	0.11	35.1	ug/L
SMW-4	9/20/2020	2-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	2-Nitroaniline	ND	0.57	0.11	190	ug/L
SMW-4	9/20/2020	2-Nitrophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	3,4-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	3,3-Dichlorobenzidine	ND	0.57	0.11	1.25	ug/L
SMW-4	9/20/2020	3-Nitroaniline	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4,6-Dinitro-2-methylphenol	ND	0.57	0.11	1.52	ug/L
SMW-4	9/20/2020	4-Bromophenyl-phenylether	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Chloro-3-Methylphenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Chloroaniline	*ND*	*0.57*	0.11	0.37	ug/L
SMW-4	9/20/2020	4-Chlorophenyl-phenylether	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	4-Nitroaniline	ND	0.57	0.11	3.8	ug/L
SMW-4	9/20/2020	4-Nitrophenol	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Acenaphthene	ND	0.57	0.11	535	ug/L
SMW-4	9/20/2020	Acenaphthylene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Aniline	ND	0.57	0.11	13	ug/L
SMW-4	9/20/2020	Anthracene	ND	0.57	0.11	1721	ug/L
SMW-4	9/20/2020	Benzo(a)anthracene	ND	0.11	0.057	0.12	ug/L
SMW-4	9/20/2020	Benzidine	*ND*	*0.57*	0.28	0.0011	ug/L
SMW-4	9/20/2020	Benzo(a)pyrene	ND	0.11	0.057	0.2	ug/L
SMW-4	9/20/2020	Benzo(b)fluoranthene	ND	0.11	0.057	0.34	ug/L
SMW-4	9/20/2020	Benzo(g,h,i)perylene	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Benzo(k)fluoranthene	ND	0.57	0.11	3.43	ug/L
SMW-4	9/20/2020	Benzoic Acid	ND	0.57	0.23	75000	ug/L
SMW-4	9/20/2020	Benzyl Alcohol	0.49	0.57	0.23	2000	ug/L
SMW-4	9/20/2020	Bis(2-chloroethoxy)methane	ND	0.57	0.11	59	ug/L
SMW-4	9/20/2020	Bis(2-chloroethyl)ether	*ND*	*0.57*	0.11	0.137	ug/L
SMW-4	9/20/2020	Bis(2-chloroisopropyl)ether	ND	0.57	0.11	9.81	ug/L
SMW-4	9/20/2020	Bis(2-ethylhexyl)phthalate	ND	0.57	0.23	55.64	ug/L
SMW-4	9/20/2020	Butylbenzylphthalate	ND	0.57	0.23	16	ug/L
SMW-4	9/20/2020	Carbazole	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Chrysene	ND	0.57	0.11	34.3	ug/L
SMW-4	9/20/2020	Di-n-butylphthalate	ND	0.57	0.23	885	ug/L
SMW-4	9/20/2020	Di-n-octylphthalate	ND	0.57	0.23	200	ug/L
SMW-4	9/20/2020	Dibenzo(a,h)anthracene	ND	0.034	0.023	NA	ug/L
SMW-4	9/20/2020	Dibenzofuran	ND	0.57	0.11	NA	ug/L
SMW-4	9/20/2020	Diethylphthalate	ND	0.57	0.23	14801	ug/L
SMW-4	9/20/2020	Dimethylphthalate	ND	0.57	0.23	612	ug/L
SMW-4	9/20/2020	Fluoranthene	ND	0.57	0.11	802	ug/L
SMW-4	9/20/2020	Fluorene	ND	0.57	0.11	288	ug/L
SMW-4	9/20/2020	Hexachlorobenzene	*ND*	*0.57*	0.11	0.0976	ug/L
SMW-4	9/20/2020	Hexachlorobutadiene	*ND*	*0.57*	0.11	0.14	ug/L
SMW-4	9/20/2020	Hexachlorocyclopentadiene	*ND*	*0.57*	0.28	0.41	ug/L
SMW-4	9/20/2020	Hexachloroethane	ND	0.57	0.11	3.28	ug/L
SMW-4	9/20/2020	Indeno(1,2,3-cd)pyrene	ND	0.23	0.11	0.343	ug/L
SMW-4	9/20/2020	Isophorone	ND	0.57	0.11	781	ug/L
SMW-4	9/20/2020	N-Nitrosodi-n-propylamine	*ND*	*0.57*	0.11	0.011	ug/L
SMW-4	9/20/2020	N-Nitrosodimethylamine	*ND*	*0.57*	0.11	0.0049	ug/L
SMW-4	9/20/2020	N-Nitrosodiphenylamine	ND	0.57	0.11	122	ug/L
SMW-4	9/20/2020	Naphthalene	ND	0.57	0.11	30	ug/L
SMW-4	9/20/2020	Nitrobenzene	ND	0.57	0.11	1.4	ug/L
SMW-4	9/20/2020	Pentachlorophenol	ND	0.57	0.23	1	ug/L
SMW-4	9/20/2020	Phenanthrene	ND	0.57	0.11	170	ug/L
SMW-4	9/20/2020	Phenol	ND	0.57	0.11	5761	ug/L
SMW-4	9/20/2020	Pyrene	ND	0.57	0.11	117	ug/L
SMW-4	9/20/2020	Pyridine	ND	0.57	0.23	20	ug/L
STP-1 to EP-2	9/10/2014	Benzo(a)pyrene	*ND*	*10*	3.2	0.2	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dinitrophenol	ND	20	3.2	38.7	ug/L
STP-1 to EP-2	9/10/2014	Dibenzo(a,h)anthracene	ND	10	3	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzo(a)anthracene	*ND*	*10*	3.1	0.12	ug/L
STP-1 to EP-2	9/10/2014	4-Chloro-3-Methylphenol	ND	10	3.7	NA	ug/L
STP-1 to EP-2	9/10/2014	Aniline	ND	10	2.4	13	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodimethylamine	*ND*	*10*	2.4	0.0049	ug/L
STP-1 to EP-2	9/10/2014	Benzoic Acid	ND	20	2.2	75000	ug/L
STP-1 to EP-2	9/10/2014	Hexachloroethane	*ND*	*10*	1.9	3.28	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorocyclopentadiene	*ND*	*10*	3	0.41	ug/L

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APPENDIX C-1b. SEMIVOLATILE ORGANIC COMPOUND DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/10/2014	Isophorone	ND	10	3.1	781	ug/L
STP-1 to EP-2	9/10/2014	Acenaphthene	ND	10	2.9	535	ug/L
STP-1 to EP-2	9/10/2014	Diethylphthalate	ND	10	4.2	14801	ug/L
STP-1 to EP-2	9/10/2014	Di-n-butylphthalate	ND	10	3.6	885	ug/L
STP-1 to EP-2	9/10/2014	Phenanthrene	ND	10	2.5	170	ug/L
STP-1 to EP-2	9/10/2014	Butylbenzylphthalate	ND	10	3.1	16	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodiphenylamine	ND	10	2.9	122	ug/L
STP-1 to EP-2	9/10/2014	Fluorene	ND	10	2.9	288	ug/L
STP-1 to EP-2	9/10/2014	Carbazole	ND	10	2.9	NA	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorobutadiene	*ND*	*10*	3	0.14	ug/L
STP-1 to EP-2	9/10/2014	Pentachlorophenol	*ND*	*20*	2.5	1	ug/L
STP-1 to EP-2	9/10/2014	2,4,6-Trichlorophenol	ND	10	1.8	11.9*	ug/L
STP-1 to EP-2	9/10/2014	2-Nitroaniline	ND	10	2.8	190	ug/L
STP-1 to EP-2	9/10/2014	2-Nitrophenol	ND	10	3.1	NA	ug/L
STP-1 to EP-2	9/10/2014	1-Methylnaphthalene	ND	10	3.6	11.38	ug/L
STP-1 to EP-2	9/10/2014	Naphthalene	ND	10	2.3	30	ug/L
STP-1 to EP-2	9/10/2014	2-Methylnaphthalene	ND	10	2.6	35.1	ug/L
STP-1 to EP-2	9/10/2014	2-Chloronaphthalene	ND	10	3	733	ug/L
STP-1 to EP-2	9/10/2014	3,3-Dichlorobenzidine	*ND*	*10*	2.4	1.25	ug/L
STP-1 to EP-2	9/10/2014	2-Methylphenol	22	20	2.8	NA	ug/L
STP-1 to EP-2	9/10/2014	1,2-Dichlorobenzene	ND	10	1.7	600	ug/L
STP-1 to EP-2	9/10/2014	2-Chlorophenol	ND	10	1.8	91	ug/L
STP-1 to EP-2	9/10/2014	2,4,5-Trichlorophenol	ND	10	3.3	1166	ug/L
STP-1 to EP-2	9/10/2014	Nitrobenzene	*ND*	*10*	2.6	1.4	ug/L
STP-1 to EP-2	9/10/2014	3-Nitroaniline	ND	10	3.6	NA	ug/L
STP-1 to EP-2	9/10/2014	4-Nitroaniline	*ND*	*10*	4.1	3.8	ug/L
STP-1 to EP-2	9/10/2014	4-Nitrophenol	ND	10	4.3	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzyl Alcohol	ND	10	1.8	2000	ug/L
STP-1 to EP-2	9/10/2014	4-Bromophenyl-phenylether	ND	10	3	NA	ug/L
STP-1 to EP-2	9/10/2014	Azobenzene	*ND*	*10*	2.5	0.12	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dimethylphenol	ND	10	3.1	354	ug/L
STP-1 to EP-2	9/10/2014	1,4-Dichlorobenzene	ND	10	2.4	75	ug/L
STP-1 to EP-2	9/10/2014	4-Chloroaniline	*ND*	*10*	2.6	0.37	ug/L
STP-1 to EP-2	9/10/2014	Phenol	140	10	1.6	5761	ug/L
STP-1 to EP-2	9/10/2014	Pyridine	ND	10	1.6	20	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroethyl)ether	*ND*	*10*	1.8	0.137	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroethoxy)methane	ND	10	2.8	59	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-ethylhexyl)phthalate	ND	10	3	55.64	ug/L
STP-1 to EP-2	9/10/2014	Di-n-octylphthalate	ND	20	2.7	200	ug/L
STP-1 to EP-2	9/10/2014	Hexachlorobenzene	*ND*	*10*	3.2	0.0976	ug/L
STP-1 to EP-2	9/10/2014	Anthracene	ND	10	2.5	1721	ug/L
STP-1 to EP-2	9/10/2014	1,2,4-Trichlorobenzene	ND	10	2.7	70	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dichlorophenol	ND	20	3	45.3	ug/L
STP-1 to EP-2	9/10/2014	2,4-Dinitrotoluene	ND	10	4.5	45.3	ug/L
STP-1 to EP-2	9/10/2014	Pyrene	ND	10	4	117	ug/L
STP-1 to EP-2	9/10/2014	Dimethylphthalate	ND	10	3.7	612	ug/L
STP-1 to EP-2	9/10/2014	Dibenzofuran	ND	10	3.7	NA	ug/L
STP-1 to EP-2	9/10/2014	Benzo(g,h,i)perylene	ND	10	3.3	NA	ug/L
STP-1 to EP-2	9/10/2014	Indeno(1,2,3-cd)pyrene	*ND*	*10*	3.4	0.343	ug/L
STP-1 to EP-2	9/10/2014	Benzo(b)fluoranthene	*ND*	*10*	4.1	0.34	ug/L
STP-1 to EP-2	9/10/2014	Fluoranthene	ND	10	3	802	ug/L
STP-1 to EP-2	9/10/2014	Benzo(k)fluoranthene	*ND*	*10*	3.5	3.43	ug/L
STP-1 to EP-2	9/10/2014	Acenaphthylene	ND	10	2.5	NA	ug/L
STP-1 to EP-2	9/10/2014	Chrysene	ND	10	2.9	34.3	ug/L
STP-1 to EP-2	9/10/2014	4,6-Dinitro-2-methylphenol	*ND*	*20*	2.4	1.52	ug/L
STP-1 to EP-2	9/10/2014	1,3-Dichlorobenzene	ND	10	1.8	NA	ug/L
STP-1 to EP-2	9/10/2014	2,6-Dinitrotoluene	*ND*	*10*	3.4	0.485	ug/L
STP-1 to EP-2	9/10/2014	N-Nitrosodi-n-propylamine	*ND*	*10*	1.9	0.011	ug/L
STP-1 to EP-2	9/10/2014	4-Chlorophenyl-phenylether	ND	10	3.5	NA	ug/L
STP-1 to EP-2	9/10/2014	Bis(2-chloroisopropyl)ether	*ND*	*10*	2.4	9.81	ug/L
STP-1 to EP-2	9/10/2014	3,4-Methylphenol	ND	10	1.8	NA	ug/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	4/29/2019	Aluminum, Total	0.5	0.1	0.012441	19914000	mg/L
EP-11	4/29/2019	Antimony, Total	0.009	0.02	0.007788	6000	mg/L
EP-11	4/29/2019	Arsenic, Total	0.12	0.02	0.006244	10000	mg/L
EP-11	4/29/2019	Barium, Total	0.2	0.01	0.003242	2000000	mg/L
EP-11	4/29/2019	Beryllium, Total	0.0027	0.01	0.001419	4000	mg/L
EP-11	4/29/2019	Boron, Total	4	0.2	0.022653	3949	mg/L
EP-11	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-11	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-11	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-11	4/29/2019	Copper, Total	0.02	0.03	0.020359	790000	mg/L
EP-11	4/29/2019	Iron, Total	0.19	0.1	0.043734	13822000	mg/L
EP-11	4/29/2019	Lead, Total	0.0011	0.01	0.001098	15000	mg/L
EP-11	4/29/2019	Manganese, Total	0.63	0.01	0.00145	2017000	mg/L
EP-11	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-11	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-11	4/29/2019	Nickel, Total	0.13	0.05	0.020043	372000	mg/L
EP-11	4/29/2019	Selenium, Total	0.017	0.02	0.00956	50000	mg/L
EP-11	4/29/2019	Silver, Total	0.019	0.025	0.007092	50000	mg/L
EP-11	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-11	4/29/2019	Uranium, Total	0.0045	0.01	0.001697	30000	mg/L
EP-11	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-11	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-11	4/29/2019	Antimony, Dissolved	0.02	0.05	0.019471	6000	mg/L
EP-11	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-11	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-11	4/29/2019	Beryllium, Dissolved	0.0017	0.01	0.001419	4000	mg/L
EP-11	4/29/2019	Boron, Dissolved	3.9	0.2	0.022653	3949110	mg/L
EP-11	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-11	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-11	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-11	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-11	4/29/2019	Copper, Dissolved	0.02	0.03	0.006481	790000	mg/L
EP-11	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-11	4/29/2019	Lead, Dissolved	ND	0.025	0.002744	NA	mg/L
EP-11	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-11	4/29/2019	Manganese, Dissolved	0.41	0.01	0.00145	2017400	mg/L
EP-11	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-11	4/29/2019	Nickel, Dissolved	0.13	0.05	0.020043	372000	mg/L
EP-11	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-11	4/29/2019	Selenium, Dissolved	0.011	0.05	0.008567	50000	mg/L
EP-11	4/29/2019	Silver, Dissolved	0.018	0.025	0.004712	81200	mg/L
EP-11	4/29/2019	Sodium, Dissolved	36000	1000	416.176299	NA	mg/L
EP-11	4/29/2019	Thallium, Dissolved	ND	0.025	0.002418	2000	mg/L
EP-11	4/29/2019	Uranium, Dissolved	0.0059	0.025	0.003737	NA	mg/L
EP-11	4/29/2019	Zinc, Dissolved	0.032	0.05	0.01126	5960450	mg/L
EP-11	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-11	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-11	12/22/2020	Manganese, Dissolved	8.5	0.01	0.003	2017400	mg/L
EP-11	12/22/2020	Zinc, Dissolved	0.02	0.02	0.008	5960450	mg/L
EP-11	12/22/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-11	12/22/2020	Aluminum, Total	1.17	1	0.255	19914000	mg/L
EP-11	12/22/2020	Boron, Total	18.6	0.5	0.11	3949	mg/L
EP-11	12/22/2020	Barium, Total	ND	0.05	0.015	2000000	mg/L
EP-11	12/22/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-11	12/22/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-11	12/22/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-11	12/22/2020	Chromium, Total	0.0959	0.05	0.025	50000	mg/L
EP-11	12/22/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-11	12/22/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-11	12/22/2020	Manganese, Total	9.55	0.05	0.015	2017000	mg/L
EP-11	12/22/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-11	12/22/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-11	12/22/2020	Aluminum, Dissolved	ND	2	0.51	19913930	mg/L
EP-11	12/22/2020	Barium, Dissolved	ND	0.1	0.03	2000000	mg/L
EP-11	12/22/2020	Boron, Dissolved	18.8	1	0.22	3949110	mg/L
EP-11	12/22/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-11	12/22/2020	Chromium, Dissolved	0.112	0.1	0.05	100000	mg/L
EP-11	12/22/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-11	12/22/2020	Iron, Dissolved	ND	2	0.75	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	12/22/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-11	12/22/2020	Nickel, Dissolved	0.669	0.06	0.03	372000	mg/L
EP-11	12/22/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-11	12/22/2020	Nickel, Total	0.674	0.03	0.015	372000	mg/L
EP-11	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	2000	ug/L
EP-11	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-11	12/22/2020	Arsenic, Dissolved	**580**	10	2.86	10	ug/L
EP-11	12/22/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-11	12/22/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-11	12/22/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-11	12/22/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-11	12/22/2020	Arsenic, Total Recoverable	**423**	10	2.86	10	ug/L
EP-11	12/22/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-11	12/22/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-11	12/22/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-11	12/22/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-11	12/22/2020	Selenium, Total Recoverable	*ND*	*500*	143	50	ug/L
EP-11	12/22/2020	Selenium, Dissolved	*ND*	*500*	143	50	ug/L
EP-11	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-11	3/5/2014	Arsenic, Total	0.042	0.01	0.0036	10000	mg/L
EP-11	3/5/2014	Barium, Total	0.081	0.002	0.00057	2000000	mg/L
EP-11	3/5/2014	Calcium, Total	330	5	0.41	NA	mg/L
EP-11	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-11	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-11	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-11	3/5/2014	Iron, Total	0.79	0.02	0.0072	13822000	mg/L
EP-11	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-11	3/5/2014	Potassium, Total	430	50	4.7	NA	mg/L
EP-11	3/5/2014	Magnesium, Total	230	5	0.09	NA	mg/L
EP-11	3/5/2014	Manganese, Total	0.99	0.002	0.00049	2017000	mg/L
EP-11	3/5/2014	Sodium, Total	7900	500	200	NA	mg/L
EP-11	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-11	3/5/2014	Selenium, Total	0.041	0.01	0.0051	50000	mg/L
EP-11	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-11	3/5/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-11	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-11	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-11	11/12/2014	Barium, Total	0.16	0.01	0.0025	2000000	mg/L
EP-11	11/12/2014	Calcium, Total	1100	50	4.1	NA	mg/L
EP-11	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-11	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-11	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-11	11/12/2014	Iron, Total	0.38	0.1	0.036	13822000	mg/L
EP-11	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-11	11/12/2014	Potassium, Total	1800	50	4.7	NA	mg/L
EP-11	11/12/2014	Magnesium, Total	1300	50	0.9	NA	mg/L
EP-11	11/12/2014	Manganese, Total	1.2	0.01	0.0024	2017000	mg/L
EP-11	11/12/2014	Sodium, Total	34000	500	200	NA	mg/L
EP-11	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-11	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-11	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-11	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-11	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-11	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-11	3/25/2015	Barium, Total	0.13	0.01	0.0037	2000000	mg/L
EP-11	3/25/2015	Calcium, Total	830	50	2.8	NA	mg/L
EP-11	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-11	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-11	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-11	3/25/2015	Iron, Total	0.22	0.1	0.036	13822000	mg/L
EP-11	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-11	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-11	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-11	3/25/2015	Manganese, Total	0.66	0.01	0.0076	2017000	mg/L
EP-11	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-11	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-11	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-11	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-11	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-11	9/1/2015	Arsenic, Total	0.17	0.1	0.029	10000	mg/L
EP-11	9/1/2015	Barium, Total	0.17	0.01	0.0053	2000000	mg/L
EP-11	9/1/2015	Calcium, Total	1100	50	2.8	NA	mg/L
EP-11	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-11	9/1/2015	Chromium, Total	0.036	0.03	0.011	50000	mg/L
EP-11	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-11	9/1/2015	Iron, Total	0.18	0.1	0.036	13822000	mg/L
EP-11	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-11	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-11	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-11	9/1/2015	Manganese, Total	0.48	0.01	0.0076	2017000	mg/L
EP-11	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-11	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-11	9/1/2015	Selenium, Total	0.21	0.1	0.012	50000	mg/L
EP-11	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-11	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-11	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-11	8/30/2016	Arsenic, Total	0.16	0.1	0.014	10000	mg/L
EP-11	8/30/2016	Barium, Total	0.19	0.01	0.0066	2000000	mg/L
EP-11	8/30/2016	Calcium, Total	730	10	5	NA	mg/L
EP-11	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-11	8/30/2016	Chromium, Total	0.016	0.03	0.0088	50000	mg/L
EP-11	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-11	8/30/2016	Mercury, Total	0.000078	0.0002	0.000053	2000	mg/L
EP-11	8/30/2016	Potassium, Total	1800	50	25	NA	mg/L
EP-11	8/30/2016	Magnesium, Total	1300	50	25	NA	mg/L
EP-11	8/30/2016	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
EP-11	8/30/2016	Sodium, Total	35000	500	250	NA	mg/L
EP-11	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-11	8/30/2016	Selenium, Total	0.21	0.1	0.021	50000	mg/L
EP-11	8/30/2016	Uranium, Total	0.0091	0.05	0.0051	30000	mg/L
EP-11	8/30/2016	Zinc, Total	0.045	0.05	0.014	5960000	mg/L
EP-11	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-11	3/30/2017	Arsenic, Total	0.17	0.05	0.011	10000	mg/L
EP-11	3/30/2017	Barium, Total	0.18	0.01	0.004	2000000	mg/L
EP-11	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-11	3/30/2017	Chromium, Total	0.018	0.03	0.013	50000	mg/L
EP-11	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-11	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-11	3/30/2017	Arsenic, Dissolved	0.15	0.05	0.0089	10000	mg/L
EP-11	3/30/2017	Barium, Dissolved	0.2	0.02	0.0085	2000000	mg/L
EP-11	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-11	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	3/30/2017	Chromium, Dissolved	0.014	0.06	0.01	100000	mg/L
EP-11	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-11	3/30/2017	Potassium, Dissolved	1800	100	50	NA	mg/L
EP-11	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-11	3/30/2017	Manganese, Dissolved	0.37	0.02	0.0038	2017400	mg/L
EP-11	3/30/2017	Sodium, Dissolved	53000	1000	500	NA	mg/L
EP-11	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-11	3/30/2017	Selenium, Dissolved	0.27	0.05	0.019	50000	mg/L
EP-11	3/30/2017	Uranium, Dissolved	0.0053	0.025	0.0025	NA	mg/L
EP-11	3/30/2017	Zinc, Dissolved	0.055	0.1	0.011	5960450	mg/L
EP-11	3/30/2017	Iron, Total	0.31	0.2	0.2	13822000	mg/L
EP-11	3/30/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
EP-11	3/30/2017	Manganese, Total	0.59	0.01	0.0014	2017000	mg/L
EP-11	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-11	3/30/2017	Selenium, Total	0.32	0.05	0.0094	50000	mg/L
EP-11	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-11	3/30/2017	Zinc, Total	0.019	0.05	0.013	5960000	mg/L
EP-11	10/24/2017	Silver, Total	ND	0.05	0.012	50000	mg/L
EP-11	10/24/2017	Arsenic, Total	0.24	0.1	0.041	10000	mg/L
EP-11	10/24/2017	Barium, Total	0.17	0.02	0.01	2000000	mg/L
EP-11	10/24/2017	Cadmium, Total	ND	0.02	0.0058	5000	mg/L
EP-11	10/24/2017	Chromium, Total	0.044	0.06	0.018	50000	mg/L
EP-11	10/24/2017	Copper, Total	ND	0.06	0.041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/24/2017	Silver, Dissolved	ND	0.05	0.018	81200	mg/L
EP-11	10/24/2017	Arsenic, Dissolved	0.25	0.05	0.014	10000	mg/L
EP-11	10/24/2017	Barium, Dissolved	0.21	0.02	0.0099	2000000	mg/L
EP-11	10/24/2017	Calcium, Dissolved	680	10	0.78	NA	mg/L
EP-11	10/24/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	10/24/2017	Chromium, Dissolved	0.058	0.06	0.013	100000	mg/L
EP-11	10/24/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	10/24/2017	Iron, Dissolved	0.38	0.2	0.16	13821880	mg/L
EP-11	10/24/2017	Potassium, Dissolved	4700	50	5.6	NA	mg/L
EP-11	10/24/2017	Magnesium, Dissolved	3500	50	12	NA	mg/L
EP-11	10/24/2017	Manganese, Dissolved	2.3	0.02	0.0039	2017400	mg/L
EP-11	10/24/2017	Sodium, Dissolved	81000	1000	160	NA	mg/L
EP-11	10/24/2017	Lead, Dissolved	ND	0.05	0.017	NA	mg/L
EP-11	10/24/2017	Selenium, Dissolved	ND	1	0.76	50000	mg/L
EP-11	10/24/2017	Uranium, Dissolved	0.011	0.05	0.0096	NA	mg/L
EP-11	10/24/2017	Zinc, Dissolved	ND	0.1	0.021	5960450	mg/L
EP-11	10/24/2017	Iron, Total	0.31	0.04	0.02	13822000	mg/L
EP-11	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-11	10/24/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
EP-11	10/24/2017	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-11	10/24/2017	Selenium, Total	0.35	0.2	0.2	50000	mg/L
EP-11	10/24/2017	Uranium, Total	ND	0.05	0.015	30000	mg/L
EP-11	10/24/2017	Zinc, Total	ND	0.1	0.033	5960000	mg/L
EP-11	2/23/2018	Silver, Total	0.025	0.025	0.0061	50000	mg/L
EP-11	2/23/2018	Arsenic, Total	0.15	0.2	0.083	10000	mg/L
EP-11	2/23/2018	Barium, Total	0.19	0.01	0.005	2000000	mg/L
EP-11	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-11	2/23/2018	Chromium, Total	0.01	0.03	0.0088	50000	mg/L
EP-11	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	2/23/2018	Silver, Dissolved	0.027	0.05	0.018	81200	mg/L
EP-11	2/23/2018	Arsenic, Dissolved	0.15	0.2	0.084	10000	mg/L
EP-11	2/23/2018	Barium, Dissolved	0.19	0.02	0.0099	2000000	mg/L
EP-11	2/23/2018	Calcium, Dissolved	720	50	3.9	NA	mg/L
EP-11	2/23/2018	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-11	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-11	2/23/2018	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-11	2/23/2018	Iron, Dissolved	0.2	0.2	0.16	13821880	mg/L
EP-11	2/23/2018	Potassium, Dissolved	2000	50	5.6	NA	mg/L
EP-11	2/23/2018	Magnesium, Dissolved	1500	50	12	NA	mg/L
EP-11	2/23/2018	Manganese, Dissolved	0.9	0.02	0.0039	2017400	mg/L
EP-11	2/23/2018	Sodium, Dissolved	40000	500	82	NA	mg/L
EP-11	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-11	2/23/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-11	2/23/2018	Uranium, Dissolved	0.0052	0.025	0.0048	NA	mg/L
EP-11	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-11	2/23/2018	Iron, Total	0.67	0.1	0.051	13822000	mg/L
EP-11	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-11	2/23/2018	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
EP-11	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L
EP-11	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-11	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-11	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-11	9/7/2018	Silver, Total	0.01	0.025	0.0061	50000	mg/L
EP-11	9/7/2018	Arsenic, Total	0.96	0.1	0.041	10000	mg/L
EP-11	9/7/2018	Barium, Total	0.027	0.01	0.005	2000000	mg/L
EP-11	9/7/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-11	9/7/2018	Chromium, Total	0.064	0.03	0.0088	50000	mg/L
EP-11	9/7/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-11	9/7/2018	Silver, Dissolved	0.014	0.025	0.0092	81200	mg/L
EP-11	9/7/2018	Arsenic, Dissolved	0.86	0.1	0.042	10000	mg/L
EP-11	9/7/2018	Barium, Dissolved	0.027	0.01	0.0049	2000000	mg/L
EP-11	9/7/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
EP-11	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-11	9/7/2018	Chromium, Dissolved	0.047	0.03	0.0064	100000	mg/L
EP-11	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-11	9/7/2018	Iron, Dissolved	0.09	0.1	0.082	13821880	mg/L
EP-11	9/7/2018	Potassium, Dissolved	7800	500	56	NA	mg/L
EP-11	9/7/2018	Magnesium, Dissolved	9200	100	25	NA	mg/L
EP-11	9/7/2018	Manganese, Dissolved	12	0.1	0.02	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	9/7/2018	Sodium, Dissolved	91000	1000	160	NA	mg/L
EP-11	9/7/2018	Lead, Dissolved	ND	0.1	0.035	NA	mg/L
EP-11	9/7/2018	Selenium, Dissolved	ND	0.1	0.076	50000	mg/L
EP-11	9/7/2018	Uranium, Dissolved	ND	0.1	0.019	NA	mg/L
EP-11	9/7/2018	Zinc, Dissolved	0.021	0.05	0.011	5960450	mg/L
EP-11	9/7/2018	Iron, Total	0.26	0.1	0.051	13822000	mg/L
EP-11	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-11	9/7/2018	Manganese, Total	9	0.02	0.011	2017000	mg/L
EP-11	9/7/2018	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-11	9/7/2018	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-11	9/7/2018	Uranium, Total	0.013	0.05	0.0068	30000	mg/L
EP-11	9/7/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-11	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-11	5/29/2012	Arsenic, Total	0.03	0.01	0.0011	10000	mg/L
EP-11	5/29/2012	Barium, Total	0.081	0.002	0.00031	2000000	mg/L
EP-11	5/29/2012	Calcium, Total	360	10	0.26	NA	mg/L
EP-11	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-11	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-11	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-11	5/29/2012	Iron, Total	0.16	0.02	0.0019	13822000	mg/L
EP-11	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-11	5/29/2012	Potassium, Total	310	10	4.8	NA	mg/L
EP-11	5/29/2012	Magnesium, Total	160	10	0.13	NA	mg/L
EP-11	5/29/2012	Manganese, Total	0.78	0.002	0.00062	2017000	mg/L
EP-11	5/29/2012	Sodium, Total	4800	100	4.5	NA	mg/L
EP-11	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-11	5/29/2012	Selenium, Total	0.019	0.01	0.0033	50000	mg/L
EP-11	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-11	5/29/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L
EP-11	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-11	11/6/2012	Arsenic, Total	0.017	0.0025	0.0014	10000	mg/L
EP-11	11/6/2012	Barium, Total	0.051	0.002	0.00039	2000000	mg/L
EP-11	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-11	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-11	11/6/2012	Chromium, Total	0.0065	0.006	0.001	50000	mg/L
EP-11	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-11	11/6/2012	Iron, Total	0.99	0.02	0.013	13822000	mg/L
EP-11	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-11	11/6/2012	Potassium, Total	210	10	4.8	NA	mg/L
EP-11	11/6/2012	Magnesium, Total	80	1	0.013	NA	mg/L
EP-11	11/6/2012	Manganese, Total	0.35	0.002	0.00026	2017000	mg/L
EP-11	11/6/2012	Sodium, Total	2800	100	4.5	NA	mg/L
EP-11	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-11	11/6/2012	Selenium, Total	0.014	0.0025	0.0025	50000	mg/L
EP-11	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-11	11/6/2012	Zinc, Total	0.024	0.01	0.0011	5960000	mg/L
EP-11	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-11	5/28/2013	Arsenic, Total	0.04	0.02	0.0026	10000	mg/L
EP-11	5/28/2013	Barium, Total	0.068	0.01	0.0048	2000000	mg/L
EP-11	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-11	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-11	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-11	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-11	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-11	5/28/2013	Manganese, Total	0.48	0.01	0.00082	2017000	mg/L
EP-11	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-11	5/28/2013	Selenium, Total	0.022	0.02	0.011	50000	mg/L
EP-11	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-11	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-11	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-11	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-11	10/15/2013	Barium, Total	0.067	0.002	0.00095	2000000	mg/L
EP-11	10/15/2013	Calcium, Total	360	5	0.34	NA	mg/L
EP-11	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-11	10/15/2013	Chromium, Total	0.0096	0.006	0.00084	50000	mg/L
EP-11	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-11	10/15/2013	Iron, Total	0.21	0.02	0.0089	13822000	mg/L
EP-11	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-11	10/15/2013	Potassium, Total	460	20	6	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	10/15/2013	Magnesium, Total	240	5	0.26	NA	mg/L
EP-11	10/15/2013	Manganese, Total	0.41	0.002	0.00016	2017000	mg/L
EP-11	10/15/2013	Sodium, Total	8000	200	71	NA	mg/L
EP-11	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-11	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-11	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-11	10/15/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
EP-12A	12/22/2020	Arsenic, Total Recoverable	**22.4**	5	1.43	10	ug/L
EP-12A	12/22/2020	Lead, Total Recoverable	**17.3**	5	0.665	15	ug/L
EP-12A	12/22/2020	Antimony, Total Recoverable	*ND*	*10*	1.76	6	ug/L
EP-12A	12/22/2020	Selenium, Total Recoverable	ND	25	7.15	50	ug/L
EP-12A	12/22/2020	Thallium, Total Recoverable	*ND*	*5*	1.7	2	ug/L
EP-12A	12/22/2020	Uranium, Total Recoverable	ND	25	5.6	30	ug/L
EP-12A	12/22/2020	Arsenic, Dissolved	**19.4**	5	1.43	10	ug/L
EP-12A	12/22/2020	Lead, Dissolved	ND	5	0.665	NA	ug/L
EP-12A	12/22/2020	Antimony, Dissolved	*ND*	*10*	1.76	6	ug/L
EP-12A	12/22/2020	Selenium, Dissolved	ND	25	7.15	50	ug/L
EP-12A	12/22/2020	Thallium, Dissolved	*ND*	*5*	1.7	2	ug/L
EP-12A	12/22/2020	Uranium, Dissolved	ND	25	5.6	NA	ug/L
EP-12A	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-12A	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-12A	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-12A	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-12A	12/22/2020	Chromium, Dissolved	0.018	0.01	0.005	100000	mg/L
EP-12A	12/22/2020	Cobalt, Dissolved	0.0117	0.01	0.003	5980	mg/L
EP-12A	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-12A	12/22/2020	Manganese, Dissolved	5.27	0.01	0.003	2017400	mg/L
EP-12A	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-12A	12/22/2020	Zinc, Dissolved	0.0514	0.02	0.008	5960450	mg/L
EP-12A	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-12A	12/22/2020	Aluminum, Total	34.7	0.2	0.051	19914000	mg/L
EP-12A	12/22/2020	Boron, Total	1.36	0.1	0.022	3949	mg/L
EP-12A	12/22/2020	Barium, Total	0.347	0.01	0.003	2000000	mg/L
EP-12A	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-12A	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-12A	12/22/2020	Cobalt, Total	0.0171	0.01	0.003	5980	mg/L
EP-12A	12/22/2020	Chromium, Total	0.041	0.01	0.005	50000	mg/L
EP-12A	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-12A	12/22/2020	Manganese, Total	5.43	0.01	0.003	2017000	mg/L
EP-12A	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-12A	12/22/2020	Zinc, Total	0.0778	0.02	0.008	5960000	mg/L
EP-12A	12/22/2020	Aluminum, Dissolved	8.26	0.4	0.102	19913930	mg/L
EP-12A	12/22/2020	Barium, Dissolved	0.162	0.02	0.006	2000000	mg/L
EP-12A	12/22/2020	Boron, Dissolved	1.41	0.2	0.044	3949110	mg/L
EP-12A	12/22/2020	Iron, Dissolved	6.79	0.4	0.15	13821880	mg/L
EP-12A	12/22/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
EP-12A	12/22/2020	Nickel, Dissolved	0.211	0.012	0.006	372000	mg/L
EP-12A	12/22/2020	Iron, Total	28.8	0.2	0.075	13822000	mg/L
EP-12A	12/22/2020	Nickel, Total	0.219	0.006	0.003	372000	mg/L
EP-12A	11/21/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-12A	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-12A	11/21/2019	Arsenic, Dissolved	0.011	0.005	0.000504	10000	mg/L
EP-12A	11/21/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
EP-12A	11/21/2019	Beryllium, Dissolved	0.00061	0.002	0.000284	4000	mg/L
EP-12A	11/21/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
EP-12A	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12A	11/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
EP-12A	11/21/2019	Chromium, Dissolved	0.01	0.006	0.001533	100000	mg/L
EP-12A	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12A	11/21/2019	Copper, Dissolved	0.003	0.006	0.001296	790000	mg/L
EP-12A	11/21/2019	Iron, Dissolved	4.9	0.1	0.043734	13821880	mg/L
EP-12A	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12A	11/21/2019	Magnesium, Dissolved	68	5	0.251452	NA	mg/L
EP-12A	11/21/2019	Manganese, Dissolved	0.57	0.002	0.00029	2017400	mg/L
EP-12A	11/21/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
EP-12A	11/21/2019	Nickel, Dissolved	0.086	0.01	0.004009	372000	mg/L
EP-12A	11/21/2019	Potassium, Dissolved	380	5	0.811441	NA	mg/L
EP-12A	11/21/2019	Selenium, Dissolved	0.0045	0.005	0.000857	50000	mg/L
EP-12A	11/21/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/21/2019	Sodium, Dissolved	1500	20	8.323526	NA	mg/L
EP-12A	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12A	11/21/2019	Uranium, Dissolved	0.0015	0.0025	0.000374	NA	mg/L
EP-12A	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L
EP-12A	11/21/2019	Aluminum, Total	1.2	0.2	0.024883	19914000	mg/L
EP-12A	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12A	11/21/2019	Arsenic, Total	0.013	0.01	0.003122	10000	mg/L
EP-12A	11/21/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
EP-12A	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-12A	11/21/2019	Boron, Total	0.71	0.04	0.004531	3949	mg/L
EP-12A	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12A	11/21/2019	Chromium, Total	0.011	0.006	0.001533	50000	mg/L
EP-12A	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12A	11/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
EP-12A	11/21/2019	Iron, Total	6.3	0.2	0.087469	13822000	mg/L
EP-12A	11/21/2019	Lead, Total	0.00061	0.0025	0.000274	15000	mg/L
EP-12A	11/21/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
EP-12A	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-12A	11/21/2019	Molybdenum, Total	0.033	0.008	0.006735	98700	mg/L
EP-12A	11/21/2019	Nickel, Total	0.087	0.01	0.004009	372000	mg/L
EP-12A	11/21/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
EP-12A	11/21/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
EP-12A	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12A	11/21/2019	Uranium, Total	0.0019	0.0025	0.000424	30000	mg/L
EP-12A	11/21/2019	Zinc, Total	0.022	0.01	0.005772	5960000	mg/L
EP-12A	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12A	5/28/2013	Arsenic, Total	0.015	0.01	0.0013	10000	mg/L
EP-12A	5/28/2013	Barium, Total	0.057	0.01	0.0048	2000000	mg/L
EP-12A	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-12A	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-12A	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-12A	5/28/2013	Iron, Total	0.49	0.1	0.045	13822000	mg/L
EP-12A	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12A	5/28/2013	Manganese, Total	0.25	0.01	0.00082	2017000	mg/L
EP-12A	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-12A	5/28/2013	Selenium, Total	0.018	0.01	0.0055	50000	mg/L
EP-12A	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-12A	5/28/2013	Zinc, Total	0.069	0.05	0.0038	5960000	mg/L
EP-12A	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12A	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-12A	10/15/2013	Barium, Total	0.066	0.002	0.00095	2000000	mg/L
EP-12A	10/15/2013	Calcium, Total	120	5	0.34	NA	mg/L
EP-12A	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-12A	10/15/2013	Chromium, Total	0.0098	0.006	0.00084	50000	mg/L
EP-12A	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12A	10/15/2013	Iron, Total	0.53	0.02	0.0089	13822000	mg/L
EP-12A	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12A	10/15/2013	Potassium, Total	140	50	15	NA	mg/L
EP-12A	10/15/2013	Magnesium, Total	45	1	0.051	NA	mg/L
EP-12A	10/15/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
EP-12A	10/15/2013	Sodium, Total	1700	50	18	NA	mg/L
EP-12A	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-12A	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-12A	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12A	10/15/2013	Zinc, Total	0.013	0.01	0.00076	5960000	mg/L
EP-12A	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12A	3/5/2014	Arsenic, Total	0.019	0.01	0.0036	10000	mg/L
EP-12A	3/5/2014	Barium, Total	0.059	0.002	0.00057	2000000	mg/L
EP-12A	3/5/2014	Calcium, Total	67	1	0.082	NA	mg/L
EP-12A	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12A	3/5/2014	Chromium, Total	0.014	0.006	0.0028	50000	mg/L
EP-12A	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-12A	3/5/2014	Iron, Total	1.9	0.1	0.036	13822000	mg/L
EP-12A	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12A	3/5/2014	Potassium, Total	170	50	4.7	NA	mg/L
EP-12A	3/5/2014	Magnesium, Total	34	1	0.018	NA	mg/L
EP-12A	3/5/2014	Manganese, Total	0.95	0.002	0.00049	2017000	mg/L
EP-12A	3/5/2014	Sodium, Total	1700	50	20	NA	mg/L
EP-12A	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/5/2014	Selenium, Total	0.02	0.01	0.0051	50000	mg/L
EP-12A	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-12A	3/5/2014	Zinc, Total	0.021	0.01	0.0035	5960000	mg/L
EP-12A	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12A	11/12/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
EP-12A	11/12/2014	Barium, Total	0.14	0.002	0.0005	2000000	mg/L
EP-12A	11/12/2014	Calcium, Total	130	10	0.82	NA	mg/L
EP-12A	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12A	11/12/2014	Chromium, Total	0.018	0.006	0.0028	50000	mg/L
EP-12A	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-12A	11/12/2014	Iron, Total	4.1	0.1	0.036	13822000	mg/L
EP-12A	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12A	11/12/2014	Potassium, Total	180	10	0.93	NA	mg/L
EP-12A	11/12/2014	Magnesium, Total	63	10	0.18	NA	mg/L
EP-12A	11/12/2014	Manganese, Total	0.44	0.002	0.00049	2017000	mg/L
EP-12A	11/12/2014	Sodium, Total	2500	50	20	NA	mg/L
EP-12A	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-12A	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-12A	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12A	11/12/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-12A	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12A	3/25/2015	Arsenic, Total	0.019	0.01	0.0044	10000	mg/L
EP-12A	3/25/2015	Barium, Total	0.076	0.002	0.00073	2000000	mg/L
EP-12A	3/25/2015	Calcium, Total	160	5	0.28	NA	mg/L
EP-12A	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-12A	3/25/2015	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
EP-12A	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12A	3/25/2015	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
EP-12A	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12A	3/25/2015	Potassium, Total	110	5	0.89	NA	mg/L
EP-12A	3/25/2015	Magnesium, Total	62	1	0.039	NA	mg/L
EP-12A	3/25/2015	Manganese, Total	0.095	0.002	0.0015	2017000	mg/L
EP-12A	3/25/2015	Sodium, Total	1900	50	3.6	NA	mg/L
EP-12A	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-12A	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-12A	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-12A	3/25/2015	Zinc, Total	0.015	0.01	0.0036	5960000	mg/L
EP-12A	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12A	9/1/2015	Arsenic, Total	0.029	0.01	0.0029	10000	mg/L
EP-12A	9/1/2015	Barium, Total	0.099	0.002	0.0011	2000000	mg/L
EP-12A	9/1/2015	Calcium, Total	150	5	0.28	NA	mg/L
EP-12A	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-12A	9/1/2015	Chromium, Total	0.02	0.006	0.0022	50000	mg/L
EP-12A	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12A	9/1/2015	Iron, Total	0.28	0.02	0.0072	13822000	mg/L
EP-12A	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12A	9/1/2015	Potassium, Total	170	5	0.89	NA	mg/L
EP-12A	9/1/2015	Magnesium, Total	110	5	0.2	NA	mg/L
EP-12A	9/1/2015	Manganese, Total	0.14	0.002	0.0015	2017000	mg/L
EP-12A	9/1/2015	Sodium, Total	3400	50	3.6	NA	mg/L
EP-12A	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-12A	9/1/2015	Selenium, Total	0.038	0.01	0.0012	50000	mg/L
EP-12A	9/1/2015	Uranium, Total	0.0029	0.0025	0.000025	30000	mg/L
EP-12A	9/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
EP-12A	8/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
EP-12A	8/30/2016	Arsenic, Total	0.018	0.01	0.0014	10000	mg/L
EP-12A	8/30/2016	Barium, Total	0.12	0.002	0.0013	2000000	mg/L
EP-12A	8/30/2016	Calcium, Total	380	5	2.5	NA	mg/L
EP-12A	8/30/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
EP-12A	8/30/2016	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-12A	8/30/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
EP-12A	8/30/2016	Iron, Total	1	0.1	0.1	13822000	mg/L
EP-12A	8/30/2016	Mercury, Total	0.000093	0.0002	0.000053	2000	mg/L
EP-12A	8/30/2016	Potassium, Total	120	5	2.5	NA	mg/L
EP-12A	8/30/2016	Magnesium, Total	120	5	2.5	NA	mg/L
EP-12A	8/30/2016	Manganese, Total	0.41	0.002	0.00032	2017000	mg/L
EP-12A	8/30/2016	Sodium, Total	3200	50	25	NA	mg/L
EP-12A	8/30/2016	Lead, Total	ND	0.005	0.0038	15000	mg/L
EP-12A	8/30/2016	Selenium, Total	0.03	0.01	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	8/30/2016	Uranium, Total	0.002	0.005	0.00051	30000	mg/L
EP-12A	8/30/2016	Zinc, Total	0.042	0.01	0.0028	5960000	mg/L
EP-12A	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-12A	3/30/2017	Arsenic, Total	0.026	0.005	0.0011	10000	mg/L
EP-12A	3/30/2017	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
EP-12A	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12A	3/30/2017	Chromium, Total	0.0079	0.006	0.0027	50000	mg/L
EP-12A	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-12A	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-12A	3/30/2017	Arsenic, Dissolved	0.023	0.005	0.00089	10000	mg/L
EP-12A	3/30/2017	Barium, Dissolved	0.12	0.002	0.00085	2000000	mg/L
EP-12A	3/30/2017	Calcium, Dissolved	370	10	5	NA	mg/L
EP-12A	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	3/30/2017	Chromium, Dissolved	0.01	0.006	0.001	100000	mg/L
EP-12A	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12A	3/30/2017	Iron, Dissolved	0.3	0.02	0.02	13821880	mg/L
EP-12A	3/30/2017	Potassium, Dissolved	270	10	5	NA	mg/L
EP-12A	3/30/2017	Magnesium, Dissolved	130	10	5	NA	mg/L
EP-12A	3/30/2017	Manganese, Dissolved	0.36	0.002	0.00038	2017400	mg/L
EP-12A	3/30/2017	Sodium, Dissolved	3800	100	50	NA	mg/L
EP-12A	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-12A	3/30/2017	Selenium, Dissolved	0.042	0.005	0.0019	50000	mg/L
EP-12A	3/30/2017	Uranium, Dissolved	0.0012	0.0025	0.00025	NA	mg/L
EP-12A	3/30/2017	Zinc, Dissolved	0.0076	0.01	0.0011	5960450	mg/L
EP-12A	3/30/2017	Iron, Total	0.7	0.02	0.02	13822000	mg/L
EP-12A	3/30/2017	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
EP-12A	3/30/2017	Manganese, Total	0.41	0.002	0.00027	2017000	mg/L
EP-12A	3/30/2017	Lead, Total	0.0005	0.0025	0.00041	15000	mg/L
EP-12A	3/30/2017	Selenium, Total	0.048	0.005	0.00094	50000	mg/L
EP-12A	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-12A	3/30/2017	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
EP-12A	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-12A	10/24/2017	Arsenic, Total	0.036	0.01	0.0041	10000	mg/L
EP-12A	10/24/2017	Barium, Total	0.21	0.002	0.001	2000000	mg/L
EP-12A	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12A	10/24/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-12A	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12A	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-12A	10/24/2017	Arsenic, Dissolved	0.036	0.01	0.0029	10000	mg/L
EP-12A	10/24/2017	Barium, Dissolved	0.19	0.002	0.00099	2000000	mg/L
EP-12A	10/24/2017	Calcium, Dissolved	700	10	0.78	NA	mg/L
EP-12A	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	10/24/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
EP-12A	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12A	10/24/2017	Iron, Dissolved	0.22	0.02	0.016	13821880	mg/L
EP-12A	10/24/2017	Potassium, Dissolved	720	10	1.1	NA	mg/L
EP-12A	10/24/2017	Magnesium, Dissolved	320	10	2.5	NA	mg/L
EP-12A	10/24/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
EP-12A	10/24/2017	Sodium, Dissolved	8400	100	16	NA	mg/L
EP-12A	10/24/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-12A	10/24/2017	Selenium, Dissolved	ND	0.5	0.38	50000	mg/L
EP-12A	10/24/2017	Uranium, Dissolved	0.0023	0.005	0.00096	NA	mg/L
EP-12A	10/24/2017	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
EP-12A	10/24/2017	Iron, Total	0.54	0.02	0.01	13822000	mg/L
EP-12A	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-12A	10/24/2017	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
EP-12A	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12A	10/24/2017	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-12A	10/24/2017	Uranium, Total	0.0028	0.005	0.0015	30000	mg/L
EP-12A	10/24/2017	Zinc, Total	0.0088	0.01	0.0033	5960000	mg/L
EP-12A	9/7/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-12A	9/7/2018	Arsenic, Total	0.052	0.02	0.0083	10000	mg/L
EP-12A	9/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
EP-12A	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12A	9/7/2018	Chromium, Total	0.018	0.006	0.0018	50000	mg/L
EP-12A	9/7/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
EP-12A	9/7/2018	Silver, Dissolved	0.017	0.005	0.0018	81200	mg/L
EP-12A	9/7/2018	Arsenic, Dissolved	0.049	0.02	0.0084	10000	mg/L
EP-12A	9/7/2018	Barium, Dissolved	0.084	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	9/7/2018	Calcium, Dissolved	740	10	0.78	NA	mg/L
EP-12A	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12A	9/7/2018	Chromium, Dissolved	0.0087	0.006	0.0013	100000	mg/L
EP-12A	9/7/2018	Copper, Dissolved	0.0062	0.006	0.0032	790000	mg/L
EP-12A	9/7/2018	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
EP-12A	9/7/2018	Potassium, Dissolved	1700	50	5.6	NA	mg/L
EP-12A	9/7/2018	Magnesium, Dissolved	820	10	2.5	NA	mg/L
EP-12A	9/7/2018	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
EP-12A	9/7/2018	Sodium, Dissolved	15000	500	82	NA	mg/L
EP-12A	9/7/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-12A	9/7/2018	Selenium, Dissolved	0.021	0.02	0.015	50000	mg/L
EP-12A	9/7/2018	Uranium, Dissolved	0.015	0.01	0.0019	NA	mg/L
EP-12A	9/7/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
EP-12A	9/7/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
EP-12A	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-12A	9/7/2018	Manganese, Total	3.1	0.01	0.0055	2017000	mg/L
EP-12A	9/7/2018	Lead, Total	0.0054	0.01	0.0046	15000	mg/L
EP-12A	9/7/2018	Selenium, Total	0.022	0.02	0.02	50000	mg/L
EP-12A	9/7/2018	Uranium, Total	0.017	0.01	0.0014	30000	mg/L
EP-12A	9/7/2018	Zinc, Total	0.021	0.01	0.0033	5960000	mg/L
EP-12A	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-12A	5/29/2012	Arsenic, Total	0.026	0.01	0.0011	10000	mg/L
EP-12A	5/29/2012	Barium, Total	0.075	0.002	0.00031	2000000	mg/L
EP-12A	5/29/2012	Calcium, Total	310	10	0.26	NA	mg/L
EP-12A	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-12A	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-12A	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-12A	5/29/2012	Iron, Total	0.16	0.02	0.0019	13822000	mg/L
EP-12A	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12A	5/29/2012	Potassium, Total	240	10	4.8	NA	mg/L
EP-12A	5/29/2012	Magnesium, Total	130	10	0.13	NA	mg/L
EP-12A	5/29/2012	Manganese, Total	0.73	0.002	0.00062	2017000	mg/L
EP-12A	5/29/2012	Sodium, Total	4000	50	2.2	NA	mg/L
EP-12A	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-12A	5/29/2012	Selenium, Total	0.018	0.01	0.0033	50000	mg/L
EP-12A	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-12A	5/29/2012	Zinc, Total	0.08	0.01	0.00062	5960000	mg/L
EP-12A	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-12A	11/6/2012	Arsenic, Total	0.015	0.0025	0.0014	10000	mg/L
EP-12A	11/6/2012	Barium, Total	0.053	0.002	0.00039	2000000	mg/L
EP-12A	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-12A	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-12A	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-12A	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12A	11/6/2012	Iron, Total	0.86	0.02	0.013	13822000	mg/L
EP-12A	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12A	11/6/2012	Potassium, Total	220	10	4.8	NA	mg/L
EP-12A	11/6/2012	Magnesium, Total	80	1	0.013	NA	mg/L
EP-12A	11/6/2012	Manganese, Total	0.32	0.002	0.00026	2017000	mg/L
EP-12A	11/6/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-12A	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-12A	11/6/2012	Selenium, Total	0.013	0.0025	0.0025	50000	mg/L
EP-12A	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-12A	11/6/2012	Zinc, Total	0.02	0.01	0.0011	5960000	mg/L
EP-12B	11/21/2019	Aluminum, Dissolved	0.16	0.02	0.002488	19913930	mg/L
EP-12B	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-12B	11/21/2019	Arsenic, Dissolved	0.0066	0.005	0.000504	10000	mg/L
EP-12B	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
EP-12B	11/21/2019	Beryllium, Dissolved	0.00057	0.002	0.000284	4000	mg/L
EP-12B	11/21/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
EP-12B	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12B	11/21/2019	Calcium, Dissolved	99	5	0.309446	NA	mg/L
EP-12B	11/21/2019	Chromium, Dissolved	0.012	0.006	0.001533	100000	mg/L
EP-12B	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12B	11/21/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L
EP-12B	11/21/2019	Iron, Dissolved	7	0.4	0.174937	13821880	mg/L
EP-12B	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12B	11/21/2019	Magnesium, Dissolved	41	5	0.251452	NA	mg/L
EP-12B	11/21/2019	Manganese, Dissolved	0.39	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	11/21/2019	Molybdenum, Dissolved	0.018	0.008	0.006735	98700	mg/L
EP-12B	11/21/2019	Nickel, Dissolved	0.059	0.01	0.004009	372000	mg/L
EP-12B	11/21/2019	Potassium, Dissolved	250	5	0.811441	NA	mg/L
EP-12B	11/21/2019	Selenium, Dissolved	0.0054	0.005	0.000857	50000	mg/L
EP-12B	11/21/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
EP-12B	11/21/2019	Sodium, Dissolved	890	20	8.323526	NA	mg/L
EP-12B	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12B	11/21/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-12B	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L
EP-12B	11/21/2019	Aluminum, Total	0.37	0.02	0.002488	19914000	mg/L
EP-12B	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12B	11/21/2019	Arsenic, Total	0.0098	0.005	0.001561	10000	mg/L
EP-12B	11/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
EP-12B	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-12B	11/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
EP-12B	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12B	11/21/2019	Chromium, Total	0.013	0.006	0.001533	50000	mg/L
EP-12B	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12B	11/21/2019	Copper, Total	0.0048	0.006	0.004072	790000	mg/L
EP-12B	11/21/2019	Iron, Total	8	0.2	0.087469	13822000	mg/L
EP-12B	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-12B	11/21/2019	Manganese, Total	0.4	0.002	0.00029	2017000	mg/L
EP-12B	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-12B	11/21/2019	Molybdenum, Total	0.05	0.008	0.006735	98700	mg/L
EP-12B	11/21/2019	Nickel, Total	0.064	0.01	0.004009	372000	mg/L
EP-12B	11/21/2019	Selenium, Total	0.0037	0.005	0.00239	50000	mg/L
EP-12B	11/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
EP-12B	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12B	11/21/2019	Uranium, Total	0.0025	0.0025	0.000424	30000	mg/L
EP-12B	11/21/2019	Zinc, Total	0.032	0.01	0.005772	5960000	mg/L
EP-12B	4/29/2019	Aluminum, Total	0.74	0.02	0.002488	19914000	mg/L
EP-12B	4/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-12B	4/29/2019	Arsenic, Total	0.021	0.005	0.001561	10000	mg/L
EP-12B	4/29/2019	Barium, Total	0.097	0.002	0.000648	2000000	mg/L
EP-12B	4/29/2019	Beryllium, Total	0.00065	0.002	0.000284	4000	mg/L
EP-12B	4/29/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
EP-12B	4/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-12B	4/29/2019	Chromium, Total	0.0028	0.006	0.001533	50000	mg/L
EP-12B	4/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-12B	4/29/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
EP-12B	4/29/2019	Iron, Total	0.49	0.02	0.008747	13822000	mg/L
EP-12B	4/29/2019	Lead, Total	0.00038	0.0025	0.000274	15000	mg/L
EP-12B	4/29/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
EP-12B	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-12B	4/29/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
EP-12B	4/29/2019	Nickel, Total	0.03	0.01	0.004009	372000	mg/L
EP-12B	4/29/2019	Selenium, Total	0.0078	0.005	0.00239	50000	mg/L
EP-12B	4/29/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
EP-12B	4/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-12B	4/29/2019	Uranium, Total	0.0018	0.0025	0.000424	30000	mg/L
EP-12B	4/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-12B	4/29/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-12B	4/29/2019	Antimony, Dissolved	0.0024	0.005	0.001947	6000	mg/L
EP-12B	4/29/2019	Arsenic, Dissolved	0.019	0.005	0.000504	10000	mg/L
EP-12B	4/29/2019	Barium, Dissolved	0.093	0.002	0.000648	2000000	mg/L
EP-12B	4/29/2019	Beryllium, Dissolved	0.00042	0.002	0.000284	4000	mg/L
EP-12B	4/29/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
EP-12B	4/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-12B	4/29/2019	Calcium, Dissolved	200	5	0.309446	NA	mg/L
EP-12B	4/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-12B	4/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-12B	4/29/2019	Copper, Dissolved	0.0046	0.006	0.001296	790000	mg/L
EP-12B	4/29/2019	Iron, Dissolved	0.13	0.02	0.008747	13821880	mg/L
EP-12B	4/29/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-12B	4/29/2019	Magnesium, Dissolved	250	5	0.251452	NA	mg/L
EP-12B	4/29/2019	Manganese, Dissolved	0.066	0.002	0.00029	2017400	mg/L
EP-12B	4/29/2019	Molybdenum, Dissolved	0.014	0.008	0.006735	98700	mg/L
EP-12B	4/29/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
EP-12B	4/29/2019	Potassium, Dissolved	810	10	1.622881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	4/29/2019	Selenium, Dissolved	0.0052	0.005	0.000857	50000	mg/L
EP-12B	4/29/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
EP-12B	4/29/2019	Sodium, Dissolved	4700	100	41.61763	NA	mg/L
EP-12B	4/29/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-12B	4/29/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-12B	4/29/2019	Zinc, Dissolved	0.036	0.01	0.002252	5960450	mg/L
EP-12B	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-12B	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-12B	12/22/2020	Chromium, Dissolved	0.0107	0.01	0.005	100000	mg/L
EP-12B	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-12B	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-12B	12/22/2020	Manganese, Dissolved	1.11	0.01	0.003	2017400	mg/L
EP-12B	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-12B	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-12B	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-12B	12/22/2020	Aluminum, Total	0.409	0.2	0.051	19914000	mg/L
EP-12B	12/22/2020	Boron, Total	0.905	0.1	0.022	3949	mg/L
EP-12B	12/22/2020	Barium, Total	0.195	0.01	0.003	2000000	mg/L
EP-12B	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-12B	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-12B	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-12B	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-12B	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-12B	12/22/2020	Manganese, Total	1.05	0.01	0.003	2017000	mg/L
EP-12B	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-12B	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-12B	12/22/2020	Aluminum, Dissolved	ND	0.4	0.102	19913930	mg/L
EP-12B	12/22/2020	Barium, Dissolved	0.202	0.02	0.006	2000000	mg/L
EP-12B	12/22/2020	Boron, Dissolved	0.92	0.2	0.044	3949110	mg/L
EP-12B	12/22/2020	Iron, Dissolved	0.828	0.4	0.15	13821880	mg/L
EP-12B	12/22/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
EP-12B	12/22/2020	Nickel, Dissolved	0.125	0.012	0.006	372000	mg/L
EP-12B	12/22/2020	Iron, Total	0.956	0.2	0.075	13822000	mg/L
EP-12B	12/22/2020	Nickel, Total	0.126	0.006	0.003	372000	mg/L
EP-12B	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-12B	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-12B	12/22/2020	Arsenic, Total Recoverable	**16**	5	1.43	10	ug/L
EP-12B	12/22/2020	Lead, Total Recoverable	ND	5	0.665	15	ug/L
EP-12B	12/22/2020	Antimony, Total Recoverable	*ND*	*10*	1.76	6	ug/L
EP-12B	12/22/2020	Selenium, Total Recoverable	ND	25	7.15	50	ug/L
EP-12B	12/22/2020	Thallium, Total Recoverable	*ND*	*5*	1.7	2	ug/L
EP-12B	12/22/2020	Uranium, Total Recoverable	ND	25	5.6	30	ug/L
EP-12B	12/22/2020	Arsenic, Dissolved	**15.9**	5	1.43	10	ug/L
EP-12B	12/22/2020	Lead, Dissolved	ND	5	0.665	NA	ug/L
EP-12B	12/22/2020	Antimony, Dissolved	*ND*	*10*	1.76	6	ug/L
EP-12B	12/22/2020	Selenium, Dissolved	ND	25	7.15	50	ug/L
EP-12B	12/22/2020	Thallium, Dissolved	*ND*	*5*	1.7	2	ug/L
EP-12B	12/22/2020	Uranium, Dissolved	ND	25	5.6	NA	ug/L
EP-12B	9/18/2020	Antimony, Dissolved	0.0052	0.005	0.0035	6000	mg/L
EP-12B	9/18/2020	Arsenic, Dissolved	0.019	0.005	0.001	10000	mg/L
EP-12B	9/18/2020	Lead, Dissolved	0.00022	0.0025	0.00017	NA	mg/L
EP-12B	9/18/2020	Selenium, Dissolved	0.0043	0.005	0.0033	50000	mg/L
EP-12B	9/18/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-12B	9/18/2020	Uranium, Dissolved	0.0016	0.0025	0.00033	NA	mg/L
EP-12B	9/18/2020	Magnesium, Dissolved	280	5	0.34	NA	mg/L
EP-12B	9/18/2020	Manganese, Dissolved	1.2	0.01	0.0029	2017400	mg/L
EP-12B	9/18/2020	Nickel, Dissolved	0.039	0.05	0.016	372000	mg/L
EP-12B	9/18/2020	Silver, Dissolved	0.027	0.025	0.0063	81200	mg/L
EP-12B	9/18/2020	Calcium, Dissolved	1000	50	5.7	NA	mg/L
EP-12B	9/18/2020	Potassium, Dissolved	510	50	8	NA	mg/L
EP-12B	9/18/2020	Sodium, Dissolved	5400	100	14	NA	mg/L
EP-12B	9/18/2020	Aluminum, Dissolved	0.041	0.02	0.0056	19913930	mg/L
EP-12B	9/18/2020	Barium, Dissolved	0.26	0.002	0.0011	2000000	mg/L
EP-12B	9/18/2020	Beryllium, Dissolved	0.0011	0.002	0.00088	4000	mg/L
EP-12B	9/18/2020	Boron, Dissolved	0.9	0.04	0.0067	3949110	mg/L
EP-12B	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-12B	9/18/2020	Chromium, Dissolved	0.0062	0.006	0.002	100000	mg/L
EP-12B	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-12B	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/18/2020	Iron, Dissolved	0.22	0.02	0.01	13821880	mg/L
EP-12B	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-12B	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
EP-12B	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-12B	9/18/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-12B	9/18/2020	Arsenic, Total	0.022	0.01	0.0026	10000	mg/L
EP-12B	9/18/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-12B	9/18/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-12B	9/18/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-12B	9/18/2020	Uranium, Total	0.0018	0.005	0.00065	30000	mg/L
EP-12B	9/18/2020	Aluminum, Total	0.46	0.02	0.0074	19914000	mg/L
EP-12B	9/18/2020	Barium, Total	0.26	0.003	0.0016	2000000	mg/L
EP-12B	9/18/2020	Beryllium, Total	0.0012	0.002	0.00088	4000	mg/L
EP-12B	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12B	9/18/2020	Chromium, Total	0.0043	0.006	0.0021	50000	mg/L
EP-12B	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-12B	9/18/2020	Iron, Total	0.42	0.05	0.013	13822000	mg/L
EP-12B	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-12B	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12B	9/18/2020	Nickel, Total	0.039	0.01	0.0033	372000	mg/L
EP-12B	9/18/2020	Silver, Total	0.016	0.005	0.0013	50000	mg/L
EP-12B	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
EP-12B	9/18/2020	Manganese, Total	1.2	0.01	0.0041	2017000	mg/L
EP-12B	9/18/2020	Boron, Total	0.95	0.04	0.0074	3949	mg/L
EP-12B	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-12B	5/29/2012	Arsenic, Total	0.019	0.01	0.0011	10000	mg/L
EP-12B	5/29/2012	Barium, Total	0.067	0.002	0.00031	2000000	mg/L
EP-12B	5/29/2012	Calcium, Total	290	10	0.26	NA	mg/L
EP-12B	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-12B	5/29/2012	Chromium, Total	0.0071	0.006	0.00056	50000	mg/L
EP-12B	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-12B	5/29/2012	Iron, Total	0.18	0.02	0.0019	13822000	mg/L
EP-12B	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-12B	5/29/2012	Potassium, Total	190	10	4.8	NA	mg/L
EP-12B	5/29/2012	Magnesium, Total	130	10	0.13	NA	mg/L
EP-12B	5/29/2012	Manganese, Total	0.11	0.002	0.00062	2017000	mg/L
EP-12B	5/29/2012	Sodium, Total	4300	50	2.2	NA	mg/L
EP-12B	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-12B	5/29/2012	Selenium, Total	0.024	0.01	0.0033	50000	mg/L
EP-12B	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-12B	5/29/2012	Zinc, Total	0.015	0.01	0.00062	5960000	mg/L
EP-12B	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-12B	11/6/2012	Arsenic, Total	0.0092	0.0025	0.0014	10000	mg/L
EP-12B	11/6/2012	Barium, Total	0.04	0.002	0.00039	2000000	mg/L
EP-12B	11/6/2012	Calcium, Total	150	10	0.26	NA	mg/L
EP-12B	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-12B	11/6/2012	Chromium, Total	0.0069	0.006	0.001	50000	mg/L
EP-12B	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	11/6/2012	Iron, Total	1.6	0.1	0.066	13822000	mg/L
EP-12B	11/6/2012	Mercury, Total	0.00042	0.0002	0.000025	2000	mg/L
EP-12B	11/6/2012	Potassium, Total	100	10	4.8	NA	mg/L
EP-12B	11/6/2012	Magnesium, Total	49	1	0.013	NA	mg/L
EP-12B	11/6/2012	Manganese, Total	0.47	0.002	0.00026	2017000	mg/L
EP-12B	11/6/2012	Sodium, Total	1700	50	2.2	NA	mg/L
EP-12B	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-12B	11/6/2012	Selenium, Total	0.0089	0.0025	0.0025	50000	mg/L
EP-12B	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-12B	11/6/2012	Zinc, Total	0.031	0.01	0.0011	5960000	mg/L
EP-12B	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-12B	5/28/2013	Arsenic, Total	ND	0.01	0.0013	10000	mg/L
EP-12B	5/28/2013	Barium, Total	0.052	0.01	0.0048	2000000	mg/L
EP-12B	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-12B	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-12B	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-12B	5/28/2013	Iron, Total	0.78	0.1	0.045	13822000	mg/L
EP-12B	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12B	5/28/2013	Manganese, Total	0.27	0.01	0.00082	2017000	mg/L
EP-12B	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-12B	5/28/2013	Selenium, Total	0.014	0.01	0.0055	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-12B	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-12B	10/15/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
EP-12B	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-12B	10/15/2013	Barium, Total	0.074	0.002	0.00095	2000000	mg/L
EP-12B	10/15/2013	Calcium, Total	82	1	0.069	NA	mg/L
EP-12B	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-12B	10/15/2013	Chromium, Total	0.0083	0.006	0.00084	50000	mg/L
EP-12B	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-12B	10/15/2013	Iron, Total	0.26	0.02	0.0089	13822000	mg/L
EP-12B	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-12B	10/15/2013	Potassium, Total	130	50	15	NA	mg/L
EP-12B	10/15/2013	Magnesium, Total	31	1	0.051	NA	mg/L
EP-12B	10/15/2013	Manganese, Total	0.2	0.002	0.00016	2017000	mg/L
EP-12B	10/15/2013	Sodium, Total	1300	50	18	NA	mg/L
EP-12B	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-12B	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-12B	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12B	10/15/2013	Zinc, Total	0.016	0.01	0.00076	5960000	mg/L
EP-12B	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12B	3/5/2014	Arsenic, Total	0.014	0.01	0.0036	10000	mg/L
EP-12B	3/5/2014	Barium, Total	0.08	0.002	0.00057	2000000	mg/L
EP-12B	3/5/2014	Calcium, Total	59	1	0.082	NA	mg/L
EP-12B	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12B	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-12B	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-12B	3/5/2014	Iron, Total	1.2	0.1	0.036	13822000	mg/L
EP-12B	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12B	3/5/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-12B	3/5/2014	Magnesium, Total	32	1	0.018	NA	mg/L
EP-12B	3/5/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
EP-12B	3/5/2014	Sodium, Total	1600	50	20	NA	mg/L
EP-12B	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-12B	3/5/2014	Selenium, Total	0.014	0.01	0.0051	50000	mg/L
EP-12B	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-12B	3/5/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
EP-12B	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-12B	11/12/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
EP-12B	11/12/2014	Barium, Total	0.087	0.002	0.0005	2000000	mg/L
EP-12B	11/12/2014	Calcium, Total	150	5	0.41	NA	mg/L
EP-12B	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-12B	11/12/2014	Chromium, Total	0.011	0.006	0.0028	50000	mg/L
EP-12B	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-12B	11/12/2014	Iron, Total	1.4	0.1	0.036	13822000	mg/L
EP-12B	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-12B	11/12/2014	Potassium, Total	150	5	0.47	NA	mg/L
EP-12B	11/12/2014	Magnesium, Total	44	1	0.018	NA	mg/L
EP-12B	11/12/2014	Manganese, Total	0.27	0.002	0.00049	2017000	mg/L
EP-12B	11/12/2014	Sodium, Total	1600	20	7.8	NA	mg/L
EP-12B	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-12B	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-12B	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-12B	11/12/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
EP-12B	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12B	3/25/2015	Arsenic, Total	0.018	0.01	0.0044	10000	mg/L
EP-12B	3/25/2015	Barium, Total	0.1	0.002	0.00073	2000000	mg/L
EP-12B	3/25/2015	Calcium, Total	240	5	0.28	NA	mg/L
EP-12B	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-12B	3/25/2015	Chromium, Total	0.011	0.006	0.0022	50000	mg/L
EP-12B	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12B	3/25/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
EP-12B	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12B	3/25/2015	Potassium, Total	92	1	0.18	NA	mg/L
EP-12B	3/25/2015	Magnesium, Total	67	1	0.039	NA	mg/L
EP-12B	3/25/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
EP-12B	3/25/2015	Sodium, Total	1900	50	3.6	NA	mg/L
EP-12B	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-12B	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-12B	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	3/25/2015	Zinc, Total	0.02	0.01	0.0036	5960000	mg/L
EP-12B	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-12B	9/1/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
EP-12B	9/1/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
EP-12B	9/1/2015	Calcium, Total	180	5	0.28	NA	mg/L
EP-12B	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-12B	9/1/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
EP-12B	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-12B	9/1/2015	Iron, Total	0.55	0.02	0.0072	13822000	mg/L
EP-12B	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-12B	9/1/2015	Potassium, Total	90	5	0.89	NA	mg/L
EP-12B	9/1/2015	Magnesium, Total	63	1	0.039	NA	mg/L
EP-12B	9/1/2015	Manganese, Total	0.26	0.002	0.0015	2017000	mg/L
EP-12B	9/1/2015	Sodium, Total	2200	50	3.6	NA	mg/L
EP-12B	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-12B	9/1/2015	Selenium, Total	0.017	0.005	0.00062	50000	mg/L
EP-12B	9/1/2015	Uranium, Total	0.0035	0.0025	0.000025	30000	mg/L
EP-12B	9/1/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
EP-12B	8/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
EP-12B	8/30/2016	Arsenic, Total	0.016	0.01	0.0014	10000	mg/L
EP-12B	8/30/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
EP-12B	8/30/2016	Calcium, Total	310	10	5	NA	mg/L
EP-12B	8/30/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
EP-12B	8/30/2016	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-12B	8/30/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
EP-12B	8/30/2016	Iron, Total	2.6	0.1	0.1	13822000	mg/L
EP-12B	8/30/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
EP-12B	8/30/2016	Potassium, Total	90	5	2.5	NA	mg/L
EP-12B	8/30/2016	Magnesium, Total	81	5	2.5	NA	mg/L
EP-12B	8/30/2016	Manganese, Total	0.43	0.002	0.00032	2017000	mg/L
EP-12B	8/30/2016	Sodium, Total	2200	50	25	NA	mg/L
EP-12B	8/30/2016	Lead, Total	ND	0.005	0.0038	15000	mg/L
EP-12B	8/30/2016	Selenium, Total	0.031	0.01	0.0021	50000	mg/L
EP-12B	8/30/2016	Uranium, Total	0.0013	0.005	0.00051	30000	mg/L
EP-12B	8/30/2016	Zinc, Total	0.045	0.01	0.0028	5960000	mg/L
EP-12B	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-12B	3/30/2017	Arsenic, Total	0.017	0.005	0.0011	10000	mg/L
EP-12B	3/30/2017	Barium, Total	0.21	0.002	0.00079	2000000	mg/L
EP-12B	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-12B	3/30/2017	Chromium, Total	0.0083	0.006	0.0027	50000	mg/L
EP-12B	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-12B	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-12B	3/30/2017	Arsenic, Dissolved	0.017	0.005	0.00089	10000	mg/L
EP-12B	3/30/2017	Barium, Dissolved	0.19	0.002	0.00085	2000000	mg/L
EP-12B	3/30/2017	Calcium, Dissolved	340	10	5	NA	mg/L
EP-12B	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	3/30/2017	Chromium, Dissolved	0.0086	0.006	0.001	100000	mg/L
EP-12B	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	3/30/2017	Iron, Dissolved	0.49	0.02	0.02	13821880	mg/L
EP-12B	3/30/2017	Potassium, Dissolved	290	10	5	NA	mg/L
EP-12B	3/30/2017	Magnesium, Dissolved	100	10	5	NA	mg/L
EP-12B	3/30/2017	Manganese, Dissolved	0.38	0.002	0.00038	2017400	mg/L
EP-12B	3/30/2017	Sodium, Dissolved	3100	100	50	NA	mg/L
EP-12B	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-12B	3/30/2017	Selenium, Dissolved	0.03	0.005	0.0019	50000	mg/L
EP-12B	3/30/2017	Uranium, Dissolved	0.0021	0.0025	0.00025	NA	mg/L
EP-12B	3/30/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
EP-12B	3/30/2017	Iron, Total	0.93	0.02	0.02	13822000	mg/L
EP-12B	3/30/2017	Mercury, Total	0.000096	0.0002	0.000037	2000	mg/L
EP-12B	3/30/2017	Manganese, Total	0.37	0.002	0.00027	2017000	mg/L
EP-12B	3/30/2017	Lead, Total	0.00087	0.0025	0.00041	15000	mg/L
EP-12B	3/30/2017	Selenium, Total	0.03	0.005	0.00094	50000	mg/L
EP-12B	3/30/2017	Uranium, Total	0.0012	0.0025	0.00087	30000	mg/L
EP-12B	3/30/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
EP-12B	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-12B	10/24/2017	Arsenic, Total	0.012	0.01	0.0041	10000	mg/L
EP-12B	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-12B	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	10/24/2017	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-12B	10/24/2017	Arsenic, Dissolved	0.011	0.005	0.0014	10000	mg/L
EP-12B	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-12B	10/24/2017	Calcium, Dissolved	230	10	0.78	NA	mg/L
EP-12B	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	10/24/2017	Chromium, Dissolved	0.0044	0.006	0.0013	100000	mg/L
EP-12B	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	10/24/2017	Iron, Dissolved	0.63	0.02	0.016	13821880	mg/L
EP-12B	10/24/2017	Potassium, Dissolved	370	10	1.1	NA	mg/L
EP-12B	10/24/2017	Magnesium, Dissolved	77	1	0.25	NA	mg/L
EP-12B	10/24/2017	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
EP-12B	10/24/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
EP-12B	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	10/24/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
EP-12B	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-12B	10/24/2017	Zinc, Dissolved	0.0098	0.01	0.0021	5960450	mg/L
EP-12B	10/24/2017	Iron, Total	0.85	0.02	0.01	13822000	mg/L
EP-12B	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-12B	10/24/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
EP-12B	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12B	10/24/2017	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-12B	10/24/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
EP-12B	10/24/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
EP-12B	2/22/2018	Silver, Total	0.0059	0.005	0.0012	50000	mg/L
EP-12B	2/22/2018	Arsenic, Total	0.013	0.02	0.0083	10000	mg/L
EP-12B	2/22/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
EP-12B	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	2/22/2018	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L
EP-12B	2/22/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
EP-12B	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-12B	2/22/2018	Arsenic, Dissolved	0.012	0.02	0.0084	10000	mg/L
EP-12B	2/22/2018	Barium, Dissolved	0.13	0.01	0.0049	2000000	mg/L
EP-12B	2/22/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
EP-12B	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-12B	2/22/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-12B	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-12B	2/22/2018	Iron, Dissolved	0.52	0.1	0.082	13821880	mg/L
EP-12B	2/22/2018	Potassium, Dissolved	310	5	0.56	NA	mg/L
EP-12B	2/22/2018	Magnesium, Dissolved	72	5	1.2	NA	mg/L
EP-12B	2/22/2018	Manganese, Dissolved	0.23	0.01	0.002	2017400	mg/L
EP-12B	2/22/2018	Sodium, Dissolved	1800	50	8.2	NA	mg/L
EP-12B	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	2/22/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
EP-12B	2/22/2018	Uranium, Dissolved	0.00079	0.0025	0.00048	NA	mg/L
EP-12B	2/22/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
EP-12B	2/22/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
EP-12B	2/22/2018	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
EP-12B	2/22/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
EP-12B	2/22/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-12B	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
EP-12B	2/22/2018	Uranium, Total	0.00098	0.0025	0.00034	30000	mg/L
EP-12B	2/22/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
EP-12B	9/7/2018	Silver, Total	0.0068	0.005	0.0012	50000	mg/L
EP-12B	9/7/2018	Arsenic, Total	0.017	0.005	0.0021	10000	mg/L
EP-12B	9/7/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-12B	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-12B	9/7/2018	Chromium, Total	0.0038	0.006	0.0018	50000	mg/L
EP-12B	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-12B	9/7/2018	Silver, Dissolved	0.0073	0.005	0.0018	81200	mg/L
EP-12B	9/7/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
EP-12B	9/7/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-12B	9/7/2018	Calcium, Dissolved	280	10	0.78	NA	mg/L
EP-12B	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-12B	9/7/2018	Chromium, Dissolved	0.002	0.006	0.0013	100000	mg/L
EP-12B	9/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-12B	9/7/2018	Iron, Dissolved	0.12	0.02	0.016	13821880	mg/L
EP-12B	9/7/2018	Potassium, Dissolved	560	10	1.1	NA	mg/L
EP-12B	9/7/2018	Magnesium, Dissolved	140	10	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	9/7/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
EP-12B	9/7/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
EP-12B	9/7/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-12B	9/7/2018	Selenium, Dissolved	0.0041	0.005	0.0038	50000	mg/L
EP-12B	9/7/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-12B	9/7/2018	Zinc, Dissolved	0.0072	0.01	0.0021	5960450	mg/L
EP-12B	9/7/2018	Iron, Total	0.18	0.02	0.01	13822000	mg/L
EP-12B	9/7/2018	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
EP-12B	9/7/2018	Manganese, Total	0.27	0.002	0.0011	2017000	mg/L
EP-12B	9/7/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-12B	9/7/2018	Selenium, Total	0.0059	0.005	0.0049	50000	mg/L
EP-12B	9/7/2018	Uranium, Total	0.0017	0.005	0.00068	30000	mg/L
EP-12B	9/7/2018	Zinc, Total	0.0035	0.01	0.0033	5960000	mg/L
EP-2	9/17/2020	Antimony, Dissolved	0.0014	0.001	0.0007	6000	mg/L
EP-2	9/17/2020	Arsenic, Dissolved	ND	0.001	0.00021	10000	mg/L
EP-2	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
EP-2	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
EP-2	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
EP-2	9/17/2020	Uranium, Dissolved	ND	0.0005	0.000065	NA	mg/L
EP-2	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
EP-2	9/17/2020	Aluminum, Dissolved	0.0065	0.02	0.0056	19913930	mg/L
EP-2	9/17/2020	Barium, Dissolved	0.0013	0.002	0.0011	2000000	mg/L
EP-2	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-2	9/17/2020	Boron, Dissolved	ND	0.04	0.0067	3949110	mg/L
EP-2	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-2	9/17/2020	Calcium, Dissolved	0.45	1	0.11	NA	mg/L
EP-2	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
EP-2	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-2	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-2	9/17/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
EP-2	9/17/2020	Magnesium, Dissolved	ND	1	0.067	NA	mg/L
EP-2	9/17/2020	Manganese, Dissolved	0.0008	0.002	0.00058	2017400	mg/L
EP-2	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-2	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
EP-2	9/17/2020	Potassium, Dissolved	ND	1	0.16	NA	mg/L
EP-2	9/17/2020	Sodium, Dissolved	0.5	1	0.14	NA	mg/L
EP-2	9/17/2020	Zinc, Dissolved	0.59	0.01	0.006	5960450	mg/L
EP-2	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-2	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
EP-2	9/17/2020	Arsenic, Total	ND	0.001	0.00026	10000	mg/L
EP-2	9/17/2020	Lead, Total	0.000043	0.0005	0.000034	15000	mg/L
EP-2	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
EP-2	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-2	9/17/2020	Uranium, Total	ND	0.0005	0.000065	30000	mg/L
EP-2	9/17/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
EP-2	9/17/2020	Barium, Total	ND	0.003	0.0016	2000000	mg/L
EP-2	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-2	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	9/17/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
EP-2	9/17/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-2	9/17/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
EP-2	9/17/2020	Manganese, Total	ND	0.002	0.00081	2017000	mg/L
EP-2	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-2	9/17/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	9/17/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
EP-2	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
EP-2	9/17/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
EP-2	9/17/2020	Boron, Total	ND	0.04	0.0074	3949	mg/L
EP-2	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-2	12/21/2020	Aluminum, Dissolved	0.29	0.2	0.051	19913930	mg/L
EP-2	12/21/2020	Barium, Dissolved	0.177	0.01	0.003	2000000	mg/L
EP-2	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-2	12/21/2020	Boron, Dissolved	0.432	0.1	0.022	3949110	mg/L
EP-2	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-2	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-2	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-2	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-2	12/21/2020	Iron, Dissolved	1.58	0.2	0.075	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	12/21/2020	Manganese, Dissolved	0.312	0.01	0.003	2017400	mg/L
EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-2	12/21/2020	Nickel, Dissolved	0.098	0.006	0.003	372000	mg/L
EP-2	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-2	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-2	12/21/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
EP-2	12/21/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
EP-2	12/21/2020	Barium, Total	0.0333	0.01	0.003	2000000	mg/L
EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-2	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-2	12/21/2020	Manganese, Total	0.0657	0.01	0.003	2017000	mg/L
EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-2	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-2	12/21/2020	Iron, Total	0.366	0.2	0.075	13822000	mg/L
EP-2	12/21/2020	Nickel, Total	0.0166	0.006	0.003	372000	mg/L
EP-2	12/21/2020	Arsenic, Total Recoverable	5.37	1	0.286	10	ug/L
EP-2	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-2	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-2	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-2	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-2	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-2	12/21/2020	Arsenic, Dissolved	5.09	1	0.286	10	ug/L
EP-2	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-2	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-2	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-2	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-2	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-2	9/16/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
EP-2	9/16/2020	Arsenic, Dissolved	0.0062	0.005	0.001	10000	mg/L
EP-2	9/16/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
EP-2	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
EP-2	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-2	9/16/2020	Uranium, Dissolved	0.00073	0.0025	0.00033	NA	mg/L
EP-2	9/16/2020	Aluminum, Dissolved	0.3	0.02	0.0056	19913930	mg/L
EP-2	9/16/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-2	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-2	9/16/2020	Boron, Dissolved	0.43	0.04	0.0067	3949110	mg/L
EP-2	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-2	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
EP-2	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-2	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-2	9/16/2020	Magnesium, Dissolved	88	1	0.067	NA	mg/L
EP-2	9/16/2020	Manganese, Dissolved	0.11	0.002	0.00058	2017400	mg/L
EP-2	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-2	9/16/2020	Nickel, Dissolved	0.051	0.01	0.0033	372000	mg/L
EP-2	9/16/2020	Silver, Dissolved	0.0028	0.005	0.0013	81200	mg/L
EP-2	9/16/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
EP-2	9/16/2020	Calcium, Dissolved	150	5	0.57	NA	mg/L
EP-2	9/16/2020	Potassium, Dissolved	200	5	0.8	NA	mg/L
EP-2	9/16/2020	Iron, Dissolved	1.9	1	0.52	13821880	mg/L
EP-2	9/16/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
EP-2	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-2	9/16/2020	Arsenic, Total	0.0064	0.001	0.00026	10000	mg/L
EP-2	9/16/2020	Selenium, Total	0.0027	0.001	0.00066	50000	mg/L
EP-2	9/16/2020	Aluminum, Total	0.36	0.02	0.0074	19914000	mg/L
EP-2	9/16/2020	Barium, Total	0.22	0.003	0.0016	2000000	mg/L
EP-2	9/16/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-2	9/16/2020	Boron, Total	0.45	0.04	0.0074	3949	mg/L
EP-2	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	9/16/2020	Chromium, Total	0.0034	0.006	0.0021	50000	mg/L
EP-2	9/16/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
EP-2	9/16/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	9/16/2020	Manganese, Total	0.12	0.002	0.00081	2017000	mg/L
EP-2	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-2	9/16/2020	Silver, Total	0.0028	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/16/2020	Zinc, Total	0.017	0.01	0.0064	5960000	mg/L
EP-2	9/16/2020	Iron, Total	2.3	0.25	0.064	13822000	mg/L
EP-2	9/16/2020	Antimony, Total	0.00075	0.001	0.0007	6000	mg/L
EP-2	9/16/2020	Lead, Total	0.00029	0.0005	0.000034	15000	mg/L
EP-2	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-2	9/16/2020	Uranium, Total	0.00091	0.0005	0.000065	30000	mg/L
EP-2	9/16/2020	Nickel, Total	0.056	0.01	0.0033	372000	mg/L
EP-2	4/30/2019	Aluminum, Total	0.17	0.02	0.002488	19914000	mg/L
EP-2	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-2	4/30/2019	Arsenic, Total	0.0068	0.005	0.001561	10000	mg/L
EP-2	4/30/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
EP-2	4/30/2019	Beryllium, Total	0.00041	0.002	0.000284	4000	mg/L
EP-2	4/30/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
EP-2	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-2	4/30/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
EP-2	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-2	4/30/2019	Copper, Total	0.0057	0.006	0.004072	790000	mg/L
EP-2	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-2	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-2	4/30/2019	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
EP-2	4/30/2019	Mercury, Total	0.000088	0.0002	0.000038	2000	mg/L
EP-2	4/30/2019	Molybdenum, Total	0.0084	0.008	0.006735	98700	mg/L
EP-2	4/30/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
EP-2	4/30/2019	Selenium, Total	0.0082	0.005	0.00239	50000	mg/L
EP-2	4/30/2019	Silver, Total	0.0047	0.005	0.001418	50000	mg/L
EP-2	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-2	4/30/2019	Uranium, Total	0.0021	0.0025	0.000424	30000	mg/L
EP-2	4/30/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
EP-2	4/30/2019	Aluminum, Dissolved	0.1	0.02	0.002488	19913930	mg/L
EP-2	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-2	4/30/2019	Arsenic, Dissolved	0.0047	0.005	0.000504	10000	mg/L
EP-2	4/30/2019	Barium, Dissolved	0.25	0.002	0.000648	2000000	mg/L
EP-2	4/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
EP-2	4/30/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
EP-2	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-2	4/30/2019	Calcium, Dissolved	210	5	0.309446	NA	mg/L
EP-2	4/30/2019	Chromium, Dissolved	0.0018	0.006	0.001533	100000	mg/L
EP-2	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-2	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-2	4/30/2019	Iron, Dissolved	0.3	0.02	0.008747	13821880	mg/L
EP-2	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-2	4/30/2019	Magnesium, Dissolved	56	1	0.05029	NA	mg/L
EP-2	4/30/2019	Manganese, Dissolved	0.27	0.002	0.00029	2017400	mg/L
EP-2	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-2	4/30/2019	Nickel, Dissolved	0.0092	0.01	0.004009	372000	mg/L
EP-2	4/30/2019	Potassium, Dissolved	190	5	0.811441	NA	mg/L
EP-2	4/30/2019	Selenium, Dissolved	0.0049	0.005	0.000857	50000	mg/L
EP-2	4/30/2019	Silver, Dissolved	0.0036	0.005	0.000942	81200	mg/L
EP-2	4/30/2019	Sodium, Dissolved	1100	20	8.323526	NA	mg/L
EP-2	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-2	4/30/2019	Uranium, Dissolved	0.0014	0.0025	0.000374	NA	mg/L
EP-2	4/30/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
EP-2	11/21/2019	Aluminum, Dissolved	0.13	0.02	0.002488	19913930	mg/L
EP-2	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-2	11/21/2019	Arsenic, Dissolved	0.0079	0.005	0.000504	10000	mg/L
EP-2	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
EP-2	11/21/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
EP-2	11/21/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
EP-2	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-2	11/21/2019	Calcium, Dissolved	100	10	0.618891	NA	mg/L
EP-2	11/21/2019	Chromium, Dissolved	0.0089	0.006	0.001533	100000	mg/L
EP-2	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-2	11/21/2019	Copper, Dissolved	0.004	0.006	0.001296	790000	mg/L
EP-2	11/21/2019	Iron, Dissolved	2.7	0.2	0.087469	13821880	mg/L
EP-2	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-2	11/21/2019	Magnesium, Dissolved	25	1	0.05029	NA	mg/L
EP-2	11/21/2019	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
EP-2	11/21/2019	Molybdenum, Dissolved	0.062	0.008	0.006735	98700	mg/L
EP-2	11/21/2019	Nickel, Dissolved	0.015	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	11/21/2019	Potassium, Dissolved	42	1	0.162288	NA	mg/L
EP-2	11/21/2019	Selenium, Dissolved	0.0063	0.005	0.000857	50000	mg/L
EP-2	11/21/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
EP-2	11/21/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L
EP-2	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-2	11/21/2019	Uranium, Dissolved	0.00065	0.0025	0.000374	NA	mg/L
EP-2	11/21/2019	Zinc, Dissolved	0.064	0.01	0.002252	5960450	mg/L
EP-2	11/21/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
EP-2	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-2	11/21/2019	Arsenic, Total	0.0094	0.005	0.001561	10000	mg/L
EP-2	11/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
EP-2	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-2	11/21/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
EP-2	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-2	11/21/2019	Chromium, Total	0.0083	0.006	0.001533	50000	mg/L
EP-2	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-2	11/21/2019	Copper, Total	0.01	0.006	0.004072	790000	mg/L
EP-2	11/21/2019	Iron, Total	2.9	0.1	0.043734	13822000	mg/L
EP-2	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-2	11/21/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
EP-2	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-2	11/21/2019	Molybdenum, Total	0.071	0.008	0.006735	98700	mg/L
EP-2	11/21/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
EP-2	11/21/2019	Selenium, Total	0.0032	0.005	0.00239	50000	mg/L
EP-2	11/21/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
EP-2	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-2	11/21/2019	Uranium, Total	0.0016	0.0025	0.000424	30000	mg/L
EP-2	11/21/2019	Zinc, Total	0.037	0.01	0.005772	5960000	mg/L
EP-2	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-2	5/29/2012	Arsenic, Total	0.011	0.005	0.00055	10000	mg/L
EP-2	5/29/2012	Barium, Total	0.06	0.002	0.00031	2000000	mg/L
EP-2	5/29/2012	Calcium, Total	200	10	0.26	NA	mg/L
EP-2	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-2	5/29/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
EP-2	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-2	5/29/2012	Iron, Total	0.46	0.02	0.0019	13822000	mg/L
EP-2	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-2	5/29/2012	Potassium, Total	150	10	4.8	NA	mg/L
EP-2	5/29/2012	Magnesium, Total	73	1	0.013	NA	mg/L
EP-2	5/29/2012	Manganese, Total	0.15	0.002	0.00062	2017000	mg/L
EP-2	5/29/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-2	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-2	5/29/2012	Selenium, Total	0.011	0.005	0.0016	50000	mg/L
EP-2	5/29/2012	Uranium, Total	ND	0.005	0.0003	30000	mg/L
EP-2	5/29/2012	Zinc, Total	0.024	0.01	0.00062	5960000	mg/L
EP-2	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-2	11/6/2012	Arsenic, Total	0.0093	0.0025	0.0014	10000	mg/L
EP-2	11/6/2012	Barium, Total	0.037	0.002	0.00039	2000000	mg/L
EP-2	11/6/2012	Calcium, Total	38	1	0.026	NA	mg/L
EP-2	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-2	11/6/2012	Chromium, Total	0.014	0.006	0.001	50000	mg/L
EP-2	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-2	11/6/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
EP-2	11/6/2012	Mercury, Total	0.00033	0.0002	0.000025	2000	mg/L
EP-2	11/6/2012	Potassium, Total	31	1	0.48	NA	mg/L
EP-2	11/6/2012	Magnesium, Total	14	1	0.013	NA	mg/L
EP-2	11/6/2012	Manganese, Total	0.37	0.002	0.00026	2017000	mg/L
EP-2	11/6/2012	Sodium, Total	830	10	0.45	NA	mg/L
EP-2	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-2	11/6/2012	Selenium, Total	0.0053	0.0025	0.0025	50000	mg/L
EP-2	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-2	11/6/2012	Zinc, Total	0.025	0.01	0.0011	5960000	mg/L
EP-2	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-2	5/28/2013	Arsenic, Total	0.012	0.01	0.0013	10000	mg/L
EP-2	5/28/2013	Barium, Total	0.059	0.01	0.0048	2000000	mg/L
EP-2	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-2	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-2	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-2	5/28/2013	Iron, Total	3.2	0.1	0.045	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-2	5/28/2013	Manganese, Total	0.48	0.01	0.00082	2017000	mg/L
EP-2	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-2	5/28/2013	Selenium, Total	0.024	0.01	0.0055	50000	mg/L
EP-2	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-2	5/28/2013	Zinc, Total	0.092	0.05	0.0038	5960000	mg/L
EP-2	10/15/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
EP-2	10/15/2013	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
EP-2	10/15/2013	Barium, Total	0.085	0.002	0.00095	2000000	mg/L
EP-2	10/15/2013	Calcium, Total	89	1	0.069	NA	mg/L
EP-2	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-2	10/15/2013	Chromium, Total	0.0071	0.006	0.00084	50000	mg/L
EP-2	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-2	10/15/2013	Iron, Total	0.27	0.02	0.0089	13822000	mg/L
EP-2	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-2	10/15/2013	Potassium, Total	130	5	1.5	NA	mg/L
EP-2	10/15/2013	Magnesium, Total	30	1	0.051	NA	mg/L
EP-2	10/15/2013	Manganese, Total	0.19	0.002	0.00016	2017000	mg/L
EP-2	10/15/2013	Sodium, Total	1200	20	7.1	NA	mg/L
EP-2	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-2	10/15/2013	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
EP-2	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-2	10/15/2013	Zinc, Total	0.017	0.01	0.00076	5960000	mg/L
EP-2	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-2	3/5/2014	Arsenic, Total	0.012	0.01	0.0036	10000	mg/L
EP-2	3/5/2014	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
EP-2	3/5/2014	Calcium, Total	140	5	0.41	NA	mg/L
EP-2	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-2	3/5/2014	Chromium, Total	0.013	0.006	0.0028	50000	mg/L
EP-2	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-2	3/5/2014	Iron, Total	1.2	0.1	0.036	13822000	mg/L
EP-2	3/5/2014	Mercury, Total	ND	0.001	0.00044	2000	mg/L
EP-2	3/5/2014	Potassium, Total	150	5	0.47	NA	mg/L
EP-2	3/5/2014	Magnesium, Total	36	1	0.018	NA	mg/L
EP-2	3/5/2014	Manganese, Total	0.36	0.002	0.00049	2017000	mg/L
EP-2	3/5/2014	Sodium, Total	1500	50	20	NA	mg/L
EP-2	3/5/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
EP-2	3/5/2014	Selenium, Total	0.023	0.01	0.0051	50000	mg/L
EP-2	3/5/2014	Uranium, Total	0.0051	0.001	0.00018	30000	mg/L
EP-2	3/5/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
EP-2	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-2	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-2	11/12/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
EP-2	11/12/2014	Calcium, Total	230	5	0.41	NA	mg/L
EP-2	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-2	11/12/2014	Chromium, Total	0.012	0.006	0.0028	50000	mg/L
EP-2	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-2	11/12/2014	Iron, Total	2.8	0.1	0.036	13822000	mg/L
EP-2	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-2	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-2	11/12/2014	Magnesium, Total	54	1	0.018	NA	mg/L
EP-2	11/12/2014	Manganese, Total	0.24	0.002	0.00049	2017000	mg/L
EP-2	11/12/2014	Sodium, Total	1700	20	7.8	NA	mg/L
EP-2	11/12/2014	Lead, Total	0.002	0.001	0.00026	15000	mg/L
EP-2	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-2	11/12/2014	Uranium, Total	0.0071	0.001	0.0000072	30000	mg/L
EP-2	11/12/2014	Zinc, Total	0.025	0.01	0.0035	5960000	mg/L
EP-2	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-2	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-2	3/24/2015	Barium, Total	0.14	0.002	0.00073	2000000	mg/L
EP-2	3/24/2015	Calcium, Total	190	5	0.28	NA	mg/L
EP-2	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-2	3/24/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-2	3/24/2015	Copper, Total	0.0073	0.006	0.0051	790000	mg/L
EP-2	3/24/2015	Iron, Total	4.4	0.2	0.072	13822000	mg/L
EP-2	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-2	3/24/2015	Potassium, Total	64	1	0.18	NA	mg/L
EP-2	3/24/2015	Magnesium, Total	45	1	0.039	NA	mg/L
EP-2	3/24/2015	Manganese, Total	0.42	0.002	0.0015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	3/24/2015	Sodium, Total	1400	50	3.6	NA	mg/L
EP-2	3/24/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-2	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-2	3/24/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-2	3/24/2015	Zinc, Total	0.089	0.01	0.0036	5960000	mg/L
EP-2	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-2	9/1/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
EP-2	9/1/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
EP-2	9/1/2015	Calcium, Total	180	5	0.28	NA	mg/L
EP-2	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-2	9/1/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
EP-2	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-2	9/1/2015	Iron, Total	0.58	0.02	0.0072	13822000	mg/L
EP-2	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-2	9/1/2015	Potassium, Total	86	1	0.18	NA	mg/L
EP-2	9/1/2015	Magnesium, Total	58	1	0.039	NA	mg/L
EP-2	9/1/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
EP-2	9/1/2015	Sodium, Total	2000	50	3.6	NA	mg/L
EP-2	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-2	9/1/2015	Selenium, Total	0.013	0.005	0.00062	50000	mg/L
EP-2	9/1/2015	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
EP-2	9/1/2015	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
EP-2	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-2	8/29/2016	Arsenic, Total	0.014	0.05	0.0069	10000	mg/L
EP-2	8/29/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
EP-2	8/29/2016	Calcium, Total	280	5	2.5	NA	mg/L
EP-2	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	8/29/2016	Chromium, Total	0.012	0.006	0.0027	50000	mg/L
EP-2	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-2	8/29/2016	Iron, Total	3.5	0.1	0.1	13822000	mg/L
EP-2	8/29/2016	Mercury, Total	0.000069	0.0002	0.000053	2000	mg/L
EP-2	8/29/2016	Potassium, Total	88	5	2.5	NA	mg/L
EP-2	8/29/2016	Magnesium, Total	79	5	2.5	NA	mg/L
EP-2	8/29/2016	Manganese, Total	0.43	0.002	0.00027	2017000	mg/L
EP-2	8/29/2016	Sodium, Total	2200	50	25	NA	mg/L
EP-2	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-2	8/29/2016	Selenium, Total	0.03	0.05	0.011	50000	mg/L
EP-2	8/29/2016	Uranium, Total	0.0015	0.0025	0.00026	30000	mg/L
EP-2	8/29/2016	Zinc, Total	0.038	0.01	0.0027	5960000	mg/L
EP-2	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-2	3/30/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
EP-2	3/30/2017	Barium, Total	0.24	0.002	0.00079	2000000	mg/L
EP-2	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-2	3/30/2017	Chromium, Total	0.0075	0.006	0.0027	50000	mg/L
EP-2	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-2	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-2	3/30/2017	Arsenic, Dissolved	0.015	0.005	0.00089	10000	mg/L
EP-2	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-2	3/30/2017	Calcium, Dissolved	310	10	5	NA	mg/L
EP-2	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	3/30/2017	Chromium, Dissolved	0.013	0.006	0.001	100000	mg/L
EP-2	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	3/30/2017	Iron, Dissolved	1.1	0.2	0.2	13821880	mg/L
EP-2	3/30/2017	Potassium, Dissolved	260	10	5	NA	mg/L
EP-2	3/30/2017	Magnesium, Dissolved	85	1	0.5	NA	mg/L
EP-2	3/30/2017	Manganese, Dissolved	0.34	0.002	0.00038	2017400	mg/L
EP-2	3/30/2017	Sodium, Dissolved	2500	100	50	NA	mg/L
EP-2	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-2	3/30/2017	Selenium, Dissolved	0.026	0.005	0.0019	50000	mg/L
EP-2	3/30/2017	Uranium, Dissolved	0.0013	0.0025	0.00025	NA	mg/L
EP-2	3/30/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
EP-2	3/30/2017	Iron, Total	1.4	0.2	0.2	13822000	mg/L
EP-2	3/30/2017	Mercury, Total	0.00014	0.0002	0.000037	2000	mg/L
EP-2	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-2	3/30/2017	Lead, Total	0.00087	0.0025	0.00041	15000	mg/L
EP-2	3/30/2017	Selenium, Total	0.032	0.005	0.00094	50000	mg/L
EP-2	3/30/2017	Uranium, Total	0.0017	0.0025	0.00087	30000	mg/L
EP-2	3/30/2017	Zinc, Total	0.024	0.01	0.0027	5960000	mg/L
EP-2	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	Arsenic, Total	0.012	0.005	0.0021	10000	mg/L
EP-2	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-2	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	10/24/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
EP-2	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-2	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-2	10/24/2017	Arsenic, Dissolved	0.0093	0.005	0.0014	10000	mg/L
EP-2	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-2	10/24/2017	Calcium, Dissolved	250	10	0.78	NA	mg/L
EP-2	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	10/24/2017	Chromium, Dissolved	0.0054	0.006	0.0013	100000	mg/L
EP-2	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	10/24/2017	Iron, Dissolved	0.64	0.02	0.016	13821880	mg/L
EP-2	10/24/2017	Potassium, Dissolved	400	10	1.1	NA	mg/L
EP-2	10/24/2017	Magnesium, Dissolved	90	1	0.25	NA	mg/L
EP-2	10/24/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
EP-2	10/24/2017	Sodium, Dissolved	2600	50	8.2	NA	mg/L
EP-2	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-2	10/24/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
EP-2	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-2	10/24/2017	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
EP-2	10/24/2017	Iron, Total	0.89	0.02	0.01	13822000	mg/L
EP-2	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-2	10/24/2017	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
EP-2	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	10/24/2017	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
EP-2	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-2	10/24/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
EP-2	2/21/2018	Silver, Total	0.0094	0.005	0.0012	50000	mg/L
EP-2	2/21/2018	Arsenic, Total	0.0087	0.005	0.0021	10000	mg/L
EP-2	2/21/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-2	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	2/21/2018	Chromium, Total	0.0027	0.006	0.0018	50000	mg/L
EP-2	2/21/2018	Copper, Total	0.0093	0.006	0.0041	790000	mg/L
EP-2	2/21/2018	Silver, Dissolved	0.0037	0.005	0.0018	81200	mg/L
EP-2	2/21/2018	Arsenic, Dissolved	0.0064	0.005	0.0021	10000	mg/L
EP-2	2/21/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
EP-2	2/21/2018	Calcium, Dissolved	260	5	0.39	NA	mg/L
EP-2	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-2	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	2/21/2018	Iron, Dissolved	0.47	0.02	0.016	13821880	mg/L
EP-2	2/21/2018	Potassium, Dissolved	380	5	0.56	NA	mg/L
EP-2	2/21/2018	Magnesium, Dissolved	83	1	0.25	NA	mg/L
EP-2	2/21/2018	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
EP-2	2/21/2018	Sodium, Dissolved	1700	50	8.2	NA	mg/L
EP-2	2/21/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
EP-2	2/21/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
EP-2	2/21/2018	Uranium, Dissolved	0.00048	0.0005	0.000096	NA	mg/L
EP-2	2/21/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
EP-2	2/21/2018	Iron, Total	0.94	0.02	0.01	13822000	mg/L
EP-2	2/21/2018	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
EP-2	2/21/2018	Manganese, Total	0.17	0.002	0.0011	2017000	mg/L
EP-2	2/21/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	2/21/2018	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
EP-2	2/21/2018	Uranium, Total	0.00071	0.0025	0.00034	30000	mg/L
EP-2	2/21/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
EP-2	9/6/2018	Silver, Total	0.0065	0.005	0.0012	50000	mg/L
EP-2	9/6/2018	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
EP-2	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-2	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-2	9/6/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
EP-2	9/6/2018	Copper, Total	0.01	0.006	0.0041	790000	mg/L
EP-2	9/6/2018	Silver, Dissolved	0.0068	0.005	0.0018	81200	mg/L
EP-2	9/6/2018	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
EP-2	9/6/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-2	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-2	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-2	9/6/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-2	9/6/2018	Iron, Dissolved	0.095	0.02	0.016	13821880	mg/L
EP-2	9/6/2018	Potassium, Dissolved	240	10	1.1	NA	mg/L
EP-2	9/6/2018	Magnesium, Dissolved	82	1	0.25	NA	mg/L
EP-2	9/6/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-2	9/6/2018	Sodium, Dissolved	1200	50	8.2	NA	mg/L
EP-2	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-2	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-2	9/6/2018	Uranium, Dissolved	0.0013	0.0025	0.00048	NA	mg/L
EP-2	9/6/2018	Zinc, Dissolved	0.0066	0.01	0.0021	5960450	mg/L
EP-2	9/6/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
EP-2	9/6/2018	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
EP-2	9/6/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
EP-2	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-2	9/6/2018	Selenium, Total	0.0057	0.005	0.0049	50000	mg/L
EP-2	9/6/2018	Uranium, Total	0.0015	0.0025	0.00034	30000	mg/L
EP-2	9/6/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
EP-3	11/20/2019	Aluminum, Dissolved	0.13	0.2	0.024883	19913930	mg/L
EP-3	11/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	11/20/2019	Arsenic, Dissolved	0.0057	0.005	0.000504	10000	mg/L
EP-3	11/20/2019	Barium, Dissolved	0.15	0.02	0.006484	2000000	mg/L
EP-3	11/20/2019	Beryllium, Dissolved	ND	0.02	0.002838	4000	mg/L
EP-3	11/20/2019	Boron, Dissolved	0.45	0.4	0.045305	3949110	mg/L
EP-3	11/20/2019	Cadmium, Dissolved	ND	0.02	0.005523	5000	mg/L
EP-3	11/20/2019	Calcium, Dissolved	97	10	0.618891	NA	mg/L
EP-3	11/20/2019	Chromium, Dissolved	ND	0.06	0.015332	100000	mg/L
EP-3	11/20/2019	Cobalt, Dissolved	ND	0.06	0.030913	5980	mg/L
EP-3	11/20/2019	Copper, Dissolved	ND	0.06	0.012962	790000	mg/L
EP-3	11/20/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
EP-3	11/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	11/20/2019	Magnesium, Dissolved	34	10	0.502904	NA	mg/L
EP-3	11/20/2019	Manganese, Dissolved	0.35	0.02	0.002899	2017400	mg/L
EP-3	11/20/2019	Molybdenum, Dissolved	ND	0.08	0.067349	98700	mg/L
EP-3	11/20/2019	Nickel, Dissolved	0.042	0.1	0.040087	372000	mg/L
EP-3	11/20/2019	Potassium, Dissolved	210	10	1.622881	NA	mg/L
EP-3	11/20/2019	Selenium, Dissolved	0.0061	0.005	0.000857	50000	mg/L
EP-3	11/20/2019	Silver, Dissolved	ND	0.05	0.009424	81200	mg/L
EP-3	11/20/2019	Sodium, Dissolved	860	10	4.161763	NA	mg/L
EP-3	11/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-3	11/20/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
EP-3	11/20/2019	Zinc, Dissolved	0.055	0.1	0.02252	5960450	mg/L
EP-3	11/20/2019	Aluminum, Total	0.25	0.02	0.002488	19914000	mg/L
EP-3	11/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	11/20/2019	Arsenic, Total	0.0092	0.01	0.003122	10000	mg/L
EP-3	11/20/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
EP-3	11/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
EP-3	11/20/2019	Boron, Total	0.47	0.04	0.004531	3949	mg/L
EP-3	11/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-3	11/20/2019	Chromium, Total	0.014	0.006	0.001533	50000	mg/L
EP-3	11/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	11/20/2019	Copper, Total	0.0075	0.006	0.004072	790000	mg/L
EP-3	11/20/2019	Iron, Total	9.6	0.2	0.087469	13822000	mg/L
EP-3	11/20/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-3	11/20/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
EP-3	11/20/2019	Mercury, Total	0.00022	0.0002	0.000121	2000	mg/L
EP-3	11/20/2019	Molybdenum, Total	0.063	0.008	0.006735	98700	mg/L
EP-3	11/20/2019	Nickel, Total	0.057	0.01	0.004009	372000	mg/L
EP-3	11/20/2019	Selenium, Total	0.0055	0.01	0.00478	50000	mg/L
EP-3	11/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
EP-3	11/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	11/20/2019	Uranium, Total	0.0029	0.0025	0.000424	30000	mg/L
EP-3	11/20/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
EP-3	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Total	0.0087	0.005	0.001561	10000	mg/L
EP-3	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
EP-3	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
EP-3	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Total	0.0056	0.006	0.004072	790000	mg/L
EP-3	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-3	4/30/2019	Lead, Total	0.00075	0.0025	0.000274	15000	mg/L
EP-3	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
EP-3	4/30/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
EP-3	4/30/2019	Molybdenum, Total	0.0075	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Selenium, Total	0.0087	0.005	0.00239	50000	mg/L
EP-3	4/30/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
EP-3	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	4/30/2019	Uranium, Total	0.002	0.0025	0.000424	30000	mg/L
EP-3	4/30/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Dissolved	0.086	0.02	0.002488	19913930	mg/L
EP-3	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Dissolved	0.0066	0.005	0.000504	10000	mg/L
EP-3	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
EP-3	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-3	4/30/2019	Calcium, Dissolved	260	10	0.618891	NA	mg/L
EP-3	4/30/2019	Chromium, Dissolved	0.0016	0.006	0.001533	100000	mg/L
EP-3	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
EP-3	4/30/2019	Iron, Dissolved	0.33	0.02	0.008747	13821880	mg/L
EP-3	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	4/30/2019	Magnesium, Dissolved	68	1	0.05029	NA	mg/L
EP-3	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-3	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Potassium, Dissolved	230	10	1.622881	NA	mg/L
EP-3	4/30/2019	Selenium, Dissolved	0.0085	0.005	0.000857	50000	mg/L
EP-3	4/30/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
EP-3	4/30/2019	Sodium, Dissolved	1400	20	8.323526	NA	mg/L
EP-3	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-3	4/30/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
EP-3	4/30/2019	Zinc, Dissolved	0.045	0.01	0.002252	5960450	mg/L
EP-3	9/16/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
EP-3	9/16/2020	Arsenic, Dissolved	0.0065	0.005	0.001	10000	mg/L
EP-3	9/16/2020	Lead, Dissolved	0.0005	0.0025	0.00017	NA	mg/L
EP-3	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
EP-3	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
EP-3	9/16/2020	Uranium, Dissolved	0.001	0.0025	0.00033	NA	mg/L
EP-3	9/16/2020	Aluminum, Dissolved	0.65	0.02	0.0056	19913930	mg/L
EP-3	9/16/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-3	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-3	9/16/2020	Boron, Dissolved	0.46	0.04	0.0067	3949110	mg/L
EP-3	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-3	9/16/2020	Chromium, Dissolved	0.0034	0.006	0.002	100000	mg/L
EP-3	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-3	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-3	9/16/2020	Magnesium, Dissolved	94	1	0.067	NA	mg/L
EP-3	9/16/2020	Manganese, Dissolved	0.16	0.002	0.00058	2017400	mg/L
EP-3	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-3	9/16/2020	Nickel, Dissolved	0.056	0.01	0.0033	372000	mg/L
EP-3	9/16/2020	Silver, Dissolved	0.0032	0.005	0.0013	81200	mg/L
EP-3	9/16/2020	Zinc, Dissolved	0.032	0.01	0.006	5960450	mg/L
EP-3	9/16/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
EP-3	9/16/2020	Iron, Dissolved	2.5	0.1	0.052	13821880	mg/L
EP-3	9/16/2020	Potassium, Dissolved	210	5	0.8	NA	mg/L
EP-3	9/16/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
EP-3	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-3	9/16/2020	Barium, Total	0.32	0.003	0.0016	2000000	mg/L
EP-3	9/16/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
EP-3	9/16/2020	Boron, Total	0.48	0.04	0.0074	3949	mg/L
EP-3	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	9/16/2020	Chromium, Total	0.0074	0.006	0.0021	50000	mg/L
EP-3	9/16/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Copper, Total	0.0088	0.006	0.0047	790000	mg/L
EP-3	9/16/2020	Manganese, Total	0.25	0.002	0.00081	2017000	mg/L
EP-3	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
EP-3	9/16/2020	Nickel, Total	0.061	0.01	0.0033	372000	mg/L
EP-3	9/16/2020	Silver, Total	0.0029	0.005	0.0013	50000	mg/L
EP-3	9/16/2020	Zinc, Total	0.053	0.01	0.0064	5960000	mg/L
EP-3	9/16/2020	Aluminum, Total	5.7	0.2	0.074	19914000	mg/L
EP-3	9/16/2020	Antimony, Total	0.00087	0.001	0.0007	6000	mg/L
EP-3	9/16/2020	Arsenic, Total	0.0096	0.001	0.00026	10000	mg/L
EP-3	9/16/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
EP-3	9/16/2020	Selenium, Total	0.0053	0.001	0.00066	50000	mg/L
EP-3	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
EP-3	9/16/2020	Uranium, Total	0.0018	0.0005	0.000065	30000	mg/L
EP-3	9/16/2020	Iron, Total	14	2.5	0.64	13822000	mg/L
EP-3	12/21/2020	Arsenic, Total Recoverable	**10.1**	1	0.286	10	ug/L
EP-3	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-3	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-3	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-3	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-3	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-3	12/21/2020	Arsenic, Dissolved	10	1	0.286	10	ug/L
EP-3	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-3	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-3	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-3	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-3	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-3	12/21/2020	Aluminum, Dissolved	0.28	0.2	0.051	19913930	mg/L
EP-3	12/21/2020	Barium, Dissolved	0.154	0.01	0.003	2000000	mg/L
EP-3	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-3	12/21/2020	Boron, Dissolved	0.738	0.1	0.022	3949110	mg/L
EP-3	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-3	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-3	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-3	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-3	12/21/2020	Iron, Dissolved	2.25	0.2	0.075	13821880	mg/L
EP-3	12/21/2020	Manganese, Dissolved	0.286	0.01	0.003	2017400	mg/L
EP-3	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-3	12/21/2020	Nickel, Dissolved	0.129	0.006	0.003	372000	mg/L
EP-3	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-3	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-3	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-3	12/21/2020	Aluminum, Total	1.55	0.2	0.051	19914000	mg/L
EP-3	12/21/2020	Boron, Total	0.678	0.1	0.022	3949	mg/L
EP-3	12/21/2020	Barium, Total	0.146	0.01	0.003	2000000	mg/L
EP-3	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-3	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-3	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-3	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-3	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-3	12/21/2020	Manganese, Total	0.281	0.01	0.003	2017000	mg/L
EP-3	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-3	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-3	12/21/2020	Iron, Total	3.05	0.2	0.075	13822000	mg/L
EP-3	12/21/2020	Nickel, Total	0.124	0.006	0.003	372000	mg/L
EP-3	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-3	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-3	4/30/2019	Aluminum, Total	0.34	0.02	0.002488	19914000	mg/L
EP-3	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Total	0.0084	0.005	0.001561	10000	mg/L
EP-3	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
EP-3	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-3	4/30/2019	Chromium, Total	0.0029	0.006	0.001533	50000	mg/L
EP-3	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
EP-3	4/30/2019	Iron, Total	0.59	0.02	0.008747	13822000	mg/L
EP-3	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-3	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	4/30/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
EP-3	4/30/2019	Molybdenum, Total	0.0092	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Selenium, Total	0.0056	0.005	0.00239	50000	mg/L
EP-3	4/30/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
EP-3	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-3	4/30/2019	Uranium, Total	0.002	0.0025	0.000424	30000	mg/L
EP-3	4/30/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
EP-3	4/30/2019	Aluminum, Dissolved	0.09	0.02	0.002488	19913930	mg/L
EP-3	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-3	4/30/2019	Arsenic, Dissolved	0.007	0.005	0.000504	10000	mg/L
EP-3	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-3	4/30/2019	Beryllium, Dissolved	0.00034	0.002	0.000284	4000	mg/L
EP-3	4/30/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
EP-3	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-3	4/30/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
EP-3	4/30/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
EP-3	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-3	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-3	4/30/2019	Iron, Dissolved	0.31	0.02	0.008747	13821880	mg/L
EP-3	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-3	4/30/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
EP-3	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-3	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-3	4/30/2019	Nickel, Dissolved	0.0096	0.01	0.004009	372000	mg/L
EP-3	4/30/2019	Potassium, Dissolved	230	5	0.811441	NA	mg/L
EP-3	4/30/2019	Selenium, Dissolved	0.008	0.005	0.000857	50000	mg/L
EP-3	4/30/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
EP-3	4/30/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
EP-3	4/30/2019	Thallium, Dissolved	0.00035	0.0025	0.000242	2000	mg/L
EP-3	4/30/2019	Uranium, Dissolved	0.0016	0.0025	0.000374	NA	mg/L
EP-3	4/30/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
EP-3	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-3	5/29/2012	Arsenic, Total	0.014	0.01	0.0011	10000	mg/L
EP-3	5/29/2012	Barium, Total	0.076	0.002	0.00031	2000000	mg/L
EP-3	5/29/2012	Calcium, Total	410	10	0.26	NA	mg/L
EP-3	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-3	5/29/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
EP-3	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-3	5/29/2012	Iron, Total	0.22	0.02	0.0019	13822000	mg/L
EP-3	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-3	5/29/2012	Potassium, Total	190	10	4.8	NA	mg/L
EP-3	5/29/2012	Magnesium, Total	140	10	0.13	NA	mg/L
EP-3	5/29/2012	Manganese, Total	0.1	0.002	0.00062	2017000	mg/L
EP-3	5/29/2012	Sodium, Total	4700	100	4.5	NA	mg/L
EP-3	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-3	5/29/2012	Selenium, Total	0.022	0.01	0.0033	50000	mg/L
EP-3	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-3	5/29/2012	Zinc, Total	0.033	0.01	0.00062	5960000	mg/L
EP-3	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-3	11/6/2012	Arsenic, Total	0.0095	0.0025	0.0014	10000	mg/L
EP-3	11/6/2012	Barium, Total	0.039	0.002	0.00039	2000000	mg/L
EP-3	11/6/2012	Calcium, Total	140	10	0.26	NA	mg/L
EP-3	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-3	11/6/2012	Chromium, Total	0.0076	0.006	0.001	50000	mg/L
EP-3	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-3	11/6/2012	Iron, Total	1.7	0.1	0.066	13822000	mg/L
EP-3	11/6/2012	Mercury, Total	0.00044	0.0002	0.000025	2000	mg/L
EP-3	11/6/2012	Potassium, Total	89	1	0.48	NA	mg/L
EP-3	11/6/2012	Magnesium, Total	46	1	0.013	NA	mg/L
EP-3	11/6/2012	Manganese, Total	0.48	0.002	0.00026	2017000	mg/L
EP-3	11/6/2012	Sodium, Total	1800	100	4.5	NA	mg/L
EP-3	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-3	11/6/2012	Selenium, Total	0.008	0.0025	0.0025	50000	mg/L
EP-3	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-3	11/6/2012	Zinc, Total	0.031	0.01	0.0011	5960000	mg/L
EP-3	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-3	5/28/2013	Arsenic, Total	0.011	0.01	0.0013	10000	mg/L
EP-3	5/28/2013	Barium, Total	0.088	0.01	0.0048	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-3	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-3	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-3	5/28/2013	Iron, Total	0.41	0.1	0.045	13822000	mg/L
EP-3	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-3	5/28/2013	Manganese, Total	0.26	0.01	0.00082	2017000	mg/L
EP-3	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-3	5/28/2013	Selenium, Total	0.013	0.01	0.0055	50000	mg/L
EP-3	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-3	5/28/2013	Zinc, Total	0.072	0.05	0.0038	5960000	mg/L
EP-3	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-3	10/15/2013	Arsenic, Total	0.01	0.01	0.00098	10000	mg/L
EP-3	10/15/2013	Barium, Total	0.085	0.002	0.00095	2000000	mg/L
EP-3	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-3	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-3	10/15/2013	Chromium, Total	0.0073	0.006	0.00084	50000	mg/L
EP-3	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-3	10/15/2013	Iron, Total	0.2	0.02	0.0089	13822000	mg/L
EP-3	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-3	10/15/2013	Potassium, Total	250	5	1.5	NA	mg/L
EP-3	10/15/2013	Magnesium, Total	130	5	0.26	NA	mg/L
EP-3	10/15/2013	Manganese, Total	0.15	0.002	0.00016	2017000	mg/L
EP-3	10/15/2013	Sodium, Total	3400	100	36	NA	mg/L
EP-3	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-3	10/15/2013	Selenium, Total	0.015	0.01	0.0029	50000	mg/L
EP-3	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-3	10/15/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
EP-3	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-3	3/5/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
EP-3	3/5/2014	Barium, Total	0.15	0.01	0.0029	2000000	mg/L
EP-3	3/5/2014	Calcium, Total	270	5	0.41	NA	mg/L
EP-3	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-3	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-3	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-3	3/5/2014	Iron, Total	1	0.1	0.036	13822000	mg/L
EP-3	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-3	3/5/2014	Potassium, Total	170	5	0.47	NA	mg/L
EP-3	3/5/2014	Magnesium, Total	73	1	0.018	NA	mg/L
EP-3	3/5/2014	Manganese, Total	0.41	0.01	0.0024	2017000	mg/L
EP-3	3/5/2014	Sodium, Total	2400	50	20	NA	mg/L
EP-3	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-3	3/5/2014	Selenium, Total	0.019	0.01	0.0051	50000	mg/L
EP-3	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-3	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-3	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-3	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-3	11/12/2014	Barium, Total	0.1	0.002	0.0005	2000000	mg/L
EP-3	11/12/2014	Calcium, Total	370	5	0.41	NA	mg/L
EP-3	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-3	11/12/2014	Chromium, Total	0.0098	0.006	0.0028	50000	mg/L
EP-3	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-3	11/12/2014	Iron, Total	1.9	0.1	0.036	13822000	mg/L
EP-3	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-3	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-3	11/12/2014	Magnesium, Total	92	1	0.018	NA	mg/L
EP-3	11/12/2014	Manganese, Total	0.23	0.002	0.00049	2017000	mg/L
EP-3	11/12/2014	Sodium, Total	2500	50	20	NA	mg/L
EP-3	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-3	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-3	11/12/2014	Uranium, Total	ND	0.02	0.00014	30000	mg/L
EP-3	11/12/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
EP-3	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-3	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-3	3/24/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-3	3/24/2015	Calcium, Total	440	5	0.28	NA	mg/L
EP-3	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-3	3/24/2015	Chromium, Total	0.01	0.006	0.0022	50000	mg/L
EP-3	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-3	3/24/2015	Iron, Total	1.2	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-3	3/24/2015	Potassium, Total	89	1	0.18	NA	mg/L
EP-3	3/24/2015	Magnesium, Total	110	5	0.2	NA	mg/L
EP-3	3/24/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
EP-3	3/24/2015	Sodium, Total	2700	50	3.6	NA	mg/L
EP-3	3/24/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-3	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-3	3/24/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-3	3/24/2015	Zinc, Total	0.021	0.01	0.0036	5960000	mg/L
EP-3	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-3	9/1/2015	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
EP-3	9/1/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
EP-3	9/1/2015	Calcium, Total	320	5	0.28	NA	mg/L
EP-3	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-3	9/1/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-3	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-3	9/1/2015	Iron, Total	0.42	0.02	0.0072	13822000	mg/L
EP-3	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-3	9/1/2015	Potassium, Total	110	5	0.89	NA	mg/L
EP-3	9/1/2015	Magnesium, Total	120	5	0.2	NA	mg/L
EP-3	9/1/2015	Manganese, Total	0.29	0.002	0.0015	2017000	mg/L
EP-3	9/1/2015	Sodium, Total	3100	50	3.6	NA	mg/L
EP-3	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-3	9/1/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
EP-3	9/1/2015	Uranium, Total	0.0027	0.0025	0.000025	30000	mg/L
EP-3	9/1/2015	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
EP-3	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-3	8/29/2016	Arsenic, Total	0.0089	0.05	0.0069	10000	mg/L
EP-3	8/29/2016	Barium, Total	0.14	0.002	0.00079	2000000	mg/L
EP-3	8/29/2016	Calcium, Total	530	10	5	NA	mg/L
EP-3	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	8/29/2016	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
EP-3	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-3	8/29/2016	Iron, Total	2.5	0.1	0.1	13822000	mg/L
EP-3	8/29/2016	Mercury, Total	0.000067	0.0002	0.000053	2000	mg/L
EP-3	8/29/2016	Potassium, Total	110	5	2.5	NA	mg/L
EP-3	8/29/2016	Magnesium, Total	140	5	2.5	NA	mg/L
EP-3	8/29/2016	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
EP-3	8/29/2016	Sodium, Total	3200	50	25	NA	mg/L
EP-3	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-3	8/29/2016	Selenium, Total	0.032	0.05	0.011	50000	mg/L
EP-3	8/29/2016	Uranium, Total	0.0016	0.0025	0.00026	30000	mg/L
EP-3	8/29/2016	Zinc, Total	0.033	0.01	0.0027	5960000	mg/L
EP-3	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-3	3/30/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
EP-3	3/30/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
EP-3	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-3	3/30/2017	Chromium, Total	0.0072	0.006	0.0027	50000	mg/L
EP-3	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-3	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-3	3/30/2017	Arsenic, Dissolved	0.016	0.005	0.00089	10000	mg/L
EP-3	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-3	3/30/2017	Calcium, Dissolved	370	10	5	NA	mg/L
EP-3	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	3/30/2017	Chromium, Dissolved	0.0095	0.006	0.001	100000	mg/L
EP-3	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	3/30/2017	Iron, Dissolved	0.5	0.02	0.02	13821880	mg/L
EP-3	3/30/2017	Potassium, Dissolved	330	10	5	NA	mg/L
EP-3	3/30/2017	Magnesium, Dissolved	100	10	5	NA	mg/L
EP-3	3/30/2017	Manganese, Dissolved	0.35	0.002	0.00038	2017400	mg/L
EP-3	3/30/2017	Sodium, Dissolved	3000	100	50	NA	mg/L
EP-3	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-3	3/30/2017	Selenium, Dissolved	0.028	0.005	0.0019	50000	mg/L
EP-3	3/30/2017	Uranium, Dissolved	0.0013	0.0025	0.00025	NA	mg/L
EP-3	3/30/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
EP-3	3/30/2017	Iron, Total	0.69	0.02	0.02	13822000	mg/L
EP-3	3/30/2017	Mercury, Total	0.000079	0.0002	0.000037	2000	mg/L
EP-3	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-3	3/30/2017	Lead, Total	0.00063	0.0025	0.00041	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	3/30/2017	Selenium, Total	0.03	0.005	0.00094	50000	mg/L
EP-3	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-3	3/30/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
EP-3	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-3	10/24/2017	Arsenic, Total	0.012	0.005	0.0021	10000	mg/L
EP-3	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-3	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	10/24/2017	Chromium, Total	0.0057	0.006	0.0018	50000	mg/L
EP-3	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-3	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-3	10/24/2017	Arsenic, Dissolved	0.011	0.005	0.0014	10000	mg/L
EP-3	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-3	10/24/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
EP-3	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	10/24/2017	Chromium, Dissolved	0.0053	0.006	0.0013	100000	mg/L
EP-3	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	10/24/2017	Iron, Dissolved	0.64	0.02	0.016	13821880	mg/L
EP-3	10/24/2017	Potassium, Dissolved	430	10	1.1	NA	mg/L
EP-3	10/24/2017	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-3	10/24/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
EP-3	10/24/2017	Sodium, Dissolved	3000	50	8.2	NA	mg/L
EP-3	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-3	10/24/2017	Selenium, Dissolved	0.011	0.005	0.0038	50000	mg/L
EP-3	10/24/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
EP-3	10/24/2017	Zinc, Dissolved	0.024	0.01	0.0021	5960450	mg/L
EP-3	10/24/2017	Iron, Total	0.98	0.02	0.01	13822000	mg/L
EP-3	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-3	10/24/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
EP-3	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-3	10/24/2017	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
EP-3	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-3	10/24/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
EP-3	2/21/2018	Silver, Total	0.013	0.005	0.0012	50000	mg/L
EP-3	2/21/2018	Arsenic, Total	0.0077	0.005	0.0021	10000	mg/L
EP-3	2/21/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
EP-3	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	2/21/2018	Chromium, Total	0.0058	0.006	0.0018	50000	mg/L
EP-3	2/21/2018	Copper, Total	0.0086	0.006	0.0041	790000	mg/L
EP-3	2/21/2018	Silver, Dissolved	0.0054	0.005	0.0018	81200	mg/L
EP-3	2/21/2018	Arsenic, Dissolved	0.0068	0.005	0.0021	10000	mg/L
EP-3	2/21/2018	Barium, Dissolved	0.19	0.002	0.00099	2000000	mg/L
EP-3	2/21/2018	Calcium, Dissolved	410	5	0.39	NA	mg/L
EP-3	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-3	2/21/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
EP-3	2/21/2018	Iron, Dissolved	0.44	0.02	0.016	13821880	mg/L
EP-3	2/21/2018	Potassium, Dissolved	290	10	1.1	NA	mg/L
EP-3	2/21/2018	Magnesium, Dissolved	110	10	2.5	NA	mg/L
EP-3	2/21/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-3	2/21/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
EP-3	2/21/2018	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
EP-3	2/21/2018	Selenium, Dissolved	0.0081	0.005	0.0038	50000	mg/L
EP-3	2/21/2018	Uranium, Dissolved	0.00066	0.0005	0.000096	NA	mg/L
EP-3	2/21/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
EP-3	2/21/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
EP-3	2/21/2018	Mercury, Total	0.00013	0.0002	0.000037	2000	mg/L
EP-3	2/21/2018	Manganese, Total	0.28	0.002	0.0011	2017000	mg/L
EP-3	2/21/2018	Lead, Total	0.0023	0.0025	0.0011	15000	mg/L
EP-3	2/21/2018	Selenium, Total	0.0094	0.005	0.0049	50000	mg/L
EP-3	2/21/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-3	2/21/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
EP-3	9/6/2018	Silver, Total	0.0069	0.005	0.0012	50000	mg/L
EP-3	9/6/2018	Arsenic, Total	0.013	0.005	0.0021	10000	mg/L
EP-3	9/6/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
EP-3	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-3	9/6/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
EP-3	9/6/2018	Copper, Total	0.0075	0.006	0.0041	790000	mg/L
EP-3	9/6/2018	Silver, Dissolved	0.0071	0.005	0.0018	81200	mg/L
EP-3	9/6/2018	Arsenic, Dissolved	0.01	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/6/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-3	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-3	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-3	9/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-3	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-3	9/6/2018	Iron, Dissolved	0.083	0.02	0.016	13821880	mg/L
EP-3	9/6/2018	Potassium, Dissolved	300	10	1.1	NA	mg/L
EP-3	9/6/2018	Magnesium, Dissolved	91	1	0.25	NA	mg/L
EP-3	9/6/2018	Manganese, Dissolved	0.22	0.002	0.00039	2017400	mg/L
EP-3	9/6/2018	Sodium, Dissolved	1400	20	3.3	NA	mg/L
EP-3	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-3	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-3	9/6/2018	Uranium, Dissolved	0.0011	0.0025	0.00048	NA	mg/L
EP-3	9/6/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
EP-3	9/6/2018	Iron, Total	0.18	0.02	0.01	13822000	mg/L
EP-3	9/6/2018	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
EP-3	9/6/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
EP-3	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-3	9/6/2018	Selenium, Total	0.006	0.005	0.0049	50000	mg/L
EP-3	9/6/2018	Uranium, Total	0.0013	0.0025	0.00034	30000	mg/L
EP-3	9/6/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
EP-4	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-4	9/17/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
EP-4	9/17/2020	Barium, Total	0.27	0.015	0.0082	2000000	mg/L
EP-4	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-4	9/17/2020	Boron, Total	1.2	0.2	0.037	3949	mg/L
EP-4	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-4	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-4	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-4	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-4	9/17/2020	Iron, Total	0.12	0.25	0.064	13822000	mg/L
EP-4	9/17/2020	Manganese, Total	1.3	0.01	0.0041	2017000	mg/L
EP-4	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-4	9/17/2020	Nickel, Total	0.05	0.05	0.016	372000	mg/L
EP-4	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-4	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-4	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-4	9/17/2020	Arsenic, Total	0.036	0.01	0.0026	10000	mg/L
EP-4	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-4	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-4	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-4	9/17/2020	Uranium, Total	0.0017	0.005	0.00065	30000	mg/L
EP-4	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-4	9/17/2020	Arsenic, Dissolved	0.03	0.05	0.01	10000	mg/L
EP-4	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-4	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-4	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-4	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-4	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-4	9/17/2020	Barium, Dissolved	0.25	0.002	0.0011	2000000	mg/L
EP-4	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-4	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-4	9/17/2020	Copper, Dissolved	0.0045	0.006	0.0035	790000	mg/L
EP-4	9/17/2020	Iron, Dissolved	0.074	0.02	0.01	13821880	mg/L
EP-4	9/17/2020	Nickel, Dissolved	0.048	0.01	0.0033	372000	mg/L
EP-4	9/17/2020	Silver, Dissolved	0.01	0.005	0.0013	81200	mg/L
EP-4	9/17/2020	Boron, Dissolved	1.2	0.2	0.033	3949110	mg/L
EP-4	9/17/2020	Magnesium, Dissolved	260	5	0.34	NA	mg/L
EP-4	9/17/2020	Manganese, Dissolved	1.3	0.01	0.0029	2017400	mg/L
EP-4	9/17/2020	Calcium, Dissolved	660	20	2.3	NA	mg/L
EP-4	9/17/2020	Potassium, Dissolved	680	20	3.2	NA	mg/L
EP-4	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-4	9/17/2020	Sodium, Dissolved	5500	100	14	NA	mg/L
EP-4	9/17/2020	Chromium, Dissolved	0.0063	0.006	0.002	100000	mg/L
EP-4	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-4	9/17/2020	Zinc, Dissolved	0.0065	0.01	0.006	5960450	mg/L
EP-4	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-4	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-4	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	12/21/2020	Barium, Dissolved	0.206	0.01	0.003	2000000	mg/L
EP-4	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-4	12/21/2020	Boron, Dissolved	1.02	0.1	0.022	3949110	mg/L
EP-4	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-4	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-4	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-4	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-4	12/21/2020	Iron, Dissolved	0.632	0.2	0.075	13821880	mg/L
EP-4	12/21/2020	Manganese, Dissolved	0.724	0.01	0.003	2017400	mg/L
EP-4	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-4	12/21/2020	Nickel, Dissolved	0.0996	0.006	0.003	372000	mg/L
EP-4	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-4	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-4	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-4	12/21/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
EP-4	12/21/2020	Boron, Total	1.03	0.1	0.022	3949	mg/L
EP-4	12/21/2020	Barium, Total	0.196	0.01	0.003	2000000	mg/L
EP-4	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-4	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-4	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-4	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-4	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-4	12/21/2020	Manganese, Total	0.739	0.01	0.003	2017000	mg/L
EP-4	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-4	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-4	12/21/2020	Iron, Total	0.797	0.2	0.075	13822000	mg/L
EP-4	12/21/2020	Nickel, Total	0.0915	0.006	0.003	372000	mg/L
EP-4	12/21/2020	Arsenic, Total Recoverable	**21.8**	1	0.286	10	ug/L
EP-4	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-4	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-4	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-4	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-4	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-4	12/21/2020	Arsenic, Dissolved	**20.7**	1	0.286	10	ug/L
EP-4	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-4	12/21/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
EP-4	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-4	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-4	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-4	4/30/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
EP-4	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-4	4/30/2019	Arsenic, Total	0.0084	0.005	0.001561	10000	mg/L
EP-4	4/30/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
EP-4	4/30/2019	Beryllium, Total	0.00051	0.002	0.000284	4000	mg/L
EP-4	4/30/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
EP-4	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-4	4/30/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
EP-4	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-4	4/30/2019	Copper, Total	0.0056	0.006	0.004072	790000	mg/L
EP-4	4/30/2019	Iron, Total	0.53	0.02	0.008747	13822000	mg/L
EP-4	4/30/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-4	4/30/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
EP-4	4/30/2019	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
EP-4	4/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-4	4/30/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
EP-4	4/30/2019	Selenium, Total	0.0068	0.005	0.00239	50000	mg/L
EP-4	4/30/2019	Silver, Total	0.0056	0.005	0.001418	50000	mg/L
EP-4	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-4	4/30/2019	Uranium, Total	0.0021	0.0025	0.000424	30000	mg/L
EP-4	4/30/2019	Zinc, Total	0.0082	0.01	0.005772	5960000	mg/L
EP-4	4/30/2019	Aluminum, Dissolved	0.074	0.02	0.002488	19913930	mg/L
EP-4	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-4	4/30/2019	Arsenic, Dissolved	0.0064	0.005	0.000504	10000	mg/L
EP-4	4/30/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
EP-4	4/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
EP-4	4/30/2019	Boron, Dissolved	0.45	0.04	0.004531	3949110	mg/L
EP-4	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-4	4/30/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
EP-4	4/30/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-4	4/30/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
EP-4	4/30/2019	Iron, Dissolved	0.31	0.02	0.008747	13821880	mg/L
EP-4	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-4	4/30/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
EP-4	4/30/2019	Manganese, Dissolved	0.34	0.002	0.00029	2017400	mg/L
EP-4	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-4	4/30/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
EP-4	4/30/2019	Potassium, Dissolved	230	5	0.811441	NA	mg/L
EP-4	4/30/2019	Selenium, Dissolved	0.012	0.005	0.000857	50000	mg/L
EP-4	4/30/2019	Silver, Dissolved	0.0046	0.005	0.000942	81200	mg/L
EP-4	4/30/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
EP-4	4/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-4	4/30/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
EP-4	4/30/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
EP-4	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-4	5/29/2012	Arsenic, Total	0.017	0.005	0.00055	10000	mg/L
EP-4	5/29/2012	Barium, Total	0.06	0.002	0.00031	2000000	mg/L
EP-4	5/29/2012	Calcium, Total	230	10	0.26	NA	mg/L
EP-4	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-4	5/29/2012	Chromium, Total	0.0067	0.006	0.00056	50000	mg/L
EP-4	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-4	5/29/2012	Iron, Total	0.2	0.02	0.0019	13822000	mg/L
EP-4	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-4	5/29/2012	Potassium, Total	170	10	4.8	NA	mg/L
EP-4	5/29/2012	Magnesium, Total	110	10	0.13	NA	mg/L
EP-4	5/29/2012	Manganese, Total	0.061	0.002	0.00062	2017000	mg/L
EP-4	5/29/2012	Sodium, Total	3600	50	2.2	NA	mg/L
EP-4	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-4	5/29/2012	Selenium, Total	0.024	0.005	0.0016	50000	mg/L
EP-4	5/29/2012	Uranium, Total	ND	0.005	0.0003	30000	mg/L
EP-4	5/29/2012	Zinc, Total	0.036	0.01	0.00062	5960000	mg/L
EP-4	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-4	11/6/2012	Arsenic, Total	0.011	0.0025	0.0014	10000	mg/L
EP-4	11/6/2012	Barium, Total	0.061	0.002	0.00039	2000000	mg/L
EP-4	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-4	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-4	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-4	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-4	11/6/2012	Iron, Total	1.2	0.1	0.066	13822000	mg/L
EP-4	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-4	11/6/2012	Potassium, Total	220	10	4.8	NA	mg/L
EP-4	11/6/2012	Magnesium, Total	83	1	0.013	NA	mg/L
EP-4	11/6/2012	Manganese, Total	0.52	0.002	0.00026	2017000	mg/L
EP-4	11/6/2012	Sodium, Total	2900	50	2.2	NA	mg/L
EP-4	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-4	11/6/2012	Selenium, Total	0.011	0.0025	0.0025	50000	mg/L
EP-4	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-4	11/6/2012	Zinc, Total	0.026	0.01	0.0011	5960000	mg/L
EP-4	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-4	5/28/2013	Arsenic, Total	0.013	0.01	0.0013	10000	mg/L
EP-4	5/28/2013	Barium, Total	0.085	0.01	0.0048	2000000	mg/L
EP-4	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-4	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-4	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-4	5/28/2013	Iron, Total	0.31	0.1	0.045	13822000	mg/L
EP-4	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-4	5/28/2013	Manganese, Total	0.19	0.01	0.00082	2017000	mg/L
EP-4	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-4	5/28/2013	Selenium, Total	0.019	0.01	0.0055	50000	mg/L
EP-4	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-4	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-4	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-4	10/15/2013	Arsenic, Total	0.012	0.01	0.00098	10000	mg/L
EP-4	10/15/2013	Barium, Total	0.084	0.002	0.00095	2000000	mg/L
EP-4	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-4	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-4	10/15/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
EP-4	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/15/2013	Iron, Total	0.26	0.02	0.0089	13822000	mg/L
EP-4	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-4	10/15/2013	Potassium, Total	260	5	1.5	NA	mg/L
EP-4	10/15/2013	Magnesium, Total	140	5	0.26	NA	mg/L
EP-4	10/15/2013	Manganese, Total	0.15	0.002	0.00016	2017000	mg/L
EP-4	10/15/2013	Sodium, Total	3500	100	36	NA	mg/L
EP-4	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-4	10/15/2013	Selenium, Total	0.017	0.01	0.0029	50000	mg/L
EP-4	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-4	10/15/2013	Zinc, Total	0.013	0.01	0.00076	5960000	mg/L
EP-4	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-4	3/5/2014	Arsenic, Total	0.012	0.01	0.0036	10000	mg/L
EP-4	3/5/2014	Barium, Total	0.14	0.01	0.0029	2000000	mg/L
EP-4	3/5/2014	Calcium, Total	310	5	0.41	NA	mg/L
EP-4	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-4	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-4	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-4	3/5/2014	Iron, Total	0.99	0.1	0.036	13822000	mg/L
EP-4	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-4	3/5/2014	Potassium, Total	170	5	0.47	NA	mg/L
EP-4	3/5/2014	Magnesium, Total	84	1	0.018	NA	mg/L
EP-4	3/5/2014	Manganese, Total	0.43	0.01	0.0024	2017000	mg/L
EP-4	3/5/2014	Sodium, Total	2800	50	20	NA	mg/L
EP-4	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-4	3/5/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
EP-4	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-4	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-4	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-4	11/12/2014	Arsenic, Total	ND	0.02	0.0072	10000	mg/L
EP-4	11/12/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
EP-4	11/12/2014	Calcium, Total	370	5	0.41	NA	mg/L
EP-4	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-4	11/12/2014	Chromium, Total	0.01	0.006	0.0028	50000	mg/L
EP-4	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-4	11/12/2014	Iron, Total	1.7	0.1	0.036	13822000	mg/L
EP-4	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-4	11/12/2014	Potassium, Total	160	5	0.47	NA	mg/L
EP-4	11/12/2014	Magnesium, Total	97	1	0.018	NA	mg/L
EP-4	11/12/2014	Manganese, Total	0.28	0.002	0.00049	2017000	mg/L
EP-4	11/12/2014	Sodium, Total	2600	50	20	NA	mg/L
EP-4	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-4	11/12/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
EP-4	11/12/2014	Uranium, Total	ND	0.02	0.00014	30000	mg/L
EP-4	11/12/2014	Zinc, Total	0.023	0.01	0.0035	5960000	mg/L
EP-4	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-4	3/24/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-4	3/24/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-4	3/24/2015	Calcium, Total	400	5	0.28	NA	mg/L
EP-4	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-4	3/24/2015	Chromium, Total	0.009	0.006	0.0022	50000	mg/L
EP-4	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-4	3/24/2015	Iron, Total	0.81	0.02	0.0072	13822000	mg/L
EP-4	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-4	3/24/2015	Potassium, Total	190	5	0.89	NA	mg/L
EP-4	3/24/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-4	3/24/2015	Manganese, Total	0.44	0.002	0.0015	2017000	mg/L
EP-4	3/24/2015	Sodium, Total	5000	100	7.2	NA	mg/L
EP-4	3/24/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-4	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-4	3/24/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-4	3/24/2015	Zinc, Total	0.014	0.01	0.0036	5960000	mg/L
EP-4	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-4	9/1/2015	Arsenic, Total	0.016	0.005	0.0015	10000	mg/L
EP-4	9/1/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
EP-4	9/1/2015	Calcium, Total	320	5	0.28	NA	mg/L
EP-4	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-4	9/1/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
EP-4	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-4	9/1/2015	Iron, Total	0.43	0.02	0.0072	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-4	9/1/2015	Potassium, Total	100	5	0.89	NA	mg/L
EP-4	9/1/2015	Magnesium, Total	120	5	0.2	NA	mg/L
EP-4	9/1/2015	Manganese, Total	0.29	0.002	0.0015	2017000	mg/L
EP-4	9/1/2015	Sodium, Total	3100	50	3.6	NA	mg/L
EP-4	9/1/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
EP-4	9/1/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
EP-4	9/1/2015	Uranium, Total	0.0028	0.0025	0.000025	30000	mg/L
EP-4	9/1/2015	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
EP-4	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-4	8/29/2016	Arsenic, Total	0.011	0.05	0.0069	10000	mg/L
EP-4	8/29/2016	Barium, Total	0.15	0.002	0.00079	2000000	mg/L
EP-4	8/29/2016	Calcium, Total	560	10	5	NA	mg/L
EP-4	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-4	8/29/2016	Chromium, Total	0.0095	0.006	0.0027	50000	mg/L
EP-4	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-4	8/29/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
EP-4	8/29/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
EP-4	8/29/2016	Potassium, Total	130	5	2.5	NA	mg/L
EP-4	8/29/2016	Magnesium, Total	150	5	2.5	NA	mg/L
EP-4	8/29/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-4	8/29/2016	Sodium, Total	3600	50	25	NA	mg/L
EP-4	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-4	8/29/2016	Selenium, Total	0.035	0.05	0.011	50000	mg/L
EP-4	8/29/2016	Uranium, Total	0.0022	0.0025	0.00026	30000	mg/L
EP-4	8/29/2016	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
EP-4	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-4	3/30/2017	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L
EP-4	3/30/2017	Barium, Total	0.23	0.002	0.00079	2000000	mg/L
EP-4	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-4	3/30/2017	Chromium, Total	0.0063	0.006	0.0027	50000	mg/L
EP-4	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-4	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-4	3/30/2017	Arsenic, Dissolved	0.015	0.005	0.00089	10000	mg/L
EP-4	3/30/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
EP-4	3/30/2017	Calcium, Dissolved	350	10	5	NA	mg/L
EP-4	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	3/30/2017	Chromium, Dissolved	0.009	0.006	0.001	100000	mg/L
EP-4	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	3/30/2017	Iron, Dissolved	0.61	0.02	0.02	13821880	mg/L
EP-4	3/30/2017	Potassium, Dissolved	310	10	5	NA	mg/L
EP-4	3/30/2017	Magnesium, Dissolved	99	10	5	NA	mg/L
EP-4	3/30/2017	Manganese, Dissolved	0.34	0.002	0.00038	2017400	mg/L
EP-4	3/30/2017	Sodium, Dissolved	2900	100	50	NA	mg/L
EP-4	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-4	3/30/2017	Selenium, Dissolved	0.029	0.005	0.0019	50000	mg/L
EP-4	3/30/2017	Uranium, Dissolved	0.0011	0.0025	0.00025	NA	mg/L
EP-4	3/30/2017	Zinc, Dissolved	0.035	0.01	0.0011	5960450	mg/L
EP-4	3/30/2017	Iron, Total	0.76	0.02	0.02	13822000	mg/L
EP-4	3/30/2017	Mercury, Total	0.000091	0.0002	0.000037	2000	mg/L
EP-4	3/30/2017	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-4	3/30/2017	Lead, Total	0.00062	0.0025	0.00041	15000	mg/L
EP-4	3/30/2017	Selenium, Total	0.027	0.005	0.00094	50000	mg/L
EP-4	3/30/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
EP-4	3/30/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
EP-4	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-4	10/24/2017	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
EP-4	10/24/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
EP-4	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	10/24/2017	Chromium, Total	0.0055	0.006	0.0018	50000	mg/L
EP-4	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-4	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-4	10/24/2017	Arsenic, Dissolved	0.013	0.005	0.0014	10000	mg/L
EP-4	10/24/2017	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-4	10/24/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
EP-4	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	10/24/2017	Chromium, Dissolved	0.006	0.006	0.0013	100000	mg/L
EP-4	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	10/24/2017	Iron, Dissolved	0.65	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	10/24/2017	Potassium, Dissolved	430	10	1.1	NA	mg/L
EP-4	10/24/2017	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-4	10/24/2017	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
EP-4	10/24/2017	Sodium, Dissolved	3000	50	8.2	NA	mg/L
EP-4	10/24/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-4	10/24/2017	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
EP-4	10/24/2017	Uranium, Dissolved	0.0005	0.0025	0.00048	NA	mg/L
EP-4	10/24/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
EP-4	10/24/2017	Iron, Total	0.96	0.02	0.01	13822000	mg/L
EP-4	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-4	10/24/2017	Manganese, Total	0.3	0.002	0.0011	2017000	mg/L
EP-4	10/24/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-4	10/24/2017	Selenium, Total	0.01	0.01	0.0098	50000	mg/L
EP-4	10/24/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
EP-4	10/24/2017	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-4	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-4	2/21/2018	Arsenic, Total	0.0089	0.01	0.0041	10000	mg/L
EP-4	2/21/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
EP-4	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	2/21/2018	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
EP-4	2/21/2018	Copper, Total	0.007	0.006	0.0041	790000	mg/L
EP-4	2/21/2018	Silver, Dissolved	0.0072	0.005	0.0018	81200	mg/L
EP-4	2/21/2018	Arsenic, Dissolved	0.009	0.005	0.0021	10000	mg/L
EP-4	2/21/2018	Barium, Dissolved	0.22	0.002	0.00099	2000000	mg/L
EP-4	2/21/2018	Calcium, Dissolved	480	5	0.39	NA	mg/L
EP-4	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	2/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
EP-4	2/21/2018	Copper, Dissolved	0.0032	0.006	0.0032	790000	mg/L
EP-4	2/21/2018	Iron, Dissolved	0.42	0.02	0.016	13821880	mg/L
EP-4	2/21/2018	Potassium, Dissolved	270	10	1.1	NA	mg/L
EP-4	2/21/2018	Magnesium, Dissolved	130	10	2.5	NA	mg/L
EP-4	2/21/2018	Manganese, Dissolved	0.27	0.002	0.00039	2017400	mg/L
EP-4	2/21/2018	Sodium, Dissolved	2900	50	8.2	NA	mg/L
EP-4	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-4	2/21/2018	Selenium, Dissolved	0.0093	0.005	0.0038	50000	mg/L
EP-4	2/21/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
EP-4	2/21/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
EP-4	2/21/2018	Iron, Total	0.99	0.02	0.01	13822000	mg/L
EP-4	2/21/2018	Mercury, Total	0.000087	0.0002	0.000037	2000	mg/L
EP-4	2/21/2018	Manganese, Total	0.29	0.002	0.0011	2017000	mg/L
EP-4	2/21/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-4	2/21/2018	Selenium, Total	0.01	0.01	0.0098	50000	mg/L
EP-4	2/21/2018	Uranium, Total	0.0011	0.005	0.00068	30000	mg/L
EP-4	2/21/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-4	9/6/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
EP-4	9/6/2018	Arsenic, Total	0.014	0.005	0.0021	10000	mg/L
EP-4	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-4	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-4	9/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
EP-4	9/6/2018	Copper, Total	0.0067	0.006	0.0041	790000	mg/L
EP-4	9/6/2018	Silver, Dissolved	0.0065	0.005	0.0018	81200	mg/L
EP-4	9/6/2018	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
EP-4	9/6/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-4	9/6/2018	Calcium, Dissolved	290	10	0.78	NA	mg/L
EP-4	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-4	9/6/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
EP-4	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-4	9/6/2018	Iron, Dissolved	0.088	0.02	0.016	13821880	mg/L
EP-4	9/6/2018	Potassium, Dissolved	350	10	1.1	NA	mg/L
EP-4	9/6/2018	Magnesium, Dissolved	100	10	2.5	NA	mg/L
EP-4	9/6/2018	Manganese, Dissolved	0.2	0.002	0.00039	2017400	mg/L
EP-4	9/6/2018	Sodium, Dissolved	1800	20	3.3	NA	mg/L
EP-4	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-4	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-4	9/6/2018	Uranium, Dissolved	0.00092	0.0025	0.00048	NA	mg/L
EP-4	9/6/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
EP-4	9/6/2018	Iron, Total	0.17	0.02	0.01	13822000	mg/L
EP-4	9/6/2018	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
EP-4	9/6/2018	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-4	9/6/2018	Selenium, Total	0.006	0.005	0.0049	50000	mg/L
EP-4	9/6/2018	Uranium, Total	0.0011	0.0025	0.00034	30000	mg/L
EP-4	9/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-5	4/30/2019	Aluminum, Total	0.71	0.02	0.002488	19914000	mg/L
EP-5	4/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-5	4/30/2019	Arsenic, Total	0.014	0.005	0.001561	10000	mg/L
EP-5	4/30/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
EP-5	4/30/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
EP-5	4/30/2019	Boron, Total	0.48	0.04	0.004531	3949	mg/L
EP-5	4/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-5	4/30/2019	Chromium, Total	0.0018	0.006	0.001533	50000	mg/L
EP-5	4/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-5	4/30/2019	Copper, Total	0.0044	0.006	0.004072	790000	mg/L
EP-5	4/30/2019	Iron, Total	0.38	0.02	0.008747	13822000	mg/L
EP-5	4/30/2019	Lead, Total	0.00049	0.0025	0.000274	15000	mg/L
EP-5	4/30/2019	Manganese, Total	0.48	0.002	0.00029	2017000	mg/L
EP-5	4/30/2019	Mercury, Total	0.000068	0.0002	0.000038	2000	mg/L
EP-5	4/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-5	4/30/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
EP-5	4/30/2019	Selenium, Total	0.0053	0.005	0.00239	50000	mg/L
EP-5	4/30/2019	Silver, Total	0.0069	0.005	0.001418	50000	mg/L
EP-5	4/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-5	4/30/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-5	4/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-5	4/30/2019	Aluminum, Dissolved	0.051	0.02	0.002488	19913930	mg/L
EP-5	4/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-5	4/30/2019	Arsenic, Dissolved	0.011	0.005	0.000504	10000	mg/L
EP-5	4/30/2019	Barium, Dissolved	0.19	0.002	0.000648	2000000	mg/L
EP-5	4/30/2019	Beryllium, Dissolved	0.00032	0.002	0.000284	4000	mg/L
EP-5	4/30/2019	Boron, Dissolved	0.47	0.04	0.004531	3949110	mg/L
EP-5	4/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-5	4/30/2019	Calcium, Dissolved	330	5	0.309446	NA	mg/L
EP-5	4/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-5	4/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-5	4/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-5	4/30/2019	Iron, Dissolved	0.093	0.02	0.008747	13821880	mg/L
EP-5	4/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-5	4/30/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
EP-5	4/30/2019	Manganese, Dissolved	0.45	0.002	0.00029	2017400	mg/L
EP-5	4/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-5	4/30/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
EP-5	4/30/2019	Potassium, Dissolved	300	5	0.811441	NA	mg/L
EP-5	4/30/2019	Selenium, Dissolved	0.0057	0.005	0.000857	50000	mg/L
EP-5	4/30/2019	Silver, Dissolved	0.0055	0.005	0.000942	81200	mg/L
EP-5	4/30/2019	Sodium, Dissolved	2300	50	20.808815	NA	mg/L
EP-5	4/30/2019	Thallium, Dissolved	0.00041	0.0025	0.000242	2000	mg/L
EP-5	4/30/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-5	4/30/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
EP-5	12/21/2020	Arsenic, Total Recoverable	**23.7**	1	0.286	10	ug/L
EP-5	12/21/2020	Lead, Total Recoverable	1.14	1	0.133	15	ug/L
EP-5	12/21/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
EP-5	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-5	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-5	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-5	12/21/2020	Arsenic, Dissolved	**22.9**	1	0.286	10	ug/L
EP-5	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-5	12/21/2020	Antimony, Dissolved	2.17	2	0.352	6	ug/L
EP-5	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-5	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-5	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-5	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-5	12/21/2020	Barium, Dissolved	0.194	0.01	0.003	2000000	mg/L
EP-5	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-5	12/21/2020	Boron, Dissolved	1.03	0.1	0.022	3949110	mg/L
EP-5	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-5	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-5	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-5	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-5	12/21/2020	Manganese, Dissolved	0.98	0.01	0.003	2017400	mg/L
EP-5	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
EP-5	12/21/2020	Nickel, Dissolved	0.0628	0.006	0.003	372000	mg/L
EP-5	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-5	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-5	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-5	12/21/2020	Aluminum, Total	0.386	0.2	0.051	19914000	mg/L
EP-5	12/21/2020	Boron, Total	0.975	0.1	0.022	3949	mg/L
EP-5	12/21/2020	Barium, Total	0.178	0.01	0.003	2000000	mg/L
EP-5	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-5	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-5	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-5	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-5	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-5	12/21/2020	Manganese, Total	0.959	0.01	0.003	2017000	mg/L
EP-5	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-5	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-5	12/21/2020	Iron, Total	0.37	0.2	0.075	13822000	mg/L
EP-5	12/21/2020	Nickel, Total	0.0605	0.006	0.003	372000	mg/L
EP-5	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
EP-5	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-5	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-5	9/17/2020	Aluminum, Total	0.14	0.1	0.037	19914000	mg/L
EP-5	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-5	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-5	9/17/2020	Boron, Total	0.97	0.2	0.037	3949	mg/L
EP-5	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-5	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-5	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-5	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-5	9/17/2020	Iron, Total	0.27	0.25	0.064	13822000	mg/L
EP-5	9/17/2020	Manganese, Total	0.94	0.01	0.0041	2017000	mg/L
EP-5	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-5	9/17/2020	Nickel, Total	0.051	0.05	0.016	372000	mg/L
EP-5	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-5	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-5	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-5	9/17/2020	Arsenic, Total	0.024	0.01	0.0026	10000	mg/L
EP-5	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-5	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-5	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-5	9/17/2020	Uranium, Total	0.0024	0.005	0.00065	30000	mg/L
EP-5	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-5	9/17/2020	Arsenic, Dissolved	0.021	0.05	0.01	10000	mg/L
EP-5	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-5	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-5	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-5	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-5	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-5	9/17/2020	Barium, Dissolved	0.23	0.002	0.0011	2000000	mg/L
EP-5	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-5	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-5	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-5	9/17/2020	Iron, Dissolved	0.13	0.02	0.01	13821880	mg/L
EP-5	9/17/2020	Manganese, Dissolved	0.9	0.002	0.00058	2017400	mg/L
EP-5	9/17/2020	Nickel, Dissolved	0.046	0.01	0.0033	372000	mg/L
EP-5	9/17/2020	Silver, Dissolved	0.0084	0.005	0.0013	81200	mg/L
EP-5	9/17/2020	Boron, Dissolved	1	0.2	0.033	3949110	mg/L
EP-5	9/17/2020	Magnesium, Dissolved	210	5	0.34	NA	mg/L
EP-5	9/17/2020	Calcium, Dissolved	570	20	2.3	NA	mg/L
EP-5	9/17/2020	Potassium, Dissolved	560	20	3.2	NA	mg/L
EP-5	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-5	9/17/2020	Chromium, Dissolved	0.003	0.006	0.002	100000	mg/L
EP-5	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-5	9/17/2020	Zinc, Dissolved	0.0065	0.01	0.006	5960450	mg/L
EP-5	9/17/2020	Sodium, Dissolved	4400	50	6.9	NA	mg/L
EP-5	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-5	5/29/2012	Arsenic, Total	0.017	0.01	0.0011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	5/29/2012	Barium, Total	0.059	0.002	0.00031	2000000	mg/L
EP-5	5/29/2012	Calcium, Total	240	10	0.26	NA	mg/L
EP-5	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-5	5/29/2012	Chromium, Total	0.0069	0.006	0.00056	50000	mg/L
EP-5	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-5	5/29/2012	Iron, Total	0.19	0.02	0.0019	13822000	mg/L
EP-5	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-5	5/29/2012	Potassium, Total	170	10	4.8	NA	mg/L
EP-5	5/29/2012	Magnesium, Total	120	10	0.13	NA	mg/L
EP-5	5/29/2012	Manganese, Total	0.065	0.002	0.00062	2017000	mg/L
EP-5	5/29/2012	Sodium, Total	3600	50	2.2	NA	mg/L
EP-5	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-5	5/29/2012	Selenium, Total	0.023	0.01	0.0033	50000	mg/L
EP-5	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-5	5/29/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L
EP-5	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-5	11/6/2012	Arsenic, Total	0.012	0.0025	0.0014	10000	mg/L
EP-5	11/6/2012	Barium, Total	0.062	0.002	0.00039	2000000	mg/L
EP-5	11/6/2012	Calcium, Total	170	10	0.26	NA	mg/L
EP-5	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-5	11/6/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
EP-5	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-5	11/6/2012	Iron, Total	0.63	0.02	0.013	13822000	mg/L
EP-5	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-5	11/6/2012	Potassium, Total	290	10	4.8	NA	mg/L
EP-5	11/6/2012	Magnesium, Total	110	10	0.13	NA	mg/L
EP-5	11/6/2012	Manganese, Total	0.39	0.002	0.00026	2017000	mg/L
EP-5	11/6/2012	Sodium, Total	3700	50	2.2	NA	mg/L
EP-5	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-5	11/6/2012	Selenium, Total	0.012	0.0025	0.0025	50000	mg/L
EP-5	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-5	11/6/2012	Zinc, Total	0.023	0.01	0.0011	5960000	mg/L
EP-5	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-5	5/28/2013	Arsenic, Total	0.013	0.01	0.0013	10000	mg/L
EP-5	5/28/2013	Barium, Total	0.085	0.01	0.0048	2000000	mg/L
EP-5	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-5	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-5	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-5	5/28/2013	Iron, Total	0.28	0.1	0.045	13822000	mg/L
EP-5	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-5	5/28/2013	Manganese, Total	0.16	0.01	0.00082	2017000	mg/L
EP-5	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-5	5/28/2013	Selenium, Total	0.019	0.01	0.0055	50000	mg/L
EP-5	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-5	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-5	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-5	10/15/2013	Arsenic, Total	0.013	0.01	0.00098	10000	mg/L
EP-5	10/15/2013	Barium, Total	0.089	0.002	0.00095	2000000	mg/L
EP-5	10/15/2013	Calcium, Total	390	5	0.34	NA	mg/L
EP-5	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-5	10/15/2013	Chromium, Total	0.0079	0.006	0.00084	50000	mg/L
EP-5	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-5	10/15/2013	Iron, Total	0.27	0.02	0.0089	13822000	mg/L
EP-5	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-5	10/15/2013	Potassium, Total	250	5	1.5	NA	mg/L
EP-5	10/15/2013	Magnesium, Total	140	5	0.26	NA	mg/L
EP-5	10/15/2013	Manganese, Total	0.18	0.002	0.00016	2017000	mg/L
EP-5	10/15/2013	Sodium, Total	3600	100	36	NA	mg/L
EP-5	10/15/2013	Lead, Total	ND	0.01	0.00018	15000	mg/L
EP-5	10/15/2013	Selenium, Total	0.018	0.01	0.0029	50000	mg/L
EP-5	10/15/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
EP-5	10/15/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
EP-5	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-5	3/5/2014	Arsenic, Total	0.015	0.01	0.0036	10000	mg/L
EP-5	3/5/2014	Barium, Total	0.12	0.01	0.0029	2000000	mg/L
EP-5	3/5/2014	Calcium, Total	350	50	4.1	NA	mg/L
EP-5	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-5	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-5	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	3/5/2014	Iron, Total	0.6	0.1	0.036	13822000	mg/L
EP-5	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-5	3/5/2014	Potassium, Total	180	5	0.47	NA	mg/L
EP-5	3/5/2014	Magnesium, Total	99	5	0.09	NA	mg/L
EP-5	3/5/2014	Manganese, Total	0.55	0.01	0.0024	2017000	mg/L
EP-5	3/5/2014	Sodium, Total	3300	50	20	NA	mg/L
EP-5	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-5	3/5/2014	Selenium, Total	0.016	0.01	0.0051	50000	mg/L
EP-5	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-5	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-5	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-5	11/12/2014	Arsenic, Total	0.032	0.02	0.0072	10000	mg/L
EP-5	11/12/2014	Barium, Total	0.13	0.002	0.0005	2000000	mg/L
EP-5	11/12/2014	Calcium, Total	520	10	0.82	NA	mg/L
EP-5	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-5	11/12/2014	Chromium, Total	0.0077	0.006	0.0028	50000	mg/L
EP-5	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
EP-5	11/12/2014	Iron, Total	0.62	0.02	0.0072	13822000	mg/L
EP-5	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-5	11/12/2014	Potassium, Total	320	5	0.47	NA	mg/L
EP-5	11/12/2014	Magnesium, Total	250	5	0.09	NA	mg/L
EP-5	11/12/2014	Manganese, Total	0.48	0.002	0.00049	2017000	mg/L
EP-5	11/12/2014	Sodium, Total	7400	100	39	NA	mg/L
EP-5	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-5	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-5	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-5	11/12/2014	Zinc, Total	0.012	0.01	0.0035	5960000	mg/L
EP-5	3/24/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-5	3/24/2015	Arsenic, Total	0.022	0.01	0.0044	10000	mg/L
EP-5	3/24/2015	Barium, Total	0.14	0.002	0.00073	2000000	mg/L
EP-5	3/24/2015	Calcium, Total	410	5	0.28	NA	mg/L
EP-5	3/24/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-5	3/24/2015	Chromium, Total	0.01	0.006	0.0022	50000	mg/L
EP-5	3/24/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-5	3/24/2015	Iron, Total	0.89	0.02	0.0072	13822000	mg/L
EP-5	3/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-5	3/24/2015	Potassium, Total	200	5	0.89	NA	mg/L
EP-5	3/24/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-5	3/24/2015	Manganese, Total	0.48	0.002	0.0015	2017000	mg/L
EP-5	3/24/2015	Sodium, Total	4900	100	7.2	NA	mg/L
EP-5	3/24/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-5	3/24/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-5	3/24/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-5	3/24/2015	Zinc, Total	0.016	0.01	0.0036	5960000	mg/L
EP-5	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-5	9/1/2015	Arsenic, Total	0.026	0.005	0.0015	10000	mg/L
EP-5	9/1/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
EP-5	9/1/2015	Calcium, Total	380	5	0.28	NA	mg/L
EP-5	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-5	9/1/2015	Chromium, Total	0.016	0.006	0.0022	50000	mg/L
EP-5	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-5	9/1/2015	Iron, Total	0.16	0.02	0.0072	13822000	mg/L
EP-5	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-5	9/1/2015	Potassium, Total	210	5	0.89	NA	mg/L
EP-5	9/1/2015	Magnesium, Total	190	5	0.2	NA	mg/L
EP-5	9/1/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
EP-5	9/1/2015	Sodium, Total	5100	100	7.2	NA	mg/L
EP-5	9/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
EP-5	9/1/2015	Selenium, Total	0.034	0.005	0.00062	50000	mg/L
EP-5	9/1/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
EP-5	9/1/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
EP-5	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-5	8/29/2016	Arsenic, Total	0.024	0.05	0.0069	10000	mg/L
EP-5	8/29/2016	Barium, Total	0.17	0.002	0.00079	2000000	mg/L
EP-5	8/29/2016	Calcium, Total	570	10	5	NA	mg/L
EP-5	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-5	8/29/2016	Chromium, Total	0.0085	0.006	0.0027	50000	mg/L
EP-5	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-5	8/29/2016	Iron, Total	0.25	0.02	0.02	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	8/29/2016	Mercury, Total	0.000054	0.0002	0.000053	2000	mg/L
EP-5	8/29/2016	Potassium, Total	230	5	2.5	NA	mg/L
EP-5	8/29/2016	Magnesium, Total	230	5	2.5	NA	mg/L
EP-5	8/29/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
EP-5	8/29/2016	Sodium, Total	6100	100	50	NA	mg/L
EP-5	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-5	8/29/2016	Selenium, Total	0.047	0.05	0.011	50000	mg/L
EP-5	8/29/2016	Uranium, Total	0.0036	0.0025	0.00026	30000	mg/L
EP-5	8/29/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
EP-5	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-5	3/30/2017	Arsenic, Total	0.032	0.005	0.0011	10000	mg/L
EP-5	3/30/2017	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
EP-5	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-5	3/30/2017	Chromium, Total	0.0094	0.006	0.0027	50000	mg/L
EP-5	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-5	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
EP-5	3/30/2017	Arsenic, Dissolved	0.029	0.005	0.00089	10000	mg/L
EP-5	3/30/2017	Barium, Dissolved	0.17	0.002	0.00085	2000000	mg/L
EP-5	3/30/2017	Calcium, Dissolved	560	10	5	NA	mg/L
EP-5	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	3/30/2017	Chromium, Dissolved	0.01	0.006	0.001	100000	mg/L
EP-5	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	3/30/2017	Iron, Dissolved	0.15	0.02	0.02	13821880	mg/L
EP-5	3/30/2017	Potassium, Dissolved	260	10	5	NA	mg/L
EP-5	3/30/2017	Magnesium, Dissolved	210	10	5	NA	mg/L
EP-5	3/30/2017	Manganese, Dissolved	0.62	0.002	0.00038	2017400	mg/L
EP-5	3/30/2017	Sodium, Dissolved	5200	100	50	NA	mg/L
EP-5	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-5	3/30/2017	Selenium, Dissolved	0.051	0.005	0.0019	50000	mg/L
EP-5	3/30/2017	Uranium, Dissolved	0.0026	0.0025	0.00025	NA	mg/L
EP-5	3/30/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
EP-5	3/30/2017	Iron, Total	0.33	0.02	0.02	13822000	mg/L
EP-5	3/30/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
EP-5	3/30/2017	Manganese, Total	0.66	0.002	0.00027	2017000	mg/L
EP-5	3/30/2017	Lead, Total	0.0008	0.0025	0.00041	15000	mg/L
EP-5	3/30/2017	Selenium, Total	0.056	0.005	0.00094	50000	mg/L
EP-5	3/30/2017	Uranium, Total	0.0025	0.0025	0.00087	30000	mg/L
EP-5	3/30/2017	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
EP-5	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-5	10/24/2017	Arsenic, Total	0.017	0.01	0.0041	10000	mg/L
EP-5	10/24/2017	Barium, Total	0.24	0.002	0.001	2000000	mg/L
EP-5	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	10/24/2017	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-5	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-5	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-5	10/24/2017	Arsenic, Dissolved	0.019	0.005	0.0014	10000	mg/L
EP-5	10/24/2017	Barium, Dissolved	0.23	0.002	0.00099	2000000	mg/L
EP-5	10/24/2017	Calcium, Dissolved	610	10	0.78	NA	mg/L
EP-5	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	10/24/2017	Chromium, Dissolved	0.0079	0.006	0.0013	100000	mg/L
EP-5	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	10/24/2017	Iron, Dissolved	0.2	0.02	0.016	13821880	mg/L
EP-5	10/24/2017	Potassium, Dissolved	370	10	1.1	NA	mg/L
EP-5	10/24/2017	Magnesium, Dissolved	220	10	2.5	NA	mg/L
EP-5	10/24/2017	Manganese, Dissolved	0.45	0.002	0.00039	2017400	mg/L
EP-5	10/24/2017	Sodium, Dissolved	5600	100	16	NA	mg/L
EP-5	10/24/2017	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-5	10/24/2017	Selenium, Dissolved	0.018	0.005	0.0038	50000	mg/L
EP-5	10/24/2017	Uranium, Dissolved	ND	0.01	0.0019	NA	mg/L
EP-5	10/24/2017	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
EP-5	10/24/2017	Iron, Total	0.28	0.02	0.01	13822000	mg/L
EP-5	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-5	10/24/2017	Manganese, Total	0.47	0.002	0.0011	2017000	mg/L
EP-5	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-5	10/24/2017	Selenium, Total	0.016	0.01	0.0098	50000	mg/L
EP-5	10/24/2017	Uranium, Total	0.0028	0.005	0.0015	30000	mg/L
EP-5	10/24/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
EP-5	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-5	2/21/2018	Arsenic, Total	0.013	0.01	0.0041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	2/21/2018	Barium, Total	0.32	0.002	0.001	2000000	mg/L
EP-5	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	2/21/2018	Chromium, Total	0.008	0.006	0.0018	50000	mg/L
EP-5	2/21/2018	Copper, Total	0.0085	0.006	0.0041	790000	mg/L
EP-5	2/21/2018	Silver, Dissolved	0.0074	0.005	0.0018	81200	mg/L
EP-5	2/21/2018	Arsenic, Dissolved	0.013	0.005	0.0021	10000	mg/L
EP-5	2/21/2018	Barium, Dissolved	0.22	0.002	0.00099	2000000	mg/L
EP-5	2/21/2018	Calcium, Dissolved	490	5	0.39	NA	mg/L
EP-5	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	2/21/2018	Chromium, Dissolved	0.0032	0.006	0.0013	100000	mg/L
EP-5	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	2/21/2018	Iron, Dissolved	0.35	0.02	0.016	13821880	mg/L
EP-5	2/21/2018	Potassium, Dissolved	300	10	1.1	NA	mg/L
EP-5	2/21/2018	Magnesium, Dissolved	160	10	2.5	NA	mg/L
EP-5	2/21/2018	Manganese, Dissolved	0.42	0.002	0.00039	2017400	mg/L
EP-5	2/21/2018	Sodium, Dissolved	3900	50	8.2	NA	mg/L
EP-5	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-5	2/21/2018	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
EP-5	2/21/2018	Uranium, Dissolved	0.0013	0.005	0.00096	NA	mg/L
EP-5	2/21/2018	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
EP-5	2/21/2018	Iron, Total	3	0.1	0.051	13822000	mg/L
EP-5	2/21/2018	Mercury, Total	0.000075	0.0002	0.000037	2000	mg/L
EP-5	2/21/2018	Manganese, Total	0.51	0.002	0.0011	2017000	mg/L
EP-5	2/21/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-5	2/21/2018	Selenium, Total	0.013	0.01	0.0098	50000	mg/L
EP-5	2/21/2018	Uranium, Total	0.0016	0.005	0.00068	30000	mg/L
EP-5	2/21/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
EP-5	9/6/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
EP-5	9/6/2018	Arsenic, Total	0.021	0.005	0.0021	10000	mg/L
EP-5	9/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-5	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-5	9/6/2018	Chromium, Total	0.0044	0.006	0.0018	50000	mg/L
EP-5	9/6/2018	Copper, Total	0.0045	0.006	0.0041	790000	mg/L
EP-5	9/6/2018	Silver, Dissolved	0.0077	0.005	0.0018	81200	mg/L
EP-5	9/6/2018	Arsenic, Dissolved	0.019	0.005	0.0021	10000	mg/L
EP-5	9/6/2018	Barium, Dissolved	0.16	0.002	0.00099	2000000	mg/L
EP-5	9/6/2018	Calcium, Dissolved	330	10	0.78	NA	mg/L
EP-5	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-5	9/6/2018	Chromium, Dissolved	0.0028	0.006	0.0013	100000	mg/L
EP-5	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-5	9/6/2018	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
EP-5	9/6/2018	Potassium, Dissolved	470	10	1.1	NA	mg/L
EP-5	9/6/2018	Magnesium, Dissolved	160	10	2.5	NA	mg/L
EP-5	9/6/2018	Manganese, Dissolved	0.15	0.002	0.00039	2017400	mg/L
EP-5	9/6/2018	Sodium, Dissolved	3500	50	8.2	NA	mg/L
EP-5	9/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-5	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-5	9/6/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-5	9/6/2018	Zinc, Dissolved	0.0033	0.01	0.0021	5960450	mg/L
EP-5	9/6/2018	Iron, Total	0.094	0.02	0.01	13822000	mg/L
EP-5	9/6/2018	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
EP-5	9/6/2018	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
EP-5	9/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-5	9/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
EP-5	9/6/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-5	9/6/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
EP-6	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-6	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-6	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-6	12/21/2020	Barium, Dissolved	0.263	0.01	0.003	2000000	mg/L
EP-6	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-6	12/21/2020	Boron, Dissolved	1.09	0.1	0.022	3949110	mg/L
EP-6	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
EP-6	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
EP-6	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
EP-6	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
EP-6	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-6	12/21/2020	Manganese, Dissolved	1.02	0.01	0.003	2017400	mg/L
EP-6	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	12/21/2020	Nickel, Dissolved	0.0559	0.006	0.003	372000	mg/L
EP-6	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
EP-6	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-6	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
EP-6	12/21/2020	Aluminum, Total	0.367	0.2	0.051	19914000	mg/L
EP-6	12/21/2020	Boron, Total	0.97	0.1	0.022	3949	mg/L
EP-6	12/21/2020	Barium, Total	0.246	0.01	0.003	2000000	mg/L
EP-6	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
EP-6	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
EP-6	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
EP-6	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
EP-6	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
EP-6	12/21/2020	Manganese, Total	0.975	0.01	0.003	2017000	mg/L
EP-6	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
EP-6	12/21/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
EP-6	12/21/2020	Iron, Total	0.262	0.2	0.075	13822000	mg/L
EP-6	12/21/2020	Nickel, Total	0.0524	0.006	0.003	372000	mg/L
EP-6	12/21/2020	Arsenic, Total Recoverable	**30**	1	0.286	10	ug/L
EP-6	12/21/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
EP-6	12/21/2020	Antimony, Total Recoverable	2.31	2	0.352	6	ug/L
EP-6	12/21/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
EP-6	12/21/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
EP-6	12/21/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
EP-6	12/21/2020	Arsenic, Dissolved	**28.8**	1	0.286	10	ug/L
EP-6	12/21/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
EP-6	12/21/2020	Antimony, Dissolved	2.15	2	0.352	6	ug/L
EP-6	12/21/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
EP-6	12/21/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
EP-6	12/21/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
EP-6	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-6	9/17/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
EP-6	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-6	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-6	9/17/2020	Boron, Total	0.9	0.2	0.037	3949	mg/L
EP-6	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-6	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-6	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-6	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-6	9/17/2020	Iron, Total	0.086	0.25	0.064	13822000	mg/L
EP-6	9/17/2020	Manganese, Total	0.77	0.01	0.0041	2017000	mg/L
EP-6	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-6	9/17/2020	Nickel, Total	0.061	0.05	0.016	372000	mg/L
EP-6	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
EP-6	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-6	9/17/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
EP-6	9/17/2020	Arsenic, Total	0.024	0.01	0.0026	10000	mg/L
EP-6	9/17/2020	Lead, Total	ND	0.005	0.00034	15000	mg/L
EP-6	9/17/2020	Selenium, Total	ND	0.01	0.0066	50000	mg/L
EP-6	9/17/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
EP-6	9/17/2020	Uranium, Total	0.0028	0.005	0.00065	30000	mg/L
EP-6	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-6	9/17/2020	Arsenic, Dissolved	0.019	0.05	0.01	10000	mg/L
EP-6	9/17/2020	Lead, Dissolved	ND	0.025	0.0017	NA	mg/L
EP-6	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-6	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-6	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-6	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
EP-6	9/17/2020	Barium, Dissolved	0.21	0.002	0.0011	2000000	mg/L
EP-6	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
EP-6	9/17/2020	Boron, Dissolved	0.92	0.04	0.0067	3949110	mg/L
EP-6	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
EP-6	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
EP-6	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
EP-6	9/17/2020	Iron, Dissolved	0.019	0.02	0.01	13821880	mg/L
EP-6	9/17/2020	Manganese, Dissolved	0.7	0.002	0.00058	2017400	mg/L
EP-6	9/17/2020	Nickel, Dissolved	0.041	0.01	0.0033	372000	mg/L
EP-6	9/17/2020	Silver, Dissolved	0.0085	0.005	0.0013	81200	mg/L
EP-6	9/17/2020	Magnesium, Dissolved	190	5	0.34	NA	mg/L
EP-6	9/17/2020	Potassium, Dissolved	490	5	0.8	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	9/17/2020	Calcium, Dissolved	510	50	5.7	NA	mg/L
EP-6	9/17/2020	Sodium, Dissolved	4300	50	6.9	NA	mg/L
EP-6	9/17/2020	Chromium, Dissolved	0.0046	0.006	0.002	100000	mg/L
EP-6	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
EP-6	9/17/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
EP-6	4/29/2019	Aluminum, Total	0.5	0.02	0.002488	19914000	mg/L
EP-6	4/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-6	4/29/2019	Arsenic, Total	0.014	0.005	0.001561	10000	mg/L
EP-6	4/29/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
EP-6	4/29/2019	Beryllium, Total	0.00057	0.002	0.000284	4000	mg/L
EP-6	4/29/2019	Boron, Total	0.48	0.04	0.004531	3949	mg/L
EP-6	4/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-6	4/29/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
EP-6	4/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-6	4/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
EP-6	4/29/2019	Iron, Total	0.32	0.02	0.008747	13822000	mg/L
EP-6	4/29/2019	Lead, Total	0.00047	0.0025	0.000274	15000	mg/L
EP-6	4/29/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
EP-6	4/29/2019	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
EP-6	4/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-6	4/29/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
EP-6	4/29/2019	Selenium, Total	0.004	0.005	0.00239	50000	mg/L
EP-6	4/29/2019	Silver, Total	0.0071	0.005	0.001418	50000	mg/L
EP-6	4/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-6	4/29/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-6	4/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
EP-6	4/29/2019	Aluminum, Dissolved	0.029	0.02	0.002488	19913930	mg/L
EP-6	4/29/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-6	4/29/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
EP-6	4/29/2019	Barium, Dissolved	0.2	0.002	0.000648	2000000	mg/L
EP-6	4/29/2019	Beryllium, Dissolved	0.00057	0.002	0.000284	4000	mg/L
EP-6	4/29/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
EP-6	4/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
EP-6	4/29/2019	Calcium, Dissolved	370	5	0.309446	NA	mg/L
EP-6	4/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
EP-6	4/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
EP-6	4/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
EP-6	4/29/2019	Iron, Dissolved	0.097	0.02	0.008747	13821880	mg/L
EP-6	4/29/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-6	4/29/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
EP-6	4/29/2019	Manganese, Dissolved	0.46	0.002	0.00029	2017400	mg/L
EP-6	4/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
EP-6	4/29/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
EP-6	4/29/2019	Potassium, Dissolved	320	5	0.811441	NA	mg/L
EP-6	4/29/2019	Selenium, Dissolved	0.005	0.005	0.000857	50000	mg/L
EP-6	4/29/2019	Silver, Dissolved	0.0071	0.005	0.000942	81200	mg/L
EP-6	4/29/2019	Sodium, Dissolved	2300	100	41.61763	NA	mg/L
EP-6	4/29/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-6	4/29/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
EP-6	4/29/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
EP-6	5/29/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
EP-6	5/29/2012	Arsenic, Total	0.02	0.01	0.0011	10000	mg/L
EP-6	5/29/2012	Barium, Total	0.094	0.002	0.00031	2000000	mg/L
EP-6	5/29/2012	Calcium, Total	340	10	0.26	NA	mg/L
EP-6	5/29/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
EP-6	5/29/2012	Chromium, Total	0.011	0.006	0.00056	50000	mg/L
EP-6	5/29/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
EP-6	5/29/2012	Iron, Total	0.11	0.02	0.0019	13822000	mg/L
EP-6	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-6	5/29/2012	Potassium, Total	270	10	4.8	NA	mg/L
EP-6	5/29/2012	Magnesium, Total	150	10	0.13	NA	mg/L
EP-6	5/29/2012	Manganese, Total	0.41	0.002	0.00062	2017000	mg/L
EP-6	5/29/2012	Sodium, Total	4400	100	4.5	NA	mg/L
EP-6	5/29/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
EP-6	5/29/2012	Selenium, Total	0.017	0.01	0.0033	50000	mg/L
EP-6	5/29/2012	Uranium, Total	ND	0.01	0.0006	30000	mg/L
EP-6	5/29/2012	Zinc, Total	0.019	0.01	0.00062	5960000	mg/L
EP-6	11/6/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
EP-6	11/6/2012	Arsenic, Total	0.023	0.0025	0.0014	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/6/2012	Barium, Total	0.092	0.002	0.00039	2000000	mg/L
EP-6	11/6/2012	Calcium, Total	410	10	0.26	NA	mg/L
EP-6	11/6/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
EP-6	11/6/2012	Chromium, Total	0.0076	0.006	0.001	50000	mg/L
EP-6	11/6/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	11/6/2012	Iron, Total	0.14	0.02	0.013	13822000	mg/L
EP-6	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-6	11/6/2012	Potassium, Total	480	10	4.8	NA	mg/L
EP-6	11/6/2012	Magnesium, Total	230	10	0.13	NA	mg/L
EP-6	11/6/2012	Manganese, Total	0.086	0.002	0.00026	2017000	mg/L
EP-6	11/6/2012	Sodium, Total	6500	100	4.5	NA	mg/L
EP-6	11/6/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
EP-6	11/6/2012	Selenium, Total	0.024	0.0025	0.0025	50000	mg/L
EP-6	11/6/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
EP-6	11/6/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
EP-6	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-6	5/28/2013	Arsenic, Total	0.021	0.01	0.0013	10000	mg/L
EP-6	5/28/2013	Barium, Total	0.096	0.01	0.0048	2000000	mg/L
EP-6	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-6	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-6	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-6	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-6	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-6	5/28/2013	Manganese, Total	0.15	0.01	0.00082	2017000	mg/L
EP-6	5/28/2013	Lead, Total	ND	0.01	0.0002	15000	mg/L
EP-6	5/28/2013	Selenium, Total	0.02	0.01	0.0055	50000	mg/L
EP-6	5/28/2013	Uranium, Total	ND	0.01	0.0001	30000	mg/L
EP-6	5/28/2013	Zinc, Total	0.069	0.05	0.0038	5960000	mg/L
EP-6	10/15/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-6	10/15/2013	Arsenic, Total	ND	0.05	0.0049	10000	mg/L
EP-6	10/15/2013	Barium, Total	0.098	0.002	0.00095	2000000	mg/L
EP-6	10/15/2013	Calcium, Total	620	10	0.69	NA	mg/L
EP-6	10/15/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
EP-6	10/15/2013	Chromium, Total	0.0086	0.006	0.00084	50000	mg/L
EP-6	10/15/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
EP-6	10/15/2013	Iron, Total	0.077	0.02	0.0089	13822000	mg/L
EP-6	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-6	10/15/2013	Potassium, Total	280	20	6	NA	mg/L
EP-6	10/15/2013	Magnesium, Total	230	5	0.26	NA	mg/L
EP-6	10/15/2013	Manganese, Total	0.22	0.002	0.00016	2017000	mg/L
EP-6	10/15/2013	Sodium, Total	6700	200	71	NA	mg/L
EP-6	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-6	10/15/2013	Selenium, Total	ND	0.05	0.015	50000	mg/L
EP-6	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-6	10/15/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
EP-6	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-6	3/5/2014	Arsenic, Total	0.015	0.01	0.0036	10000	mg/L
EP-6	3/5/2014	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
EP-6	3/5/2014	Calcium, Total	450	5	0.41	NA	mg/L
EP-6	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-6	3/5/2014	Chromium, Total	0.0089	0.006	0.0028	50000	mg/L
EP-6	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L
EP-6	3/5/2014	Iron, Total	0.67	0.02	0.0072	13822000	mg/L
EP-6	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-6	3/5/2014	Potassium, Total	240	5	0.47	NA	mg/L
EP-6	3/5/2014	Magnesium, Total	150	5	0.09	NA	mg/L
EP-6	3/5/2014	Manganese, Total	0.59	0.002	0.00049	2017000	mg/L
EP-6	3/5/2014	Sodium, Total	4800	100	39	NA	mg/L
EP-6	3/5/2014	Lead, Total	ND	0.01	0.0026	15000	mg/L
EP-6	3/5/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
EP-6	3/5/2014	Uranium, Total	ND	0.01	0.0018	30000	mg/L
EP-6	3/5/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
EP-6	11/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
EP-6	11/12/2014	Arsenic, Total	0.034	0.02	0.0072	10000	mg/L
EP-6	11/12/2014	Barium, Total	0.15	0.002	0.0005	2000000	mg/L
EP-6	11/12/2014	Calcium, Total	540	10	0.82	NA	mg/L
EP-6	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
EP-6	11/12/2014	Chromium, Total	0.0082	0.006	0.0028	50000	mg/L
EP-6	11/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Iron, Total	1.6	0.1	0.036	13822000	mg/L
EP-6	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-6	11/12/2014	Potassium, Total	370	5	0.47	NA	mg/L
EP-6	11/12/2014	Magnesium, Total	290	5	0.09	NA	mg/L
EP-6	11/12/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
EP-6	11/12/2014	Sodium, Total	8400	100	39	NA	mg/L
EP-6	11/12/2014	Lead, Total	ND	0.02	0.0053	15000	mg/L
EP-6	11/12/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
EP-6	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-6	11/12/2014	Zinc, Total	ND	0.02	0.0071	5960000	mg/L
EP-6	3/25/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-6	3/25/2015	Arsenic, Total	0.023	0.01	0.0044	10000	mg/L
EP-6	3/25/2015	Barium, Total	0.13	0.002	0.00073	2000000	mg/L
EP-6	3/25/2015	Calcium, Total	410	5	0.28	NA	mg/L
EP-6	3/25/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
EP-6	3/25/2015	Chromium, Total	0.0092	0.006	0.0022	50000	mg/L
EP-6	3/25/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-6	3/25/2015	Iron, Total	0.78	0.02	0.0072	13822000	mg/L
EP-6	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-6	3/25/2015	Potassium, Total	210	5	0.89	NA	mg/L
EP-6	3/25/2015	Magnesium, Total	170	5	0.2	NA	mg/L
EP-6	3/25/2015	Manganese, Total	0.43	0.002	0.0015	2017000	mg/L
EP-6	3/25/2015	Sodium, Total	4800	100	7.2	NA	mg/L
EP-6	3/25/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
EP-6	3/25/2015	Selenium, Total	0.026	0.01	0.0012	50000	mg/L
EP-6	3/25/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
EP-6	3/25/2015	Zinc, Total	0.018	0.01	0.0036	5960000	mg/L
EP-6	9/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
EP-6	9/1/2015	Arsenic, Total	0.031	0.005	0.0015	10000	mg/L
EP-6	9/1/2015	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
EP-6	9/1/2015	Calcium, Total	450	5	0.28	NA	mg/L
EP-6	9/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
EP-6	9/1/2015	Chromium, Total	0.019	0.006	0.0022	50000	mg/L
EP-6	9/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
EP-6	9/1/2015	Iron, Total	0.085	0.02	0.0072	13822000	mg/L
EP-6	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-6	9/1/2015	Potassium, Total	260	5	0.89	NA	mg/L
EP-6	9/1/2015	Magnesium, Total	230	5	0.2	NA	mg/L
EP-6	9/1/2015	Manganese, Total	0.35	0.002	0.0015	2017000	mg/L
EP-6	9/1/2015	Sodium, Total	5700	100	7.2	NA	mg/L
EP-6	9/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
EP-6	9/1/2015	Selenium, Total	0.04	0.005	0.00062	50000	mg/L
EP-6	9/1/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
EP-6	9/1/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
EP-6	8/29/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-6	8/29/2016	Arsenic, Total	0.038	0.05	0.0069	10000	mg/L
EP-6	8/29/2016	Barium, Total	0.19	0.002	0.00079	2000000	mg/L
EP-6	8/29/2016	Calcium, Total	570	10	5	NA	mg/L
EP-6	8/29/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-6	8/29/2016	Chromium, Total	0.0083	0.006	0.0027	50000	mg/L
EP-6	8/29/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-6	8/29/2016	Iron, Total	0.15	0.02	0.02	13822000	mg/L
EP-6	8/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
EP-6	8/29/2016	Potassium, Total	250	5	2.5	NA	mg/L
EP-6	8/29/2016	Magnesium, Total	240	5	2.5	NA	mg/L
EP-6	8/29/2016	Manganese, Total	0.39	0.002	0.00027	2017000	mg/L
EP-6	8/29/2016	Sodium, Total	6100	100	50	NA	mg/L
EP-6	8/29/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
EP-6	8/29/2016	Selenium, Total	0.046	0.05	0.011	50000	mg/L
EP-6	8/29/2016	Uranium, Total	0.0039	0.0025	0.00026	30000	mg/L
EP-6	8/29/2016	Zinc, Total	0.0073	0.01	0.0027	5960000	mg/L
EP-6	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
EP-6	3/30/2017	Arsenic, Total	0.031	0.005	0.0011	10000	mg/L
EP-6	3/30/2017	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
EP-6	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
EP-6	3/30/2017	Chromium, Total	0.0093	0.006	0.0027	50000	mg/L
EP-6	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
EP-6	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-6	3/30/2017	Arsenic, Dissolved	0.031	0.005	0.00089	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	3/30/2017	Barium, Dissolved	0.19	0.02	0.0085	2000000	mg/L
EP-6	3/30/2017	Calcium, Dissolved	530	10	5	NA	mg/L
EP-6	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-6	3/30/2017	Chromium, Dissolved	ND	0.06	0.01	100000	mg/L
EP-6	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-6	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-6	3/30/2017	Potassium, Dissolved	240	10	5	NA	mg/L
EP-6	3/30/2017	Magnesium, Dissolved	200	10	5	NA	mg/L
EP-6	3/30/2017	Manganese, Dissolved	0.72	0.02	0.0038	2017400	mg/L
EP-6	3/30/2017	Sodium, Dissolved	5300	100	50	NA	mg/L
EP-6	3/30/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
EP-6	3/30/2017	Selenium, Dissolved	0.054	0.005	0.0019	50000	mg/L
EP-6	3/30/2017	Uranium, Dissolved	0.0026	0.0025	0.00025	NA	mg/L
EP-6	3/30/2017	Zinc, Dissolved	0.042	0.1	0.011	5960450	mg/L
EP-6	3/30/2017	Iron, Total	0.38	0.02	0.02	13822000	mg/L
EP-6	3/30/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
EP-6	3/30/2017	Manganese, Total	0.66	0.002	0.00027	2017000	mg/L
EP-6	3/30/2017	Lead, Total	0.0007	0.0025	0.00041	15000	mg/L
EP-6	3/30/2017	Selenium, Total	0.058	0.02	0.0037	50000	mg/L
EP-6	3/30/2017	Uranium, Total	0.0026	0.0025	0.00087	30000	mg/L
EP-6	3/30/2017	Zinc, Total	0.0097	0.01	0.0027	5960000	mg/L
EP-6	10/24/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
EP-6	10/24/2017	Arsenic, Total	0.018	0.01	0.0041	10000	mg/L
EP-6	10/24/2017	Barium, Total	0.25	0.002	0.001	2000000	mg/L
EP-6	10/24/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	10/24/2017	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
EP-6	10/24/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	10/24/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
EP-6	10/24/2017	Arsenic, Dissolved	0.021	0.005	0.0014	10000	mg/L
EP-6	10/24/2017	Barium, Dissolved	0.23	0.002	0.00099	2000000	mg/L
EP-6	10/24/2017	Calcium, Dissolved	590	10	0.78	NA	mg/L
EP-6	10/24/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	10/24/2017	Chromium, Dissolved	0.0091	0.006	0.0013	100000	mg/L
EP-6	10/24/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	10/24/2017	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
EP-6	10/24/2017	Potassium, Dissolved	330	10	1.1	NA	mg/L
EP-6	10/24/2017	Magnesium, Dissolved	210	10	2.5	NA	mg/L
EP-6	10/24/2017	Manganese, Dissolved	0.47	0.002	0.00039	2017400	mg/L
EP-6	10/24/2017	Sodium, Dissolved	6000	100	16	NA	mg/L
EP-6	10/24/2017	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-6	10/24/2017	Selenium, Dissolved	0.017	0.005	0.0038	50000	mg/L
EP-6	10/24/2017	Uranium, Dissolved	0.0024	0.01	0.0019	NA	mg/L
EP-6	10/24/2017	Zinc, Dissolved	0.069	0.01	0.0021	5960450	mg/L
EP-6	10/24/2017	Iron, Total	0.19	0.02	0.01	13822000	mg/L
EP-6	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-6	10/24/2017	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
EP-6	10/24/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
EP-6	10/24/2017	Selenium, Total	0.018	0.01	0.0098	50000	mg/L
EP-6	10/24/2017	Uranium, Total	0.0029	0.005	0.0015	30000	mg/L
EP-6	10/24/2017	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
EP-6	2/21/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-6	2/21/2018	Arsenic, Total	0.021	0.01	0.0041	10000	mg/L
EP-6	2/21/2018	Barium, Total	0.32	0.002	0.001	2000000	mg/L
EP-6	2/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	2/21/2018	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
EP-6	2/21/2018	Copper, Total	0.0094	0.006	0.0041	790000	mg/L
EP-6	2/21/2018	Silver, Dissolved	0.0074	0.005	0.0018	81200	mg/L
EP-6	2/21/2018	Arsenic, Dissolved	0.017	0.005	0.0021	10000	mg/L
EP-6	2/21/2018	Barium, Dissolved	0.21	0.002	0.00099	2000000	mg/L
EP-6	2/21/2018	Calcium, Dissolved	500	5	0.39	NA	mg/L
EP-6	2/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	2/21/2018	Chromium, Dissolved	0.005	0.006	0.0013	100000	mg/L
EP-6	2/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	2/21/2018	Iron, Dissolved	0.27	0.02	0.016	13821880	mg/L
EP-6	2/21/2018	Potassium, Dissolved	340	10	1.1	NA	mg/L
EP-6	2/21/2018	Magnesium, Dissolved	170	10	2.5	NA	mg/L
EP-6	2/21/2018	Manganese, Dissolved	0.52	0.002	0.00039	2017400	mg/L
EP-6	2/21/2018	Sodium, Dissolved	4900	100	16	NA	mg/L
EP-6	2/21/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	2/21/2018	Selenium, Dissolved	0.015	0.005	0.0038	50000	mg/L
EP-6	2/21/2018	Uranium, Dissolved	0.0018	0.005	0.00096	NA	mg/L
EP-6	2/21/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
EP-6	2/21/2018	Iron, Total	3.9	0.1	0.051	13822000	mg/L
EP-6	2/21/2018	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
EP-6	2/21/2018	Manganese, Total	0.64	0.002	0.0011	2017000	mg/L
EP-6	2/21/2018	Lead, Total	0.0026	0.005	0.0023	15000	mg/L
EP-6	2/21/2018	Selenium, Total	0.014	0.01	0.0098	50000	mg/L
EP-6	2/21/2018	Uranium, Total	0.0022	0.005	0.00068	30000	mg/L
EP-6	2/21/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
EP-6	9/7/2018	Silver, Total	0.0087	0.005	0.0012	50000	mg/L
EP-6	9/7/2018	Arsenic, Total	0.023	0.005	0.0021	10000	mg/L
EP-6	9/7/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
EP-6	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-6	9/7/2018	Chromium, Total	0.0037	0.006	0.0018	50000	mg/L
EP-6	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-6	9/7/2018	Silver, Dissolved	0.0076	0.005	0.0018	81200	mg/L
EP-6	9/7/2018	Arsenic, Dissolved	0.022	0.005	0.0021	10000	mg/L
EP-6	9/7/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
EP-6	9/7/2018	Calcium, Dissolved	350	10	0.78	NA	mg/L
EP-6	9/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
EP-6	9/7/2018	Chromium, Dissolved	0.0042	0.006	0.0013	100000	mg/L
EP-6	9/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
EP-6	9/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
EP-6	9/7/2018	Potassium, Dissolved	490	10	1.1	NA	mg/L
EP-6	9/7/2018	Magnesium, Dissolved	180	10	2.5	NA	mg/L
EP-6	9/7/2018	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
EP-6	9/7/2018	Sodium, Dissolved	3800	100	16	NA	mg/L
EP-6	9/7/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
EP-6	9/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
EP-6	9/7/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
EP-6	9/7/2018	Zinc, Dissolved	0.0036	0.01	0.0021	5960450	mg/L
EP-6	9/7/2018	Iron, Total	0.081	0.02	0.01	13822000	mg/L
EP-6	9/7/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
EP-6	9/7/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
EP-6	9/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
EP-6	9/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
EP-6	9/7/2018	Uranium, Total	0.0012	0.0025	0.00034	30000	mg/L
EP-6	9/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Aluminum, Dissolved	ND	0.2	0.024883	19913930	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Arsenic, Dissolved	0.017	0.005	0.000504	10000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Barium, Dissolved	0.24	0.02	0.006484	2000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Beryllium, Dissolved	ND	0.02	0.002838	4000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Boron, Dissolved	0.68	0.4	0.045305	3949110	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cadmium, Dissolved	ND	0.02	0.005523	5000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Calcium, Dissolved	390	10	0.618891	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chromium, Dissolved	ND	0.06	0.015332	100000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cobalt, Dissolved	ND	0.06	0.030913	5980	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Copper, Dissolved	0.014	0.06	0.012962	790000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Iron, Dissolved	0.45	0.2	0.087469	13821880	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Magnesium, Dissolved	130	10	0.502904	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Manganese, Dissolved	0.62	0.02	0.002899	2017400	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Molybdenum, Dissolved	ND	0.08	0.067349	98700	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nickel, Dissolved	ND	0.1	0.040087	372000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Potassium, Dissolved	390	10	1.622881	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Selenium, Dissolved	0.0032	0.005	0.000857	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Silver, Dissolved	ND	0.05	0.009424	81200	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Zinc, Dissolved	0.033	0.1	0.02252	5960450	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Aluminum, Total	0.58	0.02	0.002488	19914000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Arsenic, Total	0.016	0.02	0.006244	10000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Boron, Total	0.71	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6 (Pond 4 & 5)	11/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chromium, Total	0.0055	0.006	0.001533	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Copper, Total	0.0058	0.006	0.004072	790000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Iron, Total	0.74	0.02	0.008747	13822000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Silver, Total	0.008	0.005	0.001418	50000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
EP-7	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-7	11/20/2019	Antimony, Dissolved	ND	0.1	0.038942	6000	mg/L
EP-7	11/20/2019	Arsenic, Dissolved	0.34	0.1	0.010086	10000	mg/L
EP-7	11/20/2019	Barium, Dissolved	0.19	0.1	0.032419	2000000	mg/L
EP-7	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-7	11/20/2019	Boron, Dissolved	11	2	0.226525	3949110	mg/L
EP-7	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-7	11/20/2019	Calcium, Dissolved	520	50	3.094457	NA	mg/L
EP-7	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-7	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-7	11/20/2019	Copper, Dissolved	0.11	0.3	0.064808	790000	mg/L
EP-7	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-7	11/20/2019	Lead, Dissolved	ND	0.05	0.005488	NA	mg/L
EP-7	11/20/2019	Magnesium, Dissolved	3800	50	2.514522	NA	mg/L
EP-7	11/20/2019	Manganese, Dissolved	1.3	0.1	0.014497	2017400	mg/L
EP-7	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-7	11/20/2019	Nickel, Dissolved	0.25	0.5	0.200435	372000	mg/L
EP-7	11/20/2019	Potassium, Dissolved	4900	50	8.114407	NA	mg/L
EP-7	11/20/2019	Selenium, Dissolved	0.04	0.1	0.017135	50000	mg/L
EP-7	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-7	11/20/2019	Sodium, Dissolved	91000	2000	832.352597	NA	mg/L
EP-7	11/20/2019	Thallium, Dissolved	ND	0.05	0.004836	2000	mg/L
EP-7	11/20/2019	Uranium, Dissolved	0.0094	0.05	0.007474	NA	mg/L
EP-7	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-7	11/20/2019	Aluminum, Total	0.36	0.4	0.049765	19914000	mg/L
EP-7	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-7	11/20/2019	Arsenic, Total	0.31	0.5	0.156094	10000	mg/L
EP-7	11/20/2019	Barium, Total	0.17	0.04	0.012968	2000000	mg/L
EP-7	11/20/2019	Beryllium, Total	ND	0.04	0.005675	4000	mg/L
EP-7	11/20/2019	Boron, Total	11	0.8	0.09061	3949	mg/L
EP-7	11/20/2019	Cadmium, Total	ND	0.04	0.014702	5000	mg/L
EP-7	11/20/2019	Chromium, Total	ND	0.12	0.030663	50000	mg/L
EP-7	11/20/2019	Cobalt, Total	ND	0.12	0.061827	5980	mg/L
EP-7	11/20/2019	Copper, Total	0.089	0.12	0.081436	790000	mg/L
EP-7	11/20/2019	Iron, Total	0.28	0.4	0.174937	13822000	mg/L
EP-7	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-7	11/20/2019	Manganese, Total	1.9	0.04	0.005799	2017000	mg/L
EP-7	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-7	11/20/2019	Molybdenum, Total	ND	0.16	0.134697	98700	mg/L
EP-7	11/20/2019	Nickel, Total	0.35	0.2	0.080174	372000	mg/L
EP-7	11/20/2019	Selenium, Total	ND	0.5	0.238994	50000	mg/L
EP-7	11/20/2019	Silver, Total	ND	0.1	0.028366	50000	mg/L
EP-7	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-7	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-7	11/20/2019	Zinc, Total	ND	0.2	0.115437	5960000	mg/L
EP-7	4/29/2019	Aluminum, Total	0.21	0.1	0.012441	19914000	mg/L
EP-7	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-7	4/29/2019	Arsenic, Total	0.11	0.02	0.006244	10000	mg/L
EP-7	4/29/2019	Barium, Total	0.18	0.01	0.003242	2000000	mg/L
EP-7	4/29/2019	Beryllium, Total	0.0028	0.01	0.001419	4000	mg/L
EP-7	4/29/2019	Boron, Total	3.7	0.2	0.022653	3949	mg/L
EP-7	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-7	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-7	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
EP-7	4/29/2019	Iron, Total	0.094	0.1	0.043734	13822000	mg/L
EP-7	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-7	4/29/2019	Manganese, Total	0.59	0.01	0.00145	2017000	mg/L
EP-7	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-7	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-7	4/29/2019	Nickel, Total	0.12	0.05	0.020043	372000	mg/L
EP-7	4/29/2019	Selenium, Total	0.012	0.02	0.00956	50000	mg/L
EP-7	4/29/2019	Silver, Total	0.017	0.025	0.007092	50000	mg/L
EP-7	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-7	4/29/2019	Uranium, Total	0.0048	0.01	0.001697	30000	mg/L
EP-7	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-7	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-7	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-7	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-7	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-7	4/29/2019	Beryllium, Dissolved	0.0018	0.01	0.001419	4000	mg/L
EP-7	4/29/2019	Boron, Dissolved	3.9	0.2	0.022653	3949110	mg/L
EP-7	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-7	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-7	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-7	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-7	4/29/2019	Copper, Dissolved	0.012	0.03	0.006481	790000	mg/L
EP-7	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-7	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-7	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-7	4/29/2019	Manganese, Dissolved	0.46	0.01	0.00145	2017400	mg/L
EP-7	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-7	4/29/2019	Nickel, Dissolved	0.11	0.05	0.020043	372000	mg/L
EP-7	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-7	4/29/2019	Selenium, Dissolved	0.0089	0.05	0.008567	50000	mg/L
EP-7	4/29/2019	Silver, Dissolved	0.016	0.025	0.004712	81200	mg/L
EP-7	4/29/2019	Sodium, Dissolved	33000	500	208.088149	NA	mg/L
EP-7	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-7	4/29/2019	Uranium, Dissolved	0.0048	0.01	0.001495	NA	mg/L
EP-7	4/29/2019	Zinc, Dissolved	0.03	0.05	0.01126	5960450	mg/L
EP-7	12/21/2020	Arsenic, Total Recoverable	**464**	10	2.86	10	ug/L
EP-7	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-7	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-7	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
EP-7	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-7	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-7	12/21/2020	Arsenic, Dissolved	**443**	10	2.86	10	ug/L
EP-7	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-7	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-7	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-7	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-7	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-7	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-7	12/21/2020	Barium, Dissolved	0.25	0.01	0.003	2000000	mg/L
EP-7	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-7	12/21/2020	Copper, Dissolved	0.0821	0.02	0.008	790000	mg/L
EP-7	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-7	12/21/2020	Manganese, Dissolved	3.53	0.01	0.003	2017400	mg/L
EP-7	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-7	12/21/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-7	12/21/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-7	12/21/2020	Boron, Total	11.1	0.5	0.11	3949	mg/L
EP-7	12/21/2020	Barium, Total	0.217	0.05	0.015	2000000	mg/L
EP-7	12/21/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-7	12/21/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-7	12/21/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-7	12/21/2020	Chromium, Total	0.0558	0.05	0.025	50000	mg/L
EP-7	12/21/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-7	12/21/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-7	12/21/2020	Manganese, Total	3.52	0.05	0.015	2017000	mg/L
EP-7	12/21/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-7	12/21/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-7	12/21/2020	Boron, Dissolved	11.8	1	0.22	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	12/21/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-7	12/21/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L
EP-7	12/21/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-7	12/21/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-7	12/21/2020	Nickel, Dissolved	0.409	0.06	0.03	372000	mg/L
EP-7	12/21/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-7	12/21/2020	Nickel, Total	0.414	0.03	0.015	372000	mg/L
EP-7	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-7	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-7	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-7	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-7	3/25/2015	Barium, Total	0.16	0.01	0.0037	2000000	mg/L
EP-7	3/25/2015	Calcium, Total	850	50	2.8	NA	mg/L
EP-7	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-7	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-7	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-7	3/25/2015	Iron, Total	0.32	0.1	0.036	13822000	mg/L
EP-7	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-7	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-7	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-7	3/25/2015	Manganese, Total	0.77	0.01	0.0076	2017000	mg/L
EP-7	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-7	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-7	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-7	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-7	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-7	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-7	9/1/2015	Arsenic, Total	0.16	0.1	0.029	10000	mg/L
EP-7	9/1/2015	Barium, Total	0.18	0.01	0.0053	2000000	mg/L
EP-7	9/1/2015	Calcium, Total	1100	50	2.8	NA	mg/L
EP-7	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-7	9/1/2015	Chromium, Total	0.064	0.03	0.011	50000	mg/L
EP-7	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-7	9/1/2015	Iron, Total	0.12	0.1	0.036	13822000	mg/L
EP-7	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-7	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-7	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-7	9/1/2015	Manganese, Total	0.51	0.01	0.0076	2017000	mg/L
EP-7	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-7	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-7	9/1/2015	Selenium, Total	0.22	0.1	0.012	50000	mg/L
EP-7	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-7	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-7	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-7	8/30/2016	Arsenic, Total	0.16	0.1	0.014	10000	mg/L
EP-7	8/30/2016	Barium, Total	0.2	0.01	0.0066	2000000	mg/L
EP-7	8/30/2016	Calcium, Total	810	10	5	NA	mg/L
EP-7	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-7	8/30/2016	Chromium, Total	0.014	0.03	0.0088	50000	mg/L
EP-7	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-7	8/30/2016	Mercury, Total	0.000075	0.0002	0.000053	2000	mg/L
EP-7	8/30/2016	Potassium, Total	1800	50	25	NA	mg/L
EP-7	8/30/2016	Magnesium, Total	1400	50	25	NA	mg/L
EP-7	8/30/2016	Manganese, Total	1.3	0.01	0.0016	2017000	mg/L
EP-7	8/30/2016	Sodium, Total	34000	500	250	NA	mg/L
EP-7	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-7	8/30/2016	Selenium, Total	0.18	0.1	0.021	50000	mg/L
EP-7	8/30/2016	Uranium, Total	0.0088	0.05	0.0051	30000	mg/L
EP-7	8/30/2016	Zinc, Total	0.03	0.05	0.014	5960000	mg/L
EP-7	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-7	3/30/2017	Arsenic, Total	0.18	0.05	0.011	10000	mg/L
EP-7	3/30/2017	Barium, Total	0.16	0.01	0.004	2000000	mg/L
EP-7	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-7	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-7	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-7	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-7	3/30/2017	Arsenic, Dissolved	0.16	0.05	0.0089	10000	mg/L
EP-7	3/30/2017	Barium, Dissolved	0.18	0.02	0.0085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-7	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-7	3/30/2017	Chromium, Dissolved	0.015	0.06	0.01	100000	mg/L
EP-7	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-7	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-7	3/30/2017	Potassium, Dissolved	1800	100	50	NA	mg/L
EP-7	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-7	3/30/2017	Manganese, Dissolved	0.19	0.02	0.0038	2017400	mg/L
EP-7	3/30/2017	Sodium, Dissolved	50000	1000	500	NA	mg/L
EP-7	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-7	3/30/2017	Selenium, Dissolved	0.28	0.05	0.019	50000	mg/L
EP-7	3/30/2017	Uranium, Dissolved	0.0053	0.025	0.0025	NA	mg/L
EP-7	3/30/2017	Zinc, Dissolved	0.053	0.1	0.011	5960450	mg/L
EP-7	3/30/2017	Iron, Total	0.72	0.2	0.2	13822000	mg/L
EP-7	3/30/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
EP-7	3/30/2017	Manganese, Total	0.71	0.01	0.0014	2017000	mg/L
EP-7	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-7	3/30/2017	Selenium, Total	0.3	0.05	0.0094	50000	mg/L
EP-7	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-7	3/30/2017	Zinc, Total	0.018	0.05	0.013	5960000	mg/L
EP-7	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-7	10/24/2017	Arsenic, Total	0.11	0.05	0.021	10000	mg/L
EP-7	10/24/2017	Barium, Total	0.23	0.01	0.005	2000000	mg/L
EP-7	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-7	10/24/2017	Chromium, Total	0.026	0.03	0.0088	50000	mg/L
EP-7	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	10/24/2017	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-7	10/24/2017	Arsenic, Dissolved	0.13	0.05	0.014	10000	mg/L
EP-7	10/24/2017	Barium, Dissolved	0.26	0.01	0.0049	2000000	mg/L
EP-7	10/24/2017	Calcium, Dissolved	1300	50	3.9	NA	mg/L
EP-7	10/24/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-7	10/24/2017	Chromium, Dissolved	0.026	0.03	0.0064	100000	mg/L
EP-7	10/24/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-7	10/24/2017	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-7	10/24/2017	Potassium, Dissolved	2700	50	5.6	NA	mg/L
EP-7	10/24/2017	Magnesium, Dissolved	2100	50	12	NA	mg/L
EP-7	10/24/2017	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
EP-7	10/24/2017	Sodium, Dissolved	52000	1000	160	NA	mg/L
EP-7	10/24/2017	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	10/24/2017	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-7	10/24/2017	Uranium, Dissolved	0.0079	0.025	0.0048	NA	mg/L
EP-7	10/24/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	10/24/2017	Iron, Total	0.15	0.1	0.051	13822000	mg/L
EP-7	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-7	10/24/2017	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
EP-7	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-7	10/24/2017	Selenium, Total	0.14	0.05	0.049	50000	mg/L
EP-7	10/24/2017	Uranium, Total	0.0081	0.025	0.0077	30000	mg/L
EP-7	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-7	2/23/2018	Silver, Total	0.025	0.025	0.0061	50000	mg/L
EP-7	2/23/2018	Arsenic, Total	0.14	0.2	0.083	10000	mg/L
EP-7	2/23/2018	Barium, Total	0.24	0.01	0.005	2000000	mg/L
EP-7	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-7	2/23/2018	Chromium, Total	0.017	0.03	0.0088	50000	mg/L
EP-7	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	2/23/2018	Silver, Dissolved	0.033	0.05	0.018	81200	mg/L
EP-7	2/23/2018	Arsenic, Dissolved	0.11	0.05	0.021	10000	mg/L
EP-7	2/23/2018	Barium, Dissolved	0.22	0.02	0.0099	2000000	mg/L
EP-7	2/23/2018	Calcium, Dissolved	870	50	3.9	NA	mg/L
EP-7	2/23/2018	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-7	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-7	2/23/2018	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-7	2/23/2018	Iron, Dissolved	ND	0.2	0.16	13821880	mg/L
EP-7	2/23/2018	Potassium, Dissolved	1800	50	5.6	NA	mg/L
EP-7	2/23/2018	Magnesium, Dissolved	1400	50	12	NA	mg/L
EP-7	2/23/2018	Manganese, Dissolved	0.38	0.02	0.0039	2017400	mg/L
EP-7	2/23/2018	Sodium, Dissolved	36000	500	82	NA	mg/L
EP-7	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	2/23/2018	Selenium, Dissolved	0.12	0.05	0.038	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	2/23/2018	Uranium, Dissolved	0.0059	0.025	0.0048	NA	mg/L
EP-7	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	2/23/2018	Iron, Total	0.77	0.1	0.051	13822000	mg/L
EP-7	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-7	2/23/2018	Manganese, Total	0.66	0.01	0.0055	2017000	mg/L
EP-7	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L
EP-7	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-7	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-7	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-7	9/7/2018	Silver, Total	0.016	0.005	0.0012	50000	mg/L
EP-7	9/7/2018	Arsenic, Total	0.16	0.05	0.021	10000	mg/L
EP-7	9/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
EP-7	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-7	9/7/2018	Chromium, Total	0.017	0.03	0.0088	50000	mg/L
EP-7	9/7/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	9/7/2018	Silver, Dissolved	0.027	0.025	0.0092	81200	mg/L
EP-7	9/7/2018	Arsenic, Dissolved	0.17	0.05	0.021	10000	mg/L
EP-7	9/7/2018	Barium, Dissolved	0.24	0.01	0.0049	2000000	mg/L
EP-7	9/7/2018	Calcium, Dissolved	690	10	0.78	NA	mg/L
EP-7	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-7	9/7/2018	Chromium, Dissolved	0.02	0.03	0.0064	100000	mg/L
EP-7	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-7	9/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-7	9/7/2018	Potassium, Dissolved	2300	50	5.6	NA	mg/L
EP-7	9/7/2018	Magnesium, Dissolved	1700	20	5	NA	mg/L
EP-7	9/7/2018	Manganese, Dissolved	0.46	0.01	0.002	2017400	mg/L
EP-7	9/7/2018	Sodium, Dissolved	38000	1000	160	NA	mg/L
EP-7	9/7/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-7	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-7	9/7/2018	Uranium, Dissolved	0.0051	0.025	0.0048	NA	mg/L
EP-7	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-7	9/7/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
EP-7	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-7	9/7/2018	Manganese, Total	0.8	0.002	0.0011	2017000	mg/L
EP-7	9/7/2018	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-7	9/7/2018	Selenium, Total	ND	0.05	0.049	50000	mg/L
EP-7	9/7/2018	Uranium, Total	0.0051	0.025	0.0034	30000	mg/L
EP-7	9/7/2018	Zinc, Total	0.0048	0.01	0.0033	5960000	mg/L
EP-7	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-7	9/17/2020	Aluminum, Total	3.4	0.1	0.037	19914000	mg/L
EP-7	9/17/2020	Barium, Total	0.14	0.015	0.0082	2000000	mg/L
EP-7	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-7	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-7	9/17/2020	Chromium, Total	0.016	0.03	0.011	50000	mg/L
EP-7	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-7	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	9/17/2020	Iron, Total	1.1	0.25	0.064	13822000	mg/L
EP-7	9/17/2020	Manganese, Total	4.3	0.01	0.0041	2017000	mg/L
EP-7	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-7	9/17/2020	Nickel, Total	0.34	0.05	0.016	372000	mg/L
EP-7	9/17/2020	Silver, Total	0.019	0.025	0.0063	50000	mg/L
EP-7	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-7	9/17/2020	Boron, Total	12	4	0.74	3949	mg/L
EP-7	9/17/2020	Antimony, Total	ND	0.05	0.035	6000	mg/L
EP-7	9/17/2020	Arsenic, Total	0.37	0.05	0.013	10000	mg/L
EP-7	9/17/2020	Lead, Total	ND	0.025	0.0017	15000	mg/L
EP-7	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-7	9/17/2020	Thallium, Total	ND	0.012	0.012	2000	mg/L
EP-7	9/17/2020	Uranium, Total	0.0096	0.025	0.0033	30000	mg/L
EP-7	9/17/2020	Antimony, Dissolved	ND	0.5	0.35	6000	mg/L
EP-7	9/17/2020	Arsenic, Dissolved	0.33	0.5	0.1	10000	mg/L
EP-7	9/17/2020	Lead, Dissolved	ND	0.25	0.017	NA	mg/L
EP-7	9/17/2020	Selenium, Dissolved	ND	0.5	0.33	50000	mg/L
EP-7	9/17/2020	Thallium, Dissolved	ND	0.25	0.017	2000	mg/L
EP-7	9/17/2020	Uranium, Dissolved	ND	0.25	0.033	NA	mg/L
EP-7	9/17/2020	Aluminum, Dissolved	0.4	0.1	0.028	19913930	mg/L
EP-7	9/17/2020	Barium, Dissolved	0.16	0.01	0.0056	2000000	mg/L
EP-7	9/17/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
EP-7	9/17/2020	Calcium, Dissolved	430	5	0.57	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	9/17/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L
EP-7	9/17/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
EP-7	9/17/2020	Iron, Dissolved	0.18	0.1	0.052	13821880	mg/L
EP-7	9/17/2020	Manganese, Dissolved	4	0.01	0.0029	2017400	mg/L
EP-7	9/17/2020	Nickel, Dissolved	0.33	0.05	0.016	372000	mg/L
EP-7	9/17/2020	Silver, Dissolved	0.013	0.025	0.0063	81200	mg/L
EP-7	9/17/2020	Boron, Dissolved	11	0.8	0.13	3949110	mg/L
EP-7	9/17/2020	Magnesium, Dissolved	4100	100	6.7	NA	mg/L
EP-7	9/17/2020	Potassium, Dissolved	5800	100	16	NA	mg/L
EP-7	9/17/2020	Sodium, Dissolved	120000	5000	690	NA	mg/L
EP-7	9/17/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
EP-7	9/17/2020	Chromium, Dissolved	0.023	0.03	0.0098	100000	mg/L
EP-7	9/17/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
EP-7	9/17/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
EP-7	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-7	5/29/2012	Arsenic, Total	0.081	0.02	0.0022	10000	mg/L
EP-7	5/29/2012	Barium, Total	0.14	0.02	0.0031	2000000	mg/L
EP-7	5/29/2012	Calcium, Total	1100	20	0.52	NA	mg/L
EP-7	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-7	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-7	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-7	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-7	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-7	5/29/2012	Potassium, Total	1300	20	9.6	NA	mg/L
EP-7	5/29/2012	Magnesium, Total	980	10	0.13	NA	mg/L
EP-7	5/29/2012	Manganese, Total	0.74	0.02	0.0062	2017000	mg/L
EP-7	5/29/2012	Sodium, Total	28000	5000	220	NA	mg/L
EP-7	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-7	5/29/2012	Selenium, Total	0.086	0.02	0.0066	50000	mg/L
EP-7	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-7	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-7	11/6/2012	Silver, Total	ND	0.025	0.0032	50000	mg/L
EP-7	11/6/2012	Arsenic, Total	0.14	0.02	0.011	10000	mg/L
EP-7	11/6/2012	Barium, Total	0.081	0.01	0.0019	2000000	mg/L
EP-7	11/6/2012	Calcium, Total	910	10	0.26	NA	mg/L
EP-7	11/6/2012	Cadmium, Total	ND	0.01	0.0022	5000	mg/L
EP-7	11/6/2012	Chromium, Total	ND	0.03	0.0052	50000	mg/L
EP-7	11/6/2012	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-7	11/6/2012	Iron, Total	ND	0.1	0.066	13822000	mg/L
EP-7	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-7	11/6/2012	Potassium, Total	2300	50	24	NA	mg/L
EP-7	11/6/2012	Magnesium, Total	1400	20	0.26	NA	mg/L
EP-7	11/6/2012	Manganese, Total	0.32	0.01	0.0013	2017000	mg/L
EP-7	11/6/2012	Sodium, Total	43000	1000	45	NA	mg/L
EP-7	11/6/2012	Lead, Total	ND	0.025	0.0072	15000	mg/L
EP-7	11/6/2012	Selenium, Total	ND	0.25	0.043	50000	mg/L
EP-7	11/6/2012	Uranium, Total	ND	0.02	0.00024	30000	mg/L
EP-7	11/6/2012	Zinc, Total	ND	0.05	0.0057	5960000	mg/L
EP-7	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-7	5/28/2013	Arsenic, Total	0.11	0.1	0.013	10000	mg/L
EP-7	5/28/2013	Barium, Total	0.11	0.01	0.0048	2000000	mg/L
EP-7	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-7	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-7	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-7	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-7	5/28/2013	Manganese, Total	2.9	0.01	0.00082	2017000	mg/L
EP-7	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-7	5/28/2013	Selenium, Total	0.11	0.1	0.055	50000	mg/L
EP-7	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-7	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-7	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-7	10/15/2013	Arsenic, Total	0.13	0.05	0.0049	10000	mg/L
EP-7	10/15/2013	Barium, Total	0.096	0.01	0.0048	2000000	mg/L
EP-7	10/15/2013	Calcium, Total	770	20	1.4	NA	mg/L
EP-7	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-7	10/15/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-7	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-7	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-7	10/15/2013	Potassium, Total	1600	50	15	NA	mg/L
EP-7	10/15/2013	Magnesium, Total	1200	20	1	NA	mg/L
EP-7	10/15/2013	Manganese, Total	0.38	0.01	0.00082	2017000	mg/L
EP-7	10/15/2013	Sodium, Total	32000	500	180	NA	mg/L
EP-7	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-7	10/15/2013	Selenium, Total	0.19	0.05	0.015	50000	mg/L
EP-7	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-7	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-7	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-7	3/5/2014	Arsenic, Total	0.15	0.1	0.036	10000	mg/L
EP-7	3/5/2014	Barium, Total	0.11	0.01	0.0029	2000000	mg/L
EP-7	3/5/2014	Calcium, Total	760	50	4.1	NA	mg/L
EP-7	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-7	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-7	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-7	3/5/2014	Iron, Total	0.28	0.1	0.036	13822000	mg/L
EP-7	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-7	3/5/2014	Potassium, Total	1700	50	4.7	NA	mg/L
EP-7	3/5/2014	Magnesium, Total	1000	50	0.9	NA	mg/L
EP-7	3/5/2014	Manganese, Total	2	0.01	0.0024	2017000	mg/L
EP-7	3/5/2014	Sodium, Total	28000	500	200	NA	mg/L
EP-7	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-7	3/5/2014	Selenium, Total	0.12	0.1	0.051	50000	mg/L
EP-7	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-7	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-7	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-7	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-7	11/12/2014	Barium, Total	0.2	0.01	0.0025	2000000	mg/L
EP-7	11/12/2014	Calcium, Total	1100	20	1.6	NA	mg/L
EP-7	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-7	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-7	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-7	11/12/2014	Iron, Total	0.72	0.1	0.036	13822000	mg/L
EP-7	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-7	11/12/2014	Potassium, Total	1600	20	1.9	NA	mg/L
EP-7	11/12/2014	Magnesium, Total	1200	20	0.36	NA	mg/L
EP-7	11/12/2014	Manganese, Total	1.1	0.01	0.0024	2017000	mg/L
EP-7	11/12/2014	Sodium, Total	32000	500	200	NA	mg/L
EP-7	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-7	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-7	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-7	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-8	5/29/2012	Arsenic, Total	0.16	0.02	0.0022	10000	mg/L
EP-8	5/29/2012	Barium, Total	0.18	0.02	0.0031	2000000	mg/L
EP-8	5/29/2012	Calcium, Total	730	10	0.26	NA	mg/L
EP-8	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-8	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-8	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-8	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-8	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-8	5/29/2012	Potassium, Total	2200	100	48	NA	mg/L
EP-8	5/29/2012	Magnesium, Total	1500	20	0.26	NA	mg/L
EP-8	5/29/2012	Manganese, Total	7.3	0.02	0.0062	2017000	mg/L
EP-8	5/29/2012	Sodium, Total	35000	500	22	NA	mg/L
EP-8	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-8	5/29/2012	Selenium, Total	0.13	0.02	0.0066	50000	mg/L
EP-8	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-8	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-8	11/6/2012	Silver, Total	ND	0.1	0.013	50000	mg/L
EP-8	11/6/2012	Arsenic, Total	0.5	0.02	0.011	10000	mg/L
EP-8	11/6/2012	Barium, Total	0.23	0.04	0.0077	2000000	mg/L
EP-8	11/6/2012	Calcium, Total	550	20	0.52	NA	mg/L
EP-8	11/6/2012	Cadmium, Total	ND	0.04	0.0086	5000	mg/L
EP-8	11/6/2012	Chromium, Total	ND	0.12	0.021	50000	mg/L
EP-8	11/6/2012	Copper, Total	ND	0.12	0.082	790000	mg/L
EP-8	11/6/2012	Iron, Total	ND	0.2	0.13	13822000	mg/L
EP-8	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/6/2012	Potassium, Total	7600	500	240	NA	mg/L
EP-8	11/6/2012	Magnesium, Total	5200	500	6.5	NA	mg/L
EP-8	11/6/2012	Manganese, Total	34	0.1	0.013	2017000	mg/L
EP-8	11/6/2012	Sodium, Total	99000	2000	89	NA	mg/L
EP-8	11/6/2012	Lead, Total	ND	0.1	0.029	15000	mg/L
EP-8	11/6/2012	Selenium, Total	ND	2.5	0.43	50000	mg/L
EP-8	11/6/2012	Uranium, Total	ND	0.05	0.0006	30000	mg/L
EP-8	11/6/2012	Zinc, Total	ND	0.2	0.023	5960000	mg/L
EP-8	5/28/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-8	5/28/2013	Arsenic, Total	0.11	0.1	0.013	10000	mg/L
EP-8	5/28/2013	Barium, Total	0.12	0.01	0.0048	2000000	mg/L
EP-8	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-8	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-8	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-8	5/28/2013	Mercury, Total	ND	0.001	0.00044	2000	mg/L
EP-8	5/28/2013	Manganese, Total	3	0.01	0.00082	2017000	mg/L
EP-8	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-8	5/28/2013	Selenium, Total	0.088	0.05	0.028	50000	mg/L
EP-8	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-8	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-8	10/15/2013	Silver, Total	ND	0.1	0.039	50000	mg/L
EP-8	10/15/2013	Arsenic, Total	0.37	0.05	0.0049	10000	mg/L
EP-8	10/15/2013	Barium, Total	0.22	0.01	0.0048	2000000	mg/L
EP-8	10/15/2013	Calcium, Total	850	10	0.69	NA	mg/L
EP-8	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-8	10/15/2013	Chromium, Total	0.039	0.03	0.0042	50000	mg/L
EP-8	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-8	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-8	10/15/2013	Potassium, Total	4300	1000	300	NA	mg/L
EP-8	10/15/2013	Magnesium, Total	3500	50	2.6	NA	mg/L
EP-8	10/15/2013	Manganese, Total	18	0.04	0.0033	2017000	mg/L
EP-8	10/15/2013	Sodium, Total	75000	1000	360	NA	mg/L
EP-8	10/15/2013	Lead, Total	ND	0.1	0.0018	15000	mg/L
EP-8	10/15/2013	Selenium, Total	0.47	0.05	0.015	50000	mg/L
EP-8	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-8	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-8	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-8	3/5/2014	Arsenic, Total	0.12	0.1	0.036	10000	mg/L
EP-8	3/5/2014	Barium, Total	0.12	0.01	0.0029	2000000	mg/L
EP-8	3/5/2014	Calcium, Total	780	50	4.1	NA	mg/L
EP-8	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-8	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-8	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-8	3/5/2014	Iron, Total	0.28	0.1	0.036	13822000	mg/L
EP-8	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-8	3/5/2014	Potassium, Total	1800	50	4.7	NA	mg/L
EP-8	3/5/2014	Magnesium, Total	1000	50	0.9	NA	mg/L
EP-8	3/5/2014	Manganese, Total	2.2	0.01	0.0024	2017000	mg/L
EP-8	3/5/2014	Sodium, Total	26000	500	200	NA	mg/L
EP-8	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-8	3/5/2014	Selenium, Total	ND	0.1	0.051	50000	mg/L
EP-8	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-8	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	11/12/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-8	11/12/2014	Arsenic, Total	0.14	0.05	0.018	10000	mg/L
EP-8	11/12/2014	Barium, Total	0.2	0.01	0.0025	2000000	mg/L
EP-8	11/12/2014	Calcium, Total	1100	20	1.6	NA	mg/L
EP-8	11/12/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-8	11/12/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-8	11/12/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-8	11/12/2014	Iron, Total	0.57	0.1	0.036	13822000	mg/L
EP-8	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-8	11/12/2014	Potassium, Total	1700	20	1.9	NA	mg/L
EP-8	11/12/2014	Magnesium, Total	1200	20	0.36	NA	mg/L
EP-8	11/12/2014	Manganese, Total	1.2	0.01	0.0024	2017000	mg/L
EP-8	11/12/2014	Sodium, Total	32000	500	200	NA	mg/L
EP-8	11/12/2014	Lead, Total	ND	0.05	0.013	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	11/12/2014	Selenium, Total	ND	0.5	0.025	50000	mg/L
EP-8	11/12/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-8	11/12/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-8	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-8	3/25/2015	Barium, Total	0.16	0.01	0.0037	2000000	mg/L
EP-8	3/25/2015	Calcium, Total	840	50	2.8	NA	mg/L
EP-8	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-8	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-8	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-8	3/25/2015	Iron, Total	0.34	0.1	0.036	13822000	mg/L
EP-8	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-8	3/25/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-8	3/25/2015	Magnesium, Total	880	50	2	NA	mg/L
EP-8	3/25/2015	Manganese, Total	0.78	0.01	0.0076	2017000	mg/L
EP-8	3/25/2015	Sodium, Total	23000	500	36	NA	mg/L
EP-8	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-8	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-8	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-8	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-8	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-8	9/1/2015	Arsenic, Total	0.18	0.1	0.029	10000	mg/L
EP-8	9/1/2015	Barium, Total	0.18	0.01	0.0053	2000000	mg/L
EP-8	9/1/2015	Calcium, Total	1000	50	2.8	NA	mg/L
EP-8	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-8	9/1/2015	Chromium, Total	0.046	0.03	0.011	50000	mg/L
EP-8	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-8	9/1/2015	Iron, Total	ND	0.1	0.036	13822000	mg/L
EP-8	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-8	9/1/2015	Potassium, Total	1500	50	8.9	NA	mg/L
EP-8	9/1/2015	Magnesium, Total	1100	50	2	NA	mg/L
EP-8	9/1/2015	Manganese, Total	0.52	0.01	0.0076	2017000	mg/L
EP-8	9/1/2015	Sodium, Total	30000	500	36	NA	mg/L
EP-8	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-8	9/1/2015	Selenium, Total	0.22	0.1	0.012	50000	mg/L
EP-8	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-8	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-8	8/30/2016	Silver, Total	ND	0.025	0.014	50000	mg/L
EP-8	8/30/2016	Arsenic, Total	0.18	0.05	0.0069	10000	mg/L
EP-8	8/30/2016	Barium, Total	0.2	0.01	0.0066	2000000	mg/L
EP-8	8/30/2016	Calcium, Total	890	10	5	NA	mg/L
EP-8	8/30/2016	Cadmium, Total	ND	0.01	0.0037	5000	mg/L
EP-8	8/30/2016	Chromium, Total	0.014	0.03	0.0088	50000	mg/L
EP-8	8/30/2016	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	8/30/2016	Iron, Total	ND	0.1	0.1	13822000	mg/L
EP-8	8/30/2016	Mercury, Total	0.000079	0.0002	0.000053	2000	mg/L
EP-8	8/30/2016	Potassium, Total	1900	50	25	NA	mg/L
EP-8	8/30/2016	Magnesium, Total	1400	50	25	NA	mg/L
EP-8	8/30/2016	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
EP-8	8/30/2016	Sodium, Total	31000	500	250	NA	mg/L
EP-8	8/30/2016	Lead, Total	ND	0.025	0.019	15000	mg/L
EP-8	8/30/2016	Selenium, Total	0.22	0.05	0.011	50000	mg/L
EP-8	8/30/2016	Uranium, Total	0.0096	0.025	0.0026	30000	mg/L
EP-8	8/30/2016	Zinc, Total	0.027	0.05	0.014	5960000	mg/L
EP-8	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-8	3/30/2017	Arsenic, Total	0.17	0.05	0.011	10000	mg/L
EP-8	3/30/2017	Barium, Total	0.17	0.01	0.004	2000000	mg/L
EP-8	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-8	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-8	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-8	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-8	3/30/2017	Arsenic, Dissolved	0.12	0.05	0.0089	10000	mg/L
EP-8	3/30/2017	Barium, Dissolved	0.2	0.02	0.0085	2000000	mg/L
EP-8	3/30/2017	Calcium, Dissolved	1200	100	50	NA	mg/L
EP-8	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-8	3/30/2017	Chromium, Dissolved	0.017	0.06	0.01	100000	mg/L
EP-8	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-8	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-8	3/30/2017	Potassium, Dissolved	1900	100	50	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/30/2017	Magnesium, Dissolved	1500	100	50	NA	mg/L
EP-8	3/30/2017	Manganese, Dissolved	0.13	0.02	0.0038	2017400	mg/L
EP-8	3/30/2017	Sodium, Dissolved	54000	1000	500	NA	mg/L
EP-8	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-8	3/30/2017	Selenium, Dissolved	0.17	0.05	0.019	50000	mg/L
EP-8	3/30/2017	Uranium, Dissolved	0.0061	0.025	0.0025	NA	mg/L
EP-8	3/30/2017	Zinc, Dissolved	0.071	0.1	0.011	5960450	mg/L
EP-8	3/30/2017	Iron, Total	0.31	0.2	0.2	13822000	mg/L
EP-8	3/30/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
EP-8	3/30/2017	Manganese, Total	0.55	0.01	0.0014	2017000	mg/L
EP-8	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-8	3/30/2017	Selenium, Total	0.31	0.05	0.0094	50000	mg/L
EP-8	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-8	3/30/2017	Zinc, Total	0.016	0.05	0.013	5960000	mg/L
EP-8	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-8	10/24/2017	Arsenic, Total	0.12	0.05	0.021	10000	mg/L
EP-8	10/24/2017	Barium, Total	0.22	0.01	0.005	2000000	mg/L
EP-8	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-8	10/24/2017	Chromium, Total	0.026	0.03	0.0088	50000	mg/L
EP-8	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	10/24/2017	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
EP-8	10/24/2017	Arsenic, Dissolved	0.11	0.05	0.014	10000	mg/L
EP-8	10/24/2017	Barium, Dissolved	0.26	0.01	0.0049	2000000	mg/L
EP-8	10/24/2017	Calcium, Dissolved	1300	50	3.9	NA	mg/L
EP-8	10/24/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	10/24/2017	Chromium, Dissolved	0.031	0.03	0.0064	100000	mg/L
EP-8	10/24/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	10/24/2017	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-8	10/24/2017	Potassium, Dissolved	2800	50	5.6	NA	mg/L
EP-8	10/24/2017	Magnesium, Dissolved	2200	50	12	NA	mg/L
EP-8	10/24/2017	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
EP-8	10/24/2017	Sodium, Dissolved	50000	1000	160	NA	mg/L
EP-8	10/24/2017	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-8	10/24/2017	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-8	10/24/2017	Uranium, Dissolved	0.0077	0.025	0.0048	NA	mg/L
EP-8	10/24/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	10/24/2017	Iron, Total	0.2	0.1	0.051	13822000	mg/L
EP-8	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-8	10/24/2017	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
EP-8	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-8	10/24/2017	Selenium, Total	0.19	0.1	0.098	50000	mg/L
EP-8	10/24/2017	Uranium, Total	0.0079	0.025	0.0077	30000	mg/L
EP-8	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-8	2/23/2018	Silver, Total	0.026	0.025	0.0061	50000	mg/L
EP-8	2/23/2018	Arsenic, Total	0.15	0.2	0.083	10000	mg/L
EP-8	2/23/2018	Barium, Total	0.25	0.01	0.005	2000000	mg/L
EP-8	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-8	2/23/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
EP-8	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-8	2/23/2018	Silver, Dissolved	ND	0.25	0.092	81200	mg/L
EP-8	2/23/2018	Arsenic, Dissolved	0.1	0.05	0.021	10000	mg/L
EP-8	2/23/2018	Barium, Dissolved	0.23	0.01	0.0049	2000000	mg/L
EP-8	2/23/2018	Calcium, Dissolved	870	50	3.9	NA	mg/L
EP-8	2/23/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	2/23/2018	Chromium, Dissolved	ND	0.3	0.064	100000	mg/L
EP-8	2/23/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	2/23/2018	Iron, Dissolved	0.15	0.1	0.082	13821880	mg/L
EP-8	2/23/2018	Potassium, Dissolved	1700	50	5.6	NA	mg/L
EP-8	2/23/2018	Magnesium, Dissolved	1300	50	12	NA	mg/L
EP-8	2/23/2018	Manganese, Dissolved	0.45	0.01	0.002	2017400	mg/L
EP-8	2/23/2018	Sodium, Dissolved	32000	500	82	NA	mg/L
EP-8	2/23/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-8	2/23/2018	Selenium, Dissolved	0.099	0.05	0.038	50000	mg/L
EP-8	2/23/2018	Uranium, Dissolved	0.0054	0.025	0.0048	NA	mg/L
EP-8	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	2/23/2018	Iron, Total	0.72	0.1	0.051	13822000	mg/L
EP-8	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-8	2/23/2018	Manganese, Total	0.65	0.01	0.0055	2017000	mg/L
EP-8	2/23/2018	Lead, Total	ND	0.1	0.046	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	2/23/2018	Selenium, Total	ND	0.2	0.2	50000	mg/L
EP-8	2/23/2018	Uranium, Total	ND	0.1	0.014	30000	mg/L
EP-8	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-8	9/7/2018	Silver, Total	0.015	0.005	0.0012	50000	mg/L
EP-8	9/7/2018	Arsenic, Total	0.096	0.02	0.0083	10000	mg/L
EP-8	9/7/2018	Barium, Total	0.2	0.002	0.001	2000000	mg/L
EP-8	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-8	9/7/2018	Chromium, Total	0.009	0.006	0.0018	50000	mg/L
EP-8	9/7/2018	Copper, Total	0.029	0.006	0.0041	790000	mg/L
EP-8	9/7/2018	Silver, Dissolved	0.022	0.025	0.0092	81200	mg/L
EP-8	9/7/2018	Arsenic, Dissolved	0.093	0.05	0.021	10000	mg/L
EP-8	9/7/2018	Barium, Dissolved	0.24	0.01	0.0049	2000000	mg/L
EP-8	9/7/2018	Calcium, Dissolved	620	10	0.78	NA	mg/L
EP-8	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-8	9/7/2018	Chromium, Dissolved	0.011	0.03	0.0064	100000	mg/L
EP-8	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-8	9/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
EP-8	9/7/2018	Potassium, Dissolved	1300	20	2.3	NA	mg/L
EP-8	9/7/2018	Magnesium, Dissolved	970	10	2.5	NA	mg/L
EP-8	9/7/2018	Manganese, Dissolved	0.94	0.01	0.002	2017400	mg/L
EP-8	9/7/2018	Sodium, Dissolved	23000	500	82	NA	mg/L
EP-8	9/7/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
EP-8	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-8	9/7/2018	Uranium, Dissolved	0.003	0.01	0.0019	NA	mg/L
EP-8	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-8	9/7/2018	Iron, Total	0.062	0.02	0.01	13822000	mg/L
EP-8	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	9/7/2018	Manganese, Total	1	0.01	0.0055	2017000	mg/L
EP-8	9/7/2018	Lead, Total	ND	0.01	0.0046	15000	mg/L
EP-8	9/7/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
EP-8	9/7/2018	Uranium, Total	0.0031	0.01	0.0014	30000	mg/L
EP-8	9/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
EP-8	12/22/2020	Arsenic, Total Recoverable	**552**	10	2.86	10	ug/L
EP-8	12/22/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-8	12/22/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-8	12/22/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
EP-8	12/22/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-8	12/22/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-8	12/22/2020	Arsenic, Dissolved	**564**	10	2.86	10	ug/L
EP-8	12/22/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-8	12/22/2020	Antimony, Dissolved	**20.2**	20	3.52	6	ug/L
EP-8	12/22/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-8	12/22/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-8	12/22/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-8	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-8	12/22/2020	Copper, Dissolved	0.0517	0.02	0.008	790000	mg/L
EP-8	12/22/2020	Manganese, Dissolved	3.61	0.01	0.003	2017400	mg/L
EP-8	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-8	12/22/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-8	12/22/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-8	12/22/2020	Boron, Total	18.1	0.5	0.11	3949	mg/L
EP-8	12/22/2020	Barium, Total	ND	0.05	0.015	2000000	mg/L
EP-8	12/22/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-8	12/22/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-8	12/22/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-8	12/22/2020	Chromium, Total	0.0758	0.05	0.025	50000	mg/L
EP-8	12/22/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-8	12/22/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-8	12/22/2020	Manganese, Total	5.24	0.05	0.015	2017000	mg/L
EP-8	12/22/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-8	12/22/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-8	12/22/2020	Aluminum, Dissolved	ND	2	0.51	19913930	mg/L
EP-8	12/22/2020	Barium, Dissolved	ND	0.1	0.03	2000000	mg/L
EP-8	12/22/2020	Boron, Dissolved	16.1	1	0.22	3949110	mg/L
EP-8	12/22/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-8	12/22/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L
EP-8	12/22/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-8	12/22/2020	Iron, Dissolved	ND	2	0.75	13821880	mg/L
EP-8	12/22/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	12/22/2020	Nickel, Dissolved	0.631	0.06	0.03	372000	mg/L
EP-8	12/22/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-8	12/22/2020	Nickel, Total	0.633	0.03	0.015	372000	mg/L
EP-8	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-8	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-8	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
EP-8	9/17/2020	Aluminum, Total	0.49	0.1	0.037	19914000	mg/L
EP-8	9/17/2020	Barium, Total	0.24	0.015	0.0082	2000000	mg/L
EP-8	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-8	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-8	9/17/2020	Chromium, Total	0.017	0.03	0.011	50000	mg/L
EP-8	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-8	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-8	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
EP-8	9/17/2020	Manganese, Total	3.7	0.01	0.0041	2017000	mg/L
EP-8	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-8	9/17/2020	Nickel, Total	0.26	0.05	0.016	372000	mg/L
EP-8	9/17/2020	Silver, Total	0.0099	0.025	0.0063	50000	mg/L
EP-8	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-8	9/17/2020	Boron, Total	9.2	4	0.74	3949	mg/L
EP-8	9/17/2020	Arsenic, Total	0.32	0.05	0.013	10000	mg/L
EP-8	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-8	9/17/2020	Antimony, Total	ND	0.1	0.07	6000	mg/L
EP-8	9/17/2020	Lead, Total	ND	0.05	0.0034	15000	mg/L
EP-8	9/17/2020	Thallium, Total	ND	0.025	0.025	2000	mg/L
EP-8	9/17/2020	Uranium, Total	0.009	0.05	0.0065	30000	mg/L
EP-8	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-8	9/17/2020	Arsenic, Dissolved	0.31	0.05	0.01	10000	mg/L
EP-8	9/17/2020	Lead, Dissolved	0.0029	0.025	0.0017	NA	mg/L
EP-8	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-8	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-8	9/17/2020	Uranium, Dissolved	0.0063	0.025	0.0033	NA	mg/L
EP-8	9/17/2020	Aluminum, Dissolved	0.032	0.1	0.028	19913930	mg/L
EP-8	9/17/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
EP-8	9/17/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L
EP-8	9/17/2020	Manganese, Dissolved	3.2	0.01	0.0029	2017400	mg/L
EP-8	9/17/2020	Silver, Dissolved	0.016	0.025	0.0063	81200	mg/L
EP-8	9/17/2020	Boron, Dissolved	8.9	2	0.33	3949110	mg/L
EP-8	9/17/2020	Calcium, Dissolved	570	50	5.7	NA	mg/L
EP-8	9/17/2020	Magnesium, Dissolved	3100	50	3.4	NA	mg/L
EP-8	9/17/2020	Potassium, Dissolved	4200	50	8	NA	mg/L
EP-8	9/17/2020	Barium, Dissolved	0.23	0.01	0.0056	2000000	mg/L
EP-8	9/17/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
EP-8	9/17/2020	Iron, Dissolved	0.055	0.1	0.052	13821880	mg/L
EP-8	9/17/2020	Nickel, Dissolved	0.25	0.05	0.016	372000	mg/L
EP-8	9/17/2020	Sodium, Dissolved	85000	1000	140	NA	mg/L
EP-8	9/17/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
EP-8	9/17/2020	Chromium, Dissolved	0.016	0.03	0.0098	100000	mg/L
EP-8	9/17/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
EP-8	9/17/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
EP-8	4/29/2019	Aluminum, Total	0.2	0.1	0.012441	19914000	mg/L
EP-8	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-8	4/29/2019	Arsenic, Total	0.12	0.02	0.006244	10000	mg/L
EP-8	4/29/2019	Barium, Total	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Total	0.0031	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Total	3.7	0.2	0.022653	3949	mg/L
EP-8	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-8	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-8	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Total	0.022	0.03	0.020359	790000	mg/L
EP-8	4/29/2019	Iron, Total	0.13	0.1	0.043734	13822000	mg/L
EP-8	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-8	4/29/2019	Manganese, Total	0.61	0.01	0.00145	2017000	mg/L
EP-8	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Total	0.11	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Selenium, Total	0.01	0.02	0.00956	50000	mg/L
EP-8	4/29/2019	Silver, Total	0.017	0.025	0.007092	50000	mg/L
EP-8	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Uranium, Total	0.0046	0.01	0.001697	30000	mg/L
EP-8	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-8	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-8	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-8	4/29/2019	Arsenic, Dissolved	0.11	0.05	0.005043	10000	mg/L
EP-8	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Dissolved	0.002	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Dissolved	3.8	0.2	0.022653	3949110	mg/L
EP-8	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-8	4/29/2019	Calcium, Dissolved	760	10	0.618891	NA	mg/L
EP-8	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-8	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Dissolved	0.014	0.03	0.006481	790000	mg/L
EP-8	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-8	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-8	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-8	4/29/2019	Manganese, Dissolved	0.45	0.01	0.00145	2017400	mg/L
EP-8	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Dissolved	0.12	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-8	4/29/2019	Selenium, Dissolved	0.014	0.05	0.008567	50000	mg/L
EP-8	4/29/2019	Silver, Dissolved	0.019	0.025	0.004712	81200	mg/L
EP-8	4/29/2019	Sodium, Dissolved	28000	500	208.088149	NA	mg/L
EP-8	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-8	4/29/2019	Uranium, Dissolved	0.005	0.01	0.001495	NA	mg/L
EP-8	4/29/2019	Zinc, Dissolved	0.019	0.05	0.01126	5960450	mg/L
EP-8	4/29/2019	Aluminum, Total	0.21	0.1	0.012441	19914000	mg/L
EP-8	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-8	4/29/2019	Arsenic, Total	0.11	0.02	0.006244	10000	mg/L
EP-8	4/29/2019	Barium, Total	0.18	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Total	0.0033	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Total	3.6	0.2	0.022653	3949	mg/L
EP-8	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-8	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-8	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
EP-8	4/29/2019	Iron, Total	0.088	0.1	0.043734	13822000	mg/L
EP-8	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-8	4/29/2019	Manganese, Total	0.59	0.01	0.00145	2017000	mg/L
EP-8	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-8	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Total	0.11	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Selenium, Total	0.0098	0.02	0.00956	50000	mg/L
EP-8	4/29/2019	Silver, Total	0.019	0.025	0.007092	50000	mg/L
EP-8	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-8	4/29/2019	Uranium, Total	0.0044	0.01	0.001697	30000	mg/L
EP-8	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-8	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-8	4/29/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-8	4/29/2019	Arsenic, Dissolved	0.12	0.02	0.002017	10000	mg/L
EP-8	4/29/2019	Barium, Dissolved	0.19	0.01	0.003242	2000000	mg/L
EP-8	4/29/2019	Beryllium, Dissolved	0.002	0.01	0.001419	4000	mg/L
EP-8	4/29/2019	Boron, Dissolved	3.8	0.2	0.022653	3949110	mg/L
EP-8	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-8	4/29/2019	Calcium, Dissolved	750	10	0.618891	NA	mg/L
EP-8	4/29/2019	Chromium, Dissolved	0.01	0.03	0.007666	100000	mg/L
EP-8	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-8	4/29/2019	Copper, Dissolved	0.013	0.03	0.006481	790000	mg/L
EP-8	4/29/2019	Iron, Dissolved	ND	0.1	0.043734	13821880	mg/L
EP-8	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-8	4/29/2019	Magnesium, Dissolved	1200	20	1.005809	NA	mg/L
EP-8	4/29/2019	Manganese, Dissolved	0.45	0.01	0.00145	2017400	mg/L
EP-8	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-8	4/29/2019	Nickel, Dissolved	0.1	0.05	0.020043	372000	mg/L
EP-8	4/29/2019	Potassium, Dissolved	1700	20	3.245763	NA	mg/L
EP-8	4/29/2019	Selenium, Dissolved	0.0078	0.02	0.003427	50000	mg/L
EP-8	4/29/2019	Silver, Dissolved	0.018	0.025	0.004712	81200	mg/L
EP-8	4/29/2019	Sodium, Dissolved	29000	500	208.088149	NA	mg/L
EP-8	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	4/29/2019	Uranium, Dissolved	0.0046	0.01	0.001495	NA	mg/L
EP-8	4/29/2019	Zinc, Dissolved	0.022	0.05	0.01126	5960450	mg/L
EP-8	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-8	11/20/2019	Antimony, Dissolved	ND	0.1	0.038942	6000	mg/L
EP-8	11/20/2019	Arsenic, Dissolved	0.32	0.1	0.010086	10000	mg/L
EP-8	11/20/2019	Barium, Dissolved	0.22	0.1	0.032419	2000000	mg/L
EP-8	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-8	11/20/2019	Boron, Dissolved	9	2	0.226525	3949110	mg/L
EP-8	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-8	11/20/2019	Calcium, Dissolved	690	50	3.094457	NA	mg/L
EP-8	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-8	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-8	11/20/2019	Copper, Dissolved	0.15	0.3	0.064808	790000	mg/L
EP-8	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-8	11/20/2019	Lead, Dissolved	ND	0.05	0.005488	NA	mg/L
EP-8	11/20/2019	Magnesium, Dissolved	3200	50	2.514522	NA	mg/L
EP-8	11/20/2019	Manganese, Dissolved	4.3	0.1	0.014497	2017400	mg/L
EP-8	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-8	11/20/2019	Nickel, Dissolved	0.23	0.5	0.200435	372000	mg/L
EP-8	11/20/2019	Potassium, Dissolved	4000	50	8.114407	NA	mg/L
EP-8	11/20/2019	Selenium, Dissolved	0.054	0.1	0.017135	50000	mg/L
EP-8	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-8	11/20/2019	Sodium, Dissolved	80000	2000	832.352597	NA	mg/L
EP-8	11/20/2019	Thallium, Dissolved	ND	0.05	0.004836	2000	mg/L
EP-8	11/20/2019	Uranium, Dissolved	ND	0.05	0.007474	NA	mg/L
EP-8	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-8	11/20/2019	Aluminum, Total	0.22	0.4	0.049765	19914000	mg/L
EP-8	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-8	11/20/2019	Arsenic, Total	0.26	0.5	0.156094	10000	mg/L
EP-8	11/20/2019	Barium, Total	0.21	0.04	0.012968	2000000	mg/L
EP-8	11/20/2019	Beryllium, Total	ND	0.04	0.005675	4000	mg/L
EP-8	11/20/2019	Boron, Total	8.6	0.8	0.09061	3949	mg/L
EP-8	11/20/2019	Cadmium, Total	ND	0.04	0.014702	5000	mg/L
EP-8	11/20/2019	Chromium, Total	ND	0.12	0.030663	50000	mg/L
EP-8	11/20/2019	Cobalt, Total	ND	0.12	0.061827	5980	mg/L
EP-8	11/20/2019	Copper, Total	0.11	0.12	0.081436	790000	mg/L
EP-8	11/20/2019	Iron, Total	0.23	0.4	0.174937	13822000	mg/L
EP-8	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-8	11/20/2019	Manganese, Total	5.1	0.04	0.005799	2017000	mg/L
EP-8	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-8	11/20/2019	Molybdenum, Total	ND	0.16	0.134697	98700	mg/L
EP-8	11/20/2019	Nickel, Total	0.23	0.2	0.080174	372000	mg/L
EP-8	11/20/2019	Selenium, Total	ND	0.5	0.238994	50000	mg/L
EP-8	11/20/2019	Silver, Total	0.039	0.1	0.028366	50000	mg/L
EP-8	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-8	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-8	11/20/2019	Zinc, Total	ND	0.2	0.115437	5960000	mg/L
EP-9	11/20/2019	Aluminum, Dissolved	ND	1	0.124414	19913930	mg/L
EP-9	11/20/2019	Antimony, Dissolved	ND	0.05	0.019471	6000	mg/L
EP-9	11/20/2019	Arsenic, Dissolved	0.11	0.1	0.010086	10000	mg/L
EP-9	11/20/2019	Barium, Dissolved	0.16	0.1	0.032419	2000000	mg/L
EP-9	11/20/2019	Beryllium, Dissolved	ND	0.1	0.014188	4000	mg/L
EP-9	11/20/2019	Boron, Dissolved	3	2	0.226525	3949110	mg/L
EP-9	11/20/2019	Cadmium, Dissolved	ND	0.1	0.027614	5000	mg/L
EP-9	11/20/2019	Calcium, Dissolved	1200	50	3.094457	NA	mg/L
EP-9	11/20/2019	Chromium, Dissolved	ND	0.3	0.076658	100000	mg/L
EP-9	11/20/2019	Cobalt, Dissolved	ND	0.3	0.154567	5980	mg/L
EP-9	11/20/2019	Copper, Dissolved	0.13	0.3	0.064808	790000	mg/L
EP-9	11/20/2019	Iron, Dissolved	ND	1	0.437344	13821880	mg/L
EP-9	11/20/2019	Lead, Dissolved	ND	0.025	0.002744	NA	mg/L
EP-9	11/20/2019	Magnesium, Dissolved	1300	50	2.514522	NA	mg/L
EP-9	11/20/2019	Manganese, Dissolved	1.9	0.1	0.014497	2017400	mg/L
EP-9	11/20/2019	Molybdenum, Dissolved	ND	0.4	0.336743	98700	mg/L
EP-9	11/20/2019	Nickel, Dissolved	ND	0.5	0.200435	372000	mg/L
EP-9	11/20/2019	Potassium, Dissolved	1500	50	8.114407	NA	mg/L
EP-9	11/20/2019	Selenium, Dissolved	0.042	0.1	0.017135	50000	mg/L
EP-9	11/20/2019	Silver, Dissolved	ND	0.25	0.047119	81200	mg/L
EP-9	11/20/2019	Sodium, Dissolved	33000	1000	416.176299	NA	mg/L
EP-9	11/20/2019	Thallium, Dissolved	ND	0.025	0.002418	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	11/20/2019	Uranium, Dissolved	ND	0.05	0.007474	NA	mg/L
EP-9	11/20/2019	Zinc, Dissolved	ND	0.5	0.112599	5960450	mg/L
EP-9	11/20/2019	Aluminum, Total	0.14	0.2	0.024883	19914000	mg/L
EP-9	11/20/2019	Antimony, Total	ND	0.1	0.038942	6000	mg/L
EP-9	11/20/2019	Arsenic, Total	0.1	0.2	0.062438	10000	mg/L
EP-9	11/20/2019	Barium, Total	0.16	0.02	0.006484	2000000	mg/L
EP-9	11/20/2019	Beryllium, Total	ND	0.02	0.002838	4000	mg/L
EP-9	11/20/2019	Boron, Total	2.9	0.4	0.045305	3949	mg/L
EP-9	11/20/2019	Cadmium, Total	ND	0.02	0.007351	5000	mg/L
EP-9	11/20/2019	Chromium, Total	ND	0.06	0.015332	50000	mg/L
EP-9	11/20/2019	Cobalt, Total	ND	0.06	0.030913	5980	mg/L
EP-9	11/20/2019	Copper, Total	0.073	0.06	0.040718	790000	mg/L
EP-9	11/20/2019	Iron, Total	0.17	0.2	0.087469	13822000	mg/L
EP-9	11/20/2019	Lead, Total	ND	0.05	0.005488	15000	mg/L
EP-9	11/20/2019	Manganese, Total	1.9	0.02	0.002899	2017000	mg/L
EP-9	11/20/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
EP-9	11/20/2019	Molybdenum, Total	ND	0.08	0.067349	98700	mg/L
EP-9	11/20/2019	Nickel, Total	0.28	0.1	0.040087	372000	mg/L
EP-9	11/20/2019	Selenium, Total	ND	0.2	0.095598	50000	mg/L
EP-9	11/20/2019	Silver, Total	0.031	0.05	0.014183	50000	mg/L
EP-9	11/20/2019	Thallium, Total	ND	0.05	0.00516	2000	mg/L
EP-9	11/20/2019	Uranium, Total	ND	0.05	0.008487	30000	mg/L
EP-9	11/20/2019	Zinc, Total	0.091	0.1	0.057719	5960000	mg/L
EP-9	4/29/2019	Aluminum, Total	0.3	0.1	0.012441	19914000	mg/L
EP-9	4/29/2019	Antimony, Total	ND	0.02	0.007788	6000	mg/L
EP-9	4/29/2019	Arsenic, Total	0.082	0.005	0.001561	10000	mg/L
EP-9	4/29/2019	Barium, Total	0.17	0.01	0.003242	2000000	mg/L
EP-9	4/29/2019	Beryllium, Total	0.0029	0.01	0.001419	4000	mg/L
EP-9	4/29/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
EP-9	4/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
EP-9	4/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
EP-9	4/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
EP-9	4/29/2019	Copper, Total	0.022	0.03	0.020359	790000	mg/L
EP-9	4/29/2019	Iron, Total	0.18	0.1	0.043734	13822000	mg/L
EP-9	4/29/2019	Lead, Total	ND	0.01	0.001098	15000	mg/L
EP-9	4/29/2019	Manganese, Total	0.38	0.01	0.00145	2017000	mg/L
EP-9	4/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-9	4/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
EP-9	4/29/2019	Nickel, Total	0.068	0.05	0.020043	372000	mg/L
EP-9	4/29/2019	Selenium, Total	0.011	0.005	0.00239	50000	mg/L
EP-9	4/29/2019	Silver, Total	0.016	0.025	0.007092	50000	mg/L
EP-9	4/29/2019	Thallium, Total	ND	0.01	0.001032	2000	mg/L
EP-9	4/29/2019	Uranium, Total	0.0055	0.01	0.001697	30000	mg/L
EP-9	4/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
EP-9	4/29/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
EP-9	4/29/2019	Antimony, Dissolved	ND	0.02	0.007788	6000	mg/L
EP-9	4/29/2019	Arsenic, Dissolved	0.079	0.02	0.002017	10000	mg/L
EP-9	4/29/2019	Barium, Dissolved	0.18	0.01	0.003242	2000000	mg/L
EP-9	4/29/2019	Beryllium, Dissolved	0.0019	0.01	0.001419	4000	mg/L
EP-9	4/29/2019	Boron, Dissolved	2.4	0.2	0.022653	3949110	mg/L
EP-9	4/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
EP-9	4/29/2019	Calcium, Dissolved	710	10	0.618891	NA	mg/L
EP-9	4/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
EP-9	4/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
EP-9	4/29/2019	Copper, Dissolved	0.018	0.03	0.006481	790000	mg/L
EP-9	4/29/2019	Iron, Dissolved	0.076	0.1	0.043734	13821880	mg/L
EP-9	4/29/2019	Lead, Dissolved	ND	0.01	0.001098	NA	mg/L
EP-9	4/29/2019	Magnesium, Dissolved	890	10	0.502904	NA	mg/L
EP-9	4/29/2019	Manganese, Dissolved	0.34	0.01	0.00145	2017400	mg/L
EP-9	4/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
EP-9	4/29/2019	Nickel, Dissolved	0.075	0.05	0.020043	372000	mg/L
EP-9	4/29/2019	Potassium, Dissolved	1200	20	3.245763	NA	mg/L
EP-9	4/29/2019	Selenium, Dissolved	0.0035	0.02	0.003427	50000	mg/L
EP-9	4/29/2019	Silver, Dissolved	0.017	0.025	0.004712	81200	mg/L
EP-9	4/29/2019	Sodium, Dissolved	19000	500	208.088149	NA	mg/L
EP-9	4/29/2019	Thallium, Dissolved	ND	0.01	0.000967	2000	mg/L
EP-9	4/29/2019	Uranium, Dissolved	0.0053	0.01	0.001495	NA	mg/L
EP-9	4/29/2019	Zinc, Dissolved	0.041	0.05	0.01126	5960450	mg/L
EP-9	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/17/2020	Aluminum, Total	0.11	0.1	0.037	19914000	mg/L
EP-9	9/17/2020	Barium, Total	0.26	0.015	0.0082	2000000	mg/L
EP-9	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
EP-9	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-9	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-9	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
EP-9	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	9/17/2020	Iron, Total	0.12	0.25	0.064	13822000	mg/L
EP-9	9/17/2020	Manganese, Total	3.9	0.01	0.0041	2017000	mg/L
EP-9	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
EP-9	9/17/2020	Nickel, Total	0.13	0.05	0.016	372000	mg/L
EP-9	9/17/2020	Silver, Total	0.019	0.025	0.0063	50000	mg/L
EP-9	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
EP-9	9/17/2020	Boron, Total	7.1	4	0.74	3949	mg/L
EP-9	9/17/2020	Antimony, Total	ND	0.05	0.035	6000	mg/L
EP-9	9/17/2020	Arsenic, Total	0.24	0.05	0.013	10000	mg/L
EP-9	9/17/2020	Lead, Total	ND	0.025	0.0017	15000	mg/L
EP-9	9/17/2020	Selenium, Total	ND	0.05	0.033	50000	mg/L
EP-9	9/17/2020	Thallium, Total	ND	0.012	0.012	2000	mg/L
EP-9	9/17/2020	Uranium, Total	0.0078	0.025	0.0033	30000	mg/L
EP-9	9/17/2020	Antimony, Dissolved	ND	0.05	0.035	6000	mg/L
EP-9	9/17/2020	Arsenic, Dissolved	0.03	0.05	0.01	10000	mg/L
EP-9	9/17/2020	Lead, Dissolved	0.0028	0.025	0.0017	NA	mg/L
EP-9	9/17/2020	Selenium, Dissolved	ND	0.05	0.033	50000	mg/L
EP-9	9/17/2020	Thallium, Dissolved	ND	0.025	0.0017	2000	mg/L
EP-9	9/17/2020	Uranium, Dissolved	ND	0.025	0.0033	NA	mg/L
EP-9	9/17/2020	Aluminum, Dissolved	ND	2	0.56	19913930	mg/L
EP-9	9/17/2020	Beryllium, Dissolved	ND	0.2	0.088	4000	mg/L
EP-9	9/17/2020	Boron, Dissolved	7.1	4	0.67	3949110	mg/L
EP-9	9/17/2020	Calcium, Dissolved	840	100	11	NA	mg/L
EP-9	9/17/2020	Copper, Dissolved	ND	0.6	0.35	790000	mg/L
EP-9	9/17/2020	Iron, Dissolved	ND	2	1	13821880	mg/L
EP-9	9/17/2020	Magnesium, Dissolved	3200	100	6.7	NA	mg/L
EP-9	9/17/2020	Manganese, Dissolved	3.6	0.2	0.058	2017400	mg/L
EP-9	9/17/2020	Potassium, Dissolved	3600	100	16	NA	mg/L
EP-9	9/17/2020	Silver, Dissolved	ND	0.5	0.13	81200	mg/L
EP-9	9/17/2020	Sodium, Dissolved	85000	1000	140	NA	mg/L
EP-9	9/17/2020	Barium, Dissolved	0.29	0.2	0.11	2000000	mg/L
EP-9	9/17/2020	Cadmium, Dissolved	ND	0.2	0.12	5000	mg/L
EP-9	9/17/2020	Cobalt, Dissolved	ND	0.6	0.24	5980	mg/L
EP-9	9/17/2020	Nickel, Dissolved	ND	1	0.33	372000	mg/L
EP-9	9/17/2020	Chromium, Dissolved	ND	0.6	0.2	100000	mg/L
EP-9	9/17/2020	Molybdenum, Dissolved	ND	0.8	0.56	98700	mg/L
EP-9	9/17/2020	Zinc, Dissolved	ND	1	0.6	5960450	mg/L
EP-9	12/21/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
EP-9	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
EP-9	12/21/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
EP-9	12/21/2020	Barium, Dissolved	0.361	0.01	0.003	2000000	mg/L
EP-9	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
EP-9	12/21/2020	Copper, Dissolved	0.0388	0.02	0.008	790000	mg/L
EP-9	12/21/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
EP-9	12/21/2020	Manganese, Dissolved	3.57	0.01	0.003	2017400	mg/L
EP-9	12/21/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
EP-9	12/21/2020	Silver, Total	ND	0.025	0.005	50000	mg/L
EP-9	12/21/2020	Aluminum, Total	ND	1	0.255	19914000	mg/L
EP-9	12/21/2020	Boron, Total	8.68	0.5	0.11	3949	mg/L
EP-9	12/21/2020	Barium, Total	0.304	0.05	0.015	2000000	mg/L
EP-9	12/21/2020	Beryllium, Total	ND	0.015	0.005	4000	mg/L
EP-9	12/21/2020	Cadmium, Total	ND	0.025	0.005	5000	mg/L
EP-9	12/21/2020	Cobalt, Total	ND	0.05	0.015	5980	mg/L
EP-9	12/21/2020	Chromium, Total	0.0506	0.05	0.025	50000	mg/L
EP-9	12/21/2020	Copper, Total	ND	0.1	0.04	790000	mg/L
EP-9	12/21/2020	Iron, Total	ND	1	0.375	13822000	mg/L
EP-9	12/21/2020	Manganese, Total	4.51	0.05	0.015	2017000	mg/L
EP-9	12/21/2020	Molybdenum, Total	ND	0.5	0.02	98700	mg/L
EP-9	12/21/2020	Zinc, Total	ND	0.1	0.04	5960000	mg/L
EP-9	12/21/2020	Boron, Dissolved	9.3	1	0.22	3949110	mg/L
EP-9	12/21/2020	Cadmium, Dissolved	ND	0.05	0.01	5000	mg/L
EP-9	12/21/2020	Chromium, Dissolved	ND	0.1	0.05	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	12/21/2020	Cobalt, Dissolved	ND	0.1	0.03	5980	mg/L
EP-9	12/21/2020	Molybdenum, Dissolved	ND	1	0.04	98700	mg/L
EP-9	12/21/2020	Nickel, Dissolved	0.243	0.06	0.03	372000	mg/L
EP-9	12/21/2020	Silver, Dissolved	ND	0.05	0.01	81200	mg/L
EP-9	12/21/2020	Nickel, Total	0.236	0.03	0.015	372000	mg/L
EP-9	12/21/2020	Arsenic, Total Recoverable	**380**	10	2.86	10	ug/L
EP-9	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
EP-9	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
EP-9	12/21/2020	Selenium, Total Recoverable	**60**	50	14.3	50	ug/L
EP-9	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
EP-9	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
EP-9	12/21/2020	Arsenic, Dissolved	**364**	10	2.86	10	ug/L
EP-9	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
EP-9	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
EP-9	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
EP-9	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
EP-9	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
EP-9	5/29/2012	Silver, Total	ND	0.05	0.011	50000	mg/L
EP-9	5/29/2012	Arsenic, Total	0.086	0.02	0.0022	10000	mg/L
EP-9	5/29/2012	Barium, Total	0.18	0.02	0.0031	2000000	mg/L
EP-9	5/29/2012	Calcium, Total	1100	20	0.52	NA	mg/L
EP-9	5/29/2012	Cadmium, Total	ND	0.02	0.0036	5000	mg/L
EP-9	5/29/2012	Chromium, Total	ND	0.06	0.0056	50000	mg/L
EP-9	5/29/2012	Copper, Total	ND	0.06	0.031	790000	mg/L
EP-9	5/29/2012	Iron, Total	ND	0.2	0.019	13822000	mg/L
EP-9	5/29/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-9	5/29/2012	Potassium, Total	1100	20	9.6	NA	mg/L
EP-9	5/29/2012	Magnesium, Total	930	10	0.13	NA	mg/L
EP-9	5/29/2012	Manganese, Total	4.8	0.02	0.0062	2017000	mg/L
EP-9	5/29/2012	Sodium, Total	30000	500	22	NA	mg/L
EP-9	5/29/2012	Lead, Total	ND	0.05	0.016	15000	mg/L
EP-9	5/29/2012	Selenium, Total	0.084	0.02	0.0066	50000	mg/L
EP-9	5/29/2012	Uranium, Total	ND	0.02	0.0012	30000	mg/L
EP-9	5/29/2012	Zinc, Total	ND	0.1	0.0062	5960000	mg/L
EP-9	11/6/2012	Silver, Total	ND	0.025	0.0032	50000	mg/L
EP-9	11/6/2012	Arsenic, Total	0.055	0.01	0.0057	10000	mg/L
EP-9	11/6/2012	Barium, Total	0.15	0.01	0.0019	2000000	mg/L
EP-9	11/6/2012	Calcium, Total	960	10	0.26	NA	mg/L
EP-9	11/6/2012	Cadmium, Total	ND	0.01	0.0022	5000	mg/L
EP-9	11/6/2012	Chromium, Total	ND	0.03	0.0052	50000	mg/L
EP-9	11/6/2012	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	11/6/2012	Iron, Total	0.13	0.1	0.066	13822000	mg/L
EP-9	11/6/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
EP-9	11/6/2012	Potassium, Total	1100	20	9.6	NA	mg/L
EP-9	11/6/2012	Magnesium, Total	750	10	0.13	NA	mg/L
EP-9	11/6/2012	Manganese, Total	0.94	0.01	0.0013	2017000	mg/L
EP-9	11/6/2012	Sodium, Total	25000	500	22	NA	mg/L
EP-9	11/6/2012	Lead, Total	ND	0.025	0.0072	15000	mg/L
EP-9	11/6/2012	Selenium, Total	ND	0.25	0.043	50000	mg/L
EP-9	11/6/2012	Uranium, Total	ND	0.01	0.00012	30000	mg/L
EP-9	11/6/2012	Zinc, Total	ND	0.05	0.0057	5960000	mg/L
EP-9	5/28/2013	Silver, Total	ND	0.05	0.019	50000	mg/L
EP-9	5/28/2013	Arsenic, Total	0.07	0.05	0.0065	10000	mg/L
EP-9	5/28/2013	Barium, Total	0.19	0.01	0.0048	2000000	mg/L
EP-9	5/28/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L
EP-9	5/28/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-9	5/28/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	5/28/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-9	5/28/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-9	5/28/2013	Manganese, Total	3	0.01	0.00082	2017000	mg/L
EP-9	5/28/2013	Lead, Total	ND	0.02	0.0004	15000	mg/L
EP-9	5/28/2013	Selenium, Total	0.091	0.05	0.028	50000	mg/L
EP-9	5/28/2013	Uranium, Total	ND	0.02	0.0002	30000	mg/L
EP-9	5/28/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-9	10/15/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
EP-9	10/15/2013	Arsenic, Total	0.1	0.05	0.0049	10000	mg/L
EP-9	10/15/2013	Barium, Total	0.19	0.01	0.0048	2000000	mg/L
EP-9	10/15/2013	Calcium, Total	1600	20	1.4	NA	mg/L
EP-9	10/15/2013	Cadmium, Total	ND	0.01	0.0058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/15/2013	Chromium, Total	ND	0.03	0.0042	50000	mg/L
EP-9	10/15/2013	Copper, Total	ND	0.03	0.024	790000	mg/L
EP-9	10/15/2013	Iron, Total	ND	0.1	0.045	13822000	mg/L
EP-9	10/15/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
EP-9	10/15/2013	Potassium, Total	1200	50	15	NA	mg/L
EP-9	10/15/2013	Magnesium, Total	1200	20	1	NA	mg/L
EP-9	10/15/2013	Manganese, Total	3.3	0.01	0.00082	2017000	mg/L
EP-9	10/15/2013	Sodium, Total	33000	500	180	NA	mg/L
EP-9	10/15/2013	Lead, Total	ND	0.05	0.0009	15000	mg/L
EP-9	10/15/2013	Selenium, Total	0.15	0.05	0.015	50000	mg/L
EP-9	10/15/2013	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-9	10/15/2013	Zinc, Total	ND	0.05	0.0038	5960000	mg/L
EP-9	3/5/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-9	3/5/2014	Arsenic, Total	0.12	0.1	0.036	10000	mg/L
EP-9	3/5/2014	Barium, Total	0.18	0.01	0.0029	2000000	mg/L
EP-9	3/5/2014	Calcium, Total	1400	50	4.1	NA	mg/L
EP-9	3/5/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-9	3/5/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-9	3/5/2014	Copper, Total	ND	0.03	0.025	790000	mg/L
EP-9	3/5/2014	Iron, Total	0.26	0.1	0.036	13822000	mg/L
EP-9	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-9	3/5/2014	Potassium, Total	1300	50	4.7	NA	mg/L
EP-9	3/5/2014	Magnesium, Total	1100	50	0.9	NA	mg/L
EP-9	3/5/2014	Manganese, Total	2.7	0.01	0.0024	2017000	mg/L
EP-9	3/5/2014	Sodium, Total	34000	500	200	NA	mg/L
EP-9	3/5/2014	Lead, Total	ND	0.1	0.026	15000	mg/L
EP-9	3/5/2014	Selenium, Total	0.15	0.1	0.051	50000	mg/L
EP-9	3/5/2014	Uranium, Total	ND	0.1	0.018	30000	mg/L
EP-9	3/5/2014	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-9	11/13/2014	Silver, Total	ND	0.025	0.015	50000	mg/L
EP-9	11/13/2014	Arsenic, Total	0.2	0.1	0.036	10000	mg/L
EP-9	11/13/2014	Barium, Total	0.25	0.01	0.0025	2000000	mg/L
EP-9	11/13/2014	Calcium, Total	1500	20	1.6	NA	mg/L
EP-9	11/13/2014	Cadmium, Total	ND	0.01	0.0066	5000	mg/L
EP-9	11/13/2014	Chromium, Total	ND	0.03	0.014	50000	mg/L
EP-9	11/13/2014	Copper, Total	ND	0.03	0.023	790000	mg/L
EP-9	11/13/2014	Iron, Total	0.19	0.1	0.036	13822000	mg/L
EP-9	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
EP-9	11/13/2014	Potassium, Total	2400	50	4.7	NA	mg/L
EP-9	11/13/2014	Magnesium, Total	2000	20	0.36	NA	mg/L
EP-9	11/13/2014	Manganese, Total	0.25	0.01	0.0024	2017000	mg/L
EP-9	11/13/2014	Sodium, Total	64000	1000	390	NA	mg/L
EP-9	11/13/2014	Lead, Total	ND	0.05	0.013	15000	mg/L
EP-9	11/13/2014	Selenium, Total	ND	1	0.051	50000	mg/L
EP-9	11/13/2014	Uranium, Total	ND	0.05	0.00036	30000	mg/L
EP-9	11/13/2014	Zinc, Total	ND	0.1	0.035	5960000	mg/L
EP-9	3/25/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-9	3/25/2015	Arsenic, Total	ND	0.2	0.088	10000	mg/L
EP-9	3/25/2015	Barium, Total	0.11	0.01	0.0037	2000000	mg/L
EP-9	3/25/2015	Calcium, Total	690	50	2.8	NA	mg/L
EP-9	3/25/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
EP-9	3/25/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
EP-9	3/25/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-9	3/25/2015	Iron, Total	0.12	0.1	0.036	13822000	mg/L
EP-9	3/25/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-9	3/25/2015	Potassium, Total	730	50	8.9	NA	mg/L
EP-9	3/25/2015	Magnesium, Total	620	50	2	NA	mg/L
EP-9	3/25/2015	Manganese, Total	0.5	0.01	0.0076	2017000	mg/L
EP-9	3/25/2015	Sodium, Total	19000	500	36	NA	mg/L
EP-9	3/25/2015	Lead, Total	ND	0.2	0.014	15000	mg/L
EP-9	3/25/2015	Selenium, Total	ND	0.2	0.024	50000	mg/L
EP-9	3/25/2015	Uranium, Total	ND	0.2	0.0016	30000	mg/L
EP-9	3/25/2015	Zinc, Total	ND	0.05	0.018	5960000	mg/L
EP-9	9/1/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
EP-9	9/1/2015	Arsenic, Total	0.14	0.1	0.029	10000	mg/L
EP-9	9/1/2015	Barium, Total	0.22	0.01	0.0053	2000000	mg/L
EP-9	9/1/2015	Calcium, Total	980	50	2.8	NA	mg/L
EP-9	9/1/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
EP-9	9/1/2015	Chromium, Total	0.033	0.03	0.011	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/1/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
EP-9	9/1/2015	Iron, Total	ND	0.1	0.036	13822000	mg/L
EP-9	9/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
EP-9	9/1/2015	Potassium, Total	1200	50	8.9	NA	mg/L
EP-9	9/1/2015	Magnesium, Total	1000	50	2	NA	mg/L
EP-9	9/1/2015	Manganese, Total	0.4	0.01	0.0076	2017000	mg/L
EP-9	9/1/2015	Sodium, Total	32000	500	36	NA	mg/L
EP-9	9/1/2015	Lead, Total	ND	0.05	0.0047	15000	mg/L
EP-9	9/1/2015	Selenium, Total	0.18	0.1	0.012	50000	mg/L
EP-9	9/1/2015	Uranium, Total	ND	0.05	0.00049	30000	mg/L
EP-9	9/1/2015	Zinc, Total	ND	0.05	0.019	5960000	mg/L
EP-9	8/30/2016	Silver, Total	ND	0.05	0.028	50000	mg/L
EP-9	8/30/2016	Arsenic, Total	0.27	0.1	0.014	10000	mg/L
EP-9	8/30/2016	Barium, Total	0.31	0.02	0.013	2000000	mg/L
EP-9	8/30/2016	Calcium, Total	810	10	5	NA	mg/L
EP-9	8/30/2016	Cadmium, Total	ND	0.02	0.0075	5000	mg/L
EP-9	8/30/2016	Chromium, Total	ND	0.06	0.018	50000	mg/L
EP-9	8/30/2016	Copper, Total	ND	0.06	0.04	790000	mg/L
EP-9	8/30/2016	Iron, Total	ND	0.2	0.2	13822000	mg/L
EP-9	8/30/2016	Mercury, Total	0.000092	0.0002	0.000053	2000	mg/L
EP-9	8/30/2016	Potassium, Total	2900	50	25	NA	mg/L
EP-9	8/30/2016	Magnesium, Total	2300	50	25	NA	mg/L
EP-9	8/30/2016	Manganese, Total	1.9	0.02	0.0032	2017000	mg/L
EP-9	8/30/2016	Sodium, Total	47000	1000	500	NA	mg/L
EP-9	8/30/2016	Lead, Total	ND	0.05	0.038	15000	mg/L
EP-9	8/30/2016	Selenium, Total	0.29	0.1	0.021	50000	mg/L
EP-9	8/30/2016	Uranium, Total	0.008	0.05	0.0051	30000	mg/L
EP-9	8/30/2016	Zinc, Total	0.048	0.1	0.028	5960000	mg/L
EP-9	3/30/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
EP-9	3/30/2017	Arsenic, Total	0.13	0.05	0.011	10000	mg/L
EP-9	3/30/2017	Barium, Total	0.26	0.01	0.004	2000000	mg/L
EP-9	3/30/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
EP-9	3/30/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
EP-9	3/30/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
EP-9	3/30/2017	Silver, Dissolved	ND	0.05	0.0088	81200	mg/L
EP-9	3/30/2017	Arsenic, Dissolved	0.1	0.05	0.0089	10000	mg/L
EP-9	3/30/2017	Barium, Dissolved	0.27	0.02	0.0085	2000000	mg/L
EP-9	3/30/2017	Calcium, Dissolved	850	10	5	NA	mg/L
EP-9	3/30/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-9	3/30/2017	Chromium, Dissolved	ND	0.06	0.01	100000	mg/L
EP-9	3/30/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-9	3/30/2017	Iron, Dissolved	ND	0.2	0.2	13821880	mg/L
EP-9	3/30/2017	Potassium, Dissolved	1500	100	50	NA	mg/L
EP-9	3/30/2017	Magnesium, Dissolved	1300	100	50	NA	mg/L
EP-9	3/30/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
EP-9	3/30/2017	Sodium, Dissolved	47000	1000	500	NA	mg/L
EP-9	3/30/2017	Lead, Dissolved	ND	0.025	0.0084	NA	mg/L
EP-9	3/30/2017	Selenium, Dissolved	0.12	0.05	0.019	50000	mg/L
EP-9	3/30/2017	Uranium, Dissolved	0.0025	0.025	0.0025	NA	mg/L
EP-9	3/30/2017	Zinc, Dissolved	0.081	0.1	0.011	5960450	mg/L
EP-9	3/30/2017	Iron, Total	1.8	0.2	0.2	13822000	mg/L
EP-9	3/30/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
EP-9	3/30/2017	Manganese, Total	1.4	0.02	0.0027	2017000	mg/L
EP-9	3/30/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
EP-9	3/30/2017	Selenium, Total	0.23	0.05	0.0094	50000	mg/L
EP-9	3/30/2017	Uranium, Total	ND	0.025	0.0087	30000	mg/L
EP-9	3/30/2017	Zinc, Total	0.022	0.05	0.013	5960000	mg/L
EP-9	10/24/2017	Silver, Total	ND	0.025	0.0061	50000	mg/L
EP-9	10/24/2017	Arsenic, Total	0.22	0.05	0.021	10000	mg/L
EP-9	10/24/2017	Barium, Total	0.26	0.01	0.005	2000000	mg/L
EP-9	10/24/2017	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-9	10/24/2017	Chromium, Total	0.021	0.03	0.0088	50000	mg/L
EP-9	10/24/2017	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	10/24/2017	Silver, Dissolved	ND	0.05	0.018	81200	mg/L
EP-9	10/24/2017	Arsenic, Dissolved	0.21	0.02	0.0058	10000	mg/L
EP-9	10/24/2017	Barium, Dissolved	0.26	0.02	0.0099	2000000	mg/L
EP-9	10/24/2017	Calcium, Dissolved	630	10	0.78	NA	mg/L
EP-9	10/24/2017	Cadmium, Dissolved	ND	0.02	0.01	5000	mg/L
EP-9	10/24/2017	Chromium, Dissolved	0.026	0.06	0.013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Copper, Dissolved	ND	0.06	0.032	790000	mg/L
EP-9	10/24/2017	Iron, Dissolved	ND	0.2	0.16	13821880	mg/L
EP-9	10/24/2017	Potassium, Dissolved	4700	50	5.6	NA	mg/L
EP-9	10/24/2017	Magnesium, Dissolved	4000	50	12	NA	mg/L
EP-9	10/24/2017	Manganese, Dissolved	4.5	0.02	0.0039	2017400	mg/L
EP-9	10/24/2017	Sodium, Dissolved	49000	1000	160	NA	mg/L
EP-9	10/24/2017	Lead, Dissolved	ND	0.05	0.017	NA	mg/L
EP-9	10/24/2017	Selenium, Dissolved	ND	1	0.76	50000	mg/L
EP-9	10/24/2017	Uranium, Dissolved	ND	0.05	0.0096	NA	mg/L
EP-9	10/24/2017	Zinc, Dissolved	0.043	0.1	0.021	5960450	mg/L
EP-9	10/24/2017	Iron, Total	0.1	0.1	0.051	13822000	mg/L
EP-9	10/24/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-9	10/24/2017	Manganese, Total	4.9	0.01	0.0055	2017000	mg/L
EP-9	10/24/2017	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-9	10/24/2017	Selenium, Total	0.33	0.1	0.098	50000	mg/L
EP-9	10/24/2017	Uranium, Total	0.0087	0.025	0.0077	30000	mg/L
EP-9	10/24/2017	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-9	2/23/2018	Silver, Total	0.015	0.025	0.0061	50000	mg/L
EP-9	2/23/2018	Arsenic, Total	0.067	0.1	0.041	10000	mg/L
EP-9	2/23/2018	Barium, Total	0.22	0.01	0.005	2000000	mg/L
EP-9	2/23/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
EP-9	2/23/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
EP-9	2/23/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
EP-9	2/23/2018	Silver, Dissolved	0.022	0.025	0.0092	81200	mg/L
EP-9	2/23/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
EP-9	2/23/2018	Barium, Dissolved	0.21	0.01	0.0049	2000000	mg/L
EP-9	2/23/2018	Calcium, Dissolved	540	50	3.9	NA	mg/L
EP-9	2/23/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-9	2/23/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-9	2/23/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-9	2/23/2018	Iron, Dissolved	0.13	0.1	0.082	13821880	mg/L
EP-9	2/23/2018	Potassium, Dissolved	990	50	5.6	NA	mg/L
EP-9	2/23/2018	Magnesium, Dissolved	650	50	12	NA	mg/L
EP-9	2/23/2018	Manganese, Dissolved	1.2	0.01	0.002	2017400	mg/L
EP-9	2/23/2018	Sodium, Dissolved	19000	500	82	NA	mg/L
EP-9	2/23/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
EP-9	2/23/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
EP-9	2/23/2018	Uranium, Dissolved	0.0033	0.005	0.00096	NA	mg/L
EP-9	2/23/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-9	2/23/2018	Iron, Total	0.76	0.1	0.051	13822000	mg/L
EP-9	2/23/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
EP-9	2/23/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
EP-9	2/23/2018	Lead, Total	ND	0.05	0.023	15000	mg/L
EP-9	2/23/2018	Selenium, Total	ND	0.1	0.098	50000	mg/L
EP-9	2/23/2018	Uranium, Total	ND	0.05	0.0068	30000	mg/L
EP-9	2/23/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
EP-9	9/7/2018	Silver, Total	0.014	0.005	0.0012	50000	mg/L
EP-9	9/7/2018	Arsenic, Total	0.082	0.05	0.021	10000	mg/L
EP-9	9/7/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
EP-9	9/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
EP-9	9/7/2018	Chromium, Total	0.0069	0.006	0.0018	50000	mg/L
EP-9	9/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
EP-9	9/7/2018	Silver, Dissolved	0.021	0.025	0.0092	81200	mg/L
EP-9	9/7/2018	Arsenic, Dissolved	0.086	0.05	0.021	10000	mg/L
EP-9	9/7/2018	Barium, Dissolved	0.17	0.01	0.0049	2000000	mg/L
EP-9	9/7/2018	Calcium, Dissolved	560	10	0.78	NA	mg/L
EP-9	9/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
EP-9	9/7/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
EP-9	9/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
EP-9	9/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
EP-9	9/7/2018	Potassium, Dissolved	1300	50	5.6	NA	mg/L
EP-9	9/7/2018	Magnesium, Dissolved	900	10	2.5	NA	mg/L
EP-9	9/7/2018	Manganese, Dissolved	0.72	0.01	0.002	2017400	mg/L
EP-9	9/7/2018	Sodium, Dissolved	28000	500	82	NA	mg/L
EP-9	9/7/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
EP-9	9/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
EP-9	9/7/2018	Uranium, Dissolved	ND	0.025	0.0048	NA	mg/L
EP-9	9/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
EP-9	9/7/2018	Iron, Total	0.07	0.02	0.01	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	9/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
EP-9	9/7/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
EP-9	9/7/2018	Lead, Total	ND	0.025	0.011	15000	mg/L
EP-9	9/7/2018	Selenium, Total	ND	0.05	0.049	50000	mg/L
EP-9	9/7/2018	Uranium, Total	ND	0.025	0.0034	30000	mg/L
EP-9	9/7/2018	Zinc, Total	0.0055	0.01	0.0033	5960000	mg/L
KA-3	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
KA-3	9/3/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
KA-3	9/3/2013	Barium, Total	0.15	0.002	0.00095	2000000	mg/L
KA-3	9/3/2013	Calcium, Total	75	1	0.069	NA	mg/L
KA-3	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
KA-3	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
KA-3	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	9/3/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
KA-3	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	9/3/2013	Potassium, Total	ND	1	0.24	NA	mg/L
KA-3	9/3/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	9/3/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
KA-3	9/3/2013	Sodium, Total	300	5	1.6	NA	mg/L
KA-3	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
KA-3	9/3/2013	Selenium, Total	0.0056	0.005	0.0015	50000	mg/L
KA-3	9/3/2013	Uranium, Total	0.011	0.01	0.000073	30000	mg/L
KA-3	9/3/2013	Zinc, Total	0.03	0.01	0.00076	5960000	mg/L
KA-3	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
KA-3	11/12/2013	Arsenic, Total	0.0036	0.001	0.000098	10000	mg/L
KA-3	11/12/2013	Barium, Total	0.18	0.002	0.00095	2000000	mg/L
KA-3	11/12/2013	Calcium, Total	81	1	0.069	NA	mg/L
KA-3	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
KA-3	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
KA-3	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	11/12/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
KA-3	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	11/12/2013	Potassium, Total	1.9	1	0.24	NA	mg/L
KA-3	11/12/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	11/12/2013	Manganese, Total	0.37	0.002	0.00016	2017000	mg/L
KA-3	11/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
KA-3	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	11/12/2013	Selenium, Total	0.0091	0.001	0.00029	50000	mg/L
KA-3	11/12/2013	Uranium, Total	0.02	0.001	0.0000073	30000	mg/L
KA-3	11/12/2013	Zinc, Total	0.011	0.01	0.00076	5960000	mg/L
KA-3	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
KA-3	3/10/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
KA-3	3/10/2014	Barium, Total	0.093	0.002	0.0011	2000000	mg/L
KA-3	3/10/2014	Calcium, Total	68	1	0.082	NA	mg/L
KA-3	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
KA-3	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
KA-3	3/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
KA-3	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
KA-3	3/10/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
KA-3	3/10/2014	Magnesium, Total	11	1	0.018	NA	mg/L
KA-3	3/10/2014	Manganese, Total	0.38	0.002	0.00055	2017000	mg/L
KA-3	3/10/2014	Sodium, Total	330	10	3.9	NA	mg/L
KA-3	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	3/10/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
KA-3	3/10/2014	Uranium, Total	0.048	0.005	0.000036	30000	mg/L
KA-3	3/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
KA-3	6/5/2014	Calcium, Total	62	1	0.053	NA	mg/L
KA-3	6/5/2014	Potassium, Total	5.3	1	0.24	NA	mg/L
KA-3	6/5/2014	Magnesium, Total	15	1	0.024	NA	mg/L
KA-3	6/5/2014	Sodium, Total	390	5	1.3	NA	mg/L
KA-3	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
KA-3	9/11/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
KA-3	9/11/2014	Barium, Total	0.07	0.002	0.0005	2000000	mg/L
KA-3	9/11/2014	Calcium, Total	43	1	0.082	NA	mg/L
KA-3	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
KA-3	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
KA-3	9/11/2014	Copper, Total	0.0084	0.006	0.0046	790000	mg/L
KA-3	9/11/2014	Iron, Total	1	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
KA-3	9/11/2014	Potassium, Total	5.2	1	0.093	NA	mg/L
KA-3	9/11/2014	Magnesium, Total	6.9	1	0.018	NA	mg/L
KA-3	9/11/2014	Manganese, Total	0.035	0.002	0.00049	2017000	mg/L
KA-3	9/11/2014	Sodium, Total	910	20	7.8	NA	mg/L
KA-3	9/11/2014	Lead, Total	0.0015	0.001	0.00026	15000	mg/L
KA-3	9/11/2014	Selenium, Total	0.034	0.01	0.0051	50000	mg/L
KA-3	9/11/2014	Uranium, Total	0.047	0.001	0.0000072	30000	mg/L
KA-3	9/11/2014	Zinc, Total	0.018	0.01	0.0035	5960000	mg/L
KA-3	11/11/2014	Calcium, Total	67	1	0.082	NA	mg/L
KA-3	11/11/2014	Potassium, Total	ND	1	0.093	NA	mg/L
KA-3	11/11/2014	Magnesium, Total	11	1	0.018	NA	mg/L
KA-3	11/11/2014	Sodium, Total	310	5	2	NA	mg/L
KA-3	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	3/10/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
KA-3	3/10/2015	Barium, Total	0.27	0.002	0.00073	2000000	mg/L
KA-3	3/10/2015	Calcium, Total	64	1	0.057	NA	mg/L
KA-3	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
KA-3	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	3/10/2015	Iron, Total	0.35	0.02	0.0072	13822000	mg/L
KA-3	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	3/10/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
KA-3	3/10/2015	Magnesium, Total	10	1	0.039	NA	mg/L
KA-3	3/10/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
KA-3	3/10/2015	Sodium, Total	290	5	0.36	NA	mg/L
KA-3	3/10/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
KA-3	3/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
KA-3	3/10/2015	Uranium, Total	0.015	0.001	0.0000081	30000	mg/L
KA-3	3/10/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
KA-3	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
KA-3	6/2/2015	Barium, Total	0.35	0.002	0.0011	2000000	mg/L
KA-3	6/2/2015	Calcium, Total	69	1	0.057	NA	mg/L
KA-3	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	6/2/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
KA-3	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	6/2/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	6/2/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	6/2/2015	Manganese, Total	3	0.01	0.0076	2017000	mg/L
KA-3	6/2/2015	Sodium, Total	300	5	0.36	NA	mg/L
KA-3	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
KA-3	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
KA-3	6/2/2015	Uranium, Total	0.018	0.005	0.000049	30000	mg/L
KA-3	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	8/11/2015	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
KA-3	8/11/2015	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
KA-3	8/11/2015	Calcium, Total	61	1	0.057	NA	mg/L
KA-3	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	8/11/2015	Iron, Total	0.42	0.02	0.0072	13822000	mg/L
KA-3	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	8/11/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	8/11/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
KA-3	8/11/2015	Sodium, Total	320	5	0.36	NA	mg/L
KA-3	8/11/2015	Lead, Total	0.00077	0.0005	0.000047	15000	mg/L
KA-3	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
KA-3	8/11/2015	Uranium, Total	0.019	0.0005	0.0000049	30000	mg/L
KA-3	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	10/28/2015	Arsenic, Total	0.0035	0.001	0.00029	10000	mg/L
KA-3	10/28/2015	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
KA-3	10/28/2015	Calcium, Total	69	1	0.057	NA	mg/L
KA-3	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
KA-3	10/28/2015	Iron, Total	0.11	0.02	0.0072	13822000	mg/L
KA-3	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
KA-3	10/28/2015	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	10/28/2015	Magnesium, Total	11	1	0.039	NA	mg/L
KA-3	10/28/2015	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L
KA-3	10/28/2015	Sodium, Total	270	5	0.36	NA	mg/L
KA-3	10/28/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
KA-3	10/28/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
KA-3	10/28/2015	Uranium, Total	0.013	0.0005	0.0000049	30000	mg/L
KA-3	10/28/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
KA-3	3/3/2016	Calcium, Total	67	1	0.26	NA	mg/L
KA-3	3/3/2016	Potassium, Total	ND	1	0.18	NA	mg/L
KA-3	3/3/2016	Magnesium, Total	12	1	0.013	NA	mg/L
KA-3	3/3/2016	Sodium, Total	270	5	0.48	NA	mg/L
KA-3	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
KA-3	6/7/2016	Arsenic, Total	0.0047	0.001	0.00029	10000	mg/L
KA-3	6/7/2016	Barium, Total	0.77	0.002	0.0011	2000000	mg/L
KA-3	6/7/2016	Calcium, Total	87	1	0.26	NA	mg/L
KA-3	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
KA-3	6/7/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
KA-3	6/7/2016	Copper, Total	0.0092	0.006	0.0051	790000	mg/L
KA-3	6/7/2016	Iron, Total	0.53	0.02	0.0072	13822000	mg/L
KA-3	6/7/2016	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
KA-3	6/7/2016	Potassium, Total	0.57	1	0.18	NA	mg/L
KA-3	6/7/2016	Magnesium, Total	14	1	0.013	NA	mg/L
KA-3	6/7/2016	Manganese, Total	2	0.01	0.0076	2017000	mg/L
KA-3	6/7/2016	Sodium, Total	280	5	0.48	NA	mg/L
KA-3	6/7/2016	Lead, Total	0.00048	0.0005	0.000047	15000	mg/L
KA-3	6/7/2016	Selenium, Total	0.0045	0.01	0.0012	50000	mg/L
KA-3	6/7/2016	Uranium, Total	0.0099	0.0005	0.0000049	30000	mg/L
KA-3	6/7/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
KA-3	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
KA-3	9/1/2016	Arsenic, Total	0.005	0.02	0.0042	10000	mg/L
KA-3	9/1/2016	Barium, Total	0.95	0.002	0.00079	2000000	mg/L
KA-3	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	9/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	9/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
KA-3	9/1/2016	Arsenic, Dissolved	0.0029	0.001	0.00014	10000	mg/L
KA-3	9/1/2016	Barium, Dissolved	1	0.01	0.0066	2000000	mg/L
KA-3	9/1/2016	Calcium, Dissolved	86	1	0.5	NA	mg/L
KA-3	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
KA-3	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
KA-3	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
KA-3	9/1/2016	Iron, Dissolved	0.059	0.02	0.02	13821880	mg/L
KA-3	9/1/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
KA-3	9/1/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
KA-3	9/1/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
KA-3	9/1/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
KA-3	9/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	9/1/2016	Selenium, Dissolved	0.0049	0.005	0.0011	50000	mg/L
KA-3	9/1/2016	Uranium, Dissolved	0.0075	0.0025	0.00026	NA	mg/L
KA-3	9/1/2016	Zinc, Dissolved	0.041	0.01	0.0028	5960450	mg/L
KA-3	9/1/2016	Iron, Total	0.93	0.02	0.02	13822000	mg/L
KA-3	9/1/2016	Manganese, Total	2.7	0.01	0.0014	2017000	mg/L
KA-3	9/1/2016	Lead, Total	0.00044	0.0005	0.000081	15000	mg/L
KA-3	9/1/2016	Selenium, Total	ND	0.02	0.02	50000	mg/L
KA-3	9/1/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
KA-3	9/1/2016	Zinc, Total	0.0067	0.01	0.0027	5960000	mg/L
KA-3	11/14/2016	Silver, Total	0.003	0.005	0.0015	50000	mg/L
KA-3	11/14/2016	Arsenic, Total	0.0068	0.005	0.0011	10000	mg/L
KA-3	11/14/2016	Barium, Total	1.2	0.01	0.004	2000000	mg/L
KA-3	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	11/14/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	11/14/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
KA-3	11/14/2016	Arsenic, Dissolved	0.0036	0.005	0.00069	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	11/14/2016	Barium, Dissolved	1.2	0.01	0.0066	2000000	mg/L
KA-3	11/14/2016	Calcium, Dissolved	81	1	0.5	NA	mg/L
KA-3	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
KA-3	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
KA-3	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
KA-3	11/14/2016	Iron, Dissolved	0.12	0.02	0.02	13821880	mg/L
KA-3	11/14/2016	Potassium, Dissolved	0.91	1	0.5	NA	mg/L
KA-3	11/14/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
KA-3	11/14/2016	Manganese, Dissolved	1.3	0.01	0.0016	2017400	mg/L
KA-3	11/14/2016	Sodium, Dissolved	290	5	2.5	NA	mg/L
KA-3	11/14/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	11/14/2016	Selenium, Dissolved	0.0071	0.02	0.0042	50000	mg/L
KA-3	11/14/2016	Uranium, Dissolved	0.0099	0.0005	0.000051	NA	mg/L
KA-3	11/14/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
KA-3	11/14/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
KA-3	11/14/2016	Mercury, Total	0.000084	0.0002	0.000053	2000	mg/L
KA-3	11/14/2016	Manganese, Total	1.3	0.01	0.0014	2017000	mg/L
KA-3	11/14/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
KA-3	11/14/2016	Selenium, Total	0.0049	0.02	0.0037	50000	mg/L
KA-3	11/14/2016	Uranium, Total	0.0089	0.0025	0.00087	30000	mg/L
KA-3	11/14/2016	Zinc, Total	0.0042	0.01	0.0027	5960000	mg/L
KA-3	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
KA-3	2/21/2017	Arsenic, Total	0.0068	0.01	0.0021	10000	mg/L
KA-3	2/21/2017	Barium, Total	1.1	0.01	0.004	2000000	mg/L
KA-3	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	2/21/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
KA-3	2/21/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
KA-3	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
KA-3	2/21/2017	Arsenic, Dissolved	0.0019	0.01	0.0014	10000	mg/L
KA-3	2/21/2017	Barium, Dissolved	1.2	0.01	0.0043	2000000	mg/L
KA-3	2/21/2017	Calcium, Dissolved	79	1	0.5	NA	mg/L
KA-3	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
KA-3	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	2/21/2017	Iron, Dissolved	0.17	0.02	0.02	13821880	mg/L
KA-3	2/21/2017	Potassium, Dissolved	0.72	1	0.5	NA	mg/L
KA-3	2/21/2017	Magnesium, Dissolved	13	1	0.5	NA	mg/L
KA-3	2/21/2017	Manganese, Dissolved	1.1	0.01	0.0019	2017400	mg/L
KA-3	2/21/2017	Sodium, Dissolved	280	5	2.5	NA	mg/L
KA-3	2/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	2/21/2017	Selenium, Dissolved	0.0035	0.01	0.0021	50000	mg/L
KA-3	2/21/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
KA-3	2/21/2017	Iron, Total	1.8	0.1	0.1	13822000	mg/L
KA-3	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
KA-3	2/21/2017	Manganese, Total	1.1	0.01	0.0014	2017000	mg/L
KA-3	2/21/2017	Lead, Total	0.00035	0.0005	0.000081	15000	mg/L
KA-3	2/21/2017	Selenium, Total	0.0057	0.01	0.0019	50000	mg/L
KA-3	2/21/2017	Zinc, Total	0.0047	0.01	0.0027	5960000	mg/L
KA-3	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
KA-3	6/1/2017	Arsenic, Total	0.0035	0.005	0.0015	10000	mg/L
KA-3	6/1/2017	Barium, Total	0.77	0.002	0.00093	2000000	mg/L
KA-3	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	6/1/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
KA-3	6/1/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
KA-3	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
KA-3	6/1/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
KA-3	6/1/2017	Barium, Dissolved	0.75	0.002	0.00085	2000000	mg/L
KA-3	6/1/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
KA-3	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
KA-3	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	6/1/2017	Iron, Dissolved	0.056	0.02	0.016	13821880	mg/L
KA-3	6/1/2017	Potassium, Dissolved	0.34	1	0.11	NA	mg/L
KA-3	6/1/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
KA-3	6/1/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
KA-3	6/1/2017	Sodium, Dissolved	310	10	1.6	NA	mg/L
KA-3	6/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	6/1/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
KA-3	6/1/2017	Uranium, Dissolved	0.015	0.0025	0.00025	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/1/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
KA-3	6/1/2017	Iron, Total	0.55	0.02	0.01	13822000	mg/L
KA-3	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	6/1/2017	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
KA-3	6/1/2017	Lead, Total	0.00038	0.0005	0.000095	15000	mg/L
KA-3	6/1/2017	Selenium, Total	0.0036	0.005	0.0036	50000	mg/L
KA-3	6/1/2017	Uranium, Total	0.016	0.0025	0.00077	30000	mg/L
KA-3	6/1/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
KA-3	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
KA-3	9/5/2017	Arsenic, Total	0.0072	0.001	0.0003	10000	mg/L
KA-3	9/5/2017	Barium, Total	1.4	0.02	0.0093	2000000	mg/L
KA-3	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	9/5/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	9/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
KA-3	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	9/5/2017	Arsenic, Dissolved	0.0039	0.005	0.00089	10000	mg/L
KA-3	9/5/2017	Barium, Dissolved	1.3	0.02	0.0085	2000000	mg/L
KA-3	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	9/5/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	9/5/2017	Iron, Dissolved	0.088	0.02	0.016	13821880	mg/L
KA-3	9/5/2017	Manganese, Dissolved	1.3	0.02	0.0039	2017400	mg/L
KA-3	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	9/5/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
KA-3	9/5/2017	Uranium, Dissolved	0.01	0.0005	0.00005	NA	mg/L
KA-3	9/5/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
KA-3	9/5/2017	Iron, Total	1.5	0.2	0.1	13822000	mg/L
KA-3	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	9/5/2017	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
KA-3	9/5/2017	Lead, Total	0.00054	0.0005	0.000095	15000	mg/L
KA-3	9/5/2017	Selenium, Total	0.0082	0.001	0.00071	50000	mg/L
KA-3	9/5/2017	Uranium, Total	0.01	0.0005	0.00015	30000	mg/L
KA-3	9/5/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
KA-3	12/4/2017	Silver, Total	0.015	0.005	0.0012	50000	mg/L
KA-3	12/4/2017	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
KA-3	12/4/2017	Barium, Total	1.7	0.01	0.005	2000000	mg/L
KA-3	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	12/4/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
KA-3	12/4/2017	Barium, Dissolved	1.7	0.01	0.0049	2000000	mg/L
KA-3	12/4/2017	Calcium, Dissolved	98	1	0.078	NA	mg/L
KA-3	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	12/4/2017	Iron, Dissolved	0.045	0.02	0.016	13821880	mg/L
KA-3	12/4/2017	Potassium, Dissolved	0.44	1	0.11	NA	mg/L
KA-3	12/4/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
KA-3	12/4/2017	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
KA-3	12/4/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
KA-3	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	12/4/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
KA-3	12/4/2017	Uranium, Dissolved	0.0076	0.0005	0.000096	NA	mg/L
KA-3	12/4/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
KA-3	12/4/2017	Iron, Total	0.53	0.02	0.01	13822000	mg/L
KA-3	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	12/4/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
KA-3	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
KA-3	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
KA-3	12/4/2017	Uranium, Total	0.0074	0.005	0.0015	30000	mg/L
KA-3	12/4/2017	Zinc, Total	0.004	0.01	0.0033	5960000	mg/L
KA-3	2/9/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
KA-3	2/9/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
KA-3	2/9/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
KA-3	2/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	2/9/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
KA-3	2/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	2/9/2018	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
KA-3	2/9/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
KA-3	2/9/2018	Calcium, Dissolved	93	1	0.078	NA	mg/L
KA-3	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	2/9/2018	Copper, Dissolved	0.0044	0.006	0.0032	790000	mg/L
KA-3	2/9/2018	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
KA-3	2/9/2018	Potassium, Dissolved	0.37	1	0.11	NA	mg/L
KA-3	2/9/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
KA-3	2/9/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
KA-3	2/9/2018	Sodium, Dissolved	310	5	0.82	NA	mg/L
KA-3	2/9/2018	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
KA-3	2/9/2018	Selenium, Dissolved	0.0085	0.01	0.0076	50000	mg/L
KA-3	2/9/2018	Uranium, Dissolved	0.011	0.0005	0.000096	NA	mg/L
KA-3	2/9/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
KA-3	2/9/2018	Iron, Total	0.27	0.02	0.01	13822000	mg/L
KA-3	2/9/2018	Mercury, Total	0.000069	0.0002	0.000037	2000	mg/L
KA-3	2/9/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
KA-3	2/9/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
KA-3	2/9/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
KA-3	2/9/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
KA-3	2/9/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
KA-3	4/30/2018	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
KA-3	4/30/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
KA-3	4/30/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
KA-3	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
KA-3	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
KA-3	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
KA-3	4/30/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
KA-3	4/30/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
KA-3	4/30/2018	Calcium, Dissolved	83	1	0.078	NA	mg/L
KA-3	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
KA-3	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
KA-3	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
KA-3	4/30/2018	Iron, Dissolved	0.046	0.02	0.016	13821880	mg/L
KA-3	4/30/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
KA-3	4/30/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
KA-3	4/30/2018	Manganese, Dissolved	1.2	0.01	0.002	2017400	mg/L
KA-3	4/30/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
KA-3	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
KA-3	4/30/2018	Selenium, Dissolved	0.0036	0.001	0.00076	50000	mg/L
KA-3	4/30/2018	Uranium, Dissolved	0.0086	0.0005	0.000096	NA	mg/L
KA-3	4/30/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
KA-3	4/30/2018	Iron, Total	0.23	0.02	0.01	13822000	mg/L
KA-3	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
KA-3	4/30/2018	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
KA-3	4/30/2018	Lead, Total	0.00054	0.0005	0.00023	15000	mg/L
KA-3	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
KA-3	4/30/2018	Uranium, Total	0.0089	0.0005	0.000068	30000	mg/L
KA-3	4/30/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
KA-3	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
KA-3	3/20/2012	Arsenic, Total	0.0065	0.0025	0.0014	10000	mg/L
KA-3	3/20/2012	Barium, Total	0.99	0.002	0.0006	2000000	mg/L
KA-3	3/20/2012	Calcium, Total	93	1	0.026	NA	mg/L
KA-3	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
KA-3	3/20/2012	Chromium, Total	0.033	0.006	0.001	50000	mg/L
KA-3	3/20/2012	Copper, Total	0.017	0.006	0.00066	790000	mg/L
KA-3	3/20/2012	Iron, Total	24	1	0.66	13822000	mg/L
KA-3	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	3/20/2012	Potassium, Total	2.8	1	0.48	NA	mg/L
KA-3	3/20/2012	Magnesium, Total	16	1	0.013	NA	mg/L
KA-3	3/20/2012	Manganese, Total	1.8	0.01	0.0013	2017000	mg/L
KA-3	3/20/2012	Sodium, Total	550	10	0.45	NA	mg/L
KA-3	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	3/20/2012	Selenium, Total	0.0088	0.0025	0.0025	50000	mg/L
KA-3	3/20/2012	Uranium, Total	0.023	0.0025	0.00003	30000	mg/L
KA-3	3/20/2012	Zinc, Total	0.095	0.01	0.0011	5960000	mg/L
KA-3	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2012	Arsenic, Total	0.0057	0.0025	0.0014	10000	mg/L
KA-3	6/12/2012	Barium, Total	0.61	0.002	0.00039	2000000	mg/L
KA-3	6/12/2012	Calcium, Total	68	1	0.026	NA	mg/L
KA-3	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	6/12/2012	Chromium, Total	0.022	0.006	0.001	50000	mg/L
KA-3	6/12/2012	Copper, Total	0.0092	0.006	0.0041	790000	mg/L
KA-3	6/12/2012	Iron, Total	15	0.4	0.27	13822000	mg/L
KA-3	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
KA-3	6/12/2012	Potassium, Total	1.6	1	0.48	NA	mg/L
KA-3	6/12/2012	Magnesium, Total	12	1	0.013	NA	mg/L
KA-3	6/12/2012	Manganese, Total	0.93	0.002	0.00026	2017000	mg/L
KA-3	6/12/2012	Sodium, Total	450	5	0.22	NA	mg/L
KA-3	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	6/12/2012	Selenium, Total	0.012	0.0025	0.0025	50000	mg/L
KA-3	6/12/2012	Uranium, Total	0.027	0.0025	0.00003	30000	mg/L
KA-3	6/12/2012	Zinc, Total	0.055	0.01	0.0011	5960000	mg/L
KA-3	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	8/21/2012	Arsenic, Total	0.0028	0.0025	0.0014	10000	mg/L
KA-3	8/21/2012	Barium, Total	0.3	0.002	0.00039	2000000	mg/L
KA-3	8/21/2012	Calcium, Total	77	1	0.026	NA	mg/L
KA-3	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
KA-3	8/21/2012	Copper, Total	0.007	0.006	0.0041	790000	mg/L
KA-3	8/21/2012	Iron, Total	0.32	0.02	0.013	13822000	mg/L
KA-3	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	8/21/2012	Potassium, Total	1.8	1	0.48	NA	mg/L
KA-3	8/21/2012	Magnesium, Total	13	1	0.013	NA	mg/L
KA-3	8/21/2012	Manganese, Total	0.81	0.002	0.00026	2017000	mg/L
KA-3	8/21/2012	Sodium, Total	430	5	0.22	NA	mg/L
KA-3	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
KA-3	8/21/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
KA-3	8/21/2012	Uranium, Total	0.0043	0.0025	0.00003	30000	mg/L
KA-3	8/21/2012	Zinc, Total	0.014	0.01	0.0011	5960000	mg/L
KA-3	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	11/28/2012	Arsenic, Total	0.006	0.0025	0.0014	10000	mg/L
KA-3	11/28/2012	Barium, Total	1.3	0.01	0.0019	2000000	mg/L
KA-3	11/28/2012	Calcium, Total	78	1	0.026	NA	mg/L
KA-3	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	11/28/2012	Chromium, Total	0.036	0.006	0.001	50000	mg/L
KA-3	11/28/2012	Copper, Total	0.013	0.006	0.0041	790000	mg/L
KA-3	11/28/2012	Iron, Total	30	1	0.66	13822000	mg/L
KA-3	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
KA-3	11/28/2012	Potassium, Total	3	1	0.48	NA	mg/L
KA-3	11/28/2012	Magnesium, Total	16	1	0.013	NA	mg/L
KA-3	11/28/2012	Manganese, Total	1.7	0.01	0.0013	2017000	mg/L
KA-3	11/28/2012	Sodium, Total	590	10	0.45	NA	mg/L
KA-3	11/28/2012	Lead, Total	0.0046	0.001	0.00002	15000	mg/L
KA-3	11/28/2012	Selenium, Total	0.01	0.0025	0.0025	50000	mg/L
KA-3	11/28/2012	Uranium, Total	0.032	0.0025	0.00003	30000	mg/L
KA-3	11/28/2012	Zinc, Total	0.092	0.01	0.0011	5960000	mg/L
KA-3	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
KA-3	3/18/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
KA-3	3/18/2013	Barium, Total	0.079	0.002	0.00039	2000000	mg/L
KA-3	3/18/2013	Calcium, Total	74	1	0.069	NA	mg/L
KA-3	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
KA-3	3/18/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
KA-3	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	3/18/2013	Iron, Total	0.62	0.02	0.013	13822000	mg/L
KA-3	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	3/18/2013	Potassium, Total	2.5	1	0.39	NA	mg/L
KA-3	3/18/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	3/18/2013	Manganese, Total	0.58	0.002	0.00026	2017000	mg/L
KA-3	3/18/2013	Sodium, Total	260	5	1.1	NA	mg/L
KA-3	3/18/2013	Lead, Total	0.0058	0.005	0.0014	15000	mg/L
KA-3	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
KA-3	3/18/2013	Uranium, Total	0.02	0.0025	0.0012	30000	mg/L
KA-3	3/18/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
KA-3	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
KA-3	6/12/2013	Arsenic, Total	0.0019	0.001	0.00027	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2013	Barium, Total	0.16	0.002	0.00057	2000000	mg/L
KA-3	6/12/2013	Calcium, Total	83	1	0.069	NA	mg/L
KA-3	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
KA-3	6/12/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	6/12/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
KA-3	6/12/2013	Iron, Total	0.4	0.02	0.0052	13822000	mg/L
KA-3	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
KA-3	6/12/2013	Potassium, Total	2.3	1	0.24	NA	mg/L
KA-3	6/12/2013	Magnesium, Total	12	1	0.028	NA	mg/L
KA-3	6/12/2013	Manganese, Total	0.35	0.002	0.00052	2017000	mg/L
KA-3	6/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
KA-3	6/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
KA-3	6/12/2013	Selenium, Total	0.003	0.001	0.00049	50000	mg/L
KA-3	6/12/2013	Uranium, Total	0.014	0.001	0.0005	30000	mg/L
KA-3	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
KA-3	9/22/2020	Arsenic, Dissolved	0.0029	0.001	0.00021	10000	mg/L
KA-3	9/22/2020	Lead, Dissolved	0.000056	0.0005	0.000034	NA	mg/L
KA-3	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
KA-3	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
KA-3	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
KA-3	9/22/2020	Uranium, Dissolved	0.0012	0.0005	0.000065	NA	mg/L
KA-3	9/22/2020	Barium, Dissolved	3.1	0.01	0.0056	2000000	mg/L
KA-3	9/22/2020	Calcium, Dissolved	110	5	0.57	NA	mg/L
KA-3	9/22/2020	Manganese, Dissolved	1.5	0.01	0.0029	2017400	mg/L
KA-3	9/22/2020	Sodium, Dissolved	360	5	0.69	NA	mg/L
KA-3	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
KA-3	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
KA-3	9/22/2020	Boron, Dissolved	0.7	0.04	0.0067	3949110	mg/L
KA-3	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
KA-3	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
KA-3	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
KA-3	9/22/2020	Iron, Dissolved	0.053	0.02	0.01	13821880	mg/L
KA-3	9/22/2020	Magnesium, Dissolved	18	1	0.067	NA	mg/L
KA-3	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
KA-3	9/22/2020	Nickel, Dissolved	0.016	0.01	0.0033	372000	mg/L
KA-3	9/22/2020	Potassium, Dissolved	0.41	1	0.16	NA	mg/L
KA-3	9/22/2020	Silver, Dissolved	0.0023	0.005	0.0013	81200	mg/L
KA-3	9/22/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
KA-3	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
KA-3	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
KA-3	9/22/2020	Arsenic, Total	0.0031	0.001	0.00026	10000	mg/L
KA-3	9/22/2020	Lead, Total	0.00087	0.0005	0.000034	15000	mg/L
KA-3	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
KA-3	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
KA-3	9/22/2020	Uranium, Total	0.0011	0.0005	0.000065	30000	mg/L
KA-3	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
KA-3	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
KA-3	9/22/2020	Boron, Total	0.67	0.04	0.0074	3949	mg/L
KA-3	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
KA-3	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
KA-3	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
KA-3	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
KA-3	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
KA-3	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
KA-3	9/22/2020	Silver, Total	0.0016	0.005	0.0013	50000	mg/L
KA-3	9/22/2020	Aluminum, Total	1	0.1	0.037	19914000	mg/L
KA-3	9/22/2020	Barium, Total	3	0.015	0.0082	2000000	mg/L
KA-3	9/22/2020	Iron, Total	1.3	0.25	0.064	13822000	mg/L
KA-3	9/22/2020	Manganese, Total	1.4	0.01	0.0041	2017000	mg/L
KA-3	9/22/2020	Nickel, Total	0.021	0.01	0.0033	372000	mg/L
KA-3	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
KA-3	12/17/2020	Aluminum, Total	0.248	0.2	0.051	19914000	mg/L
KA-3	12/17/2020	Calcium, Total	24.5	0.5	0.084	NA	mg/L
KA-3	12/17/2020	Boron, Total	1.46	0.1	0.022	3949	mg/L
KA-3	12/17/2020	Barium, Total	0.137	0.01	0.003	2000000	mg/L
KA-3	12/17/2020	Potassium, Total	2.7	1	0.34	NA	mg/L
KA-3	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
KA-3	12/17/2020	Magnesium, Total	4.34	0.5	0.12	NA	mg/L
KA-3	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
KA-3	12/17/2020	Sodium, Total	455	2	0.92	NA	mg/L
KA-3	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
KA-3	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
KA-3	12/17/2020	Iron, Total	0.371	0.2	0.075	13822000	mg/L
KA-3	12/17/2020	Manganese, Total	0.302	0.01	0.003	2017000	mg/L
KA-3	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
KA-3	12/17/2020	Nickel, Total	0.0205	0.006	0.003	372000	mg/L
KA-3	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
KA-3	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
KA-3	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
KA-3	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
KA-3	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
KA-3	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
KA-3	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
KA-3	12/17/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
KA-3	12/17/2020	Manganese, Dissolved	0.288	0.01	0.003	2017400	mg/L
KA-3	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
KA-3	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
KA-3	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
KA-3	12/17/2020	Barium, Dissolved	0.129	0.01	0.003	2000000	mg/L
KA-3	12/17/2020	Boron, Dissolved	1.52	0.1	0.022	3949110	mg/L
KA-3	12/17/2020	Nickel, Dissolved	0.0231	0.006	0.003	372000	mg/L
KA-3	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
KA-3	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
KA-3	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
KA-3	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
KA-3	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
KA-3	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
KA-3	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
KA-3	12/17/2020	Uranium, Total Recoverable	21	5	1.12	30	ug/L
KA-3	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
KA-3	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
KA-3	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
KA-3	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
KA-3	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
KA-3	12/17/2020	Uranium, Dissolved	21.2	5	1.12	NA	ug/L
KA-3	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
KA-3	3/4/2020	Arsenic, Dissolved	0.0048	0.001	0.0001	10000	mg/L
KA-3	3/4/2020	Lead, Dissolved	0.00008	0.0005	0.000055	NA	mg/L
KA-3	3/4/2020	Selenium, Dissolved	0.00028	0.001	0.00017	50000	mg/L
KA-3	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	3/4/2020	Uranium, Dissolved	0.004	0.0005	0.000075	NA	mg/L
KA-3	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
KA-3	3/4/2020	Beryllium, Dissolved	0.00043	0.002	0.00028	4000	mg/L
KA-3	3/4/2020	Boron, Dissolved	0.57	0.04	0.0045	3949110	mg/L
KA-3	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
KA-3	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
KA-3	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
KA-3	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
KA-3	3/4/2020	Iron, Dissolved	0.35	0.02	0.0087	13821880	mg/L
KA-3	3/4/2020	Magnesium, Dissolved	19	1	0.05	NA	mg/L
KA-3	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
KA-3	3/4/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
KA-3	3/4/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
KA-3	3/4/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
KA-3	3/4/2020	Zinc, Dissolved	0.014	0.01	0.0023	5960450	mg/L
KA-3	3/4/2020	Barium, Dissolved	2	0.01	0.0032	2000000	mg/L
KA-3	3/4/2020	Calcium, Dissolved	110	5	0.31	NA	mg/L
KA-3	3/4/2020	Sodium, Dissolved	400	5	2.1	NA	mg/L
KA-3	3/4/2020	Manganese, Dissolved	1.6	0.01	0.0014	2017400	mg/L
KA-3	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
KA-3	3/4/2020	Arsenic, Total	0.0064	0.001	0.00031	10000	mg/L
KA-3	3/4/2020	Lead, Total	0.00072	0.0005	0.000055	15000	mg/L
KA-3	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
KA-3	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	3/4/2020	Uranium, Total	0.0037	0.0005	0.000085	30000	mg/L
KA-3	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
KA-3	3/4/2020	Beryllium, Total	0.00036	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
KA-3	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
KA-3	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
KA-3	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
KA-3	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
KA-3	3/4/2020	Nickel, Total	0.024	0.01	0.004	372000	mg/L
KA-3	3/4/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
KA-3	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
KA-3	3/4/2020	Barium, Total	2	0.02	0.0065	2000000	mg/L
KA-3	3/4/2020	Iron, Total	1.2	0.2	0.087	13822000	mg/L
KA-3	3/4/2020	Manganese, Total	1.7	0.02	0.0029	2017000	mg/L
KA-3	3/4/2020	Aluminum, Total	1	0.1	0.012	19914000	mg/L
KA-3	3/4/2020	Boron, Total	0.63	0.2	0.023	3949	mg/L
KA-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
KA-3	4/9/2019	Arsenic, Dissolved	0.0033	0.001	0.000101	10000	mg/L
KA-3	4/9/2019	Barium, Dissolved	1.5	0.01	0.003242	2000000	mg/L
KA-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	4/9/2019	Boron, Dissolved	0.65	0.04	0.004531	3949110	mg/L
KA-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	4/9/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L
KA-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	4/9/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
KA-3	4/9/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
KA-3	4/9/2019	Lead, Dissolved	0.000094	0.0005	0.000055	NA	mg/L
KA-3	4/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
KA-3	4/9/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
KA-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	4/9/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
KA-3	4/9/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
KA-3	4/9/2019	Selenium, Dissolved	0.00029	0.001	0.000171	50000	mg/L
KA-3	4/9/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
KA-3	4/9/2019	Sodium, Dissolved	370	5	2.080881	NA	mg/L
KA-3	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	4/9/2019	Uranium, Dissolved	0.0093	0.0005	0.000075	NA	mg/L
KA-3	4/9/2019	Zinc, Dissolved	0.05	0.01	0.002252	5960450	mg/L
KA-3	4/9/2019	Aluminum, Total	0.1	0.02	0.001051	19914000	mg/L
KA-3	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
KA-3	4/9/2019	Arsenic, Total	0.0056	0.001	0.000312	10000	mg/L
KA-3	4/9/2019	Barium, Total	1.4	0.01	0.002442	2000000	mg/L
KA-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
KA-3	4/9/2019	Boron, Total	0.6	0.04	0.001821	3949	mg/L
KA-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
KA-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
KA-3	4/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	4/9/2019	Iron, Total	1.6	0.1	0.030263	13822000	mg/L
KA-3	4/9/2019	Lead, Total	0.0007	0.0005	0.000026	15000	mg/L
KA-3	4/9/2019	Manganese, Total	1.4	0.01	0.000299	2017000	mg/L
KA-3	4/9/2019	Molybdenum, Total	0.0034	0.008	0.002075	98700	mg/L
KA-3	4/9/2019	Nickel, Total	0.023	0.01	0.001491	372000	mg/L
KA-3	4/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
KA-3	4/9/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
KA-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	4/9/2019	Uranium, Total	0.0093	0.0005	0.000085	30000	mg/L
KA-3	4/9/2019	Zinc, Total	0.006	0.01	0.005772	5960000	mg/L
KA-3	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	5/28/2019	Antimony, Dissolved	0.00056	0.001	0.000389	6000	mg/L
KA-3	5/28/2019	Arsenic, Dissolved	0.0052	0.001	0.000101	10000	mg/L
KA-3	5/28/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
KA-3	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	5/28/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
KA-3	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	5/28/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
KA-3	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	5/28/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
KA-3	5/28/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
KA-3	5/28/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
KA-3	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	5/28/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
KA-3	5/28/2019	Potassium, Dissolved	0.34	1	0.162288	NA	mg/L
KA-3	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
KA-3	5/28/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
KA-3	5/28/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
KA-3	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	5/28/2019	Uranium, Dissolved	0.0073	0.0005	0.000075	NA	mg/L
KA-3	5/28/2019	Zinc, Dissolved	0.0094	0.01	0.002252	5960450	mg/L
KA-3	5/28/2019	Aluminum, Total	0.2	0.02	0.002488	19914000	mg/L
KA-3	5/28/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
KA-3	5/28/2019	Arsenic, Total	0.0092	0.001	0.000312	10000	mg/L
KA-3	5/28/2019	Barium, Total	1.3	0.01	0.003242	2000000	mg/L
KA-3	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	5/28/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
KA-3	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	5/28/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
KA-3	5/28/2019	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
KA-3	5/28/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
KA-3	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
KA-3	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	5/28/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
KA-3	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
KA-3	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
KA-3	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	5/28/2019	Uranium, Total	0.0077	0.0005	0.000085	30000	mg/L
KA-3	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
KA-3	10/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	10/21/2019	Antimony, Dissolved	0.00064	0.001	0.000389	6000	mg/L
KA-3	10/21/2019	Arsenic, Dissolved	0.008	0.001	0.000101	10000	mg/L
KA-3	10/21/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
KA-3	10/21/2019	Beryllium, Dissolved	0.00065	0.002	0.000284	4000	mg/L
KA-3	10/21/2019	Boron, Dissolved	0.79	0.04	0.004531	3949110	mg/L
KA-3	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	10/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
KA-3	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	10/21/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
KA-3	10/21/2019	Lead, Dissolved	0.00013	0.0005	0.000055	NA	mg/L
KA-3	10/21/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
KA-3	10/21/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
KA-3	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	10/21/2019	Nickel, Dissolved	0.027	0.01	0.004009	372000	mg/L
KA-3	10/21/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
KA-3	10/21/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
KA-3	10/21/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
KA-3	10/21/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
KA-3	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	10/21/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
KA-3	10/21/2019	Aluminum, Total	0.96	0.1	0.012441	19914000	mg/L
KA-3	10/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
KA-3	10/21/2019	Arsenic, Total	0.008	0.005	0.001561	10000	mg/L
KA-3	10/21/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
KA-3	10/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	10/21/2019	Boron, Total	0.81	0.2	0.022653	3949	mg/L
KA-3	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	10/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	10/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	10/21/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
KA-3	10/21/2019	Lead, Total	0.00056	0.0005	0.000055	15000	mg/L
KA-3	10/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	10/21/2019	Mercury, Total	0.000043	0.0002	0.000038	2000	mg/L
KA-3	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	10/21/2019	Nickel, Total	0.028	0.01	0.004009	372000	mg/L
KA-3	10/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
KA-3	10/21/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
KA-3	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
KA-3	10/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
KA-3	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
KA-3	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
KA-3	8/22/2019	Arsenic, Dissolved	0.006	0.001	0.000101	10000	mg/L
KA-3	8/22/2019	Barium, Dissolved	1.5	0.02	0.006484	2000000	mg/L
KA-3	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
KA-3	8/22/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
KA-3	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
KA-3	8/22/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
KA-3	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
KA-3	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
KA-3	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
KA-3	8/22/2019	Iron, Dissolved	0.81	0.02	0.008747	13821880	mg/L
KA-3	8/22/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
KA-3	8/22/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
KA-3	8/22/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
KA-3	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
KA-3	8/22/2019	Nickel, Dissolved	0.027	0.01	0.004009	372000	mg/L
KA-3	8/22/2019	Potassium, Dissolved	0.39	1	0.162288	NA	mg/L
KA-3	8/22/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
KA-3	8/22/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
KA-3	8/22/2019	Sodium, Dissolved	370	10	4.161763	NA	mg/L
KA-3	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
KA-3	8/22/2019	Uranium, Dissolved	0.0051	0.0005	0.000075	NA	mg/L
KA-3	8/22/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
KA-3	8/22/2019	Aluminum, Total	1.1	0.1	0.012441	19914000	mg/L
KA-3	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
KA-3	8/22/2019	Arsenic, Total	0.0067	0.001	0.000312	10000	mg/L
KA-3	8/22/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
KA-3	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
KA-3	8/22/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
KA-3	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
KA-3	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
KA-3	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
KA-3	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
KA-3	8/22/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
KA-3	8/22/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
KA-3	8/22/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
KA-3	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
KA-3	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
KA-3	8/22/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
KA-3	8/22/2019	Selenium, Total	0.00057	0.001	0.000478	50000	mg/L
KA-3	8/22/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
KA-3	8/22/2019	Thallium, Total	0.000058	0.0005	0.000052	2000	mg/L
KA-3	8/22/2019	Uranium, Total	0.0048	0.0005	0.000085	30000	mg/L
KA-3	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
LDU - East	8/22/2019	Aluminum, Dissolved	0.32	0.02	0.002488	19913930	mg/L
LDU - East	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	8/22/2019	Arsenic, Dissolved	0.00027	0.001	0.000101	10000	mg/L
LDU - East	8/22/2019	Barium, Dissolved	0.061	0.002	0.000648	2000000	mg/L
LDU - East	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	8/22/2019	Boron, Dissolved	0.025	0.04	0.004531	3949110	mg/L
LDU - East	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	8/22/2019	Chromium, Dissolved	0.094	0.006	0.001533	100000	mg/L
LDU - East	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	8/22/2019	Iron, Dissolved	4.8	0.2	0.087469	13821880	mg/L
LDU - East	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	8/22/2019	Manganese, Dissolved	0.95	0.002	0.00029	2017400	mg/L
LDU - East	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	8/22/2019	Nickel, Dissolved	0.0064	0.01	0.004009	372000	mg/L
LDU - East	8/22/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	8/22/2019	Uranium, Dissolved	0.00011	0.0005	0.000075	NA	mg/L
LDU - East	8/22/2019	Zinc, Dissolved	0.0067	0.01	0.002252	5960450	mg/L
LDU - East	8/22/2019	Aluminum, Total	0.38	0.02	0.002488	19914000	mg/L
LDU - East	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	8/22/2019	Arsenic, Total	0.00046	0.001	0.000312	10000	mg/L
LDU - East	8/22/2019	Barium, Total	0.064	0.002	0.000648	2000000	mg/L
LDU - East	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
LDU - East	8/22/2019	Boron, Total	0.022	0.04	0.004531	3949	mg/L
LDU - East	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	8/22/2019	Chromium, Total	0.17	0.006	0.001533	50000	mg/L
LDU - East	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - East	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	8/22/2019	Iron, Total	5.1	0.2	0.087469	13822000	mg/L
LDU - East	8/22/2019	Lead, Total	0.00015	0.0005	0.000055	15000	mg/L
LDU - East	8/22/2019	Manganese, Total	0.87	0.002	0.00029	2017000	mg/L
LDU - East	8/22/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
LDU - East	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	8/22/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
LDU - East	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	8/22/2019	Uranium, Total	0.00012	0.0005	0.000085	30000	mg/L
LDU - East	8/22/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
LDU - East	5/28/2019	Aluminum, Dissolved	0.19	0.02	0.002488	19913930	mg/L
LDU - East	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	5/28/2019	Arsenic, Dissolved	ND	0.001	0.000101	10000	mg/L
LDU - East	5/28/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
LDU - East	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	5/28/2019	Boron, Dissolved	0.0099	0.04	0.004531	3949110	mg/L
LDU - East	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	5/28/2019	Chromium, Dissolved	0.067	0.006	0.001533	100000	mg/L
LDU - East	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	5/28/2019	Iron, Dissolved	1.3	0.1	0.043734	13821880	mg/L
LDU - East	5/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	5/28/2019	Manganese, Dissolved	0.83	0.002	0.00029	2017400	mg/L
LDU - East	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
LDU - East	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	5/28/2019	Silver, Dissolved	0.00098	0.005	0.000942	81200	mg/L
LDU - East	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	5/28/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	5/28/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
LDU - East	5/28/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
LDU - East	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	5/28/2019	Arsenic, Total	ND	0.001	0.000312	10000	mg/L
LDU - East	5/28/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
LDU - East	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
LDU - East	5/28/2019	Boron, Total	0.0096	0.04	0.004531	3949	mg/L
LDU - East	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	5/28/2019	Chromium, Total	0.094	0.006	0.001533	50000	mg/L
LDU - East	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - East	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	5/28/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
LDU - East	5/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
LDU - East	5/28/2019	Manganese, Total	0.79	0.002	0.00029	2017000	mg/L
LDU - East	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
LDU - East	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
LDU - East	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	5/28/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
LDU - East	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
LDU - East	11/19/2019	Aluminum, Total	0.42	0.02	0.002488	19914000	mg/L
LDU - East	11/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - East	11/19/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
LDU - East	11/19/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/19/2019	Beryllium, Total	0.00034	0.002	0.000284	4000	mg/L
LDU - East	11/19/2019	Boron, Total	0.038	0.04	0.004531	3949	mg/L
LDU - East	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	11/19/2019	Chromium, Total	0.48	0.006	0.001533	50000	mg/L
LDU - East	11/19/2019	Cobalt, Total	0.0035	0.006	0.003091	5980	mg/L
LDU - East	11/19/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
LDU - East	11/19/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
LDU - East	11/19/2019	Lead, Total	0.00051	0.0005	0.000055	15000	mg/L
LDU - East	11/19/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
LDU - East	11/19/2019	Mercury, Total	0.00015	0.0002	0.000121	2000	mg/L
LDU - East	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - East	11/19/2019	Nickel, Total	0.65	0.01	0.004009	372000	mg/L
LDU - East	11/19/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	11/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	11/19/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	11/19/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
LDU - East	11/19/2019	Zinc, Total	0.071	0.01	0.005772	5960000	mg/L
LDU - East	11/19/2019	Aluminum, Dissolved	0.16	0.02	0.002488	19913930	mg/L
LDU - East	11/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	11/19/2019	Arsenic, Dissolved	0.00063	0.001	0.000101	10000	mg/L
LDU - East	11/19/2019	Barium, Dissolved	0.054	0.002	0.000648	2000000	mg/L
LDU - East	11/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	11/19/2019	Boron, Dissolved	0.041	0.04	0.004531	3949110	mg/L
LDU - East	11/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	11/19/2019	Chromium, Dissolved	0.073	0.006	0.001533	100000	mg/L
LDU - East	11/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	11/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	11/19/2019	Iron, Dissolved	0.28	0.02	0.008747	13821880	mg/L
LDU - East	11/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	11/19/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
LDU - East	11/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	11/19/2019	Nickel, Dissolved	0.3	0.01	0.004009	372000	mg/L
LDU - East	11/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	11/19/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
LDU - East	11/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	11/19/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	11/19/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
LDU - East	3/10/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
LDU - East	3/10/2020	Arsenic, Dissolved	0.0015	0.001	0.0001	10000	mg/L
LDU - East	3/10/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	3/10/2020	Selenium, Dissolved	0.0043	0.001	0.00017	50000	mg/L
LDU - East	3/10/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	3/10/2020	Uranium, Dissolved	0.00012	0.0005	0.000075	NA	mg/L
LDU - East	3/10/2020	Aluminum, Dissolved	0.57	0.02	0.0025	19913930	mg/L
LDU - East	3/10/2020	Barium, Dissolved	0.053	0.002	0.00065	2000000	mg/L
LDU - East	3/10/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
LDU - East	3/10/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
LDU - East	3/10/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
LDU - East	3/10/2020	Chromium, Dissolved	0.17	0.006	0.0015	100000	mg/L
LDU - East	3/10/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
LDU - East	3/10/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
LDU - East	3/10/2020	Iron, Dissolved	0.099	0.02	0.0087	13821880	mg/L
LDU - East	3/10/2020	Manganese, Dissolved	0.48	0.002	0.00029	2017400	mg/L
LDU - East	3/10/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
LDU - East	3/10/2020	Nickel, Dissolved	0.34	0.01	0.004	372000	mg/L
LDU - East	3/10/2020	Silver, Dissolved	0.0019	0.005	0.00094	81200	mg/L
LDU - East	3/10/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
LDU - East	3/10/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
LDU - East	3/10/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
LDU - East	3/10/2020	Lead, Total	0.000086	0.0005	0.000055	15000	mg/L
LDU - East	3/10/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - East	3/10/2020	Uranium, Total	0.0001	0.0005	0.000085	30000	mg/L
LDU - East	3/10/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
LDU - East	3/10/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
LDU - East	3/10/2020	Aluminum, Total	0.65	0.02	0.0025	19914000	mg/L
LDU - East	3/10/2020	Barium, Total	0.059	0.002	0.00065	2000000	mg/L
LDU - East	3/10/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
LDU - East	3/10/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
LDU - East	3/10/2020	Chromium, Total	0.21	0.006	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/10/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
LDU - East	3/10/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/10/2020	Iron, Total	0.53	0.02	0.0087	13822000	mg/L
LDU - East	3/10/2020	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
LDU - East	3/10/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
LDU - East	3/10/2020	Nickel, Total	0.39	0.01	0.004	372000	mg/L
LDU - East	3/10/2020	Silver, Total	0.0022	0.005	0.0014	50000	mg/L
LDU - East	3/10/2020	Zinc, Total	0.017	0.01	0.0058	5960000	mg/L
LDU - East	3/10/2020	Boron, Total	0.22	0.04	0.0045	3949	mg/L
LDU - East	4/9/2019	Aluminum, Dissolved	0.056	0.02	0.002488	19913930	mg/L
LDU - East	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - East	4/9/2019	Arsenic, Dissolved	ND	0.001	0.000101	10000	mg/L
LDU - East	4/9/2019	Barium, Dissolved	0.11	0.002	0.000648	2000000	mg/L
LDU - East	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
LDU - East	4/9/2019	Boron, Dissolved	0.0091	0.04	0.004531	3949110	mg/L
LDU - East	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - East	4/9/2019	Chromium, Dissolved	0.028	0.006	0.001533	100000	mg/L
LDU - East	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - East	4/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - East	4/9/2019	Iron, Dissolved	0.039	0.02	0.008747	13821880	mg/L
LDU - East	4/9/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - East	4/9/2019	Manganese, Dissolved	0.28	0.002	0.00029	2017400	mg/L
LDU - East	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - East	4/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
LDU - East	4/9/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
LDU - East	4/9/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
LDU - East	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - East	4/9/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
LDU - East	4/9/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
LDU - East	4/9/2019	Aluminum, Total	0.25	0.02	0.001051	19914000	mg/L
LDU - East	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
LDU - East	4/9/2019	Arsenic, Total	0.00032	0.001	0.000312	10000	mg/L
LDU - East	4/9/2019	Barium, Total	0.11	0.002	0.000488	2000000	mg/L
LDU - East	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
LDU - East	4/9/2019	Boron, Total	0.0077	0.04	0.001821	3949	mg/L
LDU - East	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - East	4/9/2019	Chromium, Total	0.093	0.006	0.0012	50000	mg/L
LDU - East	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
LDU - East	4/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - East	4/9/2019	Iron, Total	0.12	0.02	0.006053	13822000	mg/L
LDU - East	4/9/2019	Lead, Total	0.00022	0.0005	0.000026	15000	mg/L
LDU - East	4/9/2019	Manganese, Total	0.25	0.002	0.00006	2017000	mg/L
LDU - East	4/9/2019	Molybdenum, Total	ND	0.008	0.002075	98700	mg/L
LDU - East	4/9/2019	Nickel, Total	0.01	0.01	0.001491	372000	mg/L
LDU - East	4/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - East	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
LDU - East	4/9/2019	Thallium, Total	0.000091	0.0005	0.000052	2000	mg/L
LDU - East	4/9/2019	Uranium, Total	0.00021	0.0005	0.000085	30000	mg/L
LDU - East	4/9/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
LDU - East	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
LDU - East	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
LDU - East	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
LDU - East	12/17/2020	Aluminum, Total	8.75	0.2	0.051	19914000	mg/L
LDU - East	12/17/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
LDU - East	12/17/2020	Barium, Total	0.0174	0.01	0.003	2000000	mg/L
LDU - East	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
LDU - East	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
LDU - East	12/17/2020	Cobalt, Total	0.0324	0.01	0.003	5980	mg/L
LDU - East	12/17/2020	Chromium, Total	2.36	0.01	0.005	50000	mg/L
LDU - East	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
LDU - East	12/17/2020	Iron, Total	26.5	0.2	0.075	13822000	mg/L
LDU - East	12/17/2020	Manganese, Total	3.18	0.01	0.003	2017000	mg/L
LDU - East	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
LDU - East	12/17/2020	Nickel, Total	4.13	0.006	0.003	372000	mg/L
LDU - East	12/17/2020	Zinc, Total	0.0648	0.02	0.008	5960000	mg/L
LDU - East	12/17/2020	Aluminum, Dissolved	8.44	0.2	0.051	19913930	mg/L
LDU - East	12/17/2020	Barium, Dissolved	0.0148	0.01	0.003	2000000	mg/L
LDU - East	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
LDU - East	12/17/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
LDU - East	12/17/2020	Chromium, Dissolved	2.3	0.01	0.005	100000	mg/L
LDU - East	12/17/2020	Cobalt, Dissolved	0.0328	0.01	0.003	5980	mg/L
LDU - East	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
LDU - East	12/17/2020	Iron, Dissolved	24.7	0.2	0.075	13821880	mg/L
LDU - East	12/17/2020	Manganese, Dissolved	3.15	0.01	0.003	2017400	mg/L
LDU - East	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
LDU - East	12/17/2020	Nickel, Dissolved	4.16	0.006	0.003	372000	mg/L
LDU - East	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
LDU - East	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
LDU - East	12/17/2020	Arsenic, Total Recoverable	2.98	1	0.286	10	ug/L
LDU - East	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
LDU - East	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
LDU - East	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
LDU - East	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
LDU - East	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
LDU - East	12/17/2020	Arsenic, Dissolved	2.85	1	0.286	10	ug/L
LDU - East	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
LDU - East	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
LDU - East	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
LDU - East	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
LDU - East	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
LDU - East	3/20/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	3/20/2012	Arsenic, Total	0.0032	0.0025	0.0014	10000	mg/L
LDU - East	3/20/2012	Barium, Total	0.44	0.002	0.00039	2000000	mg/L
LDU - East	3/20/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	3/20/2012	Chromium, Total	0.11	0.006	0.001	50000	mg/L
LDU - East	3/20/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/20/2012	Iron, Total	2.3	0.1	0.066	13822000	mg/L
LDU - East	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - East	3/20/2012	Manganese, Total	0.58	0.002	0.00026	2017000	mg/L
LDU - East	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	3/20/2012	Selenium, Total	0.0026	0.0025	0.0025	50000	mg/L
LDU - East	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - East	3/20/2012	Zinc, Total	0.064	0.01	0.0011	5960000	mg/L
LDU - East	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	6/12/2012	Arsenic, Total	0.0099	0.005	0.0028	10000	mg/L
LDU - East	6/12/2012	Barium, Total	0.6	0.002	0.00039	2000000	mg/L
LDU - East	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	6/12/2012	Chromium, Total	0.31	0.006	0.001	50000	mg/L
LDU - East	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	6/12/2012	Iron, Total	0.17	0.02	0.013	13822000	mg/L
LDU - East	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
LDU - East	6/12/2012	Manganese, Total	1.2	0.01	0.0013	2017000	mg/L
LDU - East	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	6/12/2012	Selenium, Total	0.0065	0.005	0.005	50000	mg/L
LDU - East	6/12/2012	Uranium, Total	ND	0.005	0.00006	30000	mg/L
LDU - East	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	8/21/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
LDU - East	8/21/2012	Arsenic, Total	0.0062	0.001	0.00011	10000	mg/L
LDU - East	8/21/2012	Barium, Total	0.62	0.002	0.00031	2000000	mg/L
LDU - East	8/21/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
LDU - East	8/21/2012	Chromium, Total	0.46	0.006	0.00056	50000	mg/L
LDU - East	8/21/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
LDU - East	8/21/2012	Iron, Total	0.044	0.02	0.0019	13822000	mg/L
LDU - East	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - East	8/21/2012	Manganese, Total	1.2	0.01	0.0031	2017000	mg/L
LDU - East	8/21/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
LDU - East	8/21/2012	Selenium, Total	ND	0.05	0.0074	50000	mg/L
LDU - East	8/21/2012	Uranium, Total	ND	0.001	0.00006	30000	mg/L
LDU - East	8/21/2012	Zinc, Total	ND	0.01	0.00062	5960000	mg/L
LDU - East	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	11/28/2012	Arsenic, Total	0.0095	0.0025	0.0014	10000	mg/L
LDU - East	11/28/2012	Barium, Total	0.53	0.002	0.00039	2000000	mg/L
LDU - East	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	11/28/2012	Chromium, Total	0.71	0.006	0.001	50000	mg/L
LDU - East	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	11/28/2012	Iron, Total	0.23	0.02	0.013	13822000	mg/L
LDU - East	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	11/28/2012	Manganese, Total	1.1	0.01	0.0013	2017000	mg/L
LDU - East	11/28/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	11/28/2012	Selenium, Total	0.0036	0.0025	0.0025	50000	mg/L
LDU - East	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - East	11/28/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	3/18/2013	Arsenic, Total	0.0059	0.0025	0.00042	10000	mg/L
LDU - East	3/18/2013	Barium, Total	0.48	0.002	0.00039	2000000	mg/L
LDU - East	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	3/18/2013	Chromium, Total	0.76	0.006	0.001	50000	mg/L
LDU - East	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	3/18/2013	Iron, Total	0.09	0.02	0.013	13822000	mg/L
LDU - East	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	3/18/2013	Manganese, Total	0.62	0.002	0.00026	2017000	mg/L
LDU - East	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - East	3/18/2013	Selenium, Total	0.0027	0.0025	0.00066	50000	mg/L
LDU - East	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
LDU - East	3/18/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	6/12/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - East	6/12/2013	Arsenic, Total	0.007	0.005	0.0014	10000	mg/L
LDU - East	6/12/2013	Barium, Total	0.56	0.002	0.00039	2000000	mg/L
LDU - East	6/12/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - East	6/12/2013	Chromium, Total	0.72	0.006	0.001	50000	mg/L
LDU - East	6/12/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	6/12/2013	Iron, Total	0.091	0.02	0.013	13822000	mg/L
LDU - East	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	6/12/2013	Manganese, Total	0.56	0.002	0.00026	2017000	mg/L
LDU - East	6/12/2013	Lead, Total	ND	0.005	0.00009	15000	mg/L
LDU - East	6/12/2013	Selenium, Total	0.0081	0.005	0.0024	50000	mg/L
LDU - East	6/12/2013	Uranium, Total	ND	0.005	0.0025	30000	mg/L
LDU - East	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - East	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
LDU - East	11/12/2013	Arsenic, Total	0.0097	0.005	0.00049	10000	mg/L
LDU - East	11/12/2013	Barium, Total	0.34	0.002	0.00095	2000000	mg/L
LDU - East	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - East	11/12/2013	Chromium, Total	0.44	0.006	0.00084	50000	mg/L
LDU - East	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - East	11/12/2013	Iron, Total	0.08	0.02	0.0089	13822000	mg/L
LDU - East	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - East	11/12/2013	Manganese, Total	0.25	0.002	0.00016	2017000	mg/L
LDU - East	11/12/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - East	11/12/2013	Selenium, Total	0.0078	0.005	0.0015	50000	mg/L
LDU - East	11/12/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - East	11/12/2013	Zinc, Total	0.019	0.01	0.00076	5960000	mg/L
LDU - East	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - East	3/10/2014	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
LDU - East	3/10/2014	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
LDU - East	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	3/10/2014	Chromium, Total	0.71	0.006	0.0021	50000	mg/L
LDU - East	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - East	3/10/2014	Iron, Total	2.9	0.1	0.031	13822000	mg/L
LDU - East	3/10/2014	Mercury, Total	0.00022	0.0002	0.000087	2000	mg/L
LDU - East	3/10/2014	Manganese, Total	3	0.01	0.0027	2017000	mg/L
LDU - East	3/10/2014	Lead, Total	ND	0.01	0.000075	15000	mg/L
LDU - East	3/10/2014	Selenium, Total	0.051	0.01	0.0029	50000	mg/L
LDU - East	3/10/2014	Uranium, Total	ND	0.01	0.000073	30000	mg/L
LDU - East	3/10/2014	Zinc, Total	0.11	0.01	0.0014	5960000	mg/L
LDU - East	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - East	6/3/2014	Arsenic, Total	0.021	0.005	0.00057	10000	mg/L
LDU - East	6/3/2014	Barium, Total	0.32	0.002	0.0011	2000000	mg/L
LDU - East	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	6/3/2014	Chromium, Total	0.52	0.006	0.0021	50000	mg/L
LDU - East	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - East	6/3/2014	Iron, Total	0.025	0.02	0.0062	13822000	mg/L
LDU - East	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - East	6/3/2014	Manganese, Total	1.5	0.01	0.0027	2017000	mg/L
LDU - East	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
LDU - East	6/3/2014	Selenium, Total	0.056	0.005	0.00074	50000	mg/L
LDU - East	6/3/2014	Uranium, Total	ND	0.005	0.00025	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	6/3/2014	Zinc, Total	0.021	0.01	0.0014	5960000	mg/L
LDU - East	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
LDU - East	11/11/2014	Arsenic, Total	0.0015	0.001	0.00036	10000	mg/L
LDU - East	11/11/2014	Barium, Total	0.12	0.002	0.0005	2000000	mg/L
LDU - East	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - East	11/11/2014	Chromium, Total	0.22	0.006	0.0028	50000	mg/L
LDU - East	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
LDU - East	11/11/2014	Iron, Total	19	0.4	0.14	13822000	mg/L
LDU - East	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - East	11/11/2014	Manganese, Total	5.4	0.04	0.0098	2017000	mg/L
LDU - East	11/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
LDU - East	11/11/2014	Selenium, Total	ND	0.001	0.00051	50000	mg/L
LDU - East	11/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
LDU - East	11/11/2014	Zinc, Total	0.18	0.01	0.0035	5960000	mg/L
LDU - East	3/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	3/10/2015	Arsenic, Total	0.0037	0.002	0.00023	10000	mg/L
LDU - East	3/10/2015	Barium, Total	0.14	0.002	0.00095	2000000	mg/L
LDU - East	3/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	3/10/2015	Chromium, Total	0.8	0.006	0.0018	50000	mg/L
LDU - East	3/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	3/10/2015	Iron, Total	0.5	0.02	0.0073	13822000	mg/L
LDU - East	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	3/10/2015	Manganese, Total	6.4	0.02	0.0027	2017000	mg/L
LDU - East	3/10/2015	Lead, Total	ND	0.002	0.00012	15000	mg/L
LDU - East	3/10/2015	Selenium, Total	0.003	0.002	0.0003	50000	mg/L
LDU - East	3/10/2015	Uranium, Total	ND	0.002	0.0001	30000	mg/L
LDU - East	3/10/2015	Zinc, Total	0.028	0.01	0.0028	5960000	mg/L
LDU - East	6/1/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	6/1/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
LDU - East	6/1/2015	Barium, Total	0.28	0.002	0.00095	2000000	mg/L
LDU - East	6/1/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	6/1/2015	Chromium, Total	0.86	0.006	0.0018	50000	mg/L
LDU - East	6/1/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	6/1/2015	Iron, Total	0.086	0.02	0.0073	13822000	mg/L
LDU - East	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	6/1/2015	Manganese, Total	2.6	0.01	0.0013	2017000	mg/L
LDU - East	6/1/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
LDU - East	6/1/2015	Selenium, Total	0.044	0.01	0.0019	50000	mg/L
LDU - East	6/1/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
LDU - East	6/1/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - East	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	8/11/2015	Arsenic, Total	ND	0.05	0.015	10000	mg/L
LDU - East	8/11/2015	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
LDU - East	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	8/11/2015	Chromium, Total	0.95	0.006	0.0022	50000	mg/L
LDU - East	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - East	8/11/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
LDU - East	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	8/11/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
LDU - East	8/11/2015	Lead, Total	ND	0.025	0.0024	15000	mg/L
LDU - East	8/11/2015	Selenium, Total	ND	0.05	0.0062	50000	mg/L
LDU - East	8/11/2015	Uranium, Total	ND	0.025	0.00025	30000	mg/L
LDU - East	8/11/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
LDU - East	10/29/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	10/29/2015	Arsenic, Total	0.0052	0.001	0.000065	10000	mg/L
LDU - East	10/29/2015	Barium, Total	0.21	0.002	0.00095	2000000	mg/L
LDU - East	10/29/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - East	10/29/2015	Chromium, Total	0.74	0.006	0.0018	50000	mg/L
LDU - East	10/29/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - East	10/29/2015	Iron, Total	0.051	0.02	0.0073	13822000	mg/L
LDU - East	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - East	10/29/2015	Manganese, Total	3.3	0.01	0.0013	2017000	mg/L
LDU - East	10/29/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
LDU - East	10/29/2015	Selenium, Total	0.0029	0.001	0.00019	50000	mg/L
LDU - East	10/29/2015	Uranium, Total	ND	0.005	0.000048	30000	mg/L
LDU - East	10/29/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - East	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	3/1/2016	Arsenic, Total	0.0046	0.001	0.00029	10000	mg/L
LDU - East	3/1/2016	Barium, Total	0.13	0.002	0.0011	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	3/1/2016	Chromium, Total	0.47	0.006	0.0022	50000	mg/L
LDU - East	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - East	3/1/2016	Iron, Total	1.5	0.1	0.036	13822000	mg/L
LDU - East	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
LDU - East	3/1/2016	Manganese, Total	8	0.02	0.015	2017000	mg/L
LDU - East	3/1/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
LDU - East	3/1/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
LDU - East	3/1/2016	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
LDU - East	3/1/2016	Zinc, Total	0.056	0.01	0.0039	5960000	mg/L
LDU - East	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - East	6/7/2016	Arsenic, Total	0.0053	0.001	0.00029	10000	mg/L
LDU - East	6/7/2016	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
LDU - East	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - East	6/7/2016	Chromium, Total	0.57	0.006	0.0022	50000	mg/L
LDU - East	6/7/2016	Copper, Total	0.015	0.006	0.0051	790000	mg/L
LDU - East	6/7/2016	Iron, Total	3.8	0.1	0.036	13822000	mg/L
LDU - East	6/7/2016	Mercury, Total	0.00016	0.0002	0.000053	2000	mg/L
LDU - East	6/7/2016	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
LDU - East	6/7/2016	Lead, Total	0.0011	0.0005	0.000047	15000	mg/L
LDU - East	6/7/2016	Selenium, Total	0.0017	0.005	0.00062	50000	mg/L
LDU - East	6/7/2016	Uranium, Total	0.00062	0.0005	0.0000049	30000	mg/L
LDU - East	6/7/2016	Zinc, Total	0.088	0.01	0.0039	5960000	mg/L
LDU - East	11/17/2016	Silver, Total	0.0064	0.005	0.0015	50000	mg/L
LDU - East	11/17/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
LDU - East	11/17/2016	Barium, Total	0.097	0.002	0.00079	2000000	mg/L
LDU - East	11/17/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - East	11/17/2016	Chromium, Total	0.53	0.006	0.0027	50000	mg/L
LDU - East	11/17/2016	Copper, Total	0.0097	0.006	0.003	790000	mg/L
LDU - East	11/17/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
LDU - East	11/17/2016	Arsenic, Dissolved	0.0025	0.001	0.00014	10000	mg/L
LDU - East	11/17/2016	Barium, Dissolved	0.085	0.002	0.0013	2000000	mg/L
LDU - East	11/17/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
LDU - East	11/17/2016	Chromium, Dissolved	0.44	0.006	0.0018	100000	mg/L
LDU - East	11/17/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
LDU - East	11/17/2016	Iron, Dissolved	47	1	1	13821880	mg/L
LDU - East	11/17/2016	Manganese, Dissolved	16	0.1	0.016	2017400	mg/L
LDU - East	11/17/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	11/17/2016	Selenium, Dissolved	0.0022	0.005	0.0011	50000	mg/L
LDU - East	11/17/2016	Uranium, Dissolved	0.0001	0.0005	0.000051	NA	mg/L
LDU - East	11/17/2016	Zinc, Dissolved	0.018	0.01	0.0028	5960450	mg/L
LDU - East	11/17/2016	Iron, Total	55	2	2	13822000	mg/L
LDU - East	11/17/2016	Mercury, Total	0.00028	0.0002	0.000053	2000	mg/L
LDU - East	11/17/2016	Manganese, Total	16	0.1	0.014	2017000	mg/L
LDU - East	11/17/2016	Lead, Total	0.0027	0.0025	0.00041	15000	mg/L
LDU - East	11/17/2016	Selenium, Total	0.0023	0.005	0.00094	50000	mg/L
LDU - East	11/17/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
LDU - East	11/17/2016	Zinc, Total	0.74	0.01	0.0027	5960000	mg/L
LDU - East	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - East	2/21/2017	Arsenic, Total	0.0049	0.005	0.0011	10000	mg/L
LDU - East	2/21/2017	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
LDU - East	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - East	2/21/2017	Chromium, Total	1.2	0.03	0.013	50000	mg/L
LDU - East	2/21/2017	Copper, Total	0.039	0.006	0.003	790000	mg/L
LDU - East	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - East	2/21/2017	Arsenic, Dissolved	0.0039	0.001	0.00014	10000	mg/L
LDU - East	2/21/2017	Barium, Dissolved	0.13	0.002	0.00085	2000000	mg/L
LDU - East	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	2/21/2017	Chromium, Dissolved	1.2	0.03	0.0051	100000	mg/L
LDU - East	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	2/21/2017	Iron, Dissolved	91	2	2	13821880	mg/L
LDU - East	2/21/2017	Manganese, Dissolved	15	0.04	0.0077	2017400	mg/L
LDU - East	2/21/2017	Lead, Dissolved	0.00069	0.0005	0.00017	NA	mg/L
LDU - East	2/21/2017	Selenium, Dissolved	0.0032	0.001	0.00021	50000	mg/L
LDU - East	2/21/2017	Zinc, Dissolved	0.057	0.01	0.0011	5960450	mg/L
LDU - East	2/21/2017	Iron, Total	84	2	2	13822000	mg/L
LDU - East	2/21/2017	Mercury, Total	0.00022	0.0002	0.000053	2000	mg/L
LDU - East	2/21/2017	Manganese, Total	14	0.1	0.014	2017000	mg/L
LDU - East	2/21/2017	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	2/21/2017	Selenium, Total	0.0025	0.005	0.00094	50000	mg/L
LDU - East	2/21/2017	Zinc, Total	0.063	0.01	0.0027	5960000	mg/L
LDU - East	6/2/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
LDU - East	6/2/2017	Arsenic, Total	0.00036	0.001	0.0003	10000	mg/L
LDU - East	6/2/2017	Barium, Total	0.23	0.002	0.00093	2000000	mg/L
LDU - East	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	6/2/2017	Chromium, Total	0.05	0.006	0.0011	50000	mg/L
LDU - East	6/2/2017	Copper, Total	0.0024	0.006	0.0017	790000	mg/L
LDU - East	6/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - East	6/2/2017	Arsenic, Dissolved	0.00037	0.001	0.00018	10000	mg/L
LDU - East	6/2/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
LDU - East	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	6/2/2017	Chromium, Dissolved	0.026	0.006	0.001	100000	mg/L
LDU - East	6/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	6/2/2017	Iron, Dissolved	0.23	0.02	0.016	13821880	mg/L
LDU - East	6/2/2017	Manganese, Dissolved	0.13	0.002	0.00038	2017400	mg/L
LDU - East	6/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	6/2/2017	Selenium, Dissolved	ND	0.001	0.00039	50000	mg/L
LDU - East	6/2/2017	Uranium, Dissolved	ND	0.0005	0.00005	NA	mg/L
LDU - East	6/2/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
LDU - East	6/2/2017	Iron, Total	0.32	0.02	0.01	13822000	mg/L
LDU - East	6/2/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	6/2/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
LDU - East	6/2/2017	Lead, Total	0.00027	0.0005	0.000095	15000	mg/L
LDU - East	6/2/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
LDU - East	6/2/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	6/2/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
LDU - East	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	9/5/2017	Arsenic, Total	0.00036	0.001	0.0003	10000	mg/L
LDU - East	9/5/2017	Barium, Total	0.32	0.002	0.00093	2000000	mg/L
LDU - East	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	9/5/2017	Chromium, Total	0.054	0.006	0.0018	50000	mg/L
LDU - East	9/5/2017	Copper, Total	0.0018	0.006	0.0017	790000	mg/L
LDU - East	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	9/5/2017	Arsenic, Dissolved	0.00034	0.001	0.00018	10000	mg/L
LDU - East	9/5/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
LDU - East	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	9/5/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
LDU - East	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	9/5/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
LDU - East	9/5/2017	Manganese, Dissolved	0.055	0.002	0.00039	2017400	mg/L
LDU - East	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	9/5/2017	Selenium, Dissolved	ND	0.001	0.00039	50000	mg/L
LDU - East	9/5/2017	Uranium, Dissolved	ND	0.0005	0.00005	NA	mg/L
LDU - East	9/5/2017	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
LDU - East	9/5/2017	Iron, Total	0.23	0.02	0.01	13822000	mg/L
LDU - East	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	9/5/2017	Manganese, Total	0.058	0.002	0.0011	2017000	mg/L
LDU - East	9/5/2017	Lead, Total	0.00021	0.0005	0.000095	15000	mg/L
LDU - East	9/5/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - East	9/5/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	9/5/2017	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
LDU - East	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - East	12/4/2017	Arsenic, Total	0.00099	0.001	0.00041	10000	mg/L
LDU - East	12/4/2017	Barium, Total	0.43	0.002	0.001	2000000	mg/L
LDU - East	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	12/4/2017	Chromium, Total	0.069	0.006	0.0018	50000	mg/L
LDU - East	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	12/4/2017	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	12/4/2017	Barium, Dissolved	0.41	0.002	0.00099	2000000	mg/L
LDU - East	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	12/4/2017	Chromium, Dissolved	0.019	0.006	0.0013	100000	mg/L
LDU - East	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	12/4/2017	Iron, Dissolved	0.039	0.02	0.016	13821880	mg/L
LDU - East	12/4/2017	Manganese, Dissolved	0.25	0.002	0.00039	2017400	mg/L
LDU - East	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	12/4/2017	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
LDU - East	12/4/2017	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	12/4/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
LDU - East	12/4/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
LDU - East	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	12/4/2017	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
LDU - East	12/4/2017	Lead, Total	0.00048	0.0005	0.00023	15000	mg/L
LDU - East	12/4/2017	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	12/4/2017	Uranium, Total	ND	0.0005	0.00015	30000	mg/L
LDU - East	12/4/2017	Zinc, Total	0.041	0.01	0.0033	5960000	mg/L
LDU - East	2/12/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
LDU - East	2/12/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
LDU - East	2/12/2018	Barium, Total	0.22	0.002	0.001	2000000	mg/L
LDU - East	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	2/12/2018	Chromium, Total	0.087	0.006	0.0018	50000	mg/L
LDU - East	2/12/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
LDU - East	2/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	2/12/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	2/12/2018	Barium, Dissolved	0.21	0.002	0.00099	2000000	mg/L
LDU - East	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	2/12/2018	Chromium, Dissolved	0.048	0.006	0.0013	100000	mg/L
LDU - East	2/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	2/12/2018	Iron, Dissolved	0.041	0.02	0.016	13821880	mg/L
LDU - East	2/12/2018	Manganese, Dissolved	0.53	0.002	0.00039	2017400	mg/L
LDU - East	2/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	2/12/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
LDU - East	2/12/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
LDU - East	2/12/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
LDU - East	2/12/2018	Iron, Total	0.97	0.02	0.01	13822000	mg/L
LDU - East	2/12/2018	Manganese, Total	0.54	0.002	0.0011	2017000	mg/L
LDU - East	2/12/2018	Lead, Total	0.00035	0.0005	0.00023	15000	mg/L
LDU - East	2/12/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	2/12/2018	Uranium, Total	ND	0.0005	0.000068	30000	mg/L
LDU - East	2/12/2018	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
LDU - East	4/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
LDU - East	4/30/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
LDU - East	4/30/2018	Barium, Total	0.38	0.002	0.001	2000000	mg/L
LDU - East	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - East	4/30/2018	Chromium, Total	0.05	0.006	0.0018	50000	mg/L
LDU - East	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - East	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
LDU - East	4/30/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
LDU - East	4/30/2018	Barium, Dissolved	0.38	0.002	0.00099	2000000	mg/L
LDU - East	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - East	4/30/2018	Chromium, Dissolved	0.02	0.006	0.0013	100000	mg/L
LDU - East	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - East	4/30/2018	Iron, Dissolved	0.08	0.02	0.016	13821880	mg/L
LDU - East	4/30/2018	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
LDU - East	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - East	4/30/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
LDU - East	4/30/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
LDU - East	4/30/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
LDU - East	4/30/2018	Iron, Total	0.2	0.02	0.01	13822000	mg/L
LDU - East	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - East	4/30/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
LDU - East	4/30/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
LDU - East	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
LDU - East	4/30/2018	Uranium, Total	ND	0.0005	0.000068	30000	mg/L
LDU - East	4/30/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
LDU - West	3/20/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	3/20/2012	Arsenic, Total	0.0028	0.0025	0.0014	10000	mg/L
LDU - West	3/20/2012	Barium, Total	0.21	0.002	0.00039	2000000	mg/L
LDU - West	3/20/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	3/20/2012	Chromium, Total	0.011	0.006	0.001	50000	mg/L
LDU - West	3/20/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/20/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
LDU - West	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	3/20/2012	Manganese, Total	0.22	0.002	0.00026	2017000	mg/L
LDU - West	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	3/20/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
LDU - West	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	3/20/2012	Zinc, Total	0.014	0.01	0.0011	5960000	mg/L
LDU - West	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	6/12/2012	Arsenic, Total	0.0038	0.0025	0.0014	10000	mg/L
LDU - West	6/12/2012	Barium, Total	0.36	0.002	0.00039	2000000	mg/L
LDU - West	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	6/12/2012	Chromium, Total	0.02	0.006	0.001	50000	mg/L
LDU - West	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	6/12/2012	Iron, Total	0.16	0.02	0.013	13822000	mg/L
LDU - West	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
LDU - West	6/12/2012	Manganese, Total	0.2	0.002	0.00026	2017000	mg/L
LDU - West	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	6/12/2012	Selenium, Total	0.0049	0.0025	0.0025	50000	mg/L
LDU - West	6/12/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - West	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - West	8/21/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
LDU - West	8/21/2012	Arsenic, Total	0.002	0.001	0.00011	10000	mg/L
LDU - West	8/21/2012	Barium, Total	0.38	0.002	0.00031	2000000	mg/L
LDU - West	8/21/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
LDU - West	8/21/2012	Chromium, Total	0.032	0.006	0.00056	50000	mg/L
LDU - West	8/21/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
LDU - West	8/21/2012	Iron, Total	0.15	0.02	0.0019	13822000	mg/L
LDU - West	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	8/21/2012	Manganese, Total	0.21	0.002	0.00062	2017000	mg/L
LDU - West	8/21/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
LDU - West	8/21/2012	Selenium, Total	ND	0.05	0.0074	50000	mg/L
LDU - West	8/21/2012	Uranium, Total	ND	0.001	0.00006	30000	mg/L
LDU - West	8/21/2012	Zinc, Total	0.014	0.01	0.00062	5960000	mg/L
LDU - West	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	11/28/2012	Arsenic, Total	0.0031	0.0025	0.0014	10000	mg/L
LDU - West	11/28/2012	Barium, Total	0.17	0.002	0.00039	2000000	mg/L
LDU - West	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	11/28/2012	Chromium, Total	0.079	0.006	0.001	50000	mg/L
LDU - West	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	11/28/2012	Iron, Total	0.72	0.02	0.013	13822000	mg/L
LDU - West	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
LDU - West	11/28/2012	Manganese, Total	0.57	0.002	0.00026	2017000	mg/L
LDU - West	11/28/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	11/28/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
LDU - West	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
LDU - West	11/28/2012	Zinc, Total	0.016	0.01	0.0011	5960000	mg/L
LDU - West	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	3/18/2013	Arsenic, Total	0.0036	0.0025	0.00042	10000	mg/L
LDU - West	3/18/2013	Barium, Total	0.15	0.002	0.00039	2000000	mg/L
LDU - West	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	3/18/2013	Chromium, Total	0.046	0.006	0.001	50000	mg/L
LDU - West	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/18/2013	Iron, Total	0.71	0.02	0.013	13822000	mg/L
LDU - West	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	3/18/2013	Manganese, Total	0.32	0.002	0.00026	2017000	mg/L
LDU - West	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
LDU - West	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
LDU - West	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
LDU - West	3/18/2013	Zinc, Total	0.026	0.01	0.0011	5960000	mg/L
LDU - West	6/12/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
LDU - West	6/12/2013	Arsenic, Total	0.0053	0.005	0.0014	10000	mg/L
LDU - West	6/12/2013	Barium, Total	0.22	0.002	0.00039	2000000	mg/L
LDU - West	6/12/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
LDU - West	6/12/2013	Chromium, Total	0.036	0.006	0.001	50000	mg/L
LDU - West	6/12/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	6/12/2013	Iron, Total	0.31	0.02	0.013	13822000	mg/L
LDU - West	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	6/12/2013	Manganese, Total	0.29	0.002	0.00026	2017000	mg/L
LDU - West	6/12/2013	Lead, Total	ND	0.005	0.00009	15000	mg/L
LDU - West	6/12/2013	Selenium, Total	0.0097	0.005	0.0024	50000	mg/L
LDU - West	6/12/2013	Uranium, Total	ND	0.005	0.0025	30000	mg/L
LDU - West	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
LDU - West	9/5/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
LDU - West	9/5/2013	Arsenic, Total	0.0086	0.005	0.00049	10000	mg/L
LDU - West	9/5/2013	Barium, Total	0.23	0.002	0.00095	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - West	9/5/2013	Chromium, Total	0.28	0.006	0.00084	50000	mg/L
LDU - West	9/5/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - West	9/5/2013	Iron, Total	29	1	0.45	13822000	mg/L
LDU - West	9/5/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	9/5/2013	Manganese, Total	2	0.01	0.00082	2017000	mg/L
LDU - West	9/5/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - West	9/5/2013	Selenium, Total	0.015	0.01	0.0029	50000	mg/L
LDU - West	9/5/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - West	9/5/2013	Zinc, Total	0.35	0.01	0.00076	5960000	mg/L
LDU - West	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
LDU - West	11/12/2013	Arsenic, Total	0.01	0.005	0.00049	10000	mg/L
LDU - West	11/12/2013	Barium, Total	0.17	0.002	0.00095	2000000	mg/L
LDU - West	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
LDU - West	11/12/2013	Chromium, Total	0.14	0.006	0.00084	50000	mg/L
LDU - West	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
LDU - West	11/12/2013	Iron, Total	0.093	0.02	0.0089	13822000	mg/L
LDU - West	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
LDU - West	11/12/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
LDU - West	11/12/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
LDU - West	11/12/2013	Selenium, Total	0.044	0.005	0.0015	50000	mg/L
LDU - West	11/12/2013	Uranium, Total	ND	0.005	0.000036	30000	mg/L
LDU - West	11/12/2013	Zinc, Total	0.023	0.01	0.00076	5960000	mg/L
LDU - West	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - West	3/10/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
LDU - West	3/10/2014	Barium, Total	0.061	0.002	0.0011	2000000	mg/L
LDU - West	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	3/10/2014	Chromium, Total	0.11	0.006	0.0021	50000	mg/L
LDU - West	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - West	3/10/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L
LDU - West	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	3/10/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
LDU - West	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
LDU - West	3/10/2014	Selenium, Total	0.0023	0.001	0.00029	50000	mg/L
LDU - West	3/10/2014	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
LDU - West	3/10/2014	Zinc, Total	0.088	0.01	0.0014	5960000	mg/L
LDU - West	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
LDU - West	6/3/2014	Arsenic, Total	ND	0.002	0.00023	10000	mg/L
LDU - West	6/3/2014	Barium, Total	0.082	0.002	0.0011	2000000	mg/L
LDU - West	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	6/3/2014	Chromium, Total	0.043	0.006	0.0021	50000	mg/L
LDU - West	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
LDU - West	6/3/2014	Iron, Total	0.92	0.02	0.0062	13822000	mg/L
LDU - West	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	6/3/2014	Manganese, Total	1.9	0.01	0.0027	2017000	mg/L
LDU - West	6/3/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
LDU - West	6/3/2014	Selenium, Total	0.0027	0.002	0.0003	50000	mg/L
LDU - West	6/3/2014	Uranium, Total	0.0011	0.001	0.00005	30000	mg/L
LDU - West	6/3/2014	Zinc, Total	0.022	0.01	0.0014	5960000	mg/L
LDU - West	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
LDU - West	9/11/2014	Arsenic, Total	0.0031	0.001	0.00036	10000	mg/L
LDU - West	9/11/2014	Barium, Total	0.52	0.002	0.0005	2000000	mg/L
LDU - West	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
LDU - West	9/11/2014	Chromium, Total	0.28	0.006	0.0028	50000	mg/L
LDU - West	9/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
LDU - West	9/11/2014	Iron, Total	5.1	0.2	0.072	13822000	mg/L
LDU - West	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
LDU - West	9/11/2014	Manganese, Total	0.73	0.002	0.00049	2017000	mg/L
LDU - West	9/11/2014	Lead, Total	0.0013	0.001	0.00026	15000	mg/L
LDU - West	9/11/2014	Selenium, Total	0.0034	0.001	0.00051	50000	mg/L
LDU - West	9/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
LDU - West	9/11/2014	Zinc, Total	0.57	0.01	0.0035	5960000	mg/L
LDU - West	3/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	3/10/2015	Arsenic, Total	0.0033	0.002	0.00023	10000	mg/L
LDU - West	3/10/2015	Barium, Total	0.27	0.002	0.00095	2000000	mg/L
LDU - West	3/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - West	3/10/2015	Chromium, Total	0.66	0.006	0.0018	50000	mg/L
LDU - West	3/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - West	3/10/2015	Iron, Total	0.42	0.02	0.0073	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	3/10/2015	Manganese, Total	1.3	0.01	0.0013	2017000	mg/L
LDU - West	3/10/2015	Lead, Total	ND	0.005	0.00029	15000	mg/L
LDU - West	3/10/2015	Selenium, Total	0.0052	0.002	0.0003	50000	mg/L
LDU - West	3/10/2015	Uranium, Total	ND	0.005	0.00025	30000	mg/L
LDU - West	3/10/2015	Zinc, Total	0.033	0.01	0.0028	5960000	mg/L
LDU - West	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	8/11/2015	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
LDU - West	8/11/2015	Barium, Total	0.6	0.002	0.0011	2000000	mg/L
LDU - West	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	8/11/2015	Chromium, Total	1.4	0.03	0.011	50000	mg/L
LDU - West	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	8/11/2015	Iron, Total	1.9	0.1	0.036	13822000	mg/L
LDU - West	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	8/11/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
LDU - West	8/11/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
LDU - West	8/11/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
LDU - West	8/11/2015	Uranium, Total	ND	0.01	0.000099	30000	mg/L
LDU - West	8/11/2015	Zinc, Total	0.081	0.01	0.0039	5960000	mg/L
LDU - West	10/29/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	10/29/2015	Arsenic, Total	0.0056	0.001	0.000065	10000	mg/L
LDU - West	10/29/2015	Barium, Total	0.6	0.002	0.00095	2000000	mg/L
LDU - West	10/29/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
LDU - West	10/29/2015	Chromium, Total	1.2	0.03	0.0088	50000	mg/L
LDU - West	10/29/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
LDU - West	10/29/2015	Iron, Total	0.086	0.02	0.0073	13822000	mg/L
LDU - West	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
LDU - West	10/29/2015	Manganese, Total	0.79	0.002	0.00027	2017000	mg/L
LDU - West	10/29/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
LDU - West	10/29/2015	Selenium, Total	0.0082	0.001	0.00019	50000	mg/L
LDU - West	10/29/2015	Uranium, Total	ND	0.01	0.000096	30000	mg/L
LDU - West	10/29/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
LDU - West	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	3/1/2016	Arsenic, Total	0.0051	0.001	0.00029	10000	mg/L
LDU - West	3/1/2016	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
LDU - West	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	3/1/2016	Chromium, Total	1.5	0.03	0.011	50000	mg/L
LDU - West	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	3/1/2016	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
LDU - West	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
LDU - West	3/1/2016	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
LDU - West	3/1/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
LDU - West	3/1/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
LDU - West	3/1/2016	Uranium, Total	0.00066	0.0005	0.0000049	30000	mg/L
LDU - West	3/1/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
LDU - West	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
LDU - West	6/7/2016	Arsenic, Total	0.0051	0.001	0.00029	10000	mg/L
LDU - West	6/7/2016	Barium, Total	0.41	0.002	0.0011	2000000	mg/L
LDU - West	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
LDU - West	6/7/2016	Chromium, Total	1.2	0.03	0.011	50000	mg/L
LDU - West	6/7/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
LDU - West	6/7/2016	Iron, Total	0.49	0.02	0.0072	13822000	mg/L
LDU - West	6/7/2016	Mercury, Total	0.000095	0.0002	0.000053	2000	mg/L
LDU - West	6/7/2016	Manganese, Total	0.5	0.002	0.0015	2017000	mg/L
LDU - West	6/7/2016	Lead, Total	0.00043	0.0005	0.000047	15000	mg/L
LDU - West	6/7/2016	Selenium, Total	0.003	0.01	0.0012	50000	mg/L
LDU - West	6/7/2016	Uranium, Total	0.00034	0.0005	0.0000049	30000	mg/L
LDU - West	6/7/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
LDU - West	11/17/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - West	11/17/2016	Arsenic, Total	0.004	0.001	0.00021	10000	mg/L
LDU - West	11/17/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
LDU - West	11/17/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - West	11/17/2016	Chromium, Total	0.77	0.006	0.0027	50000	mg/L
LDU - West	11/17/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
LDU - West	11/17/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
LDU - West	11/17/2016	Arsenic, Dissolved	0.004	0.001	0.00014	10000	mg/L
LDU - West	11/17/2016	Barium, Dissolved	0.24	0.002	0.0013	2000000	mg/L
LDU - West	11/17/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
LDU - West	11/17/2016	Chromium, Dissolved	0.67	0.03	0.0088	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	11/17/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
LDU - West	11/17/2016	Iron, Dissolved	0.17	0.02	0.02	13821880	mg/L
LDU - West	11/17/2016	Manganese, Dissolved	0.51	0.002	0.00032	2017400	mg/L
LDU - West	11/17/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	11/17/2016	Selenium, Dissolved	0.0045	0.001	0.00021	50000	mg/L
LDU - West	11/17/2016	Uranium, Dissolved	0.00066	0.0005	0.000051	NA	mg/L
LDU - West	11/17/2016	Zinc, Dissolved	0.0045	0.01	0.0028	5960450	mg/L
LDU - West	11/17/2016	Iron, Total	3.3	0.2	0.2	13822000	mg/L
LDU - West	11/17/2016	Mercury, Total	0.00026	0.0002	0.000053	2000	mg/L
LDU - West	11/17/2016	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
LDU - West	11/17/2016	Lead, Total	0.00083	0.0025	0.00041	15000	mg/L
LDU - West	11/17/2016	Selenium, Total	0.0029	0.005	0.00094	50000	mg/L
LDU - West	11/17/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
LDU - West	11/17/2016	Zinc, Total	0.079	0.01	0.0027	5960000	mg/L
LDU - West	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
LDU - West	2/21/2017	Arsenic, Total	0.0072	0.005	0.0011	10000	mg/L
LDU - West	2/21/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
LDU - West	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
LDU - West	2/21/2017	Chromium, Total	2.1	0.03	0.013	50000	mg/L
LDU - West	2/21/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
LDU - West	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
LDU - West	2/21/2017	Arsenic, Dissolved	0.0068	0.005	0.00069	10000	mg/L
LDU - West	2/21/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
LDU - West	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	2/21/2017	Chromium, Dissolved	2.2	0.03	0.0051	100000	mg/L
LDU - West	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	2/21/2017	Iron, Dissolved	0.59	0.02	0.02	13821880	mg/L
LDU - West	2/21/2017	Manganese, Dissolved	2.7	0.01	0.0019	2017400	mg/L
LDU - West	2/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
LDU - West	2/21/2017	Selenium, Dissolved	0.0054	0.005	0.0011	50000	mg/L
LDU - West	2/21/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
LDU - West	2/21/2017	Iron, Total	1.4	0.1	0.1	13822000	mg/L
LDU - West	2/21/2017	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
LDU - West	2/21/2017	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
LDU - West	2/21/2017	Lead, Total	ND	0.0025	0.00041	15000	mg/L
LDU - West	2/21/2017	Selenium, Total	0.005	0.005	0.00094	50000	mg/L
LDU - West	2/21/2017	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
LDU - West	6/2/2017	Silver, Total	0.0016	0.005	0.00042	50000	mg/L
LDU - West	6/2/2017	Arsenic, Total	0.0028	0.005	0.0015	10000	mg/L
LDU - West	6/2/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
LDU - West	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	6/2/2017	Chromium, Total	0.35	0.006	0.0011	50000	mg/L
LDU - West	6/2/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
LDU - West	6/2/2017	Silver, Dissolved	0.0011	0.005	0.00088	81200	mg/L
LDU - West	6/2/2017	Arsenic, Dissolved	0.0022	0.001	0.00018	10000	mg/L
LDU - West	6/2/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
LDU - West	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	6/2/2017	Chromium, Dissolved	0.33	0.006	0.001	100000	mg/L
LDU - West	6/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	6/2/2017	Iron, Dissolved	44	1	0.82	13821880	mg/L
LDU - West	6/2/2017	Manganese, Dissolved	17	0.1	0.019	2017400	mg/L
LDU - West	6/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	6/2/2017	Selenium, Dissolved	0.0017	0.001	0.00039	50000	mg/L
LDU - West	6/2/2017	Uranium, Dissolved	0.0023	0.0005	0.00005	NA	mg/L
LDU - West	6/2/2017	Zinc, Dissolved	0.052	0.01	0.0011	5960450	mg/L
LDU - West	6/2/2017	Iron, Total	44	1	0.51	13822000	mg/L
LDU - West	6/2/2017	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
LDU - West	6/2/2017	Manganese, Total	16	0.1	0.055	2017000	mg/L
LDU - West	6/2/2017	Lead, Total	0.00055	0.0025	0.00048	15000	mg/L
LDU - West	6/2/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - West	6/2/2017	Uranium, Total	0.0021	0.0025	0.00077	30000	mg/L
LDU - West	6/2/2017	Zinc, Total	0.33	0.01	0.0028	5960000	mg/L
LDU - West	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
LDU - West	9/5/2017	Arsenic, Total	0.0038	0.005	0.0015	10000	mg/L
LDU - West	9/5/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
LDU - West	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	9/5/2017	Chromium, Total	1.3	0.06	0.018	50000	mg/L
LDU - West	9/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
LDU - West	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2017	Arsenic, Dissolved	0.0044	0.001	0.00018	10000	mg/L
LDU - West	9/5/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
LDU - West	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	9/5/2017	Chromium, Dissolved	1.3	0.06	0.013	100000	mg/L
LDU - West	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	9/5/2017	Iron, Dissolved	26	1	0.82	13821880	mg/L
LDU - West	9/5/2017	Manganese, Dissolved	9.3	0.02	0.0039	2017400	mg/L
LDU - West	9/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
LDU - West	9/5/2017	Selenium, Dissolved	0.0035	0.001	0.00039	50000	mg/L
LDU - West	9/5/2017	Uranium, Dissolved	0.00074	0.0005	0.00005	NA	mg/L
LDU - West	9/5/2017	Zinc, Dissolved	0.14	0.01	0.0021	5960450	mg/L
LDU - West	9/5/2017	Iron, Total	26	1	0.51	13822000	mg/L
LDU - West	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
LDU - West	9/5/2017	Manganese, Total	9.3	0.02	0.011	2017000	mg/L
LDU - West	9/5/2017	Lead, Total	0.00048	0.0025	0.00048	15000	mg/L
LDU - West	9/5/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
LDU - West	9/5/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
LDU - West	9/5/2017	Zinc, Total	0.056	0.01	0.0033	5960000	mg/L
LDU - West	2/12/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
LDU - West	2/12/2018	Arsenic, Total	0.0034	0.001	0.00041	10000	mg/L
LDU - West	2/12/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
LDU - West	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	2/12/2018	Chromium, Total	0.43	0.006	0.0018	50000	mg/L
LDU - West	2/12/2018	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
LDU - West	2/12/2018	Silver, Dissolved	0.012	0.005	0.0018	81200	mg/L
LDU - West	2/12/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
LDU - West	2/12/2018	Barium, Dissolved	0.086	0.002	0.00099	2000000	mg/L
LDU - West	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	2/12/2018	Chromium, Dissolved	0.37	0.006	0.0013	100000	mg/L
LDU - West	2/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	2/12/2018	Iron, Dissolved	0.19	0.02	0.016	13821880	mg/L
LDU - West	2/12/2018	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
LDU - West	2/12/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
LDU - West	2/12/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
LDU - West	2/12/2018	Uranium, Dissolved	0.00097	0.0025	0.00048	NA	mg/L
LDU - West	2/12/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
LDU - West	2/12/2018	Iron, Total	1.5	0.1	0.051	13822000	mg/L
LDU - West	2/12/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
LDU - West	2/12/2018	Lead, Total	0.00085	0.0005	0.00023	15000	mg/L
LDU - West	2/12/2018	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
LDU - West	2/12/2018	Uranium, Total	0.0013	0.0005	0.000068	30000	mg/L
LDU - West	2/12/2018	Zinc, Total	0.095	0.01	0.0033	5960000	mg/L
LDU - West	4/30/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
LDU - West	4/30/2018	Arsenic, Total	0.0051	0.005	0.0021	10000	mg/L
LDU - West	4/30/2018	Barium, Total	0.094	0.002	0.001	2000000	mg/L
LDU - West	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
LDU - West	4/30/2018	Chromium, Total	0.66	0.006	0.0018	50000	mg/L
LDU - West	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	4/30/2018	Silver, Dissolved	0.0047	0.005	0.0018	81200	mg/L
LDU - West	4/30/2018	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
LDU - West	4/30/2018	Barium, Dissolved	0.092	0.002	0.00099	2000000	mg/L
LDU - West	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
LDU - West	4/30/2018	Chromium, Dissolved	0.68	0.006	0.0013	100000	mg/L
LDU - West	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
LDU - West	4/30/2018	Iron, Dissolved	0.31	0.02	0.016	13821880	mg/L
LDU - West	4/30/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
LDU - West	4/30/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
LDU - West	4/30/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
LDU - West	4/30/2018	Uranium, Dissolved	0.00058	0.0025	0.00048	NA	mg/L
LDU - West	4/30/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
LDU - West	4/30/2018	Iron, Total	0.92	0.02	0.01	13822000	mg/L
LDU - West	4/30/2018	Mercury, Total	0.000097	0.0002	0.000037	2000	mg/L
LDU - West	4/30/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
LDU - West	4/30/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
LDU - West	4/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
LDU - West	4/30/2018	Uranium, Total	0.00069	0.0025	0.00034	30000	mg/L
LDU - West	4/30/2018	Zinc, Total	0.065	0.01	0.0033	5960000	mg/L
LDU - West	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
LDU - West	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
LDU - West	12/17/2020	Aluminum, Total	1.62	0.2	0.051	19914000	mg/L
LDU - West	12/17/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
LDU - West	12/17/2020	Barium, Total	0.167	0.01	0.003	2000000	mg/L
LDU - West	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
LDU - West	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
LDU - West	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
LDU - West	12/17/2020	Chromium, Total	0.205	0.01	0.005	50000	mg/L
LDU - West	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
LDU - West	12/17/2020	Iron, Total	1.64	0.2	0.075	13822000	mg/L
LDU - West	12/17/2020	Manganese, Total	0.851	0.01	0.003	2017000	mg/L
LDU - West	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
LDU - West	12/17/2020	Nickel, Total	0.119	0.006	0.003	372000	mg/L
LDU - West	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
LDU - West	12/17/2020	Aluminum, Dissolved	1.4	0.2	0.051	19913930	mg/L
LDU - West	12/17/2020	Barium, Dissolved	0.157	0.01	0.003	2000000	mg/L
LDU - West	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
LDU - West	12/17/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
LDU - West	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
LDU - West	12/17/2020	Chromium, Dissolved	0.0666	0.01	0.005	100000	mg/L
LDU - West	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
LDU - West	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
LDU - West	12/17/2020	Iron, Dissolved	0.747	0.2	0.075	13821880	mg/L
LDU - West	12/17/2020	Manganese, Dissolved	0.839	0.01	0.003	2017400	mg/L
LDU - West	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
LDU - West	12/17/2020	Nickel, Dissolved	0.0688	0.006	0.003	372000	mg/L
LDU - West	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
LDU - West	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
LDU - West	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
LDU - West	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
LDU - West	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
LDU - West	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
LDU - West	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
LDU - West	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
LDU - West	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
LDU - West	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
LDU - West	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
LDU - West	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
LDU - West	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
LDU - West	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
LDU - West	5/28/2019	Aluminum, Dissolved	4.6	0.1	0.012441	19913930	mg/L
LDU - West	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - West	5/28/2019	Arsenic, Dissolved	0.00025	0.001	0.000101	10000	mg/L
LDU - West	5/28/2019	Barium, Dissolved	0.076	0.002	0.000648	2000000	mg/L
LDU - West	5/28/2019	Beryllium, Dissolved	0.0036	0.002	0.000284	4000	mg/L
LDU - West	5/28/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
LDU - West	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	5/28/2019	Chromium, Dissolved	0.16	0.006	0.001533	100000	mg/L
LDU - West	5/28/2019	Cobalt, Dissolved	0.0081	0.006	0.003091	5980	mg/L
LDU - West	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	5/28/2019	Iron, Dissolved	750	20	8.746871	13821880	mg/L
LDU - West	5/28/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
LDU - West	5/28/2019	Manganese, Dissolved	76	0.2	0.028994	2017400	mg/L
LDU - West	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	5/28/2019	Nickel, Dissolved	0.52	0.01	0.004009	372000	mg/L
LDU - West	5/28/2019	Selenium, Dissolved	0.0004	0.001	0.000171	50000	mg/L
LDU - West	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
LDU - West	5/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
LDU - West	5/28/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
LDU - West	5/28/2019	Zinc, Dissolved	0.07	0.01	0.002252	5960450	mg/L
LDU - West	5/28/2019	Aluminum, Total	5.3	0.2	0.024883	19914000	mg/L
LDU - West	5/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	5/28/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
LDU - West	5/28/2019	Barium, Total	0.071	0.01	0.003242	2000000	mg/L
LDU - West	5/28/2019	Beryllium, Total	0.0039	0.01	0.001419	4000	mg/L
LDU - West	5/28/2019	Boron, Total	0.5	0.2	0.022653	3949	mg/L
LDU - West	5/28/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
LDU - West	5/28/2019	Chromium, Total	0.7	0.03	0.007666	50000	mg/L
LDU - West	5/28/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	5/28/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
LDU - West	5/28/2019	Iron, Total	770	20	8.746871	13822000	mg/L
LDU - West	5/28/2019	Lead, Total	0.0004	0.0025	0.000274	15000	mg/L
LDU - West	5/28/2019	Manganese, Total	76	0.2	0.028994	2017000	mg/L
LDU - West	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
LDU - West	5/28/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
LDU - West	5/28/2019	Nickel, Total	0.68	0.05	0.020043	372000	mg/L
LDU - West	5/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
LDU - West	5/28/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
LDU - West	5/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	5/28/2019	Uranium, Total	ND	0.0025	0.000424	30000	mg/L
LDU - West	5/28/2019	Zinc, Total	0.16	0.05	0.028859	5960000	mg/L
LDU - West	3/10/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
LDU - West	3/10/2020	Arsenic, Dissolved	0.0016	0.005	0.0005	10000	mg/L
LDU - West	3/10/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
LDU - West	3/10/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
LDU - West	3/10/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
LDU - West	3/10/2020	Uranium, Dissolved	0.001	0.0025	0.00037	NA	mg/L
LDU - West	3/10/2020	Barium, Dissolved	0.041	0.002	0.00065	2000000	mg/L
LDU - West	3/10/2020	Beryllium, Dissolved	0.0029	0.002	0.00028	4000	mg/L
LDU - West	3/10/2020	Boron, Dissolved	0.17	0.04	0.0045	3949110	mg/L
LDU - West	3/10/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
LDU - West	3/10/2020	Chromium, Dissolved	0.76	0.006	0.0015	100000	mg/L
LDU - West	3/10/2020	Cobalt, Dissolved	0.013	0.006	0.0031	5980	mg/L
LDU - West	3/10/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
LDU - West	3/10/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
LDU - West	3/10/2020	Nickel, Dissolved	0.69	0.01	0.004	372000	mg/L
LDU - West	3/10/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
LDU - West	3/10/2020	Zinc, Dissolved	0.052	0.01	0.0023	5960450	mg/L
LDU - West	3/10/2020	Aluminum, Dissolved	21	1	0.12	19913930	mg/L
LDU - West	3/10/2020	Manganese, Dissolved	38	0.1	0.014	2017400	mg/L
LDU - West	3/10/2020	Iron, Dissolved	510	20	8.7	13821880	mg/L
LDU - West	3/10/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
LDU - West	3/10/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
LDU - West	3/10/2020	Arsenic, Total	0.0016	0.005	0.0016	10000	mg/L
LDU - West	3/10/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
LDU - West	3/10/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
LDU - West	3/10/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
LDU - West	3/10/2020	Uranium, Total	ND	0.0025	0.00042	30000	mg/L
LDU - West	3/10/2020	Barium, Total	0.045	0.002	0.00065	2000000	mg/L
LDU - West	3/10/2020	Beryllium, Total	0.0021	0.002	0.00028	4000	mg/L
LDU - West	3/10/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
LDU - West	3/10/2020	Cobalt, Total	0.012	0.006	0.0031	5980	mg/L
LDU - West	3/10/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
LDU - West	3/10/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
LDU - West	3/10/2020	Nickel, Total	0.7	0.01	0.004	372000	mg/L
LDU - West	3/10/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
LDU - West	3/10/2020	Zinc, Total	0.077	0.01	0.0058	5960000	mg/L
LDU - West	3/10/2020	Chromium, Total	1.9	0.03	0.0077	50000	mg/L
LDU - West	3/10/2020	Aluminum, Total	24	1	0.12	19914000	mg/L
LDU - West	3/10/2020	Manganese, Total	41	0.1	0.014	2017000	mg/L
LDU - West	3/10/2020	Iron, Total	530	20	8.7	13822000	mg/L
LDU - West	3/10/2020	Boron, Total	0.14	0.04	0.0045	3949	mg/L
LDU - West	4/9/2019	Aluminum, Total	16	0.4	0.049765	19914000	mg/L
LDU - West	4/9/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	4/9/2019	Arsenic, Total	ND	0.005	0.000504	10000	mg/L
LDU - West	4/9/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
LDU - West	4/9/2019	Beryllium, Total	0.0063	0.002	0.000284	4000	mg/L
LDU - West	4/9/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
LDU - West	4/9/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
LDU - West	4/9/2019	Chromium, Total	0.66	0.006	0.001533	50000	mg/L
LDU - West	4/9/2019	Cobalt, Total	0.007	0.006	0.003091	5980	mg/L
LDU - West	4/9/2019	Copper, Total	ND	0.006	0.001296	790000	mg/L
LDU - West	4/9/2019	Iron, Total	1400	40	17.493741	13822000	mg/L
LDU - West	4/9/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
LDU - West	4/9/2019	Manganese, Total	81	0.2	0.028994	2017000	mg/L
LDU - West	4/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	4/9/2019	Nickel, Total	0.48	0.01	0.004009	372000	mg/L
LDU - West	4/9/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	4/9/2019	Silver, Total	ND	0.005	0.000942	50000	mg/L
LDU - West	4/9/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
LDU - West	4/9/2019	Uranium, Total	ND	0.0025	0.000374	30000	mg/L
LDU - West	4/9/2019	Zinc, Total	0.039	0.01	0.002252	5960000	mg/L
LDU - West	4/9/2019	Aluminum, Total	15	0.4	0.021015	19914000	mg/L
LDU - West	4/9/2019	Antimony, Total	ND	0.005	0.000784	6000	mg/L
LDU - West	4/9/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
LDU - West	4/9/2019	Barium, Total	0.092	0.01	0.002442	2000000	mg/L
LDU - West	4/9/2019	Beryllium, Total	0.0061	0.01	0.00112	4000	mg/L
LDU - West	4/9/2019	Boron, Total	0.4	0.2	0.009104	3949	mg/L
LDU - West	4/9/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
LDU - West	4/9/2019	Chromium, Total	0.74	0.03	0.005999	50000	mg/L
LDU - West	4/9/2019	Cobalt, Total	0.019	0.03	0.006208	5980	mg/L
LDU - West	4/9/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
LDU - West	4/9/2019	Iron, Total	1300	40	12.105137	13822000	mg/L
LDU - West	4/9/2019	Lead, Total	0.00016	0.0025	0.000131	15000	mg/L
LDU - West	4/9/2019	Manganese, Total	77	0.2	0.005982	2017000	mg/L
LDU - West	4/9/2019	Molybdenum, Total	ND	0.04	0.010377	98700	mg/L
LDU - West	4/9/2019	Nickel, Total	0.84	0.05	0.007455	372000	mg/L
LDU - West	4/9/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
LDU - West	4/9/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
LDU - West	4/9/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	4/9/2019	Uranium, Total	ND	0.0025	0.000424	30000	mg/L
LDU - West	4/9/2019	Zinc, Total	0.072	0.05	0.028859	5960000	mg/L
LDU - West	11/19/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
LDU - West	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
LDU - West	11/19/2019	Arsenic, Total	ND	0.02	0.006244	10000	mg/L
LDU - West	11/19/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L
LDU - West	11/19/2019	Beryllium, Total	0.00082	0.002	0.000284	4000	mg/L
LDU - West	11/19/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
LDU - West	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - West	11/19/2019	Chromium, Total	0.15	0.006	0.001533	50000	mg/L
LDU - West	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - West	11/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - West	11/19/2019	Iron, Total	51	2	0.874687	13822000	mg/L
LDU - West	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
LDU - West	11/19/2019	Manganese, Total	19	0.2	0.028994	2017000	mg/L
LDU - West	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
LDU - West	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	11/19/2019	Nickel, Total	0.045	0.01	0.004009	372000	mg/L
LDU - West	11/19/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L
LDU - West	11/19/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
LDU - West	11/19/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
LDU - West	11/19/2019	Uranium, Total	0.00082	0.0025	0.000424	30000	mg/L
LDU - West	11/19/2019	Zinc, Total	0.029	0.01	0.005772	5960000	mg/L
LDU - West	11/19/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
LDU - West	11/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
LDU - West	11/19/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
LDU - West	11/19/2019	Barium, Dissolved	0.063	0.002	0.000648	2000000	mg/L
LDU - West	11/19/2019	Beryllium, Dissolved	0.00048	0.002	0.000284	4000	mg/L
LDU - West	11/19/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
LDU - West	11/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	11/19/2019	Chromium, Dissolved	0.095	0.006	0.001533	100000	mg/L
LDU - West	11/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - West	11/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	11/19/2019	Iron, Dissolved	45	2	0.874687	13821880	mg/L
LDU - West	11/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
LDU - West	11/19/2019	Manganese, Dissolved	19	0.1	0.014497	2017400	mg/L
LDU - West	11/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	11/19/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
LDU - West	11/19/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
LDU - West	11/19/2019	Silver, Dissolved	0.0061	0.005	0.000942	81200	mg/L
LDU - West	11/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
LDU - West	11/19/2019	Uranium, Dissolved	0.00076	0.0005	0.000075	NA	mg/L
LDU - West	11/19/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
LDU - West	8/22/2019	Aluminum, Dissolved	0.15	0.02	0.002488	19913930	mg/L
LDU - West	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
LDU - West	8/22/2019	Arsenic, Dissolved	0.00061	0.005	0.000504	10000	mg/L
LDU - West	8/22/2019	Barium, Dissolved	0.066	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	8/22/2019	Beryllium, Dissolved	0.00064	0.002	0.000284	4000	mg/L
LDU - West	8/22/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
LDU - West	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
LDU - West	8/22/2019	Chromium, Dissolved	0.11	0.006	0.001533	100000	mg/L
LDU - West	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
LDU - West	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
LDU - West	8/22/2019	Iron, Dissolved	34	1	0.437344	13821880	mg/L
LDU - West	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
LDU - West	8/22/2019	Manganese, Dissolved	28	0.1	0.014497	2017400	mg/L
LDU - West	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
LDU - West	8/22/2019	Nickel, Dissolved	0.1	0.01	0.004009	372000	mg/L
LDU - West	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
LDU - West	8/22/2019	Silver, Dissolved	0.0054	0.005	0.000942	81200	mg/L
LDU - West	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
LDU - West	8/22/2019	Uranium, Dissolved	0.00062	0.0025	0.000374	NA	mg/L
LDU - West	8/22/2019	Zinc, Dissolved	0.0082	0.01	0.002252	5960450	mg/L
LDU - West	8/22/2019	Aluminum, Total	0.98	0.1	0.012441	19914000	mg/L
LDU - West	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
LDU - West	8/22/2019	Arsenic, Total	0.00046	0.001	0.000312	10000	mg/L
LDU - West	8/22/2019	Barium, Total	0.073	0.002	0.000648	2000000	mg/L
LDU - West	8/22/2019	Beryllium, Total	0.00063	0.002	0.000284	4000	mg/L
LDU - West	8/22/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
LDU - West	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
LDU - West	8/22/2019	Chromium, Total	0.24	0.006	0.001533	50000	mg/L
LDU - West	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
LDU - West	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
LDU - West	8/22/2019	Iron, Total	38	1	0.437344	13822000	mg/L
LDU - West	8/22/2019	Lead, Total	0.00047	0.0005	0.000055	15000	mg/L
LDU - West	8/22/2019	Manganese, Total	28	0.1	0.014497	2017000	mg/L
LDU - West	8/22/2019	Mercury, Total	0.00018	0.0002	0.000038	2000	mg/L
LDU - West	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
LDU - West	8/22/2019	Nickel, Total	0.11	0.01	0.004009	372000	mg/L
LDU - West	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
LDU - West	8/22/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
LDU - West	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
LDU - West	8/22/2019	Uranium, Total	0.00062	0.0005	0.000085	30000	mg/L
LDU - West	8/22/2019	Zinc, Total	0.029	0.01	0.005772	5960000	mg/L
MKTF-02	8/23/2019	Aluminum, Dissolved	0.41	0.02	0.002488	19913930	mg/L
MKTF-02	8/23/2019	Antimony, Dissolved	0.00047	0.001	0.000389	6000	mg/L
MKTF-02	8/23/2019	Arsenic, Dissolved	0.0038	0.001	0.000101	10000	mg/L
MKTF-02	8/23/2019	Barium, Dissolved	0.73	0.002	0.000648	2000000	mg/L
MKTF-02	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-02	8/23/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-02	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	8/23/2019	Calcium, Dissolved	230	5	0.309446	NA	mg/L
MKTF-02	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	8/23/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-02	8/23/2019	Iron, Dissolved	2.4	0.1	0.043734	13821880	mg/L
MKTF-02	8/23/2019	Lead, Dissolved	0.00039	0.0005	0.000055	NA	mg/L
MKTF-02	8/23/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-02	8/23/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-02	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	8/23/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	8/23/2019	Potassium, Dissolved	4	1	0.162288	NA	mg/L
MKTF-02	8/23/2019	Selenium, Dissolved	0.00066	0.001	0.000171	50000	mg/L
MKTF-02	8/23/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-02	8/23/2019	Sodium, Dissolved	1300	100	41.61763	NA	mg/L
MKTF-02	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	8/23/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
MKTF-02	8/23/2019	Zinc, Dissolved	0.0065	0.01	0.002252	5960450	mg/L
MKTF-02	8/23/2019	Aluminum, Total	18	2	0.248827	19914000	mg/L
MKTF-02	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-02	8/23/2019	Arsenic, Total	0.006	0.005	0.001561	10000	mg/L
MKTF-02	8/23/2019	Barium, Total	0.86	0.002	0.000648	2000000	mg/L
MKTF-02	8/23/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-02	8/23/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	8/23/2019	Chromium, Total	0.0055	0.006	0.001533	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/23/2019	Cobalt, Total	0.0037	0.006	0.003091	5980	mg/L
MKTF-02	8/23/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
MKTF-02	8/23/2019	Iron, Total	9.1	2	0.874687	13822000	mg/L
MKTF-02	8/23/2019	Lead, Total	0.009	0.0025	0.000274	15000	mg/L
MKTF-02	8/23/2019	Manganese, Total	2.3	0.01	0.00145	2017000	mg/L
MKTF-02	8/23/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-02	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	8/23/2019	Nickel, Total	0.024	0.01	0.004009	372000	mg/L
MKTF-02	8/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-02	8/23/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-02	8/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-02	8/23/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-02	8/23/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	14	0.4	0.049765	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0032	0.01	0.003122	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.34	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	0.0048	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	5.9	0.4	0.174937	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	0.0052	0.005	0.000549	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.8	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0061	0.005	0.001418	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.043	0.005	0.000849	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0026	0.005	0.000504	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0021	0.006	0.001296	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	0.38	0.02	0.008747	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.0087	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0061	0.005	0.000942	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.047	0.0025	0.000374	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.022	0.01	0.002252	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	ND	0.02	0.006244	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.33	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	0.0046	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.0053	0.006	0.004072	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	5.7	0.4	0.174937	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	0.0054	0.005	0.000549	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.02	0.00956	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.044	0.005	0.000849	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-02	11/19/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	11/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	11/19/2019	Arsenic, Total	0.0026	0.005	0.000504	10000	mg/L
MKTF-02	11/19/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-02	11/19/2019	Beryllium, Total	0.00032	0.002	0.000284	4000	mg/L
MKTF-02	11/19/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-02	11/19/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-02	11/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	11/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	11/19/2019	Copper, Total	0.002	0.006	0.001296	790000	mg/L
MKTF-02	11/19/2019	Iron, Total	0.48	0.02	0.008747	13822000	mg/L
MKTF-02	11/19/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	11/19/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-02	11/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	11/19/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-02	11/19/2019	Selenium, Total	ND	0.005	0.000857	50000	mg/L
MKTF-02	11/19/2019	Silver, Total	0.0062	0.005	0.000942	50000	mg/L
MKTF-02	11/19/2019	Thallium, Total	ND	0.0025	0.000242	2000	mg/L
MKTF-02	11/19/2019	Uranium, Total	0.046	0.0025	0.000374	30000	mg/L
MKTF-02	11/19/2019	Zinc, Total	0.026	0.01	0.002252	5960000	mg/L
MKTF-02	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-02	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-02	3/28/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
MKTF-02	3/28/2019	Barium, Dissolved	0.99	0.002	0.000648	2000000	mg/L
MKTF-02	3/28/2019	Beryllium, Dissolved	0.00041	0.002	0.000284	4000	mg/L
MKTF-02	3/28/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
MKTF-02	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	3/28/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-02	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-02	3/28/2019	Iron, Dissolved	0.42	0.02	0.008747	13821880	mg/L
MKTF-02	3/28/2019	Lead, Dissolved	0.00007	0.0005	0.000055	NA	mg/L
MKTF-02	3/28/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-02	3/28/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
MKTF-02	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	3/28/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	3/28/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
MKTF-02	3/28/2019	Selenium, Dissolved	0.0005	0.001	0.000171	50000	mg/L
MKTF-02	3/28/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-02	3/28/2019	Sodium, Dissolved	890	10	4.161763	NA	mg/L
MKTF-02	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	3/28/2019	Uranium, Dissolved	0.023	0.0005	0.000075	NA	mg/L
MKTF-02	3/28/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-02	3/28/2019	Aluminum, Total	0.022	0.02	0.004564	19914000	mg/L
MKTF-02	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-02	3/28/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
MKTF-02	3/28/2019	Barium, Total	1	0.01	0.003242	2000000	mg/L
MKTF-02	3/28/2019	Beryllium, Total	0.00038	0.002	0.000284	4000	mg/L
MKTF-02	3/28/2019	Boron, Total	0.73	0.04	0.004531	3949	mg/L
MKTF-02	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-02	3/28/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
MKTF-02	3/28/2019	Lead, Total	0.00022	0.0005	0.000055	15000	mg/L
MKTF-02	3/28/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
MKTF-02	3/28/2019	Mercury, Total	0.000087	0.0002	0.000038	2000	mg/L
MKTF-02	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	3/28/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-02	3/28/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-02	3/28/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-02	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-02	3/28/2019	Uranium, Total	0.023	0.0025	0.000424	30000	mg/L
MKTF-02	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-02	11/19/2019	Calcium, Total	310	5	0.309446	NA	mg/L
MKTF-02	11/19/2019	Magnesium, Total	55	1	0.05029	NA	mg/L
MKTF-02	11/19/2019	Potassium, Total	4.3	1	0.162288	NA	mg/L
MKTF-02	11/19/2019	Sodium, Total	1300	20	8.323526	NA	mg/L
MKTF-02	11/19/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-02	11/19/2019	Calcium, Total	320	5	0.309446	NA	mg/L
MKTF-02	11/19/2019	Magnesium, Total	55	1	0.05029	NA	mg/L
MKTF-02	11/19/2019	Potassium, Total	4.4	1	0.162288	NA	mg/L
MKTF-02	11/19/2019	Sodium, Total	1300	20	8.323526	NA	mg/L
MKTF-02	5/6/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-02	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-02	5/6/2019	Arsenic, Dissolved	0.0033	0.005	0.000504	10000	mg/L
MKTF-02	5/6/2019	Barium, Dissolved	0.9	0.002	0.000648	2000000	mg/L
MKTF-02	5/6/2019	Beryllium, Dissolved	0.00075	0.002	0.000284	4000	mg/L
MKTF-02	5/6/2019	Boron, Dissolved	0.83	0.04	0.004531	3949110	mg/L
MKTF-02	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-02	5/6/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-02	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-02	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-02	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-02	5/6/2019	Iron, Dissolved	3	0.1	0.043734	13821880	mg/L
MKTF-02	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-02	5/6/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-02	5/6/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
MKTF-02	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-02	5/6/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-02	5/6/2019	Potassium, Dissolved	2.8	1	0.162288	NA	mg/L
MKTF-02	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-02	5/6/2019	Silver, Dissolved	0.0045	0.005	0.000942	81200	mg/L
MKTF-02	5/6/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-02	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-02	5/6/2019	Uranium, Dissolved	0.017	0.0025	0.000374	NA	mg/L
MKTF-02	5/6/2019	Zinc, Dissolved	0.057	0.01	0.002252	5960450	mg/L
MKTF-02	5/6/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
MKTF-02	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-02	5/6/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L
MKTF-02	5/6/2019	Barium, Total	0.99	0.002	0.000648	2000000	mg/L
MKTF-02	5/6/2019	Beryllium, Total	0.00064	0.002	0.000284	4000	mg/L
MKTF-02	5/6/2019	Boron, Total	0.81	0.04	0.004531	3949	mg/L
MKTF-02	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-02	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-02	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-02	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-02	5/6/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-02	5/6/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-02	5/6/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-02	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-02	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-02	5/6/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-02	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-02	5/6/2019	Silver, Total	0.0043	0.005	0.001418	50000	mg/L
MKTF-02	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-02	5/6/2019	Uranium, Total	0.017	0.0025	0.000424	30000	mg/L
MKTF-02	5/6/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-02	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-02	2/25/2020	Arsenic, Dissolved	0.0011	0.001	0.0001	10000	mg/L
MKTF-02	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-02	2/25/2020	Selenium, Dissolved	0.00046	0.001	0.00017	50000	mg/L
MKTF-02	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-02	2/25/2020	Uranium, Dissolved	0.0059	0.0005	0.000075	NA	mg/L
MKTF-02	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-02	2/25/2020	Barium, Dissolved	0.083	0.002	0.00065	2000000	mg/L
MKTF-02	2/25/2020	Beryllium, Dissolved	0.00032	0.002	0.00028	4000	mg/L
MKTF-02	2/25/2020	Boron, Dissolved	0.51	0.04	0.0045	3949110	mg/L
MKTF-02	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-02	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-02	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-02	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/25/2020	Iron, Dissolved	0.34	0.02	0.0087	13821880	mg/L
MKTF-02	2/25/2020	Magnesium, Dissolved	48	1	0.05	NA	mg/L
MKTF-02	2/25/2020	Nickel, Dissolved	0.0049	0.01	0.004	372000	mg/L
MKTF-02	2/25/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-02	2/25/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-02	2/25/2020	Manganese, Dissolved	3	0.01	0.0014	2017400	mg/L
MKTF-02	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-02	2/25/2020	Silver, Dissolved	0.0057	0.005	0.00094	81200	mg/L
MKTF-02	2/25/2020	Calcium, Dissolved	300	5	0.31	NA	mg/L
MKTF-02	2/25/2020	Sodium, Dissolved	790	10	4.2	NA	mg/L
MKTF-02	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-02	2/25/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-02	2/25/2020	Lead, Total	0.00052	0.0025	0.00027	15000	mg/L
MKTF-02	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-02	2/25/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-02	2/25/2020	Aluminum, Total	0.34	0.02	0.0025	19914000	mg/L
MKTF-02	2/25/2020	Barium, Total	0.12	0.002	0.00065	2000000	mg/L
MKTF-02	2/25/2020	Beryllium, Total	0.00035	0.002	0.00028	4000	mg/L
MKTF-02	2/25/2020	Boron, Total	0.59	0.04	0.0045	3949	mg/L
MKTF-02	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-02	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-02	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	2/25/2020	Nickel, Total	0.0075	0.01	0.004	372000	mg/L
MKTF-02	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-02	2/25/2020	Iron, Total	2	0.1	0.044	13822000	mg/L
MKTF-02	2/25/2020	Manganese, Total	3	0.01	0.0014	2017000	mg/L
MKTF-02	2/25/2020	Uranium, Total	0.0059	0.0025	0.00042	30000	mg/L
MKTF-02	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-02	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-02	2/25/2020	Silver, Total	0.005	0.005	0.0014	50000	mg/L
MKTF-02	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-02	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-02	12/18/2020	Aluminum, Total	0.2	0.2	0.051	19914000	mg/L
MKTF-02	12/18/2020	Boron, Total	0.881	0.1	0.022	3949	mg/L
MKTF-02	12/18/2020	Barium, Total	0.788	0.01	0.003	2000000	mg/L
MKTF-02	12/18/2020	Potassium, Total	5.68	1	0.34	NA	mg/L
MKTF-02	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-02	12/18/2020	Magnesium, Total	109	0.5	0.12	NA	mg/L
MKTF-02	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-02	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-02	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-02	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-02	12/18/2020	Iron, Total	2.56	0.2	0.075	13822000	mg/L
MKTF-02	12/18/2020	Manganese, Total	6.14	0.01	0.003	2017000	mg/L
MKTF-02	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-02	12/18/2020	Nickel, Total	0.0165	0.006	0.003	372000	mg/L
MKTF-02	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-02	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-02	12/18/2020	Barium, Dissolved	0.765	0.01	0.003	2000000	mg/L
MKTF-02	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-02	12/18/2020	Boron, Dissolved	0.855	0.1	0.022	3949110	mg/L
MKTF-02	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-02	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-02	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-02	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-02	12/18/2020	Iron, Dissolved	1.03	0.2	0.075	13821880	mg/L
MKTF-02	12/18/2020	Manganese, Dissolved	6.46	0.01	0.003	2017400	mg/L
MKTF-02	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-02	12/18/2020	Nickel, Dissolved	0.0163	0.006	0.003	372000	mg/L
MKTF-02	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-02	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-02	12/18/2020	Calcium, Total	631	2.5	0.42	NA	mg/L
MKTF-02	12/18/2020	Sodium, Total	1150	10	4.6	NA	mg/L
MKTF-02	9/21/2020	Arsenic, Dissolved	0.0014	0.001	0.00021	10000	mg/L
MKTF-02	9/21/2020	Lead, Dissolved	0.00017	0.0005	0.000034	NA	mg/L
MKTF-02	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-02	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-02	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-02	9/21/2020	Uranium, Dissolved	0.01	0.0005	0.000065	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/21/2020	Calcium, Dissolved	210	5	0.57	NA	mg/L
MKTF-02	9/21/2020	Manganese, Dissolved	1.9	0.01	0.0029	2017400	mg/L
MKTF-02	9/21/2020	Sodium, Dissolved	820	50	6.9	NA	mg/L
MKTF-02	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-02	9/21/2020	Barium, Dissolved	0.28	0.002	0.0011	2000000	mg/L
MKTF-02	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-02	9/21/2020	Boron, Dissolved	0.84	0.04	0.0067	3949110	mg/L
MKTF-02	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-02	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-02	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-02	9/21/2020	Iron, Dissolved	0.22	0.02	0.01	13821880	mg/L
MKTF-02	9/21/2020	Magnesium, Dissolved	36	1	0.067	NA	mg/L
MKTF-02	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-02	9/21/2020	Nickel, Dissolved	0.02	0.01	0.0033	372000	mg/L
MKTF-02	9/21/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
MKTF-02	9/21/2020	Silver, Dissolved	0.0035	0.005	0.0013	81200	mg/L
MKTF-02	9/21/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
MKTF-02	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-02	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-02	9/21/2020	Arsenic, Total	0.0015	0.001	0.00026	10000	mg/L
MKTF-02	9/21/2020	Lead, Total	0.0007	0.0005	0.000034	15000	mg/L
MKTF-02	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-02	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-02	9/21/2020	Uranium, Total	0.01	0.0005	0.000065	30000	mg/L
MKTF-02	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-02	9/21/2020	Aluminum, Total	0.87	0.02	0.0074	19914000	mg/L
MKTF-02	9/21/2020	Barium, Total	0.27	0.003	0.0016	2000000	mg/L
MKTF-02	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-02	9/21/2020	Boron, Total	0.81	0.04	0.0074	3949	mg/L
MKTF-02	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-02	9/21/2020	Iron, Total	0.99	0.05	0.013	13822000	mg/L
MKTF-02	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-02	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-02	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-02	9/21/2020	Nickel, Total	0.017	0.01	0.0033	372000	mg/L
MKTF-02	9/21/2020	Silver, Total	0.0033	0.005	0.0013	50000	mg/L
MKTF-02	9/21/2020	Manganese, Total	2	0.01	0.0041	2017000	mg/L
MKTF-02	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-02	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-02	12/18/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
MKTF-02	12/18/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
MKTF-02	12/18/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
MKTF-02	12/18/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
MKTF-02	12/18/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
MKTF-02	12/18/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
MKTF-02	12/18/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
MKTF-02	12/18/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
MKTF-02	12/18/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
MKTF-02	12/18/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
MKTF-02	12/18/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
MKTF-02	12/18/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
MKTF-02	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-02	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-02	6/6/2014	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
MKTF-02	6/6/2014	Calcium, Total	110	5	0.27	NA	mg/L
MKTF-02	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-02	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-02	6/6/2014	Iron, Total	0.34	0.02	0.0062	13822000	mg/L
MKTF-02	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	6/6/2014	Potassium, Total	9.2	1	0.24	NA	mg/L
MKTF-02	6/6/2014	Magnesium, Total	17	1	0.024	NA	mg/L
MKTF-02	6/6/2014	Manganese, Total	0.56	0.002	0.00055	2017000	mg/L
MKTF-02	6/6/2014	Sodium, Total	720	10	2.5	NA	mg/L
MKTF-02	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-02	6/6/2014	Selenium, Total	0.012	0.005	0.00074	50000	mg/L
MKTF-02	6/6/2014	Uranium, Total	0.056	0.01	0.0005	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Zinc, Total	0.01	0.01	0.0014	5960000	mg/L
MKTF-02	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-02	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-02	9/18/2014	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-02	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-02	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-02	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-02	9/18/2014	Iron, Total	0.029	0.02	0.0062	13822000	mg/L
MKTF-02	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	9/18/2014	Manganese, Total	0.59	0.002	0.00055	2017000	mg/L
MKTF-02	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-02	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-02	9/18/2014	Uranium, Total	0.012	0.001	0.00005	30000	mg/L
MKTF-02	9/18/2014	Zinc, Total	0.041	0.01	0.0014	5960000	mg/L
MKTF-02	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-02	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-02	11/14/2014	Barium, Total	0.13	0.002	0.00021	2000000	mg/L
MKTF-02	11/14/2014	Calcium, Total	100	5	0.41	NA	mg/L
MKTF-02	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-02	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-02	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-02	11/14/2014	Iron, Total	2.2	0.1	0.031	13822000	mg/L
MKTF-02	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-02	11/14/2014	Potassium, Total	4.2	1	0.093	NA	mg/L
MKTF-02	11/14/2014	Magnesium, Total	16	1	0.018	NA	mg/L
MKTF-02	11/14/2014	Manganese, Total	0.51	0.002	0.00055	2017000	mg/L
MKTF-02	11/14/2014	Sodium, Total	760	10	3.9	NA	mg/L
MKTF-02	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-02	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-02	11/14/2014	Uranium, Total	0.059	0.01	0.0005	30000	mg/L
MKTF-02	11/14/2014	Zinc, Total	0.027	0.01	0.0014	5960000	mg/L
MKTF-02	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	3/11/2015	Arsenic, Total	0.0047	0.001	0.00011	10000	mg/L
MKTF-02	3/11/2015	Barium, Total	0.13	0.002	0.00095	2000000	mg/L
MKTF-02	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-02	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-02	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-02	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	3/11/2015	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
MKTF-02	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-02	3/11/2015	Selenium, Total	0.0084	0.001	0.00015	50000	mg/L
MKTF-02	3/11/2015	Uranium, Total	0.049	0.001	0.00005	30000	mg/L
MKTF-02	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-02	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-02	6/9/2015	Barium, Total	0.12	0.002	0.00095	2000000	mg/L
MKTF-02	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-02	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-02	6/9/2015	Iron, Total	0.21	0.02	0.0073	13822000	mg/L
MKTF-02	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	6/9/2015	Manganese, Total	0.56	0.002	0.00027	2017000	mg/L
MKTF-02	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-02	6/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-02	6/9/2015	Uranium, Total	0.032	0.005	0.000024	30000	mg/L
MKTF-02	6/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-02	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	8/21/2015	Arsenic, Total	0.0044	0.001	0.00029	10000	mg/L
MKTF-02	8/21/2015	Barium, Total	0.28	0.002	0.0011	2000000	mg/L
MKTF-02	8/21/2015	Calcium, Total	65	1	0.057	NA	mg/L
MKTF-02	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	8/21/2015	Chromium, Total	0.0073	0.006	0.0022	50000	mg/L
MKTF-02	8/21/2015	Copper, Total	0.0089	0.006	0.0051	790000	mg/L
MKTF-02	8/21/2015	Iron, Total	8.6	0.4	0.14	13822000	mg/L
MKTF-02	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	8/21/2015	Potassium, Total	2.8	1	0.18	NA	mg/L
MKTF-02	8/21/2015	Magnesium, Total	10	1	0.039	NA	mg/L
MKTF-02	8/21/2015	Manganese, Total	0.81	0.002	0.0015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/21/2015	Sodium, Total	610	10	0.72	NA	mg/L
MKTF-02	8/21/2015	Lead, Total	0.0088	0.0005	0.000047	15000	mg/L
MKTF-02	8/21/2015	Selenium, Total	0.0026	0.001	0.00012	50000	mg/L
MKTF-02	8/21/2015	Uranium, Total	0.05	0.005	0.000049	30000	mg/L
MKTF-02	8/21/2015	Zinc, Total	0.033	0.01	0.0039	5960000	mg/L
MKTF-02	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	11/4/2015	Arsenic, Total	0.0043	0.001	0.00029	10000	mg/L
MKTF-02	11/4/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-02	11/4/2015	Calcium, Total	48	1	0.26	NA	mg/L
MKTF-02	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-02	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-02	11/4/2015	Iron, Total	2.2	0.1	0.036	13822000	mg/L
MKTF-02	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-02	11/4/2015	Potassium, Total	3	1	0.18	NA	mg/L
MKTF-02	11/4/2015	Magnesium, Total	7.5	1	0.013	NA	mg/L
MKTF-02	11/4/2015	Manganese, Total	0.45	0.002	0.0015	2017000	mg/L
MKTF-02	11/4/2015	Sodium, Total	480	10	0.96	NA	mg/L
MKTF-02	11/4/2015	Lead, Total	0.0038	0.0005	0.000047	15000	mg/L
MKTF-02	11/4/2015	Selenium, Total	ND	0.05	0.00062	50000	mg/L
MKTF-02	11/4/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-02	11/4/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-02	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-02	2/24/2016	Arsenic, Total	0.0045	0.001	0.00029	10000	mg/L
MKTF-02	2/24/2016	Barium, Total	0.73	0.002	0.0011	2000000	mg/L
MKTF-02	2/24/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-02	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-02	2/24/2016	Chromium, Total	0.0098	0.006	0.0022	50000	mg/L
MKTF-02	2/24/2016	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-02	2/24/2016	Iron, Total	14	0.4	0.14	13822000	mg/L
MKTF-02	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	2/24/2016	Potassium, Total	3.1	1	0.18	NA	mg/L
MKTF-02	2/24/2016	Magnesium, Total	10	1	0.013	NA	mg/L
MKTF-02	2/24/2016	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
MKTF-02	2/24/2016	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-02	2/24/2016	Lead, Total	0.023	0.0025	0.00024	15000	mg/L
MKTF-02	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-02	2/24/2016	Uranium, Total	0.063	0.0025	0.000025	30000	mg/L
MKTF-02	2/24/2016	Zinc, Total	0.057	0.01	0.0039	5960000	mg/L
MKTF-02	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-02	6/10/2016	Arsenic, Total	0.0028	0.001	0.00014	10000	mg/L
MKTF-02	6/10/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
MKTF-02	6/10/2016	Calcium, Total	55	1	0.26	NA	mg/L
MKTF-02	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-02	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-02	6/10/2016	Iron, Total	0.081	0.02	0.0091	13822000	mg/L
MKTF-02	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	6/10/2016	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-02	6/10/2016	Magnesium, Total	8.9	1	0.013	NA	mg/L
MKTF-02	6/10/2016	Manganese, Total	0.33	0.002	0.00032	2017000	mg/L
MKTF-02	6/10/2016	Sodium, Total	550	10	0.96	NA	mg/L
MKTF-02	6/10/2016	Lead, Total	0.00049	0.0005	0.00017	15000	mg/L
MKTF-02	6/10/2016	Selenium, Total	0.0061	0.001	0.00021	50000	mg/L
MKTF-02	6/10/2016	Uranium, Total	0.033	0.0025	0.00026	30000	mg/L
MKTF-02	6/10/2016	Zinc, Total	0.0033	0.01	0.0028	5960000	mg/L
MKTF-02	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	9/7/2016	Arsenic, Total	0.0041	0.001	0.00021	10000	mg/L
MKTF-02	9/7/2016	Barium, Total	0.32	0.002	0.00079	2000000	mg/L
MKTF-02	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	9/7/2016	Chromium, Total	0.0054	0.006	0.0027	50000	mg/L
MKTF-02	9/7/2016	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-02	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-02	9/7/2016	Arsenic, Dissolved	0.0029	0.005	0.00069	10000	mg/L
MKTF-02	9/7/2016	Barium, Dissolved	0.16	0.002	0.0013	2000000	mg/L
MKTF-02	9/7/2016	Calcium, Dissolved	61	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-02	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-02	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	9/7/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
MKTF-02	9/7/2016	Potassium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Magnesium, Dissolved	9.9	1	0.5	NA	mg/L
MKTF-02	9/7/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
MKTF-02	9/7/2016	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-02	9/7/2016	Lead, Dissolved	0.0015	0.0005	0.00017	NA	mg/L
MKTF-02	9/7/2016	Selenium, Dissolved	0.0061	0.005	0.0011	50000	mg/L
MKTF-02	9/7/2016	Uranium, Dissolved	0.035	0.0025	0.00026	NA	mg/L
MKTF-02	9/7/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
MKTF-02	9/7/2016	Iron, Total	5.9	0.2	0.2	13822000	mg/L
MKTF-02	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	9/7/2016	Manganese, Total	0.65	0.002	0.00027	2017000	mg/L
MKTF-02	9/7/2016	Lead, Total	0.0089	0.0005	0.000081	15000	mg/L
MKTF-02	9/7/2016	Selenium, Total	0.0064	0.001	0.00019	50000	mg/L
MKTF-02	9/7/2016	Uranium, Total	0.038	0.0025	0.00087	30000	mg/L
MKTF-02	9/7/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-02	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	10/28/2016	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
MKTF-02	10/28/2016	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
MKTF-02	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-02	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-02	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-02	10/28/2016	Arsenic, Dissolved	0.003	0.001	0.00014	10000	mg/L
MKTF-02	10/28/2016	Barium, Dissolved	0.19	0.002	0.0013	2000000	mg/L
MKTF-02	10/28/2016	Calcium, Dissolved	67	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-02	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-02	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-02	10/28/2016	Iron, Dissolved	0.036	0.02	0.02	13821880	mg/L
MKTF-02	10/28/2016	Potassium, Dissolved	2.7	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Magnesium, Dissolved	11	1	0.5	NA	mg/L
MKTF-02	10/28/2016	Manganese, Dissolved	0.47	0.002	0.00032	2017400	mg/L
MKTF-02	10/28/2016	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-02	10/28/2016	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
MKTF-02	10/28/2016	Selenium, Dissolved	0.0064	0.001	0.00021	50000	mg/L
MKTF-02	10/28/2016	Uranium, Dissolved	0.024	0.0025	0.00026	NA	mg/L
MKTF-02	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-02	10/28/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-02	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-02	10/28/2016	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
MKTF-02	10/28/2016	Lead, Total	0.0027	0.0005	0.000081	15000	mg/L
MKTF-02	10/28/2016	Selenium, Total	0.0048	0.005	0.00094	50000	mg/L
MKTF-02	10/28/2016	Uranium, Total	0.026	0.0025	0.00087	30000	mg/L
MKTF-02	10/28/2016	Zinc, Total	0.038	0.01	0.0027	5960000	mg/L
MKTF-02	3/16/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-02	3/16/2017	Arsenic, Total	0.004	0.005	0.0011	10000	mg/L
MKTF-02	3/16/2017	Barium, Total	0.35	0.002	0.00079	2000000	mg/L
MKTF-02	3/16/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-02	3/16/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-02	3/16/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-02	3/16/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-02	3/16/2017	Arsenic, Dissolved	0.0016	0.001	0.00018	10000	mg/L
MKTF-02	3/16/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
MKTF-02	3/16/2017	Calcium, Dissolved	68	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	3/16/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-02	3/16/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	3/16/2017	Iron, Dissolved	0.089	0.02	0.02	13821880	mg/L
MKTF-02	3/16/2017	Potassium, Dissolved	2.1	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Magnesium, Dissolved	12	1	0.5	NA	mg/L
MKTF-02	3/16/2017	Manganese, Dissolved	0.67	0.002	0.00038	2017400	mg/L
MKTF-02	3/16/2017	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-02	3/16/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-02	3/16/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-02	3/16/2017	Uranium, Dissolved	0.024	0.0025	0.00025	NA	mg/L
MKTF-02	3/16/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-02	3/16/2017	Iron, Total	1.4	0.2	0.2	13822000	mg/L
MKTF-02	3/16/2017	Mercury, Total	ND	0.0002	0.00015	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Manganese, Total	0.74	0.002	0.00027	2017000	mg/L
MKTF-02	3/16/2017	Lead, Total	0.0017	0.0005	0.000081	15000	mg/L
MKTF-02	3/16/2017	Selenium, Total	0.0082	0.01	0.0019	50000	mg/L
MKTF-02	3/16/2017	Uranium, Total	0.024	0.0005	0.00017	30000	mg/L
MKTF-02	3/16/2017	Zinc, Total	0.0063	0.01	0.0027	5960000	mg/L
MKTF-02	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	10/3/2017	Arsenic, Total	0.0054	0.001	0.0003	10000	mg/L
MKTF-02	10/3/2017	Barium, Total	0.34	0.002	0.00093	2000000	mg/L
MKTF-02	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	10/3/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	10/3/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-02	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	10/3/2017	Arsenic, Dissolved	0.0058	0.005	0.00089	10000	mg/L
MKTF-02	10/3/2017	Barium, Dissolved	0.33	0.002	0.00085	2000000	mg/L
MKTF-02	10/3/2017	Calcium, Dissolved	56	1	0.078	NA	mg/L
MKTF-02	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	10/3/2017	Iron, Dissolved	1.5	0.2	0.16	13821880	mg/L
MKTF-02	10/3/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-02	10/3/2017	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-02	10/3/2017	Manganese, Dissolved	0.92	0.002	0.00039	2017400	mg/L
MKTF-02	10/3/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-02	10/3/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-02	10/3/2017	Selenium, Dissolved	0.0081	0.005	0.0019	50000	mg/L
MKTF-02	10/3/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-02	10/3/2017	Iron, Total	3	0.2	0.1	13822000	mg/L
MKTF-02	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	10/3/2017	Manganese, Total	0.91	0.002	0.0011	2017000	mg/L
MKTF-02	10/3/2017	Lead, Total	0.002	0.0005	0.000095	15000	mg/L
MKTF-02	10/3/2017	Selenium, Total	0.0056	0.001	0.00071	50000	mg/L
MKTF-02	10/3/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-02	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	11/20/2017	Arsenic, Total	0.0034	0.005	0.0021	10000	mg/L
MKTF-02	11/20/2017	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-02	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	11/20/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	11/20/2017	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L
MKTF-02	11/20/2017	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-02	11/20/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L
MKTF-02	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	11/20/2017	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-02	11/20/2017	Potassium, Dissolved	2.4	1	0.11	NA	mg/L
MKTF-02	11/20/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-02	11/20/2017	Manganese, Dissolved	0.56	0.002	0.00039	2017400	mg/L
MKTF-02	11/20/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-02	11/20/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-02	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	11/20/2017	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
MKTF-02	11/20/2017	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
MKTF-02	11/20/2017	Iron, Total	0.23	0.02	0.01	13822000	mg/L
MKTF-02	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	11/20/2017	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-02	11/20/2017	Lead, Total	0.00062	0.0005	0.00023	15000	mg/L
MKTF-02	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-02	11/20/2017	Uranium, Total	0.036	0.0025	0.00077	30000	mg/L
MKTF-02	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-02	2/6/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
MKTF-02	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	2/6/2018	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-02	2/6/2018	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-02	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	2/6/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-02	2/6/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-02	2/6/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	2/6/2018	Manganese, Dissolved	0.55	0.002	0.00039	2017400	mg/L
MKTF-02	2/6/2018	Sodium, Dissolved	620	10	1.6	NA	mg/L
MKTF-02	2/6/2018	Lead, Dissolved	0.00052	0.0005	0.00017	NA	mg/L
MKTF-02	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	2/6/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-02	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-02	2/6/2018	Iron, Total	0.57	0.02	0.01	13822000	mg/L
MKTF-02	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-02	2/6/2018	Manganese, Total	0.61	0.002	0.0011	2017000	mg/L
MKTF-02	2/6/2018	Lead, Total	0.0009	0.0005	0.00023	15000	mg/L
MKTF-02	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-02	2/6/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-02	2/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	5/1/2018	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-02	5/1/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-02	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	5/1/2018	Arsenic, Dissolved	0.0021	0.005	0.0021	10000	mg/L
MKTF-02	5/1/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-02	5/1/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-02	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	5/1/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-02	5/1/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-02	5/1/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	5/1/2018	Manganese, Dissolved	0.57	0.002	0.00039	2017400	mg/L
MKTF-02	5/1/2018	Sodium, Dissolved	650	10	1.6	NA	mg/L
MKTF-02	5/1/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
MKTF-02	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	5/1/2018	Uranium, Dissolved	0.024	0.0005	0.000096	NA	mg/L
MKTF-02	5/1/2018	Zinc, Dissolved	0.0051	0.01	0.0021	5960450	mg/L
MKTF-02	5/1/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
MKTF-02	5/1/2018	Mercury, Total	0.000053	0.0002	0.000037	2000	mg/L
MKTF-02	5/1/2018	Manganese, Total	0.62	0.002	0.0011	2017000	mg/L
MKTF-02	5/1/2018	Lead, Total	0.00065	0.0005	0.00023	15000	mg/L
MKTF-02	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-02	5/1/2018	Uranium, Total	0.023	0.0005	0.000068	30000	mg/L
MKTF-02	5/1/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-02	8/20/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-02	8/20/2018	Arsenic, Total	0.003	0.001	0.00041	10000	mg/L
MKTF-02	8/20/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-02	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	8/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	8/20/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-02	8/20/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-02	8/20/2018	Barium, Dissolved	0.27	0.002	0.00099	2000000	mg/L
MKTF-02	8/20/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-02	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	8/20/2018	Iron, Dissolved	0.027	0.02	0.016	13821880	mg/L
MKTF-02	8/20/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-02	8/20/2018	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-02	8/20/2018	Manganese, Dissolved	0.51	0.002	0.00039	2017400	mg/L
MKTF-02	8/20/2018	Sodium, Dissolved	740	20	3.3	NA	mg/L
MKTF-02	8/20/2018	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-02	8/20/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-02	8/20/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-02	8/20/2018	Iron, Total	0.2	0.02	0.01	13822000	mg/L
MKTF-02	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-02	8/20/2018	Manganese, Total	0.52	0.002	0.0011	2017000	mg/L
MKTF-02	8/20/2018	Lead, Total	0.00051	0.0005	0.00023	15000	mg/L
MKTF-02	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-02	8/20/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-02	8/20/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-02	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-02	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-02	11/28/2018	Barium, Total	0.44	0.002	0.001	2000000	mg/L
MKTF-02	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-02	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-02	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-02	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-02	11/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-02	11/28/2018	Barium, Dissolved	0.43	0.002	0.00099	2000000	mg/L
MKTF-02	11/28/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-02	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-02	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-02	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-02	11/28/2018	Iron, Dissolved	0.078	0.02	0.016	13821880	mg/L
MKTF-02	11/28/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-02	11/28/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-02	11/28/2018	Manganese, Dissolved	0.75	0.002	0.00039	2017400	mg/L
MKTF-02	11/28/2018	Sodium, Dissolved	690	10	1.6	NA	mg/L
MKTF-02	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-02	11/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-02	11/28/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-02	11/28/2018	Iron, Total	0.24	0.02	0.01	13822000	mg/L
MKTF-02	11/28/2018	Manganese, Total	0.74	0.002	0.0011	2017000	mg/L
MKTF-02	11/28/2018	Lead, Total	0.00059	0.0005	0.00023	15000	mg/L
MKTF-02	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-02	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	6/4/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-04	6/4/2014	Arsenic, Total	0.0078	0.005	0.00057	10000	mg/L
MKTF-04	6/4/2014	Barium, Total	1.9	0.01	0.0056	2000000	mg/L
MKTF-04	6/4/2014	Calcium, Total	120	5	0.27	NA	mg/L
MKTF-04	6/4/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-04	6/4/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-04	6/4/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-04	6/4/2014	Iron, Total	2.5	0.1	0.031	13822000	mg/L
MKTF-04	6/4/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	6/4/2014	Potassium, Total	5	1	0.24	NA	mg/L
MKTF-04	6/4/2014	Magnesium, Total	31	1	0.024	NA	mg/L
MKTF-04	6/4/2014	Manganese, Total	1.4	0.01	0.0027	2017000	mg/L
MKTF-04	6/4/2014	Sodium, Total	340	5	1.3	NA	mg/L
MKTF-04	6/4/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-04	6/4/2014	Selenium, Total	0.022	0.005	0.00074	50000	mg/L
MKTF-04	6/4/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-04	6/4/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-04	9/15/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-04	9/15/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-04	9/15/2014	Barium, Total	0.78	0.002	0.0011	2000000	mg/L
MKTF-04	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-04	9/15/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-04	9/15/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-04	9/15/2014	Iron, Total	3.6	0.1	0.031	13822000	mg/L
MKTF-04	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	9/15/2014	Manganese, Total	1.7	0.01	0.0027	2017000	mg/L
MKTF-04	9/15/2014	Lead, Total	0.0013	0.001	0.000059	15000	mg/L
MKTF-04	9/15/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-04	9/15/2014	Uranium, Total	0.018	0.001	0.00005	30000	mg/L
MKTF-04	9/15/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-04	11/13/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-04	11/13/2014	Arsenic, Total	0.006	0.005	0.00057	10000	mg/L
MKTF-04	11/13/2014	Barium, Total	1.3	0.01	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/13/2014	Calcium, Total	110	5	0.41	NA	mg/L
MKTF-04	11/13/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-04	11/13/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-04	11/13/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-04	11/13/2014	Iron, Total	4.7	0.1	0.031	13822000	mg/L
MKTF-04	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-04	11/13/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
MKTF-04	11/13/2014	Magnesium, Total	27	1	0.018	NA	mg/L
MKTF-04	11/13/2014	Manganese, Total	1.8	0.01	0.0027	2017000	mg/L
MKTF-04	11/13/2014	Sodium, Total	370	5	2	NA	mg/L
MKTF-04	11/13/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-04	11/13/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-04	11/13/2014	Uranium, Total	0.013	0.005	0.00025	30000	mg/L
MKTF-04	11/13/2014	Zinc, Total	0.01	0.01	0.0014	5960000	mg/L
MKTF-04	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-04	3/16/2015	Barium, Total	1.8	0.01	0.0037	2000000	mg/L
MKTF-04	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-04	3/16/2015	Chromium, Total	0.0092	0.006	0.0022	50000	mg/L
MKTF-04	3/16/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-04	3/16/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-04	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	3/16/2015	Manganese, Total	2.5	0.01	0.0076	2017000	mg/L
MKTF-04	3/16/2015	Lead, Total	0.022	0.001	0.000069	15000	mg/L
MKTF-04	3/16/2015	Selenium, Total	0.016	0.01	0.0012	50000	mg/L
MKTF-04	3/16/2015	Uranium, Total	0.017	0.001	0.0000081	30000	mg/L
MKTF-04	3/16/2015	Zinc, Total	0.03	0.01	0.0036	5960000	mg/L
MKTF-04	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-04	6/4/2015	Barium, Total	2.2	0.01	0.0048	2000000	mg/L
MKTF-04	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-04	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-04	6/4/2015	Iron, Total	8.6	0.4	0.15	13822000	mg/L
MKTF-04	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	6/4/2015	Manganese, Total	1.6	0.01	0.0013	2017000	mg/L
MKTF-04	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-04	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-04	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-04	6/4/2015	Zinc, Total	0.023	0.01	0.0028	5960000	mg/L
MKTF-04	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	8/18/2015	Arsenic, Total	0.0085	0.001	0.00029	10000	mg/L
MKTF-04	8/18/2015	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-04	8/18/2015	Calcium, Total	120	5	0.28	NA	mg/L
MKTF-04	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	8/18/2015	Copper, Total	0.0061	0.006	0.0051	790000	mg/L
MKTF-04	8/18/2015	Iron, Total	17	1	0.36	13822000	mg/L
MKTF-04	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	8/18/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-04	8/18/2015	Magnesium, Total	31	1	0.039	NA	mg/L
MKTF-04	8/18/2015	Manganese, Total	1.9	0.01	0.0076	2017000	mg/L
MKTF-04	8/18/2015	Sodium, Total	390	5	0.36	NA	mg/L
MKTF-04	8/18/2015	Lead, Total	0.017	0.0005	0.000047	15000	mg/L
MKTF-04	8/18/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-04	8/18/2015	Uranium, Total	0.0042	0.0005	0.0000049	30000	mg/L
MKTF-04	8/18/2015	Zinc, Total	0.025	0.01	0.0039	5960000	mg/L
MKTF-04	11/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	11/3/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-04	11/3/2015	Barium, Total	3.4	0.01	0.0053	2000000	mg/L
MKTF-04	11/3/2015	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-04	11/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	11/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	11/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	11/3/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-04	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-04	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-04	11/3/2015	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-04	11/3/2015	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/3/2015	Sodium, Total	390	5	0.48	NA	mg/L
MKTF-04	11/3/2015	Lead, Total	0.0063	0.0005	0.000047	15000	mg/L
MKTF-04	11/3/2015	Selenium, Total	0.016	0.005	0.00062	50000	mg/L
MKTF-04	11/3/2015	Uranium, Total	0.0019	0.0005	0.0000049	30000	mg/L
MKTF-04	11/3/2015	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-04	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	2/29/2016	Arsenic, Total	0.0081	0.005	0.0015	10000	mg/L
MKTF-04	2/29/2016	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-04	2/29/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-04	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	2/29/2016	Iron, Total	9.7	1	0.36	13822000	mg/L
MKTF-04	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-04	2/29/2016	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-04	2/29/2016	Manganese, Total	1.5	0.01	0.0076	2017000	mg/L
MKTF-04	2/29/2016	Sodium, Total	360	5	0.48	NA	mg/L
MKTF-04	2/29/2016	Lead, Total	0.0036	0.0025	0.00024	15000	mg/L
MKTF-04	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-04	2/29/2016	Uranium, Total	0.0042	0.0025	0.000025	30000	mg/L
MKTF-04	2/29/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-04	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-04	6/9/2016	Arsenic, Total	0.0089	0.001	0.00029	10000	mg/L
MKTF-04	6/9/2016	Barium, Total	3.1	0.01	0.0053	2000000	mg/L
MKTF-04	6/9/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-04	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-04	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-04	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-04	6/9/2016	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-04	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	6/9/2016	Potassium, Total	0.86	1	0.18	NA	mg/L
MKTF-04	6/9/2016	Magnesium, Total	28	1	0.013	NA	mg/L
MKTF-04	6/9/2016	Manganese, Total	1.7	0.01	0.0076	2017000	mg/L
MKTF-04	6/9/2016	Sodium, Total	330	5	0.48	NA	mg/L
MKTF-04	6/9/2016	Lead, Total	0.0019	0.0005	0.000047	15000	mg/L
MKTF-04	6/9/2016	Selenium, Total	0.0098	0.01	0.0012	50000	mg/L
MKTF-04	6/9/2016	Uranium, Total	0.0048	0.0005	0.0000049	30000	mg/L
MKTF-04	6/9/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-04	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-04	9/11/2016	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
MKTF-04	9/11/2016	Barium, Total	3.4	0.01	0.004	2000000	mg/L
MKTF-04	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-04	9/11/2016	Arsenic, Dissolved	0.011	0.001	0.00014	10000	mg/L
MKTF-04	9/11/2016	Barium, Dissolved	2.6	0.01	0.0066	2000000	mg/L
MKTF-04	9/11/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-04	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-04	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-04	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-04	9/11/2016	Iron, Dissolved	1.2	0.1	0.1	13821880	mg/L
MKTF-04	9/11/2016	Potassium, Dissolved	0.72	1	0.5	NA	mg/L
MKTF-04	9/11/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-04	9/11/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
MKTF-04	9/11/2016	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-04	9/11/2016	Lead, Dissolved	0.00033	0.0005	0.00017	NA	mg/L
MKTF-04	9/11/2016	Selenium, Dissolved	0.014	0.02	0.0042	50000	mg/L
MKTF-04	9/11/2016	Uranium, Dissolved	0.0037	0.0005	0.000051	NA	mg/L
MKTF-04	9/11/2016	Zinc, Dissolved	0.003	0.01	0.0028	5960450	mg/L
MKTF-04	9/11/2016	Iron, Total	6.7	0.2	0.2	13822000	mg/L
MKTF-04	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	9/11/2016	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-04	9/11/2016	Lead, Total	0.003	0.0005	0.000081	15000	mg/L
MKTF-04	9/11/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-04	9/11/2016	Uranium, Total	0.0028	0.0005	0.00017	30000	mg/L
MKTF-04	9/11/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
MKTF-04	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/2/2016	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
MKTF-04	11/2/2016	Barium, Total	2.8	0.02	0.0079	2000000	mg/L
MKTF-04	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-04	11/2/2016	Arsenic, Dissolved	0.01	0.005	0.00069	10000	mg/L
MKTF-04	11/2/2016	Barium, Dissolved	2.7	0.01	0.0066	2000000	mg/L
MKTF-04	11/2/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-04	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-04	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-04	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-04	11/2/2016	Iron, Dissolved	1.7	0.1	0.1	13821880	mg/L
MKTF-04	11/2/2016	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
MKTF-04	11/2/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-04	11/2/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
MKTF-04	11/2/2016	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-04	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	11/2/2016	Selenium, Dissolved	0.011	0.02	0.0042	50000	mg/L
MKTF-04	11/2/2016	Uranium, Dissolved	0.0031	0.0005	0.000051	NA	mg/L
MKTF-04	11/2/2016	Zinc, Dissolved	0.0057	0.01	0.0028	5960450	mg/L
MKTF-04	11/2/2016	Iron, Total	4.6	0.2	0.2	13822000	mg/L
MKTF-04	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-04	11/2/2016	Manganese, Total	1.5	0.02	0.0027	2017000	mg/L
MKTF-04	11/2/2016	Lead, Total	0.00063	0.0005	0.000081	15000	mg/L
MKTF-04	11/2/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-04	11/2/2016	Uranium, Total	0.0041	0.0005	0.00017	30000	mg/L
MKTF-04	11/2/2016	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L
MKTF-04	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-04	3/2/2017	Arsenic, Total	0.012	0.005	0.0011	10000	mg/L
MKTF-04	3/2/2017	Barium, Total	3.2	0.01	0.004	2000000	mg/L
MKTF-04	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-04	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-04	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-04	3/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-04	3/2/2017	Arsenic, Dissolved	0.012	0.005	0.00069	10000	mg/L
MKTF-04	3/2/2017	Barium, Dissolved	3	0.01	0.0043	2000000	mg/L
MKTF-04	3/2/2017	Calcium, Dissolved	120	5	2.5	NA	mg/L
MKTF-04	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-04	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	3/2/2017	Iron, Dissolved	4.8	0.1	0.1	13821880	mg/L
MKTF-04	3/2/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-04	3/2/2017	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-04	3/2/2017	Manganese, Dissolved	1.4	0.01	0.0019	2017400	mg/L
MKTF-04	3/2/2017	Sodium, Dissolved	330	5	2.5	NA	mg/L
MKTF-04	3/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	3/2/2017	Selenium, Dissolved	0.01	0.02	0.0042	50000	mg/L
MKTF-04	3/2/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
MKTF-04	3/2/2017	Iron, Total	8.2	0.2	0.2	13822000	mg/L
MKTF-04	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-04	3/2/2017	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-04	3/2/2017	Lead, Total	0.0019	0.0025	0.00041	15000	mg/L
MKTF-04	3/2/2017	Selenium, Total	0.01	0.005	0.00094	50000	mg/L
MKTF-04	3/2/2017	Zinc, Total	0.0087	0.01	0.0027	5960000	mg/L
MKTF-04	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-04	6/8/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
MKTF-04	6/8/2017	Barium, Total	3	0.02	0.0093	2000000	mg/L
MKTF-04	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-04	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-04	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-04	6/8/2017	Arsenic, Dissolved	0.0097	0.005	0.00089	10000	mg/L
MKTF-04	6/8/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-04	6/8/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-04	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-04	6/8/2017	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
MKTF-04	6/8/2017	Iron, Dissolved	0.81	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	6/8/2017	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-04	6/8/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-04	6/8/2017	Manganese, Dissolved	1.4	0.02	0.0038	2017400	mg/L
MKTF-04	6/8/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
MKTF-04	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	6/8/2017	Selenium, Dissolved	0.0091	0.02	0.0077	50000	mg/L
MKTF-04	6/8/2017	Uranium, Dissolved	0.0034	0.0005	0.00005	NA	mg/L
MKTF-04	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-04	6/8/2017	Iron, Total	5	0.2	0.1	13822000	mg/L
MKTF-04	6/8/2017	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-04	6/8/2017	Manganese, Total	1.5	0.02	0.011	2017000	mg/L
MKTF-04	6/8/2017	Lead, Total	0.0012	0.0005	0.000095	15000	mg/L
MKTF-04	6/8/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
MKTF-04	6/8/2017	Uranium, Total	0.0035	0.0005	0.00015	30000	mg/L
MKTF-04	6/8/2017	Zinc, Total	0.005	0.01	0.0028	5960000	mg/L
MKTF-04	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	9/26/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-04	9/26/2017	Barium, Total	3.8	0.01	0.0047	2000000	mg/L
MKTF-04	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-04	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	9/26/2017	Arsenic, Dissolved	0.017	0.005	0.00089	10000	mg/L
MKTF-04	9/26/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-04	9/26/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-04	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	9/26/2017	Iron, Dissolved	7.6	0.2	0.16	13821880	mg/L
MKTF-04	9/26/2017	Potassium, Dissolved	0.41	1	0.11	NA	mg/L
MKTF-04	9/26/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-04	9/26/2017	Manganese, Dissolved	1.4	0.02	0.0039	2017400	mg/L
MKTF-04	9/26/2017	Sodium, Dissolved	360	10	1.6	NA	mg/L
MKTF-04	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	9/26/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-04	9/26/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-04	9/26/2017	Iron, Total	9.4	0.2	0.1	13822000	mg/L
MKTF-04	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	9/26/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
MKTF-04	9/26/2017	Lead, Total	0.0018	0.0005	0.000095	15000	mg/L
MKTF-04	9/26/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-04	9/26/2017	Zinc, Total	0.0045	0.01	0.0033	5960000	mg/L
MKTF-04	11/28/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-04	11/28/2017	Arsenic, Total	0.015	0.005	0.0021	10000	mg/L
MKTF-04	11/28/2017	Barium, Total	3.5	0.01	0.005	2000000	mg/L
MKTF-04	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	11/28/2017	Arsenic, Dissolved	0.0098	0.01	0.0042	10000	mg/L
MKTF-04	11/28/2017	Barium, Dissolved	3.1	0.01	0.0049	2000000	mg/L
MKTF-04	11/28/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-04	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	11/28/2017	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
MKTF-04	11/28/2017	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-04	11/28/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-04	11/28/2017	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
MKTF-04	11/28/2017	Sodium, Dissolved	340	5	0.82	NA	mg/L
MKTF-04	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-04	11/28/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-04	11/28/2017	Uranium, Dissolved	0.0017	0.0025	0.00048	NA	mg/L
MKTF-04	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-04	11/28/2017	Iron, Total	7	0.2	0.1	13822000	mg/L
MKTF-04	11/28/2017	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
MKTF-04	11/28/2017	Lead, Total	0.00041	0.0005	0.00023	15000	mg/L
MKTF-04	11/28/2017	Selenium, Total	0.0062	0.005	0.0049	50000	mg/L
MKTF-04	11/28/2017	Uranium, Total	0.0019	0.0025	0.00077	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	2/14/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-04	2/14/2018	Arsenic, Total	0.0069	0.005	0.0021	10000	mg/L
MKTF-04	2/14/2018	Barium, Total	2.8	0.01	0.005	2000000	mg/L
MKTF-04	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	2/14/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-04	2/14/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-04	2/14/2018	Barium, Dissolved	2.8	0.01	0.0049	2000000	mg/L
MKTF-04	2/14/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-04	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	2/14/2018	Iron, Dissolved	1.9	0.1	0.082	13821880	mg/L
MKTF-04	2/14/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-04	2/14/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-04	2/14/2018	Manganese, Dissolved	1.5	0.01	0.002	2017400	mg/L
MKTF-04	2/14/2018	Sodium, Dissolved	340	5	0.82	NA	mg/L
MKTF-04	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	2/14/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-04	2/14/2018	Uranium, Dissolved	0.0044	0.0005	0.000096	NA	mg/L
MKTF-04	2/14/2018	Zinc, Dissolved	0.0082	0.01	0.0021	5960450	mg/L
MKTF-04	2/14/2018	Iron, Total	5.2	0.2	0.1	13822000	mg/L
MKTF-04	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	2/14/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
MKTF-04	2/14/2018	Lead, Total	0.0007	0.0005	0.00023	15000	mg/L
MKTF-04	2/14/2018	Selenium, Total	0.0083	0.005	0.0049	50000	mg/L
MKTF-04	2/14/2018	Uranium, Total	0.0042	0.0005	0.000068	30000	mg/L
MKTF-04	2/14/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	5/2/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-04	5/2/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
MKTF-04	5/2/2018	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-04	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	5/2/2018	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
MKTF-04	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	5/2/2018	Arsenic, Dissolved	0.01	0.001	0.00042	10000	mg/L
MKTF-04	5/2/2018	Barium, Dissolved	2.6	0.01	0.0049	2000000	mg/L
MKTF-04	5/2/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-04	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	5/2/2018	Iron, Dissolved	2.4	0.1	0.082	13821880	mg/L
MKTF-04	5/2/2018	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
MKTF-04	5/2/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-04	5/2/2018	Manganese, Dissolved	1.5	0.01	0.002	2017400	mg/L
MKTF-04	5/2/2018	Sodium, Dissolved	370	5	0.82	NA	mg/L
MKTF-04	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	5/2/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-04	5/2/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
MKTF-04	5/2/2018	Iron, Total	5.3	0.2	0.1	13822000	mg/L
MKTF-04	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-04	5/2/2018	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-04	5/2/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
MKTF-04	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	5/2/2018	Uranium, Total	0.004	0.0005	0.000068	30000	mg/L
MKTF-04	5/2/2018	Zinc, Total	0.0062	0.01	0.0033	5960000	mg/L
MKTF-04	9/4/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-04	9/4/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-04	9/4/2018	Barium, Total	2.9	0.02	0.01	2000000	mg/L
MKTF-04	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	9/4/2018	Silver, Dissolved	0.0031	0.005	0.0018	81200	mg/L
MKTF-04	9/4/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-04	9/4/2018	Barium, Dissolved	3.1	0.02	0.0099	2000000	mg/L
MKTF-04	9/4/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	9/4/2018	Iron, Dissolved	3.2	0.2	0.16	13821880	mg/L
MKTF-04	9/4/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-04	9/4/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-04	9/4/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-04	9/4/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-04	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	9/4/2018	Uranium, Dissolved	0.0032	0.0005	0.000096	NA	mg/L
MKTF-04	9/4/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-04	9/4/2018	Iron, Total	5.7	0.2	0.1	13822000	mg/L
MKTF-04	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	9/4/2018	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-04	9/4/2018	Lead, Total	0.00055	0.0005	0.00023	15000	mg/L
MKTF-04	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	9/4/2018	Uranium, Total	0.0041	0.0025	0.00034	30000	mg/L
MKTF-04	9/4/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
MKTF-04	11/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-04	11/20/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-04	11/20/2018	Barium, Total	4.1	0.01	0.005	2000000	mg/L
MKTF-04	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-04	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-04	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-04	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-04	11/20/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-04	11/20/2018	Barium, Dissolved	2.6	0.02	0.0099	2000000	mg/L
MKTF-04	11/20/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-04	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-04	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-04	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-04	11/20/2018	Iron, Dissolved	1	0.2	0.16	13821880	mg/L
MKTF-04	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-04	11/20/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-04	11/20/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-04	11/20/2018	Sodium, Dissolved	350	10	1.6	NA	mg/L
MKTF-04	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-04	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-04	11/20/2018	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
MKTF-04	11/20/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-04	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	11/20/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-04	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-04	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-04	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-04	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Dissolved	0.0075	0.001	0.000101	10000	mg/L
MKTF-04	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Dissolved	0.56	0.04	0.004531	3949110	mg/L
MKTF-04	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	8/21/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-04	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-04	8/21/2019	Iron, Dissolved	1.4	0.1	0.043734	13821880	mg/L
MKTF-04	8/21/2019	Lead, Dissolved	0.000057	0.0005	0.000055	NA	mg/L
MKTF-04	8/21/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-04	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-04	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Dissolved	0.0094	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Potassium, Dissolved	0.96	1	0.162288	NA	mg/L
MKTF-04	8/21/2019	Selenium, Dissolved	0.00046	0.001	0.000171	50000	mg/L
MKTF-04	8/21/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-04	8/21/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	8/21/2019	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	8/21/2019	Zinc, Dissolved	0.0055	0.01	0.002252	5960450	mg/L
MKTF-04	8/21/2019	Aluminum, Total	6.4	0.4	0.049765	19914000	mg/L
MKTF-04	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-04	8/21/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Total	0.0004	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-04	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	8/21/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-04	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	8/21/2019	Iron, Total	4.1	0.1	0.043734	13822000	mg/L
MKTF-04	8/21/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-04	8/21/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-04	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Selenium, Total	0.00089	0.001	0.000478	50000	mg/L
MKTF-04	8/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-04	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	8/21/2019	Uranium, Total	0.0076	0.0005	0.000085	30000	mg/L
MKTF-04	8/21/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-04	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	8/21/2019	Antimony, Dissolved	0.00048	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Dissolved	0.0072	0.001	0.000101	10000	mg/L
MKTF-04	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-04	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	8/21/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-04	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-04	8/21/2019	Iron, Dissolved	1.5	0.1	0.043734	13821880	mg/L
MKTF-04	8/21/2019	Lead, Dissolved	0.000072	0.0005	0.000055	NA	mg/L
MKTF-04	8/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-04	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-04	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Dissolved	0.0062	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Potassium, Dissolved	0.97	1	0.162288	NA	mg/L
MKTF-04	8/21/2019	Selenium, Dissolved	0.0006	0.001	0.000171	50000	mg/L
MKTF-04	8/21/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-04	8/21/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	8/21/2019	Uranium, Dissolved	0.0075	0.0005	0.000075	NA	mg/L
MKTF-04	8/21/2019	Zinc, Dissolved	0.0046	0.01	0.002252	5960450	mg/L
MKTF-04	8/21/2019	Aluminum, Total	10	0.4	0.049765	19914000	mg/L
MKTF-04	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	8/21/2019	Arsenic, Total	0.0084	0.001	0.000312	10000	mg/L
MKTF-04	8/21/2019	Barium, Total	2	0.01	0.003242	2000000	mg/L
MKTF-04	8/21/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-04	8/21/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-04	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	8/21/2019	Chromium, Total	0.0042	0.006	0.001533	50000	mg/L
MKTF-04	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	8/21/2019	Copper, Total	0.0055	0.006	0.004072	790000	mg/L
MKTF-04	8/21/2019	Iron, Total	5.9	0.4	0.174937	13822000	mg/L
MKTF-04	8/21/2019	Lead, Total	0.0064	0.0005	0.000055	15000	mg/L
MKTF-04	8/21/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-04	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	8/21/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-04	8/21/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-04	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-04	8/21/2019	Thallium, Total	0.000054	0.0005	0.000052	2000	mg/L
MKTF-04	8/21/2019	Uranium, Total	0.0084	0.0005	0.000085	30000	mg/L
MKTF-04	8/21/2019	Zinc, Total	0.0094	0.01	0.005772	5960000	mg/L
MKTF-04	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-04	3/3/2020	Arsenic, Dissolved	0.005	0.001	0.0001	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/3/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-04	3/3/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
MKTF-04	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	3/3/2020	Uranium, Dissolved	0.0056	0.0005	0.000075	NA	mg/L
MKTF-04	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-04	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-04	3/3/2020	Boron, Dissolved	0.41	0.04	0.0045	3949110	mg/L
MKTF-04	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-04	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-04	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-04	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-04	3/3/2020	Magnesium, Dissolved	28	1	0.05	NA	mg/L
MKTF-04	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-04	3/3/2020	Nickel, Dissolved	0.005	0.01	0.004	372000	mg/L
MKTF-04	3/3/2020	Potassium, Dissolved	0.65	1	0.16	NA	mg/L
MKTF-04	3/3/2020	Silver, Dissolved	0.0016	0.005	0.00094	81200	mg/L
MKTF-04	3/3/2020	Zinc, Dissolved	0.014	0.01	0.0023	5960450	mg/L
MKTF-04	3/3/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
MKTF-04	3/3/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
MKTF-04	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-04	3/3/2020	Sodium, Dissolved	370	5	2.1	NA	mg/L
MKTF-04	3/3/2020	Manganese, Dissolved	1.8	0.01	0.0014	2017400	mg/L
MKTF-04	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-04	3/3/2020	Boron, Total	0.49	0.04	0.0045	3949	mg/L
MKTF-04	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-04	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-04	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-04	3/3/2020	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-04	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-04	3/3/2020	Nickel, Total	0.007	0.01	0.004	372000	mg/L
MKTF-04	3/3/2020	Silver, Total	0.0026	0.005	0.0014	50000	mg/L
MKTF-04	3/3/2020	Zinc, Total	0.0079	0.01	0.0058	5960000	mg/L
MKTF-04	3/3/2020	Aluminum, Total	1.3	0.1	0.012	19914000	mg/L
MKTF-04	3/3/2020	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
MKTF-04	3/3/2020	Barium, Total	2.8	0.02	0.0065	2000000	mg/L
MKTF-04	3/3/2020	Iron, Total	6	0.2	0.087	13822000	mg/L
MKTF-04	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-04	3/3/2020	Arsenic, Total	0.0092	0.001	0.00031	10000	mg/L
MKTF-04	3/3/2020	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-04	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-04	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	3/3/2020	Uranium, Total	0.0081	0.0005	0.000085	30000	mg/L
MKTF-04	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-04	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Dissolved	0.0099	0.001	0.000101	10000	mg/L
MKTF-04	10/30/2019	Barium, Dissolved	3.2	0.01	0.003242	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Dissolved	0.56	0.04	0.004531	3949110	mg/L
MKTF-04	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	10/30/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-04	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-04	10/30/2019	Iron, Dissolved	4.9	0.1	0.043734	13821880	mg/L
MKTF-04	10/30/2019	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-04	10/30/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-04	10/30/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
MKTF-04	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
MKTF-04	10/30/2019	Selenium, Dissolved	0.00043	0.001	0.000171	50000	mg/L
MKTF-04	10/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-04	10/30/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-04	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	10/30/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-04	10/30/2019	Aluminum, Total	0.79	0.02	0.002488	19914000	mg/L
MKTF-04	10/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Total	0.01	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	10/30/2019	Barium, Total	3.6	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Total	0.61	0.04	0.004531	3949	mg/L
MKTF-04	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	10/30/2019	Iron, Total	7.4	0.2	0.087469	13822000	mg/L
MKTF-04	10/30/2019	Lead, Total	0.0005	0.0005	0.000055	15000	mg/L
MKTF-04	10/30/2019	Manganese, Total	1.6	0.02	0.002899	2017000	mg/L
MKTF-04	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Total	0.008	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-04	10/30/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-04	10/30/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Dissolved	0.0098	0.001	0.000101	10000	mg/L
MKTF-04	10/30/2019	Barium, Dissolved	3.4	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
MKTF-04	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	10/30/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
MKTF-04	10/30/2019	Iron, Dissolved	5.4	0.2	0.087469	13821880	mg/L
MKTF-04	10/30/2019	Lead, Dissolved	0.000072	0.0005	0.000055	NA	mg/L
MKTF-04	10/30/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-04	10/30/2019	Manganese, Dissolved	1.5	0.02	0.002899	2017400	mg/L
MKTF-04	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Dissolved	0.007	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-04	10/30/2019	Selenium, Dissolved	0.00035	0.001	0.000171	50000	mg/L
MKTF-04	10/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-04	10/30/2019	Sodium, Dissolved	350	10	4.161763	NA	mg/L
MKTF-04	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-04	10/30/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
MKTF-04	10/30/2019	Aluminum, Total	1.3	0.1	0.012441	19914000	mg/L
MKTF-04	10/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	10/30/2019	Arsenic, Total	0.0097	0.005	0.001561	10000	mg/L
MKTF-04	10/30/2019	Barium, Total	3.6	0.02	0.006484	2000000	mg/L
MKTF-04	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	10/30/2019	Boron, Total	0.57	0.2	0.022653	3949	mg/L
MKTF-04	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	10/30/2019	Iron, Total	7.6	0.2	0.087469	13822000	mg/L
MKTF-04	10/30/2019	Lead, Total	0.00052	0.0025	0.000274	15000	mg/L
MKTF-04	10/30/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	10/30/2019	Nickel, Total	0.0077	0.01	0.004009	372000	mg/L
MKTF-04	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-04	10/30/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-04	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-04	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Dissolved	0.0081	0.005	0.000504	10000	mg/L
MKTF-04	5/13/2019	Barium, Dissolved	3.3	0.02	0.006484	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-04	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	5/13/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-04	5/13/2019	Iron, Dissolved	4.5	0.2	0.087469	13821880	mg/L
MKTF-04	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-04	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-04	5/13/2019	Manganese, Dissolved	1.6	0.02	0.002899	2017400	mg/L
MKTF-04	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Potassium, Dissolved	0.46	1	0.162288	NA	mg/L
MKTF-04	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-04	5/13/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-04	5/13/2019	Sodium, Dissolved	360	10	4.161763	NA	mg/L
MKTF-04	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-04	5/13/2019	Uranium, Dissolved	0.0018	0.0025	0.000374	NA	mg/L
MKTF-04	5/13/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-04	5/13/2019	Aluminum, Total	1.2	0.04	0.004977	19914000	mg/L
MKTF-04	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Total	0.0086	0.001	0.000312	10000	mg/L
MKTF-04	5/13/2019	Barium, Total	3.4	0.01	0.003242	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-04	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	5/13/2019	Iron, Total	8	0.2	0.087469	13822000	mg/L
MKTF-04	5/13/2019	Lead, Total	0.0008	0.0005	0.000055	15000	mg/L
MKTF-04	5/13/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Total	0.008	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Selenium, Total	0.00073	0.001	0.000478	50000	mg/L
MKTF-04	5/13/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-04	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	5/13/2019	Uranium, Total	0.0017	0.0005	0.000085	30000	mg/L
MKTF-04	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-04	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-04	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Dissolved	0.0077	0.005	0.000504	10000	mg/L
MKTF-04	5/13/2019	Barium, Dissolved	3.2	0.02	0.006484	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-04	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-04	5/13/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-04	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-04	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-04	5/13/2019	Copper, Dissolved	0.003	0.006	0.001296	790000	mg/L
MKTF-04	5/13/2019	Iron, Dissolved	4.2	0.2	0.087469	13821880	mg/L
MKTF-04	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-04	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-04	5/13/2019	Manganese, Dissolved	1.6	0.02	0.002899	2017400	mg/L
MKTF-04	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Dissolved	0.0097	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Potassium, Dissolved	0.51	1	0.162288	NA	mg/L
MKTF-04	5/13/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-04	5/13/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-04	5/13/2019	Sodium, Dissolved	360	10	4.161763	NA	mg/L
MKTF-04	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-04	5/13/2019	Uranium, Dissolved	0.0019	0.0025	0.000374	NA	mg/L
MKTF-04	5/13/2019	Zinc, Dissolved	0.038	0.01	0.002252	5960450	mg/L
MKTF-04	5/13/2019	Aluminum, Total	1.6	0.1	0.012441	19914000	mg/L
MKTF-04	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-04	5/13/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-04	5/13/2019	Barium, Total	3.3	0.01	0.003242	2000000	mg/L
MKTF-04	5/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-04	5/13/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
MKTF-04	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-04	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-04	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-04	5/13/2019	Iron, Total	7.3	0.2	0.087469	13822000	mg/L
MKTF-04	5/13/2019	Lead, Total	0.00065	0.0005	0.000055	15000	mg/L
MKTF-04	5/13/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
MKTF-04	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-04	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-04	5/13/2019	Nickel, Total	0.0079	0.01	0.004009	372000	mg/L
MKTF-04	5/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-04	5/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-04	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-04	5/13/2019	Uranium, Total	0.0016	0.0005	0.000085	30000	mg/L
MKTF-04	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	5/13/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
MKTF-09	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-09	5/13/2019	Arsenic, Dissolved	0.0025	0.005	0.000504	10000	mg/L
MKTF-09	5/13/2019	Barium, Dissolved	0.69	0.002	0.000648	2000000	mg/L
MKTF-09	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	5/13/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
MKTF-09	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	5/13/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-09	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	5/13/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
MKTF-09	5/13/2019	Iron, Dissolved	3.2	0.1	0.043734	13821880	mg/L
MKTF-09	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-09	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-09	5/13/2019	Manganese, Dissolved	4.6	0.01	0.00145	2017400	mg/L
MKTF-09	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-09	5/13/2019	Nickel, Dissolved	0.0099	0.01	0.004009	372000	mg/L
MKTF-09	5/13/2019	Potassium, Dissolved	0.49	1	0.162288	NA	mg/L
MKTF-09	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-09	5/13/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-09	5/13/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-09	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-09	5/13/2019	Uranium, Dissolved	0.0017	0.0025	0.000374	NA	mg/L
MKTF-09	5/13/2019	Zinc, Dissolved	0.059	0.01	0.002252	5960450	mg/L
MKTF-09	5/13/2019	Aluminum, Total	2.9	0.1	0.012441	19914000	mg/L
MKTF-09	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	5/13/2019	Arsenic, Total	0.0025	0.001	0.000312	10000	mg/L
MKTF-09	5/13/2019	Barium, Total	0.72	0.002	0.000648	2000000	mg/L
MKTF-09	5/13/2019	Beryllium, Total	0.00047	0.002	0.000284	4000	mg/L
MKTF-09	5/13/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-09	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	5/13/2019	Iron, Total	3.8	0.1	0.043734	13822000	mg/L
MKTF-09	5/13/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-09	5/13/2019	Manganese, Total	4.8	0.01	0.00145	2017000	mg/L
MKTF-09	5/13/2019	Mercury, Total	0.00004	0.0002	0.000038	2000	mg/L
MKTF-09	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	5/13/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-09	5/13/2019	Selenium, Total	0.00062	0.001	0.000478	50000	mg/L
MKTF-09	5/13/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-09	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	5/13/2019	Uranium, Total	0.0017	0.0005	0.000085	30000	mg/L
MKTF-09	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	11/18/2019	Aluminum, Dissolved	0.034	0.02	0.002488	19913930	mg/L
MKTF-09	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-09	11/18/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
MKTF-09	11/18/2019	Barium, Dissolved	0.67	0.002	0.000648	2000000	mg/L
MKTF-09	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	11/18/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-09	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	11/18/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
MKTF-09	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-09	11/18/2019	Iron, Dissolved	2.4	0.1	0.043734	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/18/2019	Lead, Dissolved	0.000064	0.0005	0.000055	NA	mg/L
MKTF-09	11/18/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-09	11/18/2019	Manganese, Dissolved	4.2	0.01	0.00145	2017400	mg/L
MKTF-09	11/18/2019	Molybdenum, Dissolved	0.0068	0.008	0.006735	98700	mg/L
MKTF-09	11/18/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-09	11/18/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-09	11/18/2019	Selenium, Dissolved	0.00028	0.001	0.000171	50000	mg/L
MKTF-09	11/18/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-09	11/18/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
MKTF-09	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	11/18/2019	Uranium, Dissolved	0.0063	0.0005	0.000075	NA	mg/L
MKTF-09	11/18/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
MKTF-09	11/18/2019	Aluminum, Total	1.1	0.2	0.024883	19914000	mg/L
MKTF-09	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	11/18/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
MKTF-09	11/18/2019	Barium, Total	0.69	0.002	0.000648	2000000	mg/L
MKTF-09	11/18/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
MKTF-09	11/18/2019	Boron, Total	0.41	0.04	0.004531	3949	mg/L
MKTF-09	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	11/18/2019	Iron, Total	3.4	0.2	0.087469	13822000	mg/L
MKTF-09	11/18/2019	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
MKTF-09	11/18/2019	Manganese, Total	4.3	0.02	0.002899	2017000	mg/L
MKTF-09	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
MKTF-09	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	11/18/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-09	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-09	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
MKTF-09	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	11/18/2019	Uranium, Total	0.0063	0.0005	0.000085	30000	mg/L
MKTF-09	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	8/28/2019	Aluminum, Total	0.32	0.02	0.002488	19914000	mg/L
MKTF-09	8/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-09	8/28/2019	Arsenic, Total	0.00086	0.001	0.000312	10000	mg/L
MKTF-09	8/28/2019	Barium, Total	0.52	0.002	0.000648	2000000	mg/L
MKTF-09	8/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-09	8/28/2019	Boron, Total	0.37	0.04	0.004531	3949	mg/L
MKTF-09	8/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-09	8/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-09	8/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-09	8/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-09	8/28/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-09	8/28/2019	Lead, Total	0.00084	0.0005	0.000055	15000	mg/L
MKTF-09	8/28/2019	Manganese, Total	4.5	0.01	0.00145	2017000	mg/L
MKTF-09	8/28/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-09	8/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-09	8/28/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-09	8/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-09	8/28/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-09	8/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	8/28/2019	Uranium, Total	0.0012	0.0005	0.000085	30000	mg/L
MKTF-09	8/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-09	8/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-09	8/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-09	8/28/2019	Arsenic, Dissolved	0.0008	0.001	0.000101	10000	mg/L
MKTF-09	8/28/2019	Barium, Dissolved	0.51	0.002	0.000648	2000000	mg/L
MKTF-09	8/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-09	8/28/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
MKTF-09	8/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-09	8/28/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-09	8/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-09	8/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-09	8/28/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
MKTF-09	8/28/2019	Iron, Dissolved	3.8	0.1	0.043734	13821880	mg/L
MKTF-09	8/28/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
MKTF-09	8/28/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-09	8/28/2019	Manganese, Dissolved	4.4	0.01	0.00145	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-09	8/28/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
MKTF-09	8/28/2019	Potassium, Dissolved	0.24	1	0.162288	NA	mg/L
MKTF-09	8/28/2019	Selenium, Dissolved	0.00025	0.001	0.000171	50000	mg/L
MKTF-09	8/28/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-09	8/28/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-09	8/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	8/28/2019	Uranium, Dissolved	0.0013	0.0005	0.000075	NA	mg/L
MKTF-09	8/28/2019	Zinc, Dissolved	0.0085	0.01	0.002252	5960450	mg/L
MKTF-09	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Dissolved	0.0016	0.001	0.0001	10000	mg/L
MKTF-09	3/3/2020	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-09	3/3/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-09	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	3/3/2020	Uranium, Dissolved	0.0085	0.0005	0.000075	NA	mg/L
MKTF-09	3/3/2020	Manganese, Dissolved	3.9	0.01	0.0014	2017400	mg/L
MKTF-09	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-09	3/3/2020	Barium, Dissolved	0.52	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-09	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-09	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-09	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-09	3/3/2020	Magnesium, Dissolved	32	1	0.05	NA	mg/L
MKTF-09	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Dissolved	0.0099	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Potassium, Dissolved	0.48	1	0.16	NA	mg/L
MKTF-09	3/3/2020	Silver, Dissolved	0.0021	0.005	0.00094	81200	mg/L
MKTF-09	3/3/2020	Zinc, Dissolved	0.0067	0.01	0.0023	5960450	mg/L
MKTF-09	3/3/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-09	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-09	3/3/2020	Sodium, Dissolved	260	5	2.1	NA	mg/L
MKTF-09	3/3/2020	Aluminum, Total	0.77	0.02	0.0025	19914000	mg/L
MKTF-09	3/3/2020	Barium, Total	0.54	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Total	0.31	0.04	0.0045	3949	mg/L
MKTF-09	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-09	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-09	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	3/3/2020	Molybdenum, Total	0.0072	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Silver, Total	0.0025	0.005	0.0014	50000	mg/L
MKTF-09	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-09	3/3/2020	Iron, Total	2.7	0.1	0.044	13822000	mg/L
MKTF-09	3/3/2020	Manganese, Total	4	0.01	0.0014	2017000	mg/L
MKTF-09	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Total	0.0019	0.001	0.00031	10000	mg/L
MKTF-09	3/3/2020	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
MKTF-09	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-09	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	3/3/2020	Uranium, Total	0.0081	0.0005	0.000085	30000	mg/L
MKTF-09	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-09	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Dissolved	0.0016	0.001	0.0001	10000	mg/L
MKTF-09	3/3/2020	Lead, Dissolved	0.000061	0.0005	0.000055	NA	mg/L
MKTF-09	3/3/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
MKTF-09	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-09	3/3/2020	Uranium, Dissolved	0.0088	0.0005	0.000075	NA	mg/L
MKTF-09	3/3/2020	Manganese, Dissolved	4.1	0.01	0.0014	2017400	mg/L
MKTF-09	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-09	3/3/2020	Barium, Dissolved	0.52	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-09	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-09	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-09	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/3/2020	Magnesium, Dissolved	31	1	0.05	NA	mg/L
MKTF-09	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Dissolved	0.01	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-09	3/3/2020	Silver, Dissolved	0.0022	0.005	0.00094	81200	mg/L
MKTF-09	3/3/2020	Zinc, Dissolved	0.0076	0.01	0.0023	5960450	mg/L
MKTF-09	3/3/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-09	3/3/2020	Iron, Dissolved	1.4	0.1	0.044	13821880	mg/L
MKTF-09	3/3/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
MKTF-09	3/3/2020	Aluminum, Total	0.32	0.02	0.0025	19914000	mg/L
MKTF-09	3/3/2020	Barium, Total	0.58	0.002	0.00065	2000000	mg/L
MKTF-09	3/3/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-09	3/3/2020	Boron, Total	0.33	0.04	0.0045	3949	mg/L
MKTF-09	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-09	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-09	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-09	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-09	3/3/2020	Nickel, Total	0.012	0.01	0.004	372000	mg/L
MKTF-09	3/3/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
MKTF-09	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-09	3/3/2020	Iron, Total	2.4	0.1	0.044	13822000	mg/L
MKTF-09	3/3/2020	Manganese, Total	4	0.01	0.0014	2017000	mg/L
MKTF-09	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-09	3/3/2020	Arsenic, Total	0.0019	0.001	0.00031	10000	mg/L
MKTF-09	3/3/2020	Lead, Total	0.00096	0.0005	0.000055	15000	mg/L
MKTF-09	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-09	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-09	3/3/2020	Uranium, Total	0.0097	0.0005	0.000085	30000	mg/L
MKTF-09	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-09	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-09	6/5/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-09	6/5/2014	Barium, Total	0.44	0.002	0.0011	2000000	mg/L
MKTF-09	6/5/2014	Calcium, Total	150	5	0.27	NA	mg/L
MKTF-09	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-09	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-09	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-09	6/5/2014	Iron, Total	3.4	0.1	0.031	13822000	mg/L
MKTF-09	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-09	6/5/2014	Potassium, Total	3.1	1	0.24	NA	mg/L
MKTF-09	6/5/2014	Magnesium, Total	33	1	0.024	NA	mg/L
MKTF-09	6/5/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
MKTF-09	6/5/2014	Sodium, Total	220	5	1.3	NA	mg/L
MKTF-09	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-09	6/5/2014	Selenium, Total	0.014	0.005	0.00074	50000	mg/L
MKTF-09	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-09	6/5/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-09	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-09	9/18/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-09	9/18/2014	Barium, Total	0.32	0.002	0.0011	2000000	mg/L
MKTF-09	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-09	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-09	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-09	9/18/2014	Iron, Total	2.2	0.1	0.031	13822000	mg/L
MKTF-09	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-09	9/18/2014	Manganese, Total	2.6	0.01	0.0027	2017000	mg/L
MKTF-09	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-09	9/18/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-09	9/18/2014	Uranium, Total	0.012	0.001	0.00005	30000	mg/L
MKTF-09	9/18/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-09	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-09	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-09	11/14/2014	Barium, Total	0.34	0.002	0.00021	2000000	mg/L
MKTF-09	11/14/2014	Calcium, Total	160	5	0.41	NA	mg/L
MKTF-09	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-09	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-09	11/14/2014	Copper, Total	ND	0.03	0.00069	790000	mg/L
MKTF-09	11/14/2014	Iron, Total	2.4	0.1	0.031	13822000	mg/L
MKTF-09	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-09	11/14/2014	Magnesium, Total	30	1	0.018	NA	mg/L
MKTF-09	11/14/2014	Manganese, Total	2.8	0.01	0.0027	2017000	mg/L
MKTF-09	11/14/2014	Sodium, Total	240	5	2	NA	mg/L
MKTF-09	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-09	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-09	11/14/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-09	11/14/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
MKTF-09	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	3/16/2015	Arsenic, Total	0.0029	0.001	0.00044	10000	mg/L
MKTF-09	3/16/2015	Barium, Total	0.22	0.002	0.00073	2000000	mg/L
MKTF-09	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-09	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	3/16/2015	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-09	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	3/16/2015	Manganese, Total	2.4	0.01	0.0076	2017000	mg/L
MKTF-09	3/16/2015	Lead, Total	0.0015	0.001	0.000069	15000	mg/L
MKTF-09	3/16/2015	Selenium, Total	0.0053	0.001	0.00012	50000	mg/L
MKTF-09	3/16/2015	Uranium, Total	0.014	0.001	0.0000081	30000	mg/L
MKTF-09	3/16/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
MKTF-09	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-09	6/4/2015	Barium, Total	0.31	0.002	0.00095	2000000	mg/L
MKTF-09	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-09	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-09	6/4/2015	Iron, Total	1.9	0.1	0.036	13822000	mg/L
MKTF-09	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	6/4/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-09	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-09	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-09	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-09	6/4/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-09	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	8/18/2015	Arsenic, Total	0.0042	0.001	0.00029	10000	mg/L
MKTF-09	8/18/2015	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-09	8/18/2015	Calcium, Total	160	5	0.28	NA	mg/L
MKTF-09	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	8/18/2015	Copper, Total	0.0089	0.006	0.0051	790000	mg/L
MKTF-09	8/18/2015	Iron, Total	7.7	0.2	0.072	13822000	mg/L
MKTF-09	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	8/18/2015	Magnesium, Total	31	1	0.039	NA	mg/L
MKTF-09	8/18/2015	Manganese, Total	3.7	0.02	0.015	2017000	mg/L
MKTF-09	8/18/2015	Sodium, Total	250	5	0.36	NA	mg/L
MKTF-09	8/18/2015	Lead, Total	0.015	0.0005	0.000047	15000	mg/L
MKTF-09	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-09	8/18/2015	Uranium, Total	0.0053	0.0005	0.0000049	30000	mg/L
MKTF-09	8/18/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-09	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-09	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-09	11/3/2015	Barium, Total	0.5	0.002	0.0013	2000000	mg/L
MKTF-09	11/3/2015	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-09	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-09	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-09	11/3/2015	Iron, Total	3.2	0.1	0.045	13822000	mg/L
MKTF-09	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-09	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	11/3/2015	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-09	11/3/2015	Manganese, Total	4.2	0.01	0.0016	2017000	mg/L
MKTF-09	11/3/2015	Sodium, Total	250	5	0.48	NA	mg/L
MKTF-09	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-09	11/3/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-09	11/3/2015	Uranium, Total	0.0036	0.0005	0.0000048	30000	mg/L
MKTF-09	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-09	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/29/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-09	2/29/2016	Barium, Total	0.64	0.002	0.0011	2000000	mg/L
MKTF-09	2/29/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-09	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	2/29/2016	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-09	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-09	2/29/2016	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-09	2/29/2016	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-09	2/29/2016	Sodium, Total	240	5	0.48	NA	mg/L
MKTF-09	2/29/2016	Lead, Total	0.004	0.0025	0.00024	15000	mg/L
MKTF-09	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-09	2/29/2016	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
MKTF-09	2/29/2016	Zinc, Total	0.012	0.01	0.0039	5960000	mg/L
MKTF-09	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-09	6/9/2016	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
MKTF-09	6/9/2016	Barium, Total	0.49	0.002	0.0011	2000000	mg/L
MKTF-09	6/9/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-09	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-09	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-09	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-09	6/9/2016	Iron, Total	2.1	0.1	0.036	13822000	mg/L
MKTF-09	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	6/9/2016	Potassium, Total	0.49	1	0.18	NA	mg/L
MKTF-09	6/9/2016	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-09	6/9/2016	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
MKTF-09	6/9/2016	Sodium, Total	240	5	0.48	NA	mg/L
MKTF-09	6/9/2016	Lead, Total	0.0015	0.0005	0.000047	15000	mg/L
MKTF-09	6/9/2016	Selenium, Total	0.0047	0.005	0.00062	50000	mg/L
MKTF-09	6/9/2016	Uranium, Total	0.0069	0.0005	0.0000049	30000	mg/L
MKTF-09	6/9/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-09	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	9/11/2016	Arsenic, Total	0.0033	0.005	0.0011	10000	mg/L
MKTF-09	9/11/2016	Barium, Total	0.52	0.002	0.00079	2000000	mg/L
MKTF-09	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-09	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-09	9/11/2016	Arsenic, Dissolved	0.0032	0.005	0.00069	10000	mg/L
MKTF-09	9/11/2016	Barium, Dissolved	0.52	0.002	0.0013	2000000	mg/L
MKTF-09	9/11/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-09	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-09	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-09	9/11/2016	Iron, Dissolved	0.81	0.02	0.02	13821880	mg/L
MKTF-09	9/11/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-09	9/11/2016	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-09	9/11/2016	Manganese, Dissolved	3.7	0.01	0.0016	2017400	mg/L
MKTF-09	9/11/2016	Sodium, Dissolved	230	5	2.5	NA	mg/L
MKTF-09	9/11/2016	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-09	9/11/2016	Selenium, Dissolved	0.0075	0.01	0.0021	50000	mg/L
MKTF-09	9/11/2016	Uranium, Dissolved	0.005	0.0005	0.000051	NA	mg/L
MKTF-09	9/11/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-09	9/11/2016	Iron, Total	2.3	0.1	0.1	13822000	mg/L
MKTF-09	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	9/11/2016	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-09	9/11/2016	Lead, Total	0.0019	0.0005	0.000081	15000	mg/L
MKTF-09	9/11/2016	Selenium, Total	0.0068	0.01	0.0019	50000	mg/L
MKTF-09	9/11/2016	Uranium, Total	0.0064	0.0005	0.00017	30000	mg/L
MKTF-09	9/11/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MKTF-09	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	11/2/2016	Arsenic, Total	0.0028	0.005	0.0011	10000	mg/L
MKTF-09	11/2/2016	Barium, Total	0.47	0.002	0.00079	2000000	mg/L
MKTF-09	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-09	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/2/2016	Arsenic, Dissolved	0.0028	0.001	0.00014	10000	mg/L
MKTF-09	11/2/2016	Barium, Dissolved	0.4	0.002	0.0013	2000000	mg/L
MKTF-09	11/2/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-09	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-09	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-09	11/2/2016	Iron, Dissolved	0.92	0.02	0.02	13821880	mg/L
MKTF-09	11/2/2016	Potassium, Dissolved	0.56	1	0.5	NA	mg/L
MKTF-09	11/2/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-09	11/2/2016	Manganese, Dissolved	3.2	0.01	0.0016	2017400	mg/L
MKTF-09	11/2/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-09	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	11/2/2016	Selenium, Dissolved	0.0055	0.001	0.00021	50000	mg/L
MKTF-09	11/2/2016	Uranium, Dissolved	0.0065	0.0005	0.000051	NA	mg/L
MKTF-09	11/2/2016	Zinc, Dissolved	0.27	0.01	0.0028	5960450	mg/L
MKTF-09	11/2/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-09	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-09	11/2/2016	Manganese, Total	3.6	0.01	0.0014	2017000	mg/L
MKTF-09	11/2/2016	Lead, Total	0.0016	0.0005	0.000081	15000	mg/L
MKTF-09	11/2/2016	Selenium, Total	0.0058	0.02	0.0037	50000	mg/L
MKTF-09	11/2/2016	Uranium, Total	0.0066	0.0005	0.00017	30000	mg/L
MKTF-09	11/2/2016	Zinc, Total	0.003	0.01	0.0027	5960000	mg/L
MKTF-09	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-09	3/15/2017	Arsenic, Total	0.0052	0.005	0.0011	10000	mg/L
MKTF-09	3/15/2017	Barium, Total	0.59	0.002	0.00079	2000000	mg/L
MKTF-09	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-09	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-09	3/15/2017	Copper, Total	0.0065	0.006	0.003	790000	mg/L
MKTF-09	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-09	3/15/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-09	3/15/2017	Barium, Dissolved	0.57	0.002	0.00085	2000000	mg/L
MKTF-09	3/15/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-09	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-09	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	3/15/2017	Iron, Dissolved	2.1	0.1	0.1	13821880	mg/L
MKTF-09	3/15/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-09	3/15/2017	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-09	3/15/2017	Manganese, Dissolved	4.1	0.01	0.0019	2017400	mg/L
MKTF-09	3/15/2017	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-09	3/15/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	3/15/2017	Selenium, Dissolved	0.0023	0.005	0.0019	50000	mg/L
MKTF-09	3/15/2017	Uranium, Dissolved	0.0033	0.0005	0.00005	NA	mg/L
MKTF-09	3/15/2017	Zinc, Dissolved	0.051	0.01	0.0011	5960450	mg/L
MKTF-09	3/15/2017	Iron, Total	5.2	1	1	13822000	mg/L
MKTF-09	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	3/15/2017	Manganese, Total	4.4	0.01	0.0014	2017000	mg/L
MKTF-09	3/15/2017	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-09	3/15/2017	Selenium, Total	0.0072	0.005	0.00094	50000	mg/L
MKTF-09	3/15/2017	Uranium, Total	0.0036	0.0005	0.00017	30000	mg/L
MKTF-09	3/15/2017	Zinc, Total	0.0046	0.01	0.0027	5960000	mg/L
MKTF-09	6/12/2017	Silver, Total	0.00046	0.005	0.00042	50000	mg/L
MKTF-09	6/12/2017	Arsenic, Total	0.0025	0.005	0.0015	10000	mg/L
MKTF-09	6/12/2017	Barium, Total	0.6	0.002	0.00093	2000000	mg/L
MKTF-09	6/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	6/12/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-09	6/12/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-09	6/12/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-09	6/12/2017	Arsenic, Dissolved	0.0019	0.005	0.00089	10000	mg/L
MKTF-09	6/12/2017	Barium, Dissolved	0.6	0.002	0.00085	2000000	mg/L
MKTF-09	6/12/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-09	6/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	6/12/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-09	6/12/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	6/12/2017	Iron, Dissolved	2.3	0.2	0.16	13821880	mg/L
MKTF-09	6/12/2017	Potassium, Dissolved	0.55	1	0.11	NA	mg/L
MKTF-09	6/12/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-09	6/12/2017	Manganese, Dissolved	4.6	0.02	0.0038	2017400	mg/L
MKTF-09	6/12/2017	Sodium, Dissolved	250	10	1.6	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	6/12/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-09	6/12/2017	Selenium, Dissolved	0.0021	0.005	0.0019	50000	mg/L
MKTF-09	6/12/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-09	6/12/2017	Iron, Total	3.5	0.2	0.1	13822000	mg/L
MKTF-09	6/12/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	6/12/2017	Manganese, Total	4.5	0.02	0.011	2017000	mg/L
MKTF-09	6/12/2017	Lead, Total	0.0028	0.0005	0.000095	15000	mg/L
MKTF-09	6/12/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-09	6/12/2017	Zinc, Total	0.003	0.01	0.0028	5960000	mg/L
MKTF-09	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	9/28/2017	Arsenic, Total	0.004	0.005	0.0015	10000	mg/L
MKTF-09	9/28/2017	Barium, Total	0.61	0.002	0.00093	2000000	mg/L
MKTF-09	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	9/28/2017	Copper, Total	0.0064	0.006	0.0017	790000	mg/L
MKTF-09	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	9/28/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
MKTF-09	9/28/2017	Barium, Dissolved	0.54	0.002	0.00085	2000000	mg/L
MKTF-09	9/28/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-09	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	9/28/2017	Iron, Dissolved	3	0.2	0.16	13821880	mg/L
MKTF-09	9/28/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-09	9/28/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-09	9/28/2017	Manganese, Dissolved	4.5	0.02	0.0039	2017400	mg/L
MKTF-09	9/28/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-09	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	9/28/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-09	9/28/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-09	9/28/2017	Iron, Total	5.3	0.2	0.1	13822000	mg/L
MKTF-09	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	9/28/2017	Manganese, Total	4.8	0.02	0.011	2017000	mg/L
MKTF-09	9/28/2017	Lead, Total	0.0043	0.0005	0.000095	15000	mg/L
MKTF-09	9/28/2017	Selenium, Total	0.0085	0.005	0.0036	50000	mg/L
MKTF-09	9/28/2017	Zinc, Total	0.0072	0.01	0.0033	5960000	mg/L
MKTF-09	11/28/2017	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-09	11/28/2017	Arsenic, Total	0.0067	0.01	0.0041	10000	mg/L
MKTF-09	11/28/2017	Barium, Total	0.65	0.002	0.001	2000000	mg/L
MKTF-09	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	11/28/2017	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-09	11/28/2017	Barium, Dissolved	0.61	0.002	0.00099	2000000	mg/L
MKTF-09	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-09	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	11/28/2017	Iron, Dissolved	1.5	0.1	0.082	13821880	mg/L
MKTF-09	11/28/2017	Potassium, Dissolved	0.51	1	0.11	NA	mg/L
MKTF-09	11/28/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-09	11/28/2017	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
MKTF-09	11/28/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-09	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-09	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-09	11/28/2017	Uranium, Dissolved	0.0046	0.0025	0.00048	NA	mg/L
MKTF-09	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-09	11/28/2017	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-09	11/28/2017	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
MKTF-09	11/28/2017	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
MKTF-09	11/28/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-09	11/28/2017	Uranium, Total	0.005	0.005	0.0015	30000	mg/L
MKTF-09	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	2/14/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
MKTF-09	2/14/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-09	2/14/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
MKTF-09	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	2/14/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-09	2/14/2018	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-09	2/14/2018	Barium, Dissolved	0.52	0.002	0.00099	2000000	mg/L
MKTF-09	2/14/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-09	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	2/14/2018	Iron, Dissolved	1.3	0.1	0.082	13821880	mg/L
MKTF-09	2/14/2018	Potassium, Dissolved	0.45	1	0.11	NA	mg/L
MKTF-09	2/14/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-09	2/14/2018	Manganese, Dissolved	4	0.02	0.0039	2017400	mg/L
MKTF-09	2/14/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-09	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	2/14/2018	Selenium, Dissolved	0.0048	0.005	0.0038	50000	mg/L
MKTF-09	2/14/2018	Uranium, Dissolved	0.0054	0.0005	0.000096	NA	mg/L
MKTF-09	2/14/2018	Zinc, Dissolved	0.008	0.01	0.0021	5960450	mg/L
MKTF-09	2/14/2018	Iron, Total	2.3	0.1	0.051	13822000	mg/L
MKTF-09	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-09	2/14/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-09	2/14/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-09	2/14/2018	Selenium, Total	0.0041	0.001	0.00098	50000	mg/L
MKTF-09	2/14/2018	Uranium, Total	0.0053	0.0005	0.000068	30000	mg/L
MKTF-09	2/14/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	5/2/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-09	5/2/2018	Arsenic, Total	0.003	0.001	0.00041	10000	mg/L
MKTF-09	5/2/2018	Barium, Total	0.48	0.002	0.001	2000000	mg/L
MKTF-09	5/2/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
MKTF-09	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	5/2/2018	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-09	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	5/2/2018	Arsenic, Dissolved	0.0021	0.001	0.00042	10000	mg/L
MKTF-09	5/2/2018	Barium, Dissolved	0.46	0.002	0.00099	2000000	mg/L
MKTF-09	5/2/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-09	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	5/2/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-09	5/2/2018	Potassium, Dissolved	0.47	1	0.11	NA	mg/L
MKTF-09	5/2/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-09	5/2/2018	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
MKTF-09	5/2/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
MKTF-09	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	5/2/2018	Uranium, Dissolved	0.0042	0.0005	0.000096	NA	mg/L
MKTF-09	5/2/2018	Zinc, Dissolved	0.0085	0.01	0.0021	5960450	mg/L
MKTF-09	5/2/2018	Iron, Total	2.3	0.1	0.051	13822000	mg/L
MKTF-09	5/2/2018	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-09	5/2/2018	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-09	5/2/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-09	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	5/2/2018	Uranium, Total	0.0044	0.0005	0.000068	30000	mg/L
MKTF-09	5/2/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
MKTF-09	9/4/2018	Silver, Total	0.0035	0.005	0.0012	50000	mg/L
MKTF-09	9/4/2018	Arsenic, Total	0.0028	0.001	0.00041	10000	mg/L
MKTF-09	9/4/2018	Barium, Total	0.57	0.002	0.001	2000000	mg/L
MKTF-09	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	9/4/2018	Silver, Dissolved	0.0041	0.005	0.0018	81200	mg/L
MKTF-09	9/4/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
MKTF-09	9/4/2018	Barium, Dissolved	0.54	0.002	0.00099	2000000	mg/L
MKTF-09	9/4/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-09	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	9/4/2018	Iron, Dissolved	0.94	0.02	0.016	13821880	mg/L
MKTF-09	9/4/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MKTF-09	9/4/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	9/4/2018	Manganese, Dissolved	4.4	0.02	0.0039	2017400	mg/L
MKTF-09	9/4/2018	Sodium, Dissolved	240	10	1.6	NA	mg/L
MKTF-09	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	9/4/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-09	9/4/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-09	9/4/2018	Iron, Total	1.8	0.2	0.1	13822000	mg/L
MKTF-09	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-09	9/4/2018	Manganese, Total	4.2	0.02	0.011	2017000	mg/L
MKTF-09	9/4/2018	Lead, Total	0.00072	0.0005	0.00023	15000	mg/L
MKTF-09	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	9/4/2018	Uranium, Total	0.004	0.0005	0.000068	30000	mg/L
MKTF-09	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-09	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-09	11/28/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-09	11/28/2018	Barium, Total	0.52	0.002	0.001	2000000	mg/L
MKTF-09	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-09	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-09	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-09	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-09	11/28/2018	Arsenic, Dissolved	0.0016	0.001	0.00042	10000	mg/L
MKTF-09	11/28/2018	Barium, Dissolved	0.49	0.002	0.00099	2000000	mg/L
MKTF-09	11/28/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-09	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-09	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-09	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-09	11/28/2018	Iron, Dissolved	0.82	0.02	0.016	13821880	mg/L
MKTF-09	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-09	11/28/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-09	11/28/2018	Manganese, Dissolved	4.1	0.01	0.002	2017400	mg/L
MKTF-09	11/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-09	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-09	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-09	11/28/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
MKTF-09	11/28/2018	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-09	11/28/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-09	11/28/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-09	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-09	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-10	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-10	6/6/2014	Barium, Total	8.1	0.1	0.056	2000000	mg/L
MKTF-10	6/6/2014	Calcium, Total	410	5	0.27	NA	mg/L
MKTF-10	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-10	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-10	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-10	6/6/2014	Iron, Total	18	1	0.31	13822000	mg/L
MKTF-10	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-10	6/6/2014	Potassium, Total	4	1	0.24	NA	mg/L
MKTF-10	6/6/2014	Magnesium, Total	120	5	0.12	NA	mg/L
MKTF-10	6/6/2014	Manganese, Total	9.2	0.1	0.027	2017000	mg/L
MKTF-10	6/6/2014	Sodium, Total	490	20	5	NA	mg/L
MKTF-10	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-10	6/6/2014	Selenium, Total	0.011	0.005	0.00074	50000	mg/L
MKTF-10	6/6/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-10	6/6/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-10	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-10	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-10	9/18/2014	Barium, Total	11	0.04	0.022	2000000	mg/L
MKTF-10	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-10	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-10	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-10	9/18/2014	Iron, Total	33	2	0.62	13822000	mg/L
MKTF-10	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-10	9/18/2014	Manganese, Total	14	0.04	0.011	2017000	mg/L
MKTF-10	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-10	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-10	9/18/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
MKTF-10	9/18/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-10	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-10	11/14/2014	Barium, Total	17	0.2	0.021	2000000	mg/L
MKTF-10	11/14/2014	Calcium, Total	780	10	0.82	NA	mg/L
MKTF-10	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-10	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-10	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-10	11/14/2014	Iron, Total	67	2	0.62	13822000	mg/L
MKTF-10	11/14/2014	Mercury, Total	ND	0.0004	0.00017	2000	mg/L
MKTF-10	11/14/2014	Potassium, Total	2.5	1	0.093	NA	mg/L
MKTF-10	11/14/2014	Magnesium, Total	220	5	0.09	NA	mg/L
MKTF-10	11/14/2014	Manganese, Total	24	0.2	0.055	2017000	mg/L
MKTF-10	11/14/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-10	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-10	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-10	11/14/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-10	11/14/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-10	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	3/16/2015	Arsenic, Total	0.019	0.01	0.0044	10000	mg/L
MKTF-10	3/16/2015	Barium, Total	22	0.2	0.073	2000000	mg/L
MKTF-10	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-10	3/16/2015	Chromium, Total	0.036	0.006	0.0022	50000	mg/L
MKTF-10	3/16/2015	Copper, Total	0.095	0.006	0.0051	790000	mg/L
MKTF-10	3/16/2015	Iron, Total	100	4	1.4	13822000	mg/L
MKTF-10	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-10	3/16/2015	Manganese, Total	27	0.2	0.15	2017000	mg/L
MKTF-10	3/16/2015	Lead, Total	0.2	0.01	0.00069	15000	mg/L
MKTF-10	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-10	3/16/2015	Uranium, Total	0.019	0.01	0.000081	30000	mg/L
MKTF-10	3/16/2015	Zinc, Total	0.14	0.01	0.0036	5960000	mg/L
MKTF-10	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-10	6/4/2015	Barium, Total	12	0.04	0.019	2000000	mg/L
MKTF-10	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-10	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-10	6/4/2015	Iron, Total	53	2	0.73	13822000	mg/L
MKTF-10	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-10	6/4/2015	Manganese, Total	18	0.04	0.0054	2017000	mg/L
MKTF-10	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-10	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-10	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-10	6/4/2015	Zinc, Total	0.034	0.01	0.0028	5960000	mg/L
MKTF-10	8/18/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-10	8/18/2015	Arsenic, Total	0.038	0.01	0.0029	10000	mg/L
MKTF-10	8/18/2015	Barium, Total	45	0.1	0.053	2000000	mg/L
MKTF-10	8/18/2015	Calcium, Total	690	20	1.1	NA	mg/L
MKTF-10	8/18/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-10	8/18/2015	Chromium, Total	0.2	0.03	0.011	50000	mg/L
MKTF-10	8/18/2015	Copper, Total	0.26	0.03	0.026	790000	mg/L
MKTF-10	8/18/2015	Iron, Total	240	10	3.6	13822000	mg/L
MKTF-10	8/18/2015	Mercury, Total	0.0003	0.0002	0.000059	2000	mg/L
MKTF-10	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-10	8/18/2015	Magnesium, Total	180	5	0.2	NA	mg/L
MKTF-10	8/18/2015	Manganese, Total	50	1	0.76	2017000	mg/L
MKTF-10	8/18/2015	Sodium, Total	430	5	0.36	NA	mg/L
MKTF-10	8/18/2015	Lead, Total	0.58	0.025	0.0024	15000	mg/L
MKTF-10	8/18/2015	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-10	8/18/2015	Uranium, Total	0.063	0.005	0.000049	30000	mg/L
MKTF-10	8/18/2015	Zinc, Total	0.49	0.05	0.019	5960000	mg/L
MKTF-10	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-10	11/3/2015	Arsenic, Total	0.0056	0.001	0.000065	10000	mg/L
MKTF-10	11/3/2015	Barium, Total	13	0.04	0.026	2000000	mg/L
MKTF-10	11/3/2015	Calcium, Total	550	20	5.1	NA	mg/L
MKTF-10	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-10	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-10	11/3/2015	Iron, Total	50	2	0.91	13822000	mg/L
MKTF-10	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-10	11/3/2015	Magnesium, Total	120	5	0.065	NA	mg/L
MKTF-10	11/3/2015	Manganese, Total	18	0.04	0.0065	2017000	mg/L
MKTF-10	11/3/2015	Sodium, Total	420	5	0.48	NA	mg/L
MKTF-10	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-10	11/3/2015	Selenium, Total	0.0067	0.005	0.00097	50000	mg/L
MKTF-10	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-10	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-10	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	2/29/2016	Arsenic, Total	0.0086	0.005	0.0015	10000	mg/L
MKTF-10	2/29/2016	Barium, Total	16	0.2	0.11	2000000	mg/L
MKTF-10	2/29/2016	Calcium, Total	620	50	13	NA	mg/L
MKTF-10	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-10	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-10	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-10	2/29/2016	Iron, Total	57	2	0.72	13822000	mg/L
MKTF-10	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-10	2/29/2016	Magnesium, Total	140	5	0.065	NA	mg/L
MKTF-10	2/29/2016	Manganese, Total	21	0.2	0.15	2017000	mg/L
MKTF-10	2/29/2016	Sodium, Total	430	5	0.48	NA	mg/L
MKTF-10	2/29/2016	Lead, Total	0.0027	0.0025	0.00024	15000	mg/L
MKTF-10	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-10	2/29/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-10	2/29/2016	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-10	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-10	6/9/2016	Arsenic, Total	0.006	0.001	0.00029	10000	mg/L
MKTF-10	6/9/2016	Barium, Total	13	0.1	0.053	2000000	mg/L
MKTF-10	6/9/2016	Calcium, Total	450	5	1.3	NA	mg/L
MKTF-10	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-10	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-10	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-10	6/9/2016	Iron, Total	36	1	0.36	13822000	mg/L
MKTF-10	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	6/9/2016	Potassium, Total	0.88	1	0.18	NA	mg/L
MKTF-10	6/9/2016	Magnesium, Total	99	5	0.065	NA	mg/L
MKTF-10	6/9/2016	Manganese, Total	15	0.1	0.076	2017000	mg/L
MKTF-10	6/9/2016	Sodium, Total	330	5	0.48	NA	mg/L
MKTF-10	6/9/2016	Lead, Total	0.002	0.0005	0.000047	15000	mg/L
MKTF-10	6/9/2016	Selenium, Total	0.0033	0.005	0.00062	50000	mg/L
MKTF-10	6/9/2016	Uranium, Total	0.0008	0.0005	0.0000049	30000	mg/L
MKTF-10	6/9/2016	Zinc, Total	0.019	0.01	0.0039	5960000	mg/L
MKTF-10	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	9/11/2016	Arsenic, Total	0.0083	0.001	0.00021	10000	mg/L
MKTF-10	9/11/2016	Barium, Total	11	0.04	0.016	2000000	mg/L
MKTF-10	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-10	9/11/2016	Arsenic, Dissolved	0.0082	0.001	0.00014	10000	mg/L
MKTF-10	9/11/2016	Barium, Dissolved	11	0.1	0.066	2000000	mg/L
MKTF-10	9/11/2016	Calcium, Dissolved	390	5	2.5	NA	mg/L
MKTF-10	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-10	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-10	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-10	9/11/2016	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-10	9/11/2016	Potassium, Dissolved	0.82	1	0.5	NA	mg/L
MKTF-10	9/11/2016	Magnesium, Dissolved	95	1	0.5	NA	mg/L
MKTF-10	9/11/2016	Manganese, Dissolved	12	0.1	0.016	2017400	mg/L
MKTF-10	9/11/2016	Sodium, Dissolved	330	5	2.5	NA	mg/L
MKTF-10	9/11/2016	Lead, Dissolved	0.00086	0.0005	0.00017	NA	mg/L
MKTF-10	9/11/2016	Selenium, Dissolved	0.0066	0.001	0.00021	50000	mg/L
MKTF-10	9/11/2016	Uranium, Dissolved	0.00091	0.0005	0.000051	NA	mg/L
MKTF-10	9/11/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
MKTF-10	9/11/2016	Iron, Total	28	1	1	13822000	mg/L
MKTF-10	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	9/11/2016	Manganese, Total	12	0.04	0.0055	2017000	mg/L
MKTF-10	9/11/2016	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L
MKTF-10	9/11/2016	Selenium, Total	0.0058	0.01	0.0019	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/11/2016	Uranium, Total	0.0012	0.0005	0.00017	30000	mg/L
MKTF-10	9/11/2016	Zinc, Total	0.0027	0.01	0.0027	5960000	mg/L
MKTF-10	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	11/2/2016	Arsenic, Total	0.0096	0.005	0.0011	10000	mg/L
MKTF-10	11/2/2016	Barium, Total	6	0.02	0.0079	2000000	mg/L
MKTF-10	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-10	11/2/2016	Arsenic, Dissolved	0.008	0.001	0.00014	10000	mg/L
MKTF-10	11/2/2016	Barium, Dissolved	5.8	0.02	0.013	2000000	mg/L
MKTF-10	11/2/2016	Calcium, Dissolved	220	5	2.5	NA	mg/L
MKTF-10	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-10	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-10	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-10	11/2/2016	Iron, Dissolved	9.4	0.2	0.2	13821880	mg/L
MKTF-10	11/2/2016	Potassium, Dissolved	0.66	1	0.5	NA	mg/L
MKTF-10	11/2/2016	Magnesium, Dissolved	53	1	0.5	NA	mg/L
MKTF-10	11/2/2016	Manganese, Dissolved	5.2	0.02	0.0032	2017400	mg/L
MKTF-10	11/2/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-10	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	11/2/2016	Selenium, Dissolved	0.0046	0.001	0.00021	50000	mg/L
MKTF-10	11/2/2016	Uranium, Dissolved	0.00065	0.0005	0.000051	NA	mg/L
MKTF-10	11/2/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-10	11/2/2016	Iron, Total	10	1	1	13822000	mg/L
MKTF-10	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-10	11/2/2016	Manganese, Total	5.2	0.02	0.0027	2017000	mg/L
MKTF-10	11/2/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-10	11/2/2016	Selenium, Total	0.0049	0.005	0.00094	50000	mg/L
MKTF-10	11/2/2016	Uranium, Total	0.00086	0.0005	0.00017	30000	mg/L
MKTF-10	11/2/2016	Zinc, Total	0.0044	0.01	0.0027	5960000	mg/L
MKTF-10	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-10	3/2/2017	Arsenic, Total	0.014	0.001	0.00021	10000	mg/L
MKTF-10	3/2/2017	Barium, Total	4.7	0.01	0.004	2000000	mg/L
MKTF-10	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-10	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-10	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-10	3/2/2017	Silver, Dissolved	0.0009	0.005	0.00088	81200	mg/L
MKTF-10	3/2/2017	Arsenic, Dissolved	0.011	0.001	0.00014	10000	mg/L
MKTF-10	3/2/2017	Barium, Dissolved	4.8	0.01	0.0043	2000000	mg/L
MKTF-10	3/2/2017	Calcium, Dissolved	180	5	2.5	NA	mg/L
MKTF-10	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-10	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	3/2/2017	Iron, Dissolved	13	0.4	0.4	13821880	mg/L
MKTF-10	3/2/2017	Potassium, Dissolved	0.61	1	0.5	NA	mg/L
MKTF-10	3/2/2017	Magnesium, Dissolved	41	1	0.5	NA	mg/L
MKTF-10	3/2/2017	Manganese, Dissolved	3.4	0.01	0.0019	2017400	mg/L
MKTF-10	3/2/2017	Sodium, Dissolved	260	5	2.5	NA	mg/L
MKTF-10	3/2/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-10	3/2/2017	Selenium, Dissolved	0.0039	0.001	0.00021	50000	mg/L
MKTF-10	3/2/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-10	3/2/2017	Iron, Total	15	0.4	0.4	13822000	mg/L
MKTF-10	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-10	3/2/2017	Manganese, Total	3.5	0.01	0.0014	2017000	mg/L
MKTF-10	3/2/2017	Lead, Total	0.0051	0.0025	0.00041	15000	mg/L
MKTF-10	3/2/2017	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-10	3/2/2017	Zinc, Total	0.0091	0.01	0.0027	5960000	mg/L
MKTF-10	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-10	6/8/2017	Arsenic, Total	0.0082	0.001	0.0003	10000	mg/L
MKTF-10	6/8/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-10	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-10	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-10	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-10	6/8/2017	Arsenic, Dissolved	0.0082	0.001	0.00018	10000	mg/L
MKTF-10	6/8/2017	Barium, Dissolved	4	0.02	0.0085	2000000	mg/L
MKTF-10	6/8/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-10	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-10	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	6/8/2017	Iron, Dissolved	5.6	0.2	0.16	13821880	mg/L
MKTF-10	6/8/2017	Potassium, Dissolved	0.54	1	0.11	NA	mg/L
MKTF-10	6/8/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-10	6/8/2017	Manganese, Dissolved	3.1	0.02	0.0038	2017400	mg/L
MKTF-10	6/8/2017	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-10	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	6/8/2017	Selenium, Dissolved	0.0045	0.001	0.00039	50000	mg/L
MKTF-10	6/8/2017	Uranium, Dissolved	0.00051	0.0005	0.00005	NA	mg/L
MKTF-10	6/8/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
MKTF-10	6/8/2017	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-10	6/8/2017	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
MKTF-10	6/8/2017	Manganese, Total	3.2	0.02	0.011	2017000	mg/L
MKTF-10	6/8/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-10	6/8/2017	Selenium, Total	0.0039	0.001	0.00071	50000	mg/L
MKTF-10	6/8/2017	Uranium, Total	0.00055	0.0005	0.00015	30000	mg/L
MKTF-10	6/8/2017	Zinc, Total	0.0083	0.01	0.0028	5960000	mg/L
MKTF-10	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	9/28/2017	Arsenic, Total	0.007	0.001	0.0003	10000	mg/L
MKTF-10	9/28/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-10	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	9/28/2017	Copper, Total	0.0038	0.006	0.0017	790000	mg/L
MKTF-10	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	9/28/2017	Arsenic, Dissolved	0.0087	0.001	0.00018	10000	mg/L
MKTF-10	9/28/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-10	9/28/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-10	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	9/28/2017	Iron, Dissolved	7.5	0.2	0.16	13821880	mg/L
MKTF-10	9/28/2017	Potassium, Dissolved	0.58	1	0.11	NA	mg/L
MKTF-10	9/28/2017	Magnesium, Dissolved	32	1	0.25	NA	mg/L
MKTF-10	9/28/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-10	9/28/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-10	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	9/28/2017	Selenium, Dissolved	0.0074	0.001	0.00039	50000	mg/L
MKTF-10	9/28/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-10	9/28/2017	Iron, Total	9	0.2	0.1	13822000	mg/L
MKTF-10	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-10	9/28/2017	Manganese, Total	3	0.02	0.011	2017000	mg/L
MKTF-10	9/28/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-10	9/28/2017	Selenium, Total	0.004	0.001	0.00071	50000	mg/L
MKTF-10	9/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	11/28/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-10	11/28/2017	Arsenic, Total	0.0099	0.01	0.0041	10000	mg/L
MKTF-10	11/28/2017	Barium, Total	4.2	0.01	0.005	2000000	mg/L
MKTF-10	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	11/28/2017	Arsenic, Dissolved	0.0063	0.005	0.0021	10000	mg/L
MKTF-10	11/28/2017	Barium, Dissolved	3.9	0.01	0.0049	2000000	mg/L
MKTF-10	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	11/28/2017	Iron, Dissolved	8.2	0.2	0.16	13821880	mg/L
MKTF-10	11/28/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-10	11/28/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-10	11/28/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-10	11/28/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-10	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-10	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-10	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-10	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-10	11/28/2017	Iron, Total	9.8	0.4	0.2	13822000	mg/L
MKTF-10	11/28/2017	Manganese, Total	3	0.01	0.0055	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/28/2017	Lead, Total	0.00093	0.0005	0.00023	15000	mg/L
MKTF-10	11/28/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-10	11/28/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
MKTF-10	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	2/14/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-10	2/14/2018	Arsenic, Total	0.008	0.001	0.00041	10000	mg/L
MKTF-10	2/14/2018	Barium, Total	4.5	0.01	0.005	2000000	mg/L
MKTF-10	2/14/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	2/14/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	2/14/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	2/14/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
MKTF-10	2/14/2018	Arsenic, Dissolved	0.0083	0.001	0.00042	10000	mg/L
MKTF-10	2/14/2018	Barium, Dissolved	4.8	0.02	0.0099	2000000	mg/L
MKTF-10	2/14/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-10	2/14/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	2/14/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	2/14/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	2/14/2018	Iron, Dissolved	9.7	0.2	0.16	13821880	mg/L
MKTF-10	2/14/2018	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MKTF-10	2/14/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-10	2/14/2018	Manganese, Dissolved	3.7	0.02	0.0039	2017400	mg/L
MKTF-10	2/14/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-10	2/14/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	2/14/2018	Selenium, Dissolved	0.0072	0.001	0.00076	50000	mg/L
MKTF-10	2/14/2018	Uranium, Dissolved	0.0003	0.0005	0.000096	NA	mg/L
MKTF-10	2/14/2018	Zinc, Dissolved	0.0078	0.01	0.0021	5960450	mg/L
MKTF-10	2/14/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-10	2/14/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-10	2/14/2018	Manganese, Total	3.6	0.01	0.0055	2017000	mg/L
MKTF-10	2/14/2018	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MKTF-10	2/14/2018	Selenium, Total	0.0034	0.001	0.00098	50000	mg/L
MKTF-10	2/14/2018	Uranium, Total	0.00035	0.0005	0.000068	30000	mg/L
MKTF-10	2/14/2018	Zinc, Total	0.005	0.01	0.0033	5960000	mg/L
MKTF-10	5/2/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	5/2/2018	Arsenic, Total	0.0088	0.001	0.00041	10000	mg/L
MKTF-10	5/2/2018	Barium, Total	4.7	0.01	0.005	2000000	mg/L
MKTF-10	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	5/2/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	5/2/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-10	5/2/2018	Barium, Dissolved	4.2	0.01	0.0049	2000000	mg/L
MKTF-10	5/2/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	5/2/2018	Iron, Dissolved	9.2	0.2	0.16	13821880	mg/L
MKTF-10	5/2/2018	Potassium, Dissolved	0.43	1	0.11	NA	mg/L
MKTF-10	5/2/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-10	5/2/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-10	5/2/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-10	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	5/2/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	5/2/2018	Uranium, Dissolved	0.00014	0.0005	0.000096	NA	mg/L
MKTF-10	5/2/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-10	5/2/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-10	5/2/2018	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
MKTF-10	5/2/2018	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
MKTF-10	5/2/2018	Lead, Total	0.00034	0.0005	0.00023	15000	mg/L
MKTF-10	5/2/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	5/2/2018	Uranium, Total	0.00011	0.0005	0.000068	30000	mg/L
MKTF-10	5/2/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	9/4/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-10	9/4/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-10	9/4/2018	Barium, Total	4	0.02	0.01	2000000	mg/L
MKTF-10	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	9/4/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	9/4/2018	Arsenic, Dissolved	0.009	0.001	0.00042	10000	mg/L
MKTF-10	9/4/2018	Barium, Dissolved	4.2	0.02	0.0099	2000000	mg/L
MKTF-10	9/4/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-10	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	9/4/2018	Iron, Dissolved	6.8	0.2	0.16	13821880	mg/L
MKTF-10	9/4/2018	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-10	9/4/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-10	9/4/2018	Manganese, Dissolved	2.9	0.02	0.0039	2017400	mg/L
MKTF-10	9/4/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-10	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	9/4/2018	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
MKTF-10	9/4/2018	Zinc, Dissolved	0.0092	0.01	0.0021	5960450	mg/L
MKTF-10	9/4/2018	Iron, Total	7.7	0.2	0.1	13822000	mg/L
MKTF-10	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	9/4/2018	Manganese, Total	2.8	0.02	0.011	2017000	mg/L
MKTF-10	9/4/2018	Lead, Total	0.00053	0.0005	0.00023	15000	mg/L
MKTF-10	9/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	9/4/2018	Uranium, Total	0.00021	0.0005	0.000068	30000	mg/L
MKTF-10	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	11/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-10	11/20/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
MKTF-10	11/20/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
MKTF-10	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-10	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-10	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-10	11/20/2018	Arsenic, Dissolved	0.008	0.001	0.00042	10000	mg/L
MKTF-10	11/20/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
MKTF-10	11/20/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-10	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-10	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-10	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-10	11/20/2018	Iron, Dissolved	6.1	1	0.82	13821880	mg/L
MKTF-10	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-10	11/20/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-10	11/20/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-10	11/20/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-10	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-10	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-10	11/20/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-10	11/20/2018	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-10	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	11/20/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-10	11/20/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-10	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-10	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-10	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-10	3/3/2020	Arsenic, Dissolved	0.0056	0.001	0.0001	10000	mg/L
MKTF-10	3/3/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-10	3/3/2020	Selenium, Dissolved	0.00018	0.001	0.00017	50000	mg/L
MKTF-10	3/3/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	3/3/2020	Uranium, Dissolved	0.00059	0.0005	0.000075	NA	mg/L
MKTF-10	3/3/2020	Manganese, Dissolved	5.4	0.02	0.0029	2017400	mg/L
MKTF-10	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-10	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-10	3/3/2020	Boron, Dissolved	0.27	0.04	0.0045	3949110	mg/L
MKTF-10	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-10	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-10	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-10	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-10	3/3/2020	Magnesium, Dissolved	67	1	0.05	NA	mg/L
MKTF-10	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-10	3/3/2020	Nickel, Dissolved	0.011	0.01	0.004	372000	mg/L
MKTF-10	3/3/2020	Potassium, Dissolved	0.62	1	0.16	NA	mg/L
MKTF-10	3/3/2020	Silver, Dissolved	0.0038	0.005	0.00094	81200	mg/L
MKTF-10	3/3/2020	Zinc, Dissolved	0.0061	0.01	0.0023	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Calcium, Dissolved	280	5	0.31	NA	mg/L
MKTF-10	3/3/2020	Sodium, Dissolved	400	5	2.1	NA	mg/L
MKTF-10	3/3/2020	Barium, Dissolved	9.5	0.02	0.0065	2000000	mg/L
MKTF-10	3/3/2020	Iron, Dissolved	7.2	0.2	0.087	13821880	mg/L
MKTF-10	3/3/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
MKTF-10	3/3/2020	Boron, Total	0.38	0.04	0.0045	3949	mg/L
MKTF-10	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-10	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-10	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-10	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-10	3/3/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-10	3/3/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-10	3/3/2020	Silver, Total	0.0052	0.005	0.0014	50000	mg/L
MKTF-10	3/3/2020	Zinc, Total	0.0065	0.01	0.0058	5960000	mg/L
MKTF-10	3/3/2020	Aluminum, Total	5.3	0.2	0.025	19914000	mg/L
MKTF-10	3/3/2020	Iron, Total	12	0.4	0.17	13822000	mg/L
MKTF-10	3/3/2020	Manganese, Total	5.5	0.04	0.0058	2017000	mg/L
MKTF-10	3/3/2020	Barium, Total	10	0.04	0.013	2000000	mg/L
MKTF-10	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-10	3/3/2020	Arsenic, Total	0.0081	0.001	0.00031	10000	mg/L
MKTF-10	3/3/2020	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
MKTF-10	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-10	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	3/3/2020	Uranium, Total	0.00074	0.0005	0.000085	30000	mg/L
MKTF-10	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-10	12/18/2020	Arsenic, Total Recoverable	**11.8**	1	0.286	10	ug/L
MKTF-10	12/18/2020	Lead, Total Recoverable	1.01	1	0.133	15	ug/L
MKTF-10	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-10	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-10	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-10	12/18/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-10	12/18/2020	Arsenic, Dissolved	9.73	1	0.286	10	ug/L
MKTF-10	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-10	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-10	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-10	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-10	12/18/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-10	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-10	12/18/2020	Aluminum, Total	3.13	0.2	0.051	19914000	mg/L
MKTF-10	12/18/2020	Calcium, Total	277	0.5	0.084	NA	mg/L
MKTF-10	12/18/2020	Boron, Total	0.445	0.1	0.022	3949	mg/L
MKTF-10	12/18/2020	Barium, Total	9.4	0.01	0.003	2000000	mg/L
MKTF-10	12/18/2020	Potassium, Total	1.47	1	0.34	NA	mg/L
MKTF-10	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-10	12/18/2020	Magnesium, Total	70	0.5	0.12	NA	mg/L
MKTF-10	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-10	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-10	12/18/2020	Sodium, Total	321	2	0.92	NA	mg/L
MKTF-10	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-10	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-10	12/18/2020	Iron, Total	10.7	0.2	0.075	13822000	mg/L
MKTF-10	12/18/2020	Manganese, Total	5.07	0.01	0.003	2017000	mg/L
MKTF-10	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-10	12/18/2020	Nickel, Total	0.0164	0.006	0.003	372000	mg/L
MKTF-10	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-10	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-10	12/18/2020	Barium, Dissolved	9.09	0.01	0.003	2000000	mg/L
MKTF-10	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-10	12/18/2020	Boron, Dissolved	0.443	0.1	0.022	3949110	mg/L
MKTF-10	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-10	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-10	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-10	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-10	12/18/2020	Iron, Dissolved	7.25	0.2	0.075	13821880	mg/L
MKTF-10	12/18/2020	Manganese, Dissolved	4.81	0.01	0.003	2017400	mg/L
MKTF-10	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-10	12/18/2020	Nickel, Dissolved	0.0149	0.006	0.003	372000	mg/L
MKTF-10	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-10	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-10	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-10	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-10	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-10	10/30/2019	Arsenic, Dissolved	0.0092	0.001	0.000101	10000	mg/L
MKTF-10	10/30/2019	Barium, Dissolved	10	0.04	0.012968	2000000	mg/L
MKTF-10	10/30/2019	Beryllium, Dissolved	0.00047	0.002	0.000284	4000	mg/L
MKTF-10	10/30/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
MKTF-10	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	10/30/2019	Calcium, Dissolved	320	5	0.309446	NA	mg/L
MKTF-10	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-10	10/30/2019	Iron, Dissolved	14	0.4	0.174937	13821880	mg/L
MKTF-10	10/30/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-10	10/30/2019	Magnesium, Dissolved	76	1	0.05029	NA	mg/L
MKTF-10	10/30/2019	Manganese, Dissolved	6.2	0.04	0.005799	2017400	mg/L
MKTF-10	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	10/30/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
MKTF-10	10/30/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-10	10/30/2019	Selenium, Dissolved	0.00044	0.001	0.000171	50000	mg/L
MKTF-10	10/30/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
MKTF-10	10/30/2019	Sodium, Dissolved	430	5	2.080881	NA	mg/L
MKTF-10	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	10/30/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-10	10/30/2019	Aluminum, Total	1.8	0.1	0.012441	19914000	mg/L
MKTF-10	10/30/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-10	10/30/2019	Arsenic, Total	0.0093	0.005	0.001561	10000	mg/L
MKTF-10	10/30/2019	Barium, Total	11	0.04	0.012968	2000000	mg/L
MKTF-10	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-10	10/30/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
MKTF-10	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	10/30/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-10	10/30/2019	Lead, Total	0.00086	0.0025	0.000274	15000	mg/L
MKTF-10	10/30/2019	Manganese, Total	6.3	0.04	0.005799	2017000	mg/L
MKTF-10	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	10/30/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-10	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-10	10/30/2019	Silver, Total	0.0045	0.005	0.001418	50000	mg/L
MKTF-10	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-10	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-10	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-10	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-10	5/13/2019	Arsenic, Dissolved	0.0051	0.005	0.000504	10000	mg/L
MKTF-10	5/13/2019	Barium, Dissolved	4.6	0.01	0.003242	2000000	mg/L
MKTF-10	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-10	5/13/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-10	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	5/13/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
MKTF-10	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	5/13/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-10	5/13/2019	Iron, Dissolved	8.4	1	0.437344	13821880	mg/L
MKTF-10	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-10	5/13/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
MKTF-10	5/13/2019	Manganese, Dissolved	3.4	0.01	0.00145	2017400	mg/L
MKTF-10	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	5/13/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-10	5/13/2019	Potassium, Dissolved	0.46	1	0.162288	NA	mg/L
MKTF-10	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-10	5/13/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-10	5/13/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-10	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-10	5/13/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-10	5/13/2019	Zinc, Dissolved	0.13	0.01	0.002252	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	5/13/2019	Aluminum, Total	0.76	0.02	0.002488	19914000	mg/L
MKTF-10	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-10	5/13/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
MKTF-10	5/13/2019	Barium, Total	4.9	0.01	0.003242	2000000	mg/L
MKTF-10	5/13/2019	Beryllium, Total	0.00031	0.002	0.000284	4000	mg/L
MKTF-10	5/13/2019	Boron, Total	0.4	0.04	0.004531	3949	mg/L
MKTF-10	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	5/13/2019	Iron, Total	8.9	0.2	0.087469	13822000	mg/L
MKTF-10	5/13/2019	Lead, Total	0.00045	0.0005	0.000055	15000	mg/L
MKTF-10	5/13/2019	Manganese, Total	3.6	0.01	0.00145	2017000	mg/L
MKTF-10	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-10	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	5/13/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
MKTF-10	5/13/2019	Selenium, Total	0.00063	0.001	0.000478	50000	mg/L
MKTF-10	5/13/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-10	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	5/13/2019	Uranium, Total	0.00011	0.0005	0.000085	30000	mg/L
MKTF-10	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-10	8/22/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
MKTF-10	8/22/2019	Antimony, Dissolved	0.00046	0.001	0.000389	6000	mg/L
MKTF-10	8/22/2019	Arsenic, Dissolved	0.0059	0.001	0.000101	10000	mg/L
MKTF-10	8/22/2019	Barium, Dissolved	8.5	0.04	0.012968	2000000	mg/L
MKTF-10	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-10	8/22/2019	Boron, Dissolved	0.5	0.04	0.004531	3949110	mg/L
MKTF-10	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-10	8/22/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-10	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-10	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-10	8/22/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
MKTF-10	8/22/2019	Iron, Dissolved	7.9	0.4	0.174937	13821880	mg/L
MKTF-10	8/22/2019	Lead, Dissolved	0.000083	0.0005	0.000055	NA	mg/L
MKTF-10	8/22/2019	Magnesium, Dissolved	60	1	0.05029	NA	mg/L
MKTF-10	8/22/2019	Manganese, Dissolved	5.4	0.04	0.005799	2017400	mg/L
MKTF-10	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-10	8/22/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-10	8/22/2019	Potassium, Dissolved	0.68	1	0.162288	NA	mg/L
MKTF-10	8/22/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-10	8/22/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
MKTF-10	8/22/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
MKTF-10	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-10	8/22/2019	Uranium, Dissolved	0.00063	0.0005	0.000075	NA	mg/L
MKTF-10	8/22/2019	Zinc, Dissolved	0.0057	0.01	0.002252	5960450	mg/L
MKTF-10	8/22/2019	Aluminum, Total	0.84	0.1	0.012441	19914000	mg/L
MKTF-10	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-10	8/22/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-10	8/22/2019	Barium, Total	8.8	0.04	0.012968	2000000	mg/L
MKTF-10	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-10	8/22/2019	Boron, Total	0.51	0.2	0.022653	3949	mg/L
MKTF-10	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-10	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-10	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-10	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-10	8/22/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-10	8/22/2019	Lead, Total	0.00058	0.0005	0.000055	15000	mg/L
MKTF-10	8/22/2019	Manganese, Total	5.6	0.04	0.005799	2017000	mg/L
MKTF-10	8/22/2019	Mercury, Total	0.000092	0.0002	0.000038	2000	mg/L
MKTF-10	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-10	8/22/2019	Nickel, Total	0.015	0.01	0.004009	372000	mg/L
MKTF-10	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-10	8/22/2019	Silver, Total	0.0032	0.005	0.001418	50000	mg/L
MKTF-10	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-10	8/22/2019	Uranium, Total	0.00061	0.0005	0.000085	30000	mg/L
MKTF-10	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-11	8/21/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	8/21/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-11	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-11	8/21/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-11	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	8/21/2019	Calcium, Dissolved	95	1	0.061889	NA	mg/L
MKTF-11	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	8/21/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
MKTF-11	8/21/2019	Iron, Dissolved	3.4	0.1	0.043734	13821880	mg/L
MKTF-11	8/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-11	8/21/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-11	8/21/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-11	8/21/2019	Molybdenum, Dissolved	0.0092	0.008	0.006735	98700	mg/L
MKTF-11	8/21/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
MKTF-11	8/21/2019	Potassium, Dissolved	0.65	1	0.162288	NA	mg/L
MKTF-11	8/21/2019	Selenium, Dissolved	0.00039	0.001	0.000171	50000	mg/L
MKTF-11	8/21/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-11	8/21/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-11	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-11	8/21/2019	Uranium, Dissolved	0.0042	0.0005	0.000075	NA	mg/L
MKTF-11	8/21/2019	Zinc, Dissolved	0.0077	0.01	0.002252	5960450	mg/L
MKTF-11	8/21/2019	Aluminum, Total	0.66	0.02	0.002488	19914000	mg/L
MKTF-11	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-11	8/21/2019	Arsenic, Total	0.02	0.001	0.000312	10000	mg/L
MKTF-11	8/21/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
MKTF-11	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-11	8/21/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
MKTF-11	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	8/21/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-11	8/21/2019	Lead, Total	0.00054	0.0005	0.000055	15000	mg/L
MKTF-11	8/21/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-11	8/21/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-11	8/21/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
MKTF-11	8/21/2019	Nickel, Total	0.039	0.01	0.004009	372000	mg/L
MKTF-11	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-11	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-11	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	8/21/2019	Uranium, Total	0.004	0.0005	0.000085	30000	mg/L
MKTF-11	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	5/13/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-11	5/13/2019	Arsenic, Dissolved	0.016	0.005	0.000504	10000	mg/L
MKTF-11	5/13/2019	Barium, Dissolved	2.1	0.02	0.006484	2000000	mg/L
MKTF-11	5/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-11	5/13/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-11	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	5/13/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
MKTF-11	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	5/13/2019	Copper, Dissolved	0.0043	0.006	0.001296	790000	mg/L
MKTF-11	5/13/2019	Iron, Dissolved	3.1	0.2	0.087469	13821880	mg/L
MKTF-11	5/13/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-11	5/13/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-11	5/13/2019	Manganese, Dissolved	2.4	0.02	0.002899	2017400	mg/L
MKTF-11	5/13/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
MKTF-11	5/13/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
MKTF-11	5/13/2019	Potassium, Dissolved	0.71	1	0.162288	NA	mg/L
MKTF-11	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-11	5/13/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-11	5/13/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L
MKTF-11	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-11	5/13/2019	Uranium, Dissolved	0.0045	0.0025	0.000374	NA	mg/L
MKTF-11	5/13/2019	Zinc, Dissolved	0.098	0.01	0.002252	5960450	mg/L
MKTF-11	5/13/2019	Aluminum, Total	0.88	0.02	0.002488	19914000	mg/L
MKTF-11	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-11	5/13/2019	Arsenic, Total	0.018	0.001	0.000312	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	5/13/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-11	5/13/2019	Beryllium, Total	0.00029	0.002	0.000284	4000	mg/L
MKTF-11	5/13/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-11	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	5/13/2019	Iron, Total	5	0.2	0.087469	13822000	mg/L
MKTF-11	5/13/2019	Lead, Total	0.00063	0.0005	0.000055	15000	mg/L
MKTF-11	5/13/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-11	5/13/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-11	5/13/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
MKTF-11	5/13/2019	Nickel, Total	0.047	0.01	0.004009	372000	mg/L
MKTF-11	5/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-11	5/13/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-11	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	5/13/2019	Uranium, Total	0.0045	0.0005	0.000085	30000	mg/L
MKTF-11	5/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	10/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-11	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-11	10/30/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L
MKTF-11	10/30/2019	Barium, Dissolved	2.2	0.02	0.006484	2000000	mg/L
MKTF-11	10/30/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-11	10/30/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-11	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-11	10/30/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
MKTF-11	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-11	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-11	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-11	10/30/2019	Iron, Dissolved	3.6	0.2	0.087469	13821880	mg/L
MKTF-11	10/30/2019	Lead, Dissolved	0.000067	0.0005	0.000055	NA	mg/L
MKTF-11	10/30/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
MKTF-11	10/30/2019	Manganese, Dissolved	2.8	0.02	0.002899	2017400	mg/L
MKTF-11	10/30/2019	Molybdenum, Dissolved	0.014	0.008	0.006735	98700	mg/L
MKTF-11	10/30/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-11	10/30/2019	Potassium, Dissolved	0.9	1	0.162288	NA	mg/L
MKTF-11	10/30/2019	Selenium, Dissolved	0.00023	0.001	0.000171	50000	mg/L
MKTF-11	10/30/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-11	10/30/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-11	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-11	10/30/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-11	10/30/2019	Aluminum, Total	1	0.1	0.012441	19914000	mg/L
MKTF-11	10/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-11	10/30/2019	Arsenic, Total	0.022	0.005	0.001561	10000	mg/L
MKTF-11	10/30/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-11	10/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-11	10/30/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-11	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-11	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-11	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-11	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-11	10/30/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
MKTF-11	10/30/2019	Lead, Total	0.00066	0.0025	0.000274	15000	mg/L
MKTF-11	10/30/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-11	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	10/30/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
MKTF-11	10/30/2019	Nickel, Total	0.028	0.01	0.004009	372000	mg/L
MKTF-11	10/30/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-11	10/30/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-11	10/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-11	10/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-11	3/3/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-11	3/3/2020	Arsenic, Dissolved	0.0086	0.005	0.0005	10000	mg/L
MKTF-11	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-11	3/3/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-11	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-11	3/3/2020	Uranium, Dissolved	0.0092	0.0025	0.00037	NA	mg/L
MKTF-11	3/3/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-11	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	3/3/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-11	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-11	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-11	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-11	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-11	3/3/2020	Magnesium, Dissolved	60	1	0.05	NA	mg/L
MKTF-11	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-11	3/3/2020	Nickel, Dissolved	0.028	0.01	0.004	372000	mg/L
MKTF-11	3/3/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
MKTF-11	3/3/2020	Silver, Dissolved	0.0033	0.005	0.00094	81200	mg/L
MKTF-11	3/3/2020	Zinc, Dissolved	0.006	0.01	0.0023	5960450	mg/L
MKTF-11	3/3/2020	Barium, Dissolved	2.9	0.01	0.0032	2000000	mg/L
MKTF-11	3/3/2020	Calcium, Dissolved	220	5	0.31	NA	mg/L
MKTF-11	3/3/2020	Iron, Dissolved	5.2	0.2	0.087	13821880	mg/L
MKTF-11	3/3/2020	Sodium, Dissolved	890	10	4.2	NA	mg/L
MKTF-11	3/3/2020	Manganese, Dissolved	4.8	0.01	0.0014	2017400	mg/L
MKTF-11	3/3/2020	Aluminum, Total	0.85	0.02	0.0025	19914000	mg/L
MKTF-11	3/3/2020	Beryllium, Total	0.00042	0.002	0.00028	4000	mg/L
MKTF-11	3/3/2020	Boron, Total	0.59	0.04	0.0045	3949	mg/L
MKTF-11	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-11	3/3/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-11	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-11	3/3/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	3/3/2020	Molybdenum, Total	0.0074	0.008	0.0067	98700	mg/L
MKTF-11	3/3/2020	Nickel, Total	0.032	0.01	0.004	372000	mg/L
MKTF-11	3/3/2020	Silver, Total	0.0043	0.005	0.0014	50000	mg/L
MKTF-11	3/3/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-11	3/3/2020	Manganese, Total	4.6	0.01	0.0014	2017000	mg/L
MKTF-11	3/3/2020	Iron, Total	8.5	0.2	0.087	13822000	mg/L
MKTF-11	3/3/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-11	3/3/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-11	3/3/2020	Arsenic, Total	0.012	0.001	0.00031	10000	mg/L
MKTF-11	3/3/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-11	3/3/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-11	3/3/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-11	3/3/2020	Uranium, Total	0.0089	0.0005	0.000085	30000	mg/L
MKTF-11	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-11	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-11	6/5/2014	Arsenic, Total	0.0064	0.005	0.00057	10000	mg/L
MKTF-11	6/5/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
MKTF-11	6/5/2014	Calcium, Total	110	5	0.27	NA	mg/L
MKTF-11	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-11	6/5/2014	Chromium, Total	0.006	0.006	0.0021	50000	mg/L
MKTF-11	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-11	6/5/2014	Iron, Total	11	1	0.31	13822000	mg/L
MKTF-11	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	6/5/2014	Potassium, Total	4.7	1	0.24	NA	mg/L
MKTF-11	6/5/2014	Magnesium, Total	31	1	0.024	NA	mg/L
MKTF-11	6/5/2014	Manganese, Total	3.6	0.01	0.0027	2017000	mg/L
MKTF-11	6/5/2014	Sodium, Total	530	10	2.5	NA	mg/L
MKTF-11	6/5/2014	Lead, Total	0.022	0.005	0.00029	15000	mg/L
MKTF-11	6/5/2014	Selenium, Total	0.01	0.005	0.00074	50000	mg/L
MKTF-11	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-11	6/5/2014	Zinc, Total	0.036	0.01	0.0014	5960000	mg/L
MKTF-11	9/15/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-11	9/15/2014	Arsenic, Total	0.0086	0.005	0.00057	10000	mg/L
MKTF-11	9/15/2014	Barium, Total	1.1	0.01	0.0056	2000000	mg/L
MKTF-11	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-11	9/15/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-11	9/15/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-11	9/15/2014	Iron, Total	2.7	0.1	0.031	13822000	mg/L
MKTF-11	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	9/15/2014	Manganese, Total	2.4	0.01	0.0027	2017000	mg/L
MKTF-11	9/15/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-11	9/15/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-11	9/15/2014	Uranium, Total	0.004	0.001	0.00005	30000	mg/L
MKTF-11	9/15/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-11	11/13/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-11	11/13/2014	Arsenic, Total	ND	0.01	0.00011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/13/2014	Barium, Total	1.5	0.01	0.001	2000000	mg/L
MKTF-11	11/13/2014	Calcium, Total	120	5	0.41	NA	mg/L
MKTF-11	11/13/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-11	11/13/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-11	11/13/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-11	11/13/2014	Iron, Total	3.4	0.1	0.031	13822000	mg/L
MKTF-11	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-11	11/13/2014	Potassium, Total	1.3	1	0.093	NA	mg/L
MKTF-11	11/13/2014	Magnesium, Total	34	1	0.018	NA	mg/L
MKTF-11	11/13/2014	Manganese, Total	3.2	0.01	0.0027	2017000	mg/L
MKTF-11	11/13/2014	Sodium, Total	660	10	3.9	NA	mg/L
MKTF-11	11/13/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-11	11/13/2014	Selenium, Total	0.0051	0.001	0.00015	50000	mg/L
MKTF-11	11/13/2014	Uranium, Total	0.0033	0.001	0.00005	30000	mg/L
MKTF-11	11/13/2014	Zinc, Total	0.019	0.01	0.0014	5960000	mg/L
MKTF-11	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	3/16/2015	Arsenic, Total	0.0086	0.001	0.00044	10000	mg/L
MKTF-11	3/16/2015	Barium, Total	1.9	0.01	0.0037	2000000	mg/L
MKTF-11	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-11	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	3/16/2015	Iron, Total	10	0.4	0.14	13822000	mg/L
MKTF-11	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	3/16/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-11	3/16/2015	Lead, Total	0.0068	0.001	0.000069	15000	mg/L
MKTF-11	3/16/2015	Selenium, Total	0.006	0.001	0.00012	50000	mg/L
MKTF-11	3/16/2015	Uranium, Total	0.0021	0.001	0.0000081	30000	mg/L
MKTF-11	3/16/2015	Zinc, Total	0.024	0.01	0.0036	5960000	mg/L
MKTF-11	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-11	6/4/2015	Barium, Total	2.7	0.01	0.0048	2000000	mg/L
MKTF-11	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-11	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-11	6/4/2015	Iron, Total	9.9	0.4	0.15	13822000	mg/L
MKTF-11	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	6/4/2015	Manganese, Total	3	0.01	0.0013	2017000	mg/L
MKTF-11	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-11	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-11	6/4/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-11	6/4/2015	Zinc, Total	0.018	0.01	0.0028	5960000	mg/L
MKTF-11	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	8/18/2015	Arsenic, Total	0.0091	0.001	0.00029	10000	mg/L
MKTF-11	8/18/2015	Barium, Total	2.4	0.01	0.0053	2000000	mg/L
MKTF-11	8/18/2015	Calcium, Total	170	5	0.28	NA	mg/L
MKTF-11	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	8/18/2015	Iron, Total	14	1	0.36	13822000	mg/L
MKTF-11	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	8/18/2015	Magnesium, Total	48	1	0.039	NA	mg/L
MKTF-11	8/18/2015	Manganese, Total	4	0.01	0.0076	2017000	mg/L
MKTF-11	8/18/2015	Sodium, Total	810	10	0.72	NA	mg/L
MKTF-11	8/18/2015	Lead, Total	0.0071	0.0005	0.000047	15000	mg/L
MKTF-11	8/18/2015	Selenium, Total	0.003	0.001	0.00012	50000	mg/L
MKTF-11	8/18/2015	Uranium, Total	0.0026	0.0005	0.0000049	30000	mg/L
MKTF-11	8/18/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-11	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-11	11/3/2015	Arsenic, Total	0.0084	0.001	0.000065	10000	mg/L
MKTF-11	11/3/2015	Barium, Total	4	0.01	0.0066	2000000	mg/L
MKTF-11	11/3/2015	Calcium, Total	190	5	1.3	NA	mg/L
MKTF-11	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-11	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-11	11/3/2015	Iron, Total	12	0.4	0.18	13822000	mg/L
MKTF-11	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-11	11/3/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	11/3/2015	Magnesium, Total	49	1	0.013	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/3/2015	Manganese, Total	3.6	0.01	0.0016	2017000	mg/L
MKTF-11	11/3/2015	Sodium, Total	620	20	1.9	NA	mg/L
MKTF-11	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-11	11/3/2015	Selenium, Total	0.0064	0.001	0.00019	50000	mg/L
MKTF-11	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-11	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-11	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	2/29/2016	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-11	2/29/2016	Barium, Total	3.9	0.01	0.0053	2000000	mg/L
MKTF-11	2/29/2016	Calcium, Total	240	10	2.6	NA	mg/L
MKTF-11	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	2/29/2016	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-11	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	2/29/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-11	2/29/2016	Magnesium, Total	67	1	0.013	NA	mg/L
MKTF-11	2/29/2016	Manganese, Total	6.4	0.04	0.03	2017000	mg/L
MKTF-11	2/29/2016	Sodium, Total	880	10	0.96	NA	mg/L
MKTF-11	2/29/2016	Lead, Total	0.0027	0.0025	0.00024	15000	mg/L
MKTF-11	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-11	2/29/2016	Uranium, Total	0.0054	0.0025	0.000025	30000	mg/L
MKTF-11	2/29/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-11	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-11	6/9/2016	Arsenic, Total	0.012	0.001	0.00029	10000	mg/L
MKTF-11	6/9/2016	Barium, Total	3.4	0.01	0.0053	2000000	mg/L
MKTF-11	6/9/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-11	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-11	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-11	6/9/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-11	6/9/2016	Iron, Total	8.1	0.2	0.072	13822000	mg/L
MKTF-11	6/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	6/9/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-11	6/9/2016	Magnesium, Total	48	1	0.013	NA	mg/L
MKTF-11	6/9/2016	Manganese, Total	4	0.01	0.0076	2017000	mg/L
MKTF-11	6/9/2016	Sodium, Total	800	10	0.96	NA	mg/L
MKTF-11	6/9/2016	Lead, Total	0.0013	0.0005	0.000047	15000	mg/L
MKTF-11	6/9/2016	Selenium, Total	0.0031	0.005	0.00062	50000	mg/L
MKTF-11	6/9/2016	Uranium, Total	0.0091	0.0005	0.0000049	30000	mg/L
MKTF-11	6/9/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-11	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	9/11/2016	Arsenic, Total	0.013	0.001	0.00021	10000	mg/L
MKTF-11	9/11/2016	Barium, Total	2.9	0.01	0.004	2000000	mg/L
MKTF-11	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-11	9/11/2016	Arsenic, Dissolved	0.014	0.001	0.00014	10000	mg/L
MKTF-11	9/11/2016	Barium, Dissolved	2.5	0.02	0.013	2000000	mg/L
MKTF-11	9/11/2016	Calcium, Dissolved	160	10	5	NA	mg/L
MKTF-11	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-11	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-11	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-11	9/11/2016	Iron, Dissolved	4.6	0.2	0.2	13821880	mg/L
MKTF-11	9/11/2016	Potassium, Dissolved	0.99	1	0.5	NA	mg/L
MKTF-11	9/11/2016	Magnesium, Dissolved	44	1	0.5	NA	mg/L
MKTF-11	9/11/2016	Manganese, Dissolved	3.8	0.02	0.0032	2017400	mg/L
MKTF-11	9/11/2016	Sodium, Dissolved	740	10	5	NA	mg/L
MKTF-11	9/11/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/11/2016	Selenium, Dissolved	0.0062	0.01	0.0021	50000	mg/L
MKTF-11	9/11/2016	Uranium, Dissolved	0.0044	0.0005	0.000051	NA	mg/L
MKTF-11	9/11/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-11	9/11/2016	Iron, Total	7.1	0.2	0.2	13822000	mg/L
MKTF-11	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	9/11/2016	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-11	9/11/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-11	9/11/2016	Selenium, Total	0.0054	0.01	0.0019	50000	mg/L
MKTF-11	9/11/2016	Uranium, Total	0.0065	0.0005	0.00017	30000	mg/L
MKTF-11	9/11/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	11/2/2016	Arsenic, Total	0.014	0.001	0.00021	10000	mg/L
MKTF-11	11/2/2016	Barium, Total	2.7	0.02	0.0079	2000000	mg/L
MKTF-11	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-11	11/2/2016	Arsenic, Dissolved	0.013	0.001	0.00014	10000	mg/L
MKTF-11	11/2/2016	Barium, Dissolved	2.6	0.01	0.0066	2000000	mg/L
MKTF-11	11/2/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-11	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-11	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-11	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-11	11/2/2016	Iron, Dissolved	5.4	0.2	0.2	13821880	mg/L
MKTF-11	11/2/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-11	11/2/2016	Magnesium, Dissolved	48	1	0.5	NA	mg/L
MKTF-11	11/2/2016	Manganese, Dissolved	3.9	0.01	0.0016	2017400	mg/L
MKTF-11	11/2/2016	Sodium, Dissolved	790	10	5	NA	mg/L
MKTF-11	11/2/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/2/2016	Selenium, Dissolved	0.0046	0.001	0.00021	50000	mg/L
MKTF-11	11/2/2016	Uranium, Dissolved	0.0059	0.0005	0.000051	NA	mg/L
MKTF-11	11/2/2016	Zinc, Dissolved	0.0038	0.01	0.0028	5960450	mg/L
MKTF-11	11/2/2016	Iron, Total	8.4	0.2	0.2	13822000	mg/L
MKTF-11	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-11	11/2/2016	Manganese, Total	4	0.02	0.0027	2017000	mg/L
MKTF-11	11/2/2016	Lead, Total	0.0011	0.0005	0.000081	15000	mg/L
MKTF-11	11/2/2016	Selenium, Total	0.005	0.01	0.0019	50000	mg/L
MKTF-11	11/2/2016	Uranium, Total	0.0065	0.0005	0.00017	30000	mg/L
MKTF-11	11/2/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-11	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-11	3/2/2017	Arsenic, Total	0.019	0.005	0.0011	10000	mg/L
MKTF-11	3/2/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-11	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-11	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-11	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-11	3/2/2017	Silver, Dissolved	0.0014	0.005	0.00088	81200	mg/L
MKTF-11	3/2/2017	Arsenic, Dissolved	0.018	0.001	0.00014	10000	mg/L
MKTF-11	3/2/2017	Barium, Dissolved	2.2	0.02	0.0085	2000000	mg/L
MKTF-11	3/2/2017	Calcium, Dissolved	130	10	5	NA	mg/L
MKTF-11	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-11	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	3/2/2017	Iron, Dissolved	5.1	0.2	0.2	13821880	mg/L
MKTF-11	3/2/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
MKTF-11	3/2/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-11	3/2/2017	Manganese, Dissolved	3	0.02	0.0038	2017400	mg/L
MKTF-11	3/2/2017	Sodium, Dissolved	690	10	5	NA	mg/L
MKTF-11	3/2/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	3/2/2017	Selenium, Dissolved	0.0035	0.001	0.00021	50000	mg/L
MKTF-11	3/2/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
MKTF-11	3/2/2017	Iron, Total	6.7	0.2	0.2	13822000	mg/L
MKTF-11	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-11	3/2/2017	Manganese, Total	3.1	0.01	0.0014	2017000	mg/L
MKTF-11	3/2/2017	Lead, Total	0.00063	0.0025	0.00041	15000	mg/L
MKTF-11	3/2/2017	Selenium, Total	0.0037	0.005	0.00094	50000	mg/L
MKTF-11	3/2/2017	Zinc, Total	0.0038	0.01	0.0027	5960000	mg/L
MKTF-11	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-11	6/8/2017	Arsenic, Total	0.014	0.001	0.0003	10000	mg/L
MKTF-11	6/8/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-11	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	6/8/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-11	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-11	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-11	6/8/2017	Arsenic, Dissolved	0.014	0.001	0.00018	10000	mg/L
MKTF-11	6/8/2017	Barium, Dissolved	2.1	0.02	0.0085	2000000	mg/L
MKTF-11	6/8/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-11	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-11	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	6/8/2017	Iron, Dissolved	5.1	0.2	0.16	13821880	mg/L
MKTF-11	6/8/2017	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
MKTF-11	6/8/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-11	6/8/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-11	6/8/2017	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-11	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	6/8/2017	Selenium, Dissolved	0.0046	0.001	0.00039	50000	mg/L
MKTF-11	6/8/2017	Uranium, Dissolved	0.003	0.0005	0.00005	NA	mg/L
MKTF-11	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-11	6/8/2017	Iron, Total	6.1	0.2	0.1	13822000	mg/L
MKTF-11	6/8/2017	Mercury, Total	0.000065	0.0002	0.000037	2000	mg/L
MKTF-11	6/8/2017	Manganese, Total	2.7	0.02	0.011	2017000	mg/L
MKTF-11	6/8/2017	Lead, Total	0.00084	0.0005	0.000095	15000	mg/L
MKTF-11	6/8/2017	Selenium, Total	0.0031	0.001	0.00071	50000	mg/L
MKTF-11	6/8/2017	Uranium, Total	0.003	0.0005	0.00015	30000	mg/L
MKTF-11	6/8/2017	Zinc, Total	0.0055	0.01	0.0028	5960000	mg/L
MKTF-11	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	9/26/2017	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-11	9/26/2017	Barium, Total	3.1	0.01	0.0047	2000000	mg/L
MKTF-11	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-11	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	9/26/2017	Arsenic, Dissolved	0.011	0.005	0.00089	10000	mg/L
MKTF-11	9/26/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-11	9/26/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-11	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	9/26/2017	Iron, Dissolved	6.8	0.2	0.16	13821880	mg/L
MKTF-11	9/26/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-11	9/26/2017	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-11	9/26/2017	Manganese, Dissolved	3.1	0.02	0.0039	2017400	mg/L
MKTF-11	9/26/2017	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-11	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/26/2017	Selenium, Dissolved	0.0042	0.005	0.0019	50000	mg/L
MKTF-11	9/26/2017	Zinc, Dissolved	0.03	0.01	0.0021	5960450	mg/L
MKTF-11	9/26/2017	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-11	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-11	9/26/2017	Manganese, Total	3.3	0.01	0.0055	2017000	mg/L
MKTF-11	9/26/2017	Lead, Total	0.0034	0.0005	0.000095	15000	mg/L
MKTF-11	9/26/2017	Selenium, Total	0.0063	0.005	0.0036	50000	mg/L
MKTF-11	9/26/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-11	11/28/2017	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
MKTF-11	11/28/2017	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	11/28/2017	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-11	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	11/28/2017	Arsenic, Dissolved	0.013	0.005	0.0021	10000	mg/L
MKTF-11	11/28/2017	Barium, Dissolved	2.8	0.01	0.0049	2000000	mg/L
MKTF-11	11/28/2017	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-11	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	11/28/2017	Iron, Dissolved	5.8	0.2	0.16	13821880	mg/L
MKTF-11	11/28/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-11	11/28/2017	Magnesium, Dissolved	43	1	0.25	NA	mg/L
MKTF-11	11/28/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-11	11/28/2017	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-11	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-11	11/28/2017	Uranium, Dissolved	0.0056	0.0005	0.000096	NA	mg/L
MKTF-11	11/28/2017	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-11	11/28/2017	Iron, Total	7.6	0.2	0.1	13822000	mg/L
MKTF-11	11/28/2017	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-11	11/28/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	11/28/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	11/28/2017	Uranium, Total	0.0054	0.0025	0.00077	30000	mg/L
MKTF-11	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	2/8/2018	Silver, Total	0.003	0.005	0.0012	50000	mg/L
MKTF-11	2/8/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-11	2/8/2018	Barium, Total	2.6	0.01	0.005	2000000	mg/L
MKTF-11	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	2/8/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
MKTF-11	2/8/2018	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
MKTF-11	2/8/2018	Barium, Dissolved	2.4	0.01	0.0049	2000000	mg/L
MKTF-11	2/8/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-11	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	2/8/2018	Iron, Dissolved	6.1	0.2	0.16	13821880	mg/L
MKTF-11	2/8/2018	Potassium, Dissolved	0.92	1	0.11	NA	mg/L
MKTF-11	2/8/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-11	2/8/2018	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-11	2/8/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-11	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	2/8/2018	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
MKTF-11	2/8/2018	Uranium, Dissolved	0.0042	0.0005	0.000096	NA	mg/L
MKTF-11	2/8/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
MKTF-11	2/8/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-11	2/8/2018	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-11	2/8/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-11	2/8/2018	Lead, Total	0.00066	0.0005	0.00023	15000	mg/L
MKTF-11	2/8/2018	Selenium, Total	0.0039	0.001	0.00098	50000	mg/L
MKTF-11	2/8/2018	Uranium, Total	0.0047	0.0005	0.000068	30000	mg/L
MKTF-11	2/8/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-11	5/2/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-11	5/2/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	5/2/2018	Barium, Total	3	0.01	0.005	2000000	mg/L
MKTF-11	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	5/2/2018	Copper, Total	0.0054	0.006	0.0041	790000	mg/L
MKTF-11	5/2/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-11	5/2/2018	Arsenic, Dissolved	0.015	0.005	0.0021	10000	mg/L
MKTF-11	5/2/2018	Barium, Dissolved	2.5	0.01	0.0049	2000000	mg/L
MKTF-11	5/2/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-11	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	5/2/2018	Iron, Dissolved	6.2	0.2	0.16	13821880	mg/L
MKTF-11	5/2/2018	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-11	5/2/2018	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-11	5/2/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-11	5/2/2018	Sodium, Dissolved	810	10	1.6	NA	mg/L
MKTF-11	5/2/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	5/2/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-11	5/2/2018	Uranium, Dissolved	0.0045	0.0005	0.000096	NA	mg/L
MKTF-11	5/2/2018	Zinc, Dissolved	0.0091	0.01	0.0021	5960450	mg/L
MKTF-11	5/2/2018	Iron, Total	7.8	0.2	0.1	13822000	mg/L
MKTF-11	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-11	5/2/2018	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
MKTF-11	5/2/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	5/2/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-11	5/2/2018	Uranium, Total	0.0042	0.0025	0.00034	30000	mg/L
MKTF-11	5/2/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	9/4/2018	Silver, Total	0.0041	0.005	0.0012	50000	mg/L
MKTF-11	9/4/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-11	9/4/2018	Barium, Total	2.9	0.02	0.01	2000000	mg/L
MKTF-11	9/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	9/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	9/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	9/4/2018	Silver, Dissolved	0.0044	0.005	0.0018	81200	mg/L
MKTF-11	9/4/2018	Arsenic, Dissolved	0.013	0.001	0.00042	10000	mg/L
MKTF-11	9/4/2018	Barium, Dissolved	3	0.02	0.0099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	Calcium, Dissolved	190	10	0.78	NA	mg/L
MKTF-11	9/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	9/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	9/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	9/4/2018	Iron, Dissolved	5.2	0.2	0.16	13821880	mg/L
MKTF-11	9/4/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-11	9/4/2018	Magnesium, Dissolved	52	1	0.25	NA	mg/L
MKTF-11	9/4/2018	Manganese, Dissolved	4.1	0.02	0.0039	2017400	mg/L
MKTF-11	9/4/2018	Sodium, Dissolved	830	10	1.6	NA	mg/L
MKTF-11	9/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	9/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-11	9/4/2018	Uranium, Dissolved	0.006	0.0005	0.000096	NA	mg/L
MKTF-11	9/4/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-11	9/4/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-11	9/4/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	9/4/2018	Manganese, Total	4	0.02	0.011	2017000	mg/L
MKTF-11	9/4/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-11	9/4/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-11	9/4/2018	Uranium, Total	0.0068	0.0025	0.00034	30000	mg/L
MKTF-11	9/4/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-11	11/20/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
MKTF-11	11/20/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
MKTF-11	11/20/2018	Barium, Total	3.3	0.01	0.005	2000000	mg/L
MKTF-11	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-11	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-11	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-11	11/20/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-11	11/20/2018	Arsenic, Dissolved	0.0098	0.001	0.00042	10000	mg/L
MKTF-11	11/20/2018	Barium, Dissolved	3.2	0.02	0.0099	2000000	mg/L
MKTF-11	11/20/2018	Calcium, Dissolved	200	10	0.78	NA	mg/L
MKTF-11	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-11	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-11	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-11	11/20/2018	Iron, Dissolved	3.8	0.2	0.16	13821880	mg/L
MKTF-11	11/20/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-11	11/20/2018	Magnesium, Dissolved	54	1	0.25	NA	mg/L
MKTF-11	11/20/2018	Manganese, Dissolved	4	0.02	0.0039	2017400	mg/L
MKTF-11	11/20/2018	Sodium, Dissolved	880	10	1.6	NA	mg/L
MKTF-11	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-11	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-11	11/20/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
MKTF-11	11/20/2018	Iron, Total	5.9	0.2	0.1	13822000	mg/L
MKTF-11	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-11	11/20/2018	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-11	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-11	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-11	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-13	3/15/2017	Arsenic, Total	0.0056	0.005	0.0011	10000	mg/L
MKTF-13	3/15/2017	Barium, Total	5	0.01	0.004	2000000	mg/L
MKTF-13	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-13	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-13	3/15/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-13	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-13	3/15/2017	Arsenic, Dissolved	0.0055	0.001	0.00018	10000	mg/L
MKTF-13	3/15/2017	Barium, Dissolved	4.7	0.01	0.0043	2000000	mg/L
MKTF-13	3/15/2017	Calcium, Dissolved	200	5	2.5	NA	mg/L
MKTF-13	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-13	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	3/15/2017	Iron, Dissolved	18	0.4	0.4	13821880	mg/L
MKTF-13	3/15/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-13	3/15/2017	Magnesium, Dissolved	38	1	0.5	NA	mg/L
MKTF-13	3/15/2017	Manganese, Dissolved	3.9	0.01	0.0019	2017400	mg/L
MKTF-13	3/15/2017	Sodium, Dissolved	160	5	2.5	NA	mg/L
MKTF-13	3/15/2017	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-13	3/15/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-13	3/15/2017	Uranium, Dissolved	0.00034	0.0005	0.00005	NA	mg/L
MKTF-13	3/15/2017	Zinc, Dissolved	0.034	0.01	0.0011	5960450	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/15/2017	Iron, Total	18	0.4	0.4	13822000	mg/L
MKTF-13	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-13	3/15/2017	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-13	3/15/2017	Lead, Total	0.0021	0.0005	0.000081	15000	mg/L
MKTF-13	3/15/2017	Selenium, Total	0.0075	0.01	0.0019	50000	mg/L
MKTF-13	3/15/2017	Uranium, Total	0.00073	0.0005	0.00017	30000	mg/L
MKTF-13	3/15/2017	Zinc, Total	0.0048	0.01	0.0027	5960000	mg/L
MKTF-13	5/10/2018	Silver, Total	0.0038	0.005	0.0012	50000	mg/L
MKTF-13	5/10/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-13	5/10/2018	Barium, Total	5.7	0.02	0.01	2000000	mg/L
MKTF-13	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-13	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	5/10/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-13	5/10/2018	Arsenic, Dissolved	0.0031	0.001	0.00042	10000	mg/L
MKTF-13	5/10/2018	Barium, Dissolved	5.7	0.02	0.0099	2000000	mg/L
MKTF-13	5/10/2018	Calcium, Dissolved	230	5	0.39	NA	mg/L
MKTF-13	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	5/10/2018	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-13	5/10/2018	Potassium, Dissolved	0.26	1	0.11	NA	mg/L
MKTF-13	5/10/2018	Magnesium, Dissolved	39	1	0.25	NA	mg/L
MKTF-13	5/10/2018	Manganese, Dissolved	4.6	0.01	0.002	2017400	mg/L
MKTF-13	5/10/2018	Sodium, Dissolved	170	10	1.6	NA	mg/L
MKTF-13	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-13	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-13	5/10/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
MKTF-13	5/10/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-13	5/10/2018	Iron, Total	17	1	0.51	13822000	mg/L
MKTF-13	5/10/2018	Mercury, Total	0.000046	0.0002	0.000037	2000	mg/L
MKTF-13	5/10/2018	Manganese, Total	4.6	0.02	0.011	2017000	mg/L
MKTF-13	5/10/2018	Lead, Total	0.00067	0.0005	0.00023	15000	mg/L
MKTF-13	5/10/2018	Selenium, Total	0.0031	0.001	0.00098	50000	mg/L
MKTF-13	5/10/2018	Uranium, Total	0.00043	0.0005	0.000068	30000	mg/L
MKTF-13	5/10/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	8/30/2018	Silver, Total	0.0042	0.005	0.0012	50000	mg/L
MKTF-13	8/30/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
MKTF-13	8/30/2018	Barium, Total	5.8	0.04	0.02	2000000	mg/L
MKTF-13	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-13	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	8/30/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-13	8/30/2018	Arsenic, Dissolved	0.0034	0.001	0.00042	10000	mg/L
MKTF-13	8/30/2018	Barium, Dissolved	5.8	0.02	0.0099	2000000	mg/L
MKTF-13	8/30/2018	Calcium, Dissolved	240	10	0.78	NA	mg/L
MKTF-13	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	8/30/2018	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-13	8/30/2018	Potassium, Dissolved	0.35	1	0.11	NA	mg/L
MKTF-13	8/30/2018	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-13	8/30/2018	Manganese, Dissolved	5.1	0.02	0.0039	2017400	mg/L
MKTF-13	8/30/2018	Sodium, Dissolved	160	5	0.82	NA	mg/L
MKTF-13	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-13	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-13	8/30/2018	Uranium, Dissolved	0.00031	0.0005	0.000096	NA	mg/L
MKTF-13	8/30/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-13	8/30/2018	Iron, Total	19	0.4	0.2	13822000	mg/L
MKTF-13	8/30/2018	Mercury, Total	0.000038	0.0002	0.000038	2000	mg/L
MKTF-13	8/30/2018	Manganese, Total	4.7	0.04	0.022	2017000	mg/L
MKTF-13	8/30/2018	Lead, Total	0.00063	0.0005	0.00023	15000	mg/L
MKTF-13	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-13	8/30/2018	Uranium, Total	0.00029	0.0005	0.000068	30000	mg/L
MKTF-13	8/30/2018	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
MKTF-13	11/28/2018	Silver, Total	0.006	0.005	0.0012	50000	mg/L
MKTF-13	11/28/2018	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
MKTF-13	11/28/2018	Barium, Total	5.9	0.04	0.02	2000000	mg/L
MKTF-13	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-13	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-13	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-13	11/28/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-13	11/28/2018	Barium, Dissolved	5.6	0.04	0.02	2000000	mg/L
MKTF-13	11/28/2018	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-13	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-13	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-13	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-13	11/28/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-13	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-13	11/28/2018	Magnesium, Dissolved	43	1	0.25	NA	mg/L
MKTF-13	11/28/2018	Manganese, Dissolved	4.4	0.01	0.002	2017400	mg/L
MKTF-13	11/28/2018	Sodium, Dissolved	180	5	0.82	NA	mg/L
MKTF-13	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-13	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-13	11/28/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
MKTF-13	11/28/2018	Iron, Total	16	0.4	0.2	13822000	mg/L
MKTF-13	11/28/2018	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-13	11/28/2018	Lead, Total	0.0008	0.0005	0.00023	15000	mg/L
MKTF-13	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-13	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-13	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-13	10/29/2019	Selenium, Total	0.00026	0.001	0.000171	50000	mg/L
MKTF-13	10/29/2019	Aluminum, Total	0.45	0.02	0.002488	19914000	mg/L
MKTF-13	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-13	10/29/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L
MKTF-13	10/29/2019	Barium, Total	6.8	0.04	0.012968	2000000	mg/L
MKTF-13	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-13	10/29/2019	Boron, Total	0.22	0.04	0.004531	3949	mg/L
MKTF-13	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-13	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-13	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-13	10/29/2019	Iron, Total	20	0.4	0.174937	13822000	mg/L
MKTF-13	10/29/2019	Lead, Total	0.00061	0.0005	0.000055	15000	mg/L
MKTF-13	10/29/2019	Manganese, Total	4.7	0.01	0.00145	2017000	mg/L
MKTF-13	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-13	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-13	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-13	10/29/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-13	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-13	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-13	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-13	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-13	10/29/2019	Arsenic, Dissolved	0.0034	0.001	0.000101	10000	mg/L
MKTF-13	10/29/2019	Barium, Dissolved	6	0.04	0.012968	2000000	mg/L
MKTF-13	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	10/29/2019	Boron, Dissolved	0.21	0.04	0.004531	3949110	mg/L
MKTF-13	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	10/29/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
MKTF-13	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	10/29/2019	Iron, Dissolved	15	0.4	0.174937	13821880	mg/L
MKTF-13	10/29/2019	Lead, Dissolved	0.00018	0.0005	0.000055	NA	mg/L
MKTF-13	10/29/2019	Magnesium, Dissolved	46	1	0.05029	NA	mg/L
MKTF-13	10/29/2019	Manganese, Dissolved	4.6	0.01	0.00145	2017400	mg/L
MKTF-13	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-13	10/29/2019	Potassium, Dissolved	0.26	1	0.162288	NA	mg/L
MKTF-13	10/29/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-13	10/29/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-13	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-13	10/29/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-13	3/26/2019	Aluminum, Dissolved	0.037	0.02	0.002488	19913930	mg/L
MKTF-13	3/26/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-13	3/26/2019	Arsenic, Dissolved	0.0034	0.001	0.000101	10000	mg/L
MKTF-13	3/26/2019	Barium, Dissolved	5.8	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	3/26/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	3/26/2019	Boron, Dissolved	0.2	0.04	0.004531	3949110	mg/L
MKTF-13	3/26/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	3/26/2019	Calcium, Dissolved	280	5	0.309446	NA	mg/L
MKTF-13	3/26/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	3/26/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	3/26/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	3/26/2019	Iron, Dissolved	24	1	0.437344	13821880	mg/L
MKTF-13	3/26/2019	Lead, Dissolved	0.00027	0.0005	0.000055	NA	mg/L
MKTF-13	3/26/2019	Magnesium, Dissolved	53	1	0.05029	NA	mg/L
MKTF-13	3/26/2019	Manganese, Dissolved	5.1	0.02	0.002899	2017400	mg/L
MKTF-13	3/26/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	3/26/2019	Nickel, Dissolved	0.0052	0.01	0.004009	372000	mg/L
MKTF-13	3/26/2019	Potassium, Dissolved	0.24	1	0.162288	NA	mg/L
MKTF-13	3/26/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
MKTF-13	3/26/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
MKTF-13	3/26/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L
MKTF-13	3/26/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-13	3/26/2019	Uranium, Dissolved	0.00057	0.0005	0.000075	NA	mg/L
MKTF-13	3/26/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-13	3/26/2019	Aluminum, Total	6.6	0.2	0.045644	19914000	mg/L
MKTF-13	3/26/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
MKTF-13	3/26/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
MKTF-13	3/26/2019	Barium, Total	5.8	0.02	0.004884	2000000	mg/L
MKTF-13	3/26/2019	Beryllium, Total	0.00084	0.002	0.000224	4000	mg/L
MKTF-13	3/26/2019	Boron, Total	0.2	0.04	0.001821	3949	mg/L
MKTF-13	3/26/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	3/26/2019	Calcium, Total	250	5	0.137145	NA	mg/L
MKTF-13	3/26/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
MKTF-13	3/26/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-13	3/26/2019	Iron, Total	25	1	0.302628	13822000	mg/L
MKTF-13	3/26/2019	Lead, Total	0.0067	0.0005	0.000026	15000	mg/L
MKTF-13	3/26/2019	Manganese, Total	4.7	0.01	0.000299	2017000	mg/L
MKTF-13	3/26/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
MKTF-13	3/26/2019	Molybdenum, Total	ND	0.008	0.002075	98700	mg/L
MKTF-13	3/26/2019	Nickel, Total	0.0088	0.01	0.001491	372000	mg/L
MKTF-13	3/26/2019	Selenium, Total	0.00049	0.001	0.000478	50000	mg/L
MKTF-13	3/26/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-13	3/26/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-13	3/26/2019	Uranium, Total	0.00075	0.0005	0.000085	30000	mg/L
MKTF-13	3/26/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-13	5/9/2019	Aluminum, Dissolved	0.051	0.02	0.002488	19913930	mg/L
MKTF-13	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-13	5/9/2019	Arsenic, Dissolved	0.0039	0.005	0.000504	10000	mg/L
MKTF-13	5/9/2019	Barium, Dissolved	5.5	0.04	0.012968	2000000	mg/L
MKTF-13	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-13	5/9/2019	Boron, Dissolved	0.17	0.04	0.004531	3949110	mg/L
MKTF-13	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-13	5/9/2019	Calcium, Dissolved	280	5	0.309446	NA	mg/L
MKTF-13	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-13	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-13	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-13	5/9/2019	Iron, Dissolved	25	1	0.437344	13821880	mg/L
MKTF-13	5/9/2019	Lead, Dissolved	0.0004	0.0025	0.000274	NA	mg/L
MKTF-13	5/9/2019	Magnesium, Dissolved	52	1	0.05029	NA	mg/L
MKTF-13	5/9/2019	Manganese, Dissolved	5.3	0.04	0.005799	2017400	mg/L
MKTF-13	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-13	5/9/2019	Nickel, Dissolved	0.004	0.01	0.004009	372000	mg/L
MKTF-13	5/9/2019	Potassium, Dissolved	0.21	1	0.162288	NA	mg/L
MKTF-13	5/9/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-13	5/9/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-13	5/9/2019	Sodium, Dissolved	210	5	2.080881	NA	mg/L
MKTF-13	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-13	5/9/2019	Uranium, Dissolved	0.00044	0.0025	0.000374	NA	mg/L
MKTF-13	5/9/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-13	5/9/2019	Aluminum, Total	20	1	0.124414	19914000	mg/L
MKTF-13	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-13	5/9/2019	Arsenic, Total	0.0057	0.001	0.000312	10000	mg/L
MKTF-13	5/9/2019	Barium, Total	6.4	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	5/9/2019	Beryllium, Total	0.0018	0.002	0.000284	4000	mg/L
MKTF-13	5/9/2019	Boron, Total	0.18	0.04	0.004531	3949	mg/L
MKTF-13	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-13	5/9/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-13	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-13	5/9/2019	Copper, Total	0.0068	0.006	0.004072	790000	mg/L
MKTF-13	5/9/2019	Iron, Total	35	1	0.437344	13822000	mg/L
MKTF-13	5/9/2019	Lead, Total	0.016	0.0005	0.000055	15000	mg/L
MKTF-13	5/9/2019	Manganese, Total	6.1	0.02	0.002899	2017000	mg/L
MKTF-13	5/9/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-13	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-13	5/9/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-13	5/9/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-13	5/9/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-13	5/9/2019	Thallium, Total	0.0001	0.0005	0.000052	2000	mg/L
MKTF-13	5/9/2019	Uranium, Total	0.001	0.0005	0.000085	30000	mg/L
MKTF-13	5/9/2019	Zinc, Total	0.022	0.01	0.005772	5960000	mg/L
MKTF-15	5/13/2019	Aluminum, Dissolved	0.045	0.02	0.002488	19913930	mg/L
MKTF-15	5/13/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-15	5/13/2019	Arsenic, Dissolved	0.0059	0.005	0.000504	10000	mg/L
MKTF-15	5/13/2019	Barium, Dissolved	17	0.1	0.032419	2000000	mg/L
MKTF-15	5/13/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-15	5/13/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-15	5/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-15	5/13/2019	Calcium, Dissolved	670	50	3.094457	NA	mg/L
MKTF-15	5/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-15	5/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-15	5/13/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-15	5/13/2019	Iron, Dissolved	26	1	0.437344	13821880	mg/L
MKTF-15	5/13/2019	Lead, Dissolved	0.00041	0.0025	0.000274	NA	mg/L
MKTF-15	5/13/2019	Magnesium, Dissolved	180	5	0.251452	NA	mg/L
MKTF-15	5/13/2019	Manganese, Dissolved	8.2	0.1	0.014497	2017400	mg/L
MKTF-15	5/13/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-15	5/13/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-15	5/13/2019	Potassium, Dissolved	2.4	1	0.162288	NA	mg/L
MKTF-15	5/13/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-15	5/13/2019	Silver, Dissolved	0.009	0.005	0.000942	81200	mg/L
MKTF-15	5/13/2019	Sodium, Dissolved	1600	50	20.808815	NA	mg/L
MKTF-15	5/13/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-15	5/13/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-15	5/13/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
MKTF-15	5/13/2019	Aluminum, Total	1.6	0.04	0.004977	19914000	mg/L
MKTF-15	5/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-15	5/13/2019	Arsenic, Total	0.0081	0.001	0.000312	10000	mg/L
MKTF-15	5/13/2019	Barium, Total	19	0.1	0.032419	2000000	mg/L
MKTF-15	5/13/2019	Beryllium, Total	0.00089	0.002	0.000284	4000	mg/L
MKTF-15	5/13/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-15	5/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-15	5/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-15	5/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-15	5/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-15	5/13/2019	Iron, Total	31	1	0.437344	13822000	mg/L
MKTF-15	5/13/2019	Lead, Total	0.0058	0.0005	0.000055	15000	mg/L
MKTF-15	5/13/2019	Manganese, Total	8.4	0.02	0.002899	2017000	mg/L
MKTF-15	5/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-15	5/13/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-15	5/13/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
MKTF-15	5/13/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-15	5/13/2019	Silver, Total	0.0064	0.005	0.001418	50000	mg/L
MKTF-15	5/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-15	5/13/2019	Uranium, Total	0.00058	0.0005	0.000085	30000	mg/L
MKTF-15	5/13/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
MKTF-15	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-15	6/5/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-15	6/5/2014	Barium, Total	25	0.1	0.056	2000000	mg/L
MKTF-15	6/5/2014	Calcium, Total	880	10	0.53	NA	mg/L
MKTF-15	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-15	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-15	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	6/5/2014	Iron, Total	11	1	0.31	13822000	mg/L
MKTF-15	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-15	6/5/2014	Potassium, Total	14	1	0.24	NA	mg/L
MKTF-15	6/5/2014	Magnesium, Total	260	10	0.24	NA	mg/L
MKTF-15	6/5/2014	Manganese, Total	7.5	0.1	0.027	2017000	mg/L
MKTF-15	6/5/2014	Sodium, Total	2400	50	13	NA	mg/L
MKTF-15	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-15	6/5/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-15	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-15	6/5/2014	Zinc, Total	0.011	0.01	0.0014	5960000	mg/L
MKTF-15	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-15	9/17/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-15	9/17/2014	Barium, Total	27	0.2	0.11	2000000	mg/L
MKTF-15	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-15	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-15	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-15	9/17/2014	Iron, Total	13	2	0.62	13822000	mg/L
MKTF-15	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-15	9/17/2014	Manganese, Total	9	0.02	0.0055	2017000	mg/L
MKTF-15	9/17/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-15	9/17/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-15	9/17/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-15	9/17/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-15	9/11/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	9/11/2016	Arsenic, Total	0.0022	0.005	0.0011	10000	mg/L
MKTF-15	9/11/2016	Barium, Total	23	0.1	0.04	2000000	mg/L
MKTF-15	9/11/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	9/11/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	9/11/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	9/11/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-15	9/11/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-15	9/11/2016	Barium, Dissolved	23	0.1	0.066	2000000	mg/L
MKTF-15	9/11/2016	Calcium, Dissolved	660	50	25	NA	mg/L
MKTF-15	9/11/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-15	9/11/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-15	9/11/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-15	9/11/2016	Iron, Dissolved	32	1	1	13821880	mg/L
MKTF-15	9/11/2016	Potassium, Dissolved	3	1	0.5	NA	mg/L
MKTF-15	9/11/2016	Magnesium, Dissolved	190	5	2.5	NA	mg/L
MKTF-15	9/11/2016	Manganese, Dissolved	7.6	0.1	0.016	2017400	mg/L
MKTF-15	9/11/2016	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	9/11/2016	Lead, Dissolved	0.00048	0.0005	0.00017	NA	mg/L
MKTF-15	9/11/2016	Selenium, Dissolved	0.0091	0.02	0.0042	50000	mg/L
MKTF-15	9/11/2016	Uranium, Dissolved	0.00023	0.0005	0.000051	NA	mg/L
MKTF-15	9/11/2016	Zinc, Dissolved	0.04	0.01	0.0028	5960450	mg/L
MKTF-15	9/11/2016	Iron, Total	35	1	1	13822000	mg/L
MKTF-15	9/11/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-15	9/11/2016	Manganese, Total	7.7	0.1	0.014	2017000	mg/L
MKTF-15	9/11/2016	Lead, Total	0.0059	0.0025	0.00041	15000	mg/L
MKTF-15	9/11/2016	Selenium, Total	0.0054	0.01	0.0019	50000	mg/L
MKTF-15	9/11/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-15	9/11/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-15	11/2/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	11/2/2016	Arsenic, Total	0.0037	0.005	0.0011	10000	mg/L
MKTF-15	11/2/2016	Barium, Total	22	0.1	0.04	2000000	mg/L
MKTF-15	11/2/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	11/2/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	11/2/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	11/2/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-15	11/2/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-15	11/2/2016	Barium, Dissolved	20	0.1	0.066	2000000	mg/L
MKTF-15	11/2/2016	Calcium, Dissolved	590	10	5	NA	mg/L
MKTF-15	11/2/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-15	11/2/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-15	11/2/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-15	11/2/2016	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-15	11/2/2016	Potassium, Dissolved	3.4	1	0.5	NA	mg/L
MKTF-15	11/2/2016	Magnesium, Dissolved	180	5	2.5	NA	mg/L
MKTF-15	11/2/2016	Manganese, Dissolved	6.5	0.02	0.0032	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/2/2016	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	11/2/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	11/2/2016	Selenium, Dissolved	0.0069	0.01	0.0021	50000	mg/L
MKTF-15	11/2/2016	Uranium, Dissolved	ND	0.0025	0.00026	NA	mg/L
MKTF-15	11/2/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
MKTF-15	11/2/2016	Iron, Total	34	1	1	13822000	mg/L
MKTF-15	11/2/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-15	11/2/2016	Manganese, Total	6.8	0.02	0.0027	2017000	mg/L
MKTF-15	11/2/2016	Lead, Total	0.006	0.0025	0.00041	15000	mg/L
MKTF-15	11/2/2016	Selenium, Total	0.0069	0.005	0.00094	50000	mg/L
MKTF-15	11/2/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-15	11/2/2016	Zinc, Total	0.028	0.01	0.0027	5960000	mg/L
MKTF-15	3/2/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-15	3/2/2017	Arsenic, Total	0.0045	0.005	0.0011	10000	mg/L
MKTF-15	3/2/2017	Barium, Total	29	0.1	0.04	2000000	mg/L
MKTF-15	3/2/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-15	3/2/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-15	3/2/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-15	3/2/2017	Silver, Dissolved	0.0066	0.005	0.00088	81200	mg/L
MKTF-15	3/2/2017	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-15	3/2/2017	Barium, Dissolved	28	0.1	0.043	2000000	mg/L
MKTF-15	3/2/2017	Calcium, Dissolved	780	50	25	NA	mg/L
MKTF-15	3/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	3/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-15	3/2/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	3/2/2017	Iron, Dissolved	45	1	1	13821880	mg/L
MKTF-15	3/2/2017	Potassium, Dissolved	2.8	1	0.5	NA	mg/L
MKTF-15	3/2/2017	Magnesium, Dissolved	210	5	2.5	NA	mg/L
MKTF-15	3/2/2017	Manganese, Dissolved	9.5	0.1	0.019	2017400	mg/L
MKTF-15	3/2/2017	Sodium, Dissolved	1600	50	25	NA	mg/L
MKTF-15	3/2/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	3/2/2017	Selenium, Dissolved	0.0086	0.01	0.0021	50000	mg/L
MKTF-15	3/2/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-15	3/2/2017	Iron, Total	49	1	1	13822000	mg/L
MKTF-15	3/2/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-15	3/2/2017	Manganese, Total	9.6	0.02	0.0027	2017000	mg/L
MKTF-15	3/2/2017	Lead, Total	0.0097	0.005	0.00081	15000	mg/L
MKTF-15	3/2/2017	Selenium, Total	0.0058	0.01	0.0019	50000	mg/L
MKTF-15	3/2/2017	Zinc, Total	0.027	0.01	0.0027	5960000	mg/L
MKTF-15	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-15	6/8/2017	Arsenic, Total	0.0072	0.005	0.0015	10000	mg/L
MKTF-15	6/8/2017	Barium, Total	33	0.1	0.047	2000000	mg/L
MKTF-15	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	6/8/2017	Chromium, Total	0.0011	0.006	0.0011	50000	mg/L
MKTF-15	6/8/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-15	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-15	6/8/2017	Arsenic, Dissolved	0.0057	0.01	0.0018	10000	mg/L
MKTF-15	6/8/2017	Barium, Dissolved	31	0.1	0.043	2000000	mg/L
MKTF-15	6/8/2017	Calcium, Dissolved	920	10	0.78	NA	mg/L
MKTF-15	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-15	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	6/8/2017	Iron, Dissolved	54	2	1.6	13821880	mg/L
MKTF-15	6/8/2017	Potassium, Dissolved	2.9	1	0.11	NA	mg/L
MKTF-15	6/8/2017	Magnesium, Dissolved	260	10	2.5	NA	mg/L
MKTF-15	6/8/2017	Manganese, Dissolved	13	0.04	0.0077	2017400	mg/L
MKTF-15	6/8/2017	Sodium, Dissolved	1700	20	3.3	NA	mg/L
MKTF-15	6/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-15	6/8/2017	Selenium, Dissolved	0.0062	0.01	0.0039	50000	mg/L
MKTF-15	6/8/2017	Uranium, Dissolved	0.00057	0.0025	0.00025	NA	mg/L
MKTF-15	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-15	6/8/2017	Iron, Total	65	2	1	13822000	mg/L
MKTF-15	6/8/2017	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-15	6/8/2017	Manganese, Total	14	0.1	0.055	2017000	mg/L
MKTF-15	6/8/2017	Lead, Total	0.0098	0.0025	0.00048	15000	mg/L
MKTF-15	6/8/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-15	6/8/2017	Uranium, Total	0.0015	0.0025	0.00077	30000	mg/L
MKTF-15	6/8/2017	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-15	11/28/2017	Silver, Total	0.012	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	11/28/2017	Arsenic, Total	0.024	0.05	0.021	10000	mg/L
MKTF-15	11/28/2017	Barium, Total	47	0.1	0.05	2000000	mg/L
MKTF-15	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	11/28/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-15	11/28/2017	Silver, Dissolved	ND	0.1	0.037	81200	mg/L
MKTF-15	11/28/2017	Arsenic, Dissolved	0.0072	0.01	0.0042	10000	mg/L
MKTF-15	11/28/2017	Barium, Dissolved	44	0.1	0.049	2000000	mg/L
MKTF-15	11/28/2017	Calcium, Dissolved	1600	20	1.6	NA	mg/L
MKTF-15	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	11/28/2017	Iron, Dissolved	75	2	1.6	13821880	mg/L
MKTF-15	11/28/2017	Potassium, Dissolved	4.3	1	0.11	NA	mg/L
MKTF-15	11/28/2017	Magnesium, Dissolved	470	20	5	NA	mg/L
MKTF-15	11/28/2017	Manganese, Dissolved	23	0.1	0.02	2017400	mg/L
MKTF-15	11/28/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-15	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-15	11/28/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-15	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-15	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-15	11/28/2017	Iron, Total	78	2	1	13822000	mg/L
MKTF-15	11/28/2017	Manganese, Total	25	0.1	0.055	2017000	mg/L
MKTF-15	11/28/2017	Lead, Total	0.0037	0.0025	0.0011	15000	mg/L
MKTF-15	11/28/2017	Selenium, Total	0.0079	0.005	0.0049	50000	mg/L
MKTF-15	11/28/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
MKTF-15	11/28/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-15	5/2/2018	Silver, Total	0.0077	0.005	0.0012	50000	mg/L
MKTF-15	5/2/2018	Arsenic, Total	0.016	0.01	0.0041	10000	mg/L
MKTF-15	5/2/2018	Barium, Total	33	0.1	0.05	2000000	mg/L
MKTF-15	5/2/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	5/2/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	5/2/2018	Copper, Total	0.0075	0.006	0.0041	790000	mg/L
MKTF-15	5/2/2018	Silver, Dissolved	0.008	0.005	0.0018	81200	mg/L
MKTF-15	5/2/2018	Arsenic, Dissolved	0.01	0.01	0.0042	10000	mg/L
MKTF-15	5/2/2018	Barium, Dissolved	31	0.1	0.049	2000000	mg/L
MKTF-15	5/2/2018	Calcium, Dissolved	1200	50	3.9	NA	mg/L
MKTF-15	5/2/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	5/2/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	5/2/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-15	5/2/2018	Iron, Dissolved	46	1	0.82	13821880	mg/L
MKTF-15	5/2/2018	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
MKTF-15	5/2/2018	Magnesium, Dissolved	370	5	1.2	NA	mg/L
MKTF-15	5/2/2018	Manganese, Dissolved	17	0.1	0.02	2017400	mg/L
MKTF-15	5/2/2018	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-15	5/2/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-15	5/2/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-15	5/2/2018	Uranium, Dissolved	ND	0.005	0.00096	NA	mg/L
MKTF-15	5/2/2018	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
MKTF-15	5/2/2018	Iron, Total	53	2	1	13822000	mg/L
MKTF-15	5/2/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-15	5/2/2018	Manganese, Total	18	0.1	0.055	2017000	mg/L
MKTF-15	5/2/2018	Lead, Total	0.0044	0.005	0.0023	15000	mg/L
MKTF-15	5/2/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-15	5/2/2018	Uranium, Total	ND	0.005	0.00068	30000	mg/L
MKTF-15	5/2/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-15	8/28/2018	Silver, Total	0.019	0.005	0.0012	50000	mg/L
MKTF-15	8/28/2018	Arsenic, Total	0.0035	0.005	0.0021	10000	mg/L
MKTF-15	8/28/2018	Barium, Total	26	0.1	0.05	2000000	mg/L
MKTF-15	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-15	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-15	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-15	8/28/2018	Silver, Dissolved	0.02	0.005	0.0018	81200	mg/L
MKTF-15	8/28/2018	Arsenic, Dissolved	0.0055	0.005	0.0021	10000	mg/L
MKTF-15	8/28/2018	Barium, Dissolved	26	0.1	0.049	2000000	mg/L
MKTF-15	8/28/2018	Calcium, Dissolved	1100	20	1.6	NA	mg/L
MKTF-15	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-15	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-15	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	8/28/2018	Iron, Dissolved	36	1	0.82	13821880	mg/L
MKTF-15	8/28/2018	Potassium, Dissolved	3.7	1	0.11	NA	mg/L
MKTF-15	8/28/2018	Magnesium, Dissolved	300	5	1.2	NA	mg/L
MKTF-15	8/28/2018	Manganese, Dissolved	14	0.04	0.0078	2017400	mg/L
MKTF-15	8/28/2018	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-15	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-15	8/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-15	8/28/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-15	8/28/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-15	8/28/2018	Iron, Total	36	1	0.51	13822000	mg/L
MKTF-15	8/28/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
MKTF-15	8/28/2018	Manganese, Total	13	0.1	0.055	2017000	mg/L
MKTF-15	8/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-15	8/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-15	8/28/2018	Uranium, Total	ND	0.0025	0.00034	30000	mg/L
MKTF-15	8/28/2018	Zinc, Total	0.0045	0.01	0.0033	5960000	mg/L
MKTF-16	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-16	6/5/2014	Arsenic, Total	0.013	0.005	0.00057	10000	mg/L
MKTF-16	6/5/2014	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-16	6/5/2014	Calcium, Total	68	1	0.053	NA	mg/L
MKTF-16	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-16	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-16	6/5/2014	Iron, Total	7.9	0.2	0.062	13822000	mg/L
MKTF-16	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	6/5/2014	Potassium, Total	5.2	1	0.24	NA	mg/L
MKTF-16	6/5/2014	Magnesium, Total	17	1	0.024	NA	mg/L
MKTF-16	6/5/2014	Manganese, Total	1.3	0.01	0.0027	2017000	mg/L
MKTF-16	6/5/2014	Sodium, Total	740	10	2.5	NA	mg/L
MKTF-16	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-16	6/5/2014	Selenium, Total	0.017	0.005	0.00074	50000	mg/L
MKTF-16	6/5/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-16	6/5/2014	Zinc, Total	0.022	0.01	0.0014	5960000	mg/L
MKTF-16	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-16	9/17/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
MKTF-16	9/17/2014	Barium, Total	0.81	0.002	0.0011	2000000	mg/L
MKTF-16	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-16	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-16	9/17/2014	Iron, Total	7.3	0.2	0.062	13822000	mg/L
MKTF-16	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	9/17/2014	Manganese, Total	1.1	0.02	0.0055	2017000	mg/L
MKTF-16	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-16	9/17/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-16	9/17/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
MKTF-16	9/17/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
MKTF-16	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-16	11/18/2014	Arsenic, Total	0.01	0.005	0.0018	10000	mg/L
MKTF-16	11/18/2014	Barium, Total	1.1	0.01	0.0025	2000000	mg/L
MKTF-16	11/18/2014	Calcium, Total	62	1	0.082	NA	mg/L
MKTF-16	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-16	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-16	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-16	11/18/2014	Iron, Total	10	0.4	0.14	13822000	mg/L
MKTF-16	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-16	11/18/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
MKTF-16	11/18/2014	Magnesium, Total	16	1	0.018	NA	mg/L
MKTF-16	11/18/2014	Manganese, Total	1.3	0.01	0.0024	2017000	mg/L
MKTF-16	11/18/2014	Sodium, Total	840	10	3.9	NA	mg/L
MKTF-16	11/18/2014	Lead, Total	0.0042	0.001	0.00026	15000	mg/L
MKTF-16	11/18/2014	Selenium, Total	ND	0.05	0.0025	50000	mg/L
MKTF-16	11/18/2014	Uranium, Total	0.0016	0.001	0.0000072	30000	mg/L
MKTF-16	11/18/2014	Zinc, Total	0.05	0.01	0.0035	5960000	mg/L
MKTF-16	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-16	3/16/2015	Barium, Total	1	0.02	0.0073	2000000	mg/L
MKTF-16	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-16	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	3/16/2015	Copper, Total	0.023	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/16/2015	Iron, Total	7.2	0.2	0.072	13822000	mg/L
MKTF-16	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	3/16/2015	Manganese, Total	1.3	0.02	0.015	2017000	mg/L
MKTF-16	3/16/2015	Lead, Total	ND	0.01	0.00069	15000	mg/L
MKTF-16	3/16/2015	Selenium, Total	ND	0.02	0.0024	50000	mg/L
MKTF-16	3/16/2015	Uranium, Total	ND	0.01	0.000081	30000	mg/L
MKTF-16	3/16/2015	Zinc, Total	0.035	0.01	0.0036	5960000	mg/L
MKTF-16	6/8/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-16	6/8/2015	Arsenic, Total	0.0097	0.005	0.0015	10000	mg/L
MKTF-16	6/8/2015	Barium, Total	2.2	0.01	0.0053	2000000	mg/L
MKTF-16	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	6/8/2015	Copper, Total	0.0091	0.006	0.0051	790000	mg/L
MKTF-16	6/8/2015	Iron, Total	12	0.4	0.14	13822000	mg/L
MKTF-16	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	6/8/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-16	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-16	6/8/2015	Selenium, Total	0.0072	0.005	0.00062	50000	mg/L
MKTF-16	6/8/2015	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-16	6/8/2015	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-16	8/23/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	8/23/2015	Arsenic, Total	0.014	0.01	0.0029	10000	mg/L
MKTF-16	8/23/2015	Barium, Total	3.9	0.02	0.011	2000000	mg/L
MKTF-16	8/23/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-16	8/23/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	8/23/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	8/23/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	8/23/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-16	8/23/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	8/23/2015	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-16	8/23/2015	Magnesium, Total	41	1	0.039	NA	mg/L
MKTF-16	8/23/2015	Manganese, Total	5.5	0.02	0.015	2017000	mg/L
MKTF-16	8/23/2015	Sodium, Total	1100	50	3.6	NA	mg/L
MKTF-16	8/23/2015	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
MKTF-16	8/23/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-16	8/23/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
MKTF-16	8/23/2015	Zinc, Total	0.01	0.01	0.0039	5960000	mg/L
MKTF-16	11/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	11/3/2015	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-16	11/3/2015	Barium, Total	3	0.01	0.0053	2000000	mg/L
MKTF-16	11/3/2015	Calcium, Total	150	10	2.6	NA	mg/L
MKTF-16	11/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	11/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	11/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	11/3/2015	Iron, Total	13	0.4	0.14	13822000	mg/L
MKTF-16	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-16	11/3/2015	Potassium, Total	2.5	1	0.18	NA	mg/L
MKTF-16	11/3/2015	Magnesium, Total	39	1	0.013	NA	mg/L
MKTF-16	11/3/2015	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-16	11/3/2015	Sodium, Total	780	10	0.96	NA	mg/L
MKTF-16	11/3/2015	Lead, Total	0.0027	0.0005	0.000047	15000	mg/L
MKTF-16	11/3/2015	Selenium, Total	0.021	0.005	0.00062	50000	mg/L
MKTF-16	11/3/2015	Uranium, Total	0.00053	0.0005	0.0000049	30000	mg/L
MKTF-16	11/3/2015	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-16	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-16	2/29/2016	Arsenic, Total	0.0092	0.005	0.0015	10000	mg/L
MKTF-16	2/29/2016	Barium, Total	1.3	0.02	0.011	2000000	mg/L
MKTF-16	2/29/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-16	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-16	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-16	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-16	2/29/2016	Iron, Total	6.5	0.2	0.072	13822000	mg/L
MKTF-16	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	2/29/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-16	2/29/2016	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-16	2/29/2016	Manganese, Total	1.8	0.02	0.015	2017000	mg/L
MKTF-16	2/29/2016	Sodium, Total	710	10	0.96	NA	mg/L
MKTF-16	2/29/2016	Lead, Total	0.0031	0.0025	0.00024	15000	mg/L
MKTF-16	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	2/29/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-16	2/29/2016	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-16	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	9/12/2016	Arsenic, Total	0.014	0.005	0.0011	10000	mg/L
MKTF-16	9/12/2016	Barium, Total	0.72	0.002	0.00079	2000000	mg/L
MKTF-16	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	9/12/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-16	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-16	9/12/2016	Arsenic, Dissolved	0.014	0.001	0.00014	10000	mg/L
MKTF-16	9/12/2016	Barium, Dissolved	0.67	0.002	0.0013	2000000	mg/L
MKTF-16	9/12/2016	Calcium, Dissolved	47	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-16	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-16	9/12/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-16	9/12/2016	Iron, Dissolved	2.4	0.2	0.2	13821880	mg/L
MKTF-16	9/12/2016	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-16	9/12/2016	Manganese, Dissolved	0.94	0.002	0.00032	2017400	mg/L
MKTF-16	9/12/2016	Sodium, Dissolved	660	10	5	NA	mg/L
MKTF-16	9/12/2016	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-16	9/12/2016	Selenium, Dissolved	0.013	0.005	0.0011	50000	mg/L
MKTF-16	9/12/2016	Uranium, Dissolved	0.004	0.0005	0.000051	NA	mg/L
MKTF-16	9/12/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-16	9/12/2016	Iron, Total	4.6	0.1	0.1	13822000	mg/L
MKTF-16	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	9/12/2016	Manganese, Total	0.96	0.002	0.00027	2017000	mg/L
MKTF-16	9/12/2016	Lead, Total	0.0029	0.0005	0.000081	15000	mg/L
MKTF-16	9/12/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-16	9/12/2016	Uranium, Total	0.0067	0.0005	0.00017	30000	mg/L
MKTF-16	9/12/2016	Zinc, Total	0.022	0.01	0.0027	5960000	mg/L
MKTF-16	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	11/3/2016	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L
MKTF-16	11/3/2016	Barium, Total	0.67	0.002	0.00079	2000000	mg/L
MKTF-16	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	11/3/2016	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-16	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-16	11/3/2016	Arsenic, Dissolved	0.015	0.005	0.00069	10000	mg/L
MKTF-16	11/3/2016	Barium, Dissolved	0.69	0.002	0.0013	2000000	mg/L
MKTF-16	11/3/2016	Calcium, Dissolved	46	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-16	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-16	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-16	11/3/2016	Iron, Dissolved	2.2	0.1	0.1	13821880	mg/L
MKTF-16	11/3/2016	Potassium, Dissolved	0.93	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-16	11/3/2016	Manganese, Dissolved	0.87	0.002	0.00032	2017400	mg/L
MKTF-16	11/3/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-16	11/3/2016	Lead, Dissolved	0.00042	0.0005	0.00017	NA	mg/L
MKTF-16	11/3/2016	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
MKTF-16	11/3/2016	Uranium, Dissolved	0.0053	0.0005	0.000051	NA	mg/L
MKTF-16	11/3/2016	Zinc, Dissolved	0.0041	0.01	0.0028	5960450	mg/L
MKTF-16	11/3/2016	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-16	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-16	11/3/2016	Manganese, Total	0.86	0.002	0.00027	2017000	mg/L
MKTF-16	11/3/2016	Lead, Total	0.0034	0.0005	0.000081	15000	mg/L
MKTF-16	11/3/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-16	11/3/2016	Uranium, Total	0.0077	0.0005	0.00017	30000	mg/L
MKTF-16	11/3/2016	Zinc, Total	0.02	0.01	0.0027	5960000	mg/L
MKTF-16	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-16	3/14/2017	Arsenic, Total	0.014	0.005	0.0011	10000	mg/L
MKTF-16	3/14/2017	Barium, Total	1.9	0.01	0.004	2000000	mg/L
MKTF-16	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-16	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-16	3/14/2017	Copper, Total	0.0054	0.006	0.003	790000	mg/L
MKTF-16	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-16	3/14/2017	Arsenic, Dissolved	0.01	0.005	0.00089	10000	mg/L
MKTF-16	3/14/2017	Barium, Dissolved	1.9	0.01	0.0043	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	3/14/2017	Calcium, Dissolved	77	5	2.5	NA	mg/L
MKTF-16	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-16	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	3/14/2017	Iron, Dissolved	4.7	0.2	0.2	13821880	mg/L
MKTF-16	3/14/2017	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-16	3/14/2017	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-16	3/14/2017	Manganese, Dissolved	1.8	0.01	0.0019	2017400	mg/L
MKTF-16	3/14/2017	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-16	3/14/2017	Lead, Dissolved	0.00078	0.0005	0.00017	NA	mg/L
MKTF-16	3/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-16	3/14/2017	Uranium, Dissolved	0.0012	0.0005	0.00005	NA	mg/L
MKTF-16	3/14/2017	Zinc, Dissolved	0.027	0.01	0.0011	5960450	mg/L
MKTF-16	3/14/2017	Iron, Total	6.3	0.2	0.2	13822000	mg/L
MKTF-16	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-16	3/14/2017	Manganese, Total	1.7	0.01	0.0014	2017000	mg/L
MKTF-16	3/14/2017	Lead, Total	0.0058	0.0025	0.00041	15000	mg/L
MKTF-16	3/14/2017	Selenium, Total	0.0081	0.02	0.0037	50000	mg/L
MKTF-16	3/14/2017	Uranium, Total	0.0024	0.0025	0.00087	30000	mg/L
MKTF-16	3/14/2017	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
MKTF-16	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-16	6/8/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-16	6/8/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-16	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	6/8/2017	Chromium, Total	0.0018	0.006	0.0011	50000	mg/L
MKTF-16	6/8/2017	Copper, Total	0.0022	0.006	0.0017	790000	mg/L
MKTF-16	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-16	6/8/2017	Arsenic, Dissolved	0.018	0.005	0.00089	10000	mg/L
MKTF-16	6/8/2017	Barium, Dissolved	2.3	0.02	0.0085	2000000	mg/L
MKTF-16	6/8/2017	Calcium, Dissolved	86	1	0.078	NA	mg/L
MKTF-16	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-16	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	6/8/2017	Iron, Dissolved	1.4	0.2	0.16	13821880	mg/L
MKTF-16	6/8/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-16	6/8/2017	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-16	6/8/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
MKTF-16	6/8/2017	Sodium, Dissolved	770	10	1.6	NA	mg/L
MKTF-16	6/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-16	6/8/2017	Selenium, Dissolved	0.018	0.005	0.0019	50000	mg/L
MKTF-16	6/8/2017	Uranium, Dissolved	0.0087	0.0025	0.00025	NA	mg/L
MKTF-16	6/8/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-16	6/8/2017	Iron, Total	3.4	0.2	0.1	13822000	mg/L
MKTF-16	6/8/2017	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-16	6/8/2017	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
MKTF-16	6/8/2017	Lead, Total	0.0033	0.0005	0.000095	15000	mg/L
MKTF-16	6/8/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
MKTF-16	6/8/2017	Uranium, Total	0.015	0.0005	0.00015	30000	mg/L
MKTF-16	6/8/2017	Zinc, Total	0.016	0.01	0.0028	5960000	mg/L
MKTF-16	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-16	9/26/2017	Arsenic, Total	0.016	0.005	0.0015	10000	mg/L
MKTF-16	9/26/2017	Barium, Total	2.7	0.01	0.0047	2000000	mg/L
MKTF-16	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	9/26/2017	Copper, Total	0.0021	0.006	0.0017	790000	mg/L
MKTF-16	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	9/26/2017	Arsenic, Dissolved	0.013	0.01	0.0018	10000	mg/L
MKTF-16	9/26/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
MKTF-16	9/26/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-16	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	9/26/2017	Iron, Dissolved	8.8	0.2	0.16	13821880	mg/L
MKTF-16	9/26/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-16	9/26/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-16	9/26/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-16	9/26/2017	Sodium, Dissolved	820	10	1.6	NA	mg/L
MKTF-16	9/26/2017	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
MKTF-16	9/26/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-16	9/26/2017	Iron, Total	8.6	0.2	0.1	13822000	mg/L
MKTF-16	9/26/2017	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-16	9/26/2017	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-16	9/26/2017	Lead, Total	0.002	0.0005	0.000095	15000	mg/L
MKTF-16	9/26/2017	Selenium, Total	0.019	0.005	0.0036	50000	mg/L
MKTF-16	9/26/2017	Zinc, Total	0.0096	0.01	0.0033	5960000	mg/L
MKTF-16	11/29/2017	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-16	11/29/2017	Arsenic, Total	0.019	0.01	0.0041	10000	mg/L
MKTF-16	11/29/2017	Barium, Total	2.9	0.01	0.005	2000000	mg/L
MKTF-16	11/29/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	11/29/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	11/29/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-16	11/29/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	11/29/2017	Arsenic, Dissolved	0.015	0.01	0.0042	10000	mg/L
MKTF-16	11/29/2017	Barium, Dissolved	2.7	0.01	0.0049	2000000	mg/L
MKTF-16	11/29/2017	Calcium, Dissolved	97	5	0.39	NA	mg/L
MKTF-16	11/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	11/29/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	11/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	11/29/2017	Iron, Dissolved	3.5	0.1	0.082	13821880	mg/L
MKTF-16	11/29/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-16	11/29/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-16	11/29/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
MKTF-16	11/29/2017	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-16	11/29/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	11/29/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-16	11/29/2017	Uranium, Dissolved	0.0046	0.0025	0.00048	NA	mg/L
MKTF-16	11/29/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-16	11/29/2017	Iron, Total	5.2	0.2	0.1	13822000	mg/L
MKTF-16	11/29/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-16	11/29/2017	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
MKTF-16	11/29/2017	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
MKTF-16	11/29/2017	Uranium, Total	0.0066	0.0005	0.00015	30000	mg/L
MKTF-16	11/29/2017	Zinc, Total	0.0079	0.01	0.0033	5960000	mg/L
MKTF-16	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-16	2/15/2018	Arsenic, Total	0.0071	0.001	0.00041	10000	mg/L
MKTF-16	2/15/2018	Barium, Total	1.6	0.01	0.005	2000000	mg/L
MKTF-16	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	2/15/2018	Chromium, Total	0.023	0.006	0.0018	50000	mg/L
MKTF-16	2/15/2018	Copper, Total	0.078	0.006	0.0041	790000	mg/L
MKTF-16	2/15/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-16	2/15/2018	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
MKTF-16	2/15/2018	Barium, Dissolved	0.67	0.002	0.00099	2000000	mg/L
MKTF-16	2/15/2018	Calcium, Dissolved	64	1	0.078	NA	mg/L
MKTF-16	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	2/15/2018	Copper, Dissolved	0.019	0.006	0.0032	790000	mg/L
MKTF-16	2/15/2018	Iron, Dissolved	0.095	0.02	0.016	13821880	mg/L
MKTF-16	2/15/2018	Potassium, Dissolved	17	1	0.11	NA	mg/L
MKTF-16	2/15/2018	Magnesium, Dissolved	6.1	1	0.25	NA	mg/L
MKTF-16	2/15/2018	Manganese, Dissolved	0.37	0.002	0.00039	2017400	mg/L
MKTF-16	2/15/2018	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-16	2/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	2/15/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-16	2/15/2018	Uranium, Dissolved	0.002	0.0025	0.00048	NA	mg/L
MKTF-16	2/15/2018	Zinc, Dissolved	0.072	0.01	0.0021	5960450	mg/L
MKTF-16	2/15/2018	Iron, Total	18	1	0.51	13822000	mg/L
MKTF-16	2/15/2018	Mercury, Total	0.00044	0.0002	0.000037	2000	mg/L
MKTF-16	2/15/2018	Manganese, Total	0.8	0.01	0.0055	2017000	mg/L
MKTF-16	2/15/2018	Lead, Total	0.025	0.0025	0.0011	15000	mg/L
MKTF-16	2/15/2018	Selenium, Total	0.0025	0.001	0.00098	50000	mg/L
MKTF-16	2/15/2018	Uranium, Total	0.006	0.0005	0.000068	30000	mg/L
MKTF-16	2/15/2018	Zinc, Total	0.29	0.05	0.016	5960000	mg/L
MKTF-16	5/11/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-16	5/11/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-16	5/11/2018	Barium, Total	2.3	0.01	0.005	2000000	mg/L
MKTF-16	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	5/11/2018	Chromium, Total	0.0031	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/11/2018	Copper, Total	0.0069	0.006	0.0041	790000	mg/L
MKTF-16	5/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	5/11/2018	Arsenic, Dissolved	0.01	0.005	0.0021	10000	mg/L
MKTF-16	5/11/2018	Barium, Dissolved	2.1	0.02	0.0099	2000000	mg/L
MKTF-16	5/11/2018	Calcium, Dissolved	88	5	0.39	NA	mg/L
MKTF-16	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	5/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	5/11/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
MKTF-16	5/11/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-16	5/11/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-16	5/11/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-16	5/11/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-16	5/11/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-16	5/11/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-16	5/11/2018	Uranium, Dissolved	0.0067	0.005	0.00096	NA	mg/L
MKTF-16	5/11/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-16	5/11/2018	Iron, Total	4.3	0.2	0.1	13822000	mg/L
MKTF-16	5/11/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-16	5/11/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-16	5/11/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-16	5/11/2018	Selenium, Total	0.0046	0.001	0.00098	50000	mg/L
MKTF-16	5/11/2018	Uranium, Total	0.0093	0.0005	0.000068	30000	mg/L
MKTF-16	5/11/2018	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
MKTF-16	8/31/2018	Silver, Total	0.0016	0.005	0.0012	50000	mg/L
MKTF-16	8/31/2018	Arsenic, Total	0.019	0.005	0.0021	10000	mg/L
MKTF-16	8/31/2018	Barium, Total	1.9	0.01	0.005	2000000	mg/L
MKTF-16	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	8/31/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-16	8/31/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	8/31/2018	Arsenic, Dissolved	0.018	0.001	0.00042	10000	mg/L
MKTF-16	8/31/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-16	8/31/2018	Calcium, Dissolved	85	1	0.078	NA	mg/L
MKTF-16	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	8/31/2018	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
MKTF-16	8/31/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-16	8/31/2018	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-16	8/31/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-16	8/31/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-16	8/31/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-16	8/31/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-16	8/31/2018	Uranium, Dissolved	0.0062	0.0005	0.000096	NA	mg/L
MKTF-16	8/31/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
MKTF-16	8/31/2018	Iron, Total	3.6	0.1	0.051	13822000	mg/L
MKTF-16	8/31/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	8/31/2018	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-16	8/31/2018	Lead, Total	0.0019	0.0025	0.0011	15000	mg/L
MKTF-16	8/31/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-16	8/31/2018	Uranium, Total	0.0074	0.0025	0.00034	30000	mg/L
MKTF-16	8/31/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-16	11/29/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
MKTF-16	11/29/2018	Arsenic, Total	0.018	0.001	0.00041	10000	mg/L
MKTF-16	11/29/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-16	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-16	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-16	11/29/2018	Copper, Total	0.0065	0.006	0.0041	790000	mg/L
MKTF-16	11/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-16	11/29/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-16	11/29/2018	Barium, Dissolved	1.4	0.02	0.0099	2000000	mg/L
MKTF-16	11/29/2018	Calcium, Dissolved	72	10	0.78	NA	mg/L
MKTF-16	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-16	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-16	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-16	11/29/2018	Iron, Dissolved	2.7	0.2	0.16	13821880	mg/L
MKTF-16	11/29/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-16	11/29/2018	Magnesium, Dissolved	19	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/29/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
MKTF-16	11/29/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-16	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-16	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-16	11/29/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-16	11/29/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-16	11/29/2018	Mercury, Total	0.000065	0.0002	0.000038	2000	mg/L
MKTF-16	11/29/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
MKTF-16	11/29/2018	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-16	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-16	11/29/2018	Zinc, Total	0.023	0.01	0.0033	5960000	mg/L
MKTF-16	2/20/2019	Antimony, Dissolved	0.00026	0.001	0.000204	6000	mg/L
MKTF-16	2/20/2019	Arsenic, Dissolved	0.011	0.001	0.000068	10000	mg/L
MKTF-16	2/20/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
MKTF-16	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-16	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	2/20/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-16	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	2/20/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
MKTF-16	2/20/2019	Iron, Dissolved	2	0.1	0.043734	13821880	mg/L
MKTF-16	2/20/2019	Lead, Dissolved	0.00023	0.0005	0.000047	NA	mg/L
MKTF-16	2/20/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
MKTF-16	2/20/2019	Manganese, Dissolved	1.7	0.01	0.00145	2017400	mg/L
MKTF-16	2/20/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-16	2/20/2019	Selenium, Dissolved	0.00038	0.001	0.000203	50000	mg/L
MKTF-16	2/20/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-16	2/20/2019	Sodium, Dissolved	640	10	4.161763	NA	mg/L
MKTF-16	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-16	2/20/2019	Uranium, Dissolved	0.0016	0.0005	0.00003	NA	mg/L
MKTF-16	2/20/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-16	2/20/2019	Antimony, Total	0.00041	0.001	0.000389	6000	mg/L
MKTF-16	2/20/2019	Arsenic, Total	0.014	0.001	0.000312	10000	mg/L
MKTF-16	2/20/2019	Barium, Total	2.4	0.01	0.003242	2000000	mg/L
MKTF-16	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	2/20/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
MKTF-16	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	2/20/2019	Iron, Total	5.8	0.2	0.087469	13822000	mg/L
MKTF-16	2/20/2019	Lead, Total	0.005	0.0005	0.000055	15000	mg/L
MKTF-16	2/20/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
MKTF-16	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-16	2/20/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
MKTF-16	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-16	2/20/2019	Uranium, Total	0.0023	0.0005	0.000085	30000	mg/L
MKTF-16	2/20/2019	Zinc, Total	0.027	0.01	0.005772	5960000	mg/L
MKTF-16	5/14/2019	Aluminum, Dissolved	0.026	0.02	0.002488	19913930	mg/L
MKTF-16	5/14/2019	Antimony, Dissolved	0.0069	0.005	0.001947	6000	mg/L
MKTF-16	5/14/2019	Arsenic, Dissolved	0.0093	0.005	0.000504	10000	mg/L
MKTF-16	5/14/2019	Barium, Dissolved	2.5	0.02	0.006484	2000000	mg/L
MKTF-16	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-16	5/14/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-16	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	5/14/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
MKTF-16	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	5/14/2019	Iron, Dissolved	5.8	0.2	0.087469	13821880	mg/L
MKTF-16	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-16	5/14/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-16	5/14/2019	Manganese, Dissolved	2.6	0.02	0.002899	2017400	mg/L
MKTF-16	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	5/14/2019	Nickel, Dissolved	0.056	0.01	0.004009	372000	mg/L
MKTF-16	5/14/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-16	5/14/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-16	5/14/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-16	5/14/2019	Sodium, Dissolved	760	10	4.161763	NA	mg/L
MKTF-16	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-16	5/14/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	5/14/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-16	5/14/2019	Aluminum, Total	0.69	0.02	0.002488	19914000	mg/L
MKTF-16	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-16	5/14/2019	Arsenic, Total	0.012	0.001	0.000312	10000	mg/L
MKTF-16	5/14/2019	Barium, Total	3.5	0.01	0.003242	2000000	mg/L
MKTF-16	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	5/14/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-16	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	5/14/2019	Iron, Total	5.8	0.2	0.087469	13822000	mg/L
MKTF-16	5/14/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-16	5/14/2019	Manganese, Total	3	0.01	0.00145	2017000	mg/L
MKTF-16	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	5/14/2019	Nickel, Total	0.054	0.01	0.004009	372000	mg/L
MKTF-16	5/14/2019	Selenium, Total	0.00076	0.001	0.000478	50000	mg/L
MKTF-16	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-16	5/14/2019	Thallium, Total	0.000062	0.0005	0.000052	2000	mg/L
MKTF-16	5/14/2019	Uranium, Total	0.0028	0.0005	0.000085	30000	mg/L
MKTF-16	5/14/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-16	8/30/2019	Aluminum, Total	0.027	0.02	0.002488	19914000	mg/L
MKTF-16	8/30/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-16	8/30/2019	Arsenic, Total	0.021	0.001	0.000312	10000	mg/L
MKTF-16	8/30/2019	Barium, Total	6.7	0.02	0.006484	2000000	mg/L
MKTF-16	8/30/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-16	8/30/2019	Boron, Total	0.7	0.04	0.004531	3949	mg/L
MKTF-16	8/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	8/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	8/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	8/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	8/30/2019	Iron, Total	24	1	0.437344	13822000	mg/L
MKTF-16	8/30/2019	Lead, Total	0.00063	0.0025	0.000274	15000	mg/L
MKTF-16	8/30/2019	Manganese, Total	6.8	0.02	0.002899	2017000	mg/L
MKTF-16	8/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	8/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	8/30/2019	Nickel, Total	0.044	0.01	0.004009	372000	mg/L
MKTF-16	8/30/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-16	8/30/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-16	8/30/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-16	8/30/2019	Uranium, Total	0.0027	0.0025	0.000424	30000	mg/L
MKTF-16	8/30/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-16	8/30/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-16	8/30/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-16	8/30/2019	Arsenic, Dissolved	0.018	0.005	0.000504	10000	mg/L
MKTF-16	8/30/2019	Barium, Dissolved	6.9	0.1	0.032419	2000000	mg/L
MKTF-16	8/30/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-16	8/30/2019	Boron, Dissolved	0.7	0.04	0.004531	3949110	mg/L
MKTF-16	8/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	8/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	8/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	8/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	8/30/2019	Iron, Dissolved	21	1	0.437344	13821880	mg/L
MKTF-16	8/30/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-16	8/30/2019	Manganese, Dissolved	7.1	0.1	0.014497	2017400	mg/L
MKTF-16	8/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	8/30/2019	Nickel, Dissolved	0.046	0.01	0.004009	372000	mg/L
MKTF-16	8/30/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-16	8/30/2019	Silver, Dissolved	0.0025	0.005	0.000942	81200	mg/L
MKTF-16	8/30/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-16	8/30/2019	Uranium, Dissolved	0.0024	0.0025	0.000374	NA	mg/L
MKTF-16	8/30/2019	Zinc, Dissolved	0.0086	0.01	0.002252	5960450	mg/L
MKTF-16	10/30/2019	Aluminum, Dissolved	0.027	0.02	0.002488	19913930	mg/L
MKTF-16	10/30/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-16	10/30/2019	Arsenic, Dissolved	0.012	0.001	0.000101	10000	mg/L
MKTF-16	10/30/2019	Barium, Dissolved	4.3	0.01	0.003242	2000000	mg/L
MKTF-16	10/30/2019	Beryllium, Dissolved	0.00049	0.002	0.000284	4000	mg/L
MKTF-16	10/30/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	10/30/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-16	10/30/2019	Calcium, Dissolved	210	5	0.309446	NA	mg/L
MKTF-16	10/30/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-16	10/30/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-16	10/30/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-16	10/30/2019	Iron, Dissolved	15	0.4	0.174937	13821880	mg/L
MKTF-16	10/30/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
MKTF-16	10/30/2019	Magnesium, Dissolved	57	1	0.05029	NA	mg/L
MKTF-16	10/30/2019	Manganese, Dissolved	5.5	0.04	0.005799	2017400	mg/L
MKTF-16	10/30/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-16	10/30/2019	Nickel, Dissolved	0.047	0.01	0.004009	372000	mg/L
MKTF-16	10/30/2019	Potassium, Dissolved	1.9	1	0.162288	NA	mg/L
MKTF-16	10/30/2019	Selenium, Dissolved	0.00087	0.001	0.000171	50000	mg/L
MKTF-16	10/30/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-16	10/30/2019	Sodium, Dissolved	1100	20	8.323526	NA	mg/L
MKTF-16	10/30/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-16	10/30/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-16	10/30/2019	Aluminum, Total	2.3	0.1	0.012441	19914000	mg/L
MKTF-16	10/30/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-16	10/30/2019	Arsenic, Total	0.012	0.01	0.003122	10000	mg/L
MKTF-16	10/30/2019	Barium, Total	4.7	0.01	0.003242	2000000	mg/L
MKTF-16	10/30/2019	Beryllium, Total	0.00049	0.002	0.000284	4000	mg/L
MKTF-16	10/30/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-16	10/30/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-16	10/30/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-16	10/30/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-16	10/30/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-16	10/30/2019	Iron, Total	17	0.4	0.174937	13822000	mg/L
MKTF-16	10/30/2019	Lead, Total	0.0037	0.005	0.000549	15000	mg/L
MKTF-16	10/30/2019	Manganese, Total	4.9	0.01	0.00145	2017000	mg/L
MKTF-16	10/30/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-16	10/30/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-16	10/30/2019	Nickel, Total	0.043	0.01	0.004009	372000	mg/L
MKTF-16	10/30/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-16	10/30/2019	Silver, Total	0.0024	0.005	0.001418	50000	mg/L
MKTF-16	10/30/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
MKTF-16	10/30/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-16	12/28/2020	Arsenic, Total Recoverable	**10.7**	1	0.286	10	ug/L
MKTF-16	12/28/2020	Lead, Total Recoverable	2.41	1	0.133	15	ug/L
MKTF-16	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-16	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-16	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-16	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-16	12/28/2020	Aluminum, Total	2.44	0.2	0.051	19914000	mg/L
MKTF-16	12/28/2020	Barium, Total	3.29	0.01	0.003	2000000	mg/L
MKTF-16	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-16	12/28/2020	Boron, Total	0.439	0.1	0.022	3949	mg/L
MKTF-16	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-16	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-16	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-16	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-16	12/28/2020	Iron, Total	12.4	0.2	0.075	13822000	mg/L
MKTF-16	12/28/2020	Manganese, Total	2.68	0.01	0.003	2017000	mg/L
MKTF-16	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-16	12/28/2020	Nickel, Total	0.0191	0.006	0.003	372000	mg/L
MKTF-16	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-16	12/28/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-16	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-16	12/23/2020	Aluminum, Total	2.59	0.2	0.051	19914000	mg/L
MKTF-16	12/23/2020	Barium, Total	2.72	0.01	0.003	2000000	mg/L
MKTF-16	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-16	12/23/2020	Boron, Total	0.407	0.1	0.022	3949	mg/L
MKTF-16	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-16	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-16	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-16	12/23/2020	Iron, Total	10.7	0.2	0.075	13822000	mg/L
MKTF-16	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-16	12/23/2020	Nickel, Total	0.0183	0.006	0.003	372000	mg/L
MKTF-16	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	12/23/2020	Zinc, Total	0.0238	0.02	0.008	5960000	mg/L
MKTF-16	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-16	12/23/2020	Manganese, Total	2.54	0.01	0.003	2017000	mg/L
MKTF-16	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-17	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	8/20/2019	Antimony, Dissolved	0.00053	0.001	0.000389	6000	mg/L
MKTF-17	8/20/2019	Arsenic, Dissolved	0.0047	0.001	0.000101	10000	mg/L
MKTF-17	8/20/2019	Barium, Dissolved	0.98	0.002	0.000648	2000000	mg/L
MKTF-17	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	8/20/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
MKTF-17	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	8/20/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-17	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	8/20/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
MKTF-17	8/20/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
MKTF-17	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-17	8/20/2019	Magnesium, Dissolved	25	1	0.05029	NA	mg/L
MKTF-17	8/20/2019	Manganese, Dissolved	2.8	0.01	0.00145	2017400	mg/L
MKTF-17	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	8/20/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-17	8/20/2019	Potassium, Dissolved	0.6	1	0.162288	NA	mg/L
MKTF-17	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-17	8/20/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
MKTF-17	8/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-17	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-17	8/20/2019	Uranium, Dissolved	0.0033	0.0005	0.000075	NA	mg/L
MKTF-17	8/20/2019	Zinc, Dissolved	0.0026	0.01	0.002252	5960450	mg/L
MKTF-17	8/20/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-17	8/20/2019	Antimony, Total	0.0007	0.001	0.000389	6000	mg/L
MKTF-17	8/20/2019	Arsenic, Total	0.007	0.001	0.000312	10000	mg/L
MKTF-17	8/20/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
MKTF-17	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-17	8/20/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-17	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-17	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-17	8/20/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
MKTF-17	8/20/2019	Lead, Total	0.0005	0.0005	0.000055	15000	mg/L
MKTF-17	8/20/2019	Manganese, Total	3	0.01	0.00145	2017000	mg/L
MKTF-17	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	8/20/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-17	8/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	8/20/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-17	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-17	8/20/2019	Uranium, Total	0.0036	0.0005	0.000085	30000	mg/L
MKTF-17	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-17	10/29/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	10/29/2019	Selenium, Total	0.00018	0.001	0.000171	50000	mg/L
MKTF-17	10/29/2019	Aluminum, Total	2.3	0.2	0.024883	19914000	mg/L
MKTF-17	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-17	10/29/2019	Arsenic, Total	0.0068	0.001	0.000312	10000	mg/L
MKTF-17	10/29/2019	Barium, Total	1.8	0.01	0.003242	2000000	mg/L
MKTF-17	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-17	10/29/2019	Boron, Total	0.44	0.04	0.004531	3949	mg/L
MKTF-17	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-17	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-17	10/29/2019	Iron, Total	4.8	0.2	0.087469	13822000	mg/L
MKTF-17	10/29/2019	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-17	10/29/2019	Manganese, Total	3.4	0.01	0.00145	2017000	mg/L
MKTF-17	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-17	10/29/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-17	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	10/29/2019	Zinc, Total	0.0078	0.01	0.005772	5960000	mg/L
MKTF-17	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	10/29/2019	Antimony, Dissolved	0.0007	0.001	0.000389	6000	mg/L
MKTF-17	10/29/2019	Arsenic, Dissolved	0.0044	0.001	0.000101	10000	mg/L
MKTF-17	10/29/2019	Barium, Dissolved	1.6	0.01	0.003242	2000000	mg/L
MKTF-17	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	10/29/2019	Boron, Dissolved	0.42	0.04	0.004531	3949110	mg/L
MKTF-17	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-17	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-17	10/29/2019	Iron, Dissolved	0.45	0.02	0.008747	13821880	mg/L
MKTF-17	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-17	10/29/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-17	10/29/2019	Manganese, Dissolved	3.5	0.01	0.00145	2017400	mg/L
MKTF-17	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-17	10/29/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
MKTF-17	10/29/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-17	10/29/2019	Sodium, Dissolved	270	5	2.080881	NA	mg/L
MKTF-17	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-17	10/29/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-17	5/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-17	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-17	5/9/2019	Arsenic, Dissolved	0.0035	0.005	0.000504	10000	mg/L
MKTF-17	5/9/2019	Barium, Dissolved	0.96	0.002	0.000648	2000000	mg/L
MKTF-17	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-17	5/9/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-17	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-17	5/9/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
MKTF-17	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-17	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-17	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-17	5/9/2019	Iron, Dissolved	0.27	0.02	0.008747	13821880	mg/L
MKTF-17	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-17	5/9/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-17	5/9/2019	Manganese, Dissolved	3	0.01	0.00145	2017400	mg/L
MKTF-17	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-17	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-17	5/9/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-17	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-17	5/9/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L
MKTF-17	5/9/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MKTF-17	5/9/2019	Thallium, Dissolved	0.00026	0.0025	0.000242	2000	mg/L
MKTF-17	5/9/2019	Uranium, Dissolved	0.0037	0.0025	0.000374	NA	mg/L
MKTF-17	5/9/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MKTF-17	5/9/2019	Aluminum, Total	6.9	0.2	0.024883	19914000	mg/L
MKTF-17	5/9/2019	Antimony, Total	0.0084	0.001	0.000389	6000	mg/L
MKTF-17	5/9/2019	Arsenic, Total	0.0082	0.001	0.000312	10000	mg/L
MKTF-17	5/9/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
MKTF-17	5/9/2019	Beryllium, Total	0.00036	0.002	0.000284	4000	mg/L
MKTF-17	5/9/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-17	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-17	5/9/2019	Chromium, Total	0.0018	0.006	0.001533	50000	mg/L
MKTF-17	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-17	5/9/2019	Copper, Total	0.0067	0.006	0.004072	790000	mg/L
MKTF-17	5/9/2019	Iron, Total	5.4	0.2	0.087469	13822000	mg/L
MKTF-17	5/9/2019	Lead, Total	0.0031	0.0005	0.000055	15000	mg/L
MKTF-17	5/9/2019	Manganese, Total	3.1	0.01	0.00145	2017000	mg/L
MKTF-17	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-17	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-17	5/9/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-17	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-17	5/9/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-17	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-17	5/9/2019	Uranium, Total	0.0044	0.0005	0.000085	30000	mg/L
MKTF-17	5/9/2019	Zinc, Total	0.032	0.01	0.005772	5960000	mg/L
MKTF-17	6/16/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/16/2014	Arsenic, Total	0.0054	0.005	0.00057	10000	mg/L
MKTF-17	6/16/2014	Barium, Total	0.24	0.002	0.00021	2000000	mg/L
MKTF-17	6/16/2014	Calcium, Total	89	1	0.082	NA	mg/L
MKTF-17	6/16/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-17	6/16/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-17	6/16/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-17	6/16/2014	Iron, Total	0.94	0.02	0.0062	13822000	mg/L
MKTF-17	6/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	6/16/2014	Potassium, Total	2.6	1	0.093	NA	mg/L
MKTF-17	6/16/2014	Magnesium, Total	17	1	0.018	NA	mg/L
MKTF-17	6/16/2014	Manganese, Total	3.3	0.01	0.0027	2017000	mg/L
MKTF-17	6/16/2014	Sodium, Total	240	5	2	NA	mg/L
MKTF-17	6/16/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-17	6/16/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-17	6/16/2014	Uranium, Total	0.022	0.005	0.00025	30000	mg/L
MKTF-17	6/16/2014	Zinc, Total	0.14	0.01	0.0014	5960000	mg/L
MKTF-17	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-17	9/18/2014	Arsenic, Total	0.0053	0.005	0.00057	10000	mg/L
MKTF-17	9/18/2014	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-17	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-17	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-17	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-17	9/18/2014	Iron, Total	0.27	0.02	0.0062	13822000	mg/L
MKTF-17	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	9/18/2014	Manganese, Total	3.1	0.01	0.0027	2017000	mg/L
MKTF-17	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-17	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-17	9/18/2014	Uranium, Total	0.022	0.001	0.00005	30000	mg/L
MKTF-17	9/18/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-17	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-17	11/18/2014	Arsenic, Total	0.0051	0.001	0.00036	10000	mg/L
MKTF-17	11/18/2014	Barium, Total	0.21	0.002	0.0005	2000000	mg/L
MKTF-17	11/18/2014	Calcium, Total	92	1	0.082	NA	mg/L
MKTF-17	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-17	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-17	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-17	11/18/2014	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-17	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-17	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-17	11/18/2014	Magnesium, Total	17	1	0.018	NA	mg/L
MKTF-17	11/18/2014	Manganese, Total	3	0.01	0.0024	2017000	mg/L
MKTF-17	11/18/2014	Sodium, Total	280	5	2	NA	mg/L
MKTF-17	11/18/2014	Lead, Total	0.0031	0.001	0.00026	15000	mg/L
MKTF-17	11/18/2014	Selenium, Total	ND	0.01	0.00051	50000	mg/L
MKTF-17	11/18/2014	Uranium, Total	0.025	0.001	0.0000072	30000	mg/L
MKTF-17	11/18/2014	Zinc, Total	0.019	0.01	0.0035	5960000	mg/L
MKTF-17	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	3/12/2015	Arsenic, Total	0.0057	0.001	0.00044	10000	mg/L
MKTF-17	3/12/2015	Barium, Total	0.17	0.002	0.00073	2000000	mg/L
MKTF-17	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-17	3/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	3/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	3/12/2015	Iron, Total	1.8	0.1	0.036	13822000	mg/L
MKTF-17	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	3/12/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-17	3/12/2015	Lead, Total	0.0017	0.001	0.000069	15000	mg/L
MKTF-17	3/12/2015	Selenium, Total	0.0023	0.001	0.00012	50000	mg/L
MKTF-17	3/12/2015	Uranium, Total	0.022	0.001	0.0000081	30000	mg/L
MKTF-17	3/12/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
MKTF-17	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-17	6/8/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-17	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	6/8/2015	Iron, Total	2.6	0.1	0.036	13822000	mg/L
MKTF-17	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	6/8/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-17	6/8/2015	Lead, Total	0.0032	0.0025	0.00024	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	6/8/2015	Uranium, Total	0.02	0.0025	0.000025	30000	mg/L
MKTF-17	6/8/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-17	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	8/18/2015	Arsenic, Total	0.0052	0.001	0.00029	10000	mg/L
MKTF-17	8/18/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
MKTF-17	8/18/2015	Calcium, Total	94	1	0.057	NA	mg/L
MKTF-17	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	8/18/2015	Copper, Total	0.0097	0.006	0.0051	790000	mg/L
MKTF-17	8/18/2015	Iron, Total	1.7	0.1	0.036	13822000	mg/L
MKTF-17	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-17	8/18/2015	Magnesium, Total	19	1	0.039	NA	mg/L
MKTF-17	8/18/2015	Manganese, Total	2.9	0.01	0.0076	2017000	mg/L
MKTF-17	8/18/2015	Sodium, Total	260	5	0.36	NA	mg/L
MKTF-17	8/18/2015	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
MKTF-17	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	8/18/2015	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
MKTF-17	8/18/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-17	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-17	11/3/2015	Arsenic, Total	0.01	0.001	0.000065	10000	mg/L
MKTF-17	11/3/2015	Barium, Total	0.19	0.002	0.0013	2000000	mg/L
MKTF-17	11/3/2015	Calcium, Total	98	1	0.26	NA	mg/L
MKTF-17	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-17	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-17	11/3/2015	Iron, Total	0.65	0.02	0.0091	13822000	mg/L
MKTF-17	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-17	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-17	11/3/2015	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-17	11/3/2015	Manganese, Total	3.5	0.01	0.0016	2017000	mg/L
MKTF-17	11/3/2015	Sodium, Total	250	5	0.48	NA	mg/L
MKTF-17	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-17	11/3/2015	Selenium, Total	0.0045	0.001	0.00019	50000	mg/L
MKTF-17	11/3/2015	Uranium, Total	0.013	0.0005	0.0000048	30000	mg/L
MKTF-17	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-17	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-17	2/26/2016	Arsenic, Total	0.0046	0.001	0.00029	10000	mg/L
MKTF-17	2/26/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-17	2/26/2016	Calcium, Total	96	1	0.26	NA	mg/L
MKTF-17	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-17	2/26/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-17	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-17	2/26/2016	Iron, Total	0.98	0.02	0.0072	13822000	mg/L
MKTF-17	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-17	2/26/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-17	2/26/2016	Magnesium, Total	18	1	0.013	NA	mg/L
MKTF-17	2/26/2016	Manganese, Total	2.6	0.01	0.0076	2017000	mg/L
MKTF-17	2/26/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-17	2/26/2016	Lead, Total	0.00095	0.0005	0.000047	15000	mg/L
MKTF-17	2/26/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-17	2/26/2016	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
MKTF-17	2/26/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-17	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	9/13/2016	Arsenic, Total	0.007	0.001	0.00021	10000	mg/L
MKTF-17	9/13/2016	Barium, Total	0.58	0.01	0.004	2000000	mg/L
MKTF-17	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-17	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-17	9/13/2016	Arsenic, Dissolved	0.0062	0.001	0.00014	10000	mg/L
MKTF-17	9/13/2016	Barium, Dissolved	0.65	0.002	0.0013	2000000	mg/L
MKTF-17	9/13/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-17	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-17	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-17	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-17	9/13/2016	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
MKTF-17	9/13/2016	Potassium, Dissolved	0.65	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	9/13/2016	Magnesium, Dissolved	22	1	0.5	NA	mg/L
MKTF-17	9/13/2016	Manganese, Dissolved	3	0.01	0.0016	2017400	mg/L
MKTF-17	9/13/2016	Sodium, Dissolved	250	5	2.5	NA	mg/L
MKTF-17	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	9/13/2016	Selenium, Dissolved	0.0046	0.005	0.0011	50000	mg/L
MKTF-17	9/13/2016	Uranium, Dissolved	0.008	0.0005	0.000051	NA	mg/L
MKTF-17	9/13/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-17	9/13/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-17	9/13/2016	Mercury, Total	0.000071	0.0002	0.000053	2000	mg/L
MKTF-17	9/13/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	9/13/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-17	9/13/2016	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-17	9/13/2016	Uranium, Total	0.011	0.0005	0.00017	30000	mg/L
MKTF-17	9/13/2016	Zinc, Total	0.0061	0.01	0.0027	5960000	mg/L
MKTF-17	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	11/8/2016	Arsenic, Total	0.0064	0.001	0.00021	10000	mg/L
MKTF-17	11/8/2016	Barium, Total	0.6	0.01	0.004	2000000	mg/L
MKTF-17	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-17	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-17	11/8/2016	Arsenic, Dissolved	0.0046	0.001	0.00014	10000	mg/L
MKTF-17	11/8/2016	Barium, Dissolved	0.52	0.002	0.0013	2000000	mg/L
MKTF-17	11/8/2016	Calcium, Dissolved	100	5	2.5	NA	mg/L
MKTF-17	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-17	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-17	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-17	11/8/2016	Iron, Dissolved	0.21	0.02	0.02	13821880	mg/L
MKTF-17	11/8/2016	Potassium, Dissolved	0.85	1	0.5	NA	mg/L
MKTF-17	11/8/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-17	11/8/2016	Manganese, Dissolved	2.7	0.01	0.0016	2017400	mg/L
MKTF-17	11/8/2016	Sodium, Dissolved	250	10	5	NA	mg/L
MKTF-17	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	11/8/2016	Selenium, Dissolved	0.003	0.001	0.00021	50000	mg/L
MKTF-17	11/8/2016	Uranium, Dissolved	0.0069	0.0005	0.000051	NA	mg/L
MKTF-17	11/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-17	11/8/2016	Iron, Total	1.9	0.1	0.1	13822000	mg/L
MKTF-17	11/8/2016	Mercury, Total	ND	0.001	0.00027	2000	mg/L
MKTF-17	11/8/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	11/8/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
MKTF-17	11/8/2016	Selenium, Total	0.0034	0.005	0.00094	50000	mg/L
MKTF-17	11/8/2016	Uranium, Total	0.0077	0.0005	0.00017	30000	mg/L
MKTF-17	11/8/2016	Zinc, Total	0.0068	0.01	0.0027	5960000	mg/L
MKTF-17	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-17	3/15/2017	Arsenic, Total	0.0078	0.001	0.00021	10000	mg/L
MKTF-17	3/15/2017	Barium, Total	0.76	0.002	0.00079	2000000	mg/L
MKTF-17	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-17	3/15/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-17	3/15/2017	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-17	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-17	3/15/2017	Arsenic, Dissolved	0.005	0.001	0.00018	10000	mg/L
MKTF-17	3/15/2017	Barium, Dissolved	0.76	0.002	0.00085	2000000	mg/L
MKTF-17	3/15/2017	Calcium, Dissolved	97	5	2.5	NA	mg/L
MKTF-17	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-17	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	3/15/2017	Iron, Dissolved	1.3	0.1	0.1	13821880	mg/L
MKTF-17	3/15/2017	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-17	3/15/2017	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-17	3/15/2017	Manganese, Dissolved	2.6	0.01	0.0019	2017400	mg/L
MKTF-17	3/15/2017	Sodium, Dissolved	220	5	2.5	NA	mg/L
MKTF-17	3/15/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	3/15/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
MKTF-17	3/15/2017	Uranium, Dissolved	0.0054	0.0005	0.00005	NA	mg/L
MKTF-17	3/15/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-17	3/15/2017	Iron, Total	6.5	1	1	13822000	mg/L
MKTF-17	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	3/15/2017	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-17	3/15/2017	Lead, Total	0.0026	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	3/15/2017	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-17	3/15/2017	Uranium, Total	0.0057	0.0005	0.00017	30000	mg/L
MKTF-17	3/15/2017	Zinc, Total	0.0059	0.01	0.0027	5960000	mg/L
MKTF-17	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-17	6/14/2017	Arsenic, Total	0.008	0.001	0.0003	10000	mg/L
MKTF-17	6/14/2017	Barium, Total	0.56	0.002	0.00093	2000000	mg/L
MKTF-17	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	6/14/2017	Chromium, Total	0.0022	0.006	0.0011	50000	mg/L
MKTF-17	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-17	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-17	6/14/2017	Arsenic, Dissolved	0.0079	0.001	0.00018	10000	mg/L
MKTF-17	6/14/2017	Barium, Dissolved	0.74	0.002	0.00085	2000000	mg/L
MKTF-17	6/14/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-17	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-17	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	6/14/2017	Iron, Dissolved	2.9	0.2	0.16	13821880	mg/L
MKTF-17	6/14/2017	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-17	6/14/2017	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-17	6/14/2017	Manganese, Dissolved	2.7	0.02	0.0038	2017400	mg/L
MKTF-17	6/14/2017	Sodium, Dissolved	220	10	1.6	NA	mg/L
MKTF-17	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	6/14/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
MKTF-17	6/14/2017	Zinc, Dissolved	0.0095	0.01	0.0011	5960450	mg/L
MKTF-17	6/14/2017	Iron, Total	3.8	0.2	0.1	13822000	mg/L
MKTF-17	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	6/14/2017	Manganese, Total	2.5	0.02	0.011	2017000	mg/L
MKTF-17	6/14/2017	Lead, Total	0.0032	0.0005	0.000095	15000	mg/L
MKTF-17	6/14/2017	Selenium, Total	0.0029	0.001	0.00071	50000	mg/L
MKTF-17	6/14/2017	Zinc, Total	0.03	0.01	0.0028	5960000	mg/L
MKTF-17	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-17	9/26/2017	Arsenic, Total	0.008	0.005	0.0015	10000	mg/L
MKTF-17	9/26/2017	Barium, Total	0.77	0.002	0.00093	2000000	mg/L
MKTF-17	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	9/26/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-17	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	9/26/2017	Arsenic, Dissolved	0.0065	0.01	0.0018	10000	mg/L
MKTF-17	9/26/2017	Barium, Dissolved	0.73	0.002	0.00085	2000000	mg/L
MKTF-17	9/26/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-17	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	9/26/2017	Iron, Dissolved	3.2	0.2	0.16	13821880	mg/L
MKTF-17	9/26/2017	Potassium, Dissolved	0.53	1	0.11	NA	mg/L
MKTF-17	9/26/2017	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-17	9/26/2017	Manganese, Dissolved	2.8	0.02	0.0039	2017400	mg/L
MKTF-17	9/26/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
MKTF-17	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	9/26/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-17	9/26/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-17	9/26/2017	Iron, Total	4.2	0.2	0.1	13822000	mg/L
MKTF-17	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	9/26/2017	Manganese, Total	2.9	0.02	0.011	2017000	mg/L
MKTF-17	9/26/2017	Lead, Total	0.0014	0.0005	0.000095	15000	mg/L
MKTF-17	9/26/2017	Selenium, Total	0.0056	0.005	0.0036	50000	mg/L
MKTF-17	9/26/2017	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-17	12/1/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-17	12/1/2017	Arsenic, Total	0.0041	0.001	0.00041	10000	mg/L
MKTF-17	12/1/2017	Barium, Total	0.62	0.002	0.001	2000000	mg/L
MKTF-17	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	12/1/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	12/1/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-17	12/1/2017	Barium, Dissolved	0.42	0.002	0.00099	2000000	mg/L
MKTF-17	12/1/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
MKTF-17	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	12/1/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
MKTF-17	12/1/2017	Potassium, Dissolved	0.7	1	0.11	NA	mg/L
MKTF-17	12/1/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-17	12/1/2017	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-17	12/1/2017	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-17	12/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-17	12/1/2017	Uranium, Dissolved	0.0062	0.0005	0.000096	NA	mg/L
MKTF-17	12/1/2017	Zinc, Dissolved	0.0032	0.01	0.0021	5960450	mg/L
MKTF-17	12/1/2017	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-17	12/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	12/1/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-17	12/1/2017	Lead, Total	0.00065	0.0005	0.00023	15000	mg/L
MKTF-17	12/1/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-17	12/1/2017	Uranium, Total	0.0046	0.005	0.0015	30000	mg/L
MKTF-17	12/1/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-17	2/16/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
MKTF-17	2/16/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-17	2/16/2018	Barium, Total	0.44	0.002	0.001	2000000	mg/L
MKTF-17	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	2/16/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-17	2/16/2018	Arsenic, Dissolved	0.0067	0.005	0.0021	10000	mg/L
MKTF-17	2/16/2018	Barium, Dissolved	0.44	0.002	0.00099	2000000	mg/L
MKTF-17	2/16/2018	Calcium, Dissolved	98	1	0.078	NA	mg/L
MKTF-17	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	2/16/2018	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
MKTF-17	2/16/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
MKTF-17	2/16/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	2/16/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-17	2/16/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	2/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-17	2/16/2018	Uranium, Dissolved	0.0055	0.0005	0.000096	NA	mg/L
MKTF-17	2/16/2018	Zinc, Dissolved	0.0048	0.01	0.0021	5960450	mg/L
MKTF-17	2/16/2018	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-17	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	2/16/2018	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-17	2/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-17	2/16/2018	Selenium, Total	0.0085	0.005	0.0049	50000	mg/L
MKTF-17	2/16/2018	Uranium, Total	0.0055	0.0005	0.000068	30000	mg/L
MKTF-17	2/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-17	5/4/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-17	5/4/2018	Arsenic, Total	0.0071	0.001	0.00041	10000	mg/L
MKTF-17	5/4/2018	Barium, Total	0.45	0.002	0.001	2000000	mg/L
MKTF-17	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	5/4/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-17	5/4/2018	Arsenic, Dissolved	0.0049	0.001	0.00042	10000	mg/L
MKTF-17	5/4/2018	Barium, Dissolved	0.51	0.002	0.00099	2000000	mg/L
MKTF-17	5/4/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-17	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	5/4/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
MKTF-17	5/4/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-17	5/4/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-17	5/4/2018	Manganese, Dissolved	2.7	0.01	0.002	2017400	mg/L
MKTF-17	5/4/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	5/4/2018	Uranium, Dissolved	0.0045	0.0005	0.000096	NA	mg/L
MKTF-17	5/4/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
MKTF-17	5/4/2018	Iron, Total	1.8	0.1	0.051	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-17	5/4/2018	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
MKTF-17	5/4/2018	Lead, Total	0.00026	0.0005	0.00023	15000	mg/L
MKTF-17	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	5/4/2018	Uranium, Total	0.005	0.0005	0.000068	30000	mg/L
MKTF-17	5/4/2018	Zinc, Total	0.004	0.01	0.0033	5960000	mg/L
MKTF-17	8/24/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-17	8/24/2018	Arsenic, Total	0.007	0.001	0.00041	10000	mg/L
MKTF-17	8/24/2018	Barium, Total	0.42	0.002	0.001	2000000	mg/L
MKTF-17	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	8/24/2018	Copper, Total	0.0049	0.006	0.0041	790000	mg/L
MKTF-17	8/24/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-17	8/24/2018	Arsenic, Dissolved	0.0048	0.001	0.00042	10000	mg/L
MKTF-17	8/24/2018	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
MKTF-17	8/24/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-17	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	8/24/2018	Iron, Dissolved	0.39	0.02	0.016	13821880	mg/L
MKTF-17	8/24/2018	Potassium, Dissolved	0.71	1	0.11	NA	mg/L
MKTF-17	8/24/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	8/24/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-17	8/24/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-17	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	8/24/2018	Uranium, Dissolved	0.0061	0.0005	0.000096	NA	mg/L
MKTF-17	8/24/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
MKTF-17	8/24/2018	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-17	8/24/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
MKTF-17	8/24/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-17	8/24/2018	Lead, Total	0.00036	0.0005	0.00023	15000	mg/L
MKTF-17	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	8/24/2018	Uranium, Total	0.0061	0.0005	0.000068	30000	mg/L
MKTF-17	8/24/2018	Zinc, Total	0.0042	0.01	0.0033	5960000	mg/L
MKTF-17	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-17	11/28/2018	Arsenic, Total	0.0066	0.001	0.00041	10000	mg/L
MKTF-17	11/28/2018	Barium, Total	0.46	0.002	0.001	2000000	mg/L
MKTF-17	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-17	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-17	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-17	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-17	11/28/2018	Arsenic, Dissolved	0.0085	0.001	0.00042	10000	mg/L
MKTF-17	11/28/2018	Barium, Dissolved	0.43	0.002	0.00099	2000000	mg/L
MKTF-17	11/28/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-17	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-17	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-17	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-17	11/28/2018	Iron, Dissolved	0.27	0.02	0.016	13821880	mg/L
MKTF-17	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-17	11/28/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-17	11/28/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-17	11/28/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-17	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-17	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-17	11/28/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
MKTF-17	11/28/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-17	11/28/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-17	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-17	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-17	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-18	6/6/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-18	6/6/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-18	6/6/2014	Barium, Total	2.4	0.01	0.0056	2000000	mg/L
MKTF-18	6/6/2014	Calcium, Total	890	20	1.1	NA	mg/L
MKTF-18	6/6/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	6/6/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-18	6/6/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-18	6/6/2014	Iron, Total	4.5	0.1	0.031	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/6/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	6/6/2014	Potassium, Total	11	5	1.2	NA	mg/L
MKTF-18	6/6/2014	Magnesium, Total	100	5	0.12	NA	mg/L
MKTF-18	6/6/2014	Manganese, Total	2	0.01	0.0027	2017000	mg/L
MKTF-18	6/6/2014	Sodium, Total	250	5	1.3	NA	mg/L
MKTF-18	6/6/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-18	6/6/2014	Selenium, Total	0.0086	0.005	0.00074	50000	mg/L
MKTF-18	6/6/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
MKTF-18	6/6/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MKTF-18	9/18/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MKTF-18	9/18/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-18	9/18/2014	Barium, Total	2.3	0.01	0.0056	2000000	mg/L
MKTF-18	9/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	9/18/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-18	9/18/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MKTF-18	9/18/2014	Iron, Total	0.3	0.02	0.0062	13822000	mg/L
MKTF-18	9/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	9/18/2014	Manganese, Total	1.7	0.01	0.0027	2017000	mg/L
MKTF-18	9/18/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-18	9/18/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-18	9/18/2014	Uranium, Total	0.0012	0.001	0.00005	30000	mg/L
MKTF-18	9/18/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
MKTF-18	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-18	11/18/2014	Arsenic, Total	0.0019	0.001	0.00036	10000	mg/L
MKTF-18	11/18/2014	Barium, Total	2.5	0.01	0.0025	2000000	mg/L
MKTF-18	11/18/2014	Calcium, Total	77	1	0.082	NA	mg/L
MKTF-18	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-18	11/18/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-18	11/18/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-18	11/18/2014	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-18	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-18	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-18	11/18/2014	Magnesium, Total	21	1	0.018	NA	mg/L
MKTF-18	11/18/2014	Manganese, Total	1.8	0.01	0.0024	2017000	mg/L
MKTF-18	11/18/2014	Sodium, Total	280	5	2	NA	mg/L
MKTF-18	11/18/2014	Lead, Total	0.0016	0.001	0.00026	15000	mg/L
MKTF-18	11/18/2014	Selenium, Total	ND	0.01	0.00051	50000	mg/L
MKTF-18	11/18/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
MKTF-18	11/18/2014	Zinc, Total	0.02	0.01	0.0035	5960000	mg/L
MKTF-18	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	3/17/2015	Arsenic, Total	0.0031	0.001	0.00044	10000	mg/L
MKTF-18	3/17/2015	Barium, Total	3.5	0.02	0.0073	2000000	mg/L
MKTF-18	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-18	3/17/2015	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-18	3/17/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-18	3/17/2015	Iron, Total	14	1	0.36	13822000	mg/L
MKTF-18	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-18	3/17/2015	Manganese, Total	2.7	0.02	0.015	2017000	mg/L
MKTF-18	3/17/2015	Lead, Total	0.021	0.001	0.000069	15000	mg/L
MKTF-18	3/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-18	3/17/2015	Uranium, Total	0.0026	0.001	0.0000081	30000	mg/L
MKTF-18	3/17/2015	Zinc, Total	0.051	0.01	0.0036	5960000	mg/L
MKTF-18	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-18	6/8/2015	Barium, Total	2.5	0.01	0.0053	2000000	mg/L
MKTF-18	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-18	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-18	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-18	6/8/2015	Iron, Total	5	0.1	0.036	13822000	mg/L
MKTF-18	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-18	6/8/2015	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
MKTF-18	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-18	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-18	6/8/2015	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-18	6/8/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-18	8/18/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-18	8/18/2015	Arsenic, Total	0.018	0.01	0.0029	10000	mg/L
MKTF-18	8/18/2015	Barium, Total	24	0.1	0.053	2000000	mg/L
MKTF-18	8/18/2015	Calcium, Total	74	1	0.057	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	8/18/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-18	8/18/2015	Chromium, Total	0.26	0.03	0.011	50000	mg/L
MKTF-18	8/18/2015	Copper, Total	0.21	0.03	0.026	790000	mg/L
MKTF-18	8/18/2015	Iron, Total	110	10	3.6	13822000	mg/L
MKTF-18	8/18/2015	Mercury, Total	0.00025	0.0002	0.000059	2000	mg/L
MKTF-18	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-18	8/18/2015	Magnesium, Total	20	1	0.039	NA	mg/L
MKTF-18	8/18/2015	Manganese, Total	22	0.1	0.076	2017000	mg/L
MKTF-18	8/18/2015	Sodium, Total	290	5	0.36	NA	mg/L
MKTF-18	8/18/2015	Lead, Total	0.37	0.01	0.00094	15000	mg/L
MKTF-18	8/18/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-18	8/18/2015	Uranium, Total	0.037	0.005	0.000049	30000	mg/L
MKTF-18	8/18/2015	Zinc, Total	0.54	0.05	0.019	5960000	mg/L
MKTF-18	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-18	11/3/2015	Arsenic, Total	0.0031	0.001	0.000065	10000	mg/L
MKTF-18	11/3/2015	Barium, Total	2.5	0.01	0.0066	2000000	mg/L
MKTF-18	11/3/2015	Calcium, Total	78	1	0.26	NA	mg/L
MKTF-18	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-18	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-18	11/3/2015	Iron, Total	4.8	0.1	0.045	13822000	mg/L
MKTF-18	11/3/2015	Mercury, Total	ND	0.001	0.00029	2000	mg/L
MKTF-18	11/3/2015	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-18	11/3/2015	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-18	11/3/2015	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-18	11/3/2015	Sodium, Total	260	5	0.48	NA	mg/L
MKTF-18	11/3/2015	Lead, Total	0.0053	0.0005	0.000026	15000	mg/L
MKTF-18	11/3/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-18	11/3/2015	Uranium, Total	0.0012	0.0005	0.0000048	30000	mg/L
MKTF-18	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-18	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-18	2/26/2016	Arsenic, Total	0.0022	0.001	0.00029	10000	mg/L
MKTF-18	2/26/2016	Barium, Total	2.3	0.02	0.011	2000000	mg/L
MKTF-18	2/26/2016	Calcium, Total	81	1	0.26	NA	mg/L
MKTF-18	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-18	2/26/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-18	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-18	2/26/2016	Iron, Total	6.4	0.2	0.072	13822000	mg/L
MKTF-18	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	2/26/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-18	2/26/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-18	2/26/2016	Manganese, Total	2.1	0.02	0.015	2017000	mg/L
MKTF-18	2/26/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-18	2/26/2016	Lead, Total	0.0064	0.0005	0.000047	15000	mg/L
MKTF-18	2/26/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-18	2/26/2016	Uranium, Total	0.0016	0.0005	0.0000049	30000	mg/L
MKTF-18	2/26/2016	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-18	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-18	6/10/2016	Arsenic, Total	0.0026	0.001	0.00014	10000	mg/L
MKTF-18	6/10/2016	Barium, Total	1.9	0.01	0.0066	2000000	mg/L
MKTF-18	6/10/2016	Calcium, Total	80	1	0.26	NA	mg/L
MKTF-18	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-18	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-18	6/10/2016	Iron, Total	1.5	0.1	0.045	13822000	mg/L
MKTF-18	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	6/10/2016	Potassium, Total	0.64	1	0.18	NA	mg/L
MKTF-18	6/10/2016	Magnesium, Total	21	1	0.013	NA	mg/L
MKTF-18	6/10/2016	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-18	6/10/2016	Sodium, Total	280	5	0.48	NA	mg/L
MKTF-18	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-18	6/10/2016	Selenium, Total	0.0054	0.001	0.00021	50000	mg/L
MKTF-18	6/10/2016	Uranium, Total	0.0011	0.0005	0.000051	30000	mg/L
MKTF-18	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-18	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	9/13/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
MKTF-18	9/13/2016	Barium, Total	1.8	0.01	0.004	2000000	mg/L
MKTF-18	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-18	9/13/2016	Arsenic, Dissolved	0.0026	0.001	0.00014	10000	mg/L
MKTF-18	9/13/2016	Barium, Dissolved	1.8	0.01	0.0066	2000000	mg/L
MKTF-18	9/13/2016	Calcium, Dissolved	78	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-18	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-18	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-18	9/13/2016	Iron, Dissolved	0.89	0.02	0.02	13821880	mg/L
MKTF-18	9/13/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-18	9/13/2016	Manganese, Dissolved	2	0.01	0.0016	2017400	mg/L
MKTF-18	9/13/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
MKTF-18	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	9/13/2016	Selenium, Dissolved	0.0072	0.01	0.0021	50000	mg/L
MKTF-18	9/13/2016	Uranium, Dissolved	0.0012	0.0005	0.000051	NA	mg/L
MKTF-18	9/13/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-18	9/13/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-18	9/13/2016	Mercury, Total	0.000064	0.0002	0.000053	2000	mg/L
MKTF-18	9/13/2016	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-18	9/13/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
MKTF-18	9/13/2016	Selenium, Total	0.0049	0.01	0.0019	50000	mg/L
MKTF-18	9/13/2016	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
MKTF-18	9/13/2016	Zinc, Total	0.0037	0.01	0.0027	5960000	mg/L
MKTF-18	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	11/8/2016	Arsenic, Total	0.0033	0.001	0.00021	10000	mg/L
MKTF-18	11/8/2016	Barium, Total	1.7	0.01	0.004	2000000	mg/L
MKTF-18	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-18	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-18	11/8/2016	Arsenic, Dissolved	0.0025	0.001	0.00014	10000	mg/L
MKTF-18	11/8/2016	Barium, Dissolved	1.7	0.01	0.0066	2000000	mg/L
MKTF-18	11/8/2016	Calcium, Dissolved	79	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-18	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-18	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-18	11/8/2016	Iron, Dissolved	0.81	0.02	0.02	13821880	mg/L
MKTF-18	11/8/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-18	11/8/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-18	11/8/2016	Sodium, Dissolved	280	5	2.5	NA	mg/L
MKTF-18	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	11/8/2016	Selenium, Dissolved	0.0053	0.001	0.00021	50000	mg/L
MKTF-18	11/8/2016	Uranium, Dissolved	0.001	0.0005	0.000051	NA	mg/L
MKTF-18	11/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-18	11/8/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-18	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-18	11/8/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-18	11/8/2016	Lead, Total	0.00041	0.0005	0.000081	15000	mg/L
MKTF-18	11/8/2016	Selenium, Total	0.0059	0.01	0.0019	50000	mg/L
MKTF-18	11/8/2016	Uranium, Total	0.0011	0.0005	0.00017	30000	mg/L
MKTF-18	11/8/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MKTF-18	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-18	3/1/2017	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
MKTF-18	3/1/2017	Barium, Total	2.2	0.01	0.004	2000000	mg/L
MKTF-18	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-18	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-18	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-18	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-18	3/1/2017	Arsenic, Dissolved	0.0023	0.001	0.00014	10000	mg/L
MKTF-18	3/1/2017	Barium, Dissolved	2	0.01	0.0043	2000000	mg/L
MKTF-18	3/1/2017	Calcium, Dissolved	81	1	0.5	NA	mg/L
MKTF-18	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-18	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	3/1/2017	Iron, Dissolved	1.4	0.1	0.1	13821880	mg/L
MKTF-18	3/1/2017	Potassium, Dissolved	0.52	1	0.5	NA	mg/L
MKTF-18	3/1/2017	Magnesium, Dissolved	20	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	3/1/2017	Manganese, Dissolved	1.9	0.01	0.0019	2017400	mg/L
MKTF-18	3/1/2017	Sodium, Dissolved	260	5	2.5	NA	mg/L
MKTF-18	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	3/1/2017	Selenium, Dissolved	0.0043	0.001	0.00021	50000	mg/L
MKTF-18	3/1/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
MKTF-18	3/1/2017	Iron, Total	4.9	0.2	0.2	13822000	mg/L
MKTF-18	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-18	3/1/2017	Manganese, Total	2.1	0.01	0.0014	2017000	mg/L
MKTF-18	3/1/2017	Lead, Total	0.0047	0.0005	0.000081	15000	mg/L
MKTF-18	3/1/2017	Selenium, Total	0.0039	0.001	0.00019	50000	mg/L
MKTF-18	3/1/2017	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-18	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-18	6/14/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-18	6/14/2017	Barium, Total	2.4	0.02	0.0093	2000000	mg/L
MKTF-18	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	6/14/2017	Chromium, Total	0.0048	0.006	0.0011	50000	mg/L
MKTF-18	6/14/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-18	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-18	6/14/2017	Arsenic, Dissolved	0.0029	0.001	0.00018	10000	mg/L
MKTF-18	6/14/2017	Barium, Dissolved	1.9	0.02	0.0085	2000000	mg/L
MKTF-18	6/14/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
MKTF-18	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-18	6/14/2017	Copper, Dissolved	0.0063	0.006	0.0032	790000	mg/L
MKTF-18	6/14/2017	Iron, Dissolved	2.6	0.2	0.16	13821880	mg/L
MKTF-18	6/14/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MKTF-18	6/14/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-18	6/14/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
MKTF-18	6/14/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-18	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	6/14/2017	Selenium, Dissolved	0.0025	0.005	0.0019	50000	mg/L
MKTF-18	6/14/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-18	6/14/2017	Iron, Total	7	0.2	0.1	13822000	mg/L
MKTF-18	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	6/14/2017	Manganese, Total	2.3	0.02	0.011	2017000	mg/L
MKTF-18	6/14/2017	Lead, Total	0.0088	0.0005	0.000095	15000	mg/L
MKTF-18	6/14/2017	Selenium, Total	0.0041	0.005	0.0036	50000	mg/L
MKTF-18	6/14/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-18	2/16/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-18	2/16/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-18	2/16/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
MKTF-18	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-18	2/16/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-18	2/16/2018	Barium, Dissolved	2.2	0.01	0.0049	2000000	mg/L
MKTF-18	2/16/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-18	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	2/16/2018	Iron, Dissolved	0.42	0.02	0.016	13821880	mg/L
MKTF-18	2/16/2018	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-18	2/16/2018	Magnesium, Dissolved	23	1	0.25	NA	mg/L
MKTF-18	2/16/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	2/16/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	2/16/2018	Selenium, Dissolved	0.0046	0.005	0.0038	50000	mg/L
MKTF-18	2/16/2018	Uranium, Dissolved	0.0008	0.0005	0.000096	NA	mg/L
MKTF-18	2/16/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-18	2/16/2018	Iron, Total	3.3	0.1	0.051	13822000	mg/L
MKTF-18	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	2/16/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-18	2/16/2018	Lead, Total	0.0028	0.0005	0.00023	15000	mg/L
MKTF-18	2/16/2018	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
MKTF-18	2/16/2018	Uranium, Total	0.001	0.0005	0.000068	30000	mg/L
MKTF-18	2/16/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-18	5/4/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
MKTF-18	5/4/2018	Arsenic, Total	0.0021	0.001	0.00041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	5/4/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
MKTF-18	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	5/4/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
MKTF-18	5/4/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-18	5/4/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-18	5/4/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
MKTF-18	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	5/4/2018	Iron, Dissolved	0.41	0.02	0.016	13821880	mg/L
MKTF-18	5/4/2018	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-18	5/4/2018	Magnesium, Dissolved	24	1	0.25	NA	mg/L
MKTF-18	5/4/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	5/4/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-18	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	5/4/2018	Uranium, Dissolved	0.00064	0.0005	0.000096	NA	mg/L
MKTF-18	5/4/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
MKTF-18	5/4/2018	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-18	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-18	5/4/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-18	5/4/2018	Lead, Total	0.00051	0.0005	0.00023	15000	mg/L
MKTF-18	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	5/4/2018	Uranium, Total	0.00074	0.0005	0.000068	30000	mg/L
MKTF-18	5/4/2018	Zinc, Total	0.0051	0.01	0.0033	5960000	mg/L
MKTF-18	8/24/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-18	8/24/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-18	8/24/2018	Barium, Total	2	0.01	0.005	2000000	mg/L
MKTF-18	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	8/24/2018	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-18	8/24/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L
MKTF-18	8/24/2018	Arsenic, Dissolved	0.0016	0.001	0.00042	10000	mg/L
MKTF-18	8/24/2018	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
MKTF-18	8/24/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
MKTF-18	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-18	8/24/2018	Iron, Dissolved	0.68	0.02	0.016	13821880	mg/L
MKTF-18	8/24/2018	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-18	8/24/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-18	8/24/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-18	8/24/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	8/24/2018	Uranium, Dissolved	0.0006	0.0005	0.000096	NA	mg/L
MKTF-18	8/24/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
MKTF-18	8/24/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-18	8/24/2018	Mercury, Total	0.000082	0.0002	0.000038	2000	mg/L
MKTF-18	8/24/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-18	8/24/2018	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
MKTF-18	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	8/24/2018	Uranium, Total	0.00064	0.0005	0.000068	30000	mg/L
MKTF-18	8/24/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-18	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-18	11/28/2018	Arsenic, Total	0.0018	0.001	0.00041	10000	mg/L
MKTF-18	11/28/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-18	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-18	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-18	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-18	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-18	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-18	11/28/2018	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-18	11/28/2018	Calcium, Dissolved	89	1	0.078	NA	mg/L
MKTF-18	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-18	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-18	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	11/28/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
MKTF-18	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-18	11/28/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-18	11/28/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
MKTF-18	11/28/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-18	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-18	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-18	11/28/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-18	11/28/2018	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-18	11/28/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-18	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-18	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-18	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-18	5/16/2019	Aluminum, Dissolved	0.048	0.02	0.002488	19913930	mg/L
MKTF-18	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-18	5/16/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
MKTF-18	5/16/2019	Barium, Dissolved	2	0.01	0.003242	2000000	mg/L
MKTF-18	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-18	5/16/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
MKTF-18	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-18	5/16/2019	Calcium, Dissolved	87	1	0.061889	NA	mg/L
MKTF-18	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-18	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-18	5/16/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
MKTF-18	5/16/2019	Iron, Dissolved	2	0.1	0.043734	13821880	mg/L
MKTF-18	5/16/2019	Lead, Dissolved	0.00007	0.0005	0.000055	NA	mg/L
MKTF-18	5/16/2019	Magnesium, Dissolved	23	1	0.05029	NA	mg/L
MKTF-18	5/16/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-18	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-18	5/16/2019	Nickel, Dissolved	0.0042	0.01	0.004009	372000	mg/L
MKTF-18	5/16/2019	Potassium, Dissolved	0.42	1	0.162288	NA	mg/L
MKTF-18	5/16/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
MKTF-18	5/16/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-18	5/16/2019	Sodium, Dissolved	270	5	2.080881	NA	mg/L
MKTF-18	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	5/16/2019	Uranium, Dissolved	0.00065	0.0005	0.000075	NA	mg/L
MKTF-18	5/16/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-18	5/16/2019	Aluminum, Total	1.1	0.1	0.012441	19914000	mg/L
MKTF-18	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-18	5/16/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
MKTF-18	5/16/2019	Barium, Total	2.2	0.01	0.003242	2000000	mg/L
MKTF-18	5/16/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-18	5/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-18	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-18	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-18	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-18	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-18	5/16/2019	Iron, Total	3.8	0.1	0.043734	13822000	mg/L
MKTF-18	5/16/2019	Lead, Total	0.0032	0.0005	0.000055	15000	mg/L
MKTF-18	5/16/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-18	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-18	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-18	5/16/2019	Nickel, Total	0.0042	0.01	0.004009	372000	mg/L
MKTF-18	5/16/2019	Selenium, Total	0.00056	0.001	0.000478	50000	mg/L
MKTF-18	5/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-18	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-18	5/16/2019	Uranium, Total	0.00096	0.0005	0.000085	30000	mg/L
MKTF-18	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-18	10/29/2019	Aluminum, Total	1	0.02	0.002488	19914000	mg/L
MKTF-18	10/29/2019	Antimony, Total	0.00081	0.001	0.000389	6000	mg/L
MKTF-18	10/29/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-18	10/29/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-18	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-18	10/29/2019	Boron, Total	0.42	0.04	0.004531	3949	mg/L
MKTF-18	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-18	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-18	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-18	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-18	10/29/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	10/29/2019	Lead, Total	0.00045	0.0005	0.000055	15000	mg/L
MKTF-18	10/29/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-18	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-18	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-18	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-18	10/29/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-18	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-18	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-18	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-18	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-18	10/29/2019	Arsenic, Dissolved	0.0012	0.001	0.000101	10000	mg/L
MKTF-18	10/29/2019	Barium, Dissolved	2	0.01	0.003242	2000000	mg/L
MKTF-18	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-18	10/29/2019	Boron, Dissolved	0.39	0.04	0.004531	3949110	mg/L
MKTF-18	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-18	10/29/2019	Calcium, Dissolved	86	1	0.061889	NA	mg/L
MKTF-18	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-18	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-18	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-18	10/29/2019	Iron, Dissolved	0.65	0.02	0.008747	13821880	mg/L
MKTF-18	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-18	10/29/2019	Magnesium, Dissolved	24	1	0.05029	NA	mg/L
MKTF-18	10/29/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-18	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-18	10/29/2019	Nickel, Dissolved	0.0058	0.01	0.004009	372000	mg/L
MKTF-18	10/29/2019	Potassium, Dissolved	0.4	1	0.162288	NA	mg/L
MKTF-18	10/29/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-18	10/29/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-18	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	10/29/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-18	10/29/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-18	10/29/2019	Selenium, Total	ND	0.001	0.000171	50000	mg/L
MKTF-18	12/16/2020	Arsenic, Total Recoverable	1.7	1	0.286	10	ug/L
MKTF-18	12/16/2020	Lead, Total Recoverable	1.01	1	0.133	15	ug/L
MKTF-18	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-18	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-18	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-18	12/16/2020	Arsenic, Dissolved	1.72	1	0.286	10	ug/L
MKTF-18	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-18	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-18	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-18	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-18	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-18	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-18	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-18	12/16/2020	Aluminum, Total	2.91	0.2	0.051	19914000	mg/L
MKTF-18	12/16/2020	Calcium, Total	102	0.5	0.084	NA	mg/L
MKTF-18	12/16/2020	Boron, Total	0.381	0.1	0.022	3949	mg/L
MKTF-18	12/16/2020	Barium, Total	2.25	0.01	0.003	2000000	mg/L
MKTF-18	12/16/2020	Potassium, Total	1.11	1	0.34	NA	mg/L
MKTF-18	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-18	12/16/2020	Magnesium, Total	26.1	0.5	0.12	NA	mg/L
MKTF-18	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-18	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-18	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-18	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-18	12/16/2020	Iron, Total	4.01	0.2	0.075	13822000	mg/L
MKTF-18	12/16/2020	Manganese, Total	2.35	0.01	0.003	2017000	mg/L
MKTF-18	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-18	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-18	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-18	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-18	12/16/2020	Barium, Dissolved	2.18	0.01	0.003	2000000	mg/L
MKTF-18	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-18	12/16/2020	Boron, Dissolved	0.404	0.1	0.022	3949110	mg/L
MKTF-18	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-18	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-18	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-18	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	12/16/2020	Iron, Dissolved	0.239	0.2	0.075	13821880	mg/L
MKTF-18	12/16/2020	Manganese, Dissolved	2.2	0.01	0.003	2017400	mg/L
MKTF-18	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-18	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-18	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-18	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-18	12/16/2020	Sodium, Total	251	2	0.92	NA	mg/L
MKTF-18	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-18	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-18	2/6/2020	Aluminum, Dissolved	0.03	0.02	0.0025	19913930	mg/L
MKTF-18	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-18	2/6/2020	Boron, Dissolved	0.23	0.04	0.0045	3949110	mg/L
MKTF-18	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-18	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-18	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-18	2/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-18	2/6/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-18	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-18	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-18	2/6/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-18	2/6/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L
MKTF-18	2/6/2020	Zinc, Dissolved	0.008	0.01	0.0023	5960450	mg/L
MKTF-18	2/6/2020	Barium, Dissolved	1.6	0.01	0.0032	2000000	mg/L
MKTF-18	2/6/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-18	2/6/2020	Iron, Dissolved	2.7	0.1	0.044	13821880	mg/L
MKTF-18	2/6/2020	Manganese, Dissolved	2.9	0.01	0.0014	2017400	mg/L
MKTF-18	2/6/2020	Sodium, Dissolved	190	5	2.1	NA	mg/L
MKTF-18	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-18	2/6/2020	Arsenic, Dissolved	ND	0.001	0.0001	10000	mg/L
MKTF-18	2/6/2020	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
MKTF-18	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-18	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-18	2/6/2020	Uranium, Dissolved	0.0012	0.0005	0.000075	NA	mg/L
MKTF-18	2/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-18	2/6/2020	Lead, Total	0.0091	0.0005	0.000055	15000	mg/L
MKTF-18	2/6/2020	Thallium, Total	0.000099	0.0005	0.000052	2000	mg/L
MKTF-18	2/6/2020	Uranium, Total	0.0025	0.0005	0.000085	30000	mg/L
MKTF-18	2/6/2020	Arsenic, Total	0.0025	0.005	0.0016	10000	mg/L
MKTF-18	2/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-18	2/6/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-18	2/6/2020	Boron, Total	0.24	0.04	0.0045	3949	mg/L
MKTF-18	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-18	2/6/2020	Chromium, Total	0.0084	0.006	0.0015	50000	mg/L
MKTF-18	2/6/2020	Cobalt, Total	0.004	0.006	0.0031	5980	mg/L
MKTF-18	2/6/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-18	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-18	2/6/2020	Nickel, Total	0.01	0.01	0.004	372000	mg/L
MKTF-18	2/6/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-18	2/6/2020	Zinc, Total	0.015	0.01	0.0058	5960000	mg/L
MKTF-18	2/6/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-18	2/6/2020	Aluminum, Total	18	0.4	0.05	19914000	mg/L
MKTF-18	2/6/2020	Iron, Total	9.8	0.4	0.17	13822000	mg/L
MKTF-18	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-18	2/6/2020	Manganese, Total	3.7	0.01	0.0014	2017000	mg/L
MKTF-19	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-19	10/29/2019	Selenium, Total	0.00052	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-19	8/19/2019	Antimony, Dissolved	0.001	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	8/19/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-19	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	8/19/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-19	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Dissolved	0.0013	0.006	0.001296	790000	mg/L
MKTF-19	8/19/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	8/19/2019	Lead, Dissolved	0.0018	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-19	8/19/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-19	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Dissolved	0.0047	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Potassium, Dissolved	0.68	1	0.162288	NA	mg/L
MKTF-19	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-19	8/19/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-19	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	8/19/2019	Uranium, Dissolved	0.00016	0.0005	0.000075	NA	mg/L
MKTF-19	8/19/2019	Zinc, Dissolved	0.0037	0.01	0.002252	5960450	mg/L
MKTF-19	8/19/2019	Aluminum, Total	27	1	0.124414	19914000	mg/L
MKTF-19	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Total	0.015	0.001	0.000312	10000	mg/L
MKTF-19	8/19/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Total	0.0024	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	8/19/2019	Chromium, Total	0.009	0.006	0.001533	50000	mg/L
MKTF-19	8/19/2019	Cobalt, Total	0.0054	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Total	0.0099	0.006	0.004072	790000	mg/L
MKTF-19	8/19/2019	Iron, Total	21	1	0.437344	13822000	mg/L
MKTF-19	8/19/2019	Lead, Total	0.028	0.0025	0.000274	15000	mg/L
MKTF-19	8/19/2019	Manganese, Total	2.8	0.01	0.00145	2017000	mg/L
MKTF-19	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Total	0.017	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Selenium, Total	0.0023	0.001	0.000478	50000	mg/L
MKTF-19	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-19	8/19/2019	Thallium, Total	0.00013	0.0005	0.000052	2000	mg/L
MKTF-19	8/19/2019	Uranium, Total	0.0034	0.0005	0.000085	30000	mg/L
MKTF-19	8/19/2019	Zinc, Total	0.038	0.01	0.005772	5960000	mg/L
MKTF-19	8/19/2019	Aluminum, Dissolved	0.043	0.02	0.002488	19913930	mg/L
MKTF-19	8/19/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	8/19/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-19	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	8/19/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-19	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	8/19/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	8/19/2019	Lead, Dissolved	0.002	0.0005	0.000055	NA	mg/L
MKTF-19	8/19/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-19	8/19/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-19	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Dissolved	0.0046	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Potassium, Dissolved	0.71	1	0.162288	NA	mg/L
MKTF-19	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-19	8/19/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-19	8/19/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-19	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	8/19/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
MKTF-19	8/19/2019	Zinc, Dissolved	0.0084	0.01	0.002252	5960450	mg/L
MKTF-19	8/19/2019	Aluminum, Total	23	1	0.124414	19914000	mg/L
MKTF-19	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	8/19/2019	Arsenic, Total	0.014	0.001	0.000312	10000	mg/L
MKTF-19	8/19/2019	Barium, Total	2.3	0.01	0.003242	2000000	mg/L
MKTF-19	8/19/2019	Beryllium, Total	0.002	0.002	0.000284	4000	mg/L
MKTF-19	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	8/19/2019	Chromium, Total	0.007	0.006	0.001533	50000	mg/L
MKTF-19	8/19/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
MKTF-19	8/19/2019	Copper, Total	0.007	0.006	0.004072	790000	mg/L
MKTF-19	8/19/2019	Iron, Total	19	1	0.437344	13822000	mg/L
MKTF-19	8/19/2019	Lead, Total	0.022	0.0005	0.000055	15000	mg/L
MKTF-19	8/19/2019	Manganese, Total	2.7	0.01	0.00145	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	8/19/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-19	8/19/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-19	8/19/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-19	8/19/2019	Thallium, Total	0.00013	0.0005	0.000052	2000	mg/L
MKTF-19	8/19/2019	Uranium, Total	0.0028	0.0005	0.000085	30000	mg/L
MKTF-19	8/19/2019	Zinc, Total	0.035	0.01	0.005772	5960000	mg/L
MKTF-19	10/29/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-19	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-19	10/29/2019	Arsenic, Total	0.013	0.005	0.001561	10000	mg/L
MKTF-19	10/29/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-19	10/29/2019	Beryllium, Total	0.00065	0.002	0.000284	4000	mg/L
MKTF-19	10/29/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-19	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-19	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-19	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-19	10/29/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-19	10/29/2019	Lead, Total	0.009	0.0005	0.000055	15000	mg/L
MKTF-19	10/29/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
MKTF-19	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-19	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	10/29/2019	Nickel, Total	0.0052	0.01	0.004009	372000	mg/L
MKTF-19	10/29/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-19	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-19	10/29/2019	Zinc, Total	0.03	0.01	0.005772	5960000	mg/L
MKTF-19	10/29/2019	Aluminum, Dissolved	0.0093	0.02	0.002488	19913930	mg/L
MKTF-19	10/29/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
MKTF-19	10/29/2019	Arsenic, Dissolved	0.013	0.001	0.000101	10000	mg/L
MKTF-19	10/29/2019	Barium, Dissolved	1.9	0.01	0.003242	2000000	mg/L
MKTF-19	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	10/29/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
MKTF-19	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-19	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	10/29/2019	Iron, Dissolved	10	0.4	0.174937	13821880	mg/L
MKTF-19	10/29/2019	Lead, Dissolved	0.0017	0.0005	0.000055	NA	mg/L
MKTF-19	10/29/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-19	10/29/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-19	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	10/29/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-19	10/29/2019	Potassium, Dissolved	0.84	1	0.162288	NA	mg/L
MKTF-19	10/29/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-19	10/29/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-19	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-19	10/29/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-19	5/9/2019	Aluminum, Dissolved	0.03	0.02	0.002488	19913930	mg/L
MKTF-19	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-19	5/9/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
MKTF-19	5/9/2019	Barium, Dissolved	1.8	0.01	0.003242	2000000	mg/L
MKTF-19	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-19	5/9/2019	Boron, Dissolved	0.3	0.04	0.004531	3949110	mg/L
MKTF-19	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-19	5/9/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-19	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-19	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-19	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-19	5/9/2019	Iron, Dissolved	11	0.4	0.174937	13821880	mg/L
MKTF-19	5/9/2019	Lead, Dissolved	0.0017	0.0025	0.000274	NA	mg/L
MKTF-19	5/9/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
MKTF-19	5/9/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-19	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-19	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-19	5/9/2019	Potassium, Dissolved	0.63	1	0.162288	NA	mg/L
MKTF-19	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-19	5/9/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-19	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-19	5/9/2019	Uranium, Dissolved	0.001	0.0025	0.000374	NA	mg/L
MKTF-19	5/9/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-19	5/9/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-19	5/9/2019	Antimony, Total	0.00051	0.001	0.000389	6000	mg/L
MKTF-19	5/9/2019	Arsenic, Total	0.012	0.001	0.000312	10000	mg/L
MKTF-19	5/9/2019	Barium, Total	2.1	0.01	0.003242	2000000	mg/L
MKTF-19	5/9/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-19	5/9/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
MKTF-19	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-19	5/9/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
MKTF-19	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-19	5/9/2019	Copper, Total	0.0054	0.006	0.004072	790000	mg/L
MKTF-19	5/9/2019	Iron, Total	15	0.4	0.174937	13822000	mg/L
MKTF-19	5/9/2019	Lead, Total	0.013	0.0025	0.000274	15000	mg/L
MKTF-19	5/9/2019	Manganese, Total	2.7	0.01	0.00145	2017000	mg/L
MKTF-19	5/9/2019	Mercury, Total	0.000051	0.0002	0.000038	2000	mg/L
MKTF-19	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-19	5/9/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-19	5/9/2019	Selenium, Total	0.00091	0.001	0.000478	50000	mg/L
MKTF-19	5/9/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
MKTF-19	5/9/2019	Thallium, Total	0.00014	0.0005	0.000052	2000	mg/L
MKTF-19	5/9/2019	Uranium, Total	0.001	0.0005	0.000085	30000	mg/L
MKTF-19	5/9/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-19	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-19	11/18/2014	Arsenic, Total	0.022	0.01	0.0036	10000	mg/L
MKTF-19	11/18/2014	Barium, Total	3.6	0.02	0.005	2000000	mg/L
MKTF-19	11/18/2014	Calcium, Total	140	5	0.41	NA	mg/L
MKTF-19	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-19	11/18/2014	Chromium, Total	0.035	0.006	0.0028	50000	mg/L
MKTF-19	11/18/2014	Copper, Total	0.043	0.006	0.0046	790000	mg/L
MKTF-19	11/18/2014	Iron, Total	47	2	0.72	13822000	mg/L
MKTF-19	11/18/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-19	11/18/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
MKTF-19	11/18/2014	Magnesium, Total	28	1	0.018	NA	mg/L
MKTF-19	11/18/2014	Manganese, Total	5.6	0.02	0.0049	2017000	mg/L
MKTF-19	11/18/2014	Sodium, Total	270	5	2	NA	mg/L
MKTF-19	11/18/2014	Lead, Total	0.079	0.01	0.0026	15000	mg/L
MKTF-19	11/18/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
MKTF-19	11/18/2014	Uranium, Total	0.014	0.001	0.0000072	30000	mg/L
MKTF-19	11/18/2014	Zinc, Total	0.11	0.01	0.0035	5960000	mg/L
MKTF-19	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	3/12/2015	Arsenic, Total	0.017	0.001	0.00044	10000	mg/L
MKTF-19	3/12/2015	Barium, Total	2.7	0.01	0.0037	2000000	mg/L
MKTF-19	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-19	3/12/2015	Chromium, Total	0.022	0.006	0.0022	50000	mg/L
MKTF-19	3/12/2015	Copper, Total	0.026	0.006	0.0051	790000	mg/L
MKTF-19	3/12/2015	Iron, Total	33	1	0.36	13822000	mg/L
MKTF-19	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	3/12/2015	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-19	3/12/2015	Lead, Total	0.052	0.01	0.00069	15000	mg/L
MKTF-19	3/12/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-19	3/12/2015	Uranium, Total	0.0065	0.001	0.0000081	30000	mg/L
MKTF-19	3/12/2015	Zinc, Total	0.078	0.01	0.0036	5960000	mg/L
MKTF-19	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	6/8/2015	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
MKTF-19	6/8/2015	Barium, Total	2.5	0.01	0.0053	2000000	mg/L
MKTF-19	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	6/8/2015	Chromium, Total	0.024	0.006	0.0022	50000	mg/L
MKTF-19	6/8/2015	Copper, Total	0.017	0.006	0.0051	790000	mg/L
MKTF-19	6/8/2015	Iron, Total	28	1	0.36	13822000	mg/L
MKTF-19	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	6/8/2015	Manganese, Total	4.2	0.01	0.0076	2017000	mg/L
MKTF-19	6/8/2015	Lead, Total	0.035	0.0025	0.00024	15000	mg/L
MKTF-19	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-19	6/8/2015	Uranium, Total	0.0048	0.0025	0.000025	30000	mg/L
MKTF-19	6/8/2015	Zinc, Total	0.082	0.01	0.0039	5960000	mg/L
MKTF-19	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	8/18/2015	Arsenic, Total	0.018	0.001	0.00029	10000	mg/L
MKTF-19	8/18/2015	Barium, Total	4.4	0.02	0.011	2000000	mg/L
MKTF-19	8/18/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-19	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	8/18/2015	Chromium, Total	0.044	0.006	0.0022	50000	mg/L
MKTF-19	8/18/2015	Copper, Total	0.06	0.006	0.0051	790000	mg/L
MKTF-19	8/18/2015	Iron, Total	64	2	0.72	13822000	mg/L
MKTF-19	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	8/18/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-19	8/18/2015	Magnesium, Total	32	1	0.039	NA	mg/L
MKTF-19	8/18/2015	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
MKTF-19	8/18/2015	Sodium, Total	290	5	0.36	NA	mg/L
MKTF-19	8/18/2015	Lead, Total	0.14	0.005	0.00047	15000	mg/L
MKTF-19	8/18/2015	Selenium, Total	0.0062	0.005	0.00062	50000	mg/L
MKTF-19	8/18/2015	Uranium, Total	0.024	0.0005	0.0000049	30000	mg/L
MKTF-19	8/18/2015	Zinc, Total	0.22	0.01	0.0039	5960000	mg/L
MKTF-19	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-19	11/3/2015	Arsenic, Total	0.018	0.005	0.00032	10000	mg/L
MKTF-19	11/3/2015	Barium, Total	1.7	0.01	0.0066	2000000	mg/L
MKTF-19	11/3/2015	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-19	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-19	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-19	11/3/2015	Iron, Total	13	0.4	0.18	13822000	mg/L
MKTF-19	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-19	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-19	11/3/2015	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-19	11/3/2015	Manganese, Total	3.4	0.01	0.0016	2017000	mg/L
MKTF-19	11/3/2015	Sodium, Total	260	5	0.48	NA	mg/L
MKTF-19	11/3/2015	Lead, Total	0.0016	0.0005	0.000026	15000	mg/L
MKTF-19	11/3/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-19	11/3/2015	Uranium, Total	ND	0.0005	0.0000048	30000	mg/L
MKTF-19	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-19	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-19	2/25/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
MKTF-19	2/25/2016	Barium, Total	2.8	0.01	0.0053	2000000	mg/L
MKTF-19	2/25/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-19	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-19	2/25/2016	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-19	2/25/2016	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-19	2/25/2016	Iron, Total	23	1	0.36	13822000	mg/L
MKTF-19	2/25/2016	Mercury, Total	ND	0.001	0.00027	2000	mg/L
MKTF-19	2/25/2016	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-19	2/25/2016	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-19	2/25/2016	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-19	2/25/2016	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-19	2/25/2016	Lead, Total	0.069	0.0025	0.00024	15000	mg/L
MKTF-19	2/25/2016	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-19	2/25/2016	Uranium, Total	0.025	0.0025	0.000025	30000	mg/L
MKTF-19	2/25/2016	Zinc, Total	0.08	0.01	0.0039	5960000	mg/L
MKTF-19	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-19	6/10/2016	Arsenic, Total	0.015	0.005	0.00069	10000	mg/L
MKTF-19	6/10/2016	Barium, Total	1.6	0.01	0.0066	2000000	mg/L
MKTF-19	6/10/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-19	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-19	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-19	6/10/2016	Iron, Total	9.7	0.2	0.091	13822000	mg/L
MKTF-19	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-19	6/10/2016	Potassium, Total	0.95	1	0.18	NA	mg/L
MKTF-19	6/10/2016	Magnesium, Total	32	1	0.013	NA	mg/L
MKTF-19	6/10/2016	Manganese, Total	2.7	0.01	0.0016	2017000	mg/L
MKTF-19	6/10/2016	Sodium, Total	300	5	0.48	NA	mg/L
MKTF-19	6/10/2016	Lead, Total	0.0022	0.0025	0.00084	15000	mg/L
MKTF-19	6/10/2016	Selenium, Total	0.013	0.02	0.0042	50000	mg/L
MKTF-19	6/10/2016	Uranium, Total	0.00045	0.0025	0.00026	30000	mg/L
MKTF-19	6/10/2016	Zinc, Total	0.0062	0.01	0.0028	5960000	mg/L
MKTF-19	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	9/13/2016	Arsenic, Total	0.015	0.005	0.0011	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/13/2016	Barium, Total	2.1	0.01	0.004	2000000	mg/L
MKTF-19	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	9/13/2016	Chromium, Total	0.0057	0.006	0.0027	50000	mg/L
MKTF-19	9/13/2016	Copper, Total	0.0083	0.006	0.003	790000	mg/L
MKTF-19	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-19	9/13/2016	Arsenic, Dissolved	0.017	0.001	0.00014	10000	mg/L
MKTF-19	9/13/2016	Barium, Dissolved	1.7	0.01	0.0066	2000000	mg/L
MKTF-19	9/13/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-19	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-19	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-19	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-19	9/13/2016	Iron, Dissolved	10	0.4	0.4	13821880	mg/L
MKTF-19	9/13/2016	Potassium, Dissolved	0.93	1	0.5	NA	mg/L
MKTF-19	9/13/2016	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-19	9/13/2016	Manganese, Dissolved	2.4	0.01	0.0016	2017400	mg/L
MKTF-19	9/13/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-19	9/13/2016	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-19	9/13/2016	Selenium, Dissolved	0.0082	0.02	0.0042	50000	mg/L
MKTF-19	9/13/2016	Uranium, Dissolved	0.00064	0.0005	0.000051	NA	mg/L
MKTF-19	9/13/2016	Zinc, Dissolved	0.0044	0.01	0.0028	5960450	mg/L
MKTF-19	9/13/2016	Iron, Total	17	1	1	13822000	mg/L
MKTF-19	9/13/2016	Mercury, Total	0.000073	0.0002	0.000053	2000	mg/L
MKTF-19	9/13/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-19	9/13/2016	Lead, Total	0.023	0.0005	0.000081	15000	mg/L
MKTF-19	9/13/2016	Selenium, Total	0.0079	0.01	0.0019	50000	mg/L
MKTF-19	9/13/2016	Uranium, Total	0.0043	0.0005	0.00017	30000	mg/L
MKTF-19	9/13/2016	Zinc, Total	0.065	0.01	0.0027	5960000	mg/L
MKTF-19	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	11/8/2016	Arsenic, Total	0.013	0.005	0.0011	10000	mg/L
MKTF-19	11/8/2016	Barium, Total	2.2	0.01	0.004	2000000	mg/L
MKTF-19	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	11/8/2016	Chromium, Total	0.0088	0.006	0.0027	50000	mg/L
MKTF-19	11/8/2016	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-19	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-19	11/8/2016	Arsenic, Dissolved	0.011	0.005	0.00069	10000	mg/L
MKTF-19	11/8/2016	Barium, Dissolved	1.6	0.02	0.013	2000000	mg/L
MKTF-19	11/8/2016	Calcium, Dissolved	150	10	5	NA	mg/L
MKTF-19	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-19	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-19	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-19	11/8/2016	Iron, Dissolved	8.5	0.2	0.2	13821880	mg/L
MKTF-19	11/8/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-19	11/8/2016	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-19	11/8/2016	Manganese, Dissolved	2.2	0.02	0.0032	2017400	mg/L
MKTF-19	11/8/2016	Sodium, Dissolved	290	10	5	NA	mg/L
MKTF-19	11/8/2016	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-19	11/8/2016	Selenium, Dissolved	0.0075	0.02	0.0042	50000	mg/L
MKTF-19	11/8/2016	Uranium, Dissolved	0.0016	0.0005	0.000051	NA	mg/L
MKTF-19	11/8/2016	Zinc, Dissolved	0.0091	0.01	0.0028	5960450	mg/L
MKTF-19	11/8/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-19	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-19	11/8/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-19	11/8/2016	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-19	11/8/2016	Selenium, Total	0.0087	0.02	0.0037	50000	mg/L
MKTF-19	11/8/2016	Uranium, Total	0.0059	0.0005	0.00017	30000	mg/L
MKTF-19	11/8/2016	Zinc, Total	0.07	0.01	0.0027	5960000	mg/L
MKTF-19	3/15/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-19	3/15/2017	Arsenic, Total	0.018	0.005	0.0011	10000	mg/L
MKTF-19	3/15/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-19	3/15/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-19	3/15/2017	Chromium, Total	0.0075	0.006	0.0027	50000	mg/L
MKTF-19	3/15/2017	Copper, Total	0.018	0.006	0.003	790000	mg/L
MKTF-19	3/15/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-19	3/15/2017	Arsenic, Dissolved	0.015	0.01	0.0018	10000	mg/L
MKTF-19	3/15/2017	Barium, Dissolved	1.7	0.01	0.0043	2000000	mg/L
MKTF-19	3/15/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-19	3/15/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	3/15/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-19	3/15/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Iron, Dissolved	9	0.2	0.2	13821880	mg/L
MKTF-19	3/15/2017	Potassium, Dissolved	0.87	1	0.5	NA	mg/L
MKTF-19	3/15/2017	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-19	3/15/2017	Manganese, Dissolved	2.4	0.01	0.0019	2017400	mg/L
MKTF-19	3/15/2017	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-19	3/15/2017	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-19	3/15/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
MKTF-19	3/15/2017	Uranium, Dissolved	0.0021	0.0005	0.00005	NA	mg/L
MKTF-19	3/15/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
MKTF-19	3/15/2017	Iron, Total	20	1	1	13822000	mg/L
MKTF-19	3/15/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	3/15/2017	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-19	3/15/2017	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-19	3/15/2017	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
MKTF-19	3/15/2017	Uranium, Total	0.0071	0.0005	0.00017	30000	mg/L
MKTF-19	3/15/2017	Zinc, Total	0.1	0.01	0.0027	5960000	mg/L
MKTF-19	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-19	6/14/2017	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-19	6/14/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
MKTF-19	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	6/14/2017	Chromium, Total	0.0059	0.006	0.0011	50000	mg/L
MKTF-19	6/14/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
MKTF-19	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-19	6/14/2017	Arsenic, Dissolved	0.014	0.005	0.00089	10000	mg/L
MKTF-19	6/14/2017	Barium, Dissolved	1.7	0.02	0.0085	2000000	mg/L
MKTF-19	6/14/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-19	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-19	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	6/14/2017	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	6/14/2017	Potassium, Dissolved	0.76	1	0.11	NA	mg/L
MKTF-19	6/14/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-19	6/14/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-19	6/14/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-19	6/14/2017	Lead, Dissolved	0.0019	0.0005	0.00017	NA	mg/L
MKTF-19	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-19	6/14/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-19	6/14/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-19	6/14/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-19	6/14/2017	Manganese, Total	3.3	0.02	0.011	2017000	mg/L
MKTF-19	6/14/2017	Lead, Total	0.022	0.0005	0.000095	15000	mg/L
MKTF-19	6/14/2017	Selenium, Total	ND	0.01	0.0071	50000	mg/L
MKTF-19	6/14/2017	Zinc, Total	0.1	0.01	0.0028	5960000	mg/L
MKTF-19	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	9/26/2017	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
MKTF-19	9/26/2017	Barium, Total	2.4	0.01	0.0047	2000000	mg/L
MKTF-19	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	9/26/2017	Chromium, Total	0.012	0.006	0.0018	50000	mg/L
MKTF-19	9/26/2017	Copper, Total	0.015	0.006	0.0017	790000	mg/L
MKTF-19	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	9/26/2017	Arsenic, Dissolved	0.014	0.01	0.0018	10000	mg/L
MKTF-19	9/26/2017	Barium, Dissolved	1.6	0.02	0.0085	2000000	mg/L
MKTF-19	9/26/2017	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-19	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	9/26/2017	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-19	9/26/2017	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-19	9/26/2017	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-19	9/26/2017	Manganese, Dissolved	3.1	0.02	0.0039	2017400	mg/L
MKTF-19	9/26/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-19	9/26/2017	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-19	9/26/2017	Selenium, Dissolved	0.0048	0.01	0.0039	50000	mg/L
MKTF-19	9/26/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-19	9/26/2017	Iron, Total	20	1	0.51	13822000	mg/L
MKTF-19	9/26/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
MKTF-19	9/26/2017	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-19	9/26/2017	Lead, Total	0.026	0.0025	0.00048	15000	mg/L
MKTF-19	9/26/2017	Selenium, Total	0.0077	0.005	0.0036	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	9/26/2017	Zinc, Total	0.062	0.01	0.0033	5960000	mg/L
MKTF-19	12/1/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	12/1/2017	Arsenic, Total	0.0077	0.001	0.00041	10000	mg/L
MKTF-19	12/1/2017	Barium, Total	2	0.01	0.005	2000000	mg/L
MKTF-19	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	12/1/2017	Copper, Total	0.0056	0.006	0.0041	790000	mg/L
MKTF-19	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	12/1/2017	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
MKTF-19	12/1/2017	Barium, Dissolved	1.5	0.01	0.0049	2000000	mg/L
MKTF-19	12/1/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-19	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	12/1/2017	Iron, Dissolved	9.2	0.2	0.16	13821880	mg/L
MKTF-19	12/1/2017	Potassium, Dissolved	0.83	1	0.11	NA	mg/L
MKTF-19	12/1/2017	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-19	12/1/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
MKTF-19	12/1/2017	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-19	12/1/2017	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-19	12/1/2017	Uranium, Dissolved	0.00089	0.0005	0.000096	NA	mg/L
MKTF-19	12/1/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-19	12/1/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
MKTF-19	12/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	12/1/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-19	12/1/2017	Lead, Total	0.01	0.0005	0.00023	15000	mg/L
MKTF-19	12/1/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-19	12/1/2017	Uranium, Total	0.0016	0.005	0.0015	30000	mg/L
MKTF-19	12/1/2017	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-19	2/16/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-19	2/16/2018	Arsenic, Total	0.01	0.001	0.00041	10000	mg/L
MKTF-19	2/16/2018	Barium, Total	1.7	0.01	0.005	2000000	mg/L
MKTF-19	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	2/16/2018	Arsenic, Dissolved	0.0096	0.005	0.0021	10000	mg/L
MKTF-19	2/16/2018	Barium, Dissolved	1.7	0.01	0.0049	2000000	mg/L
MKTF-19	2/16/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-19	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	2/16/2018	Iron, Dissolved	9.6	0.2	0.16	13821880	mg/L
MKTF-19	2/16/2018	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-19	2/16/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-19	2/16/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-19	2/16/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-19	2/16/2018	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-19	2/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-19	2/16/2018	Uranium, Dissolved	0.00049	0.0005	0.000096	NA	mg/L
MKTF-19	2/16/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-19	2/16/2018	Iron, Total	10	0.4	0.2	13822000	mg/L
MKTF-19	2/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	2/16/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
MKTF-19	2/16/2018	Lead, Total	0.0058	0.0005	0.00023	15000	mg/L
MKTF-19	2/16/2018	Selenium, Total	0.0029	0.001	0.00098	50000	mg/L
MKTF-19	2/16/2018	Uranium, Total	0.0012	0.0005	0.000068	30000	mg/L
MKTF-19	2/16/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-19	5/4/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-19	5/4/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-19	5/4/2018	Barium, Total	1.8	0.01	0.005	2000000	mg/L
MKTF-19	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	5/4/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	5/4/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-19	5/4/2018	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
MKTF-19	5/4/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	5/4/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	5/4/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
MKTF-19	5/4/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-19	5/4/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-19	5/4/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-19	5/4/2018	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	5/4/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	5/4/2018	Uranium, Dissolved	0.0003	0.0005	0.000096	NA	mg/L
MKTF-19	5/4/2018	Zinc, Dissolved	0.0042	0.01	0.0021	5960450	mg/L
MKTF-19	5/4/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-19	5/4/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-19	5/4/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	5/4/2018	Lead, Total	0.0047	0.0005	0.00023	15000	mg/L
MKTF-19	5/4/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	5/4/2018	Uranium, Total	0.00073	0.0005	0.000068	30000	mg/L
MKTF-19	5/4/2018	Zinc, Total	0.0063	0.01	0.0033	5960000	mg/L
MKTF-19	8/24/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-19	8/24/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
MKTF-19	8/24/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
MKTF-19	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	8/24/2018	Chromium, Total	0.0019	0.006	0.0018	50000	mg/L
MKTF-19	8/24/2018	Copper, Total	0.0055	0.006	0.0041	790000	mg/L
MKTF-19	8/24/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-19	8/24/2018	Arsenic, Dissolved	0.014	0.001	0.00042	10000	mg/L
MKTF-19	8/24/2018	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
MKTF-19	8/24/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-19	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	8/24/2018	Iron, Dissolved	10	0.4	0.33	13821880	mg/L
MKTF-19	8/24/2018	Potassium, Dissolved	0.86	1	0.11	NA	mg/L
MKTF-19	8/24/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-19	8/24/2018	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-19	8/24/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-19	8/24/2018	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-19	8/24/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	8/24/2018	Uranium, Dissolved	0.00075	0.0005	0.000096	NA	mg/L
MKTF-19	8/24/2018	Zinc, Dissolved	0.0097	0.01	0.0021	5960450	mg/L
MKTF-19	8/24/2018	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-19	8/24/2018	Mercury, Total	0.000088	0.0002	0.000038	2000	mg/L
MKTF-19	8/24/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	8/24/2018	Lead, Total	0.016	0.0005	0.00023	15000	mg/L
MKTF-19	8/24/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	8/24/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-19	8/24/2018	Zinc, Total	0.033	0.01	0.0033	5960000	mg/L
MKTF-19	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-19	11/28/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-19	11/28/2018	Barium, Total	1.9	0.01	0.005	2000000	mg/L
MKTF-19	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-19	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-19	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-19	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-19	11/28/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-19	11/28/2018	Barium, Dissolved	1.2	0.01	0.0049	2000000	mg/L
MKTF-19	11/28/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-19	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-19	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-19	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-19	11/28/2018	Iron, Dissolved	8.3	0.4	0.33	13821880	mg/L
MKTF-19	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-19	11/28/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-19	11/28/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-19	11/28/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-19	11/28/2018	Lead, Dissolved	0.0017	0.0005	0.00017	NA	mg/L
MKTF-19	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-19	11/28/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	11/28/2018	Iron, Total	7.5	0.4	0.2	13822000	mg/L
MKTF-19	11/28/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-19	11/28/2018	Lead, Total	0.0051	0.0005	0.00023	15000	mg/L
MKTF-19	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-19	11/28/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-20	11/18/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-20	11/18/2014	Arsenic, Total	0.017	0.005	0.0018	10000	mg/L
MKTF-20	11/18/2014	Barium, Total	4.5	0.02	0.005	2000000	mg/L
MKTF-20	11/18/2014	Calcium, Total	110	5	0.41	NA	mg/L
MKTF-20	11/18/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-20	11/18/2014	Chromium, Total	0.022	0.006	0.0028	50000	mg/L
MKTF-20	11/18/2014	Copper, Total	0.12	0.006	0.0046	790000	mg/L
MKTF-20	11/18/2014	Iron, Total	45	2	0.72	13822000	mg/L
MKTF-20	11/18/2014	Mercury, Total	0.00028	0.0002	0.000087	2000	mg/L
MKTF-20	11/18/2014	Potassium, Total	22	1	0.093	NA	mg/L
MKTF-20	11/18/2014	Magnesium, Total	20	1	0.018	NA	mg/L
MKTF-20	11/18/2014	Manganese, Total	4.9	0.02	0.0049	2017000	mg/L
MKTF-20	11/18/2014	Sodium, Total	100	5	2	NA	mg/L
MKTF-20	11/18/2014	Lead, Total	0.048	0.001	0.00026	15000	mg/L
MKTF-20	11/18/2014	Selenium, Total	ND	0.005	0.0025	50000	mg/L
MKTF-20	11/18/2014	Uranium, Total	0.0066	0.001	0.0000072	30000	mg/L
MKTF-20	11/18/2014	Zinc, Total	0.19	0.01	0.0035	5960000	mg/L
MKTF-20	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	3/16/2015	Arsenic, Total	0.025	0.001	0.00044	10000	mg/L
MKTF-20	3/16/2015	Barium, Total	2	0.01	0.0037	2000000	mg/L
MKTF-20	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-20	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-20	3/16/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-20	3/16/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
MKTF-20	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-20	3/16/2015	Manganese, Total	3.2	0.01	0.0076	2017000	mg/L
MKTF-20	3/16/2015	Lead, Total	0.0066	0.001	0.000069	15000	mg/L
MKTF-20	3/16/2015	Selenium, Total	0.0046	0.001	0.00012	50000	mg/L
MKTF-20	3/16/2015	Uranium, Total	0.011	0.001	0.0000081	30000	mg/L
MKTF-20	3/16/2015	Zinc, Total	0.03	0.01	0.0036	5960000	mg/L
MKTF-20	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	6/8/2015	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-20	6/8/2015	Barium, Total	2.1	0.01	0.0053	2000000	mg/L
MKTF-20	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-20	6/8/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
MKTF-20	6/8/2015	Copper, Total	0.078	0.006	0.0051	790000	mg/L
MKTF-20	6/8/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-20	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-20	6/8/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-20	6/8/2015	Lead, Total	0.018	0.0025	0.00024	15000	mg/L
MKTF-20	6/8/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-20	6/8/2015	Uranium, Total	0.0078	0.0025	0.000025	30000	mg/L
MKTF-20	6/8/2015	Zinc, Total	0.26	0.01	0.0039	5960000	mg/L
MKTF-20	6/9/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-20	6/9/2016	Arsenic, Total	0.038	0.01	0.0029	10000	mg/L
MKTF-20	6/9/2016	Barium, Total	4.6	0.01	0.0053	2000000	mg/L
MKTF-20	6/9/2016	Calcium, Total	220	5	1.3	NA	mg/L
MKTF-20	6/9/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-20	6/9/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-20	6/9/2016	Copper, Total	0.09	0.006	0.0051	790000	mg/L
MKTF-20	6/9/2016	Iron, Total	17	1	0.36	13822000	mg/L
MKTF-20	6/9/2016	Mercury, Total	0.000077	0.0002	0.000053	2000	mg/L
MKTF-20	6/9/2016	Potassium, Total	20	1	0.18	NA	mg/L
MKTF-20	6/9/2016	Magnesium, Total	40	1	0.013	NA	mg/L
MKTF-20	6/9/2016	Manganese, Total	5	0.01	0.0076	2017000	mg/L
MKTF-20	6/9/2016	Sodium, Total	230	5	0.48	NA	mg/L
MKTF-20	6/9/2016	Lead, Total	0.019	0.0005	0.000047	15000	mg/L
MKTF-20	6/9/2016	Selenium, Total	0.0093	0.01	0.0012	50000	mg/L
MKTF-20	6/9/2016	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-20	6/9/2016	Zinc, Total	0.085	0.01	0.0039	5960000	mg/L
MKTF-20	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	9/12/2016	Arsenic, Total	0.025	0.005	0.0011	10000	mg/L
MKTF-20	9/12/2016	Barium, Total	5.2	0.02	0.0079	2000000	mg/L
MKTF-20	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	9/12/2016	Copper, Total	0.022	0.006	0.003	790000	mg/L
MKTF-20	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-20	9/12/2016	Arsenic, Dissolved	0.027	0.001	0.00014	10000	mg/L
MKTF-20	9/12/2016	Barium, Dissolved	4.7	0.01	0.0066	2000000	mg/L
MKTF-20	9/12/2016	Calcium, Dissolved	220	5	2.5	NA	mg/L
MKTF-20	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-20	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-20	9/12/2016	Copper, Dissolved	0.0046	0.006	0.004	790000	mg/L
MKTF-20	9/12/2016	Iron, Dissolved	14	0.4	0.4	13821880	mg/L
MKTF-20	9/12/2016	Potassium, Dissolved	13	1	0.5	NA	mg/L
MKTF-20	9/12/2016	Magnesium, Dissolved	45	1	0.5	NA	mg/L
MKTF-20	9/12/2016	Manganese, Dissolved	3.8	0.01	0.0016	2017400	mg/L
MKTF-20	9/12/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MKTF-20	9/12/2016	Lead, Dissolved	0.004	0.0005	0.00017	NA	mg/L
MKTF-20	9/12/2016	Selenium, Dissolved	0.0079	0.005	0.0011	50000	mg/L
MKTF-20	9/12/2016	Uranium, Dissolved	0.0033	0.0005	0.000051	NA	mg/L
MKTF-20	9/12/2016	Zinc, Dissolved	0.012	0.01	0.0028	5960450	mg/L
MKTF-20	9/12/2016	Iron, Total	17	1	1	13822000	mg/L
MKTF-20	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-20	9/12/2016	Manganese, Total	4.4	0.01	0.0014	2017000	mg/L
MKTF-20	9/12/2016	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-20	9/12/2016	Selenium, Total	0.0092	0.005	0.00094	50000	mg/L
MKTF-20	9/12/2016	Uranium, Total	0.0044	0.0005	0.00017	30000	mg/L
MKTF-20	9/12/2016	Zinc, Total	0.033	0.01	0.0027	5960000	mg/L
MKTF-20	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	11/3/2016	Arsenic, Total	0.029	0.005	0.0011	10000	mg/L
MKTF-20	11/3/2016	Barium, Total	9.3	0.02	0.0079	2000000	mg/L
MKTF-20	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-20	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	11/3/2016	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-20	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-20	11/3/2016	Arsenic, Dissolved	0.026	0.005	0.00069	10000	mg/L
MKTF-20	11/3/2016	Barium, Dissolved	8.6	0.02	0.013	2000000	mg/L
MKTF-20	11/3/2016	Calcium, Dissolved	480	10	5	NA	mg/L
MKTF-20	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-20	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-20	11/3/2016	Copper, Dissolved	0.0073	0.006	0.004	790000	mg/L
MKTF-20	11/3/2016	Iron, Dissolved	20	1	1	13821880	mg/L
MKTF-20	11/3/2016	Potassium, Dissolved	22	1	0.5	NA	mg/L
MKTF-20	11/3/2016	Magnesium, Dissolved	92	1	0.5	NA	mg/L
MKTF-20	11/3/2016	Manganese, Dissolved	8	0.02	0.0032	2017400	mg/L
MKTF-20	11/3/2016	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-20	11/3/2016	Lead, Dissolved	0.0053	0.0025	0.00084	NA	mg/L
MKTF-20	11/3/2016	Selenium, Dissolved	0.011	0.005	0.0011	50000	mg/L
MKTF-20	11/3/2016	Uranium, Dissolved	0.0052	0.0025	0.00026	NA	mg/L
MKTF-20	11/3/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
MKTF-20	11/3/2016	Iron, Total	22	1	1	13822000	mg/L
MKTF-20	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-20	11/3/2016	Manganese, Total	8.9	0.02	0.0027	2017000	mg/L
MKTF-20	11/3/2016	Lead, Total	0.009	0.0025	0.00041	15000	mg/L
MKTF-20	11/3/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-20	11/3/2016	Uranium, Total	0.0052	0.0025	0.00087	30000	mg/L
MKTF-20	11/3/2016	Zinc, Total	0.024	0.01	0.0027	5960000	mg/L
MKTF-20	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-20	3/14/2017	Arsenic, Total	0.025	0.01	0.0021	10000	mg/L
MKTF-20	3/14/2017	Barium, Total	11	0.1	0.04	2000000	mg/L
MKTF-20	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-20	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-20	3/14/2017	Copper, Total	0.036	0.006	0.003	790000	mg/L
MKTF-20	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-20	3/14/2017	Arsenic, Dissolved	0.019	0.01	0.0018	10000	mg/L
MKTF-20	3/14/2017	Barium, Dissolved	12	0.04	0.017	2000000	mg/L
MKTF-20	3/14/2017	Calcium, Dissolved	400	20	10	NA	mg/L
MKTF-20	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-20	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	3/14/2017	Iron, Dissolved	23	1	1	13821880	mg/L
MKTF-20	3/14/2017	Potassium, Dissolved	6.2	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	3/14/2017	Magnesium, Dissolved	87	1	0.5	NA	mg/L
MKTF-20	3/14/2017	Manganese, Dissolved	7.2	0.04	0.0077	2017400	mg/L
MKTF-20	3/14/2017	Sodium, Dissolved	520	50	25	NA	mg/L
MKTF-20	3/14/2017	Lead, Dissolved	0.0023	0.0005	0.00017	NA	mg/L
MKTF-20	3/14/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-20	3/14/2017	Uranium, Dissolved	0.00053	0.0005	0.00005	NA	mg/L
MKTF-20	3/14/2017	Zinc, Dissolved	0.041	0.01	0.0011	5960450	mg/L
MKTF-20	3/14/2017	Iron, Total	22	1	1	13822000	mg/L
MKTF-20	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	3/14/2017	Manganese, Total	6.3	0.02	0.0027	2017000	mg/L
MKTF-20	3/14/2017	Lead, Total	0.013	0.0005	0.000081	15000	mg/L
MKTF-20	3/14/2017	Selenium, Total	0.018	0.05	0.0094	50000	mg/L
MKTF-20	3/14/2017	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
MKTF-20	3/14/2017	Zinc, Total	0.097	0.01	0.0027	5960000	mg/L
MKTF-20	6/12/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-20	6/12/2017	Arsenic, Total	0.022	0.005	0.0015	10000	mg/L
MKTF-20	6/12/2017	Barium, Total	7.5	0.02	0.0093	2000000	mg/L
MKTF-20	6/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	6/12/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-20	6/12/2017	Copper, Total	0.02	0.006	0.0017	790000	mg/L
MKTF-20	6/12/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-20	6/12/2017	Arsenic, Dissolved	0.021	0.01	0.0018	10000	mg/L
MKTF-20	6/12/2017	Barium, Dissolved	7.6	0.02	0.0085	2000000	mg/L
MKTF-20	6/12/2017	Calcium, Dissolved	230	10	0.78	NA	mg/L
MKTF-20	6/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	6/12/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-20	6/12/2017	Copper, Dissolved	0.0037	0.006	0.0032	790000	mg/L
MKTF-20	6/12/2017	Iron, Dissolved	17	0.4	0.33	13821880	mg/L
MKTF-20	6/12/2017	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-20	6/12/2017	Magnesium, Dissolved	56	1	0.25	NA	mg/L
MKTF-20	6/12/2017	Manganese, Dissolved	4.1	0.02	0.0038	2017400	mg/L
MKTF-20	6/12/2017	Sodium, Dissolved	340	10	1.6	NA	mg/L
MKTF-20	6/12/2017	Lead, Dissolved	0.0042	0.0005	0.00017	NA	mg/L
MKTF-20	6/12/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-20	6/12/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-20	6/12/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-20	6/12/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	6/12/2017	Manganese, Total	4.1	0.02	0.011	2017000	mg/L
MKTF-20	6/12/2017	Lead, Total	0.012	0.0005	0.000095	15000	mg/L
MKTF-20	6/12/2017	Selenium, Total	0.035	0.01	0.0071	50000	mg/L
MKTF-20	6/12/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-20	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-20	9/26/2017	Arsenic, Total	0.026	0.01	0.003	10000	mg/L
MKTF-20	9/26/2017	Barium, Total	7.6	0.02	0.0093	2000000	mg/L
MKTF-20	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	9/26/2017	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-20	9/26/2017	Copper, Total	0.11	0.006	0.0017	790000	mg/L
MKTF-20	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-20	9/26/2017	Arsenic, Dissolved	0.02	0.01	0.0018	10000	mg/L
MKTF-20	9/26/2017	Barium, Dissolved	8.5	0.02	0.0085	2000000	mg/L
MKTF-20	9/26/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
MKTF-20	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	9/26/2017	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-20	9/26/2017	Potassium, Dissolved	2.6	1	0.11	NA	mg/L
MKTF-20	9/26/2017	Magnesium, Dissolved	55	1	0.25	NA	mg/L
MKTF-20	9/26/2017	Manganese, Dissolved	3.8	0.02	0.0039	2017400	mg/L
MKTF-20	9/26/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-20	9/26/2017	Lead, Dissolved	0.00097	0.0005	0.00017	NA	mg/L
MKTF-20	9/26/2017	Selenium, Dissolved	ND	0.1	0.039	50000	mg/L
MKTF-20	9/26/2017	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-20	9/26/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
MKTF-20	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	9/26/2017	Manganese, Total	3.9	0.02	0.011	2017000	mg/L
MKTF-20	9/26/2017	Lead, Total	0.0083	0.0005	0.000095	15000	mg/L
MKTF-20	9/26/2017	Selenium, Total	0.033	0.01	0.0071	50000	mg/L
MKTF-20	9/26/2017	Zinc, Total	0.35	0.01	0.0033	5960000	mg/L
MKTF-20	11/29/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2017	Arsenic, Total	0.025	0.005	0.0021	10000	mg/L
MKTF-20	11/29/2017	Barium, Total	9.3	0.04	0.02	2000000	mg/L
MKTF-20	11/29/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	11/29/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	11/29/2017	Copper, Total	0.045	0.006	0.0041	790000	mg/L
MKTF-20	11/29/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-20	11/29/2017	Arsenic, Dissolved	0.017	0.005	0.0021	10000	mg/L
MKTF-20	11/29/2017	Barium, Dissolved	8.6	0.02	0.0099	2000000	mg/L
MKTF-20	11/29/2017	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-20	11/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	11/29/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	11/29/2017	Copper, Dissolved	0.014	0.006	0.0032	790000	mg/L
MKTF-20	11/29/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-20	11/29/2017	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
MKTF-20	11/29/2017	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-20	11/29/2017	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-20	11/29/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-20	11/29/2017	Lead, Dissolved	0.0033	0.0005	0.00017	NA	mg/L
MKTF-20	11/29/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-20	11/29/2017	Uranium, Dissolved	0.0023	0.0005	0.000096	NA	mg/L
MKTF-20	11/29/2017	Zinc, Dissolved	0.0086	0.01	0.0021	5960450	mg/L
MKTF-20	11/29/2017	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-20	11/29/2017	Manganese, Total	2.9	0.01	0.0055	2017000	mg/L
MKTF-20	11/29/2017	Lead, Total	0.0086	0.0005	0.00023	15000	mg/L
MKTF-20	11/29/2017	Selenium, Total	0.0096	0.005	0.0049	50000	mg/L
MKTF-20	11/29/2017	Uranium, Total	0.0025	0.0005	0.00015	30000	mg/L
MKTF-20	11/29/2017	Zinc, Total	0.06	0.01	0.0033	5960000	mg/L
MKTF-20	2/15/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-20	2/15/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-20	2/15/2018	Barium, Total	32	0.1	0.05	2000000	mg/L
MKTF-20	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	2/15/2018	Copper, Total	0.029	0.006	0.0041	790000	mg/L
MKTF-20	2/15/2018	Silver, Dissolved	0.011	0.005	0.0018	81200	mg/L
MKTF-20	2/15/2018	Arsenic, Dissolved	0.0096	0.005	0.0021	10000	mg/L
MKTF-20	2/15/2018	Barium, Dissolved	33	0.1	0.049	2000000	mg/L
MKTF-20	2/15/2018	Calcium, Dissolved	950	10	0.78	NA	mg/L
MKTF-20	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-20	2/15/2018	Iron, Dissolved	53	2	1.6	13821880	mg/L
MKTF-20	2/15/2018	Potassium, Dissolved	6.9	1	0.11	NA	mg/L
MKTF-20	2/15/2018	Magnesium, Dissolved	250	5	1.2	NA	mg/L
MKTF-20	2/15/2018	Manganese, Dissolved	17	0.1	0.02	2017400	mg/L
MKTF-20	2/15/2018	Sodium, Dissolved	1100	50	8.2	NA	mg/L
MKTF-20	2/15/2018	Lead, Dissolved	0.0015	0.0025	0.00087	NA	mg/L
MKTF-20	2/15/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
MKTF-20	2/15/2018	Uranium, Dissolved	0.0017	0.0025	0.00048	NA	mg/L
MKTF-20	2/15/2018	Zinc, Dissolved	0.0093	0.01	0.0021	5960450	mg/L
MKTF-20	2/15/2018	Iron, Total	52	2	1	13822000	mg/L
MKTF-20	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	2/15/2018	Manganese, Total	16	0.04	0.022	2017000	mg/L
MKTF-20	2/15/2018	Lead, Total	0.0073	0.0025	0.0011	15000	mg/L
MKTF-20	2/15/2018	Selenium, Total	0.01	0.005	0.0049	50000	mg/L
MKTF-20	2/15/2018	Uranium, Total	0.0031	0.0025	0.00034	30000	mg/L
MKTF-20	2/15/2018	Zinc, Total	0.029	0.01	0.0033	5960000	mg/L
MKTF-20	5/11/2018	Silver, Total	0.0057	0.005	0.0012	50000	mg/L
MKTF-20	5/11/2018	Arsenic, Total	0.028	0.005	0.0021	10000	mg/L
MKTF-20	5/11/2018	Barium, Total	9	0.02	0.01	2000000	mg/L
MKTF-20	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	5/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	5/11/2018	Copper, Total	0.027	0.006	0.0041	790000	mg/L
MKTF-20	5/11/2018	Silver, Dissolved	0.0038	0.005	0.0018	81200	mg/L
MKTF-20	5/11/2018	Arsenic, Dissolved	0.023	0.001	0.00042	10000	mg/L
MKTF-20	5/11/2018	Barium, Dissolved	8.8	0.02	0.0099	2000000	mg/L
MKTF-20	5/11/2018	Calcium, Dissolved	320	10	0.78	NA	mg/L
MKTF-20	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	5/11/2018	Copper, Dissolved	0.014	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	5/11/2018	Iron, Dissolved	17	0.4	0.33	13821880	mg/L
MKTF-20	5/11/2018	Potassium, Dissolved	7.5	1	0.11	NA	mg/L
MKTF-20	5/11/2018	Magnesium, Dissolved	79	1	0.25	NA	mg/L
MKTF-20	5/11/2018	Manganese, Dissolved	5.4	0.02	0.0039	2017400	mg/L
MKTF-20	5/11/2018	Sodium, Dissolved	740	10	1.6	NA	mg/L
MKTF-20	5/11/2018	Lead, Dissolved	0.0043	0.0005	0.00017	NA	mg/L
MKTF-20	5/11/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
MKTF-20	5/11/2018	Uranium, Dissolved	0.0037	0.005	0.00096	NA	mg/L
MKTF-20	5/11/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
MKTF-20	5/11/2018	Iron, Total	16	1	0.51	13822000	mg/L
MKTF-20	5/11/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-20	5/11/2018	Manganese, Total	5.5	0.02	0.011	2017000	mg/L
MKTF-20	5/11/2018	Lead, Total	0.0088	0.0025	0.0011	15000	mg/L
MKTF-20	5/11/2018	Selenium, Total	0.012	0.005	0.0049	50000	mg/L
MKTF-20	5/11/2018	Uranium, Total	0.0052	0.0025	0.00034	30000	mg/L
MKTF-20	5/11/2018	Zinc, Total	0.023	0.01	0.0033	5960000	mg/L
MKTF-20	8/31/2018	Silver, Total	0.0041	0.005	0.0012	50000	mg/L
MKTF-20	8/31/2018	Arsenic, Total	0.028	0.001	0.00041	10000	mg/L
MKTF-20	8/31/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
MKTF-20	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	8/31/2018	Copper, Total	0.021	0.006	0.0041	790000	mg/L
MKTF-20	8/31/2018	Silver, Dissolved	0.0036	0.005	0.0018	81200	mg/L
MKTF-20	8/31/2018	Arsenic, Dissolved	0.026	0.005	0.0021	10000	mg/L
MKTF-20	8/31/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
MKTF-20	8/31/2018	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-20	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	8/31/2018	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
MKTF-20	8/31/2018	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
MKTF-20	8/31/2018	Potassium, Dissolved	17	1	0.11	NA	mg/L
MKTF-20	8/31/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-20	8/31/2018	Manganese, Dissolved	2.8	0.01	0.002	2017400	mg/L
MKTF-20	8/31/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
MKTF-20	8/31/2018	Lead, Dissolved	0.0039	0.0025	0.00087	NA	mg/L
MKTF-20	8/31/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-20	8/31/2018	Uranium, Dissolved	0.0012	0.0025	0.00048	NA	mg/L
MKTF-20	8/31/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-20	8/31/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
MKTF-20	8/31/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	8/31/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-20	8/31/2018	Lead, Total	0.0054	0.0005	0.00023	15000	mg/L
MKTF-20	8/31/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-20	8/31/2018	Uranium, Total	0.0017	0.0005	0.000068	30000	mg/L
MKTF-20	8/31/2018	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
MKTF-20	11/29/2018	Silver, Total	0.0045	0.005	0.0012	50000	mg/L
MKTF-20	11/29/2018	Arsenic, Total	0.025	0.001	0.00041	10000	mg/L
MKTF-20	11/29/2018	Barium, Total	5.5	0.02	0.01	2000000	mg/L
MKTF-20	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-20	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-20	11/29/2018	Copper, Total	0.095	0.006	0.0041	790000	mg/L
MKTF-20	11/29/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
MKTF-20	11/29/2018	Arsenic, Dissolved	0.019	0.001	0.00042	10000	mg/L
MKTF-20	11/29/2018	Barium, Dissolved	4.9	0.01	0.0049	2000000	mg/L
MKTF-20	11/29/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-20	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-20	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-20	11/29/2018	Copper, Dissolved	0.0059	0.006	0.0032	790000	mg/L
MKTF-20	11/29/2018	Iron, Dissolved	2.5	0.1	0.082	13821880	mg/L
MKTF-20	11/29/2018	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-20	11/29/2018	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-20	11/29/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-20	11/29/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
MKTF-20	11/29/2018	Lead, Dissolved	0.00078	0.0005	0.00017	NA	mg/L
MKTF-20	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-20	11/29/2018	Zinc, Dissolved	0.061	0.01	0.0021	5960450	mg/L
MKTF-20	11/29/2018	Iron, Total	8	0.2	0.1	13822000	mg/L
MKTF-20	11/29/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-20	11/29/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	Lead, Total	0.0047	0.0005	0.00023	15000	mg/L
MKTF-20	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-20	11/29/2018	Zinc, Total	0.26	0.01	0.0033	5960000	mg/L
MKTF-20	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-20	8/21/2019	Antimony, Dissolved	0.00049	0.001	0.000389	6000	mg/L
MKTF-20	8/21/2019	Arsenic, Dissolved	0.02	0.001	0.000101	10000	mg/L
MKTF-20	8/21/2019	Barium, Dissolved	22	0.1	0.032419	2000000	mg/L
MKTF-20	8/21/2019	Beryllium, Dissolved	0.00043	0.002	0.000284	4000	mg/L
MKTF-20	8/21/2019	Boron, Dissolved	1	0.2	0.022653	3949110	mg/L
MKTF-20	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	8/21/2019	Calcium, Dissolved	610	50	3.094457	NA	mg/L
MKTF-20	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-20	8/21/2019	Copper, Dissolved	0.014	0.006	0.001296	790000	mg/L
MKTF-20	8/21/2019	Iron, Dissolved	20	1	0.437344	13821880	mg/L
MKTF-20	8/21/2019	Lead, Dissolved	0.003	0.0025	0.000274	NA	mg/L
MKTF-20	8/21/2019	Magnesium, Dissolved	170	5	0.251452	NA	mg/L
MKTF-20	8/21/2019	Manganese, Dissolved	8.1	0.1	0.014497	2017400	mg/L
MKTF-20	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	8/21/2019	Nickel, Dissolved	0.09	0.01	0.004009	372000	mg/L
MKTF-20	8/21/2019	Potassium, Dissolved	6.4	1	0.162288	NA	mg/L
MKTF-20	8/21/2019	Selenium, Dissolved	0.0013	0.001	0.000171	50000	mg/L
MKTF-20	8/21/2019	Silver, Dissolved	0.0068	0.005	0.000942	81200	mg/L
MKTF-20	8/21/2019	Sodium, Dissolved	1400	50	20.808815	NA	mg/L
MKTF-20	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-20	8/21/2019	Uranium, Dissolved	0.0027	0.0025	0.000374	NA	mg/L
MKTF-20	8/21/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-20	8/21/2019	Aluminum, Total	0.027	0.02	0.002488	19914000	mg/L
MKTF-20	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-20	8/21/2019	Arsenic, Total	0.02	0.001	0.000312	10000	mg/L
MKTF-20	8/21/2019	Barium, Total	21	0.1	0.032419	2000000	mg/L
MKTF-20	8/21/2019	Beryllium, Total	0.00061	0.002	0.000284	4000	mg/L
MKTF-20	8/21/2019	Boron, Total	0.99	0.2	0.022653	3949	mg/L
MKTF-20	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	8/21/2019	Copper, Total	0.016	0.006	0.004072	790000	mg/L
MKTF-20	8/21/2019	Iron, Total	19	1	0.437344	13822000	mg/L
MKTF-20	8/21/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-20	8/21/2019	Manganese, Total	7.5	0.1	0.014497	2017000	mg/L
MKTF-20	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	8/21/2019	Nickel, Total	0.089	0.01	0.004009	372000	mg/L
MKTF-20	8/21/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
MKTF-20	8/21/2019	Silver, Total	0.007	0.005	0.001418	50000	mg/L
MKTF-20	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-20	8/21/2019	Uranium, Total	0.0023	0.0025	0.000424	30000	mg/L
MKTF-20	8/21/2019	Zinc, Total	0.02	0.01	0.005772	5960000	mg/L
MKTF-20	2/20/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-20	2/20/2019	Arsenic, Dissolved	0.036	0.005	0.00034	10000	mg/L
MKTF-20	2/20/2019	Barium, Dissolved	3.6	0.01	0.003242	2000000	mg/L
MKTF-20	2/20/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
MKTF-20	2/20/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
MKTF-20	2/20/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-20	2/20/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
MKTF-20	2/20/2019	Copper, Dissolved	0.0094	0.03	0.006481	790000	mg/L
MKTF-20	2/20/2019	Iron, Dissolved	47	1	0.437344	13821880	mg/L
MKTF-20	2/20/2019	Lead, Dissolved	0.0035	0.0025	0.000235	NA	mg/L
MKTF-20	2/20/2019	Magnesium, Dissolved	39	5	0.251452	NA	mg/L
MKTF-20	2/20/2019	Manganese, Dissolved	5.5	0.1	0.014497	2017400	mg/L
MKTF-20	2/20/2019	Potassium, Dissolved	15	5	0.811441	NA	mg/L
MKTF-20	2/20/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-20	2/20/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
MKTF-20	2/20/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-20	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000158	2000	mg/L
MKTF-20	2/20/2019	Uranium, Dissolved	0.0012	0.0025	0.000152	NA	mg/L
MKTF-20	2/20/2019	Zinc, Dissolved	0.16	0.05	0.01126	5960450	mg/L
MKTF-20	2/20/2019	Antimony, Total	0.00078	0.001	0.000389	6000	mg/L
MKTF-20	2/20/2019	Arsenic, Total	0.045	0.001	0.000312	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	2/20/2019	Barium, Total	3.9	0.01	0.003242	2000000	mg/L
MKTF-20	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-20	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	2/20/2019	Copper, Total	0.045	0.006	0.004072	790000	mg/L
MKTF-20	2/20/2019	Iron, Total	58	2	0.874687	13822000	mg/L
MKTF-20	2/20/2019	Lead, Total	0.01	0.0005	0.000055	15000	mg/L
MKTF-20	2/20/2019	Manganese, Total	5.5	0.02	0.002899	2017000	mg/L
MKTF-20	2/20/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
MKTF-20	2/20/2019	Selenium, Total	0.00065	0.001	0.000478	50000	mg/L
MKTF-20	2/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-20	2/20/2019	Thallium, Total	0.000061	0.0005	0.000052	2000	mg/L
MKTF-20	2/20/2019	Uranium, Total	0.0018	0.0005	0.000085	30000	mg/L
MKTF-20	2/20/2019	Zinc, Total	0.52	0.01	0.005772	5960000	mg/L
MKTF-20	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-20	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-20	5/14/2019	Arsenic, Dissolved	0.027	0.005	0.000504	10000	mg/L
MKTF-20	5/14/2019	Barium, Dissolved	5	0.01	0.003242	2000000	mg/L
MKTF-20	5/14/2019	Beryllium, Dissolved	0.00061	0.002	0.000284	4000	mg/L
MKTF-20	5/14/2019	Boron, Dissolved	0.88	0.04	0.004531	3949110	mg/L
MKTF-20	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	5/14/2019	Calcium, Dissolved	650	50	3.094457	NA	mg/L
MKTF-20	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-20	5/14/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-20	5/14/2019	Iron, Dissolved	22	1	0.437344	13821880	mg/L
MKTF-20	5/14/2019	Lead, Dissolved	0.002	0.0025	0.000274	NA	mg/L
MKTF-20	5/14/2019	Magnesium, Dissolved	200	5	0.251452	NA	mg/L
MKTF-20	5/14/2019	Manganese, Dissolved	9	0.1	0.014497	2017400	mg/L
MKTF-20	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	5/14/2019	Nickel, Dissolved	0.078	0.01	0.004009	372000	mg/L
MKTF-20	5/14/2019	Potassium, Dissolved	2.7	1	0.162288	NA	mg/L
MKTF-20	5/14/2019	Selenium, Dissolved	0.0015	0.005	0.000857	50000	mg/L
MKTF-20	5/14/2019	Silver, Dissolved	0.0079	0.005	0.000942	81200	mg/L
MKTF-20	5/14/2019	Sodium, Dissolved	1500	50	20.808815	NA	mg/L
MKTF-20	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-20	5/14/2019	Uranium, Dissolved	0.0027	0.0025	0.000374	NA	mg/L
MKTF-20	5/14/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-20	5/14/2019	Aluminum, Total	0.068	0.02	0.002488	19914000	mg/L
MKTF-20	5/14/2019	Antimony, Total	0.00056	0.001	0.000389	6000	mg/L
MKTF-20	5/14/2019	Arsenic, Total	0.034	0.001	0.000312	10000	mg/L
MKTF-20	5/14/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
MKTF-20	5/14/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-20	5/14/2019	Boron, Total	0.87	0.04	0.004531	3949	mg/L
MKTF-20	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	5/14/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
MKTF-20	5/14/2019	Iron, Total	25	1	0.437344	13822000	mg/L
MKTF-20	5/14/2019	Lead, Total	0.005	0.0005	0.000055	15000	mg/L
MKTF-20	5/14/2019	Manganese, Total	8.5	0.04	0.005799	2017000	mg/L
MKTF-20	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-20	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	5/14/2019	Nickel, Total	0.078	0.01	0.004009	372000	mg/L
MKTF-20	5/14/2019	Selenium, Total	0.00079	0.001	0.000478	50000	mg/L
MKTF-20	5/14/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-20	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-20	5/14/2019	Uranium, Total	0.0037	0.0005	0.000085	30000	mg/L
MKTF-20	5/14/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-20	11/5/2019	Aluminum, Dissolved	0.035	0.02	0.002488	19913930	mg/L
MKTF-20	11/5/2019	Antimony, Dissolved	0.00041	0.001	0.000389	6000	mg/L
MKTF-20	11/5/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
MKTF-20	11/5/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
MKTF-20	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-20	11/5/2019	Boron, Dissolved	0.12	0.04	0.004531	3949110	mg/L
MKTF-20	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-20	11/5/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-20	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-20	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/5/2019	Copper, Dissolved	0.0058	0.006	0.001296	790000	mg/L
MKTF-20	11/5/2019	Iron, Dissolved	2.2	0.1	0.043734	13821880	mg/L
MKTF-20	11/5/2019	Lead, Dissolved	0.00026	0.0005	0.000055	NA	mg/L
MKTF-20	11/5/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-20	11/5/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
MKTF-20	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-20	11/5/2019	Nickel, Dissolved	0.0051	0.01	0.004009	372000	mg/L
MKTF-20	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-20	11/5/2019	Selenium, Dissolved	0.00067	0.001	0.000171	50000	mg/L
MKTF-20	11/5/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-20	11/5/2019	Sodium, Dissolved	130	5	2.080881	NA	mg/L
MKTF-20	11/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-20	11/5/2019	Uranium, Dissolved	0.00022	0.0005	0.000075	NA	mg/L
MKTF-20	11/5/2019	Zinc, Dissolved	0.083	0.01	0.002252	5960450	mg/L
MKTF-20	11/5/2019	Aluminum, Total	0.25	0.02	0.002488	19914000	mg/L
MKTF-20	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-20	11/5/2019	Arsenic, Total	0.016	0.001	0.000312	10000	mg/L
MKTF-20	11/5/2019	Barium, Total	2	0.02	0.006484	2000000	mg/L
MKTF-20	11/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-20	11/5/2019	Boron, Total	0.12	0.04	0.004531	3949	mg/L
MKTF-20	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-20	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-20	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-20	11/5/2019	Copper, Total	0.075	0.006	0.004072	790000	mg/L
MKTF-20	11/5/2019	Iron, Total	4.3	0.2	0.087469	13822000	mg/L
MKTF-20	11/5/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-20	11/5/2019	Manganese, Total	2	0.02	0.002899	2017000	mg/L
MKTF-20	11/5/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-20	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-20	11/5/2019	Nickel, Total	0.0073	0.01	0.004009	372000	mg/L
MKTF-20	11/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-20	11/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-20	11/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-20	11/5/2019	Uranium, Total	0.00052	0.0005	0.000085	30000	mg/L
MKTF-20	11/5/2019	Zinc, Total	0.44	0.01	0.005772	5960000	mg/L
MKTF-21	5/14/2019	Aluminum, Dissolved	0.038	0.02	0.002488	19913930	mg/L
MKTF-21	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-21	5/14/2019	Arsenic, Dissolved	0.016	0.005	0.000504	10000	mg/L
MKTF-21	5/14/2019	Barium, Dissolved	5	0.01	0.003242	2000000	mg/L
MKTF-21	5/14/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-21	5/14/2019	Boron, Dissolved	0.12	0.04	0.004531	3949110	mg/L
MKTF-21	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	5/14/2019	Calcium, Dissolved	260	5	0.309446	NA	mg/L
MKTF-21	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	5/14/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-21	5/14/2019	Iron, Dissolved	33	1	0.437344	13821880	mg/L
MKTF-21	5/14/2019	Lead, Dissolved	0.0011	0.0025	0.000274	NA	mg/L
MKTF-21	5/14/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-21	5/14/2019	Manganese, Dissolved	5.6	0.1	0.014497	2017400	mg/L
MKTF-21	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-21	5/14/2019	Nickel, Dissolved	0.0094	0.01	0.004009	372000	mg/L
MKTF-21	5/14/2019	Potassium, Dissolved	15	1	0.162288	NA	mg/L
MKTF-21	5/14/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-21	5/14/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-21	5/14/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
MKTF-21	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-21	5/14/2019	Uranium, Dissolved	0.0021	0.0025	0.000374	NA	mg/L
MKTF-21	5/14/2019	Zinc, Dissolved	0.065	0.01	0.002252	5960450	mg/L
MKTF-21	5/14/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MKTF-21	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	5/14/2019	Arsenic, Total	0.022	0.001	0.000312	10000	mg/L
MKTF-21	5/14/2019	Barium, Total	5.2	0.02	0.006484	2000000	mg/L
MKTF-21	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	5/14/2019	Boron, Total	0.12	0.04	0.004531	3949	mg/L
MKTF-21	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	5/14/2019	Copper, Total	0.02	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	5/14/2019	Iron, Total	42	1	0.437344	13822000	mg/L
MKTF-21	5/14/2019	Lead, Total	0.0032	0.0005	0.000055	15000	mg/L
MKTF-21	5/14/2019	Manganese, Total	5.7	0.02	0.002899	2017000	mg/L
MKTF-21	5/14/2019	Mercury, Total	0.000043	0.0002	0.000038	2000	mg/L
MKTF-21	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-21	5/14/2019	Nickel, Total	0.0086	0.01	0.004009	372000	mg/L
MKTF-21	5/14/2019	Selenium, Total	0.00084	0.001	0.000478	50000	mg/L
MKTF-21	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-21	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-21	5/14/2019	Uranium, Total	0.0027	0.0005	0.000085	30000	mg/L
MKTF-21	5/14/2019	Zinc, Total	0.14	0.01	0.005772	5960000	mg/L
MKTF-21	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-21	8/22/2019	Antimony, Dissolved	0.001	0.001	0.000389	6000	mg/L
MKTF-21	8/22/2019	Arsenic, Dissolved	0.014	0.001	0.000101	10000	mg/L
MKTF-21	8/22/2019	Barium, Dissolved	3.4	0.01	0.003242	2000000	mg/L
MKTF-21	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-21	8/22/2019	Boron, Dissolved	0.16	0.04	0.004531	3949110	mg/L
MKTF-21	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	8/22/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-21	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-21	8/22/2019	Iron, Dissolved	16	1	0.437344	13821880	mg/L
MKTF-21	8/22/2019	Lead, Dissolved	0.00029	0.0005	0.000055	NA	mg/L
MKTF-21	8/22/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-21	8/22/2019	Manganese, Dissolved	3.4	0.01	0.00145	2017400	mg/L
MKTF-21	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-21	8/22/2019	Nickel, Dissolved	0.0085	0.01	0.004009	372000	mg/L
MKTF-21	8/22/2019	Potassium, Dissolved	15	1	0.162288	NA	mg/L
MKTF-21	8/22/2019	Selenium, Dissolved	0.00082	0.001	0.000171	50000	mg/L
MKTF-21	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-21	8/22/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-21	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-21	8/22/2019	Uranium, Dissolved	0.00047	0.0005	0.000075	NA	mg/L
MKTF-21	8/22/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-21	8/22/2019	Aluminum, Total	0.1	0.02	0.002488	19914000	mg/L
MKTF-21	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	8/22/2019	Arsenic, Total	0.017	0.001	0.000312	10000	mg/L
MKTF-21	8/22/2019	Barium, Total	3.4	0.02	0.006484	2000000	mg/L
MKTF-21	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	8/22/2019	Boron, Total	0.16	0.04	0.004531	3949	mg/L
MKTF-21	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	8/22/2019	Copper, Total	0.0098	0.006	0.004072	790000	mg/L
MKTF-21	8/22/2019	Iron, Total	21	1	0.437344	13822000	mg/L
MKTF-21	8/22/2019	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-21	8/22/2019	Manganese, Total	3.3	0.02	0.002899	2017000	mg/L
MKTF-21	8/22/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-21	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-21	8/22/2019	Nickel, Total	0.009	0.01	0.004009	372000	mg/L
MKTF-21	8/22/2019	Selenium, Total	0.00073	0.001	0.000478	50000	mg/L
MKTF-21	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-21	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-21	8/22/2019	Uranium, Total	0.00074	0.0005	0.000085	30000	mg/L
MKTF-21	8/22/2019	Zinc, Total	0.068	0.01	0.005772	5960000	mg/L
MKTF-21	2/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-21	2/20/2019	Arsenic, Dissolved	0.013	0.005	0.000504	10000	mg/L
MKTF-21	2/20/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
MKTF-21	2/20/2019	Beryllium, Dissolved	0.00034	0.002	0.000284	4000	mg/L
MKTF-21	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	2/20/2019	Calcium, Dissolved	990	10	0.618891	NA	mg/L
MKTF-21	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	2/20/2019	Copper, Dissolved	0.0036	0.006	0.001296	790000	mg/L
MKTF-21	2/20/2019	Iron, Dissolved	57	2	0.874687	13821880	mg/L
MKTF-21	2/20/2019	Lead, Dissolved	0.0014	0.0025	0.000542	NA	mg/L
MKTF-21	2/20/2019	Magnesium, Dissolved	280	10	0.502904	NA	mg/L
MKTF-21	2/20/2019	Manganese, Dissolved	14	0.04	0.005799	2017400	mg/L
MKTF-21	2/20/2019	Potassium, Dissolved	4.4	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
MKTF-21	2/20/2019	Silver, Dissolved	0.0091	0.005	0.000942	81200	mg/L
MKTF-21	2/20/2019	Sodium, Dissolved	1800	50	20.808815	NA	mg/L
MKTF-21	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000658	2000	mg/L
MKTF-21	2/20/2019	Uranium, Dissolved	0.0029	0.0025	0.000374	NA	mg/L
MKTF-21	2/20/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
MKTF-21	2/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-21	2/20/2019	Arsenic, Total	0.017	0.005	0.001561	10000	mg/L
MKTF-21	2/20/2019	Barium, Total	0.67	0.002	0.000648	2000000	mg/L
MKTF-21	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-21	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	2/20/2019	Copper, Total	0.0054	0.006	0.004072	790000	mg/L
MKTF-21	2/20/2019	Iron, Total	63	2	0.874687	13822000	mg/L
MKTF-21	2/20/2019	Lead, Total	0.0029	0.0025	0.000274	15000	mg/L
MKTF-21	2/20/2019	Manganese, Total	15	0.04	0.005799	2017000	mg/L
MKTF-21	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-21	2/20/2019	Silver, Total	0.011	0.005	0.001418	50000	mg/L
MKTF-21	2/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-21	2/20/2019	Uranium, Total	0.0028	0.0025	0.000424	30000	mg/L
MKTF-21	2/20/2019	Zinc, Total	0.041	0.01	0.005772	5960000	mg/L
MKTF-21	11/5/2019	Aluminum, Dissolved	0.024	0.02	0.002488	19913930	mg/L
MKTF-21	11/5/2019	Antimony, Dissolved	0.00052	0.001	0.000389	6000	mg/L
MKTF-21	11/5/2019	Arsenic, Dissolved	0.019	0.001	0.000101	10000	mg/L
MKTF-21	11/5/2019	Barium, Dissolved	14	0.04	0.012968	2000000	mg/L
MKTF-21	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-21	11/5/2019	Boron, Dissolved	0.84	0.04	0.004531	3949110	mg/L
MKTF-21	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-21	11/5/2019	Calcium, Dissolved	470	5	0.309446	NA	mg/L
MKTF-21	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-21	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-21	11/5/2019	Copper, Dissolved	0.0061	0.006	0.001296	790000	mg/L
MKTF-21	11/5/2019	Iron, Dissolved	8.3	0.4	0.174937	13821880	mg/L
MKTF-21	11/5/2019	Lead, Dissolved	0.0011	0.0025	0.000274	NA	mg/L
MKTF-21	11/5/2019	Magnesium, Dissolved	140	5	0.251452	NA	mg/L
MKTF-21	11/5/2019	Manganese, Dissolved	6.2	0.04	0.005799	2017400	mg/L
MKTF-21	11/5/2019	Molybdenum, Dissolved	0.0071	0.008	0.006735	98700	mg/L
MKTF-21	11/5/2019	Nickel, Dissolved	0.059	0.01	0.004009	372000	mg/L
MKTF-21	11/5/2019	Potassium, Dissolved	7.3	1	0.162288	NA	mg/L
MKTF-21	11/5/2019	Selenium, Dissolved	0.0011	0.001	0.000171	50000	mg/L
MKTF-21	11/5/2019	Silver, Dissolved	0.0096	0.005	0.000942	81200	mg/L
MKTF-21	11/5/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-21	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-21	11/5/2019	Uranium, Dissolved	0.0031	0.0025	0.000374	NA	mg/L
MKTF-21	11/5/2019	Zinc, Dissolved	0.063	0.01	0.002252	5960450	mg/L
MKTF-21	11/5/2019	Aluminum, Total	0.067	0.02	0.002488	19914000	mg/L
MKTF-21	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-21	11/5/2019	Arsenic, Total	0.022	0.001	0.000312	10000	mg/L
MKTF-21	11/5/2019	Barium, Total	14	0.04	0.012968	2000000	mg/L
MKTF-21	11/5/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
MKTF-21	11/5/2019	Boron, Total	0.81	0.04	0.004531	3949	mg/L
MKTF-21	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-21	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-21	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-21	11/5/2019	Copper, Total	0.014	0.006	0.004072	790000	mg/L
MKTF-21	11/5/2019	Iron, Total	9	0.4	0.174937	13822000	mg/L
MKTF-21	11/5/2019	Lead, Total	0.0022	0.0025	0.000274	15000	mg/L
MKTF-21	11/5/2019	Manganese, Total	5.8	0.04	0.005799	2017000	mg/L
MKTF-21	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	11/5/2019	Molybdenum, Total	0.014	0.008	0.006735	98700	mg/L
MKTF-21	11/5/2019	Nickel, Total	0.055	0.01	0.004009	372000	mg/L
MKTF-21	11/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-21	11/5/2019	Silver, Total	0.0069	0.005	0.001418	50000	mg/L
MKTF-21	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-21	11/5/2019	Uranium, Total	0.0027	0.0025	0.000424	30000	mg/L
MKTF-21	11/5/2019	Zinc, Total	0.096	0.01	0.005772	5960000	mg/L
MKTF-21	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-21	3/16/2015	Arsenic, Total	0.02	0.01	0.0044	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/16/2015	Barium, Total	4.9	0.02	0.0073	2000000	mg/L
MKTF-21	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-21	3/16/2015	Chromium, Total	0.029	0.006	0.0022	50000	mg/L
MKTF-21	3/16/2015	Copper, Total	0.1	0.006	0.0051	790000	mg/L
MKTF-21	3/16/2015	Iron, Total	55	2	0.72	13822000	mg/L
MKTF-21	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-21	3/16/2015	Manganese, Total	6.4	0.02	0.015	2017000	mg/L
MKTF-21	3/16/2015	Lead, Total	0.079	0.01	0.00069	15000	mg/L
MKTF-21	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-21	3/16/2015	Uranium, Total	0.0066	0.001	0.0000081	30000	mg/L
MKTF-21	3/16/2015	Zinc, Total	0.44	0.01	0.0036	5960000	mg/L
MKTF-21	9/12/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	9/12/2016	Arsenic, Total	0.019	0.005	0.0011	10000	mg/L
MKTF-21	9/12/2016	Barium, Total	2.7	0.01	0.004	2000000	mg/L
MKTF-21	9/12/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	9/12/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	9/12/2016	Copper, Total	0.0064	0.006	0.003	790000	mg/L
MKTF-21	9/12/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-21	9/12/2016	Arsenic, Dissolved	0.02	0.001	0.00014	10000	mg/L
MKTF-21	9/12/2016	Barium, Dissolved	2.5	0.01	0.0066	2000000	mg/L
MKTF-21	9/12/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-21	9/12/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-21	9/12/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-21	9/12/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-21	9/12/2016	Iron, Dissolved	22	1	1	13821880	mg/L
MKTF-21	9/12/2016	Potassium, Dissolved	23	1	0.5	NA	mg/L
MKTF-21	9/12/2016	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-21	9/12/2016	Manganese, Dissolved	3.7	0.01	0.0016	2017400	mg/L
MKTF-21	9/12/2016	Sodium, Dissolved	110	5	2.5	NA	mg/L
MKTF-21	9/12/2016	Lead, Dissolved	0.0018	0.0005	0.00017	NA	mg/L
MKTF-21	9/12/2016	Selenium, Dissolved	0.0094	0.02	0.0042	50000	mg/L
MKTF-21	9/12/2016	Uranium, Dissolved	0.00071	0.0005	0.000051	NA	mg/L
MKTF-21	9/12/2016	Zinc, Dissolved	0.023	0.01	0.0028	5960450	mg/L
MKTF-21	9/12/2016	Iron, Total	24	1	1	13822000	mg/L
MKTF-21	9/12/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-21	9/12/2016	Manganese, Total	4.1	0.01	0.0014	2017000	mg/L
MKTF-21	9/12/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-21	9/12/2016	Selenium, Total	0.0085	0.02	0.0037	50000	mg/L
MKTF-21	9/12/2016	Uranium, Total	0.001	0.0005	0.00017	30000	mg/L
MKTF-21	9/12/2016	Zinc, Total	0.048	0.01	0.0027	5960000	mg/L
MKTF-21	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	11/3/2016	Arsenic, Total	0.021	0.005	0.0011	10000	mg/L
MKTF-21	11/3/2016	Barium, Total	4.3	0.02	0.0079	2000000	mg/L
MKTF-21	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	11/3/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-21	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-21	11/3/2016	Arsenic, Dissolved	0.019	0.005	0.00069	10000	mg/L
MKTF-21	11/3/2016	Barium, Dissolved	4.3	0.01	0.0066	2000000	mg/L
MKTF-21	11/3/2016	Calcium, Dissolved	190	5	2.5	NA	mg/L
MKTF-21	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-21	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-21	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-21	11/3/2016	Iron, Dissolved	30	1	1	13821880	mg/L
MKTF-21	11/3/2016	Potassium, Dissolved	21	1	0.5	NA	mg/L
MKTF-21	11/3/2016	Magnesium, Dissolved	28	1	0.5	NA	mg/L
MKTF-21	11/3/2016	Manganese, Dissolved	5	0.01	0.0016	2017400	mg/L
MKTF-21	11/3/2016	Sodium, Dissolved	110	5	2.5	NA	mg/L
MKTF-21	11/3/2016	Lead, Dissolved	0.00098	0.0005	0.00017	NA	mg/L
MKTF-21	11/3/2016	Selenium, Dissolved	0.012	0.05	0.011	50000	mg/L
MKTF-21	11/3/2016	Uranium, Dissolved	0.002	0.0005	0.000051	NA	mg/L
MKTF-21	11/3/2016	Zinc, Dissolved	0.017	0.01	0.0028	5960450	mg/L
MKTF-21	11/3/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-21	11/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-21	11/3/2016	Manganese, Total	5.1	0.02	0.0027	2017000	mg/L
MKTF-21	11/3/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-21	11/3/2016	Selenium, Total	0.0086	0.02	0.0037	50000	mg/L
MKTF-21	11/3/2016	Uranium, Total	0.0022	0.0005	0.00017	30000	mg/L
MKTF-21	11/3/2016	Zinc, Total	0.057	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-21	3/14/2017	Arsenic, Total	0.016	0.005	0.0011	10000	mg/L
MKTF-21	3/14/2017	Barium, Total	3.6	0.02	0.0079	2000000	mg/L
MKTF-21	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-21	3/14/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-21	3/14/2017	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-21	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-21	3/14/2017	Arsenic, Dissolved	0.011	0.01	0.0018	10000	mg/L
MKTF-21	3/14/2017	Barium, Dissolved	3.7	0.02	0.0085	2000000	mg/L
MKTF-21	3/14/2017	Calcium, Dissolved	270	10	5	NA	mg/L
MKTF-21	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-21	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	3/14/2017	Iron, Dissolved	26	1	1	13821880	mg/L
MKTF-21	3/14/2017	Potassium, Dissolved	22	1	0.5	NA	mg/L
MKTF-21	3/14/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-21	3/14/2017	Manganese, Dissolved	5.7	0.02	0.0038	2017400	mg/L
MKTF-21	3/14/2017	Sodium, Dissolved	240	10	5	NA	mg/L
MKTF-21	3/14/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-21	3/14/2017	Selenium, Dissolved	0.0039	0.01	0.0039	50000	mg/L
MKTF-21	3/14/2017	Uranium, Dissolved	0.00052	0.0005	0.00005	NA	mg/L
MKTF-21	3/14/2017	Zinc, Dissolved	0.045	0.01	0.0011	5960450	mg/L
MKTF-21	3/14/2017	Iron, Total	29	1	1	13822000	mg/L
MKTF-21	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	3/14/2017	Manganese, Total	5.6	0.02	0.0027	2017000	mg/L
MKTF-21	3/14/2017	Lead, Total	0.0035	0.0005	0.000081	15000	mg/L
MKTF-21	3/14/2017	Selenium, Total	0.0064	0.02	0.0037	50000	mg/L
MKTF-21	3/14/2017	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
MKTF-21	3/14/2017	Zinc, Total	0.045	0.01	0.0027	5960000	mg/L
MKTF-21	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-21	6/21/2017	Arsenic, Total	0.018	0.005	0.0015	10000	mg/L
MKTF-21	6/21/2017	Barium, Total	4.1	0.02	0.0093	2000000	mg/L
MKTF-21	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	6/21/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-21	6/21/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
MKTF-21	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-21	6/21/2017	Arsenic, Dissolved	0.014	0.01	0.0018	10000	mg/L
MKTF-21	6/21/2017	Barium, Dissolved	3.9	0.02	0.0085	2000000	mg/L
MKTF-21	6/21/2017	Calcium, Dissolved	240	10	0.78	NA	mg/L
MKTF-21	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-21	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	6/21/2017	Iron, Dissolved	39	1	0.82	13821880	mg/L
MKTF-21	6/21/2017	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-21	6/21/2017	Magnesium, Dissolved	44	1	0.25	NA	mg/L
MKTF-21	6/21/2017	Manganese, Dissolved	6.7	0.02	0.0038	2017400	mg/L
MKTF-21	6/21/2017	Sodium, Dissolved	150	10	1.6	NA	mg/L
MKTF-21	6/21/2017	Lead, Dissolved	0.00086	0.0005	0.00017	NA	mg/L
MKTF-21	6/21/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
MKTF-21	6/21/2017	Uranium, Dissolved	0.00052	0.0005	0.00005	NA	mg/L
MKTF-21	6/21/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-21	6/21/2017	Iron, Total	43	1	0.51	13822000	mg/L
MKTF-21	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	6/21/2017	Manganese, Total	6.9	0.02	0.011	2017000	mg/L
MKTF-21	6/21/2017	Lead, Total	0.0065	0.0025	0.00048	15000	mg/L
MKTF-21	6/21/2017	Selenium, Total	0.023	0.005	0.0036	50000	mg/L
MKTF-21	6/21/2017	Uranium, Total	0.0011	0.0025	0.00077	30000	mg/L
MKTF-21	6/21/2017	Zinc, Total	0.069	0.01	0.0028	5960000	mg/L
MKTF-21	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	9/26/2017	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
MKTF-21	9/26/2017	Barium, Total	2.8	0.01	0.0047	2000000	mg/L
MKTF-21	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	9/26/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	9/26/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-21	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	9/26/2017	Arsenic, Dissolved	0.0077	0.005	0.00089	10000	mg/L
MKTF-21	9/26/2017	Barium, Dissolved	2.7	0.02	0.0085	2000000	mg/L
MKTF-21	9/26/2017	Calcium, Dissolved	170	10	0.78	NA	mg/L
MKTF-21	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	9/26/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	9/26/2017	Iron, Dissolved	5.6	0.2	0.16	13821880	mg/L
MKTF-21	9/26/2017	Potassium, Dissolved	22	1	0.11	NA	mg/L
MKTF-21	9/26/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-21	9/26/2017	Manganese, Dissolved	3.9	0.02	0.0039	2017400	mg/L
MKTF-21	9/26/2017	Sodium, Dissolved	170	10	1.6	NA	mg/L
MKTF-21	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-21	9/26/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-21	9/26/2017	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
MKTF-21	9/26/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
MKTF-21	9/26/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	9/26/2017	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-21	9/26/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-21	9/26/2017	Selenium, Total	0.0098	0.005	0.0036	50000	mg/L
MKTF-21	9/26/2017	Zinc, Total	0.091	0.01	0.0033	5960000	mg/L
MKTF-21	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	11/28/2017	Arsenic, Total	0.023	0.01	0.0041	10000	mg/L
MKTF-21	11/28/2017	Barium, Total	4.4	0.02	0.01	2000000	mg/L
MKTF-21	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	11/28/2017	Copper, Total	0.0061	0.006	0.0041	790000	mg/L
MKTF-21	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	11/28/2017	Arsenic, Dissolved	0.012	0.005	0.0021	10000	mg/L
MKTF-21	11/28/2017	Barium, Dissolved	3.7	0.01	0.0049	2000000	mg/L
MKTF-21	11/28/2017	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-21	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	11/28/2017	Iron, Dissolved	15	0.4	0.33	13821880	mg/L
MKTF-21	11/28/2017	Potassium, Dissolved	20	1	0.11	NA	mg/L
MKTF-21	11/28/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-21	11/28/2017	Manganese, Dissolved	4.4	0.01	0.002	2017400	mg/L
MKTF-21	11/28/2017	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-21	11/28/2017	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
MKTF-21	11/28/2017	Selenium, Dissolved	0.0084	0.01	0.0076	50000	mg/L
MKTF-21	11/28/2017	Uranium, Dissolved	0.0022	0.0005	0.000096	NA	mg/L
MKTF-21	11/28/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-21	11/28/2017	Iron, Total	21	1	0.51	13822000	mg/L
MKTF-21	11/28/2017	Manganese, Total	4.9	0.02	0.011	2017000	mg/L
MKTF-21	11/28/2017	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MKTF-21	11/28/2017	Selenium, Total	0.0056	0.005	0.0049	50000	mg/L
MKTF-21	11/28/2017	Uranium, Total	0.0047	0.0005	0.00015	30000	mg/L
MKTF-21	11/28/2017	Zinc, Total	0.07	0.01	0.0033	5960000	mg/L
MKTF-21	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	2/15/2018	Arsenic, Total	0.016	0.005	0.0021	10000	mg/L
MKTF-21	2/15/2018	Barium, Total	2.9	0.01	0.005	2000000	mg/L
MKTF-21	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	2/15/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-21	2/15/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-21	2/15/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
MKTF-21	2/15/2018	Barium, Dissolved	2.5	0.01	0.0049	2000000	mg/L
MKTF-21	2/15/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-21	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	2/15/2018	Iron, Dissolved	9.2	0.4	0.33	13821880	mg/L
MKTF-21	2/15/2018	Potassium, Dissolved	15	1	0.11	NA	mg/L
MKTF-21	2/15/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-21	2/15/2018	Manganese, Dissolved	5.2	0.02	0.0039	2017400	mg/L
MKTF-21	2/15/2018	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-21	2/15/2018	Lead, Dissolved	0.00034	0.0005	0.00017	NA	mg/L
MKTF-21	2/15/2018	Selenium, Dissolved	0.0074	0.005	0.0038	50000	mg/L
MKTF-21	2/15/2018	Uranium, Dissolved	0.0038	0.0005	0.000096	NA	mg/L
MKTF-21	2/15/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-21	2/15/2018	Iron, Total	20	0.4	0.2	13822000	mg/L
MKTF-21	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-21	2/15/2018	Manganese, Total	5	0.04	0.022	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/15/2018	Lead, Total	0.0018	0.0005	0.00023	15000	mg/L
MKTF-21	2/15/2018	Selenium, Total	0.0087	0.005	0.0049	50000	mg/L
MKTF-21	2/15/2018	Uranium, Total	0.0055	0.0005	0.000068	30000	mg/L
MKTF-21	2/15/2018	Zinc, Total	0.12	0.01	0.0033	5960000	mg/L
MKTF-21	5/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-21	5/11/2018	Arsenic, Total	0.022	0.001	0.00041	10000	mg/L
MKTF-21	5/11/2018	Barium, Total	4	0.02	0.01	2000000	mg/L
MKTF-21	5/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	5/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	5/11/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-21	5/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-21	5/11/2018	Arsenic, Dissolved	0.022	0.005	0.0021	10000	mg/L
MKTF-21	5/11/2018	Barium, Dissolved	3.8	0.02	0.0099	2000000	mg/L
MKTF-21	5/11/2018	Calcium, Dissolved	220	10	0.78	NA	mg/L
MKTF-21	5/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	5/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	5/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	5/11/2018	Iron, Dissolved	31	1	0.82	13821880	mg/L
MKTF-21	5/11/2018	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-21	5/11/2018	Magnesium, Dissolved	37	1	0.25	NA	mg/L
MKTF-21	5/11/2018	Manganese, Dissolved	5.8	0.02	0.0039	2017400	mg/L
MKTF-21	5/11/2018	Sodium, Dissolved	150	10	1.6	NA	mg/L
MKTF-21	5/11/2018	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-21	5/11/2018	Selenium, Dissolved	0.0071	0.005	0.0038	50000	mg/L
MKTF-21	5/11/2018	Uranium, Dissolved	0.0026	0.005	0.00096	NA	mg/L
MKTF-21	5/11/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-21	5/11/2018	Iron, Total	43	2	1	13822000	mg/L
MKTF-21	5/11/2018	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-21	5/11/2018	Manganese, Total	5.9	0.02	0.011	2017000	mg/L
MKTF-21	5/11/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-21	5/11/2018	Selenium, Total	0.0057	0.001	0.00098	50000	mg/L
MKTF-21	5/11/2018	Uranium, Total	0.0038	0.0005	0.000068	30000	mg/L
MKTF-21	5/11/2018	Zinc, Total	0.11	0.01	0.0033	5960000	mg/L
MKTF-21	8/31/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
MKTF-21	8/31/2018	Arsenic, Total	0.023	0.001	0.00041	10000	mg/L
MKTF-21	8/31/2018	Barium, Total	4.1	0.01	0.005	2000000	mg/L
MKTF-21	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	8/31/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	8/31/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-21	8/31/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-21	8/31/2018	Arsenic, Dissolved	0.02	0.005	0.0021	10000	mg/L
MKTF-21	8/31/2018	Barium, Dissolved	4.1	0.01	0.0049	2000000	mg/L
MKTF-21	8/31/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-21	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	8/31/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	8/31/2018	Iron, Dissolved	16	0.4	0.33	13821880	mg/L
MKTF-21	8/31/2018	Potassium, Dissolved	21	1	0.11	NA	mg/L
MKTF-21	8/31/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-21	8/31/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
MKTF-21	8/31/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-21	8/31/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-21	8/31/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-21	8/31/2018	Uranium, Dissolved	0.0011	0.0025	0.00048	NA	mg/L
MKTF-21	8/31/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-21	8/31/2018	Iron, Total	18	0.4	0.2	13822000	mg/L
MKTF-21	8/31/2018	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-21	8/31/2018	Manganese, Total	3.7	0.01	0.0055	2017000	mg/L
MKTF-21	8/31/2018	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
MKTF-21	8/31/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-21	8/31/2018	Uranium, Total	0.002	0.0005	0.000068	30000	mg/L
MKTF-21	8/31/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-21	11/29/2018	Silver, Total	0.0037	0.005	0.0012	50000	mg/L
MKTF-21	11/29/2018	Arsenic, Total	0.02	0.001	0.00041	10000	mg/L
MKTF-21	11/29/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
MKTF-21	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-21	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-21	11/29/2018	Copper, Total	0.022	0.006	0.0041	790000	mg/L
MKTF-21	11/29/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	11/29/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-21	11/29/2018	Barium, Dissolved	3.4	0.01	0.0049	2000000	mg/L
MKTF-21	11/29/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-21	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-21	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-21	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-21	11/29/2018	Iron, Dissolved	9.3	1	0.82	13821880	mg/L
MKTF-21	11/29/2018	Potassium, Dissolved	20	1	0.11	NA	mg/L
MKTF-21	11/29/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-21	11/29/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
MKTF-21	11/29/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-21	11/29/2018	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
MKTF-21	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-21	11/29/2018	Zinc, Dissolved	0.053	0.01	0.0021	5960450	mg/L
MKTF-21	11/29/2018	Iron, Total	29	1	0.51	13822000	mg/L
MKTF-21	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-21	11/29/2018	Manganese, Total	4.1	0.01	0.0055	2017000	mg/L
MKTF-21	11/29/2018	Lead, Total	0.003	0.0005	0.00023	15000	mg/L
MKTF-21	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-21	11/29/2018	Zinc, Total	0.27	0.01	0.0033	5960000	mg/L
MKTF-22	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-22	11/17/2014	Arsenic, Total	0.0028	0.001	0.00036	10000	mg/L
MKTF-22	11/17/2014	Barium, Total	1.1	0.01	0.0025	2000000	mg/L
MKTF-22	11/17/2014	Calcium, Total	110	10	0.82	NA	mg/L
MKTF-22	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-22	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-22	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-22	11/17/2014	Iron, Total	15	1	0.36	13822000	mg/L
MKTF-22	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-22	11/17/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
MKTF-22	11/17/2014	Magnesium, Total	23	1	0.018	NA	mg/L
MKTF-22	11/17/2014	Manganese, Total	3	0.01	0.0024	2017000	mg/L
MKTF-22	11/17/2014	Sodium, Total	260	10	3.9	NA	mg/L
MKTF-22	11/17/2014	Lead, Total	0.014	0.001	0.00026	15000	mg/L
MKTF-22	11/17/2014	Selenium, Total	0.004	0.001	0.00051	50000	mg/L
MKTF-22	11/17/2014	Uranium, Total	0.0041	0.001	0.0000072	30000	mg/L
MKTF-22	11/17/2014	Zinc, Total	0.025	0.01	0.0035	5960000	mg/L
MKTF-22	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	3/12/2015	Arsenic, Total	0.0031	0.001	0.00011	10000	mg/L
MKTF-22	3/12/2015	Barium, Total	1.3	0.02	0.0095	2000000	mg/L
MKTF-22	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-22	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-22	3/12/2015	Iron, Total	7.5	0.2	0.073	13822000	mg/L
MKTF-22	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	3/12/2015	Manganese, Total	2.3	0.02	0.0027	2017000	mg/L
MKTF-22	3/12/2015	Lead, Total	0.0016	0.001	0.000059	15000	mg/L
MKTF-22	3/12/2015	Selenium, Total	0.0067	0.001	0.00015	50000	mg/L
MKTF-22	3/12/2015	Uranium, Total	0.0032	0.001	0.00005	30000	mg/L
MKTF-22	3/12/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-22	6/9/2015	Barium, Total	2.2	0.01	0.0053	2000000	mg/L
MKTF-22	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	6/9/2015	Chromium, Total	0.018	0.006	0.0022	50000	mg/L
MKTF-22	6/9/2015	Copper, Total	0.026	0.006	0.0051	790000	mg/L
MKTF-22	6/9/2015	Iron, Total	27	1	0.36	13822000	mg/L
MKTF-22	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	6/9/2015	Manganese, Total	3.6	0.01	0.0076	2017000	mg/L
MKTF-22	6/9/2015	Lead, Total	0.048	0.0025	0.00024	15000	mg/L
MKTF-22	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-22	6/9/2015	Uranium, Total	0.0053	0.0025	0.000025	30000	mg/L
MKTF-22	6/9/2015	Zinc, Total	0.057	0.01	0.0039	5960000	mg/L
MKTF-22	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	8/20/2015	Arsenic, Total	0.0076	0.005	0.0015	10000	mg/L
MKTF-22	8/20/2015	Barium, Total	5.6	0.02	0.011	2000000	mg/L
MKTF-22	8/20/2015	Calcium, Total	100	1	0.057	NA	mg/L
MKTF-22	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	8/20/2015	Chromium, Total	0.1	0.006	0.0022	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2015	Copper, Total	0.15	0.006	0.0051	790000	mg/L
MKTF-22	8/20/2015	Iron, Total	87	2	0.72	13822000	mg/L
MKTF-22	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	8/20/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-22	8/20/2015	Magnesium, Total	23	1	0.039	NA	mg/L
MKTF-22	8/20/2015	Manganese, Total	9.1	0.02	0.015	2017000	mg/L
MKTF-22	8/20/2015	Sodium, Total	310	10	0.72	NA	mg/L
MKTF-22	8/20/2015	Lead, Total	0.24	0.01	0.00094	15000	mg/L
MKTF-22	8/20/2015	Selenium, Total	0.0074	0.005	0.00062	50000	mg/L
MKTF-22	8/20/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-22	8/20/2015	Zinc, Total	0.21	0.01	0.0039	5960000	mg/L
MKTF-22	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-22	11/9/2015	Arsenic, Total	0.0033	0.001	0.000065	10000	mg/L
MKTF-22	11/9/2015	Barium, Total	0.92	0.002	0.0013	2000000	mg/L
MKTF-22	11/9/2015	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-22	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-22	11/9/2015	Iron, Total	5.9	0.2	0.091	13822000	mg/L
MKTF-22	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-22	11/9/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-22	11/9/2015	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-22	11/9/2015	Manganese, Total	2.4	0.02	0.0032	2017000	mg/L
MKTF-22	11/9/2015	Sodium, Total	230	10	0.96	NA	mg/L
MKTF-22	11/9/2015	Lead, Total	0.0083	0.0025	0.00013	15000	mg/L
MKTF-22	11/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-22	11/9/2015	Uranium, Total	0.0048	0.0025	0.000024	30000	mg/L
MKTF-22	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-22	2/25/2016	Arsenic, Total	0.0023	0.001	0.00029	10000	mg/L
MKTF-22	2/25/2016	Barium, Total	2	0.01	0.0053	2000000	mg/L
MKTF-22	2/25/2016	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-22	2/25/2016	Chromium, Total	0.012	0.006	0.0022	50000	mg/L
MKTF-22	2/25/2016	Copper, Total	0.013	0.006	0.0051	790000	mg/L
MKTF-22	2/25/2016	Iron, Total	20	1	0.36	13822000	mg/L
MKTF-22	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	2/25/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-22	2/25/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-22	2/25/2016	Manganese, Total	3.4	0.01	0.0076	2017000	mg/L
MKTF-22	2/25/2016	Sodium, Total	250	10	0.96	NA	mg/L
MKTF-22	2/25/2016	Lead, Total	0.035	0.0025	0.00024	15000	mg/L
MKTF-22	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-22	2/25/2016	Uranium, Total	0.0039	0.0005	0.0000049	30000	mg/L
MKTF-22	2/25/2016	Zinc, Total	0.039	0.01	0.0039	5960000	mg/L
MKTF-22	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-22	6/10/2016	Arsenic, Total	0.0025	0.005	0.00069	10000	mg/L
MKTF-22	6/10/2016	Barium, Total	1.1	0.02	0.013	2000000	mg/L
MKTF-22	6/10/2016	Calcium, Total	120	10	2.6	NA	mg/L
MKTF-22	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-22	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-22	6/10/2016	Iron, Total	2.9	0.2	0.091	13822000	mg/L
MKTF-22	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	6/10/2016	Potassium, Total	0.82	1	0.18	NA	mg/L
MKTF-22	6/10/2016	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-22	6/10/2016	Manganese, Total	2.2	0.02	0.0032	2017000	mg/L
MKTF-22	6/10/2016	Sodium, Total	250	10	0.96	NA	mg/L
MKTF-22	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-22	6/10/2016	Selenium, Total	0.0046	0.001	0.00021	50000	mg/L
MKTF-22	6/10/2016	Uranium, Total	0.0028	0.0005	0.000051	30000	mg/L
MKTF-22	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-22	9/10/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	9/10/2016	Arsenic, Total	0.0032	0.005	0.0011	10000	mg/L
MKTF-22	9/10/2016	Barium, Total	1.3	0.01	0.004	2000000	mg/L
MKTF-22	9/10/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	9/10/2016	Chromium, Total	0.0051	0.006	0.0027	50000	mg/L
MKTF-22	9/10/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-22	9/10/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	9/10/2016	Arsenic, Dissolved	0.0024	0.001	0.00014	10000	mg/L
MKTF-22	9/10/2016	Barium, Dissolved	1.1	0.02	0.013	2000000	mg/L
MKTF-22	9/10/2016	Calcium, Dissolved	120	10	5	NA	mg/L
MKTF-22	9/10/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-22	9/10/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-22	9/10/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-22	9/10/2016	Iron, Dissolved	2.7	0.2	0.2	13821880	mg/L
MKTF-22	9/10/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MKTF-22	9/10/2016	Magnesium, Dissolved	24	1	0.5	NA	mg/L
MKTF-22	9/10/2016	Manganese, Dissolved	2.3	0.02	0.0032	2017400	mg/L
MKTF-22	9/10/2016	Sodium, Dissolved	250	10	5	NA	mg/L
MKTF-22	9/10/2016	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-22	9/10/2016	Selenium, Dissolved	0.0053	0.01	0.0021	50000	mg/L
MKTF-22	9/10/2016	Uranium, Dissolved	0.0028	0.0005	0.000051	NA	mg/L
MKTF-22	9/10/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-22	9/10/2016	Iron, Total	8.8	0.2	0.2	13822000	mg/L
MKTF-22	9/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	9/10/2016	Manganese, Total	2.6	0.01	0.0014	2017000	mg/L
MKTF-22	9/10/2016	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-22	9/10/2016	Selenium, Total	0.0045	0.005	0.00094	50000	mg/L
MKTF-22	9/10/2016	Uranium, Total	0.004	0.0005	0.00017	30000	mg/L
MKTF-22	9/10/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-22	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	11/1/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-22	11/1/2016	Barium, Total	1.7	0.01	0.004	2000000	mg/L
MKTF-22	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	11/1/2016	Chromium, Total	0.0062	0.006	0.0027	50000	mg/L
MKTF-22	11/1/2016	Copper, Total	0.0096	0.006	0.003	790000	mg/L
MKTF-22	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-22	11/1/2016	Arsenic, Dissolved	0.0021	0.001	0.00014	10000	mg/L
MKTF-22	11/1/2016	Barium, Dissolved	1.2	0.01	0.0066	2000000	mg/L
MKTF-22	11/1/2016	Calcium, Dissolved	130	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-22	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-22	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-22	11/1/2016	Iron, Dissolved	3	0.1	0.1	13821880	mg/L
MKTF-22	11/1/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Magnesium, Dissolved	25	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Manganese, Dissolved	2.5	0.01	0.0016	2017400	mg/L
MKTF-22	11/1/2016	Sodium, Dissolved	270	1	0.5	NA	mg/L
MKTF-22	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/1/2016	Selenium, Dissolved	0.0038	0.001	0.00021	50000	mg/L
MKTF-22	11/1/2016	Uranium, Dissolved	0.0024	0.0005	0.000051	NA	mg/L
MKTF-22	11/1/2016	Zinc, Dissolved	0.0099	0.01	0.0028	5960450	mg/L
MKTF-22	11/1/2016	Iron, Total	12	0.4	0.4	13822000	mg/L
MKTF-22	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-22	11/1/2016	Manganese, Total	3.1	0.01	0.0014	2017000	mg/L
MKTF-22	11/1/2016	Lead, Total	0.033	0.0025	0.00041	15000	mg/L
MKTF-22	11/1/2016	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-22	11/1/2016	Uranium, Total	0.0041	0.0005	0.00017	30000	mg/L
MKTF-22	11/1/2016	Zinc, Total	0.02	0.01	0.0027	5960000	mg/L
MKTF-22	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-22	3/8/2017	Arsenic, Total	0.0041	0.005	0.0011	10000	mg/L
MKTF-22	3/8/2017	Barium, Total	2	0.01	0.004	2000000	mg/L
MKTF-22	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-22	3/8/2017	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
MKTF-22	3/8/2017	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-22	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-22	3/8/2017	Arsenic, Dissolved	0.0022	0.001	0.00014	10000	mg/L
MKTF-22	3/8/2017	Barium, Dissolved	1.4	0.01	0.0043	2000000	mg/L
MKTF-22	3/8/2017	Calcium, Dissolved	120	5	2.5	NA	mg/L
MKTF-22	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	3/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-22	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	3/8/2017	Iron, Dissolved	4.2	0.1	0.1	13821880	mg/L
MKTF-22	3/8/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-22	3/8/2017	Magnesium, Dissolved	25	1	0.5	NA	mg/L
MKTF-22	3/8/2017	Manganese, Dissolved	2.3	0.01	0.0019	2017400	mg/L
MKTF-22	3/8/2017	Sodium, Dissolved	250	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	3/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	3/8/2017	Selenium, Dissolved	0.0042	0.001	0.00021	50000	mg/L
MKTF-22	3/8/2017	Zinc, Dissolved	0.025	0.01	0.0011	5960450	mg/L
MKTF-22	3/8/2017	Iron, Total	17	0.4	0.4	13822000	mg/L
MKTF-22	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-22	3/8/2017	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-22	3/8/2017	Lead, Total	0.029	0.0025	0.00041	15000	mg/L
MKTF-22	3/8/2017	Selenium, Total	0.0067	0.005	0.00094	50000	mg/L
MKTF-22	3/8/2017	Zinc, Total	0.032	0.01	0.0027	5960000	mg/L
MKTF-22	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-22	6/8/2017	Arsenic, Total	0.0016	0.001	0.0003	10000	mg/L
MKTF-22	6/8/2017	Barium, Total	1.3	0.02	0.0093	2000000	mg/L
MKTF-22	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	6/8/2017	Chromium, Total	0.0075	0.006	0.0011	50000	mg/L
MKTF-22	6/8/2017	Copper, Total	0.0061	0.006	0.0017	790000	mg/L
MKTF-22	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-22	6/8/2017	Arsenic, Dissolved	0.0022	0.001	0.00018	10000	mg/L
MKTF-22	6/8/2017	Barium, Dissolved	1	0.02	0.0085	2000000	mg/L
MKTF-22	6/8/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-22	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-22	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	6/8/2017	Iron, Dissolved	0.98	0.02	0.016	13821880	mg/L
MKTF-22	6/8/2017	Potassium, Dissolved	0.88	1	0.11	NA	mg/L
MKTF-22	6/8/2017	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-22	6/8/2017	Manganese, Dissolved	2.1	0.02	0.0038	2017400	mg/L
MKTF-22	6/8/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-22	6/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	6/8/2017	Selenium, Dissolved	0.0035	0.001	0.00039	50000	mg/L
MKTF-22	6/8/2017	Uranium, Dissolved	0.003	0.0005	0.00005	NA	mg/L
MKTF-22	6/8/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-22	6/8/2017	Iron, Total	10	0.2	0.1	13822000	mg/L
MKTF-22	6/8/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
MKTF-22	6/8/2017	Manganese, Total	2.4	0.02	0.011	2017000	mg/L
MKTF-22	6/8/2017	Lead, Total	0.01	0.0005	0.000095	15000	mg/L
MKTF-22	6/8/2017	Selenium, Total	0.0019	0.001	0.00071	50000	mg/L
MKTF-22	6/8/2017	Uranium, Total	0.0033	0.0005	0.00015	30000	mg/L
MKTF-22	6/8/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-22	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	10/3/2017	Arsenic, Total	0.0024	0.001	0.0003	10000	mg/L
MKTF-22	10/3/2017	Barium, Total	1.8	0.02	0.0093	2000000	mg/L
MKTF-22	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	10/3/2017	Chromium, Total	0.017	0.006	0.0018	50000	mg/L
MKTF-22	10/3/2017	Copper, Total	0.017	0.006	0.0017	790000	mg/L
MKTF-22	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	10/3/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-22	10/3/2017	Barium, Dissolved	1.6	0.02	0.0085	2000000	mg/L
MKTF-22	10/3/2017	Calcium, Dissolved	140	10	0.78	NA	mg/L
MKTF-22	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	10/3/2017	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
MKTF-22	10/3/2017	Potassium, Dissolved	0.58	1	0.11	NA	mg/L
MKTF-22	10/3/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-22	10/3/2017	Manganese, Dissolved	2.6	0.02	0.0039	2017400	mg/L
MKTF-22	10/3/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
MKTF-22	10/3/2017	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-22	10/3/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-22	10/3/2017	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
MKTF-22	10/3/2017	Iron, Total	25	1	0.51	13822000	mg/L
MKTF-22	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-22	10/3/2017	Manganese, Total	3	0.02	0.011	2017000	mg/L
MKTF-22	10/3/2017	Lead, Total	0.027	0.0025	0.00048	15000	mg/L
MKTF-22	10/3/2017	Selenium, Total	0.0022	0.001	0.00071	50000	mg/L
MKTF-22	10/3/2017	Zinc, Total	0.034	0.01	0.0033	5960000	mg/L
MKTF-22	11/28/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-22	11/28/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
MKTF-22	11/28/2017	Barium, Total	1.5	0.02	0.01	2000000	mg/L
MKTF-22	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/28/2017	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-22	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	11/28/2017	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-22	11/28/2017	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-22	11/28/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	11/28/2017	Iron, Dissolved	1.6	0.1	0.082	13821880	mg/L
MKTF-22	11/28/2017	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-22	11/28/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-22	11/28/2017	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-22	11/28/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-22	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	11/28/2017	Uranium, Dissolved	0.0023	0.0005	0.000096	NA	mg/L
MKTF-22	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-22	11/28/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
MKTF-22	11/28/2017	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-22	11/28/2017	Lead, Total	0.0048	0.0005	0.00023	15000	mg/L
MKTF-22	11/28/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-22	11/28/2017	Uranium, Total	0.0026	0.0005	0.00015	30000	mg/L
MKTF-22	11/28/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
MKTF-22	2/8/2018	Silver, Total	0.0026	0.005	0.0012	50000	mg/L
MKTF-22	2/8/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
MKTF-22	2/8/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-22	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	2/8/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-22	2/8/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-22	2/8/2018	Barium, Dissolved	1	0.01	0.0049	2000000	mg/L
MKTF-22	2/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-22	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	2/8/2018	Iron, Dissolved	1	0.1	0.082	13821880	mg/L
MKTF-22	2/8/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-22	2/8/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-22	2/8/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-22	2/8/2018	Sodium, Dissolved	220	5	0.82	NA	mg/L
MKTF-22	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	2/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	2/8/2018	Uranium, Dissolved	0.0025	0.0005	0.000096	NA	mg/L
MKTF-22	2/8/2018	Zinc, Dissolved	0.0055	0.01	0.0021	5960450	mg/L
MKTF-22	2/8/2018	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-22	2/8/2018	Mercury, Total	0.000093	0.0002	0.000037	2000	mg/L
MKTF-22	2/8/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	2/8/2018	Lead, Total	0.0039	0.0005	0.00023	15000	mg/L
MKTF-22	2/8/2018	Selenium, Total	0.0021	0.001	0.00098	50000	mg/L
MKTF-22	2/8/2018	Uranium, Total	0.0026	0.0005	0.000068	30000	mg/L
MKTF-22	2/8/2018	Zinc, Total	0.0078	0.01	0.0033	5960000	mg/L
MKTF-22	5/10/2018	Silver, Total	0.0028	0.005	0.0012	50000	mg/L
MKTF-22	5/10/2018	Arsenic, Total	0.00091	0.001	0.00041	10000	mg/L
MKTF-22	5/10/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
MKTF-22	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	5/10/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-22	5/10/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-22	5/10/2018	Barium, Dissolved	1.2	0.02	0.0099	2000000	mg/L
MKTF-22	5/10/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	5/10/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-22	5/10/2018	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MKTF-22	5/10/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	5/10/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-22	5/10/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
MKTF-22	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-22	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-22	5/10/2018	Uranium, Dissolved	0.0019	0.005	0.00096	NA	mg/L
MKTF-22	5/10/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-22	5/10/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-22	5/10/2018	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
MKTF-22	5/10/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	5/10/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
MKTF-22	5/10/2018	Selenium, Total	0.0013	0.001	0.00098	50000	mg/L
MKTF-22	5/10/2018	Uranium, Total	0.0023	0.0005	0.000068	30000	mg/L
MKTF-22	5/10/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-22	8/30/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
MKTF-22	8/30/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-22	8/30/2018	Barium, Total	1.3	0.02	0.01	2000000	mg/L
MKTF-22	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	8/30/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-22	8/30/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-22	8/30/2018	Barium, Dissolved	1.4	0.01	0.0049	2000000	mg/L
MKTF-22	8/30/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-22	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	8/30/2018	Iron, Dissolved	3	0.1	0.082	13821880	mg/L
MKTF-22	8/30/2018	Potassium, Dissolved	0.88	1	0.11	NA	mg/L
MKTF-22	8/30/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-22	8/30/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-22	8/30/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-22	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-22	8/30/2018	Uranium, Dissolved	0.002	0.0005	0.000096	NA	mg/L
MKTF-22	8/30/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-22	8/30/2018	Iron, Total	7.4	0.2	0.1	13822000	mg/L
MKTF-22	8/30/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-22	8/30/2018	Manganese, Total	2.5	0.02	0.011	2017000	mg/L
MKTF-22	8/30/2018	Lead, Total	0.002	0.0005	0.00023	15000	mg/L
MKTF-22	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-22	8/30/2018	Uranium, Total	0.0024	0.0005	0.000068	30000	mg/L
MKTF-22	8/30/2018	Zinc, Total	0.0059	0.01	0.0033	5960000	mg/L
MKTF-22	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-22	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-22	11/28/2018	Barium, Total	1.4	0.01	0.005	2000000	mg/L
MKTF-22	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-22	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-22	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-22	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-22	11/28/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-22	11/28/2018	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
MKTF-22	11/28/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-22	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-22	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-22	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-22	11/28/2018	Iron, Dissolved	1.4	0.1	0.082	13821880	mg/L
MKTF-22	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-22	11/28/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-22	11/28/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-22	11/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
MKTF-22	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-22	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-22	11/28/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-22	11/28/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-22	11/28/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
MKTF-22	11/28/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-22	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-22	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-22	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	8/20/2019	Antimony, Dissolved	0.00055	0.001	0.000389	6000	mg/L
MKTF-22	8/20/2019	Arsenic, Dissolved	0.0013	0.001	0.000101	10000	mg/L
MKTF-22	8/20/2019	Barium, Dissolved	1.2	0.01	0.003242	2000000	mg/L
MKTF-22	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-22	8/20/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-22	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	8/20/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-22	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	8/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-22	8/20/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
MKTF-22	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-22	8/20/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
MKTF-22	8/20/2019	Manganese, Dissolved	2.6	0.01	0.00145	2017400	mg/L
MKTF-22	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-22	8/20/2019	Potassium, Dissolved	0.77	1	0.162288	NA	mg/L
MKTF-22	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-22	8/20/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-22	8/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MKTF-22	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-22	8/20/2019	Uranium, Dissolved	0.0021	0.0005	0.000075	NA	mg/L
MKTF-22	8/20/2019	Zinc, Dissolved	0.004	0.01	0.002252	5960450	mg/L
MKTF-22	8/20/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
MKTF-22	8/20/2019	Antimony, Total	0.00041	0.001	0.000389	6000	mg/L
MKTF-22	8/20/2019	Arsenic, Total	0.0016	0.001	0.000312	10000	mg/L
MKTF-22	8/20/2019	Barium, Total	1.4	0.01	0.003242	2000000	mg/L
MKTF-22	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-22	8/20/2019	Boron, Total	0.39	0.04	0.004531	3949	mg/L
MKTF-22	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-22	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	8/20/2019	Iron, Total	8.5	0.4	0.174937	13822000	mg/L
MKTF-22	8/20/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
MKTF-22	8/20/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-22	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-22	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	8/20/2019	Nickel, Total	0.0049	0.01	0.004009	372000	mg/L
MKTF-22	8/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-22	8/20/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-22	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-22	8/20/2019	Uranium, Total	0.0023	0.0005	0.000085	30000	mg/L
MKTF-22	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-22	10/24/2019	Aluminum, Total	13	0.4	0.049765	19914000	mg/L
MKTF-22	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-22	10/24/2019	Arsenic, Total	0.002	0.005	0.001561	10000	mg/L
MKTF-22	10/24/2019	Barium, Total	1.7	0.01	0.003242	2000000	mg/L
MKTF-22	10/24/2019	Beryllium, Total	0.00036	0.002	0.000284	4000	mg/L
MKTF-22	10/24/2019	Boron, Total	0.42	0.04	0.004531	3949	mg/L
MKTF-22	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	10/24/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
MKTF-22	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	10/24/2019	Iron, Total	12	0.4	0.174937	13822000	mg/L
MKTF-22	10/24/2019	Lead, Total	0.0054	0.0005	0.000055	15000	mg/L
MKTF-22	10/24/2019	Manganese, Total	2.9	0.01	0.00145	2017000	mg/L
MKTF-22	10/24/2019	Mercury, Total	0.000097	0.0002	0.000038	2000	mg/L
MKTF-22	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	10/24/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-22	10/24/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-22	10/24/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-22	10/24/2019	Thallium, Total	0.000052	0.0005	0.000052	2000	mg/L
MKTF-22	10/24/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-22	10/24/2019	Aluminum, Dissolved	0.023	0.02	0.002488	19913930	mg/L
MKTF-22	10/24/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-22	10/24/2019	Arsenic, Dissolved	0.0017	0.005	0.000504	10000	mg/L
MKTF-22	10/24/2019	Barium, Dissolved	1.4	0.02	0.006484	2000000	mg/L
MKTF-22	10/24/2019	Beryllium, Dissolved	0.00043	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	10/24/2019	Boron, Dissolved	0.41	0.04	0.004531	3949110	mg/L
MKTF-22	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	10/24/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
MKTF-22	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	10/24/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-22	10/24/2019	Iron, Dissolved	6.8	0.2	0.087469	13821880	mg/L
MKTF-22	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-22	10/24/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
MKTF-22	10/24/2019	Manganese, Dissolved	2.9	0.02	0.002899	2017400	mg/L
MKTF-22	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	10/24/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L
MKTF-22	10/24/2019	Potassium, Dissolved	0.86	1	0.162288	NA	mg/L
MKTF-22	10/24/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-22	10/24/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-22	10/24/2019	Sodium, Dissolved	280	10	4.161763	NA	mg/L
MKTF-22	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-22	10/24/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-22	5/9/2019	Aluminum, Dissolved	0.031	0.02	0.002488	19913930	mg/L
MKTF-22	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-22	5/9/2019	Arsenic, Dissolved	0.0015	0.005	0.000504	10000	mg/L
MKTF-22	5/9/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
MKTF-22	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-22	5/9/2019	Boron, Dissolved	0.43	0.04	0.004531	3949110	mg/L
MKTF-22	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-22	5/9/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-22	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-22	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-22	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-22	5/9/2019	Iron, Dissolved	7.3	0.2	0.087469	13821880	mg/L
MKTF-22	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-22	5/9/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-22	5/9/2019	Manganese, Dissolved	2.6	0.01	0.00145	2017400	mg/L
MKTF-22	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-22	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-22	5/9/2019	Potassium, Dissolved	0.88	1	0.162288	NA	mg/L
MKTF-22	5/9/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
MKTF-22	5/9/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
MKTF-22	5/9/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MKTF-22	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-22	5/9/2019	Uranium, Dissolved	0.0024	0.0025	0.000374	NA	mg/L
MKTF-22	5/9/2019	Zinc, Dissolved	0.0081	0.01	0.002252	5960450	mg/L
MKTF-22	5/9/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-22	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-22	5/9/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-22	5/9/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-22	5/9/2019	Beryllium, Total	0.00086	0.002	0.000284	4000	mg/L
MKTF-22	5/9/2019	Boron, Total	0.43	0.04	0.004531	3949	mg/L
MKTF-22	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-22	5/9/2019	Chromium, Total	0.0026	0.006	0.001533	50000	mg/L
MKTF-22	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-22	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-22	5/9/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-22	5/9/2019	Lead, Total	0.0066	0.0005	0.000055	15000	mg/L
MKTF-22	5/9/2019	Manganese, Total	3.1	0.01	0.00145	2017000	mg/L
MKTF-22	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-22	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-22	5/9/2019	Nickel, Total	0.0075	0.01	0.004009	372000	mg/L
MKTF-22	5/9/2019	Selenium, Total	0.00099	0.001	0.000478	50000	mg/L
MKTF-22	5/9/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-22	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-22	5/9/2019	Uranium, Total	0.0022	0.0005	0.000085	30000	mg/L
MKTF-22	5/9/2019	Zinc, Total	0.024	0.01	0.005772	5960000	mg/L
MKTF-23	10/29/2019	Aluminum, Total	0.78	0.02	0.002488	19914000	mg/L
MKTF-23	10/29/2019	Antimony, Total	0.00052	0.001	0.000389	6000	mg/L
MKTF-23	10/29/2019	Arsenic, Total	0.009	0.005	0.001561	10000	mg/L
MKTF-23	10/29/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L
MKTF-23	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-23	10/29/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-23	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-23	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-23	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-23	10/29/2019	Iron, Total	0.51	0.02	0.008747	13822000	mg/L
MKTF-23	10/29/2019	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-23	10/29/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
MKTF-23	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-23	10/29/2019	Molybdenum, Total	0.0091	0.008	0.006735	98700	mg/L
MKTF-23	10/29/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
MKTF-23	10/29/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-23	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-23	10/29/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-23	10/29/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-23	10/29/2019	Antimony, Dissolved	0.00091	0.001	0.000389	6000	mg/L
MKTF-23	10/29/2019	Arsenic, Dissolved	0.0084	0.001	0.000101	10000	mg/L
MKTF-23	10/29/2019	Barium, Dissolved	1.7	0.02	0.006484	2000000	mg/L
MKTF-23	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-23	10/29/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
MKTF-23	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-23	10/29/2019	Calcium, Dissolved	84	1	0.061889	NA	mg/L
MKTF-23	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-23	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-23	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-23	10/29/2019	Iron, Dissolved	0.16	0.02	0.008747	13821880	mg/L
MKTF-23	10/29/2019	Lead, Dissolved	0.00072	0.0005	0.000055	NA	mg/L
MKTF-23	10/29/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-23	10/29/2019	Manganese, Dissolved	2	0.02	0.002899	2017400	mg/L
MKTF-23	10/29/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
MKTF-23	10/29/2019	Nickel, Dissolved	0.022	0.01	0.004009	372000	mg/L
MKTF-23	10/29/2019	Potassium, Dissolved	0.93	1	0.162288	NA	mg/L
MKTF-23	10/29/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-23	10/29/2019	Sodium, Dissolved	540	10	4.161763	NA	mg/L
MKTF-23	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-23	10/29/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-23	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-23	10/29/2019	Selenium, Total	0.00032	0.001	0.000171	50000	mg/L
MKTF-23	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-23	11/17/2014	Arsenic, Total	0.011	0.001	0.00036	10000	mg/L
MKTF-23	11/17/2014	Barium, Total	0.49	0.002	0.0005	2000000	mg/L
MKTF-23	11/17/2014	Calcium, Total	77	1	0.082	NA	mg/L
MKTF-23	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-23	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-23	11/17/2014	Copper, Total	ND	0.06	0.046	790000	mg/L
MKTF-23	11/17/2014	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-23	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-23	11/17/2014	Potassium, Total	2.1	1	0.093	NA	mg/L
MKTF-23	11/17/2014	Magnesium, Total	13	1	0.018	NA	mg/L
MKTF-23	11/17/2014	Manganese, Total	1.6	0.02	0.0049	2017000	mg/L
MKTF-23	11/17/2014	Sodium, Total	530	10	3.9	NA	mg/L
MKTF-23	11/17/2014	Lead, Total	0.005	0.001	0.00026	15000	mg/L
MKTF-23	11/17/2014	Selenium, Total	0.0067	0.001	0.00051	50000	mg/L
MKTF-23	11/17/2014	Uranium, Total	0.016	0.001	0.0000072	30000	mg/L
MKTF-23	11/17/2014	Zinc, Total	0.035	0.01	0.0035	5960000	mg/L
MKTF-23	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-23	3/12/2015	Arsenic, Total	0.013	0.01	0.0011	10000	mg/L
MKTF-23	3/12/2015	Barium, Total	0.61	0.002	0.00095	2000000	mg/L
MKTF-23	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-23	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-23	3/12/2015	Iron, Total	4.4	0.1	0.036	13822000	mg/L
MKTF-23	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	3/12/2015	Manganese, Total	1.9	0.01	0.0013	2017000	mg/L
MKTF-23	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-23	3/12/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-23	3/12/2015	Uranium, Total	0.0045	0.001	0.00005	30000	mg/L
MKTF-23	3/12/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-23	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	6/9/2015	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	Barium, Total	0.83	0.002	0.0011	2000000	mg/L
MKTF-23	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	6/9/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-23	6/9/2015	Iron, Total	5.4	0.2	0.072	13822000	mg/L
MKTF-23	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	6/9/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-23	6/9/2015	Lead, Total	0.0093	0.0025	0.00024	15000	mg/L
MKTF-23	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	6/9/2015	Uranium, Total	0.011	0.0025	0.000025	30000	mg/L
MKTF-23	6/9/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-23	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	8/21/2015	Arsenic, Total	0.014	0.005	0.0015	10000	mg/L
MKTF-23	8/21/2015	Barium, Total	0.9	0.002	0.0011	2000000	mg/L
MKTF-23	8/21/2015	Calcium, Total	76	1	0.057	NA	mg/L
MKTF-23	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	8/21/2015	Chromium, Total	0.0062	0.006	0.0022	50000	mg/L
MKTF-23	8/21/2015	Copper, Total	0.008	0.006	0.0051	790000	mg/L
MKTF-23	8/21/2015	Iron, Total	5.4	0.2	0.072	13822000	mg/L
MKTF-23	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	8/21/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-23	8/21/2015	Magnesium, Total	13	1	0.039	NA	mg/L
MKTF-23	8/21/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
MKTF-23	8/21/2015	Sodium, Total	500	5	0.36	NA	mg/L
MKTF-23	8/21/2015	Lead, Total	0.0088	0.0025	0.00024	15000	mg/L
MKTF-23	8/21/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	8/21/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-23	8/21/2015	Zinc, Total	0.022	0.01	0.0039	5960000	mg/L
MKTF-23	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-23	11/9/2015	Arsenic, Total	0.015	0.001	0.000065	10000	mg/L
MKTF-23	11/9/2015	Barium, Total	0.71	0.002	0.0013	2000000	mg/L
MKTF-23	11/9/2015	Calcium, Total	70	1	0.26	NA	mg/L
MKTF-23	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-23	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-23	11/9/2015	Iron, Total	0.99	0.02	0.0091	13822000	mg/L
MKTF-23	11/9/2015	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-23	11/9/2015	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	11/9/2015	Manganese, Total	1.4	0.01	0.0016	2017000	mg/L
MKTF-23	11/9/2015	Sodium, Total	450	5	0.48	NA	mg/L
MKTF-23	11/9/2015	Lead, Total	ND	0.0025	0.00013	15000	mg/L
MKTF-23	11/9/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-23	11/9/2015	Uranium, Total	0.024	0.0025	0.000024	30000	mg/L
MKTF-23	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-23	11/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	11/10/2015	Arsenic, Total	0.013	0.005	0.0015	10000	mg/L
MKTF-23	11/10/2015	Barium, Total	0.66	0.002	0.0011	2000000	mg/L
MKTF-23	11/10/2015	Calcium, Total	66	1	0.084	NA	mg/L
MKTF-23	11/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	11/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	11/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-23	11/10/2015	Iron, Total	0.29	0.02	0.0072	13822000	mg/L
MKTF-23	11/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-23	11/10/2015	Potassium, Total	2.6	1	0.22	NA	mg/L
MKTF-23	11/10/2015	Magnesium, Total	12	1	0.075	NA	mg/L
MKTF-23	11/10/2015	Manganese, Total	1.4	0.01	0.0076	2017000	mg/L
MKTF-23	11/10/2015	Sodium, Total	510	10	1	NA	mg/L
MKTF-23	11/10/2015	Lead, Total	0.0009	0.0005	0.000047	15000	mg/L
MKTF-23	11/10/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-23	11/10/2015	Uranium, Total	0.037	0.0025	0.000025	30000	mg/L
MKTF-23	11/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-23	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-23	2/25/2016	Arsenic, Total	0.0094	0.001	0.00029	10000	mg/L
MKTF-23	2/25/2016	Barium, Total	0.67	0.002	0.0011	2000000	mg/L
MKTF-23	2/25/2016	Calcium, Total	70	1	0.26	NA	mg/L
MKTF-23	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-23	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-23	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-23	2/25/2016	Iron, Total	3.8	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-23	2/25/2016	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-23	2/25/2016	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	2/25/2016	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-23	2/25/2016	Sodium, Total	470	5	0.48	NA	mg/L
MKTF-23	2/25/2016	Lead, Total	0.0025	0.0005	0.000047	15000	mg/L
MKTF-23	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-23	2/25/2016	Uranium, Total	0.0027	0.0005	0.0000049	30000	mg/L
MKTF-23	2/25/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-23	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-23	6/10/2016	Arsenic, Total	0.01	0.001	0.00014	10000	mg/L
MKTF-23	6/10/2016	Barium, Total	0.66	0.002	0.0013	2000000	mg/L
MKTF-23	6/10/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-23	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-23	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-23	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-23	6/10/2016	Iron, Total	2.6	0.1	0.045	13822000	mg/L
MKTF-23	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-23	6/10/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
MKTF-23	6/10/2016	Magnesium, Total	12	1	0.013	NA	mg/L
MKTF-23	6/10/2016	Manganese, Total	1.8	0.01	0.0016	2017000	mg/L
MKTF-23	6/10/2016	Sodium, Total	460	5	0.48	NA	mg/L
MKTF-23	6/10/2016	Lead, Total	0.00065	0.0005	0.00017	15000	mg/L
MKTF-23	6/10/2016	Selenium, Total	0.009	0.005	0.0011	50000	mg/L
MKTF-23	6/10/2016	Uranium, Total	0.0022	0.0005	0.000051	30000	mg/L
MKTF-23	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-24	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-24	11/14/2014	Barium, Total	0.29	0.002	0.00021	2000000	mg/L
MKTF-24	11/14/2014	Calcium, Total	120	5	0.41	NA	mg/L
MKTF-24	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-24	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-24	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-24	11/14/2014	Iron, Total	4.4	0.1	0.031	13822000	mg/L
MKTF-24	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-24	11/14/2014	Potassium, Total	5.4	1	0.093	NA	mg/L
MKTF-24	11/14/2014	Magnesium, Total	22	1	0.018	NA	mg/L
MKTF-24	11/14/2014	Manganese, Total	1.6	0.01	0.0027	2017000	mg/L
MKTF-24	11/14/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-24	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-24	11/14/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-24	11/14/2014	Uranium, Total	0.038	0.005	0.00025	30000	mg/L
MKTF-24	11/14/2014	Zinc, Total	0.018	0.01	0.0014	5960000	mg/L
MKTF-24	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	3/11/2015	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-24	3/11/2015	Barium, Total	0.26	0.002	0.00095	2000000	mg/L
MKTF-24	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-24	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-24	3/11/2015	Iron, Total	0.34	0.02	0.0073	13822000	mg/L
MKTF-24	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	3/11/2015	Manganese, Total	1.2	0.01	0.0013	2017000	mg/L
MKTF-24	3/11/2015	Lead, Total	0.0015	0.001	0.000059	15000	mg/L
MKTF-24	3/11/2015	Selenium, Total	0.011	0.005	0.00074	50000	mg/L
MKTF-24	3/11/2015	Uranium, Total	0.043	0.005	0.00025	30000	mg/L
MKTF-24	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-24	6/10/2015	Barium, Total	0.29	0.002	0.00095	2000000	mg/L
MKTF-24	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-24	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-24	6/10/2015	Iron, Total	0.69	0.02	0.0073	13822000	mg/L
MKTF-24	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	6/10/2015	Manganese, Total	1.4	0.01	0.0013	2017000	mg/L
MKTF-24	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-24	6/10/2015	Selenium, Total	0.0058	0.005	0.00097	50000	mg/L
MKTF-24	6/10/2015	Uranium, Total	0.037	0.005	0.000024	30000	mg/L
MKTF-24	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	8/20/2015	Arsenic, Total	0.0057	0.001	0.00029	10000	mg/L
MKTF-24	8/20/2015	Barium, Total	1.3	0.01	0.0053	2000000	mg/L
MKTF-24	8/20/2015	Calcium, Total	160	5	0.28	NA	mg/L
MKTF-24	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	8/20/2015	Chromium, Total	0.025	0.006	0.0022	50000	mg/L
MKTF-24	8/20/2015	Copper, Total	0.037	0.006	0.0051	790000	mg/L
MKTF-24	8/20/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-24	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	8/20/2015	Potassium, Total	4.8	1	0.18	NA	mg/L
MKTF-24	8/20/2015	Magnesium, Total	26	1	0.039	NA	mg/L
MKTF-24	8/20/2015	Manganese, Total	3.3	0.01	0.0076	2017000	mg/L
MKTF-24	8/20/2015	Sodium, Total	610	10	0.72	NA	mg/L
MKTF-24	8/20/2015	Lead, Total	0.04	0.0025	0.00024	15000	mg/L
MKTF-24	8/20/2015	Selenium, Total	0.0067	0.001	0.00012	50000	mg/L
MKTF-24	8/20/2015	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
MKTF-24	8/20/2015	Zinc, Total	0.06	0.01	0.0039	5960000	mg/L
MKTF-24	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	11/4/2015	Arsenic, Total	0.0059	0.001	0.00029	10000	mg/L
MKTF-24	11/4/2015	Barium, Total	0.87	0.002	0.0011	2000000	mg/L
MKTF-24	11/4/2015	Calcium, Total	160	10	2.6	NA	mg/L
MKTF-24	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	11/4/2015	Chromium, Total	0.017	0.006	0.0022	50000	mg/L
MKTF-24	11/4/2015	Copper, Total	0.023	0.006	0.0051	790000	mg/L
MKTF-24	11/4/2015	Iron, Total	16	0.4	0.14	13822000	mg/L
MKTF-24	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-24	11/4/2015	Potassium, Total	4.3	1	0.18	NA	mg/L
MKTF-24	11/4/2015	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-24	11/4/2015	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-24	11/4/2015	Sodium, Total	590	10	0.96	NA	mg/L
MKTF-24	11/4/2015	Lead, Total	0.025	0.0025	0.00024	15000	mg/L
MKTF-24	11/4/2015	Selenium, Total	ND	0.05	0.00062	50000	mg/L
MKTF-24	11/4/2015	Uranium, Total	0.034	0.0025	0.000025	30000	mg/L
MKTF-24	11/4/2015	Zinc, Total	0.04	0.01	0.0039	5960000	mg/L
MKTF-24	2/22/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-24	2/22/2016	Arsenic, Total	0.0028	0.001	0.00029	10000	mg/L
MKTF-24	2/22/2016	Barium, Total	0.51	0.002	0.0011	2000000	mg/L
MKTF-24	2/22/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-24	2/22/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-24	2/22/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-24	2/22/2016	Copper, Total	0.0086	0.006	0.0051	790000	mg/L
MKTF-24	2/22/2016	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-24	2/22/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	2/22/2016	Potassium, Total	2.6	1	0.18	NA	mg/L
MKTF-24	2/22/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-24	2/22/2016	Manganese, Total	2.3	0.01	0.0076	2017000	mg/L
MKTF-24	2/22/2016	Sodium, Total	500	5	0.48	NA	mg/L
MKTF-24	2/22/2016	Lead, Total	0.013	0.0005	0.000047	15000	mg/L
MKTF-24	2/22/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-24	2/22/2016	Uranium, Total	0.024	0.0025	0.000025	30000	mg/L
MKTF-24	2/22/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-24	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-24	6/8/2016	Arsenic, Total	0.0045	0.005	0.00069	10000	mg/L
MKTF-24	6/8/2016	Barium, Total	0.27	0.002	0.0013	2000000	mg/L
MKTF-24	6/8/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-24	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-24	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-24	6/8/2016	Iron, Total	0.65	0.02	0.0091	13822000	mg/L
MKTF-24	6/8/2016	Mercury, Total	0.0006	0.0002	0.000053	2000	mg/L
MKTF-24	6/8/2016	Potassium, Total	3.7	1	0.18	NA	mg/L
MKTF-24	6/8/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-24	6/8/2016	Manganese, Total	1.9	0.01	0.0016	2017000	mg/L
MKTF-24	6/8/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-24	6/8/2016	Lead, Total	0.0019	0.0005	0.00017	15000	mg/L
MKTF-24	6/8/2016	Selenium, Total	0.0084	0.005	0.0011	50000	mg/L
MKTF-24	6/8/2016	Uranium, Total	0.027	0.0025	0.00026	30000	mg/L
MKTF-24	6/8/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-24	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/7/2016	Arsenic, Total	0.0048	0.01	0.0021	10000	mg/L
MKTF-24	9/7/2016	Barium, Total	0.34	0.002	0.00079	2000000	mg/L
MKTF-24	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-24	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-24	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-24	9/7/2016	Arsenic, Dissolved	0.0035	0.005	0.00069	10000	mg/L
MKTF-24	9/7/2016	Barium, Dissolved	0.24	0.002	0.0013	2000000	mg/L
MKTF-24	9/7/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-24	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-24	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-24	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-24	9/7/2016	Iron, Dissolved	0.19	0.02	0.02	13821880	mg/L
MKTF-24	9/7/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
MKTF-24	9/7/2016	Magnesium, Dissolved	19	1	0.5	NA	mg/L
MKTF-24	9/7/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-24	9/7/2016	Sodium, Dissolved	550	10	5	NA	mg/L
MKTF-24	9/7/2016	Lead, Dissolved	0.0015	0.0005	0.00017	NA	mg/L
MKTF-24	9/7/2016	Selenium, Dissolved	0.0063	0.001	0.00021	50000	mg/L
MKTF-24	9/7/2016	Uranium, Dissolved	0.02	0.0005	0.000051	NA	mg/L
MKTF-24	9/7/2016	Zinc, Dissolved	0.0071	0.01	0.0028	5960450	mg/L
MKTF-24	9/7/2016	Iron, Total	3.9	0.1	0.1	13822000	mg/L
MKTF-24	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	9/7/2016	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-24	9/7/2016	Lead, Total	0.0089	0.0005	0.000081	15000	mg/L
MKTF-24	9/7/2016	Selenium, Total	0.0075	0.01	0.0019	50000	mg/L
MKTF-24	9/7/2016	Uranium, Total	0.023	0.0005	0.00017	30000	mg/L
MKTF-24	9/7/2016	Zinc, Total	0.0085	0.01	0.0027	5960000	mg/L
MKTF-24	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-24	10/28/2016	Arsenic, Total	0.0025	0.01	0.0021	10000	mg/L
MKTF-24	10/28/2016	Barium, Total	0.28	0.002	0.00079	2000000	mg/L
MKTF-24	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-24	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-24	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-24	10/28/2016	Arsenic, Dissolved	0.0033	0.001	0.00014	10000	mg/L
MKTF-24	10/28/2016	Barium, Dissolved	0.23	0.002	0.0013	2000000	mg/L
MKTF-24	10/28/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
MKTF-24	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-24	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-24	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-24	10/28/2016	Iron, Dissolved	0.069	0.02	0.02	13821880	mg/L
MKTF-24	10/28/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
MKTF-24	10/28/2016	Magnesium, Dissolved	19	1	0.5	NA	mg/L
MKTF-24	10/28/2016	Manganese, Dissolved	2	0.01	0.0016	2017400	mg/L
MKTF-24	10/28/2016	Sodium, Dissolved	520	10	5	NA	mg/L
MKTF-24	10/28/2016	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	10/28/2016	Selenium, Dissolved	0.0064	0.001	0.00021	50000	mg/L
MKTF-24	10/28/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
MKTF-24	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-24	10/28/2016	Iron, Total	1.3	0.1	0.1	13822000	mg/L
MKTF-24	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-24	10/28/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-24	10/28/2016	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-24	10/28/2016	Selenium, Total	0.0055	0.01	0.0019	50000	mg/L
MKTF-24	10/28/2016	Uranium, Total	0.02	0.0005	0.00017	30000	mg/L
MKTF-24	10/28/2016	Zinc, Total	0.0065	0.01	0.0027	5960000	mg/L
MKTF-24	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-24	3/29/2017	Arsenic, Total	0.006	0.001	0.00021	10000	mg/L
MKTF-24	3/29/2017	Barium, Total	1.4	0.02	0.0079	2000000	mg/L
MKTF-24	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	3/29/2017	Chromium, Total	0.028	0.006	0.0027	50000	mg/L
MKTF-24	3/29/2017	Copper, Total	0.037	0.006	0.003	790000	mg/L
MKTF-24	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-24	3/29/2017	Arsenic, Dissolved	0.0031	0.005	0.00089	10000	mg/L
MKTF-24	3/29/2017	Barium, Dissolved	0.29	0.002	0.00085	2000000	mg/L
MKTF-24	3/29/2017	Calcium, Dissolved	180	10	5	NA	mg/L
MKTF-24	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	3/29/2017	Iron, Dissolved	0.55	0.02	0.02	13821880	mg/L
MKTF-24	3/29/2017	Potassium, Dissolved	3.5	1	0.5	NA	mg/L
MKTF-24	3/29/2017	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-24	3/29/2017	Manganese, Dissolved	1.6	0.02	0.0038	2017400	mg/L
MKTF-24	3/29/2017	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-24	3/29/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	3/29/2017	Selenium, Dissolved	0.0057	0.005	0.0019	50000	mg/L
MKTF-24	3/29/2017	Uranium, Dissolved	0.033	0.0025	0.00025	NA	mg/L
MKTF-24	3/29/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-24	3/29/2017	Iron, Total	24	1	1	13822000	mg/L
MKTF-24	3/29/2017	Mercury, Total	0.00013	0.0002	0.000037	2000	mg/L
MKTF-24	3/29/2017	Manganese, Total	3.9	0.02	0.0027	2017000	mg/L
MKTF-24	3/29/2017	Lead, Total	0.043	0.0025	0.00041	15000	mg/L
MKTF-24	3/29/2017	Selenium, Total	0.01	0.005	0.00094	50000	mg/L
MKTF-24	3/29/2017	Uranium, Total	0.03	0.0025	0.00087	30000	mg/L
MKTF-24	3/29/2017	Zinc, Total	0.061	0.01	0.0027	5960000	mg/L
MKTF-24	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-24	6/5/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
MKTF-24	6/5/2017	Barium, Total	0.27	0.002	0.00093	2000000	mg/L
MKTF-24	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	6/5/2017	Chromium, Total	0.0021	0.006	0.0011	50000	mg/L
MKTF-24	6/5/2017	Copper, Total	0.0035	0.006	0.0017	790000	mg/L
MKTF-24	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-24	6/5/2017	Arsenic, Dissolved	0.0029	0.005	0.00089	10000	mg/L
MKTF-24	6/5/2017	Barium, Dissolved	0.25	0.002	0.00085	2000000	mg/L
MKTF-24	6/5/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-24	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-24	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	6/5/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-24	6/5/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-24	6/5/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-24	6/5/2017	Manganese, Dissolved	2.1	0.02	0.0038	2017400	mg/L
MKTF-24	6/5/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-24	6/5/2017	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	6/5/2017	Selenium, Dissolved	0.0052	0.005	0.0019	50000	mg/L
MKTF-24	6/5/2017	Uranium, Dissolved	0.017	0.0005	0.00005	NA	mg/L
MKTF-24	6/5/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-24	6/5/2017	Iron, Total	1.9	0.1	0.051	13822000	mg/L
MKTF-24	6/5/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-24	6/5/2017	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	6/5/2017	Lead, Total	0.0037	0.0025	0.00048	15000	mg/L
MKTF-24	6/5/2017	Selenium, Total	0.0053	0.005	0.0036	50000	mg/L
MKTF-24	6/5/2017	Uranium, Total	0.017	0.0025	0.00077	30000	mg/L
MKTF-24	6/5/2017	Zinc, Total	0.0055	0.01	0.0028	5960000	mg/L
MKTF-24	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	10/3/2017	Arsenic, Total	0.0039	0.001	0.0003	10000	mg/L
MKTF-24	10/3/2017	Barium, Total	0.42	0.002	0.00093	2000000	mg/L
MKTF-24	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	10/3/2017	Chromium, Total	0.009	0.006	0.0018	50000	mg/L
MKTF-24	10/3/2017	Copper, Total	0.0084	0.006	0.0017	790000	mg/L
MKTF-24	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	10/3/2017	Arsenic, Dissolved	0.0047	0.005	0.00089	10000	mg/L
MKTF-24	10/3/2017	Barium, Dissolved	0.23	0.002	0.00085	2000000	mg/L
MKTF-24	10/3/2017	Calcium, Dissolved	180	10	0.78	NA	mg/L
MKTF-24	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	10/3/2017	Iron, Dissolved	0.85	0.02	0.016	13821880	mg/L
MKTF-24	10/3/2017	Potassium, Dissolved	3	1	0.11	NA	mg/L
MKTF-24	10/3/2017	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-24	10/3/2017	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
MKTF-24	10/3/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-24	10/3/2017	Lead, Dissolved	0.0006	0.0005	0.00017	NA	mg/L
MKTF-24	10/3/2017	Selenium, Dissolved	0.0094	0.005	0.0019	50000	mg/L
MKTF-24	10/3/2017	Zinc, Dissolved	0.058	0.01	0.0021	5960450	mg/L
MKTF-24	10/3/2017	Iron, Total	8.3	0.2	0.1	13822000	mg/L
MKTF-24	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/3/2017	Manganese, Total	1.8	0.02	0.011	2017000	mg/L
MKTF-24	10/3/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
MKTF-24	10/3/2017	Selenium, Total	0.0052	0.001	0.00071	50000	mg/L
MKTF-24	10/3/2017	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
MKTF-24	11/20/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-24	11/20/2017	Arsenic, Total	0.0028	0.005	0.0021	10000	mg/L
MKTF-24	11/20/2017	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-24	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	11/20/2017	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-24	11/20/2017	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-24	11/20/2017	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-24	11/20/2017	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-24	11/20/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-24	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	11/20/2017	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
MKTF-24	11/20/2017	Potassium, Dissolved	1.9	1	0.11	NA	mg/L
MKTF-24	11/20/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	11/20/2017	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
MKTF-24	11/20/2017	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-24	11/20/2017	Lead, Dissolved	0.0013	0.0005	0.00017	NA	mg/L
MKTF-24	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	11/20/2017	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	11/20/2017	Zinc, Dissolved	0.0035	0.01	0.0021	5960450	mg/L
MKTF-24	11/20/2017	Iron, Total	1.4	0.1	0.051	13822000	mg/L
MKTF-24	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-24	11/20/2017	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	11/20/2017	Lead, Total	0.0031	0.0005	0.00023	15000	mg/L
MKTF-24	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-24	11/20/2017	Uranium, Total	0.014	0.0005	0.00015	30000	mg/L
MKTF-24	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-24	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-24	2/6/2018	Barium, Total	0.26	0.002	0.001	2000000	mg/L
MKTF-24	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-24	2/6/2018	Barium, Dissolved	0.27	0.002	0.00099	2000000	mg/L
MKTF-24	2/6/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	2/6/2018	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
MKTF-24	2/6/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-24	2/6/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	2/6/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-24	2/6/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
MKTF-24	2/6/2018	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-24	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	2/6/2018	Uranium, Dissolved	0.014	0.0005	0.000096	NA	mg/L
MKTF-24	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-24	2/6/2018	Iron, Total	0.78	0.1	0.051	13822000	mg/L
MKTF-24	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-24	2/6/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-24	2/6/2018	Lead, Total	0.0027	0.0005	0.00023	15000	mg/L
MKTF-24	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-24	2/6/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
MKTF-24	2/6/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-24	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	5/1/2018	Arsenic, Total	0.003	0.005	0.0021	10000	mg/L
MKTF-24	5/1/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-24	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/1/2018	Arsenic, Dissolved	0.0025	0.005	0.0021	10000	mg/L
MKTF-24	5/1/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-24	5/1/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-24	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	5/1/2018	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
MKTF-24	5/1/2018	Potassium, Dissolved	1.9	1	0.11	NA	mg/L
MKTF-24	5/1/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-24	5/1/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-24	5/1/2018	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-24	5/1/2018	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
MKTF-24	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-24	5/1/2018	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	5/1/2018	Zinc, Dissolved	0.0047	0.01	0.0021	5960450	mg/L
MKTF-24	5/1/2018	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-24	5/1/2018	Mercury, Total	0.000061	0.0002	0.000037	2000	mg/L
MKTF-24	5/1/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
MKTF-24	5/1/2018	Lead, Total	0.0026	0.0005	0.00023	15000	mg/L
MKTF-24	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-24	5/1/2018	Uranium, Total	0.015	0.0005	0.000068	30000	mg/L
MKTF-24	5/1/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
MKTF-24	8/20/2018	Silver, Total	0.0029	0.005	0.0012	50000	mg/L
MKTF-24	8/20/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-24	8/20/2018	Barium, Total	0.27	0.002	0.001	2000000	mg/L
MKTF-24	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	8/20/2018	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-24	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	8/20/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
MKTF-24	8/20/2018	Arsenic, Dissolved	0.0021	0.001	0.00042	10000	mg/L
MKTF-24	8/20/2018	Barium, Dissolved	0.25	0.002	0.00099	2000000	mg/L
MKTF-24	8/20/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	8/20/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
MKTF-24	8/20/2018	Potassium, Dissolved	2.1	1	0.11	NA	mg/L
MKTF-24	8/20/2018	Magnesium, Dissolved	19	1	0.25	NA	mg/L
MKTF-24	8/20/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-24	8/20/2018	Sodium, Dissolved	620	10	1.6	NA	mg/L
MKTF-24	8/20/2018	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
MKTF-24	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-24	8/20/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
MKTF-24	8/20/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-24	8/20/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-24	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-24	8/20/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-24	8/20/2018	Lead, Total	0.0032	0.0005	0.00023	15000	mg/L
MKTF-24	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-24	8/20/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
MKTF-24	8/20/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-24	10/10/2018	Calcium, Dissolved	150	10	0.78	NA	mg/L
MKTF-24	10/10/2018	Potassium, Dissolved	2.6	1	0.11	NA	mg/L
MKTF-24	10/10/2018	Magnesium, Dissolved	24	1	0.25	NA	mg/L
MKTF-24	10/10/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-24	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-24	11/15/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-24	11/15/2018	Barium, Total	0.28	0.002	0.001	2000000	mg/L
MKTF-24	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-24	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-24	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-24	11/15/2018	Arsenic, Dissolved	0.0013	0.001	0.00042	10000	mg/L
MKTF-24	11/15/2018	Barium, Dissolved	0.25	0.002	0.00099	2000000	mg/L
MKTF-24	11/15/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-24	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-24	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-24	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-24	11/15/2018	Iron, Dissolved	0.1	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/15/2018	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
MKTF-24	11/15/2018	Magnesium, Dissolved	21	1	0.25	NA	mg/L
MKTF-24	11/15/2018	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-24	11/15/2018	Sodium, Dissolved	610	20	3.3	NA	mg/L
MKTF-24	11/15/2018	Lead, Dissolved	0.0012	0.0005	0.00017	NA	mg/L
MKTF-24	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-24	11/15/2018	Uranium, Dissolved	0.013	0.0005	0.000096	NA	mg/L
MKTF-24	11/15/2018	Zinc, Dissolved	0.027	0.01	0.0021	5960450	mg/L
MKTF-24	11/15/2018	Iron, Total	0.7	0.02	0.01	13822000	mg/L
MKTF-24	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-24	11/15/2018	Manganese, Total	2	0.01	0.0055	2017000	mg/L
MKTF-24	11/15/2018	Lead, Total	0.0018	0.0005	0.00023	15000	mg/L
MKTF-24	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-24	11/15/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
MKTF-24	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-24	8/23/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
MKTF-24	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-24	8/23/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
MKTF-24	8/23/2019	Barium, Dissolved	0.34	0.002	0.000648	2000000	mg/L
MKTF-24	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-24	8/23/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-24	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	8/23/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-24	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	8/23/2019	Cobalt, Dissolved	0.0044	0.006	0.003091	5980	mg/L
MKTF-24	8/23/2019	Copper, Dissolved	0.0018	0.006	0.001296	790000	mg/L
MKTF-24	8/23/2019	Iron, Dissolved	1.6	0.1	0.043734	13821880	mg/L
MKTF-24	8/23/2019	Lead, Dissolved	0.0009	0.0005	0.000055	NA	mg/L
MKTF-24	8/23/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-24	8/23/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
MKTF-24	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	8/23/2019	Nickel, Dissolved	0.031	0.01	0.004009	372000	mg/L
MKTF-24	8/23/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
MKTF-24	8/23/2019	Selenium, Dissolved	0.00051	0.001	0.000171	50000	mg/L
MKTF-24	8/23/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-24	8/23/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-24	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	8/23/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
MKTF-24	8/23/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
MKTF-24	8/23/2019	Aluminum, Total	8.4	1	0.124414	19914000	mg/L
MKTF-24	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-24	8/23/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
MKTF-24	8/23/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
MKTF-24	8/23/2019	Beryllium, Total	0.00086	0.002	0.000284	4000	mg/L
MKTF-24	8/23/2019	Boron, Total	0.7	0.04	0.004531	3949	mg/L
MKTF-24	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	8/23/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
MKTF-24	8/23/2019	Cobalt, Total	0.0056	0.006	0.003091	5980	mg/L
MKTF-24	8/23/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
MKTF-24	8/23/2019	Iron, Total	5.3	1	0.437344	13822000	mg/L
MKTF-24	8/23/2019	Lead, Total	0.0058	0.0005	0.000055	15000	mg/L
MKTF-24	8/23/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
MKTF-24	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-24	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	8/23/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
MKTF-24	8/23/2019	Selenium, Total	0.0006	0.001	0.000478	50000	mg/L
MKTF-24	8/23/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-24	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-24	8/23/2019	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-24	8/23/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-24	10/23/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-24	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-24	10/23/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-24	10/23/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
MKTF-24	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-24	10/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-24	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-24	10/23/2019	Cobalt, Total	0.0051	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-24	10/23/2019	Iron, Total	0.9	0.02	0.008747	13822000	mg/L
MKTF-24	10/23/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
MKTF-24	10/23/2019	Manganese, Total	2.3	0.01	0.00145	2017000	mg/L
MKTF-24	10/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-24	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	10/23/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
MKTF-24	10/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-24	10/23/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-24	10/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-24	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-24	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-24	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-24	10/23/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
MKTF-24	10/23/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
MKTF-24	10/23/2019	Beryllium, Dissolved	0.00096	0.002	0.000284	4000	mg/L
MKTF-24	10/23/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-24	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	10/23/2019	Calcium, Dissolved	140	10	0.618891	NA	mg/L
MKTF-24	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	10/23/2019	Cobalt, Dissolved	0.0046	0.006	0.003091	5980	mg/L
MKTF-24	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-24	10/23/2019	Iron, Dissolved	0.59	0.02	0.008747	13821880	mg/L
MKTF-24	10/23/2019	Lead, Dissolved	0.00098	0.0005	0.000055	NA	mg/L
MKTF-24	10/23/2019	Magnesium, Dissolved	24	1	0.05029	NA	mg/L
MKTF-24	10/23/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-24	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	10/23/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-24	10/23/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
MKTF-24	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-24	10/23/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-24	10/23/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-24	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	10/23/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-24	5/6/2019	Aluminum, Dissolved	0.01	0.02	0.002488	19913930	mg/L
MKTF-24	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-24	5/6/2019	Arsenic, Dissolved	0.0033	0.005	0.000504	10000	mg/L
MKTF-24	5/6/2019	Barium, Dissolved	0.32	0.002	0.000648	2000000	mg/L
MKTF-24	5/6/2019	Beryllium, Dissolved	0.00066	0.002	0.000284	4000	mg/L
MKTF-24	5/6/2019	Boron, Dissolved	0.77	0.04	0.004531	3949110	mg/L
MKTF-24	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-24	5/6/2019	Calcium, Dissolved	200	10	0.618891	NA	mg/L
MKTF-24	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-24	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-24	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-24	5/6/2019	Iron, Dissolved	5.7	0.2	0.087469	13821880	mg/L
MKTF-24	5/6/2019	Lead, Dissolved	0.00036	0.0025	0.000274	NA	mg/L
MKTF-24	5/6/2019	Magnesium, Dissolved	34	1	0.05029	NA	mg/L
MKTF-24	5/6/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-24	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-24	5/6/2019	Nickel, Dissolved	0.026	0.01	0.004009	372000	mg/L
MKTF-24	5/6/2019	Potassium, Dissolved	2.9	1	0.162288	NA	mg/L
MKTF-24	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-24	5/6/2019	Silver, Dissolved	0.004	0.005	0.000942	81200	mg/L
MKTF-24	5/6/2019	Sodium, Dissolved	680	10	4.161763	NA	mg/L
MKTF-24	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-24	5/6/2019	Uranium, Dissolved	0.011	0.0025	0.000374	NA	mg/L
MKTF-24	5/6/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
MKTF-24	5/6/2019	Aluminum, Total	9.8	0.4	0.049765	19914000	mg/L
MKTF-24	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-24	5/6/2019	Arsenic, Total	0.0038	0.005	0.001561	10000	mg/L
MKTF-24	5/6/2019	Barium, Total	0.46	0.002	0.000648	2000000	mg/L
MKTF-24	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-24	5/6/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-24	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-24	5/6/2019	Chromium, Total	0.0019	0.006	0.001533	50000	mg/L
MKTF-24	5/6/2019	Cobalt, Total	0.0064	0.006	0.003091	5980	mg/L
MKTF-24	5/6/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
MKTF-24	5/6/2019	Iron, Total	8.3	0.2	0.087469	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	5/6/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
MKTF-24	5/6/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-24	5/6/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-24	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-24	5/6/2019	Nickel, Total	0.035	0.01	0.004009	372000	mg/L
MKTF-24	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-24	5/6/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
MKTF-24	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-24	5/6/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
MKTF-24	5/6/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-24	2/25/2020	Antimony, Dissolved	0.00083	0.001	0.00039	6000	mg/L
MKTF-24	2/25/2020	Arsenic, Dissolved	0.0013	0.001	0.0001	10000	mg/L
MKTF-24	2/25/2020	Lead, Dissolved	0.0015	0.0005	0.000055	NA	mg/L
MKTF-24	2/25/2020	Selenium, Dissolved	0.00044	0.001	0.00017	50000	mg/L
MKTF-24	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-24	2/25/2020	Uranium, Dissolved	0.02	0.0005	0.000075	NA	mg/L
MKTF-24	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-24	2/25/2020	Barium, Dissolved	0.27	0.002	0.00065	2000000	mg/L
MKTF-24	2/25/2020	Beryllium, Dissolved	0.00032	0.002	0.00028	4000	mg/L
MKTF-24	2/25/2020	Boron, Dissolved	0.56	0.04	0.0045	3949110	mg/L
MKTF-24	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-24	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-24	2/25/2020	Cobalt, Dissolved	0.0044	0.006	0.0031	5980	mg/L
MKTF-24	2/25/2020	Copper, Dissolved	0.0037	0.006	0.0013	790000	mg/L
MKTF-24	2/25/2020	Iron, Dissolved	0.08	0.02	0.0087	13821880	mg/L
MKTF-24	2/25/2020	Magnesium, Dissolved	27	1	0.05	NA	mg/L
MKTF-24	2/25/2020	Nickel, Dissolved	0.025	0.01	0.004	372000	mg/L
MKTF-24	2/25/2020	Potassium, Dissolved	2.2	1	0.16	NA	mg/L
MKTF-24	2/25/2020	Zinc, Dissolved	0.04	0.01	0.0023	5960450	mg/L
MKTF-24	2/25/2020	Manganese, Dissolved	1.9	0.01	0.0014	2017400	mg/L
MKTF-24	2/25/2020	Silver, Dissolved	0.0032	0.005	0.00094	81200	mg/L
MKTF-24	2/25/2020	Calcium, Dissolved	160	10	0.62	NA	mg/L
MKTF-24	2/25/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-24	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-24	2/25/2020	Antimony, Total	0.00063	0.001	0.00039	6000	mg/L
MKTF-24	2/25/2020	Lead, Total	0.0041	0.0005	0.000055	15000	mg/L
MKTF-24	2/25/2020	Thallium, Total	0.000071	0.0005	0.000052	2000	mg/L
MKTF-24	2/25/2020	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-24	2/25/2020	Arsenic, Total	0.0016	0.005	0.0016	10000	mg/L
MKTF-24	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-24	2/25/2020	Barium, Total	0.43	0.002	0.00065	2000000	mg/L
MKTF-24	2/25/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-24	2/25/2020	Boron, Total	0.66	0.04	0.0045	3949	mg/L
MKTF-24	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-24	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-24	2/25/2020	Cobalt, Total	0.005	0.006	0.0031	5980	mg/L
MKTF-24	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-24	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-24	2/25/2020	Nickel, Total	0.037	0.01	0.004	372000	mg/L
MKTF-24	2/25/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
MKTF-24	2/25/2020	Zinc, Total	0.007	0.01	0.0058	5960000	mg/L
MKTF-24	2/25/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-24	2/25/2020	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
MKTF-24	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-24	2/25/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-24	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-24	9/19/2020	Arsenic, Total	0.0065	0.001	0.00026	10000	mg/L
MKTF-24	9/19/2020	Selenium, Total	0.0059	0.001	0.00066	50000	mg/L
MKTF-24	9/19/2020	Lead, Total	0.032	0.0025	0.00017	15000	mg/L
MKTF-24	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-24	9/19/2020	Uranium, Total	0.014	0.0025	0.00033	30000	mg/L
MKTF-24	9/19/2020	Beryllium, Total	0.005	0.002	0.00088	4000	mg/L
MKTF-24	9/19/2020	Boron, Total	0.69	0.04	0.0074	3949	mg/L
MKTF-24	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-24	9/19/2020	Chromium, Total	0.026	0.006	0.0021	50000	mg/L
MKTF-24	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-24	9/19/2020	Copper, Total	0.015	0.006	0.0047	790000	mg/L
MKTF-24	9/19/2020	Nickel, Total	0.062	0.01	0.0033	372000	mg/L
MKTF-24	9/19/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	9/19/2020	Barium, Total	1.2	0.015	0.0082	2000000	mg/L
MKTF-24	9/19/2020	Manganese, Total	4.4	0.01	0.0041	2017000	mg/L
MKTF-24	9/19/2020	Iron, Total	32	2.5	0.64	13822000	mg/L
MKTF-24	9/19/2020	Aluminum, Total	71	2	0.74	19914000	mg/L
MKTF-24	9/19/2020	Cobalt, Total	0.02	0.006	0.0024	5980	mg/L
MKTF-24	9/19/2020	Zinc, Total	0.039	0.01	0.0064	5960000	mg/L
MKTF-24	9/19/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-24	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-24	9/19/2020	Arsenic, Dissolved	0.0015	0.005	0.001	10000	mg/L
MKTF-24	9/19/2020	Lead, Dissolved	0.0015	0.0025	0.00017	NA	mg/L
MKTF-24	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-24	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-24	9/19/2020	Uranium, Dissolved	0.027	0.0025	0.00033	NA	mg/L
MKTF-24	9/19/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
MKTF-24	9/19/2020	Manganese, Dissolved	1.9	0.01	0.0029	2017400	mg/L
MKTF-24	9/19/2020	Sodium, Dissolved	610	50	6.9	NA	mg/L
MKTF-24	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-24	9/19/2020	Barium, Dissolved	0.42	0.002	0.0011	2000000	mg/L
MKTF-24	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-24	9/19/2020	Boron, Dissolved	0.62	0.04	0.0067	3949110	mg/L
MKTF-24	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-24	9/19/2020	Cobalt, Dissolved	0.0067	0.006	0.0024	5980	mg/L
MKTF-24	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-24	9/19/2020	Iron, Dissolved	0.26	0.02	0.01	13821880	mg/L
MKTF-24	9/19/2020	Magnesium, Dissolved	31	1	0.067	NA	mg/L
MKTF-24	9/19/2020	Nickel, Dissolved	0.032	0.01	0.0033	372000	mg/L
MKTF-24	9/19/2020	Potassium, Dissolved	2.6	1	0.16	NA	mg/L
MKTF-24	9/19/2020	Silver, Dissolved	0.0021	0.005	0.0013	81200	mg/L
MKTF-24	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-24	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-24	9/19/2020	Zinc, Dissolved	0.0095	0.01	0.006	5960450	mg/L
MKTF-24	12/18/2020	Arsenic, Total Recoverable	3.63	1	0.286	10	ug/L
MKTF-24	12/18/2020	Lead, Total Recoverable	**19.8**	1	0.133	15	ug/L
MKTF-24	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-24	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-24	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-24	12/18/2020	Uranium, Total Recoverable	16.1	5	1.12	30	ug/L
MKTF-24	12/18/2020	Arsenic, Dissolved	2.14	1	0.286	10	ug/L
MKTF-24	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-24	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-24	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-24	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-24	12/18/2020	Uranium, Dissolved	18.5	5	1.12	NA	ug/L
MKTF-24	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-24	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-24	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-24	12/18/2020	Aluminum, Total	12.5	0.2	0.051	19914000	mg/L
MKTF-24	12/18/2020	Calcium, Total	182	0.5	0.084	NA	mg/L
MKTF-24	12/18/2020	Boron, Total	0.687	0.1	0.022	3949	mg/L
MKTF-24	12/18/2020	Barium, Total	0.628	0.01	0.003	2000000	mg/L
MKTF-24	12/18/2020	Potassium, Total	5.15	1	0.34	NA	mg/L
MKTF-24	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-24	12/18/2020	Magnesium, Total	34.9	0.5	0.12	NA	mg/L
MKTF-24	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-24	12/18/2020	Cobalt, Total	0.0105	0.01	0.003	5980	mg/L
MKTF-24	12/18/2020	Sodium, Total	438	2	0.92	NA	mg/L
MKTF-24	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-24	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-24	12/18/2020	Iron, Total	7.25	0.2	0.075	13822000	mg/L
MKTF-24	12/18/2020	Manganese, Total	2.84	0.01	0.003	2017000	mg/L
MKTF-24	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-24	12/18/2020	Nickel, Total	0.0442	0.006	0.003	372000	mg/L
MKTF-24	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-24	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-24	12/18/2020	Barium, Dissolved	0.457	0.01	0.003	2000000	mg/L
MKTF-24	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-24	12/18/2020	Boron, Dissolved	0.686	0.1	0.022	3949110	mg/L
MKTF-24	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-24	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-24	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-24	12/18/2020	Iron, Dissolved	0.248	0.2	0.075	13821880	mg/L
MKTF-24	12/18/2020	Manganese, Dissolved	2.39	0.01	0.003	2017400	mg/L
MKTF-24	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-24	12/18/2020	Nickel, Dissolved	0.0376	0.006	0.003	372000	mg/L
MKTF-24	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-24	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-25	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-25	12/18/2020	Aluminum, Total	4.98	0.2	0.051	19914000	mg/L
MKTF-25	12/18/2020	Calcium, Total	166	0.5	0.084	NA	mg/L
MKTF-25	12/18/2020	Boron, Total	0.71	0.1	0.022	3949	mg/L
MKTF-25	12/18/2020	Barium, Total	0.341	0.01	0.003	2000000	mg/L
MKTF-25	12/18/2020	Potassium, Total	3.11	1	0.34	NA	mg/L
MKTF-25	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-25	12/18/2020	Magnesium, Total	32.8	0.5	0.12	NA	mg/L
MKTF-25	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-25	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-25	12/18/2020	Sodium, Total	447	2	0.92	NA	mg/L
MKTF-25	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-25	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-25	12/18/2020	Iron, Total	4.07	0.2	0.075	13822000	mg/L
MKTF-25	12/18/2020	Manganese, Total	3.2	0.01	0.003	2017000	mg/L
MKTF-25	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-25	12/18/2020	Nickel, Total	0.027	0.006	0.003	372000	mg/L
MKTF-25	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-25	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-25	12/18/2020	Barium, Dissolved	0.293	0.01	0.003	2000000	mg/L
MKTF-25	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-25	12/18/2020	Boron, Dissolved	0.726	0.1	0.022	3949110	mg/L
MKTF-25	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-25	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-25	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-25	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-25	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-25	12/18/2020	Manganese, Dissolved	2.98	0.01	0.003	2017400	mg/L
MKTF-25	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-25	12/18/2020	Nickel, Dissolved	0.0245	0.006	0.003	372000	mg/L
MKTF-25	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-25	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-25	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-25	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-25	12/18/2020	Arsenic, Total Recoverable	3.67	1	0.286	10	ug/L
MKTF-25	12/18/2020	Lead, Total Recoverable	2.23	1	0.133	15	ug/L
MKTF-25	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-25	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-25	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-25	12/18/2020	Uranium, Total Recoverable	**46.2**	5	1.12	30	ug/L
MKTF-25	12/18/2020	Arsenic, Dissolved	1.46	1	0.286	10	ug/L
MKTF-25	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-25	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-25	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-25	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-25	12/18/2020	Uranium, Dissolved	51.3	5	1.12	NA	ug/L
MKTF-25	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-25	2/27/2020	Arsenic, Dissolved	0.0015	0.001	0.0001	10000	mg/L
MKTF-25	2/27/2020	Lead, Dissolved	0.00017	0.0005	0.000055	NA	mg/L
MKTF-25	2/27/2020	Selenium, Dissolved	0.00036	0.001	0.00017	50000	mg/L
MKTF-25	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-25	2/27/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L
MKTF-25	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-25	2/27/2020	Barium, Dissolved	0.22	0.002	0.00065	2000000	mg/L
MKTF-25	2/27/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-25	2/27/2020	Boron, Dissolved	0.41	0.04	0.0045	3949110	mg/L
MKTF-25	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-25	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-25	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-25	2/27/2020	Copper, Dissolved	0.0018	0.006	0.0013	790000	mg/L
MKTF-25	2/27/2020	Iron, Dissolved	0.13	0.02	0.0087	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/27/2020	Magnesium, Dissolved	36	1	0.05	NA	mg/L
MKTF-25	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-25	2/27/2020	Nickel, Dissolved	0.019	0.01	0.004	372000	mg/L
MKTF-25	2/27/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-25	2/27/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L
MKTF-25	2/27/2020	Zinc, Dissolved	0.0094	0.01	0.0023	5960450	mg/L
MKTF-25	2/27/2020	Calcium, Dissolved	200	5	0.31	NA	mg/L
MKTF-25	2/27/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
MKTF-25	2/27/2020	Manganese, Dissolved	3.2	0.01	0.0014	2017400	mg/L
MKTF-25	2/27/2020	Barium, Total	0.47	0.002	0.00065	2000000	mg/L
MKTF-25	2/27/2020	Beryllium, Total	0.00081	0.002	0.00028	4000	mg/L
MKTF-25	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-25	2/27/2020	Chromium, Total	0.0044	0.006	0.0015	50000	mg/L
MKTF-25	2/27/2020	Cobalt, Total	0.0036	0.006	0.0031	5980	mg/L
MKTF-25	2/27/2020	Copper, Total	0.0099	0.006	0.0041	790000	mg/L
MKTF-25	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-25	2/27/2020	Nickel, Total	0.028	0.01	0.004	372000	mg/L
MKTF-25	2/27/2020	Silver, Total	0.0037	0.005	0.0014	50000	mg/L
MKTF-25	2/27/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-25	2/27/2020	Boron, Total	0.58	0.2	0.023	3949	mg/L
MKTF-25	2/27/2020	Manganese, Total	3.4	0.01	0.0014	2017000	mg/L
MKTF-25	2/27/2020	Iron, Total	5.6	0.2	0.087	13822000	mg/L
MKTF-25	2/27/2020	Aluminum, Total	14	0.4	0.05	19914000	mg/L
MKTF-25	2/27/2020	Uranium, Total	0.034	0.0025	0.00042	30000	mg/L
MKTF-25	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-25	2/27/2020	Arsenic, Total	0.0038	0.001	0.00031	10000	mg/L
MKTF-25	2/27/2020	Lead, Total	0.0069	0.0005	0.000055	15000	mg/L
MKTF-25	2/27/2020	Selenium, Total	0.0012	0.001	0.00048	50000	mg/L
MKTF-25	2/27/2020	Thallium, Total	0.000061	0.0005	0.000052	2000	mg/L
MKTF-25	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-25	5/6/2019	Aluminum, Dissolved	0.0042	0.02	0.002488	19913930	mg/L
MKTF-25	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	5/6/2019	Arsenic, Dissolved	0.0019	0.005	0.000504	10000	mg/L
MKTF-25	5/6/2019	Barium, Dissolved	0.43	0.002	0.000648	2000000	mg/L
MKTF-25	5/6/2019	Beryllium, Dissolved	0.00072	0.002	0.000284	4000	mg/L
MKTF-25	5/6/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-25	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	5/6/2019	Calcium, Dissolved	160	10	0.618891	NA	mg/L
MKTF-25	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	5/6/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
MKTF-25	5/6/2019	Iron, Dissolved	0.21	0.02	0.008747	13821880	mg/L
MKTF-25	5/6/2019	Lead, Dissolved	0.00055	0.0025	0.000274	NA	mg/L
MKTF-25	5/6/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
MKTF-25	5/6/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
MKTF-25	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	5/6/2019	Nickel, Dissolved	0.029	0.01	0.004009	372000	mg/L
MKTF-25	5/6/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-25	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	5/6/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
MKTF-25	5/6/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-25	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	5/6/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-25	5/6/2019	Zinc, Dissolved	0.035	0.01	0.002252	5960450	mg/L
MKTF-25	5/6/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-25	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-25	5/6/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-25	5/6/2019	Barium, Total	0.61	0.002	0.000648	2000000	mg/L
MKTF-25	5/6/2019	Beryllium, Total	0.0016	0.002	0.000284	4000	mg/L
MKTF-25	5/6/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-25	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	5/6/2019	Chromium, Total	0.0035	0.006	0.001533	50000	mg/L
MKTF-25	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-25	5/6/2019	Copper, Total	0.021	0.006	0.004072	790000	mg/L
MKTF-25	5/6/2019	Iron, Total	4.7	0.1	0.043734	13822000	mg/L
MKTF-25	5/6/2019	Lead, Total	0.007	0.0025	0.000274	15000	mg/L
MKTF-25	5/6/2019	Manganese, Total	2.2	0.01	0.00145	2017000	mg/L
MKTF-25	5/6/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
MKTF-25	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
MKTF-25	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-25	5/6/2019	Silver, Total	0.0041	0.005	0.001418	50000	mg/L
MKTF-25	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-25	5/6/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-25	5/6/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-25	10/23/2019	Aluminum, Total	25	1	0.124414	19914000	mg/L
MKTF-25	10/23/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-25	10/23/2019	Arsenic, Total	0.0064	0.005	0.001561	10000	mg/L
MKTF-25	10/23/2019	Barium, Total	0.94	0.002	0.000648	2000000	mg/L
MKTF-25	10/23/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-25	10/23/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-25	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	10/23/2019	Chromium, Total	0.0086	0.006	0.001533	50000	mg/L
MKTF-25	10/23/2019	Cobalt, Total	0.0062	0.006	0.003091	5980	mg/L
MKTF-25	10/23/2019	Copper, Total	0.011	0.006	0.004072	790000	mg/L
MKTF-25	10/23/2019	Iron, Total	10	1	0.437344	13822000	mg/L
MKTF-25	10/23/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
MKTF-25	10/23/2019	Manganese, Total	5.8	0.02	0.002899	2017000	mg/L
MKTF-25	10/23/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-25	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-25	10/23/2019	Nickel, Total	0.035	0.01	0.004009	372000	mg/L
MKTF-25	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-25	10/23/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-25	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-25	10/23/2019	Zinc, Total	0.021	0.01	0.005772	5960000	mg/L
MKTF-25	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-25	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	10/23/2019	Arsenic, Dissolved	0.0037	0.005	0.000504	10000	mg/L
MKTF-25	10/23/2019	Barium, Dissolved	0.53	0.002	0.000648	2000000	mg/L
MKTF-25	10/23/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
MKTF-25	10/23/2019	Boron, Dissolved	0.77	0.04	0.004531	3949110	mg/L
MKTF-25	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	10/23/2019	Calcium, Dissolved	260	10	0.618891	NA	mg/L
MKTF-25	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	10/23/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-25	10/23/2019	Iron, Dissolved	0.28	0.02	0.008747	13821880	mg/L
MKTF-25	10/23/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-25	10/23/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-25	10/23/2019	Manganese, Dissolved	5.4	0.02	0.002899	2017400	mg/L
MKTF-25	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	10/23/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
MKTF-25	10/23/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-25	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	10/23/2019	Silver, Dissolved	0.005	0.005	0.000942	81200	mg/L
MKTF-25	10/23/2019	Sodium, Dissolved	810	10	4.161763	NA	mg/L
MKTF-25	10/23/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	10/23/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-25	8/27/2019	Aluminum, Total	4.6	0.4	0.049765	19914000	mg/L
MKTF-25	8/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-25	8/27/2019	Arsenic, Total	0.0027	0.001	0.000312	10000	mg/L
MKTF-25	8/27/2019	Barium, Total	0.39	0.002	0.000648	2000000	mg/L
MKTF-25	8/27/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-25	8/27/2019	Boron, Total	0.65	0.2	0.022653	3949	mg/L
MKTF-25	8/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-25	8/27/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-25	8/27/2019	Cobalt, Total	0.0044	0.006	0.003091	5980	mg/L
MKTF-25	8/27/2019	Copper, Total	0.017	0.006	0.004072	790000	mg/L
MKTF-25	8/27/2019	Iron, Total	1.8	0.4	0.174937	13822000	mg/L
MKTF-25	8/27/2019	Lead, Total	0.0077	0.0005	0.000055	15000	mg/L
MKTF-25	8/27/2019	Manganese, Total	3.9	0.01	0.00145	2017000	mg/L
MKTF-25	8/27/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MKTF-25	8/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-25	8/27/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
MKTF-25	8/27/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-25	8/27/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-25	8/27/2019	Thallium, Total	0.000067	0.0005	0.000052	2000	mg/L
MKTF-25	8/27/2019	Uranium, Total	0.036	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/27/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-25	8/27/2019	Aluminum, Dissolved	0.21	0.02	0.002488	19913930	mg/L
MKTF-25	8/27/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-25	8/27/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
MKTF-25	8/27/2019	Barium, Dissolved	0.39	0.002	0.000648	2000000	mg/L
MKTF-25	8/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-25	8/27/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-25	8/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-25	8/27/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
MKTF-25	8/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-25	8/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-25	8/27/2019	Copper, Dissolved	0.0055	0.006	0.001296	790000	mg/L
MKTF-25	8/27/2019	Iron, Dissolved	0.25	0.02	0.008747	13821880	mg/L
MKTF-25	8/27/2019	Lead, Dissolved	0.00052	0.0025	0.000274	NA	mg/L
MKTF-25	8/27/2019	Magnesium, Dissolved	35	1	0.05029	NA	mg/L
MKTF-25	8/27/2019	Manganese, Dissolved	3.6	0.01	0.00145	2017400	mg/L
MKTF-25	8/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-25	8/27/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
MKTF-25	8/27/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-25	8/27/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-25	8/27/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-25	8/27/2019	Sodium, Dissolved	810	20	8.323526	NA	mg/L
MKTF-25	8/27/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-25	8/27/2019	Uranium, Dissolved	0.037	0.0025	0.000374	NA	mg/L
MKTF-25	8/27/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MKTF-25	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-25	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-25	11/14/2014	Barium, Total	0.28	0.002	0.00021	2000000	mg/L
MKTF-25	11/14/2014	Calcium, Total	150	5	0.41	NA	mg/L
MKTF-25	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-25	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-25	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-25	11/14/2014	Iron, Total	0.21	0.02	0.0062	13822000	mg/L
MKTF-25	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-25	11/14/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
MKTF-25	11/14/2014	Magnesium, Total	27	1	0.018	NA	mg/L
MKTF-25	11/14/2014	Manganese, Total	3.1	0.01	0.0027	2017000	mg/L
MKTF-25	11/14/2014	Sodium, Total	640	10	3.9	NA	mg/L
MKTF-25	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-25	11/14/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
MKTF-25	11/14/2014	Uranium, Total	0.03	0.005	0.00025	30000	mg/L
MKTF-25	11/14/2014	Zinc, Total	0.1	0.01	0.0014	5960000	mg/L
MKTF-25	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-25	3/11/2015	Barium, Total	0.26	0.002	0.00095	2000000	mg/L
MKTF-25	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-25	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-25	3/11/2015	Iron, Total	0.2	0.02	0.0073	13822000	mg/L
MKTF-25	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	3/11/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-25	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-25	3/11/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-25	3/11/2015	Uranium, Total	0.038	0.001	0.00005	30000	mg/L
MKTF-25	3/11/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-25	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-25	6/10/2015	Barium, Total	0.32	0.002	0.00095	2000000	mg/L
MKTF-25	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-25	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-25	6/10/2015	Iron, Total	0.64	0.02	0.0073	13822000	mg/L
MKTF-25	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	6/10/2015	Manganese, Total	3.2	0.01	0.0013	2017000	mg/L
MKTF-25	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-25	6/10/2015	Selenium, Total	0.005	0.005	0.00097	50000	mg/L
MKTF-25	6/10/2015	Uranium, Total	0.033	0.005	0.000024	30000	mg/L
MKTF-25	6/10/2015	Zinc, Total	0.016	0.01	0.0028	5960000	mg/L
MKTF-25	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	8/21/2015	Arsenic, Total	0.0039	0.001	0.00029	10000	mg/L
MKTF-25	8/21/2015	Barium, Total	0.49	0.002	0.0011	2000000	mg/L
MKTF-25	8/21/2015	Calcium, Total	150	5	0.28	NA	mg/L
MKTF-25	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	8/21/2015	Chromium, Total	0.0065	0.006	0.0022	50000	mg/L
MKTF-25	8/21/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-25	8/21/2015	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-25	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	8/21/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-25	8/21/2015	Magnesium, Total	26	1	0.039	NA	mg/L
MKTF-25	8/21/2015	Manganese, Total	3.7	0.02	0.015	2017000	mg/L
MKTF-25	8/21/2015	Sodium, Total	650	10	0.72	NA	mg/L
MKTF-25	8/21/2015	Lead, Total	0.0084	0.0005	0.000047	15000	mg/L
MKTF-25	8/21/2015	Selenium, Total	0.0038	0.001	0.00012	50000	mg/L
MKTF-25	8/21/2015	Uranium, Total	0.033	0.005	0.000049	30000	mg/L
MKTF-25	8/21/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-25	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-25	11/5/2015	Arsenic, Total	0.0049	0.001	0.00029	10000	mg/L
MKTF-25	11/5/2015	Barium, Total	0.81	0.01	0.0053	2000000	mg/L
MKTF-25	11/5/2015	Calcium, Total	140	10	2.6	NA	mg/L
MKTF-25	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	11/5/2015	Chromium, Total	0.0075	0.006	0.0022	50000	mg/L
MKTF-25	11/5/2015	Copper, Total	0.019	0.006	0.0051	790000	mg/L
MKTF-25	11/5/2015	Iron, Total	7.9	0.2	0.072	13822000	mg/L
MKTF-25	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-25	11/5/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-25	11/5/2015	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-25	11/5/2015	Manganese, Total	3.9	0.01	0.0076	2017000	mg/L
MKTF-25	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-25	11/5/2015	Lead, Total	0.019	0.0005	0.000047	15000	mg/L
MKTF-25	11/5/2015	Selenium, Total	0.0076	0.005	0.00062	50000	mg/L
MKTF-25	11/5/2015	Uranium, Total	0.033	0.0025	0.000025	30000	mg/L
MKTF-25	11/5/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-25	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-25	2/23/2016	Arsenic, Total	0.0028	0.001	0.00029	10000	mg/L
MKTF-25	2/23/2016	Barium, Total	0.31	0.002	0.0011	2000000	mg/L
MKTF-25	2/23/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-25	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-25	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-25	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-25	2/23/2016	Iron, Total	1.4	0.1	0.036	13822000	mg/L
MKTF-25	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-25	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-25	2/23/2016	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-25	2/23/2016	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-25	2/23/2016	Sodium, Total	640	10	0.96	NA	mg/L
MKTF-25	2/23/2016	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-25	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-25	2/23/2016	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-25	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-25	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-25	6/9/2016	Arsenic, Total	0.0049	0.001	0.00014	10000	mg/L
MKTF-25	6/9/2016	Barium, Total	0.32	0.002	0.0013	2000000	mg/L
MKTF-25	6/9/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-25	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-25	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-25	6/9/2016	Iron, Total	0.47	0.02	0.0091	13822000	mg/L
MKTF-25	6/9/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
MKTF-25	6/9/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-25	6/9/2016	Magnesium, Total	24	1	0.013	NA	mg/L
MKTF-25	6/9/2016	Manganese, Total	2.9	0.01	0.0016	2017000	mg/L
MKTF-25	6/9/2016	Sodium, Total	590	10	0.96	NA	mg/L
MKTF-25	6/9/2016	Lead, Total	0.001	0.0005	0.00017	15000	mg/L
MKTF-25	6/9/2016	Selenium, Total	0.0096	0.001	0.00021	50000	mg/L
MKTF-25	6/9/2016	Uranium, Total	0.03	0.0025	0.00026	30000	mg/L
MKTF-25	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-25	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	9/9/2016	Arsenic, Total	0.0044	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/9/2016	Barium, Total	0.45	0.002	0.00079	2000000	mg/L
MKTF-25	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-25	9/9/2016	Copper, Total	0.006	0.006	0.003	790000	mg/L
MKTF-25	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-25	9/9/2016	Arsenic, Dissolved	0.0058	0.001	0.00014	10000	mg/L
MKTF-25	9/9/2016	Barium, Dissolved	0.31	0.002	0.0013	2000000	mg/L
MKTF-25	9/9/2016	Calcium, Dissolved	100	10	5	NA	mg/L
MKTF-25	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-25	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-25	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-25	9/9/2016	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-25	9/9/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-25	9/9/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-25	9/9/2016	Manganese, Dissolved	2.7	0.02	0.0032	2017400	mg/L
MKTF-25	9/9/2016	Sodium, Dissolved	570	10	5	NA	mg/L
MKTF-25	9/9/2016	Lead, Dissolved	0.0066	0.0005	0.00017	NA	mg/L
MKTF-25	9/9/2016	Selenium, Dissolved	0.0074	0.001	0.00021	50000	mg/L
MKTF-25	9/9/2016	Uranium, Dissolved	0.032	0.0025	0.00026	NA	mg/L
MKTF-25	9/9/2016	Zinc, Dissolved	0.0089	0.01	0.0028	5960450	mg/L
MKTF-25	9/9/2016	Iron, Total	4.3	0.1	0.1	13822000	mg/L
MKTF-25	9/9/2016	Mercury, Total	0.000054	0.0002	0.000053	2000	mg/L
MKTF-25	9/9/2016	Manganese, Total	3.4	0.01	0.0014	2017000	mg/L
MKTF-25	9/9/2016	Lead, Total	0.0063	0.0005	0.000081	15000	mg/L
MKTF-25	9/9/2016	Selenium, Total	0.0059	0.01	0.0019	50000	mg/L
MKTF-25	9/9/2016	Uranium, Total	0.027	0.0025	0.00087	30000	mg/L
MKTF-25	9/9/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-25	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	11/1/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-25	11/1/2016	Barium, Total	0.39	0.002	0.00079	2000000	mg/L
MKTF-25	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-25	11/1/2016	Copper, Total	0.021	0.006	0.003	790000	mg/L
MKTF-25	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-25	11/1/2016	Arsenic, Dissolved	0.0047	0.001	0.00014	10000	mg/L
MKTF-25	11/1/2016	Barium, Dissolved	0.28	0.002	0.0013	2000000	mg/L
MKTF-25	11/1/2016	Calcium, Dissolved	110	10	5	NA	mg/L
MKTF-25	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-25	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-25	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-25	11/1/2016	Iron, Dissolved	0.35	0.02	0.02	13821880	mg/L
MKTF-25	11/1/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-25	11/1/2016	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-25	11/1/2016	Manganese, Dissolved	2.5	0.01	0.0016	2017400	mg/L
MKTF-25	11/1/2016	Sodium, Dissolved	590	10	5	NA	mg/L
MKTF-25	11/1/2016	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-25	11/1/2016	Selenium, Dissolved	0.0067	0.001	0.00021	50000	mg/L
MKTF-25	11/1/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-25	11/1/2016	Zinc, Dissolved	0.035	0.01	0.0028	5960450	mg/L
MKTF-25	11/1/2016	Iron, Total	3.2	0.1	0.1	13822000	mg/L
MKTF-25	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-25	11/1/2016	Manganese, Total	2.8	0.01	0.0014	2017000	mg/L
MKTF-25	11/1/2016	Lead, Total	0.005	0.0005	0.000081	15000	mg/L
MKTF-25	11/1/2016	Selenium, Total	0.0062	0.01	0.0019	50000	mg/L
MKTF-25	11/1/2016	Uranium, Total	0.032	0.0025	0.00087	30000	mg/L
MKTF-25	11/1/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
MKTF-25	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-25	3/29/2017	Arsenic, Total	0.0059	0.001	0.00021	10000	mg/L
MKTF-25	3/29/2017	Barium, Total	0.58	0.002	0.00079	2000000	mg/L
MKTF-25	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-25	3/29/2017	Chromium, Total	0.0091	0.006	0.0027	50000	mg/L
MKTF-25	3/29/2017	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-25	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-25	3/29/2017	Arsenic, Dissolved	0.0054	0.001	0.00018	10000	mg/L
MKTF-25	3/29/2017	Barium, Dissolved	0.27	0.002	0.00085	2000000	mg/L
MKTF-25	3/29/2017	Calcium, Dissolved	120	10	5	NA	mg/L
MKTF-25	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-25	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	3/29/2017	Iron, Dissolved	0.56	0.02	0.02	13821880	mg/L
MKTF-25	3/29/2017	Potassium, Dissolved	0.96	1	0.5	NA	mg/L
MKTF-25	3/29/2017	Magnesium, Dissolved	21	1	0.5	NA	mg/L
MKTF-25	3/29/2017	Manganese, Dissolved	2.6	0.02	0.0038	2017400	mg/L
MKTF-25	3/29/2017	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-25	3/29/2017	Lead, Dissolved	0.00082	0.0005	0.00017	NA	mg/L
MKTF-25	3/29/2017	Selenium, Dissolved	0.0076	0.001	0.00039	50000	mg/L
MKTF-25	3/29/2017	Uranium, Dissolved	0.029	0.0025	0.00025	NA	mg/L
MKTF-25	3/29/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-25	3/29/2017	Iron, Total	8.7	0.2	0.2	13822000	mg/L
MKTF-25	3/29/2017	Mercury, Total	0.00007	0.0002	0.000037	2000	mg/L
MKTF-25	3/29/2017	Manganese, Total	3.7	0.02	0.0027	2017000	mg/L
MKTF-25	3/29/2017	Lead, Total	0.02	0.0005	0.000081	15000	mg/L
MKTF-25	3/29/2017	Selenium, Total	0.005	0.001	0.00019	50000	mg/L
MKTF-25	3/29/2017	Uranium, Total	0.028	0.0025	0.00087	30000	mg/L
MKTF-25	3/29/2017	Zinc, Total	0.021	0.01	0.0027	5960000	mg/L
MKTF-25	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-25	6/5/2017	Arsenic, Total	0.0047	0.001	0.0003	10000	mg/L
MKTF-25	6/5/2017	Barium, Total	0.28	0.002	0.00093	2000000	mg/L
MKTF-25	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	6/5/2017	Chromium, Total	0.0052	0.006	0.0011	50000	mg/L
MKTF-25	6/5/2017	Copper, Total	0.008	0.006	0.0017	790000	mg/L
MKTF-25	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-25	6/5/2017	Arsenic, Dissolved	0.0047	0.001	0.00018	10000	mg/L
MKTF-25	6/5/2017	Barium, Dissolved	0.18	0.002	0.00085	2000000	mg/L
MKTF-25	6/5/2017	Calcium, Dissolved	99	10	0.78	NA	mg/L
MKTF-25	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-25	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	6/5/2017	Iron, Dissolved	0.57	0.02	0.016	13821880	mg/L
MKTF-25	6/5/2017	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
MKTF-25	6/5/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	6/5/2017	Manganese, Dissolved	2.3	0.02	0.0038	2017400	mg/L
MKTF-25	6/5/2017	Sodium, Dissolved	510	10	1.6	NA	mg/L
MKTF-25	6/5/2017	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-25	6/5/2017	Selenium, Dissolved	0.0044	0.001	0.00039	50000	mg/L
MKTF-25	6/5/2017	Uranium, Dissolved	0.027	0.0025	0.00025	NA	mg/L
MKTF-25	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-25	6/5/2017	Iron, Total	4.8	0.1	0.051	13822000	mg/L
MKTF-25	6/5/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
MKTF-25	6/5/2017	Manganese, Total	2.9	0.01	0.0055	2017000	mg/L
MKTF-25	6/5/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-25	6/5/2017	Selenium, Total	0.0034	0.001	0.00071	50000	mg/L
MKTF-25	6/5/2017	Uranium, Total	0.032	0.0025	0.00077	30000	mg/L
MKTF-25	6/5/2017	Zinc, Total	0.0084	0.01	0.0028	5960000	mg/L
MKTF-25	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	9/25/2017	Arsenic, Total	0.0052	0.005	0.0015	10000	mg/L
MKTF-25	9/25/2017	Barium, Total	0.38	0.002	0.00093	2000000	mg/L
MKTF-25	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	9/25/2017	Chromium, Total	0.0048	0.006	0.0018	50000	mg/L
MKTF-25	9/25/2017	Copper, Total	0.0098	0.006	0.0017	790000	mg/L
MKTF-25	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	9/25/2017	Arsenic, Dissolved	0.0044	0.005	0.00089	10000	mg/L
MKTF-25	9/25/2017	Barium, Dissolved	0.24	0.002	0.00085	2000000	mg/L
MKTF-25	9/25/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
MKTF-25	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	9/25/2017	Iron, Dissolved	0.57	0.02	0.016	13821880	mg/L
MKTF-25	9/25/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-25	9/25/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	9/25/2017	Manganese, Dissolved	2.4	0.02	0.0039	2017400	mg/L
MKTF-25	9/25/2017	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-25	9/25/2017	Lead, Dissolved	0.00039	0.0005	0.00017	NA	mg/L
MKTF-25	9/25/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
MKTF-25	9/25/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-25	9/25/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-25	9/25/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MKTF-25	9/25/2017	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	9/25/2017	Lead, Total	0.0057	0.0005	0.000095	15000	mg/L
MKTF-25	9/25/2017	Selenium, Total	0.0061	0.005	0.0036	50000	mg/L
MKTF-25	9/25/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-25	11/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	11/21/2017	Arsenic, Total	0.004	0.005	0.0021	10000	mg/L
MKTF-25	11/21/2017	Barium, Total	0.34	0.002	0.001	2000000	mg/L
MKTF-25	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	11/21/2017	Chromium, Total	0.0032	0.006	0.0018	50000	mg/L
MKTF-25	11/21/2017	Copper, Total	0.016	0.006	0.0041	790000	mg/L
MKTF-25	11/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	11/21/2017	Arsenic, Dissolved	0.0042	0.001	0.00042	10000	mg/L
MKTF-25	11/21/2017	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-25	11/21/2017	Calcium, Dissolved	97	1	0.078	NA	mg/L
MKTF-25	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	11/21/2017	Iron, Dissolved	0.8	0.02	0.016	13821880	mg/L
MKTF-25	11/21/2017	Potassium, Dissolved	0.94	1	0.11	NA	mg/L
MKTF-25	11/21/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	11/21/2017	Manganese, Dissolved	2.4	0.02	0.0039	2017400	mg/L
MKTF-25	11/21/2017	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-25	11/21/2017	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
MKTF-25	11/21/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-25	11/21/2017	Uranium, Dissolved	0.024	0.0005	0.000096	NA	mg/L
MKTF-25	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-25	11/21/2017	Iron, Total	4.5	0.1	0.051	13822000	mg/L
MKTF-25	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-25	11/21/2017	Manganese, Total	2.7	0.01	0.0055	2017000	mg/L
MKTF-25	11/21/2017	Lead, Total	0.0053	0.0025	0.0011	15000	mg/L
MKTF-25	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-25	11/21/2017	Uranium, Total	0.026	0.0025	0.00077	30000	mg/L
MKTF-25	11/21/2017	Zinc, Total	0.0086	0.01	0.0033	5960000	mg/L
MKTF-25	2/5/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-25	2/5/2018	Barium, Total	0.42	0.002	0.001	2000000	mg/L
MKTF-25	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	2/5/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-25	2/5/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	2/5/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-25	2/5/2018	Barium, Dissolved	0.28	0.002	0.00099	2000000	mg/L
MKTF-25	2/5/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-25	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	2/5/2018	Iron, Dissolved	0.7	0.02	0.016	13821880	mg/L
MKTF-25	2/5/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-25	2/5/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	2/5/2018	Manganese, Dissolved	2.6	0.01	0.002	2017400	mg/L
MKTF-25	2/5/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-25	2/5/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-25	2/5/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-25	2/5/2018	Uranium, Dissolved	0.023	0.0025	0.00048	NA	mg/L
MKTF-25	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-25	2/5/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
MKTF-25	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-25	2/5/2018	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-25	2/5/2018	Lead, Total	0.0062	0.0025	0.0011	15000	mg/L
MKTF-25	2/5/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-25	2/5/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-25	2/5/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-25	5/6/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
MKTF-25	5/6/2018	Arsenic, Total	0.0053	0.001	0.00041	10000	mg/L
MKTF-25	5/6/2018	Barium, Total	0.33	0.002	0.001	2000000	mg/L
MKTF-25	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-25	5/6/2018	Copper, Total	0.0056	0.006	0.0041	790000	mg/L
MKTF-25	5/6/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
MKTF-25	5/6/2018	Arsenic, Dissolved	0.0041	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-25	5/6/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-25	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	5/6/2018	Copper, Dissolved	0.0073	0.006	0.0032	790000	mg/L
MKTF-25	5/6/2018	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
MKTF-25	5/6/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-25	5/6/2018	Magnesium, Dissolved	22	1	0.25	NA	mg/L
MKTF-25	5/6/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-25	5/6/2018	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-25	5/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-25	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	5/6/2018	Uranium, Dissolved	0.023	0.0005	0.000096	NA	mg/L
MKTF-25	5/6/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-25	5/6/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
MKTF-25	5/6/2018	Mercury, Total	0.000062	0.0002	0.000037	2000	mg/L
MKTF-25	5/6/2018	Manganese, Total	2.7	0.01	0.0055	2017000	mg/L
MKTF-25	5/6/2018	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-25	5/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-25	5/6/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-25	5/6/2018	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
MKTF-25	8/17/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
MKTF-25	8/17/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
MKTF-25	8/17/2018	Barium, Total	0.48	0.002	0.001	2000000	mg/L
MKTF-25	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	8/17/2018	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
MKTF-25	8/17/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-25	8/17/2018	Silver, Dissolved	0.0033	0.005	0.0018	81200	mg/L
MKTF-25	8/17/2018	Arsenic, Dissolved	0.0052	0.001	0.00042	10000	mg/L
MKTF-25	8/17/2018	Barium, Dissolved	0.33	0.002	0.00099	2000000	mg/L
MKTF-25	8/17/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
MKTF-25	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	8/17/2018	Copper, Dissolved	0.0051	0.006	0.0032	790000	mg/L
MKTF-25	8/17/2018	Iron, Dissolved	0.97	0.1	0.082	13821880	mg/L
MKTF-25	8/17/2018	Potassium, Dissolved	1	1	0.11	NA	mg/L
MKTF-25	8/17/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-25	8/17/2018	Manganese, Dissolved	2.4	0.01	0.002	2017400	mg/L
MKTF-25	8/17/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
MKTF-25	8/17/2018	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-25	8/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	8/17/2018	Uranium, Dissolved	0.027	0.0025	0.00048	NA	mg/L
MKTF-25	8/17/2018	Zinc, Dissolved	0.0075	0.01	0.0021	5960450	mg/L
MKTF-25	8/17/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-25	8/17/2018	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-25	8/17/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-25	8/17/2018	Lead, Total	0.0063	0.0025	0.0011	15000	mg/L
MKTF-25	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-25	8/17/2018	Uranium, Total	0.029	0.0025	0.00034	30000	mg/L
MKTF-25	8/17/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-25	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-25	11/15/2018	Arsenic, Total	0.0058	0.001	0.00041	10000	mg/L
MKTF-25	11/15/2018	Barium, Total	0.46	0.002	0.001	2000000	mg/L
MKTF-25	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-25	11/15/2018	Chromium, Total	0.1	0.006	0.0018	50000	mg/L
MKTF-25	11/15/2018	Copper, Total	0.017	0.006	0.0041	790000	mg/L
MKTF-25	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-25	11/15/2018	Arsenic, Dissolved	0.0043	0.001	0.00042	10000	mg/L
MKTF-25	11/15/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-25	11/15/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-25	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-25	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-25	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-25	11/15/2018	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
MKTF-25	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-25	11/15/2018	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-25	11/15/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-25	11/15/2018	Sodium, Dissolved	620	20	3.3	NA	mg/L
MKTF-25	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-25	11/15/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
MKTF-25	11/15/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-25	11/15/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-25	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-25	11/15/2018	Manganese, Total	3.1	0.01	0.0055	2017000	mg/L
MKTF-25	11/15/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-25	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-25	11/15/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-25	11/15/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-27	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-27	11/14/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-27	11/14/2014	Barium, Total	0.094	0.002	0.00021	2000000	mg/L
MKTF-27	11/14/2014	Calcium, Total	160	5	0.41	NA	mg/L
MKTF-27	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-27	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-27	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-27	11/14/2014	Iron, Total	0.55	0.02	0.0062	13822000	mg/L
MKTF-27	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-27	11/14/2014	Potassium, Total	12	1	0.093	NA	mg/L
MKTF-27	11/14/2014	Magnesium, Total	26	1	0.018	NA	mg/L
MKTF-27	11/14/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
MKTF-27	11/14/2014	Sodium, Total	1800	50	20	NA	mg/L
MKTF-27	11/14/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-27	11/14/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-27	11/14/2014	Uranium, Total	0.075	0.01	0.0005	30000	mg/L
MKTF-27	11/14/2014	Zinc, Total	0.03	0.01	0.0014	5960000	mg/L
MKTF-27	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-27	3/11/2015	Barium, Total	0.086	0.002	0.00095	2000000	mg/L
MKTF-27	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-27	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-27	3/11/2015	Iron, Total	0.15	0.02	0.0073	13822000	mg/L
MKTF-27	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	3/11/2015	Manganese, Total	0.1	0.002	0.00027	2017000	mg/L
MKTF-27	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-27	3/11/2015	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
MKTF-27	3/11/2015	Uranium, Total	0.075	0.01	0.0005	30000	mg/L
MKTF-27	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-27	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-27	6/9/2015	Barium, Total	0.083	0.002	0.00095	2000000	mg/L
MKTF-27	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-27	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-27	6/9/2015	Iron, Total	0.56	0.02	0.0073	13822000	mg/L
MKTF-27	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	6/9/2015	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
MKTF-27	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-27	6/9/2015	Selenium, Total	0.0075	0.005	0.00097	50000	mg/L
MKTF-27	6/9/2015	Uranium, Total	0.067	0.005	0.000024	30000	mg/L
MKTF-27	6/9/2015	Zinc, Total	0.01	0.01	0.0028	5960000	mg/L
MKTF-27	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	8/20/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	8/20/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-27	8/20/2015	Calcium, Total	170	5	0.28	NA	mg/L
MKTF-27	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	8/20/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	8/20/2015	Iron, Total	6.2	0.2	0.072	13822000	mg/L
MKTF-27	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	8/20/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-27	8/20/2015	Magnesium, Total	27	1	0.039	NA	mg/L
MKTF-27	8/20/2015	Manganese, Total	0.7	0.002	0.0015	2017000	mg/L
MKTF-27	8/20/2015	Sodium, Total	1900	50	3.6	NA	mg/L
MKTF-27	8/20/2015	Lead, Total	0.0064	0.0025	0.00024	15000	mg/L
MKTF-27	8/20/2015	Selenium, Total	0.0056	0.005	0.00062	50000	mg/L
MKTF-27	8/20/2015	Uranium, Total	0.071	0.0025	0.000025	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/20/2015	Zinc, Total	0.027	0.01	0.0039	5960000	mg/L
MKTF-27	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	11/4/2015	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-27	11/4/2015	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-27	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	11/4/2015	Iron, Total	7.4	0.2	0.072	13822000	mg/L
MKTF-27	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-27	11/4/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-27	11/4/2015	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-27	11/4/2015	Manganese, Total	0.93	0.002	0.0015	2017000	mg/L
MKTF-27	11/4/2015	Sodium, Total	1800	20	1.9	NA	mg/L
MKTF-27	11/4/2015	Lead, Total	0.0073	0.0025	0.00024	15000	mg/L
MKTF-27	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-27	11/4/2015	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
MKTF-27	11/4/2015	Zinc, Total	0.029	0.01	0.0039	5960000	mg/L
MKTF-27	2/22/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-27	2/22/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-27	2/22/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-27	2/22/2016	Calcium, Total	180	5	1.3	NA	mg/L
MKTF-27	2/22/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-27	2/22/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-27	2/22/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-27	2/22/2016	Iron, Total	3.6	0.1	0.036	13822000	mg/L
MKTF-27	2/22/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-27	2/22/2016	Potassium, Total	9.6	1	0.18	NA	mg/L
MKTF-27	2/22/2016	Magnesium, Total	30	1	0.013	NA	mg/L
MKTF-27	2/22/2016	Manganese, Total	0.43	0.002	0.0015	2017000	mg/L
MKTF-27	2/22/2016	Sodium, Total	1800	20	1.9	NA	mg/L
MKTF-27	2/22/2016	Lead, Total	0.0044	0.0025	0.00024	15000	mg/L
MKTF-27	2/22/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-27	2/22/2016	Uranium, Total	0.063	0.0025	0.000025	30000	mg/L
MKTF-27	2/22/2016	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-27	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-27	6/8/2016	Arsenic, Total	0.0036	0.005	0.00069	10000	mg/L
MKTF-27	6/8/2016	Barium, Total	0.074	0.002	0.0013	2000000	mg/L
MKTF-27	6/8/2016	Calcium, Total	170	5	1.3	NA	mg/L
MKTF-27	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-27	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-27	6/8/2016	Iron, Total	0.4	0.02	0.0091	13822000	mg/L
MKTF-27	6/8/2016	Mercury, Total	0.000086	0.0002	0.000053	2000	mg/L
MKTF-27	6/8/2016	Potassium, Total	9.9	1	0.18	NA	mg/L
MKTF-27	6/8/2016	Magnesium, Total	27	1	0.013	NA	mg/L
MKTF-27	6/8/2016	Manganese, Total	0.52	0.002	0.00032	2017000	mg/L
MKTF-27	6/8/2016	Sodium, Total	1900	20	1.9	NA	mg/L
MKTF-27	6/8/2016	Lead, Total	0.0025	0.0025	0.00084	15000	mg/L
MKTF-27	6/8/2016	Selenium, Total	0.014	0.05	0.011	50000	mg/L
MKTF-27	6/8/2016	Uranium, Total	0.056	0.0025	0.00026	30000	mg/L
MKTF-27	6/8/2016	Zinc, Total	0.007	0.01	0.0028	5960000	mg/L
MKTF-27	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	9/7/2016	Arsenic, Total	0.0035	0.005	0.0011	10000	mg/L
MKTF-27	9/7/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-27	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	9/7/2016	Chromium, Total	0.0035	0.006	0.0027	50000	mg/L
MKTF-27	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-27	9/7/2016	Arsenic, Dissolved	0.003	0.005	0.00069	10000	mg/L
MKTF-27	9/7/2016	Barium, Dissolved	0.067	0.002	0.0013	2000000	mg/L
MKTF-27	9/7/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-27	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-27	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-27	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-27	9/7/2016	Iron, Dissolved	0.083	0.02	0.02	13821880	mg/L
MKTF-27	9/7/2016	Potassium, Dissolved	11	1	0.5	NA	mg/L
MKTF-27	9/7/2016	Magnesium, Dissolved	27	1	0.5	NA	mg/L
MKTF-27	9/7/2016	Manganese, Dissolved	0.29	0.002	0.00032	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	9/7/2016	Sodium, Dissolved	1900	50	25	NA	mg/L
MKTF-27	9/7/2016	Lead, Dissolved	0.00063	0.0005	0.00017	NA	mg/L
MKTF-27	9/7/2016	Selenium, Dissolved	0.0092	0.01	0.0021	50000	mg/L
MKTF-27	9/7/2016	Uranium, Dissolved	0.055	0.0025	0.00026	NA	mg/L
MKTF-27	9/7/2016	Zinc, Dissolved	0.0034	0.01	0.0028	5960450	mg/L
MKTF-27	9/7/2016	Iron, Total	3.7	0.1	0.1	13822000	mg/L
MKTF-27	9/7/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
MKTF-27	9/7/2016	Manganese, Total	0.58	0.002	0.00027	2017000	mg/L
MKTF-27	9/7/2016	Lead, Total	0.0051	0.0005	0.000081	15000	mg/L
MKTF-27	9/7/2016	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
MKTF-27	9/7/2016	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
MKTF-27	9/7/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
MKTF-27	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	10/28/2016	Arsenic, Total	0.0028	0.005	0.0011	10000	mg/L
MKTF-27	10/28/2016	Barium, Total	0.089	0.002	0.00079	2000000	mg/L
MKTF-27	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-27	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-27	10/28/2016	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-27	10/28/2016	Barium, Dissolved	0.065	0.002	0.0013	2000000	mg/L
MKTF-27	10/28/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-27	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-27	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-27	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-27	10/28/2016	Iron, Dissolved	0.039	0.02	0.02	13821880	mg/L
MKTF-27	10/28/2016	Potassium, Dissolved	11	1	0.5	NA	mg/L
MKTF-27	10/28/2016	Magnesium, Dissolved	27	1	0.5	NA	mg/L
MKTF-27	10/28/2016	Manganese, Dissolved	0.085	0.002	0.00032	2017400	mg/L
MKTF-27	10/28/2016	Sodium, Dissolved	1900	50	25	NA	mg/L
MKTF-27	10/28/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	10/28/2016	Selenium, Dissolved	0.0095	0.01	0.0021	50000	mg/L
MKTF-27	10/28/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-27	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-27	10/28/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-27	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-27	10/28/2016	Manganese, Total	0.24	0.002	0.00027	2017000	mg/L
MKTF-27	10/28/2016	Lead, Total	0.0022	0.0025	0.00041	15000	mg/L
MKTF-27	10/28/2016	Selenium, Total	0.0088	0.005	0.00094	50000	mg/L
MKTF-27	10/28/2016	Uranium, Total	0.063	0.0025	0.00087	30000	mg/L
MKTF-27	10/28/2016	Zinc, Total	0.0095	0.01	0.0027	5960000	mg/L
MKTF-27	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-27	3/29/2017	Arsenic, Total	0.015	0.02	0.0042	10000	mg/L
MKTF-27	3/29/2017	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-27	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	3/29/2017	Chromium, Total	0.0054	0.006	0.0027	50000	mg/L
MKTF-27	3/29/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-27	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-27	3/29/2017	Arsenic, Dissolved	0.004	0.005	0.00089	10000	mg/L
MKTF-27	3/29/2017	Barium, Dissolved	0.097	0.002	0.00085	2000000	mg/L
MKTF-27	3/29/2017	Calcium, Dissolved	500	10	5	NA	mg/L
MKTF-27	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-27	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	3/29/2017	Iron, Dissolved	0.034	0.02	0.02	13821880	mg/L
MKTF-27	3/29/2017	Potassium, Dissolved	15	1	0.5	NA	mg/L
MKTF-27	3/29/2017	Magnesium, Dissolved	87	1	0.5	NA	mg/L
MKTF-27	3/29/2017	Manganese, Dissolved	0.49	0.002	0.00038	2017400	mg/L
MKTF-27	3/29/2017	Sodium, Dissolved	3300	50	25	NA	mg/L
MKTF-27	3/29/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	3/29/2017	Selenium, Dissolved	0.015	0.005	0.0019	50000	mg/L
MKTF-27	3/29/2017	Uranium, Dissolved	0.077	0.025	0.0025	NA	mg/L
MKTF-27	3/29/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-27	3/29/2017	Iron, Total	9.8	0.2	0.2	13822000	mg/L
MKTF-27	3/29/2017	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-27	3/29/2017	Manganese, Total	1.5	0.02	0.0027	2017000	mg/L
MKTF-27	3/29/2017	Lead, Total	0.0096	0.0025	0.00041	15000	mg/L
MKTF-27	3/29/2017	Selenium, Total	0.022	0.005	0.00094	50000	mg/L
MKTF-27	3/29/2017	Uranium, Total	0.097	0.0025	0.00087	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	Zinc, Total	0.032	0.01	0.0027	5960000	mg/L
MKTF-27	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-27	6/5/2017	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
MKTF-27	6/5/2017	Barium, Total	0.15	0.002	0.00093	2000000	mg/L
MKTF-27	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	6/5/2017	Chromium, Total	0.004	0.006	0.0011	50000	mg/L
MKTF-27	6/5/2017	Copper, Total	0.0029	0.006	0.0017	790000	mg/L
MKTF-27	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-27	6/5/2017	Arsenic, Dissolved	0.0033	0.005	0.00089	10000	mg/L
MKTF-27	6/5/2017	Barium, Dissolved	0.071	0.002	0.00085	2000000	mg/L
MKTF-27	6/5/2017	Calcium, Dissolved	330	10	0.78	NA	mg/L
MKTF-27	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-27	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	6/5/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
MKTF-27	6/5/2017	Potassium, Dissolved	13	1	0.11	NA	mg/L
MKTF-27	6/5/2017	Magnesium, Dissolved	60	1	0.25	NA	mg/L
MKTF-27	6/5/2017	Manganese, Dissolved	0.064	0.002	0.00038	2017400	mg/L
MKTF-27	6/5/2017	Sodium, Dissolved	2600	50	8.2	NA	mg/L
MKTF-27	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	6/5/2017	Selenium, Dissolved	0.011	0.005	0.0019	50000	mg/L
MKTF-27	6/5/2017	Uranium, Dissolved	0.058	0.01	0.001	NA	mg/L
MKTF-27	6/5/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-27	6/5/2017	Iron, Total	4.8	0.1	0.051	13822000	mg/L
MKTF-27	6/5/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
MKTF-27	6/5/2017	Manganese, Total	0.63	0.002	0.0011	2017000	mg/L
MKTF-27	6/5/2017	Lead, Total	0.0053	0.0025	0.00048	15000	mg/L
MKTF-27	6/5/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-27	6/5/2017	Uranium, Total	0.07	0.0025	0.00077	30000	mg/L
MKTF-27	6/5/2017	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-27	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	10/3/2017	Arsenic, Total	0.0048	0.005	0.0015	10000	mg/L
MKTF-27	10/3/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-27	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	10/3/2017	Chromium, Total	0.0019	0.006	0.0018	50000	mg/L
MKTF-27	10/3/2017	Copper, Total	0.0038	0.006	0.0017	790000	mg/L
MKTF-27	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-27	10/3/2017	Arsenic, Dissolved	0.0037	0.005	0.00089	10000	mg/L
MKTF-27	10/3/2017	Barium, Dissolved	0.067	0.002	0.00085	2000000	mg/L
MKTF-27	10/3/2017	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-27	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	10/3/2017	Iron, Dissolved	0.018	0.02	0.016	13821880	mg/L
MKTF-27	10/3/2017	Potassium, Dissolved	12	1	0.11	NA	mg/L
MKTF-27	10/3/2017	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-27	10/3/2017	Manganese, Dissolved	0.17	0.002	0.00039	2017400	mg/L
MKTF-27	10/3/2017	Sodium, Dissolved	2000	20	3.3	NA	mg/L
MKTF-27	10/3/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-27	10/3/2017	Selenium, Dissolved	0.012	0.005	0.0019	50000	mg/L
MKTF-27	10/3/2017	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
MKTF-27	10/3/2017	Iron, Total	2.1	0.2	0.1	13822000	mg/L
MKTF-27	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	10/3/2017	Manganese, Total	0.4	0.002	0.0011	2017000	mg/L
MKTF-27	10/3/2017	Lead, Total	0.0024	0.0025	0.00048	15000	mg/L
MKTF-27	10/3/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
MKTF-27	10/3/2017	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-27	11/20/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-27	11/20/2017	Arsenic, Total	0.003	0.005	0.0021	10000	mg/L
MKTF-27	11/20/2017	Barium, Total	0.19	0.002	0.001	2000000	mg/L
MKTF-27	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	11/20/2017	Chromium, Total	0.003	0.006	0.0018	50000	mg/L
MKTF-27	11/20/2017	Copper, Total	0.0084	0.006	0.0041	790000	mg/L
MKTF-27	11/20/2017	Silver, Dissolved	0.0033	0.005	0.0018	81200	mg/L
MKTF-27	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-27	11/20/2017	Barium, Dissolved	0.069	0.002	0.00099	2000000	mg/L
MKTF-27	11/20/2017	Calcium, Dissolved	200	5	0.39	NA	mg/L
MKTF-27	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	11/20/2017	Copper, Dissolved	0.0047	0.006	0.0032	790000	mg/L
MKTF-27	11/20/2017	Iron, Dissolved	0.1	0.02	0.016	13821880	mg/L
MKTF-27	11/20/2017	Potassium, Dissolved	11	1	0.11	NA	mg/L
MKTF-27	11/20/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-27	11/20/2017	Manganese, Dissolved	0.24	0.002	0.00039	2017400	mg/L
MKTF-27	11/20/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-27	11/20/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-27	11/20/2017	Uranium, Dissolved	0.046	0.0025	0.00048	NA	mg/L
MKTF-27	11/20/2017	Zinc, Dissolved	0.0044	0.01	0.0021	5960450	mg/L
MKTF-27	11/20/2017	Iron, Total	6.1	0.2	0.1	13822000	mg/L
MKTF-27	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	11/20/2017	Manganese, Total	0.92	0.002	0.0011	2017000	mg/L
MKTF-27	11/20/2017	Lead, Total	0.0057	0.0025	0.0011	15000	mg/L
MKTF-27	11/20/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	11/20/2017	Uranium, Total	0.052	0.0025	0.00077	30000	mg/L
MKTF-27	11/20/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-27	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-27	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-27	2/6/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-27	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	2/6/2018	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
MKTF-27	2/6/2018	Silver, Dissolved	0.0059	0.005	0.0018	81200	mg/L
MKTF-27	2/6/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-27	2/6/2018	Barium, Dissolved	0.061	0.002	0.00099	2000000	mg/L
MKTF-27	2/6/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
MKTF-27	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	2/6/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-27	2/6/2018	Potassium, Dissolved	8.5	1	0.11	NA	mg/L
MKTF-27	2/6/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
MKTF-27	2/6/2018	Manganese, Dissolved	0.032	0.002	0.00039	2017400	mg/L
MKTF-27	2/6/2018	Sodium, Dissolved	1700	50	8.2	NA	mg/L
MKTF-27	2/6/2018	Lead, Dissolved	ND	0.01	0.0035	NA	mg/L
MKTF-27	2/6/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-27	2/6/2018	Uranium, Dissolved	0.033	0.01	0.0019	NA	mg/L
MKTF-27	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-27	2/6/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-27	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-27	2/6/2018	Manganese, Total	0.52	0.002	0.0011	2017000	mg/L
MKTF-27	2/6/2018	Lead, Total	0.0041	0.0025	0.0011	15000	mg/L
MKTF-27	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	2/6/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-27	2/6/2018	Zinc, Total	0.024	0.01	0.0033	5960000	mg/L
MKTF-27	5/1/2018	Silver, Total	0.0074	0.005	0.0012	50000	mg/L
MKTF-27	5/1/2018	Arsenic, Total	0.008	0.01	0.0041	10000	mg/L
MKTF-27	5/1/2018	Barium, Total	0.14	0.002	0.001	2000000	mg/L
MKTF-27	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	5/1/2018	Copper, Total	0.0092	0.006	0.0041	790000	mg/L
MKTF-27	5/1/2018	Silver, Dissolved	0.0058	0.005	0.0018	81200	mg/L
MKTF-27	5/1/2018	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
MKTF-27	5/1/2018	Barium, Dissolved	0.091	0.002	0.00099	2000000	mg/L
MKTF-27	5/1/2018	Calcium, Dissolved	450	10	0.78	NA	mg/L
MKTF-27	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	5/1/2018	Copper, Dissolved	0.0084	0.006	0.0032	790000	mg/L
MKTF-27	5/1/2018	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-27	5/1/2018	Potassium, Dissolved	14	1	0.11	NA	mg/L
MKTF-27	5/1/2018	Magnesium, Dissolved	98	1	0.25	NA	mg/L
MKTF-27	5/1/2018	Manganese, Dissolved	0.033	0.002	0.00039	2017400	mg/L
MKTF-27	5/1/2018	Sodium, Dissolved	2800	50	8.2	NA	mg/L
MKTF-27	5/1/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-27	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-27	5/1/2018	Uranium, Dissolved	0.034	0.005	0.00096	NA	mg/L
MKTF-27	5/1/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
MKTF-27	5/1/2018	Iron, Total	3.4	0.1	0.051	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/1/2018	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-27	5/1/2018	Manganese, Total	0.69	0.002	0.0011	2017000	mg/L
MKTF-27	5/1/2018	Lead, Total	0.0029	0.005	0.0023	15000	mg/L
MKTF-27	5/1/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-27	5/1/2018	Uranium, Total	0.037	0.005	0.00068	30000	mg/L
MKTF-27	5/1/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-27	8/20/2018	Silver, Total	0.0058	0.005	0.0012	50000	mg/L
MKTF-27	8/20/2018	Arsenic, Total	0.004	0.005	0.0021	10000	mg/L
MKTF-27	8/20/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-27	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	8/20/2018	Chromium, Total	0.0042	0.006	0.0018	50000	mg/L
MKTF-27	8/20/2018	Copper, Total	0.0082	0.006	0.0041	790000	mg/L
MKTF-27	8/20/2018	Silver, Dissolved	0.0064	0.005	0.0018	81200	mg/L
MKTF-27	8/20/2018	Arsenic, Dissolved	0.0024	0.001	0.00042	10000	mg/L
MKTF-27	8/20/2018	Barium, Dissolved	0.068	0.002	0.00099	2000000	mg/L
MKTF-27	8/20/2018	Calcium, Dissolved	280	5	0.39	NA	mg/L
MKTF-27	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	8/20/2018	Copper, Dissolved	0.0052	0.006	0.0032	790000	mg/L
MKTF-27	8/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-27	8/20/2018	Potassium, Dissolved	12	1	0.11	NA	mg/L
MKTF-27	8/20/2018	Magnesium, Dissolved	46	1	0.25	NA	mg/L
MKTF-27	8/20/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
MKTF-27	8/20/2018	Sodium, Dissolved	2400	50	8.2	NA	mg/L
MKTF-27	8/20/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-27	8/20/2018	Uranium, Dissolved	0.033	0.0025	0.00048	NA	mg/L
MKTF-27	8/20/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-27	8/20/2018	Iron, Total	6.7	0.4	0.2	13822000	mg/L
MKTF-27	8/20/2018	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
MKTF-27	8/20/2018	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
MKTF-27	8/20/2018	Lead, Total	0.0065	0.0025	0.0011	15000	mg/L
MKTF-27	8/20/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-27	8/20/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
MKTF-27	8/20/2018	Zinc, Total	0.025	0.01	0.0033	5960000	mg/L
MKTF-27	11/15/2018	Silver, Total	0.0067	0.005	0.0012	50000	mg/L
MKTF-27	11/15/2018	Arsenic, Total	0.0039	0.001	0.00041	10000	mg/L
MKTF-27	11/15/2018	Barium, Total	0.076	0.002	0.001	2000000	mg/L
MKTF-27	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-27	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-27	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-27	11/15/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-27	11/15/2018	Arsenic, Dissolved	0.0017	0.001	0.00042	10000	mg/L
MKTF-27	11/15/2018	Barium, Dissolved	0.063	0.002	0.00099	2000000	mg/L
MKTF-27	11/15/2018	Calcium, Dissolved	240	5	0.39	NA	mg/L
MKTF-27	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-27	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-27	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-27	11/15/2018	Iron, Dissolved	0.16	0.02	0.016	13821880	mg/L
MKTF-27	11/15/2018	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-27	11/15/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-27	11/15/2018	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-27	11/15/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-27	11/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-27	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-27	11/15/2018	Uranium, Dissolved	0.031	0.0025	0.00048	NA	mg/L
MKTF-27	11/15/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-27	11/15/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-27	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-27	11/15/2018	Manganese, Total	0.42	0.002	0.0011	2017000	mg/L
MKTF-27	11/15/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
MKTF-27	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-27	11/15/2018	Uranium, Total	0.036	0.0025	0.00034	30000	mg/L
MKTF-27	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-27	10/23/2019	Aluminum, Total	0.32	0.02	0.002488	19914000	mg/L
MKTF-27	10/23/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	10/23/2019	Barium, Total	0.044	0.002	0.000648	2000000	mg/L
MKTF-27	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	10/23/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
MKTF-27	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	10/23/2019	Copper, Total	0.0045	0.006	0.004072	790000	mg/L
MKTF-27	10/23/2019	Iron, Total	0.19	0.02	0.008747	13822000	mg/L
MKTF-27	10/23/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-27	10/23/2019	Manganese, Total	0.13	0.002	0.00029	2017000	mg/L
MKTF-27	10/23/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
MKTF-27	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	10/23/2019	Nickel, Total	0.031	0.01	0.004009	372000	mg/L
MKTF-27	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-27	10/23/2019	Silver, Total	0.0053	0.005	0.001418	50000	mg/L
MKTF-27	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	10/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	10/23/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-27	10/23/2019	Barium, Dissolved	0.041	0.002	0.000648	2000000	mg/L
MKTF-27	10/23/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-27	10/23/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-27	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	10/23/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
MKTF-27	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	10/23/2019	Copper, Dissolved	0.0068	0.006	0.001296	790000	mg/L
MKTF-27	10/23/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
MKTF-27	10/23/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	10/23/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
MKTF-27	10/23/2019	Manganese, Dissolved	0.048	0.002	0.00029	2017400	mg/L
MKTF-27	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	10/23/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
MKTF-27	10/23/2019	Potassium, Dissolved	11	1	0.162288	NA	mg/L
MKTF-27	10/23/2019	Selenium, Dissolved	0.0019	0.005	0.000857	50000	mg/L
MKTF-27	10/23/2019	Silver, Dissolved	0.0057	0.005	0.000942	81200	mg/L
MKTF-27	10/23/2019	Sodium, Dissolved	1900	50	20.808815	NA	mg/L
MKTF-27	10/23/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	10/23/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
MKTF-27	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	8/21/2019	Antimony, Dissolved	0.00059	0.001	0.000389	6000	mg/L
MKTF-27	8/21/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-27	8/21/2019	Barium, Dissolved	0.041	0.002	0.000648	2000000	mg/L
MKTF-27	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-27	8/21/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
MKTF-27	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	8/21/2019	Calcium, Dissolved	290	5	0.309446	NA	mg/L
MKTF-27	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	8/21/2019	Copper, Dissolved	0.017	0.006	0.001296	790000	mg/L
MKTF-27	8/21/2019	Iron, Dissolved	0.0089	0.02	0.008747	13821880	mg/L
MKTF-27	8/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	8/21/2019	Magnesium, Dissolved	50	1	0.05029	NA	mg/L
MKTF-27	8/21/2019	Manganese, Dissolved	0.32	0.002	0.00029	2017400	mg/L
MKTF-27	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	8/21/2019	Nickel, Dissolved	0.034	0.01	0.004009	372000	mg/L
MKTF-27	8/21/2019	Potassium, Dissolved	11	1	0.162288	NA	mg/L
MKTF-27	8/21/2019	Selenium, Dissolved	0.0028	0.001	0.000171	50000	mg/L
MKTF-27	8/21/2019	Silver, Dissolved	0.0048	0.005	0.000942	81200	mg/L
MKTF-27	8/21/2019	Sodium, Dissolved	2300	50	20.808815	NA	mg/L
MKTF-27	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	8/21/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
MKTF-27	8/21/2019	Zinc, Dissolved	0.008	0.01	0.002252	5960450	mg/L
MKTF-27	8/21/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
MKTF-27	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	8/21/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-27	8/21/2019	Barium, Total	0.061	0.002	0.000648	2000000	mg/L
MKTF-27	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-27	8/21/2019	Boron, Total	0.57	0.04	0.004531	3949	mg/L
MKTF-27	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	8/21/2019	Copper, Total	0.015	0.006	0.004072	790000	mg/L
MKTF-27	8/21/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-27	8/21/2019	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-27	8/21/2019	Manganese, Total	0.58	0.002	0.00029	2017000	mg/L
MKTF-27	8/21/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-27	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	8/21/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
MKTF-27	8/21/2019	Selenium, Total	0.0022	0.001	0.000478	50000	mg/L
MKTF-27	8/21/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
MKTF-27	8/21/2019	Thallium, Total	0.000058	0.0005	0.000052	2000	mg/L
MKTF-27	8/21/2019	Uranium, Total	0.028	0.0025	0.000424	30000	mg/L
MKTF-27	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	5/6/2019	Aluminum, Dissolved	0.0062	0.02	0.002488	19913930	mg/L
MKTF-27	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	5/6/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-27	5/6/2019	Barium, Dissolved	0.04	0.002	0.000648	2000000	mg/L
MKTF-27	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-27	5/6/2019	Boron, Dissolved	0.4	0.04	0.004531	3949110	mg/L
MKTF-27	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	5/6/2019	Calcium, Dissolved	400	5	0.309446	NA	mg/L
MKTF-27	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-27	5/6/2019	Copper, Dissolved	0.0095	0.006	0.001296	790000	mg/L
MKTF-27	5/6/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-27	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	5/6/2019	Magnesium, Dissolved	69	1	0.05029	NA	mg/L
MKTF-27	5/6/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
MKTF-27	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	5/6/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
MKTF-27	5/6/2019	Potassium, Dissolved	12	1	0.162288	NA	mg/L
MKTF-27	5/6/2019	Selenium, Dissolved	0.0044	0.005	0.000857	50000	mg/L
MKTF-27	5/6/2019	Silver, Dissolved	0.0093	0.005	0.000942	81200	mg/L
MKTF-27	5/6/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
MKTF-27	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	5/6/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
MKTF-27	5/6/2019	Zinc, Dissolved	0.043	0.01	0.002252	5960450	mg/L
MKTF-27	5/6/2019	Aluminum, Total	4.2	0.1	0.012441	19914000	mg/L
MKTF-27	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	5/6/2019	Barium, Total	0.086	0.002	0.000648	2000000	mg/L
MKTF-27	5/6/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-27	5/6/2019	Boron, Total	0.4	0.04	0.004531	3949	mg/L
MKTF-27	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	5/6/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
MKTF-27	5/6/2019	Iron, Total	2.2	0.1	0.043734	13822000	mg/L
MKTF-27	5/6/2019	Lead, Total	0.0019	0.0025	0.000274	15000	mg/L
MKTF-27	5/6/2019	Manganese, Total	0.7	0.002	0.00029	2017000	mg/L
MKTF-27	5/6/2019	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
MKTF-27	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	5/6/2019	Nickel, Total	0.031	0.01	0.004009	372000	mg/L
MKTF-27	5/6/2019	Selenium, Total	0.0041	0.005	0.00239	50000	mg/L
MKTF-27	5/6/2019	Silver, Total	0.0092	0.005	0.001418	50000	mg/L
MKTF-27	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	5/6/2019	Uranium, Total	0.03	0.0025	0.000424	30000	mg/L
MKTF-27	5/6/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-27	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-27	3/28/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-27	3/28/2019	Arsenic, Dissolved	0.0017	0.005	0.000504	10000	mg/L
MKTF-27	3/28/2019	Barium, Dissolved	0.039	0.002	0.000648	2000000	mg/L
MKTF-27	3/28/2019	Beryllium, Dissolved	0.00049	0.002	0.000284	4000	mg/L
MKTF-27	3/28/2019	Boron, Dissolved	0.22	0.04	0.004531	3949110	mg/L
MKTF-27	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-27	3/28/2019	Calcium, Dissolved	400	5	0.309446	NA	mg/L
MKTF-27	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-27	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/28/2019	Copper, Dissolved	0.011	0.006	0.001296	790000	mg/L
MKTF-27	3/28/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
MKTF-27	3/28/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-27	3/28/2019	Magnesium, Dissolved	71	1	0.05029	NA	mg/L
MKTF-27	3/28/2019	Manganese, Dissolved	0.011	0.002	0.00029	2017400	mg/L
MKTF-27	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-27	3/28/2019	Nickel, Dissolved	0.026	0.01	0.004009	372000	mg/L
MKTF-27	3/28/2019	Potassium, Dissolved	7.9	1	0.162288	NA	mg/L
MKTF-27	3/28/2019	Selenium, Dissolved	0.0049	0.005	0.000857	50000	mg/L
MKTF-27	3/28/2019	Silver, Dissolved	0.0064	0.005	0.000942	81200	mg/L
MKTF-27	3/28/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
MKTF-27	3/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-27	3/28/2019	Uranium, Dissolved	0.025	0.0025	0.000374	NA	mg/L
MKTF-27	3/28/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-27	3/28/2019	Aluminum, Total	0.97	0.1	0.022822	19914000	mg/L
MKTF-27	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-27	3/28/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-27	3/28/2019	Barium, Total	0.055	0.002	0.000648	2000000	mg/L
MKTF-27	3/28/2019	Beryllium, Total	0.00058	0.002	0.000284	4000	mg/L
MKTF-27	3/28/2019	Boron, Total	0.26	0.04	0.004531	3949	mg/L
MKTF-27	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-27	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-27	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-27	3/28/2019	Copper, Total	0.0093	0.006	0.004072	790000	mg/L
MKTF-27	3/28/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-27	3/28/2019	Lead, Total	0.00089	0.0025	0.000274	15000	mg/L
MKTF-27	3/28/2019	Manganese, Total	0.077	0.002	0.00029	2017000	mg/L
MKTF-27	3/28/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-27	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-27	3/28/2019	Nickel, Total	0.023	0.01	0.004009	372000	mg/L
MKTF-27	3/28/2019	Selenium, Total	0.0055	0.005	0.00239	50000	mg/L
MKTF-27	3/28/2019	Silver, Total	0.0066	0.005	0.001418	50000	mg/L
MKTF-27	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-27	3/28/2019	Uranium, Total	0.028	0.0025	0.000424	30000	mg/L
MKTF-27	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-27	2/25/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-27	2/25/2020	Arsenic, Dissolved	0.0017	0.005	0.0005	10000	mg/L
MKTF-27	2/25/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-27	2/25/2020	Selenium, Dissolved	0.0065	0.005	0.00086	50000	mg/L
MKTF-27	2/25/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-27	2/25/2020	Uranium, Dissolved	0.034	0.0025	0.00037	NA	mg/L
MKTF-27	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-27	2/25/2020	Barium, Dissolved	0.067	0.002	0.00065	2000000	mg/L
MKTF-27	2/25/2020	Beryllium, Dissolved	0.00055	0.002	0.00028	4000	mg/L
MKTF-27	2/25/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
MKTF-27	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-27	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-27	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-27	2/25/2020	Copper, Dissolved	0.0085	0.006	0.0013	790000	mg/L
MKTF-27	2/25/2020	Iron, Dissolved	0.029	0.02	0.0087	13821880	mg/L
MKTF-27	2/25/2020	Manganese, Dissolved	0.065	0.002	0.00029	2017400	mg/L
MKTF-27	2/25/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
MKTF-27	2/25/2020	Potassium, Dissolved	13	1	0.16	NA	mg/L
MKTF-27	2/25/2020	Zinc, Dissolved	0.029	0.01	0.0023	5960450	mg/L
MKTF-27	2/25/2020	Magnesium, Dissolved	140	5	0.25	NA	mg/L
MKTF-27	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-27	2/25/2020	Silver, Dissolved	0.0096	0.005	0.00094	81200	mg/L
MKTF-27	2/25/2020	Calcium, Dissolved	820	10	0.62	NA	mg/L
MKTF-27	2/25/2020	Sodium, Dissolved	3300	50	21	NA	mg/L
MKTF-27	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-27	2/25/2020	Arsenic, Total	ND	0.01	0.0031	10000	mg/L
MKTF-27	2/25/2020	Lead, Total	0.001	0.005	0.00055	15000	mg/L
MKTF-27	2/25/2020	Selenium, Total	0.0071	0.01	0.0048	50000	mg/L
MKTF-27	2/25/2020	Thallium, Total	ND	0.005	0.00052	2000	mg/L
MKTF-27	2/25/2020	Barium, Total	0.091	0.002	0.00065	2000000	mg/L
MKTF-27	2/25/2020	Beryllium, Total	0.00046	0.002	0.00028	4000	mg/L
MKTF-27	2/25/2020	Boron, Total	0.3	0.04	0.0045	3949	mg/L
MKTF-27	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-27	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	2/25/2020	Copper, Total	0.013	0.006	0.0041	790000	mg/L
MKTF-27	2/25/2020	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-27	2/25/2020	Nickel, Total	0.028	0.01	0.004	372000	mg/L
MKTF-27	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-27	2/25/2020	Aluminum, Total	1.2	0.1	0.012	19914000	mg/L
MKTF-27	2/25/2020	Iron, Total	1.3	0.1	0.044	13822000	mg/L
MKTF-27	2/25/2020	Uranium, Total	0.034	0.005	0.00085	30000	mg/L
MKTF-27	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-27	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-27	2/25/2020	Silver, Total	0.014	0.005	0.0014	50000	mg/L
MKTF-27	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-27	9/20/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-27	9/20/2020	Arsenic, Total	ND	0.005	0.0013	10000	mg/L
MKTF-27	9/20/2020	Lead, Total	ND	0.0025	0.00017	15000	mg/L
MKTF-27	9/20/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-27	9/20/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-27	9/20/2020	Uranium, Total	0.03	0.0025	0.00033	30000	mg/L
MKTF-27	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-27	9/20/2020	Barium, Total	0.046	0.003	0.0016	2000000	mg/L
MKTF-27	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-27	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-27	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-27	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-27	9/20/2020	Iron, Total	0.21	0.05	0.013	13822000	mg/L
MKTF-27	9/20/2020	Manganese, Total	0.45	0.002	0.00081	2017000	mg/L
MKTF-27	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-27	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-27	9/20/2020	Nickel, Total	0.03	0.01	0.0033	372000	mg/L
MKTF-27	9/20/2020	Silver, Total	0.0045	0.005	0.0013	50000	mg/L
MKTF-27	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-27	9/20/2020	Aluminum, Total	0.18	0.02	0.0074	19914000	mg/L
MKTF-27	9/20/2020	Boron, Total	0.62	0.04	0.0074	3949	mg/L
MKTF-27	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-27	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-27	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-27	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-27	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-27	9/20/2020	Uranium, Dissolved	0.037	0.0025	0.00033	NA	mg/L
MKTF-27	9/20/2020	Calcium, Dissolved	270	5	0.57	NA	mg/L
MKTF-27	9/20/2020	Nickel, Dissolved	0.039	0.05	0.016	372000	mg/L
MKTF-27	9/20/2020	Silver, Dissolved	0.0073	0.025	0.0063	81200	mg/L
MKTF-27	9/20/2020	Sodium, Dissolved	2100	50	6.9	NA	mg/L
MKTF-27	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-27	9/20/2020	Barium, Dissolved	0.048	0.002	0.0011	2000000	mg/L
MKTF-27	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-27	9/20/2020	Boron, Dissolved	0.57	0.04	0.0067	3949110	mg/L
MKTF-27	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-27	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-27	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-27	9/20/2020	Copper, Dissolved	0.0054	0.006	0.0035	790000	mg/L
MKTF-27	9/20/2020	Iron, Dissolved	0.015	0.02	0.01	13821880	mg/L
MKTF-27	9/20/2020	Magnesium, Dissolved	48	1	0.067	NA	mg/L
MKTF-27	9/20/2020	Manganese, Dissolved	0.23	0.002	0.00058	2017400	mg/L
MKTF-27	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-27	9/20/2020	Potassium, Dissolved	11	1	0.16	NA	mg/L
MKTF-27	9/20/2020	Zinc, Dissolved	0.022	0.01	0.006	5960450	mg/L
MKTF-27	12/18/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
MKTF-27	12/18/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
MKTF-27	12/18/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
MKTF-27	12/18/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
MKTF-27	12/18/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
MKTF-27	12/18/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
MKTF-27	12/18/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
MKTF-27	12/18/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
MKTF-27	12/18/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
MKTF-27	12/18/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
MKTF-27	12/18/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
MKTF-27	12/18/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
MKTF-27	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-27	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-27	12/18/2020	Aluminum, Total	0.93	0.2	0.051	19914000	mg/L
MKTF-27	12/18/2020	Calcium, Total	248	0.5	0.084	NA	mg/L
MKTF-27	12/18/2020	Boron, Total	0.531	0.1	0.022	3949	mg/L
MKTF-27	12/18/2020	Barium, Total	0.0602	0.01	0.003	2000000	mg/L
MKTF-27	12/18/2020	Potassium, Total	14.7	1	0.34	NA	mg/L
MKTF-27	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-27	12/18/2020	Magnesium, Total	46.7	0.5	0.12	NA	mg/L
MKTF-27	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-27	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-27	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-27	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-27	12/18/2020	Iron, Total	0.779	0.2	0.075	13822000	mg/L
MKTF-27	12/18/2020	Manganese, Total	0.295	0.01	0.003	2017000	mg/L
MKTF-27	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-27	12/18/2020	Nickel, Total	0.0344	0.006	0.003	372000	mg/L
MKTF-27	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-27	12/18/2020	Aluminum, Dissolved	0.296	0.2	0.051	19913930	mg/L
MKTF-27	12/18/2020	Barium, Dissolved	0.0448	0.01	0.003	2000000	mg/L
MKTF-27	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-27	12/18/2020	Boron, Dissolved	0.54	0.1	0.022	3949110	mg/L
MKTF-27	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-27	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-27	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-27	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-27	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-27	12/18/2020	Manganese, Dissolved	0.254	0.01	0.003	2017400	mg/L
MKTF-27	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-27	12/18/2020	Nickel, Dissolved	0.0335	0.006	0.003	372000	mg/L
MKTF-27	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-27	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-27	12/18/2020	Sodium, Total	1810	10	4.6	NA	mg/L
MKTF-28	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-28	12/18/2020	Aluminum, Total	1.07	0.2	0.051	19914000	mg/L
MKTF-28	12/18/2020	Calcium, Total	59.9	0.5	0.084	NA	mg/L
MKTF-28	12/18/2020	Boron, Total	1.62	0.1	0.022	3949	mg/L
MKTF-28	12/18/2020	Barium, Total	0.0854	0.01	0.003	2000000	mg/L
MKTF-28	12/18/2020	Potassium, Total	2.93	1	0.34	NA	mg/L
MKTF-28	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-28	12/18/2020	Magnesium, Total	13.3	0.5	0.12	NA	mg/L
MKTF-28	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-28	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-28	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-28	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-28	12/18/2020	Iron, Total	0.952	0.2	0.075	13822000	mg/L
MKTF-28	12/18/2020	Manganese, Total	0.059	0.01	0.003	2017000	mg/L
MKTF-28	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-28	12/18/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-28	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-28	12/18/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-28	12/18/2020	Barium, Dissolved	0.0729	0.01	0.003	2000000	mg/L
MKTF-28	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-28	12/18/2020	Boron, Dissolved	1.7	0.1	0.022	3949110	mg/L
MKTF-28	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-28	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-28	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-28	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-28	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-28	12/18/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-28	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-28	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-28	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-28	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-28	12/18/2020	Sodium, Total	568	10	4.6	NA	mg/L
MKTF-28	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-28	12/18/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-28	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-28	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-28	12/18/2020	Uranium, Total Recoverable	**125**	5	1.12	30	ug/L
MKTF-28	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-28	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-28	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-28	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-28	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-28	12/18/2020	Uranium, Dissolved	119	5	1.12	NA	ug/L
MKTF-28	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-28	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-28	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-28	9/20/2020	Arsenic, Total	0.0013	0.001	0.00026	10000	mg/L
MKTF-28	9/20/2020	Lead, Total	0.00056	0.0005	0.000034	15000	mg/L
MKTF-28	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-28	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-28	9/20/2020	Uranium, Total	0.11	0.005	0.00065	30000	mg/L
MKTF-28	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-28	9/20/2020	Barium, Total	0.066	0.003	0.0016	2000000	mg/L
MKTF-28	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-28	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-28	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-28	9/20/2020	Iron, Total	0.51	0.05	0.013	13822000	mg/L
MKTF-28	9/20/2020	Manganese, Total	0.088	0.002	0.00081	2017000	mg/L
MKTF-28	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-28	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-28	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-28	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-28	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-28	9/20/2020	Aluminum, Total	0.91	0.02	0.0074	19914000	mg/L
MKTF-28	9/20/2020	Boron, Total	2	0.2	0.037	3949	mg/L
MKTF-28	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-28	9/20/2020	Arsenic, Dissolved	0.00097	0.001	0.00021	10000	mg/L
MKTF-28	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MKTF-28	9/20/2020	Selenium, Dissolved	0.00083	0.001	0.00066	50000	mg/L
MKTF-28	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-28	9/20/2020	Uranium, Dissolved	0.15	0.005	0.00065	NA	mg/L
MKTF-28	9/20/2020	Boron, Dissolved	1.9	0.2	0.033	3949110	mg/L
MKTF-28	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-28	9/20/2020	Sodium, Dissolved	650	50	6.9	NA	mg/L
MKTF-28	9/20/2020	Aluminum, Dissolved	0.02	0.02	0.0056	19913930	mg/L
MKTF-28	9/20/2020	Barium, Dissolved	0.074	0.002	0.0011	2000000	mg/L
MKTF-28	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-28	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-28	9/20/2020	Calcium, Dissolved	58	1	0.11	NA	mg/L
MKTF-28	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-28	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-28	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-28	9/20/2020	Iron, Dissolved	0.012	0.02	0.01	13821880	mg/L
MKTF-28	9/20/2020	Magnesium, Dissolved	12	1	0.067	NA	mg/L
MKTF-28	9/20/2020	Manganese, Dissolved	0.015	0.002	0.00058	2017400	mg/L
MKTF-28	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-28	9/20/2020	Nickel, Dissolved	0.0039	0.01	0.0033	372000	mg/L
MKTF-28	9/20/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
MKTF-28	9/20/2020	Zinc, Dissolved	0.014	0.01	0.006	5960450	mg/L
MKTF-28	2/25/2020	Antimony, Dissolved	0.00046	0.001	0.00039	6000	mg/L
MKTF-28	2/25/2020	Arsenic, Dissolved	0.001	0.001	0.0001	10000	mg/L
MKTF-28	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	2/25/2020	Selenium, Dissolved	0.00046	0.001	0.00017	50000	mg/L
MKTF-28	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	2/25/2020	Uranium, Dissolved	0.13	0.005	0.00075	NA	mg/L
MKTF-28	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-28	2/25/2020	Barium, Dissolved	0.051	0.002	0.00065	2000000	mg/L
MKTF-28	2/25/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-28	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-28	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-28	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-28	2/25/2020	Copper, Dissolved	0.0013	0.006	0.0013	790000	mg/L
MKTF-28	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	2/25/2020	Magnesium, Dissolved	11	1	0.05	NA	mg/L
MKTF-28	2/25/2020	Manganese, Dissolved	0.00042	0.002	0.00029	2017400	mg/L
MKTF-28	2/25/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-28	2/25/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
MKTF-28	2/25/2020	Zinc, Dissolved	0.054	0.01	0.0023	5960450	mg/L
MKTF-28	2/25/2020	Boron, Dissolved	1.4	0.2	0.023	3949110	mg/L
MKTF-28	2/25/2020	Calcium, Dissolved	54	1	0.062	NA	mg/L
MKTF-28	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-28	2/25/2020	Silver, Dissolved	0.0011	0.005	0.00094	81200	mg/L
MKTF-28	2/25/2020	Sodium, Dissolved	540	10	4.2	NA	mg/L
MKTF-28	2/25/2020	Uranium, Total	0.12	0.005	0.00085	30000	mg/L
MKTF-28	2/25/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-28	2/25/2020	Arsenic, Total	0.0015	0.001	0.00031	10000	mg/L
MKTF-28	2/25/2020	Lead, Total	0.0022	0.0005	0.000055	15000	mg/L
MKTF-28	2/25/2020	Selenium, Total	0.001	0.001	0.00048	50000	mg/L
MKTF-28	2/25/2020	Thallium, Total	0.000092	0.0005	0.000052	2000	mg/L
MKTF-28	2/25/2020	Barium, Total	0.089	0.002	0.00065	2000000	mg/L
MKTF-28	2/25/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-28	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-28	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-28	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-28	2/25/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	2/25/2020	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-28	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-28	2/25/2020	Nickel, Total	0.005	0.01	0.004	372000	mg/L
MKTF-28	2/25/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-28	2/25/2020	Zinc, Total	0.007	0.01	0.0058	5960000	mg/L
MKTF-28	2/25/2020	Aluminum, Total	2.6	0.1	0.012	19914000	mg/L
MKTF-28	2/25/2020	Boron, Total	1.5	0.2	0.023	3949	mg/L
MKTF-28	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-28	2/25/2020	Iron, Total	2	0.1	0.044	13822000	mg/L
MKTF-28	3/28/2019	Aluminum, Dissolved	0.03	0.02	0.002488	19913930	mg/L
MKTF-28	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-28	3/28/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-28	3/28/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-28	3/28/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-28	3/28/2019	Boron, Dissolved	1.4	0.2	0.022653	3949110	mg/L
MKTF-28	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	3/28/2019	Calcium, Dissolved	44	1	0.061889	NA	mg/L
MKTF-28	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	3/28/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L
MKTF-28	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	3/28/2019	Magnesium, Dissolved	8.7	1	0.05029	NA	mg/L
MKTF-28	3/28/2019	Manganese, Dissolved	0.0036	0.002	0.00029	2017400	mg/L
MKTF-28	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	3/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	3/28/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-28	3/28/2019	Selenium, Dissolved	0.00044	0.001	0.000171	50000	mg/L
MKTF-28	3/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-28	3/28/2019	Sodium, Dissolved	520	10	4.161763	NA	mg/L
MKTF-28	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	3/28/2019	Uranium, Dissolved	0.13	0.005	0.000747	NA	mg/L
MKTF-28	3/28/2019	Zinc, Dissolved	0.052	0.01	0.002252	5960450	mg/L
MKTF-28	3/28/2019	Aluminum, Total	1.9	0.1	0.022822	19914000	mg/L
MKTF-28	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	3/28/2019	Arsenic, Total	0.0014	0.001	0.000312	10000	mg/L
MKTF-28	3/28/2019	Barium, Total	0.071	0.002	0.000648	2000000	mg/L
MKTF-28	3/28/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
MKTF-28	3/28/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
MKTF-28	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-28	3/28/2019	Iron, Total	1.4	0.1	0.043734	13822000	mg/L
MKTF-28	3/28/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-28	3/28/2019	Manganese, Total	0.094	0.002	0.00029	2017000	mg/L
MKTF-28	3/28/2019	Mercury, Total	0.000086	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	3/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-28	3/28/2019	Selenium, Total	0.00064	0.001	0.000478	50000	mg/L
MKTF-28	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	3/28/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
MKTF-28	3/28/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-28	5/6/2019	Aluminum, Dissolved	0.049	0.02	0.002488	19913930	mg/L
MKTF-28	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	5/6/2019	Arsenic, Dissolved	0.0013	0.005	0.000504	10000	mg/L
MKTF-28	5/6/2019	Barium, Dissolved	0.043	0.002	0.000648	2000000	mg/L
MKTF-28	5/6/2019	Beryllium, Dissolved	0.00062	0.002	0.000284	4000	mg/L
MKTF-28	5/6/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
MKTF-28	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	5/6/2019	Calcium, Dissolved	43	1	0.061889	NA	mg/L
MKTF-28	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	5/6/2019	Iron, Dissolved	0.029	0.02	0.008747	13821880	mg/L
MKTF-28	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	5/6/2019	Magnesium, Dissolved	8.4	1	0.05029	NA	mg/L
MKTF-28	5/6/2019	Manganese, Dissolved	0.004	0.002	0.00029	2017400	mg/L
MKTF-28	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	5/6/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	5/6/2019	Potassium, Dissolved	1.7	1	0.162288	NA	mg/L
MKTF-28	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	5/6/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-28	5/6/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-28	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	5/6/2019	Uranium, Dissolved	0.14	0.005	0.000747	NA	mg/L
MKTF-28	5/6/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
MKTF-28	5/6/2019	Aluminum, Total	4.7	0.2	0.024883	19914000	mg/L
MKTF-28	5/6/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
MKTF-28	5/6/2019	Arsenic, Total	ND	0.01	0.003122	10000	mg/L
MKTF-28	5/6/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-28	5/6/2019	Beryllium, Total	0.00096	0.002	0.000284	4000	mg/L
MKTF-28	5/6/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
MKTF-28	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	5/6/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-28	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	5/6/2019	Copper, Total	0.006	0.006	0.004072	790000	mg/L
MKTF-28	5/6/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-28	5/6/2019	Lead, Total	0.0043	0.0005	0.000055	15000	mg/L
MKTF-28	5/6/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
MKTF-28	5/6/2019	Mercury, Total	0.000049	0.0002	0.000038	2000	mg/L
MKTF-28	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	5/6/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-28	5/6/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
MKTF-28	5/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	5/6/2019	Thallium, Total	0.000074	0.0005	0.000052	2000	mg/L
MKTF-28	5/6/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
MKTF-28	5/6/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-28	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-28	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-28	8/21/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MKTF-28	8/21/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-28	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-28	8/21/2019	Boron, Dissolved	1.9	0.2	0.022653	3949110	mg/L
MKTF-28	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	8/21/2019	Calcium, Dissolved	43	1	0.061889	NA	mg/L
MKTF-28	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	8/21/2019	Copper, Dissolved	0.0045	0.006	0.001296	790000	mg/L
MKTF-28	8/21/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-28	8/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-28	8/21/2019	Magnesium, Dissolved	8.1	1	0.05029	NA	mg/L
MKTF-28	8/21/2019	Manganese, Dissolved	0.023	0.002	0.00029	2017400	mg/L
MKTF-28	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	8/21/2019	Nickel, Dissolved	0.0066	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Potassium, Dissolved	1.8	1	0.162288	NA	mg/L
MKTF-28	8/21/2019	Selenium, Dissolved	0.001	0.001	0.000171	50000	mg/L
MKTF-28	8/21/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
MKTF-28	8/21/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
MKTF-28	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-28	8/21/2019	Uranium, Dissolved	0.12	0.005	0.000747	NA	mg/L
MKTF-28	8/21/2019	Zinc, Dissolved	0.0051	0.01	0.002252	5960450	mg/L
MKTF-28	8/21/2019	Aluminum, Total	1.2	0.1	0.012441	19914000	mg/L
MKTF-28	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	8/21/2019	Arsenic, Total	0.0014	0.001	0.000312	10000	mg/L
MKTF-28	8/21/2019	Barium, Total	0.065	0.002	0.000648	2000000	mg/L
MKTF-28	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-28	8/21/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-28	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	8/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-28	8/21/2019	Iron, Total	0.79	0.02	0.008747	13822000	mg/L
MKTF-28	8/21/2019	Lead, Total	0.00099	0.0005	0.000055	15000	mg/L
MKTF-28	8/21/2019	Manganese, Total	0.074	0.002	0.00029	2017000	mg/L
MKTF-28	8/21/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-28	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	8/21/2019	Nickel, Total	0.0046	0.01	0.004009	372000	mg/L
MKTF-28	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
MKTF-28	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	8/21/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
MKTF-28	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-28	10/22/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-28	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Dissolved	0.0013	0.005	0.000504	10000	mg/L
MKTF-28	10/22/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Dissolved	0.00054	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Dissolved	1.8	0.2	0.022653	3949110	mg/L
MKTF-28	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/22/2019	Calcium, Dissolved	44	1	0.061889	NA	mg/L
MKTF-28	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/22/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-28	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	10/22/2019	Magnesium, Dissolved	8.9	1	0.05029	NA	mg/L
MKTF-28	10/22/2019	Manganese, Dissolved	0.037	0.002	0.00029	2017400	mg/L
MKTF-28	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-28	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	10/22/2019	Silver, Dissolved	0.0013	0.005	0.000942	81200	mg/L
MKTF-28	10/22/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-28	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/22/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-28	10/22/2019	Aluminum, Total	2.3	0.1	0.012441	19914000	mg/L
MKTF-28	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-28	10/22/2019	Barium, Total	0.081	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Total	0.00033	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Total	2	0.2	0.022653	3949	mg/L
MKTF-28	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-28	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Total	0.0041	0.006	0.004072	790000	mg/L
MKTF-28	10/22/2019	Iron, Total	1.6	0.1	0.043734	13822000	mg/L
MKTF-28	10/22/2019	Lead, Total	0.0019	0.0005	0.000055	15000	mg/L
MKTF-28	10/22/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-28	10/22/2019	Mercury, Total	0.00005	0.0002	0.000038	2000	mg/L
MKTF-28	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Total	0.0045	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-28	10/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-28	10/22/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-28	10/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-28	10/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/21/2019	Arsenic, Dissolved	0.01	0.005	0.000504	10000	mg/L
MKTF-28	10/21/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
MKTF-28	10/21/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-28	10/21/2019	Boron, Dissolved	1.5	0.2	0.022653	3949110	mg/L
MKTF-28	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/21/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-28	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/21/2019	Iron, Dissolved	1.2	0.1	0.043734	13821880	mg/L
MKTF-28	10/21/2019	Lead, Dissolved	0.00051	0.0025	0.000274	NA	mg/L
MKTF-28	10/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-28	10/21/2019	Manganese, Dissolved	1.3	0.01	0.00145	2017400	mg/L
MKTF-28	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/21/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
MKTF-28	10/21/2019	Potassium, Dissolved	4	1	0.162288	NA	mg/L
MKTF-28	10/21/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-28	10/21/2019	Silver, Dissolved	0.0034	0.005	0.000942	81200	mg/L
MKTF-28	10/21/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
MKTF-28	10/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/21/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-28	10/21/2019	Aluminum, Total	7.8	0.2	0.024883	19914000	mg/L
MKTF-28	10/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/21/2019	Arsenic, Total	0.013	0.005	0.001561	10000	mg/L
MKTF-28	10/21/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
MKTF-28	10/21/2019	Beryllium, Total	0.00066	0.002	0.000284	4000	mg/L
MKTF-28	10/21/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
MKTF-28	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/21/2019	Chromium, Total	0.0059	0.006	0.001533	50000	mg/L
MKTF-28	10/21/2019	Cobalt, Total	0.0065	0.006	0.003091	5980	mg/L
MKTF-28	10/21/2019	Copper, Total	0.015	0.006	0.004072	790000	mg/L
MKTF-28	10/21/2019	Iron, Total	5.5	0.2	0.087469	13822000	mg/L
MKTF-28	10/21/2019	Lead, Total	0.0076	0.0025	0.000274	15000	mg/L
MKTF-28	10/21/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
MKTF-28	10/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	10/21/2019	Molybdenum, Total	0.0077	0.008	0.006735	98700	mg/L
MKTF-28	10/21/2019	Nickel, Total	0.19	0.01	0.004009	372000	mg/L
MKTF-28	10/21/2019	Selenium, Total	0.0033	0.005	0.00239	50000	mg/L
MKTF-28	10/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-28	10/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-28	10/21/2019	Zinc, Total	0.031	0.01	0.005772	5960000	mg/L
MKTF-28	10/22/2019	Aluminum, Dissolved	0.068	0.02	0.002488	19913930	mg/L
MKTF-28	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
MKTF-28	10/22/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Dissolved	0.00062	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Dissolved	2	0.2	0.022653	3949110	mg/L
MKTF-28	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-28	10/22/2019	Calcium, Dissolved	50	1	0.061889	NA	mg/L
MKTF-28	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-28	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-28	10/22/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
MKTF-28	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-28	10/22/2019	Magnesium, Dissolved	9.7	1	0.05029	NA	mg/L
MKTF-28	10/22/2019	Manganese, Dissolved	0.078	0.002	0.00029	2017400	mg/L
MKTF-28	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Potassium, Dissolved	1.9	1	0.162288	NA	mg/L
MKTF-28	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-28	10/22/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-28	10/22/2019	Sodium, Dissolved	660	10	4.161763	NA	mg/L
MKTF-28	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-28	10/22/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
MKTF-28	10/22/2019	Aluminum, Total	9	0.2	0.024883	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-28	10/22/2019	Arsenic, Total	0.0041	0.005	0.001561	10000	mg/L
MKTF-28	10/22/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
MKTF-28	10/22/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
MKTF-28	10/22/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
MKTF-28	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-28	10/22/2019	Chromium, Total	0.0038	0.006	0.001533	50000	mg/L
MKTF-28	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-28	10/22/2019	Copper, Total	0.0066	0.006	0.004072	790000	mg/L
MKTF-28	10/22/2019	Iron, Total	7.4	0.2	0.087469	13822000	mg/L
MKTF-28	10/22/2019	Lead, Total	0.0074	0.0005	0.000055	15000	mg/L
MKTF-28	10/22/2019	Manganese, Total	0.44	0.002	0.00029	2017000	mg/L
MKTF-28	10/22/2019	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
MKTF-28	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-28	10/22/2019	Nickel, Total	0.0069	0.01	0.004009	372000	mg/L
MKTF-28	10/22/2019	Selenium, Total	0.003	0.005	0.00239	50000	mg/L
MKTF-28	10/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-28	10/22/2019	Thallium, Total	0.00017	0.0005	0.000052	2000	mg/L
MKTF-28	10/22/2019	Zinc, Total	0.034	0.01	0.005772	5960000	mg/L
MKTF-28	11/14/2014	Silver, Total	ND	0.005	0.000017	50000	mg/L
MKTF-28	11/14/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
MKTF-28	11/14/2014	Barium, Total	0.099	0.002	0.00021	2000000	mg/L
MKTF-28	11/14/2014	Calcium, Total	50	1	0.082	NA	mg/L
MKTF-28	11/14/2014	Cadmium, Total	ND	0.002	0.000051	5000	mg/L
MKTF-28	11/14/2014	Chromium, Total	ND	0.006	0.00026	50000	mg/L
MKTF-28	11/14/2014	Copper, Total	ND	0.006	0.00014	790000	mg/L
MKTF-28	11/14/2014	Iron, Total	0.63	0.02	0.0062	13822000	mg/L
MKTF-28	11/14/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-28	11/14/2014	Potassium, Total	3.2	1	0.093	NA	mg/L
MKTF-28	11/14/2014	Magnesium, Total	9.2	1	0.018	NA	mg/L
MKTF-28	11/14/2014	Manganese, Total	0.32	0.002	0.00055	2017000	mg/L
MKTF-28	11/14/2014	Sodium, Total	640	10	3.9	NA	mg/L
MKTF-28	11/14/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
MKTF-28	11/14/2014	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-28	11/14/2014	Uranium, Total	0.12	0.005	0.00025	30000	mg/L
MKTF-28	11/14/2014	Zinc, Total	0.038	0.01	0.0014	5960000	mg/L
MKTF-28	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-28	3/11/2015	Barium, Total	0.09	0.002	0.00095	2000000	mg/L
MKTF-28	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-28	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-28	3/11/2015	Iron, Total	0.075	0.02	0.0073	13822000	mg/L
MKTF-28	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	3/11/2015	Manganese, Total	0.0057	0.002	0.00027	2017000	mg/L
MKTF-28	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-28	3/11/2015	Selenium, Total	ND	0.05	0.0074	50000	mg/L
MKTF-28	3/11/2015	Uranium, Total	0.17	0.01	0.0005	30000	mg/L
MKTF-28	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-28	6/9/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	6/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-28	6/9/2015	Barium, Total	0.087	0.002	0.00095	2000000	mg/L
MKTF-28	6/9/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-28	6/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	6/9/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-28	6/9/2015	Iron, Total	0.062	0.02	0.0073	13822000	mg/L
MKTF-28	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	6/9/2015	Manganese, Total	0.0054	0.002	0.00027	2017000	mg/L
MKTF-28	6/9/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-28	6/9/2015	Selenium, Total	0.012	0.005	0.00097	50000	mg/L
MKTF-28	6/9/2015	Uranium, Total	0.16	0.01	0.000048	30000	mg/L
MKTF-28	6/9/2015	Zinc, Total	0.031	0.01	0.0028	5960000	mg/L
MKTF-28	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	8/20/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-28	8/20/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-28	8/20/2015	Calcium, Total	48	1	0.057	NA	mg/L
MKTF-28	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	8/20/2015	Copper, Total	0.0077	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/20/2015	Iron, Total	4.8	0.2	0.072	13822000	mg/L
MKTF-28	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-28	8/20/2015	Potassium, Total	3.2	1	0.18	NA	mg/L
MKTF-28	8/20/2015	Magnesium, Total	9.2	1	0.039	NA	mg/L
MKTF-28	8/20/2015	Manganese, Total	0.2	0.002	0.0015	2017000	mg/L
MKTF-28	8/20/2015	Sodium, Total	620	10	0.72	NA	mg/L
MKTF-28	8/20/2015	Lead, Total	0.005	0.0005	0.000047	15000	mg/L
MKTF-28	8/20/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-28	8/20/2015	Uranium, Total	0.17	0.005	0.000049	30000	mg/L
MKTF-28	8/20/2015	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-28	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	11/4/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-28	11/4/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-28	11/4/2015	Calcium, Total	51	1	0.26	NA	mg/L
MKTF-28	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-28	11/4/2015	Iron, Total	7.4	0.2	0.072	13822000	mg/L
MKTF-28	11/4/2015	Mercury, Total	ND	0.001	0.00029	2000	mg/L
MKTF-28	11/4/2015	Potassium, Total	3	1	0.18	NA	mg/L
MKTF-28	11/4/2015	Magnesium, Total	9.5	1	0.013	NA	mg/L
MKTF-28	11/4/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
MKTF-28	11/4/2015	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-28	11/4/2015	Lead, Total	0.0072	0.0005	0.000047	15000	mg/L
MKTF-28	11/4/2015	Selenium, Total	0.02	0.005	0.00062	50000	mg/L
MKTF-28	11/4/2015	Uranium, Total	0.14	0.005	0.000049	30000	mg/L
MKTF-28	11/4/2015	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
MKTF-28	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-28	2/23/2016	Arsenic, Total	0.0032	0.001	0.00029	10000	mg/L
MKTF-28	2/23/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-28	2/23/2016	Calcium, Total	49	1	0.26	NA	mg/L
MKTF-28	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-28	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-28	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-28	2/23/2016	Iron, Total	3.7	0.1	0.036	13822000	mg/L
MKTF-28	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	2/23/2016	Potassium, Total	2.2	1	0.18	NA	mg/L
MKTF-28	2/23/2016	Magnesium, Total	9.8	1	0.013	NA	mg/L
MKTF-28	2/23/2016	Manganese, Total	0.18	0.002	0.0015	2017000	mg/L
MKTF-28	2/23/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-28	2/23/2016	Lead, Total	0.0047	0.0005	0.000047	15000	mg/L
MKTF-28	2/23/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-28	2/23/2016	Uranium, Total	0.16	0.005	0.000049	30000	mg/L
MKTF-28	2/23/2016	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-28	6/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-28	6/8/2016	Arsenic, Total	0.0054	0.01	0.0014	10000	mg/L
MKTF-28	6/8/2016	Barium, Total	0.074	0.002	0.0013	2000000	mg/L
MKTF-28	6/8/2016	Calcium, Total	51	1	0.26	NA	mg/L
MKTF-28	6/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-28	6/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	6/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-28	6/8/2016	Iron, Total	0.14	0.02	0.0091	13822000	mg/L
MKTF-28	6/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	6/8/2016	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-28	6/8/2016	Magnesium, Total	9.9	1	0.013	NA	mg/L
MKTF-28	6/8/2016	Manganese, Total	0.022	0.002	0.00032	2017000	mg/L
MKTF-28	6/8/2016	Sodium, Total	620	10	0.96	NA	mg/L
MKTF-28	6/8/2016	Lead, Total	0.00076	0.0005	0.00017	15000	mg/L
MKTF-28	6/8/2016	Selenium, Total	0.015	0.01	0.0021	50000	mg/L
MKTF-28	6/8/2016	Uranium, Total	0.15	0.005	0.00051	30000	mg/L
MKTF-28	6/8/2016	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-28	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	9/8/2016	Arsenic, Total	0.0056	0.01	0.0021	10000	mg/L
MKTF-28	9/8/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-28	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	9/8/2016	Chromium, Total	0.0067	0.006	0.0027	50000	mg/L
MKTF-28	9/8/2016	Copper, Total	0.0094	0.006	0.003	790000	mg/L
MKTF-28	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-28	9/8/2016	Arsenic, Dissolved	0.0039	0.01	0.0014	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	9/8/2016	Barium, Dissolved	0.061	0.002	0.0013	2000000	mg/L
MKTF-28	9/8/2016	Calcium, Dissolved	46	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-28	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-28	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-28	9/8/2016	Iron, Dissolved	0.12	0.02	0.02	13821880	mg/L
MKTF-28	9/8/2016	Potassium, Dissolved	2.7	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Magnesium, Dissolved	8.9	1	0.5	NA	mg/L
MKTF-28	9/8/2016	Manganese, Dissolved	0.031	0.002	0.00032	2017400	mg/L
MKTF-28	9/8/2016	Sodium, Dissolved	620	20	10	NA	mg/L
MKTF-28	9/8/2016	Lead, Dissolved	0.00087	0.0005	0.00017	NA	mg/L
MKTF-28	9/8/2016	Selenium, Dissolved	0.012	0.05	0.011	50000	mg/L
MKTF-28	9/8/2016	Uranium, Dissolved	0.14	0.005	0.00051	NA	mg/L
MKTF-28	9/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-28	9/8/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-28	9/8/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
MKTF-28	9/8/2016	Manganese, Total	0.44	0.002	0.00027	2017000	mg/L
MKTF-28	9/8/2016	Lead, Total	0.014	0.0005	0.000081	15000	mg/L
MKTF-28	9/8/2016	Selenium, Total	0.013	0.05	0.0094	50000	mg/L
MKTF-28	9/8/2016	Uranium, Total	0.14	0.005	0.0017	30000	mg/L
MKTF-28	9/8/2016	Zinc, Total	0.049	0.01	0.0027	5960000	mg/L
MKTF-28	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	10/28/2016	Arsenic, Total	0.0044	0.02	0.0042	10000	mg/L
MKTF-28	10/28/2016	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-28	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-28	10/28/2016	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-28	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-28	10/28/2016	Arsenic, Dissolved	0.0047	0.005	0.00069	10000	mg/L
MKTF-28	10/28/2016	Barium, Dissolved	0.061	0.002	0.0013	2000000	mg/L
MKTF-28	10/28/2016	Calcium, Dissolved	39	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-28	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-28	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-28	10/28/2016	Iron, Dissolved	0.049	0.02	0.02	13821880	mg/L
MKTF-28	10/28/2016	Potassium, Dissolved	2.5	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Magnesium, Dissolved	7.3	1	0.5	NA	mg/L
MKTF-28	10/28/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
MKTF-28	10/28/2016	Sodium, Dissolved	570	10	5	NA	mg/L
MKTF-28	10/28/2016	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
MKTF-28	10/28/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
MKTF-28	10/28/2016	Uranium, Dissolved	0.16	0.005	0.00051	NA	mg/L
MKTF-28	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-28	10/28/2016	Iron, Total	3.3	0.1	0.1	13822000	mg/L
MKTF-28	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-28	10/28/2016	Manganese, Total	0.18	0.002	0.00027	2017000	mg/L
MKTF-28	10/28/2016	Lead, Total	0.0056	0.0005	0.000081	15000	mg/L
MKTF-28	10/28/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-28	10/28/2016	Uranium, Total	0.15	0.01	0.0035	30000	mg/L
MKTF-28	10/28/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
MKTF-28	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-28	3/29/2017	Arsenic, Total	0.0089	0.005	0.0011	10000	mg/L
MKTF-28	3/29/2017	Barium, Total	0.36	0.002	0.00079	2000000	mg/L
MKTF-28	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-28	3/29/2017	Chromium, Total	0.0093	0.006	0.0027	50000	mg/L
MKTF-28	3/29/2017	Copper, Total	0.013	0.006	0.003	790000	mg/L
MKTF-28	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-28	3/29/2017	Arsenic, Dissolved	0.0029	0.005	0.00089	10000	mg/L
MKTF-28	3/29/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-28	3/29/2017	Calcium, Dissolved	43	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-28	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	3/29/2017	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-28	3/29/2017	Potassium, Dissolved	1.9	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Magnesium, Dissolved	8.5	1	0.5	NA	mg/L
MKTF-28	3/29/2017	Manganese, Dissolved	0.011	0.002	0.00038	2017400	mg/L
MKTF-28	3/29/2017	Sodium, Dissolved	550	10	5	NA	mg/L
MKTF-28	3/29/2017	Lead, Dissolved	0.00042	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	3/29/2017	Selenium, Dissolved	0.0081	0.01	0.0039	50000	mg/L
MKTF-28	3/29/2017	Uranium, Dissolved	0.16	0.005	0.0005	NA	mg/L
MKTF-28	3/29/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
MKTF-28	3/29/2017	Iron, Total	21	1	1	13822000	mg/L
MKTF-28	3/29/2017	Mercury, Total	0.000088	0.0002	0.000037	2000	mg/L
MKTF-28	3/29/2017	Manganese, Total	0.89	0.002	0.00027	2017000	mg/L
MKTF-28	3/29/2017	Lead, Total	0.025	0.0025	0.00041	15000	mg/L
MKTF-28	3/29/2017	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-28	3/29/2017	Uranium, Total	0.16	0.005	0.0017	30000	mg/L
MKTF-28	3/29/2017	Zinc, Total	0.079	0.01	0.0027	5960000	mg/L
MKTF-28	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-28	6/5/2017	Arsenic, Total	0.0048	0.01	0.003	10000	mg/L
MKTF-28	6/5/2017	Barium, Total	0.076	0.002	0.00093	2000000	mg/L
MKTF-28	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	6/5/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-28	6/5/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
MKTF-28	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-28	6/5/2017	Arsenic, Dissolved	0.004	0.005	0.00089	10000	mg/L
MKTF-28	6/5/2017	Barium, Dissolved	0.046	0.002	0.00085	2000000	mg/L
MKTF-28	6/5/2017	Calcium, Dissolved	43	1	0.078	NA	mg/L
MKTF-28	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-28	6/5/2017	Copper, Dissolved	0.01	0.006	0.0032	790000	mg/L
MKTF-28	6/5/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
MKTF-28	6/5/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	6/5/2017	Magnesium, Dissolved	8.9	1	0.25	NA	mg/L
MKTF-28	6/5/2017	Manganese, Dissolved	0.0023	0.002	0.00038	2017400	mg/L
MKTF-28	6/5/2017	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-28	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	6/5/2017	Selenium, Dissolved	0.0086	0.02	0.0077	50000	mg/L
MKTF-28	6/5/2017	Uranium, Dissolved	0.13	0.01	0.001	NA	mg/L
MKTF-28	6/5/2017	Zinc, Dissolved	0.019	0.01	0.0011	5960450	mg/L
MKTF-28	6/5/2017	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-28	6/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	6/5/2017	Manganese, Total	0.078	0.002	0.0011	2017000	mg/L
MKTF-28	6/5/2017	Lead, Total	0.0016	0.0005	0.000095	15000	mg/L
MKTF-28	6/5/2017	Selenium, Total	0.012	0.01	0.0071	50000	mg/L
MKTF-28	6/5/2017	Uranium, Total	0.16	0.005	0.0015	30000	mg/L
MKTF-28	6/5/2017	Zinc, Total	0.0057	0.01	0.0028	5960000	mg/L
MKTF-28	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	10/3/2017	Arsenic, Total	0.0051	0.005	0.0015	10000	mg/L
MKTF-28	10/3/2017	Barium, Total	0.07	0.002	0.00093	2000000	mg/L
MKTF-28	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	10/3/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	10/3/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-28	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	10/3/2017	Arsenic, Dissolved	0.0042	0.005	0.00089	10000	mg/L
MKTF-28	10/3/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-28	10/3/2017	Calcium, Dissolved	36	1	0.078	NA	mg/L
MKTF-28	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	10/3/2017	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
MKTF-28	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	10/3/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-28	10/3/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	10/3/2017	Magnesium, Dissolved	7	1	0.25	NA	mg/L
MKTF-28	10/3/2017	Manganese, Dissolved	0.0017	0.002	0.00039	2017400	mg/L
MKTF-28	10/3/2017	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-28	10/3/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	10/3/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
MKTF-28	10/3/2017	Zinc, Dissolved	0.049	0.01	0.0021	5960450	mg/L
MKTF-28	10/3/2017	Iron, Total	1.4	0.2	0.1	13822000	mg/L
MKTF-28	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	10/3/2017	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-28	10/3/2017	Lead, Total	0.0015	0.0005	0.000095	15000	mg/L
MKTF-28	10/3/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-28	10/3/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
MKTF-28	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	11/20/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-28	11/20/2017	Barium, Total	0.087	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	11/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	11/20/2017	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
MKTF-28	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	11/20/2017	Arsenic, Dissolved	ND	0.01	0.0042	10000	mg/L
MKTF-28	11/20/2017	Barium, Dissolved	0.054	0.002	0.00099	2000000	mg/L
MKTF-28	11/20/2017	Calcium, Dissolved	45	1	0.078	NA	mg/L
MKTF-28	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	11/20/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
MKTF-28	11/20/2017	Potassium, Dissolved	2.1	1	0.11	NA	mg/L
MKTF-28	11/20/2017	Magnesium, Dissolved	8.6	1	0.25	NA	mg/L
MKTF-28	11/20/2017	Manganese, Dissolved	0.091	0.002	0.00039	2017400	mg/L
MKTF-28	11/20/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-28	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	11/20/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-28	11/20/2017	Uranium, Dissolved	0.13	0.005	0.00096	NA	mg/L
MKTF-28	11/20/2017	Zinc, Dissolved	0.0045	0.01	0.0021	5960450	mg/L
MKTF-28	11/20/2017	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-28	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	11/20/2017	Manganese, Total	0.18	0.002	0.0011	2017000	mg/L
MKTF-28	11/20/2017	Lead, Total	0.0029	0.0005	0.00023	15000	mg/L
MKTF-28	11/20/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-28	11/20/2017	Uranium, Total	0.15	0.005	0.0015	30000	mg/L
MKTF-28	11/20/2017	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
MKTF-28	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	2/6/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-28	2/6/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-28	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-28	2/6/2018	Barium, Dissolved	0.051	0.002	0.00099	2000000	mg/L
MKTF-28	2/6/2018	Calcium, Dissolved	44	1	0.078	NA	mg/L
MKTF-28	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	2/6/2018	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-28	2/6/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	2/6/2018	Magnesium, Dissolved	8.7	1	0.25	NA	mg/L
MKTF-28	2/6/2018	Manganese, Dissolved	0.0032	0.002	0.00039	2017400	mg/L
MKTF-28	2/6/2018	Sodium, Dissolved	530	10	1.6	NA	mg/L
MKTF-28	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-28	2/6/2018	Uranium, Dissolved	0.13	0.025	0.0048	NA	mg/L
MKTF-28	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-28	2/6/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-28	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-28	2/6/2018	Manganese, Total	0.093	0.002	0.0011	2017000	mg/L
MKTF-28	2/6/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-28	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-28	2/6/2018	Uranium, Total	0.15	0.005	0.00068	30000	mg/L
MKTF-28	2/6/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
MKTF-28	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	5/1/2018	Arsenic, Total	0.0024	0.005	0.0021	10000	mg/L
MKTF-28	5/1/2018	Barium, Total	0.082	0.002	0.001	2000000	mg/L
MKTF-28	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	5/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	5/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	5/1/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-28	5/1/2018	Barium, Dissolved	0.046	0.002	0.00099	2000000	mg/L
MKTF-28	5/1/2018	Calcium, Dissolved	43	1	0.078	NA	mg/L
MKTF-28	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	5/1/2018	Iron, Dissolved	0.027	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	5/1/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	5/1/2018	Magnesium, Dissolved	8.6	1	0.25	NA	mg/L
MKTF-28	5/1/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MKTF-28	5/1/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-28	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	5/1/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	5/1/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-28	5/1/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-28	5/1/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
MKTF-28	5/1/2018	Mercury, Total	0.000075	0.0002	0.000037	2000	mg/L
MKTF-28	5/1/2018	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
MKTF-28	5/1/2018	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
MKTF-28	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-28	5/1/2018	Uranium, Total	0.15	0.005	0.00068	30000	mg/L
MKTF-28	5/1/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-28	8/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	8/20/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-28	8/20/2018	Barium, Total	0.077	0.002	0.001	2000000	mg/L
MKTF-28	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	8/20/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
MKTF-28	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	8/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	8/20/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-28	8/20/2018	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
MKTF-28	8/20/2018	Calcium, Dissolved	38	1	0.078	NA	mg/L
MKTF-28	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	8/20/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-28	8/20/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-28	8/20/2018	Magnesium, Dissolved	6.9	1	0.25	NA	mg/L
MKTF-28	8/20/2018	Manganese, Dissolved	0.0046	0.002	0.00039	2017400	mg/L
MKTF-28	8/20/2018	Sodium, Dissolved	600	20	3.3	NA	mg/L
MKTF-28	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	8/20/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
MKTF-28	8/20/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-28	8/20/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-28	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	8/20/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-28	8/20/2018	Lead, Total	0.0029	0.0005	0.00023	15000	mg/L
MKTF-28	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-28	8/20/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-28	8/20/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-28	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-28	11/15/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
MKTF-28	11/15/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-28	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-28	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-28	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-28	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-28	11/15/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-28	11/15/2018	Barium, Dissolved	0.048	0.002	0.00099	2000000	mg/L
MKTF-28	11/15/2018	Calcium, Dissolved	42	1	0.078	NA	mg/L
MKTF-28	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-28	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-28	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-28	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-28	11/15/2018	Potassium, Dissolved	2	1	0.11	NA	mg/L
MKTF-28	11/15/2018	Magnesium, Dissolved	8.4	1	0.25	NA	mg/L
MKTF-28	11/15/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-28	11/15/2018	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-28	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-28	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-28	11/15/2018	Uranium, Dissolved	0.13	0.005	0.00096	NA	mg/L
MKTF-28	11/15/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
MKTF-28	11/15/2018	Iron, Total	1	0.1	0.051	13822000	mg/L
MKTF-28	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-28	11/15/2018	Manganese, Total	0.069	0.002	0.0011	2017000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	11/15/2018	Lead, Total	0.00095	0.0005	0.00023	15000	mg/L
MKTF-28	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-28	11/15/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-28	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-29	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	3/11/2015	Arsenic, Total	0.0024	0.001	0.00011	10000	mg/L
MKTF-29	3/11/2015	Barium, Total	0.031	0.002	0.00095	2000000	mg/L
MKTF-29	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-29	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-29	3/11/2015	Iron, Total	ND	0.02	0.0073	13822000	mg/L
MKTF-29	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	3/11/2015	Manganese, Total	0.34	0.002	0.00027	2017000	mg/L
MKTF-29	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-29	3/11/2015	Selenium, Total	0.0045	0.001	0.00015	50000	mg/L
MKTF-29	3/11/2015	Uranium, Total	0.023	0.001	0.00005	30000	mg/L
MKTF-29	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-29	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-29	6/10/2015	Barium, Total	0.035	0.002	0.00095	2000000	mg/L
MKTF-29	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-29	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-29	6/10/2015	Iron, Total	0.049	0.02	0.0073	13822000	mg/L
MKTF-29	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	6/10/2015	Manganese, Total	0.36	0.002	0.00027	2017000	mg/L
MKTF-29	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-29	6/10/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-29	6/10/2015	Uranium, Total	0.019	0.005	0.000024	30000	mg/L
MKTF-29	6/10/2015	Zinc, Total	0.025	0.01	0.0028	5960000	mg/L
MKTF-29	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	8/20/2015	Arsenic, Total	0.0021	0.001	0.00029	10000	mg/L
MKTF-29	8/20/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-29	8/20/2015	Calcium, Total	65	1	0.057	NA	mg/L
MKTF-29	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-29	8/20/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	8/20/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-29	8/20/2015	Iron, Total	3.9	0.2	0.072	13822000	mg/L
MKTF-29	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	8/20/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	8/20/2015	Magnesium, Total	9.1	1	0.039	NA	mg/L
MKTF-29	8/20/2015	Manganese, Total	0.6	0.002	0.0015	2017000	mg/L
MKTF-29	8/20/2015	Sodium, Total	530	10	0.72	NA	mg/L
MKTF-29	8/20/2015	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-29	8/20/2015	Selenium, Total	0.0022	0.001	0.00012	50000	mg/L
MKTF-29	8/20/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-29	8/20/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-29	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	11/4/2015	Arsenic, Total	0.002	0.001	0.00029	10000	mg/L
MKTF-29	11/4/2015	Barium, Total	0.089	0.002	0.0011	2000000	mg/L
MKTF-29	11/4/2015	Calcium, Total	78	1	0.26	NA	mg/L
MKTF-29	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-29	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-29	11/4/2015	Iron, Total	1.3	0.1	0.036	13822000	mg/L
MKTF-29	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-29	11/4/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	11/4/2015	Magnesium, Total	10	1	0.013	NA	mg/L
MKTF-29	11/4/2015	Manganese, Total	0.61	0.002	0.0015	2017000	mg/L
MKTF-29	11/4/2015	Sodium, Total	520	10	0.96	NA	mg/L
MKTF-29	11/4/2015	Lead, Total	0.0011	0.0005	0.000047	15000	mg/L
MKTF-29	11/4/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-29	11/4/2015	Uranium, Total	0.017	0.0005	0.0000049	30000	mg/L
MKTF-29	11/4/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-29	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-29	2/23/2016	Arsenic, Total	0.0013	0.001	0.00029	10000	mg/L
MKTF-29	2/23/2016	Barium, Total	0.062	0.002	0.0011	2000000	mg/L
MKTF-29	2/23/2016	Calcium, Total	68	1	0.26	NA	mg/L
MKTF-29	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-29	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-29	2/23/2016	Iron, Total	0.9	0.02	0.0072	13822000	mg/L
MKTF-29	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-29	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-29	2/23/2016	Magnesium, Total	9.8	1	0.013	NA	mg/L
MKTF-29	2/23/2016	Manganese, Total	0.51	0.002	0.0015	2017000	mg/L
MKTF-29	2/23/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-29	2/23/2016	Lead, Total	0.0007	0.0005	0.000047	15000	mg/L
MKTF-29	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-29	2/23/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-29	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-29	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-29	6/9/2016	Arsenic, Total	0.0021	0.001	0.00014	10000	mg/L
MKTF-29	6/9/2016	Barium, Total	0.028	0.002	0.0013	2000000	mg/L
MKTF-29	6/9/2016	Calcium, Total	66	1	0.26	NA	mg/L
MKTF-29	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-29	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-29	6/9/2016	Iron, Total	0.022	0.02	0.0091	13822000	mg/L
MKTF-29	6/9/2016	Mercury, Total	0.000076	0.0002	0.000053	2000	mg/L
MKTF-29	6/9/2016	Potassium, Total	0.49	1	0.18	NA	mg/L
MKTF-29	6/9/2016	Magnesium, Total	9.5	1	0.013	NA	mg/L
MKTF-29	6/9/2016	Manganese, Total	0.39	0.002	0.00032	2017000	mg/L
MKTF-29	6/9/2016	Sodium, Total	530	10	0.96	NA	mg/L
MKTF-29	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-29	6/9/2016	Selenium, Total	0.0039	0.001	0.00021	50000	mg/L
MKTF-29	6/9/2016	Uranium, Total	0.013	0.0005	0.000051	30000	mg/L
MKTF-29	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-29	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	9/7/2016	Arsenic, Total	0.0018	0.001	0.00021	10000	mg/L
MKTF-29	9/7/2016	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-29	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-29	9/7/2016	Copper, Total	0.0044	0.006	0.003	790000	mg/L
MKTF-29	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-29	9/7/2016	Arsenic, Dissolved	0.0018	0.001	0.00014	10000	mg/L
MKTF-29	9/7/2016	Barium, Dissolved	0.037	0.002	0.0013	2000000	mg/L
MKTF-29	9/7/2016	Calcium, Dissolved	66	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-29	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-29	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-29	9/7/2016	Iron, Dissolved	0.073	0.02	0.02	13821880	mg/L
MKTF-29	9/7/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Magnesium, Dissolved	8.8	1	0.5	NA	mg/L
MKTF-29	9/7/2016	Manganese, Dissolved	0.62	0.002	0.00032	2017400	mg/L
MKTF-29	9/7/2016	Sodium, Dissolved	490	5	2.5	NA	mg/L
MKTF-29	9/7/2016	Lead, Dissolved	0.0021	0.0005	0.00017	NA	mg/L
MKTF-29	9/7/2016	Selenium, Dissolved	0.0023	0.001	0.00021	50000	mg/L
MKTF-29	9/7/2016	Uranium, Dissolved	0.012	0.0005	0.000051	NA	mg/L
MKTF-29	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-29	9/7/2016	Iron, Total	2.6	0.1	0.1	13822000	mg/L
MKTF-29	9/7/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
MKTF-29	9/7/2016	Manganese, Total	0.52	0.002	0.00027	2017000	mg/L
MKTF-29	9/7/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
MKTF-29	9/7/2016	Selenium, Total	0.0022	0.005	0.00094	50000	mg/L
MKTF-29	9/7/2016	Uranium, Total	0.011	0.0005	0.00017	30000	mg/L
MKTF-29	9/7/2016	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
MKTF-29	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	10/28/2016	Arsenic, Total	0.0018	0.001	0.00021	10000	mg/L
MKTF-29	10/28/2016	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-29	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	10/28/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-29	10/28/2016	Copper, Total	0.0039	0.006	0.003	790000	mg/L
MKTF-29	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-29	10/28/2016	Arsenic, Dissolved	0.0016	0.001	0.00014	10000	mg/L
MKTF-29	10/28/2016	Barium, Dissolved	0.027	0.002	0.0013	2000000	mg/L
MKTF-29	10/28/2016	Calcium, Dissolved	63	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-29	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-29	10/28/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-29	10/28/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Magnesium, Dissolved	8.7	1	0.5	NA	mg/L
MKTF-29	10/28/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
MKTF-29	10/28/2016	Sodium, Dissolved	510	10	5	NA	mg/L
MKTF-29	10/28/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	10/28/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
MKTF-29	10/28/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
MKTF-29	10/28/2016	Zinc, Dissolved	0.013	0.01	0.0028	5960450	mg/L
MKTF-29	10/28/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
MKTF-29	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-29	10/28/2016	Manganese, Total	0.47	0.002	0.00027	2017000	mg/L
MKTF-29	10/28/2016	Lead, Total	0.002	0.0005	0.000081	15000	mg/L
MKTF-29	10/28/2016	Selenium, Total	0.002	0.005	0.00094	50000	mg/L
MKTF-29	10/28/2016	Uranium, Total	0.013	0.0005	0.00017	30000	mg/L
MKTF-29	10/28/2016	Zinc, Total	0.005	0.01	0.0027	5960000	mg/L
MKTF-29	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-29	3/29/2017	Arsenic, Total	0.0019	0.001	0.00021	10000	mg/L
MKTF-29	3/29/2017	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-29	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	3/29/2017	Chromium, Total	0.004	0.006	0.0027	50000	mg/L
MKTF-29	3/29/2017	Copper, Total	0.0034	0.006	0.003	790000	mg/L
MKTF-29	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-29	3/29/2017	Arsenic, Dissolved	0.0019	0.001	0.00018	10000	mg/L
MKTF-29	3/29/2017	Barium, Dissolved	0.032	0.002	0.00085	2000000	mg/L
MKTF-29	3/29/2017	Calcium, Dissolved	72	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-29	3/29/2017	Copper, Dissolved	0.0053	0.006	0.0032	790000	mg/L
MKTF-29	3/29/2017	Iron, Dissolved	0.034	0.02	0.02	13821880	mg/L
MKTF-29	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Magnesium, Dissolved	10	1	0.5	NA	mg/L
MKTF-29	3/29/2017	Manganese, Dissolved	0.35	0.002	0.00038	2017400	mg/L
MKTF-29	3/29/2017	Sodium, Dissolved	510	10	5	NA	mg/L
MKTF-29	3/29/2017	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
MKTF-29	3/29/2017	Selenium, Dissolved	0.0038	0.001	0.00039	50000	mg/L
MKTF-29	3/29/2017	Uranium, Dissolved	0.012	0.0005	0.00005	NA	mg/L
MKTF-29	3/29/2017	Zinc, Dissolved	0.021	0.01	0.0011	5960450	mg/L
MKTF-29	3/29/2017	Iron, Total	2.8	0.2	0.2	13822000	mg/L
MKTF-29	3/29/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	3/29/2017	Manganese, Total	0.47	0.002	0.00027	2017000	mg/L
MKTF-29	3/29/2017	Lead, Total	0.0016	0.0005	0.000081	15000	mg/L
MKTF-29	3/29/2017	Selenium, Total	0.0022	0.001	0.00019	50000	mg/L
MKTF-29	3/29/2017	Uranium, Total	0.012	0.0005	0.00017	30000	mg/L
MKTF-29	3/29/2017	Zinc, Total	0.0059	0.01	0.0027	5960000	mg/L
MKTF-29	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-29	6/5/2017	Arsenic, Total	0.0022	0.001	0.0003	10000	mg/L
MKTF-29	6/5/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-29	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	6/5/2017	Chromium, Total	0.0073	0.006	0.0011	50000	mg/L
MKTF-29	6/5/2017	Copper, Total	0.0075	0.006	0.0017	790000	mg/L
MKTF-29	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-29	6/5/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-29	6/5/2017	Barium, Dissolved	0.031	0.002	0.00085	2000000	mg/L
MKTF-29	6/5/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-29	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-29	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	6/5/2017	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-29	6/5/2017	Potassium, Dissolved	0.42	1	0.11	NA	mg/L
MKTF-29	6/5/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	6/5/2017	Manganese, Dissolved	0.53	0.002	0.00038	2017400	mg/L
MKTF-29	6/5/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-29	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	6/5/2017	Selenium, Dissolved	0.003	0.001	0.00039	50000	mg/L
MKTF-29	6/5/2017	Uranium, Dissolved	0.011	0.0005	0.00005	NA	mg/L
MKTF-29	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	6/5/2017	Iron, Total	5.5	0.2	0.1	13822000	mg/L
MKTF-29	6/5/2017	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-29	6/5/2017	Manganese, Total	0.74	0.002	0.0011	2017000	mg/L
MKTF-29	6/5/2017	Lead, Total	0.0038	0.0005	0.000095	15000	mg/L
MKTF-29	6/5/2017	Selenium, Total	0.0033	0.001	0.00071	50000	mg/L
MKTF-29	6/5/2017	Uranium, Total	0.012	0.0005	0.00015	30000	mg/L
MKTF-29	6/5/2017	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-29	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	10/3/2017	Arsenic, Total	0.002	0.001	0.0003	10000	mg/L
MKTF-29	10/3/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
MKTF-29	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	10/3/2017	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
MKTF-29	10/3/2017	Copper, Total	0.0048	0.006	0.0017	790000	mg/L
MKTF-29	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	10/3/2017	Arsenic, Dissolved	0.0017	0.001	0.00018	10000	mg/L
MKTF-29	10/3/2017	Barium, Dissolved	0.031	0.002	0.00085	2000000	mg/L
MKTF-29	10/3/2017	Calcium, Dissolved	84	1	0.078	NA	mg/L
MKTF-29	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	10/3/2017	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-29	10/3/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-29	10/3/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	10/3/2017	Manganese, Dissolved	0.62	0.002	0.00039	2017400	mg/L
MKTF-29	10/3/2017	Sodium, Dissolved	550	10	1.6	NA	mg/L
MKTF-29	10/3/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	10/3/2017	Selenium, Dissolved	0.0029	0.001	0.00039	50000	mg/L
MKTF-29	10/3/2017	Zinc, Dissolved	0.064	0.01	0.0021	5960450	mg/L
MKTF-29	10/3/2017	Iron, Total	2.9	0.2	0.1	13822000	mg/L
MKTF-29	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	10/3/2017	Manganese, Total	0.73	0.002	0.0011	2017000	mg/L
MKTF-29	10/3/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-29	10/3/2017	Selenium, Total	0.0027	0.001	0.00071	50000	mg/L
MKTF-29	10/3/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-29	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	11/20/2017	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-29	11/20/2017	Barium, Total	0.32	0.002	0.001	2000000	mg/L
MKTF-29	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	11/20/2017	Chromium, Total	0.0077	0.006	0.0018	50000	mg/L
MKTF-29	11/20/2017	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-29	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-29	11/20/2017	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
MKTF-29	11/20/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
MKTF-29	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	11/20/2017	Iron, Dissolved	0.036	0.02	0.016	13821880	mg/L
MKTF-29	11/20/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-29	11/20/2017	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-29	11/20/2017	Manganese, Dissolved	0.71	0.002	0.00039	2017400	mg/L
MKTF-29	11/20/2017	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-29	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-29	11/20/2017	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-29	11/20/2017	Zinc, Dissolved	0.0034	0.01	0.0021	5960450	mg/L
MKTF-29	11/20/2017	Iron, Total	8	0.2	0.1	13822000	mg/L
MKTF-29	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	11/20/2017	Manganese, Total	1.1	0.01	0.0055	2017000	mg/L
MKTF-29	11/20/2017	Lead, Total	0.006	0.0005	0.00023	15000	mg/L
MKTF-29	11/20/2017	Selenium, Total	0.0023	0.001	0.00098	50000	mg/L
MKTF-29	11/20/2017	Uranium, Total	0.0094	0.0005	0.00015	30000	mg/L
MKTF-29	11/20/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-29	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	2/6/2018	Arsenic, Total	0.0014	0.001	0.00041	10000	mg/L
MKTF-29	2/6/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-29	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	2/6/2018	Copper, Total	0.0072	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-29	2/6/2018	Barium, Dissolved	0.024	0.002	0.00099	2000000	mg/L
MKTF-29	2/6/2018	Calcium, Dissolved	70	1	0.078	NA	mg/L
MKTF-29	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	2/6/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-29	2/6/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-29	2/6/2018	Magnesium, Dissolved	10	1	0.25	NA	mg/L
MKTF-29	2/6/2018	Manganese, Dissolved	0.49	0.002	0.00039	2017400	mg/L
MKTF-29	2/6/2018	Sodium, Dissolved	470	5	0.82	NA	mg/L
MKTF-29	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-29	2/6/2018	Uranium, Dissolved	0.0094	0.0005	0.000096	NA	mg/L
MKTF-29	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-29	2/6/2018	Iron, Total	3.9	0.2	0.1	13822000	mg/L
MKTF-29	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-29	2/6/2018	Manganese, Total	0.65	0.002	0.0011	2017000	mg/L
MKTF-29	2/6/2018	Lead, Total	0.0025	0.0005	0.00023	15000	mg/L
MKTF-29	2/6/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-29	2/6/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
MKTF-29	2/6/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-29	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	5/1/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-29	5/1/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-29	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	5/1/2018	Chromium, Total	0.0031	0.006	0.0018	50000	mg/L
MKTF-29	5/1/2018	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-29	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	5/1/2018	Arsenic, Dissolved	0.0015	0.001	0.00042	10000	mg/L
MKTF-29	5/1/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
MKTF-29	5/1/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-29	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	5/1/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-29	5/1/2018	Potassium, Dissolved	0.25	1	0.11	NA	mg/L
MKTF-29	5/1/2018	Magnesium, Dissolved	8.8	1	0.25	NA	mg/L
MKTF-29	5/1/2018	Manganese, Dissolved	0.38	0.002	0.00039	2017400	mg/L
MKTF-29	5/1/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
MKTF-29	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	5/1/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	5/1/2018	Uranium, Dissolved	0.0079	0.0005	0.000096	NA	mg/L
MKTF-29	5/1/2018	Zinc, Dissolved	0.0048	0.01	0.0021	5960450	mg/L
MKTF-29	5/1/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
MKTF-29	5/1/2018	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
MKTF-29	5/1/2018	Manganese, Total	0.55	0.002	0.0011	2017000	mg/L
MKTF-29	5/1/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
MKTF-29	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-29	5/1/2018	Uranium, Total	0.0084	0.0005	0.000068	30000	mg/L
MKTF-29	5/1/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-29	8/20/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-29	8/20/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-29	8/20/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-29	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	8/20/2018	Chromium, Total	0.004	0.006	0.0018	50000	mg/L
MKTF-29	8/20/2018	Copper, Total	0.0078	0.006	0.0041	790000	mg/L
MKTF-29	8/20/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
MKTF-29	8/20/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-29	8/20/2018	Barium, Dissolved	0.026	0.002	0.00099	2000000	mg/L
MKTF-29	8/20/2018	Calcium, Dissolved	72	1	0.078	NA	mg/L
MKTF-29	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	8/20/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
MKTF-29	8/20/2018	Iron, Dissolved	0.053	0.02	0.016	13821880	mg/L
MKTF-29	8/20/2018	Potassium, Dissolved	0.29	1	0.11	NA	mg/L
MKTF-29	8/20/2018	Magnesium, Dissolved	9.5	1	0.25	NA	mg/L
MKTF-29	8/20/2018	Manganese, Dissolved	0.48	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2018	Sodium, Dissolved	580	10	1.6	NA	mg/L
MKTF-29	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	8/20/2018	Uranium, Dissolved	0.0082	0.0005	0.000096	NA	mg/L
MKTF-29	8/20/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-29	8/20/2018	Iron, Total	4.5	0.1	0.051	13822000	mg/L
MKTF-29	8/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	8/20/2018	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-29	8/20/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-29	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-29	8/20/2018	Uranium, Total	0.0085	0.0005	0.000068	30000	mg/L
MKTF-29	8/20/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-29	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-29	11/15/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-29	11/15/2018	Barium, Total	0.037	0.002	0.001	2000000	mg/L
MKTF-29	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-29	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-29	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-29	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-29	11/15/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-29	11/15/2018	Barium, Dissolved	0.028	0.002	0.00099	2000000	mg/L
MKTF-29	11/15/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-29	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-29	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-29	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-29	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-29	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-29	11/15/2018	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-29	11/15/2018	Manganese, Dissolved	0.48	0.002	0.00039	2017400	mg/L
MKTF-29	11/15/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-29	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-29	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-29	11/15/2018	Uranium, Dissolved	0.0077	0.0005	0.000096	NA	mg/L
MKTF-29	11/15/2018	Zinc, Dissolved	0.03	0.01	0.0021	5960450	mg/L
MKTF-29	11/15/2018	Iron, Total	0.24	0.02	0.01	13822000	mg/L
MKTF-29	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	11/15/2018	Manganese, Total	0.47	0.002	0.0011	2017000	mg/L
MKTF-29	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-29	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-29	11/15/2018	Uranium, Total	0.0081	0.0005	0.000068	30000	mg/L
MKTF-29	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-29	8/23/2019	Nickel, Total	0.0084	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	8/23/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
MKTF-29	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	8/23/2019	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-29	8/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-29	8/23/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Dissolved	0.67	0.04	0.004531	3949110	mg/L
MKTF-29	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	8/23/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
MKTF-29	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L
MKTF-29	8/23/2019	Iron, Dissolved	0.0092	0.02	0.008747	13821880	mg/L
MKTF-29	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	8/23/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-29	8/23/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
MKTF-29	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Dissolved	0.0092	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
MKTF-29	8/23/2019	Selenium, Dissolved	0.00026	0.001	0.000171	50000	mg/L
MKTF-29	8/23/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
MKTF-29	8/23/2019	Sodium, Dissolved	690	10	4.161763	NA	mg/L
MKTF-29	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Uranium, Dissolved	0.0063	0.0005	0.000075	NA	mg/L
MKTF-29	8/23/2019	Zinc, Dissolved	0.0081	0.01	0.002252	5960450	mg/L
MKTF-29	8/23/2019	Aluminum, Total	0.9	0.02	0.002488	19914000	mg/L
MKTF-29	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Total	0.00093	0.001	0.000312	10000	mg/L
MKTF-29	8/23/2019	Barium, Total	0.046	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-29	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	8/23/2019	Iron, Total	0.27	0.02	0.008747	13822000	mg/L
MKTF-29	8/23/2019	Lead, Total	0.00025	0.0005	0.000055	15000	mg/L
MKTF-29	8/23/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
MKTF-29	8/23/2019	Mercury, Total	0.000081	0.0002	0.000038	2000	mg/L
MKTF-29	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	8/23/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-29	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	8/23/2019	Uranium, Total	0.0079	0.0005	0.000085	30000	mg/L
MKTF-29	8/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Dissolved	0.00094	0.001	0.000101	10000	mg/L
MKTF-29	8/23/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-29	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	8/23/2019	Calcium, Dissolved	110	10	0.618891	NA	mg/L
MKTF-29	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-29	8/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-29	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	8/23/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-29	8/23/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
MKTF-29	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	8/23/2019	Nickel, Dissolved	0.0056	0.01	0.004009	372000	mg/L
MKTF-29	8/23/2019	Potassium, Dissolved	0.27	1	0.162288	NA	mg/L
MKTF-29	8/23/2019	Selenium, Dissolved	0.00057	0.001	0.000171	50000	mg/L
MKTF-29	8/23/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
MKTF-29	8/23/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-29	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	8/23/2019	Uranium, Dissolved	0.0064	0.0005	0.000075	NA	mg/L
MKTF-29	8/23/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
MKTF-29	8/23/2019	Aluminum, Total	1.5	0.2	0.024883	19914000	mg/L
MKTF-29	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	8/23/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-29	8/23/2019	Barium, Total	0.058	0.002	0.000648	2000000	mg/L
MKTF-29	8/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	8/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-29	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	8/23/2019	Iron, Total	0.52	0.02	0.008747	13822000	mg/L
MKTF-29	8/23/2019	Lead, Total	0.00044	0.0005	0.000055	15000	mg/L
MKTF-29	8/23/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
MKTF-29	8/23/2019	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
MKTF-29	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	10/22/2019	Antimony, Dissolved	0.0032	0.005	0.001947	6000	mg/L
MKTF-29	10/22/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-29	10/22/2019	Barium, Dissolved	0.062	0.002	0.000648	2000000	mg/L
MKTF-29	10/22/2019	Beryllium, Dissolved	0.00073	0.002	0.000284	4000	mg/L
MKTF-29	10/22/2019	Boron, Dissolved	0.7	0.04	0.004531	3949110	mg/L
MKTF-29	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	10/22/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
MKTF-29	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	10/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-29	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-29	10/22/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
MKTF-29	10/22/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
MKTF-29	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-29	10/22/2019	Potassium, Dissolved	0.39	1	0.162288	NA	mg/L
MKTF-29	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-29	10/22/2019	Silver, Dissolved	0.0044	0.005	0.000942	81200	mg/L
MKTF-29	10/22/2019	Sodium, Dissolved	770	10	4.161763	NA	mg/L
MKTF-29	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-29	10/22/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-29	10/22/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
MKTF-29	10/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-29	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-29	10/22/2019	Barium, Total	0.092	0.002	0.000648	2000000	mg/L
MKTF-29	10/22/2019	Beryllium, Total	0.00045	0.002	0.000284	4000	mg/L
MKTF-29	10/22/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-29	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	10/22/2019	Copper, Total	0.0057	0.006	0.004072	790000	mg/L
MKTF-29	10/22/2019	Iron, Total	0.66	0.02	0.008747	13822000	mg/L
MKTF-29	10/22/2019	Lead, Total	0.00064	0.0025	0.000274	15000	mg/L
MKTF-29	10/22/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
MKTF-29	10/22/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-29	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	10/22/2019	Nickel, Total	0.0098	0.01	0.004009	372000	mg/L
MKTF-29	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-29	10/22/2019	Silver, Total	0.0034	0.005	0.001418	50000	mg/L
MKTF-29	10/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-29	10/22/2019	Zinc, Total	0.0069	0.01	0.005772	5960000	mg/L
MKTF-29	5/6/2019	Aluminum, Dissolved	0.0091	0.02	0.002488	19913930	mg/L
MKTF-29	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-29	5/6/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-29	5/6/2019	Barium, Dissolved	0.025	0.002	0.000648	2000000	mg/L
MKTF-29	5/6/2019	Beryllium, Dissolved	0.00089	0.002	0.000284	4000	mg/L
MKTF-29	5/6/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
MKTF-29	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	5/6/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-29	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	5/6/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
MKTF-29	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-29	5/6/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	5/6/2019	Manganese, Dissolved	0.66	0.002	0.00029	2017400	mg/L
MKTF-29	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	5/6/2019	Nickel, Dissolved	0.0078	0.01	0.004009	372000	mg/L
MKTF-29	5/6/2019	Potassium, Dissolved	0.26	1	0.162288	NA	mg/L
MKTF-29	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-29	5/6/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
MKTF-29	5/6/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
MKTF-29	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-29	5/6/2019	Uranium, Dissolved	0.0085	0.0025	0.000374	NA	mg/L
MKTF-29	5/6/2019	Zinc, Dissolved	0.039	0.01	0.002252	5960450	mg/L
MKTF-29	5/6/2019	Aluminum, Total	3.2	0.1	0.012441	19914000	mg/L
MKTF-29	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-29	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-29	5/6/2019	Barium, Total	0.073	0.002	0.000648	2000000	mg/L
MKTF-29	5/6/2019	Beryllium, Total	0.00097	0.002	0.000284	4000	mg/L
MKTF-29	5/6/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
MKTF-29	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	5/6/2019	Iron, Total	1.2	0.1	0.043734	13822000	mg/L
MKTF-29	5/6/2019	Lead, Total	0.00082	0.0005	0.000055	15000	mg/L
MKTF-29	5/6/2019	Manganese, Total	0.71	0.002	0.00029	2017000	mg/L
MKTF-29	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-29	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	5/6/2019	Nickel, Total	0.0076	0.01	0.004009	372000	mg/L
MKTF-29	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-29	5/6/2019	Silver, Total	0.0031	0.005	0.001418	50000	mg/L
MKTF-29	5/6/2019	Thallium, Total	0.000053	0.0005	0.000052	2000	mg/L
MKTF-29	5/6/2019	Uranium, Total	0.0091	0.0005	0.000085	30000	mg/L
MKTF-29	5/6/2019	Zinc, Total	0.0086	0.01	0.005772	5960000	mg/L
MKTF-29	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-29	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Dissolved	0.00032	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-29	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	3/28/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-29	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	3/28/2019	Iron, Dissolved	0.02	0.02	0.008747	13821880	mg/L
MKTF-29	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	3/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	3/28/2019	Manganese, Dissolved	0.59	0.002	0.00029	2017400	mg/L
MKTF-29	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
MKTF-29	3/28/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
MKTF-29	3/28/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-29	3/28/2019	Sodium, Dissolved	480	5	2.080881	NA	mg/L
MKTF-29	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	3/28/2019	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
MKTF-29	3/28/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
MKTF-29	3/28/2019	Aluminum, Total	1.6	0.1	0.022822	19914000	mg/L
MKTF-29	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Total	0.001	0.001	0.000312	10000	mg/L
MKTF-29	3/28/2019	Barium, Total	0.051	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
MKTF-29	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	3/28/2019	Iron, Total	0.57	0.02	0.008747	13822000	mg/L
MKTF-29	3/28/2019	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
MKTF-29	3/28/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
MKTF-29	3/28/2019	Mercury, Total	0.000085	0.0002	0.000038	2000	mg/L
MKTF-29	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Total	0.0067	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-29	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	3/28/2019	Uranium, Total	0.0088	0.0005	0.000085	30000	mg/L
MKTF-29	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-29	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-29	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Dissolved	0.00097	0.001	0.000101	10000	mg/L
MKTF-29	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
MKTF-29	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-29	3/28/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
MKTF-29	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-29	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-29	3/28/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	3/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
MKTF-29	3/28/2019	Manganese, Dissolved	0.59	0.002	0.00029	2017400	mg/L
MKTF-29	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Dissolved	0.0078	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
MKTF-29	3/28/2019	Selenium, Dissolved	0.00021	0.001	0.000171	50000	mg/L
MKTF-29	3/28/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
MKTF-29	3/28/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
MKTF-29	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	3/28/2019	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
MKTF-29	3/28/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
MKTF-29	3/28/2019	Aluminum, Total	1.3	0.1	0.022822	19914000	mg/L
MKTF-29	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-29	3/28/2019	Arsenic, Total	0.00091	0.001	0.000312	10000	mg/L
MKTF-29	3/28/2019	Barium, Total	0.047	0.002	0.000648	2000000	mg/L
MKTF-29	3/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-29	3/28/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-29	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-29	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-29	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-29	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-29	3/28/2019	Iron, Total	0.5	0.02	0.008747	13822000	mg/L
MKTF-29	3/28/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
MKTF-29	3/28/2019	Manganese, Total	0.6	0.002	0.00029	2017000	mg/L
MKTF-29	3/28/2019	Mercury, Total	0.000079	0.0002	0.000038	2000	mg/L
MKTF-29	3/28/2019	Molybdenum, Total	0.0077	0.008	0.006735	98700	mg/L
MKTF-29	3/28/2019	Nickel, Total	0.0068	0.01	0.004009	372000	mg/L
MKTF-29	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-29	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-29	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-29	3/28/2019	Uranium, Total	0.0087	0.0005	0.000085	30000	mg/L
MKTF-29	3/28/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
MKTF-29	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-29	2/25/2020	Arsenic, Dissolved	0.00091	0.001	0.0001	10000	mg/L
MKTF-29	2/25/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-29	2/25/2020	Selenium, Dissolved	0.00054	0.001	0.00017	50000	mg/L
MKTF-29	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-29	2/25/2020	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
MKTF-29	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-29	2/25/2020	Barium, Dissolved	0.056	0.002	0.00065	2000000	mg/L
MKTF-29	2/25/2020	Beryllium, Dissolved	0.0005	0.002	0.00028	4000	mg/L
MKTF-29	2/25/2020	Boron, Dissolved	0.47	0.04	0.0045	3949110	mg/L
MKTF-29	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-29	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-29	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-29	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-29	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-29	2/25/2020	Magnesium, Dissolved	38	1	0.05	NA	mg/L
MKTF-29	2/25/2020	Nickel, Dissolved	0.0082	0.01	0.004	372000	mg/L
MKTF-29	2/25/2020	Potassium, Dissolved	0.52	1	0.16	NA	mg/L
MKTF-29	2/25/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
MKTF-29	2/25/2020	Manganese, Dissolved	2.5	0.01	0.0014	2017400	mg/L
MKTF-29	2/25/2020	Silver, Dissolved	0.0056	0.005	0.00094	81200	mg/L
MKTF-29	2/25/2020	Calcium, Dissolved	280	10	0.62	NA	mg/L
MKTF-29	2/25/2020	Sodium, Dissolved	830	10	4.2	NA	mg/L
MKTF-29	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-29	2/25/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-29	2/25/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-29	2/25/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
MKTF-29	2/25/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-29	2/25/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-29	2/25/2020	Aluminum, Total	0.064	0.02	0.0025	19914000	mg/L
MKTF-29	2/25/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-29	2/25/2020	Boron, Total	0.57	0.04	0.0045	3949	mg/L
MKTF-29	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-29	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-29	2/25/2020	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-29	2/25/2020	Iron, Total	0.04	0.02	0.0087	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	2/25/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
MKTF-29	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-29	2/25/2020	Manganese, Total	2.4	0.01	0.0014	2017000	mg/L
MKTF-29	2/25/2020	Uranium, Total	0.013	0.0025	0.00042	30000	mg/L
MKTF-29	2/25/2020	Barium, Total	0.079	0.002	0.00065	2000000	mg/L
MKTF-29	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-29	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-29	2/25/2020	Silver, Total	0.005	0.005	0.0014	50000	mg/L
MKTF-29	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-29	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-29	9/20/2020	Arsenic, Total	0.00094	0.001	0.00026	10000	mg/L
MKTF-29	9/20/2020	Lead, Total	0.00014	0.0005	0.000034	15000	mg/L
MKTF-29	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-29	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-29	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-29	9/20/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
MKTF-29	9/20/2020	Barium, Total	0.13	0.003	0.0016	2000000	mg/L
MKTF-29	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-29	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-29	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-29	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-29	9/20/2020	Iron, Total	0.033	0.05	0.013	13822000	mg/L
MKTF-29	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-29	9/20/2020	Uranium, Total	0.016	0.0025	0.00033	30000	mg/L
MKTF-29	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-29	9/20/2020	Nickel, Total	0.015	0.01	0.0033	372000	mg/L
MKTF-29	9/20/2020	Silver, Total	0.0062	0.005	0.0013	50000	mg/L
MKTF-29	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-29	9/20/2020	Manganese, Total	4.5	0.01	0.0041	2017000	mg/L
MKTF-29	9/20/2020	Boron, Total	0.76	0.04	0.0074	3949	mg/L
MKTF-29	9/20/2020	Antimony, Dissolved	0.00072	0.001	0.0007	6000	mg/L
MKTF-29	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-29	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-29	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-29	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-29	9/20/2020	Uranium, Dissolved	0.016	0.0005	0.000065	NA	mg/L
MKTF-29	9/20/2020	Calcium, Dissolved	380	5	0.57	NA	mg/L
MKTF-29	9/20/2020	Manganese, Dissolved	4.2	0.01	0.0029	2017400	mg/L
MKTF-29	9/20/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-29	9/20/2020	Silver, Dissolved	0.0093	0.025	0.0063	81200	mg/L
MKTF-29	9/20/2020	Sodium, Dissolved	870	50	6.9	NA	mg/L
MKTF-29	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-29	9/20/2020	Barium, Dissolved	0.13	0.002	0.0011	2000000	mg/L
MKTF-29	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-29	9/20/2020	Boron, Dissolved	0.72	0.04	0.0067	3949110	mg/L
MKTF-29	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-29	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-29	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-29	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-29	9/20/2020	Iron, Dissolved	0.012	0.02	0.01	13821880	mg/L
MKTF-29	9/20/2020	Magnesium, Dissolved	56	1	0.067	NA	mg/L
MKTF-29	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-29	9/20/2020	Potassium, Dissolved	0.35	1	0.16	NA	mg/L
MKTF-29	9/20/2020	Zinc, Dissolved	0.29	0.01	0.006	5960450	mg/L
MKTF-29	12/15/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-29	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-29	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-29	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-29	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-29	12/15/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-29	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-29	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-29	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-29	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-29	12/15/2020	Uranium, Total Recoverable	18.5	5	1.12	30	ug/L
MKTF-29	12/15/2020	Uranium, Dissolved	18	5	1.12	NA	ug/L
MKTF-29	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-29	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-29	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	12/15/2020	Aluminum, Total	0.206	0.2	0.051	19914000	mg/L
MKTF-29	12/15/2020	Calcium, Total	377	0.5	0.084	NA	mg/L
MKTF-29	12/15/2020	Boron, Total	0.696	0.1	0.022	3949	mg/L
MKTF-29	12/15/2020	Barium, Total	0.155	0.01	0.003	2000000	mg/L
MKTF-29	12/15/2020	Potassium, Total	1.02	1	0.34	NA	mg/L
MKTF-29	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-29	12/15/2020	Magnesium, Total	58	0.5	0.12	NA	mg/L
MKTF-29	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-29	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-29	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-29	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-29	12/15/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-29	12/15/2020	Manganese, Total	4.77	0.01	0.003	2017000	mg/L
MKTF-29	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-29	12/15/2020	Nickel, Total	0.0197	0.006	0.003	372000	mg/L
MKTF-29	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-29	12/15/2020	Sodium, Total	814	20	9.2	NA	mg/L
MKTF-29	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-29	12/15/2020	Barium, Dissolved	0.16	0.01	0.003	2000000	mg/L
MKTF-29	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-29	12/15/2020	Boron, Dissolved	0.694	0.1	0.022	3949110	mg/L
MKTF-29	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-29	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-29	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-29	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-29	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-29	12/15/2020	Manganese, Dissolved	5.14	0.01	0.003	2017400	mg/L
MKTF-29	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-29	12/15/2020	Nickel, Dissolved	0.0213	0.006	0.003	372000	mg/L
MKTF-29	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-29	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-30	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-30	12/15/2020	Aluminum, Total	0.961	0.2	0.051	19914000	mg/L
MKTF-30	12/15/2020	Calcium, Total	77.3	0.5	0.084	NA	mg/L
MKTF-30	12/15/2020	Boron, Total	0.693	0.1	0.022	3949	mg/L
MKTF-30	12/15/2020	Barium, Total	0.0426	0.01	0.003	2000000	mg/L
MKTF-30	12/15/2020	Potassium, Total	ND	1	0.34	NA	mg/L
MKTF-30	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-30	12/15/2020	Magnesium, Total	14.8	0.5	0.12	NA	mg/L
MKTF-30	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-30	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-30	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-30	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-30	12/15/2020	Iron, Total	0.498	0.2	0.075	13822000	mg/L
MKTF-30	12/15/2020	Manganese, Total	0.0603	0.01	0.003	2017000	mg/L
MKTF-30	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-30	12/15/2020	Nickel, Total	0.0156	0.006	0.003	372000	mg/L
MKTF-30	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-30	12/15/2020	Aluminum, Dissolved	12.2	0.2	0.051	19913930	mg/L
MKTF-30	12/15/2020	Barium, Dissolved	0.123	0.01	0.003	2000000	mg/L
MKTF-30	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-30	12/15/2020	Boron, Dissolved	0.76	0.1	0.022	3949110	mg/L
MKTF-30	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-30	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-30	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-30	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-30	12/15/2020	Iron, Dissolved	5.62	0.2	0.075	13821880	mg/L
MKTF-30	12/15/2020	Manganese, Dissolved	0.302	0.01	0.003	2017400	mg/L
MKTF-30	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-30	12/15/2020	Nickel, Dissolved	0.0221	0.006	0.003	372000	mg/L
MKTF-30	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-30	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-30	12/15/2020	Sodium, Total	711	20	9.2	NA	mg/L
MKTF-30	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-30	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-30	12/15/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-30	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-30	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-30	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-30	12/15/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-30	12/15/2020	Lead, Dissolved	2.48	1	0.133	NA	ug/L
MKTF-30	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-30	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-30	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-30	12/15/2020	Uranium, Total Recoverable	**32.2**	5	1.12	30	ug/L
MKTF-30	12/15/2020	Uranium, Dissolved	33.5	5	1.12	NA	ug/L
MKTF-30	9/20/2020	Uranium, Total	0.034	0.0025	0.00033	30000	mg/L
MKTF-30	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-30	9/20/2020	Arsenic, Total	0.0012	0.001	0.00026	10000	mg/L
MKTF-30	9/20/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
MKTF-30	9/20/2020	Selenium, Total	0.0016	0.001	0.00066	50000	mg/L
MKTF-30	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-30	9/20/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-30	9/20/2020	Barium, Total	0.11	0.003	0.0016	2000000	mg/L
MKTF-30	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-30	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-30	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-30	9/20/2020	Manganese, Total	0.44	0.002	0.00081	2017000	mg/L
MKTF-30	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-30	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-30	9/20/2020	Nickel, Total	0.019	0.01	0.0033	372000	mg/L
MKTF-30	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-30	9/20/2020	Zinc, Total	0.0078	0.01	0.0064	5960000	mg/L
MKTF-30	9/20/2020	Aluminum, Total	7.7	0.2	0.074	19914000	mg/L
MKTF-30	9/20/2020	Iron, Total	3.3	0.5	0.13	13822000	mg/L
MKTF-30	9/20/2020	Boron, Total	0.7	0.04	0.0074	3949	mg/L
MKTF-30	9/20/2020	Uranium, Dissolved	0.036	0.0025	0.00033	NA	mg/L
MKTF-30	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-30	9/20/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-30	9/20/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-30	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-30	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-30	9/20/2020	Nickel, Dissolved	0.019	0.05	0.016	372000	mg/L
MKTF-30	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-30	9/20/2020	Sodium, Dissolved	820	50	6.9	NA	mg/L
MKTF-30	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-30	9/20/2020	Barium, Dissolved	0.033	0.002	0.0011	2000000	mg/L
MKTF-30	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-30	9/20/2020	Boron, Dissolved	0.65	0.04	0.0067	3949110	mg/L
MKTF-30	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-30	9/20/2020	Calcium, Dissolved	80	1	0.11	NA	mg/L
MKTF-30	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-30	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-30	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-30	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-30	9/20/2020	Magnesium, Dissolved	15	1	0.067	NA	mg/L
MKTF-30	9/20/2020	Manganese, Dissolved	0.0016	0.002	0.00058	2017400	mg/L
MKTF-30	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-30	9/20/2020	Potassium, Dissolved	0.44	1	0.16	NA	mg/L
MKTF-30	9/20/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-30	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-30	2/27/2020	Arsenic, Dissolved	0.00054	0.001	0.0001	10000	mg/L
MKTF-30	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	2/27/2020	Selenium, Dissolved	0.00033	0.001	0.00017	50000	mg/L
MKTF-30	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	2/27/2020	Uranium, Dissolved	0.029	0.0025	0.00037	NA	mg/L
MKTF-30	2/27/2020	Aluminum, Dissolved	0.055	0.02	0.0025	19913930	mg/L
MKTF-30	2/27/2020	Barium, Dissolved	0.026	0.002	0.00065	2000000	mg/L
MKTF-30	2/27/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
MKTF-30	2/27/2020	Boron, Dissolved	0.54	0.04	0.0045	3949110	mg/L
MKTF-30	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-30	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-30	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-30	2/27/2020	Copper, Dissolved	0.0041	0.006	0.0013	790000	mg/L
MKTF-30	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-30	2/27/2020	Magnesium, Dissolved	13	1	0.05	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/27/2020	Manganese, Dissolved	0.0011	0.002	0.00029	2017400	mg/L
MKTF-30	2/27/2020	Nickel, Dissolved	0.013	0.01	0.004	372000	mg/L
MKTF-30	2/27/2020	Potassium, Dissolved	0.32	1	0.16	NA	mg/L
MKTF-30	2/27/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
MKTF-30	2/27/2020	Calcium, Dissolved	73	1	0.062	NA	mg/L
MKTF-30	2/27/2020	Silver, Dissolved	0.0021	0.005	0.00094	81200	mg/L
MKTF-30	2/27/2020	Sodium, Dissolved	750	10	4.2	NA	mg/L
MKTF-30	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-30	2/27/2020	Antimony, Total	0.00041	0.001	0.00039	6000	mg/L
MKTF-30	2/27/2020	Arsenic, Total	0.00093	0.001	0.00031	10000	mg/L
MKTF-30	2/27/2020	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-30	2/27/2020	Selenium, Total	0.00051	0.001	0.00048	50000	mg/L
MKTF-30	2/27/2020	Thallium, Total	0.000097	0.0005	0.000052	2000	mg/L
MKTF-30	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-30	2/27/2020	Uranium, Total	0.029	0.0025	0.00042	30000	mg/L
MKTF-30	2/27/2020	Barium, Total	0.067	0.002	0.00065	2000000	mg/L
MKTF-30	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-30	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-30	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-30	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-30	2/27/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-30	2/27/2020	Manganese, Total	0.27	0.002	0.00029	2017000	mg/L
MKTF-30	2/27/2020	Nickel, Total	0.017	0.01	0.004	372000	mg/L
MKTF-30	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-30	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-30	2/27/2020	Aluminum, Total	4.4	0.1	0.012	19914000	mg/L
MKTF-30	2/27/2020	Boron, Total	0.56	0.2	0.023	3949	mg/L
MKTF-30	2/27/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-30	2/27/2020	Molybdenum, Total	ND	0.04	0.034	98700	mg/L
MKTF-30	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-30	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-30	5/6/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-30	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-30	5/6/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
MKTF-30	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	5/6/2019	Chromium, Total	0.0046	0.006	0.001533	50000	mg/L
MKTF-30	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	5/6/2019	Iron, Total	5.3	0.4	0.174937	13822000	mg/L
MKTF-30	5/6/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
MKTF-30	5/6/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
MKTF-30	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-30	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	5/6/2019	Nickel, Total	0.022	0.01	0.004009	372000	mg/L
MKTF-30	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	5/6/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-30	5/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-30	5/6/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-30	5/6/2019	Zinc, Total	0.013	0.01	0.005772	5960000	mg/L
MKTF-30	3/28/2019	Aluminum, Dissolved	0.093	0.02	0.002488	19913930	mg/L
MKTF-30	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-30	3/28/2019	Arsenic, Dissolved	0.00065	0.001	0.000101	10000	mg/L
MKTF-30	3/28/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
MKTF-30	3/28/2019	Beryllium, Dissolved	0.00033	0.002	0.000284	4000	mg/L
MKTF-30	3/28/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-30	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	3/28/2019	Calcium, Dissolved	65	1	0.061889	NA	mg/L
MKTF-30	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	3/28/2019	Iron, Dissolved	0.043	0.02	0.008747	13821880	mg/L
MKTF-30	3/28/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-30	3/28/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
MKTF-30	3/28/2019	Manganese, Dissolved	0.0065	0.002	0.00029	2017400	mg/L
MKTF-30	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	3/28/2019	Nickel, Dissolved	0.015	0.01	0.004009	372000	mg/L
MKTF-30	3/28/2019	Potassium, Dissolved	0.19	1	0.162288	NA	mg/L
MKTF-30	3/28/2019	Selenium, Dissolved	0.0004	0.001	0.000171	50000	mg/L
MKTF-30	3/28/2019	Silver, Dissolved	0.00098	0.005	0.000942	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/28/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-30	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	3/28/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-30	3/28/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
MKTF-30	3/28/2019	Aluminum, Total	20	1	0.228221	19914000	mg/L
MKTF-30	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-30	3/28/2019	Arsenic, Total	0.0021	0.005	0.001561	10000	mg/L
MKTF-30	3/28/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-30	3/28/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-30	3/28/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
MKTF-30	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	3/28/2019	Chromium, Total	0.0068	0.006	0.001533	50000	mg/L
MKTF-30	3/28/2019	Cobalt, Total	0.0044	0.006	0.003091	5980	mg/L
MKTF-30	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	3/28/2019	Iron, Total	9.5	0.2	0.087469	13822000	mg/L
MKTF-30	3/28/2019	Lead, Total	0.0084	0.0025	0.000274	15000	mg/L
MKTF-30	3/28/2019	Manganese, Total	0.41	0.002	0.00029	2017000	mg/L
MKTF-30	3/28/2019	Mercury, Total	0.000084	0.0002	0.000038	2000	mg/L
MKTF-30	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	3/28/2019	Nickel, Total	0.024	0.01	0.004009	372000	mg/L
MKTF-30	3/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-30	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-30	3/28/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
MKTF-30	3/28/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-30	5/6/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-30	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	5/6/2019	Arsenic, Dissolved	0.00056	0.005	0.000504	10000	mg/L
MKTF-30	5/6/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
MKTF-30	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-30	5/6/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
MKTF-30	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	5/6/2019	Calcium, Dissolved	64	1	0.061889	NA	mg/L
MKTF-30	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	5/6/2019	Iron, Dissolved	0.012	0.02	0.008747	13821880	mg/L
MKTF-30	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-30	5/6/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
MKTF-30	5/6/2019	Manganese, Dissolved	0.0099	0.002	0.00029	2017400	mg/L
MKTF-30	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	5/6/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-30	5/6/2019	Potassium, Dissolved	0.16	1	0.162288	NA	mg/L
MKTF-30	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	5/6/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-30	5/6/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-30	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-30	5/6/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
MKTF-30	5/6/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-30	5/6/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-30	8/23/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-30	8/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-30	8/23/2019	Arsenic, Dissolved	0.00056	0.001	0.000101	10000	mg/L
MKTF-30	8/23/2019	Barium, Dissolved	0.033	0.002	0.000648	2000000	mg/L
MKTF-30	8/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-30	8/23/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
MKTF-30	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	8/23/2019	Calcium, Dissolved	72	1	0.061889	NA	mg/L
MKTF-30	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	8/23/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-30	8/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-30	8/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	8/23/2019	Magnesium, Dissolved	14	1	0.05029	NA	mg/L
MKTF-30	8/23/2019	Manganese, Dissolved	0.0014	0.002	0.00029	2017400	mg/L
MKTF-30	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	8/23/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
MKTF-30	8/23/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
MKTF-30	8/23/2019	Selenium, Dissolved	0.00057	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-30	8/23/2019	Sodium, Dissolved	830	50	20.808815	NA	mg/L
MKTF-30	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	8/23/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-30	8/23/2019	Zinc, Dissolved	0.0046	0.01	0.002252	5960450	mg/L
MKTF-30	8/23/2019	Aluminum, Total	17	1	0.124414	19914000	mg/L
MKTF-30	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	8/23/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
MKTF-30	8/23/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
MKTF-30	8/23/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-30	8/23/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
MKTF-30	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	8/23/2019	Chromium, Total	0.0061	0.006	0.001533	50000	mg/L
MKTF-30	8/23/2019	Cobalt, Total	0.0046	0.006	0.003091	5980	mg/L
MKTF-30	8/23/2019	Copper, Total	0.0075	0.006	0.004072	790000	mg/L
MKTF-30	8/23/2019	Iron, Total	7	1	0.437344	13822000	mg/L
MKTF-30	8/23/2019	Lead, Total	0.0073	0.0005	0.000055	15000	mg/L
MKTF-30	8/23/2019	Manganese, Total	0.95	0.002	0.00029	2017000	mg/L
MKTF-30	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-30	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	8/23/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
MKTF-30	8/23/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
MKTF-30	8/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-30	8/23/2019	Thallium, Total	0.0001	0.0005	0.000052	2000	mg/L
MKTF-30	8/23/2019	Uranium, Total	0.031	0.0025	0.000424	30000	mg/L
MKTF-30	8/23/2019	Zinc, Total	0.02	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
MKTF-30	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-30	10/23/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Total	0.00035	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Total	0.67	0.04	0.004531	3949	mg/L
MKTF-30	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	10/23/2019	Chromium, Total	0.0033	0.006	0.001533	50000	mg/L
MKTF-30	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	10/23/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
MKTF-30	10/23/2019	Lead, Total	0.0034	0.0005	0.000055	15000	mg/L
MKTF-30	10/23/2019	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
MKTF-30	10/23/2019	Mercury, Total	0.00022	0.0002	0.000038	2000	mg/L
MKTF-30	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	10/23/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
MKTF-30	10/23/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
MKTF-30	10/23/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Dissolved	0.0061	0.02	0.002488	19913930	mg/L
MKTF-30	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Dissolved	0.00079	0.005	0.000504	10000	mg/L
MKTF-30	10/23/2019	Barium, Dissolved	0.032	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Dissolved	0.00082	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Dissolved	0.66	0.04	0.004531	3949110	mg/L
MKTF-30	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	10/23/2019	Calcium, Dissolved	70	1	0.061889	NA	mg/L
MKTF-30	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	10/23/2019	Iron, Dissolved	0.013	0.02	0.008747	13821880	mg/L
MKTF-30	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	10/23/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
MKTF-30	10/23/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
MKTF-30	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Dissolved	0.016	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
MKTF-30	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	10/23/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-30	10/23/2019	Sodium, Dissolved	750	10	4.161763	NA	mg/L
MKTF-30	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	10/23/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/23/2019	Aluminum, Total	7.5	0.4	0.049765	19914000	mg/L
MKTF-30	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-30	10/23/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Total	0.66	0.04	0.004531	3949	mg/L
MKTF-30	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-30	10/23/2019	Chromium, Total	0.0022	0.006	0.001533	50000	mg/L
MKTF-30	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-30	10/23/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
MKTF-30	10/23/2019	Lead, Total	0.0022	0.0005	0.000055	15000	mg/L
MKTF-30	10/23/2019	Manganese, Total	0.27	0.002	0.00029	2017000	mg/L
MKTF-30	10/23/2019	Mercury, Total	0.0002	0.0002	0.000038	2000	mg/L
MKTF-30	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-30	10/23/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-30	10/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-30	10/23/2019	Zinc, Total	0.0088	0.01	0.005772	5960000	mg/L
MKTF-30	10/23/2019	Aluminum, Dissolved	0.012	0.02	0.002488	19913930	mg/L
MKTF-30	10/23/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-30	10/23/2019	Arsenic, Dissolved	0.00091	0.005	0.000504	10000	mg/L
MKTF-30	10/23/2019	Barium, Dissolved	0.031	0.002	0.000648	2000000	mg/L
MKTF-30	10/23/2019	Beryllium, Dissolved	0.00071	0.002	0.000284	4000	mg/L
MKTF-30	10/23/2019	Boron, Dissolved	0.65	0.04	0.004531	3949110	mg/L
MKTF-30	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-30	10/23/2019	Calcium, Dissolved	71	1	0.061889	NA	mg/L
MKTF-30	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-30	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-30	10/23/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-30	10/23/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-30	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-30	10/23/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
MKTF-30	10/23/2019	Manganese, Dissolved	0.0012	0.002	0.00029	2017400	mg/L
MKTF-30	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-30	10/23/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
MKTF-30	10/23/2019	Potassium, Dissolved	0.36	1	0.162288	NA	mg/L
MKTF-30	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-30	10/23/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
MKTF-30	10/23/2019	Sodium, Dissolved	740	10	4.161763	NA	mg/L
MKTF-30	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-30	10/23/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
MKTF-30	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-30	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-30	11/17/2014	Barium, Total	0.26	0.002	0.0005	2000000	mg/L
MKTF-30	11/17/2014	Calcium, Total	180	10	0.82	NA	mg/L
MKTF-30	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-30	11/17/2014	Chromium, Total	0.007	0.006	0.0028	50000	mg/L
MKTF-30	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-30	11/17/2014	Iron, Total	8	0.2	0.072	13822000	mg/L
MKTF-30	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-30	11/17/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-30	11/17/2014	Magnesium, Total	32	1	0.018	NA	mg/L
MKTF-30	11/17/2014	Manganese, Total	0.72	0.002	0.00049	2017000	mg/L
MKTF-30	11/17/2014	Sodium, Total	1200	20	7.8	NA	mg/L
MKTF-30	11/17/2014	Lead, Total	0.009	0.001	0.00026	15000	mg/L
MKTF-30	11/17/2014	Selenium, Total	0.01	0.005	0.0025	50000	mg/L
MKTF-30	11/17/2014	Uranium, Total	0.039	0.001	0.0000072	30000	mg/L
MKTF-30	11/17/2014	Zinc, Total	0.029	0.01	0.0035	5960000	mg/L
MKTF-30	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-30	3/11/2015	Barium, Total	0.036	0.002	0.00095	2000000	mg/L
MKTF-30	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-30	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-30	3/11/2015	Iron, Total	0.19	0.02	0.0073	13822000	mg/L
MKTF-30	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	3/11/2015	Manganese, Total	0.018	0.002	0.00027	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-30	3/11/2015	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
MKTF-30	3/11/2015	Uranium, Total	0.041	0.01	0.0005	30000	mg/L
MKTF-30	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-30	6/10/2015	Barium, Total	0.05	0.002	0.00095	2000000	mg/L
MKTF-30	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-30	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-30	6/10/2015	Iron, Total	0.58	0.02	0.0073	13822000	mg/L
MKTF-30	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	6/10/2015	Manganese, Total	0.089	0.002	0.00027	2017000	mg/L
MKTF-30	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-30	6/10/2015	Selenium, Total	0.0065	0.005	0.00097	50000	mg/L
MKTF-30	6/10/2015	Uranium, Total	0.033	0.005	0.000024	30000	mg/L
MKTF-30	6/10/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	8/20/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	8/20/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-30	8/20/2015	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
MKTF-30	8/20/2015	Calcium, Total	130	5	0.28	NA	mg/L
MKTF-30	8/20/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	8/20/2015	Chromium, Total	0.011	0.006	0.0022	50000	mg/L
MKTF-30	8/20/2015	Copper, Total	0.0084	0.006	0.0051	790000	mg/L
MKTF-30	8/20/2015	Iron, Total	8.4	0.4	0.14	13822000	mg/L
MKTF-30	8/20/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	8/20/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
MKTF-30	8/20/2015	Magnesium, Total	25	1	0.039	NA	mg/L
MKTF-30	8/20/2015	Manganese, Total	0.55	0.002	0.0015	2017000	mg/L
MKTF-30	8/20/2015	Sodium, Total	1100	50	3.6	NA	mg/L
MKTF-30	8/20/2015	Lead, Total	0.0094	0.0005	0.000047	15000	mg/L
MKTF-30	8/20/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-30	8/20/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-30	8/20/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-30	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-30	11/4/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-30	11/4/2015	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-30	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-30	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-30	11/4/2015	Iron, Total	7.1	0.2	0.072	13822000	mg/L
MKTF-30	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-30	11/4/2015	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-30	11/4/2015	Magnesium, Total	23	1	0.013	NA	mg/L
MKTF-30	11/4/2015	Manganese, Total	0.54	0.002	0.0015	2017000	mg/L
MKTF-30	11/4/2015	Sodium, Total	950	20	1.9	NA	mg/L
MKTF-30	11/4/2015	Lead, Total	0.0097	0.0005	0.000047	15000	mg/L
MKTF-30	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-30	11/4/2015	Uranium, Total	0.026	0.0025	0.000025	30000	mg/L
MKTF-30	11/4/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-30	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-30	2/23/2016	Arsenic, Total	0.0017	0.001	0.00029	10000	mg/L
MKTF-30	2/23/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-30	2/23/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-30	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-30	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-30	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-30	2/23/2016	Iron, Total	3.3	0.1	0.036	13822000	mg/L
MKTF-30	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-30	2/23/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-30	2/23/2016	Magnesium, Total	21	1	0.013	NA	mg/L
MKTF-30	2/23/2016	Manganese, Total	0.18	0.002	0.0015	2017000	mg/L
MKTF-30	2/23/2016	Sodium, Total	1100	20	1.9	NA	mg/L
MKTF-30	2/23/2016	Lead, Total	0.0041	0.0005	0.000047	15000	mg/L
MKTF-30	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-30	2/23/2016	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-30	2/23/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-30	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/9/2016	Arsenic, Total	0.0041	0.005	0.00069	10000	mg/L
MKTF-30	6/9/2016	Barium, Total	0.04	0.002	0.0013	2000000	mg/L
MKTF-30	6/9/2016	Calcium, Total	88	1	0.26	NA	mg/L
MKTF-30	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-30	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-30	6/9/2016	Iron, Total	0.016	0.02	0.0091	13822000	mg/L
MKTF-30	6/9/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
MKTF-30	6/9/2016	Potassium, Total	0.68	1	0.18	NA	mg/L
MKTF-30	6/9/2016	Magnesium, Total	17	1	0.013	NA	mg/L
MKTF-30	6/9/2016	Manganese, Total	0.0075	0.002	0.00032	2017000	mg/L
MKTF-30	6/9/2016	Sodium, Total	910	10	0.96	NA	mg/L
MKTF-30	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-30	6/9/2016	Selenium, Total	0.013	0.005	0.0011	50000	mg/L
MKTF-30	6/9/2016	Uranium, Total	0.034	0.0025	0.00026	30000	mg/L
MKTF-30	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-30	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	9/7/2016	Arsenic, Total	0.0024	0.005	0.0011	10000	mg/L
MKTF-30	9/7/2016	Barium, Total	0.074	0.002	0.00079	2000000	mg/L
MKTF-30	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-30	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-30	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-30	9/7/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-30	9/7/2016	Barium, Dissolved	0.046	0.002	0.0013	2000000	mg/L
MKTF-30	9/7/2016	Calcium, Dissolved	87	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-30	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-30	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-30	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-30	9/7/2016	Potassium, Dissolved	0.63	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Magnesium, Dissolved	17	1	0.5	NA	mg/L
MKTF-30	9/7/2016	Manganese, Dissolved	0.053	0.002	0.00032	2017400	mg/L
MKTF-30	9/7/2016	Sodium, Dissolved	930	10	5	NA	mg/L
MKTF-30	9/7/2016	Lead, Dissolved	0.022	0.0005	0.00017	NA	mg/L
MKTF-30	9/7/2016	Selenium, Dissolved	0.0076	0.005	0.0011	50000	mg/L
MKTF-30	9/7/2016	Uranium, Dissolved	0.026	0.0025	0.00026	NA	mg/L
MKTF-30	9/7/2016	Zinc, Dissolved	0.0048	0.01	0.0028	5960450	mg/L
MKTF-30	9/7/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-30	9/7/2016	Mercury, Total	0.000068	0.0002	0.000053	2000	mg/L
MKTF-30	9/7/2016	Manganese, Total	0.18	0.002	0.00027	2017000	mg/L
MKTF-30	9/7/2016	Lead, Total	0.0039	0.0005	0.000081	15000	mg/L
MKTF-30	9/7/2016	Selenium, Total	0.0081	0.01	0.0019	50000	mg/L
MKTF-30	9/7/2016	Uranium, Total	0.027	0.0025	0.00087	30000	mg/L
MKTF-30	9/7/2016	Zinc, Total	0.0063	0.01	0.0027	5960000	mg/L
MKTF-30	10/28/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	10/28/2016	Arsenic, Total	0.0022	0.005	0.0011	10000	mg/L
MKTF-30	10/28/2016	Barium, Total	0.16	0.002	0.00079	2000000	mg/L
MKTF-30	10/28/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	10/28/2016	Chromium, Total	0.0031	0.006	0.0027	50000	mg/L
MKTF-30	10/28/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-30	10/28/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-30	10/28/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
MKTF-30	10/28/2016	Barium, Dissolved	0.046	0.002	0.0013	2000000	mg/L
MKTF-30	10/28/2016	Calcium, Dissolved	93	5	2.5	NA	mg/L
MKTF-30	10/28/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-30	10/28/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-30	10/28/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-30	10/28/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-30	10/28/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-30	10/28/2016	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-30	10/28/2016	Manganese, Dissolved	0.0031	0.002	0.00032	2017400	mg/L
MKTF-30	10/28/2016	Sodium, Dissolved	910	20	10	NA	mg/L
MKTF-30	10/28/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	10/28/2016	Selenium, Dissolved	0.0077	0.001	0.00021	50000	mg/L
MKTF-30	10/28/2016	Uranium, Dissolved	0.029	0.0025	0.00026	NA	mg/L
MKTF-30	10/28/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-30	10/28/2016	Iron, Total	3	0.1	0.1	13822000	mg/L
MKTF-30	10/28/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/28/2016	Manganese, Total	0.32	0.002	0.00027	2017000	mg/L
MKTF-30	10/28/2016	Lead, Total	0.0045	0.0005	0.000081	15000	mg/L
MKTF-30	10/28/2016	Selenium, Total	0.0065	0.01	0.0019	50000	mg/L
MKTF-30	10/28/2016	Uranium, Total	0.03	0.0025	0.00087	30000	mg/L
MKTF-30	10/28/2016	Zinc, Total	0.0088	0.01	0.0027	5960000	mg/L
MKTF-30	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-30	3/29/2017	Arsenic, Total	0.0035	0.001	0.00021	10000	mg/L
MKTF-30	3/29/2017	Barium, Total	0.33	0.002	0.00079	2000000	mg/L
MKTF-30	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-30	3/29/2017	Chromium, Total	0.0078	0.006	0.0027	50000	mg/L
MKTF-30	3/29/2017	Copper, Total	0.0043	0.006	0.003	790000	mg/L
MKTF-30	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-30	3/29/2017	Arsenic, Dissolved	0.0013	0.005	0.00089	10000	mg/L
MKTF-30	3/29/2017	Barium, Dissolved	0.039	0.002	0.00085	2000000	mg/L
MKTF-30	3/29/2017	Calcium, Dissolved	88	5	2.5	NA	mg/L
MKTF-30	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-30	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	3/29/2017	Iron, Dissolved	0.087	0.02	0.02	13821880	mg/L
MKTF-30	3/29/2017	Potassium, Dissolved	0.53	1	0.5	NA	mg/L
MKTF-30	3/29/2017	Magnesium, Dissolved	17	1	0.5	NA	mg/L
MKTF-30	3/29/2017	Manganese, Dissolved	0.044	0.002	0.00038	2017400	mg/L
MKTF-30	3/29/2017	Sodium, Dissolved	860	10	5	NA	mg/L
MKTF-30	3/29/2017	Lead, Dissolved	0.00037	0.0005	0.00017	NA	mg/L
MKTF-30	3/29/2017	Selenium, Dissolved	0.0055	0.005	0.0019	50000	mg/L
MKTF-30	3/29/2017	Uranium, Dissolved	0.033	0.0025	0.00025	NA	mg/L
MKTF-30	3/29/2017	Zinc, Dissolved	0.021	0.01	0.0011	5960450	mg/L
MKTF-30	3/29/2017	Iron, Total	7.9	0.2	0.2	13822000	mg/L
MKTF-30	3/29/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
MKTF-30	3/29/2017	Manganese, Total	0.5	0.002	0.00027	2017000	mg/L
MKTF-30	3/29/2017	Lead, Total	0.0093	0.0025	0.00041	15000	mg/L
MKTF-30	3/29/2017	Selenium, Total	0.0073	0.001	0.00019	50000	mg/L
MKTF-30	3/29/2017	Uranium, Total	0.033	0.0025	0.00087	30000	mg/L
MKTF-30	3/29/2017	Zinc, Total	0.021	0.01	0.0027	5960000	mg/L
MKTF-30	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-30	6/5/2017	Arsenic, Total	0.0024	0.001	0.0003	10000	mg/L
MKTF-30	6/5/2017	Barium, Total	0.26	0.002	0.00093	2000000	mg/L
MKTF-30	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	6/5/2017	Chromium, Total	0.0077	0.006	0.0011	50000	mg/L
MKTF-30	6/5/2017	Copper, Total	0.006	0.006	0.0017	790000	mg/L
MKTF-30	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-30	6/5/2017	Arsenic, Dissolved	0.0015	0.005	0.00089	10000	mg/L
MKTF-30	6/5/2017	Barium, Dissolved	0.026	0.002	0.00085	2000000	mg/L
MKTF-30	6/5/2017	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-30	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-30	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	6/5/2017	Iron, Dissolved	0.024	0.02	0.016	13821880	mg/L
MKTF-30	6/5/2017	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
MKTF-30	6/5/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-30	6/5/2017	Manganese, Dissolved	0.017	0.002	0.00038	2017400	mg/L
MKTF-30	6/5/2017	Sodium, Dissolved	760	10	1.6	NA	mg/L
MKTF-30	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	6/5/2017	Selenium, Dissolved	0.0044	0.001	0.00039	50000	mg/L
MKTF-30	6/5/2017	Uranium, Dissolved	0.039	0.0025	0.00025	NA	mg/L
MKTF-30	6/5/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
MKTF-30	6/5/2017	Iron, Total	8.5	0.2	0.1	13822000	mg/L
MKTF-30	6/5/2017	Mercury, Total	0.00006	0.0002	0.000037	2000	mg/L
MKTF-30	6/5/2017	Manganese, Total	0.38	0.002	0.0011	2017000	mg/L
MKTF-30	6/5/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-30	6/5/2017	Selenium, Total	0.0035	0.001	0.00071	50000	mg/L
MKTF-30	6/5/2017	Uranium, Total	0.044	0.0025	0.00077	30000	mg/L
MKTF-30	6/5/2017	Zinc, Total	0.018	0.01	0.0028	5960000	mg/L
MKTF-30	10/3/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	10/3/2017	Arsenic, Total	0.0023	0.001	0.0003	10000	mg/L
MKTF-30	10/3/2017	Barium, Total	0.18	0.002	0.00093	2000000	mg/L
MKTF-30	10/3/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	10/3/2017	Chromium, Total	0.0075	0.006	0.0018	50000	mg/L
MKTF-30	10/3/2017	Copper, Total	0.0068	0.006	0.0017	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	10/3/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	10/3/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-30	10/3/2017	Barium, Dissolved	0.033	0.002	0.00085	2000000	mg/L
MKTF-30	10/3/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
MKTF-30	10/3/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	10/3/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	10/3/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	10/3/2017	Iron, Dissolved	0.051	0.02	0.016	13821880	mg/L
MKTF-30	10/3/2017	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
MKTF-30	10/3/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-30	10/3/2017	Manganese, Dissolved	0.017	0.002	0.00039	2017400	mg/L
MKTF-30	10/3/2017	Sodium, Dissolved	760	10	1.6	NA	mg/L
MKTF-30	10/3/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
MKTF-30	10/3/2017	Selenium, Dissolved	0.0042	0.001	0.00039	50000	mg/L
MKTF-30	10/3/2017	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
MKTF-30	10/3/2017	Iron, Total	7.1	0.2	0.1	13822000	mg/L
MKTF-30	10/3/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	10/3/2017	Manganese, Total	0.66	0.002	0.0011	2017000	mg/L
MKTF-30	10/3/2017	Lead, Total	0.007	0.0005	0.000095	15000	mg/L
MKTF-30	10/3/2017	Selenium, Total	0.0036	0.001	0.00071	50000	mg/L
MKTF-30	10/3/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-30	11/20/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	11/20/2017	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-30	11/20/2017	Barium, Total	0.081	0.002	0.001	2000000	mg/L
MKTF-30	11/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	11/20/2017	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-30	11/20/2017	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-30	11/20/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	11/20/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	11/20/2017	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-30	11/20/2017	Calcium, Dissolved	66	1	0.078	NA	mg/L
MKTF-30	11/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	11/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	11/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	11/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	11/20/2017	Potassium, Dissolved	0.16	1	0.11	NA	mg/L
MKTF-30	11/20/2017	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-30	11/20/2017	Manganese, Dissolved	0.0081	0.002	0.00039	2017400	mg/L
MKTF-30	11/20/2017	Sodium, Dissolved	770	10	1.6	NA	mg/L
MKTF-30	11/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	11/20/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	11/20/2017	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
MKTF-30	11/20/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-30	11/20/2017	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-30	11/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	11/20/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
MKTF-30	11/20/2017	Lead, Total	0.0021	0.0005	0.00023	15000	mg/L
MKTF-30	11/20/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	11/20/2017	Uranium, Total	0.031	0.0025	0.00077	30000	mg/L
MKTF-30	11/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-30	2/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	2/6/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
MKTF-30	2/6/2018	Barium, Total	0.087	0.002	0.001	2000000	mg/L
MKTF-30	2/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	2/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	2/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	2/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	2/6/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	2/6/2018	Barium, Dissolved	0.027	0.002	0.00099	2000000	mg/L
MKTF-30	2/6/2018	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-30	2/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	2/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	2/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	2/6/2018	Iron, Dissolved	0.047	0.02	0.016	13821880	mg/L
MKTF-30	2/6/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-30	2/6/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-30	2/6/2018	Manganese, Dissolved	0.013	0.002	0.00039	2017400	mg/L
MKTF-30	2/6/2018	Sodium, Dissolved	730	10	1.6	NA	mg/L
MKTF-30	2/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	2/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	2/6/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-30	2/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-30	2/6/2018	Iron, Total	2.8	0.1	0.051	13822000	mg/L
MKTF-30	2/6/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-30	2/6/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
MKTF-30	2/6/2018	Lead, Total	0.0025	0.0005	0.00023	15000	mg/L
MKTF-30	2/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	2/6/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
MKTF-30	2/6/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-30	5/1/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	5/1/2018	Arsenic, Total	0.0023	0.005	0.0021	10000	mg/L
MKTF-30	5/1/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-30	5/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	5/1/2018	Chromium, Total	0.0041	0.006	0.0018	50000	mg/L
MKTF-30	5/1/2018	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
MKTF-30	5/1/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	5/1/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-30	5/1/2018	Barium, Dissolved	0.016	0.002	0.00099	2000000	mg/L
MKTF-30	5/1/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-30	5/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	5/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	5/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	5/1/2018	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
MKTF-30	5/1/2018	Potassium, Dissolved	0.16	1	0.11	NA	mg/L
MKTF-30	5/1/2018	Magnesium, Dissolved	12	1	0.25	NA	mg/L
MKTF-30	5/1/2018	Manganese, Dissolved	0.005	0.002	0.00039	2017400	mg/L
MKTF-30	5/1/2018	Sodium, Dissolved	750	5	0.82	NA	mg/L
MKTF-30	5/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	5/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-30	5/1/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-30	5/1/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
MKTF-30	5/1/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-30	5/1/2018	Mercury, Total	0.000083	0.0002	0.000037	2000	mg/L
MKTF-30	5/1/2018	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-30	5/1/2018	Lead, Total	0.0029	0.0025	0.0011	15000	mg/L
MKTF-30	5/1/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-30	5/1/2018	Uranium, Total	0.039	0.0025	0.00034	30000	mg/L
MKTF-30	5/1/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-30	8/20/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-30	8/20/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-30	8/20/2018	Barium, Total	0.057	0.002	0.001	2000000	mg/L
MKTF-30	8/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	8/20/2018	Chromium, Total	0.0021	0.006	0.0018	50000	mg/L
MKTF-30	8/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	8/20/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
MKTF-30	8/20/2018	Arsenic, Dissolved	0.00073	0.001	0.00042	10000	mg/L
MKTF-30	8/20/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-30	8/20/2018	Calcium, Dissolved	74	1	0.078	NA	mg/L
MKTF-30	8/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	8/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	8/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	8/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	8/20/2018	Potassium, Dissolved	0.18	1	0.11	NA	mg/L
MKTF-30	8/20/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-30	8/20/2018	Manganese, Dissolved	0.015	0.002	0.00039	2017400	mg/L
MKTF-30	8/20/2018	Sodium, Dissolved	810	20	3.3	NA	mg/L
MKTF-30	8/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	8/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-30	8/20/2018	Uranium, Dissolved	0.03	0.0025	0.00048	NA	mg/L
MKTF-30	8/20/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
MKTF-30	8/20/2018	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-30	8/20/2018	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
MKTF-30	8/20/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-30	8/20/2018	Lead, Total	0.0011	0.0005	0.00023	15000	mg/L
MKTF-30	8/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-30	8/20/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
MKTF-30	8/20/2018	Zinc, Total	0.0069	0.01	0.0033	5960000	mg/L
MKTF-30	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/15/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-30	11/15/2018	Barium, Total	0.048	0.002	0.001	2000000	mg/L
MKTF-30	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-30	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-30	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-30	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-30	11/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-30	11/15/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
MKTF-30	11/15/2018	Calcium, Dissolved	63	1	0.078	NA	mg/L
MKTF-30	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-30	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-30	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-30	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-30	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-30	11/15/2018	Magnesium, Dissolved	11	1	0.25	NA	mg/L
MKTF-30	11/15/2018	Manganese, Dissolved	0.013	0.002	0.00039	2017400	mg/L
MKTF-30	11/15/2018	Sodium, Dissolved	760	20	3.3	NA	mg/L
MKTF-30	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-30	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-30	11/15/2018	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
MKTF-30	11/15/2018	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
MKTF-30	11/15/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-30	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-30	11/15/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
MKTF-30	11/15/2018	Lead, Total	0.00076	0.0005	0.00023	15000	mg/L
MKTF-30	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-30	11/15/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-30	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-31	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-31	11/17/2014	Barium, Total	0.22	0.002	0.0005	2000000	mg/L
MKTF-31	11/17/2014	Calcium, Total	210	10	0.82	NA	mg/L
MKTF-31	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-31	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-31	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-31	11/17/2014	Iron, Total	2.9	0.1	0.036	13822000	mg/L
MKTF-31	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-31	11/17/2014	Potassium, Total	1.7	1	0.093	NA	mg/L
MKTF-31	11/17/2014	Magnesium, Total	40	1	0.018	NA	mg/L
MKTF-31	11/17/2014	Manganese, Total	0.24	0.002	0.00049	2017000	mg/L
MKTF-31	11/17/2014	Sodium, Total	550	10	3.9	NA	mg/L
MKTF-31	11/17/2014	Lead, Total	0.0041	0.001	0.00026	15000	mg/L
MKTF-31	11/17/2014	Selenium, Total	0.008	0.005	0.0025	50000	mg/L
MKTF-31	11/17/2014	Uranium, Total	0.05	0.001	0.0000072	30000	mg/L
MKTF-31	11/17/2014	Zinc, Total	0.017	0.01	0.0035	5960000	mg/L
MKTF-31	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-31	3/11/2015	Barium, Total	0.17	0.002	0.00095	2000000	mg/L
MKTF-31	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-31	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-31	3/11/2015	Iron, Total	0.026	0.02	0.0073	13822000	mg/L
MKTF-31	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	3/11/2015	Manganese, Total	0.032	0.002	0.00027	2017000	mg/L
MKTF-31	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-31	3/11/2015	Selenium, Total	0.013	0.01	0.0015	50000	mg/L
MKTF-31	3/11/2015	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
MKTF-31	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-31	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-31	6/10/2015	Barium, Total	0.13	0.002	0.00095	2000000	mg/L
MKTF-31	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-31	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-31	6/10/2015	Iron, Total	0.021	0.02	0.0073	13822000	mg/L
MKTF-31	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	6/10/2015	Manganese, Total	0.026	0.002	0.00027	2017000	mg/L
MKTF-31	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-31	6/10/2015	Selenium, Total	0.0058	0.005	0.00097	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/10/2015	Uranium, Total	0.048	0.005	0.000024	30000	mg/L
MKTF-31	6/10/2015	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-31	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-31	8/21/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-31	8/21/2015	Calcium, Total	160	10	0.57	NA	mg/L
MKTF-31	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	8/21/2015	Iron, Total	3.1	0.2	0.072	13822000	mg/L
MKTF-31	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	8/21/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
MKTF-31	8/21/2015	Magnesium, Total	33	1	0.039	NA	mg/L
MKTF-31	8/21/2015	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-31	8/21/2015	Sodium, Total	540	10	0.72	NA	mg/L
MKTF-31	8/21/2015	Lead, Total	0.0032	0.0005	0.000047	15000	mg/L
MKTF-31	8/21/2015	Selenium, Total	0.0046	0.001	0.00012	50000	mg/L
MKTF-31	8/21/2015	Uranium, Total	0.049	0.005	0.000049	30000	mg/L
MKTF-31	8/21/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-31	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-31	11/4/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-31	11/4/2015	Calcium, Total	160	10	2.6	NA	mg/L
MKTF-31	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	11/4/2015	Iron, Total	4	0.1	0.036	13822000	mg/L
MKTF-31	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-31	11/4/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-31	11/4/2015	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-31	11/4/2015	Manganese, Total	0.25	0.002	0.0015	2017000	mg/L
MKTF-31	11/4/2015	Sodium, Total	520	10	0.96	NA	mg/L
MKTF-31	11/4/2015	Lead, Total	0.0064	0.0005	0.000047	15000	mg/L
MKTF-31	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-31	11/4/2015	Uranium, Total	0.041	0.0025	0.000025	30000	mg/L
MKTF-31	11/4/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-31	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-31	2/23/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-31	2/23/2016	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
MKTF-31	2/23/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-31	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-31	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-31	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-31	2/23/2016	Iron, Total	2.5	0.1	0.036	13822000	mg/L
MKTF-31	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-31	2/23/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-31	2/23/2016	Magnesium, Total	35	1	0.013	NA	mg/L
MKTF-31	2/23/2016	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-31	2/23/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-31	2/23/2016	Lead, Total	0.0036	0.0005	0.000047	15000	mg/L
MKTF-31	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-31	2/23/2016	Uranium, Total	0.045	0.0025	0.000025	30000	mg/L
MKTF-31	2/23/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-31	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-31	6/9/2016	Arsenic, Total	0.0043	0.005	0.00069	10000	mg/L
MKTF-31	6/9/2016	Barium, Total	0.14	0.002	0.0013	2000000	mg/L
MKTF-31	6/9/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-31	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-31	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-31	6/9/2016	Iron, Total	0.013	0.02	0.0091	13822000	mg/L
MKTF-31	6/9/2016	Mercury, Total	0.000082	0.0002	0.000053	2000	mg/L
MKTF-31	6/9/2016	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-31	6/9/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-31	6/9/2016	Manganese, Total	0.018	0.002	0.00032	2017000	mg/L
MKTF-31	6/9/2016	Sodium, Total	560	10	0.96	NA	mg/L
MKTF-31	6/9/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-31	6/9/2016	Selenium, Total	0.014	0.005	0.0011	50000	mg/L
MKTF-31	6/9/2016	Uranium, Total	0.046	0.0025	0.00026	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-31	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	9/8/2016	Arsenic, Total	0.0029	0.005	0.0011	10000	mg/L
MKTF-31	9/8/2016	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
MKTF-31	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	9/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-31	9/8/2016	Copper, Total	0.0065	0.006	0.003	790000	mg/L
MKTF-31	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-31	9/8/2016	Arsenic, Dissolved	0.0021	0.005	0.00069	10000	mg/L
MKTF-31	9/8/2016	Barium, Dissolved	0.14	0.002	0.0013	2000000	mg/L
MKTF-31	9/8/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
MKTF-31	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-31	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-31	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-31	9/8/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-31	9/8/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-31	9/8/2016	Magnesium, Dissolved	34	1	0.5	NA	mg/L
MKTF-31	9/8/2016	Manganese, Dissolved	0.035	0.002	0.00032	2017400	mg/L
MKTF-31	9/8/2016	Sodium, Dissolved	570	20	10	NA	mg/L
MKTF-31	9/8/2016	Lead, Dissolved	0.00084	0.0005	0.00017	NA	mg/L
MKTF-31	9/8/2016	Selenium, Dissolved	0.0068	0.005	0.0011	50000	mg/L
MKTF-31	9/8/2016	Uranium, Dissolved	0.04	0.0025	0.00026	NA	mg/L
MKTF-31	9/8/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-31	9/8/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-31	9/8/2016	Mercury, Total	0.00009	0.0002	0.000053	2000	mg/L
MKTF-31	9/8/2016	Manganese, Total	0.17	0.002	0.00027	2017000	mg/L
MKTF-31	9/8/2016	Lead, Total	0.0043	0.0005	0.000081	15000	mg/L
MKTF-31	9/8/2016	Selenium, Total	ND	0.05	0.0094	50000	mg/L
MKTF-31	9/8/2016	Uranium, Total	0.044	0.0025	0.00087	30000	mg/L
MKTF-31	9/8/2016	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-31	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	10/31/2016	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
MKTF-31	10/31/2016	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
MKTF-31	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-31	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-31	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-31	10/31/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-31	10/31/2016	Barium, Dissolved	0.13	0.002	0.0013	2000000	mg/L
MKTF-31	10/31/2016	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-31	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-31	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-31	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-31	10/31/2016	Iron, Dissolved	0.02	0.02	0.02	13821880	mg/L
MKTF-31	10/31/2016	Potassium, Dissolved	1.4	1	0.5	NA	mg/L
MKTF-31	10/31/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-31	10/31/2016	Manganese, Dissolved	0.018	0.002	0.00032	2017400	mg/L
MKTF-31	10/31/2016	Sodium, Dissolved	540	10	5	NA	mg/L
MKTF-31	10/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	10/31/2016	Selenium, Dissolved	0.01	0.005	0.0011	50000	mg/L
MKTF-31	10/31/2016	Uranium, Dissolved	0.043	0.0025	0.00026	NA	mg/L
MKTF-31	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-31	10/31/2016	Iron, Total	1.5	0.1	0.1	13822000	mg/L
MKTF-31	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-31	10/31/2016	Manganese, Total	0.11	0.002	0.00027	2017000	mg/L
MKTF-31	10/31/2016	Lead, Total	0.0031	0.0005	0.000081	15000	mg/L
MKTF-31	10/31/2016	Selenium, Total	0.0064	0.02	0.0037	50000	mg/L
MKTF-31	10/31/2016	Uranium, Total	0.041	0.0025	0.00087	30000	mg/L
MKTF-31	10/31/2016	Zinc, Total	0.0098	0.01	0.0027	5960000	mg/L
MKTF-31	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-31	3/7/2017	Arsenic, Total	0.0049	0.005	0.0011	10000	mg/L
MKTF-31	3/7/2017	Barium, Total	0.25	0.002	0.00079	2000000	mg/L
MKTF-31	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	3/7/2017	Chromium, Total	0.0027	0.006	0.0027	50000	mg/L
MKTF-31	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-31	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-31	3/7/2017	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
MKTF-31	3/7/2017	Barium, Dissolved	0.17	0.002	0.00085	2000000	mg/L
MKTF-31	3/7/2017	Calcium, Dissolved	230	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-31	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-31	3/7/2017	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
MKTF-31	3/7/2017	Magnesium, Dissolved	46	1	0.5	NA	mg/L
MKTF-31	3/7/2017	Manganese, Dissolved	0.022	0.002	0.00038	2017400	mg/L
MKTF-31	3/7/2017	Sodium, Dissolved	610	10	5	NA	mg/L
MKTF-31	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	3/7/2017	Selenium, Dissolved	0.0078	0.005	0.0011	50000	mg/L
MKTF-31	3/7/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-31	3/7/2017	Iron, Total	3.8	0.2	0.2	13822000	mg/L
MKTF-31	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-31	3/7/2017	Manganese, Total	0.19	0.002	0.00027	2017000	mg/L
MKTF-31	3/7/2017	Lead, Total	0.005	0.0025	0.00041	15000	mg/L
MKTF-31	3/7/2017	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-31	3/7/2017	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-31	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-31	6/5/2017	Arsenic, Total	0.0026	0.005	0.0015	10000	mg/L
MKTF-31	6/5/2017	Barium, Total	0.16	0.002	0.00093	2000000	mg/L
MKTF-31	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	6/5/2017	Chromium, Total	0.0019	0.006	0.0011	50000	mg/L
MKTF-31	6/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-31	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-31	6/5/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-31	6/5/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
MKTF-31	6/5/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
MKTF-31	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-31	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	6/5/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	6/5/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	6/5/2017	Magnesium, Dissolved	45	1	0.25	NA	mg/L
MKTF-31	6/5/2017	Manganese, Dissolved	0.013	0.002	0.00038	2017400	mg/L
MKTF-31	6/5/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
MKTF-31	6/5/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	6/5/2017	Selenium, Dissolved	0.0072	0.005	0.0019	50000	mg/L
MKTF-31	6/5/2017	Uranium, Dissolved	0.046	0.0025	0.00025	NA	mg/L
MKTF-31	6/5/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-31	6/5/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-31	6/5/2017	Mercury, Total	0.000059	0.0002	0.000037	2000	mg/L
MKTF-31	6/5/2017	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
MKTF-31	6/5/2017	Lead, Total	0.0014	0.0025	0.00048	15000	mg/L
MKTF-31	6/5/2017	Selenium, Total	0.0069	0.005	0.0036	50000	mg/L
MKTF-31	6/5/2017	Uranium, Total	0.051	0.0025	0.00077	30000	mg/L
MKTF-31	6/5/2017	Zinc, Total	0.0052	0.01	0.0028	5960000	mg/L
MKTF-31	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	9/25/2017	Arsenic, Total	0.0025	0.005	0.0015	10000	mg/L
MKTF-31	9/25/2017	Barium, Total	0.17	0.002	0.00093	2000000	mg/L
MKTF-31	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	9/25/2017	Chromium, Total	0.0023	0.006	0.0018	50000	mg/L
MKTF-31	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-31	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	9/25/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-31	9/25/2017	Barium, Dissolved	0.12	0.002	0.00085	2000000	mg/L
MKTF-31	9/25/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-31	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	9/25/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-31	9/25/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-31	9/25/2017	Manganese, Dissolved	0.029	0.002	0.00039	2017400	mg/L
MKTF-31	9/25/2017	Sodium, Dissolved	530	10	1.6	NA	mg/L
MKTF-31	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	9/25/2017	Selenium, Dissolved	0.0062	0.005	0.0019	50000	mg/L
MKTF-31	9/25/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-31	9/25/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-31	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-31	9/25/2017	Lead, Total	0.0023	0.0005	0.000095	15000	mg/L
MKTF-31	9/25/2017	Selenium, Total	0.0081	0.005	0.0036	50000	mg/L
MKTF-31	9/25/2017	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-31	11/21/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-31	11/21/2017	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-31	11/21/2017	Barium, Total	0.14	0.002	0.001	2000000	mg/L
MKTF-31	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	11/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	11/21/2017	Copper, Total	0.0044	0.006	0.0041	790000	mg/L
MKTF-31	11/21/2017	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
MKTF-31	11/21/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-31	11/21/2017	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
MKTF-31	11/21/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-31	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	11/21/2017	Iron, Dissolved	0.026	0.02	0.016	13821880	mg/L
MKTF-31	11/21/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	11/21/2017	Magnesium, Dissolved	27	1	0.25	NA	mg/L
MKTF-31	11/21/2017	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
MKTF-31	11/21/2017	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-31	11/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	11/21/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-31	11/21/2017	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
MKTF-31	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-31	11/21/2017	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-31	11/21/2017	Manganese, Total	0.083	0.002	0.0011	2017000	mg/L
MKTF-31	11/21/2017	Lead, Total	0.0018	0.0025	0.0011	15000	mg/L
MKTF-31	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	11/21/2017	Uranium, Total	0.039	0.0025	0.00077	30000	mg/L
MKTF-31	11/21/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	2/5/2018	Silver, Total	0.0052	0.005	0.0012	50000	mg/L
MKTF-31	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-31	2/5/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-31	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	2/5/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	2/5/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	2/5/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-31	2/5/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
MKTF-31	2/5/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-31	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	2/5/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	2/5/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-31	2/5/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-31	2/5/2018	Manganese, Dissolved	0.028	0.002	0.00039	2017400	mg/L
MKTF-31	2/5/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
MKTF-31	2/5/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	2/5/2018	Selenium, Dissolved	0.0056	0.005	0.0038	50000	mg/L
MKTF-31	2/5/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-31	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-31	2/5/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-31	2/5/2018	Manganese, Total	0.097	0.002	0.0011	2017000	mg/L
MKTF-31	2/5/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-31	2/5/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	2/5/2018	Uranium, Total	0.044	0.0025	0.00034	30000	mg/L
MKTF-31	2/5/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-31	5/6/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
MKTF-31	5/6/2018	Arsenic, Total	0.0021	0.005	0.0021	10000	mg/L
MKTF-31	5/6/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-31	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	5/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	5/6/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
MKTF-31	5/6/2018	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
MKTF-31	5/6/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-31	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	5/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	5/6/2018	Iron, Dissolved	0.036	0.02	0.016	13821880	mg/L
MKTF-31	5/6/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-31	5/6/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-31	5/6/2018	Manganese, Dissolved	0.03	0.002	0.00039	2017400	mg/L
MKTF-31	5/6/2018	Sodium, Dissolved	560	10	1.6	NA	mg/L
MKTF-31	5/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	5/6/2018	Uranium, Dissolved	0.038	0.0025	0.00048	NA	mg/L
MKTF-31	5/6/2018	Zinc, Dissolved	0.0037	0.01	0.0021	5960450	mg/L
MKTF-31	5/6/2018	Iron, Total	0.77	0.02	0.01	13822000	mg/L
MKTF-31	5/6/2018	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-31	5/6/2018	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
MKTF-31	5/6/2018	Lead, Total	0.00061	0.0005	0.00023	15000	mg/L
MKTF-31	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	5/6/2018	Uranium, Total	0.044	0.0025	0.00034	30000	mg/L
MKTF-31	5/6/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-31	8/17/2018	Silver, Total	0.0033	0.005	0.0012	50000	mg/L
MKTF-31	8/17/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-31	8/17/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-31	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	8/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	8/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	8/17/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-31	8/17/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-31	8/17/2018	Barium, Dissolved	0.13	0.002	0.00099	2000000	mg/L
MKTF-31	8/17/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-31	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	8/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	8/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	8/17/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	8/17/2018	Magnesium, Dissolved	26	1	0.25	NA	mg/L
MKTF-31	8/17/2018	Manganese, Dissolved	0.065	0.002	0.00039	2017400	mg/L
MKTF-31	8/17/2018	Sodium, Dissolved	570	10	1.6	NA	mg/L
MKTF-31	8/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	8/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	8/17/2018	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
MKTF-31	8/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-31	8/17/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
MKTF-31	8/17/2018	Mercury, Total	0.000067	0.0002	0.000038	2000	mg/L
MKTF-31	8/17/2018	Manganese, Total	0.098	0.002	0.0011	2017000	mg/L
MKTF-31	8/17/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-31	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-31	8/17/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-31	8/17/2018	Zinc, Total	0.0048	0.01	0.0033	5960000	mg/L
MKTF-31	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-31	11/15/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-31	11/15/2018	Barium, Total	0.21	0.002	0.001	2000000	mg/L
MKTF-31	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-31	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-31	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-31	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-31	11/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-31	11/15/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
MKTF-31	11/15/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-31	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-31	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-31	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-31	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-31	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-31	11/15/2018	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-31	11/15/2018	Manganese, Dissolved	0.051	0.002	0.00039	2017400	mg/L
MKTF-31	11/15/2018	Sodium, Dissolved	530	10	1.6	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-31	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-31	11/15/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-31	11/15/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
MKTF-31	11/15/2018	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-31	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	11/15/2018	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
MKTF-31	11/15/2018	Lead, Total	0.0046	0.0005	0.00023	15000	mg/L
MKTF-31	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-31	11/15/2018	Uranium, Total	0.042	0.0025	0.00034	30000	mg/L
MKTF-31	11/15/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-31	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Dissolved	0.0006	0.001	0.000068	10000	mg/L
MKTF-31	2/20/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	2/20/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
MKTF-31	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	2/20/2019	Copper, Dissolved	0.0032	0.006	0.001296	790000	mg/L
MKTF-31	2/20/2019	Iron, Dissolved	0.012	0.02	0.008747	13821880	mg/L
MKTF-31	2/20/2019	Lead, Dissolved	0.0001	0.0005	0.000047	NA	mg/L
MKTF-31	2/20/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	2/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
MKTF-31	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-31	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
MKTF-31	2/20/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-31	2/20/2019	Sodium, Dissolved	510	10	4.161763	NA	mg/L
MKTF-31	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-31	2/20/2019	Uranium, Dissolved	0.04	0.0025	0.000374	NA	mg/L
MKTF-31	2/20/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-31	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	2/20/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	2/20/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
MKTF-31	2/20/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-31	2/20/2019	Manganese, Total	0.043	0.002	0.00029	2017000	mg/L
MKTF-31	2/20/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-31	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	2/20/2019	Silver, Total	0.0034	0.005	0.001418	50000	mg/L
MKTF-31	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/20/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
MKTF-31	2/20/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
MKTF-31	10/22/2019	Aluminum, Total	9.8	0.4	0.049765	19914000	mg/L
MKTF-31	10/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	10/22/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-31	10/22/2019	Beryllium, Total	0.00042	0.002	0.000284	4000	mg/L
MKTF-31	10/22/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MKTF-31	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	10/22/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
MKTF-31	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	10/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	10/22/2019	Iron, Total	3.8	0.4	0.174937	13822000	mg/L
MKTF-31	10/22/2019	Lead, Total	0.0035	0.0005	0.000055	15000	mg/L
MKTF-31	10/22/2019	Manganese, Total	0.17	0.002	0.00029	2017000	mg/L
MKTF-31	10/22/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	10/22/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
MKTF-31	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	10/22/2019	Silver, Total	0.0029	0.005	0.001418	50000	mg/L
MKTF-31	10/22/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
MKTF-31	10/22/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L
MKTF-31	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-31	10/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-31	10/22/2019	Arsenic, Dissolved	0.00066	0.005	0.000504	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	10/22/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
MKTF-31	10/22/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-31	10/22/2019	Boron, Dissolved	0.71	0.04	0.004531	3949110	mg/L
MKTF-31	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	10/22/2019	Calcium, Dissolved	140	10	0.618891	NA	mg/L
MKTF-31	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	10/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	10/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-31	10/22/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	10/22/2019	Manganese, Dissolved	0.015	0.002	0.00029	2017400	mg/L
MKTF-31	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	10/22/2019	Nickel, Dissolved	0.0044	0.01	0.004009	372000	mg/L
MKTF-31	10/22/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
MKTF-31	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	10/22/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-31	10/22/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
MKTF-31	10/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	10/22/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Dissolved	0.0037	0.02	0.002488	19913930	mg/L
MKTF-31	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Dissolved	0.00095	0.005	0.000504	10000	mg/L
MKTF-31	5/6/2019	Barium, Dissolved	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Dissolved	0.00063	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
MKTF-31	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	5/6/2019	Calcium, Dissolved	240	10	0.618891	NA	mg/L
MKTF-31	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	5/6/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-31	5/6/2019	Magnesium, Dissolved	53	1	0.05029	NA	mg/L
MKTF-31	5/6/2019	Manganese, Dissolved	0.011	0.002	0.00029	2017400	mg/L
MKTF-31	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	5/6/2019	Silver, Dissolved	0.0056	0.005	0.000942	81200	mg/L
MKTF-31	5/6/2019	Sodium, Dissolved	640	10	4.161763	NA	mg/L
MKTF-31	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-31	5/6/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
MKTF-31	5/6/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Total	3.9	0.2	0.024883	19914000	mg/L
MKTF-31	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	5/6/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-31	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	5/6/2019	Iron, Total	2.1	0.1	0.043734	13822000	mg/L
MKTF-31	5/6/2019	Lead, Total	0.0016	0.0025	0.000274	15000	mg/L
MKTF-31	5/6/2019	Manganese, Total	0.052	0.002	0.00029	2017000	mg/L
MKTF-31	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-31	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Total	0.0066	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	5/6/2019	Silver, Total	0.0059	0.005	0.001418	50000	mg/L
MKTF-31	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-31	5/6/2019	Uranium, Total	0.046	0.0025	0.000424	30000	mg/L
MKTF-31	5/6/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
MKTF-31	8/23/2019	Aluminum, Dissolved	0.05	0.02	0.002488	19913930	mg/L
MKTF-31	8/23/2019	Antimony, Dissolved	0.00055	0.001	0.000389	6000	mg/L
MKTF-31	8/23/2019	Arsenic, Dissolved	0.00064	0.001	0.000101	10000	mg/L
MKTF-31	8/23/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	8/23/2019	Beryllium, Dissolved	0.00035	0.002	0.000284	4000	mg/L
MKTF-31	8/23/2019	Boron, Dissolved	0.73	0.04	0.004531	3949110	mg/L
MKTF-31	8/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	8/23/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
MKTF-31	8/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	8/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	8/23/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
MKTF-31	8/23/2019	Iron, Dissolved	0.027	0.02	0.008747	13821880	mg/L
MKTF-31	8/23/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-31	8/23/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-31	8/23/2019	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
MKTF-31	8/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	8/23/2019	Nickel, Dissolved	0.005	0.01	0.004009	372000	mg/L
MKTF-31	8/23/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	8/23/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
MKTF-31	8/23/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-31	8/23/2019	Sodium, Dissolved	580	10	4.161763	NA	mg/L
MKTF-31	8/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	8/23/2019	Uranium, Dissolved	0.042	0.0025	0.000374	NA	mg/L
MKTF-31	8/23/2019	Zinc, Dissolved	0.0042	0.01	0.002252	5960450	mg/L
MKTF-31	8/23/2019	Aluminum, Total	5.2	0.4	0.049765	19914000	mg/L
MKTF-31	8/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	8/23/2019	Arsenic, Total	0.00098	0.001	0.000312	10000	mg/L
MKTF-31	8/23/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-31	8/23/2019	Beryllium, Total	0.00049	0.002	0.000284	4000	mg/L
MKTF-31	8/23/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
MKTF-31	8/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	8/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	8/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	8/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	8/23/2019	Iron, Total	2	0.1	0.043734	13822000	mg/L
MKTF-31	8/23/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-31	8/23/2019	Manganese, Total	0.074	0.002	0.00029	2017000	mg/L
MKTF-31	8/23/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-31	8/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	8/23/2019	Nickel, Total	0.0057	0.01	0.004009	372000	mg/L
MKTF-31	8/23/2019	Selenium, Total	0.00091	0.001	0.000478	50000	mg/L
MKTF-31	8/23/2019	Silver, Total	0.0023	0.005	0.001418	50000	mg/L
MKTF-31	8/23/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	8/23/2019	Uranium, Total	0.039	0.0025	0.000424	30000	mg/L
MKTF-31	8/23/2019	Zinc, Total	0.0091	0.01	0.005772	5960000	mg/L
MKTF-31	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Dissolved	0.00059	0.001	0.000068	10000	mg/L
MKTF-31	2/20/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	2/20/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
MKTF-31	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	2/20/2019	Copper, Dissolved	0.0075	0.006	0.001296	790000	mg/L
MKTF-31	2/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	2/20/2019	Lead, Dissolved	0.000076	0.0005	0.000047	NA	mg/L
MKTF-31	2/20/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-31	2/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
MKTF-31	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
MKTF-31	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
MKTF-31	2/20/2019	Silver, Dissolved	0.0031	0.005	0.000942	81200	mg/L
MKTF-31	2/20/2019	Sodium, Dissolved	500	10	4.161763	NA	mg/L
MKTF-31	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-31	2/20/2019	Uranium, Dissolved	0.041	0.0025	0.000374	NA	mg/L
MKTF-31	2/20/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-31	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-31	2/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	2/20/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-31	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	2/20/2019	Iron, Total	1.7	0.1	0.043734	13822000	mg/L
MKTF-31	2/20/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	2/20/2019	Manganese, Total	0.06	0.002	0.00029	2017000	mg/L
MKTF-31	2/20/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MKTF-31	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	2/20/2019	Silver, Total	0.0033	0.005	0.001418	50000	mg/L
MKTF-31	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/20/2019	Uranium, Total	0.039	0.0025	0.000424	30000	mg/L
MKTF-31	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-31	2/25/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-31	2/25/2020	Arsenic, Dissolved	0.00044	0.001	0.0001	10000	mg/L
MKTF-31	2/25/2020	Lead, Dissolved	0.000074	0.0005	0.000055	NA	mg/L
MKTF-31	2/25/2020	Selenium, Dissolved	0.00026	0.001	0.00017	50000	mg/L
MKTF-31	2/25/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-31	2/25/2020	Uranium, Dissolved	0.042	0.0025	0.00037	NA	mg/L
MKTF-31	2/25/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-31	2/25/2020	Barium, Dissolved	0.09	0.002	0.00065	2000000	mg/L
MKTF-31	2/25/2020	Beryllium, Dissolved	0.00035	0.002	0.00028	4000	mg/L
MKTF-31	2/25/2020	Boron, Dissolved	0.39	0.04	0.0045	3949110	mg/L
MKTF-31	2/25/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-31	2/25/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-31	2/25/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-31	2/25/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-31	2/25/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-31	2/25/2020	Magnesium, Dissolved	26	1	0.05	NA	mg/L
MKTF-31	2/25/2020	Manganese, Dissolved	0.016	0.002	0.00029	2017400	mg/L
MKTF-31	2/25/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-31	2/25/2020	Potassium, Dissolved	1	1	0.16	NA	mg/L
MKTF-31	2/25/2020	Zinc, Dissolved	0.03	0.01	0.0023	5960450	mg/L
MKTF-31	2/25/2020	Sodium, Dissolved	490	5	2.1	NA	mg/L
MKTF-31	2/25/2020	Silver, Dissolved	0.0029	0.005	0.00094	81200	mg/L
MKTF-31	2/25/2020	Calcium, Dissolved	130	5	0.31	NA	mg/L
MKTF-31	2/25/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-31	2/25/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-31	2/25/2020	Arsenic, Total	0.00064	0.001	0.00031	10000	mg/L
MKTF-31	2/25/2020	Lead, Total	0.0012	0.0005	0.000055	15000	mg/L
MKTF-31	2/25/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-31	2/25/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-31	2/25/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-31	2/25/2020	Boron, Total	0.45	0.04	0.0045	3949	mg/L
MKTF-31	2/25/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-31	2/25/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-31	2/25/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-31	2/25/2020	Manganese, Total	0.059	0.002	0.00029	2017000	mg/L
MKTF-31	2/25/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-31	2/25/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-31	2/25/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-31	2/25/2020	Iron, Total	1	0.1	0.044	13822000	mg/L
MKTF-31	2/25/2020	Uranium, Total	0.043	0.0025	0.00042	30000	mg/L
MKTF-31	2/25/2020	Barium, Total	0.15	0.002	0.00065	2000000	mg/L
MKTF-31	2/25/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-31	2/25/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-31	2/25/2020	Silver, Total	0.002	0.005	0.0014	50000	mg/L
MKTF-31	2/25/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-31	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-31	9/19/2020	Arsenic, Total	0.0011	0.001	0.00026	10000	mg/L
MKTF-31	9/19/2020	Lead, Total	0.0025	0.0005	0.000034	15000	mg/L
MKTF-31	9/19/2020	Selenium, Total	0.001	0.001	0.00066	50000	mg/L
MKTF-31	9/19/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-31	9/19/2020	Uranium, Total	0.037	0.0025	0.00033	30000	mg/L
MKTF-31	9/19/2020	Barium, Total	0.17	0.003	0.0016	2000000	mg/L
MKTF-31	9/19/2020	Beryllium, Total	0.0009	0.002	0.00088	4000	mg/L
MKTF-31	9/19/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MKTF-31	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-31	9/19/2020	Chromium, Total	0.0023	0.006	0.0021	50000	mg/L
MKTF-31	9/19/2020	Manganese, Total	0.14	0.002	0.00081	2017000	mg/L
MKTF-31	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-31	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-31	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-31	9/19/2020	Nickel, Total	0.0073	0.01	0.0033	372000	mg/L
MKTF-31	9/19/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/19/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-31	9/19/2020	Aluminum, Total	7.7	0.2	0.074	19914000	mg/L
MKTF-31	9/19/2020	Iron, Total	3.3	0.5	0.13	13822000	mg/L
MKTF-31	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-31	9/19/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-31	9/19/2020	Arsenic, Dissolved	0.0007	0.001	0.00021	10000	mg/L
MKTF-31	9/19/2020	Lead, Dissolved	0.00009	0.0005	0.000034	NA	mg/L
MKTF-31	9/19/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-31	9/19/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-31	9/19/2020	Uranium, Dissolved	0.042	0.0025	0.00033	NA	mg/L
MKTF-31	9/19/2020	Calcium, Dissolved	100	5	0.57	NA	mg/L
MKTF-31	9/19/2020	Sodium, Dissolved	440	5	0.69	NA	mg/L
MKTF-31	9/19/2020	Aluminum, Dissolved	0.095	0.02	0.0056	19913930	mg/L
MKTF-31	9/19/2020	Barium, Dissolved	0.12	0.002	0.0011	2000000	mg/L
MKTF-31	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-31	9/19/2020	Boron, Dissolved	0.72	0.04	0.0067	3949110	mg/L
MKTF-31	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-31	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-31	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-31	9/19/2020	Iron, Dissolved	0.05	0.02	0.01	13821880	mg/L
MKTF-31	9/19/2020	Magnesium, Dissolved	22	1	0.067	NA	mg/L
MKTF-31	9/19/2020	Manganese, Dissolved	0.061	0.002	0.00058	2017400	mg/L
MKTF-31	9/19/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-31	9/19/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-31	9/19/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-31	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-31	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-31	9/19/2020	Zinc, Dissolved	0.01	0.01	0.006	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Dissolved	0.0085	0.02	0.002488	19913930	mg/L
MKTF-31	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Dissolved	0.00052	0.005	0.000504	10000	mg/L
MKTF-31	5/6/2019	Barium, Dissolved	0.17	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Dissolved	0.00069	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
MKTF-31	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-31	5/6/2019	Calcium, Dissolved	250	10	0.618891	NA	mg/L
MKTF-31	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-31	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-31	5/6/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-31	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-31	5/6/2019	Magnesium, Dissolved	54	1	0.05029	NA	mg/L
MKTF-31	5/6/2019	Manganese, Dissolved	0.0086	0.002	0.00029	2017400	mg/L
MKTF-31	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Dissolved	0.0049	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-31	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-31	5/6/2019	Silver, Dissolved	0.006	0.005	0.000942	81200	mg/L
MKTF-31	5/6/2019	Sodium, Dissolved	630	10	4.161763	NA	mg/L
MKTF-31	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-31	5/6/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
MKTF-31	5/6/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
MKTF-31	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-31	12/18/2020	Aluminum, Total	4.84	0.2	0.051	19914000	mg/L
MKTF-31	12/18/2020	Calcium, Total	111	0.5	0.084	NA	mg/L
MKTF-31	12/18/2020	Boron, Total	0.626	0.1	0.022	3949	mg/L
MKTF-31	12/18/2020	Barium, Total	0.163	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Potassium, Total	2.49	1	0.34	NA	mg/L
MKTF-31	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Magnesium, Total	24.4	0.5	0.12	NA	mg/L
MKTF-31	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Sodium, Total	319	2	0.92	NA	mg/L
MKTF-31	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-31	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Total	2.76	0.2	0.075	13822000	mg/L
MKTF-31	12/18/2020	Manganese, Total	0.0866	0.01	0.003	2017000	mg/L
MKTF-31	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Total	0.00652	0.006	0.003	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-31	12/18/2020	Aluminum, Dissolved	1.81	0.2	0.051	19913930	mg/L
MKTF-31	12/18/2020	Barium, Dissolved	0.133	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Boron, Dissolved	0.617	0.1	0.022	3949110	mg/L
MKTF-31	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-31	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Dissolved	0.851	0.2	0.075	13821880	mg/L
MKTF-31	12/18/2020	Manganese, Dissolved	0.0457	0.01	0.003	2017400	mg/L
MKTF-31	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-31	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-31	12/18/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-31	12/18/2020	Aluminum, Total	2.62	0.2	0.051	19914000	mg/L
MKTF-31	12/18/2020	Calcium, Total	109	0.5	0.084	NA	mg/L
MKTF-31	12/18/2020	Boron, Total	0.625	0.1	0.022	3949	mg/L
MKTF-31	12/18/2020	Barium, Total	0.151	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Potassium, Total	2.02	1	0.34	NA	mg/L
MKTF-31	12/18/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Magnesium, Total	23.7	0.5	0.12	NA	mg/L
MKTF-31	12/18/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Sodium, Total	354	2	0.92	NA	mg/L
MKTF-31	12/18/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-31	12/18/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Total	1.5	0.2	0.075	13822000	mg/L
MKTF-31	12/18/2020	Manganese, Total	0.0616	0.01	0.003	2017000	mg/L
MKTF-31	12/18/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Total	0.00662	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-31	12/18/2020	Aluminum, Dissolved	0.205	0.2	0.051	19913930	mg/L
MKTF-31	12/18/2020	Barium, Dissolved	0.127	0.01	0.003	2000000	mg/L
MKTF-31	12/18/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-31	12/18/2020	Boron, Dissolved	0.613	0.1	0.022	3949110	mg/L
MKTF-31	12/18/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-31	12/18/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-31	12/18/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-31	12/18/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-31	12/18/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-31	12/18/2020	Manganese, Dissolved	0.0365	0.01	0.003	2017400	mg/L
MKTF-31	12/18/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-31	12/18/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-31	12/18/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-31	12/18/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-31	5/6/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
MKTF-31	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-31	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-31	5/6/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
MKTF-31	5/6/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-31	5/6/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-31	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-31	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-31	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-31	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-31	5/6/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
MKTF-31	5/6/2019	Lead, Total	0.00095	0.0025	0.000274	15000	mg/L
MKTF-31	5/6/2019	Manganese, Total	0.035	0.002	0.00029	2017000	mg/L
MKTF-31	5/6/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-31	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-31	5/6/2019	Nickel, Total	0.0045	0.01	0.004009	372000	mg/L
MKTF-31	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-31	5/6/2019	Silver, Total	0.0062	0.005	0.001418	50000	mg/L
MKTF-31	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-31	5/6/2019	Uranium, Total	0.047	0.0025	0.000424	30000	mg/L
MKTF-31	5/6/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-31	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	12/18/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-31	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Total Recoverable	**41.6**	5	1.12	30	ug/L
MKTF-31	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-31	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Dissolved	40.4	5	1.12	NA	ug/L
MKTF-31	12/18/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Total Recoverable	1.11	1	0.133	15	ug/L
MKTF-31	12/18/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Total Recoverable	**42.1**	5	1.12	30	ug/L
MKTF-31	12/18/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-31	12/18/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-31	12/18/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-31	12/18/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-31	12/18/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-31	12/18/2020	Uranium, Dissolved	41.3	5	1.12	NA	ug/L
MKTF-31	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-31	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-31	12/18/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-31	12/18/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-32	12/15/2020	Arsenic, Total Recoverable	2.78	1	0.286	10	ug/L
MKTF-32	12/15/2020	Lead, Total Recoverable	1.68	1	0.133	15	ug/L
MKTF-32	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-32	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-32	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-32	12/15/2020	Arsenic, Dissolved	2.33	1	0.286	10	ug/L
MKTF-32	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-32	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-32	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-32	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-32	12/15/2020	Uranium, Total Recoverable	**52.7**	5	1.12	30	ug/L
MKTF-32	12/15/2020	Uranium, Dissolved	52.4	5	1.12	NA	ug/L
MKTF-32	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-32	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-32	9/21/2020	Arsenic, Dissolved	0.0022	0.001	0.00021	10000	mg/L
MKTF-32	9/21/2020	Lead, Dissolved	0.0001	0.0005	0.000034	NA	mg/L
MKTF-32	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-32	9/21/2020	Uranium, Dissolved	0.054	0.0025	0.00033	NA	mg/L
MKTF-32	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-32	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-32	9/21/2020	Boron, Dissolved	1.1	0.2	0.033	3949110	mg/L
MKTF-32	9/21/2020	Sodium, Dissolved	560	50	6.9	NA	mg/L
MKTF-32	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-32	9/21/2020	Barium, Dissolved	0.05	0.002	0.0011	2000000	mg/L
MKTF-32	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-32	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-32	9/21/2020	Calcium, Dissolved	23	1	0.11	NA	mg/L
MKTF-32	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-32	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-32	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-32	9/21/2020	Magnesium, Dissolved	4.7	1	0.067	NA	mg/L
MKTF-32	9/21/2020	Manganese, Dissolved	0.16	0.002	0.00058	2017400	mg/L
MKTF-32	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-32	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-32	9/21/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
MKTF-32	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-32	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-32	9/21/2020	Zinc, Dissolved	0.0096	0.01	0.006	5960450	mg/L
MKTF-32	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-32	9/21/2020	Arsenic, Total	0.0026	0.001	0.00026	10000	mg/L
MKTF-32	9/21/2020	Lead, Total	0.0001	0.0005	0.000034	15000	mg/L
MKTF-32	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-32	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-32	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
MKTF-32	9/21/2020	Barium, Total	0.043	0.003	0.0016	2000000	mg/L
MKTF-32	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-32	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-32	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-32	9/21/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
MKTF-32	9/21/2020	Manganese, Total	0.065	0.002	0.00081	2017000	mg/L
MKTF-32	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-32	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-32	9/21/2020	Uranium, Total	0.054	0.0025	0.00033	30000	mg/L
MKTF-32	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-32	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-32	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-32	9/21/2020	Boron, Total	1.2	0.2	0.037	3949	mg/L
MKTF-32	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-32	12/15/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
MKTF-32	12/15/2020	Calcium, Total	21.7	0.5	0.084	NA	mg/L
MKTF-32	12/15/2020	Boron, Total	1.13	0.1	0.022	3949	mg/L
MKTF-32	12/15/2020	Barium, Total	0.0432	0.01	0.003	2000000	mg/L
MKTF-32	12/15/2020	Potassium, Total	ND	1	0.34	NA	mg/L
MKTF-32	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-32	12/15/2020	Magnesium, Total	4.29	0.5	0.12	NA	mg/L
MKTF-32	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-32	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-32	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-32	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-32	12/15/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-32	12/15/2020	Manganese, Total	0.0637	0.01	0.003	2017000	mg/L
MKTF-32	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-32	12/15/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-32	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-32	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-32	12/15/2020	Barium, Dissolved	0.0509	0.01	0.003	2000000	mg/L
MKTF-32	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-32	12/15/2020	Boron, Dissolved	1.19	0.1	0.022	3949110	mg/L
MKTF-32	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-32	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-32	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-32	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-32	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-32	12/15/2020	Manganese, Dissolved	0.0378	0.01	0.003	2017400	mg/L
MKTF-32	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-32	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-32	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-32	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-32	12/15/2020	Sodium, Total	523	20	9.2	NA	mg/L
MKTF-32	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-32	2/27/2020	Arsenic, Dissolved	0.0023	0.001	0.0001	10000	mg/L
MKTF-32	2/27/2020	Lead, Dissolved	0.000085	0.0005	0.000055	NA	mg/L
MKTF-32	2/27/2020	Selenium, Dissolved	0.00039	0.001	0.00017	50000	mg/L
MKTF-32	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	2/27/2020	Uranium, Dissolved	0.052	0.0025	0.00037	NA	mg/L
MKTF-32	2/27/2020	Barium, Dissolved	0.038	0.002	0.00065	2000000	mg/L
MKTF-32	2/27/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
MKTF-32	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-32	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-32	2/27/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-32	2/27/2020	Manganese, Dissolved	0.074	0.002	0.00029	2017400	mg/L
MKTF-32	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-32	2/27/2020	Zinc, Dissolved	0.023	0.01	0.0023	5960450	mg/L
MKTF-32	2/27/2020	Boron, Dissolved	1	0.2	0.023	3949110	mg/L
MKTF-32	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-32	2/27/2020	Calcium, Dissolved	26	1	0.062	NA	mg/L
MKTF-32	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-32	2/27/2020	Magnesium, Dissolved	4.9	1	0.05	NA	mg/L
MKTF-32	2/27/2020	Potassium, Dissolved	0.59	1	0.16	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/27/2020	Sodium, Dissolved	550	10	4.2	NA	mg/L
MKTF-32	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-32	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-32	2/27/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-32	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-32	2/27/2020	Arsenic, Total	0.0024	0.001	0.00031	10000	mg/L
MKTF-32	2/27/2020	Lead, Total	0.00054	0.0005	0.000055	15000	mg/L
MKTF-32	2/27/2020	Selenium, Total	0.00091	0.001	0.00048	50000	mg/L
MKTF-32	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-32	2/27/2020	Uranium, Total	0.051	0.0025	0.00042	30000	mg/L
MKTF-32	2/27/2020	Aluminum, Total	0.86	0.02	0.0025	19914000	mg/L
MKTF-32	2/27/2020	Barium, Total	0.056	0.002	0.00065	2000000	mg/L
MKTF-32	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-32	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-32	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-32	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-32	2/27/2020	Iron, Total	0.44	0.02	0.0087	13822000	mg/L
MKTF-32	2/27/2020	Manganese, Total	0.1	0.002	0.00029	2017000	mg/L
MKTF-32	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-32	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-32	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-32	2/27/2020	Boron, Total	1	0.2	0.023	3949	mg/L
MKTF-32	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-32	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-32	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-32	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-32	8/20/2019	Arsenic, Dissolved	0.002	0.001	0.000101	10000	mg/L
MKTF-32	8/20/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-32	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	8/20/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-32	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	8/20/2019	Calcium, Dissolved	28	1	0.061889	NA	mg/L
MKTF-32	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	8/20/2019	Copper, Dissolved	0.0052	0.006	0.001296	790000	mg/L
MKTF-32	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-32	8/20/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-32	8/20/2019	Magnesium, Dissolved	5.3	1	0.05029	NA	mg/L
MKTF-32	8/20/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-32	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-32	8/20/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-32	8/20/2019	Selenium, Dissolved	0.00025	0.001	0.000171	50000	mg/L
MKTF-32	8/20/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	8/20/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
MKTF-32	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	8/20/2019	Uranium, Dissolved	0.056	0.0025	0.000374	NA	mg/L
MKTF-32	8/20/2019	Zinc, Dissolved	0.0045	0.01	0.002252	5960450	mg/L
MKTF-32	8/20/2019	Aluminum, Total	2.6	0.1	0.012441	19914000	mg/L
MKTF-32	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	8/20/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	8/20/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
MKTF-32	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-32	8/20/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	8/20/2019	Copper, Total	0.005	0.006	0.004072	790000	mg/L
MKTF-32	8/20/2019	Iron, Total	1.2	0.1	0.043734	13822000	mg/L
MKTF-32	8/20/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-32	8/20/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-32	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-32	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	8/20/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-32	8/20/2019	Selenium, Total	0.00077	0.001	0.000478	50000	mg/L
MKTF-32	8/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	8/20/2019	Uranium, Total	0.056	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/20/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-32	10/23/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-32	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	10/23/2019	Arsenic, Total	0.0034	0.005	0.001561	10000	mg/L
MKTF-32	10/23/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-32	10/23/2019	Beryllium, Total	0.00035	0.002	0.000284	4000	mg/L
MKTF-32	10/23/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	10/23/2019	Chromium, Total	0.003	0.006	0.001533	50000	mg/L
MKTF-32	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	10/23/2019	Copper, Total	0.0046	0.006	0.004072	790000	mg/L
MKTF-32	10/23/2019	Iron, Total	5.5	0.4	0.174937	13822000	mg/L
MKTF-32	10/23/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
MKTF-32	10/23/2019	Manganese, Total	0.16	0.002	0.00029	2017000	mg/L
MKTF-32	10/23/2019	Mercury, Total	0.00019	0.0002	0.000038	2000	mg/L
MKTF-32	10/23/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	10/23/2019	Nickel, Total	0.0055	0.01	0.004009	372000	mg/L
MKTF-32	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-32	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	10/23/2019	Thallium, Total	0.000081	0.0005	0.000052	2000	mg/L
MKTF-32	10/23/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
MKTF-32	10/23/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
MKTF-32	10/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-32	10/23/2019	Arsenic, Dissolved	0.003	0.005	0.000504	10000	mg/L
MKTF-32	10/23/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-32	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	10/23/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-32	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	10/23/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
MKTF-32	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	10/23/2019	Copper, Dissolved	0.0043	0.006	0.001296	790000	mg/L
MKTF-32	10/23/2019	Iron, Dissolved	0.059	0.02	0.008747	13821880	mg/L
MKTF-32	10/23/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
MKTF-32	10/23/2019	Magnesium, Dissolved	5.1	1	0.05029	NA	mg/L
MKTF-32	10/23/2019	Manganese, Dissolved	0.043	0.002	0.00029	2017400	mg/L
MKTF-32	10/23/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-32	10/23/2019	Potassium, Dissolved	0.7	1	0.162288	NA	mg/L
MKTF-32	10/23/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-32	10/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	10/23/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-32	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-32	10/23/2019	Zinc, Dissolved	0.0072	0.01	0.002252	5960450	mg/L
MKTF-32	5/7/2019	Aluminum, Dissolved	0.043	0.02	0.002488	19913930	mg/L
MKTF-32	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-32	5/7/2019	Arsenic, Dissolved	0.002	0.005	0.000504	10000	mg/L
MKTF-32	5/7/2019	Barium, Dissolved	0.045	0.002	0.000648	2000000	mg/L
MKTF-32	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	5/7/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-32	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	5/7/2019	Calcium, Dissolved	29	1	0.061889	NA	mg/L
MKTF-32	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-32	5/7/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-32	5/7/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
MKTF-32	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-32	5/7/2019	Magnesium, Dissolved	5.1	1	0.05029	NA	mg/L
MKTF-32	5/7/2019	Manganese, Dissolved	0.071	0.002	0.00029	2017400	mg/L
MKTF-32	5/7/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-32	5/7/2019	Nickel, Dissolved	0.0083	0.01	0.004009	372000	mg/L
MKTF-32	5/7/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
MKTF-32	5/7/2019	Selenium, Dissolved	0.0027	0.005	0.000857	50000	mg/L
MKTF-32	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	5/7/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
MKTF-32	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-32	5/7/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
MKTF-32	5/7/2019	Zinc, Dissolved	0.041	0.01	0.002252	5960450	mg/L
MKTF-32	5/7/2019	Aluminum, Total	3.5	0.1	0.012441	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	5/7/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-32	5/7/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	5/7/2019	Barium, Total	0.084	0.002	0.000648	2000000	mg/L
MKTF-32	5/7/2019	Beryllium, Total	0.0005	0.002	0.000284	4000	mg/L
MKTF-32	5/7/2019	Boron, Total	1.2	0.2	0.022653	3949	mg/L
MKTF-32	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-32	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-32	5/7/2019	Iron, Total	1.5	0.1	0.043734	13822000	mg/L
MKTF-32	5/7/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-32	5/7/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-32	5/7/2019	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
MKTF-32	5/7/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-32	5/7/2019	Nickel, Total	0.0059	0.01	0.004009	372000	mg/L
MKTF-32	5/7/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-32	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	5/7/2019	Uranium, Total	0.057	0.0025	0.000424	30000	mg/L
MKTF-32	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-32	2/13/2019	Antimony, Total	0.00032	0.001	0.000204	6000	mg/L
MKTF-32	2/13/2019	Arsenic, Total	0.0024	0.001	0.000312	10000	mg/L
MKTF-32	2/13/2019	Barium, Total	0.056	0.002	0.000648	2000000	mg/L
MKTF-32	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-32	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-32	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-32	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-32	2/13/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
MKTF-32	2/13/2019	Lead, Total	0.00031	0.0005	0.000047	15000	mg/L
MKTF-32	2/13/2019	Manganese, Total	0.079	0.002	0.00029	2017000	mg/L
MKTF-32	2/13/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-32	2/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-32	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-32	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-32	2/13/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-32	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-32	2/13/2019	Antimony, Dissolved	0.00034	0.001	0.000204	6000	mg/L
MKTF-32	2/13/2019	Arsenic, Dissolved	0.0021	0.001	0.000068	10000	mg/L
MKTF-32	2/13/2019	Barium, Dissolved	0.047	0.002	0.000648	2000000	mg/L
MKTF-32	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-32	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-32	2/13/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
MKTF-32	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-32	2/13/2019	Copper, Dissolved	0.0045	0.006	0.001296	790000	mg/L
MKTF-32	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-32	2/13/2019	Lead, Dissolved	0.00011	0.0005	0.000047	NA	mg/L
MKTF-32	2/13/2019	Magnesium, Dissolved	5	1	0.05029	NA	mg/L
MKTF-32	2/13/2019	Manganese, Dissolved	0.059	0.002	0.00029	2017400	mg/L
MKTF-32	2/13/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
MKTF-32	2/13/2019	Selenium, Dissolved	0.00043	0.001	0.000203	50000	mg/L
MKTF-32	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-32	2/13/2019	Sodium, Dissolved	570	20	8.323526	NA	mg/L
MKTF-32	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-32	2/13/2019	Uranium, Dissolved	0.058	0.0025	0.000152	NA	mg/L
MKTF-32	2/13/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
MKTF-32	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-32	11/17/2014	Arsenic, Total	ND	0.005	0.0018	10000	mg/L
MKTF-32	11/17/2014	Barium, Total	0.091	0.002	0.0005	2000000	mg/L
MKTF-32	11/17/2014	Calcium, Total	37	1	0.082	NA	mg/L
MKTF-32	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-32	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-32	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-32	11/17/2014	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-32	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-32	11/17/2014	Potassium, Total	ND	1	0.093	NA	mg/L
MKTF-32	11/17/2014	Magnesium, Total	7	1	0.018	NA	mg/L
MKTF-32	11/17/2014	Manganese, Total	0.23	0.002	0.00049	2017000	mg/L
MKTF-32	11/17/2014	Sodium, Total	680	10	3.9	NA	mg/L
MKTF-32	11/17/2014	Lead, Total	0.0027	0.001	0.00026	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	11/17/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
MKTF-32	11/17/2014	Uranium, Total	0.067	0.005	0.000036	30000	mg/L
MKTF-32	11/17/2014	Zinc, Total	0.014	0.01	0.0035	5960000	mg/L
MKTF-32	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-32	3/12/2015	Barium, Total	0.057	0.002	0.00095	2000000	mg/L
MKTF-32	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-32	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-32	3/12/2015	Iron, Total	0.18	0.02	0.0073	13822000	mg/L
MKTF-32	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	3/12/2015	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-32	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-32	3/12/2015	Selenium, Total	ND	0.02	0.003	50000	mg/L
MKTF-32	3/12/2015	Uranium, Total	0.068	0.01	0.0005	30000	mg/L
MKTF-32	3/12/2015	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-32	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-32	6/9/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-32	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-32	6/9/2015	Copper, Total	0.018	0.006	0.0051	790000	mg/L
MKTF-32	6/9/2015	Iron, Total	5.7	0.2	0.072	13822000	mg/L
MKTF-32	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	6/9/2015	Manganese, Total	0.31	0.002	0.0015	2017000	mg/L
MKTF-32	6/9/2015	Lead, Total	0.0063	0.0025	0.00024	15000	mg/L
MKTF-32	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-32	6/9/2015	Uranium, Total	0.066	0.0025	0.000025	30000	mg/L
MKTF-32	6/9/2015	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-32	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	8/21/2015	Arsenic, Total	0.0037	0.001	0.00029	10000	mg/L
MKTF-32	8/21/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-32	8/21/2015	Calcium, Total	36	1	0.057	NA	mg/L
MKTF-32	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	8/21/2015	Chromium, Total	0.0072	0.006	0.0022	50000	mg/L
MKTF-32	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	8/21/2015	Iron, Total	6.1	0.2	0.072	13822000	mg/L
MKTF-32	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	8/21/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-32	8/21/2015	Magnesium, Total	6.8	1	0.039	NA	mg/L
MKTF-32	8/21/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
MKTF-32	8/21/2015	Sodium, Total	660	10	0.72	NA	mg/L
MKTF-32	8/21/2015	Lead, Total	0.0072	0.0005	0.000047	15000	mg/L
MKTF-32	8/21/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-32	8/21/2015	Uranium, Total	0.073	0.005	0.000049	30000	mg/L
MKTF-32	8/21/2015	Zinc, Total	0.029	0.01	0.0039	5960000	mg/L
MKTF-32	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	11/5/2015	Arsenic, Total	0.0052	0.001	0.00029	10000	mg/L
MKTF-32	11/5/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-32	11/5/2015	Calcium, Total	31	1	0.26	NA	mg/L
MKTF-32	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-32	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	11/5/2015	Iron, Total	3.2	0.1	0.036	13822000	mg/L
MKTF-32	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-32	11/5/2015	Potassium, Total	1.1	1	0.18	NA	mg/L
MKTF-32	11/5/2015	Magnesium, Total	6.2	1	0.013	NA	mg/L
MKTF-32	11/5/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
MKTF-32	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-32	11/5/2015	Lead, Total	0.0046	0.0005	0.000047	15000	mg/L
MKTF-32	11/5/2015	Selenium, Total	0.0083	0.005	0.00062	50000	mg/L
MKTF-32	11/5/2015	Uranium, Total	0.061	0.0025	0.000025	30000	mg/L
MKTF-32	11/5/2015	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
MKTF-32	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-32	2/24/2016	Arsenic, Total	0.0034	0.001	0.00029	10000	mg/L
MKTF-32	2/24/2016	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
MKTF-32	2/24/2016	Calcium, Total	30	1	0.26	NA	mg/L
MKTF-32	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-32	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-32	2/24/2016	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-32	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	2/24/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-32	2/24/2016	Magnesium, Total	5.6	1	0.013	NA	mg/L
MKTF-32	2/24/2016	Manganese, Total	0.13	0.002	0.0015	2017000	mg/L
MKTF-32	2/24/2016	Sodium, Total	580	10	0.96	NA	mg/L
MKTF-32	2/24/2016	Lead, Total	0.0028	0.0005	0.000047	15000	mg/L
MKTF-32	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-32	2/24/2016	Uranium, Total	0.062	0.0025	0.000025	30000	mg/L
MKTF-32	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-32	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-32	6/9/2016	Arsenic, Total	0.0057	0.001	0.00014	10000	mg/L
MKTF-32	6/9/2016	Barium, Total	0.064	0.002	0.0013	2000000	mg/L
MKTF-32	6/9/2016	Calcium, Total	32	1	0.26	NA	mg/L
MKTF-32	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-32	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-32	6/9/2016	Iron, Total	0.099	0.02	0.0091	13822000	mg/L
MKTF-32	6/9/2016	Mercury, Total	0.00012	0.0002	0.000053	2000	mg/L
MKTF-32	6/9/2016	Potassium, Total	0.91	1	0.18	NA	mg/L
MKTF-32	6/9/2016	Magnesium, Total	6.5	1	0.013	NA	mg/L
MKTF-32	6/9/2016	Manganese, Total	0.082	0.002	0.00032	2017000	mg/L
MKTF-32	6/9/2016	Sodium, Total	670	10	0.96	NA	mg/L
MKTF-32	6/9/2016	Lead, Total	0.00057	0.0005	0.00017	15000	mg/L
MKTF-32	6/9/2016	Selenium, Total	0.012	0.005	0.0011	50000	mg/L
MKTF-32	6/9/2016	Uranium, Total	0.064	0.0025	0.00026	30000	mg/L
MKTF-32	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-32	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	9/9/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-32	9/9/2016	Barium, Total	0.086	0.002	0.00079	2000000	mg/L
MKTF-32	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-32	9/9/2016	Copper, Total	0.013	0.006	0.003	790000	mg/L
MKTF-32	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-32	9/9/2016	Arsenic, Dissolved	0.0038	0.005	0.00069	10000	mg/L
MKTF-32	9/9/2016	Barium, Dissolved	0.05	0.002	0.0013	2000000	mg/L
MKTF-32	9/9/2016	Calcium, Dissolved	29	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-32	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-32	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-32	9/9/2016	Iron, Dissolved	0.027	0.02	0.02	13821880	mg/L
MKTF-32	9/9/2016	Potassium, Dissolved	0.64	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Magnesium, Dissolved	5.9	1	0.5	NA	mg/L
MKTF-32	9/9/2016	Manganese, Dissolved	0.074	0.002	0.00032	2017400	mg/L
MKTF-32	9/9/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-32	9/9/2016	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-32	9/9/2016	Selenium, Dissolved	0.0072	0.005	0.0011	50000	mg/L
MKTF-32	9/9/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-32	9/9/2016	Zinc, Dissolved	0.0095	0.01	0.0028	5960450	mg/L
MKTF-32	9/9/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-32	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
MKTF-32	9/9/2016	Lead, Total	0.0023	0.0005	0.000081	15000	mg/L
MKTF-32	9/9/2016	Selenium, Total	0.0069	0.005	0.00094	50000	mg/L
MKTF-32	9/9/2016	Uranium, Total	0.058	0.0025	0.00087	30000	mg/L
MKTF-32	9/9/2016	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
MKTF-32	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	10/31/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-32	10/31/2016	Barium, Total	0.1	0.002	0.00079	2000000	mg/L
MKTF-32	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	10/31/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
MKTF-32	10/31/2016	Copper, Total	0.0042	0.006	0.003	790000	mg/L
MKTF-32	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-32	10/31/2016	Arsenic, Dissolved	0.004	0.005	0.00069	10000	mg/L
MKTF-32	10/31/2016	Barium, Dissolved	0.051	0.002	0.0013	2000000	mg/L
MKTF-32	10/31/2016	Calcium, Dissolved	28	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-32	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-32	10/31/2016	Iron, Dissolved	0.05	0.02	0.02	13821880	mg/L
MKTF-32	10/31/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Magnesium, Dissolved	5.8	1	0.5	NA	mg/L
MKTF-32	10/31/2016	Manganese, Dissolved	0.056	0.002	0.00032	2017400	mg/L
MKTF-32	10/31/2016	Sodium, Dissolved	630	10	5	NA	mg/L
MKTF-32	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-32	10/31/2016	Selenium, Dissolved	0.0069	0.005	0.0011	50000	mg/L
MKTF-32	10/31/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-32	10/31/2016	Zinc, Dissolved	0.0096	0.01	0.0028	5960450	mg/L
MKTF-32	10/31/2016	Iron, Total	3	0.1	0.1	13822000	mg/L
MKTF-32	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-32	10/31/2016	Manganese, Total	0.13	0.002	0.00027	2017000	mg/L
MKTF-32	10/31/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-32	10/31/2016	Selenium, Total	0.006	0.02	0.0037	50000	mg/L
MKTF-32	10/31/2016	Uranium, Total	0.059	0.0025	0.00087	30000	mg/L
MKTF-32	10/31/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
MKTF-32	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-32	3/7/2017	Arsenic, Total	0.0046	0.01	0.0021	10000	mg/L
MKTF-32	3/7/2017	Barium, Total	0.055	0.002	0.00079	2000000	mg/L
MKTF-32	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-32	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-32	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-32	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-32	3/7/2017	Arsenic, Dissolved	0.0039	0.001	0.00014	10000	mg/L
MKTF-32	3/7/2017	Barium, Dissolved	0.043	0.002	0.00085	2000000	mg/L
MKTF-32	3/7/2017	Calcium, Dissolved	27	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-32	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-32	3/7/2017	Potassium, Dissolved	0.52	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Magnesium, Dissolved	5.5	1	0.5	NA	mg/L
MKTF-32	3/7/2017	Manganese, Dissolved	0.065	0.002	0.00038	2017400	mg/L
MKTF-32	3/7/2017	Sodium, Dissolved	580	10	5	NA	mg/L
MKTF-32	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	3/7/2017	Selenium, Dissolved	0.0059	0.001	0.00021	50000	mg/L
MKTF-32	3/7/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-32	3/7/2017	Iron, Total	0.51	0.02	0.02	13822000	mg/L
MKTF-32	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-32	3/7/2017	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-32	3/7/2017	Lead, Total	0.00083	0.0025	0.00041	15000	mg/L
MKTF-32	3/7/2017	Selenium, Total	0.0091	0.005	0.00094	50000	mg/L
MKTF-32	3/7/2017	Zinc, Total	0.003	0.01	0.0027	5960000	mg/L
MKTF-32	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-32	6/6/2017	Arsenic, Total	0.0046	0.005	0.0015	10000	mg/L
MKTF-32	6/6/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-32	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	6/6/2017	Chromium, Total	0.0064	0.006	0.0011	50000	mg/L
MKTF-32	6/6/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
MKTF-32	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-32	6/6/2017	Arsenic, Dissolved	0.0041	0.005	0.00089	10000	mg/L
MKTF-32	6/6/2017	Barium, Dissolved	0.049	0.002	0.00085	2000000	mg/L
MKTF-32	6/6/2017	Calcium, Dissolved	30	1	0.078	NA	mg/L
MKTF-32	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-32	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	6/6/2017	Iron, Dissolved	0.086	0.02	0.016	13821880	mg/L
MKTF-32	6/6/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MKTF-32	6/6/2017	Magnesium, Dissolved	6	1	0.25	NA	mg/L
MKTF-32	6/6/2017	Manganese, Dissolved	0.05	0.002	0.00038	2017400	mg/L
MKTF-32	6/6/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-32	6/6/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
MKTF-32	6/6/2017	Selenium, Dissolved	0.005	0.005	0.0019	50000	mg/L
MKTF-32	6/6/2017	Uranium, Dissolved	0.059	0.0025	0.00025	NA	mg/L
MKTF-32	6/6/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-32	6/6/2017	Iron, Total	6.4	0.2	0.1	13822000	mg/L
MKTF-32	6/6/2017	Mercury, Total	0.000068	0.0002	0.000037	2000	mg/L
MKTF-32	6/6/2017	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	6/6/2017	Lead, Total	0.0055	0.0025	0.00048	15000	mg/L
MKTF-32	6/6/2017	Selenium, Total	0.0063	0.005	0.0036	50000	mg/L
MKTF-32	6/6/2017	Uranium, Total	0.065	0.0025	0.00077	30000	mg/L
MKTF-32	6/6/2017	Zinc, Total	0.024	0.01	0.0028	5960000	mg/L
MKTF-32	9/25/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-32	9/25/2017	Arsenic, Total	0.0035	0.001	0.0003	10000	mg/L
MKTF-32	9/25/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-32	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	9/25/2017	Chromium, Total	0.0035	0.006	0.0018	50000	mg/L
MKTF-32	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-32	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	9/25/2017	Arsenic, Dissolved	0.0036	0.01	0.0018	10000	mg/L
MKTF-32	9/25/2017	Barium, Dissolved	0.045	0.002	0.00085	2000000	mg/L
MKTF-32	9/25/2017	Calcium, Dissolved	29	1	0.078	NA	mg/L
MKTF-32	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	9/25/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
MKTF-32	9/25/2017	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-32	9/25/2017	Magnesium, Dissolved	5.6	1	0.25	NA	mg/L
MKTF-32	9/25/2017	Manganese, Dissolved	0.075	0.002	0.00039	2017400	mg/L
MKTF-32	9/25/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	9/25/2017	Selenium, Dissolved	0.005	0.01	0.0039	50000	mg/L
MKTF-32	9/25/2017	Zinc, Dissolved	0.0087	0.01	0.0021	5960450	mg/L
MKTF-32	9/25/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-32	9/25/2017	Mercury, Total	0.000069	0.0002	0.000037	2000	mg/L
MKTF-32	9/25/2017	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-32	9/25/2017	Lead, Total	0.0021	0.0005	0.000095	15000	mg/L
MKTF-32	9/25/2017	Selenium, Total	0.0045	0.001	0.00071	50000	mg/L
MKTF-32	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-32	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	11/27/2017	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-32	11/27/2017	Barium, Total	0.067	0.002	0.001	2000000	mg/L
MKTF-32	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	11/27/2017	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
MKTF-32	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	11/27/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-32	11/27/2017	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-32	11/27/2017	Calcium, Dissolved	27	1	0.078	NA	mg/L
MKTF-32	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	11/27/2017	Iron, Dissolved	0.043	0.02	0.016	13821880	mg/L
MKTF-32	11/27/2017	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
MKTF-32	11/27/2017	Magnesium, Dissolved	5.4	1	0.25	NA	mg/L
MKTF-32	11/27/2017	Manganese, Dissolved	0.078	0.002	0.00039	2017400	mg/L
MKTF-32	11/27/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-32	11/27/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	11/27/2017	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
MKTF-32	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-32	11/27/2017	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-32	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-32	11/27/2017	Manganese, Total	0.079	0.002	0.0011	2017000	mg/L
MKTF-32	11/27/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-32	11/27/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-32	11/27/2017	Uranium, Total	0.058	0.0025	0.00077	30000	mg/L
MKTF-32	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-32	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	2/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-32	2/7/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-32	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	2/7/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
MKTF-32	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	2/7/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-32	2/7/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/7/2018	Calcium, Dissolved	29	1	0.078	NA	mg/L
MKTF-32	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	2/7/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
MKTF-32	2/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-32	2/7/2018	Magnesium, Dissolved	5.6	1	0.25	NA	mg/L
MKTF-32	2/7/2018	Manganese, Dissolved	0.062	0.002	0.00039	2017400	mg/L
MKTF-32	2/7/2018	Sodium, Dissolved	540	10	1.6	NA	mg/L
MKTF-32	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	2/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	2/7/2018	Uranium, Dissolved	0.06	0.0025	0.00048	NA	mg/L
MKTF-32	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-32	2/7/2018	Iron, Total	2.1	0.1	0.051	13822000	mg/L
MKTF-32	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-32	2/7/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-32	2/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-32	2/7/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-32	2/7/2018	Uranium, Total	0.06	0.0025	0.00034	30000	mg/L
MKTF-32	2/7/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-32	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	5/9/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-32	5/9/2018	Barium, Total	0.055	0.002	0.001	2000000	mg/L
MKTF-32	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	5/9/2018	Copper, Total	0.0049	0.006	0.0041	790000	mg/L
MKTF-32	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	5/9/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
MKTF-32	5/9/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-32	5/9/2018	Calcium, Dissolved	28	1	0.078	NA	mg/L
MKTF-32	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	5/9/2018	Copper, Dissolved	0.0039	0.006	0.0032	790000	mg/L
MKTF-32	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-32	5/9/2018	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
MKTF-32	5/9/2018	Magnesium, Dissolved	5.5	1	0.25	NA	mg/L
MKTF-32	5/9/2018	Manganese, Dissolved	0.049	0.002	0.00039	2017400	mg/L
MKTF-32	5/9/2018	Sodium, Dissolved	590	10	1.6	NA	mg/L
MKTF-32	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-32	5/9/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-32	5/9/2018	Uranium, Dissolved	0.05	0.005	0.00096	NA	mg/L
MKTF-32	5/9/2018	Zinc, Dissolved	0.0092	0.01	0.0021	5960450	mg/L
MKTF-32	5/9/2018	Iron, Total	0.51	0.02	0.01	13822000	mg/L
MKTF-32	5/9/2018	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-32	5/9/2018	Manganese, Total	0.06	0.002	0.0011	2017000	mg/L
MKTF-32	5/9/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
MKTF-32	5/9/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	5/9/2018	Uranium, Total	0.058	0.0025	0.00034	30000	mg/L
MKTF-32	5/9/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-32	8/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	8/28/2018	Arsenic, Total	0.0032	0.001	0.00041	10000	mg/L
MKTF-32	8/28/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-32	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	8/28/2018	Copper, Total	0.0083	0.006	0.0041	790000	mg/L
MKTF-32	8/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	8/28/2018	Arsenic, Dissolved	0.0025	0.001	0.00042	10000	mg/L
MKTF-32	8/28/2018	Barium, Dissolved	0.051	0.002	0.00099	2000000	mg/L
MKTF-32	8/28/2018	Calcium, Dissolved	28	1	0.078	NA	mg/L
MKTF-32	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	8/28/2018	Copper, Dissolved	0.0045	0.006	0.0032	790000	mg/L
MKTF-32	8/28/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-32	8/28/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-32	8/28/2018	Magnesium, Dissolved	5.3	1	0.25	NA	mg/L
MKTF-32	8/28/2018	Manganese, Dissolved	0.037	0.002	0.00039	2017400	mg/L
MKTF-32	8/28/2018	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-32	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	8/28/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
MKTF-32	8/28/2018	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
MKTF-32	8/28/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-32	8/28/2018	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
MKTF-32	8/28/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
MKTF-32	8/28/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-32	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	8/28/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-32	8/28/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-32	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-32	11/15/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-32	11/15/2018	Barium, Total	0.07	0.002	0.001	2000000	mg/L
MKTF-32	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-32	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-32	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-32	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-32	11/15/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
MKTF-32	11/15/2018	Barium, Dissolved	0.043	0.002	0.00099	2000000	mg/L
MKTF-32	11/15/2018	Calcium, Dissolved	26	1	0.078	NA	mg/L
MKTF-32	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-32	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-32	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-32	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-32	11/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-32	11/15/2018	Magnesium, Dissolved	4.9	1	0.25	NA	mg/L
MKTF-32	11/15/2018	Manganese, Dissolved	0.045	0.002	0.00039	2017400	mg/L
MKTF-32	11/15/2018	Sodium, Dissolved	610	20	3.3	NA	mg/L
MKTF-32	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-32	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-32	11/15/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
MKTF-32	11/15/2018	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
MKTF-32	11/15/2018	Iron, Total	0.81	0.02	0.01	13822000	mg/L
MKTF-32	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-32	11/15/2018	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
MKTF-32	11/15/2018	Lead, Total	0.00099	0.0005	0.00023	15000	mg/L
MKTF-32	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-32	11/15/2018	Uranium, Total	0.055	0.0025	0.00034	30000	mg/L
MKTF-32	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-33	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-33	11/17/2014	Arsenic, Total	0.0016	0.001	0.00036	10000	mg/L
MKTF-33	11/17/2014	Barium, Total	0.18	0.002	0.0005	2000000	mg/L
MKTF-33	11/17/2014	Calcium, Total	89	1	0.082	NA	mg/L
MKTF-33	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-33	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-33	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-33	11/17/2014	Iron, Total	3.3	0.1	0.036	13822000	mg/L
MKTF-33	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-33	11/17/2014	Potassium, Total	1.3	1	0.093	NA	mg/L
MKTF-33	11/17/2014	Magnesium, Total	19	1	0.018	NA	mg/L
MKTF-33	11/17/2014	Manganese, Total	0.92	0.002	0.00049	2017000	mg/L
MKTF-33	11/17/2014	Sodium, Total	310	10	3.9	NA	mg/L
MKTF-33	11/17/2014	Lead, Total	0.005	0.001	0.00026	15000	mg/L
MKTF-33	11/17/2014	Selenium, Total	0.0031	0.001	0.00051	50000	mg/L
MKTF-33	11/17/2014	Uranium, Total	0.043	0.001	0.0000072	30000	mg/L
MKTF-33	11/17/2014	Zinc, Total	0.018	0.01	0.0035	5960000	mg/L
MKTF-33	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-33	3/12/2015	Barium, Total	0.061	0.002	0.00095	2000000	mg/L
MKTF-33	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-33	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-33	3/12/2015	Iron, Total	0.026	0.02	0.0073	13822000	mg/L
MKTF-33	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	3/12/2015	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
MKTF-33	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-33	3/12/2015	Selenium, Total	ND	0.01	0.0015	50000	mg/L
MKTF-33	3/12/2015	Uranium, Total	0.045	0.001	0.00005	30000	mg/L
MKTF-33	3/12/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-33	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-33	6/9/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-33	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-33	6/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-33	6/9/2015	Iron, Total	4.1	0.1	0.036	13822000	mg/L
MKTF-33	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	6/9/2015	Manganese, Total	0.7	0.002	0.0015	2017000	mg/L
MKTF-33	6/9/2015	Lead, Total	0.0058	0.0025	0.00024	15000	mg/L
MKTF-33	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-33	6/9/2015	Uranium, Total	0.044	0.0025	0.000025	30000	mg/L
MKTF-33	6/9/2015	Zinc, Total	0.02	0.01	0.0039	5960000	mg/L
MKTF-33	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-33	8/21/2015	Arsenic, Total	0.002	0.001	0.00029	10000	mg/L
MKTF-33	8/21/2015	Barium, Total	0.74	0.002	0.0011	2000000	mg/L
MKTF-33	8/21/2015	Calcium, Total	87	1	0.057	NA	mg/L
MKTF-33	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	8/21/2015	Chromium, Total	0.015	0.006	0.0022	50000	mg/L
MKTF-33	8/21/2015	Copper, Total	0.01	0.006	0.0051	790000	mg/L
MKTF-33	8/21/2015	Iron, Total	14	0.4	0.14	13822000	mg/L
MKTF-33	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	8/21/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-33	8/21/2015	Magnesium, Total	18	1	0.039	NA	mg/L
MKTF-33	8/21/2015	Manganese, Total	1.6	0.01	0.0076	2017000	mg/L
MKTF-33	8/21/2015	Sodium, Total	310	5	0.36	NA	mg/L
MKTF-33	8/21/2015	Lead, Total	0.022	0.0005	0.000047	15000	mg/L
MKTF-33	8/21/2015	Selenium, Total	0.0019	0.001	0.00012	50000	mg/L
MKTF-33	8/21/2015	Uranium, Total	0.049	0.0025	0.000025	30000	mg/L
MKTF-33	8/21/2015	Zinc, Total	0.048	0.01	0.0039	5960000	mg/L
MKTF-33	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-33	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-33	11/9/2015	Barium, Total	0.062	0.002	0.0013	2000000	mg/L
MKTF-33	11/9/2015	Calcium, Total	82	1	0.26	NA	mg/L
MKTF-33	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-33	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-33	11/9/2015	Iron, Total	0.071	0.02	0.0091	13822000	mg/L
MKTF-33	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-33	11/9/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-33	11/9/2015	Magnesium, Total	18	1	0.013	NA	mg/L
MKTF-33	11/9/2015	Manganese, Total	0.24	0.002	0.00032	2017000	mg/L
MKTF-33	11/9/2015	Sodium, Total	270	5	0.48	NA	mg/L
MKTF-33	11/9/2015	Lead, Total	0.00059	0.0005	0.000026	15000	mg/L
MKTF-33	11/9/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-33	11/9/2015	Uranium, Total	0.04	0.0025	0.000024	30000	mg/L
MKTF-33	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-33	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-33	2/25/2016	Arsenic, Total	0.0012	0.001	0.00029	10000	mg/L
MKTF-33	2/25/2016	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-33	2/25/2016	Calcium, Total	92	1	0.26	NA	mg/L
MKTF-33	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-33	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-33	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-33	2/25/2016	Iron, Total	4.9	0.1	0.036	13822000	mg/L
MKTF-33	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	2/25/2016	Potassium, Total	1.2	1	0.18	NA	mg/L
MKTF-33	2/25/2016	Magnesium, Total	20	1	0.013	NA	mg/L
MKTF-33	2/25/2016	Manganese, Total	0.55	0.002	0.0015	2017000	mg/L
MKTF-33	2/25/2016	Sodium, Total	310	5	0.48	NA	mg/L
MKTF-33	2/25/2016	Lead, Total	0.0067	0.0005	0.000047	15000	mg/L
MKTF-33	2/25/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-33	2/25/2016	Uranium, Total	0.04	0.0025	0.000025	30000	mg/L
MKTF-33	2/25/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-33	6/10/2016	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-33	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-33	6/10/2016	Arsenic, Total	0.0017	0.005	0.00069	10000	mg/L
MKTF-33	6/10/2016	Barium, Total	0.04	0.002	0.0013	2000000	mg/L
MKTF-33	6/10/2016	Calcium, Total	88	1	0.26	NA	mg/L
MKTF-33	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-33	6/10/2016	Iron, Total	0.014	0.02	0.0091	13822000	mg/L
MKTF-33	6/10/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MKTF-33	6/10/2016	Potassium, Total	1	1	0.18	NA	mg/L
MKTF-33	6/10/2016	Magnesium, Total	19	1	0.013	NA	mg/L
MKTF-33	6/10/2016	Manganese, Total	0.031	0.002	0.00032	2017000	mg/L
MKTF-33	6/10/2016	Sodium, Total	310	5	0.48	NA	mg/L
MKTF-33	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-33	6/10/2016	Selenium, Total	0.004	0.001	0.00021	50000	mg/L
MKTF-33	6/10/2016	Uranium, Total	0.038	0.0025	0.00026	30000	mg/L
MKTF-33	9/10/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	9/10/2016	Arsenic, Total	ND	0.005	0.0011	10000	mg/L
MKTF-33	9/10/2016	Barium, Total	0.091	0.002	0.00079	2000000	mg/L
MKTF-33	9/10/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	9/10/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	9/10/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	9/10/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-33	9/10/2016	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
MKTF-33	9/10/2016	Barium, Dissolved	0.043	0.002	0.0013	2000000	mg/L
MKTF-33	9/10/2016	Calcium, Dissolved	90	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-33	9/10/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-33	9/10/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-33	9/10/2016	Iron, Dissolved	0.02	0.02	0.02	13821880	mg/L
MKTF-33	9/10/2016	Potassium, Dissolved	0.74	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-33	9/10/2016	Manganese, Dissolved	0.13	0.002	0.00032	2017400	mg/L
MKTF-33	9/10/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-33	9/10/2016	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
MKTF-33	9/10/2016	Selenium, Dissolved	0.0035	0.001	0.00021	50000	mg/L
MKTF-33	9/10/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-33	9/10/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-33	9/10/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
MKTF-33	9/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	9/10/2016	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
MKTF-33	9/10/2016	Lead, Total	0.0027	0.0005	0.000081	15000	mg/L
MKTF-33	9/10/2016	Selenium, Total	0.0031	0.005	0.00094	50000	mg/L
MKTF-33	9/10/2016	Uranium, Total	0.036	0.0025	0.00087	30000	mg/L
MKTF-33	9/10/2016	Zinc, Total	0.0075	0.01	0.0027	5960000	mg/L
MKTF-33	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	11/1/2016	Arsenic, Total	0.0021	0.005	0.0011	10000	mg/L
MKTF-33	11/1/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-33	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-33	11/1/2016	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
MKTF-33	11/1/2016	Barium, Dissolved	0.041	0.002	0.0013	2000000	mg/L
MKTF-33	11/1/2016	Calcium, Dissolved	91	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-33	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-33	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-33	11/1/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-33	11/1/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Manganese, Dissolved	0.13	0.002	0.00032	2017400	mg/L
MKTF-33	11/1/2016	Sodium, Dissolved	310	1	0.5	NA	mg/L
MKTF-33	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/1/2016	Selenium, Dissolved	0.0028	0.001	0.00021	50000	mg/L
MKTF-33	11/1/2016	Uranium, Dissolved	0.038	0.0025	0.00026	NA	mg/L
MKTF-33	11/1/2016	Zinc, Dissolved	0.017	0.01	0.0028	5960450	mg/L
MKTF-33	11/1/2016	Iron, Total	3.1	0.1	0.1	13822000	mg/L
MKTF-33	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-33	11/1/2016	Manganese, Total	0.25	0.002	0.00027	2017000	mg/L
MKTF-33	11/1/2016	Lead, Total	0.0025	0.0005	0.000081	15000	mg/L
MKTF-33	11/1/2016	Selenium, Total	0.0024	0.005	0.00094	50000	mg/L
MKTF-33	11/1/2016	Uranium, Total	0.034	0.0025	0.00087	30000	mg/L
MKTF-33	11/1/2016	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-33	3/8/2017	Arsenic, Total	0.0024	0.005	0.0011	10000	mg/L
MKTF-33	3/8/2017	Barium, Total	0.13	0.002	0.00079	2000000	mg/L
MKTF-33	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-33	3/8/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-33	3/8/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-33	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-33	3/8/2017	Arsenic, Dissolved	0.0014	0.005	0.00069	10000	mg/L
MKTF-33	3/8/2017	Barium, Dissolved	0.04	0.002	0.00085	2000000	mg/L
MKTF-33	3/8/2017	Calcium, Dissolved	82	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	3/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-33	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	3/8/2017	Iron, Dissolved	0.032	0.02	0.02	13821880	mg/L
MKTF-33	3/8/2017	Potassium, Dissolved	0.89	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Magnesium, Dissolved	18	1	0.5	NA	mg/L
MKTF-33	3/8/2017	Manganese, Dissolved	0.2	0.002	0.00038	2017400	mg/L
MKTF-33	3/8/2017	Sodium, Dissolved	300	5	2.5	NA	mg/L
MKTF-33	3/8/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-33	3/8/2017	Selenium, Dissolved	0.0028	0.001	0.00021	50000	mg/L
MKTF-33	3/8/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-33	3/8/2017	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-33	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-33	3/8/2017	Manganese, Total	0.41	0.002	0.00027	2017000	mg/L
MKTF-33	3/8/2017	Lead, Total	0.0027	0.0025	0.00041	15000	mg/L
MKTF-33	3/8/2017	Selenium, Total	0.0054	0.005	0.00094	50000	mg/L
MKTF-33	3/8/2017	Zinc, Total	0.0067	0.01	0.0027	5960000	mg/L
MKTF-33	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-33	6/8/2017	Arsenic, Total	0.002	0.001	0.0003	10000	mg/L
MKTF-33	6/8/2017	Barium, Total	0.49	0.002	0.00093	2000000	mg/L
MKTF-33	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	6/8/2017	Chromium, Total	0.01	0.006	0.0011	50000	mg/L
MKTF-33	6/8/2017	Copper, Total	0.0062	0.006	0.0017	790000	mg/L
MKTF-33	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-33	6/8/2017	Arsenic, Dissolved	0.0011	0.005	0.00089	10000	mg/L
MKTF-33	6/8/2017	Barium, Dissolved	0.04	0.002	0.00085	2000000	mg/L
MKTF-33	6/8/2017	Calcium, Dissolved	90	1	0.078	NA	mg/L
MKTF-33	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-33	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	6/8/2017	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-33	6/8/2017	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
MKTF-33	6/8/2017	Magnesium, Dissolved	20	1	0.25	NA	mg/L
MKTF-33	6/8/2017	Manganese, Dissolved	0.042	0.002	0.00038	2017400	mg/L
MKTF-33	6/8/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
MKTF-33	6/8/2017	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
MKTF-33	6/8/2017	Selenium, Dissolved	0.0023	0.001	0.00039	50000	mg/L
MKTF-33	6/8/2017	Uranium, Dissolved	0.035	0.0025	0.00025	NA	mg/L
MKTF-33	6/8/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-33	6/8/2017	Iron, Total	9.8	0.2	0.1	13822000	mg/L
MKTF-33	6/8/2017	Mercury, Total	0.000081	0.0002	0.000037	2000	mg/L
MKTF-33	6/8/2017	Manganese, Total	0.83	0.002	0.0011	2017000	mg/L
MKTF-33	6/8/2017	Lead, Total	0.013	0.0005	0.000095	15000	mg/L
MKTF-33	6/8/2017	Selenium, Total	0.003	0.001	0.00071	50000	mg/L
MKTF-33	6/8/2017	Uranium, Total	0.037	0.0025	0.00077	30000	mg/L
MKTF-33	6/8/2017	Zinc, Total	0.028	0.01	0.0028	5960000	mg/L
MKTF-33	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	9/25/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-33	9/25/2017	Barium, Total	0.22	0.002	0.00093	2000000	mg/L
MKTF-33	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	9/25/2017	Chromium, Total	0.0058	0.006	0.0018	50000	mg/L
MKTF-33	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-33	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	9/25/2017	Arsenic, Dissolved	ND	0.005	0.00089	10000	mg/L
MKTF-33	9/25/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
MKTF-33	9/25/2017	Calcium, Dissolved	82	1	0.078	NA	mg/L
MKTF-33	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	9/25/2017	Potassium, Dissolved	0.98	1	0.11	NA	mg/L
MKTF-33	9/25/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
MKTF-33	9/25/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
MKTF-33	9/25/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
MKTF-33	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	9/25/2017	Selenium, Dissolved	0.002	0.005	0.0019	50000	mg/L
MKTF-33	9/25/2017	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
MKTF-33	9/25/2017	Iron, Total	4.4	0.1	0.051	13822000	mg/L
MKTF-33	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-33	9/25/2017	Manganese, Total	0.6	0.002	0.0011	2017000	mg/L
MKTF-33	9/25/2017	Lead, Total	0.0046	0.0005	0.000095	15000	mg/L
MKTF-33	9/25/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
MKTF-33	9/25/2017	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-33	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	11/28/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
MKTF-33	11/28/2017	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-33	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/28/2017	Copper, Total	0.0045	0.006	0.0041	790000	mg/L
MKTF-33	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	11/28/2017	Arsenic, Dissolved	0.00071	0.001	0.00042	10000	mg/L
MKTF-33	11/28/2017	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-33	11/28/2017	Calcium, Dissolved	73	1	0.078	NA	mg/L
MKTF-33	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	11/28/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	11/28/2017	Potassium, Dissolved	0.99	1	0.11	NA	mg/L
MKTF-33	11/28/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	5/9/2019	Aluminum, Dissolved	0.0079	0.02	0.002488	19913930	mg/L
MKTF-33	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Dissolved	0.00055	0.005	0.000504	10000	mg/L
MKTF-33	5/9/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-33	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	5/9/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
MKTF-33	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-33	5/9/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
MKTF-33	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-33	5/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
MKTF-33	5/9/2019	Manganese, Dissolved	0.081	0.002	0.00029	2017400	mg/L
MKTF-33	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
MKTF-33	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-33	5/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-33	5/9/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-33	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-33	5/9/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
MKTF-33	5/9/2019	Zinc, Dissolved	0.031	0.01	0.002252	5960450	mg/L
MKTF-33	5/9/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-33	5/9/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	5/9/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
MKTF-33	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	5/9/2019	Chromium, Total	0.0033	0.006	0.001533	50000	mg/L
MKTF-33	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Total	0.0051	0.006	0.004072	790000	mg/L
MKTF-33	5/9/2019	Iron, Total	4.4	0.2	0.087469	13822000	mg/L
MKTF-33	5/9/2019	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
MKTF-33	5/9/2019	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-33	5/9/2019	Mercury, Total	0.00008	0.0002	0.000038	2000	mg/L
MKTF-33	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	5/9/2019	Nickel, Total	0.0076	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-33	5/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-33	5/9/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-33	5/9/2019	Uranium, Total	0.033	0.0025	0.000424	30000	mg/L
MKTF-33	5/9/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-33	5/9/2019	Aluminum, Dissolved	0.0041	0.02	0.002488	19913930	mg/L
MKTF-33	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-33	5/9/2019	Barium, Dissolved	0.053	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-33	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	5/9/2019	Calcium, Dissolved	77	1	0.061889	NA	mg/L
MKTF-33	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-33	5/9/2019	Iron, Dissolved	0.01	0.02	0.008747	13821880	mg/L
MKTF-33	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-33	5/9/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
MKTF-33	5/9/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-33	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Dissolved	0.0048	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-33	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-33	5/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-33	5/9/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-33	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-33	5/9/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-33	5/9/2019	Zinc, Dissolved	0.0092	0.01	0.002252	5960450	mg/L
MKTF-33	5/9/2019	Aluminum, Total	8.8	0.2	0.024883	19914000	mg/L
MKTF-33	5/9/2019	Antimony, Total	0.0004	0.001	0.000389	6000	mg/L
MKTF-33	5/9/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	5/9/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
MKTF-33	5/9/2019	Beryllium, Total	0.00051	0.002	0.000284	4000	mg/L
MKTF-33	5/9/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
MKTF-33	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	5/9/2019	Chromium, Total	0.0029	0.006	0.001533	50000	mg/L
MKTF-33	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	5/9/2019	Iron, Total	3.6	0.2	0.087469	13822000	mg/L
MKTF-33	5/9/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-33	5/9/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
MKTF-33	5/9/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-33	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	5/9/2019	Nickel, Total	0.0077	0.01	0.004009	372000	mg/L
MKTF-33	5/9/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MKTF-33	5/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-33	5/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-33	5/9/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-33	5/9/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
MKTF-33	10/24/2019	Aluminum, Total	7.6	0.4	0.049765	19914000	mg/L
MKTF-33	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	10/24/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-33	10/24/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
MKTF-33	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-33	10/24/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-33	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	10/24/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
MKTF-33	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	10/24/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-33	10/24/2019	Lead, Total	0.0031	0.0005	0.000055	15000	mg/L
MKTF-33	10/24/2019	Manganese, Total	0.48	0.002	0.00029	2017000	mg/L
MKTF-33	10/24/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-33	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	10/24/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-33	10/24/2019	Selenium, Total	0.00055	0.001	0.000478	50000	mg/L
MKTF-33	10/24/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	10/24/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-33	10/24/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
MKTF-33	10/24/2019	Aluminum, Dissolved	0.0076	0.02	0.002488	19913930	mg/L
MKTF-33	10/24/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-33	10/24/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
MKTF-33	10/24/2019	Barium, Dissolved	0.076	0.002	0.000648	2000000	mg/L
MKTF-33	10/24/2019	Beryllium, Dissolved	0.00044	0.002	0.000284	4000	mg/L
MKTF-33	10/24/2019	Boron, Dissolved	0.51	0.2	0.022653	3949110	mg/L
MKTF-33	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	10/24/2019	Calcium, Dissolved	84	5	0.309446	NA	mg/L
MKTF-33	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	10/24/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
MKTF-33	10/24/2019	Iron, Dissolved	0.052	0.02	0.008747	13821880	mg/L
MKTF-33	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-33	10/24/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-33	10/24/2019	Manganese, Dissolved	0.38	0.002	0.00029	2017400	mg/L
MKTF-33	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	10/24/2019	Nickel, Dissolved	0.0054	0.01	0.004009	372000	mg/L
MKTF-33	10/24/2019	Potassium, Dissolved	0.78	1	0.162288	NA	mg/L
MKTF-33	10/24/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
MKTF-33	10/24/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
MKTF-33	10/24/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-33	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	10/24/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-33	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-33	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-33	8/20/2019	Arsenic, Dissolved	0.00042	0.001	0.000101	10000	mg/L
MKTF-33	8/20/2019	Barium, Dissolved	0.069	0.002	0.000648	2000000	mg/L
MKTF-33	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-33	8/20/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
MKTF-33	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-33	8/20/2019	Calcium, Dissolved	78	1	0.061889	NA	mg/L
MKTF-33	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-33	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-33	8/20/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
MKTF-33	8/20/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
MKTF-33	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-33	8/20/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
MKTF-33	8/20/2019	Manganese, Dissolved	0.44	0.002	0.00029	2017400	mg/L
MKTF-33	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-33	8/20/2019	Nickel, Dissolved	0.0043	0.01	0.004009	372000	mg/L
MKTF-33	8/20/2019	Potassium, Dissolved	0.75	1	0.162288	NA	mg/L
MKTF-33	8/20/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-33	8/20/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
MKTF-33	8/20/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
MKTF-33	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	8/20/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
MKTF-33	8/20/2019	Zinc, Dissolved	0.004	0.01	0.002252	5960450	mg/L
MKTF-33	8/20/2019	Aluminum, Total	6.3	0.2	0.024883	19914000	mg/L
MKTF-33	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-33	8/20/2019	Arsenic, Total	0.001	0.001	0.000312	10000	mg/L
MKTF-33	8/20/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L
MKTF-33	8/20/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
MKTF-33	8/20/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
MKTF-33	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-33	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-33	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-33	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-33	8/20/2019	Iron, Total	2.6	0.2	0.087469	13822000	mg/L
MKTF-33	8/20/2019	Lead, Total	0.0029	0.0005	0.000055	15000	mg/L
MKTF-33	8/20/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
MKTF-33	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-33	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-33	8/20/2019	Nickel, Total	0.0064	0.01	0.004009	372000	mg/L
MKTF-33	8/20/2019	Selenium, Total	0.00095	0.001	0.000478	50000	mg/L
MKTF-33	8/20/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-33	8/20/2019	Thallium, Total	0.000052	0.0005	0.000052	2000	mg/L
MKTF-33	8/20/2019	Uranium, Total	0.035	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-33	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-33	2/28/2020	Arsenic, Dissolved	0.00054	0.001	0.0001	10000	mg/L
MKTF-33	2/28/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-33	2/28/2020	Selenium, Dissolved	0.0002	0.001	0.00017	50000	mg/L
MKTF-33	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-33	2/28/2020	Uranium, Dissolved	0.032	0.0025	0.00037	NA	mg/L
MKTF-33	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-33	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-33	2/28/2020	Boron, Dissolved	0.48	0.04	0.0045	3949110	mg/L
MKTF-33	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-33	2/28/2020	Manganese, Dissolved	0.31	0.002	0.00029	2017400	mg/L
MKTF-33	2/28/2020	Silver, Dissolved	0.0018	0.005	0.00094	81200	mg/L
MKTF-33	2/28/2020	Barium, Dissolved	0.082	0.002	0.00065	2000000	mg/L
MKTF-33	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-33	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-33	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-33	2/28/2020	Iron, Dissolved	0.032	0.02	0.0087	13821880	mg/L
MKTF-33	2/28/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
MKTF-33	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-33	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-33	2/28/2020	Potassium, Dissolved	0.99	1	0.16	NA	mg/L
MKTF-33	2/28/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-33	2/28/2020	Calcium, Dissolved	76	5	0.31	NA	mg/L
MKTF-33	2/28/2020	Sodium, Dissolved	300	10	4.2	NA	mg/L
MKTF-33	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-33	2/28/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
MKTF-33	2/28/2020	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-33	2/28/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-33	2/28/2020	Thallium, Total	0.000054	0.0005	0.000052	2000	mg/L
MKTF-33	2/28/2020	Uranium, Total	0.03	0.0025	0.00042	30000	mg/L
MKTF-33	2/28/2020	Barium, Total	0.12	0.002	0.00065	2000000	mg/L
MKTF-33	2/28/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-33	2/28/2020	Boron, Total	0.51	0.04	0.0045	3949	mg/L
MKTF-33	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-33	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-33	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	2/28/2020	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
MKTF-33	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-33	2/28/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-33	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-33	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-33	2/28/2020	Iron, Total	0.93	0.02	0.0087	13822000	mg/L
MKTF-33	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-33	2/28/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-33	2/28/2020	Aluminum, Total	2.4	0.1	0.012	19914000	mg/L
MKTF-33	11/28/2017	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
MKTF-33	11/28/2017	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-33	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/28/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	11/28/2017	Uranium, Dissolved	0.032	0.0025	0.00048	NA	mg/L
MKTF-33	11/28/2017	Zinc, Dissolved	0.0051	0.01	0.0021	5960450	mg/L
MKTF-33	11/28/2017	Iron, Total	3	0.1	0.051	13822000	mg/L
MKTF-33	11/28/2017	Manganese, Total	0.39	0.002	0.0011	2017000	mg/L
MKTF-33	11/28/2017	Lead, Total	0.0036	0.0005	0.00023	15000	mg/L
MKTF-33	11/28/2017	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
MKTF-33	11/28/2017	Uranium, Total	0.033	0.005	0.0015	30000	mg/L
MKTF-33	11/28/2017	Zinc, Total	0.0095	0.01	0.0033	5960000	mg/L
MKTF-33	2/8/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-33	2/8/2018	Arsenic, Total	0.0018	0.001	0.00041	10000	mg/L
MKTF-33	2/8/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
MKTF-33	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	2/8/2018	Chromium, Total	0.002	0.006	0.0018	50000	mg/L
MKTF-33	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	2/8/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-33	2/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-33	2/8/2018	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-33	2/8/2018	Calcium, Dissolved	74	1	0.078	NA	mg/L
MKTF-33	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	2/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	2/8/2018	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
MKTF-33	2/8/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	2/8/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
MKTF-33	2/8/2018	Sodium, Dissolved	280	5	0.82	NA	mg/L
MKTF-33	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	2/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	2/8/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-33	2/8/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
MKTF-33	2/8/2018	Iron, Total	4	0.1	0.051	13822000	mg/L
MKTF-33	2/8/2018	Mercury, Total	0.000098	0.0002	0.000037	2000	mg/L
MKTF-33	2/8/2018	Manganese, Total	0.41	0.002	0.0011	2017000	mg/L
MKTF-33	2/8/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-33	2/8/2018	Selenium, Total	0.0015	0.001	0.00098	50000	mg/L
MKTF-33	2/8/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
MKTF-33	2/8/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-33	5/10/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
MKTF-33	5/10/2018	Arsenic, Total	0.00059	0.001	0.00041	10000	mg/L
MKTF-33	5/10/2018	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-33	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	5/10/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	5/10/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	5/10/2018	Arsenic, Dissolved	0.00076	0.001	0.00042	10000	mg/L
MKTF-33	5/10/2018	Barium, Dissolved	0.042	0.002	0.00099	2000000	mg/L
MKTF-33	5/10/2018	Calcium, Dissolved	75	1	0.078	NA	mg/L
MKTF-33	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	5/10/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	5/10/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	5/10/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	5/10/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-33	5/10/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	5/10/2018	Manganese, Dissolved	0.15	0.002	0.00039	2017400	mg/L
MKTF-33	5/10/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
MKTF-33	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-33	5/10/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-33	5/10/2018	Uranium, Dissolved	0.032	0.005	0.00096	NA	mg/L
MKTF-33	5/10/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
MKTF-33	5/10/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-33	5/10/2018	Mercury, Total	0.000064	0.0002	0.000037	2000	mg/L
MKTF-33	5/10/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-33	5/10/2018	Lead, Total	0.0016	0.0005	0.00023	15000	mg/L
MKTF-33	5/10/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	5/10/2018	Uranium, Total	0.034	0.0025	0.00034	30000	mg/L
MKTF-33	5/10/2018	Zinc, Total	0.0043	0.01	0.0033	5960000	mg/L
MKTF-33	8/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
MKTF-33	8/30/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-33	8/30/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-33	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	8/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	8/30/2018	Arsenic, Dissolved	0.00075	0.001	0.00042	10000	mg/L
MKTF-33	8/30/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-33	8/30/2018	Calcium, Dissolved	72	1	0.078	NA	mg/L
MKTF-33	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-33	8/30/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-33	8/30/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-33	8/30/2018	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
MKTF-33	8/30/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-33	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	8/30/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-33	8/30/2018	Uranium, Dissolved	0.031	0.0025	0.00048	NA	mg/L
MKTF-33	8/30/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/30/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
MKTF-33	8/30/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
MKTF-33	8/30/2018	Manganese, Total	0.42	0.002	0.0011	2017000	mg/L
MKTF-33	8/30/2018	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-33	8/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	8/30/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-33	8/30/2018	Zinc, Total	0.0091	0.01	0.0033	5960000	mg/L
MKTF-33	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-33	11/28/2018	Arsenic, Total	0.001	0.001	0.00041	10000	mg/L
MKTF-33	11/28/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-33	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-33	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-33	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-33	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-33	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-33	11/28/2018	Barium, Dissolved	0.055	0.002	0.00099	2000000	mg/L
MKTF-33	11/28/2018	Calcium, Dissolved	80	1	0.078	NA	mg/L
MKTF-33	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-33	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-33	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-33	11/28/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-33	11/28/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-33	11/28/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
MKTF-33	11/28/2018	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
MKTF-33	11/28/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
MKTF-33	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-33	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-33	11/28/2018	Zinc, Dissolved	0.032	0.01	0.0021	5960450	mg/L
MKTF-33	11/28/2018	Iron, Total	2.7	0.1	0.051	13822000	mg/L
MKTF-33	11/28/2018	Manganese, Total	0.45	0.002	0.0011	2017000	mg/L
MKTF-33	11/28/2018	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-33	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-33	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-34	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Dissolved	0.00047	0.001	0.0001	10000	mg/L
MKTF-34	2/28/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/28/2020	Uranium, Dissolved	0.017	0.0005	0.000075	NA	mg/L
MKTF-34	2/28/2020	Selenium, Dissolved	0.00085	0.001	0.00017	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-34	2/28/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/28/2020	Magnesium, Dissolved	47	1	0.05	NA	mg/L
MKTF-34	2/28/2020	Manganese, Dissolved	0.00038	0.002	0.00029	2017400	mg/L
MKTF-34	2/28/2020	Potassium, Dissolved	0.85	1	0.16	NA	mg/L
MKTF-34	2/28/2020	Silver, Dissolved	0.0041	0.005	0.00094	81200	mg/L
MKTF-34	2/28/2020	Calcium, Dissolved	210	5	0.31	NA	mg/L
MKTF-34	2/28/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
MKTF-34	2/28/2020	Barium, Dissolved	0.18	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Boron, Dissolved	0.19	0.04	0.0045	3949110	mg/L
MKTF-34	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Zinc, Dissolved	0.018	0.01	0.0023	5960450	mg/L
MKTF-34	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Total	0.00086	0.001	0.00031	10000	mg/L
MKTF-34	2/28/2020	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
MKTF-34	2/28/2020	Thallium, Total	0.000056	0.0005	0.000052	2000	mg/L
MKTF-34	2/28/2020	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-34	2/28/2020	Selenium, Total	0.0013	0.001	0.00048	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Total	1.6	0.1	0.012	19914000	mg/L
MKTF-34	2/28/2020	Iron, Total	1.1	0.1	0.044	13822000	mg/L
MKTF-34	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	2/28/2020	Barium, Total	0.2	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Beryllium, Total	0.00051	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Boron, Total	0.19	0.04	0.0045	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/28/2020	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
MKTF-34	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Silver, Total	0.004	0.005	0.0014	50000	mg/L
MKTF-34	2/28/2020	Zinc, Total	0.012	0.01	0.0058	5960000	mg/L
MKTF-34	2/28/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Dissolved	0.00046	0.001	0.0001	10000	mg/L
MKTF-34	2/28/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/28/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/28/2020	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
MKTF-34	2/28/2020	Selenium, Dissolved	0.0011	0.001	0.00017	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/28/2020	Beryllium, Dissolved	0.00038	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-34	2/28/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/28/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-34	2/28/2020	Manganese, Dissolved	0.00059	0.002	0.00029	2017400	mg/L
MKTF-34	2/28/2020	Potassium, Dissolved	0.95	1	0.16	NA	mg/L
MKTF-34	2/28/2020	Silver, Dissolved	0.0038	0.005	0.00094	81200	mg/L
MKTF-34	2/28/2020	Calcium, Dissolved	190	5	0.31	NA	mg/L
MKTF-34	2/28/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
MKTF-34	2/28/2020	Barium, Dissolved	0.15	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Boron, Dissolved	0.19	0.04	0.0045	3949110	mg/L
MKTF-34	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-34	2/28/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/28/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
MKTF-34	2/28/2020	Lead, Total	0.00086	0.0005	0.000055	15000	mg/L
MKTF-34	2/28/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	2/28/2020	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-34	2/28/2020	Selenium, Total	0.0014	0.001	0.00048	50000	mg/L
MKTF-34	2/28/2020	Aluminum, Total	1.2	0.1	0.012	19914000	mg/L
MKTF-34	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	2/28/2020	Barium, Total	0.17	0.002	0.00065	2000000	mg/L
MKTF-34	2/28/2020	Beryllium, Total	0.00055	0.002	0.00028	4000	mg/L
MKTF-34	2/28/2020	Boron, Total	0.23	0.04	0.0045	3949	mg/L
MKTF-34	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/28/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/28/2020	Iron, Total	0.79	0.02	0.0087	13822000	mg/L
MKTF-34	2/28/2020	Manganese, Total	0.025	0.002	0.00029	2017000	mg/L
MKTF-34	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/28/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/28/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
MKTF-34	2/28/2020	Zinc, Total	0.0092	0.01	0.0058	5960000	mg/L
MKTF-34	2/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-34	2/5/2020	Barium, Dissolved	0.16	0.002	0.00065	2000000	mg/L
MKTF-34	2/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-34	2/5/2020	Boron, Dissolved	0.26	0.04	0.0045	3949110	mg/L
MKTF-34	2/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-34	2/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-34	2/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/5/2020	Copper, Dissolved	0.002	0.006	0.0013	790000	mg/L
MKTF-34	2/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-34	2/5/2020	Magnesium, Dissolved	40	1	0.05	NA	mg/L
MKTF-34	2/5/2020	Manganese, Dissolved	0.001	0.002	0.00029	2017400	mg/L
MKTF-34	2/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-34	2/5/2020	Potassium, Dissolved	0.89	1	0.16	NA	mg/L
MKTF-34	2/5/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/5/2020	Zinc, Dissolved	0.06	0.01	0.0023	5960450	mg/L
MKTF-34	2/5/2020	Calcium, Dissolved	180	5	0.31	NA	mg/L
MKTF-34	2/5/2020	Sodium, Dissolved	280	5	2.1	NA	mg/L
MKTF-34	2/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-34	2/5/2020	Arsenic, Dissolved	0.00039	0.001	0.0001	10000	mg/L
MKTF-34	2/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	2/5/2020	Selenium, Dissolved	0.0015	0.001	0.00017	50000	mg/L
MKTF-34	2/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	2/5/2020	Uranium, Dissolved	0.017	0.0005	0.000075	NA	mg/L
MKTF-34	2/5/2020	Antimony, Total	0.00093	0.001	0.00039	6000	mg/L
MKTF-34	2/5/2020	Lead, Total	0.0009	0.0005	0.000055	15000	mg/L
MKTF-34	2/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	2/5/2020	Uranium, Total	0.018	0.0005	0.000085	30000	mg/L
MKTF-34	2/5/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-34	2/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-34	2/5/2020	Barium, Total	0.18	0.002	0.00065	2000000	mg/L
MKTF-34	2/5/2020	Beryllium, Total	0.0003	0.002	0.00028	4000	mg/L
MKTF-34	2/5/2020	Boron, Total	0.25	0.04	0.0045	3949	mg/L
MKTF-34	2/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-34	2/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-34	2/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-34	2/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/5/2020	Iron, Total	0.92	0.02	0.0087	13822000	mg/L
MKTF-34	2/5/2020	Manganese, Total	0.03	0.002	0.00029	2017000	mg/L
MKTF-34	2/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-34	2/5/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-34	2/5/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
MKTF-34	2/5/2020	Zinc, Total	0.01	0.01	0.0058	5960000	mg/L
MKTF-34	2/5/2020	Aluminum, Total	1.4	0.1	0.012	19914000	mg/L
MKTF-34	2/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-34	9/16/2020	Mercury, Total	0.0013	0.0002	0.00012	2000	mg/L
MKTF-34	9/16/2020	Barium, Total	0.52	0.015	0.0082	2000000	mg/L
MKTF-34	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-34	9/16/2020	Boron, Total	0.5	0.2	0.037	3949	mg/L
MKTF-34	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-34	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-34	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-34	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-34	9/16/2020	Manganese, Total	0.41	0.01	0.0041	2017000	mg/L
MKTF-34	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-34	9/16/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
MKTF-34	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-34	9/16/2020	Zinc, Total	0.15	0.05	0.032	5960000	mg/L
MKTF-34	9/16/2020	Aluminum, Total	19	2	0.74	19914000	mg/L
MKTF-34	9/16/2020	Iron, Total	21	5	1.3	13822000	mg/L
MKTF-34	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-34	9/16/2020	Arsenic, Total	0.0068	0.001	0.00026	10000	mg/L
MKTF-34	9/16/2020	Lead, Total	0.018	0.0005	0.000034	15000	mg/L
MKTF-34	9/16/2020	Selenium, Total	0.0082	0.001	0.00066	50000	mg/L
MKTF-34	9/16/2020	Thallium, Total	0.00041	0.00025	0.00025	2000	mg/L
MKTF-34	9/16/2020	Uranium, Total	0.027	0.0025	0.00033	30000	mg/L
MKTF-34	9/16/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
MKTF-34	9/16/2020	Arsenic, Dissolved	ND	0.01	0.0021	10000	mg/L
MKTF-34	9/16/2020	Lead, Dissolved	0.0025	0.005	0.00034	NA	mg/L
MKTF-34	9/16/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
MKTF-34	9/16/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
MKTF-34	9/16/2020	Uranium, Dissolved	0.021	0.005	0.00065	NA	mg/L
MKTF-34	9/16/2020	Iron, Dissolved	1.9	0.1	0.052	13821880	mg/L
MKTF-34	9/16/2020	Barium, Dissolved	0.18	0.002	0.0011	2000000	mg/L
MKTF-34	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-34	9/16/2020	Boron, Dissolved	0.46	0.04	0.0067	3949110	mg/L
MKTF-34	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-34	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-34	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-34	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-34	9/16/2020	Magnesium, Dissolved	22	1	0.067	NA	mg/L
MKTF-34	9/16/2020	Manganese, Dissolved	0.078	0.002	0.00058	2017400	mg/L
MKTF-34	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-34	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/16/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-34	9/16/2020	Silver, Dissolved	0.0014	0.005	0.0013	81200	mg/L
MKTF-34	9/16/2020	Zinc, Dissolved	0.031	0.01	0.006	5960450	mg/L
MKTF-34	9/16/2020	Aluminum, Dissolved	1.4	0.1	0.028	19913930	mg/L
MKTF-34	9/16/2020	Calcium, Dissolved	100	5	0.57	NA	mg/L
MKTF-34	9/16/2020	Sodium, Dissolved	380	50	6.9	NA	mg/L
MKTF-34	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-34	8/19/2019	Antimony, Dissolved	0.0009	0.001	0.000389	6000	mg/L
MKTF-34	8/19/2019	Arsenic, Dissolved	0.00044	0.001	0.000101	10000	mg/L
MKTF-34	8/19/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
MKTF-34	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	8/19/2019	Boron, Dissolved	0.41	0.04	0.004531	3949110	mg/L
MKTF-34	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	8/19/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-34	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	8/19/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-34	8/19/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-34	8/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	8/19/2019	Magnesium, Dissolved	28	1	0.05029	NA	mg/L
MKTF-34	8/19/2019	Manganese, Dissolved	ND	0.002	0.00029	2017400	mg/L
MKTF-34	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	8/19/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	8/19/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	8/19/2019	Selenium, Dissolved	0.0014	0.001	0.000171	50000	mg/L
MKTF-34	8/19/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-34	8/19/2019	Sodium, Dissolved	450	5	2.080881	NA	mg/L
MKTF-34	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	8/19/2019	Uranium, Dissolved	0.019	0.0005	0.000075	NA	mg/L
MKTF-34	8/19/2019	Zinc, Dissolved	0.0085	0.01	0.002252	5960450	mg/L
MKTF-34	8/19/2019	Aluminum, Total	4.1	0.1	0.012441	19914000	mg/L
MKTF-34	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-34	8/19/2019	Arsenic, Total	0.00095	0.001	0.000312	10000	mg/L
MKTF-34	8/19/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-34	8/19/2019	Beryllium, Total	0.00031	0.002	0.000284	4000	mg/L
MKTF-34	8/19/2019	Boron, Total	0.43	0.04	0.004531	3949	mg/L
MKTF-34	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	8/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	8/19/2019	Iron, Total	2	0.1	0.043734	13822000	mg/L
MKTF-34	8/19/2019	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
MKTF-34	8/19/2019	Manganese, Total	0.045	0.002	0.00029	2017000	mg/L
MKTF-34	8/19/2019	Mercury, Total	0.000099	0.0002	0.000038	2000	mg/L
MKTF-34	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	8/19/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-34	8/19/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-34	8/19/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
MKTF-34	8/19/2019	Thallium, Total	0.000089	0.0005	0.000052	2000	mg/L
MKTF-34	8/19/2019	Uranium, Total	0.02	0.0005	0.000085	30000	mg/L
MKTF-34	8/19/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-34	10/29/2019	Selenium, Total	0.0044	0.005	0.00239	50000	mg/L
MKTF-34	10/29/2019	Selenium, Total	0.0029	0.001	0.000171	50000	mg/L
MKTF-34	10/29/2019	Aluminum, Total	1.4	0.1	0.012441	19914000	mg/L
MKTF-34	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-34	10/29/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-34	10/29/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-34	10/29/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-34	10/29/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-34	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	10/29/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	10/29/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
MKTF-34	10/29/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
MKTF-34	10/29/2019	Manganese, Total	0.033	0.002	0.00029	2017000	mg/L
MKTF-34	10/29/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-34	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	10/29/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	10/29/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
MKTF-34	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-34	10/29/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-34	10/29/2019	Aluminum, Dissolved	0.0045	0.02	0.002488	19913930	mg/L
MKTF-34	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-34	10/29/2019	Arsenic, Dissolved	0.00053	0.001	0.000101	10000	mg/L
MKTF-34	10/29/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
MKTF-34	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	10/29/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
MKTF-34	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	10/29/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
MKTF-34	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-34	10/29/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-34	10/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-34	10/29/2019	Magnesium, Dissolved	26	1	0.05029	NA	mg/L
MKTF-34	10/29/2019	Manganese, Dissolved	0.00044	0.002	0.00029	2017400	mg/L
MKTF-34	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	10/29/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	10/29/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	10/29/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
MKTF-34	10/29/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
MKTF-34	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-34	10/29/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
MKTF-34	5/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-34	5/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-34	5/9/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-34	5/9/2019	Barium, Dissolved	0.23	0.002	0.000648	2000000	mg/L
MKTF-34	5/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-34	5/9/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-34	5/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-34	5/9/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-34	5/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-34	5/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-34	5/9/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-34	5/9/2019	Iron, Dissolved	0.021	0.02	0.008747	13821880	mg/L
MKTF-34	5/9/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-34	5/9/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-34	5/9/2019	Manganese, Dissolved	0.00082	0.002	0.00029	2017400	mg/L
MKTF-34	5/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-34	5/9/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-34	5/9/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-34	5/9/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-34	5/9/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
MKTF-34	5/9/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
MKTF-34	5/9/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-34	5/9/2019	Uranium, Dissolved	0.015	0.0025	0.000374	NA	mg/L
MKTF-34	5/9/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
MKTF-34	5/9/2019	Aluminum, Total	0.97	0.02	0.002488	19914000	mg/L
MKTF-34	5/9/2019	Antimony, Total	0.00063	0.001	0.000389	6000	mg/L
MKTF-34	5/9/2019	Arsenic, Total	0.00065	0.001	0.000312	10000	mg/L
MKTF-34	5/9/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
MKTF-34	5/9/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-34	5/9/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-34	5/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-34	5/9/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-34	5/9/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-34	5/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-34	5/9/2019	Iron, Total	0.94	0.1	0.043734	13822000	mg/L
MKTF-34	5/9/2019	Lead, Total	0.00089	0.0005	0.000055	15000	mg/L
MKTF-34	5/9/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
MKTF-34	5/9/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-34	5/9/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-34	5/9/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-34	5/9/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
MKTF-34	5/9/2019	Silver, Total	0.0036	0.005	0.001418	50000	mg/L
MKTF-34	5/9/2019	Thallium, Total	0.00011	0.0005	0.000052	2000	mg/L
MKTF-34	5/9/2019	Uranium, Total	0.015	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/9/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-34	11/17/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
MKTF-34	11/17/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
MKTF-34	11/17/2014	Barium, Total	0.17	0.002	0.0005	2000000	mg/L
MKTF-34	11/17/2014	Calcium, Total	63	1	0.082	NA	mg/L
MKTF-34	11/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MKTF-34	11/17/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
MKTF-34	11/17/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
MKTF-34	11/17/2014	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-34	11/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MKTF-34	11/17/2014	Potassium, Total	1.8	1	0.093	NA	mg/L
MKTF-34	11/17/2014	Magnesium, Total	14	1	0.018	NA	mg/L
MKTF-34	11/17/2014	Manganese, Total	0.075	0.002	0.00049	2017000	mg/L
MKTF-34	11/17/2014	Sodium, Total	360	10	3.9	NA	mg/L
MKTF-34	11/17/2014	Lead, Total	0.0014	0.001	0.00026	15000	mg/L
MKTF-34	11/17/2014	Selenium, Total	ND	0.02	0.01	50000	mg/L
MKTF-34	11/17/2014	Uranium, Total	0.026	0.001	0.0000072	30000	mg/L
MKTF-34	11/17/2014	Zinc, Total	0.037	0.01	0.0035	5960000	mg/L
MKTF-34	3/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	3/12/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-34	3/12/2015	Barium, Total	0.25	0.002	0.00073	2000000	mg/L
MKTF-34	3/12/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-34	3/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	3/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	3/12/2015	Iron, Total	5.2	0.2	0.072	13822000	mg/L
MKTF-34	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	3/12/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
MKTF-34	3/12/2015	Lead, Total	0.0045	0.001	0.000069	15000	mg/L
MKTF-34	3/12/2015	Selenium, Total	0.013	0.01	0.0012	50000	mg/L
MKTF-34	3/12/2015	Uranium, Total	0.028	0.001	0.0000081	30000	mg/L
MKTF-34	3/12/2015	Zinc, Total	0.059	0.01	0.0036	5960000	mg/L
MKTF-34	6/8/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	6/8/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	6/8/2015	Barium, Total	0.2	0.002	0.0011	2000000	mg/L
MKTF-34	6/8/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	6/8/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	6/8/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	6/8/2015	Iron, Total	2.3	0.1	0.036	13822000	mg/L
MKTF-34	6/8/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	6/8/2015	Manganese, Total	0.066	0.002	0.0015	2017000	mg/L
MKTF-34	6/8/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-34	6/8/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-34	6/8/2015	Uranium, Total	0.028	0.0025	0.000025	30000	mg/L
MKTF-34	6/8/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-34	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	8/18/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	8/18/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-34	8/18/2015	Calcium, Total	60	1	0.057	NA	mg/L
MKTF-34	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	8/18/2015	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-34	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	8/18/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-34	8/18/2015	Magnesium, Total	14	1	0.039	NA	mg/L
MKTF-34	8/18/2015	Manganese, Total	0.074	0.002	0.0015	2017000	mg/L
MKTF-34	8/18/2015	Sodium, Total	380	5	0.36	NA	mg/L
MKTF-34	8/18/2015	Lead, Total	0.0027	0.0005	0.000047	15000	mg/L
MKTF-34	8/18/2015	Selenium, Total	0.0086	0.005	0.00062	50000	mg/L
MKTF-34	8/18/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-34	8/18/2015	Zinc, Total	0.03	0.01	0.0039	5960000	mg/L
MKTF-34	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-34	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-34	11/3/2015	Barium, Total	0.12	0.002	0.0013	2000000	mg/L
MKTF-34	11/3/2015	Calcium, Total	57	1	0.26	NA	mg/L
MKTF-34	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-34	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-34	11/3/2015	Iron, Total	ND	0.02	0.0091	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-34	11/3/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-34	11/3/2015	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	11/3/2015	Manganese, Total	ND	0.002	0.00032	2017000	mg/L
MKTF-34	11/3/2015	Sodium, Total	350	5	0.48	NA	mg/L
MKTF-34	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-34	11/3/2015	Selenium, Total	ND	0.02	0.0039	50000	mg/L
MKTF-34	11/3/2015	Uranium, Total	0.027	0.01	0.000096	30000	mg/L
MKTF-34	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-34	2/25/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-34	2/25/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-34	2/25/2016	Barium, Total	0.15	0.002	0.0011	2000000	mg/L
MKTF-34	2/25/2016	Calcium, Total	63	1	0.26	NA	mg/L
MKTF-34	2/25/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-34	2/25/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-34	2/25/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-34	2/25/2016	Iron, Total	1.6	0.1	0.036	13822000	mg/L
MKTF-34	2/25/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-34	2/25/2016	Potassium, Total	1.6	1	0.18	NA	mg/L
MKTF-34	2/25/2016	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	2/25/2016	Manganese, Total	0.044	0.002	0.0015	2017000	mg/L
MKTF-34	2/25/2016	Sodium, Total	340	5	0.48	NA	mg/L
MKTF-34	2/25/2016	Lead, Total	0.0016	0.0005	0.000047	15000	mg/L
MKTF-34	2/25/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-34	2/25/2016	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-34	2/25/2016	Zinc, Total	0.023	0.01	0.0039	5960000	mg/L
MKTF-34	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-34	6/10/2016	Arsenic, Total	0.0046	0.005	0.00069	10000	mg/L
MKTF-34	6/10/2016	Barium, Total	0.1	0.002	0.0013	2000000	mg/L
MKTF-34	6/10/2016	Calcium, Total	61	1	0.26	NA	mg/L
MKTF-34	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-34	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-34	6/10/2016	Iron, Total	0.041	0.02	0.0091	13822000	mg/L
MKTF-34	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-34	6/10/2016	Potassium, Total	1.4	1	0.18	NA	mg/L
MKTF-34	6/10/2016	Magnesium, Total	14	1	0.013	NA	mg/L
MKTF-34	6/10/2016	Manganese, Total	0.0017	0.002	0.00032	2017000	mg/L
MKTF-34	6/10/2016	Sodium, Total	370	5	0.48	NA	mg/L
MKTF-34	6/10/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
MKTF-34	6/10/2016	Selenium, Total	0.018	0.02	0.0042	50000	mg/L
MKTF-34	6/10/2016	Uranium, Total	0.03	0.0025	0.00026	30000	mg/L
MKTF-34	6/10/2016	Zinc, Total	0.0037	0.01	0.0028	5960000	mg/L
MKTF-34	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	9/13/2016	Arsenic, Total	0.0044	0.005	0.0011	10000	mg/L
MKTF-34	9/13/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-34	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-34	9/13/2016	Arsenic, Dissolved	0.0042	0.005	0.00069	10000	mg/L
MKTF-34	9/13/2016	Barium, Dissolved	0.11	0.002	0.0013	2000000	mg/L
MKTF-34	9/13/2016	Calcium, Dissolved	62	5	2.5	NA	mg/L
MKTF-34	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-34	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-34	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-34	9/13/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	9/13/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-34	9/13/2016	Magnesium, Dissolved	15	1	0.5	NA	mg/L
MKTF-34	9/13/2016	Manganese, Dissolved	0.00053	0.002	0.00032	2017400	mg/L
MKTF-34	9/13/2016	Sodium, Dissolved	380	5	2.5	NA	mg/L
MKTF-34	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	9/13/2016	Selenium, Dissolved	0.016	0.02	0.0042	50000	mg/L
MKTF-34	9/13/2016	Uranium, Dissolved	0.037	0.0025	0.00026	NA	mg/L
MKTF-34	9/13/2016	Zinc, Dissolved	0.0032	0.01	0.0028	5960450	mg/L
MKTF-34	9/13/2016	Iron, Total	0.62	0.02	0.02	13822000	mg/L
MKTF-34	9/13/2016	Mercury, Total	0.00015	0.0002	0.000053	2000	mg/L
MKTF-34	9/13/2016	Manganese, Total	0.014	0.002	0.00027	2017000	mg/L
MKTF-34	9/13/2016	Lead, Total	0.0008	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	9/13/2016	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-34	9/13/2016	Uranium, Total	0.034	0.0025	0.00087	30000	mg/L
MKTF-34	9/13/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
MKTF-34	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	11/8/2016	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
MKTF-34	11/8/2016	Barium, Total	0.085	0.002	0.00079	2000000	mg/L
MKTF-34	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-34	11/8/2016	Arsenic, Dissolved	0.003	0.005	0.00069	10000	mg/L
MKTF-34	11/8/2016	Barium, Dissolved	0.057	0.002	0.0013	2000000	mg/L
MKTF-34	11/8/2016	Calcium, Dissolved	53	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-34	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-34	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-34	11/8/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	11/8/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-34	11/8/2016	Manganese, Dissolved	0.00035	0.002	0.00032	2017400	mg/L
MKTF-34	11/8/2016	Sodium, Dissolved	390	5	2.5	NA	mg/L
MKTF-34	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	11/8/2016	Selenium, Dissolved	0.0077	0.02	0.0042	50000	mg/L
MKTF-34	11/8/2016	Uranium, Dissolved	0.036	0.0025	0.00026	NA	mg/L
MKTF-34	11/8/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-34	11/8/2016	Iron, Total	0.66	0.02	0.02	13822000	mg/L
MKTF-34	11/8/2016	Mercury, Total	0.00024	0.0002	0.000053	2000	mg/L
MKTF-34	11/8/2016	Manganese, Total	0.017	0.002	0.00027	2017000	mg/L
MKTF-34	11/8/2016	Lead, Total	0.00087	0.0005	0.000081	15000	mg/L
MKTF-34	11/8/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
MKTF-34	11/8/2016	Uranium, Total	0.038	0.0025	0.00087	30000	mg/L
MKTF-34	11/8/2016	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
MKTF-34	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-34	3/1/2017	Arsenic, Total	0.0034	0.005	0.0011	10000	mg/L
MKTF-34	3/1/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-34	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-34	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-34	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-34	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-34	3/1/2017	Arsenic, Dissolved	0.0025	0.005	0.00069	10000	mg/L
MKTF-34	3/1/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-34	3/1/2017	Calcium, Dissolved	69	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-34	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	3/1/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-34	3/1/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Magnesium, Dissolved	16	1	0.5	NA	mg/L
MKTF-34	3/1/2017	Manganese, Dissolved	0.00076	0.002	0.00038	2017400	mg/L
MKTF-34	3/1/2017	Sodium, Dissolved	340	5	2.5	NA	mg/L
MKTF-34	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	3/1/2017	Selenium, Dissolved	0.0045	0.02	0.0042	50000	mg/L
MKTF-34	3/1/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
MKTF-34	3/1/2017	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-34	3/1/2017	Mercury, Total	0.00018	0.0002	0.000037	2000	mg/L
MKTF-34	3/1/2017	Manganese, Total	0.049	0.002	0.00027	2017000	mg/L
MKTF-34	3/1/2017	Lead, Total	0.002	0.0005	0.000081	15000	mg/L
MKTF-34	3/1/2017	Selenium, Total	0.011	0.005	0.00094	50000	mg/L
MKTF-34	3/1/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-34	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-34	6/14/2017	Arsenic, Total	0.0019	0.005	0.0015	10000	mg/L
MKTF-34	6/14/2017	Barium, Total	0.099	0.002	0.00093	2000000	mg/L
MKTF-34	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	6/14/2017	Chromium, Total	0.0016	0.006	0.0011	50000	mg/L
MKTF-34	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-34	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-34	6/14/2017	Arsenic, Dissolved	0.0015	0.005	0.00089	10000	mg/L
MKTF-34	6/14/2017	Barium, Dissolved	0.072	0.002	0.00085	2000000	mg/L
MKTF-34	6/14/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-34	6/14/2017	Copper, Dissolved	0.019	0.006	0.0032	790000	mg/L
MKTF-34	6/14/2017	Iron, Dissolved	0.033	0.02	0.016	13821880	mg/L
MKTF-34	6/14/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-34	6/14/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
MKTF-34	6/14/2017	Manganese, Dissolved	0.00099	0.002	0.00038	2017400	mg/L
MKTF-34	6/14/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
MKTF-34	6/14/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-34	6/14/2017	Zinc, Dissolved	0.01	0.01	0.0011	5960450	mg/L
MKTF-34	6/14/2017	Iron, Total	1.6	0.2	0.1	13822000	mg/L
MKTF-34	6/14/2017	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
MKTF-34	6/14/2017	Manganese, Total	0.037	0.002	0.0011	2017000	mg/L
MKTF-34	6/14/2017	Lead, Total	0.0017	0.0005	0.000095	15000	mg/L
MKTF-34	6/14/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
MKTF-34	6/14/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-34	9/26/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	9/26/2017	Arsenic, Total	0.004	0.005	0.0015	10000	mg/L
MKTF-34	9/26/2017	Barium, Total	0.12	0.002	0.00093	2000000	mg/L
MKTF-34	9/26/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	9/26/2017	Chromium, Total	0.0032	0.006	0.0018	50000	mg/L
MKTF-34	9/26/2017	Copper, Total	0.0033	0.006	0.0017	790000	mg/L
MKTF-34	9/26/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	9/26/2017	Arsenic, Dissolved	0.0025	0.005	0.00089	10000	mg/L
MKTF-34	9/26/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
MKTF-34	9/26/2017	Calcium, Dissolved	66	1	0.078	NA	mg/L
MKTF-34	9/26/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	9/26/2017	Chromium, Dissolved	0.0015	0.006	0.0013	100000	mg/L
MKTF-34	9/26/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	9/26/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	9/26/2017	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-34	9/26/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
MKTF-34	9/26/2017	Manganese, Dissolved	0.00062	0.002	0.00039	2017400	mg/L
MKTF-34	9/26/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
MKTF-34	9/26/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	9/26/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-34	9/26/2017	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
MKTF-34	9/26/2017	Iron, Total	3.8	0.1	0.051	13822000	mg/L
MKTF-34	9/26/2017	Mercury, Total	0.00012	0.0002	0.000037	2000	mg/L
MKTF-34	9/26/2017	Manganese, Total	0.086	0.002	0.0011	2017000	mg/L
MKTF-34	9/26/2017	Lead, Total	0.0018	0.0005	0.000095	15000	mg/L
MKTF-34	9/26/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
MKTF-34	9/26/2017	Zinc, Total	0.032	0.01	0.0033	5960000	mg/L
MKTF-34	12/1/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	12/1/2017	Arsenic, Total	0.0016	0.001	0.00041	10000	mg/L
MKTF-34	12/1/2017	Barium, Total	0.093	0.002	0.001	2000000	mg/L
MKTF-34	12/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	12/1/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	12/1/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	12/1/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	12/1/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-34	12/1/2017	Barium, Dissolved	0.063	0.002	0.00099	2000000	mg/L
MKTF-34	12/1/2017	Calcium, Dissolved	61	1	0.078	NA	mg/L
MKTF-34	12/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	12/1/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	12/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	12/1/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	12/1/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-34	12/1/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
MKTF-34	12/1/2017	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	12/1/2017	Sodium, Dissolved	390	5	0.82	NA	mg/L
MKTF-34	12/1/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-34	12/1/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-34	12/1/2017	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	12/1/2017	Zinc, Dissolved	0.0082	0.01	0.0021	5960450	mg/L
MKTF-34	12/1/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-34	12/1/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-34	12/1/2017	Manganese, Total	0.039	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	12/1/2017	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
MKTF-34	12/1/2017	Selenium, Total	0.0063	0.005	0.0049	50000	mg/L
MKTF-34	12/1/2017	Uranium, Total	0.038	0.0025	0.00077	30000	mg/L
MKTF-34	12/1/2017	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-34	2/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	2/16/2018	Arsenic, Total	0.0044	0.001	0.00041	10000	mg/L
MKTF-34	2/16/2018	Barium, Total	0.083	0.002	0.001	2000000	mg/L
MKTF-34	2/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	2/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	2/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	2/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	2/16/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
MKTF-34	2/16/2018	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-34	2/16/2018	Calcium, Dissolved	51	1	0.078	NA	mg/L
MKTF-34	2/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	2/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	2/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	2/16/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	2/16/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-34	2/16/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-34	2/16/2018	Manganese, Dissolved	0.0025	0.002	0.00039	2017400	mg/L
MKTF-34	2/16/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	2/16/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	2/16/2018	Selenium, Dissolved	0.0067	0.005	0.0038	50000	mg/L
MKTF-34	2/16/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
MKTF-34	2/16/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
MKTF-34	2/16/2018	Iron, Total	2.2	0.1	0.051	13822000	mg/L
MKTF-34	2/16/2018	Mercury, Total	0.00021	0.0002	0.000037	2000	mg/L
MKTF-34	2/16/2018	Manganese, Total	0.045	0.002	0.0011	2017000	mg/L
MKTF-34	2/16/2018	Lead, Total	0.0023	0.0005	0.00023	15000	mg/L
MKTF-34	2/16/2018	Selenium, Total	0.0053	0.001	0.00098	50000	mg/L
MKTF-34	2/16/2018	Uranium, Total	0.038	0.0025	0.00034	30000	mg/L
MKTF-34	2/16/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-34	5/4/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	5/4/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-34	5/4/2018	Barium, Total	0.049	0.002	0.001	2000000	mg/L
MKTF-34	5/4/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	5/4/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	5/4/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	5/4/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	5/4/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-34	5/4/2018	Barium, Dissolved	0.05	0.002	0.00099	2000000	mg/L
MKTF-34	5/4/2018	Calcium, Dissolved	64	1	0.078	NA	mg/L
MKTF-34	5/4/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	5/4/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	5/4/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	5/4/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	5/4/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-34	5/4/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-34	5/4/2018	Manganese, Dissolved	0.00041	0.002	0.00039	2017400	mg/L
MKTF-34	5/4/2018	Sodium, Dissolved	390	5	0.82	NA	mg/L
MKTF-34	5/4/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	5/4/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
MKTF-34	5/4/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	5/4/2018	Zinc, Dissolved	0.0061	0.01	0.0021	5960450	mg/L
MKTF-34	5/4/2018	Iron, Total	0.34	0.02	0.01	13822000	mg/L
MKTF-34	5/4/2018	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-34	5/4/2018	Manganese, Total	0.0078	0.002	0.0011	2017000	mg/L
MKTF-34	5/4/2018	Lead, Total	0.00033	0.0005	0.00023	15000	mg/L
MKTF-34	5/4/2018	Selenium, Total	0.0027	0.001	0.00098	50000	mg/L
MKTF-34	5/4/2018	Uranium, Total	0.037	0.0025	0.00034	30000	mg/L
MKTF-34	5/4/2018	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
MKTF-34	8/24/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-34	8/24/2018	Arsenic, Total	0.0016	0.001	0.00041	10000	mg/L
MKTF-34	8/24/2018	Barium, Total	0.06	0.002	0.001	2000000	mg/L
MKTF-34	8/24/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	8/24/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	8/24/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	8/24/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	8/24/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-34	8/24/2018	Barium, Dissolved	0.045	0.002	0.00099	2000000	mg/L
MKTF-34	8/24/2018	Calcium, Dissolved	59	1	0.078	NA	mg/L
MKTF-34	8/24/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	8/24/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	8/24/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	8/24/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	8/24/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-34	8/24/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
MKTF-34	8/24/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	8/24/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	8/24/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	8/24/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
MKTF-34	8/24/2018	Uranium, Dissolved	0.036	0.0025	0.00048	NA	mg/L
MKTF-34	8/24/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
MKTF-34	8/24/2018	Iron, Total	0.83	0.02	0.01	13822000	mg/L
MKTF-34	8/24/2018	Mercury, Total	0.0004	0.0002	0.000038	2000	mg/L
MKTF-34	8/24/2018	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
MKTF-34	8/24/2018	Lead, Total	0.00073	0.0005	0.00023	15000	mg/L
MKTF-34	8/24/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
MKTF-34	8/24/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
MKTF-34	8/24/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-34	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-34	11/28/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
MKTF-34	11/28/2018	Barium, Total	0.053	0.002	0.001	2000000	mg/L
MKTF-34	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-34	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-34	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-34	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-34	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-34	11/28/2018	Barium, Dissolved	0.035	0.002	0.00099	2000000	mg/L
MKTF-34	11/28/2018	Calcium, Dissolved	58	1	0.078	NA	mg/L
MKTF-34	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-34	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-34	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-34	11/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-34	11/28/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-34	11/28/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
MKTF-34	11/28/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-34	11/28/2018	Sodium, Dissolved	400	5	0.82	NA	mg/L
MKTF-34	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-34	11/28/2018	Selenium, Dissolved	0.0022	0.001	0.00076	50000	mg/L
MKTF-34	11/28/2018	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
MKTF-34	11/28/2018	Iron, Total	0.63	0.02	0.01	13822000	mg/L
MKTF-34	11/28/2018	Manganese, Total	0.013	0.002	0.0011	2017000	mg/L
MKTF-34	11/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-34	11/28/2018	Selenium, Total	0.0022	0.001	0.00098	50000	mg/L
MKTF-34	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-35	5/16/2019	Aluminum, Dissolved	0.077	0.02	0.002488	19913930	mg/L
MKTF-35	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Dissolved	0.0004	0.001	0.000101	10000	mg/L
MKTF-35	5/16/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Dissolved	0.24	0.04	0.004531	3949110	mg/L
MKTF-35	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	5/16/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-35	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
MKTF-35	5/16/2019	Iron, Dissolved	3.6	0.1	0.043734	13821880	mg/L
MKTF-35	5/16/2019	Lead, Dissolved	0.00031	0.0005	0.000055	NA	mg/L
MKTF-35	5/16/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
MKTF-35	5/16/2019	Manganese, Dissolved	3.3	0.01	0.00145	2017400	mg/L
MKTF-35	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Dissolved	0.0067	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Potassium, Dissolved	0.35	1	0.162288	NA	mg/L
MKTF-35	5/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	5/16/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-35	5/16/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	5/16/2019	Uranium, Dissolved	0.0032	0.0005	0.000075	NA	mg/L
MKTF-35	5/16/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Total	1.5	0.1	0.012441	19914000	mg/L
MKTF-35	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-35	5/16/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Total	0.00043	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Total	0.23	0.04	0.004531	3949	mg/L
MKTF-35	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-35	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	5/16/2019	Iron, Total	4.5	0.1	0.043734	13822000	mg/L
MKTF-35	5/16/2019	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-35	5/16/2019	Manganese, Total	3.7	0.01	0.00145	2017000	mg/L
MKTF-35	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Total	0.0058	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Selenium, Total	0.00064	0.001	0.000478	50000	mg/L
MKTF-35	5/16/2019	Silver, Total	0.0022	0.005	0.001418	50000	mg/L
MKTF-35	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	5/16/2019	Uranium, Total	0.0038	0.0005	0.000085	30000	mg/L
MKTF-35	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-35	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Total	0.0022	0.005	0.001561	10000	mg/L
MKTF-35	10/29/2019	Barium, Total	2.7	0.01	0.003242	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Total	0.00054	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
MKTF-35	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	10/29/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MKTF-35	10/29/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	10/29/2019	Iron, Total	8.3	0.4	0.174937	13822000	mg/L
MKTF-35	10/29/2019	Lead, Total	0.0062	0.0005	0.000055	15000	mg/L
MKTF-35	10/29/2019	Manganese, Total	3.5	0.01	0.00145	2017000	mg/L
MKTF-35	10/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Total	0.0087	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-35	10/29/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	10/29/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Dissolved	0.028	0.02	0.002488	19913930	mg/L
MKTF-35	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Dissolved	0.00043	0.001	0.000101	10000	mg/L
MKTF-35	10/29/2019	Barium, Dissolved	0.48	0.002	0.000648	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-35	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-35	10/29/2019	Iron, Dissolved	3.4	0.1	0.043734	13821880	mg/L
MKTF-35	10/29/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
MKTF-35	10/29/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-35	10/29/2019	Manganese, Dissolved	2.9	0.01	0.00145	2017400	mg/L
MKTF-35	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Dissolved	0.0056	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-35	10/29/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
MKTF-35	10/29/2019	Sodium, Dissolved	200	5	2.080881	NA	mg/L
MKTF-35	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	10/29/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Dissolved	0.034	0.02	0.002488	19913930	mg/L
MKTF-35	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Dissolved	0.0004	0.001	0.000101	10000	mg/L
MKTF-35	5/16/2019	Barium, Dissolved	0.42	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Dissolved	0.24	0.04	0.004531	3949110	mg/L
MKTF-35	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	5/16/2019	Calcium, Dissolved	170	5	0.309446	NA	mg/L
MKTF-35	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Dissolved	0.0072	0.006	0.001296	790000	mg/L
MKTF-35	5/16/2019	Iron, Dissolved	3.6	0.1	0.043734	13821880	mg/L
MKTF-35	5/16/2019	Lead, Dissolved	0.00025	0.0005	0.000055	NA	mg/L
MKTF-35	5/16/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
MKTF-35	5/16/2019	Manganese, Dissolved	3.3	0.01	0.00145	2017400	mg/L
MKTF-35	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Potassium, Dissolved	0.41	1	0.162288	NA	mg/L
MKTF-35	5/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	5/16/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
MKTF-35	5/16/2019	Sodium, Dissolved	180	5	2.080881	NA	mg/L
MKTF-35	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	5/16/2019	Uranium, Dissolved	0.0031	0.0005	0.000075	NA	mg/L
MKTF-35	5/16/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
MKTF-35	5/16/2019	Aluminum, Total	1.8	0.1	0.012441	19914000	mg/L
MKTF-35	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	5/16/2019	Arsenic, Total	0.0011	0.001	0.000312	10000	mg/L
MKTF-35	5/16/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
MKTF-35	5/16/2019	Beryllium, Total	0.00053	0.002	0.000284	4000	mg/L
MKTF-35	5/16/2019	Boron, Total	0.23	0.04	0.004531	3949	mg/L
MKTF-35	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-35	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-35	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-35	5/16/2019	Iron, Total	4.8	0.1	0.043734	13822000	mg/L
MKTF-35	5/16/2019	Lead, Total	0.0051	0.0005	0.000055	15000	mg/L
MKTF-35	5/16/2019	Manganese, Total	4	0.01	0.00145	2017000	mg/L
MKTF-35	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-35	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	5/16/2019	Nickel, Total	0.0093	0.01	0.004009	372000	mg/L
MKTF-35	5/16/2019	Selenium, Total	0.00088	0.001	0.000478	50000	mg/L
MKTF-35	5/16/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
MKTF-35	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	5/16/2019	Uranium, Total	0.0042	0.0005	0.000085	30000	mg/L
MKTF-35	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Total	18	0.4	0.049765	19914000	mg/L
MKTF-35	10/29/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-35	10/29/2019	Barium, Total	4	0.01	0.003242	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Total	0.00076	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
MKTF-35	10/29/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	10/29/2019	Chromium, Total	0.0047	0.006	0.001533	50000	mg/L
MKTF-35	10/29/2019	Cobalt, Total	0.0055	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Total	0.005	0.006	0.004072	790000	mg/L
MKTF-35	10/29/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
MKTF-35	10/29/2019	Lead, Total	0.0095	0.0005	0.000055	15000	mg/L
MKTF-35	10/29/2019	Manganese, Total	3.8	0.01	0.00145	2017000	mg/L
MKTF-35	10/29/2019	Mercury, Total	0.000063	0.0002	0.000038	2000	mg/L
MKTF-35	10/29/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Total	0.013	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-35	10/29/2019	Thallium, Total	0.000069	0.0005	0.000052	2000	mg/L
MKTF-35	10/29/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-35	10/29/2019	Aluminum, Dissolved	0.07	0.02	0.002488	19913930	mg/L
MKTF-35	10/29/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-35	10/29/2019	Arsenic, Dissolved	0.00045	0.001	0.000101	10000	mg/L
MKTF-35	10/29/2019	Barium, Dissolved	0.52	0.002	0.000648	2000000	mg/L
MKTF-35	10/29/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	10/29/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
MKTF-35	10/29/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	10/29/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	10/29/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	10/29/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	10/29/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-35	10/29/2019	Iron, Dissolved	3.3	0.1	0.043734	13821880	mg/L
MKTF-35	10/29/2019	Lead, Dissolved	0.00024	0.0005	0.000055	NA	mg/L
MKTF-35	10/29/2019	Magnesium, Dissolved	43	1	0.05029	NA	mg/L
MKTF-35	10/29/2019	Manganese, Dissolved	2.9	0.01	0.00145	2017400	mg/L
MKTF-35	10/29/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-35	10/29/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-35	10/29/2019	Potassium, Dissolved	0.53	1	0.162288	NA	mg/L
MKTF-35	10/29/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
MKTF-35	10/29/2019	Sodium, Dissolved	200	5	2.080881	NA	mg/L
MKTF-35	10/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	10/29/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-35	10/29/2019	Selenium, Total	0.00018	0.001	0.000171	50000	mg/L
MKTF-35	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-35	8/19/2019	Antimony, Dissolved	0.00045	0.001	0.000389	6000	mg/L
MKTF-35	8/19/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
MKTF-35	8/19/2019	Barium, Dissolved	0.51	0.002	0.000648	2000000	mg/L
MKTF-35	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-35	8/19/2019	Boron, Dissolved	0.31	0.04	0.004531	3949110	mg/L
MKTF-35	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-35	8/19/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
MKTF-35	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-35	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-35	8/19/2019	Copper, Dissolved	0.0014	0.006	0.001296	790000	mg/L
MKTF-35	8/19/2019	Iron, Dissolved	3.1	0.1	0.043734	13821880	mg/L
MKTF-35	8/19/2019	Lead, Dissolved	0.000089	0.0005	0.000055	NA	mg/L
MKTF-35	8/19/2019	Magnesium, Dissolved	39	1	0.05029	NA	mg/L
MKTF-35	8/19/2019	Manganese, Dissolved	2.8	0.01	0.00145	2017400	mg/L
MKTF-35	8/19/2019	Molybdenum, Dissolved	0.008	0.008	0.006735	98700	mg/L
MKTF-35	8/19/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-35	8/19/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
MKTF-35	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MKTF-35	8/19/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
MKTF-35	8/19/2019	Sodium, Dissolved	190	5	2.080881	NA	mg/L
MKTF-35	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	8/19/2019	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L
MKTF-35	8/19/2019	Zinc, Dissolved	0.0091	0.01	0.002252	5960450	mg/L
MKTF-35	8/19/2019	Aluminum, Total	16	0.4	0.049765	19914000	mg/L
MKTF-35	8/19/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-35	8/19/2019	Arsenic, Total	0.004	0.001	0.000312	10000	mg/L
MKTF-35	8/19/2019	Barium, Total	3.3	0.01	0.003242	2000000	mg/L
MKTF-35	8/19/2019	Beryllium, Total	0.00093	0.002	0.000284	4000	mg/L
MKTF-35	8/19/2019	Boron, Total	0.31	0.04	0.004531	3949	mg/L
MKTF-35	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-35	8/19/2019	Chromium, Total	0.0052	0.006	0.001533	50000	mg/L
MKTF-35	8/19/2019	Cobalt, Total	0.0049	0.006	0.003091	5980	mg/L
MKTF-35	8/19/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
MKTF-35	8/19/2019	Iron, Total	9.8	0.4	0.174937	13822000	mg/L
MKTF-35	8/19/2019	Lead, Total	0.011	0.0005	0.000055	15000	mg/L
MKTF-35	8/19/2019	Manganese, Total	4	0.01	0.00145	2017000	mg/L
MKTF-35	8/19/2019	Mercury, Total	0.000042	0.0002	0.000038	2000	mg/L
MKTF-35	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-35	8/19/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-35	8/19/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-35	8/19/2019	Silver, Total	0.0027	0.005	0.001418	50000	mg/L
MKTF-35	8/19/2019	Thallium, Total	0.00015	0.0005	0.000052	2000	mg/L
MKTF-35	8/19/2019	Uranium, Total	0.0089	0.0005	0.000085	30000	mg/L
MKTF-35	8/19/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-35	9/16/2020	Mercury, Total	0.0002	0.0002	0.00012	2000	mg/L
MKTF-35	9/16/2020	Barium, Total	4.3	0.015	0.0082	2000000	mg/L
MKTF-35	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-35	9/16/2020	Boron, Total	0.35	0.2	0.037	3949	mg/L
MKTF-35	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-35	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-35	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-35	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-35	9/16/2020	Manganese, Total	5	0.01	0.0041	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-35	9/16/2020	Nickel, Total	0.019	0.05	0.016	372000	mg/L
MKTF-35	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-35	9/16/2020	Zinc, Total	0.037	0.05	0.032	5960000	mg/L
MKTF-35	9/16/2020	Aluminum, Total	22	2	0.74	19914000	mg/L
MKTF-35	9/16/2020	Iron, Total	13	5	1.3	13822000	mg/L
MKTF-35	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Total	0.0038	0.001	0.00026	10000	mg/L
MKTF-35	9/16/2020	Lead, Total	0.015	0.0005	0.000034	15000	mg/L
MKTF-35	9/16/2020	Selenium, Total	0.003	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-35	9/16/2020	Uranium, Total	0.0041	0.0005	0.000065	30000	mg/L
MKTF-35	9/16/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Dissolved	ND	0.01	0.0021	10000	mg/L
MKTF-35	9/16/2020	Lead, Dissolved	0.00059	0.005	0.00034	NA	mg/L
MKTF-35	9/16/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
MKTF-35	9/16/2020	Uranium, Dissolved	0.00087	0.005	0.00065	NA	mg/L
MKTF-35	9/16/2020	Aluminum, Dissolved	0.18	0.02	0.0056	19913930	mg/L
MKTF-35	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-35	9/16/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
MKTF-35	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-35	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-35	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-35	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-35	9/16/2020	Magnesium, Dissolved	48	1	0.067	NA	mg/L
MKTF-35	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-35	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-35	9/16/2020	Potassium, Dissolved	0.5	1	0.16	NA	mg/L
MKTF-35	9/16/2020	Silver, Dissolved	0.0027	0.005	0.0013	81200	mg/L
MKTF-35	9/16/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
MKTF-35	9/16/2020	Calcium, Dissolved	180	5	0.57	NA	mg/L
MKTF-35	9/16/2020	Sodium, Dissolved	200	5	0.69	NA	mg/L
MKTF-35	9/16/2020	Barium, Dissolved	2.6	0.1	0.056	2000000	mg/L
MKTF-35	9/16/2020	Iron, Dissolved	4.2	1	0.52	13821880	mg/L
MKTF-35	9/16/2020	Manganese, Dissolved	3.1	0.1	0.029	2017400	mg/L
MKTF-35	9/16/2020	Mercury, Total	0.00019	0.0002	0.00012	2000	mg/L
MKTF-35	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
MKTF-35	9/16/2020	Boron, Total	0.38	0.2	0.037	3949	mg/L
MKTF-35	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-35	9/16/2020	Chromium, Total	0.017	0.03	0.011	50000	mg/L
MKTF-35	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
MKTF-35	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
MKTF-35	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
MKTF-35	9/16/2020	Nickel, Total	0.017	0.05	0.016	372000	mg/L
MKTF-35	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
MKTF-35	9/16/2020	Zinc, Total	0.041	0.05	0.032	5960000	mg/L
MKTF-35	9/16/2020	Aluminum, Total	43	2	0.74	19914000	mg/L
MKTF-35	9/16/2020	Barium, Total	5.9	0.3	0.16	2000000	mg/L
MKTF-35	9/16/2020	Iron, Total	22	5	1.3	13822000	mg/L
MKTF-35	9/16/2020	Manganese, Total	5.7	0.2	0.081	2017000	mg/L
MKTF-35	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Total	0.0064	0.001	0.00026	10000	mg/L
MKTF-35	9/16/2020	Lead, Total	0.022	0.0005	0.000034	15000	mg/L
MKTF-35	9/16/2020	Selenium, Total	0.0045	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-35	9/16/2020	Uranium, Total	0.0049	0.0005	0.000065	30000	mg/L
MKTF-35	9/16/2020	Antimony, Dissolved	0.0017	0.001	0.0007	6000	mg/L
MKTF-35	9/16/2020	Arsenic, Dissolved	0.00064	0.001	0.00021	10000	mg/L
MKTF-35	9/16/2020	Lead, Dissolved	0.00033	0.0005	0.000034	NA	mg/L
MKTF-35	9/16/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-35	9/16/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-35	9/16/2020	Uranium, Dissolved	0.001	0.0005	0.000065	NA	mg/L
MKTF-35	9/16/2020	Aluminum, Dissolved	0.088	0.02	0.0056	19913930	mg/L
MKTF-35	9/16/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-35	9/16/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
MKTF-35	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-35	9/16/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-35	9/16/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-35	9/16/2020	Magnesium, Dissolved	49	1	0.067	NA	mg/L
MKTF-35	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-35	9/16/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-35	9/16/2020	Potassium, Dissolved	0.57	1	0.16	NA	mg/L
MKTF-35	9/16/2020	Silver, Dissolved	0.0025	0.005	0.0013	81200	mg/L
MKTF-35	9/16/2020	Zinc, Dissolved	0.1	0.01	0.006	5960450	mg/L
MKTF-35	9/16/2020	Barium, Dissolved	2.8	0.01	0.0056	2000000	mg/L
MKTF-35	9/16/2020	Calcium, Dissolved	170	5	0.57	NA	mg/L
MKTF-35	9/16/2020	Iron, Dissolved	4	0.1	0.052	13821880	mg/L
MKTF-35	9/16/2020	Manganese, Dissolved	3	0.01	0.0029	2017400	mg/L
MKTF-35	9/16/2020	Sodium, Dissolved	200	5	0.69	NA	mg/L
MKTF-35	2/6/2020	Aluminum, Dissolved	0.048	0.02	0.0025	19913930	mg/L
MKTF-35	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Dissolved	0.38	0.04	0.0045	3949110	mg/L
MKTF-35	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-35	2/6/2020	Calcium, Dissolved	88	1	0.062	NA	mg/L
MKTF-35	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-35	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Dissolved	0.004	0.006	0.0013	790000	mg/L
MKTF-35	2/6/2020	Iron, Dissolved	0.065	0.02	0.0087	13821880	mg/L
MKTF-35	2/6/2020	Magnesium, Dissolved	23	1	0.05	NA	mg/L
MKTF-35	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Potassium, Dissolved	0.59	1	0.16	NA	mg/L
MKTF-35	2/6/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
MKTF-35	2/6/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-35	2/6/2020	Barium, Dissolved	2.1	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Manganese, Dissolved	2	0.01	0.0014	2017400	mg/L
MKTF-35	2/6/2020	Sodium, Dissolved	280	5	2.1	NA	mg/L
MKTF-35	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Dissolved	0.00073	0.001	0.0001	10000	mg/L
MKTF-35	2/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-35	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-35	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	2/6/2020	Uranium, Dissolved	0.00066	0.0005	0.000075	NA	mg/L
MKTF-35	2/6/2020	Antimony, Total	0.0017	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Total	0.0013	0.001	0.00031	10000	mg/L
MKTF-35	2/6/2020	Lead, Total	0.00043	0.0005	0.000055	15000	mg/L
MKTF-35	2/6/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-35	2/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-35	2/6/2020	Uranium, Total	0.00072	0.0005	0.000085	30000	mg/L
MKTF-35	2/6/2020	Aluminum, Total	0.66	0.02	0.0025	19914000	mg/L
MKTF-35	2/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Total	0.38	0.04	0.0045	3949	mg/L
MKTF-35	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-35	2/6/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-35	2/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Silver, Total	0.0015	0.005	0.0014	50000	mg/L
MKTF-35	2/6/2020	Zinc, Total	0.006	0.01	0.0058	5960000	mg/L
MKTF-35	2/6/2020	Barium, Total	2.1	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Iron, Total	2.1	0.1	0.044	13822000	mg/L
MKTF-35	2/6/2020	Manganese, Total	2	0.01	0.0014	2017000	mg/L
MKTF-35	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-35	2/6/2020	Aluminum, Dissolved	0.032	0.02	0.0025	19913930	mg/L
MKTF-35	2/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Dissolved	0.23	0.04	0.0045	3949110	mg/L
MKTF-35	2/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-35	2/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-35	2/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-35	2/6/2020	Magnesium, Dissolved	42	1	0.05	NA	mg/L
MKTF-35	2/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Potassium, Dissolved	0.48	1	0.16	NA	mg/L
MKTF-35	2/6/2020	Silver, Dissolved	0.003	0.005	0.00094	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	2/6/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
MKTF-35	2/6/2020	Barium, Dissolved	1.6	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Calcium, Dissolved	150	5	0.31	NA	mg/L
MKTF-35	2/6/2020	Iron, Dissolved	2.8	0.1	0.044	13821880	mg/L
MKTF-35	2/6/2020	Manganese, Dissolved	2.8	0.01	0.0014	2017400	mg/L
MKTF-35	2/6/2020	Sodium, Dissolved	190	5	2.1	NA	mg/L
MKTF-35	2/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Dissolved	ND	0.001	0.0001	10000	mg/L
MKTF-35	2/6/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
MKTF-35	2/6/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-35	2/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-35	2/6/2020	Uranium, Dissolved	0.0012	0.0005	0.000075	NA	mg/L
MKTF-35	2/6/2020	Lead, Total	0.0088	0.0005	0.000055	15000	mg/L
MKTF-35	2/6/2020	Thallium, Total	0.000098	0.0005	0.000052	2000	mg/L
MKTF-35	2/6/2020	Uranium, Total	0.0026	0.0005	0.000085	30000	mg/L
MKTF-35	2/6/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-35	2/6/2020	Arsenic, Total	0.0022	0.005	0.0016	10000	mg/L
MKTF-35	2/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-35	2/6/2020	Beryllium, Total	0.00098	0.002	0.00028	4000	mg/L
MKTF-35	2/6/2020	Boron, Total	0.24	0.04	0.0045	3949	mg/L
MKTF-35	2/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-35	2/6/2020	Chromium, Total	0.0079	0.006	0.0015	50000	mg/L
MKTF-35	2/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-35	2/6/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
MKTF-35	2/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-35	2/6/2020	Nickel, Total	0.0096	0.01	0.004	372000	mg/L
MKTF-35	2/6/2020	Silver, Total	0.0017	0.005	0.0014	50000	mg/L
MKTF-35	2/6/2020	Zinc, Total	0.014	0.01	0.0058	5960000	mg/L
MKTF-35	2/6/2020	Barium, Total	2.9	0.01	0.0032	2000000	mg/L
MKTF-35	2/6/2020	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-35	2/6/2020	Iron, Total	9.9	0.2	0.087	13822000	mg/L
MKTF-35	2/6/2020	Aluminum, Total	18	0.4	0.05	19914000	mg/L
MKTF-35	2/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-35	10/29/2019	Selenium, Total	ND	0.001	0.000171	50000	mg/L
MKTF-35	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	3/17/2015	Arsenic, Total	0.004	0.001	0.00044	10000	mg/L
MKTF-35	3/17/2015	Barium, Total	8.2	0.02	0.0073	2000000	mg/L
MKTF-35	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-35	3/17/2015	Chromium, Total	0.013	0.006	0.0022	50000	mg/L
MKTF-35	3/17/2015	Copper, Total	0.025	0.006	0.0051	790000	mg/L
MKTF-35	3/17/2015	Iron, Total	15	1	0.36	13822000	mg/L
MKTF-35	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	3/17/2015	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
MKTF-35	3/17/2015	Lead, Total	0.034	0.001	0.000069	15000	mg/L
MKTF-35	3/17/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
MKTF-35	3/17/2015	Uranium, Total	0.0053	0.001	0.0000081	30000	mg/L
MKTF-35	3/17/2015	Zinc, Total	0.062	0.01	0.0036	5960000	mg/L
MKTF-35	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	6/4/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-35	6/4/2015	Barium, Total	0.36	0.002	0.00095	2000000	mg/L
MKTF-35	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-35	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-35	6/4/2015	Iron, Total	2.6	0.1	0.036	13822000	mg/L
MKTF-35	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	6/4/2015	Manganese, Total	3.1	0.01	0.0013	2017000	mg/L
MKTF-35	6/4/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-35	6/4/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-35	6/4/2015	Uranium, Total	ND	0.005	0.000024	30000	mg/L
MKTF-35	6/4/2015	Zinc, Total	0.017	0.01	0.0028	5960000	mg/L
MKTF-35	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	8/18/2015	Arsenic, Total	0.0038	0.001	0.00029	10000	mg/L
MKTF-35	8/18/2015	Barium, Total	8.7	0.02	0.011	2000000	mg/L
MKTF-35	8/18/2015	Calcium, Total	130	5	0.28	NA	mg/L
MKTF-35	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-35	8/18/2015	Chromium, Total	0.016	0.006	0.0022	50000	mg/L
MKTF-35	8/18/2015	Copper, Total	0.02	0.006	0.0051	790000	mg/L
MKTF-35	8/18/2015	Iron, Total	17	1	0.36	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	8/18/2015	Magnesium, Total	37	1	0.039	NA	mg/L
MKTF-35	8/18/2015	Manganese, Total	6.5	0.02	0.015	2017000	mg/L
MKTF-35	8/18/2015	Sodium, Total	190	5	0.36	NA	mg/L
MKTF-35	8/18/2015	Lead, Total	0.034	0.0005	0.000047	15000	mg/L
MKTF-35	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-35	8/18/2015	Uranium, Total	0.0054	0.0005	0.0000049	30000	mg/L
MKTF-35	8/18/2015	Zinc, Total	0.051	0.01	0.0039	5960000	mg/L
MKTF-35	11/3/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-35	11/3/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-35	11/3/2015	Barium, Total	0.57	0.002	0.0013	2000000	mg/L
MKTF-35	11/3/2015	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-35	11/3/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-35	11/3/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/3/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-35	11/3/2015	Iron, Total	2.6	0.1	0.045	13822000	mg/L
MKTF-35	11/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-35	11/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	11/3/2015	Magnesium, Total	36	1	0.013	NA	mg/L
MKTF-35	11/3/2015	Manganese, Total	3	0.01	0.0016	2017000	mg/L
MKTF-35	11/3/2015	Sodium, Total	180	5	0.48	NA	mg/L
MKTF-35	11/3/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-35	11/3/2015	Selenium, Total	0.0035	0.001	0.00019	50000	mg/L
MKTF-35	11/3/2015	Uranium, Total	0.0019	0.0005	0.0000048	30000	mg/L
MKTF-35	11/3/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-35	2/26/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-35	2/26/2016	Arsenic, Total	0.0018	0.001	0.00029	10000	mg/L
MKTF-35	2/26/2016	Barium, Total	3.3	0.02	0.011	2000000	mg/L
MKTF-35	2/26/2016	Calcium, Total	130	5	1.3	NA	mg/L
MKTF-35	2/26/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-35	2/26/2016	Chromium, Total	0.0087	0.006	0.0022	50000	mg/L
MKTF-35	2/26/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-35	2/26/2016	Iron, Total	9.1	0.4	0.14	13822000	mg/L
MKTF-35	2/26/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-35	2/26/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-35	2/26/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-35	2/26/2016	Manganese, Total	4.1	0.02	0.015	2017000	mg/L
MKTF-35	2/26/2016	Sodium, Total	150	5	0.48	NA	mg/L
MKTF-35	2/26/2016	Lead, Total	0.013	0.0005	0.000047	15000	mg/L
MKTF-35	2/26/2016	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MKTF-35	2/26/2016	Uranium, Total	0.0029	0.0005	0.0000049	30000	mg/L
MKTF-35	2/26/2016	Zinc, Total	0.026	0.01	0.0039	5960000	mg/L
MKTF-35	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-35	6/10/2016	Arsenic, Total	0.00061	0.001	0.00014	10000	mg/L
MKTF-35	6/10/2016	Barium, Total	0.37	0.002	0.0013	2000000	mg/L
MKTF-35	6/10/2016	Calcium, Total	120	5	1.3	NA	mg/L
MKTF-35	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-35	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-35	6/10/2016	Iron, Total	2.5	0.1	0.045	13822000	mg/L
MKTF-35	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-35	6/10/2016	Potassium, Total	0.47	1	0.18	NA	mg/L
MKTF-35	6/10/2016	Magnesium, Total	34	1	0.013	NA	mg/L
MKTF-35	6/10/2016	Manganese, Total	2.7	0.01	0.0016	2017000	mg/L
MKTF-35	6/10/2016	Sodium, Total	150	5	0.48	NA	mg/L
MKTF-35	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
MKTF-35	6/10/2016	Selenium, Total	0.0023	0.005	0.0011	50000	mg/L
MKTF-35	6/10/2016	Uranium, Total	0.0011	0.0005	0.000051	30000	mg/L
MKTF-35	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-35	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	9/13/2016	Arsenic, Total	0.0024	0.001	0.00021	10000	mg/L
MKTF-35	9/13/2016	Barium, Total	2.3	0.01	0.004	2000000	mg/L
MKTF-35	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	9/13/2016	Chromium, Total	0.0045	0.006	0.0027	50000	mg/L
MKTF-35	9/13/2016	Copper, Total	0.0044	0.006	0.003	790000	mg/L
MKTF-35	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-35	9/13/2016	Arsenic, Dissolved	0.00089	0.001	0.00014	10000	mg/L
MKTF-35	9/13/2016	Barium, Dissolved	0.17	0.002	0.0013	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/13/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-35	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-35	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-35	9/13/2016	Iron, Dissolved	2.7	0.1	0.1	13821880	mg/L
MKTF-35	9/13/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	9/13/2016	Magnesium, Dissolved	35	1	0.5	NA	mg/L
MKTF-35	9/13/2016	Manganese, Dissolved	3.1	0.01	0.0016	2017400	mg/L
MKTF-35	9/13/2016	Sodium, Dissolved	140	5	2.5	NA	mg/L
MKTF-35	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	9/13/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
MKTF-35	9/13/2016	Uranium, Dissolved	0.001	0.0005	0.000051	NA	mg/L
MKTF-35	9/13/2016	Zinc, Dissolved	0.0032	0.01	0.0028	5960450	mg/L
MKTF-35	9/13/2016	Iron, Total	8.6	0.2	0.2	13822000	mg/L
MKTF-35	9/13/2016	Mercury, Total	0.000091	0.0002	0.000053	2000	mg/L
MKTF-35	9/13/2016	Manganese, Total	3.8	0.01	0.0014	2017000	mg/L
MKTF-35	9/13/2016	Lead, Total	0.012	0.0005	0.000081	15000	mg/L
MKTF-35	9/13/2016	Selenium, Total	0.002	0.005	0.00094	50000	mg/L
MKTF-35	9/13/2016	Uranium, Total	0.0021	0.0005	0.00017	30000	mg/L
MKTF-35	9/13/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
MKTF-35	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	11/3/2016	Arsenic, Total	0.0035	0.001	0.00021	10000	mg/L
MKTF-35	11/3/2016	Barium, Total	1.2	0.02	0.0079	2000000	mg/L
MKTF-35	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	11/3/2016	Chromium, Total	0.011	0.006	0.0027	50000	mg/L
MKTF-35	11/3/2016	Copper, Total	0.012	0.006	0.003	790000	mg/L
MKTF-35	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-35	11/3/2016	Arsenic, Dissolved	0.00081	0.001	0.00014	10000	mg/L
MKTF-35	11/3/2016	Barium, Dissolved	0.23	0.002	0.0013	2000000	mg/L
MKTF-35	11/3/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-35	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-35	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-35	11/3/2016	Iron, Dissolved	3	0.1	0.1	13821880	mg/L
MKTF-35	11/3/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	11/3/2016	Magnesium, Dissolved	37	1	0.5	NA	mg/L
MKTF-35	11/3/2016	Manganese, Dissolved	2.9	0.01	0.0016	2017400	mg/L
MKTF-35	11/3/2016	Sodium, Dissolved	130	5	2.5	NA	mg/L
MKTF-35	11/3/2016	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-35	11/3/2016	Selenium, Dissolved	0.0014	0.005	0.0011	50000	mg/L
MKTF-35	11/3/2016	Uranium, Dissolved	0.00075	0.0005	0.000051	NA	mg/L
MKTF-35	11/3/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-35	11/3/2016	Iron, Total	22	1	1	13822000	mg/L
MKTF-35	11/3/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
MKTF-35	11/3/2016	Manganese, Total	5.5	0.02	0.0027	2017000	mg/L
MKTF-35	11/3/2016	Lead, Total	0.019	0.0005	0.000081	15000	mg/L
MKTF-35	11/3/2016	Selenium, Total	0.0024	0.005	0.00094	50000	mg/L
MKTF-35	11/3/2016	Uranium, Total	0.0039	0.0005	0.00017	30000	mg/L
MKTF-35	11/3/2016	Zinc, Total	0.039	0.01	0.0027	5960000	mg/L
MKTF-35	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-35	3/1/2017	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
MKTF-35	3/1/2017	Barium, Total	1.9	0.02	0.0079	2000000	mg/L
MKTF-35	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-35	3/1/2017	Chromium, Total	0.0055	0.006	0.0027	50000	mg/L
MKTF-35	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-35	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-35	3/1/2017	Arsenic, Dissolved	0.00072	0.005	0.00069	10000	mg/L
MKTF-35	3/1/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
MKTF-35	3/1/2017	Calcium, Dissolved	150	5	2.5	NA	mg/L
MKTF-35	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-35	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	3/1/2017	Iron, Dissolved	3.1	0.1	0.1	13821880	mg/L
MKTF-35	3/1/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-35	3/1/2017	Magnesium, Dissolved	41	1	0.5	NA	mg/L
MKTF-35	3/1/2017	Manganese, Dissolved	3.3	0.01	0.0019	2017400	mg/L
MKTF-35	3/1/2017	Sodium, Dissolved	120	5	2.5	NA	mg/L
MKTF-35	3/1/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	3/1/2017	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-35	3/1/2017	Iron, Total	8.6	0.2	0.2	13822000	mg/L
MKTF-35	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-35	3/1/2017	Manganese, Total	4.3	0.02	0.0027	2017000	mg/L
MKTF-35	3/1/2017	Lead, Total	0.0087	0.0005	0.000081	15000	mg/L
MKTF-35	3/1/2017	Selenium, Total	0.0029	0.001	0.00019	50000	mg/L
MKTF-35	3/1/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
MKTF-35	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-35	6/14/2017	Arsenic, Total	0.0023	0.005	0.0015	10000	mg/L
MKTF-35	6/14/2017	Barium, Total	3.9	0.01	0.0047	2000000	mg/L
MKTF-35	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	6/14/2017	Chromium, Total	0.0088	0.006	0.0011	50000	mg/L
MKTF-35	6/14/2017	Copper, Total	0.0097	0.006	0.0017	790000	mg/L
MKTF-35	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-35	6/14/2017	Arsenic, Dissolved	0.003	0.005	0.00089	10000	mg/L
MKTF-35	6/14/2017	Barium, Dissolved	0.13	0.002	0.00085	2000000	mg/L
MKTF-35	6/14/2017	Calcium, Dissolved	140	10	0.78	NA	mg/L
MKTF-35	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-35	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	6/14/2017	Iron, Dissolved	3.1	0.2	0.16	13821880	mg/L
MKTF-35	6/14/2017	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-35	6/14/2017	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	6/14/2017	Manganese, Dissolved	3.1	0.02	0.0038	2017400	mg/L
MKTF-35	6/14/2017	Sodium, Dissolved	140	10	1.6	NA	mg/L
MKTF-35	6/14/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
MKTF-35	6/14/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-35	6/14/2017	Zinc, Dissolved	0.0095	0.01	0.0011	5960450	mg/L
MKTF-35	6/14/2017	Iron, Total	11	0.4	0.2	13822000	mg/L
MKTF-35	6/14/2017	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-35	6/14/2017	Manganese, Total	4.4	0.01	0.0055	2017000	mg/L
MKTF-35	6/14/2017	Lead, Total	0.013	0.0005	0.000095	15000	mg/L
MKTF-35	6/14/2017	Selenium, Total	0.0075	0.005	0.0036	50000	mg/L
MKTF-35	6/14/2017	Zinc, Total	0.022	0.01	0.0028	5960000	mg/L
MKTF-35	9/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	9/27/2017	Arsenic, Total	0.0035	0.005	0.0015	10000	mg/L
MKTF-35	9/27/2017	Barium, Total	5.2	0.02	0.0093	2000000	mg/L
MKTF-35	9/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	9/27/2017	Chromium, Total	0.014	0.006	0.0018	50000	mg/L
MKTF-35	9/27/2017	Copper, Total	0.013	0.006	0.0017	790000	mg/L
MKTF-35	9/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	9/27/2017	Arsenic, Dissolved	0.002	0.005	0.00089	10000	mg/L
MKTF-35	9/27/2017	Barium, Dissolved	0.31	0.002	0.00085	2000000	mg/L
MKTF-35	9/27/2017	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-35	9/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	9/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	9/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	9/27/2017	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
MKTF-35	9/27/2017	Potassium, Dissolved	0.39	1	0.11	NA	mg/L
MKTF-35	9/27/2017	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	9/27/2017	Manganese, Dissolved	3.4	0.01	0.002	2017400	mg/L
MKTF-35	9/27/2017	Sodium, Dissolved	150	5	0.82	NA	mg/L
MKTF-35	9/27/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
MKTF-35	9/27/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
MKTF-35	9/27/2017	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
MKTF-35	9/27/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
MKTF-35	9/27/2017	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-35	9/27/2017	Manganese, Total	5	0.02	0.011	2017000	mg/L
MKTF-35	9/27/2017	Lead, Total	0.017	0.0005	0.000095	15000	mg/L
MKTF-35	9/27/2017	Selenium, Total	0.0057	0.005	0.0036	50000	mg/L
MKTF-35	9/27/2017	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
MKTF-35	11/30/2017	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
MKTF-35	11/30/2017	Arsenic, Total	0.00075	0.001	0.00041	10000	mg/L
MKTF-35	11/30/2017	Barium, Total	1.6	0.02	0.01	2000000	mg/L
MKTF-35	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	11/30/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	11/30/2017	Barium, Dissolved	0.29	0.002	0.00099	2000000	mg/L
MKTF-35	11/30/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-35	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	11/30/2017	Iron, Dissolved	2.9	0.1	0.082	13821880	mg/L
MKTF-35	11/30/2017	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MKTF-35	11/30/2017	Magnesium, Dissolved	40	1	0.25	NA	mg/L
MKTF-35	11/30/2017	Manganese, Dissolved	3.1	0.01	0.002	2017400	mg/L
MKTF-35	11/30/2017	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	11/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-35	11/30/2017	Uranium, Dissolved	0.0024	0.0005	0.000096	NA	mg/L
MKTF-35	11/30/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-35	11/30/2017	Iron, Total	6.9	0.2	0.1	13822000	mg/L
MKTF-35	11/30/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MKTF-35	11/30/2017	Manganese, Total	3.6	0.02	0.011	2017000	mg/L
MKTF-35	11/30/2017	Lead, Total	0.005	0.0005	0.00023	15000	mg/L
MKTF-35	11/30/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-35	11/30/2017	Uranium, Total	0.0028	0.0025	0.00077	30000	mg/L
MKTF-35	11/30/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-35	2/15/2018	Silver, Total	0.0023	0.005	0.0012	50000	mg/L
MKTF-35	2/15/2018	Arsenic, Total	0.0034	0.001	0.00041	10000	mg/L
MKTF-35	2/15/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
MKTF-35	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	2/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	2/15/2018	Silver, Dissolved	0.0025	0.005	0.0018	81200	mg/L
MKTF-35	2/15/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-35	2/15/2018	Barium, Dissolved	0.26	0.002	0.00099	2000000	mg/L
MKTF-35	2/15/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	2/15/2018	Iron, Dissolved	3.2	0.1	0.082	13821880	mg/L
MKTF-35	2/15/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
MKTF-35	2/15/2018	Magnesium, Dissolved	39	1	0.25	NA	mg/L
MKTF-35	2/15/2018	Manganese, Dissolved	3.4	0.01	0.002	2017400	mg/L
MKTF-35	2/15/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	2/15/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
MKTF-35	2/15/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-35	2/15/2018	Uranium, Dissolved	0.0028	0.0005	0.000096	NA	mg/L
MKTF-35	2/15/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-35	2/15/2018	Iron, Total	6.2	0.2	0.1	13822000	mg/L
MKTF-35	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-35	2/15/2018	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-35	2/15/2018	Lead, Total	0.0045	0.0005	0.00023	15000	mg/L
MKTF-35	2/15/2018	Selenium, Total	0.0041	0.001	0.00098	50000	mg/L
MKTF-35	2/15/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-35	2/15/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-35	5/3/2018	Silver, Total	0.0016	0.005	0.0012	50000	mg/L
MKTF-35	5/3/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
MKTF-35	5/3/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
MKTF-35	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	5/3/2018	Chromium, Total	0.0036	0.006	0.0018	50000	mg/L
MKTF-35	5/3/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
MKTF-35	5/3/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
MKTF-35	5/3/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-35	5/3/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-35	5/3/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	5/3/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
MKTF-35	5/3/2018	Potassium, Dissolved	0.43	1	0.11	NA	mg/L
MKTF-35	5/3/2018	Magnesium, Dissolved	40	1	0.25	NA	mg/L
MKTF-35	5/3/2018	Manganese, Dissolved	3.3	0.01	0.002	2017400	mg/L
MKTF-35	5/3/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	5/3/2018	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	5/3/2018	Uranium, Dissolved	0.0028	0.0005	0.000096	NA	mg/L
MKTF-35	5/3/2018	Zinc, Dissolved	0.0061	0.01	0.0021	5960450	mg/L
MKTF-35	5/3/2018	Iron, Total	8.5	0.2	0.1	13822000	mg/L
MKTF-35	5/3/2018	Mercury, Total	0.000055	0.0002	0.000037	2000	mg/L
MKTF-35	5/3/2018	Manganese, Total	4	0.01	0.0055	2017000	mg/L
MKTF-35	5/3/2018	Lead, Total	0.0073	0.0005	0.00023	15000	mg/L
MKTF-35	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	5/3/2018	Uranium, Total	0.0038	0.0005	0.000068	30000	mg/L
MKTF-35	5/3/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-35	8/23/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
MKTF-35	8/23/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-35	8/23/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
MKTF-35	8/23/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	8/23/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	8/23/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	8/23/2018	Silver, Dissolved	0.0035	0.005	0.0018	81200	mg/L
MKTF-35	8/23/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-35	8/23/2018	Barium, Dissolved	0.37	0.002	0.00099	2000000	mg/L
MKTF-35	8/23/2018	Calcium, Dissolved	140	5	0.39	NA	mg/L
MKTF-35	8/23/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	8/23/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	8/23/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	8/23/2018	Iron, Dissolved	2.9	0.1	0.082	13821880	mg/L
MKTF-35	8/23/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MKTF-35	8/23/2018	Magnesium, Dissolved	41	1	0.25	NA	mg/L
MKTF-35	8/23/2018	Manganese, Dissolved	2.9	0.01	0.002	2017400	mg/L
MKTF-35	8/23/2018	Sodium, Dissolved	170	5	0.82	NA	mg/L
MKTF-35	8/23/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
MKTF-35	8/23/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	8/23/2018	Uranium, Dissolved	0.0029	0.0005	0.000096	NA	mg/L
MKTF-35	8/23/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
MKTF-35	8/23/2018	Iron, Total	5.6	0.2	0.1	13822000	mg/L
MKTF-35	8/23/2018	Mercury, Total	0.000099	0.0002	0.000038	2000	mg/L
MKTF-35	8/23/2018	Manganese, Total	3.4	0.01	0.0055	2017000	mg/L
MKTF-35	8/23/2018	Lead, Total	0.0037	0.0005	0.00023	15000	mg/L
MKTF-35	8/23/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	8/23/2018	Uranium, Total	0.0034	0.0005	0.000068	30000	mg/L
MKTF-35	8/23/2018	Zinc, Total	0.0084	0.01	0.0033	5960000	mg/L
MKTF-35	11/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-35	11/28/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-35	11/28/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
MKTF-35	11/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-35	11/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-35	11/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-35	11/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-35	11/28/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-35	11/28/2018	Barium, Dissolved	0.31	0.002	0.00099	2000000	mg/L
MKTF-35	11/28/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
MKTF-35	11/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-35	11/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-35	11/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-35	11/28/2018	Iron, Dissolved	3.2	0.1	0.082	13821880	mg/L
MKTF-35	11/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-35	11/28/2018	Magnesium, Dissolved	42	1	0.25	NA	mg/L
MKTF-35	11/28/2018	Manganese, Dissolved	3	0.01	0.002	2017400	mg/L
MKTF-35	11/28/2018	Sodium, Dissolved	180	5	0.82	NA	mg/L
MKTF-35	11/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-35	11/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-35	11/28/2018	Zinc, Dissolved	0.044	0.01	0.0021	5960450	mg/L
MKTF-35	11/28/2018	Iron, Total	6.7	0.2	0.1	13822000	mg/L
MKTF-35	11/28/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-35	11/28/2018	Lead, Total	0.0031	0.0005	0.00023	15000	mg/L
MKTF-35	11/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-35	11/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-36	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-36	9/18/2020	Arsenic, Dissolved	0.016	0.001	0.00021	10000	mg/L
MKTF-36	9/18/2020	Lead, Dissolved	0.0016	0.0005	0.000034	NA	mg/L
MKTF-36	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-36	9/18/2020	Uranium, Dissolved	0.00034	0.0005	0.000065	NA	mg/L
MKTF-36	9/18/2020	Calcium, Dissolved	140	5	0.57	NA	mg/L
MKTF-36	9/18/2020	Manganese, Dissolved	1.6	0.01	0.0029	2017400	mg/L
MKTF-36	9/18/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-36	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-36	9/18/2020	Sodium, Dissolved	220	5	0.69	NA	mg/L
MKTF-36	9/18/2020	Barium, Dissolved	7.7	0.1	0.056	2000000	mg/L
MKTF-36	9/18/2020	Iron, Dissolved	11	1	0.52	13821880	mg/L
MKTF-36	9/18/2020	Aluminum, Dissolved	0.042	0.02	0.0056	19913930	mg/L
MKTF-36	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-36	9/18/2020	Boron, Dissolved	0.35	0.04	0.0067	3949110	mg/L
MKTF-36	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-36	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-36	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-36	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-36	9/18/2020	Magnesium, Dissolved	37	1	0.067	NA	mg/L
MKTF-36	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-36	9/18/2020	Potassium, Dissolved	0.94	1	0.16	NA	mg/L
MKTF-36	9/18/2020	Zinc, Dissolved	0.21	0.01	0.006	5960450	mg/L
MKTF-36	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-36	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-36	9/18/2020	Arsenic, Total	0.018	0.001	0.00026	10000	mg/L
MKTF-36	9/18/2020	Lead, Total	0.0049	0.0005	0.000034	15000	mg/L
MKTF-36	9/18/2020	Selenium, Total	0.00076	0.001	0.00066	50000	mg/L
MKTF-36	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-36	9/18/2020	Uranium, Total	0.0004	0.0005	0.000065	30000	mg/L
MKTF-36	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-36	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-36	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-36	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-36	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-36	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-36	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-36	9/18/2020	Zinc, Total	0.016	0.01	0.0064	5960000	mg/L
MKTF-36	9/18/2020	Aluminum, Total	1.7	0.1	0.037	19914000	mg/L
MKTF-36	9/18/2020	Manganese, Total	1.8	0.01	0.0041	2017000	mg/L
MKTF-36	9/18/2020	Barium, Total	7.5	0.06	0.033	2000000	mg/L
MKTF-36	9/18/2020	Iron, Total	12	1	0.26	13822000	mg/L
MKTF-36	9/18/2020	Boron, Total	0.37	0.04	0.0074	3949	mg/L
MKTF-36	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-36	3/17/2015	Arsenic, Total	0.016	0.001	0.00044	10000	mg/L
MKTF-36	3/17/2015	Barium, Total	7	0.02	0.0073	2000000	mg/L
MKTF-36	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-36	3/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-36	3/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-36	3/17/2015	Iron, Total	22	1	0.36	13822000	mg/L
MKTF-36	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	3/17/2015	Manganese, Total	2.8	0.02	0.015	2017000	mg/L
MKTF-36	3/17/2015	Lead, Total	0.015	0.001	0.000069	15000	mg/L
MKTF-36	3/17/2015	Selenium, Total	0.0057	0.001	0.00012	50000	mg/L
MKTF-36	3/17/2015	Uranium, Total	0.0016	0.001	0.0000081	30000	mg/L
MKTF-36	3/17/2015	Zinc, Total	0.028	0.01	0.0036	5960000	mg/L
MKTF-36	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	6/4/2015	Arsenic, Total	0.016	0.005	0.00032	10000	mg/L
MKTF-36	6/4/2015	Barium, Total	6.6	0.04	0.019	2000000	mg/L
MKTF-36	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-36	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-36	6/4/2015	Iron, Total	18	1	0.36	13822000	mg/L
MKTF-36	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	6/4/2015	Manganese, Total	2.4	0.01	0.0013	2017000	mg/L
MKTF-36	6/4/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-36	6/4/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-36	6/4/2015	Uranium, Total	ND	0.005	0.000024	30000	mg/L
MKTF-36	6/4/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-36	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-36	8/18/2015	Arsenic, Total	0.016	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	8/18/2015	Barium, Total	5.7	0.02	0.011	2000000	mg/L
MKTF-36	8/18/2015	Calcium, Total	140	5	0.28	NA	mg/L
MKTF-36	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-36	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-36	8/18/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-36	8/18/2015	Iron, Total	21	1	0.36	13822000	mg/L
MKTF-36	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-36	8/18/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-36	8/18/2015	Magnesium, Total	43	1	0.039	NA	mg/L
MKTF-36	8/18/2015	Manganese, Total	2.7	0.02	0.015	2017000	mg/L
MKTF-36	8/18/2015	Sodium, Total	220	5	0.36	NA	mg/L
MKTF-36	8/18/2015	Lead, Total	0.017	0.0005	0.000047	15000	mg/L
MKTF-36	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-36	8/18/2015	Uranium, Total	0.0011	0.0005	0.0000049	30000	mg/L
MKTF-36	8/18/2015	Zinc, Total	0.018	0.01	0.0039	5960000	mg/L
MKTF-36	11/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-36	11/8/2016	Arsenic, Total	0.018	0.001	0.00021	10000	mg/L
MKTF-36	11/8/2016	Barium, Total	6.6	0.02	0.0079	2000000	mg/L
MKTF-36	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-36	11/8/2016	Copper, Total	0.0068	0.006	0.003	790000	mg/L
MKTF-36	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-36	11/8/2016	Arsenic, Dissolved	0.015	0.001	0.00014	10000	mg/L
MKTF-36	11/8/2016	Barium, Dissolved	6	0.1	0.066	2000000	mg/L
MKTF-36	11/8/2016	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-36	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-36	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-36	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-36	11/8/2016	Iron, Dissolved	13	1	1	13821880	mg/L
MKTF-36	11/8/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
MKTF-36	11/8/2016	Magnesium, Dissolved	38	1	0.5	NA	mg/L
MKTF-36	11/8/2016	Manganese, Dissolved	1.9	0.01	0.0016	2017400	mg/L
MKTF-36	11/8/2016	Sodium, Dissolved	210	5	2.5	NA	mg/L
MKTF-36	11/8/2016	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-36	11/8/2016	Selenium, Dissolved	0.0042	0.001	0.00021	50000	mg/L
MKTF-36	11/8/2016	Uranium, Dissolved	0.00021	0.0005	0.000051	NA	mg/L
MKTF-36	11/8/2016	Zinc, Dissolved	0.0055	0.01	0.0028	5960450	mg/L
MKTF-36	11/8/2016	Iron, Total	18	1	1	13822000	mg/L
MKTF-36	11/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-36	11/8/2016	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
MKTF-36	11/8/2016	Lead, Total	0.01	0.0005	0.000081	15000	mg/L
MKTF-36	11/8/2016	Selenium, Total	0.0045	0.01	0.0019	50000	mg/L
MKTF-36	11/8/2016	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
MKTF-36	11/8/2016	Zinc, Total	0.16	0.01	0.0027	5960000	mg/L
MKTF-36	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-36	3/1/2017	Arsenic, Total	0.013	0.001	0.00021	10000	mg/L
MKTF-36	3/1/2017	Barium, Total	5.8	0.02	0.0079	2000000	mg/L
MKTF-36	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-36	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-36	3/1/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-36	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-36	3/1/2017	Arsenic, Dissolved	0.012	0.001	0.00014	10000	mg/L
MKTF-36	3/1/2017	Barium, Dissolved	5.4	0.02	0.0085	2000000	mg/L
MKTF-36	3/1/2017	Calcium, Dissolved	130	5	2.5	NA	mg/L
MKTF-36	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-36	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	3/1/2017	Iron, Dissolved	17	0.4	0.4	13821880	mg/L
MKTF-36	3/1/2017	Potassium, Dissolved	0.57	1	0.5	NA	mg/L
MKTF-36	3/1/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
MKTF-36	3/1/2017	Manganese, Dissolved	2.1	0.01	0.0019	2017400	mg/L
MKTF-36	3/1/2017	Sodium, Dissolved	200	5	2.5	NA	mg/L
MKTF-36	3/1/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	3/1/2017	Selenium, Dissolved	0.0036	0.001	0.00021	50000	mg/L
MKTF-36	3/1/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-36	3/1/2017	Iron, Total	17	1	1	13822000	mg/L
MKTF-36	3/1/2017	Mercury, Total	0.00015	0.0002	0.000037	2000	mg/L
MKTF-36	3/1/2017	Manganese, Total	2.1	0.02	0.0027	2017000	mg/L
MKTF-36	3/1/2017	Lead, Total	0.0092	0.0005	0.000081	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	3/1/2017	Selenium, Total	0.0032	0.001	0.00019	50000	mg/L
MKTF-36	3/1/2017	Zinc, Total	0.066	0.01	0.0027	5960000	mg/L
MKTF-36	6/14/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-36	6/14/2017	Arsenic, Total	0.012	0.001	0.0003	10000	mg/L
MKTF-36	6/14/2017	Barium, Total	4.7	0.02	0.0093	2000000	mg/L
MKTF-36	6/14/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	6/14/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-36	6/14/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-36	6/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-36	6/14/2017	Arsenic, Dissolved	0.013	0.001	0.00018	10000	mg/L
MKTF-36	6/14/2017	Barium, Dissolved	4.7	0.02	0.0085	2000000	mg/L
MKTF-36	6/14/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-36	6/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	6/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-36	6/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	6/14/2017	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-36	6/14/2017	Potassium, Dissolved	0.79	1	0.11	NA	mg/L
MKTF-36	6/14/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-36	6/14/2017	Manganese, Dissolved	1.8	0.02	0.0038	2017400	mg/L
MKTF-36	6/14/2017	Sodium, Dissolved	210	10	1.6	NA	mg/L
MKTF-36	6/14/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	6/14/2017	Selenium, Dissolved	0.0026	0.005	0.0019	50000	mg/L
MKTF-36	6/14/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-36	6/14/2017	Iron, Total	16	0.4	0.2	13822000	mg/L
MKTF-36	6/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	6/14/2017	Manganese, Total	1.9	0.02	0.011	2017000	mg/L
MKTF-36	6/14/2017	Lead, Total	0.0084	0.0005	0.000095	15000	mg/L
MKTF-36	6/14/2017	Selenium, Total	0.0044	0.005	0.0036	50000	mg/L
MKTF-36	6/14/2017	Zinc, Total	0.076	0.01	0.0028	5960000	mg/L
MKTF-36	9/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	9/27/2017	Arsenic, Total	0.018	0.001	0.0003	10000	mg/L
MKTF-36	9/27/2017	Barium, Total	5.3	0.02	0.0093	2000000	mg/L
MKTF-36	9/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	9/27/2017	Chromium, Total	0.0053	0.006	0.0018	50000	mg/L
MKTF-36	9/27/2017	Copper, Total	0.012	0.006	0.0017	790000	mg/L
MKTF-36	9/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	9/27/2017	Arsenic, Dissolved	0.016	0.005	0.00089	10000	mg/L
MKTF-36	9/27/2017	Barium, Dissolved	4.7	0.04	0.017	2000000	mg/L
MKTF-36	9/27/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-36	9/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	9/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	9/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	9/27/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	9/27/2017	Potassium, Dissolved	0.8	1	0.11	NA	mg/L
MKTF-36	9/27/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
MKTF-36	9/27/2017	Manganese, Dissolved	1.7	0.02	0.0039	2017400	mg/L
MKTF-36	9/27/2017	Sodium, Dissolved	190	5	0.82	NA	mg/L
MKTF-36	9/27/2017	Lead, Dissolved	0.0022	0.0005	0.00017	NA	mg/L
MKTF-36	9/27/2017	Selenium, Dissolved	0.0036	0.005	0.0019	50000	mg/L
MKTF-36	9/27/2017	Zinc, Dissolved	0.043	0.01	0.0021	5960450	mg/L
MKTF-36	9/27/2017	Iron, Total	20	0.4	0.2	13822000	mg/L
MKTF-36	9/27/2017	Mercury, Total	0.000047	0.0002	0.000037	2000	mg/L
MKTF-36	9/27/2017	Manganese, Total	2	0.02	0.011	2017000	mg/L
MKTF-36	9/27/2017	Lead, Total	0.018	0.0005	0.000095	15000	mg/L
MKTF-36	9/27/2017	Selenium, Total	0.0035	0.001	0.00071	50000	mg/L
MKTF-36	9/27/2017	Zinc, Total	0.15	0.01	0.0033	5960000	mg/L
MKTF-36	11/30/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	11/30/2017	Arsenic, Total	0.0097	0.001	0.00041	10000	mg/L
MKTF-36	11/30/2017	Barium, Total	6.6	0.04	0.02	2000000	mg/L
MKTF-36	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	11/30/2017	Arsenic, Dissolved	0.011	0.005	0.0021	10000	mg/L
MKTF-36	11/30/2017	Barium, Dissolved	5.7	0.02	0.0099	2000000	mg/L
MKTF-36	11/30/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
MKTF-36	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	11/30/2017	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	11/30/2017	Potassium, Dissolved	0.77	1	0.11	NA	mg/L
MKTF-36	11/30/2017	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-36	11/30/2017	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
MKTF-36	11/30/2017	Sodium, Dissolved	200	5	0.82	NA	mg/L
MKTF-36	11/30/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-36	11/30/2017	Uranium, Dissolved	0.00047	0.0005	0.000096	NA	mg/L
MKTF-36	11/30/2017	Zinc, Dissolved	0.0063	0.01	0.0021	5960450	mg/L
MKTF-36	11/30/2017	Iron, Total	17	0.4	0.2	13822000	mg/L
MKTF-36	11/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	11/30/2017	Manganese, Total	1.7	0.01	0.0055	2017000	mg/L
MKTF-36	11/30/2017	Lead, Total	0.0055	0.0005	0.00023	15000	mg/L
MKTF-36	11/30/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-36	11/30/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
MKTF-36	11/30/2017	Zinc, Total	0.052	0.01	0.0033	5960000	mg/L
MKTF-36	2/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	2/15/2018	Arsenic, Total	0.0087	0.001	0.00041	10000	mg/L
MKTF-36	2/15/2018	Barium, Total	6.4	0.04	0.02	2000000	mg/L
MKTF-36	2/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	2/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	2/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	2/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	2/15/2018	Arsenic, Dissolved	0.0085	0.001	0.00042	10000	mg/L
MKTF-36	2/15/2018	Barium, Dissolved	5.8	0.04	0.02	2000000	mg/L
MKTF-36	2/15/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-36	2/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	2/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	2/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	2/15/2018	Iron, Dissolved	14	0.4	0.33	13821880	mg/L
MKTF-36	2/15/2018	Potassium, Dissolved	0.61	1	0.11	NA	mg/L
MKTF-36	2/15/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
MKTF-36	2/15/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-36	2/15/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-36	2/15/2018	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-36	2/15/2018	Selenium, Dissolved	0.0037	0.001	0.00076	50000	mg/L
MKTF-36	2/15/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-36	2/15/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-36	2/15/2018	Iron, Total	15	0.4	0.2	13822000	mg/L
MKTF-36	2/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-36	2/15/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-36	2/15/2018	Lead, Total	0.0053	0.0005	0.00023	15000	mg/L
MKTF-36	2/15/2018	Selenium, Total	0.0028	0.001	0.00098	50000	mg/L
MKTF-36	2/15/2018	Uranium, Total	0.00016	0.0005	0.000068	30000	mg/L
MKTF-36	2/15/2018	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-36	5/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-36	5/3/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
MKTF-36	5/3/2018	Barium, Total	5.9	0.04	0.02	2000000	mg/L
MKTF-36	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	5/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	5/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-36	5/3/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
MKTF-36	5/3/2018	Barium, Dissolved	5.7	0.04	0.02	2000000	mg/L
MKTF-36	5/3/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-36	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	5/3/2018	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-36	5/3/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MKTF-36	5/3/2018	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-36	5/3/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
MKTF-36	5/3/2018	Sodium, Dissolved	210	5	0.82	NA	mg/L
MKTF-36	5/3/2018	Lead, Dissolved	0.0016	0.0005	0.00017	NA	mg/L
MKTF-36	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-36	5/3/2018	Uranium, Dissolved	0.00011	0.0005	0.000096	NA	mg/L
MKTF-36	5/3/2018	Zinc, Dissolved	0.0096	0.01	0.0021	5960450	mg/L
MKTF-36	5/3/2018	Iron, Total	13	0.4	0.2	13822000	mg/L
MKTF-36	5/3/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	5/3/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-36	5/3/2018	Lead, Total	0.0051	0.0005	0.00023	15000	mg/L
MKTF-36	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-36	5/3/2018	Uranium, Total	0.00019	0.0005	0.000068	30000	mg/L
MKTF-36	5/3/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-36	9/5/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-36	9/5/2018	Arsenic, Total	0.016	0.001	0.00041	10000	mg/L
MKTF-36	9/5/2018	Barium, Total	5.8	0.02	0.01	2000000	mg/L
MKTF-36	9/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-36	9/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-36	9/5/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-36	9/5/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
MKTF-36	9/5/2018	Arsenic, Dissolved	0.015	0.001	0.00042	10000	mg/L
MKTF-36	9/5/2018	Barium, Dissolved	5.9	0.02	0.0099	2000000	mg/L
MKTF-36	9/5/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
MKTF-36	9/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-36	9/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-36	9/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-36	9/5/2018	Iron, Dissolved	13	0.4	0.33	13821880	mg/L
MKTF-36	9/5/2018	Potassium, Dissolved	0.91	1	0.11	NA	mg/L
MKTF-36	9/5/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
MKTF-36	9/5/2018	Manganese, Dissolved	1.7	0.02	0.0039	2017400	mg/L
MKTF-36	9/5/2018	Sodium, Dissolved	200	10	1.6	NA	mg/L
MKTF-36	9/5/2018	Lead, Dissolved	0.0018	0.0005	0.00017	NA	mg/L
MKTF-36	9/5/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-36	9/5/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-36	9/5/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-36	9/5/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-36	9/5/2018	Mercury, Total	0.000038	0.0002	0.000038	2000	mg/L
MKTF-36	9/5/2018	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
MKTF-36	9/5/2018	Lead, Total	0.0064	0.0005	0.00023	15000	mg/L
MKTF-36	9/5/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-36	9/5/2018	Uranium, Total	0.00035	0.0005	0.000068	30000	mg/L
MKTF-36	9/5/2018	Zinc, Total	0.031	0.01	0.0033	5960000	mg/L
MKTF-37	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-37	9/17/2020	Arsenic, Dissolved	0.0026	0.001	0.00021	10000	mg/L
MKTF-37	9/17/2020	Lead, Dissolved	0.00076	0.0005	0.000034	NA	mg/L
MKTF-37	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-37	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-37	9/17/2020	Uranium, Dissolved	0.0021	0.0005	0.000065	NA	mg/L
MKTF-37	9/17/2020	Barium, Dissolved	1.7	0.01	0.0056	2000000	mg/L
MKTF-37	9/17/2020	Manganese, Dissolved	1.2	0.01	0.0029	2017400	mg/L
MKTF-37	9/17/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-37	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-37	9/17/2020	Sodium, Dissolved	280	5	0.69	NA	mg/L
MKTF-37	9/17/2020	Iron, Dissolved	11	1	0.52	13821880	mg/L
MKTF-37	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-37	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-37	9/17/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
MKTF-37	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-37	9/17/2020	Calcium, Dissolved	72	1	0.11	NA	mg/L
MKTF-37	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-37	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-37	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-37	9/17/2020	Magnesium, Dissolved	16	1	0.067	NA	mg/L
MKTF-37	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-37	9/17/2020	Potassium, Dissolved	1.9	1	0.16	NA	mg/L
MKTF-37	9/17/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-37	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-37	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-37	9/17/2020	Arsenic, Total	0.0059	0.001	0.00026	10000	mg/L
MKTF-37	9/17/2020	Lead, Total	0.023	0.0005	0.000034	15000	mg/L
MKTF-37	9/17/2020	Selenium, Total	0.0021	0.001	0.00066	50000	mg/L
MKTF-37	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-37	9/17/2020	Uranium, Total	0.0089	0.0005	0.000065	30000	mg/L
MKTF-37	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-37	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	9/17/2020	Chromium, Total	0.0073	0.006	0.0021	50000	mg/L
MKTF-37	9/17/2020	Cobalt, Total	0.0035	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	9/17/2020	Molybdenum, Total	0.011	0.008	0.0065	98700	mg/L
MKTF-37	9/17/2020	Copper, Total	0.012	0.006	0.0047	790000	mg/L
MKTF-37	9/17/2020	Nickel, Total	0.0095	0.01	0.0033	372000	mg/L
MKTF-37	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-37	9/17/2020	Zinc, Total	0.066	0.01	0.0064	5960000	mg/L
MKTF-37	9/17/2020	Barium, Total	2	0.015	0.0082	2000000	mg/L
MKTF-37	9/17/2020	Manganese, Total	1.6	0.01	0.0041	2017000	mg/L
MKTF-37	9/17/2020	Aluminum, Total	7.1	1	0.37	19914000	mg/L
MKTF-37	9/17/2020	Iron, Total	24	2.5	0.64	13822000	mg/L
MKTF-37	9/17/2020	Boron, Total	0.55	0.04	0.0074	3949	mg/L
MKTF-37	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-37	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-37	5/14/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-37	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-37	5/14/2019	Calcium, Dissolved	170	10	0.618891	NA	mg/L
MKTF-37	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-37	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-37	5/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-37	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-37	5/14/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-37	5/14/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
MKTF-37	5/14/2019	Molybdenum, Dissolved	0.0095	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Dissolved	0.0047	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-37	5/14/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
MKTF-37	5/14/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-37	5/14/2019	Sodium, Dissolved	310	10	4.161763	NA	mg/L
MKTF-37	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-37	5/14/2019	Uranium, Dissolved	0.021	0.0025	0.000374	NA	mg/L
MKTF-37	5/14/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
MKTF-37	5/14/2019	Aluminum, Total	6.6	0.2	0.024883	19914000	mg/L
MKTF-37	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Total	0.00097	0.001	0.000312	10000	mg/L
MKTF-37	5/14/2019	Barium, Total	0.17	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Total	0.00037	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Total	0.49	0.04	0.004531	3949	mg/L
MKTF-37	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-37	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-37	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-37	5/14/2019	Iron, Total	2.6	0.1	0.043734	13822000	mg/L
MKTF-37	5/14/2019	Lead, Total	0.0028	0.0005	0.000055	15000	mg/L
MKTF-37	5/14/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-37	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-37	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Total	0.0092	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-37	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-37	5/14/2019	Thallium, Total	0.000062	0.0005	0.000052	2000	mg/L
MKTF-37	5/14/2019	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
MKTF-37	5/14/2019	Zinc, Total	0.008	0.01	0.005772	5960000	mg/L
MKTF-37	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-37	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-37	5/14/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
MKTF-37	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-37	5/14/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-37	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-37	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-37	5/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-37	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-37	5/14/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/14/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
MKTF-37	5/14/2019	Molybdenum, Dissolved	0.0074	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Dissolved	0.0062	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-37	5/14/2019	Selenium, Dissolved	0.00098	0.005	0.000857	50000	mg/L
MKTF-37	5/14/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
MKTF-37	5/14/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
MKTF-37	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-37	5/14/2019	Uranium, Dissolved	0.021	0.0025	0.000374	NA	mg/L
MKTF-37	5/14/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-37	5/14/2019	Aluminum, Total	4.8	0.1	0.012441	19914000	mg/L
MKTF-37	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-37	5/14/2019	Arsenic, Total	0.00072	0.001	0.000312	10000	mg/L
MKTF-37	5/14/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-37	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-37	5/14/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-37	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-37	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-37	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-37	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-37	5/14/2019	Iron, Total	1.6	0.04	0.017494	13822000	mg/L
MKTF-37	5/14/2019	Lead, Total	0.0017	0.0005	0.000055	15000	mg/L
MKTF-37	5/14/2019	Manganese, Total	2	0.01	0.00145	2017000	mg/L
MKTF-37	5/14/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
MKTF-37	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-37	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-37	5/14/2019	Selenium, Total	0.0017	0.001	0.000478	50000	mg/L
MKTF-37	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-37	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-37	5/14/2019	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-37	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-37	3/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-37	3/17/2015	Arsenic, Total	0.0032	0.001	0.00044	10000	mg/L
MKTF-37	3/17/2015	Barium, Total	0.23	0.002	0.00073	2000000	mg/L
MKTF-37	3/17/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-37	3/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-37	3/17/2015	Copper, Total	0.012	0.006	0.0051	790000	mg/L
MKTF-37	3/17/2015	Iron, Total	5.1	0.2	0.072	13822000	mg/L
MKTF-37	3/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	3/17/2015	Manganese, Total	2.9	0.02	0.015	2017000	mg/L
MKTF-37	3/17/2015	Lead, Total	0.03	0.001	0.000069	15000	mg/L
MKTF-37	3/17/2015	Selenium, Total	0.0036	0.001	0.00012	50000	mg/L
MKTF-37	3/17/2015	Uranium, Total	0.026	0.001	0.0000081	30000	mg/L
MKTF-37	3/17/2015	Zinc, Total	0.14	0.01	0.0036	5960000	mg/L
MKTF-37	6/4/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	6/4/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-37	6/4/2015	Barium, Total	0.19	0.002	0.00095	2000000	mg/L
MKTF-37	6/4/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-37	6/4/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	6/4/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-37	6/4/2015	Iron, Total	1.8	0.1	0.036	13822000	mg/L
MKTF-37	6/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	6/4/2015	Manganese, Total	2.3	0.01	0.0013	2017000	mg/L
MKTF-37	6/4/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-37	6/4/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-37	6/4/2015	Uranium, Total	0.023	0.01	0.000048	30000	mg/L
MKTF-37	6/4/2015	Zinc, Total	0.039	0.01	0.0028	5960000	mg/L
MKTF-37	8/18/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-37	8/18/2015	Arsenic, Total	0.0031	0.001	0.00029	10000	mg/L
MKTF-37	8/18/2015	Barium, Total	0.24	0.002	0.0011	2000000	mg/L
MKTF-37	8/18/2015	Calcium, Total	37	1	0.057	NA	mg/L
MKTF-37	8/18/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-37	8/18/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-37	8/18/2015	Copper, Total	0.0092	0.006	0.0051	790000	mg/L
MKTF-37	8/18/2015	Iron, Total	5.7	0.2	0.072	13822000	mg/L
MKTF-37	8/18/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-37	8/18/2015	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-37	8/18/2015	Magnesium, Total	8.2	1	0.039	NA	mg/L
MKTF-37	8/18/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	8/18/2015	Sodium, Total	250	5	0.36	NA	mg/L
MKTF-37	8/18/2015	Lead, Total	0.024	0.0005	0.000047	15000	mg/L
MKTF-37	8/18/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-37	8/18/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
MKTF-37	8/18/2015	Zinc, Total	0.074	0.01	0.0039	5960000	mg/L
MKTF-37	11/3/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-37	11/3/2016	Arsenic, Total	0.0034	0.001	0.00021	10000	mg/L
MKTF-37	11/3/2016	Barium, Total	0.69	0.002	0.00079	2000000	mg/L
MKTF-37	11/3/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	11/3/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-37	11/3/2016	Copper, Total	0.005	0.006	0.003	790000	mg/L
MKTF-37	11/3/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-37	11/3/2016	Arsenic, Dissolved	0.0035	0.001	0.00014	10000	mg/L
MKTF-37	11/3/2016	Barium, Dissolved	0.58	0.002	0.0013	2000000	mg/L
MKTF-37	11/3/2016	Calcium, Dissolved	29	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-37	11/3/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-37	11/3/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-37	11/3/2016	Iron, Dissolved	0.25	0.02	0.02	13821880	mg/L
MKTF-37	11/3/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Magnesium, Dissolved	6.4	1	0.5	NA	mg/L
MKTF-37	11/3/2016	Manganese, Dissolved	0.46	0.002	0.00032	2017400	mg/L
MKTF-37	11/3/2016	Sodium, Dissolved	200	5	2.5	NA	mg/L
MKTF-37	11/3/2016	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
MKTF-37	11/3/2016	Selenium, Dissolved	0.003	0.001	0.00021	50000	mg/L
MKTF-37	11/3/2016	Uranium, Dissolved	0.036	0.0025	0.00026	NA	mg/L
MKTF-37	11/3/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-37	11/3/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-37	11/3/2016	Mercury, Total	0.000081	0.0002	0.000053	2000	mg/L
MKTF-37	11/3/2016	Manganese, Total	0.55	0.002	0.00027	2017000	mg/L
MKTF-37	11/3/2016	Lead, Total	0.0046	0.0005	0.000081	15000	mg/L
MKTF-37	11/3/2016	Selenium, Total	0.0036	0.005	0.00094	50000	mg/L
MKTF-37	11/3/2016	Uranium, Total	0.025	0.0025	0.00087	30000	mg/L
MKTF-37	11/3/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
MKTF-37	3/1/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-37	3/1/2017	Arsenic, Total	0.004	0.001	0.00021	10000	mg/L
MKTF-37	3/1/2017	Barium, Total	1.3	0.01	0.004	2000000	mg/L
MKTF-37	3/1/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-37	3/1/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-37	3/1/2017	Copper, Total	0.0038	0.006	0.003	790000	mg/L
MKTF-37	3/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-37	3/1/2017	Arsenic, Dissolved	0.0036	0.001	0.00014	10000	mg/L
MKTF-37	3/1/2017	Barium, Dissolved	1.2	0.02	0.0085	2000000	mg/L
MKTF-37	3/1/2017	Calcium, Dissolved	56	5	2.5	NA	mg/L
MKTF-37	3/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	3/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-37	3/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	3/1/2017	Iron, Dissolved	2.4	0.1	0.1	13821880	mg/L
MKTF-37	3/1/2017	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-37	3/1/2017	Magnesium, Dissolved	13	1	0.5	NA	mg/L
MKTF-37	3/1/2017	Manganese, Dissolved	1.1	0.02	0.0038	2017400	mg/L
MKTF-37	3/1/2017	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-37	3/1/2017	Lead, Dissolved	0.002	0.0005	0.00017	NA	mg/L
MKTF-37	3/1/2017	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L
MKTF-37	3/1/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
MKTF-37	3/1/2017	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-37	3/1/2017	Mercury, Total	0.00019	0.0002	0.000037	2000	mg/L
MKTF-37	3/1/2017	Manganese, Total	1.5	0.01	0.0014	2017000	mg/L
MKTF-37	3/1/2017	Lead, Total	0.027	0.0025	0.00041	15000	mg/L
MKTF-37	3/1/2017	Selenium, Total	0.0034	0.001	0.00019	50000	mg/L
MKTF-37	3/1/2017	Zinc, Total	0.027	0.01	0.0027	5960000	mg/L
MKTF-37	5/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	5/3/2018	Arsenic, Total	0.0027	0.001	0.00041	10000	mg/L
MKTF-37	5/3/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
MKTF-37	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-37	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	5/3/2018	Copper, Total	0.014	0.006	0.0041	790000	mg/L
MKTF-37	5/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-37	5/3/2018	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
MKTF-37	5/3/2018	Calcium, Dissolved	41	1	0.078	NA	mg/L
MKTF-37	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-37	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	5/3/2018	Iron, Dissolved	1.9	0.1	0.082	13821880	mg/L
MKTF-37	5/3/2018	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-37	5/3/2018	Magnesium, Dissolved	8.4	1	0.25	NA	mg/L
MKTF-37	5/3/2018	Manganese, Dissolved	0.67	0.002	0.00039	2017400	mg/L
MKTF-37	5/3/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-37	5/3/2018	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
MKTF-37	5/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-37	5/3/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
MKTF-37	5/3/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
MKTF-37	5/3/2018	Iron, Total	3.4	0.1	0.051	13822000	mg/L
MKTF-37	5/3/2018	Mercury, Total	0.000094	0.0002	0.000037	2000	mg/L
MKTF-37	5/3/2018	Manganese, Total	0.72	0.002	0.0011	2017000	mg/L
MKTF-37	5/3/2018	Lead, Total	0.0046	0.0005	0.00023	15000	mg/L
MKTF-37	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-37	5/3/2018	Uranium, Total	0.013	0.0005	0.000068	30000	mg/L
MKTF-37	5/3/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
MKTF-37	8/23/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-37	8/23/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-37	8/23/2018	Barium, Total	0.84	0.01	0.005	2000000	mg/L
MKTF-37	8/23/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-37	8/23/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-37	8/23/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-37	8/23/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-37	8/23/2018	Arsenic, Dissolved	0.0024	0.001	0.00042	10000	mg/L
MKTF-37	8/23/2018	Barium, Dissolved	0.96	0.002	0.00099	2000000	mg/L
MKTF-37	8/23/2018	Calcium, Dissolved	34	1	0.078	NA	mg/L
MKTF-37	8/23/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-37	8/23/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-37	8/23/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-37	8/23/2018	Iron, Dissolved	0.99	0.02	0.016	13821880	mg/L
MKTF-37	8/23/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-37	8/23/2018	Magnesium, Dissolved	7.2	1	0.25	NA	mg/L
MKTF-37	8/23/2018	Manganese, Dissolved	0.55	0.002	0.00039	2017400	mg/L
MKTF-37	8/23/2018	Sodium, Dissolved	240	5	0.82	NA	mg/L
MKTF-37	8/23/2018	Lead, Dissolved	0.00088	0.0005	0.00017	NA	mg/L
MKTF-37	8/23/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-37	8/23/2018	Uranium, Dissolved	0.019	0.0025	0.00048	NA	mg/L
MKTF-37	8/23/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
MKTF-37	8/23/2018	Iron, Total	4.8	0.2	0.1	13822000	mg/L
MKTF-37	8/23/2018	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-37	8/23/2018	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
MKTF-37	8/23/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
MKTF-37	8/23/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-37	8/23/2018	Uranium, Total	0.019	0.0005	0.000068	30000	mg/L
MKTF-37	8/23/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-38	6/27/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
MKTF-38	6/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-38	6/27/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
MKTF-38	6/27/2019	Barium, Total	0.29	0.002	0.000648	2000000	mg/L
MKTF-38	6/27/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
MKTF-38	6/27/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
MKTF-38	6/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-38	6/27/2019	Chromium, Total	0.0024	0.006	0.001533	50000	mg/L
MKTF-38	6/27/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-38	6/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-38	6/27/2019	Iron, Total	4.1	0.1	0.043734	13822000	mg/L
MKTF-38	6/27/2019	Lead, Total	0.0047	0.0005	0.000055	15000	mg/L
MKTF-38	6/27/2019	Manganese, Total	2.5	0.01	0.00145	2017000	mg/L
MKTF-38	6/27/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	6/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-38	6/27/2019	Nickel, Total	0.0099	0.01	0.004009	372000	mg/L
MKTF-38	6/27/2019	Selenium, Total	0.0026	0.001	0.000478	50000	mg/L
MKTF-38	6/27/2019	Silver, Total	0.0072	0.005	0.001418	50000	mg/L
MKTF-38	6/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/27/2019	Uranium, Total	0.021	0.0005	0.000085	30000	mg/L
MKTF-38	6/27/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
MKTF-38	6/27/2019	Aluminum, Dissolved	0.019	0.02	0.002488	19913930	mg/L
MKTF-38	6/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-38	6/27/2019	Arsenic, Dissolved	0.0005	0.001	0.000101	10000	mg/L
MKTF-38	6/27/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
MKTF-38	6/27/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-38	6/27/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
MKTF-38	6/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-38	6/27/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-38	6/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-38	6/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-38	6/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-38	6/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-38	6/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	6/27/2019	Magnesium, Dissolved	35	1	0.05029	NA	mg/L
MKTF-38	6/27/2019	Manganese, Dissolved	2.3	0.01	0.00145	2017400	mg/L
MKTF-38	6/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-38	6/27/2019	Nickel, Dissolved	0.0063	0.01	0.004009	372000	mg/L
MKTF-38	6/27/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
MKTF-38	6/27/2019	Selenium, Dissolved	0.0022	0.001	0.000171	50000	mg/L
MKTF-38	6/27/2019	Silver, Dissolved	0.0027	0.005	0.000942	81200	mg/L
MKTF-38	6/27/2019	Sodium, Dissolved	340	5	2.080881	NA	mg/L
MKTF-38	6/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-38	6/27/2019	Uranium, Dissolved	0.02	0.0005	0.000075	NA	mg/L
MKTF-38	6/27/2019	Zinc, Dissolved	0.079	0.01	0.002252	5960450	mg/L
MKTF-38	9/19/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-38	9/19/2020	Arsenic, Total	0.0016	0.001	0.00026	10000	mg/L
MKTF-38	9/19/2020	Lead, Total	0.0044	0.0005	0.000034	15000	mg/L
MKTF-38	9/19/2020	Selenium, Total	0.0095	0.001	0.00066	50000	mg/L
MKTF-38	9/19/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-38	9/19/2020	Uranium, Total	0.024	0.0025	0.00033	30000	mg/L
MKTF-38	9/19/2020	Barium, Total	0.18	0.003	0.0016	2000000	mg/L
MKTF-38	9/19/2020	Beryllium, Total	0.00093	0.002	0.00088	4000	mg/L
MKTF-38	9/19/2020	Boron, Total	0.47	0.04	0.0074	3949	mg/L
MKTF-38	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	9/19/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-38	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-38	9/19/2020	Cobalt, Total	0.0028	0.006	0.0024	5980	mg/L
MKTF-38	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-38	9/19/2020	Nickel, Total	0.0059	0.01	0.0033	372000	mg/L
MKTF-38	9/19/2020	Silver, Total	0.0029	0.005	0.0013	50000	mg/L
MKTF-38	9/19/2020	Zinc, Total	0.034	0.01	0.0064	5960000	mg/L
MKTF-38	9/19/2020	Iron, Total	4.4	0.25	0.064	13822000	mg/L
MKTF-38	9/19/2020	Manganese, Total	1.3	0.01	0.0041	2017000	mg/L
MKTF-38	9/19/2020	Aluminum, Total	10	0.4	0.15	19914000	mg/L
MKTF-38	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-38	9/19/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-38	9/19/2020	Arsenic, Dissolved	0.00076	0.001	0.00021	10000	mg/L
MKTF-38	9/19/2020	Lead, Dissolved	0.00017	0.0025	0.00017	NA	mg/L
MKTF-38	9/19/2020	Selenium, Dissolved	0.0073	0.005	0.0033	50000	mg/L
MKTF-38	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-38	9/19/2020	Uranium, Dissolved	0.025	0.0025	0.00033	NA	mg/L
MKTF-38	9/19/2020	Calcium, Dissolved	230	5	0.57	NA	mg/L
MKTF-38	9/19/2020	Sodium, Dissolved	390	5	0.69	NA	mg/L
MKTF-38	9/19/2020	Aluminum, Dissolved	0.44	0.02	0.0056	19913930	mg/L
MKTF-38	9/19/2020	Barium, Dissolved	0.036	0.002	0.0011	2000000	mg/L
MKTF-38	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-38	9/19/2020	Boron, Dissolved	0.44	0.04	0.0067	3949110	mg/L
MKTF-38	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-38	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-38	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-38	9/19/2020	Iron, Dissolved	0.17	0.02	0.01	13821880	mg/L
MKTF-38	9/19/2020	Magnesium, Dissolved	44	1	0.067	NA	mg/L
MKTF-38	9/19/2020	Manganese, Dissolved	0.32	0.002	0.00058	2017400	mg/L
MKTF-38	9/19/2020	Nickel, Dissolved	0.0046	0.01	0.0033	372000	mg/L
MKTF-38	9/19/2020	Potassium, Dissolved	0.89	1	0.16	NA	mg/L
MKTF-38	9/19/2020	Silver, Dissolved	0.0028	0.005	0.0013	81200	mg/L
MKTF-38	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-38	9/19/2020	Zinc, Dissolved	0.0098	0.01	0.006	5960450	mg/L
MKTF-38	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-38	3/5/2020	Lead, Total	0.0039	0.0005	0.000055	15000	mg/L
MKTF-38	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-38	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-38	3/5/2020	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
MKTF-38	3/5/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-38	3/5/2020	Selenium, Total	0.0061	0.005	0.0024	50000	mg/L
MKTF-38	3/5/2020	Barium, Total	0.24	0.002	0.00065	2000000	mg/L
MKTF-38	3/5/2020	Beryllium, Total	0.00079	0.002	0.00028	4000	mg/L
MKTF-38	3/5/2020	Boron, Total	0.47	0.04	0.0045	3949	mg/L
MKTF-38	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-38	3/5/2020	Chromium, Total	0.0049	0.006	0.0015	50000	mg/L
MKTF-38	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-38	3/5/2020	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-38	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-38	3/5/2020	Nickel, Total	0.0086	0.01	0.004	372000	mg/L
MKTF-38	3/5/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
MKTF-38	3/5/2020	Zinc, Total	0.014	0.01	0.0058	5960000	mg/L
MKTF-38	3/5/2020	Iron, Total	3.8	0.1	0.044	13822000	mg/L
MKTF-38	3/5/2020	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
MKTF-38	3/5/2020	Aluminum, Total	11	0.4	0.05	19914000	mg/L
MKTF-38	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-38	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-38	3/5/2020	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
MKTF-38	3/5/2020	Arsenic, Dissolved	0.00046	0.001	0.0001	10000	mg/L
MKTF-38	3/5/2020	Selenium, Dissolved	0.0074	0.001	0.00017	50000	mg/L
MKTF-38	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-38	3/5/2020	Barium, Dissolved	0.014	0.002	0.00065	2000000	mg/L
MKTF-38	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-38	3/5/2020	Boron, Dissolved	0.36	0.04	0.0045	3949110	mg/L
MKTF-38	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-38	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-38	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-38	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-38	3/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-38	3/5/2020	Magnesium, Dissolved	27	1	0.05	NA	mg/L
MKTF-38	3/5/2020	Manganese, Dissolved	0.72	0.002	0.00029	2017400	mg/L
MKTF-38	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-38	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-38	3/5/2020	Potassium, Dissolved	0.42	1	0.16	NA	mg/L
MKTF-38	3/5/2020	Silver, Dissolved	0.0022	0.005	0.00094	81200	mg/L
MKTF-38	3/5/2020	Zinc, Dissolved	0.0047	0.01	0.0023	5960450	mg/L
MKTF-38	3/5/2020	Calcium, Dissolved	140	5	0.31	NA	mg/L
MKTF-38	3/5/2020	Sodium, Dissolved	300	5	2.1	NA	mg/L
MKTF-38	8/20/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-38	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-38	8/20/2019	Arsenic, Dissolved	0.00044	0.001	0.000101	10000	mg/L
MKTF-38	8/20/2019	Barium, Dissolved	0.027	0.002	0.000648	2000000	mg/L
MKTF-38	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-38	8/20/2019	Boron, Dissolved	0.53	0.2	0.022653	3949110	mg/L
MKTF-38	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-38	8/20/2019	Calcium, Dissolved	180	5	0.309446	NA	mg/L
MKTF-38	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-38	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-38	8/20/2019	Copper, Dissolved	0.0048	0.006	0.001296	790000	mg/L
MKTF-38	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-38	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-38	8/20/2019	Magnesium, Dissolved	32	1	0.05029	NA	mg/L
MKTF-38	8/20/2019	Manganese, Dissolved	2.4	0.01	0.00145	2017400	mg/L
MKTF-38	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-38	8/20/2019	Nickel, Dissolved	0.0076	0.01	0.004009	372000	mg/L
MKTF-38	8/20/2019	Potassium, Dissolved	0.45	1	0.162288	NA	mg/L
MKTF-38	8/20/2019	Selenium, Dissolved	0.0029	0.001	0.000171	50000	mg/L
MKTF-38	8/20/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
MKTF-38	8/20/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
MKTF-38	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	8/20/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
MKTF-38	8/20/2019	Zinc, Dissolved	0.0044	0.01	0.002252	5960450	mg/L
MKTF-38	8/20/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
MKTF-38	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-38	8/20/2019	Arsenic, Total	0.00068	0.001	0.000312	10000	mg/L
MKTF-38	8/20/2019	Barium, Total	0.069	0.002	0.000648	2000000	mg/L
MKTF-38	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-38	8/20/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-38	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-38	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-38	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-38	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-38	8/20/2019	Iron, Total	0.83	0.02	0.008747	13822000	mg/L
MKTF-38	8/20/2019	Lead, Total	0.00083	0.0005	0.000055	15000	mg/L
MKTF-38	8/20/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
MKTF-38	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	8/20/2019	Molybdenum, Total	0.0068	0.008	0.006735	98700	mg/L
MKTF-38	8/20/2019	Nickel, Total	0.0059	0.01	0.004009	372000	mg/L
MKTF-38	8/20/2019	Selenium, Total	0.0028	0.001	0.000478	50000	mg/L
MKTF-38	8/20/2019	Silver, Total	0.0028	0.005	0.001418	50000	mg/L
MKTF-38	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-38	8/20/2019	Uranium, Total	0.02	0.0025	0.000424	30000	mg/L
MKTF-38	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-38	3/16/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	3/16/2015	Arsenic, Total	0.0031	0.001	0.00044	10000	mg/L
MKTF-38	3/16/2015	Barium, Total	0.34	0.002	0.00073	2000000	mg/L
MKTF-38	3/16/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
MKTF-38	3/16/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	3/16/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	3/16/2015	Iron, Total	3.5	0.2	0.072	13822000	mg/L
MKTF-38	3/16/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	3/16/2015	Manganese, Total	3.1	0.01	0.0076	2017000	mg/L
MKTF-38	3/16/2015	Lead, Total	0.006	0.001	0.000069	15000	mg/L
MKTF-38	3/16/2015	Selenium, Total	0.0058	0.001	0.00012	50000	mg/L
MKTF-38	3/16/2015	Uranium, Total	0.029	0.001	0.0000081	30000	mg/L
MKTF-38	3/16/2015	Zinc, Total	0.014	0.01	0.0036	5960000	mg/L
MKTF-38	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-38	6/10/2015	Barium, Total	0.074	0.002	0.00095	2000000	mg/L
MKTF-38	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-38	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-38	6/10/2015	Iron, Total	0.31	0.02	0.0073	13822000	mg/L
MKTF-38	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	6/10/2015	Manganese, Total	3.1	0.01	0.0013	2017000	mg/L
MKTF-38	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-38	6/10/2015	Selenium, Total	ND	0.005	0.00097	50000	mg/L
MKTF-38	6/10/2015	Uranium, Total	0.021	0.005	0.000024	30000	mg/L
MKTF-38	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L
MKTF-38	8/24/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	8/24/2015	Arsenic, Total	0.0019	0.001	0.000065	10000	mg/L
MKTF-38	8/24/2015	Barium, Total	0.066	0.002	0.00095	2000000	mg/L
MKTF-38	8/24/2015	Calcium, Total	140	5	0.28	NA	mg/L
MKTF-38	8/24/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-38	8/24/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	8/24/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-38	8/24/2015	Iron, Total	0.094	0.02	0.0073	13822000	mg/L
MKTF-38	8/24/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	8/24/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-38	8/24/2015	Magnesium, Total	28	1	0.039	NA	mg/L
MKTF-38	8/24/2015	Manganese, Total	3	0.01	0.0013	2017000	mg/L
MKTF-38	8/24/2015	Sodium, Total	270	5	0.36	NA	mg/L
MKTF-38	8/24/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
MKTF-38	8/24/2015	Selenium, Total	0.0033	0.001	0.00019	50000	mg/L
MKTF-38	8/24/2015	Uranium, Total	0.023	0.0005	0.0000048	30000	mg/L
MKTF-38	8/24/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-38	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-38	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-38	11/9/2015	Barium, Total	0.066	0.002	0.0013	2000000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/9/2015	Calcium, Total	170	5	1.3	NA	mg/L
MKTF-38	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-38	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-38	11/9/2015	Iron, Total	0.22	0.02	0.0091	13822000	mg/L
MKTF-38	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-38	11/9/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-38	11/9/2015	Magnesium, Total	29	1	0.013	NA	mg/L
MKTF-38	11/9/2015	Manganese, Total	3.4	0.01	0.0016	2017000	mg/L
MKTF-38	11/9/2015	Sodium, Total	230	5	0.48	NA	mg/L
MKTF-38	11/9/2015	Lead, Total	0.001	0.0005	0.000026	15000	mg/L
MKTF-38	11/9/2015	Selenium, Total	ND	0.05	0.00097	50000	mg/L
MKTF-38	11/9/2015	Uranium, Total	0.019	0.0005	0.0000048	30000	mg/L
MKTF-38	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-38	2/29/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	2/29/2016	Arsenic, Total	0.0017	0.001	0.00029	10000	mg/L
MKTF-38	2/29/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-38	2/29/2016	Calcium, Total	150	5	1.3	NA	mg/L
MKTF-38	2/29/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-38	2/29/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	2/29/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	2/29/2016	Iron, Total	2.3	0.1	0.036	13822000	mg/L
MKTF-38	2/29/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	2/29/2016	Potassium, Total	ND	1	0.18	NA	mg/L
MKTF-38	2/29/2016	Magnesium, Total	31	1	0.013	NA	mg/L
MKTF-38	2/29/2016	Manganese, Total	2.7	0.01	0.0076	2017000	mg/L
MKTF-38	2/29/2016	Sodium, Total	210	5	0.48	NA	mg/L
MKTF-38	2/29/2016	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
MKTF-38	2/29/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-38	2/29/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-38	2/29/2016	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-38	6/8/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-38	6/8/2016	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
MKTF-38	6/8/2016	Barium, Total	0.23	0.002	0.0011	2000000	mg/L
MKTF-38	6/8/2016	Calcium, Total	160	5	1.3	NA	mg/L
MKTF-38	6/8/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-38	6/8/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-38	6/8/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-38	6/8/2016	Iron, Total	3	0.1	0.036	13822000	mg/L
MKTF-38	6/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	6/8/2016	Potassium, Total	0.54	1	0.18	NA	mg/L
MKTF-38	6/8/2016	Magnesium, Total	33	1	0.013	NA	mg/L
MKTF-38	6/8/2016	Manganese, Total	3.8	0.01	0.0076	2017000	mg/L
MKTF-38	6/8/2016	Sodium, Total	220	5	0.48	NA	mg/L
MKTF-38	6/8/2016	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
MKTF-38	6/8/2016	Selenium, Total	0.0051	0.005	0.00062	50000	mg/L
MKTF-38	6/8/2016	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
MKTF-38	6/8/2016	Zinc, Total	0.025	0.01	0.0039	5960000	mg/L
MKTF-38	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	9/13/2016	Arsenic, Total	0.0025	0.005	0.0011	10000	mg/L
MKTF-38	9/13/2016	Barium, Total	0.075	0.002	0.00079	2000000	mg/L
MKTF-38	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-38	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-38	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-38	9/13/2016	Arsenic, Dissolved	0.0018	0.005	0.00069	10000	mg/L
MKTF-38	9/13/2016	Barium, Dissolved	0.039	0.002	0.0013	2000000	mg/L
MKTF-38	9/13/2016	Calcium, Dissolved	160	5	2.5	NA	mg/L
MKTF-38	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-38	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-38	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-38	9/13/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-38	9/13/2016	Potassium, Dissolved	0.54	1	0.5	NA	mg/L
MKTF-38	9/13/2016	Magnesium, Dissolved	32	1	0.5	NA	mg/L
MKTF-38	9/13/2016	Manganese, Dissolved	3.1	0.01	0.0016	2017400	mg/L
MKTF-38	9/13/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
MKTF-38	9/13/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	9/13/2016	Selenium, Dissolved	0.0053	0.001	0.00021	50000	mg/L
MKTF-38	9/13/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	9/13/2016	Zinc, Dissolved	0.004	0.01	0.0028	5960450	mg/L
MKTF-38	9/13/2016	Iron, Total	0.61	0.02	0.02	13822000	mg/L
MKTF-38	9/13/2016	Mercury, Total	0.000065	0.0002	0.000053	2000	mg/L
MKTF-38	9/13/2016	Manganese, Total	3	0.01	0.0014	2017000	mg/L
MKTF-38	9/13/2016	Lead, Total	0.001	0.0005	0.000081	15000	mg/L
MKTF-38	9/13/2016	Selenium, Total	0.0047	0.005	0.00094	50000	mg/L
MKTF-38	9/13/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
MKTF-38	9/13/2016	Zinc, Total	0.0057	0.01	0.0027	5960000	mg/L
MKTF-38	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	11/1/2016	Arsenic, Total	0.0022	0.001	0.00021	10000	mg/L
MKTF-38	11/1/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-38	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-38	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-38	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-38	11/1/2016	Arsenic, Dissolved	0.0014	0.005	0.00069	10000	mg/L
MKTF-38	11/1/2016	Barium, Dissolved	0.044	0.002	0.0013	2000000	mg/L
MKTF-38	11/1/2016	Calcium, Dissolved	160	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-38	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-38	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-38	11/1/2016	Iron, Dissolved	0.038	0.02	0.02	13821880	mg/L
MKTF-38	11/1/2016	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Manganese, Dissolved	3.3	0.01	0.0016	2017400	mg/L
MKTF-38	11/1/2016	Sodium, Dissolved	230	1	0.5	NA	mg/L
MKTF-38	11/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	11/1/2016	Selenium, Dissolved	0.004	0.001	0.00021	50000	mg/L
MKTF-38	11/1/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
MKTF-38	11/1/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-38	11/1/2016	Iron, Total	1.7	0.1	0.1	13822000	mg/L
MKTF-38	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-38	11/1/2016	Manganese, Total	3.3	0.01	0.0014	2017000	mg/L
MKTF-38	11/1/2016	Lead, Total	0.0033	0.0005	0.000081	15000	mg/L
MKTF-38	11/1/2016	Selenium, Total	0.0035	0.005	0.00094	50000	mg/L
MKTF-38	11/1/2016	Uranium, Total	0.014	0.0005	0.00017	30000	mg/L
MKTF-38	11/1/2016	Zinc, Total	0.0069	0.01	0.0027	5960000	mg/L
MKTF-38	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-38	3/14/2017	Arsenic, Total	0.0022	0.001	0.00021	10000	mg/L
MKTF-38	3/14/2017	Barium, Total	0.31	0.002	0.00079	2000000	mg/L
MKTF-38	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-38	3/14/2017	Chromium, Total	0.0051	0.006	0.0027	50000	mg/L
MKTF-38	3/14/2017	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-38	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-38	3/14/2017	Arsenic, Dissolved	0.0011	0.005	0.00089	10000	mg/L
MKTF-38	3/14/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
MKTF-38	3/14/2017	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-38	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-38	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	3/14/2017	Iron, Dissolved	0.098	0.02	0.02	13821880	mg/L
MKTF-38	3/14/2017	Potassium, Dissolved	0.58	1	0.5	NA	mg/L
MKTF-38	3/14/2017	Magnesium, Dissolved	29	1	0.5	NA	mg/L
MKTF-38	3/14/2017	Manganese, Dissolved	2.6	0.01	0.0019	2017400	mg/L
MKTF-38	3/14/2017	Sodium, Dissolved	210	5	2.5	NA	mg/L
MKTF-38	3/14/2017	Lead, Dissolved	0.00031	0.0005	0.00017	NA	mg/L
MKTF-38	3/14/2017	Selenium, Dissolved	0.003	0.005	0.0019	50000	mg/L
MKTF-38	3/14/2017	Uranium, Dissolved	0.015	0.0005	0.00005	NA	mg/L
MKTF-38	3/14/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
MKTF-38	3/14/2017	Iron, Total	5.8	0.2	0.2	13822000	mg/L
MKTF-38	3/14/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	3/14/2017	Manganese, Total	2.9	0.02	0.0027	2017000	mg/L
MKTF-38	3/14/2017	Lead, Total	0.0072	0.0005	0.000081	15000	mg/L
MKTF-38	3/14/2017	Selenium, Total	0.0041	0.001	0.00019	50000	mg/L
MKTF-38	3/14/2017	Uranium, Total	0.017	0.0005	0.00017	30000	mg/L
MKTF-38	3/14/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-38	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-38	6/21/2017	Arsenic, Total	0.0023	0.001	0.0003	10000	mg/L
MKTF-38	6/21/2017	Barium, Total	0.36	0.002	0.00093	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	6/21/2017	Chromium, Total	0.0056	0.006	0.0011	50000	mg/L
MKTF-38	6/21/2017	Copper, Total	0.0067	0.006	0.0017	790000	mg/L
MKTF-38	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-38	6/21/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-38	6/21/2017	Barium, Dissolved	0.041	0.002	0.00085	2000000	mg/L
MKTF-38	6/21/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-38	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-38	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	6/21/2017	Iron, Dissolved	0.076	0.02	0.016	13821880	mg/L
MKTF-38	6/21/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
MKTF-38	6/21/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
MKTF-38	6/21/2017	Manganese, Dissolved	2.5	0.02	0.0038	2017400	mg/L
MKTF-38	6/21/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MKTF-38	6/21/2017	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-38	6/21/2017	Selenium, Dissolved	0.0043	0.001	0.00039	50000	mg/L
MKTF-38	6/21/2017	Uranium, Dissolved	0.024	0.0025	0.00025	NA	mg/L
MKTF-38	6/21/2017	Zinc, Dissolved	0.011	0.01	0.0011	5960450	mg/L
MKTF-38	6/21/2017	Iron, Total	6.6	0.2	0.1	13822000	mg/L
MKTF-38	6/21/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
MKTF-38	6/21/2017	Manganese, Total	2.7	0.02	0.011	2017000	mg/L
MKTF-38	6/21/2017	Lead, Total	0.0077	0.0025	0.00048	15000	mg/L
MKTF-38	6/21/2017	Selenium, Total	0.0032	0.001	0.00071	50000	mg/L
MKTF-38	6/21/2017	Uranium, Total	0.026	0.0025	0.00077	30000	mg/L
MKTF-38	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
MKTF-38	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-38	9/28/2017	Arsenic, Total	0.0025	0.001	0.0003	10000	mg/L
MKTF-38	9/28/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
MKTF-38	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	9/28/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
MKTF-38	9/28/2017	Copper, Total	0.0064	0.006	0.0017	790000	mg/L
MKTF-38	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	9/28/2017	Arsenic, Dissolved	0.0017	0.005	0.00089	10000	mg/L
MKTF-38	9/28/2017	Barium, Dissolved	0.03	0.002	0.00085	2000000	mg/L
MKTF-38	9/28/2017	Calcium, Dissolved	130	10	0.78	NA	mg/L
MKTF-38	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	9/28/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	9/28/2017	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MKTF-38	9/28/2017	Magnesium, Dissolved	28	1	0.25	NA	mg/L
MKTF-38	9/28/2017	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
MKTF-38	9/28/2017	Sodium, Dissolved	280	10	1.6	NA	mg/L
MKTF-38	9/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	9/28/2017	Selenium, Dissolved	0.0041	0.005	0.0019	50000	mg/L
MKTF-38	9/28/2017	Zinc, Dissolved	0.044	0.01	0.0021	5960450	mg/L
MKTF-38	9/28/2017	Iron, Total	3.5	0.2	0.1	13822000	mg/L
MKTF-38	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	9/28/2017	Manganese, Total	2.3	0.02	0.011	2017000	mg/L
MKTF-38	9/28/2017	Lead, Total	0.0039	0.0005	0.000095	15000	mg/L
MKTF-38	9/28/2017	Selenium, Total	0.0047	0.001	0.00071	50000	mg/L
MKTF-38	9/28/2017	Zinc, Total	0.01	0.01	0.0033	5960000	mg/L
MKTF-38	11/30/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
MKTF-38	11/30/2017	Arsenic, Total	0.00069	0.001	0.00041	10000	mg/L
MKTF-38	11/30/2017	Barium, Total	0.1	0.002	0.001	2000000	mg/L
MKTF-38	11/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	11/30/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/30/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	11/30/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	11/30/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-38	11/30/2017	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
MKTF-38	11/30/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
MKTF-38	11/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	11/30/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	11/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	11/30/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	11/30/2017	Potassium, Dissolved	0.51	1	0.11	NA	mg/L
MKTF-38	11/30/2017	Magnesium, Dissolved	26	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	11/30/2017	Manganese, Dissolved	1.8	0.01	0.002	2017400	mg/L
MKTF-38	11/30/2017	Sodium, Dissolved	290	5	0.82	NA	mg/L
MKTF-38	11/30/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	11/30/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-38	11/30/2017	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
MKTF-38	11/30/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-38	11/30/2017	Iron, Total	1.7	0.1	0.051	13822000	mg/L
MKTF-38	11/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-38	11/30/2017	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-38	11/30/2017	Lead, Total	0.0019	0.0005	0.00023	15000	mg/L
MKTF-38	11/30/2017	Selenium, Total	0.003	0.001	0.00098	50000	mg/L
MKTF-38	11/30/2017	Uranium, Total	0.027	0.005	0.0015	30000	mg/L
MKTF-38	11/30/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-38	2/12/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
MKTF-38	2/12/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
MKTF-38	2/12/2018	Barium, Total	0.21	0.002	0.001	2000000	mg/L
MKTF-38	2/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	2/12/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	2/12/2018	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
MKTF-38	2/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	2/12/2018	Arsenic, Dissolved	0.0039	0.005	0.0021	10000	mg/L
MKTF-38	2/12/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-38	2/12/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L
MKTF-38	2/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	2/12/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	2/12/2018	Copper, Dissolved	0.0034	0.006	0.0032	790000	mg/L
MKTF-38	2/12/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	2/12/2018	Potassium, Dissolved	0.49	1	0.11	NA	mg/L
MKTF-38	2/12/2018	Magnesium, Dissolved	25	1	0.25	NA	mg/L
MKTF-38	2/12/2018	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
MKTF-38	2/12/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MKTF-38	2/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	2/12/2018	Selenium, Dissolved	0.0075	0.005	0.0038	50000	mg/L
MKTF-38	2/12/2018	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
MKTF-38	2/12/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-38	2/12/2018	Iron, Total	2.9	0.1	0.051	13822000	mg/L
MKTF-38	2/12/2018	Mercury, Total	0.00017	0.0002	0.000037	2000	mg/L
MKTF-38	2/12/2018	Manganese, Total	1.8	0.01	0.0055	2017000	mg/L
MKTF-38	2/12/2018	Lead, Total	0.0036	0.0005	0.00023	15000	mg/L
MKTF-38	2/12/2018	Selenium, Total	0.0058	0.005	0.0049	50000	mg/L
MKTF-38	2/12/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
MKTF-38	2/12/2018	Zinc, Total	0.0089	0.01	0.0033	5960000	mg/L
MKTF-38	5/3/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
MKTF-38	5/3/2018	Arsenic, Total	0.0025	0.001	0.00041	10000	mg/L
MKTF-38	5/3/2018	Barium, Total	0.082	0.002	0.001	2000000	mg/L
MKTF-38	5/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	5/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	5/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	5/3/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
MKTF-38	5/3/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-38	5/3/2018	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
MKTF-38	5/3/2018	Calcium, Dissolved	160	5	0.39	NA	mg/L
MKTF-38	5/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	5/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	5/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	5/3/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	5/3/2018	Potassium, Dissolved	0.63	1	0.11	NA	mg/L
MKTF-38	5/3/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-38	5/3/2018	Manganese, Dissolved	2.5	0.01	0.002	2017400	mg/L
MKTF-38	5/3/2018	Sodium, Dissolved	310	5	0.82	NA	mg/L
MKTF-38	5/3/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	5/3/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-38	5/3/2018	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
MKTF-38	5/3/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
MKTF-38	5/3/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-38	5/3/2018	Mercury, Total	0.000045	0.0002	0.000037	2000	mg/L
MKTF-38	5/3/2018	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
MKTF-38	5/3/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
MKTF-38	5/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Uranium, Total	0.027	0.0025	0.00034	30000	mg/L
MKTF-38	5/3/2018	Zinc, Total	0.0058	0.01	0.0033	5960000	mg/L
MKTF-38	8/21/2018	Silver, Total	0.005	0.005	0.0012	50000	mg/L
MKTF-38	8/21/2018	Arsenic, Total	0.0029	0.001	0.00041	10000	mg/L
MKTF-38	8/21/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-38	8/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	8/21/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
MKTF-38	8/21/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	8/21/2018	Silver, Dissolved	0.004	0.005	0.0018	81200	mg/L
MKTF-38	8/21/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-38	8/21/2018	Barium, Dissolved	0.043	0.002	0.00099	2000000	mg/L
MKTF-38	8/21/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-38	8/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	8/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	8/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	8/21/2018	Iron, Dissolved	0.037	0.02	0.016	13821880	mg/L
MKTF-38	8/21/2018	Potassium, Dissolved	0.65	1	0.11	NA	mg/L
MKTF-38	8/21/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
MKTF-38	8/21/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
MKTF-38	8/21/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
MKTF-38	8/21/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-38	8/21/2018	Selenium, Dissolved	0.00076	0.001	0.00076	50000	mg/L
MKTF-38	8/21/2018	Uranium, Dissolved	0.027	0.0025	0.00048	NA	mg/L
MKTF-38	8/21/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-38	8/21/2018	Iron, Total	2.8	0.1	0.051	13822000	mg/L
MKTF-38	8/21/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
MKTF-38	8/21/2018	Manganese, Total	3	0.01	0.0055	2017000	mg/L
MKTF-38	8/21/2018	Lead, Total	0.0026	0.0005	0.00023	15000	mg/L
MKTF-38	8/21/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-38	8/21/2018	Uranium, Total	0.028	0.0025	0.00034	30000	mg/L
MKTF-38	8/21/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-38	11/20/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
MKTF-38	11/20/2018	Arsenic, Total	0.0015	0.001	0.00041	10000	mg/L
MKTF-38	11/20/2018	Barium, Total	0.063	0.002	0.001	2000000	mg/L
MKTF-38	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-38	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-38	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-38	11/20/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-38	11/20/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
MKTF-38	11/20/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
MKTF-38	11/20/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
MKTF-38	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-38	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-38	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-38	11/20/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-38	11/20/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
MKTF-38	11/20/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
MKTF-38	11/20/2018	Manganese, Dissolved	2.7	0.02	0.0039	2017400	mg/L
MKTF-38	11/20/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
MKTF-38	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-38	11/20/2018	Selenium, Dissolved	0.0017	0.001	0.00076	50000	mg/L
MKTF-38	11/20/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
MKTF-38	11/20/2018	Iron, Total	0.23	0.02	0.01	13822000	mg/L
MKTF-38	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-38	11/20/2018	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
MKTF-38	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-38	11/20/2018	Selenium, Total	0.0019	0.001	0.00098	50000	mg/L
MKTF-38	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-39	8/20/2019	Aluminum, Dissolved	0.05	0.02	0.002488	19913930	mg/L
MKTF-39	8/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	8/20/2019	Barium, Dissolved	43	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	8/20/2019	Calcium, Dissolved	1100	50	3.094457	NA	mg/L
MKTF-39	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Dissolved	0.0052	0.006	0.001296	790000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Iron, Dissolved	25	1	0.437344	13821880	mg/L
MKTF-39	8/20/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	8/20/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	8/20/2019	Manganese, Dissolved	9.6	0.1	0.014497	2017400	mg/L
MKTF-39	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Dissolved	0.0091	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	8/20/2019	Selenium, Dissolved	0.0013	0.005	0.000857	50000	mg/L
MKTF-39	8/20/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-39	8/20/2019	Sodium, Dissolved	4600	50	20.808815	NA	mg/L
MKTF-39	8/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	8/20/2019	Uranium, Dissolved	ND	0.0025	0.000374	NA	mg/L
MKTF-39	8/20/2019	Zinc, Dissolved	ND	0.01	0.002252	5960450	mg/L
MKTF-39	8/20/2019	Aluminum, Total	7.9	1	0.124414	19914000	mg/L
MKTF-39	8/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	8/20/2019	Barium, Total	48	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Total	0.56	0.2	0.022653	3949	mg/L
MKTF-39	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Total	0.0052	0.006	0.004072	790000	mg/L
MKTF-39	8/20/2019	Iron, Total	28	1	0.437344	13822000	mg/L
MKTF-39	8/20/2019	Lead, Total	0.0061	0.0025	0.000274	15000	mg/L
MKTF-39	8/20/2019	Manganese, Total	9.5	0.1	0.014497	2017000	mg/L
MKTF-39	8/20/2019	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
MKTF-39	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Total	0.012	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Selenium, Total	0.0029	0.005	0.00239	50000	mg/L
MKTF-39	8/20/2019	Silver, Total	0.012	0.005	0.001418	50000	mg/L
MKTF-39	8/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	8/20/2019	Uranium, Total	0.00091	0.0025	0.000424	30000	mg/L
MKTF-39	8/20/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
MKTF-39	8/20/2019	Aluminum, Dissolved	0.22	0.02	0.002488	19913930	mg/L
MKTF-39	8/20/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	8/20/2019	Barium, Dissolved	40	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	8/20/2019	Calcium, Dissolved	1000	50	3.094457	NA	mg/L
MKTF-39	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Dissolved	0.0072	0.006	0.001296	790000	mg/L
MKTF-39	8/20/2019	Iron, Dissolved	24	1	0.437344	13821880	mg/L
MKTF-39	8/20/2019	Lead, Dissolved	0.0005	0.0025	0.000274	NA	mg/L
MKTF-39	8/20/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	8/20/2019	Manganese, Dissolved	9.2	0.1	0.014497	2017400	mg/L
MKTF-39	8/20/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Dissolved	0.011	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	8/20/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-39	8/20/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-39	8/20/2019	Sodium, Dissolved	4400	50	20.808815	NA	mg/L
MKTF-39	8/20/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	8/20/2019	Uranium, Dissolved	0.00041	0.0025	0.000374	NA	mg/L
MKTF-39	8/20/2019	Zinc, Dissolved	0.0028	0.01	0.002252	5960450	mg/L
MKTF-39	8/20/2019	Aluminum, Total	3.3	0.1	0.012441	19914000	mg/L
MKTF-39	8/20/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	8/20/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	8/20/2019	Barium, Total	40	0.1	0.032419	2000000	mg/L
MKTF-39	8/20/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	8/20/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
MKTF-39	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-39	8/20/2019	Iron, Total	25	1	0.437344	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Lead, Total	0.0025	0.0025	0.000274	15000	mg/L
MKTF-39	8/20/2019	Manganese, Total	9.3	0.02	0.002899	2017000	mg/L
MKTF-39	8/20/2019	Mercury, Total	ND	0.001	0.000187	2000	mg/L
MKTF-39	8/20/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	8/20/2019	Nickel, Total	0.0086	0.01	0.004009	372000	mg/L
MKTF-39	8/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	8/20/2019	Silver, Total	0.013	0.005	0.001418	50000	mg/L
MKTF-39	8/20/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	8/20/2019	Uranium, Total	0.00063	0.0025	0.000424	30000	mg/L
MKTF-39	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-39	2/5/2020	Aluminum, Dissolved	0.024	0.02	0.0025	19913930	mg/L
MKTF-39	2/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-39	2/5/2020	Boron, Dissolved	0.46	0.04	0.0045	3949110	mg/L
MKTF-39	2/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-39	2/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-39	2/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-39	2/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-39	2/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-39	2/5/2020	Nickel, Dissolved	0.008	0.01	0.004	372000	mg/L
MKTF-39	2/5/2020	Potassium, Dissolved	12	1	0.16	NA	mg/L
MKTF-39	2/5/2020	Silver, Dissolved	0.012	0.005	0.00094	81200	mg/L
MKTF-39	2/5/2020	Zinc, Dissolved	0.008	0.01	0.0023	5960450	mg/L
MKTF-39	2/5/2020	Magnesium, Dissolved	220	5	0.25	NA	mg/L
MKTF-39	2/5/2020	Calcium, Dissolved	740	10	0.62	NA	mg/L
MKTF-39	2/5/2020	Manganese, Dissolved	6	0.02	0.0029	2017400	mg/L
MKTF-39	2/5/2020	Barium, Dissolved	43	0.1	0.032	2000000	mg/L
MKTF-39	2/5/2020	Iron, Dissolved	23	1	0.44	13821880	mg/L
MKTF-39	2/5/2020	Sodium, Dissolved	4200	50	21	NA	mg/L
MKTF-39	2/5/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-39	2/5/2020	Arsenic, Dissolved	0.00089	0.005	0.0005	10000	mg/L
MKTF-39	2/5/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-39	2/5/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-39	2/5/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-39	2/5/2020	Uranium, Dissolved	0.0049	0.0025	0.00037	NA	mg/L
MKTF-39	2/5/2020	Lead, Total	0.012	0.0025	0.00027	15000	mg/L
MKTF-39	2/5/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-39	2/5/2020	Uranium, Total	0.0066	0.0025	0.00042	30000	mg/L
MKTF-39	2/5/2020	Antimony, Total	ND	0.02	0.0078	6000	mg/L
MKTF-39	2/5/2020	Arsenic, Total	ND	0.02	0.0062	10000	mg/L
MKTF-39	2/5/2020	Selenium, Total	ND	0.02	0.0096	50000	mg/L
MKTF-39	2/5/2020	Beryllium, Total	0.0016	0.002	0.00028	4000	mg/L
MKTF-39	2/5/2020	Boron, Total	0.46	0.04	0.0045	3949	mg/L
MKTF-39	2/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-39	2/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-39	2/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-39	2/5/2020	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-39	2/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-39	2/5/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-39	2/5/2020	Silver, Total	0.011	0.005	0.0014	50000	mg/L
MKTF-39	2/5/2020	Zinc, Total	0.022	0.01	0.0058	5960000	mg/L
MKTF-39	2/5/2020	Manganese, Total	6.7	0.02	0.0029	2017000	mg/L
MKTF-39	2/5/2020	Aluminum, Total	18	1	0.12	19914000	mg/L
MKTF-39	2/5/2020	Iron, Total	33	1	0.44	13822000	mg/L
MKTF-39	2/5/2020	Barium, Total	55	0.2	0.065	2000000	mg/L
MKTF-39	2/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-39	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-39	9/19/2020	Arsenic, Total	ND	0.005	0.0013	10000	mg/L
MKTF-39	9/19/2020	Lead, Total	0.0025	0.0025	0.00017	15000	mg/L
MKTF-39	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-39	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-39	9/19/2020	Uranium, Total	0.004	0.0025	0.00033	30000	mg/L
MKTF-39	9/19/2020	Beryllium, Total	0.0013	0.002	0.00088	4000	mg/L
MKTF-39	9/19/2020	Boron, Total	0.58	0.04	0.0074	3949	mg/L
MKTF-39	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	9/19/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-39	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-39	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-39	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-39	9/19/2020	Nickel, Total	0.011	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/19/2020	Silver, Total	0.0058	0.005	0.0013	50000	mg/L
MKTF-39	9/19/2020	Zinc, Total	0.01	0.01	0.0064	5960000	mg/L
MKTF-39	9/19/2020	Aluminum, Total	4.8	0.2	0.074	19914000	mg/L
MKTF-39	9/19/2020	Manganese, Total	4.5	0.02	0.0081	2017000	mg/L
MKTF-39	9/19/2020	Barium, Total	38	0.15	0.082	2000000	mg/L
MKTF-39	9/19/2020	Iron, Total	29	2.5	0.64	13822000	mg/L
MKTF-39	9/19/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
MKTF-39	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-39	9/19/2020	Arsenic, Dissolved	0.0016	0.005	0.001	10000	mg/L
MKTF-39	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-39	9/19/2020	Lead, Dissolved	0.00024	0.0025	0.00017	NA	mg/L
MKTF-39	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-39	9/19/2020	Uranium, Dissolved	0.0047	0.0025	0.00033	NA	mg/L
MKTF-39	9/19/2020	Magnesium, Dissolved	160	5	0.34	NA	mg/L
MKTF-39	9/19/2020	Manganese, Dissolved	4.1	0.01	0.0029	2017400	mg/L
MKTF-39	9/19/2020	Barium, Dissolved	38	0.1	0.056	2000000	mg/L
MKTF-39	9/19/2020	Calcium, Dissolved	530	50	5.7	NA	mg/L
MKTF-39	9/19/2020	Iron, Dissolved	25	1	0.52	13821880	mg/L
MKTF-39	9/19/2020	Sodium, Dissolved	3200	50	6.9	NA	mg/L
MKTF-39	9/19/2020	Aluminum, Dissolved	0.065	0.02	0.0056	19913930	mg/L
MKTF-39	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-39	9/19/2020	Boron, Dissolved	0.56	0.04	0.0067	3949110	mg/L
MKTF-39	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-39	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-39	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-39	9/19/2020	Nickel, Dissolved	0.0082	0.01	0.0033	372000	mg/L
MKTF-39	9/19/2020	Potassium, Dissolved	13	1	0.16	NA	mg/L
MKTF-39	9/19/2020	Silver, Dissolved	0.0051	0.005	0.0013	81200	mg/L
MKTF-39	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-39	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-39	9/19/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
MKTF-39	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-39	12/16/2020	Aluminum, Total	13.5	0.2	0.051	19914000	mg/L
MKTF-39	12/16/2020	Boron, Total	0.467	0.1	0.022	3949	mg/L
MKTF-39	12/16/2020	Barium, Total	30.4	0.01	0.003	2000000	mg/L
MKTF-39	12/16/2020	Potassium, Total	18.2	1	0.34	NA	mg/L
MKTF-39	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-39	12/16/2020	Magnesium, Total	162	0.5	0.12	NA	mg/L
MKTF-39	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-39	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-39	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-39	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-39	12/16/2020	Iron, Total	28.5	0.2	0.075	13822000	mg/L
MKTF-39	12/16/2020	Manganese, Total	5.51	0.01	0.003	2017000	mg/L
MKTF-39	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-39	12/16/2020	Nickel, Total	0.0154	0.006	0.003	372000	mg/L
MKTF-39	12/16/2020	Zinc, Total	0.0215	0.02	0.008	5960000	mg/L
MKTF-39	12/16/2020	Aluminum, Dissolved	19	0.2	0.051	19913930	mg/L
MKTF-39	12/16/2020	Barium, Dissolved	36.1	0.01	0.003	2000000	mg/L
MKTF-39	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-39	12/16/2020	Boron, Dissolved	0.491	0.1	0.022	3949110	mg/L
MKTF-39	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-39	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-39	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-39	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-39	12/16/2020	Iron, Dissolved	32.9	0.2	0.075	13821880	mg/L
MKTF-39	12/16/2020	Manganese, Dissolved	4.74	0.01	0.003	2017400	mg/L
MKTF-39	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-39	12/16/2020	Nickel, Dissolved	0.0166	0.006	0.003	372000	mg/L
MKTF-39	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-39	12/16/2020	Zinc, Dissolved	0.0265	0.02	0.008	5960450	mg/L
MKTF-39	12/16/2020	Calcium, Total	601	5	0.84	NA	mg/L
MKTF-39	12/16/2020	Sodium, Total	2740	20	9.2	NA	mg/L
MKTF-39	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-39	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-39	12/16/2020	Arsenic, Total Recoverable	1.92	1	0.286	10	ug/L
MKTF-39	12/16/2020	Lead, Total Recoverable	11.4	1	0.133	15	ug/L
MKTF-39	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-39	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-39	12/16/2020	Lead, Dissolved	1.64	1	0.133	NA	ug/L
MKTF-39	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-39	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-39	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-39	12/16/2020	Selenium, Total Recoverable	ND	10	2.86	50	ug/L
MKTF-39	12/16/2020	Arsenic, Dissolved	ND	2	0.572	10	ug/L
MKTF-39	12/16/2020	Selenium, Dissolved	ND	10	2.86	50	ug/L
MKTF-39	6/5/2019	Aluminum, Total	4.9	0.4	0.049765	19914000	mg/L
MKTF-39	6/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	6/5/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-39	6/5/2019	Barium, Total	11	0.04	0.012968	2000000	mg/L
MKTF-39	6/5/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	6/5/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
MKTF-39	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	6/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-39	6/5/2019	Iron, Total	27	1	0.437344	13822000	mg/L
MKTF-39	6/5/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-39	6/5/2019	Manganese, Total	10	0.04	0.005799	2017000	mg/L
MKTF-39	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	6/5/2019	Nickel, Total	0.007	0.01	0.004009	372000	mg/L
MKTF-39	6/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	6/5/2019	Silver, Total	0.0097	0.005	0.001418	50000	mg/L
MKTF-39	6/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	6/5/2019	Uranium, Total	0.00084	0.0025	0.000424	30000	mg/L
MKTF-39	6/5/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-39	6/5/2019	Aluminum, Dissolved	0.061	0.02	0.002488	19913930	mg/L
MKTF-39	6/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	6/5/2019	Arsenic, Dissolved	ND	0.005	0.000504	10000	mg/L
MKTF-39	6/5/2019	Barium, Dissolved	1.6	0.01	0.003242	2000000	mg/L
MKTF-39	6/5/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
MKTF-39	6/5/2019	Boron, Dissolved	0.48	0.04	0.004531	3949110	mg/L
MKTF-39	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	6/5/2019	Calcium, Dissolved	1000	20	1.237783	NA	mg/L
MKTF-39	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	6/5/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
MKTF-39	6/5/2019	Iron, Dissolved	27	1	0.437344	13821880	mg/L
MKTF-39	6/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	6/5/2019	Magnesium, Dissolved	300	5	0.251452	NA	mg/L
MKTF-39	6/5/2019	Manganese, Dissolved	10	0.04	0.005799	2017400	mg/L
MKTF-39	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	6/5/2019	Nickel, Dissolved	0.0045	0.01	0.004009	372000	mg/L
MKTF-39	6/5/2019	Potassium, Dissolved	13	1	0.162288	NA	mg/L
MKTF-39	6/5/2019	Selenium, Dissolved	0.0012	0.005	0.000857	50000	mg/L
MKTF-39	6/5/2019	Silver, Dissolved	0.01	0.005	0.000942	81200	mg/L
MKTF-39	6/5/2019	Sodium, Dissolved	4300	50	20.808815	NA	mg/L
MKTF-39	6/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	6/5/2019	Uranium, Dissolved	0.00048	0.0025	0.000374	NA	mg/L
MKTF-39	6/5/2019	Zinc, Dissolved	0.0067	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Dissolved	0.048	0.02	0.002488	19913930	mg/L
MKTF-39	11/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
MKTF-39	11/5/2019	Barium, Dissolved	55	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	11/5/2019	Calcium, Dissolved	830	10	0.618891	NA	mg/L
MKTF-39	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-39	11/5/2019	Iron, Dissolved	29	2	0.874687	13821880	mg/L
MKTF-39	11/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	11/5/2019	Magnesium, Dissolved	260	10	0.502904	NA	mg/L
MKTF-39	11/5/2019	Manganese, Dissolved	6.8	0.02	0.002899	2017400	mg/L
MKTF-39	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	11/5/2019	Selenium, Dissolved	0.0027	0.005	0.000857	50000	mg/L
MKTF-39	11/5/2019	Silver, Dissolved	0.014	0.005	0.000942	81200	mg/L
MKTF-39	11/5/2019	Sodium, Dissolved	4400	100	41.61763	NA	mg/L
MKTF-39	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	11/5/2019	Uranium, Dissolved	0.0046	0.0025	0.000374	NA	mg/L
MKTF-39	11/5/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Total	20	2	0.248827	19914000	mg/L
MKTF-39	11/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Total	0.0021	0.005	0.001561	10000	mg/L
MKTF-39	11/5/2019	Barium, Total	52	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Total	0.0015	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Total	0.57	0.2	0.022653	3949	mg/L
MKTF-39	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
MKTF-39	11/5/2019	Iron, Total	32	2	0.874687	13822000	mg/L
MKTF-39	11/5/2019	Lead, Total	0.013	0.0025	0.000274	15000	mg/L
MKTF-39	11/5/2019	Manganese, Total	6.7	0.02	0.002899	2017000	mg/L
MKTF-39	11/5/2019	Mercury, Total	0.000085	0.0002	0.000038	2000	mg/L
MKTF-39	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Total	0.018	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Selenium, Total	0.0041	0.005	0.00239	50000	mg/L
MKTF-39	11/5/2019	Silver, Total	0.01	0.005	0.001418	50000	mg/L
MKTF-39	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	11/5/2019	Uranium, Total	0.0043	0.0025	0.000424	30000	mg/L
MKTF-39	11/5/2019	Zinc, Total	0.025	0.01	0.005772	5960000	mg/L
MKTF-39	11/5/2019	Aluminum, Dissolved	0.085	0.02	0.002488	19913930	mg/L
MKTF-39	11/5/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Dissolved	0.0016	0.005	0.000504	10000	mg/L
MKTF-39	11/5/2019	Barium, Dissolved	55	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
MKTF-39	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-39	11/5/2019	Calcium, Dissolved	820	10	0.618891	NA	mg/L
MKTF-39	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-39	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-39	11/5/2019	Iron, Dissolved	28	2	0.874687	13821880	mg/L
MKTF-39	11/5/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-39	11/5/2019	Magnesium, Dissolved	260	10	0.502904	NA	mg/L
MKTF-39	11/5/2019	Manganese, Dissolved	6.9	0.02	0.002899	2017400	mg/L
MKTF-39	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
MKTF-39	11/5/2019	Potassium, Dissolved	14	1	0.162288	NA	mg/L
MKTF-39	11/5/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-39	11/5/2019	Silver, Dissolved	0.015	0.005	0.000942	81200	mg/L
MKTF-39	11/5/2019	Sodium, Dissolved	4500	100	41.61763	NA	mg/L
MKTF-39	11/5/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-39	11/5/2019	Uranium, Dissolved	0.0047	0.0025	0.000374	NA	mg/L
MKTF-39	11/5/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
MKTF-39	11/5/2019	Aluminum, Total	15	2	0.248827	19914000	mg/L
MKTF-39	11/5/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-39	11/5/2019	Arsenic, Total	0.0018	0.005	0.001561	10000	mg/L
MKTF-39	11/5/2019	Barium, Total	52	0.2	0.064838	2000000	mg/L
MKTF-39	11/5/2019	Beryllium, Total	0.0011	0.002	0.000284	4000	mg/L
MKTF-39	11/5/2019	Boron, Total	0.56	0.2	0.022653	3949	mg/L
MKTF-39	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-39	11/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-39	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-39	11/5/2019	Copper, Total	0.0095	0.006	0.004072	790000	mg/L
MKTF-39	11/5/2019	Iron, Total	30	2	0.874687	13822000	mg/L
MKTF-39	11/5/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
MKTF-39	11/5/2019	Manganese, Total	6.5	0.02	0.002899	2017000	mg/L
MKTF-39	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-39	11/5/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/5/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-39	11/5/2019	Silver, Total	0.0094	0.005	0.001418	50000	mg/L
MKTF-39	11/5/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-39	11/5/2019	Uranium, Total	0.0041	0.0025	0.000424	30000	mg/L
MKTF-39	11/5/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
MKTF-39	3/16/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-39	3/16/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
MKTF-39	3/16/2015	Barium, Total	35	0.2	0.073	2000000	mg/L
MKTF-39	3/16/2015	Cadmium, Total	ND	0.01	0.0028	5000	mg/L
MKTF-39	3/16/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-39	3/16/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-39	3/16/2015	Iron, Total	50	2	0.72	13822000	mg/L
MKTF-39	3/16/2015	Mercury, Total	0.00021	0.0002	0.000059	2000	mg/L
MKTF-39	3/16/2015	Manganese, Total	8.6	0.02	0.015	2017000	mg/L
MKTF-39	3/16/2015	Lead, Total	0.034	0.01	0.00069	15000	mg/L
MKTF-39	3/16/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	3/16/2015	Uranium, Total	0.012	0.01	0.000081	30000	mg/L
MKTF-39	3/16/2015	Zinc, Total	0.059	0.05	0.018	5960000	mg/L
MKTF-39	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	6/10/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-39	6/10/2015	Barium, Total	67	0.2	0.095	2000000	mg/L
MKTF-39	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-39	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-39	6/10/2015	Iron, Total	60	2	0.73	13822000	mg/L
MKTF-39	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-39	6/10/2015	Manganese, Total	8.8	0.02	0.0027	2017000	mg/L
MKTF-39	6/10/2015	Lead, Total	ND	0.01	0.00026	15000	mg/L
MKTF-39	6/10/2015	Selenium, Total	ND	0.01	0.0019	50000	mg/L
MKTF-39	6/10/2015	Uranium, Total	ND	0.01	0.000048	30000	mg/L
MKTF-39	6/10/2015	Zinc, Total	0.012	0.01	0.0028	5960000	mg/L
MKTF-39	8/23/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	8/23/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-39	8/23/2015	Barium, Total	49	0.2	0.11	2000000	mg/L
MKTF-39	8/23/2015	Calcium, Total	680	10	0.57	NA	mg/L
MKTF-39	8/23/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	8/23/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	8/23/2015	Copper, Total	0.019	0.006	0.0051	790000	mg/L
MKTF-39	8/23/2015	Iron, Total	57	2	0.72	13822000	mg/L
MKTF-39	8/23/2015	Mercury, Total	0.00027	0.0002	0.000059	2000	mg/L
MKTF-39	8/23/2015	Potassium, Total	12	1	0.18	NA	mg/L
MKTF-39	8/23/2015	Magnesium, Total	220	5	0.2	NA	mg/L
MKTF-39	8/23/2015	Manganese, Total	6.8	0.02	0.015	2017000	mg/L
MKTF-39	8/23/2015	Sodium, Total	4600	100	7.2	NA	mg/L
MKTF-39	8/23/2015	Lead, Total	0.034	0.0025	0.00024	15000	mg/L
MKTF-39	8/23/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	8/23/2015	Uranium, Total	0.0035	0.0025	0.000025	30000	mg/L
MKTF-39	8/23/2015	Zinc, Total	0.062	0.01	0.0039	5960000	mg/L
MKTF-39	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-39	11/9/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-39	11/9/2015	Barium, Total	30	0.1	0.066	2000000	mg/L
MKTF-39	11/9/2015	Calcium, Total	470	5	1.3	NA	mg/L
MKTF-39	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-39	11/9/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-39	11/9/2015	Iron, Total	29	1	0.45	13822000	mg/L
MKTF-39	11/9/2015	Mercury, Total	0.00028	0.0002	0.000059	2000	mg/L
MKTF-39	11/9/2015	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-39	11/9/2015	Magnesium, Total	130	5	0.065	NA	mg/L
MKTF-39	11/9/2015	Manganese, Total	3.9	0.01	0.0016	2017000	mg/L
MKTF-39	11/9/2015	Sodium, Total	3400	50	4.8	NA	mg/L
MKTF-39	11/9/2015	Lead, Total	ND	0.005	0.00026	15000	mg/L
MKTF-39	11/9/2015	Selenium, Total	ND	0.02	0.0039	50000	mg/L
MKTF-39	11/9/2015	Uranium, Total	ND	0.005	0.000048	30000	mg/L
MKTF-39	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-39	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	3/3/2016	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-39	3/3/2016	Barium, Total	11	0.04	0.021	2000000	mg/L
MKTF-39	3/3/2016	Calcium, Total	160	5	1.3	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-39	3/3/2016	Iron, Total	13	0.4	0.14	13822000	mg/L
MKTF-39	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-39	3/3/2016	Potassium, Total	7.2	1	0.18	NA	mg/L
MKTF-39	3/3/2016	Magnesium, Total	54	1	0.013	NA	mg/L
MKTF-39	3/3/2016	Manganese, Total	1.9	0.04	0.03	2017000	mg/L
MKTF-39	3/3/2016	Sodium, Total	2100	50	4.8	NA	mg/L
MKTF-39	3/3/2016	Lead, Total	0.01	0.0025	0.00024	15000	mg/L
MKTF-39	3/3/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-39	3/3/2016	Uranium, Total	ND	0.0025	0.000025	30000	mg/L
MKTF-39	3/3/2016	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
MKTF-39	6/8/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-39	6/8/2016	Arsenic, Total	0.0024	0.001	0.00029	10000	mg/L
MKTF-39	6/8/2016	Barium, Total	8.5	0.04	0.021	2000000	mg/L
MKTF-39	6/8/2016	Calcium, Total	110	5	1.3	NA	mg/L
MKTF-39	6/8/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-39	6/8/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-39	6/8/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-39	6/8/2016	Iron, Total	12	0.4	0.14	13822000	mg/L
MKTF-39	6/8/2016	Mercury, Total	0.000061	0.0002	0.000053	2000	mg/L
MKTF-39	6/8/2016	Potassium, Total	6.1	1	0.18	NA	mg/L
MKTF-39	6/8/2016	Magnesium, Total	37	1	0.013	NA	mg/L
MKTF-39	6/8/2016	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
MKTF-39	6/8/2016	Sodium, Total	1500	20	1.9	NA	mg/L
MKTF-39	6/8/2016	Lead, Total	0.012	0.0005	0.000047	15000	mg/L
MKTF-39	6/8/2016	Selenium, Total	0.0069	0.01	0.0012	50000	mg/L
MKTF-39	6/8/2016	Uranium, Total	0.00092	0.0005	0.0000049	30000	mg/L
MKTF-39	6/8/2016	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
MKTF-39	9/13/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	9/13/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-39	9/13/2016	Barium, Total	9.7	0.04	0.016	2000000	mg/L
MKTF-39	9/13/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	9/13/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-39	9/13/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-39	9/13/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-39	9/13/2016	Arsenic, Dissolved	0.0047	0.005	0.00069	10000	mg/L
MKTF-39	9/13/2016	Barium, Dissolved	8.9	0.04	0.026	2000000	mg/L
MKTF-39	9/13/2016	Calcium, Dissolved	140	5	2.5	NA	mg/L
MKTF-39	9/13/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-39	9/13/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-39	9/13/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-39	9/13/2016	Iron, Dissolved	9.6	0.4	0.4	13821880	mg/L
MKTF-39	9/13/2016	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-39	9/13/2016	Magnesium, Dissolved	46	1	0.5	NA	mg/L
MKTF-39	9/13/2016	Manganese, Dissolved	1.7	0.01	0.0016	2017400	mg/L
MKTF-39	9/13/2016	Sodium, Dissolved	1300	20	10	NA	mg/L
MKTF-39	9/13/2016	Lead, Dissolved	0.00038	0.0005	0.00017	NA	mg/L
MKTF-39	9/13/2016	Selenium, Dissolved	0.016	0.005	0.0011	50000	mg/L
MKTF-39	9/13/2016	Uranium, Dissolved	0.000071	0.0005	0.000051	NA	mg/L
MKTF-39	9/13/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-39	9/13/2016	Iron, Total	12	0.4	0.4	13822000	mg/L
MKTF-39	9/13/2016	Mercury, Total	0.000074	0.0002	0.000053	2000	mg/L
MKTF-39	9/13/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
MKTF-39	9/13/2016	Lead, Total	0.0074	0.0005	0.000081	15000	mg/L
MKTF-39	9/13/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
MKTF-39	9/13/2016	Uranium, Total	0.00048	0.0005	0.00017	30000	mg/L
MKTF-39	9/13/2016	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
MKTF-39	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	11/1/2016	Arsenic, Total	0.0037	0.005	0.0011	10000	mg/L
MKTF-39	11/1/2016	Barium, Total	6.1	0.02	0.0079	2000000	mg/L
MKTF-39	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	11/1/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-39	11/1/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-39	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-39	11/1/2016	Arsenic, Dissolved	0.0036	0.005	0.00069	10000	mg/L
MKTF-39	11/1/2016	Barium, Dissolved	6	0.002	0.0013	2000000	mg/L
MKTF-39	11/1/2016	Calcium, Dissolved	91	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-39	11/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-39	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-39	11/1/2016	Iron, Dissolved	6.9	0.02	0.02	13821880	mg/L
MKTF-39	11/1/2016	Potassium, Dissolved	5.6	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Magnesium, Dissolved	31	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Manganese, Dissolved	1.2	0.01	0.0016	2017400	mg/L
MKTF-39	11/1/2016	Sodium, Dissolved	1100	1	0.5	NA	mg/L
MKTF-39	11/1/2016	Lead, Dissolved	0.00045	0.0005	0.00017	NA	mg/L
MKTF-39	11/1/2016	Selenium, Dissolved	0.01	0.005	0.0011	50000	mg/L
MKTF-39	11/1/2016	Uranium, Dissolved	0.000078	0.0005	0.000051	NA	mg/L
MKTF-39	11/1/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-39	11/1/2016	Iron, Total	8.7	0.2	0.2	13822000	mg/L
MKTF-39	11/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-39	11/1/2016	Manganese, Total	1.3	0.02	0.0027	2017000	mg/L
MKTF-39	11/1/2016	Lead, Total	0.0046	0.0025	0.00041	15000	mg/L
MKTF-39	11/1/2016	Selenium, Total	0.0084	0.01	0.0019	50000	mg/L
MKTF-39	11/1/2016	Uranium, Total	ND	0.0025	0.00087	30000	mg/L
MKTF-39	11/1/2016	Zinc, Total	0.0093	0.01	0.0027	5960000	mg/L
MKTF-39	3/14/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-39	3/14/2017	Arsenic, Total	0.0058	0.01	0.0021	10000	mg/L
MKTF-39	3/14/2017	Barium, Total	6.4	0.04	0.016	2000000	mg/L
MKTF-39	3/14/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-39	3/14/2017	Chromium, Total	0.004	0.006	0.0027	50000	mg/L
MKTF-39	3/14/2017	Copper, Total	0.0089	0.006	0.003	790000	mg/L
MKTF-39	3/14/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-39	3/14/2017	Arsenic, Dissolved	0.0032	0.005	0.00089	10000	mg/L
MKTF-39	3/14/2017	Barium, Dissolved	5.6	0.02	0.0085	2000000	mg/L
MKTF-39	3/14/2017	Calcium, Dissolved	89	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	3/14/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-39	3/14/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	3/14/2017	Iron, Dissolved	6.3	0.2	0.2	13821880	mg/L
MKTF-39	3/14/2017	Potassium, Dissolved	4.7	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Magnesium, Dissolved	30	1	0.5	NA	mg/L
MKTF-39	3/14/2017	Manganese, Dissolved	1.2	0.004	0.00077	2017400	mg/L
MKTF-39	3/14/2017	Sodium, Dissolved	780	10	5	NA	mg/L
MKTF-39	3/14/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
MKTF-39	3/14/2017	Selenium, Dissolved	0.0088	0.005	0.0019	50000	mg/L
MKTF-39	3/14/2017	Uranium, Dissolved	0.000079	0.0005	0.00005	NA	mg/L
MKTF-39	3/14/2017	Zinc, Dissolved	0.022	0.01	0.0011	5960450	mg/L
MKTF-39	3/14/2017	Iron, Total	11	0.4	0.4	13822000	mg/L
MKTF-39	3/14/2017	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-39	3/14/2017	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
MKTF-39	3/14/2017	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
MKTF-39	3/14/2017	Selenium, Total	ND	0.05	0.0094	50000	mg/L
MKTF-39	3/14/2017	Uranium, Total	0.0011	0.0025	0.00087	30000	mg/L
MKTF-39	3/14/2017	Zinc, Total	0.022	0.01	0.0027	5960000	mg/L
MKTF-39	6/8/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-39	6/8/2017	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
MKTF-39	6/8/2017	Barium, Total	6.7	0.02	0.0093	2000000	mg/L
MKTF-39	6/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	6/8/2017	Chromium, Total	0.0043	0.006	0.0011	50000	mg/L
MKTF-39	6/8/2017	Copper, Total	0.0085	0.006	0.0017	790000	mg/L
MKTF-39	6/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-39	6/8/2017	Arsenic, Dissolved	0.0051	0.02	0.0035	10000	mg/L
MKTF-39	6/8/2017	Barium, Dissolved	6.7	0.02	0.0085	2000000	mg/L
MKTF-39	6/8/2017	Calcium, Dissolved	99	1	0.078	NA	mg/L
MKTF-39	6/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	6/8/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-39	6/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	6/8/2017	Iron, Dissolved	7.3	0.2	0.16	13821880	mg/L
MKTF-39	6/8/2017	Potassium, Dissolved	5.1	1	0.11	NA	mg/L
MKTF-39	6/8/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
MKTF-39	6/8/2017	Manganese, Dissolved	1.3	0.02	0.0038	2017400	mg/L
MKTF-39	6/8/2017	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-39	6/8/2017	Lead, Dissolved	0.00087	0.0005	0.00017	NA	mg/L
MKTF-39	6/8/2017	Selenium, Dissolved	0.016	0.005	0.0019	50000	mg/L
MKTF-39	6/8/2017	Uranium, Dissolved	0.00013	0.0005	0.00005	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	6/8/2017	Zinc, Dissolved	0.084	0.01	0.0011	5960450	mg/L
MKTF-39	6/8/2017	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	6/8/2017	Mercury, Total	0.0001	0.0002	0.000037	2000	mg/L
MKTF-39	6/8/2017	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-39	6/8/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
MKTF-39	6/8/2017	Selenium, Total	0.0098	0.005	0.0036	50000	mg/L
MKTF-39	6/8/2017	Uranium, Total	0.00067	0.0005	0.00015	30000	mg/L
MKTF-39	6/8/2017	Zinc, Total	0.02	0.01	0.0028	5960000	mg/L
MKTF-39	9/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	9/28/2017	Arsenic, Total	0.0046	0.005	0.0015	10000	mg/L
MKTF-39	9/28/2017	Barium, Total	35	0.1	0.047	2000000	mg/L
MKTF-39	9/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	9/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	9/28/2017	Copper, Total	0.0021	0.006	0.0017	790000	mg/L
MKTF-39	9/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-39	9/28/2017	Arsenic, Dissolved	0.0042	0.005	0.00089	10000	mg/L
MKTF-39	9/28/2017	Barium, Dissolved	34	0.1	0.043	2000000	mg/L
MKTF-39	9/28/2017	Calcium, Dissolved	450	10	0.78	NA	mg/L
MKTF-39	9/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	9/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	9/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	9/28/2017	Iron, Dissolved	31	1	0.82	13821880	mg/L
MKTF-39	9/28/2017	Potassium, Dissolved	11	1	0.11	NA	mg/L
MKTF-39	9/28/2017	Magnesium, Dissolved	180	10	2.5	NA	mg/L
MKTF-39	9/28/2017	Manganese, Dissolved	5.2	0.02	0.0039	2017400	mg/L
MKTF-39	9/28/2017	Sodium, Dissolved	1800	50	8.2	NA	mg/L
MKTF-39	9/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-39	9/28/2017	Selenium, Dissolved	0.013	0.005	0.0019	50000	mg/L
MKTF-39	9/28/2017	Zinc, Dissolved	0.034	0.1	0.021	5960450	mg/L
MKTF-39	9/28/2017	Iron, Total	34	1	0.51	13822000	mg/L
MKTF-39	9/28/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-39	9/28/2017	Manganese, Total	5.5	0.02	0.011	2017000	mg/L
MKTF-39	9/28/2017	Lead, Total	0.0026	0.0025	0.00048	15000	mg/L
MKTF-39	9/28/2017	Selenium, Total	0.016	0.005	0.0036	50000	mg/L
MKTF-39	9/28/2017	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
MKTF-39	11/28/2017	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
MKTF-39	11/28/2017	Arsenic, Total	0.0072	0.01	0.0041	10000	mg/L
MKTF-39	11/28/2017	Barium, Total	13	0.1	0.05	2000000	mg/L
MKTF-39	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	11/28/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/28/2017	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
MKTF-39	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-39	11/28/2017	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
MKTF-39	11/28/2017	Barium, Dissolved	12	0.04	0.02	2000000	mg/L
MKTF-39	11/28/2017	Calcium, Dissolved	170	5	0.39	NA	mg/L
MKTF-39	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	11/28/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	11/28/2017	Iron, Dissolved	12	0.4	0.33	13821880	mg/L
MKTF-39	11/28/2017	Potassium, Dissolved	6	1	0.11	NA	mg/L
MKTF-39	11/28/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-39	11/28/2017	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
MKTF-39	11/28/2017	Sodium, Dissolved	1200	20	3.3	NA	mg/L
MKTF-39	11/28/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-39	11/28/2017	Selenium, Dissolved	0.0099	0.01	0.0076	50000	mg/L
MKTF-39	11/28/2017	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-39	11/28/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-39	11/28/2017	Iron, Total	13	1	0.51	13822000	mg/L
MKTF-39	11/28/2017	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
MKTF-39	11/28/2017	Lead, Total	0.0039	0.0025	0.0011	15000	mg/L
MKTF-39	11/28/2017	Selenium, Total	0.0061	0.005	0.0049	50000	mg/L
MKTF-39	11/28/2017	Uranium, Total	ND	0.0025	0.00077	30000	mg/L
MKTF-39	11/28/2017	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
MKTF-39	2/8/2018	Silver, Total	0.0066	0.005	0.0012	50000	mg/L
MKTF-39	2/8/2018	Arsenic, Total	0.0027	0.005	0.0021	10000	mg/L
MKTF-39	2/8/2018	Barium, Total	26	0.1	0.05	2000000	mg/L
MKTF-39	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	2/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	2/8/2018	Silver, Dissolved	0.0083	0.005	0.0018	81200	mg/L
MKTF-39	2/8/2018	Arsenic, Dissolved	0.0061	0.01	0.0042	10000	mg/L
MKTF-39	2/8/2018	Barium, Dissolved	25	0.1	0.049	2000000	mg/L
MKTF-39	2/8/2018	Calcium, Dissolved	360	5	0.39	NA	mg/L
MKTF-39	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	2/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	2/8/2018	Iron, Dissolved	22	1	0.82	13821880	mg/L
MKTF-39	2/8/2018	Potassium, Dissolved	6.8	1	0.11	NA	mg/L
MKTF-39	2/8/2018	Magnesium, Dissolved	120	5	1.2	NA	mg/L
MKTF-39	2/8/2018	Manganese, Dissolved	4.2	0.01	0.002	2017400	mg/L
MKTF-39	2/8/2018	Sodium, Dissolved	1500	50	8.2	NA	mg/L
MKTF-39	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-39	2/8/2018	Selenium, Dissolved	0.0094	0.01	0.0076	50000	mg/L
MKTF-39	2/8/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-39	2/8/2018	Zinc, Dissolved	0.0055	0.01	0.0021	5960450	mg/L
MKTF-39	2/8/2018	Iron, Total	24	1	0.51	13822000	mg/L
MKTF-39	2/8/2018	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-39	2/8/2018	Manganese, Total	4.2	0.01	0.0055	2017000	mg/L
MKTF-39	2/8/2018	Lead, Total	0.0047	0.0025	0.0011	15000	mg/L
MKTF-39	2/8/2018	Selenium, Total	0.011	0.005	0.0049	50000	mg/L
MKTF-39	2/8/2018	Uranium, Total	0.00035	0.0025	0.00034	30000	mg/L
MKTF-39	2/8/2018	Zinc, Total	0.0034	0.01	0.0033	5960000	mg/L
MKTF-39	5/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-39	5/6/2018	Arsenic, Total	0.0022	0.005	0.0021	10000	mg/L
MKTF-39	5/6/2018	Barium, Total	6.6	0.02	0.01	2000000	mg/L
MKTF-39	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	5/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	5/6/2018	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-39	5/6/2018	Silver, Dissolved	0.0044	0.005	0.0018	81200	mg/L
MKTF-39	5/6/2018	Arsenic, Dissolved	0.0011	0.001	0.00042	10000	mg/L
MKTF-39	5/6/2018	Barium, Dissolved	5.6	0.02	0.0099	2000000	mg/L
MKTF-39	5/6/2018	Calcium, Dissolved	88	1	0.078	NA	mg/L
MKTF-39	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	5/6/2018	Copper, Dissolved	0.0049	0.006	0.0032	790000	mg/L
MKTF-39	5/6/2018	Iron, Dissolved	4.9	0.1	0.082	13821880	mg/L
MKTF-39	5/6/2018	Potassium, Dissolved	3.4	1	0.11	NA	mg/L
MKTF-39	5/6/2018	Magnesium, Dissolved	32	1	0.25	NA	mg/L
MKTF-39	5/6/2018	Manganese, Dissolved	0.96	0.002	0.00039	2017400	mg/L
MKTF-39	5/6/2018	Sodium, Dissolved	780	10	1.6	NA	mg/L
MKTF-39	5/6/2018	Lead, Dissolved	0.00027	0.0005	0.00017	NA	mg/L
MKTF-39	5/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-39	5/6/2018	Uranium, Dissolved	ND	0.0005	0.000096	NA	mg/L
MKTF-39	5/6/2018	Zinc, Dissolved	0.0043	0.01	0.0021	5960450	mg/L
MKTF-39	5/6/2018	Iron, Total	8.1	0.2	0.1	13822000	mg/L
MKTF-39	5/6/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
MKTF-39	5/6/2018	Manganese, Total	1.4	0.02	0.011	2017000	mg/L
MKTF-39	5/6/2018	Lead, Total	0.004	0.0025	0.0011	15000	mg/L
MKTF-39	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-39	5/6/2018	Uranium, Total	ND	0.0025	0.00034	30000	mg/L
MKTF-39	5/6/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-39	8/21/2018	Silver, Total	0.0043	0.005	0.0012	50000	mg/L
MKTF-39	8/21/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
MKTF-39	8/21/2018	Barium, Total	11	0.04	0.02	2000000	mg/L
MKTF-39	8/21/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	8/21/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	8/21/2018	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-39	8/21/2018	Silver, Dissolved	0.003	0.005	0.0018	81200	mg/L
MKTF-39	8/21/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-39	8/21/2018	Barium, Dissolved	11	0.04	0.02	2000000	mg/L
MKTF-39	8/21/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
MKTF-39	8/21/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	8/21/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	8/21/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	8/21/2018	Iron, Dissolved	11	0.4	0.33	13821880	mg/L
MKTF-39	8/21/2018	Potassium, Dissolved	5.2	1	0.11	NA	mg/L
MKTF-39	8/21/2018	Magnesium, Dissolved	55	1	0.25	NA	mg/L
MKTF-39	8/21/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/21/2018	Sodium, Dissolved	1300	20	3.3	NA	mg/L
MKTF-39	8/21/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-39	8/21/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-39	8/21/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
MKTF-39	8/21/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-39	8/21/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	8/21/2018	Mercury, Total	0.000067	0.0002	0.000038	2000	mg/L
MKTF-39	8/21/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
MKTF-39	8/21/2018	Lead, Total	0.0033	0.0025	0.0011	15000	mg/L
MKTF-39	8/21/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-39	8/21/2018	Uranium, Total	0.00055	0.0025	0.00034	30000	mg/L
MKTF-39	8/21/2018	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
MKTF-39	11/20/2018	Silver, Total	0.0052	0.005	0.0012	50000	mg/L
MKTF-39	11/20/2018	Arsenic, Total	0.0021	0.001	0.00041	10000	mg/L
MKTF-39	11/20/2018	Barium, Total	13	0.04	0.02	2000000	mg/L
MKTF-39	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-39	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-39	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-39	11/20/2018	Silver, Dissolved	0.0077	0.005	0.0018	81200	mg/L
MKTF-39	11/20/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
MKTF-39	11/20/2018	Barium, Dissolved	13	0.1	0.049	2000000	mg/L
MKTF-39	11/20/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
MKTF-39	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-39	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-39	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-39	11/20/2018	Iron, Dissolved	10	1	0.82	13821880	mg/L
MKTF-39	11/20/2018	Potassium, Dissolved	4.9	1	0.11	NA	mg/L
MKTF-39	11/20/2018	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-39	11/20/2018	Manganese, Dissolved	2.3	0.01	0.002	2017400	mg/L
MKTF-39	11/20/2018	Sodium, Dissolved	1100	50	8.2	NA	mg/L
MKTF-39	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-39	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-39	11/20/2018	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
MKTF-39	11/20/2018	Iron, Total	12	0.4	0.2	13822000	mg/L
MKTF-39	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-39	11/20/2018	Manganese, Total	2.6	0.01	0.0055	2017000	mg/L
MKTF-39	11/20/2018	Lead, Total	0.0044	0.0005	0.00023	15000	mg/L
MKTF-39	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-39	11/20/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-40	2/20/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-40	2/20/2019	Arsenic, Dissolved	ND	0.005	0.001322	10000	mg/L
MKTF-40	2/20/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
MKTF-40	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-40	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	2/20/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-40	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	2/20/2019	Copper, Dissolved	0.0058	0.006	0.001296	790000	mg/L
MKTF-40	2/20/2019	Iron, Dissolved	0.035	0.02	0.008747	13821880	mg/L
MKTF-40	2/20/2019	Lead, Dissolved	ND	0.0025	0.000542	NA	mg/L
MKTF-40	2/20/2019	Magnesium, Dissolved	51	1	0.05029	NA	mg/L
MKTF-40	2/20/2019	Manganese, Dissolved	0.0029	0.002	0.00029	2017400	mg/L
MKTF-40	2/20/2019	Potassium, Dissolved	5.3	1	0.162288	NA	mg/L
MKTF-40	2/20/2019	Selenium, Dissolved	ND	0.005	0.002844	50000	mg/L
MKTF-40	2/20/2019	Silver, Dissolved	0.0057	0.005	0.000942	81200	mg/L
MKTF-40	2/20/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	2/20/2019	Thallium, Dissolved	ND	0.0025	0.000658	2000	mg/L
MKTF-40	2/20/2019	Uranium, Dissolved	0.042	0.0025	0.000374	NA	mg/L
MKTF-40	2/20/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
MKTF-40	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-40	2/20/2019	Arsenic, Total	0.0024	0.005	0.001561	10000	mg/L
MKTF-40	2/20/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-40	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-40	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	2/20/2019	Iron, Total	2.7	0.1	0.043734	13822000	mg/L
MKTF-40	2/20/2019	Lead, Total	0.0028	0.0005	0.000055	15000	mg/L
MKTF-40	2/20/2019	Manganese, Total	0.053	0.002	0.00029	2017000	mg/L
MKTF-40	2/20/2019	Mercury, Total	0.000056	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/20/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	2/20/2019	Silver, Total	0.0064	0.005	0.001418	50000	mg/L
MKTF-40	2/20/2019	Thallium, Total	0.000072	0.0005	0.000052	2000	mg/L
MKTF-40	2/20/2019	Uranium, Total	0.042	0.0025	0.000424	30000	mg/L
MKTF-40	2/20/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-40	10/22/2019	Aluminum, Total	3.1	0.1	0.012441	19914000	mg/L
MKTF-40	10/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	10/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-40	10/22/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-40	10/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-40	10/22/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
MKTF-40	10/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	10/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	10/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	10/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	10/22/2019	Iron, Total	2.3	0.1	0.043734	13822000	mg/L
MKTF-40	10/22/2019	Lead, Total	0.0023	0.0025	0.000274	15000	mg/L
MKTF-40	10/22/2019	Manganese, Total	0.056	0.002	0.00029	2017000	mg/L
MKTF-40	10/22/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	10/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	10/22/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
MKTF-40	10/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	10/22/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
MKTF-40	10/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	10/22/2019	Zinc, Total	0.0098	0.01	0.005772	5960000	mg/L
MKTF-40	10/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-40	10/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	10/22/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-40	10/22/2019	Barium, Dissolved	0.062	0.002	0.000648	2000000	mg/L
MKTF-40	10/22/2019	Beryllium, Dissolved	0.0013	0.002	0.000284	4000	mg/L
MKTF-40	10/22/2019	Boron, Dissolved	2.2	0.2	0.022653	3949110	mg/L
MKTF-40	10/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	10/22/2019	Calcium, Dissolved	250	5	0.309446	NA	mg/L
MKTF-40	10/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	10/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	10/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-40	10/22/2019	Iron, Dissolved	0.032	0.02	0.008747	13821880	mg/L
MKTF-40	10/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	10/22/2019	Magnesium, Dissolved	45	1	0.05029	NA	mg/L
MKTF-40	10/22/2019	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
MKTF-40	10/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	10/22/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
MKTF-40	10/22/2019	Potassium, Dissolved	5.3	1	0.162288	NA	mg/L
MKTF-40	10/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	10/22/2019	Silver, Dissolved	0.0046	0.005	0.000942	81200	mg/L
MKTF-40	10/22/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	10/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	10/22/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-40	8/22/2019	Aluminum, Dissolved	0.092	0.02	0.002488	19913930	mg/L
MKTF-40	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	8/22/2019	Arsenic, Dissolved	0.00074	0.005	0.000504	10000	mg/L
MKTF-40	8/22/2019	Barium, Dissolved	0.064	0.002	0.000648	2000000	mg/L
MKTF-40	8/22/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
MKTF-40	8/22/2019	Boron, Dissolved	2.3	0.2	0.022653	3949110	mg/L
MKTF-40	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	8/22/2019	Calcium, Dissolved	300	5	0.309446	NA	mg/L
MKTF-40	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	8/22/2019	Copper, Dissolved	0.0031	0.006	0.001296	790000	mg/L
MKTF-40	8/22/2019	Iron, Dissolved	0.098	0.02	0.008747	13821880	mg/L
MKTF-40	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	8/22/2019	Magnesium, Dissolved	55	1	0.05029	NA	mg/L
MKTF-40	8/22/2019	Manganese, Dissolved	0.0068	0.002	0.00029	2017400	mg/L
MKTF-40	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	8/22/2019	Nickel, Dissolved	0.0095	0.01	0.004009	372000	mg/L
MKTF-40	8/22/2019	Potassium, Dissolved	5.6	1	0.162288	NA	mg/L
MKTF-40	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	8/22/2019	Silver, Dissolved	0.0047	0.005	0.000942	81200	mg/L
MKTF-40	8/22/2019	Sodium, Dissolved	2600	50	20.808815	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	8/22/2019	Uranium, Dissolved	0.05	0.0025	0.000374	NA	mg/L
MKTF-40	8/22/2019	Zinc, Dissolved	0.0031	0.01	0.002252	5960450	mg/L
MKTF-40	8/22/2019	Aluminum, Total	9.3	1	0.124414	19914000	mg/L
MKTF-40	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	8/22/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-40	8/22/2019	Barium, Total	0.23	0.002	0.000648	2000000	mg/L
MKTF-40	8/22/2019	Beryllium, Total	0.00089	0.002	0.000284	4000	mg/L
MKTF-40	8/22/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
MKTF-40	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	8/22/2019	Chromium, Total	0.0022	0.006	0.001533	50000	mg/L
MKTF-40	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	8/22/2019	Copper, Total	0.0076	0.006	0.004072	790000	mg/L
MKTF-40	8/22/2019	Iron, Total	6.9	1	0.437344	13822000	mg/L
MKTF-40	8/22/2019	Lead, Total	0.0094	0.0025	0.000274	15000	mg/L
MKTF-40	8/22/2019	Manganese, Total	0.25	0.002	0.00029	2017000	mg/L
MKTF-40	8/22/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-40	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	8/22/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-40	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	8/22/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
MKTF-40	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	8/22/2019	Uranium, Total	0.042	0.0025	0.000424	30000	mg/L
MKTF-40	8/22/2019	Zinc, Total	0.024	0.01	0.005772	5960000	mg/L
MKTF-40	5/6/2019	Aluminum, Dissolved	0.018	0.02	0.002488	19913930	mg/L
MKTF-40	5/6/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-40	5/6/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-40	5/6/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
MKTF-40	5/6/2019	Beryllium, Dissolved	0.0011	0.002	0.000284	4000	mg/L
MKTF-40	5/6/2019	Boron, Dissolved	2.1	0.2	0.022653	3949110	mg/L
MKTF-40	5/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-40	5/6/2019	Calcium, Dissolved	270	5	0.309446	NA	mg/L
MKTF-40	5/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-40	5/6/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-40	5/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-40	5/6/2019	Iron, Dissolved	0.034	0.02	0.008747	13821880	mg/L
MKTF-40	5/6/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-40	5/6/2019	Magnesium, Dissolved	54	1	0.05029	NA	mg/L
MKTF-40	5/6/2019	Manganese, Dissolved	0.0019	0.002	0.00029	2017400	mg/L
MKTF-40	5/6/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-40	5/6/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
MKTF-40	5/6/2019	Potassium, Dissolved	5.2	1	0.162288	NA	mg/L
MKTF-40	5/6/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-40	5/6/2019	Silver, Dissolved	0.0071	0.005	0.000942	81200	mg/L
MKTF-40	5/6/2019	Sodium, Dissolved	2100	50	20.808815	NA	mg/L
MKTF-40	5/6/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-40	5/6/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
MKTF-40	5/6/2019	Zinc, Dissolved	0.037	0.01	0.002252	5960450	mg/L
MKTF-40	5/6/2019	Aluminum, Total	3.7	0.2	0.024883	19914000	mg/L
MKTF-40	5/6/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-40	5/6/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-40	5/6/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-40	5/6/2019	Beryllium, Total	0.0013	0.002	0.000284	4000	mg/L
MKTF-40	5/6/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
MKTF-40	5/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-40	5/6/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-40	5/6/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-40	5/6/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-40	5/6/2019	Iron, Total	3.7	0.1	0.043734	13822000	mg/L
MKTF-40	5/6/2019	Lead, Total	0.0037	0.0025	0.000274	15000	mg/L
MKTF-40	5/6/2019	Manganese, Total	0.063	0.002	0.00029	2017000	mg/L
MKTF-40	5/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	5/6/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-40	5/6/2019	Nickel, Total	0.014	0.01	0.004009	372000	mg/L
MKTF-40	5/6/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-40	5/6/2019	Silver, Total	0.0068	0.005	0.001418	50000	mg/L
MKTF-40	5/6/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-40	5/6/2019	Uranium, Total	0.046	0.0025	0.000424	30000	mg/L
MKTF-40	5/6/2019	Zinc, Total	0.011	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-40	12/17/2020	Aluminum, Total	3.65	0.2	0.051	19914000	mg/L
MKTF-40	12/17/2020	Calcium, Total	242	0.5	0.084	NA	mg/L
MKTF-40	12/17/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
MKTF-40	12/17/2020	Barium, Total	0.116	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Potassium, Total	8.84	1	0.34	NA	mg/L
MKTF-40	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Magnesium, Total	45.6	0.5	0.12	NA	mg/L
MKTF-40	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-40	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Total	1.98	0.2	0.075	13822000	mg/L
MKTF-40	12/17/2020	Manganese, Total	0.087	0.01	0.003	2017000	mg/L
MKTF-40	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Total	0.0125	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-40	12/17/2020	Aluminum, Dissolved	0.522	0.2	0.051	19913930	mg/L
MKTF-40	12/17/2020	Barium, Dissolved	0.0654	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Boron, Dissolved	2.08	0.1	0.022	3949110	mg/L
MKTF-40	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-40	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Dissolved	0.281	0.2	0.075	13821880	mg/L
MKTF-40	12/17/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-40	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Dissolved	0.0116	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-40	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-40	12/17/2020	Sodium, Total	1880	20	9.2	NA	mg/L
MKTF-40	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-40	12/17/2020	Aluminum, Total	1.5	0.2	0.051	19914000	mg/L
MKTF-40	12/17/2020	Calcium, Total	236	0.5	0.084	NA	mg/L
MKTF-40	12/17/2020	Boron, Total	2.13	0.1	0.022	3949	mg/L
MKTF-40	12/17/2020	Barium, Total	0.0843	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Potassium, Total	9.13	1	0.34	NA	mg/L
MKTF-40	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Magnesium, Total	45.1	0.5	0.12	NA	mg/L
MKTF-40	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-40	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Total	0.957	0.2	0.075	13822000	mg/L
MKTF-40	12/17/2020	Manganese, Total	0.0309	0.01	0.003	2017000	mg/L
MKTF-40	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Total	0.0128	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-40	12/17/2020	Aluminum, Dissolved	2.3	0.2	0.051	19913930	mg/L
MKTF-40	12/17/2020	Barium, Dissolved	0.0853	0.01	0.003	2000000	mg/L
MKTF-40	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-40	12/17/2020	Boron, Dissolved	2.1	0.1	0.022	3949110	mg/L
MKTF-40	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-40	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-40	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-40	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-40	12/17/2020	Iron, Dissolved	1.23	0.2	0.075	13821880	mg/L
MKTF-40	12/17/2020	Manganese, Dissolved	0.0334	0.01	0.003	2017400	mg/L
MKTF-40	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-40	12/17/2020	Nickel, Dissolved	0.012	0.006	0.003	372000	mg/L
MKTF-40	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-40	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-40	12/17/2020	Sodium, Total	1710	10	4.6	NA	mg/L
MKTF-40	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-40	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-40	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-40	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-40	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	12/17/2020	Lead, Dissolved	1.44	1	0.133	NA	ug/L
MKTF-40	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Total Recoverable	1.35	1	0.133	15	ug/L
MKTF-40	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-40	12/17/2020	Uranium, Dissolved	42.1	5	1.12	NA	ug/L
MKTF-40	12/17/2020	Arsenic, Total Recoverable	1.48	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Total Recoverable	3.38	1	0.133	15	ug/L
MKTF-40	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-40	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-40	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-40	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-40	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-40	12/17/2020	Uranium, Dissolved	40.1	5	1.12	NA	ug/L
MKTF-40	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-40	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
MKTF-40	9/19/2020	Arsenic, Total	0.0015	0.005	0.0013	10000	mg/L
MKTF-40	9/19/2020	Lead, Total	0.0075	0.0025	0.00017	15000	mg/L
MKTF-40	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
MKTF-40	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
MKTF-40	9/19/2020	Uranium, Total	0.038	0.0025	0.00033	30000	mg/L
MKTF-40	9/19/2020	Barium, Total	0.25	0.003	0.0016	2000000	mg/L
MKTF-40	9/19/2020	Beryllium, Total	0.0014	0.002	0.00088	4000	mg/L
MKTF-40	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	9/19/2020	Chromium, Total	0.0035	0.006	0.0021	50000	mg/L
MKTF-40	9/19/2020	Manganese, Total	0.33	0.002	0.00081	2017000	mg/L
MKTF-40	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-40	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-40	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-40	9/19/2020	Nickel, Total	0.014	0.01	0.0033	372000	mg/L
MKTF-40	9/19/2020	Silver, Total	0.0034	0.005	0.0013	50000	mg/L
MKTF-40	9/19/2020	Boron, Total	2.3	0.2	0.037	3949	mg/L
MKTF-40	9/19/2020	Iron, Total	7.2	0.5	0.13	13822000	mg/L
MKTF-40	9/19/2020	Aluminum, Total	14	0.4	0.15	19914000	mg/L
MKTF-40	9/19/2020	Zinc, Total	0.017	0.01	0.0064	5960000	mg/L
MKTF-40	9/19/2020	Mercury, Total	0.00017	0.0002	0.00012	2000	mg/L
MKTF-40	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-40	9/19/2020	Arsenic, Dissolved	ND	0.005	0.001	10000	mg/L
MKTF-40	9/19/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-40	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-40	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-40	9/19/2020	Uranium, Dissolved	0.016	0.0025	0.00033	NA	mg/L
MKTF-40	9/19/2020	Boron, Dissolved	2.1	0.2	0.033	3949110	mg/L
MKTF-40	9/19/2020	Calcium, Dissolved	250	5	0.57	NA	mg/L
MKTF-40	9/19/2020	Sodium, Dissolved	2300	50	6.9	NA	mg/L
MKTF-40	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-40	9/19/2020	Barium, Dissolved	0.067	0.002	0.0011	2000000	mg/L
MKTF-40	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-40	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-40	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-40	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-40	9/19/2020	Iron, Dissolved	0.013	0.02	0.01	13821880	mg/L
MKTF-40	9/19/2020	Magnesium, Dissolved	49	1	0.067	NA	mg/L
MKTF-40	9/19/2020	Manganese, Dissolved	0.00091	0.002	0.00058	2017400	mg/L
MKTF-40	9/19/2020	Nickel, Dissolved	0.0071	0.01	0.0033	372000	mg/L
MKTF-40	9/19/2020	Potassium, Dissolved	5.4	1	0.16	NA	mg/L
MKTF-40	9/19/2020	Silver, Dissolved	0.0034	0.005	0.0013	81200	mg/L
MKTF-40	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-40	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-40	9/19/2020	Zinc, Dissolved	0.62	0.01	0.006	5960450	mg/L
MKTF-40	2/28/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-40	2/28/2020	Arsenic, Dissolved	0.0008	0.005	0.0005	10000	mg/L
MKTF-40	2/28/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-40	2/28/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-40	2/28/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-40	2/28/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-40	2/28/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-40	2/28/2020	Copper, Dissolved	0.0013	0.006	0.0013	790000	mg/L
MKTF-40	2/28/2020	Manganese, Dissolved	0.00047	0.002	0.00029	2017400	mg/L
MKTF-40	2/28/2020	Silver, Dissolved	0.0044	0.005	0.00094	81200	mg/L
MKTF-40	2/28/2020	Calcium, Dissolved	200	5	0.31	NA	mg/L
MKTF-40	2/28/2020	Barium, Dissolved	0.034	0.002	0.00065	2000000	mg/L
MKTF-40	2/28/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-40	2/28/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-40	2/28/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-40	2/28/2020	Iron, Dissolved	0.01	0.02	0.0087	13821880	mg/L
MKTF-40	2/28/2020	Magnesium, Dissolved	37	1	0.05	NA	mg/L
MKTF-40	2/28/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-40	2/28/2020	Nickel, Dissolved	0.007	0.01	0.004	372000	mg/L
MKTF-40	2/28/2020	Potassium, Dissolved	4.4	1	0.16	NA	mg/L
MKTF-40	2/28/2020	Zinc, Dissolved	0.0053	0.01	0.0023	5960450	mg/L
MKTF-40	2/28/2020	Boron, Dissolved	1.7	0.2	0.023	3949110	mg/L
MKTF-40	2/28/2020	Sodium, Dissolved	1800	20	8.3	NA	mg/L
MKTF-40	2/28/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-40	2/28/2020	Arsenic, Total	0.003	0.005	0.0016	10000	mg/L
MKTF-40	2/28/2020	Lead, Total	0.012	0.0025	0.00027	15000	mg/L
MKTF-40	2/28/2020	Selenium, Total	0.0032	0.005	0.0024	50000	mg/L
MKTF-40	2/28/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-40	2/28/2020	Uranium, Total	0.045	0.0025	0.00042	30000	mg/L
MKTF-40	2/28/2020	Barium, Total	0.29	0.002	0.00065	2000000	mg/L
MKTF-40	2/28/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-40	2/28/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-40	2/28/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-40	2/28/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-40	2/28/2020	Manganese, Total	0.38	0.002	0.00029	2017000	mg/L
MKTF-40	2/28/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
MKTF-40	2/28/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
MKTF-40	2/28/2020	Boron, Total	1.8	0.2	0.023	3949	mg/L
MKTF-40	2/28/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-40	2/28/2020	Chromium, Total	0.0032	0.006	0.0015	50000	mg/L
MKTF-40	2/28/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-40	2/28/2020	Zinc, Total	0.021	0.01	0.0058	5960000	mg/L
MKTF-40	2/28/2020	Iron, Total	7.7	0.2	0.087	13822000	mg/L
MKTF-40	2/28/2020	Aluminum, Total	11	0.4	0.05	19914000	mg/L
MKTF-40	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-40	3/11/2015	Barium, Total	0.19	0.002	0.00095	2000000	mg/L
MKTF-40	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-40	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-40	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-40	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	3/11/2015	Manganese, Total	0.2	0.002	0.00027	2017000	mg/L
MKTF-40	3/11/2015	Lead, Total	ND	0.01	0.00059	15000	mg/L
MKTF-40	3/11/2015	Selenium, Total	0.02	0.01	0.0015	50000	mg/L
MKTF-40	3/11/2015	Uranium, Total	0.07	0.01	0.0005	30000	mg/L
MKTF-40	3/11/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-40	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-40	6/10/2015	Barium, Total	0.16	0.002	0.00095	2000000	mg/L
MKTF-40	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-40	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-40	6/10/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-40	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	6/10/2015	Manganese, Total	0.15	0.002	0.00027	2017000	mg/L
MKTF-40	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-40	6/10/2015	Selenium, Total	0.0096	0.005	0.00097	50000	mg/L
MKTF-40	6/10/2015	Uranium, Total	0.069	0.005	0.000024	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	6/10/2015	Zinc, Total	0.022	0.01	0.0028	5960000	mg/L
MKTF-40	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-40	8/21/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-40	8/21/2015	Calcium, Total	400	10	0.57	NA	mg/L
MKTF-40	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	8/21/2015	Iron, Total	3.4	0.2	0.072	13822000	mg/L
MKTF-40	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	8/21/2015	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-40	8/21/2015	Magnesium, Total	78	1	0.039	NA	mg/L
MKTF-40	8/21/2015	Manganese, Total	0.24	0.002	0.0015	2017000	mg/L
MKTF-40	8/21/2015	Sodium, Total	2500	50	3.6	NA	mg/L
MKTF-40	8/21/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
MKTF-40	8/21/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
MKTF-40	8/21/2015	Uranium, Total	0.081	0.005	0.000049	30000	mg/L
MKTF-40	8/21/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-40	11/4/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	11/4/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-40	11/4/2015	Barium, Total	0.26	0.002	0.0011	2000000	mg/L
MKTF-40	11/4/2015	Calcium, Total	450	10	2.6	NA	mg/L
MKTF-40	11/4/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	11/4/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	11/4/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	11/4/2015	Iron, Total	5.5	0.2	0.072	13822000	mg/L
MKTF-40	11/4/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-40	11/4/2015	Potassium, Total	10	1	0.18	NA	mg/L
MKTF-40	11/4/2015	Magnesium, Total	85	1	0.013	NA	mg/L
MKTF-40	11/4/2015	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
MKTF-40	11/4/2015	Sodium, Total	2700	50	4.8	NA	mg/L
MKTF-40	11/4/2015	Lead, Total	0.0066	0.0025	0.00024	15000	mg/L
MKTF-40	11/4/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-40	11/4/2015	Uranium, Total	0.06	0.0025	0.000025	30000	mg/L
MKTF-40	11/4/2015	Zinc, Total	0.024	0.01	0.0039	5960000	mg/L
MKTF-40	2/23/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-40	2/23/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-40	2/23/2016	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
MKTF-40	2/23/2016	Calcium, Total	350	5	1.3	NA	mg/L
MKTF-40	2/23/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-40	2/23/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-40	2/23/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-40	2/23/2016	Iron, Total	2	0.1	0.036	13822000	mg/L
MKTF-40	2/23/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-40	2/23/2016	Potassium, Total	8.1	1	0.18	NA	mg/L
MKTF-40	2/23/2016	Magnesium, Total	68	1	0.013	NA	mg/L
MKTF-40	2/23/2016	Manganese, Total	0.17	0.002	0.0015	2017000	mg/L
MKTF-40	2/23/2016	Sodium, Total	2500	50	4.8	NA	mg/L
MKTF-40	2/23/2016	Lead, Total	0.0026	0.0025	0.00024	15000	mg/L
MKTF-40	2/23/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-40	2/23/2016	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
MKTF-40	2/23/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-40	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-40	6/9/2016	Arsenic, Total	ND	0.05	0.0069	10000	mg/L
MKTF-40	6/9/2016	Barium, Total	0.13	0.002	0.0013	2000000	mg/L
MKTF-40	6/9/2016	Calcium, Total	440	5	1.3	NA	mg/L
MKTF-40	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-40	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-40	6/9/2016	Iron, Total	0.089	0.02	0.0091	13822000	mg/L
MKTF-40	6/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L
MKTF-40	6/9/2016	Potassium, Total	9	1	0.18	NA	mg/L
MKTF-40	6/9/2016	Magnesium, Total	84	1	0.013	NA	mg/L
MKTF-40	6/9/2016	Manganese, Total	0.18	0.002	0.00032	2017000	mg/L
MKTF-40	6/9/2016	Sodium, Total	3000	50	4.8	NA	mg/L
MKTF-40	6/9/2016	Lead, Total	ND	0.0025	0.00084	15000	mg/L
MKTF-40	6/9/2016	Selenium, Total	0.019	0.05	0.011	50000	mg/L
MKTF-40	6/9/2016	Uranium, Total	0.058	0.0025	0.00026	30000	mg/L
MKTF-40	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	9/8/2016	Arsenic, Total	0.0045	0.005	0.0011	10000	mg/L
MKTF-40	9/8/2016	Barium, Total	0.31	0.002	0.00079	2000000	mg/L
MKTF-40	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	9/8/2016	Chromium, Total	0.0053	0.006	0.0027	50000	mg/L
MKTF-40	9/8/2016	Copper, Total	0.0057	0.006	0.003	790000	mg/L
MKTF-40	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-40	9/8/2016	Arsenic, Dissolved	0.0023	0.005	0.00069	10000	mg/L
MKTF-40	9/8/2016	Barium, Dissolved	0.11	0.002	0.0013	2000000	mg/L
MKTF-40	9/8/2016	Calcium, Dissolved	400	5	2.5	NA	mg/L
MKTF-40	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-40	9/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-40	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-40	9/8/2016	Iron, Dissolved	0.11	0.02	0.02	13821880	mg/L
MKTF-40	9/8/2016	Potassium, Dissolved	9	1	0.5	NA	mg/L
MKTF-40	9/8/2016	Magnesium, Dissolved	76	1	0.5	NA	mg/L
MKTF-40	9/8/2016	Manganese, Dissolved	0.052	0.002	0.00032	2017400	mg/L
MKTF-40	9/8/2016	Sodium, Dissolved	2800	50	25	NA	mg/L
MKTF-40	9/8/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	9/8/2016	Selenium, Dissolved	0.0096	0.02	0.0042	50000	mg/L
MKTF-40	9/8/2016	Uranium, Dissolved	0.059	0.0025	0.00026	NA	mg/L
MKTF-40	9/8/2016	Zinc, Dissolved	0.0031	0.01	0.0028	5960450	mg/L
MKTF-40	9/8/2016	Iron, Total	10	0.4	0.4	13822000	mg/L
MKTF-40	9/8/2016	Mercury, Total	0.00012	0.0002	0.000053	2000	mg/L
MKTF-40	9/8/2016	Manganese, Total	0.49	0.002	0.00027	2017000	mg/L
MKTF-40	9/8/2016	Lead, Total	0.029	0.0025	0.00041	15000	mg/L
MKTF-40	9/8/2016	Selenium, Total	0.013	0.05	0.0094	50000	mg/L
MKTF-40	9/8/2016	Uranium, Total	0.059	0.0025	0.00087	30000	mg/L
MKTF-40	9/8/2016	Zinc, Total	0.043	0.01	0.0027	5960000	mg/L
MKTF-40	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	10/31/2016	Arsenic, Total	0.0041	0.005	0.0011	10000	mg/L
MKTF-40	10/31/2016	Barium, Total	0.21	0.002	0.00079	2000000	mg/L
MKTF-40	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	10/31/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
MKTF-40	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-40	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-40	10/31/2016	Arsenic, Dissolved	0.0039	0.005	0.00069	10000	mg/L
MKTF-40	10/31/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
MKTF-40	10/31/2016	Calcium, Dissolved	380	5	2.5	NA	mg/L
MKTF-40	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-40	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-40	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-40	10/31/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
MKTF-40	10/31/2016	Potassium, Dissolved	8	1	0.5	NA	mg/L
MKTF-40	10/31/2016	Magnesium, Dissolved	71	1	0.5	NA	mg/L
MKTF-40	10/31/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
MKTF-40	10/31/2016	Sodium, Dissolved	2800	50	25	NA	mg/L
MKTF-40	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	10/31/2016	Selenium, Dissolved	0.012	0.01	0.0021	50000	mg/L
MKTF-40	10/31/2016	Uranium, Dissolved	0.06	0.0025	0.00026	NA	mg/L
MKTF-40	10/31/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
MKTF-40	10/31/2016	Iron, Total	5.3	0.2	0.2	13822000	mg/L
MKTF-40	10/31/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
MKTF-40	10/31/2016	Manganese, Total	0.26	0.002	0.00027	2017000	mg/L
MKTF-40	10/31/2016	Lead, Total	0.0084	0.0025	0.00041	15000	mg/L
MKTF-40	10/31/2016	Selenium, Total	0.0082	0.02	0.0037	50000	mg/L
MKTF-40	10/31/2016	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
MKTF-40	10/31/2016	Zinc, Total	0.019	0.01	0.0027	5960000	mg/L
MKTF-40	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-40	3/7/2017	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-40	3/7/2017	Barium, Total	0.22	0.002	0.00079	2000000	mg/L
MKTF-40	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-40	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-40	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-40	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-40	3/7/2017	Arsenic, Dissolved	0.0029	0.01	0.0014	10000	mg/L
MKTF-40	3/7/2017	Barium, Dissolved	0.097	0.002	0.00085	2000000	mg/L
MKTF-40	3/7/2017	Calcium, Dissolved	370	5	2.5	NA	mg/L
MKTF-40	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-40	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-40	3/7/2017	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-40	3/7/2017	Magnesium, Dissolved	69	1	0.5	NA	mg/L
MKTF-40	3/7/2017	Manganese, Dissolved	0.04	0.002	0.00038	2017400	mg/L
MKTF-40	3/7/2017	Sodium, Dissolved	2600	50	25	NA	mg/L
MKTF-40	3/7/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	3/7/2017	Selenium, Dissolved	0.01	0.02	0.0042	50000	mg/L
MKTF-40	3/7/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
MKTF-40	3/7/2017	Iron, Total	5.3	0.2	0.2	13822000	mg/L
MKTF-40	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-40	3/7/2017	Manganese, Total	0.2	0.002	0.00027	2017000	mg/L
MKTF-40	3/7/2017	Lead, Total	0.0081	0.0025	0.00041	15000	mg/L
MKTF-40	3/7/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
MKTF-40	3/7/2017	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-40	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-40	6/5/2017	Arsenic, Total	0.0038	0.005	0.0015	10000	mg/L
MKTF-40	6/5/2017	Barium, Total	0.15	0.002	0.00093	2000000	mg/L
MKTF-40	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	6/5/2017	Chromium, Total	0.0018	0.006	0.0011	50000	mg/L
MKTF-40	6/5/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-40	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-40	6/5/2017	Arsenic, Dissolved	0.0023	0.005	0.00089	10000	mg/L
MKTF-40	6/5/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-40	6/5/2017	Calcium, Dissolved	330	10	0.78	NA	mg/L
MKTF-40	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	6/5/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-40	6/5/2017	Copper, Dissolved	0.0081	0.006	0.0032	790000	mg/L
MKTF-40	6/5/2017	Iron, Dissolved	0.053	0.02	0.016	13821880	mg/L
MKTF-40	6/5/2017	Potassium, Dissolved	6.3	1	0.11	NA	mg/L
MKTF-40	6/5/2017	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	6/5/2017	Manganese, Dissolved	0.09	0.002	0.00038	2017400	mg/L
MKTF-40	6/5/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-40	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	6/5/2017	Selenium, Dissolved	0.0075	0.01	0.0039	50000	mg/L
MKTF-40	6/5/2017	Uranium, Dissolved	0.058	0.0025	0.00025	NA	mg/L
MKTF-40	6/5/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-40	6/5/2017	Iron, Total	3.7	0.1	0.051	13822000	mg/L
MKTF-40	6/5/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
MKTF-40	6/5/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
MKTF-40	6/5/2017	Lead, Total	0.0052	0.0025	0.00048	15000	mg/L
MKTF-40	6/5/2017	Selenium, Total	0.0089	0.005	0.0036	50000	mg/L
MKTF-40	6/5/2017	Uranium, Total	0.063	0.0025	0.00077	30000	mg/L
MKTF-40	6/5/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
MKTF-40	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-40	9/25/2017	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
MKTF-40	9/25/2017	Barium, Total	0.14	0.002	0.00093	2000000	mg/L
MKTF-40	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-40	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-40	9/25/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
MKTF-40	9/25/2017	Barium, Dissolved	0.072	0.002	0.00085	2000000	mg/L
MKTF-40	9/25/2017	Calcium, Dissolved	320	10	0.78	NA	mg/L
MKTF-40	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	9/25/2017	Iron, Dissolved	0.094	0.02	0.016	13821880	mg/L
MKTF-40	9/25/2017	Potassium, Dissolved	6.4	1	0.11	NA	mg/L
MKTF-40	9/25/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-40	9/25/2017	Manganese, Dissolved	0.052	0.002	0.00039	2017400	mg/L
MKTF-40	9/25/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-40	9/25/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-40	9/25/2017	Selenium, Dissolved	0.0082	0.005	0.0019	50000	mg/L
MKTF-40	9/25/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
MKTF-40	9/25/2017	Iron, Total	2.5	0.1	0.051	13822000	mg/L
MKTF-40	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	9/25/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	9/25/2017	Lead, Total	0.0028	0.0025	0.00048	15000	mg/L
MKTF-40	9/25/2017	Selenium, Total	0.0071	0.005	0.0036	50000	mg/L
MKTF-40	9/25/2017	Zinc, Total	0.0081	0.01	0.0033	5960000	mg/L
MKTF-40	11/21/2017	Silver, Total	0.0047	0.005	0.0012	50000	mg/L
MKTF-40	11/21/2017	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-40	11/21/2017	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-40	11/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	11/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	11/21/2017	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
MKTF-40	11/21/2017	Silver, Dissolved	0.0056	0.005	0.0018	81200	mg/L
MKTF-40	11/21/2017	Arsenic, Dissolved	0.0046	0.01	0.0042	10000	mg/L
MKTF-40	11/21/2017	Barium, Dissolved	0.076	0.002	0.00099	2000000	mg/L
MKTF-40	11/21/2017	Calcium, Dissolved	320	5	0.39	NA	mg/L
MKTF-40	11/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	11/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	11/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	11/21/2017	Iron, Dissolved	0.072	0.02	0.016	13821880	mg/L
MKTF-40	11/21/2017	Potassium, Dissolved	6.3	1	0.11	NA	mg/L
MKTF-40	11/21/2017	Magnesium, Dissolved	61	1	0.25	NA	mg/L
MKTF-40	11/21/2017	Manganese, Dissolved	0.021	0.002	0.00039	2017400	mg/L
MKTF-40	11/21/2017	Sodium, Dissolved	2400	50	8.2	NA	mg/L
MKTF-40	11/21/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	11/21/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-40	11/21/2017	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
MKTF-40	11/21/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	11/21/2017	Iron, Total	4	0.1	0.051	13822000	mg/L
MKTF-40	11/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	11/21/2017	Manganese, Total	0.18	0.002	0.0011	2017000	mg/L
MKTF-40	11/21/2017	Lead, Total	0.0042	0.0025	0.0011	15000	mg/L
MKTF-40	11/21/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	11/21/2017	Uranium, Total	0.053	0.0025	0.00077	30000	mg/L
MKTF-40	11/21/2017	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-40	2/5/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-40	2/5/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-40	2/5/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-40	2/5/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	2/5/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	2/5/2018	Copper, Total	0.006	0.006	0.0041	790000	mg/L
MKTF-40	2/5/2018	Silver, Dissolved	0.0082	0.005	0.0018	81200	mg/L
MKTF-40	2/5/2018	Arsenic, Dissolved	ND	0.05	0.021	10000	mg/L
MKTF-40	2/5/2018	Barium, Dissolved	0.08	0.002	0.00099	2000000	mg/L
MKTF-40	2/5/2018	Calcium, Dissolved	360	5	0.39	NA	mg/L
MKTF-40	2/5/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	2/5/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	2/5/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	2/5/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	2/5/2018	Potassium, Dissolved	6.2	1	0.11	NA	mg/L
MKTF-40	2/5/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	2/5/2018	Manganese, Dissolved	0.06	0.002	0.00039	2017400	mg/L
MKTF-40	2/5/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
MKTF-40	2/5/2018	Lead, Dissolved	ND	0.025	0.0087	NA	mg/L
MKTF-40	2/5/2018	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
MKTF-40	2/5/2018	Uranium, Dissolved	0.044	0.025	0.0048	NA	mg/L
MKTF-40	2/5/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	2/5/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
MKTF-40	2/5/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-40	2/5/2018	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
MKTF-40	2/5/2018	Lead, Total	0.0062	0.0025	0.0011	15000	mg/L
MKTF-40	2/5/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
MKTF-40	2/5/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
MKTF-40	2/5/2018	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
MKTF-40	5/6/2018	Silver, Total	0.0044	0.005	0.0012	50000	mg/L
MKTF-40	5/6/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
MKTF-40	5/6/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
MKTF-40	5/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	5/6/2018	Chromium, Total	0.0026	0.006	0.0018	50000	mg/L
MKTF-40	5/6/2018	Copper, Total	0.0048	0.006	0.0041	790000	mg/L
MKTF-40	5/6/2018	Silver, Dissolved	0.03	0.025	0.0092	81200	mg/L
MKTF-40	5/6/2018	Arsenic, Dissolved	0.0029	0.005	0.0021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	Barium, Dissolved	0.059	0.002	0.00099	2000000	mg/L
MKTF-40	5/6/2018	Calcium, Dissolved	260	5	0.39	NA	mg/L
MKTF-40	5/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	5/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	5/6/2018	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
MKTF-40	5/6/2018	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
MKTF-40	5/6/2018	Potassium, Dissolved	5	5	0.56	NA	mg/L
MKTF-40	5/6/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-40	5/6/2018	Manganese, Dissolved	0.036	0.002	0.00039	2017400	mg/L
MKTF-40	5/6/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
MKTF-40	5/6/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	5/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-40	5/6/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
MKTF-40	5/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-40	5/6/2018	Iron, Total	5.1	0.2	0.1	13822000	mg/L
MKTF-40	5/6/2018	Mercury, Total	0.000054	0.0002	0.000037	2000	mg/L
MKTF-40	5/6/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
MKTF-40	5/6/2018	Lead, Total	0.0059	0.0025	0.0011	15000	mg/L
MKTF-40	5/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	5/6/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
MKTF-40	5/6/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-40	8/17/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
MKTF-40	8/17/2018	Arsenic, Total	0.0034	0.005	0.0021	10000	mg/L
MKTF-40	8/17/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-40	8/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	8/17/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-40	8/17/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
MKTF-40	8/17/2018	Silver, Dissolved	0.0052	0.005	0.0018	81200	mg/L
MKTF-40	8/17/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
MKTF-40	8/17/2018	Barium, Dissolved	0.04	0.002	0.00099	2000000	mg/L
MKTF-40	8/17/2018	Calcium, Dissolved	210	5	0.39	NA	mg/L
MKTF-40	8/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	8/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	8/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	8/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	8/17/2018	Potassium, Dissolved	4.6	1	0.11	NA	mg/L
MKTF-40	8/17/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
MKTF-40	8/17/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-40	8/17/2018	Sodium, Dissolved	2100	50	8.2	NA	mg/L
MKTF-40	8/17/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-40	8/17/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-40	8/17/2018	Uranium, Dissolved	0.053	0.0025	0.00048	NA	mg/L
MKTF-40	8/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-40	8/17/2018	Iron, Total	3.5	0.1	0.051	13822000	mg/L
MKTF-40	8/17/2018	Mercury, Total	0.000079	0.0002	0.000038	2000	mg/L
MKTF-40	8/17/2018	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
MKTF-40	8/17/2018	Lead, Total	0.0031	0.0025	0.0011	15000	mg/L
MKTF-40	8/17/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-40	8/17/2018	Uranium, Total	0.051	0.0025	0.00034	30000	mg/L
MKTF-40	8/17/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
MKTF-40	11/15/2018	Silver, Total	0.0067	0.005	0.0012	50000	mg/L
MKTF-40	11/15/2018	Arsenic, Total	0.0037	0.001	0.00041	10000	mg/L
MKTF-40	11/15/2018	Barium, Total	0.072	0.002	0.001	2000000	mg/L
MKTF-40	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-40	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-40	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-40	11/15/2018	Silver, Dissolved	0.0054	0.005	0.0018	81200	mg/L
MKTF-40	11/15/2018	Arsenic, Dissolved	0.0014	0.001	0.00042	10000	mg/L
MKTF-40	11/15/2018	Barium, Dissolved	0.049	0.002	0.00099	2000000	mg/L
MKTF-40	11/15/2018	Calcium, Dissolved	230	5	0.39	NA	mg/L
MKTF-40	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-40	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-40	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-40	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-40	11/15/2018	Potassium, Dissolved	4.9	1	0.11	NA	mg/L
MKTF-40	11/15/2018	Magnesium, Dissolved	42	1	0.25	NA	mg/L
MKTF-40	11/15/2018	Manganese, Dissolved	0.0031	0.002	0.00039	2017400	mg/L
MKTF-40	11/15/2018	Sodium, Dissolved	1900	50	8.2	NA	mg/L
MKTF-40	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-40	11/15/2018	Uranium, Dissolved	0.039	0.0025	0.00048	NA	mg/L
MKTF-40	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-40	11/15/2018	Iron, Total	1.2	0.1	0.051	13822000	mg/L
MKTF-40	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-40	11/15/2018	Manganese, Total	0.025	0.002	0.0011	2017000	mg/L
MKTF-40	11/15/2018	Lead, Total	0.0016	0.0005	0.00023	15000	mg/L
MKTF-40	11/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-40	11/15/2018	Uranium, Total	0.046	0.0025	0.00034	30000	mg/L
MKTF-40	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-41	2/27/2020	Antimony, Dissolved	0.00048	0.001	0.00039	6000	mg/L
MKTF-41	2/27/2020	Arsenic, Dissolved	0.0022	0.001	0.0001	10000	mg/L
MKTF-41	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	2/27/2020	Selenium, Dissolved	0.038	0.001	0.00017	50000	mg/L
MKTF-41	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	2/27/2020	Uranium, Dissolved	0.01	0.0005	0.000075	NA	mg/L
MKTF-41	2/27/2020	Barium, Dissolved	0.052	0.002	0.00065	2000000	mg/L
MKTF-41	2/27/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-41	2/27/2020	Boron, Dissolved	0.73	0.04	0.0045	3949110	mg/L
MKTF-41	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-41	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-41	2/27/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-41	2/27/2020	Manganese, Dissolved	0.0051	0.002	0.00029	2017400	mg/L
MKTF-41	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-41	2/27/2020	Zinc, Dissolved	0.024	0.01	0.0023	5960450	mg/L
MKTF-41	2/27/2020	Aluminum, Dissolved	0.0065	0.02	0.0025	19913930	mg/L
MKTF-41	2/27/2020	Calcium, Dissolved	14	1	0.062	NA	mg/L
MKTF-41	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-41	2/27/2020	Magnesium, Dissolved	1.7	1	0.05	NA	mg/L
MKTF-41	2/27/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-41	2/27/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-41	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-41	2/27/2020	Molybdenum, Dissolved	0.012	0.008	0.0067	98700	mg/L
MKTF-41	2/27/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-41	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-41	2/27/2020	Arsenic, Total	0.0022	0.001	0.00031	10000	mg/L
MKTF-41	2/27/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MKTF-41	2/27/2020	Selenium, Total	0.041	0.001	0.00048	50000	mg/L
MKTF-41	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	2/27/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
MKTF-41	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-41	2/27/2020	Aluminum, Total	0.094	0.02	0.0025	19914000	mg/L
MKTF-41	2/27/2020	Barium, Total	0.063	0.002	0.00065	2000000	mg/L
MKTF-41	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-41	2/27/2020	Boron, Total	0.76	0.04	0.0045	3949	mg/L
MKTF-41	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-41	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-41	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	2/27/2020	Iron, Total	0.039	0.02	0.0087	13822000	mg/L
MKTF-41	2/27/2020	Manganese, Total	0.008	0.002	0.00029	2017000	mg/L
MKTF-41	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-41	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-41	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-41	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-41	2/27/2020	Molybdenum, Total	0.01	0.008	0.0067	98700	mg/L
MKTF-41	12/15/2020	Arsenic, Total Recoverable	1.95	1	0.286	10	ug/L
MKTF-41	12/15/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-41	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-41	12/15/2020	Selenium, Total Recoverable	36	5	1.43	50	ug/L
MKTF-41	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-41	12/15/2020	Arsenic, Dissolved	1.95	1	0.286	10	ug/L
MKTF-41	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-41	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-41	12/15/2020	Selenium, Dissolved	35.5	5	1.43	50	ug/L
MKTF-41	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-41	12/15/2020	Uranium, Total Recoverable	13.3	5	1.12	30	ug/L
MKTF-41	12/15/2020	Uranium, Dissolved	13.1	5	1.12	NA	ug/L
MKTF-41	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-41	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-41	12/15/2020	Aluminum, Total	1.43	0.2	0.051	19914000	mg/L
MKTF-41	12/15/2020	Calcium, Total	14.4	0.5	0.084	NA	mg/L
MKTF-41	12/15/2020	Boron, Total	0.765	0.1	0.022	3949	mg/L
MKTF-41	12/15/2020	Barium, Total	0.0773	0.01	0.003	2000000	mg/L
MKTF-41	12/15/2020	Potassium, Total	2.07	1	0.34	NA	mg/L
MKTF-41	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-41	12/15/2020	Magnesium, Total	1.87	0.5	0.12	NA	mg/L
MKTF-41	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-41	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-41	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-41	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-41	12/15/2020	Iron, Total	0.764	0.2	0.075	13822000	mg/L
MKTF-41	12/15/2020	Manganese, Total	0.0491	0.01	0.003	2017000	mg/L
MKTF-41	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-41	12/15/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-41	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-41	12/15/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-41	12/15/2020	Barium, Dissolved	0.062	0.01	0.003	2000000	mg/L
MKTF-41	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-41	12/15/2020	Boron, Dissolved	0.796	0.1	0.022	3949110	mg/L
MKTF-41	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-41	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-41	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-41	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-41	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-41	12/15/2020	Manganese, Dissolved	0.0113	0.01	0.003	2017400	mg/L
MKTF-41	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-41	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-41	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-41	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-41	12/15/2020	Sodium, Total	575	20	9.2	NA	mg/L
MKTF-41	9/21/2020	Arsenic, Dissolved	0.0021	0.005	0.001	10000	mg/L
MKTF-41	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-41	9/21/2020	Selenium, Dissolved	0.036	0.005	0.0033	50000	mg/L
MKTF-41	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-41	9/21/2020	Uranium, Dissolved	0.013	0.0025	0.00033	NA	mg/L
MKTF-41	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-41	9/21/2020	Sodium, Dissolved	630	50	6.9	NA	mg/L
MKTF-41	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-41	9/21/2020	Barium, Dissolved	0.058	0.002	0.0011	2000000	mg/L
MKTF-41	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-41	9/21/2020	Boron, Dissolved	0.76	0.04	0.0067	3949110	mg/L
MKTF-41	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-41	9/21/2020	Calcium, Dissolved	13	1	0.11	NA	mg/L
MKTF-41	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-41	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-41	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-41	9/21/2020	Magnesium, Dissolved	1.6	1	0.067	NA	mg/L
MKTF-41	9/21/2020	Manganese, Dissolved	0.006	0.002	0.00058	2017400	mg/L
MKTF-41	9/21/2020	Molybdenum, Dissolved	0.012	0.008	0.0056	98700	mg/L
MKTF-41	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-41	9/21/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
MKTF-41	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-41	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-41	9/21/2020	Zinc, Dissolved	0.061	0.01	0.006	5960450	mg/L
MKTF-41	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-41	9/21/2020	Arsenic, Total	0.002	0.001	0.00026	10000	mg/L
MKTF-41	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
MKTF-41	9/21/2020	Selenium, Total	0.036	0.001	0.00066	50000	mg/L
MKTF-41	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-41	9/21/2020	Uranium, Total	0.012	0.0005	0.000065	30000	mg/L
MKTF-41	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-41	9/21/2020	Aluminum, Total	0.015	0.02	0.0074	19914000	mg/L
MKTF-41	9/21/2020	Barium, Total	0.06	0.003	0.0016	2000000	mg/L
MKTF-41	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-41	9/21/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MKTF-41	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-41	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-41	9/21/2020	Iron, Total	0.02	0.05	0.013	13822000	mg/L
MKTF-41	9/21/2020	Manganese, Total	0.0064	0.002	0.00081	2017000	mg/L
MKTF-41	9/21/2020	Molybdenum, Total	0.013	0.008	0.0065	98700	mg/L
MKTF-41	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-41	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-41	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-41	5/7/2019	Aluminum, Dissolved	0.015	0.02	0.002488	19913930	mg/L
MKTF-41	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Dissolved	0.0016	0.005	0.000504	10000	mg/L
MKTF-41	5/7/2019	Barium, Dissolved	0.068	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Dissolved	0.86	0.04	0.004531	3949110	mg/L
MKTF-41	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	5/7/2019	Calcium, Dissolved	16	1	0.061889	NA	mg/L
MKTF-41	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MKTF-41	5/7/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-41	5/7/2019	Magnesium, Dissolved	1.8	1	0.05029	NA	mg/L
MKTF-41	5/7/2019	Manganese, Dissolved	0.0032	0.002	0.00029	2017400	mg/L
MKTF-41	5/7/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-41	5/7/2019	Selenium, Dissolved	0.031	0.005	0.000857	50000	mg/L
MKTF-41	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	5/7/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-41	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-41	5/7/2019	Uranium, Dissolved	0.012	0.0025	0.000374	NA	mg/L
MKTF-41	5/7/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-41	5/7/2019	Aluminum, Total	0.88	0.1	0.012441	19914000	mg/L
MKTF-41	5/7/2019	Antimony, Total	0.00044	0.001	0.000389	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Total	0.0018	0.001	0.000312	10000	mg/L
MKTF-41	5/7/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Total	0.00078	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Total	0.92	0.04	0.004531	3949	mg/L
MKTF-41	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	5/7/2019	Iron, Total	0.61	0.02	0.008747	13822000	mg/L
MKTF-41	5/7/2019	Lead, Total	0.00065	0.0005	0.000055	15000	mg/L
MKTF-41	5/7/2019	Manganese, Total	0.029	0.002	0.00029	2017000	mg/L
MKTF-41	5/7/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
MKTF-41	5/7/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Selenium, Total	0.032	0.001	0.000478	50000	mg/L
MKTF-41	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	5/7/2019	Uranium, Total	0.014	0.0005	0.000085	30000	mg/L
MKTF-41	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	5/7/2019	Aluminum, Dissolved	0.0061	0.02	0.002488	19913930	mg/L
MKTF-41	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-41	5/7/2019	Barium, Dissolved	0.075	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Dissolved	0.92	0.04	0.004531	3949110	mg/L
MKTF-41	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	5/7/2019	Calcium, Dissolved	18	1	0.061889	NA	mg/L
MKTF-41	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
MKTF-41	5/7/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-41	5/7/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	5/7/2019	Manganese, Dissolved	0.0023	0.002	0.00029	2017400	mg/L
MKTF-41	5/7/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-41	5/7/2019	Selenium, Dissolved	0.036	0.005	0.000857	50000	mg/L
MKTF-41	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	5/7/2019	Sodium, Dissolved	660	10	4.161763	NA	mg/L
MKTF-41	5/7/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-41	5/7/2019	Uranium, Dissolved	0.013	0.0025	0.000374	NA	mg/L
MKTF-41	5/7/2019	Zinc, Dissolved	0.042	0.01	0.002252	5960450	mg/L
MKTF-41	5/7/2019	Aluminum, Total	0.96	0.1	0.012441	19914000	mg/L
MKTF-41	5/7/2019	Antimony, Total	0.0011	0.001	0.000389	6000	mg/L
MKTF-41	5/7/2019	Arsenic, Total	0.0016	0.001	0.000312	10000	mg/L
MKTF-41	5/7/2019	Barium, Total	0.1	0.002	0.000648	2000000	mg/L
MKTF-41	5/7/2019	Beryllium, Total	0.0009	0.002	0.000284	4000	mg/L
MKTF-41	5/7/2019	Boron, Total	0.93	0.04	0.004531	3949	mg/L
MKTF-41	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	5/7/2019	Iron, Total	0.73	0.02	0.008747	13822000	mg/L
MKTF-41	5/7/2019	Lead, Total	0.00076	0.0005	0.000055	15000	mg/L
MKTF-41	5/7/2019	Manganese, Total	0.028	0.002	0.00029	2017000	mg/L
MKTF-41	5/7/2019	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
MKTF-41	5/7/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
MKTF-41	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	5/7/2019	Selenium, Total	0.031	0.001	0.000478	50000	mg/L
MKTF-41	5/7/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
MKTF-41	5/7/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	5/7/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
MKTF-41	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	8/22/2019	Aluminum, Dissolved	0.039	0.02	0.002488	19913930	mg/L
MKTF-41	8/22/2019	Antimony, Dissolved	0.00064	0.001	0.000389	6000	mg/L
MKTF-41	8/22/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
MKTF-41	8/22/2019	Barium, Dissolved	0.073	0.002	0.000648	2000000	mg/L
MKTF-41	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	8/22/2019	Boron, Dissolved	0.9	0.04	0.004531	3949110	mg/L
MKTF-41	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	8/22/2019	Calcium, Dissolved	15	1	0.061889	NA	mg/L
MKTF-41	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	8/22/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
MKTF-41	8/22/2019	Iron, Dissolved	0.022	0.02	0.008747	13821880	mg/L
MKTF-41	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	8/22/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	8/22/2019	Manganese, Dissolved	0.0024	0.002	0.00029	2017400	mg/L
MKTF-41	8/22/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
MKTF-41	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	8/22/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
MKTF-41	8/22/2019	Selenium, Dissolved	0.034	0.001	0.000171	50000	mg/L
MKTF-41	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	8/22/2019	Sodium, Dissolved	730	100	41.61763	NA	mg/L
MKTF-41	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	8/22/2019	Uranium, Dissolved	0.014	0.0005	0.000075	NA	mg/L
MKTF-41	8/22/2019	Zinc, Dissolved	0.0058	0.01	0.002252	5960450	mg/L
MKTF-41	8/22/2019	Aluminum, Total	14	2	0.248827	19914000	mg/L
MKTF-41	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-41	8/22/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
MKTF-41	8/22/2019	Barium, Total	0.31	0.002	0.000648	2000000	mg/L
MKTF-41	8/22/2019	Beryllium, Total	0.0012	0.002	0.000284	4000	mg/L
MKTF-41	8/22/2019	Boron, Total	0.86	0.04	0.004531	3949	mg/L
MKTF-41	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	8/22/2019	Chromium, Total	0.0061	0.006	0.001533	50000	mg/L
MKTF-41	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	8/22/2019	Copper, Total	0.007	0.006	0.004072	790000	mg/L
MKTF-41	8/22/2019	Iron, Total	7.3	2	0.874687	13822000	mg/L
MKTF-41	8/22/2019	Lead, Total	0.0081	0.0005	0.000055	15000	mg/L
MKTF-41	8/22/2019	Manganese, Total	0.45	0.002	0.00029	2017000	mg/L
MKTF-41	8/22/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-41	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-41	8/22/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/22/2019	Selenium, Total	0.034	0.001	0.000478	50000	mg/L
MKTF-41	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	8/22/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-41	8/22/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
MKTF-41	8/22/2019	Zinc, Total	0.034	0.01	0.005772	5960000	mg/L
MKTF-41	2/13/2019	Antimony, Total	ND	0.001	0.000204	6000	mg/L
MKTF-41	2/13/2019	Arsenic, Total	0.0021	0.001	0.000312	10000	mg/L
MKTF-41	2/13/2019	Barium, Total	0.068	0.002	0.000648	2000000	mg/L
MKTF-41	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-41	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	2/13/2019	Iron, Total	0.16	0.02	0.008747	13822000	mg/L
MKTF-41	2/13/2019	Lead, Total	0.0002	0.0005	0.000047	15000	mg/L
MKTF-41	2/13/2019	Manganese, Total	0.014	0.002	0.00029	2017000	mg/L
MKTF-41	2/13/2019	Mercury, Total	0.00008	0.0002	0.000038	2000	mg/L
MKTF-41	2/13/2019	Selenium, Total	0.036	0.001	0.000478	50000	mg/L
MKTF-41	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-41	2/13/2019	Uranium, Total	0.011	0.0005	0.000085	30000	mg/L
MKTF-41	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-41	2/13/2019	Antimony, Dissolved	0.00025	0.001	0.000204	6000	mg/L
MKTF-41	2/13/2019	Arsenic, Dissolved	0.0019	0.001	0.000068	10000	mg/L
MKTF-41	2/13/2019	Barium, Dissolved	0.06	0.002	0.000648	2000000	mg/L
MKTF-41	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	2/13/2019	Calcium, Dissolved	14	1	0.061889	NA	mg/L
MKTF-41	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-41	2/13/2019	Copper, Dissolved	0.0028	0.006	0.001296	790000	mg/L
MKTF-41	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-41	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-41	2/13/2019	Magnesium, Dissolved	1.6	1	0.05029	NA	mg/L
MKTF-41	2/13/2019	Manganese, Dissolved	0.0085	0.002	0.00029	2017400	mg/L
MKTF-41	2/13/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-41	2/13/2019	Selenium, Dissolved	0.033	0.001	0.000203	50000	mg/L
MKTF-41	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	2/13/2019	Sodium, Dissolved	650	20	8.323526	NA	mg/L
MKTF-41	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-41	2/13/2019	Uranium, Dissolved	0.012	0.0005	0.00003	NA	mg/L
MKTF-41	2/13/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
MKTF-41	10/23/2019	Aluminum, Total	4.3	0.1	0.012441	19914000	mg/L
MKTF-41	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-41	10/23/2019	Arsenic, Total	0.0025	0.005	0.001561	10000	mg/L
MKTF-41	10/23/2019	Barium, Total	0.11	0.002	0.000648	2000000	mg/L
MKTF-41	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-41	10/23/2019	Boron, Total	0.86	0.04	0.004531	3949	mg/L
MKTF-41	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-41	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-41	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-41	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-41	10/23/2019	Iron, Total	2.2	0.1	0.043734	13822000	mg/L
MKTF-41	10/23/2019	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
MKTF-41	10/23/2019	Manganese, Total	0.067	0.002	0.00029	2017000	mg/L
MKTF-41	10/23/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
MKTF-41	10/23/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
MKTF-41	10/23/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-41	10/23/2019	Selenium, Total	0.033	0.005	0.00239	50000	mg/L
MKTF-41	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-41	10/23/2019	Thallium, Total	0.000053	0.0005	0.000052	2000	mg/L
MKTF-41	10/23/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
MKTF-41	10/23/2019	Aluminum, Dissolved	0.018	0.02	0.002488	19913930	mg/L
MKTF-41	10/23/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MKTF-41	10/23/2019	Arsenic, Dissolved	0.0022	0.005	0.000504	10000	mg/L
MKTF-41	10/23/2019	Barium, Dissolved	0.073	0.002	0.000648	2000000	mg/L
MKTF-41	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-41	10/23/2019	Boron, Dissolved	0.89	0.04	0.004531	3949110	mg/L
MKTF-41	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-41	10/23/2019	Calcium, Dissolved	16	1	0.061889	NA	mg/L
MKTF-41	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-41	10/23/2019	Copper, Dissolved	0.0035	0.006	0.001296	790000	mg/L
MKTF-41	10/23/2019	Iron, Dissolved	0.0091	0.02	0.008747	13821880	mg/L
MKTF-41	10/23/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-41	10/23/2019	Magnesium, Dissolved	2	1	0.05029	NA	mg/L
MKTF-41	10/23/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
MKTF-41	10/23/2019	Molybdenum, Dissolved	0.013	0.008	0.006735	98700	mg/L
MKTF-41	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-41	10/23/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-41	10/23/2019	Selenium, Dissolved	0.039	0.005	0.000857	50000	mg/L
MKTF-41	10/23/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-41	10/23/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
MKTF-41	10/23/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-41	10/23/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
MKTF-41	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-41	3/12/2015	Barium, Total	0.081	0.002	0.00095	2000000	mg/L
MKTF-41	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-41	3/12/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-41	3/12/2015	Iron, Total	0.2	0.02	0.0073	13822000	mg/L
MKTF-41	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	3/12/2015	Manganese, Total	0.024	0.002	0.00027	2017000	mg/L
MKTF-41	3/12/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-41	3/12/2015	Selenium, Total	0.059	0.01	0.0015	50000	mg/L
MKTF-41	3/12/2015	Uranium, Total	0.034	0.001	0.00005	30000	mg/L
MKTF-41	3/12/2015	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
MKTF-41	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-41	6/9/2015	Barium, Total	0.16	0.002	0.0011	2000000	mg/L
MKTF-41	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	6/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	6/9/2015	Iron, Total	4.1	0.1	0.036	13822000	mg/L
MKTF-41	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	6/9/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
MKTF-41	6/9/2015	Lead, Total	0.006	0.0025	0.00024	15000	mg/L
MKTF-41	6/9/2015	Selenium, Total	0.047	0.005	0.00062	50000	mg/L
MKTF-41	6/9/2015	Uranium, Total	0.031	0.0025	0.000025	30000	mg/L
MKTF-41	6/9/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-41	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	8/21/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-41	8/21/2015	Barium, Total	0.27	0.002	0.0011	2000000	mg/L
MKTF-41	8/21/2015	Calcium, Total	16	1	0.057	NA	mg/L
MKTF-41	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	8/21/2015	Chromium, Total	0.0063	0.006	0.0022	50000	mg/L
MKTF-41	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	8/21/2015	Iron, Total	9	0.4	0.14	13822000	mg/L
MKTF-41	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	8/21/2015	Potassium, Total	3.5	1	0.18	NA	mg/L
MKTF-41	8/21/2015	Magnesium, Total	2.3	1	0.039	NA	mg/L
MKTF-41	8/21/2015	Manganese, Total	0.35	0.002	0.0015	2017000	mg/L
MKTF-41	8/21/2015	Sodium, Total	650	10	0.72	NA	mg/L
MKTF-41	8/21/2015	Lead, Total	0.012	0.0005	0.000047	15000	mg/L
MKTF-41	8/21/2015	Selenium, Total	0.044	0.005	0.00062	50000	mg/L
MKTF-41	8/21/2015	Uranium, Total	0.029	0.0025	0.000025	30000	mg/L
MKTF-41	8/21/2015	Zinc, Total	0.034	0.01	0.0039	5960000	mg/L
MKTF-41	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	11/5/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-41	11/5/2015	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
MKTF-41	11/5/2015	Calcium, Total	16	1	0.26	NA	mg/L
MKTF-41	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	11/5/2015	Iron, Total	4.3	0.1	0.036	13822000	mg/L
MKTF-41	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-41	11/5/2015	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-41	11/5/2015	Magnesium, Total	2.4	1	0.013	NA	mg/L
MKTF-41	11/5/2015	Manganese, Total	0.17	0.002	0.0015	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/5/2015	Sodium, Total	630	10	0.96	NA	mg/L
MKTF-41	11/5/2015	Lead, Total	0.0056	0.0005	0.000047	15000	mg/L
MKTF-41	11/5/2015	Selenium, Total	0.052	0.005	0.00062	50000	mg/L
MKTF-41	11/5/2015	Uranium, Total	0.025	0.0005	0.0000049	30000	mg/L
MKTF-41	11/5/2015	Zinc, Total	0.019	0.01	0.0039	5960000	mg/L
MKTF-41	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-41	2/24/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-41	2/24/2016	Barium, Total	0.12	0.002	0.0011	2000000	mg/L
MKTF-41	2/24/2016	Calcium, Total	16	1	0.26	NA	mg/L
MKTF-41	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-41	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-41	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-41	2/24/2016	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-41	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	2/24/2016	Potassium, Total	2.4	1	0.18	NA	mg/L
MKTF-41	2/24/2016	Magnesium, Total	2	1	0.013	NA	mg/L
MKTF-41	2/24/2016	Manganese, Total	0.12	0.002	0.0015	2017000	mg/L
MKTF-41	2/24/2016	Sodium, Total	600	10	0.96	NA	mg/L
MKTF-41	2/24/2016	Lead, Total	0.0035	0.0025	0.00024	15000	mg/L
MKTF-41	2/24/2016	Selenium, Total	0.044	0.005	0.00062	50000	mg/L
MKTF-41	2/24/2016	Uranium, Total	0.022	0.0025	0.000025	30000	mg/L
MKTF-41	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-41	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-41	6/9/2016	Arsenic, Total	0.0075	0.02	0.0028	10000	mg/L
MKTF-41	6/9/2016	Barium, Total	0.071	0.002	0.0013	2000000	mg/L
MKTF-41	6/9/2016	Calcium, Total	14	1	0.26	NA	mg/L
MKTF-41	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-41	6/9/2016	Chromium, Total	0.0027	0.006	0.0018	50000	mg/L
MKTF-41	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-41	6/9/2016	Iron, Total	0.19	0.02	0.0091	13822000	mg/L
MKTF-41	6/9/2016	Mercury, Total	0.000094	0.0002	0.000053	2000	mg/L
MKTF-41	6/9/2016	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-41	6/9/2016	Magnesium, Total	2	1	0.013	NA	mg/L
MKTF-41	6/9/2016	Manganese, Total	0.019	0.002	0.00032	2017000	mg/L
MKTF-41	6/9/2016	Sodium, Total	640	10	0.96	NA	mg/L
MKTF-41	6/9/2016	Lead, Total	0.00091	0.0005	0.00017	15000	mg/L
MKTF-41	6/9/2016	Selenium, Total	0.06	0.01	0.0021	50000	mg/L
MKTF-41	6/9/2016	Uranium, Total	0.023	0.0005	0.000051	30000	mg/L
MKTF-41	6/9/2016	Zinc, Total	0.0029	0.01	0.0028	5960000	mg/L
MKTF-41	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-41	9/9/2016	Arsenic, Total	0.0061	0.01	0.0021	10000	mg/L
MKTF-41	9/9/2016	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-41	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	9/9/2016	Chromium, Total	0.003	0.006	0.0027	50000	mg/L
MKTF-41	9/9/2016	Copper, Total	0.0031	0.006	0.003	790000	mg/L
MKTF-41	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-41	9/9/2016	Arsenic, Dissolved	ND	0.05	0.0069	10000	mg/L
MKTF-41	9/9/2016	Barium, Dissolved	0.059	0.002	0.0013	2000000	mg/L
MKTF-41	9/9/2016	Calcium, Dissolved	13	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-41	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-41	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-41	9/9/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-41	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Magnesium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	9/9/2016	Manganese, Dissolved	0.0012	0.002	0.00032	2017400	mg/L
MKTF-41	9/9/2016	Sodium, Dissolved	640	10	5	NA	mg/L
MKTF-41	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	9/9/2016	Selenium, Dissolved	0.048	0.005	0.0011	50000	mg/L
MKTF-41	9/9/2016	Uranium, Dissolved	0.014	0.0005	0.000051	NA	mg/L
MKTF-41	9/9/2016	Zinc, Dissolved	0.0098	0.01	0.0028	5960450	mg/L
MKTF-41	9/9/2016	Iron, Total	2.5	0.1	0.1	13822000	mg/L
MKTF-41	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
MKTF-41	9/9/2016	Lead, Total	0.0037	0.0005	0.000081	15000	mg/L
MKTF-41	9/9/2016	Selenium, Total	0.045	0.05	0.0094	50000	mg/L
MKTF-41	9/9/2016	Uranium, Total	0.015	0.0005	0.00017	30000	mg/L
MKTF-41	9/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
MKTF-41	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	10/31/2016	Arsenic, Total	0.0064	0.02	0.0042	10000	mg/L
MKTF-41	10/31/2016	Barium, Total	0.094	0.002	0.00079	2000000	mg/L
MKTF-41	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-41	10/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-41	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-41	10/31/2016	Arsenic, Dissolved	0.0054	0.02	0.0028	10000	mg/L
MKTF-41	10/31/2016	Barium, Dissolved	0.058	0.002	0.0013	2000000	mg/L
MKTF-41	10/31/2016	Calcium, Dissolved	12	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-41	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-41	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-41	10/31/2016	Iron, Dissolved	0.052	0.02	0.02	13821880	mg/L
MKTF-41	10/31/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Magnesium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	10/31/2016	Manganese, Dissolved	0.0043	0.002	0.00032	2017400	mg/L
MKTF-41	10/31/2016	Sodium, Dissolved	650	10	5	NA	mg/L
MKTF-41	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-41	10/31/2016	Selenium, Dissolved	0.05	0.005	0.0011	50000	mg/L
MKTF-41	10/31/2016	Uranium, Dissolved	0.013	0.0025	0.00026	NA	mg/L
MKTF-41	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-41	10/31/2016	Iron, Total	1.8	0.1	0.1	13822000	mg/L
MKTF-41	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-41	10/31/2016	Manganese, Total	0.088	0.002	0.00027	2017000	mg/L
MKTF-41	10/31/2016	Lead, Total	0.0029	0.0005	0.000081	15000	mg/L
MKTF-41	10/31/2016	Selenium, Total	0.045	0.005	0.00094	50000	mg/L
MKTF-41	10/31/2016	Uranium, Total	0.017	0.0005	0.00017	30000	mg/L
MKTF-41	10/31/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
MKTF-41	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-41	3/7/2017	Arsenic, Total	0.0081	0.01	0.0021	10000	mg/L
MKTF-41	3/7/2017	Barium, Total	0.12	0.002	0.00079	2000000	mg/L
MKTF-41	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-41	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-41	3/7/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
MKTF-41	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-41	3/7/2017	Arsenic, Dissolved	0.0055	0.01	0.0014	10000	mg/L
MKTF-41	3/7/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
MKTF-41	3/7/2017	Calcium, Dissolved	13	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	3/7/2017	Chromium, Dissolved	0.002	0.006	0.001	100000	mg/L
MKTF-41	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	3/7/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-41	3/7/2017	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Magnesium, Dissolved	1.8	1	0.5	NA	mg/L
MKTF-41	3/7/2017	Manganese, Dissolved	0.0016	0.002	0.00038	2017400	mg/L
MKTF-41	3/7/2017	Sodium, Dissolved	620	10	5	NA	mg/L
MKTF-41	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	3/7/2017	Selenium, Dissolved	0.049	0.01	0.0021	50000	mg/L
MKTF-41	3/7/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-41	3/7/2017	Iron, Total	2.1	0.1	0.1	13822000	mg/L
MKTF-41	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-41	3/7/2017	Manganese, Total	0.1	0.002	0.00027	2017000	mg/L
MKTF-41	3/7/2017	Lead, Total	0.0032	0.0025	0.00041	15000	mg/L
MKTF-41	3/7/2017	Selenium, Total	0.047	0.005	0.00094	50000	mg/L
MKTF-41	3/7/2017	Zinc, Total	0.0084	0.01	0.0027	5960000	mg/L
MKTF-41	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-41	6/6/2017	Arsenic, Total	0.0063	0.005	0.0015	10000	mg/L
MKTF-41	6/6/2017	Barium, Total	0.14	0.002	0.00093	2000000	mg/L
MKTF-41	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	6/6/2017	Chromium, Total	0.0038	0.006	0.0011	50000	mg/L
MKTF-41	6/6/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
MKTF-41	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-41	6/6/2017	Arsenic, Dissolved	0.0064	0.01	0.0018	10000	mg/L
MKTF-41	6/6/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
MKTF-41	6/6/2017	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	6/6/2017	Chromium, Dissolved	0.0017	0.006	0.001	100000	mg/L
MKTF-41	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	6/6/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	6/6/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-41	6/6/2017	Magnesium, Dissolved	2	1	0.25	NA	mg/L
MKTF-41	6/6/2017	Manganese, Dissolved	0.014	0.002	0.00038	2017400	mg/L
MKTF-41	6/6/2017	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-41	6/6/2017	Lead, Dissolved	0.00055	0.0005	0.00017	NA	mg/L
MKTF-41	6/6/2017	Selenium, Dissolved	0.044	0.005	0.0019	50000	mg/L
MKTF-41	6/6/2017	Uranium, Dissolved	0.02	0.0005	0.00005	NA	mg/L
MKTF-41	6/6/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
MKTF-41	6/6/2017	Iron, Total	4.6	0.1	0.051	13822000	mg/L
MKTF-41	6/6/2017	Mercury, Total	0.000049	0.0002	0.000037	2000	mg/L
MKTF-41	6/6/2017	Manganese, Total	0.16	0.002	0.0011	2017000	mg/L
MKTF-41	6/6/2017	Lead, Total	0.0048	0.0025	0.00048	15000	mg/L
MKTF-41	6/6/2017	Selenium, Total	0.044	0.005	0.0036	50000	mg/L
MKTF-41	6/6/2017	Uranium, Total	0.02	0.0025	0.00077	30000	mg/L
MKTF-41	6/6/2017	Zinc, Total	0.015	0.01	0.0028	5960000	mg/L
MKTF-41	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	9/25/2017	Arsenic, Total	0.0053	0.005	0.0015	10000	mg/L
MKTF-41	9/25/2017	Barium, Total	0.092	0.002	0.00093	2000000	mg/L
MKTF-41	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	9/25/2017	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
MKTF-41	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-41	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	9/25/2017	Arsenic, Dissolved	0.0063	0.01	0.0018	10000	mg/L
MKTF-41	9/25/2017	Barium, Dissolved	0.063	0.002	0.00085	2000000	mg/L
MKTF-41	9/25/2017	Calcium, Dissolved	15	1	0.078	NA	mg/L
MKTF-41	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	9/25/2017	Chromium, Dissolved	0.0021	0.006	0.0013	100000	mg/L
MKTF-41	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	9/25/2017	Iron, Dissolved	0.018	0.02	0.016	13821880	mg/L
MKTF-41	9/25/2017	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-41	9/25/2017	Magnesium, Dissolved	2	1	0.25	NA	mg/L
MKTF-41	9/25/2017	Manganese, Dissolved	0.0014	0.002	0.00039	2017400	mg/L
MKTF-41	9/25/2017	Sodium, Dissolved	650	10	1.6	NA	mg/L
MKTF-41	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	9/25/2017	Selenium, Dissolved	0.045	0.01	0.0039	50000	mg/L
MKTF-41	9/25/2017	Zinc, Dissolved	0.065	0.01	0.0021	5960450	mg/L
MKTF-41	9/25/2017	Iron, Total	0.99	0.02	0.01	13822000	mg/L
MKTF-41	9/25/2017	Mercury, Total	0.000074	0.0002	0.000037	2000	mg/L
MKTF-41	9/25/2017	Manganese, Total	0.031	0.002	0.0011	2017000	mg/L
MKTF-41	9/25/2017	Lead, Total	0.001	0.0005	0.000095	15000	mg/L
MKTF-41	9/25/2017	Selenium, Total	0.044	0.005	0.0036	50000	mg/L
MKTF-41	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-41	11/27/2017	Selenium, Total	0.037	0.005	0.0049	50000	mg/L
MKTF-41	11/27/2017	Uranium, Total	0.015	0.0025	0.00077	30000	mg/L
MKTF-41	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-41	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	11/27/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-41	11/27/2017	Barium, Total	0.088	0.002	0.001	2000000	mg/L
MKTF-41	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	11/27/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	11/27/2017	Arsenic, Dissolved	ND	0.05	0.021	10000	mg/L
MKTF-41	11/27/2017	Barium, Dissolved	0.061	0.002	0.00099	2000000	mg/L
MKTF-41	11/27/2017	Calcium, Dissolved	13	1	0.078	NA	mg/L
MKTF-41	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	11/27/2017	Iron, Dissolved	0.02	0.02	0.016	13821880	mg/L
MKTF-41	11/27/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	11/27/2017	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	11/27/2017	Manganese, Dissolved	0.0016	0.002	0.00039	2017400	mg/L
MKTF-41	11/27/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
MKTF-41	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	11/27/2017	Selenium, Dissolved	0.037	0.005	0.0038	50000	mg/L
MKTF-41	11/27/2017	Uranium, Dissolved	0.013	0.0025	0.00048	NA	mg/L
MKTF-41	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-41	11/27/2017	Iron, Total	1.3	0.1	0.051	13822000	mg/L
MKTF-41	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	11/27/2017	Manganese, Total	0.05	0.002	0.0011	2017000	mg/L
MKTF-41	11/27/2017	Lead, Total	0.0016	0.0025	0.0011	15000	mg/L
MKTF-41	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	2/7/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-41	2/7/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-41	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	2/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	2/7/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-41	2/7/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-41	2/7/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	2/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	2/7/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-41	2/7/2018	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	2/7/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
MKTF-41	2/7/2018	Sodium, Dissolved	610	10	1.6	NA	mg/L
MKTF-41	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	2/7/2018	Selenium, Dissolved	0.038	0.005	0.0038	50000	mg/L
MKTF-41	2/7/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
MKTF-41	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-41	2/7/2018	Iron, Total	2.4	0.1	0.051	13822000	mg/L
MKTF-41	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-41	2/7/2018	Manganese, Total	0.084	0.002	0.0011	2017000	mg/L
MKTF-41	2/7/2018	Lead, Total	0.0026	0.0025	0.0011	15000	mg/L
MKTF-41	2/7/2018	Selenium, Total	0.038	0.005	0.0049	50000	mg/L
MKTF-41	2/7/2018	Uranium, Total	0.016	0.0025	0.00034	30000	mg/L
MKTF-41	2/7/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
MKTF-41	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	5/9/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
MKTF-41	5/9/2018	Barium, Total	0.085	0.002	0.001	2000000	mg/L
MKTF-41	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	5/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	5/9/2018	Arsenic, Dissolved	0.0024	0.005	0.0021	10000	mg/L
MKTF-41	5/9/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
MKTF-41	5/9/2018	Calcium, Dissolved	13	1	0.078	NA	mg/L
MKTF-41	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	5/9/2018	Chromium, Dissolved	0.0013	0.006	0.0013	100000	mg/L
MKTF-41	5/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	5/9/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	5/9/2018	Magnesium, Dissolved	1.7	1	0.25	NA	mg/L
MKTF-41	5/9/2018	Manganese, Dissolved	0.0014	0.002	0.00039	2017400	mg/L
MKTF-41	5/9/2018	Sodium, Dissolved	670	10	1.6	NA	mg/L
MKTF-41	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	5/9/2018	Selenium, Dissolved	0.04	0.005	0.0038	50000	mg/L
MKTF-41	5/9/2018	Uranium, Dissolved	0.011	0.005	0.00096	NA	mg/L
MKTF-41	5/9/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
MKTF-41	5/9/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
MKTF-41	5/9/2018	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-41	5/9/2018	Manganese, Total	0.048	0.002	0.0011	2017000	mg/L
MKTF-41	5/9/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
MKTF-41	5/9/2018	Selenium, Total	0.039	0.001	0.00098	50000	mg/L
MKTF-41	5/9/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
MKTF-41	5/9/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
MKTF-41	8/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	8/29/2018	Arsenic, Total	0.0024	0.001	0.00041	10000	mg/L
MKTF-41	8/29/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
MKTF-41	8/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	8/29/2018	Chromium, Total	0.0024	0.006	0.0018	50000	mg/L
MKTF-41	8/29/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
MKTF-41	8/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	8/29/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-41	8/29/2018	Barium, Dissolved	0.056	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	Calcium, Dissolved	15	1	0.078	NA	mg/L
MKTF-41	8/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	8/29/2018	Chromium, Dissolved	0.0016	0.006	0.0013	100000	mg/L
MKTF-41	8/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	8/29/2018	Iron, Dissolved	0.029	0.02	0.016	13821880	mg/L
MKTF-41	8/29/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	8/29/2018	Magnesium, Dissolved	1.8	1	0.25	NA	mg/L
MKTF-41	8/29/2018	Manganese, Dissolved	0.0028	0.002	0.00039	2017400	mg/L
MKTF-41	8/29/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
MKTF-41	8/29/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-41	8/29/2018	Selenium, Dissolved	0.035	0.005	0.0038	50000	mg/L
MKTF-41	8/29/2018	Uranium, Dissolved	0.013	0.0025	0.00048	NA	mg/L
MKTF-41	8/29/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
MKTF-41	8/29/2018	Iron, Total	3.1	0.1	0.051	13822000	mg/L
MKTF-41	8/29/2018	Mercury, Total	0.000076	0.0002	0.000038	2000	mg/L
MKTF-41	8/29/2018	Manganese, Total	0.078	0.002	0.0011	2017000	mg/L
MKTF-41	8/29/2018	Lead, Total	0.002	0.0005	0.00023	15000	mg/L
MKTF-41	8/29/2018	Selenium, Total	0.035	0.001	0.00098	50000	mg/L
MKTF-41	8/29/2018	Uranium, Total	0.014	0.0025	0.00034	30000	mg/L
MKTF-41	8/29/2018	Zinc, Total	0.014	0.01	0.0033	5960000	mg/L
MKTF-41	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-41	11/15/2018	Arsenic, Total	0.0022	0.001	0.00041	10000	mg/L
MKTF-41	11/15/2018	Barium, Total	0.062	0.002	0.001	2000000	mg/L
MKTF-41	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-41	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-41	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-41	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-41	11/15/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L
MKTF-41	11/15/2018	Barium, Dissolved	0.059	0.002	0.00099	2000000	mg/L
MKTF-41	11/15/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
MKTF-41	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-41	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-41	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-41	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-41	11/15/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-41	11/15/2018	Magnesium, Dissolved	1.6	1	0.25	NA	mg/L
MKTF-41	11/15/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MKTF-41	11/15/2018	Sodium, Dissolved	690	20	3.3	NA	mg/L
MKTF-41	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-41	11/15/2018	Selenium, Dissolved	0.033	0.001	0.00076	50000	mg/L
MKTF-41	11/15/2018	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-41	11/15/2018	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
MKTF-41	11/15/2018	Iron, Total	0.055	0.02	0.01	13822000	mg/L
MKTF-41	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-41	11/15/2018	Manganese, Total	0.0049	0.002	0.0011	2017000	mg/L
MKTF-41	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-41	11/15/2018	Selenium, Total	0.035	0.001	0.00098	50000	mg/L
MKTF-41	11/15/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
MKTF-41	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	10/23/2019	Aluminum, Total	0.32	0.1	0.012441	19914000	mg/L
MKTF-42	10/23/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-42	10/23/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-42	10/23/2019	Barium, Total	0.062	0.002	0.000648	2000000	mg/L
MKTF-42	10/23/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	10/23/2019	Boron, Total	0.76	0.2	0.022653	3949	mg/L
MKTF-42	10/23/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	10/23/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	10/23/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	10/23/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	10/23/2019	Iron, Total	0.19	0.02	0.008747	13822000	mg/L
MKTF-42	10/23/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
MKTF-42	10/23/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-42	10/23/2019	Mercury, Total	0.0002	0.0002	0.000038	2000	mg/L
MKTF-42	10/23/2019	Molybdenum, Total	0.039	0.008	0.006735	98700	mg/L
MKTF-42	10/23/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	10/23/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-42	10/23/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	10/23/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-42	10/23/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	10/23/2019	Aluminum, Dissolved	0.0044	0.02	0.002488	19913930	mg/L
MKTF-42	10/23/2019	Antimony, Dissolved	ND	0.01	0.003894	6000	mg/L
MKTF-42	10/23/2019	Arsenic, Dissolved	0.004	0.01	0.001009	10000	mg/L
MKTF-42	10/23/2019	Barium, Dissolved	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	10/23/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	10/23/2019	Boron, Dissolved	0.8	0.04	0.004531	3949110	mg/L
MKTF-42	10/23/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	10/23/2019	Calcium, Dissolved	22	1	0.061889	NA	mg/L
MKTF-42	10/23/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	10/23/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	10/23/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
MKTF-42	10/23/2019	Iron, Dissolved	0.03	0.02	0.008747	13821880	mg/L
MKTF-42	10/23/2019	Lead, Dissolved	ND	0.005	0.000549	NA	mg/L
MKTF-42	10/23/2019	Magnesium, Dissolved	2.7	1	0.05029	NA	mg/L
MKTF-42	10/23/2019	Manganese, Dissolved	0.1	0.002	0.00029	2017400	mg/L
MKTF-42	10/23/2019	Molybdenum, Dissolved	0.038	0.008	0.006735	98700	mg/L
MKTF-42	10/23/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	10/23/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-42	10/23/2019	Selenium, Dissolved	ND	0.01	0.001713	50000	mg/L
MKTF-42	10/23/2019	Silver, Dissolved	0.00094	0.005	0.000942	81200	mg/L
MKTF-42	10/23/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-42	10/23/2019	Thallium, Dissolved	ND	0.005	0.000484	2000	mg/L
MKTF-42	10/23/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
MKTF-42	2/13/2019	Antimony, Total	0.00022	0.001	0.000204	6000	mg/L
MKTF-42	2/13/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-42	2/13/2019	Barium, Total	0.067	0.002	0.000648	2000000	mg/L
MKTF-42	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	2/13/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
MKTF-42	2/13/2019	Lead, Total	0.00037	0.0005	0.000047	15000	mg/L
MKTF-42	2/13/2019	Manganese, Total	0.055	0.002	0.00029	2017000	mg/L
MKTF-42	2/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-42	2/13/2019	Selenium, Total	0.0011	0.001	0.000478	50000	mg/L
MKTF-42	2/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	2/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	2/13/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
MKTF-42	2/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	2/13/2019	Antimony, Dissolved	0.00028	0.001	0.000204	6000	mg/L
MKTF-42	2/13/2019	Arsenic, Dissolved	0.0014	0.001	0.000068	10000	mg/L
MKTF-42	2/13/2019	Barium, Dissolved	0.057	0.002	0.000648	2000000	mg/L
MKTF-42	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	2/13/2019	Calcium, Dissolved	24	1	0.061889	NA	mg/L
MKTF-42	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	2/13/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-42	2/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-42	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-42	2/13/2019	Magnesium, Dissolved	2.9	1	0.05029	NA	mg/L
MKTF-42	2/13/2019	Manganese, Dissolved	0.044	0.002	0.00029	2017400	mg/L
MKTF-42	2/13/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
MKTF-42	2/13/2019	Selenium, Dissolved	0.0012	0.001	0.000203	50000	mg/L
MKTF-42	2/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	2/13/2019	Sodium, Dissolved	740	20	8.323526	NA	mg/L
MKTF-42	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-42	2/13/2019	Uranium, Dissolved	0.016	0.0005	0.00003	NA	mg/L
MKTF-42	2/13/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-42	8/22/2019	Aluminum, Dissolved	0.0052	0.02	0.002488	19913930	mg/L
MKTF-42	8/22/2019	Antimony, Dissolved	0.00044	0.001	0.000389	6000	mg/L
MKTF-42	8/22/2019	Arsenic, Dissolved	0.0016	0.001	0.000101	10000	mg/L
MKTF-42	8/22/2019	Barium, Dissolved	0.058	0.002	0.000648	2000000	mg/L
MKTF-42	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	8/22/2019	Boron, Dissolved	0.8	0.04	0.004531	3949110	mg/L
MKTF-42	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	8/22/2019	Calcium, Dissolved	21	1	0.061889	NA	mg/L
MKTF-42	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	8/22/2019	Copper, Dissolved	0.0029	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	8/22/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
MKTF-42	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-42	8/22/2019	Magnesium, Dissolved	2.7	1	0.05029	NA	mg/L
MKTF-42	8/22/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-42	8/22/2019	Molybdenum, Dissolved	0.042	0.008	0.006735	98700	mg/L
MKTF-42	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	8/22/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
MKTF-42	8/22/2019	Selenium, Dissolved	0.00058	0.001	0.000171	50000	mg/L
MKTF-42	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	8/22/2019	Sodium, Dissolved	790	20	8.323526	NA	mg/L
MKTF-42	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-42	8/22/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
MKTF-42	8/22/2019	Zinc, Dissolved	0.0091	0.01	0.002252	5960450	mg/L
MKTF-42	8/22/2019	Aluminum, Total	0.23	0.02	0.002488	19914000	mg/L
MKTF-42	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-42	8/22/2019	Arsenic, Total	0.0015	0.001	0.000312	10000	mg/L
MKTF-42	8/22/2019	Barium, Total	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	8/22/2019	Boron, Total	0.78	0.04	0.004531	3949	mg/L
MKTF-42	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	8/22/2019	Iron, Total	0.16	0.02	0.008747	13822000	mg/L
MKTF-42	8/22/2019	Lead, Total	0.00028	0.0005	0.000055	15000	mg/L
MKTF-42	8/22/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-42	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MKTF-42	8/22/2019	Molybdenum, Total	0.04	0.008	0.006735	98700	mg/L
MKTF-42	8/22/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	8/22/2019	Selenium, Total	0.00087	0.001	0.000478	50000	mg/L
MKTF-42	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	8/22/2019	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
MKTF-42	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	5/7/2019	Aluminum, Dissolved	0.0062	0.02	0.002488	19913930	mg/L
MKTF-42	5/7/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-42	5/7/2019	Arsenic, Dissolved	0.0012	0.005	0.000504	10000	mg/L
MKTF-42	5/7/2019	Barium, Dissolved	0.059	0.002	0.000648	2000000	mg/L
MKTF-42	5/7/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-42	5/7/2019	Boron, Dissolved	0.81	0.04	0.004531	3949110	mg/L
MKTF-42	5/7/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-42	5/7/2019	Calcium, Dissolved	23	1	0.061889	NA	mg/L
MKTF-42	5/7/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-42	5/7/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-42	5/7/2019	Copper, Dissolved	0.0024	0.006	0.001296	790000	mg/L
MKTF-42	5/7/2019	Iron, Dissolved	0.037	0.02	0.008747	13821880	mg/L
MKTF-42	5/7/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-42	5/7/2019	Magnesium, Dissolved	2.6	1	0.05029	NA	mg/L
MKTF-42	5/7/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
MKTF-42	5/7/2019	Molybdenum, Dissolved	0.045	0.008	0.006735	98700	mg/L
MKTF-42	5/7/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-42	5/7/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
MKTF-42	5/7/2019	Selenium, Dissolved	0.0015	0.005	0.000857	50000	mg/L
MKTF-42	5/7/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-42	5/7/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
MKTF-42	5/7/2019	Thallium, Dissolved	0.00069	0.0025	0.000242	2000	mg/L
MKTF-42	5/7/2019	Uranium, Dissolved	0.012	0.0025	0.000374	NA	mg/L
MKTF-42	5/7/2019	Zinc, Dissolved	0.0078	0.01	0.002252	5960450	mg/L
MKTF-42	5/7/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MKTF-42	5/7/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-42	5/7/2019	Arsenic, Total	0.0017	0.005	0.001561	10000	mg/L
MKTF-42	5/7/2019	Barium, Total	0.065	0.002	0.000648	2000000	mg/L
MKTF-42	5/7/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-42	5/7/2019	Boron, Total	0.82	0.04	0.004531	3949	mg/L
MKTF-42	5/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-42	5/7/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-42	5/7/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-42	5/7/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-42	5/7/2019	Iron, Total	0.15	0.02	0.008747	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	5/7/2019	Lead, Total	0.00037	0.0025	0.000274	15000	mg/L
MKTF-42	5/7/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
MKTF-42	5/7/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MKTF-42	5/7/2019	Molybdenum, Total	0.046	0.008	0.006735	98700	mg/L
MKTF-42	5/7/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-42	5/7/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-42	5/7/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-42	5/7/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-42	5/7/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
MKTF-42	5/7/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-42	9/21/2020	Arsenic, Dissolved	0.0021	0.005	0.001	10000	mg/L
MKTF-42	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-42	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-42	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-42	9/21/2020	Uranium, Dissolved	0.015	0.0025	0.00033	NA	mg/L
MKTF-42	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-42	9/21/2020	Sodium, Dissolved	730	50	6.9	NA	mg/L
MKTF-42	9/21/2020	Aluminum, Dissolved	0.008	0.02	0.0056	19913930	mg/L
MKTF-42	9/21/2020	Barium, Dissolved	0.052	0.002	0.0011	2000000	mg/L
MKTF-42	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-42	9/21/2020	Boron, Dissolved	0.75	0.04	0.0067	3949110	mg/L
MKTF-42	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-42	9/21/2020	Calcium, Dissolved	21	1	0.11	NA	mg/L
MKTF-42	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-42	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-42	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-42	9/21/2020	Magnesium, Dissolved	3.1	1	0.067	NA	mg/L
MKTF-42	9/21/2020	Manganese, Dissolved	0.041	0.002	0.00058	2017400	mg/L
MKTF-42	9/21/2020	Molybdenum, Dissolved	0.018	0.008	0.0056	98700	mg/L
MKTF-42	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-42	9/21/2020	Potassium, Dissolved	1.4	1	0.16	NA	mg/L
MKTF-42	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-42	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-42	9/21/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
MKTF-42	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-42	9/21/2020	Arsenic, Total	0.0019	0.001	0.00026	10000	mg/L
MKTF-42	9/21/2020	Lead, Total	0.00013	0.0005	0.000034	15000	mg/L
MKTF-42	9/21/2020	Selenium, Total	0.0013	0.001	0.00066	50000	mg/L
MKTF-42	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-42	9/21/2020	Uranium, Total	0.019	0.0005	0.000065	30000	mg/L
MKTF-42	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-42	9/21/2020	Aluminum, Total	0.045	0.02	0.0074	19914000	mg/L
MKTF-42	9/21/2020	Barium, Total	0.052	0.003	0.0016	2000000	mg/L
MKTF-42	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-42	9/21/2020	Boron, Total	0.71	0.04	0.0074	3949	mg/L
MKTF-42	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-42	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-42	9/21/2020	Iron, Total	0.031	0.05	0.013	13822000	mg/L
MKTF-42	9/21/2020	Manganese, Total	0.042	0.002	0.00081	2017000	mg/L
MKTF-42	9/21/2020	Molybdenum, Total	0.025	0.008	0.0065	98700	mg/L
MKTF-42	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-42	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-42	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MKTF-42	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-42	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-42	12/16/2020	Aluminum, Total	0.28	0.2	0.051	19914000	mg/L
MKTF-42	12/16/2020	Calcium, Total	18.4	0.5	0.084	NA	mg/L
MKTF-42	12/16/2020	Boron, Total	0.722	0.1	0.022	3949	mg/L
MKTF-42	12/16/2020	Barium, Total	0.0515	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Potassium, Total	1.76	1	0.34	NA	mg/L
MKTF-42	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Magnesium, Total	2.64	0.5	0.12	NA	mg/L
MKTF-42	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-42	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-42	12/16/2020	Manganese, Total	0.0612	0.01	0.003	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-42	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-42	12/16/2020	Barium, Dissolved	0.0503	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Boron, Dissolved	0.76	0.1	0.022	3949110	mg/L
MKTF-42	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-42	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-42	12/16/2020	Manganese, Dissolved	0.0566	0.01	0.003	2017400	mg/L
MKTF-42	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-42	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-42	12/16/2020	Sodium, Total	639	20	9.2	NA	mg/L
MKTF-42	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-42	12/16/2020	Aluminum, Total	0.27	0.2	0.051	19914000	mg/L
MKTF-42	12/16/2020	Calcium, Total	18.1	0.5	0.084	NA	mg/L
MKTF-42	12/16/2020	Boron, Total	0.722	0.1	0.022	3949	mg/L
MKTF-42	12/16/2020	Barium, Total	0.0536	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Potassium, Total	1.73	1	0.34	NA	mg/L
MKTF-42	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Magnesium, Total	2.63	0.5	0.12	NA	mg/L
MKTF-42	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-42	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-42	12/16/2020	Manganese, Total	0.0413	0.01	0.003	2017000	mg/L
MKTF-42	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-42	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-42	12/16/2020	Barium, Dissolved	0.0502	0.01	0.003	2000000	mg/L
MKTF-42	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-42	12/16/2020	Boron, Dissolved	0.77	0.1	0.022	3949110	mg/L
MKTF-42	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-42	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-42	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-42	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-42	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-42	12/16/2020	Manganese, Dissolved	0.0628	0.01	0.003	2017400	mg/L
MKTF-42	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-42	12/16/2020	Nickel, Dissolved	0.0166	0.006	0.003	372000	mg/L
MKTF-42	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-42	12/16/2020	Zinc, Dissolved	0.0904	0.02	0.008	5960450	mg/L
MKTF-42	12/16/2020	Sodium, Total	609	10	4.6	NA	mg/L
MKTF-42	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-42	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-42	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-42	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-42	12/16/2020	Arsenic, Total Recoverable	2.31	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-42	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Arsenic, Dissolved	2.1	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-42	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Uranium, Total Recoverable	13.5	5	1.12	30	ug/L
MKTF-42	12/16/2020	Uranium, Dissolved	14.9	5	1.12	NA	ug/L
MKTF-42	12/16/2020	Arsenic, Total Recoverable	2.15	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-42	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Arsenic, Dissolved	2.22	1	0.286	10	ug/L
MKTF-42	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-42	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-42	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-42	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-42	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-42	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-42	2/27/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-42	2/27/2020	Arsenic, Dissolved	0.0022	0.001	0.0001	10000	mg/L
MKTF-42	2/27/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-42	2/27/2020	Selenium, Dissolved	0.0016	0.001	0.00017	50000	mg/L
MKTF-42	2/27/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-42	2/27/2020	Uranium, Dissolved	0.013	0.0005	0.000075	NA	mg/L
MKTF-42	2/27/2020	Barium, Dissolved	0.047	0.01	0.0032	2000000	mg/L
MKTF-42	2/27/2020	Beryllium, Dissolved	0.0019	0.01	0.0014	4000	mg/L
MKTF-42	2/27/2020	Boron, Dissolved	0.62	0.2	0.023	3949110	mg/L
MKTF-42	2/27/2020	Cadmium, Dissolved	ND	0.01	0.0028	5000	mg/L
MKTF-42	2/27/2020	Cobalt, Dissolved	ND	0.03	0.015	5980	mg/L
MKTF-42	2/27/2020	Copper, Dissolved	ND	0.03	0.0065	790000	mg/L
MKTF-42	2/27/2020	Manganese, Dissolved	0.05	0.01	0.0014	2017400	mg/L
MKTF-42	2/27/2020	Nickel, Dissolved	ND	0.05	0.02	372000	mg/L
MKTF-42	2/27/2020	Zinc, Dissolved	0.025	0.05	0.011	5960450	mg/L
MKTF-42	2/27/2020	Aluminum, Dissolved	0.015	0.1	0.012	19913930	mg/L
MKTF-42	2/27/2020	Calcium, Dissolved	23	5	0.31	NA	mg/L
MKTF-42	2/27/2020	Iron, Dissolved	ND	0.1	0.044	13821880	mg/L
MKTF-42	2/27/2020	Magnesium, Dissolved	3.2	5	0.25	NA	mg/L
MKTF-42	2/27/2020	Potassium, Dissolved	1.4	5	0.81	NA	mg/L
MKTF-42	2/27/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
MKTF-42	2/27/2020	Chromium, Dissolved	ND	0.03	0.0077	100000	mg/L
MKTF-42	2/27/2020	Molybdenum, Dissolved	ND	0.04	0.034	98700	mg/L
MKTF-42	2/27/2020	Silver, Dissolved	ND	0.025	0.0047	81200	mg/L
MKTF-42	2/27/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-42	2/27/2020	Arsenic, Total	0.0023	0.001	0.00031	10000	mg/L
MKTF-42	2/27/2020	Lead, Total	0.00016	0.0005	0.000055	15000	mg/L
MKTF-42	2/27/2020	Selenium, Total	0.0011	0.001	0.00048	50000	mg/L
MKTF-42	2/27/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-42	2/27/2020	Uranium, Total	0.014	0.0005	0.000085	30000	mg/L
MKTF-42	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-42	2/27/2020	Aluminum, Total	0.14	0.02	0.0025	19914000	mg/L
MKTF-42	2/27/2020	Barium, Total	0.052	0.002	0.00065	2000000	mg/L
MKTF-42	2/27/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-42	2/27/2020	Boron, Total	0.65	0.04	0.0045	3949	mg/L
MKTF-42	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-42	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-42	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	2/27/2020	Iron, Total	0.069	0.02	0.0087	13822000	mg/L
MKTF-42	2/27/2020	Manganese, Total	0.051	0.002	0.00029	2017000	mg/L
MKTF-42	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-42	2/27/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-42	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-42	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-42	2/27/2020	Molybdenum, Total	0.017	0.008	0.0067	98700	mg/L
MKTF-42	3/11/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	3/11/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-42	3/11/2015	Barium, Total	0.094	0.002	0.00095	2000000	mg/L
MKTF-42	3/11/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-42	3/11/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	3/11/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-42	3/11/2015	Iron, Total	0.11	0.02	0.0073	13822000	mg/L
MKTF-42	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	3/11/2015	Manganese, Total	0.54	0.002	0.00027	2017000	mg/L
MKTF-42	3/11/2015	Lead, Total	ND	0.001	0.000059	15000	mg/L
MKTF-42	3/11/2015	Selenium, Total	0.015	0.01	0.0015	50000	mg/L
MKTF-42	3/11/2015	Uranium, Total	0.04	0.001	0.00005	30000	mg/L
MKTF-42	3/11/2015	Zinc, Total	0.036	0.01	0.0028	5960000	mg/L
MKTF-42	6/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	6/9/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2015	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
MKTF-42	6/9/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	6/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	6/9/2015	Copper, Total	0.011	0.006	0.0051	790000	mg/L
MKTF-42	6/9/2015	Iron, Total	1.6	0.1	0.036	13822000	mg/L
MKTF-42	6/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	6/9/2015	Manganese, Total	0.6	0.002	0.0015	2017000	mg/L
MKTF-42	6/9/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
MKTF-42	6/9/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-42	6/9/2015	Uranium, Total	0.036	0.0025	0.000025	30000	mg/L
MKTF-42	6/9/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
MKTF-42	8/21/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	8/21/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
MKTF-42	8/21/2015	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
MKTF-42	8/21/2015	Calcium, Total	21	1	0.057	NA	mg/L
MKTF-42	8/21/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	8/21/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	8/21/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-42	8/21/2015	Iron, Total	0.75	0.02	0.0072	13822000	mg/L
MKTF-42	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	8/21/2015	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-42	8/21/2015	Magnesium, Total	2.7	1	0.039	NA	mg/L
MKTF-42	8/21/2015	Manganese, Total	0.36	0.002	0.0015	2017000	mg/L
MKTF-42	8/21/2015	Sodium, Total	690	10	0.72	NA	mg/L
MKTF-42	8/21/2015	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
MKTF-42	8/21/2015	Selenium, Total	0.0045	0.001	0.00012	50000	mg/L
MKTF-42	8/21/2015	Uranium, Total	0.032	0.0025	0.000025	30000	mg/L
MKTF-42	8/21/2015	Zinc, Total	0.014	0.01	0.0039	5960000	mg/L
MKTF-42	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	11/5/2015	Arsenic, Total	ND	0.01	0.00029	10000	mg/L
MKTF-42	11/5/2015	Barium, Total	0.076	0.002	0.0011	2000000	mg/L
MKTF-42	11/5/2015	Calcium, Total	19	1	0.26	NA	mg/L
MKTF-42	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-42	11/5/2015	Iron, Total	0.49	0.02	0.0072	13822000	mg/L
MKTF-42	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-42	11/5/2015	Potassium, Total	2	1	0.18	NA	mg/L
MKTF-42	11/5/2015	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	11/5/2015	Manganese, Total	0.39	0.002	0.0015	2017000	mg/L
MKTF-42	11/5/2015	Sodium, Total	660	10	0.96	NA	mg/L
MKTF-42	11/5/2015	Lead, Total	0.00077	0.0005	0.000047	15000	mg/L
MKTF-42	11/5/2015	Selenium, Total	0.011	0.005	0.00062	50000	mg/L
MKTF-42	11/5/2015	Uranium, Total	0.027	0.0025	0.000025	30000	mg/L
MKTF-42	11/5/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-42	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-42	2/24/2016	Arsenic, Total	0.0026	0.001	0.00029	10000	mg/L
MKTF-42	2/24/2016	Barium, Total	0.092	0.002	0.0011	2000000	mg/L
MKTF-42	2/24/2016	Calcium, Total	20	1	0.26	NA	mg/L
MKTF-42	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-42	2/24/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-42	2/24/2016	Copper, Total	0.01	0.006	0.0051	790000	mg/L
MKTF-42	2/24/2016	Iron, Total	0.89	0.02	0.0072	13822000	mg/L
MKTF-42	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	2/24/2016	Potassium, Total	2.3	1	0.18	NA	mg/L
MKTF-42	2/24/2016	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	2/24/2016	Manganese, Total	0.41	0.002	0.0015	2017000	mg/L
MKTF-42	2/24/2016	Sodium, Total	680	10	0.96	NA	mg/L
MKTF-42	2/24/2016	Lead, Total	0.0015	0.0005	0.000047	15000	mg/L
MKTF-42	2/24/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
MKTF-42	2/24/2016	Uranium, Total	0.023	0.0025	0.000025	30000	mg/L
MKTF-42	2/24/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MKTF-42	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-42	6/9/2016	Arsenic, Total	0.006	0.01	0.0014	10000	mg/L
MKTF-42	6/9/2016	Barium, Total	0.079	0.002	0.0013	2000000	mg/L
MKTF-42	6/9/2016	Calcium, Total	19	1	0.26	NA	mg/L
MKTF-42	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-42	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	6/9/2016	Iron, Total	0.077	0.02	0.0091	13822000	mg/L
MKTF-42	6/9/2016	Mercury, Total	0.000097	0.0002	0.000053	2000	mg/L
MKTF-42	6/9/2016	Potassium, Total	1.7	1	0.18	NA	mg/L
MKTF-42	6/9/2016	Magnesium, Total	2.5	1	0.013	NA	mg/L
MKTF-42	6/9/2016	Manganese, Total	0.37	0.002	0.00032	2017000	mg/L
MKTF-42	6/9/2016	Sodium, Total	690	10	0.96	NA	mg/L
MKTF-42	6/9/2016	Lead, Total	0.00031	0.0005	0.00017	15000	mg/L
MKTF-42	6/9/2016	Selenium, Total	0.016	0.01	0.0021	50000	mg/L
MKTF-42	6/9/2016	Uranium, Total	0.021	0.0005	0.000051	30000	mg/L
MKTF-42	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-42	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-42	9/9/2016	Arsenic, Total	0.0042	0.005	0.0011	10000	mg/L
MKTF-42	9/9/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	9/9/2016	Copper, Total	0.0054	0.006	0.003	790000	mg/L
MKTF-42	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-42	9/9/2016	Arsenic, Dissolved	0.0033	0.005	0.00069	10000	mg/L
MKTF-42	9/9/2016	Barium, Dissolved	0.078	0.002	0.0013	2000000	mg/L
MKTF-42	9/9/2016	Calcium, Dissolved	20	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-42	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-42	9/9/2016	Copper, Dissolved	0.0052	0.006	0.004	790000	mg/L
MKTF-42	9/9/2016	Iron, Dissolved	0.081	0.02	0.02	13821880	mg/L
MKTF-42	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	9/9/2016	Manganese, Dissolved	0.29	0.002	0.00032	2017400	mg/L
MKTF-42	9/9/2016	Sodium, Dissolved	690	10	5	NA	mg/L
MKTF-42	9/9/2016	Lead, Dissolved	0.00067	0.0005	0.00017	NA	mg/L
MKTF-42	9/9/2016	Selenium, Dissolved	0.0095	0.005	0.0011	50000	mg/L
MKTF-42	9/9/2016	Uranium, Dissolved	0.019	0.0005	0.000051	NA	mg/L
MKTF-42	9/9/2016	Zinc, Dissolved	0.0078	0.01	0.0028	5960450	mg/L
MKTF-42	9/9/2016	Iron, Total	0.8	0.02	0.02	13822000	mg/L
MKTF-42	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	9/9/2016	Manganese, Total	0.32	0.002	0.00027	2017000	mg/L
MKTF-42	9/9/2016	Lead, Total	0.0018	0.0005	0.000081	15000	mg/L
MKTF-42	9/9/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
MKTF-42	9/9/2016	Uranium, Total	0.017	0.0025	0.00087	30000	mg/L
MKTF-42	9/9/2016	Zinc, Total	0.0074	0.01	0.0027	5960000	mg/L
MKTF-42	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-42	10/31/2016	Arsenic, Total	0.0047	0.005	0.0011	10000	mg/L
MKTF-42	10/31/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	10/31/2016	Copper, Total	0.0052	0.006	0.003	790000	mg/L
MKTF-42	10/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-42	10/31/2016	Arsenic, Dissolved	0.0044	0.01	0.0014	10000	mg/L
MKTF-42	10/31/2016	Barium, Dissolved	0.075	0.002	0.0013	2000000	mg/L
MKTF-42	10/31/2016	Calcium, Dissolved	20	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-42	10/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-42	10/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-42	10/31/2016	Iron, Dissolved	0.18	0.02	0.02	13821880	mg/L
MKTF-42	10/31/2016	Potassium, Dissolved	1.7	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	10/31/2016	Manganese, Dissolved	0.3	0.002	0.00032	2017400	mg/L
MKTF-42	10/31/2016	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-42	10/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-42	10/31/2016	Selenium, Dissolved	0.012	0.005	0.0011	50000	mg/L
MKTF-42	10/31/2016	Uranium, Dissolved	0.013	0.0025	0.00026	NA	mg/L
MKTF-42	10/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MKTF-42	10/31/2016	Iron, Total	1.3	0.1	0.1	13822000	mg/L
MKTF-42	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-42	10/31/2016	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
MKTF-42	10/31/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
MKTF-42	10/31/2016	Selenium, Total	0.0095	0.02	0.0037	50000	mg/L
MKTF-42	10/31/2016	Uranium, Total	0.014	0.0025	0.00087	30000	mg/L
MKTF-42	10/31/2016	Zinc, Total	0.0078	0.01	0.0027	5960000	mg/L
MKTF-42	3/7/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Arsenic, Total	0.0089	0.02	0.0042	10000	mg/L
MKTF-42	3/7/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
MKTF-42	3/7/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-42	3/7/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-42	3/7/2017	Copper, Total	0.005	0.006	0.003	790000	mg/L
MKTF-42	3/7/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-42	3/7/2017	Arsenic, Dissolved	0.0033	0.02	0.0028	10000	mg/L
MKTF-42	3/7/2017	Barium, Dissolved	0.079	0.002	0.00085	2000000	mg/L
MKTF-42	3/7/2017	Calcium, Dissolved	19	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	3/7/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-42	3/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	3/7/2017	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
MKTF-42	3/7/2017	Potassium, Dissolved	1.4	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Magnesium, Dissolved	2.6	1	0.5	NA	mg/L
MKTF-42	3/7/2017	Manganese, Dissolved	0.23	0.002	0.00038	2017400	mg/L
MKTF-42	3/7/2017	Sodium, Dissolved	700	10	5	NA	mg/L
MKTF-42	3/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	3/7/2017	Selenium, Dissolved	0.0086	0.02	0.0042	50000	mg/L
MKTF-42	3/7/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
MKTF-42	3/7/2017	Iron, Total	1.2	0.1	0.1	13822000	mg/L
MKTF-42	3/7/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-42	3/7/2017	Manganese, Total	0.26	0.002	0.00027	2017000	mg/L
MKTF-42	3/7/2017	Lead, Total	0.0023	0.0025	0.00041	15000	mg/L
MKTF-42	3/7/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
MKTF-42	3/7/2017	Zinc, Total	0.006	0.01	0.0027	5960000	mg/L
MKTF-42	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-42	6/6/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
MKTF-42	6/6/2017	Barium, Total	0.082	0.002	0.00093	2000000	mg/L
MKTF-42	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	6/6/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-42	6/6/2017	Copper, Total	0.0044	0.006	0.0017	790000	mg/L
MKTF-42	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-42	6/6/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-42	6/6/2017	Barium, Dissolved	0.065	0.002	0.00085	2000000	mg/L
MKTF-42	6/6/2017	Calcium, Dissolved	20	1	0.078	NA	mg/L
MKTF-42	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-42	6/6/2017	Copper, Dissolved	0.0084	0.006	0.0032	790000	mg/L
MKTF-42	6/6/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-42	6/6/2017	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
MKTF-42	6/6/2017	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	6/6/2017	Manganese, Dissolved	0.24	0.002	0.00038	2017400	mg/L
MKTF-42	6/6/2017	Sodium, Dissolved	680	10	1.6	NA	mg/L
MKTF-42	6/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	6/6/2017	Selenium, Dissolved	0.0079	0.005	0.0019	50000	mg/L
MKTF-42	6/6/2017	Uranium, Dissolved	0.013	0.0005	0.00005	NA	mg/L
MKTF-42	6/6/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
MKTF-42	6/6/2017	Iron, Total	0.92	0.02	0.01	13822000	mg/L
MKTF-42	6/6/2017	Mercury, Total	0.000057	0.0002	0.000037	2000	mg/L
MKTF-42	6/6/2017	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
MKTF-42	6/6/2017	Lead, Total	0.0014	0.0025	0.00048	15000	mg/L
MKTF-42	6/6/2017	Selenium, Total	0.0054	0.005	0.0036	50000	mg/L
MKTF-42	6/6/2017	Uranium, Total	0.012	0.0025	0.00077	30000	mg/L
MKTF-42	6/6/2017	Zinc, Total	0.0029	0.01	0.0028	5960000	mg/L
MKTF-42	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	9/25/2017	Arsenic, Total	0.0032	0.005	0.0015	10000	mg/L
MKTF-42	9/25/2017	Barium, Total	0.061	0.002	0.00093	2000000	mg/L
MKTF-42	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-42	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	9/25/2017	Arsenic, Dissolved	0.0036	0.005	0.00089	10000	mg/L
MKTF-42	9/25/2017	Barium, Dissolved	0.059	0.002	0.00085	2000000	mg/L
MKTF-42	9/25/2017	Calcium, Dissolved	22	1	0.078	NA	mg/L
MKTF-42	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	9/25/2017	Iron, Dissolved	0.056	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	9/25/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	9/25/2017	Magnesium, Dissolved	2.9	1	0.25	NA	mg/L
MKTF-42	9/25/2017	Manganese, Dissolved	0.19	0.002	0.00039	2017400	mg/L
MKTF-42	9/25/2017	Sodium, Dissolved	710	10	1.6	NA	mg/L
MKTF-42	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	9/25/2017	Selenium, Dissolved	0.0086	0.005	0.0019	50000	mg/L
MKTF-42	9/25/2017	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-42	9/25/2017	Iron, Total	0.22	0.02	0.01	13822000	mg/L
MKTF-42	9/25/2017	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
MKTF-42	9/25/2017	Manganese, Total	0.2	0.002	0.0011	2017000	mg/L
MKTF-42	9/25/2017	Lead, Total	0.00023	0.0005	0.000095	15000	mg/L
MKTF-42	9/25/2017	Selenium, Total	0.0068	0.005	0.0036	50000	mg/L
MKTF-42	9/25/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	11/27/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	11/27/2017	Arsenic, Total	0.0025	0.005	0.0021	10000	mg/L
MKTF-42	11/27/2017	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-42	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	11/27/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	11/27/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	11/27/2017	Arsenic, Dissolved	0.0033	0.005	0.0021	10000	mg/L
MKTF-42	11/27/2017	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
MKTF-42	11/27/2017	Calcium, Dissolved	20	1	0.078	NA	mg/L
MKTF-42	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	11/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	11/27/2017	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
MKTF-42	11/27/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	11/27/2017	Magnesium, Dissolved	2.6	1	0.25	NA	mg/L
MKTF-42	11/27/2017	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-42	11/27/2017	Sodium, Dissolved	730	10	1.6	NA	mg/L
MKTF-42	11/27/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	11/27/2017	Selenium, Dissolved	0.0044	0.005	0.0038	50000	mg/L
MKTF-42	11/27/2017	Uranium, Dissolved	0.0093	0.0025	0.00048	NA	mg/L
MKTF-42	11/27/2017	Zinc, Dissolved	ND	0.01	0.01	5960450	mg/L
MKTF-42	11/27/2017	Iron, Total	0.44	0.02	0.01	13822000	mg/L
MKTF-42	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-42	11/27/2017	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
MKTF-42	11/27/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-42	11/27/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-42	11/27/2017	Uranium, Total	0.011	0.0025	0.00077	30000	mg/L
MKTF-42	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	2/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	2/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
MKTF-42	2/7/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-42	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	2/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	2/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	2/7/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	2/7/2018	Barium, Dissolved	0.068	0.002	0.00099	2000000	mg/L
MKTF-42	2/7/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-42	2/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	2/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	2/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	2/7/2018	Iron, Dissolved	0.28	0.02	0.016	13821880	mg/L
MKTF-42	2/7/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-42	2/7/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	2/7/2018	Manganese, Dissolved	0.21	0.002	0.00039	2017400	mg/L
MKTF-42	2/7/2018	Sodium, Dissolved	660	10	1.6	NA	mg/L
MKTF-42	2/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	2/7/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	2/7/2018	Uranium, Dissolved	0.0083	0.0005	0.000096	NA	mg/L
MKTF-42	2/7/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-42	2/7/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-42	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-42	2/7/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-42	2/7/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-42	2/7/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/7/2018	Uranium, Total	0.0095	0.0025	0.00034	30000	mg/L
MKTF-42	2/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-42	5/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	5/9/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
MKTF-42	5/9/2018	Barium, Total	0.08	0.002	0.001	2000000	mg/L
MKTF-42	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	5/9/2018	Copper, Total	0.0067	0.006	0.0041	790000	mg/L
MKTF-42	5/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	5/9/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	5/9/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-42	5/9/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-42	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	5/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	5/9/2018	Iron, Dissolved	0.096	0.02	0.016	13821880	mg/L
MKTF-42	5/9/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
MKTF-42	5/9/2018	Magnesium, Dissolved	2.8	1	0.25	NA	mg/L
MKTF-42	5/9/2018	Manganese, Dissolved	0.17	0.002	0.00039	2017400	mg/L
MKTF-42	5/9/2018	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-42	5/9/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	5/9/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	5/9/2018	Uranium, Dissolved	0.0077	0.005	0.00096	NA	mg/L
MKTF-42	5/9/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-42	5/9/2018	Iron, Total	0.75	0.02	0.01	13822000	mg/L
MKTF-42	5/9/2018	Mercury, Total	0.000067	0.0002	0.000037	2000	mg/L
MKTF-42	5/9/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-42	5/9/2018	Lead, Total	0.0011	0.0005	0.00023	15000	mg/L
MKTF-42	5/9/2018	Selenium, Total	0.0012	0.001	0.00098	50000	mg/L
MKTF-42	5/9/2018	Uranium, Total	0.012	0.0005	0.000068	30000	mg/L
MKTF-42	5/9/2018	Zinc, Total	0.0085	0.01	0.0033	5960000	mg/L
MKTF-42	8/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	8/29/2018	Arsenic, Total	0.0019	0.001	0.00041	10000	mg/L
MKTF-42	8/29/2018	Barium, Total	0.074	0.002	0.001	2000000	mg/L
MKTF-42	8/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	8/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	8/29/2018	Copper, Total	0.0041	0.006	0.0041	790000	mg/L
MKTF-42	8/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	8/29/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
MKTF-42	8/29/2018	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
MKTF-42	8/29/2018	Calcium, Dissolved	23	1	0.078	NA	mg/L
MKTF-42	8/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	8/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	8/29/2018	Copper, Dissolved	0.0051	0.006	0.0032	790000	mg/L
MKTF-42	8/29/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
MKTF-42	8/29/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
MKTF-42	8/29/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
MKTF-42	8/29/2018	Manganese, Dissolved	0.14	0.002	0.00039	2017400	mg/L
MKTF-42	8/29/2018	Sodium, Dissolved	750	10	1.6	NA	mg/L
MKTF-42	8/29/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-42	8/29/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-42	8/29/2018	Uranium, Dissolved	0.011	0.0025	0.00048	NA	mg/L
MKTF-42	8/29/2018	Zinc, Dissolved	0.0088	0.01	0.0021	5960450	mg/L
MKTF-42	8/29/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
MKTF-42	8/29/2018	Mercury, Total	0.000072	0.0002	0.000038	2000	mg/L
MKTF-42	8/29/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
MKTF-42	8/29/2018	Lead, Total	0.00057	0.0005	0.00023	15000	mg/L
MKTF-42	8/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MKTF-42	8/29/2018	Uranium, Total	0.01	0.0025	0.00034	30000	mg/L
MKTF-42	8/29/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
MKTF-42	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-42	11/15/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
MKTF-42	11/15/2018	Barium, Total	0.035	0.002	0.001	2000000	mg/L
MKTF-42	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-42	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-42	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-42	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-42	11/15/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
MKTF-42	11/15/2018	Barium, Dissolved	0.037	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	11/15/2018	Calcium, Dissolved	23	1	0.078	NA	mg/L
MKTF-42	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-42	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-42	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-42	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-42	11/15/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
MKTF-42	11/15/2018	Magnesium, Dissolved	3.1	1	0.25	NA	mg/L
MKTF-42	11/15/2018	Manganese, Dissolved	0.055	0.002	0.00039	2017400	mg/L
MKTF-42	11/15/2018	Sodium, Dissolved	770	20	3.3	NA	mg/L
MKTF-42	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-42	11/15/2018	Selenium, Dissolved	0.0012	0.001	0.00076	50000	mg/L
MKTF-42	11/15/2018	Uranium, Dissolved	0.0092	0.0005	0.000096	NA	mg/L
MKTF-42	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-42	11/15/2018	Iron, Total	0.039	0.02	0.01	13822000	mg/L
MKTF-42	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-42	11/15/2018	Manganese, Total	0.051	0.002	0.0011	2017000	mg/L
MKTF-42	11/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MKTF-42	11/15/2018	Selenium, Total	0.0015	0.001	0.00098	50000	mg/L
MKTF-42	11/15/2018	Uranium, Total	0.0092	0.0005	0.000068	30000	mg/L
MKTF-42	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-43	2/27/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Dissolved	0.00091	0.005	0.0005	10000	mg/L
MKTF-43	2/27/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-43	2/27/2020	Selenium, Dissolved	0.0014	0.005	0.00086	50000	mg/L
MKTF-43	2/27/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-43	2/27/2020	Uranium, Dissolved	0.061	0.0025	0.00037	NA	mg/L
MKTF-43	2/27/2020	Barium, Dissolved	0.051	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Dissolved	0.00076	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-43	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Dissolved	0.0023	0.006	0.0013	790000	mg/L
MKTF-43	2/27/2020	Manganese, Dissolved	0.013	0.002	0.00029	2017400	mg/L
MKTF-43	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
MKTF-43	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-43	2/27/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-43	2/27/2020	Potassium, Dissolved	6	1	0.16	NA	mg/L
MKTF-43	2/27/2020	Calcium, Dissolved	880	10	0.62	NA	mg/L
MKTF-43	2/27/2020	Magnesium, Dissolved	130	10	0.5	NA	mg/L
MKTF-43	2/27/2020	Sodium, Dissolved	2200	50	21	NA	mg/L
MKTF-43	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-43	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Silver, Dissolved	0.017	0.005	0.00094	81200	mg/L
MKTF-43	2/27/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-43	2/27/2020	Lead, Total	0.0018	0.0025	0.00027	15000	mg/L
MKTF-43	2/27/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-43	2/27/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-43	2/27/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-43	2/27/2020	Uranium, Total	0.062	0.0025	0.00042	30000	mg/L
MKTF-43	2/27/2020	Barium, Total	0.092	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Total	0.68	0.04	0.0045	3949	mg/L
MKTF-43	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	2/27/2020	Manganese, Total	0.5	0.002	0.00029	2017000	mg/L
MKTF-43	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Silver, Total	0.015	0.005	0.0014	50000	mg/L
MKTF-43	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-43	2/27/2020	Aluminum, Total	3.2	0.1	0.012	19914000	mg/L
MKTF-43	2/27/2020	Iron, Total	1.7	0.1	0.044	13822000	mg/L
MKTF-43	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-43	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Dissolved	0.00088	0.005	0.0005	10000	mg/L
MKTF-43	2/27/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
MKTF-43	2/27/2020	Selenium, Dissolved	0.001	0.005	0.00086	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/27/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
MKTF-43	2/27/2020	Uranium, Dissolved	0.06	0.0025	0.00037	NA	mg/L
MKTF-43	2/27/2020	Barium, Dissolved	0.053	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Dissolved	0.00082	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Dissolved	0.5	0.04	0.0045	3949110	mg/L
MKTF-43	2/27/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-43	2/27/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Dissolved	0.0046	0.006	0.0013	790000	mg/L
MKTF-43	2/27/2020	Manganese, Dissolved	0.0079	0.002	0.00029	2017400	mg/L
MKTF-43	2/27/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Zinc, Dissolved	0.01	0.01	0.0023	5960450	mg/L
MKTF-43	2/27/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-43	2/27/2020	Iron, Dissolved	0.0097	0.02	0.0087	13821880	mg/L
MKTF-43	2/27/2020	Potassium, Dissolved	6.3	1	0.16	NA	mg/L
MKTF-43	2/27/2020	Silver, Dissolved	0.016	0.005	0.00094	81200	mg/L
MKTF-43	2/27/2020	Calcium, Dissolved	900	10	0.62	NA	mg/L
MKTF-43	2/27/2020	Magnesium, Dissolved	140	10	0.5	NA	mg/L
MKTF-43	2/27/2020	Sodium, Dissolved	2200	50	21	NA	mg/L
MKTF-43	2/27/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-43	2/27/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-43	2/27/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
MKTF-43	2/27/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-43	2/27/2020	Lead, Total	0.0017	0.0025	0.00027	15000	mg/L
MKTF-43	2/27/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-43	2/27/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
MKTF-43	2/27/2020	Mercury, Total	0.00012	0.0002	0.00012	2000	mg/L
MKTF-43	2/27/2020	Uranium, Total	0.063	0.0025	0.00042	30000	mg/L
MKTF-43	2/27/2020	Barium, Total	0.097	0.002	0.00065	2000000	mg/L
MKTF-43	2/27/2020	Beryllium, Total	0.001	0.002	0.00028	4000	mg/L
MKTF-43	2/27/2020	Boron, Total	0.64	0.04	0.0045	3949	mg/L
MKTF-43	2/27/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-43	2/27/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
MKTF-43	2/27/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-43	2/27/2020	Copper, Total	0.005	0.006	0.0041	790000	mg/L
MKTF-43	2/27/2020	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
MKTF-43	2/27/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-43	2/27/2020	Silver, Total	0.016	0.005	0.0014	50000	mg/L
MKTF-43	2/27/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-43	2/27/2020	Aluminum, Total	2.9	0.1	0.012	19914000	mg/L
MKTF-43	2/27/2020	Iron, Total	1.7	0.1	0.044	13822000	mg/L
MKTF-43	2/27/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-43	12/15/2020	Arsenic, Total Recoverable	2	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Total Recoverable	3.02	1	0.133	15	ug/L
MKTF-43	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Arsenic, Dissolved	1.39	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-43	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Uranium, Total Recoverable	**117**	5	1.12	30	ug/L
MKTF-43	12/15/2020	Uranium, Dissolved	113	5	1.12	NA	ug/L
MKTF-43	12/15/2020	Arsenic, Total Recoverable	2.65	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Total Recoverable	5.68	1	0.133	15	ug/L
MKTF-43	12/15/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Arsenic, Dissolved	1.52	1	0.286	10	ug/L
MKTF-43	12/15/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-43	12/15/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-43	12/15/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-43	12/15/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-43	12/15/2020	Uranium, Total Recoverable	**118**	5	1.12	30	ug/L
MKTF-43	12/15/2020	Uranium, Dissolved	116	5	1.12	NA	ug/L
MKTF-43	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-43	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-43	12/15/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-43	12/15/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-43	12/15/2020	Aluminum, Total	6.53	0.2	0.051	19914000	mg/L
MKTF-43	12/15/2020	Boron, Total	1.28	0.1	0.022	3949	mg/L
MKTF-43	12/15/2020	Barium, Total	0.147	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Potassium, Total	10.4	1	0.34	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Magnesium, Total	175	0.5	0.12	NA	mg/L
MKTF-43	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-43	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Total	5.33	0.2	0.075	13822000	mg/L
MKTF-43	12/15/2020	Manganese, Total	1.85	0.01	0.003	2017000	mg/L
MKTF-43	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Total	0.00679	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-43	12/15/2020	Calcium, Total	1220	10	1.68	NA	mg/L
MKTF-43	12/15/2020	Sodium, Total	3000	40	18.4	NA	mg/L
MKTF-43	12/15/2020	Aluminum, Dissolved	0.316	0.2	0.051	19913930	mg/L
MKTF-43	12/15/2020	Barium, Dissolved	0.0845	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Boron, Dissolved	1.43	0.1	0.022	3949110	mg/L
MKTF-43	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-43	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-43	12/15/2020	Manganese, Dissolved	0.283	0.01	0.003	2017400	mg/L
MKTF-43	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-43	12/15/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-43	12/15/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-43	12/15/2020	Aluminum, Total	7.77	0.2	0.051	19914000	mg/L
MKTF-43	12/15/2020	Boron, Total	1.33	0.1	0.022	3949	mg/L
MKTF-43	12/15/2020	Barium, Total	0.159	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Potassium, Total	17.3	1	0.34	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Magnesium, Total	188	0.5	0.12	NA	mg/L
MKTF-43	12/15/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-43	12/15/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Iron, Total	6.21	0.2	0.075	13822000	mg/L
MKTF-43	12/15/2020	Manganese, Total	2.13	0.01	0.003	2017000	mg/L
MKTF-43	12/15/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Total	0.00782	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-43	12/15/2020	Calcium, Total	1270	5	0.84	NA	mg/L
MKTF-43	12/15/2020	Sodium, Total	2870	20	9.2	NA	mg/L
MKTF-43	12/15/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-43	12/15/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-43	12/15/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-43	12/15/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-43	12/15/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-43	12/15/2020	Manganese, Dissolved	2.12	0.01	0.003	2017400	mg/L
MKTF-43	12/15/2020	Zinc, Dissolved	0.0292	0.02	0.008	5960450	mg/L
MKTF-43	12/15/2020	Aluminum, Dissolved	8.08	0.2	0.051	19913930	mg/L
MKTF-43	12/15/2020	Barium, Dissolved	0.167	0.01	0.003	2000000	mg/L
MKTF-43	12/15/2020	Boron, Dissolved	1.39	0.1	0.022	3949110	mg/L
MKTF-43	12/15/2020	Iron, Dissolved	6.12	0.2	0.075	13821880	mg/L
MKTF-43	12/15/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-43	12/15/2020	Nickel, Dissolved	0.0107	0.006	0.003	372000	mg/L
MKTF-43	12/15/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-43	9/21/2020	Arsenic, Dissolved	0.0014	0.005	0.001	10000	mg/L
MKTF-43	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
MKTF-43	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-43	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-43	9/21/2020	Uranium, Dissolved	0.12	0.0025	0.00033	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-43	9/21/2020	Boron, Dissolved	1.2	0.2	0.033	3949110	mg/L
MKTF-43	9/21/2020	Magnesium, Dissolved	250	5	0.34	NA	mg/L
MKTF-43	9/21/2020	Manganese, Dissolved	1.7	0.01	0.0029	2017400	mg/L
MKTF-43	9/21/2020	Calcium, Dissolved	1500	50	5.7	NA	mg/L
MKTF-43	9/21/2020	Sodium, Dissolved	3300	50	6.9	NA	mg/L
MKTF-43	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-43	9/21/2020	Barium, Dissolved	0.086	0.002	0.0011	2000000	mg/L
MKTF-43	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-43	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-43	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-43	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-43	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MKTF-43	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-43	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MKTF-43	9/21/2020	Potassium, Dissolved	9.1	1	0.16	NA	mg/L
MKTF-43	9/21/2020	Silver, Dissolved	0.019	0.005	0.0013	81200	mg/L
MKTF-43	9/21/2020	Zinc, Dissolved	ND	0.01	0.006	5960450	mg/L
MKTF-43	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-43	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-43	9/21/2020	Aluminum, Total	0.42	0.02	0.0074	19914000	mg/L
MKTF-43	9/21/2020	Barium, Total	0.098	0.003	0.0016	2000000	mg/L
MKTF-43	9/21/2020	Beryllium, Total	0.0012	0.002	0.00088	4000	mg/L
MKTF-43	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-43	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-43	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-43	9/21/2020	Iron, Total	0.3	0.05	0.013	13822000	mg/L
MKTF-43	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-43	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-43	9/21/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
MKTF-43	9/21/2020	Lead, Total	0.00038	0.005	0.00034	15000	mg/L
MKTF-43	9/21/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L
MKTF-43	9/21/2020	Uranium, Total	0.11	0.005	0.00065	30000	mg/L
MKTF-43	9/21/2020	Arsenic, Total	ND	0.02	0.0053	10000	mg/L
MKTF-43	9/21/2020	Selenium, Total	ND	0.02	0.013	50000	mg/L
MKTF-43	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-43	9/21/2020	Nickel, Total	0.0046	0.01	0.0033	372000	mg/L
MKTF-43	9/21/2020	Silver, Total	0.02	0.005	0.0013	50000	mg/L
MKTF-43	9/21/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
MKTF-43	9/21/2020	Manganese, Total	1.4	0.01	0.0041	2017000	mg/L
MKTF-43	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Dissolved	0.001	0.001	0.000101	10000	mg/L
MKTF-43	8/22/2019	Barium, Dissolved	0.079	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-43	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	8/22/2019	Calcium, Dissolved	680	10	0.618891	NA	mg/L
MKTF-43	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Dissolved	0.0081	0.006	0.001296	790000	mg/L
MKTF-43	8/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	8/22/2019	Magnesium, Dissolved	110	10	0.502904	NA	mg/L
MKTF-43	8/22/2019	Manganese, Dissolved	0.73	0.002	0.00029	2017400	mg/L
MKTF-43	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Potassium, Dissolved	4.7	1	0.162288	NA	mg/L
MKTF-43	8/22/2019	Selenium, Dissolved	0.0015	0.001	0.000171	50000	mg/L
MKTF-43	8/22/2019	Silver, Dissolved	0.0086	0.005	0.000942	81200	mg/L
MKTF-43	8/22/2019	Sodium, Dissolved	2800	50	20.808815	NA	mg/L
MKTF-43	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	8/22/2019	Uranium, Dissolved	0.058	0.0025	0.000374	NA	mg/L
MKTF-43	8/22/2019	Zinc, Dissolved	0.0051	0.01	0.002252	5960450	mg/L
MKTF-43	8/22/2019	Aluminum, Total	5	0.2	0.024883	19914000	mg/L
MKTF-43	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Total	0.0018	0.005	0.001561	10000	mg/L
MKTF-43	8/22/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Total	0.0007	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	8/22/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Total	0.0081	0.006	0.004072	790000	mg/L
MKTF-43	8/22/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L
MKTF-43	8/22/2019	Lead, Total	0.0035	0.0025	0.000274	15000	mg/L
MKTF-43	8/22/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
MKTF-43	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Total	0.0062	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	8/22/2019	Silver, Total	0.0088	0.005	0.001418	50000	mg/L
MKTF-43	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	8/22/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-43	8/22/2019	Zinc, Total	0.0083	0.01	0.005772	5960000	mg/L
MKTF-43	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-43	8/22/2019	Barium, Dissolved	0.085	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Dissolved	1.2	0.4	0.045305	3949110	mg/L
MKTF-43	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	8/22/2019	Calcium, Dissolved	690	10	0.618891	NA	mg/L
MKTF-43	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Dissolved	0.009	0.006	0.001296	790000	mg/L
MKTF-43	8/22/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	8/22/2019	Magnesium, Dissolved	110	10	0.502904	NA	mg/L
MKTF-43	8/22/2019	Manganese, Dissolved	0.77	0.002	0.00029	2017400	mg/L
MKTF-43	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Dissolved	0.0041	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Potassium, Dissolved	4.6	1	0.162288	NA	mg/L
MKTF-43	8/22/2019	Selenium, Dissolved	0.00092	0.005	0.000857	50000	mg/L
MKTF-43	8/22/2019	Silver, Dissolved	0.0096	0.005	0.000942	81200	mg/L
MKTF-43	8/22/2019	Sodium, Dissolved	2700	50	20.808815	NA	mg/L
MKTF-43	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	8/22/2019	Uranium, Dissolved	0.058	0.0025	0.000374	NA	mg/L
MKTF-43	8/22/2019	Zinc, Dissolved	0.0052	0.01	0.002252	5960450	mg/L
MKTF-43	8/22/2019	Aluminum, Total	5	0.2	0.024883	19914000	mg/L
MKTF-43	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	8/22/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
MKTF-43	8/22/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	8/22/2019	Beryllium, Total	0.00057	0.002	0.000284	4000	mg/L
MKTF-43	8/22/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	8/22/2019	Copper, Total	0.0079	0.006	0.004072	790000	mg/L
MKTF-43	8/22/2019	Iron, Total	3.3	0.1	0.043734	13822000	mg/L
MKTF-43	8/22/2019	Lead, Total	0.0032	0.0025	0.000274	15000	mg/L
MKTF-43	8/22/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	8/22/2019	Mercury, Total	0.000078	0.0002	0.000038	2000	mg/L
MKTF-43	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	8/22/2019	Nickel, Total	0.0054	0.01	0.004009	372000	mg/L
MKTF-43	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	8/22/2019	Silver, Total	0.0089	0.005	0.001418	50000	mg/L
MKTF-43	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	8/22/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
MKTF-43	8/22/2019	Zinc, Total	0.0079	0.01	0.005772	5960000	mg/L
MKTF-43	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	5/8/2019	Arsenic, Dissolved	0.00073	0.005	0.000504	10000	mg/L
MKTF-43	5/8/2019	Barium, Dissolved	0.1	0.002	0.000648	2000000	mg/L
MKTF-43	5/8/2019	Beryllium, Dissolved	0.00056	0.002	0.000284	4000	mg/L
MKTF-43	5/8/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
MKTF-43	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	5/8/2019	Calcium, Dissolved	580	20	1.237783	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	5/8/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	5/8/2019	Copper, Dissolved	0.0042	0.006	0.001296	790000	mg/L
MKTF-43	5/8/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-43	5/8/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	5/8/2019	Magnesium, Dissolved	92	1	0.05029	NA	mg/L
MKTF-43	5/8/2019	Manganese, Dissolved	0.53	0.002	0.00029	2017400	mg/L
MKTF-43	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	5/8/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-43	5/8/2019	Potassium, Dissolved	5.2	1	0.162288	NA	mg/L
MKTF-43	5/8/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
MKTF-43	5/8/2019	Silver, Dissolved	0.011	0.005	0.000942	81200	mg/L
MKTF-43	5/8/2019	Sodium, Dissolved	1800	20	8.323526	NA	mg/L
MKTF-43	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	5/8/2019	Uranium, Dissolved	0.034	0.0025	0.000374	NA	mg/L
MKTF-43	5/8/2019	Zinc, Dissolved	0.0086	0.01	0.002252	5960450	mg/L
MKTF-43	5/8/2019	Aluminum, Total	1.5	0.1	0.012441	19914000	mg/L
MKTF-43	5/8/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	5/8/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
MKTF-43	5/8/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	5/8/2019	Beryllium, Total	0.00048	0.002	0.000284	4000	mg/L
MKTF-43	5/8/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
MKTF-43	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	5/8/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	5/8/2019	Copper, Total	0.0046	0.006	0.004072	790000	mg/L
MKTF-43	5/8/2019	Iron, Total	1.4	0.1	0.043734	13822000	mg/L
MKTF-43	5/8/2019	Lead, Total	0.0013	0.0005	0.000055	15000	mg/L
MKTF-43	5/8/2019	Manganese, Total	0.71	0.002	0.00029	2017000	mg/L
MKTF-43	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-43	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	5/8/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-43	5/8/2019	Selenium, Total	0.00098	0.001	0.000478	50000	mg/L
MKTF-43	5/8/2019	Silver, Total	0.01	0.005	0.001418	50000	mg/L
MKTF-43	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-43	5/8/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
MKTF-43	5/8/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Total	0.0036	0.005	0.001561	10000	mg/L
MKTF-43	2/13/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	2/13/2019	Iron, Total	2.9	0.1	0.043734	13822000	mg/L
MKTF-43	2/13/2019	Lead, Total	0.003	0.0025	0.000235	15000	mg/L
MKTF-43	2/13/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	2/13/2019	Mercury, Total	0.000075	0.0002	0.000038	2000	mg/L
MKTF-43	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	2/13/2019	Silver, Total	0.015	0.005	0.001418	50000	mg/L
MKTF-43	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	2/13/2019	Uranium, Total	0.047	0.0025	0.000424	30000	mg/L
MKTF-43	2/13/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Dissolved	0.0017	0.005	0.00034	10000	mg/L
MKTF-43	2/13/2019	Barium, Dissolved	0.082	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Dissolved	0.00045	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	2/13/2019	Calcium, Dissolved	680	20	1.237783	NA	mg/L
MKTF-43	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	2/13/2019	Copper, Dissolved	0.0057	0.006	0.001296	790000	mg/L
MKTF-43	2/13/2019	Iron, Dissolved	0.059	0.02	0.008747	13821880	mg/L
MKTF-43	2/13/2019	Lead, Dissolved	0.00014	0.0005	0.000047	NA	mg/L
MKTF-43	2/13/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
MKTF-43	2/13/2019	Manganese, Dissolved	0.46	0.002	0.00029	2017400	mg/L
MKTF-43	2/13/2019	Potassium, Dissolved	4.1	1	0.162288	NA	mg/L
MKTF-43	2/13/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-43	2/13/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-43	2/13/2019	Sodium, Dissolved	2200	50	20.808815	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-43	2/13/2019	Uranium, Dissolved	0.05	0.0025	0.000152	NA	mg/L
MKTF-43	2/13/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
MKTF-43	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Total	0.0039	0.005	0.001561	10000	mg/L
MKTF-43	2/13/2019	Barium, Total	0.12	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	2/13/2019	Iron, Total	1.7	0.1	0.043734	13822000	mg/L
MKTF-43	2/13/2019	Lead, Total	0.0017	0.0025	0.000235	15000	mg/L
MKTF-43	2/13/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	2/13/2019	Mercury, Total	0.000091	0.0002	0.000038	2000	mg/L
MKTF-43	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	2/13/2019	Silver, Total	0.016	0.005	0.001418	50000	mg/L
MKTF-43	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	2/13/2019	Uranium, Total	0.057	0.0025	0.000424	30000	mg/L
MKTF-43	2/13/2019	Zinc, Total	0.0077	0.01	0.005772	5960000	mg/L
MKTF-43	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-43	2/13/2019	Arsenic, Dissolved	0.0015	0.005	0.00034	10000	mg/L
MKTF-43	2/13/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
MKTF-43	2/13/2019	Beryllium, Dissolved	0.00038	0.002	0.000284	4000	mg/L
MKTF-43	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	2/13/2019	Calcium, Dissolved	660	20	1.237783	NA	mg/L
MKTF-43	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	2/13/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
MKTF-43	2/13/2019	Iron, Dissolved	0.011	0.02	0.008747	13821880	mg/L
MKTF-43	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
MKTF-43	2/13/2019	Magnesium, Dissolved	110	5	0.251452	NA	mg/L
MKTF-43	2/13/2019	Manganese, Dissolved	0.3	0.002	0.00029	2017400	mg/L
MKTF-43	2/13/2019	Potassium, Dissolved	4.4	1	0.162288	NA	mg/L
MKTF-43	2/13/2019	Selenium, Dissolved	ND	0.005	0.001013	50000	mg/L
MKTF-43	2/13/2019	Silver, Dissolved	0.012	0.005	0.000942	81200	mg/L
MKTF-43	2/13/2019	Sodium, Dissolved	1900	20	8.323526	NA	mg/L
MKTF-43	2/13/2019	Thallium, Dissolved	0.000037	0.0005	0.000032	2000	mg/L
MKTF-43	2/13/2019	Uranium, Dissolved	0.046	0.0025	0.000152	NA	mg/L
MKTF-43	2/13/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
MKTF-43	10/24/2019	Aluminum, Total	4.5	0.1	0.012441	19914000	mg/L
MKTF-43	10/24/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Total	0.0023	0.005	0.001561	10000	mg/L
MKTF-43	10/24/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	10/24/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	10/24/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
MKTF-43	10/24/2019	Lead, Total	0.0028	0.0025	0.000274	15000	mg/L
MKTF-43	10/24/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
MKTF-43	10/24/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-43	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Total	0.0041	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Selenium, Total	0.0025	0.005	0.00239	50000	mg/L
MKTF-43	10/24/2019	Silver, Total	0.014	0.005	0.001418	50000	mg/L
MKTF-43	10/24/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	10/24/2019	Zinc, Total	0.0088	0.01	0.005772	5960000	mg/L
MKTF-43	10/24/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Dissolved	0.0011	0.005	0.000504	10000	mg/L
MKTF-43	10/24/2019	Barium, Dissolved	0.095	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Dissolved	0.0007	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-43	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	10/24/2019	Calcium, Dissolved	780	10	0.618891	NA	mg/L
MKTF-43	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Dissolved	0.012	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	10/24/2019	Iron, Dissolved	0.014	0.02	0.008747	13821880	mg/L
MKTF-43	10/24/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	10/24/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
MKTF-43	10/24/2019	Manganese, Dissolved	0.45	0.002	0.00029	2017400	mg/L
MKTF-43	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Dissolved	0.0065	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Potassium, Dissolved	6.1	1	0.162288	NA	mg/L
MKTF-43	10/24/2019	Selenium, Dissolved	0.0011	0.005	0.000857	50000	mg/L
MKTF-43	10/24/2019	Silver, Dissolved	0.014	0.005	0.000942	81200	mg/L
MKTF-43	10/24/2019	Sodium, Dissolved	2600	50	20.808815	NA	mg/L
MKTF-43	10/24/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	10/24/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
MKTF-43	10/24/2019	Aluminum, Total	4.8	0.2	0.024883	19914000	mg/L
MKTF-43	10/24/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Total	0.0019	0.005	0.001561	10000	mg/L
MKTF-43	10/24/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Total	1.1	0.2	0.022653	3949	mg/L
MKTF-43	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-43	10/24/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MKTF-43	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-43	10/24/2019	Iron, Total	3.4	0.1	0.043734	13822000	mg/L
MKTF-43	10/24/2019	Lead, Total	0.0033	0.0025	0.000274	15000	mg/L
MKTF-43	10/24/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
MKTF-43	10/24/2019	Mercury, Total	0.00013	0.0002	0.000038	2000	mg/L
MKTF-43	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
MKTF-43	10/24/2019	Silver, Total	0.014	0.005	0.001418	50000	mg/L
MKTF-43	10/24/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
MKTF-43	10/24/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
MKTF-43	10/24/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-43	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-43	10/24/2019	Arsenic, Dissolved	0.0012	0.005	0.000504	10000	mg/L
MKTF-43	10/24/2019	Barium, Dissolved	0.098	0.002	0.000648	2000000	mg/L
MKTF-43	10/24/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
MKTF-43	10/24/2019	Boron, Dissolved	1.1	0.2	0.022653	3949110	mg/L
MKTF-43	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-43	10/24/2019	Calcium, Dissolved	770	10	0.618891	NA	mg/L
MKTF-43	10/24/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MKTF-43	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-43	10/24/2019	Copper, Dissolved	0.009	0.006	0.001296	790000	mg/L
MKTF-43	10/24/2019	Iron, Dissolved	0.019	0.02	0.008747	13821880	mg/L
MKTF-43	10/24/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-43	10/24/2019	Magnesium, Dissolved	120	5	0.251452	NA	mg/L
MKTF-43	10/24/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
MKTF-43	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-43	10/24/2019	Nickel, Dissolved	0.005	0.01	0.004009	372000	mg/L
MKTF-43	10/24/2019	Potassium, Dissolved	5.8	1	0.162288	NA	mg/L
MKTF-43	10/24/2019	Selenium, Dissolved	0.0014	0.005	0.000857	50000	mg/L
MKTF-43	10/24/2019	Silver, Dissolved	0.015	0.005	0.000942	81200	mg/L
MKTF-43	10/24/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
MKTF-43	10/24/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-43	10/24/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-43	3/11/2015	Silver, Total	ND	0.025	0.0061	50000	mg/L
MKTF-43	3/11/2015	Arsenic, Total	ND	0.05	0.0057	10000	mg/L
MKTF-43	3/11/2015	Barium, Total	0.17	0.01	0.0048	2000000	mg/L
MKTF-43	3/11/2015	Cadmium, Total	ND	0.01	0.0048	5000	mg/L
MKTF-43	3/11/2015	Chromium, Total	0.048	0.03	0.0088	50000	mg/L
MKTF-43	3/11/2015	Copper, Total	ND	0.03	0.012	790000	mg/L
MKTF-43	3/11/2015	Iron, Total	0.49	0.1	0.036	13822000	mg/L
MKTF-43	3/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	3/11/2015	Manganese, Total	3.7	0.01	0.0013	2017000	mg/L
MKTF-43	3/11/2015	Lead, Total	ND	0.05	0.0029	15000	mg/L
MKTF-43	3/11/2015	Selenium, Total	0.11	0.05	0.0074	50000	mg/L
MKTF-43	3/11/2015	Uranium, Total	0.15	0.05	0.0025	30000	mg/L
MKTF-43	3/11/2015	Zinc, Total	ND	0.05	0.014	5960000	mg/L
MKTF-43	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/10/2015	Arsenic, Total	ND	0.05	0.0032	10000	mg/L
MKTF-43	6/10/2015	Barium, Total	0.12	0.002	0.00095	2000000	mg/L
MKTF-43	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-43	6/10/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-43	6/10/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
MKTF-43	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	6/10/2015	Manganese, Total	15	0.04	0.0054	2017000	mg/L
MKTF-43	6/10/2015	Lead, Total	ND	0.05	0.0013	15000	mg/L
MKTF-43	6/10/2015	Selenium, Total	ND	0.1	0.019	50000	mg/L
MKTF-43	6/10/2015	Uranium, Total	0.23	0.05	0.00024	30000	mg/L
MKTF-43	6/10/2015	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
MKTF-43	8/21/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
MKTF-43	8/21/2015	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
MKTF-43	8/21/2015	Barium, Total	0.31	0.01	0.0053	2000000	mg/L
MKTF-43	8/21/2015	Calcium, Total	3100	100	5.7	NA	mg/L
MKTF-43	8/21/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-43	8/21/2015	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-43	8/21/2015	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-43	8/21/2015	Iron, Total	6.6	0.2	0.072	13822000	mg/L
MKTF-43	8/21/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	8/21/2015	Potassium, Total	14	1	0.18	NA	mg/L
MKTF-43	8/21/2015	Magnesium, Total	480	10	0.39	NA	mg/L
MKTF-43	8/21/2015	Manganese, Total	23	0.1	0.076	2017000	mg/L
MKTF-43	8/21/2015	Sodium, Total	6500	100	7.2	NA	mg/L
MKTF-43	8/21/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
MKTF-43	8/21/2015	Selenium, Total	0.06	0.02	0.0025	50000	mg/L
MKTF-43	8/21/2015	Uranium, Total	0.28	0.01	0.000099	30000	mg/L
MKTF-43	8/21/2015	Zinc, Total	0.056	0.05	0.019	5960000	mg/L
MKTF-43	11/5/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-43	11/5/2015	Arsenic, Total	ND	0.05	0.05	10000	mg/L
MKTF-43	11/5/2015	Barium, Total	0.19	0.002	0.0011	2000000	mg/L
MKTF-43	11/5/2015	Calcium, Total	2700	50	13	NA	mg/L
MKTF-43	11/5/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-43	11/5/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MKTF-43	11/5/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-43	11/5/2015	Iron, Total	4.8	0.1	0.036	13822000	mg/L
MKTF-43	11/5/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-43	11/5/2015	Potassium, Total	13	1	0.18	NA	mg/L
MKTF-43	11/5/2015	Magnesium, Total	430	5	0.065	NA	mg/L
MKTF-43	11/5/2015	Manganese, Total	16	0.04	0.03	2017000	mg/L
MKTF-43	11/5/2015	Sodium, Total	6000	500	48	NA	mg/L
MKTF-43	11/5/2015	Lead, Total	ND	0.01	0.00094	15000	mg/L
MKTF-43	11/5/2015	Selenium, Total	ND	0.5	0.5	50000	mg/L
MKTF-43	11/5/2015	Uranium, Total	0.25	0.01	0.000099	30000	mg/L
MKTF-43	11/5/2015	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
MKTF-43	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-43	2/24/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
MKTF-43	2/24/2016	Barium, Total	0.13	0.01	0.0053	2000000	mg/L
MKTF-43	2/24/2016	Calcium, Total	2500	100	26	NA	mg/L
MKTF-43	2/24/2016	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
MKTF-43	2/24/2016	Chromium, Total	ND	0.03	0.011	50000	mg/L
MKTF-43	2/24/2016	Copper, Total	ND	0.03	0.026	790000	mg/L
MKTF-43	2/24/2016	Iron, Total	2.4	0.1	0.036	13822000	mg/L
MKTF-43	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	2/24/2016	Potassium, Total	11	1	0.18	NA	mg/L
MKTF-43	2/24/2016	Magnesium, Total	410	5	0.065	NA	mg/L
MKTF-43	2/24/2016	Manganese, Total	12	0.04	0.03	2017000	mg/L
MKTF-43	2/24/2016	Sodium, Total	6000	100	9.6	NA	mg/L
MKTF-43	2/24/2016	Lead, Total	ND	0.025	0.0024	15000	mg/L
MKTF-43	2/24/2016	Selenium, Total	ND	0.05	0.0062	50000	mg/L
MKTF-43	2/24/2016	Uranium, Total	0.22	0.025	0.00025	30000	mg/L
MKTF-43	2/24/2016	Zinc, Total	ND	0.05	0.019	5960000	mg/L
MKTF-43	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-43	6/9/2016	Arsenic, Total	0.027	0.05	0.0069	10000	mg/L
MKTF-43	6/9/2016	Barium, Total	0.065	0.002	0.0013	2000000	mg/L
MKTF-43	6/9/2016	Calcium, Total	3100	100	26	NA	mg/L
MKTF-43	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-43	6/9/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-43	6/9/2016	Iron, Total	0.11	0.02	0.0091	13822000	mg/L
MKTF-43	6/9/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
MKTF-43	6/9/2016	Potassium, Total	9.8	1	0.18	NA	mg/L
MKTF-43	6/9/2016	Magnesium, Total	480	5	0.065	NA	mg/L
MKTF-43	6/9/2016	Manganese, Total	20	0.2	0.032	2017000	mg/L
MKTF-43	6/9/2016	Sodium, Total	6400	100	9.6	NA	mg/L
MKTF-43	6/9/2016	Lead, Total	ND	0.005	0.0017	15000	mg/L
MKTF-43	6/9/2016	Selenium, Total	0.091	0.05	0.011	50000	mg/L
MKTF-43	6/9/2016	Uranium, Total	0.27	0.01	0.001	30000	mg/L
MKTF-43	6/9/2016	Zinc, Total	0.0073	0.01	0.0028	5960000	mg/L
MKTF-43	9/9/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-43	9/9/2016	Arsenic, Total	0.022	0.05	0.011	10000	mg/L
MKTF-43	9/9/2016	Barium, Total	0.17	0.01	0.004	2000000	mg/L
MKTF-43	9/9/2016	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-43	9/9/2016	Chromium, Total	ND	0.03	0.013	50000	mg/L
MKTF-43	9/9/2016	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-43	9/9/2016	Arsenic, Dissolved	0.018	0.05	0.0069	10000	mg/L
MKTF-43	9/9/2016	Barium, Dissolved	0.086	0.002	0.0013	2000000	mg/L
MKTF-43	9/9/2016	Calcium, Dissolved	2900	100	50	NA	mg/L
MKTF-43	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-43	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MKTF-43	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-43	9/9/2016	Iron, Dissolved	0.073	0.02	0.02	13821880	mg/L
MKTF-43	9/9/2016	Potassium, Dissolved	9.5	1	0.5	NA	mg/L
MKTF-43	9/9/2016	Magnesium, Dissolved	460	5	2.5	NA	mg/L
MKTF-43	9/9/2016	Manganese, Dissolved	23	0.2	0.032	2017400	mg/L
MKTF-43	9/9/2016	Sodium, Dissolved	6500	100	50	NA	mg/L
MKTF-43	9/9/2016	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	9/9/2016	Selenium, Dissolved	0.067	0.05	0.011	50000	mg/L
MKTF-43	9/9/2016	Uranium, Dissolved	0.25	0.01	0.001	NA	mg/L
MKTF-43	9/9/2016	Zinc, Dissolved	0.013	0.01	0.0028	5960450	mg/L
MKTF-43	9/9/2016	Iron, Total	3.6	0.1	0.1	13822000	mg/L
MKTF-43	9/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	9/9/2016	Manganese, Total	21	0.1	0.014	2017000	mg/L
MKTF-43	9/9/2016	Lead, Total	0.0041	0.0025	0.00041	15000	mg/L
MKTF-43	9/9/2016	Selenium, Total	0.065	0.1	0.019	50000	mg/L
MKTF-43	9/9/2016	Uranium, Total	0.21	0.025	0.0087	30000	mg/L
MKTF-43	9/9/2016	Zinc, Total	0.032	0.05	0.013	5960000	mg/L
MKTF-43	10/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-43	10/31/2016	Arsenic, Total	0.03	0.05	0.011	10000	mg/L
MKTF-43	10/31/2016	Barium, Total	0.18	0.002	0.00079	2000000	mg/L
MKTF-43	10/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-43	10/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MKTF-43	10/31/2016	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	10/31/2016	Silver, Dissolved	ND	0.025	0.014	81200	mg/L
MKTF-43	10/31/2016	Arsenic, Dissolved	ND	0.05	0.05	10000	mg/L
MKTF-43	10/31/2016	Barium, Dissolved	0.13	0.01	0.0066	2000000	mg/L
MKTF-43	10/31/2016	Calcium, Dissolved	4700	100	50	NA	mg/L
MKTF-43	10/31/2016	Cadmium, Dissolved	ND	0.01	0.0037	5000	mg/L
MKTF-43	10/31/2016	Chromium, Dissolved	ND	0.03	0.0088	100000	mg/L
MKTF-43	10/31/2016	Copper, Dissolved	ND	0.03	0.02	790000	mg/L
MKTF-43	10/31/2016	Iron, Dissolved	0.48	0.02	0.02	13821880	mg/L
MKTF-43	10/31/2016	Potassium, Dissolved	19	1	0.5	NA	mg/L
MKTF-43	10/31/2016	Magnesium, Dissolved	680	10	5	NA	mg/L
MKTF-43	10/31/2016	Manganese, Dissolved	19	0.2	0.032	2017400	mg/L
MKTF-43	10/31/2016	Sodium, Dissolved	8800	100	50	NA	mg/L
MKTF-43	10/31/2016	Lead, Dissolved	ND	0.01	0.0034	NA	mg/L
MKTF-43	10/31/2016	Selenium, Dissolved	ND	0.5	0.5	50000	mg/L
MKTF-43	10/31/2016	Uranium, Dissolved	0.19	0.025	0.0026	NA	mg/L
MKTF-43	10/31/2016	Zinc, Dissolved	0.016	0.05	0.014	5960450	mg/L
MKTF-43	10/31/2016	Iron, Total	2.2	0.1	0.1	13822000	mg/L
MKTF-43	10/31/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-43	10/31/2016	Manganese, Total	18	0.1	0.014	2017000	mg/L
MKTF-43	10/31/2016	Lead, Total	ND	0.025	0.0041	15000	mg/L
MKTF-43	10/31/2016	Selenium, Total	0.084	0.05	0.0094	50000	mg/L
MKTF-43	10/31/2016	Uranium, Total	0.19	0.025	0.0087	30000	mg/L
MKTF-43	10/31/2016	Zinc, Total	0.032	0.05	0.013	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/8/2017	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-43	3/8/2017	Arsenic, Total	0.033	0.05	0.011	10000	mg/L
MKTF-43	3/8/2017	Barium, Total	0.12	0.01	0.004	2000000	mg/L
MKTF-43	3/8/2017	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
MKTF-43	3/8/2017	Chromium, Total	ND	0.03	0.013	50000	mg/L
MKTF-43	3/8/2017	Copper, Total	ND	0.03	0.015	790000	mg/L
MKTF-43	3/8/2017	Silver, Dissolved	ND	0.025	0.0044	81200	mg/L
MKTF-43	3/8/2017	Arsenic, Dissolved	0.017	0.1	0.014	10000	mg/L
MKTF-43	3/8/2017	Barium, Dissolved	0.068	0.01	0.0043	2000000	mg/L
MKTF-43	3/8/2017	Calcium, Dissolved	3000	50	25	NA	mg/L
MKTF-43	3/8/2017	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
MKTF-43	3/8/2017	Chromium, Dissolved	ND	0.03	0.0051	100000	mg/L
MKTF-43	3/8/2017	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
MKTF-43	3/8/2017	Iron, Dissolved	ND	0.1	0.1	13821880	mg/L
MKTF-43	3/8/2017	Potassium, Dissolved	7.8	5	2.5	NA	mg/L
MKTF-43	3/8/2017	Magnesium, Dissolved	490	5	2.5	NA	mg/L
MKTF-43	3/8/2017	Manganese, Dissolved	11	0.1	0.019	2017400	mg/L
MKTF-43	3/8/2017	Sodium, Dissolved	6200	100	50	NA	mg/L
MKTF-43	3/8/2017	Lead, Dissolved	ND	0.01	0.0034	NA	mg/L
MKTF-43	3/8/2017	Selenium, Dissolved	0.059	0.1	0.021	50000	mg/L
MKTF-43	3/8/2017	Zinc, Dissolved	0.037	0.05	0.0057	5960450	mg/L
MKTF-43	3/8/2017	Iron, Total	2.6	0.1	0.1	13822000	mg/L
MKTF-43	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-43	3/8/2017	Manganese, Total	11	0.04	0.0055	2017000	mg/L
MKTF-43	3/8/2017	Lead, Total	ND	0.025	0.0041	15000	mg/L
MKTF-43	3/8/2017	Selenium, Total	0.082	0.05	0.0094	50000	mg/L
MKTF-43	3/8/2017	Zinc, Total	0.016	0.05	0.013	5960000	mg/L
MKTF-43	6/6/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-43	6/6/2017	Arsenic, Total	0.013	0.01	0.003	10000	mg/L
MKTF-43	6/6/2017	Barium, Total	0.16	0.002	0.00093	2000000	mg/L
MKTF-43	6/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	6/6/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MKTF-43	6/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-43	6/6/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-43	6/6/2017	Arsenic, Dissolved	ND	0.1	0.018	10000	mg/L
MKTF-43	6/6/2017	Barium, Dissolved	0.083	0.002	0.00085	2000000	mg/L
MKTF-43	6/6/2017	Calcium, Dissolved	2100	100	7.8	NA	mg/L
MKTF-43	6/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	6/6/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
MKTF-43	6/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	6/6/2017	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
MKTF-43	6/6/2017	Potassium, Dissolved	10	1	0.11	NA	mg/L
MKTF-43	6/6/2017	Magnesium, Dissolved	430	5	1.2	NA	mg/L
MKTF-43	6/6/2017	Manganese, Dissolved	6.6	0.2	0.038	2017400	mg/L
MKTF-43	6/6/2017	Sodium, Dissolved	4600	100	16	NA	mg/L
MKTF-43	6/6/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	6/6/2017	Selenium, Dissolved	0.045	0.1	0.039	50000	mg/L
MKTF-43	6/6/2017	Uranium, Dissolved	0.18	0.005	0.0005	NA	mg/L
MKTF-43	6/6/2017	Zinc, Dissolved	0.017	0.01	0.0011	5960450	mg/L
MKTF-43	6/6/2017	Iron, Total	4.1	0.2	0.1	13822000	mg/L
MKTF-43	6/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	6/6/2017	Manganese, Total	7.1	0.02	0.011	2017000	mg/L
MKTF-43	6/6/2017	Lead, Total	0.0048	0.005	0.00095	15000	mg/L
MKTF-43	6/6/2017	Selenium, Total	0.043	0.01	0.0071	50000	mg/L
MKTF-43	6/6/2017	Uranium, Total	0.16	0.005	0.0015	30000	mg/L
MKTF-43	6/6/2017	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-43	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-43	9/25/2017	Arsenic, Total	0.016	0.05	0.015	10000	mg/L
MKTF-43	9/25/2017	Barium, Total	0.1	0.002	0.00093	2000000	mg/L
MKTF-43	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	9/25/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-43	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-43	9/25/2017	Arsenic, Dissolved	ND	0.1	0.018	10000	mg/L
MKTF-43	9/25/2017	Barium, Dissolved	0.071	0.002	0.00085	2000000	mg/L
MKTF-43	9/25/2017	Calcium, Dissolved	2200	50	3.9	NA	mg/L
MKTF-43	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	9/25/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
MKTF-43	9/25/2017	Potassium, Dissolved	7.8	1	0.11	NA	mg/L
MKTF-43	9/25/2017	Magnesium, Dissolved	340	10	2.5	NA	mg/L
MKTF-43	9/25/2017	Manganese, Dissolved	9.7	0.02	0.0039	2017400	mg/L
MKTF-43	9/25/2017	Sodium, Dissolved	5000	50	8.2	NA	mg/L
MKTF-43	9/25/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	9/25/2017	Selenium, Dissolved	0.044	0.01	0.0039	50000	mg/L
MKTF-43	9/25/2017	Zinc, Dissolved	ND	0.02	0.0042	5960450	mg/L
MKTF-43	9/25/2017	Iron, Total	1.4	0.2	0.1	13822000	mg/L
MKTF-43	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	9/25/2017	Manganese, Total	8.4	0.02	0.011	2017000	mg/L
MKTF-43	9/25/2017	Lead, Total	0.0015	0.0025	0.00048	15000	mg/L
MKTF-43	9/25/2017	Selenium, Total	0.045	0.01	0.0071	50000	mg/L
MKTF-43	9/25/2017	Zinc, Total	ND	0.01	0.01	5960000	mg/L
MKTF-43	11/27/2017	Silver, Total	0.022	0.005	0.0012	50000	mg/L
MKTF-43	11/27/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-43	11/27/2017	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-43	11/27/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	11/27/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	11/27/2017	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-43	11/27/2017	Silver, Dissolved	ND	0.05	0.05	81200	mg/L
MKTF-43	11/27/2017	Arsenic, Dissolved	0.0049	0.01	0.0042	10000	mg/L
MKTF-43	11/27/2017	Barium, Dissolved	0.081	0.002	0.00099	2000000	mg/L
MKTF-43	11/27/2017	Calcium, Dissolved	2100	100	7.8	NA	mg/L
MKTF-43	11/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	11/27/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	11/27/2017	Copper, Dissolved	0.0076	0.006	0.0032	790000	mg/L
MKTF-43	11/27/2017	Iron, Dissolved	0.072	0.02	0.016	13821880	mg/L
MKTF-43	11/27/2017	Potassium, Dissolved	7.8	1	0.11	NA	mg/L
MKTF-43	11/27/2017	Magnesium, Dissolved	330	10	2.5	NA	mg/L
MKTF-43	11/27/2017	Manganese, Dissolved	6.6	0.02	0.0039	2017400	mg/L
MKTF-43	11/27/2017	Sodium, Dissolved	5200	100	16	NA	mg/L
MKTF-43	11/27/2017	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	11/27/2017	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
MKTF-43	11/27/2017	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-43	11/27/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MKTF-43	11/27/2017	Iron, Total	2.4	0.2	0.1	13822000	mg/L
MKTF-43	11/27/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	11/27/2017	Manganese, Total	6.8	0.02	0.011	2017000	mg/L
MKTF-43	11/27/2017	Lead, Total	0.0026	0.005	0.0023	15000	mg/L
MKTF-43	11/27/2017	Selenium, Total	ND	0.05	0.049	50000	mg/L
MKTF-43	11/27/2017	Uranium, Total	0.13	0.005	0.0015	30000	mg/L
MKTF-43	11/27/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-43	2/7/2018	Silver, Total	0.029	0.005	0.0012	50000	mg/L
MKTF-43	2/7/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
MKTF-43	2/7/2018	Barium, Total	0.17	0.002	0.001	2000000	mg/L
MKTF-43	2/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	2/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	2/7/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
MKTF-43	2/7/2018	Silver, Dissolved	0.0096	0.005	0.0018	81200	mg/L
MKTF-43	2/7/2018	Arsenic, Dissolved	ND	0.02	0.0084	10000	mg/L
MKTF-43	2/7/2018	Barium, Dissolved	0.075	0.01	0.0049	2000000	mg/L
MKTF-43	2/7/2018	Calcium, Dissolved	2000	50	3.9	NA	mg/L
MKTF-43	2/7/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
MKTF-43	2/7/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
MKTF-43	2/7/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
MKTF-43	2/7/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
MKTF-43	2/7/2018	Potassium, Dissolved	7.1	5	0.56	NA	mg/L
MKTF-43	2/7/2018	Magnesium, Dissolved	310	5	1.2	NA	mg/L
MKTF-43	2/7/2018	Manganese, Dissolved	5.5	0.1	0.02	2017400	mg/L
MKTF-43	2/7/2018	Sodium, Dissolved	4700	50	8.2	NA	mg/L
MKTF-43	2/7/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	2/7/2018	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
MKTF-43	2/7/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
MKTF-43	2/7/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
MKTF-43	2/7/2018	Iron, Total	4.7	0.2	0.1	13822000	mg/L
MKTF-43	2/7/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-43	2/7/2018	Manganese, Total	4.9	0.02	0.011	2017000	mg/L
MKTF-43	2/7/2018	Lead, Total	0.005	0.005	0.0023	15000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	2/7/2018	Selenium, Total	0.023	0.02	0.02	50000	mg/L
MKTF-43	2/7/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
MKTF-43	2/7/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
MKTF-43	5/9/2018	Silver, Total	0.02	0.005	0.0012	50000	mg/L
MKTF-43	5/9/2018	Arsenic, Total	0.0057	0.01	0.0041	10000	mg/L
MKTF-43	5/9/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
MKTF-43	5/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	5/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	5/9/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-43	5/9/2018	Silver, Dissolved	0.017	0.005	0.0018	81200	mg/L
MKTF-43	5/9/2018	Arsenic, Dissolved	0.01	0.01	0.0042	10000	mg/L
MKTF-43	5/9/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
MKTF-43	5/9/2018	Calcium, Dissolved	1300	50	3.9	NA	mg/L
MKTF-43	5/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	5/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	5/9/2018	Copper, Dissolved	0.0057	0.006	0.0032	790000	mg/L
MKTF-43	5/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	5/9/2018	Potassium, Dissolved	5.3	1	0.11	NA	mg/L
MKTF-43	5/9/2018	Magnesium, Dissolved	170	5	1.2	NA	mg/L
MKTF-43	5/9/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
MKTF-43	5/9/2018	Sodium, Dissolved	3400	50	8.2	NA	mg/L
MKTF-43	5/9/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L
MKTF-43	5/9/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
MKTF-43	5/9/2018	Uranium, Dissolved	0.086	0.005	0.00096	NA	mg/L
MKTF-43	5/9/2018	Zinc, Dissolved	0.0064	0.01	0.0021	5960450	mg/L
MKTF-43	5/9/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
MKTF-43	5/9/2018	Mercury, Total	0.000061	0.0002	0.000037	2000	mg/L
MKTF-43	5/9/2018	Manganese, Total	3.2	0.01	0.0055	2017000	mg/L
MKTF-43	5/9/2018	Lead, Total	0.0091	0.0025	0.0011	15000	mg/L
MKTF-43	5/9/2018	Selenium, Total	0.034	0.005	0.0049	50000	mg/L
MKTF-43	5/9/2018	Uranium, Total	0.12	0.005	0.00068	30000	mg/L
MKTF-43	5/9/2018	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
MKTF-43	8/30/2018	Silver, Total	0.012	0.005	0.0012	50000	mg/L
MKTF-43	8/30/2018	Arsenic, Total	0.0058	0.005	0.0021	10000	mg/L
MKTF-43	8/30/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
MKTF-43	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	8/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	8/30/2018	Silver, Dissolved	0.013	0.005	0.0018	81200	mg/L
MKTF-43	8/30/2018	Arsenic, Dissolved	0.0036	0.005	0.0021	10000	mg/L
MKTF-43	8/30/2018	Barium, Dissolved	0.14	0.002	0.00099	2000000	mg/L
MKTF-43	8/30/2018	Calcium, Dissolved	510	20	1.6	NA	mg/L
MKTF-43	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	8/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	8/30/2018	Potassium, Dissolved	18	1	0.11	NA	mg/L
MKTF-43	8/30/2018	Magnesium, Dissolved	84	1	0.25	NA	mg/L
MKTF-43	8/30/2018	Manganese, Dissolved	0.38	0.002	0.00039	2017400	mg/L
MKTF-43	8/30/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
MKTF-43	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-43	8/30/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
MKTF-43	8/30/2018	Uranium, Dissolved	0.019	0.0005	0.000096	NA	mg/L
MKTF-43	8/30/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-43	8/30/2018	Iron, Total	0.25	0.02	0.01	13822000	mg/L
MKTF-43	8/30/2018	Mercury, Total	0.000051	0.0002	0.000038	2000	mg/L
MKTF-43	8/30/2018	Manganese, Total	0.43	0.002	0.0011	2017000	mg/L
MKTF-43	8/30/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
MKTF-43	8/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
MKTF-43	8/30/2018	Uranium, Total	0.021	0.0025	0.00034	30000	mg/L
MKTF-43	8/30/2018	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
MKTF-43	11/15/2018	Silver, Total	0.011	0.005	0.0012	50000	mg/L
MKTF-43	11/15/2018	Arsenic, Total	0.005	0.001	0.00041	10000	mg/L
MKTF-43	11/15/2018	Barium, Total	0.091	0.002	0.001	2000000	mg/L
MKTF-43	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-43	11/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MKTF-43	11/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-43	11/15/2018	Silver, Dissolved	0.0088	0.005	0.0018	81200	mg/L
MKTF-43	11/15/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	11/15/2018	Barium, Dissolved	0.071	0.002	0.00099	2000000	mg/L
MKTF-43	11/15/2018	Calcium, Dissolved	440	5	0.39	NA	mg/L
MKTF-43	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-43	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-43	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-43	11/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-43	11/15/2018	Potassium, Dissolved	4.6	1	0.11	NA	mg/L
MKTF-43	11/15/2018	Magnesium, Dissolved	65	1	0.25	NA	mg/L
MKTF-43	11/15/2018	Manganese, Dissolved	0.26	0.002	0.00039	2017400	mg/L
MKTF-43	11/15/2018	Sodium, Dissolved	1400	20	3.3	NA	mg/L
MKTF-43	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-43	11/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MKTF-43	11/15/2018	Uranium, Dissolved	0.028	0.0025	0.00048	NA	mg/L
MKTF-43	11/15/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
MKTF-43	11/15/2018	Iron, Total	0.95	0.02	0.01	13822000	mg/L
MKTF-43	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-43	11/15/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
MKTF-43	11/15/2018	Lead, Total	0.00094	0.0005	0.00023	15000	mg/L
MKTF-43	11/15/2018	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
MKTF-43	11/15/2018	Uranium, Total	0.032	0.0025	0.00034	30000	mg/L
MKTF-43	11/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MKTF-44	8/22/2019	Aluminum, Total	0.078	0.02	0.002488	19914000	mg/L
MKTF-44	8/22/2019	Antimony, Total	0.00099	0.001	0.000389	6000	mg/L
MKTF-44	8/22/2019	Arsenic, Total	0.0036	0.001	0.000101	10000	mg/L
MKTF-44	8/22/2019	Barium, Total	0.22	0.002	0.000648	2000000	mg/L
MKTF-44	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	8/22/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	8/22/2019	Cadmium, Total	ND	0.002	0.000552	5000	mg/L
MKTF-44	8/22/2019	Chromium, Total	0.01	0.006	0.001533	50000	mg/L
MKTF-44	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	8/22/2019	Copper, Total	0.0056	0.006	0.001296	790000	mg/L
MKTF-44	8/22/2019	Iron, Total	0.082	0.02	0.008747	13822000	mg/L
MKTF-44	8/22/2019	Lead, Total	0.00018	0.0005	0.000055	15000	mg/L
MKTF-44	8/22/2019	Manganese, Total	0.0031	0.002	0.00029	2017000	mg/L
MKTF-44	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	8/22/2019	Nickel, Total	0.004	0.01	0.004009	372000	mg/L
MKTF-44	8/22/2019	Selenium, Total	0.01	0.001	0.000171	50000	mg/L
MKTF-44	8/22/2019	Silver, Total	0.001	0.005	0.000942	50000	mg/L
MKTF-44	8/22/2019	Thallium, Total	ND	0.0005	0.000048	2000	mg/L
MKTF-44	8/22/2019	Uranium, Total	0.12	0.0025	0.000374	30000	mg/L
MKTF-44	8/22/2019	Zinc, Total	0.0054	0.01	0.002252	5960000	mg/L
MKTF-44	8/22/2019	Aluminum, Total	3.6	0.1	0.012441	19914000	mg/L
MKTF-44	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-44	8/22/2019	Arsenic, Total	0.005	0.001	0.000312	10000	mg/L
MKTF-44	8/22/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
MKTF-44	8/22/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
MKTF-44	8/22/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	8/22/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
MKTF-44	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	8/22/2019	Copper, Total	0.0048	0.006	0.004072	790000	mg/L
MKTF-44	8/22/2019	Iron, Total	3.9	0.1	0.043734	13822000	mg/L
MKTF-44	8/22/2019	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
MKTF-44	8/22/2019	Manganese, Total	0.083	0.002	0.00029	2017000	mg/L
MKTF-44	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	8/22/2019	Nickel, Total	0.0042	0.01	0.004009	372000	mg/L
MKTF-44	8/22/2019	Selenium, Total	0.0095	0.001	0.000478	50000	mg/L
MKTF-44	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-44	8/22/2019	Thallium, Total	0.000098	0.0005	0.000052	2000	mg/L
MKTF-44	8/22/2019	Uranium, Total	0.12	0.0025	0.000424	30000	mg/L
MKTF-44	8/22/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-44	10/24/2019	Aluminum, Total	4.6	0.1	0.012441	19914000	mg/L
MKTF-44	10/24/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MKTF-44	10/24/2019	Arsenic, Total	0.0059	0.005	0.001561	10000	mg/L
MKTF-44	10/24/2019	Barium, Total	0.19	0.002	0.000648	2000000	mg/L
MKTF-44	10/24/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	10/24/2019	Boron, Total	1.9	0.2	0.022653	3949	mg/L
MKTF-44	10/24/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	10/24/2019	Chromium, Total	0.0069	0.006	0.001533	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	10/24/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	10/24/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-44	10/24/2019	Iron, Total	4	0.1	0.043734	13822000	mg/L
MKTF-44	10/24/2019	Lead, Total	0.0038	0.0005	0.000055	15000	mg/L
MKTF-44	10/24/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
MKTF-44	10/24/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
MKTF-44	10/24/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	10/24/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-44	10/24/2019	Selenium, Total	0.011	0.005	0.00239	50000	mg/L
MKTF-44	10/24/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MKTF-44	10/24/2019	Thallium, Total	0.000095	0.0005	0.000052	2000	mg/L
MKTF-44	10/24/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
MKTF-44	10/24/2019	Aluminum, Dissolved	0.031	0.02	0.002488	19913930	mg/L
MKTF-44	10/24/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-44	10/24/2019	Arsenic, Dissolved	0.0051	0.005	0.000504	10000	mg/L
MKTF-44	10/24/2019	Barium, Dissolved	0.11	0.002	0.000648	2000000	mg/L
MKTF-44	10/24/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	10/24/2019	Boron, Dissolved	1.9	0.4	0.045305	3949110	mg/L
MKTF-44	10/24/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	10/24/2019	Calcium, Dissolved	20	1	0.061889	NA	mg/L
MKTF-44	10/24/2019	Chromium, Dissolved	0.0063	0.006	0.001533	100000	mg/L
MKTF-44	10/24/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-44	10/24/2019	Copper, Dissolved	0.0048	0.006	0.001296	790000	mg/L
MKTF-44	10/24/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
MKTF-44	10/24/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-44	10/24/2019	Magnesium, Dissolved	1.8	1	0.05029	NA	mg/L
MKTF-44	10/24/2019	Manganese, Dissolved	0.0015	0.002	0.00029	2017400	mg/L
MKTF-44	10/24/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-44	10/24/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-44	10/24/2019	Potassium, Dissolved	2	1	0.162288	NA	mg/L
MKTF-44	10/24/2019	Selenium, Dissolved	0.012	0.005	0.000857	50000	mg/L
MKTF-44	10/24/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MKTF-44	10/24/2019	Sodium, Dissolved	800	10	4.161763	NA	mg/L
MKTF-44	10/24/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-44	10/24/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
MKTF-44	2/13/2019	Antimony, Total	0.00039	0.001	0.000204	6000	mg/L
MKTF-44	2/13/2019	Arsenic, Total	0.005	0.001	0.000312	10000	mg/L
MKTF-44	2/13/2019	Barium, Total	0.3	0.002	0.000648	2000000	mg/L
MKTF-44	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	2/13/2019	Chromium, Total	0.018	0.006	0.001533	50000	mg/L
MKTF-44	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MKTF-44	2/13/2019	Iron, Total	6.7	0.2	0.087469	13822000	mg/L
MKTF-44	2/13/2019	Lead, Total	0.0074	0.0005	0.000047	15000	mg/L
MKTF-44	2/13/2019	Manganese, Total	0.14	0.002	0.00029	2017000	mg/L
MKTF-44	2/13/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
MKTF-44	2/13/2019	Selenium, Total	0.009	0.001	0.000478	50000	mg/L
MKTF-44	2/13/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
MKTF-44	2/13/2019	Thallium, Total	0.00016	0.0005	0.000052	2000	mg/L
MKTF-44	2/13/2019	Uranium, Total	0.12	0.005	0.000849	30000	mg/L
MKTF-44	2/13/2019	Zinc, Total	0.026	0.01	0.005772	5960000	mg/L
MKTF-44	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
MKTF-44	2/13/2019	Arsenic, Dissolved	0.0022	0.001	0.000068	10000	mg/L
MKTF-44	2/13/2019	Barium, Dissolved	0.23	0.002	0.000648	2000000	mg/L
MKTF-44	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	2/13/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
MKTF-44	2/13/2019	Chromium, Dissolved	0.008	0.006	0.001533	100000	mg/L
MKTF-44	2/13/2019	Copper, Dissolved	0.0034	0.006	0.001296	790000	mg/L
MKTF-44	2/13/2019	Iron, Dissolved	0.025	0.02	0.008747	13821880	mg/L
MKTF-44	2/13/2019	Lead, Dissolved	0.000097	0.0005	0.000047	NA	mg/L
MKTF-44	2/13/2019	Magnesium, Dissolved	2.5	1	0.05029	NA	mg/L
MKTF-44	2/13/2019	Manganese, Dissolved	0.0027	0.002	0.00029	2017400	mg/L
MKTF-44	2/13/2019	Potassium, Dissolved	2.8	1	0.162288	NA	mg/L
MKTF-44	2/13/2019	Selenium, Dissolved	0.0081	0.001	0.000203	50000	mg/L
MKTF-44	2/13/2019	Silver, Dissolved	0.0021	0.005	0.000942	81200	mg/L
MKTF-44	2/13/2019	Sodium, Dissolved	1000	20	8.323526	NA	mg/L
MKTF-44	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
MKTF-44	2/13/2019	Uranium, Dissolved	0.13	0.005	0.000305	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
MKTF-44	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
MKTF-44	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
MKTF-44	5/8/2019	Arsenic, Dissolved	0.0021	0.005	0.000504	10000	mg/L
MKTF-44	5/8/2019	Barium, Dissolved	0.47	0.002	0.000648	2000000	mg/L
MKTF-44	5/8/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MKTF-44	5/8/2019	Boron, Dissolved	2.1	0.2	0.022653	3949110	mg/L
MKTF-44	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MKTF-44	5/8/2019	Calcium, Dissolved	98	1	0.061889	NA	mg/L
MKTF-44	5/8/2019	Chromium, Dissolved	0.015	0.006	0.001533	100000	mg/L
MKTF-44	5/8/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MKTF-44	5/8/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
MKTF-44	5/8/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MKTF-44	5/8/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
MKTF-44	5/8/2019	Magnesium, Dissolved	7.3	1	0.05029	NA	mg/L
MKTF-44	5/8/2019	Manganese, Dissolved	0.00049	0.002	0.00029	2017400	mg/L
MKTF-44	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
MKTF-44	5/8/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MKTF-44	5/8/2019	Potassium, Dissolved	3.4	1	0.162288	NA	mg/L
MKTF-44	5/8/2019	Selenium, Dissolved	0.0085	0.005	0.000857	50000	mg/L
MKTF-44	5/8/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
MKTF-44	5/8/2019	Sodium, Dissolved	1600	20	8.323526	NA	mg/L
MKTF-44	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
MKTF-44	5/8/2019	Uranium, Dissolved	0.11	0.0025	0.000374	NA	mg/L
MKTF-44	5/8/2019	Zinc, Dissolved	0.008	0.01	0.002252	5960450	mg/L
MKTF-44	5/8/2019	Aluminum, Total	0.99	0.02	0.002488	19914000	mg/L
MKTF-44	5/8/2019	Antimony, Total	0.00083	0.001	0.000389	6000	mg/L
MKTF-44	5/8/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
MKTF-44	5/8/2019	Barium, Total	0.5	0.002	0.000648	2000000	mg/L
MKTF-44	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MKTF-44	5/8/2019	Boron, Total	2.1	0.2	0.022653	3949	mg/L
MKTF-44	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MKTF-44	5/8/2019	Chromium, Total	0.016	0.006	0.001533	50000	mg/L
MKTF-44	5/8/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MKTF-44	5/8/2019	Copper, Total	0.0049	0.006	0.004072	790000	mg/L
MKTF-44	5/8/2019	Iron, Total	0.82	0.1	0.043734	13822000	mg/L
MKTF-44	5/8/2019	Lead, Total	0.00097	0.0005	0.000055	15000	mg/L
MKTF-44	5/8/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
MKTF-44	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-44	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
MKTF-44	5/8/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MKTF-44	5/8/2019	Selenium, Total	0.0089	0.001	0.000478	50000	mg/L
MKTF-44	5/8/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
MKTF-44	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-44	5/8/2019	Uranium, Total	0.11	0.005	0.000849	30000	mg/L
MKTF-44	5/8/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
MKTF-44	8/22/2019	Calcium, Total	39	1	0.061889	NA	mg/L
MKTF-44	8/22/2019	Magnesium, Total	3.5	1	0.05029	NA	mg/L
MKTF-44	8/22/2019	Potassium, Total	2.4	1	0.162288	NA	mg/L
MKTF-44	8/22/2019	Sodium, Total	1100	20	8.323526	NA	mg/L
MKTF-44	8/22/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
MKTF-44	9/21/2020	Arsenic, Dissolved	0.0056	0.001	0.00021	10000	mg/L
MKTF-44	9/21/2020	Lead, Dissolved	0.0037	0.0005	0.000034	NA	mg/L
MKTF-44	9/21/2020	Selenium, Dissolved	0.013	0.001	0.00066	50000	mg/L
MKTF-44	9/21/2020	Thallium, Dissolved	0.000036	0.0005	0.000035	2000	mg/L
MKTF-44	9/21/2020	Uranium, Dissolved	0.15	0.005	0.00065	NA	mg/L
MKTF-44	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-44	9/21/2020	Aluminum, Dissolved	2.1	0.1	0.028	19913930	mg/L
MKTF-44	9/21/2020	Boron, Dissolved	1.8	0.2	0.033	3949110	mg/L
MKTF-44	9/21/2020	Iron, Dissolved	1.8	0.1	0.052	13821880	mg/L
MKTF-44	9/21/2020	Sodium, Dissolved	810	50	6.9	NA	mg/L
MKTF-44	9/21/2020	Barium, Dissolved	0.16	0.002	0.0011	2000000	mg/L
MKTF-44	9/21/2020	Beryllium, Dissolved	0.00097	0.002	0.00088	4000	mg/L
MKTF-44	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-44	9/21/2020	Calcium, Dissolved	34	1	0.11	NA	mg/L
MKTF-44	9/21/2020	Chromium, Dissolved	0.014	0.006	0.002	100000	mg/L
MKTF-44	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-44	9/21/2020	Magnesium, Dissolved	1.9	1	0.067	NA	mg/L
MKTF-44	9/21/2020	Manganese, Dissolved	0.08	0.002	0.00058	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-44	9/21/2020	Nickel, Dissolved	0.0035	0.01	0.0033	372000	mg/L
MKTF-44	9/21/2020	Potassium, Dissolved	4.9	1	0.16	NA	mg/L
MKTF-44	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MKTF-44	9/21/2020	Zinc, Dissolved	0.022	0.01	0.006	5960450	mg/L
MKTF-44	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-44	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-44	9/21/2020	Arsenic, Total	0.011	0.001	0.00026	10000	mg/L
MKTF-44	9/21/2020	Lead, Total	0.019	0.0005	0.000034	15000	mg/L
MKTF-44	9/21/2020	Selenium, Total	0.014	0.001	0.00066	50000	mg/L
MKTF-44	9/21/2020	Thallium, Total	0.00036	0.00025	0.00025	2000	mg/L
MKTF-44	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-44	9/21/2020	Barium, Total	0.27	0.003	0.0016	2000000	mg/L
MKTF-44	9/21/2020	Beryllium, Total	0.0018	0.002	0.00088	4000	mg/L
MKTF-44	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	9/21/2020	Chromium, Total	0.023	0.006	0.0021	50000	mg/L
MKTF-44	9/21/2020	Cobalt, Total	0.0053	0.006	0.0024	5980	mg/L
MKTF-44	9/21/2020	Manganese, Total	0.32	0.002	0.00081	2017000	mg/L
MKTF-44	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-44	9/21/2020	Zinc, Total	0.061	0.01	0.0064	5960000	mg/L
MKTF-44	9/21/2020	Uranium, Total	0.15	0.005	0.00065	30000	mg/L
MKTF-44	9/21/2020	Copper, Total	0.0087	0.006	0.0047	790000	mg/L
MKTF-44	9/21/2020	Nickel, Total	0.0057	0.01	0.0033	372000	mg/L
MKTF-44	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MKTF-44	9/21/2020	Boron, Total	1.8	0.2	0.037	3949	mg/L
MKTF-44	9/21/2020	Aluminum, Total	18	0.4	0.15	19914000	mg/L
MKTF-44	9/21/2020	Iron, Total	17	1	0.26	13822000	mg/L
MKTF-44	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-44	12/23/2020	Barium, Dissolved	0.0404	0.01	0.003	2000000	mg/L
MKTF-44	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-44	12/23/2020	Boron, Dissolved	1.74	0.1	0.022	3949110	mg/L
MKTF-44	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-44	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-44	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-44	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-44	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-44	12/23/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
MKTF-44	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-44	12/23/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-44	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-44	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-44	12/23/2020	Aluminum, Total	3.18	0.2	0.051	19914000	mg/L
MKTF-44	12/23/2020	Barium, Total	0.0829	0.01	0.003	2000000	mg/L
MKTF-44	12/23/2020	Calcium, Total	16.6	0.5	0.084	NA	mg/L
MKTF-44	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-44	12/23/2020	Boron, Total	1.76	0.1	0.022	3949	mg/L
MKTF-44	12/23/2020	Potassium, Total	3.11	1	0.34	NA	mg/L
MKTF-44	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-44	12/23/2020	Magnesium, Total	1	0.5	0.12	NA	mg/L
MKTF-44	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-44	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-44	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-44	12/23/2020	Iron, Total	2.8	0.2	0.075	13822000	mg/L
MKTF-44	12/23/2020	Manganese, Total	0.06	0.01	0.003	2017000	mg/L
MKTF-44	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-44	12/23/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-44	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-44	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-44	12/23/2020	Sodium, Total	545	20	9.2	NA	mg/L
MKTF-44	12/23/2020	Arsenic, Total Recoverable	9.85	1	0.286	10	ug/L
MKTF-44	12/23/2020	Lead, Total Recoverable	1.93	1	0.133	15	ug/L
MKTF-44	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-44	12/23/2020	Selenium, Total Recoverable	12.1	5	1.43	50	ug/L
MKTF-44	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-44	12/23/2020	Uranium, Total Recoverable	**166**	5	1.12	30	ug/L
MKTF-44	12/23/2020	Arsenic, Dissolved	9.54	1	0.286	10	ug/L
MKTF-44	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-44	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-44	12/23/2020	Selenium, Dissolved	11.9	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-44	12/23/2020	Uranium, Dissolved	162	5	1.12	NA	ug/L
MKTF-44	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-44	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-44	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-44	3/5/2020	Lead, Total	0.015	0.0005	0.000055	15000	mg/L
MKTF-44	3/5/2020	Thallium, Total	0.00029	0.0005	0.000052	2000	mg/L
MKTF-44	3/5/2020	Arsenic, Total	0.0091	0.005	0.0016	10000	mg/L
MKTF-44	3/5/2020	Selenium, Total	0.016	0.005	0.0024	50000	mg/L
MKTF-44	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-44	3/5/2020	Uranium, Total	0.16	0.005	0.00085	30000	mg/L
MKTF-44	3/5/2020	Barium, Total	0.29	0.002	0.00065	2000000	mg/L
MKTF-44	3/5/2020	Beryllium, Total	0.0017	0.002	0.00028	4000	mg/L
MKTF-44	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-44	3/5/2020	Chromium, Total	0.018	0.006	0.0015	50000	mg/L
MKTF-44	3/5/2020	Cobalt, Total	0.0037	0.006	0.0031	5980	mg/L
MKTF-44	3/5/2020	Copper, Total	0.011	0.006	0.0041	790000	mg/L
MKTF-44	3/5/2020	Manganese, Total	0.32	0.002	0.00029	2017000	mg/L
MKTF-44	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-44	3/5/2020	Nickel, Total	0.0062	0.01	0.004	372000	mg/L
MKTF-44	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-44	3/5/2020	Zinc, Total	0.052	0.01	0.0058	5960000	mg/L
MKTF-44	3/5/2020	Boron, Total	1.9	0.2	0.023	3949	mg/L
MKTF-44	3/5/2020	Aluminum, Total	12	0.4	0.05	19914000	mg/L
MKTF-44	3/5/2020	Iron, Total	14	0.4	0.17	13822000	mg/L
MKTF-44	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-44	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-44	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-44	3/5/2020	Arsenic, Dissolved	0.0045	0.005	0.0005	10000	mg/L
MKTF-44	3/5/2020	Selenium, Dissolved	0.01	0.005	0.00086	50000	mg/L
MKTF-44	3/5/2020	Uranium, Dissolved	0.16	0.005	0.00075	NA	mg/L
MKTF-44	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-44	3/5/2020	Barium, Dissolved	0.12	0.002	0.00065	2000000	mg/L
MKTF-44	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-44	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-44	3/5/2020	Calcium, Dissolved	37	1	0.062	NA	mg/L
MKTF-44	3/5/2020	Chromium, Dissolved	0.0061	0.006	0.0015	100000	mg/L
MKTF-44	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-44	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-44	3/5/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-44	3/5/2020	Magnesium, Dissolved	1.8	1	0.05	NA	mg/L
MKTF-44	3/5/2020	Manganese, Dissolved	0.00032	0.002	0.00029	2017400	mg/L
MKTF-44	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-44	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-44	3/5/2020	Potassium, Dissolved	2	1	0.16	NA	mg/L
MKTF-44	3/5/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
MKTF-44	3/5/2020	Zinc, Dissolved	0.0079	0.01	0.0023	5960450	mg/L
MKTF-44	3/5/2020	Boron, Dissolved	1.8	0.2	0.023	3949110	mg/L
MKTF-44	3/5/2020	Sodium, Dissolved	760	10	4.2	NA	mg/L
MKTF-44	3/12/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	3/12/2015	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
MKTF-44	3/12/2015	Barium, Total	0.07	0.002	0.00095	2000000	mg/L
MKTF-44	3/12/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-44	3/12/2015	Chromium, Total	0.0072	0.006	0.0018	50000	mg/L
MKTF-44	3/12/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-44	3/12/2015	Iron, Total	0.85	0.02	0.0073	13822000	mg/L
MKTF-44	3/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	3/12/2015	Manganese, Total	0.079	0.002	0.00027	2017000	mg/L
MKTF-44	3/12/2015	Lead, Total	0.0031	0.001	0.000059	15000	mg/L
MKTF-44	3/12/2015	Selenium, Total	0.017	0.001	0.00015	50000	mg/L
MKTF-44	3/12/2015	Uranium, Total	0.22	0.01	0.0005	30000	mg/L
MKTF-44	3/12/2015	Zinc, Total	0.011	0.01	0.0028	5960000	mg/L
MKTF-44	6/10/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	6/10/2015	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
MKTF-44	6/10/2015	Barium, Total	0.05	0.002	0.00095	2000000	mg/L
MKTF-44	6/10/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
MKTF-44	6/10/2015	Chromium, Total	0.0099	0.006	0.0018	50000	mg/L
MKTF-44	6/10/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
MKTF-44	6/10/2015	Iron, Total	0.91	0.02	0.0073	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	6/10/2015	Manganese, Total	0.042	0.002	0.00027	2017000	mg/L
MKTF-44	6/10/2015	Lead, Total	ND	0.005	0.00013	15000	mg/L
MKTF-44	6/10/2015	Selenium, Total	0.015	0.005	0.00097	50000	mg/L
MKTF-44	6/10/2015	Uranium, Total	0.21	0.01	0.000048	30000	mg/L
MKTF-44	6/10/2015	Zinc, Total	0.021	0.01	0.0028	5960000	mg/L
MKTF-44	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-44	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
MKTF-44	8/17/2015	Barium, Total	0.43	0.002	0.0011	2000000	mg/L
MKTF-44	8/17/2015	Calcium, Total	8.9	1	0.057	NA	mg/L
MKTF-44	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-44	8/17/2015	Chromium, Total	0.031	0.006	0.0022	50000	mg/L
MKTF-44	8/17/2015	Copper, Total	0.016	0.006	0.0051	790000	mg/L
MKTF-44	8/17/2015	Iron, Total	26	1	0.36	13822000	mg/L
MKTF-44	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	8/17/2015	Potassium, Total	1.9	1	0.18	NA	mg/L
MKTF-44	8/17/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
MKTF-44	8/17/2015	Manganese, Total	0.92	0.002	0.0015	2017000	mg/L
MKTF-44	8/17/2015	Sodium, Total	480	5	0.36	NA	mg/L
MKTF-44	8/17/2015	Lead, Total	0.034	0.005	0.00047	15000	mg/L
MKTF-44	8/17/2015	Selenium, Total	0.015	0.01	0.0012	50000	mg/L
MKTF-44	8/17/2015	Uranium, Total	0.24	0.005	0.000049	30000	mg/L
MKTF-44	8/17/2015	Zinc, Total	0.1	0.01	0.0039	5960000	mg/L
MKTF-44	11/9/2015	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-44	11/9/2015	Arsenic, Total	ND	0.01	0.00065	10000	mg/L
MKTF-44	11/9/2015	Barium, Total	0.053	0.002	0.0013	2000000	mg/L
MKTF-44	11/9/2015	Calcium, Total	5.7	1	0.26	NA	mg/L
MKTF-44	11/9/2015	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-44	11/9/2015	Chromium, Total	0.0062	0.006	0.0018	50000	mg/L
MKTF-44	11/9/2015	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-44	11/9/2015	Iron, Total	0.87	0.02	0.0091	13822000	mg/L
MKTF-44	11/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MKTF-44	11/9/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
MKTF-44	11/9/2015	Magnesium, Total	ND	1	0.013	NA	mg/L
MKTF-44	11/9/2015	Manganese, Total	0.081	0.002	0.00032	2017000	mg/L
MKTF-44	11/9/2015	Sodium, Total	400	5	0.48	NA	mg/L
MKTF-44	11/9/2015	Lead, Total	0.0053	0.005	0.00026	15000	mg/L
MKTF-44	11/9/2015	Selenium, Total	0.014	0.001	0.00019	50000	mg/L
MKTF-44	11/9/2015	Uranium, Total	0.21	0.005	0.000048	30000	mg/L
MKTF-44	11/9/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-44	2/24/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
MKTF-44	2/24/2016	Arsenic, Total	ND	0.02	0.0058	10000	mg/L
MKTF-44	2/24/2016	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
MKTF-44	2/24/2016	Calcium, Total	24	1	0.26	NA	mg/L
MKTF-44	2/24/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MKTF-44	2/24/2016	Chromium, Total	0.0098	0.006	0.0022	50000	mg/L
MKTF-44	2/24/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
MKTF-44	2/24/2016	Iron, Total	2.9	0.1	0.036	13822000	mg/L
MKTF-44	2/24/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MKTF-44	2/24/2016	Potassium, Total	2.3	1	0.18	NA	mg/L
MKTF-44	2/24/2016	Magnesium, Total	1.1	1	0.013	NA	mg/L
MKTF-44	2/24/2016	Manganese, Total	0.056	0.002	0.0015	2017000	mg/L
MKTF-44	2/24/2016	Sodium, Total	530	10	0.96	NA	mg/L
MKTF-44	2/24/2016	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
MKTF-44	2/24/2016	Selenium, Total	ND	0.02	0.0025	50000	mg/L
MKTF-44	2/24/2016	Uranium, Total	0.18	0.01	0.000099	30000	mg/L
MKTF-44	2/24/2016	Zinc, Total	0.013	0.01	0.0039	5960000	mg/L
MKTF-44	6/9/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
MKTF-44	6/9/2016	Arsenic, Total	0.0049	0.01	0.0014	10000	mg/L
MKTF-44	6/9/2016	Barium, Total	0.11	0.002	0.0013	2000000	mg/L
MKTF-44	6/9/2016	Calcium, Total	35	1	0.26	NA	mg/L
MKTF-44	6/9/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
MKTF-44	6/9/2016	Chromium, Total	0.011	0.006	0.0018	50000	mg/L
MKTF-44	6/9/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
MKTF-44	6/9/2016	Iron, Total	0.045	0.02	0.0091	13822000	mg/L
MKTF-44	6/9/2016	Mercury, Total	0.000089	0.0002	0.000053	2000	mg/L
MKTF-44	6/9/2016	Potassium, Total	2.1	1	0.18	NA	mg/L
MKTF-44	6/9/2016	Magnesium, Total	1.3	1	0.013	NA	mg/L
MKTF-44	6/9/2016	Manganese, Total	0.0031	0.002	0.00032	2017000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	6/9/2016	Sodium, Total	660	10	0.96	NA	mg/L
MKTF-44	6/9/2016	Lead, Total	0.00019	0.0005	0.00017	15000	mg/L
MKTF-44	6/9/2016	Selenium, Total	0.016	0.001	0.00021	50000	mg/L
MKTF-44	6/9/2016	Uranium, Total	0.17	0.005	0.00051	30000	mg/L
MKTF-44	6/9/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
MKTF-44	9/9/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
MKTF-44	9/9/2016	Arsenic, Total	0.0086	0.001	0.00021	10000	mg/L
MKTF-44	9/9/2016	Barium, Total	0.26	0.002	0.00079	2000000	mg/L
MKTF-44	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	9/9/2016	Chromium, Total	0.031	0.006	0.0027	50000	mg/L
MKTF-44	9/9/2016	Copper, Total	0.019	0.006	0.003	790000	mg/L
MKTF-44	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-44	9/9/2016	Arsenic, Dissolved	0.0088	0.001	0.00014	10000	mg/L
MKTF-44	9/9/2016	Barium, Dissolved	0.058	0.002	0.0013	2000000	mg/L
MKTF-44	9/9/2016	Calcium, Dissolved	11	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-44	9/9/2016	Chromium, Dissolved	0.0077	0.006	0.0018	100000	mg/L
MKTF-44	9/9/2016	Copper, Dissolved	0.0041	0.006	0.004	790000	mg/L
MKTF-44	9/9/2016	Iron, Dissolved	0.97	0.02	0.02	13821880	mg/L
MKTF-44	9/9/2016	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Magnesium, Dissolved	0.68	1	0.5	NA	mg/L
MKTF-44	9/9/2016	Manganese, Dissolved	0.042	0.002	0.00032	2017400	mg/L
MKTF-44	9/9/2016	Sodium, Dissolved	530	10	5	NA	mg/L
MKTF-44	9/9/2016	Lead, Dissolved	0.005	0.0005	0.00017	NA	mg/L
MKTF-44	9/9/2016	Selenium, Dissolved	0.015	0.001	0.00021	50000	mg/L
MKTF-44	9/9/2016	Uranium, Dissolved	0.17	0.005	0.00051	NA	mg/L
MKTF-44	9/9/2016	Zinc, Dissolved	0.0078	0.01	0.0028	5960450	mg/L
MKTF-44	9/9/2016	Iron, Total	33	1	1	13822000	mg/L
MKTF-44	9/9/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
MKTF-44	9/9/2016	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
MKTF-44	9/9/2016	Lead, Total	0.031	0.0025	0.00041	15000	mg/L
MKTF-44	9/9/2016	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
MKTF-44	9/9/2016	Uranium, Total	0.17	0.01	0.0035	30000	mg/L
MKTF-44	9/9/2016	Zinc, Total	0.089	0.01	0.0027	5960000	mg/L
MKTF-44	11/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-44	11/1/2016	Arsenic, Total	0.011	0.001	0.00021	10000	mg/L
MKTF-44	11/1/2016	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
MKTF-44	11/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	11/1/2016	Chromium, Total	0.022	0.006	0.0027	50000	mg/L
MKTF-44	11/1/2016	Copper, Total	0.015	0.006	0.003	790000	mg/L
MKTF-44	11/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MKTF-44	11/1/2016	Arsenic, Dissolved	0.0095	0.005	0.00069	10000	mg/L
MKTF-44	11/1/2016	Barium, Dissolved	0.037	0.002	0.0013	2000000	mg/L
MKTF-44	11/1/2016	Calcium, Dissolved	5.7	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MKTF-44	11/1/2016	Chromium, Dissolved	0.0043	0.006	0.0018	100000	mg/L
MKTF-44	11/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MKTF-44	11/1/2016	Iron, Dissolved	0.37	0.02	0.02	13821880	mg/L
MKTF-44	11/1/2016	Potassium, Dissolved	1.2	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MKTF-44	11/1/2016	Manganese, Dissolved	0.011	0.002	0.00032	2017400	mg/L
MKTF-44	11/1/2016	Sodium, Dissolved	440	5	2.5	NA	mg/L
MKTF-44	11/1/2016	Lead, Dissolved	0.0012	0.0025	0.00084	NA	mg/L
MKTF-44	11/1/2016	Selenium, Dissolved	0.014	0.005	0.0011	50000	mg/L
MKTF-44	11/1/2016	Uranium, Dissolved	0.17	0.01	0.001	NA	mg/L
MKTF-44	11/1/2016	Zinc, Dissolved	0.0061	0.01	0.0028	5960450	mg/L
MKTF-44	11/1/2016	Iron, Total	18	1	1	13822000	mg/L
MKTF-44	11/1/2016	Mercury, Total	0.000083	0.0002	0.000053	2000	mg/L
MKTF-44	11/1/2016	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
MKTF-44	11/1/2016	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
MKTF-44	11/1/2016	Selenium, Total	0.013	0.02	0.0037	50000	mg/L
MKTF-44	11/1/2016	Uranium, Total	0.18	0.005	0.0017	30000	mg/L
MKTF-44	11/1/2016	Zinc, Total	0.074	0.01	0.0027	5960000	mg/L
MKTF-44	3/8/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
MKTF-44	3/8/2017	Arsenic, Total	0.012	0.02	0.0042	10000	mg/L
MKTF-44	3/8/2017	Barium, Total	0.97	0.002	0.00079	2000000	mg/L
MKTF-44	3/8/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-44	3/8/2017	Chromium, Total	0.038	0.006	0.0027	50000	mg/L
MKTF-44	3/8/2017	Copper, Total	ND	0.006	0.003	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	3/8/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-44	3/8/2017	Arsenic, Dissolved	0.0043	0.005	0.00069	10000	mg/L
MKTF-44	3/8/2017	Barium, Dissolved	0.96	0.002	0.00085	2000000	mg/L
MKTF-44	3/8/2017	Calcium, Dissolved	370	5	2.5	NA	mg/L
MKTF-44	3/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	3/8/2017	Chromium, Dissolved	0.032	0.006	0.001	100000	mg/L
MKTF-44	3/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	3/8/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MKTF-44	3/8/2017	Potassium, Dissolved	6.8	1	0.5	NA	mg/L
MKTF-44	3/8/2017	Magnesium, Dissolved	11	1	0.5	NA	mg/L
MKTF-44	3/8/2017	Manganese, Dissolved	0.0082	0.002	0.00038	2017400	mg/L
MKTF-44	3/8/2017	Sodium, Dissolved	2200	50	25	NA	mg/L
MKTF-44	3/8/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-44	3/8/2017	Selenium, Dissolved	0.017	0.005	0.0011	50000	mg/L
MKTF-44	3/8/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
MKTF-44	3/8/2017	Iron, Total	3.1	0.2	0.2	13822000	mg/L
MKTF-44	3/8/2017	Mercury, Total	ND	0.0002	0.0002	2000	mg/L
MKTF-44	3/8/2017	Manganese, Total	0.08	0.002	0.00027	2017000	mg/L
MKTF-44	3/8/2017	Lead, Total	0.0042	0.01	0.0016	15000	mg/L
MKTF-44	3/8/2017	Selenium, Total	0.025	0.02	0.0037	50000	mg/L
MKTF-44	3/8/2017	Zinc, Total	0.013	0.01	0.0027	5960000	mg/L
MKTF-44	6/5/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
MKTF-44	6/5/2017	Arsenic, Total	0.0039	0.001	0.0003	10000	mg/L
MKTF-44	6/5/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
MKTF-44	6/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	6/5/2017	Chromium, Total	0.016	0.006	0.0011	50000	mg/L
MKTF-44	6/5/2017	Copper, Total	0.0031	0.006	0.0017	790000	mg/L
MKTF-44	6/5/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
MKTF-44	6/5/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
MKTF-44	6/5/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
MKTF-44	6/5/2017	Calcium, Dissolved	33	1	0.078	NA	mg/L
MKTF-44	6/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	6/5/2017	Chromium, Dissolved	0.011	0.006	0.001	100000	mg/L
MKTF-44	6/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	6/5/2017	Iron, Dissolved	0.044	0.02	0.016	13821880	mg/L
MKTF-44	6/5/2017	Potassium, Dissolved	2.4	1	0.11	NA	mg/L
MKTF-44	6/5/2017	Magnesium, Dissolved	2.9	1	0.25	NA	mg/L
MKTF-44	6/5/2017	Manganese, Dissolved	0.0029	0.002	0.00038	2017400	mg/L
MKTF-44	6/5/2017	Sodium, Dissolved	1000	20	3.3	NA	mg/L
MKTF-44	6/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
MKTF-44	6/5/2017	Selenium, Dissolved	0.012	0.001	0.00039	50000	mg/L
MKTF-44	6/5/2017	Uranium, Dissolved	0.13	0.01	0.001	NA	mg/L
MKTF-44	6/5/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
MKTF-44	6/5/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
MKTF-44	6/5/2017	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
MKTF-44	6/5/2017	Manganese, Total	0.14	0.002	0.0011	2017000	mg/L
MKTF-44	6/5/2017	Lead, Total	0.0052	0.0005	0.000095	15000	mg/L
MKTF-44	6/5/2017	Selenium, Total	0.011	0.001	0.00071	50000	mg/L
MKTF-44	6/5/2017	Uranium, Total	0.13	0.005	0.0015	30000	mg/L
MKTF-44	6/5/2017	Zinc, Total	0.014	0.01	0.0028	5960000	mg/L
MKTF-44	9/25/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	9/25/2017	Arsenic, Total	0.0036	0.001	0.0003	10000	mg/L
MKTF-44	9/25/2017	Barium, Total	0.19	0.002	0.00093	2000000	mg/L
MKTF-44	9/25/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	9/25/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
MKTF-44	9/25/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MKTF-44	9/25/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	9/25/2017	Arsenic, Dissolved	0.0033	0.01	0.0018	10000	mg/L
MKTF-44	9/25/2017	Barium, Dissolved	0.16	0.002	0.00085	2000000	mg/L
MKTF-44	9/25/2017	Calcium, Dissolved	45	1	0.078	NA	mg/L
MKTF-44	9/25/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	9/25/2017	Chromium, Dissolved	0.013	0.006	0.0013	100000	mg/L
MKTF-44	9/25/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	9/25/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	9/25/2017	Potassium, Dissolved	2.5	1	0.11	NA	mg/L
MKTF-44	9/25/2017	Magnesium, Dissolved	2.3	1	0.25	NA	mg/L
MKTF-44	9/25/2017	Manganese, Dissolved	0.00064	0.002	0.00039	2017400	mg/L
MKTF-44	9/25/2017	Sodium, Dissolved	940	20	3.3	NA	mg/L
MKTF-44	9/25/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	9/25/2017	Selenium, Dissolved	0.012	0.01	0.0039	50000	mg/L
MKTF-44	9/25/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MKTF-44	9/25/2017	Iron, Total	1.6	0.1	0.051	13822000	mg/L
MKTF-44	9/25/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MKTF-44	9/25/2017	Manganese, Total	0.047	0.002	0.0011	2017000	mg/L
MKTF-44	9/25/2017	Lead, Total	0.0019	0.0005	0.000095	15000	mg/L
MKTF-44	9/25/2017	Selenium, Total	0.011	0.001	0.00071	50000	mg/L
MKTF-44	9/25/2017	Zinc, Total	0.0072	0.01	0.0033	5960000	mg/L
MKTF-44	11/28/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	11/28/2017	Arsenic, Total	ND	0.05	0.021	10000	mg/L
MKTF-44	11/28/2017	Barium, Total	0.13	0.002	0.001	2000000	mg/L
MKTF-44	11/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	11/28/2017	Chromium, Total	0.0098	0.006	0.0018	50000	mg/L
MKTF-44	11/28/2017	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
MKTF-44	11/28/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	11/28/2017	Arsenic, Dissolved	0.0054	0.001	0.00042	10000	mg/L
MKTF-44	11/28/2017	Barium, Dissolved	0.076	0.002	0.00099	2000000	mg/L
MKTF-44	11/28/2017	Calcium, Dissolved	17	1	0.078	NA	mg/L
MKTF-44	11/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	11/28/2017	Chromium, Dissolved	0.0065	0.006	0.0013	100000	mg/L
MKTF-44	11/28/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	11/28/2017	Iron, Dissolved	0.034	0.02	0.016	13821880	mg/L
MKTF-44	11/28/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
MKTF-44	11/28/2017	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
MKTF-44	11/28/2017	Manganese, Dissolved	0.0012	0.002	0.00039	2017400	mg/L
MKTF-44	11/28/2017	Sodium, Dissolved	720	10	1.6	NA	mg/L
MKTF-44	11/28/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	11/28/2017	Selenium, Dissolved	0.0097	0.001	0.00076	50000	mg/L
MKTF-44	11/28/2017	Uranium, Dissolved	0.14	0.01	0.0019	NA	mg/L
MKTF-44	11/28/2017	Zinc, Dissolved	0.005	0.01	0.0021	5960450	mg/L
MKTF-44	11/28/2017	Iron, Total	6.5	0.2	0.1	13822000	mg/L
MKTF-44	11/28/2017	Manganese, Total	0.092	0.002	0.0011	2017000	mg/L
MKTF-44	11/28/2017	Lead, Total	0.0054	0.0005	0.00023	15000	mg/L
MKTF-44	11/28/2017	Selenium, Total	0.0089	0.001	0.00098	50000	mg/L
MKTF-44	11/28/2017	Uranium, Total	0.15	0.01	0.0031	30000	mg/L
MKTF-44	11/28/2017	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-44	2/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	2/8/2018	Arsenic, Total	0.0095	0.001	0.00041	10000	mg/L
MKTF-44	2/8/2018	Barium, Total	0.096	0.002	0.001	2000000	mg/L
MKTF-44	2/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	2/8/2018	Chromium, Total	0.0088	0.006	0.0018	50000	mg/L
MKTF-44	2/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	2/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	2/8/2018	Arsenic, Dissolved	0.0075	0.001	0.00042	10000	mg/L
MKTF-44	2/8/2018	Barium, Dissolved	0.039	0.002	0.00099	2000000	mg/L
MKTF-44	2/8/2018	Calcium, Dissolved	8.9	1	0.078	NA	mg/L
MKTF-44	2/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	2/8/2018	Chromium, Dissolved	0.0033	0.006	0.0013	100000	mg/L
MKTF-44	2/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	2/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	2/8/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
MKTF-44	2/8/2018	Magnesium, Dissolved	0.73	1	0.25	NA	mg/L
MKTF-44	2/8/2018	Manganese, Dissolved	0.00056	0.002	0.00039	2017400	mg/L
MKTF-44	2/8/2018	Sodium, Dissolved	520	10	1.6	NA	mg/L
MKTF-44	2/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	2/8/2018	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
MKTF-44	2/8/2018	Uranium, Dissolved	0.17	0.01	0.0019	NA	mg/L
MKTF-44	2/8/2018	Zinc, Dissolved	0.0057	0.01	0.0021	5960450	mg/L
MKTF-44	2/8/2018	Iron, Total	4.7	0.1	0.051	13822000	mg/L
MKTF-44	2/8/2018	Mercury, Total	0.000079	0.0002	0.000037	2000	mg/L
MKTF-44	2/8/2018	Manganese, Total	0.092	0.002	0.0011	2017000	mg/L
MKTF-44	2/8/2018	Lead, Total	0.0056	0.0005	0.00023	15000	mg/L
MKTF-44	2/8/2018	Selenium, Total	0.011	0.001	0.00098	50000	mg/L
MKTF-44	2/8/2018	Uranium, Total	0.18	0.01	0.0014	30000	mg/L
MKTF-44	2/8/2018	Zinc, Total	0.02	0.01	0.0033	5960000	mg/L
MKTF-44	5/10/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	5/10/2018	Arsenic, Total	0.0083	0.001	0.00041	10000	mg/L
MKTF-44	5/10/2018	Barium, Total	0.084	0.002	0.001	2000000	mg/L
MKTF-44	5/10/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	5/10/2018	Chromium, Total	0.0064	0.006	0.0018	50000	mg/L
MKTF-44	5/10/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	5/10/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	5/10/2018	Arsenic, Dissolved	0.0084	0.001	0.00042	10000	mg/L
MKTF-44	5/10/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
MKTF-44	5/10/2018	Calcium, Dissolved	6.9	1	0.078	NA	mg/L
MKTF-44	5/10/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	5/10/2018	Chromium, Dissolved	0.0044	0.006	0.0013	100000	mg/L
MKTF-44	5/10/2018	Copper, Dissolved	0.0036	0.006	0.0032	790000	mg/L
MKTF-44	5/10/2018	Iron, Dissolved	0.087	0.02	0.016	13821880	mg/L
MKTF-44	5/10/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
MKTF-44	5/10/2018	Magnesium, Dissolved	0.66	1	0.25	NA	mg/L
MKTF-44	5/10/2018	Manganese, Dissolved	0.0034	0.002	0.00039	2017400	mg/L
MKTF-44	5/10/2018	Sodium, Dissolved	490	10	1.6	NA	mg/L
MKTF-44	5/10/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
MKTF-44	5/10/2018	Selenium, Dissolved	0.013	0.005	0.0038	50000	mg/L
MKTF-44	5/10/2018	Uranium, Dissolved	0.17	0.005	0.00096	NA	mg/L
MKTF-44	5/10/2018	Zinc, Dissolved	0.0089	0.01	0.0021	5960450	mg/L
MKTF-44	5/10/2018	Iron, Total	5.5	0.2	0.1	13822000	mg/L
MKTF-44	5/10/2018	Mercury, Total	0.000071	0.0002	0.000037	2000	mg/L
MKTF-44	5/10/2018	Manganese, Total	0.062	0.002	0.0011	2017000	mg/L
MKTF-44	5/10/2018	Lead, Total	0.0041	0.0005	0.00023	15000	mg/L
MKTF-44	5/10/2018	Selenium, Total	0.012	0.001	0.00098	50000	mg/L
MKTF-44	5/10/2018	Uranium, Total	0.19	0.01	0.0014	30000	mg/L
MKTF-44	5/10/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
MKTF-44	8/30/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	8/30/2018	Arsenic, Total	0.0048	0.001	0.00041	10000	mg/L
MKTF-44	8/30/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
MKTF-44	8/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	8/30/2018	Chromium, Total	0.0046	0.006	0.0018	50000	mg/L
MKTF-44	8/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-44	8/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	8/30/2018	Arsenic, Dissolved	0.005	0.001	0.00042	10000	mg/L
MKTF-44	8/30/2018	Barium, Dissolved	0.062	0.002	0.00099	2000000	mg/L
MKTF-44	8/30/2018	Calcium, Dissolved	21	1	0.078	NA	mg/L
MKTF-44	8/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	8/30/2018	Chromium, Dissolved	0.004	0.006	0.0013	100000	mg/L
MKTF-44	8/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	8/30/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MKTF-44	8/30/2018	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
MKTF-44	8/30/2018	Magnesium, Dissolved	1	1	0.25	NA	mg/L
MKTF-44	8/30/2018	Manganese, Dissolved	0.0013	0.002	0.00039	2017400	mg/L
MKTF-44	8/30/2018	Sodium, Dissolved	630	10	1.6	NA	mg/L
MKTF-44	8/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	8/30/2018	Selenium, Dissolved	0.011	0.001	0.00076	50000	mg/L
MKTF-44	8/30/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
MKTF-44	8/30/2018	Zinc, Dissolved	0.006	0.01	0.0021	5960450	mg/L
MKTF-44	8/30/2018	Iron, Total	0.89	0.02	0.01	13822000	mg/L
MKTF-44	8/30/2018	Mercury, Total	0.000039	0.0002	0.000038	2000	mg/L
MKTF-44	8/30/2018	Manganese, Total	0.016	0.002	0.0011	2017000	mg/L
MKTF-44	8/30/2018	Lead, Total	0.00081	0.0005	0.00023	15000	mg/L
MKTF-44	8/30/2018	Selenium, Total	0.01	0.001	0.00098	50000	mg/L
MKTF-44	8/30/2018	Uranium, Total	0.16	0.005	0.00068	30000	mg/L
MKTF-44	8/30/2018	Zinc, Total	0.0052	0.01	0.0033	5960000	mg/L
MKTF-44	11/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MKTF-44	11/15/2018	Arsenic, Total	0.0077	0.001	0.00041	10000	mg/L
MKTF-44	11/15/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
MKTF-44	11/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MKTF-44	11/15/2018	Chromium, Total	0.01	0.006	0.0018	50000	mg/L
MKTF-44	11/15/2018	Copper, Total	0.0066	0.006	0.0041	790000	mg/L
MKTF-44	11/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MKTF-44	11/15/2018	Arsenic, Dissolved	0.0069	0.001	0.00042	10000	mg/L
MKTF-44	11/15/2018	Barium, Dissolved	0.032	0.002	0.00099	2000000	mg/L
MKTF-44	11/15/2018	Calcium, Dissolved	9.8	1	0.078	NA	mg/L
MKTF-44	11/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MKTF-44	11/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MKTF-44	11/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MKTF-44	11/15/2018	Iron, Dissolved	0.16	0.02	0.016	13821880	mg/L
MKTF-44	11/15/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/15/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MKTF-44	11/15/2018	Manganese, Dissolved	0.0049	0.002	0.00039	2017400	mg/L
MKTF-44	11/15/2018	Sodium, Dissolved	530	20	3.3	NA	mg/L
MKTF-44	11/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MKTF-44	11/15/2018	Selenium, Dissolved	0.009	0.001	0.00076	50000	mg/L
MKTF-44	11/15/2018	Uranium, Dissolved	0.18	0.01	0.0019	NA	mg/L
MKTF-44	11/15/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
MKTF-44	11/15/2018	Iron, Total	7.8	0.2	0.1	13822000	mg/L
MKTF-44	11/15/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MKTF-44	11/15/2018	Manganese, Total	0.23	0.002	0.0011	2017000	mg/L
MKTF-44	11/15/2018	Lead, Total	0.0075	0.0005	0.00023	15000	mg/L
MKTF-44	11/15/2018	Selenium, Total	0.0096	0.001	0.00098	50000	mg/L
MKTF-44	11/15/2018	Uranium, Total	0.18	0.005	0.00068	30000	mg/L
MKTF-44	11/15/2018	Zinc, Total	0.036	0.01	0.0033	5960000	mg/L
MKTF-46	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MKTF-46	9/17/2020	Arsenic, Dissolved	0.00035	0.001	0.00021	10000	mg/L
MKTF-46	9/17/2020	Lead, Dissolved	0.000034	0.0005	0.000034	NA	mg/L
MKTF-46	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MKTF-46	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MKTF-46	9/17/2020	Uranium, Dissolved	0.0067	0.0005	0.000065	NA	mg/L
MKTF-46	9/17/2020	Calcium, Dissolved	240	5	0.57	NA	mg/L
MKTF-46	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-46	9/17/2020	Sodium, Dissolved	210	5	0.69	NA	mg/L
MKTF-46	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MKTF-46	9/17/2020	Barium, Dissolved	0.061	0.002	0.0011	2000000	mg/L
MKTF-46	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-46	9/17/2020	Boron, Dissolved	0.2	0.04	0.0067	3949110	mg/L
MKTF-46	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-46	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-46	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-46	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-46	9/17/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
MKTF-46	9/17/2020	Magnesium, Dissolved	51	1	0.067	NA	mg/L
MKTF-46	9/17/2020	Manganese, Dissolved	0.19	0.002	0.00058	2017400	mg/L
MKTF-46	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-46	9/17/2020	Nickel, Dissolved	0.0038	0.01	0.0033	372000	mg/L
MKTF-46	9/17/2020	Potassium, Dissolved	2.6	1	0.16	NA	mg/L
MKTF-46	9/17/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
MKTF-46	9/17/2020	Mercury, Total	0.0002	0.0002	0.00012	2000	mg/L
MKTF-46	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-46	9/17/2020	Arsenic, Total	0.0039	0.001	0.00026	10000	mg/L
MKTF-46	9/17/2020	Lead, Total	0.015	0.0005	0.000034	15000	mg/L
MKTF-46	9/17/2020	Selenium, Total	0.0028	0.001	0.00066	50000	mg/L
MKTF-46	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-46	9/17/2020	Uranium, Total	0.0097	0.0005	0.000065	30000	mg/L
MKTF-46	9/17/2020	Barium, Total	0.59	0.003	0.0016	2000000	mg/L
MKTF-46	9/17/2020	Beryllium, Total	0.002	0.002	0.00088	4000	mg/L
MKTF-46	9/17/2020	Cadmium, Total	0.0017	0.002	0.0015	5000	mg/L
MKTF-46	9/17/2020	Chromium, Total	0.037	0.006	0.0021	50000	mg/L
MKTF-46	9/17/2020	Cobalt, Total	0.0076	0.006	0.0024	5980	mg/L
MKTF-46	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-46	9/17/2020	Copper, Total	0.012	0.006	0.0047	790000	mg/L
MKTF-46	9/17/2020	Nickel, Total	0.013	0.01	0.0033	372000	mg/L
MKTF-46	9/17/2020	Silver, Total	0.0054	0.005	0.0013	50000	mg/L
MKTF-46	9/17/2020	Zinc, Total	0.048	0.01	0.0064	5960000	mg/L
MKTF-46	9/17/2020	Manganese, Total	3.4	0.01	0.0041	2017000	mg/L
MKTF-46	9/17/2020	Aluminum, Total	22	1	0.37	19914000	mg/L
MKTF-46	9/17/2020	Iron, Total	17	2.5	0.64	13822000	mg/L
MKTF-46	9/17/2020	Boron, Total	0.22	0.04	0.0074	3949	mg/L
MKTF-46	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
MKTF-46	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-46	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-46	3/6/2020	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-46	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-46	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-46	3/6/2020	Barium, Total	0.1	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Total	0.17	0.04	0.0045	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-46	3/6/2020	Chromium, Total	0.0032	0.006	0.0015	50000	mg/L
MKTF-46	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-46	3/6/2020	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
MKTF-46	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Total	0.0048	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Silver, Total	0.0063	0.005	0.0014	50000	mg/L
MKTF-46	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-46	3/6/2020	Aluminum, Total	4.6	0.1	0.012	19914000	mg/L
MKTF-46	3/6/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-46	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Arsenic, Dissolved	0.00048	0.001	0.0001	10000	mg/L
MKTF-46	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-46	3/6/2020	Selenium, Dissolved	0.0012	0.001	0.00017	50000	mg/L
MKTF-46	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-46	3/6/2020	Uranium, Dissolved	0.0075	0.0005	0.000075	NA	mg/L
MKTF-46	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-46	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Dissolved	0.13	0.04	0.0045	3949110	mg/L
MKTF-46	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-46	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-46	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-46	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-46	3/6/2020	Magnesium, Dissolved	53	1	0.05	NA	mg/L
MKTF-46	3/6/2020	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
MKTF-46	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Potassium, Dissolved	3.6	1	0.16	NA	mg/L
MKTF-46	3/6/2020	Silver, Dissolved	0.0043	0.005	0.00094	81200	mg/L
MKTF-46	3/6/2020	Zinc, Dissolved	0.019	0.01	0.0023	5960450	mg/L
MKTF-46	3/6/2020	Calcium, Dissolved	240	5	0.31	NA	mg/L
MKTF-46	3/6/2020	Sodium, Dissolved	240	5	2.1	NA	mg/L
MKTF-46	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
MKTF-46	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-46	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-46	3/6/2020	Uranium, Total	0.008	0.0005	0.000085	30000	mg/L
MKTF-46	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-46	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-46	3/6/2020	Barium, Total	0.11	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Total	0.17	0.04	0.0045	3949	mg/L
MKTF-46	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-46	3/6/2020	Chromium, Total	0.0038	0.006	0.0015	50000	mg/L
MKTF-46	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-46	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-46	3/6/2020	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
MKTF-46	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-46	3/6/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
MKTF-46	3/6/2020	Aluminum, Total	4.3	1	0.12	19914000	mg/L
MKTF-46	3/6/2020	Silver, Total	0.0056	0.005	0.0014	50000	mg/L
MKTF-46	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-46	3/6/2020	Arsenic, Dissolved	0.00052	0.001	0.0001	10000	mg/L
MKTF-46	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-46	3/6/2020	Selenium, Dissolved	0.00071	0.001	0.00017	50000	mg/L
MKTF-46	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-46	3/6/2020	Uranium, Dissolved	0.0074	0.0005	0.000075	NA	mg/L
MKTF-46	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-46	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-46	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-46	3/6/2020	Boron, Dissolved	0.14	0.04	0.0045	3949110	mg/L
MKTF-46	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-46	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-46	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-46	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-46	3/6/2020	Magnesium, Dissolved	53	1	0.05	NA	mg/L
MKTF-46	3/6/2020	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
MKTF-46	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-46	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-46	3/6/2020	Potassium, Dissolved	3.5	1	0.16	NA	mg/L
MKTF-46	3/6/2020	Silver, Dissolved	0.0042	0.005	0.00094	81200	mg/L
MKTF-46	3/6/2020	Zinc, Dissolved	0.0084	0.01	0.0023	5960450	mg/L
MKTF-46	3/6/2020	Calcium, Dissolved	240	5	0.31	NA	mg/L
MKTF-46	3/6/2020	Sodium, Dissolved	230	5	2.1	NA	mg/L
MKTF-46	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-46	12/16/2020	Aluminum, Total	0.203	0.2	0.051	19914000	mg/L
MKTF-46	12/16/2020	Calcium, Total	240	0.5	0.084	NA	mg/L
MKTF-46	12/16/2020	Boron, Total	0.181	0.1	0.022	3949	mg/L
MKTF-46	12/16/2020	Barium, Total	0.0455	0.01	0.003	2000000	mg/L
MKTF-46	12/16/2020	Potassium, Total	2.89	1	0.34	NA	mg/L
MKTF-46	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-46	12/16/2020	Magnesium, Total	47.4	0.5	0.12	NA	mg/L
MKTF-46	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-46	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-46	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-46	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-46	12/16/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
MKTF-46	12/16/2020	Manganese, Total	0.406	0.01	0.003	2017000	mg/L
MKTF-46	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-46	12/16/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
MKTF-46	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-46	12/16/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
MKTF-46	12/16/2020	Barium, Dissolved	0.0468	0.01	0.003	2000000	mg/L
MKTF-46	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-46	12/16/2020	Boron, Dissolved	0.196	0.1	0.022	3949110	mg/L
MKTF-46	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-46	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-46	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-46	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-46	12/16/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
MKTF-46	12/16/2020	Manganese, Dissolved	0.238	0.01	0.003	2017400	mg/L
MKTF-46	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-46	12/16/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
MKTF-46	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-46	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-46	12/16/2020	Sodium, Total	215	2	0.92	NA	mg/L
MKTF-46	12/16/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
MKTF-46	12/16/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
MKTF-46	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-46	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-46	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-46	12/16/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-46	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-46	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-46	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-46	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-46	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-46	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-46	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-46	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-47	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-47	3/6/2020	Lead, Total	0.00073	0.0005	0.000055	15000	mg/L
MKTF-47	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-47	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-47	3/6/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
MKTF-47	3/6/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
MKTF-47	3/6/2020	Selenium, Total	0.0051	0.005	0.0024	50000	mg/L
MKTF-47	3/6/2020	Barium, Total	0.1	0.002	0.00065	2000000	mg/L
MKTF-47	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
MKTF-47	3/6/2020	Boron, Total	0.25	0.04	0.0045	3949	mg/L
MKTF-47	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-47	3/6/2020	Chromium, Total	0.011	0.006	0.0015	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-47	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-47	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-47	3/6/2020	Manganese, Total	0.075	0.002	0.00029	2017000	mg/L
MKTF-47	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-47	3/6/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
MKTF-47	3/6/2020	Silver, Total	0.0024	0.005	0.0014	50000	mg/L
MKTF-47	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
MKTF-47	3/6/2020	Aluminum, Total	3.2	0.1	0.012	19914000	mg/L
MKTF-47	3/6/2020	Iron, Total	1.6	0.1	0.044	13822000	mg/L
MKTF-47	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-47	3/6/2020	Arsenic, Dissolved	0.00056	0.001	0.0001	10000	mg/L
MKTF-47	3/6/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-47	3/6/2020	Selenium, Dissolved	0.0047	0.001	0.00017	50000	mg/L
MKTF-47	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-47	3/6/2020	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
MKTF-47	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-47	3/6/2020	Barium, Dissolved	0.033	0.002	0.00065	2000000	mg/L
MKTF-47	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-47	3/6/2020	Boron, Dissolved	0.22	0.04	0.0045	3949110	mg/L
MKTF-47	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-47	3/6/2020	Chromium, Dissolved	0.0053	0.006	0.0015	100000	mg/L
MKTF-47	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-47	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-47	3/6/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
MKTF-47	3/6/2020	Magnesium, Dissolved	26	1	0.05	NA	mg/L
MKTF-47	3/6/2020	Manganese, Dissolved	0.00059	0.002	0.00029	2017400	mg/L
MKTF-47	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
MKTF-47	3/6/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-47	3/6/2020	Potassium, Dissolved	5.3	1	0.16	NA	mg/L
MKTF-47	3/6/2020	Silver, Dissolved	0.0018	0.005	0.00094	81200	mg/L
MKTF-47	3/6/2020	Zinc, Dissolved	0.0062	0.01	0.0023	5960450	mg/L
MKTF-47	3/6/2020	Calcium, Dissolved	110	5	0.31	NA	mg/L
MKTF-47	3/6/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
MKTF-49	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-49	3/5/2020	Arsenic, Total	0.0025	0.001	0.00031	10000	mg/L
MKTF-49	3/5/2020	Selenium, Total	0.0028	0.001	0.00048	50000	mg/L
MKTF-49	3/5/2020	Thallium, Total	0.00009	0.0005	0.000052	2000	mg/L
MKTF-49	3/5/2020	Uranium, Total	0.0059	0.0005	0.000085	30000	mg/L
MKTF-49	3/5/2020	Lead, Total	0.031	0.0025	0.00027	15000	mg/L
MKTF-49	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-49	3/5/2020	Beryllium, Total	0.0021	0.002	0.00028	4000	mg/L
MKTF-49	3/5/2020	Boron, Total	0.72	0.04	0.0045	3949	mg/L
MKTF-49	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-49	3/5/2020	Chromium, Total	0.0068	0.006	0.0015	50000	mg/L
MKTF-49	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-49	3/5/2020	Copper, Total	0.0096	0.006	0.0041	790000	mg/L
MKTF-49	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-49	3/5/2020	Nickel, Total	0.02	0.01	0.004	372000	mg/L
MKTF-49	3/5/2020	Silver, Total	0.0047	0.005	0.0014	50000	mg/L
MKTF-49	3/5/2020	Zinc, Total	0.018	0.01	0.0058	5960000	mg/L
MKTF-49	3/5/2020	Barium, Total	5.7	0.02	0.0065	2000000	mg/L
MKTF-49	3/5/2020	Manganese, Total	6.8	0.02	0.0029	2017000	mg/L
MKTF-49	3/5/2020	Aluminum, Total	24	1	0.12	19914000	mg/L
MKTF-49	3/5/2020	Iron, Total	18	1	0.44	13822000	mg/L
MKTF-49	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-49	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-49	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-49	3/5/2020	Uranium, Dissolved	0.0038	0.0005	0.000075	NA	mg/L
MKTF-49	3/5/2020	Arsenic, Dissolved	0.0015	0.005	0.0005	10000	mg/L
MKTF-49	3/5/2020	Selenium, Dissolved	ND	0.005	0.00086	50000	mg/L
MKTF-49	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-49	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-49	3/5/2020	Boron, Dissolved	0.57	0.04	0.0045	3949110	mg/L
MKTF-49	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-49	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-49	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-49	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-49	3/5/2020	Magnesium, Dissolved	61	1	0.05	NA	mg/L
MKTF-49	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	3/5/2020	Nickel, Dissolved	0.0076	0.01	0.004	372000	mg/L
MKTF-49	3/5/2020	Potassium, Dissolved	1.5	1	0.16	NA	mg/L
MKTF-49	3/5/2020	Silver, Dissolved	0.0034	0.005	0.00094	81200	mg/L
MKTF-49	3/5/2020	Zinc, Dissolved	0.0077	0.01	0.0023	5960450	mg/L
MKTF-49	3/5/2020	Barium, Dissolved	5	0.01	0.0032	2000000	mg/L
MKTF-49	3/5/2020	Calcium, Dissolved	230	5	0.31	NA	mg/L
MKTF-49	3/5/2020	Iron, Dissolved	5	0.2	0.087	13821880	mg/L
MKTF-49	3/5/2020	Manganese, Dissolved	5.3	0.02	0.0029	2017400	mg/L
MKTF-49	3/5/2020	Sodium, Dissolved	620	10	4.2	NA	mg/L
MKTF-49	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MKTF-49	9/20/2020	Arsenic, Total	0.0012	0.001	0.00026	10000	mg/L
MKTF-49	9/20/2020	Lead, Total	0.0024	0.0005	0.000034	15000	mg/L
MKTF-49	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MKTF-49	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MKTF-49	9/20/2020	Uranium, Total	0.0021	0.0005	0.000065	30000	mg/L
MKTF-49	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-49	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MKTF-49	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MKTF-49	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MKTF-49	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MKTF-49	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MKTF-49	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MKTF-49	9/20/2020	Nickel, Total	0.0059	0.01	0.0033	372000	mg/L
MKTF-49	9/20/2020	Silver, Total	0.0027	0.005	0.0013	50000	mg/L
MKTF-49	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MKTF-49	9/20/2020	Aluminum, Total	5.8	0.2	0.074	19914000	mg/L
MKTF-49	9/20/2020	Barium, Total	6.1	0.03	0.016	2000000	mg/L
MKTF-49	9/20/2020	Manganese, Total	6.1	0.02	0.0081	2017000	mg/L
MKTF-49	9/20/2020	Iron, Total	16	1	0.26	13822000	mg/L
MKTF-49	9/20/2020	Boron, Total	0.65	0.2	0.037	3949	mg/L
MKTF-49	9/20/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
MKTF-49	9/20/2020	Arsenic, Dissolved	0.0011	0.005	0.001	10000	mg/L
MKTF-49	9/20/2020	Lead, Dissolved	0.0002	0.0025	0.00017	NA	mg/L
MKTF-49	9/20/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
MKTF-49	9/20/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
MKTF-49	9/20/2020	Uranium, Dissolved	0.0048	0.0005	0.000065	NA	mg/L
MKTF-49	9/20/2020	Calcium, Dissolved	260	5	0.57	NA	mg/L
MKTF-49	9/20/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
MKTF-49	9/20/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MKTF-49	9/20/2020	Barium, Dissolved	6.1	0.1	0.056	2000000	mg/L
MKTF-49	9/20/2020	Iron, Dissolved	9	1	0.52	13821880	mg/L
MKTF-49	9/20/2020	Manganese, Dissolved	6	0.1	0.029	2017400	mg/L
MKTF-49	9/20/2020	Sodium, Dissolved	690	50	6.9	NA	mg/L
MKTF-49	9/20/2020	Aluminum, Dissolved	0.06	0.02	0.0056	19913930	mg/L
MKTF-49	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MKTF-49	9/20/2020	Boron, Dissolved	0.59	0.04	0.0067	3949110	mg/L
MKTF-49	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MKTF-49	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MKTF-49	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MKTF-49	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MKTF-49	9/20/2020	Magnesium, Dissolved	65	1	0.067	NA	mg/L
MKTF-49	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MKTF-49	9/20/2020	Potassium, Dissolved	1.4	1	0.16	NA	mg/L
MKTF-49	9/20/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
MKTF-49	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-49	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-49	12/23/2020	Arsenic, Total Recoverable	2.02	1	0.286	10	ug/L
MKTF-49	12/23/2020	Lead, Total Recoverable	13.5	1	0.133	15	ug/L
MKTF-49	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-49	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
MKTF-49	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-49	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-49	12/23/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
MKTF-49	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-49	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-49	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-49	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-49	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-49	12/23/2020	Aluminum, Dissolved	0.28	0.2	0.051	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-49	12/23/2020	Barium, Dissolved	7.12	0.01	0.003	2000000	mg/L
MKTF-49	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-49	12/23/2020	Boron, Dissolved	0.677	0.1	0.022	3949110	mg/L
MKTF-49	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-49	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-49	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-49	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-49	12/23/2020	Manganese, Dissolved	6.71	0.01	0.003	2017400	mg/L
MKTF-49	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-49	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-49	12/23/2020	Aluminum, Total	68.1	0.2	0.051	19914000	mg/L
MKTF-49	12/23/2020	Barium, Total	7.56	0.01	0.003	2000000	mg/L
MKTF-49	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-49	12/23/2020	Boron, Total	0.582	0.1	0.022	3949	mg/L
MKTF-49	12/23/2020	Potassium, Total	10.9	1	0.34	NA	mg/L
MKTF-49	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-49	12/23/2020	Magnesium, Total	84.5	0.5	0.12	NA	mg/L
MKTF-49	12/23/2020	Chromium, Total	0.0334	0.01	0.005	50000	mg/L
MKTF-49	12/23/2020	Copper, Total	0.025	0.02	0.008	790000	mg/L
MKTF-49	12/23/2020	Iron, Total	48	0.2	0.075	13822000	mg/L
MKTF-49	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-49	12/23/2020	Nickel, Total	0.0308	0.006	0.003	372000	mg/L
MKTF-49	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-49	12/23/2020	Zinc, Total	0.0456	0.02	0.008	5960000	mg/L
MKTF-49	12/23/2020	Cobalt, Total	0.0147	0.01	0.003	5980	mg/L
MKTF-49	12/23/2020	Manganese, Total	7.89	0.01	0.003	2017000	mg/L
MKTF-49	12/23/2020	Calcium, Total	351	2.5	0.42	NA	mg/L
MKTF-49	12/23/2020	Sodium, Total	803	10	4.6	NA	mg/L
MKTF-49	12/23/2020	Iron, Dissolved	12	0.2	0.075	13821880	mg/L
MKTF-49	12/23/2020	Nickel, Dissolved	0.00718	0.006	0.003	372000	mg/L
MKTF-49	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-50	12/16/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
MKTF-50	12/16/2020	Aluminum, Total	6.33	0.2	0.051	19914000	mg/L
MKTF-50	12/16/2020	Calcium, Total	117	0.5	0.084	NA	mg/L
MKTF-50	12/16/2020	Boron, Total	0.887	0.1	0.022	3949	mg/L
MKTF-50	12/16/2020	Barium, Total	4.13	0.01	0.003	2000000	mg/L
MKTF-50	12/16/2020	Potassium, Total	4.76	1	0.34	NA	mg/L
MKTF-50	12/16/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
MKTF-50	12/16/2020	Magnesium, Total	30.9	0.5	0.12	NA	mg/L
MKTF-50	12/16/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
MKTF-50	12/16/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
MKTF-50	12/16/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
MKTF-50	12/16/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
MKTF-50	12/16/2020	Iron, Total	6.79	0.2	0.075	13822000	mg/L
MKTF-50	12/16/2020	Manganese, Total	2.09	0.01	0.003	2017000	mg/L
MKTF-50	12/16/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
MKTF-50	12/16/2020	Nickel, Total	0.0102	0.006	0.003	372000	mg/L
MKTF-50	12/16/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
MKTF-50	12/16/2020	Aluminum, Dissolved	1.85	0.2	0.051	19913930	mg/L
MKTF-50	12/16/2020	Barium, Dissolved	4.2	0.01	0.003	2000000	mg/L
MKTF-50	12/16/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
MKTF-50	12/16/2020	Boron, Dissolved	0.988	0.1	0.022	3949110	mg/L
MKTF-50	12/16/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
MKTF-50	12/16/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
MKTF-50	12/16/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
MKTF-50	12/16/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
MKTF-50	12/16/2020	Iron, Dissolved	4.32	0.2	0.075	13821880	mg/L
MKTF-50	12/16/2020	Manganese, Dissolved	2.1	0.01	0.003	2017400	mg/L
MKTF-50	12/16/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
MKTF-50	12/16/2020	Nickel, Dissolved	0.00806	0.006	0.003	372000	mg/L
MKTF-50	12/16/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
MKTF-50	12/16/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
MKTF-50	12/16/2020	Sodium, Total	460	2	0.92	NA	mg/L
MKTF-50	12/16/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
MKTF-50	12/16/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
MKTF-50	12/16/2020	Arsenic, Total Recoverable	2.09	1	0.286	10	ug/L
MKTF-50	12/16/2020	Lead, Total Recoverable	1.34	1	0.133	15	ug/L
MKTF-50	12/16/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
MKTF-50	12/16/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	12/16/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
MKTF-50	12/16/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
MKTF-50	12/16/2020	Arsenic, Dissolved	3.37	1	0.286	10	ug/L
MKTF-50	12/16/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
MKTF-50	12/16/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
MKTF-50	12/16/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
MKTF-50	12/16/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
MKTF-50	12/16/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
MKTF-50	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Total	0.003	0.0005	0.000055	15000	mg/L
MKTF-50	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-50	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-50	3/5/2020	Arsenic, Total	0.0079	0.001	0.00031	10000	mg/L
MKTF-50	3/5/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
MKTF-50	3/5/2020	Uranium, Total	0.00068	0.0005	0.000085	30000	mg/L
MKTF-50	3/5/2020	Beryllium, Total	0.00055	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Total	0.97	0.04	0.0045	3949	mg/L
MKTF-50	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-50	3/5/2020	Chromium, Total	0.002	0.006	0.0015	50000	mg/L
MKTF-50	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-50	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Total	0.0047	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
MKTF-50	3/5/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-50	3/5/2020	Aluminum, Total	6.9	0.2	0.025	19914000	mg/L
MKTF-50	3/5/2020	Barium, Total	2.5	0.02	0.0065	2000000	mg/L
MKTF-50	3/5/2020	Iron, Total	5.3	0.2	0.087	13822000	mg/L
MKTF-50	3/5/2020	Manganese, Total	1.5	0.02	0.0029	2017000	mg/L
MKTF-50	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-50	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-50	3/5/2020	Uranium, Dissolved	0.00046	0.0005	0.000075	NA	mg/L
MKTF-50	3/5/2020	Arsenic, Dissolved	0.0066	0.001	0.0001	10000	mg/L
MKTF-50	3/5/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
MKTF-50	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-50	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Dissolved	0.88	0.04	0.0045	3949110	mg/L
MKTF-50	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-50	3/5/2020	Calcium, Dissolved	55	1	0.062	NA	mg/L
MKTF-50	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-50	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-50	3/5/2020	Magnesium, Dissolved	15	1	0.05	NA	mg/L
MKTF-50	3/5/2020	Molybdenum, Dissolved	0.0083	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Potassium, Dissolved	1.8	1	0.16	NA	mg/L
MKTF-50	3/5/2020	Silver, Dissolved	0.0011	0.005	0.00094	81200	mg/L
MKTF-50	3/5/2020	Zinc, Dissolved	0.0088	0.01	0.0023	5960450	mg/L
MKTF-50	3/5/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
MKTF-50	3/5/2020	Iron, Dissolved	1.6	0.1	0.044	13821880	mg/L
MKTF-50	3/5/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
MKTF-50	3/5/2020	Sodium, Dissolved	420	5	2.1	NA	mg/L
MKTF-50	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
MKTF-50	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MKTF-50	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MKTF-50	3/5/2020	Uranium, Total	0.00067	0.0005	0.000085	30000	mg/L
MKTF-50	3/5/2020	Arsenic, Total	0.0078	0.005	0.0016	10000	mg/L
MKTF-50	3/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
MKTF-50	3/5/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Total	0.97	0.04	0.0045	3949	mg/L
MKTF-50	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
MKTF-50	3/5/2020	Chromium, Total	0.0023	0.006	0.0015	50000	mg/L
MKTF-50	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
MKTF-50	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Total	0.004	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Zinc, Total	0.011	0.01	0.0058	5960000	mg/L
MKTF-50	3/5/2020	Aluminum, Total	5.5	0.2	0.025	19914000	mg/L
MKTF-50	3/5/2020	Barium, Total	2.6	0.02	0.0065	2000000	mg/L
MKTF-50	3/5/2020	Iron, Total	4.8	0.2	0.087	13822000	mg/L
MKTF-50	3/5/2020	Manganese, Total	1.5	0.02	0.0029	2017000	mg/L
MKTF-50	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
MKTF-50	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MKTF-50	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MKTF-50	3/5/2020	Uranium, Dissolved	0.00045	0.0005	0.000075	NA	mg/L
MKTF-50	3/5/2020	Arsenic, Dissolved	0.0068	0.001	0.0001	10000	mg/L
MKTF-50	3/5/2020	Selenium, Dissolved	0.00021	0.001	0.00017	50000	mg/L
MKTF-50	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
MKTF-50	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
MKTF-50	3/5/2020	Boron, Dissolved	0.88	0.04	0.0045	3949110	mg/L
MKTF-50	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
MKTF-50	3/5/2020	Calcium, Dissolved	54	1	0.062	NA	mg/L
MKTF-50	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
MKTF-50	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
MKTF-50	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
MKTF-50	3/5/2020	Magnesium, Dissolved	15	1	0.05	NA	mg/L
MKTF-50	3/5/2020	Molybdenum, Dissolved	0.0083	0.008	0.0067	98700	mg/L
MKTF-50	3/5/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
MKTF-50	3/5/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
MKTF-50	3/5/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
MKTF-50	3/5/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
MKTF-50	3/5/2020	Barium, Dissolved	2.4	0.01	0.0032	2000000	mg/L
MKTF-50	3/5/2020	Iron, Dissolved	2.1	0.1	0.044	13821880	mg/L
MKTF-50	3/5/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
MKTF-50	3/5/2020	Sodium, Dissolved	430	5	2.1	NA	mg/L
MW-1	8/12/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
MW-1	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-1	8/12/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
MW-1	9/22/2020	Arsenic, Dissolved	0.0015	0.001	0.00021	10000	mg/L
MW-1	9/22/2020	Lead, Dissolved	0.000082	0.0005	0.000034	NA	mg/L
MW-1	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-1	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-1	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-1	9/22/2020	Uranium, Dissolved	0.0097	0.0005	0.000065	NA	mg/L
MW-1	9/22/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
MW-1	9/22/2020	Aluminum, Dissolved	0.011	0.02	0.0056	19913930	mg/L
MW-1	9/22/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
MW-1	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-1	9/22/2020	Boron, Dissolved	0.74	0.04	0.0067	3949110	mg/L
MW-1	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-1	9/22/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-1	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-1	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-1	9/22/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-1	9/22/2020	Magnesium, Dissolved	0.17	1	0.067	NA	mg/L
MW-1	9/22/2020	Manganese, Dissolved	0.002	0.002	0.00058	2017400	mg/L
MW-1	9/22/2020	Molybdenum, Dissolved	0.0071	0.008	0.0056	98700	mg/L
MW-1	9/22/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-1	9/22/2020	Potassium, Dissolved	0.55	1	0.16	NA	mg/L
MW-1	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-1	9/22/2020	Zinc, Dissolved	0.0081	0.01	0.006	5960450	mg/L
MW-1	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-1	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-1	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-1	9/22/2020	Arsenic, Total	0.0014	0.001	0.00026	10000	mg/L
MW-1	9/22/2020	Lead, Total	0.00042	0.0005	0.000034	15000	mg/L
MW-1	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-1	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-1	9/22/2020	Uranium, Total	0.0094	0.0005	0.000065	30000	mg/L
MW-1	9/22/2020	Aluminum, Total	0.081	0.02	0.0074	19914000	mg/L
MW-1	9/22/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
MW-1	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-1	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-1	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-1	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-1	9/22/2020	Iron, Total	0.037	0.05	0.013	13822000	mg/L
MW-1	9/22/2020	Manganese, Total	0.0047	0.002	0.00081	2017000	mg/L
MW-1	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-1	9/22/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-1	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-1	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-1	9/22/2020	Boron, Total	0.76	0.2	0.037	3949	mg/L
MW-1	8/12/2019	Barium, Total	0.014	0.002	0.000648	2000000	mg/L
MW-1	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-1	8/12/2019	Boron, Total	0.7	0.2	0.022653	3949	mg/L
MW-1	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-1	8/12/2019	Chromium, Total	0.0017	0.006	0.001533	50000	mg/L
MW-1	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-1	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-1	8/12/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
MW-1	8/12/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
MW-1	8/12/2019	Manganese, Total	0.0046	0.002	0.00029	2017000	mg/L
MW-1	8/12/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
MW-1	8/12/2019	Molybdenum, Total	0.0095	0.008	0.006735	98700	mg/L
MW-1	8/12/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-1	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-1	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-1	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-1	8/12/2019	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
MW-1	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-1	8/12/2019	Aluminum, Dissolved	0.01	0.02	0.002488	19913930	mg/L
MW-1	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-1	8/12/2019	Arsenic, Dissolved	0.0012	0.001	0.000101	10000	mg/L
MW-1	8/12/2019	Barium, Dissolved	0.012	0.002	0.000648	2000000	mg/L
MW-1	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-1	8/12/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L
MW-1	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-1	8/12/2019	Calcium, Dissolved	1.8	1	0.061889	NA	mg/L
MW-1	8/12/2019	Chromium, Dissolved	0.0021	0.006	0.001533	100000	mg/L
MW-1	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-1	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-1	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-1	8/12/2019	Lead, Dissolved	0.000099	0.0005	0.000055	NA	mg/L
MW-1	8/12/2019	Magnesium, Dissolved	0.19	1	0.05029	NA	mg/L
MW-1	8/12/2019	Manganese, Dissolved	0.0017	0.002	0.00029	2017400	mg/L
MW-1	8/12/2019	Molybdenum, Dissolved	0.0076	0.008	0.006735	98700	mg/L
MW-1	8/12/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-1	8/12/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
MW-1	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-1	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-1	8/12/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
MW-1	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-1	8/12/2019	Uranium, Dissolved	0.01	0.0005	0.000075	NA	mg/L
MW-1	8/12/2019	Zinc, Dissolved	0.0059	0.01	0.002252	5960450	mg/L
MW-1	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-1	8/24/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-1	8/24/2012	Barium, Total	0.014	0.002	0.00039	2000000	mg/L
MW-1	8/24/2012	Calcium, Total	1.6	1	0.026	NA	mg/L
MW-1	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-1	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-1	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-1	8/24/2012	Iron, Total	0.078	0.02	0.013	13822000	mg/L
MW-1	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-1	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-1	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-1	8/24/2012	Manganese, Total	0.0071	0.002	0.00026	2017000	mg/L
MW-1	8/24/2012	Sodium, Total	260	5	0.22	NA	mg/L
MW-1	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-1	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-1	8/24/2012	Uranium, Total	0.011	0.0025	0.00003	30000	mg/L
MW-1	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-1	9/9/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-1	9/9/2013	Arsenic, Total	0.0016	0.001	0.000098	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/9/2013	Barium, Total	0.012	0.002	0.00095	2000000	mg/L
MW-1	9/9/2013	Calcium, Total	1.9	1	0.069	NA	mg/L
MW-1	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-1	9/9/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-1	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-1	9/9/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-1	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-1	9/9/2013	Potassium, Total	ND	1	0.24	NA	mg/L
MW-1	9/9/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-1	9/9/2013	Manganese, Total	ND	0.002	0.00016	2017000	mg/L
MW-1	9/9/2013	Sodium, Total	260	5	1.6	NA	mg/L
MW-1	9/9/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-1	9/9/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-1	9/9/2013	Uranium, Total	0.012	0.001	0.0000073	30000	mg/L
MW-1	9/9/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
MW-1	9/16/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-1	9/16/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-1	9/16/2014	Barium, Total	0.0095	0.002	0.0011	2000000	mg/L
MW-1	9/16/2014	Calcium, Total	1.6	1	0.082	NA	mg/L
MW-1	9/16/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-1	9/16/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-1	9/16/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-1	9/16/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-1	9/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-1	9/16/2014	Potassium, Total	1.5	1	0.093	NA	mg/L
MW-1	9/16/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-1	9/16/2014	Manganese, Total	0.0027	0.002	0.00055	2017000	mg/L
MW-1	9/16/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-1	9/16/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-1	9/16/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-1	9/16/2014	Uranium, Total	0.011	0.001	0.00005	30000	mg/L
MW-1	9/16/2014	Zinc, Total	0.014	0.01	0.0014	5960000	mg/L
MW-1	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-1	8/14/2015	Arsenic, Total	0.0013	0.001	0.00029	10000	mg/L
MW-1	8/14/2015	Barium, Total	0.013	0.002	0.0011	2000000	mg/L
MW-1	8/14/2015	Calcium, Total	1.6	1	0.057	NA	mg/L
MW-1	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-1	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-1	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-1	8/14/2015	Iron, Total	0.048	0.02	0.0072	13822000	mg/L
MW-1	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-1	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-1	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-1	8/14/2015	Manganese, Total	0.0033	0.002	0.0015	2017000	mg/L
MW-1	8/14/2015	Sodium, Total	260	5	0.36	NA	mg/L
MW-1	8/14/2015	Lead, Total	0.00051	0.0005	0.000047	15000	mg/L
MW-1	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-1	8/14/2015	Uranium, Total	0.011	0.0005	0.0000049	30000	mg/L
MW-1	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-1	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-1	9/7/2016	Arsenic, Total	0.0015	0.001	0.00021	10000	mg/L
MW-1	9/7/2016	Barium, Total	0.012	0.002	0.00079	2000000	mg/L
MW-1	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-1	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-1	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-1	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-1	9/7/2016	Arsenic, Dissolved	0.0013	0.001	0.00014	10000	mg/L
MW-1	9/7/2016	Barium, Dissolved	0.011	0.002	0.0013	2000000	mg/L
MW-1	9/7/2016	Calcium, Dissolved	1.6	1	0.5	NA	mg/L
MW-1	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-1	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-1	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-1	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-1	9/7/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MW-1	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-1	9/7/2016	Manganese, Dissolved	0.0031	0.002	0.00032	2017400	mg/L
MW-1	9/7/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
MW-1	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/7/2016	Selenium, Dissolved	0.00054	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/7/2016	Uranium, Dissolved	0.011	0.0005	0.000051	NA	mg/L
MW-1	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-1	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-1	9/7/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MW-1	9/7/2016	Manganese, Total	0.0032	0.002	0.00027	2017000	mg/L
MW-1	9/7/2016	Lead, Total	0.00014	0.0005	0.000081	15000	mg/L
MW-1	9/7/2016	Selenium, Total	0.00053	0.001	0.00019	50000	mg/L
MW-1	9/7/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
MW-1	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-1	9/20/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-1	9/20/2017	Arsenic, Total	0.00097	0.001	0.0003	10000	mg/L
MW-1	9/20/2017	Barium, Total	0.015	0.002	0.00093	2000000	mg/L
MW-1	9/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-1	9/20/2017	Chromium, Total	0.0074	0.006	0.0018	50000	mg/L
MW-1	9/20/2017	Copper, Total	0.0018	0.006	0.0017	790000	mg/L
MW-1	9/20/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-1	9/20/2017	Arsenic, Dissolved	0.0013	0.001	0.00018	10000	mg/L
MW-1	9/20/2017	Barium, Dissolved	0.013	0.002	0.00085	2000000	mg/L
MW-1	9/20/2017	Calcium, Dissolved	1.7	1	0.078	NA	mg/L
MW-1	9/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-1	9/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-1	9/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-1	9/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-1	9/20/2017	Potassium, Dissolved	0.69	1	0.11	NA	mg/L
MW-1	9/20/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-1	9/20/2017	Manganese, Dissolved	0.0018	0.002	0.00039	2017400	mg/L
MW-1	9/20/2017	Sodium, Dissolved	260	5	0.82	NA	mg/L
MW-1	9/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/20/2017	Selenium, Dissolved	0.00088	0.001	0.00039	50000	mg/L
MW-1	9/20/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-1	9/20/2017	Iron, Total	0.26	0.02	0.01	13822000	mg/L
MW-1	9/20/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-1	9/20/2017	Manganese, Total	0.014	0.002	0.0011	2017000	mg/L
MW-1	9/20/2017	Lead, Total	0.0016	0.0005	0.000095	15000	mg/L
MW-1	9/20/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-1	9/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-1	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-1	9/13/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
MW-1	9/13/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
MW-1	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-1	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-1	9/13/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
MW-1	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-1	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-1	9/13/2018	Arsenic, Dissolved	0.0013	0.001	0.00042	10000	mg/L
MW-1	9/13/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
MW-1	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-1	9/13/2018	Calcium, Dissolved	1.7	1	0.078	NA	mg/L
MW-1	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-1	9/13/2018	Chromium, Dissolved	0.0024	0.006	0.0013	100000	mg/L
MW-1	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-1	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-1	9/13/2018	Potassium, Dissolved	0.57	1	0.11	NA	mg/L
MW-1	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-1	9/13/2018	Manganese, Dissolved	0.002	0.002	0.00039	2017400	mg/L
MW-1	9/13/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-1	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-1	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-1	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-1	9/13/2018	Uranium, Dissolved	0.0095	0.0005	0.000096	NA	mg/L
MW-1	9/13/2018	Vanadium, Dissolved	0.0022	0.05	0.0019	63100	mg/L
MW-1	9/13/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
MW-1	9/13/2018	Iron, Total	0.16	0.02	0.01	13822000	mg/L
MW-1	9/13/2018	Mercury, Total	0.00017	0.0002	0.000038	2000	mg/L
MW-1	9/13/2018	Manganese, Total	0.01	0.002	0.0011	2017000	mg/L
MW-1	9/13/2018	Lead, Total	0.0013	0.0005	0.00023	15000	mg/L
MW-1	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-1	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-1	9/13/2018	Uranium, Total	0.0094	0.0005	0.000068	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/13/2018	Vanadium, Total	0.0023	0.05	0.00076	63100	mg/L
MW-1	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-1	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-1	12/6/2018	Arsenic, Total	0.0011	0.001	0.0005	10000	mg/L
MW-1	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-1	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-1	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-1	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-1	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-1	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-1	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-1	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-1	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-1	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-1	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-1	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-2	8/13/2019	Aluminum, Total	0.015	0.02	0.002488	19914000	mg/L
MW-2	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-2	8/13/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
MW-2	8/13/2019	Barium, Total	0.018	0.002	0.000648	2000000	mg/L
MW-2	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-2	8/13/2019	Boron, Total	0.75	0.04	0.004531	3949	mg/L
MW-2	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-2	8/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-2	8/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-2	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-2	8/13/2019	Iron, Total	0.069	0.02	0.008747	13822000	mg/L
MW-2	8/13/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-2	8/13/2019	Manganese, Total	0.0027	0.002	0.00029	2017000	mg/L
MW-2	8/13/2019	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
MW-2	8/13/2019	Molybdenum, Total	0.0085	0.008	0.006735	98700	mg/L
MW-2	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-2	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-2	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-2	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-2	8/13/2019	Uranium, Total	0.0086	0.0005	0.000085	30000	mg/L
MW-2	8/13/2019	Zinc, Total	0.0075	0.01	0.005772	5960000	mg/L
MW-2	8/13/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
MW-2	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-2	8/13/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
MW-2	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
MW-2	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-2	8/13/2019	Boron, Dissolved	0.78	0.04	0.004531	3949110	mg/L
MW-2	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-2	8/13/2019	Calcium, Dissolved	1.5	1	0.061889	NA	mg/L
MW-2	8/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-2	8/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-2	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-2	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-2	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-2	8/13/2019	Magnesium, Dissolved	0.15	1	0.05029	NA	mg/L
MW-2	8/13/2019	Manganese, Dissolved	0.0018	0.002	0.00029	2017400	mg/L
MW-2	8/13/2019	Molybdenum, Dissolved	0.0091	0.008	0.006735	98700	mg/L
MW-2	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-2	8/13/2019	Potassium, Dissolved	0.61	1	0.162288	NA	mg/L
MW-2	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-2	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-2	8/13/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
MW-2	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-2	8/13/2019	Uranium, Dissolved	0.0084	0.0005	0.000075	NA	mg/L
MW-2	8/13/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
MW-2	9/18/2020	Barium, Total	0.021	0.003	0.0016	2000000	mg/L
MW-2	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-2	9/18/2020	Boron, Total	0.77	0.04	0.0074	3949	mg/L
MW-2	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-2	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-2	9/18/2020	Manganese, Total	0.021	0.002	0.00081	2017000	mg/L
MW-2	9/18/2020	Molybdenum, Total	0.0086	0.008	0.0065	98700	mg/L
MW-2	9/18/2020	Aluminum, Total	0.069	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-2	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-2	9/18/2020	Iron, Total	0.036	0.05	0.013	13822000	mg/L
MW-2	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-2	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-2	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-2	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-2	9/18/2020	Arsenic, Total	0.001	0.001	0.00026	10000	mg/L
MW-2	9/18/2020	Lead, Total	0.00039	0.0005	0.000034	15000	mg/L
MW-2	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-2	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-2	9/18/2020	Uranium, Total	0.0094	0.0005	0.000065	30000	mg/L
MW-2	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-2	9/18/2020	Arsenic, Dissolved	0.001	0.001	0.00021	10000	mg/L
MW-2	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-2	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-2	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-2	9/18/2020	Uranium, Dissolved	0.0077	0.0005	0.000065	NA	mg/L
MW-2	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-2	9/18/2020	Sodium, Dissolved	250	5	0.69	NA	mg/L
MW-2	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MW-2	9/18/2020	Barium, Dissolved	0.017	0.002	0.0011	2000000	mg/L
MW-2	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-2	9/18/2020	Boron, Dissolved	0.73	0.04	0.0067	3949110	mg/L
MW-2	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-2	9/18/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-2	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-2	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-2	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-2	9/18/2020	Magnesium, Dissolved	0.15	1	0.067	NA	mg/L
MW-2	9/18/2020	Manganese, Dissolved	0.0033	0.002	0.00058	2017400	mg/L
MW-2	9/18/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-2	9/18/2020	Potassium, Dissolved	0.69	1	0.16	NA	mg/L
MW-2	9/18/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-2	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-2	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
MW-2	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
MW-2	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-2	8/24/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-2	8/24/2012	Barium, Total	0.021	0.002	0.00039	2000000	mg/L
MW-2	8/24/2012	Calcium, Total	1.4	1	0.026	NA	mg/L
MW-2	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-2	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-2	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-2	8/24/2012	Iron, Total	0.022	0.02	0.013	13822000	mg/L
MW-2	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-2	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-2	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-2	8/24/2012	Manganese, Total	0.0072	0.002	0.00026	2017000	mg/L
MW-2	8/24/2012	Sodium, Total	270	5	0.22	NA	mg/L
MW-2	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-2	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-2	8/24/2012	Uranium, Total	0.0097	0.0025	0.00003	30000	mg/L
MW-2	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-2	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-2	9/10/2013	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
MW-2	9/10/2013	Barium, Total	0.02	0.002	0.00095	2000000	mg/L
MW-2	9/10/2013	Calcium, Total	1.8	1	0.069	NA	mg/L
MW-2	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-2	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-2	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-2	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-2	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-2	9/10/2013	Potassium, Total	1	1	0.24	NA	mg/L
MW-2	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-2	9/10/2013	Manganese, Total	0.0051	0.002	0.00016	2017000	mg/L
MW-2	9/10/2013	Sodium, Total	250	5	1.6	NA	mg/L
MW-2	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-2	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/10/2013	Uranium, Total	0.0095	0.001	0.0000073	30000	mg/L
MW-2	9/10/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
MW-2	9/16/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-2	9/16/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-2	9/16/2014	Barium, Total	0.017	0.002	0.0011	2000000	mg/L
MW-2	9/16/2014	Calcium, Total	1.5	1	0.082	NA	mg/L
MW-2	9/16/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-2	9/16/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-2	9/16/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-2	9/16/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-2	9/16/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-2	9/16/2014	Potassium, Total	1.5	1	0.093	NA	mg/L
MW-2	9/16/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-2	9/16/2014	Manganese, Total	0.0026	0.002	0.00055	2017000	mg/L
MW-2	9/16/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-2	9/16/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-2	9/16/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-2	9/16/2014	Uranium, Total	0.0093	0.001	0.00005	30000	mg/L
MW-2	9/16/2014	Zinc, Total	0.026	0.01	0.0014	5960000	mg/L
MW-2	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-2	8/14/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-2	8/14/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
MW-2	8/14/2015	Calcium, Total	1.5	1	0.057	NA	mg/L
MW-2	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-2	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-2	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-2	8/14/2015	Iron, Total	0.023	0.02	0.0072	13822000	mg/L
MW-2	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-2	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-2	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-2	8/14/2015	Manganese, Total	0.0035	0.002	0.0015	2017000	mg/L
MW-2	8/14/2015	Sodium, Total	270	5	0.36	NA	mg/L
MW-2	8/14/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-2	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-2	8/14/2015	Uranium, Total	0.0094	0.0005	0.0000049	30000	mg/L
MW-2	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-2	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-2	9/7/2016	Arsenic, Total	0.0013	0.001	0.00021	10000	mg/L
MW-2	9/7/2016	Barium, Total	0.02	0.002	0.00079	2000000	mg/L
MW-2	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-2	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-2	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-2	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-2	9/7/2016	Arsenic, Dissolved	0.0011	0.001	0.00014	10000	mg/L
MW-2	9/7/2016	Barium, Dissolved	0.018	0.002	0.0013	2000000	mg/L
MW-2	9/7/2016	Calcium, Dissolved	1.5	1	0.5	NA	mg/L
MW-2	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-2	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-2	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-2	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-2	9/7/2016	Potassium, Dissolved	0.71	1	0.5	NA	mg/L
MW-2	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-2	9/7/2016	Manganese, Dissolved	0.0024	0.002	0.00032	2017400	mg/L
MW-2	9/7/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MW-2	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/7/2016	Selenium, Dissolved	0.0006	0.001	0.00021	50000	mg/L
MW-2	9/7/2016	Uranium, Dissolved	0.0095	0.0005	0.000051	NA	mg/L
MW-2	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-2	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-2	9/7/2016	Mercury, Total	0.000056	0.0002	0.000053	2000	mg/L
MW-2	9/7/2016	Manganese, Total	0.0031	0.002	0.00027	2017000	mg/L
MW-2	9/7/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
MW-2	9/7/2016	Selenium, Total	0.00058	0.001	0.00019	50000	mg/L
MW-2	9/7/2016	Uranium, Total	0.0088	0.0005	0.00017	30000	mg/L
MW-2	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-2	9/20/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-2	9/20/2017	Arsenic, Total	0.00073	0.001	0.0003	10000	mg/L
MW-2	9/20/2017	Barium, Total	0.022	0.002	0.00093	2000000	mg/L
MW-2	9/20/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	9/20/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-2	9/20/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MW-2	9/20/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-2	9/20/2017	Arsenic, Dissolved	0.0011	0.001	0.00018	10000	mg/L
MW-2	9/20/2017	Barium, Dissolved	0.018	0.002	0.00085	2000000	mg/L
MW-2	9/20/2017	Calcium, Dissolved	1.5	1	0.078	NA	mg/L
MW-2	9/20/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-2	9/20/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-2	9/20/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-2	9/20/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-2	9/20/2017	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
MW-2	9/20/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-2	9/20/2017	Manganese, Dissolved	0.0028	0.002	0.00039	2017400	mg/L
MW-2	9/20/2017	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-2	9/20/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/20/2017	Selenium, Dissolved	0.00081	0.001	0.00039	50000	mg/L
MW-2	9/20/2017	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
MW-2	9/20/2017	Iron, Total	0.097	0.02	0.01	13822000	mg/L
MW-2	9/20/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
MW-2	9/20/2017	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
MW-2	9/20/2017	Lead, Total	0.00055	0.0005	0.000095	15000	mg/L
MW-2	9/20/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-2	9/20/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-2	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-2	9/13/2018	Arsenic, Total	0.00099	0.001	0.00041	10000	mg/L
MW-2	9/13/2018	Barium, Total	0.017	0.002	0.001	2000000	mg/L
MW-2	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-2	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-2	9/13/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-2	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-2	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-2	9/13/2018	Arsenic, Dissolved	0.00098	0.001	0.00042	10000	mg/L
MW-2	9/13/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
MW-2	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-2	9/13/2018	Calcium, Dissolved	1.6	1	0.078	NA	mg/L
MW-2	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-2	9/13/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-2	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-2	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-2	9/13/2018	Potassium, Dissolved	0.5	1	0.11	NA	mg/L
MW-2	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-2	9/13/2018	Manganese, Dissolved	0.0024	0.002	0.00039	2017400	mg/L
MW-2	9/13/2018	Sodium, Dissolved	270	10	1.6	NA	mg/L
MW-2	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-2	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-2	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-2	9/13/2018	Uranium, Dissolved	0.008	0.0005	0.000096	NA	mg/L
MW-2	9/13/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-2	9/13/2018	Zinc, Dissolved	0.0079	0.01	0.0021	5960450	mg/L
MW-2	9/13/2018	Iron, Total	0.01	0.02	0.01	13822000	mg/L
MW-2	9/13/2018	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
MW-2	9/13/2018	Manganese, Total	0.0026	0.002	0.0011	2017000	mg/L
MW-2	9/13/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-2	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-2	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-2	9/13/2018	Uranium, Total	0.008	0.0005	0.000068	30000	mg/L
MW-2	9/13/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
MW-2	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-2	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-2	12/6/2018	Arsenic, Total	0.0011	0.001	0.0005	10000	mg/L
MW-2	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-2	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-2	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-2	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-2	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-2	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-2	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-2	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-2	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-2	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-2	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-4	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-4	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Arsenic, Total	0.00078	0.001	0.00026	10000	mg/L
MW-4	9/18/2020	Lead, Total	0.0027	0.0005	0.000034	15000	mg/L
MW-4	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-4	9/18/2020	Aluminum, Total	0.3	0.02	0.0074	19914000	mg/L
MW-4	9/18/2020	Barium, Total	0.029	0.003	0.0016	2000000	mg/L
MW-4	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/18/2020	Chromium, Total	0.0037	0.006	0.0021	50000	mg/L
MW-4	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Iron, Total	0.13	0.05	0.013	13822000	mg/L
MW-4	9/18/2020	Manganese, Total	0.12	0.002	0.00081	2017000	mg/L
MW-4	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-4	9/18/2020	Uranium, Total	0.016	0.0025	0.00033	30000	mg/L
MW-4	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-4	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-4	9/18/2020	Boron, Total	0.38	0.04	0.0074	3949	mg/L
MW-4	9/18/2020	Arsenic, Dissolved	0.00075	0.001	0.00021	10000	mg/L
MW-4	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-4	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-4	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Uranium, Dissolved	0.02	0.0025	0.00033	NA	mg/L
MW-4	9/18/2020	Aluminum, Dissolved	0.0073	0.02	0.0056	19913930	mg/L
MW-4	9/18/2020	Barium, Dissolved	0.019	0.002	0.0011	2000000	mg/L
MW-4	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Boron, Dissolved	0.36	0.04	0.0067	3949110	mg/L
MW-4	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-4	9/18/2020	Calcium, Dissolved	1.9	1	0.11	NA	mg/L
MW-4	9/18/2020	Chromium, Dissolved	0.0022	0.006	0.002	100000	mg/L
MW-4	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-4	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-4	9/18/2020	Magnesium, Dissolved	0.2	1	0.067	NA	mg/L
MW-4	9/18/2020	Manganese, Dissolved	0.004	0.002	0.00058	2017400	mg/L
MW-4	9/18/2020	Molybdenum, Dissolved	0.0066	0.008	0.0056	98700	mg/L
MW-4	9/18/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Potassium, Dissolved	0.72	1	0.16	NA	mg/L
MW-4	9/18/2020	Zinc, Dissolved	0.0069	0.01	0.006	5960450	mg/L
MW-4	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MW-4	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-4	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Arsenic, Total	0.00077	0.001	0.00026	10000	mg/L
MW-4	9/18/2020	Lead, Total	0.0028	0.0005	0.000034	15000	mg/L
MW-4	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-4	9/18/2020	Uranium, Total	0.015	0.0005	0.000065	30000	mg/L
MW-4	9/18/2020	Aluminum, Total	0.31	0.02	0.0074	19914000	mg/L
MW-4	9/18/2020	Barium, Total	0.031	0.003	0.0016	2000000	mg/L
MW-4	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-4	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Iron, Total	0.14	0.05	0.013	13822000	mg/L
MW-4	9/18/2020	Manganese, Total	0.13	0.002	0.00081	2017000	mg/L
MW-4	9/18/2020	Molybdenum, Total	0.0085	0.008	0.0065	98700	mg/L
MW-4	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/18/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-4	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-4	9/18/2020	Boron, Total	0.38	0.04	0.0074	3949	mg/L
MW-4	9/18/2020	Arsenic, Dissolved	0.00077	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-4	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-4	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-4	9/18/2020	Uranium, Dissolved	0.014	0.0005	0.000065	NA	mg/L
MW-4	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-4	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
MW-4	9/18/2020	Sodium, Dissolved	270	5	0.69	NA	mg/L
MW-4	9/18/2020	Aluminum, Dissolved	0.006	0.02	0.0056	19913930	mg/L
MW-4	9/18/2020	Barium, Dissolved	0.02	0.002	0.0011	2000000	mg/L
MW-4	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-4	9/18/2020	Boron, Dissolved	0.36	0.04	0.0067	3949110	mg/L
MW-4	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-4	9/18/2020	Calcium, Dissolved	1.9	1	0.11	NA	mg/L
MW-4	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-4	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-4	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-4	9/18/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-4	9/18/2020	Magnesium, Dissolved	0.2	1	0.067	NA	mg/L
MW-4	9/18/2020	Manganese, Dissolved	0.0045	0.002	0.00058	2017400	mg/L
MW-4	9/18/2020	Molybdenum, Dissolved	0.0078	0.008	0.0056	98700	mg/L
MW-4	9/18/2020	Nickel, Dissolved	0.0045	0.01	0.0033	372000	mg/L
MW-4	9/18/2020	Potassium, Dissolved	0.69	1	0.16	NA	mg/L
MW-4	9/18/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
MW-4	8/13/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
MW-4	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-4	8/13/2019	Arsenic, Total	0.00071	0.001	0.000312	10000	mg/L
MW-4	8/13/2019	Barium, Total	0.021	0.002	0.000648	2000000	mg/L
MW-4	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-4	8/13/2019	Boron, Total	0.38	0.04	0.004531	3949	mg/L
MW-4	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-4	8/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-4	8/13/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-4	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-4	8/13/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
MW-4	8/13/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-4	8/13/2019	Manganese, Total	0.0056	0.002	0.00029	2017000	mg/L
MW-4	8/13/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-4	8/13/2019	Molybdenum, Total	0.0081	0.008	0.006735	98700	mg/L
MW-4	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-4	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-4	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-4	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-4	8/13/2019	Uranium, Total	0.013	0.0005	0.000085	30000	mg/L
MW-4	8/13/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-4	8/13/2019	Aluminum, Dissolved	0.0056	0.02	0.002488	19913930	mg/L
MW-4	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-4	8/13/2019	Arsenic, Dissolved	0.00078	0.001	0.000101	10000	mg/L
MW-4	8/13/2019	Barium, Dissolved	0.021	0.002	0.000648	2000000	mg/L
MW-4	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-4	8/13/2019	Boron, Dissolved	0.38	0.04	0.004531	3949110	mg/L
MW-4	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-4	8/13/2019	Calcium, Dissolved	1.8	1	0.061889	NA	mg/L
MW-4	8/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-4	8/13/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-4	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-4	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-4	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-4	8/13/2019	Magnesium, Dissolved	0.2	1	0.05029	NA	mg/L
MW-4	8/13/2019	Manganese, Dissolved	0.0052	0.002	0.00029	2017400	mg/L
MW-4	8/13/2019	Molybdenum, Dissolved	0.0097	0.008	0.006735	98700	mg/L
MW-4	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-4	8/13/2019	Potassium, Dissolved	0.75	1	0.162288	NA	mg/L
MW-4	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-4	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-4	8/13/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
MW-4	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-4	8/13/2019	Uranium, Dissolved	0.014	0.0005	0.000075	NA	mg/L
MW-4	8/13/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
MW-4	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	8/21/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-4	8/21/2012	Barium, Total	0.02	0.002	0.00039	2000000	mg/L
MW-4	8/21/2012	Calcium, Total	1.8	1	0.026	NA	mg/L
MW-4	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-4	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-4	8/21/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-4	8/21/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
MW-4	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-4	8/21/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-4	8/21/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-4	8/21/2012	Manganese, Total	0.0034	0.002	0.00026	2017000	mg/L
MW-4	8/21/2012	Sodium, Total	290	5	0.22	NA	mg/L
MW-4	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
MW-4	8/21/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-4	8/21/2012	Uranium, Total	0.018	0.0025	0.00003	30000	mg/L
MW-4	8/21/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-4	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-4	9/10/2013	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
MW-4	9/10/2013	Barium, Total	0.022	0.002	0.00095	2000000	mg/L
MW-4	9/10/2013	Calcium, Total	6.3	1	0.069	NA	mg/L
MW-4	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-4	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-4	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-4	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-4	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-4	9/10/2013	Potassium, Total	1.1	1	0.24	NA	mg/L
MW-4	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-4	9/10/2013	Manganese, Total	0.0057	0.002	0.00016	2017000	mg/L
MW-4	9/10/2013	Sodium, Total	280	5	1.6	NA	mg/L
MW-4	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-4	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-4	9/10/2013	Uranium, Total	0.018	0.001	0.0000073	30000	mg/L
MW-4	9/10/2013	Zinc, Total	0.017	0.01	0.00076	5960000	mg/L
MW-4	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-4	9/17/2014	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
MW-4	9/17/2014	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
MW-4	9/17/2014	Calcium, Total	1.9	1	0.082	NA	mg/L
MW-4	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-4	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-4	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-4	9/17/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-4	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-4	9/17/2014	Potassium, Total	1.7	1	0.093	NA	mg/L
MW-4	9/17/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-4	9/17/2014	Manganese, Total	0.0057	0.002	0.00055	2017000	mg/L
MW-4	9/17/2014	Sodium, Total	280	5	2	NA	mg/L
MW-4	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-4	9/17/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-4	9/17/2014	Uranium, Total	0.017	0.001	0.00005	30000	mg/L
MW-4	9/17/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
MW-4	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-4	8/17/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-4	8/17/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
MW-4	8/17/2015	Calcium, Total	1.7	1	0.057	NA	mg/L
MW-4	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-4	8/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-4	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-4	8/17/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
MW-4	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-4	8/17/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-4	8/17/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-4	8/17/2015	Manganese, Total	0.0052	0.002	0.0015	2017000	mg/L
MW-4	8/17/2015	Sodium, Total	300	5	0.36	NA	mg/L
MW-4	8/17/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-4	8/17/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-4	8/17/2015	Uranium, Total	0.016	0.0005	0.0000049	30000	mg/L
MW-4	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-4	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-4	9/7/2016	Arsenic, Total	0.00098	0.001	0.00021	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/7/2016	Barium, Total	0.022	0.002	0.00079	2000000	mg/L
MW-4	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-4	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-4	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-4	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-4	9/7/2016	Arsenic, Dissolved	0.00089	0.001	0.00014	10000	mg/L
MW-4	9/7/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
MW-4	9/7/2016	Calcium, Dissolved	1.8	1	0.5	NA	mg/L
MW-4	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-4	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-4	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-4	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-4	9/7/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
MW-4	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-4	9/7/2016	Manganese, Dissolved	0.0046	0.002	0.00032	2017400	mg/L
MW-4	9/7/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
MW-4	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/7/2016	Selenium, Dissolved	0.00072	0.001	0.00021	50000	mg/L
MW-4	9/7/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
MW-4	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-4	9/7/2016	Iron, Total	0.028	0.02	0.02	13822000	mg/L
MW-4	9/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
MW-4	9/7/2016	Manganese, Total	0.0064	0.002	0.00027	2017000	mg/L
MW-4	9/7/2016	Lead, Total	0.00017	0.0005	0.000081	15000	mg/L
MW-4	9/7/2016	Selenium, Total	0.00065	0.001	0.00019	50000	mg/L
MW-4	9/7/2016	Uranium, Total	0.016	0.0005	0.00017	30000	mg/L
MW-4	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-4	9/21/2017	Silver, Total	ND	0.0005	0.00039	50000	mg/L
MW-4	9/21/2017	Arsenic, Total	0.00084	0.001	0.0003	10000	mg/L
MW-4	9/21/2017	Barium, Total	0.02	0.002	0.00093	2000000	mg/L
MW-4	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-4	9/21/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-4	9/21/2017	Copper, Total	0.0019	0.006	0.0017	790000	mg/L
MW-4	9/21/2017	Silver, Dissolved	ND	0.0005	0.000053	81200	mg/L
MW-4	9/21/2017	Arsenic, Dissolved	0.00087	0.001	0.00018	10000	mg/L
MW-4	9/21/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
MW-4	9/21/2017	Calcium, Dissolved	1.9	1	0.078	NA	mg/L
MW-4	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-4	9/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-4	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-4	9/21/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-4	9/21/2017	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
MW-4	9/21/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-4	9/21/2017	Manganese, Dissolved	0.0052	0.002	0.00039	2017400	mg/L
MW-4	9/21/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
MW-4	9/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/21/2017	Selenium, Dissolved	0.00088	0.001	0.00039	50000	mg/L
MW-4	9/21/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-4	9/21/2017	Iron, Total	0.021	0.02	0.01	13822000	mg/L
MW-4	9/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-4	9/21/2017	Manganese, Total	0.0069	0.002	0.0011	2017000	mg/L
MW-4	9/21/2017	Lead, Total	0.00017	0.0005	0.000095	15000	mg/L
MW-4	9/21/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-4	9/21/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-4	9/13/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-4	9/13/2018	Arsenic, Total	0.00076	0.001	0.00041	10000	mg/L
MW-4	9/13/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
MW-4	9/13/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-4	9/13/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-4	9/13/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-4	9/13/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-4	9/13/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-4	9/13/2018	Arsenic, Dissolved	0.00072	0.001	0.00042	10000	mg/L
MW-4	9/13/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
MW-4	9/13/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-4	9/13/2018	Calcium, Dissolved	1.9	1	0.078	NA	mg/L
MW-4	9/13/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-4	9/13/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-4	9/13/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/13/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-4	9/13/2018	Potassium, Dissolved	0.59	1	0.11	NA	mg/L
MW-4	9/13/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-4	9/13/2018	Manganese, Dissolved	0.0064	0.002	0.00039	2017400	mg/L
MW-4	9/13/2018	Sodium, Dissolved	300	10	1.6	NA	mg/L
MW-4	9/13/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-4	9/13/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-4	9/13/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-4	9/13/2018	Uranium, Dissolved	0.014	0.0005	0.000096	NA	mg/L
MW-4	9/13/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-4	9/13/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
MW-4	9/13/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-4	9/13/2018	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
MW-4	9/13/2018	Manganese, Total	0.0059	0.002	0.0011	2017000	mg/L
MW-4	9/13/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-4	9/13/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-4	9/13/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-4	9/13/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
MW-4	9/13/2018	Vanadium, Total	0.00091	0.05	0.00076	63100	mg/L
MW-4	9/13/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-4	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-4	12/6/2018	Arsenic, Total	ND	0.001	0.0005	10000	mg/L
MW-4	12/6/2018	Barium, Total	0.021	0.02	0.02	2000000	mg/L
MW-4	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-4	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-4	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-4	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-4	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-4	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-4	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-4	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-4	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-4	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-4	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
MW-5	8/14/2019	Aluminum, Total	0.0098	0.02	0.002488	19914000	mg/L
MW-5	8/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
MW-5	8/14/2019	Arsenic, Total	0.00099	0.001	0.000312	10000	mg/L
MW-5	8/14/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
MW-5	8/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
MW-5	8/14/2019	Boron, Total	0.76	0.04	0.004531	3949	mg/L
MW-5	8/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
MW-5	8/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
MW-5	8/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
MW-5	8/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
MW-5	8/14/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
MW-5	8/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
MW-5	8/14/2019	Manganese, Total	0.0059	0.002	0.00029	2017000	mg/L
MW-5	8/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-5	8/14/2019	Molybdenum, Total	0.008	0.008	0.006735	98700	mg/L
MW-5	8/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
MW-5	8/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
MW-5	8/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
MW-5	8/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
MW-5	8/14/2019	Uranium, Total	0.009	0.0025	0.000424	30000	mg/L
MW-5	8/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
MW-5	8/14/2019	Aluminum, Dissolved	0.0033	0.02	0.002488	19913930	mg/L
MW-5	8/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
MW-5	8/14/2019	Arsenic, Dissolved	0.00098	0.001	0.000101	10000	mg/L
MW-5	8/14/2019	Barium, Dissolved	0.016	0.002	0.000648	2000000	mg/L
MW-5	8/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
MW-5	8/14/2019	Boron, Dissolved	0.75	0.04	0.004531	3949110	mg/L
MW-5	8/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
MW-5	8/14/2019	Calcium, Dissolved	1.4	1	0.061889	NA	mg/L
MW-5	8/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
MW-5	8/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
MW-5	8/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
MW-5	8/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
MW-5	8/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
MW-5	8/14/2019	Magnesium, Dissolved	0.14	1	0.05029	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/14/2019	Manganese, Dissolved	0.0037	0.002	0.00029	2017400	mg/L
MW-5	8/14/2019	Molybdenum, Dissolved	0.0083	0.008	0.006735	98700	mg/L
MW-5	8/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
MW-5	8/14/2019	Potassium, Dissolved	0.61	1	0.162288	NA	mg/L
MW-5	8/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
MW-5	8/14/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
MW-5	8/14/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
MW-5	8/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
MW-5	8/14/2019	Uranium, Dissolved	0.0078	0.0005	0.000075	NA	mg/L
MW-5	8/14/2019	Zinc, Dissolved	0.006	0.01	0.002252	5960450	mg/L
MW-5	9/21/2020	Arsenic, Dissolved	0.00091	0.001	0.00021	10000	mg/L
MW-5	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
MW-5	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
MW-5	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
MW-5	9/21/2020	Uranium, Dissolved	0.0077	0.0005	0.000065	NA	mg/L
MW-5	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
MW-5	9/21/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
MW-5	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
MW-5	9/21/2020	Barium, Dissolved	0.017	0.002	0.0011	2000000	mg/L
MW-5	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
MW-5	9/21/2020	Boron, Dissolved	0.73	0.04	0.0067	3949110	mg/L
MW-5	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
MW-5	9/21/2020	Calcium, Dissolved	1.6	1	0.11	NA	mg/L
MW-5	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
MW-5	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
MW-5	9/21/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
MW-5	9/21/2020	Magnesium, Dissolved	0.15	1	0.067	NA	mg/L
MW-5	9/21/2020	Manganese, Dissolved	0.0035	0.002	0.00058	2017400	mg/L
MW-5	9/21/2020	Molybdenum, Dissolved	0.0081	0.008	0.0056	98700	mg/L
MW-5	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
MW-5	9/21/2020	Potassium, Dissolved	0.51	1	0.16	NA	mg/L
MW-5	9/21/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
MW-5	9/21/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
MW-5	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
MW-5	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
MW-5	9/21/2020	Arsenic, Total	0.00093	0.001	0.00026	10000	mg/L
MW-5	9/21/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
MW-5	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
MW-5	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
MW-5	9/21/2020	Uranium, Total	0.009	0.0005	0.000065	30000	mg/L
MW-5	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
MW-5	9/21/2020	Aluminum, Total	0.14	0.02	0.0074	19914000	mg/L
MW-5	9/21/2020	Barium, Total	0.049	0.003	0.0016	2000000	mg/L
MW-5	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
MW-5	9/21/2020	Boron, Total	0.76	0.04	0.0074	3949	mg/L
MW-5	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-5	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-5	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
MW-5	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-5	9/21/2020	Iron, Total	0.053	0.05	0.013	13822000	mg/L
MW-5	9/21/2020	Manganese, Total	0.013	0.002	0.00081	2017000	mg/L
MW-5	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
MW-5	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
MW-5	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
MW-5	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
MW-5	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
MW-5	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
MW-5	8/23/2012	Barium, Total	0.026	0.002	0.00039	2000000	mg/L
MW-5	8/23/2012	Calcium, Total	1.4	1	0.026	NA	mg/L
MW-5	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
MW-5	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
MW-5	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-5	8/23/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
MW-5	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
MW-5	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
MW-5	8/23/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
MW-5	8/23/2012	Manganese, Total	0.012	0.002	0.00026	2017000	mg/L
MW-5	8/23/2012	Sodium, Total	270	5	0.22	NA	mg/L
MW-5	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
MW-5	8/23/2012	Uranium, Total	0.0095	0.0025	0.00003	30000	mg/L
MW-5	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
MW-5	9/10/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
MW-5	9/10/2013	Arsenic, Total	0.001	0.001	0.000098	10000	mg/L
MW-5	9/10/2013	Barium, Total	0.018	0.002	0.00095	2000000	mg/L
MW-5	9/10/2013	Calcium, Total	1.6	1	0.069	NA	mg/L
MW-5	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
MW-5	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
MW-5	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
MW-5	9/10/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
MW-5	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
MW-5	9/10/2013	Potassium, Total	ND	1	0.24	NA	mg/L
MW-5	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
MW-5	9/10/2013	Manganese, Total	0.0034	0.002	0.00016	2017000	mg/L
MW-5	9/10/2013	Sodium, Total	260	5	1.6	NA	mg/L
MW-5	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
MW-5	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
MW-5	9/10/2013	Uranium, Total	0.01	0.001	0.0000073	30000	mg/L
MW-5	9/10/2013	Zinc, Total	0.012	0.01	0.00076	5960000	mg/L
MW-5	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
MW-5	9/17/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
MW-5	9/17/2014	Barium, Total	0.015	0.002	0.0011	2000000	mg/L
MW-5	9/17/2014	Calcium, Total	1.6	1	0.082	NA	mg/L
MW-5	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
MW-5	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
MW-5	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
MW-5	9/17/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
MW-5	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
MW-5	9/17/2014	Potassium, Total	1.6	1	0.093	NA	mg/L
MW-5	9/17/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
MW-5	9/17/2014	Manganese, Total	0.0045	0.002	0.00055	2017000	mg/L
MW-5	9/17/2014	Sodium, Total	250	10	3.9	NA	mg/L
MW-5	9/17/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
MW-5	9/17/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
MW-5	9/17/2014	Uranium, Total	0.0094	0.001	0.00005	30000	mg/L
MW-5	9/17/2014	Zinc, Total	0.025	0.01	0.0014	5960000	mg/L
MW-5	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
MW-5	8/14/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
MW-5	8/14/2015	Barium, Total	0.09	0.002	0.0011	2000000	mg/L
MW-5	8/14/2015	Calcium, Total	1.5	1	0.057	NA	mg/L
MW-5	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
MW-5	8/14/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
MW-5	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
MW-5	8/14/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
MW-5	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
MW-5	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
MW-5	8/14/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
MW-5	8/14/2015	Manganese, Total	0.0031	0.002	0.0015	2017000	mg/L
MW-5	8/14/2015	Sodium, Total	260	5	0.36	NA	mg/L
MW-5	8/14/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
MW-5	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
MW-5	8/14/2015	Uranium, Total	0.0093	0.0005	0.0000049	30000	mg/L
MW-5	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
MW-5	9/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
MW-5	9/7/2016	Arsenic, Total	0.0012	0.001	0.00021	10000	mg/L
MW-5	9/7/2016	Barium, Total	0.041	0.002	0.00079	2000000	mg/L
MW-5	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
MW-5	9/7/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
MW-5	9/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
MW-5	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
MW-5	9/7/2016	Arsenic, Dissolved	0.001	0.001	0.00014	10000	mg/L
MW-5	9/7/2016	Barium, Dissolved	0.017	0.002	0.0013	2000000	mg/L
MW-5	9/7/2016	Calcium, Dissolved	1.4	1	0.5	NA	mg/L
MW-5	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
MW-5	9/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
MW-5	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
MW-5	9/7/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
MW-5	9/7/2016	Potassium, Dissolved	0.67	1	0.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/7/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
MW-5	9/7/2016	Manganese, Dissolved	0.0035	0.002	0.00032	2017400	mg/L
MW-5	9/7/2016	Sodium, Dissolved	270	5	2.5	NA	mg/L
MW-5	9/7/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/7/2016	Selenium, Dissolved	0.0005	0.001	0.00021	50000	mg/L
MW-5	9/7/2016	Uranium, Dissolved	0.0094	0.0005	0.000051	NA	mg/L
MW-5	9/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
MW-5	9/7/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
MW-5	9/7/2016	Mercury, Total	0.000055	0.0002	0.000053	2000	mg/L
MW-5	9/7/2016	Manganese, Total	0.0046	0.002	0.00027	2017000	mg/L
MW-5	9/7/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
MW-5	9/7/2016	Selenium, Total	0.00038	0.001	0.00019	50000	mg/L
MW-5	9/7/2016	Uranium, Total	0.0092	0.0005	0.00017	30000	mg/L
MW-5	9/7/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
MW-5	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-5	9/11/2017	Arsenic, Total	0.001	0.001	0.0003	10000	mg/L
MW-5	9/11/2017	Barium, Total	0.02	0.002	0.00093	2000000	mg/L
MW-5	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-5	9/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-5	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
MW-5	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-5	9/11/2017	Arsenic, Dissolved	0.0012	0.001	0.00018	10000	mg/L
MW-5	9/11/2017	Barium, Dissolved	0.017	0.002	0.00085	2000000	mg/L
MW-5	9/11/2017	Calcium, Dissolved	1.5	1	0.078	NA	mg/L
MW-5	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-5	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-5	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-5	9/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-5	9/11/2017	Potassium, Dissolved	0.54	1	0.11	NA	mg/L
MW-5	9/11/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-5	9/11/2017	Manganese, Dissolved	0.0042	0.002	0.00039	2017400	mg/L
MW-5	9/11/2017	Sodium, Dissolved	260	10	1.6	NA	mg/L
MW-5	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/11/2017	Selenium, Dissolved	0.0012	0.001	0.00039	50000	mg/L
MW-5	9/11/2017	Uranium, Dissolved	0.0095	0.0005	0.00005	NA	mg/L
MW-5	9/11/2017	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
MW-5	9/11/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-5	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
MW-5	9/11/2017	Manganese, Total	0.0043	0.002	0.0011	2017000	mg/L
MW-5	9/11/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
MW-5	9/11/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
MW-5	9/11/2017	Uranium, Total	0.0099	0.0005	0.00015	30000	mg/L
MW-5	9/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-5	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
MW-5	9/17/2018	Arsenic, Total	0.0011	0.001	0.00041	10000	mg/L
MW-5	9/17/2018	Barium, Total	0.021	0.002	0.001	2000000	mg/L
MW-5	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
MW-5	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
MW-5	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
MW-5	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
MW-5	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
MW-5	9/17/2018	Arsenic, Dissolved	0.00093	0.001	0.00042	10000	mg/L
MW-5	9/17/2018	Barium, Dissolved	0.017	0.002	0.00099	2000000	mg/L
MW-5	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
MW-5	9/17/2018	Calcium, Dissolved	1.4	1	0.078	NA	mg/L
MW-5	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
MW-5	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
MW-5	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
MW-5	9/17/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
MW-5	9/17/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
MW-5	9/17/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
MW-5	9/17/2018	Manganese, Dissolved	0.0039	0.002	0.00039	2017400	mg/L
MW-5	9/17/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
MW-5	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
MW-5	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
MW-5	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
MW-5	9/17/2018	Uranium, Dissolved	0.0075	0.0005	0.000096	NA	mg/L
MW-5	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
MW-5	9/17/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	9/17/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
MW-5	9/17/2018	Mercury, Total	0.000096	0.0002	0.000038	2000	mg/L
MW-5	9/17/2018	Manganese, Total	0.0045	0.002	0.0011	2017000	mg/L
MW-5	9/17/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
MW-5	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
MW-5	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
MW-5	9/17/2018	Uranium, Total	0.0082	0.0005	0.000068	30000	mg/L
MW-5	9/17/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
MW-5	9/17/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
MW-5	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
MW-5	12/6/2018	Arsenic, Total	0.001	0.001	0.0005	10000	mg/L
MW-5	12/6/2018	Barium, Total	ND	0.02	0.02	2000000	mg/L
MW-5	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
MW-5	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
MW-5	12/6/2018	Cobalt, Total	ND	0.006	0.00098	5980	mg/L
MW-5	12/6/2018	Chromium, Total	ND	0.006	0.0011	50000	mg/L
MW-5	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
MW-5	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
MW-5	12/6/2018	Lead, Total	ND	0.001	0.0005	15000	mg/L
MW-5	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
MW-5	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
MW-5	12/6/2018	Vanadium, Total	ND	0.05	0.0023	63100	mg/L
MW-5	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
NAPIS-2	9/22/2020	Arsenic, Dissolved	0.0031	0.001	0.00021	10000	mg/L
NAPIS-2	9/22/2020	Lead, Dissolved	0.00012	0.0005	0.000034	NA	mg/L
NAPIS-2	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
NAPIS-2	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
NAPIS-2	9/22/2020	Uranium, Dissolved	0.00043	0.0005	0.000065	NA	mg/L
NAPIS-2	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
NAPIS-2	9/22/2020	Barium, Dissolved	1.8	0.01	0.0056	2000000	mg/L
NAPIS-2	9/22/2020	Iron, Dissolved	1	0.1	0.052	13821880	mg/L
NAPIS-2	9/22/2020	Sodium, Dissolved	270	5	0.69	NA	mg/L
NAPIS-2	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
NAPIS-2	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
NAPIS-2	9/22/2020	Boron, Dissolved	0.6	0.04	0.0067	3949110	mg/L
NAPIS-2	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
NAPIS-2	9/22/2020	Calcium, Dissolved	54	1	0.11	NA	mg/L
NAPIS-2	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
NAPIS-2	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
NAPIS-2	9/22/2020	Magnesium, Dissolved	10	1	0.067	NA	mg/L
NAPIS-2	9/22/2020	Manganese, Dissolved	0.71	0.002	0.00058	2017400	mg/L
NAPIS-2	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
NAPIS-2	9/22/2020	Nickel, Dissolved	0.0088	0.01	0.0033	372000	mg/L
NAPIS-2	9/22/2020	Potassium, Dissolved	0.22	1	0.16	NA	mg/L
NAPIS-2	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
NAPIS-2	9/22/2020	Zinc, Dissolved	0.0091	0.01	0.006	5960450	mg/L
NAPIS-2	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
NAPIS-2	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
NAPIS-2	9/22/2020	Arsenic, Total	0.002	0.001	0.00026	10000	mg/L
NAPIS-2	9/22/2020	Lead, Total	0.00037	0.0005	0.000034	15000	mg/L
NAPIS-2	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
NAPIS-2	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
NAPIS-2	9/22/2020	Uranium, Total	0.00007	0.0005	0.000065	30000	mg/L
NAPIS-2	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-2	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
NAPIS-2	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
NAPIS-2	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
NAPIS-2	9/22/2020	Nickel, Total	0.01	0.01	0.0033	372000	mg/L
NAPIS-2	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
NAPIS-2	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
NAPIS-2	9/22/2020	Barium, Total	1.8	0.015	0.0082	2000000	mg/L
NAPIS-2	9/22/2020	Boron, Total	0.61	0.2	0.037	3949	mg/L
NAPIS-2	9/22/2020	Manganese, Total	0.73	0.01	0.0041	2017000	mg/L
NAPIS-2	9/22/2020	Iron, Total	2	0.25	0.064	13822000	mg/L
NAPIS-2	9/22/2020	Aluminum, Total	0.66	0.1	0.037	19914000	mg/L
NAPIS-2	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	12/17/2020	Aluminum, Total	3.09	0.2	0.051	19914000	mg/L
NAPIS-2	12/17/2020	Calcium, Total	60.6	0.5	0.084	NA	mg/L
NAPIS-2	12/17/2020	Boron, Total	0.529	0.1	0.022	3949	mg/L
NAPIS-2	12/17/2020	Barium, Total	2.82	0.01	0.003	2000000	mg/L
NAPIS-2	12/17/2020	Potassium, Total	1.09	1	0.34	NA	mg/L
NAPIS-2	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
NAPIS-2	12/17/2020	Magnesium, Total	12.2	0.5	0.12	NA	mg/L
NAPIS-2	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
NAPIS-2	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
NAPIS-2	12/17/2020	Sodium, Total	237	2	0.92	NA	mg/L
NAPIS-2	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
NAPIS-2	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
NAPIS-2	12/17/2020	Iron, Total	2.43	0.2	0.075	13822000	mg/L
NAPIS-2	12/17/2020	Manganese, Total	0.736	0.01	0.003	2017000	mg/L
NAPIS-2	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
NAPIS-2	12/17/2020	Nickel, Total	0.0119	0.006	0.003	372000	mg/L
NAPIS-2	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
NAPIS-2	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
NAPIS-2	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
NAPIS-2	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
NAPIS-2	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
NAPIS-2	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
NAPIS-2	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
NAPIS-2	12/17/2020	Manganese, Dissolved	0.716	0.01	0.003	2017400	mg/L
NAPIS-2	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
NAPIS-2	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
NAPIS-2	12/17/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
NAPIS-2	12/17/2020	Barium, Dissolved	2.51	0.01	0.003	2000000	mg/L
NAPIS-2	12/17/2020	Boron, Dissolved	0.554	0.1	0.022	3949110	mg/L
NAPIS-2	12/17/2020	Iron, Dissolved	0.298	0.2	0.075	13821880	mg/L
NAPIS-2	12/17/2020	Nickel, Dissolved	0.0115	0.006	0.003	372000	mg/L
NAPIS-2	12/17/2020	Arsenic, Total Recoverable	3.53	1	0.286	10	ug/L
NAPIS-2	12/17/2020	Lead, Total Recoverable	1.62	1	0.133	15	ug/L
NAPIS-2	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
NAPIS-2	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
NAPIS-2	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
NAPIS-2	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
NAPIS-2	12/17/2020	Arsenic, Dissolved	3.1	1	0.286	10	ug/L
NAPIS-2	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
NAPIS-2	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
NAPIS-2	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
NAPIS-2	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
NAPIS-2	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
NAPIS-2	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
NAPIS-2	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
NAPIS-2	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
NAPIS-2	3/4/2020	Arsenic, Dissolved	0.0028	0.001	0.0001	10000	mg/L
NAPIS-2	3/4/2020	Lead, Dissolved	0.000058	0.0005	0.000055	NA	mg/L
NAPIS-2	3/4/2020	Selenium, Dissolved	0.0003	0.001	0.00017	50000	mg/L
NAPIS-2	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	3/4/2020	Uranium, Dissolved	0.00032	0.0005	0.000075	NA	mg/L
NAPIS-2	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
NAPIS-2	3/4/2020	Beryllium, Dissolved	0.00031	0.002	0.00028	4000	mg/L
NAPIS-2	3/4/2020	Boron, Dissolved	0.52	0.04	0.0045	3949110	mg/L
NAPIS-2	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
NAPIS-2	3/4/2020	Calcium, Dissolved	55	1	0.062	NA	mg/L
NAPIS-2	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
NAPIS-2	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
NAPIS-2	3/4/2020	Magnesium, Dissolved	11	1	0.05	NA	mg/L
NAPIS-2	3/4/2020	Nickel, Dissolved	0.0092	0.01	0.004	372000	mg/L
NAPIS-2	3/4/2020	Potassium, Dissolved	0.21	1	0.16	NA	mg/L
NAPIS-2	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
NAPIS-2	3/4/2020	Barium, Dissolved	2.3	0.01	0.0032	2000000	mg/L
NAPIS-2	3/4/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
NAPIS-2	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
NAPIS-2	3/4/2020	Iron, Dissolved	0.84	0.02	0.0087	13821880	mg/L
NAPIS-2	3/4/2020	Manganese, Dissolved	0.65	0.002	0.00029	2017400	mg/L
NAPIS-2	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
NAPIS-2	3/4/2020	Zinc, Dissolved	0.0075	0.01	0.0023	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
NAPIS-2	3/4/2020	Arsenic, Total	0.0032	0.001	0.00031	10000	mg/L
NAPIS-2	3/4/2020	Lead, Total	0.0014	0.0005	0.000055	15000	mg/L
NAPIS-2	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
NAPIS-2	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	3/4/2020	Uranium, Total	0.00028	0.0005	0.000085	30000	mg/L
NAPIS-2	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-2	3/4/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
NAPIS-2	3/4/2020	Boron, Total	0.57	0.04	0.0045	3949	mg/L
NAPIS-2	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
NAPIS-2	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
NAPIS-2	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
NAPIS-2	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	3/4/2020	Manganese, Total	0.69	0.002	0.00029	2017000	mg/L
NAPIS-2	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
NAPIS-2	3/4/2020	Nickel, Total	0.011	0.01	0.004	372000	mg/L
NAPIS-2	3/4/2020	Silver, Total	0.0014	0.005	0.0014	50000	mg/L
NAPIS-2	3/4/2020	Zinc, Total	0.0071	0.01	0.0058	5960000	mg/L
NAPIS-2	3/4/2020	Aluminum, Total	2.1	0.1	0.012	19914000	mg/L
NAPIS-2	3/4/2020	Barium, Total	2.4	0.01	0.0032	2000000	mg/L
NAPIS-2	3/4/2020	Iron, Total	2.3	0.1	0.044	13822000	mg/L
NAPIS-2	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-2	5/28/2019	Iron, Total	3.2	0.1	0.043734	13822000	mg/L
NAPIS-2	5/28/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
NAPIS-2	5/28/2019	Manganese, Total	0.75	0.002	0.00029	2017000	mg/L
NAPIS-2	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
NAPIS-2	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	5/28/2019	Nickel, Total	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	5/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
NAPIS-2	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	5/28/2019	Uranium, Total	0.00022	0.0005	0.000085	30000	mg/L
NAPIS-2	5/28/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
NAPIS-2	5/28/2019	Aluminum, Dissolved	0.013	0.02	0.002488	19913930	mg/L
NAPIS-2	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	5/28/2019	Arsenic, Dissolved	0.0025	0.001	0.000101	10000	mg/L
NAPIS-2	5/28/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	5/28/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
NAPIS-2	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	5/28/2019	Calcium, Dissolved	59	1	0.061889	NA	mg/L
NAPIS-2	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	5/28/2019	Iron, Dissolved	0.37	0.02	0.008747	13821880	mg/L
NAPIS-2	5/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	5/28/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	5/28/2019	Manganese, Dissolved	0.78	0.002	0.00029	2017400	mg/L
NAPIS-2	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	5/28/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	5/28/2019	Potassium, Dissolved	0.25	1	0.162288	NA	mg/L
NAPIS-2	5/28/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
NAPIS-2	5/28/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
NAPIS-2	5/28/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
NAPIS-2	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	5/28/2019	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
NAPIS-2	5/28/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
NAPIS-2	5/28/2019	Aluminum, Total	4	0.1	0.012441	19914000	mg/L
NAPIS-2	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	5/28/2019	Arsenic, Total	0.0043	0.001	0.000312	10000	mg/L
NAPIS-2	5/28/2019	Barium, Total	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	5/28/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
NAPIS-2	5/28/2019	Boron, Total	0.64	0.04	0.004531	3949	mg/L
NAPIS-2	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	5/28/2019	Chromium, Total	0.0015	0.006	0.001533	50000	mg/L
NAPIS-2	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-2	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	4/9/2019	Arsenic, Dissolved	0.003	0.001	0.000101	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	4/9/2019	Barium, Dissolved	2.1	0.01	0.003242	2000000	mg/L
NAPIS-2	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	4/9/2019	Boron, Dissolved	0.64	0.04	0.004531	3949110	mg/L
NAPIS-2	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	4/9/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
NAPIS-2	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	4/9/2019	Copper, Dissolved	0.0014	0.006	0.001296	790000	mg/L
NAPIS-2	4/9/2019	Iron, Dissolved	0.26	0.02	0.008747	13821880	mg/L
NAPIS-2	4/9/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
NAPIS-2	4/9/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	4/9/2019	Manganese, Dissolved	0.68	0.002	0.00029	2017400	mg/L
NAPIS-2	4/9/2019	Molybdenum, Dissolved	0.0087	0.008	0.006735	98700	mg/L
NAPIS-2	4/9/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
NAPIS-2	4/9/2019	Potassium, Dissolved	0.3	1	0.162288	NA	mg/L
NAPIS-2	4/9/2019	Selenium, Dissolved	0.00024	0.001	0.000171	50000	mg/L
NAPIS-2	4/9/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
NAPIS-2	4/9/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
NAPIS-2	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	4/9/2019	Uranium, Dissolved	0.00081	0.0005	0.000075	NA	mg/L
NAPIS-2	4/9/2019	Zinc, Dissolved	0.043	0.01	0.002252	5960450	mg/L
NAPIS-2	4/9/2019	Aluminum, Total	5.5	0.2	0.010508	19914000	mg/L
NAPIS-2	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
NAPIS-2	4/9/2019	Arsenic, Total	0.0046	0.001	0.000312	10000	mg/L
NAPIS-2	4/9/2019	Barium, Total	2.1	0.02	0.004884	2000000	mg/L
NAPIS-2	4/9/2019	Beryllium, Total	0.00024	0.002	0.000224	4000	mg/L
NAPIS-2	4/9/2019	Boron, Total	0.56	0.4	0.018207	3949	mg/L
NAPIS-2	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	4/9/2019	Chromium, Total	0.0017	0.006	0.0012	50000	mg/L
NAPIS-2	4/9/2019	Cobalt, Total	0.0014	0.006	0.001242	5980	mg/L
NAPIS-2	4/9/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-2	4/9/2019	Iron, Total	4	0.2	0.060526	13822000	mg/L
NAPIS-2	4/9/2019	Lead, Total	0.0033	0.0005	0.000026	15000	mg/L
NAPIS-2	4/9/2019	Manganese, Total	0.65	0.02	0.000598	2017000	mg/L
NAPIS-2	4/9/2019	Molybdenum, Total	0.0051	0.008	0.002075	98700	mg/L
NAPIS-2	4/9/2019	Nickel, Total	0.015	0.01	0.001491	372000	mg/L
NAPIS-2	4/9/2019	Selenium, Total	0.00049	0.001	0.000478	50000	mg/L
NAPIS-2	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	4/9/2019	Thallium, Total	0.000096	0.0005	0.000052	2000	mg/L
NAPIS-2	4/9/2019	Uranium, Total	0.00091	0.0005	0.000085	30000	mg/L
NAPIS-2	4/9/2019	Zinc, Total	0.019	0.01	0.005772	5960000	mg/L
NAPIS-2	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-2	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-2	8/22/2019	Arsenic, Dissolved	0.003	0.001	0.000101	10000	mg/L
NAPIS-2	8/22/2019	Barium, Dissolved	1.7	0.01	0.003242	2000000	mg/L
NAPIS-2	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-2	8/22/2019	Boron, Dissolved	0.74	0.04	0.004531	3949110	mg/L
NAPIS-2	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	8/22/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
NAPIS-2	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	8/22/2019	Iron, Dissolved	1.4	0.1	0.043734	13821880	mg/L
NAPIS-2	8/22/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	8/22/2019	Magnesium, Dissolved	11	1	0.05029	NA	mg/L
NAPIS-2	8/22/2019	Manganese, Dissolved	0.82	0.002	0.00029	2017400	mg/L
NAPIS-2	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	8/22/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
NAPIS-2	8/22/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
NAPIS-2	8/22/2019	Selenium, Dissolved	0.00027	0.001	0.000171	50000	mg/L
NAPIS-2	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-2	8/22/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
NAPIS-2	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	8/22/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
NAPIS-2	8/22/2019	Zinc, Dissolved	0.0079	0.01	0.002252	5960450	mg/L
NAPIS-2	8/22/2019	Aluminum, Total	3	0.1	0.012441	19914000	mg/L
NAPIS-2	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	8/22/2019	Arsenic, Total	0.0044	0.001	0.000312	10000	mg/L
NAPIS-2	8/22/2019	Barium, Total	1.9	0.01	0.003242	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-2	8/22/2019	Boron, Total	0.75	0.04	0.004531	3949	mg/L
NAPIS-2	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
NAPIS-2	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	8/22/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-2	8/22/2019	Iron, Total	3.2	0.1	0.043734	13822000	mg/L
NAPIS-2	8/22/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
NAPIS-2	8/22/2019	Manganese, Total	0.89	0.002	0.00029	2017000	mg/L
NAPIS-2	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
NAPIS-2	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	8/22/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
NAPIS-2	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
NAPIS-2	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	8/22/2019	Uranium, Total	0.00021	0.0005	0.000085	30000	mg/L
NAPIS-2	8/22/2019	Zinc, Total	0.0064	0.01	0.005772	5960000	mg/L
NAPIS-2	10/21/2019	Aluminum, Dissolved	0.0028	0.02	0.002488	19913930	mg/L
NAPIS-2	10/21/2019	Antimony, Dissolved	0.00061	0.001	0.000389	6000	mg/L
NAPIS-2	10/21/2019	Arsenic, Dissolved	0.0036	0.001	0.000101	10000	mg/L
NAPIS-2	10/21/2019	Barium, Dissolved	1.9	0.01	0.003242	2000000	mg/L
NAPIS-2	10/21/2019	Beryllium, Dissolved	0.00068	0.002	0.000284	4000	mg/L
NAPIS-2	10/21/2019	Boron, Dissolved	0.76	0.04	0.004531	3949110	mg/L
NAPIS-2	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-2	10/21/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
NAPIS-2	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-2	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-2	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-2	10/21/2019	Iron, Dissolved	1.2	0.1	0.043734	13821880	mg/L
NAPIS-2	10/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
NAPIS-2	10/21/2019	Magnesium, Dissolved	12	1	0.05029	NA	mg/L
NAPIS-2	10/21/2019	Manganese, Dissolved	0.79	0.002	0.00029	2017400	mg/L
NAPIS-2	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-2	10/21/2019	Nickel, Dissolved	0.01	0.01	0.004009	372000	mg/L
NAPIS-2	10/21/2019	Potassium, Dissolved	0.35	1	0.162288	NA	mg/L
NAPIS-2	10/21/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
NAPIS-2	10/21/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
NAPIS-2	10/21/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
NAPIS-2	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-2	10/21/2019	Zinc, Dissolved	0.0065	0.01	0.002252	5960450	mg/L
NAPIS-2	10/21/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
NAPIS-2	10/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
NAPIS-2	10/21/2019	Arsenic, Total	0.0042	0.001	0.000312	10000	mg/L
NAPIS-2	10/21/2019	Barium, Total	2	0.01	0.003242	2000000	mg/L
NAPIS-2	10/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-2	10/21/2019	Boron, Total	0.81	0.2	0.022653	3949	mg/L
NAPIS-2	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-2	10/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
NAPIS-2	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-2	10/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-2	10/21/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
NAPIS-2	10/21/2019	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
NAPIS-2	10/21/2019	Manganese, Total	0.92	0.01	0.00145	2017000	mg/L
NAPIS-2	10/21/2019	Mercury, Total	0.000055	0.0002	0.000038	2000	mg/L
NAPIS-2	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-2	10/21/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
NAPIS-2	10/21/2019	Selenium, Total	0.00057	0.001	0.000478	50000	mg/L
NAPIS-2	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-2	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-2	10/21/2019	Zinc, Total	0.0084	0.01	0.005772	5960000	mg/L
NAPIS-2	1/30/2012	Calcium, Total	110	5	0.085	NA	mg/L
NAPIS-2	1/30/2012	Potassium, Total	ND	5	0.37	NA	mg/L
NAPIS-2	1/30/2012	Magnesium, Total	23	5	0.013	NA	mg/L
NAPIS-2	1/30/2012	Sodium, Total	370	5	0.21	NA	mg/L
NAPIS-2	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
NAPIS-2	3/20/2012	Arsenic, Total	0.011	0.0025	0.0014	10000	mg/L
NAPIS-2	3/20/2012	Barium, Total	2.1	0.02	0.0039	2000000	mg/L
NAPIS-2	3/20/2012	Calcium, Total	94	1	0.026	NA	mg/L
NAPIS-2	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/20/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	3/20/2012	Copper, Total	0.0071	0.006	0.00066	790000	mg/L
NAPIS-2	3/20/2012	Iron, Total	5	0.2	0.13	13822000	mg/L
NAPIS-2	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	3/20/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	3/20/2012	Magnesium, Total	18	1	0.013	NA	mg/L
NAPIS-2	3/20/2012	Manganese, Total	1.6	0.02	0.0026	2017000	mg/L
NAPIS-2	3/20/2012	Sodium, Total	350	5	0.22	NA	mg/L
NAPIS-2	3/20/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	3/20/2012	Selenium, Total	0.0036	0.0025	0.0025	50000	mg/L
NAPIS-2	3/20/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	3/20/2012	Zinc, Total	0.015	0.01	0.0011	5960000	mg/L
NAPIS-2	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	6/12/2012	Arsenic, Total	0.01	0.0025	0.0014	10000	mg/L
NAPIS-2	6/12/2012	Barium, Total	1.9	0.01	0.0019	2000000	mg/L
NAPIS-2	6/12/2012	Calcium, Total	93	1	0.026	NA	mg/L
NAPIS-2	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	6/12/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	6/12/2012	Copper, Total	ND	0.06	0.041	790000	mg/L
NAPIS-2	6/12/2012	Iron, Total	3.8	0.1	0.066	13822000	mg/L
NAPIS-2	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
NAPIS-2	6/12/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	6/12/2012	Magnesium, Total	19	1	0.013	NA	mg/L
NAPIS-2	6/12/2012	Manganese, Total	1.9	0.01	0.0013	2017000	mg/L
NAPIS-2	6/12/2012	Sodium, Total	350	5	0.22	NA	mg/L
NAPIS-2	6/12/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	6/12/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
NAPIS-2	6/12/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	6/12/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	8/21/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	8/21/2012	Arsenic, Total	0.0097	0.0025	0.0014	10000	mg/L
NAPIS-2	8/21/2012	Barium, Total	1.7	0.01	0.0019	2000000	mg/L
NAPIS-2	8/21/2012	Calcium, Total	110	5	0.13	NA	mg/L
NAPIS-2	8/21/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	8/21/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	8/21/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	8/21/2012	Iron, Total	3.1	0.1	0.066	13822000	mg/L
NAPIS-2	8/21/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	8/21/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	8/21/2012	Magnesium, Total	21	1	0.013	NA	mg/L
NAPIS-2	8/21/2012	Manganese, Total	1.7	0.01	0.0013	2017000	mg/L
NAPIS-2	8/21/2012	Sodium, Total	380	5	0.22	NA	mg/L
NAPIS-2	8/21/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	8/21/2012	Selenium, Total	0.0031	0.0025	0.0025	50000	mg/L
NAPIS-2	8/21/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	8/21/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	11/28/2012	Arsenic, Total	0.0069	0.0025	0.0014	10000	mg/L
NAPIS-2	11/28/2012	Barium, Total	1.7	0.01	0.0019	2000000	mg/L
NAPIS-2	11/28/2012	Calcium, Total	100	5	0.13	NA	mg/L
NAPIS-2	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	11/28/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
NAPIS-2	11/28/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	11/28/2012	Iron, Total	3.3	0.1	0.066	13822000	mg/L
NAPIS-2	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-2	11/28/2012	Potassium, Total	ND	1	0.48	NA	mg/L
NAPIS-2	11/28/2012	Magnesium, Total	22	1	0.013	NA	mg/L
NAPIS-2	11/28/2012	Manganese, Total	1.6	0.01	0.0013	2017000	mg/L
NAPIS-2	11/28/2012	Sodium, Total	330	5	0.22	NA	mg/L
NAPIS-2	11/28/2012	Lead, Total	ND	0.001	0.00002	15000	mg/L
NAPIS-2	11/28/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
NAPIS-2	11/28/2012	Uranium, Total	ND	0.0025	0.00003	30000	mg/L
NAPIS-2	11/28/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-2	3/18/2013	Arsenic, Total	0.0073	0.0025	0.00042	10000	mg/L
NAPIS-2	3/18/2013	Barium, Total	1.6	0.01	0.0019	2000000	mg/L
NAPIS-2	3/18/2013	Calcium, Total	77	1	0.069	NA	mg/L
NAPIS-2	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-2	3/18/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/18/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	3/18/2013	Iron, Total	2.9	0.1	0.066	13822000	mg/L
NAPIS-2	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	3/18/2013	Potassium, Total	ND	1	0.39	NA	mg/L
NAPIS-2	3/18/2013	Magnesium, Total	15	1	0.028	NA	mg/L
NAPIS-2	3/18/2013	Manganese, Total	1.3	0.01	0.0013	2017000	mg/L
NAPIS-2	3/18/2013	Sodium, Total	280	5	1.1	NA	mg/L
NAPIS-2	3/18/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
NAPIS-2	3/18/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
NAPIS-2	3/18/2013	Uranium, Total	ND	0.0025	0.0012	30000	mg/L
NAPIS-2	3/18/2013	Zinc, Total	0.015	0.01	0.0011	5960000	mg/L
NAPIS-2	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
NAPIS-2	6/12/2013	Arsenic, Total	0.007	0.001	0.00027	10000	mg/L
NAPIS-2	6/12/2013	Barium, Total	2	0.01	0.0029	2000000	mg/L
NAPIS-2	6/12/2013	Calcium, Total	92	1	0.069	NA	mg/L
NAPIS-2	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
NAPIS-2	6/12/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	6/12/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
NAPIS-2	6/12/2013	Iron, Total	3.2	0.1	0.026	13822000	mg/L
NAPIS-2	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	6/12/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
NAPIS-2	6/12/2013	Magnesium, Total	16	1	0.028	NA	mg/L
NAPIS-2	6/12/2013	Manganese, Total	1.5	0.01	0.0026	2017000	mg/L
NAPIS-2	6/12/2013	Sodium, Total	360	5	1.6	NA	mg/L
NAPIS-2	6/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	6/12/2013	Selenium, Total	0.0051	0.001	0.00049	50000	mg/L
NAPIS-2	6/12/2013	Uranium, Total	ND	0.001	0.0005	30000	mg/L
NAPIS-2	6/12/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
NAPIS-2	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-2	9/3/2013	Arsenic, Total	0.0069	0.005	0.00049	10000	mg/L
NAPIS-2	9/3/2013	Barium, Total	1.7	0.01	0.0048	2000000	mg/L
NAPIS-2	9/3/2013	Calcium, Total	90	1	0.069	NA	mg/L
NAPIS-2	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-2	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-2	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	9/3/2013	Iron, Total	2.6	0.1	0.045	13822000	mg/L
NAPIS-2	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	9/3/2013	Potassium, Total	ND	1	0.24	NA	mg/L
NAPIS-2	9/3/2013	Magnesium, Total	17	1	0.028	NA	mg/L
NAPIS-2	9/3/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
NAPIS-2	9/3/2013	Sodium, Total	350	5	1.6	NA	mg/L
NAPIS-2	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
NAPIS-2	9/3/2013	Selenium, Total	0.006	0.005	0.0015	50000	mg/L
NAPIS-2	9/3/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
NAPIS-2	9/3/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
NAPIS-2	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-2	11/12/2013	Arsenic, Total	0.0077	0.001	0.000098	10000	mg/L
NAPIS-2	11/12/2013	Barium, Total	1.5	0.01	0.0048	2000000	mg/L
NAPIS-2	11/12/2013	Calcium, Total	79	1	0.069	NA	mg/L
NAPIS-2	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-2	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-2	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-2	11/12/2013	Iron, Total	1.8	0.1	0.045	13822000	mg/L
NAPIS-2	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-2	11/12/2013	Potassium, Total	ND	1	0.24	NA	mg/L
NAPIS-2	11/12/2013	Magnesium, Total	16	1	0.028	NA	mg/L
NAPIS-2	11/12/2013	Manganese, Total	1.3	0.01	0.00082	2017000	mg/L
NAPIS-2	11/12/2013	Sodium, Total	310	5	1.6	NA	mg/L
NAPIS-2	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	11/12/2013	Selenium, Total	0.008	0.001	0.00029	50000	mg/L
NAPIS-2	11/12/2013	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
NAPIS-2	11/12/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
NAPIS-2	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-2	3/10/2014	Arsenic, Total	0.0053	0.005	0.00049	10000	mg/L
NAPIS-2	3/10/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
NAPIS-2	3/10/2014	Calcium, Total	88	1	0.082	NA	mg/L
NAPIS-2	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2014	Iron, Total	1.8	0.1	0.031	13822000	mg/L
NAPIS-2	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	3/10/2014	Potassium, Total	ND	1	0.093	NA	mg/L
NAPIS-2	3/10/2014	Magnesium, Total	17	1	0.018	NA	mg/L
NAPIS-2	3/10/2014	Manganese, Total	1.2	0.01	0.0027	2017000	mg/L
NAPIS-2	3/10/2014	Sodium, Total	350	5	2	NA	mg/L
NAPIS-2	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-2	3/10/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	3/10/2014	Uranium, Total	ND	0.001	0.0000073	30000	mg/L
NAPIS-2	3/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
NAPIS-2	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-2	6/5/2014	Arsenic, Total	0.0064	0.005	0.00057	10000	mg/L
NAPIS-2	6/5/2014	Barium, Total	1.6	0.01	0.0056	2000000	mg/L
NAPIS-2	6/5/2014	Calcium, Total	100	5	0.27	NA	mg/L
NAPIS-2	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	6/5/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-2	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-2	6/5/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L
NAPIS-2	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	6/5/2014	Potassium, Total	3.4	1	0.24	NA	mg/L
NAPIS-2	6/5/2014	Magnesium, Total	19	1	0.024	NA	mg/L
NAPIS-2	6/5/2014	Manganese, Total	1.4	0.01	0.0027	2017000	mg/L
NAPIS-2	6/5/2014	Sodium, Total	400	5	1.3	NA	mg/L
NAPIS-2	6/5/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
NAPIS-2	6/5/2014	Selenium, Total	0.01	0.005	0.00074	50000	mg/L
NAPIS-2	6/5/2014	Uranium, Total	ND	0.001	0.00005	30000	mg/L
NAPIS-2	6/5/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
NAPIS-2	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-2	9/11/2014	Arsenic, Total	0.01	0.01	0.0036	10000	mg/L
NAPIS-2	9/11/2014	Barium, Total	2.1	0.01	0.0025	2000000	mg/L
NAPIS-2	9/11/2014	Calcium, Total	98	1	0.082	NA	mg/L
NAPIS-2	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-2	9/11/2014	Copper, Total	0.012	0.006	0.0046	790000	mg/L
NAPIS-2	9/11/2014	Iron, Total	3.5	0.1	0.036	13822000	mg/L
NAPIS-2	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	9/11/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
NAPIS-2	9/11/2014	Magnesium, Total	18	1	0.018	NA	mg/L
NAPIS-2	9/11/2014	Manganese, Total	1.3	0.01	0.0024	2017000	mg/L
NAPIS-2	9/11/2014	Sodium, Total	410	10	3.9	NA	mg/L
NAPIS-2	9/11/2014	Lead, Total	0.003	0.001	0.00026	15000	mg/L
NAPIS-2	9/11/2014	Selenium, Total	0.011	0.01	0.0051	50000	mg/L
NAPIS-2	9/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
NAPIS-2	9/11/2014	Zinc, Total	0.017	0.01	0.0035	5960000	mg/L
NAPIS-2	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-2	11/11/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
NAPIS-2	11/11/2014	Barium, Total	1.7	0.01	0.0025	2000000	mg/L
NAPIS-2	11/11/2014	Calcium, Total	99	1	0.082	NA	mg/L
NAPIS-2	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-2	11/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-2	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-2	11/11/2014	Iron, Total	2.9	0.1	0.036	13822000	mg/L
NAPIS-2	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-2	11/11/2014	Potassium, Total	ND	1	0.093	NA	mg/L
NAPIS-2	11/11/2014	Magnesium, Total	18	1	0.018	NA	mg/L
NAPIS-2	11/11/2014	Manganese, Total	1.4	0.01	0.0024	2017000	mg/L
NAPIS-2	11/11/2014	Sodium, Total	410	5	2	NA	mg/L
NAPIS-2	11/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
NAPIS-2	11/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
NAPIS-2	11/11/2014	Uranium, Total	ND	0.001	0.0000072	30000	mg/L
NAPIS-2	11/11/2014	Zinc, Total	0.013	0.01	0.0035	5960000	mg/L
NAPIS-2	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	3/10/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
NAPIS-2	3/10/2015	Barium, Total	1.9	0.01	0.0037	2000000	mg/L
NAPIS-2	3/10/2015	Calcium, Total	85	5	0.28	NA	mg/L
NAPIS-2	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
NAPIS-2	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	3/10/2015	Iron, Total	3	0.1	0.036	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	3/10/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
NAPIS-2	3/10/2015	Magnesium, Total	16	1	0.039	NA	mg/L
NAPIS-2	3/10/2015	Manganese, Total	1.1	0.01	0.0076	2017000	mg/L
NAPIS-2	3/10/2015	Sodium, Total	370	5	0.36	NA	mg/L
NAPIS-2	3/10/2015	Lead, Total	0.0013	0.001	0.000069	15000	mg/L
NAPIS-2	3/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	3/10/2015	Uranium, Total	ND	0.001	0.0000081	30000	mg/L
NAPIS-2	3/10/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
NAPIS-2	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-2	6/2/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	6/2/2015	Calcium, Total	75	1	0.057	NA	mg/L
NAPIS-2	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	6/2/2015	Iron, Total	2.9	0.1	0.036	13822000	mg/L
NAPIS-2	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	6/2/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	6/2/2015	Magnesium, Total	14	1	0.039	NA	mg/L
NAPIS-2	6/2/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	6/2/2015	Sodium, Total	370	5	0.36	NA	mg/L
NAPIS-2	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
NAPIS-2	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	6/2/2015	Uranium, Total	ND	0.005	0.000049	30000	mg/L
NAPIS-2	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
NAPIS-2	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	8/11/2015	Arsenic, Total	0.008	0.001	0.00029	10000	mg/L
NAPIS-2	8/11/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	8/11/2015	Calcium, Total	75	1	0.057	NA	mg/L
NAPIS-2	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	8/11/2015	Copper, Total	0.0099	0.006	0.0051	790000	mg/L
NAPIS-2	8/11/2015	Iron, Total	3.3	0.1	0.036	13822000	mg/L
NAPIS-2	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	8/11/2015	Magnesium, Total	15	1	0.039	NA	mg/L
NAPIS-2	8/11/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	8/11/2015	Sodium, Total	400	5	0.36	NA	mg/L
NAPIS-2	8/11/2015	Lead, Total	0.0023	0.0005	0.000047	15000	mg/L
NAPIS-2	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
NAPIS-2	8/11/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
NAPIS-2	8/11/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
NAPIS-2	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	10/28/2015	Arsenic, Total	0.008	0.001	0.00029	10000	mg/L
NAPIS-2	10/28/2015	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	10/28/2015	Calcium, Total	95	1	0.057	NA	mg/L
NAPIS-2	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-2	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-2	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	10/28/2015	Iron, Total	3.3	0.1	0.036	13822000	mg/L
NAPIS-2	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-2	10/28/2015	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	10/28/2015	Magnesium, Total	17	1	0.039	NA	mg/L
NAPIS-2	10/28/2015	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	10/28/2015	Sodium, Total	360	5	0.36	NA	mg/L
NAPIS-2	10/28/2015	Lead, Total	0.0018	0.0005	0.000047	15000	mg/L
NAPIS-2	10/28/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
NAPIS-2	10/28/2015	Uranium, Total	ND	0.0005	0.0000049	30000	mg/L
NAPIS-2	10/28/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
NAPIS-2	3/1/2016	Calcium, Total	89	1	0.26	NA	mg/L
NAPIS-2	3/1/2016	Potassium, Total	ND	1	0.18	NA	mg/L
NAPIS-2	3/1/2016	Magnesium, Total	17	1	0.013	NA	mg/L
NAPIS-2	3/1/2016	Sodium, Total	390	5	0.48	NA	mg/L
NAPIS-2	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-2	6/7/2016	Arsenic, Total	0.0082	0.001	0.00029	10000	mg/L
NAPIS-2	6/7/2016	Barium, Total	1.6	0.01	0.0053	2000000	mg/L
NAPIS-2	6/7/2016	Calcium, Total	89	1	0.26	NA	mg/L
NAPIS-2	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/7/2016	Chromium, Total	0.0034	0.006	0.0022	50000	mg/L
NAPIS-2	6/7/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-2	6/7/2016	Iron, Total	5.6	0.2	0.072	13822000	mg/L
NAPIS-2	6/7/2016	Mercury, Total	0.00008	0.0002	0.000053	2000	mg/L
NAPIS-2	6/7/2016	Potassium, Total	0.7	1	0.18	NA	mg/L
NAPIS-2	6/7/2016	Magnesium, Total	17	1	0.013	NA	mg/L
NAPIS-2	6/7/2016	Manganese, Total	1.2	0.01	0.0076	2017000	mg/L
NAPIS-2	6/7/2016	Sodium, Total	430	5	0.48	NA	mg/L
NAPIS-2	6/7/2016	Lead, Total	0.0053	0.0005	0.000047	15000	mg/L
NAPIS-2	6/7/2016	Selenium, Total	0.0059	0.02	0.0025	50000	mg/L
NAPIS-2	6/7/2016	Uranium, Total	0.0015	0.0005	0.0000049	30000	mg/L
NAPIS-2	6/7/2016	Zinc, Total	0.022	0.01	0.0039	5960000	mg/L
NAPIS-2	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	9/1/2016	Arsenic, Total	0.0087	0.01	0.0021	10000	mg/L
NAPIS-2	9/1/2016	Barium, Total	2	0.01	0.004	2000000	mg/L
NAPIS-2	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	9/1/2016	Chromium, Total	0.011	0.006	0.0027	50000	mg/L
NAPIS-2	9/1/2016	Copper, Total	0.01	0.006	0.003	790000	mg/L
NAPIS-2	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-2	9/1/2016	Arsenic, Dissolved	0.0075	0.001	0.00014	10000	mg/L
NAPIS-2	9/1/2016	Barium, Dissolved	1.4	0.01	0.0066	2000000	mg/L
NAPIS-2	9/1/2016	Calcium, Dissolved	82	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-2	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-2	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-2	9/1/2016	Iron, Dissolved	1.6	0.1	0.1	13821880	mg/L
NAPIS-2	9/1/2016	Potassium, Dissolved	ND	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Magnesium, Dissolved	15	1	0.5	NA	mg/L
NAPIS-2	9/1/2016	Manganese, Dissolved	1.1	0.01	0.0016	2017400	mg/L
NAPIS-2	9/1/2016	Sodium, Dissolved	370	5	2.5	NA	mg/L
NAPIS-2	9/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	9/1/2016	Selenium, Dissolved	0.0066	0.02	0.0042	50000	mg/L
NAPIS-2	9/1/2016	Uranium, Dissolved	0.00031	0.0025	0.00026	NA	mg/L
NAPIS-2	9/1/2016	Zinc, Dissolved	0.17	0.01	0.0028	5960450	mg/L
NAPIS-2	9/1/2016	Iron, Total	7.8	0.2	0.2	13822000	mg/L
NAPIS-2	9/1/2016	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
NAPIS-2	9/1/2016	Lead, Total	0.0081	0.0005	0.000081	15000	mg/L
NAPIS-2	9/1/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
NAPIS-2	9/1/2016	Uranium, Total	0.0013	0.0005	0.00017	30000	mg/L
NAPIS-2	9/1/2016	Zinc, Total	0.057	0.01	0.0027	5960000	mg/L
NAPIS-2	11/14/2016	Silver, Total	0.0017	0.005	0.0015	50000	mg/L
NAPIS-2	11/14/2016	Arsenic, Total	0.0084	0.005	0.0011	10000	mg/L
NAPIS-2	11/14/2016	Barium, Total	1.9	0.02	0.0079	2000000	mg/L
NAPIS-2	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	11/14/2016	Chromium, Total	0.0069	0.006	0.0027	50000	mg/L
NAPIS-2	11/14/2016	Copper, Total	0.0071	0.006	0.003	790000	mg/L
NAPIS-2	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-2	11/14/2016	Arsenic, Dissolved	0.0085	0.005	0.00069	10000	mg/L
NAPIS-2	11/14/2016	Barium, Dissolved	1.5	0.01	0.0066	2000000	mg/L
NAPIS-2	11/14/2016	Calcium, Dissolved	77	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-2	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-2	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-2	11/14/2016	Iron, Dissolved	1.5	0.1	0.1	13821880	mg/L
NAPIS-2	11/14/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Magnesium, Dissolved	16	1	0.5	NA	mg/L
NAPIS-2	11/14/2016	Manganese, Dissolved	1.1	0.01	0.0016	2017400	mg/L
NAPIS-2	11/14/2016	Sodium, Dissolved	380	5	2.5	NA	mg/L
NAPIS-2	11/14/2016	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
NAPIS-2	11/14/2016	Selenium, Dissolved	0.0078	0.02	0.0042	50000	mg/L
NAPIS-2	11/14/2016	Uranium, Dissolved	0.00051	0.0005	0.000051	NA	mg/L
NAPIS-2	11/14/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
NAPIS-2	11/14/2016	Iron, Total	5.5	0.2	0.2	13822000	mg/L
NAPIS-2	11/14/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
NAPIS-2	11/14/2016	Manganese, Total	1.3	0.02	0.0027	2017000	mg/L
NAPIS-2	11/14/2016	Lead, Total	0.007	0.0005	0.000081	15000	mg/L
NAPIS-2	11/14/2016	Selenium, Total	0.005	0.02	0.0037	50000	mg/L
NAPIS-2	11/14/2016	Uranium, Total	0.00085	0.0005	0.00017	30000	mg/L
NAPIS-2	11/14/2016	Zinc, Total	0.03	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-2	2/21/2017	Arsenic, Total	0.008	0.02	0.0042	10000	mg/L
NAPIS-2	2/21/2017	Barium, Total	1.8	0.01	0.004	2000000	mg/L
NAPIS-2	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-2	2/21/2017	Chromium, Total	0.0062	0.006	0.0027	50000	mg/L
NAPIS-2	2/21/2017	Copper, Total	0.0043	0.006	0.003	790000	mg/L
NAPIS-2	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-2	2/21/2017	Arsenic, Dissolved	0.0053	0.01	0.0014	10000	mg/L
NAPIS-2	2/21/2017	Barium, Dissolved	1.4	0.01	0.0043	2000000	mg/L
NAPIS-2	2/21/2017	Calcium, Dissolved	76	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-2	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	2/21/2017	Iron, Dissolved	0.88	0.02	0.02	13821880	mg/L
NAPIS-2	2/21/2017	Potassium, Dissolved	0.68	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Magnesium, Dissolved	15	1	0.5	NA	mg/L
NAPIS-2	2/21/2017	Manganese, Dissolved	0.97	0.002	0.00038	2017400	mg/L
NAPIS-2	2/21/2017	Sodium, Dissolved	360	5	2.5	NA	mg/L
NAPIS-2	2/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	2/21/2017	Selenium, Dissolved	0.0047	0.01	0.0021	50000	mg/L
NAPIS-2	2/21/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
NAPIS-2	2/21/2017	Iron, Total	4	0.1	0.1	13822000	mg/L
NAPIS-2	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
NAPIS-2	2/21/2017	Manganese, Total	0.96	0.01	0.0014	2017000	mg/L
NAPIS-2	2/21/2017	Lead, Total	0.0038	0.0005	0.000081	15000	mg/L
NAPIS-2	2/21/2017	Selenium, Total	0.0067	0.02	0.0037	50000	mg/L
NAPIS-2	2/21/2017	Zinc, Total	0.016	0.01	0.0027	5960000	mg/L
NAPIS-2	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
NAPIS-2	6/1/2017	Arsenic, Total	0.005	0.001	0.0003	10000	mg/L
NAPIS-2	6/1/2017	Barium, Total	2.1	0.02	0.0093	2000000	mg/L
NAPIS-2	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	6/1/2017	Chromium, Total	0.0032	0.006	0.0011	50000	mg/L
NAPIS-2	6/1/2017	Copper, Total	0.0079	0.006	0.0017	790000	mg/L
NAPIS-2	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-2	6/1/2017	Arsenic, Dissolved	0.0035	0.001	0.00018	10000	mg/L
NAPIS-2	6/1/2017	Barium, Dissolved	1.9	0.02	0.0085	2000000	mg/L
NAPIS-2	6/1/2017	Calcium, Dissolved	76	20	1.6	NA	mg/L
NAPIS-2	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-2	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	6/1/2017	Iron, Dissolved	0.52	0.1	0.082	13821880	mg/L
NAPIS-2	6/1/2017	Potassium, Dissolved	0.57	5	0.56	NA	mg/L
NAPIS-2	6/1/2017	Magnesium, Dissolved	15	5	1.2	NA	mg/L
NAPIS-2	6/1/2017	Manganese, Dissolved	0.86	0.002	0.00038	2017400	mg/L
NAPIS-2	6/1/2017	Sodium, Dissolved	370	20	3.3	NA	mg/L
NAPIS-2	6/1/2017	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
NAPIS-2	6/1/2017	Selenium, Dissolved	ND	0.01	0.0039	50000	mg/L
NAPIS-2	6/1/2017	Uranium, Dissolved	0.0007	0.0005	0.00005	NA	mg/L
NAPIS-2	6/1/2017	Zinc, Dissolved	0.018	0.01	0.0011	5960450	mg/L
NAPIS-2	6/1/2017	Iron, Total	4.8	0.2	0.1	13822000	mg/L
NAPIS-2	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	6/1/2017	Manganese, Total	0.98	0.002	0.0011	2017000	mg/L
NAPIS-2	6/1/2017	Lead, Total	0.0029	0.0005	0.000095	15000	mg/L
NAPIS-2	6/1/2017	Selenium, Total	0.0024	0.001	0.00071	50000	mg/L
NAPIS-2	6/1/2017	Uranium, Total	0.00066	0.0005	0.00015	30000	mg/L
NAPIS-2	6/1/2017	Zinc, Total	0.013	0.01	0.0028	5960000	mg/L
NAPIS-2	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-2	9/5/2017	Arsenic, Total	0.0068	0.001	0.0003	10000	mg/L
NAPIS-2	9/5/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
NAPIS-2	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	9/5/2017	Chromium, Total	0.0029	0.006	0.0018	50000	mg/L
NAPIS-2	9/5/2017	Copper, Total	0.0051	0.006	0.0017	790000	mg/L
NAPIS-2	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	9/5/2017	Arsenic, Dissolved	0.0054	0.005	0.00089	10000	mg/L
NAPIS-2	9/5/2017	Barium, Dissolved	2.4	0.02	0.0085	2000000	mg/L
NAPIS-2	9/5/2017	Calcium, Dissolved	76	1	0.078	NA	mg/L
NAPIS-2	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	9/5/2017	Chromium, Dissolved	0.0017	0.006	0.0013	100000	mg/L
NAPIS-2	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Iron, Dissolved	0.56	0.02	0.016	13821880	mg/L
NAPIS-2	9/5/2017	Potassium, Dissolved	0.53	1	0.11	NA	mg/L
NAPIS-2	9/5/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
NAPIS-2	9/5/2017	Manganese, Dissolved	0.89	0.002	0.00039	2017400	mg/L
NAPIS-2	9/5/2017	Sodium, Dissolved	370	10	1.6	NA	mg/L
NAPIS-2	9/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
NAPIS-2	9/5/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
NAPIS-2	9/5/2017	Uranium, Dissolved	0.00054	0.0025	0.00025	NA	mg/L
NAPIS-2	9/5/2017	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
NAPIS-2	9/5/2017	Iron, Total	5.7	0.2	0.1	13822000	mg/L
NAPIS-2	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	9/5/2017	Manganese, Total	1.1	0.02	0.011	2017000	mg/L
NAPIS-2	9/5/2017	Lead, Total	0.0044	0.0005	0.000095	15000	mg/L
NAPIS-2	9/5/2017	Selenium, Total	0.0056	0.001	0.00071	50000	mg/L
NAPIS-2	9/5/2017	Uranium, Total	0.00056	0.0005	0.00015	30000	mg/L
NAPIS-2	9/5/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
NAPIS-2	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-2	12/4/2017	Arsenic, Total	0.0055	0.001	0.00041	10000	mg/L
NAPIS-2	12/4/2017	Barium, Total	1.9	0.01	0.005	2000000	mg/L
NAPIS-2	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	12/4/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	12/4/2017	Arsenic, Dissolved	0.0049	0.005	0.0021	10000	mg/L
NAPIS-2	12/4/2017	Barium, Dissolved	1.8	0.01	0.0049	2000000	mg/L
NAPIS-2	12/4/2017	Calcium, Dissolved	78	1	0.078	NA	mg/L
NAPIS-2	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	12/4/2017	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
NAPIS-2	12/4/2017	Potassium, Dissolved	0.34	1	0.11	NA	mg/L
NAPIS-2	12/4/2017	Magnesium, Dissolved	14	1	0.25	NA	mg/L
NAPIS-2	12/4/2017	Manganese, Dissolved	0.94	0.01	0.002	2017400	mg/L
NAPIS-2	12/4/2017	Sodium, Dissolved	340	5	0.82	NA	mg/L
NAPIS-2	12/4/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	12/4/2017	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
NAPIS-2	12/4/2017	Uranium, Dissolved	0.00017	0.0005	0.000096	NA	mg/L
NAPIS-2	12/4/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
NAPIS-2	12/4/2017	Iron, Total	2.2	0.1	0.051	13822000	mg/L
NAPIS-2	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	12/4/2017	Manganese, Total	1	0.01	0.0055	2017000	mg/L
NAPIS-2	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
NAPIS-2	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
NAPIS-2	12/4/2017	Uranium, Total	ND	0.005	0.0015	30000	mg/L
NAPIS-2	12/4/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
NAPIS-2	2/9/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
NAPIS-2	2/9/2018	Arsenic, Total	0.0056	0.001	0.00041	10000	mg/L
NAPIS-2	2/9/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
NAPIS-2	2/9/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	2/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	2/9/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
NAPIS-2	2/9/2018	Arsenic, Dissolved	0.0047	0.005	0.0021	10000	mg/L
NAPIS-2	2/9/2018	Barium, Dissolved	2	0.01	0.0049	2000000	mg/L
NAPIS-2	2/9/2018	Calcium, Dissolved	76	1	0.078	NA	mg/L
NAPIS-2	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	2/9/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	2/9/2018	Iron, Dissolved	1.6	0.1	0.082	13821880	mg/L
NAPIS-2	2/9/2018	Potassium, Dissolved	0.33	1	0.11	NA	mg/L
NAPIS-2	2/9/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
NAPIS-2	2/9/2018	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
NAPIS-2	2/9/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
NAPIS-2	2/9/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	2/9/2018	Selenium, Dissolved	0.004	0.005	0.0038	50000	mg/L
NAPIS-2	2/9/2018	Uranium, Dissolved	0.00029	0.0005	0.000096	NA	mg/L
NAPIS-2	2/9/2018	Zinc, Dissolved	0.0049	0.01	0.0021	5960450	mg/L
NAPIS-2	2/9/2018	Iron, Total	4.9	0.1	0.051	13822000	mg/L
NAPIS-2	2/9/2018	Mercury, Total	0.000073	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	2/9/2018	Manganese, Total	0.99	0.002	0.0011	2017000	mg/L
NAPIS-2	2/9/2018	Lead, Total	0.0015	0.0005	0.00023	15000	mg/L
NAPIS-2	2/9/2018	Selenium, Total	0.0044	0.001	0.00098	50000	mg/L
NAPIS-2	2/9/2018	Uranium, Total	0.0004	0.0005	0.000068	30000	mg/L
NAPIS-2	2/9/2018	Zinc, Total	0.0066	0.01	0.0033	5960000	mg/L
NAPIS-2	4/30/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
NAPIS-2	4/30/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
NAPIS-2	4/30/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
NAPIS-2	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-2	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-2	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-2	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-2	4/30/2018	Arsenic, Dissolved	0.0045	0.001	0.00042	10000	mg/L
NAPIS-2	4/30/2018	Barium, Dissolved	1.6	0.01	0.0049	2000000	mg/L
NAPIS-2	4/30/2018	Calcium, Dissolved	66	1	0.078	NA	mg/L
NAPIS-2	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-2	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-2	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-2	4/30/2018	Iron, Dissolved	1.8	0.1	0.082	13821880	mg/L
NAPIS-2	4/30/2018	Potassium, Dissolved	0.27	1	0.11	NA	mg/L
NAPIS-2	4/30/2018	Magnesium, Dissolved	13	1	0.25	NA	mg/L
NAPIS-2	4/30/2018	Manganese, Dissolved	0.91	0.002	0.00039	2017400	mg/L
NAPIS-2	4/30/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
NAPIS-2	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-2	4/30/2018	Selenium, Dissolved	0.0049	0.001	0.00076	50000	mg/L
NAPIS-2	4/30/2018	Uranium, Dissolved	0.00016	0.0005	0.000096	NA	mg/L
NAPIS-2	4/30/2018	Zinc, Dissolved	0.0054	0.01	0.0021	5960450	mg/L
NAPIS-2	4/30/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
NAPIS-2	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-2	4/30/2018	Manganese, Total	0.94	0.002	0.0011	2017000	mg/L
NAPIS-2	4/30/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
NAPIS-2	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
NAPIS-2	4/30/2018	Uranium, Total	0.00029	0.0005	0.000068	30000	mg/L
NAPIS-2	4/30/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
NAPIS-3	10/21/2019	Aluminum, Dissolved	0.033	0.02	0.002488	19913930	mg/L
NAPIS-3	10/21/2019	Antimony, Dissolved	0.00066	0.001	0.000389	6000	mg/L
NAPIS-3	10/21/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
NAPIS-3	10/21/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
NAPIS-3	10/21/2019	Beryllium, Dissolved	0.00054	0.002	0.000284	4000	mg/L
NAPIS-3	10/21/2019	Boron, Dissolved	2	0.2	0.022653	3949110	mg/L
NAPIS-3	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	10/21/2019	Calcium, Dissolved	19	1	0.061889	NA	mg/L
NAPIS-3	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
NAPIS-3	10/21/2019	Iron, Dissolved	0.02	0.02	0.008747	13821880	mg/L
NAPIS-3	10/21/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
NAPIS-3	10/21/2019	Magnesium, Dissolved	3.3	1	0.05029	NA	mg/L
NAPIS-3	10/21/2019	Manganese, Dissolved	0.061	0.002	0.00029	2017400	mg/L
NAPIS-3	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	10/21/2019	Nickel, Dissolved	0.013	0.01	0.004009	372000	mg/L
NAPIS-3	10/21/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
NAPIS-3	10/21/2019	Selenium, Dissolved	0.0048	0.001	0.000171	50000	mg/L
NAPIS-3	10/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	10/21/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
NAPIS-3	10/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	10/21/2019	Zinc, Dissolved	0.035	0.01	0.002252	5960450	mg/L
NAPIS-3	10/21/2019	Aluminum, Total	2.9	0.1	0.012441	19914000	mg/L
NAPIS-3	10/21/2019	Antimony, Total	0.001	0.001	0.000389	6000	mg/L
NAPIS-3	10/21/2019	Arsenic, Total	0.002	0.005	0.001561	10000	mg/L
NAPIS-3	10/21/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
NAPIS-3	10/21/2019	Beryllium, Total	0.0003	0.002	0.000284	4000	mg/L
NAPIS-3	10/21/2019	Boron, Total	2.2	0.2	0.022653	3949	mg/L
NAPIS-3	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	10/21/2019	Chromium, Total	0.0041	0.006	0.001533	50000	mg/L
NAPIS-3	10/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-3	10/21/2019	Copper, Total	0.008	0.006	0.004072	790000	mg/L
NAPIS-3	10/21/2019	Iron, Total	1.3	0.1	0.043734	13822000	mg/L
NAPIS-3	10/21/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	10/21/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
NAPIS-3	10/21/2019	Mercury, Total	0.000073	0.0002	0.000038	2000	mg/L
NAPIS-3	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-3	10/21/2019	Nickel, Total	0.016	0.01	0.004009	372000	mg/L
NAPIS-3	10/21/2019	Selenium, Total	0.006	0.005	0.00239	50000	mg/L
NAPIS-3	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	10/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	10/21/2019	Zinc, Total	0.036	0.01	0.005772	5960000	mg/L
NAPIS-3	8/22/2019	Aluminum, Dissolved	0.082	0.02	0.002488	19913930	mg/L
NAPIS-3	8/22/2019	Antimony, Dissolved	0.00087	0.001	0.000389	6000	mg/L
NAPIS-3	8/22/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
NAPIS-3	8/22/2019	Barium, Dissolved	0.084	0.002	0.000648	2000000	mg/L
NAPIS-3	8/22/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	8/22/2019	Boron, Dissolved	2.3	0.2	0.022653	3949110	mg/L
NAPIS-3	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	8/22/2019	Calcium, Dissolved	18	1	0.061889	NA	mg/L
NAPIS-3	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	8/22/2019	Copper, Dissolved	0.0065	0.006	0.001296	790000	mg/L
NAPIS-3	8/22/2019	Iron, Dissolved	0.039	0.02	0.008747	13821880	mg/L
NAPIS-3	8/22/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
NAPIS-3	8/22/2019	Magnesium, Dissolved	3	1	0.05029	NA	mg/L
NAPIS-3	8/22/2019	Manganese, Dissolved	0.063	0.002	0.00029	2017400	mg/L
NAPIS-3	8/22/2019	Molybdenum, Dissolved	0.007	0.008	0.006735	98700	mg/L
NAPIS-3	8/22/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
NAPIS-3	8/22/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	8/22/2019	Selenium, Dissolved	0.0025	0.001	0.000171	50000	mg/L
NAPIS-3	8/22/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	8/22/2019	Sodium, Dissolved	670	20	8.323526	NA	mg/L
NAPIS-3	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	8/22/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
NAPIS-3	8/22/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
NAPIS-3	8/22/2019	Aluminum, Total	6.4	0.2	0.024883	19914000	mg/L
NAPIS-3	8/22/2019	Antimony, Total	0.00068	0.001	0.000389	6000	mg/L
NAPIS-3	8/22/2019	Arsenic, Total	0.0021	0.001	0.000312	10000	mg/L
NAPIS-3	8/22/2019	Barium, Total	0.21	0.002	0.000648	2000000	mg/L
NAPIS-3	8/22/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
NAPIS-3	8/22/2019	Boron, Total	2.4	0.2	0.022653	3949	mg/L
NAPIS-3	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	8/22/2019	Chromium, Total	0.0073	0.006	0.001533	50000	mg/L
NAPIS-3	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
NAPIS-3	8/22/2019	Copper, Total	0.0093	0.006	0.004072	790000	mg/L
NAPIS-3	8/22/2019	Iron, Total	3.3	0.4	0.174937	13822000	mg/L
NAPIS-3	8/22/2019	Lead, Total	0.0042	0.0005	0.000055	15000	mg/L
NAPIS-3	8/22/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
NAPIS-3	8/22/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
NAPIS-3	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
NAPIS-3	8/22/2019	Nickel, Total	0.02	0.01	0.004009	372000	mg/L
NAPIS-3	8/22/2019	Selenium, Total	0.0037	0.001	0.000478	50000	mg/L
NAPIS-3	8/22/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	8/22/2019	Thallium, Total	0.000063	0.0005	0.000052	2000	mg/L
NAPIS-3	8/22/2019	Uranium, Total	0.041	0.0025	0.000424	30000	mg/L
NAPIS-3	8/22/2019	Zinc, Total	0.073	0.01	0.005772	5960000	mg/L
NAPIS-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
NAPIS-3	4/9/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	4/9/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
NAPIS-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	4/9/2019	Calcium, Dissolved	24	1	0.061889	NA	mg/L
NAPIS-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	4/9/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
NAPIS-3	4/9/2019	Iron, Dissolved	0.015	0.02	0.008747	13821880	mg/L
NAPIS-3	4/9/2019	Lead, Dissolved	0.00021	0.0005	0.000055	NA	mg/L
NAPIS-3	4/9/2019	Magnesium, Dissolved	4.2	1	0.05029	NA	mg/L
NAPIS-3	4/9/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
NAPIS-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Nickel, Dissolved	0.017	0.01	0.004009	372000	mg/L
NAPIS-3	4/9/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	4/9/2019	Selenium, Dissolved	0.0033	0.001	0.000171	50000	mg/L
NAPIS-3	4/9/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	4/9/2019	Sodium, Dissolved	590	10	4.161763	NA	mg/L
NAPIS-3	4/9/2019	Thallium, Dissolved	0.00005	0.0005	0.000048	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	4/9/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
NAPIS-3	4/9/2019	Aluminum, Total	0.26	0.02	0.001051	19914000	mg/L
NAPIS-3	4/9/2019	Antimony, Total	0.00016	0.001	0.000157	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Total	0.0013	0.001	0.000312	10000	mg/L
NAPIS-3	4/9/2019	Barium, Total	0.12	0.002	0.000488	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
NAPIS-3	4/9/2019	Boron, Total	1.6	0.2	0.009104	3949	mg/L
NAPIS-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
NAPIS-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
NAPIS-3	4/9/2019	Copper, Total	0.0047	0.006	0.004072	790000	mg/L
NAPIS-3	4/9/2019	Iron, Total	0.19	0.02	0.006053	13822000	mg/L
NAPIS-3	4/9/2019	Lead, Total	0.00045	0.0005	0.000026	15000	mg/L
NAPIS-3	4/9/2019	Manganese, Total	0.21	0.002	0.00006	2017000	mg/L
NAPIS-3	4/9/2019	Molybdenum, Total	0.004	0.008	0.002075	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Total	0.018	0.01	0.001491	372000	mg/L
NAPIS-3	4/9/2019	Selenium, Total	0.0045	0.001	0.000478	50000	mg/L
NAPIS-3	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Total	0.023	0.0005	0.000085	30000	mg/L
NAPIS-3	4/9/2019	Zinc, Total	0.0098	0.01	0.005772	5960000	mg/L
NAPIS-3	4/9/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
NAPIS-3	4/9/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Dissolved	0.0011	0.001	0.000101	10000	mg/L
NAPIS-3	4/9/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	4/9/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
NAPIS-3	4/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	4/9/2019	Calcium, Dissolved	25	1	0.061889	NA	mg/L
NAPIS-3	4/9/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	4/9/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	4/9/2019	Copper, Dissolved	0.0073	0.006	0.001296	790000	mg/L
NAPIS-3	4/9/2019	Iron, Dissolved	0.013	0.02	0.008747	13821880	mg/L
NAPIS-3	4/9/2019	Lead, Dissolved	0.00019	0.0005	0.000055	NA	mg/L
NAPIS-3	4/9/2019	Magnesium, Dissolved	4.4	1	0.05029	NA	mg/L
NAPIS-3	4/9/2019	Manganese, Dissolved	0.17	0.002	0.00029	2017400	mg/L
NAPIS-3	4/9/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Dissolved	0.018	0.01	0.004009	372000	mg/L
NAPIS-3	4/9/2019	Potassium, Dissolved	2.3	1	0.162288	NA	mg/L
NAPIS-3	4/9/2019	Selenium, Dissolved	0.0037	0.001	0.000171	50000	mg/L
NAPIS-3	4/9/2019	Silver, Dissolved	0.0013	0.005	0.000942	81200	mg/L
NAPIS-3	4/9/2019	Sodium, Dissolved	620	10	4.161763	NA	mg/L
NAPIS-3	4/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	4/9/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
NAPIS-3	4/9/2019	Aluminum, Total	0.14	0.02	0.001051	19914000	mg/L
NAPIS-3	4/9/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
NAPIS-3	4/9/2019	Arsenic, Total	0.0012	0.001	0.000312	10000	mg/L
NAPIS-3	4/9/2019	Barium, Total	0.11	0.002	0.000488	2000000	mg/L
NAPIS-3	4/9/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
NAPIS-3	4/9/2019	Boron, Total	1.6	0.2	0.009104	3949	mg/L
NAPIS-3	4/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	4/9/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
NAPIS-3	4/9/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
NAPIS-3	4/9/2019	Copper, Total	0.0042	0.006	0.004072	790000	mg/L
NAPIS-3	4/9/2019	Iron, Total	0.096	0.02	0.006053	13822000	mg/L
NAPIS-3	4/9/2019	Lead, Total	0.00032	0.0005	0.000026	15000	mg/L
NAPIS-3	4/9/2019	Manganese, Total	0.19	0.002	0.00006	2017000	mg/L
NAPIS-3	4/9/2019	Molybdenum, Total	0.0036	0.008	0.002075	98700	mg/L
NAPIS-3	4/9/2019	Nickel, Total	0.016	0.01	0.001491	372000	mg/L
NAPIS-3	4/9/2019	Selenium, Total	0.004	0.001	0.000478	50000	mg/L
NAPIS-3	4/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/9/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	4/9/2019	Uranium, Total	0.023	0.0005	0.000085	30000	mg/L
NAPIS-3	4/9/2019	Zinc, Total	0.017	0.01	0.005772	5960000	mg/L
NAPIS-3	5/28/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
NAPIS-3	5/28/2019	Antimony, Dissolved	0.00078	0.001	0.000389	6000	mg/L
NAPIS-3	5/28/2019	Arsenic, Dissolved	0.0014	0.001	0.000101	10000	mg/L
NAPIS-3	5/28/2019	Barium, Dissolved	0.094	0.002	0.000648	2000000	mg/L
NAPIS-3	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
NAPIS-3	5/28/2019	Boron, Dissolved	1.9	0.2	0.022653	3949110	mg/L
NAPIS-3	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
NAPIS-3	5/28/2019	Calcium, Dissolved	21	1	0.061889	NA	mg/L
NAPIS-3	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
NAPIS-3	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
NAPIS-3	5/28/2019	Copper, Dissolved	0.0022	0.006	0.001296	790000	mg/L
NAPIS-3	5/28/2019	Iron, Dissolved	0.069	0.02	0.008747	13821880	mg/L
NAPIS-3	5/28/2019	Lead, Dissolved	0.00033	0.0005	0.000055	NA	mg/L
NAPIS-3	5/28/2019	Magnesium, Dissolved	3.5	1	0.05029	NA	mg/L
NAPIS-3	5/28/2019	Manganese, Dissolved	0.054	0.002	0.00029	2017400	mg/L
NAPIS-3	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
NAPIS-3	5/28/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
NAPIS-3	5/28/2019	Potassium, Dissolved	2.1	1	0.162288	NA	mg/L
NAPIS-3	5/28/2019	Selenium, Dissolved	0.0032	0.001	0.000171	50000	mg/L
NAPIS-3	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
NAPIS-3	5/28/2019	Sodium, Dissolved	620	10	4.161763	NA	mg/L
NAPIS-3	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	5/28/2019	Uranium, Dissolved	0.033	0.0025	0.000374	NA	mg/L
NAPIS-3	5/28/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
NAPIS-3	5/28/2019	Aluminum, Total	9	0.4	0.049765	19914000	mg/L
NAPIS-3	5/28/2019	Antimony, Total	0.00075	0.001	0.000389	6000	mg/L
NAPIS-3	5/28/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
NAPIS-3	5/28/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
NAPIS-3	5/28/2019	Beryllium, Total	0.00064	0.002	0.000284	4000	mg/L
NAPIS-3	5/28/2019	Boron, Total	2.1	0.2	0.022653	3949	mg/L
NAPIS-3	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
NAPIS-3	5/28/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
NAPIS-3	5/28/2019	Cobalt, Total	0.0031	0.006	0.003091	5980	mg/L
NAPIS-3	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
NAPIS-3	5/28/2019	Iron, Total	4.4	0.1	0.043734	13822000	mg/L
NAPIS-3	5/28/2019	Lead, Total	0.0052	0.0005	0.000055	15000	mg/L
NAPIS-3	5/28/2019	Manganese, Total	0.23	0.002	0.00029	2017000	mg/L
NAPIS-3	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
NAPIS-3	5/28/2019	Molybdenum, Total	0.013	0.008	0.006735	98700	mg/L
NAPIS-3	5/28/2019	Nickel, Total	0.019	0.01	0.004009	372000	mg/L
NAPIS-3	5/28/2019	Selenium, Total	0.0027	0.001	0.000478	50000	mg/L
NAPIS-3	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
NAPIS-3	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	5/28/2019	Uranium, Total	0.037	0.0025	0.000424	30000	mg/L
NAPIS-3	5/28/2019	Zinc, Total	0.087	0.01	0.005772	5960000	mg/L
NAPIS-3	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
NAPIS-3	3/4/2020	Lead, Dissolved	0.00023	0.0005	0.000055	NA	mg/L
NAPIS-3	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
NAPIS-3	3/4/2020	Uranium, Dissolved	0.022	0.0005	0.000075	NA	mg/L
NAPIS-3	3/4/2020	Arsenic, Dissolved	0.0012	0.005	0.0005	10000	mg/L
NAPIS-3	3/4/2020	Selenium, Dissolved	0.0036	0.005	0.00086	50000	mg/L
NAPIS-3	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
NAPIS-3	3/4/2020	Barium, Dissolved	0.092	0.002	0.00065	2000000	mg/L
NAPIS-3	3/4/2020	Beryllium, Dissolved	0.00033	0.002	0.00028	4000	mg/L
NAPIS-3	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
NAPIS-3	3/4/2020	Calcium, Dissolved	25	1	0.062	NA	mg/L
NAPIS-3	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
NAPIS-3	3/4/2020	Copper, Dissolved	0.0032	0.006	0.0013	790000	mg/L
NAPIS-3	3/4/2020	Magnesium, Dissolved	4.6	1	0.05	NA	mg/L
NAPIS-3	3/4/2020	Nickel, Dissolved	0.014	0.01	0.004	372000	mg/L
NAPIS-3	3/4/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
NAPIS-3	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
NAPIS-3	3/4/2020	Boron, Dissolved	1.5	0.2	0.023	3949110	mg/L
NAPIS-3	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
NAPIS-3	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
NAPIS-3	3/4/2020	Manganese, Dissolved	0.19	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
NAPIS-3	3/4/2020	Zinc, Dissolved	0.019	0.01	0.0023	5960450	mg/L
NAPIS-3	3/4/2020	Sodium, Dissolved	610	10	4.2	NA	mg/L
NAPIS-3	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
NAPIS-3	3/4/2020	Arsenic, Total	0.0012	0.001	0.00031	10000	mg/L
NAPIS-3	3/4/2020	Lead, Total	0.00029	0.0005	0.000055	15000	mg/L
NAPIS-3	3/4/2020	Selenium, Total	0.0028	0.001	0.00048	50000	mg/L
NAPIS-3	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
NAPIS-3	3/4/2020	Uranium, Total	0.022	0.0005	0.000085	30000	mg/L
NAPIS-3	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-3	3/4/2020	Barium, Total	0.11	0.002	0.00065	2000000	mg/L
NAPIS-3	3/4/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
NAPIS-3	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
NAPIS-3	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
NAPIS-3	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
NAPIS-3	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	3/4/2020	Iron, Total	0.037	0.02	0.0087	13822000	mg/L
NAPIS-3	3/4/2020	Manganese, Total	0.22	0.002	0.00029	2017000	mg/L
NAPIS-3	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
NAPIS-3	3/4/2020	Nickel, Total	0.018	0.01	0.004	372000	mg/L
NAPIS-3	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
NAPIS-3	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
NAPIS-3	3/4/2020	Boron, Total	1.7	0.4	0.045	3949	mg/L
NAPIS-3	3/4/2020	Aluminum, Total	0.028	0.02	0.0025	19914000	mg/L
NAPIS-3	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
NAPIS-3	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
NAPIS-3	12/17/2020	Arsenic, Total Recoverable	4.22	1	0.286	10	ug/L
NAPIS-3	12/17/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
NAPIS-3	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
NAPIS-3	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
NAPIS-3	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
NAPIS-3	12/17/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
NAPIS-3	12/17/2020	Arsenic, Dissolved	3.07	1	0.286	10	ug/L
NAPIS-3	12/17/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
NAPIS-3	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
NAPIS-3	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
NAPIS-3	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
NAPIS-3	12/17/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
NAPIS-3	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
NAPIS-3	12/17/2020	Aluminum, Total	0.364	0.2	0.051	19914000	mg/L
NAPIS-3	12/17/2020	Calcium, Total	108	0.5	0.084	NA	mg/L
NAPIS-3	12/17/2020	Boron, Total	0.676	0.1	0.022	3949	mg/L
NAPIS-3	12/17/2020	Barium, Total	2.23	0.01	0.003	2000000	mg/L
NAPIS-3	12/17/2020	Potassium, Total	ND	1	0.34	NA	mg/L
NAPIS-3	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
NAPIS-3	12/17/2020	Magnesium, Total	19.1	0.5	0.12	NA	mg/L
NAPIS-3	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
NAPIS-3	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
NAPIS-3	12/17/2020	Sodium, Total	339	2	0.92	NA	mg/L
NAPIS-3	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
NAPIS-3	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
NAPIS-3	12/17/2020	Iron, Total	2.05	0.2	0.075	13822000	mg/L
NAPIS-3	12/17/2020	Manganese, Total	1.61	0.01	0.003	2017000	mg/L
NAPIS-3	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
NAPIS-3	12/17/2020	Nickel, Total	0.0226	0.006	0.003	372000	mg/L
NAPIS-3	12/17/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
NAPIS-3	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
NAPIS-3	12/17/2020	Barium, Dissolved	2.17	0.01	0.003	2000000	mg/L
NAPIS-3	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
NAPIS-3	12/17/2020	Boron, Dissolved	0.688	0.1	0.022	3949110	mg/L
NAPIS-3	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
NAPIS-3	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
NAPIS-3	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
NAPIS-3	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
NAPIS-3	12/17/2020	Iron, Dissolved	0.329	0.2	0.075	13821880	mg/L
NAPIS-3	12/17/2020	Manganese, Dissolved	1.55	0.01	0.003	2017400	mg/L
NAPIS-3	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
NAPIS-3	12/17/2020	Nickel, Dissolved	0.0362	0.006	0.003	372000	mg/L
NAPIS-3	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/17/2020	Zinc, Dissolved	0.0641	0.02	0.008	5960450	mg/L
NAPIS-3	9/22/2020	Arsenic, Dissolved	0.0009	0.001	0.00021	10000	mg/L
NAPIS-3	9/22/2020	Lead, Dissolved	0.00019	0.0005	0.000034	NA	mg/L
NAPIS-3	9/22/2020	Selenium, Dissolved	0.0013	0.001	0.00066	50000	mg/L
NAPIS-3	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
NAPIS-3	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
NAPIS-3	9/22/2020	Uranium, Dissolved	0.022	0.0025	0.00033	NA	mg/L
NAPIS-3	9/22/2020	Boron, Dissolved	1.3	0.2	0.033	3949110	mg/L
NAPIS-3	9/22/2020	Sodium, Dissolved	540	50	6.9	NA	mg/L
NAPIS-3	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
NAPIS-3	9/22/2020	Barium, Dissolved	0.094	0.002	0.0011	2000000	mg/L
NAPIS-3	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
NAPIS-3	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
NAPIS-3	9/22/2020	Calcium, Dissolved	22	1	0.11	NA	mg/L
NAPIS-3	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
NAPIS-3	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
NAPIS-3	9/22/2020	Iron, Dissolved	0.03	0.02	0.01	13821880	mg/L
NAPIS-3	9/22/2020	Magnesium, Dissolved	4	1	0.067	NA	mg/L
NAPIS-3	9/22/2020	Manganese, Dissolved	0.26	0.002	0.00058	2017400	mg/L
NAPIS-3	9/22/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
NAPIS-3	9/22/2020	Nickel, Dissolved	0.019	0.01	0.0033	372000	mg/L
NAPIS-3	9/22/2020	Potassium, Dissolved	2.1	1	0.16	NA	mg/L
NAPIS-3	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
NAPIS-3	9/22/2020	Zinc, Dissolved	0.0092	0.01	0.006	5960450	mg/L
NAPIS-3	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
NAPIS-3	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
NAPIS-3	9/22/2020	Arsenic, Total	0.00063	0.001	0.00026	10000	mg/L
NAPIS-3	9/22/2020	Lead, Total	0.00043	0.0005	0.000034	15000	mg/L
NAPIS-3	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
NAPIS-3	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
NAPIS-3	9/22/2020	Aluminum, Total	0.19	0.02	0.0074	19914000	mg/L
NAPIS-3	9/22/2020	Barium, Total	0.1	0.003	0.0016	2000000	mg/L
NAPIS-3	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
NAPIS-3	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-3	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
NAPIS-3	9/22/2020	Iron, Total	0.32	0.05	0.013	13822000	mg/L
NAPIS-3	9/22/2020	Manganese, Total	0.25	0.002	0.00081	2017000	mg/L
NAPIS-3	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
NAPIS-3	9/22/2020	Zinc, Total	0.008	0.01	0.0064	5960000	mg/L
NAPIS-3	9/22/2020	Copper, Total	0.0048	0.006	0.0047	790000	mg/L
NAPIS-3	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
NAPIS-3	9/22/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
NAPIS-3	9/22/2020	Nickel, Total	0.02	0.01	0.0033	372000	mg/L
NAPIS-3	9/22/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
NAPIS-3	9/22/2020	Uranium, Total	0.02	0.0025	0.00033	30000	mg/L
NAPIS-3	3/20/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
NAPIS-3	3/20/2012	Arsenic, Total	0.006	0.0025	0.0014	10000	mg/L
NAPIS-3	3/20/2012	Barium, Total	0.16	0.002	0.0006	2000000	mg/L
NAPIS-3	3/20/2012	Calcium, Total	40	1	0.026	NA	mg/L
NAPIS-3	3/20/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
NAPIS-3	3/20/2012	Chromium, Total	0.017	0.006	0.001	50000	mg/L
NAPIS-3	3/20/2012	Copper, Total	0.0083	0.006	0.00066	790000	mg/L
NAPIS-3	3/20/2012	Iron, Total	5.5	0.2	0.13	13822000	mg/L
NAPIS-3	3/20/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	3/20/2012	Potassium, Total	3.9	1	0.48	NA	mg/L
NAPIS-3	3/20/2012	Magnesium, Total	6.4	1	0.013	NA	mg/L
NAPIS-3	3/20/2012	Manganese, Total	0.12	0.002	0.00012	2017000	mg/L
NAPIS-3	3/20/2012	Sodium, Total	920	10	0.45	NA	mg/L
NAPIS-3	3/20/2012	Lead, Total	0.0082	0.005	0.0014	15000	mg/L
NAPIS-3	3/20/2012	Selenium, Total	0.017	0.0025	0.0025	50000	mg/L
NAPIS-3	3/20/2012	Uranium, Total	0.038	0.0025	0.00003	30000	mg/L
NAPIS-3	3/20/2012	Zinc, Total	0.22	0.01	0.0011	5960000	mg/L
NAPIS-3	6/12/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	6/12/2012	Arsenic, Total	0.0051	0.0025	0.0014	10000	mg/L
NAPIS-3	6/12/2012	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
NAPIS-3	6/12/2012	Calcium, Total	37	1	0.026	NA	mg/L
NAPIS-3	6/12/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	6/12/2012	Chromium, Total	0.0075	0.006	0.001	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	6/12/2012	Iron, Total	2.4	0.1	0.066	13822000	mg/L
NAPIS-3	6/12/2012	Mercury, Total	ND	0.001	0.00012	2000	mg/L
NAPIS-3	6/12/2012	Potassium, Total	3.7	1	0.48	NA	mg/L
NAPIS-3	6/12/2012	Magnesium, Total	6.2	1	0.013	NA	mg/L
NAPIS-3	6/12/2012	Manganese, Total	0.082	0.002	0.00026	2017000	mg/L
NAPIS-3	6/12/2012	Sodium, Total	870	10	0.45	NA	mg/L
NAPIS-3	6/12/2012	Lead, Total	0.0052	0.005	0.0014	15000	mg/L
NAPIS-3	6/12/2012	Selenium, Total	0.017	0.0025	0.0025	50000	mg/L
NAPIS-3	6/12/2012	Uranium, Total	0.041	0.0025	0.00003	30000	mg/L
NAPIS-3	6/12/2012	Zinc, Total	0.057	0.01	0.0011	5960000	mg/L
NAPIS-3	10/2/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
NAPIS-3	10/2/2012	Arsenic, Total	0.004	0.001	0.00011	10000	mg/L
NAPIS-3	10/2/2012	Barium, Total	0.11	0.002	0.00031	2000000	mg/L
NAPIS-3	10/2/2012	Calcium, Total	51	1	0.026	NA	mg/L
NAPIS-3	10/2/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
NAPIS-3	10/2/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
NAPIS-3	10/2/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
NAPIS-3	10/2/2012	Iron, Total	3.2	0.1	0.0096	13822000	mg/L
NAPIS-3	10/2/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	10/2/2012	Potassium, Total	4	1	0.48	NA	mg/L
NAPIS-3	10/2/2012	Magnesium, Total	7.5	1	0.013	NA	mg/L
NAPIS-3	10/2/2012	Manganese, Total	0.14	0.002	0.00062	2017000	mg/L
NAPIS-3	10/2/2012	Sodium, Total	890	10	0.45	NA	mg/L
NAPIS-3	10/2/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
NAPIS-3	10/2/2012	Selenium, Total	0.013	0.001	0.00033	50000	mg/L
NAPIS-3	10/2/2012	Uranium, Total	0.038	0.001	0.00006	30000	mg/L
NAPIS-3	10/2/2012	Zinc, Total	0.035	0.01	0.00062	5960000	mg/L
NAPIS-3	11/28/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	11/28/2012	Arsenic, Total	0.0048	0.0025	0.0014	10000	mg/L
NAPIS-3	11/28/2012	Barium, Total	0.57	0.002	0.00039	2000000	mg/L
NAPIS-3	11/28/2012	Calcium, Total	84	1	0.026	NA	mg/L
NAPIS-3	11/28/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	11/28/2012	Chromium, Total	0.018	0.006	0.001	50000	mg/L
NAPIS-3	11/28/2012	Copper, Total	0.018	0.006	0.0041	790000	mg/L
NAPIS-3	11/28/2012	Iron, Total	9.9	0.2	0.13	13822000	mg/L
NAPIS-3	11/28/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
NAPIS-3	11/28/2012	Potassium, Total	4.9	1	0.48	NA	mg/L
NAPIS-3	11/28/2012	Magnesium, Total	11	1	0.013	NA	mg/L
NAPIS-3	11/28/2012	Manganese, Total	0.46	0.002	0.00026	2017000	mg/L
NAPIS-3	11/28/2012	Sodium, Total	930	20	0.89	NA	mg/L
NAPIS-3	11/28/2012	Lead, Total	0.01	0.001	0.00002	15000	mg/L
NAPIS-3	11/28/2012	Selenium, Total	0.0097	0.0025	0.0025	50000	mg/L
NAPIS-3	11/28/2012	Uranium, Total	0.04	0.0025	0.00003	30000	mg/L
NAPIS-3	11/28/2012	Zinc, Total	0.12	0.01	0.0011	5960000	mg/L
NAPIS-3	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
NAPIS-3	3/18/2013	Arsenic, Total	0.016	0.0025	0.00042	10000	mg/L
NAPIS-3	3/18/2013	Barium, Total	3.8	0.02	0.0039	2000000	mg/L
NAPIS-3	3/18/2013	Calcium, Total	48	1	0.069	NA	mg/L
NAPIS-3	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
NAPIS-3	3/18/2013	Chromium, Total	0.13	0.006	0.001	50000	mg/L
NAPIS-3	3/18/2013	Copper, Total	0.16	0.006	0.0041	790000	mg/L
NAPIS-3	3/18/2013	Iron, Total	62	2	1.3	13822000	mg/L
NAPIS-3	3/18/2013	Mercury, Total	0.0016	0.0002	0.000089	2000	mg/L
NAPIS-3	3/18/2013	Potassium, Total	5.4	1	0.39	NA	mg/L
NAPIS-3	3/18/2013	Magnesium, Total	7.8	1	0.028	NA	mg/L
NAPIS-3	3/18/2013	Manganese, Total	3.8	0.01	0.0013	2017000	mg/L
NAPIS-3	3/18/2013	Sodium, Total	810	10	2.2	NA	mg/L
NAPIS-3	3/18/2013	Lead, Total	0.097	0.025	0.0072	15000	mg/L
NAPIS-3	3/18/2013	Selenium, Total	0.0089	0.0025	0.00066	50000	mg/L
NAPIS-3	3/18/2013	Uranium, Total	0.052	0.0025	0.0012	30000	mg/L
NAPIS-3	3/18/2013	Zinc, Total	1.1	0.05	0.0057	5960000	mg/L
NAPIS-3	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
NAPIS-3	6/12/2013	Arsenic, Total	0.0064	0.001	0.00027	10000	mg/L
NAPIS-3	6/12/2013	Barium, Total	0.85	0.002	0.00057	2000000	mg/L
NAPIS-3	6/12/2013	Calcium, Total	48	1	0.069	NA	mg/L
NAPIS-3	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
NAPIS-3	6/12/2013	Chromium, Total	0.036	0.006	0.0021	50000	mg/L
NAPIS-3	6/12/2013	Copper, Total	0.03	0.006	0.005	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2013	Iron, Total	15	0.4	0.1	13822000	mg/L
NAPIS-3	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	6/12/2013	Potassium, Total	5.4	1	0.24	NA	mg/L
NAPIS-3	6/12/2013	Magnesium, Total	6.7	1	0.028	NA	mg/L
NAPIS-3	6/12/2013	Manganese, Total	0.57	0.002	0.00052	2017000	mg/L
NAPIS-3	6/12/2013	Sodium, Total	900	20	6.5	NA	mg/L
NAPIS-3	6/12/2013	Lead, Total	0.0014	0.001	0.0000075	15000	mg/L
NAPIS-3	6/12/2013	Selenium, Total	0.016	0.001	0.00049	50000	mg/L
NAPIS-3	6/12/2013	Uranium, Total	0.039	0.001	0.0005	30000	mg/L
NAPIS-3	6/12/2013	Zinc, Total	0.26	0.01	0.0011	5960000	mg/L
NAPIS-3	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-3	9/3/2013	Arsenic, Total	0.0063	0.001	0.000098	10000	mg/L
NAPIS-3	9/3/2013	Barium, Total	0.058	0.002	0.00095	2000000	mg/L
NAPIS-3	9/3/2013	Calcium, Total	43	1	0.069	NA	mg/L
NAPIS-3	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-3	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-3	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-3	9/3/2013	Iron, Total	0.17	0.02	0.0089	13822000	mg/L
NAPIS-3	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	9/3/2013	Potassium, Total	2.9	1	0.24	NA	mg/L
NAPIS-3	9/3/2013	Magnesium, Total	6.8	1	0.028	NA	mg/L
NAPIS-3	9/3/2013	Manganese, Total	0.0075	0.002	0.00016	2017000	mg/L
NAPIS-3	9/3/2013	Sodium, Total	950	20	6.5	NA	mg/L
NAPIS-3	9/3/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	9/3/2013	Selenium, Total	0.023	0.01	0.0029	50000	mg/L
NAPIS-3	9/3/2013	Uranium, Total	0.041	0.001	0.0000073	30000	mg/L
NAPIS-3	9/3/2013	Zinc, Total	0.028	0.01	0.00076	5960000	mg/L
NAPIS-3	11/12/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
NAPIS-3	11/12/2013	Arsenic, Total	0.0076	0.001	0.000098	10000	mg/L
NAPIS-3	11/12/2013	Barium, Total	0.055	0.002	0.00095	2000000	mg/L
NAPIS-3	11/12/2013	Calcium, Total	37	1	0.069	NA	mg/L
NAPIS-3	11/12/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
NAPIS-3	11/12/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
NAPIS-3	11/12/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
NAPIS-3	11/12/2013	Iron, Total	0.15	0.02	0.0089	13822000	mg/L
NAPIS-3	11/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
NAPIS-3	11/12/2013	Potassium, Total	4.5	1	0.24	NA	mg/L
NAPIS-3	11/12/2013	Magnesium, Total	5.8	1	0.028	NA	mg/L
NAPIS-3	11/12/2013	Manganese, Total	0.0047	0.002	0.00016	2017000	mg/L
NAPIS-3	11/12/2013	Sodium, Total	820	10	3.3	NA	mg/L
NAPIS-3	11/12/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	11/12/2013	Selenium, Total	0.029	0.001	0.00029	50000	mg/L
NAPIS-3	11/12/2013	Uranium, Total	0.036	0.001	0.0000073	30000	mg/L
NAPIS-3	11/12/2013	Zinc, Total	0.024	0.01	0.00076	5960000	mg/L
NAPIS-3	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-3	3/10/2014	Arsenic, Total	ND	0.01	0.00098	10000	mg/L
NAPIS-3	3/10/2014	Barium, Total	0.053	0.002	0.0011	2000000	mg/L
NAPIS-3	3/10/2014	Calcium, Total	40	1	0.082	NA	mg/L
NAPIS-3	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
NAPIS-3	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-3	3/10/2014	Iron, Total	0.24	0.02	0.0062	13822000	mg/L
NAPIS-3	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	3/10/2014	Potassium, Total	3.5	1	0.093	NA	mg/L
NAPIS-3	3/10/2014	Magnesium, Total	6.5	1	0.018	NA	mg/L
NAPIS-3	3/10/2014	Manganese, Total	0.0073	0.002	0.00055	2017000	mg/L
NAPIS-3	3/10/2014	Sodium, Total	890	10	3.9	NA	mg/L
NAPIS-3	3/10/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
NAPIS-3	3/10/2014	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
NAPIS-3	3/10/2014	Uranium, Total	0.039	0.001	0.0000073	30000	mg/L
NAPIS-3	3/10/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
NAPIS-3	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
NAPIS-3	6/5/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
NAPIS-3	6/5/2014	Barium, Total	0.094	0.002	0.0011	2000000	mg/L
NAPIS-3	6/5/2014	Calcium, Total	55	1	0.053	NA	mg/L
NAPIS-3	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	6/5/2014	Chromium, Total	0.0073	0.006	0.0021	50000	mg/L
NAPIS-3	6/5/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
NAPIS-3	6/5/2014	Iron, Total	2.6	0.1	0.031	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	6/5/2014	Potassium, Total	9.8	1	0.24	NA	mg/L
NAPIS-3	6/5/2014	Magnesium, Total	9	1	0.024	NA	mg/L
NAPIS-3	6/5/2014	Manganese, Total	0.058	0.002	0.00055	2017000	mg/L
NAPIS-3	6/5/2014	Sodium, Total	920	10	2.5	NA	mg/L
NAPIS-3	6/5/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
NAPIS-3	6/5/2014	Selenium, Total	0.045	0.01	0.0015	50000	mg/L
NAPIS-3	6/5/2014	Uranium, Total	0.034	0.01	0.0005	30000	mg/L
NAPIS-3	6/5/2014	Zinc, Total	0.07	0.01	0.0014	5960000	mg/L
NAPIS-3	11/13/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	11/13/2014	Potassium, Total	3	1	0.093	NA	mg/L
NAPIS-3	11/13/2014	Magnesium, Total	6.1	1	0.018	NA	mg/L
NAPIS-3	11/13/2014	Manganese, Total	0.07	0.002	0.00049	2017000	mg/L
NAPIS-3	11/13/2014	Sodium, Total	880	20	7.8	NA	mg/L
NAPIS-3	11/13/2014	Lead, Total	0.0034	0.001	0.00026	15000	mg/L
NAPIS-3	11/13/2014	Selenium, Total	ND	0.05	0.025	50000	mg/L
NAPIS-3	11/13/2014	Uranium, Total	0.039	0.001	0.0000072	30000	mg/L
NAPIS-3	11/13/2014	Zinc, Total	0.063	0.01	0.0035	5960000	mg/L
NAPIS-3	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-3	9/11/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
NAPIS-3	9/11/2014	Barium, Total	0.22	0.002	0.0005	2000000	mg/L
NAPIS-3	9/11/2014	Calcium, Total	63	1	0.082	NA	mg/L
NAPIS-3	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	9/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
NAPIS-3	9/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-3	9/11/2014	Iron, Total	0.14	0.02	0.0072	13822000	mg/L
NAPIS-3	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
NAPIS-3	9/11/2014	Potassium, Total	1.6	1	0.093	NA	mg/L
NAPIS-3	9/11/2014	Magnesium, Total	10	1	0.018	NA	mg/L
NAPIS-3	9/11/2014	Manganese, Total	0.55	0.002	0.00049	2017000	mg/L
NAPIS-3	9/11/2014	Sodium, Total	300	10	3.9	NA	mg/L
NAPIS-3	9/11/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
NAPIS-3	9/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
NAPIS-3	9/11/2014	Uranium, Total	0.019	0.001	0.0000072	30000	mg/L
NAPIS-3	9/11/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
NAPIS-3	11/13/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
NAPIS-3	11/13/2014	Arsenic, Total	ND	0.05	0.018	10000	mg/L
NAPIS-3	11/13/2014	Barium, Total	0.11	0.002	0.0005	2000000	mg/L
NAPIS-3	11/13/2014	Calcium, Total	37	1	0.082	NA	mg/L
NAPIS-3	11/13/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
NAPIS-3	11/13/2014	Chromium, Total	0.01	0.006	0.0028	50000	mg/L
NAPIS-3	11/13/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
NAPIS-3	11/13/2014	Iron, Total	2.1	0.1	0.036	13822000	mg/L
NAPIS-3	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	3/10/2015	Arsenic, Total	ND	0.02	0.0088	10000	mg/L
NAPIS-3	3/10/2015	Barium, Total	0.1	0.002	0.00073	2000000	mg/L
NAPIS-3	3/10/2015	Calcium, Total	42	1	0.057	NA	mg/L
NAPIS-3	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
NAPIS-3	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-3	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	3/10/2015	Iron, Total	1.1	0.1	0.036	13822000	mg/L
NAPIS-3	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	3/10/2015	Potassium, Total	4.6	1	0.18	NA	mg/L
NAPIS-3	3/10/2015	Magnesium, Total	6.5	1	0.039	NA	mg/L
NAPIS-3	3/10/2015	Manganese, Total	0.26	0.002	0.0015	2017000	mg/L
NAPIS-3	3/10/2015	Sodium, Total	910	20	1.4	NA	mg/L
NAPIS-3	3/10/2015	Lead, Total	0.0015	0.001	0.000069	15000	mg/L
NAPIS-3	3/10/2015	Selenium, Total	ND	0.05	0.0061	50000	mg/L
NAPIS-3	3/10/2015	Uranium, Total	0.042	0.001	0.0000081	30000	mg/L
NAPIS-3	3/10/2015	Zinc, Total	0.018	0.01	0.0036	5960000	mg/L
NAPIS-3	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	6/2/2015	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
NAPIS-3	6/2/2015	Calcium, Total	36	1	0.057	NA	mg/L
NAPIS-3	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	6/2/2015	Chromium, Total	0.0066	0.006	0.0022	50000	mg/L
NAPIS-3	6/2/2015	Copper, Total	0.0075	0.006	0.0051	790000	mg/L
NAPIS-3	6/2/2015	Iron, Total	1.4	0.1	0.036	13822000	mg/L
NAPIS-3	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/2/2015	Potassium, Total	7.7	1	0.18	NA	mg/L
NAPIS-3	6/2/2015	Magnesium, Total	6.3	1	0.039	NA	mg/L
NAPIS-3	6/2/2015	Manganese, Total	0.08	0.002	0.0015	2017000	mg/L
NAPIS-3	6/2/2015	Sodium, Total	880	20	1.4	NA	mg/L
NAPIS-3	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
NAPIS-3	6/2/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
NAPIS-3	6/2/2015	Uranium, Total	0.038	0.005	0.000049	30000	mg/L
NAPIS-3	6/2/2015	Zinc, Total	0.028	0.01	0.0039	5960000	mg/L
NAPIS-3	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	8/11/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	8/11/2015	Barium, Total	0.1	0.002	0.0011	2000000	mg/L
NAPIS-3	8/11/2015	Calcium, Total	33	1	0.057	NA	mg/L
NAPIS-3	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	8/11/2015	Chromium, Total	0.0095	0.006	0.0022	50000	mg/L
NAPIS-3	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	8/11/2015	Iron, Total	2.2	0.1	0.036	13822000	mg/L
NAPIS-3	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	8/11/2015	Potassium, Total	3	1	0.18	NA	mg/L
NAPIS-3	8/11/2015	Magnesium, Total	5.5	1	0.039	NA	mg/L
NAPIS-3	8/11/2015	Manganese, Total	0.081	0.002	0.0015	2017000	mg/L
NAPIS-3	8/11/2015	Sodium, Total	940	10	0.72	NA	mg/L
NAPIS-3	8/11/2015	Lead, Total	0.0035	0.0005	0.000047	15000	mg/L
NAPIS-3	8/11/2015	Selenium, Total	0.019	0.01	0.0012	50000	mg/L
NAPIS-3	8/11/2015	Uranium, Total	0.038	0.005	0.000049	30000	mg/L
NAPIS-3	8/11/2015	Zinc, Total	0.07	0.01	0.0039	5960000	mg/L
NAPIS-3	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	10/28/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
NAPIS-3	10/28/2015	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
NAPIS-3	10/28/2015	Calcium, Total	41	1	0.057	NA	mg/L
NAPIS-3	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
NAPIS-3	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
NAPIS-3	10/28/2015	Iron, Total	1.6	0.1	0.036	13822000	mg/L
NAPIS-3	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
NAPIS-3	10/28/2015	Potassium, Total	3.9	1	0.18	NA	mg/L
NAPIS-3	10/28/2015	Magnesium, Total	6.6	1	0.039	NA	mg/L
NAPIS-3	10/28/2015	Manganese, Total	0.093	0.002	0.0015	2017000	mg/L
NAPIS-3	10/28/2015	Sodium, Total	730	10	0.72	NA	mg/L
NAPIS-3	10/28/2015	Lead, Total	0.0019	0.0005	0.000047	15000	mg/L
NAPIS-3	10/28/2015	Selenium, Total	0.018	0.005	0.00062	50000	mg/L
NAPIS-3	10/28/2015	Uranium, Total	0.039	0.0025	0.000025	30000	mg/L
NAPIS-3	10/28/2015	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
NAPIS-3	3/1/2016	Calcium, Total	35	1	0.26	NA	mg/L
NAPIS-3	3/1/2016	Potassium, Total	3.4	1	0.18	NA	mg/L
NAPIS-3	3/1/2016	Magnesium, Total	5.3	1	0.013	NA	mg/L
NAPIS-3	3/1/2016	Sodium, Total	850	10	0.96	NA	mg/L
NAPIS-3	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
NAPIS-3	6/7/2016	Arsenic, Total	ND	0.05	0.015	10000	mg/L
NAPIS-3	6/7/2016	Barium, Total	0.27	0.002	0.0011	2000000	mg/L
NAPIS-3	6/7/2016	Calcium, Total	32	1	0.26	NA	mg/L
NAPIS-3	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
NAPIS-3	6/7/2016	Chromium, Total	0.019	0.006	0.0022	50000	mg/L
NAPIS-3	6/7/2016	Copper, Total	0.011	0.006	0.0051	790000	mg/L
NAPIS-3	6/7/2016	Iron, Total	6.8	0.2	0.072	13822000	mg/L
NAPIS-3	6/7/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
NAPIS-3	6/7/2016	Potassium, Total	3.2	1	0.18	NA	mg/L
NAPIS-3	6/7/2016	Magnesium, Total	4.7	1	0.013	NA	mg/L
NAPIS-3	6/7/2016	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
NAPIS-3	6/7/2016	Sodium, Total	780	10	0.96	NA	mg/L
NAPIS-3	6/7/2016	Lead, Total	0.011	0.0005	0.000047	15000	mg/L
NAPIS-3	6/7/2016	Selenium, Total	0.017	0.05	0.0062	50000	mg/L
NAPIS-3	6/7/2016	Uranium, Total	0.039	0.0025	0.000025	30000	mg/L
NAPIS-3	6/7/2016	Zinc, Total	0.2	0.01	0.0039	5960000	mg/L
NAPIS-3	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	9/1/2016	Arsenic, Total	0.0048	0.01	0.0021	10000	mg/L
NAPIS-3	9/1/2016	Barium, Total	0.98	0.002	0.00079	2000000	mg/L
NAPIS-3	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	9/1/2016	Chromium, Total	0.025	0.006	0.0027	50000	mg/L
NAPIS-3	9/1/2016	Copper, Total	0.03	0.006	0.003	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-3	9/1/2016	Arsenic, Dissolved	0.0039	0.02	0.0028	10000	mg/L
NAPIS-3	9/1/2016	Barium, Dissolved	0.13	0.002	0.0013	2000000	mg/L
NAPIS-3	9/1/2016	Calcium, Dissolved	23	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-3	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
NAPIS-3	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
NAPIS-3	9/1/2016	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
NAPIS-3	9/1/2016	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Magnesium, Dissolved	3	1	0.5	NA	mg/L
NAPIS-3	9/1/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
NAPIS-3	9/1/2016	Sodium, Dissolved	440	5	2.5	NA	mg/L
NAPIS-3	9/1/2016	Lead, Dissolved	0.001	0.0025	0.00084	NA	mg/L
NAPIS-3	9/1/2016	Selenium, Dissolved	0.0096	0.02	0.0042	50000	mg/L
NAPIS-3	9/1/2016	Uranium, Dissolved	0.023	0.0025	0.00026	NA	mg/L
NAPIS-3	9/1/2016	Zinc, Dissolved	0.047	0.01	0.0028	5960450	mg/L
NAPIS-3	9/1/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
NAPIS-3	9/1/2016	Manganese, Total	0.96	0.002	0.00027	2017000	mg/L
NAPIS-3	9/1/2016	Lead, Total	0.025	0.0005	0.000081	15000	mg/L
NAPIS-3	9/1/2016	Selenium, Total	0.0086	0.01	0.0019	50000	mg/L
NAPIS-3	9/1/2016	Uranium, Total	0.029	0.0025	0.00087	30000	mg/L
NAPIS-3	9/1/2016	Zinc, Total	0.15	0.01	0.0027	5960000	mg/L
NAPIS-3	11/14/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	11/14/2016	Arsenic, Total	0.011	0.005	0.0011	10000	mg/L
NAPIS-3	11/14/2016	Barium, Total	3	0.01	0.004	2000000	mg/L
NAPIS-3	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	11/14/2016	Chromium, Total	0.078	0.006	0.0027	50000	mg/L
NAPIS-3	11/14/2016	Copper, Total	0.11	0.006	0.003	790000	mg/L
NAPIS-3	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
NAPIS-3	11/14/2016	Arsenic, Dissolved	0.007	0.02	0.0028	10000	mg/L
NAPIS-3	11/14/2016	Barium, Dissolved	0.16	0.002	0.0013	2000000	mg/L
NAPIS-3	11/14/2016	Calcium, Dissolved	45	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
NAPIS-3	11/14/2016	Chromium, Dissolved	0.0031	0.006	0.0018	100000	mg/L
NAPIS-3	11/14/2016	Copper, Dissolved	0.008	0.006	0.004	790000	mg/L
NAPIS-3	11/14/2016	Iron, Dissolved	1.4	0.1	0.1	13821880	mg/L
NAPIS-3	11/14/2016	Potassium, Dissolved	3.1	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Magnesium, Dissolved	4.5	1	0.5	NA	mg/L
NAPIS-3	11/14/2016	Manganese, Dissolved	0.36	0.002	0.00032	2017400	mg/L
NAPIS-3	11/14/2016	Sodium, Dissolved	570	10	5	NA	mg/L
NAPIS-3	11/14/2016	Lead, Dissolved	0.0063	0.0005	0.00017	NA	mg/L
NAPIS-3	11/14/2016	Selenium, Dissolved	0.016	0.005	0.0011	50000	mg/L
NAPIS-3	11/14/2016	Uranium, Dissolved	0.034	0.0025	0.00026	NA	mg/L
NAPIS-3	11/14/2016	Zinc, Dissolved	0.047	0.01	0.0028	5960450	mg/L
NAPIS-3	11/14/2016	Iron, Total	29	1	1	13822000	mg/L
NAPIS-3	11/14/2016	Mercury, Total	0.00077	0.0002	0.000053	2000	mg/L
NAPIS-3	11/14/2016	Manganese, Total	2.9	0.01	0.0014	2017000	mg/L
NAPIS-3	11/14/2016	Lead, Total	0.079	0.0025	0.00041	15000	mg/L
NAPIS-3	11/14/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
NAPIS-3	11/14/2016	Uranium, Total	0.041	0.0025	0.00087	30000	mg/L
NAPIS-3	11/14/2016	Zinc, Total	0.56	0.01	0.0027	5960000	mg/L
NAPIS-3	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
NAPIS-3	2/21/2017	Arsenic, Total	0.0052	0.01	0.0021	10000	mg/L
NAPIS-3	2/21/2017	Barium, Total	0.6	0.002	0.00079	2000000	mg/L
NAPIS-3	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
NAPIS-3	2/21/2017	Chromium, Total	0.025	0.006	0.0027	50000	mg/L
NAPIS-3	2/21/2017	Copper, Total	0.026	0.006	0.003	790000	mg/L
NAPIS-3	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-3	2/21/2017	Arsenic, Dissolved	0.0039	0.005	0.00069	10000	mg/L
NAPIS-3	2/21/2017	Barium, Dissolved	0.089	0.002	0.00085	2000000	mg/L
NAPIS-3	2/21/2017	Calcium, Dissolved	19	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	2/21/2017	Chromium, Dissolved	0.0015	0.006	0.001	100000	mg/L
NAPIS-3	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	2/21/2017	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
NAPIS-3	2/21/2017	Potassium, Dissolved	2.4	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Magnesium, Dissolved	2.5	1	0.5	NA	mg/L
NAPIS-3	2/21/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
NAPIS-3	2/21/2017	Sodium, Dissolved	490	5	2.5	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	2/21/2017	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
NAPIS-3	2/21/2017	Selenium, Dissolved	0.0083	0.01	0.0021	50000	mg/L
NAPIS-3	2/21/2017	Zinc, Dissolved	0.027	0.01	0.0011	5960450	mg/L
NAPIS-3	2/21/2017	Iron, Total	7.2	0.4	0.4	13822000	mg/L
NAPIS-3	2/21/2017	Mercury, Total	0.00015	0.0002	0.000053	2000	mg/L
NAPIS-3	2/21/2017	Manganese, Total	0.53	0.002	0.00027	2017000	mg/L
NAPIS-3	2/21/2017	Lead, Total	0.014	0.0005	0.000081	15000	mg/L
NAPIS-3	2/21/2017	Selenium, Total	0.0088	0.01	0.0019	50000	mg/L
NAPIS-3	2/21/2017	Zinc, Total	0.14	0.01	0.0027	5960000	mg/L
NAPIS-3	6/2/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
NAPIS-3	6/2/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
NAPIS-3	6/2/2017	Barium, Total	0.093	0.002	0.00093	2000000	mg/L
NAPIS-3	6/2/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	6/2/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
NAPIS-3	6/2/2017	Copper, Total	0.0043	0.006	0.0017	790000	mg/L
NAPIS-3	6/2/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
NAPIS-3	6/2/2017	Arsenic, Dissolved	0.0021	0.005	0.00089	10000	mg/L
NAPIS-3	6/2/2017	Barium, Dissolved	0.089	0.002	0.00085	2000000	mg/L
NAPIS-3	6/2/2017	Calcium, Dissolved	16	1	0.078	NA	mg/L
NAPIS-3	6/2/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	6/2/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
NAPIS-3	6/2/2017	Copper, Dissolved	0.0041	0.006	0.0032	790000	mg/L
NAPIS-3	6/2/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	6/2/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
NAPIS-3	6/2/2017	Magnesium, Dissolved	2.8	1	0.25	NA	mg/L
NAPIS-3	6/2/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
NAPIS-3	6/2/2017	Sodium, Dissolved	420	10	1.6	NA	mg/L
NAPIS-3	6/2/2017	Lead, Dissolved	0.00053	0.0005	0.00017	NA	mg/L
NAPIS-3	6/2/2017	Selenium, Dissolved	0.006	0.01	0.0039	50000	mg/L
NAPIS-3	6/2/2017	Uranium, Dissolved	0.029	0.0025	0.00025	NA	mg/L
NAPIS-3	6/2/2017	Zinc, Dissolved	0.012	0.01	0.0011	5960450	mg/L
NAPIS-3	6/2/2017	Iron, Total	0.075	0.02	0.01	13822000	mg/L
NAPIS-3	6/2/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	6/2/2017	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
NAPIS-3	6/2/2017	Lead, Total	0.00043	0.0005	0.000095	15000	mg/L
NAPIS-3	6/2/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
NAPIS-3	6/2/2017	Uranium, Total	0.03	0.0025	0.00077	30000	mg/L
NAPIS-3	6/2/2017	Zinc, Total	0.0049	0.01	0.0028	5960000	mg/L
NAPIS-3	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	9/5/2017	Arsenic, Total	0.0062	0.01	0.003	10000	mg/L
NAPIS-3	9/5/2017	Barium, Total	0.21	0.002	0.00093	2000000	mg/L
NAPIS-3	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	9/5/2017	Chromium, Total	0.0085	0.006	0.0018	50000	mg/L
NAPIS-3	9/5/2017	Copper, Total	0.0084	0.006	0.0017	790000	mg/L
NAPIS-3	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	9/5/2017	Arsenic, Dissolved	0.0041	0.02	0.0035	10000	mg/L
NAPIS-3	9/5/2017	Barium, Dissolved	0.082	0.002	0.00085	2000000	mg/L
NAPIS-3	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	9/5/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	9/5/2017	Iron, Dissolved	0.14	0.02	0.016	13821880	mg/L
NAPIS-3	9/5/2017	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
NAPIS-3	9/5/2017	Lead, Dissolved	0.00058	0.0005	0.00017	NA	mg/L
NAPIS-3	9/5/2017	Selenium, Dissolved	0.0093	0.02	0.0077	50000	mg/L
NAPIS-3	9/5/2017	Uranium, Dissolved	0.043	0.0025	0.00025	NA	mg/L
NAPIS-3	9/5/2017	Zinc, Dissolved	0.021	0.01	0.0021	5960450	mg/L
NAPIS-3	9/5/2017	Iron, Total	4.3	0.2	0.1	13822000	mg/L
NAPIS-3	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	9/5/2017	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
NAPIS-3	9/5/2017	Lead, Total	0.005	0.0005	0.000095	15000	mg/L
NAPIS-3	9/5/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
NAPIS-3	9/5/2017	Uranium, Total	0.041	0.0025	0.00077	30000	mg/L
NAPIS-3	9/5/2017	Zinc, Total	0.064	0.01	0.0033	5960000	mg/L
NAPIS-3	12/4/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	12/4/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
NAPIS-3	12/4/2017	Barium, Total	0.099	0.002	0.001	2000000	mg/L
NAPIS-3	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	12/4/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	12/4/2017	Copper, Total	0.0054	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	12/4/2017	Arsenic, Dissolved	ND	0.01	0.0042	10000	mg/L
NAPIS-3	12/4/2017	Barium, Dissolved	0.1	0.002	0.00099	2000000	mg/L
NAPIS-3	12/4/2017	Calcium, Dissolved	18	1	0.078	NA	mg/L
NAPIS-3	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	12/4/2017	Copper, Dissolved	0.0048	0.006	0.0032	790000	mg/L
NAPIS-3	12/4/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	12/4/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
NAPIS-3	12/4/2017	Magnesium, Dissolved	3.1	1	0.25	NA	mg/L
NAPIS-3	12/4/2017	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
NAPIS-3	12/4/2017	Sodium, Dissolved	500	5	0.82	NA	mg/L
NAPIS-3	12/4/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
NAPIS-3	12/4/2017	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
NAPIS-3	12/4/2017	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
NAPIS-3	12/4/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
NAPIS-3	12/4/2017	Iron, Total	0.04	0.02	0.01	13822000	mg/L
NAPIS-3	12/4/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	12/4/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
NAPIS-3	12/4/2017	Lead, Total	ND	0.005	0.0023	15000	mg/L
NAPIS-3	12/4/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
NAPIS-3	12/4/2017	Uranium, Total	0.025	0.005	0.0015	30000	mg/L
NAPIS-3	12/4/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
NAPIS-3	2/9/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	2/9/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
NAPIS-3	2/9/2018	Barium, Total	0.095	0.002	0.001	2000000	mg/L
NAPIS-3	2/9/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
NAPIS-3	2/9/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	2/9/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	2/9/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	2/9/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
NAPIS-3	2/9/2018	Barium, Dissolved	0.097	0.002	0.00099	2000000	mg/L
NAPIS-3	2/9/2018	Calcium, Dissolved	16	1	0.078	NA	mg/L
NAPIS-3	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	2/9/2018	Copper, Dissolved	0.0049	0.006	0.0032	790000	mg/L
NAPIS-3	2/9/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
NAPIS-3	2/9/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
NAPIS-3	2/9/2018	Magnesium, Dissolved	2.7	1	0.25	NA	mg/L
NAPIS-3	2/9/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
NAPIS-3	2/9/2018	Sodium, Dissolved	470	5	0.82	NA	mg/L
NAPIS-3	2/9/2018	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
NAPIS-3	2/9/2018	Selenium, Dissolved	0.0045	0.005	0.0038	50000	mg/L
NAPIS-3	2/9/2018	Uranium, Dissolved	0.025	0.0025	0.00048	NA	mg/L
NAPIS-3	2/9/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
NAPIS-3	2/9/2018	Iron, Total	0.046	0.02	0.01	13822000	mg/L
NAPIS-3	2/9/2018	Mercury, Total	0.000064	0.0002	0.000037	2000	mg/L
NAPIS-3	2/9/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
NAPIS-3	2/9/2018	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
NAPIS-3	2/9/2018	Selenium, Total	0.0054	0.001	0.00098	50000	mg/L
NAPIS-3	2/9/2018	Uranium, Total	0.024	0.0025	0.00034	30000	mg/L
NAPIS-3	2/9/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
NAPIS-3	4/30/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
NAPIS-3	4/30/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
NAPIS-3	4/30/2018	Barium, Total	0.09	0.002	0.001	2000000	mg/L
NAPIS-3	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
NAPIS-3	4/30/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
NAPIS-3	4/30/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
NAPIS-3	4/30/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
NAPIS-3	4/30/2018	Arsenic, Dissolved	0.0012	0.001	0.00042	10000	mg/L
NAPIS-3	4/30/2018	Barium, Dissolved	0.093	0.002	0.00099	2000000	mg/L
NAPIS-3	4/30/2018	Calcium, Dissolved	14	1	0.078	NA	mg/L
NAPIS-3	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
NAPIS-3	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
NAPIS-3	4/30/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
NAPIS-3	4/30/2018	Iron, Dissolved	0.04	0.02	0.016	13821880	mg/L
NAPIS-3	4/30/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
NAPIS-3	4/30/2018	Magnesium, Dissolved	2.6	1	0.25	NA	mg/L
NAPIS-3	4/30/2018	Manganese, Dissolved	0.14	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	4/30/2018	Sodium, Dissolved	500	5	0.82	NA	mg/L
NAPIS-3	4/30/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
NAPIS-3	4/30/2018	Selenium, Dissolved	0.0029	0.001	0.00076	50000	mg/L
NAPIS-3	4/30/2018	Uranium, Dissolved	0.022	0.0005	0.000096	NA	mg/L
NAPIS-3	4/30/2018	Zinc, Dissolved	0.0077	0.01	0.0021	5960450	mg/L
NAPIS-3	4/30/2018	Iron, Total	0.074	0.02	0.01	13822000	mg/L
NAPIS-3	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
NAPIS-3	4/30/2018	Manganese, Total	0.15	0.002	0.0011	2017000	mg/L
NAPIS-3	4/30/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
NAPIS-3	4/30/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
NAPIS-3	4/30/2018	Uranium, Total	0.023	0.0005	0.000068	30000	mg/L
NAPIS-3	4/30/2018	Zinc, Total	0.0053	0.01	0.0033	5960000	mg/L
OAPIS-1	12/17/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OAPIS-1	12/17/2020	Aluminum, Total	0.497	0.2	0.051	19914000	mg/L
OAPIS-1	12/17/2020	Calcium, Total	134	0.5	0.084	NA	mg/L
OAPIS-1	12/17/2020	Boron, Total	1.69	0.1	0.022	3949	mg/L
OAPIS-1	12/17/2020	Barium, Total	1.01	0.01	0.003	2000000	mg/L
OAPIS-1	12/17/2020	Potassium, Total	5.53	1	0.34	NA	mg/L
OAPIS-1	12/17/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OAPIS-1	12/17/2020	Magnesium, Total	26.5	0.5	0.12	NA	mg/L
OAPIS-1	12/17/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OAPIS-1	12/17/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OAPIS-1	12/17/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OAPIS-1	12/17/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OAPIS-1	12/17/2020	Iron, Total	2.5	0.2	0.075	13822000	mg/L
OAPIS-1	12/17/2020	Manganese, Total	1.23	0.01	0.003	2017000	mg/L
OAPIS-1	12/17/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OAPIS-1	12/17/2020	Nickel, Total	0.216	0.006	0.003	372000	mg/L
OAPIS-1	12/17/2020	Zinc, Total	0.0205	0.02	0.008	5960000	mg/L
OAPIS-1	12/17/2020	Sodium, Total	1130	10	4.6	NA	mg/L
OAPIS-1	12/17/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OAPIS-1	12/17/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OAPIS-1	12/17/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OAPIS-1	12/17/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OAPIS-1	12/17/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OAPIS-1	12/17/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OAPIS-1	12/17/2020	Manganese, Dissolved	0.884	0.01	0.003	2017400	mg/L
OAPIS-1	12/17/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OAPIS-1	12/17/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OAPIS-1	12/17/2020	Zinc, Dissolved	0.0216	0.02	0.008	5960450	mg/L
OAPIS-1	12/17/2020	Barium, Dissolved	0.922	0.01	0.003	2000000	mg/L
OAPIS-1	12/17/2020	Boron, Dissolved	1.57	0.1	0.022	3949110	mg/L
OAPIS-1	12/17/2020	Iron, Dissolved	0.809	0.2	0.075	13821880	mg/L
OAPIS-1	12/17/2020	Nickel, Dissolved	0.209	0.006	0.003	372000	mg/L
OAPIS-1	12/17/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OAPIS-1	12/17/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OAPIS-1	12/17/2020	Arsenic, Total Recoverable	6.82	1	0.286	10	ug/L
OAPIS-1	12/17/2020	Lead, Total Recoverable	7.75	1	0.133	15	ug/L
OAPIS-1	12/17/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OAPIS-1	12/17/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OAPIS-1	12/17/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OAPIS-1	12/17/2020	Uranium, Total Recoverable	**45**	5	1.12	30	ug/L
OAPIS-1	12/17/2020	Arsenic, Dissolved	5.15	1	0.286	10	ug/L
OAPIS-1	12/17/2020	Lead, Dissolved	5.06	1	0.133	NA	ug/L
OAPIS-1	12/17/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OAPIS-1	12/17/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OAPIS-1	12/17/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OAPIS-1	12/17/2020	Uranium, Dissolved	51.7	5	1.12	NA	ug/L
OAPIS-1	9/22/2020	Arsenic, Dissolved	0.0058	0.005	0.001	10000	mg/L
OAPIS-1	9/22/2020	Lead, Dissolved	0.0034	0.0025	0.00017	NA	mg/L
OAPIS-1	9/22/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
OAPIS-1	9/22/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
OAPIS-1	9/22/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
OAPIS-1	9/22/2020	Uranium, Dissolved	0.069	0.0025	0.00033	NA	mg/L
OAPIS-1	9/22/2020	Boron, Dissolved	1.4	0.2	0.033	3949110	mg/L
OAPIS-1	9/22/2020	Calcium, Dissolved	150	5	0.57	NA	mg/L
OAPIS-1	9/22/2020	Sodium, Dissolved	1300	50	6.9	NA	mg/L
OAPIS-1	9/22/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OAPIS-1	9/22/2020	Barium, Dissolved	0.93	0.002	0.0011	2000000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OAPIS-1	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OAPIS-1	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OAPIS-1	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OAPIS-1	9/22/2020	Iron, Dissolved	0.81	0.02	0.01	13821880	mg/L
OAPIS-1	9/22/2020	Magnesium, Dissolved	29	1	0.067	NA	mg/L
OAPIS-1	9/22/2020	Manganese, Dissolved	0.86	0.002	0.00058	2017400	mg/L
OAPIS-1	9/22/2020	Molybdenum, Dissolved	0.0092	0.008	0.0056	98700	mg/L
OAPIS-1	9/22/2020	Nickel, Dissolved	0.17	0.01	0.0033	372000	mg/L
OAPIS-1	9/22/2020	Potassium, Dissolved	3.9	1	0.16	NA	mg/L
OAPIS-1	9/22/2020	Silver, Dissolved	0.0023	0.005	0.0013	81200	mg/L
OAPIS-1	9/22/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OAPIS-1	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OAPIS-1	9/22/2020	Antimony, Total	0.00089	0.001	0.0007	6000	mg/L
OAPIS-1	9/22/2020	Arsenic, Total	0.0084	0.001	0.00026	10000	mg/L
OAPIS-1	9/22/2020	Lead, Total	0.0088	0.0005	0.000034	15000	mg/L
OAPIS-1	9/22/2020	Selenium, Total	0.0011	0.001	0.00066	50000	mg/L
OAPIS-1	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OAPIS-1	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OAPIS-1	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OAPIS-1	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	9/22/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OAPIS-1	9/22/2020	Cobalt, Total	0.0029	0.006	0.0024	5980	mg/L
OAPIS-1	9/22/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OAPIS-1	9/22/2020	Zinc, Total	0.023	0.01	0.0064	5960000	mg/L
OAPIS-1	9/22/2020	Uranium, Total	0.049	0.0025	0.00033	30000	mg/L
OAPIS-1	9/22/2020	Barium, Total	0.97	0.003	0.0016	2000000	mg/L
OAPIS-1	9/22/2020	Copper, Total	0.006	0.006	0.0047	790000	mg/L
OAPIS-1	9/22/2020	Nickel, Total	0.17	0.01	0.0033	372000	mg/L
OAPIS-1	9/22/2020	Silver, Total	0.0021	0.005	0.0013	50000	mg/L
OAPIS-1	9/22/2020	Aluminum, Total	3.9	0.1	0.037	19914000	mg/L
OAPIS-1	9/22/2020	Boron, Total	1.5	0.2	0.037	3949	mg/L
OAPIS-1	9/22/2020	Iron, Total	4.3	0.25	0.064	13822000	mg/L
OAPIS-1	9/22/2020	Manganese, Total	1.2	0.01	0.0041	2017000	mg/L
OAPIS-1	3/4/2020	Uranium, Dissolved	0.071	0.0025	0.00037	NA	mg/L
OAPIS-1	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OAPIS-1	3/4/2020	Barium, Dissolved	0.97	0.002	0.00065	2000000	mg/L
OAPIS-1	3/4/2020	Beryllium, Dissolved	0.00039	0.002	0.00028	4000	mg/L
OAPIS-1	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OAPIS-1	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OAPIS-1	3/4/2020	Copper, Dissolved	0.0018	0.006	0.0013	790000	mg/L
OAPIS-1	3/4/2020	Magnesium, Dissolved	31	1	0.05	NA	mg/L
OAPIS-1	3/4/2020	Nickel, Dissolved	0.12	0.01	0.004	372000	mg/L
OAPIS-1	3/4/2020	Potassium, Dissolved	3.7	1	0.16	NA	mg/L
OAPIS-1	3/4/2020	Silver, Dissolved	0.0027	0.005	0.00094	81200	mg/L
OAPIS-1	3/4/2020	Boron, Dissolved	1	0.2	0.023	3949110	mg/L
OAPIS-1	3/4/2020	Calcium, Dissolved	160	5	0.31	NA	mg/L
OAPIS-1	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OAPIS-1	3/4/2020	Iron, Dissolved	0.72	0.02	0.0087	13821880	mg/L
OAPIS-1	3/4/2020	Manganese, Dissolved	0.79	0.002	0.00029	2017400	mg/L
OAPIS-1	3/4/2020	Molybdenum, Dissolved	0.012	0.008	0.0067	98700	mg/L
OAPIS-1	3/4/2020	Zinc, Dissolved	0.018	0.01	0.0023	5960450	mg/L
OAPIS-1	3/4/2020	Sodium, Dissolved	1200	20	8.3	NA	mg/L
OAPIS-1	3/4/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OAPIS-1	3/4/2020	Arsenic, Dissolved	0.0053	0.005	0.0005	10000	mg/L
OAPIS-1	3/4/2020	Lead, Dissolved	0.0026	0.0025	0.00027	NA	mg/L
OAPIS-1	3/4/2020	Selenium, Dissolved	0.0016	0.005	0.00086	50000	mg/L
OAPIS-1	3/4/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OAPIS-1	3/4/2020	Uranium, Total	0.07	0.0025	0.00042	30000	mg/L
OAPIS-1	3/4/2020	Antimony, Total	0.0011	0.001	0.00039	6000	mg/L
OAPIS-1	3/4/2020	Arsenic, Total	0.0062	0.001	0.00031	10000	mg/L
OAPIS-1	3/4/2020	Lead, Total	0.0043	0.0005	0.000055	15000	mg/L
OAPIS-1	3/4/2020	Selenium, Total	0.0016	0.001	0.00048	50000	mg/L
OAPIS-1	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OAPIS-1	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OAPIS-1	3/4/2020	Aluminum, Total	0.44	0.02	0.0025	19914000	mg/L
OAPIS-1	3/4/2020	Beryllium, Total	0.00035	0.002	0.00028	4000	mg/L
OAPIS-1	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OAPIS-1	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L

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GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OAPIS-1	3/4/2020	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
OAPIS-1	3/4/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OAPIS-1	3/4/2020	Nickel, Total	0.18	0.01	0.004	372000	mg/L
OAPIS-1	3/4/2020	Silver, Total	0.0036	0.005	0.0014	50000	mg/L
OAPIS-1	3/4/2020	Zinc, Total	0.018	0.01	0.0058	5960000	mg/L
OAPIS-1	3/4/2020	Barium, Total	1.3	0.01	0.0032	2000000	mg/L
OAPIS-1	3/4/2020	Boron, Total	1.3	0.2	0.023	3949	mg/L
OAPIS-1	3/4/2020	Iron, Total	1.5	0.1	0.044	13822000	mg/L
OAPIS-1	3/4/2020	Manganese, Total	1.1	0.01	0.0014	2017000	mg/L
OAPIS-1	3/28/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	3/28/2019	Uranium, Total	0.012	0.0025	0.000424	30000	mg/L
OAPIS-1	3/28/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
OAPIS-1	3/28/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
OAPIS-1	3/28/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	3/28/2019	Arsenic, Dissolved	0.0067	0.005	0.000504	10000	mg/L
OAPIS-1	3/28/2019	Barium, Dissolved	1.1	0.02	0.006484	2000000	mg/L
OAPIS-1	3/28/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
OAPIS-1	3/28/2019	Boron, Dissolved	1.6	0.4	0.045305	3949110	mg/L
OAPIS-1	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	3/28/2019	Calcium, Dissolved	150	10	0.618891	NA	mg/L
OAPIS-1	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	3/28/2019	Cobalt, Dissolved	0.0054	0.006	0.003091	5980	mg/L
OAPIS-1	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	3/28/2019	Iron, Dissolved	4.2	0.2	0.087469	13821880	mg/L
OAPIS-1	3/28/2019	Lead, Dissolved	0.00044	0.0025	0.000274	NA	mg/L
OAPIS-1	3/28/2019	Magnesium, Dissolved	29	1	0.05029	NA	mg/L
OAPIS-1	3/28/2019	Manganese, Dissolved	1.7	0.02	0.002899	2017400	mg/L
OAPIS-1	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	3/28/2019	Nickel, Dissolved	0.19	0.01	0.004009	372000	mg/L
OAPIS-1	3/28/2019	Potassium, Dissolved	3.3	1	0.162288	NA	mg/L
OAPIS-1	3/28/2019	Selenium, Dissolved	0.0013	0.005	0.000857	50000	mg/L
OAPIS-1	3/28/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OAPIS-1	3/28/2019	Sodium, Dissolved	1200	50	20.808815	NA	mg/L
OAPIS-1	3/28/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	3/28/2019	Uranium, Dissolved	0.011	0.0025	0.000374	NA	mg/L
OAPIS-1	3/28/2019	Zinc, Dissolved	0.045	0.01	0.002252	5960450	mg/L
OAPIS-1	3/28/2019	Aluminum, Total	2.5	0.1	0.022822	19914000	mg/L
OAPIS-1	3/28/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	3/28/2019	Arsenic, Total	0.0071	0.005	0.001561	10000	mg/L
OAPIS-1	3/28/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	3/28/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
OAPIS-1	3/28/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
OAPIS-1	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	3/28/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
OAPIS-1	3/28/2019	Cobalt, Total	0.0056	0.006	0.003091	5980	mg/L
OAPIS-1	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	3/28/2019	Iron, Total	5.6	0.2	0.087469	13822000	mg/L
OAPIS-1	3/28/2019	Lead, Total	0.0061	0.0025	0.000274	15000	mg/L
OAPIS-1	3/28/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	3/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	3/28/2019	Nickel, Total	0.2	0.01	0.004009	372000	mg/L
OAPIS-1	3/28/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	3/28/2019	Silver, Total	0.0019	0.005	0.001418	50000	mg/L
OAPIS-1	8/22/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OAPIS-1	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Dissolved	0.0076	0.001	0.000101	10000	mg/L
OAPIS-1	8/22/2019	Barium, Dissolved	1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	8/22/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
OAPIS-1	8/22/2019	Calcium, Dissolved	150	5	0.309446	NA	mg/L
OAPIS-1	8/22/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
OAPIS-1	8/22/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Dissolved	0.0068	0.03	0.006481	790000	mg/L
OAPIS-1	8/22/2019	Iron, Dissolved	6	1	0.437344	13821880	mg/L
OAPIS-1	8/22/2019	Lead, Dissolved	0.00041	0.0005	0.000055	NA	mg/L
OAPIS-1	8/22/2019	Magnesium, Dissolved	28	5	0.251452	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
OAPIS-1	8/22/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Dissolved	0.17	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Potassium, Dissolved	2.9	5	0.811441	NA	mg/L
OAPIS-1	8/22/2019	Selenium, Dissolved	0.0012	0.001	0.000171	50000	mg/L
OAPIS-1	8/22/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
OAPIS-1	8/22/2019	Sodium, Dissolved	1300	50	20.808815	NA	mg/L
OAPIS-1	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Dissolved	0.0051	0.0005	0.000075	NA	mg/L
OAPIS-1	8/22/2019	Zinc, Dissolved	ND	0.05	0.01126	5960450	mg/L
OAPIS-1	8/22/2019	Aluminum, Total	2.2	0.1	0.012441	19914000	mg/L
OAPIS-1	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Total	0.0089	0.005	0.001561	10000	mg/L
OAPIS-1	8/22/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
OAPIS-1	8/22/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
OAPIS-1	8/22/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
OAPIS-1	8/22/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
OAPIS-1	8/22/2019	Iron, Total	7.9	1	0.437344	13822000	mg/L
OAPIS-1	8/22/2019	Lead, Total	0.0065	0.0025	0.000274	15000	mg/L
OAPIS-1	8/22/2019	Manganese, Total	1.7	0.01	0.00145	2017000	mg/L
OAPIS-1	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OAPIS-1	8/22/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Total	0.18	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	8/22/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
OAPIS-1	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Total	0.0051	0.0025	0.000424	30000	mg/L
OAPIS-1	8/22/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OAPIS-1	8/22/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OAPIS-1	8/22/2019	Antimony, Dissolved	0.00048	0.001	0.000389	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Dissolved	0.0071	0.001	0.000101	10000	mg/L
OAPIS-1	8/22/2019	Barium, Dissolved	1	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	8/22/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
OAPIS-1	8/22/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OAPIS-1	8/22/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
OAPIS-1	8/22/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
OAPIS-1	8/22/2019	Iron, Dissolved	5.8	1	0.437344	13821880	mg/L
OAPIS-1	8/22/2019	Lead, Dissolved	0.00048	0.0005	0.000055	NA	mg/L
OAPIS-1	8/22/2019	Magnesium, Dissolved	28	5	0.251452	NA	mg/L
OAPIS-1	8/22/2019	Manganese, Dissolved	1.6	0.01	0.00145	2017400	mg/L
OAPIS-1	8/22/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Dissolved	0.18	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Potassium, Dissolved	2.9	5	0.811441	NA	mg/L
OAPIS-1	8/22/2019	Selenium, Dissolved	0.00091	0.001	0.000171	50000	mg/L
OAPIS-1	8/22/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
OAPIS-1	8/22/2019	Sodium, Dissolved	1300	50	20.808815	NA	mg/L
OAPIS-1	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Dissolved	0.0062	0.0005	0.000075	NA	mg/L
OAPIS-1	8/22/2019	Zinc, Dissolved	0.024	0.05	0.01126	5960450	mg/L
OAPIS-1	8/22/2019	Aluminum, Total	0.51	0.1	0.012441	19914000	mg/L
OAPIS-1	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	8/22/2019	Arsenic, Total	0.0078	0.005	0.001561	10000	mg/L
OAPIS-1	8/22/2019	Barium, Total	0.99	0.01	0.003242	2000000	mg/L
OAPIS-1	8/22/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
OAPIS-1	8/22/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
OAPIS-1	8/22/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
OAPIS-1	8/22/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
OAPIS-1	8/22/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
OAPIS-1	8/22/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
OAPIS-1	8/22/2019	Iron, Total	7.3	1	0.437344	13822000	mg/L
OAPIS-1	8/22/2019	Lead, Total	0.0027	0.0025	0.000274	15000	mg/L
OAPIS-1	8/22/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	8/22/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
OAPIS-1	8/22/2019	Nickel, Total	0.19	0.05	0.020043	372000	mg/L
OAPIS-1	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	8/22/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
OAPIS-1	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	8/22/2019	Uranium, Total	0.0047	0.0025	0.000424	30000	mg/L
OAPIS-1	8/22/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OAPIS-1	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OAPIS-1	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Dissolved	0.0073	0.005	0.000504	10000	mg/L
OAPIS-1	5/8/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Dissolved	0.00052	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Dissolved	1.5	0.2	0.022653	3949110	mg/L
OAPIS-1	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	5/8/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
OAPIS-1	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	5/8/2019	Cobalt, Dissolved	0.0036	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	5/8/2019	Iron, Dissolved	5.3	0.2	0.087469	13821880	mg/L
OAPIS-1	5/8/2019	Lead, Dissolved	0.0012	0.0025	0.000274	NA	mg/L
OAPIS-1	5/8/2019	Magnesium, Dissolved	30	1	0.05029	NA	mg/L
OAPIS-1	5/8/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
OAPIS-1	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Potassium, Dissolved	3.1	1	0.162288	NA	mg/L
OAPIS-1	5/8/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
OAPIS-1	5/8/2019	Silver, Dissolved	0.003	0.005	0.000942	81200	mg/L
OAPIS-1	5/8/2019	Sodium, Dissolved	1200	20	8.323526	NA	mg/L
OAPIS-1	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Dissolved	0.015	0.0025	0.000374	NA	mg/L
OAPIS-1	5/8/2019	Zinc, Dissolved	0.01	0.01	0.002252	5960450	mg/L
OAPIS-1	5/8/2019	Aluminum, Total	0.26	0.02	0.002488	19914000	mg/L
OAPIS-1	5/8/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Total	0.0078	0.001	0.000312	10000	mg/L
OAPIS-1	5/8/2019	Barium, Total	1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Total	1.4	0.2	0.022653	3949	mg/L
OAPIS-1	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OAPIS-1	5/8/2019	Cobalt, Total	0.004	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	5/8/2019	Iron, Total	4.8	0.1	0.043734	13822000	mg/L
OAPIS-1	5/8/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OAPIS-1	5/8/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OAPIS-1	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Total	0.18	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Selenium, Total	0.0012	0.001	0.000478	50000	mg/L
OAPIS-1	5/8/2019	Silver, Total	0.0026	0.005	0.001418	50000	mg/L
OAPIS-1	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OAPIS-1	5/8/2019	Zinc, Total	0.0072	0.01	0.005772	5960000	mg/L
OAPIS-1	10/21/2019	Aluminum, Dissolved	0.063	0.02	0.002488	19913930	mg/L
OAPIS-1	10/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	10/21/2019	Arsenic, Dissolved	0.009	0.005	0.000504	10000	mg/L
OAPIS-1	10/21/2019	Barium, Dissolved	1.3	0.01	0.003242	2000000	mg/L
OAPIS-1	10/21/2019	Beryllium, Dissolved	0.00086	0.002	0.000284	4000	mg/L
OAPIS-1	10/21/2019	Boron, Dissolved	1.6	0.2	0.022653	3949110	mg/L
OAPIS-1	10/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	10/21/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OAPIS-1	10/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	10/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OAPIS-1	10/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	10/21/2019	Iron, Dissolved	3.2	0.1	0.043734	13821880	mg/L
OAPIS-1	10/21/2019	Lead, Dissolved	0.00045	0.0025	0.000274	NA	mg/L
OAPIS-1	10/21/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OAPIS-1	10/21/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OAPIS-1	10/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	10/21/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	10/21/2019	Potassium, Dissolved	3.7	1	0.162288	NA	mg/L
OAPIS-1	10/21/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OAPIS-1	10/21/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
OAPIS-1	10/21/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
OAPIS-1	10/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	10/21/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
OAPIS-1	10/21/2019	Aluminum, Total	11	0.4	0.049765	19914000	mg/L
OAPIS-1	10/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OAPIS-1	10/21/2019	Arsenic, Total	0.011	0.005	0.001561	10000	mg/L
OAPIS-1	10/21/2019	Barium, Total	1.5	0.01	0.003242	2000000	mg/L
OAPIS-1	10/21/2019	Beryllium, Total	0.00068	0.002	0.000284	4000	mg/L
OAPIS-1	10/21/2019	Boron, Total	1.7	0.2	0.022653	3949	mg/L
OAPIS-1	10/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	10/21/2019	Chromium, Total	0.0078	0.006	0.001533	50000	mg/L
OAPIS-1	10/21/2019	Cobalt, Total	0.0082	0.006	0.003091	5980	mg/L
OAPIS-1	10/21/2019	Copper, Total	0.019	0.006	0.004072	790000	mg/L
OAPIS-1	10/21/2019	Iron, Total	8.8	0.2	0.087469	13822000	mg/L
OAPIS-1	10/21/2019	Lead, Total	0.01	0.0025	0.000274	15000	mg/L
OAPIS-1	10/21/2019	Manganese, Total	1.8	0.01	0.00145	2017000	mg/L
OAPIS-1	10/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	10/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	10/21/2019	Nickel, Total	0.19	0.01	0.004009	372000	mg/L
OAPIS-1	10/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OAPIS-1	10/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OAPIS-1	10/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OAPIS-1	10/21/2019	Zinc, Total	0.037	0.01	0.005772	5960000	mg/L
OAPIS-1	5/8/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OAPIS-1	5/8/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Dissolved	0.0068	0.005	0.000504	10000	mg/L
OAPIS-1	5/8/2019	Barium, Dissolved	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Dissolved	0.00037	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Dissolved	1.4	0.2	0.022653	3949110	mg/L
OAPIS-1	5/8/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OAPIS-1	5/8/2019	Calcium, Dissolved	160	5	0.309446	NA	mg/L
OAPIS-1	5/8/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OAPIS-1	5/8/2019	Cobalt, Dissolved	0.0042	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OAPIS-1	5/8/2019	Iron, Dissolved	5.2	0.2	0.087469	13821880	mg/L
OAPIS-1	5/8/2019	Lead, Dissolved	0.0014	0.0025	0.000274	NA	mg/L
OAPIS-1	5/8/2019	Magnesium, Dissolved	31	1	0.05029	NA	mg/L
OAPIS-1	5/8/2019	Manganese, Dissolved	1.8	0.01	0.00145	2017400	mg/L
OAPIS-1	5/8/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Dissolved	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Potassium, Dissolved	3.1	1	0.162288	NA	mg/L
OAPIS-1	5/8/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OAPIS-1	5/8/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
OAPIS-1	5/8/2019	Sodium, Dissolved	1200	20	8.323526	NA	mg/L
OAPIS-1	5/8/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OAPIS-1	5/8/2019	Uranium, Dissolved	0.016	0.0025	0.000374	NA	mg/L
OAPIS-1	5/8/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
OAPIS-1	5/8/2019	Aluminum, Total	0.23	0.02	0.002488	19914000	mg/L
OAPIS-1	5/8/2019	Antimony, Total	0.00058	0.001	0.000389	6000	mg/L
OAPIS-1	5/8/2019	Arsenic, Total	0.008	0.001	0.000312	10000	mg/L
OAPIS-1	5/8/2019	Barium, Total	1.1	0.01	0.003242	2000000	mg/L
OAPIS-1	5/8/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OAPIS-1	5/8/2019	Boron, Total	1.5	0.2	0.022653	3949	mg/L
OAPIS-1	5/8/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OAPIS-1	5/8/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OAPIS-1	5/8/2019	Cobalt, Total	0.0031	0.006	0.003091	5980	mg/L
OAPIS-1	5/8/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OAPIS-1	5/8/2019	Iron, Total	4.6	0.2	0.087469	13822000	mg/L
OAPIS-1	5/8/2019	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OAPIS-1	5/8/2019	Manganese, Total	1.8	0.01	0.00145	2017000	mg/L
OAPIS-1	5/8/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	5/8/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OAPIS-1	5/8/2019	Nickel, Total	0.17	0.01	0.004009	372000	mg/L
OAPIS-1	5/8/2019	Selenium, Total	0.0019	0.001	0.000478	50000	mg/L
OAPIS-1	5/8/2019	Silver, Total	0.0029	0.005	0.001418	50000	mg/L
OAPIS-1	5/8/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	5/8/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OAPIS-1	5/8/2019	Zinc, Total	0.0093	0.01	0.005772	5960000	mg/L
OAPIS-1	3/18/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OAPIS-1	3/18/2013	Arsenic, Total	0.0082	0.0025	0.00042	10000	mg/L
OAPIS-1	3/18/2013	Barium, Total	0.61	0.002	0.00039	2000000	mg/L
OAPIS-1	3/18/2013	Calcium, Total	120	5	0.34	NA	mg/L
OAPIS-1	3/18/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OAPIS-1	3/18/2013	Chromium, Total	0.01	0.006	0.001	50000	mg/L
OAPIS-1	3/18/2013	Copper, Total	0.026	0.006	0.0041	790000	mg/L
OAPIS-1	3/18/2013	Iron, Total	7.9	0.2	0.13	13822000	mg/L
OAPIS-1	3/18/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	3/18/2013	Potassium, Total	6.9	1	0.39	NA	mg/L
OAPIS-1	3/18/2013	Magnesium, Total	24	1	0.028	NA	mg/L
OAPIS-1	3/18/2013	Manganese, Total	2.1	0.01	0.0013	2017000	mg/L
OAPIS-1	3/18/2013	Sodium, Total	1100	50	11	NA	mg/L
OAPIS-1	3/18/2013	Lead, Total	0.0085	0.005	0.0014	15000	mg/L
OAPIS-1	3/18/2013	Selenium, Total	0.0075	0.0025	0.00066	50000	mg/L
OAPIS-1	3/18/2013	Uranium, Total	0.065	0.0025	0.0012	30000	mg/L
OAPIS-1	3/18/2013	Zinc, Total	0.062	0.01	0.0011	5960000	mg/L
OAPIS-1	6/12/2013	Silver, Total	ND	0.025	0.0039	50000	mg/L
OAPIS-1	6/12/2013	Arsenic, Total	0.012	0.01	0.0027	10000	mg/L
OAPIS-1	6/12/2013	Barium, Total	0.75	0.002	0.00057	2000000	mg/L
OAPIS-1	6/12/2013	Calcium, Total	160	5	0.34	NA	mg/L
OAPIS-1	6/12/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OAPIS-1	6/12/2013	Chromium, Total	0.011	0.006	0.0021	50000	mg/L
OAPIS-1	6/12/2013	Copper, Total	0.024	0.006	0.005	790000	mg/L
OAPIS-1	6/12/2013	Iron, Total	10	0.4	0.1	13822000	mg/L
OAPIS-1	6/12/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	6/12/2013	Potassium, Total	7.5	1	0.24	NA	mg/L
OAPIS-1	6/12/2013	Magnesium, Total	28	1	0.028	NA	mg/L
OAPIS-1	6/12/2013	Manganese, Total	2.4	0.01	0.0026	2017000	mg/L
OAPIS-1	6/12/2013	Sodium, Total	1200	20	6.5	NA	mg/L
OAPIS-1	6/12/2013	Lead, Total	0.0018	0.001	0.0000075	15000	mg/L
OAPIS-1	6/12/2013	Selenium, Total	0.022	0.01	0.0049	50000	mg/L
OAPIS-1	6/12/2013	Uranium, Total	0.049	0.01	0.005	30000	mg/L
OAPIS-1	6/12/2013	Zinc, Total	0.058	0.01	0.0011	5960000	mg/L
OAPIS-1	9/3/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OAPIS-1	9/3/2013	Arsenic, Total	0.012	0.005	0.00049	10000	mg/L
OAPIS-1	9/3/2013	Barium, Total	0.55	0.002	0.00095	2000000	mg/L
OAPIS-1	9/3/2013	Calcium, Total	160	5	0.34	NA	mg/L
OAPIS-1	9/3/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OAPIS-1	9/3/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OAPIS-1	9/3/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OAPIS-1	9/3/2013	Iron, Total	5.2	0.4	0.18	13822000	mg/L
OAPIS-1	9/3/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	9/3/2013	Potassium, Total	3.9	1	0.24	NA	mg/L
OAPIS-1	9/3/2013	Magnesium, Total	29	1	0.028	NA	mg/L
OAPIS-1	9/3/2013	Manganese, Total	2	0.01	0.00082	2017000	mg/L
OAPIS-1	9/3/2013	Sodium, Total	1300	20	6.5	NA	mg/L
OAPIS-1	9/3/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OAPIS-1	9/3/2013	Selenium, Total	0.023	0.005	0.0015	50000	mg/L
OAPIS-1	9/3/2013	Uranium, Total	0.047	0.01	0.000073	30000	mg/L
OAPIS-1	9/3/2013	Zinc, Total	0.05	0.01	0.00076	5960000	mg/L
OAPIS-1	11/11/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OAPIS-1	11/11/2013	Arsenic, Total	0.013	0.001	0.000098	10000	mg/L
OAPIS-1	11/11/2013	Barium, Total	0.59	0.002	0.00095	2000000	mg/L
OAPIS-1	11/11/2013	Calcium, Total	140	5	0.34	NA	mg/L
OAPIS-1	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OAPIS-1	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OAPIS-1	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OAPIS-1	11/11/2013	Iron, Total	6.4	0.4	0.18	13822000	mg/L
OAPIS-1	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OAPIS-1	11/11/2013	Potassium, Total	4.8	1	0.24	NA	mg/L
OAPIS-1	11/11/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OAPIS-1	11/11/2013	Manganese, Total	2.1	0.01	0.00082	2017000	mg/L
OAPIS-1	11/11/2013	Sodium, Total	1300	20	6.5	NA	mg/L
OAPIS-1	11/11/2013	Lead, Total	0.0014	0.001	0.0000075	15000	mg/L
OAPIS-1	11/11/2013	Selenium, Total	0.026	0.001	0.00029	50000	mg/L
OAPIS-1	11/11/2013	Uranium, Total	0.042	0.001	0.0000073	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/11/2013	Zinc, Total	0.056	0.01	0.00076	5960000	mg/L
OAPIS-1	3/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OAPIS-1	3/10/2014	Arsenic, Total	0.0083	0.005	0.00049	10000	mg/L
OAPIS-1	3/10/2014	Barium, Total	0.61	0.002	0.0011	2000000	mg/L
OAPIS-1	3/10/2014	Calcium, Total	160	5	0.41	NA	mg/L
OAPIS-1	3/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	3/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OAPIS-1	3/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OAPIS-1	3/10/2014	Iron, Total	5.4	0.4	0.12	13822000	mg/L
OAPIS-1	3/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	3/10/2014	Potassium, Total	4.5	1	0.093	NA	mg/L
OAPIS-1	3/10/2014	Magnesium, Total	28	1	0.018	NA	mg/L
OAPIS-1	3/10/2014	Manganese, Total	2	0.01	0.0027	2017000	mg/L
OAPIS-1	3/10/2014	Sodium, Total	1300	20	7.8	NA	mg/L
OAPIS-1	3/10/2014	Lead, Total	0.0079	0.005	0.000038	15000	mg/L
OAPIS-1	3/10/2014	Selenium, Total	0.0084	0.005	0.0015	50000	mg/L
OAPIS-1	3/10/2014	Uranium, Total	0.039	0.005	0.000036	30000	mg/L
OAPIS-1	3/10/2014	Zinc, Total	0.046	0.01	0.0014	5960000	mg/L
OAPIS-1	6/5/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OAPIS-1	6/5/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
OAPIS-1	6/5/2014	Barium, Total	0.8	0.002	0.0011	2000000	mg/L
OAPIS-1	6/5/2014	Calcium, Total	180	5	0.27	NA	mg/L
OAPIS-1	6/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	6/5/2014	Chromium, Total	0.0082	0.006	0.0021	50000	mg/L
OAPIS-1	6/5/2014	Copper, Total	0.025	0.006	0.0028	790000	mg/L
OAPIS-1	6/5/2014	Iron, Total	10	0.4	0.12	13822000	mg/L
OAPIS-1	6/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	6/5/2014	Potassium, Total	11	1	0.24	NA	mg/L
OAPIS-1	6/5/2014	Magnesium, Total	33	1	0.024	NA	mg/L
OAPIS-1	6/5/2014	Manganese, Total	2.2	0.01	0.0027	2017000	mg/L
OAPIS-1	6/5/2014	Sodium, Total	1300	50	13	NA	mg/L
OAPIS-1	6/5/2014	Lead, Total	0.02	0.005	0.00029	15000	mg/L
OAPIS-1	6/5/2014	Selenium, Total	0.014	0.01	0.0015	50000	mg/L
OAPIS-1	6/5/2014	Uranium, Total	0.039	0.01	0.0005	30000	mg/L
OAPIS-1	6/5/2014	Zinc, Total	0.1	0.01	0.0014	5960000	mg/L
OAPIS-1	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OAPIS-1	9/12/2014	Arsenic, Total	0.018	0.01	0.0036	10000	mg/L
OAPIS-1	9/12/2014	Barium, Total	0.72	0.002	0.0005	2000000	mg/L
OAPIS-1	9/12/2014	Calcium, Total	170	10	0.82	NA	mg/L
OAPIS-1	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OAPIS-1	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OAPIS-1	9/12/2014	Iron, Total	7.9	0.2	0.072	13822000	mg/L
OAPIS-1	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	9/12/2014	Potassium, Total	6	1	0.093	NA	mg/L
OAPIS-1	9/12/2014	Magnesium, Total	33	1	0.018	NA	mg/L
OAPIS-1	9/12/2014	Manganese, Total	1.9	0.02	0.0049	2017000	mg/L
OAPIS-1	9/12/2014	Sodium, Total	1400	100	39	NA	mg/L
OAPIS-1	9/12/2014	Lead, Total	0.0051	0.001	0.00026	15000	mg/L
OAPIS-1	9/12/2014	Selenium, Total	0.035	0.01	0.0051	50000	mg/L
OAPIS-1	9/12/2014	Uranium, Total	0.031	0.001	0.0000072	30000	mg/L
OAPIS-1	9/12/2014	Zinc, Total	0.021	0.01	0.0035	5960000	mg/L
OAPIS-1	11/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OAPIS-1	11/11/2014	Arsenic, Total	0.016	0.01	0.0036	10000	mg/L
OAPIS-1	11/11/2014	Barium, Total	0.75	0.002	0.0005	2000000	mg/L
OAPIS-1	11/11/2014	Calcium, Total	170	5	0.41	NA	mg/L
OAPIS-1	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OAPIS-1	11/11/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OAPIS-1	11/11/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OAPIS-1	11/11/2014	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OAPIS-1	11/11/2014	Potassium, Total	4.8	1	0.093	NA	mg/L
OAPIS-1	11/11/2014	Magnesium, Total	31	1	0.018	NA	mg/L
OAPIS-1	11/11/2014	Manganese, Total	1.9	0.01	0.0024	2017000	mg/L
OAPIS-1	11/11/2014	Sodium, Total	1300	20	7.8	NA	mg/L
OAPIS-1	11/11/2014	Lead, Total	0.0073	0.001	0.00026	15000	mg/L
OAPIS-1	11/11/2014	Selenium, Total	0.03	0.01	0.0051	50000	mg/L
OAPIS-1	11/11/2014	Uranium, Total	0.03	0.001	0.0000072	30000	mg/L
OAPIS-1	11/11/2014	Zinc, Total	0.031	0.01	0.0035	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	3/10/2015	Arsenic, Total	ND	0.05	0.022	10000	mg/L
OAPIS-1	3/10/2015	Barium, Total	0.66	0.002	0.00073	2000000	mg/L
OAPIS-1	3/10/2015	Calcium, Total	170	5	0.28	NA	mg/L
OAPIS-1	3/10/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OAPIS-1	3/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	3/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	3/10/2015	Iron, Total	6.9	0.2	0.072	13822000	mg/L
OAPIS-1	3/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	3/10/2015	Potassium, Total	5.9	1	0.18	NA	mg/L
OAPIS-1	3/10/2015	Magnesium, Total	30	1	0.039	NA	mg/L
OAPIS-1	3/10/2015	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
OAPIS-1	3/10/2015	Sodium, Total	1300	50	3.6	NA	mg/L
OAPIS-1	3/10/2015	Lead, Total	0.0059	0.001	0.000069	15000	mg/L
OAPIS-1	3/10/2015	Selenium, Total	ND	0.05	0.0061	50000	mg/L
OAPIS-1	3/10/2015	Uranium, Total	0.023	0.001	0.0000081	30000	mg/L
OAPIS-1	3/10/2015	Zinc, Total	0.02	0.01	0.0036	5960000	mg/L
OAPIS-1	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	6/2/2015	Arsenic, Total	0.012	0.01	0.0029	10000	mg/L
OAPIS-1	6/2/2015	Barium, Total	0.71	0.002	0.0011	2000000	mg/L
OAPIS-1	6/2/2015	Calcium, Total	160	5	0.28	NA	mg/L
OAPIS-1	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	6/2/2015	Chromium, Total	0.0086	0.006	0.0022	50000	mg/L
OAPIS-1	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	6/2/2015	Iron, Total	7.5	0.2	0.072	13822000	mg/L
OAPIS-1	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	6/2/2015	Potassium, Total	4.6	1	0.18	NA	mg/L
OAPIS-1	6/2/2015	Magnesium, Total	29	1	0.039	NA	mg/L
OAPIS-1	6/2/2015	Manganese, Total	1.9	0.02	0.015	2017000	mg/L
OAPIS-1	6/2/2015	Sodium, Total	1300	50	3.6	NA	mg/L
OAPIS-1	6/2/2015	Lead, Total	0.0071	0.005	0.00047	15000	mg/L
OAPIS-1	6/2/2015	Selenium, Total	0.018	0.01	0.0012	50000	mg/L
OAPIS-1	6/2/2015	Uranium, Total	0.022	0.005	0.000049	30000	mg/L
OAPIS-1	6/2/2015	Zinc, Total	0.031	0.01	0.0039	5960000	mg/L
OAPIS-1	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	8/11/2015	Arsenic, Total	0.012	0.01	0.0029	10000	mg/L
OAPIS-1	8/11/2015	Barium, Total	0.72	0.002	0.0011	2000000	mg/L
OAPIS-1	8/11/2015	Calcium, Total	160	5	0.28	NA	mg/L
OAPIS-1	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	8/11/2015	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	8/11/2015	Potassium, Total	3.7	1	0.18	NA	mg/L
OAPIS-1	8/11/2015	Magnesium, Total	31	1	0.039	NA	mg/L
OAPIS-1	8/11/2015	Manganese, Total	1.8	0.02	0.015	2017000	mg/L
OAPIS-1	8/11/2015	Sodium, Total	1400	20	1.4	NA	mg/L
OAPIS-1	8/11/2015	Lead, Total	0.0077	0.0005	0.000047	15000	mg/L
OAPIS-1	8/11/2015	Selenium, Total	0.018	0.01	0.0012	50000	mg/L
OAPIS-1	8/11/2015	Uranium, Total	0.02	0.0005	0.0000049	30000	mg/L
OAPIS-1	8/11/2015	Zinc, Total	0.035	0.01	0.0039	5960000	mg/L
OAPIS-1	10/29/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	10/29/2015	Arsenic, Total	0.015	0.005	0.0015	10000	mg/L
OAPIS-1	10/29/2015	Barium, Total	0.78	0.01	0.0053	2000000	mg/L
OAPIS-1	10/29/2015	Calcium, Total	170	5	0.28	NA	mg/L
OAPIS-1	10/29/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	10/29/2015	Chromium, Total	0.0079	0.006	0.0022	50000	mg/L
OAPIS-1	10/29/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	10/29/2015	Iron, Total	8.4	0.2	0.072	13822000	mg/L
OAPIS-1	10/29/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OAPIS-1	10/29/2015	Potassium, Total	5.1	1	0.18	NA	mg/L
OAPIS-1	10/29/2015	Magnesium, Total	32	1	0.039	NA	mg/L
OAPIS-1	10/29/2015	Manganese, Total	1.8	0.01	0.0076	2017000	mg/L
OAPIS-1	10/29/2015	Sodium, Total	1300	20	1.4	NA	mg/L
OAPIS-1	10/29/2015	Lead, Total	0.015	0.0025	0.00024	15000	mg/L
OAPIS-1	10/29/2015	Selenium, Total	0.022	0.005	0.00062	50000	mg/L
OAPIS-1	10/29/2015	Uranium, Total	0.017	0.0025	0.000025	30000	mg/L
OAPIS-1	10/29/2015	Zinc, Total	0.055	0.01	0.0039	5960000	mg/L
OAPIS-1	3/1/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	3/1/2016	Arsenic, Total	0.0097	0.005	0.0015	10000	mg/L
OAPIS-1	3/1/2016	Barium, Total	0.72	0.002	0.0011	2000000	mg/L
OAPIS-1	3/1/2016	Calcium, Total	150	5	1.3	NA	mg/L
OAPIS-1	3/1/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	3/1/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	3/1/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OAPIS-1	3/1/2016	Iron, Total	5.7	0.2	0.072	13822000	mg/L
OAPIS-1	3/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OAPIS-1	3/1/2016	Potassium, Total	3.9	1	0.18	NA	mg/L
OAPIS-1	3/1/2016	Magnesium, Total	30	1	0.013	NA	mg/L
OAPIS-1	3/1/2016	Manganese, Total	1.7	0.02	0.015	2017000	mg/L
OAPIS-1	3/1/2016	Sodium, Total	1400	20	1.9	NA	mg/L
OAPIS-1	3/1/2016	Lead, Total	0.0034	0.0025	0.00024	15000	mg/L
OAPIS-1	3/1/2016	Selenium, Total	0.011	0.01	0.0012	50000	mg/L
OAPIS-1	3/1/2016	Uranium, Total	0.016	0.0025	0.000025	30000	mg/L
OAPIS-1	3/1/2016	Zinc, Total	0.016	0.01	0.0039	5960000	mg/L
OAPIS-1	6/7/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OAPIS-1	6/7/2016	Arsenic, Total	0.017	0.005	0.0015	10000	mg/L
OAPIS-1	6/7/2016	Barium, Total	0.77	0.002	0.0011	2000000	mg/L
OAPIS-1	6/7/2016	Calcium, Total	180	5	1.3	NA	mg/L
OAPIS-1	6/7/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OAPIS-1	6/7/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OAPIS-1	6/7/2016	Copper, Total	0.011	0.006	0.0051	790000	mg/L
OAPIS-1	6/7/2016	Iron, Total	9.2	0.4	0.14	13822000	mg/L
OAPIS-1	6/7/2016	Mercury, Total	0.000072	0.0002	0.000053	2000	mg/L
OAPIS-1	6/7/2016	Potassium, Total	4.5	1	0.18	NA	mg/L
OAPIS-1	6/7/2016	Magnesium, Total	35	1	0.013	NA	mg/L
OAPIS-1	6/7/2016	Manganese, Total	1.9	0.01	0.0076	2017000	mg/L
OAPIS-1	6/7/2016	Sodium, Total	1200	20	1.9	NA	mg/L
OAPIS-1	6/7/2016	Lead, Total	0.0055	0.0025	0.00024	15000	mg/L
OAPIS-1	6/7/2016	Selenium, Total	0.024	0.05	0.0062	50000	mg/L
OAPIS-1	6/7/2016	Uranium, Total	0.014	0.0025	0.000025	30000	mg/L
OAPIS-1	6/7/2016	Zinc, Total	0.015	0.01	0.0039	5960000	mg/L
OAPIS-1	9/1/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OAPIS-1	9/1/2016	Arsenic, Total	0.018	0.02	0.0042	10000	mg/L
OAPIS-1	9/1/2016	Barium, Total	0.89	0.002	0.00079	2000000	mg/L
OAPIS-1	9/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	9/1/2016	Chromium, Total	0.0053	0.006	0.0027	50000	mg/L
OAPIS-1	9/1/2016	Copper, Total	0.014	0.006	0.003	790000	mg/L
OAPIS-1	9/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OAPIS-1	9/1/2016	Arsenic, Dissolved	0.016	0.005	0.00069	10000	mg/L
OAPIS-1	9/1/2016	Barium, Dissolved	0.85	0.002	0.0013	2000000	mg/L
OAPIS-1	9/1/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	9/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OAPIS-1	9/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OAPIS-1	9/1/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OAPIS-1	9/1/2016	Iron, Dissolved	7.5	0.4	0.4	13821880	mg/L
OAPIS-1	9/1/2016	Potassium, Dissolved	3.8	1	0.5	NA	mg/L
OAPIS-1	9/1/2016	Magnesium, Dissolved	33	1	0.5	NA	mg/L
OAPIS-1	9/1/2016	Manganese, Dissolved	1.8	0.01	0.0016	2017400	mg/L
OAPIS-1	9/1/2016	Sodium, Dissolved	1400	20	10	NA	mg/L
OAPIS-1	9/1/2016	Lead, Dissolved	0.00099	0.0025	0.00084	NA	mg/L
OAPIS-1	9/1/2016	Selenium, Dissolved	0.025	0.005	0.0011	50000	mg/L
OAPIS-1	9/1/2016	Uranium, Dissolved	0.015	0.0025	0.00026	NA	mg/L
OAPIS-1	9/1/2016	Zinc, Dissolved	0.0059	0.01	0.0028	5960450	mg/L
OAPIS-1	9/1/2016	Iron, Total	9.1	0.2	0.2	13822000	mg/L
OAPIS-1	9/1/2016	Manganese, Total	1.9	0.01	0.0014	2017000	mg/L
OAPIS-1	9/1/2016	Lead, Total	0.015	0.0005	0.000081	15000	mg/L
OAPIS-1	9/1/2016	Selenium, Total	ND	0.05	0.05	50000	mg/L
OAPIS-1	9/1/2016	Uranium, Total	0.02	0.0005	0.00017	30000	mg/L
OAPIS-1	9/1/2016	Zinc, Total	0.064	0.01	0.0027	5960000	mg/L
OAPIS-1	11/14/2016	Silver, Total	0.011	0.005	0.0015	50000	mg/L
OAPIS-1	11/14/2016	Arsenic, Total	0.014	0.05	0.011	10000	mg/L
OAPIS-1	11/14/2016	Barium, Total	0.96	0.002	0.00079	2000000	mg/L
OAPIS-1	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	11/14/2016	Chromium, Total	0.0028	0.006	0.0027	50000	mg/L
OAPIS-1	11/14/2016	Copper, Total	0.0035	0.006	0.003	790000	mg/L
OAPIS-1	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OAPIS-1	11/14/2016	Arsenic, Dissolved	0.017	0.005	0.00069	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	11/14/2016	Barium, Dissolved	0.87	0.002	0.0013	2000000	mg/L
OAPIS-1	11/14/2016	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OAPIS-1	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OAPIS-1	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OAPIS-1	11/14/2016	Iron, Dissolved	7.4	1	1	13821880	mg/L
OAPIS-1	11/14/2016	Potassium, Dissolved	4.2	1	0.5	NA	mg/L
OAPIS-1	11/14/2016	Magnesium, Dissolved	33	1	0.5	NA	mg/L
OAPIS-1	11/14/2016	Manganese, Dissolved	1.8	0.01	0.0016	2017400	mg/L
OAPIS-1	11/14/2016	Sodium, Dissolved	1400	50	25	NA	mg/L
OAPIS-1	11/14/2016	Lead, Dissolved	0.00081	0.0005	0.00017	NA	mg/L
OAPIS-1	11/14/2016	Selenium, Dissolved	0.033	0.005	0.0011	50000	mg/L
OAPIS-1	11/14/2016	Uranium, Dissolved	0.014	0.0005	0.000051	NA	mg/L
OAPIS-1	11/14/2016	Zinc, Dissolved	0.0071	0.01	0.0028	5960450	mg/L
OAPIS-1	11/14/2016	Iron, Total	8.3	0.2	0.2	13822000	mg/L
OAPIS-1	11/14/2016	Mercury, Total	0.000089	0.0002	0.000053	2000	mg/L
OAPIS-1	11/14/2016	Manganese, Total	1.8	0.01	0.0014	2017000	mg/L
OAPIS-1	11/14/2016	Lead, Total	0.011	0.0025	0.00041	15000	mg/L
OAPIS-1	11/14/2016	Selenium, Total	0.02	0.05	0.0094	50000	mg/L
OAPIS-1	11/14/2016	Uranium, Total	0.012	0.0025	0.00087	30000	mg/L
OAPIS-1	11/14/2016	Zinc, Total	0.028	0.01	0.0027	5960000	mg/L
OAPIS-1	2/21/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OAPIS-1	2/21/2017	Arsenic, Total	0.021	0.05	0.011	10000	mg/L
OAPIS-1	2/21/2017	Barium, Total	0.98	0.002	0.00079	2000000	mg/L
OAPIS-1	2/21/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OAPIS-1	2/21/2017	Chromium, Total	0.0056	0.006	0.0027	50000	mg/L
OAPIS-1	2/21/2017	Copper, Total	0.0093	0.006	0.003	790000	mg/L
OAPIS-1	2/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OAPIS-1	2/21/2017	Arsenic, Dissolved	0.013	0.005	0.00069	10000	mg/L
OAPIS-1	2/21/2017	Barium, Dissolved	0.95	0.002	0.00085	2000000	mg/L
OAPIS-1	2/21/2017	Calcium, Dissolved	170	5	2.5	NA	mg/L
OAPIS-1	2/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	2/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OAPIS-1	2/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	2/21/2017	Iron, Dissolved	4.8	0.1	0.1	13821880	mg/L
OAPIS-1	2/21/2017	Potassium, Dissolved	4	1	0.5	NA	mg/L
OAPIS-1	2/21/2017	Magnesium, Dissolved	32	1	0.5	NA	mg/L
OAPIS-1	2/21/2017	Manganese, Dissolved	1.7	0.01	0.0019	2017400	mg/L
OAPIS-1	2/21/2017	Sodium, Dissolved	1400	50	25	NA	mg/L
OAPIS-1	2/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	2/21/2017	Selenium, Dissolved	0.022	0.005	0.0011	50000	mg/L
OAPIS-1	2/21/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
OAPIS-1	2/21/2017	Iron, Total	5.8	0.2	0.2	13822000	mg/L
OAPIS-1	2/21/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OAPIS-1	2/21/2017	Manganese, Total	1.6	0.02	0.0027	2017000	mg/L
OAPIS-1	2/21/2017	Lead, Total	0.014	0.0025	0.00041	15000	mg/L
OAPIS-1	2/21/2017	Selenium, Total	0.025	0.01	0.0019	50000	mg/L
OAPIS-1	2/21/2017	Zinc, Total	0.03	0.01	0.0027	5960000	mg/L
OAPIS-1	6/1/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OAPIS-1	6/1/2017	Arsenic, Total	0.012	0.005	0.0015	10000	mg/L
OAPIS-1	6/1/2017	Barium, Total	0.99	0.002	0.00093	2000000	mg/L
OAPIS-1	6/1/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	6/1/2017	Chromium, Total	0.0057	0.006	0.0011	50000	mg/L
OAPIS-1	6/1/2017	Copper, Total	0.013	0.006	0.0017	790000	mg/L
OAPIS-1	6/1/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OAPIS-1	6/1/2017	Arsenic, Dissolved	0.011	0.02	0.0035	10000	mg/L
OAPIS-1	6/1/2017	Barium, Dissolved	0.92	0.002	0.00085	2000000	mg/L
OAPIS-1	6/1/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	6/1/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	6/1/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OAPIS-1	6/1/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	6/1/2017	Iron, Dissolved	6.4	0.4	0.33	13821880	mg/L
OAPIS-1	6/1/2017	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
OAPIS-1	6/1/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OAPIS-1	6/1/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
OAPIS-1	6/1/2017	Sodium, Dissolved	1300	20	3.3	NA	mg/L
OAPIS-1	6/1/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	6/1/2017	Selenium, Dissolved	0.016	0.02	0.0077	50000	mg/L
OAPIS-1	6/1/2017	Uranium, Dissolved	0.013	0.0025	0.00025	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/1/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OAPIS-1	6/1/2017	Iron, Total	8.8	0.2	0.1	13822000	mg/L
OAPIS-1	6/1/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	6/1/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OAPIS-1	6/1/2017	Lead, Total	0.011	0.0005	0.000095	15000	mg/L
OAPIS-1	6/1/2017	Selenium, Total	0.015	0.005	0.0036	50000	mg/L
OAPIS-1	6/1/2017	Uranium, Total	0.014	0.0025	0.00077	30000	mg/L
OAPIS-1	6/1/2017	Zinc, Total	0.039	0.01	0.0028	5960000	mg/L
OAPIS-1	9/5/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OAPIS-1	9/5/2017	Arsenic, Total	0.019	0.005	0.0015	10000	mg/L
OAPIS-1	9/5/2017	Barium, Total	0.91	0.002	0.00093	2000000	mg/L
OAPIS-1	9/5/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	9/5/2017	Chromium, Total	0.005	0.006	0.0018	50000	mg/L
OAPIS-1	9/5/2017	Copper, Total	0.01	0.006	0.0017	790000	mg/L
OAPIS-1	9/5/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OAPIS-1	9/5/2017	Arsenic, Dissolved	0.014	0.05	0.0089	10000	mg/L
OAPIS-1	9/5/2017	Barium, Dissolved	0.89	0.002	0.00085	2000000	mg/L
OAPIS-1	9/5/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	9/5/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	9/5/2017	Chromium, Dissolved	0.0031	0.006	0.0013	100000	mg/L
OAPIS-1	9/5/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	9/5/2017	Iron, Dissolved	6	0.2	0.16	13821880	mg/L
OAPIS-1	9/5/2017	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
OAPIS-1	9/5/2017	Magnesium, Dissolved	32	1	0.25	NA	mg/L
OAPIS-1	9/5/2017	Manganese, Dissolved	1.6	0.02	0.0039	2017400	mg/L
OAPIS-1	9/5/2017	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	9/5/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OAPIS-1	9/5/2017	Selenium, Dissolved	0.028	0.05	0.019	50000	mg/L
OAPIS-1	9/5/2017	Uranium, Dissolved	0.0096	0.0025	0.00025	NA	mg/L
OAPIS-1	9/5/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OAPIS-1	9/5/2017	Iron, Total	7.9	0.2	0.1	13822000	mg/L
OAPIS-1	9/5/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	9/5/2017	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
OAPIS-1	9/5/2017	Lead, Total	0.011	0.0025	0.00048	15000	mg/L
OAPIS-1	9/5/2017	Selenium, Total	0.037	0.005	0.0036	50000	mg/L
OAPIS-1	9/5/2017	Uranium, Total	0.0097	0.0025	0.00077	30000	mg/L
OAPIS-1	9/5/2017	Zinc, Total	0.027	0.01	0.0033	5960000	mg/L
OAPIS-1	12/4/2017	Silver, Total	0.027	0.005	0.0012	50000	mg/L
OAPIS-1	12/4/2017	Arsenic, Total	0.018	0.005	0.0021	10000	mg/L
OAPIS-1	12/4/2017	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OAPIS-1	12/4/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	12/4/2017	Chromium, Total	0.0026	0.006	0.0018	50000	mg/L
OAPIS-1	12/4/2017	Copper, Total	0.0099	0.006	0.0041	790000	mg/L
OAPIS-1	12/4/2017	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
OAPIS-1	12/4/2017	Arsenic, Dissolved	0.015	0.01	0.0042	10000	mg/L
OAPIS-1	12/4/2017	Barium, Dissolved	1.1	0.01	0.0049	2000000	mg/L
OAPIS-1	12/4/2017	Calcium, Dissolved	160	5	0.39	NA	mg/L
OAPIS-1	12/4/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	12/4/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	12/4/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	12/4/2017	Iron, Dissolved	3	0.1	0.082	13821880	mg/L
OAPIS-1	12/4/2017	Potassium, Dissolved	3.8	1	0.11	NA	mg/L
OAPIS-1	12/4/2017	Magnesium, Dissolved	30	1	0.25	NA	mg/L
OAPIS-1	12/4/2017	Manganese, Dissolved	1.6	0.01	0.002	2017400	mg/L
OAPIS-1	12/4/2017	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	12/4/2017	Lead, Dissolved	0.00068	0.0005	0.00017	NA	mg/L
OAPIS-1	12/4/2017	Selenium, Dissolved	0.02	0.01	0.0076	50000	mg/L
OAPIS-1	12/4/2017	Uranium, Dissolved	0.021	0.0005	0.000096	NA	mg/L
OAPIS-1	12/4/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OAPIS-1	12/4/2017	Iron, Total	2	0.1	0.051	13822000	mg/L
OAPIS-1	12/4/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
OAPIS-1	12/4/2017	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OAPIS-1	12/4/2017	Lead, Total	0.0065	0.005	0.0023	15000	mg/L
OAPIS-1	12/4/2017	Selenium, Total	ND	0.05	0.049	50000	mg/L
OAPIS-1	12/4/2017	Uranium, Total	0.05	0.005	0.0015	30000	mg/L
OAPIS-1	12/4/2017	Zinc, Total	0.019	0.01	0.0033	5960000	mg/L
OAPIS-1	2/9/2018	Silver, Total	0.0038	0.005	0.0012	50000	mg/L
OAPIS-1	2/9/2018	Arsenic, Total	0.02	0.005	0.0021	10000	mg/L
OAPIS-1	2/9/2018	Barium, Total	1.2	0.02	0.01	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	2/9/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
OAPIS-1	2/9/2018	Chromium, Total	0.0045	0.006	0.0018	50000	mg/L
OAPIS-1	2/9/2018	Copper, Total	0.031	0.006	0.0041	790000	mg/L
OAPIS-1	2/9/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OAPIS-1	2/9/2018	Arsenic, Dissolved	0.016	0.005	0.0021	10000	mg/L
OAPIS-1	2/9/2018	Barium, Dissolved	0.98	0.002	0.00099	2000000	mg/L
OAPIS-1	2/9/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	2/9/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	2/9/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	2/9/2018	Copper, Dissolved	0.0036	0.006	0.0032	790000	mg/L
OAPIS-1	2/9/2018	Iron, Dissolved	1.3	0.1	0.082	13821880	mg/L
OAPIS-1	2/9/2018	Potassium, Dissolved	3.5	1	0.11	NA	mg/L
OAPIS-1	2/9/2018	Magnesium, Dissolved	27	1	0.25	NA	mg/L
OAPIS-1	2/9/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OAPIS-1	2/9/2018	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	2/9/2018	Lead, Dissolved	0.0029	0.0005	0.00017	NA	mg/L
OAPIS-1	2/9/2018	Selenium, Dissolved	0.019	0.005	0.0038	50000	mg/L
OAPIS-1	2/9/2018	Uranium, Dissolved	0.038	0.0025	0.00048	NA	mg/L
OAPIS-1	2/9/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
OAPIS-1	2/9/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OAPIS-1	2/9/2018	Mercury, Total	0.000085	0.0002	0.000037	2000	mg/L
OAPIS-1	2/9/2018	Manganese, Total	1.3	0.02	0.011	2017000	mg/L
OAPIS-1	2/9/2018	Lead, Total	0.016	0.0025	0.0011	15000	mg/L
OAPIS-1	2/9/2018	Selenium, Total	0.022	0.005	0.0049	50000	mg/L
OAPIS-1	2/9/2018	Uranium, Total	0.074	0.0025	0.00034	30000	mg/L
OAPIS-1	2/9/2018	Zinc, Total	0.059	0.05	0.016	5960000	mg/L
OAPIS-1	4/30/2018	Silver, Total	0.0026	0.005	0.0012	50000	mg/L
OAPIS-1	4/30/2018	Arsenic, Total	0.011	0.005	0.0021	10000	mg/L
OAPIS-1	4/30/2018	Barium, Total	1.2	0.01	0.005	2000000	mg/L
OAPIS-1	4/30/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	4/30/2018	Chromium, Total	0.0086	0.006	0.0018	50000	mg/L
OAPIS-1	4/30/2018	Copper, Total	0.034	0.006	0.0041	790000	mg/L
OAPIS-1	4/30/2018	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
OAPIS-1	4/30/2018	Arsenic, Dissolved	0.0091	0.005	0.0021	10000	mg/L
OAPIS-1	4/30/2018	Barium, Dissolved	0.93	0.002	0.00099	2000000	mg/L
OAPIS-1	4/30/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	4/30/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	4/30/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	4/30/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
OAPIS-1	4/30/2018	Iron, Dissolved	0.98	0.1	0.082	13821880	mg/L
OAPIS-1	4/30/2018	Potassium, Dissolved	3.7	1	0.11	NA	mg/L
OAPIS-1	4/30/2018	Magnesium, Dissolved	30	1	0.25	NA	mg/L
OAPIS-1	4/30/2018	Manganese, Dissolved	1.1	0.01	0.002	2017400	mg/L
OAPIS-1	4/30/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	4/30/2018	Lead, Dissolved	0.0043	0.0025	0.00087	NA	mg/L
OAPIS-1	4/30/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OAPIS-1	4/30/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OAPIS-1	4/30/2018	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
OAPIS-1	4/30/2018	Iron, Total	7.5	0.2	0.1	13822000	mg/L
OAPIS-1	4/30/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OAPIS-1	4/30/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OAPIS-1	4/30/2018	Lead, Total	0.013	0.0025	0.0011	15000	mg/L
OAPIS-1	4/30/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OAPIS-1	4/30/2018	Uranium, Total	0.046	0.0025	0.00034	30000	mg/L
OAPIS-1	4/30/2018	Zinc, Total	0.053	0.01	0.0033	5960000	mg/L
OAPIS-1	9/6/2018	Silver, Total	0.0043	0.005	0.0012	50000	mg/L
OAPIS-1	9/6/2018	Arsenic, Total	0.0091	0.005	0.0021	10000	mg/L
OAPIS-1	9/6/2018	Barium, Total	1.3	0.01	0.005	2000000	mg/L
OAPIS-1	9/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OAPIS-1	9/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OAPIS-1	9/6/2018	Copper, Total	0.013	0.006	0.0041	790000	mg/L
OAPIS-1	9/6/2018	Silver, Dissolved	0.0042	0.005	0.0018	81200	mg/L
OAPIS-1	9/6/2018	Arsenic, Dissolved	0.008	0.005	0.0021	10000	mg/L
OAPIS-1	9/6/2018	Barium, Dissolved	1.1	0.02	0.0099	2000000	mg/L
OAPIS-1	9/6/2018	Calcium, Dissolved	160	10	0.78	NA	mg/L
OAPIS-1	9/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OAPIS-1	9/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OAPIS-1	9/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OAPIS-1	9/6/2018	Iron, Dissolved	0.88	0.02	0.016	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	9/6/2018	Potassium, Dissolved	4	1	0.11	NA	mg/L
OAPIS-1	9/6/2018	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OAPIS-1	9/6/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OAPIS-1	9/6/2018	Sodium, Dissolved	1200	20	3.3	NA	mg/L
OAPIS-1	9/6/2018	Lead, Dissolved	0.0038	0.0025	0.00087	NA	mg/L
OAPIS-1	9/6/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OAPIS-1	9/6/2018	Uranium, Dissolved	0.041	0.0025	0.00048	NA	mg/L
OAPIS-1	9/6/2018	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OAPIS-1	9/6/2018	Iron, Total	1.8	0.1	0.051	13822000	mg/L
OAPIS-1	9/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	9/6/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
OAPIS-1	9/6/2018	Lead, Total	0.0091	0.0025	0.0011	15000	mg/L
OAPIS-1	9/6/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OAPIS-1	9/6/2018	Uranium, Total	0.029	0.0025	0.00034	30000	mg/L
OAPIS-1	9/6/2018	Zinc, Total	0.041	0.01	0.0033	5960000	mg/L
OAPIS-1	11/19/2018	Silver, Total	ND	0.025	0.0061	50000	mg/L
OAPIS-1	11/19/2018	Arsenic, Total	0.0096	0.001	0.00041	10000	mg/L
OAPIS-1	11/19/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OAPIS-1	11/19/2018	Cadmium, Total	ND	0.01	0.0029	5000	mg/L
OAPIS-1	11/19/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OAPIS-1	11/19/2018	Copper, Total	ND	0.03	0.02	790000	mg/L
OAPIS-1	11/19/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OAPIS-1	11/19/2018	Arsenic, Dissolved	0.0083	0.001	0.00042	10000	mg/L
OAPIS-1	11/19/2018	Barium, Dissolved	0.99	0.01	0.0049	2000000	mg/L
OAPIS-1	11/19/2018	Calcium, Dissolved	150	5	0.39	NA	mg/L
OAPIS-1	11/19/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OAPIS-1	11/19/2018	Chromium, Dissolved	ND	0.03	0.0064	100000	mg/L
OAPIS-1	11/19/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OAPIS-1	11/19/2018	Iron, Dissolved	6.2	1	0.82	13821880	mg/L
OAPIS-1	11/19/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OAPIS-1	11/19/2018	Magnesium, Dissolved	28	5	1.2	NA	mg/L
OAPIS-1	11/19/2018	Manganese, Dissolved	1.7	0.01	0.002	2017400	mg/L
OAPIS-1	11/19/2018	Sodium, Dissolved	1300	50	8.2	NA	mg/L
OAPIS-1	11/19/2018	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
OAPIS-1	11/19/2018	Selenium, Dissolved	0.001	0.001	0.00076	50000	mg/L
OAPIS-1	11/19/2018	Uranium, Dissolved	0.0058	0.0005	0.000096	NA	mg/L
OAPIS-1	11/19/2018	Zinc, Dissolved	ND	0.05	0.011	5960450	mg/L
OAPIS-1	11/19/2018	Iron, Total	6.9	1	0.51	13822000	mg/L
OAPIS-1	11/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OAPIS-1	11/19/2018	Manganese, Total	1.6	0.01	0.0055	2017000	mg/L
OAPIS-1	11/19/2018	Lead, Total	0.0064	0.0005	0.00023	15000	mg/L
OAPIS-1	11/19/2018	Selenium, Total	0.0011	0.001	0.00098	50000	mg/L
OAPIS-1	11/19/2018	Uranium, Total	0.0099	0.0005	0.000068	30000	mg/L
OAPIS-1	11/19/2018	Zinc, Total	0.09	0.05	0.016	5960000	mg/L
OW-01	10/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-01	10/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	10/16/2019	Arsenic, Dissolved	0.0009	0.001	0.000101	10000	mg/L
OW-01	10/16/2019	Barium, Dissolved	0.037	0.002	0.000648	2000000	mg/L
OW-01	10/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	10/16/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
OW-01	10/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	10/16/2019	Calcium, Dissolved	2.3	1	0.061889	NA	mg/L
OW-01	10/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	10/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	10/16/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	10/16/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	10/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	10/16/2019	Magnesium, Dissolved	0.27	1	0.05029	NA	mg/L
OW-01	10/16/2019	Manganese, Dissolved	0.0007	0.002	0.00029	2017400	mg/L
OW-01	10/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	10/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	10/16/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-01	10/16/2019	Selenium, Dissolved	0.0025	0.001	0.000171	50000	mg/L
OW-01	10/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	10/16/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
OW-01	10/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	10/16/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	10/16/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
OW-01	10/16/2019	Aluminum, Total	0.12	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	10/16/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-01	10/16/2019	Barium, Total	0.036	0.002	0.000648	2000000	mg/L
OW-01	10/16/2019	Beryllium, Total	0.0016	0.002	0.000284	4000	mg/L
OW-01	10/16/2019	Boron, Total	0.3	0.04	0.004531	3949	mg/L
OW-01	10/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	10/16/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
OW-01	10/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-01	10/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	10/16/2019	Iron, Total	0.034	0.02	0.008747	13822000	mg/L
OW-01	10/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-01	10/16/2019	Manganese, Total	0.00078	0.002	0.00029	2017000	mg/L
OW-01	10/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	10/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	10/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-01	10/16/2019	Selenium, Total	0.0025	0.005	0.00239	50000	mg/L
OW-01	10/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	10/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	10/16/2019	Uranium, Total	0.04	0.0025	0.000424	30000	mg/L
OW-01	10/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	3/27/2019	Aluminum, Dissolved	ND	0.1	0.012441	19913930	mg/L
OW-01	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	3/27/2019	Arsenic, Dissolved	0.0007	0.001	0.000101	10000	mg/L
OW-01	3/27/2019	Barium, Dissolved	0.038	0.002	0.000648	2000000	mg/L
OW-01	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	3/27/2019	Boron, Dissolved	0.38	0.04	0.004531	3949110	mg/L
OW-01	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	3/27/2019	Calcium, Dissolved	2.6	1	0.061889	NA	mg/L
OW-01	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	3/27/2019	Magnesium, Dissolved	0.26	1	0.05029	NA	mg/L
OW-01	3/27/2019	Manganese, Dissolved	0.0029	0.002	0.00029	2017400	mg/L
OW-01	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	3/27/2019	Potassium, Dissolved	0.72	1	0.162288	NA	mg/L
OW-01	3/27/2019	Selenium, Dissolved	0.0023	0.001	0.000171	50000	mg/L
OW-01	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	3/27/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
OW-01	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	3/27/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	3/27/2019	Zinc, Dissolved	0.051	0.01	0.002252	5960450	mg/L
OW-01	3/27/2019	Aluminum, Total	0.32	0.02	0.004564	19914000	mg/L
OW-01	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-01	3/27/2019	Arsenic, Total	0.00073	0.001	0.000312	10000	mg/L
OW-01	3/27/2019	Barium, Total	0.036	0.002	0.000488	2000000	mg/L
OW-01	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-01	3/27/2019	Boron, Total	0.34	0.04	0.001821	3949	mg/L
OW-01	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	3/27/2019	Chromium, Total	0.0013	0.006	0.0012	50000	mg/L
OW-01	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-01	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	3/27/2019	Iron, Total	0.17	0.02	0.006053	13822000	mg/L
OW-01	3/27/2019	Lead, Total	0.00021	0.0005	0.000026	15000	mg/L
OW-01	3/27/2019	Manganese, Total	0.011	0.002	0.00006	2017000	mg/L
OW-01	3/27/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-01	3/27/2019	Molybdenum, Total	0.0026	0.008	0.002075	98700	mg/L
OW-01	3/27/2019	Nickel, Total	0.0027	0.01	0.001491	372000	mg/L
OW-01	3/27/2019	Selenium, Total	0.0025	0.001	0.000478	50000	mg/L
OW-01	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	3/27/2019	Uranium, Total	0.037	0.0025	0.000424	30000	mg/L
OW-01	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	8/15/2019	Aluminum, Total	12	0.4	0.049765	19914000	mg/L
OW-01	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	8/15/2019	Arsenic, Total	0.003	0.001	0.000312	10000	mg/L
OW-01	8/15/2019	Barium, Total	0.16	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	8/15/2019	Beryllium, Total	0.00067	0.002	0.000284	4000	mg/L
OW-01	8/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-01	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	8/15/2019	Chromium, Total	0.057	0.006	0.001533	50000	mg/L
OW-01	8/15/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-01	8/15/2019	Copper, Total	0.0064	0.006	0.004072	790000	mg/L
OW-01	8/15/2019	Iron, Total	7.7	0.2	0.087469	13822000	mg/L
OW-01	8/15/2019	Lead, Total	0.012	0.0005	0.000055	15000	mg/L
OW-01	8/15/2019	Manganese, Total	0.33	0.002	0.00029	2017000	mg/L
OW-01	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	8/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	8/15/2019	Nickel, Total	0.048	0.01	0.004009	372000	mg/L
OW-01	8/15/2019	Selenium, Total	0.0046	0.001	0.000478	50000	mg/L
OW-01	8/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	8/15/2019	Thallium, Total	0.000074	0.0005	0.000052	2000	mg/L
OW-01	8/15/2019	Uranium, Total	0.038	0.0025	0.000424	30000	mg/L
OW-01	8/15/2019	Zinc, Total	0.083	0.01	0.005772	5960000	mg/L
OW-01	8/15/2019	Aluminum, Dissolved	0.31	0.02	0.002488	19913930	mg/L
OW-01	8/15/2019	Antimony, Dissolved	0.0011	0.001	0.000389	6000	mg/L
OW-01	8/15/2019	Arsenic, Dissolved	0.00083	0.001	0.000101	10000	mg/L
OW-01	8/15/2019	Barium, Dissolved	0.032	0.002	0.000648	2000000	mg/L
OW-01	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	8/15/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-01	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	8/15/2019	Calcium, Dissolved	2.6	1	0.061889	NA	mg/L
OW-01	8/15/2019	Chromium, Dissolved	0.0048	0.006	0.001533	100000	mg/L
OW-01	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	8/15/2019	Copper, Dissolved	0.0027	0.006	0.001296	790000	mg/L
OW-01	8/15/2019	Iron, Dissolved	0.19	0.02	0.008747	13821880	mg/L
OW-01	8/15/2019	Lead, Dissolved	0.00046	0.0005	0.000055	NA	mg/L
OW-01	8/15/2019	Magnesium, Dissolved	0.34	1	0.05029	NA	mg/L
OW-01	8/15/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-01	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	8/15/2019	Nickel, Dissolved	0.0049	0.01	0.004009	372000	mg/L
OW-01	8/15/2019	Potassium, Dissolved	0.7	1	0.162288	NA	mg/L
OW-01	8/15/2019	Selenium, Dissolved	0.0028	0.001	0.000171	50000	mg/L
OW-01	8/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	8/15/2019	Sodium, Dissolved	360	5	2.080881	NA	mg/L
OW-01	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	8/15/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-01	8/15/2019	Zinc, Dissolved	0.0078	0.01	0.002252	5960450	mg/L
OW-01	5/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-01	5/21/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-01	5/21/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-01	5/21/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	5/21/2019	Magnesium, Dissolved	0.25	1	0.05029	NA	mg/L
OW-01	5/21/2019	Manganese, Dissolved	0.0015	0.002	0.00029	2017400	mg/L
OW-01	5/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-01	5/21/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-01	5/21/2019	Potassium, Dissolved	0.76	1	0.162288	NA	mg/L
OW-01	5/21/2019	Selenium, Dissolved	0.0023	0.001	0.000171	50000	mg/L
OW-01	5/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-01	5/21/2019	Sodium, Dissolved	330	5	2.080881	NA	mg/L
OW-01	5/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	5/21/2019	Uranium, Dissolved	0.032	0.0025	0.000374	NA	mg/L
OW-01	5/21/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
OW-01	5/21/2019	Aluminum, Total	0.028	0.02	0.002488	19914000	mg/L
OW-01	5/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-01	5/21/2019	Arsenic, Total	0.00067	0.001	0.000312	10000	mg/L
OW-01	5/21/2019	Barium, Total	0.037	0.002	0.000648	2000000	mg/L
OW-01	5/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-01	5/21/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-01	5/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-01	5/21/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-01	5/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-01	5/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-01	5/21/2019	Iron, Total	0.023	0.02	0.008747	13822000	mg/L
OW-01	5/21/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-01	5/21/2019	Manganese, Total	0.0026	0.002	0.00029	2017000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	5/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-01	5/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-01	5/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-01	5/21/2019	Arsenic, Dissolved	0.00074	0.001	0.000101	10000	mg/L
OW-01	5/21/2019	Barium, Dissolved	0.036	0.002	0.000648	2000000	mg/L
OW-01	5/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-01	5/21/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-01	5/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-01	5/21/2019	Calcium, Dissolved	2.3	1	0.061889	NA	mg/L
OW-01	5/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-01	5/21/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-01	5/21/2019	Selenium, Total	0.0024	0.001	0.000478	50000	mg/L
OW-01	5/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-01	5/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	5/21/2019	Uranium, Total	0.034	0.0025	0.000424	30000	mg/L
OW-01	5/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-01	3/9/2020	Antimony, Dissolved	0.00043	0.001	0.00039	6000	mg/L
OW-01	3/9/2020	Arsenic, Dissolved	0.00087	0.001	0.0001	10000	mg/L
OW-01	3/9/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-01	3/9/2020	Selenium, Dissolved	0.0023	0.001	0.00017	50000	mg/L
OW-01	3/9/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-01	3/9/2020	Uranium, Dissolved	0.037	0.0025	0.00037	NA	mg/L
OW-01	3/9/2020	Aluminum, Dissolved	0.11	0.02	0.0025	19913930	mg/L
OW-01	3/9/2020	Barium, Dissolved	0.026	0.002	0.00065	2000000	mg/L
OW-01	3/9/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-01	3/9/2020	Boron, Dissolved	0.32	0.04	0.0045	3949110	mg/L
OW-01	3/9/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-01	3/9/2020	Calcium, Dissolved	2.5	1	0.062	NA	mg/L
OW-01	3/9/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-01	3/9/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-01	3/9/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-01	3/9/2020	Iron, Dissolved	0.051	0.02	0.0087	13821880	mg/L
OW-01	3/9/2020	Magnesium, Dissolved	0.31	1	0.05	NA	mg/L
OW-01	3/9/2020	Manganese, Dissolved	0.0052	0.002	0.00029	2017400	mg/L
OW-01	3/9/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-01	3/9/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-01	3/9/2020	Potassium, Dissolved	0.68	1	0.16	NA	mg/L
OW-01	3/9/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-01	3/9/2020	Zinc, Dissolved	0.013	0.01	0.0023	5960450	mg/L
OW-01	3/9/2020	Sodium, Dissolved	330	5	2.1	NA	mg/L
OW-01	3/9/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-01	3/9/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-01	3/9/2020	Arsenic, Total	0.0011	0.001	0.00031	10000	mg/L
OW-01	3/9/2020	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
OW-01	3/9/2020	Selenium, Total	0.0023	0.001	0.00048	50000	mg/L
OW-01	3/9/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-01	3/9/2020	Uranium, Total	0.038	0.0025	0.00042	30000	mg/L
OW-01	3/9/2020	Barium, Total	0.059	0.002	0.00065	2000000	mg/L
OW-01	3/9/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-01	3/9/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-01	3/9/2020	Chromium, Total	0.019	0.006	0.0015	50000	mg/L
OW-01	3/9/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-01	3/9/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	3/9/2020	Manganese, Total	0.053	0.002	0.00029	2017000	mg/L
OW-01	3/9/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-01	3/9/2020	Nickel, Total	0.012	0.01	0.004	372000	mg/L
OW-01	3/9/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-01	3/9/2020	Zinc, Total	0.0088	0.01	0.0058	5960000	mg/L
OW-01	3/9/2020	Iron, Total	3.1	0.1	0.044	13822000	mg/L
OW-01	3/9/2020	Aluminum, Total	7.3	1	0.12	19914000	mg/L
OW-01	3/9/2020	Boron, Total	0.35	0.04	0.0045	3949	mg/L
OW-01	9/20/2020	Mercury, Total	0.00016	0.0002	0.00012	2000	mg/L
OW-01	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-01	9/20/2020	Arsenic, Total	0.0023	0.001	0.00026	10000	mg/L
OW-01	9/20/2020	Lead, Total	0.01	0.0005	0.000034	15000	mg/L
OW-01	9/20/2020	Selenium, Total	0.0035	0.001	0.00066	50000	mg/L
OW-01	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-01	9/20/2020	Uranium, Total	0.035	0.0025	0.00033	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/20/2020	Barium, Total	0.16	0.003	0.0016	2000000	mg/L
OW-01	9/20/2020	Beryllium, Total	0.001	0.002	0.00088	4000	mg/L
OW-01	9/20/2020	Boron, Total	0.35	0.04	0.0074	3949	mg/L
OW-01	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	9/20/2020	Chromium, Total	0.046	0.006	0.0021	50000	mg/L
OW-01	9/20/2020	Manganese, Total	0.36	0.002	0.00081	2017000	mg/L
OW-01	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-01	9/20/2020	Cobalt, Total	0.0032	0.006	0.0024	5980	mg/L
OW-01	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	9/20/2020	Nickel, Total	0.04	0.01	0.0033	372000	mg/L
OW-01	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-01	9/20/2020	Zinc, Total	0.057	0.01	0.0064	5960000	mg/L
OW-01	9/20/2020	Aluminum, Total	12	0.4	0.15	19914000	mg/L
OW-01	9/20/2020	Iron, Total	8.5	1	0.26	13822000	mg/L
OW-01	9/20/2020	Arsenic, Dissolved	0.00061	0.001	0.00021	10000	mg/L
OW-01	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-01	9/20/2020	Selenium, Dissolved	0.0019	0.001	0.00066	50000	mg/L
OW-01	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-01	9/20/2020	Uranium, Dissolved	0.03	0.0025	0.00033	NA	mg/L
OW-01	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-01	9/20/2020	Sodium, Dissolved	320	5	0.69	NA	mg/L
OW-01	9/20/2020	Aluminum, Dissolved	0.025	0.02	0.0056	19913930	mg/L
OW-01	9/20/2020	Barium, Dissolved	0.035	0.002	0.0011	2000000	mg/L
OW-01	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-01	9/20/2020	Boron, Dissolved	0.34	0.04	0.0067	3949110	mg/L
OW-01	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-01	9/20/2020	Calcium, Dissolved	2.4	1	0.11	NA	mg/L
OW-01	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-01	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-01	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-01	9/20/2020	Iron, Dissolved	0.015	0.02	0.01	13821880	mg/L
OW-01	9/20/2020	Magnesium, Dissolved	0.28	1	0.067	NA	mg/L
OW-01	9/20/2020	Manganese, Dissolved	0.0059	0.002	0.00058	2017400	mg/L
OW-01	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-01	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-01	9/20/2020	Potassium, Dissolved	0.7	1	0.16	NA	mg/L
OW-01	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-01	9/20/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OW-01	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-01	12/11/2020	Aluminum, Total	0.29	0.2	0.051	19914000	mg/L
OW-01	12/11/2020	Calcium, Total	2.56	0.5	0.084	NA	mg/L
OW-01	12/11/2020	Boron, Total	0.349	0.1	0.022	3949	mg/L
OW-01	12/11/2020	Barium, Total	0.0429	0.01	0.003	2000000	mg/L
OW-01	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-01	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-01	12/11/2020	Magnesium, Total	ND	0.5	0.12	NA	mg/L
OW-01	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-01	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-01	12/11/2020	Sodium, Total	317	2	0.92	NA	mg/L
OW-01	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-01	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-01	12/11/2020	Manganese, Total	0.0134	0.01	0.003	2017000	mg/L
OW-01	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-01	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-01	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-01	12/11/2020	Iron, Total	0.423	0.2	0.075	13822000	mg/L
OW-01	12/11/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-01	12/11/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-01	12/11/2020	Boron, Dissolved	0.376	0.2	0.0527	3949110	mg/L
OW-01	12/11/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-01	12/11/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-01	12/11/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-01	12/11/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-01	12/11/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-01	12/11/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-01	12/11/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-01	12/11/2020	Manganese, Dissolved	ND	0.015	0.00141	2017400	mg/L
OW-01	12/11/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-01	12/11/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/11/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-01	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-01	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-01	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-01	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-01	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-01	12/11/2020	Uranium, Total Recoverable	**33.9**	5	1.12	30	ug/L
OW-01	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-01	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-01	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-01	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-01	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-01	12/11/2020	Uranium, Dissolved	33.7	5	1.12	NA	ug/L
OW-01	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-01	12/11/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-01	3/22/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
OW-01	3/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	3/22/2012	Barium, Total	0.045	0.002	0.0006	2000000	mg/L
OW-01	3/22/2012	Calcium, Total	2.2	1	0.026	NA	mg/L
OW-01	3/22/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
OW-01	3/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	3/22/2012	Copper, Total	ND	0.006	0.00066	790000	mg/L
OW-01	3/22/2012	Iron, Total	0.23	0.02	0.0089	13822000	mg/L
OW-01	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-01	3/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	3/22/2012	Manganese, Total	0.058	0.002	0.00012	2017000	mg/L
OW-01	3/22/2012	Sodium, Total	330	5	0.22	NA	mg/L
OW-01	3/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	3/22/2012	Selenium, Total	0.0035	0.0025	0.0025	50000	mg/L
OW-01	3/22/2012	Uranium, Total	0.041	0.0025	0.00003	30000	mg/L
OW-01	3/22/2012	Zinc, Total	0.01	0.01	0.0011	5960000	mg/L
OW-01	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-01	6/13/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-01	6/13/2012	Barium, Total	0.036	0.002	0.00031	2000000	mg/L
OW-01	6/13/2012	Calcium, Total	2.1	1	0.026	NA	mg/L
OW-01	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-01	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-01	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-01	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-01	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	6/13/2012	Potassium, Total	1.1	1	0.48	NA	mg/L
OW-01	6/13/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	6/13/2012	Manganese, Total	0.0067	0.002	0.00062	2017000	mg/L
OW-01	6/13/2012	Sodium, Total	320	5	0.22	NA	mg/L
OW-01	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-01	6/13/2012	Selenium, Total	0.0037	0.001	0.00033	50000	mg/L
OW-01	6/13/2012	Uranium, Total	0.043	0.001	0.00006	30000	mg/L
OW-01	6/13/2012	Zinc, Total	0.015	0.01	0.00062	5960000	mg/L
OW-01	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	8/22/2012	Barium, Total	0.039	0.002	0.00039	2000000	mg/L
OW-01	8/22/2012	Calcium, Total	2.4	1	0.026	NA	mg/L
OW-01	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	8/22/2012	Copper, Total	0.008	0.006	0.0041	790000	mg/L
OW-01	8/22/2012	Iron, Total	0.19	0.02	0.013	13822000	mg/L
OW-01	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	8/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-01	8/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	8/22/2012	Manganese, Total	0.027	0.002	0.00026	2017000	mg/L
OW-01	8/22/2012	Sodium, Total	330	5	0.22	NA	mg/L
OW-01	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	8/22/2012	Selenium, Total	0.0041	0.0025	0.0025	50000	mg/L
OW-01	8/22/2012	Uranium, Total	0.04	0.0025	0.00003	30000	mg/L
OW-01	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-01	11/27/2012	Barium, Total	0.035	0.002	0.00039	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/27/2012	Calcium, Total	ND	5	0.13	NA	mg/L
OW-01	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	11/27/2012	Iron, Total	0.18	0.02	0.013	13822000	mg/L
OW-01	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-01	11/27/2012	Potassium, Total	ND	5	2.4	NA	mg/L
OW-01	11/27/2012	Magnesium, Total	ND	5	0.065	NA	mg/L
OW-01	11/27/2012	Manganese, Total	0.013	0.002	0.00026	2017000	mg/L
OW-01	11/27/2012	Sodium, Total	280	5	0.22	NA	mg/L
OW-01	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	11/27/2012	Selenium, Total	0.0026	0.0025	0.0025	50000	mg/L
OW-01	11/27/2012	Uranium, Total	0.045	0.0025	0.00003	30000	mg/L
OW-01	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-01	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-01	3/19/2013	Barium, Total	0.035	0.002	0.00039	2000000	mg/L
OW-01	3/19/2013	Calcium, Total	2	1	0.069	NA	mg/L
OW-01	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-01	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-01	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	3/19/2013	Iron, Total	0.088	0.02	0.013	13822000	mg/L
OW-01	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	3/19/2013	Potassium, Total	ND	1	0.39	NA	mg/L
OW-01	3/19/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	3/19/2013	Manganese, Total	0.0074	0.002	0.00026	2017000	mg/L
OW-01	3/19/2013	Sodium, Total	290	5	1.1	NA	mg/L
OW-01	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-01	3/19/2013	Selenium, Total	0.0032	0.0025	0.00066	50000	mg/L
OW-01	3/19/2013	Uranium, Total	0.044	0.0025	0.0012	30000	mg/L
OW-01	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-01	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-01	6/13/2013	Arsenic, Total	0.0061	0.001	0.00027	10000	mg/L
OW-01	6/13/2013	Barium, Total	0.26	0.002	0.00057	2000000	mg/L
OW-01	6/13/2013	Calcium, Total	2.4	1	0.069	NA	mg/L
OW-01	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-01	6/13/2013	Chromium, Total	0.028	0.006	0.0021	50000	mg/L
OW-01	6/13/2013	Copper, Total	0.0061	0.006	0.005	790000	mg/L
OW-01	6/13/2013	Iron, Total	19	1	0.26	13822000	mg/L
OW-01	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	6/13/2013	Potassium, Total	ND	1	0.24	NA	mg/L
OW-01	6/13/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	6/13/2013	Manganese, Total	0.82	0.002	0.00052	2017000	mg/L
OW-01	6/13/2013	Sodium, Total	290	5	1.6	NA	mg/L
OW-01	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	6/13/2013	Selenium, Total	0.0042	0.001	0.00049	50000	mg/L
OW-01	6/13/2013	Uranium, Total	0.052	0.005	0.0025	30000	mg/L
OW-01	6/13/2013	Zinc, Total	0.07	0.01	0.0011	5960000	mg/L
OW-01	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-01	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-01	9/4/2013	Barium, Total	0.033	0.002	0.00095	2000000	mg/L
OW-01	9/4/2013	Calcium, Total	2.1	1	0.069	NA	mg/L
OW-01	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-01	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-01	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	9/4/2013	Iron, Total	0.037	0.02	0.0089	13822000	mg/L
OW-01	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	9/4/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
OW-01	9/4/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	9/4/2013	Manganese, Total	0.0062	0.002	0.00016	2017000	mg/L
OW-01	9/4/2013	Sodium, Total	310	5	1.6	NA	mg/L
OW-01	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-01	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-01	9/4/2013	Uranium, Total	0.045	0.01	0.000073	30000	mg/L
OW-01	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-01	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-01	11/11/2013	Arsenic, Total	0.0012	0.001	0.000098	10000	mg/L
OW-01	11/11/2013	Barium, Total	0.038	0.002	0.00095	2000000	mg/L
OW-01	11/11/2013	Calcium, Total	1.9	1	0.069	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-01	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-01	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-01	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-01	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-01	11/11/2013	Potassium, Total	1	1	0.24	NA	mg/L
OW-01	11/11/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-01	11/11/2013	Manganese, Total	0.0075	0.002	0.00016	2017000	mg/L
OW-01	11/11/2013	Sodium, Total	270	5	1.6	NA	mg/L
OW-01	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	11/11/2013	Selenium, Total	0.0046	0.001	0.00029	50000	mg/L
OW-01	11/11/2013	Uranium, Total	0.041	0.001	0.0000073	30000	mg/L
OW-01	11/11/2013	Zinc, Total	0.029	0.01	0.00076	5960000	mg/L
OW-01	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	3/7/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
OW-01	3/7/2014	Barium, Total	0.035	0.002	0.0011	2000000	mg/L
OW-01	3/7/2014	Calcium, Total	2	1	0.082	NA	mg/L
OW-01	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-01	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	3/7/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-01	3/7/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-01	3/7/2014	Manganese, Total	0.0063	0.002	0.00055	2017000	mg/L
OW-01	3/7/2014	Sodium, Total	320	5	2	NA	mg/L
OW-01	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-01	3/7/2014	Selenium, Total	0.0039	0.001	0.00029	50000	mg/L
OW-01	3/7/2014	Uranium, Total	0.043	0.001	0.0000073	30000	mg/L
OW-01	3/7/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
OW-01	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	6/3/2014	Arsenic, Total	0.0016	0.001	0.00011	10000	mg/L
OW-01	6/3/2014	Barium, Total	0.039	0.002	0.0011	2000000	mg/L
OW-01	6/3/2014	Calcium, Total	3.5	1	0.053	NA	mg/L
OW-01	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	6/3/2014	Iron, Total	0.64	0.02	0.0062	13822000	mg/L
OW-01	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	6/3/2014	Potassium, Total	1.7	1	0.24	NA	mg/L
OW-01	6/3/2014	Magnesium, Total	ND	1	0.024	NA	mg/L
OW-01	6/3/2014	Manganese, Total	0.025	0.002	0.00055	2017000	mg/L
OW-01	6/3/2014	Sodium, Total	310	5	1.3	NA	mg/L
OW-01	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-01	6/3/2014	Selenium, Total	0.0066	0.001	0.00015	50000	mg/L
OW-01	6/3/2014	Uranium, Total	0.044	0.005	0.00025	30000	mg/L
OW-01	6/3/2014	Zinc, Total	0.013	0.01	0.0014	5960000	mg/L
OW-01	9/11/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-01	9/11/2014	Arsenic, Total	0.013	0.01	0.0036	10000	mg/L
OW-01	9/11/2014	Barium, Total	0.56	0.002	0.0005	2000000	mg/L
OW-01	9/11/2014	Calcium, Total	17	1	0.082	NA	mg/L
OW-01	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-01	9/11/2014	Chromium, Total	0.12	0.006	0.0028	50000	mg/L
OW-01	9/11/2014	Copper, Total	0.025	0.006	0.0046	790000	mg/L
OW-01	9/11/2014	Iron, Total	41	2	0.72	13822000	mg/L
OW-01	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	9/11/2014	Potassium, Total	2	1	0.093	NA	mg/L
OW-01	9/11/2014	Magnesium, Total	1.7	1	0.018	NA	mg/L
OW-01	9/11/2014	Manganese, Total	1.7	0.02	0.0049	2017000	mg/L
OW-01	9/11/2014	Sodium, Total	330	10	3.9	NA	mg/L
OW-01	9/11/2014	Lead, Total	0.078	0.01	0.0026	15000	mg/L
OW-01	9/11/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
OW-01	9/11/2014	Uranium, Total	0.066	0.01	0.000072	30000	mg/L
OW-01	9/11/2014	Zinc, Total	0.19	0.01	0.0035	5960000	mg/L
OW-01	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-01	11/10/2014	Arsenic, Total	0.0013	0.001	0.00011	10000	mg/L
OW-01	11/10/2014	Barium, Total	0.033	0.002	0.0011	2000000	mg/L
OW-01	11/10/2014	Calcium, Total	2.1	1	0.082	NA	mg/L
OW-01	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-01	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-01	11/10/2014	Iron, Total	0.048	0.02	0.0062	13822000	mg/L
OW-01	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-01	11/10/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-01	11/10/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-01	11/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
OW-01	11/10/2014	Sodium, Total	310	5	2	NA	mg/L
OW-01	11/10/2014	Lead, Total	ND	0.02	0.0012	15000	mg/L
OW-01	11/10/2014	Selenium, Total	0.0037	0.001	0.00015	50000	mg/L
OW-01	11/10/2014	Uranium, Total	0.038	0.02	0.001	30000	mg/L
OW-01	11/10/2014	Zinc, Total	0.031	0.01	0.0014	5960000	mg/L
OW-01	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-01	3/9/2015	Barium, Total	0.04	0.002	0.00073	2000000	mg/L
OW-01	3/9/2015	Calcium, Total	2.2	1	0.057	NA	mg/L
OW-01	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-01	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	3/9/2015	Iron, Total	0.54	0.02	0.0072	13822000	mg/L
OW-01	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	3/9/2015	Potassium, Total	1.7	1	0.18	NA	mg/L
OW-01	3/9/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-01	3/9/2015	Manganese, Total	0.024	0.002	0.0015	2017000	mg/L
OW-01	3/9/2015	Sodium, Total	310	5	0.36	NA	mg/L
OW-01	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-01	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-01	3/9/2015	Uranium, Total	0.042	0.001	0.0000081	30000	mg/L
OW-01	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-01	6/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	6/3/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-01	6/3/2015	Barium, Total	0.047	0.002	0.0011	2000000	mg/L
OW-01	6/3/2015	Calcium, Total	2	1	0.057	NA	mg/L
OW-01	6/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	6/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	6/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	6/3/2015	Iron, Total	1	0.1	0.036	13822000	mg/L
OW-01	6/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	6/3/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-01	6/3/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-01	6/3/2015	Manganese, Total	0.05	0.002	0.0015	2017000	mg/L
OW-01	6/3/2015	Sodium, Total	300	5	0.36	NA	mg/L
OW-01	6/3/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-01	6/3/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-01	6/3/2015	Uranium, Total	0.042	0.005	0.000049	30000	mg/L
OW-01	6/3/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-01	8/12/2015	Silver, Total	ND	0.025	0.011	50000	mg/L
OW-01	8/12/2015	Arsenic, Total	0.036	0.01	0.0029	10000	mg/L
OW-01	8/12/2015	Barium, Total	2.1	0.01	0.0053	2000000	mg/L
OW-01	8/12/2015	Calcium, Total	7.7	1	0.057	NA	mg/L
OW-01	8/12/2015	Cadmium, Total	ND	0.01	0.0031	5000	mg/L
OW-01	8/12/2015	Chromium, Total	0.51	0.03	0.011	50000	mg/L
OW-01	8/12/2015	Copper, Total	0.048	0.03	0.026	790000	mg/L
OW-01	8/12/2015	Iron, Total	140	4	1.4	13822000	mg/L
OW-01	8/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	8/12/2015	Potassium, Total	1.2	1	0.18	NA	mg/L
OW-01	8/12/2015	Magnesium, Total	1.7	1	0.039	NA	mg/L
OW-01	8/12/2015	Manganese, Total	6.7	0.02	0.015	2017000	mg/L
OW-01	8/12/2015	Sodium, Total	320	5	0.36	NA	mg/L
OW-01	8/12/2015	Lead, Total	0.25	0.005	0.00047	15000	mg/L
OW-01	8/12/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-01	8/12/2015	Uranium, Total	0.098	0.005	0.000049	30000	mg/L
OW-01	8/12/2015	Zinc, Total	0.65	0.05	0.019	5960000	mg/L
OW-01	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	10/28/2015	Arsenic, Total	0.0038	0.001	0.00029	10000	mg/L
OW-01	10/28/2015	Barium, Total	0.18	0.002	0.0011	2000000	mg/L
OW-01	10/28/2015	Calcium, Total	7.6	1	0.057	NA	mg/L
OW-01	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	10/28/2015	Chromium, Total	0.056	0.006	0.0022	50000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	10/28/2015	Iron, Total	11	0.4	0.14	13822000	mg/L
OW-01	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-01	10/28/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-01	10/28/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
OW-01	10/28/2015	Manganese, Total	0.42	0.002	0.0015	2017000	mg/L
OW-01	10/28/2015	Sodium, Total	290	5	0.36	NA	mg/L
OW-01	10/28/2015	Lead, Total	0.015	0.0005	0.000047	15000	mg/L
OW-01	10/28/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-01	10/28/2015	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
OW-01	10/28/2015	Zinc, Total	0.06	0.01	0.0039	5960000	mg/L
OW-01	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	3/3/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-01	3/3/2016	Barium, Total	0.044	0.002	0.0011	2000000	mg/L
OW-01	3/3/2016	Calcium, Total	2	1	0.26	NA	mg/L
OW-01	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-01	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	3/3/2016	Iron, Total	0.71	0.02	0.0072	13822000	mg/L
OW-01	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-01	3/3/2016	Potassium, Total	ND	1	0.18	NA	mg/L
OW-01	3/3/2016	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-01	3/3/2016	Manganese, Total	0.034	0.002	0.0015	2017000	mg/L
OW-01	3/3/2016	Sodium, Total	330	5	0.48	NA	mg/L
OW-01	3/3/2016	Lead, Total	0.0012	0.0005	0.000047	15000	mg/L
OW-01	3/3/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-01	3/3/2016	Uranium, Total	0.042	0.0025	0.000025	30000	mg/L
OW-01	3/3/2016	Zinc, Total	0.021	0.01	0.0039	5960000	mg/L
OW-01	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-01	6/6/2016	Arsenic, Total	0.0022	0.001	0.00029	10000	mg/L
OW-01	6/6/2016	Barium, Total	0.13	0.002	0.0011	2000000	mg/L
OW-01	6/6/2016	Calcium, Total	6.7	1	0.26	NA	mg/L
OW-01	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-01	6/6/2016	Chromium, Total	0.014	0.006	0.0022	50000	mg/L
OW-01	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-01	6/6/2016	Iron, Total	4.8	0.2	0.072	13822000	mg/L
OW-01	6/6/2016	Mercury, Total	0.000083	0.0002	0.000053	2000	mg/L
OW-01	6/6/2016	Potassium, Total	0.88	1	0.18	NA	mg/L
OW-01	6/6/2016	Magnesium, Total	0.6	1	0.013	NA	mg/L
OW-01	6/6/2016	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
OW-01	6/6/2016	Sodium, Total	330	5	0.48	NA	mg/L
OW-01	6/6/2016	Lead, Total	0.011	0.0005	0.000047	15000	mg/L
OW-01	6/6/2016	Selenium, Total	0.0047	0.005	0.00062	50000	mg/L
OW-01	6/6/2016	Uranium, Total	0.041	0.0025	0.000025	30000	mg/L
OW-01	6/6/2016	Zinc, Total	0.042	0.01	0.0039	5960000	mg/L
OW-01	9/6/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-01	9/6/2016	Arsenic, Total	0.0031	0.001	0.00021	10000	mg/L
OW-01	9/6/2016	Barium, Total	0.17	0.002	0.00079	2000000	mg/L
OW-01	9/6/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	9/6/2016	Chromium, Total	0.043	0.006	0.0027	50000	mg/L
OW-01	9/6/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-01	9/6/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-01	9/6/2016	Arsenic, Dissolved	0.0015	0.005	0.00069	10000	mg/L
OW-01	9/6/2016	Barium, Dissolved	0.039	0.002	0.0013	2000000	mg/L
OW-01	9/6/2016	Calcium, Dissolved	3.1	1	0.5	NA	mg/L
OW-01	9/6/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-01	9/6/2016	Chromium, Dissolved	0.0023	0.006	0.0018	100000	mg/L
OW-01	9/6/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-01	9/6/2016	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
OW-01	9/6/2016	Potassium, Dissolved	0.81	1	0.5	NA	mg/L
OW-01	9/6/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	9/6/2016	Manganese, Dissolved	0.026	0.002	0.00032	2017400	mg/L
OW-01	9/6/2016	Sodium, Dissolved	310	5	2.5	NA	mg/L
OW-01	9/6/2016	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
OW-01	9/6/2016	Selenium, Dissolved	0.0041	0.001	0.00021	50000	mg/L
OW-01	9/6/2016	Uranium, Dissolved	0.04	0.0025	0.00026	NA	mg/L
OW-01	9/6/2016	Zinc, Dissolved	0.096	0.01	0.0028	5960450	mg/L
OW-01	9/6/2016	Iron, Total	9.2	0.2	0.2	13822000	mg/L
OW-01	9/6/2016	Mercury, Total	0.000087	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/6/2016	Manganese, Total	0.35	0.002	0.00027	2017000	mg/L
OW-01	9/6/2016	Lead, Total	0.015	0.0025	0.00041	15000	mg/L
OW-01	9/6/2016	Selenium, Total	0.0041	0.005	0.00094	50000	mg/L
OW-01	9/6/2016	Uranium, Total	0.045	0.0025	0.00087	30000	mg/L
OW-01	9/6/2016	Zinc, Total	0.069	0.01	0.0027	5960000	mg/L
OW-01	11/15/2016	Silver, Total	0.0016	0.005	0.0015	50000	mg/L
OW-01	11/15/2016	Arsenic, Total	ND	0.005	0.0011	10000	mg/L
OW-01	11/15/2016	Barium, Total	0.036	0.002	0.00079	2000000	mg/L
OW-01	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-01	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-01	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-01	11/15/2016	Arsenic, Dissolved	0.0012	0.005	0.00069	10000	mg/L
OW-01	11/15/2016	Barium, Dissolved	0.034	0.002	0.0013	2000000	mg/L
OW-01	11/15/2016	Calcium, Dissolved	2.1	1	0.5	NA	mg/L
OW-01	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-01	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-01	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-01	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-01	11/15/2016	Potassium, Dissolved	0.85	1	0.5	NA	mg/L
OW-01	11/15/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	11/15/2016	Manganese, Dissolved	0.0029	0.002	0.00032	2017400	mg/L
OW-01	11/15/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
OW-01	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	11/15/2016	Selenium, Dissolved	0.0047	0.001	0.00021	50000	mg/L
OW-01	11/15/2016	Uranium, Dissolved	0.039	0.0025	0.00026	NA	mg/L
OW-01	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-01	11/15/2016	Iron, Total	0.24	0.02	0.02	13822000	mg/L
OW-01	11/15/2016	Mercury, Total	0.000078	0.0002	0.000053	2000	mg/L
OW-01	11/15/2016	Manganese, Total	0.0088	0.002	0.00027	2017000	mg/L
OW-01	11/15/2016	Lead, Total	0.00013	0.0005	0.000081	15000	mg/L
OW-01	11/15/2016	Selenium, Total	0.0042	0.005	0.00094	50000	mg/L
OW-01	11/15/2016	Uranium, Total	0.039	0.0025	0.00087	30000	mg/L
OW-01	11/15/2016	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
OW-01	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-01	2/27/2017	Arsenic, Total	0.0029	0.001	0.00021	10000	mg/L
OW-01	2/27/2017	Barium, Total	0.2	0.002	0.00079	2000000	mg/L
OW-01	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-01	2/27/2017	Chromium, Total	0.099	0.006	0.0027	50000	mg/L
OW-01	2/27/2017	Copper, Total	0.0087	0.006	0.003	790000	mg/L
OW-01	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-01	2/27/2017	Arsenic, Dissolved	0.0012	0.005	0.00069	10000	mg/L
OW-01	2/27/2017	Barium, Dissolved	0.03	0.002	0.00085	2000000	mg/L
OW-01	2/27/2017	Calcium, Dissolved	2.5	1	0.5	NA	mg/L
OW-01	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	2/27/2017	Chromium, Dissolved	0.0071	0.006	0.001	100000	mg/L
OW-01	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	2/27/2017	Iron, Dissolved	0.16	0.02	0.02	13821880	mg/L
OW-01	2/27/2017	Potassium, Dissolved	0.69	1	0.5	NA	mg/L
OW-01	2/27/2017	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-01	2/27/2017	Manganese, Dissolved	0.014	0.002	0.00038	2017400	mg/L
OW-01	2/27/2017	Sodium, Dissolved	330	5	2.5	NA	mg/L
OW-01	2/27/2017	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
OW-01	2/27/2017	Selenium, Dissolved	0.0037	0.001	0.00021	50000	mg/L
OW-01	2/27/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
OW-01	2/27/2017	Iron, Total	9.8	0.2	0.2	13822000	mg/L
OW-01	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-01	2/27/2017	Manganese, Total	0.38	0.002	0.00027	2017000	mg/L
OW-01	2/27/2017	Lead, Total	0.017	0.0005	0.000081	15000	mg/L
OW-01	2/27/2017	Selenium, Total	0.0033	0.001	0.00019	50000	mg/L
OW-01	2/27/2017	Zinc, Total	0.073	0.01	0.0027	5960000	mg/L
OW-01	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-01	5/31/2017	Arsenic, Total	0.00076	0.001	0.0003	10000	mg/L
OW-01	5/31/2017	Barium, Total	0.036	0.002	0.00093	2000000	mg/L
OW-01	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-01	5/31/2017	Copper, Total	0.0027	0.006	0.0017	790000	mg/L
OW-01	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-01	5/31/2017	Arsenic, Dissolved	0.00098	0.001	0.00018	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/31/2017	Barium, Dissolved	0.034	0.002	0.00085	2000000	mg/L
OW-01	5/31/2017	Calcium, Dissolved	2.2	1	0.078	NA	mg/L
OW-01	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-01	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	5/31/2017	Potassium, Dissolved	0.66	1	0.11	NA	mg/L
OW-01	5/31/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	5/31/2017	Manganese, Dissolved	0.0011	0.002	0.00038	2017400	mg/L
OW-01	5/31/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
OW-01	5/31/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	5/31/2017	Selenium, Dissolved	0.0033	0.001	0.00039	50000	mg/L
OW-01	5/31/2017	Zinc, Dissolved	0.02	0.01	0.0011	5960450	mg/L
OW-01	5/31/2017	Iron, Total	0.061	0.02	0.01	13822000	mg/L
OW-01	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	5/31/2017	Manganese, Total	0.004	0.002	0.0011	2017000	mg/L
OW-01	5/31/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-01	5/31/2017	Selenium, Total	0.0028	0.001	0.00071	50000	mg/L
OW-01	5/31/2017	Zinc, Total	0.0028	0.01	0.0028	5960000	mg/L
OW-01	9/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	9/7/2017	Arsenic, Total	0.00085	0.001	0.0003	10000	mg/L
OW-01	9/7/2017	Barium, Total	0.041	0.002	0.00093	2000000	mg/L
OW-01	9/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	9/7/2017	Chromium, Total	0.0037	0.006	0.0018	50000	mg/L
OW-01	9/7/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-01	9/7/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	9/7/2017	Arsenic, Dissolved	0.00099	0.005	0.00089	10000	mg/L
OW-01	9/7/2017	Barium, Dissolved	0.037	0.002	0.00085	2000000	mg/L
OW-01	9/7/2017	Calcium, Dissolved	2.3	1	0.078	NA	mg/L
OW-01	9/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	9/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	9/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	9/7/2017	Iron, Dissolved	0.035	0.02	0.016	13821880	mg/L
OW-01	9/7/2017	Potassium, Dissolved	0.64	1	0.11	NA	mg/L
OW-01	9/7/2017	Magnesium, Dissolved	0.27	1	0.25	NA	mg/L
OW-01	9/7/2017	Manganese, Dissolved	0.006	0.002	0.00039	2017400	mg/L
OW-01	9/7/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-01	9/7/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	9/7/2017	Selenium, Dissolved	0.004	0.005	0.0019	50000	mg/L
OW-01	9/7/2017	Uranium, Dissolved	0.035	0.0025	0.00025	NA	mg/L
OW-01	9/7/2017	Zinc, Dissolved	0.026	0.01	0.0021	5960450	mg/L
OW-01	9/7/2017	Iron, Total	0.42	0.02	0.01	13822000	mg/L
OW-01	9/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	9/7/2017	Manganese, Total	0.012	0.002	0.0011	2017000	mg/L
OW-01	9/7/2017	Lead, Total	0.00041	0.0005	0.000095	15000	mg/L
OW-01	9/7/2017	Selenium, Total	0.0031	0.001	0.00071	50000	mg/L
OW-01	9/7/2017	Uranium, Total	0.037	0.0025	0.00077	30000	mg/L
OW-01	9/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-01	12/8/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	12/8/2017	Arsenic, Total	0.00089	0.001	0.00041	10000	mg/L
OW-01	12/8/2017	Barium, Total	0.033	0.002	0.001	2000000	mg/L
OW-01	12/8/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	12/8/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	12/8/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	12/8/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	12/8/2017	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-01	12/8/2017	Barium, Dissolved	0.034	0.002	0.00099	2000000	mg/L
OW-01	12/8/2017	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	12/8/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	12/8/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	12/8/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	12/8/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	12/8/2017	Potassium, Dissolved	0.75	1	0.11	NA	mg/L
OW-01	12/8/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	12/8/2017	Manganese, Dissolved	0.0031	0.002	0.00039	2017400	mg/L
OW-01	12/8/2017	Sodium, Dissolved	330	5	0.82	NA	mg/L
OW-01	12/8/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	12/8/2017	Selenium, Dissolved	0.004	0.005	0.0038	50000	mg/L
OW-01	12/8/2017	Uranium, Dissolved	0.037	0.0025	0.00048	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	12/8/2017	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
OW-01	12/8/2017	Iron, Total	0.034	0.02	0.01	13822000	mg/L
OW-01	12/8/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	12/8/2017	Manganese, Total	0.0051	0.002	0.0011	2017000	mg/L
OW-01	12/8/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-01	12/8/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-01	12/8/2017	Uranium, Total	0.035	0.0025	0.00077	30000	mg/L
OW-01	12/8/2017	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
OW-01	2/27/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	2/27/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-01	2/27/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-01	2/27/2018	Cadmium, Total	0.00091	0.002	0.00058	5000	mg/L
OW-01	2/27/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
OW-01	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	2/27/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-01	2/27/2018	Barium, Dissolved	0.033	0.002	0.00099	2000000	mg/L
OW-01	2/27/2018	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	2/27/2018	Chromium, Dissolved	0.0019	0.006	0.0013	100000	mg/L
OW-01	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	2/27/2018	Iron, Dissolved	0.022	0.02	0.016	13821880	mg/L
OW-01	2/27/2018	Potassium, Dissolved	0.79	1	0.11	NA	mg/L
OW-01	2/27/2018	Magnesium, Dissolved	0.25	1	0.25	NA	mg/L
OW-01	2/27/2018	Manganese, Dissolved	0.003	0.002	0.00039	2017400	mg/L
OW-01	2/27/2018	Sodium, Dissolved	340	5	0.82	NA	mg/L
OW-01	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	2/27/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-01	2/27/2018	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
OW-01	2/27/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
OW-01	2/27/2018	Iron, Total	0.11	0.02	0.01	13822000	mg/L
OW-01	2/27/2018	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
OW-01	2/27/2018	Manganese, Total	0.0077	0.002	0.0011	2017000	mg/L
OW-01	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	2/27/2018	Selenium, Total	0.0025	0.001	0.00098	50000	mg/L
OW-01	2/27/2018	Uranium, Total	0.037	0.0025	0.00034	30000	mg/L
OW-01	2/27/2018	Zinc, Total	0.0044	0.01	0.0033	5960000	mg/L
OW-01	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	5/15/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-01	5/15/2018	Barium, Total	0.04	0.002	0.001	2000000	mg/L
OW-01	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	5/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-01	5/15/2018	Barium, Dissolved	0.033	0.002	0.00099	2000000	mg/L
OW-01	5/15/2018	Calcium, Dissolved	2.2	1	0.078	NA	mg/L
OW-01	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	5/15/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-01	5/15/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	5/15/2018	Manganese, Dissolved	0.0045	0.002	0.00039	2017400	mg/L
OW-01	5/15/2018	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-01	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	5/15/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
OW-01	5/15/2018	Uranium, Dissolved	0.034	0.0025	0.00048	NA	mg/L
OW-01	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-01	5/15/2018	Iron, Total	0.27	0.1	0.051	13822000	mg/L
OW-01	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-01	5/15/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-01	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	5/15/2018	Selenium, Total	0.0023	0.001	0.00098	50000	mg/L
OW-01	5/15/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
OW-01	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-01	9/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	9/11/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-01	9/11/2018	Barium, Total	0.072	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	9/11/2018	Chromium, Total	0.024	0.006	0.0018	50000	mg/L
OW-01	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	9/11/2018	Arsenic, Dissolved	0.0007	0.001	0.00042	10000	mg/L
OW-01	9/11/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
OW-01	9/11/2018	Calcium, Dissolved	2.3	1	0.078	NA	mg/L
OW-01	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	9/11/2018	Iron, Dissolved	0.017	0.02	0.016	13821880	mg/L
OW-01	9/11/2018	Potassium, Dissolved	0.76	1	0.11	NA	mg/L
OW-01	9/11/2018	Magnesium, Dissolved	0.26	1	0.25	NA	mg/L
OW-01	9/11/2018	Manganese, Dissolved	0.0068	0.002	0.00039	2017400	mg/L
OW-01	9/11/2018	Sodium, Dissolved	370	5	0.82	NA	mg/L
OW-01	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	9/11/2018	Selenium, Dissolved	0.0023	0.001	0.00076	50000	mg/L
OW-01	9/11/2018	Uranium, Dissolved	0.033	0.0025	0.00048	NA	mg/L
OW-01	9/11/2018	Zinc, Dissolved	0.0072	0.01	0.0021	5960450	mg/L
OW-01	9/11/2018	Iron, Total	2	0.1	0.051	13822000	mg/L
OW-01	9/11/2018	Mercury, Total	0.000081	0.0002	0.000038	2000	mg/L
OW-01	9/11/2018	Manganese, Total	0.11	0.002	0.0011	2017000	mg/L
OW-01	9/11/2018	Lead, Total	0.0033	0.0025	0.0011	15000	mg/L
OW-01	9/11/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-01	9/11/2018	Uranium, Total	0.035	0.0025	0.00034	30000	mg/L
OW-01	9/11/2018	Zinc, Total	0.022	0.01	0.0033	5960000	mg/L
OW-01	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-01	11/8/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-01	11/8/2018	Barium, Total	0.043	0.002	0.001	2000000	mg/L
OW-01	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-01	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-01	11/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-01	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-01	11/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-01	11/8/2018	Barium, Dissolved	0.038	0.002	0.00099	2000000	mg/L
OW-01	11/8/2018	Calcium, Dissolved	2.1	1	0.078	NA	mg/L
OW-01	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-01	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-01	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-01	11/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-01	11/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-01	11/8/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-01	11/8/2018	Manganese, Dissolved	0.0048	0.002	0.00039	2017400	mg/L
OW-01	11/8/2018	Sodium, Dissolved	330	5	0.82	NA	mg/L
OW-01	11/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-01	11/8/2018	Selenium, Dissolved	0.0024	0.001	0.00076	50000	mg/L
OW-01	11/8/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
OW-01	11/8/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-01	11/8/2018	Iron, Total	0.31	0.02	0.01	13822000	mg/L
OW-01	11/8/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-01	11/8/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-01	11/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-01	11/8/2018	Selenium, Total	0.0028	0.001	0.00098	50000	mg/L
OW-01	11/8/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
OW-01	11/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-10	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-10	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-10	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-10	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-10	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Total Recoverable	9.91	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Total Recoverable	**45.1**	5	1.12	30	ug/L
OW-10	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-10	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Dissolved	9.81	5	1.43	50	ug/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Dissolved	44.4	5	1.12	NA	ug/L
OW-10	12/11/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-10	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Total Recoverable	9.73	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Total Recoverable	**44.8**	5	1.12	30	ug/L
OW-10	12/11/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-10	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-10	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-10	12/11/2020	Selenium, Dissolved	9.52	5	1.43	50	ug/L
OW-10	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-10	12/11/2020	Uranium, Dissolved	44.7	5	1.12	NA	ug/L
OW-10	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-10	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-10	12/11/2020	Calcium, Total	59.5	0.5	0.084	NA	mg/L
OW-10	12/11/2020	Boron, Total	0.527	0.1	0.022	3949	mg/L
OW-10	12/11/2020	Barium, Total	0.0535	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Potassium, Total	1.04	1	0.34	NA	mg/L
OW-10	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Magnesium, Total	7.67	0.5	0.12	NA	mg/L
OW-10	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Sodium, Total	406	2	0.92	NA	mg/L
OW-10	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-10	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-10	12/11/2020	Manganese, Total	0.0213	0.01	0.003	2017000	mg/L
OW-10	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-10	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-10	12/11/2020	Barium, Dissolved	0.0517	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Boron, Dissolved	0.519	0.1	0.022	3949110	mg/L
OW-10	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-10	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-10	12/11/2020	Manganese, Dissolved	0.0186	0.01	0.003	2017400	mg/L
OW-10	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-10	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-10	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-10	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-10	12/11/2020	Calcium, Total	58.2	0.5	0.084	NA	mg/L
OW-10	12/11/2020	Boron, Total	0.524	0.1	0.022	3949	mg/L
OW-10	12/11/2020	Barium, Total	0.0532	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-10	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Magnesium, Total	7.49	0.5	0.12	NA	mg/L
OW-10	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-10	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Sodium, Total	397	2	0.92	NA	mg/L
OW-10	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-10	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-10	12/11/2020	Manganese, Total	0.0197	0.01	0.003	2017000	mg/L
OW-10	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-10	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-10	12/11/2020	Barium, Dissolved	0.0582	0.01	0.003	2000000	mg/L
OW-10	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-10	12/11/2020	Boron, Dissolved	0.55	0.1	0.022	3949110	mg/L
OW-10	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-10	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-10	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-10	12/11/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-10	12/11/2020	Manganese, Dissolved	0.0199	0.01	0.003	2017400	mg/L
OW-10	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-10	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-10	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-10	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-10	9/20/2020	Arsenic, Dissolved	0.00063	0.001	0.00021	10000	mg/L
OW-10	9/20/2020	Lead, Dissolved	0.0001	0.0005	0.000034	NA	mg/L
OW-10	9/20/2020	Selenium, Dissolved	0.011	0.001	0.00066	50000	mg/L
OW-10	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-10	9/20/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-10	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-10	9/20/2020	Sodium, Dissolved	590	50	6.9	NA	mg/L
OW-10	9/20/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-10	9/20/2020	Barium, Dissolved	0.053	0.002	0.0011	2000000	mg/L
OW-10	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-10	9/20/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
OW-10	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-10	9/20/2020	Calcium, Dissolved	75	1	0.11	NA	mg/L
OW-10	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-10	9/20/2020	Copper, Dissolved	0.0036	0.006	0.0035	790000	mg/L
OW-10	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-10	9/20/2020	Magnesium, Dissolved	13	1	0.067	NA	mg/L
OW-10	9/20/2020	Manganese, Dissolved	0.093	0.002	0.00058	2017400	mg/L
OW-10	9/20/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-10	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-10	9/20/2020	Potassium, Dissolved	1.1	1	0.16	NA	mg/L
OW-10	9/20/2020	Silver, Dissolved	0.0017	0.005	0.0013	81200	mg/L
OW-10	9/20/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
OW-10	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-10	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-10	9/20/2020	Arsenic, Total	0.00072	0.001	0.00026	10000	mg/L
OW-10	9/20/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
OW-10	9/20/2020	Selenium, Total	0.011	0.001	0.00066	50000	mg/L
OW-10	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-10	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	9/20/2020	Aluminum, Total	0.012	0.02	0.0074	19914000	mg/L
OW-10	9/20/2020	Barium, Total	0.056	0.003	0.0016	2000000	mg/L
OW-10	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-10	9/20/2020	Boron, Total	0.52	0.04	0.0074	3949	mg/L
OW-10	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-10	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	9/20/2020	Iron, Total	0.038	0.05	0.013	13822000	mg/L
OW-10	9/20/2020	Manganese, Total	0.095	0.002	0.00081	2017000	mg/L
OW-10	9/20/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-10	9/20/2020	Silver, Total	0.0084	0.005	0.0013	50000	mg/L
OW-10	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-10	9/20/2020	Uranium, Total	0.048	0.0025	0.00033	30000	mg/L
OW-10	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
OW-10	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
OW-10	3/4/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
OW-10	3/4/2020	Selenium, Total	0.0078	0.005	0.0024	50000	mg/L
OW-10	3/4/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-10	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	3/4/2020	Uranium, Total	0.05	0.0025	0.00042	30000	mg/L
OW-10	3/4/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-10	3/4/2020	Barium, Total	0.061	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Total	0.00052	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-10	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-10	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-10	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Iron, Total	0.022	0.02	0.0087	13822000	mg/L
OW-10	3/4/2020	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-10	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Silver, Total	0.0034	0.005	0.0014	50000	mg/L
OW-10	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-10	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/4/2020	Arsenic, Dissolved	0.00066	0.005	0.0005	10000	mg/L
OW-10	3/4/2020	Selenium, Dissolved	0.0095	0.005	0.00086	50000	mg/L
OW-10	3/4/2020	Uranium, Dissolved	0.049	0.0025	0.00037	NA	mg/L
OW-10	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-10	3/4/2020	Barium, Dissolved	0.044	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Dissolved	0.43	0.04	0.0045	3949110	mg/L
OW-10	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-10	3/4/2020	Calcium, Dissolved	91	1	0.062	NA	mg/L
OW-10	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-10	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-10	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-10	3/4/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-10	3/4/2020	Manganese, Dissolved	0.13	0.002	0.00029	2017400	mg/L
OW-10	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-10	3/4/2020	Silver, Dissolved	0.0017	0.005	0.00094	81200	mg/L
OW-10	3/4/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-10	3/4/2020	Sodium, Dissolved	710	10	4.2	NA	mg/L
OW-10	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Arsenic, Total	ND	0.005	0.0016	10000	mg/L
OW-10	3/4/2020	Lead, Total	ND	0.0025	0.00027	15000	mg/L
OW-10	3/4/2020	Selenium, Total	0.012	0.005	0.0024	50000	mg/L
OW-10	3/4/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-10	3/4/2020	Uranium, Total	0.049	0.0025	0.00042	30000	mg/L
OW-10	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-10	3/4/2020	Aluminum, Total	0.012	0.02	0.0025	19914000	mg/L
OW-10	3/4/2020	Barium, Total	0.064	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Total	0.00045	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Total	0.56	0.04	0.0045	3949	mg/L
OW-10	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-10	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-10	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
OW-10	3/4/2020	Iron, Total	0.014	0.02	0.0087	13822000	mg/L
OW-10	3/4/2020	Manganese, Total	0.3	0.002	0.00029	2017000	mg/L
OW-10	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Silver, Total	0.0035	0.005	0.0014	50000	mg/L
OW-10	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-10	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-10	3/4/2020	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/4/2020	Arsenic, Dissolved	0.00069	0.005	0.0005	10000	mg/L
OW-10	3/4/2020	Selenium, Dissolved	0.0088	0.005	0.00086	50000	mg/L
OW-10	3/4/2020	Uranium, Dissolved	0.049	0.0025	0.00037	NA	mg/L
OW-10	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-10	3/4/2020	Barium, Dissolved	0.052	0.002	0.00065	2000000	mg/L
OW-10	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-10	3/4/2020	Boron, Dissolved	0.51	0.04	0.0045	3949110	mg/L
OW-10	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-10	3/4/2020	Calcium, Dissolved	96	1	0.062	NA	mg/L
OW-10	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-10	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-10	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-10	3/4/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-10	3/4/2020	Magnesium, Dissolved	18	1	0.05	NA	mg/L
OW-10	3/4/2020	Manganese, Dissolved	0.16	0.002	0.00029	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-10	3/4/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-10	3/4/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-10	3/4/2020	Silver, Dissolved	0.0024	0.005	0.00094	81200	mg/L
OW-10	3/4/2020	Zinc, Dissolved	0.011	0.01	0.0023	5960450	mg/L
OW-10	3/4/2020	Sodium, Dissolved	720	10	4.2	NA	mg/L
OW-10	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Dissolved	0.0006	0.001	0.000101	10000	mg/L
OW-10	5/28/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-10	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	5/28/2019	Calcium, Dissolved	63	1	0.061889	NA	mg/L
OW-10	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	5/28/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	5/28/2019	Lead, Dissolved	0.00014	0.0005	0.000055	NA	mg/L
OW-10	5/28/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	5/28/2019	Manganese, Dissolved	0.039	0.002	0.00029	2017400	mg/L
OW-10	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	5/28/2019	Selenium, Dissolved	0.0085	0.001	0.000171	50000	mg/L
OW-10	5/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-10	5/28/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
OW-10	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	5/28/2019	Uranium, Dissolved	0.045	0.0025	0.000374	NA	mg/L
OW-10	5/28/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Aluminum, Total	0.0094	0.02	0.002488	19914000	mg/L
OW-10	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Total	0.00063	0.001	0.000312	10000	mg/L
OW-10	5/28/2019	Barium, Total	0.048	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
OW-10	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	5/28/2019	Iron, Total	0.013	0.02	0.008747	13822000	mg/L
OW-10	5/28/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-10	5/28/2019	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
OW-10	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Selenium, Total	0.01	0.001	0.000478	50000	mg/L
OW-10	5/28/2019	Silver, Total	0.0017	0.005	0.001418	50000	mg/L
OW-10	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	5/28/2019	Uranium, Total	0.044	0.0025	0.000424	30000	mg/L
OW-10	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Total	0.0057	0.02	0.002488	19914000	mg/L
OW-10	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Total	0.00077	0.001	0.000312	10000	mg/L
OW-10	8/15/2019	Barium, Total	0.054	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-10	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	8/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	8/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	8/15/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-10	8/15/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-10	8/15/2019	Manganese, Total	0.088	0.002	0.00029	2017000	mg/L
OW-10	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	8/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Selenium, Total	0.0096	0.001	0.000478	50000	mg/L
OW-10	8/15/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	8/15/2019	Uranium, Total	0.05	0.0025	0.000424	30000	mg/L
OW-10	8/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	8/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Dissolved	0.0006	0.001	0.000101	10000	mg/L
OW-10	8/15/2019	Barium, Dissolved	0.056	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	8/15/2019	Calcium, Dissolved	93	1	0.061889	NA	mg/L
OW-10	8/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-10	8/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	8/15/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	8/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-10	8/15/2019	Manganese, Dissolved	0.093	0.002	0.00029	2017400	mg/L
OW-10	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-10	8/15/2019	Selenium, Dissolved	0.0079	0.001	0.000171	50000	mg/L
OW-10	8/15/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
OW-10	8/15/2019	Sodium, Dissolved	670	10	4.161763	NA	mg/L
OW-10	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	8/15/2019	Uranium, Dissolved	0.048	0.0025	0.000374	NA	mg/L
OW-10	8/15/2019	Zinc, Dissolved	0.0063	0.01	0.002252	5960450	mg/L
OW-10	8/15/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-10	8/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Total	0.00056	0.001	0.000312	10000	mg/L
OW-10	8/15/2019	Barium, Total	0.055	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Total	0.5	0.04	0.004531	3949	mg/L
OW-10	8/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	8/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	8/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	8/15/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-10	8/15/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-10	8/15/2019	Manganese, Total	0.092	0.002	0.00029	2017000	mg/L
OW-10	8/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	8/15/2019	Molybdenum, Total	0.0067	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Selenium, Total	0.0068	0.005	0.00239	50000	mg/L
OW-10	8/15/2019	Silver, Total	0.0021	0.005	0.001418	50000	mg/L
OW-10	8/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	8/15/2019	Uranium, Total	0.048	0.0025	0.000424	30000	mg/L
OW-10	8/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	8/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	8/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	8/15/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-10	8/15/2019	Barium, Dissolved	0.058	0.002	0.000648	2000000	mg/L
OW-10	8/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	8/15/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	8/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	8/15/2019	Calcium, Dissolved	93	1	0.061889	NA	mg/L
OW-10	8/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	8/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	8/15/2019	Copper, Dissolved	0.0042	0.006	0.001296	790000	mg/L
OW-10	8/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	8/15/2019	Lead, Dissolved	0.00011	0.0005	0.000055	NA	mg/L
OW-10	8/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-10	8/15/2019	Manganese, Dissolved	0.094	0.002	0.00029	2017400	mg/L
OW-10	8/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	8/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	8/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-10	8/15/2019	Selenium, Dissolved	0.008	0.001	0.000171	50000	mg/L
OW-10	8/15/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-10	8/15/2019	Sodium, Dissolved	650	10	4.161763	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	8/15/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-10	8/15/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
OW-10	5/28/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-10	5/28/2019	Aluminum, Total	0.014	0.02	0.002488	19914000	mg/L
OW-10	5/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Total	0.00075	0.001	0.000312	10000	mg/L
OW-10	5/28/2019	Barium, Total	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-10	5/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	5/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	5/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	5/28/2019	Iron, Total	0.01	0.02	0.008747	13822000	mg/L
OW-10	5/28/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-10	5/28/2019	Manganese, Total	0.037	0.002	0.00029	2017000	mg/L
OW-10	5/28/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	5/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Selenium, Total	0.01	0.001	0.000478	50000	mg/L
OW-10	5/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	5/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	5/28/2019	Uranium, Total	0.044	0.0025	0.000424	30000	mg/L
OW-10	5/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	5/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	5/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	5/28/2019	Arsenic, Dissolved	0.00047	0.001	0.000101	10000	mg/L
OW-10	5/28/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	5/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	5/28/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-10	5/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	5/28/2019	Calcium, Dissolved	63	1	0.061889	NA	mg/L
OW-10	5/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	5/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	5/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	5/28/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	5/28/2019	Lead, Dissolved	0.00015	0.0005	0.000055	NA	mg/L
OW-10	5/28/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	5/28/2019	Manganese, Dissolved	0.039	0.002	0.00029	2017400	mg/L
OW-10	5/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	5/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	5/28/2019	Potassium, Dissolved	1	1	0.162288	NA	mg/L
OW-10	5/28/2019	Selenium, Dissolved	0.0075	0.001	0.000171	50000	mg/L
OW-10	5/28/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-10	5/28/2019	Sodium, Dissolved	530	10	4.161763	NA	mg/L
OW-10	5/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	3/27/2019	Arsenic, Dissolved	0.00053	0.001	0.000101	10000	mg/L
OW-10	3/27/2019	Barium, Dissolved	0.049	0.002	0.000648	2000000	mg/L
OW-10	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	3/27/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-10	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	3/27/2019	Calcium, Dissolved	62	5	0.309446	NA	mg/L
OW-10	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	3/27/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	3/27/2019	Magnesium, Dissolved	9.5	1	0.05029	NA	mg/L
OW-10	3/27/2019	Manganese, Dissolved	0.042	0.002	0.00029	2017400	mg/L
OW-10	3/27/2019	Molybdenum, Dissolved	0.0069	0.008	0.006735	98700	mg/L
OW-10	3/27/2019	Nickel, Dissolved	0.0044	0.01	0.004009	372000	mg/L
OW-10	3/27/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	3/27/2019	Selenium, Dissolved	0.0083	0.001	0.000171	50000	mg/L
OW-10	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-10	3/27/2019	Sodium, Dissolved	500	5	2.080881	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-10	3/27/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-10	3/27/2019	Aluminum, Total	0.0047	0.02	0.004564	19914000	mg/L
OW-10	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-10	3/27/2019	Arsenic, Total	0.00052	0.001	0.000312	10000	mg/L
OW-10	3/27/2019	Barium, Total	0.043	0.002	0.000488	2000000	mg/L
OW-10	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-10	3/27/2019	Boron, Total	0.52	0.04	0.001821	3949	mg/L
OW-10	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	3/27/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-10	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-10	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	3/27/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-10	3/27/2019	Lead, Total	0.00014	0.0005	0.000026	15000	mg/L
OW-10	3/27/2019	Manganese, Total	0.035	0.002	0.00006	2017000	mg/L
OW-10	3/27/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-10	3/27/2019	Molybdenum, Total	0.0044	0.008	0.002075	98700	mg/L
OW-10	3/27/2019	Nickel, Total	0.003	0.01	0.001491	372000	mg/L
OW-10	3/27/2019	Selenium, Total	0.0088	0.001	0.000478	50000	mg/L
OW-10	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	3/27/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-10	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-10	3/27/2019	Arsenic, Dissolved	0.00046	0.001	0.000101	10000	mg/L
OW-10	3/27/2019	Barium, Dissolved	0.046	0.002	0.000648	2000000	mg/L
OW-10	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-10	3/27/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-10	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	3/27/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-10	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	3/27/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	3/27/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-10	3/27/2019	Magnesium, Dissolved	9.1	1	0.05029	NA	mg/L
OW-10	3/27/2019	Manganese, Dissolved	0.038	0.002	0.00029	2017400	mg/L
OW-10	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	3/27/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-10	3/27/2019	Selenium, Dissolved	0.0093	0.001	0.000171	50000	mg/L
OW-10	3/27/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
OW-10	3/27/2019	Sodium, Dissolved	490	5	2.080881	NA	mg/L
OW-10	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-10	3/27/2019	Uranium, Dissolved	0.046	0.0025	0.000374	NA	mg/L
OW-10	3/27/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-10	3/27/2019	Aluminum, Total	0.02	0.02	0.004564	19914000	mg/L
OW-10	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-10	3/27/2019	Arsenic, Total	0.0006	0.001	0.000312	10000	mg/L
OW-10	3/27/2019	Barium, Total	0.045	0.002	0.000488	2000000	mg/L
OW-10	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-10	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	3/27/2019	Calcium, Total	62	1	0.027429	NA	mg/L
OW-10	3/27/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-10	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-10	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	3/27/2019	Iron, Total	0.0094	0.02	0.006053	13822000	mg/L
OW-10	3/27/2019	Lead, Total	0.00015	0.0005	0.000026	15000	mg/L
OW-10	3/27/2019	Manganese, Total	0.042	0.002	0.00006	2017000	mg/L
OW-10	3/27/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OW-10	3/27/2019	Molybdenum, Total	0.0058	0.008	0.002075	98700	mg/L
OW-10	3/27/2019	Nickel, Total	0.0032	0.01	0.001491	372000	mg/L
OW-10	3/27/2019	Selenium, Total	0.0079	0.001	0.000478	50000	mg/L
OW-10	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-10	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-10	3/27/2019	Uranium, Total	0.048	0.0025	0.000424	30000	mg/L
OW-10	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	10/17/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-10	10/17/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-10	10/17/2019	Arsenic, Dissolved	0.00098	0.005	0.000504	10000	mg/L
OW-10	10/17/2019	Barium, Dissolved	0.066	0.002	0.000648	2000000	mg/L
OW-10	10/17/2019	Beryllium, Dissolved	0.00039	0.002	0.000284	4000	mg/L
OW-10	10/17/2019	Boron, Dissolved	0.49	0.04	0.004531	3949110	mg/L
OW-10	10/17/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-10	10/17/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-10	10/17/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-10	10/17/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-10	10/17/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-10	10/17/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-10	10/17/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-10	10/17/2019	Magnesium, Dissolved	22	1	0.05029	NA	mg/L
OW-10	10/17/2019	Manganese, Dissolved	0.16	0.002	0.00029	2017400	mg/L
OW-10	10/17/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-10	10/17/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-10	10/17/2019	Potassium, Dissolved	2.9	1	0.162288	NA	mg/L
OW-10	10/17/2019	Selenium, Dissolved	0.009	0.005	0.000857	50000	mg/L
OW-10	10/17/2019	Silver, Dissolved	0.0032	0.005	0.000942	81200	mg/L
OW-10	10/17/2019	Sodium, Dissolved	730	10	4.161763	NA	mg/L
OW-10	10/17/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-10	10/17/2019	Uranium, Dissolved	0.057	0.0025	0.000374	NA	mg/L
OW-10	10/17/2019	Zinc, Dissolved	0.0076	0.01	0.002252	5960450	mg/L
OW-10	10/17/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-10	10/17/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-10	10/17/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-10	10/17/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-10	10/17/2019	Beryllium, Total	0.0017	0.002	0.000284	4000	mg/L
OW-10	10/17/2019	Boron, Total	0.45	0.04	0.004531	3949	mg/L
OW-10	10/17/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-10	10/17/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-10	10/17/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-10	10/17/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-10	10/17/2019	Iron, Total	0.0099	0.02	0.008747	13822000	mg/L
OW-10	10/17/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
OW-10	10/17/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
OW-10	10/17/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	10/17/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-10	10/17/2019	Nickel, Total	0.0067	0.01	0.004009	372000	mg/L
OW-10	10/17/2019	Selenium, Total	0.0089	0.005	0.00239	50000	mg/L
OW-10	10/17/2019	Silver, Total	0.0039	0.005	0.001418	50000	mg/L
OW-10	10/17/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-10	10/17/2019	Uranium, Total	0.055	0.0025	0.000424	30000	mg/L
OW-10	10/17/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-10	3/22/2012	Silver, Total	ND	0.005	0.00048	50000	mg/L
OW-10	3/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	3/22/2012	Barium, Total	0.033	0.002	0.0006	2000000	mg/L
OW-10	3/22/2012	Calcium, Total	32	1	0.026	NA	mg/L
OW-10	3/22/2012	Cadmium, Total	ND	0.002	0.00015	5000	mg/L
OW-10	3/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	3/22/2012	Copper, Total	ND	0.006	0.00066	790000	mg/L
OW-10	3/22/2012	Iron, Total	0.029	0.02	0.0089	13822000	mg/L
OW-10	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-10	3/22/2012	Magnesium, Total	4.6	1	0.013	NA	mg/L
OW-10	3/22/2012	Manganese, Total	ND	0.002	0.00012	2017000	mg/L
OW-10	3/22/2012	Sodium, Total	400	5	0.22	NA	mg/L
OW-10	3/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	3/22/2012	Selenium, Total	0.0076	0.0025	0.0025	50000	mg/L
OW-10	3/22/2012	Uranium, Total	0.051	0.0025	0.00003	30000	mg/L
OW-10	3/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-10	6/13/2012	Arsenic, Total	ND	0.002	0.00022	10000	mg/L
OW-10	6/13/2012	Barium, Total	0.08	0.002	0.00031	2000000	mg/L
OW-10	6/13/2012	Calcium, Total	160	10	0.26	NA	mg/L
OW-10	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-10	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-10	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-10	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	6/13/2012	Potassium, Total	1.9	1	0.48	NA	mg/L
OW-10	6/13/2012	Magnesium, Total	21	1	0.013	NA	mg/L
OW-10	6/13/2012	Manganese, Total	0.053	0.002	0.00062	2017000	mg/L
OW-10	6/13/2012	Sodium, Total	740	10	0.45	NA	mg/L
OW-10	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-10	6/13/2012	Selenium, Total	0.014	0.002	0.00066	50000	mg/L
OW-10	6/13/2012	Uranium, Total	0.067	0.002	0.00012	30000	mg/L
OW-10	6/13/2012	Zinc, Total	0.026	0.01	0.00062	5960000	mg/L
OW-10	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	8/22/2012	Barium, Total	0.037	0.002	0.00039	2000000	mg/L
OW-10	8/22/2012	Calcium, Total	29	1	0.026	NA	mg/L
OW-10	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	8/22/2012	Iron, Total	0.03	0.02	0.013	13822000	mg/L
OW-10	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	8/22/2012	Potassium, Total	1	1	0.48	NA	mg/L
OW-10	8/22/2012	Magnesium, Total	5.4	1	0.013	NA	mg/L
OW-10	8/22/2012	Manganese, Total	0.0034	0.002	0.00026	2017000	mg/L
OW-10	8/22/2012	Sodium, Total	410	5	0.22	NA	mg/L
OW-10	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	8/22/2012	Selenium, Total	0.0084	0.0025	0.0025	50000	mg/L
OW-10	8/22/2012	Uranium, Total	0.049	0.0025	0.00003	30000	mg/L
OW-10	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-10	11/27/2012	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
OW-10	11/27/2012	Calcium, Total	310	5	0.13	NA	mg/L
OW-10	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	11/27/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-10	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-10	11/27/2012	Potassium, Total	ND	5	2.4	NA	mg/L
OW-10	11/27/2012	Magnesium, Total	54	5	0.065	NA	mg/L
OW-10	11/27/2012	Manganese, Total	0.13	0.002	0.00026	2017000	mg/L
OW-10	11/27/2012	Sodium, Total	1200	20	0.89	NA	mg/L
OW-10	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	11/27/2012	Selenium, Total	0.013	0.0025	0.0025	50000	mg/L
OW-10	11/27/2012	Uranium, Total	0.087	0.0025	0.00003	30000	mg/L
OW-10	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-10	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-10	3/19/2013	Barium, Total	0.11	0.002	0.00039	2000000	mg/L
OW-10	3/19/2013	Calcium, Total	220	5	0.34	NA	mg/L
OW-10	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-10	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-10	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	3/19/2013	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-10	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	3/19/2013	Potassium, Total	2.3	1	0.39	NA	mg/L
OW-10	3/19/2013	Magnesium, Total	35	1	0.028	NA	mg/L
OW-10	3/19/2013	Manganese, Total	0.16	0.002	0.00026	2017000	mg/L
OW-10	3/19/2013	Sodium, Total	900	20	4.3	NA	mg/L
OW-10	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-10	3/19/2013	Selenium, Total	0.0098	0.0025	0.00066	50000	mg/L
OW-10	3/19/2013	Uranium, Total	0.077	0.005	0.0025	30000	mg/L
OW-10	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	6/13/2013	Silver, Total	0.015	0.005	0.00079	50000	mg/L
OW-10	6/13/2013	Arsenic, Total	ND	0.005	0.0014	10000	mg/L
OW-10	6/13/2013	Barium, Total	0.12	0.002	0.00057	2000000	mg/L
OW-10	6/13/2013	Calcium, Total	250	5	0.34	NA	mg/L
OW-10	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-10	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-10	6/13/2013	Iron, Total	ND	0.02	0.0052	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	6/13/2013	Potassium, Total	2.6	1	0.24	NA	mg/L
OW-10	6/13/2013	Magnesium, Total	37	1	0.028	NA	mg/L
OW-10	6/13/2013	Manganese, Total	0.14	0.002	0.00052	2017000	mg/L
OW-10	6/13/2013	Sodium, Total	1000	20	6.5	NA	mg/L
OW-10	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	6/13/2013	Selenium, Total	0.017	0.005	0.0024	50000	mg/L
OW-10	6/13/2013	Uranium, Total	0.076	0.005	0.0025	30000	mg/L
OW-10	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-10	9/4/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-10	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-10	9/4/2013	Barium, Total	0.082	0.002	0.00095	2000000	mg/L
OW-10	9/4/2013	Calcium, Total	170	5	0.34	NA	mg/L
OW-10	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-10	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-10	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-10	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	9/4/2013	Potassium, Total	3.5	1	0.24	NA	mg/L
OW-10	9/4/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OW-10	9/4/2013	Manganese, Total	0.12	0.002	0.00016	2017000	mg/L
OW-10	9/4/2013	Sodium, Total	810	10	3.3	NA	mg/L
OW-10	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-10	9/4/2013	Selenium, Total	0.011	0.005	0.0015	50000	mg/L
OW-10	9/4/2013	Uranium, Total	0.066	0.01	0.000073	30000	mg/L
OW-10	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-10	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-10	11/11/2013	Arsenic, Total	0.0021	0.001	0.000098	10000	mg/L
OW-10	11/11/2013	Barium, Total	0.063	0.002	0.00095	2000000	mg/L
OW-10	11/11/2013	Calcium, Total	110	5	0.34	NA	mg/L
OW-10	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-10	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-10	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-10	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-10	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-10	11/11/2013	Potassium, Total	2.8	1	0.24	NA	mg/L
OW-10	11/11/2013	Magnesium, Total	18	1	0.028	NA	mg/L
OW-10	11/11/2013	Manganese, Total	0.066	0.002	0.00016	2017000	mg/L
OW-10	11/11/2013	Sodium, Total	710	50	16	NA	mg/L
OW-10	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	11/11/2013	Selenium, Total	0.013	0.001	0.00029	50000	mg/L
OW-10	11/11/2013	Uranium, Total	0.054	0.005	0.000036	30000	mg/L
OW-10	11/11/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-10	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-10	3/7/2014	Barium, Total	0.071	0.002	0.0011	2000000	mg/L
OW-10	3/7/2014	Calcium, Total	180	5	0.41	NA	mg/L
OW-10	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	3/7/2014	Potassium, Total	2.1	1	0.093	NA	mg/L
OW-10	3/7/2014	Magnesium, Total	30	1	0.018	NA	mg/L
OW-10	3/7/2014	Manganese, Total	0.098	0.002	0.00055	2017000	mg/L
OW-10	3/7/2014	Sodium, Total	910	10	3.9	NA	mg/L
OW-10	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-10	3/7/2014	Selenium, Total	0.0095	0.005	0.0015	50000	mg/L
OW-10	3/7/2014	Uranium, Total	0.057	0.005	0.000036	30000	mg/L
OW-10	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-10	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	6/3/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-10	6/3/2014	Barium, Total	0.094	0.002	0.0011	2000000	mg/L
OW-10	6/3/2014	Calcium, Total	250	5	0.27	NA	mg/L
OW-10	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	6/3/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2014	Potassium, Total	4.4	1	0.24	NA	mg/L
OW-10	6/3/2014	Magnesium, Total	40	1	0.024	NA	mg/L
OW-10	6/3/2014	Manganese, Total	0.13	0.002	0.00055	2017000	mg/L
OW-10	6/3/2014	Sodium, Total	1100	20	5	NA	mg/L
OW-10	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-10	6/3/2014	Selenium, Total	0.017	0.005	0.00074	50000	mg/L
OW-10	6/3/2014	Uranium, Total	0.062	0.005	0.00025	30000	mg/L
OW-10	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-10	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-10	9/12/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
OW-10	9/12/2014	Barium, Total	0.086	0.002	0.0005	2000000	mg/L
OW-10	9/12/2014	Calcium, Total	220	10	0.82	NA	mg/L
OW-10	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-10	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-10	9/12/2014	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	9/12/2014	Potassium, Total	4.1	1	0.093	NA	mg/L
OW-10	9/12/2014	Magnesium, Total	36	1	0.018	NA	mg/L
OW-10	9/12/2014	Manganese, Total	0.18	0.002	0.00049	2017000	mg/L
OW-10	9/12/2014	Sodium, Total	1100	100	39	NA	mg/L
OW-10	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-10	9/12/2014	Selenium, Total	0.017	0.01	0.0051	50000	mg/L
OW-10	9/12/2014	Uranium, Total	0.065	0.01	0.000072	30000	mg/L
OW-10	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-10	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-10	11/10/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-10	11/10/2014	Barium, Total	0.039	0.002	0.0011	2000000	mg/L
OW-10	11/10/2014	Calcium, Total	39	1	0.082	NA	mg/L
OW-10	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-10	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-10	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-10	11/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-10	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-10	11/10/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
OW-10	11/10/2014	Magnesium, Total	5.3	1	0.018	NA	mg/L
OW-10	11/10/2014	Manganese, Total	0.0099	0.002	0.00055	2017000	mg/L
OW-10	11/10/2014	Sodium, Total	430	5	2	NA	mg/L
OW-10	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-10	11/10/2014	Selenium, Total	0.013	0.01	0.0015	50000	mg/L
OW-10	11/10/2014	Uranium, Total	0.057	0.01	0.0005	30000	mg/L
OW-10	11/10/2014	Zinc, Total	0.038	0.01	0.0014	5960000	mg/L
OW-10	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-10	3/9/2015	Barium, Total	0.067	0.002	0.00073	2000000	mg/L
OW-10	3/9/2015	Calcium, Total	130	10	0.57	NA	mg/L
OW-10	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-10	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	3/9/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	3/9/2015	Potassium, Total	3.2	1	0.18	NA	mg/L
OW-10	3/9/2015	Magnesium, Total	20	1	0.039	NA	mg/L
OW-10	3/9/2015	Manganese, Total	0.087	0.002	0.0015	2017000	mg/L
OW-10	3/9/2015	Sodium, Total	730	10	0.72	NA	mg/L
OW-10	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-10	3/9/2015	Selenium, Total	0.012	0.005	0.00061	50000	mg/L
OW-10	3/9/2015	Uranium, Total	0.061	0.005	0.00004	30000	mg/L
OW-10	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-10	6/3/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	6/3/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-10	6/3/2015	Barium, Total	0.095	0.002	0.0011	2000000	mg/L
OW-10	6/3/2015	Calcium, Total	100	5	0.28	NA	mg/L
OW-10	6/3/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	6/3/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	6/3/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	6/3/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	6/3/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	6/3/2015	Potassium, Total	1.4	1	0.18	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/3/2015	Magnesium, Total	18	1	0.039	NA	mg/L
OW-10	6/3/2015	Manganese, Total	0.15	0.002	0.0015	2017000	mg/L
OW-10	6/3/2015	Sodium, Total	660	10	0.72	NA	mg/L
OW-10	6/3/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-10	6/3/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-10	6/3/2015	Uranium, Total	0.063	0.005	0.000049	30000	mg/L
OW-10	6/3/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	8/12/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	8/12/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	8/12/2015	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
OW-10	8/12/2015	Calcium, Total	110	5	0.28	NA	mg/L
OW-10	8/12/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	8/12/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	8/12/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	8/12/2015	Iron, Total	0.038	0.02	0.0072	13822000	mg/L
OW-10	8/12/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	8/12/2015	Potassium, Total	1.5	1	0.18	NA	mg/L
OW-10	8/12/2015	Magnesium, Total	18	1	0.039	NA	mg/L
OW-10	8/12/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
OW-10	8/12/2015	Sodium, Total	720	10	0.72	NA	mg/L
OW-10	8/12/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-10	8/12/2015	Selenium, Total	0.011	0.005	0.00062	50000	mg/L
OW-10	8/12/2015	Uranium, Total	0.064	0.0025	0.000025	30000	mg/L
OW-10	8/12/2015	Zinc, Total	0.011	0.01	0.0039	5960000	mg/L
OW-10	10/28/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	10/28/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	10/28/2015	Barium, Total	0.095	0.002	0.0011	2000000	mg/L
OW-10	10/28/2015	Calcium, Total	180	5	0.28	NA	mg/L
OW-10	10/28/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	10/28/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	10/28/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	10/28/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	10/28/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-10	10/28/2015	Potassium, Total	2.4	1	0.18	NA	mg/L
OW-10	10/28/2015	Magnesium, Total	32	1	0.039	NA	mg/L
OW-10	10/28/2015	Manganese, Total	0.22	0.002	0.0015	2017000	mg/L
OW-10	10/28/2015	Sodium, Total	880	10	0.72	NA	mg/L
OW-10	10/28/2015	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-10	10/28/2015	Selenium, Total	0.013	0.005	0.00062	50000	mg/L
OW-10	10/28/2015	Uranium, Total	0.061	0.0025	0.000025	30000	mg/L
OW-10	10/28/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	3/3/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	3/3/2016	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-10	3/3/2016	Barium, Total	0.068	0.002	0.0011	2000000	mg/L
OW-10	3/3/2016	Calcium, Total	110	5	1.3	NA	mg/L
OW-10	3/3/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	3/3/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	3/3/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	3/3/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-10	3/3/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-10	3/3/2016	Potassium, Total	2.2	1	0.18	NA	mg/L
OW-10	3/3/2016	Magnesium, Total	22	1	0.013	NA	mg/L
OW-10	3/3/2016	Manganese, Total	0.11	0.002	0.0015	2017000	mg/L
OW-10	3/3/2016	Sodium, Total	840	10	0.96	NA	mg/L
OW-10	3/3/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-10	3/3/2016	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-10	3/3/2016	Uranium, Total	0.06	0.0025	0.000025	30000	mg/L
OW-10	3/3/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-10	6/6/2016	Arsenic, Total	0.0023	0.005	0.0015	10000	mg/L
OW-10	6/6/2016	Barium, Total	0.064	0.002	0.0011	2000000	mg/L
OW-10	6/6/2016	Calcium, Total	120	5	1.3	NA	mg/L
OW-10	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-10	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-10	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-10	6/6/2016	Iron, Total	0.01	0.02	0.0072	13822000	mg/L
OW-10	6/6/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
OW-10	6/6/2016	Potassium, Total	2	1	0.18	NA	mg/L
OW-10	6/6/2016	Magnesium, Total	22	1	0.013	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	6/6/2016	Manganese, Total	0.11	0.002	0.0015	2017000	mg/L
OW-10	6/6/2016	Sodium, Total	720	10	0.96	NA	mg/L
OW-10	6/6/2016	Lead, Total	0.00024	0.0005	0.000047	15000	mg/L
OW-10	6/6/2016	Selenium, Total	0.015	0.005	0.00062	50000	mg/L
OW-10	6/6/2016	Uranium, Total	0.057	0.0025	0.000025	30000	mg/L
OW-10	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-10	9/6/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-10	9/6/2016	Arsenic, Total	0.0035	0.005	0.0011	10000	mg/L
OW-10	9/6/2016	Barium, Total	0.061	0.002	0.00079	2000000	mg/L
OW-10	9/6/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	9/6/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-10	9/6/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	9/6/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-10	9/6/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
OW-10	9/6/2016	Barium, Dissolved	0.064	0.002	0.0013	2000000	mg/L
OW-10	9/6/2016	Calcium, Dissolved	110	5	2.5	NA	mg/L
OW-10	9/6/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-10	9/6/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-10	9/6/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-10	9/6/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	9/6/2016	Potassium, Dissolved	1.8	1	0.5	NA	mg/L
OW-10	9/6/2016	Magnesium, Dissolved	20	1	0.5	NA	mg/L
OW-10	9/6/2016	Manganese, Dissolved	0.12	0.002	0.00032	2017400	mg/L
OW-10	9/6/2016	Sodium, Dissolved	790	10	5	NA	mg/L
OW-10	9/6/2016	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
OW-10	9/6/2016	Selenium, Dissolved	0.015	0.005	0.0011	50000	mg/L
OW-10	9/6/2016	Uranium, Dissolved	0.056	0.0025	0.00026	NA	mg/L
OW-10	9/6/2016	Zinc, Dissolved	0.062	0.01	0.0028	5960450	mg/L
OW-10	9/6/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	9/6/2016	Mercury, Total	0.000058	0.0002	0.000053	2000	mg/L
OW-10	9/6/2016	Manganese, Total	0.11	0.002	0.00027	2017000	mg/L
OW-10	9/6/2016	Lead, Total	0.00019	0.0005	0.000081	15000	mg/L
OW-10	9/6/2016	Selenium, Total	0.013	0.001	0.00019	50000	mg/L
OW-10	9/6/2016	Uranium, Total	0.056	0.0025	0.00087	30000	mg/L
OW-10	9/6/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	11/15/2016	Silver, Total	0.0027	0.005	0.0015	50000	mg/L
OW-10	11/15/2016	Arsenic, Total	0.0021	0.005	0.0011	10000	mg/L
OW-10	11/15/2016	Barium, Total	0.047	0.002	0.00079	2000000	mg/L
OW-10	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-10	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-10	11/15/2016	Arsenic, Dissolved	0.0024	0.005	0.00069	10000	mg/L
OW-10	11/15/2016	Barium, Dissolved	0.051	0.002	0.0013	2000000	mg/L
OW-10	11/15/2016	Calcium, Dissolved	80	1	0.5	NA	mg/L
OW-10	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-10	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-10	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-10	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	11/15/2016	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
OW-10	11/15/2016	Magnesium, Dissolved	14	1	0.5	NA	mg/L
OW-10	11/15/2016	Manganese, Dissolved	0.076	0.002	0.00032	2017400	mg/L
OW-10	11/15/2016	Sodium, Dissolved	630	10	5	NA	mg/L
OW-10	11/15/2016	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
OW-10	11/15/2016	Selenium, Dissolved	0.016	0.001	0.00021	50000	mg/L
OW-10	11/15/2016	Uranium, Dissolved	0.056	0.0025	0.00026	NA	mg/L
OW-10	11/15/2016	Zinc, Dissolved	0.014	0.01	0.0028	5960450	mg/L
OW-10	11/15/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	11/15/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-10	11/15/2016	Manganese, Total	0.047	0.002	0.00027	2017000	mg/L
OW-10	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-10	11/15/2016	Selenium, Total	0.016	0.005	0.00094	50000	mg/L
OW-10	11/15/2016	Uranium, Total	0.055	0.0025	0.00087	30000	mg/L
OW-10	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-10	2/27/2017	Arsenic, Total	0.002	0.005	0.0011	10000	mg/L
OW-10	2/27/2017	Barium, Total	0.042	0.002	0.00079	2000000	mg/L
OW-10	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-10	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-10	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-10	2/27/2017	Arsenic, Dissolved	0.0019	0.005	0.00069	10000	mg/L
OW-10	2/27/2017	Barium, Dissolved	0.045	0.002	0.00085	2000000	mg/L
OW-10	2/27/2017	Calcium, Dissolved	55	1	0.5	NA	mg/L
OW-10	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-10	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	2/27/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-10	2/27/2017	Potassium, Dissolved	1.1	1	0.5	NA	mg/L
OW-10	2/27/2017	Magnesium, Dissolved	8.7	1	0.5	NA	mg/L
OW-10	2/27/2017	Manganese, Dissolved	0.042	0.002	0.00038	2017400	mg/L
OW-10	2/27/2017	Sodium, Dissolved	510	10	5	NA	mg/L
OW-10	2/27/2017	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
OW-10	2/27/2017	Selenium, Dissolved	0.013	0.001	0.00021	50000	mg/L
OW-10	2/27/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
OW-10	2/27/2017	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-10	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-10	2/27/2017	Manganese, Total	0.04	0.002	0.00027	2017000	mg/L
OW-10	2/27/2017	Lead, Total	0.0002	0.0005	0.000081	15000	mg/L
OW-10	2/27/2017	Selenium, Total	0.011	0.001	0.00019	50000	mg/L
OW-10	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-10	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-10	5/31/2017	Arsenic, Total	0.0018	0.005	0.0015	10000	mg/L
OW-10	5/31/2017	Barium, Total	0.057	0.002	0.00093	2000000	mg/L
OW-10	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-10	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-10	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-10	5/31/2017	Arsenic, Dissolved	0.0018	0.005	0.00089	10000	mg/L
OW-10	5/31/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
OW-10	5/31/2017	Calcium, Dissolved	95	1	0.078	NA	mg/L
OW-10	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-10	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	5/31/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	5/31/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-10	5/31/2017	Manganese, Dissolved	0.074	0.002	0.00038	2017400	mg/L
OW-10	5/31/2017	Sodium, Dissolved	600	10	1.6	NA	mg/L
OW-10	5/31/2017	Lead, Dissolved	0.00025	0.0005	0.00017	NA	mg/L
OW-10	5/31/2017	Selenium, Dissolved	0.012	0.005	0.0019	50000	mg/L
OW-10	5/31/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-10	5/31/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	5/31/2017	Manganese, Total	0.075	0.002	0.0011	2017000	mg/L
OW-10	5/31/2017	Lead, Total	0.00023	0.0005	0.000095	15000	mg/L
OW-10	5/31/2017	Selenium, Total	0.0096	0.001	0.00071	50000	mg/L
OW-10	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-10	9/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	9/7/2017	Arsenic, Total	0.0022	0.005	0.0015	10000	mg/L
OW-10	9/7/2017	Barium, Total	0.059	0.002	0.00093	2000000	mg/L
OW-10	9/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	9/7/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	9/7/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-10	9/7/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	9/7/2017	Arsenic, Dissolved	0.0028	0.005	0.00089	10000	mg/L
OW-10	9/7/2017	Barium, Dissolved	0.06	0.002	0.00085	2000000	mg/L
OW-10	9/7/2017	Calcium, Dissolved	88	1	0.078	NA	mg/L
OW-10	9/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	9/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	9/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	9/7/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	9/7/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-10	9/7/2017	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-10	9/7/2017	Manganese, Dissolved	0.066	0.002	0.00039	2017400	mg/L
OW-10	9/7/2017	Sodium, Dissolved	650	10	1.6	NA	mg/L
OW-10	9/7/2017	Lead, Dissolved	0.00024	0.0005	0.00017	NA	mg/L
OW-10	9/7/2017	Selenium, Dissolved	0.018	0.005	0.0019	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	9/7/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-10	9/7/2017	Zinc, Dissolved	0.069	0.01	0.0021	5960450	mg/L
OW-10	9/7/2017	Iron, Total	0.018	0.02	0.01	13822000	mg/L
OW-10	9/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	9/7/2017	Manganese, Total	0.063	0.002	0.0011	2017000	mg/L
OW-10	9/7/2017	Lead, Total	0.00026	0.0005	0.000095	15000	mg/L
OW-10	9/7/2017	Selenium, Total	0.016	0.001	0.00071	50000	mg/L
OW-10	9/7/2017	Uranium, Total	0.057	0.0025	0.00077	30000	mg/L
OW-10	9/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	12/7/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	12/7/2017	Arsenic, Total	0.0023	0.005	0.0021	10000	mg/L
OW-10	12/7/2017	Barium, Total	0.049	0.002	0.001	2000000	mg/L
OW-10	12/7/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	12/7/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	12/7/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	12/7/2017	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
OW-10	12/7/2017	Arsenic, Dissolved	0.0046	0.005	0.0021	10000	mg/L
OW-10	12/7/2017	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	12/7/2017	Calcium, Dissolved	74	1	0.078	NA	mg/L
OW-10	12/7/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	12/7/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	12/7/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	12/7/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	12/7/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	12/7/2017	Magnesium, Dissolved	13	1	0.25	NA	mg/L
OW-10	12/7/2017	Manganese, Dissolved	0.069	0.002	0.00039	2017400	mg/L
OW-10	12/7/2017	Sodium, Dissolved	630	10	1.6	NA	mg/L
OW-10	12/7/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-10	12/7/2017	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
OW-10	12/7/2017	Uranium, Dissolved	0.051	0.0025	0.00048	NA	mg/L
OW-10	12/7/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-10	12/7/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	12/7/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	12/7/2017	Manganese, Total	0.069	0.002	0.0011	2017000	mg/L
OW-10	12/7/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-10	12/7/2017	Selenium, Total	0.014	0.005	0.0049	50000	mg/L
OW-10	12/7/2017	Uranium, Total	0.052	0.0025	0.00077	30000	mg/L
OW-10	12/7/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	2/27/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-10	2/27/2018	Arsenic, Total	0.0041	0.005	0.0021	10000	mg/L
OW-10	2/27/2018	Barium, Total	0.047	0.002	0.001	2000000	mg/L
OW-10	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	2/27/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
OW-10	2/27/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-10	2/27/2018	Barium, Dissolved	0.057	0.002	0.00099	2000000	mg/L
OW-10	2/27/2018	Calcium, Dissolved	96	1	0.078	NA	mg/L
OW-10	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	2/27/2018	Iron, Dissolved	0.043	0.02	0.016	13821880	mg/L
OW-10	2/27/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-10	2/27/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-10	2/27/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L
OW-10	2/27/2018	Sodium, Dissolved	770	10	1.6	NA	mg/L
OW-10	2/27/2018	Lead, Dissolved	0.0002	0.0005	0.00017	NA	mg/L
OW-10	2/27/2018	Selenium, Dissolved	0.01	0.005	0.0038	50000	mg/L
OW-10	2/27/2018	Uranium, Dissolved	0.054	0.0025	0.00048	NA	mg/L
OW-10	2/27/2018	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
OW-10	2/27/2018	Iron, Total	0.075	0.02	0.01	13822000	mg/L
OW-10	2/27/2018	Mercury, Total	0.000092	0.0002	0.000037	2000	mg/L
OW-10	2/27/2018	Manganese, Total	0.015	0.002	0.0011	2017000	mg/L
OW-10	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	2/27/2018	Selenium, Total	0.0096	0.001	0.00098	50000	mg/L
OW-10	2/27/2018	Uranium, Total	0.05	0.0025	0.00034	30000	mg/L
OW-10	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	5/15/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	5/15/2018	Barium, Total	0.054	0.002	0.001	2000000	mg/L
OW-10	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	5/15/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-10	5/15/2018	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	5/15/2018	Calcium, Dissolved	88	1	0.078	NA	mg/L
OW-10	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	5/15/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-10	5/15/2018	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-10	5/15/2018	Manganese, Dissolved	0.075	0.002	0.00039	2017400	mg/L
OW-10	5/15/2018	Sodium, Dissolved	700	10	1.6	NA	mg/L
OW-10	5/15/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-10	5/15/2018	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
OW-10	5/15/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
OW-10	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-10	5/15/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-10	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-10	5/15/2018	Manganese, Total	0.075	0.002	0.0011	2017000	mg/L
OW-10	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	5/15/2018	Selenium, Total	0.012	0.001	0.00098	50000	mg/L
OW-10	5/15/2018	Uranium, Total	0.056	0.0025	0.00034	30000	mg/L
OW-10	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	9/11/2018	Silver, Total	0.0036	0.005	0.0012	50000	mg/L
OW-10	9/11/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-10	9/11/2018	Barium, Total	0.055	0.002	0.001	2000000	mg/L
OW-10	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	9/11/2018	Silver, Dissolved	0.0041	0.005	0.0018	81200	mg/L
OW-10	9/11/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
OW-10	9/11/2018	Barium, Dissolved	0.06	0.002	0.00099	2000000	mg/L
OW-10	9/11/2018	Calcium, Dissolved	92	1	0.078	NA	mg/L
OW-10	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-10	9/11/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	9/11/2018	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-10	9/11/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-10	9/11/2018	Manganese, Dissolved	0.089	0.002	0.00039	2017400	mg/L
OW-10	9/11/2018	Sodium, Dissolved	720	10	1.6	NA	mg/L
OW-10	9/11/2018	Lead, Dissolved	0.00018	0.0005	0.00017	NA	mg/L
OW-10	9/11/2018	Selenium, Dissolved	0.011	0.001	0.00076	50000	mg/L
OW-10	9/11/2018	Uranium, Dissolved	0.05	0.0025	0.00048	NA	mg/L
OW-10	9/11/2018	Zinc, Dissolved	0.014	0.01	0.0021	5960450	mg/L
OW-10	9/11/2018	Iron, Total	0.013	0.02	0.01	13822000	mg/L
OW-10	9/11/2018	Mercury, Total	0.000094	0.0002	0.000038	2000	mg/L
OW-10	9/11/2018	Manganese, Total	0.084	0.002	0.0011	2017000	mg/L
OW-10	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	9/11/2018	Selenium, Total	0.01	0.001	0.00098	50000	mg/L
OW-10	9/11/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-10	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-10	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-10	11/8/2018	Arsenic, Total	0.0017	0.001	0.00041	10000	mg/L
OW-10	11/8/2018	Barium, Total	0.053	0.002	0.001	2000000	mg/L
OW-10	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-10	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-10	11/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-10	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-10	11/8/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-10	11/8/2018	Barium, Dissolved	0.053	0.002	0.00099	2000000	mg/L
OW-10	11/8/2018	Calcium, Dissolved	77	1	0.078	NA	mg/L
OW-10	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-10	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-10	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-10	11/8/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
OW-10	11/8/2018	Magnesium, Dissolved	14	1	0.25	NA	mg/L
OW-10	11/8/2018	Manganese, Dissolved	0.061	0.002	0.00039	2017400	mg/L
OW-10	11/8/2018	Sodium, Dissolved	670	10	1.6	NA	mg/L
OW-10	11/8/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-10	11/8/2018	Selenium, Dissolved	0.01	0.001	0.00076	50000	mg/L
OW-10	11/8/2018	Uranium, Dissolved	0.053	0.0025	0.00048	NA	mg/L
OW-10	11/8/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-10	11/8/2018	Iron, Total	0.028	0.02	0.01	13822000	mg/L
OW-10	11/8/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-10	11/8/2018	Manganese, Total	0.064	0.002	0.0011	2017000	mg/L
OW-10	11/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-10	11/8/2018	Selenium, Total	0.011	0.001	0.00098	50000	mg/L
OW-10	11/8/2018	Uranium, Total	0.048	0.0025	0.00034	30000	mg/L
OW-10	11/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-11	8/20/2019	Aluminum, Dissolved	0.0073	0.02	0.002488	19913930	mg/L
OW-11	8/20/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-11	8/20/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-11	8/20/2019	Barium, Dissolved	0.0068	0.002	0.000648	2000000	mg/L
OW-11	8/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-11	8/20/2019	Boron, Dissolved	1.3	0.2	0.022653	3949110	mg/L
OW-11	8/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-11	8/20/2019	Calcium, Dissolved	10	1	0.061889	NA	mg/L
OW-11	8/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-11	8/20/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-11	8/20/2019	Copper, Dissolved	0.004	0.006	0.001296	790000	mg/L
OW-11	8/20/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-11	8/20/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-11	8/20/2019	Magnesium, Dissolved	1.2	1	0.05029	NA	mg/L
OW-11	8/20/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
OW-11	8/20/2019	Molybdenum, Dissolved	0.17	0.008	0.006735	98700	mg/L
OW-11	8/20/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-11	8/20/2019	Potassium, Dissolved	1.6	1	0.162288	NA	mg/L
OW-11	8/20/2019	Selenium, Dissolved	0.0047	0.001	0.000171	50000	mg/L
OW-11	8/20/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-11	8/20/2019	Sodium, Dissolved	600	10	4.161763	NA	mg/L
OW-11	8/20/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-11	8/20/2019	Uranium, Dissolved	0.2	0.005	0.000747	NA	mg/L
OW-11	8/20/2019	Zinc, Dissolved	0.0039	0.01	0.002252	5960450	mg/L
OW-11	8/20/2019	Aluminum, Total	0.0045	0.02	0.002488	19914000	mg/L
OW-11	8/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-11	8/20/2019	Arsenic, Total	0.002	0.001	0.000312	10000	mg/L
OW-11	8/20/2019	Barium, Total	0.0073	0.002	0.000648	2000000	mg/L
OW-11	8/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-11	8/20/2019	Boron, Total	1.3	0.2	0.022653	3949	mg/L
OW-11	8/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-11	8/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-11	8/20/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-11	8/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-11	8/20/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-11	8/20/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-11	8/20/2019	Manganese, Total	0.018	0.002	0.00029	2017000	mg/L
OW-11	8/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-11	8/20/2019	Molybdenum, Total	0.18	0.008	0.006735	98700	mg/L
OW-11	8/20/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-11	8/20/2019	Selenium, Total	0.0044	0.001	0.000478	50000	mg/L
OW-11	8/20/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-11	8/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-11	8/20/2019	Uranium, Total	0.19	0.005	0.000849	30000	mg/L
OW-11	8/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-11	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-11	9/20/2020	Arsenic, Dissolved	0.002	0.001	0.00021	10000	mg/L
OW-11	9/20/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-11	9/20/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-11	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-11	9/20/2020	Uranium, Dissolved	0.2	0.005	0.00065	NA	mg/L
OW-11	9/20/2020	Boron, Dissolved	1.4	0.2	0.033	3949110	mg/L
OW-11	9/20/2020	Sodium, Dissolved	630	50	6.9	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/20/2020	Aluminum, Dissolved	0.0072	0.02	0.0056	19913930	mg/L
OW-11	9/20/2020	Barium, Dissolved	0.0085	0.002	0.0011	2000000	mg/L
OW-11	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-11	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-11	9/20/2020	Calcium, Dissolved	12	1	0.11	NA	mg/L
OW-11	9/20/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-11	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-11	9/20/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-11	9/20/2020	Magnesium, Dissolved	1.4	1	0.067	NA	mg/L
OW-11	9/20/2020	Manganese, Dissolved	0.018	0.002	0.00058	2017400	mg/L
OW-11	9/20/2020	Molybdenum, Dissolved	0.2	0.008	0.0056	98700	mg/L
OW-11	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-11	9/20/2020	Potassium, Dissolved	1.7	1	0.16	NA	mg/L
OW-11	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-11	9/20/2020	Zinc, Dissolved	0.021	0.01	0.006	5960450	mg/L
OW-11	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-11	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-11	9/20/2020	Arsenic, Total	0.0017	0.001	0.00026	10000	mg/L
OW-11	9/20/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
OW-11	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-11	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-11	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-11	9/20/2020	Aluminum, Total	0.013	0.02	0.0074	19914000	mg/L
OW-11	9/20/2020	Barium, Total	0.0078	0.003	0.0016	2000000	mg/L
OW-11	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-11	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-11	9/20/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-11	9/20/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-11	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-11	9/20/2020	Iron, Total	ND	0.05	0.013	13822000	mg/L
OW-11	9/20/2020	Manganese, Total	0.017	0.002	0.00081	2017000	mg/L
OW-11	9/20/2020	Molybdenum, Total	0.21	0.008	0.0065	98700	mg/L
OW-11	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-11	9/20/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-11	9/20/2020	Uranium, Total	0.2	0.005	0.00065	30000	mg/L
OW-11	9/20/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
OW-11	9/20/2020	Boron, Total	1.5	0.2	0.037	3949	mg/L
OW-11	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-11	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-11	8/22/2012	Barium, Total	0.0086	0.002	0.00039	2000000	mg/L
OW-11	8/22/2012	Calcium, Total	11	1	0.026	NA	mg/L
OW-11	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-11	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-11	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-11	8/22/2012	Iron, Total	0.041	0.02	0.013	13822000	mg/L
OW-11	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-11	8/22/2012	Potassium, Total	2	1	0.48	NA	mg/L
OW-11	8/22/2012	Magnesium, Total	1.3	1	0.013	NA	mg/L
OW-11	8/22/2012	Manganese, Total	0.095	0.002	0.00026	2017000	mg/L
OW-11	8/22/2012	Sodium, Total	640	10	0.45	NA	mg/L
OW-11	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-11	8/22/2012	Selenium, Total	0.0032	0.0025	0.0025	50000	mg/L
OW-11	8/22/2012	Uranium, Total	0.22	0.005	0.00006	30000	mg/L
OW-11	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-11	9/16/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-11	9/16/2013	Arsenic, Total	0.0024	0.001	0.000098	10000	mg/L
OW-11	9/16/2013	Barium, Total	0.0084	0.002	0.00095	2000000	mg/L
OW-11	9/16/2013	Calcium, Total	12	1	0.069	NA	mg/L
OW-11	9/16/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-11	9/16/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-11	9/16/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-11	9/16/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-11	9/16/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-11	9/16/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-11	9/16/2013	Magnesium, Total	1.3	1	0.028	NA	mg/L
OW-11	9/16/2013	Manganese, Total	0.019	0.002	0.00016	2017000	mg/L
OW-11	9/16/2013	Sodium, Total	630	10	3.3	NA	mg/L
OW-11	9/16/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-11	9/16/2013	Selenium, Total	0.0024	0.001	0.00029	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/16/2013	Uranium, Total	0.23	0.01	0.000073	30000	mg/L
OW-11	9/16/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
OW-11	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-11	9/12/2014	Arsenic, Total	0.0027	0.001	0.00036	10000	mg/L
OW-11	9/12/2014	Barium, Total	0.0083	0.002	0.0005	2000000	mg/L
OW-11	9/12/2014	Calcium, Total	12	1	0.082	NA	mg/L
OW-11	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-11	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-11	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-11	9/12/2014	Iron, Total	0.047	0.02	0.0072	13822000	mg/L
OW-11	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-11	9/12/2014	Potassium, Total	3.1	1	0.093	NA	mg/L
OW-11	9/12/2014	Magnesium, Total	1.4	1	0.018	NA	mg/L
OW-11	9/12/2014	Manganese, Total	0.021	0.002	0.00049	2017000	mg/L
OW-11	9/12/2014	Sodium, Total	660	10	3.9	NA	mg/L
OW-11	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-11	9/12/2014	Selenium, Total	0.0023	0.001	0.00051	50000	mg/L
OW-11	9/12/2014	Uranium, Total	0.25	0.01	0.000072	30000	mg/L
OW-11	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-11	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-11	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-11	8/17/2015	Barium, Total	0.0076	0.002	0.0011	2000000	mg/L
OW-11	8/17/2015	Calcium, Total	9.2	1	0.057	NA	mg/L
OW-11	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-11	8/17/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-11	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-11	8/17/2015	Iron, Total	0.025	0.02	0.0072	13822000	mg/L
OW-11	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-11	8/17/2015	Potassium, Total	1.8	1	0.18	NA	mg/L
OW-11	8/17/2015	Magnesium, Total	1.2	1	0.039	NA	mg/L
OW-11	8/17/2015	Manganese, Total	0.015	0.002	0.0015	2017000	mg/L
OW-11	8/17/2015	Sodium, Total	610	10	0.72	NA	mg/L
OW-11	8/17/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-11	8/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-11	8/17/2015	Uranium, Total	0.23	0.005	0.000049	30000	mg/L
OW-11	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-11	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-11	9/9/2016	Arsenic, Total	0.0023	0.005	0.0011	10000	mg/L
OW-11	9/9/2016	Barium, Total	0.008	0.002	0.00079	2000000	mg/L
OW-11	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-11	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-11	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-11	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-11	9/9/2016	Arsenic, Dissolved	0.0021	0.005	0.00069	10000	mg/L
OW-11	9/9/2016	Barium, Dissolved	0.0087	0.002	0.0013	2000000	mg/L
OW-11	9/9/2016	Calcium, Dissolved	9.8	1	0.5	NA	mg/L
OW-11	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-11	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-11	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-11	9/9/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-11	9/9/2016	Potassium, Dissolved	1.6	1	0.5	NA	mg/L
OW-11	9/9/2016	Magnesium, Dissolved	1.2	1	0.5	NA	mg/L
OW-11	9/9/2016	Manganese, Dissolved	0.015	0.002	0.00032	2017400	mg/L
OW-11	9/9/2016	Sodium, Dissolved	620	10	5	NA	mg/L
OW-11	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/9/2016	Selenium, Dissolved	0.0081	0.001	0.00021	50000	mg/L
OW-11	9/9/2016	Uranium, Dissolved	0.18	0.01	0.001	NA	mg/L
OW-11	9/9/2016	Zinc, Dissolved	0.0091	0.01	0.0028	5960450	mg/L
OW-11	9/9/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-11	9/9/2016	Mercury, Total	0.000095	0.0002	0.000053	2000	mg/L
OW-11	9/9/2016	Manganese, Total	0.016	0.002	0.00027	2017000	mg/L
OW-11	9/9/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-11	9/9/2016	Selenium, Total	0.0074	0.005	0.00094	50000	mg/L
OW-11	9/9/2016	Uranium, Total	0.18	0.01	0.0035	30000	mg/L
OW-11	9/9/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-11	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-11	9/18/2017	Arsenic, Total	0.0029	0.005	0.0015	10000	mg/L
OW-11	9/18/2017	Barium, Total	0.0077	0.002	0.00093	2000000	mg/L
OW-11	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-11	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-11	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-11	9/18/2017	Arsenic, Dissolved	0.0026	0.001	0.00018	10000	mg/L
OW-11	9/18/2017	Barium, Dissolved	0.0078	0.002	0.00085	2000000	mg/L
OW-11	9/18/2017	Calcium, Dissolved	12	1	0.078	NA	mg/L
OW-11	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-11	9/18/2017	Chromium, Dissolved	0.002	0.006	0.0013	100000	mg/L
OW-11	9/18/2017	Copper, Dissolved	0.0044	0.006	0.0032	790000	mg/L
OW-11	9/18/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-11	9/18/2017	Potassium, Dissolved	1.8	1	0.11	NA	mg/L
OW-11	9/18/2017	Magnesium, Dissolved	1.3	1	0.25	NA	mg/L
OW-11	9/18/2017	Manganese, Dissolved	0.019	0.002	0.00039	2017400	mg/L
OW-11	9/18/2017	Sodium, Dissolved	640	10	1.6	NA	mg/L
OW-11	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/18/2017	Selenium, Dissolved	0.0042	0.001	0.00039	50000	mg/L
OW-11	9/18/2017	Zinc, Dissolved	0.087	0.01	0.0021	5960450	mg/L
OW-11	9/18/2017	Iron, Total	0.011	0.02	0.01	13822000	mg/L
OW-11	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-11	9/18/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-11	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-11	9/18/2017	Selenium, Total	0.005	0.001	0.00071	50000	mg/L
OW-11	9/18/2017	Uranium, Total	0.21	0.005	0.0015	30000	mg/L
OW-11	9/18/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-11	9/18/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-11	9/18/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
OW-11	9/18/2018	Barium, Total	0.008	0.002	0.001	2000000	mg/L
OW-11	9/18/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-11	9/18/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-11	9/18/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-11	9/18/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-11	9/18/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-11	9/18/2018	Barium, Dissolved	0.0075	0.002	0.00099	2000000	mg/L
OW-11	9/18/2018	Calcium, Dissolved	11	1	0.078	NA	mg/L
OW-11	9/18/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-11	9/18/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-11	9/18/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-11	9/18/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-11	9/18/2018	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
OW-11	9/18/2018	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
OW-11	9/18/2018	Manganese, Dissolved	0.018	0.002	0.00039	2017400	mg/L
OW-11	9/18/2018	Sodium, Dissolved	630	10	1.6	NA	mg/L
OW-11	9/18/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-11	9/18/2018	Selenium, Dissolved	0.0025	0.001	0.00076	50000	mg/L
OW-11	9/18/2018	Uranium, Dissolved	0.21	0.01	0.0019	NA	mg/L
OW-11	9/18/2018	Zinc, Dissolved	0.0098	0.01	0.0021	5960450	mg/L
OW-11	9/18/2018	Iron, Total	0.012	0.02	0.01	13822000	mg/L
OW-11	9/18/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-11	9/18/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-11	9/18/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-11	9/18/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
OW-11	9/18/2018	Uranium, Total	0.18	0.005	0.00068	30000	mg/L
OW-11	9/18/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-12	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-12	9/17/2020	Arsenic, Dissolved	0.0015	0.001	0.00021	10000	mg/L
OW-12	9/17/2020	Lead, Dissolved	0.000069	0.0005	0.000034	NA	mg/L
OW-12	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-12	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-12	9/17/2020	Uranium, Dissolved	0.011	0.0005	0.000065	NA	mg/L
OW-12	9/17/2020	Aluminum, Dissolved	0.027	0.02	0.0056	19913930	mg/L
OW-12	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-12	9/17/2020	Boron, Dissolved	0.38	0.04	0.0067	3949110	mg/L
OW-12	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-12	9/17/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
OW-12	9/17/2020	Manganese, Dissolved	0.0023	0.002	0.00058	2017400	mg/L
OW-12	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-12	9/17/2020	Barium, Dissolved	0.018	0.002	0.0011	2000000	mg/L
OW-12	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-12	9/17/2020	Chromium, Dissolved	0.0024	0.006	0.002	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-12	9/17/2020	Molybdenum, Dissolved	0.0084	0.008	0.0056	98700	mg/L
OW-12	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-12	9/17/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L
OW-12	9/17/2020	Mercury, Total	0.00015	0.0002	0.00012	2000	mg/L
OW-12	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-12	9/17/2020	Arsenic, Total	0.0017	0.001	0.00026	10000	mg/L
OW-12	9/17/2020	Lead, Total	0.00051	0.0005	0.000034	15000	mg/L
OW-12	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-12	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-12	9/17/2020	Uranium, Total	0.014	0.0005	0.000065	30000	mg/L
OW-12	9/17/2020	Aluminum, Total	0.23	0.1	0.037	19914000	mg/L
OW-12	9/17/2020	Barium, Total	0.026	0.015	0.0082	2000000	mg/L
OW-12	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-12	9/17/2020	Boron, Total	0.4	0.2	0.037	3949	mg/L
OW-12	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-12	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-12	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-12	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-12	9/17/2020	Iron, Total	0.18	0.25	0.064	13822000	mg/L
OW-12	9/17/2020	Manganese, Total	0.0095	0.01	0.0041	2017000	mg/L
OW-12	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-12	9/17/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
OW-12	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-12	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-12	8/22/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-12	8/22/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-12	8/22/2012	Barium, Total	0.028	0.002	0.00039	2000000	mg/L
OW-12	8/22/2012	Calcium, Total	1.8	1	0.026	NA	mg/L
OW-12	8/22/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-12	8/22/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-12	8/22/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-12	8/22/2012	Iron, Total	0.29	0.02	0.013	13822000	mg/L
OW-12	8/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-12	8/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-12	8/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-12	8/22/2012	Manganese, Total	0.013	0.002	0.00026	2017000	mg/L
OW-12	8/22/2012	Sodium, Total	270	5	0.22	NA	mg/L
OW-12	8/22/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-12	8/22/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-12	8/22/2012	Uranium, Total	0.012	0.0025	0.00003	30000	mg/L
OW-12	8/22/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-12	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-12	9/10/2013	Arsenic, Total	0.002	0.001	0.000098	10000	mg/L
OW-12	9/10/2013	Barium, Total	0.022	0.002	0.00095	2000000	mg/L
OW-12	9/10/2013	Calcium, Total	2	1	0.069	NA	mg/L
OW-12	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-12	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-12	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-12	9/10/2013	Iron, Total	0.048	0.02	0.0089	13822000	mg/L
OW-12	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-12	9/10/2013	Potassium, Total	1.3	1	0.24	NA	mg/L
OW-12	9/10/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-12	9/10/2013	Manganese, Total	0.0021	0.002	0.00016	2017000	mg/L
OW-12	9/10/2013	Sodium, Total	240	5	1.6	NA	mg/L
OW-12	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-12	9/10/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
OW-12	9/10/2013	Uranium, Total	0.013	0.001	0.0000073	30000	mg/L
OW-12	9/10/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
OW-12	9/12/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-12	9/12/2014	Arsenic, Total	0.0021	0.001	0.00036	10000	mg/L
OW-12	9/12/2014	Barium, Total	0.024	0.002	0.0005	2000000	mg/L
OW-12	9/12/2014	Calcium, Total	1.7	1	0.082	NA	mg/L
OW-12	9/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-12	9/12/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-12	9/12/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-12	9/12/2014	Iron, Total	0.12	0.02	0.0072	13822000	mg/L
OW-12	9/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-12	9/12/2014	Potassium, Total	1.7	1	0.093	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/12/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-12	9/12/2014	Manganese, Total	0.0054	0.002	0.00049	2017000	mg/L
OW-12	9/12/2014	Sodium, Total	260	10	3.9	NA	mg/L
OW-12	9/12/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-12	9/12/2014	Selenium, Total	0.0011	0.001	0.00051	50000	mg/L
OW-12	9/12/2014	Uranium, Total	0.014	0.001	0.0000072	30000	mg/L
OW-12	9/12/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-12	8/13/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-12	8/13/2015	Arsenic, Total	0.0016	0.001	0.00029	10000	mg/L
OW-12	8/13/2015	Barium, Total	0.023	0.002	0.0011	2000000	mg/L
OW-12	8/13/2015	Calcium, Total	1.9	1	0.057	NA	mg/L
OW-12	8/13/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-12	8/13/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-12	8/13/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-12	8/13/2015	Iron, Total	0.078	0.02	0.0072	13822000	mg/L
OW-12	8/13/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-12	8/13/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-12	8/13/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-12	8/13/2015	Manganese, Total	0.0038	0.002	0.0015	2017000	mg/L
OW-12	8/13/2015	Sodium, Total	260	5	0.36	NA	mg/L
OW-12	8/13/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-12	8/13/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-12	8/13/2015	Uranium, Total	0.014	0.0005	0.0000049	30000	mg/L
OW-12	8/13/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-12	9/8/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-12	9/8/2016	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
OW-12	9/8/2016	Barium, Total	0.025	0.002	0.00079	2000000	mg/L
OW-12	9/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-12	9/8/2016	Chromium, Total	0.0055	0.006	0.0027	50000	mg/L
OW-12	9/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-12	9/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-12	9/8/2016	Arsenic, Dissolved	0.002	0.001	0.00014	10000	mg/L
OW-12	9/8/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-12	9/8/2016	Calcium, Dissolved	1.7	1	0.5	NA	mg/L
OW-12	9/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-12	9/8/2016	Chromium, Dissolved	0.0036	0.006	0.0018	100000	mg/L
OW-12	9/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-12	9/8/2016	Iron, Dissolved	0.047	0.02	0.02	13821880	mg/L
OW-12	9/8/2016	Potassium, Dissolved	1	1	0.5	NA	mg/L
OW-12	9/8/2016	Magnesium, Dissolved	ND	1	0.5	NA	mg/L
OW-12	9/8/2016	Manganese, Dissolved	0.0027	0.002	0.00032	2017400	mg/L
OW-12	9/8/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
OW-12	9/8/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
OW-12	9/8/2016	Selenium, Dissolved	0.00094	0.001	0.00021	50000	mg/L
OW-12	9/8/2016	Uranium, Dissolved	0.013	0.0005	0.000051	NA	mg/L
OW-12	9/8/2016	Zinc, Dissolved	0.004	0.01	0.0028	5960450	mg/L
OW-12	9/8/2016	Iron, Total	0.11	0.02	0.02	13822000	mg/L
OW-12	9/8/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
OW-12	9/8/2016	Manganese, Total	0.0063	0.002	0.00027	2017000	mg/L
OW-12	9/8/2016	Lead, Total	0.00028	0.0005	0.000081	15000	mg/L
OW-12	9/8/2016	Selenium, Total	0.0008	0.001	0.00019	50000	mg/L
OW-12	9/8/2016	Uranium, Total	0.012	0.0005	0.00017	30000	mg/L
OW-12	9/8/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-12	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-12	9/19/2017	Arsenic, Total	0.0019	0.001	0.0003	10000	mg/L
OW-12	9/19/2017	Barium, Total	0.023	0.002	0.00093	2000000	mg/L
OW-12	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-12	9/19/2017	Chromium, Total	0.0041	0.006	0.0018	50000	mg/L
OW-12	9/19/2017	Copper, Total	0.0019	0.006	0.0017	790000	mg/L
OW-12	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-12	9/19/2017	Arsenic, Dissolved	0.002	0.001	0.00018	10000	mg/L
OW-12	9/19/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-12	9/19/2017	Calcium, Dissolved	1.6	1	0.078	NA	mg/L
OW-12	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-12	9/19/2017	Chromium, Dissolved	0.0041	0.006	0.0013	100000	mg/L
OW-12	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-12	9/19/2017	Iron, Dissolved	0.049	0.02	0.016	13821880	mg/L
OW-12	9/19/2017	Potassium, Dissolved	0.85	1	0.11	NA	mg/L
OW-12	9/19/2017	Magnesium, Dissolved	ND	1	0.25	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	Manganese, Dissolved	0.0026	0.002	0.00039	2017400	mg/L
OW-12	9/19/2017	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-12	9/19/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-12	9/19/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-12	9/19/2017	Zinc, Dissolved	0.035	0.01	0.0021	5960450	mg/L
OW-12	9/19/2017	Iron, Total	0.11	0.02	0.01	13822000	mg/L
OW-12	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-12	9/19/2017	Manganese, Total	0.0058	0.002	0.0011	2017000	mg/L
OW-12	9/19/2017	Lead, Total	0.00032	0.0005	0.000095	15000	mg/L
OW-12	9/19/2017	Selenium, Total	0.00089	0.001	0.00071	50000	mg/L
OW-12	9/19/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
OW-12	9/19/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-12	9/19/2018	Arsenic, Total	0.002	0.001	0.00041	10000	mg/L
OW-12	9/19/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-12	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-12	9/19/2018	Chromium, Total	0.0046	0.006	0.0018	50000	mg/L
OW-12	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-12	9/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-12	9/19/2018	Arsenic, Dissolved	0.002	0.001	0.00042	10000	mg/L
OW-12	9/19/2018	Barium, Dissolved	0.021	0.002	0.00099	2000000	mg/L
OW-12	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-12	9/19/2018	Chromium, Dissolved	0.0025	0.006	0.0013	100000	mg/L
OW-12	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-12	9/19/2018	Iron, Dissolved	0.069	0.02	0.016	13821880	mg/L
OW-12	9/19/2018	Manganese, Dissolved	0.004	0.002	0.00039	2017400	mg/L
OW-12	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-12	9/19/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-12	9/19/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-12	9/19/2018	Zinc, Dissolved	0.0081	0.01	0.0021	5960450	mg/L
OW-12	9/19/2018	Iron, Total	0.43	0.02	0.01	13822000	mg/L
OW-12	9/19/2018	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
OW-12	9/19/2018	Manganese, Total	0.018	0.002	0.0011	2017000	mg/L
OW-12	9/19/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
OW-12	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-12	9/19/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-12	9/19/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
OW-13	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-13	9/17/2020	Arsenic, Dissolved	0.00071	0.001	0.00021	10000	mg/L
OW-13	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-13	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-13	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-13	9/17/2020	Uranium, Dissolved	0.015	0.0005	0.000065	NA	mg/L
OW-13	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-13	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-13	9/17/2020	Boron, Dissolved	0.31	0.04	0.0067	3949110	mg/L
OW-13	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-13	9/17/2020	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-13	9/17/2020	Manganese, Dissolved	0.018	0.002	0.00058	2017400	mg/L
OW-13	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-13	9/17/2020	Barium, Dissolved	0.019	0.002	0.0011	2000000	mg/L
OW-13	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-13	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-13	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-13	9/17/2020	Molybdenum, Dissolved	0.01	0.008	0.0056	98700	mg/L
OW-13	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-13	9/17/2020	Zinc, Dissolved	0.017	0.01	0.006	5960450	mg/L
OW-13	9/17/2020	Mercury, Total	0.00013	0.0002	0.00012	2000	mg/L
OW-13	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-13	9/17/2020	Arsenic, Total	0.00077	0.001	0.00026	10000	mg/L
OW-13	9/17/2020	Lead, Total	0.000074	0.0005	0.000034	15000	mg/L
OW-13	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-13	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-13	9/17/2020	Uranium, Total	0.017	0.0005	0.000065	30000	mg/L
OW-13	9/17/2020	Aluminum, Total	0.051	0.1	0.037	19914000	mg/L
OW-13	9/17/2020	Barium, Total	0.022	0.015	0.0082	2000000	mg/L
OW-13	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-13	9/17/2020	Boron, Total	0.31	0.2	0.037	3949	mg/L
OW-13	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-13	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-13	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-13	9/17/2020	Iron, Total	ND	0.25	0.064	13822000	mg/L
OW-13	9/17/2020	Manganese, Total	0.023	0.01	0.0041	2017000	mg/L
OW-13	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-13	9/17/2020	Nickel, Total	ND	0.05	0.016	372000	mg/L
OW-13	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-13	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-13	5/1/2019	Aluminum, Dissolved	0.0065	0.02	0.002488	19913930	mg/L
OW-13	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	5/1/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-13	5/1/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	5/1/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
OW-13	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	5/1/2019	Calcium, Dissolved	8.8	1	0.061889	NA	mg/L
OW-13	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	5/1/2019	Copper, Dissolved	0.0017	0.006	0.001296	790000	mg/L
OW-13	5/1/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	5/1/2019	Magnesium, Dissolved	1.3	1	0.05029	NA	mg/L
OW-13	5/1/2019	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	5/1/2019	Molybdenum, Dissolved	0.0087	0.008	0.006735	98700	mg/L
OW-13	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	5/1/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-13	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	5/1/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
OW-13	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Dissolved	0.00079	0.001	0.0001	10000	mg/L
OW-13	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-13	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-13	3/2/2020	Barium, Dissolved	0.019	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Dissolved	0.31	0.04	0.0045	3949110	mg/L
OW-13	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-13	3/2/2020	Calcium, Dissolved	8.6	1	0.062	NA	mg/L
OW-13	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-13	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-13	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-13	3/2/2020	Magnesium, Dissolved	1.3	1	0.05	NA	mg/L
OW-13	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Potassium, Dissolved	1.3	1	0.16	NA	mg/L
OW-13	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-13	3/2/2020	Sodium, Dissolved	300	5	2.1	NA	mg/L
OW-13	3/2/2020	Manganese, Dissolved	0.021	0.002	0.00029	2017400	mg/L
OW-13	3/2/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
OW-13	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Total	0.00078	0.001	0.00031	10000	mg/L
OW-13	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-13	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	3/2/2020	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OW-13	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-13	3/2/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-13	3/2/2020	Barium, Total	0.019	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Total	0.34	0.04	0.0045	3949	mg/L
OW-13	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-13	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-13	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/2/2020	Iron, Total	0.012	0.02	0.0087	13822000	mg/L
OW-13	3/2/2020	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	3/2/2020	Molybdenum, Total	0.009	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-13	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-13	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Dissolved	0.00075	0.001	0.0001	10000	mg/L
OW-13	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-13	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	3/2/2020	Aluminum, Dissolved	0.0033	0.02	0.0025	19913930	mg/L
OW-13	3/2/2020	Barium, Dissolved	0.017	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Dissolved	0.29	0.04	0.0045	3949110	mg/L
OW-13	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-13	3/2/2020	Calcium, Dissolved	8.6	1	0.062	NA	mg/L
OW-13	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-13	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-13	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-13	3/2/2020	Magnesium, Dissolved	1.3	1	0.05	NA	mg/L
OW-13	3/2/2020	Molybdenum, Dissolved	0.0076	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-13	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-13	3/2/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-13	3/2/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
OW-13	3/2/2020	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-13	3/2/2020	Arsenic, Total	0.00075	0.001	0.00031	10000	mg/L
OW-13	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-13	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	3/2/2020	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-13	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-13	3/2/2020	Aluminum, Total	ND	0.02	0.0025	19914000	mg/L
OW-13	3/2/2020	Barium, Total	0.018	0.002	0.00065	2000000	mg/L
OW-13	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-13	3/2/2020	Boron, Total	0.33	0.04	0.0045	3949	mg/L
OW-13	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-13	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-13	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-13	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	3/2/2020	Iron, Total	ND	0.02	0.0087	13822000	mg/L
OW-13	3/2/2020	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	3/2/2020	Molybdenum, Total	0.0097	0.008	0.0067	98700	mg/L
OW-13	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-13	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-13	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-13	5/1/2019	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-13	5/1/2019	Zinc, Dissolved	0.12	0.01	0.002252	5960450	mg/L
OW-13	5/1/2019	Aluminum, Total	0.0026	0.02	0.002488	19914000	mg/L
OW-13	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	5/1/2019	Arsenic, Total	0.0007	0.001	0.000312	10000	mg/L
OW-13	5/1/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	5/1/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-13	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	5/1/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	5/1/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	5/1/2019	Manganese, Total	0.019	0.002	0.00029	2017000	mg/L
OW-13	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	5/1/2019	Molybdenum, Total	0.0078	0.008	0.006735	98700	mg/L
OW-13	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	5/1/2019	Uranium, Total	0.016	0.0025	0.000424	30000	mg/L
OW-13	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-13	12/9/2020	Barium, Total	0.0196	0.01	0.003	2000000	mg/L
OW-13	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-13	12/9/2020	Boron, Total	0.326	0.1	0.022	3949	mg/L
OW-13	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-13	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-13	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-13	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-13	12/9/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-13	12/9/2020	Manganese, Total	0.0269	0.01	0.003	2017000	mg/L
OW-13	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-13	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-13	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-13	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-13	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-13	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-13	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-13	12/9/2020	Boron, Dissolved	0.372	0.2	0.0527	3949110	mg/L
OW-13	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-13	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-13	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-13	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-13	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-13	12/9/2020	Manganese, Dissolved	0.0261	0.015	0.00141	2017400	mg/L
OW-13	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-13	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-13	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-13	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-13	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-13	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-13	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-13	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-13	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-13	12/9/2020	Uranium, Dissolved	15.2	5	1.12	NA	ug/L
OW-13	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-13	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-13	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-13	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-13	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-13	12/9/2020	Uranium, Total Recoverable	16	5	1.12	30	ug/L
OW-13	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-13	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-13	8/12/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-13	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Total	0.00079	0.001	0.000312	10000	mg/L
OW-13	8/12/2019	Barium, Total	0.018	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-13	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/12/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	8/12/2019	Manganese, Total	0.017	0.002	0.00029	2017000	mg/L
OW-13	8/12/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	8/12/2019	Molybdenum, Total	0.0081	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	8/12/2019	Uranium, Total	0.015	0.0005	0.000085	30000	mg/L
OW-13	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Dissolved	0.00076	0.001	0.000101	10000	mg/L
OW-13	8/12/2019	Barium, Dissolved	0.018	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-13	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/12/2019	Manganese, Dissolved	0.017	0.002	0.00029	2017400	mg/L
OW-13	8/12/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/12/2019	Thallium, Dissolved	0.00005	0.0005	0.000048	2000	mg/L
OW-13	8/12/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-13	8/12/2019	Zinc, Dissolved	0.0068	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-13	2/5/2019	Arsenic, Dissolved	0.00072	0.001	0.000068	10000	mg/L
OW-13	2/5/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
OW-13	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	2/5/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-13	2/5/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-13	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-13	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-13	2/5/2019	Uranium, Dissolved	0.015	0.0005	0.00003	NA	mg/L
OW-13	2/5/2019	Zinc, Dissolved	0.016	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-13	2/5/2019	Arsenic, Total	0.00079	0.001	0.000022	10000	mg/L
OW-13	2/5/2019	Barium, Total	0.019	0.002	0.000488	2000000	mg/L
OW-13	2/5/2019	Beryllium, Total	0.00031	0.002	0.000224	4000	mg/L
OW-13	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-13	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	2/5/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-13	2/5/2019	Lead, Total	ND	0.0005	0.000063	15000	mg/L
OW-13	2/5/2019	Manganese, Total	0.018	0.002	0.00006	2017000	mg/L
OW-13	2/5/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-13	2/5/2019	Selenium, Total	0.00014	0.001	0.000118	50000	mg/L
OW-13	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-13	2/5/2019	Uranium, Total	0.015	0.0005	0.00005	30000	mg/L
OW-13	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-13	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Total	0.00088	0.001	0.000312	10000	mg/L
OW-13	8/12/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-13	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/12/2019	Iron, Total	0.0089	0.02	0.008747	13822000	mg/L
OW-13	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	8/12/2019	Manganese, Total	0.018	0.002	0.00029	2017000	mg/L
OW-13	8/12/2019	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
OW-13	8/12/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/12/2019	Silver, Total	0.0054	0.005	0.001418	50000	mg/L
OW-13	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	8/12/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-13	8/12/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-13	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/12/2019	Arsenic, Dissolved	0.00079	0.001	0.000101	10000	mg/L
OW-13	8/12/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/12/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-13	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/12/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/12/2019	Manganese, Dissolved	0.018	0.002	0.00029	2017400	mg/L
OW-13	8/12/2019	Molybdenum, Dissolved	0.01	0.008	0.006735	98700	mg/L
OW-13	8/12/2019	Nickel, Dissolved	0.0087	0.01	0.004009	372000	mg/L
OW-13	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/12/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	8/12/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-13	8/12/2019	Zinc, Dissolved	0.0074	0.01	0.002252	5960450	mg/L
OW-13	8/13/2019	Aluminum, Total	0.95	0.02	0.002488	19914000	mg/L
OW-13	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	8/13/2019	Arsenic, Total	0.0036	0.001	0.000312	10000	mg/L
OW-13	8/13/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
OW-13	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	8/13/2019	Boron, Total	1.7	0.2	0.022653	3949	mg/L
OW-13	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	8/13/2019	Chromium, Total	0.0039	0.006	0.001533	50000	mg/L
OW-13	8/13/2019	Cobalt, Total	0.0093	0.006	0.003091	5980	mg/L
OW-13	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	8/13/2019	Iron, Total	0.4	0.02	0.008747	13822000	mg/L
OW-13	8/13/2019	Lead, Total	0.00035	0.0005	0.000055	15000	mg/L
OW-13	8/13/2019	Manganese, Total	0.0085	0.002	0.00029	2017000	mg/L
OW-13	8/13/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-13	8/13/2019	Molybdenum, Total	0.011	0.008	0.006735	98700	mg/L
OW-13	8/13/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	8/13/2019	Uranium, Total	0.029	0.0025	0.000424	30000	mg/L
OW-13	8/13/2019	Zinc, Total	0.0064	0.01	0.005772	5960000	mg/L
OW-13	8/13/2019	Aluminum, Dissolved	0.014	0.02	0.002488	19913930	mg/L
OW-13	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-13	8/13/2019	Arsenic, Dissolved	0.0031	0.001	0.000101	10000	mg/L
OW-13	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
OW-13	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	8/13/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
OW-13	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	8/13/2019	Calcium, Dissolved	3.5	1	0.061889	NA	mg/L
OW-13	8/13/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
OW-13	8/13/2019	Cobalt, Dissolved	0.0065	0.006	0.003091	5980	mg/L
OW-13	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	8/13/2019	Iron, Dissolved	0.009	0.02	0.008747	13821880	mg/L
OW-13	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	8/13/2019	Magnesium, Dissolved	0.81	1	0.05029	NA	mg/L
OW-13	8/13/2019	Manganese, Dissolved	0.00056	0.002	0.00029	2017400	mg/L
OW-13	8/13/2019	Molybdenum, Dissolved	0.011	0.008	0.006735	98700	mg/L
OW-13	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	8/13/2019	Potassium, Dissolved	0.54	1	0.162288	NA	mg/L
OW-13	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	8/13/2019	Sodium, Dissolved	310	5	2.080881	NA	mg/L
OW-13	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	8/13/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
OW-13	8/13/2019	Zinc, Dissolved	0.0054	0.01	0.002252	5960450	mg/L
OW-13	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-13	10/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	10/14/2019	Arsenic, Dissolved	0.00079	0.001	0.000101	10000	mg/L
OW-13	10/14/2019	Barium, Dissolved	0.019	0.002	0.000648	2000000	mg/L
OW-13	10/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	10/14/2019	Boron, Dissolved	0.34	0.04	0.004531	3949110	mg/L
OW-13	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	10/14/2019	Calcium, Dissolved	9.3	1	0.061889	NA	mg/L
OW-13	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-13	10/14/2019	Copper, Dissolved	0.0015	0.006	0.001296	790000	mg/L
OW-13	10/14/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-13	10/14/2019	Magnesium, Dissolved	1.3	1	0.05029	NA	mg/L
OW-13	10/14/2019	Manganese, Dissolved	0.019	0.002	0.00029	2017400	mg/L
OW-13	10/14/2019	Molybdenum, Dissolved	0.0084	0.008	0.006735	98700	mg/L
OW-13	10/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-13	10/14/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-13	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-13	10/14/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	10/14/2019	Sodium, Dissolved	290	5	2.080881	NA	mg/L
OW-13	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-13	10/14/2019	Zinc, Dissolved	0.0087	0.01	0.002252	5960450	mg/L
OW-13	10/14/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
OW-13	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-13	10/14/2019	Arsenic, Total	0.00095	0.001	0.000312	10000	mg/L
OW-13	10/14/2019	Barium, Total	0.019	0.002	0.000648	2000000	mg/L
OW-13	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-13	10/14/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-13	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-13	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-13	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	10/14/2019	Iron, Total	ND	0.02	0.008747	13822000	mg/L
OW-13	10/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-13	10/14/2019	Manganese, Total	0.02	0.002	0.00029	2017000	mg/L
OW-13	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-13	10/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-13	10/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-13	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-13	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-13	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-13	2/5/2019	Arsenic, Dissolved	0.00069	0.001	0.000068	10000	mg/L
OW-13	2/5/2019	Barium, Dissolved	0.02	0.002	0.000648	2000000	mg/L
OW-13	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-13	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-13	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-13	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-13	2/5/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-13	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-13	2/5/2019	Manganese, Dissolved	0.02	0.002	0.00029	2017400	mg/L
OW-13	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-13	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-13	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-13	2/5/2019	Uranium, Dissolved	0.015	0.0005	0.00003	NA	mg/L
OW-13	2/5/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
OW-13	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-13	2/5/2019	Arsenic, Total	0.00079	0.001	0.000022	10000	mg/L
OW-13	2/5/2019	Barium, Total	0.02	0.002	0.000488	2000000	mg/L
OW-13	2/5/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-13	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-13	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-13	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-13	2/5/2019	Iron, Total	ND	0.02	0.006053	13822000	mg/L
OW-13	2/5/2019	Lead, Total	ND	0.0005	0.000063	15000	mg/L
OW-13	2/5/2019	Manganese, Total	0.019	0.002	0.00006	2017000	mg/L
OW-13	2/5/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-13	2/5/2019	Selenium, Total	0.00026	0.001	0.000118	50000	mg/L
OW-13	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-13	2/5/2019	Uranium, Total	0.015	0.0005	0.00005	30000	mg/L
OW-13	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-13	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-13	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-13	8/23/2012	Barium, Total	0.024	0.002	0.00039	2000000	mg/L
OW-13	8/23/2012	Calcium, Total	8.5	1	0.026	NA	mg/L
OW-13	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-13	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-13	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	8/23/2012	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-13	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-13	8/23/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-13	8/23/2012	Magnesium, Total	1.3	1	0.013	NA	mg/L
OW-13	8/23/2012	Manganese, Total	0.01	0.002	0.00026	2017000	mg/L
OW-13	8/23/2012	Sodium, Total	300	5	0.22	NA	mg/L
OW-13	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-13	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-13	8/23/2012	Uranium, Total	0.017	0.0025	0.00003	30000	mg/L
OW-13	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-13	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-13	3/19/2013	Barium, Total	0.018	0.002	0.00039	2000000	mg/L
OW-13	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-13	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-13	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	3/19/2013	Iron, Total	ND	0.02	0.013	13822000	mg/L
OW-13	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	3/19/2013	Manganese, Total	0.021	0.002	0.00026	2017000	mg/L
OW-13	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-13	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-13	3/19/2013	Uranium, Total	0.018	0.0025	0.0012	30000	mg/L
OW-13	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-13	6/13/2013	Arsenic, Total	ND	0.001	0.00027	10000	mg/L
OW-13	6/13/2013	Barium, Total	0.019	0.002	0.00057	2000000	mg/L
OW-13	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-13	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-13	6/13/2013	Iron, Total	ND	0.02	0.0052	13822000	mg/L
OW-13	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	6/13/2013	Manganese, Total	0.02	0.002	0.00052	2017000	mg/L
OW-13	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	6/13/2013	Selenium, Total	ND	0.001	0.00049	50000	mg/L
OW-13	6/13/2013	Uranium, Total	0.017	0.001	0.0005	30000	mg/L
OW-13	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-13	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-13	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-13	9/4/2013	Barium, Total	0.019	0.002	0.00095	2000000	mg/L
OW-13	9/4/2013	Calcium, Total	8.8	1	0.069	NA	mg/L
OW-13	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-13	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-13	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-13	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-13	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	9/4/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-13	9/4/2013	Magnesium, Total	1.3	1	0.028	NA	mg/L
OW-13	9/4/2013	Manganese, Total	0.024	0.002	0.00016	2017000	mg/L
OW-13	9/4/2013	Sodium, Total	280	5	1.6	NA	mg/L
OW-13	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-13	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-13	9/4/2013	Uranium, Total	0.017	0.01	0.000073	30000	mg/L
OW-13	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-13	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-13	11/11/2013	Arsenic, Total	0.0012	0.001	0.000098	10000	mg/L
OW-13	11/11/2013	Barium, Total	0.02	0.002	0.00095	2000000	mg/L
OW-13	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-13	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-13	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	11/11/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-13	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-13	11/11/2013	Manganese, Total	0.021	0.002	0.00016	2017000	mg/L
OW-13	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	11/11/2013	Selenium, Total	0.002	0.001	0.00029	50000	mg/L
OW-13	11/11/2013	Uranium, Total	0.016	0.001	0.0000073	30000	mg/L
OW-13	11/11/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
OW-13	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	3/7/2014	Arsenic, Total	ND	0.001	0.000098	10000	mg/L
OW-13	3/7/2014	Barium, Total	0.019	0.002	0.0011	2000000	mg/L
OW-13	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	3/7/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	3/7/2014	Manganese, Total	0.02	0.002	0.00055	2017000	mg/L
OW-13	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-13	3/7/2014	Selenium, Total	ND	0.001	0.00029	50000	mg/L
OW-13	3/7/2014	Uranium, Total	0.018	0.001	0.0000073	30000	mg/L
OW-13	3/7/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
OW-13	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	6/3/2014	Arsenic, Total	0.0012	0.001	0.00011	10000	mg/L
OW-13	6/3/2014	Barium, Total	0.017	0.002	0.0011	2000000	mg/L
OW-13	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	6/3/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	6/3/2014	Manganese, Total	0.017	0.002	0.00055	2017000	mg/L
OW-13	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-13	6/3/2014	Selenium, Total	0.0022	0.001	0.00015	50000	mg/L
OW-13	6/3/2014	Uranium, Total	0.015	0.005	0.00025	30000	mg/L
OW-13	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-13	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-13	9/15/2014	Arsenic, Total	0.0011	0.001	0.00036	10000	mg/L
OW-13	9/15/2014	Barium, Total	0.018	0.002	0.0005	2000000	mg/L
OW-13	9/15/2014	Calcium, Total	8.8	1	0.082	NA	mg/L
OW-13	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-13	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-13	9/15/2014	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	9/15/2014	Potassium, Total	1.9	1	0.093	NA	mg/L
OW-13	9/15/2014	Magnesium, Total	1.3	1	0.018	NA	mg/L
OW-13	9/15/2014	Manganese, Total	0.017	0.002	0.00049	2017000	mg/L
OW-13	9/15/2014	Sodium, Total	300	10	3.9	NA	mg/L
OW-13	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-13	9/15/2014	Selenium, Total	0.0018	0.001	0.00051	50000	mg/L
OW-13	9/15/2014	Uranium, Total	0.018	0.001	0.0000072	30000	mg/L
OW-13	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-13	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-13	11/10/2014	Arsenic, Total	0.0011	0.001	0.00011	10000	mg/L
OW-13	11/10/2014	Barium, Total	0.019	0.002	0.0011	2000000	mg/L
OW-13	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-13	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-13	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-13	11/10/2014	Iron, Total	ND	0.02	0.0062	13822000	mg/L
OW-13	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-13	11/10/2014	Manganese, Total	0.022	0.002	0.00055	2017000	mg/L
OW-13	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-13	11/10/2014	Selenium, Total	ND	0.001	0.00015	50000	mg/L
OW-13	11/10/2014	Uranium, Total	0.016	0.01	0.0005	30000	mg/L
OW-13	11/10/2014	Zinc, Total	0.063	0.01	0.0014	5960000	mg/L
OW-13	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-13	3/9/2015	Barium, Total	0.02	0.002	0.00073	2000000	mg/L
OW-13	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-13	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	3/9/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	3/9/2015	Manganese, Total	0.021	0.002	0.0015	2017000	mg/L
OW-13	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-13	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-13	3/9/2015	Uranium, Total	0.017	0.001	0.0000081	30000	mg/L
OW-13	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-13	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-13	6/1/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	6/1/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	6/1/2015	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-13	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-13	6/1/2015	Uranium, Total	0.017	0.005	0.000049	30000	mg/L
OW-13	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	8/11/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
OW-13	8/11/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	8/11/2015	Calcium, Total	8.1	1	0.057	NA	mg/L
OW-13	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	8/11/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	8/11/2015	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-13	8/11/2015	Magnesium, Total	1.3	1	0.039	NA	mg/L
OW-13	8/11/2015	Manganese, Total	0.019	0.002	0.0015	2017000	mg/L
OW-13	8/11/2015	Sodium, Total	280	5	0.36	NA	mg/L
OW-13	8/11/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	8/11/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-13	8/11/2015	Uranium, Total	0.018	0.0005	0.0000049	30000	mg/L
OW-13	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	10/27/2015	Arsenic, Total	0.0012	0.001	0.00029	10000	mg/L
OW-13	10/27/2015	Barium, Total	0.02	0.002	0.0011	2000000	mg/L
OW-13	10/27/2015	Calcium, Total	9.7	1	0.057	NA	mg/L
OW-13	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	10/27/2015	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-13	10/27/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
OW-13	10/27/2015	Magnesium, Total	1.4	1	0.039	NA	mg/L
OW-13	10/27/2015	Manganese, Total	0.021	0.002	0.0015	2017000	mg/L
OW-13	10/27/2015	Sodium, Total	270	5	0.36	NA	mg/L
OW-13	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-13	10/27/2015	Uranium, Total	0.017	0.0005	0.0000049	30000	mg/L
OW-13	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	3/4/2016	Arsenic, Total	0.001	0.001	0.00029	10000	mg/L
OW-13	3/4/2016	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
OW-13	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	3/4/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-13	3/4/2016	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-13	3/4/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-13	3/4/2016	Uranium, Total	0.016	0.0025	0.000025	30000	mg/L
OW-13	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-13	6/6/2016	Arsenic, Total	0.0019	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	6/6/2016	Barium, Total	0.021	0.002	0.0011	2000000	mg/L
OW-13	6/6/2016	Calcium, Total	9.4	1	0.26	NA	mg/L
OW-13	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-13	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-13	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-13	6/6/2016	Iron, Total	ND	0.02	0.0072	13822000	mg/L
OW-13	6/6/2016	Mercury, Total	0.00006	0.0002	0.000053	2000	mg/L
OW-13	6/6/2016	Potassium, Total	1.3	1	0.18	NA	mg/L
OW-13	6/6/2016	Magnesium, Total	1.4	1	0.013	NA	mg/L
OW-13	6/6/2016	Manganese, Total	0.02	0.002	0.0015	2017000	mg/L
OW-13	6/6/2016	Sodium, Total	310	5	0.48	NA	mg/L
OW-13	6/6/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-13	6/6/2016	Selenium, Total	0.0025	0.005	0.00062	50000	mg/L
OW-13	6/6/2016	Uranium, Total	0.019	0.0005	0.0000049	30000	mg/L
OW-13	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-13	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	8/31/2016	Arsenic, Total	0.0015	0.001	0.00021	10000	mg/L
OW-13	8/31/2016	Barium, Total	0.019	0.002	0.00079	2000000	mg/L
OW-13	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-13	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-13	8/31/2016	Arsenic, Dissolved	0.0015	0.005	0.00069	10000	mg/L
OW-13	8/31/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-13	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-13	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-13	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-13	8/31/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	8/31/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
OW-13	8/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-13	8/31/2016	Selenium, Dissolved	0.002	0.005	0.0011	50000	mg/L
OW-13	8/31/2016	Uranium, Dissolved	0.017	0.0025	0.00026	NA	mg/L
OW-13	8/31/2016	Zinc, Dissolved	0.042	0.01	0.0028	5960450	mg/L
OW-13	8/31/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	8/31/2016	Manganese, Total	0.02	0.002	0.00027	2017000	mg/L
OW-13	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	8/31/2016	Selenium, Total	0.0021	0.001	0.00019	50000	mg/L
OW-13	8/31/2016	Uranium, Total	0.018	0.0025	0.00087	30000	mg/L
OW-13	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	11/15/2016	Arsenic, Total	0.0016	0.001	0.00021	10000	mg/L
OW-13	11/15/2016	Barium, Total	0.02	0.002	0.00079	2000000	mg/L
OW-13	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-13	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-13	11/15/2016	Arsenic, Dissolved	0.0013	0.005	0.00069	10000	mg/L
OW-13	11/15/2016	Barium, Dissolved	0.02	0.002	0.0013	2000000	mg/L
OW-13	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-13	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-13	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-13	11/15/2016	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	11/15/2016	Manganese, Dissolved	0.021	0.002	0.00032	2017400	mg/L
OW-13	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	11/15/2016	Selenium, Dissolved	0.0026	0.005	0.0011	50000	mg/L
OW-13	11/15/2016	Uranium, Dissolved	0.017	0.0005	0.000051	NA	mg/L
OW-13	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-13	11/15/2016	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	11/15/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-13	11/15/2016	Manganese, Total	0.021	0.002	0.00027	2017000	mg/L
OW-13	11/15/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	11/15/2016	Selenium, Total	0.0033	0.005	0.00094	50000	mg/L
OW-13	11/15/2016	Uranium, Total	0.017	0.0025	0.00087	30000	mg/L
OW-13	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-13	2/27/2017	Arsenic, Total	0.0012	0.001	0.00021	10000	mg/L
OW-13	2/27/2017	Barium, Total	0.019	0.002	0.00079	2000000	mg/L
OW-13	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-13	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-13	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-13	2/27/2017	Arsenic, Dissolved	0.0011	0.005	0.00069	10000	mg/L
OW-13	2/27/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-13	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-13	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	2/27/2017	Iron, Dissolved	ND	0.02	0.02	13821880	mg/L
OW-13	2/27/2017	Manganese, Dissolved	0.02	0.002	0.00038	2017400	mg/L
OW-13	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	2/27/2017	Selenium, Dissolved	0.0036	0.005	0.0011	50000	mg/L
OW-13	2/27/2017	Zinc, Dissolved	0.029	0.01	0.0011	5960450	mg/L
OW-13	2/27/2017	Iron, Total	ND	0.02	0.02	13822000	mg/L
OW-13	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-13	2/27/2017	Manganese, Total	0.019	0.002	0.00027	2017000	mg/L
OW-13	2/27/2017	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-13	2/27/2017	Selenium, Total	0.0014	0.001	0.00019	50000	mg/L
OW-13	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-13	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-13	5/31/2017	Arsenic, Total	0.00073	0.001	0.0003	10000	mg/L
OW-13	5/31/2017	Barium, Total	0.019	0.002	0.00093	2000000	mg/L
OW-13	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-13	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-13	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-13	5/31/2017	Arsenic, Dissolved	0.00099	0.001	0.00018	10000	mg/L
OW-13	5/31/2017	Barium, Dissolved	0.02	0.002	0.00085	2000000	mg/L
OW-13	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-13	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	5/31/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	5/31/2017	Manganese, Dissolved	0.019	0.002	0.00038	2017400	mg/L
OW-13	5/31/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	5/31/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-13	5/31/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OW-13	5/31/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	5/31/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-13	5/31/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-13	5/31/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
OW-13	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-13	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	9/6/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-13	9/6/2017	Barium, Total	0.019	0.002	0.00093	2000000	mg/L
OW-13	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	9/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-13	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	9/6/2017	Arsenic, Dissolved	0.0012	0.005	0.00089	10000	mg/L
OW-13	9/6/2017	Barium, Dissolved	0.019	0.002	0.00085	2000000	mg/L
OW-13	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	9/6/2017	Chromium, Dissolved	0.0057	0.006	0.0013	100000	mg/L
OW-13	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	9/6/2017	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
OW-13	9/6/2017	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	9/6/2017	Selenium, Dissolved	0.0023	0.005	0.0019	50000	mg/L
OW-13	9/6/2017	Uranium, Dissolved	0.017	0.0005	0.00005	NA	mg/L
OW-13	9/6/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
OW-13	9/6/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	9/6/2017	Manganese, Total	0.019	0.002	0.0011	2017000	mg/L
OW-13	9/6/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-13	9/6/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-13	9/6/2017	Uranium, Total	0.018	0.0005	0.00015	30000	mg/L
OW-13	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	12/11/2017	Arsenic, Total	0.00084	0.001	0.00041	10000	mg/L
OW-13	12/11/2017	Barium, Total	0.019	0.002	0.001	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	12/11/2017	Cadmium, Total	0.00064	0.002	0.00058	5000	mg/L
OW-13	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	12/11/2017	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-13	12/11/2017	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	12/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	12/11/2017	Manganese, Dissolved	0.023	0.002	0.00039	2017400	mg/L
OW-13	12/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	12/11/2017	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-13	12/11/2017	Uranium, Dissolved	0.015	0.0025	0.00048	NA	mg/L
OW-13	12/11/2017	Zinc, Dissolved	0.0095	0.01	0.0021	5960450	mg/L
OW-13	12/11/2017	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	12/11/2017	Mercury, Total	0.000097	0.0002	0.000037	2000	mg/L
OW-13	12/11/2017	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
OW-13	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	12/11/2017	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	12/11/2017	Uranium, Total	0.016	0.0005	0.00015	30000	mg/L
OW-13	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	2/28/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	2/28/2018	Arsenic, Total	0.0009	0.001	0.00041	10000	mg/L
OW-13	2/28/2018	Barium, Total	0.021	0.002	0.001	2000000	mg/L
OW-13	2/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	2/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	2/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	2/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	2/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-13	2/28/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
OW-13	2/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	2/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	2/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	2/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	2/28/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	2/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	2/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-13	2/28/2018	Uranium, Dissolved	0.014	0.0025	0.00048	NA	mg/L
OW-13	2/28/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
OW-13	2/28/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	2/28/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	2/28/2018	Manganese, Total	0.021	0.002	0.0011	2017000	mg/L
OW-13	2/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	2/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	2/28/2018	Uranium, Total	0.016	0.0005	0.000068	30000	mg/L
OW-13	2/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	5/15/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-13	5/15/2018	Barium, Total	0.019	0.002	0.001	2000000	mg/L
OW-13	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	5/15/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-13	5/15/2018	Barium, Dissolved	0.018	0.002	0.00099	2000000	mg/L
OW-13	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	5/15/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	5/15/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	5/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	5/15/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-13	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-13	5/15/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-13	5/15/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	5/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	5/15/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
OW-13	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	9/11/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	9/11/2018	Arsenic, Total	0.00078	0.001	0.00041	10000	mg/L
OW-13	9/11/2018	Barium, Total	0.018	0.002	0.001	2000000	mg/L
OW-13	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	9/11/2018	Arsenic, Dissolved	0.00078	0.001	0.00042	10000	mg/L
OW-13	9/11/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	9/11/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	9/11/2018	Manganese, Dissolved	0.02	0.002	0.00039	2017400	mg/L
OW-13	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	9/11/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
OW-13	9/11/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
OW-13	9/11/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	9/11/2018	Mercury, Total	0.000069	0.0002	0.000038	2000	mg/L
OW-13	9/11/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	9/11/2018	Uranium, Total	0.015	0.0005	0.000068	30000	mg/L
OW-13	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-13	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-13	11/6/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-13	11/6/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
OW-13	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-13	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-13	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-13	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-13	11/6/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-13	11/6/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-13	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-13	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-13	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-13	11/6/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-13	11/6/2018	Manganese, Dissolved	0.021	0.002	0.00039	2017400	mg/L
OW-13	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-13	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-13	11/6/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-13	11/6/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-13	11/6/2018	Iron, Total	ND	0.02	0.01	13822000	mg/L
OW-13	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-13	11/6/2018	Manganese, Total	0.02	0.002	0.0011	2017000	mg/L
OW-13	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-13	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-13	11/6/2018	Uranium, Total	0.014	0.0005	0.000068	30000	mg/L
OW-13	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	2/5/2019	Antimony, Dissolved	0.00024	0.001	0.000204	6000	mg/L
OW-14	2/5/2019	Arsenic, Dissolved	0.0052	0.001	0.000068	10000	mg/L
OW-14	2/5/2019	Barium, Dissolved	2.2	0.01	0.003242	2000000	mg/L
OW-14	2/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-14	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-14	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-14	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-14	2/5/2019	Iron, Dissolved	4.6	0.1	0.043734	13821880	mg/L
OW-14	2/5/2019	Lead, Dissolved	0.000055	0.0005	0.000047	NA	mg/L
OW-14	2/5/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-14	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-14	2/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-14	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-14	2/5/2019	Uranium, Dissolved	0.0028	0.0005	0.00003	NA	mg/L
OW-14	2/5/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-14	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	2/5/2019	Arsenic, Total	0.0058	0.001	0.000022	10000	mg/L
OW-14	2/5/2019	Barium, Total	2.4	0.01	0.002442	2000000	mg/L
OW-14	2/5/2019	Beryllium, Total	0.00028	0.002	0.000224	4000	mg/L
OW-14	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-14	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-14	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-14	2/5/2019	Iron, Total	5	0.1	0.030263	13822000	mg/L
OW-14	2/5/2019	Lead, Total	0.00018	0.0005	0.000063	15000	mg/L
OW-14	2/5/2019	Manganese, Total	2.1	0.01	0.000299	2017000	mg/L
OW-14	2/5/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-14	2/5/2019	Selenium, Total	0.00032	0.001	0.000118	50000	mg/L
OW-14	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-14	2/5/2019	Thallium, Total	0.000057	0.0005	0.00005	2000	mg/L
OW-14	2/5/2019	Uranium, Total	0.0028	0.0005	0.00005	30000	mg/L
OW-14	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-14	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-14	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-14	5/1/2019	Arsenic, Dissolved	0.0049	0.001	0.000101	10000	mg/L
OW-14	5/1/2019	Barium, Dissolved	2.2	0.01	0.003242	2000000	mg/L
OW-14	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-14	5/1/2019	Boron, Dissolved	0.47	0.04	0.004531	3949110	mg/L
OW-14	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-14	5/1/2019	Calcium, Dissolved	79	1	0.061889	NA	mg/L
OW-14	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-14	5/1/2019	Cobalt, Dissolved	0.015	0.006	0.003091	5980	mg/L
OW-14	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-14	5/1/2019	Iron, Dissolved	4.7	0.1	0.043734	13821880	mg/L
OW-14	5/1/2019	Lead, Dissolved	0.000057	0.0005	0.000055	NA	mg/L
OW-14	5/1/2019	Magnesium, Dissolved	22	1	0.05029	NA	mg/L
OW-14	5/1/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-14	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-14	5/1/2019	Nickel, Dissolved	0.19	0.01	0.004009	372000	mg/L
OW-14	5/1/2019	Potassium, Dissolved	0.18	1	0.162288	NA	mg/L
OW-14	5/1/2019	Selenium, Dissolved	0.00018	0.001	0.000171	50000	mg/L
OW-14	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-14	5/1/2019	Sodium, Dissolved	330	5	2.080881	NA	mg/L
OW-14	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-14	5/1/2019	Uranium, Dissolved	0.0026	0.0005	0.000075	NA	mg/L
OW-14	5/1/2019	Zinc, Dissolved	0.095	0.01	0.002252	5960450	mg/L
OW-14	5/1/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
OW-14	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-14	5/1/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
OW-14	5/1/2019	Barium, Total	2.4	0.01	0.003242	2000000	mg/L
OW-14	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-14	5/1/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-14	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-14	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-14	5/1/2019	Cobalt, Total	0.015	0.006	0.003091	5980	mg/L
OW-14	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-14	5/1/2019	Iron, Total	4.7	0.2	0.087469	13822000	mg/L
OW-14	5/1/2019	Lead, Total	0.000081	0.0005	0.000055	15000	mg/L
OW-14	5/1/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-14	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-14	5/1/2019	Molybdenum, Total	0.0086	0.008	0.006735	98700	mg/L
OW-14	5/1/2019	Nickel, Total	0.2	0.01	0.004009	372000	mg/L
OW-14	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-14	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-14	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-14	5/1/2019	Uranium, Total	0.0026	0.0005	0.000085	30000	mg/L
OW-14	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-14	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-14	8/23/2012	Arsenic, Total	0.012	0.0025	0.0014	10000	mg/L
OW-14	8/23/2012	Barium, Total	1.2	0.01	0.0019	2000000	mg/L
OW-14	8/23/2012	Calcium, Total	98	1	0.026	NA	mg/L
OW-14	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-14	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-14	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	8/23/2012	Iron, Total	4.2	0.1	0.066	13822000	mg/L
OW-14	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-14	8/23/2012	Magnesium, Total	28	1	0.013	NA	mg/L
OW-14	8/23/2012	Manganese, Total	2.3	0.01	0.0013	2017000	mg/L
OW-14	8/23/2012	Sodium, Total	430	5	0.22	NA	mg/L
OW-14	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-14	8/23/2012	Selenium, Total	0.0066	0.0025	0.0025	50000	mg/L
OW-14	8/23/2012	Uranium, Total	0.0095	0.0025	0.00003	30000	mg/L
OW-14	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-14	3/19/2013	Arsenic, Total	0.01	0.0025	0.00042	10000	mg/L
OW-14	3/19/2013	Barium, Total	1.3	0.01	0.0019	2000000	mg/L
OW-14	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-14	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-14	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	3/19/2013	Iron, Total	4.4	0.1	0.066	13822000	mg/L
OW-14	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	3/19/2013	Manganese, Total	2.1	0.01	0.0013	2017000	mg/L
OW-14	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-14	3/19/2013	Selenium, Total	0.0038	0.0025	0.00066	50000	mg/L
OW-14	3/19/2013	Uranium, Total	0.009	0.0025	0.0012	30000	mg/L
OW-14	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-14	6/13/2013	Arsenic, Total	0.011	0.001	0.00027	10000	mg/L
OW-14	6/13/2013	Barium, Total	1.5	0.01	0.0029	2000000	mg/L
OW-14	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-14	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-14	6/13/2013	Iron, Total	4.5	0.1	0.026	13822000	mg/L
OW-14	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	6/13/2013	Manganese, Total	2.4	0.01	0.0026	2017000	mg/L
OW-14	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	6/13/2013	Selenium, Total	0.014	0.005	0.0024	50000	mg/L
OW-14	6/13/2013	Uranium, Total	0.011	0.001	0.0005	30000	mg/L
OW-14	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-14	9/4/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
OW-14	9/4/2013	Arsenic, Total	0.01	0.005	0.00049	10000	mg/L
OW-14	9/4/2013	Barium, Total	1.5	0.01	0.0048	2000000	mg/L
OW-14	9/4/2013	Calcium, Total	94	1	0.069	NA	mg/L
OW-14	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-14	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-14	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-14	9/4/2013	Iron, Total	4.5	0.1	0.045	13822000	mg/L
OW-14	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	9/4/2013	Potassium, Total	1.9	1	0.24	NA	mg/L
OW-14	9/4/2013	Magnesium, Total	26	1	0.028	NA	mg/L
OW-14	9/4/2013	Manganese, Total	2.2	0.01	0.00082	2017000	mg/L
OW-14	9/4/2013	Sodium, Total	390	10	3.3	NA	mg/L
OW-14	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-14	9/4/2013	Selenium, Total	0.012	0.005	0.0015	50000	mg/L
OW-14	9/4/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
OW-14	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-14	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-14	11/11/2013	Arsenic, Total	0.012	0.001	0.000098	10000	mg/L
OW-14	11/11/2013	Barium, Total	1.6	0.01	0.0048	2000000	mg/L
OW-14	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-14	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-14	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-14	11/11/2013	Iron, Total	4.6	0.1	0.045	13822000	mg/L
OW-14	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-14	11/11/2013	Manganese, Total	2.3	0.01	0.00082	2017000	mg/L
OW-14	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	11/11/2013	Selenium, Total	0.015	0.001	0.00029	50000	mg/L
OW-14	11/11/2013	Uranium, Total	0.0093	0.001	0.0000073	30000	mg/L
OW-14	11/11/2013	Zinc, Total	0.021	0.01	0.00076	5960000	mg/L
OW-14	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	3/7/2014	Arsenic, Total	0.0084	0.005	0.00049	10000	mg/L
OW-14	3/7/2014	Barium, Total	1.6	0.01	0.0056	2000000	mg/L
OW-14	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-14	3/7/2014	Iron, Total	4.2	0.1	0.031	13822000	mg/L
OW-14	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	3/7/2014	Manganese, Total	2.1	0.01	0.0027	2017000	mg/L
OW-14	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-14	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-14	3/7/2014	Uranium, Total	0.0097	0.001	0.0000073	30000	mg/L
OW-14	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-14	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	11/6/2018	Arsenic, Total	0.0058	0.001	0.00041	10000	mg/L
OW-14	11/6/2018	Barium, Total	2.1	0.01	0.005	2000000	mg/L
OW-14	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	11/6/2018	Arsenic, Dissolved	0.0047	0.001	0.00042	10000	mg/L
OW-14	11/6/2018	Barium, Dissolved	2.2	0.02	0.0099	2000000	mg/L
OW-14	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	11/6/2018	Iron, Dissolved	4.4	0.2	0.16	13821880	mg/L
OW-14	11/6/2018	Manganese, Dissolved	2.1	0.02	0.0039	2017400	mg/L
OW-14	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	11/6/2018	Uranium, Dissolved	0.0029	0.0025	0.00048	NA	mg/L
OW-14	11/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-14	11/6/2018	Iron, Total	4.6	0.1	0.051	13822000	mg/L
OW-14	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-14	11/6/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	11/6/2018	Uranium, Total	0.0025	0.0005	0.000068	30000	mg/L
OW-14	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	6/3/2014	Arsenic, Total	0.011	0.005	0.00057	10000	mg/L
OW-14	6/3/2014	Barium, Total	1.7	0.01	0.0056	2000000	mg/L
OW-14	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-14	6/3/2014	Iron, Total	4.6	0.1	0.031	13822000	mg/L
OW-14	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	6/3/2014	Manganese, Total	2.3	0.01	0.0027	2017000	mg/L
OW-14	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-14	6/3/2014	Selenium, Total	0.018	0.005	0.00074	50000	mg/L
OW-14	6/3/2014	Uranium, Total	0.0083	0.005	0.00025	30000	mg/L
OW-14	6/3/2014	Zinc, Total	0.017	0.01	0.0014	5960000	mg/L
OW-14	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-14	9/15/2014	Arsenic, Total	0.014	0.01	0.0036	10000	mg/L
OW-14	9/15/2014	Barium, Total	1.9	0.02	0.005	2000000	mg/L
OW-14	9/15/2014	Calcium, Total	94	1	0.082	NA	mg/L
OW-14	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-14	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-14	9/15/2014	Iron, Total	4.7	0.2	0.072	13822000	mg/L
OW-14	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	9/15/2014	Potassium, Total	ND	1	0.093	NA	mg/L
OW-14	9/15/2014	Magnesium, Total	25	1	0.018	NA	mg/L
OW-14	9/15/2014	Manganese, Total	2.3	0.02	0.0049	2017000	mg/L
OW-14	9/15/2014	Sodium, Total	400	10	3.9	NA	mg/L
OW-14	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-14	9/15/2014	Selenium, Total	0.018	0.01	0.0051	50000	mg/L
OW-14	9/15/2014	Uranium, Total	0.0079	0.001	0.0000072	30000	mg/L
OW-14	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-14	11/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-14	11/10/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-14	11/10/2014	Barium, Total	1.8	0.01	0.0056	2000000	mg/L
OW-14	11/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-14	11/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-14	11/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/10/2014	Iron, Total	4.5	0.1	0.031	13822000	mg/L
OW-14	11/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-14	11/10/2014	Manganese, Total	2.2	0.01	0.0027	2017000	mg/L
OW-14	11/10/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-14	11/10/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-14	11/10/2014	Uranium, Total	ND	0.01	0.0005	30000	mg/L
OW-14	11/10/2014	Zinc, Total	0.036	0.01	0.0014	5960000	mg/L
OW-14	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	3/9/2015	Arsenic, Total	ND	0.02	0.0088	10000	mg/L
OW-14	3/9/2015	Barium, Total	1.8	0.01	0.0037	2000000	mg/L
OW-14	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-14	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	3/9/2015	Iron, Total	4.5	0.1	0.036	13822000	mg/L
OW-14	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	3/9/2015	Manganese, Total	2.1	0.01	0.0076	2017000	mg/L
OW-14	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-14	3/9/2015	Selenium, Total	ND	0.02	0.0024	50000	mg/L
OW-14	3/9/2015	Uranium, Total	0.0065	0.001	0.0000081	30000	mg/L
OW-14	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-14	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-14	6/1/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	6/1/2015	Iron, Total	4.8	0.1	0.036	13822000	mg/L
OW-14	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	6/1/2015	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-14	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-14	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	6/1/2015	Uranium, Total	0.0067	0.005	0.000049	30000	mg/L
OW-14	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	8/10/2015	Arsenic, Total	0.0088	0.001	0.00029	10000	mg/L
OW-14	8/10/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	8/10/2015	Calcium, Total	84	1	0.057	NA	mg/L
OW-14	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	8/10/2015	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-14	8/10/2015	Magnesium, Total	25	1	0.039	NA	mg/L
OW-14	8/10/2015	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-14	8/10/2015	Sodium, Total	360	5	0.36	NA	mg/L
OW-14	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-14	8/10/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	8/10/2015	Uranium, Total	0.0068	0.0005	0.0000049	30000	mg/L
OW-14	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	10/27/2015	Arsenic, Total	0.0094	0.005	0.0015	10000	mg/L
OW-14	10/27/2015	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	10/27/2015	Calcium, Total	99	1	0.057	NA	mg/L
OW-14	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	10/27/2015	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-14	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-14	10/27/2015	Magnesium, Total	26	1	0.039	NA	mg/L
OW-14	10/27/2015	Manganese, Total	2.1	0.01	0.0076	2017000	mg/L
OW-14	10/27/2015	Sodium, Total	380	5	0.36	NA	mg/L
OW-14	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-14	10/27/2015	Selenium, Total	ND	0.02	0.0025	50000	mg/L
OW-14	10/27/2015	Uranium, Total	0.0067	0.0005	0.0000049	30000	mg/L
OW-14	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	3/4/2016	Arsenic, Total	0.0078	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	3/4/2016	Barium, Total	1.9	0.01	0.0053	2000000	mg/L
OW-14	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	3/4/2016	Iron, Total	4.6	0.1	0.036	13822000	mg/L
OW-14	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	3/4/2016	Manganese, Total	2	0.01	0.0076	2017000	mg/L
OW-14	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-14	3/4/2016	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-14	3/4/2016	Uranium, Total	0.006	0.0025	0.000025	30000	mg/L
OW-14	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-14	6/6/2016	Arsenic, Total	0.016	0.02	0.0058	10000	mg/L
OW-14	6/6/2016	Barium, Total	2.2	0.02	0.011	2000000	mg/L
OW-14	6/6/2016	Calcium, Total	93	1	0.26	NA	mg/L
OW-14	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-14	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-14	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-14	6/6/2016	Iron, Total	5.1	0.2	0.072	13822000	mg/L
OW-14	6/6/2016	Mercury, Total	0.000068	0.0002	0.000053	2000	mg/L
OW-14	6/6/2016	Potassium, Total	0.3	1	0.18	NA	mg/L
OW-14	6/6/2016	Magnesium, Total	26	1	0.013	NA	mg/L
OW-14	6/6/2016	Manganese, Total	2.4	0.02	0.015	2017000	mg/L
OW-14	6/6/2016	Sodium, Total	390	5	0.48	NA	mg/L
OW-14	6/6/2016	Lead, Total	0.0002	0.0005	0.000047	15000	mg/L
OW-14	6/6/2016	Selenium, Total	0.017	0.02	0.0025	50000	mg/L
OW-14	6/6/2016	Uranium, Total	0.0074	0.0005	0.0000049	30000	mg/L
OW-14	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-14	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	8/31/2016	Arsenic, Total	0.0076	0.01	0.0021	10000	mg/L
OW-14	8/31/2016	Barium, Total	2.1	0.01	0.004	2000000	mg/L
OW-14	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-14	8/31/2016	Arsenic, Dissolved	0.0086	0.001	0.00014	10000	mg/L
OW-14	8/31/2016	Barium, Dissolved	2.2	0.01	0.0066	2000000	mg/L
OW-14	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-14	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-14	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-14	8/31/2016	Iron, Dissolved	4.9	0.1	0.1	13821880	mg/L
OW-14	8/31/2016	Manganese, Dissolved	2.2	0.01	0.0016	2017400	mg/L
OW-14	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	8/31/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
OW-14	8/31/2016	Uranium, Dissolved	0.0054	0.0025	0.00026	NA	mg/L
OW-14	8/31/2016	Zinc, Dissolved	0.028	0.01	0.0028	5960450	mg/L
OW-14	8/31/2016	Iron, Total	4.9	0.1	0.1	13822000	mg/L
OW-14	8/31/2016	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
OW-14	8/31/2016	Lead, Total	0.00014	0.0005	0.000081	15000	mg/L
OW-14	8/31/2016	Selenium, Total	0.014	0.01	0.0019	50000	mg/L
OW-14	8/31/2016	Uranium, Total	0.0059	0.0005	0.00017	30000	mg/L
OW-14	8/31/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
OW-14	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	11/15/2016	Arsenic, Total	0.011	0.005	0.0011	10000	mg/L
OW-14	11/15/2016	Barium, Total	2.3	0.02	0.0079	2000000	mg/L
OW-14	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-14	11/15/2016	Arsenic, Dissolved	0.0099	0.005	0.00069	10000	mg/L
OW-14	11/15/2016	Barium, Dissolved	2.2	0.02	0.013	2000000	mg/L
OW-14	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-14	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-14	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-14	11/15/2016	Iron, Dissolved	4.7	0.2	0.2	13821880	mg/L
OW-14	11/15/2016	Manganese, Dissolved	2.1	0.02	0.0032	2017400	mg/L
OW-14	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	11/15/2016	Selenium, Dissolved	0.015	0.02	0.0042	50000	mg/L
OW-14	11/15/2016	Uranium, Dissolved	0.0048	0.0005	0.000051	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-14	11/15/2016	Iron, Total	5.1	0.2	0.2	13822000	mg/L
OW-14	11/15/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	11/15/2016	Manganese, Total	2.3	0.02	0.0027	2017000	mg/L
OW-14	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-14	11/15/2016	Selenium, Total	0.018	0.05	0.0094	50000	mg/L
OW-14	11/15/2016	Uranium, Total	0.0041	0.0025	0.00087	30000	mg/L
OW-14	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-14	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-14	2/27/2017	Arsenic, Total	0.0096	0.005	0.0011	10000	mg/L
OW-14	2/27/2017	Barium, Total	2.3	0.01	0.004	2000000	mg/L
OW-14	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-14	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-14	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-14	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-14	2/27/2017	Arsenic, Dissolved	0.0083	0.005	0.00069	10000	mg/L
OW-14	2/27/2017	Barium, Dissolved	2.3	0.01	0.0043	2000000	mg/L
OW-14	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-14	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	2/27/2017	Iron, Dissolved	5.1	0.2	0.2	13821880	mg/L
OW-14	2/27/2017	Manganese, Dissolved	2.2	0.01	0.0019	2017400	mg/L
OW-14	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	2/27/2017	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
OW-14	2/27/2017	Zinc, Dissolved	0.015	0.01	0.0011	5960450	mg/L
OW-14	2/27/2017	Iron, Total	4.9	0.1	0.1	13822000	mg/L
OW-14	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-14	2/27/2017	Manganese, Total	2.2	0.01	0.0014	2017000	mg/L
OW-14	2/27/2017	Lead, Total	0.00017	0.0005	0.000081	15000	mg/L
OW-14	2/27/2017	Selenium, Total	0.01	0.02	0.0037	50000	mg/L
OW-14	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-14	5/30/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-14	5/30/2017	Arsenic, Total	0.0074	0.005	0.0015	10000	mg/L
OW-14	5/30/2017	Barium, Total	2.2	0.02	0.0093	2000000	mg/L
OW-14	5/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	5/30/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-14	5/30/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-14	5/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-14	5/30/2017	Arsenic, Dissolved	0.0076	0.01	0.0018	10000	mg/L
OW-14	5/30/2017	Barium, Dissolved	2.2	0.01	0.0043	2000000	mg/L
OW-14	5/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	5/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-14	5/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	5/30/2017	Iron, Dissolved	4.5	0.2	0.16	13821880	mg/L
OW-14	5/30/2017	Manganese, Dissolved	2.1	0.01	0.0019	2017400	mg/L
OW-14	5/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	5/30/2017	Selenium, Dissolved	0.0069	0.01	0.0039	50000	mg/L
OW-14	5/30/2017	Zinc, Dissolved	0.026	0.01	0.0011	5960450	mg/L
OW-14	5/30/2017	Iron, Total	4.6	0.2	0.1	13822000	mg/L
OW-14	5/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	5/30/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-14	5/30/2017	Lead, Total	0.00014	0.0005	0.000095	15000	mg/L
OW-14	5/30/2017	Selenium, Total	0.0061	0.005	0.0036	50000	mg/L
OW-14	5/30/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-14	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	9/6/2017	Arsenic, Total	0.0097	0.01	0.003	10000	mg/L
OW-14	9/6/2017	Barium, Total	2.3	0.02	0.0093	2000000	mg/L
OW-14	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	9/6/2017	Copper, Total	0.0022	0.006	0.0017	790000	mg/L
OW-14	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	9/6/2017	Arsenic, Dissolved	0.009	0.005	0.00089	10000	mg/L
OW-14	9/6/2017	Barium, Dissolved	2.2	0.01	0.0043	2000000	mg/L
OW-14	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	9/6/2017	Iron, Dissolved	4.6	0.1	0.082	13821880	mg/L
OW-14	9/6/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-14	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/6/2017	Selenium, Dissolved	0.013	0.02	0.0077	50000	mg/L
OW-14	9/6/2017	Uranium, Dissolved	0.0042	0.0005	0.00005	NA	mg/L
OW-14	9/6/2017	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
OW-14	9/6/2017	Iron, Total	5.1	0.2	0.1	13822000	mg/L
OW-14	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	9/6/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
OW-14	9/6/2017	Lead, Total	0.00011	0.0005	0.000095	15000	mg/L
OW-14	9/6/2017	Selenium, Total	0.013	0.01	0.0071	50000	mg/L
OW-14	9/6/2017	Uranium, Total	0.0043	0.0005	0.00015	30000	mg/L
OW-14	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	12/11/2017	Arsenic, Total	0.0057	0.01	0.0041	10000	mg/L
OW-14	12/11/2017	Barium, Total	2.3	0.01	0.005	2000000	mg/L
OW-14	12/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	12/11/2017	Arsenic, Dissolved	0.0083	0.005	0.0021	10000	mg/L
OW-14	12/11/2017	Barium, Dissolved	2.1	0.01	0.0049	2000000	mg/L
OW-14	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	12/11/2017	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	12/11/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-14	12/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	12/11/2017	Selenium, Dissolved	0.011	0.005	0.0038	50000	mg/L
OW-14	12/11/2017	Uranium, Dissolved	0.0033	0.0005	0.000096	NA	mg/L
OW-14	12/11/2017	Zinc, Dissolved	0.0085	0.01	0.0021	5960450	mg/L
OW-14	12/11/2017	Iron, Total	4.9	0.1	0.051	13822000	mg/L
OW-14	12/11/2017	Mercury, Total	0.00011	0.0002	0.000037	2000	mg/L
OW-14	12/11/2017	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
OW-14	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	12/11/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-14	12/11/2017	Uranium, Total	0.0031	0.0005	0.00015	30000	mg/L
OW-14	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	2/27/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	2/27/2018	Arsenic, Total	0.0079	0.01	0.0041	10000	mg/L
OW-14	2/27/2018	Barium, Total	2.3	0.01	0.005	2000000	mg/L
OW-14	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	2/27/2018	Arsenic, Dissolved	0.0064	0.01	0.0042	10000	mg/L
OW-14	2/27/2018	Barium, Dissolved	2.1	0.02	0.0099	2000000	mg/L
OW-14	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	2/27/2018	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	2/27/2018	Manganese, Dissolved	1.9	0.02	0.0039	2017400	mg/L
OW-14	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	2/27/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-14	2/27/2018	Uranium, Dissolved	0.0034	0.0005	0.000096	NA	mg/L
OW-14	2/27/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
OW-14	2/27/2018	Iron, Total	4.8	0.1	0.051	13822000	mg/L
OW-14	2/27/2018	Mercury, Total	0.000077	0.0002	0.000037	2000	mg/L
OW-14	2/27/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	2/27/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-14	2/27/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-14	2/27/2018	Uranium, Total	0.0031	0.0025	0.00034	30000	mg/L
OW-14	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	5/15/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-14	5/15/2018	Arsenic, Total	0.0065	0.001	0.00041	10000	mg/L
OW-14	5/15/2018	Barium, Total	2.4	0.01	0.005	2000000	mg/L
OW-14	5/15/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	5/15/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	5/15/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	5/15/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	5/15/2018	Arsenic, Dissolved	0.006	0.001	0.00042	10000	mg/L
OW-14	5/15/2018	Barium, Dissolved	2.2	0.01	0.0049	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	5/15/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	5/15/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	5/15/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	5/15/2018	Iron, Dissolved	4.4	0.1	0.082	13821880	mg/L
OW-14	5/15/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
OW-14	5/15/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	5/15/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	5/15/2018	Uranium, Dissolved	0.0033	0.0005	0.000096	NA	mg/L
OW-14	5/15/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-14	5/15/2018	Iron, Total	4.7	0.2	0.1	13822000	mg/L
OW-14	5/15/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-14	5/15/2018	Manganese, Total	2.2	0.01	0.0055	2017000	mg/L
OW-14	5/15/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	5/15/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	5/15/2018	Uranium, Total	0.0031	0.0005	0.000068	30000	mg/L
OW-14	5/15/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-14	9/11/2018	Silver, Total	0.0025	0.005	0.0012	50000	mg/L
OW-14	9/11/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-14	9/11/2018	Barium, Total	2.2	0.01	0.005	2000000	mg/L
OW-14	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-14	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-14	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-14	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-14	9/11/2018	Arsenic, Dissolved	0.0056	0.001	0.00042	10000	mg/L
OW-14	9/11/2018	Barium, Dissolved	2.3	0.01	0.0049	2000000	mg/L
OW-14	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-14	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-14	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-14	9/11/2018	Iron, Dissolved	4.7	0.2	0.16	13821880	mg/L
OW-14	9/11/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-14	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-14	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-14	9/11/2018	Uranium, Dissolved	0.0029	0.0005	0.000096	NA	mg/L
OW-14	9/11/2018	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
OW-14	9/11/2018	Iron, Total	5	0.1	0.051	13822000	mg/L
OW-14	9/11/2018	Mercury, Total	0.000059	0.0002	0.000038	2000	mg/L
OW-14	9/11/2018	Manganese, Total	2.1	0.01	0.0055	2017000	mg/L
OW-14	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-14	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-14	9/11/2018	Uranium, Total	0.0028	0.0005	0.000068	30000	mg/L
OW-14	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Dissolved	0.00061	0.001	0.000101	10000	mg/L
OW-29	5/1/2019	Barium, Dissolved	0.072	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-29	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	5/1/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-29	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	5/1/2019	Iron, Dissolved	0.27	0.02	0.008747	13821880	mg/L
OW-29	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	5/1/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	5/1/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-29	5/1/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-29	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	5/1/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-29	5/1/2019	Zinc, Dissolved	0.064	0.01	0.002252	5960450	mg/L
OW-29	5/1/2019	Aluminum, Total	0.17	0.02	0.002488	19914000	mg/L
OW-29	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Total	0.00071	0.001	0.000312	10000	mg/L
OW-29	5/1/2019	Barium, Total	0.077	0.002	0.000648	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Total	0.57	0.04	0.004531	3949	mg/L
OW-29	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	5/1/2019	Iron, Total	0.36	0.02	0.008747	13822000	mg/L
OW-29	5/1/2019	Lead, Total	0.00013	0.0005	0.000055	15000	mg/L
OW-29	5/1/2019	Manganese, Total	0.34	0.002	0.00029	2017000	mg/L
OW-29	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	5/1/2019	Thallium, Total	0.000057	0.0005	0.000052	2000	mg/L
OW-29	5/1/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	5/1/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Dissolved	0.00061	0.001	0.000101	10000	mg/L
OW-29	5/1/2019	Barium, Dissolved	0.071	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
OW-29	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	5/1/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-29	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Dissolved	0.0023	0.006	0.001296	790000	mg/L
OW-29	5/1/2019	Iron, Dissolved	0.22	0.02	0.008747	13821880	mg/L
OW-29	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	5/1/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	5/1/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	5/1/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-29	5/1/2019	Sodium, Dissolved	400	5	2.080881	NA	mg/L
OW-29	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	5/1/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-29	5/1/2019	Zinc, Dissolved	0.072	0.01	0.002252	5960450	mg/L
OW-29	5/1/2019	Aluminum, Total	0.16	0.02	0.002488	19914000	mg/L
OW-29	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	5/1/2019	Arsenic, Total	0.00074	0.001	0.000312	10000	mg/L
OW-29	5/1/2019	Barium, Total	0.077	0.002	0.000648	2000000	mg/L
OW-29	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	5/1/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
OW-29	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	5/1/2019	Iron, Total	0.35	0.02	0.008747	13822000	mg/L
OW-29	5/1/2019	Lead, Total	0.000074	0.0005	0.000055	15000	mg/L
OW-29	5/1/2019	Manganese, Total	0.35	0.002	0.00029	2017000	mg/L
OW-29	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	5/1/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-29	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	5/1/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	2/24/2020	Zinc, Dissolved	0.016	0.01	0.0023	5960450	mg/L
OW-29	2/24/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-29	2/24/2020	Arsenic, Total	0.00088	0.001	0.00031	10000	mg/L
OW-29	2/24/2020	Lead, Total	0.00021	0.0005	0.000055	15000	mg/L
OW-29	2/24/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-29	2/24/2020	Thallium, Total	0.000073	0.0005	0.000052	2000	mg/L
OW-29	2/24/2020	Uranium, Total	0.056	0.0025	0.00042	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/24/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	2/24/2020	Aluminum, Total	0.56	0.02	0.0025	19914000	mg/L
OW-29	2/24/2020	Barium, Total	0.078	0.002	0.00065	2000000	mg/L
OW-29	2/24/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-29	2/24/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-29	2/24/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-29	2/24/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	2/24/2020	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
OW-29	2/24/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-29	2/24/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-29	2/24/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-29	2/24/2020	Iron, Total	0.47	0.02	0.0087	13822000	mg/L
OW-29	2/24/2020	Nickel, Total	0.021	0.01	0.004	372000	mg/L
OW-29	2/24/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-29	2/24/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-29	2/24/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-29	2/24/2020	Arsenic, Dissolved	0.00088	0.001	0.0001	10000	mg/L
OW-29	2/24/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	2/24/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-29	2/24/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	2/24/2020	Uranium, Dissolved	0.048	0.0025	0.00037	NA	mg/L
OW-29	2/24/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-29	2/24/2020	Barium, Dissolved	0.073	0.002	0.00065	2000000	mg/L
OW-29	2/24/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-29	2/24/2020	Boron, Dissolved	0.52	0.04	0.0045	3949110	mg/L
OW-29	2/24/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-29	2/24/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-29	2/24/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-29	2/24/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-29	2/24/2020	Iron, Dissolved	0.25	0.02	0.0087	13821880	mg/L
OW-29	2/24/2020	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	2/24/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-29	2/24/2020	Nickel, Dissolved	0.023	0.01	0.004	372000	mg/L
OW-29	2/24/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-29	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Dissolved	0.00059	0.001	0.00021	10000	mg/L
OW-29	9/17/2020	Lead, Dissolved	0.000036	0.0005	0.000034	NA	mg/L
OW-29	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-29	9/17/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-29	9/17/2020	Aluminum, Dissolved	0.0088	0.02	0.0056	19913930	mg/L
OW-29	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-29	9/17/2020	Boron, Dissolved	0.51	0.04	0.0067	3949110	mg/L
OW-29	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-29	9/17/2020	Iron, Dissolved	0.21	0.02	0.01	13821880	mg/L
OW-29	9/17/2020	Manganese, Dissolved	0.31	0.002	0.00058	2017400	mg/L
OW-29	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-29	9/17/2020	Barium, Dissolved	0.073	0.002	0.0011	2000000	mg/L
OW-29	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-29	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-29	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-29	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-29	9/17/2020	Nickel, Dissolved	0.022	0.01	0.0033	372000	mg/L
OW-29	9/17/2020	Zinc, Dissolved	0.015	0.01	0.006	5960450	mg/L
OW-29	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Total	0.00063	0.001	0.00026	10000	mg/L
OW-29	9/17/2020	Lead, Total	0.000052	0.0005	0.000034	15000	mg/L
OW-29	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-29	9/17/2020	Uranium, Total	0.049	0.0025	0.00033	30000	mg/L
OW-29	9/17/2020	Aluminum, Total	0.11	0.1	0.037	19914000	mg/L
OW-29	9/17/2020	Barium, Total	0.075	0.015	0.0082	2000000	mg/L
OW-29	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-29	9/17/2020	Boron, Total	0.51	0.2	0.037	3949	mg/L
OW-29	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-29	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-29	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-29	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
OW-29	9/17/2020	Manganese, Total	0.33	0.01	0.0041	2017000	mg/L
OW-29	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-29	9/17/2020	Nickel, Total	0.023	0.05	0.016	372000	mg/L
OW-29	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-29	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-29	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Dissolved	0.00058	0.001	0.00021	10000	mg/L
OW-29	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-29	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-29	9/17/2020	Uranium, Dissolved	0.046	0.0025	0.00033	NA	mg/L
OW-29	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-29	9/17/2020	Barium, Dissolved	0.07	0.002	0.0011	2000000	mg/L
OW-29	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-29	9/17/2020	Boron, Dissolved	0.52	0.04	0.0067	3949110	mg/L
OW-29	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-29	9/17/2020	Iron, Dissolved	0.18	0.02	0.01	13821880	mg/L
OW-29	9/17/2020	Manganese, Dissolved	0.31	0.002	0.00058	2017400	mg/L
OW-29	9/17/2020	Nickel, Dissolved	0.023	0.01	0.0033	372000	mg/L
OW-29	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-29	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-29	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-29	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-29	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-29	9/17/2020	Zinc, Dissolved	0.013	0.01	0.006	5960450	mg/L
OW-29	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-29	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-29	9/17/2020	Arsenic, Total	0.00061	0.001	0.00026	10000	mg/L
OW-29	9/17/2020	Lead, Total	0.000079	0.0005	0.000034	15000	mg/L
OW-29	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-29	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-29	9/17/2020	Uranium, Total	0.05	0.0025	0.00033	30000	mg/L
OW-29	9/17/2020	Aluminum, Total	0.12	0.1	0.037	19914000	mg/L
OW-29	9/17/2020	Barium, Total	0.074	0.015	0.0082	2000000	mg/L
OW-29	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-29	9/17/2020	Boron, Total	0.5	0.2	0.037	3949	mg/L
OW-29	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-29	9/17/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-29	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-29	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-29	9/17/2020	Iron, Total	0.26	0.25	0.064	13822000	mg/L
OW-29	9/17/2020	Manganese, Total	0.32	0.01	0.0041	2017000	mg/L
OW-29	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-29	9/17/2020	Nickel, Total	0.022	0.05	0.016	372000	mg/L
OW-29	9/17/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-29	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-29	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-29	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-29	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-29	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-29	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-29	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-29	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-29	12/9/2020	Uranium, Dissolved	47.8	5	1.12	NA	ug/L
OW-29	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-29	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-29	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-29	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-29	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-29	12/9/2020	Uranium, Total Recoverable	**51.1**	5	1.12	30	ug/L
OW-29	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-29	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-29	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-29	12/9/2020	Boron, Dissolved	0.584	0.2	0.0527	3949110	mg/L
OW-29	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-29	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-29	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-29	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	12/9/2020	Iron, Dissolved	0.259	0.1	0.0248	13821880	mg/L
OW-29	12/9/2020	Manganese, Dissolved	0.342	0.015	0.00141	2017400	mg/L
OW-29	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-29	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-29	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-29	12/9/2020	Zinc, Dissolved	0.0432	0.02	0.00589	5960450	mg/L
OW-29	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-29	12/9/2020	Barium, Total	0.0792	0.01	0.003	2000000	mg/L
OW-29	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-29	12/9/2020	Boron, Total	0.528	0.1	0.022	3949	mg/L
OW-29	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-29	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-29	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-29	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-29	12/9/2020	Iron, Total	0.338	0.2	0.075	13822000	mg/L
OW-29	12/9/2020	Manganese, Total	0.349	0.01	0.003	2017000	mg/L
OW-29	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-29	12/9/2020	Nickel, Total	0.0262	0.006	0.003	372000	mg/L
OW-29	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-29	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-29	2/5/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-29	2/5/2019	Arsenic, Dissolved	0.00065	0.001	0.000068	10000	mg/L
OW-29	2/5/2019	Barium, Dissolved	0.072	0.002	0.000648	2000000	mg/L
OW-29	2/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	2/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	2/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	2/5/2019	Iron, Dissolved	0.22	0.02	0.008747	13821880	mg/L
OW-29	2/5/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-29	2/5/2019	Manganese, Dissolved	0.31	0.002	0.00029	2017400	mg/L
OW-29	2/5/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-29	2/5/2019	Silver, Dissolved	0.001	0.005	0.000942	81200	mg/L
OW-29	2/5/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-29	2/5/2019	Uranium, Dissolved	0.048	0.0025	0.000152	NA	mg/L
OW-29	2/5/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-29	2/5/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-29	2/5/2019	Arsenic, Total	0.0012	0.001	0.000022	10000	mg/L
OW-29	2/5/2019	Barium, Total	0.078	0.002	0.000488	2000000	mg/L
OW-29	2/5/2019	Beryllium, Total	0.00036	0.002	0.000224	4000	mg/L
OW-29	2/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	2/5/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-29	2/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	2/5/2019	Iron, Total	0.43	0.02	0.006053	13822000	mg/L
OW-29	2/5/2019	Lead, Total	0.00022	0.0005	0.000063	15000	mg/L
OW-29	2/5/2019	Manganese, Total	0.33	0.002	0.00006	2017000	mg/L
OW-29	2/5/2019	Mercury, Total	0.00012	0.0002	0.000038	2000	mg/L
OW-29	2/5/2019	Selenium, Total	0.00024	0.001	0.000118	50000	mg/L
OW-29	2/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	2/5/2019	Thallium, Total	ND	0.0005	0.00005	2000	mg/L
OW-29	2/5/2019	Uranium, Total	0.048	0.0025	0.00025	30000	mg/L
OW-29	2/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	10/14/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-29	10/14/2019	Barium, Dissolved	0.075	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Dissolved	0.00035	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Dissolved	0.55	0.04	0.004531	3949110	mg/L
OW-29	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/14/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
OW-29	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Dissolved	0.0028	0.006	0.001296	790000	mg/L
OW-29	10/14/2019	Iron, Dissolved	0.17	0.02	0.008747	13821880	mg/L
OW-29	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/14/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	10/14/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	10/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Potassium, Dissolved	0.38	1	0.162288	NA	mg/L
OW-29	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
OW-29	10/14/2019	Sodium, Dissolved	380	5	2.080881	NA	mg/L
OW-29	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/14/2019	Zinc, Dissolved	0.063	0.01	0.002252	5960450	mg/L
OW-29	10/14/2019	Aluminum, Total	0.63	0.02	0.002488	19914000	mg/L
OW-29	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Total	0.00099	0.001	0.000312	10000	mg/L
OW-29	10/14/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Total	0.53	0.04	0.004531	3949	mg/L
OW-29	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/14/2019	Iron, Total	0.45	0.02	0.008747	13822000	mg/L
OW-29	10/14/2019	Lead, Total	0.00011	0.0005	0.000055	15000	mg/L
OW-29	10/14/2019	Manganese, Total	0.31	0.002	0.00029	2017000	mg/L
OW-29	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Total	0.02	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/15/2019	Aluminum, Dissolved	0.006	0.02	0.002488	19913930	mg/L
OW-29	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	10/15/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-29	10/15/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-29	10/15/2019	Beryllium, Dissolved	0.0004	0.002	0.000284	4000	mg/L
OW-29	10/15/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-29	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/15/2019	Calcium, Dissolved	5	1	0.061889	NA	mg/L
OW-29	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/15/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	10/15/2019	Iron, Dissolved	0.046	0.02	0.008747	13821880	mg/L
OW-29	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/15/2019	Magnesium, Dissolved	0.61	1	0.05029	NA	mg/L
OW-29	10/15/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-29	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-29	10/15/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-29	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-29	10/15/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-29	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/15/2019	Zinc, Dissolved	0.018	0.01	0.002252	5960450	mg/L
OW-29	10/15/2019	Aluminum, Total	0.28	0.02	0.002488	19914000	mg/L
OW-29	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/15/2019	Arsenic, Total	0.00078	0.001	0.000312	10000	mg/L
OW-29	10/15/2019	Barium, Total	0.028	0.002	0.000648	2000000	mg/L
OW-29	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-29	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/15/2019	Iron, Total	0.11	0.02	0.008747	13822000	mg/L
OW-29	10/15/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-29	10/15/2019	Manganese, Total	0.025	0.002	0.00029	2017000	mg/L
OW-29	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-29	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	10/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	10/14/2019	Antimony, Dissolved	0.00077	0.001	0.000389	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	10/14/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-29	10/14/2019	Barium, Dissolved	0.074	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
OW-29	10/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-29	10/14/2019	Calcium, Dissolved	61	1	0.061889	NA	mg/L
OW-29	10/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	10/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
OW-29	10/14/2019	Iron, Dissolved	0.2	0.02	0.008747	13821880	mg/L
OW-29	10/14/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	10/14/2019	Magnesium, Dissolved	13	1	0.05029	NA	mg/L
OW-29	10/14/2019	Manganese, Dissolved	0.33	0.002	0.00029	2017400	mg/L
OW-29	10/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Dissolved	0.022	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Potassium, Dissolved	0.44	1	0.162288	NA	mg/L
OW-29	10/14/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	10/14/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
OW-29	10/14/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-29	10/14/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	10/14/2019	Zinc, Dissolved	0.078	0.01	0.002252	5960450	mg/L
OW-29	10/14/2019	Aluminum, Total	0.42	0.02	0.002488	19914000	mg/L
OW-29	10/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	10/14/2019	Arsenic, Total	ND	0.005	0.001561	10000	mg/L
OW-29	10/14/2019	Barium, Total	0.074	0.002	0.000648	2000000	mg/L
OW-29	10/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	10/14/2019	Boron, Total	0.55	0.04	0.004531	3949	mg/L
OW-29	10/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	10/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	10/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	10/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	10/14/2019	Iron, Total	0.32	0.02	0.008747	13822000	mg/L
OW-29	10/14/2019	Lead, Total	0.00012	0.0005	0.000055	15000	mg/L
OW-29	10/14/2019	Manganese, Total	0.3	0.002	0.00029	2017000	mg/L
OW-29	10/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	10/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	10/14/2019	Nickel, Total	0.023	0.01	0.004009	372000	mg/L
OW-29	10/14/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-29	10/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	10/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	10/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-29	8/12/2019	Aluminum, Total	0.067	0.02	0.002488	19914000	mg/L
OW-29	8/12/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-29	8/12/2019	Arsenic, Total	0.00087	0.001	0.000312	10000	mg/L
OW-29	8/12/2019	Barium, Total	0.071	0.002	0.000648	2000000	mg/L
OW-29	8/12/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-29	8/12/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L
OW-29	8/12/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-29	8/12/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-29	8/12/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-29	8/12/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-29	8/12/2019	Iron, Total	0.22	0.02	0.008747	13822000	mg/L
OW-29	8/12/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-29	8/12/2019	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-29	8/12/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	8/12/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-29	8/12/2019	Nickel, Total	0.022	0.01	0.004009	372000	mg/L
OW-29	8/12/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-29	8/12/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-29	8/12/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-29	8/12/2019	Uranium, Total	0.049	0.0025	0.000424	30000	mg/L
OW-29	8/12/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
OW-29	8/12/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-29	8/12/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-29	8/12/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-29	8/12/2019	Barium, Dissolved	0.071	0.002	0.000648	2000000	mg/L
OW-29	8/12/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-29	8/12/2019	Boron, Dissolved	0.53	0.04	0.004531	3949110	mg/L
OW-29	8/12/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-29	8/12/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-29	8/12/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-29	8/12/2019	Iron, Dissolved	0.18	0.02	0.008747	13821880	mg/L
OW-29	8/12/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-29	8/12/2019	Manganese, Dissolved	0.29	0.002	0.00029	2017400	mg/L
OW-29	8/12/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-29	8/12/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-29	8/12/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-29	8/12/2019	Silver, Dissolved	0.00097	0.005	0.000942	81200	mg/L
OW-29	8/12/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-29	8/12/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
OW-29	8/12/2019	Zinc, Dissolved	0.0036	0.01	0.002252	5960450	mg/L
OW-29	11/15/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-29	11/15/2016	Iron, Dissolved	0.32	0.02	0.02	13821880	mg/L
OW-29	11/15/2016	Manganese, Dissolved	0.34	0.002	0.00032	2017400	mg/L
OW-29	11/15/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	11/15/2016	Selenium, Dissolved	0.0076	0.01	0.0021	50000	mg/L
OW-29	11/15/2016	Uranium, Dissolved	0.053	0.0025	0.00026	NA	mg/L
OW-29	11/15/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-29	11/15/2016	Iron, Total	0.34	0.02	0.02	13822000	mg/L
OW-29	11/15/2016	Mercury, Total	0.00006	0.0002	0.000053	2000	mg/L
OW-29	11/15/2016	Manganese, Total	0.34	0.002	0.00027	2017000	mg/L
OW-29	11/15/2016	Lead, Total	ND	0.0025	0.00041	15000	mg/L
OW-29	11/15/2016	Selenium, Total	0.0088	0.02	0.0037	50000	mg/L
OW-29	11/15/2016	Uranium, Total	0.055	0.0025	0.00087	30000	mg/L
OW-29	11/15/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	2/27/2017	Arsenic, Total	0.0026	0.005	0.0011	10000	mg/L
OW-29	2/27/2017	Barium, Total	0.07	0.002	0.00079	2000000	mg/L
OW-29	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-29	2/27/2017	Arsenic, Dissolved	0.002	0.005	0.00069	10000	mg/L
OW-29	2/27/2017	Barium, Dissolved	0.07	0.002	0.00085	2000000	mg/L
OW-29	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-29	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	2/27/2017	Iron, Dissolved	0.31	0.02	0.02	13821880	mg/L
OW-29	2/27/2017	Manganese, Dissolved	0.32	0.002	0.00038	2017400	mg/L
OW-29	2/27/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	2/27/2017	Selenium, Dissolved	0.0064	0.005	0.0011	50000	mg/L
OW-29	2/27/2017	Zinc, Dissolved	0.028	0.01	0.0011	5960450	mg/L
OW-29	2/27/2017	Iron, Total	0.36	0.02	0.02	13822000	mg/L
OW-29	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-29	2/27/2017	Manganese, Total	0.31	0.002	0.00027	2017000	mg/L
OW-29	2/27/2017	Lead, Total	0.000098	0.0005	0.000081	15000	mg/L
OW-29	2/27/2017	Selenium, Total	0.006	0.01	0.0019	50000	mg/L
OW-29	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	5/30/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-29	5/30/2017	Arsenic, Total	0.0017	0.005	0.0015	10000	mg/L
OW-29	5/30/2017	Barium, Total	0.07	0.002	0.00093	2000000	mg/L
OW-29	5/30/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	5/30/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-29	5/30/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-29	5/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-29	5/30/2017	Arsenic, Dissolved	0.0018	0.005	0.00089	10000	mg/L
OW-29	5/30/2017	Barium, Dissolved	0.069	0.002	0.00085	2000000	mg/L
OW-29	5/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	5/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-29	5/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	5/30/2017	Iron, Dissolved	0.28	0.02	0.016	13821880	mg/L
OW-29	5/30/2017	Manganese, Dissolved	0.31	0.002	0.00038	2017400	mg/L
OW-29	5/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	5/30/2017	Selenium, Dissolved	0.0038	0.005	0.0019	50000	mg/L
OW-29	5/30/2017	Zinc, Dissolved	0.024	0.01	0.0011	5960450	mg/L
OW-29	5/30/2017	Iron, Total	0.38	0.02	0.01	13822000	mg/L
OW-29	5/30/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	5/30/2017	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
OW-29	5/30/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-29	5/30/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-29	5/30/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-29	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	9/6/2017	Arsenic, Total	0.0031	0.005	0.0015	10000	mg/L
OW-29	9/6/2017	Barium, Total	0.066	0.002	0.00093	2000000	mg/L
OW-29	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	9/6/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-29	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	9/6/2017	Arsenic, Dissolved	0.0026	0.005	0.00089	10000	mg/L
OW-29	9/6/2017	Barium, Dissolved	0.067	0.002	0.00085	2000000	mg/L
OW-29	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	9/6/2017	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
OW-29	9/6/2017	Manganese, Dissolved	0.29	0.002	0.00039	2017400	mg/L
OW-29	9/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	9/6/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-29	9/6/2017	Uranium, Dissolved	0.052	0.0025	0.00025	NA	mg/L
OW-29	9/6/2017	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
OW-29	9/6/2017	Iron, Total	0.27	0.02	0.01	13822000	mg/L
OW-29	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	9/6/2017	Manganese, Total	0.29	0.002	0.0011	2017000	mg/L
OW-29	9/6/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-29	9/6/2017	Selenium, Total	ND	0.01	0.0071	50000	mg/L
OW-29	9/6/2017	Uranium, Total	0.053	0.0025	0.00077	30000	mg/L
OW-29	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	12/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	12/11/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-29	12/11/2017	Barium, Total	0.059	0.002	0.001	2000000	mg/L
OW-29	12/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	12/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	12/11/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	12/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	12/11/2017	Arsenic, Dissolved	0.0028	0.005	0.0021	10000	mg/L
OW-29	12/11/2017	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
OW-29	12/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	12/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	12/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	12/11/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-29	12/11/2017	Manganese, Dissolved	0.022	0.002	0.00039	2017400	mg/L
OW-29	12/11/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-29	12/11/2017	Selenium, Dissolved	0.006	0.005	0.0038	50000	mg/L
OW-29	12/11/2017	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	12/11/2017	Zinc, Dissolved	0.0099	0.01	0.0021	5960450	mg/L
OW-29	12/11/2017	Iron, Total	0.3	0.02	0.01	13822000	mg/L
OW-29	12/11/2017	Mercury, Total	0.0001	0.0002	0.000037	2000	mg/L
OW-29	12/11/2017	Manganese, Total	0.33	0.002	0.0011	2017000	mg/L
OW-29	12/11/2017	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	12/11/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-29	12/11/2017	Uranium, Total	0.054	0.005	0.0015	30000	mg/L
OW-29	12/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	2/27/2018	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
OW-29	2/27/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-29	2/27/2018	Barium, Total	0.074	0.002	0.001	2000000	mg/L
OW-29	2/27/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	2/27/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	2/27/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	2/27/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	2/27/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-29	2/27/2018	Barium, Dissolved	0.067	0.002	0.00099	2000000	mg/L
OW-29	2/27/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	2/27/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	2/27/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	2/27/2018	Iron, Dissolved	0.25	0.02	0.016	13821880	mg/L
OW-29	2/27/2018	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
OW-29	2/27/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	2/27/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-29	2/27/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	2/27/2018	Zinc, Dissolved	0.0071	0.01	0.0021	5960450	mg/L
OW-29	2/27/2018	Iron, Total	0.54	0.02	0.01	13822000	mg/L
OW-29	2/27/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	2/27/2018	Manganese, Total	0.35	0.002	0.0011	2017000	mg/L
OW-29	2/27/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	2/27/2018	Selenium, Total	0.0021	0.001	0.00098	50000	mg/L
OW-29	2/27/2018	Uranium, Total	0.049	0.0025	0.00034	30000	mg/L
OW-29	2/27/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	5/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	5/16/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-29	5/16/2018	Barium, Total	0.07	0.002	0.001	2000000	mg/L
OW-29	5/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	5/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	5/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	5/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	5/16/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-29	5/16/2018	Barium, Dissolved	0.064	0.002	0.00099	2000000	mg/L
OW-29	5/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	5/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	5/16/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	5/16/2018	Iron, Dissolved	0.21	0.02	0.016	13821880	mg/L
OW-29	5/16/2018	Manganese, Dissolved	0.28	0.002	0.00039	2017400	mg/L
OW-29	5/16/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-29	5/16/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-29	5/16/2018	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OW-29	5/16/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-29	5/16/2018	Iron, Total	0.56	0.02	0.01	13822000	mg/L
OW-29	5/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-29	5/16/2018	Manganese, Total	0.32	0.002	0.0011	2017000	mg/L
OW-29	5/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	5/16/2018	Selenium, Total	0.0024	0.001	0.00098	50000	mg/L
OW-29	5/16/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-29	5/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	9/11/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
OW-29	9/11/2018	Arsenic, Total	0.001	0.001	0.00041	10000	mg/L
OW-29	9/11/2018	Barium, Total	0.071	0.002	0.001	2000000	mg/L
OW-29	9/11/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	9/11/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	9/11/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	9/11/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	9/11/2018	Arsenic, Dissolved	0.00086	0.001	0.00042	10000	mg/L
OW-29	9/11/2018	Barium, Dissolved	0.073	0.002	0.00099	2000000	mg/L
OW-29	9/11/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	9/11/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	9/11/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	9/11/2018	Iron, Dissolved	0.26	0.02	0.016	13821880	mg/L
OW-29	9/11/2018	Manganese, Dissolved	0.33	0.002	0.00039	2017400	mg/L
OW-29	9/11/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	9/11/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-29	9/11/2018	Uranium, Dissolved	0.048	0.0025	0.00048	NA	mg/L
OW-29	9/11/2018	Zinc, Dissolved	0.0062	0.01	0.0021	5960450	mg/L
OW-29	9/11/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
OW-29	9/11/2018	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
OW-29	9/11/2018	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
OW-29	9/11/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	9/11/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-29	9/11/2018	Uranium, Total	0.051	0.0025	0.00034	30000	mg/L
OW-29	9/11/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	11/6/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-29	11/6/2018	Arsenic, Total	0.0014	0.001	0.00041	10000	mg/L
OW-29	11/6/2018	Barium, Total	0.073	0.002	0.001	2000000	mg/L
OW-29	11/6/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-29	11/6/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-29	11/6/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	11/6/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-29	11/6/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-29	11/6/2018	Barium, Dissolved	0.071	0.002	0.00099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/6/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-29	11/6/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-29	11/6/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-29	11/6/2018	Iron, Dissolved	0.24	0.02	0.016	13821880	mg/L
OW-29	11/6/2018	Manganese, Dissolved	0.3	0.002	0.00039	2017400	mg/L
OW-29	11/6/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-29	11/6/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-29	11/6/2018	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
OW-29	11/6/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-29	11/6/2018	Iron, Total	0.38	0.02	0.01	13822000	mg/L
OW-29	11/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-29	11/6/2018	Manganese, Total	0.3	0.002	0.0011	2017000	mg/L
OW-29	11/6/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-29	11/6/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-29	11/6/2018	Uranium, Total	0.048	0.0025	0.00034	30000	mg/L
OW-29	11/6/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-29	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-29	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-29	8/23/2012	Barium, Total	0.058	0.002	0.00039	2000000	mg/L
OW-29	8/23/2012	Calcium, Total	50	1	0.026	NA	mg/L
OW-29	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-29	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-29	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	8/23/2012	Iron, Total	0.16	0.02	0.013	13822000	mg/L
OW-29	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-29	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-29	8/23/2012	Magnesium, Total	12	1	0.013	NA	mg/L
OW-29	8/23/2012	Manganese, Total	0.25	0.002	0.00026	2017000	mg/L
OW-29	8/23/2012	Sodium, Total	360	5	0.22	NA	mg/L
OW-29	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-29	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-29	8/23/2012	Uranium, Total	0.055	0.0025	0.00003	30000	mg/L
OW-29	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-29	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-29	3/19/2013	Barium, Total	0.059	0.002	0.00039	2000000	mg/L
OW-29	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-29	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-29	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-29	3/19/2013	Iron, Total	0.47	0.02	0.013	13822000	mg/L
OW-29	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	3/19/2013	Manganese, Total	0.29	0.002	0.00026	2017000	mg/L
OW-29	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-29	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-29	3/19/2013	Uranium, Total	0.057	0.0025	0.0012	30000	mg/L
OW-29	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	6/13/2013	Silver, Total	ND	0.005	0.00079	50000	mg/L
OW-29	6/13/2013	Arsenic, Total	0.0013	0.001	0.00027	10000	mg/L
OW-29	6/13/2013	Barium, Total	0.065	0.002	0.00057	2000000	mg/L
OW-29	6/13/2013	Cadmium, Total	ND	0.002	0.00061	5000	mg/L
OW-29	6/13/2013	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	6/13/2013	Copper, Total	ND	0.006	0.005	790000	mg/L
OW-29	6/13/2013	Iron, Total	0.52	0.02	0.0052	13822000	mg/L
OW-29	6/13/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	6/13/2013	Manganese, Total	0.32	0.002	0.00052	2017000	mg/L
OW-29	6/13/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	6/13/2013	Selenium, Total	0.0033	0.001	0.00049	50000	mg/L
OW-29	6/13/2013	Uranium, Total	0.056	0.005	0.0025	30000	mg/L
OW-29	6/13/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-29	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-29	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-29	9/4/2013	Barium, Total	0.062	0.002	0.00095	2000000	mg/L
OW-29	9/4/2013	Calcium, Total	53	1	0.069	NA	mg/L
OW-29	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-29	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-29	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-29	9/4/2013	Iron, Total	0.31	0.02	0.0089	13822000	mg/L
OW-29	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	9/4/2013	Potassium, Total	1.9	1	0.24	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	9/4/2013	Magnesium, Total	11	1	0.028	NA	mg/L
OW-29	9/4/2013	Manganese, Total	0.28	0.002	0.00016	2017000	mg/L
OW-29	9/4/2013	Sodium, Total	350	5	1.6	NA	mg/L
OW-29	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-29	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-29	9/4/2013	Uranium, Total	0.06	0.01	0.000073	30000	mg/L
OW-29	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-29	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-29	11/11/2013	Arsenic, Total	0.0019	0.001	0.000098	10000	mg/L
OW-29	11/11/2013	Barium, Total	0.063	0.002	0.00095	2000000	mg/L
OW-29	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-29	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-29	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-29	11/11/2013	Iron, Total	0.33	0.02	0.0089	13822000	mg/L
OW-29	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-29	11/11/2013	Manganese, Total	0.3	0.002	0.00016	2017000	mg/L
OW-29	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	11/11/2013	Selenium, Total	0.0052	0.001	0.00029	50000	mg/L
OW-29	11/11/2013	Uranium, Total	0.053	0.005	0.000036	30000	mg/L
OW-29	11/11/2013	Zinc, Total	0.028	0.01	0.00076	5960000	mg/L
OW-29	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-29	3/7/2014	Barium, Total	0.059	0.002	0.0011	2000000	mg/L
OW-29	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	3/7/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-29	3/7/2014	Iron, Total	0.28	0.02	0.0062	13822000	mg/L
OW-29	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	3/7/2014	Manganese, Total	0.29	0.002	0.00055	2017000	mg/L
OW-29	3/7/2014	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-29	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-29	3/7/2014	Uranium, Total	0.053	0.005	0.000036	30000	mg/L
OW-29	3/7/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-29	6/2/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	6/2/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-29	6/2/2014	Barium, Total	0.057	0.002	0.0011	2000000	mg/L
OW-29	6/2/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	6/2/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	6/2/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-29	6/2/2014	Iron, Total	0.2	0.02	0.0062	13822000	mg/L
OW-29	6/2/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	6/2/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
OW-29	6/2/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-29	6/2/2014	Selenium, Total	0.0064	0.005	0.00074	50000	mg/L
OW-29	6/2/2014	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
OW-29	6/2/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-29	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-29	9/15/2014	Arsenic, Total	ND	0.01	0.0036	10000	mg/L
OW-29	9/15/2014	Barium, Total	0.058	0.002	0.0005	2000000	mg/L
OW-29	9/15/2014	Calcium, Total	57	1	0.082	NA	mg/L
OW-29	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-29	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-29	9/15/2014	Iron, Total	0.2	0.02	0.0072	13822000	mg/L
OW-29	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	9/15/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
OW-29	9/15/2014	Magnesium, Total	12	1	0.018	NA	mg/L
OW-29	9/15/2014	Manganese, Total	0.26	0.002	0.00049	2017000	mg/L
OW-29	9/15/2014	Sodium, Total	380	10	3.9	NA	mg/L
OW-29	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-29	9/15/2014	Selenium, Total	ND	0.01	0.0051	50000	mg/L
OW-29	9/15/2014	Uranium, Total	0.053	0.01	0.000072	30000	mg/L
OW-29	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-29	11/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-29	11/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-29	11/11/2014	Barium, Total	0.061	0.002	0.0011	2000000	mg/L
OW-29	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-29	11/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-29	11/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	11/11/2014	Iron, Total	0.23	0.02	0.0062	13822000	mg/L
OW-29	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-29	11/11/2014	Manganese, Total	0.28	0.002	0.00055	2017000	mg/L
OW-29	11/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-29	11/11/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-29	11/11/2014	Uranium, Total	0.054	0.01	0.0005	30000	mg/L
OW-29	11/11/2014	Zinc, Total	0.029	0.01	0.0014	5960000	mg/L
OW-29	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	3/9/2015	Arsenic, Total	ND	0.005	0.0022	10000	mg/L
OW-29	3/9/2015	Barium, Total	0.063	0.002	0.00073	2000000	mg/L
OW-29	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-29	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	3/9/2015	Iron, Total	0.41	0.02	0.0072	13822000	mg/L
OW-29	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	3/9/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
OW-29	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-29	3/9/2015	Selenium, Total	ND	0.005	0.00061	50000	mg/L
OW-29	3/9/2015	Uranium, Total	0.061	0.005	0.00004	30000	mg/L
OW-29	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-29	6/1/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	6/1/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-29	6/1/2015	Barium, Total	0.06	0.002	0.0011	2000000	mg/L
OW-29	6/1/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	6/1/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	6/1/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	6/1/2015	Iron, Total	0.35	0.02	0.0072	13822000	mg/L
OW-29	6/1/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	6/1/2015	Manganese, Total	0.25	0.002	0.0015	2017000	mg/L
OW-29	6/1/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-29	6/1/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-29	6/1/2015	Uranium, Total	0.054	0.005	0.000049	30000	mg/L
OW-29	6/1/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	8/11/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	8/11/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-29	8/11/2015	Barium, Total	0.063	0.002	0.0011	2000000	mg/L
OW-29	8/11/2015	Calcium, Total	52	1	0.057	NA	mg/L
OW-29	8/11/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	8/11/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	8/11/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	8/11/2015	Iron, Total	0.25	0.02	0.0072	13822000	mg/L
OW-29	8/11/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	8/11/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-29	8/11/2015	Magnesium, Total	12	1	0.039	NA	mg/L
OW-29	8/11/2015	Manganese, Total	0.28	0.002	0.0015	2017000	mg/L
OW-29	8/11/2015	Sodium, Total	400	5	0.36	NA	mg/L
OW-29	8/11/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	8/11/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	8/11/2015	Uranium, Total	0.054	0.0025	0.000025	30000	mg/L
OW-29	8/11/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	10/27/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-29	10/27/2015	Barium, Total	0.066	0.002	0.0011	2000000	mg/L
OW-29	10/27/2015	Calcium, Total	62	1	0.057	NA	mg/L
OW-29	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	10/27/2015	Iron, Total	0.33	0.02	0.0072	13822000	mg/L
OW-29	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-29	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-29	10/27/2015	Magnesium, Total	13	1	0.039	NA	mg/L
OW-29	10/27/2015	Manganese, Total	0.3	0.002	0.0015	2017000	mg/L
OW-29	10/27/2015	Sodium, Total	370	5	0.36	NA	mg/L
OW-29	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	10/27/2015	Uranium, Total	0.051	0.0025	0.000025	30000	mg/L
OW-29	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	3/4/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	3/4/2016	Arsenic, Total	0.0015	0.001	0.00029	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	3/4/2016	Barium, Total	0.064	0.002	0.0011	2000000	mg/L
OW-29	3/4/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	3/4/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	3/4/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	3/4/2016	Iron, Total	0.38	0.02	0.0072	13822000	mg/L
OW-29	3/4/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-29	3/4/2016	Manganese, Total	0.32	0.002	0.0015	2017000	mg/L
OW-29	3/4/2016	Lead, Total	ND	0.0025	0.00024	15000	mg/L
OW-29	3/4/2016	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-29	3/4/2016	Uranium, Total	0.053	0.0025	0.000025	30000	mg/L
OW-29	3/4/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-29	6/6/2016	Arsenic, Total	0.0039	0.005	0.0015	10000	mg/L
OW-29	6/6/2016	Barium, Total	0.072	0.002	0.0011	2000000	mg/L
OW-29	6/6/2016	Calcium, Total	60	1	0.26	NA	mg/L
OW-29	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-29	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-29	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-29	6/6/2016	Iron, Total	0.36	0.02	0.0072	13822000	mg/L
OW-29	6/6/2016	Mercury, Total	0.000061	0.0002	0.000053	2000	mg/L
OW-29	6/6/2016	Potassium, Total	0.55	1	0.18	NA	mg/L
OW-29	6/6/2016	Magnesium, Total	14	1	0.013	NA	mg/L
OW-29	6/6/2016	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
OW-29	6/6/2016	Sodium, Total	390	5	0.48	NA	mg/L
OW-29	6/6/2016	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-29	6/6/2016	Selenium, Total	0.0068	0.005	0.00062	50000	mg/L
OW-29	6/6/2016	Uranium, Total	0.053	0.0025	0.000025	30000	mg/L
OW-29	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-29	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	8/31/2016	Arsenic, Total	ND	0.01	0.0021	10000	mg/L
OW-29	8/31/2016	Barium, Total	0.065	0.002	0.00079	2000000	mg/L
OW-29	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-29	8/31/2016	Arsenic, Dissolved	0.0026	0.005	0.00069	10000	mg/L
OW-29	8/31/2016	Barium, Dissolved	0.068	0.002	0.0013	2000000	mg/L
OW-29	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-29	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-29	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-29	8/31/2016	Iron, Dissolved	0.27	0.02	0.02	13821880	mg/L
OW-29	8/31/2016	Manganese, Dissolved	0.3	0.002	0.00032	2017400	mg/L
OW-29	8/31/2016	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-29	8/31/2016	Selenium, Dissolved	0.0065	0.01	0.0021	50000	mg/L
OW-29	8/31/2016	Uranium, Dissolved	0.054	0.0025	0.00026	NA	mg/L
OW-29	8/31/2016	Zinc, Dissolved	0.028	0.01	0.0028	5960450	mg/L
OW-29	8/31/2016	Iron, Total	0.33	0.02	0.02	13822000	mg/L
OW-29	8/31/2016	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
OW-29	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
OW-29	8/31/2016	Selenium, Total	0.0062	0.01	0.0019	50000	mg/L
OW-29	8/31/2016	Uranium, Total	0.053	0.0025	0.00087	30000	mg/L
OW-29	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-29	11/15/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-29	11/15/2016	Arsenic, Total	0.0023	0.005	0.0011	10000	mg/L
OW-29	11/15/2016	Barium, Total	0.071	0.002	0.00079	2000000	mg/L
OW-29	11/15/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-29	11/15/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-29	11/15/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-29	11/15/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-29	11/15/2016	Arsenic, Dissolved	0.0027	0.005	0.00069	10000	mg/L
OW-29	11/15/2016	Barium, Dissolved	0.07	0.002	0.0013	2000000	mg/L
OW-29	11/15/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-29	11/15/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	6/5/2019	Aluminum, Total	0.14	0.02	0.002488	19914000	mg/L
OW-30	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Total	0.0008	0.001	0.000312	10000	mg/L
OW-30	6/5/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Total	0.52	0.04	0.004531	3949	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Total	0.006	0.006	0.004072	790000	mg/L
OW-30	6/5/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
OW-30	6/5/2019	Lead, Total	0.00051	0.0005	0.000055	15000	mg/L
OW-30	6/5/2019	Manganese, Total	0.073	0.002	0.00029	2017000	mg/L
OW-30	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Total	0.043	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	6/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	6/5/2019	Uranium, Total	0.033	0.0025	0.000424	30000	mg/L
OW-30	6/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Dissolved	0.00075	0.001	0.000101	10000	mg/L
OW-30	6/5/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-30	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Dissolved	0.0063	0.006	0.001296	790000	mg/L
OW-30	6/5/2019	Iron, Dissolved	0.06	0.02	0.008747	13821880	mg/L
OW-30	6/5/2019	Lead, Dissolved	0.00056	0.0005	0.000055	NA	mg/L
OW-30	6/5/2019	Manganese, Dissolved	0.067	0.002	0.00029	2017400	mg/L
OW-30	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Dissolved	0.041	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	6/5/2019	Silver, Dissolved	0.001	0.005	0.000942	81200	mg/L
OW-30	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	6/5/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
OW-30	6/5/2019	Zinc, Dissolved	0.19	0.01	0.002252	5960450	mg/L
OW-30	3/27/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	3/27/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-30	3/27/2019	Barium, Dissolved	0.13	0.002	0.000648	2000000	mg/L
OW-30	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	3/27/2019	Boron, Dissolved	0.54	0.04	0.004531	3949110	mg/L
OW-30	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	3/27/2019	Calcium, Dissolved	72	1	0.061889	NA	mg/L
OW-30	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-30	3/27/2019	Iron, Dissolved	0.055	0.02	0.008747	13821880	mg/L
OW-30	3/27/2019	Lead, Dissolved	0.00041	0.0005	0.000055	NA	mg/L
OW-30	3/27/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-30	3/27/2019	Manganese, Dissolved	0.068	0.002	0.00029	2017400	mg/L
OW-30	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	3/27/2019	Nickel, Dissolved	0.039	0.01	0.004009	372000	mg/L
OW-30	3/27/2019	Potassium, Dissolved	0.27	1	0.162288	NA	mg/L
OW-30	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	3/27/2019	Silver, Dissolved	0.0014	0.005	0.000942	81200	mg/L
OW-30	3/27/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
OW-30	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	3/27/2019	Uranium, Dissolved	0.036	0.0025	0.000374	NA	mg/L
OW-30	3/27/2019	Zinc, Dissolved	0.034	0.01	0.002252	5960450	mg/L
OW-30	3/27/2019	Aluminum, Total	0.29	0.02	0.004564	19914000	mg/L
OW-30	3/27/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	3/27/2019	Arsenic, Total	0.0008	0.001	0.000312	10000	mg/L
OW-30	3/27/2019	Barium, Total	0.14	0.002	0.000648	2000000	mg/L
OW-30	3/27/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	3/27/2019	Boron, Total	0.56	0.04	0.004531	3949	mg/L
OW-30	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	3/27/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	3/27/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/27/2019	Iron, Total	0.17	0.02	0.008747	13822000	mg/L
OW-30	3/27/2019	Lead, Total	0.00059	0.0005	0.000055	15000	mg/L
OW-30	3/27/2019	Manganese, Total	0.073	0.002	0.00029	2017000	mg/L
OW-30	3/27/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	3/27/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	3/27/2019	Nickel, Total	0.04	0.01	0.004009	372000	mg/L
OW-30	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	3/27/2019	Uranium, Total	0.04	0.0025	0.000424	30000	mg/L
OW-30	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Total	0.13	0.02	0.002488	19914000	mg/L
OW-30	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Total	0.00083	0.001	0.000312	10000	mg/L
OW-30	6/5/2019	Barium, Total	0.13	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Total	0.54	0.04	0.004531	3949	mg/L
OW-30	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-30	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-30	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Total	0.0058	0.006	0.004072	790000	mg/L
OW-30	6/5/2019	Iron, Total	0.12	0.02	0.008747	13822000	mg/L
OW-30	6/5/2019	Lead, Total	0.00052	0.0005	0.000055	15000	mg/L
OW-30	6/5/2019	Manganese, Total	0.075	0.002	0.00029	2017000	mg/L
OW-30	6/5/2019	Mercury, Total	ND	0.001	0.000187	2000	mg/L
OW-30	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Total	0.045	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-30	6/5/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-30	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-30	6/5/2019	Uranium, Total	0.035	0.0025	0.000424	30000	mg/L
OW-30	6/5/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-30	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-30	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-30	6/5/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-30	6/5/2019	Barium, Dissolved	0.12	0.002	0.000648	2000000	mg/L
OW-30	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-30	6/5/2019	Boron, Dissolved	0.52	0.04	0.004531	3949110	mg/L
OW-30	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-30	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-30	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-30	6/5/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
OW-30	6/5/2019	Iron, Dissolved	0.057	0.02	0.008747	13821880	mg/L
OW-30	6/5/2019	Lead, Dissolved	0.00055	0.0005	0.000055	NA	mg/L
OW-30	6/5/2019	Manganese, Dissolved	0.067	0.002	0.00029	2017400	mg/L
OW-30	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-30	6/5/2019	Nickel, Dissolved	0.042	0.01	0.004009	372000	mg/L
OW-30	6/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-30	6/5/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-30	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-30	6/5/2019	Uranium, Dissolved	0.035	0.0025	0.000374	NA	mg/L
OW-30	6/5/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
OW-30	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-30	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-30	8/23/2012	Barium, Total	0.078	0.002	0.00039	2000000	mg/L
OW-30	8/23/2012	Calcium, Total	61	1	0.026	NA	mg/L
OW-30	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-30	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-30	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	8/23/2012	Iron, Total	0.058	0.02	0.013	13822000	mg/L
OW-30	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-30	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-30	8/23/2012	Magnesium, Total	14	1	0.013	NA	mg/L
OW-30	8/23/2012	Manganese, Total	0.018	0.002	0.00026	2017000	mg/L
OW-30	8/23/2012	Sodium, Total	370	5	0.22	NA	mg/L
OW-30	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-30	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-30	8/23/2012	Uranium, Total	0.056	0.0025	0.00003	30000	mg/L
OW-30	8/23/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	3/19/2013	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-30	3/19/2013	Arsenic, Total	ND	0.0025	0.00042	10000	mg/L
OW-30	3/19/2013	Barium, Total	0.078	0.002	0.00039	2000000	mg/L
OW-30	3/19/2013	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-30	3/19/2013	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-30	3/19/2013	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	3/19/2013	Iron, Total	0.052	0.02	0.013	13822000	mg/L
OW-30	3/19/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	3/19/2013	Manganese, Total	0.02	0.002	0.00026	2017000	mg/L
OW-30	3/19/2013	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-30	3/19/2013	Selenium, Total	ND	0.0025	0.00066	50000	mg/L
OW-30	3/19/2013	Uranium, Total	0.057	0.0025	0.0012	30000	mg/L
OW-30	3/19/2013	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-30	6/17/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	6/17/2013	Arsenic, Total	0.0019	0.001	0.000098	10000	mg/L
OW-30	6/17/2013	Barium, Total	0.078	0.002	0.00095	2000000	mg/L
OW-30	6/17/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	6/17/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	6/17/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	6/17/2013	Iron, Total	0.048	0.02	0.0089	13822000	mg/L
OW-30	6/17/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	6/17/2013	Manganese, Total	0.025	0.002	0.00016	2017000	mg/L
OW-30	6/17/2013	Lead, Total	ND	0.005	0.0042	15000	mg/L
OW-30	6/17/2013	Selenium, Total	0.0055	0.001	0.00029	50000	mg/L
OW-30	6/17/2013	Uranium, Total	0.054	0.005	0.000036	30000	mg/L
OW-30	6/17/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-30	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-30	9/4/2013	Barium, Total	0.08	0.002	0.00095	2000000	mg/L
OW-30	9/4/2013	Calcium, Total	56	5	0.34	NA	mg/L
OW-30	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	9/4/2013	Iron, Total	0.04	0.02	0.0089	13822000	mg/L
OW-30	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	9/4/2013	Potassium, Total	ND	1	0.24	NA	mg/L
OW-30	9/4/2013	Magnesium, Total	15	1	0.028	NA	mg/L
OW-30	9/4/2013	Manganese, Total	0.028	0.002	0.00016	2017000	mg/L
OW-30	9/4/2013	Sodium, Total	360	5	1.6	NA	mg/L
OW-30	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-30	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-30	9/4/2013	Uranium, Total	0.059	0.01	0.000073	30000	mg/L
OW-30	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-30	11/11/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-30	11/11/2013	Arsenic, Total	0.0017	0.001	0.000098	10000	mg/L
OW-30	11/11/2013	Barium, Total	0.084	0.002	0.00095	2000000	mg/L
OW-30	11/11/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-30	11/11/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-30	11/11/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-30	11/11/2013	Iron, Total	0.06	0.02	0.0089	13822000	mg/L
OW-30	11/11/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-30	11/11/2013	Manganese, Total	0.031	0.002	0.00016	2017000	mg/L
OW-30	11/11/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
OW-30	11/11/2013	Selenium, Total	0.0046	0.001	0.00029	50000	mg/L
OW-30	11/11/2013	Uranium, Total	0.05	0.005	0.000036	30000	mg/L
OW-30	11/11/2013	Zinc, Total	0.022	0.01	0.00076	5960000	mg/L
OW-30	3/7/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	3/7/2014	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-30	3/7/2014	Barium, Total	0.29	0.002	0.0011	2000000	mg/L
OW-30	3/7/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	3/7/2014	Chromium, Total	0.014	0.006	0.0021	50000	mg/L
OW-30	3/7/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	3/7/2014	Iron, Total	7.2	0.2	0.062	13822000	mg/L
OW-30	3/7/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	3/7/2014	Manganese, Total	0.18	0.002	0.00055	2017000	mg/L
OW-30	3/7/2014	Lead, Total	0.0023	0.001	0.0000075	15000	mg/L
OW-30	3/7/2014	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-30	3/7/2014	Uranium, Total	0.05	0.005	0.000036	30000	mg/L
OW-30	3/7/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/3/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	6/3/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-30	6/3/2014	Barium, Total	0.17	0.002	0.0011	2000000	mg/L
OW-30	6/3/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	6/3/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	6/3/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	6/3/2014	Iron, Total	2.3	0.1	0.031	13822000	mg/L
OW-30	6/3/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	6/3/2014	Manganese, Total	0.082	0.002	0.00055	2017000	mg/L
OW-30	6/3/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-30	6/3/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-30	6/3/2014	Uranium, Total	0.051	0.01	0.0005	30000	mg/L
OW-30	6/3/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
OW-30	9/17/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	9/17/2014	Arsenic, Total	ND	0.005	0.00057	10000	mg/L
OW-30	9/17/2014	Barium, Total	0.086	0.002	0.0011	2000000	mg/L
OW-30	9/17/2014	Calcium, Total	68	1	0.082	NA	mg/L
OW-30	9/17/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	9/17/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	9/17/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	9/17/2014	Iron, Total	0.067	0.02	0.0062	13822000	mg/L
OW-30	9/17/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	9/17/2014	Potassium, Total	1.2	1	0.093	NA	mg/L
OW-30	9/17/2014	Magnesium, Total	15	1	0.018	NA	mg/L
OW-30	9/17/2014	Manganese, Total	0.033	0.002	0.00055	2017000	mg/L
OW-30	9/17/2014	Sodium, Total	390	10	3.9	NA	mg/L
OW-30	9/17/2014	Lead, Total	ND	0.005	0.00029	15000	mg/L
OW-30	9/17/2014	Selenium, Total	ND	0.005	0.00074	50000	mg/L
OW-30	9/17/2014	Uranium, Total	0.049	0.005	0.00025	30000	mg/L
OW-30	9/17/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
OW-30	11/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
OW-30	11/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
OW-30	11/11/2014	Barium, Total	0.086	0.002	0.0011	2000000	mg/L
OW-30	11/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-30	11/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-30	11/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
OW-30	11/11/2014	Iron, Total	0.051	0.02	0.0062	13822000	mg/L
OW-30	11/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-30	11/11/2014	Manganese, Total	0.034	0.002	0.00055	2017000	mg/L
OW-30	11/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
OW-30	11/11/2014	Selenium, Total	ND	0.01	0.0015	50000	mg/L
OW-30	11/11/2014	Uranium, Total	0.05	0.01	0.0005	30000	mg/L
OW-30	11/11/2014	Zinc, Total	0.029	0.01	0.0014	5960000	mg/L
OW-30	3/9/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	3/9/2015	Arsenic, Total	ND	0.01	0.0044	10000	mg/L
OW-30	3/9/2015	Barium, Total	0.09	0.002	0.00073	2000000	mg/L
OW-30	3/9/2015	Cadmium, Total	ND	0.002	0.00056	5000	mg/L
OW-30	3/9/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	3/9/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	3/9/2015	Iron, Total	0.089	0.02	0.0072	13822000	mg/L
OW-30	3/9/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	3/9/2015	Manganese, Total	0.037	0.002	0.0015	2017000	mg/L
OW-30	3/9/2015	Lead, Total	ND	0.001	0.000069	15000	mg/L
OW-30	3/9/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-30	3/9/2015	Uranium, Total	0.056	0.005	0.00004	30000	mg/L
OW-30	3/9/2015	Zinc, Total	ND	0.01	0.0036	5960000	mg/L
OW-30	6/2/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	6/2/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
OW-30	6/2/2015	Barium, Total	0.088	0.002	0.0011	2000000	mg/L
OW-30	6/2/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	6/2/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	6/2/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	6/2/2015	Iron, Total	0.065	0.02	0.0072	13822000	mg/L
OW-30	6/2/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	6/2/2015	Manganese, Total	0.036	0.002	0.0015	2017000	mg/L
OW-30	6/2/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
OW-30	6/2/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
OW-30	6/2/2015	Uranium, Total	0.05	0.005	0.000049	30000	mg/L
OW-30	6/2/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	8/10/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-30	8/10/2015	Barium, Total	0.091	0.002	0.0011	2000000	mg/L
OW-30	8/10/2015	Calcium, Total	67	1	0.057	NA	mg/L
OW-30	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	8/10/2015	Iron, Total	0.073	0.02	0.0072	13822000	mg/L
OW-30	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-30	8/10/2015	Magnesium, Total	16	1	0.039	NA	mg/L
OW-30	8/10/2015	Manganese, Total	0.037	0.002	0.0015	2017000	mg/L
OW-30	8/10/2015	Sodium, Total	350	5	0.36	NA	mg/L
OW-30	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-30	8/10/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-30	8/10/2015	Uranium, Total	0.048	0.0025	0.000025	30000	mg/L
OW-30	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	10/27/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	10/27/2015	Arsenic, Total	ND	0.005	0.0015	10000	mg/L
OW-30	10/27/2015	Barium, Total	0.097	0.002	0.0011	2000000	mg/L
OW-30	10/27/2015	Calcium, Total	77	1	0.057	NA	mg/L
OW-30	10/27/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	10/27/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	10/27/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	10/27/2015	Iron, Total	0.12	0.02	0.0072	13822000	mg/L
OW-30	10/27/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-30	10/27/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-30	10/27/2015	Magnesium, Total	17	1	0.039	NA	mg/L
OW-30	10/27/2015	Manganese, Total	0.041	0.002	0.0015	2017000	mg/L
OW-30	10/27/2015	Sodium, Total	390	5	0.36	NA	mg/L
OW-30	10/27/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-30	10/27/2015	Selenium, Total	ND	0.005	0.00062	50000	mg/L
OW-30	10/27/2015	Uranium, Total	0.047	0.0025	0.000025	30000	mg/L
OW-30	10/27/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	3/8/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-30	3/8/2016	Arsenic, Total	ND	0.005	0.00032	10000	mg/L
OW-30	3/8/2016	Barium, Total	0.091	0.002	0.0013	2000000	mg/L
OW-30	3/8/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-30	3/8/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	3/8/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
OW-30	3/8/2016	Iron, Total	0.061	0.02	0.0091	13822000	mg/L
OW-30	3/8/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-30	3/8/2016	Manganese, Total	0.037	0.002	0.00032	2017000	mg/L
OW-30	3/8/2016	Lead, Total	ND	0.0005	0.000026	15000	mg/L
OW-30	3/8/2016	Selenium, Total	ND	0.005	0.00097	50000	mg/L
OW-30	3/8/2016	Uranium, Total	0.049	0.0025	0.000024	30000	mg/L
OW-30	3/8/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-30	6/6/2016	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-30	6/6/2016	Arsenic, Total	0.0042	0.005	0.0015	10000	mg/L
OW-30	6/6/2016	Barium, Total	0.11	0.002	0.0011	2000000	mg/L
OW-30	6/6/2016	Calcium, Total	74	1	0.26	NA	mg/L
OW-30	6/6/2016	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-30	6/6/2016	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-30	6/6/2016	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-30	6/6/2016	Iron, Total	0.11	0.02	0.0072	13822000	mg/L
OW-30	6/6/2016	Mercury, Total	0.000062	0.0002	0.000053	2000	mg/L
OW-30	6/6/2016	Potassium, Total	0.46	1	0.18	NA	mg/L
OW-30	6/6/2016	Magnesium, Total	17	1	0.013	NA	mg/L
OW-30	6/6/2016	Manganese, Total	0.045	0.002	0.0015	2017000	mg/L
OW-30	6/6/2016	Sodium, Total	370	5	0.48	NA	mg/L
OW-30	6/6/2016	Lead, Total	0.0003	0.0005	0.000047	15000	mg/L
OW-30	6/6/2016	Selenium, Total	0.009	0.005	0.00062	50000	mg/L
OW-30	6/6/2016	Uranium, Total	0.046	0.0025	0.000025	30000	mg/L
OW-30	6/6/2016	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-30	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	8/31/2016	Arsenic, Total	ND	0.01	0.0021	10000	mg/L
OW-30	8/31/2016	Barium, Total	0.096	0.002	0.00079	2000000	mg/L
OW-30	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-30	8/31/2016	Arsenic, Dissolved	0.0031	0.005	0.00069	10000	mg/L
OW-30	8/31/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
OW-30	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-30	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-30	8/31/2016	Iron, Dissolved	0.071	0.02	0.02	13821880	mg/L
OW-30	8/31/2016	Manganese, Dissolved	0.038	0.002	0.00032	2017400	mg/L
OW-30	8/31/2016	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-30	8/31/2016	Selenium, Dissolved	0.0075	0.02	0.0042	50000	mg/L
OW-30	8/31/2016	Uranium, Dissolved	0.046	0.0025	0.00026	NA	mg/L
OW-30	8/31/2016	Zinc, Dissolved	0.044	0.01	0.0028	5960450	mg/L
OW-30	8/31/2016	Iron, Total	0.071	0.02	0.02	13822000	mg/L
OW-30	8/31/2016	Manganese, Total	0.035	0.002	0.00027	2017000	mg/L
OW-30	8/31/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
OW-30	8/31/2016	Selenium, Total	0.0067	0.01	0.0019	50000	mg/L
OW-30	8/31/2016	Uranium, Total	0.048	0.0025	0.00087	30000	mg/L
OW-30	8/31/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	11/14/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	11/14/2016	Arsenic, Total	0.0038	0.005	0.0011	10000	mg/L
OW-30	11/14/2016	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
OW-30	11/14/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	11/14/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-30	11/14/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	11/14/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-30	11/14/2016	Arsenic, Dissolved	0.0032	0.005	0.00069	10000	mg/L
OW-30	11/14/2016	Barium, Dissolved	0.1	0.002	0.0013	2000000	mg/L
OW-30	11/14/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-30	11/14/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-30	11/14/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-30	11/14/2016	Iron, Dissolved	0.087	0.02	0.02	13821880	mg/L
OW-30	11/14/2016	Manganese, Dissolved	0.031	0.002	0.00032	2017400	mg/L
OW-30	11/14/2016	Lead, Dissolved	0.00028	0.0005	0.00017	NA	mg/L
OW-30	11/14/2016	Selenium, Dissolved	0.0094	0.02	0.0042	50000	mg/L
OW-30	11/14/2016	Uranium, Dissolved	0.044	0.0025	0.00026	NA	mg/L
OW-30	11/14/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-30	11/14/2016	Iron, Total	0.095	0.02	0.02	13822000	mg/L
OW-30	11/14/2016	Mercury, Total	0.000088	0.0002	0.000053	2000	mg/L
OW-30	11/14/2016	Manganese, Total	0.038	0.002	0.00027	2017000	mg/L
OW-30	11/14/2016	Lead, Total	0.00028	0.0005	0.000081	15000	mg/L
OW-30	11/14/2016	Selenium, Total	0.0061	0.02	0.0037	50000	mg/L
OW-30	11/14/2016	Uranium, Total	0.046	0.0025	0.00087	30000	mg/L
OW-30	11/14/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	2/27/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-30	2/27/2017	Arsenic, Total	0.0025	0.005	0.0011	10000	mg/L
OW-30	2/27/2017	Barium, Total	0.11	0.002	0.00079	2000000	mg/L
OW-30	2/27/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-30	2/27/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-30	2/27/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-30	2/27/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-30	2/27/2017	Arsenic, Dissolved	0.0018	0.01	0.0014	10000	mg/L
OW-30	2/27/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	2/27/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	2/27/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-30	2/27/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	2/27/2017	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
OW-30	2/27/2017	Manganese, Dissolved	0.044	0.002	0.00038	2017400	mg/L
OW-30	2/27/2017	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-30	2/27/2017	Selenium, Dissolved	0.0072	0.01	0.0021	50000	mg/L
OW-30	2/27/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-30	2/27/2017	Iron, Total	0.098	0.02	0.02	13822000	mg/L
OW-30	2/27/2017	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-30	2/27/2017	Manganese, Total	0.045	0.002	0.00027	2017000	mg/L
OW-30	2/27/2017	Lead, Total	0.00082	0.0005	0.000081	15000	mg/L
OW-30	2/27/2017	Selenium, Total	0.007	0.005	0.00094	50000	mg/L
OW-30	2/27/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-30	5/31/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-30	5/31/2017	Arsenic, Total	ND	0.005	0.0015	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	5/31/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-30	5/31/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	5/31/2017	Chromium, Total	ND	0.006	0.0011	50000	mg/L
OW-30	5/31/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-30	5/31/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-30	5/31/2017	Arsenic, Dissolved	0.0019	0.005	0.00089	10000	mg/L
OW-30	5/31/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	5/31/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	5/31/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-30	5/31/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	5/31/2017	Iron, Dissolved	0.068	0.02	0.016	13821880	mg/L
OW-30	5/31/2017	Manganese, Dissolved	0.045	0.002	0.00038	2017400	mg/L
OW-30	5/31/2017	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
OW-30	5/31/2017	Selenium, Dissolved	0.0041	0.005	0.0019	50000	mg/L
OW-30	5/31/2017	Zinc, Dissolved	0.023	0.01	0.0011	5960450	mg/L
OW-30	5/31/2017	Iron, Total	0.088	0.02	0.01	13822000	mg/L
OW-30	5/31/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	5/31/2017	Manganese, Total	0.047	0.002	0.0011	2017000	mg/L
OW-30	5/31/2017	Lead, Total	0.00031	0.0005	0.000095	15000	mg/L
OW-30	5/31/2017	Selenium, Total	ND	0.005	0.0036	50000	mg/L
OW-30	5/31/2017	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
OW-30	9/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	9/6/2017	Arsenic, Total	0.0036	0.005	0.0015	10000	mg/L
OW-30	9/6/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-30	9/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	9/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	9/6/2017	Copper, Total	0.004	0.006	0.0017	790000	mg/L
OW-30	9/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	9/6/2017	Arsenic, Dissolved	0.003	0.005	0.00089	10000	mg/L
OW-30	9/6/2017	Barium, Dissolved	0.11	0.002	0.00085	2000000	mg/L
OW-30	9/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	9/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	9/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	9/6/2017	Iron, Dissolved	0.067	0.02	0.016	13821880	mg/L
OW-30	9/6/2017	Manganese, Dissolved	0.044	0.002	0.00039	2017400	mg/L
OW-30	9/6/2017	Lead, Dissolved	0.00035	0.0005	0.00017	NA	mg/L
OW-30	9/6/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-30	9/6/2017	Uranium, Dissolved	0.042	0.0025	0.00025	NA	mg/L
OW-30	9/6/2017	Zinc, Dissolved	0.023	0.01	0.0021	5960450	mg/L
OW-30	9/6/2017	Iron, Total	0.072	0.02	0.01	13822000	mg/L
OW-30	9/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	9/6/2017	Manganese, Total	0.045	0.002	0.0011	2017000	mg/L
OW-30	9/6/2017	Lead, Total	0.00036	0.0005	0.000095	15000	mg/L
OW-30	9/6/2017	Selenium, Total	0.0089	0.005	0.0036	50000	mg/L
OW-30	9/6/2017	Uranium, Total	0.043	0.0025	0.00077	30000	mg/L
OW-30	9/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	12/12/2017	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
OW-30	12/12/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-30	12/12/2017	Barium, Total	0.11	0.002	0.001	2000000	mg/L
OW-30	12/12/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	12/12/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	12/12/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	12/12/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	12/12/2017	Arsenic, Dissolved	0.005	0.005	0.0021	10000	mg/L
OW-30	12/12/2017	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
OW-30	12/12/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	12/12/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	12/12/2017	Copper, Dissolved	0.0037	0.006	0.0032	790000	mg/L
OW-30	12/12/2017	Iron, Dissolved	0.058	0.02	0.016	13821880	mg/L
OW-30	12/12/2017	Manganese, Dissolved	0.035	0.002	0.00039	2017400	mg/L
OW-30	12/12/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-30	12/12/2017	Selenium, Dissolved	ND	0.02	0.015	50000	mg/L
OW-30	12/12/2017	Uranium, Dissolved	0.04	0.0025	0.00048	NA	mg/L
OW-30	12/12/2017	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
OW-30	12/12/2017	Iron, Total	0.063	0.02	0.01	13822000	mg/L
OW-30	12/12/2017	Mercury, Total	0.000056	0.0002	0.000037	2000	mg/L
OW-30	12/12/2017	Manganese, Total	0.036	0.002	0.0011	2017000	mg/L
OW-30	12/12/2017	Lead, Total	0.00042	0.0005	0.00023	15000	mg/L
OW-30	12/12/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	12/12/2017	Uranium, Total	0.041	0.005	0.0015	30000	mg/L
OW-30	12/12/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	2/28/2018	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
OW-30	2/28/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
OW-30	2/28/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-30	2/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	2/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	2/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	2/28/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	2/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-30	2/28/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	2/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	2/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	2/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	2/28/2018	Iron, Dissolved	0.064	0.02	0.016	13821880	mg/L
OW-30	2/28/2018	Manganese, Dissolved	0.04	0.002	0.00039	2017400	mg/L
OW-30	2/28/2018	Lead, Dissolved	0.0003	0.0005	0.00017	NA	mg/L
OW-30	2/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-30	2/28/2018	Uranium, Dissolved	0.035	0.0025	0.00048	NA	mg/L
OW-30	2/28/2018	Zinc, Dissolved	0.0066	0.01	0.0021	5960450	mg/L
OW-30	2/28/2018	Iron, Total	0.071	0.02	0.01	13822000	mg/L
OW-30	2/28/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	2/28/2018	Manganese, Total	0.042	0.002	0.0011	2017000	mg/L
OW-30	2/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-30	2/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-30	2/28/2018	Uranium, Total	0.04	0.0025	0.00034	30000	mg/L
OW-30	2/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	5/16/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	5/16/2018	Arsenic, Total	0.0012	0.001	0.00041	10000	mg/L
OW-30	5/16/2018	Barium, Total	0.11	0.002	0.001	2000000	mg/L
OW-30	5/16/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	5/16/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	5/16/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	5/16/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	5/16/2018	Arsenic, Dissolved	0.0046	0.001	0.00042	10000	mg/L
OW-30	5/16/2018	Barium, Dissolved	0.11	0.002	0.00099	2000000	mg/L
OW-30	5/16/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	5/16/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	5/16/2018	Copper, Dissolved	0.0064	0.006	0.0032	790000	mg/L
OW-30	5/16/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
OW-30	5/16/2018	Manganese, Dissolved	0.052	0.002	0.00039	2017400	mg/L
OW-30	5/16/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-30	5/16/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-30	5/16/2018	Uranium, Dissolved	0.037	0.0025	0.00048	NA	mg/L
OW-30	5/16/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-30	5/16/2018	Iron, Total	0.071	0.02	0.01	13822000	mg/L
OW-30	5/16/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-30	5/16/2018	Manganese, Total	0.053	0.002	0.0011	2017000	mg/L
OW-30	5/16/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-30	5/16/2018	Selenium, Total	0.0033	0.001	0.00098	50000	mg/L
OW-30	5/16/2018	Uranium, Total	0.042	0.0025	0.00034	30000	mg/L
OW-30	5/16/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	9/19/2018	Silver, Total	0.0015	0.005	0.0012	50000	mg/L
OW-30	9/19/2018	Arsenic, Total	0.0013	0.001	0.00041	10000	mg/L
OW-30	9/19/2018	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-30	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	9/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	9/19/2018	Arsenic, Dissolved	0.001	0.001	0.00042	10000	mg/L
OW-30	9/19/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	9/19/2018	Copper, Dissolved	0.0067	0.006	0.0032	790000	mg/L
OW-30	9/19/2018	Iron, Dissolved	0.06	0.02	0.016	13821880	mg/L
OW-30	9/19/2018	Manganese, Dissolved	0.051	0.002	0.00039	2017400	mg/L
OW-30	9/19/2018	Lead, Dissolved	0.00044	0.0005	0.00017	NA	mg/L
OW-30	9/19/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-30	9/19/2018	Uranium, Dissolved	0.041	0.0025	0.00048	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	9/19/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
OW-30	9/19/2018	Iron, Total	0.067	0.02	0.01	13822000	mg/L
OW-30	9/19/2018	Mercury, Total	0.000058	0.0002	0.000038	2000	mg/L
OW-30	9/19/2018	Manganese, Total	0.054	0.002	0.0011	2017000	mg/L
OW-30	9/19/2018	Lead, Total	0.00043	0.0005	0.00023	15000	mg/L
OW-30	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-30	9/19/2018	Uranium, Total	0.034	0.0025	0.00034	30000	mg/L
OW-30	9/19/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-30	12/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-30	12/3/2018	Arsenic, Total	0.0011	0.001	0.00041	10000	mg/L
OW-30	12/3/2018	Barium, Total	0.13	0.002	0.001	2000000	mg/L
OW-30	12/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-30	12/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-30	12/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-30	12/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-30	12/3/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-30	12/3/2018	Barium, Dissolved	0.12	0.002	0.00099	2000000	mg/L
OW-30	12/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-30	12/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-30	12/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-30	12/3/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
OW-30	12/3/2018	Manganese, Dissolved	0.053	0.002	0.00039	2017400	mg/L
OW-30	12/3/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-30	12/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-30	12/3/2018	Zinc, Dissolved	0.034	0.01	0.0021	5960450	mg/L
OW-30	12/3/2018	Iron, Total	0.1	0.02	0.01	13822000	mg/L
OW-30	12/3/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-30	12/3/2018	Manganese, Total	0.057	0.002	0.0011	2017000	mg/L
OW-30	12/3/2018	Lead, Total	0.0005	0.0005	0.00023	15000	mg/L
OW-30	12/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-30	12/3/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-50	10/15/2019	Aluminum, Dissolved	0.0057	0.02	0.002488	19913930	mg/L
OW-50	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	10/15/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-50	10/15/2019	Barium, Dissolved	0.052	0.002	0.000648	2000000	mg/L
OW-50	10/15/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
OW-50	10/15/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	10/15/2019	Calcium, Dissolved	29	1	0.061889	NA	mg/L
OW-50	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	10/15/2019	Copper, Dissolved	0.0013	0.006	0.001296	790000	mg/L
OW-50	10/15/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-50	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	10/15/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	10/15/2019	Manganese, Dissolved	0.12	0.002	0.00029	2017400	mg/L
OW-50	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	10/15/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
OW-50	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	10/15/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-50	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	10/15/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
OW-50	10/15/2019	Aluminum, Total	0.15	0.02	0.002488	19914000	mg/L
OW-50	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	10/15/2019	Arsenic, Total	0.0026	0.001	0.000312	10000	mg/L
OW-50	10/15/2019	Barium, Total	0.054	0.002	0.000648	2000000	mg/L
OW-50	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	10/15/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-50	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	10/15/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-50	10/15/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-50	10/15/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	3/27/2019	Aluminum, Dissolved	0.0027	0.02	0.002488	19913930	mg/L
OW-50	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	3/27/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-50	3/27/2019	Barium, Dissolved	0.054	0.002	0.000648	2000000	mg/L
OW-50	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	3/27/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	3/27/2019	Calcium, Dissolved	28	1	0.061889	NA	mg/L
OW-50	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-50	3/27/2019	Iron, Dissolved	0.0089	0.02	0.008747	13821880	mg/L
OW-50	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	3/27/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	3/27/2019	Manganese, Dissolved	0.12	0.002	0.00029	2017400	mg/L
OW-50	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	3/27/2019	Potassium, Dissolved	0.5	1	0.162288	NA	mg/L
OW-50	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	3/27/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-50	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	3/27/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-50	3/27/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-50	3/27/2019	Aluminum, Total	1.4	0.1	0.022822	19914000	mg/L
OW-50	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-50	3/27/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
OW-50	3/27/2019	Barium, Total	0.064	0.002	0.000488	2000000	mg/L
OW-50	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-50	3/27/2019	Boron, Total	0.35	0.04	0.001821	3949	mg/L
OW-50	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	3/27/2019	Chromium, Total	0.0022	0.006	0.0012	50000	mg/L
OW-50	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-50	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	3/27/2019	Iron, Total	0.48	0.02	0.006053	13822000	mg/L
OW-50	3/27/2019	Lead, Total	0.00031	0.0005	0.000026	15000	mg/L
OW-50	3/27/2019	Manganese, Total	0.12	0.002	0.00006	2017000	mg/L
OW-50	3/27/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-50	3/27/2019	Molybdenum, Total	0.0055	0.008	0.002075	98700	mg/L
OW-50	3/27/2019	Nickel, Total	ND	0.01	0.001491	372000	mg/L
OW-50	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	3/27/2019	Thallium, Total	0.000064	0.0005	0.000052	2000	mg/L
OW-50	3/27/2019	Uranium, Total	0.011	0.0005	0.000085	30000	mg/L
OW-50	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	8/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-50	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	8/16/2019	Arsenic, Dissolved	0.0021	0.001	0.000101	10000	mg/L
OW-50	8/16/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
OW-50	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-50	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	8/16/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
OW-50	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	8/16/2019	Copper, Dissolved	0.0017	0.006	0.001296	790000	mg/L
OW-50	8/16/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
OW-50	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	8/16/2019	Magnesium, Dissolved	4.6	1	0.05029	NA	mg/L
OW-50	8/16/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	8/16/2019	Potassium, Dissolved	0.41	1	0.162288	NA	mg/L
OW-50	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	8/16/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-50	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	8/16/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	8/16/2019	Zinc, Dissolved	0.011	0.01	0.002252	5960450	mg/L
OW-50	8/16/2019	Aluminum, Total	0.13	0.02	0.002488	19914000	mg/L
OW-50	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	8/16/2019	Arsenic, Total	0.0023	0.001	0.000312	10000	mg/L
OW-50	8/16/2019	Barium, Total	0.051	0.002	0.000648	2000000	mg/L
OW-50	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-50	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	8/16/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-50	8/16/2019	Lead, Total	0.000062	0.0005	0.000055	15000	mg/L
OW-50	8/16/2019	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	8/16/2019	Mercury, Total	0.000083	0.0002	0.000038	2000	mg/L
OW-50	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-50	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	8/16/2019	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	8/16/2019	Zinc, Total	0.0061	0.01	0.005772	5960000	mg/L
OW-50	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-50	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-50	12/9/2020	Arsenic, Dissolved	1.8	1	0.286	10	ug/L
OW-50	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-50	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-50	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-50	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-50	12/9/2020	Uranium, Dissolved	12.1	5	1.12	NA	ug/L
OW-50	12/9/2020	Arsenic, Total Recoverable	1.78	1	0.286	10	ug/L
OW-50	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-50	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-50	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-50	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-50	12/9/2020	Uranium, Total Recoverable	13	5	1.12	30	ug/L
OW-50	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-50	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-50	12/9/2020	Boron, Dissolved	0.392	0.2	0.0527	3949110	mg/L
OW-50	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-50	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-50	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-50	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-50	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-50	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-50	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-50	12/9/2020	Manganese, Dissolved	0.12	0.015	0.00141	2017400	mg/L
OW-50	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-50	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-50	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-50	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-50	12/9/2020	Aluminum, Total	1.25	0.2	0.051	19914000	mg/L
OW-50	12/9/2020	Boron, Total	0.353	0.1	0.022	3949	mg/L
OW-50	12/9/2020	Barium, Total	0.0914	0.01	0.003	2000000	mg/L
OW-50	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-50	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-50	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-50	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-50	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-50	12/9/2020	Iron, Total	0.502	0.2	0.075	13822000	mg/L
OW-50	12/9/2020	Manganese, Total	0.134	0.01	0.003	2017000	mg/L
OW-50	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-50	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-50	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-50	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/17/2020	Arsenic, Dissolved	0.0019	0.001	0.00021	10000	mg/L
OW-50	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-50	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-50	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-50	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-50	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-50	9/17/2020	Boron, Dissolved	0.35	0.04	0.0067	3949110	mg/L
OW-50	9/17/2020	Calcium, Dissolved	27	1	0.11	NA	mg/L
OW-50	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-50	9/17/2020	Iron, Dissolved	0.014	0.02	0.01	13821880	mg/L
OW-50	9/17/2020	Magnesium, Dissolved	4.6	1	0.067	NA	mg/L
OW-50	9/17/2020	Manganese, Dissolved	0.11	0.002	0.00058	2017400	mg/L
OW-50	9/17/2020	Potassium, Dissolved	0.52	1	0.16	NA	mg/L
OW-50	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-50	9/17/2020	Sodium, Dissolved	230	10	1.4	NA	mg/L
OW-50	9/17/2020	Barium, Dissolved	0.049	0.002	0.0011	2000000	mg/L
OW-50	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-50	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-50	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-50	9/17/2020	Molybdenum, Dissolved	0.0062	0.008	0.0056	98700	mg/L
OW-50	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-50	9/17/2020	Zinc, Dissolved	0.016	0.01	0.006	5960450	mg/L
OW-50	9/17/2020	Mercury, Total	0.00015	0.0002	0.00012	2000	mg/L
OW-50	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-50	9/17/2020	Arsenic, Total	0.0027	0.001	0.00026	10000	mg/L
OW-50	9/17/2020	Lead, Total	0.00092	0.0005	0.000034	15000	mg/L
OW-50	9/17/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-50	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-50	9/17/2020	Uranium, Total	0.017	0.0005	0.000065	30000	mg/L
OW-50	9/17/2020	Aluminum, Total	2.1	0.1	0.037	19914000	mg/L
OW-50	9/17/2020	Barium, Total	0.13	0.015	0.0082	2000000	mg/L
OW-50	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-50	9/17/2020	Boron, Total	0.35	0.2	0.037	3949	mg/L
OW-50	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-50	9/17/2020	Chromium, Total	0.028	0.03	0.011	50000	mg/L
OW-50	9/17/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-50	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-50	9/17/2020	Iron, Total	0.82	0.25	0.064	13822000	mg/L
OW-50	9/17/2020	Manganese, Total	0.17	0.01	0.0041	2017000	mg/L
OW-50	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-50	9/17/2020	Nickel, Total	0.028	0.05	0.016	372000	mg/L
OW-50	9/17/2020	Silver, Total	0.024	0.025	0.0063	50000	mg/L
OW-50	9/17/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-50	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-50	3/2/2020	Arsenic, Dissolved	0.0019	0.001	0.0001	10000	mg/L
OW-50	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-50	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	3/2/2020	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-50	3/2/2020	Barium, Dissolved	0.046	0.002	0.00065	2000000	mg/L
OW-50	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-50	3/2/2020	Boron, Dissolved	0.3	0.04	0.0045	3949110	mg/L
OW-50	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-50	3/2/2020	Calcium, Dissolved	26	1	0.062	NA	mg/L
OW-50	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-50	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-50	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-50	3/2/2020	Iron, Dissolved	ND	0.02	0.0087	13821880	mg/L
OW-50	3/2/2020	Magnesium, Dissolved	4.6	1	0.05	NA	mg/L
OW-50	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-50	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-50	3/2/2020	Potassium, Dissolved	0.46	1	0.16	NA	mg/L
OW-50	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-50	3/2/2020	Zinc, Dissolved	0.012	0.01	0.0023	5960450	mg/L
OW-50	3/2/2020	Sodium, Dissolved	270	5	2.1	NA	mg/L
OW-50	3/2/2020	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-50	3/2/2020	Arsenic, Total	0.002	0.001	0.00031	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/2/2020	Lead, Total	0.000096	0.0005	0.000055	15000	mg/L
OW-50	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-50	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	3/2/2020	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-50	3/2/2020	Aluminum, Total	0.18	0.02	0.0025	19914000	mg/L
OW-50	3/2/2020	Barium, Total	0.055	0.002	0.00065	2000000	mg/L
OW-50	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-50	3/2/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-50	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-50	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-50	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-50	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	3/2/2020	Iron, Total	0.06	0.02	0.0087	13822000	mg/L
OW-50	3/2/2020	Manganese, Total	0.11	0.002	0.00029	2017000	mg/L
OW-50	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-50	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-50	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-50	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-50	5/1/2019	Aluminum, Dissolved	0.024	0.02	0.002488	19913930	mg/L
OW-50	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-50	5/1/2019	Arsenic, Dissolved	0.0018	0.001	0.000101	10000	mg/L
OW-50	5/1/2019	Barium, Dissolved	0.051	0.002	0.000648	2000000	mg/L
OW-50	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-50	5/1/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-50	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-50	5/1/2019	Calcium, Dissolved	27	1	0.061889	NA	mg/L
OW-50	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-50	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-50	5/1/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-50	5/1/2019	Iron, Dissolved	0.017	0.02	0.008747	13821880	mg/L
OW-50	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-50	5/1/2019	Magnesium, Dissolved	4.5	1	0.05029	NA	mg/L
OW-50	5/1/2019	Manganese, Dissolved	0.11	0.002	0.00029	2017400	mg/L
OW-50	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-50	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-50	5/1/2019	Potassium, Dissolved	0.52	1	0.162288	NA	mg/L
OW-50	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-50	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-50	5/1/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-50	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-50	5/1/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-50	5/1/2019	Zinc, Dissolved	0.056	0.01	0.002252	5960450	mg/L
OW-50	5/1/2019	Aluminum, Total	1.9	0.1	0.012441	19914000	mg/L
OW-50	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-50	5/1/2019	Arsenic, Total	0.0019	0.001	0.000312	10000	mg/L
OW-50	5/1/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-50	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-50	5/1/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-50	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-50	5/1/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-50	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-50	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-50	5/1/2019	Iron, Total	0.64	0.02	0.008747	13822000	mg/L
OW-50	5/1/2019	Lead, Total	0.00055	0.0005	0.000055	15000	mg/L
OW-50	5/1/2019	Manganese, Total	0.12	0.002	0.00029	2017000	mg/L
OW-50	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-50	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-50	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-50	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-50	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-50	5/1/2019	Uranium, Total	0.012	0.0005	0.000085	30000	mg/L
OW-50	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-50	3/22/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-50	3/22/2012	Arsenic, Total	0.0019	0.001	0.00011	10000	mg/L
OW-50	3/22/2012	Barium, Total	0.041	0.002	0.00031	2000000	mg/L
OW-50	3/22/2012	Calcium, Total	22	1	0.026	NA	mg/L
OW-50	3/22/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	3/22/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-50	3/22/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-50	3/22/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-50	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	3/22/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	3/22/2012	Magnesium, Total	3.8	1	0.013	NA	mg/L
OW-50	3/22/2012	Manganese, Total	0.082	0.002	0.00062	2017000	mg/L
OW-50	3/22/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-50	3/22/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-50	3/22/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-50	3/22/2012	Uranium, Total	0.0076	0.001	0.00006	30000	mg/L
OW-50	3/22/2012	Zinc, Total	0.039	0.01	0.00062	5960000	mg/L
OW-50	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-50	6/13/2012	Arsenic, Total	0.0019	0.001	0.00011	10000	mg/L
OW-50	6/13/2012	Barium, Total	0.041	0.002	0.00031	2000000	mg/L
OW-50	6/13/2012	Calcium, Total	21	1	0.026	NA	mg/L
OW-50	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-50	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-50	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-50	6/13/2012	Iron, Total	ND	0.02	0.0019	13822000	mg/L
OW-50	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	6/13/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	6/13/2012	Magnesium, Total	3.6	1	0.013	NA	mg/L
OW-50	6/13/2012	Manganese, Total	0.081	0.002	0.00062	2017000	mg/L
OW-50	6/13/2012	Sodium, Total	240	5	0.22	NA	mg/L
OW-50	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-50	6/13/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-50	6/13/2012	Uranium, Total	0.0085	0.001	0.00006	30000	mg/L
OW-50	6/13/2012	Zinc, Total	0.012	0.01	0.00062	5960000	mg/L
OW-50	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-50	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-50	8/23/2012	Barium, Total	0.043	0.002	0.00039	2000000	mg/L
OW-50	8/23/2012	Calcium, Total	22	1	0.026	NA	mg/L
OW-50	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-50	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-50	8/23/2012	Copper, Total	0.0086	0.006	0.0041	790000	mg/L
OW-50	8/23/2012	Iron, Total	0.071	0.02	0.013	13822000	mg/L
OW-50	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	8/23/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	8/23/2012	Magnesium, Total	3.7	1	0.013	NA	mg/L
OW-50	8/23/2012	Manganese, Total	0.058	0.002	0.00026	2017000	mg/L
OW-50	8/23/2012	Sodium, Total	230	5	0.22	NA	mg/L
OW-50	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-50	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-50	8/23/2012	Uranium, Total	0.008	0.0025	0.00003	30000	mg/L
OW-50	8/23/2012	Zinc, Total	0.011	0.01	0.0011	5960000	mg/L
OW-50	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-50	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-50	11/27/2012	Barium, Total	0.12	0.002	0.00039	2000000	mg/L
OW-50	11/27/2012	Calcium, Total	21	1	0.026	NA	mg/L
OW-50	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-50	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-50	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	11/27/2012	Iron, Total	1.3	0.1	0.066	13822000	mg/L
OW-50	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-50	11/27/2012	Potassium, Total	ND	1	0.48	NA	mg/L
OW-50	11/27/2012	Magnesium, Total	3.9	1	0.013	NA	mg/L
OW-50	11/27/2012	Manganese, Total	0.12	0.002	0.00026	2017000	mg/L
OW-50	11/27/2012	Sodium, Total	220	5	0.22	NA	mg/L
OW-50	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-50	11/27/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-50	11/27/2012	Uranium, Total	0.0096	0.0025	0.00003	30000	mg/L
OW-50	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-50	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-50	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-50	9/4/2013	Barium, Total	0.042	0.002	0.00095	2000000	mg/L
OW-50	9/4/2013	Calcium, Total	22	1	0.069	NA	mg/L
OW-50	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-50	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-50	9/4/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
OW-50	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-50	9/4/2013	Potassium, Total	1.4	1	0.24	NA	mg/L
OW-50	9/4/2013	Magnesium, Total	3.5	1	0.028	NA	mg/L
OW-50	9/4/2013	Manganese, Total	0.1	0.002	0.00016	2017000	mg/L
OW-50	9/4/2013	Sodium, Total	220	5	1.6	NA	mg/L
OW-50	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-50	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-50	9/4/2013	Uranium, Total	ND	0.01	0.000073	30000	mg/L
OW-50	9/4/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
OW-50	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-50	9/15/2014	Arsenic, Total	0.0019	0.001	0.00036	10000	mg/L
OW-50	9/15/2014	Barium, Total	0.075	0.002	0.0005	2000000	mg/L
OW-50	9/15/2014	Calcium, Total	24	1	0.082	NA	mg/L
OW-50	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-50	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-50	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-50	9/15/2014	Iron, Total	0.6	0.02	0.0072	13822000	mg/L
OW-50	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-50	9/15/2014	Potassium, Total	1.1	1	0.093	NA	mg/L
OW-50	9/15/2014	Magnesium, Total	3.9	1	0.018	NA	mg/L
OW-50	9/15/2014	Manganese, Total	0.11	0.002	0.00049	2017000	mg/L
OW-50	9/15/2014	Sodium, Total	240	10	3.9	NA	mg/L
OW-50	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-50	9/15/2014	Selenium, Total	0.001	0.001	0.00051	50000	mg/L
OW-50	9/15/2014	Uranium, Total	0.01	0.001	0.0000072	30000	mg/L
OW-50	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-50	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
OW-50	8/10/2015	Arsenic, Total	0.0019	0.001	0.00029	10000	mg/L
OW-50	8/10/2015	Barium, Total	0.14	0.002	0.0011	2000000	mg/L
OW-50	8/10/2015	Calcium, Total	24	1	0.057	NA	mg/L
OW-50	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-50	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-50	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-50	8/10/2015	Iron, Total	0.68	0.02	0.0072	13822000	mg/L
OW-50	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-50	8/10/2015	Potassium, Total	ND	1	0.18	NA	mg/L
OW-50	8/10/2015	Magnesium, Total	4.2	1	0.039	NA	mg/L
OW-50	8/10/2015	Manganese, Total	0.14	0.002	0.0015	2017000	mg/L
OW-50	8/10/2015	Sodium, Total	210	5	0.36	NA	mg/L
OW-50	8/10/2015	Lead, Total	0.0024	0.0005	0.000047	15000	mg/L
OW-50	8/10/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-50	8/10/2015	Uranium, Total	0.011	0.0005	0.0000049	30000	mg/L
OW-50	8/10/2015	Zinc, Total	0.017	0.01	0.0039	5960000	mg/L
OW-50	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-50	9/9/2016	Arsenic, Total	0.0021	0.001	0.00021	10000	mg/L
OW-50	9/9/2016	Barium, Total	0.087	0.002	0.00079	2000000	mg/L
OW-50	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-50	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-50	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-50	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-50	9/9/2016	Arsenic, Dissolved	0.0023	0.001	0.00014	10000	mg/L
OW-50	9/9/2016	Barium, Dissolved	0.055	0.002	0.0013	2000000	mg/L
OW-50	9/9/2016	Calcium, Dissolved	27	1	0.5	NA	mg/L
OW-50	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-50	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-50	9/9/2016	Copper, Dissolved	0.016	0.006	0.004	790000	mg/L
OW-50	9/9/2016	Iron, Dissolved	0.059	0.02	0.02	13821880	mg/L
OW-50	9/9/2016	Potassium, Dissolved	0.62	1	0.5	NA	mg/L
OW-50	9/9/2016	Magnesium, Dissolved	4.5	1	0.5	NA	mg/L
OW-50	9/9/2016	Manganese, Dissolved	0.11	0.002	0.00032	2017400	mg/L
OW-50	9/9/2016	Sodium, Dissolved	260	5	2.5	NA	mg/L
OW-50	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/9/2016	Selenium, Dissolved	0.0014	0.005	0.0011	50000	mg/L
OW-50	9/9/2016	Uranium, Dissolved	0.012	0.0005	0.000051	NA	mg/L
OW-50	9/9/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-50	9/9/2016	Iron, Total	0.68	0.02	0.02	13822000	mg/L
OW-50	9/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/9/2016	Manganese, Total	0.12	0.002	0.00027	2017000	mg/L
OW-50	9/9/2016	Lead, Total	0.00087	0.0005	0.000081	15000	mg/L
OW-50	9/9/2016	Selenium, Total	0.0015	0.005	0.00094	50000	mg/L
OW-50	9/9/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
OW-50	9/9/2016	Zinc, Total	0.0027	0.01	0.0027	5960000	mg/L
OW-50	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	9/11/2017	Arsenic, Total	0.0021	0.001	0.0003	10000	mg/L
OW-50	9/11/2017	Barium, Total	0.11	0.002	0.00093	2000000	mg/L
OW-50	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-50	9/11/2017	Chromium, Total	0.0029	0.006	0.0018	50000	mg/L
OW-50	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-50	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	9/11/2017	Arsenic, Dissolved	0.0024	0.001	0.00018	10000	mg/L
OW-50	9/11/2017	Barium, Dissolved	0.053	0.002	0.00085	2000000	mg/L
OW-50	9/11/2017	Calcium, Dissolved	27	1	0.078	NA	mg/L
OW-50	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	9/11/2017	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
OW-50	9/11/2017	Potassium, Dissolved	0.4	1	0.11	NA	mg/L
OW-50	9/11/2017	Magnesium, Dissolved	4.6	1	0.25	NA	mg/L
OW-50	9/11/2017	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
OW-50	9/11/2017	Sodium, Dissolved	240	10	1.6	NA	mg/L
OW-50	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/11/2017	Selenium, Dissolved	0.0026	0.005	0.0019	50000	mg/L
OW-50	9/11/2017	Uranium, Dissolved	0.012	0.0005	0.00005	NA	mg/L
OW-50	9/11/2017	Zinc, Dissolved	0.079	0.01	0.0021	5960450	mg/L
OW-50	9/11/2017	Iron, Total	1.7	0.2	0.1	13822000	mg/L
OW-50	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-50	9/11/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-50	9/11/2017	Lead, Total	0.0015	0.0005	0.000095	15000	mg/L
OW-50	9/11/2017	Selenium, Total	0.0014	0.001	0.00071	50000	mg/L
OW-50	9/11/2017	Uranium, Total	0.012	0.0005	0.00015	30000	mg/L
OW-50	9/11/2017	Zinc, Total	0.0068	0.01	0.0033	5960000	mg/L
OW-50	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	9/17/2018	Arsenic, Total	0.0022	0.001	0.00041	10000	mg/L
OW-50	9/17/2018	Barium, Total	0.069	0.002	0.001	2000000	mg/L
OW-50	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
OW-50	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-50	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-50	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	9/17/2018	Arsenic, Dissolved	0.0019	0.001	0.00042	10000	mg/L
OW-50	9/17/2018	Barium, Dissolved	0.052	0.002	0.00099	2000000	mg/L
OW-50	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
OW-50	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	9/17/2018	Iron, Dissolved	0.037	0.02	0.016	13821880	mg/L
OW-50	9/17/2018	Manganese, Dissolved	0.11	0.002	0.00039	2017400	mg/L
OW-50	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
OW-50	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-50	9/17/2018	Uranium, Dissolved	0.01	0.0005	0.000096	NA	mg/L
OW-50	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
OW-50	9/17/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-50	9/17/2018	Iron, Total	0.46	0.02	0.01	13822000	mg/L
OW-50	9/17/2018	Mercury, Total	0.00009	0.0002	0.000038	2000	mg/L
OW-50	9/17/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-50	9/17/2018	Lead, Total	0.00079	0.0005	0.00023	15000	mg/L
OW-50	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
OW-50	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-50	9/17/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-50	9/17/2018	Vanadium, Total	ND	0.05	0.00076	63100	mg/L
OW-50	9/17/2018	Zinc, Total	0.0055	0.01	0.0033	5960000	mg/L
OW-50	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-50	11/7/2018	Arsenic, Total	0.0023	0.001	0.00041	10000	mg/L
OW-50	11/7/2018	Barium, Total	0.069	0.002	0.001	2000000	mg/L
OW-50	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-50	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-50	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-50	11/7/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-50	11/7/2018	Barium, Dissolved	0.05	0.002	0.00099	2000000	mg/L
OW-50	11/7/2018	Calcium, Dissolved	26	1	0.078	NA	mg/L
OW-50	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-50	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-50	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-50	11/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-50	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-50	11/7/2018	Magnesium, Dissolved	4.6	1	0.25	NA	mg/L
OW-50	11/7/2018	Manganese, Dissolved	0.1	0.002	0.00039	2017400	mg/L
OW-50	11/7/2018	Sodium, Dissolved	250	5	0.82	NA	mg/L
OW-50	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-50	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-50	11/7/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-50	11/7/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-50	11/7/2018	Iron, Total	0.68	0.02	0.01	13822000	mg/L
OW-50	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-50	11/7/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-50	11/7/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-50	11/7/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-50	11/7/2018	Uranium, Total	0.011	0.0005	0.000068	30000	mg/L
OW-50	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	5/1/2019	Aluminum, Dissolved	0.022	0.02	0.002488	19913930	mg/L
OW-52	5/1/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	5/1/2019	Arsenic, Dissolved	0.00062	0.001	0.000101	10000	mg/L
OW-52	5/1/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-52	5/1/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	5/1/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-52	5/1/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	5/1/2019	Calcium, Dissolved	4.7	1	0.061889	NA	mg/L
OW-52	5/1/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	5/1/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	5/1/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
OW-52	5/1/2019	Iron, Dissolved	0.06	0.02	0.008747	13821880	mg/L
OW-52	5/1/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	5/1/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	5/1/2019	Manganese, Dissolved	0.026	0.002	0.00029	2017400	mg/L
OW-52	5/1/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	5/1/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	5/1/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-52	5/1/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	5/1/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	5/1/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-52	5/1/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	5/1/2019	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-52	5/1/2019	Zinc, Dissolved	0.052	0.01	0.002252	5960450	mg/L
OW-52	5/1/2019	Aluminum, Total	0.44	0.02	0.002488	19914000	mg/L
OW-52	5/1/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	5/1/2019	Arsenic, Total	0.00057	0.001	0.000312	10000	mg/L
OW-52	5/1/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
OW-52	5/1/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	5/1/2019	Boron, Total	0.36	0.04	0.004531	3949	mg/L
OW-52	5/1/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	5/1/2019	Chromium, Total	0.0054	0.006	0.001533	50000	mg/L
OW-52	5/1/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	5/1/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	5/1/2019	Iron, Total	0.29	0.02	0.008747	13822000	mg/L
OW-52	5/1/2019	Lead, Total	0.00011	0.0005	0.000055	15000	mg/L
OW-52	5/1/2019	Manganese, Total	0.028	0.002	0.00029	2017000	mg/L
OW-52	5/1/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	5/1/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	5/1/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	5/1/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	5/1/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	5/1/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	5/1/2019	Uranium, Total	0.0099	0.0005	0.000085	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	5/1/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-52	3/2/2020	Arsenic, Dissolved	0.00053	0.001	0.0001	10000	mg/L
OW-52	3/2/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	3/2/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-52	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	3/2/2020	Uranium, Dissolved	0.011	0.0005	0.000075	NA	mg/L
OW-52	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-52	3/2/2020	Barium, Dissolved	0.027	0.002	0.00065	2000000	mg/L
OW-52	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-52	3/2/2020	Boron, Dissolved	0.31	0.04	0.0045	3949110	mg/L
OW-52	3/2/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-52	3/2/2020	Calcium, Dissolved	4.5	1	0.062	NA	mg/L
OW-52	3/2/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-52	3/2/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-52	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-52	3/2/2020	Iron, Dissolved	0.058	0.02	0.0087	13821880	mg/L
OW-52	3/2/2020	Magnesium, Dissolved	0.61	1	0.05	NA	mg/L
OW-52	3/2/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-52	3/2/2020	Nickel, Dissolved	ND	0.01	0.004	372000	mg/L
OW-52	3/2/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-52	3/2/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-52	3/2/2020	Zinc, Dissolved	0.015	0.01	0.0023	5960450	mg/L
OW-52	3/2/2020	Sodium, Dissolved	250	5	2.1	NA	mg/L
OW-52	3/2/2020	Manganese, Dissolved	0.023	0.002	0.00029	2017400	mg/L
OW-52	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-52	3/2/2020	Arsenic, Total	0.0007	0.001	0.00031	10000	mg/L
OW-52	3/2/2020	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-52	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	3/2/2020	Uranium, Total	0.01	0.0005	0.000085	30000	mg/L
OW-52	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-52	3/2/2020	Aluminum, Total	0.13	0.02	0.0025	19914000	mg/L
OW-52	3/2/2020	Barium, Total	0.03	0.002	0.00065	2000000	mg/L
OW-52	3/2/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-52	3/2/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-52	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-52	3/2/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-52	3/2/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-52	3/2/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	3/2/2020	Iron, Total	0.091	0.02	0.0087	13822000	mg/L
OW-52	3/2/2020	Manganese, Total	0.026	0.002	0.00029	2017000	mg/L
OW-52	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-52	3/2/2020	Nickel, Total	ND	0.01	0.004	372000	mg/L
OW-52	3/2/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-52	3/2/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-52	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-52	9/17/2020	Arsenic, Dissolved	0.00059	0.001	0.00021	10000	mg/L
OW-52	9/17/2020	Lead, Dissolved	0.00018	0.0005	0.000034	NA	mg/L
OW-52	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-52	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-52	9/17/2020	Uranium, Dissolved	0.0089	0.0005	0.000065	NA	mg/L
OW-52	9/17/2020	Aluminum, Dissolved	0.57	0.02	0.0056	19913930	mg/L
OW-52	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-52	9/17/2020	Boron, Dissolved	0.32	0.04	0.0067	3949110	mg/L
OW-52	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-52	9/17/2020	Manganese, Dissolved	0.045	0.002	0.00058	2017400	mg/L
OW-52	9/17/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-52	9/17/2020	Barium, Dissolved	0.035	0.002	0.0011	2000000	mg/L
OW-52	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-52	9/17/2020	Calcium, Dissolved	5	1	0.11	NA	mg/L
OW-52	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-52	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-52	9/17/2020	Iron, Dissolved	0.17	0.02	0.01	13821880	mg/L
OW-52	9/17/2020	Magnesium, Dissolved	0.63	1	0.067	NA	mg/L
OW-52	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-52	9/17/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-52	9/17/2020	Potassium, Dissolved	1.2	1	0.16	NA	mg/L
OW-52	9/17/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/17/2020	Sodium, Dissolved	220	5	0.69	NA	mg/L
OW-52	9/17/2020	Mercury, Total	0.00018	0.0002	0.00012	2000	mg/L
OW-52	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-52	9/17/2020	Arsenic, Total	0.0031	0.001	0.00026	10000	mg/L
OW-52	9/17/2020	Lead, Total	0.013	0.0005	0.000034	15000	mg/L
OW-52	9/17/2020	Selenium, Total	0.0042	0.001	0.00066	50000	mg/L
OW-52	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-52	9/17/2020	Uranium, Total	0.013	0.0005	0.000065	30000	mg/L
OW-52	9/17/2020	Barium, Total	0.35	0.015	0.0082	2000000	mg/L
OW-52	9/17/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-52	9/17/2020	Boron, Total	0.36	0.2	0.037	3949	mg/L
OW-52	9/17/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-52	9/17/2020	Chromium, Total	0.061	0.03	0.011	50000	mg/L
OW-52	9/17/2020	Cobalt, Total	0.014	0.03	0.012	5980	mg/L
OW-52	9/17/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-52	9/17/2020	Manganese, Total	0.64	0.01	0.0041	2017000	mg/L
OW-52	9/17/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-52	9/17/2020	Nickel, Total	0.028	0.05	0.016	372000	mg/L
OW-52	9/17/2020	Silver, Total	0.0081	0.025	0.0063	50000	mg/L
OW-52	9/17/2020	Zinc, Total	0.064	0.05	0.032	5960000	mg/L
OW-52	9/17/2020	Aluminum, Total	51	2	0.74	19914000	mg/L
OW-52	9/17/2020	Iron, Total	17	5	1.3	13822000	mg/L
OW-52	12/9/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-52	12/9/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-52	12/9/2020	Boron, Total	0.322	0.1	0.022	3949	mg/L
OW-52	12/9/2020	Barium, Total	0.0293	0.01	0.003	2000000	mg/L
OW-52	12/9/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-52	12/9/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-52	12/9/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-52	12/9/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-52	12/9/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-52	12/9/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
OW-52	12/9/2020	Manganese, Total	0.0341	0.01	0.003	2017000	mg/L
OW-52	12/9/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-52	12/9/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-52	12/9/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-52	12/9/2020	Silver, Dissolved	ND	0.005	0.00083	81200	mg/L
OW-52	12/9/2020	Aluminum, Dissolved	ND	0.2	0.0757	19913930	mg/L
OW-52	12/9/2020	Boron, Dissolved	0.362	0.2	0.0527	3949110	mg/L
OW-52	12/9/2020	Barium, Dissolved	ND	0.2	0.003	2000000	mg/L
OW-52	12/9/2020	Beryllium, Dissolved	ND	0.004	0.000351	4000	mg/L
OW-52	12/9/2020	Cadmium, Dissolved	ND	0.005	0.000301	5000	mg/L
OW-52	12/9/2020	Cobalt, Dissolved	ND	0.05	0.000447	5980	mg/L
OW-52	12/9/2020	Chromium, Dissolved	ND	0.005	0.000711	100000	mg/L
OW-52	12/9/2020	Copper, Dissolved	ND	0.025	0.0041	790000	mg/L
OW-52	12/9/2020	Iron, Dissolved	ND	0.1	0.0248	13821880	mg/L
OW-52	12/9/2020	Manganese, Dissolved	0.0299	0.015	0.00141	2017400	mg/L
OW-52	12/9/2020	Molybdenum, Dissolved	ND	0.04	0.00327	98700	mg/L
OW-52	12/9/2020	Nickel, Dissolved	ND	0.04	0.0016	372000	mg/L
OW-52	12/9/2020	Zinc, Dissolved	ND	0.02	0.00589	5960450	mg/L
OW-52	12/9/2020	Arsenic, Dissolved	ND	1	0.286	10	ug/L
OW-52	12/9/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-52	12/9/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-52	12/9/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-52	12/9/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-52	12/9/2020	Uranium, Dissolved	10.6	5	1.12	NA	ug/L
OW-52	12/9/2020	Arsenic, Total Recoverable	ND	1	0.286	10	ug/L
OW-52	12/9/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-52	12/9/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-52	12/9/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-52	12/9/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-52	12/9/2020	Uranium, Total Recoverable	10.6	5	1.12	30	ug/L
OW-52	12/9/2020	Mercury, Dissolved	ND	0.2	0.13	NA	ug/L
OW-52	12/9/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-52	8/16/2019	Aluminum, Dissolved	0.0041	0.02	0.002488	19913930	mg/L
OW-52	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Dissolved	0.00067	0.001	0.000101	10000	mg/L
OW-52	8/16/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	8/16/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Dissolved	0.0019	0.006	0.001296	790000	mg/L
OW-52	8/16/2019	Iron, Dissolved	0.044	0.02	0.008747	13821880	mg/L
OW-52	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	8/16/2019	Magnesium, Dissolved	0.63	1	0.05029	NA	mg/L
OW-52	8/16/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	8/16/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-52	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	8/16/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
OW-52	8/16/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-52	8/16/2019	Aluminum, Total	0.0097	0.02	0.002488	19914000	mg/L
OW-52	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Total	0.00062	0.001	0.000312	10000	mg/L
OW-52	8/16/2019	Barium, Total	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	8/16/2019	Iron, Total	0.049	0.02	0.008747	13822000	mg/L
OW-52	8/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	8/16/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
OW-52	8/16/2019	Mercury, Total	0.000074	0.0002	0.000038	2000	mg/L
OW-52	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	8/16/2019	Uranium, Total	0.01	0.0025	0.000424	30000	mg/L
OW-52	8/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	8/16/2019	Aluminum, Dissolved	0.012	0.02	0.002488	19913930	mg/L
OW-52	8/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Dissolved	0.00066	0.001	0.000101	10000	mg/L
OW-52	8/16/2019	Barium, Dissolved	0.028	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	8/16/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	8/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	8/16/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	8/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	8/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Dissolved	0.0021	0.006	0.001296	790000	mg/L
OW-52	8/16/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
OW-52	8/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	8/16/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	8/16/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	8/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	8/16/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	8/16/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	8/16/2019	Sodium, Dissolved	240	5	2.080881	NA	mg/L
OW-52	8/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	8/16/2019	Uranium, Dissolved	0.0098	0.0005	0.000075	NA	mg/L
OW-52	8/16/2019	Zinc, Dissolved	0.0098	0.01	0.002252	5960450	mg/L
OW-52	8/16/2019	Aluminum, Total	0.011	0.02	0.002488	19914000	mg/L
OW-52	8/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	8/16/2019	Arsenic, Total	0.00061	0.001	0.000312	10000	mg/L
OW-52	8/16/2019	Barium, Total	0.029	0.002	0.000648	2000000	mg/L
OW-52	8/16/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/16/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	8/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	8/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	8/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	8/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	8/16/2019	Iron, Total	0.053	0.02	0.008747	13822000	mg/L
OW-52	8/16/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-52	8/16/2019	Manganese, Total	0.024	0.002	0.00029	2017000	mg/L
OW-52	8/16/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-52	8/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-52	8/16/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	8/16/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	8/16/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	8/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	8/16/2019	Uranium, Total	0.01	0.0025	0.000424	30000	mg/L
OW-52	8/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/27/2019	Aluminum, Dissolved	0.0058	0.02	0.002488	19913930	mg/L
OW-52	3/27/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	3/27/2019	Arsenic, Dissolved	0.00057	0.001	0.000101	10000	mg/L
OW-52	3/27/2019	Barium, Dissolved	0.03	0.002	0.000648	2000000	mg/L
OW-52	3/27/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-52	3/27/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	3/27/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	3/27/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L
OW-52	3/27/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	3/27/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	3/27/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-52	3/27/2019	Iron, Dissolved	0.049	0.02	0.008747	13821880	mg/L
OW-52	3/27/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	3/27/2019	Magnesium, Dissolved	0.63	1	0.05029	NA	mg/L
OW-52	3/27/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	3/27/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-52	3/27/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	3/27/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-52	3/27/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	3/27/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	3/27/2019	Sodium, Dissolved	230	5	2.080881	NA	mg/L
OW-52	3/27/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	3/27/2019	Uranium, Dissolved	0.0094	0.0005	0.000075	NA	mg/L
OW-52	3/27/2019	Zinc, Dissolved	0.032	0.01	0.002252	5960450	mg/L
OW-52	3/27/2019	Aluminum, Total	0.48	0.02	0.004564	19914000	mg/L
OW-52	3/27/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-52	3/27/2019	Arsenic, Total	0.00061	0.001	0.000312	10000	mg/L
OW-52	3/27/2019	Barium, Total	0.031	0.002	0.000488	2000000	mg/L
OW-52	3/27/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-52	3/27/2019	Boron, Total	0.36	0.04	0.001821	3949	mg/L
OW-52	3/27/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	3/27/2019	Chromium, Total	0.0012	0.006	0.0012	50000	mg/L
OW-52	3/27/2019	Cobalt, Total	ND	0.006	0.001242	5980	mg/L
OW-52	3/27/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	3/27/2019	Iron, Total	0.21	0.02	0.006053	13822000	mg/L
OW-52	3/27/2019	Lead, Total	0.00008	0.0005	0.000026	15000	mg/L
OW-52	3/27/2019	Manganese, Total	0.027	0.002	0.00006	2017000	mg/L
OW-52	3/27/2019	Mercury, Total	0.0001	0.0002	0.000038	2000	mg/L
OW-52	3/27/2019	Molybdenum, Total	0.0055	0.008	0.002075	98700	mg/L
OW-52	3/27/2019	Nickel, Total	0.0025	0.01	0.001491	372000	mg/L
OW-52	3/27/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	3/27/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	3/27/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	3/27/2019	Uranium, Total	0.0096	0.0005	0.000085	30000	mg/L
OW-52	3/27/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	10/15/2019	Aluminum, Dissolved	0.0046	0.02	0.002488	19913930	mg/L
OW-52	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-52	10/15/2019	Arsenic, Dissolved	0.00069	0.001	0.000101	10000	mg/L
OW-52	10/15/2019	Barium, Dissolved	0.029	0.002	0.000648	2000000	mg/L
OW-52	10/15/2019	Beryllium, Dissolved	0.00029	0.002	0.000284	4000	mg/L
OW-52	10/15/2019	Boron, Dissolved	0.37	0.04	0.004531	3949110	mg/L
OW-52	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-52	10/15/2019	Calcium, Dissolved	4.9	1	0.061889	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-52	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-52	10/15/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
OW-52	10/15/2019	Iron, Dissolved	0.044	0.02	0.008747	13821880	mg/L
OW-52	10/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-52	10/15/2019	Magnesium, Dissolved	0.62	1	0.05029	NA	mg/L
OW-52	10/15/2019	Manganese, Dissolved	0.024	0.002	0.00029	2017400	mg/L
OW-52	10/15/2019	Molybdenum, Dissolved	0.0069	0.008	0.006735	98700	mg/L
OW-52	10/15/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-52	10/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-52	10/15/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-52	10/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-52	10/15/2019	Sodium, Dissolved	230	5	2.080881	NA	mg/L
OW-52	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-52	10/15/2019	Zinc, Dissolved	0.012	0.01	0.002252	5960450	mg/L
OW-52	10/15/2019	Aluminum, Total	0.45	0.02	0.002488	19914000	mg/L
OW-52	10/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-52	10/15/2019	Arsenic, Total	0.00083	0.001	0.000312	10000	mg/L
OW-52	10/15/2019	Barium, Total	0.03	0.002	0.000648	2000000	mg/L
OW-52	10/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-52	10/15/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-52	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-52	10/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-52	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-52	10/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-52	10/15/2019	Iron, Total	0.2	0.02	0.008747	13822000	mg/L
OW-52	10/15/2019	Lead, Total	0.000057	0.0005	0.000055	15000	mg/L
OW-52	10/15/2019	Manganese, Total	0.026	0.002	0.00029	2017000	mg/L
OW-52	10/15/2019	Mercury, Total	0.00015	0.0002	0.000038	2000	mg/L
OW-52	10/15/2019	Molybdenum, Total	0.0071	0.008	0.006735	98700	mg/L
OW-52	10/15/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-52	10/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-52	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-52	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-52	10/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-52	3/22/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-52	3/22/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-52	3/22/2012	Barium, Total	0.025	0.002	0.00031	2000000	mg/L
OW-52	3/22/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	3/22/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-52	3/22/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-52	3/22/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-52	3/22/2012	Iron, Total	0.071	0.02	0.0019	13822000	mg/L
OW-52	3/22/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	3/22/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-52	3/22/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	3/22/2012	Manganese, Total	0.03	0.002	0.00062	2017000	mg/L
OW-52	3/22/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-52	3/22/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-52	3/22/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-52	3/22/2012	Uranium, Total	0.01	0.001	0.00006	30000	mg/L
OW-52	3/22/2012	Zinc, Total	0.084	0.01	0.00062	5960000	mg/L
OW-52	6/13/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
OW-52	6/13/2012	Arsenic, Total	ND	0.001	0.00011	10000	mg/L
OW-52	6/13/2012	Barium, Total	0.026	0.002	0.00031	2000000	mg/L
OW-52	6/13/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	6/13/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
OW-52	6/13/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
OW-52	6/13/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
OW-52	6/13/2012	Iron, Total	0.076	0.02	0.0019	13822000	mg/L
OW-52	6/13/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	6/13/2012	Potassium, Total	1.4	1	0.48	NA	mg/L
OW-52	6/13/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	6/13/2012	Manganese, Total	0.023	0.002	0.00062	2017000	mg/L
OW-52	6/13/2012	Sodium, Total	230	5	0.22	NA	mg/L
OW-52	6/13/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
OW-52	6/13/2012	Selenium, Total	ND	0.001	0.00033	50000	mg/L
OW-52	6/13/2012	Uranium, Total	0.011	0.001	0.00006	30000	mg/L
OW-52	6/13/2012	Zinc, Total	0.023	0.01	0.00062	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-52	8/23/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-52	8/23/2012	Barium, Total	0.029	0.002	0.00039	2000000	mg/L
OW-52	8/23/2012	Calcium, Total	4.4	1	0.026	NA	mg/L
OW-52	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-52	8/23/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-52	8/23/2012	Copper, Total	0.014	0.006	0.0041	790000	mg/L
OW-52	8/23/2012	Iron, Total	0.3	0.02	0.013	13822000	mg/L
OW-52	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	8/23/2012	Potassium, Total	1.5	1	0.48	NA	mg/L
OW-52	8/23/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	8/23/2012	Manganese, Total	0.026	0.002	0.00026	2017000	mg/L
OW-52	8/23/2012	Sodium, Total	250	5	0.22	NA	mg/L
OW-52	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-52	8/23/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-52	8/23/2012	Uranium, Total	0.0076	0.0025	0.00003	30000	mg/L
OW-52	8/23/2012	Zinc, Total	0.012	0.01	0.0011	5960000	mg/L
OW-52	11/27/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
OW-52	11/27/2012	Arsenic, Total	ND	0.0025	0.0014	10000	mg/L
OW-52	11/27/2012	Barium, Total	0.029	0.002	0.00039	2000000	mg/L
OW-52	11/27/2012	Calcium, Total	4.2	1	0.026	NA	mg/L
OW-52	11/27/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
OW-52	11/27/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
OW-52	11/27/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	11/27/2012	Iron, Total	0.15	0.02	0.013	13822000	mg/L
OW-52	11/27/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
OW-52	11/27/2012	Potassium, Total	1.2	1	0.48	NA	mg/L
OW-52	11/27/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
OW-52	11/27/2012	Manganese, Total	0.029	0.002	0.00026	2017000	mg/L
OW-52	11/27/2012	Sodium, Total	220	5	0.22	NA	mg/L
OW-52	11/27/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
OW-52	11/27/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
OW-52	11/27/2012	Uranium, Total	0.011	0.0025	0.00003	30000	mg/L
OW-52	11/27/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
OW-52	9/4/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
OW-52	9/4/2013	Arsenic, Total	ND	0.005	0.00049	10000	mg/L
OW-52	9/4/2013	Barium, Total	0.026	0.002	0.00095	2000000	mg/L
OW-52	9/4/2013	Calcium, Total	4.4	1	0.069	NA	mg/L
OW-52	9/4/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
OW-52	9/4/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
OW-52	9/4/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-52	9/4/2013	Iron, Total	0.063	0.02	0.0089	13822000	mg/L
OW-52	9/4/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
OW-52	9/4/2013	Potassium, Total	2.2	1	0.24	NA	mg/L
OW-52	9/4/2013	Magnesium, Total	ND	1	0.028	NA	mg/L
OW-52	9/4/2013	Manganese, Total	0.038	0.002	0.00016	2017000	mg/L
OW-52	9/4/2013	Sodium, Total	230	5	1.6	NA	mg/L
OW-52	9/4/2013	Lead, Total	ND	0.005	0.000038	15000	mg/L
OW-52	9/4/2013	Selenium, Total	ND	0.005	0.0015	50000	mg/L
OW-52	9/4/2013	Uranium, Total	0.011	0.01	0.000073	30000	mg/L
OW-52	9/4/2013	Zinc, Total	0.016	0.01	0.00076	5960000	mg/L
OW-52	9/15/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
OW-52	9/15/2014	Arsenic, Total	ND	0.001	0.00036	10000	mg/L
OW-52	9/15/2014	Barium, Total	0.032	0.002	0.0005	2000000	mg/L
OW-52	9/15/2014	Calcium, Total	7.5	1	0.082	NA	mg/L
OW-52	9/15/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
OW-52	9/15/2014	Chromium, Total	ND	0.006	0.0028	50000	mg/L
OW-52	9/15/2014	Copper, Total	ND	0.006	0.0046	790000	mg/L
OW-52	9/15/2014	Iron, Total	0.31	0.02	0.0072	13822000	mg/L
OW-52	9/15/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
OW-52	9/15/2014	Potassium, Total	2	1	0.093	NA	mg/L
OW-52	9/15/2014	Magnesium, Total	ND	1	0.018	NA	mg/L
OW-52	9/15/2014	Manganese, Total	0.036	0.002	0.00049	2017000	mg/L
OW-52	9/15/2014	Sodium, Total	240	10	3.9	NA	mg/L
OW-52	9/15/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
OW-52	9/15/2014	Selenium, Total	ND	0.001	0.00051	50000	mg/L
OW-52	9/15/2014	Uranium, Total	0.011	0.001	0.0000072	30000	mg/L
OW-52	9/15/2014	Zinc, Total	ND	0.01	0.0035	5960000	mg/L
OW-52	8/10/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/10/2015	Arsenic, Total	ND	0.001	0.00029	10000	mg/L
OW-52	8/10/2015	Barium, Total	0.031	0.002	0.0011	2000000	mg/L
OW-52	8/10/2015	Calcium, Total	4.6	1	0.057	NA	mg/L
OW-52	8/10/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
OW-52	8/10/2015	Chromium, Total	ND	0.006	0.0022	50000	mg/L
OW-52	8/10/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
OW-52	8/10/2015	Iron, Total	0.17	0.02	0.0072	13822000	mg/L
OW-52	8/10/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
OW-52	8/10/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
OW-52	8/10/2015	Magnesium, Total	ND	1	0.039	NA	mg/L
OW-52	8/10/2015	Manganese, Total	0.033	0.002	0.0015	2017000	mg/L
OW-52	8/10/2015	Sodium, Total	220	5	0.36	NA	mg/L
OW-52	8/10/2015	Lead, Total	ND	0.0005	0.000047	15000	mg/L
OW-52	8/10/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
OW-52	8/10/2015	Uranium, Total	0.012	0.0005	0.0000049	30000	mg/L
OW-52	8/10/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
OW-52	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-52	9/9/2016	Arsenic, Total	0.00096	0.001	0.00021	10000	mg/L
OW-52	9/9/2016	Barium, Total	0.032	0.002	0.00079	2000000	mg/L
OW-52	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-52	9/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-52	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-52	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-52	9/9/2016	Arsenic, Dissolved	0.00086	0.001	0.00014	10000	mg/L
OW-52	9/9/2016	Barium, Dissolved	0.028	0.002	0.0013	2000000	mg/L
OW-52	9/9/2016	Calcium, Dissolved	4.7	1	0.5	NA	mg/L
OW-52	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-52	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-52	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-52	9/9/2016	Iron, Dissolved	0.05	0.02	0.02	13821880	mg/L
OW-52	9/9/2016	Potassium, Dissolved	1.3	1	0.5	NA	mg/L
OW-52	9/9/2016	Magnesium, Dissolved	0.63	1	0.5	NA	mg/L
OW-52	9/9/2016	Manganese, Dissolved	0.026	0.002	0.00032	2017400	mg/L
OW-52	9/9/2016	Sodium, Dissolved	240	5	2.5	NA	mg/L
OW-52	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/9/2016	Selenium, Dissolved	ND	0.005	0.0011	50000	mg/L
OW-52	9/9/2016	Uranium, Dissolved	0.011	0.0005	0.000051	NA	mg/L
OW-52	9/9/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-52	9/9/2016	Iron, Total	0.15	0.02	0.02	13822000	mg/L
OW-52	9/9/2016	Mercury, Total	0.000094	0.0002	0.000053	2000	mg/L
OW-52	9/9/2016	Manganese, Total	0.03	0.002	0.00027	2017000	mg/L
OW-52	9/9/2016	Lead, Total	0.000086	0.0005	0.000081	15000	mg/L
OW-52	9/9/2016	Selenium, Total	0.00084	0.001	0.00019	50000	mg/L
OW-52	9/9/2016	Uranium, Total	0.01	0.0005	0.00017	30000	mg/L
OW-52	9/9/2016	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
OW-52	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	9/11/2017	Arsenic, Total	0.00051	0.001	0.0003	10000	mg/L
OW-52	9/11/2017	Barium, Total	0.029	0.002	0.00093	2000000	mg/L
OW-52	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	9/11/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	9/11/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
OW-52	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	9/11/2017	Arsenic, Dissolved	ND	0.005	0.00089	10000	mg/L
OW-52	9/11/2017	Barium, Dissolved	0.029	0.002	0.00085	2000000	mg/L
OW-52	9/11/2017	Calcium, Dissolved	4.9	1	0.078	NA	mg/L
OW-52	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	9/11/2017	Iron, Dissolved	0.05	0.02	0.016	13821880	mg/L
OW-52	9/11/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-52	9/11/2017	Magnesium, Dissolved	0.63	1	0.25	NA	mg/L
OW-52	9/11/2017	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
OW-52	9/11/2017	Sodium, Dissolved	230	10	1.6	NA	mg/L
OW-52	9/11/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/11/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
OW-52	9/11/2017	Uranium, Dissolved	0.011	0.0005	0.00005	NA	mg/L
OW-52	9/11/2017	Zinc, Dissolved	0.063	0.01	0.0021	5960450	mg/L
OW-52	9/11/2017	Iron, Total	0.091	0.02	0.01	13822000	mg/L
OW-52	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	9/11/2017	Manganese, Total	0.026	0.002	0.0011	2017000	mg/L
OW-52	9/11/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
OW-52	9/11/2017	Selenium, Total	ND	0.001	0.00071	50000	mg/L
OW-52	9/11/2017	Uranium, Total	0.011	0.0005	0.00015	30000	mg/L
OW-52	9/11/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	9/17/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	9/17/2018	Arsenic, Total	0.00073	0.001	0.00041	10000	mg/L
OW-52	9/17/2018	Barium, Total	0.033	0.002	0.001	2000000	mg/L
OW-52	9/17/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
OW-52	9/17/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	9/17/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	9/17/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	9/17/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	9/17/2018	Arsenic, Dissolved	0.00062	0.001	0.00042	10000	mg/L
OW-52	9/17/2018	Barium, Dissolved	0.031	0.002	0.00099	2000000	mg/L
OW-52	9/17/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
OW-52	9/17/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	9/17/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	9/17/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	9/17/2018	Iron, Dissolved	0.08	0.02	0.016	13821880	mg/L
OW-52	9/17/2018	Manganese, Dissolved	0.026	0.002	0.00039	2017400	mg/L
OW-52	9/17/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	9/17/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
OW-52	9/17/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-52	9/17/2018	Uranium, Dissolved	0.0086	0.0005	0.000096	NA	mg/L
OW-52	9/17/2018	Vanadium, Dissolved	ND	0.05	0.0019	63100	mg/L
OW-52	9/17/2018	Zinc, Dissolved	0.007	0.01	0.0021	5960450	mg/L
OW-52	9/17/2018	Iron, Total	0.32	0.02	0.01	13822000	mg/L
OW-52	9/17/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	9/17/2018	Manganese, Total	0.03	0.002	0.0011	2017000	mg/L
OW-52	9/17/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-52	9/17/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
OW-52	9/17/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-52	9/17/2018	Uranium, Total	0.0093	0.0005	0.000068	30000	mg/L
OW-52	9/17/2018	Vanadium, Total	0.00091	0.05	0.00076	63100	mg/L
OW-52	9/17/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-52	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-52	11/7/2018	Arsenic, Total	ND	0.001	0.00041	10000	mg/L
OW-52	11/7/2018	Barium, Total	0.037	0.002	0.001	2000000	mg/L
OW-52	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-52	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-52	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-52	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-52	11/7/2018	Arsenic, Dissolved	ND	0.001	0.00042	10000	mg/L
OW-52	11/7/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-52	11/7/2018	Calcium, Dissolved	4.5	1	0.078	NA	mg/L
OW-52	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-52	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-52	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-52	11/7/2018	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
OW-52	11/7/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-52	11/7/2018	Magnesium, Dissolved	ND	1	0.25	NA	mg/L
OW-52	11/7/2018	Manganese, Dissolved	0.024	0.002	0.00039	2017400	mg/L
OW-52	11/7/2018	Sodium, Dissolved	230	5	0.82	NA	mg/L
OW-52	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-52	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-52	11/7/2018	Uranium, Dissolved	0.01	0.0005	0.000096	NA	mg/L
OW-52	11/7/2018	Zinc, Dissolved	0.016	0.01	0.0021	5960450	mg/L
OW-52	11/7/2018	Iron, Total	0.6	0.02	0.01	13822000	mg/L
OW-52	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-52	11/7/2018	Manganese, Total	0.034	0.002	0.0011	2017000	mg/L
OW-52	11/7/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-52	11/7/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-52	11/7/2018	Uranium, Total	0.0092	0.0005	0.000068	30000	mg/L
OW-52	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	2/6/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-54	2/6/2019	Arsenic, Dissolved	0.0027	0.001	0.000068	10000	mg/L
OW-54	2/6/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
OW-54	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	2/6/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-54	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	2/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-54	2/6/2019	Iron, Dissolved	0.51	0.02	0.008747	13821880	mg/L
OW-54	2/6/2019	Lead, Dissolved	0.0065	0.0005	0.000047	NA	mg/L
OW-54	2/6/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	2/6/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	2/6/2019	Selenium, Dissolved	0.0003	0.001	0.000203	50000	mg/L
OW-54	2/6/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-54	2/6/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-54	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-54	2/6/2019	Uranium, Dissolved	0.056	0.0025	0.000152	NA	mg/L
OW-54	2/6/2019	Zinc, Dissolved	0.025	0.01	0.002252	5960450	mg/L
OW-54	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-54	2/6/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-54	2/6/2019	Barium, Total	0.26	0.002	0.000488	2000000	mg/L
OW-54	2/6/2019	Beryllium, Total	0.00023	0.002	0.000224	4000	mg/L
OW-54	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	2/6/2019	Chromium, Total	0.0027	0.006	0.0012	50000	mg/L
OW-54	2/6/2019	Copper, Total	0.026	0.006	0.004072	790000	mg/L
OW-54	2/6/2019	Iron, Total	2.5	0.1	0.030263	13822000	mg/L
OW-54	2/6/2019	Lead, Total	0.011	0.0005	0.000026	15000	mg/L
OW-54	2/6/2019	Manganese, Total	1.5	0.01	0.000299	2017000	mg/L
OW-54	2/6/2019	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
OW-54	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	2/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	2/6/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	2/6/2019	Zinc, Total	0.0067	0.01	0.005772	5960000	mg/L
OW-54	2/6/2019	Antimony, Dissolved	0.00022	0.001	0.000204	6000	mg/L
OW-54	2/6/2019	Arsenic, Dissolved	0.0039	0.001	0.000068	10000	mg/L
OW-54	2/6/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
OW-54	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	2/6/2019	Calcium, Dissolved	60	1	0.061889	NA	mg/L
OW-54	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	2/6/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-54	2/6/2019	Iron, Dissolved	0.47	0.02	0.008747	13821880	mg/L
OW-54	2/6/2019	Lead, Dissolved	0.0082	0.0005	0.000047	NA	mg/L
OW-54	2/6/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	2/6/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	2/6/2019	Selenium, Dissolved	0.00025	0.001	0.000203	50000	mg/L
OW-54	2/6/2019	Silver, Dissolved	0.00096	0.005	0.000942	81200	mg/L
OW-54	2/6/2019	Sodium, Dissolved	390	5	2.080881	NA	mg/L
OW-54	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-54	2/6/2019	Uranium, Dissolved	0.058	0.0025	0.000152	NA	mg/L
OW-54	2/6/2019	Zinc, Dissolved	0.026	0.01	0.002252	5960450	mg/L
OW-54	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-54	2/6/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-54	2/6/2019	Barium, Total	0.28	0.002	0.000488	2000000	mg/L
OW-54	2/6/2019	Beryllium, Total	ND	0.002	0.000224	4000	mg/L
OW-54	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	2/6/2019	Chromium, Total	0.0026	0.006	0.0012	50000	mg/L
OW-54	2/6/2019	Copper, Total	0.031	0.006	0.004072	790000	mg/L
OW-54	2/6/2019	Iron, Total	2.7	0.1	0.030263	13822000	mg/L
OW-54	2/6/2019	Lead, Total	0.013	0.0005	0.000026	15000	mg/L
OW-54	2/6/2019	Manganese, Total	1.5	0.01	0.000299	2017000	mg/L
OW-54	2/6/2019	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-54	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	2/6/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	2/6/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-54	2/6/2019	Zinc, Total	0.0073	0.01	0.005772	5960000	mg/L
OW-54	5/2/2019	Aluminum, Dissolved	0.073	0.02	0.002488	19913930	mg/L
OW-54	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Dissolved	0.0027	0.005	0.000504	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-54	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	5/2/2019	Calcium, Dissolved	59	1	0.061889	NA	mg/L
OW-54	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	5/2/2019	Cobalt, Dissolved	0.091	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Dissolved	0.0049	0.006	0.001296	790000	mg/L
OW-54	5/2/2019	Iron, Dissolved	0.64	0.02	0.008747	13821880	mg/L
OW-54	5/2/2019	Lead, Dissolved	0.0052	0.0025	0.000274	NA	mg/L
OW-54	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	5/2/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OW-54	5/2/2019	Molybdenum, Dissolved	0.007	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Potassium, Dissolved	0.19	1	0.162288	NA	mg/L
OW-54	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-54	5/2/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	5/2/2019	Sodium, Dissolved	420	5	2.080881	NA	mg/L
OW-54	5/2/2019	Thallium, Dissolved	0.00046	0.0025	0.000242	2000	mg/L
OW-54	5/2/2019	Uranium, Dissolved	0.053	0.0025	0.000374	NA	mg/L
OW-54	5/2/2019	Zinc, Dissolved	0.028	0.01	0.002252	5960450	mg/L
OW-54	5/2/2019	Aluminum, Total	6	0.2	0.024883	19914000	mg/L
OW-54	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Total	0.0035	0.005	0.001561	10000	mg/L
OW-54	5/2/2019	Barium, Total	0.24	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Total	0.6	0.04	0.004531	3949	mg/L
OW-54	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	5/2/2019	Chromium, Total	0.0024	0.006	0.001533	50000	mg/L
OW-54	5/2/2019	Cobalt, Total	0.087	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Total	0.025	0.006	0.004072	790000	mg/L
OW-54	5/2/2019	Iron, Total	2.5	0.1	0.043734	13822000	mg/L
OW-54	5/2/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
OW-54	5/2/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
OW-54	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-54	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-54	5/2/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	5/2/2019	Zinc, Total	0.0059	0.01	0.005772	5960000	mg/L
OW-54	5/2/2019	Aluminum, Dissolved	0.066	0.02	0.002488	19913930	mg/L
OW-54	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
OW-54	5/2/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L
OW-54	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	5/2/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-54	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	5/2/2019	Cobalt, Dissolved	0.088	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Dissolved	0.005	0.006	0.001296	790000	mg/L
OW-54	5/2/2019	Iron, Dissolved	0.67	0.02	0.008747	13821880	mg/L
OW-54	5/2/2019	Lead, Dissolved	0.0054	0.0025	0.000274	NA	mg/L
OW-54	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	5/2/2019	Manganese, Dissolved	1.5	0.01	0.00145	2017400	mg/L
OW-54	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-54	5/2/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	5/2/2019	Sodium, Dissolved	410	5	2.080881	NA	mg/L
OW-54	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-54	5/2/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-54	5/2/2019	Zinc, Dissolved	0.048	0.01	0.002252	5960450	mg/L
OW-54	5/2/2019	Aluminum, Total	6.5	0.2	0.024883	19914000	mg/L
OW-54	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-54	5/2/2019	Arsenic, Total	0.0033	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/2/2019	Barium, Total	0.25	0.002	0.000648	2000000	mg/L
OW-54	5/2/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	5/2/2019	Boron, Total	0.62	0.04	0.004531	3949	mg/L
OW-54	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	5/2/2019	Chromium, Total	0.0027	0.006	0.001533	50000	mg/L
OW-54	5/2/2019	Cobalt, Total	0.087	0.006	0.003091	5980	mg/L
OW-54	5/2/2019	Copper, Total	0.021	0.006	0.004072	790000	mg/L
OW-54	5/2/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
OW-54	5/2/2019	Lead, Total	0.011	0.0025	0.000274	15000	mg/L
OW-54	5/2/2019	Manganese, Total	1.5	0.01	0.00145	2017000	mg/L
OW-54	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	5/2/2019	Nickel, Total	0.34	0.01	0.004009	372000	mg/L
OW-54	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-54	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-54	5/2/2019	Uranium, Total	0.052	0.0025	0.000424	30000	mg/L
OW-54	5/2/2019	Zinc, Total	0.0092	0.01	0.005772	5960000	mg/L
OW-54	8/21/2019	Aluminum, Dissolved	0.027	0.02	0.002488	19913930	mg/L
OW-54	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-54	8/21/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Dissolved	0.58	0.04	0.004531	3949110	mg/L
OW-54	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	8/21/2019	Calcium, Dissolved	57	1	0.061889	NA	mg/L
OW-54	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	8/21/2019	Cobalt, Dissolved	0.088	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-54	8/21/2019	Iron, Dissolved	0.46	0.02	0.008747	13821880	mg/L
OW-54	8/21/2019	Lead, Dissolved	0.0058	0.0005	0.000055	NA	mg/L
OW-54	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	8/21/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	8/21/2019	Molybdenum, Dissolved	0.0072	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Dissolved	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	8/21/2019	Selenium, Dissolved	0.00024	0.001	0.000171	50000	mg/L
OW-54	8/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	8/21/2019	Sodium, Dissolved	430	5	2.080881	NA	mg/L
OW-54	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-54	8/21/2019	Uranium, Dissolved	0.055	0.0025	0.000374	NA	mg/L
OW-54	8/21/2019	Zinc, Dissolved	0.0094	0.01	0.002252	5960450	mg/L
OW-54	8/21/2019	Aluminum, Total	6.1	0.4	0.049765	19914000	mg/L
OW-54	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Total	0.0038	0.001	0.000312	10000	mg/L
OW-54	8/21/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Total	0.59	0.04	0.004531	3949	mg/L
OW-54	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	8/21/2019	Chromium, Total	0.0023	0.006	0.001533	50000	mg/L
OW-54	8/21/2019	Cobalt, Total	0.1	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Total	0.026	0.006	0.004072	790000	mg/L
OW-54	8/21/2019	Iron, Total	2.7	0.1	0.043734	13822000	mg/L
OW-54	8/21/2019	Lead, Total	0.014	0.0005	0.000055	15000	mg/L
OW-54	8/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OW-54	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-54	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	8/21/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-54	8/21/2019	Zinc, Total	0.0074	0.01	0.005772	5960000	mg/L
OW-54	8/21/2019	Aluminum, Dissolved	0.028	0.02	0.002488	19913930	mg/L
OW-54	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
OW-54	8/21/2019	Barium, Dissolved	0.15	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Dissolved	0.59	0.04	0.004531	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-54	8/21/2019	Calcium, Dissolved	58	1	0.061889	NA	mg/L
OW-54	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-54	8/21/2019	Cobalt, Dissolved	0.09	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
OW-54	8/21/2019	Iron, Dissolved	0.48	0.02	0.008747	13821880	mg/L
OW-54	8/21/2019	Lead, Dissolved	0.0058	0.0005	0.000055	NA	mg/L
OW-54	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-54	8/21/2019	Manganese, Dissolved	1.4	0.01	0.00145	2017400	mg/L
OW-54	8/21/2019	Molybdenum, Dissolved	0.009	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Dissolved	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-54	8/21/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-54	8/21/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-54	8/21/2019	Sodium, Dissolved	420	5	2.080881	NA	mg/L
OW-54	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-54	8/21/2019	Uranium, Dissolved	0.047	0.0025	0.000374	NA	mg/L
OW-54	8/21/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-54	8/21/2019	Aluminum, Total	6.5	0.4	0.049765	19914000	mg/L
OW-54	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-54	8/21/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-54	8/21/2019	Barium, Total	0.27	0.002	0.000648	2000000	mg/L
OW-54	8/21/2019	Beryllium, Total	0.00033	0.002	0.000284	4000	mg/L
OW-54	8/21/2019	Boron, Total	0.6	0.04	0.004531	3949	mg/L
OW-54	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-54	8/21/2019	Chromium, Total	0.0025	0.006	0.001533	50000	mg/L
OW-54	8/21/2019	Cobalt, Total	0.098	0.006	0.003091	5980	mg/L
OW-54	8/21/2019	Copper, Total	0.025	0.006	0.004072	790000	mg/L
OW-54	8/21/2019	Iron, Total	2.8	0.1	0.043734	13822000	mg/L
OW-54	8/21/2019	Lead, Total	0.013	0.0005	0.000055	15000	mg/L
OW-54	8/21/2019	Manganese, Total	1.6	0.01	0.00145	2017000	mg/L
OW-54	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-54	8/21/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-54	8/21/2019	Selenium, Total	0.00059	0.001	0.000478	50000	mg/L
OW-54	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-54	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-54	8/21/2019	Uranium, Total	0.051	0.0025	0.000424	30000	mg/L
OW-54	8/21/2019	Zinc, Total	0.0072	0.01	0.005772	5960000	mg/L
OW-54	6/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-54	6/1/2016	Arsenic, Total	0.0093	0.005	0.0015	10000	mg/L
OW-54	6/1/2016	Barium, Total	1.4	0.01	0.0066	2000000	mg/L
OW-54	6/1/2016	Beryllium, Total	0.0032	0.002	0.00031	4000	mg/L
OW-54	6/1/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-54	6/1/2016	Cobalt, Total	0.11	0.006	0.00085	5980	mg/L
OW-54	6/1/2016	Chromium, Total	0.015	0.006	0.0022	50000	mg/L
OW-54	6/1/2016	Iron, Total	14	0.4	0.18	13822000	mg/L
OW-54	6/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-54	6/1/2016	Manganese, Total	2.2	0.01	0.0076	2017000	mg/L
OW-54	6/1/2016	Nickel, Total	0.36	0.01	0.0024	372000	mg/L
OW-54	6/1/2016	Lead, Total	0.032	0.0025	0.00084	15000	mg/L
OW-54	6/1/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-54	6/1/2016	Selenium, Total	0.017	0.02	0.0042	50000	mg/L
OW-54	6/1/2016	Vanadium, Total	0.036	0.05	0.0015	63100	mg/L
OW-54	6/1/2016	Zinc, Total	0.062	0.01	0.0039	5960000	mg/L
OW-54	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-54	9/16/2016	Arsenic, Total	0.0057	0.01	0.0021	10000	mg/L
OW-54	9/16/2016	Barium, Total	1.1	0.01	0.004	2000000	mg/L
OW-54	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	9/16/2016	Chromium, Total	0.013	0.006	0.0027	50000	mg/L
OW-54	9/16/2016	Copper, Total	0.032	0.006	0.003	790000	mg/L
OW-54	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-54	9/16/2016	Arsenic, Dissolved	0.0049	0.005	0.00069	10000	mg/L
OW-54	9/16/2016	Barium, Dissolved	0.14	0.002	0.0013	2000000	mg/L
OW-54	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-54	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-54	9/16/2016	Copper, Dissolved	0.0088	0.006	0.004	790000	mg/L
OW-54	9/16/2016	Iron, Dissolved	0.23	0.02	0.02	13821880	mg/L
OW-54	9/16/2016	Manganese, Dissolved	1.3	0.01	0.0016	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	9/16/2016	Lead, Dissolved	0.0052	0.0005	0.00017	NA	mg/L
OW-54	9/16/2016	Selenium, Dissolved	0.0068	0.02	0.0042	50000	mg/L
OW-54	9/16/2016	Uranium, Dissolved	0.062	0.0025	0.00026	NA	mg/L
OW-54	9/16/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
OW-54	9/16/2016	Iron, Total	11	0.4	0.4	13822000	mg/L
OW-54	9/16/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
OW-54	9/16/2016	Manganese, Total	2.3	0.01	0.0014	2017000	mg/L
OW-54	9/16/2016	Lead, Total	0.032	0.0025	0.00041	15000	mg/L
OW-54	9/16/2016	Selenium, Total	0.0063	0.01	0.0019	50000	mg/L
OW-54	9/16/2016	Uranium, Total	0.065	0.0025	0.00087	30000	mg/L
OW-54	9/16/2016	Zinc, Total	0.036	0.01	0.0027	5960000	mg/L
OW-54	11/9/2016	Silver, Total	0.0044	0.005	0.0015	50000	mg/L
OW-54	11/9/2016	Arsenic, Total	0.0061	0.02	0.0042	10000	mg/L
OW-54	11/9/2016	Barium, Total	0.46	0.002	0.00079	2000000	mg/L
OW-54	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	11/9/2016	Chromium, Total	0.0061	0.006	0.0027	50000	mg/L
OW-54	11/9/2016	Copper, Total	0.024	0.006	0.003	790000	mg/L
OW-54	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-54	11/9/2016	Arsenic, Dissolved	0.006	0.02	0.0028	10000	mg/L
OW-54	11/9/2016	Barium, Dissolved	0.15	0.002	0.0013	2000000	mg/L
OW-54	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-54	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-54	11/9/2016	Copper, Dissolved	0.0067	0.006	0.004	790000	mg/L
OW-54	11/9/2016	Iron, Dissolved	0.24	0.02	0.02	13821880	mg/L
OW-54	11/9/2016	Manganese, Dissolved	1.4	0.01	0.0016	2017400	mg/L
OW-54	11/9/2016	Lead, Dissolved	0.0064	0.0005	0.00017	NA	mg/L
OW-54	11/9/2016	Selenium, Dissolved	0.013	0.02	0.0042	50000	mg/L
OW-54	11/9/2016	Uranium, Dissolved	0.057	0.0025	0.00026	NA	mg/L
OW-54	11/9/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-54	11/9/2016	Iron, Total	4.4	0.1	0.1	13822000	mg/L
OW-54	11/9/2016	Mercury, Total	0.000057	0.0002	0.000053	2000	mg/L
OW-54	11/9/2016	Manganese, Total	1.7	0.01	0.0014	2017000	mg/L
OW-54	11/9/2016	Lead, Total	0.019	0.0025	0.00041	15000	mg/L
OW-54	11/9/2016	Selenium, Total	0.015	0.02	0.0037	50000	mg/L
OW-54	11/9/2016	Uranium, Total	0.062	0.0025	0.00087	30000	mg/L
OW-54	11/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L
OW-54	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-54	3/29/2017	Arsenic, Total	0.0092	0.005	0.0011	10000	mg/L
OW-54	3/29/2017	Barium, Total	1.7	0.02	0.0079	2000000	mg/L
OW-54	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-54	3/29/2017	Chromium, Total	0.021	0.006	0.0027	50000	mg/L
OW-54	3/29/2017	Copper, Total	0.12	0.006	0.003	790000	mg/L
OW-54	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-54	3/29/2017	Arsenic, Dissolved	0.0041	0.005	0.00089	10000	mg/L
OW-54	3/29/2017	Barium, Dissolved	0.22	0.002	0.00085	2000000	mg/L
OW-54	3/29/2017	Calcium, Dissolved	72	1	0.5	NA	mg/L
OW-54	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-54	3/29/2017	Copper, Dissolved	0.012	0.006	0.0032	790000	mg/L
OW-54	3/29/2017	Iron, Dissolved	0.72	0.02	0.02	13821880	mg/L
OW-54	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-54	3/29/2017	Magnesium, Dissolved	19	1	0.5	NA	mg/L
OW-54	3/29/2017	Manganese, Dissolved	1.5	0.02	0.0038	2017400	mg/L
OW-54	3/29/2017	Sodium, Dissolved	430	10	5	NA	mg/L
OW-54	3/29/2017	Lead, Dissolved	0.0081	0.0005	0.00017	NA	mg/L
OW-54	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-54	3/29/2017	Uranium, Dissolved	0.059	0.0025	0.00025	NA	mg/L
OW-54	3/29/2017	Zinc, Dissolved	0.016	0.01	0.0011	5960450	mg/L
OW-54	3/29/2017	Iron, Total	21	1	1	13822000	mg/L
OW-54	3/29/2017	Mercury, Total	0.00011	0.0002	0.000037	2000	mg/L
OW-54	3/29/2017	Manganese, Total	2.4	0.02	0.0027	2017000	mg/L
OW-54	3/29/2017	Lead, Total	0.043	0.0025	0.00041	15000	mg/L
OW-54	3/29/2017	Selenium, Total	0.014	0.005	0.00094	50000	mg/L
OW-54	3/29/2017	Uranium, Total	0.06	0.0025	0.00087	30000	mg/L
OW-54	3/29/2017	Zinc, Total	0.039	0.01	0.0027	5960000	mg/L
OW-54	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-54	6/21/2017	Arsenic, Total	0.0083	0.005	0.0015	10000	mg/L
OW-54	6/21/2017	Barium, Total	0.62	0.002	0.00093	2000000	mg/L
OW-54	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/21/2017	Chromium, Total	0.012	0.006	0.0011	50000	mg/L
OW-54	6/21/2017	Copper, Total	0.063	0.006	0.0017	790000	mg/L
OW-54	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-54	6/21/2017	Arsenic, Dissolved	0.0078	0.02	0.0035	10000	mg/L
OW-54	6/21/2017	Barium, Dissolved	0.14	0.002	0.00085	2000000	mg/L
OW-54	6/21/2017	Calcium, Dissolved	63	1	0.078	NA	mg/L
OW-54	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-54	6/21/2017	Copper, Dissolved	0.0055	0.006	0.0032	790000	mg/L
OW-54	6/21/2017	Iron, Dissolved	0.63	0.02	0.016	13821880	mg/L
OW-54	6/21/2017	Potassium, Dissolved	0.19	1	0.11	NA	mg/L
OW-54	6/21/2017	Magnesium, Dissolved	19	1	0.25	NA	mg/L
OW-54	6/21/2017	Manganese, Dissolved	1.2	0.02	0.0038	2017400	mg/L
OW-54	6/21/2017	Sodium, Dissolved	400	10	1.6	NA	mg/L
OW-54	6/21/2017	Lead, Dissolved	0.0049	0.0005	0.00017	NA	mg/L
OW-54	6/21/2017	Selenium, Dissolved	0.014	0.02	0.0077	50000	mg/L
OW-54	6/21/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-54	6/21/2017	Zinc, Dissolved	0.0062	0.01	0.0011	5960450	mg/L
OW-54	6/21/2017	Iron, Total	9.5	0.2	0.1	13822000	mg/L
OW-54	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-54	6/21/2017	Manganese, Total	1.7	0.02	0.011	2017000	mg/L
OW-54	6/21/2017	Lead, Total	0.025	0.0025	0.00048	15000	mg/L
OW-54	6/21/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-54	6/21/2017	Uranium, Total	0.063	0.0025	0.00077	30000	mg/L
OW-54	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
OW-54	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	9/11/2017	Arsenic, Total	0.008	0.005	0.0015	10000	mg/L
OW-54	9/11/2017	Barium, Total	1.2	0.02	0.0093	2000000	mg/L
OW-54	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	9/11/2017	Chromium, Total	0.02	0.006	0.0018	50000	mg/L
OW-54	9/11/2017	Copper, Total	0.047	0.006	0.0017	790000	mg/L
OW-54	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	9/11/2017	Arsenic, Dissolved	0.0074	0.02	0.0035	10000	mg/L
OW-54	9/11/2017	Barium, Dissolved	0.2	0.002	0.00085	2000000	mg/L
OW-54	9/11/2017	Calcium, Dissolved	69	1	0.078	NA	mg/L
OW-54	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-54	9/11/2017	Iron, Dissolved	0.75	0.02	0.016	13821880	mg/L
OW-54	9/11/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	9/11/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-54	9/11/2017	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OW-54	9/11/2017	Sodium, Dissolved	420	10	1.6	NA	mg/L
OW-54	9/11/2017	Lead, Dissolved	0.0068	0.0005	0.00017	NA	mg/L
OW-54	9/11/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-54	9/11/2017	Uranium, Dissolved	0.055	0.0025	0.00025	NA	mg/L
OW-54	9/11/2017	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
OW-54	9/11/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
OW-54	9/11/2017	Mercury, Total	0.000037	0.0002	0.000037	2000	mg/L
OW-54	9/11/2017	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-54	9/11/2017	Lead, Total	0.033	0.0025	0.00048	15000	mg/L
OW-54	9/11/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
OW-54	9/11/2017	Uranium, Total	0.06	0.0025	0.00077	30000	mg/L
OW-54	9/11/2017	Zinc, Total	0.04	0.01	0.0033	5960000	mg/L
OW-54	12/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	12/6/2017	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-54	12/6/2017	Barium, Total	0.17	0.002	0.001	2000000	mg/L
OW-54	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	12/6/2017	Copper, Total	0.014	0.006	0.0041	790000	mg/L
OW-54	12/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	12/6/2017	Arsenic, Dissolved	0.0057	0.01	0.0042	10000	mg/L
OW-54	12/6/2017	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	12/6/2017	Calcium, Dissolved	61	1	0.078	NA	mg/L
OW-54	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	12/6/2017	Copper, Dissolved	0.0077	0.006	0.0032	790000	mg/L
OW-54	12/6/2017	Iron, Dissolved	0.31	0.02	0.016	13821880	mg/L
OW-54	12/6/2017	Potassium, Dissolved	0.17	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	12/6/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	12/6/2017	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OW-54	12/6/2017	Sodium, Dissolved	410	5	0.82	NA	mg/L
OW-54	12/6/2017	Lead, Dissolved	0.0083	0.0005	0.00017	NA	mg/L
OW-54	12/6/2017	Selenium, Dissolved	ND	0.05	0.038	50000	mg/L
OW-54	12/6/2017	Uranium, Dissolved	0.061	0.0025	0.00048	NA	mg/L
OW-54	12/6/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-54	12/6/2017	Iron, Total	0.63	0.02	0.01	13822000	mg/L
OW-54	12/6/2017	Mercury, Total	0.000072	0.0002	0.000037	2000	mg/L
OW-54	12/6/2017	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	12/6/2017	Lead, Total	0.0092	0.0025	0.0011	15000	mg/L
OW-54	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-54	12/6/2017	Uranium, Total	0.057	0.0025	0.00077	30000	mg/L
OW-54	12/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	2/22/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-54	2/22/2018	Barium, Total	0.22	0.002	0.001	2000000	mg/L
OW-54	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-54	2/22/2018	Copper, Total	0.076	0.006	0.0041	790000	mg/L
OW-54	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-54	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-54	2/22/2018	Barium, Dissolved	0.14	0.01	0.0049	2000000	mg/L
OW-54	2/22/2018	Calcium, Dissolved	57	5	0.39	NA	mg/L
OW-54	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-54	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	2/22/2018	Copper, Dissolved	0.022	0.03	0.016	790000	mg/L
OW-54	2/22/2018	Iron, Dissolved	0.24	0.1	0.082	13821880	mg/L
OW-54	2/22/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OW-54	2/22/2018	Magnesium, Dissolved	18	5	1.2	NA	mg/L
OW-54	2/22/2018	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
OW-54	2/22/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
OW-54	2/22/2018	Lead, Dissolved	0.016	0.005	0.0017	NA	mg/L
OW-54	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-54	2/22/2018	Uranium, Dissolved	0.053	0.005	0.00096	NA	mg/L
OW-54	2/22/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
OW-54	2/22/2018	Iron, Total	3.6	0.1	0.051	13822000	mg/L
OW-54	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-54	2/22/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	2/22/2018	Lead, Total	0.015	0.0005	0.00023	15000	mg/L
OW-54	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-54	2/22/2018	Uranium, Total	0.059	0.0025	0.00034	30000	mg/L
OW-54	2/22/2018	Zinc, Total	0.022	0.05	0.016	5960000	mg/L
OW-54	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	5/8/2018	Arsenic, Total	0.0032	0.001	0.00041	10000	mg/L
OW-54	5/8/2018	Barium, Total	0.15	0.002	0.001	2000000	mg/L
OW-54	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	5/8/2018	Copper, Total	0.02	0.006	0.0041	790000	mg/L
OW-54	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	5/8/2018	Arsenic, Dissolved	0.0024	0.005	0.0021	10000	mg/L
OW-54	5/8/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	5/8/2018	Calcium, Dissolved	66	1	0.078	NA	mg/L
OW-54	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	5/8/2018	Copper, Dissolved	0.0075	0.006	0.0032	790000	mg/L
OW-54	5/8/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
OW-54	5/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	5/8/2018	Manganese, Dissolved	1.4	0.01	0.002	2017400	mg/L
OW-54	5/8/2018	Sodium, Dissolved	440	5	0.82	NA	mg/L
OW-54	5/8/2018	Lead, Dissolved	0.0065	0.0025	0.00087	NA	mg/L
OW-54	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-54	5/8/2018	Uranium, Dissolved	0.057	0.0025	0.00048	NA	mg/L
OW-54	5/8/2018	Zinc, Dissolved	0.0084	0.01	0.0021	5960450	mg/L
OW-54	5/8/2018	Iron, Total	0.69	0.02	0.01	13822000	mg/L
OW-54	5/8/2018	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
OW-54	5/8/2018	Manganese, Total	1.5	0.01	0.0055	2017000	mg/L
OW-54	5/8/2018	Lead, Total	0.0069	0.0005	0.00023	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-54	5/8/2018	Uranium, Total	0.058	0.0025	0.00034	30000	mg/L
OW-54	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-54	8/28/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-54	8/28/2018	Arsenic, Total	0.0047	0.001	0.00041	10000	mg/L
OW-54	8/28/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
OW-54	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	8/28/2018	Copper, Total	0.024	0.006	0.0041	790000	mg/L
OW-54	8/28/2018	Silver, Dissolved	0.0023	0.005	0.0018	81200	mg/L
OW-54	8/28/2018	Arsenic, Dissolved	0.0045	0.001	0.00042	10000	mg/L
OW-54	8/28/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	8/28/2018	Calcium, Dissolved	62	1	0.078	NA	mg/L
OW-54	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	8/28/2018	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
OW-54	8/28/2018	Iron, Dissolved	0.3	0.02	0.016	13821880	mg/L
OW-54	8/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	8/28/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	8/28/2018	Manganese, Dissolved	1.3	0.01	0.002	2017400	mg/L
OW-54	8/28/2018	Sodium, Dissolved	410	5	0.82	NA	mg/L
OW-54	8/28/2018	Lead, Dissolved	0.0097	0.0005	0.00017	NA	mg/L
OW-54	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-54	8/28/2018	Uranium, Dissolved	0.055	0.0025	0.00048	NA	mg/L
OW-54	8/28/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
OW-54	8/28/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
OW-54	8/28/2018	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-54	8/28/2018	Manganese, Total	1.4	0.01	0.0055	2017000	mg/L
OW-54	8/28/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
OW-54	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-54	8/28/2018	Uranium, Total	0.06	0.0025	0.00034	30000	mg/L
OW-54	8/28/2018	Zinc, Total	0.007	0.01	0.0033	5960000	mg/L
OW-54	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-54	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-54	11/7/2018	Barium, Total	0.19	0.002	0.001	2000000	mg/L
OW-54	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-54	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-54	11/7/2018	Copper, Total	0.015	0.006	0.0041	790000	mg/L
OW-54	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-54	11/7/2018	Arsenic, Dissolved	0.0026	0.001	0.00042	10000	mg/L
OW-54	11/7/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
OW-54	11/7/2018	Calcium, Dissolved	59	1	0.078	NA	mg/L
OW-54	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-54	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-54	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-54	11/7/2018	Iron, Dissolved	0.32	0.02	0.016	13821880	mg/L
OW-54	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-54	11/7/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-54	11/7/2018	Manganese, Dissolved	1.5	0.02	0.0039	2017400	mg/L
OW-54	11/7/2018	Sodium, Dissolved	430	10	1.6	NA	mg/L
OW-54	11/7/2018	Lead, Dissolved	0.01	0.0005	0.00017	NA	mg/L
OW-54	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-54	11/7/2018	Uranium, Dissolved	0.059	0.0025	0.00048	NA	mg/L
OW-54	11/7/2018	Zinc, Dissolved	0.025	0.01	0.0021	5960450	mg/L
OW-54	11/7/2018	Iron, Total	0.94	0.02	0.01	13822000	mg/L
OW-54	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-54	11/7/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OW-54	11/7/2018	Lead, Total	0.013	0.0005	0.00023	15000	mg/L
OW-54	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-54	11/7/2018	Uranium, Total	0.062	0.0025	0.00034	30000	mg/L
OW-54	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	5/2/2019	Aluminum, Dissolved	0.23	0.02	0.002488	19913930	mg/L
OW-55	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-55	5/2/2019	Arsenic, Dissolved	0.0047	0.005	0.000504	10000	mg/L
OW-55	5/2/2019	Barium, Dissolved	0.57	0.002	0.000648	2000000	mg/L
OW-55	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-55	5/2/2019	Boron, Dissolved	0.44	0.04	0.004531	3949110	mg/L
OW-55	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-55	5/2/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-55	5/2/2019	Cobalt, Dissolved	0.014	0.006	0.003091	5980	mg/L
OW-55	5/2/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-55	5/2/2019	Iron, Dissolved	4.4	0.1	0.043734	13821880	mg/L
OW-55	5/2/2019	Lead, Dissolved	0.00049	0.0025	0.000274	NA	mg/L
OW-55	5/2/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OW-55	5/2/2019	Manganese, Dissolved	3.8	0.01	0.00145	2017400	mg/L
OW-55	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-55	5/2/2019	Nickel, Dissolved	0.33	0.01	0.004009	372000	mg/L
OW-55	5/2/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-55	5/2/2019	Selenium, Dissolved	0.001	0.005	0.000857	50000	mg/L
OW-55	5/2/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-55	5/2/2019	Sodium, Dissolved	370	5	2.080881	NA	mg/L
OW-55	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-55	5/2/2019	Uranium, Dissolved	0.0038	0.0025	0.000374	NA	mg/L
OW-55	5/2/2019	Zinc, Dissolved	0.033	0.01	0.002252	5960450	mg/L
OW-55	5/2/2019	Aluminum, Total	6.8	0.2	0.024883	19914000	mg/L
OW-55	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-55	5/2/2019	Arsenic, Total	0.0064	0.005	0.001561	10000	mg/L
OW-55	5/2/2019	Barium, Total	0.63	0.002	0.000648	2000000	mg/L
OW-55	5/2/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
OW-55	5/2/2019	Boron, Total	0.46	0.04	0.004531	3949	mg/L
OW-55	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-55	5/2/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-55	5/2/2019	Cobalt, Total	0.022	0.006	0.003091	5980	mg/L
OW-55	5/2/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-55	5/2/2019	Iron, Total	7.8	0.2	0.087469	13822000	mg/L
OW-55	5/2/2019	Lead, Total	0.0046	0.0025	0.000274	15000	mg/L
OW-55	5/2/2019	Manganese, Total	3.6	0.01	0.00145	2017000	mg/L
OW-55	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-55	5/2/2019	Nickel, Total	0.32	0.01	0.004009	372000	mg/L
OW-55	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-55	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-55	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-55	5/2/2019	Uranium, Total	0.0046	0.0025	0.000424	30000	mg/L
OW-55	5/2/2019	Zinc, Total	0.01	0.01	0.005772	5960000	mg/L
OW-55	2/6/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-55	2/6/2019	Arsenic, Dissolved	0.0053	0.001	0.000068	10000	mg/L
OW-55	2/6/2019	Barium, Dissolved	0.54	0.002	0.000648	2000000	mg/L
OW-55	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-55	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-55	2/6/2019	Calcium, Dissolved	100	5	0.309446	NA	mg/L
OW-55	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-55	2/6/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-55	2/6/2019	Iron, Dissolved	4	0.1	0.043734	13821880	mg/L
OW-55	2/6/2019	Lead, Dissolved	0.00014	0.0005	0.000047	NA	mg/L
OW-55	2/6/2019	Magnesium, Dissolved	27	1	0.05029	NA	mg/L
OW-55	2/6/2019	Manganese, Dissolved	3.7	0.01	0.00145	2017400	mg/L
OW-55	2/6/2019	Potassium, Dissolved	ND	1	0.162288	NA	mg/L
OW-55	2/6/2019	Selenium, Dissolved	0.00025	0.001	0.000203	50000	mg/L
OW-55	2/6/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-55	2/6/2019	Sodium, Dissolved	350	5	2.080881	NA	mg/L
OW-55	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-55	2/6/2019	Uranium, Dissolved	0.0071	0.0005	0.00003	NA	mg/L
OW-55	2/6/2019	Zinc, Dissolved	0.021	0.01	0.002252	5960450	mg/L
OW-55	2/6/2019	Antimony, Total	ND	0.001	0.000157	6000	mg/L
OW-55	2/6/2019	Arsenic, Total	0.0055	0.001	0.000312	10000	mg/L
OW-55	2/6/2019	Barium, Total	0.58	0.002	0.000488	2000000	mg/L
OW-55	2/6/2019	Beryllium, Total	0.00027	0.002	0.000224	4000	mg/L
OW-55	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-55	2/6/2019	Chromium, Total	ND	0.006	0.0012	50000	mg/L
OW-55	2/6/2019	Copper, Total	0.0045	0.006	0.004072	790000	mg/L
OW-55	2/6/2019	Iron, Total	5.5	0.2	0.060526	13822000	mg/L
OW-55	2/6/2019	Lead, Total	0.0021	0.0005	0.000026	15000	mg/L
OW-55	2/6/2019	Manganese, Total	3.8	0.01	0.000299	2017000	mg/L
OW-55	2/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-55	2/6/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-55	2/6/2019	Uranium, Total	0.007	0.0005	0.000085	30000	mg/L
OW-55	2/6/2019	Zinc, Total	0.0075	0.01	0.005772	5960000	mg/L
OW-55	6/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-55	6/1/2016	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
OW-55	6/1/2016	Barium, Total	3.2	0.01	0.0066	2000000	mg/L
OW-55	6/1/2016	Beryllium, Total	0.008	0.002	0.00031	4000	mg/L
OW-55	6/1/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
OW-55	6/1/2016	Cobalt, Total	0.046	0.006	0.00085	5980	mg/L
OW-55	6/1/2016	Chromium, Total	0.031	0.006	0.0022	50000	mg/L
OW-55	6/1/2016	Iron, Total	39	1	0.45	13822000	mg/L
OW-55	6/1/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-55	6/1/2016	Manganese, Total	6.3	0.02	0.015	2017000	mg/L
OW-55	6/1/2016	Nickel, Total	0.46	0.01	0.0024	372000	mg/L
OW-55	6/1/2016	Lead, Total	0.083	0.0025	0.00084	15000	mg/L
OW-55	6/1/2016	Antimony, Total	ND	0.005	0.0024	6000	mg/L
OW-55	6/1/2016	Selenium, Total	0.009	0.005	0.0011	50000	mg/L
OW-55	6/1/2016	Vanadium, Total	0.061	0.05	0.0015	63100	mg/L
OW-55	6/1/2016	Zinc, Total	0.1	0.01	0.0039	5960000	mg/L
OW-55	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-55	9/16/2016	Arsenic, Total	0.0078	0.005	0.0011	10000	mg/L
OW-55	9/16/2016	Barium, Total	1.2	0.01	0.004	2000000	mg/L
OW-55	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	9/16/2016	Chromium, Total	0.009	0.006	0.0027	50000	mg/L
OW-55	9/16/2016	Copper, Total	0.0094	0.006	0.003	790000	mg/L
OW-55	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-55	9/16/2016	Arsenic, Dissolved	0.0074	0.001	0.00014	10000	mg/L
OW-55	9/16/2016	Barium, Dissolved	0.6	0.002	0.0013	2000000	mg/L
OW-55	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-55	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-55	9/16/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-55	9/16/2016	Iron, Dissolved	3.8	0.1	0.1	13821880	mg/L
OW-55	9/16/2016	Manganese, Dissolved	4.1	0.01	0.0016	2017400	mg/L
OW-55	9/16/2016	Lead, Dissolved	0.00022	0.0005	0.00017	NA	mg/L
OW-55	9/16/2016	Selenium, Dissolved	0.0082	0.001	0.00021	50000	mg/L
OW-55	9/16/2016	Uranium, Dissolved	0.0074	0.0005	0.000051	NA	mg/L
OW-55	9/16/2016	Zinc, Dissolved	0.0035	0.01	0.0028	5960450	mg/L
OW-55	9/16/2016	Iron, Total	13	0.4	0.4	13822000	mg/L
OW-55	9/16/2016	Mercury, Total	0.00011	0.0002	0.000053	2000	mg/L
OW-55	9/16/2016	Manganese, Total	5.2	0.04	0.0055	2017000	mg/L
OW-55	9/16/2016	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
OW-55	9/16/2016	Selenium, Total	0.0038	0.005	0.00094	50000	mg/L
OW-55	9/16/2016	Uranium, Total	0.0094	0.0005	0.00017	30000	mg/L
OW-55	9/16/2016	Zinc, Total	0.066	0.01	0.0027	5960000	mg/L
OW-55	11/9/2016	Silver, Total	0.0062	0.005	0.0015	50000	mg/L
OW-55	11/9/2016	Arsenic, Total	0.0077	0.001	0.00021	10000	mg/L
OW-55	11/9/2016	Barium, Total	0.85	0.002	0.00079	2000000	mg/L
OW-55	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	11/9/2016	Chromium, Total	0.0057	0.006	0.0027	50000	mg/L
OW-55	11/9/2016	Copper, Total	0.0032	0.006	0.003	790000	mg/L
OW-55	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-55	11/9/2016	Arsenic, Dissolved	0.0075	0.001	0.00014	10000	mg/L
OW-55	11/9/2016	Barium, Dissolved	0.62	0.002	0.0013	2000000	mg/L
OW-55	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-55	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-55	11/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-55	11/9/2016	Iron, Dissolved	3.8	0.2	0.2	13821880	mg/L
OW-55	11/9/2016	Manganese, Dissolved	4.4	0.02	0.0032	2017400	mg/L
OW-55	11/9/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
OW-55	11/9/2016	Selenium, Dissolved	0.0081	0.001	0.00021	50000	mg/L
OW-55	11/9/2016	Uranium, Dissolved	0.0074	0.0005	0.000051	NA	mg/L
OW-55	11/9/2016	Zinc, Dissolved	0.0094	0.01	0.0028	5960450	mg/L
OW-55	11/9/2016	Iron, Total	8.7	0.2	0.2	13822000	mg/L
OW-55	11/9/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-55	11/9/2016	Manganese, Total	4.5	0.02	0.0027	2017000	mg/L
OW-55	11/9/2016	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
OW-55	11/9/2016	Selenium, Total	0.0076	0.02	0.0037	50000	mg/L
OW-55	11/9/2016	Uranium, Total	0.007	0.0025	0.00087	30000	mg/L
OW-55	11/9/2016	Zinc, Total	0.018	0.01	0.0027	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-55	3/29/2017	Arsenic, Total	0.0079	0.001	0.00021	10000	mg/L
OW-55	3/29/2017	Barium, Total	0.81	0.002	0.00079	2000000	mg/L
OW-55	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-55	3/29/2017	Chromium, Total	0.012	0.006	0.0027	50000	mg/L
OW-55	3/29/2017	Copper, Total	0.01	0.006	0.003	790000	mg/L
OW-55	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-55	3/29/2017	Arsenic, Dissolved	0.0058	0.005	0.00089	10000	mg/L
OW-55	3/29/2017	Barium, Dissolved	0.63	0.002	0.00085	2000000	mg/L
OW-55	3/29/2017	Calcium, Dissolved	130	10	5	NA	mg/L
OW-55	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-55	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	3/29/2017	Iron, Dissolved	5	0.2	0.2	13821880	mg/L
OW-55	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-55	3/29/2017	Magnesium, Dissolved	35	1	0.5	NA	mg/L
OW-55	3/29/2017	Manganese, Dissolved	4.2	0.02	0.0038	2017400	mg/L
OW-55	3/29/2017	Sodium, Dissolved	410	10	5	NA	mg/L
OW-55	3/29/2017	Lead, Dissolved	0.00091	0.0005	0.00017	NA	mg/L
OW-55	3/29/2017	Selenium, Dissolved	0.0047	0.005	0.0019	50000	mg/L
OW-55	3/29/2017	Uranium, Dissolved	0.0047	0.0005	0.00005	NA	mg/L
OW-55	3/29/2017	Zinc, Dissolved	0.0083	0.01	0.0011	5960450	mg/L
OW-55	3/29/2017	Iron, Total	15	1	1	13822000	mg/L
OW-55	3/29/2017	Mercury, Total	0.000037	0.0002	0.000037	2000	mg/L
OW-55	3/29/2017	Manganese, Total	4.6	0.02	0.0027	2017000	mg/L
OW-55	3/29/2017	Lead, Total	0.018	0.0005	0.000081	15000	mg/L
OW-55	3/29/2017	Selenium, Total	0.0075	0.001	0.00019	50000	mg/L
OW-55	3/29/2017	Uranium, Total	0.0056	0.0005	0.00017	30000	mg/L
OW-55	3/29/2017	Zinc, Total	0.026	0.01	0.0027	5960000	mg/L
OW-55	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-55	6/21/2017	Arsenic, Total	0.0071	0.001	0.0003	10000	mg/L
OW-55	6/21/2017	Barium, Total	0.69	0.002	0.00093	2000000	mg/L
OW-55	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	6/21/2017	Chromium, Total	0.011	0.006	0.0011	50000	mg/L
OW-55	6/21/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
OW-55	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-55	6/21/2017	Arsenic, Dissolved	0.006	0.001	0.00018	10000	mg/L
OW-55	6/21/2017	Barium, Dissolved	0.56	0.002	0.00085	2000000	mg/L
OW-55	6/21/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
OW-55	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-55	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	6/21/2017	Iron, Dissolved	4.2	0.2	0.16	13821880	mg/L
OW-55	6/21/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	6/21/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-55	6/21/2017	Manganese, Dissolved	3.7	0.02	0.0038	2017400	mg/L
OW-55	6/21/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
OW-55	6/21/2017	Lead, Dissolved	0.00029	0.0005	0.00017	NA	mg/L
OW-55	6/21/2017	Selenium, Dissolved	0.0056	0.001	0.00039	50000	mg/L
OW-55	6/21/2017	Uranium, Dissolved	0.004	0.0005	0.00005	NA	mg/L
OW-55	6/21/2017	Zinc, Dissolved	0.0082	0.01	0.0011	5960450	mg/L
OW-55	6/21/2017	Iron, Total	14	0.4	0.2	13822000	mg/L
OW-55	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	6/21/2017	Manganese, Total	4.3	0.02	0.011	2017000	mg/L
OW-55	6/21/2017	Lead, Total	0.014	0.0025	0.00048	15000	mg/L
OW-55	6/21/2017	Selenium, Total	0.0041	0.001	0.00071	50000	mg/L
OW-55	6/21/2017	Uranium, Total	0.0063	0.0025	0.00077	30000	mg/L
OW-55	6/21/2017	Zinc, Total	0.023	0.01	0.0028	5960000	mg/L
OW-55	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	9/11/2017	Arsenic, Total	0.0082	0.001	0.0003	10000	mg/L
OW-55	9/11/2017	Barium, Total	1.1	0.02	0.0093	2000000	mg/L
OW-55	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	9/11/2017	Chromium, Total	0.019	0.006	0.0018	50000	mg/L
OW-55	9/11/2017	Copper, Total	0.017	0.006	0.0017	790000	mg/L
OW-55	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	9/11/2017	Arsenic, Dissolved	0.0075	0.001	0.00018	10000	mg/L
OW-55	9/11/2017	Barium, Dissolved	0.67	0.002	0.00085	2000000	mg/L
OW-55	9/11/2017	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-55	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	9/11/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	9/11/2017	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
OW-55	9/11/2017	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	9/11/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
OW-55	9/11/2017	Manganese, Dissolved	3.9	0.02	0.0039	2017400	mg/L
OW-55	9/11/2017	Sodium, Dissolved	380	10	1.6	NA	mg/L
OW-55	9/11/2017	Lead, Dissolved	0.0014	0.0005	0.00017	NA	mg/L
OW-55	9/11/2017	Selenium, Dissolved	0.0086	0.001	0.00039	50000	mg/L
OW-55	9/11/2017	Uranium, Dissolved	0.0042	0.0005	0.00005	NA	mg/L
OW-55	9/11/2017	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
OW-55	9/11/2017	Iron, Total	23	1	0.51	13822000	mg/L
OW-55	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	9/11/2017	Manganese, Total	4.8	0.02	0.011	2017000	mg/L
OW-55	9/11/2017	Lead, Total	0.024	0.0025	0.00048	15000	mg/L
OW-55	9/11/2017	Selenium, Total	0.007	0.001	0.00071	50000	mg/L
OW-55	9/11/2017	Uranium, Total	0.0061	0.0005	0.00015	30000	mg/L
OW-55	9/11/2017	Zinc, Total	0.042	0.01	0.0033	5960000	mg/L
OW-55	12/6/2017	Silver, Total	0.0017	0.005	0.0012	50000	mg/L
OW-55	12/6/2017	Arsenic, Total	0.0053	0.001	0.00041	10000	mg/L
OW-55	12/6/2017	Barium, Total	0.51	0.002	0.001	2000000	mg/L
OW-55	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	12/6/2017	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-55	12/6/2017	Arsenic, Dissolved	0.0051	0.001	0.00042	10000	mg/L
OW-55	12/6/2017	Barium, Dissolved	0.48	0.002	0.00099	2000000	mg/L
OW-55	12/6/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-55	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	12/6/2017	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
OW-55	12/6/2017	Potassium, Dissolved	0.13	1	0.11	NA	mg/L
OW-55	12/6/2017	Magnesium, Dissolved	31	1	0.25	NA	mg/L
OW-55	12/6/2017	Manganese, Dissolved	3.9	0.01	0.002	2017400	mg/L
OW-55	12/6/2017	Sodium, Dissolved	380	5	0.82	NA	mg/L
OW-55	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	12/6/2017	Selenium, Dissolved	0.0047	0.005	0.0038	50000	mg/L
OW-55	12/6/2017	Uranium, Dissolved	0.0041	0.0005	0.000096	NA	mg/L
OW-55	12/6/2017	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-55	12/6/2017	Iron, Total	4.1	0.1	0.051	13822000	mg/L
OW-55	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	12/6/2017	Manganese, Total	3.9	0.01	0.0055	2017000	mg/L
OW-55	12/6/2017	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-55	12/6/2017	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-55	12/6/2017	Uranium, Total	0.0043	0.0025	0.00077	30000	mg/L
OW-55	12/6/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	2/22/2018	Silver, Total	0.0019	0.005	0.0012	50000	mg/L
OW-55	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-55	2/22/2018	Barium, Total	0.51	0.002	0.001	2000000	mg/L
OW-55	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-55	2/22/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-55	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-55	2/22/2018	Barium, Dissolved	0.46	0.01	0.0049	2000000	mg/L
OW-55	2/22/2018	Calcium, Dissolved	99	5	0.39	NA	mg/L
OW-55	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-55	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-55	2/22/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
OW-55	2/22/2018	Potassium, Dissolved	ND	5	0.56	NA	mg/L
OW-55	2/22/2018	Magnesium, Dissolved	31	5	1.2	NA	mg/L
OW-55	2/22/2018	Manganese, Dissolved	3.7	0.01	0.002	2017400	mg/L
OW-55	2/22/2018	Sodium, Dissolved	380	5	0.82	NA	mg/L
OW-55	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-55	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-55	2/22/2018	Uranium, Dissolved	0.0036	0.0025	0.00048	NA	mg/L
OW-55	2/22/2018	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/22/2018	Iron, Total	3.7	0.1	0.051	13822000	mg/L
OW-55	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	2/22/2018	Manganese, Total	3.8	0.01	0.0055	2017000	mg/L
OW-55	2/22/2018	Lead, Total	0.0006	0.0005	0.00023	15000	mg/L
OW-55	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-55	2/22/2018	Uranium, Total	0.0043	0.0005	0.000068	30000	mg/L
OW-55	2/22/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
OW-55	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	5/8/2018	Arsenic, Total	0.006	0.001	0.00041	10000	mg/L
OW-55	5/8/2018	Barium, Total	0.49	0.002	0.001	2000000	mg/L
OW-55	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	5/8/2018	Arsenic, Dissolved	0.0043	0.005	0.0021	10000	mg/L
OW-55	5/8/2018	Barium, Dissolved	0.52	0.002	0.00099	2000000	mg/L
OW-55	5/8/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-55	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	5/8/2018	Iron, Dissolved	3.7	0.1	0.082	13821880	mg/L
OW-55	5/8/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	5/8/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	5/8/2018	Manganese, Dissolved	4	0.01	0.002	2017400	mg/L
OW-55	5/8/2018	Sodium, Dissolved	390	5	0.82	NA	mg/L
OW-55	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-55	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-55	5/8/2018	Uranium, Dissolved	0.0036	0.0025	0.00048	NA	mg/L
OW-55	5/8/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
OW-55	5/8/2018	Iron, Total	4.4	0.1	0.051	13822000	mg/L
OW-55	5/8/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-55	5/8/2018	Manganese, Total	4.1	0.01	0.0055	2017000	mg/L
OW-55	5/8/2018	Lead, Total	0.00069	0.0005	0.00023	15000	mg/L
OW-55	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-55	5/8/2018	Uranium, Total	0.0046	0.0005	0.000068	30000	mg/L
OW-55	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-55	8/28/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
OW-55	8/28/2018	Arsenic, Total	0.007	0.001	0.00041	10000	mg/L
OW-55	8/28/2018	Barium, Total	0.55	0.002	0.001	2000000	mg/L
OW-55	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-55	8/28/2018	Chromium, Total	0.0018	0.006	0.0018	50000	mg/L
OW-55	8/28/2018	Copper, Total	0.0053	0.006	0.0041	790000	mg/L
OW-55	8/28/2018	Silver, Dissolved	0.003	0.005	0.0018	81200	mg/L
OW-55	8/28/2018	Arsenic, Dissolved	0.0044	0.001	0.00042	10000	mg/L
OW-55	8/28/2018	Barium, Dissolved	0.51	0.002	0.00099	2000000	mg/L
OW-55	8/28/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
OW-55	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	8/28/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
OW-55	8/28/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	8/28/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	8/28/2018	Manganese, Dissolved	3.6	0.01	0.002	2017400	mg/L
OW-55	8/28/2018	Sodium, Dissolved	360	5	0.82	NA	mg/L
OW-55	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-55	8/28/2018	Uranium, Dissolved	0.0037	0.0005	0.000096	NA	mg/L
OW-55	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-55	8/28/2018	Iron, Total	6.8	0.2	0.1	13822000	mg/L
OW-55	8/28/2018	Mercury, Total	0.000066	0.0002	0.000038	2000	mg/L
OW-55	8/28/2018	Manganese, Total	3.8	0.02	0.011	2017000	mg/L
OW-55	8/28/2018	Lead, Total	0.0039	0.0005	0.00023	15000	mg/L
OW-55	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-55	8/28/2018	Uranium, Total	0.0064	0.0025	0.00034	30000	mg/L
OW-55	8/28/2018	Zinc, Total	0.013	0.01	0.0033	5960000	mg/L
OW-55	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-55	11/7/2018	Arsenic, Total	0.0063	0.005	0.0021	10000	mg/L
OW-55	11/7/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
OW-55	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-55	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-55	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-55	11/7/2018	Arsenic, Dissolved	0.0044	0.001	0.00042	10000	mg/L
OW-55	11/7/2018	Barium, Dissolved	0.5	0.002	0.00099	2000000	mg/L
OW-55	11/7/2018	Calcium, Dissolved	100	5	0.39	NA	mg/L
OW-55	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-55	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-55	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-55	11/7/2018	Iron, Dissolved	3.4	0.1	0.082	13821880	mg/L
OW-55	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-55	11/7/2018	Magnesium, Dissolved	29	1	0.25	NA	mg/L
OW-55	11/7/2018	Manganese, Dissolved	3.5	0.01	0.002	2017400	mg/L
OW-55	11/7/2018	Sodium, Dissolved	350	5	0.82	NA	mg/L
OW-55	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-55	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-55	11/7/2018	Uranium, Dissolved	0.0051	0.0005	0.000096	NA	mg/L
OW-55	11/7/2018	Zinc, Dissolved	0.015	0.01	0.0021	5960450	mg/L
OW-55	11/7/2018	Iron, Total	4.3	0.1	0.051	13822000	mg/L
OW-55	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-55	11/7/2018	Manganese, Total	3.6	0.01	0.0055	2017000	mg/L
OW-55	11/7/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
OW-55	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-55	11/7/2018	Uranium, Total	0.0056	0.0005	0.000068	30000	mg/L
OW-55	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-56	2/6/2019	Antimony, Dissolved	0.0003	0.001	0.000204	6000	mg/L
OW-56	2/6/2019	Arsenic, Dissolved	0.0021	0.001	0.000068	10000	mg/L
OW-56	2/6/2019	Barium, Dissolved	0.38	0.002	0.000648	2000000	mg/L
OW-56	2/6/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	2/6/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	2/6/2019	Calcium, Dissolved	92	1	0.061889	NA	mg/L
OW-56	2/6/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	2/6/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
OW-56	2/6/2019	Iron, Dissolved	0.032	0.02	0.008747	13821880	mg/L
OW-56	2/6/2019	Lead, Dissolved	0.00019	0.0005	0.000047	NA	mg/L
OW-56	2/6/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	2/6/2019	Manganese, Dissolved	0.082	0.002	0.00029	2017400	mg/L
OW-56	2/6/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	2/6/2019	Selenium, Dissolved	0.00035	0.001	0.000203	50000	mg/L
OW-56	2/6/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-56	2/6/2019	Sodium, Dissolved	450	5	2.080881	NA	mg/L
OW-56	2/6/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-56	2/6/2019	Uranium, Dissolved	0.016	0.0005	0.00003	NA	mg/L
OW-56	2/6/2019	Zinc, Dissolved	0.017	0.01	0.002252	5960450	mg/L
OW-56	2/6/2019	Antimony, Total	0.00048	0.001	0.000157	6000	mg/L
OW-56	2/6/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
OW-56	2/6/2019	Barium, Total	0.42	0.002	0.000488	2000000	mg/L
OW-56	2/6/2019	Beryllium, Total	0.00067	0.002	0.000224	4000	mg/L
OW-56	2/6/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	2/6/2019	Chromium, Total	0.0038	0.006	0.0012	50000	mg/L
OW-56	2/6/2019	Copper, Total	0.0094	0.006	0.004072	790000	mg/L
OW-56	2/6/2019	Iron, Total	1.9	0.1	0.030263	13822000	mg/L
OW-56	2/6/2019	Lead, Total	0.0021	0.0005	0.000026	15000	mg/L
OW-56	2/6/2019	Manganese, Total	0.19	0.002	0.00006	2017000	mg/L
OW-56	2/6/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	2/6/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-56	2/6/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-56	2/6/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	2/6/2019	Uranium, Total	0.017	0.0005	0.000085	30000	mg/L
OW-56	2/6/2019	Zinc, Total	0.0086	0.01	0.005772	5960000	mg/L
OW-56	10/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-56	10/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-56	10/15/2019	Arsenic, Dissolved	0.0023	0.001	0.000101	10000	mg/L
OW-56	10/15/2019	Barium, Dissolved	0.32	0.002	0.000648	2000000	mg/L
OW-56	10/15/2019	Beryllium, Dissolved	0.00058	0.002	0.000284	4000	mg/L
OW-56	10/15/2019	Boron, Dissolved	0.61	0.04	0.004531	3949110	mg/L
OW-56	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	10/15/2019	Calcium, Dissolved	88	1	0.061889	NA	mg/L
OW-56	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	10/15/2019	Copper, Dissolved	0.0086	0.006	0.001296	790000	mg/L
OW-56	10/15/2019	Iron, Dissolved	0.016	0.02	0.008747	13821880	mg/L
OW-56	10/15/2019	Lead, Dissolved	0.000098	0.0005	0.000055	NA	mg/L
OW-56	10/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-56	10/15/2019	Manganese, Dissolved	0.081	0.002	0.00029	2017400	mg/L
OW-56	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	10/15/2019	Nickel, Dissolved	0.084	0.01	0.004009	372000	mg/L
OW-56	10/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-56	10/15/2019	Selenium, Dissolved	0.00034	0.001	0.000171	50000	mg/L
OW-56	10/15/2019	Silver, Dissolved	0.0026	0.005	0.000942	81200	mg/L
OW-56	10/15/2019	Sodium, Dissolved	470	5	2.080881	NA	mg/L
OW-56	10/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	10/15/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
OW-56	10/15/2019	Aluminum, Total	4.3	0.1	0.012441	19914000	mg/L
OW-56	10/15/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-56	10/15/2019	Arsenic, Total	0.0042	0.005	0.001561	10000	mg/L
OW-56	10/15/2019	Barium, Total	0.47	0.002	0.000648	2000000	mg/L
OW-56	10/15/2019	Beryllium, Total	0.00046	0.002	0.000284	4000	mg/L
OW-56	10/15/2019	Boron, Total	0.63	0.04	0.004531	3949	mg/L
OW-56	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	10/15/2019	Chromium, Total	0.0034	0.006	0.001533	50000	mg/L
OW-56	10/15/2019	Cobalt, Total	0.0037	0.006	0.003091	5980	mg/L
OW-56	10/15/2019	Copper, Total	0.0047	0.006	0.004072	790000	mg/L
OW-56	10/15/2019	Iron, Total	3.1	0.1	0.043734	13822000	mg/L
OW-56	10/15/2019	Lead, Total	0.0021	0.0005	0.000055	15000	mg/L
OW-56	10/15/2019	Manganese, Total	0.24	0.002	0.00029	2017000	mg/L
OW-56	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	10/15/2019	Nickel, Total	0.066	0.01	0.004009	372000	mg/L
OW-56	10/15/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-56	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-56	10/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	10/15/2019	Zinc, Total	0.014	0.01	0.005772	5960000	mg/L
OW-56	5/2/2019	Aluminum, Dissolved	0.041	0.02	0.002488	19913930	mg/L
OW-56	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-56	5/2/2019	Arsenic, Dissolved	0.0015	0.005	0.000504	10000	mg/L
OW-56	5/2/2019	Barium, Dissolved	0.24	0.002	0.000648	2000000	mg/L
OW-56	5/2/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	5/2/2019	Boron, Dissolved	0.51	0.04	0.004531	3949110	mg/L
OW-56	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	5/2/2019	Calcium, Dissolved	95	1	0.061889	NA	mg/L
OW-56	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	5/2/2019	Copper, Dissolved	0.0065	0.006	0.001296	790000	mg/L
OW-56	5/2/2019	Iron, Dissolved	0.041	0.02	0.008747	13821880	mg/L
OW-56	5/2/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-56	5/2/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	5/2/2019	Manganese, Dissolved	0.064	0.002	0.00029	2017400	mg/L
OW-56	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	5/2/2019	Nickel, Dissolved	0.077	0.01	0.004009	372000	mg/L
OW-56	5/2/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	5/2/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
OW-56	5/2/2019	Silver, Dissolved	0.0019	0.005	0.000942	81200	mg/L
OW-56	5/2/2019	Sodium, Dissolved	510	10	4.161763	NA	mg/L
OW-56	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-56	5/2/2019	Uranium, Dissolved	0.016	0.0025	0.000374	NA	mg/L
OW-56	5/2/2019	Zinc, Dissolved	0.046	0.01	0.002252	5960450	mg/L
OW-56	5/2/2019	Aluminum, Total	6.2	0.2	0.024883	19914000	mg/L
OW-56	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-56	5/2/2019	Arsenic, Total	0.0038	0.005	0.001561	10000	mg/L
OW-56	5/2/2019	Barium, Total	0.49	0.002	0.000648	2000000	mg/L
OW-56	5/2/2019	Beryllium, Total	0.001	0.002	0.000284	4000	mg/L
OW-56	5/2/2019	Boron, Total	0.51	0.04	0.004531	3949	mg/L
OW-56	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	5/2/2019	Chromium, Total	0.0049	0.006	0.001533	50000	mg/L
OW-56	5/2/2019	Cobalt, Total	0.0045	0.006	0.003091	5980	mg/L
OW-56	5/2/2019	Copper, Total	0.0076	0.006	0.004072	790000	mg/L
OW-56	5/2/2019	Iron, Total	4	0.1	0.043734	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	5/2/2019	Lead, Total	0.0044	0.0025	0.000274	15000	mg/L
OW-56	5/2/2019	Manganese, Total	0.25	0.002	0.00029	2017000	mg/L
OW-56	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	5/2/2019	Nickel, Total	0.081	0.01	0.004009	372000	mg/L
OW-56	5/2/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-56	5/2/2019	Silver, Total	0.0014	0.005	0.001418	50000	mg/L
OW-56	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-56	5/2/2019	Uranium, Total	0.019	0.0025	0.000424	30000	mg/L
OW-56	5/2/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-56	8/21/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-56	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-56	8/21/2019	Arsenic, Dissolved	0.0019	0.001	0.000101	10000	mg/L
OW-56	8/21/2019	Barium, Dissolved	0.36	0.002	0.000648	2000000	mg/L
OW-56	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-56	8/21/2019	Boron, Dissolved	0.57	0.04	0.004531	3949110	mg/L
OW-56	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-56	8/21/2019	Calcium, Dissolved	91	1	0.061889	NA	mg/L
OW-56	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-56	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-56	8/21/2019	Copper, Dissolved	0.0082	0.006	0.001296	790000	mg/L
OW-56	8/21/2019	Iron, Dissolved	0.011	0.02	0.008747	13821880	mg/L
OW-56	8/21/2019	Lead, Dissolved	0.00012	0.0005	0.000055	NA	mg/L
OW-56	8/21/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-56	8/21/2019	Manganese, Dissolved	0.068	0.002	0.00029	2017400	mg/L
OW-56	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-56	8/21/2019	Nickel, Dissolved	0.078	0.01	0.004009	372000	mg/L
OW-56	8/21/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
OW-56	8/21/2019	Selenium, Dissolved	0.00037	0.001	0.000171	50000	mg/L
OW-56	8/21/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-56	8/21/2019	Sodium, Dissolved	520	10	4.161763	NA	mg/L
OW-56	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	8/21/2019	Uranium, Dissolved	0.015	0.0005	0.000075	NA	mg/L
OW-56	8/21/2019	Zinc, Dissolved	0.0098	0.01	0.002252	5960450	mg/L
OW-56	8/21/2019	Aluminum, Total	3.9	0.2	0.024883	19914000	mg/L
OW-56	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-56	8/21/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-56	8/21/2019	Barium, Total	0.52	0.002	0.000648	2000000	mg/L
OW-56	8/21/2019	Beryllium, Total	0.00072	0.002	0.000284	4000	mg/L
OW-56	8/21/2019	Boron, Total	0.58	0.04	0.004531	3949	mg/L
OW-56	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-56	8/21/2019	Chromium, Total	0.0032	0.006	0.001533	50000	mg/L
OW-56	8/21/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-56	8/21/2019	Copper, Total	0.0086	0.006	0.004072	790000	mg/L
OW-56	8/21/2019	Iron, Total	3	0.2	0.087469	13822000	mg/L
OW-56	8/21/2019	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
OW-56	8/21/2019	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
OW-56	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-56	8/21/2019	Nickel, Total	0.08	0.01	0.004009	372000	mg/L
OW-56	8/21/2019	Selenium, Total	0.0014	0.001	0.000478	50000	mg/L
OW-56	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-56	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	8/21/2019	Uranium, Total	0.017	0.0005	0.000085	30000	mg/L
OW-56	8/21/2019	Zinc, Total	0.016	0.01	0.005772	5960000	mg/L
OW-56	3/2/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-56	3/2/2020	Arsenic, Dissolved	0.0023	0.001	0.0001	10000	mg/L
OW-56	3/2/2020	Lead, Dissolved	0.000091	0.0005	0.000055	NA	mg/L
OW-56	3/2/2020	Selenium, Dissolved	0.00027	0.001	0.00017	50000	mg/L
OW-56	3/2/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-56	3/2/2020	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-56	3/2/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-56	3/2/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-56	3/2/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-56	3/2/2020	Iron, Dissolved	0.021	0.02	0.0087	13821880	mg/L
OW-56	3/2/2020	Magnesium, Dissolved	16	1	0.05	NA	mg/L
OW-56	3/2/2020	Potassium, Dissolved	0.92	1	0.16	NA	mg/L
OW-56	3/2/2020	Barium, Dissolved	0.3	0.01	0.0032	2000000	mg/L
OW-56	3/2/2020	Boron, Dissolved	0.49	0.2	0.023	3949110	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/2/2020	Cadmium, Dissolved	ND	0.01	0.0028	5000	mg/L
OW-56	3/2/2020	Calcium, Dissolved	82	5	0.31	NA	mg/L
OW-56	3/2/2020	Chromium, Dissolved	ND	0.03	0.0077	100000	mg/L
OW-56	3/2/2020	Cobalt, Dissolved	ND	0.03	0.015	5980	mg/L
OW-56	3/2/2020	Molybdenum, Dissolved	ND	0.04	0.034	98700	mg/L
OW-56	3/2/2020	Nickel, Dissolved	0.081	0.05	0.02	372000	mg/L
OW-56	3/2/2020	Silver, Dissolved	ND	0.025	0.0047	81200	mg/L
OW-56	3/2/2020	Sodium, Dissolved	480	5	2.1	NA	mg/L
OW-56	3/2/2020	Zinc, Dissolved	0.012	0.05	0.011	5960450	mg/L
OW-56	3/2/2020	Manganese, Dissolved	0.07	0.002	0.00029	2017400	mg/L
OW-56	3/2/2020	Uranium, Total	0.017	0.0025	0.00042	30000	mg/L
OW-56	3/2/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-56	3/2/2020	Arsenic, Total	0.0032	0.001	0.00031	10000	mg/L
OW-56	3/2/2020	Lead, Total	0.002	0.0005	0.000055	15000	mg/L
OW-56	3/2/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-56	3/2/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-56	3/2/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-56	3/2/2020	Barium, Total	0.47	0.002	0.00065	2000000	mg/L
OW-56	3/2/2020	Beryllium, Total	0.00053	0.002	0.00028	4000	mg/L
OW-56	3/2/2020	Boron, Total	0.54	0.04	0.0045	3949	mg/L
OW-56	3/2/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-56	3/2/2020	Chromium, Total	0.0029	0.006	0.0015	50000	mg/L
OW-56	3/2/2020	Cobalt, Total	0.0037	0.006	0.0031	5980	mg/L
OW-56	3/2/2020	Copper, Total	0.0055	0.006	0.0041	790000	mg/L
OW-56	3/2/2020	Manganese, Total	0.26	0.002	0.00029	2017000	mg/L
OW-56	3/2/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-56	3/2/2020	Nickel, Total	0.069	0.01	0.004	372000	mg/L
OW-56	3/2/2020	Silver, Total	0.0022	0.005	0.0014	50000	mg/L
OW-56	3/2/2020	Zinc, Total	0.0094	0.01	0.0058	5960000	mg/L
OW-56	3/2/2020	Aluminum, Total	2.3	0.1	0.012	19914000	mg/L
OW-56	3/2/2020	Iron, Total	1.9	0.1	0.044	13822000	mg/L
OW-56	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-56	12/23/2020	Barium, Dissolved	0.476	0.01	0.003	2000000	mg/L
OW-56	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-56	12/23/2020	Boron, Dissolved	0.666	0.1	0.022	3949110	mg/L
OW-56	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-56	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-56	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-56	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-56	12/23/2020	Manganese, Dissolved	0.431	0.01	0.003	2017400	mg/L
OW-56	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-56	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-56	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-56	12/23/2020	Aluminum, Total	4.57	0.2	0.051	19914000	mg/L
OW-56	12/23/2020	Barium, Total	0.572	0.01	0.003	2000000	mg/L
OW-56	12/23/2020	Calcium, Total	66.8	0.5	0.084	NA	mg/L
OW-56	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-56	12/23/2020	Boron, Total	0.553	0.1	0.022	3949	mg/L
OW-56	12/23/2020	Potassium, Total	2.16	1	0.34	NA	mg/L
OW-56	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-56	12/23/2020	Magnesium, Total	13.5	0.5	0.12	NA	mg/L
OW-56	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-56	12/23/2020	Sodium, Total	340	2	0.92	NA	mg/L
OW-56	12/23/2020	Copper, Total	0.0298	0.02	0.008	790000	mg/L
OW-56	12/23/2020	Iron, Total	4.44	0.2	0.075	13822000	mg/L
OW-56	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-56	12/23/2020	Nickel, Total	0.0791	0.006	0.003	372000	mg/L
OW-56	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-56	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-56	12/23/2020	Iron, Dissolved	0.272	0.2	0.075	13821880	mg/L
OW-56	12/23/2020	Nickel, Dissolved	0.0861	0.006	0.003	372000	mg/L
OW-56	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-56	12/23/2020	Manganese, Total	0.846	0.01	0.003	2017000	mg/L
OW-56	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-56	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-56	12/23/2020	Arsenic, Total Recoverable	2.54	1	0.286	10	ug/L
OW-56	12/23/2020	Lead, Total Recoverable	1.19	1	0.133	15	ug/L
OW-56	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-56	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-56	12/23/2020	Uranium, Total Recoverable	14	5	1.12	30	ug/L
OW-56	12/23/2020	Arsenic, Dissolved	2.52	1	0.286	10	ug/L
OW-56	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-56	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-56	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-56	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-56	12/23/2020	Uranium, Dissolved	14.2	5	1.12	NA	ug/L
OW-56	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	9/11/2017	Chromium, Total	0.0096	0.006	0.0018	50000	mg/L
OW-56	9/11/2017	Copper, Total	0.011	0.006	0.0017	790000	mg/L
OW-56	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	9/11/2017	Arsenic, Dissolved	0.0066	0.02	0.0035	10000	mg/L
OW-56	9/11/2017	Barium, Dissolved	0.36	0.002	0.00085	2000000	mg/L
OW-56	9/11/2017	Calcium, Dissolved	92	1	0.078	NA	mg/L
OW-56	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	9/11/2017	Chromium, Dissolved	0.0017	0.006	0.0013	100000	mg/L
OW-56	9/11/2017	Copper, Dissolved	0.0057	0.006	0.0032	790000	mg/L
OW-56	9/11/2017	Iron, Dissolved	0.048	0.02	0.016	13821880	mg/L
OW-56	9/11/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	9/11/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	9/11/2017	Manganese, Dissolved	0.09	0.002	0.00039	2017400	mg/L
OW-56	9/11/2017	Sodium, Dissolved	490	10	1.6	NA	mg/L
OW-56	9/11/2017	Lead, Dissolved	0.00023	0.0005	0.00017	NA	mg/L
OW-56	9/11/2017	Selenium, Dissolved	0.013	0.005	0.0019	50000	mg/L
OW-56	9/11/2017	Uranium, Dissolved	0.018	0.0025	0.00025	NA	mg/L
OW-56	9/11/2017	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
OW-56	9/11/2017	Iron, Total	7.4	0.2	0.1	13822000	mg/L
OW-56	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	9/11/2017	Manganese, Total	0.35	0.002	0.0011	2017000	mg/L
OW-56	9/11/2017	Lead, Total	0.0055	0.0005	0.000095	15000	mg/L
OW-56	9/11/2017	Selenium, Total	0.01	0.005	0.0036	50000	mg/L
OW-56	9/11/2017	Uranium, Total	0.024	0.0005	0.00015	30000	mg/L
OW-56	9/11/2017	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
OW-56	12/6/2017	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-56	12/6/2017	Arsenic, Total	0.0049	0.001	0.00041	10000	mg/L
OW-56	12/6/2017	Barium, Total	0.41	0.002	0.001	2000000	mg/L
OW-56	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	12/6/2017	Copper, Total	0.0094	0.006	0.0041	790000	mg/L
OW-56	12/6/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	12/6/2017	Arsenic, Dissolved	0.0046	0.005	0.0021	10000	mg/L
OW-56	12/6/2017	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
OW-56	12/6/2017	Calcium, Dissolved	83	1	0.078	NA	mg/L
OW-56	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	12/6/2017	Copper, Dissolved	0.009	0.006	0.0032	790000	mg/L
OW-56	12/6/2017	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-56	12/6/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-56	12/6/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-56	12/6/2017	Manganese, Dissolved	0.048	0.002	0.00039	2017400	mg/L
OW-56	12/6/2017	Sodium, Dissolved	450	5	0.82	NA	mg/L
OW-56	12/6/2017	Lead, Dissolved	0.00038	0.0005	0.00017	NA	mg/L
OW-56	12/6/2017	Selenium, Dissolved	0.012	0.005	0.0038	50000	mg/L
OW-56	12/6/2017	Uranium, Dissolved	0.021	0.0005	0.000096	NA	mg/L
OW-56	12/6/2017	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-56	12/6/2017	Iron, Total	1.1	0.1	0.051	13822000	mg/L
OW-56	12/6/2017	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
OW-56	12/6/2017	Manganese, Total	0.1	0.002	0.0011	2017000	mg/L
OW-56	12/6/2017	Lead, Total	0.0012	0.0025	0.0011	15000	mg/L
OW-56	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-56	12/6/2017	Uranium, Total	0.021	0.0025	0.00077	30000	mg/L
OW-56	12/6/2017	Zinc, Total	0.0062	0.01	0.0033	5960000	mg/L
OW-56	2/22/2018	Silver, Total	0.0018	0.005	0.0012	50000	mg/L
OW-56	2/22/2018	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-56	2/22/2018	Barium, Total	0.38	0.002	0.001	2000000	mg/L
OW-56	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-56	2/22/2018	Copper, Total	0.0098	0.006	0.0041	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-56	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-56	2/22/2018	Barium, Dissolved	0.31	0.01	0.0049	2000000	mg/L
OW-56	2/22/2018	Calcium, Dissolved	81	5	0.39	NA	mg/L
OW-56	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-56	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-56	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-56	2/22/2018	Potassium, Dissolved	1.2	5	0.56	NA	mg/L
OW-56	2/22/2018	Magnesium, Dissolved	17	5	1.2	NA	mg/L
OW-56	2/22/2018	Manganese, Dissolved	0.032	0.01	0.002	2017400	mg/L
OW-56	2/22/2018	Sodium, Dissolved	490	5	0.82	NA	mg/L
OW-56	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-56	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-56	2/22/2018	Uranium, Dissolved	0.016	0.0025	0.00048	NA	mg/L
OW-56	2/22/2018	Zinc, Dissolved	0.0053	0.01	0.0021	5960450	mg/L
OW-56	2/22/2018	Iron, Total	1	0.1	0.051	13822000	mg/L
OW-56	2/22/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	2/22/2018	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-56	2/22/2018	Lead, Total	0.001	0.0005	0.00023	15000	mg/L
OW-56	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-56	2/22/2018	Uranium, Total	0.019	0.0005	0.000068	30000	mg/L
OW-56	2/22/2018	Zinc, Total	0.017	0.05	0.016	5960000	mg/L
OW-56	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	5/8/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-56	5/8/2018	Barium, Total	0.3	0.002	0.001	2000000	mg/L
OW-56	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	5/8/2018	Copper, Total	0.011	0.006	0.0041	790000	mg/L
OW-56	5/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	5/8/2018	Arsenic, Dissolved	0.0023	0.005	0.0021	10000	mg/L
OW-56	5/8/2018	Barium, Dissolved	0.34	0.002	0.00099	2000000	mg/L
OW-56	5/8/2018	Calcium, Dissolved	94	1	0.078	NA	mg/L
OW-56	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	5/8/2018	Copper, Dissolved	0.0083	0.006	0.0032	790000	mg/L
OW-56	5/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-56	5/8/2018	Potassium, Dissolved	1	1	0.11	NA	mg/L
OW-56	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	5/8/2018	Manganese, Dissolved	0.031	0.002	0.00039	2017400	mg/L
OW-56	5/8/2018	Sodium, Dissolved	500	10	1.6	NA	mg/L
OW-56	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-56	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-56	5/8/2018	Uranium, Dissolved	0.017	0.0025	0.00048	NA	mg/L
OW-56	5/8/2018	Zinc, Dissolved	0.0075	0.01	0.0021	5960450	mg/L
OW-56	5/8/2018	Iron, Total	0.48	0.02	0.01	13822000	mg/L
OW-56	5/8/2018	Mercury, Total	0.00004	0.0002	0.000037	2000	mg/L
OW-56	5/8/2018	Manganese, Total	0.049	0.002	0.0011	2017000	mg/L
OW-56	5/8/2018	Lead, Total	0.00054	0.0005	0.00023	15000	mg/L
OW-56	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-56	5/8/2018	Uranium, Total	0.018	0.0005	0.000068	30000	mg/L
OW-56	5/8/2018	Zinc, Total	0.006	0.01	0.0033	5960000	mg/L
OW-56	8/28/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-56	8/28/2018	Arsenic, Total	0.0046	0.001	0.00041	10000	mg/L
OW-56	8/28/2018	Barium, Total	0.57	0.002	0.001	2000000	mg/L
OW-56	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	8/28/2018	Chromium, Total	0.006	0.006	0.0018	50000	mg/L
OW-56	8/28/2018	Copper, Total	0.017	0.006	0.0041	790000	mg/L
OW-56	8/28/2018	Silver, Dissolved	0.0027	0.005	0.0018	81200	mg/L
OW-56	8/28/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
OW-56	8/28/2018	Barium, Dissolved	0.39	0.002	0.00099	2000000	mg/L
OW-56	8/28/2018	Calcium, Dissolved	85	1	0.078	NA	mg/L
OW-56	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	8/28/2018	Copper, Dissolved	0.0061	0.006	0.0032	790000	mg/L
OW-56	8/28/2018	Iron, Dissolved	0.6	0.02	0.016	13821880	mg/L
OW-56	8/28/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
OW-56	8/28/2018	Magnesium, Dissolved	15	1	0.25	NA	mg/L
OW-56	8/28/2018	Manganese, Dissolved	0.12	0.002	0.00039	2017400	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Sodium, Dissolved	480	5	0.82	NA	mg/L
OW-56	8/28/2018	Lead, Dissolved	0.00058	0.0005	0.00017	NA	mg/L
OW-56	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-56	8/28/2018	Uranium, Dissolved	0.016	0.0005	0.000096	NA	mg/L
OW-56	8/28/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-56	8/28/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
OW-56	8/28/2018	Mercury, Total	0.000063	0.0002	0.000038	2000	mg/L
OW-56	8/28/2018	Manganese, Total	0.44	0.002	0.0011	2017000	mg/L
OW-56	8/28/2018	Lead, Total	0.007	0.0005	0.00023	15000	mg/L
OW-56	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-56	8/28/2018	Uranium, Total	0.02	0.0025	0.00034	30000	mg/L
OW-56	8/28/2018	Zinc, Total	0.031	0.01	0.0033	5960000	mg/L
OW-56	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-56	11/7/2018	Barium, Total	0.5	0.002	0.001	2000000	mg/L
OW-56	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-56	11/7/2018	Copper, Total	0.0071	0.006	0.0041	790000	mg/L
OW-56	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-56	11/7/2018	Arsenic, Dissolved	0.0022	0.001	0.00042	10000	mg/L
OW-56	11/7/2018	Barium, Dissolved	0.45	0.002	0.00099	2000000	mg/L
OW-56	11/7/2018	Calcium, Dissolved	89	1	0.078	NA	mg/L
OW-56	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-56	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-56	11/7/2018	Iron, Dissolved	0.13	0.02	0.016	13821880	mg/L
OW-56	11/7/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	11/7/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	11/7/2018	Manganese, Dissolved	0.18	0.002	0.00039	2017400	mg/L
OW-56	11/7/2018	Sodium, Dissolved	490	10	1.6	NA	mg/L
OW-56	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-56	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-56	11/7/2018	Uranium, Dissolved	0.015	0.0005	0.000096	NA	mg/L
OW-56	11/7/2018	Zinc, Dissolved	0.022	0.01	0.0021	5960450	mg/L
OW-56	11/7/2018	Iron, Total	2.7	0.1	0.051	13822000	mg/L
OW-56	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-56	11/7/2018	Manganese, Total	0.34	0.002	0.0011	2017000	mg/L
OW-56	11/7/2018	Lead, Total	0.0032	0.0005	0.00023	15000	mg/L
OW-56	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-56	11/7/2018	Uranium, Total	0.017	0.0025	0.00034	30000	mg/L
OW-56	11/7/2018	Zinc, Total	0.015	0.01	0.0033	5960000	mg/L
OW-56	9/21/2020	Arsenic, Dissolved	0.0041	0.001	0.00021	10000	mg/L
OW-56	9/21/2020	Lead, Dissolved	0.000083	0.0005	0.000034	NA	mg/L
OW-56	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-56	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-56	9/21/2020	Uranium, Dissolved	0.015	0.0005	0.000065	NA	mg/L
OW-56	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-56	9/21/2020	Manganese, Dissolved	2.7	0.01	0.0029	2017400	mg/L
OW-56	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-56	9/21/2020	Barium, Dissolved	0.53	0.002	0.0011	2000000	mg/L
OW-56	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-56	9/21/2020	Boron, Dissolved	0.6	0.04	0.0067	3949110	mg/L
OW-56	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-56	9/21/2020	Cobalt, Dissolved	0.0057	0.006	0.0024	5980	mg/L
OW-56	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-56	9/21/2020	Iron, Dissolved	0.39	0.02	0.01	13821880	mg/L
OW-56	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-56	9/21/2020	Nickel, Dissolved	0.081	0.01	0.0033	372000	mg/L
OW-56	9/21/2020	Silver, Dissolved	0.0018	0.005	0.0013	81200	mg/L
OW-56	9/21/2020	Zinc, Dissolved	0.0082	0.01	0.006	5960450	mg/L
OW-56	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-56	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-56	9/21/2020	Arsenic, Total	0.0056	0.001	0.00026	10000	mg/L
OW-56	9/21/2020	Lead, Total	0.00084	0.0005	0.000034	15000	mg/L
OW-56	9/21/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-56	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-56	9/21/2020	Uranium, Total	0.02	0.0005	0.000065	30000	mg/L
OW-56	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-56	9/21/2020	Aluminum, Total	0.8	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	9/21/2020	Barium, Total	0.59	0.003	0.0016	2000000	mg/L
OW-56	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-56	9/21/2020	Boron, Total	0.62	0.04	0.0074	3949	mg/L
OW-56	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-56	9/21/2020	Cobalt, Total	0.0068	0.006	0.0024	5980	mg/L
OW-56	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-56	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-56	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-56	9/21/2020	Zinc, Total	0.014	0.01	0.0064	5960000	mg/L
OW-56	9/21/2020	Nickel, Total	0.086	0.01	0.0033	372000	mg/L
OW-56	9/21/2020	Iron, Total	1.3	0.25	0.064	13822000	mg/L
OW-56	9/21/2020	Manganese, Total	3.2	0.01	0.0041	2017000	mg/L
OW-56	9/16/2016	Selenium, Dissolved	0.0046	0.02	0.0042	50000	mg/L
OW-56	9/16/2016	Uranium, Dissolved	0.023	0.0005	0.000051	NA	mg/L
OW-56	9/16/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-56	9/16/2016	Iron, Total	0.33	0.02	0.02	13822000	mg/L
OW-56	9/16/2016	Mercury, Total	0.0001	0.0002	0.000053	2000	mg/L
OW-56	9/16/2016	Manganese, Total	0.42	0.002	0.00027	2017000	mg/L
OW-56	9/16/2016	Lead, Total	0.001	0.0005	0.000081	15000	mg/L
OW-56	9/16/2016	Selenium, Total	0.0046	0.01	0.0019	50000	mg/L
OW-56	9/16/2016	Uranium, Total	0.024	0.0025	0.00087	30000	mg/L
OW-56	9/16/2016	Zinc, Total	0.012	0.01	0.0027	5960000	mg/L
OW-56	11/9/2016	Silver, Total	0.0044	0.005	0.0015	50000	mg/L
OW-56	11/9/2016	Arsenic, Total	0.0097	0.02	0.0042	10000	mg/L
OW-56	11/9/2016	Barium, Total	0.38	0.002	0.00079	2000000	mg/L
OW-56	11/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	11/9/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-56	11/9/2016	Copper, Total	0.0089	0.006	0.003	790000	mg/L
OW-56	11/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-56	11/9/2016	Arsenic, Dissolved	0.0045	0.02	0.0028	10000	mg/L
OW-56	11/9/2016	Barium, Dissolved	0.36	0.002	0.0013	2000000	mg/L
OW-56	11/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-56	11/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-56	11/9/2016	Copper, Dissolved	0.0058	0.006	0.004	790000	mg/L
OW-56	11/9/2016	Iron, Dissolved	0.045	0.02	0.02	13821880	mg/L
OW-56	11/9/2016	Manganese, Dissolved	0.26	0.002	0.00032	2017400	mg/L
OW-56	11/9/2016	Lead, Dissolved	0.00051	0.0005	0.00017	NA	mg/L
OW-56	11/9/2016	Selenium, Dissolved	0.011	0.005	0.0011	50000	mg/L
OW-56	11/9/2016	Uranium, Dissolved	0.021	0.0005	0.000051	NA	mg/L
OW-56	11/9/2016	Zinc, Dissolved	0.0077	0.01	0.0028	5960450	mg/L
OW-56	11/9/2016	Iron, Total	1.1	0.1	0.1	13822000	mg/L
OW-56	11/9/2016	Mercury, Total	0.000066	0.0002	0.000053	2000	mg/L
OW-56	11/9/2016	Manganese, Total	0.28	0.002	0.00027	2017000	mg/L
OW-56	11/9/2016	Lead, Total	0.002	0.0025	0.00041	15000	mg/L
OW-56	11/9/2016	Selenium, Total	0.011	0.02	0.0037	50000	mg/L
OW-56	11/9/2016	Uranium, Total	0.022	0.0025	0.00087	30000	mg/L
OW-56	11/9/2016	Zinc, Total	0.015	0.01	0.0027	5960000	mg/L
OW-56	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-56	3/29/2017	Arsenic, Total	0.0074	0.005	0.0011	10000	mg/L
OW-56	3/29/2017	Barium, Total	0.46	0.002	0.00079	2000000	mg/L
OW-56	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	3/29/2017	Chromium, Total	0.01	0.006	0.0027	50000	mg/L
OW-56	3/29/2017	Copper, Total	0.01	0.006	0.003	790000	mg/L
OW-56	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-56	3/29/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
OW-56	3/29/2017	Barium, Dissolved	0.3	0.002	0.00085	2000000	mg/L
OW-56	3/29/2017	Calcium, Dissolved	95	1	0.5	NA	mg/L
OW-56	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-56	3/29/2017	Copper, Dissolved	0.0066	0.006	0.0032	790000	mg/L
OW-56	3/29/2017	Iron, Dissolved	0.085	0.02	0.02	13821880	mg/L
OW-56	3/29/2017	Potassium, Dissolved	1.5	1	0.5	NA	mg/L
OW-56	3/29/2017	Magnesium, Dissolved	18	1	0.5	NA	mg/L
OW-56	3/29/2017	Manganese, Dissolved	0.1	0.002	0.00038	2017400	mg/L
OW-56	3/29/2017	Sodium, Dissolved	490	10	5	NA	mg/L
OW-56	3/29/2017	Lead, Dissolved	0.00041	0.0005	0.00017	NA	mg/L
OW-56	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-56	3/29/2017	Uranium, Dissolved	0.022	0.0005	0.00005	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	3/29/2017	Zinc, Dissolved	0.039	0.01	0.0011	5960450	mg/L
OW-56	3/29/2017	Iron, Total	6.4	0.2	0.2	13822000	mg/L
OW-56	3/29/2017	Mercury, Total	0.000041	0.0002	0.000037	2000	mg/L
OW-56	3/29/2017	Manganese, Total	0.33	0.002	0.00027	2017000	mg/L
OW-56	3/29/2017	Lead, Total	0.0069	0.0005	0.000081	15000	mg/L
OW-56	3/29/2017	Selenium, Total	0.013	0.005	0.00094	50000	mg/L
OW-56	3/29/2017	Uranium, Total	0.022	0.0025	0.00087	30000	mg/L
OW-56	3/29/2017	Zinc, Total	0.025	0.01	0.0027	5960000	mg/L
OW-56	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-56	6/21/2017	Arsenic, Total	0.0073	0.005	0.0015	10000	mg/L
OW-56	6/21/2017	Barium, Total	0.39	0.002	0.00093	2000000	mg/L
OW-56	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-56	6/21/2017	Chromium, Total	0.0072	0.006	0.0011	50000	mg/L
OW-56	6/21/2017	Copper, Total	0.016	0.006	0.0017	790000	mg/L
OW-56	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-56	6/21/2017	Arsenic, Dissolved	0.0054	0.01	0.0018	10000	mg/L
OW-56	6/21/2017	Barium, Dissolved	0.26	0.002	0.00085	2000000	mg/L
OW-56	6/21/2017	Calcium, Dissolved	89	1	0.078	NA	mg/L
OW-56	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-56	6/21/2017	Chromium, Dissolved	0.0014	0.006	0.001	100000	mg/L
OW-56	6/21/2017	Copper, Dissolved	0.011	0.006	0.0032	790000	mg/L
OW-56	6/21/2017	Iron, Dissolved	0.026	0.02	0.016	13821880	mg/L
OW-56	6/21/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
OW-56	6/21/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-56	6/21/2017	Manganese, Dissolved	0.073	0.002	0.00038	2017400	mg/L
OW-56	6/21/2017	Sodium, Dissolved	500	10	1.6	NA	mg/L
OW-56	6/21/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-56	6/21/2017	Selenium, Dissolved	0.014	0.02	0.0077	50000	mg/L
OW-56	6/21/2017	Uranium, Dissolved	0.021	0.0005	0.00005	NA	mg/L
OW-56	6/21/2017	Zinc, Dissolved	0.063	0.01	0.0011	5960450	mg/L
OW-56	6/21/2017	Iron, Total	5.2	0.2	0.1	13822000	mg/L
OW-56	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-56	6/21/2017	Manganese, Total	0.31	0.002	0.0011	2017000	mg/L
OW-56	6/21/2017	Lead, Total	0.005	0.0025	0.00048	15000	mg/L
OW-56	6/21/2017	Selenium, Total	0.011	0.005	0.0036	50000	mg/L
OW-56	6/21/2017	Uranium, Total	0.023	0.0025	0.00077	30000	mg/L
OW-56	6/21/2017	Zinc, Total	0.019	0.01	0.0028	5960000	mg/L
OW-56	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-56	9/11/2017	Arsenic, Total	0.0074	0.005	0.0015	10000	mg/L
OW-56	9/11/2017	Barium, Total	0.62	0.01	0.0047	2000000	mg/L
OW-56	9/16/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-56	9/16/2016	Arsenic, Total	0.0046	0.01	0.0021	10000	mg/L
OW-56	9/16/2016	Barium, Total	0.37	0.002	0.00079	2000000	mg/L
OW-56	9/16/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-56	9/16/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-56	9/16/2016	Copper, Total	0.0049	0.006	0.003	790000	mg/L
OW-56	9/16/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-56	9/16/2016	Arsenic, Dissolved	0.0049	0.005	0.00069	10000	mg/L
OW-56	9/16/2016	Barium, Dissolved	0.36	0.002	0.0013	2000000	mg/L
OW-56	9/16/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-56	9/16/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-56	9/16/2016	Copper, Dissolved	0.0047	0.006	0.004	790000	mg/L
OW-56	9/16/2016	Iron, Dissolved	0.078	0.02	0.02	13821880	mg/L
OW-56	9/16/2016	Manganese, Dissolved	0.39	0.002	0.00032	2017400	mg/L
OW-56	9/16/2016	Lead, Dissolved	0.00046	0.0005	0.00017	NA	mg/L
OW-57	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-57	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-57	9/18/2020	Arsenic, Total	0.0041	0.001	0.00026	10000	mg/L
OW-57	9/18/2020	Lead, Total	0.0023	0.0005	0.000034	15000	mg/L
OW-57	9/18/2020	Selenium, Total	0.00089	0.001	0.00066	50000	mg/L
OW-57	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-57	9/18/2020	Uranium, Total	0.00048	0.0005	0.000065	30000	mg/L
OW-57	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-57	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-57	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-57	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-57	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-57	9/18/2020	Nickel, Total	0.071	0.01	0.0033	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	9/18/2020	Silver, Total	0.0013	0.005	0.0013	50000	mg/L
OW-57	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-57	9/18/2020	Aluminum, Total	5.4	0.2	0.074	19914000	mg/L
OW-57	9/18/2020	Barium, Total	4	0.03	0.016	2000000	mg/L
OW-57	9/18/2020	Iron, Total	6.3	0.5	0.13	13822000	mg/L
OW-57	9/18/2020	Manganese, Total	2.5	0.02	0.0081	2017000	mg/L
OW-57	9/18/2020	Boron, Total	0.27	0.04	0.0074	3949	mg/L
OW-57	9/18/2020	Arsenic, Dissolved	0.0031	0.001	0.00021	10000	mg/L
OW-57	9/18/2020	Lead, Dissolved	0.000043	0.0005	0.000034	NA	mg/L
OW-57	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-57	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-57	9/18/2020	Uranium, Dissolved	0.0003	0.0005	0.000065	NA	mg/L
OW-57	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-57	9/18/2020	Barium, Dissolved	3.8	0.01	0.0056	2000000	mg/L
OW-57	9/18/2020	Iron, Dissolved	2.9	0.1	0.052	13821880	mg/L
OW-57	9/18/2020	Manganese, Dissolved	2	0.01	0.0029	2017400	mg/L
OW-57	9/18/2020	Nickel, Dissolved	0.073	0.05	0.016	372000	mg/L
OW-57	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-57	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-57	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-57	9/18/2020	Boron, Dissolved	0.26	0.04	0.0067	3949110	mg/L
OW-57	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-57	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-57	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-57	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-57	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-57	9/18/2020	Zinc, Dissolved	0.019	0.01	0.006	5960450	mg/L
OW-57	10/1/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-57	10/1/2016	Arsenic, Total	0.0087	0.02	0.0042	10000	mg/L
OW-57	10/1/2016	Barium, Total	3	0.01	0.0066	2000000	mg/L
OW-57	10/1/2016	Beryllium, Total	0.00051	0.002	0.00036	4000	mg/L
OW-57	10/1/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	10/1/2016	Cobalt, Total	0.012	0.006	0.0017	5980	mg/L
OW-57	10/1/2016	Chromium, Total	0.0045	0.006	0.0027	50000	mg/L
OW-57	10/1/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-57	10/1/2016	Arsenic, Dissolved	0.0041	0.005	0.00069	10000	mg/L
OW-57	10/1/2016	Barium, Dissolved	2.1	0.01	0.0066	2000000	mg/L
OW-57	10/1/2016	Beryllium, Dissolved	ND	0.002	0.00031	4000	mg/L
OW-57	10/1/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-57	10/1/2016	Cobalt, Dissolved	0.0083	0.006	0.00074	5980	mg/L
OW-57	10/1/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-57	10/1/2016	Iron, Dissolved	0.74	0.02	0.02	13821880	mg/L
OW-57	10/1/2016	Manganese, Dissolved	2.1	0.01	0.0016	2017400	mg/L
OW-57	10/1/2016	Nickel, Dissolved	0.08	0.01	0.0024	372000	mg/L
OW-57	10/1/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	10/1/2016	Antimony, Dissolved	ND	0.001	0.00047	6000	mg/L
OW-57	10/1/2016	Selenium, Dissolved	0.0082	0.02	0.0042	50000	mg/L
OW-57	10/1/2016	Vanadium, Dissolved	0.0049	0.05	0.0013	63100	mg/L
OW-57	10/1/2016	Zinc, Dissolved	0.0053	0.01	0.0028	5960450	mg/L
OW-57	10/1/2016	Iron, Total	9.1	0.2	0.2	13822000	mg/L
OW-57	10/1/2016	Mercury, Total	0.00014	0.0002	0.000053	2000	mg/L
OW-57	10/1/2016	Manganese, Total	3.5	0.01	0.0016	2017000	mg/L
OW-57	10/1/2016	Nickel, Total	0.084	0.01	0.0031	372000	mg/L
OW-57	10/1/2016	Lead, Total	0.0093	0.0005	0.00017	15000	mg/L
OW-57	10/1/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-57	10/1/2016	Selenium, Total	0.013	0.005	0.0011	50000	mg/L
OW-57	10/1/2016	Vanadium, Total	0.017	0.05	0.0013	63100	mg/L
OW-57	10/1/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
OW-57	11/8/2016	Silver, Total	0.004	0.005	0.0015	50000	mg/L
OW-57	11/8/2016	Arsenic, Total	0.0046	0.02	0.0042	10000	mg/L
OW-57	11/8/2016	Barium, Total	2.4	0.01	0.004	2000000	mg/L
OW-57	11/8/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	11/8/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
OW-57	11/8/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-57	11/8/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-57	11/8/2016	Arsenic, Dissolved	0.0051	0.02	0.0028	10000	mg/L
OW-57	11/8/2016	Barium, Dissolved	2.4	0.01	0.0066	2000000	mg/L
OW-57	11/8/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-57	11/8/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/8/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-57	11/8/2016	Iron, Dissolved	1.6	0.1	0.1	13821880	mg/L
OW-57	11/8/2016	Manganese, Dissolved	2.3	0.01	0.0016	2017400	mg/L
OW-57	11/8/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	11/8/2016	Selenium, Dissolved	0.012	0.02	0.0042	50000	mg/L
OW-57	11/8/2016	Uranium, Dissolved	0.0047	0.0005	0.000051	NA	mg/L
OW-57	11/8/2016	Zinc, Dissolved	0.0037	0.01	0.0028	5960450	mg/L
OW-57	11/8/2016	Iron, Total	4.6	0.1	0.1	13822000	mg/L
OW-57	11/8/2016	Mercury, Total	0.000057	0.0002	0.000053	2000	mg/L
OW-57	11/8/2016	Manganese, Total	2.5	0.01	0.0014	2017000	mg/L
OW-57	11/8/2016	Lead, Total	0.0028	0.0005	0.000081	15000	mg/L
OW-57	11/8/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
OW-57	11/8/2016	Uranium, Total	0.0053	0.0005	0.00017	30000	mg/L
OW-57	11/8/2016	Zinc, Total	0.0089	0.01	0.0027	5960000	mg/L
OW-57	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-57	3/30/2017	Arsenic, Total	0.01	0.005	0.0011	10000	mg/L
OW-57	3/30/2017	Barium, Total	2.4	0.02	0.0079	2000000	mg/L
OW-57	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-57	3/30/2017	Chromium, Total	0.0061	0.006	0.0027	50000	mg/L
OW-57	3/30/2017	Copper, Total	0.0069	0.006	0.003	790000	mg/L
OW-57	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-57	3/30/2017	Arsenic, Dissolved	0.0084	0.005	0.00089	10000	mg/L
OW-57	3/30/2017	Barium, Dissolved	1.4	0.02	0.0085	2000000	mg/L
OW-57	3/30/2017	Calcium, Dissolved	39	1	0.5	NA	mg/L
OW-57	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	3/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-57	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	3/30/2017	Iron, Dissolved	0.5	0.02	0.02	13821880	mg/L
OW-57	3/30/2017	Potassium, Dissolved	4.8	1	0.5	NA	mg/L
OW-57	3/30/2017	Magnesium, Dissolved	6.2	1	0.5	NA	mg/L
OW-57	3/30/2017	Manganese, Dissolved	0.69	0.002	0.00038	2017400	mg/L
OW-57	3/30/2017	Sodium, Dissolved	260	10	5	NA	mg/L
OW-57	3/30/2017	Lead, Dissolved	0.00053	0.0005	0.00017	NA	mg/L
OW-57	3/30/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-57	3/30/2017	Uranium, Dissolved	0.0028	0.0005	0.00005	NA	mg/L
OW-57	3/30/2017	Zinc, Dissolved	0.03	0.01	0.0011	5960450	mg/L
OW-57	3/30/2017	Iron, Total	6.3	0.2	0.2	13822000	mg/L
OW-57	3/30/2017	Mercury, Total	0.000062	0.0002	0.000037	2000	mg/L
OW-57	3/30/2017	Manganese, Total	2.5	0.02	0.0027	2017000	mg/L
OW-57	3/30/2017	Lead, Total	0.0092	0.0005	0.000081	15000	mg/L
OW-57	3/30/2017	Selenium, Total	0.013	0.005	0.00094	50000	mg/L
OW-57	3/30/2017	Uranium, Total	0.0042	0.0005	0.00017	30000	mg/L
OW-57	3/30/2017	Zinc, Total	0.014	0.01	0.0027	5960000	mg/L
OW-57	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-57	6/21/2017	Arsenic, Total	0.0083	0.005	0.0015	10000	mg/L
OW-57	6/21/2017	Barium, Total	3.3	0.01	0.0047	2000000	mg/L
OW-57	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	6/21/2017	Chromium, Total	0.0017	0.006	0.0011	50000	mg/L
OW-57	6/21/2017	Copper, Total	0.0053	0.006	0.0017	790000	mg/L
OW-57	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-57	6/21/2017	Arsenic, Dissolved	0.0067	0.01	0.0018	10000	mg/L
OW-57	6/21/2017	Barium, Dissolved	2.9	0.02	0.0085	2000000	mg/L
OW-57	6/21/2017	Calcium, Dissolved	98	1	0.078	NA	mg/L
OW-57	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-57	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	6/21/2017	Iron, Dissolved	1.3	0.2	0.16	13821880	mg/L
OW-57	6/21/2017	Potassium, Dissolved	3.6	1	0.11	NA	mg/L
OW-57	6/21/2017	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-57	6/21/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
OW-57	6/21/2017	Sodium, Dissolved	330	10	1.6	NA	mg/L
OW-57	6/21/2017	Lead, Dissolved	0.00032	0.0005	0.00017	NA	mg/L
OW-57	6/21/2017	Selenium, Dissolved	0.013	0.02	0.0077	50000	mg/L
OW-57	6/21/2017	Uranium, Dissolved	0.0025	0.0005	0.00005	NA	mg/L
OW-57	6/21/2017	Zinc, Dissolved	0.014	0.01	0.0011	5960450	mg/L
OW-57	6/21/2017	Iron, Total	4.5	0.2	0.1	13822000	mg/L
OW-57	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	6/21/2017	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
OW-57	6/21/2017	Lead, Total	0.0039	0.0025	0.00048	15000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	6/21/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-57	6/21/2017	Uranium, Total	0.0026	0.0025	0.00077	30000	mg/L
OW-57	6/21/2017	Zinc, Total	0.0082	0.01	0.0028	5960000	mg/L
OW-57	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-57	9/19/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
OW-57	9/19/2017	Barium, Total	3.9	0.02	0.0093	2000000	mg/L
OW-57	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	9/19/2017	Chromium, Total	0.0038	0.006	0.0018	50000	mg/L
OW-57	9/19/2017	Copper, Total	0.0032	0.006	0.0017	790000	mg/L
OW-57	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-57	9/19/2017	Arsenic, Dissolved	0.0077	0.005	0.00089	10000	mg/L
OW-57	9/19/2017	Barium, Dissolved	3.4	0.02	0.0085	2000000	mg/L
OW-57	9/19/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	9/19/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	9/19/2017	Iron, Dissolved	6.4	0.2	0.16	13821880	mg/L
OW-57	9/19/2017	Potassium, Dissolved	2	1	0.11	NA	mg/L
OW-57	9/19/2017	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	9/19/2017	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-57	9/19/2017	Sodium, Dissolved	310	10	1.6	NA	mg/L
OW-57	9/19/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	9/19/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-57	9/19/2017	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
OW-57	9/19/2017	Iron, Total	8.6	0.2	0.1	13822000	mg/L
OW-57	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	9/19/2017	Manganese, Total	2.9	0.02	0.011	2017000	mg/L
OW-57	9/19/2017	Lead, Total	0.0046	0.0005	0.000095	15000	mg/L
OW-57	9/19/2017	Selenium, Total	0.019	0.005	0.0036	50000	mg/L
OW-57	9/19/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
OW-57	12/6/2017	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-57	12/6/2017	Arsenic, Total	0.006	0.001	0.00041	10000	mg/L
OW-57	12/6/2017	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-57	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	12/6/2017	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-57	12/6/2017	Arsenic, Dissolved	0.0062	0.01	0.0042	10000	mg/L
OW-57	12/6/2017	Barium, Dissolved	3.2	0.01	0.0049	2000000	mg/L
OW-57	12/6/2017	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	12/6/2017	Iron, Dissolved	2	0.1	0.082	13821880	mg/L
OW-57	12/6/2017	Potassium, Dissolved	1.4	1	0.11	NA	mg/L
OW-57	12/6/2017	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	12/6/2017	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	12/6/2017	Sodium, Dissolved	280	5	0.82	NA	mg/L
OW-57	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	12/6/2017	Selenium, Dissolved	0.0077	0.01	0.0076	50000	mg/L
OW-57	12/6/2017	Uranium, Dissolved	0.00089	0.0005	0.000096	NA	mg/L
OW-57	12/6/2017	Zinc, Dissolved	0.0091	0.01	0.0021	5960450	mg/L
OW-57	12/6/2017	Iron, Total	4.2	0.1	0.051	13822000	mg/L
OW-57	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-57	12/6/2017	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-57	12/6/2017	Lead, Total	0.0012	0.0025	0.0011	15000	mg/L
OW-57	12/6/2017	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-57	12/6/2017	Uranium, Total	0.00089	0.0025	0.00077	30000	mg/L
OW-57	12/6/2017	Zinc, Total	0.0042	0.01	0.0033	5960000	mg/L
OW-57	2/20/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-57	2/20/2018	Arsenic, Total	ND	0.01	0.0041	10000	mg/L
OW-57	2/20/2018	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-57	2/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	2/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	2/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	2/20/2018	Silver, Dissolved	0.0031	0.005	0.0018	81200	mg/L
OW-57	2/20/2018	Arsenic, Dissolved	0.0045	0.005	0.0021	10000	mg/L
OW-57	2/20/2018	Barium, Dissolved	3.5	0.01	0.0049	2000000	mg/L
OW-57	2/20/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	2/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	2/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	2/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	2/20/2018	Iron, Dissolved	2.6	0.1	0.082	13821880	mg/L
OW-57	2/20/2018	Potassium, Dissolved	1.1	1	0.11	NA	mg/L
OW-57	2/20/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	2/20/2018	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	2/20/2018	Sodium, Dissolved	290	5	0.82	NA	mg/L
OW-57	2/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	2/20/2018	Selenium, Dissolved	0.0047	0.005	0.0038	50000	mg/L
OW-57	2/20/2018	Uranium, Dissolved	0.00062	0.0005	0.000096	NA	mg/L
OW-57	2/20/2018	Zinc, Dissolved	0.0063	0.01	0.0021	5960450	mg/L
OW-57	2/20/2018	Iron, Total	5.3	0.2	0.1	13822000	mg/L
OW-57	2/20/2018	Mercury, Total	0.000081	0.0002	0.000037	2000	mg/L
OW-57	2/20/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
OW-57	2/20/2018	Lead, Total	0.0016	0.0025	0.0011	15000	mg/L
OW-57	2/20/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-57	2/20/2018	Uranium, Total	0.00069	0.0025	0.00034	30000	mg/L
OW-57	2/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-57	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-57	5/8/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-57	5/8/2018	Barium, Total	4.2	0.02	0.01	2000000	mg/L
OW-57	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	5/8/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-57	5/8/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-57	5/8/2018	Barium, Dissolved	3.8	0.02	0.0099	2000000	mg/L
OW-57	5/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-57	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	5/8/2018	Iron, Dissolved	2.8	0.2	0.16	13821880	mg/L
OW-57	5/8/2018	Potassium, Dissolved	0.93	1	0.11	NA	mg/L
OW-57	5/8/2018	Magnesium, Dissolved	17	1	0.25	NA	mg/L
OW-57	5/8/2018	Manganese, Dissolved	2.2	0.01	0.002	2017400	mg/L
OW-57	5/8/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-57	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-57	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-57	5/8/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
OW-57	5/8/2018	Zinc, Dissolved	0.0069	0.01	0.0021	5960450	mg/L
OW-57	5/8/2018	Iron, Total	6	0.2	0.1	13822000	mg/L
OW-57	5/8/2018	Mercury, Total	0.000044	0.0002	0.000037	2000	mg/L
OW-57	5/8/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L
OW-57	5/8/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
OW-57	5/8/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	5/8/2018	Uranium, Total	0.00065	0.0005	0.000068	30000	mg/L
OW-57	5/8/2018	Zinc, Total	0.0046	0.01	0.0033	5960000	mg/L
OW-57	8/28/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
OW-57	8/28/2018	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-57	8/28/2018	Barium, Total	3.9	0.01	0.005	2000000	mg/L
OW-57	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	8/28/2018	Silver, Dissolved	0.0028	0.005	0.0018	81200	mg/L
OW-57	8/28/2018	Arsenic, Dissolved	0.004	0.001	0.00042	10000	mg/L
OW-57	8/28/2018	Barium, Dissolved	3.6	0.01	0.0049	2000000	mg/L
OW-57	8/28/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-57	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	8/28/2018	Iron, Dissolved	3.3	0.1	0.082	13821880	mg/L
OW-57	8/28/2018	Potassium, Dissolved	0.68	1	0.11	NA	mg/L
OW-57	8/28/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	8/28/2018	Manganese, Dissolved	2.1	0.01	0.002	2017400	mg/L
OW-57	8/28/2018	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-57	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-57	8/28/2018	Uranium, Dissolved	0.00042	0.0005	0.000096	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-57	8/28/2018	Iron, Total	6.9	0.2	0.1	13822000	mg/L
OW-57	8/28/2018	Mercury, Total	0.00007	0.0002	0.000038	2000	mg/L
OW-57	8/28/2018	Manganese, Total	2.5	0.01	0.0055	2017000	mg/L
OW-57	8/28/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-57	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	8/28/2018	Uranium, Total	0.00056	0.0005	0.000068	30000	mg/L
OW-57	8/28/2018	Zinc, Total	0.0073	0.01	0.0033	5960000	mg/L
OW-57	11/29/2018	Silver, Total	0.0035	0.005	0.0012	50000	mg/L
OW-57	11/29/2018	Arsenic, Total	0.0051	0.001	0.00041	10000	mg/L
OW-57	11/29/2018	Barium, Total	4.7	0.02	0.01	2000000	mg/L
OW-57	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-57	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-57	11/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	11/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-57	11/29/2018	Arsenic, Dissolved	0.004	0.001	0.00042	10000	mg/L
OW-57	11/29/2018	Barium, Dissolved	4	0.02	0.0099	2000000	mg/L
OW-57	11/29/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-57	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-57	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-57	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-57	11/29/2018	Iron, Dissolved	3.4	0.2	0.16	13821880	mg/L
OW-57	11/29/2018	Potassium, Dissolved	0.89	1	0.11	NA	mg/L
OW-57	11/29/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-57	11/29/2018	Manganese, Dissolved	2.3	0.02	0.0039	2017400	mg/L
OW-57	11/29/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-57	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-57	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-57	11/29/2018	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-57	11/29/2018	Iron, Total	6.9	0.2	0.1	13822000	mg/L
OW-57	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	11/29/2018	Manganese, Total	2.6	0.02	0.011	2017000	mg/L
OW-57	11/29/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
OW-57	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-57	11/29/2018	Zinc, Total	0.0033	0.01	0.0033	5960000	mg/L
OW-57	12/23/2020	Arsenic, Total Recoverable	3.01	1	0.286	10	ug/L
OW-57	12/23/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-57	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-57	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-57	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-57	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-57	12/23/2020	Arsenic, Dissolved	2.79	1	0.286	10	ug/L
OW-57	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-57	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-57	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-57	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-57	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-57	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-57	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-57	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-57	12/23/2020	Barium, Dissolved	3.69	0.01	0.003	2000000	mg/L
OW-57	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-57	12/23/2020	Boron, Dissolved	0.302	0.1	0.022	3949110	mg/L
OW-57	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-57	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-57	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-57	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-57	12/23/2020	Manganese, Dissolved	2.08	0.01	0.003	2017400	mg/L
OW-57	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-57	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-57	12/23/2020	Zinc, Dissolved	0.0351	0.02	0.008	5960450	mg/L
OW-57	12/23/2020	Aluminum, Total	24.5	0.2	0.051	19914000	mg/L
OW-57	12/23/2020	Barium, Total	4.74	0.01	0.003	2000000	mg/L
OW-57	12/23/2020	Calcium, Total	146	0.5	0.084	NA	mg/L
OW-57	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-57	12/23/2020	Boron, Total	0.262	0.1	0.022	3949	mg/L
OW-57	12/23/2020	Potassium, Total	3.49	1	0.34	NA	mg/L
OW-57	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-57	12/23/2020	Magnesium, Total	20.6	0.5	0.12	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	12/23/2020	Chromium, Total	0.0128	0.01	0.005	50000	mg/L
OW-57	12/23/2020	Sodium, Total	237	2	0.92	NA	mg/L
OW-57	12/23/2020	Copper, Total	0.0211	0.02	0.008	790000	mg/L
OW-57	12/23/2020	Iron, Total	17.4	0.2	0.075	13822000	mg/L
OW-57	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-57	12/23/2020	Nickel, Total	0.0788	0.006	0.003	372000	mg/L
OW-57	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-57	12/23/2020	Zinc, Total	0.0227	0.02	0.008	5960000	mg/L
OW-57	12/23/2020	Iron, Dissolved	2.77	0.2	0.075	13821880	mg/L
OW-57	12/23/2020	Nickel, Dissolved	0.0806	0.006	0.003	372000	mg/L
OW-57	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-57	12/23/2020	Manganese, Total	3.99	0.01	0.003	2017000	mg/L
OW-57	8/21/2019	Aluminum, Dissolved	0.025	0.02	0.002488	19913930	mg/L
OW-57	8/21/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	8/21/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
OW-57	8/21/2019	Barium, Dissolved	3.8	0.01	0.003242	2000000	mg/L
OW-57	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	8/21/2019	Boron, Dissolved	0.29	0.04	0.004531	3949110	mg/L
OW-57	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	8/21/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	8/21/2019	Copper, Dissolved	0.0026	0.006	0.001296	790000	mg/L
OW-57	8/21/2019	Iron, Dissolved	4.1	0.1	0.043734	13821880	mg/L
OW-57	8/21/2019	Lead, Dissolved	0.000071	0.0005	0.000055	NA	mg/L
OW-57	8/21/2019	Magnesium, Dissolved	17	1	0.05029	NA	mg/L
OW-57	8/21/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
OW-57	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	8/21/2019	Nickel, Dissolved	0.082	0.01	0.004009	372000	mg/L
OW-57	8/21/2019	Potassium, Dissolved	0.94	1	0.162288	NA	mg/L
OW-57	8/21/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-57	8/21/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
OW-57	8/21/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-57	8/21/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	8/21/2019	Uranium, Dissolved	0.00026	0.0005	0.000075	NA	mg/L
OW-57	8/21/2019	Zinc, Dissolved	0.0068	0.01	0.002252	5960450	mg/L
OW-57	8/21/2019	Aluminum, Total	13	1	0.124414	19914000	mg/L
OW-57	8/21/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	8/21/2019	Arsenic, Total	0.0051	0.001	0.000312	10000	mg/L
OW-57	8/21/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
OW-57	8/21/2019	Beryllium, Total	0.00077	0.002	0.000284	4000	mg/L
OW-57	8/21/2019	Boron, Total	0.28	0.04	0.004531	3949	mg/L
OW-57	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	8/21/2019	Chromium, Total	0.005	0.006	0.001533	50000	mg/L
OW-57	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	8/21/2019	Copper, Total	0.0082	0.006	0.004072	790000	mg/L
OW-57	8/21/2019	Iron, Total	10	1	0.437344	13822000	mg/L
OW-57	8/21/2019	Lead, Total	0.007	0.0005	0.000055	15000	mg/L
OW-57	8/21/2019	Manganese, Total	3.8	0.01	0.00145	2017000	mg/L
OW-57	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	8/21/2019	Nickel, Total	0.09	0.05	0.020043	372000	mg/L
OW-57	8/21/2019	Selenium, Total	0.003	0.001	0.000478	50000	mg/L
OW-57	8/21/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-57	8/21/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	8/21/2019	Uranium, Total	0.00092	0.0005	0.000085	30000	mg/L
OW-57	8/21/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
OW-57	11/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-57	11/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	11/5/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-57	11/5/2019	Barium, Dissolved	4	0.01	0.003242	2000000	mg/L
OW-57	11/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	11/5/2019	Boron, Dissolved	0.29	0.04	0.004531	3949110	mg/L
OW-57	11/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	11/5/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	11/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	11/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	11/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-57	11/5/2019	Iron, Dissolved	3.3	0.1	0.043734	13821880	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/5/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	11/5/2019	Magnesium, Dissolved	18	1	0.05029	NA	mg/L
OW-57	11/5/2019	Manganese, Dissolved	2.2	0.01	0.00145	2017400	mg/L
OW-57	11/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	11/5/2019	Nickel, Dissolved	0.079	0.01	0.004009	372000	mg/L
OW-57	11/5/2019	Potassium, Dissolved	0.58	1	0.162288	NA	mg/L
OW-57	11/5/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-57	11/5/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OW-57	11/5/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-57	11/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	11/5/2019	Uranium, Dissolved	0.00019	0.0005	0.000075	NA	mg/L
OW-57	11/5/2019	Zinc, Dissolved	0.022	0.01	0.002252	5960450	mg/L
OW-57	11/5/2019	Aluminum, Total	14	0.4	0.049765	19914000	mg/L
OW-57	11/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	11/5/2019	Arsenic, Total	0.0047	0.001	0.000312	10000	mg/L
OW-57	11/5/2019	Barium, Total	4.7	0.04	0.012968	2000000	mg/L
OW-57	11/5/2019	Beryllium, Total	0.00085	0.002	0.000284	4000	mg/L
OW-57	11/5/2019	Boron, Total	0.28	0.04	0.004531	3949	mg/L
OW-57	11/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	11/5/2019	Chromium, Total	0.0028	0.006	0.001533	50000	mg/L
OW-57	11/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	11/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	11/5/2019	Iron, Total	11	0.4	0.174937	13822000	mg/L
OW-57	11/5/2019	Lead, Total	0.008	0.0005	0.000055	15000	mg/L
OW-57	11/5/2019	Manganese, Total	4.1	0.04	0.005799	2017000	mg/L
OW-57	11/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	11/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	11/5/2019	Nickel, Total	0.084	0.01	0.004009	372000	mg/L
OW-57	11/5/2019	Selenium, Total	0.002	0.001	0.000478	50000	mg/L
OW-57	11/5/2019	Silver, Total	0.0018	0.005	0.001418	50000	mg/L
OW-57	11/5/2019	Thallium, Total	0.000057	0.0005	0.000052	2000	mg/L
OW-57	11/5/2019	Uranium, Total	0.00086	0.0005	0.000085	30000	mg/L
OW-57	11/5/2019	Zinc, Total	0.012	0.01	0.005772	5960000	mg/L
OW-57	3/5/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-57	3/5/2020	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-57	3/5/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	3/5/2020	Uranium, Total	0.00045	0.0005	0.000085	30000	mg/L
OW-57	3/5/2020	Arsenic, Total	0.0043	0.005	0.0016	10000	mg/L
OW-57	3/5/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-57	3/5/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-57	3/5/2020	Beryllium, Total	0.00031	0.002	0.00028	4000	mg/L
OW-57	3/5/2020	Boron, Total	0.3	0.04	0.0045	3949	mg/L
OW-57	3/5/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-57	3/5/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-57	3/5/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-57	3/5/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-57	3/5/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-57	3/5/2020	Nickel, Total	0.085	0.01	0.004	372000	mg/L
OW-57	3/5/2020	Silver, Total	0.003	0.005	0.0014	50000	mg/L
OW-57	3/5/2020	Zinc, Total	0.0083	0.01	0.0058	5960000	mg/L
OW-57	3/5/2020	Aluminum, Total	2.8	0.2	0.025	19914000	mg/L
OW-57	3/5/2020	Barium, Total	4.2	0.02	0.0065	2000000	mg/L
OW-57	3/5/2020	Iron, Total	6.3	0.2	0.087	13822000	mg/L
OW-57	3/5/2020	Manganese, Total	2.5	0.02	0.0029	2017000	mg/L
OW-57	3/5/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-57	3/5/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	3/5/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	3/5/2020	Uranium, Dissolved	0.00031	0.0005	0.000075	NA	mg/L
OW-57	3/5/2020	Arsenic, Dissolved	0.0033	0.001	0.0001	10000	mg/L
OW-57	3/5/2020	Selenium, Dissolved	0.00045	0.001	0.00017	50000	mg/L
OW-57	3/5/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-57	3/5/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-57	3/5/2020	Boron, Dissolved	0.21	0.04	0.0045	3949110	mg/L
OW-57	3/5/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-57	3/5/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-57	3/5/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-57	3/5/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-57	3/5/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-57	3/5/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	3/5/2020	Nickel, Dissolved	0.056	0.01	0.004	372000	mg/L
OW-57	3/5/2020	Potassium, Dissolved	0.51	1	0.16	NA	mg/L
OW-57	3/5/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
OW-57	3/5/2020	Zinc, Dissolved	0.0082	0.01	0.0023	5960450	mg/L
OW-57	3/5/2020	Barium, Dissolved	4	0.01	0.0032	2000000	mg/L
OW-57	3/5/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
OW-57	3/5/2020	Iron, Dissolved	3	0.1	0.044	13821880	mg/L
OW-57	3/5/2020	Manganese, Dissolved	2.2	0.01	0.0014	2017400	mg/L
OW-57	3/5/2020	Sodium, Dissolved	290	5	2.1	NA	mg/L
OW-57	2/20/2019	Antimony, Dissolved	0.00029	0.001	0.000204	6000	mg/L
OW-57	2/20/2019	Arsenic, Dissolved	0.0032	0.001	0.000068	10000	mg/L
OW-57	2/20/2019	Barium, Dissolved	3.7	0.01	0.003242	2000000	mg/L
OW-57	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	2/20/2019	Calcium, Dissolved	120	5	0.309446	NA	mg/L
OW-57	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	2/20/2019	Copper, Dissolved	0.0016	0.006	0.001296	790000	mg/L
OW-57	2/20/2019	Iron, Dissolved	2.3	0.1	0.043734	13821880	mg/L
OW-57	2/20/2019	Lead, Dissolved	0.000069	0.0005	0.000047	NA	mg/L
OW-57	2/20/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-57	2/20/2019	Manganese, Dissolved	2.1	0.01	0.00145	2017400	mg/L
OW-57	2/20/2019	Potassium, Dissolved	0.79	1	0.162288	NA	mg/L
OW-57	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-57	2/20/2019	Silver, Dissolved	0.0018	0.005	0.000942	81200	mg/L
OW-57	2/20/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-57	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-57	2/20/2019	Uranium, Dissolved	0.00042	0.0005	0.00003	NA	mg/L
OW-57	2/20/2019	Zinc, Dissolved	0.03	0.01	0.002252	5960450	mg/L
OW-57	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	2/20/2019	Arsenic, Total	0.0045	0.001	0.000312	10000	mg/L
OW-57	2/20/2019	Barium, Total	4.1	0.01	0.003242	2000000	mg/L
OW-57	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-57	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-57	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	2/20/2019	Iron, Total	5.3	0.2	0.087469	13822000	mg/L
OW-57	2/20/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-57	2/20/2019	Manganese, Total	2.4	0.01	0.00145	2017000	mg/L
OW-57	2/20/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
OW-57	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-57	2/20/2019	Silver, Total	0.0024	0.005	0.001418	50000	mg/L
OW-57	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	2/20/2019	Uranium, Total	0.00044	0.0005	0.000085	30000	mg/L
OW-57	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-57	5/16/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-57	5/16/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-57	5/16/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-57	5/16/2019	Barium, Dissolved	3.6	0.02	0.006484	2000000	mg/L
OW-57	5/16/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-57	5/16/2019	Boron, Dissolved	0.27	0.04	0.004531	3949110	mg/L
OW-57	5/16/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-57	5/16/2019	Calcium, Dissolved	120	10	0.618891	NA	mg/L
OW-57	5/16/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-57	5/16/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-57	5/16/2019	Copper, Dissolved	0.0041	0.006	0.001296	790000	mg/L
OW-57	5/16/2019	Iron, Dissolved	2.5	0.2	0.087469	13821880	mg/L
OW-57	5/16/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-57	5/16/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-57	5/16/2019	Manganese, Dissolved	2.1	0.02	0.002899	2017400	mg/L
OW-57	5/16/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-57	5/16/2019	Nickel, Dissolved	0.075	0.01	0.004009	372000	mg/L
OW-57	5/16/2019	Potassium, Dissolved	0.77	1	0.162288	NA	mg/L
OW-57	5/16/2019	Selenium, Dissolved	0.00022	0.001	0.000171	50000	mg/L
OW-57	5/16/2019	Silver, Dissolved	0.0024	0.005	0.000942	81200	mg/L
OW-57	5/16/2019	Sodium, Dissolved	270	10	4.161763	NA	mg/L
OW-57	5/16/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-57	5/16/2019	Uranium, Dissolved	0.00033	0.0005	0.000075	NA	mg/L
OW-57	5/16/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-57	5/16/2019	Aluminum, Total	0.84	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	5/16/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-57	5/16/2019	Arsenic, Total	0.0035	0.001	0.000312	10000	mg/L
OW-57	5/16/2019	Barium, Total	3.9	0.01	0.003242	2000000	mg/L
OW-57	5/16/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
OW-57	5/16/2019	Boron, Total	0.26	0.04	0.004531	3949	mg/L
OW-57	5/16/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-57	5/16/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-57	5/16/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-57	5/16/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-57	5/16/2019	Iron, Total	4.9	0.1	0.043734	13822000	mg/L
OW-57	5/16/2019	Lead, Total	0.0025	0.0005	0.000055	15000	mg/L
OW-57	5/16/2019	Manganese, Total	2.6	0.01	0.00145	2017000	mg/L
OW-57	5/16/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-57	5/16/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-57	5/16/2019	Nickel, Total	0.078	0.01	0.004009	372000	mg/L
OW-57	5/16/2019	Selenium, Total	0.00061	0.001	0.000478	50000	mg/L
OW-57	5/16/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-57	5/16/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-57	5/16/2019	Uranium, Total	0.00051	0.0005	0.000085	30000	mg/L
OW-57	5/16/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	8/22/2019	Aluminum, Dissolved	0.078	0.02	0.002488	19913930	mg/L
OW-58	8/22/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	8/22/2019	Arsenic, Dissolved	0.0028	0.001	0.000101	10000	mg/L
OW-58	8/22/2019	Barium, Dissolved	4.2	0.01	0.003242	2000000	mg/L
OW-58	8/22/2019	Beryllium, Dissolved	0.00039	0.002	0.000284	4000	mg/L
OW-58	8/22/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-58	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	8/22/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-58	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	8/22/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	8/22/2019	Iron, Dissolved	8.4	0.2	0.087469	13821880	mg/L
OW-58	8/22/2019	Lead, Dissolved	0.0001	0.0005	0.000055	NA	mg/L
OW-58	8/22/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
OW-58	8/22/2019	Manganese, Dissolved	1.9	0.01	0.00145	2017400	mg/L
OW-58	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	8/22/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	8/22/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
OW-58	8/22/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
OW-58	8/22/2019	Silver, Dissolved	0.0012	0.005	0.000942	81200	mg/L
OW-58	8/22/2019	Sodium, Dissolved	260	5	2.080881	NA	mg/L
OW-58	8/22/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	8/22/2019	Uranium, Dissolved	0.00025	0.0005	0.000075	NA	mg/L
OW-58	8/22/2019	Zinc, Dissolved	0.0029	0.01	0.002252	5960450	mg/L
OW-58	8/22/2019	Aluminum, Total	5.9	1	0.124414	19914000	mg/L
OW-58	8/22/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	8/22/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
OW-58	8/22/2019	Barium, Total	4.4	0.01	0.003242	2000000	mg/L
OW-58	8/22/2019	Beryllium, Total	0.00055	0.002	0.000284	4000	mg/L
OW-58	8/22/2019	Boron, Total	0.38	0.04	0.004531	3949	mg/L
OW-58	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	8/22/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	8/22/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-58	8/22/2019	Lead, Total	0.0027	0.0005	0.000055	15000	mg/L
OW-58	8/22/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	8/22/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
OW-58	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	8/22/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
OW-58	8/22/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	8/22/2019	Silver, Total	0.0016	0.005	0.001418	50000	mg/L
OW-58	8/22/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	8/22/2019	Uranium, Total	0.00042	0.0005	0.000085	30000	mg/L
OW-58	8/22/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-58	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	11/18/2019	Arsenic, Dissolved	0.0026	0.001	0.000101	10000	mg/L
OW-58	11/18/2019	Barium, Dissolved	4.5	0.02	0.006484	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-58	11/18/2019	Boron, Dissolved	0.36	0.04	0.004531	3949110	mg/L
OW-58	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	11/18/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
OW-58	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	11/18/2019	Iron, Dissolved	8.7	0.2	0.087469	13821880	mg/L
OW-58	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	11/18/2019	Magnesium, Dissolved	37	1	0.05029	NA	mg/L
OW-58	11/18/2019	Manganese, Dissolved	2	0.02	0.002899	2017400	mg/L
OW-58	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	11/18/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	11/18/2019	Potassium, Dissolved	0.4	1	0.162288	NA	mg/L
OW-58	11/18/2019	Selenium, Dissolved	0.00031	0.001	0.000171	50000	mg/L
OW-58	11/18/2019	Silver, Dissolved	0.0016	0.005	0.000942	81200	mg/L
OW-58	11/18/2019	Sodium, Dissolved	240	10	4.161763	NA	mg/L
OW-58	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	11/18/2019	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
OW-58	11/18/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
OW-58	11/18/2019	Aluminum, Total	3.2	0.1	0.012441	19914000	mg/L
OW-58	11/18/2019	Antimony, Total	0.00043	0.001	0.000389	6000	mg/L
OW-58	11/18/2019	Arsenic, Total	0.0033	0.001	0.000312	10000	mg/L
OW-58	11/18/2019	Barium, Total	4.5	0.01	0.003242	2000000	mg/L
OW-58	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-58	11/18/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-58	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	11/18/2019	Iron, Total	9.9	0.4	0.174937	13822000	mg/L
OW-58	11/18/2019	Lead, Total	0.0016	0.0005	0.000055	15000	mg/L
OW-58	11/18/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-58	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	11/18/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
OW-58	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-58	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	11/18/2019	Uranium, Total	0.00037	0.0005	0.000085	30000	mg/L
OW-58	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	6/5/2019	Aluminum, Total	3.4	0.1	0.012441	19914000	mg/L
OW-58	6/5/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	6/5/2019	Arsenic, Total	0.0028	0.001	0.000312	10000	mg/L
OW-58	6/5/2019	Barium, Total	4.3	0.01	0.003242	2000000	mg/L
OW-58	6/5/2019	Beryllium, Total	0.00059	0.002	0.000284	4000	mg/L
OW-58	6/5/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-58	6/5/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	6/5/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	6/5/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	6/5/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	6/5/2019	Iron, Total	9.8	0.4	0.174937	13822000	mg/L
OW-58	6/5/2019	Lead, Total	0.0015	0.0005	0.000055	15000	mg/L
OW-58	6/5/2019	Manganese, Total	2.1	0.01	0.00145	2017000	mg/L
OW-58	6/5/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-58	6/5/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	6/5/2019	Nickel, Total	0.025	0.01	0.004009	372000	mg/L
OW-58	6/5/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	6/5/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-58	6/5/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	6/5/2019	Uranium, Total	0.0003	0.0005	0.000085	30000	mg/L
OW-58	6/5/2019	Zinc, Total	0.0062	0.01	0.005772	5960000	mg/L
OW-58	6/5/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	6/5/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	6/5/2019	Arsenic, Dissolved	0.0024	0.001	0.000101	10000	mg/L
OW-58	6/5/2019	Barium, Dissolved	4.2	0.01	0.003242	2000000	mg/L
OW-58	6/5/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-58	6/5/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-58	6/5/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/5/2019	Calcium, Dissolved	130	5	0.309446	NA	mg/L
OW-58	6/5/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	6/5/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	6/5/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	6/5/2019	Iron, Dissolved	7.9	0.2	0.087469	13821880	mg/L
OW-58	6/5/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	6/5/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
OW-58	6/5/2019	Manganese, Dissolved	2	0.01	0.00145	2017400	mg/L
OW-58	6/5/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	6/5/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	6/5/2019	Potassium, Dissolved	0.33	1	0.162288	NA	mg/L
OW-58	6/5/2019	Selenium, Dissolved	0.00027	0.001	0.000171	50000	mg/L
OW-58	6/5/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-58	6/5/2019	Sodium, Dissolved	250	5	2.080881	NA	mg/L
OW-58	6/5/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	6/5/2019	Uranium, Dissolved	0.00015	0.0005	0.000075	NA	mg/L
OW-58	6/5/2019	Zinc, Dissolved	0.0029	0.01	0.002252	5960450	mg/L
OW-58	3/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-58	3/28/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-58	3/28/2019	Arsenic, Dissolved	0.0029	0.001	0.000101	10000	mg/L
OW-58	3/28/2019	Barium, Dissolved	4	0.02	0.006484	2000000	mg/L
OW-58	3/28/2019	Beryllium, Dissolved	0.0003	0.002	0.000284	4000	mg/L
OW-58	3/28/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-58	3/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-58	3/28/2019	Calcium, Dissolved	130	10	0.618891	NA	mg/L
OW-58	3/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-58	3/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-58	3/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-58	3/28/2019	Iron, Dissolved	7.8	0.2	0.087469	13821880	mg/L
OW-58	3/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-58	3/28/2019	Magnesium, Dissolved	36	1	0.05029	NA	mg/L
OW-58	3/28/2019	Manganese, Dissolved	1.9	0.02	0.002899	2017400	mg/L
OW-58	3/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-58	3/28/2019	Nickel, Dissolved	0.021	0.01	0.004009	372000	mg/L
OW-58	3/28/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
OW-58	3/28/2019	Selenium, Dissolved	0.00022	0.001	0.000171	50000	mg/L
OW-58	3/28/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-58	3/28/2019	Sodium, Dissolved	230	10	4.161763	NA	mg/L
OW-58	3/28/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58	3/28/2019	Uranium, Dissolved	0.00016	0.0005	0.000075	NA	mg/L
OW-58	3/28/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
OW-58	3/28/2019	Aluminum, Total	0.025	0.02	0.004564	19914000	mg/L
OW-58	3/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-58	3/28/2019	Arsenic, Total	0.003	0.001	0.000312	10000	mg/L
OW-58	3/28/2019	Barium, Total	4.3	0.01	0.003242	2000000	mg/L
OW-58	3/28/2019	Beryllium, Total	0.00034	0.002	0.000284	4000	mg/L
OW-58	3/28/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-58	3/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-58	3/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-58	3/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-58	3/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-58	3/28/2019	Iron, Total	8.8	0.2	0.087469	13822000	mg/L
OW-58	3/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
OW-58	3/28/2019	Manganese, Total	1.9	0.01	0.00145	2017000	mg/L
OW-58	3/28/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-58	3/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-58	3/28/2019	Nickel, Total	0.021	0.01	0.004009	372000	mg/L
OW-58	3/28/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-58	3/28/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-58	3/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58	3/28/2019	Uranium, Total	0.00017	0.0005	0.000085	30000	mg/L
OW-58	3/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-58	9/17/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58	9/17/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-58	9/17/2020	Arsenic, Total	0.0032	0.001	0.00026	10000	mg/L
OW-58	9/17/2020	Lead, Total	0.002	0.0005	0.000034	15000	mg/L
OW-58	9/17/2020	Selenium, Total	0.00075	0.001	0.00066	50000	mg/L
OW-58	9/17/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-58	9/17/2020	Uranium, Total	0.00041	0.0005	0.000065	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	9/17/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-58	9/17/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	9/17/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-58	9/17/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-58	9/17/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-58	9/17/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-58	9/17/2020	Nickel, Total	0.026	0.01	0.0033	372000	mg/L
OW-58	9/17/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-58	9/17/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-58	9/17/2020	Barium, Total	4.5	0.015	0.0082	2000000	mg/L
OW-58	9/17/2020	Manganese, Total	2	0.01	0.0041	2017000	mg/L
OW-58	9/17/2020	Aluminum, Total	4.9	0.4	0.15	19914000	mg/L
OW-58	9/17/2020	Iron, Total	11	1	0.26	13822000	mg/L
OW-58	9/17/2020	Boron, Total	0.33	0.04	0.0074	3949	mg/L
OW-58	9/17/2020	Arsenic, Dissolved	0.0026	0.001	0.00021	10000	mg/L
OW-58	9/17/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-58	9/17/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-58	9/17/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-58	9/17/2020	Uranium, Dissolved	0.00016	0.0005	0.000065	NA	mg/L
OW-58	9/17/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-58	9/17/2020	Barium, Dissolved	4.4	0.01	0.0056	2000000	mg/L
OW-58	9/17/2020	Manganese, Dissolved	1.8	0.01	0.0029	2017400	mg/L
OW-58	9/17/2020	Nickel, Dissolved	0.024	0.05	0.016	372000	mg/L
OW-58	9/17/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-58	9/17/2020	Iron, Dissolved	8.3	1	0.52	13821880	mg/L
OW-58	9/17/2020	Boron, Dissolved	0.32	0.04	0.0067	3949110	mg/L
OW-58	9/17/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-58	9/17/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-58	9/17/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-58	9/17/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-58	9/17/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-58	9/17/2020	Zinc, Dissolved	0.024	0.01	0.006	5960450	mg/L
OW-58	9/17/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-58	9/17/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-58	9/30/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
OW-58	9/30/2016	Arsenic, Total	0.0094	0.005	0.0011	10000	mg/L
OW-58	9/30/2016	Barium, Total	5.2	0.02	0.013	2000000	mg/L
OW-58	9/30/2016	Beryllium, Total	0.0037	0.002	0.00036	4000	mg/L
OW-58	9/30/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	9/30/2016	Cobalt, Total	0.013	0.006	0.0017	5980	mg/L
OW-58	9/30/2016	Chromium, Total	0.017	0.006	0.0027	50000	mg/L
OW-58	9/30/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-58	9/30/2016	Arsenic, Dissolved	0.0041	0.005	0.00069	10000	mg/L
OW-58	9/30/2016	Barium, Dissolved	3	0.01	0.0066	2000000	mg/L
OW-58	9/30/2016	Beryllium, Dissolved	ND	0.002	0.00031	4000	mg/L
OW-58	9/30/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-58	9/30/2016	Cobalt, Dissolved	0.0022	0.006	0.00074	5980	mg/L
OW-58	9/30/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-58	9/30/2016	Iron, Dissolved	6.6	0.2	0.2	13821880	mg/L
OW-58	9/30/2016	Manganese, Dissolved	2.1	0.01	0.0016	2017400	mg/L
OW-58	9/30/2016	Nickel, Dissolved	0.015	0.01	0.0024	372000	mg/L
OW-58	9/30/2016	Lead, Dissolved	0.0011	0.0005	0.00017	NA	mg/L
OW-58	9/30/2016	Antimony, Dissolved	ND	0.001	0.00047	6000	mg/L
OW-58	9/30/2016	Selenium, Dissolved	0.0064	0.02	0.0042	50000	mg/L
OW-58	9/30/2016	Vanadium, Dissolved	0.0046	0.05	0.0013	63100	mg/L
OW-58	9/30/2016	Zinc, Dissolved	0.003	0.01	0.0028	5960450	mg/L
OW-58	9/30/2016	Iron, Total	27	1	1	13822000	mg/L
OW-58	9/30/2016	Mercury, Total	0.00013	0.0002	0.000053	2000	mg/L
OW-58	9/30/2016	Manganese, Total	4.1	0.02	0.0032	2017000	mg/L
OW-58	9/30/2016	Nickel, Total	0.035	0.01	0.0031	372000	mg/L
OW-58	9/30/2016	Lead, Total	0.036	0.0025	0.00084	15000	mg/L
OW-58	9/30/2016	Antimony, Total	ND	0.001	0.00047	6000	mg/L
OW-58	9/30/2016	Selenium, Total	0.012	0.005	0.0011	50000	mg/L
OW-58	9/30/2016	Vanadium, Total	0.043	0.05	0.0013	63100	mg/L
OW-58	9/30/2016	Zinc, Total	0.048	0.01	0.0027	5960000	mg/L
OW-58	11/7/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-58	11/7/2016	Arsenic, Total	0.006	0.005	0.0011	10000	mg/L
OW-58	11/7/2016	Barium, Total	4.8	0.02	0.0079	2000000	mg/L
OW-58	11/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	Chromium, Total	0.0044	0.006	0.0027	50000	mg/L
OW-58	11/7/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
OW-58	11/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
OW-58	11/7/2016	Arsenic, Dissolved	0.0056	0.02	0.0028	10000	mg/L
OW-58	11/7/2016	Barium, Dissolved	4	0.02	0.013	2000000	mg/L
OW-58	11/7/2016	Calcium, Dissolved	130	10	5	NA	mg/L
OW-58	11/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
OW-58	11/7/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
OW-58	11/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
OW-58	11/7/2016	Iron, Dissolved	7.9	0.2	0.2	13821880	mg/L
OW-58	11/7/2016	Potassium, Dissolved	0.6	1	0.5	NA	mg/L
OW-58	11/7/2016	Magnesium, Dissolved	38	1	0.5	NA	mg/L
OW-58	11/7/2016	Manganese, Dissolved	2.2	0.02	0.0032	2017400	mg/L
OW-58	11/7/2016	Sodium, Dissolved	270	10	5	NA	mg/L
OW-58	11/7/2016	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-58	11/7/2016	Selenium, Dissolved	0.011	0.02	0.0042	50000	mg/L
OW-58	11/7/2016	Uranium, Dissolved	0.00065	0.0005	0.000051	NA	mg/L
OW-58	11/7/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
OW-58	11/7/2016	Iron, Total	15	1	1	13822000	mg/L
OW-58	11/7/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
OW-58	11/7/2016	Manganese, Total	3	0.02	0.0027	2017000	mg/L
OW-58	11/7/2016	Lead, Total	0.012	0.0025	0.00041	15000	mg/L
OW-58	11/7/2016	Selenium, Total	0.012	0.02	0.0037	50000	mg/L
OW-58	11/7/2016	Uranium, Total	0.0012	0.0025	0.00087	30000	mg/L
OW-58	11/7/2016	Zinc, Total	0.017	0.01	0.0027	5960000	mg/L
OW-58	3/29/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
OW-58	3/29/2017	Arsenic, Total	0.0087	0.005	0.0011	10000	mg/L
OW-58	3/29/2017	Barium, Total	5.7	0.02	0.0079	2000000	mg/L
OW-58	3/29/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58	3/29/2017	Chromium, Total	0.015	0.006	0.0027	50000	mg/L
OW-58	3/29/2017	Copper, Total	0.0066	0.006	0.003	790000	mg/L
OW-58	3/29/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-58	3/29/2017	Arsenic, Dissolved	0.0035	0.005	0.00089	10000	mg/L
OW-58	3/29/2017	Barium, Dissolved	4.1	0.02	0.0085	2000000	mg/L
OW-58	3/29/2017	Calcium, Dissolved	120	10	5	NA	mg/L
OW-58	3/29/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	3/29/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-58	3/29/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	3/29/2017	Iron, Dissolved	7.7	0.2	0.2	13821880	mg/L
OW-58	3/29/2017	Potassium, Dissolved	ND	1	0.5	NA	mg/L
OW-58	3/29/2017	Magnesium, Dissolved	36	1	0.5	NA	mg/L
OW-58	3/29/2017	Manganese, Dissolved	1.9	0.02	0.0038	2017400	mg/L
OW-58	3/29/2017	Sodium, Dissolved	280	10	5	NA	mg/L
OW-58	3/29/2017	Lead, Dissolved	0.00043	0.0005	0.00017	NA	mg/L
OW-58	3/29/2017	Selenium, Dissolved	ND	0.02	0.0077	50000	mg/L
OW-58	3/29/2017	Uranium, Dissolved	0.00082	0.0005	0.00005	NA	mg/L
OW-58	3/29/2017	Zinc, Dissolved	0.034	0.01	0.0011	5960450	mg/L
OW-58	3/29/2017	Iron, Total	24	1	1	13822000	mg/L
OW-58	3/29/2017	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
OW-58	3/29/2017	Manganese, Total	3.4	0.02	0.0027	2017000	mg/L
OW-58	3/29/2017	Lead, Total	0.024	0.0005	0.000081	15000	mg/L
OW-58	3/29/2017	Selenium, Total	0.012	0.005	0.00094	50000	mg/L
OW-58	3/29/2017	Uranium, Total	0.0027	0.0005	0.00017	30000	mg/L
OW-58	3/29/2017	Zinc, Total	0.037	0.01	0.0027	5960000	mg/L
OW-58	6/21/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-58	6/21/2017	Arsenic, Total	0.01	0.005	0.0015	10000	mg/L
OW-58	6/21/2017	Barium, Total	5.9	0.02	0.0093	2000000	mg/L
OW-58	6/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	6/21/2017	Chromium, Total	0.02	0.006	0.0011	50000	mg/L
OW-58	6/21/2017	Copper, Total	0.019	0.006	0.0017	790000	mg/L
OW-58	6/21/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-58	6/21/2017	Arsenic, Dissolved	0.0059	0.01	0.0018	10000	mg/L
OW-58	6/21/2017	Barium, Dissolved	3.5	0.02	0.0085	2000000	mg/L
OW-58	6/21/2017	Calcium, Dissolved	110	10	0.78	NA	mg/L
OW-58	6/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	6/21/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-58	6/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	6/21/2017	Iron, Dissolved	6.9	0.2	0.16	13821880	mg/L
OW-58	6/21/2017	Potassium, Dissolved	0.27	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	6/21/2017	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	6/21/2017	Manganese, Dissolved	1.7	0.02	0.0038	2017400	mg/L
OW-58	6/21/2017	Sodium, Dissolved	240	10	1.6	NA	mg/L
OW-58	6/21/2017	Lead, Dissolved	0.00033	0.0005	0.00017	NA	mg/L
OW-58	6/21/2017	Selenium, Dissolved	0.01	0.01	0.0039	50000	mg/L
OW-58	6/21/2017	Uranium, Dissolved	0.0004	0.0005	0.00005	NA	mg/L
OW-58	6/21/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
OW-58	6/21/2017	Iron, Total	29	1	0.51	13822000	mg/L
OW-58	6/21/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	6/21/2017	Manganese, Total	3.8	0.02	0.011	2017000	mg/L
OW-58	6/21/2017	Lead, Total	0.034	0.0025	0.00048	15000	mg/L
OW-58	6/21/2017	Selenium, Total	0.012	0.005	0.0036	50000	mg/L
OW-58	6/21/2017	Uranium, Total	0.0035	0.0025	0.00077	30000	mg/L
OW-58	6/21/2017	Zinc, Total	0.049	0.01	0.0028	5960000	mg/L
OW-58	9/19/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	9/19/2017	Arsenic, Total	0.0096	0.005	0.0015	10000	mg/L
OW-58	9/19/2017	Barium, Total	5	0.02	0.0093	2000000	mg/L
OW-58	9/19/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	9/19/2017	Chromium, Total	0.013	0.006	0.0018	50000	mg/L
OW-58	9/19/2017	Copper, Total	0.0092	0.006	0.0017	790000	mg/L
OW-58	9/19/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-58	9/19/2017	Arsenic, Dissolved	0.007	0.02	0.0035	10000	mg/L
OW-58	9/19/2017	Barium, Dissolved	4	0.01	0.0043	2000000	mg/L
OW-58	9/19/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	9/19/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	9/19/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	9/19/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	9/19/2017	Iron, Dissolved	7.5	0.2	0.16	13821880	mg/L
OW-58	9/19/2017	Potassium, Dissolved	0.38	1	0.11	NA	mg/L
OW-58	9/19/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-58	9/19/2017	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	9/19/2017	Sodium, Dissolved	270	5	0.82	NA	mg/L
OW-58	9/19/2017	Lead, Dissolved	0.00017	0.0005	0.00017	NA	mg/L
OW-58	9/19/2017	Selenium, Dissolved	0.015	0.02	0.0077	50000	mg/L
OW-58	9/19/2017	Zinc, Dissolved	0.018	0.01	0.0021	5960450	mg/L
OW-58	9/19/2017	Iron, Total	19	0.4	0.2	13822000	mg/L
OW-58	9/19/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	9/19/2017	Manganese, Total	2.8	0.01	0.0055	2017000	mg/L
OW-58	9/19/2017	Lead, Total	0.015	0.0005	0.000095	15000	mg/L
OW-58	9/19/2017	Selenium, Total	0.014	0.005	0.0036	50000	mg/L
OW-58	9/19/2017	Zinc, Total	0.035	0.01	0.0033	5960000	mg/L
OW-58	12/6/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	12/6/2017	Arsenic, Total	0.0059	0.001	0.00041	10000	mg/L
OW-58	12/6/2017	Barium, Total	4.7	0.01	0.005	2000000	mg/L
OW-58	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	12/6/2017	Chromium, Total	0.0061	0.006	0.0018	50000	mg/L
OW-58	12/6/2017	Copper, Total	0.0047	0.006	0.0041	790000	mg/L
OW-58	12/6/2017	Silver, Dissolved	0.002	0.005	0.0018	81200	mg/L
OW-58	12/6/2017	Arsenic, Dissolved	0.0045	0.005	0.0021	10000	mg/L
OW-58	12/6/2017	Barium, Dissolved	3.8	0.01	0.0049	2000000	mg/L
OW-58	12/6/2017	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	12/6/2017	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
OW-58	12/6/2017	Potassium, Dissolved	0.41	1	0.11	NA	mg/L
OW-58	12/6/2017	Magnesium, Dissolved	34	1	0.25	NA	mg/L
OW-58	12/6/2017	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	12/6/2017	Sodium, Dissolved	250	5	0.82	NA	mg/L
OW-58	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	12/6/2017	Selenium, Dissolved	0.0069	0.005	0.0038	50000	mg/L
OW-58	12/6/2017	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
OW-58	12/6/2017	Zinc, Dissolved	0.0076	0.01	0.0021	5960450	mg/L
OW-58	12/6/2017	Iron, Total	15	0.4	0.2	13822000	mg/L
OW-58	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	12/6/2017	Manganese, Total	2.4	0.01	0.0055	2017000	mg/L
OW-58	12/6/2017	Lead, Total	0.0095	0.0025	0.0011	15000	mg/L
OW-58	12/6/2017	Selenium, Total	0.0058	0.005	0.0049	50000	mg/L
OW-58	12/6/2017	Uranium, Total	0.001	0.0025	0.00077	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/6/2017	Zinc, Total	0.017	0.01	0.0033	5960000	mg/L
OW-58	2/20/2018	Silver, Total	0.0014	0.005	0.0012	50000	mg/L
OW-58	2/20/2018	Arsenic, Total	0.0043	0.01	0.0041	10000	mg/L
OW-58	2/20/2018	Barium, Total	4.3	0.01	0.005	2000000	mg/L
OW-58	2/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	2/20/2018	Chromium, Total	0.0022	0.006	0.0018	50000	mg/L
OW-58	2/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	2/20/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
OW-58	2/20/2018	Arsenic, Dissolved	0.0036	0.005	0.0021	10000	mg/L
OW-58	2/20/2018	Barium, Dissolved	3.9	0.01	0.0049	2000000	mg/L
OW-58	2/20/2018	Calcium, Dissolved	120	10	0.78	NA	mg/L
OW-58	2/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	2/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	2/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	2/20/2018	Iron, Dissolved	7.1	0.2	0.16	13821880	mg/L
OW-58	2/20/2018	Potassium, Dissolved	0.36	1	0.11	NA	mg/L
OW-58	2/20/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	2/20/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	2/20/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
OW-58	2/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	2/20/2018	Selenium, Dissolved	0.0049	0.005	0.0038	50000	mg/L
OW-58	2/20/2018	Uranium, Dissolved	0.00022	0.0005	0.000096	NA	mg/L
OW-58	2/20/2018	Zinc, Dissolved	0.0058	0.01	0.0021	5960450	mg/L
OW-58	2/20/2018	Iron, Total	11	0.4	0.2	13822000	mg/L
OW-58	2/20/2018	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-58	2/20/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-58	2/20/2018	Lead, Total	0.0042	0.0025	0.0011	15000	mg/L
OW-58	2/20/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-58	2/20/2018	Uranium, Total	0.00061	0.0025	0.00034	30000	mg/L
OW-58	2/20/2018	Zinc, Total	0.012	0.01	0.0033	5960000	mg/L
OW-58	5/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-58	5/8/2018	Arsenic, Total	0.0038	0.005	0.0021	10000	mg/L
OW-58	5/8/2018	Barium, Total	4.3	0.02	0.01	2000000	mg/L
OW-58	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	5/8/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	5/8/2018	Silver, Dissolved	0.0019	0.005	0.0018	81200	mg/L
OW-58	5/8/2018	Arsenic, Dissolved	0.0028	0.005	0.0021	10000	mg/L
OW-58	5/8/2018	Barium, Dissolved	4.2	0.02	0.0099	2000000	mg/L
OW-58	5/8/2018	Calcium, Dissolved	120	5	0.39	NA	mg/L
OW-58	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	5/8/2018	Iron, Dissolved	7	0.2	0.16	13821880	mg/L
OW-58	5/8/2018	Potassium, Dissolved	0.4	1	0.11	NA	mg/L
OW-58	5/8/2018	Magnesium, Dissolved	35	1	0.25	NA	mg/L
OW-58	5/8/2018	Manganese, Dissolved	2	0.01	0.002	2017400	mg/L
OW-58	5/8/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
OW-58	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-58	5/8/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-58	5/8/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
OW-58	5/8/2018	Zinc, Dissolved	0.0095	0.01	0.0021	5960450	mg/L
OW-58	5/8/2018	Iron, Total	8.1	0.2	0.1	13822000	mg/L
OW-58	5/8/2018	Mercury, Total	0.000043	0.0002	0.000037	2000	mg/L
OW-58	5/8/2018	Manganese, Total	2.1	0.02	0.011	2017000	mg/L
OW-58	5/8/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-58	5/8/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-58	5/8/2018	Uranium, Total	0.00021	0.0005	0.000068	30000	mg/L
OW-58	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-58	8/28/2018	Silver, Total	0.0027	0.005	0.0012	50000	mg/L
OW-58	8/28/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-58	8/28/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
OW-58	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	8/28/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	8/28/2018	Silver, Dissolved	0.0026	0.005	0.0018	81200	mg/L
OW-58	8/28/2018	Arsenic, Dissolved	0.0028	0.001	0.00042	10000	mg/L
OW-58	8/28/2018	Barium, Dissolved	3.8	0.01	0.0049	2000000	mg/L
OW-58	8/28/2018	Calcium, Dissolved	130	5	0.39	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	8/28/2018	Iron, Dissolved	7.4	0.2	0.16	13821880	mg/L
OW-58	8/28/2018	Potassium, Dissolved	0.28	1	0.11	NA	mg/L
OW-58	8/28/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
OW-58	8/28/2018	Manganese, Dissolved	1.9	0.01	0.002	2017400	mg/L
OW-58	8/28/2018	Sodium, Dissolved	260	5	0.82	NA	mg/L
OW-58	8/28/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	8/28/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-58	8/28/2018	Uranium, Dissolved	0.00017	0.0005	0.000096	NA	mg/L
OW-58	8/28/2018	Zinc, Dissolved	0.013	0.01	0.0021	5960450	mg/L
OW-58	8/28/2018	Iron, Total	8	0.2	0.1	13822000	mg/L
OW-58	8/28/2018	Mercury, Total	0.000057	0.0002	0.000038	2000	mg/L
OW-58	8/28/2018	Manganese, Total	1.9	0.01	0.0055	2017000	mg/L
OW-58	8/28/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
OW-58	8/28/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-58	8/28/2018	Uranium, Total	0.00017	0.0005	0.000068	30000	mg/L
OW-58	8/28/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-58	11/29/2018	Silver, Total	0.004	0.005	0.0012	50000	mg/L
OW-58	11/29/2018	Arsenic, Total	0.0036	0.001	0.00041	10000	mg/L
OW-58	11/29/2018	Barium, Total	4.8	0.04	0.02	2000000	mg/L
OW-58	11/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-58	11/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-58	11/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58	11/29/2018	Silver, Dissolved	0.0021	0.005	0.0018	81200	mg/L
OW-58	11/29/2018	Arsenic, Dissolved	0.003	0.001	0.00042	10000	mg/L
OW-58	11/29/2018	Barium, Dissolved	4	0.02	0.0099	2000000	mg/L
OW-58	11/29/2018	Calcium, Dissolved	130	10	0.78	NA	mg/L
OW-58	11/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-58	11/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-58	11/29/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-58	11/29/2018	Iron, Dissolved	7	0.2	0.16	13821880	mg/L
OW-58	11/29/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-58	11/29/2018	Magnesium, Dissolved	36	1	0.25	NA	mg/L
OW-58	11/29/2018	Manganese, Dissolved	2	0.02	0.0039	2017400	mg/L
OW-58	11/29/2018	Sodium, Dissolved	260	10	1.6	NA	mg/L
OW-58	11/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-58	11/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-58	11/29/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-58	11/29/2018	Iron, Total	10	0.4	0.2	13822000	mg/L
OW-58	11/29/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-58	11/29/2018	Manganese, Total	2.3	0.01	0.0055	2017000	mg/L
OW-58	11/29/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-58	11/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-58	11/29/2018	Zinc, Total	0.0054	0.01	0.0033	5960000	mg/L
OW-58	12/22/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Dissolved	2	0.01	0.003	2017400	mg/L
OW-58	12/22/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-58	12/22/2020	Barium, Dissolved	4.56	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Boron, Dissolved	0.351	0.1	0.022	3949110	mg/L
OW-58	12/22/2020	Iron, Dissolved	7.08	0.2	0.075	13821880	mg/L
OW-58	12/22/2020	Nickel, Dissolved	0.0361	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58	12/22/2020	Calcium, Total	131	0.5	0.084	NA	mg/L
OW-58	12/22/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58	12/22/2020	Magnesium, Total	35.8	0.5	0.12	NA	mg/L
OW-58	12/22/2020	Iron, Total	8.65	0.2	0.075	13822000	mg/L
OW-58	12/22/2020	Nickel, Total	0.0257	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Aluminum, Total	1.68	0.2	0.051	19914000	mg/L
OW-58	12/22/2020	Boron, Total	0.337	0.1	0.022	3949	mg/L
OW-58	12/22/2020	Barium, Total	5	0.01	0.003	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Sodium, Total	274	2	0.92	NA	mg/L
OW-58	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Total	2.05	0.01	0.003	2017000	mg/L
OW-58	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-58	12/22/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58	12/22/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58	12/22/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Dissolved	1.98	0.01	0.003	2017400	mg/L
OW-58	12/22/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58	12/22/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-58	12/22/2020	Barium, Dissolved	4.59	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Boron, Dissolved	0.354	0.1	0.022	3949110	mg/L
OW-58	12/22/2020	Iron, Dissolved	9.19	0.2	0.075	13821880	mg/L
OW-58	12/22/2020	Nickel, Dissolved	0.0308	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Aluminum, Total	0.319	0.2	0.051	19914000	mg/L
OW-58	12/22/2020	Boron, Total	0.353	0.1	0.022	3949	mg/L
OW-58	12/22/2020	Barium, Total	4.62	0.01	0.003	2000000	mg/L
OW-58	12/22/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58	12/22/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58	12/22/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58	12/22/2020	Sodium, Total	267	2	0.92	NA	mg/L
OW-58	12/22/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58	12/22/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58	12/22/2020	Manganese, Total	2.03	0.01	0.003	2017000	mg/L
OW-58	12/22/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58	12/22/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-58	12/22/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58	12/22/2020	Calcium, Total	142	0.5	0.084	NA	mg/L
OW-58	12/22/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58	12/22/2020	Magnesium, Total	38.7	0.5	0.12	NA	mg/L
OW-58	12/22/2020	Iron, Total	10.1	0.2	0.075	13822000	mg/L
OW-58	12/22/2020	Nickel, Total	0.0284	0.006	0.003	372000	mg/L
OW-58	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58	12/22/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58	12/22/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58	12/22/2020	Arsenic, Total Recoverable	2.84	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-58	12/22/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58	12/22/2020	Arsenic, Dissolved	3.13	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-58	12/22/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-58	12/22/2020	Arsenic, Total Recoverable	3.54	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-58	12/22/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58	12/22/2020	Arsenic, Dissolved	2.86	1	0.286	10	ug/L
OW-58	12/22/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-58	12/22/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58	12/22/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58	12/22/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58	12/22/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	9/18/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58A	9/18/2020	Arsenic, Total	0.0053	0.001	0.00026	10000	mg/L
OW-58A	9/18/2020	Lead, Total	0.0016	0.0005	0.000034	15000	mg/L
OW-58A	9/18/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-58A	9/18/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-58A	9/18/2020	Uranium, Total	0.00051	0.0005	0.000065	30000	mg/L
OW-58A	9/18/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-58A	9/18/2020	Aluminum, Total	0.67	0.02	0.0074	19914000	mg/L
OW-58A	9/18/2020	Barium, Total	0.73	0.003	0.0016	2000000	mg/L
OW-58A	9/18/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-58A	9/18/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-58A	9/18/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
OW-58A	9/18/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-58A	9/18/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-58A	9/18/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-58A	9/18/2020	Nickel, Total	0.029	0.01	0.0033	372000	mg/L
OW-58A	9/18/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-58A	9/18/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-58A	9/18/2020	Iron, Total	5.4	0.5	0.13	13822000	mg/L
OW-58A	9/18/2020	Manganese, Total	1.4	0.02	0.0081	2017000	mg/L
OW-58A	9/18/2020	Boron, Total	0.46	0.04	0.0074	3949	mg/L
OW-58A	9/18/2020	Arsenic, Dissolved	0.0053	0.001	0.00021	10000	mg/L
OW-58A	9/18/2020	Lead, Dissolved	0.00081	0.0005	0.000034	NA	mg/L
OW-58A	9/18/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-58A	9/18/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-58A	9/18/2020	Uranium, Dissolved	0.00048	0.0005	0.000065	NA	mg/L
OW-58A	9/18/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-58A	9/18/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
OW-58A	9/18/2020	Barium, Dissolved	0.73	0.002	0.0011	2000000	mg/L
OW-58A	9/18/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-58A	9/18/2020	Boron, Dissolved	0.43	0.04	0.0067	3949110	mg/L
OW-58A	9/18/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-58A	9/18/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-58A	9/18/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-58A	9/18/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-58A	9/18/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
OW-58A	9/18/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L
OW-58A	9/18/2020	Iron, Dissolved	4.7	0.1	0.052	13821880	mg/L
OW-58A	9/18/2020	Manganese, Dissolved	1.4	0.01	0.0029	2017400	mg/L
OW-58A	9/18/2020	Nickel, Dissolved	0.03	0.05	0.016	372000	mg/L
OW-58A	9/18/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-58A	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-58A	12/23/2020	Barium, Dissolved	0.74	0.01	0.003	2000000	mg/L
OW-58A	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-58A	12/23/2020	Boron, Dissolved	0.504	0.1	0.022	3949110	mg/L
OW-58A	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-58A	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-58A	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-58A	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-58A	12/23/2020	Manganese, Dissolved	1.37	0.01	0.003	2017400	mg/L
OW-58A	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-58A	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-58A	12/23/2020	Zinc, Dissolved	0.0247	0.02	0.008	5960450	mg/L
OW-58A	12/23/2020	Aluminum, Total	0.409	0.2	0.051	19914000	mg/L
OW-58A	12/23/2020	Barium, Total	0.711	0.01	0.003	2000000	mg/L
OW-58A	12/23/2020	Calcium, Total	67.7	0.5	0.084	NA	mg/L
OW-58A	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-58A	12/23/2020	Boron, Total	0.426	0.1	0.022	3949	mg/L
OW-58A	12/23/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-58A	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-58A	12/23/2020	Magnesium, Total	21.1	0.5	0.12	NA	mg/L
OW-58A	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-58A	12/23/2020	Sodium, Total	395	2	0.92	NA	mg/L
OW-58A	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-58A	12/23/2020	Iron, Total	4.4	0.2	0.075	13822000	mg/L
OW-58A	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-58A	12/23/2020	Nickel, Total	0.0307	0.006	0.003	372000	mg/L
OW-58A	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-58A	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Iron, Dissolved	4.54	0.2	0.075	13821880	mg/L
OW-58A	12/23/2020	Nickel, Dissolved	0.0378	0.006	0.003	372000	mg/L
OW-58A	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-58A	12/23/2020	Manganese, Total	1.36	0.01	0.003	2017000	mg/L
OW-58A	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-58A	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-58A	12/23/2020	Arsenic, Total Recoverable	4.41	1	0.286	10	ug/L
OW-58A	12/23/2020	Lead, Total Recoverable	1.73	1	0.133	15	ug/L
OW-58A	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-58A	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-58A	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-58A	12/23/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-58A	12/23/2020	Arsenic, Dissolved	4.13	1	0.286	10	ug/L
OW-58A	12/23/2020	Lead, Dissolved	1.24	1	0.133	NA	ug/L
OW-58A	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-58A	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-58A	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-58A	12/23/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-58A	3/6/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-58A	3/6/2020	Lead, Total	0.0064	0.0005	0.000055	15000	mg/L
OW-58A	3/6/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-58A	3/6/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-58A	3/6/2020	Uranium, Total	0.00093	0.0005	0.000085	30000	mg/L
OW-58A	3/6/2020	Arsenic, Total	0.0049	0.005	0.0016	10000	mg/L
OW-58A	3/6/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-58A	3/6/2020	Beryllium, Total	ND	0.002	0.00028	4000	mg/L
OW-58A	3/6/2020	Boron, Total	0.47	0.04	0.0045	3949	mg/L
OW-58A	3/6/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-58A	3/6/2020	Chromium, Total	0.0041	0.006	0.0015	50000	mg/L
OW-58A	3/6/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-58A	3/6/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-58A	3/6/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-58A	3/6/2020	Nickel, Total	0.037	0.01	0.004	372000	mg/L
OW-58A	3/6/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-58A	3/6/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-58A	3/6/2020	Aluminum, Total	3.7	0.1	0.012	19914000	mg/L
OW-58A	3/6/2020	Barium, Total	0.73	0.01	0.0032	2000000	mg/L
OW-58A	3/6/2020	Manganese, Total	1.4	0.01	0.0014	2017000	mg/L
OW-58A	3/6/2020	Iron, Total	6.7	1	0.44	13822000	mg/L
OW-58A	3/6/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-58A	3/6/2020	Arsenic, Dissolved	0.0033	0.001	0.0001	10000	mg/L
OW-58A	3/6/2020	Lead, Dissolved	0.0019	0.0005	0.000055	NA	mg/L
OW-58A	3/6/2020	Selenium, Dissolved	0.00037	0.001	0.00017	50000	mg/L
OW-58A	3/6/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-58A	3/6/2020	Uranium, Dissolved	0.00059	0.0005	0.000075	NA	mg/L
OW-58A	3/6/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-58A	3/6/2020	Barium, Dissolved	0.62	0.002	0.00065	2000000	mg/L
OW-58A	3/6/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-58A	3/6/2020	Boron, Dissolved	0.46	0.04	0.0045	3949110	mg/L
OW-58A	3/6/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-58A	3/6/2020	Calcium, Dissolved	73	1	0.062	NA	mg/L
OW-58A	3/6/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-58A	3/6/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-58A	3/6/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-58A	3/6/2020	Magnesium, Dissolved	24	1	0.05	NA	mg/L
OW-58A	3/6/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-58A	3/6/2020	Nickel, Dissolved	0.034	0.01	0.004	372000	mg/L
OW-58A	3/6/2020	Potassium, Dissolved	0.4	1	0.16	NA	mg/L
OW-58A	3/6/2020	Silver, Dissolved	0.0012	0.005	0.00094	81200	mg/L
OW-58A	3/6/2020	Zinc, Dissolved	0.0088	0.01	0.0023	5960450	mg/L
OW-58A	3/6/2020	Iron, Dissolved	3.4	0.1	0.044	13821880	mg/L
OW-58A	3/6/2020	Manganese, Dissolved	1.3	0.01	0.0014	2017400	mg/L
OW-58A	3/6/2020	Sodium, Dissolved	470	5	2.1	NA	mg/L
OW-59	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-59	9/19/2020	Antimony, Total	ND	0.01	0.007	6000	mg/L
OW-59	9/19/2020	Arsenic, Total	0.023	0.01	0.0026	10000	mg/L
OW-59	9/19/2020	Lead, Total	0.03	0.005	0.00034	15000	mg/L
OW-59	9/19/2020	Selenium, Total	0.0086	0.01	0.0066	50000	mg/L
OW-59	9/19/2020	Thallium, Total	ND	0.0025	0.0025	2000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	9/19/2020	Uranium, Total	0.14	0.005	0.00065	30000	mg/L
OW-59	9/19/2020	Barium, Total	0.98	0.003	0.0016	2000000	mg/L
OW-59	9/19/2020	Beryllium, Total	0.0052	0.002	0.00088	4000	mg/L
OW-59	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-59	9/19/2020	Chromium, Total	0.047	0.006	0.0021	50000	mg/L
OW-59	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-59	9/19/2020	Cobalt, Total	0.015	0.006	0.0024	5980	mg/L
OW-59	9/19/2020	Copper, Total	0.028	0.006	0.0047	790000	mg/L
OW-59	9/19/2020	Nickel, Total	0.066	0.01	0.0033	372000	mg/L
OW-59	9/19/2020	Silver, Total	0.0015	0.005	0.0013	50000	mg/L
OW-59	9/19/2020	Zinc, Total	0.13	0.01	0.0064	5960000	mg/L
OW-59	9/19/2020	Boron, Total	2.4	0.2	0.037	3949	mg/L
OW-59	9/19/2020	Manganese, Total	1.5	0.01	0.0041	2017000	mg/L
OW-59	9/19/2020	Iron, Total	48	2.5	0.64	13822000	mg/L
OW-59	9/19/2020	Aluminum, Total	99	2	0.74	19914000	mg/L
OW-59	9/19/2020	Arsenic, Dissolved	0.0047	0.01	0.0021	10000	mg/L
OW-59	9/19/2020	Lead, Dissolved	0.00075	0.005	0.00034	NA	mg/L
OW-59	9/19/2020	Selenium, Dissolved	ND	0.01	0.0066	50000	mg/L
OW-59	9/19/2020	Thallium, Dissolved	ND	0.005	0.00035	2000	mg/L
OW-59	9/19/2020	Uranium, Dissolved	0.12	0.005	0.00065	NA	mg/L
OW-59	9/19/2020	Antimony, Dissolved	ND	0.01	0.007	6000	mg/L
OW-59	9/19/2020	Aluminum, Dissolved	1.4	0.1	0.028	19913930	mg/L
OW-59	9/19/2020	Boron, Dissolved	2.4	0.2	0.033	3949110	mg/L
OW-59	9/19/2020	Calcium, Dissolved	210	5	0.57	NA	mg/L
OW-59	9/19/2020	Sodium, Dissolved	2100	50	6.9	NA	mg/L
OW-59	9/19/2020	Barium, Dissolved	0.02	0.002	0.0011	2000000	mg/L
OW-59	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-59	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-59	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-59	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-59	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-59	9/19/2020	Iron, Dissolved	0.61	0.02	0.01	13821880	mg/L
OW-59	9/19/2020	Magnesium, Dissolved	60	1	0.067	NA	mg/L
OW-59	9/19/2020	Manganese, Dissolved	0.22	0.002	0.00058	2017400	mg/L
OW-59	9/19/2020	Molybdenum, Dissolved	0.018	0.008	0.0056	98700	mg/L
OW-59	9/19/2020	Potassium, Dissolved	0.7	1	0.16	NA	mg/L
OW-59	9/19/2020	Zinc, Dissolved	0.02	0.01	0.006	5960450	mg/L
OW-59	9/19/2020	Silver, Dissolved	0.0043	0.005	0.0013	81200	mg/L
OW-59	9/19/2020	Nickel, Dissolved	0.034	0.01	0.0033	372000	mg/L
OW-59	5/2/2019	Arsenic, Dissolved	0.004	0.005	0.000504	10000	mg/L
OW-59	5/2/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
OW-59	5/2/2019	Beryllium, Dissolved	0.00041	0.002	0.000284	4000	mg/L
OW-59	5/2/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-59	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	5/2/2019	Calcium, Dissolved	230	5	0.309446	NA	mg/L
OW-59	5/2/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	5/2/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
OW-59	5/2/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
OW-59	5/2/2019	Lead, Dissolved	0.00036	0.0025	0.000274	NA	mg/L
OW-59	5/2/2019	Magnesium, Dissolved	64	1	0.05029	NA	mg/L
OW-59	8/21/2019	Aluminum, Dissolved	0.0047	0.02	0.002488	19913930	mg/L
OW-59	8/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	8/21/2019	Arsenic, Dissolved	0.0045	0.005	0.000504	10000	mg/L
OW-59	8/21/2019	Barium, Dissolved	0.011	0.002	0.000648	2000000	mg/L
OW-59	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-59	8/21/2019	Boron, Dissolved	2.5	0.4	0.045305	3949110	mg/L
OW-59	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	8/21/2019	Calcium, Dissolved	220	10	0.618891	NA	mg/L
OW-59	8/21/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	8/21/2019	Copper, Dissolved	0.0067	0.006	0.001296	790000	mg/L
OW-59	8/21/2019	Iron, Dissolved	0.023	0.02	0.008747	13821880	mg/L
OW-59	8/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-59	8/21/2019	Magnesium, Dissolved	62	1	0.05029	NA	mg/L
OW-59	8/21/2019	Manganese, Dissolved	0.13	0.002	0.00029	2017400	mg/L
OW-59	8/21/2019	Molybdenum, Dissolved	0.019	0.008	0.006735	98700	mg/L
OW-59	8/21/2019	Nickel, Dissolved	0.024	0.01	0.004009	372000	mg/L
OW-59	8/21/2019	Potassium, Dissolved	0.56	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	8/21/2019	Selenium, Dissolved	0.0016	0.005	0.000857	50000	mg/L
OW-59	8/21/2019	Silver, Dissolved	0.0031	0.005	0.000942	81200	mg/L
OW-59	8/21/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	8/21/2019	Uranium, Dissolved	0.12	0.0025	0.000374	NA	mg/L
OW-59	8/21/2019	Zinc, Dissolved	0.013	0.01	0.002252	5960450	mg/L
OW-59	8/21/2019	Aluminum, Total	4.9	0.2	0.024883	19914000	mg/L
OW-59	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-59	8/21/2019	Arsenic, Total	0.0055	0.005	0.001561	10000	mg/L
OW-59	8/21/2019	Barium, Total	0.076	0.002	0.000648	2000000	mg/L
OW-59	8/21/2019	Beryllium, Total	0.00044	0.002	0.000284	4000	mg/L
OW-59	8/21/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	8/21/2019	Chromium, Total	0.0016	0.006	0.001533	50000	mg/L
OW-59	8/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-59	8/21/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-59	8/21/2019	Iron, Total	2.1	0.2	0.087469	13822000	mg/L
OW-59	8/21/2019	Lead, Total	0.0014	0.0025	0.000274	15000	mg/L
OW-59	8/21/2019	Manganese, Total	0.22	0.01	0.00145	2017000	mg/L
OW-59	8/21/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	8/21/2019	Molybdenum, Total	0.022	0.008	0.006735	98700	mg/L
OW-59	8/21/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-59	8/21/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-59	8/21/2019	Silver, Total	0.0038	0.005	0.001418	50000	mg/L
OW-59	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	8/21/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
OW-59	8/21/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-59	5/2/2019	Aluminum, Dissolved	0.21	0.02	0.002488	19913930	mg/L
OW-59	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	5/2/2019	Manganese, Dissolved	0.053	0.002	0.00029	2017400	mg/L
OW-59	5/2/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
OW-59	5/2/2019	Nickel, Dissolved	0.02	0.01	0.004009	372000	mg/L
OW-59	5/2/2019	Potassium, Dissolved	0.66	1	0.162288	NA	mg/L
OW-59	5/2/2019	Selenium, Dissolved	0.0022	0.005	0.000857	50000	mg/L
OW-59	5/2/2019	Silver, Dissolved	0.0042	0.005	0.000942	81200	mg/L
OW-59	5/2/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	5/2/2019	Uranium, Dissolved	0.14	0.005	0.000747	NA	mg/L
OW-59	5/2/2019	Zinc, Dissolved	0.05	0.01	0.002252	5960450	mg/L
OW-59	5/2/2019	Aluminum, Total	27	1	0.124414	19914000	mg/L
OW-59	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-59	5/2/2019	Arsenic, Total	0.0095	0.005	0.001561	10000	mg/L
OW-59	5/2/2019	Barium, Total	0.41	0.002	0.000648	2000000	mg/L
OW-59	5/2/2019	Beryllium, Total	0.0014	0.002	0.000284	4000	mg/L
OW-59	5/2/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	5/2/2019	Chromium, Total	0.014	0.006	0.001533	50000	mg/L
OW-59	5/2/2019	Cobalt, Total	0.0033	0.006	0.003091	5980	mg/L
OW-59	5/2/2019	Copper, Total	0.01	0.006	0.004072	790000	mg/L
OW-59	5/2/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-59	5/2/2019	Lead, Total	0.0095	0.0025	0.000274	15000	mg/L
OW-59	5/2/2019	Manganese, Total	0.54	0.002	0.00029	2017000	mg/L
OW-59	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	5/2/2019	Molybdenum, Total	0.012	0.008	0.006735	98700	mg/L
OW-59	5/2/2019	Nickel, Total	0.034	0.01	0.004009	372000	mg/L
OW-59	5/2/2019	Selenium, Total	0.0038	0.005	0.00239	50000	mg/L
OW-59	5/2/2019	Silver, Total	0.0044	0.005	0.001418	50000	mg/L
OW-59	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	5/2/2019	Uranium, Total	0.14	0.005	0.000849	30000	mg/L
OW-59	5/2/2019	Zinc, Total	0.023	0.01	0.005772	5960000	mg/L
OW-59	3/3/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OW-59	3/3/2020	Arsenic, Dissolved	0.0048	0.005	0.0005	10000	mg/L
OW-59	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
OW-59	3/3/2020	Selenium, Dissolved	0.0011	0.005	0.00086	50000	mg/L
OW-59	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OW-59	3/3/2020	Uranium, Dissolved	0.14	0.005	0.00075	NA	mg/L
OW-59	3/3/2020	Aluminum, Dissolved	0.0054	0.02	0.0025	19913930	mg/L
OW-59	3/3/2020	Barium, Dissolved	0.0062	0.002	0.00065	2000000	mg/L
OW-59	3/3/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-59	3/3/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-59	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-59	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-59	3/3/2020	Iron, Dissolved	0.021	0.02	0.0087	13821880	mg/L
OW-59	3/3/2020	Magnesium, Dissolved	63	1	0.05	NA	mg/L
OW-59	3/3/2020	Molybdenum, Dissolved	0.0086	0.008	0.0067	98700	mg/L
OW-59	3/3/2020	Nickel, Dissolved	0.014	0.01	0.004	372000	mg/L
OW-59	3/3/2020	Potassium, Dissolved	0.63	1	0.16	NA	mg/L
OW-59	3/3/2020	Silver, Dissolved	0.0029	0.005	0.00094	81200	mg/L
OW-59	3/3/2020	Zinc, Dissolved	0.0048	0.01	0.0023	5960450	mg/L
OW-59	3/3/2020	Boron, Dissolved	2.3	0.2	0.023	3949110	mg/L
OW-59	3/3/2020	Calcium, Dissolved	220	5	0.31	NA	mg/L
OW-59	3/3/2020	Manganese, Dissolved	0.084	0.002	0.00029	2017400	mg/L
OW-59	3/3/2020	Sodium, Dissolved	2400	50	21	NA	mg/L
OW-59	3/3/2020	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-59	3/3/2020	Arsenic, Total	0.0067	0.005	0.0016	10000	mg/L
OW-59	3/3/2020	Lead, Total	0.0035	0.0025	0.00027	15000	mg/L
OW-59	3/3/2020	Selenium, Total	ND	0.005	0.0024	50000	mg/L
OW-59	3/3/2020	Thallium, Total	ND	0.0025	0.00026	2000	mg/L
OW-59	3/3/2020	Uranium, Total	0.13	0.005	0.00085	30000	mg/L
OW-59	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-59	3/3/2020	Barium, Total	0.14	0.002	0.00065	2000000	mg/L
OW-59	3/3/2020	Beryllium, Total	0.00071	0.002	0.00028	4000	mg/L
OW-59	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-59	3/3/2020	Chromium, Total	0.0054	0.006	0.0015	50000	mg/L
OW-59	3/3/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-59	3/3/2020	Copper, Total	0.0062	0.006	0.0041	790000	mg/L
OW-59	3/3/2020	Manganese, Total	0.29	0.002	0.00029	2017000	mg/L
OW-59	3/3/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OW-59	3/3/2020	Nickel, Total	0.023	0.01	0.004	372000	mg/L
OW-59	3/3/2020	Silver, Total	0.0047	0.005	0.0014	50000	mg/L
OW-59	3/3/2020	Zinc, Total	0.0093	0.01	0.0058	5960000	mg/L
OW-59	3/3/2020	Boron, Total	2.5	0.2	0.023	3949	mg/L
OW-59	3/3/2020	Aluminum, Total	12	0.4	0.05	19914000	mg/L
OW-59	3/3/2020	Iron, Total	5.1	0.4	0.17	13822000	mg/L
OW-59	12/23/2020	Arsenic, Total Recoverable	4.7	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Total Recoverable	1.37	1	0.133	15	ug/L
OW-59	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Total Recoverable	**138**	5	1.12	30	ug/L
OW-59	12/23/2020	Arsenic, Dissolved	3.75	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-59	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Dissolved	136	5	1.12	NA	ug/L
OW-59	12/23/2020	Arsenic, Total Recoverable	4.79	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Total Recoverable	1.22	1	0.133	15	ug/L
OW-59	12/23/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Total Recoverable	**139**	5	1.12	30	ug/L
OW-59	12/23/2020	Arsenic, Dissolved	4.06	1	0.286	10	ug/L
OW-59	12/23/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-59	12/23/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-59	12/23/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-59	12/23/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-59	12/23/2020	Uranium, Dissolved	133	5	1.12	NA	ug/L
OW-59	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-59	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-59	12/23/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-59	12/23/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-59	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-59	12/23/2020	Barium, Dissolved	0.0127	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Dissolved	2.44	0.1	0.022	3949110	mg/L
OW-59	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-59	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-59	12/23/2020	Manganese, Dissolved	0.0699	0.01	0.003	2017400	mg/L
OW-59	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-59	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-59	12/23/2020	Aluminum, Total	5.81	0.2	0.051	19914000	mg/L
OW-59	12/23/2020	Barium, Total	0.0819	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Calcium, Total	187	0.5	0.084	NA	mg/L
OW-59	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
OW-59	12/23/2020	Potassium, Total	5.77	1	0.34	NA	mg/L
OW-59	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Magnesium, Total	54	0.5	0.12	NA	mg/L
OW-59	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-59	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Total	3.28	0.2	0.075	13822000	mg/L
OW-59	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Nickel, Total	0.0315	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-59	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-59	12/23/2020	Nickel, Dissolved	0.0319	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Manganese, Total	0.212	0.01	0.003	2017000	mg/L
OW-59	12/23/2020	Sodium, Total	2740	20	9.2	NA	mg/L
OW-59	12/23/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-59	12/23/2020	Barium, Dissolved	0.0137	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Dissolved	2.42	0.1	0.022	3949110	mg/L
OW-59	12/23/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-59	12/23/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
OW-59	12/23/2020	Manganese, Dissolved	0.0733	0.01	0.003	2017400	mg/L
OW-59	12/23/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-59	12/23/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-59	12/23/2020	Aluminum, Total	1.66	0.2	0.051	19914000	mg/L
OW-59	12/23/2020	Barium, Total	0.0285	0.01	0.003	2000000	mg/L
OW-59	12/23/2020	Calcium, Total	191	0.5	0.084	NA	mg/L
OW-59	12/23/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-59	12/23/2020	Boron, Total	2.14	0.1	0.022	3949	mg/L
OW-59	12/23/2020	Potassium, Total	5.94	1	0.34	NA	mg/L
OW-59	12/23/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-59	12/23/2020	Magnesium, Total	54.2	0.5	0.12	NA	mg/L
OW-59	12/23/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-59	12/23/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-59	12/23/2020	Iron, Total	0.963	0.2	0.075	13822000	mg/L
OW-59	12/23/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-59	12/23/2020	Nickel, Total	0.0304	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-59	12/23/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-59	12/23/2020	Nickel, Dissolved	0.0317	0.006	0.003	372000	mg/L
OW-59	12/23/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-59	12/23/2020	Manganese, Total	0.145	0.01	0.003	2017000	mg/L
OW-59	12/23/2020	Sodium, Total	2650	20	9.2	NA	mg/L
OW-59	6/28/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L
OW-59	6/28/2017	Arsenic, Total	0.011	0.005	0.0015	10000	mg/L
OW-59	6/28/2017	Barium, Total	0.35	0.002	0.00093	2000000	mg/L
OW-59	6/28/2017	Beryllium, Total	0.0015	0.002	0.00026	4000	mg/L
OW-59	6/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	6/28/2017	Cobalt, Total	0.008	0.006	0.00076	5980	mg/L
OW-59	6/28/2017	Chromium, Total	0.014	0.006	0.0011	50000	mg/L
OW-59	6/28/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
OW-59	6/28/2017	Arsenic, Dissolved	0.0094	0.01	0.0018	10000	mg/L
OW-59	6/28/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	6/28/2017	Beryllium, Dissolved	0.00039	0.002	0.00029	4000	mg/L
OW-59	6/28/2017	Calcium, Dissolved	210	10	0.78	NA	mg/L
OW-59	6/28/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	6/28/2017	Cobalt, Dissolved	0.0035	0.006	0.0016	5980	mg/L
OW-59	6/28/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
OW-59	6/28/2017	Iron, Dissolved	0.03	0.02	0.016	13821880	mg/L
OW-59	6/28/2017	Potassium, Dissolved	1.7	1	0.11	NA	mg/L
OW-59	6/28/2017	Magnesium, Dissolved	65	1	0.25	NA	mg/L
OW-59	6/28/2017	Manganese, Dissolved	0.67	0.002	0.00038	2017400	mg/L
OW-59	6/28/2017	Sodium, Dissolved	2400	50	8.2	NA	mg/L
OW-59	6/28/2017	Nickel, Dissolved	0.01	0.01	0.0011	372000	mg/L
OW-59	6/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-59	6/28/2017	Antimony, Dissolved	0.001	0.005	0.00084	6000	mg/L
OW-59	6/28/2017	Selenium, Dissolved	0.023	0.005	0.0019	50000	mg/L
OW-59	6/28/2017	Vanadium, Dissolved	0.0042	0.05	0.0019	63100	mg/L
OW-59	6/28/2017	Zinc, Dissolved	0.013	0.01	0.0011	5960450	mg/L
OW-59	6/28/2017	Iron, Total	9.7	0.4	0.2	13822000	mg/L
OW-59	6/28/2017	Mercury, Total	0.000082	0.0002	0.000037	2000	mg/L
OW-59	6/28/2017	Manganese, Total	1.2	0.02	0.011	2017000	mg/L
OW-59	6/28/2017	Nickel, Total	0.02	0.01	0.0036	372000	mg/L
OW-59	6/28/2017	Lead, Total	0.0094	0.005	0.00095	15000	mg/L
OW-59	6/28/2017	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-59	6/28/2017	Selenium, Total	0.015	0.005	0.0036	50000	mg/L
OW-59	6/28/2017	Vanadium, Total	0.026	0.05	0.00076	63100	mg/L
OW-59	6/28/2017	Zinc, Total	0.032	0.01	0.0028	5960000	mg/L
OW-59	10/15/2019	Aluminum, Dissolved	0.27	0.02	0.002488	19913930	mg/L
OW-59	10/15/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-59	10/15/2019	Arsenic, Dissolved	0.0061	0.01	0.001009	10000	mg/L
OW-59	10/15/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
OW-59	10/15/2019	Beryllium, Dissolved	0.00071	0.002	0.000284	4000	mg/L
OW-59	10/15/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-59	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	10/15/2019	Calcium, Dissolved	240	5	0.309446	NA	mg/L
OW-59	10/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-59	10/15/2019	Copper, Dissolved	0.0056	0.006	0.001296	790000	mg/L
OW-59	10/15/2019	Iron, Dissolved	0.13	0.02	0.008747	13821880	mg/L
OW-59	10/15/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-59	10/15/2019	Magnesium, Dissolved	64	1	0.05029	NA	mg/L
OW-59	10/15/2019	Manganese, Dissolved	0.03	0.002	0.00029	2017400	mg/L
OW-59	10/15/2019	Molybdenum, Dissolved	0.021	0.008	0.006735	98700	mg/L
OW-59	10/15/2019	Nickel, Dissolved	0.023	0.01	0.004009	372000	mg/L
OW-59	10/15/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
OW-59	10/15/2019	Selenium, Dissolved	0.003	0.01	0.001713	50000	mg/L
OW-59	10/15/2019	Silver, Dissolved	0.0056	0.005	0.000942	81200	mg/L
OW-59	10/15/2019	Sodium, Dissolved	2500	50	20.808815	NA	mg/L
OW-59	10/15/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-59	10/15/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
OW-59	10/15/2019	Aluminum, Total	22	1	0.124414	19914000	mg/L
OW-59	10/15/2019	Antimony, Total	ND	0.01	0.003894	6000	mg/L
OW-59	10/15/2019	Arsenic, Total	0.0096	0.01	0.003122	10000	mg/L
OW-59	10/15/2019	Barium, Total	0.32	0.002	0.000648	2000000	mg/L
OW-59	10/15/2019	Beryllium, Total	0.00079	0.002	0.000284	4000	mg/L
OW-59	10/15/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-59	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	10/15/2019	Chromium, Total	0.01	0.006	0.001533	50000	mg/L
OW-59	10/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-59	10/15/2019	Copper, Total	0.0065	0.006	0.004072	790000	mg/L
OW-59	10/15/2019	Iron, Total	8.6	0.2	0.087469	13822000	mg/L
OW-59	10/15/2019	Lead, Total	0.0054	0.0025	0.000274	15000	mg/L
OW-59	10/15/2019	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
OW-59	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	10/15/2019	Molybdenum, Total	0.017	0.008	0.006735	98700	mg/L
OW-59	10/15/2019	Nickel, Total	0.029	0.01	0.004009	372000	mg/L
OW-59	10/15/2019	Selenium, Total	ND	0.01	0.00478	50000	mg/L
OW-59	10/15/2019	Silver, Total	0.003	0.005	0.001418	50000	mg/L
OW-59	10/15/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	10/15/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
OW-59	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	Arsenic, Total	0.0055	0.005	0.001561	10000	mg/L
OW-59	2/13/2019	Barium, Total	0.066	0.002	0.000648	2000000	mg/L
OW-59	2/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-59	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-59	2/13/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-59	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-59	2/13/2019	Iron, Total	1.8	0.1	0.043734	13822000	mg/L
OW-59	2/13/2019	Lead, Total	0.0017	0.0025	0.000235	15000	mg/L
OW-59	2/13/2019	Manganese, Total	0.13	0.002	0.00029	2017000	mg/L
OW-59	2/13/2019	Mercury, Total	0.000044	0.0002	0.000038	2000	mg/L
OW-59	2/13/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
OW-59	2/13/2019	Silver, Total	0.0052	0.005	0.001418	50000	mg/L
OW-59	2/13/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-59	2/13/2019	Uranium, Total	0.13	0.005	0.000849	30000	mg/L
OW-59	2/13/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-59	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
OW-59	2/13/2019	Arsenic, Dissolved	0.0043	0.001	0.000068	10000	mg/L
OW-59	2/13/2019	Barium, Dissolved	0.011	0.002	0.000648	2000000	mg/L
OW-59	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-59	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-59	2/13/2019	Calcium, Dissolved	220	5	0.309446	NA	mg/L
OW-59	2/13/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-59	2/13/2019	Copper, Dissolved	0.0046	0.006	0.001296	790000	mg/L
OW-59	2/13/2019	Iron, Dissolved	0.031	0.02	0.008747	13821880	mg/L
OW-59	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-59	2/13/2019	Magnesium, Dissolved	61	1	0.05029	NA	mg/L
OW-59	2/13/2019	Manganese, Dissolved	0.054	0.002	0.00029	2017400	mg/L
OW-59	2/13/2019	Potassium, Dissolved	0.65	1	0.162288	NA	mg/L
OW-59	2/13/2019	Selenium, Dissolved	0.001	0.001	0.000203	50000	mg/L
OW-59	2/13/2019	Silver, Dissolved	0.0043	0.005	0.000942	81200	mg/L
OW-59	2/13/2019	Sodium, Dissolved	2400	50	20.808815	NA	mg/L
OW-59	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-59	2/13/2019	Uranium, Dissolved	0.15	0.005	0.000305	NA	mg/L
OW-59	2/13/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-59	9/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-59	9/21/2017	Arsenic, Total	0.017	0.01	0.003	10000	mg/L
OW-59	9/21/2017	Barium, Total	0.64	0.002	0.00093	2000000	mg/L
OW-59	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	9/21/2017	Chromium, Total	0.028	0.006	0.0018	50000	mg/L
OW-59	9/21/2017	Copper, Total	0.018	0.006	0.0017	790000	mg/L
OW-59	9/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-59	9/21/2017	Arsenic, Dissolved	ND	0.05	0.0089	10000	mg/L
OW-59	9/21/2017	Barium, Dissolved	0.015	0.002	0.00085	2000000	mg/L
OW-59	9/21/2017	Calcium, Dissolved	260	10	0.78	NA	mg/L
OW-59	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	9/21/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	9/21/2017	Iron, Dissolved	0.18	0.02	0.016	13821880	mg/L
OW-59	9/21/2017	Potassium, Dissolved	2.2	1	0.11	NA	mg/L
OW-59	9/21/2017	Magnesium, Dissolved	79	1	0.25	NA	mg/L
OW-59	9/21/2017	Manganese, Dissolved	0.34	0.002	0.00039	2017400	mg/L
OW-59	9/21/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	9/21/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-59	9/21/2017	Selenium, Dissolved	ND	0.05	0.019	50000	mg/L
OW-59	9/21/2017	Zinc, Dissolved	0.019	0.01	0.0021	5960450	mg/L
OW-59	9/21/2017	Iron, Total	20	1	0.51	13822000	mg/L
OW-59	9/21/2017	Mercury, Total	0.000066	0.0002	0.000037	2000	mg/L
OW-59	9/21/2017	Manganese, Total	1.3	0.02	0.011	2017000	mg/L
OW-59	9/21/2017	Lead, Total	0.017	0.0025	0.00048	15000	mg/L
OW-59	9/21/2017	Selenium, Total	0.021	0.01	0.0071	50000	mg/L
OW-59	9/21/2017	Zinc, Total	0.042	0.01	0.0033	5960000	mg/L
OW-59	12/6/2017	Silver, Total	0.0037	0.005	0.0012	50000	mg/L
OW-59	12/6/2017	Arsenic, Total	0.0095	0.005	0.0021	10000	mg/L
OW-59	12/6/2017	Barium, Total	0.064	0.002	0.001	2000000	mg/L
OW-59	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	12/6/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	12/6/2017	Copper, Total	0.0042	0.006	0.0041	790000	mg/L
OW-59	12/6/2017	Silver, Dissolved	0.0047	0.005	0.0018	81200	mg/L
OW-59	12/6/2017	Arsenic, Dissolved	0.012	0.01	0.0042	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	12/6/2017	Barium, Dissolved	0.013	0.002	0.00099	2000000	mg/L
OW-59	12/6/2017	Calcium, Dissolved	220	5	0.39	NA	mg/L
OW-59	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	12/6/2017	Iron, Dissolved	0.024	0.02	0.016	13821880	mg/L
OW-59	12/6/2017	Potassium, Dissolved	1	1	0.11	NA	mg/L
OW-59	12/6/2017	Magnesium, Dissolved	68	1	0.25	NA	mg/L
OW-59	12/6/2017	Manganese, Dissolved	0.13	0.002	0.00039	2017400	mg/L
OW-59	12/6/2017	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	12/6/2017	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	12/6/2017	Selenium, Dissolved	0.023	0.01	0.0076	50000	mg/L
OW-59	12/6/2017	Uranium, Dissolved	0.14	0.025	0.0048	NA	mg/L
OW-59	12/6/2017	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-59	12/6/2017	Iron, Total	2.1	0.1	0.051	13822000	mg/L
OW-59	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-59	12/6/2017	Manganese, Total	0.17	0.002	0.0011	2017000	mg/L
OW-59	12/6/2017	Lead, Total	0.0014	0.0025	0.0011	15000	mg/L
OW-59	12/6/2017	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-59	12/6/2017	Uranium, Total	0.17	0.01	0.0031	30000	mg/L
OW-59	12/6/2017	Zinc, Total	0.0041	0.01	0.0033	5960000	mg/L
OW-59	2/22/2018	Silver, Total	ND	0.025	0.0061	50000	mg/L
OW-59	2/22/2018	Arsenic, Total	0.012	0.02	0.0083	10000	mg/L
OW-59	2/22/2018	Barium, Total	0.16	0.002	0.001	2000000	mg/L
OW-59	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	2/22/2018	Chromium, Total	ND	0.03	0.0088	50000	mg/L
OW-59	2/22/2018	Copper, Total	0.0073	0.006	0.0041	790000	mg/L
OW-59	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-59	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-59	2/22/2018	Barium, Dissolved	0.0084	0.01	0.0049	2000000	mg/L
OW-59	2/22/2018	Calcium, Dissolved	190	5	0.39	NA	mg/L
OW-59	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-59	2/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-59	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-59	2/22/2018	Potassium, Dissolved	0.96	5	0.56	NA	mg/L
OW-59	2/22/2018	Magnesium, Dissolved	66	5	1.2	NA	mg/L
OW-59	2/22/2018	Manganese, Dissolved	0.048	0.01	0.002	2017400	mg/L
OW-59	2/22/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-59	2/22/2018	Uranium, Dissolved	0.16	0.1	0.019	NA	mg/L
OW-59	2/22/2018	Zinc, Dissolved	ND	0.01	0.0021	5960450	mg/L
OW-59	2/22/2018	Iron, Total	4.9	0.1	0.051	13822000	mg/L
OW-59	2/22/2018	Mercury, Total	0.000042	0.0002	0.000037	2000	mg/L
OW-59	2/22/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
OW-59	2/22/2018	Lead, Total	0.0039	0.005	0.0023	15000	mg/L
OW-59	2/22/2018	Selenium, Total	ND	0.02	0.02	50000	mg/L
OW-59	2/22/2018	Uranium, Total	0.16	0.005	0.00068	30000	mg/L
OW-59	2/22/2018	Zinc, Total	ND	0.05	0.016	5960000	mg/L
OW-59	5/8/2018	Silver, Total	0.003	0.005	0.0012	50000	mg/L
OW-59	5/8/2018	Arsenic, Total	0.0076	0.01	0.0041	10000	mg/L
OW-59	5/8/2018	Barium, Total	0.02	0.002	0.001	2000000	mg/L
OW-59	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	5/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	5/8/2018	Copper, Total	0.0059	0.006	0.0041	790000	mg/L
OW-59	5/8/2018	Silver, Dissolved	0.0042	0.005	0.0018	81200	mg/L
OW-59	5/8/2018	Arsenic, Dissolved	0.0061	0.01	0.0042	10000	mg/L
OW-59	5/8/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	5/8/2018	Calcium, Dissolved	220	5	0.39	NA	mg/L
OW-59	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	5/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	5/8/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	5/8/2018	Potassium, Dissolved	0.78	1	0.11	NA	mg/L
OW-59	5/8/2018	Magnesium, Dissolved	62	1	0.25	NA	mg/L
OW-59	5/8/2018	Manganese, Dissolved	0.026	0.002	0.00039	2017400	mg/L
OW-59	5/8/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	5/8/2018	Lead, Dissolved	ND	0.005	0.0017	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	5/8/2018	Selenium, Dissolved	ND	0.01	0.0076	50000	mg/L
OW-59	5/8/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
OW-59	5/8/2018	Zinc, Dissolved	0.0046	0.01	0.0021	5960450	mg/L
OW-59	5/8/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
OW-59	5/8/2018	Mercury, Total	0.000058	0.0002	0.000037	2000	mg/L
OW-59	5/8/2018	Manganese, Total	0.041	0.002	0.0011	2017000	mg/L
OW-59	5/8/2018	Lead, Total	ND	0.005	0.0023	15000	mg/L
OW-59	5/8/2018	Selenium, Total	ND	0.01	0.0098	50000	mg/L
OW-59	5/8/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	5/8/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-59	8/28/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
OW-59	8/28/2018	Arsenic, Total	0.0068	0.005	0.0021	10000	mg/L
OW-59	8/28/2018	Barium, Total	0.038	0.002	0.001	2000000	mg/L
OW-59	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	8/28/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	8/28/2018	Copper, Total	0.0043	0.006	0.0041	790000	mg/L
OW-59	8/28/2018	Silver, Dissolved	0.0057	0.005	0.0018	81200	mg/L
OW-59	8/28/2018	Arsenic, Dissolved	0.0053	0.005	0.0021	10000	mg/L
OW-59	8/28/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	8/28/2018	Calcium, Dissolved	200	5	0.39	NA	mg/L
OW-59	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	8/28/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	8/28/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	8/28/2018	Potassium, Dissolved	0.73	1	0.11	NA	mg/L
OW-59	8/28/2018	Magnesium, Dissolved	61	1	0.25	NA	mg/L
OW-59	8/28/2018	Manganese, Dissolved	0.025	0.002	0.00039	2017400	mg/L
OW-59	8/28/2018	Sodium, Dissolved	2500	50	8.2	NA	mg/L
OW-59	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-59	8/28/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
OW-59	8/28/2018	Uranium, Dissolved	0.14	0.005	0.00096	NA	mg/L
OW-59	8/28/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-59	8/28/2018	Iron, Total	0.97	0.02	0.01	13822000	mg/L
OW-59	8/28/2018	Mercury, Total	0.000064	0.0002	0.000038	2000	mg/L
OW-59	8/28/2018	Manganese, Total	0.064	0.002	0.0011	2017000	mg/L
OW-59	8/28/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
OW-59	8/28/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-59	8/28/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	8/28/2018	Zinc, Total	0.0049	0.01	0.0033	5960000	mg/L
OW-59	11/7/2018	Silver, Total	0.0068	0.005	0.0012	50000	mg/L
OW-59	11/7/2018	Arsenic, Total	0.0074	0.005	0.0021	10000	mg/L
OW-59	11/7/2018	Barium, Total	0.058	0.002	0.001	2000000	mg/L
OW-59	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-59	11/7/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-59	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-59	11/7/2018	Silver, Dissolved	0.0051	0.005	0.0018	81200	mg/L
OW-59	11/7/2018	Arsenic, Dissolved	0.0049	0.001	0.00042	10000	mg/L
OW-59	11/7/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
OW-59	11/7/2018	Calcium, Dissolved	210	10	0.78	NA	mg/L
OW-59	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-59	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-59	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-59	11/7/2018	Iron, Dissolved	ND	0.02	0.016	13821880	mg/L
OW-59	11/7/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-59	11/7/2018	Magnesium, Dissolved	62	1	0.25	NA	mg/L
OW-59	11/7/2018	Manganese, Dissolved	0.038	0.002	0.00039	2017400	mg/L
OW-59	11/7/2018	Sodium, Dissolved	2400	100	16	NA	mg/L
OW-59	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-59	11/7/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-59	11/7/2018	Uranium, Dissolved	0.15	0.005	0.00096	NA	mg/L
OW-59	11/7/2018	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-59	11/7/2018	Iron, Total	1.6	0.1	0.051	13822000	mg/L
OW-59	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-59	11/7/2018	Manganese, Total	0.12	0.002	0.0011	2017000	mg/L
OW-59	11/7/2018	Lead, Total	0.0014	0.0005	0.00023	15000	mg/L
OW-59	11/7/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
OW-59	11/7/2018	Uranium, Total	0.14	0.005	0.00068	30000	mg/L
OW-59	11/7/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-60	6/28/2017	Silver, Total	ND	0.005	0.00042	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Arsenic, Total	0.0081	0.005	0.0015	10000	mg/L
OW-60	6/28/2017	Barium, Total	1.6	0.02	0.0093	2000000	mg/L
OW-60	6/28/2017	Beryllium, Total	0.0046	0.002	0.00026	4000	mg/L
OW-60	6/28/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	6/28/2017	Cobalt, Total	0.021	0.006	0.00076	5980	mg/L
OW-60	6/28/2017	Chromium, Total	0.048	0.006	0.0011	50000	mg/L
OW-60	6/28/2017	Silver, Dissolved	ND	0.005	0.00042	81200	mg/L
OW-60	6/28/2017	Arsenic, Dissolved	0.0044	0.005	0.00089	10000	mg/L
OW-60	6/28/2017	Barium, Dissolved	0.044	0.002	0.00093	2000000	mg/L
OW-60	6/28/2017	Beryllium, Dissolved	0.00045	0.002	0.00026	4000	mg/L
OW-60	6/28/2017	Calcium, Dissolved	170	10	0.45	NA	mg/L
OW-60	6/28/2017	Cadmium, Dissolved	ND	0.002	0.00058	5000	mg/L
OW-60	6/28/2017	Cobalt, Dissolved	0.0019	0.006	0.00076	5980	mg/L
OW-60	6/28/2017	Chromium, Dissolved	ND	0.006	0.0011	100000	mg/L
OW-60	6/28/2017	Iron, Dissolved	ND	0.02	0.01	13821880	mg/L
OW-60	6/28/2017	Potassium, Dissolved	5	1	0.071	NA	mg/L
OW-60	6/28/2017	Magnesium, Dissolved	33	1	0.12	NA	mg/L
OW-60	6/28/2017	Manganese, Dissolved	0.55	0.002	0.0011	2017400	mg/L
OW-60	6/28/2017	Sodium, Dissolved	1100	20	3.2	NA	mg/L
OW-60	6/28/2017	Nickel, Dissolved	0.0061	0.01	0.0036	372000	mg/L
OW-60	6/28/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
OW-60	6/28/2017	Antimony, Dissolved	0.00028	0.001	0.00017	6000	mg/L
OW-60	6/28/2017	Selenium, Dissolved	0.014	0.005	0.0019	50000	mg/L
OW-60	6/28/2017	Vanadium, Dissolved	0.0066	0.05	0.00076	63100	mg/L
OW-60	6/28/2017	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
OW-60	6/28/2017	Iron, Total	28	1	0.51	13822000	mg/L
OW-60	6/28/2017	Mercury, Total	0.000099	0.0002	0.000037	2000	mg/L
OW-60	6/28/2017	Manganese, Total	2.2	0.02	0.011	2017000	mg/L
OW-60	6/28/2017	Nickel, Total	0.047	0.01	0.0036	372000	mg/L
OW-60	6/28/2017	Lead, Total	0.031	0.0025	0.00048	15000	mg/L
OW-60	6/28/2017	Antimony, Total	ND	0.005	0.0019	6000	mg/L
OW-60	6/28/2017	Selenium, Total	0.013	0.005	0.0036	50000	mg/L
OW-60	6/28/2017	Vanadium, Total	0.07	0.05	0.00076	63100	mg/L
OW-60	6/28/2017	Zinc, Total	0.071	0.01	0.0028	5960000	mg/L
OW-60	9/21/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-60	9/21/2017	Arsenic, Total	0.0081	0.01	0.003	10000	mg/L
OW-60	9/21/2017	Barium, Total	0.59	0.002	0.00093	2000000	mg/L
OW-60	9/21/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	9/21/2017	Chromium, Total	0.024	0.006	0.0018	50000	mg/L
OW-60	9/21/2017	Copper, Total	0.0058	0.006	0.0017	790000	mg/L
OW-60	9/21/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-60	9/21/2017	Arsenic, Dissolved	ND	0.05	0.0089	10000	mg/L
OW-60	9/21/2017	Barium, Dissolved	0.056	0.002	0.00085	2000000	mg/L
OW-60	9/21/2017	Calcium, Dissolved	200	5	0.39	NA	mg/L
OW-60	9/21/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	9/21/2017	Chromium, Dissolved	0.0024	0.006	0.0013	100000	mg/L
OW-60	9/21/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	9/21/2017	Iron, Dissolved	0.32	0.02	0.016	13821880	mg/L
OW-60	9/21/2017	Potassium, Dissolved	5.3	1	0.11	NA	mg/L
OW-60	9/21/2017	Magnesium, Dissolved	33	1	0.25	NA	mg/L
OW-60	9/21/2017	Manganese, Dissolved	0.16	0.002	0.00039	2017400	mg/L
OW-60	9/21/2017	Sodium, Dissolved	1400	50	8.2	NA	mg/L
OW-60	9/21/2017	Lead, Dissolved	0.0013	0.0025	0.00084	NA	mg/L
OW-60	9/21/2017	Selenium, Dissolved	0.031	0.005	0.0019	50000	mg/L
OW-60	9/21/2017	Zinc, Dissolved	0.02	0.01	0.0021	5960450	mg/L
OW-60	9/21/2017	Iron, Total	13	0.4	0.2	13822000	mg/L
OW-60	9/21/2017	Mercury, Total	0.00005	0.0002	0.000037	2000	mg/L
OW-60	9/21/2017	Manganese, Total	0.86	0.002	0.0011	2017000	mg/L
OW-60	9/21/2017	Lead, Total	0.011	0.0025	0.00048	15000	mg/L
OW-60	9/21/2017	Selenium, Total	0.036	0.005	0.0036	50000	mg/L
OW-60	9/21/2017	Zinc, Total	0.033	0.01	0.0033	5960000	mg/L
OW-60	12/6/2017	Silver, Total	0.0024	0.005	0.0012	50000	mg/L
OW-60	12/6/2017	Arsenic, Total	ND	0.02	0.0083	10000	mg/L
OW-60	12/6/2017	Barium, Total	0.12	0.002	0.001	2000000	mg/L
OW-60	12/6/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	12/6/2017	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
OW-60	12/6/2017	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-60	12/6/2017	Silver, Dissolved	0.0029	0.005	0.0018	81200	mg/L
OW-60	12/6/2017	Arsenic, Dissolved	0.013	0.02	0.0084	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/6/2017	Barium, Dissolved	0.029	0.002	0.00099	2000000	mg/L
OW-60	12/6/2017	Calcium, Dissolved	130	5	0.39	NA	mg/L
OW-60	12/6/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	12/6/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-60	12/6/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	12/6/2017	Iron, Dissolved	0.02	0.02	0.016	13821880	mg/L
OW-60	12/6/2017	Potassium, Dissolved	4	1	0.11	NA	mg/L
OW-60	12/6/2017	Magnesium, Dissolved	22	1	0.25	NA	mg/L
OW-60	12/6/2017	Manganese, Dissolved	0.042	0.002	0.00039	2017400	mg/L
OW-60	12/6/2017	Sodium, Dissolved	1400	20	3.3	NA	mg/L
OW-60	12/6/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-60	12/6/2017	Selenium, Dissolved	0.031	0.02	0.015	50000	mg/L
OW-60	12/6/2017	Uranium, Dissolved	0.047	0.0025	0.00048	NA	mg/L
OW-60	12/6/2017	Zinc, Dissolved	0.01	0.01	0.0021	5960450	mg/L
OW-60	12/6/2017	Iron, Total	3.1	0.1	0.051	13822000	mg/L
OW-60	12/6/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
OW-60	12/6/2017	Manganese, Total	0.13	0.002	0.0011	2017000	mg/L
OW-60	12/6/2017	Lead, Total	0.002	0.0025	0.0011	15000	mg/L
OW-60	12/6/2017	Selenium, Total	0.021	0.02	0.02	50000	mg/L
OW-60	12/6/2017	Uranium, Total	0.048	0.0025	0.00077	30000	mg/L
OW-60	12/6/2017	Zinc, Total	0.0097	0.01	0.0033	5960000	mg/L
OW-60	2/22/2018	Silver, Total	0.0021	0.005	0.0012	50000	mg/L
OW-60	2/22/2018	Arsenic, Total	0.011	0.02	0.0083	10000	mg/L
OW-60	2/22/2018	Barium, Total	0.23	0.002	0.001	2000000	mg/L
OW-60	2/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	2/22/2018	Chromium, Total	0.02	0.03	0.0088	50000	mg/L
OW-60	2/22/2018	Copper, Total	0.0063	0.006	0.0041	790000	mg/L
OW-60	2/22/2018	Silver, Dissolved	ND	0.025	0.0092	81200	mg/L
OW-60	2/22/2018	Arsenic, Dissolved	ND	0.2	0.084	10000	mg/L
OW-60	2/22/2018	Barium, Dissolved	0.024	0.01	0.0049	2000000	mg/L
OW-60	2/22/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	2/22/2018	Cadmium, Dissolved	ND	0.01	0.005	5000	mg/L
OW-60	2/22/2018	Chromium, Dissolved	0.0057	0.006	0.0013	100000	mg/L
OW-60	2/22/2018	Copper, Dissolved	ND	0.03	0.016	790000	mg/L
OW-60	2/22/2018	Iron, Dissolved	ND	0.1	0.082	13821880	mg/L
OW-60	2/22/2018	Potassium, Dissolved	4.4	5	0.56	NA	mg/L
OW-60	2/22/2018	Magnesium, Dissolved	19	5	1.2	NA	mg/L
OW-60	2/22/2018	Manganese, Dissolved	ND	0.01	0.002	2017400	mg/L
OW-60	2/22/2018	Sodium, Dissolved	1500	50	8.2	NA	mg/L
OW-60	2/22/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-60	2/22/2018	Selenium, Dissolved	ND	0.2	0.15	50000	mg/L
OW-60	2/22/2018	Uranium, Dissolved	0.046	0.0025	0.00048	NA	mg/L
OW-60	2/22/2018	Zinc, Dissolved	0.012	0.01	0.0021	5960450	mg/L
OW-60	2/22/2018	Iron, Total	6.7	0.2	0.1	13822000	mg/L
OW-60	2/22/2018	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
OW-60	2/22/2018	Manganese, Total	0.25	0.002	0.0011	2017000	mg/L
OW-60	2/22/2018	Lead, Total	0.0051	0.0025	0.0011	15000	mg/L
OW-60	2/22/2018	Selenium, Total	0.032	0.02	0.02	50000	mg/L
OW-60	2/22/2018	Uranium, Total	0.053	0.0025	0.00034	30000	mg/L
OW-60	2/22/2018	Zinc, Total	0.019	0.05	0.016	5960000	mg/L
OW-60	5/8/2018	Silver, Total	0.0013	0.005	0.0012	50000	mg/L
OW-60	5/8/2018	Arsenic, Total	0.0055	0.005	0.0021	10000	mg/L
OW-60	5/8/2018	Barium, Total	0.36	0.002	0.001	2000000	mg/L
OW-60	5/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	5/8/2018	Chromium, Total	0.019	0.006	0.0018	50000	mg/L
OW-60	5/8/2018	Copper, Total	0.009	0.006	0.0041	790000	mg/L
OW-60	5/8/2018	Silver, Dissolved	0.0024	0.005	0.0018	81200	mg/L
OW-60	5/8/2018	Arsenic, Dissolved	0.0026	0.005	0.0021	10000	mg/L
OW-60	5/8/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-60	5/8/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	5/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	5/8/2018	Chromium, Dissolved	0.0091	0.006	0.0013	100000	mg/L
OW-60	5/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	5/8/2018	Iron, Dissolved	0.11	0.02	0.016	13821880	mg/L
OW-60	5/8/2018	Potassium, Dissolved	3.3	1	0.11	NA	mg/L
OW-60	5/8/2018	Magnesium, Dissolved	18	1	0.25	NA	mg/L
OW-60	5/8/2018	Manganese, Dissolved	0.0084	0.002	0.00039	2017400	mg/L
OW-60	5/8/2018	Sodium, Dissolved	1500	20	3.3	NA	mg/L
OW-60	5/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/8/2018	Selenium, Dissolved	0.023	0.005	0.0038	50000	mg/L
OW-60	5/8/2018	Uranium, Dissolved	0.05	0.0025	0.00048	NA	mg/L
OW-60	5/8/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-60	5/8/2018	Iron, Total	8.4	0.2	0.1	13822000	mg/L
OW-60	5/8/2018	Mercury, Total	0.000049	0.0002	0.000037	2000	mg/L
OW-60	5/8/2018	Manganese, Total	1.3	0.01	0.0055	2017000	mg/L
OW-60	5/8/2018	Lead, Total	0.0077	0.0025	0.0011	15000	mg/L
OW-60	5/8/2018	Selenium, Total	0.022	0.005	0.0049	50000	mg/L
OW-60	5/8/2018	Uranium, Total	0.052	0.0025	0.00034	30000	mg/L
OW-60	5/8/2018	Zinc, Total	0.021	0.01	0.0033	5960000	mg/L
OW-60	8/28/2018	Silver, Total	0.0031	0.005	0.0012	50000	mg/L
OW-60	8/28/2018	Arsenic, Total	0.0029	0.005	0.0021	10000	mg/L
OW-60	8/28/2018	Barium, Total	0.096	0.002	0.001	2000000	mg/L
OW-60	8/28/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	8/28/2018	Chromium, Total	0.0063	0.006	0.0018	50000	mg/L
OW-60	8/28/2018	Copper, Total	0.0064	0.006	0.0041	790000	mg/L
OW-60	8/28/2018	Silver, Dissolved	0.0032	0.005	0.0018	81200	mg/L
OW-60	8/28/2018	Arsenic, Dissolved	ND	0.005	0.0021	10000	mg/L
OW-60	8/28/2018	Barium, Dissolved	0.028	0.002	0.00099	2000000	mg/L
OW-60	8/28/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	8/28/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	8/28/2018	Chromium, Dissolved	0.0032	0.006	0.0013	100000	mg/L
OW-60	8/28/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	8/28/2018	Iron, Dissolved	0.023	0.02	0.016	13821880	mg/L
OW-60	8/28/2018	Potassium, Dissolved	3.2	1	0.11	NA	mg/L
OW-60	8/28/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-60	8/28/2018	Manganese, Dissolved	0.017	0.002	0.00039	2017400	mg/L
OW-60	8/28/2018	Sodium, Dissolved	1500	20	3.3	NA	mg/L
OW-60	8/28/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
OW-60	8/28/2018	Selenium, Dissolved	0.019	0.005	0.0038	50000	mg/L
OW-60	8/28/2018	Uranium, Dissolved	0.052	0.0025	0.00048	NA	mg/L
OW-60	8/28/2018	Zinc, Dissolved	0.0068	0.01	0.0021	5960450	mg/L
OW-60	8/28/2018	Iron, Total	2.5	0.1	0.051	13822000	mg/L
OW-60	8/28/2018	Mercury, Total	0.000098	0.0002	0.000038	2000	mg/L
OW-60	8/28/2018	Manganese, Total	0.19	0.002	0.0011	2017000	mg/L
OW-60	8/28/2018	Lead, Total	0.0017	0.0005	0.00023	15000	mg/L
OW-60	8/28/2018	Selenium, Total	0.016	0.005	0.0049	50000	mg/L
OW-60	8/28/2018	Uranium, Total	0.053	0.0025	0.00034	30000	mg/L
OW-60	8/28/2018	Zinc, Total	0.0081	0.01	0.0033	5960000	mg/L
OW-60	11/7/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-60	11/7/2018	Arsenic, Total	ND	0.005	0.0021	10000	mg/L
OW-60	11/7/2018	Barium, Total	0.2	0.002	0.001	2000000	mg/L
OW-60	11/7/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-60	11/7/2018	Chromium, Total	0.014	0.006	0.0018	50000	mg/L
OW-60	11/7/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-60	11/7/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-60	11/7/2018	Arsenic, Dissolved	0.0018	0.001	0.00042	10000	mg/L
OW-60	11/7/2018	Barium, Dissolved	0.03	0.002	0.00099	2000000	mg/L
OW-60	11/7/2018	Calcium, Dissolved	110	5	0.39	NA	mg/L
OW-60	11/7/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-60	11/7/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-60	11/7/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-60	11/7/2018	Iron, Dissolved	0.042	0.02	0.016	13821880	mg/L
OW-60	11/7/2018	Potassium, Dissolved	3.8	1	0.11	NA	mg/L
OW-60	11/7/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-60	11/7/2018	Manganese, Dissolved	0.022	0.002	0.00039	2017400	mg/L
OW-60	11/7/2018	Sodium, Dissolved	1400	50	8.2	NA	mg/L
OW-60	11/7/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-60	11/7/2018	Selenium, Dissolved	0.016	0.001	0.00076	50000	mg/L
OW-60	11/7/2018	Uranium, Dissolved	0.056	0.0025	0.00048	NA	mg/L
OW-60	11/7/2018	Zinc, Dissolved	0.029	0.01	0.0021	5960450	mg/L
OW-60	11/7/2018	Iron, Total	5	0.2	0.1	13822000	mg/L
OW-60	11/7/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	11/7/2018	Manganese, Total	0.22	0.002	0.0011	2017000	mg/L
OW-60	11/7/2018	Lead, Total	0.0038	0.0005	0.00023	15000	mg/L
OW-60	11/7/2018	Selenium, Total	0.018	0.005	0.0049	50000	mg/L
OW-60	11/7/2018	Uranium, Total	0.054	0.0025	0.00034	30000	mg/L
OW-60	11/7/2018	Zinc, Total	0.018	0.01	0.0033	5960000	mg/L
OW-60	2/13/2019	Antimony, Total	ND	0.005	0.001019	6000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	2/13/2019	Arsenic, Total	0.0029	0.001	0.000312	10000	mg/L
OW-60	2/13/2019	Barium, Total	0.2	0.002	0.000648	2000000	mg/L
OW-60	2/13/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
OW-60	2/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	2/13/2019	Chromium, Total	0.011	0.006	0.001533	50000	mg/L
OW-60	2/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-60	2/13/2019	Iron, Total	4.8	0.2	0.087469	13822000	mg/L
OW-60	2/13/2019	Lead, Total	0.0037	0.0005	0.000047	15000	mg/L
OW-60	2/13/2019	Manganese, Total	0.21	0.002	0.00029	2017000	mg/L
OW-60	2/13/2019	Mercury, Total	0.000061	0.0002	0.000038	2000	mg/L
OW-60	2/13/2019	Selenium, Total	0.016	0.001	0.000478	50000	mg/L
OW-60	2/13/2019	Silver, Total	0.0025	0.005	0.001418	50000	mg/L
OW-60	2/13/2019	Thallium, Total	0.000077	0.0005	0.000052	2000	mg/L
OW-60	2/13/2019	Uranium, Total	0.051	0.0025	0.000424	30000	mg/L
OW-60	2/13/2019	Zinc, Total	0.015	0.01	0.005772	5960000	mg/L
OW-60	2/13/2019	Antimony, Dissolved	ND	0.005	0.001019	6000	mg/L
OW-60	2/13/2019	Arsenic, Dissolved	0.0015	0.001	0.000068	10000	mg/L
OW-60	2/13/2019	Barium, Dissolved	0.026	0.002	0.000648	2000000	mg/L
OW-60	2/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-60	2/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	2/13/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
OW-60	2/13/2019	Chromium, Dissolved	0.0017	0.006	0.001533	100000	mg/L
OW-60	2/13/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
OW-60	2/13/2019	Iron, Dissolved	0.0097	0.02	0.008747	13821880	mg/L
OW-60	2/13/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-60	2/13/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	2/13/2019	Manganese, Dissolved	0.0031	0.002	0.00029	2017400	mg/L
OW-60	2/13/2019	Potassium, Dissolved	3	1	0.162288	NA	mg/L
OW-60	2/13/2019	Selenium, Dissolved	0.016	0.001	0.000203	50000	mg/L
OW-60	2/13/2019	Silver, Dissolved	0.0028	0.005	0.000942	81200	mg/L
OW-60	2/13/2019	Sodium, Dissolved	1400	20	8.323526	NA	mg/L
OW-60	2/13/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-60	2/13/2019	Uranium, Dissolved	0.06	0.0025	0.000152	NA	mg/L
OW-60	2/13/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
OW-60	8/21/2019	Aluminum, Dissolved	1.6	0.1	0.012441	19913930	mg/L
OW-60	8/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	8/21/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
OW-60	8/21/2019	Barium, Dissolved	0.056	0.002	0.000648	2000000	mg/L
OW-60	8/21/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-60	8/21/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	8/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	8/21/2019	Calcium, Dissolved	100	1	0.061889	NA	mg/L
OW-60	8/21/2019	Chromium, Dissolved	0.0031	0.006	0.001533	100000	mg/L
OW-60	8/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	8/21/2019	Copper, Dissolved	0.0039	0.006	0.001296	790000	mg/L
OW-60	8/21/2019	Iron, Dissolved	0.38	0.02	0.008747	13821880	mg/L
OW-60	8/21/2019	Lead, Dissolved	0.00063	0.0025	0.000274	NA	mg/L
OW-60	8/21/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	8/21/2019	Manganese, Dissolved	0.062	0.002	0.00029	2017400	mg/L
OW-60	8/21/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	8/21/2019	Nickel, Dissolved	0.012	0.01	0.004009	372000	mg/L
OW-60	8/21/2019	Potassium, Dissolved	3.5	1	0.162288	NA	mg/L
OW-60	8/21/2019	Selenium, Dissolved	0.015	0.005	0.000857	50000	mg/L
OW-60	8/21/2019	Silver, Dissolved	0.0017	0.005	0.000942	81200	mg/L
OW-60	8/21/2019	Sodium, Dissolved	1600	100	41.61763	NA	mg/L
OW-60	8/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	8/21/2019	Uranium, Dissolved	0.051	0.0025	0.000374	NA	mg/L
OW-60	8/21/2019	Zinc, Dissolved	0.0066	0.01	0.002252	5960450	mg/L
OW-60	8/21/2019	Aluminum, Total	39	2	0.248827	19914000	mg/L
OW-60	8/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	8/21/2019	Arsenic, Total	0.0048	0.005	0.001561	10000	mg/L
OW-60	8/21/2019	Barium, Total	0.49	0.002	0.000648	2000000	mg/L
OW-60	8/21/2019	Beryllium, Total	0.002	0.002	0.000284	4000	mg/L
OW-60	8/21/2019	Boron, Total	2.5	0.2	0.022653	3949	mg/L
OW-60	8/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	8/21/2019	Chromium, Total	0.038	0.006	0.001533	50000	mg/L
OW-60	8/21/2019	Cobalt, Total	0.0071	0.006	0.003091	5980	mg/L
OW-60	8/21/2019	Copper, Total	0.0088	0.006	0.004072	790000	mg/L
OW-60	8/21/2019	Iron, Total	15	2	0.874687	13822000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	8/21/2019	Lead, Total	0.012	0.0025	0.000274	15000	mg/L
OW-60	8/21/2019	Manganese, Total	0.57	0.002	0.00029	2017000	mg/L
OW-60	8/21/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
OW-60	8/21/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	8/21/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
OW-60	8/21/2019	Selenium, Total	0.022	0.005	0.00239	50000	mg/L
OW-60	8/21/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	8/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	8/21/2019	Uranium, Total	0.054	0.0025	0.000424	30000	mg/L
OW-60	8/21/2019	Zinc, Total	0.041	0.01	0.005772	5960000	mg/L
OW-60	10/15/2019	Aluminum, Dissolved	0.39	0.02	0.002488	19913930	mg/L
OW-60	10/15/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	10/15/2019	Arsenic, Dissolved	0.0018	0.005	0.000504	10000	mg/L
OW-60	10/15/2019	Barium, Dissolved	0.031	0.002	0.000648	2000000	mg/L
OW-60	10/15/2019	Beryllium, Dissolved	0.00053	0.002	0.000284	4000	mg/L
OW-60	10/15/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	10/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	10/15/2019	Calcium, Dissolved	140	5	0.309446	NA	mg/L
OW-60	10/15/2019	Chromium, Dissolved	0.0052	0.006	0.001533	100000	mg/L
OW-60	10/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	10/15/2019	Copper, Dissolved	0.0071	0.006	0.001296	790000	mg/L
OW-60	10/15/2019	Iron, Dissolved	0.14	0.02	0.008747	13821880	mg/L
OW-60	10/15/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
OW-60	10/15/2019	Magnesium, Dissolved	19	1	0.05029	NA	mg/L
OW-60	10/15/2019	Manganese, Dissolved	0.03	0.002	0.00029	2017400	mg/L
OW-60	10/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	10/15/2019	Nickel, Dissolved	0.04	0.01	0.004009	372000	mg/L
OW-60	10/15/2019	Potassium, Dissolved	2.2	1	0.162288	NA	mg/L
OW-60	10/15/2019	Selenium, Dissolved	0.021	0.005	0.000857	50000	mg/L
OW-60	10/15/2019	Silver, Dissolved	0.0038	0.005	0.000942	81200	mg/L
OW-60	10/15/2019	Sodium, Dissolved	1300	20	8.323526	NA	mg/L
OW-60	10/15/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	10/15/2019	Zinc, Dissolved	0.037	0.01	0.002252	5960450	mg/L
OW-60	10/15/2019	Aluminum, Total	30	1	0.124414	19914000	mg/L
OW-60	10/15/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	10/15/2019	Arsenic, Total	0.0052	0.005	0.001561	10000	mg/L
OW-60	10/15/2019	Barium, Total	0.43	0.002	0.000648	2000000	mg/L
OW-60	10/15/2019	Beryllium, Total	0.00096	0.002	0.000284	4000	mg/L
OW-60	10/15/2019	Boron, Total	2.5	0.4	0.045305	3949	mg/L
OW-60	10/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	10/15/2019	Chromium, Total	0.078	0.006	0.001533	50000	mg/L
OW-60	10/15/2019	Cobalt, Total	0.0059	0.006	0.003091	5980	mg/L
OW-60	10/15/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
OW-60	10/15/2019	Iron, Total	11	1	0.437344	13822000	mg/L
OW-60	10/15/2019	Lead, Total	0.0059	0.0025	0.000274	15000	mg/L
OW-60	10/15/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
OW-60	10/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	10/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	10/15/2019	Nickel, Total	0.053	0.01	0.004009	372000	mg/L
OW-60	10/15/2019	Selenium, Total	0.018	0.005	0.00239	50000	mg/L
OW-60	10/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	10/15/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	10/15/2019	Zinc, Total	0.058	0.01	0.005772	5960000	mg/L
OW-60	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-60	12/11/2020	Aluminum, Total	9.48	0.2	0.051	19914000	mg/L
OW-60	12/11/2020	Calcium, Total	97.6	0.5	0.084	NA	mg/L
OW-60	12/11/2020	Boron, Total	2.31	0.1	0.022	3949	mg/L
OW-60	12/11/2020	Barium, Total	0.102	0.01	0.003	2000000	mg/L
OW-60	12/11/2020	Potassium, Total	5.03	1	0.34	NA	mg/L
OW-60	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-60	12/11/2020	Magnesium, Total	16.6	0.5	0.12	NA	mg/L
OW-60	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-60	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-60	12/11/2020	Chromium, Total	0.0379	0.01	0.005	50000	mg/L
OW-60	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-60	12/11/2020	Iron, Total	4.18	0.2	0.075	13822000	mg/L
OW-60	12/11/2020	Manganese, Total	0.144	0.01	0.003	2017000	mg/L
OW-60	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-60	12/11/2020	Nickel, Total	0.0902	0.006	0.003	372000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-60	12/11/2020	Sodium, Total	1400	20	9.2	NA	mg/L
OW-60	12/11/2020	Aluminum, Dissolved	2.46	0.2	0.051	19913930	mg/L
OW-60	12/11/2020	Barium, Dissolved	0.0477	0.01	0.003	2000000	mg/L
OW-60	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-60	12/11/2020	Boron, Dissolved	2.43	0.1	0.022	3949110	mg/L
OW-60	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-60	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-60	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-60	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-60	12/11/2020	Iron, Dissolved	1.11	0.2	0.075	13821880	mg/L
OW-60	12/11/2020	Manganese, Dissolved	0.056	0.01	0.003	2017400	mg/L
OW-60	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-60	12/11/2020	Nickel, Dissolved	0.0688	0.006	0.003	372000	mg/L
OW-60	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-60	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-60	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-60	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-60	12/11/2020	Arsenic, Total Recoverable	1.57	1	0.286	10	ug/L
OW-60	12/11/2020	Lead, Total Recoverable	1.5	1	0.133	15	ug/L
OW-60	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-60	12/11/2020	Selenium, Total Recoverable	15.2	5	1.43	50	ug/L
OW-60	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-60	12/11/2020	Uranium, Total Recoverable	**53.2**	5	1.12	30	ug/L
OW-60	12/11/2020	Arsenic, Dissolved	1.14	1	0.286	10	ug/L
OW-60	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-60	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-60	12/11/2020	Selenium, Dissolved	15.6	5	1.43	50	ug/L
OW-60	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-60	12/11/2020	Uranium, Dissolved	52.7	5	1.12	NA	ug/L
OW-60	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-60	9/21/2020	Arsenic, Total	0.0022	0.001	0.00026	10000	mg/L
OW-60	9/21/2020	Lead, Total	0.0038	0.0005	0.000034	15000	mg/L
OW-60	9/21/2020	Selenium, Total	0.014	0.001	0.00066	50000	mg/L
OW-60	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-60	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-60	9/21/2020	Barium, Total	0.21	0.003	0.0016	2000000	mg/L
OW-60	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-60	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-60	9/21/2020	Chromium, Total	0.059	0.006	0.0021	50000	mg/L
OW-60	9/21/2020	Cobalt, Total	0.0058	0.006	0.0024	5980	mg/L
OW-60	9/21/2020	Manganese, Total	0.29	0.002	0.00081	2017000	mg/L
OW-60	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
OW-60	9/21/2020	Zinc, Total	0.021	0.01	0.0064	5960000	mg/L
OW-60	9/21/2020	Aluminum, Total	20	1	0.37	19914000	mg/L
OW-60	9/21/2020	Uranium, Total	0.054	0.0025	0.00033	30000	mg/L
OW-60	9/21/2020	Copper, Total	0.0085	0.006	0.0047	790000	mg/L
OW-60	9/21/2020	Nickel, Total	0.068	0.01	0.0033	372000	mg/L
OW-60	9/21/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-60	9/21/2020	Boron, Total	2.4	0.4	0.074	3949	mg/L
OW-60	9/21/2020	Iron, Total	7.9	0.5	0.13	13822000	mg/L
OW-60	9/21/2020	Arsenic, Dissolved	0.0014	0.005	0.001	10000	mg/L
OW-60	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
OW-60	9/21/2020	Selenium, Dissolved	0.014	0.005	0.0033	50000	mg/L
OW-60	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
OW-60	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
OW-60	9/21/2020	Uranium, Dissolved	0.053	0.0025	0.00033	NA	mg/L
OW-60	9/21/2020	Aluminum, Dissolved	0.3	0.1	0.028	19913930	mg/L
OW-60	9/21/2020	Boron, Dissolved	2.3	0.2	0.033	3949110	mg/L
OW-60	9/21/2020	Barium, Dissolved	0.033	0.002	0.0011	2000000	mg/L
OW-60	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-60	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-60	9/21/2020	Calcium, Dissolved	95	1	0.11	NA	mg/L
OW-60	9/21/2020	Chromium, Dissolved	0.0045	0.006	0.002	100000	mg/L
OW-60	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-60	9/21/2020	Iron, Dissolved	0.52	0.02	0.01	13821880	mg/L
OW-60	9/21/2020	Magnesium, Dissolved	16	1	0.067	NA	mg/L
OW-60	9/21/2020	Manganese, Dissolved	0.055	0.002	0.00058	2017400	mg/L
OW-60	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	9/21/2020	Nickel, Dissolved	0.057	0.01	0.0033	372000	mg/L
OW-60	9/21/2020	Potassium, Dissolved	3	1	0.16	NA	mg/L
OW-60	9/21/2020	Silver, Dissolved	0.0018	0.005	0.0013	81200	mg/L
OW-60	9/21/2020	Zinc, Dissolved	0.034	0.01	0.006	5960450	mg/L
OW-60	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-60	9/21/2020	Sodium, Dissolved	1300	20	2.7	NA	mg/L
OW-60	3/3/2020	Antimony, Dissolved	ND	0.005	0.0019	6000	mg/L
OW-60	3/3/2020	Arsenic, Dissolved	0.0013	0.005	0.0005	10000	mg/L
OW-60	3/3/2020	Lead, Dissolved	ND	0.0025	0.00027	NA	mg/L
OW-60	3/3/2020	Selenium, Dissolved	0.017	0.005	0.00086	50000	mg/L
OW-60	3/3/2020	Thallium, Dissolved	ND	0.0025	0.00024	2000	mg/L
OW-60	3/3/2020	Uranium, Dissolved	0.059	0.0025	0.00037	NA	mg/L
OW-60	3/3/2020	Aluminum, Dissolved	0.051	0.02	0.0025	19913930	mg/L
OW-60	3/3/2020	Barium, Dissolved	0.013	0.002	0.00065	2000000	mg/L
OW-60	3/3/2020	Beryllium, Dissolved	0.0003	0.002	0.00028	4000	mg/L
OW-60	3/3/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-60	3/3/2020	Chromium, Dissolved	0.0031	0.006	0.0015	100000	mg/L
OW-60	3/3/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-60	3/3/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-60	3/3/2020	Iron, Dissolved	0.056	0.02	0.0087	13821880	mg/L
OW-60	3/3/2020	Magnesium, Dissolved	18	1	0.05	NA	mg/L
OW-60	3/3/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-60	3/3/2020	Nickel, Dissolved	0.0096	0.01	0.004	372000	mg/L
OW-60	3/3/2020	Potassium, Dissolved	2.2	1	0.16	NA	mg/L
OW-60	3/3/2020	Silver, Dissolved	0.002	0.005	0.00094	81200	mg/L
OW-60	3/3/2020	Zinc, Dissolved	0.0036	0.01	0.0023	5960450	mg/L
OW-60	3/3/2020	Boron, Dissolved	2.2	0.2	0.023	3949110	mg/L
OW-60	3/3/2020	Calcium, Dissolved	120	5	0.31	NA	mg/L
OW-60	3/3/2020	Manganese, Dissolved	0.0067	0.002	0.00029	2017400	mg/L
OW-60	3/3/2020	Sodium, Dissolved	1500	20	8.3	NA	mg/L
OW-60	3/3/2020	Uranium, Total	0.053	0.0025	0.00042	30000	mg/L
OW-60	3/3/2020	Antimony, Total	0.00043	0.001	0.00039	6000	mg/L
OW-60	3/3/2020	Arsenic, Total	0.0036	0.001	0.00031	10000	mg/L
OW-60	3/3/2020	Lead, Total	0.0049	0.0005	0.000055	15000	mg/L
OW-60	3/3/2020	Selenium, Total	0.016	0.001	0.00048	50000	mg/L
OW-60	3/3/2020	Thallium, Total	0.000077	0.0005	0.000052	2000	mg/L
OW-60	3/3/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-60	3/3/2020	Barium, Total	0.24	0.002	0.00065	2000000	mg/L
OW-60	3/3/2020	Beryllium, Total	0.00072	0.002	0.00028	4000	mg/L
OW-60	3/3/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-60	3/3/2020	Chromium, Total	0.54	0.006	0.0015	50000	mg/L
OW-60	3/3/2020	Cobalt, Total	0.0078	0.006	0.0031	5980	mg/L
OW-60	3/3/2020	Copper, Total	0.024	0.006	0.0041	790000	mg/L
OW-60	3/3/2020	Manganese, Total	0.28	0.002	0.00029	2017000	mg/L
OW-60	3/3/2020	Molybdenum, Total	0.016	0.008	0.0067	98700	mg/L
OW-60	3/3/2020	Nickel, Total	0.17	0.01	0.004	372000	mg/L
OW-60	3/3/2020	Silver, Total	0.0015	0.005	0.0014	50000	mg/L
OW-60	3/3/2020	Zinc, Total	0.082	0.01	0.0058	5960000	mg/L
OW-60	3/3/2020	Boron, Total	2.4	0.2	0.023	3949	mg/L
OW-60	3/3/2020	Aluminum, Total	21	1	0.12	19914000	mg/L
OW-60	3/3/2020	Iron, Total	11	0.4	0.17	13822000	mg/L
OW-60	5/2/2019	Aluminum, Dissolved	0.6	0.02	0.002488	19913930	mg/L
OW-60	5/2/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
OW-60	5/2/2019	Arsenic, Dissolved	0.0014	0.005	0.000504	10000	mg/L
OW-60	5/2/2019	Barium, Dissolved	0.042	0.002	0.000648	2000000	mg/L
OW-60	5/2/2019	Beryllium, Dissolved	0.00036	0.002	0.000284	4000	mg/L
OW-60	5/2/2019	Boron, Dissolved	2.5	0.2	0.022653	3949110	mg/L
OW-60	5/2/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-60	5/2/2019	Calcium, Dissolved	110	5	0.309446	NA	mg/L
OW-60	5/2/2019	Chromium, Dissolved	0.003	0.006	0.001533	100000	mg/L
OW-60	5/2/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-60	5/2/2019	Copper, Dissolved	0.0038	0.006	0.001296	790000	mg/L
OW-60	5/2/2019	Iron, Dissolved	0.12	0.02	0.008747	13821880	mg/L
OW-60	5/2/2019	Lead, Dissolved	0.00047	0.0025	0.000274	NA	mg/L
OW-60	5/2/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-60	5/2/2019	Manganese, Dissolved	0.04	0.002	0.00029	2017400	mg/L
OW-60	5/2/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-60	5/2/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-60	5/2/2019	Potassium, Dissolved	3.5	1	0.162288	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Selenium, Dissolved	0.018	0.005	0.000857	50000	mg/L
OW-60	5/2/2019	Silver, Dissolved	0.0022	0.005	0.000942	81200	mg/L
OW-60	5/2/2019	Sodium, Dissolved	1500	20	8.323526	NA	mg/L
OW-60	5/2/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
OW-60	5/2/2019	Uranium, Dissolved	0.054	0.0025	0.000374	NA	mg/L
OW-60	5/2/2019	Zinc, Dissolved	0.019	0.01	0.002252	5960450	mg/L
OW-60	5/2/2019	Aluminum, Total	60	2	0.248827	19914000	mg/L
OW-60	5/2/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
OW-60	5/2/2019	Arsenic, Total	0.0047	0.005	0.001561	10000	mg/L
OW-60	5/2/2019	Barium, Total	0.82	0.002	0.000648	2000000	mg/L
OW-60	5/2/2019	Beryllium, Total	0.0026	0.002	0.000284	4000	mg/L
OW-60	5/2/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
OW-60	5/2/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-60	5/2/2019	Chromium, Total	0.031	0.006	0.001533	50000	mg/L
OW-60	5/2/2019	Cobalt, Total	0.0092	0.006	0.003091	5980	mg/L
OW-60	5/2/2019	Copper, Total	0.0072	0.006	0.004072	790000	mg/L
OW-60	5/2/2019	Iron, Total	16	1	0.437344	13822000	mg/L
OW-60	5/2/2019	Lead, Total	0.014	0.0025	0.000274	15000	mg/L
OW-60	5/2/2019	Manganese, Total	0.86	0.002	0.00029	2017000	mg/L
OW-60	5/2/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-60	5/2/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-60	5/2/2019	Nickel, Total	0.032	0.01	0.004009	372000	mg/L
OW-60	5/2/2019	Selenium, Total	0.017	0.005	0.00239	50000	mg/L
OW-60	5/2/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-60	5/2/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
OW-60	5/2/2019	Uranium, Total	0.053	0.0025	0.000424	30000	mg/L
OW-60	5/2/2019	Zinc, Total	0.04	0.01	0.005772	5960000	mg/L
OW-63	9/16/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-63	9/16/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-63	9/16/2020	Arsenic, Total	0.0082	0.001	0.00026	10000	mg/L
OW-63	9/16/2020	Lead, Total	0.00011	0.0005	0.000034	15000	mg/L
OW-63	9/16/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-63	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-63	9/16/2020	Uranium, Total	ND	0.0005	0.000065	30000	mg/L
OW-63	9/16/2020	Aluminum, Total	ND	0.1	0.037	19914000	mg/L
OW-63	9/16/2020	Barium, Total	4	0.015	0.0082	2000000	mg/L
OW-63	9/16/2020	Beryllium, Total	ND	0.01	0.0044	4000	mg/L
OW-63	9/16/2020	Boron, Total	0.3	0.2	0.037	3949	mg/L
OW-63	9/16/2020	Cadmium, Total	ND	0.01	0.0074	5000	mg/L
OW-63	9/16/2020	Chromium, Total	ND	0.03	0.011	50000	mg/L
OW-63	9/16/2020	Cobalt, Total	ND	0.03	0.012	5980	mg/L
OW-63	9/16/2020	Copper, Total	ND	0.03	0.024	790000	mg/L
OW-63	9/16/2020	Manganese, Total	0.98	0.01	0.0041	2017000	mg/L
OW-63	9/16/2020	Molybdenum, Total	ND	0.04	0.033	98700	mg/L
OW-63	9/16/2020	Nickel, Total	0.039	0.05	0.016	372000	mg/L
OW-63	9/16/2020	Silver, Total	ND	0.025	0.0063	50000	mg/L
OW-63	9/16/2020	Zinc, Total	ND	0.05	0.032	5960000	mg/L
OW-63	9/16/2020	Iron, Total	5.8	5	1.3	13822000	mg/L
OW-63	9/16/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-63	9/16/2020	Arsenic, Dissolved	0.0046	0.001	0.00021	10000	mg/L
OW-63	9/16/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
OW-63	9/16/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-63	9/16/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-63	9/16/2020	Aluminum, Dissolved	ND	0.1	0.028	19913930	mg/L
OW-63	9/16/2020	Barium, Dissolved	3.7	0.01	0.0056	2000000	mg/L
OW-63	9/16/2020	Beryllium, Dissolved	ND	0.01	0.0044	4000	mg/L
OW-63	9/16/2020	Boron, Dissolved	0.31	0.2	0.033	3949110	mg/L
OW-63	9/16/2020	Calcium, Dissolved	83	5	0.57	NA	mg/L
OW-63	9/16/2020	Copper, Dissolved	ND	0.03	0.017	790000	mg/L
OW-63	9/16/2020	Iron, Dissolved	0.21	0.1	0.052	13821880	mg/L
OW-63	9/16/2020	Magnesium, Dissolved	15	5	0.34	NA	mg/L
OW-63	9/16/2020	Manganese, Dissolved	0.99	0.01	0.0029	2017400	mg/L
OW-63	9/16/2020	Nickel, Dissolved	ND	0.05	0.016	372000	mg/L
OW-63	9/16/2020	Potassium, Dissolved	ND	5	0.8	NA	mg/L
OW-63	9/16/2020	Silver, Dissolved	ND	0.025	0.0063	81200	mg/L
OW-63	9/16/2020	Sodium, Dissolved	260	5	0.69	NA	mg/L
OW-63	9/16/2020	Cadmium, Dissolved	ND	0.01	0.006	5000	mg/L
OW-63	9/16/2020	Chromium, Dissolved	ND	0.03	0.0098	100000	mg/L
OW-63	9/16/2020	Cobalt, Dissolved	ND	0.03	0.012	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	9/16/2020	Molybdenum, Dissolved	ND	0.04	0.028	98700	mg/L
OW-63	9/16/2020	Zinc, Dissolved	ND	0.05	0.03	5960450	mg/L
OW-63	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-63	3/4/2020	Arsenic, Total	0.009	0.001	0.00031	10000	mg/L
OW-63	3/4/2020	Lead, Total	0.00036	0.0005	0.000055	15000	mg/L
OW-63	3/4/2020	Selenium, Total	ND	0.001	0.00048	50000	mg/L
OW-63	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	3/4/2020	Uranium, Total	0.00014	0.0005	0.000085	30000	mg/L
OW-63	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-63	3/4/2020	Beryllium, Total	0.00028	0.002	0.00028	4000	mg/L
OW-63	3/4/2020	Boron, Total	0.36	0.04	0.0045	3949	mg/L
OW-63	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-63	3/4/2020	Chromium, Total	ND	0.006	0.0015	50000	mg/L
OW-63	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-63	3/4/2020	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	3/4/2020	Molybdenum, Total	ND	0.008	0.0067	98700	mg/L
OW-63	3/4/2020	Nickel, Total	0.029	0.01	0.004	372000	mg/L
OW-63	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-63	3/4/2020	Zinc, Total	ND	0.01	0.0058	5960000	mg/L
OW-63	3/4/2020	Manganese, Total	1.2	0.01	0.0014	2017000	mg/L
OW-63	3/4/2020	Barium, Total	4.4	0.02	0.0065	2000000	mg/L
OW-63	3/4/2020	Iron, Total	6.8	0.2	0.087	13822000	mg/L
OW-63	3/4/2020	Aluminum, Total	0.28	0.02	0.0025	19914000	mg/L
OW-63	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-63	3/4/2020	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	3/4/2020	Uranium, Dissolved	0.00014	0.0005	0.000075	NA	mg/L
OW-63	3/4/2020	Arsenic, Dissolved	0.0089	0.001	0.0001	10000	mg/L
OW-63	3/4/2020	Selenium, Dissolved	ND	0.001	0.00017	50000	mg/L
OW-63	3/4/2020	Aluminum, Dissolved	ND	0.02	0.0025	19913930	mg/L
OW-63	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-63	3/4/2020	Boron, Dissolved	0.25	0.04	0.0045	3949110	mg/L
OW-63	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-63	3/4/2020	Calcium, Dissolved	86	1	0.062	NA	mg/L
OW-63	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-63	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-63	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-63	3/4/2020	Magnesium, Dissolved	17	1	0.05	NA	mg/L
OW-63	3/4/2020	Manganese, Dissolved	0.88	0.002	0.00029	2017400	mg/L
OW-63	3/4/2020	Molybdenum, Dissolved	ND	0.008	0.0067	98700	mg/L
OW-63	3/4/2020	Nickel, Dissolved	0.02	0.01	0.004	372000	mg/L
OW-63	3/4/2020	Potassium, Dissolved	0.57	1	0.16	NA	mg/L
OW-63	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-63	3/4/2020	Zinc, Dissolved	0.0091	0.01	0.0023	5960450	mg/L
OW-63	3/4/2020	Barium, Dissolved	4.4	0.01	0.0032	2000000	mg/L
OW-63	3/4/2020	Sodium, Dissolved	310	5	2.1	NA	mg/L
OW-63	3/4/2020	Iron, Dissolved	6.5	0.2	0.087	13821880	mg/L
OW-63	12/11/2020	Arsenic, Total Recoverable	8.59	1	0.286	10	ug/L
OW-63	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-63	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
OW-63	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-63	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-63	12/11/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
OW-63	12/11/2020	Arsenic, Dissolved	8.3	1	0.286	10	ug/L
OW-63	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-63	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-63	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-63	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-63	12/11/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
OW-63	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-63	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-63	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-63	12/11/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
OW-63	12/11/2020	Calcium, Total	80.9	0.5	0.084	NA	mg/L
OW-63	12/11/2020	Boron, Total	0.328	0.1	0.022	3949	mg/L
OW-63	12/11/2020	Barium, Total	4.37	0.01	0.003	2000000	mg/L
OW-63	12/11/2020	Potassium, Total	ND	1	0.34	NA	mg/L
OW-63	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-63	12/11/2020	Magnesium, Total	15.3	0.5	0.12	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-63	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-63	12/11/2020	Sodium, Total	262	2	0.92	NA	mg/L
OW-63	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-63	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-63	12/11/2020	Iron, Total	6.44	0.2	0.075	13822000	mg/L
OW-63	12/11/2020	Manganese, Total	1.05	0.01	0.003	2017000	mg/L
OW-63	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-63	12/11/2020	Nickel, Total	0.0225	0.006	0.003	372000	mg/L
OW-63	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-63	12/11/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
OW-63	12/11/2020	Barium, Dissolved	4.16	0.01	0.003	2000000	mg/L
OW-63	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-63	12/11/2020	Boron, Dissolved	0.327	0.1	0.022	3949110	mg/L
OW-63	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-63	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-63	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-63	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-63	12/11/2020	Iron, Dissolved	6.06	0.2	0.075	13821880	mg/L
OW-63	12/11/2020	Manganese, Dissolved	0.985	0.01	0.003	2017400	mg/L
OW-63	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-63	12/11/2020	Nickel, Dissolved	0.0203	0.006	0.003	372000	mg/L
OW-63	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-63	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-63	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
OW-63	2/20/2019	Arsenic, Dissolved	0.011	0.001	0.000068	10000	mg/L
OW-63	2/20/2019	Barium, Dissolved	3.8	0.01	0.003242	2000000	mg/L
OW-63	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	2/20/2019	Calcium, Dissolved	82	1	0.061889	NA	mg/L
OW-63	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	2/20/2019	Iron, Dissolved	5.2	0.2	0.087469	13821880	mg/L
OW-63	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
OW-63	2/20/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	2/20/2019	Manganese, Dissolved	1.1	0.01	0.00145	2017400	mg/L
OW-63	2/20/2019	Potassium, Dissolved	0.43	1	0.162288	NA	mg/L
OW-63	2/20/2019	Selenium, Dissolved	ND	0.001	0.000203	50000	mg/L
OW-63	2/20/2019	Silver, Dissolved	0.00095	0.005	0.000942	81200	mg/L
OW-63	2/20/2019	Sodium, Dissolved	280	5	2.080881	NA	mg/L
OW-63	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
OW-63	2/20/2019	Uranium, Dissolved	0.0004	0.0005	0.00003	NA	mg/L
OW-63	2/20/2019	Zinc, Dissolved	0.036	0.01	0.002252	5960450	mg/L
OW-63	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	2/20/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	2/20/2019	Barium, Total	4	0.01	0.003242	2000000	mg/L
OW-63	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	2/20/2019	Iron, Total	5.7	0.2	0.087469	13822000	mg/L
OW-63	2/20/2019	Lead, Total	0.00018	0.0005	0.000055	15000	mg/L
OW-63	2/20/2019	Manganese, Total	1.2	0.01	0.00145	2017000	mg/L
OW-63	2/20/2019	Mercury, Total	0.000048	0.0002	0.000038	2000	mg/L
OW-63	2/20/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	2/20/2019	Silver, Total	0.0015	0.005	0.001418	50000	mg/L
OW-63	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	2/20/2019	Uranium, Total	0.00044	0.0005	0.000085	30000	mg/L
OW-63	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Dissolved	0.0097	0.001	0.000101	10000	mg/L
OW-63	11/18/2019	Barium, Dissolved	4.5	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-63	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	11/18/2019	Calcium, Dissolved	84	1	0.061889	NA	mg/L
OW-63	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	11/18/2019	Iron, Dissolved	5.7	0.2	0.087469	13821880	mg/L
OW-63	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	11/18/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-63	11/18/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
OW-63	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Potassium, Dissolved	0.63	1	0.162288	NA	mg/L
OW-63	11/18/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	11/18/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-63	11/18/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	11/18/2019	Uranium, Dissolved	0.00025	0.0005	0.000075	NA	mg/L
OW-63	11/18/2019	Zinc, Dissolved	0.023	0.01	0.002252	5960450	mg/L
OW-63	11/18/2019	Aluminum, Total	0.062	0.02	0.002488	19914000	mg/L
OW-63	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	11/18/2019	Barium, Total	4.4	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Total	0.35	0.04	0.004531	3949	mg/L
OW-63	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	11/18/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	11/18/2019	Lead, Total	0.00024	0.0005	0.000055	15000	mg/L
OW-63	11/18/2019	Manganese, Total	1	0.02	0.002899	2017000	mg/L
OW-63	11/18/2019	Mercury, Total	ND	0.0008	0.000484	2000	mg/L
OW-63	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-63	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	11/18/2019	Uranium, Total	0.00013	0.0005	0.000085	30000	mg/L
OW-63	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	11/18/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Dissolved	0.0093	0.001	0.000101	10000	mg/L
OW-63	11/18/2019	Barium, Dissolved	4.4	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Dissolved	0.35	0.04	0.004531	3949110	mg/L
OW-63	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	11/18/2019	Calcium, Dissolved	83	1	0.061889	NA	mg/L
OW-63	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-63	11/18/2019	Iron, Dissolved	5.4	0.2	0.087469	13821880	mg/L
OW-63	11/18/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	11/18/2019	Magnesium, Dissolved	16	1	0.05029	NA	mg/L
OW-63	11/18/2019	Manganese, Dissolved	1.1	0.02	0.002899	2017400	mg/L
OW-63	11/18/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Dissolved	0.025	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Potassium, Dissolved	0.59	1	0.162288	NA	mg/L
OW-63	11/18/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	11/18/2019	Silver, Dissolved	0.0011	0.005	0.000942	81200	mg/L
OW-63	11/18/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	11/18/2019	Uranium, Dissolved	0.00018	0.0005	0.000075	NA	mg/L
OW-63	11/18/2019	Zinc, Dissolved	0.02	0.01	0.002252	5960450	mg/L
OW-63	11/18/2019	Aluminum, Total	0.064	0.02	0.002488	19914000	mg/L
OW-63	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	11/18/2019	Arsenic, Total	0.01	0.001	0.000312	10000	mg/L
OW-63	11/18/2019	Barium, Total	4.5	0.02	0.006484	2000000	mg/L
OW-63	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	11/18/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
OW-63	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	11/18/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	11/18/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	11/18/2019	Lead, Total	0.00023	0.0005	0.000055	15000	mg/L
OW-63	11/18/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
OW-63	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-63	11/18/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	11/18/2019	Nickel, Total	0.027	0.01	0.004009	372000	mg/L
OW-63	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-63	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	11/18/2019	Uranium, Total	0.00018	0.0005	0.000085	30000	mg/L
OW-63	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	8/19/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	8/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	8/19/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
OW-63	8/19/2019	Barium, Dissolved	4.1	0.01	0.003242	2000000	mg/L
OW-63	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	8/19/2019	Boron, Dissolved	0.33	0.04	0.004531	3949110	mg/L
OW-63	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	8/19/2019	Calcium, Dissolved	80	1	0.061889	NA	mg/L
OW-63	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	8/19/2019	Copper, Dissolved	0.002	0.006	0.001296	790000	mg/L
OW-63	8/19/2019	Iron, Dissolved	6.1	0.2	0.087469	13821880	mg/L
OW-63	8/19/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
OW-63	8/19/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	8/19/2019	Manganese, Dissolved	1	0.002	0.00029	2017400	mg/L
OW-63	8/19/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	8/19/2019	Nickel, Dissolved	0.029	0.01	0.004009	372000	mg/L
OW-63	8/19/2019	Potassium, Dissolved	0.51	1	0.162288	NA	mg/L
OW-63	8/19/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
OW-63	8/19/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-63	8/19/2019	Sodium, Dissolved	320	5	2.080881	NA	mg/L
OW-63	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	8/19/2019	Uranium, Dissolved	ND	0.0005	0.000075	NA	mg/L
OW-63	8/19/2019	Zinc, Dissolved	0.0055	0.01	0.002252	5960450	mg/L
OW-63	8/19/2019	Aluminum, Total	0.022	0.02	0.002488	19914000	mg/L
OW-63	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	8/19/2019	Arsenic, Total	0.011	0.001	0.000312	10000	mg/L
OW-63	8/19/2019	Barium, Total	4.1	0.02	0.006484	2000000	mg/L
OW-63	8/19/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	8/19/2019	Boron, Total	0.32	0.04	0.004531	3949	mg/L
OW-63	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	8/19/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	8/19/2019	Iron, Total	6.1	0.2	0.087469	13822000	mg/L
OW-63	8/19/2019	Lead, Total	0.00027	0.0005	0.000055	15000	mg/L
OW-63	8/19/2019	Manganese, Total	1.1	0.02	0.002899	2017000	mg/L
OW-63	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-63	8/19/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	8/19/2019	Nickel, Total	0.029	0.01	0.004009	372000	mg/L
OW-63	8/19/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-63	8/19/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	8/19/2019	Uranium, Total	ND	0.0005	0.000085	30000	mg/L
OW-63	8/19/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	5/15/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
OW-63	5/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-63	5/15/2019	Arsenic, Dissolved	0.01	0.001	0.000101	10000	mg/L
OW-63	5/15/2019	Barium, Dissolved	3.9	0.02	0.006484	2000000	mg/L
OW-63	5/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-63	5/15/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
OW-63	5/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-63	5/15/2019	Calcium, Dissolved	80	1	0.061889	NA	mg/L
OW-63	5/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-63	5/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-63	5/15/2019	Copper, Dissolved	0.0051	0.006	0.001296	790000	mg/L
OW-63	5/15/2019	Iron, Dissolved	5.9	0.2	0.087469	13821880	mg/L
OW-63	5/15/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	5/15/2019	Magnesium, Dissolved	15	1	0.05029	NA	mg/L
OW-63	5/15/2019	Manganese, Dissolved	1	0.002	0.00029	2017400	mg/L
OW-63	5/15/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
OW-63	5/15/2019	Nickel, Dissolved	0.033	0.01	0.004009	372000	mg/L
OW-63	5/15/2019	Potassium, Dissolved	0.54	1	0.162288	NA	mg/L
OW-63	5/15/2019	Selenium, Dissolved	0.0002	0.001	0.000171	50000	mg/L
OW-63	5/15/2019	Silver, Dissolved	0.0015	0.005	0.000942	81200	mg/L
OW-63	5/15/2019	Sodium, Dissolved	290	10	4.161763	NA	mg/L
OW-63	5/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-63	5/15/2019	Uranium, Dissolved	0.00013	0.0005	0.000075	NA	mg/L
OW-63	5/15/2019	Zinc, Dissolved	0.014	0.01	0.002252	5960450	mg/L
OW-63	5/15/2019	Aluminum, Total	0.37	0.02	0.002488	19914000	mg/L
OW-63	5/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-63	5/15/2019	Arsenic, Total	0.01	0.001	0.000312	10000	mg/L
OW-63	5/15/2019	Barium, Total	4.1	0.01	0.003242	2000000	mg/L
OW-63	5/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-63	5/15/2019	Boron, Total	0.33	0.04	0.004531	3949	mg/L
OW-63	5/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-63	5/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-63	5/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-63	5/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-63	5/15/2019	Iron, Total	6.2	0.2	0.087469	13822000	mg/L
OW-63	5/15/2019	Lead, Total	0.00077	0.0005	0.000055	15000	mg/L
OW-63	5/15/2019	Manganese, Total	1.1	0.01	0.00145	2017000	mg/L
OW-63	5/15/2019	Mercury, Total	0.000041	0.0002	0.000038	2000	mg/L
OW-63	5/15/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
OW-63	5/15/2019	Nickel, Total	0.033	0.01	0.004009	372000	mg/L
OW-63	5/15/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-63	5/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-63	5/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-63	5/15/2019	Uranium, Total	0.0001	0.0005	0.000085	30000	mg/L
OW-63	5/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-63	4/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-63	4/29/2018	Arsenic, Total	0.014	0.001	0.00041	10000	mg/L
OW-63	4/29/2018	Barium, Total	4	0.01	0.005	2000000	mg/L
OW-63	4/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	4/29/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	4/29/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	4/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-63	4/29/2018	Arsenic, Dissolved	0.012	0.001	0.00042	10000	mg/L
OW-63	4/29/2018	Barium, Dissolved	4	0.01	0.0049	2000000	mg/L
OW-63	4/29/2018	Calcium, Dissolved	82	1	0.078	NA	mg/L
OW-63	4/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	4/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	4/29/2018	Copper, Dissolved	0.0038	0.006	0.0032	790000	mg/L
OW-63	4/29/2018	Iron, Dissolved	5.5	0.2	0.16	13821880	mg/L
OW-63	4/29/2018	Potassium, Dissolved	0.6	1	0.11	NA	mg/L
OW-63	4/29/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	4/29/2018	Manganese, Dissolved	0.92	0.002	0.00039	2017400	mg/L
OW-63	4/29/2018	Sodium, Dissolved	300	5	0.82	NA	mg/L
OW-63	4/29/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	4/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	4/29/2018	Uranium, Dissolved	0.00013	0.0005	0.000096	NA	mg/L
OW-63	4/29/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-63	4/29/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OW-63	4/29/2018	Manganese, Total	1	0.01	0.0055	2017000	mg/L
OW-63	4/29/2018	Lead, Total	0.00045	0.0005	0.00023	15000	mg/L
OW-63	4/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	4/29/2018	Uranium, Total	0.00027	0.0005	0.000068	30000	mg/L
OW-63	4/29/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-63	8/22/2018	Silver, Total	0.002	0.005	0.0012	50000	mg/L
OW-63	8/22/2018	Arsenic, Total	0.013	0.001	0.00041	10000	mg/L
OW-63	8/22/2018	Barium, Total	3.8	0.02	0.01	2000000	mg/L
OW-63	8/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	8/22/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	8/22/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	8/22/2018	Silver, Dissolved	0.0022	0.005	0.0018	81200	mg/L
OW-63	8/22/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
OW-63	8/22/2018	Barium, Dissolved	3.9	0.02	0.0099	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	8/22/2018	Calcium, Dissolved	87	1	0.078	NA	mg/L
OW-63	8/22/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	8/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	8/22/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-63	8/22/2018	Iron, Dissolved	5.8	0.2	0.16	13821880	mg/L
OW-63	8/22/2018	Potassium, Dissolved	0.56	1	0.11	NA	mg/L
OW-63	8/22/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	8/22/2018	Manganese, Dissolved	1.2	0.02	0.0039	2017400	mg/L
OW-63	8/22/2018	Sodium, Dissolved	310	10	1.6	NA	mg/L
OW-63	8/22/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	8/22/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	8/22/2018	Uranium, Dissolved	0.0002	0.0005	0.000096	NA	mg/L
OW-63	8/22/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-63	8/22/2018	Iron, Total	5.9	0.2	0.1	13822000	mg/L
OW-63	8/22/2018	Mercury, Total	0.000047	0.0002	0.000038	2000	mg/L
OW-63	8/22/2018	Manganese, Total	1.6	0.02	0.011	2017000	mg/L
OW-63	8/22/2018	Lead, Total	0.00078	0.0005	0.00023	15000	mg/L
OW-63	8/22/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	8/22/2018	Uranium, Total	0.00037	0.0005	0.000068	30000	mg/L
OW-63	8/22/2018	Zinc, Total	0.0064	0.01	0.0033	5960000	mg/L
OW-63	12/3/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-63	12/3/2018	Arsenic, Total	0.012	0.001	0.00041	10000	mg/L
OW-63	12/3/2018	Barium, Total	3.7	0.01	0.005	2000000	mg/L
OW-63	12/3/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-63	12/3/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
OW-63	12/3/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
OW-63	12/3/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-63	12/3/2018	Arsenic, Dissolved	0.011	0.001	0.00042	10000	mg/L
OW-63	12/3/2018	Barium, Dissolved	3.7	0.02	0.0099	2000000	mg/L
OW-63	12/3/2018	Calcium, Dissolved	70	1	0.078	NA	mg/L
OW-63	12/3/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-63	12/3/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-63	12/3/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-63	12/3/2018	Iron, Dissolved	5.3	0.2	0.16	13821880	mg/L
OW-63	12/3/2018	Potassium, Dissolved	ND	1	0.11	NA	mg/L
OW-63	12/3/2018	Magnesium, Dissolved	16	1	0.25	NA	mg/L
OW-63	12/3/2018	Manganese, Dissolved	0.93	0.002	0.00039	2017400	mg/L
OW-63	12/3/2018	Sodium, Dissolved	290	10	1.6	NA	mg/L
OW-63	12/3/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
OW-63	12/3/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-63	12/3/2018	Zinc, Dissolved	0.031	0.01	0.0021	5960450	mg/L
OW-63	12/3/2018	Iron, Total	5.8	0.2	0.1	13822000	mg/L
OW-63	12/3/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-63	12/3/2018	Manganese, Total	1.2	0.01	0.0055	2017000	mg/L
OW-63	12/3/2018	Lead, Total	0.00053	0.0005	0.00023	15000	mg/L
OW-63	12/3/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-63	12/3/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
OW-64	4/29/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-64	4/29/2018	Arsenic, Total	0.011	0.001	0.00041	10000	mg/L
OW-64	4/29/2018	Barium, Total	1.1	0.01	0.005	2000000	mg/L
OW-64	4/29/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-64	4/29/2018	Chromium, Total	0.02	0.006	0.0018	50000	mg/L
OW-64	4/29/2018	Copper, Total	0.032	0.006	0.0041	790000	mg/L
OW-64	4/29/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-64	4/29/2018	Arsenic, Dissolved	0.0089	0.001	0.00042	10000	mg/L
OW-64	4/29/2018	Barium, Dissolved	0.35	0.002	0.00099	2000000	mg/L
OW-64	4/29/2018	Calcium, Dissolved	18	1	0.078	NA	mg/L
OW-64	4/29/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-64	4/29/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-64	4/29/2018	Copper, Dissolved	0.009	0.006	0.0032	790000	mg/L
OW-64	4/29/2018	Iron, Dissolved	0.93	0.1	0.082	13821880	mg/L
OW-64	4/29/2018	Potassium, Dissolved	3	1	0.11	NA	mg/L
OW-64	4/29/2018	Magnesium, Dissolved	5.1	1	0.25	NA	mg/L
OW-64	4/29/2018	Manganese, Dissolved	0.44	0.002	0.00039	2017400	mg/L
OW-64	4/29/2018	Sodium, Dissolved	460	5	0.82	NA	mg/L
OW-64	4/29/2018	Lead, Dissolved	0.0034	0.0005	0.00017	NA	mg/L
OW-64	4/29/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-64	4/29/2018	Uranium, Dissolved	0.026	0.0025	0.00048	NA	mg/L
OW-64	4/29/2018	Zinc, Dissolved	0.0039	0.01	0.0021	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	4/29/2018	Iron, Total	13	0.4	0.2	13822000	mg/L
OW-64	4/29/2018	Manganese, Total	1	0.002	0.0011	2017000	mg/L
OW-64	4/29/2018	Lead, Total	0.015	0.0005	0.00023	15000	mg/L
OW-64	4/29/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-64	4/29/2018	Uranium, Total	0.031	0.0025	0.00034	30000	mg/L
OW-64	4/29/2018	Zinc, Total	0.011	0.01	0.0033	5960000	mg/L
OW-64	8/22/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
OW-64	8/22/2018	Arsenic, Total	0.0067	0.001	0.00041	10000	mg/L
OW-64	8/22/2018	Barium, Total	0.47	0.002	0.001	2000000	mg/L
OW-64	8/22/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
OW-64	8/22/2018	Chromium, Total	0.0033	0.006	0.0018	50000	mg/L
OW-64	8/22/2018	Copper, Total	0.018	0.006	0.0041	790000	mg/L
OW-64	8/22/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
OW-64	8/22/2018	Arsenic, Dissolved	0.0068	0.001	0.00042	10000	mg/L
OW-64	8/22/2018	Barium, Dissolved	0.33	0.002	0.00099	2000000	mg/L
OW-64	8/22/2018	Calcium, Dissolved	11	1	0.078	NA	mg/L
OW-64	8/22/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
OW-64	8/22/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
OW-64	8/22/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
OW-64	8/22/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
OW-64	8/22/2018	Potassium, Dissolved	1.6	1	0.11	NA	mg/L
OW-64	8/22/2018	Magnesium, Dissolved	3	1	0.25	NA	mg/L
OW-64	8/22/2018	Manganese, Dissolved	0.34	0.002	0.00039	2017400	mg/L
OW-64	8/22/2018	Sodium, Dissolved	470	10	1.6	NA	mg/L
OW-64	8/22/2018	Lead, Dissolved	0.00019	0.0005	0.00017	NA	mg/L
OW-64	8/22/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
OW-64	8/22/2018	Uranium, Dissolved	0.012	0.0005	0.000096	NA	mg/L
OW-64	8/22/2018	Zinc, Dissolved	0.011	0.01	0.0021	5960450	mg/L
OW-64	8/22/2018	Iron, Total	2.6	0.1	0.051	13822000	mg/L
OW-64	8/22/2018	Mercury, Total	0.000046	0.0002	0.000038	2000	mg/L
OW-64	8/22/2018	Manganese, Total	0.46	0.002	0.0011	2017000	mg/L
OW-64	8/22/2018	Lead, Total	0.0022	0.0005	0.00023	15000	mg/L
OW-64	8/22/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
OW-64	8/22/2018	Uranium, Total	0.01	0.0005	0.000068	30000	mg/L
OW-64	8/22/2018	Zinc, Total	0.0089	0.01	0.0033	5960000	mg/L
OW-64	5/15/2019	Aluminum, Dissolved	0.17	0.02	0.002488	19913930	mg/L
OW-64	5/15/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	5/15/2019	Arsenic, Dissolved	0.0041	0.001	0.000101	10000	mg/L
OW-64	5/15/2019	Barium, Dissolved	0.34	0.002	0.000648	2000000	mg/L
OW-64	5/15/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	5/15/2019	Boron, Dissolved	1.4	0.4	0.045305	3949110	mg/L
OW-64	5/15/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	5/15/2019	Calcium, Dissolved	17	1	0.061889	NA	mg/L
OW-64	5/15/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	5/15/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	5/15/2019	Copper, Dissolved	0.0054	0.006	0.001296	790000	mg/L
OW-64	5/15/2019	Iron, Dissolved	0.11	0.02	0.008747	13821880	mg/L
OW-64	5/15/2019	Lead, Dissolved	0.00026	0.0005	0.000055	NA	mg/L
OW-64	5/15/2019	Magnesium, Dissolved	4.5	1	0.05029	NA	mg/L
OW-64	5/15/2019	Manganese, Dissolved	0.48	0.002	0.00029	2017400	mg/L
OW-64	5/15/2019	Molybdenum, Dissolved	0.03	0.008	0.006735	98700	mg/L
OW-64	5/15/2019	Nickel, Dissolved	0.0048	0.01	0.004009	372000	mg/L
OW-64	5/15/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-64	5/15/2019	Selenium, Dissolved	0.00035	0.001	0.000171	50000	mg/L
OW-64	5/15/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	5/15/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	5/15/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	5/15/2019	Uranium, Dissolved	0.016	0.0005	0.000075	NA	mg/L
OW-64	5/15/2019	Zinc, Dissolved	0.027	0.01	0.002252	5960450	mg/L
OW-64	5/15/2019	Aluminum, Total	0.97	0.1	0.012441	19914000	mg/L
OW-64	5/15/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	5/15/2019	Arsenic, Total	0.004	0.001	0.000312	10000	mg/L
OW-64	5/15/2019	Barium, Total	0.35	0.002	0.000648	2000000	mg/L
OW-64	5/15/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	5/15/2019	Boron, Total	1.4	0.2	0.022653	3949	mg/L
OW-64	5/15/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	5/15/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
OW-64	5/15/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	5/15/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	5/15/2019	Iron, Total	0.44	0.02	0.008747	13822000	mg/L
OW-64	5/15/2019	Lead, Total	0.001	0.0005	0.000055	15000	mg/L
OW-64	5/15/2019	Manganese, Total	0.53	0.002	0.00029	2017000	mg/L
OW-64	5/15/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-64	5/15/2019	Molybdenum, Total	0.034	0.008	0.006735	98700	mg/L
OW-64	5/15/2019	Nickel, Total	0.004	0.01	0.004009	372000	mg/L
OW-64	5/15/2019	Selenium, Total	0.00078	0.001	0.000478	50000	mg/L
OW-64	5/15/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-64	5/15/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	5/15/2019	Uranium, Total	0.016	0.0005	0.000085	30000	mg/L
OW-64	5/15/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-64	8/19/2019	Aluminum, Dissolved	0.18	0.02	0.002488	19913930	mg/L
OW-64	8/19/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	8/19/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
OW-64	8/19/2019	Barium, Dissolved	0.27	0.002	0.000648	2000000	mg/L
OW-64	8/19/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	8/19/2019	Boron, Dissolved	2.2	0.2	0.022653	3949110	mg/L
OW-64	8/19/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	8/19/2019	Calcium, Dissolved	12	1	0.061889	NA	mg/L
OW-64	8/19/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	8/19/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	8/19/2019	Copper, Dissolved	0.0033	0.006	0.001296	790000	mg/L
OW-64	8/19/2019	Iron, Dissolved	0.076	0.02	0.008747	13821880	mg/L
OW-64	8/19/2019	Lead, Dissolved	0.000082	0.0005	0.000055	NA	mg/L
OW-64	8/19/2019	Magnesium, Dissolved	3.4	1	0.05029	NA	mg/L
OW-64	8/19/2019	Manganese, Dissolved	0.35	0.002	0.00029	2017400	mg/L
OW-64	8/19/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
OW-64	8/19/2019	Nickel, Dissolved	0.0057	0.01	0.004009	372000	mg/L
OW-64	8/19/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
OW-64	8/19/2019	Selenium, Dissolved	0.00036	0.001	0.000171	50000	mg/L
OW-64	8/19/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	8/19/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	8/19/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	8/19/2019	Uranium, Dissolved	0.012	0.0005	0.000075	NA	mg/L
OW-64	8/19/2019	Zinc, Dissolved	0.0073	0.01	0.002252	5960450	mg/L
OW-64	8/19/2019	Aluminum, Total	8.3	0.2	0.024883	19914000	mg/L
OW-64	8/19/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	8/19/2019	Arsenic, Total	0.0046	0.001	0.000312	10000	mg/L
OW-64	8/19/2019	Barium, Total	0.37	0.002	0.000648	2000000	mg/L
OW-64	8/19/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	8/19/2019	Boron, Total	2.1	0.4	0.045305	3949	mg/L
OW-64	8/19/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	8/19/2019	Chromium, Total	0.012	0.006	0.001533	50000	mg/L
OW-64	8/19/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	8/19/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-64	8/19/2019	Iron, Total	3.1	0.2	0.087469	13822000	mg/L
OW-64	8/19/2019	Lead, Total	0.0029	0.0005	0.000055	15000	mg/L
OW-64	8/19/2019	Manganese, Total	0.47	0.002	0.00029	2017000	mg/L
OW-64	8/19/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
OW-64	8/19/2019	Molybdenum, Total	0.023	0.008	0.006735	98700	mg/L
OW-64	8/19/2019	Nickel, Total	0.011	0.01	0.004009	372000	mg/L
OW-64	8/19/2019	Selenium, Total	0.00053	0.001	0.000478	50000	mg/L
OW-64	8/19/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
OW-64	8/19/2019	Thallium, Total	0.000068	0.0005	0.000052	2000	mg/L
OW-64	8/19/2019	Uranium, Total	0.013	0.0005	0.000085	30000	mg/L
OW-64	8/19/2019	Zinc, Total	0.009	0.01	0.005772	5960000	mg/L
OW-64	11/18/2019	Aluminum, Dissolved	0.13	0.02	0.002488	19913930	mg/L
OW-64	11/18/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
OW-64	11/18/2019	Arsenic, Dissolved	0.0033	0.001	0.000101	10000	mg/L
OW-64	11/18/2019	Barium, Dissolved	0.28	0.002	0.000648	2000000	mg/L
OW-64	11/18/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
OW-64	11/18/2019	Boron, Dissolved	2.4	0.4	0.045305	3949110	mg/L
OW-64	11/18/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
OW-64	11/18/2019	Calcium, Dissolved	12	1	0.061889	NA	mg/L
OW-64	11/18/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
OW-64	11/18/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
OW-64	11/18/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
OW-64	11/18/2019	Iron, Dissolved	0.067	0.02	0.008747	13821880	mg/L
OW-64	11/18/2019	Lead, Dissolved	0.000092	0.0005	0.000055	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	11/18/2019	Magnesium, Dissolved	3.3	1	0.05029	NA	mg/L
OW-64	11/18/2019	Manganese, Dissolved	0.35	0.002	0.00029	2017400	mg/L
OW-64	11/18/2019	Molybdenum, Dissolved	0.042	0.008	0.006735	98700	mg/L
OW-64	11/18/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
OW-64	11/18/2019	Potassium, Dissolved	1.3	1	0.162288	NA	mg/L
OW-64	11/18/2019	Selenium, Dissolved	0.0003	0.001	0.000171	50000	mg/L
OW-64	11/18/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
OW-64	11/18/2019	Sodium, Dissolved	480	10	4.161763	NA	mg/L
OW-64	11/18/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	11/18/2019	Uranium, Dissolved	0.018	0.0005	0.000075	NA	mg/L
OW-64	11/18/2019	Zinc, Dissolved	0.024	0.01	0.002252	5960450	mg/L
OW-64	11/18/2019	Aluminum, Total	3.5	0.1	0.012441	19914000	mg/L
OW-64	11/18/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
OW-64	11/18/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
OW-64	11/18/2019	Barium, Total	0.29	0.002	0.000648	2000000	mg/L
OW-64	11/18/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
OW-64	11/18/2019	Boron, Total	2.3	0.2	0.022653	3949	mg/L
OW-64	11/18/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
OW-64	11/18/2019	Chromium, Total	0.0031	0.006	0.001533	50000	mg/L
OW-64	11/18/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
OW-64	11/18/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
OW-64	11/18/2019	Iron, Total	1.1	0.1	0.043734	13822000	mg/L
OW-64	11/18/2019	Lead, Total	0.0011	0.0005	0.000055	15000	mg/L
OW-64	11/18/2019	Manganese, Total	0.36	0.002	0.00029	2017000	mg/L
OW-64	11/18/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
OW-64	11/18/2019	Molybdenum, Total	0.04	0.008	0.006735	98700	mg/L
OW-64	11/18/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
OW-64	11/18/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
OW-64	11/18/2019	Silver, Total	ND	0.0005	0.000279	50000	mg/L
OW-64	11/18/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	11/18/2019	Uranium, Total	0.019	0.0005	0.000085	30000	mg/L
OW-64	11/18/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
OW-64	12/11/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
OW-64	12/11/2020	Aluminum, Total	1.06	0.2	0.051	19914000	mg/L
OW-64	12/11/2020	Calcium, Total	12.1	0.5	0.084	NA	mg/L
OW-64	12/11/2020	Boron, Total	1.72	0.1	0.022	3949	mg/L
OW-64	12/11/2020	Barium, Total	0.323	0.01	0.003	2000000	mg/L
OW-64	12/11/2020	Potassium, Total	1.4	1	0.34	NA	mg/L
OW-64	12/11/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
OW-64	12/11/2020	Magnesium, Total	3.45	0.5	0.12	NA	mg/L
OW-64	12/11/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
OW-64	12/11/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
OW-64	12/11/2020	Sodium, Total	400	2	0.92	NA	mg/L
OW-64	12/11/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
OW-64	12/11/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
OW-64	12/11/2020	Manganese, Total	0.331	0.01	0.003	2017000	mg/L
OW-64	12/11/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
OW-64	12/11/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
OW-64	12/11/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
OW-64	12/11/2020	Aluminum, Dissolved	0.537	0.2	0.051	19913930	mg/L
OW-64	12/11/2020	Barium, Dissolved	0.324	0.01	0.003	2000000	mg/L
OW-64	12/11/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
OW-64	12/11/2020	Boron, Dissolved	1.79	0.1	0.022	3949110	mg/L
OW-64	12/11/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
OW-64	12/11/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
OW-64	12/11/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
OW-64	12/11/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
OW-64	12/11/2020	Iron, Dissolved	0.234	0.2	0.075	13821880	mg/L
OW-64	12/11/2020	Manganese, Dissolved	0.328	0.01	0.003	2017400	mg/L
OW-64	12/11/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
OW-64	12/11/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
OW-64	12/11/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
OW-64	12/11/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
OW-64	12/11/2020	Iron, Total	0.603	0.2	0.075	13822000	mg/L
OW-64	12/11/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
OW-64	12/11/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
OW-64	12/11/2020	Arsenic, Total Recoverable	2.51	1	0.286	10	ug/L
OW-64	12/11/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
OW-64	12/11/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
OW-64	12/11/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
OW-64	12/11/2020	Uranium, Total Recoverable	14	5	1.12	30	ug/L
OW-64	12/11/2020	Arsenic, Dissolved	2.47	1	0.286	10	ug/L
OW-64	12/11/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
OW-64	12/11/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
OW-64	12/11/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
OW-64	12/11/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
OW-64	12/11/2020	Uranium, Dissolved	13.1	5	1.12	NA	ug/L
OW-64	9/22/2020	Arsenic, Dissolved	0.0036	0.001	0.00021	10000	mg/L
OW-64	9/22/2020	Lead, Dissolved	0.000038	0.0005	0.000034	NA	mg/L
OW-64	9/22/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
OW-64	9/22/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
OW-64	9/22/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
OW-64	9/22/2020	Uranium, Dissolved	0.014	0.0005	0.000065	NA	mg/L
OW-64	9/22/2020	Boron, Dissolved	2.3	0.2	0.033	3949110	mg/L
OW-64	9/22/2020	Sodium, Dissolved	530	50	6.9	NA	mg/L
OW-64	9/22/2020	Aluminum, Dissolved	0.019	0.02	0.0056	19913930	mg/L
OW-64	9/22/2020	Barium, Dissolved	0.34	0.002	0.0011	2000000	mg/L
OW-64	9/22/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
OW-64	9/22/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
OW-64	9/22/2020	Calcium, Dissolved	16	1	0.11	NA	mg/L
OW-64	9/22/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
OW-64	9/22/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
OW-64	9/22/2020	Iron, Dissolved	0.023	0.02	0.01	13821880	mg/L
OW-64	9/22/2020	Magnesium, Dissolved	4.2	1	0.067	NA	mg/L
OW-64	9/22/2020	Manganese, Dissolved	0.4	0.002	0.00058	2017400	mg/L
OW-64	9/22/2020	Molybdenum, Dissolved	0.022	0.008	0.0056	98700	mg/L
OW-64	9/22/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
OW-64	9/22/2020	Potassium, Dissolved	1.1	1	0.16	NA	mg/L
OW-64	9/22/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
OW-64	9/22/2020	Zinc, Dissolved	0.033	0.01	0.006	5960450	mg/L
OW-64	9/22/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
OW-64	9/22/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
OW-64	9/22/2020	Arsenic, Total	0.0035	0.001	0.00026	10000	mg/L
OW-64	9/22/2020	Lead, Total	0.00057	0.0005	0.000034	15000	mg/L
OW-64	9/22/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
OW-64	9/22/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
OW-64	9/22/2020	Uranium, Total	0.015	0.0005	0.000065	30000	mg/L
OW-64	9/22/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-64	9/22/2020	Barium, Total	0.36	0.003	0.0016	2000000	mg/L
OW-64	9/22/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
OW-64	9/22/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
OW-64	9/22/2020	Chromium, Total	0.0023	0.006	0.0021	50000	mg/L
OW-64	9/22/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
OW-64	9/22/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
OW-64	9/22/2020	Iron, Total	0.96	0.05	0.013	13822000	mg/L
OW-64	9/22/2020	Manganese, Total	0.41	0.002	0.00081	2017000	mg/L
OW-64	9/22/2020	Molybdenum, Total	0.024	0.008	0.0065	98700	mg/L
OW-64	9/22/2020	Nickel, Total	0.0048	0.01	0.0033	372000	mg/L
OW-64	9/22/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
OW-64	9/22/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
OW-64	9/22/2020	Aluminum, Total	2.3	0.1	0.037	19914000	mg/L
OW-64	9/22/2020	Boron, Total	2.4	0.2	0.037	3949	mg/L
OW-64	3/4/2020	Antimony, Total	ND	0.001	0.00039	6000	mg/L
OW-64	3/4/2020	Arsenic, Total	0.004	0.001	0.00031	10000	mg/L
OW-64	3/4/2020	Lead, Total	0.0018	0.0005	0.000055	15000	mg/L
OW-64	3/4/2020	Selenium, Total	0.00048	0.001	0.00048	50000	mg/L
OW-64	3/4/2020	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
OW-64	3/4/2020	Uranium, Total	0.0095	0.0005	0.000085	30000	mg/L
OW-64	3/4/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
OW-64	3/4/2020	Barium, Total	0.41	0.002	0.00065	2000000	mg/L
OW-64	3/4/2020	Beryllium, Total	0.0004	0.002	0.00028	4000	mg/L
OW-64	3/4/2020	Cadmium, Total	ND	0.002	0.00074	5000	mg/L
OW-64	3/4/2020	Chromium, Total	0.0083	0.006	0.0015	50000	mg/L
OW-64	3/4/2020	Cobalt, Total	ND	0.006	0.0031	5980	mg/L
OW-64	3/4/2020	Copper, Total	0.0052	0.006	0.0041	790000	mg/L
OW-64	3/4/2020	Manganese, Total	0.45	0.002	0.00029	2017000	mg/L
OW-64	3/4/2020	Molybdenum, Total	0.017	0.008	0.0067	98700	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	3/4/2020	Nickel, Total	0.009	0.01	0.004	372000	mg/L
OW-64	3/4/2020	Silver, Total	ND	0.005	0.0014	50000	mg/L
OW-64	3/4/2020	Zinc, Total	0.0062	0.01	0.0058	5960000	mg/L
OW-64	3/4/2020	Boron, Total	1.5	0.2	0.023	3949	mg/L
OW-64	3/4/2020	Aluminum, Total	6.5	0.2	0.025	19914000	mg/L
OW-64	3/4/2020	Iron, Total	2.2	0.1	0.044	13822000	mg/L
OW-64	3/4/2020	Antimony, Dissolved	ND	0.001	0.00039	6000	mg/L
OW-64	3/4/2020	Lead, Dissolved	0.000092	0.0005	0.000055	NA	mg/L
OW-64	3/4/2020	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
OW-64	3/4/2020	Uranium, Dissolved	0.0076	0.0005	0.000075	NA	mg/L
OW-64	3/4/2020	Arsenic, Dissolved	0.0037	0.001	0.0001	10000	mg/L
OW-64	3/4/2020	Selenium, Dissolved	0.00038	0.001	0.00017	50000	mg/L
OW-64	3/4/2020	Aluminum, Dissolved	0.16	0.02	0.0025	19913930	mg/L
OW-64	3/4/2020	Barium, Dissolved	0.32	0.002	0.00065	2000000	mg/L
OW-64	3/4/2020	Beryllium, Dissolved	ND	0.002	0.00028	4000	mg/L
OW-64	3/4/2020	Cadmium, Dissolved	ND	0.002	0.00055	5000	mg/L
OW-64	3/4/2020	Calcium, Dissolved	13	1	0.062	NA	mg/L
OW-64	3/4/2020	Chromium, Dissolved	ND	0.006	0.0015	100000	mg/L
OW-64	3/4/2020	Cobalt, Dissolved	ND	0.006	0.0031	5980	mg/L
OW-64	3/4/2020	Copper, Dissolved	ND	0.006	0.0013	790000	mg/L
OW-64	3/4/2020	Iron, Dissolved	0.075	0.02	0.0087	13821880	mg/L
OW-64	3/4/2020	Magnesium, Dissolved	3.7	1	0.05	NA	mg/L
OW-64	3/4/2020	Manganese, Dissolved	0.36	0.002	0.00029	2017400	mg/L
OW-64	3/4/2020	Molybdenum, Dissolved	0.018	0.008	0.0067	98700	mg/L
OW-64	3/4/2020	Nickel, Dissolved	0.0086	0.01	0.004	372000	mg/L
OW-64	3/4/2020	Potassium, Dissolved	0.91	1	0.16	NA	mg/L
OW-64	3/4/2020	Silver, Dissolved	ND	0.005	0.00094	81200	mg/L
OW-64	3/4/2020	Zinc, Dissolved	0.0043	0.01	0.0023	5960450	mg/L
OW-64	3/4/2020	Boron, Dissolved	1.5	0.2	0.023	3949110	mg/L
OW-64	3/4/2020	Sodium, Dissolved	480	5	2.1	NA	mg/L
PW-2	9/21/2020	Uranium, Total	0.0014	0.0005	0.000065	30000	mg/L
PW-2	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-2	9/21/2020	Arsenic, Total	0.0034	0.001	0.00026	10000	mg/L
PW-2	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
PW-2	9/21/2020	Selenium, Total	0.00099	0.001	0.00066	50000	mg/L
PW-2	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-2	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-2	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
PW-2	9/21/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
PW-2	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-2	9/21/2020	Boron, Total	0.051	0.04	0.0074	3949	mg/L
PW-2	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-2	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-2	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-2	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-2	9/21/2020	Iron, Total	0.027	0.05	0.013	13822000	mg/L
PW-2	9/21/2020	Manganese, Total	0.002	0.002	0.00081	2017000	mg/L
PW-2	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-2	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
PW-2	9/21/2020	Silver, Total	0.0019	0.005	0.0013	50000	mg/L
PW-2	9/21/2020	Zinc, Total	0.028	0.01	0.0064	5960000	mg/L
PW-2	9/21/2020	Arsenic, Dissolved	0.0037	0.001	0.00021	10000	mg/L
PW-2	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
PW-2	9/21/2020	Selenium, Dissolved	0.0011	0.001	0.00066	50000	mg/L
PW-2	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
PW-2	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
PW-2	9/21/2020	Uranium, Dissolved	0.0016	0.0005	0.000065	NA	mg/L
PW-2	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-2	9/21/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
PW-2	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-2	9/21/2020	Boron, Dissolved	0.055	0.04	0.0067	3949110	mg/L
PW-2	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-2	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-2	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-2	9/21/2020	Iron, Dissolved	0.026	0.02	0.01	13821880	mg/L
PW-2	9/21/2020	Manganese, Dissolved	0.0023	0.002	0.00058	2017400	mg/L
PW-2	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-2	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-2	9/21/2020	Silver, Dissolved	0.0031	0.005	0.0013	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/21/2020	Zinc, Dissolved	0.067	0.01	0.006	5960450	mg/L
PW-2	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-2	12/28/2020	Arsenic, Total Recoverable	3.52	1	0.286	10	ug/L
PW-2	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-2	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-2	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-2	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-2	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-2	12/28/2020	Arsenic, Dissolved	2.28	1	0.286	10	ug/L
PW-2	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-2	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-2	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-2	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-2	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-2	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-2	12/28/2020	Barium, Total	0.0154	0.01	0.003	2000000	mg/L
PW-2	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-2	12/28/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
PW-2	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-2	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-2	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-2	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-2	12/28/2020	Iron, Total	0.353	0.2	0.075	13822000	mg/L
PW-2	12/28/2020	Manganese, Total	0.0109	0.01	0.003	2017000	mg/L
PW-2	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-2	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-2	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-2	12/28/2020	Zinc, Total	0.106	0.02	0.008	5960000	mg/L
PW-2	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-2	12/28/2020	Barium, Dissolved	0.0151	0.01	0.003	2000000	mg/L
PW-2	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-2	12/28/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
PW-2	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-2	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-2	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-2	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-2	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-2	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-2	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-2	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-2	12/28/2020	Zinc, Dissolved	0.0938	0.02	0.008	5960450	mg/L
PW-2	12/28/2020	Manganese, Dissolved	0.0106	0.01	0.003	2017400	mg/L
PW-2	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-2	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-2	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
PW-2	9/10/2014	Arsenic, Total	0.0031	0.001	0.00011	10000	mg/L
PW-2	9/10/2014	Barium, Total	0.012	0.002	0.0011	2000000	mg/L
PW-2	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
PW-2	9/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-2	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
PW-2	9/10/2014	Iron, Total	0.042	0.02	0.0062	13822000	mg/L
PW-2	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
PW-2	9/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
PW-2	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
PW-2	9/10/2014	Selenium, Total	0.0014	0.001	0.00015	50000	mg/L
PW-2	9/10/2014	Uranium, Total	0.0024	0.001	0.00005	30000	mg/L
PW-2	9/10/2014	Zinc, Total	0.012	0.01	0.0014	5960000	mg/L
PW-2	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-2	9/18/2017	Arsenic, Total	0.0031	0.001	0.0003	10000	mg/L
PW-2	9/18/2017	Barium, Total	0.013	0.002	0.00093	2000000	mg/L
PW-2	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-2	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-2	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-2	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-2	9/18/2017	Arsenic, Dissolved	0.0031	0.001	0.00018	10000	mg/L
PW-2	9/18/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L
PW-2	9/18/2017	Calcium, Dissolved	160	10	0.78	NA	mg/L
PW-2	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-2	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-2	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-2	9/18/2017	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
PW-2	9/18/2017	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
PW-2	9/18/2017	Magnesium, Dissolved	37	1	0.25	NA	mg/L
PW-2	9/18/2017	Manganese, Dissolved	0.0012	0.002	0.00039	2017400	mg/L
PW-2	9/18/2017	Sodium, Dissolved	18	1	0.16	NA	mg/L
PW-2	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-2	9/18/2017	Selenium, Dissolved	0.0017	0.001	0.00039	50000	mg/L
PW-2	9/18/2017	Zinc, Dissolved	0.041	0.01	0.0021	5960450	mg/L
PW-2	9/18/2017	Iron, Total	0.042	0.02	0.01	13822000	mg/L
PW-2	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-2	9/18/2017	Manganese, Total	0.0033	0.002	0.0011	2017000	mg/L
PW-2	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-2	9/18/2017	Selenium, Total	0.0011	0.001	0.00071	50000	mg/L
PW-2	9/18/2017	Uranium, Total	0.0023	0.0005	0.00015	30000	mg/L
PW-2	9/18/2017	Zinc, Total	0.0071	0.01	0.0033	5960000	mg/L
PW-3	8/24/2012	Silver, Total	ND	0.005	0.0011	50000	mg/L
PW-3	8/24/2012	Arsenic, Total	0.0034	0.001	0.00011	10000	mg/L
PW-3	8/24/2012	Barium, Total	0.011	0.002	0.00031	2000000	mg/L
PW-3	8/24/2012	Calcium, Total	240	5	0.13	NA	mg/L
PW-3	8/24/2012	Cadmium, Total	ND	0.002	0.00036	5000	mg/L
PW-3	8/24/2012	Chromium, Total	ND	0.006	0.00056	50000	mg/L
PW-3	8/24/2012	Copper, Total	ND	0.006	0.0031	790000	mg/L
PW-3	8/24/2012	Iron, Total	0.042	0.02	0.0019	13822000	mg/L
PW-3	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
PW-3	8/24/2012	Potassium, Total	1.3	1	0.48	NA	mg/L
PW-3	8/24/2012	Magnesium, Total	50	1	0.013	NA	mg/L
PW-3	8/24/2012	Manganese, Total	ND	0.002	0.00062	2017000	mg/L
PW-3	8/24/2012	Sodium, Total	59	1	0.045	NA	mg/L
PW-3	8/24/2012	Lead, Total	ND	0.005	0.0016	15000	mg/L
PW-3	8/24/2012	Selenium, Total	0.0012	0.001	0.00033	50000	mg/L
PW-3	8/24/2012	Uranium, Total	0.0015	0.001	0.00006	30000	mg/L
PW-3	8/24/2012	Zinc, Total	0.03	0.01	0.00062	5960000	mg/L
PW-3	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
PW-3	9/10/2013	Arsenic, Total	0.0037	0.001	0.000098	10000	mg/L
PW-3	9/10/2013	Barium, Total	0.011	0.002	0.00095	2000000	mg/L
PW-3	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
PW-3	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
PW-3	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-3	9/10/2013	Iron, Total	0.28	0.02	0.0089	13822000	mg/L
PW-3	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
PW-3	9/10/2013	Manganese, Total	0.0036	0.002	0.00016	2017000	mg/L
PW-3	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
PW-3	9/10/2013	Selenium, Total	0.0014	0.001	0.00029	50000	mg/L
PW-3	9/10/2013	Uranium, Total	0.0016	0.001	0.0000073	30000	mg/L
PW-3	9/10/2013	Zinc, Total	0.029	0.01	0.00076	5960000	mg/L
PW-3	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
PW-3	9/10/2014	Arsenic, Total	0.0039	0.001	0.00011	10000	mg/L
PW-3	9/10/2014	Barium, Total	0.011	0.002	0.0011	2000000	mg/L
PW-3	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
PW-3	9/10/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-3	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
PW-3	9/10/2014	Iron, Total	0.13	0.02	0.0062	13822000	mg/L
PW-3	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
PW-3	9/10/2014	Manganese, Total	ND	0.002	0.00055	2017000	mg/L
PW-3	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
PW-3	9/10/2014	Selenium, Total	0.002	0.001	0.00015	50000	mg/L
PW-3	9/10/2014	Uranium, Total	0.0016	0.001	0.00005	30000	mg/L
PW-3	9/10/2014	Zinc, Total	0.011	0.01	0.0014	5960000	mg/L
PW-3	8/23/2015	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-3	8/23/2015	Arsenic, Total	0.0034	0.001	0.000065	10000	mg/L
PW-3	8/23/2015	Barium, Total	0.011	0.002	0.00095	2000000	mg/L
PW-3	8/23/2015	Calcium, Total	250	5	0.28	NA	mg/L
PW-3	8/23/2015	Cadmium, Total	ND	0.002	0.00097	5000	mg/L
PW-3	8/23/2015	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	8/23/2015	Copper, Total	ND	0.006	0.0024	790000	mg/L
PW-3	8/23/2015	Iron, Total	0.034	0.02	0.0073	13822000	mg/L
PW-3	8/23/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
PW-3	8/23/2015	Potassium, Total	1.6	1	0.18	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/23/2015	Magnesium, Total	50	1	0.039	NA	mg/L
PW-3	8/23/2015	Manganese, Total	ND	0.002	0.00027	2017000	mg/L
PW-3	8/23/2015	Sodium, Total	62	1	0.072	NA	mg/L
PW-3	8/23/2015	Lead, Total	ND	0.0005	0.000026	15000	mg/L
PW-3	8/23/2015	Selenium, Total	0.0014	0.001	0.00019	50000	mg/L
PW-3	8/23/2015	Uranium, Total	0.0016	0.0005	0.0000048	30000	mg/L
PW-3	8/23/2015	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
PW-3	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-3	8/31/2016	Arsenic, Total	0.0041	0.001	0.00021	10000	mg/L
PW-3	8/31/2016	Barium, Total	0.011	0.002	0.00079	2000000	mg/L
PW-3	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-3	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-3	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-3	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
PW-3	8/31/2016	Arsenic, Dissolved	0.0035	0.001	0.00014	10000	mg/L
PW-3	8/31/2016	Barium, Dissolved	0.011	0.002	0.0013	2000000	mg/L
PW-3	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
PW-3	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
PW-3	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
PW-3	8/31/2016	Iron, Dissolved	0.092	0.02	0.02	13821880	mg/L
PW-3	8/31/2016	Manganese, Dissolved	0.0014	0.002	0.00032	2017400	mg/L
PW-3	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	8/31/2016	Selenium, Dissolved	0.0018	0.005	0.0011	50000	mg/L
PW-3	8/31/2016	Uranium, Dissolved	0.0015	0.0025	0.00026	NA	mg/L
PW-3	8/31/2016	Zinc, Dissolved	0.011	0.01	0.0028	5960450	mg/L
PW-3	8/31/2016	Iron, Total	0.24	0.02	0.02	13822000	mg/L
PW-3	8/31/2016	Manganese, Total	0.0016	0.002	0.00027	2017000	mg/L
PW-3	8/31/2016	Lead, Total	0.00025	0.0005	0.000081	15000	mg/L
PW-3	8/31/2016	Selenium, Total	0.0017	0.001	0.00019	50000	mg/L
PW-3	8/31/2016	Uranium, Total	0.0017	0.0005	0.00017	30000	mg/L
PW-3	8/31/2016	Zinc, Total	0.0072	0.01	0.0027	5960000	mg/L
PW-3	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-3	9/18/2017	Arsenic, Total	0.0036	0.001	0.0003	10000	mg/L
PW-3	9/18/2017	Barium, Total	0.01	0.002	0.00093	2000000	mg/L
PW-3	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-3	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-3	9/18/2017	Arsenic, Dissolved	0.0038	0.001	0.00018	10000	mg/L
PW-3	9/18/2017	Barium, Dissolved	0.011	0.002	0.00085	2000000	mg/L
PW-3	9/18/2017	Calcium, Dissolved	250	10	0.78	NA	mg/L
PW-3	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	9/18/2017	Iron, Dissolved	0.055	0.02	0.016	13821880	mg/L
PW-3	9/18/2017	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	9/18/2017	Magnesium, Dissolved	49	1	0.25	NA	mg/L
PW-3	9/18/2017	Manganese, Dissolved	0.002	0.002	0.00039	2017400	mg/L
PW-3	9/18/2017	Sodium, Dissolved	62	1	0.16	NA	mg/L
PW-3	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	9/18/2017	Selenium, Dissolved	0.0022	0.001	0.00039	50000	mg/L
PW-3	9/18/2017	Zinc, Dissolved	0.038	0.01	0.0021	5960450	mg/L
PW-3	9/18/2017	Iron, Total	0.12	0.02	0.01	13822000	mg/L
PW-3	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-3	9/18/2017	Manganese, Total	0.0021	0.002	0.0011	2017000	mg/L
PW-3	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-3	9/18/2017	Selenium, Total	0.0014	0.001	0.00071	50000	mg/L
PW-3	9/18/2017	Uranium, Total	0.0016	0.0005	0.00015	30000	mg/L
PW-3	9/18/2017	Zinc, Total	0.0039	0.01	0.0033	5960000	mg/L
PW-3	9/19/2018	Silver, Total	0.0056	0.005	0.0012	50000	mg/L
PW-3	9/19/2018	Arsenic, Total	0.0057	0.001	0.00041	10000	mg/L
PW-3	9/19/2018	Barium, Total	0.011	0.002	0.001	2000000	mg/L
PW-3	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-3	9/19/2018	Silver, Dissolved	0.006	0.005	0.0018	81200	mg/L
PW-3	9/19/2018	Arsenic, Dissolved	0.0046	0.001	0.00042	10000	mg/L
PW-3	9/19/2018	Barium, Dissolved	0.011	0.002	0.00099	2000000	mg/L
PW-3	9/19/2018	Calcium, Dissolved	240	10	0.78	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	9/19/2018	Iron, Dissolved	0.039	0.02	0.016	13821880	mg/L
PW-3	9/19/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	9/19/2018	Magnesium, Dissolved	47	1	0.25	NA	mg/L
PW-3	9/19/2018	Manganese, Dissolved	0.00095	0.002	0.00039	2017400	mg/L
PW-3	9/19/2018	Sodium, Dissolved	62	1	0.16	NA	mg/L
PW-3	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	9/19/2018	Selenium, Dissolved	0.00084	0.001	0.00076	50000	mg/L
PW-3	9/19/2018	Uranium, Dissolved	0.0016	0.0005	0.000096	NA	mg/L
PW-3	9/19/2018	Zinc, Dissolved	0.0074	0.01	0.0021	5960450	mg/L
PW-3	9/19/2018	Iron, Total	0.05	0.02	0.01	13822000	mg/L
PW-3	9/19/2018	Mercury, Total	0.000045	0.0002	0.000038	2000	mg/L
PW-3	9/19/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-3	9/19/2018	Lead, Total	0.00055	0.0005	0.00023	15000	mg/L
PW-3	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-3	9/19/2018	Uranium, Total	0.0014	0.0005	0.000068	30000	mg/L
PW-3	9/19/2018	Zinc, Total	0.0057	0.01	0.0033	5960000	mg/L
PW-3	11/20/2018	Silver, Total	0.0088	0.005	0.0012	50000	mg/L
PW-3	11/20/2018	Arsenic, Total	0.0049	0.001	0.00041	10000	mg/L
PW-3	11/20/2018	Barium, Total	0.011	0.002	0.001	2000000	mg/L
PW-3	11/20/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-3	11/20/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-3	11/20/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-3	11/20/2018	Silver, Dissolved	0.005	0.005	0.0018	81200	mg/L
PW-3	11/20/2018	Arsenic, Dissolved	0.0037	0.001	0.00042	10000	mg/L
PW-3	11/20/2018	Barium, Dissolved	0.01	0.002	0.00099	2000000	mg/L
PW-3	11/20/2018	Calcium, Dissolved	250	10	0.78	NA	mg/L
PW-3	11/20/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-3	11/20/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-3	11/20/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-3	11/20/2018	Iron, Dissolved	0.028	0.02	0.016	13821880	mg/L
PW-3	11/20/2018	Potassium, Dissolved	1.5	1	0.11	NA	mg/L
PW-3	11/20/2018	Magnesium, Dissolved	49	1	0.25	NA	mg/L
PW-3	11/20/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
PW-3	11/20/2018	Sodium, Dissolved	65	1	0.16	NA	mg/L
PW-3	11/20/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-3	11/20/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
PW-3	11/20/2018	Zinc, Dissolved	0.028	0.01	0.0021	5960450	mg/L
PW-3	11/20/2018	Iron, Total	0.031	0.02	0.01	13822000	mg/L
PW-3	11/20/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	11/20/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-3	11/20/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-3	11/20/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-3	11/20/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-3	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-3	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-3	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-3	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-3	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-3	12/28/2020	Barium, Total	0.0118	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Total	0.155	0.1	0.022	3949	mg/L
PW-3	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-3	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Total	0.0438	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
PW-3	12/28/2020	Manganese, Total	0.0151	0.01	0.003	2017000	mg/L
PW-3	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-3	12/28/2020	Zinc, Total	0.0456	0.02	0.008	5960000	mg/L
PW-3	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-3	12/28/2020	Barium, Dissolved	0.0112	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Dissolved	0.152	0.1	0.022	3949110	mg/L
PW-3	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-3	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-3	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-3	12/28/2020	Zinc, Dissolved	0.0246	0.02	0.008	5960450	mg/L
PW-3	12/28/2020	Manganese, Dissolved	0.0126	0.01	0.003	2017400	mg/L
PW-3	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-3	12/28/2020	Barium, Total	0.0137	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Total	0.183	0.1	0.022	3949	mg/L
PW-3	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-3	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Total	0.213	0.2	0.075	13822000	mg/L
PW-3	12/28/2020	Manganese, Total	0.0193	0.01	0.003	2017000	mg/L
PW-3	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-3	12/28/2020	Zinc, Total	0.0464	0.02	0.008	5960000	mg/L
PW-3	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-3	12/28/2020	Barium, Dissolved	0.0117	0.01	0.003	2000000	mg/L
PW-3	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-3	12/28/2020	Boron, Dissolved	0.177	0.1	0.022	3949110	mg/L
PW-3	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-3	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-3	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-3	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-3	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-3	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-3	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-3	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-3	12/28/2020	Zinc, Dissolved	0.0386	0.02	0.008	5960450	mg/L
PW-3	12/28/2020	Manganese, Dissolved	0.0179	0.01	0.003	2017400	mg/L
PW-3	12/28/2020	Arsenic, Total Recoverable	5.34	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Total Recoverable	4.2	1	0.133	15	ug/L
PW-3	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-3	12/28/2020	Arsenic, Dissolved	3.23	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-3	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-3	12/28/2020	Arsenic, Total Recoverable	2.84	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-3	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-3	12/28/2020	Arsenic, Dissolved	2.49	1	0.286	10	ug/L
PW-3	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-3	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-3	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-3	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-3	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-3	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-3	9/21/2020	Arsenic, Total	0.0037	0.001	0.00026	10000	mg/L
PW-3	9/21/2020	Lead, Total	0.00031	0.0005	0.000034	15000	mg/L
PW-3	9/21/2020	Selenium, Total	0.00094	0.001	0.00066	50000	mg/L
PW-3	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-3	9/21/2020	Uranium, Total	0.0012	0.0005	0.000065	30000	mg/L
PW-3	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-3	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	9/21/2020	Barium, Total	0.0095	0.003	0.0016	2000000	mg/L
PW-3	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-3	9/21/2020	Boron, Total	0.13	0.04	0.0074	3949	mg/L
PW-3	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-3	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-3	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-3	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-3	9/21/2020	Iron, Total	0.17	0.05	0.013	13822000	mg/L
PW-3	9/21/2020	Manganese, Total	0.0048	0.002	0.00081	2017000	mg/L
PW-3	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-3	9/21/2020	Nickel, Total	0.004	0.01	0.0033	372000	mg/L
PW-3	9/21/2020	Silver, Total	0.0034	0.005	0.0013	50000	mg/L
PW-3	9/21/2020	Zinc, Total	0.02	0.01	0.0064	5960000	mg/L
PW-3	9/21/2020	Arsenic, Dissolved	0.0035	0.005	0.001	10000	mg/L
PW-3	9/21/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
PW-3	9/21/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
PW-3	9/21/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
PW-3	9/21/2020	Uranium, Dissolved	0.0016	0.0025	0.00033	NA	mg/L
PW-3	9/21/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
PW-3	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-3	9/21/2020	Barium, Dissolved	0.0091	0.002	0.0011	2000000	mg/L
PW-3	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-3	9/21/2020	Boron, Dissolved	0.13	0.04	0.0067	3949110	mg/L
PW-3	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-3	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-3	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-3	9/21/2020	Iron, Dissolved	0.095	0.02	0.01	13821880	mg/L
PW-3	9/21/2020	Manganese, Dissolved	0.0046	0.002	0.00058	2017400	mg/L
PW-3	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-3	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-3	9/21/2020	Silver, Dissolved	0.0036	0.005	0.0013	81200	mg/L
PW-3	9/21/2020	Zinc, Dissolved	0.027	0.01	0.006	5960450	mg/L
PW-3	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-3	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
PW-3	2/20/2019	Arsenic, Dissolved	0.0037	0.001	0.000068	10000	mg/L
PW-3	2/20/2019	Barium, Dissolved	0.0099	0.002	0.000648	2000000	mg/L
PW-3	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	2/20/2019	Calcium, Dissolved	250	5	0.309446	NA	mg/L
PW-3	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	2/20/2019	Iron, Dissolved	0.033	0.02	0.008747	13821880	mg/L
PW-3	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
PW-3	2/20/2019	Magnesium, Dissolved	47	1	0.05029	NA	mg/L
PW-3	2/20/2019	Manganese, Dissolved	0.0013	0.002	0.00029	2017400	mg/L
PW-3	2/20/2019	Potassium, Dissolved	1.4	1	0.162288	NA	mg/L
PW-3	2/20/2019	Selenium, Dissolved	0.00089	0.001	0.000203	50000	mg/L
PW-3	2/20/2019	Silver, Dissolved	0.004	0.005	0.000942	81200	mg/L
PW-3	2/20/2019	Sodium, Dissolved	62	1	0.416176	NA	mg/L
PW-3	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
PW-3	2/20/2019	Uranium, Dissolved	0.0014	0.0005	0.00003	NA	mg/L
PW-3	2/20/2019	Zinc, Dissolved	0.029	0.01	0.002252	5960450	mg/L
PW-3	2/20/2019	Antimony, Total	ND	0.001	0.000204	6000	mg/L
PW-3	2/20/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
PW-3	2/20/2019	Barium, Total	0.011	0.002	0.000648	2000000	mg/L
PW-3	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-3	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	2/20/2019	Iron, Total	0.035	0.02	0.008747	13822000	mg/L
PW-3	2/20/2019	Lead, Total	ND	0.0005	0.000047	15000	mg/L
PW-3	2/20/2019	Manganese, Total	0.0012	0.002	0.00029	2017000	mg/L
PW-3	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	2/20/2019	Selenium, Total	0.00079	0.001	0.000478	50000	mg/L
PW-3	2/20/2019	Silver, Total	0.0058	0.005	0.001418	50000	mg/L
PW-3	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	2/20/2019	Uranium, Total	0.0014	0.0005	0.000085	30000	mg/L
PW-3	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-3	8/28/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	8/28/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-3	8/28/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
PW-3	8/28/2019	Barium, Total	0.01	0.002	0.000648	2000000	mg/L
PW-3	8/28/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-3	8/28/2019	Boron, Total	0.15	0.04	0.004531	3949	mg/L
PW-3	8/28/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	8/28/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	8/28/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-3	8/28/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	8/28/2019	Iron, Total	0.032	0.02	0.008747	13822000	mg/L
PW-3	8/28/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-3	8/28/2019	Manganese, Total	0.001	0.002	0.00029	2017000	mg/L
PW-3	8/28/2019	Mercury, Total	0.00011	0.0002	0.000038	2000	mg/L
PW-3	8/28/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
PW-3	8/28/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-3	8/28/2019	Selenium, Total	0.0011	0.001	0.000478	50000	mg/L
PW-3	8/28/2019	Silver, Total	0.0041	0.005	0.001418	50000	mg/L
PW-3	8/28/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	8/28/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-3	8/28/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-3	8/28/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-3	8/28/2019	Antimony, Dissolved	0.00087	0.001	0.000389	6000	mg/L
PW-3	8/28/2019	Arsenic, Dissolved	0.0037	0.001	0.000101	10000	mg/L
PW-3	8/28/2019	Barium, Dissolved	0.0096	0.002	0.000648	2000000	mg/L
PW-3	8/28/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	8/28/2019	Boron, Dissolved	0.14	0.04	0.004531	3949110	mg/L
PW-3	8/28/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	8/28/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	8/28/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-3	8/28/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	8/28/2019	Iron, Dissolved	0.028	0.02	0.008747	13821880	mg/L
PW-3	8/28/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
PW-3	8/28/2019	Manganese, Dissolved	0.001	0.002	0.00029	2017400	mg/L
PW-3	8/28/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-3	8/28/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-3	8/28/2019	Selenium, Dissolved	0.0011	0.001	0.000171	50000	mg/L
PW-3	8/28/2019	Silver, Dissolved	0.0038	0.005	0.000942	81200	mg/L
PW-3	8/28/2019	Thallium, Dissolved	0.000054	0.0005	0.000048	2000	mg/L
PW-3	8/28/2019	Uranium, Dissolved	0.0013	0.0005	0.000075	NA	mg/L
PW-3	8/28/2019	Zinc, Dissolved	0.015	0.01	0.002252	5960450	mg/L
PW-3	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-3	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
PW-3	5/14/2019	Arsenic, Dissolved	0.0038	0.005	0.000504	10000	mg/L
PW-3	5/14/2019	Barium, Dissolved	0.0099	0.002	0.000648	2000000	mg/L
PW-3	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-3	5/14/2019	Boron, Dissolved	0.13	0.04	0.004531	3949110	mg/L
PW-3	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-3	5/14/2019	Calcium, Dissolved	240	10	0.618891	NA	mg/L
PW-3	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-3	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-3	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-3	5/14/2019	Iron, Dissolved	0.019	0.02	0.008747	13821880	mg/L
PW-3	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
PW-3	5/14/2019	Magnesium, Dissolved	50	1	0.05029	NA	mg/L
PW-3	5/14/2019	Manganese, Dissolved	0.00066	0.002	0.00029	2017400	mg/L
PW-3	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-3	5/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-3	5/14/2019	Potassium, Dissolved	1.5	1	0.162288	NA	mg/L
PW-3	5/14/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
PW-3	5/14/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
PW-3	5/14/2019	Sodium, Dissolved	72	1	0.416176	NA	mg/L
PW-3	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
PW-3	5/14/2019	Uranium, Dissolved	0.0014	0.0025	0.000374	NA	mg/L
PW-3	5/14/2019	Zinc, Dissolved	0.065	0.01	0.002252	5960450	mg/L
PW-3	5/14/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
PW-3	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-3	5/14/2019	Arsenic, Total	0.0037	0.001	0.000312	10000	mg/L
PW-3	5/14/2019	Barium, Total	0.01	0.002	0.000648	2000000	mg/L
PW-3	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	Boron, Total	0.13	0.04	0.004531	3949	mg/L
PW-3	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-3	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-3	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-3	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-3	5/14/2019	Iron, Total	0.023	0.02	0.008747	13822000	mg/L
PW-3	5/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-3	5/14/2019	Manganese, Total	0.00053	0.002	0.00029	2017000	mg/L
PW-3	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-3	5/14/2019	Molybdenum, Total	0.0076	0.008	0.006735	98700	mg/L
PW-3	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-3	5/14/2019	Selenium, Total	0.00077	0.001	0.000478	50000	mg/L
PW-3	5/14/2019	Silver, Total	0.003	0.005	0.001418	50000	mg/L
PW-3	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-3	5/14/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-3	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	5/14/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
PW-4	5/14/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
PW-4	5/14/2019	Arsenic, Dissolved	0.0031	0.005	0.000504	10000	mg/L
PW-4	5/14/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
PW-4	5/14/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-4	5/14/2019	Boron, Dissolved	0.05	0.04	0.004531	3949110	mg/L
PW-4	5/14/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-4	5/14/2019	Calcium, Dissolved	170	10	0.618891	NA	mg/L
PW-4	5/14/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-4	5/14/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
PW-4	5/14/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
PW-4	5/14/2019	Iron, Dissolved	0.033	0.02	0.008747	13821880	mg/L
PW-4	5/14/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
PW-4	5/14/2019	Magnesium, Dissolved	41	1	0.05029	NA	mg/L
PW-4	5/14/2019	Manganese, Dissolved	0.00049	0.002	0.00029	2017400	mg/L
PW-4	5/14/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
PW-4	5/14/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
PW-4	5/14/2019	Potassium, Dissolved	1.2	1	0.162288	NA	mg/L
PW-4	5/14/2019	Selenium, Dissolved	0.0017	0.005	0.000857	50000	mg/L
PW-4	5/14/2019	Silver, Dissolved	0.002	0.005	0.000942	81200	mg/L
PW-4	5/14/2019	Sodium, Dissolved	18	1	0.416176	NA	mg/L
PW-4	5/14/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
PW-4	5/14/2019	Uranium, Dissolved	0.0015	0.0025	0.000374	NA	mg/L
PW-4	5/14/2019	Zinc, Dissolved	0.038	0.01	0.002252	5960450	mg/L
PW-4	5/14/2019	Aluminum, Total	ND	0.02	0.002488	19914000	mg/L
PW-4	5/14/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-4	5/14/2019	Arsenic, Total	0.0031	0.001	0.000312	10000	mg/L
PW-4	5/14/2019	Barium, Total	0.013	0.002	0.000648	2000000	mg/L
PW-4	5/14/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-4	5/14/2019	Boron, Total	0.05	0.04	0.004531	3949	mg/L
PW-4	5/14/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-4	5/14/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-4	5/14/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
PW-4	5/14/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-4	5/14/2019	Iron, Total	0.068	0.02	0.008747	13822000	mg/L
PW-4	5/14/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-4	5/14/2019	Manganese, Total	ND	0.002	0.00029	2017000	mg/L
PW-4	5/14/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	5/14/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
PW-4	5/14/2019	Nickel, Total	ND	0.01	0.004009	372000	mg/L
PW-4	5/14/2019	Selenium, Total	0.00089	0.001	0.000478	50000	mg/L
PW-4	5/14/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
PW-4	5/14/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-4	5/14/2019	Uranium, Total	0.0014	0.0005	0.000085	30000	mg/L
PW-4	5/14/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	2/20/2019	Antimony, Dissolved	ND	0.001	0.000204	6000	mg/L
PW-4	2/20/2019	Arsenic, Dissolved	0.0031	0.001	0.000068	10000	mg/L
PW-4	2/20/2019	Barium, Dissolved	0.013	0.002	0.000648	2000000	mg/L
PW-4	2/20/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
PW-4	2/20/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
PW-4	2/20/2019	Calcium, Dissolved	190	5	0.309446	NA	mg/L
PW-4	2/20/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
PW-4	2/20/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	2/20/2019	Iron, Dissolved	0.031	0.02	0.008747	13821880	mg/L
PW-4	2/20/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
PW-4	2/20/2019	Magnesium, Dissolved	38	1	0.05029	NA	mg/L
PW-4	2/20/2019	Manganese, Dissolved	0.00034	0.002	0.00029	2017400	mg/L
PW-4	2/20/2019	Potassium, Dissolved	1.1	1	0.162288	NA	mg/L
PW-4	2/20/2019	Selenium, Dissolved	0.00096	0.001	0.000203	50000	mg/L
PW-4	2/20/2019	Silver, Dissolved	0.0033	0.005	0.000942	81200	mg/L
PW-4	2/20/2019	Sodium, Dissolved	16	1	0.416176	NA	mg/L
PW-4	2/20/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
PW-4	2/20/2019	Uranium, Dissolved	0.0015	0.0005	0.00003	NA	mg/L
PW-4	2/20/2019	Zinc, Dissolved	0.047	0.01	0.002252	5960450	mg/L
PW-4	2/20/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
PW-4	2/20/2019	Arsenic, Total	0.0039	0.001	0.000312	10000	mg/L
PW-4	2/20/2019	Barium, Total	0.014	0.002	0.000648	2000000	mg/L
PW-4	2/20/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
PW-4	2/20/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
PW-4	2/20/2019	Chromium, Total	ND	0.006	0.001533	50000	mg/L
PW-4	2/20/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
PW-4	2/20/2019	Iron, Total	0.18	0.02	0.008747	13822000	mg/L
PW-4	2/20/2019	Lead, Total	ND	0.0005	0.000055	15000	mg/L
PW-4	2/20/2019	Manganese, Total	0.00072	0.002	0.00029	2017000	mg/L
PW-4	2/20/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	2/20/2019	Selenium, Total	0.001	0.001	0.000478	50000	mg/L
PW-4	2/20/2019	Silver, Total	0.004	0.005	0.001418	50000	mg/L
PW-4	2/20/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
PW-4	2/20/2019	Uranium, Total	0.0013	0.0005	0.000085	30000	mg/L
PW-4	2/20/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
PW-4	9/21/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
PW-4	9/21/2020	Arsenic, Total	0.0029	0.001	0.00026	10000	mg/L
PW-4	9/21/2020	Lead, Total	ND	0.0005	0.000034	15000	mg/L
PW-4	9/21/2020	Selenium, Total	0.0011	0.001	0.00066	50000	mg/L
PW-4	9/21/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
PW-4	9/21/2020	Uranium, Total	0.0013	0.0005	0.000065	30000	mg/L
PW-4	9/21/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
PW-4	9/21/2020	Aluminum, Total	ND	0.02	0.0074	19914000	mg/L
PW-4	9/21/2020	Barium, Total	0.013	0.003	0.0016	2000000	mg/L
PW-4	9/21/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
PW-4	9/21/2020	Boron, Total	0.053	0.04	0.0074	3949	mg/L
PW-4	9/21/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	9/21/2020	Chromium, Total	ND	0.006	0.0021	50000	mg/L
PW-4	9/21/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
PW-4	9/21/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-4	9/21/2020	Iron, Total	0.08	0.05	0.013	13822000	mg/L
PW-4	9/21/2020	Manganese, Total	0.0012	0.002	0.00081	2017000	mg/L
PW-4	9/21/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
PW-4	9/21/2020	Nickel, Total	ND	0.01	0.0033	372000	mg/L
PW-4	9/21/2020	Silver, Total	0.0027	0.005	0.0013	50000	mg/L
PW-4	9/21/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
PW-4	9/21/2020	Arsenic, Dissolved	0.0032	0.001	0.00021	10000	mg/L
PW-4	9/21/2020	Lead, Dissolved	ND	0.0005	0.000034	NA	mg/L
PW-4	9/21/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
PW-4	9/21/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
PW-4	9/21/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
PW-4	9/21/2020	Uranium, Dissolved	0.0011	0.0005	0.000065	NA	mg/L
PW-4	9/21/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
PW-4	9/21/2020	Barium, Dissolved	0.012	0.002	0.0011	2000000	mg/L
PW-4	9/21/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
PW-4	9/21/2020	Boron, Dissolved	0.056	0.04	0.0067	3949110	mg/L
PW-4	9/21/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
PW-4	9/21/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
PW-4	9/21/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
PW-4	9/21/2020	Iron, Dissolved	0.07	0.02	0.01	13821880	mg/L
PW-4	9/21/2020	Manganese, Dissolved	0.0018	0.002	0.00058	2017400	mg/L
PW-4	9/21/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
PW-4	9/21/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
PW-4	9/21/2020	Silver, Dissolved	0.0029	0.005	0.0013	81200	mg/L
PW-4	9/21/2020	Zinc, Dissolved	0.38	0.01	0.006	5960450	mg/L
PW-4	9/21/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
PW-4	12/28/2020	Arsenic, Total Recoverable	1.71	1	0.286	10	ug/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	12/28/2020	Lead, Total Recoverable	ND	1	0.133	15	ug/L
PW-4	12/28/2020	Antimony, Total Recoverable	ND	2	0.352	6	ug/L
PW-4	12/28/2020	Selenium, Total Recoverable	ND	5	1.43	50	ug/L
PW-4	12/28/2020	Thallium, Total Recoverable	ND	1	0.339	2	ug/L
PW-4	12/28/2020	Uranium, Total Recoverable	ND	5	1.12	30	ug/L
PW-4	12/28/2020	Arsenic, Dissolved	2.22	1	0.286	10	ug/L
PW-4	12/28/2020	Lead, Dissolved	ND	1	0.133	NA	ug/L
PW-4	12/28/2020	Antimony, Dissolved	ND	2	0.352	6	ug/L
PW-4	12/28/2020	Selenium, Dissolved	ND	5	1.43	50	ug/L
PW-4	12/28/2020	Thallium, Dissolved	ND	1	0.339	2	ug/L
PW-4	12/28/2020	Uranium, Dissolved	ND	5	1.12	NA	ug/L
PW-4	12/28/2020	Aluminum, Total	ND	0.2	0.051	19914000	mg/L
PW-4	12/28/2020	Barium, Total	0.0156	0.01	0.003	2000000	mg/L
PW-4	12/28/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
PW-4	12/28/2020	Boron, Total	ND	0.1	0.022	3949	mg/L
PW-4	12/28/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
PW-4	12/28/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
PW-4	12/28/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
PW-4	12/28/2020	Copper, Total	ND	0.02	0.008	790000	mg/L
PW-4	12/28/2020	Iron, Total	ND	0.2	0.075	13822000	mg/L
PW-4	12/28/2020	Manganese, Total	ND	0.01	0.003	2017000	mg/L
PW-4	12/28/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
PW-4	12/28/2020	Nickel, Total	ND	0.006	0.003	372000	mg/L
PW-4	12/28/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
PW-4	12/28/2020	Zinc, Total	ND	0.02	0.008	5960000	mg/L
PW-4	12/28/2020	Aluminum, Dissolved	ND	0.2	0.051	19913930	mg/L
PW-4	12/28/2020	Barium, Dissolved	0.0147	0.01	0.003	2000000	mg/L
PW-4	12/28/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
PW-4	12/28/2020	Boron, Dissolved	ND	0.1	0.022	3949110	mg/L
PW-4	12/28/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
PW-4	12/28/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
PW-4	12/28/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
PW-4	12/28/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
PW-4	12/28/2020	Iron, Dissolved	ND	0.2	0.075	13821880	mg/L
PW-4	12/28/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
PW-4	12/28/2020	Nickel, Dissolved	ND	0.006	0.003	372000	mg/L
PW-4	12/28/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
PW-4	12/28/2020	Zinc, Dissolved	ND	0.02	0.008	5960450	mg/L
PW-4	12/28/2020	Manganese, Dissolved	ND	0.01	0.003	2017400	mg/L
PW-4	12/28/2020	Mercury, Dissolved	ND	0.2	0.07	NA	ug/L
PW-4	12/28/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
PW-4	9/10/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
PW-4	9/10/2013	Arsenic, Total	0.003	0.001	0.000098	10000	mg/L
PW-4	9/10/2013	Barium, Total	0.014	0.002	0.00095	2000000	mg/L
PW-4	9/10/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
PW-4	9/10/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
PW-4	9/10/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
PW-4	9/10/2013	Iron, Total	0.12	0.02	0.0089	13822000	mg/L
PW-4	9/10/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
PW-4	9/10/2013	Manganese, Total	0.007	0.002	0.00016	2017000	mg/L
PW-4	9/10/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
PW-4	9/10/2013	Selenium, Total	0.0012	0.001	0.00029	50000	mg/L
PW-4	9/10/2013	Uranium, Total	0.0016	0.001	0.0000073	30000	mg/L
PW-4	9/10/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
PW-4	6/10/2016	Silver, Total	ND	0.005	0.0028	50000	mg/L
PW-4	6/10/2016	Arsenic, Total	0.003	0.001	0.00014	10000	mg/L
PW-4	6/10/2016	Barium, Total	0.014	0.002	0.0013	2000000	mg/L
PW-4	6/10/2016	Calcium, Total	190	5	1.3	NA	mg/L
PW-4	6/10/2016	Cadmium, Total	ND	0.002	0.00075	5000	mg/L
PW-4	6/10/2016	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	6/10/2016	Copper, Total	ND	0.006	0.004	790000	mg/L
PW-4	6/10/2016	Iron, Total	0.11	0.02	0.0091	13822000	mg/L
PW-4	6/10/2016	Mercury, Total	ND	0.0002	0.000053	2000	mg/L
PW-4	6/10/2016	Potassium, Total	1.1	1	0.18	NA	mg/L
PW-4	6/10/2016	Magnesium, Total	40	1	0.013	NA	mg/L
PW-4	6/10/2016	Manganese, Total	0.0012	0.002	0.00032	2017000	mg/L
PW-4	6/10/2016	Sodium, Total	16	1	0.096	NA	mg/L
PW-4	6/10/2016	Lead, Total	ND	0.0005	0.00017	15000	mg/L
PW-4	6/10/2016	Selenium, Total	0.0017	0.001	0.00021	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	6/10/2016	Uranium, Total	0.0016	0.0005	0.000051	30000	mg/L
PW-4	6/10/2016	Zinc, Total	ND	0.01	0.0028	5960000	mg/L
PW-4	8/31/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-4	8/31/2016	Arsenic, Total	0.0037	0.001	0.00021	10000	mg/L
PW-4	8/31/2016	Barium, Total	0.014	0.002	0.00079	2000000	mg/L
PW-4	8/31/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	8/31/2016	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-4	8/31/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-4	8/31/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
PW-4	8/31/2016	Arsenic, Dissolved	0.0029	0.001	0.00014	10000	mg/L
PW-4	8/31/2016	Barium, Dissolved	0.014	0.002	0.0013	2000000	mg/L
PW-4	8/31/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
PW-4	8/31/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
PW-4	8/31/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
PW-4	8/31/2016	Iron, Dissolved	0.061	0.02	0.02	13821880	mg/L
PW-4	8/31/2016	Manganese, Dissolved	0.00098	0.002	0.00032	2017400	mg/L
PW-4	8/31/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	8/31/2016	Selenium, Dissolved	0.0018	0.005	0.0011	50000	mg/L
PW-4	8/31/2016	Uranium, Dissolved	0.0015	0.0025	0.00026	NA	mg/L
PW-4	8/31/2016	Zinc, Dissolved	ND	0.01	0.0028	5960450	mg/L
PW-4	8/31/2016	Iron, Total	0.14	0.02	0.02	13822000	mg/L
PW-4	8/31/2016	Manganese, Total	0.0012	0.002	0.00027	2017000	mg/L
PW-4	8/31/2016	Lead, Total	ND	0.0005	0.000081	15000	mg/L
PW-4	8/31/2016	Selenium, Total	0.0016	0.001	0.00019	50000	mg/L
PW-4	8/31/2016	Uranium, Total	0.0018	0.0005	0.00017	30000	mg/L
PW-4	8/31/2016	Zinc, Total	0.0036	0.01	0.0027	5960000	mg/L
PW-4	3/30/2017	Silver, Total	ND	0.005	0.0015	50000	mg/L
PW-4	3/30/2017	Arsenic, Total	0.0032	0.001	0.00021	10000	mg/L
PW-4	3/30/2017	Barium, Total	0.012	0.002	0.00079	2000000	mg/L
PW-4	3/30/2017	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
PW-4	3/30/2017	Chromium, Total	ND	0.006	0.0027	50000	mg/L
PW-4	3/30/2017	Copper, Total	ND	0.006	0.003	790000	mg/L
PW-4	3/30/2017	Silver, Dissolved	ND	0.005	0.00088	81200	mg/L
PW-4	3/30/2017	Arsenic, Dissolved	0.003	0.001	0.00018	10000	mg/L
PW-4	3/30/2017	Barium, Dissolved	0.013	0.002	0.00085	2000000	mg/L
PW-4	3/30/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	3/30/2017	Chromium, Dissolved	ND	0.006	0.001	100000	mg/L
PW-4	3/30/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	3/30/2017	Iron, Dissolved	0.074	0.02	0.02	13821880	mg/L
PW-4	3/30/2017	Manganese, Dissolved	0.00088	0.002	0.00038	2017400	mg/L
PW-4	3/30/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	3/30/2017	Selenium, Dissolved	0.0018	0.001	0.00039	50000	mg/L
PW-4	3/30/2017	Uranium, Dissolved	0.0015	0.0005	0.00005	NA	mg/L
PW-4	3/30/2017	Zinc, Dissolved	0.031	0.01	0.0011	5960450	mg/L
PW-4	3/30/2017	Iron, Total	0.15	0.02	0.02	13822000	mg/L
PW-4	3/30/2017	Mercury, Total	0.000052	0.0002	0.000037	2000	mg/L
PW-4	3/30/2017	Manganese, Total	0.00087	0.002	0.00027	2017000	mg/L
PW-4	3/30/2017	Lead, Total	ND	0.0005	0.000081	15000	mg/L
PW-4	3/30/2017	Selenium, Total	0.0013	0.005	0.00094	50000	mg/L
PW-4	3/30/2017	Uranium, Total	0.0015	0.0005	0.00017	30000	mg/L
PW-4	3/30/2017	Zinc, Total	ND	0.01	0.0027	5960000	mg/L
PW-4	9/18/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
PW-4	9/18/2017	Arsenic, Total	0.0029	0.001	0.0003	10000	mg/L
PW-4	9/18/2017	Barium, Total	0.013	0.002	0.00093	2000000	mg/L
PW-4	9/18/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	9/18/2017	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	9/18/2017	Copper, Total	ND	0.006	0.0017	790000	mg/L
PW-4	9/18/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-4	9/18/2017	Arsenic, Dissolved	0.0031	0.001	0.00018	10000	mg/L
PW-4	9/18/2017	Barium, Dissolved	0.014	0.002	0.00085	2000000	mg/L
PW-4	9/18/2017	Calcium, Dissolved	180	10	0.78	NA	mg/L
PW-4	9/18/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	9/18/2017	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	9/18/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	9/18/2017	Iron, Dissolved	0.04	0.02	0.016	13821880	mg/L
PW-4	9/18/2017	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	9/18/2017	Magnesium, Dissolved	39	1	0.25	NA	mg/L
PW-4	9/18/2017	Manganese, Dissolved	0.00074	0.002	0.00039	2017400	mg/L
PW-4	9/18/2017	Sodium, Dissolved	16	1	0.16	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/18/2017	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	9/18/2017	Selenium, Dissolved	0.0016	0.001	0.00039	50000	mg/L
PW-4	9/18/2017	Zinc, Dissolved	0.053	0.01	0.0021	5960450	mg/L
PW-4	9/18/2017	Iron, Total	0.087	0.02	0.01	13822000	mg/L
PW-4	9/18/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
PW-4	9/18/2017	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-4	9/18/2017	Lead, Total	ND	0.0005	0.000095	15000	mg/L
PW-4	9/18/2017	Selenium, Total	0.0012	0.001	0.00071	50000	mg/L
PW-4	9/18/2017	Uranium, Total	0.0016	0.0005	0.00015	30000	mg/L
PW-4	9/18/2017	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-4	3/1/2018	Silver, Total	0.0048	0.005	0.0012	50000	mg/L
PW-4	3/1/2018	Arsenic, Total	0.0026	0.001	0.00041	10000	mg/L
PW-4	3/1/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
PW-4	3/1/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	3/1/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	3/1/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	3/1/2018	Silver, Dissolved	0.004	0.005	0.0018	81200	mg/L
PW-4	3/1/2018	Arsenic, Dissolved	0.0027	0.005	0.0021	10000	mg/L
PW-4	3/1/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
PW-4	3/1/2018	Calcium, Dissolved	180	5	0.39	NA	mg/L
PW-4	3/1/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	3/1/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	3/1/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	3/1/2018	Iron, Dissolved	0.33	0.02	0.016	13821880	mg/L
PW-4	3/1/2018	Potassium, Dissolved	1.3	1	0.11	NA	mg/L
PW-4	3/1/2018	Magnesium, Dissolved	40	1	0.25	NA	mg/L
PW-4	3/1/2018	Manganese, Dissolved	0.0094	0.002	0.00039	2017400	mg/L
PW-4	3/1/2018	Sodium, Dissolved	18	1	0.16	NA	mg/L
PW-4	3/1/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	3/1/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
PW-4	3/1/2018	Uranium, Dissolved	0.0013	0.0025	0.00048	NA	mg/L
PW-4	3/1/2018	Zinc, Dissolved	0.0067	0.01	0.0021	5960450	mg/L
PW-4	3/1/2018	Iron, Total	0.47	0.02	0.01	13822000	mg/L
PW-4	3/1/2018	Mercury, Total	0.000048	0.0002	0.000037	2000	mg/L
PW-4	3/1/2018	Manganese, Total	0.01	0.002	0.0011	2017000	mg/L
PW-4	3/1/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	3/1/2018	Selenium, Total	0.0012	0.001	0.00098	50000	mg/L
PW-4	3/1/2018	Uranium, Total	0.0015	0.0005	0.000068	30000	mg/L
PW-4	3/1/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
PW-4	9/19/2018	Silver, Total	0.0036	0.005	0.0012	50000	mg/L
PW-4	9/19/2018	Arsenic, Total	0.0045	0.001	0.00041	10000	mg/L
PW-4	9/19/2018	Barium, Total	0.014	0.002	0.001	2000000	mg/L
PW-4	9/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	9/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	9/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	9/19/2018	Silver, Dissolved	0.0039	0.005	0.0018	81200	mg/L
PW-4	9/19/2018	Arsenic, Dissolved	0.0038	0.001	0.00042	10000	mg/L
PW-4	9/19/2018	Barium, Dissolved	0.014	0.002	0.00099	2000000	mg/L
PW-4	9/19/2018	Calcium, Dissolved	170	10	0.78	NA	mg/L
PW-4	9/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	9/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	9/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	9/19/2018	Iron, Dissolved	0.085	0.02	0.016	13821880	mg/L
PW-4	9/19/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	9/19/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
PW-4	9/19/2018	Manganese, Dissolved	0.00084	0.002	0.00039	2017400	mg/L
PW-4	9/19/2018	Sodium, Dissolved	16	1	0.16	NA	mg/L
PW-4	9/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	9/19/2018	Selenium, Dissolved	0.00099	0.001	0.00076	50000	mg/L
PW-4	9/19/2018	Uranium, Dissolved	0.0016	0.0005	0.000096	NA	mg/L
PW-4	9/19/2018	Zinc, Dissolved	0.0083	0.01	0.0021	5960450	mg/L
PW-4	9/19/2018	Iron, Total	0.11	0.02	0.01	13822000	mg/L
PW-4	9/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	9/19/2018	Manganese, Total	0.0015	0.002	0.0011	2017000	mg/L
PW-4	9/19/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	9/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-4	9/19/2018	Uranium, Total	0.0014	0.0005	0.000068	30000	mg/L
PW-4	9/19/2018	Zinc, Total	0.0047	0.01	0.0033	5960000	mg/L
PW-4	11/19/2018	Silver, Total	0.0065	0.005	0.0012	50000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	11/19/2018	Arsenic, Total	0.0038	0.001	0.00041	10000	mg/L
PW-4	11/19/2018	Barium, Total	0.013	0.002	0.001	2000000	mg/L
PW-4	11/19/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
PW-4	11/19/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
PW-4	11/19/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
PW-4	11/19/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
PW-4	11/19/2018	Arsenic, Dissolved	0.0033	0.001	0.00042	10000	mg/L
PW-4	11/19/2018	Barium, Dissolved	0.012	0.002	0.00099	2000000	mg/L
PW-4	11/19/2018	Calcium, Dissolved	190	10	0.78	NA	mg/L
PW-4	11/19/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
PW-4	11/19/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
PW-4	11/19/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
PW-4	11/19/2018	Iron, Dissolved	0.061	0.02	0.016	13821880	mg/L
PW-4	11/19/2018	Potassium, Dissolved	1.2	1	0.11	NA	mg/L
PW-4	11/19/2018	Magnesium, Dissolved	38	1	0.25	NA	mg/L
PW-4	11/19/2018	Manganese, Dissolved	ND	0.002	0.00039	2017400	mg/L
PW-4	11/19/2018	Sodium, Dissolved	17	1	0.16	NA	mg/L
PW-4	11/19/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
PW-4	11/19/2018	Selenium, Dissolved	0.001	0.001	0.00076	50000	mg/L
PW-4	11/19/2018	Uranium, Dissolved	0.0015	0.0005	0.000096	NA	mg/L
PW-4	11/19/2018	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
PW-4	11/19/2018	Iron, Total	0.089	0.02	0.01	13822000	mg/L
PW-4	11/19/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
PW-4	11/19/2018	Manganese, Total	ND	0.002	0.0011	2017000	mg/L
PW-4	11/19/2018	Lead, Total	ND	0.0005	0.00023	15000	mg/L
PW-4	11/19/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
PW-4	11/19/2018	Uranium, Total	0.0013	0.0005	0.000068	30000	mg/L
PW-4	11/19/2018	Zinc, Total	ND	0.01	0.0033	5960000	mg/L
SMW-2	8/23/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
SMW-2	8/23/2012	Arsenic, Total	0.005	0.0025	0.0014	10000	mg/L
SMW-2	8/23/2012	Barium, Total	0.038	0.002	0.00039	2000000	mg/L
SMW-2	8/23/2012	Calcium, Total	260	5	0.13	NA	mg/L
SMW-2	8/23/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
SMW-2	8/23/2012	Chromium, Total	0.17	0.006	0.001	50000	mg/L
SMW-2	8/23/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-2	8/23/2012	Iron, Total	1.5	0.1	0.066	13822000	mg/L
SMW-2	8/23/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
SMW-2	8/23/2012	Potassium, Total	1.9	1	0.48	NA	mg/L
SMW-2	8/23/2012	Magnesium, Total	84	1	0.013	NA	mg/L
SMW-2	8/23/2012	Manganese, Total	0.25	0.002	0.00026	2017000	mg/L
SMW-2	8/23/2012	Sodium, Total	2100	50	2.2	NA	mg/L
SMW-2	8/23/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
SMW-2	8/23/2012	Selenium, Total	0.0072	0.0025	0.0025	50000	mg/L
SMW-2	8/23/2012	Uranium, Total	0.11	0.0025	0.00003	30000	mg/L
SMW-2	8/23/2012	Zinc, Total	0.021	0.01	0.0011	5960000	mg/L
SMW-2	9/9/2013	Silver, Total	ND	0.025	0.0096	50000	mg/L
SMW-2	9/9/2013	Arsenic, Total	0.0055	0.001	0.000098	10000	mg/L
SMW-2	9/9/2013	Barium, Total	0.016	0.002	0.00095	2000000	mg/L
SMW-2	9/9/2013	Calcium, Total	270	5	0.34	NA	mg/L
SMW-2	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
SMW-2	9/9/2013	Chromium, Total	ND	0.006	0.00084	50000	mg/L
SMW-2	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-2	9/9/2013	Iron, Total	0.028	0.02	0.0089	13822000	mg/L
SMW-2	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
SMW-2	9/9/2013	Potassium, Total	1.7	1	0.24	NA	mg/L
SMW-2	9/9/2013	Magnesium, Total	75	1	0.028	NA	mg/L
SMW-2	9/9/2013	Manganese, Total	0.17	0.002	0.00016	2017000	mg/L
SMW-2	9/9/2013	Sodium, Total	2200	50	16	NA	mg/L
SMW-2	9/9/2013	Lead, Total	ND	0.01	0.000075	15000	mg/L
SMW-2	9/9/2013	Selenium, Total	0.011	0.01	0.0029	50000	mg/L
SMW-2	9/9/2013	Uranium, Total	0.1	0.01	0.000073	30000	mg/L
SMW-2	9/9/2013	Zinc, Total	0.014	0.01	0.00076	5960000	mg/L
SMW-2	9/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
SMW-2	9/11/2014	Arsenic, Total	ND	0.01	0.0011	10000	mg/L
SMW-2	9/11/2014	Barium, Total	0.015	0.002	0.0011	2000000	mg/L
SMW-2	9/11/2014	Calcium, Total	280	10	0.82	NA	mg/L
SMW-2	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
SMW-2	9/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
SMW-2	9/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2014	Iron, Total	0.049	0.02	0.0062	13822000	mg/L
SMW-2	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
SMW-2	9/11/2014	Potassium, Total	3.7	1	0.093	NA	mg/L
SMW-2	9/11/2014	Magnesium, Total	84	1	0.018	NA	mg/L
SMW-2	9/11/2014	Manganese, Total	0.27	0.002	0.00055	2017000	mg/L
SMW-2	9/11/2014	Sodium, Total	2100	100	39	NA	mg/L
SMW-2	9/11/2014	Lead, Total	ND	0.02	0.0012	15000	mg/L
SMW-2	9/11/2014	Selenium, Total	0.021	0.01	0.0015	50000	mg/L
SMW-2	9/11/2014	Uranium, Total	0.11	0.02	0.001	30000	mg/L
SMW-2	9/11/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
SMW-2	8/17/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
SMW-2	8/17/2015	Arsenic, Total	ND	0.01	0.0029	10000	mg/L
SMW-2	8/17/2015	Barium, Total	0.018	0.002	0.0011	2000000	mg/L
SMW-2	8/17/2015	Calcium, Total	270	5	0.28	NA	mg/L
SMW-2	8/17/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
SMW-2	8/17/2015	Chromium, Total	0.0071	0.006	0.0022	50000	mg/L
SMW-2	8/17/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
SMW-2	8/17/2015	Iron, Total	0.26	0.02	0.0072	13822000	mg/L
SMW-2	8/17/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
SMW-2	8/17/2015	Potassium, Total	1.4	1	0.18	NA	mg/L
SMW-2	8/17/2015	Magnesium, Total	88	1	0.039	NA	mg/L
SMW-2	8/17/2015	Manganese, Total	0.33	0.002	0.0015	2017000	mg/L
SMW-2	8/17/2015	Sodium, Total	2100	50	3.6	NA	mg/L
SMW-2	8/17/2015	Lead, Total	ND	0.005	0.00047	15000	mg/L
SMW-2	8/17/2015	Selenium, Total	ND	0.01	0.0012	50000	mg/L
SMW-2	8/17/2015	Uranium, Total	0.12	0.005	0.000049	30000	mg/L
SMW-2	8/17/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
SMW-2	9/9/2016	Silver, Total	ND	0.005	0.0015	50000	mg/L
SMW-2	9/9/2016	Arsenic, Total	0.011	0.05	0.011	10000	mg/L
SMW-2	9/9/2016	Barium, Total	0.042	0.002	0.00079	2000000	mg/L
SMW-2	9/9/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-2	9/9/2016	Chromium, Total	0.13	0.006	0.0027	50000	mg/L
SMW-2	9/9/2016	Copper, Total	ND	0.006	0.003	790000	mg/L
SMW-2	9/9/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
SMW-2	9/9/2016	Arsenic, Dissolved	0.0066	0.01	0.0014	10000	mg/L
SMW-2	9/9/2016	Barium, Dissolved	0.018	0.002	0.0013	2000000	mg/L
SMW-2	9/9/2016	Calcium, Dissolved	320	5	2.5	NA	mg/L
SMW-2	9/9/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
SMW-2	9/9/2016	Chromium, Dissolved	ND	0.006	0.0018	100000	mg/L
SMW-2	9/9/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
SMW-2	9/9/2016	Iron, Dissolved	0.032	0.02	0.02	13821880	mg/L
SMW-2	9/9/2016	Potassium, Dissolved	1.9	1	0.5	NA	mg/L
SMW-2	9/9/2016	Magnesium, Dissolved	96	1	0.5	NA	mg/L
SMW-2	9/9/2016	Manganese, Dissolved	0.24	0.002	0.00032	2017400	mg/L
SMW-2	9/9/2016	Sodium, Dissolved	2300	50	25	NA	mg/L
SMW-2	9/9/2016	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
SMW-2	9/9/2016	Selenium, Dissolved	0.015	0.05	0.011	50000	mg/L
SMW-2	9/9/2016	Uranium, Dissolved	0.11	0.005	0.00051	NA	mg/L
SMW-2	9/9/2016	Zinc, Dissolved	0.005	0.01	0.0028	5960450	mg/L
SMW-2	9/9/2016	Iron, Total	1.4	0.1	0.1	13822000	mg/L
SMW-2	9/9/2016	Mercury, Total	0.000096	0.0002	0.000053	2000	mg/L
SMW-2	9/9/2016	Manganese, Total	0.3	0.002	0.00027	2017000	mg/L
SMW-2	9/9/2016	Lead, Total	0.0013	0.0005	0.000081	15000	mg/L
SMW-2	9/9/2016	Selenium, Total	0.016	0.05	0.0094	50000	mg/L
SMW-2	9/9/2016	Uranium, Total	0.11	0.0025	0.00087	30000	mg/L
SMW-2	9/9/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
SMW-2	6/28/2017	Calcium, Dissolved	300	20	1.6	NA	mg/L
SMW-2	6/28/2017	Potassium, Dissolved	0.75	1	0.11	NA	mg/L
SMW-2	6/28/2017	Magnesium, Dissolved	90	1	0.25	NA	mg/L
SMW-2	6/28/2017	Sodium, Dissolved	2300	50	8.2	NA	mg/L
SMW-2	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-2	9/11/2017	Arsenic, Total	0.0092	0.01	0.003	10000	mg/L
SMW-2	9/11/2017	Barium, Total	0.082	0.002	0.00093	2000000	mg/L
SMW-2	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-2	9/11/2017	Chromium, Total	0.39	0.006	0.0018	50000	mg/L
SMW-2	9/11/2017	Copper, Total	0.0042	0.006	0.0017	790000	mg/L
SMW-2	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-2	9/11/2017	Arsenic, Dissolved	0.0098	0.01	0.0018	10000	mg/L
SMW-2	9/11/2017	Barium, Dissolved	0.016	0.002	0.00085	2000000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/11/2017	Calcium, Dissolved	340	10	0.78	NA	mg/L
SMW-2	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-2	9/11/2017	Chromium, Dissolved	0.0014	0.006	0.0013	100000	mg/L
SMW-2	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-2	9/11/2017	Iron, Dissolved	0.054	0.02	0.016	13821880	mg/L
SMW-2	9/11/2017	Potassium, Dissolved	0.98	1	0.11	NA	mg/L
SMW-2	9/11/2017	Magnesium, Dissolved	96	1	0.25	NA	mg/L
SMW-2	9/11/2017	Manganese, Dissolved	0.31	0.002	0.00039	2017400	mg/L
SMW-2	9/11/2017	Sodium, Dissolved	2200	50	8.2	NA	mg/L
SMW-2	9/11/2017	Lead, Dissolved	ND	0.0025	0.00084	NA	mg/L
SMW-2	9/11/2017	Selenium, Dissolved	0.024	0.005	0.0019	50000	mg/L
SMW-2	9/11/2017	Uranium, Dissolved	0.12	0.0025	0.00025	NA	mg/L
SMW-2	9/11/2017	Zinc, Dissolved	0.033	0.01	0.0021	5960450	mg/L
SMW-2	9/11/2017	Iron, Total	4	0.2	0.1	13822000	mg/L
SMW-2	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
SMW-2	9/11/2017	Manganese, Total	0.49	0.002	0.0011	2017000	mg/L
SMW-2	9/11/2017	Lead, Total	0.0027	0.0025	0.00048	15000	mg/L
SMW-2	9/11/2017	Selenium, Total	0.024	0.005	0.0036	50000	mg/L
SMW-2	9/11/2017	Uranium, Total	0.12	0.0025	0.00077	30000	mg/L
SMW-2	9/11/2017	Zinc, Total	0.008	0.01	0.0033	5960000	mg/L
SMW-2	9/18/2018	Silver, Total	0.0073	0.005	0.0012	50000	mg/L
SMW-2	9/18/2018	Arsenic, Total	0.0056	0.005	0.0021	10000	mg/L
SMW-2	9/18/2018	Barium, Total	0.03	0.002	0.001	2000000	mg/L
SMW-2	9/18/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-2	9/18/2018	Chromium, Total	0.026	0.006	0.0018	50000	mg/L
SMW-2	9/18/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-2	9/18/2018	Silver, Dissolved	0.0079	0.005	0.0018	81200	mg/L
SMW-2	9/18/2018	Arsenic, Dissolved	0.0041	0.005	0.0021	10000	mg/L
SMW-2	9/18/2018	Barium, Dissolved	0.014	0.002	0.00099	2000000	mg/L
SMW-2	9/18/2018	Calcium, Dissolved	320	10	0.78	NA	mg/L
SMW-2	9/18/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-2	9/18/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
SMW-2	9/18/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-2	9/18/2018	Iron, Dissolved	0.031	0.02	0.016	13821880	mg/L
SMW-2	9/18/2018	Potassium, Dissolved	0.74	1	0.11	NA	mg/L
SMW-2	9/18/2018	Magnesium, Dissolved	96	1	0.25	NA	mg/L
SMW-2	9/18/2018	Manganese, Dissolved	0.33	0.002	0.00039	2017400	mg/L
SMW-2	9/18/2018	Sodium, Dissolved	2300	50	8.2	NA	mg/L
SMW-2	9/18/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
SMW-2	9/18/2018	Selenium, Dissolved	ND	0.005	0.0038	50000	mg/L
SMW-2	9/18/2018	Uranium, Dissolved	0.099	0.0025	0.00048	NA	mg/L
SMW-2	9/18/2018	Zinc, Dissolved	0.0065	0.01	0.0021	5960450	mg/L
SMW-2	9/18/2018	Iron, Total	0.76	0.02	0.01	13822000	mg/L
SMW-2	9/18/2018	Mercury, Total	0.00006	0.0002	0.000038	2000	mg/L
SMW-2	9/18/2018	Manganese, Total	0.34	0.002	0.0011	2017000	mg/L
SMW-2	9/18/2018	Lead, Total	ND	0.0025	0.0011	15000	mg/L
SMW-2	9/18/2018	Selenium, Total	ND	0.005	0.0049	50000	mg/L
SMW-2	9/18/2018	Uranium, Total	0.091	0.0025	0.00034	30000	mg/L
SMW-2	9/18/2018	Zinc, Total	0.0065	0.01	0.0033	5960000	mg/L
SMW-2	9/19/2020	Barium, Total	0.021	0.003	0.0016	2000000	mg/L
SMW-2	9/19/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
SMW-2	9/19/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-2	9/19/2020	Chromium, Total	0.02	0.006	0.0021	50000	mg/L
SMW-2	9/19/2020	Manganese, Total	0.34	0.002	0.00081	2017000	mg/L
SMW-2	9/19/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
SMW-2	9/19/2020	Aluminum, Total	0.7	0.02	0.0074	19914000	mg/L
SMW-2	9/19/2020	Cobalt, Total	ND	0.006	0.0024	5980	mg/L
SMW-2	9/19/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-2	9/19/2020	Iron, Total	0.39	0.05	0.013	13822000	mg/L
SMW-2	9/19/2020	Nickel, Total	0.041	0.01	0.0033	372000	mg/L
SMW-2	9/19/2020	Silver, Total	0.0053	0.005	0.0013	50000	mg/L
SMW-2	9/19/2020	Zinc, Total	ND	0.01	0.0064	5960000	mg/L
SMW-2	9/19/2020	Boron, Total	1.3	0.2	0.037	3949	mg/L
SMW-2	9/19/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
SMW-2	9/19/2020	Arsenic, Total	0.0023	0.005	0.0013	10000	mg/L
SMW-2	9/19/2020	Lead, Total	0.00027	0.0025	0.00017	15000	mg/L
SMW-2	9/19/2020	Selenium, Total	ND	0.005	0.0033	50000	mg/L
SMW-2	9/19/2020	Thallium, Total	ND	0.0012	0.0012	2000	mg/L
SMW-2	9/19/2020	Uranium, Total	0.085	0.0025	0.00033	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/19/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
SMW-2	9/19/2020	Arsenic, Dissolved	0.0024	0.005	0.001	10000	mg/L
SMW-2	9/19/2020	Lead, Dissolved	ND	0.0025	0.00017	NA	mg/L
SMW-2	9/19/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
SMW-2	9/19/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
SMW-2	9/19/2020	Uranium, Dissolved	0.088	0.0025	0.00033	NA	mg/L
SMW-2	9/19/2020	Antimony, Dissolved	ND	0.005	0.0035	6000	mg/L
SMW-2	9/19/2020	Boron, Dissolved	1.3	0.2	0.033	3949110	mg/L
SMW-2	9/19/2020	Calcium, Dissolved	300	5	0.57	NA	mg/L
SMW-2	9/19/2020	Magnesium, Dissolved	100	5	0.34	NA	mg/L
SMW-2	9/19/2020	Sodium, Dissolved	2200	50	6.9	NA	mg/L
SMW-2	9/19/2020	Aluminum, Dissolved	ND	0.02	0.0056	19913930	mg/L
SMW-2	9/19/2020	Barium, Dissolved	0.015	0.002	0.0011	2000000	mg/L
SMW-2	9/19/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
SMW-2	9/19/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
SMW-2	9/19/2020	Cobalt, Dissolved	ND	0.006	0.0024	5980	mg/L
SMW-2	9/19/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
SMW-2	9/19/2020	Iron, Dissolved	0.02	0.02	0.01	13821880	mg/L
SMW-2	9/19/2020	Manganese, Dissolved	0.4	0.002	0.00058	2017400	mg/L
SMW-2	9/19/2020	Nickel, Dissolved	0.042	0.01	0.0033	372000	mg/L
SMW-2	9/19/2020	Potassium, Dissolved	0.81	1	0.16	NA	mg/L
SMW-2	9/19/2020	Silver, Dissolved	0.0041	0.005	0.0013	81200	mg/L
SMW-2	9/19/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
SMW-2	9/19/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
SMW-2	9/19/2020	Zinc, Dissolved	0.012	0.01	0.006	5960450	mg/L
SMW-2	8/22/2019	Aluminum, Dissolved	ND	0.02	0.002488	19913930	mg/L
SMW-2	8/22/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
SMW-2	8/22/2019	Arsenic, Dissolved	0.0026	0.005	0.000504	10000	mg/L
SMW-2	8/22/2019	Barium, Dissolved	0.014	0.002	0.000648	2000000	mg/L
SMW-2	8/22/2019	Beryllium, Dissolved	0.00042	0.002	0.000284	4000	mg/L
SMW-2	8/22/2019	Boron, Dissolved	1.4	0.4	0.045305	3949110	mg/L
SMW-2	8/22/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
SMW-2	8/22/2019	Calcium, Dissolved	320	10	0.618891	NA	mg/L
SMW-2	8/22/2019	Chromium, Dissolved	ND	0.006	0.001533	100000	mg/L
SMW-2	8/22/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
SMW-2	8/22/2019	Copper, Dissolved	0.0037	0.006	0.001296	790000	mg/L
SMW-2	8/22/2019	Iron, Dissolved	0.026	0.02	0.008747	13821880	mg/L
SMW-2	8/22/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
SMW-2	8/22/2019	Magnesium, Dissolved	100	10	0.502904	NA	mg/L
SMW-2	8/22/2019	Manganese, Dissolved	0.36	0.002	0.00029	2017400	mg/L
SMW-2	8/22/2019	Molybdenum, Dissolved	ND	0.008	0.006735	98700	mg/L
SMW-2	8/22/2019	Nickel, Dissolved	0.039	0.01	0.004009	372000	mg/L
SMW-2	8/22/2019	Potassium, Dissolved	0.72	1	0.162288	NA	mg/L
SMW-2	8/22/2019	Selenium, Dissolved	ND	0.005	0.000857	50000	mg/L
SMW-2	8/22/2019	Silver, Dissolved	0.0048	0.005	0.000942	81200	mg/L
SMW-2	8/22/2019	Sodium, Dissolved	2400	100	41.61763	NA	mg/L
SMW-2	8/22/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
SMW-2	8/22/2019	Uranium, Dissolved	0.11	0.0025	0.000374	NA	mg/L
SMW-2	8/22/2019	Zinc, Dissolved	ND	0.01	0.002252	5960450	mg/L
SMW-2	8/22/2019	Aluminum, Total	0.85	0.02	0.002488	19914000	mg/L
SMW-2	8/22/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
SMW-2	8/22/2019	Arsenic, Total	0.0026	0.005	0.001561	10000	mg/L
SMW-2	8/22/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
SMW-2	8/22/2019	Beryllium, Total	0.00039	0.002	0.000284	4000	mg/L
SMW-2	8/22/2019	Boron, Total	1.3	0.4	0.045305	3949	mg/L
SMW-2	8/22/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
SMW-2	8/22/2019	Chromium, Total	0.047	0.006	0.001533	50000	mg/L
SMW-2	8/22/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
SMW-2	8/22/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
SMW-2	8/22/2019	Iron, Total	0.52	0.02	0.008747	13822000	mg/L
SMW-2	8/22/2019	Lead, Total	0.00059	0.0025	0.000274	15000	mg/L
SMW-2	8/22/2019	Manganese, Total	0.37	0.002	0.00029	2017000	mg/L
SMW-2	8/22/2019	Mercury, Total	0.000094	0.0002	0.000038	2000	mg/L
SMW-2	8/22/2019	Molybdenum, Total	ND	0.008	0.006735	98700	mg/L
SMW-2	8/22/2019	Nickel, Total	0.047	0.01	0.004009	372000	mg/L
SMW-2	8/22/2019	Selenium, Total	ND	0.005	0.00239	50000	mg/L
SMW-2	8/22/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
SMW-2	8/22/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
SMW-2	8/22/2019	Uranium, Total	0.092	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	8/22/2019	Zinc, Total	ND	0.01	0.005772	5960000	mg/L
SMW-4	8/13/2019	Aluminum, Total	0.9	0.02	0.002488	19914000	mg/L
SMW-4	8/13/2019	Antimony, Total	ND	0.001	0.000389	6000	mg/L
SMW-4	8/13/2019	Arsenic, Total	0.0034	0.001	0.000312	10000	mg/L
SMW-4	8/13/2019	Barium, Total	0.023	0.002	0.000648	2000000	mg/L
SMW-4	8/13/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
SMW-4	8/13/2019	Boron, Total	1.6	0.2	0.022653	3949	mg/L
SMW-4	8/13/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
SMW-4	8/13/2019	Chromium, Total	0.0034	0.006	0.001533	50000	mg/L
SMW-4	8/13/2019	Cobalt, Total	0.0092	0.006	0.003091	5980	mg/L
SMW-4	8/13/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
SMW-4	8/13/2019	Iron, Total	0.41	0.02	0.008747	13822000	mg/L
SMW-4	8/13/2019	Lead, Total	0.00037	0.0005	0.000055	15000	mg/L
SMW-4	8/13/2019	Manganese, Total	0.0086	0.002	0.00029	2017000	mg/L
SMW-4	8/13/2019	Mercury, Total	0.000054	0.0002	0.000038	2000	mg/L
SMW-4	8/13/2019	Molybdenum, Total	0.01	0.008	0.006735	98700	mg/L
SMW-4	8/13/2019	Nickel, Total	0.0041	0.01	0.004009	372000	mg/L
SMW-4	8/13/2019	Selenium, Total	ND	0.001	0.000478	50000	mg/L
SMW-4	8/13/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
SMW-4	8/13/2019	Thallium, Total	ND	0.0005	0.000052	2000	mg/L
SMW-4	8/13/2019	Uranium, Total	0.03	0.0025	0.000424	30000	mg/L
SMW-4	8/13/2019	Zinc, Total	0.0058	0.01	0.005772	5960000	mg/L
SMW-4	8/13/2019	Aluminum, Dissolved	0.011	0.02	0.002488	19913930	mg/L
SMW-4	8/13/2019	Antimony, Dissolved	ND	0.001	0.000389	6000	mg/L
SMW-4	8/13/2019	Arsenic, Dissolved	0.0031	0.001	0.000101	10000	mg/L
SMW-4	8/13/2019	Barium, Dissolved	0.017	0.002	0.000648	2000000	mg/L
SMW-4	8/13/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
SMW-4	8/13/2019	Boron, Dissolved	1.7	0.2	0.022653	3949110	mg/L
SMW-4	8/13/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
SMW-4	8/13/2019	Calcium, Dissolved	3.5	1	0.061889	NA	mg/L
SMW-4	8/13/2019	Chromium, Dissolved	0.0026	0.006	0.001533	100000	mg/L
SMW-4	8/13/2019	Cobalt, Dissolved	0.0066	0.006	0.003091	5980	mg/L
SMW-4	8/13/2019	Copper, Dissolved	ND	0.006	0.001296	790000	mg/L
SMW-4	8/13/2019	Iron, Dissolved	ND	0.02	0.008747	13821880	mg/L
SMW-4	8/13/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
SMW-4	8/13/2019	Magnesium, Dissolved	0.81	1	0.05029	NA	mg/L
SMW-4	8/13/2019	Manganese, Dissolved	0.00056	0.002	0.00029	2017400	mg/L
SMW-4	8/13/2019	Molybdenum, Dissolved	0.012	0.008	0.006735	98700	mg/L
SMW-4	8/13/2019	Nickel, Dissolved	ND	0.01	0.004009	372000	mg/L
SMW-4	8/13/2019	Potassium, Dissolved	0.48	1	0.162288	NA	mg/L
SMW-4	8/13/2019	Selenium, Dissolved	ND	0.001	0.000171	50000	mg/L
SMW-4	8/13/2019	Silver, Dissolved	ND	0.005	0.000942	81200	mg/L
SMW-4	8/13/2019	Sodium, Dissolved	300	5	2.080881	NA	mg/L
SMW-4	8/13/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
SMW-4	8/13/2019	Uranium, Dissolved	0.031	0.0025	0.000374	NA	mg/L
SMW-4	8/13/2019	Zinc, Dissolved	0.0075	0.01	0.002252	5960450	mg/L
SMW-4	9/20/2020	Arsenic, Dissolved	0.0029	0.001	0.00021	10000	mg/L
SMW-4	9/20/2020	Lead, Dissolved	0.000038	0.0005	0.000034	NA	mg/L
SMW-4	9/20/2020	Selenium, Dissolved	ND	0.001	0.00066	50000	mg/L
SMW-4	9/20/2020	Thallium, Dissolved	ND	0.0005	0.000035	2000	mg/L
SMW-4	9/20/2020	Uranium, Dissolved	0.026	0.0025	0.00033	NA	mg/L
SMW-4	9/20/2020	Antimony, Dissolved	ND	0.001	0.0007	6000	mg/L
SMW-4	9/20/2020	Boron, Dissolved	1.7	0.2	0.033	3949110	mg/L
SMW-4	9/20/2020	Sodium, Dissolved	280	5	0.69	NA	mg/L
SMW-4	9/20/2020	Aluminum, Dissolved	0.043	0.02	0.0056	19913930	mg/L
SMW-4	9/20/2020	Barium, Dissolved	0.014	0.002	0.0011	2000000	mg/L
SMW-4	9/20/2020	Beryllium, Dissolved	ND	0.002	0.00088	4000	mg/L
SMW-4	9/20/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
SMW-4	9/20/2020	Calcium, Dissolved	3.1	1	0.11	NA	mg/L
SMW-4	9/20/2020	Cobalt, Dissolved	0.077	0.006	0.0024	5980	mg/L
SMW-4	9/20/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
SMW-4	9/20/2020	Iron, Dissolved	0.017	0.02	0.01	13821880	mg/L
SMW-4	9/20/2020	Magnesium, Dissolved	0.67	1	0.067	NA	mg/L
SMW-4	9/20/2020	Manganese, Dissolved	0.0014	0.002	0.00058	2017400	mg/L
SMW-4	9/20/2020	Molybdenum, Dissolved	0.0093	0.008	0.0056	98700	mg/L
SMW-4	9/20/2020	Nickel, Dissolved	ND	0.01	0.0033	372000	mg/L
SMW-4	9/20/2020	Potassium, Dissolved	0.5	1	0.16	NA	mg/L
SMW-4	9/20/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
SMW-4	9/20/2020	Zinc, Dissolved	0.011	0.01	0.006	5960450	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/20/2020	Chromium, Dissolved	ND	0.006	0.002	100000	mg/L
SMW-4	9/20/2020	Antimony, Total	ND	0.001	0.0007	6000	mg/L
SMW-4	9/20/2020	Arsenic, Total	0.0026	0.001	0.00026	10000	mg/L
SMW-4	9/20/2020	Lead, Total	0.0019	0.0005	0.000034	15000	mg/L
SMW-4	9/20/2020	Selenium, Total	ND	0.001	0.00066	50000	mg/L
SMW-4	9/20/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
SMW-4	9/20/2020	Uranium, Total	0.024	0.0005	0.000065	30000	mg/L
SMW-4	9/20/2020	Mercury, Total	ND	0.0002	0.00012	2000	mg/L
SMW-4	9/20/2020	Barium, Total	0.049	0.003	0.0016	2000000	mg/L
SMW-4	9/20/2020	Beryllium, Total	ND	0.002	0.00088	4000	mg/L
SMW-4	9/20/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-4	9/20/2020	Chromium, Total	0.015	0.006	0.0021	50000	mg/L
SMW-4	9/20/2020	Cobalt, Total	0.0087	0.006	0.0024	5980	mg/L
SMW-4	9/20/2020	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-4	9/20/2020	Manganese, Total	0.042	0.002	0.00081	2017000	mg/L
SMW-4	9/20/2020	Molybdenum, Total	0.0091	0.008	0.0065	98700	mg/L
SMW-4	9/20/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
SMW-4	9/20/2020	Zinc, Total	0.0088	0.01	0.0064	5960000	mg/L
SMW-4	9/20/2020	Nickel, Total	0.019	0.01	0.0033	372000	mg/L
SMW-4	9/20/2020	Aluminum, Total	3.7	0.1	0.037	19914000	mg/L
SMW-4	9/20/2020	Boron, Total	1.7	0.2	0.037	3949	mg/L
SMW-4	9/20/2020	Iron, Total	1.7	0.25	0.064	13822000	mg/L
SMW-4	8/24/2012	Silver, Total	ND	0.005	0.00064	50000	mg/L
SMW-4	8/24/2012	Arsenic, Total	0.0033	0.0025	0.0014	10000	mg/L
SMW-4	8/24/2012	Barium, Total	0.019	0.002	0.00039	2000000	mg/L
SMW-4	8/24/2012	Calcium, Total	3	1	0.026	NA	mg/L
SMW-4	8/24/2012	Cadmium, Total	ND	0.002	0.00043	5000	mg/L
SMW-4	8/24/2012	Chromium, Total	ND	0.006	0.001	50000	mg/L
SMW-4	8/24/2012	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-4	8/24/2012	Iron, Total	0.13	0.02	0.013	13822000	mg/L
SMW-4	8/24/2012	Mercury, Total	ND	0.0002	0.000025	2000	mg/L
SMW-4	8/24/2012	Potassium, Total	ND	1	0.48	NA	mg/L
SMW-4	8/24/2012	Magnesium, Total	ND	1	0.013	NA	mg/L
SMW-4	8/24/2012	Manganese, Total	0.0046	0.002	0.00026	2017000	mg/L
SMW-4	8/24/2012	Sodium, Total	290	5	0.22	NA	mg/L
SMW-4	8/24/2012	Lead, Total	ND	0.005	0.0014	15000	mg/L
SMW-4	8/24/2012	Selenium, Total	ND	0.0025	0.0025	50000	mg/L
SMW-4	8/24/2012	Uranium, Total	0.033	0.0025	0.00003	30000	mg/L
SMW-4	8/24/2012	Zinc, Total	ND	0.01	0.0011	5960000	mg/L
SMW-4	9/9/2013	Silver, Total	ND	0.005	0.0019	50000	mg/L
SMW-4	9/9/2013	Arsenic, Total	0.0026	0.001	0.000098	10000	mg/L
SMW-4	9/9/2013	Barium, Total	0.021	0.002	0.00095	2000000	mg/L
SMW-4	9/9/2013	Calcium, Total	4.5	1	0.069	NA	mg/L
SMW-4	9/9/2013	Cadmium, Total	ND	0.002	0.0012	5000	mg/L
SMW-4	9/9/2013	Chromium, Total	0.012	0.006	0.00084	50000	mg/L
SMW-4	9/9/2013	Copper, Total	ND	0.006	0.0047	790000	mg/L
SMW-4	9/9/2013	Iron, Total	ND	0.02	0.0089	13822000	mg/L
SMW-4	9/9/2013	Mercury, Total	ND	0.0002	0.000089	2000	mg/L
SMW-4	9/9/2013	Potassium, Total	ND	1	0.24	NA	mg/L
SMW-4	9/9/2013	Magnesium, Total	1.1	1	0.028	NA	mg/L
SMW-4	9/9/2013	Manganese, Total	ND	0.002	0.00016	2017000	mg/L
SMW-4	9/9/2013	Sodium, Total	290	5	1.6	NA	mg/L
SMW-4	9/9/2013	Lead, Total	ND	0.001	0.0000075	15000	mg/L
SMW-4	9/9/2013	Selenium, Total	ND	0.001	0.00029	50000	mg/L
SMW-4	9/9/2013	Uranium, Total	0.031	0.005	0.000036	30000	mg/L
SMW-4	9/9/2013	Zinc, Total	ND	0.01	0.00076	5960000	mg/L
SMW-4	9/11/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
SMW-4	9/11/2014	Arsenic, Total	0.0033	0.001	0.00011	10000	mg/L
SMW-4	9/11/2014	Barium, Total	0.021	0.002	0.0011	2000000	mg/L
SMW-4	9/11/2014	Calcium, Total	4.5	1	0.082	NA	mg/L
SMW-4	9/11/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
SMW-4	9/11/2014	Chromium, Total	ND	0.006	0.0021	50000	mg/L
SMW-4	9/11/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
SMW-4	9/11/2014	Iron, Total	0.041	0.02	0.0062	13822000	mg/L
SMW-4	9/11/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
SMW-4	9/11/2014	Potassium, Total	1.4	1	0.093	NA	mg/L
SMW-4	9/11/2014	Magnesium, Total	1.2	1	0.018	NA	mg/L
SMW-4	9/11/2014	Manganese, Total	0.0033	0.002	0.00055	2017000	mg/L
SMW-4	9/11/2014	Sodium, Total	300	10	3.9	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2014	Lead, Total	ND	0.01	0.00059	15000	mg/L
SMW-4	9/11/2014	Selenium, Total	0.0013	0.001	0.00015	50000	mg/L
SMW-4	9/11/2014	Uranium, Total	0.033	0.01	0.0005	30000	mg/L
SMW-4	9/11/2014	Zinc, Total	ND	0.01	0.0014	5960000	mg/L
SMW-4	8/14/2015	Silver, Total	ND	0.005	0.0021	50000	mg/L
SMW-4	8/14/2015	Arsenic, Total	0.003	0.001	0.00029	10000	mg/L
SMW-4	8/14/2015	Barium, Total	0.028	0.002	0.0011	2000000	mg/L
SMW-4	8/14/2015	Calcium, Total	5	1	0.057	NA	mg/L
SMW-4	8/14/2015	Cadmium, Total	ND	0.002	0.00062	5000	mg/L
SMW-4	8/14/2015	Chromium, Total	0.0078	0.006	0.0022	50000	mg/L
SMW-4	8/14/2015	Copper, Total	ND	0.006	0.0051	790000	mg/L
SMW-4	8/14/2015	Iron, Total	0.32	0.02	0.0072	13822000	mg/L
SMW-4	8/14/2015	Mercury, Total	ND	0.0002	0.000059	2000	mg/L
SMW-4	8/14/2015	Potassium, Total	ND	1	0.18	NA	mg/L
SMW-4	8/14/2015	Magnesium, Total	1.5	1	0.039	NA	mg/L
SMW-4	8/14/2015	Manganese, Total	0.01	0.002	0.0015	2017000	mg/L
SMW-4	8/14/2015	Sodium, Total	310	5	0.36	NA	mg/L
SMW-4	8/14/2015	Lead, Total	0.00053	0.0005	0.000047	15000	mg/L
SMW-4	8/14/2015	Selenium, Total	ND	0.001	0.00012	50000	mg/L
SMW-4	8/14/2015	Uranium, Total	0.036	0.005	0.000049	30000	mg/L
SMW-4	8/14/2015	Zinc, Total	ND	0.01	0.0039	5960000	mg/L
SMW-4	9/7/2016	Silver, Total	ND	0.025	0.0077	50000	mg/L
SMW-4	9/7/2016	Arsenic, Total	0.003	0.001	0.00021	10000	mg/L
SMW-4	9/7/2016	Barium, Total	0.043	0.002	0.00079	2000000	mg/L
SMW-4	9/7/2016	Cadmium, Total	ND	0.002	0.0015	5000	mg/L
SMW-4	9/7/2016	Chromium, Total	0.036	0.006	0.0027	50000	mg/L
SMW-4	9/7/2016	Copper, Total	0.0099	0.006	0.003	790000	mg/L
SMW-4	9/7/2016	Silver, Dissolved	ND	0.005	0.0028	81200	mg/L
SMW-4	9/7/2016	Arsenic, Dissolved	0.003	0.001	0.00014	10000	mg/L
SMW-4	9/7/2016	Barium, Dissolved	0.019	0.002	0.0013	2000000	mg/L
SMW-4	9/7/2016	Calcium, Dissolved	3.5	1	0.5	NA	mg/L
SMW-4	9/7/2016	Cadmium, Dissolved	ND	0.002	0.00075	5000	mg/L
SMW-4	9/7/2016	Chromium, Dissolved	0.0028	0.006	0.0018	100000	mg/L
SMW-4	9/7/2016	Copper, Dissolved	ND	0.006	0.004	790000	mg/L
SMW-4	9/7/2016	Iron, Dissolved	0.078	0.02	0.02	13821880	mg/L
SMW-4	9/7/2016	Potassium, Dissolved	0.57	1	0.5	NA	mg/L
SMW-4	9/7/2016	Magnesium, Dissolved	0.87	1	0.5	NA	mg/L
SMW-4	9/7/2016	Manganese, Dissolved	0.0064	0.002	0.00032	2017400	mg/L
SMW-4	9/7/2016	Sodium, Dissolved	300	5	2.5	NA	mg/L
SMW-4	9/7/2016	Lead, Dissolved	0.00021	0.0005	0.00017	NA	mg/L
SMW-4	9/7/2016	Selenium, Dissolved	0.0011	0.001	0.00021	50000	mg/L
SMW-4	9/7/2016	Uranium, Dissolved	0.032	0.0025	0.00026	NA	mg/L
SMW-4	9/7/2016	Zinc, Dissolved	0.0029	0.01	0.0028	5960450	mg/L
SMW-4	9/7/2016	Iron, Total	1.6	0.1	0.1	13822000	mg/L
SMW-4	9/7/2016	Mercury, Total	0.000058	0.0002	0.000053	2000	mg/L
SMW-4	9/7/2016	Manganese, Total	0.035	0.002	0.00027	2017000	mg/L
SMW-4	9/7/2016	Lead, Total	0.0017	0.0005	0.000081	15000	mg/L
SMW-4	9/7/2016	Selenium, Total	0.00096	0.001	0.00019	50000	mg/L
SMW-4	9/7/2016	Uranium, Total	0.031	0.0025	0.00087	30000	mg/L
SMW-4	9/7/2016	Zinc, Total	0.011	0.01	0.0027	5960000	mg/L
SMW-4	6/28/2017	Calcium, Dissolved	4.5	1	0.078	NA	mg/L
SMW-4	6/28/2017	Potassium, Dissolved	0.52	1	0.11	NA	mg/L
SMW-4	6/28/2017	Magnesium, Dissolved	1.2	1	0.25	NA	mg/L
SMW-4	6/28/2017	Sodium, Dissolved	310	20	3.3	NA	mg/L
SMW-4	9/11/2017	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-4	9/11/2017	Arsenic, Total	0.0032	0.001	0.0003	10000	mg/L
SMW-4	9/11/2017	Barium, Total	0.065	0.002	0.00093	2000000	mg/L
SMW-4	9/11/2017	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-4	9/11/2017	Chromium, Total	0.06	0.006	0.0018	50000	mg/L
SMW-4	9/11/2017	Copper, Total	0.0035	0.006	0.0017	790000	mg/L
SMW-4	9/11/2017	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-4	9/11/2017	Arsenic, Dissolved	0.0032	0.001	0.00018	10000	mg/L
SMW-4	9/11/2017	Barium, Dissolved	0.023	0.002	0.00085	2000000	mg/L
SMW-4	9/11/2017	Calcium, Dissolved	4.4	1	0.078	NA	mg/L
SMW-4	9/11/2017	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-4	9/11/2017	Chromium, Dissolved	0.0043	0.006	0.0013	100000	mg/L
SMW-4	9/11/2017	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-4	9/11/2017	Iron, Dissolved	0.12	0.02	0.016	13821880	mg/L
SMW-4	9/11/2017	Potassium, Dissolved	0.5	1	0.11	NA	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	9/11/2017	Magnesium, Dissolved	1.1	1	0.25	NA	mg/L
SMW-4	9/11/2017	Manganese, Dissolved	0.01	0.002	0.00039	2017400	mg/L
SMW-4	9/11/2017	Sodium, Dissolved	300	10	1.6	NA	mg/L
SMW-4	9/11/2017	Lead, Dissolved	0.00059	0.0005	0.00017	NA	mg/L
SMW-4	9/11/2017	Selenium, Dissolved	ND	0.005	0.0019	50000	mg/L
SMW-4	9/11/2017	Uranium, Dissolved	0.031	0.0025	0.00025	NA	mg/L
SMW-4	9/11/2017	Zinc, Dissolved	0.046	0.01	0.0021	5960450	mg/L
SMW-4	9/11/2017	Iron, Total	3.1	0.1	0.051	13822000	mg/L
SMW-4	9/11/2017	Mercury, Total	ND	0.0002	0.000037	2000	mg/L
SMW-4	9/11/2017	Manganese, Total	0.068	0.002	0.0011	2017000	mg/L
SMW-4	9/11/2017	Lead, Total	0.0032	0.0005	0.000095	15000	mg/L
SMW-4	9/11/2017	Selenium, Total	0.00097	0.001	0.00071	50000	mg/L
SMW-4	9/11/2017	Uranium, Total	0.033	0.0025	0.00077	30000	mg/L
SMW-4	9/11/2017	Zinc, Total	0.016	0.01	0.0033	5960000	mg/L
SMW-4	9/12/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
SMW-4	9/12/2018	Arsenic, Total	0.0031	0.001	0.00041	10000	mg/L
SMW-4	9/12/2018	Barium, Total	0.027	0.002	0.001	2000000	mg/L
SMW-4	9/12/2018	Beryllium, Total	ND	0.002	0.00026	4000	mg/L
SMW-4	9/12/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
SMW-4	9/12/2018	Chromium, Total	0.017	0.006	0.0018	50000	mg/L
SMW-4	9/12/2018	Copper, Total	ND	0.006	0.0041	790000	mg/L
SMW-4	9/12/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
SMW-4	9/12/2018	Arsenic, Dissolved	0.0029	0.001	0.00042	10000	mg/L
SMW-4	9/12/2018	Barium, Dissolved	0.019	0.002	0.00099	2000000	mg/L
SMW-4	9/12/2018	Beryllium, Dissolved	ND	0.002	0.00029	4000	mg/L
SMW-4	9/12/2018	Calcium, Dissolved	3.7	1	0.078	NA	mg/L
SMW-4	9/12/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
SMW-4	9/12/2018	Chromium, Dissolved	0.0042	0.006	0.0013	100000	mg/L
SMW-4	9/12/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
SMW-4	9/12/2018	Iron, Dissolved	0.079	0.02	0.016	13821880	mg/L
SMW-4	9/12/2018	Potassium, Dissolved	0.62	1	0.11	NA	mg/L
SMW-4	9/12/2018	Magnesium, Dissolved	0.99	1	0.25	NA	mg/L
SMW-4	9/12/2018	Manganese, Dissolved	0.0042	0.002	0.00039	2017400	mg/L
SMW-4	9/12/2018	Sodium, Dissolved	300	10	1.6	NA	mg/L
SMW-4	9/12/2018	Lead, Dissolved	ND	0.0005	0.00017	NA	mg/L
SMW-4	9/12/2018	Antimony, Dissolved	ND	0.001	0.00026	6000	mg/L
SMW-4	9/12/2018	Selenium, Dissolved	ND	0.001	0.00076	50000	mg/L
SMW-4	9/12/2018	Uranium, Dissolved	0.029	0.0025	0.00048	NA	mg/L
SMW-4	9/12/2018	Vanadium, Dissolved	0.045	0.05	0.0019	63100	mg/L
SMW-4	9/12/2018	Zinc, Dissolved	0.0094	0.01	0.0021	5960450	mg/L
SMW-4	9/12/2018	Iron, Total	0.71	0.02	0.01	13822000	mg/L
SMW-4	9/12/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
SMW-4	9/12/2018	Manganese, Total	0.022	0.002	0.0011	2017000	mg/L
SMW-4	9/12/2018	Lead, Total	0.00088	0.0005	0.00023	15000	mg/L
SMW-4	9/12/2018	Antimony, Total	ND	0.001	0.00024	6000	mg/L
SMW-4	9/12/2018	Selenium, Total	ND	0.001	0.00098	50000	mg/L
SMW-4	9/12/2018	Uranium, Total	0.03	0.0025	0.00034	30000	mg/L
SMW-4	9/12/2018	Vanadium, Total	0.049	0.05	0.00076	63100	mg/L
SMW-4	9/12/2018	Zinc, Total	0.0058	0.01	0.0033	5960000	mg/L
SMW-4	12/6/2018	Silver, Total	ND	0.005	0.0018	50000	mg/L
SMW-4	12/6/2018	Arsenic, Total	0.0029	0.001	0.0005	10000	mg/L
SMW-4	12/6/2018	Barium, Total	0.032	0.02	0.02	2000000	mg/L
SMW-4	12/6/2018	Beryllium, Total	ND	0.003	0.00044	4000	mg/L
SMW-4	12/6/2018	Cadmium, Total	ND	0.002	0.00099	5000	mg/L
SMW-4	12/6/2018	Cobalt, Total	0.019	0.006	0.00098	5980	mg/L
SMW-4	12/6/2018	Chromium, Total	0.011	0.006	0.0011	50000	mg/L
SMW-4	12/6/2018	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
SMW-4	12/6/2018	Nickel, Total	ND	0.01	0.0027	372000	mg/L
SMW-4	12/6/2018	Lead, Total	0.001	0.001	0.0005	15000	mg/L
SMW-4	12/6/2018	Antimony, Total	ND	0.001	0.0005	6000	mg/L
SMW-4	12/6/2018	Selenium, Total	ND	0.001	0.0005	50000	mg/L
SMW-4	12/6/2018	Vanadium, Total	0.05	0.05	0.0023	63100	mg/L
SMW-4	12/6/2018	Zinc, Total	ND	0.02	0.0033	5960000	mg/L
STP-1 to EP-2	3/5/2014	Silver, Total	ND	0.005	0.0029	50000	mg/L
STP-1 to EP-2	3/5/2014	Arsenic, Total	0.011	0.01	0.0036	10000	mg/L
STP-1 to EP-2	3/5/2014	Barium, Total	0.18	0.002	0.00057	2000000	mg/L
STP-1 to EP-2	3/5/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	3/5/2014	Chromium, Total	0.014	0.006	0.0028	50000	mg/L
STP-1 to EP-2	3/5/2014	Copper, Total	ND	0.006	0.005	790000	mg/L

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APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	3/5/2014	Iron, Total	0.94	0.02	0.0072	13822000	mg/L
STP-1 to EP-2	3/5/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	3/5/2014	Manganese, Total	0.36	0.002	0.00049	2017000	mg/L
STP-1 to EP-2	3/5/2014	Lead, Total	ND	0.001	0.00026	15000	mg/L
STP-1 to EP-2	3/5/2014	Selenium, Total	0.027	0.01	0.0051	50000	mg/L
STP-1 to EP-2	3/5/2014	Uranium, Total	0.004	0.001	0.00018	30000	mg/L
STP-1 to EP-2	3/5/2014	Zinc, Total	0.044	0.01	0.0035	5960000	mg/L
STP-1 to EP-2	9/10/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
STP-1 to EP-2	9/10/2014	Arsenic, Total	0.011	0.01	0.0011	10000	mg/L
STP-1 to EP-2	9/10/2014	Barium, Total	0.087	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	9/10/2014	Calcium, Total	67	1	0.082	NA	mg/L
STP-1 to EP-2	9/10/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	9/10/2014	Chromium, Total	0.018	0.006	0.0021	50000	mg/L
STP-1 to EP-2	9/10/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
STP-1 to EP-2	9/10/2014	Iron, Total	3.5	0.1	0.031	13822000	mg/L
STP-1 to EP-2	9/10/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	9/10/2014	Potassium, Total	53	1	0.093	NA	mg/L
STP-1 to EP-2	9/10/2014	Magnesium, Total	17	1	0.018	NA	mg/L
STP-1 to EP-2	9/10/2014	Manganese, Total	0.18	0.002	0.00055	2017000	mg/L
STP-1 to EP-2	9/10/2014	Sodium, Total	600	10	3.9	NA	mg/L
STP-1 to EP-2	9/10/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
STP-1 to EP-2	9/10/2014	Selenium, Total	0.022	0.01	0.0015	50000	mg/L
STP-1 to EP-2	9/10/2014	Uranium, Total	0.0028	0.001	0.00005	30000	mg/L
STP-1 to EP-2	9/10/2014	Zinc, Total	0.087	0.01	0.0014	5960000	mg/L
STP-1 to EP-2	11/12/2014	Silver, Total	ND	0.005	0.0022	50000	mg/L
STP-1 to EP-2	11/12/2014	Arsenic, Total	0.01	0.001	0.00011	10000	mg/L
STP-1 to EP-2	11/12/2014	Barium, Total	0.068	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	11/12/2014	Cadmium, Total	ND	0.002	0.0013	5000	mg/L
STP-1 to EP-2	11/12/2014	Chromium, Total	0.014	0.006	0.0021	50000	mg/L
STP-1 to EP-2	11/12/2014	Copper, Total	ND	0.006	0.0028	790000	mg/L
STP-1 to EP-2	11/12/2014	Iron, Total	1.4	0.1	0.031	13822000	mg/L
STP-1 to EP-2	11/12/2014	Mercury, Total	ND	0.0002	0.000087	2000	mg/L
STP-1 to EP-2	11/12/2014	Manganese, Total	0.17	0.002	0.00055	2017000	mg/L
STP-1 to EP-2	11/12/2014	Lead, Total	ND	0.001	0.000059	15000	mg/L
STP-1 to EP-2	11/12/2014	Selenium, Total	ND	0.025	0.00015	50000	mg/L
STP-1 to EP-2	11/12/2014	Uranium, Total	0.0013	0.001	0.00005	30000	mg/L
STP-1 to EP-2	11/12/2014	Zinc, Total	0.072	0.01	0.0014	5960000	mg/L
STP-1 to EP-2	8/31/2018	Silver, Total	0.0022	0.005	0.0012	50000	mg/L
STP-1 to EP-2	8/31/2018	Arsenic, Total	0.0087	0.005	0.0021	10000	mg/L
STP-1 to EP-2	8/31/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
STP-1 to EP-2	8/31/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
STP-1 to EP-2	8/31/2018	Chromium, Total	0.0025	0.006	0.0018	50000	mg/L
STP-1 to EP-2	8/31/2018	Copper, Total	0.012	0.006	0.0041	790000	mg/L
STP-1 to EP-2	8/31/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L
STP-1 to EP-2	8/31/2018	Arsenic, Dissolved	0.0075	0.005	0.0021	10000	mg/L
STP-1 to EP-2	8/31/2018	Barium, Dissolved	0.15	0.002	0.00099	2000000	mg/L
STP-1 to EP-2	8/31/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
STP-1 to EP-2	8/31/2018	Chromium, Dissolved	0.0023	0.006	0.0013	100000	mg/L
STP-1 to EP-2	8/31/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
STP-1 to EP-2	8/31/2018	Iron, Dissolved	0.17	0.02	0.016	13821880	mg/L
STP-1 to EP-2	8/31/2018	Manganese, Dissolved	0.36	0.002	0.00039	2017400	mg/L
STP-1 to EP-2	8/31/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
STP-1 to EP-2	8/31/2018	Selenium, Dissolved	0.014	0.005	0.0038	50000	mg/L
STP-1 to EP-2	8/31/2018	Uranium, Dissolved	ND	0.0025	0.00048	NA	mg/L
STP-1 to EP-2	8/31/2018	Zinc, Dissolved	0.017	0.01	0.0021	5960450	mg/L
STP-1 to EP-2	8/31/2018	Iron, Total	0.36	0.02	0.01	13822000	mg/L
STP-1 to EP-2	8/31/2018	Mercury, Total	0.000095	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	8/31/2018	Manganese, Total	0.4	0.002	0.0011	2017000	mg/L
STP-1 to EP-2	8/31/2018	Lead, Total	0.0003	0.0005	0.00023	15000	mg/L
STP-1 to EP-2	8/31/2018	Selenium, Total	0.0084	0.005	0.0049	50000	mg/L
STP-1 to EP-2	8/31/2018	Uranium, Total	0.0003	0.0005	0.000068	30000	mg/L
STP-1 to EP-2	8/31/2018	Zinc, Total	0.026	0.01	0.0033	5960000	mg/L
STP-1 to EP-2	11/8/2018	Silver, Total	ND	0.005	0.0012	50000	mg/L
STP-1 to EP-2	11/8/2018	Arsenic, Total	0.015	0.001	0.00041	10000	mg/L
STP-1 to EP-2	11/8/2018	Barium, Total	0.18	0.002	0.001	2000000	mg/L
STP-1 to EP-2	11/8/2018	Cadmium, Total	ND	0.002	0.00058	5000	mg/L
STP-1 to EP-2	11/8/2018	Chromium, Total	ND	0.006	0.0018	50000	mg/L
STP-1 to EP-2	11/8/2018	Copper, Total	0.0074	0.006	0.0041	790000	mg/L
STP-1 to EP-2	11/8/2018	Silver, Dissolved	ND	0.005	0.0018	81200	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/8/2018	Arsenic, Dissolved	0.012	0.001	0.00042	10000	mg/L
STP-1 to EP-2	11/8/2018	Barium, Dissolved	0.13	0.002	0.00099	2000000	mg/L
STP-1 to EP-2	11/8/2018	Cadmium, Dissolved	ND	0.002	0.001	5000	mg/L
STP-1 to EP-2	11/8/2018	Chromium, Dissolved	ND	0.006	0.0013	100000	mg/L
STP-1 to EP-2	11/8/2018	Copper, Dissolved	ND	0.006	0.0032	790000	mg/L
STP-1 to EP-2	11/8/2018	Iron, Dissolved	0.49	0.02	0.016	13821880	mg/L
STP-1 to EP-2	11/8/2018	Manganese, Dissolved	0.2	0.002	0.00039	2017400	mg/L
STP-1 to EP-2	11/8/2018	Lead, Dissolved	ND	0.0025	0.00087	NA	mg/L
STP-1 to EP-2	11/8/2018	Selenium, Dissolved	0.013	0.001	0.00076	50000	mg/L
STP-1 to EP-2	11/8/2018	Uranium, Dissolved	0.004	0.0025	0.00048	NA	mg/L
STP-1 to EP-2	11/8/2018	Zinc, Dissolved	0.04	0.01	0.0021	5960450	mg/L
STP-1 to EP-2	11/8/2018	Iron, Total	1.1	0.1	0.051	13822000	mg/L
STP-1 to EP-2	11/8/2018	Mercury, Total	0.00049	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	11/8/2018	Manganese, Total	0.21	0.002	0.0011	2017000	mg/L
STP-1 to EP-2	11/8/2018	Lead, Total	0.0012	0.0005	0.00023	15000	mg/L
STP-1 to EP-2	11/8/2018	Selenium, Total	0.0097	0.001	0.00098	50000	mg/L
STP-1 to EP-2	11/8/2018	Uranium, Total	0.0056	0.0005	0.000068	30000	mg/L
STP-1 to EP-2	11/8/2018	Zinc, Total	0.051	0.01	0.0033	5960000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Dissolved	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Dissolved	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Dissolved	ND	0.01	0.005	100000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Dissolved	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Copper, Dissolved	ND	0.02	0.008	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Dissolved	0.276	0.01	0.003	2017400	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Silver, Dissolved	ND	0.005	0.001	81200	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Dissolved	0.0634	0.02	0.008	5960450	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Dissolved	0.623	0.2	0.051	19913930	mg/L
STP-1 to EP-2	12/21/2020	Barium, Dissolved	0.0881	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Dissolved	0.239	0.1	0.022	3949110	mg/L
STP-1 to EP-2	12/21/2020	Iron, Dissolved	1.24	0.2	0.075	13821880	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Dissolved	0.0123	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Total	0.901	0.2	0.051	19914000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Total	0.238	0.1	0.022	3949	mg/L
STP-1 to EP-2	12/21/2020	Barium, Total	0.0876	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
STP-1 to EP-2	12/21/2020	Copper, Total	0.0363	0.02	0.008	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Total	0.283	0.01	0.003	2017000	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Total	0.00881	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Total	0.0643	0.02	0.008	5960000	mg/L
STP-1 to EP-2	12/21/2020	Iron, Total	1.84	0.2	0.075	13822000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Dissolved	ND	0.006	0.002	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Dissolved	ND	0.01	0.002	5000	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Dissolved	ND	0.02	0.01	100000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Dissolved	ND	0.02	0.006	5980	mg/L
STP-1 to EP-2	12/21/2020	Copper, Dissolved	ND	0.04	0.016	790000	mg/L
STP-1 to EP-2	12/21/2020	Manganese, Dissolved	0.267	0.02	0.006	2017400	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Dissolved	ND	0.2	0.008	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Dissolved	ND	0.012	0.006	372000	mg/L
STP-1 to EP-2	12/21/2020	Silver, Dissolved	ND	0.01	0.002	81200	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Dissolved	0.0493	0.04	0.016	5960450	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Dissolved	0.637	0.4	0.102	19913930	mg/L
STP-1 to EP-2	12/21/2020	Barium, Dissolved	0.0835	0.02	0.006	2000000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Dissolved	0.236	0.2	0.044	3949110	mg/L
STP-1 to EP-2	12/21/2020	Iron, Dissolved	1.08	0.4	0.15	13821880	mg/L
STP-1 to EP-2	12/21/2020	Silver, Total	ND	0.005	0.001	50000	mg/L
STP-1 to EP-2	12/21/2020	Aluminum, Total	0.779	0.2	0.051	19914000	mg/L
STP-1 to EP-2	12/21/2020	Boron, Total	0.211	0.1	0.022	3949	mg/L
STP-1 to EP-2	12/21/2020	Barium, Total	0.0767	0.01	0.003	2000000	mg/L
STP-1 to EP-2	12/21/2020	Beryllium, Total	ND	0.003	0.001	4000	mg/L
STP-1 to EP-2	12/21/2020	Cadmium, Total	ND	0.005	0.001	5000	mg/L
STP-1 to EP-2	12/21/2020	Cobalt, Total	ND	0.01	0.003	5980	mg/L
STP-1 to EP-2	12/21/2020	Chromium, Total	ND	0.01	0.005	50000	mg/L
STP-1 to EP-2	12/21/2020	Copper, Total	ND	0.02	0.008	790000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	Manganese, Total	0.242	0.01	0.003	2017000	mg/L
STP-1 to EP-2	12/21/2020	Molybdenum, Total	ND	0.1	0.004	98700	mg/L
STP-1 to EP-2	12/21/2020	Nickel, Total	0.00771	0.006	0.003	372000	mg/L
STP-1 to EP-2	12/21/2020	Zinc, Total	0.0577	0.02	0.008	5960000	mg/L
STP-1 to EP-2	12/21/2020	Iron, Total	1.51	0.2	0.075	13822000	mg/L
STP-1 to EP-2	12/21/2020	Mercury, Dissolved	ND	0.4	0.14	NA	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Dissolved	ND	0.8	0.28	NA	ug/L
STP-1 to EP-2	12/21/2020	Mercury, Total	ND	0.2	0.07	2	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Total Recoverable	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Total Recoverable	ND	10	1.33	15	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Total Recoverable	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Total Recoverable	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Total Recoverable	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Total Recoverable	*ND*	*50*	11.2	30	ug/L
STP-1 to EP-2	12/21/2020	Arsenic, Dissolved	ND	10	2.86	10	ug/L
STP-1 to EP-2	12/21/2020	Lead, Dissolved	ND	10	1.33	NA	ug/L
STP-1 to EP-2	12/21/2020	Antimony, Dissolved	*ND*	*20*	3.52	6	ug/L
STP-1 to EP-2	12/21/2020	Selenium, Dissolved	ND	50	14.3	50	ug/L
STP-1 to EP-2	12/21/2020	Thallium, Dissolved	*ND*	*10*	3.39	2	ug/L
STP-1 to EP-2	12/21/2020	Uranium, Dissolved	ND	50	11.2	NA	ug/L
STP-1 to EP-2	9/16/2020	Antimony, Dissolved	0.0042	0.001	0.0007	6000	mg/L
STP-1 to EP-2	9/16/2020	Arsenic, Dissolved	0.0035	0.005	0.001	10000	mg/L
STP-1 to EP-2	9/16/2020	Lead, Dissolved	0.00043	0.0025	0.00017	NA	mg/L
STP-1 to EP-2	9/16/2020	Selenium, Dissolved	ND	0.005	0.0033	50000	mg/L
STP-1 to EP-2	9/16/2020	Thallium, Dissolved	ND	0.0025	0.00017	2000	mg/L
STP-1 to EP-2	9/16/2020	Uranium, Dissolved	ND	0.0025	0.00033	NA	mg/L
STP-1 to EP-2	9/16/2020	Barium, Dissolved	0.045	0.002	0.0011	2000000	mg/L
STP-1 to EP-2	9/16/2020	Beryllium, Dissolved	0.0014	0.002	0.00088	4000	mg/L
STP-1 to EP-2	9/16/2020	Boron, Dissolved	0.4	0.04	0.0067	3949110	mg/L
STP-1 to EP-2	9/16/2020	Cadmium, Dissolved	ND	0.002	0.0012	5000	mg/L
STP-1 to EP-2	9/16/2020	Chromium, Dissolved	0.012	0.006	0.002	100000	mg/L
STP-1 to EP-2	9/16/2020	Cobalt, Dissolved	0.0062	0.006	0.0024	5980	mg/L
STP-1 to EP-2	9/16/2020	Copper, Dissolved	ND	0.006	0.0035	790000	mg/L
STP-1 to EP-2	9/16/2020	Manganese, Dissolved	0.72	0.002	0.00058	2017400	mg/L
STP-1 to EP-2	9/16/2020	Molybdenum, Dissolved	ND	0.008	0.0056	98700	mg/L
STP-1 to EP-2	9/16/2020	Nickel, Dissolved	0.55	0.01	0.0033	372000	mg/L
STP-1 to EP-2	9/16/2020	Silver, Dissolved	ND	0.005	0.0013	81200	mg/L
STP-1 to EP-2	9/16/2020	Zinc, Dissolved	0.1	0.01	0.006	5960450	mg/L
STP-1 to EP-2	9/16/2020	Aluminum, Dissolved	0.97	0.1	0.028	19913930	mg/L
STP-1 to EP-2	9/16/2020	Iron, Dissolved	30	1	0.52	13821880	mg/L
STP-1 to EP-2	9/16/2020	Arsenic, Total	0.0036	0.001	0.00026	10000	mg/L
STP-1 to EP-2	9/16/2020	Lead, Total	0.00043	0.0005	0.000034	15000	mg/L
STP-1 to EP-2	9/16/2020	Selenium, Total	0.0031	0.001	0.00066	50000	mg/L
STP-1 to EP-2	9/16/2020	Thallium, Total	ND	0.00025	0.00025	2000	mg/L
STP-1 to EP-2	9/16/2020	Antimony, Total	ND	0.005	0.0035	6000	mg/L
STP-1 to EP-2	9/16/2020	Mercury, Total	0.00017	0.0002	0.00012	2000	mg/L
STP-1 to EP-2	9/16/2020	Barium, Total	0.074	0.003	0.0016	2000000	mg/L
STP-1 to EP-2	9/16/2020	Beryllium, Total	0.0014	0.002	0.00088	4000	mg/L
STP-1 to EP-2	9/16/2020	Boron, Total	0.41	0.04	0.0074	3949	mg/L
STP-1 to EP-2	9/16/2020	Copper, Total	0.0099	0.006	0.0047	790000	mg/L
STP-1 to EP-2	9/16/2020	Manganese, Total	0.76	0.002	0.00081	2017000	mg/L
STP-1 to EP-2	9/16/2020	Nickel, Total	0.59	0.01	0.0033	372000	mg/L
STP-1 to EP-2	9/16/2020	Silver, Total	ND	0.005	0.0013	50000	mg/L
STP-1 to EP-2	9/16/2020	Aluminum, Total	1.4	0.1	0.037	19914000	mg/L
STP-1 to EP-2	9/16/2020	Uranium, Total	0.00048	0.0005	0.000065	30000	mg/L
STP-1 to EP-2	9/16/2020	Cadmium, Total	ND	0.002	0.0015	5000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	9/16/2020	Chromium, Total	0.026	0.006	0.0021	50000	mg/L
STP-1 to EP-2	9/16/2020	Molybdenum, Total	ND	0.008	0.0065	98700	mg/L
STP-1 to EP-2	9/16/2020	Zinc, Total	0.15	0.01	0.0064	5960000	mg/L
STP-1 to EP-2	9/16/2020	Iron, Total	34	2.5	0.64	13822000	mg/L
STP-1 to EP-2	9/16/2020	Cobalt, Total	0.0062	0.006	0.0024	5980	mg/L
STP-1 to EP-2	5/29/2019	Aluminum, Dissolved	0.32	0.1	0.012441	19913930	mg/L
STP-1 to EP-2	5/29/2019	Antimony, Dissolved	0.00081	0.001	0.000389	6000	mg/L
STP-1 to EP-2	5/29/2019	Arsenic, Dissolved	0.0069	0.001	0.000101	10000	mg/L
STP-1 to EP-2	5/29/2019	Barium, Dissolved	0.25	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	5/29/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	5/29/2019	Boron, Dissolved	0.41	0.2	0.022653	3949110	mg/L
STP-1 to EP-2	5/29/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
STP-1 to EP-2	5/29/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
STP-1 to EP-2	5/29/2019	Cobalt, Dissolved	ND	0.03	0.015457	5980	mg/L
STP-1 to EP-2	5/29/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
STP-1 to EP-2	5/29/2019	Iron, Dissolved	1.8	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	5/29/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
STP-1 to EP-2	5/29/2019	Manganese, Dissolved	0.22	0.01	0.00145	2017400	mg/L
STP-1 to EP-2	5/29/2019	Molybdenum, Dissolved	ND	0.04	0.033674	98700	mg/L
STP-1 to EP-2	5/29/2019	Nickel, Dissolved	ND	0.05	0.020043	372000	mg/L
STP-1 to EP-2	5/29/2019	Selenium, Dissolved	0.0084	0.001	0.000171	50000	mg/L
STP-1 to EP-2	5/29/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
STP-1 to EP-2	5/29/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
STP-1 to EP-2	5/29/2019	Uranium, Dissolved	0.00042	0.0005	0.000075	NA	mg/L
STP-1 to EP-2	5/29/2019	Zinc, Dissolved	0.033	0.05	0.01126	5960450	mg/L
STP-1 to EP-2	5/29/2019	Aluminum, Total	0.43	0.1	0.012441	19914000	mg/L
STP-1 to EP-2	5/29/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	5/29/2019	Arsenic, Total	0.0082	0.005	0.001561	10000	mg/L
STP-1 to EP-2	5/29/2019	Barium, Total	0.26	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	5/29/2019	Beryllium, Total	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	5/29/2019	Boron, Total	0.43	0.2	0.022653	3949	mg/L
STP-1 to EP-2	5/29/2019	Cadmium, Total	ND	0.01	0.003675	5000	mg/L
STP-1 to EP-2	5/29/2019	Chromium, Total	ND	0.03	0.007666	50000	mg/L
STP-1 to EP-2	5/29/2019	Cobalt, Total	ND	0.03	0.015457	5980	mg/L
STP-1 to EP-2	5/29/2019	Copper, Total	ND	0.03	0.020359	790000	mg/L
STP-1 to EP-2	5/29/2019	Iron, Total	1.9	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	5/29/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	5/29/2019	Manganese, Total	0.23	0.01	0.00145	2017000	mg/L
STP-1 to EP-2	5/29/2019	Mercury, Total	ND	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	5/29/2019	Molybdenum, Total	ND	0.04	0.033674	98700	mg/L
STP-1 to EP-2	5/29/2019	Nickel, Total	ND	0.05	0.020043	372000	mg/L
STP-1 to EP-2	5/29/2019	Selenium, Total	0.0055	0.005	0.00239	50000	mg/L
STP-1 to EP-2	5/29/2019	Silver, Total	ND	0.025	0.007092	50000	mg/L
STP-1 to EP-2	5/29/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	5/29/2019	Uranium, Total	0.00065	0.0025	0.000424	30000	mg/L
STP-1 to EP-2	5/29/2019	Zinc, Total	ND	0.05	0.028859	5960000	mg/L
STP-1 to EP-2	10/9/2019	Aluminum, Dissolved	0.23	0.02	0.002488	19913930	mg/L
STP-1 to EP-2	10/9/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	10/9/2019	Arsenic, Dissolved	0.0032	0.005	0.000504	10000	mg/L
STP-1 to EP-2	10/9/2019	Barium, Dissolved	0.16	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	10/9/2019	Beryllium, Dissolved	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	10/9/2019	Boron, Dissolved	0.25	0.04	0.004531	3949110	mg/L
STP-1 to EP-2	10/9/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
STP-1 to EP-2	10/9/2019	Chromium, Dissolved	0.0049	0.006	0.001533	100000	mg/L
STP-1 to EP-2	10/9/2019	Cobalt, Dissolved	0.0051	0.006	0.003091	5980	mg/L
STP-1 to EP-2	10/9/2019	Copper, Dissolved	0.0025	0.006	0.001296	790000	mg/L
STP-1 to EP-2	10/9/2019	Iron, Dissolved	7.5	0.2	0.087469	13821880	mg/L
STP-1 to EP-2	10/9/2019	Lead, Dissolved	ND	0.0005	0.000055	NA	mg/L
STP-1 to EP-2	10/9/2019	Manganese, Dissolved	0.25	0.002	0.00029	2017400	mg/L
STP-1 to EP-2	10/9/2019	Molybdenum, Dissolved	0.022	0.008	0.006735	98700	mg/L
STP-1 to EP-2	10/9/2019	Nickel, Dissolved	0.03	0.01	0.004009	372000	mg/L
STP-1 to EP-2	10/9/2019	Selenium, Dissolved	0.002	0.005	0.000857	50000	mg/L
STP-1 to EP-2	10/9/2019	Silver, Dissolved	0.0023	0.005	0.000942	81200	mg/L
STP-1 to EP-2	10/9/2019	Thallium, Dissolved	ND	0.0005	0.000048	2000	mg/L
STP-1 to EP-2	10/9/2019	Uranium, Dissolved	0.0015	0.0005	0.000075	NA	mg/L
STP-1 to EP-2	10/9/2019	Zinc, Dissolved	0.04	0.01	0.002252	5960450	mg/L
STP-1 to EP-2	10/9/2019	Aluminum, Total	0.27	0.02	0.002488	19914000	mg/L
STP-1 to EP-2	10/9/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	10/9/2019	Arsenic, Total	0.0053	0.005	0.001561	10000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	10/9/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	10/9/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	10/9/2019	Boron, Total	0.24	0.04	0.004531	3949	mg/L
STP-1 to EP-2	10/9/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	10/9/2019	Chromium, Total	0.0053	0.006	0.001533	50000	mg/L
STP-1 to EP-2	10/9/2019	Cobalt, Total	0.0048	0.006	0.003091	5980	mg/L
STP-1 to EP-2	10/9/2019	Copper, Total	ND	0.006	0.004072	790000	mg/L
STP-1 to EP-2	10/9/2019	Iron, Total	7.7	0.2	0.087469	13822000	mg/L
STP-1 to EP-2	10/9/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	10/9/2019	Manganese, Total	0.24	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	10/9/2019	Mercury, Total	0.00016	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	10/9/2019	Molybdenum, Total	0.023	0.008	0.006735	98700	mg/L
STP-1 to EP-2	10/9/2019	Nickel, Total	0.026	0.01	0.004009	372000	mg/L
STP-1 to EP-2	10/9/2019	Selenium, Total	0.0028	0.005	0.00239	50000	mg/L
STP-1 to EP-2	10/9/2019	Silver, Total	ND	0.005	0.001418	50000	mg/L
STP-1 to EP-2	10/9/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	10/9/2019	Uranium, Total	0.0017	0.0025	0.000424	30000	mg/L
STP-1 to EP-2	10/9/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	2/7/2019	Antimony, Total	ND	0.01	0.002038	6000	mg/L
STP-1 to EP-2	2/7/2019	Arsenic, Total	0.0055	0.01	0.003122	10000	mg/L
STP-1 to EP-2	2/7/2019	Barium, Total	0.28	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	2/7/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	2/7/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	2/7/2019	Chromium, Total	0.0021	0.006	0.001533	50000	mg/L
STP-1 to EP-2	2/7/2019	Copper, Total	0.013	0.006	0.004072	790000	mg/L
STP-1 to EP-2	2/7/2019	Iron, Total	0.76	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	2/7/2019	Lead, Total	ND	0.005	0.000471	15000	mg/L
STP-1 to EP-2	2/7/2019	Manganese, Total	0.23	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	2/7/2019	Mercury, Total	0.00014	0.0002	0.000038	2000	mg/L
STP-1 to EP-2	2/7/2019	Selenium, Total	0.0095	0.01	0.00478	50000	mg/L
STP-1 to EP-2	2/7/2019	Silver, Total	0.0051	0.005	0.001418	50000	mg/L
STP-1 to EP-2	2/7/2019	Thallium, Total	ND	0.005	0.000516	2000	mg/L
STP-1 to EP-2	2/7/2019	Uranium, Total	0.0057	0.005	0.000849	30000	mg/L
STP-1 to EP-2	2/7/2019	Zinc, Total	0.018	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	2/7/2019	Antimony, Dissolved	0.0014	0.005	0.001019	6000	mg/L
STP-1 to EP-2	2/7/2019	Arsenic, Dissolved	0.0074	0.001	0.000068	10000	mg/L
STP-1 to EP-2	2/7/2019	Barium, Dissolved	0.26	0.01	0.003242	2000000	mg/L
STP-1 to EP-2	2/7/2019	Beryllium, Dissolved	ND	0.01	0.001419	4000	mg/L
STP-1 to EP-2	2/7/2019	Cadmium, Dissolved	ND	0.01	0.002761	5000	mg/L
STP-1 to EP-2	2/7/2019	Chromium, Dissolved	ND	0.03	0.007666	100000	mg/L
STP-1 to EP-2	2/7/2019	Copper, Dissolved	ND	0.03	0.006481	790000	mg/L
STP-1 to EP-2	2/7/2019	Iron, Dissolved	0.59	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	2/7/2019	Lead, Dissolved	ND	0.0005	0.000047	NA	mg/L
STP-1 to EP-2	2/7/2019	Manganese, Dissolved	0.22	0.01	0.00145	2017400	mg/L
STP-1 to EP-2	2/7/2019	Selenium, Dissolved	0.011	0.001	0.000203	50000	mg/L
STP-1 to EP-2	2/7/2019	Silver, Dissolved	ND	0.025	0.004712	81200	mg/L
STP-1 to EP-2	2/7/2019	Thallium, Dissolved	ND	0.0005	0.000032	2000	mg/L
STP-1 to EP-2	2/7/2019	Uranium, Dissolved	0.0055	0.0005	0.00003	NA	mg/L
STP-1 to EP-2	2/7/2019	Zinc, Dissolved	0.025	0.05	0.01126	5960450	mg/L
STP-1 to EP-2	11/21/2019	Aluminum, Total	0.18	0.02	0.002488	19914000	mg/L
STP-1 to EP-2	11/21/2019	Antimony, Total	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	11/21/2019	Arsenic, Total	0.009	0.005	0.001561	10000	mg/L
STP-1 to EP-2	11/21/2019	Barium, Total	0.15	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	11/21/2019	Beryllium, Total	ND	0.002	0.000284	4000	mg/L
STP-1 to EP-2	11/21/2019	Boron, Total	0.34	0.04	0.004531	3949	mg/L
STP-1 to EP-2	11/21/2019	Cadmium, Total	ND	0.002	0.000735	5000	mg/L
STP-1 to EP-2	11/21/2019	Chromium, Total	0.0097	0.006	0.001533	50000	mg/L
STP-1 to EP-2	11/21/2019	Cobalt, Total	ND	0.006	0.003091	5980	mg/L
STP-1 to EP-2	11/21/2019	Copper, Total	0.011	0.006	0.004072	790000	mg/L
STP-1 to EP-2	11/21/2019	Iron, Total	3	0.1	0.043734	13822000	mg/L
STP-1 to EP-2	11/21/2019	Lead, Total	ND	0.0025	0.000274	15000	mg/L
STP-1 to EP-2	11/21/2019	Manganese, Total	0.15	0.002	0.00029	2017000	mg/L
STP-1 to EP-2	11/21/2019	Mercury, Total	ND	0.0002	0.000121	2000	mg/L
STP-1 to EP-2	11/21/2019	Molybdenum, Total	0.071	0.008	0.006735	98700	mg/L
STP-1 to EP-2	11/21/2019	Nickel, Total	0.018	0.01	0.004009	372000	mg/L
STP-1 to EP-2	11/21/2019	Selenium, Total	0.003	0.005	0.00239	50000	mg/L
STP-1 to EP-2	11/21/2019	Silver, Total	0.002	0.005	0.001418	50000	mg/L
STP-1 to EP-2	11/21/2019	Thallium, Total	ND	0.0025	0.000258	2000	mg/L
STP-1 to EP-2	11/21/2019	Uranium, Total	0.0017	0.0025	0.000424	30000	mg/L

APPENDIX C-1c. TOTAL AND DISSOLVED METALS DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	11/21/2019	Zinc, Total	0.039	0.01	0.005772	5960000	mg/L
STP-1 to EP-2	11/21/2019	Aluminum, Dissolved	0.12	0.02	0.002488	19913930	mg/L
STP-1 to EP-2	11/21/2019	Antimony, Dissolved	ND	0.005	0.001947	6000	mg/L
STP-1 to EP-2	11/21/2019	Arsenic, Dissolved	0.007	0.005	0.000504	10000	mg/L
STP-1 to EP-2	11/21/2019	Barium, Dissolved	0.14	0.002	0.000648	2000000	mg/L
STP-1 to EP-2	11/21/2019	Beryllium, Dissolved	0.00045	0.002	0.000284	4000	mg/L
STP-1 to EP-2	11/21/2019	Boron, Dissolved	0.32	0.04	0.004531	3949110	mg/L
STP-1 to EP-2	11/21/2019	Cadmium, Dissolved	ND	0.002	0.000552	5000	mg/L
STP-1 to EP-2	11/21/2019	Chromium, Dissolved	0.0084	0.006	0.001533	100000	mg/L
STP-1 to EP-2	11/21/2019	Cobalt, Dissolved	ND	0.006	0.003091	5980	mg/L
STP-1 to EP-2	11/21/2019	Copper, Dissolved	0.0047	0.006	0.001296	790000	mg/L
STP-1 to EP-2	11/21/2019	Iron, Dissolved	2.8	0.1	0.043734	13821880	mg/L
STP-1 to EP-2	11/21/2019	Lead, Dissolved	ND	0.0025	0.000274	NA	mg/L
STP-1 to EP-2	11/21/2019	Manganese, Dissolved	0.15	0.002	0.00029	2017400	mg/L
STP-1 to EP-2	11/21/2019	Molybdenum, Dissolved	0.06	0.008	0.006735	98700	mg/L
STP-1 to EP-2	11/21/2019	Nickel, Dissolved	0.014	0.01	0.004009	372000	mg/L
STP-1 to EP-2	11/21/2019	Selenium, Dissolved	0.0051	0.005	0.000857	50000	mg/L
STP-1 to EP-2	11/21/2019	Silver, Dissolved	0.0029	0.005	0.000942	81200	mg/L
STP-1 to EP-2	11/21/2019	Thallium, Dissolved	ND	0.0025	0.000242	2000	mg/L
STP-1 to EP-2	11/21/2019	Uranium, Dissolved	0.00069	0.0025	0.000374	NA	mg/L
STP-1 to EP-2	11/21/2019	Zinc, Dissolved	0.049	0.01	0.002252	5960450	mg/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

MDL - Method Detection Limit

mg/L - milligrams per liter

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	5/29/2012	Bromide	5.1	0.5	0.37	NA	mg/L
EP-11	5/29/2012	Chloride	8200	500	51	250000000	mg/L
EP-11	5/29/2012	Fluoride, Total	22	2	0.76	1600000	mg/L
EP-11	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-11	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-11	5/29/2012	Sulfate	3700	50	12	600000000	mg/L
EP-11	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-11	5/30/2012	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-11	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-11	11/6/2012	Chloride	3500	500	51	250000000	mg/L
EP-11	11/6/2012	Fluoride, Total	40	2	0.76	1600000	mg/L
EP-11	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-11	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-11	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-11	11/6/2012	Sulfate	1300	500	120	600000000	mg/L
EP-11	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-11	11/7/2012	Biochemical Oxygen Demand	130	2	2	NA	mg/L
EP-11	11/7/2012	Chemical Oxygen Demand	620	20	20	NA	mg/L
EP-11	5/28/2013	Bromide	5.7	1	0.26	NA	mg/L
EP-11	5/28/2013	Chloride	8900	500	150	250000000	mg/L
EP-11	5/28/2013	Fluoride, Total	23	10	3.3	1600000	mg/L
EP-11	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-11	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-11	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-11	5/28/2013	Sulfate	4000	50	12	600000000	mg/L
EP-11	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-11	5/29/2013	Biochemical Oxygen Demand	30	5	2	NA	mg/L
EP-11	5/29/2013	Chemical Oxygen Demand	610	10	10	NA	mg/L
EP-11	10/15/2013	Bromide	5.9	1	0.79	NA	mg/L
EP-11	10/15/2013	Chloride	11000	500	76	250000000	mg/L
EP-11	10/15/2013	Fluoride, Total	22	1	0.35	1600000	mg/L
EP-11	10/15/2013	Ortho-Phosphate	ND	10	4.2	NA	mg/L
EP-11	10/15/2013	Nitrate & Nitrite	ND	10	3.8	NA	mg/L
EP-11	10/15/2013	Sulfate	4500	500	160	600000000	mg/L
EP-11	10/16/2013	E-Coli	20	10	10	NA	CFU/100ml
EP-11	10/16/2013	Biochemical Oxygen Demand	190	2	2	NA	mg/L
EP-11	10/16/2013	Chemical Oxygen Demand	530	10	10	NA	mg/L
EP-11	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-11	3/5/2014	Biochemical Oxygen Demand	48	2	2	NA	mg/L
EP-11	3/5/2014	Bromide	6.3	1	0.79	NA	mg/L
EP-11	3/5/2014	Chloride	10000	500	390	250000000	mg/L
EP-11	3/5/2014	Chemical Oxygen Demand	570	100	100	NA	mg/L
EP-11	3/5/2014	Fluoride, Total	22	1	0.35	1600000	mg/L
EP-11	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-11	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-11	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-11	3/5/2014	Sulfate	4300	50	16	600000000	mg/L
EP-11	10/21/2014	TPH DRO	1.2	1	0.83	16700	mg/L
EP-11	10/21/2014	TPH ORO	ND	5	5	85800	mg/L
EP-11	10/21/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
EP-11	11/12/2014	Biochemical Oxygen Demand	89	2	2	NA	mg/L
EP-11	11/12/2014	Bromide	32	10	2.6	NA	mg/L
EP-11	11/12/2014	Chloride	63000	2500	110	250000000	mg/L
EP-11	11/12/2014	Chemical Oxygen Demand	4700	100	100	NA	mg/L
EP-11	11/12/2014	Fluoride, Total	32	10	1.5	1600000	mg/L
EP-11	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-11	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-11	11/12/2014	Sulfate	17000	250	41	600000000	mg/L
EP-11	11/13/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-11	3/25/2015	Bromide	25	10	7.7	NA	mg/L
EP-11	3/25/2015	Chloride	38000	2500	670	250000000	mg/L
EP-11	3/25/2015	Chemical Oxygen Demand	690	100	100	NA	mg/L
EP-11	3/25/2015	Fluoride, Total	34	10	2.9	1600000	mg/L
EP-11	3/25/2015	Ortho-Phosphate	ND	50	18	NA	mg/L
EP-11	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-11	3/25/2015	Sulfate	8200	2500	570	600000000	mg/L
EP-11	3/26/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-11	3/26/2015	Biochemical Oxygen Demand	16	2	2	NA	mg/L
EP-11	9/1/2015	Bromide	26	10	6.8	NA	mg/L
EP-11	9/1/2015	Chloride	66000	2500	1700	250000000	mg/L
EP-11	9/1/2015	Fluoride, Total	25	10	3.2	1600000	mg/L
EP-11	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-11	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-11	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-11	9/1/2015	Sulfate	13000	2500	1600	600000000	mg/L
EP-11	9/2/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-11	9/2/2015	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-11	9/2/2015	Chemical Oxygen Demand	1100	1000	1000	NA	mg/L
EP-11	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-11	8/30/2016	Biochemical Oxygen Demand	4	2	2	NA	mg/L
EP-11	8/30/2016	Bromide	33	5	2.2	NA	mg/L
EP-11	8/30/2016	Chloride	93000	5000	510	250000000	mg/L
EP-11	8/30/2016	Chemical Oxygen Demand	2300	1000	300	NA	mg/L
EP-11	8/30/2016	Fluoride, Total	16	5	2.5	1600000	mg/L
EP-11	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-11	8/30/2016	Nitrate & Nitrite	ND	40	18	NA	mg/L
EP-11	8/30/2016	Sulfate	13000	1000	280	600000000	mg/L
EP-11	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-11	3/30/2017	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-11	3/30/2017	Bromide	34	2	0.61	NA	mg/L
EP-11	3/30/2017	Chloride	49000	2500	1200	250000000	mg/L
EP-11	3/30/2017	Chemical Oxygen Demand	4120	200	200	NA	mg/L
EP-11	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-11	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-11	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-11	3/30/2017	Sulfate	10000	2500	480	600000000	mg/L
EP-11	10/24/2017	Bromide	91	10	1.5	NA	mg/L
EP-11	10/24/2017	Chloride	210000	10000	5000	250000000	mg/L
EP-11	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-11	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-11	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-11	10/24/2017	Sulfate	36000	10000	1900	600000000	mg/L
EP-11	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-11	10/24/2017	Biochemical Oxygen Demand	24	2	2	NA	mg/L
EP-11	10/24/2017	Chemical Oxygen Demand	6100	400	400	NA	mg/L
EP-11	2/23/2018	Bromide	40	5	0.73	NA	mg/L
EP-11	2/23/2018	Chloride	66000	5000	2500	250000000	mg/L
EP-11	2/23/2018	Fluoride, Total	16	5	2.2	1600000	mg/L
EP-11	2/23/2018	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-11	2/23/2018	Nitrate & Nitrite	21	100	13	NA	mg/L
EP-11	2/23/2018	Sulfate	13000	5000	960	600000000	mg/L
EP-11	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-11	3/1/2018	Biochemical Oxygen Demand	44	2	2	NA	mg/L
EP-11	3/1/2018	Chemical Oxygen Demand	3290	200	200	NA	mg/L
EP-11	9/7/2018	Bromide	280	10	2.7	NA	mg/L
EP-11	9/7/2018	Chloride	170000	10000	3600	250000000	mg/L
EP-11	9/7/2018	Fluoride, Total	41	10	3.1	1600000	mg/L
EP-11	9/7/2018	Ortho-Phosphate	8.6	50	3	NA	mg/L
EP-11	9/7/2018	Nitrate & Nitrite	ND	200	55	NA	mg/L
EP-11	9/7/2018	Sulfate	57000	10000	4100	600000000	mg/L
EP-11	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-11	9/14/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-11	9/14/2018	Chemical Oxygen Demand	14000	1000	1000	NA	mg/L
EP-11	4/29/2019	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-11	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-11	4/29/2019	Bromide	24	20	2.9	NA	mg/L
EP-11	4/29/2019	Chloride	76000	2500	2500	250000000	mg/L
EP-11	4/29/2019	Fluoride, Total	24	2	1	1600000	mg/L
EP-11	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-11	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-11	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-11	4/29/2019	Sulfate	12000	2500	267.5	600000000	mg/L
EP-11	4/29/2019	Chemical Oxygen Demand	2160	100	100	NA	mg/L
EP-11	12/22/2020	Nitrogen, Nitrate & Nitrite	0.097	0.05	0.018	10000000	mg/L
EP-11	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-11	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-11	12/22/2020	Nitrogen, Nitrate	0.097	0.05	0.018	10000000	mg/L
EP-11	12/22/2020	Solids, Total Suspended	1010	10	0	NA	mg/L
EP-11	12/22/2020	Biochemical Oxygen Demand	45.3	2	2	NA	mg/L
EP-11	12/22/2020	Chemical Oxygen Demand	3430	250	160	NA	mg/L
EP-11	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-11	12/22/2020	Chloride	16800	500	60	250000000	mg/L
EP-11	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-11	12/22/2020	Sulfate	6130	500	185	600000000	mg/L
EP-11	12/22/2020	Solids, Total Suspended	1010	10	0	NA	mg/L
EP-12A	5/29/2012	Bromide	5	0.5	0.37	NA	mg/L
EP-12A	5/29/2012	Chloride	7600	250	26	250000000	mg/L
EP-12A	5/29/2012	Fluoride, Total	23	2	0.76	1600000	mg/L
EP-12A	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-12A	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-12A	5/29/2012	Sulfate	2300	50	12	600000000	mg/L
EP-12A	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	5/30/2012	Biochemical Oxygen Demand	22	2	2	NA	mg/L
EP-12A	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-12A	11/6/2012	Chloride	4000	250	26	250000000	mg/L
EP-12A	11/6/2012	Fluoride, Total	35	2	0.76	1600000	mg/L
EP-12A	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-12A	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-12A	11/6/2012	Sulfate	1400	250	59	600000000	mg/L
EP-12A	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	11/7/2012	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-12A	11/7/2012	Chemical Oxygen Demand	650	20	20	NA	mg/L
EP-12A	5/28/2013	Bromide	3	1	0.26	NA	mg/L
EP-12A	5/28/2013	Chloride	3800	250	74	250000000	mg/L
EP-12A	5/28/2013	Fluoride, Total	29	1	0.33	1600000	mg/L
EP-12A	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12A	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-12A	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-12A	5/28/2013	Sulfate	1700	50	12	600000000	mg/L
EP-12A	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	5/29/2013	Biochemical Oxygen Demand	100	5	2	NA	mg/L
EP-12A	5/29/2013	Chemical Oxygen Demand	1400	10	10	NA	mg/L
EP-12A	10/15/2013	Bromide	2.2	1	0.79	NA	mg/L
EP-12A	10/15/2013	Chloride	1900	50	7.6	250000000	mg/L
EP-12A	10/15/2013	Fluoride, Total	43	10	3.5	1600000	mg/L
EP-12A	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12A	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-12A	10/15/2013	Sulfate	1300	50	16	600000000	mg/L
EP-12A	10/16/2013	E-Coli	41	10	10	NA	CFU/100ml
EP-12A	10/16/2013	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12A	10/16/2013	Chemical Oxygen Demand	930	10	10	NA	mg/L
EP-12A	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-12A	3/5/2014	Biochemical Oxygen Demand	210	2	2	NA	mg/L
EP-12A	3/5/2014	Bromide	2.3	1	0.79	NA	mg/L
EP-12A	3/5/2014	Chloride	1800	50	39	250000000	mg/L
EP-12A	3/5/2014	Chemical Oxygen Demand	560	10	10	NA	mg/L
EP-12A	3/5/2014	Fluoride, Total	34	10	3.5	1600000	mg/L
EP-12A	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12A	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-12A	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-12A	3/5/2014	Sulfate	1100	50	16	600000000	mg/L
EP-12A	10/20/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-12A	10/20/2014	TPH ORO	ND	5	5	85800	mg/L
EP-12A	10/20/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-12A	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12A	11/12/2014	Bromide	2.1	1	0.26	NA	mg/L
EP-12A	11/12/2014	Chloride	3000	100	4.3	250000000	mg/L
EP-12A	11/12/2014	Chemical Oxygen Demand	450	10	10	NA	mg/L
EP-12A	11/12/2014	Fluoride, Total	43	10	1.5	1600000	mg/L
EP-12A	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-12A	11/12/2014	Nitrate & Nitrite	2.5	2	0.17	NA	mg/L
EP-12A	11/12/2014	Sulfate	1600	50	8.2	600000000	mg/L
EP-12A	11/13/2014	E-Coli	131	10	10	NA	CFU/100ml
EP-12A	3/25/2015	Bromide	3.8	1	0.77	NA	mg/L
EP-12A	3/25/2015	Chloride	2500	100	27	250000000	mg/L
EP-12A	3/25/2015	Chemical Oxygen Demand	400	10	10	NA	mg/L
EP-12A	3/25/2015	Fluoride, Total	20	1	0.29	1600000	mg/L
EP-12A	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-12A	3/25/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
EP-12A	3/25/2015	Sulfate	1000	50	11	600000000	mg/L
EP-12A	3/26/2015	E-Coli	12033	10	10	NA	CFU/100ml
EP-12A	3/26/2015	Biochemical Oxygen Demand	170	2	2	NA	mg/L
EP-12A	9/1/2015	Bromide	ND	10	6.8	NA	mg/L
EP-12A	9/1/2015	Chloride	4900	250	170	250000000	mg/L
EP-12A	9/1/2015	Fluoride, Total	31	10	3.2	1600000	mg/L
EP-12A	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-12A	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-12A	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-12A	9/1/2015	Sulfate	1700	50	32	600000000	mg/L
EP-12A	9/2/2015	E-Coli	8164	10	10	NA	CFU/100ml
EP-12A	9/2/2015	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-12A	9/2/2015	Chemical Oxygen Demand	760	10	10	NA	mg/L
EP-12A	8/30/2016	E-Coli	2723	10	10	NA	CFU/100ml
EP-12A	8/30/2016	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12A	8/30/2016	Bromide	4.7	0.5	0.22	NA	mg/L
EP-12A	8/30/2016	Chloride	5800	2500	250	250000000	mg/L
EP-12A	8/30/2016	Chemical Oxygen Demand	620	10	3	NA	mg/L
EP-12A	8/30/2016	Fluoride, Total	18	2	1	1600000	mg/L
EP-12A	8/30/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-12A	8/30/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12A	8/30/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-12A	8/30/2016	Sulfate	3100	2500	710	600000000	mg/L
EP-12A	3/30/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-12A	3/30/2017	Biochemical Oxygen Demand	59	2	2	NA	mg/L
EP-12A	3/30/2017	Bromide	4.6	0.5	0.15	NA	mg/L
EP-12A	3/30/2017	Chloride	4900	250	120	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12A	3/30/2017	Chemical Oxygen Demand	721	10	10	NA	mg/L
EP-12A	3/30/2017	Fluoride, Total	21	2	1	1600000	mg/L
EP-12A	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12A	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-12A	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-12A	3/30/2017	Sulfate	1600	250	48	600000000	mg/L
EP-12A	10/24/2017	Bromide	6.7	1	0.15	NA	mg/L
EP-12A	10/24/2017	Chloride	1500	100	50	250000000	mg/L
EP-12A	10/24/2017	Fluoride, Total	27	10	4.4	1600000	mg/L
EP-12A	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12A	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-12A	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-12A	10/24/2017	Sulfate	520	100	19	600000000	mg/L
EP-12A	10/24/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-12A	10/24/2017	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12A	10/24/2017	Chemical Oxygen Demand	1100	50	50	NA	mg/L
EP-12A	9/7/2018	Bromide	14	2	0.54	NA	mg/L
EP-12A	9/7/2018	Chloride	30000	1000	360	250000000	mg/L
EP-12A	9/7/2018	Fluoride, Total	27	2	0.59	1600000	mg/L
EP-12A	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-12A	9/7/2018	Nitrate & Nitrite	ND	20	5.5	NA	mg/L
EP-12A	9/7/2018	Sulfate	7600	1000	410	600000000	mg/L
EP-12A	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-12A	11/21/2019	Chloride	1700	100	50	250000000	mg/L
EP-12A	11/21/2019	Fluoride, Total	32	2	0.579636	1600000	mg/L
EP-12A	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-12A	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-12A	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-12A	11/21/2019	Sulfate	2000	100	50	600000000	mg/L
EP-12A	11/21/2019	E-Coli	15530	10	10	NA	MPN/100ml
EP-12A	11/21/2019	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-12A	11/21/2019	Chemical Oxygen Demand	237	50	50	NA	mg/L
EP-12A	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-12A	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-12A	12/22/2020	Sulfate	15300	500	185	600000000	mg/L
EP-12A	12/22/2020	Chloride	198000	10000	1200	250000000	mg/L
EP-12A	12/22/2020	Chemical Oxygen Demand	528	80	51.2	NA	mg/L
EP-12A	12/22/2020	Biochemical Oxygen Demand	49	2	2	NA	mg/L
EP-12A	12/22/2020	Solids, Total Suspended	1280	50	0	NA	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrate	35.6	0.05	0.018	10000000	mg/L
EP-12A	12/22/2020	Phosphorus, Ortho	0.105	0.05	0.015	NA	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-12A	12/22/2020	Nitrogen, Nitrate & Nitrite	35.6	1	0.36	10000000	mg/L
EP-12A	12/22/2020	Solids, Total Suspended	1280	50	0	NA	mg/L
EP-12B	5/29/2012	Bromide	3.6	0.5	0.37	NA	mg/L
EP-12B	5/29/2012	Chloride	7000	250	26	250000000	mg/L
EP-12B	5/29/2012	Fluoride, Total	19	2	0.76	1600000	mg/L
EP-12B	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-12B	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-12B	5/29/2012	Sulfate	1500	25	5.9	600000000	mg/L
EP-12B	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	5/30/2012	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-12B	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-12B	11/6/2012	Chloride	1900	250	26	250000000	mg/L
EP-12B	11/6/2012	Fluoride, Total	71	2	0.76	1600000	mg/L
EP-12B	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-12B	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12B	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-12B	11/6/2012	Sulfate	1100	250	59	600000000	mg/L
EP-12B	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	11/7/2012	Biochemical Oxygen Demand	310	2	2	NA	mg/L
EP-12B	11/7/2012	Chemical Oxygen Demand	850	20	20	NA	mg/L
EP-12B	5/28/2013	Bromide	3.1	1	0.26	NA	mg/L
EP-12B	5/28/2013	Chloride	3100	100	30	250000000	mg/L
EP-12B	5/28/2013	Fluoride, Total	32	1	0.33	1600000	mg/L
EP-12B	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12B	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-12B	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-12B	5/28/2013	Sulfate	1500	50	12	600000000	mg/L
EP-12B	5/29/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-12B	5/29/2013	Biochemical Oxygen Demand	260	5	2	NA	mg/L
EP-12B	5/29/2013	Chemical Oxygen Demand	770	10	10	NA	mg/L
EP-12B	10/15/2013	Bromide	1.5	1	0.79	NA	mg/L
EP-12B	10/15/2013	Chloride	1300	50	7.6	250000000	mg/L
EP-12B	10/15/2013	Fluoride, Total	14	10	3.5	1600000	mg/L
EP-12B	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12B	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-12B	10/15/2013	Sulfate	770	50	16	600000000	mg/L
EP-12B	10/16/2013	E-Coli	231	10	10	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	10/16/2013	Biochemical Oxygen Demand	460	2	2	NA	mg/L
EP-12B	10/16/2013	Chemical Oxygen Demand	940	10	10	NA	mg/L
EP-12B	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	3/5/2014	Biochemical Oxygen Demand	430	2	2	NA	mg/L
EP-12B	3/5/2014	Bromide	2.7	1	0.79	NA	mg/L
EP-12B	3/5/2014	Chloride	1800	50	39	250000000	mg/L
EP-12B	3/5/2014	Chemical Oxygen Demand	810	10	10	NA	mg/L
EP-12B	3/5/2014	Fluoride, Total	38	10	3.5	1600000	mg/L
EP-12B	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-12B	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-12B	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-12B	3/5/2014	Sulfate	710	50	16	600000000	mg/L
EP-12B	10/20/2014	TPH DRO	4.3	1	0.83	16700	mg/L
EP-12B	10/20/2014	TPH ORO	ND	5	5	85800	mg/L
EP-12B	10/20/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-12B	11/12/2014	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-12B	11/12/2014	Bromide	1.3	1	0.26	NA	mg/L
EP-12B	11/12/2014	Chloride	1900	50	2.2	250000000	mg/L
EP-12B	11/12/2014	Chemical Oxygen Demand	410	10	10	NA	mg/L
EP-12B	11/12/2014	Fluoride, Total	38	10	1.5	1600000	mg/L
EP-12B	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-12B	11/12/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
EP-12B	11/12/2014	Sulfate	1200	50	8.2	600000000	mg/L
EP-12B	11/13/2014	E-Coli	1012	10	10	NA	CFU/100ml
EP-12B	3/25/2015	Bromide	5.5	1	0.77	NA	mg/L
EP-12B	3/25/2015	Chloride	2800	100	27	250000000	mg/L
EP-12B	3/25/2015	Chemical Oxygen Demand	650	10	10	NA	mg/L
EP-12B	3/25/2015	Fluoride, Total	11	1	0.29	1600000	mg/L
EP-12B	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-12B	3/25/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
EP-12B	3/25/2015	Sulfate	980	50	11	600000000	mg/L
EP-12B	3/26/2015	E-Coli	17329	10	10	NA	CFU/100ml
EP-12B	3/26/2015	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-12B	9/1/2015	Bromide	ND	10	6.8	NA	mg/L
EP-12B	9/1/2015	Chloride	3200	100	68	250000000	mg/L
EP-12B	9/1/2015	Fluoride, Total	51	10	3.2	1600000	mg/L
EP-12B	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-12B	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-12B	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-12B	9/1/2015	Sulfate	900	50	32	600000000	mg/L
EP-12B	9/2/2015	E-Coli	3873	10	10	NA	CFU/100ml
EP-12B	9/2/2015	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-12B	9/2/2015	Chemical Oxygen Demand	660	10	10	NA	mg/L
EP-12B	8/30/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-12B	8/30/2016	Biochemical Oxygen Demand	240	2	2	NA	mg/L
EP-12B	8/30/2016	Bromide	5	0.5	0.22	NA	mg/L
EP-12B	8/30/2016	Chloride	2600	1000	100	250000000	mg/L
EP-12B	8/30/2016	Chemical Oxygen Demand	770	100	30	NA	mg/L
EP-12B	8/30/2016	Fluoride, Total	21	2	1	1600000	mg/L
EP-12B	8/30/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-12B	8/30/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-12B	8/30/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-12B	8/30/2016	Sulfate	1600	1000	280	600000000	mg/L
EP-12B	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-12B	3/30/2017	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-12B	3/30/2017	Bromide	2.7	0.5	0.15	NA	mg/L
EP-12B	3/30/2017	Chloride	4300	250	120	250000000	mg/L
EP-12B	3/30/2017	Chemical Oxygen Demand	694	10	10	NA	mg/L
EP-12B	3/30/2017	Fluoride, Total	20	2	1	1600000	mg/L
EP-12B	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12B	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-12B	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-12B	3/30/2017	Sulfate	1400	250	48	600000000	mg/L
EP-12B	10/24/2017	Bromide	ND	1	0.15	NA	mg/L
EP-12B	10/24/2017	Chloride	4000	250	120	250000000	mg/L
EP-12B	10/24/2017	Fluoride, Total	34	1	0.44	1600000	mg/L
EP-12B	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-12B	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-12B	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-12B	10/24/2017	Sulfate	1200	50	9.6	600000000	mg/L
EP-12B	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-12B	10/24/2017	Biochemical Oxygen Demand	370	2	2	NA	mg/L
EP-12B	10/24/2017	Chemical Oxygen Demand	780	50	50	NA	mg/L
EP-12B	2/22/2018	Bromide	0.98	0.5	0.073	NA	mg/L
EP-12B	2/22/2018	Chloride	2700	100	50	250000000	mg/L
EP-12B	2/22/2018	Fluoride, Total	20	2	0.87	1600000	mg/L
EP-12B	2/22/2018	Ortho-Phosphate	1.9	2.5	1.2	NA	mg/L
EP-12B	2/22/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-12B	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-12B	2/22/2018	Sulfate	900	10	1.9	600000000	mg/L
EP-12B	3/1/2018	E-Coli	12997	10	10	NA	MPN/100mL
EP-12B	3/1/2018	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-12B	3/1/2018	Chemical Oxygen Demand	678	100	100	NA	mg/L
EP-12B	9/7/2018	Bromide	2.2	0.5	0.13	NA	mg/L
EP-12B	9/7/2018	Chloride	3800	250	91	250000000	mg/L
EP-12B	9/7/2018	Fluoride, Total	36	2	0.59	1600000	mg/L
EP-12B	9/7/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-12B	9/7/2018	Nitrate & Nitrite	ND	20	5.5	NA	mg/L
EP-12B	9/7/2018	Sulfate	1400	250	100	600000000	mg/L
EP-12B	9/14/2018	E-Coli	120	10	10	NA	MPN/100mL
EP-12B	9/14/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-12B	9/14/2018	Chemical Oxygen Demand	600	10	10	NA	mg/L
EP-12B	4/29/2019	Biochemical Oxygen Demand	38	2	2	NA	mg/L
EP-12B	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-12B	4/29/2019	Bromide	3.3	2	0.29	NA	mg/L
EP-12B	4/29/2019	Chloride	7200	500	500	250000000	mg/L
EP-12B	4/29/2019	Fluoride, Total	28	2	1	1600000	mg/L
EP-12B	4/29/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-12B	4/29/2019	Nitrogen, Nitrite	5.5	5	0.19	1000000	mg/L
EP-12B	4/29/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-12B	4/29/2019	Sulfate	2800	500	53.5	600000000	mg/L
EP-12B	4/29/2019	Chemical Oxygen Demand	839	10	10	NA	mg/L
EP-12B	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-12B	11/21/2019	Chloride	980	25	12.5	250000000	mg/L
EP-12B	11/21/2019	Fluoride, Total	31	2	0.579636	1600000	mg/L
EP-12B	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-12B	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-12B	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-12B	11/21/2019	Sulfate	1700	25	12.5	600000000	mg/L
EP-12B	11/21/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-12B	11/21/2019	Biochemical Oxygen Demand	290	2	2	NA	mg/L
EP-12B	11/21/2019	Chemical Oxygen Demand	448	50	50	NA	mg/L
EP-12B	9/18/2020	Biochemical Oxygen Demand	71	2	2	NA	mg/L
EP-12B	9/18/2020	Solids, Total Suspended	140	8	8	NA	mg/L
EP-12B	9/18/2020	Bromide	3.2	0.5	0.25	NA	mg/L
EP-12B	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-12B	9/18/2020	Fluoride, Total	15	2	0.87	1600000	mg/L
EP-12B	9/18/2020	Chloride	8400	500	250	250000000	mg/L
EP-12B	9/18/2020	Sulfate	4800	500	250	600000000	mg/L
EP-12B	9/18/2020	Nitrate & Nitrite	ND	10	0.61	NA	mg/L
EP-12B	9/18/2020	Chemical Oxygen Demand	445	125	32.5	NA	mg/L
EP-12B	9/18/2020	Coliform, E-Coli	471	10	10	NA	MPN/100ml
EP-12B	12/22/2020	Nitrogen, Nitrate & Nitrite	0.215	0.05	0.018	10000000	mg/L
EP-12B	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-12B	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-12B	12/22/2020	Nitrogen, Nitrate	0.215	0.05	0.018	10000000	mg/L
EP-12B	12/22/2020	Solids, Total Suspended	270	16.7	0	NA	mg/L
EP-12B	12/22/2020	Biochemical Oxygen Demand	46.4	2	2	NA	mg/L
EP-12B	12/22/2020	Chemical Oxygen Demand	484	80	51.2	NA	mg/L
EP-12B	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-12B	12/22/2020	Chloride	10700	500	60	250000000	mg/L
EP-12B	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-12B	12/22/2020	Sulfate	4140	500	185	600000000	mg/L
EP-12B	12/22/2020	Solids, Total Suspended	270	16.7	0	NA	mg/L
EP-12B	9/18/2020	Solids, Total Suspended	140	8	8	NA	mg/L
EP-2	5/29/2012	Bromide	2.6	0.5	0.37	NA	mg/L
EP-2	5/29/2012	Chloride	6600	250	26	250000000	mg/L
EP-2	5/29/2012	Fluoride, Total	55	2	0.76	1600000	mg/L
EP-2	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-2	5/29/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	5/29/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
EP-2	5/29/2012	Sulfate	1300	25	5.9	600000000	mg/L
EP-2	5/30/2012	E-Coli	4106	10	10	NA	CFU/100ml
EP-2	5/30/2012	Biochemical Oxygen Demand	100	2	2	NA	mg/L
EP-2	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-2	11/6/2012	Chloride	290	10	1	250000000	mg/L
EP-2	11/6/2012	Fluoride, Total	84	5	1.9	1600000	mg/L
EP-2	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-2	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-2	11/6/2012	Sulfate	820	10	2.4	600000000	mg/L
EP-2	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-2	11/7/2012	Biochemical Oxygen Demand	750	2	2	NA	mg/L
EP-2	11/7/2012	Chemical Oxygen Demand	1300	20	20	NA	mg/L
EP-2	5/28/2013	Bromide	6.1	1	0.26	NA	mg/L
EP-2	5/28/2013	Chloride	310	50	15	250000000	mg/L
EP-2	5/28/2013	Fluoride, Total	42	10	3.3	1600000	mg/L
EP-2	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	5/28/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-2	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-2	5/28/2013	Sulfate	1700	50	12	600000000	mg/L
EP-2	5/29/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-2	5/29/2013	Biochemical Oxygen Demand	210	5	2	NA	mg/L
EP-2	5/29/2013	Chemical Oxygen Demand	700	10	10	NA	mg/L
EP-2	10/15/2013	Bromide	1.4	1	0.79	NA	mg/L
EP-2	10/15/2013	Chloride	1100	50	7.6	250000000	mg/L
EP-2	10/15/2013	Fluoride, Total	70	10	3.5	1600000	mg/L
EP-2	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-2	10/15/2013	Nitrate & Nitrite	ND	2	0.77	NA	mg/L
EP-2	10/15/2013	Sulfate	680	50	16	600000000	mg/L
EP-2	10/16/2013	E-Coli	3282	10	10	NA	CFU/100ml
EP-2	10/16/2013	Biochemical Oxygen Demand	420	2	2	NA	mg/L
EP-2	10/16/2013	Chemical Oxygen Demand	1100	50	50	NA	mg/L
EP-2	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-2	3/5/2014	Biochemical Oxygen Demand	450	2	2	NA	mg/L
EP-2	3/5/2014	Bromide	3.4	1	0.79	NA	mg/L
EP-2	3/5/2014	Chloride	1900	50	39	250000000	mg/L
EP-2	3/5/2014	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-2	3/5/2014	Fluoride, Total	37	10	3.5	1600000	mg/L
EP-2	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-2	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-2	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-2	3/5/2014	Sulfate	680	50	16	600000000	mg/L
EP-2	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-2	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-2	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-2	11/12/2014	Biochemical Oxygen Demand	170	2	2	NA	mg/L
EP-2	11/12/2014	Bromide	ND	1	0.26	NA	mg/L
EP-2	11/12/2014	Chloride	2400	100	4.3	250000000	mg/L
EP-2	11/12/2014	Chemical Oxygen Demand	580	10	10	NA	mg/L
EP-2	11/12/2014	Fluoride, Total	40	10	1.5	1600000	mg/L
EP-2	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-2	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-2	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-2	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-2	11/13/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-2	3/24/2015	Bromide	7.1	1	0.77	NA	mg/L
EP-2	3/24/2015	Chloride	1700	50	13	250000000	mg/L
EP-2	3/24/2015	Chemical Oxygen Demand	610	50	250	NA	mg/L
EP-2	3/24/2015	Fluoride, Total	35	1	0.29	1600000	mg/L
EP-2	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-2	3/24/2015	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-2	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-2	3/24/2015	Sulfate	1200	50	11	600000000	mg/L
EP-2	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-2	3/26/2015	Biochemical Oxygen Demand	330	2	2	NA	mg/L
EP-2	9/1/2015	Bromide	1.3	1	0.68	NA	mg/L
EP-2	9/1/2015	Chloride	2900	100	68	250000000	mg/L
EP-2	9/1/2015	Fluoride, Total	ND	1	0.32	1600000	mg/L
EP-2	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-2	9/1/2015	Nitrogen, Nitrite	ND	1	0.28	1000000	mg/L
EP-2	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-2	9/1/2015	Sulfate	960	50	32	600000000	mg/L
EP-2	9/2/2015	E-Coli	5475	10	10	NA	CFU/100ml
EP-2	9/2/2015	Biochemical Oxygen Demand	460	2	2	NA	mg/L
EP-2	9/2/2015	Chemical Oxygen Demand	780	10	10	NA	mg/L
EP-2	8/29/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-2	8/29/2016	Biochemical Oxygen Demand	220	2	2	NA	mg/L
EP-2	8/29/2016	Bromide	4.5	0.5	0.22	NA	mg/L
EP-2	8/29/2016	Chloride	3000	100	10	250000000	mg/L
EP-2	8/29/2016	Chemical Oxygen Demand	690	10	3	NA	mg/L
EP-2	8/29/2016	Fluoride, Total	22	2	1	1600000	mg/L
EP-2	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-2	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-2	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-2	8/29/2016	Sulfate	1600	50	14	600000000	mg/L
EP-2	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-2	3/30/2017	Biochemical Oxygen Demand	410	2	2	NA	mg/L
EP-2	3/30/2017	Bromide	1.5	2	0.61	NA	mg/L
EP-2	3/30/2017	Chloride	3500	250	120	250000000	mg/L
EP-2	3/30/2017	Chemical Oxygen Demand	1030	20	20	NA	mg/L
EP-2	3/30/2017	Fluoride, Total	35	2	1	1600000	mg/L
EP-2	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	3/30/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-2	3/30/2017	Sulfate	1200	250	48	600000000	mg/L
EP-2	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-2	10/24/2017	Biochemical Oxygen Demand	410	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-2	10/24/2017	Bromide	1.2	1	0.15	NA	mg/L
EP-2	10/24/2017	Chloride	3900	250	120	250000000	mg/L
EP-2	10/24/2017	Chemical Oxygen Demand	770	10	10	NA	mg/L
EP-2	10/24/2017	Fluoride, Total	36	1	0.44	1600000	mg/L
EP-2	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-2	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-2	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-2	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-2	2/21/2018	Bromide	0.86	0.5	0.073	NA	mg/L
EP-2	2/21/2018	Chloride	2600	100	50	250000000	mg/L
EP-2	2/21/2018	Fluoride, Total	11	2	0.87	1600000	mg/L
EP-2	2/21/2018	Ortho-Phosphate	1.5	2.5	1.2	NA	mg/L
EP-2	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-2	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-2	2/21/2018	Sulfate	910	10	1.9	600000000	mg/L
EP-2	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-2	3/1/2018	Biochemical Oxygen Demand	450	2	2	NA	mg/L
EP-2	3/1/2018	Chemical Oxygen Demand	787	100	100	NA	mg/L
EP-2	9/6/2018	Bromide	1.2	0.5	0.13	NA	mg/L
EP-2	9/6/2018	Chloride	1700	100	36	250000000	mg/L
EP-2	9/6/2018	Fluoride, Total	25	2	0.59	1600000	mg/L
EP-2	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-2	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-2	9/6/2018	Sulfate	800	100	41	600000000	mg/L
EP-2	9/14/2018	E-Coli	12997	10	10	NA	MPN/100mL
EP-2	9/14/2018	Biochemical Oxygen Demand	180	2	2	NA	mg/L
EP-2	9/14/2018	Chemical Oxygen Demand	370	10	10	NA	mg/L
EP-2	4/30/2019	Bromide	0.55	0.5	0.0725	NA	mg/L
EP-2	4/30/2019	Chloride	1700	50	6.25	250000000	mg/L
EP-2	4/30/2019	Fluoride, Total	38	2	1	1600000	mg/L
EP-2	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-2	4/30/2019	Nitrogen, Nitrite	ND	0.5	0.019	1000000	mg/L
EP-2	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-2	4/30/2019	Sulfate	1200	50	5.35	600000000	mg/L
EP-2	4/30/2019	Biochemical Oxygen Demand	520	2	2	NA	mg/L
EP-2	4/30/2019	Chemical Oxygen Demand	738	50	50	NA	mg/L
EP-2	4/30/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-2	11/21/2019	Bromide	ND	0.5	0.25	NA	mg/L
EP-2	11/21/2019	Chloride	510	25	12.5	250000000	mg/L
EP-2	11/21/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
EP-2	11/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
EP-2	11/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
EP-2	11/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
EP-2	11/21/2019	Sulfate	1700	25	12.5	600000000	mg/L
EP-2	11/21/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-2	11/21/2019	Biochemical Oxygen Demand	1600	2	2	NA	mg/L
EP-2	11/21/2019	Chemical Oxygen Demand	2290	625	625	NA	mg/L
EP-2	9/16/2020	Coliform, E-Coli	10462	10	10	NA	MPN/100ml
EP-2	9/16/2020	Biochemical Oxygen Demand	240	2	2	NA	mg/L
EP-2	9/16/2020	Bromide	1.9	0.5	0.25	NA	mg/L
EP-2	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-2	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	9/16/2020	Chloride	3400	250	120	250000000	mg/L
EP-2	9/16/2020	Fluoride, Total	51	2	0.87	1600000	mg/L
EP-2	9/16/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-2	9/16/2020	Sulfate	350	10	5	600000000	mg/L
EP-2	9/16/2020	Chemical Oxygen Demand	379	125	32.5	NA	mg/L
EP-2	9/17/2020	Bromide	ND	0.5	0.25	NA	mg/L
EP-2	9/17/2020	Chloride	1.4	2.5	1.2	250000000	mg/L
EP-2	9/17/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
EP-2	9/17/2020	Nitrogen, Nitrate	0.34	0.5	0.1	10000000	mg/L
EP-2	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
EP-2	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-2	9/17/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
EP-2	12/21/2020	Chemical Oxygen Demand	644	80	51.2	NA	mg/L
EP-2	12/21/2020	Bromide	ND	100	11	NA	mg/L
EP-2	12/21/2020	Chloride	3250	100	12	250000000	mg/L
EP-2	12/21/2020	Fluoride, Total	ND	100	30	1600000	mg/L
EP-2	12/21/2020	Sulfate	656	100	37	600000000	mg/L
EP-2	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-2	12/21/2020	Phosphorus, Ortho	0.103	0.05	0.015	NA	mg/L
EP-2	12/21/2020	Nitrogen, Nitrate	0.28	0.05	0.018	10000000	mg/L
EP-2	12/21/2020	Solids, Total Suspended	327	33.3	0	NA	mg/L
EP-2	12/21/2020	Biochemical Oxygen Demand	39.8	2	2	NA	mg/L
EP-2	12/21/2020	Nitrogen, Nitrate & Nitrite	0.28	0.05	0.018	10000000	mg/L
EP-2	12/21/2020	Solids, Total Suspended	327	33.3	0	NA	mg/L
EP-3	5/29/2012	Bromide	2.4	0.5	0.37	NA	mg/L
EP-3	5/29/2012	Chloride	9500	250	26	250000000	mg/L
EP-3	5/29/2012	Fluoride, Total	22	2	0.76	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-3	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-3	5/29/2012	Sulfate	1400	25	5.9	600000000	mg/L
EP-3	5/30/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-3	5/30/2012	Biochemical Oxygen Demand	69	2	2	NA	mg/L
EP-3	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-3	11/6/2012	Chloride	2000	250	26	250000000	mg/L
EP-3	11/6/2012	Fluoride, Total	77	2	0.76	1600000	mg/L
EP-3	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-3	11/6/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-3	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-3	11/6/2012	Sulfate	1200	250	59	600000000	mg/L
EP-3	11/7/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-3	11/7/2012	Biochemical Oxygen Demand	390	2	2	NA	mg/L
EP-3	11/7/2012	Chemical Oxygen Demand	900	10	10	NA	mg/L
EP-3	5/28/2013	Bromide	2.7	1	0.26	NA	mg/L
EP-3	5/28/2013	Chloride	6500	500	150	250000000	mg/L
EP-3	5/28/2013	Fluoride, Total	21	10	3.3	1600000	mg/L
EP-3	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-3	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-3	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-3	5/28/2013	Sulfate	1400	50	12	600000000	mg/L
EP-3	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-3	5/29/2013	Biochemical Oxygen Demand	120	5	2	NA	mg/L
EP-3	5/29/2013	Chemical Oxygen Demand	1600	10	10	NA	mg/L
EP-3	10/15/2013	Bromide	1.3	1	0.79	NA	mg/L
EP-3	10/15/2013	Chloride	5200	250	38	250000000	mg/L
EP-3	10/15/2013	Fluoride, Total	39	10	3.5	1600000	mg/L
EP-3	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-3	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-3	10/15/2013	Sulfate	730	50	16	600000000	mg/L
EP-3	10/16/2013	E-Coli	121	10	10	NA	CFU/100ml
EP-3	10/16/2013	Biochemical Oxygen Demand	320	2	2	NA	mg/L
EP-3	10/16/2013	Chemical Oxygen Demand	870	100	100	NA	mg/L
EP-3	3/5/2014	E-Coli	122	10	10	NA	CFU/100ml
EP-3	3/5/2014	Biochemical Oxygen Demand	440	2	2	NA	mg/L
EP-3	3/5/2014	Bromide	3.2	1	0.79	NA	mg/L
EP-3	3/5/2014	Chloride	3700	250	190	250000000	mg/L
EP-3	3/5/2014	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-3	3/5/2014	Fluoride, Total	23	1	0.35	1600000	mg/L
EP-3	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-3	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-3	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-3	3/5/2014	Sulfate	670	50	16	600000000	mg/L
EP-3	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-3	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-3	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-3	11/12/2014	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	11/12/2014	Bromide	1	1	0.26	NA	mg/L
EP-3	11/12/2014	Chloride	4000	250	11	250000000	mg/L
EP-3	11/12/2014	Chemical Oxygen Demand	590	10	10	NA	mg/L
EP-3	11/12/2014	Fluoride, Total	34	1	0.15	1600000	mg/L
EP-3	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-3	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-3	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-3	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-3	11/13/2014	E-Coli	408	10	10	NA	CFU/100ml
EP-3	3/24/2015	Bromide	5.4	1	0.77	NA	mg/L
EP-3	3/24/2015	Chloride	4000	250	67	250000000	mg/L
EP-3	3/24/2015	Chemical Oxygen Demand	980	10	10	NA	mg/L
EP-3	3/24/2015	Fluoride, Total	17	1	0.29	1600000	mg/L
EP-3	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-3	3/24/2015	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
EP-3	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-3	3/24/2015	Sulfate	900	50	11	600000000	mg/L
EP-3	3/26/2015	E-Coli	24196	10	10	NA	CFU/100ml
EP-3	3/26/2015	Biochemical Oxygen Demand	230	2	2	NA	mg/L
EP-3	9/1/2015	Bromide	1.9	1	0.68	NA	mg/L
EP-3	9/1/2015	Chloride	5300	250	170	250000000	mg/L
EP-3	9/1/2015	Fluoride, Total	23	10	3.2	1600000	mg/L
EP-3	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-3	9/1/2015	Nitrogen, Nitrite	ND	1	0.28	1000000	mg/L
EP-3	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-3	9/1/2015	Sulfate	650	50	32	600000000	mg/L
EP-3	9/2/2015	E-Coli	1076	10	10	NA	CFU/100ml
EP-3	9/2/2015	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	9/2/2015	Chemical Oxygen Demand	720	10	10	NA	mg/L
EP-3	8/29/2016	E-Coli	--	10	10	NA	CFU/100ml
EP-3	8/29/2016	Biochemical Oxygen Demand	110	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	8/29/2016	Bromide	3.7	0.5	0.22	NA	mg/L
EP-3	8/29/2016	Chloride	5100	250	25	250000000	mg/L
EP-3	8/29/2016	Chemical Oxygen Demand	750	10	3	NA	mg/L
EP-3	8/29/2016	Fluoride, Total	18	2	1	1600000	mg/L
EP-3	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-3	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-3	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-3	8/29/2016	Sulfate	1600	100	28	600000000	mg/L
EP-3	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-3	3/30/2017	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-3	3/30/2017	Bromide	2.5	0.5	0.15	NA	mg/L
EP-3	3/30/2017	Chloride	5000	2500	1200	250000000	mg/L
EP-3	3/30/2017	Chemical Oxygen Demand	717	10	10	NA	mg/L
EP-3	3/30/2017	Fluoride, Total	10	2	1	1600000	mg/L
EP-3	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-3	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-3	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-3	3/30/2017	Sulfate	1200	1000	190	600000000	mg/L
EP-3	10/24/2017	Bromide	1.5	1	0.15	NA	mg/L
EP-3	10/24/2017	Chloride	4800	250	120	250000000	mg/L
EP-3	10/24/2017	Fluoride, Total	31	1	0.44	1600000	mg/L
EP-3	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-3	10/24/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-3	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-3	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-3	10/24/2017	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-3	10/24/2017	Chemical Oxygen Demand	800	10	10	NA	mg/L
EP-3	2/21/2018	Bromide	0.86	0.5	0.073	NA	mg/L
EP-3	2/21/2018	Chloride	3700	250	120	250000000	mg/L
EP-3	2/21/2018	Fluoride, Total	10	2	0.87	1600000	mg/L
EP-3	2/21/2018	Ortho-Phosphate	2	2.5	1.2	NA	mg/L
EP-3	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-3	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-3	2/21/2018	Sulfate	830	10	1.9	600000000	mg/L
EP-3	3/1/2018	E-Coli	2987	10	10	NA	MPN/100mL
EP-3	3/1/2018	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-3	3/1/2018	Chemical Oxygen Demand	611	100	100	NA	mg/L
EP-3	9/6/2018	Bromide	1	0.5	0.13	NA	mg/L
EP-3	9/6/2018	Chloride	1900	100	36	250000000	mg/L
EP-3	9/6/2018	Fluoride, Total	31	2	0.59	1600000	mg/L
EP-3	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-3	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-3	9/6/2018	Sulfate	890	100	41	600000000	mg/L
EP-3	9/14/2018	E-Coli	1354	10	10	NA	MPN/100mL
EP-3	9/14/2018	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-3	9/14/2018	Chemical Oxygen Demand	340	10	10	NA	mg/L
EP-3	4/30/2019	Bromide	0.58	0.5	0.0725	NA	mg/L
EP-3	4/30/2019	Chloride	2000	100	12.5	250000000	mg/L
EP-3	4/30/2019	Fluoride, Total	33	2	1	1600000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-3	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-3	4/30/2019	Sulfate	1400	100	10.7	600000000	mg/L
EP-3	4/30/2019	Biochemical Oxygen Demand	180	2	2	NA	mg/L
EP-3	4/30/2019	Chemical Oxygen Demand	698	10	10	NA	mg/L
EP-3	4/30/2019	E-Coli	17330	10	10	NA	MPN/100ml
EP-3	4/30/2019	Bromide	0.54	0.5	0.0725	NA	mg/L
EP-3	4/30/2019	Chloride	2200	100	12.5	250000000	mg/L
EP-3	4/30/2019	Fluoride, Total	34	2	1	1600000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-3	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-3	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-3	4/30/2019	Sulfate	1500	100	10.7	600000000	mg/L
EP-3	4/30/2019	Biochemical Oxygen Demand	160	2	2	NA	mg/L
EP-3	4/30/2019	Chemical Oxygen Demand	683	10	10	NA	mg/L
EP-3	4/30/2019	E-Coli	19860	10	10	NA	MPN/100ml
EP-3	11/20/2019	Bromide	2.3	2	1	NA	mg/L
EP-3	11/20/2019	Chloride	770	100	50	250000000	mg/L
EP-3	11/20/2019	Fluoride, Total	37	2	0.579636	1600000	mg/L
EP-3	11/20/2019	Nitrogen, Nitrate	0.22	2	0.12155	10000000	mg/L
EP-3	11/20/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
EP-3	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-3	11/20/2019	Sulfate	1500	100	50	600000000	mg/L
EP-3	11/20/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-3	11/20/2019	Biochemical Oxygen Demand	300	2	2	NA	mg/L
EP-3	11/20/2019	Chemical Oxygen Demand	731	50	50	NA	mg/L
EP-3	9/16/2020	Coliform, E-Coli	5794	10	10	NA	MPN/100ml
EP-3	9/16/2020	Biochemical Oxygen Demand	191	2	2	NA	mg/L
EP-3	9/16/2020	Chloride	3500	250	120	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-3	9/16/2020	Bromide	1.5	0.5	0.25	NA	mg/L
EP-3	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-3	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-3	9/16/2020	Fluoride, Total	41	2	0.87	1600000	mg/L
EP-3	9/16/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-3	9/16/2020	Sulfate	460	10	5	600000000	mg/L
EP-3	9/16/2020	Chemical Oxygen Demand	417	15	3.9	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrate & Nitrite	0.098	0.05	0.018	10000000	mg/L
EP-3	12/21/2020	Biochemical Oxygen Demand	47.1	2	2	NA	mg/L
EP-3	12/21/2020	Solids, Total Suspended	353	33.3	0	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrate	0.098	0.05	0.018	10000000	mg/L
EP-3	12/21/2020	Phosphorus, Ortho	0.097	0.05	0.015	NA	mg/L
EP-3	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-3	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-3	12/21/2020	Chloride	7190	500	60	250000000	mg/L
EP-3	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-3	12/21/2020	Sulfate	1740	500	185	600000000	mg/L
EP-3	12/21/2020	Chemical Oxygen Demand	376	40	25.6	NA	mg/L
EP-3	12/21/2020	Solids, Total Suspended	353	33.3	0	NA	mg/L
EP-4	5/29/2012	Bromide	3.3	0.5	0.37	NA	mg/L
EP-4	5/29/2012	Chloride	6500	250	26	250000000	mg/L
EP-4	5/29/2012	Fluoride, Total	20	2	0.76	1600000	mg/L
EP-4	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-4	5/29/2012	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-4	5/29/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
EP-4	5/29/2012	Sulfate	1400	25	5.9	600000000	mg/L
EP-4	5/30/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-4	5/30/2012	Biochemical Oxygen Demand	59	2	2	NA	mg/L
EP-4	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-4	11/6/2012	Chloride	4000	250	26	250000000	mg/L
EP-4	11/6/2012	Fluoride, Total	46	2	0.76	1600000	mg/L
EP-4	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-4	11/6/2012	Nitrate & Nitrite	ND	10	5	NA	mg/L
EP-4	11/6/2012	Sulfate	980	10	2.4	600000000	mg/L
EP-4	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-4	11/7/2012	Biochemical Oxygen Demand	230	2	2	NA	mg/L
EP-4	11/7/2012	Chemical Oxygen Demand	880	10	10	NA	mg/L
EP-4	5/28/2013	Bromide	2.6	1	0.26	NA	mg/L
EP-4	5/28/2013	Chloride	7700	500	150	250000000	mg/L
EP-4	5/28/2013	Fluoride, Total	19	10	3.3	1600000	mg/L
EP-4	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-4	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-4	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-4	5/28/2013	Sulfate	1500	50	12	600000000	mg/L
EP-4	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-4	5/29/2013	Biochemical Oxygen Demand	96	5	2	NA	mg/L
EP-4	5/29/2013	Chemical Oxygen Demand	700	10	10	NA	mg/L
EP-4	10/15/2013	Bromide	1.4	1	0.79	NA	mg/L
EP-4	10/15/2013	Chloride	6000	250	38	250000000	mg/L
EP-4	10/15/2013	Fluoride, Total	33	1	0.35	1600000	mg/L
EP-4	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-4	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-4	10/15/2013	Sulfate	830	50	16	600000000	mg/L
EP-4	10/16/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-4	10/16/2013	Biochemical Oxygen Demand	270	2	2	NA	mg/L
EP-4	10/16/2013	Chemical Oxygen Demand	840	100	100	NA	mg/L
EP-4	3/5/2014	E-Coli	1	1	1	NA	CFU/100ml
EP-4	3/5/2014	Biochemical Oxygen Demand	500	2	2	NA	mg/L
EP-4	3/5/2014	Bromide	3.1	1	0.79	NA	mg/L
EP-4	3/5/2014	Chloride	4300	250	190	250000000	mg/L
EP-4	3/5/2014	Chemical Oxygen Demand	1000	10	10	NA	mg/L
EP-4	3/5/2014	Fluoride, Total	18	1	0.35	1600000	mg/L
EP-4	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-4	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-4	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-4	3/5/2014	Sulfate	650	50	16	600000000	mg/L
EP-4	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-4	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-4	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-4	11/12/2014	Biochemical Oxygen Demand	120	2	2	NA	mg/L
EP-4	11/12/2014	Bromide	1.1	1	0.26	NA	mg/L
EP-4	11/12/2014	Chloride	4200	250	11	250000000	mg/L
EP-4	11/12/2014	Chemical Oxygen Demand	670	10	10	NA	mg/L
EP-4	11/12/2014	Fluoride, Total	33	1	0.15	1600000	mg/L
EP-4	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-4	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-4	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-4	11/12/2014	Sulfate	1300	50	8.2	600000000	mg/L
EP-4	11/13/2014	E-Coli	63	10	10	NA	CFU/100ml

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	3/24/2015	Bromide	4.3	1	0.77	NA	mg/L
EP-4	3/24/2015	Chloride	7200	500	130	250000000	mg/L
EP-4	3/24/2015	Chemical Oxygen Demand	730	10	10	NA	mg/L
EP-4	3/24/2015	Fluoride, Total	20	10	2.9	1600000	mg/L
EP-4	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-4	3/24/2015	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-4	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-4	3/24/2015	Sulfate	1700	50	11	600000000	mg/L
EP-4	3/26/2015	E-Coli	5475	10	10	NA	CFU/100ml
EP-4	3/26/2015	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-4	9/1/2015	Bromide	1.8	1	0.68	NA	mg/L
EP-4	9/1/2015	Chloride	5300	250	170	250000000	mg/L
EP-4	9/1/2015	Fluoride, Total	24	10	3.2	1600000	mg/L
EP-4	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-4	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-4	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-4	9/1/2015	Sulfate	690	50	32	600000000	mg/L
EP-4	9/2/2015	E-Coli	880	10	10	NA	CFU/100ml
EP-4	9/2/2015	Biochemical Oxygen Demand	110	2	2	NA	mg/L
EP-4	9/2/2015	Chemical Oxygen Demand	910	10	10	NA	mg/L
EP-4	8/29/2016	E-Coli	6131	10	10	NA	CFU/100ml
EP-4	8/29/2016	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-4	8/29/2016	Bromide	3.9	0.5	0.22	NA	mg/L
EP-4	8/29/2016	Chloride	5600	250	25	250000000	mg/L
EP-4	8/29/2016	Chemical Oxygen Demand	870	10	3	NA	mg/L
EP-4	8/29/2016	Fluoride, Total	17	2	1	1600000	mg/L
EP-4	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-4	8/29/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
EP-4	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-4	8/29/2016	Sulfate	1900	100	28	600000000	mg/L
EP-4	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-4	3/30/2017	Biochemical Oxygen Demand	390	2	2	NA	mg/L
EP-4	3/30/2017	Bromide	10	2	0.61	NA	mg/L
EP-4	3/30/2017	Chloride	4300	250	120	250000000	mg/L
EP-4	3/30/2017	Chemical Oxygen Demand	802	10	10	NA	mg/L
EP-4	3/30/2017	Fluoride, Total	37	2	1	1600000	mg/L
EP-4	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-4	3/30/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-4	3/30/2017	Sulfate	1100	250	48	600000000	mg/L
EP-4	10/24/2017	Bromide	1.5	1	0.15	NA	mg/L
EP-4	10/24/2017	Chloride	4900	250	120	250000000	mg/L
EP-4	10/24/2017	Fluoride, Total	31	1	0.44	1600000	mg/L
EP-4	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-4	10/24/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
EP-4	10/24/2017	Sulfate	1100	50	9.6	600000000	mg/L
EP-4	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-4	10/24/2017	Biochemical Oxygen Demand	280	2	2	NA	mg/L
EP-4	10/24/2017	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-4	2/21/2018	Bromide	1	0.5	0.073	NA	mg/L
EP-4	2/21/2018	Chloride	4500	250	120	250000000	mg/L
EP-4	2/21/2018	Fluoride, Total	10	2	0.87	1600000	mg/L
EP-4	2/21/2018	Ortho-Phosphate	2.5	2.5	1.2	NA	mg/L
EP-4	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-4	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-4	2/21/2018	Sulfate	840	10	1.9	600000000	mg/L
EP-4	3/1/2018	E-Coli	402	10	10	NA	MPN/100mL
EP-4	3/1/2018	Biochemical Oxygen Demand	160	2	2	NA	mg/L
EP-4	3/1/2018	Chemical Oxygen Demand	106	20	20	NA	mg/L
EP-4	9/6/2018	Bromide	1.3	0.5	0.13	NA	mg/L
EP-4	9/6/2018	Chloride	2700	100	36	250000000	mg/L
EP-4	9/6/2018	Fluoride, Total	28	2	0.59	1600000	mg/L
EP-4	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-4	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
EP-4	9/6/2018	Sulfate	1000	100	41	600000000	mg/L
EP-4	9/14/2018	E-Coli	71	10	10	NA	MPN/100mL
EP-4	9/14/2018	Biochemical Oxygen Demand	85	2	2	NA	mg/L
EP-4	9/14/2018	Chemical Oxygen Demand	320	10	10	NA	mg/L
EP-4	4/30/2019	Bromide	0.77	0.5	0.0725	NA	mg/L
EP-4	4/30/2019	Chloride	3100	100	12.5	250000000	mg/L
EP-4	4/30/2019	Fluoride, Total	32	2	1	1600000	mg/L
EP-4	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-4	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-4	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-4	4/30/2019	Sulfate	1500	100	10.7	600000000	mg/L
EP-4	4/30/2019	Biochemical Oxygen Demand	260	2	2	NA	mg/L
EP-4	4/30/2019	Chemical Oxygen Demand	800	10	10	NA	mg/L
EP-4	4/30/2019	E-Coli	24200	10	10	NA	MPN/100ml
EP-4	9/17/2020	Bromide	6.1	0.5	0.25	NA	mg/L
EP-4	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-4	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-4	9/17/2020	Fluoride, Total	18	2	0.87	1600000	mg/L
EP-4	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-4	9/17/2020	Solids, Total Suspended	36	4	4	NA	mg/L
EP-4	9/17/2020	Chloride	8800	500	250	250000000	mg/L
EP-4	9/17/2020	Sulfate	4000	500	250	600000000	mg/L
EP-4	9/17/2020	Chemical Oxygen Demand	298	15	3.9	NA	mg/L
EP-4	9/18/2020	Coliform, E-Coli	1607	10	10	NA	MPN/100ml
EP-4	9/29/2020	Biochemical Oxygen Demand	93	2	2	NA	mg/L
EP-4	12/21/2020	Chemical Oxygen Demand	336	80	51.2	NA	mg/L
EP-4	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-4	12/21/2020	Chloride	9130	500	60	250000000	mg/L
EP-4	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-4	12/21/2020	Sulfate	2890	500	185	600000000	mg/L
EP-4	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-4	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-4	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-4	12/21/2020	Solids, Total Suspended	183	14.3	0	NA	mg/L
EP-4	12/21/2020	Biochemical Oxygen Demand	40	2	2	NA	mg/L
EP-4	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-4	9/17/2020	Solids, Total Suspended	36	4	4	NA	mg/L
EP-4	12/21/2020	Solids, Total Suspended	183	14.3	0	NA	mg/L
EP-5	5/29/2012	Bromide	3.2	0.5	0.37	NA	mg/L
EP-5	5/29/2012	Chloride	6100	250	26	250000000	mg/L
EP-5	5/29/2012	Fluoride, Total	21	2	0.76	1600000	mg/L
EP-5	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-5	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-5	5/29/2012	Sulfate	1300	25	5.9	600000000	mg/L
EP-5	5/30/2012	E-Coli	10	10	10	NA	CFU/100ml
EP-5	5/30/2012	Biochemical Oxygen Demand	35	2	2	NA	mg/L
EP-5	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-5	11/6/2012	Chloride	5600	250	26	250000000	mg/L
EP-5	11/6/2012	Fluoride, Total	16	5	1.9	1600000	mg/L
EP-5	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-5	11/6/2012	Nitrogen, Nitrite	ND	50	25	1000000	mg/L
EP-5	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-5	11/6/2012	Sulfate	870	10	2.4	600000000	mg/L
EP-5	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-5	11/7/2012	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-5	11/7/2012	Chemical Oxygen Demand	1000	10	10	NA	mg/L
EP-5	5/28/2013	Bromide	2.9	1	0.26	NA	mg/L
EP-5	5/28/2013	Chloride	8400	500	150	250000000	mg/L
EP-5	5/28/2013	Fluoride, Total	17	10	3.3	1600000	mg/L
EP-5	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-5	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-5	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-5	5/28/2013	Sulfate	1400	50	12	600000000	mg/L
EP-5	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-5	5/29/2013	Biochemical Oxygen Demand	66	5	2	NA	mg/L
EP-5	5/29/2013	Chemical Oxygen Demand	600	10	10	NA	mg/L
EP-5	10/15/2013	Bromide	1.6	1	0.79	NA	mg/L
EP-5	10/15/2013	Chloride	6500	250	38	250000000	mg/L
EP-5	10/15/2013	Fluoride, Total	29	1	0.35	1600000	mg/L
EP-5	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-5	10/15/2013	Nitrate & Nitrite	ND	4	1.5	NA	mg/L
EP-5	10/15/2013	Sulfate	950	50	16	600000000	mg/L
EP-5	10/16/2013	E-Coli	31	10	10	NA	CFU/100ml
EP-5	10/16/2013	Biochemical Oxygen Demand	220	2	2	NA	mg/L
EP-5	10/16/2013	Chemical Oxygen Demand	720	10	10	NA	mg/L
EP-5	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-5	3/5/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	3/5/2014	Bromide	2.8	1	0.79	NA	mg/L
EP-5	3/5/2014	Chloride	5200	250	190	250000000	mg/L
EP-5	3/5/2014	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-5	3/5/2014	Fluoride, Total	12	1	0.35	1600000	mg/L
EP-5	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-5	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-5	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-5	3/5/2014	Sulfate	740	50	16	600000000	mg/L
EP-5	10/22/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-5	10/22/2014	TPH ORO	ND	5	5	85800	mg/L
EP-5	10/22/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-5	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	11/12/2014	Bromide	3.5	1	0.26	NA	mg/L
EP-5	11/12/2014	Chloride	13000	500	22	250000000	mg/L
EP-5	11/12/2014	Chemical Oxygen Demand	660	50	50	NA	mg/L
EP-5	11/12/2014	Fluoride, Total	27	10	1.5	1600000	mg/L
EP-5	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-5	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-5	11/12/2014	Sulfate	2100	50	8.2	600000000	mg/L
EP-5	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-5	3/24/2015	Bromide	4.1	1	0.77	NA	mg/L
EP-5	3/24/2015	Chloride	7500	500	130	250000000	mg/L
EP-5	3/24/2015	Chemical Oxygen Demand	860	10	10	NA	mg/L
EP-5	3/24/2015	Fluoride, Total	17	1	0.29	1600000	mg/L
EP-5	3/24/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-5	3/24/2015	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-5	3/24/2015	Nitrogen, Nitrate	ND	1	0.32	10000000	mg/L
EP-5	3/24/2015	Sulfate	1600	50	11	600000000	mg/L
EP-5	3/26/2015	E-Coli	135	10	10	NA	CFU/100ml
EP-5	3/26/2015	Biochemical Oxygen Demand	47	2	2	NA	mg/L
EP-5	9/1/2015	Bromide	3.7	1	0.68	NA	mg/L
EP-5	9/1/2015	Chloride	8500	500	340	250000000	mg/L
EP-5	9/1/2015	Fluoride, Total	20	10	3.2	1600000	mg/L
EP-5	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-5	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-5	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-5	9/1/2015	Sulfate	1600	50	32	600000000	mg/L
EP-5	9/2/2015	E-Coli	1515	10	10	NA	CFU/100ml
EP-5	9/2/2015	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-5	9/2/2015	Chemical Oxygen Demand	980	50	50	NA	mg/L
EP-5	8/29/2016	E-Coli	31	10	10	NA	CFU/100ml
EP-5	8/29/2016	Biochemical Oxygen Demand	19	2	2	NA	mg/L
EP-5	8/29/2016	Bromide	5.9	0.5	0.22	NA	mg/L
EP-5	8/29/2016	Chloride	11000	500	51	250000000	mg/L
EP-5	8/29/2016	Chemical Oxygen Demand	860	10	3	NA	mg/L
EP-5	8/29/2016	Fluoride, Total	20	2	1	1600000	mg/L
EP-5	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-5	8/29/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
EP-5	8/29/2016	Sulfate	2900	500	140	600000000	mg/L
EP-5	3/30/2017	E-Coli	52	10	10	NA	MPN/100mL
EP-5	3/30/2017	Biochemical Oxygen Demand	32	2	2	NA	mg/L
EP-5	3/30/2017	Bromide	5.4	0.5	0.15	NA	mg/L
EP-5	3/30/2017	Chloride	7700	500	250	250000000	mg/L
EP-5	3/30/2017	Chemical Oxygen Demand	990	10	10	NA	mg/L
EP-5	3/30/2017	Fluoride, Total	20	2	1	1600000	mg/L
EP-5	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-5	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-5	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-5	3/30/2017	Sulfate	1900	500	96	600000000	mg/L
EP-5	10/24/2017	Bromide	4.5	1	0.15	NA	mg/L
EP-5	10/24/2017	Chloride	10000	500	250	250000000	mg/L
EP-5	10/24/2017	Fluoride, Total	30	10	4.4	1600000	mg/L
EP-5	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-5	10/24/2017	Nitrate & Nitrite	ND	10	1.3	NA	mg/L
EP-5	10/24/2017	Sulfate	2200	50	9.6	600000000	mg/L
EP-5	10/24/2017	E-Coli	52	10	10	NA	MPN/100mL
EP-5	10/24/2017	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	10/24/2017	Chemical Oxygen Demand	820	50	50	NA	mg/L
EP-5	2/21/2018	Bromide	1.3	0.5	0.073	NA	mg/L
EP-5	2/21/2018	Chloride	6300	250	120	250000000	mg/L
EP-5	2/21/2018	Fluoride, Total	14	2	0.87	1600000	mg/L
EP-5	2/21/2018	Ortho-Phosphate	2.6	2.5	1.2	NA	mg/L
EP-5	2/21/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
EP-5	2/21/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-5	2/21/2018	Sulfate	1200	250	48	600000000	mg/L
EP-5	3/1/2018	E-Coli	109	10	10	NA	MPN/100mL
EP-5	3/1/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-5	3/1/2018	Chemical Oxygen Demand	849	20	20	NA	mg/L
EP-5	9/6/2018	Bromide	2.8	0.5	0.13	NA	mg/L
EP-5	9/6/2018	Chloride	5800	250	91	250000000	mg/L
EP-5	9/6/2018	Fluoride, Total	30	2	0.59	1600000	mg/L
EP-5	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-5	9/6/2018	Nitrate & Nitrite	ND	4	1.1	NA	mg/L
EP-5	9/6/2018	Sulfate	1500	250	100	600000000	mg/L
EP-5	9/14/2018	E-Coli	10	10	10	NA	MPN/100mL
EP-5	9/14/2018	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-5	9/14/2018	Chemical Oxygen Demand	930	10	10	NA	mg/L
EP-5	4/30/2019	Bromide	1	0.5	0.0725	NA	mg/L
EP-5	4/30/2019	Chloride	3900	250	31.25	250000000	mg/L
EP-5	4/30/2019	Fluoride, Total	31	2	1	1600000	mg/L
EP-5	4/30/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
EP-5	4/30/2019	Nitrogen, Nitrite	ND	2	0.076	1000000	mg/L
EP-5	4/30/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-5	4/30/2019	Sulfate	1500	250	26.75	600000000	mg/L
EP-5	4/30/2019	Biochemical Oxygen Demand	97	2	2	NA	mg/L
EP-5	4/30/2019	Chemical Oxygen Demand	618	10	10	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-5	4/30/2019	E-Coli	109	10	10	NA	MPN/100ml
EP-5	9/17/2020	Bromide	4.8	0.5	0.25	NA	mg/L
EP-5	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-5	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-5	9/17/2020	Fluoride, Total	62	2	0.87	1600000	mg/L
EP-5	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-5	9/17/2020	Solids, Total Suspended	150	8	8	NA	mg/L
EP-5	9/17/2020	Chloride	6900	500	250	250000000	mg/L
EP-5	9/17/2020	Sulfate	3400	500	250	600000000	mg/L
EP-5	9/17/2020	Chemical Oxygen Demand	310	15	3.9	NA	mg/L
EP-5	9/18/2020	Coliform, E-Coli	74	10	10	NA	MPN/100ml
EP-5	9/29/2020	Biochemical Oxygen Demand	38	2	2	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-5	12/21/2020	Biochemical Oxygen Demand	12.4	2	2	NA	mg/L
EP-5	12/21/2020	Solids, Total Suspended	97.1	14.3	0	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-5	12/21/2020	Phosphorus, Ortho	0.253	0.05	0.015	NA	mg/L
EP-5	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-5	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-5	12/21/2020	Chloride	8970	500	60	250000000	mg/L
EP-5	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-5	12/21/2020	Sulfate	3570	500	185	600000000	mg/L
EP-5	12/21/2020	Chemical Oxygen Demand	217	80	51.2	NA	mg/L
EP-5	12/21/2020	Solids, Total Suspended	97.1	14.3	0	NA	mg/L
EP-5	9/17/2020	Solids, Total Suspended	150	8	8	NA	mg/L
EP-6	5/29/2012	Bromide	3.3	0.5	0.37	NA	mg/L
EP-6	5/29/2012	Chloride	8800	250	26	250000000	mg/L
EP-6	5/29/2012	Fluoride, Total	20	2	0.76	1600000	mg/L
EP-6	5/29/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
EP-6	5/29/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
EP-6	5/29/2012	Sulfate	2100	250	59	600000000	mg/L
EP-6	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-6	5/30/2012	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-6	11/6/2012	Bromide	ND	2	1.5	NA	mg/L
EP-6	11/6/2012	Chloride	11000	500	51	250000000	mg/L
EP-6	11/6/2012	Fluoride, Total	21	2	0.76	1600000	mg/L
EP-6	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-6	11/6/2012	Nitrogen, Nitrite	ND	50	25	1000000	mg/L
EP-6	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-6	11/6/2012	Sulfate	2500	250	59	600000000	mg/L
EP-6	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-6	11/7/2012	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-6	11/7/2012	Chemical Oxygen Demand	1000	20	20	NA	mg/L
EP-6	5/28/2013	Bromide	4.4	1	0.26	NA	mg/L
EP-6	5/28/2013	Chloride	11000	500	150	250000000	mg/L
EP-6	5/28/2013	Fluoride, Total	15	10	3.3	1600000	mg/L
EP-6	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-6	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-6	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-6	5/28/2013	Sulfate	1900	50	12	600000000	mg/L
EP-6	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-6	5/29/2013	Biochemical Oxygen Demand	46	5	2	NA	mg/L
EP-6	5/29/2013	Chemical Oxygen Demand	710	10	10	NA	mg/L
EP-6	10/15/2013	Bromide	3.1	1	0.79	NA	mg/L
EP-6	10/15/2013	Chloride	11000	500	76	250000000	mg/L
EP-6	10/15/2013	Fluoride, Total	17	1	0.35	1600000	mg/L
EP-6	10/15/2013	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-6	10/15/2013	Nitrate & Nitrite	ND	10	3.8	NA	mg/L
EP-6	10/15/2013	Sulfate	2200	50	16	600000000	mg/L
EP-6	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-6	10/16/2013	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	10/16/2013	Chemical Oxygen Demand	940	10	10	NA	mg/L
EP-6	3/5/2014	E-Coli	--	10	10	NA	CFU/100ml
EP-6	3/5/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	3/5/2014	Bromide	2.3	1	0.79	NA	mg/L
EP-6	3/5/2014	Chloride	6900	500	390	250000000	mg/L
EP-6	3/5/2014	Chemical Oxygen Demand	600	50	50	NA	mg/L
EP-6	3/5/2014	Fluoride, Total	18	1	0.35	1600000	mg/L
EP-6	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-6	3/5/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
EP-6	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-6	3/5/2014	Sulfate	1500	50	16	600000000	mg/L
EP-6	10/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
EP-6	10/23/2014	TPH ORO	ND	5	5	85800	mg/L
EP-6	10/23/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-6	11/12/2014	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-6	11/12/2014	Bromide	4.3	1	0.26	NA	mg/L
EP-6	11/12/2014	Chloride	15000	500	22	250000000	mg/L
EP-6	11/12/2014	Chemical Oxygen Demand	810	50	50	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	11/12/2014	Fluoride, Total	26	10	1.5	1600000	mg/L
EP-6	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-6	11/12/2014	Nitrogen, Nitrite	ND	10	1	1000000	mg/L
EP-6	11/12/2014	Nitrogen, Nitrate	ND	1	0.064	10000000	mg/L
EP-6	11/12/2014	Sulfate	2200	50	8.2	600000000	mg/L
EP-6	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-6	3/25/2015	Bromide	3.4	1	0.77	NA	mg/L
EP-6	3/25/2015	Chloride	7900	500	130	250000000	mg/L
EP-6	3/25/2015	Chemical Oxygen Demand	980	10	10	NA	mg/L
EP-6	3/25/2015	Fluoride, Total	15	1	0.29	1600000	mg/L
EP-6	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-6	3/25/2015	Nitrate & Nitrite	ND	10	2.2	NA	mg/L
EP-6	3/25/2015	Sulfate	1700	50	11	600000000	mg/L
EP-6	3/26/2015	E-Coli	63	10	10	NA	CFU/100ml
EP-6	3/26/2015	Biochemical Oxygen Demand	47	2	2	NA	mg/L
EP-6	9/1/2015	Bromide	4.6	1	0.68	NA	mg/L
EP-6	9/1/2015	Chloride	11000	500	340	250000000	mg/L
EP-6	9/1/2015	Fluoride, Total	21	10	3.2	1600000	mg/L
EP-6	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-6	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-6	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-6	9/1/2015	Sulfate	2000	50	32	600000000	mg/L
EP-6	9/2/2015	E-Coli	341	10	10	NA	CFU/100ml
EP-6	9/2/2015	Biochemical Oxygen Demand	8	2	2	NA	mg/L
EP-6	9/2/2015	Chemical Oxygen Demand	1700	50	50	NA	mg/L
EP-6	8/29/2016	E-Coli	10	10	10	NA	CFU/100ml
EP-6	8/29/2016	Biochemical Oxygen Demand	14	2	2	NA	mg/L
EP-6	8/29/2016	Bromide	6	0.5	0.22	NA	mg/L
EP-6	8/29/2016	Chloride	10000	500	51	250000000	mg/L
EP-6	8/29/2016	Chemical Oxygen Demand	750	10	3	NA	mg/L
EP-6	8/29/2016	Fluoride, Total	20	2	1	1600000	mg/L
EP-6	8/29/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
EP-6	8/29/2016	Nitrogen, Nitrite	ND	5	2.6	1000000	mg/L
EP-6	8/29/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
EP-6	8/29/2016	Sulfate	2600	500	140	600000000	mg/L
EP-6	3/30/2017	E-Coli	10	10	10	NA	MPN/100mL
EP-6	3/30/2017	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-6	3/30/2017	Bromide	5.5	0.5	0.15	NA	mg/L
EP-6	3/30/2017	Chloride	7200	500	250	250000000	mg/L
EP-6	3/30/2017	Chemical Oxygen Demand	981	10	10	NA	mg/L
EP-6	3/30/2017	Fluoride, Total	22	2	1	1600000	mg/L
EP-6	3/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-6	3/30/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
EP-6	3/30/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
EP-6	3/30/2017	Sulfate	1800	500	96	600000000	mg/L
EP-6	10/24/2017	Bromide	4.7	1	0.15	NA	mg/L
EP-6	10/24/2017	Chloride	10000	500	250	250000000	mg/L
EP-6	10/24/2017	Fluoride, Total	31	10	4.4	1600000	mg/L
EP-6	10/24/2017	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-6	10/24/2017	Nitrogen, Nitrite	ND	10	0.69	1000000	mg/L
EP-6	10/24/2017	Nitrogen, Nitrate	ND	1	0.22	10000000	mg/L
EP-6	10/24/2017	Sulfate	2300	50	9.6	600000000	mg/L
EP-6	10/24/2017	E-Coli	63	10	10	NA	MPN/100mL
EP-6	10/24/2017	Biochemical Oxygen Demand	100	2	2	NA	mg/L
EP-6	10/24/2017	Chemical Oxygen Demand	640	50	50	NA	mg/L
EP-6	2/21/2018	Bromide	2	0.5	0.073	NA	mg/L
EP-6	2/21/2018	Chloride	7500	500	250	250000000	mg/L
EP-6	2/21/2018	Fluoride, Total	39	2	0.87	1600000	mg/L
EP-6	2/21/2018	Ortho-Phosphate	3	2.5	1.2	NA	mg/L
EP-6	2/21/2018	Nitrate & Nitrite	2.6	10	1.3	NA	mg/L
EP-6	2/21/2018	Sulfate	1900	500	96	600000000	mg/L
EP-6	3/1/2018	E-Coli	109	10	10	NA	MPN/100mL
EP-6	3/1/2018	Biochemical Oxygen Demand	150	2	2	NA	mg/L
EP-6	3/1/2018	Chemical Oxygen Demand	591	50	50	NA	mg/L
EP-6	9/7/2018	Bromide	3.3	0.5	0.13	NA	mg/L
EP-6	9/7/2018	Chloride	6300	500	180	250000000	mg/L
EP-6	9/7/2018	Fluoride, Total	33	2	0.59	1600000	mg/L
EP-6	9/7/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
EP-6	9/7/2018	Nitrate & Nitrite	ND	10	2.7	NA	mg/L
EP-6	9/7/2018	Sulfate	1600	500	210	600000000	mg/L
EP-6	9/14/2018	E-Coli	10	10	10	NA	MPN/100mL
EP-6	9/14/2018	Biochemical Oxygen Demand	14	2	2	NA	mg/L
EP-6	9/14/2018	Chemical Oxygen Demand	550	10	10	NA	mg/L
EP-6	4/29/2019	Biochemical Oxygen Demand	54	2	2	NA	mg/L
EP-6	4/29/2019	E-Coli	20	10	10	NA	MPN/100ml
EP-6	4/29/2019	Bromide	1.5	0.5	0.0725	NA	mg/L
EP-6	4/29/2019	Chloride	4100	250	250	250000000	mg/L
EP-6	4/29/2019	Fluoride, Total	33	2	1	1600000	mg/L
EP-6	4/29/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-6	4/29/2019	Nitrogen, Nitrite	2.6	2	0.076	1000000	mg/L
EP-6	4/29/2019	Phosphorus, Ortho	ND	2.5	0.1155	NA	mg/L
EP-6	4/29/2019	Sulfate	1400	250	26.75	600000000	mg/L
EP-6	4/29/2019	Chemical Oxygen Demand	393	10	10	NA	mg/L
EP-6	9/17/2020	Bromide	4.4	0.5	0.25	NA	mg/L
EP-6	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
EP-6	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
EP-6	9/17/2020	Fluoride, Total	57	2	0.87	1600000	mg/L
EP-6	9/17/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
EP-6	9/17/2020	Solids, Total Suspended	130	8	8	NA	mg/L
EP-6	9/17/2020	Chloride	6600	500	250	250000000	mg/L
EP-6	9/17/2020	Sulfate	3200	500	250	600000000	mg/L
EP-6	9/17/2020	Chemical Oxygen Demand	440	15	3.9	NA	mg/L
EP-6	9/18/2020	Coliform, E-Coli	171	10	10	NA	MPN/100ml
EP-6	9/29/2020	Biochemical Oxygen Demand	39	2	2	NA	mg/L
EP-6	12/21/2020	Chemical Oxygen Demand	222	80	51.2	NA	mg/L
EP-6	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-6	12/21/2020	Chloride	10400	500	60	250000000	mg/L
EP-6	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-6	12/21/2020	Sulfate	3960	500	185	600000000	mg/L
EP-6	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-6	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-6	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-6	12/21/2020	Solids, Total Suspended	57	5	0	NA	mg/L
EP-6	12/21/2020	Biochemical Oxygen Demand	2.35	2	2	NA	mg/L
EP-6	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-6	9/17/2020	Solids, Total Suspended	130	8	8	NA	mg/L
EP-6	12/21/2020	Solids, Total Suspended	57	5	0	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Bromide	1.9	2	1	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chloride	4200	250	125	250000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Fluoride, Total	48	2	0.579636	1600000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrogen, Nitrate	ND	2	0.12155	10000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Sulfate	2000	100	50	600000000	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	E-Coli	183	10	10	NA	MPN/100ml
EP-6 (Pond 4 & 5)	11/20/2019	Biochemical Oxygen Demand	12	2	2	NA	mg/L
EP-6 (Pond 4 & 5)	11/20/2019	Chemical Oxygen Demand	214	7.5	7.5	NA	mg/L
EP-7	5/29/2012	Bromide	25	5	3.7	NA	mg/L
EP-7	5/29/2012	Chloride	50000	2500	260	250000000	mg/L
EP-7	5/29/2012	Fluoride, Total	24	5	1.9	1600000	mg/L
EP-7	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-7	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-7	5/29/2012	Sulfate	9500	500	120	600000000	mg/L
EP-7	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-7	5/30/2012	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	11/6/2012	Bromide	ND	500	380	NA	mg/L
EP-7	11/6/2012	Chloride	81000	2500	260	250000000	mg/L
EP-7	11/6/2012	Fluoride, Total	37	10	3.8	1600000	mg/L
EP-7	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-7	11/6/2012	Nitrogen, Nitrite	ND	500	250	1000000	mg/L
EP-7	11/6/2012	Nitrogen, Nitrate	ND	2	1	10000000	mg/L
EP-7	11/6/2012	Sulfate	15000	2500	590	600000000	mg/L
EP-7	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-7	11/7/2012	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-7	11/7/2012	Chemical Oxygen Demand	2300	200	200	NA	mg/L
EP-7	5/28/2013	Bromide	30	10	2.6	NA	mg/L
EP-7	5/28/2013	Chloride	55000	2500	740	250000000	mg/L
EP-7	5/28/2013	Fluoride, Total	28	10	3.3	1600000	mg/L
EP-7	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-7	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-7	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-7	5/28/2013	Sulfate	11000	250	62	600000000	mg/L
EP-7	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-7	5/29/2013	Biochemical Oxygen Demand	19	5	2	NA	mg/L
EP-7	5/29/2013	Chemical Oxygen Demand	6000	10	10	NA	mg/L
EP-7	10/15/2013	Bromide	26	10	7.9	NA	mg/L
EP-7	10/15/2013	Chloride	52000	2500	380	250000000	mg/L
EP-7	10/15/2013	Fluoride, Total	24	10	3.5	1600000	mg/L
EP-7	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-7	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-7	10/15/2013	Sulfate	11000	2500	800	600000000	mg/L
EP-7	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-7	10/16/2013	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-7	10/16/2013	Chemical Oxygen Demand	3200	50	50	NA	mg/L
EP-7	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-7	3/5/2014	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-7	3/5/2014	Bromide	19	1	0.79	NA	mg/L
EP-7	3/5/2014	Chloride	41000	2500	1900	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	3/5/2014	Chemical Oxygen Demand	3900	1000	1000	NA	mg/L
EP-7	3/5/2014	Fluoride, Total	28	10	3.5	1600000	mg/L
EP-7	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-7	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-7	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-7	3/5/2014	Sulfate	8500	2500	800	600000000	mg/L
EP-7	11/12/2014	Biochemical Oxygen Demand	28	2	2	NA	mg/L
EP-7	11/12/2014	Bromide	33	10	2.6	NA	mg/L
EP-7	11/12/2014	Chloride	61000	2500	110	250000000	mg/L
EP-7	11/12/2014	Chemical Oxygen Demand	4400	100	100	NA	mg/L
EP-7	11/12/2014	Fluoride, Total	44	10	1.5	1600000	mg/L
EP-7	11/12/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-7	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-7	11/12/2014	Sulfate	12000	250	41	600000000	mg/L
EP-7	11/13/2014	E-Coli	20	10	10	NA	CFU/100ml
EP-7	3/25/2015	Bromide	27	10	7.7	NA	mg/L
EP-7	3/25/2015	Chloride	50000	2500	670	250000000	mg/L
EP-7	3/25/2015	Chemical Oxygen Demand	670	100	100	NA	mg/L
EP-7	3/25/2015	Fluoride, Total	25	10	2.9	1600000	mg/L
EP-7	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-7	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-7	3/25/2015	Sulfate	11000	2500	570	600000000	mg/L
EP-7	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-7	3/26/2015	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-7	9/1/2015	Bromide	26	10	6.8	NA	mg/L
EP-7	9/1/2015	Chloride	59000	2500	1700	250000000	mg/L
EP-7	9/1/2015	Fluoride, Total	27	10	3.2	1600000	mg/L
EP-7	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-7	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-7	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-7	9/1/2015	Sulfate	12000	2500	1600	600000000	mg/L
EP-7	9/2/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-7	9/2/2015	Biochemical Oxygen Demand	21	2	2	NA	mg/L
EP-7	9/2/2015	Chemical Oxygen Demand	2000	500	500	NA	mg/L
EP-7	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-7	8/30/2016	Biochemical Oxygen Demand	4	2	2	NA	mg/L
EP-7	8/30/2016	Bromide	34	5	2.2	NA	mg/L
EP-7	8/30/2016	Chloride	66000	2500	250	250000000	mg/L
EP-7	8/30/2016	Chemical Oxygen Demand	3100	1000	300	NA	mg/L
EP-7	8/30/2016	Fluoride, Total	17	5	2.5	1600000	mg/L
EP-7	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-7	8/30/2016	Nitrate & Nitrite	ND	100	46	NA	mg/L
EP-7	8/30/2016	Sulfate	15000	1000	280	600000000	mg/L
EP-7	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-7	3/30/2017	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-7	3/30/2017	Bromide	33	2	0.61	NA	mg/L
EP-7	3/30/2017	Chloride	49000	2500	1200	250000000	mg/L
EP-7	3/30/2017	Chemical Oxygen Demand	3150	200	200	NA	mg/L
EP-7	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-7	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-7	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-7	3/30/2017	Sulfate	9100	2500	480	600000000	mg/L
EP-7	10/24/2017	Bromide	38	10	1.5	NA	mg/L
EP-7	10/24/2017	Chloride	95000	5000	2500	250000000	mg/L
EP-7	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-7	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-7	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-7	10/24/2017	Sulfate	18000	5000	960	600000000	mg/L
EP-7	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-7	10/24/2017	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-7	10/24/2017	Chemical Oxygen Demand	2700	200	200	NA	mg/L
EP-7	2/23/2018	Bromide	35	5	0.73	NA	mg/L
EP-7	2/23/2018	Chloride	56000	2500	1200	250000000	mg/L
EP-7	2/23/2018	Fluoride, Total	16	5	2.2	1600000	mg/L
EP-7	2/23/2018	Ortho-Phosphate	12	10	5	NA	mg/L
EP-7	2/23/2018	Nitrate & Nitrite	19	40	5.2	NA	mg/L
EP-7	2/23/2018	Sulfate	9900	2500	480	600000000	mg/L
EP-7	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-7	3/1/2018	Biochemical Oxygen Demand	27	2	2	NA	mg/L
EP-7	3/1/2018	Chemical Oxygen Demand	3530	200	200	NA	mg/L
EP-7	9/7/2018	Bromide	43	2	0.54	NA	mg/L
EP-7	9/7/2018	Chloride	70000	5000	1800	250000000	mg/L
EP-7	9/7/2018	Fluoride, Total	45	5	1.6	1600000	mg/L
EP-7	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-7	9/7/2018	Nitrate & Nitrite	ND	100	27	NA	mg/L
EP-7	9/7/2018	Sulfate	12000	5000	2100	600000000	mg/L
EP-7	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-7	9/14/2018	Biochemical Oxygen Demand	46	2	2	NA	mg/L
EP-7	9/14/2018	Chemical Oxygen Demand	4700	1000	1000	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-7	4/29/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-7	4/29/2019	Bromide	25	20	2.9	NA	mg/L
EP-7	4/29/2019	Chloride	88000	2500	2500	250000000	mg/L
EP-7	4/29/2019	Fluoride, Total	25	2	1	1600000	mg/L
EP-7	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-7	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-7	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-7	4/29/2019	Sulfate	14000	2500	267.5	600000000	mg/L
EP-7	4/29/2019	Chemical Oxygen Demand	2370	100	100	NA	mg/L
EP-7	11/20/2019	Bromide	71	20	10	NA	mg/L
EP-7	11/20/2019	Chloride	210000	10000	5000	250000000	mg/L
EP-7	11/20/2019	Fluoride, Total	81	20	5.79636	1600000	mg/L
EP-7	11/20/2019	Nitrogen, Nitrate & Nitrite	ND	400	19.4	10000000	mg/L
EP-7	11/20/2019	Phosphorus, Ortho	ND	100	50	NA	mg/L
EP-7	11/20/2019	Sulfate	21000	1000	500	600000000	mg/L
EP-7	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-7	11/20/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-7	11/20/2019	Chemical Oxygen Demand	5040	375	375	NA	mg/L
EP-7	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-7	9/17/2020	Solids, Total Suspended	200	4	4	NA	mg/L
EP-7	9/17/2020	Chloride	160000	10000	5000	250000000	mg/L
EP-7	9/17/2020	Sulfate	25000	10000	5000	600000000	mg/L
EP-7	9/17/2020	Bromide	98	10	5	NA	mg/L
EP-7	9/17/2020	Fluoride, Total	93	10	4.3	1600000	mg/L
EP-7	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-7	9/17/2020	Chemical Oxygen Demand	356	15	3.9	NA	mg/L
EP-7	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-7	9/29/2020	Biochemical Oxygen Demand	31	2	2	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-7	12/21/2020	Biochemical Oxygen Demand	14.7	2	2	NA	mg/L
EP-7	12/21/2020	Solids, Total Suspended	3270	33.3	0	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-7	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-7	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-7	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-7	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-7	12/21/2020	Sulfate	14000	500	185	600000000	mg/L
EP-7	12/21/2020	Chloride	171000	5000	600	250000000	mg/L
EP-7	12/21/2020	Chemical Oxygen Demand	2410	250	160	NA	mg/L
EP-7	12/21/2020	Solids, Total Suspended	3270	33.3	0	NA	mg/L
EP-7	9/17/2020	Solids, Total Suspended	200	4	4	NA	mg/L
EP-8	5/29/2012	Bromide	39	5	3.7	NA	mg/L
EP-8	5/29/2012	Chloride	67000	2500	260	250000000	mg/L
EP-8	5/29/2012	Fluoride, Total	33	5	1.9	1600000	mg/L
EP-8	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-8	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-8	5/29/2012	Sulfate	9700	250	59	600000000	mg/L
EP-8	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-8	5/30/2012	Biochemical Oxygen Demand	4.5	2	2	NA	mg/L
EP-8	11/6/2012	Bromide	ND	500	380	NA	mg/L
EP-8	11/6/2012	Chloride	250000	10000	1000	250000000	mg/L
EP-8	11/6/2012	Fluoride, Total	71	20	7.6	1600000	mg/L
EP-8	11/6/2012	Ortho-Phosphate	ND	2500	1500	NA	mg/L
EP-8	11/6/2012	Nitrogen, Nitrite	ND	500	250	1000000	mg/L
EP-8	11/6/2012	Nitrogen, Nitrate	ND	500	250	10000000	mg/L
EP-8	11/6/2012	Sulfate	31000	2500	590	600000000	mg/L
EP-8	11/7/2012	E-Coli	--	10	10	NA	CFU/100ml
EP-8	11/7/2012	Biochemical Oxygen Demand	10	2	2	NA	mg/L
EP-8	11/7/2012	Chemical Oxygen Demand	13000	200	200	NA	mg/L
EP-8	5/28/2013	Bromide	19	1	0.26	NA	mg/L
EP-8	5/28/2013	Chloride	47000	2500	740	250000000	mg/L
EP-8	5/28/2013	Fluoride, Total	29	10	3.3	1600000	mg/L
EP-8	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-8	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-8	5/28/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
EP-8	5/28/2013	Sulfate	8600	250	62	600000000	mg/L
EP-8	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-8	5/29/2013	Biochemical Oxygen Demand	22	5	2	NA	mg/L
EP-8	5/29/2013	Chemical Oxygen Demand	4600	10	10	NA	mg/L
EP-8	10/15/2013	Bromide	58	10	7.9	NA	mg/L
EP-8	10/15/2013	Chloride	110000	5000	760	250000000	mg/L
EP-8	10/15/2013	Fluoride, Total	33	10	3.5	1600000	mg/L
EP-8	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-8	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-8	10/15/2013	Sulfate	18000	5000	1600	600000000	mg/L
EP-8	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-8	10/16/2013	Biochemical Oxygen Demand	6.8	2	2	NA	mg/L
EP-8	10/16/2013	Chemical Oxygen Demand	9800	100	100	NA	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-8	3/5/2014	Biochemical Oxygen Demand	13	2	2	NA	mg/L
EP-8	3/5/2014	Bromide	20	1	0.79	NA	mg/L
EP-8	3/5/2014	Chloride	39000	2500	1900	250000000	mg/L
EP-8	3/5/2014	Chemical Oxygen Demand	2900	50	50	NA	mg/L
EP-8	3/5/2014	Fluoride, Total	27	10	3.5	1600000	mg/L
EP-8	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-8	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-8	3/5/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
EP-8	3/5/2014	Sulfate	7900	2500	800	600000000	mg/L
EP-8	11/12/2014	Biochemical Oxygen Demand	27	2	2	NA	mg/L
EP-8	11/12/2014	Bromide	29	10	2.6	NA	mg/L
EP-8	11/12/2014	Chloride	61000	2500	110	250000000	mg/L
EP-8	11/12/2014	Chemical Oxygen Demand	4100	100	100	NA	mg/L
EP-8	11/12/2014	Fluoride, Total	41	10	1.5	1600000	mg/L
EP-8	11/12/2014	Ortho-Phosphate	ND	50	7.5	NA	mg/L
EP-8	11/12/2014	Nitrate & Nitrite	ND	40	3.3	NA	mg/L
EP-8	11/12/2014	Sulfate	11000	250	41	600000000	mg/L
EP-8	11/13/2014	E-Coli	10	10	10	NA	CFU/100ml
EP-8	3/25/2015	Bromide	29	10	7.7	NA	mg/L
EP-8	3/25/2015	Chloride	65000	2500	670	250000000	mg/L
EP-8	3/25/2015	Chemical Oxygen Demand	600	100	100	NA	mg/L
EP-8	3/25/2015	Fluoride, Total	27	10	2.9	1600000	mg/L
EP-8	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-8	3/25/2015	Nitrate & Nitrite	ND	40	9	NA	mg/L
EP-8	3/25/2015	Sulfate	14000	2500	570	600000000	mg/L
EP-8	3/26/2015	E-Coli	--	1	1	NA	CFU/100ml
EP-8	3/26/2015	Biochemical Oxygen Demand	12	2	2	NA	mg/L
EP-8	9/1/2015	Bromide	24	10	6.8	NA	mg/L
EP-8	9/1/2015	Chloride	64000	2500	1700	250000000	mg/L
EP-8	9/1/2015	Fluoride, Total	27	10	3.2	1600000	mg/L
EP-8	9/1/2015	Ortho-Phosphate	ND	50	8.8	NA	mg/L
EP-8	9/1/2015	Nitrogen, Nitrite	ND	10	2.8	1000000	mg/L
EP-8	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-8	9/1/2015	Sulfate	13000	2500	1600	600000000	mg/L
EP-8	9/2/2015	E-Coli	10	10	10	NA	CFU/100ml
EP-8	9/2/2015	Biochemical Oxygen Demand	32	2	2	NA	mg/L
EP-8	9/2/2015	Chemical Oxygen Demand	880	500	500	NA	mg/L
EP-8	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-8	8/30/2016	Biochemical Oxygen Demand	6	2	2	NA	mg/L
EP-8	8/30/2016	Bromide	35	5	2.2	NA	mg/L
EP-8	8/30/2016	Chloride	81000	2500	250	250000000	mg/L
EP-8	8/30/2016	Chemical Oxygen Demand	3200	500	150	NA	mg/L
EP-8	8/30/2016	Fluoride, Total	17	5	2.5	1600000	mg/L
EP-8	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-8	8/30/2016	Nitrate & Nitrite	ND	40	18	NA	mg/L
EP-8	8/30/2016	Sulfate	13000	1000	280	600000000	mg/L
EP-8	3/30/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-8	3/30/2017	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-8	3/30/2017	Bromide	38	2	0.61	NA	mg/L
EP-8	3/30/2017	Chloride	64000	2500	1200	250000000	mg/L
EP-8	3/30/2017	Chemical Oxygen Demand	5430	200	200	NA	mg/L
EP-8	3/30/2017	Fluoride, Total	11	5	2.5	1600000	mg/L
EP-8	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-8	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-8	3/30/2017	Sulfate	12000	2500	480	600000000	mg/L
EP-8	10/24/2017	Bromide	35	10	1.5	NA	mg/L
EP-8	10/24/2017	Chloride	94000	5000	2500	250000000	mg/L
EP-8	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-8	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-8	10/24/2017	Nitrate & Nitrite	ND	100	13	NA	mg/L
EP-8	10/24/2017	Sulfate	16000	5000	960	600000000	mg/L
EP-8	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL
EP-8	10/24/2017	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-8	10/24/2017	Chemical Oxygen Demand	2100	200	200	NA	mg/L
EP-8	2/23/2018	Bromide	31	5	0.73	NA	mg/L
EP-8	2/23/2018	Chloride	71000	2500	1200	250000000	mg/L
EP-8	2/23/2018	Fluoride, Total	17	5	2.2	1600000	mg/L
EP-8	2/23/2018	Ortho-Phosphate	11	10	5	NA	mg/L
EP-8	2/23/2018	Nitrate & Nitrite	17	40	5.2	NA	mg/L
EP-8	2/23/2018	Sulfate	12000	2500	480	600000000	mg/L
EP-8	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-8	3/1/2018	Biochemical Oxygen Demand	29	2	2	NA	mg/L
EP-8	3/1/2018	Chemical Oxygen Demand	4040	100	100	NA	mg/L
EP-8	9/7/2018	Bromide	23	2	0.54	NA	mg/L
EP-8	9/7/2018	Chloride	37000	2500	910	250000000	mg/L
EP-8	9/7/2018	Fluoride, Total	36	2	0.59	1600000	mg/L
EP-8	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-8	9/7/2018	Nitrate & Nitrite	ND	40	11	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-8	9/7/2018	Sulfate	6600	2500	1000	600000000	mg/L
EP-8	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-8	9/14/2018	Biochemical Oxygen Demand	17	2	2	NA	mg/L
EP-8	9/14/2018	Chemical Oxygen Demand	2300	1000	1000	NA	mg/L
EP-8	4/29/2019	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-8	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	4/29/2019	Bromide	26	20	2.9	NA	mg/L
EP-8	4/29/2019	Chloride	62000	2500	2500	250000000	mg/L
EP-8	4/29/2019	Fluoride, Total	26	2	1	1600000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrite	53	20	0.76	1000000	mg/L
EP-8	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-8	4/29/2019	Sulfate	10000	2500	267.5	600000000	mg/L
EP-8	4/29/2019	Chemical Oxygen Demand	1850	100	100	NA	mg/L
EP-8	4/29/2019	Biochemical Oxygen Demand	18	2	2	NA	mg/L
EP-8	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	4/29/2019	Bromide	27	20	2.9	NA	mg/L
EP-8	4/29/2019	Chloride	75000	2500	2500	250000000	mg/L
EP-8	4/29/2019	Fluoride, Total	27	2	1	1600000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-8	4/29/2019	Nitrogen, Nitrite	52	20	0.76	1000000	mg/L
EP-8	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-8	4/29/2019	Sulfate	12000	2500	267.5	600000000	mg/L
EP-8	4/29/2019	Chemical Oxygen Demand	2410	100	100	NA	mg/L
EP-8	11/20/2019	Bromide	60	20	10	NA	mg/L
EP-8	11/20/2019	Chloride	160000	25000	12500	250000000	mg/L
EP-8	11/20/2019	Fluoride, Total	65	20	5.79636	1600000	mg/L
EP-8	11/20/2019	Nitrogen, Nitrate & Nitrite	ND	400	19.4	10000000	mg/L
EP-8	11/20/2019	Phosphorus, Ortho	ND	100	50	NA	mg/L
EP-8	11/20/2019	Sulfate	14000	1000	500	600000000	mg/L
EP-8	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-8	11/20/2019	Biochemical Oxygen Demand	28	2	2	NA	mg/L
EP-8	11/20/2019	Chemical Oxygen Demand	5170	250	250	NA	mg/L
EP-8	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-8	9/17/2020	Solids, Total Suspended	130	4	4	NA	mg/L
EP-8	9/17/2020	Chloride	130000	10000	5000	250000000	mg/L
EP-8	9/17/2020	Sulfate	21000	10000	5000	600000000	mg/L
EP-8	9/17/2020	Bromide	82	10	5	NA	mg/L
EP-8	9/17/2020	Fluoride, Total	89	10	4.3	1600000	mg/L
EP-8	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-8	9/17/2020	Chemical Oxygen Demand	415	15	3.9	NA	mg/L
EP-8	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-8	9/29/2020	Biochemical Oxygen Demand	25	2	2	NA	mg/L
EP-8	12/22/2020	Nitrogen, Nitrate & Nitrite	0.068	0.05	0.018	10000000	mg/L
EP-8	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-8	12/22/2020	Nitrogen, Nitrate	0.068	0.05	0.018	10000000	mg/L
EP-8	12/22/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-8	12/22/2020	Bromide	ND	500	55	NA	mg/L
EP-8	12/22/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-8	12/22/2020	Sulfate	12400	500	185	600000000	mg/L
EP-8	12/22/2020	Chloride	201000	5000	600	250000000	mg/L
EP-8	12/22/2020	Chemical Oxygen Demand	3060	250	160	NA	mg/L
EP-8	12/22/2020	Biochemical Oxygen Demand	23.8	2	2	NA	mg/L
EP-8	12/22/2020	Solids, Total Suspended	4180	50	0	NA	mg/L
EP-8	9/17/2020	Solids, Total Suspended	130	4	4	NA	mg/L
EP-8	12/22/2020	Solids, Total Suspended	4180	50	0	NA	mg/L
EP-9	5/29/2012	Bromide	24	5	3.7	NA	mg/L
EP-9	5/29/2012	Chloride	63000	2500	260	250000000	mg/L
EP-9	5/29/2012	Fluoride, Total	21	5	1.9	1600000	mg/L
EP-9	5/29/2012	Ortho-Phosphate	ND	25	15	NA	mg/L
EP-9	5/29/2012	Nitrate & Nitrite	ND	20	10	NA	mg/L
EP-9	5/29/2012	Sulfate	7500	250	59	600000000	mg/L
EP-9	5/30/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-9	5/30/2012	Biochemical Oxygen Demand	23	2	2	NA	mg/L
EP-9	11/6/2012	Bromide	380	20	15	NA	mg/L
EP-9	11/6/2012	Chloride	46000	2500	260	250000000	mg/L
EP-9	11/6/2012	Fluoride, Total	13	2	0.76	1600000	mg/L
EP-9	11/6/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
EP-9	11/6/2012	Nitrate & Nitrite	ND	40	20	NA	mg/L
EP-9	11/6/2012	Sulfate	6400	2500	590	600000000	mg/L
EP-9	11/7/2012	E-Coli	--	1	1	NA	CFU/100ml
EP-9	11/7/2012	Biochemical Oxygen Demand	7.9	2	2	NA	mg/L
EP-9	11/7/2012	Chemical Oxygen Demand	1400	50	50	NA	mg/L
EP-9	5/28/2013	Bromide	24	10	2.6	NA	mg/L
EP-9	5/28/2013	Chloride	62000	2500	740	250000000	mg/L
EP-9	5/28/2013	Fluoride, Total	19	10	3.3	1600000	mg/L
EP-9	5/28/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
EP-9	5/28/2013	Nitrogen, Nitrite	ND	10	2	1000000	mg/L
EP-9	5/28/2013	Nitrogen, Nitrate	3	1	0.16	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	5/28/2013	Sulfate	8400	250	62	600000000	mg/L
EP-9	5/29/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-9	5/29/2013	Biochemical Oxygen Demand	19	5	2	NA	mg/L
EP-9	5/29/2013	Chemical Oxygen Demand	7400	10	10	NA	mg/L
EP-9	10/15/2013	Bromide	21	10	7.9	NA	mg/L
EP-9	10/15/2013	Chloride	55000	5000	760	250000000	mg/L
EP-9	10/15/2013	Fluoride, Total	15	10	3.5	1600000	mg/L
EP-9	10/15/2013	Ortho-Phosphate	ND	50	21	NA	mg/L
EP-9	10/15/2013	Nitrate & Nitrite	ND	40	15	NA	mg/L
EP-9	10/15/2013	Sulfate	8100	5000	1600	600000000	mg/L
EP-9	10/16/2013	E-Coli	--	10	10	NA	CFU/100ml
EP-9	10/16/2013	Biochemical Oxygen Demand	--	2	2	NA	mg/L
EP-9	10/16/2013	Chemical Oxygen Demand	4700	50	50	NA	mg/L
EP-9	3/5/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-9	3/5/2014	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	3/5/2014	Bromide	20	10	7.9	NA	mg/L
EP-9	3/5/2014	Chloride	56000	2500	1900	250000000	mg/L
EP-9	3/5/2014	Chemical Oxygen Demand	3700	1000	1000	NA	mg/L
EP-9	3/5/2014	Fluoride, Total	18	10	3.5	1600000	mg/L
EP-9	3/5/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
EP-9	3/5/2014	Nitrogen, Nitrite	ND	10	1.5	1000000	mg/L
EP-9	3/5/2014	Nitrogen, Nitrate	8.1	1	0.65	10000000	mg/L
EP-9	3/5/2014	Sulfate	7800	100	32	600000000	mg/L
EP-9	10/21/2014	TPH DRO	3.6	1	0.83	16700	mg/L
EP-9	10/21/2014	TPH ORO	ND	5	5	85800	mg/L
EP-9	10/21/2014	TPH GRO	ND	0.25	0.096	10100	mg/L
EP-9	11/13/2014	E-Coli	--	1	1	NA	CFU/100ml
EP-9	11/13/2014	Biochemical Oxygen Demand	4.2	2	2	NA	mg/L
EP-9	11/13/2014	Bromide	34	10	2.6	NA	mg/L
EP-9	11/13/2014	Chloride	98000	5000	220	250000000	mg/L
EP-9	11/13/2014	Chemical Oxygen Demand	3900	1000	1000	NA	mg/L
EP-9	11/13/2014	Fluoride, Total	22	10	1.5	1600000	mg/L
EP-9	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
EP-9	11/13/2014	Nitrate & Nitrite	ND	100	8.3	NA	mg/L
EP-9	11/13/2014	Sulfate	12000	500	82	600000000	mg/L
EP-9	3/25/2015	Bromide	12	1	0.77	NA	mg/L
EP-9	3/25/2015	Chloride	30000	2500	670	250000000	mg/L
EP-9	3/25/2015	Chemical Oxygen Demand	510	100	100	NA	mg/L
EP-9	3/25/2015	Fluoride, Total	22	10	2.9	1600000	mg/L
EP-9	3/25/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
EP-9	3/25/2015	Nitrate & Nitrite	ND	20	4.5	NA	mg/L
EP-9	3/25/2015	Sulfate	4500	50	11	600000000	mg/L
EP-9	3/26/2015	E-Coli	--	10	10	NA	CFU/100ml
EP-9	3/26/2015	Biochemical Oxygen Demand	11	2	2	NA	mg/L
EP-9	9/1/2015	Bromide	31	10	6.8	NA	mg/L
EP-9	9/1/2015	Chloride	59000	2500	1700	250000000	mg/L
EP-9	9/1/2015	Fluoride, Total	20	10	3.2	1600000	mg/L
EP-9	9/1/2015	Ortho-Phosphate	ND	5	0.88	NA	mg/L
EP-9	9/1/2015	Nitrogen, Nitrite	ND	20	5.6	1000000	mg/L
EP-9	9/1/2015	Nitrogen, Nitrate	ND	1	0.58	10000000	mg/L
EP-9	9/1/2015	Sulfate	7200	100	64	600000000	mg/L
EP-9	9/2/2015	E-Coli	74	10	10	NA	CFU/100ml
EP-9	9/2/2015	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-9	9/2/2015	Chemical Oxygen Demand	1500	500	500	NA	mg/L
EP-9	8/30/2016	E-Coli	--	1	1	NA	CFU/100ml
EP-9	8/30/2016	Biochemical Oxygen Demand	37	2	2	NA	mg/L
EP-9	8/30/2016	Bromide	47	5	2.2	NA	mg/L
EP-9	8/30/2016	Chloride	160000	10000	1000	250000000	mg/L
EP-9	8/30/2016	Chemical Oxygen Demand	5400	500	150	NA	mg/L
EP-9	8/30/2016	Fluoride, Total	ND	10	5	1600000	mg/L
EP-9	8/30/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
EP-9	8/30/2016	Nitrate & Nitrite	ND	400	180	NA	mg/L
EP-9	8/30/2016	Sulfate	12000	2500	710	600000000	mg/L
EP-9	3/30/2017	E-Coli	--	1	1	NA	MPN/100mL
EP-9	3/30/2017	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-9	3/30/2017	Bromide	23	2	0.61	NA	mg/L
EP-9	3/30/2017	Chloride	58000	2500	1200	250000000	mg/L
EP-9	3/30/2017	Chemical Oxygen Demand	5590	200	200	NA	mg/L
EP-9	3/30/2017	Fluoride, Total	13	5	2.5	1600000	mg/L
EP-9	3/30/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-9	3/30/2017	Nitrate & Nitrite	ND	40	5.2	NA	mg/L
EP-9	3/30/2017	Sulfate	5600	2500	480	600000000	mg/L
EP-9	10/24/2017	Bromide	84	10	1.5	NA	mg/L
EP-9	10/24/2017	Chloride	200000	10000	5000	250000000	mg/L
EP-9	10/24/2017	Fluoride, Total	ND	10	4.4	1600000	mg/L
EP-9	10/24/2017	Ortho-Phosphate	ND	50	25	NA	mg/L
EP-9	10/24/2017	Nitrate & Nitrite	ND	200	26	NA	mg/L
EP-9	10/24/2017	Sulfate	16000	10000	1900	600000000	mg/L
EP-9	10/24/2017	E-Coli	--	10	10	NA	MPN/100mL

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
EP-9	10/24/2017	Biochemical Oxygen Demand	20	2	2	NA	mg/L
EP-9	10/24/2017	Chemical Oxygen Demand	5000	400	400	NA	mg/L
EP-9	2/23/2018	Bromide	8.1	2	0.29	NA	mg/L
EP-9	2/23/2018	Chloride	28000	2500	1200	250000000	mg/L
EP-9	2/23/2018	Fluoride, Total	27	2	0.87	1600000	mg/L
EP-9	2/23/2018	Ortho-Phosphate	8.4	10	5	NA	mg/L
EP-9	2/23/2018	Nitrate & Nitrite	5.2	20	2.6	NA	mg/L
EP-9	2/23/2018	Sulfate	3900	2500	480	600000000	mg/L
EP-9	3/1/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-9	3/1/2018	Biochemical Oxygen Demand	26	2	2	NA	mg/L
EP-9	3/1/2018	Chemical Oxygen Demand	1510	100	100	NA	mg/L
EP-9	9/7/2018	Bromide	20	2	0.54	NA	mg/L
EP-9	9/7/2018	Chloride	42000	2500	910	250000000	mg/L
EP-9	9/7/2018	Fluoride, Total	42	2	0.59	1600000	mg/L
EP-9	9/7/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
EP-9	9/7/2018	Nitrate & Nitrite	ND	40	11	NA	mg/L
EP-9	9/7/2018	Sulfate	4600	2500	1000	600000000	mg/L
EP-9	9/14/2018	E-Coli	--	10	10	NA	MPN/100mL
EP-9	9/14/2018	Biochemical Oxygen Demand	30	2	2	NA	mg/L
EP-9	9/14/2018	Chemical Oxygen Demand	2200	1000	1000	NA	mg/L
EP-9	4/29/2019	Biochemical Oxygen Demand	90	2	2	NA	mg/L
EP-9	4/29/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-9	4/29/2019	Bromide	12	10	1.7753	NA	mg/L
EP-9	4/29/2019	Chloride	55000	2500	2500	250000000	mg/L
EP-9	4/29/2019	Fluoride, Total	25	2	1	1600000	mg/L
EP-9	4/29/2019	Nitrogen, Nitrate	ND	2	0.108	10000000	mg/L
EP-9	4/29/2019	Nitrogen, Nitrite	39	20	0.76	1000000	mg/L
EP-9	4/29/2019	Phosphorus, Ortho	ND	10	0.462	NA	mg/L
EP-9	4/29/2019	Sulfate	6100	2500	267.5	600000000	mg/L
EP-9	4/29/2019	Chemical Oxygen Demand	1630	100	100	NA	mg/L
EP-9	11/20/2019	Bromide	17	20	10	NA	mg/L
EP-9	11/20/2019	Chloride	57000	2500	1250	250000000	mg/L
EP-9	11/20/2019	Fluoride, Total	24	20	5.79636	1600000	mg/L
EP-9	11/20/2019	Nitrogen, Nitrate	ND	2	0.12155	10000000	mg/L
EP-9	11/20/2019	Nitrogen, Nitrite	ND	20	1.08	1000000	mg/L
EP-9	11/20/2019	Phosphorus, Ortho	ND	10	5	NA	mg/L
EP-9	11/20/2019	Sulfate	6400	100	50	600000000	mg/L
EP-9	11/20/2019	E-Coli	ND	10	10	NA	MPN/100ml
EP-9	11/20/2019	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	11/20/2019	Chemical Oxygen Demand	2230	250	250	NA	mg/L
EP-9	9/17/2020	Ortho-Phosphate	ND	10	5	NA	mg/L
EP-9	9/17/2020	Solids, Total Suspended	69	4	4	NA	mg/L
EP-9	9/17/2020	Chloride	150000	10000	5000	250000000	mg/L
EP-9	9/17/2020	Sulfate	12000	10000	5000	600000000	mg/L
EP-9	9/17/2020	Bromide	71	10	5	NA	mg/L
EP-9	9/17/2020	Fluoride, Total	41	10	4.3	1600000	mg/L
EP-9	9/17/2020	Nitrate & Nitrite	ND	100	6.1	NA	mg/L
EP-9	9/17/2020	Chemical Oxygen Demand	428	15	3.9	NA	mg/L
EP-9	9/18/2020	Coliform, E-Coli	--	10	10	NA	MPN/100ml
EP-9	9/29/2020	Biochemical Oxygen Demand	15	2	2	NA	mg/L
EP-9	12/21/2020	Chemical Oxygen Demand	2220	250	160	NA	mg/L
EP-9	12/21/2020	Bromide	ND	500	55	NA	mg/L
EP-9	12/21/2020	Fluoride, Total	ND	500	150	1600000	mg/L
EP-9	12/21/2020	Sulfate	13100	500	185	600000000	mg/L
EP-9	12/21/2020	Chloride	183000	5000	600	250000000	mg/L
EP-9	12/21/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
EP-9	12/21/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
EP-9	12/21/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
EP-9	12/21/2020	Solids, Total Suspended	1760	25	0	NA	mg/L
EP-9	12/21/2020	Biochemical Oxygen Demand	11.4	2	2	NA	mg/L
EP-9	12/21/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
EP-9	12/21/2020	Solids, Total Suspended	1760	25	0	NA	mg/L
EP-9	9/17/2020	Solids, Total Suspended	69	4	4	NA	mg/L
KA-3	3/20/2012	Bromide	1.9	0.5	0.42	NA	mg/L
KA-3	3/20/2012	Chloride	440	25	10	250000000	mg/L
KA-3	3/20/2012	Fluoride, Total	2	0.5	0.1	1600000	mg/L
KA-3	3/20/2012	Ortho-Phosphate	ND	2.5	0.23	NA	mg/L
KA-3	3/20/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
KA-3	3/20/2012	Nitrogen, Nitrate	15	0.5	0.25	10000000	mg/L
KA-3	3/20/2012	Sulfate	220	2.5	1.1	600000000	mg/L
KA-3	3/20/2012	TPH DRO	1.8	1	0.57	16700	mg/L
KA-3	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/20/2012	TPH GRO	0.16	0.1	0.028	10100	mg/L
KA-3	6/12/2012	Bromide	3.9	0.5	0.37	NA	mg/L
KA-3	6/12/2012	Chloride	710	25	2.6	250000000	mg/L
KA-3	6/12/2012	Fluoride, Total	1.3	0.5	0.19	1600000	mg/L
KA-3	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
KA-3	6/12/2012	Nitrogen, Nitrite	2.1	0.5	0.25	1000000	mg/L
KA-3	6/12/2012	Nitrogen, Nitrate	11	0.5	0.25	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	6/12/2012	Sulfate	220	10	2.4	600000000	mg/L
KA-3	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/12/2012	TPH GRO	0.14	0.05	0.014	10100	mg/L
KA-3	8/21/2012	Bromide	1.2	0.1	0.074	NA	mg/L
KA-3	8/21/2012	Chloride	250	10	1	250000000	mg/L
KA-3	8/21/2012	Fluoride, Total	ND	2	0.76	1600000	mg/L
KA-3	8/21/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
KA-3	8/21/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
KA-3	8/21/2012	Nitrogen, Nitrate	0.31	0.1	0.05	10000000	mg/L
KA-3	8/21/2012	Sulfate	43	10	2.4	600000000	mg/L
KA-3	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/21/2012	TPH GRO	0.1	0.05	0.014	10100	mg/L
KA-3	11/28/2012	Bromide	4	0.5	0.38	NA	mg/L
KA-3	11/28/2012	Chloride	870	25	2.6	250000000	mg/L
KA-3	11/28/2012	Fluoride, Total	0.98	0.5	0.19	1600000	mg/L
KA-3	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
KA-3	11/28/2012	Nitrogen, Nitrite	2.8	0.5	0.25	1000000	mg/L
KA-3	11/28/2012	Nitrogen, Nitrate	9.9	0.5	0.25	10000000	mg/L
KA-3	11/28/2012	Sulfate	270	10	2.4	600000000	mg/L
KA-3	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
KA-3	11/28/2012	TPH GRO	ND	0.1	0.028	10100	mg/L
KA-3	3/18/2013	Bromide	1.2	0.5	0.38	NA	mg/L
KA-3	3/18/2013	Chloride	180	10	1.3	250000000	mg/L
KA-3	3/18/2013	Fluoride, Total	1.8	0.5	0.1	1600000	mg/L
KA-3	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
KA-3	3/18/2013	Nitrate & Nitrite	2.4	1	0.19	NA	mg/L
KA-3	3/18/2013	Sulfate	81	2.5	1.2	600000000	mg/L
KA-3	3/18/2013	TPH DRO	ND	1	0.4	16700	mg/L
KA-3	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/18/2013	TPH GRO	0.063	0.05	0.02	10100	mg/L
KA-3	6/12/2013	Bromide	1.1	1	0.26	NA	mg/L
KA-3	6/12/2013	Chloride	190	5	1.5	250000000	mg/L
KA-3	6/12/2013	Fluoride, Total	1.4	1	0.33	1600000	mg/L
KA-3	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
KA-3	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
KA-3	6/12/2013	Sulfate	33	5	1.2	600000000	mg/L
KA-3	6/12/2013	TPH DRO	ND	1	0.4	16700	mg/L
KA-3	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/12/2013	TPH GRO	0.072	0.05	0.02	10100	mg/L
KA-3	9/3/2013	Bromide	1	0.1	0.026	NA	mg/L
KA-3	9/3/2013	Chloride	170	10	3	250000000	mg/L
KA-3	9/3/2013	Fluoride, Total	1.1	0.1	0.033	1600000	mg/L
KA-3	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	9/3/2013	Nitrate & Nitrite	20	1	0.18	NA	mg/L
KA-3	9/3/2013	Sulfate	39	0.5	0.12	600000000	mg/L
KA-3	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/3/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
KA-3	11/12/2013	Bromide	1.4	0.1	0.079	NA	mg/L
KA-3	11/12/2013	Chloride	110	10	7.8	250000000	mg/L
KA-3	11/12/2013	Fluoride, Total	1.3	0.1	0.035	1600000	mg/L
KA-3	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
KA-3	11/12/2013	Nitrogen, Nitrite	0.2	0.1	0.015	1000000	mg/L
KA-3	11/12/2013	Nitrogen, Nitrate	9.3	2	1.3	10000000	mg/L
KA-3	11/12/2013	Sulfate	54	10	3.2	600000000	mg/L
KA-3	11/12/2013	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	11/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
KA-3	3/10/2014	Bromide	1.8	0.5	0.39	NA	mg/L
KA-3	3/10/2014	Chloride	140	10	7.8	250000000	mg/L
KA-3	3/10/2014	Fluoride, Total	1.1	0.5	0.17	1600000	mg/L
KA-3	3/10/2014	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
KA-3	3/10/2014	Nitrogen, Nitrite	ND	0.5	0.075	1000000	mg/L
KA-3	3/10/2014	Nitrogen, Nitrate	13	0.5	0.33	10000000	mg/L
KA-3	3/10/2014	Sulfate	72	2.5	0.8	600000000	mg/L
KA-3	3/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	6/5/2014	Bromide	1.6	0.1	0.022	NA	mg/L
KA-3	6/5/2014	Chloride	180	10	5	250000000	mg/L
KA-3	6/5/2014	Fluoride, Total	1	0.1	0.018	1600000	mg/L
KA-3	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
KA-3	6/5/2014	Nitrate & Nitrite	7.7	1	0.076	NA	mg/L
KA-3	6/5/2014	Sulfate	95	10	1.4	600000000	mg/L
KA-3	6/5/2014	TPH DRO	ND	1	0.57	16700	mg/L
KA-3	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/5/2014	TPH GRO	ND	0.05	0.019	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/11/2014	Bromide	4.4	0.1	0.022	NA	mg/L
KA-3	9/11/2014	Chloride	760	50	25	250000000	mg/L
KA-3	9/11/2014	Fluoride, Total	0.45	0.1	0.018	1600000	mg/L
KA-3	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
KA-3	9/11/2014	Nitrate & Nitrite	19	1	0.076	NA	mg/L
KA-3	9/11/2014	Sulfate	420	10	1.6	600000000	mg/L
KA-3	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
KA-3	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	11/11/2014	Bromide	1.2	0.1	0.026	NA	mg/L
KA-3	11/11/2014	Chloride	160	10	0.43	250000000	mg/L
KA-3	11/11/2014	Fluoride, Total	1.1	0.1	0.015	1600000	mg/L
KA-3	11/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
KA-3	11/11/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
KA-3	11/11/2014	Sulfate	54	10	1.6	600000000	mg/L
KA-3	11/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
KA-3	11/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
KA-3	3/10/2015	Bromide	1	0.1	0.077	NA	mg/L
KA-3	3/10/2015	Chloride	120	10	2.7	250000000	mg/L
KA-3	3/10/2015	Fluoride, Total	1.1	0.1	0.029	1600000	mg/L
KA-3	3/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
KA-3	3/10/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
KA-3	3/10/2015	Nitrogen, Nitrate	0.53	0.1	0.032	10000000	mg/L
KA-3	3/10/2015	Sulfate	43	10	2.3	600000000	mg/L
KA-3	3/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
KA-3	6/2/2015	Bromide	1.3	1	0.77	NA	mg/L
KA-3	6/2/2015	Chloride	150	5	1.3	250000000	mg/L
KA-3	6/2/2015	Fluoride, Total	1.5	1	0.29	1600000	mg/L
KA-3	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
KA-3	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
KA-3	6/2/2015	Sulfate	42	5	1.1	600000000	mg/L
KA-3	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/11/2015	Bromide	1.1	0.1	0.077	NA	mg/L
KA-3	8/11/2015	Chloride	130	10	2.7	250000000	mg/L
KA-3	8/11/2015	Fluoride, Total	1	0.1	0.029	1600000	mg/L
KA-3	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
KA-3	8/11/2015	Nitrate & Nitrite	2.8	1	0.22	NA	mg/L
KA-3	8/11/2015	Sulfate	52	10	2.3	600000000	mg/L
KA-3	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
KA-3	10/28/2015	Bromide	1.3	0.1	0.068	NA	mg/L
KA-3	10/28/2015	Chloride	120	10	6.8	250000000	mg/L
KA-3	10/28/2015	Fluoride, Total	1.1	0.1	0.032	1600000	mg/L
KA-3	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
KA-3	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
KA-3	10/28/2015	Sulfate	57	10	6.4	600000000	mg/L
KA-3	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
KA-3	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
KA-3	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
KA-3	3/3/2016	Bromide	0.92	0.1	0.032	NA	mg/L
KA-3	3/3/2016	Chloride	110	10	0.55	250000000	mg/L
KA-3	3/3/2016	Fluoride, Total	0.96	0.1	0.023	1600000	mg/L
KA-3	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
KA-3	3/3/2016	Nitrogen, Nitrite	ND	0.1	0.042	1000000	mg/L
KA-3	3/3/2016	Nitrogen, Nitrate	0.71	0.1	0.042	10000000	mg/L
KA-3	3/3/2016	Sulfate	34	0.5	0.064	600000000	mg/L
KA-3	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	3/3/2016	TPH GRO	0.063	0.05	0.025	10100	mg/L
KA-3	6/7/2016	Bromide	1	0.1	0.032	NA	mg/L
KA-3	6/7/2016	Chloride	190	10	0.55	250000000	mg/L
KA-3	6/7/2016	Fluoride, Total	1	0.1	0.023	1600000	mg/L
KA-3	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
KA-3	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
KA-3	6/7/2016	Sulfate	25	0.5	0.064	600000000	mg/L
KA-3	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/7/2016	TPH GRO	0.11	0.05	0.025	10100	mg/L
KA-3	9/1/2016	Bromide	1.2	0.1	0.044	NA	mg/L
KA-3	9/1/2016	Chloride	210	10	1	250000000	mg/L
KA-3	9/1/2016	Fluoride, Total	0.86	0.1	0.05	1600000	mg/L
KA-3	9/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
KA-3	9/1/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
KA-3	9/1/2016	Nitrogen, Nitrate	0.25	0.1	0.041	10000000	mg/L
KA-3	9/1/2016	Sulfate	36	0.5	0.14	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	9/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/1/2016	TPH GRO	0.18	0.05	0.025	10100	mg/L
KA-3	11/14/2016	Bromide	0.6	0.1	0.044	NA	mg/L
KA-3	11/14/2016	Chloride	190	10	1	250000000	mg/L
KA-3	11/14/2016	Fluoride, Total	0.93	0.1	0.05	1600000	mg/L
KA-3	11/14/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
KA-3	11/14/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
KA-3	11/14/2016	Sulfate	35	0.5	0.14	600000000	mg/L
KA-3	11/14/2016	TPH DRO	ND	1	0.69	16700	mg/L
KA-3	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
KA-3	11/14/2016	TPH GRO	0.13	0.05	0.025	10100	mg/L
KA-3	2/21/2017	Bromide	1.1	0.1	0.031	NA	mg/L
KA-3	2/21/2017	Chloride	160	10	5	250000000	mg/L
KA-3	2/21/2017	Fluoride, Total	1	0.1	0.05	1600000	mg/L
KA-3	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	2/21/2017	Sulfate	26	0.5	0.096	600000000	mg/L
KA-3	2/21/2017	TPH DRO	1	1	0.48	16700	mg/L
KA-3	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	2/21/2017	TPH GRO	0.2	0.05	0.025	10100	mg/L
KA-3	6/1/2017	Bromide	1.3	0.1	0.014	NA	mg/L
KA-3	6/1/2017	Chloride	220	10	5	250000000	mg/L
KA-3	6/1/2017	Fluoride, Total	0.66	0.1	0.044	1600000	mg/L
KA-3	6/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
KA-3	6/1/2017	Nitrate & Nitrite	0.34	1	0.13	NA	mg/L
KA-3	6/1/2017	Sulfate	41	0.5	0.096	600000000	mg/L
KA-3	6/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
KA-3	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	6/1/2017	TPH GRO	0.068	0.05	0.025	10100	mg/L
KA-3	9/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
KA-3	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	9/5/2017	TPH GRO	0.12	0.05	0.025	10100	mg/L
KA-3	12/4/2017	Bromide	1.3	0.5	0.073	NA	mg/L
KA-3	12/4/2017	Chloride	200	10	5	250000000	mg/L
KA-3	12/4/2017	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
KA-3	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	12/4/2017	Sulfate	27	2.5	0.48	600000000	mg/L
KA-3	12/4/2017	TPH DRO	0.66	1	0.36	16700	mg/L
KA-3	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
KA-3	12/4/2017	TPH GRO	0.15	0.05	0.0097	10100	mg/L
KA-3	2/9/2018	Bromide	1.5	0.5	0.073	NA	mg/L
KA-3	2/9/2018	Chloride	190	10	5	250000000	mg/L
KA-3	2/9/2018	Fluoride, Total	0.8	0.5	0.22	1600000	mg/L
KA-3	2/9/2018	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
KA-3	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
KA-3	2/9/2018	Sulfate	30	2.5	0.48	600000000	mg/L
KA-3	2/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
KA-3	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
KA-3	2/9/2018	TPH GRO	0.12	0.05	0.0097	10100	mg/L
KA-3	4/30/2018	Bromide	1.4	0.5	0.13	NA	mg/L
KA-3	4/30/2018	Chloride	170	10	0.59	250000000	mg/L
KA-3	4/30/2018	Fluoride, Total	0.79	0.5	0.15	1600000	mg/L
KA-3	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
KA-3	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
KA-3	4/30/2018	Sulfate	18	2.5	1	600000000	mg/L
KA-3	4/30/2018	TPH DRO	0.65	1	0.63	16700	mg/L
KA-3	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
KA-3	4/30/2018	TPH GRO	2.9	0.05	0.021	10100	mg/L
KA-3	4/9/2019	TPH GRO	0.65	0.05	0.0211	10100	mg/L
KA-3	4/9/2019	TPH DRO	0.53	1	0.35	16700	mg/L
KA-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	4/9/2019	Bromide	1.6	0.5	0.0675	NA	mg/L
KA-3	4/9/2019	Chloride	210	10	10	250000000	mg/L
KA-3	4/9/2019	Fluoride, Total	0.88	0.5	0.25	1600000	mg/L
KA-3	4/9/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
KA-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
KA-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
KA-3	4/9/2019	Sulfate	15	2.5	0.32	600000000	mg/L
KA-3	5/28/2019	TPH GRO	0.48	0.25	0.1055	10100	mg/L
KA-3	5/28/2019	TPH DRO	0.64	1	0.35	16700	mg/L
KA-3	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	5/28/2019	Bromide	1.7	0.5	0.088765	NA	mg/L
KA-3	5/28/2019	Chloride	230	10	10	250000000	mg/L
KA-3	5/28/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
KA-3	5/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
KA-3	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
KA-3	5/28/2019	Sulfate	12	2.5	0.3345	600000000	mg/L
KA-3	8/22/2019	TPH GRO	0.99	0.05	0.0211	10100	mg/L
KA-3	8/22/2019	TPH DRO	1.2	1	0.35	16700	mg/L
KA-3	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
KA-3	8/22/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
KA-3	8/22/2019	Chloride	240	10	10	250000000	mg/L
KA-3	8/22/2019	Fluoride, Total	0.98	0.5	0.073	1600000	mg/L
KA-3	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
KA-3	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
KA-3	8/22/2019	Sulfate	9	2.5	0.3345	600000000	mg/L
KA-3	10/21/2019	TPH GRO	0.2	0.05	0.0211	10100	mg/L
KA-3	10/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
KA-3	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
KA-3	10/21/2019	Bromide	1.9	0.5	0.077	NA	mg/L
KA-3	10/21/2019	Chloride	240	10	10	250000000	mg/L
KA-3	10/21/2019	Fluoride, Total	0.96	0.5	0.144909	1600000	mg/L
KA-3	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
KA-3	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
KA-3	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
KA-3	10/21/2019	Sulfate	12	2.5	0.3345	600000000	mg/L
KA-3	3/4/2020	TPH GRO	0.35	0.05	0.0068	10100	mg/L
KA-3	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
KA-3	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
KA-3	3/4/2020	Bromide	1.8	0.5	0.25	NA	mg/L
KA-3	3/4/2020	Fluoride, Total	0.29	0.5	0.11	1600000	mg/L
KA-3	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
KA-3	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
KA-3	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	3/4/2020	Sulfate	8.9	2.5	1.2	600000000	mg/L
KA-3	3/4/2020	Chloride	280	10	5	250000000	mg/L
KA-3	9/22/2020	TPH GRO	0.85	0.05	0.008	10100	mg/L
KA-3	9/22/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
KA-3	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
KA-3	9/22/2020	Bromide	1.5	0.5	0.25	NA	mg/L
KA-3	9/22/2020	Fluoride, Total	0.76	0.5	0.22	1600000	mg/L
KA-3	9/22/2020	Nitrogen, Nitrate	0.18	0.5	0.1	10000000	mg/L
KA-3	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
KA-3	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
KA-3	9/22/2020	Sulfate	4.1	2.5	1.2	600000000	mg/L
KA-3	9/22/2020	Chloride	240	10	5	250000000	mg/L
KA-3	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
KA-3	12/17/2020	Nitrogen, Nitrate	1.09	0.1	0.033	10000000	mg/L
KA-3	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
KA-3	12/17/2020	Chloride	342	10	1.2	250000000	mg/L
KA-3	12/17/2020	Sulfate	74.5	10	3.7	600000000	mg/L
KA-3	12/17/2020	Bicarbonate	820	1	0.5	NA	mg/L
KA-3	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
KA-3	12/17/2020	TPH (C6-C10)	107	100	47	NA	ug/L
KA-3	12/17/2020	TPH DRO	1140	139	111	16700	ug/L
KA-3	12/17/2020	C28-C40	ND	139	111	NA	ug/L
LDU - East	3/20/2012	TPH DRO	30	1	0.57	16700	mg/L
LDU - East	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/20/2012	TPH GRO	31	10	2.8	10100	mg/L
LDU - East	6/12/2012	TPH DRO	27	1	0.57	16700	mg/L
LDU - East	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/12/2012	TPH GRO	24	5	1.4	10100	mg/L
LDU - East	8/21/2012	TPH DRO	10	1	0.57	16700	mg/L
LDU - East	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	8/21/2012	TPH GRO	17	5	1.4	10100	mg/L
LDU - East	11/28/2012	TPH DRO	19	1	0.57	16700	mg/L
LDU - East	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - East	11/28/2012	TPH GRO	27	5	1.4	10100	mg/L
LDU - East	3/18/2013	TPH DRO	28	1	0.4	16700	mg/L
LDU - East	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/18/2013	TPH GRO	50	10	3.9	10100	mg/L
LDU - East	6/12/2013	TPH DRO	18	1	0.4	16700	mg/L
LDU - East	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/12/2013	TPH GRO	38	10	3.9	10100	mg/L
LDU - East	11/12/2013	TPH DRO	410	10	5.7	16700	mg/L
LDU - East	11/12/2013	TPH GRO	32	10	3.9	10100	mg/L
LDU - East	3/10/2014	TPH DRO	310	10	5.7	16700	mg/L
LDU - East	3/10/2014	TPH ORO	ND	50	50	85800	mg/L
LDU - East	3/10/2014	TPH GRO	200	10	3.8	10100	mg/L
LDU - East	5/14/2014	TPH DRO	90	10	5.7	16700	mg/L
LDU - East	5/14/2014	TPH GRO	56	5	1.9	10100	mg/L
LDU - East	6/3/2014	TPH DRO	29	1	0.57	16700	mg/L
LDU - East	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/3/2014	TPH GRO	130	10	3.8	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - East	10/16/2014	Hexane Extractable Materia	15	5.7	3.9	NA	mg/L
LDU - East	11/11/2014	TPH DRO	17	1	0.83	16700	mg/L
LDU - East	11/11/2014	TPH GRO	38	10	3.8	10100	mg/L
LDU - East	3/10/2015	TPH DRO	26	1	0.91	16700	mg/L
LDU - East	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/10/2015	TPH GRO	9.4	1	0.24	10100	mg/L
LDU - East	6/1/2015	TPH DRO	17	1	0.91	16700	mg/L
LDU - East	6/1/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/1/2015	TPH GRO	0.54	0.05	0.012	10100	mg/L
LDU - East	8/11/2015	TPH DRO	19	1	0.91	16700	mg/L
LDU - East	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	8/11/2015	TPH GRO	15	1	0.8	10100	mg/L
LDU - East	10/29/2015	TPH DRO	24	1	0.91	16700	mg/L
LDU - East	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - East	10/29/2015	TPH GRO	5.5	2.5	0.6	10100	mg/L
LDU - East	3/1/2016	TPH DRO	21	1	0.69	16700	mg/L
LDU - East	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	3/1/2016	TPH GRO	5.6	0.5	0.25	10100	mg/L
LDU - East	6/7/2016	TPH DRO	16	1	0.69	16700	mg/L
LDU - East	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/7/2016	TPH GRO	4.9	0.05	0.025	10100	mg/L
LDU - East	7/7/2016	Hexane Extractable Materia	22	5.7	2.7	NA	mg/L
LDU - East	11/17/2016	TPH DRO	16	1	0.69	16700	mg/L
LDU - East	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - East	11/17/2016	TPH GRO	1.6	0.5	0.25	10100	mg/L
LDU - East	2/21/2017	TPH DRO	27	1	0.48	16700	mg/L
LDU - East	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	2/21/2017	TPH GRO	4.4	0.5	0.25	10100	mg/L
LDU - East	6/2/2017	TPH DRO	7.1	1	0.36	16700	mg/L
LDU - East	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	6/2/2017	TPH GRO	2	0.5	0.25	10100	mg/L
LDU - East	9/5/2017	TPH DRO	6.9	1	0.36	16700	mg/L
LDU - East	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	9/5/2017	TPH GRO	5.5	0.25	0.12	10100	mg/L
LDU - East	12/4/2017	TPH DRO	4.4	1	0.36	16700	mg/L
LDU - East	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - East	12/4/2017	TPH GRO	7.6	0.5	0.097	10100	mg/L
LDU - East	2/12/2018	TPH DRO	4.5	1	0.63	16700	mg/L
LDU - East	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - East	2/12/2018	TPH GRO	7.9	0.5	0.097	10100	mg/L
LDU - East	4/30/2018	TPH DRO	4.2	1	0.63	16700	mg/L
LDU - East	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - East	4/30/2018	TPH GRO	5.1	1	0.42	10100	mg/L
LDU - East	4/9/2019	TPH GRO	3.5	0.25	0.1055	10100	mg/L
LDU - East	4/9/2019	TPH DRO	3	1	0.35	16700	mg/L
LDU - East	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	5/28/2019	TPH GRO	2.4	0.25	0.1055	10100	mg/L
LDU - East	5/28/2019	TPH DRO	2.4	1	0.35	16700	mg/L
LDU - East	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	8/22/2019	TPH GRO	2.2	0.25	0.1055	10100	mg/L
LDU - East	8/22/2019	TPH DRO	2.8	1	0.35	16700	mg/L
LDU - East	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - East	11/19/2019	TPH GRO	5.2	0.5	0.211	10100	mg/L
LDU - East	11/19/2019	TPH DRO	1.1	0.4	0.132	16700	mg/L
LDU - East	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
LDU - East	3/10/2020	TPH GRO	2.3	0.25	0.034	10100	mg/L
LDU - East	3/10/2020	TPH DRO	1.9	0.4	0.2	16700	mg/L
LDU - East	3/10/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
LDU - East	12/17/2020	TPH (C6-C10)	1490	100	47	NA	ug/L
LDU - East	12/17/2020	TPH DRO	5240	148	119	16700	ug/L
LDU - East	12/17/2020	C28-C40	ND	148	119	NA	ug/L
LDU - West	3/20/2012	TPH DRO	6.9	1	0.57	16700	mg/L
LDU - West	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/20/2012	TPH GRO	42	2.5	0.7	10100	mg/L
LDU - West	6/12/2012	TPH DRO	9	1	0.57	16700	mg/L
LDU - West	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/12/2012	TPH GRO	27	5	1.4	10100	mg/L
LDU - West	8/21/2012	TPH DRO	4	1	0.57	16700	mg/L
LDU - West	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	8/21/2012	TPH GRO	18	5	1.4	10100	mg/L
LDU - West	11/28/2012	TPH DRO	5.7	1	0.57	16700	mg/L
LDU - West	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
LDU - West	11/28/2012	TPH GRO	25	5	1.4	10100	mg/L
LDU - West	3/18/2013	TPH DRO	2.6	1	0.4	16700	mg/L
LDU - West	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/18/2013	TPH GRO	20	5	2	10100	mg/L
LDU - West	6/12/2013	TPH DRO	4.7	1	0.4	16700	mg/L
LDU - West	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/12/2013	TPH GRO	31	5	2	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
LDU - West	9/5/2013	TPH DRO	110	10	5.7	16700	mg/L
LDU - West	9/5/2013	TPH ORO	ND	50	50	85800	mg/L
LDU - West	9/5/2013	TPH GRO	47	5	2	10100	mg/L
LDU - West	11/12/2013	TPH DRO	17	10	5.7	16700	mg/L
LDU - West	11/12/2013	TPH GRO	30	5	2	10100	mg/L
LDU - West	3/10/2014	TPH DRO	14	1	0.57	16700	mg/L
LDU - West	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/10/2014	TPH GRO	13	5	1.9	10100	mg/L
LDU - West	5/14/2014	TPH DRO	14	1	0.57	16700	mg/L
LDU - West	5/14/2014	TPH GRO	14	1	0.38	10100	mg/L
LDU - West	6/3/2014	TPH DRO	8	1	0.57	16700	mg/L
LDU - West	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/3/2014	TPH GRO	12	1	0.38	10100	mg/L
LDU - West	9/11/2014	TPH DRO	6.6	1	0.83	16700	mg/L
LDU - West	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
LDU - West	9/11/2014	TPH GRO	6.7	2.5	0.96	10100	mg/L
LDU - West	3/10/2015	TPH DRO	12	1	0.91	16700	mg/L
LDU - West	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/10/2015	TPH GRO	2.7	0.25	0.06	10100	mg/L
LDU - West	8/11/2015	TPH DRO	9.9	1	0.91	16700	mg/L
LDU - West	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	8/11/2015	TPH GRO	11	1	0.8	10100	mg/L
LDU - West	10/29/2015	TPH DRO	12	1	0.91	16700	mg/L
LDU - West	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
LDU - West	10/29/2015	TPH GRO	3	1	0.24	10100	mg/L
LDU - West	3/1/2016	TPH DRO	7.2	1	0.69	16700	mg/L
LDU - West	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	3/1/2016	TPH GRO	1.9	0.25	0.13	10100	mg/L
LDU - West	6/7/2016	TPH DRO	7.3	1	0.69	16700	mg/L
LDU - West	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/7/2016	TPH GRO	3.6	0.05	0.025	10100	mg/L
LDU - West	7/7/2016	Hexane Extractable Materia	29	6.3	3	NA	mg/L
LDU - West	11/17/2016	TPH DRO	8.6	1	0.69	16700	mg/L
LDU - West	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
LDU - West	11/17/2016	TPH GRO	2.2	0.25	0.13	10100	mg/L
LDU - West	2/21/2017	TPH DRO	14	1	0.48	16700	mg/L
LDU - West	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	2/21/2017	TPH GRO	2.6	0.5	0.25	10100	mg/L
LDU - West	6/2/2017	TPH DRO	8.5	1	0.36	16700	mg/L
LDU - West	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	6/2/2017	TPH GRO	1.1	0.5	0.25	10100	mg/L
LDU - West	9/5/2017	TPH DRO	9.8	1	0.36	16700	mg/L
LDU - West	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	9/5/2017	TPH GRO	0.76	0.25	0.12	10100	mg/L
LDU - West	12/4/2017	TPH DRO	7.7	1	0.36	16700	mg/L
LDU - West	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
LDU - West	12/4/2017	TPH GRO	1.2	0.5	0.097	10100	mg/L
LDU - West	2/12/2018	TPH DRO	7.6	1	0.63	16700	mg/L
LDU - West	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - West	2/12/2018	TPH GRO	5	0.5	0.097	10100	mg/L
LDU - West	4/30/2018	TPH DRO	9.4	1	0.63	16700	mg/L
LDU - West	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
LDU - West	4/30/2018	TPH GRO	5.8	1	0.42	10100	mg/L
LDU - West	4/9/2019	TPH GRO	0.57	0.05	0.0211	10100	mg/L
LDU - West	4/9/2019	TPH DRO	7.4	1	0.35	16700	mg/L
LDU - West	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	5/28/2019	TPH GRO	0.32	0.05	0.0211	10100	mg/L
LDU - West	5/28/2019	TPH DRO	7.8	1	0.35	16700	mg/L
LDU - West	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	8/22/2019	TPH GRO	0.32	0.05	0.0211	10100	mg/L
LDU - West	8/22/2019	TPH DRO	6.7	1	0.35	16700	mg/L
LDU - West	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
LDU - West	11/19/2019	TPH GRO	0.13	0.05	0.0211	10100	mg/L
LDU - West	11/19/2019	TPH DRO	2.3	0.4	0.132	16700	mg/L
LDU - West	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
LDU - West	3/10/2020	TPH GRO	0.91	0.25	0.034	10100	mg/L
LDU - West	3/10/2020	TPH DRO	3	0.4	0.2	16700	mg/L
LDU - West	3/10/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
LDU - West	12/17/2020	TPH (C6-C10)	444	100	47	NA	ug/L
LDU - West	12/17/2020	TPH DRO	2860	140	112	16700	ug/L
LDU - West	12/17/2020	C28-C40	ND	140	112	NA	ug/L
MKTF-02	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-02	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	4/8/2014	TPH GRO	0.67	0.05	0.0092	10100	mg/L
MKTF-02	6/6/2014	Bromide	0.46	0.1	0.022	NA	mg/L
MKTF-02	6/6/2014	Chloride	750	50	25	250000000	mg/L
MKTF-02	6/6/2014	Fluoride, Total	0.76	0.1	0.018	1600000	mg/L
MKTF-02	6/6/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-02	6/6/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	6/6/2014	Sulfate	200	10	1.4	600000000	mg/L
MKTF-02	6/6/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-02	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/6/2014	TPH GRO	1.5	0.05	0.0071	10100	mg/L
MKTF-02	9/18/2014	TPH DRO	1.7	1	0.83	16700	mg/L
MKTF-02	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	9/18/2014	TPH GRO	6.8	0.05	0.019	10100	mg/L
MKTF-02	11/14/2014	Bromide	1.2	1	0.26	NA	mg/L
MKTF-02	11/14/2014	Chloride	830	50	2.2	250000000	mg/L
MKTF-02	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-02	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-02	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-02	11/14/2014	Sulfate	230	5	0.82	600000000	mg/L
MKTF-02	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-02	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/14/2014	TPH GRO	0.61	0.05	0.019	10100	mg/L
MKTF-02	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	3/11/2015	TPH GRO	1.3	0.05	0.012	10100	mg/L
MKTF-02	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/9/2015	TPH GRO	3.5	0.05	0.012	10100	mg/L
MKTF-02	8/21/2015	Bromide	1.1	0.5	0.34	NA	mg/L
MKTF-02	8/21/2015	Chloride	550	25	17	250000000	mg/L
MKTF-02	8/21/2015	Fluoride, Total	1.2	0.5	0.16	1600000	mg/L
MKTF-02	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-02	8/21/2015	Nitrate & Nitrite	6.2	1	0.22	NA	mg/L
MKTF-02	8/21/2015	Sulfate	130	2.5	1.6	600000000	mg/L
MKTF-02	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-02	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	8/21/2015	TPH GRO	2	0.05	0.04	10100	mg/L
MKTF-02	11/4/2015	Bromide	0.48	0.1	0.068	NA	mg/L
MKTF-02	11/4/2015	Chloride	360	10	6.8	250000000	mg/L
MKTF-02	11/4/2015	Fluoride, Total	2.5	2	0.64	1600000	mg/L
MKTF-02	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-02	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-02	11/4/2015	Sulfate	49	0.5	0.32	600000000	mg/L
MKTF-02	11/4/2015	TPH DRO	1	1	0.91	16700	mg/L
MKTF-02	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/4/2015	TPH GRO	2.5	0.25	0.06	10100	mg/L
MKTF-02	2/24/2016	Bromide	1.7	0.5	0.16	NA	mg/L
MKTF-02	2/24/2016	Chloride	520	25	1.4	250000000	mg/L
MKTF-02	2/24/2016	Fluoride, Total	1.8	0.5	0.11	1600000	mg/L
MKTF-02	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-02	2/24/2016	Nitrate & Nitrite	8.8	1	0.42	NA	mg/L
MKTF-02	2/24/2016	Sulfate	160	2.5	0.32	600000000	mg/L
MKTF-02	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-02	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	2/24/2016	TPH GRO	1.2	0.25	0.13	10100	mg/L
MKTF-02	6/10/2016	Bromide	0.16	0.1	0.032	NA	mg/L
MKTF-02	6/10/2016	Chloride	390	25	1.4	250000000	mg/L
MKTF-02	6/10/2016	Fluoride, Total	2.7	0.1	0.023	1600000	mg/L
MKTF-02	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-02	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-02	6/10/2016	Sulfate	50	0.5	0.064	600000000	mg/L
MKTF-02	6/10/2016	TPH DRO	1.2	1	0.69	16700	mg/L
MKTF-02	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	6/10/2016	TPH GRO	5.2	0.25	0.13	10100	mg/L
MKTF-02	9/7/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-02	9/7/2016	Chloride	410	25	2.5	250000000	mg/L
MKTF-02	9/7/2016	Fluoride, Total	2.3	0.1	0.05	1600000	mg/L
MKTF-02	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-02	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-02	9/7/2016	Sulfate	48	0.5	0.14	600000000	mg/L
MKTF-02	9/7/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-02	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	9/7/2016	TPH GRO	6.2	0.5	0.15	10100	mg/L
MKTF-02	10/28/2016	Bromide	0.32	0.1	0.044	NA	mg/L
MKTF-02	10/28/2016	Chloride	380	25	2.5	250000000	mg/L
MKTF-02	10/28/2016	Fluoride, Total	2.7	0.1	0.05	1600000	mg/L
MKTF-02	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-02	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-02	10/28/2016	Sulfate	40	0.5	0.14	600000000	mg/L
MKTF-02	10/28/2016	TPH DRO	1.4	1	0.69	16700	mg/L
MKTF-02	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	10/28/2016	TPH GRO	6.1	0.5	0.25	10100	mg/L
MKTF-02	3/16/2017	Bromide	4.1	0.5	0.15	NA	mg/L
MKTF-02	3/16/2017	Chloride	400	25	12	250000000	mg/L
MKTF-02	3/16/2017	Fluoride, Total	2.7	0.5	0.25	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	3/16/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	3/16/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-02	3/16/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	3/16/2017	Sulfate	16	2.5	0.48	600000000	mg/L
MKTF-02	3/16/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-02	3/16/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	3/16/2017	TPH GRO	14	0.25	0.048	10100	mg/L
MKTF-02	10/3/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-02	10/3/2017	Chloride	460	25	12	250000000	mg/L
MKTF-02	10/3/2017	Fluoride, Total	1.8	0.5	0.22	1600000	mg/L
MKTF-02	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-02	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-02	10/3/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	10/3/2017	Sulfate	20	2.5	0.48	600000000	mg/L
MKTF-02	10/3/2017	TPH DRO	1.5	1	0.36	16700	mg/L
MKTF-02	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	10/3/2017	TPH GRO	9.3	0.25	0.048	10100	mg/L
MKTF-02	11/20/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-02	11/20/2017	Chloride	540	25	12	250000000	mg/L
MKTF-02	11/20/2017	Fluoride, Total	2.4	0.5	0.22	1600000	mg/L
MKTF-02	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-02	11/20/2017	Sulfate	18	2.5	0.48	600000000	mg/L
MKTF-02	11/20/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-02	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/20/2017	TPH GRO	12	0.5	0.25	10100	mg/L
MKTF-02	2/6/2018	Bromide	1	0.5	0.073	NA	mg/L
MKTF-02	2/6/2018	Chloride	520	25	12	250000000	mg/L
MKTF-02	2/6/2018	Fluoride, Total	2.3	0.5	0.22	1600000	mg/L
MKTF-02	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-02	2/6/2018	Sulfate	20	2.5	0.48	600000000	mg/L
MKTF-02	2/6/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-02	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	2/6/2018	TPH GRO	7.7	0.5	0.097	10100	mg/L
MKTF-02	5/1/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-02	5/1/2018	Chloride	520	25	1.5	250000000	mg/L
MKTF-02	5/1/2018	Fluoride, Total	2.3	0.5	0.15	1600000	mg/L
MKTF-02	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-02	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-02	5/1/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-02	5/1/2018	Sulfate	15	2.5	1	600000000	mg/L
MKTF-02	5/1/2018	TPH DRO	3.2	1	0.63	16700	mg/L
MKTF-02	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	5/1/2018	TPH GRO	9.1	1	0.42	10100	mg/L
MKTF-02	8/20/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-02	8/20/2018	Chloride	510	25	1.5	250000000	mg/L
MKTF-02	8/20/2018	Fluoride, Total	2.1	0.5	0.15	1600000	mg/L
MKTF-02	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-02	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-02	8/20/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-02	8/20/2018	Sulfate	11	2.5	1	600000000	mg/L
MKTF-02	8/20/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-02	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	8/20/2018	TPH GRO	7.8	0.5	0.097	10100	mg/L
MKTF-02	11/28/2018	Bromide	0.97	0.5	0.1	NA	mg/L
MKTF-02	11/28/2018	Chloride	570	25	25	250000000	mg/L
MKTF-02	11/28/2018	Fluoride, Total	2.3	0.5	0.5	1600000	mg/L
MKTF-02	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-02	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-02	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-02	11/28/2018	Sulfate	5.6	2.5	0.63	600000000	mg/L
MKTF-02	11/28/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-02	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-02	11/28/2018	TPH GRO	18	0.5	0.24	10100	mg/L
MKTF-02	3/28/2019	TPH GRO	4.1	1	0.614	10100	mg/L
MKTF-02	3/28/2019	Bromide	0.76	0.5	0.0675	NA	mg/L
MKTF-02	3/28/2019	Chloride	1400	50	50	250000000	mg/L
MKTF-02	3/28/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-02	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-02	3/28/2019	Phosphorus, Ortho	0.29	2.5	0.1305	NA	mg/L
MKTF-02	3/28/2019	Sulfate	52	2.5	0.32	600000000	mg/L
MKTF-02	3/28/2019	TPH DRO	3.8	1	0.35	16700	mg/L
MKTF-02	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	5/6/2019	TPH GRO	5.3	1	0.614	10100	mg/L
MKTF-02	5/6/2019	TPH DRO	3.5	1	0.35	16700	mg/L
MKTF-02	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	5/6/2019	Bromide	0.72	0.5	0.088765	NA	mg/L
MKTF-02	5/6/2019	Chloride	1600	50	6.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-02	5/6/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
MKTF-02	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-02	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-02	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-02	5/6/2019	Sulfate	61	2.5	0.2675	600000000	mg/L
MKTF-02	8/23/2019	TPH GRO	3.9	1	0.614	10100	mg/L
MKTF-02	8/23/2019	TPH DRO	3.1	1	0.35	16700	mg/L
MKTF-02	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-02	8/23/2019	Bromide	0.86	0.5	0.088765	NA	mg/L
MKTF-02	8/23/2019	Chloride	2000	100	100	250000000	mg/L
MKTF-02	8/23/2019	Fluoride, Total	0.95	0.5	0.073	1600000	mg/L
MKTF-02	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-02	8/23/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-02	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-02	8/23/2019	Sulfate	150	2.5	0.3345	600000000	mg/L
MKTF-02	11/19/2019	TPH GRO	2.4	0.5	0.211	10100	mg/L
MKTF-02	11/19/2019	TPH DRO	0.65	0.4	0.132	16700	mg/L
MKTF-02	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-02	11/19/2019	Bromide, dissolved	0.92	0.5	0.077	NA	mg/L
MKTF-02	11/19/2019	Chloride, Dissolved	1900	100	50	NA	mg/L
MKTF-02	11/19/2019	Fluoride, Dissolved	0.98	0.5	0.144909	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrate, Dissolved	ND	0.5	0.030387	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrite, Dissolved	ND	2	0.108	NA	mg/L
MKTF-02	11/19/2019	Orthophosphate as P, Dissolved	ND	2.5	1.25	NA	mg/L
MKTF-02	11/19/2019	Sulfate, Dissolved	330	10	1.338	NA	mg/L
MKTF-02	11/19/2019	TPH GRO	2.4	0.5	0.211	10100	mg/L
MKTF-02	11/19/2019	TPH DRO	0.41	0.4	0.132	16700	mg/L
MKTF-02	11/19/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-02	11/19/2019	Bromide, dissolved	0.85	0.5	0.077	NA	mg/L
MKTF-02	11/19/2019	Chloride, Dissolved	2000	100	50	NA	mg/L
MKTF-02	11/19/2019	Fluoride, Dissolved	0.89	0.5	0.144909	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrate, Dissolved	ND	0.5	0.030387	NA	mg/L
MKTF-02	11/19/2019	Nitrogen, Nitrite, Dissolved	ND	2	0.108	NA	mg/L
MKTF-02	11/19/2019	Orthophosphate as P, Dissolved	ND	2.5	1.25	NA	mg/L
MKTF-02	11/19/2019	Sulfate, Dissolved	390	10	1.338	NA	mg/L
MKTF-02	2/25/2020	TPH GRO	7.9	0.25	0.034	10100	mg/L
MKTF-02	2/25/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
MKTF-02	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-02	2/25/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-02	2/25/2020	Fluoride, Total	0.61	0.5	0.11	1600000	mg/L
MKTF-02	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-02	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-02	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	2/25/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-02	2/25/2020	Chloride	1300	50	25	250000000	mg/L
MKTF-02	9/21/2020	TPH GRO	9.8	0.25	0.04	10100	mg/L
MKTF-02	9/21/2020	TPH DRO	2.1	0.07	0.067	16700	mg/L
MKTF-02	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-02	9/21/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-02	9/21/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-02	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-02	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-02	9/21/2020	Sulfate	64	2.5	1.2	600000000	mg/L
MKTF-02	9/21/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-02	9/21/2020	Chloride	1000	50	25	250000000	mg/L
MKTF-02	9/21/2020	Solids, Total Suspended	20	4	4	NA	mg/L
MKTF-02	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-02	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-02	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-02	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-02	12/18/2020	Chloride	3020	100	12	250000000	mg/L
MKTF-02	12/18/2020	Sulfate	185	100	37	600000000	mg/L
MKTF-02	12/18/2020	Bicarbonate	219	1	0.5	NA	mg/L
MKTF-02	12/18/2020	TPH DRO	4550	142	114	16700	ug/L
MKTF-02	12/18/2020	C28-C40	ND	142	114	NA	ug/L
MKTF-02	12/18/2020	TPH (C6-C10)	3150	500	235	NA	ug/L
MKTF-02	9/21/2020	Solids, Total Suspended	20	4	4	NA	mg/L
MKTF-04	4/11/2014	TPH DRO	4.5	1	0.57	16700	mg/L
MKTF-04	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	4/11/2014	TPH GRO	9.4	0.5	0.19	10100	mg/L
MKTF-04	6/4/2014	Bromide	1.8	0.1	0.022	NA	mg/L
MKTF-04	6/4/2014	Chloride	190	10	5	250000000	mg/L
MKTF-04	6/4/2014	Fluoride, Total	0.7	0.1	0.018	1600000	mg/L
MKTF-04	6/4/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-04	6/4/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-04	6/4/2014	Sulfate	6.8	0.5	0.068	600000000	mg/L
MKTF-04	6/4/2014	TPH DRO	2.9	1	0.57	16700	mg/L
MKTF-04	6/4/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/4/2014	TPH GRO	8.2	0.5	0.071	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	9/15/2014	TPH DRO	1.5	1	0.83	16700	mg/L
MKTF-04	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/15/2014	TPH GRO	3.4	0.5	0.19	10100	mg/L
MKTF-04	11/13/2014	Bromide	2.1	1	0.26	NA	mg/L
MKTF-04	11/13/2014	Chloride	250	50	2.2	250000000	mg/L
MKTF-04	11/13/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-04	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-04	11/13/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-04	11/13/2014	Sulfate	26	5	0.82	600000000	mg/L
MKTF-04	11/13/2014	TPH DRO	2	1	0.83	16700	mg/L
MKTF-04	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/13/2014	TPH GRO	4.2	0.5	0.19	10100	mg/L
MKTF-04	3/16/2015	TPH DRO	1.9	1	0.91	16700	mg/L
MKTF-04	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	3/16/2015	TPH GRO	4.8	0.5	0.12	10100	mg/L
MKTF-04	6/4/2015	TPH DRO	2.3	1	0.91	16700	mg/L
MKTF-04	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/4/2015	TPH GRO	6.2	0.5	0.12	10100	mg/L
MKTF-04	8/18/2015	Bromide	0.33	0.1	0.077	NA	mg/L
MKTF-04	8/18/2015	Chloride	300	10	2.7	250000000	mg/L
MKTF-04	8/18/2015	Fluoride, Total	0.86	0.1	0.029	1600000	mg/L
MKTF-04	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-04	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-04	8/18/2015	Nitrogen, Nitrate	0.32	0.1	0.032	10000000	mg/L
MKTF-04	8/18/2015	Sulfate	4.2	0.5	0.11	600000000	mg/L
MKTF-04	8/18/2015	TPH DRO	3.7	1	0.91	16700	mg/L
MKTF-04	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	8/18/2015	TPH GRO	6.8	1	0.24	10100	mg/L
MKTF-04	11/3/2015	Bromide	2.4	0.5	0.34	NA	mg/L
MKTF-04	11/3/2015	Chloride	300	10	6.8	250000000	mg/L
MKTF-04	11/3/2015	Fluoride, Total	0.96	0.5	0.16	1600000	mg/L
MKTF-04	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-04	11/3/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-04	11/3/2015	Sulfate	3	2.5	1.6	600000000	mg/L
MKTF-04	11/3/2015	TPH DRO	3	1	0.91	16700	mg/L
MKTF-04	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/3/2015	TPH GRO	8.6	0.5	0.12	10100	mg/L
MKTF-04	2/29/2016	Bromide	2.8	0.5	0.16	NA	mg/L
MKTF-04	2/29/2016	Chloride	250	10	0.55	250000000	mg/L
MKTF-04	2/29/2016	Fluoride, Total	0.97	0.5	0.11	1600000	mg/L
MKTF-04	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-04	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-04	2/29/2016	Sulfate	3.2	2.5	0.32	600000000	mg/L
MKTF-04	2/29/2016	TPH DRO	3.6	1	0.69	16700	mg/L
MKTF-04	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	2/29/2016	TPH GRO	9.2	0.5	0.25	10100	mg/L
MKTF-04	6/9/2016	Bromide	3.2	2	0.65	NA	mg/L
MKTF-04	6/9/2016	Chloride	250	10	0.55	250000000	mg/L
MKTF-04	6/9/2016	Fluoride, Total	0.79	0.1	0.023	1600000	mg/L
MKTF-04	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-04	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-04	6/9/2016	Sulfate	7	0.5	0.064	600000000	mg/L
MKTF-04	6/9/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-04	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/9/2016	TPH GRO	9	0.5	0.25	10100	mg/L
MKTF-04	9/11/2016	Bromide	2.2	0.1	0.044	NA	mg/L
MKTF-04	9/11/2016	Chloride	220	10	1	250000000	mg/L
MKTF-04	9/11/2016	Fluoride, Total	0.74	0.1	0.05	1600000	mg/L
MKTF-04	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-04	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-04	9/11/2016	Sulfate	4.1	0.5	0.14	600000000	mg/L
MKTF-04	9/11/2016	TPH DRO	5.3	1	0.69	16700	mg/L
MKTF-04	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/11/2016	TPH GRO	10	0.25	0.075	10100	mg/L
MKTF-04	11/2/2016	Bromide	2.1	0.5	0.22	NA	mg/L
MKTF-04	11/2/2016	Chloride	180	10	1	250000000	mg/L
MKTF-04	11/2/2016	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-04	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-04	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-04	11/2/2016	Sulfate	6.1	2.5	0.71	600000000	mg/L
MKTF-04	11/2/2016	TPH DRO	4.1	1	0.69	16700	mg/L
MKTF-04	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/2/2016	TPH GRO	9.8	1	0.51	10100	mg/L
MKTF-04	3/2/2017	Bromide	2.1	0.1	0.031	NA	mg/L
MKTF-04	3/2/2017	Chloride	220	10	5	250000000	mg/L
MKTF-04	3/2/2017	Fluoride, Total	0.99	0.1	0.05	1600000	mg/L
MKTF-04	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-04	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	3/2/2017	Sulfate	2.8	0.5	0.096	600000000	mg/L
MKTF-04	3/2/2017	TPH DRO	5.7	1	0.36	16700	mg/L
MKTF-04	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	3/2/2017	TPH GRO	12	1	0.5	10100	mg/L
MKTF-04	6/8/2017	Bromide	2.1	0.1	0.014	NA	mg/L
MKTF-04	6/8/2017	Chloride	210	10	5	250000000	mg/L
MKTF-04	6/8/2017	Fluoride, Total	0.67	0.1	0.044	1600000	mg/L
MKTF-04	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-04	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	6/8/2017	Sulfate	5.3	0.5	0.096	600000000	mg/L
MKTF-04	6/8/2017	TPH DRO	5.7	1	0.36	16700	mg/L
MKTF-04	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	6/8/2017	TPH GRO	10	1	0.5	10100	mg/L
MKTF-04	9/26/2017	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-04	9/26/2017	Chloride	200	10	5	250000000	mg/L
MKTF-04	9/26/2017	Fluoride, Total	0.87	0.5	0.22	1600000	mg/L
MKTF-04	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	9/26/2017	Sulfate	0.7	2.5	0.48	600000000	mg/L
MKTF-04	9/26/2017	TPH DRO	6.6	1	0.36	16700	mg/L
MKTF-04	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/26/2017	TPH GRO	13	1	0.5	10100	mg/L
MKTF-04	11/28/2017	Bromide	2.6	0.5	0.073	NA	mg/L
MKTF-04	11/28/2017	Chloride	210	10	5	250000000	mg/L
MKTF-04	11/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-04	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-04	11/28/2017	Sulfate	2.3	2.5	0.48	600000000	mg/L
MKTF-04	11/28/2017	TPH DRO	5.6	1	0.36	16700	mg/L
MKTF-04	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/28/2017	TPH GRO	16	1	0.19	10100	mg/L
MKTF-04	2/14/2018	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-04	2/14/2018	Chloride	220	10	5	250000000	mg/L
MKTF-04	2/14/2018	Fluoride, Total	0.93	0.5	0.22	1600000	mg/L
MKTF-04	2/14/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
MKTF-04	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-04	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-04	2/14/2018	Sulfate	8.6	2.5	0.48	600000000	mg/L
MKTF-04	2/14/2018	TPH DRO	5	1	0.63	16700	mg/L
MKTF-04	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	2/14/2018	TPH GRO	9.6	1	0.19	10100	mg/L
MKTF-04	5/2/2018	Bromide	2.2	0.5	0.13	NA	mg/L
MKTF-04	5/2/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-04	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-04	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-04	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-04	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-04	5/2/2018	Sulfate	9.8	2.5	1	600000000	mg/L
MKTF-04	5/2/2018	TPH DRO	4.9	1	0.63	16700	mg/L
MKTF-04	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	5/2/2018	TPH GRO	12	1	0.19	10100	mg/L
MKTF-04	9/4/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-04	9/4/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-04	9/4/2018	Fluoride, Total	1	0.5	0.15	1600000	mg/L
MKTF-04	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-04	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-04	9/4/2018	Nitrogen, Nitrate	0.083	0.5	0.033	10000000	mg/L
MKTF-04	9/4/2018	Sulfate	5.5	2.5	1	600000000	mg/L
MKTF-04	9/4/2018	TPH DRO	4.7	1	0.63	16700	mg/L
MKTF-04	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	9/4/2018	TPH GRO	12	1	0.49	10100	mg/L
MKTF-04	11/20/2018	Bromide	2.2	0.5	0.1	NA	mg/L
MKTF-04	11/20/2018	Chloride	210	10	10	250000000	mg/L
MKTF-04	11/20/2018	Fluoride, Total	1.1	0.5	0.5	1600000	mg/L
MKTF-04	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-04	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-04	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-04	11/20/2018	Sulfate	9.6	2.5	0.63	600000000	mg/L
MKTF-04	11/20/2018	TPH DRO	4.5	1	0.63	16700	mg/L
MKTF-04	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-04	11/20/2018	TPH GRO	7.6	1	0.49	10100	mg/L
MKTF-04	5/13/2019	TPH GRO	9.8	0.25	0.1535	10100	mg/L
MKTF-04	5/13/2019	TPH DRO	5.6	1	0.35	16700	mg/L
MKTF-04	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	5/13/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
MKTF-04	5/13/2019	Chloride	240	10	1.25	250000000	mg/L
MKTF-04	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-04	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-04	5/13/2019	Sulfate	5.3	2.5	0.2675	600000000	mg/L
MKTF-04	5/13/2019	TPH GRO	9.6	0.25	0.1535	10100	mg/L
MKTF-04	5/13/2019	TPH DRO	5.4	1	0.35	16700	mg/L
MKTF-04	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	5/13/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
MKTF-04	5/13/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-04	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-04	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-04	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-04	5/13/2019	Sulfate	5.6	2.5	0.2675	600000000	mg/L
MKTF-04	8/21/2019	TPH GRO	10	0.25	0.1535	10100	mg/L
MKTF-04	8/21/2019	TPH DRO	5.9	1	0.35	16700	mg/L
MKTF-04	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	8/21/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-04	8/21/2019	Chloride	230	10	10	250000000	mg/L
MKTF-04	8/21/2019	Fluoride, Total	0.83	0.5	0.073	1600000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrate	0.34	0.5	0.025	10000000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	8/21/2019	Sulfate	15	2.5	0.3345	600000000	mg/L
MKTF-04	8/21/2019	TPH GRO	6.4	0.05	0.0307	10100	mg/L
MKTF-04	8/21/2019	TPH DRO	4.3	1	0.35	16700	mg/L
MKTF-04	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-04	8/21/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-04	8/21/2019	Chloride	220	10	10	250000000	mg/L
MKTF-04	8/21/2019	Fluoride, Total	0.81	0.5	0.073	1600000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrate	0.12	0.5	0.025	10000000	mg/L
MKTF-04	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	8/21/2019	Sulfate	16	2.5	0.3345	600000000	mg/L
MKTF-04	10/30/2019	TPH GRO	8.7	0.25	0.0965	10100	mg/L
MKTF-04	10/30/2019	TPH DRO	0.77	0.4	0.132	16700	mg/L
MKTF-04	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-04	10/30/2019	Bromide	2.4	0.5	0.077	NA	mg/L
MKTF-04	10/30/2019	Chloride	210	10	10	250000000	mg/L
MKTF-04	10/30/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	10/30/2019	Sulfate	3.4	2.5	0.3345	600000000	mg/L
MKTF-04	10/30/2019	TPH GRO	10	0.25	0.0965	10100	mg/L
MKTF-04	10/30/2019	TPH DRO	0.73	0.4	0.132	16700	mg/L
MKTF-04	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-04	10/30/2019	Bromide	2.5	0.5	0.077	NA	mg/L
MKTF-04	10/30/2019	Chloride	210	10	10	250000000	mg/L
MKTF-04	10/30/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-04	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-04	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-04	10/30/2019	Sulfate	2.9	2.5	0.3345	600000000	mg/L
MKTF-04	3/3/2020	TPH GRO	8.2	0.25	0.034	10100	mg/L
MKTF-04	3/3/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
MKTF-04	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-04	3/3/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-04	3/3/2020	Fluoride, Total	0.56	0.5	0.11	1600000	mg/L
MKTF-04	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-04	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-04	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-04	3/3/2020	Sulfate	9.3	2.5	1.2	600000000	mg/L
MKTF-04	3/3/2020	Chloride	220	10	5	250000000	mg/L
MKTF-09	4/14/2014	TPH DRO	3.6	1	0.57	16700	mg/L
MKTF-09	4/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	4/14/2014	TPH GRO	5.7	1	0.38	10100	mg/L
MKTF-09	6/5/2014	Bromide	1.1	0.1	0.022	NA	mg/L
MKTF-09	6/5/2014	Chloride	180	10	5	250000000	mg/L
MKTF-09	6/5/2014	Fluoride, Total	0.43	0.1	0.018	1600000	mg/L
MKTF-09	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-09	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-09	6/5/2014	Sulfate	78	10	1.4	600000000	mg/L
MKTF-09	6/5/2014	TPH DRO	2.7	1	0.57	16700	mg/L
MKTF-09	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/5/2014	TPH GRO	6.2	0.5	0.071	10100	mg/L
MKTF-09	9/18/2014	TPH DRO	1.4	1	0.83	16700	mg/L
MKTF-09	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/18/2014	TPH GRO	5.6	1	0.38	10100	mg/L
MKTF-09	11/14/2014	Bromide	1.2	1	0.26	NA	mg/L
MKTF-09	11/14/2014	Chloride	180	50	2.2	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-09	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-09	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-09	11/14/2014	Sulfate	140	5	0.82	600000000	mg/L
MKTF-09	11/14/2014	TPH DRO	2.1	1	0.83	16700	mg/L
MKTF-09	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/14/2014	TPH GRO	4.4	0.5	0.19	10100	mg/L
MKTF-09	3/16/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-09	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	3/16/2015	TPH GRO	3.3	0.5	0.12	10100	mg/L
MKTF-09	6/4/2015	TPH DRO	1.8	1	0.91	16700	mg/L
MKTF-09	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/4/2015	TPH GRO	4.1	0.25	0.06	10100	mg/L
MKTF-09	8/18/2015	Bromide	0.26	0.1	0.077	NA	mg/L
MKTF-09	8/18/2015	Chloride	170	10	2.7	250000000	mg/L
MKTF-09	8/18/2015	Fluoride, Total	0.43	0.1	0.029	1600000	mg/L
MKTF-09	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-09	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-09	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-09	8/18/2015	Sulfate	130	10	2.3	600000000	mg/L
MKTF-09	8/18/2015	TPH DRO	4.7	1	0.91	16700	mg/L
MKTF-09	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	8/18/2015	TPH GRO	7.1	0.5	0.12	10100	mg/L
MKTF-09	11/3/2015	Bromide	1	0.1	0.068	NA	mg/L
MKTF-09	11/3/2015	Chloride	170	10	6.8	250000000	mg/L
MKTF-09	11/3/2015	Fluoride, Total	0.46	0.1	0.032	1600000	mg/L
MKTF-09	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-09	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-09	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-09	11/3/2015	Sulfate	110	10	6.4	600000000	mg/L
MKTF-09	11/3/2015	TPH DRO	5.3	1	0.91	16700	mg/L
MKTF-09	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/3/2015	TPH GRO	9.8	0.5	0.12	10100	mg/L
MKTF-09	2/29/2016	Bromide	0.94	0.1	0.032	NA	mg/L
MKTF-09	2/29/2016	Chloride	170	10	0.55	250000000	mg/L
MKTF-09	2/29/2016	Fluoride, Total	0.47	0.1	0.023	1600000	mg/L
MKTF-09	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-09	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-09	2/29/2016	Sulfate	70	10	1.3	600000000	mg/L
MKTF-09	2/29/2016	TPH DRO	2.5	1	0.69	16700	mg/L
MKTF-09	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	2/29/2016	TPH GRO	7.4	1	0.51	10100	mg/L
MKTF-09	6/9/2016	Bromide	1.1	0.1	0.032	NA	mg/L
MKTF-09	6/9/2016	Chloride	170	10	0.55	250000000	mg/L
MKTF-09	6/9/2016	Fluoride, Total	0.35	0.1	0.023	1600000	mg/L
MKTF-09	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-09	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-09	6/9/2016	Sulfate	81	10	1.3	600000000	mg/L
MKTF-09	6/9/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-09	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/9/2016	TPH GRO	7.8	0.5	0.25	10100	mg/L
MKTF-09	9/11/2016	Bromide	1.2	0.1	0.044	NA	mg/L
MKTF-09	9/11/2016	Chloride	160	10	1	250000000	mg/L
MKTF-09	9/11/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-09	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-09	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-09	9/11/2016	Sulfate	57	10	2.8	600000000	mg/L
MKTF-09	9/11/2016	TPH DRO	2.3	1	0.69	16700	mg/L
MKTF-09	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/11/2016	TPH GRO	6.7	0.5	0.15	10100	mg/L
MKTF-09	11/2/2016	Bromide	1.1	0.5	0.22	NA	mg/L
MKTF-09	11/2/2016	Chloride	150	10	1	250000000	mg/L
MKTF-09	11/2/2016	Fluoride, Total	0.46	0.5	0.25	1600000	mg/L
MKTF-09	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-09	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-09	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-09	11/2/2016	Sulfate	71	2.5	0.71	600000000	mg/L
MKTF-09	11/2/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-09	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/2/2016	TPH GRO	7.8	1	0.51	10100	mg/L
MKTF-09	3/15/2017	Bromide	2.4	2	0.61	NA	mg/L
MKTF-09	3/15/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	3/15/2017	Fluoride, Total	0.33	0.1	0.05	1600000	mg/L
MKTF-09	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-09	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-09	3/15/2017	Nitrogen, Nitrate	0.04	0.1	0.022	10000000	mg/L
MKTF-09	3/15/2017	Sulfate	28	0.5	0.096	600000000	mg/L
MKTF-09	3/15/2017	TPH DRO	3.9	1	0.36	16700	mg/L
MKTF-09	3/15/2017	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	3/15/2017	TPH GRO	12	0.5	0.25	10100	mg/L
MKTF-09	6/12/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-09	6/12/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	6/12/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-09	6/12/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	6/12/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-09	6/12/2017	Sulfate	14	2.5	0.48	600000000	mg/L
MKTF-09	6/12/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-09	6/12/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	6/12/2017	TPH GRO	11	1	0.5	10100	mg/L
MKTF-09	9/28/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-09	9/28/2017	Chloride	180	10	5	250000000	mg/L
MKTF-09	9/28/2017	Fluoride, Total	0.35	0.5	0.22	1600000	mg/L
MKTF-09	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-09	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	9/28/2017	Sulfate	14	2.5	0.48	600000000	mg/L
MKTF-09	9/28/2017	TPH DRO	4.2	1	0.36	16700	mg/L
MKTF-09	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/28/2017	TPH GRO	13	1	0.5	10100	mg/L
MKTF-09	11/28/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-09	11/28/2017	Chloride	220	10	5	250000000	mg/L
MKTF-09	11/28/2017	Fluoride, Total	0.45	0.5	0.22	1600000	mg/L
MKTF-09	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-09	11/28/2017	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-09	11/28/2017	TPH DRO	2.6	1	0.36	16700	mg/L
MKTF-09	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/28/2017	TPH GRO	11	1	0.19	10100	mg/L
MKTF-09	2/14/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-09	2/14/2018	Chloride	220	10	5	250000000	mg/L
MKTF-09	2/14/2018	Fluoride, Total	0.4	0.5	0.22	1600000	mg/L
MKTF-09	2/14/2018	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
MKTF-09	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-09	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	2/14/2018	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-09	2/14/2018	TPH DRO	2.2	1	0.63	16700	mg/L
MKTF-09	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	2/14/2018	TPH GRO	8.7	1	0.19	10100	mg/L
MKTF-09	5/2/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-09	5/2/2018	Chloride	250	10	0.59	250000000	mg/L
MKTF-09	5/2/2018	Fluoride, Total	0.34	0.5	0.15	1600000	mg/L
MKTF-09	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-09	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-09	5/2/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-09	5/2/2018	Sulfate	22	2.5	1	600000000	mg/L
MKTF-09	5/2/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-09	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	5/2/2018	TPH GRO	8.2	1	0.19	10100	mg/L
MKTF-09	9/4/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-09	9/4/2018	Chloride	260	10	0.59	250000000	mg/L
MKTF-09	9/4/2018	Fluoride, Total	0.52	0.5	0.15	1600000	mg/L
MKTF-09	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-09	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-09	9/4/2018	Nitrogen, Nitrate	0.066	0.5	0.033	10000000	mg/L
MKTF-09	9/4/2018	Sulfate	17	2.5	1	600000000	mg/L
MKTF-09	9/4/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-09	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	9/4/2018	TPH GRO	11	1	0.49	10100	mg/L
MKTF-09	11/28/2018	Bromide	1.1	0.5	0.1	NA	mg/L
MKTF-09	11/28/2018	Chloride	260	10	10	250000000	mg/L
MKTF-09	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-09	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-09	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-09	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-09	11/28/2018	Sulfate	24	2.5	0.63	600000000	mg/L
MKTF-09	11/28/2018	TPH DRO	1.8	1	0.63	16700	mg/L
MKTF-09	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-09	11/28/2018	TPH GRO	9.1	1	0.49	10100	mg/L
MKTF-09	5/13/2019	TPH GRO	8.4	0.5	0.307	10100	mg/L
MKTF-09	5/13/2019	TPH DRO	3.1	1	0.35	16700	mg/L
MKTF-09	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-09	5/13/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-09	5/13/2019	Chloride	250	10	1.25	250000000	mg/L
MKTF-09	5/13/2019	Fluoride, Total	0.47	0.5	0.25	1600000	mg/L
MKTF-09	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-09	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-09	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-09	5/13/2019	Sulfate	8.1	2.5	0.2675	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-09	8/28/2019	TPH GRO	12	0.5	0.211	10100	mg/L
MKTF-09	8/28/2019	TPH DRO	3.9	1	0.35	16700	mg/L
MKTF-09	8/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-09	8/28/2019	Bromide	1.3	0.5	0.25	NA	mg/L
MKTF-09	8/28/2019	Chloride	230	10	5	250000000	mg/L
MKTF-09	8/28/2019	Fluoride, Total	0.51	0.5	0.073	1600000	mg/L
MKTF-09	8/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-09	8/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-09	8/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-09	8/28/2019	Sulfate	12	2.5	1.25	600000000	mg/L
MKTF-09	11/18/2019	TPH GRO	10	0.5	0.211	10100	mg/L
MKTF-09	11/18/2019	TPH DRO	1	0.4	0.132	16700	mg/L
MKTF-09	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-09	11/18/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-09	11/18/2019	Chloride	220	10	10	250000000	mg/L
MKTF-09	11/18/2019	Fluoride, Total	0.3	0.5	0.144909	1600000	mg/L
MKTF-09	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-09	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-09	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-09	11/18/2019	Sulfate	25	2.5	0.3345	600000000	mg/L
MKTF-09	3/3/2020	TPH GRO	6.3	0.05	0.0068	10100	mg/L
MKTF-09	3/3/2020	TPH DRO	1	0.4	0.2	16700	mg/L
MKTF-09	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-09	3/3/2020	Bromide	1.1	0.5	0.25	NA	mg/L
MKTF-09	3/3/2020	Fluoride, Total	0.44	0.5	0.11	1600000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-09	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	3/3/2020	Sulfate	46	2.5	1.2	600000000	mg/L
MKTF-09	3/3/2020	Chloride	290	10	5	250000000	mg/L
MKTF-09	3/3/2020	TPH GRO	7.9	1	0.14	10100	mg/L
MKTF-09	3/3/2020	TPH DRO	0.96	0.4	0.2	16700	mg/L
MKTF-09	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-09	3/3/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-09	3/3/2020	Fluoride, Total	0.43	0.5	0.11	1600000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-09	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-09	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-09	3/3/2020	Sulfate	43	2.5	1.2	600000000	mg/L
MKTF-09	3/3/2020	Chloride	290	10	5	250000000	mg/L
MKTF-10	4/11/2014	TPH DRO	5.9	1	0.57	16700	mg/L
MKTF-10	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	4/11/2014	TPH GRO	88	10	3.8	10100	mg/L
MKTF-10	6/6/2014	TPH DRO	5.5	1	0.57	16700	mg/L
MKTF-10	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/6/2014	TPH GRO	64	10	1.4	10100	mg/L
MKTF-10	9/18/2014	TPH DRO	7.7	1	0.83	16700	mg/L
MKTF-10	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/18/2014	TPH GRO	88	1	0.38	10100	mg/L
MKTF-10	11/14/2014	Bromide	ND	1	0.26	NA	mg/L
MKTF-10	11/14/2014	Chloride	260	50	2.2	250000000	mg/L
MKTF-10	11/14/2014	Fluoride, Total	270	10	1.5	1600000	mg/L
MKTF-10	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-10	11/14/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
MKTF-10	11/14/2014	Sulfate	ND	5	0.82	600000000	mg/L
MKTF-10	11/14/2014	TPH DRO	74	10	8.3	16700	mg/L
MKTF-10	11/14/2014	TPH ORO	ND	50	50	85800	mg/L
MKTF-10	11/14/2014	TPH GRO	84	2.5	0.96	10100	mg/L
MKTF-10	3/16/2015	TPH DRO	32	1	0.91	16700	mg/L
MKTF-10	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	3/16/2015	TPH GRO	80	10	2.4	10100	mg/L
MKTF-10	6/4/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-10	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/4/2015	TPH GRO	79	2.5	0.6	10100	mg/L
MKTF-10	8/18/2015	Bromide	0.74	0.5	0.39	NA	mg/L
MKTF-10	8/18/2015	Chloride	390	10	2.7	250000000	mg/L
MKTF-10	8/18/2015	Fluoride, Total	ND	5	1.5	1600000	mg/L
MKTF-10	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-10	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-10	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-10	8/18/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-10	8/18/2015	TPH DRO	55	1	0.91	16700	mg/L
MKTF-10	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	8/18/2015	TPH GRO	130	5	1.2	10100	mg/L
MKTF-10	11/3/2015	Bromide	0.76	0.5	0.34	NA	mg/L
MKTF-10	11/3/2015	Chloride	380	10	6.8	250000000	mg/L
MKTF-10	11/3/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-10	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-10	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-10	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-10	11/3/2015	TPH DRO	8	1	0.91	16700	mg/L
MKTF-10	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/3/2015	TPH GRO	100	5	1.2	10100	mg/L
MKTF-10	2/29/2016	Bromide	0.88	0.5	0.16	NA	mg/L
MKTF-10	2/29/2016	Chloride	280	10	0.55	250000000	mg/L
MKTF-10	2/29/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-10	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-10	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-10	2/29/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-10	2/29/2016	TPH DRO	14	1	0.69	16700	mg/L
MKTF-10	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	2/29/2016	TPH GRO	110	5	2.5	10100	mg/L
MKTF-10	6/9/2016	Bromide	0.91	0.5	0.16	NA	mg/L
MKTF-10	6/9/2016	Chloride	260	10	0.55	250000000	mg/L
MKTF-10	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-10	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-10	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-10	6/9/2016	Sulfate	0.4	2.5	0.32	600000000	mg/L
MKTF-10	6/9/2016	TPH DRO	8	1	0.69	16700	mg/L
MKTF-10	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/9/2016	TPH GRO	110	2.5	1.3	10100	mg/L
MKTF-10	9/11/2016	Bromide	0.79	0.5	0.22	NA	mg/L
MKTF-10	9/11/2016	Chloride	240	10	1	250000000	mg/L
MKTF-10	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-10	9/11/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-10	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-10	9/11/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-10	9/11/2016	TPH DRO	6	1	0.69	16700	mg/L
MKTF-10	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/11/2016	TPH GRO	110	5	1.5	10100	mg/L
MKTF-10	11/2/2016	Bromide	0.92	0.5	0.22	NA	mg/L
MKTF-10	11/2/2016	Chloride	230	10	1	250000000	mg/L
MKTF-10	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-10	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-10	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-10	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-10	11/2/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-10	11/2/2016	TPH DRO	3.8	1	0.69	16700	mg/L
MKTF-10	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/2/2016	TPH GRO	100	10	5.1	10100	mg/L
MKTF-10	3/2/2017	Bromide	1.3	0.1	0.031	NA	mg/L
MKTF-10	3/2/2017	Chloride	350	10	5	250000000	mg/L
MKTF-10	3/2/2017	Fluoride, Total	0.35	0.1	0.05	1600000	mg/L
MKTF-10	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-10	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	3/2/2017	Sulfate	0.3	0.5	0.096	600000000	mg/L
MKTF-10	3/2/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-10	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	3/2/2017	TPH GRO	110	10	5	10100	mg/L
MKTF-10	6/8/2017	Bromide	0.86	0.1	0.014	NA	mg/L
MKTF-10	6/8/2017	Chloride	310	10	5	250000000	mg/L
MKTF-10	6/8/2017	Fluoride, Total	0.49	0.1	0.044	1600000	mg/L
MKTF-10	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-10	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	6/8/2017	Sulfate	0.25	0.5	0.096	600000000	mg/L
MKTF-10	6/8/2017	TPH DRO	3.5	1	0.36	16700	mg/L
MKTF-10	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	6/8/2017	TPH GRO	100	10	5	10100	mg/L
MKTF-10	9/28/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-10	9/28/2017	Chloride	330	10	5	250000000	mg/L
MKTF-10	9/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-10	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-10	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-10	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	9/28/2017	Sulfate	0.55	2.5	0.48	600000000	mg/L
MKTF-10	9/28/2017	TPH DRO	3.6	1	0.36	16700	mg/L
MKTF-10	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/28/2017	TPH GRO	74	10	5	10100	mg/L
MKTF-10	11/28/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-10	11/28/2017	Chloride	370	25	12	250000000	mg/L
MKTF-10	11/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-10	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-10	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-10	11/28/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-10	11/28/2017	TPH DRO	3.5	1	0.36	16700	mg/L
MKTF-10	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/28/2017	TPH GRO	83	10	1.9	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	2/14/2018	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-10	2/14/2018	Chloride	390	25	12	250000000	mg/L
MKTF-10	2/14/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-10	2/14/2018	Ortho-Phosphate	3.3	2.5	1.2	NA	mg/L
MKTF-10	2/14/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-10	2/14/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	2/14/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-10	2/14/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-10	2/14/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	2/14/2018	TPH GRO	74	5	0.97	10100	mg/L
MKTF-10	5/2/2018	Bromide	0.93	0.5	0.13	NA	mg/L
MKTF-10	5/2/2018	Chloride	380	25	1.5	250000000	mg/L
MKTF-10	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-10	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-10	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-10	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-10	5/2/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-10	5/2/2018	TPH DRO	3.7	1	0.63	16700	mg/L
MKTF-10	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	5/2/2018	TPH GRO	100	5	0.97	10100	mg/L
MKTF-10	9/4/2018	Bromide	0.9	0.5	0.13	NA	mg/L
MKTF-10	9/4/2018	Chloride	340	10	0.59	250000000	mg/L
MKTF-10	9/4/2018	Fluoride, Total	0.85	0.5	0.15	1600000	mg/L
MKTF-10	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-10	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-10	9/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-10	9/4/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-10	9/4/2018	TPH DRO	2.5	1	0.63	16700	mg/L
MKTF-10	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	9/4/2018	TPH GRO	57	5	2.4	10100	mg/L
MKTF-10	11/20/2018	Bromide	0.66	0.5	0.1	NA	mg/L
MKTF-10	11/20/2018	Chloride	320	10	10	250000000	mg/L
MKTF-10	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-10	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-10	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-10	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-10	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-10	11/20/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-10	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-10	11/20/2018	TPH GRO	53	5	2.4	10100	mg/L
MKTF-10	5/13/2019	TPH GRO	48	2.5	1.535	10100	mg/L
MKTF-10	5/13/2019	TPH DRO	3.5	1	0.35	16700	mg/L
MKTF-10	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-10	5/13/2019	Bromide	0.56	0.5	0.088765	NA	mg/L
MKTF-10	5/13/2019	Chloride	460	25	3.125	250000000	mg/L
MKTF-10	5/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-10	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-10	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-10	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-10	5/13/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
MKTF-10	8/22/2019	TPH GRO	35	2.5	1.055	10100	mg/L
MKTF-10	8/22/2019	TPH DRO	3	1	0.35	16700	mg/L
MKTF-10	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-10	8/22/2019	Bromide	0.64	0.5	0.088765	NA	mg/L
MKTF-10	8/22/2019	Chloride	960	50	50	250000000	mg/L
MKTF-10	8/22/2019	Fluoride, Total	0.91	0.5	0.073	1600000	mg/L
MKTF-10	8/22/2019	Nitrogen, Nitrate	0.1	0.5	0.025	10000000	mg/L
MKTF-10	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-10	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-10	8/22/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-10	10/30/2019	TPH GRO	40	0.5	0.193	10100	mg/L
MKTF-10	10/30/2019	TPH DRO	0.35	0.4	0.132	16700	mg/L
MKTF-10	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-10	10/30/2019	Bromide	0.59	0.5	0.077	NA	mg/L
MKTF-10	10/30/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-10	10/30/2019	Fluoride, Total	0.76	0.5	0.144909	1600000	mg/L
MKTF-10	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-10	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-10	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-10	10/30/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-10	3/3/2020	TPH GRO	40	0.5	0.068	10100	mg/L
MKTF-10	3/3/2020	TPH DRO	1.3	0.4	0.2	16700	mg/L
MKTF-10	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-10	3/3/2020	Chloride	970	50	25	250000000	mg/L
MKTF-10	3/3/2020	Bromide	0.7	0.5	0.25	NA	mg/L
MKTF-10	3/3/2020	Fluoride, Total	0.72	0.5	0.11	1600000	mg/L
MKTF-10	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-10	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-10	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-10	3/3/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-10	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-10	12/18/2020	Bicarbonate	265	1	0.5	NA	mg/L
MKTF-10	12/18/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-10	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-10	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-10	12/18/2020	Chloride	937	50	6	250000000	mg/L
MKTF-10	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-10	12/18/2020	TPH DRO	5540	129	103	16700	ug/L
MKTF-10	12/18/2020	C28-C40	ND	129	103	NA	ug/L
MKTF-10	12/18/2020	TPH (C6-C10)	31800	1000	470	NA	ug/L
MKTF-11	4/11/2014	TPH DRO	2.7	1	0.57	16700	mg/L
MKTF-11	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	4/11/2014	TPH GRO	53	5	1.9	10100	mg/L
MKTF-11	6/5/2014	Bromide	0.67	0.1	0.022	NA	mg/L
MKTF-11	6/5/2014	Chloride	480	25	12	250000000	mg/L
MKTF-11	6/5/2014	Fluoride, Total	7	2	0.36	1600000	mg/L
MKTF-11	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-11	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-11	6/5/2014	Sulfate	11	0.5	0.068	600000000	mg/L
MKTF-11	6/5/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-11	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/5/2014	TPH GRO	48	10	1.4	10100	mg/L
MKTF-11	9/15/2014	TPH DRO	1.8	1	0.83	16700	mg/L
MKTF-11	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/15/2014	TPH GRO	57	1	0.38	10100	mg/L
MKTF-11	11/13/2014	Bromide	ND	1	0.26	NA	mg/L
MKTF-11	11/13/2014	Chloride	780	50	2.2	250000000	mg/L
MKTF-11	11/13/2014	Fluoride, Total	6.5	1	0.15	1600000	mg/L
MKTF-11	11/13/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-11	11/13/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-11	11/13/2014	Sulfate	ND	5	0.82	600000000	mg/L
MKTF-11	11/13/2014	TPH DRO	1.8	1	0.83	16700	mg/L
MKTF-11	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/13/2014	TPH GRO	35	2.5	0.96	10100	mg/L
MKTF-11	3/16/2015	TPH DRO	2.6	1	0.91	16700	mg/L
MKTF-11	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	3/16/2015	TPH GRO	55	10	2.4	10100	mg/L
MKTF-11	6/4/2015	TPH DRO	2.8	1	0.91	16700	mg/L
MKTF-11	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/4/2015	TPH GRO	71	1	0.24	10100	mg/L
MKTF-11	8/18/2015	Bromide	0.26	0.1	0.077	NA	mg/L
MKTF-11	8/18/2015	Chloride	1200	50	13	250000000	mg/L
MKTF-11	8/18/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
MKTF-11	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-11	8/18/2015	Nitrogen, Nitrite	ND	2	0.4	1000000	mg/L
MKTF-11	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-11	8/18/2015	Sulfate	1.2	0.5	0.11	600000000	mg/L
MKTF-11	8/18/2015	TPH DRO	1.6	1	0.91	16700	mg/L
MKTF-11	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	8/18/2015	TPH GRO	36	5	1.2	10100	mg/L
MKTF-11	11/3/2015	Bromide	0.89	0.5	0.34	NA	mg/L
MKTF-11	11/3/2015	Chloride	740	25	17	250000000	mg/L
MKTF-11	11/3/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-11	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-11	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-11	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-11	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-11	11/3/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-11	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/3/2015	TPH GRO	71	2.5	0.6	10100	mg/L
MKTF-11	2/29/2016	Bromide	3.4	0.5	0.16	NA	mg/L
MKTF-11	2/29/2016	Chloride	1600	50	2.7	250000000	mg/L
MKTF-11	2/29/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-11	2/29/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-11	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-11	2/29/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-11	2/29/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-11	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	2/29/2016	TPH GRO	42	2.5	1.3	10100	mg/L
MKTF-11	6/9/2016	Bromide	0.11	0.1	0.032	NA	mg/L
MKTF-11	6/9/2016	Chloride	1000	50	2.8	250000000	mg/L
MKTF-11	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-11	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-11	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-11	6/9/2016	Sulfate	2.2	0.5	0.064	600000000	mg/L
MKTF-11	6/9/2016	TPH DRO	1.4	1	0.69	16700	mg/L
MKTF-11	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/9/2016	TPH GRO	39	2.5	1.3	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/11/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-11	9/11/2016	Chloride	880	50	5.1	250000000	mg/L
MKTF-11	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-11	9/11/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-11	9/11/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-11	9/11/2016	Sulfate	2.2	0.5	0.14	600000000	mg/L
MKTF-11	9/11/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-11	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/11/2016	TPH GRO	29	2.5	0.75	10100	mg/L
MKTF-11	11/2/2016	Bromide	0.77	0.5	0.22	NA	mg/L
MKTF-11	11/2/2016	Chloride	900	50	5.1	250000000	mg/L
MKTF-11	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-11	11/2/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-11	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-11	11/2/2016	Sulfate	2.2	2.5	0.71	600000000	mg/L
MKTF-11	11/2/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-11	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/2/2016	TPH GRO	27	2.5	1.3	10100	mg/L
MKTF-11	3/2/2017	Bromide	2.7	2	0.61	NA	mg/L
MKTF-11	3/2/2017	Chloride	650	25	12	250000000	mg/L
MKTF-11	3/2/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	3/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-11	3/2/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	3/2/2017	Sulfate	3.4	0.5	0.096	600000000	mg/L
MKTF-11	3/2/2017	TPH DRO	1.7	1	0.36	16700	mg/L
MKTF-11	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	3/2/2017	TPH GRO	27	2.5	1.2	10100	mg/L
MKTF-11	6/8/2017	Bromide	0.8	0.1	0.014	NA	mg/L
MKTF-11	6/8/2017	Chloride	630	25	12	250000000	mg/L
MKTF-11	6/8/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-11	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-11	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	6/8/2017	Sulfate	4.3	0.5	0.096	600000000	mg/L
MKTF-11	6/8/2017	TPH DRO	1.8	1	0.36	16700	mg/L
MKTF-11	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	6/8/2017	TPH GRO	30	2.5	1.2	10100	mg/L
MKTF-11	9/26/2017	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-11	9/26/2017	Chloride	820	25	12	250000000	mg/L
MKTF-11	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-11	9/26/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-11	9/26/2017	TPH DRO	2.8	1	0.36	16700	mg/L
MKTF-11	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/26/2017	TPH GRO	63	2.5	1.2	10100	mg/L
MKTF-11	11/28/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-11	11/28/2017	Chloride	860	25	12	250000000	mg/L
MKTF-11	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	11/28/2017	Nitrate & Nitrite	0.27	1	0.13	NA	mg/L
MKTF-11	11/28/2017	Sulfate	1.2	2.5	0.48	600000000	mg/L
MKTF-11	11/28/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-11	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/28/2017	TPH GRO	59	2.5	0.48	10100	mg/L
MKTF-11	2/8/2018	Bromide	1	0.5	0.073	NA	mg/L
MKTF-11	2/8/2018	Chloride	740	25	12	250000000	mg/L
MKTF-11	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-11	2/8/2018	Ortho-Phosphate	3.4	2.5	1.2	NA	mg/L
MKTF-11	2/8/2018	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
MKTF-11	2/8/2018	Sulfate	1.5	2.5	0.48	600000000	mg/L
MKTF-11	2/8/2018	TPH DRO	2.2	1	0.63	16700	mg/L
MKTF-11	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	2/8/2018	TPH GRO	69	2.5	0.48	10100	mg/L
MKTF-11	5/2/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-11	5/2/2018	Chloride	850	50	2.9	250000000	mg/L
MKTF-11	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-11	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-11	5/2/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-11	5/2/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-11	5/2/2018	Sulfate	1.4	2.5	1	600000000	mg/L
MKTF-11	5/2/2018	TPH DRO	2.5	1	0.63	16700	mg/L
MKTF-11	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	5/2/2018	TPH GRO	72	2.5	0.48	10100	mg/L
MKTF-11	9/4/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-11	9/4/2018	Chloride	1200	50	18	250000000	mg/L
MKTF-11	9/4/2018	Fluoride, Total	0.75	0.5	0.15	1600000	mg/L
MKTF-11	9/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-11	9/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-11	9/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-11	9/4/2018	Sulfate	2	2.5	1	600000000	mg/L
MKTF-11	9/4/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-11	9/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	9/4/2018	TPH GRO	53	5	2.4	10100	mg/L
MKTF-11	11/20/2018	Bromide	0.9	0.5	0.1	NA	mg/L
MKTF-11	11/20/2018	Chloride	1200	50	50	250000000	mg/L
MKTF-11	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-11	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-11	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-11	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-11	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-11	11/20/2018	TPH DRO	1.7	1	0.63	16700	mg/L
MKTF-11	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-11	11/20/2018	TPH GRO	41	5	2.4	10100	mg/L
MKTF-11	5/13/2019	TPH GRO	28	2.5	1.535	10100	mg/L
MKTF-11	5/13/2019	TPH DRO	1.5	1	0.35	16700	mg/L
MKTF-11	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-11	5/13/2019	Bromide	0.79	0.5	0.088765	NA	mg/L
MKTF-11	5/13/2019	Chloride	760	25	3.125	250000000	mg/L
MKTF-11	5/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-11	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-11	5/13/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-11	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-11	5/13/2019	Sulfate	6.3	2.5	0.2675	600000000	mg/L
MKTF-11	8/21/2019	TPH GRO	35	2.5	1.055	10100	mg/L
MKTF-11	8/21/2019	TPH DRO	1.4	1	0.35	16700	mg/L
MKTF-11	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-11	8/21/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-11	8/21/2019	Chloride	620	25	25	250000000	mg/L
MKTF-11	8/21/2019	Fluoride, Total	1.3	0.5	0.073	1600000	mg/L
MKTF-11	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-11	8/21/2019	Nitrogen, Nitrite	0.57	0.5	0.027	1000000	mg/L
MKTF-11	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-11	8/21/2019	Sulfate	1.8	2.5	0.3345	600000000	mg/L
MKTF-11	10/30/2019	TPH GRO	32	1	0.386	10100	mg/L
MKTF-11	10/30/2019	TPH DRO	0.18	0.4	0.132	16700	mg/L
MKTF-11	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-11	10/30/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-11	10/30/2019	Chloride	750	50	50	250000000	mg/L
MKTF-11	10/30/2019	Fluoride, Total	1.4	0.5	0.144909	1600000	mg/L
MKTF-11	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-11	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-11	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-11	10/30/2019	Sulfate	4.4	2.5	0.3345	600000000	mg/L
MKTF-11	3/3/2020	TPH GRO	18	1	0.14	10100	mg/L
MKTF-11	3/3/2020	TPH DRO	0.5	0.4	0.2	16700	mg/L
MKTF-11	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-11	3/3/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-11	3/3/2020	Fluoride, Total	0.89	0.5	0.11	1600000	mg/L
MKTF-11	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-11	3/3/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-11	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-11	3/3/2020	Sulfate	19	2.5	1.2	600000000	mg/L
MKTF-11	3/3/2020	Chloride	1500	100	50	250000000	mg/L
MKTF-13	3/15/2017	Bromide	1.6	0.5	0.15	NA	mg/L
MKTF-13	3/15/2017	Chloride	120	10	5	250000000	mg/L
MKTF-13	3/15/2017	Fluoride, Total	0.27	0.1	0.05	1600000	mg/L
MKTF-13	3/15/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-13	3/15/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-13	3/15/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-13	3/15/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-13	3/15/2017	TPH DRO	48	1	0.36	16700	mg/L
MKTF-13	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	3/15/2017	TPH GRO	28	2.5	1.2	10100	mg/L
MKTF-13	5/10/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-13	5/10/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-13	5/10/2018	Fluoride, Total	0.29	0.5	0.15	1600000	mg/L
MKTF-13	5/10/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-13	5/10/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-13	5/10/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-13	5/10/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-13	5/10/2018	TPH DRO	30	1	0.63	16700	mg/L
MKTF-13	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	5/10/2018	TPH GRO	28	0.25	0.048	10100	mg/L
MKTF-13	8/30/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-13	8/30/2018	Chloride	210	10	0.59	250000000	mg/L
MKTF-13	8/30/2018	Fluoride, Total	0.28	0.5	0.15	1600000	mg/L
MKTF-13	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-13	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-13	8/30/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
MKTF-13	8/30/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-13	8/30/2018	TPH DRO	5.5	1	0.63	16700	mg/L
MKTF-13	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	8/30/2018	TPH GRO	26	1	0.19	10100	mg/L
MKTF-13	11/28/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-13	11/28/2018	Chloride	220	10	10	250000000	mg/L
MKTF-13	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-13	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-13	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-13	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-13	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-13	11/28/2018	TPH DRO	4.5	1	0.63	16700	mg/L
MKTF-13	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-13	11/28/2018	TPH GRO	24	0.5	0.24	10100	mg/L
MKTF-13	3/26/2019	TPH GRO	27	1	0.614	10100	mg/L
MKTF-13	3/26/2019	TPH DRO	8.1	1	0.35	16700	mg/L
MKTF-13	3/26/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-13	3/26/2019	Bromide	0.68	0.5	0.0675	NA	mg/L
MKTF-13	3/26/2019	Chloride	390	10	10	250000000	mg/L
MKTF-13	3/26/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-13	3/26/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-13	3/26/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-13	3/26/2019	Sulfate	0.75	2.5	0.32	600000000	mg/L
MKTF-13	5/9/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-13	5/9/2019	TPH DRO	63	1	0.35	16700	mg/L
MKTF-13	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-13	5/9/2019	Bromide	0.53	0.5	0.088765	NA	mg/L
MKTF-13	5/9/2019	Chloride	400	10	1.25	250000000	mg/L
MKTF-13	5/9/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-13	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-13	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-13	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-13	5/9/2019	Sulfate	1.1	2.5	0.2675	600000000	mg/L
MKTF-13	10/29/2019	TPH GRO	23	1	0.386	10100	mg/L
MKTF-13	10/29/2019	TPH DRO	7.3	0.4	0.132	16700	mg/L
MKTF-13	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-13	10/29/2019	Bromide	0.74	0.5	0.077	NA	mg/L
MKTF-13	10/29/2019	Chloride	290	10	10	250000000	mg/L
MKTF-13	10/29/2019	Fluoride, Total	0.38	0.5	0.144909	1600000	mg/L
MKTF-13	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-13	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-13	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-13	10/29/2019	Sulfate	0.59	2.5	0.3345	600000000	mg/L
MKTF-15	4/10/2014	TPH DRO	4.1	1	0.57	16700	mg/L
MKTF-15	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	4/10/2014	TPH GRO	71	5	1.9	10100	mg/L
MKTF-15	6/5/2014	Bromide	ND	2	0.43	NA	mg/L
MKTF-15	6/5/2014	Chloride	5200	500	250	250000000	mg/L
MKTF-15	6/5/2014	Fluoride, Total	ND	2	0.36	1600000	mg/L
MKTF-15	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-15	6/5/2014	Nitrate & Nitrite	ND	4	0.3	NA	mg/L
MKTF-15	6/5/2014	Sulfate	1.2	0.5	0.068	600000000	mg/L
MKTF-15	6/5/2014	TPH DRO	10	1	0.57	16700	mg/L
MKTF-15	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	6/5/2014	TPH GRO	57	10	1.4	10100	mg/L
MKTF-15	9/17/2014	TPH DRO	17	1	0.83	16700	mg/L
MKTF-15	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	9/17/2014	TPH GRO	88	1	0.38	10100	mg/L
MKTF-15	9/11/2016	Bromide	0.84	0.5	0.22	NA	mg/L
MKTF-15	9/11/2016	Chloride	3100	250	25	250000000	mg/L
MKTF-15	9/11/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-15	9/11/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-15	9/11/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-15	9/11/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-15	9/11/2016	TPH DRO	17	1	0.69	16700	mg/L
MKTF-15	9/11/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	9/11/2016	TPH GRO	110	2.5	0.75	10100	mg/L
MKTF-15	11/2/2016	Bromide	0.89	0.5	0.22	NA	mg/L
MKTF-15	11/2/2016	Chloride	2800	250	25	250000000	mg/L
MKTF-15	11/2/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-15	11/2/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-15	11/2/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
MKTF-15	11/2/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-15	11/2/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-15	11/2/2016	TPH DRO	6.2	1	0.69	16700	mg/L
MKTF-15	11/2/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	11/2/2016	TPH GRO	110	10	5.1	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-15	3/2/2017	Bromide	6.4	2	0.61	NA	mg/L
MKTF-15	3/2/2017	Chloride	3400	250	120	250000000	mg/L
MKTF-15	3/2/2017	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-15	3/2/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	3/2/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
MKTF-15	3/2/2017	Sulfate	1	2.5	0.48	600000000	mg/L
MKTF-15	3/2/2017	TPH DRO	8.8	1	0.36	16700	mg/L
MKTF-15	3/2/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	3/2/2017	TPH GRO	140	10	5	10100	mg/L
MKTF-15	6/8/2017	Bromide	0.73	0.5	0.073	NA	mg/L
MKTF-15	6/8/2017	Chloride	4300	250	120	250000000	mg/L
MKTF-15	6/8/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-15	6/8/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	6/8/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-15	6/8/2017	Sulfate	0.74	2.5	0.48	600000000	mg/L
MKTF-15	6/8/2017	TPH DRO	5.9	1	0.36	16700	mg/L
MKTF-15	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	6/8/2017	TPH GRO	150	10	5	10100	mg/L
MKTF-15	11/28/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-15	11/28/2017	Chloride	6000	500	250	250000000	mg/L
MKTF-15	11/28/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-15	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-15	11/28/2017	Nitrate & Nitrite	1.8	10	1.3	NA	mg/L
MKTF-15	11/28/2017	Sulfate	0.56	2.5	0.48	600000000	mg/L
MKTF-15	11/28/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-15	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	11/28/2017	TPH GRO	130	10	1.9	10100	mg/L
MKTF-15	5/2/2018	Bromide	0.52	0.5	0.13	NA	mg/L
MKTF-15	5/2/2018	Chloride	7200	250	15	250000000	mg/L
MKTF-15	5/2/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-15	5/2/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-15	5/2/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-15	5/2/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-15	5/2/2018	Sulfate	1.3	2.5	1	600000000	mg/L
MKTF-15	5/2/2018	TPH DRO	4	1	0.63	16700	mg/L
MKTF-15	5/2/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	5/2/2018	TPH GRO	97	10	1.9	10100	mg/L
MKTF-15	8/28/2018	Bromide	0.97	0.5	0.13	NA	mg/L
MKTF-15	8/28/2018	Chloride	6400	500	180	250000000	mg/L
MKTF-15	8/28/2018	Fluoride, Total	ND	2	0.59	1600000	mg/L
MKTF-15	8/28/2018	Ortho-Phosphate	8.4	10	1.9	NA	mg/L
MKTF-15	8/28/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-15	8/28/2018	Nitrogen, Nitrate	ND	2	0.13	10000000	mg/L
MKTF-15	8/28/2018	Sulfate	1.5	2.5	1	600000000	mg/L
MKTF-15	8/28/2018	TPH DRO	2.7	1	0.63	16700	mg/L
MKTF-15	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-15	8/28/2018	TPH GRO	78	2.5	1.2	10100	mg/L
MKTF-15	5/13/2019	TPH GRO	72	2.5	1.535	10100	mg/L
MKTF-15	5/13/2019	TPH DRO	9.7	1	0.35	16700	mg/L
MKTF-15	5/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-15	5/13/2019	Bromide	ND	2	0.35506	NA	mg/L
MKTF-15	5/13/2019	Chloride	3900	250	31.25	250000000	mg/L
MKTF-15	5/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-15	5/13/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-15	5/13/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-15	5/13/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-15	5/13/2019	Sulfate	0.44	2.5	0.2675	600000000	mg/L
MKTF-16	4/10/2014	TPH DRO	3.5	1	0.57	16700	mg/L
MKTF-16	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	4/10/2014	TPH GRO	67	5	1.9	10100	mg/L
MKTF-16	6/5/2014	Bromide	1.7	0.5	0.11	NA	mg/L
MKTF-16	6/5/2014	Chloride	540	25	12	250000000	mg/L
MKTF-16	6/5/2014	Fluoride, Total	1.1	0.5	0.089	1600000	mg/L
MKTF-16	6/5/2014	Ortho-Phosphate	ND	2.5	0.74	NA	mg/L
MKTF-16	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-16	6/5/2014	Sulfate	ND	2.5	0.34	600000000	mg/L
MKTF-16	6/5/2014	TPH DRO	5.7	1	0.57	16700	mg/L
MKTF-16	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/5/2014	TPH GRO	71	2.5	0.36	10100	mg/L
MKTF-16	9/17/2014	TPH DRO	4.6	1	0.83	16700	mg/L
MKTF-16	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/17/2014	TPH GRO	66	5	1.9	10100	mg/L
MKTF-16	11/18/2014	Bromide	1.8	0.5	0.13	NA	mg/L
MKTF-16	11/18/2014	Chloride	700	25	1.1	250000000	mg/L
MKTF-16	11/18/2014	Fluoride, Total	1.5	0.5	0.074	1600000	mg/L
MKTF-16	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-16	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-16	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-16	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	11/18/2014	TPH DRO	2.7	1	0.83	16700	mg/L
MKTF-16	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/18/2014	TPH GRO	53	2.5	0.96	10100	mg/L
MKTF-16	3/16/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-16	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	3/16/2015	TPH GRO	61	10	2.4	10100	mg/L
MKTF-16	6/8/2015	TPH DRO	4.3	1	0.91	16700	mg/L
MKTF-16	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/8/2015	TPH GRO	69	2.5	0.6	10100	mg/L
MKTF-16	8/23/2015	Bromide	2.3	0.5	0.39	NA	mg/L
MKTF-16	8/23/2015	Chloride	1700	50	34	250000000	mg/L
MKTF-16	8/23/2015	Fluoride, Total	0.66	0.5	0.15	1600000	mg/L
MKTF-16	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-16	8/23/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-16	8/23/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-16	8/23/2015	TPH DRO	3.7	1	0.91	16700	mg/L
MKTF-16	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	8/23/2015	TPH GRO	83	5	4	10100	mg/L
MKTF-16	11/3/2015	Bromide	2.8	0.5	0.34	NA	mg/L
MKTF-16	11/3/2015	Chloride	1000	50	34	250000000	mg/L
MKTF-16	11/3/2015	Fluoride, Total	0.88	0.5	0.16	1600000	mg/L
MKTF-16	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-16	11/3/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-16	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-16	11/3/2015	TPH DRO	3.1	1	0.91	16700	mg/L
MKTF-16	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/3/2015	TPH GRO	91	5	1.2	10100	mg/L
MKTF-16	2/29/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-16	2/29/2016	Chloride	710	25	1.4	250000000	mg/L
MKTF-16	2/29/2016	Fluoride, Total	1	0.1	0.023	1600000	mg/L
MKTF-16	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-16	2/29/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-16	2/29/2016	Sulfate	ND	0.5	0.064	600000000	mg/L
MKTF-16	2/29/2016	TPH DRO	2.6	1	0.69	16700	mg/L
MKTF-16	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	2/29/2016	TPH GRO	73	5	2.5	10100	mg/L
MKTF-16	6/9/2016	TPH DRO	3	1	0.69	16700	mg/L
MKTF-16	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/9/2016	TPH GRO	69	5	2.5	10100	mg/L
MKTF-16	9/12/2016	Bromide	0.8	0.1	0.044	NA	mg/L
MKTF-16	9/12/2016	Chloride	390	25	2.5	250000000	mg/L
MKTF-16	9/12/2016	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
MKTF-16	9/12/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-16	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-16	9/12/2016	Sulfate	0.36	0.5	0.14	600000000	mg/L
MKTF-16	9/12/2016	TPH DRO	3.5	1	0.69	16700	mg/L
MKTF-16	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/12/2016	TPH GRO	62	5	1.5	10100	mg/L
MKTF-16	11/3/2016	Bromide	2.3	0.5	0.22	NA	mg/L
MKTF-16	11/3/2016	Chloride	380	10	1	250000000	mg/L
MKTF-16	11/3/2016	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-16	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-16	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-16	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-16	11/3/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-16	11/3/2016	TPH DRO	3.3	1	0.69	16700	mg/L
MKTF-16	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/3/2016	TPH GRO	70	10	5.1	10100	mg/L
MKTF-16	3/14/2017	Bromide	0.64	0.1	0.031	NA	mg/L
MKTF-16	3/14/2017	Chloride	580	25	12	250000000	mg/L
MKTF-16	3/14/2017	Fluoride, Total	0.95	0.1	0.05	1600000	mg/L
MKTF-16	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-16	3/14/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
MKTF-16	3/14/2017	Nitrogen, Nitrate	0.35	0.1	0.022	10000000	mg/L
MKTF-16	3/14/2017	Sulfate	0.14	0.5	0.096	600000000	mg/L
MKTF-16	3/14/2017	TPH DRO	5.9	1	0.36	16700	mg/L
MKTF-16	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	3/14/2017	TPH GRO	85	5	2.5	10100	mg/L
MKTF-16	6/8/2017	Bromide	2.7	0.1	0.014	NA	mg/L
MKTF-16	6/8/2017	Chloride	800	25	12	250000000	mg/L
MKTF-16	6/8/2017	Fluoride, Total	1.4	0.1	0.044	1600000	mg/L
MKTF-16	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-16	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	6/8/2017	Sulfate	0.68	0.5	0.096	600000000	mg/L
MKTF-16	6/8/2017	TPH DRO	4.3	1	0.36	16700	mg/L
MKTF-16	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	6/8/2017	TPH GRO	60	5	2.5	10100	mg/L
MKTF-16	9/26/2017	Bromide	3.8	0.5	0.073	NA	mg/L
MKTF-16	9/26/2017	Chloride	810	50	25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	9/26/2017	Fluoride, Total	0.48	0.5	0.22	1600000	mg/L
MKTF-16	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	9/26/2017	Sulfate	0.64	2.5	0.48	600000000	mg/L
MKTF-16	9/26/2017	TPH DRO	4.7	1	0.36	16700	mg/L
MKTF-16	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	9/26/2017	TPH GRO	78	5	2.5	10100	mg/L
MKTF-16	11/29/2017	Bromide	3.7	0.5	0.073	NA	mg/L
MKTF-16	11/29/2017	Chloride	700	50	25	250000000	mg/L
MKTF-16	11/29/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MKTF-16	11/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	11/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-16	11/29/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-16	11/29/2017	TPH DRO	4	1	0.36	16700	mg/L
MKTF-16	11/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/29/2017	TPH GRO	70	5	0.97	10100	mg/L
MKTF-16	2/15/2018	Bromide	ND	0.5	0.073	NA	mg/L
MKTF-16	2/15/2018	Chloride	760	50	25	250000000	mg/L
MKTF-16	2/15/2018	Fluoride, Total	4.5	0.5	0.22	1600000	mg/L
MKTF-16	2/15/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-16	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-16	2/15/2018	Nitrogen, Nitrate	0.13	0.5	0.11	10000000	mg/L
MKTF-16	2/15/2018	Sulfate	57	2.5	0.48	600000000	mg/L
MKTF-16	2/15/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-16	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	2/15/2018	TPH GRO	8.4	1	0.19	10100	mg/L
MKTF-16	5/11/2018	Bromide	2.1	0.5	0.13	NA	mg/L
MKTF-16	5/11/2018	Chloride	840	25	1.5	250000000	mg/L
MKTF-16	5/11/2018	Fluoride, Total	0.25	0.5	0.15	1600000	mg/L
MKTF-16	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-16	5/11/2018	Nitrogen, Nitrite	0.33	0.5	0.24	1000000	mg/L
MKTF-16	5/11/2018	Nitrogen, Nitrate	0.099	0.5	0.033	10000000	mg/L
MKTF-16	5/11/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-16	5/11/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-16	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	5/11/2018	TPH GRO	47	1	0.19	10100	mg/L
MKTF-16	8/31/2018	Bromide	2.3	0.5	0.13	NA	mg/L
MKTF-16	8/31/2018	Chloride	650	25	9.1	250000000	mg/L
MKTF-16	8/31/2018	Fluoride, Total	1.5	0.5	0.16	1600000	mg/L
MKTF-16	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-16	8/31/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-16	8/31/2018	Sulfate	1.4	2.5	1	600000000	mg/L
MKTF-16	8/31/2018	TPH DRO	3.3	1	0.63	16700	mg/L
MKTF-16	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	8/31/2018	TPH GRO	50	5	0.97	10100	mg/L
MKTF-16	11/29/2018	Bromide	2.1	0.5	0.1	NA	mg/L
MKTF-16	11/29/2018	Chloride	620	25	25	250000000	mg/L
MKTF-16	11/29/2018	Fluoride, Total	1.4	0.5	0.5	1600000	mg/L
MKTF-16	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-16	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-16	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-16	11/29/2018	Sulfate	0.64	2.5	0.63	600000000	mg/L
MKTF-16	11/29/2018	TPH DRO	2.6	1	0.63	16700	mg/L
MKTF-16	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-16	11/29/2018	TPH GRO	34	2.5	1.2	10100	mg/L
MKTF-16	2/20/2019	TPH GRO	48	2.5	1.055	10100	mg/L
MKTF-16	2/20/2019	TPH DRO	2.2	1	0.35	16700	mg/L
MKTF-16	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-16	2/20/2019	Bromide	1.9	0.5	0.0675	NA	mg/L
MKTF-16	2/20/2019	Chloride	590	25	25	250000000	mg/L
MKTF-16	2/20/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
MKTF-16	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-16	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-16	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-16	2/20/2019	Sulfate	0.41	2.5	0.32	600000000	mg/L
MKTF-16	5/14/2019	TPH GRO	30	5	3.07	10100	mg/L
MKTF-16	5/14/2019	TPH DRO	3.4	1	0.35	16700	mg/L
MKTF-16	5/14/2019	Motor Oil	16	5	5	85800	mg/L
MKTF-16	5/14/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-16	5/14/2019	Chloride	960	50	6.25	250000000	mg/L
MKTF-16	5/14/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-16	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-16	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-16	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-16	5/14/2019	Sulfate	0.68	2.5	0.2675	600000000	mg/L
MKTF-16	8/22/2019	TPH GRO	20	5	3.07	10100	mg/L
MKTF-16	8/22/2019	TPH DRO	3.6	1	0.35	16700	mg/L
MKTF-16	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-16	8/30/2019	Bromide	1.9	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-16	8/30/2019	Chloride	1800	100	50	250000000	mg/L
MKTF-16	8/30/2019	Fluoride, Total	0.67	0.5	0.073	1600000	mg/L
MKTF-16	8/30/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-16	8/30/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-16	8/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-16	8/30/2019	Sulfate	ND	2.5	1.25	600000000	mg/L
MKTF-16	10/30/2019	TPH GRO	33	5	1.93	10100	mg/L
MKTF-16	10/30/2019	TPH DRO	0.24	0.4	0.132	16700	mg/L
MKTF-16	10/30/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-16	10/30/2019	Bromide	1.8	0.5	0.077	NA	mg/L
MKTF-16	10/30/2019	Chloride	1700	100	100	250000000	mg/L
MKTF-16	10/30/2019	Fluoride, Total	0.81	0.1	0.028982	1600000	mg/L
MKTF-16	10/30/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-16	10/30/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-16	10/30/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-16	10/30/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-16	12/23/2020	Ammonia	1.13	0.05	0.024	NA	mg/L
MKTF-16	12/23/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-16	12/23/2020	TPH (C6-C10)	32000	2000	940	NA	ug/L
MKTF-17	4/9/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-17	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	4/9/2014	TPH GRO	8.6	2.5	0.46	10100	mg/L
MKTF-17	6/6/2014	TPH DRO	4.2	1	0.57	16700	mg/L
MKTF-17	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/6/2014	TPH GRO	8.3	0.5	0.071	10100	mg/L
MKTF-17	6/16/2014	Bromide	0.26	0.1	0.022	NA	mg/L
MKTF-17	6/16/2014	Chloride	98	10	5	250000000	mg/L
MKTF-17	6/16/2014	Fluoride, Total	0.61	0.1	0.018	1600000	mg/L
MKTF-17	6/16/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-17	6/16/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
MKTF-17	6/16/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
MKTF-17	6/16/2014	Sulfate	60	10	1.4	600000000	mg/L
MKTF-17	9/18/2014	TPH DRO	1.5	1	0.83	16700	mg/L
MKTF-17	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/18/2014	TPH GRO	3.3	1	0.38	10100	mg/L
MKTF-17	11/18/2014	Bromide	0.44	0.1	0.026	NA	mg/L
MKTF-17	11/18/2014	Chloride	84	10	0.43	250000000	mg/L
MKTF-17	11/18/2014	Fluoride, Total	0.66	0.1	0.015	1600000	mg/L
MKTF-17	11/18/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-17	11/18/2014	Nitrogen, Nitrite	ND	0.1	0.01	1000000	mg/L
MKTF-17	11/18/2014	Nitrogen, Nitrate	ND	0.1	0.0064	10000000	mg/L
MKTF-17	11/18/2014	Sulfate	200	10	1.6	600000000	mg/L
MKTF-17	11/18/2014	TPH DRO	1.4	1	0.83	16700	mg/L
MKTF-17	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/18/2014	TPH GRO	1.2	1	0.38	10100	mg/L
MKTF-17	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-17	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	3/12/2015	TPH GRO	0.8	0.05	0.012	10100	mg/L
MKTF-17	6/8/2015	TPH DRO	1.3	1	0.91	16700	mg/L
MKTF-17	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/8/2015	TPH GRO	0.77	0.05	0.012	10100	mg/L
MKTF-17	8/18/2015	Bromide	0.47	0.1	0.077	NA	mg/L
MKTF-17	8/18/2015	Chloride	74	10	2.7	250000000	mg/L
MKTF-17	8/18/2015	Fluoride, Total	0.5	0.1	0.029	1600000	mg/L
MKTF-17	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-17	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-17	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-17	8/18/2015	Sulfate	160	10	2.3	600000000	mg/L
MKTF-17	8/18/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-17	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	8/18/2015	TPH GRO	1.7	0.05	0.012	10100	mg/L
MKTF-17	11/3/2015	Bromide	0.64	0.1	0.068	NA	mg/L
MKTF-17	11/3/2015	Chloride	78	10	6.8	250000000	mg/L
MKTF-17	11/3/2015	Fluoride, Total	0.61	0.1	0.032	1600000	mg/L
MKTF-17	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-17	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-17	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-17	11/3/2015	Sulfate	120	10	6.4	600000000	mg/L
MKTF-17	11/3/2015	TPH DRO	1.5	1	0.91	16700	mg/L
MKTF-17	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/3/2015	TPH GRO	2.5	0.25	0.06	10100	mg/L
MKTF-17	2/26/2016	Bromide	0.66	0.1	0.032	NA	mg/L
MKTF-17	2/26/2016	Chloride	76	10	0.55	250000000	mg/L
MKTF-17	2/26/2016	Fluoride, Total	0.54	0.1	0.023	1600000	mg/L
MKTF-17	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-17	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-17	2/26/2016	Sulfate	180	10	1.3	600000000	mg/L
MKTF-17	2/26/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-17	2/26/2016	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	2/26/2016	TPH GRO	1.6	0.25	0.13	10100	mg/L
MKTF-17	6/10/2016	TPH DRO	2.1	1	0.69	16700	mg/L
MKTF-17	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/10/2016	TPH GRO	9.2	0.5	0.25	10100	mg/L
MKTF-17	9/13/2016	Bromide	0.29	0.1	0.044	NA	mg/L
MKTF-17	9/13/2016	Chloride	70	10	1	250000000	mg/L
MKTF-17	9/13/2016	Fluoride, Total	0.83	0.1	0.05	1600000	mg/L
MKTF-17	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-17	9/13/2016	Nitrate & Nitrite	0.58	1	0.46	NA	mg/L
MKTF-17	9/13/2016	Sulfate	45	10	2.8	600000000	mg/L
MKTF-17	9/13/2016	TPH DRO	1.6	1	0.69	16700	mg/L
MKTF-17	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/13/2016	TPH GRO	7.5	0.5	0.15	10100	mg/L
MKTF-17	11/8/2016	Bromide	0.49	0.1	0.044	NA	mg/L
MKTF-17	11/8/2016	Chloride	64	10	1	250000000	mg/L
MKTF-17	11/8/2016	Fluoride, Total	0.77	0.1	0.05	1600000	mg/L
MKTF-17	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-17	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-17	11/8/2016	Sulfate	45	10	2.8	600000000	mg/L
MKTF-17	11/8/2016	TPH DRO	1.3	1	0.69	16700	mg/L
MKTF-17	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/8/2016	TPH GRO	4.5	1	0.51	10100	mg/L
MKTF-17	3/15/2017	Bromide	0.46	0.1	0.031	NA	mg/L
MKTF-17	3/15/2017	Chloride	61	10	5	250000000	mg/L
MKTF-17	3/15/2017	Fluoride, Total	0.73	0.1	0.05	1600000	mg/L
MKTF-17	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-17	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-17	3/15/2017	Nitrogen, Nitrate	ND	0.1	0.022	10000000	mg/L
MKTF-17	3/15/2017	Sulfate	43	10	1.9	600000000	mg/L
MKTF-17	3/15/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-17	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	3/15/2017	TPH GRO	3.5	0.5	0.25	10100	mg/L
MKTF-17	6/14/2017	Bromide	0.68	0.5	0.073	NA	mg/L
MKTF-17	6/14/2017	Chloride	70	2.5	1.2	250000000	mg/L
MKTF-17	6/14/2017	Fluoride, Total	0.81	0.5	0.22	1600000	mg/L
MKTF-17	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	6/14/2017	Sulfate	66	2.5	0.48	600000000	mg/L
MKTF-17	6/14/2017	TPH DRO	2.2	1	0.36	16700	mg/L
MKTF-17	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	6/14/2017	TPH GRO	4	0.5	0.25	10100	mg/L
MKTF-17	9/26/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-17	9/26/2017	Chloride	83	2.5	1.2	250000000	mg/L
MKTF-17	9/26/2017	Fluoride, Total	0.76	0.5	0.22	1600000	mg/L
MKTF-17	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	9/26/2017	Sulfate	22	2.5	0.48	600000000	mg/L
MKTF-17	9/26/2017	TPH DRO	2	1	0.36	16700	mg/L
MKTF-17	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	9/26/2017	TPH GRO	4.3	0.5	0.25	10100	mg/L
MKTF-17	12/1/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-17	12/1/2017	Chloride	92	2.5	1.2	250000000	mg/L
MKTF-17	12/1/2017	Fluoride, Total	0.91	0.5	0.22	1600000	mg/L
MKTF-17	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-17	12/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-17	12/1/2017	Sulfate	97	2.5	0.48	600000000	mg/L
MKTF-17	12/1/2017	TPH DRO	1.1	1	0.36	16700	mg/L
MKTF-17	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	12/1/2017	TPH GRO	2.5	0.5	0.097	10100	mg/L
MKTF-17	2/16/2018	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-17	2/16/2018	Chloride	100	10	5	250000000	mg/L
MKTF-17	2/16/2018	Fluoride, Total	0.74	0.5	0.22	1600000	mg/L
MKTF-17	2/16/2018	Ortho-Phosphate	1.9	2.5	1.2	NA	mg/L
MKTF-17	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-17	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-17	2/16/2018	Sulfate	52	2.5	0.48	600000000	mg/L
MKTF-17	2/16/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-17	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	2/16/2018	TPH GRO	3.7	0.5	0.097	10100	mg/L
MKTF-17	5/4/2018	Bromide	1.9	0.1	0.027	NA	mg/L
MKTF-17	5/4/2018	Chloride	130	10	0.59	250000000	mg/L
MKTF-17	5/4/2018	Fluoride, Total	0.26	0.1	0.03	1600000	mg/L
MKTF-17	5/4/2018	Ortho-Phosphate	1.2	0.5	0.093	NA	mg/L
MKTF-17	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-17	5/4/2018	Nitrogen, Nitrate	0.054	0.1	0.0066	10000000	mg/L
MKTF-17	5/4/2018	Sulfate	68	10	4.1	600000000	mg/L
MKTF-17	5/4/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-17	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	5/4/2018	TPH GRO	7.1	0.5	0.097	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-17	8/24/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-17	8/24/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-17	8/24/2018	Fluoride, Total	0.55	0.5	0.15	1600000	mg/L
MKTF-17	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-17	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-17	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-17	8/24/2018	Sulfate	160	2.5	1	600000000	mg/L
MKTF-17	8/24/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-17	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	8/24/2018	TPH GRO	4.7	0.05	0.024	10100	mg/L
MKTF-17	11/28/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-17	11/28/2018	Chloride	110	10	10	250000000	mg/L
MKTF-17	11/28/2018	Fluoride, Total	0.9	0.5	0.5	1600000	mg/L
MKTF-17	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-17	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-17	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-17	11/28/2018	Sulfate	120	2.5	0.63	600000000	mg/L
MKTF-17	11/28/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-17	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-17	11/28/2018	TPH GRO	3	0.05	0.024	10100	mg/L
MKTF-17	5/9/2019	TPH GRO	9.1	0.25	0.1535	10100	mg/L
MKTF-17	5/9/2019	TPH DRO	7.6	1	0.35	16700	mg/L
MKTF-17	5/9/2019	Motor Oil	5	5	5	85800	mg/L
MKTF-17	5/9/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-17	5/9/2019	Chloride	100	10	1.25	250000000	mg/L
MKTF-17	5/9/2019	Fluoride, Total	0.71	0.5	0.25	1600000	mg/L
MKTF-17	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-17	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-17	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-17	5/9/2019	Sulfate	15	2.5	0.2675	600000000	mg/L
MKTF-17	8/20/2019	TPH GRO	7.6	0.5	0.307	10100	mg/L
MKTF-17	8/20/2019	TPH DRO	3.3	1	0.35	16700	mg/L
MKTF-17	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-17	8/20/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-17	8/20/2019	Chloride	140	10	10	250000000	mg/L
MKTF-17	8/20/2019	Fluoride, Total	0.74	0.5	0.073	1600000	mg/L
MKTF-17	8/20/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-17	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-17	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-17	8/20/2019	Sulfate	14	2.5	0.3345	600000000	mg/L
MKTF-17	10/29/2019	TPH GRO	78	5	1.93	10100	mg/L
MKTF-17	10/29/2019	TPH DRO	0.7	0.4	0.132	16700	mg/L
MKTF-17	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-17	10/29/2019	Bromide	1.3	0.5	0.077	NA	mg/L
MKTF-17	10/29/2019	Chloride	240	10	10	250000000	mg/L
MKTF-17	10/29/2019	Fluoride, Total	0.82	0.5	0.144909	1600000	mg/L
MKTF-17	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-17	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-17	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-17	10/29/2019	Sulfate	6.2	2.5	0.3345	600000000	mg/L
MKTF-18	4/14/2014	TPH DRO	4.4	1	0.57	16700	mg/L
MKTF-18	4/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	4/14/2014	TPH GRO	2.2	0.25	0.096	10100	mg/L
MKTF-18	6/6/2014	Bromide	0.81	0.1	0.022	NA	mg/L
MKTF-18	6/6/2014	Chloride	170	10	5	250000000	mg/L
MKTF-18	6/6/2014	Fluoride, Total	0.65	0.1	0.018	1600000	mg/L
MKTF-18	6/6/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
MKTF-18	6/6/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MKTF-18	6/6/2014	Sulfate	0.95	0.5	0.068	600000000	mg/L
MKTF-18	6/6/2014	TPH DRO	7.8	1	0.57	16700	mg/L
MKTF-18	6/6/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/6/2014	TPH GRO	2.2	0.25	0.036	10100	mg/L
MKTF-18	9/18/2014	TPH DRO	3.1	1	0.83	16700	mg/L
MKTF-18	9/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	9/18/2014	TPH GRO	1.4	0.5	0.19	10100	mg/L
MKTF-18	11/18/2014	Bromide	0.81	0.5	0.13	NA	mg/L
MKTF-18	11/18/2014	Chloride	160	10	0.43	250000000	mg/L
MKTF-18	11/18/2014	Fluoride, Total	0.68	0.5	0.074	1600000	mg/L
MKTF-18	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-18	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-18	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-18	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L
MKTF-18	11/18/2014	TPH DRO	2.3	1	0.83	16700	mg/L
MKTF-18	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/18/2014	TPH GRO	1.4	0.25	0.096	10100	mg/L
MKTF-18	3/17/2015	TPH DRO	5.4	1	0.91	16700	mg/L
MKTF-18	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	3/17/2015	TPH GRO	1.8	0.25	0.06	10100	mg/L
MKTF-18	6/8/2015	TPH DRO	3.3	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/8/2015	TPH GRO	1.4	0.25	0.06	10100	mg/L
MKTF-18	8/18/2015	Bromide	0.52	0.1	0.077	NA	mg/L
MKTF-18	8/18/2015	Chloride	170	10	2.7	250000000	mg/L
MKTF-18	8/18/2015	Fluoride, Total	0.55	0.1	0.029	1600000	mg/L
MKTF-18	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-18	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-18	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-18	8/18/2015	Sulfate	ND	0.5	0.11	600000000	mg/L
MKTF-18	8/18/2015	TPH DRO	34	1	0.91	16700	mg/L
MKTF-18	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	8/18/2015	TPH GRO	1.3	0.25	0.06	10100	mg/L
MKTF-18	11/3/2015	Bromide	0.64	0.1	0.068	NA	mg/L
MKTF-18	11/3/2015	Chloride	160	10	6.8	250000000	mg/L
MKTF-18	11/3/2015	Fluoride, Total	0.61	0.1	0.032	1600000	mg/L
MKTF-18	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-18	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-18	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-18	11/3/2015	Sulfate	ND	0.5	0.32	600000000	mg/L
MKTF-18	11/3/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-18	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/3/2015	TPH GRO	1.3	0.25	0.06	10100	mg/L
MKTF-18	2/26/2016	Bromide	0.8	0.1	0.032	NA	mg/L
MKTF-18	2/26/2016	Chloride	160	10	0.55	250000000	mg/L
MKTF-18	2/26/2016	Fluoride, Total	0.64	0.1	0.023	1600000	mg/L
MKTF-18	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-18	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-18	2/26/2016	Sulfate	ND	0.5	0.064	600000000	mg/L
MKTF-18	2/26/2016	TPH DRO	3	1	0.69	16700	mg/L
MKTF-18	2/26/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	2/26/2016	TPH GRO	0.79	0.25	0.13	10100	mg/L
MKTF-18	6/10/2016	Bromide	0.13	0.1	0.032	NA	mg/L
MKTF-18	6/10/2016	Chloride	180	10	0.55	250000000	mg/L
MKTF-18	6/10/2016	Fluoride, Total	0.63	0.1	0.023	1600000	mg/L
MKTF-18	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-18	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-18	6/10/2016	Sulfate	0.21	0.5	0.064	600000000	mg/L
MKTF-18	6/10/2016	TPH DRO	1.9	1	0.69	16700	mg/L
MKTF-18	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/10/2016	TPH GRO	0.71	0.05	0.025	10100	mg/L
MKTF-18	9/13/2016	Bromide	0.83	0.1	0.044	NA	mg/L
MKTF-18	9/13/2016	Chloride	170	10	1	250000000	mg/L
MKTF-18	9/13/2016	Fluoride, Total	0.67	0.1	0.05	1600000	mg/L
MKTF-18	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-18	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-18	9/13/2016	Sulfate	0.34	0.5	0.14	600000000	mg/L
MKTF-18	9/13/2016	TPH DRO	2.2	1	0.69	16700	mg/L
MKTF-18	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	9/13/2016	TPH GRO	0.56	0.05	0.015	10100	mg/L
MKTF-18	11/8/2016	Bromide	0.85	0.1	0.044	NA	mg/L
MKTF-18	11/8/2016	Chloride	160	10	1	250000000	mg/L
MKTF-18	11/8/2016	Fluoride, Total	0.62	0.1	0.05	1600000	mg/L
MKTF-18	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-18	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-18	11/8/2016	Sulfate	0.23	0.5	0.14	600000000	mg/L
MKTF-18	11/8/2016	TPH DRO	1.7	1	0.69	16700	mg/L
MKTF-18	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/8/2016	TPH GRO	0.6	0.05	0.025	10100	mg/L
MKTF-18	3/1/2017	Bromide	1.1	0.1	0.031	NA	mg/L
MKTF-18	3/1/2017	Chloride	180	10	5	250000000	mg/L
MKTF-18	3/1/2017	Fluoride, Total	0.62	0.1	0.05	1600000	mg/L
MKTF-18	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-18	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-18	3/1/2017	Sulfate	0.22	0.5	0.096	600000000	mg/L
MKTF-18	3/1/2017	TPH DRO	2.7	1	0.36	16700	mg/L
MKTF-18	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	3/1/2017	TPH GRO	0.81	0.05	0.025	10100	mg/L
MKTF-18	6/14/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-18	6/14/2017	Chloride	190	10	5	250000000	mg/L
MKTF-18	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-18	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-18	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-18	6/14/2017	Sulfate	0.53	2.5	0.48	600000000	mg/L
MKTF-18	6/14/2017	TPH DRO	7.1	1	0.36	16700	mg/L
MKTF-18	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	6/14/2017	TPH GRO	0.83	0.05	0.025	10100	mg/L
MKTF-18	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-18	2/16/2018	Chloride	220	10	5	250000000	mg/L
MKTF-18	2/16/2018	Fluoride, Total	0.61	0.5	0.22	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-18	2/16/2018	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
MKTF-18	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-18	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-18	2/16/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-18	2/16/2018	TPH DRO	2.8	1	0.63	16700	mg/L
MKTF-18	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	2/16/2018	TPH GRO	0.85	0.05	0.0097	10100	mg/L
MKTF-18	5/4/2018	Bromide	1.1	0.1	0.027	NA	mg/L
MKTF-18	5/4/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-18	5/4/2018	Fluoride, Total	0.49	0.1	0.03	1600000	mg/L
MKTF-18	5/4/2018	Ortho-Phosphate	1.4	0.5	0.093	NA	mg/L
MKTF-18	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-18	5/4/2018	Nitrogen, Nitrate	0.051	0.1	0.0066	10000000	mg/L
MKTF-18	5/4/2018	Sulfate	0.41	0.5	0.21	600000000	mg/L
MKTF-18	5/4/2018	TPH DRO	2.4	1	0.63	16700	mg/L
MKTF-18	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	5/4/2018	TPH GRO	0.8	0.05	0.0097	10100	mg/L
MKTF-18	8/24/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-18	8/24/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-18	8/24/2018	Fluoride, Total	0.51	0.5	0.15	1600000	mg/L
MKTF-18	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-18	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-18	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-18	8/24/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-18	8/24/2018	TPH DRO	1.6	1	0.63	16700	mg/L
MKTF-18	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	8/24/2018	TPH GRO	0.97	0.05	0.024	10100	mg/L
MKTF-18	11/28/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-18	11/28/2018	Chloride	220	10	10	250000000	mg/L
MKTF-18	11/28/2018	Fluoride, Total	0.73	0.5	0.5	1600000	mg/L
MKTF-18	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-18	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-18	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-18	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-18	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-18	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-18	11/28/2018	TPH GRO	0.12	0.05	0.024	10100	mg/L
MKTF-18	5/16/2019	TPH GRO	0.69	0.1	0.0614	10100	mg/L
MKTF-18	5/16/2019	TPH DRO	3.3	1	0.35	16700	mg/L
MKTF-18	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-18	5/16/2019	Bromide	0.99	0.5	0.088765	NA	mg/L
MKTF-18	5/16/2019	Chloride	190	10	1.25	250000000	mg/L
MKTF-18	5/16/2019	Fluoride, Total	0.59	0.5	0.25	1600000	mg/L
MKTF-18	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-18	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-18	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-18	5/16/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
MKTF-18	10/29/2019	TPH GRO	0.73	0.05	0.0193	10100	mg/L
MKTF-18	10/29/2019	TPH DRO	0.2	0.4	0.132	16700	mg/L
MKTF-18	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-18	10/29/2019	Bromide	0.99	0.5	0.077	NA	mg/L
MKTF-18	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-18	10/29/2019	Fluoride, Total	0.76	0.5	0.144909	1600000	mg/L
MKTF-18	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-18	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-18	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-18	10/29/2019	Sulfate	0.57	2.5	0.3345	600000000	mg/L
MKTF-18	2/6/2020	TPH GRO	0.82	0.05	0.021	10100	mg/L
MKTF-18	2/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-18	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-18	2/6/2020	Bromide	0.68	0.5	0.25	NA	mg/L
MKTF-18	2/6/2020	Fluoride, Total	0.77	0.5	0.11	1600000	mg/L
MKTF-18	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-18	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-18	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-18	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-18	2/6/2020	Chloride	200	10	5	250000000	mg/L
MKTF-18	12/16/2020	Phosphorus, Total	0.187	0.1	0.032	NA	mg/L
MKTF-18	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-18	12/16/2020	Bicarbonate	618	1	0.5	NA	mg/L
MKTF-18	12/16/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-18	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-18	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-18	12/16/2020	Chloride	279	10	1.2	250000000	mg/L
MKTF-18	12/16/2020	TPH DRO	2930	148	119	16700	ug/L
MKTF-18	12/16/2020	C28-C40	ND	148	119	NA	ug/L
MKTF-18	12/16/2020	TPH (C6-C10)	1250	500	235	NA	ug/L
MKTF-19	4/9/2014	TPH DRO	17	1	0.57	16700	mg/L
MKTF-19	4/9/2014	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	4/9/2014	TPH GRO	18	2.5	0.46	10100	mg/L
MKTF-19	9/24/2014	TPH DRO	61	1	0.83	16700	mg/L
MKTF-19	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/24/2014	TPH GRO	16	2.5	0.96	10100	mg/L
MKTF-19	11/18/2014	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-19	11/18/2014	Chloride	110	10	0.43	250000000	mg/L
MKTF-19	11/18/2014	Fluoride, Total	ND	0.5	0.074	1600000	mg/L
MKTF-19	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-19	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-19	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-19	11/18/2014	Sulfate	ND	2.5	0.41	600000000	mg/L
MKTF-19	11/18/2014	TPH DRO	13	1	0.83	16700	mg/L
MKTF-19	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/18/2014	TPH GRO	20	2.5	0.96	10100	mg/L
MKTF-19	3/12/2015	TPH DRO	9.3	1	0.91	16700	mg/L
MKTF-19	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	3/12/2015	TPH GRO	14	1	0.24	10100	mg/L
MKTF-19	6/8/2015	TPH DRO	9.9	1	0.91	16700	mg/L
MKTF-19	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/8/2015	TPH GRO	19	0.5	0.12	10100	mg/L
MKTF-19	8/18/2015	Bromide	0.47	0.1	0.077	NA	mg/L
MKTF-19	8/18/2015	Chloride	140	10	2.7	250000000	mg/L
MKTF-19	8/18/2015	Fluoride, Total	0.18	0.1	0.029	1600000	mg/L
MKTF-19	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-19	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-19	8/18/2015	Nitrogen, Nitrate	0.17	0.1	0.032	10000000	mg/L
MKTF-19	8/18/2015	Sulfate	ND	0.5	0.11	600000000	mg/L
MKTF-19	8/18/2015	TPH DRO	27	1	0.91	16700	mg/L
MKTF-19	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	8/18/2015	TPH GRO	20	1	0.24	10100	mg/L
MKTF-19	11/3/2015	Bromide	1.5	0.5	0.34	NA	mg/L
MKTF-19	11/3/2015	Chloride	130	10	6.8	250000000	mg/L
MKTF-19	11/3/2015	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-19	11/3/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-19	11/3/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-19	11/3/2015	Nitrogen, Nitrate	ND	0.5	0.29	10000000	mg/L
MKTF-19	11/3/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-19	11/3/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-19	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/3/2015	TPH GRO	34	0.5	0.12	10100	mg/L
MKTF-19	2/25/2016	Bromide	1.6	0.5	0.16	NA	mg/L
MKTF-19	2/25/2016	Chloride	150	10	0.55	250000000	mg/L
MKTF-19	2/25/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-19	2/25/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-19	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-19	2/25/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-19	2/25/2016	TPH DRO	7.8	1	0.69	16700	mg/L
MKTF-19	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	2/25/2016	TPH GRO	22	1	0.51	10100	mg/L
MKTF-19	6/10/2016	Bromide	0.3	0.1	0.032	NA	mg/L
MKTF-19	6/10/2016	Chloride	150	10	0.55	250000000	mg/L
MKTF-19	6/10/2016	Fluoride, Total	0.17	0.1	0.023	1600000	mg/L
MKTF-19	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-19	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-19	6/10/2016	Sulfate	0.28	0.5	0.064	600000000	mg/L
MKTF-19	6/10/2016	TPH DRO	7.2	1	0.69	16700	mg/L
MKTF-19	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/10/2016	TPH GRO	21	1	0.51	10100	mg/L
MKTF-19	9/13/2016	Bromide	0.66	0.1	0.044	NA	mg/L
MKTF-19	9/13/2016	Chloride	130	10	1	250000000	mg/L
MKTF-19	9/13/2016	Fluoride, Total	0.34	0.1	0.05	1600000	mg/L
MKTF-19	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-19	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-19	9/13/2016	Sulfate	0.57	0.5	0.14	600000000	mg/L
MKTF-19	9/13/2016	TPH DRO	7.6	1	0.69	16700	mg/L
MKTF-19	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/13/2016	TPH GRO	25	1	0.3	10100	mg/L
MKTF-19	11/8/2016	Bromide	0.55	0.1	0.044	NA	mg/L
MKTF-19	11/8/2016	Chloride	110	10	1	250000000	mg/L
MKTF-19	11/8/2016	Fluoride, Total	0.28	0.1	0.05	1600000	mg/L
MKTF-19	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-19	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-19	11/8/2016	Sulfate	0.89	0.5	0.14	600000000	mg/L
MKTF-19	11/8/2016	TPH DRO	6.7	1	0.69	16700	mg/L
MKTF-19	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/8/2016	TPH GRO	26	2.5	1.3	10100	mg/L
MKTF-19	3/15/2017	Bromide	ND	0.1	0.031	NA	mg/L
MKTF-19	3/15/2017	Chloride	130	10	5	250000000	mg/L
MKTF-19	3/15/2017	Fluoride, Total	0.098	0.1	0.05	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	3/15/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-19	3/15/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
MKTF-19	3/15/2017	Nitrogen, Nitrate	ND	0.1	0.022	10000000	mg/L
MKTF-19	3/15/2017	Sulfate	0.52	0.5	0.096	600000000	mg/L
MKTF-19	3/15/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-19	3/15/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	3/15/2017	TPH GRO	25	2.5	1.2	10100	mg/L
MKTF-19	6/14/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-19	6/14/2017	Chloride	130	10	5	250000000	mg/L
MKTF-19	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-19	6/14/2017	Sulfate	0.73	2.5	0.48	600000000	mg/L
MKTF-19	6/14/2017	TPH DRO	11	1	0.36	16700	mg/L
MKTF-19	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	6/14/2017	TPH GRO	23	2.5	1.2	10100	mg/L
MKTF-19	9/26/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-19	9/26/2017	Chloride	120	10	5	250000000	mg/L
MKTF-19	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-19	9/26/2017	Sulfate	0.77	2.5	0.48	600000000	mg/L
MKTF-19	9/26/2017	TPH DRO	11	1	0.36	16700	mg/L
MKTF-19	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	9/26/2017	TPH GRO	29	2.5	1.2	10100	mg/L
MKTF-19	12/1/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-19	12/1/2017	Chloride	120	10	5	250000000	mg/L
MKTF-19	12/1/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-19	12/1/2017	Nitrate & Nitrite	0.14	1	0.13	NA	mg/L
MKTF-19	12/1/2017	Sulfate	0.67	2.5	0.48	600000000	mg/L
MKTF-19	12/1/2017	TPH DRO	13	1	0.36	16700	mg/L
MKTF-19	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	12/1/2017	TPH GRO	24	2.5	0.48	10100	mg/L
MKTF-19	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-19	2/16/2018	Chloride	120	10	5	250000000	mg/L
MKTF-19	2/16/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-19	2/16/2018	Ortho-Phosphate	3.3	2.5	1.2	NA	mg/L
MKTF-19	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-19	2/16/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-19	2/16/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-19	2/16/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-19	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	2/16/2018	TPH GRO	16	1	0.19	10100	mg/L
MKTF-19	5/4/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-19	5/4/2018	Chloride	130	10	0.59	250000000	mg/L
MKTF-19	5/4/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-19	5/4/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-19	5/4/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-19	5/4/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-19	5/4/2018	Sulfate	1.2	2.5	1	600000000	mg/L
MKTF-19	5/4/2018	TPH DRO	9.3	1	0.63	16700	mg/L
MKTF-19	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	5/4/2018	TPH GRO	23	1	0.19	10100	mg/L
MKTF-19	8/24/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-19	8/24/2018	Chloride	120	10	0.59	250000000	mg/L
MKTF-19	8/24/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-19	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-19	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-19	8/24/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-19	8/24/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-19	8/24/2018	TPH DRO	7.9	1	0.63	16700	mg/L
MKTF-19	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	8/24/2018	TPH GRO	22	1	0.49	10100	mg/L
MKTF-19	11/28/2018	Bromide	1.4	0.5	0.1	NA	mg/L
MKTF-19	11/28/2018	Chloride	140	10	10	250000000	mg/L
MKTF-19	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-19	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-19	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-19	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-19	11/28/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-19	11/28/2018	TPH DRO	7.8	1	0.63	16700	mg/L
MKTF-19	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-19	11/28/2018	TPH GRO	15	1	0.49	10100	mg/L
MKTF-19	5/9/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-19	5/9/2019	TPH DRO	11	1	0.35	16700	mg/L
MKTF-19	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	5/9/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	5/9/2019	Chloride	140	10	1.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-19	5/9/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-19	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-19	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-19	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-19	5/9/2019	Sulfate	0.31	2.5	0.2675	600000000	mg/L
MKTF-19	8/19/2019	TPH GRO	19	1	0.614	10100	mg/L
MKTF-19	8/19/2019	TPH DRO	11	1	0.35	16700	mg/L
MKTF-19	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	8/19/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	8/19/2019	Chloride	140	10	10	250000000	mg/L
MKTF-19	8/19/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-19	8/19/2019	TPH GRO	18	2.5	1.535	10100	mg/L
MKTF-19	8/19/2019	TPH DRO	13	1	0.35	16700	mg/L
MKTF-19	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-19	8/19/2019	Bromide	1.5	0.5	0.088765	NA	mg/L
MKTF-19	8/19/2019	Chloride	140	10	10	250000000	mg/L
MKTF-19	8/19/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-19	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
MKTF-19	10/29/2019	TPH GRO	17	1	0.386	10100	mg/L
MKTF-19	10/29/2019	TPH DRO	1	0.4	0.132	16700	mg/L
MKTF-19	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-19	10/29/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-19	10/29/2019	Chloride	130	10	10	250000000	mg/L
MKTF-19	10/29/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-19	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-19	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-19	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-19	10/29/2019	Sulfate	0.5	2.5	0.3345	600000000	mg/L
MKTF-20	4/11/2014	TPH DRO	16	1	0.57	16700	mg/L
MKTF-20	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	4/11/2014	TPH GRO	120	5	1.9	10100	mg/L
MKTF-20	11/18/2014	Bromide	ND	0.5	0.13	NA	mg/L
MKTF-20	11/18/2014	Chloride	82	2.5	0.11	250000000	mg/L
MKTF-20	11/18/2014	Fluoride, Total	0.87	0.5	0.074	1600000	mg/L
MKTF-20	11/18/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-20	11/18/2014	Nitrogen, Nitrite	ND	0.5	0.051	1000000	mg/L
MKTF-20	11/18/2014	Nitrogen, Nitrate	ND	0.5	0.032	10000000	mg/L
MKTF-20	11/18/2014	Sulfate	16	2.5	0.41	600000000	mg/L
MKTF-20	11/18/2014	TPH DRO	24	1	0.83	16700	mg/L
MKTF-20	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/18/2014	TPH GRO	45	5	1.9	10100	mg/L
MKTF-20	3/16/2015	TPH DRO	4.5	1	0.91	16700	mg/L
MKTF-20	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/16/2015	TPH GRO	37	2.5	0.6	10100	mg/L
MKTF-20	6/8/2015	TPH DRO	9.9	1	0.91	16700	mg/L
MKTF-20	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/8/2015	TPH GRO	30	2.5	0.6	10100	mg/L
MKTF-20	3/1/2016	TPH DRO	6.9	1	0.69	16700	mg/L
MKTF-20	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/1/2016	TPH GRO	73	2.5	1.3	10100	mg/L
MKTF-20	6/9/2016	Bromide	1.8	0.5	0.16	NA	mg/L
MKTF-20	6/9/2016	Chloride	450	25	1.4	250000000	mg/L
MKTF-20	6/9/2016	Fluoride, Total	3.1	0.5	0.11	1600000	mg/L
MKTF-20	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-20	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-20	6/9/2016	Sulfate	10	2.5	0.32	600000000	mg/L
MKTF-20	6/9/2016	TPH DRO	9	1	0.69	16700	mg/L
MKTF-20	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/9/2016	TPH GRO	63	2.5	1.3	10100	mg/L
MKTF-20	9/12/2016	Bromide	0.99	0.5	0.22	NA	mg/L
MKTF-20	9/12/2016	Chloride	370	25	2.5	250000000	mg/L
MKTF-20	9/12/2016	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
MKTF-20	9/12/2016	Ortho-Phosphate	3.1	2.5	0.38	NA	mg/L
MKTF-20	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-20	9/12/2016	Sulfate	1.2	2.5	0.71	600000000	mg/L
MKTF-20	9/12/2016	TPH DRO	8.7	1	0.69	16700	mg/L
MKTF-20	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	9/12/2016	TPH GRO	72	5	1.5	10100	mg/L
MKTF-20	11/3/2016	Bromide	1.6	0.5	0.22	NA	mg/L
MKTF-20	11/3/2016	Chloride	1500	50	5.1	250000000	mg/L
MKTF-20	11/3/2016	Fluoride, Total	2.6	0.5	0.25	1600000	mg/L
MKTF-20	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-20	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-20	11/3/2016	Sulfate	13	2.5	0.71	600000000	mg/L
MKTF-20	11/3/2016	TPH DRO	9.4	1	0.69	16700	mg/L
MKTF-20	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/3/2016	TPH GRO	65	10	5.1	10100	mg/L
MKTF-20	3/14/2017	Bromide	20	0.5	0.15	NA	mg/L
MKTF-20	3/14/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-20	3/14/2017	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-20	3/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	3/14/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-20	3/14/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-20	3/14/2017	Sulfate	5	2.5	0.48	600000000	mg/L
MKTF-20	3/14/2017	TPH DRO	16	1	0.36	16700	mg/L
MKTF-20	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	3/14/2017	TPH GRO	90	5	2.5	10100	mg/L
MKTF-20	6/12/2017	Bromide	8.7	0.5	0.073	NA	mg/L
MKTF-20	6/12/2017	Chloride	580	25	12	250000000	mg/L
MKTF-20	6/12/2017	Fluoride, Total	2	0.5	0.22	1600000	mg/L
MKTF-20	6/12/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	6/12/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	6/12/2017	Sulfate	0.64	2.5	0.48	600000000	mg/L
MKTF-20	6/12/2017	TPH DRO	5.3	1	0.36	16700	mg/L
MKTF-20	6/12/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	6/12/2017	TPH GRO	95	5	2.5	10100	mg/L
MKTF-20	9/26/2017	Bromide	6.6	0.5	0.073	NA	mg/L
MKTF-20	9/26/2017	Chloride	590	25	12	250000000	mg/L
MKTF-20	9/26/2017	Fluoride, Total	2.2	0.5	0.22	1600000	mg/L
MKTF-20	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	9/26/2017	Sulfate	73	2.5	0.48	600000000	mg/L
MKTF-20	9/26/2017	TPH DRO	3.9	1	0.36	16700	mg/L
MKTF-20	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	9/26/2017	TPH GRO	78	5	2.5	10100	mg/L
MKTF-20	11/29/2017	Bromide	3.5	0.5	0.073	NA	mg/L
MKTF-20	11/29/2017	Chloride	420	25	12	250000000	mg/L
MKTF-20	11/29/2017	Fluoride, Total	2.1	0.5	0.22	1600000	mg/L
MKTF-20	11/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-20	11/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-20	11/29/2017	Sulfate	1	2.5	0.48	600000000	mg/L
MKTF-20	11/29/2017	TPH DRO	22	1	0.36	16700	mg/L
MKTF-20	11/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/29/2017	TPH GRO	91	5	0.97	10100	mg/L
MKTF-20	2/15/2018	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-20	2/15/2018	Chloride	3100	250	120	250000000	mg/L
MKTF-20	2/15/2018	Fluoride, Total	0.55	0.5	0.22	1600000	mg/L
MKTF-20	2/15/2018	Ortho-Phosphate	3.4	2.5	1.2	NA	mg/L
MKTF-20	2/15/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-20	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-20	2/15/2018	Sulfate	15	2.5	0.48	600000000	mg/L
MKTF-20	2/15/2018	TPH DRO	5.1	1	0.63	16700	mg/L
MKTF-20	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	2/15/2018	TPH GRO	79	5	0.97	10100	mg/L
MKTF-20	5/11/2018	Bromide	3.7	0.5	0.13	NA	mg/L
MKTF-20	5/11/2018	Chloride	1600	50	2.9	250000000	mg/L
MKTF-20	5/11/2018	Fluoride, Total	2.4	0.5	0.15	1600000	mg/L
MKTF-20	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-20	5/11/2018	Nitrogen, Nitrite	0.63	0.5	0.24	1000000	mg/L
MKTF-20	5/11/2018	Nitrogen, Nitrate	0.097	0.5	0.033	10000000	mg/L
MKTF-20	5/11/2018	Sulfate	18	2.5	1	600000000	mg/L
MKTF-20	5/11/2018	TPH DRO	9.7	1	0.63	16700	mg/L
MKTF-20	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	5/11/2018	TPH GRO	76	5	0.97	10100	mg/L
MKTF-20	8/31/2018	Bromide	1.9	0.5	0.13	NA	mg/L
MKTF-20	8/31/2018	Chloride	560	25	9.1	250000000	mg/L
MKTF-20	8/31/2018	Fluoride, Total	3.3	0.5	0.16	1600000	mg/L
MKTF-20	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-20	8/31/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-20	8/31/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-20	8/31/2018	Sulfate	8.4	2.5	1	600000000	mg/L
MKTF-20	8/31/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-20	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	8/31/2018	TPH GRO	70	5	0.97	10100	mg/L
MKTF-20	11/29/2018	Bromide	1.6	0.5	0.1	NA	mg/L
MKTF-20	11/29/2018	Chloride	460	25	25	250000000	mg/L
MKTF-20	11/29/2018	Fluoride, Total	4.2	0.5	0.5	1600000	mg/L
MKTF-20	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-20	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-20	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-20	11/29/2018	Sulfate	4.3	2.5	0.63	600000000	mg/L
MKTF-20	11/29/2018	TPH DRO	6.9	1	0.63	16700	mg/L
MKTF-20	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-20	11/29/2018	TPH GRO	17	0.25	0.12	10100	mg/L
MKTF-20	2/20/2019	TPH GRO	7.3	1	0.422	10100	mg/L
MKTF-20	2/20/2019	TPH DRO	9.8	1	0.35	16700	mg/L
MKTF-20	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	2/20/2019	Bromide	0.95	0.5	0.0675	NA	mg/L
MKTF-20	2/20/2019	Chloride	760	25	25	250000000	mg/L
MKTF-20	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-20	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-20	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-20	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-20	2/20/2019	Sulfate	11	2.5	0.32	600000000	mg/L
MKTF-20	5/14/2019	TPH GRO	25	0.5	0.307	10100	mg/L
MKTF-20	5/14/2019	TPH DRO	5.4	1	0.35	16700	mg/L
MKTF-20	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	5/14/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
MKTF-20	5/14/2019	Chloride	3400	250	31.25	250000000	mg/L
MKTF-20	5/14/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-20	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-20	5/14/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-20	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-20	5/14/2019	Sulfate	36	2.5	0.2675	600000000	mg/L
MKTF-20	8/21/2019	TPH GRO	28	2.5	1.055	10100	mg/L
MKTF-20	8/21/2019	TPH DRO	5.1	1	0.35	16700	mg/L
MKTF-20	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-20	8/21/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
MKTF-20	8/21/2019	Chloride	3300	100	100	250000000	mg/L
MKTF-20	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-20	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-20	8/21/2019	Nitrogen, Nitrite	3.3	2	0.108	1000000	mg/L
MKTF-20	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-20	8/21/2019	Sulfate	2.8	2.5	0.3345	600000000	mg/L
MKTF-20	11/5/2019	TPH GRO	7	2.5	1.055	10100	mg/L
MKTF-20	11/5/2019	TPH DRO	1.5	0.4	0.132	16700	mg/L
MKTF-20	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-20	11/5/2019	Bromide	0.61	0.5	0.077	NA	mg/L
MKTF-20	11/5/2019	Chloride	140	10	10	250000000	mg/L
MKTF-20	11/5/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-20	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-20	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-20	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-20	11/5/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
MKTF-20	2/5/2020	TPH GRO	4.6	1	0.42	10100	mg/L
MKTF-20	2/5/2020	TPH DRO	1	0.4	0.2	16700	mg/L
MKTF-20	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-21	4/11/2014	TPH DRO	27	1	0.57	16700	mg/L
MKTF-21	4/11/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	4/11/2014	TPH GRO	78	5	1.9	10100	mg/L
MKTF-21	3/16/2015	TPH DRO	3.8	1	0.91	16700	mg/L
MKTF-21	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/16/2015	TPH GRO	16	1	0.24	10100	mg/L
MKTF-21	3/1/2016	TPH DRO	3.6	1	0.69	16700	mg/L
MKTF-21	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/1/2016	TPH GRO	24	0.5	0.25	10100	mg/L
MKTF-21	6/9/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-21	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	6/9/2016	TPH GRO	32	5	2.5	10100	mg/L
MKTF-21	9/12/2016	Bromide	1.4	0.5	0.22	NA	mg/L
MKTF-21	9/12/2016	Chloride	81	2.5	0.25	250000000	mg/L
MKTF-21	9/12/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	9/12/2016	Ortho-Phosphate	2.6	2.5	0.38	NA	mg/L
MKTF-21	9/12/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-21	9/12/2016	Sulfate	19	2.5	0.71	600000000	mg/L
MKTF-21	9/12/2016	TPH DRO	3.9	1	0.69	16700	mg/L
MKTF-21	9/12/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	9/12/2016	TPH GRO	28	2.5	0.75	10100	mg/L
MKTF-21	11/3/2016	Bromide	2.3	0.5	0.22	NA	mg/L
MKTF-21	11/3/2016	Chloride	110	10	1	250000000	mg/L
MKTF-21	11/3/2016	Fluoride, Total	0.91	0.5	0.25	1600000	mg/L
MKTF-21	11/3/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-21	11/3/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-21	11/3/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-21	11/3/2016	Sulfate	3.9	2.5	0.71	600000000	mg/L
MKTF-21	11/3/2016	TPH DRO	3.4	1	0.69	16700	mg/L
MKTF-21	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/3/2016	TPH GRO	34	5	2.5	10100	mg/L
MKTF-21	3/14/2017	Bromide	6	0.5	0.15	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	3/14/2017	Chloride	440	25	12	250000000	mg/L
MKTF-21	3/14/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	3/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	3/14/2017	Nitrogen, Nitrite	ND	0.5	0.097	1000000	mg/L
MKTF-21	3/14/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-21	3/14/2017	Sulfate	3.4	2.5	0.48	600000000	mg/L
MKTF-21	3/14/2017	TPH DRO	4	1	0.36	16700	mg/L
MKTF-21	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	3/14/2017	TPH GRO	37	2.5	1.2	10100	mg/L
MKTF-21	6/21/2017	Bromide	3.4	0.5	0.073	NA	mg/L
MKTF-21	6/21/2017	Chloride	310	10	5	250000000	mg/L
MKTF-21	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	6/21/2017	Ortho-Phosphate	2	2.5	1.2	NA	mg/L
MKTF-21	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	6/21/2017	Sulfate	1.1	2.5	0.48	600000000	mg/L
MKTF-21	6/21/2017	TPH DRO	6.2	1	0.36	16700	mg/L
MKTF-21	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	6/21/2017	TPH GRO	30	5	2.5	10100	mg/L
MKTF-21	9/26/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-21	9/26/2017	Chloride	230	10	5	250000000	mg/L
MKTF-21	9/26/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	9/26/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	9/26/2017	Sulfate	2	2.5	0.48	600000000	mg/L
MKTF-21	9/26/2017	TPH DRO	2	1	0.36	16700	mg/L
MKTF-21	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	9/26/2017	TPH GRO	24	5	2.5	10100	mg/L
MKTF-21	11/28/2017	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-21	11/28/2017	Chloride	210	10	5	250000000	mg/L
MKTF-21	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-21	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-21	11/28/2017	Sulfate	7	2.5	0.48	600000000	mg/L
MKTF-21	11/28/2017	TPH DRO	2.6	1	0.36	16700	mg/L
MKTF-21	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/28/2017	TPH GRO	25	5	0.97	10100	mg/L
MKTF-21	2/15/2018	Bromide	2	0.5	0.073	NA	mg/L
MKTF-21	2/15/2018	Chloride	210	10	5	250000000	mg/L
MKTF-21	2/15/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-21	2/15/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
MKTF-21	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-21	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-21	2/15/2018	Sulfate	23	2.5	0.48	600000000	mg/L
MKTF-21	2/15/2018	TPH DRO	3.2	1	0.63	16700	mg/L
MKTF-21	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	2/15/2018	TPH GRO	12	2.5	0.48	10100	mg/L
MKTF-21	5/11/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-21	5/11/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-21	5/11/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-21	5/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-21	5/11/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-21	5/11/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
MKTF-21	5/11/2018	Sulfate	4.3	2.5	1	600000000	mg/L
MKTF-21	5/11/2018	TPH DRO	3.6	1	0.63	16700	mg/L
MKTF-21	5/11/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	5/11/2018	TPH GRO	17	2.5	0.48	10100	mg/L
MKTF-21	8/31/2018	Bromide	2	0.5	0.13	NA	mg/L
MKTF-21	8/31/2018	Chloride	330	10	0.59	250000000	mg/L
MKTF-21	8/31/2018	Fluoride, Total	0.43	0.5	0.16	1600000	mg/L
MKTF-21	8/31/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-21	8/31/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-21	8/31/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-21	8/31/2018	Sulfate	7.1	2.5	1	600000000	mg/L
MKTF-21	8/31/2018	TPH DRO	2.9	1	0.63	16700	mg/L
MKTF-21	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	8/31/2018	TPH GRO	22	1	0.19	10100	mg/L
MKTF-21	11/29/2018	Bromide	1.9	0.5	0.1	NA	mg/L
MKTF-21	11/29/2018	Chloride	340	10	10	250000000	mg/L
MKTF-21	11/29/2018	Fluoride, Total	0.89	0.5	0.5	1600000	mg/L
MKTF-21	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-21	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-21	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-21	11/29/2018	Sulfate	8.6	2.5	0.63	600000000	mg/L
MKTF-21	11/29/2018	TPH DRO	3.8	1	0.63	16700	mg/L
MKTF-21	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-21	11/29/2018	TPH GRO	7.2	0.5	0.24	10100	mg/L
MKTF-21	2/20/2019	TPH GRO	40	0.5	0.211	10100	mg/L
MKTF-21	2/20/2019	TPH DRO	20	1	0.35	16700	mg/L
MKTF-21	2/20/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-21	2/20/2019	Bromide	1.7	0.5	0.0675	NA	mg/L
MKTF-21	2/20/2019	Chloride	4600	250	250	250000000	mg/L
MKTF-21	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-21	2/20/2019	Nitrogen, Nitrite	1.6	2	1.39	1000000	mg/L
MKTF-21	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-21	2/20/2019	Sulfate	880	250	32	600000000	mg/L
MKTF-21	5/14/2019	TPH GRO	8.5	1	0.614	10100	mg/L
MKTF-21	5/14/2019	TPH DRO	9.4	1	0.35	16700	mg/L
MKTF-21	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-21	5/14/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-21	5/14/2019	Chloride	540	25	3.125	250000000	mg/L
MKTF-21	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-21	5/14/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-21	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-21	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-21	5/14/2019	Sulfate	6.9	2.5	0.2675	600000000	mg/L
MKTF-21	8/22/2019	TPH GRO	17	1	0.614	10100	mg/L
MKTF-21	8/22/2019	TPH DRO	7.4	1	0.35	16700	mg/L
MKTF-21	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-21	8/22/2019	Bromide	0.89	0.5	0.088765	NA	mg/L
MKTF-21	8/22/2019	Chloride	230	10	10	250000000	mg/L
MKTF-21	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-21	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-21	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-21	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-21	8/22/2019	Sulfate	6.2	2.5	0.3345	600000000	mg/L
MKTF-21	11/5/2019	TPH GRO	27	1	0.422	10100	mg/L
MKTF-21	11/5/2019	TPH DRO	2.7	0.4	0.132	16700	mg/L
MKTF-21	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-21	11/5/2019	Bromide	1.9	0.5	0.077	NA	mg/L
MKTF-21	11/5/2019	Chloride	2300	100	100	250000000	mg/L
MKTF-21	11/5/2019	Fluoride, Total	2.4	0.5	0.144909	1600000	mg/L
MKTF-21	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-21	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-21	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-21	11/5/2019	Sulfate	19	2.5	0.3345	600000000	mg/L
MKTF-21	2/5/2020	TPH GRO	0.74	0.25	0.11	10100	mg/L
MKTF-21	2/5/2020	TPH DRO	0.31	0.4	0.2	16700	mg/L
MKTF-21	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-22	4/10/2014	TPH DRO	2.6	1	0.57	16700	mg/L
MKTF-22	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	4/10/2014	TPH GRO	10	0.5	0.19	10100	mg/L
MKTF-22	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-22	11/17/2014	Chloride	96	10	0.43	250000000	mg/L
MKTF-22	11/17/2014	Fluoride, Total	0.38	0.1	0.015	1600000	mg/L
MKTF-22	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-22	11/17/2014	Nitrate & Nitrite	7.1	1	0.083	NA	mg/L
MKTF-22	11/17/2014	Sulfate	19	0.5	0.082	600000000	mg/L
MKTF-22	11/17/2014	TPH DRO	1.6	1	0.83	16700	mg/L
MKTF-22	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/17/2014	TPH GRO	6.8	0.5	0.19	10100	mg/L
MKTF-22	3/12/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-22	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	3/12/2015	TPH GRO	13	0.5	0.12	10100	mg/L
MKTF-22	6/9/2015	TPH DRO	2.5	1	0.91	16700	mg/L
MKTF-22	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/9/2015	TPH GRO	15	1	0.24	10100	mg/L
MKTF-22	8/20/2015	Bromide	0.84	0.5	0.39	NA	mg/L
MKTF-22	8/20/2015	Chloride	120	10	2.7	250000000	mg/L
MKTF-22	8/20/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-22	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-22	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-22	8/20/2015	Sulfate	48	2.5	0.57	600000000	mg/L
MKTF-22	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-22	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	8/20/2015	TPH GRO	9.3	1	0.8	10100	mg/L
MKTF-22	11/9/2015	Bromide	0.84	0.1	0.068	NA	mg/L
MKTF-22	11/9/2015	Chloride	100	10	6.8	250000000	mg/L
MKTF-22	11/9/2015	Fluoride, Total	0.41	0.1	0.032	1600000	mg/L
MKTF-22	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-22	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-22	11/9/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-22	11/9/2015	Sulfate	17	0.5	0.32	600000000	mg/L
MKTF-22	11/9/2015	TPH DRO	1.6	1	0.91	16700	mg/L
MKTF-22	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/9/2015	TPH GRO	14	1	0.24	10100	mg/L
MKTF-22	2/25/2016	Bromide	0.75	0.1	0.032	NA	mg/L
MKTF-22	2/25/2016	Chloride	95	10	0.55	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/25/2016	Fluoride, Total	0.37	0.1	0.023	1600000	mg/L
MKTF-22	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-22	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-22	2/25/2016	Sulfate	4.7	0.5	0.064	600000000	mg/L
MKTF-22	2/25/2016	TPH DRO	2.7	1	0.69	16700	mg/L
MKTF-22	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	2/25/2016	TPH GRO	24	1	0.51	10100	mg/L
MKTF-22	6/10/2016	Bromide	0.096	0.1	0.032	NA	mg/L
MKTF-22	6/10/2016	Chloride	99	10	0.55	250000000	mg/L
MKTF-22	6/10/2016	Fluoride, Total	0.37	0.1	0.023	1600000	mg/L
MKTF-22	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-22	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-22	6/10/2016	Sulfate	4.2	0.5	0.064	600000000	mg/L
MKTF-22	6/10/2016	TPH DRO	2.5	1	0.69	16700	mg/L
MKTF-22	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/10/2016	TPH GRO	27	2.5	1.3	10100	mg/L
MKTF-22	9/10/2016	Bromide	0.71	0.1	0.044	NA	mg/L
MKTF-22	9/10/2016	Chloride	98	10	1	250000000	mg/L
MKTF-22	9/10/2016	Fluoride, Total	0.23	0.1	0.05	1600000	mg/L
MKTF-22	9/10/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-22	9/10/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-22	9/10/2016	Sulfate	4.1	0.5	0.14	600000000	mg/L
MKTF-22	9/10/2016	TPH DRO	2.7	1	0.69	16700	mg/L
MKTF-22	9/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	9/10/2016	TPH GRO	17	1	0.3	10100	mg/L
MKTF-22	11/1/2016	Bromide	0.44	0.1	0.044	NA	mg/L
MKTF-22	11/1/2016	Chloride	100	10	1	250000000	mg/L
MKTF-22	11/1/2016	Fluoride, Total	0.41	0.1	0.05	1600000	mg/L
MKTF-22	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-22	11/1/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
MKTF-22	11/1/2016	Nitrogen, Nitrate	ND	0.1	0.041	10000000	mg/L
MKTF-22	11/1/2016	Sulfate	3.3	0.5	0.14	600000000	mg/L
MKTF-22	11/1/2016	TPH DRO	2.1	1	0.69	16700	mg/L
MKTF-22	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/1/2016	TPH GRO	26	2.5	1.3	10100	mg/L
MKTF-22	3/8/2017	Bromide	0.76	0.1	0.031	NA	mg/L
MKTF-22	3/8/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	3/8/2017	Fluoride, Total	0.33	0.1	0.05	1600000	mg/L
MKTF-22	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-22	3/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	3/8/2017	Sulfate	2	0.5	0.096	600000000	mg/L
MKTF-22	3/8/2017	TPH DRO	3	1	0.36	16700	mg/L
MKTF-22	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	3/8/2017	TPH GRO	23	0.5	0.25	10100	mg/L
MKTF-22	6/8/2017	Bromide	0.72	0.1	0.014	NA	mg/L
MKTF-22	6/8/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	6/8/2017	Fluoride, Total	0.25	0.1	0.044	1600000	mg/L
MKTF-22	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-22	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	6/8/2017	Sulfate	6	0.5	0.096	600000000	mg/L
MKTF-22	6/8/2017	TPH DRO	3	1	0.36	16700	mg/L
MKTF-22	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	6/8/2017	TPH GRO	14	2.5	1.2	10100	mg/L
MKTF-22	10/3/2017	Bromide	0.76	0.5	0.073	NA	mg/L
MKTF-22	10/3/2017	Chloride	110	10	5	250000000	mg/L
MKTF-22	10/3/2017	Fluoride, Total	0.28	0.5	0.22	1600000	mg/L
MKTF-22	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-22	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-22	10/3/2017	Nitrogen, Nitrate	ND	2	0.43	10000000	mg/L
MKTF-22	10/3/2017	Sulfate	7.6	2.5	0.48	600000000	mg/L
MKTF-22	10/3/2017	TPH DRO	2.5	1	0.36	16700	mg/L
MKTF-22	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	10/3/2017	TPH GRO	13	0.5	0.097	10100	mg/L
MKTF-22	11/28/2017	Bromide	0.92	0.5	0.073	NA	mg/L
MKTF-22	11/28/2017	Chloride	100	10	5	250000000	mg/L
MKTF-22	11/28/2017	Fluoride, Total	0.34	0.5	0.22	1600000	mg/L
MKTF-22	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-22	11/28/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	11/28/2017	Sulfate	3.3	2.5	0.48	600000000	mg/L
MKTF-22	11/28/2017	TPH DRO	2.4	1	0.36	16700	mg/L
MKTF-22	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/28/2017	TPH GRO	13	0.5	0.097	10100	mg/L
MKTF-22	2/8/2018	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-22	2/8/2018	Chloride	110	10	5	250000000	mg/L
MKTF-22	2/8/2018	Fluoride, Total	0.24	0.5	0.22	1600000	mg/L
MKTF-22	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-22	2/8/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-22	2/8/2018	Sulfate	5.2	2.5	0.48	600000000	mg/L
MKTF-22	2/8/2018	TPH DRO	2.9	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-22	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	2/8/2018	TPH GRO	10	0.5	0.097	10100	mg/L
MKTF-22	5/10/2018	Bromide	0.034	0.1	0.027	NA	mg/L
MKTF-22	5/10/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-22	5/10/2018	Fluoride, Total	0.27	0.1	0.03	1600000	mg/L
MKTF-22	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-22	5/10/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-22	5/10/2018	Nitrogen, Nitrate	0.15	0.1	0.0066	10000000	mg/L
MKTF-22	5/10/2018	Sulfate	5.8	0.5	0.21	600000000	mg/L
MKTF-22	5/10/2018	TPH DRO	3.5	1	0.63	16700	mg/L
MKTF-22	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	5/10/2018	TPH GRO	11	0.5	0.097	10100	mg/L
MKTF-22	8/30/2018	Bromide	0.8	0.5	0.13	NA	mg/L
MKTF-22	8/30/2018	Chloride	110	10	0.59	250000000	mg/L
MKTF-22	8/30/2018	Fluoride, Total	0.35	0.5	0.15	1600000	mg/L
MKTF-22	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-22	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-22	8/30/2018	Nitrogen, Nitrate	1.7	0.5	0.033	10000000	mg/L
MKTF-22	8/30/2018	Sulfate	3.8	2.5	1	600000000	mg/L
MKTF-22	8/30/2018	TPH DRO	3.1	1	0.63	16700	mg/L
MKTF-22	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	8/30/2018	TPH GRO	11	1	0.19	10100	mg/L
MKTF-22	11/28/2018	Bromide	0.89	0.5	0.1	NA	mg/L
MKTF-22	11/28/2018	Chloride	130	10	10	250000000	mg/L
MKTF-22	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-22	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-22	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-22	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-22	11/28/2018	Sulfate	5.8	2.5	0.63	600000000	mg/L
MKTF-22	11/28/2018	TPH DRO	2	1	0.63	16700	mg/L
MKTF-22	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-22	11/28/2018	TPH GRO	11	1	0.49	10100	mg/L
MKTF-22	5/9/2019	TPH GRO	11	1	0.614	10100	mg/L
MKTF-22	5/9/2019	TPH DRO	2.6	1	0.35	16700	mg/L
MKTF-22	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-22	5/9/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-22	5/9/2019	Chloride	170	10	1.25	250000000	mg/L
MKTF-22	5/9/2019	Fluoride, Total	0.39	0.5	0.25	1600000	mg/L
MKTF-22	5/9/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-22	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-22	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-22	5/9/2019	Sulfate	13	2.5	0.2675	600000000	mg/L
MKTF-22	8/20/2019	TPH GRO	8.2	1	0.614	10100	mg/L
MKTF-22	8/20/2019	TPH DRO	2.4	1	0.35	16700	mg/L
MKTF-22	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-22	8/20/2019	Bromide	1.2	0.5	0.088765	NA	mg/L
MKTF-22	8/20/2019	Chloride	200	10	10	250000000	mg/L
MKTF-22	8/20/2019	Fluoride, Total	0.4	0.5	0.073	1600000	mg/L
MKTF-22	8/20/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-22	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-22	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-22	8/20/2019	Sulfate	4.7	2.5	0.3345	600000000	mg/L
MKTF-22	10/24/2019	TPH GRO	9	1	0.386	10100	mg/L
MKTF-22	10/24/2019	TPH DRO	0.28	0.4	0.132	16700	mg/L
MKTF-22	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-22	10/24/2019	Bromide	1.2	0.5	0.077	NA	mg/L
MKTF-22	10/24/2019	Chloride	190	10	10	250000000	mg/L
MKTF-22	10/24/2019	Fluoride, Total	0.41	0.5	0.144909	1600000	mg/L
MKTF-22	10/24/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-22	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-22	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-22	10/24/2019	Sulfate	2.9	2.5	0.3345	600000000	mg/L
MKTF-23	9/23/2014	TPH DRO	14	1	0.83	16700	mg/L
MKTF-23	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	9/23/2014	TPH GRO	23	5	1.9	10100	mg/L
MKTF-23	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-23	11/17/2014	Chloride	390	10	0.43	250000000	mg/L
MKTF-23	11/17/2014	Fluoride, Total	0.43	0.1	0.015	1600000	mg/L
MKTF-23	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-23	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-23	11/17/2014	Sulfate	5.9	0.5	0.082	600000000	mg/L
MKTF-23	11/17/2014	TPH DRO	7.7	1	0.83	16700	mg/L
MKTF-23	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	11/17/2014	TPH GRO	26	1	0.38	10100	mg/L
MKTF-23	3/12/2015	TPH DRO	14	1	0.91	16700	mg/L
MKTF-23	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	3/12/2015	TPH GRO	35	1	0.24	10100	mg/L
MKTF-23	6/9/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-23	6/9/2015	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-23	6/9/2015	TPH GRO	32	0.5	0.12	10100	mg/L
MKTF-23	8/21/2015	Bromide	1.6	0.5	0.34	NA	mg/L
MKTF-23	8/21/2015	Chloride	300	10	6.8	250000000	mg/L
MKTF-23	8/21/2015	Fluoride, Total	0.57	0.5	0.16	1600000	mg/L
MKTF-23	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-23	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-23	8/21/2015	Sulfate	ND	2.5	1.6	600000000	mg/L
MKTF-23	8/21/2015	TPH DRO	35	1	0.91	16700	mg/L
MKTF-23	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	8/21/2015	TPH GRO	29	1	0.8	10100	mg/L
MKTF-23	11/9/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-23	11/9/2015	TPH DRO	71	1	0.91	16700	mg/L
MKTF-23	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	11/9/2015	TPH GRO	34	2.5	0.6	10100	mg/L
MKTF-23	11/10/2015	Bromide	2.2	0.1	0.068	NA	mg/L
MKTF-23	11/10/2015	Chloride	250	10	6.8	250000000	mg/L
MKTF-23	11/10/2015	Fluoride, Total	1	0.1	0.032	1600000	mg/L
MKTF-23	11/10/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-23	11/10/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-23	11/10/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-23	11/10/2015	Sulfate	14	0.5	0.32	600000000	mg/L
MKTF-23	2/25/2016	Bromide	1.9	0.5	0.16	NA	mg/L
MKTF-23	2/25/2016	Chloride	240	10	0.55	250000000	mg/L
MKTF-23	2/25/2016	Fluoride, Total	0.69	0.5	0.11	1600000	mg/L
MKTF-23	2/25/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-23	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-23	2/25/2016	Sulfate	ND	2.5	0.32	600000000	mg/L
MKTF-23	2/25/2016	TPH DRO	56	1	0.69	16700	mg/L
MKTF-23	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-23	2/25/2016	TPH GRO	32	2.5	1.3	10100	mg/L
MKTF-23	6/10/2016	Bromide	1.4	0.5	0.16	NA	mg/L
MKTF-23	6/10/2016	Chloride	240	10	0.55	250000000	mg/L
MKTF-23	6/10/2016	Fluoride, Total	0.75	0.5	0.11	1600000	mg/L
MKTF-23	6/10/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-23	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-23	6/10/2016	Sulfate	0.36	2.5	0.32	600000000	mg/L
MKTF-23	6/10/2016	TPH DRO	710	10	6.9	16700	mg/L
MKTF-23	6/10/2016	TPH ORO	ND	50	50	85800	mg/L
MKTF-23	6/10/2016	TPH GRO	38	2.5	1.3	10100	mg/L
MKTF-23	10/29/2019	TPH GRO	55	5	1.93	10100	mg/L
MKTF-23	10/29/2019	TPH DRO	2200	20	6.6	16700	mg/L
MKTF-23	10/29/2019	Motor Oil	ND	125	125	85800	mg/L
MKTF-23	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-23	10/29/2019	Chloride	440	25	25	250000000	mg/L
MKTF-23	10/29/2019	Fluoride, Total	0.75	0.5	0.144909	1600000	mg/L
MKTF-23	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-23	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-23	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-23	10/29/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
MKTF-24	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-24	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	4/8/2014	TPH GRO	4.2	0.5	0.092	10100	mg/L
MKTF-24	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-24	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	9/24/2014	TPH GRO	6.3	0.5	0.19	10100	mg/L
MKTF-24	11/14/2014	Bromide	1.4	1	0.26	NA	mg/L
MKTF-24	11/14/2014	Chloride	630	50	2.2	250000000	mg/L
MKTF-24	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-24	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-24	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-24	11/14/2014	Sulfate	72	5	0.82	600000000	mg/L
MKTF-24	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-24	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/14/2014	TPH GRO	5.7	0.5	0.19	10100	mg/L
MKTF-24	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	3/11/2015	TPH GRO	9.2	0.5	0.12	10100	mg/L
MKTF-24	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/10/2015	TPH GRO	9.8	0.5	0.12	10100	mg/L
MKTF-24	8/20/2015	Bromide	1.6	0.5	0.39	NA	mg/L
MKTF-24	8/20/2015	Chloride	850	25	17	250000000	mg/L
MKTF-24	8/20/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-24	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-24	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-24	8/20/2015	Sulfate	72	2.5	0.57	600000000	mg/L
MKTF-24	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	8/20/2015	TPH GRO	9.5	1	0.8	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/4/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-24	11/4/2015	Chloride	850	25	17	250000000	mg/L
MKTF-24	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-24	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-24	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-24	11/4/2015	Sulfate	68	10	6.4	600000000	mg/L
MKTF-24	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-24	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/4/2015	TPH GRO	10	1	0.24	10100	mg/L
MKTF-24	2/22/2016	Bromide	1	0.1	0.032	NA	mg/L
MKTF-24	2/22/2016	Chloride	650	25	1.4	250000000	mg/L
MKTF-24	2/22/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-24	2/22/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-24	2/22/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-24	2/22/2016	Sulfate	50	10	1.3	600000000	mg/L
MKTF-24	2/22/2016	TPH DRO	1.5	1	0.69	16700	mg/L
MKTF-24	2/22/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	2/22/2016	TPH GRO	29	0.5	0.25	10100	mg/L
MKTF-24	6/8/2016	Bromide	0.47	0.1	0.032	NA	mg/L
MKTF-24	6/8/2016	Chloride	700	25	1.4	250000000	mg/L
MKTF-24	6/8/2016	Fluoride, Total	0.097	0.1	0.023	1600000	mg/L
MKTF-24	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-24	6/8/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-24	6/8/2016	Sulfate	60	10	1.3	600000000	mg/L
MKTF-24	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-24	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/8/2016	TPH GRO	14	2.5	1.3	10100	mg/L
MKTF-24	9/7/2016	Bromide	ND	0.1	0.044	NA	mg/L
MKTF-24	9/7/2016	Chloride	630	25	2.5	250000000	mg/L
MKTF-24	9/7/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-24	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-24	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-24	9/7/2016	Sulfate	51	10	2.8	600000000	mg/L
MKTF-24	9/7/2016	TPH DRO	1.2	1	0.69	16700	mg/L
MKTF-24	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	9/7/2016	TPH GRO	19	1	0.3	10100	mg/L
MKTF-24	10/28/2016	Bromide	0.36	0.1	0.044	NA	mg/L
MKTF-24	10/28/2016	Chloride	440	25	2.5	250000000	mg/L
MKTF-24	10/28/2016	Fluoride, Total	0.078	0.1	0.05	1600000	mg/L
MKTF-24	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-24	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-24	10/28/2016	Sulfate	46	0.5	0.14	600000000	mg/L
MKTF-24	10/28/2016	TPH DRO	1.1	1	0.69	16700	mg/L
MKTF-24	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	10/28/2016	TPH GRO	30	2.5	1.3	10100	mg/L
MKTF-24	3/29/2017	Bromide	0.78	0.1	0.031	NA	mg/L
MKTF-24	3/29/2017	Chloride	800	50	25	250000000	mg/L
MKTF-24	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-24	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-24	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	3/29/2017	Sulfate	59	10	1.9	600000000	mg/L
MKTF-24	3/29/2017	TPH DRO	0.74	1	0.36	16700	mg/L
MKTF-24	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	3/29/2017	TPH GRO	8.2	1	0.19	10100	mg/L
MKTF-24	6/5/2017	Bromide	0.42	0.1	0.014	NA	mg/L
MKTF-24	6/5/2017	Chloride	620	25	12	250000000	mg/L
MKTF-24	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-24	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-24	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	6/5/2017	Sulfate	43	0.5	0.096	600000000	mg/L
MKTF-24	6/5/2017	TPH DRO	1.8	1	0.36	16700	mg/L
MKTF-24	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	6/5/2017	TPH GRO	23	1	0.5	10100	mg/L
MKTF-24	10/3/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-24	10/3/2017	Chloride	800	50	25	250000000	mg/L
MKTF-24	10/3/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-24	10/3/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	10/3/2017	Sulfate	64	2.5	0.48	600000000	mg/L
MKTF-24	10/3/2017	TPH DRO	0.56	1	0.36	16700	mg/L
MKTF-24	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	10/3/2017	TPH GRO	10	1	0.19	10100	mg/L
MKTF-24	11/20/2017	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-24	11/20/2017	Chloride	560	25	12	250000000	mg/L
MKTF-24	11/20/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	11/20/2017	Sulfate	34	2.5	0.48	600000000	mg/L
MKTF-24	11/20/2017	TPH DRO	1	1	0.36	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/20/2017	TPH GRO	28	2.5	1.2	10100	mg/L
MKTF-24	2/6/2018	Bromide	1.1	0.5	0.073	NA	mg/L
MKTF-24	2/6/2018	Chloride	430	25	12	250000000	mg/L
MKTF-24	2/6/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-24	2/6/2018	Sulfate	30	2.5	0.48	600000000	mg/L
MKTF-24	2/6/2018	TPH DRO	1.1	1	0.63	16700	mg/L
MKTF-24	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	2/6/2018	TPH GRO	21	2.5	0.48	10100	mg/L
MKTF-24	5/1/2018	Bromide	0.2	0.1	0.027	NA	mg/L
MKTF-24	5/1/2018	Chloride	500	25	1.5	250000000	mg/L
MKTF-24	5/1/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-24	5/1/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-24	5/1/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-24	5/1/2018	Nitrogen, Nitrate	0.17	0.1	0.0066	10000000	mg/L
MKTF-24	5/1/2018	Sulfate	29	25	10	600000000	mg/L
MKTF-24	5/1/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-24	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	5/1/2018	TPH GRO	23	2.5	1.1	10100	mg/L
MKTF-24	8/20/2018	Bromide	0.96	0.5	0.13	NA	mg/L
MKTF-24	8/20/2018	Chloride	560	25	1.5	250000000	mg/L
MKTF-24	8/20/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-24	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-24	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-24	8/20/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-24	8/20/2018	Sulfate	30	2.5	1	600000000	mg/L
MKTF-24	8/20/2018	TPH DRO	1.4	1	0.63	16700	mg/L
MKTF-24	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	8/20/2018	TPH GRO	23	10	1.9	10100	mg/L
MKTF-24	10/10/2018	Bromide	1.5	0.5	0.13	NA	mg/L
MKTF-24	10/10/2018	Chloride	810	25	9.1	250000000	mg/L
MKTF-24	10/10/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-24	10/10/2018	Ortho-Phosphate	ND	2.5	0.15	NA	mg/L
MKTF-24	10/10/2018	Nitrogen, Nitrite	ND	0.5	0.049	1000000	mg/L
MKTF-24	10/10/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
MKTF-24	10/10/2018	Sulfate	52	2.5	0.63	600000000	mg/L
MKTF-24	11/15/2018	Bromide	1.1	0.5	0.1	NA	mg/L
MKTF-24	11/15/2018	Chloride	520	25	25	250000000	mg/L
MKTF-24	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-24	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-24	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-24	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-24	11/15/2018	Sulfate	27	2.5	0.63	600000000	mg/L
MKTF-24	11/15/2018	TPH DRO	1.5	1	0.63	16700	mg/L
MKTF-24	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-24	11/15/2018	TPH GRO	16	1	0.49	10100	mg/L
MKTF-24	5/6/2019	TPH GRO	8.6	1	0.614	10100	mg/L
MKTF-24	5/6/2019	TPH DRO	0.65	1	0.35	16700	mg/L
MKTF-24	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-24	5/6/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-24	5/6/2019	Chloride	1000	50	6.25	250000000	mg/L
MKTF-24	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-24	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-24	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-24	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-24	5/6/2019	Sulfate	42	2.5	0.2675	600000000	mg/L
MKTF-24	8/23/2019	TPH GRO	15	0.5	0.211	10100	mg/L
MKTF-24	8/23/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-24	8/23/2019	Chloride	800	25	25	250000000	mg/L
MKTF-24	8/23/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-24	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-24	8/23/2019	Nitrogen, Nitrite	0.8	0.5	0.027	1000000	mg/L
MKTF-24	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-24	8/23/2019	Sulfate	34	2.5	0.3345	600000000	mg/L
MKTF-24	8/23/2019	TPH DRO	0.94	1	0.35	16700	mg/L
MKTF-24	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-24	10/23/2019	TPH GRO	17	0.5	0.211	10100	mg/L
MKTF-24	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-24	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-24	10/23/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-24	10/23/2019	Chloride	660	25	25	250000000	mg/L
MKTF-24	10/23/2019	Fluoride, Total	0.15	0.5	0.144909	1600000	mg/L
MKTF-24	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-24	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-24	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-24	10/23/2019	Sulfate	20	2.5	0.3345	600000000	mg/L
MKTF-24	11/19/2019	Biochemical Oxygen Demand	13	2	2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-24	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-24	11/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-24	11/19/2019	Chemical Oxygen Demand	60.8	10	3	NA	mg/L
MKTF-24	2/25/2020	TPH GRO	7.2	1	0.14	10100	mg/L
MKTF-24	2/25/2020	TPH DRO	0.71	0.4	0.2	16700	mg/L
MKTF-24	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-24	2/25/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-24	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-24	2/25/2020	Chloride	940	25	12	250000000	mg/L
MKTF-24	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-24	2/25/2020	Nitrogen, Nitrate	0.12	0.5	0.11	10000000	mg/L
MKTF-24	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	2/25/2020	Sulfate	27	2.5	1.2	600000000	mg/L
MKTF-24	9/19/2020	TPH GRO	15	1	0.16	10100	mg/L
MKTF-24	9/19/2020	TPH DRO	0.38	0.07	0.067	16700	mg/L
MKTF-24	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-24	9/19/2020	Chloride	950	50	25	250000000	mg/L
MKTF-24	9/19/2020	Bromide	1.8	0.5	0.25	NA	mg/L
MKTF-24	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-24	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-24	9/19/2020	Sulfate	35	2.5	1.2	600000000	mg/L
MKTF-24	9/19/2020	Nitrate & Nitrite	ND	1	0.061	NA	mg/L
MKTF-24	12/18/2020	Sulfate	21.8	1	0.37	600000000	mg/L
MKTF-24	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-24	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-24	12/18/2020	Chloride	893	50	6	250000000	mg/L
MKTF-24	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-24	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-24	12/18/2020	Bicarbonate	410	1	0.5	NA	mg/L
MKTF-24	12/18/2020	TPH (C6-C10)	14300	1000	470	NA	ug/L
MKTF-24	12/18/2020	TPH DRO	2470	126	101	16700	ug/L
MKTF-24	12/18/2020	C28-C40	ND	126	101	NA	ug/L
MKTF-25	4/8/2014	TPH DRO	1.2	1	0.57	16700	mg/L
MKTF-25	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	4/8/2014	TPH GRO	6.9	1	0.18	10100	mg/L
MKTF-25	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-25	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/23/2014	TPH GRO	5.8	1	0.38	10100	mg/L
MKTF-25	11/14/2014	Bromide	1.4	1	0.26	NA	mg/L
MKTF-25	11/14/2014	Chloride	880	50	2.2	250000000	mg/L
MKTF-25	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-25	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-25	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-25	11/14/2014	Sulfate	35	5	0.82	600000000	mg/L
MKTF-25	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-25	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/14/2014	TPH GRO	4.8	0.5	0.19	10100	mg/L
MKTF-25	3/11/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-25	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	3/11/2015	TPH GRO	10	0.5	0.12	10100	mg/L
MKTF-25	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-25	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/10/2015	TPH GRO	11	0.5	0.12	10100	mg/L
MKTF-25	8/21/2015	Bromide	1.8	0.5	0.34	NA	mg/L
MKTF-25	8/21/2015	Chloride	870	25	17	250000000	mg/L
MKTF-25	8/21/2015	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
MKTF-25	8/21/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-25	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-25	8/21/2015	Sulfate	31	2.5	1.6	600000000	mg/L
MKTF-25	8/21/2015	TPH DRO	1.1	1	0.91	16700	mg/L
MKTF-25	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	8/21/2015	TPH GRO	8.7	0.25	0.2	10100	mg/L
MKTF-25	11/5/2015	Bromide	1	0.1	0.068	NA	mg/L
MKTF-25	11/5/2015	Chloride	750	25	17	250000000	mg/L
MKTF-25	11/5/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-25	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-25	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-25	11/5/2015	Sulfate	35	0.5	0.32	600000000	mg/L
MKTF-25	11/5/2015	TPH DRO	1.2	1	0.91	16700	mg/L
MKTF-25	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/5/2015	TPH GRO	12	1	0.24	10100	mg/L
MKTF-25	2/23/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-25	2/23/2016	Chloride	670	25	1.4	250000000	mg/L
MKTF-25	2/23/2016	Fluoride, Total	0.12	0.1	0.023	1600000	mg/L
MKTF-25	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-25	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-25	2/23/2016	Sulfate	31	10	1.3	600000000	mg/L
MKTF-25	2/23/2016	TPH DRO	1.1	1	0.69	16700	mg/L
MKTF-25	2/23/2016	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	2/23/2016	TPH GRO	14	1	0.51	10100	mg/L
MKTF-25	6/9/2016	Bromide	ND	0.1	0.032	NA	mg/L
MKTF-25	6/9/2016	Chloride	680	25	1.4	250000000	mg/L
MKTF-25	6/9/2016	Fluoride, Total	0.18	0.1	0.023	1600000	mg/L
MKTF-25	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-25	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-25	6/9/2016	Sulfate	35	0.5	0.064	600000000	mg/L
MKTF-25	6/9/2016	TPH DRO	0.89	1	0.69	16700	mg/L
MKTF-25	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/9/2016	TPH GRO	13	1	0.51	10100	mg/L
MKTF-25	9/9/2016	Bromide	0.89	0.1	0.044	NA	mg/L
MKTF-25	9/9/2016	Chloride	560	25	2.5	250000000	mg/L
MKTF-25	9/9/2016	Fluoride, Total	0.073	0.1	0.05	1600000	mg/L
MKTF-25	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-25	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-25	9/9/2016	Sulfate	34	0.5	0.14	600000000	mg/L
MKTF-25	9/9/2016	TPH DRO	0.94	1	0.69	16700	mg/L
MKTF-25	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/9/2016	TPH GRO	7.1	0.5	0.15	10100	mg/L
MKTF-25	11/1/2016	Bromide	3.9	2	0.87	NA	mg/L
MKTF-25	11/1/2016	Chloride	530	25	2.5	250000000	mg/L
MKTF-25	11/1/2016	Fluoride, Total	0.052	0.1	0.05	1600000	mg/L
MKTF-25	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-25	11/1/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-25	11/1/2016	Sulfate	36	0.5	0.14	600000000	mg/L
MKTF-25	11/1/2016	TPH DRO	0.88	1	0.69	16700	mg/L
MKTF-25	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/1/2016	TPH GRO	10	1	0.51	10100	mg/L
MKTF-25	3/29/2017	Bromide	0.56	0.1	0.031	NA	mg/L
MKTF-25	3/29/2017	Chloride	380	25	12	250000000	mg/L
MKTF-25	3/29/2017	Fluoride, Total	0.095	0.1	0.05	1600000	mg/L
MKTF-25	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-25	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	3/29/2017	Sulfate	100	10	1.9	600000000	mg/L
MKTF-25	3/29/2017	TPH DRO	0.95	1	0.36	16700	mg/L
MKTF-25	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	3/29/2017	TPH GRO	7.8	0.25	0.048	10100	mg/L
MKTF-25	6/5/2017	Bromide	0.26	0.1	0.014	NA	mg/L
MKTF-25	6/5/2017	Chloride	420	25	12	250000000	mg/L
MKTF-25	6/5/2017	Fluoride, Total	0.054	0.1	0.044	1600000	mg/L
MKTF-25	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-25	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	6/5/2017	Sulfate	130	10	1.9	600000000	mg/L
MKTF-25	6/5/2017	TPH DRO	1.2	1	0.36	16700	mg/L
MKTF-25	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	6/5/2017	TPH GRO	8.4	0.25	0.12	10100	mg/L
MKTF-25	9/25/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-25	9/25/2017	Chloride	500	25	12	250000000	mg/L
MKTF-25	9/25/2017	Fluoride, Total	0.25	0.5	0.22	1600000	mg/L
MKTF-25	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	9/25/2017	Sulfate	31	2.5	0.48	600000000	mg/L
MKTF-25	9/25/2017	TPH DRO	1	1	0.36	16700	mg/L
MKTF-25	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	9/25/2017	TPH GRO	16	0.25	0.12	10100	mg/L
MKTF-25	11/21/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-25	11/21/2017	Chloride	550	25	12	250000000	mg/L
MKTF-25	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-25	11/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	11/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-25	11/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-25	11/21/2017	Sulfate	29	2.5	0.48	600000000	mg/L
MKTF-25	11/21/2017	TPH DRO	0.78	1	0.36	16700	mg/L
MKTF-25	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/21/2017	TPH GRO	17	0.5	0.25	10100	mg/L
MKTF-25	2/5/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-25	2/5/2018	Chloride	520	25	12	250000000	mg/L
MKTF-25	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-25	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	2/5/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-25	2/5/2018	Sulfate	27	2.5	0.48	600000000	mg/L
MKTF-25	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-25	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	2/5/2018	TPH GRO	16	1	0.5	10100	mg/L
MKTF-25	5/6/2018	Bromide	0.23	0.1	0.027	NA	mg/L
MKTF-25	5/6/2018	Chloride	500	25	1.5	250000000	mg/L
MKTF-25	5/6/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-25	5/6/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-25	5/6/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-25	5/6/2018	Sulfate	28	0.5	0.21	600000000	mg/L
MKTF-25	5/6/2018	TPH DRO	1.1	1	0.63	16700	mg/L
MKTF-25	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	5/6/2018	TPH GRO	12	1	0.19	10100	mg/L
MKTF-25	8/17/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-25	8/17/2018	Chloride	540	25	1.5	250000000	mg/L
MKTF-25	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-25	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-25	8/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-25	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-25	8/17/2018	Sulfate	23	2.5	1	600000000	mg/L
MKTF-25	8/17/2018	TPH DRO	1	1	0.63	16700	mg/L
MKTF-25	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	8/17/2018	TPH GRO	17	0.5	0.097	10100	mg/L
MKTF-25	11/15/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-25	11/15/2018	Chloride	630	25	25	250000000	mg/L
MKTF-25	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-25	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-25	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-25	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-25	11/15/2018	Sulfate	50	2.5	0.63	600000000	mg/L
MKTF-25	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-25	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-25	11/15/2018	TPH GRO	5	1	0.49	10100	mg/L
MKTF-25	5/6/2019	TPH GRO	3.6	0.5	0.307	10100	mg/L
MKTF-25	5/6/2019	TPH DRO	0.4	1	0.35	16700	mg/L
MKTF-25	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-25	5/6/2019	Bromide	1.4	0.5	0.088765	NA	mg/L
MKTF-25	5/6/2019	Chloride	860	50	6.25	250000000	mg/L
MKTF-25	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-25	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-25	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-25	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-25	5/6/2019	Sulfate	52	2.5	0.2675	600000000	mg/L
MKTF-25	8/27/2019	TPH GRO	1.7	0.05	0.0211	10100	mg/L
MKTF-25	8/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-25	8/27/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-25	8/27/2019	Bromide	1.4	0.5	0.25	NA	mg/L
MKTF-25	8/27/2019	Chloride	1100	50	25	250000000	mg/L
MKTF-25	8/27/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-25	8/27/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-25	8/27/2019	Nitrogen, Nitrite	0.88	0.5	0.027	1000000	mg/L
MKTF-25	8/27/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-25	8/27/2019	Sulfate	68	2.5	1.25	600000000	mg/L
MKTF-25	10/23/2019	TPH GRO	3	0.05	0.0211	10100	mg/L
MKTF-25	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-25	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-25	10/23/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-25	10/23/2019	Chloride	1400	50	50	250000000	mg/L
MKTF-25	10/23/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-25	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-25	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-25	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-25	10/23/2019	Sulfate	73	2.5	0.3345	600000000	mg/L
MKTF-25	11/18/2019	Biochemical Oxygen Demand	6	2	2	NA	mg/L
MKTF-25	11/18/2019	Nitrogen, Nitrate	0.014	0.1	0.006078	10000000	mg/L
MKTF-25	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-25	11/18/2019	Chemical Oxygen Demand	70.9	10	3	NA	mg/L
MKTF-25	2/27/2020	TPH GRO	2.5	0.25	0.034	10100	mg/L
MKTF-25	2/27/2020	TPH DRO	0.32	0.4	0.2	16700	mg/L
MKTF-25	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-25	2/27/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-25	2/27/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-25	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-25	2/27/2020	Sulfate	76	2.5	1.2	600000000	mg/L
MKTF-25	2/27/2020	Nitrate & Nitrite	ND	2	0.24	NA	mg/L
MKTF-25	2/27/2020	Chloride	980	50	25	250000000	mg/L
MKTF-25	12/18/2020	Bicarbonate	384	1	0.5	NA	mg/L
MKTF-25	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-25	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-25	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-25	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-25	12/18/2020	Chloride	844	50	6	250000000	mg/L
MKTF-25	12/18/2020	Sulfate	68	50	18.5	600000000	mg/L
MKTF-25	12/18/2020	TPH DRO	1860	142	114	16700	ug/L
MKTF-25	12/18/2020	C28-C40	ND	142	114	NA	ug/L
MKTF-25	12/18/2020	TPH (C6-C10)	3650	500	235	NA	ug/L
MKTF-27	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-27	4/8/2014	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	4/8/2014	TPH GRO	ND	0.1	0.018	10100	mg/L
MKTF-27	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-27	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-27	11/14/2014	Bromide	1.8	1	0.26	NA	mg/L
MKTF-27	11/14/2014	Chloride	2500	100	4.3	250000000	mg/L
MKTF-27	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-27	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-27	11/14/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
MKTF-27	11/14/2014	Sulfate	470	50	8.2	600000000	mg/L
MKTF-27	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-27	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/14/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-27	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	8/20/2015	Bromide	1.9	0.5	0.39	NA	mg/L
MKTF-27	8/20/2015	Chloride	2700	100	68	250000000	mg/L
MKTF-27	8/20/2015	Fluoride, Total	0.81	0.5	0.15	1600000	mg/L
MKTF-27	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-27	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-27	8/20/2015	Sulfate	330	10	2.3	600000000	mg/L
MKTF-27	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	8/20/2015	TPH GRO	0.064	0.05	0.04	10100	mg/L
MKTF-27	11/4/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-27	11/4/2015	Chloride	2700	100	68	250000000	mg/L
MKTF-27	11/4/2015	Fluoride, Total	0.8	0.1	0.032	1600000	mg/L
MKTF-27	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-27	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-27	11/4/2015	Sulfate	450	10	6.4	600000000	mg/L
MKTF-27	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-27	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-27	2/22/2016	Bromide	4.3	2	0.65	NA	mg/L
MKTF-27	2/22/2016	Chloride	2400	100	5.5	250000000	mg/L
MKTF-27	2/22/2016	Fluoride, Total	0.8	0.1	0.023	1600000	mg/L
MKTF-27	2/22/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-27	2/22/2016	Nitrate & Nitrite	ND	2	0.84	NA	mg/L
MKTF-27	2/22/2016	Sulfate	360	10	1.3	600000000	mg/L
MKTF-27	2/22/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	2/22/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	2/22/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-27	6/8/2016	Bromide	1.5	0.5	0.22	NA	mg/L
MKTF-27	6/8/2016	Chloride	2800	100	5.5	250000000	mg/L
MKTF-27	6/8/2016	Fluoride, Total	1.2	0.5	0.14	1600000	mg/L
MKTF-27	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-27	6/8/2016	Nitrate & Nitrite	1.1	2	0.92	NA	mg/L
MKTF-27	6/8/2016	Sulfate	350	10	1.3	600000000	mg/L
MKTF-27	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/8/2016	TPH GRO	0.084	0.05	0.025	10100	mg/L
MKTF-27	9/7/2016	Bromide	1.4	2	0.87	NA	mg/L
MKTF-27	9/7/2016	Chloride	2600	100	10	250000000	mg/L
MKTF-27	9/7/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-27	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-27	9/7/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-27	9/7/2016	Sulfate	400	10	2.8	600000000	mg/L
MKTF-27	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	9/7/2016	TPH GRO	0.068	0.05	0.015	10100	mg/L
MKTF-27	10/28/2016	Bromide	0.76	0.1	0.044	NA	mg/L
MKTF-27	10/28/2016	Chloride	2200	100	10	250000000	mg/L
MKTF-27	10/28/2016	Fluoride, Total	0.94	0.1	0.05	1600000	mg/L
MKTF-27	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-27	10/28/2016	Nitrate & Nitrite	1.4	2	0.92	NA	mg/L
MKTF-27	10/28/2016	Sulfate	410	10	2.8	600000000	mg/L
MKTF-27	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-27	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	10/28/2016	TPH GRO	0.034	0.05	0.025	10100	mg/L
MKTF-27	3/29/2017	Bromide	2.3	1	0.31	NA	mg/L
MKTF-27	3/29/2017	Chloride	5000	250	120	250000000	mg/L
MKTF-27	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-27	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-27	3/29/2017	Nitrate & Nitrite	3.7	4	0.52	NA	mg/L
MKTF-27	3/29/2017	Sulfate	600	10	1.9	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	3/29/2017	TPH GRO	0.022	0.05	0.0097	10100	mg/L
MKTF-27	6/5/2017	Bromide	3.3	2	0.29	NA	mg/L
MKTF-27	6/5/2017	Chloride	3800	250	120	250000000	mg/L
MKTF-27	6/5/2017	Fluoride, Total	0.27	0.5	0.22	1600000	mg/L
MKTF-27	6/5/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-27	6/5/2017	Nitrate & Nitrite	2.5	4	0.52	NA	mg/L
MKTF-27	6/5/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-27	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	6/5/2017	TPH GRO	0.03	0.05	0.025	10100	mg/L
MKTF-27	10/3/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-27	10/3/2017	Chloride	2900	250	120	250000000	mg/L
MKTF-27	10/3/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-27	10/3/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-27	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-27	10/3/2017	Nitrogen, Nitrate	0.53	0.5	0.11	10000000	mg/L
MKTF-27	10/3/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-27	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	10/3/2017	TPH GRO	0.013	0.05	0.0097	10100	mg/L
MKTF-27	11/20/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-27	11/20/2017	Chloride	3200	250	120	250000000	mg/L
MKTF-27	11/20/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-27	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	11/20/2017	Nitrate & Nitrite	0.51	2	0.26	NA	mg/L
MKTF-27	11/20/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-27	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-27	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/20/2017	TPH GRO	0.036	0.05	0.025	10100	mg/L
MKTF-27	2/6/2018	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-27	2/6/2018	Chloride	2300	100	50	250000000	mg/L
MKTF-27	2/6/2018	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
MKTF-27	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	2/6/2018	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
MKTF-27	2/6/2018	Sulfate	200	2.5	0.48	600000000	mg/L
MKTF-27	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-27	5/1/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-27	5/1/2018	Chloride	4800	250	15	250000000	mg/L
MKTF-27	5/1/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-27	5/1/2018	Ortho-Phosphate	0.75	2.5	0.46	NA	mg/L
MKTF-27	5/1/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-27	5/1/2018	Nitrogen, Nitrate	2.3	0.5	0.033	10000000	mg/L
MKTF-27	5/1/2018	Sulfate	450	250	100	600000000	mg/L
MKTF-27	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	5/1/2018	TPH GRO	0.028	0.05	0.021	10100	mg/L
MKTF-27	8/20/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-27	8/20/2018	Chloride	4000	250	15	250000000	mg/L
MKTF-27	8/20/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-27	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-27	8/20/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-27	8/20/2018	Nitrogen, Nitrate	0.61	0.5	0.033	10000000	mg/L
MKTF-27	8/20/2018	Sulfate	300	10	4.1	600000000	mg/L
MKTF-27	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	8/20/2018	TPH GRO	0.033	0.05	0.0097	10100	mg/L
MKTF-27	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-27	11/15/2018	Chloride	3100	250	250	250000000	mg/L
MKTF-27	11/15/2018	Fluoride, Total	0.83	0.5	0.5	1600000	mg/L
MKTF-27	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-27	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-27	11/15/2018	Nitrogen, Nitrate	0.64	0.5	0.25	10000000	mg/L
MKTF-27	11/15/2018	Sulfate	270	10	2.5	600000000	mg/L
MKTF-27	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-27	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-27	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-27	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-27	3/28/2019	Bromide	0.86	2	0.27	NA	mg/L
MKTF-27	3/28/2019	Chloride	3500	250	250	250000000	mg/L
MKTF-27	3/28/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-27	3/28/2019	Nitrogen, Nitrate & Nitrite	8.1	4	1.962	10000000	mg/L
MKTF-27	3/28/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-27	3/28/2019	Sulfate	1200	250	32	600000000	mg/L
MKTF-27	3/28/2019	TPH DRO	0.48	1	0.35	16700	mg/L
MKTF-27	3/28/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-27	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-27	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-27	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-27	5/6/2019	Bromide	0.85	0.5	0.088765	NA	mg/L
MKTF-27	5/6/2019	Chloride	4000	250	31.25	250000000	mg/L
MKTF-27	5/6/2019	Fluoride, Total	0.63	0.5	0.25	1600000	mg/L
MKTF-27	5/6/2019	Nitrogen, Nitrate	5.5	0.5	0.027	10000000	mg/L
MKTF-27	5/6/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-27	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-27	5/6/2019	Sulfate	980	10	1.07	600000000	mg/L
MKTF-27	8/21/2019	TPH GRO	0.035	0.05	0.0211	10100	mg/L
MKTF-27	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-27	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-27	8/21/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-27	8/21/2019	Chloride	3400	250	250	250000000	mg/L
MKTF-27	8/21/2019	Fluoride, Total	0.7	0.5	0.073	1600000	mg/L
MKTF-27	8/21/2019	Nitrogen, Nitrate	2.8	0.5	0.025	10000000	mg/L
MKTF-27	8/21/2019	Nitrogen, Nitrite	3.2	2	0.108	1000000	mg/L
MKTF-27	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-27	8/21/2019	Sulfate	770	10	1.338	600000000	mg/L
MKTF-27	10/23/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-27	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-27	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-27	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-27	10/23/2019	Chloride	2900	100	100	250000000	mg/L
MKTF-27	10/23/2019	Fluoride, Total	1.4	0.5	0.144909	1600000	mg/L
MKTF-27	10/23/2019	Nitrogen, Nitrate	1.2	0.5	0.030387	10000000	mg/L
MKTF-27	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-27	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-27	10/23/2019	Sulfate	570	10	1.338	600000000	mg/L
MKTF-27	2/25/2020	TPH GRO	0.0068	0.05	0.0068	10100	mg/L
MKTF-27	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-27	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-27	2/25/2020	Bromide	3	0.5	0.25	NA	mg/L
MKTF-27	2/25/2020	Chloride	7000	250	120	250000000	mg/L
MKTF-27	2/25/2020	Sulfate	1100	250	120	600000000	mg/L
MKTF-27	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-27	2/25/2020	Nitrogen, Nitrate	5.7	0.5	0.11	10000000	mg/L
MKTF-27	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	2/25/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-27	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-27	9/20/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
MKTF-27	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-27	9/20/2020	Bromide	1.9	0.5	0.25	NA	mg/L
MKTF-27	9/20/2020	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
MKTF-27	9/20/2020	Nitrogen, Nitrate	0.56	0.5	0.1	10000000	mg/L
MKTF-27	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-27	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-27	9/20/2020	Sulfate	520	10	5	600000000	mg/L
MKTF-27	9/20/2020	Solids, Total Suspended	11	4	4	NA	mg/L
MKTF-27	9/20/2020	Chloride	2700	250	120	250000000	mg/L
MKTF-27	12/18/2020	Fluoride, Total	1.92	1	0.3	1600000	mg/L
MKTF-27	12/18/2020	Nitrogen, Nitrate	0.767	0.1	0.033	10000000	mg/L
MKTF-27	12/18/2020	Chloride	3400	100	12	250000000	mg/L
MKTF-27	12/18/2020	Sulfate	430	100	37	600000000	mg/L
MKTF-27	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-27	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-27	12/18/2020	Bicarbonate	592	1	0.5	NA	mg/L
MKTF-27	12/18/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-27	12/18/2020	TPH DRO	1340	140	112	16700	ug/L
MKTF-27	12/18/2020	C28-C40	444	140	112	NA	ug/L
MKTF-27	9/20/2020	Solids, Total Suspended	11	4	4	NA	mg/L
MKTF-28	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-28	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-28	11/14/2014	Bromide	2.7	1	0.26	NA	mg/L
MKTF-28	11/14/2014	Chloride	540	50	2.2	250000000	mg/L
MKTF-28	11/14/2014	Fluoride, Total	ND	1	0.15	1600000	mg/L
MKTF-28	11/14/2014	Ortho-Phosphate	ND	5	0.75	NA	mg/L
MKTF-28	11/14/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-28	11/14/2014	Sulfate	260	5	0.82	600000000	mg/L
MKTF-28	11/14/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-28	11/14/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/14/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-28	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	6/9/2015	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	8/20/2015	Bromide	2.5	0.5	0.39	NA	mg/L
MKTF-28	8/20/2015	Chloride	520	25	17	250000000	mg/L
MKTF-28	8/20/2015	Fluoride, Total	0.86	0.5	0.15	1600000	mg/L
MKTF-28	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-28	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-28	8/20/2015	Sulfate	150	2.5	0.57	600000000	mg/L
MKTF-28	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	8/20/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-28	11/4/2015	Bromide	2.4	0.1	0.068	NA	mg/L
MKTF-28	11/4/2015	Chloride	510	25	17	250000000	mg/L
MKTF-28	11/4/2015	Fluoride, Total	0.86	0.1	0.032	1600000	mg/L
MKTF-28	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-28	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-28	11/4/2015	Sulfate	160	10	6.4	600000000	mg/L
MKTF-28	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-28	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-28	2/23/2016	Bromide	3.1	2	0.65	NA	mg/L
MKTF-28	2/23/2016	Chloride	500	25	1.4	250000000	mg/L
MKTF-28	2/23/2016	Fluoride, Total	0.93	0.1	0.023	1600000	mg/L
MKTF-28	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-28	2/23/2016	Nitrate & Nitrite	4.9	1	0.42	NA	mg/L
MKTF-28	2/23/2016	Sulfate	160	10	1.3	600000000	mg/L
MKTF-28	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	6/8/2016	Bromide	2.3	0.1	0.032	NA	mg/L
MKTF-28	6/8/2016	Chloride	490	25	1.4	250000000	mg/L
MKTF-28	6/8/2016	Fluoride, Total	0.93	0.1	0.023	1600000	mg/L
MKTF-28	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-28	6/8/2016	Nitrate & Nitrite	0.84	1	0.42	NA	mg/L
MKTF-28	6/8/2016	Sulfate	160	10	1.3	600000000	mg/L
MKTF-28	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	6/8/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	9/8/2016	Bromide	2.5	0.1	0.044	NA	mg/L
MKTF-28	9/8/2016	Chloride	470	25	2.5	250000000	mg/L
MKTF-28	9/8/2016	Fluoride, Total	0.66	0.1	0.05	1600000	mg/L
MKTF-28	9/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-28	9/8/2016	Nitrate & Nitrite	0.73	1	0.46	NA	mg/L
MKTF-28	9/8/2016	Sulfate	190	10	2.8	600000000	mg/L
MKTF-28	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	9/8/2016	TPH GRO	0.023	0.05	0.015	10100	mg/L
MKTF-28	10/28/2016	Bromide	2.2	0.1	0.044	NA	mg/L
MKTF-28	10/28/2016	Chloride	370	25	2.5	250000000	mg/L
MKTF-28	10/28/2016	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
MKTF-28	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-28	10/28/2016	Nitrate & Nitrite	1.1	1	0.46	NA	mg/L
MKTF-28	10/28/2016	Sulfate	130	10	2.8	600000000	mg/L
MKTF-28	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-28	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	10/28/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	3/29/2017	Bromide	2.2	0.1	0.031	NA	mg/L
MKTF-28	3/29/2017	Chloride	410	25	12	250000000	mg/L
MKTF-28	3/29/2017	Fluoride, Total	0.87	0.1	0.05	1600000	mg/L
MKTF-28	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-28	3/29/2017	Nitrate & Nitrite	1	1	0.13	NA	mg/L
MKTF-28	3/29/2017	Sulfate	160	10	1.9	600000000	mg/L
MKTF-28	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	3/29/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	6/5/2017	Bromide	2.2	0.1	0.014	NA	mg/L
MKTF-28	6/5/2017	Chloride	420	25	12	250000000	mg/L
MKTF-28	6/5/2017	Fluoride, Total	0.85	0.1	0.044	1600000	mg/L
MKTF-28	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-28	6/5/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
MKTF-28	6/5/2017	Sulfate	160	10	1.9	600000000	mg/L
MKTF-28	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	10/3/2017	Bromide	2	0.5	0.073	NA	mg/L
MKTF-28	10/3/2017	Chloride	390	25	12	250000000	mg/L
MKTF-28	10/3/2017	Fluoride, Total	0.95	0.5	0.22	1600000	mg/L
MKTF-28	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	10/3/2017	Nitrate & Nitrite	1.6	1	0.13	NA	mg/L
MKTF-28	10/3/2017	Sulfate	150	2.5	0.48	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	10/3/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	11/20/2017	Bromide	2.3	0.5	0.073	NA	mg/L
MKTF-28	11/20/2017	Chloride	410	25	12	250000000	mg/L
MKTF-28	11/20/2017	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-28	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	11/20/2017	Nitrate & Nitrite	1.9	1	0.13	NA	mg/L
MKTF-28	11/20/2017	Sulfate	180	2.5	0.48	600000000	mg/L
MKTF-28	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-28	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/20/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-28	2/6/2018	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-28	2/6/2018	Chloride	380	25	12	250000000	mg/L
MKTF-28	2/6/2018	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-28	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	2/6/2018	Nitrate & Nitrite	2.7	1	0.13	NA	mg/L
MKTF-28	2/6/2018	Sulfate	180	2.5	0.48	600000000	mg/L
MKTF-28	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-28	5/1/2018	Bromide	2	0.5	0.13	NA	mg/L
MKTF-28	5/1/2018	Chloride	400	25	1.5	250000000	mg/L
MKTF-28	5/1/2018	Fluoride, Total	0.83	0.5	0.15	1600000	mg/L
MKTF-28	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-28	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-28	5/1/2018	Nitrogen, Nitrate	2.7	0.5	0.033	10000000	mg/L
MKTF-28	5/1/2018	Sulfate	150	25	10	600000000	mg/L
MKTF-28	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	5/1/2018	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-28	8/20/2018	Bromide	2.4	0.5	0.13	NA	mg/L
MKTF-28	8/20/2018	Chloride	540	25	1.5	250000000	mg/L
MKTF-28	8/20/2018	Fluoride, Total	0.48	0.5	0.15	1600000	mg/L
MKTF-28	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-28	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-28	8/20/2018	Nitrogen, Nitrate	1.3	0.5	0.033	10000000	mg/L
MKTF-28	8/20/2018	Sulfate	240	10	4.1	600000000	mg/L
MKTF-28	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	8/20/2018	TPH GRO	0.024	0.05	0.0097	10100	mg/L
MKTF-28	11/15/2018	Bromide	2.1	0.5	0.1	NA	mg/L
MKTF-28	11/15/2018	Chloride	400	25	25	250000000	mg/L
MKTF-28	11/15/2018	Fluoride, Total	1.4	0.5	0.5	1600000	mg/L
MKTF-28	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-28	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-28	11/15/2018	Nitrogen, Nitrate	1.7	0.5	0.25	10000000	mg/L
MKTF-28	11/15/2018	Sulfate	180	2.5	0.63	600000000	mg/L
MKTF-28	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-28	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-28	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-28	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-28	3/28/2019	Bromide	2	0.5	0.0675	NA	mg/L
MKTF-28	3/28/2019	Chloride	420	25	25	250000000	mg/L
MKTF-28	3/28/2019	Fluoride, Total	0.97	0.5	0.25	1600000	mg/L
MKTF-28	3/28/2019	Nitrogen, Nitrate & Nitrite	1.2	1	0.4905	10000000	mg/L
MKTF-28	3/28/2019	Phosphorus, Ortho	0.51	2.5	0.1305	NA	mg/L
MKTF-28	3/28/2019	Sulfate	180	2.5	0.32	600000000	mg/L
MKTF-28	3/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-28	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	5/6/2019	Bromide	2	0.5	0.088765	NA	mg/L
MKTF-28	5/6/2019	Chloride	470	25	3.125	250000000	mg/L
MKTF-28	5/6/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-28	5/6/2019	Nitrogen, Nitrate	1.1	0.5	0.027	10000000	mg/L
MKTF-28	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-28	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-28	5/6/2019	Sulfate	200	2.5	0.2675	600000000	mg/L
MKTF-28	8/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-28	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-28	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-28	8/21/2019	Chloride	470	25	25	250000000	mg/L
MKTF-28	8/21/2019	Fluoride, Total	1.2	0.5	0.073	1600000	mg/L
MKTF-28	8/21/2019	Nitrogen, Nitrate	0.91	0.5	0.025	10000000	mg/L
MKTF-28	8/21/2019	Nitrogen, Nitrite	0.49	0.5	0.027	1000000	mg/L
MKTF-28	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-28	8/21/2019	Sulfate	180	2.5	0.3345	600000000	mg/L
MKTF-28	10/21/2019	TPH GRO	0.69	0.05	0.0211	10100	mg/L
MKTF-28	10/21/2019	TPH DRO	1.2	0.4	0.132	16700	mg/L
MKTF-28	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/21/2019	Cyanide, Total	0.0723	0.01	0.01	1460	mg/L
MKTF-28	10/21/2019	Bromide	3.6	0.5	0.077	NA	mg/L
MKTF-28	10/21/2019	Chloride	1500	50	50	250000000	mg/L
MKTF-28	10/21/2019	Fluoride, Total	1.9	0.5	0.144909	1600000	mg/L
MKTF-28	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-28	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/21/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
MKTF-28	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-28	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/22/2019	Bromide	2.4	0.5	0.077	NA	mg/L
MKTF-28	10/22/2019	Chloride	530	25	25	250000000	mg/L
MKTF-28	10/22/2019	Fluoride, Total	1	0.5	0.144909	1600000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrate	0.32	0.5	0.030387	10000000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/22/2019	Sulfate	220	10	1.338	600000000	mg/L
MKTF-28	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-28	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-28	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-28	10/22/2019	Bromide	2.1	0.5	0.077	NA	mg/L
MKTF-28	10/22/2019	Chloride	460	25	25	250000000	mg/L
MKTF-28	10/22/2019	Fluoride, Total	1.2	0.5	0.144909	1600000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrate	0.56	0.5	0.030387	10000000	mg/L
MKTF-28	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-28	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-28	10/22/2019	Sulfate	190	2.5	0.3345	600000000	mg/L
MKTF-28	2/25/2020	TPH GRO	0.011	0.05	0.0068	10100	mg/L
MKTF-28	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-28	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-28	2/25/2020	Bromide	2.2	0.5	0.25	NA	mg/L
MKTF-28	2/25/2020	Chloride	570	25	12	250000000	mg/L
MKTF-28	2/25/2020	Fluoride, Total	1.1	0.5	0.11	1600000	mg/L
MKTF-28	2/25/2020	Nitrogen, Nitrate	0.26	0.5	0.11	10000000	mg/L
MKTF-28	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-28	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	2/25/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-28	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-28	9/20/2020	TPH DRO	0.11	0.07	0.067	16700	mg/L
MKTF-28	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-28	9/20/2020	Bromide	2.2	0.5	0.25	NA	mg/L
MKTF-28	9/20/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-28	9/20/2020	Nitrogen, Nitrate	0.25	0.5	0.1	10000000	mg/L
MKTF-28	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-28	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-28	9/20/2020	Sulfate	130	2.5	1.2	600000000	mg/L
MKTF-28	9/20/2020	Solids, Total Suspended	24	4	4	NA	mg/L
MKTF-28	9/20/2020	Chloride	630	25	12	250000000	mg/L
MKTF-28	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-28	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-28	12/18/2020	Fluoride, Total	1.24	1	0.3	1600000	mg/L
MKTF-28	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-28	12/18/2020	Chloride	676	20	2.4	250000000	mg/L
MKTF-28	12/18/2020	Sulfate	133	20	7.4	600000000	mg/L
MKTF-28	12/18/2020	Bicarbonate	380	1	0.5	NA	mg/L
MKTF-28	12/18/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-28	12/18/2020	TPH DRO	336	134	107	16700	ug/L
MKTF-28	12/18/2020	C28-C40	ND	134	107	NA	ug/L
MKTF-28	9/20/2020	Solids, Total Suspended	24	4	4	NA	mg/L
MKTF-29	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-29	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-29	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-29	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-29	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	8/20/2015	Bromide	ND	0.5	0.39	NA	mg/L
MKTF-29	8/20/2015	Chloride	95	10	2.7	250000000	mg/L
MKTF-29	8/20/2015	Fluoride, Total	0.83	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-29	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-29	8/20/2015	Sulfate	440	10	2.3	600000000	mg/L
MKTF-29	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	8/20/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-29	11/4/2015	Bromide	0.33	0.1	0.068	NA	mg/L
MKTF-29	11/4/2015	Chloride	90	10	6.8	250000000	mg/L
MKTF-29	11/4/2015	Fluoride, Total	0.92	0.1	0.032	1600000	mg/L
MKTF-29	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-29	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-29	11/4/2015	Sulfate	650	10	6.4	600000000	mg/L
MKTF-29	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-29	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-29	2/23/2016	Bromide	0.46	0.1	0.032	NA	mg/L
MKTF-29	2/23/2016	Chloride	91	10	0.55	250000000	mg/L
MKTF-29	2/23/2016	Fluoride, Total	0.96	0.1	0.023	1600000	mg/L
MKTF-29	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-29	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-29	2/23/2016	Sulfate	640	10	1.3	600000000	mg/L
MKTF-29	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	6/9/2016	Bromide	0.4	0.1	0.032	NA	mg/L
MKTF-29	6/9/2016	Chloride	82	10	0.55	250000000	mg/L
MKTF-29	6/9/2016	Fluoride, Total	1.1	0.1	0.023	1600000	mg/L
MKTF-29	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-29	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-29	6/9/2016	Sulfate	650	10	1.3	600000000	mg/L
MKTF-29	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	9/7/2016	Bromide	0.34	0.1	0.044	NA	mg/L
MKTF-29	9/7/2016	Chloride	81	10	1	250000000	mg/L
MKTF-29	9/7/2016	Fluoride, Total	0.85	0.1	0.05	1600000	mg/L
MKTF-29	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-29	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-29	9/7/2016	Sulfate	590	10	2.8	600000000	mg/L
MKTF-29	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	9/7/2016	TPH GRO	0.029	0.05	0.015	10100	mg/L
MKTF-29	10/28/2016	Bromide	0.36	0.1	0.044	NA	mg/L
MKTF-29	10/28/2016	Chloride	80	10	1	250000000	mg/L
MKTF-29	10/28/2016	Fluoride, Total	1.1	0.1	0.05	1600000	mg/L
MKTF-29	10/28/2016	Ortho-Phosphate	0.16	0.5	0.076	NA	mg/L
MKTF-29	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-29	10/28/2016	Sulfate	560	10	2.8	600000000	mg/L
MKTF-29	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-29	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	10/28/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	3/29/2017	Bromide	0.4	0.1	0.031	NA	mg/L
MKTF-29	3/29/2017	Chloride	100	10	5	250000000	mg/L
MKTF-29	3/29/2017	Fluoride, Total	0.75	0.1	0.05	1600000	mg/L
MKTF-29	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-29	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	3/29/2017	Sulfate	640	10	1.9	600000000	mg/L
MKTF-29	3/29/2017	TPH DRO	0.43	1	0.36	16700	mg/L
MKTF-29	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	3/29/2017	TPH GRO	0.012	0.05	0.0097	10100	mg/L
MKTF-29	6/5/2017	Bromide	0.55	0.1	0.014	NA	mg/L
MKTF-29	6/5/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	6/5/2017	Fluoride, Total	0.68	0.1	0.044	1600000	mg/L
MKTF-29	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-29	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	6/5/2017	Sulfate	670	10	1.9	600000000	mg/L
MKTF-29	6/5/2017	TPH DRO	1	1	0.36	16700	mg/L
MKTF-29	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	10/3/2017	Bromide	0.65	0.5	0.073	NA	mg/L
MKTF-29	10/3/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	10/3/2017	Fluoride, Total	0.6	0.5	0.22	1600000	mg/L
MKTF-29	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	10/3/2017	Nitrate & Nitrite	0.14	1	0.13	NA	mg/L
MKTF-29	10/3/2017	Sulfate	880	10	1.9	600000000	mg/L
MKTF-29	10/3/2017	TPH DRO	0.37	1	0.36	16700	mg/L
MKTF-29	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	10/3/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-29	11/20/2017	Bromide	0.81	0.5	0.073	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	11/20/2017	Chloride	150	10	5	250000000	mg/L
MKTF-29	11/20/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MKTF-29	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	11/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	11/20/2017	Sulfate	780	10	1.9	600000000	mg/L
MKTF-29	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-29	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/20/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-29	2/6/2018	Bromide	0.83	0.5	0.073	NA	mg/L
MKTF-29	2/6/2018	Chloride	160	10	5	250000000	mg/L
MKTF-29	2/6/2018	Fluoride, Total	0.81	0.5	0.22	1600000	mg/L
MKTF-29	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-29	2/6/2018	Sulfate	560	10	1.9	600000000	mg/L
MKTF-29	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	2/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-29	5/1/2018	Bromide	0.9	0.5	0.13	NA	mg/L
MKTF-29	5/1/2018	Chloride	160	10	0.59	250000000	mg/L
MKTF-29	5/1/2018	Fluoride, Total	0.68	0.5	0.15	1600000	mg/L
MKTF-29	5/1/2018	Ortho-Phosphate	0.78	2.5	0.46	NA	mg/L
MKTF-29	5/1/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-29	5/1/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
MKTF-29	5/1/2018	Sulfate	460	10	4.1	600000000	mg/L
MKTF-29	5/1/2018	TPH DRO	0.66	1	0.63	16700	mg/L
MKTF-29	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	5/1/2018	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-29	8/20/2018	Bromide	0.79	0.5	0.13	NA	mg/L
MKTF-29	8/20/2018	Chloride	200	10	0.59	250000000	mg/L
MKTF-29	8/20/2018	Fluoride, Total	0.57	0.5	0.15	1600000	mg/L
MKTF-29	8/20/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-29	8/20/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-29	8/20/2018	Nitrogen, Nitrate	0.31	0.5	0.033	10000000	mg/L
MKTF-29	8/20/2018	Sulfate	520	10	4.1	600000000	mg/L
MKTF-29	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	8/20/2018	TPH GRO	0.021	0.05	0.0097	10100	mg/L
MKTF-29	11/15/2018	Bromide	0.85	0.5	0.1	NA	mg/L
MKTF-29	11/15/2018	Chloride	210	10	10	250000000	mg/L
MKTF-29	11/15/2018	Fluoride, Total	0.8	0.5	0.5	1600000	mg/L
MKTF-29	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-29	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-29	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-29	11/15/2018	Sulfate	630	10	2.5	600000000	mg/L
MKTF-29	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-29	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-29	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-29	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	3/28/2019	Bromide	0.77	0.5	0.0675	NA	mg/L
MKTF-29	3/28/2019	Chloride	190	10	10	250000000	mg/L
MKTF-29	3/28/2019	Fluoride, Total	0.54	0.5	0.25	1600000	mg/L
MKTF-29	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-29	3/28/2019	Phosphorus, Ortho	0.14	2.5	0.1305	NA	mg/L
MKTF-29	3/28/2019	Sulfate	540	10	1.28	600000000	mg/L
MKTF-29	3/28/2019	TPH DRO	0.51	1	0.35	16700	mg/L
MKTF-29	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	3/28/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	3/28/2019	Bromide	0.77	0.5	0.0675	NA	mg/L
MKTF-29	3/28/2019	Chloride	190	10	10	250000000	mg/L
MKTF-29	3/28/2019	Fluoride, Total	0.53	0.5	0.25	1600000	mg/L
MKTF-29	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-29	3/28/2019	Phosphorus, Ortho	0.16	2.5	0.1305	NA	mg/L
MKTF-29	3/28/2019	Sulfate	530	10	1.28	600000000	mg/L
MKTF-29	3/28/2019	TPH DRO	0.49	1	0.35	16700	mg/L
MKTF-29	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	5/6/2019	TPH DRO	0.36	1	0.35	16700	mg/L
MKTF-29	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	5/6/2019	Bromide	0.75	0.5	0.088765	NA	mg/L
MKTF-29	5/6/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-29	5/6/2019	Fluoride, Total	0.76	0.5	0.25	1600000	mg/L
MKTF-29	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-29	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-29	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-29	5/6/2019	Sulfate	540	10	1.07	600000000	mg/L
MKTF-29	8/23/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	8/23/2019	TPH DRO	0.59	1	0.35	16700	mg/L
MKTF-29	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	8/23/2019	Bromide	0.97	0.5	0.088765	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-29	8/23/2019	Chloride	620	25	25	250000000	mg/L
MKTF-29	8/23/2019	Fluoride, Total	0.61	0.5	0.073	1600000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-29	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	8/23/2019	Sulfate	430	10	1.338	600000000	mg/L
MKTF-29	8/23/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-29	8/23/2019	TPH DRO	0.39	1	0.35	16700	mg/L
MKTF-29	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-29	8/23/2019	Bromide	1	0.5	0.088765	NA	mg/L
MKTF-29	8/23/2019	Chloride	610	25	25	250000000	mg/L
MKTF-29	8/23/2019	Fluoride, Total	0.71	0.5	0.073	1600000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrate	0.097	0.5	0.025	10000000	mg/L
MKTF-29	8/23/2019	Nitrogen, Nitrite	0.46	0.5	0.027	1000000	mg/L
MKTF-29	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	8/23/2019	Sulfate	440	10	1.338	600000000	mg/L
MKTF-29	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-29	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-29	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-29	10/22/2019	Bromide	1.5	0.5	0.077	NA	mg/L
MKTF-29	10/22/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-29	10/22/2019	Fluoride, Total	0.42	0.5	0.144909	1600000	mg/L
MKTF-29	10/22/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-29	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-29	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-29	10/22/2019	Sulfate	320	10	1.338	600000000	mg/L
MKTF-29	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrate	0.091	0.1	0.006078	10000000	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-29	11/18/2019	Chemical Oxygen Demand	66.7	10	3	NA	mg/L
MKTF-29	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrate	0.072	0.1	0.006078	10000000	mg/L
MKTF-29	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-29	11/18/2019	Chemical Oxygen Demand	56.5	10	3	NA	mg/L
MKTF-29	2/25/2020	TPH GRO	0.013	0.05	0.0068	10100	mg/L
MKTF-29	2/25/2020	TPH DRO	0.21	0.4	0.2	16700	mg/L
MKTF-29	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-29	2/25/2020	Bromide	2.7	0.5	0.25	NA	mg/L
MKTF-29	2/25/2020	Chloride	1500	50	25	250000000	mg/L
MKTF-29	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-29	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-29	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-29	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	2/25/2020	Sulfate	230	10	5	600000000	mg/L
MKTF-29	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-29	9/20/2020	TPH DRO	0.26	0.07	0.067	16700	mg/L
MKTF-29	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-29	9/20/2020	Bromide	2.7	0.5	0.25	NA	mg/L
MKTF-29	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-29	9/20/2020	Nitrogen, Nitrate	0.14	0.5	0.1	10000000	mg/L
MKTF-29	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-29	9/20/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MKTF-29	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-29	9/20/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-29	9/20/2020	Chloride	18000	1000	500	250000000	mg/L
MKTF-29	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-29	12/15/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-29	12/15/2020	Bicarbonate	676	1	0.5	NA	mg/L
MKTF-29	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-29	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-29	12/15/2020	Sulfate	106	20	7.4	600000000	mg/L
MKTF-29	12/15/2020	Chloride	1670	200	24	250000000	mg/L
MKTF-29	12/15/2020	TPH DRO	847	131	105	16700	ug/L
MKTF-29	12/15/2020	C28-C40	ND	131	105	NA	ug/L
MKTF-29	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-29	9/20/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-30	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-30	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-30	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-30	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-30	11/17/2014	Bromide	1.3	0.1	0.026	NA	mg/L
MKTF-30	11/17/2014	Chloride	1400	50	2.2	250000000	mg/L
MKTF-30	11/17/2014	Fluoride, Total	0.56	0.1	0.015	1600000	mg/L
MKTF-30	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-30	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-30	11/17/2014	Sulfate	730	10	1.6	600000000	mg/L
MKTF-30	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/17/2014	TPH GRO	0.054	0.05	0.019	10100	mg/L
MKTF-30	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	3/11/2015	TPH GRO	0.053	0.05	0.012	10100	mg/L
MKTF-30	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	6/10/2015	TPH GRO	0.071	0.05	0.012	10100	mg/L
MKTF-30	8/20/2015	Bromide	1.6	0.5	0.39	NA	mg/L
MKTF-30	8/20/2015	Chloride	1300	50	34	250000000	mg/L
MKTF-30	8/20/2015	Fluoride, Total	0.79	0.5	0.15	1600000	mg/L
MKTF-30	8/20/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-30	8/20/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-30	8/20/2015	Sulfate	450	10	2.3	600000000	mg/L
MKTF-30	8/20/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	8/20/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	8/20/2015	TPH GRO	0.17	0.05	0.04	10100	mg/L
MKTF-30	11/4/2015	Bromide	0.65	0.1	0.068	NA	mg/L
MKTF-30	11/4/2015	Chloride	1300	50	34	250000000	mg/L
MKTF-30	11/4/2015	Fluoride, Total	0.99	0.1	0.032	1600000	mg/L
MKTF-30	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-30	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-30	11/4/2015	Sulfate	380	10	6.4	600000000	mg/L
MKTF-30	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-30	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/4/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-30	2/23/2016	Bromide	3.2	2	0.65	NA	mg/L
MKTF-30	2/23/2016	Chloride	1100	250	14	250000000	mg/L
MKTF-30	2/23/2016	Fluoride, Total	1.1	0.1	0.023	1600000	mg/L
MKTF-30	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-30	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-30	2/23/2016	Sulfate	320	10	1.3	600000000	mg/L
MKTF-30	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	2/23/2016	TPH GRO	0.13	0.05	0.025	10100	mg/L
MKTF-30	6/9/2016	Bromide	1.3	0.1	0.032	NA	mg/L
MKTF-30	6/9/2016	Chloride	890	50	2.8	250000000	mg/L
MKTF-30	6/9/2016	Fluoride, Total	1.3	0.1	0.023	1600000	mg/L
MKTF-30	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-30	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-30	6/9/2016	Sulfate	330	10	1.3	600000000	mg/L
MKTF-30	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	6/9/2016	TPH GRO	0.095	0.05	0.025	10100	mg/L
MKTF-30	9/7/2016	Bromide	1	0.1	0.044	NA	mg/L
MKTF-30	9/7/2016	Chloride	970	50	5.1	250000000	mg/L
MKTF-30	9/7/2016	Fluoride, Total	0.79	0.1	0.05	1600000	mg/L
MKTF-30	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-30	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-30	9/7/2016	Sulfate	330	10	2.8	600000000	mg/L
MKTF-30	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	9/7/2016	TPH GRO	0.23	0.05	0.015	10100	mg/L
MKTF-30	10/28/2016	Bromide	1.1	0.1	0.044	NA	mg/L
MKTF-30	10/28/2016	Chloride	810	50	5.1	250000000	mg/L
MKTF-30	10/28/2016	Fluoride, Total	1.1	0.1	0.05	1600000	mg/L
MKTF-30	10/28/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-30	10/28/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-30	10/28/2016	Sulfate	400	10	2.8	600000000	mg/L
MKTF-30	10/28/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-30	10/28/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	10/28/2016	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-30	3/29/2017	Bromide	0.37	0.1	0.031	NA	mg/L
MKTF-30	3/29/2017	Chloride	740	50	25	250000000	mg/L
MKTF-30	3/29/2017	Fluoride, Total	0.8	0.1	0.05	1600000	mg/L
MKTF-30	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-30	3/29/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-30	3/29/2017	Sulfate	360	50	9.6	600000000	mg/L
MKTF-30	3/29/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	3/29/2017	TPH GRO	0.14	0.05	0.0097	10100	mg/L
MKTF-30	6/5/2017	Bromide	0.78	0.1	0.014	NA	mg/L
MKTF-30	6/5/2017	Chloride	620	25	12	250000000	mg/L
MKTF-30	6/5/2017	Fluoride, Total	1	0.1	0.044	1600000	mg/L
MKTF-30	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-30	6/5/2017	Nitrate & Nitrite	0.3	1	0.13	NA	mg/L
MKTF-30	6/5/2017	Sulfate	560	10	1.9	600000000	mg/L
MKTF-30	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	6/5/2017	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	6/5/2017	TPH GRO	0.048	0.05	0.025	10100	mg/L
MKTF-30	10/3/2017	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-30	10/3/2017	Chloride	630	25	12	250000000	mg/L
MKTF-30	10/3/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-30	10/3/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	10/3/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-30	10/3/2017	Nitrogen, Nitrate	0.33	0.5	0.11	10000000	mg/L
MKTF-30	10/3/2017	Sulfate	510	10	1.9	600000000	mg/L
MKTF-30	10/3/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	10/3/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	10/3/2017	TPH GRO	0.1	0.05	0.0097	10100	mg/L
MKTF-30	11/20/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-30	11/20/2017	Chloride	620	25	12	250000000	mg/L
MKTF-30	11/20/2017	Fluoride, Total	0.88	0.5	0.22	1600000	mg/L
MKTF-30	11/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	11/20/2017	Nitrate & Nitrite	0.44	1	0.13	NA	mg/L
MKTF-30	11/20/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-30	11/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-30	11/20/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/20/2017	TPH GRO	0.075	0.05	0.025	10100	mg/L
MKTF-30	2/6/2018	Bromide	0.95	0.5	0.073	NA	mg/L
MKTF-30	2/6/2018	Chloride	550	25	12	250000000	mg/L
MKTF-30	2/6/2018	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
MKTF-30	2/6/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	2/6/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-30	2/6/2018	Sulfate	390	10	1.9	600000000	mg/L
MKTF-30	2/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	2/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	2/6/2018	TPH GRO	0.1	0.05	0.0097	10100	mg/L
MKTF-30	5/1/2018	Bromide	0.91	0.5	0.13	NA	mg/L
MKTF-30	5/1/2018	Chloride	400	25	1.5	250000000	mg/L
MKTF-30	5/1/2018	Fluoride, Total	1.3	0.5	0.15	1600000	mg/L
MKTF-30	5/1/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-30	5/1/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-30	5/1/2018	Sulfate	480	10	4.1	600000000	mg/L
MKTF-30	5/1/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	5/1/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	5/1/2018	TPH GRO	0.023	0.05	0.021	10100	mg/L
MKTF-30	8/20/2018	Bromide	0.93	0.5	0.13	NA	mg/L
MKTF-30	8/20/2018	Chloride	510	25	1.5	250000000	mg/L
MKTF-30	8/20/2018	Fluoride, Total	0.54	0.1	0.03	1600000	mg/L
MKTF-30	8/20/2018	Ortho-Phosphate	1.5	2.5	0.46	NA	mg/L
MKTF-30	8/20/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-30	8/20/2018	Sulfate	430	10	4.1	600000000	mg/L
MKTF-30	8/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	8/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	8/20/2018	TPH GRO	0.12	0.05	0.0097	10100	mg/L
MKTF-30	11/15/2018	Bromide	0.94	0.5	0.1	NA	mg/L
MKTF-30	11/15/2018	Chloride	460	25	25	250000000	mg/L
MKTF-30	11/15/2018	Fluoride, Total	1.2	0.5	0.5	1600000	mg/L
MKTF-30	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-30	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-30	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-30	11/15/2018	Sulfate	490	10	2.5	600000000	mg/L
MKTF-30	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-30	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-30	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-30	3/28/2019	TPH GRO	0.036	0.05	0.0307	10100	mg/L
MKTF-30	3/28/2019	Bromide	0.82	0.5	0.0675	NA	mg/L
MKTF-30	3/28/2019	Chloride	410	25	25	250000000	mg/L
MKTF-30	3/28/2019	Fluoride, Total	0.93	0.5	0.25	1600000	mg/L
MKTF-30	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
MKTF-30	3/28/2019	Phosphorus, Ortho	0.27	2.5	0.1305	NA	mg/L
MKTF-30	3/28/2019	Sulfate	510	10	1.28	600000000	mg/L
MKTF-30	3/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-30	5/6/2019	TPH GRO	0.043	0.05	0.0307	10100	mg/L
MKTF-30	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-30	5/6/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
MKTF-30	5/6/2019	Chloride	410	25	3.125	250000000	mg/L
MKTF-30	5/6/2019	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
MKTF-30	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-30	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-30	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-30	5/6/2019	Sulfate	540	10	1.07	600000000	mg/L
MKTF-30	8/23/2019	TPH GRO	0.047	0.05	0.0307	10100	mg/L
MKTF-30	8/23/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-30	8/23/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-30	8/23/2019	Bromide	0.89	0.5	0.088765	NA	mg/L
MKTF-30	8/23/2019	Chloride	480	25	25	250000000	mg/L
MKTF-30	8/23/2019	Fluoride, Total	1.3	0.5	0.073	1600000	mg/L
MKTF-30	8/23/2019	Nitrogen, Nitrate	0.22	0.5	0.025	10000000	mg/L
MKTF-30	8/23/2019	Nitrogen, Nitrite	0.37	0.5	0.027	1000000	mg/L
MKTF-30	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	8/23/2019	Sulfate	570	10	1.338	600000000	mg/L
MKTF-30	10/23/2019	TPH GRO	0.031	0.05	0.0211	10100	mg/L
MKTF-30	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-30	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-30	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-30	10/23/2019	Chloride	480	25	25	250000000	mg/L
MKTF-30	10/23/2019	Fluoride, Total	1.1	0.5	0.144909	1600000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-30	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	10/23/2019	Sulfate	480	10	1.338	600000000	mg/L
MKTF-30	10/23/2019	TPH GRO	0.038	0.05	0.0211	10100	mg/L
MKTF-30	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-30	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-30	10/23/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-30	10/23/2019	Chloride	490	25	25	250000000	mg/L
MKTF-30	10/23/2019	Fluoride, Total	1.1	0.5	0.144909	1600000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-30	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-30	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-30	10/23/2019	Sulfate	490	10	1.338	600000000	mg/L
MKTF-30	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-30	11/18/2019	Nitrogen, Nitrate	0.16	0.1	0.006078	10000000	mg/L
MKTF-30	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-30	11/18/2019	Chemical Oxygen Demand	23.5	10	3	NA	mg/L
MKTF-30	2/27/2020	TPH GRO	0.051	0.05	0.0068	10100	mg/L
MKTF-30	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-30	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-30	2/27/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-30	2/27/2020	Fluoride, Total	1.1	0.5	0.11	1600000	mg/L
MKTF-30	2/27/2020	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L
MKTF-30	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-30	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	2/27/2020	Sulfate	530	10	5	600000000	mg/L
MKTF-30	2/27/2020	Chloride	520	25	12	250000000	mg/L
MKTF-30	9/20/2020	TPH GRO	0.03	0.05	0.008	10100	mg/L
MKTF-30	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-30	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-30	9/20/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-30	9/20/2020	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-30	9/20/2020	Nitrogen, Nitrate	0.11	0.5	0.1	10000000	mg/L
MKTF-30	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-30	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-30	9/20/2020	Sulfate	520	10	5	600000000	mg/L
MKTF-30	9/20/2020	Solids, Total Suspended	320	8	8	NA	mg/L
MKTF-30	9/20/2020	Chloride	510	25	12	250000000	mg/L
MKTF-30	12/15/2020	Fluoride, Total	1.12	1	0.3	1600000	mg/L
MKTF-30	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-30	12/15/2020	Chloride	583	20	2.4	250000000	mg/L
MKTF-30	12/15/2020	Sulfate	529	20	7.4	600000000	mg/L
MKTF-30	12/15/2020	Phosphorus, Total	0.232	0.1	0.032	NA	mg/L
MKTF-30	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-30	12/15/2020	Bicarbonate	694	1	0.5	NA	mg/L
MKTF-30	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-30	12/15/2020	TPH DRO	368	138	111	16700	ug/L
MKTF-30	12/15/2020	C28-C40	ND	138	111	NA	ug/L
MKTF-30	9/20/2020	Solids, Total Suspended	320	8	8	NA	mg/L
MKTF-31	4/8/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-31	4/8/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	4/8/2014	TPH GRO	0.11	0.05	0.0092	10100	mg/L
MKTF-31	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-31	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/23/2014	TPH GRO	0.061	0.05	0.019	10100	mg/L
MKTF-31	11/17/2014	Bromide	ND	0.1	0.026	NA	mg/L
MKTF-31	11/17/2014	Chloride	920	50	2.2	250000000	mg/L
MKTF-31	11/17/2014	Fluoride, Total	ND	0.1	0.015	1600000	mg/L
MKTF-31	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-31	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-31	11/17/2014	Sulfate	82	10	1.6	600000000	mg/L
MKTF-31	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-31	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/17/2014	TPH GRO	0.068	0.05	0.019	10100	mg/L
MKTF-31	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	3/11/2015	TPH GRO	0.077	0.05	0.012	10100	mg/L
MKTF-31	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-31	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/10/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-31	8/21/2015	Bromide	1.5	0.5	0.39	NA	mg/L
MKTF-31	8/21/2015	Chloride	890	25	17	250000000	mg/L
MKTF-31	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-31	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-31	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-31	8/21/2015	Sulfate	71	2.5	0.57	600000000	mg/L
MKTF-31	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-31	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	8/21/2015	TPH GRO	0.1	0.05	0.04	10100	mg/L
MKTF-31	11/4/2015	Bromide	0.85	0.1	0.068	NA	mg/L
MKTF-31	11/4/2015	Chloride	850	25	17	250000000	mg/L
MKTF-31	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-31	11/4/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-31	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-31	11/4/2015	Sulfate	69	10	6.4	600000000	mg/L
MKTF-31	11/4/2015	TPH DRO	1.3	1	0.91	16700	mg/L
MKTF-31	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/4/2015	TPH GRO	0.086	0.05	0.012	10100	mg/L
MKTF-31	2/23/2016	Bromide	3	2	0.65	NA	mg/L
MKTF-31	2/23/2016	Chloride	830	50	2.7	250000000	mg/L
MKTF-31	2/23/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-31	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-31	2/23/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-31	2/23/2016	Sulfate	68	10	1.3	600000000	mg/L
MKTF-31	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	2/23/2016	TPH GRO	0.1	0.05	0.025	10100	mg/L
MKTF-31	6/9/2016	Bromide	1.5	0.1	0.032	NA	mg/L
MKTF-31	6/9/2016	Chloride	770	50	2.8	250000000	mg/L
MKTF-31	6/9/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-31	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-31	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-31	6/9/2016	Sulfate	69	10	1.3	600000000	mg/L
MKTF-31	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/9/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-31	9/8/2016	Bromide	1.3	0.1	0.044	NA	mg/L
MKTF-31	9/8/2016	Chloride	940	50	5.1	250000000	mg/L
MKTF-31	9/8/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	9/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-31	9/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-31	9/8/2016	Sulfate	70	10	2.8	600000000	mg/L
MKTF-31	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/8/2016	TPH GRO	0.23	0.05	0.015	10100	mg/L
MKTF-31	10/31/2016	Bromide	4.6	2	0.87	NA	mg/L
MKTF-31	10/31/2016	Chloride	720	50	5.1	250000000	mg/L
MKTF-31	10/31/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-31	10/31/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-31	10/31/2016	Sulfate	70	10	2.8	600000000	mg/L
MKTF-31	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-31	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	10/31/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-31	3/7/2017	Bromide	1.4	0.1	0.031	NA	mg/L
MKTF-31	3/7/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-31	3/7/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-31	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-31	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	3/7/2017	Sulfate	87	10	1.9	600000000	mg/L
MKTF-31	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	3/7/2017	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-31	6/5/2017	Bromide	1.4	0.1	0.014	NA	mg/L
MKTF-31	6/5/2017	Chloride	1200	50	25	250000000	mg/L
MKTF-31	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-31	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-31	6/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	6/5/2017	Sulfate	98	10	1.9	600000000	mg/L
MKTF-31	6/5/2017	TPH DRO	0.47	1	0.36	16700	mg/L
MKTF-31	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	6/5/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
MKTF-31	9/25/2017	Bromide	2.2	0.5	0.073	NA	mg/L
MKTF-31	9/25/2017	Chloride	770	25	12	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
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Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	9/25/2017	Sulfate	76	2.5	0.48	600000000	mg/L
MKTF-31	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	9/25/2017	TPH GRO	0.2	0.05	0.025	10100	mg/L
MKTF-31	11/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-31	11/21/2017	Chloride	890	25	12	250000000	mg/L
MKTF-31	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	11/21/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-31	11/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-31	11/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-31	11/21/2017	Sulfate	76	2.5	0.48	600000000	mg/L
MKTF-31	11/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/21/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
MKTF-31	2/5/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-31	2/5/2018	Chloride	750	25	12	250000000	mg/L
MKTF-31	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	2/5/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-31	2/5/2018	Sulfate	63	2.5	0.48	600000000	mg/L
MKTF-31	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-31	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	2/5/2018	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-31	5/6/2018	Bromide	0.34	0.1	0.027	NA	mg/L
MKTF-31	5/6/2018	Chloride	750	25	1.5	250000000	mg/L
MKTF-31	5/6/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
MKTF-31	5/6/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-31	5/6/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-31	5/6/2018	Sulfate	63	10	4.1	600000000	mg/L
MKTF-31	5/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	5/6/2018	TPH GRO	0.32	0.05	0.0097	10100	mg/L
MKTF-31	8/17/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-31	8/17/2018	Chloride	840	25	1.5	250000000	mg/L
MKTF-31	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-31	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-31	8/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-31	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-31	8/17/2018	Sulfate	64	2.5	1	600000000	mg/L
MKTF-31	8/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	8/17/2018	TPH GRO	0.22	0.05	0.0097	10100	mg/L
MKTF-31	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-31	11/15/2018	Chloride	810	25	25	250000000	mg/L
MKTF-31	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-31	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-31	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-31	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-31	11/15/2018	Sulfate	67	2.5	0.63	600000000	mg/L
MKTF-31	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-31	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-31	11/15/2018	TPH GRO	0.12	0.05	0.024	10100	mg/L
MKTF-31	2/20/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	2/20/2019	Bromide	1.3	0.5	0.0675	NA	mg/L
MKTF-31	2/20/2019	Chloride	760	25	25	250000000	mg/L
MKTF-31	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-31	2/20/2019	Phosphorus, Ortho	1.3	2.5	0.1305	NA	mg/L
MKTF-31	2/20/2019	Sulfate	65	2.5	0.32	600000000	mg/L
MKTF-31	2/20/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	2/20/2019	Bromide	1.3	0.5	0.0675	NA	mg/L
MKTF-31	2/20/2019	Chloride	770	25	25	250000000	mg/L
MKTF-31	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-31	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-31	2/20/2019	Phosphorus, Ortho	1.2	2.5	0.1305	NA	mg/L
MKTF-31	2/20/2019	Sulfate	67	2.5	0.32	600000000	mg/L
MKTF-31	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	5/6/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-31	5/6/2019	Chloride	1200	50	6.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-31	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrate	0.27	0.5	0.027	10000000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-31	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-31	5/6/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
MKTF-31	5/6/2019	TPH GRO	0.13	0.05	0.0307	10100	mg/L
MKTF-31	5/6/2019	TPH GRO	0.13	0.05	0.0307	10100	mg/L
MKTF-31	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-31	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	5/6/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-31	5/6/2019	Chloride	1200	50	6.25	250000000	mg/L
MKTF-31	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrate	0.25	0.5	0.027	10000000	mg/L
MKTF-31	5/6/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-31	5/6/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-31	5/6/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
MKTF-31	8/23/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-31	8/23/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-31	8/23/2019	Chloride	820	50	50	250000000	mg/L
MKTF-31	8/23/2019	Fluoride, Total	0.12	0.5	0.073	1600000	mg/L
MKTF-31	8/23/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-31	8/23/2019	Nitrogen, Nitrite	0.91	0.5	0.027	1000000	mg/L
MKTF-31	8/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-31	8/23/2019	Sulfate	82	2.5	0.3345	600000000	mg/L
MKTF-31	8/23/2019	TPH DRO	0.84	1	0.35	16700	mg/L
MKTF-31	8/23/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-31	10/22/2019	TPH GRO	0.096	0.05	0.0211	10100	mg/L
MKTF-31	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-31	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-31	10/22/2019	Bromide	1.6	0.5	0.077	NA	mg/L
MKTF-31	10/22/2019	Chloride	770	25	25	250000000	mg/L
MKTF-31	10/22/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-31	10/22/2019	Nitrogen, Nitrate	0.095	0.5	0.030387	10000000	mg/L
MKTF-31	10/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-31	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-31	10/22/2019	Sulfate	72	2.5	0.3345	600000000	mg/L
MKTF-31	11/18/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-31	11/18/2019	Nitrogen, Nitrate	0.052	0.1	0.006078	10000000	mg/L
MKTF-31	11/18/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-31	11/18/2019	Chemical Oxygen Demand	26.3	10	3	NA	mg/L
MKTF-31	2/25/2020	TPH GRO	0.22	0.05	0.0068	10100	mg/L
MKTF-31	2/25/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-31	2/25/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-31	2/25/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-31	2/25/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-31	2/25/2020	Chloride	820	25	12	250000000	mg/L
MKTF-31	2/25/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-31	2/25/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-31	2/25/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	2/25/2020	Sulfate	68	2.5	1.2	600000000	mg/L
MKTF-31	9/19/2020	TPH GRO	0.074	0.05	0.008	10100	mg/L
MKTF-31	9/19/2020	TPH DRO	0.2	0.07	0.067	16700	mg/L
MKTF-31	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-31	9/19/2020	Chloride	550	25	12	250000000	mg/L
MKTF-31	9/19/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-31	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-31	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-31	9/19/2020	Sulfate	59	2.5	1.2	600000000	mg/L
MKTF-31	9/19/2020	Nitrate & Nitrite	0.076	1	0.061	NA	mg/L
MKTF-31	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-31	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-31	12/18/2020	Chloride	610	20	2.4	250000000	mg/L
MKTF-31	12/18/2020	Sulfate	60.4	20	7.4	600000000	mg/L
MKTF-31	12/18/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-31	12/18/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-31	12/18/2020	Chloride	604	20	2.4	250000000	mg/L
MKTF-31	12/18/2020	Sulfate	58.7	20	7.4	600000000	mg/L
MKTF-31	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-31	12/18/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-31	12/18/2020	Bicarbonate	300	1	0.5	NA	mg/L
MKTF-31	12/18/2020	Bicarbonate	317	1	0.5	NA	mg/L
MKTF-31	12/18/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-31	12/18/2020	Phosphorus, Total	0.404	0.1	0.032	NA	mg/L
MKTF-31	12/18/2020	TPH (C6-C10)	257	100	47	NA	ug/L
MKTF-31	12/18/2020	TPH (C6-C10)	276	100	47	NA	ug/L
MKTF-31	12/18/2020	TPH DRO	728	143	115	16700	ug/L
MKTF-31	12/18/2020	C28-C40	ND	143	115	NA	ug/L
MKTF-31	12/18/2020	TPH DRO	800	141	113	16700	ug/L
MKTF-31	12/18/2020	C28-C40	ND	141	113	NA	ug/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-32	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	4/9/2014	TPH GRO	0.22	0.05	0.0092	10100	mg/L
MKTF-32	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-32	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/23/2014	TPH GRO	0.23	0.05	0.019	10100	mg/L
MKTF-32	11/17/2014	Bromide	1.3	0.1	0.026	NA	mg/L
MKTF-32	11/17/2014	Chloride	610	25	1.1	250000000	mg/L
MKTF-32	11/17/2014	Fluoride, Total	0.27	0.1	0.015	1600000	mg/L
MKTF-32	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-32	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-32	11/17/2014	Sulfate	100	10	1.6	600000000	mg/L
MKTF-32	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-32	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/17/2014	TPH GRO	0.28	0.25	0.096	10100	mg/L
MKTF-32	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	3/12/2015	TPH GRO	0.46	0.05	0.012	10100	mg/L
MKTF-32	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/9/2015	TPH GRO	0.58	0.05	0.012	10100	mg/L
MKTF-32	8/21/2015	Bromide	1.4	0.5	0.39	NA	mg/L
MKTF-32	8/21/2015	Chloride	580	25	17	250000000	mg/L
MKTF-32	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-32	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-32	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-32	8/21/2015	Sulfate	110	2.5	0.57	600000000	mg/L
MKTF-32	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	8/21/2015	TPH GRO	0.42	0.1	0.08	10100	mg/L
MKTF-32	11/5/2015	Bromide	1.2	0.1	0.068	NA	mg/L
MKTF-32	11/5/2015	Chloride	510	25	17	250000000	mg/L
MKTF-32	11/5/2015	Fluoride, Total	0.19	0.1	0.032	1600000	mg/L
MKTF-32	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-32	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-32	11/5/2015	Sulfate	100	10	6.4	600000000	mg/L
MKTF-32	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-32	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/5/2015	TPH GRO	0.57	0.05	0.012	10100	mg/L
MKTF-32	2/24/2016	Bromide	1.6	0.1	0.032	NA	mg/L
MKTF-32	2/24/2016	Chloride	450	25	1.4	250000000	mg/L
MKTF-32	2/24/2016	Fluoride, Total	0.28	0.1	0.023	1600000	mg/L
MKTF-32	2/24/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-32	2/24/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-32	2/24/2016	Sulfate	91	25	3.2	600000000	mg/L
MKTF-32	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	2/24/2016	TPH GRO	0.88	0.05	0.025	10100	mg/L
MKTF-32	6/9/2016	Bromide	1.4	0.1	0.032	NA	mg/L
MKTF-32	6/9/2016	Chloride	520	25	1.4	250000000	mg/L
MKTF-32	6/9/2016	Fluoride, Total	0.28	0.1	0.023	1600000	mg/L
MKTF-32	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-32	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-32	6/9/2016	Sulfate	100	10	1.3	600000000	mg/L
MKTF-32	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/9/2016	TPH GRO	0.81	0.05	0.025	10100	mg/L
MKTF-32	9/9/2016	Bromide	1.2	0.1	0.044	NA	mg/L
MKTF-32	9/9/2016	Chloride	460	25	2.5	250000000	mg/L
MKTF-32	9/9/2016	Fluoride, Total	0.18	0.1	0.05	1600000	mg/L
MKTF-32	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-32	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-32	9/9/2016	Sulfate	91	10	2.8	600000000	mg/L
MKTF-32	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/9/2016	TPH GRO	0.79	0.1	0.03	10100	mg/L
MKTF-32	10/31/2016	Bromide	3.1	2	0.87	NA	mg/L
MKTF-32	10/31/2016	Chloride	420	25	2.5	250000000	mg/L
MKTF-32	10/31/2016	Fluoride, Total	0.16	0.1	0.05	1600000	mg/L
MKTF-32	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-32	10/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-32	10/31/2016	Sulfate	95	10	2.8	600000000	mg/L
MKTF-32	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-32	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	10/31/2016	TPH GRO	0.92	0.05	0.025	10100	mg/L
MKTF-32	3/7/2017	Bromide	1.1	0.1	0.031	NA	mg/L
MKTF-32	3/7/2017	Chloride	400	25	12	250000000	mg/L
MKTF-32	3/7/2017	Fluoride, Total	0.17	0.1	0.05	1600000	mg/L
MKTF-32	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	3/7/2017	Sulfate	91	10	1.9	600000000	mg/L
MKTF-32	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	3/7/2017	TPH GRO	0.92	0.05	0.025	10100	mg/L
MKTF-32	6/6/2017	Bromide	1.2	0.1	0.014	NA	mg/L
MKTF-32	6/6/2017	Chloride	480	25	12	250000000	mg/L
MKTF-32	6/6/2017	Fluoride, Total	0.31	0.1	0.044	1600000	mg/L
MKTF-32	6/6/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-32	6/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	6/6/2017	Sulfate	92	10	1.9	600000000	mg/L
MKTF-32	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	6/6/2017	TPH GRO	0.71	0.05	0.025	10100	mg/L
MKTF-32	9/25/2017	Bromide	1.7	0.5	0.073	NA	mg/L
MKTF-32	9/25/2017	Chloride	420	25	12	250000000	mg/L
MKTF-32	9/25/2017	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
MKTF-32	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	9/25/2017	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-32	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	9/25/2017	TPH GRO	0.73	0.05	0.025	10100	mg/L
MKTF-32	11/27/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-32	11/27/2017	Chloride	420	25	12	250000000	mg/L
MKTF-32	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-32	11/27/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-32	11/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	11/27/2017	Sulfate	99	2.5	0.48	600000000	mg/L
MKTF-32	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-32	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/27/2017	TPH GRO	0.86	0.05	0.025	10100	mg/L
MKTF-32	2/7/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-32	2/7/2018	Chloride	420	25	12	250000000	mg/L
MKTF-32	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-32	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	2/7/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-32	2/7/2018	Sulfate	93	2.5	0.48	600000000	mg/L
MKTF-32	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	2/7/2018	TPH GRO	0.65	0.05	0.0097	10100	mg/L
MKTF-32	5/9/2018	Bromide	1	0.1	0.027	NA	mg/L
MKTF-32	5/9/2018	Chloride	430	25	1.5	250000000	mg/L
MKTF-32	5/9/2018	Fluoride, Total	0.049	0.1	0.03	1600000	mg/L
MKTF-32	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-32	5/9/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-32	5/9/2018	Sulfate	83	10	4.1	600000000	mg/L
MKTF-32	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	5/9/2018	TPH GRO	0.64	0.05	0.0097	10100	mg/L
MKTF-32	8/28/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-32	8/28/2018	Chloride	440	25	9.1	250000000	mg/L
MKTF-32	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-32	8/28/2018	Ortho-Phosphate	1.9	2.5	0.46	NA	mg/L
MKTF-32	8/28/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-32	8/28/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-32	8/28/2018	Sulfate	94	2.5	1	600000000	mg/L
MKTF-32	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	8/28/2018	TPH GRO	0.7	0.05	0.024	10100	mg/L
MKTF-32	11/15/2018	Bromide	1.2	0.5	0.1	NA	mg/L
MKTF-32	11/15/2018	Chloride	370	25	25	250000000	mg/L
MKTF-32	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-32	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-32	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-32	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-32	11/15/2018	Sulfate	89	2.5	0.63	600000000	mg/L
MKTF-32	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-32	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-32	11/15/2018	TPH GRO	0.56	0.05	0.024	10100	mg/L
MKTF-32	2/13/2019	TPH GRO	0.43	0.05	0.0211	10100	mg/L
MKTF-32	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	2/13/2019	Bromide	1.1	0.5	0.0675	NA	mg/L
MKTF-32	2/13/2019	Chloride	420	25	25	250000000	mg/L
MKTF-32	2/13/2019	Fluoride, Total	0.29	0.5	0.25	1600000	mg/L
MKTF-32	2/13/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-32	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-32	2/13/2019	Phosphorus, Ortho	0.99	2.5	0.1305	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-32	2/13/2019	Sulfate	89	2.5	0.32	600000000	mg/L
MKTF-32	5/7/2019	TPH GRO	0.47	0.1	0.0614	10100	mg/L
MKTF-32	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	5/7/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-32	5/7/2019	Chloride	450	25	3.125	250000000	mg/L
MKTF-32	5/7/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-32	5/7/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-32	5/7/2019	Nitrogen, Nitrite	0.3	0.5	0.02246	1000000	mg/L
MKTF-32	5/7/2019	Phosphorus, Ortho	0.72	2.5	0.2	NA	mg/L
MKTF-32	5/7/2019	Sulfate	93	2.5	0.2675	600000000	mg/L
MKTF-32	8/20/2019	TPH GRO	0.5	0.05	0.0307	10100	mg/L
MKTF-32	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-32	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-32	8/20/2019	Bromide	1.1	0.5	0.088765	NA	mg/L
MKTF-32	8/20/2019	Chloride	400	25	25	250000000	mg/L
MKTF-32	8/20/2019	Fluoride, Total	0.28	0.5	0.073	1600000	mg/L
MKTF-32	8/20/2019	Nitrogen, Nitrate	0.41	0.5	0.025	10000000	mg/L
MKTF-32	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-32	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-32	8/20/2019	Sulfate	92	2.5	0.3345	600000000	mg/L
MKTF-32	10/23/2019	Sulfate	90	2.5	0.3345	600000000	mg/L
MKTF-32	10/23/2019	TPH GRO	0.28	0.05	0.0211	10100	mg/L
MKTF-32	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-32	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-32	10/23/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-32	10/23/2019	Chloride	400	25	25	250000000	mg/L
MKTF-32	10/23/2019	Fluoride, Total	0.37	0.5	0.144909	1600000	mg/L
MKTF-32	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-32	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-32	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-32	2/27/2020	TPH GRO	0.6	0.1	0.014	10100	mg/L
MKTF-32	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-32	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-32	2/27/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-32	2/27/2020	Fluoride, Total	0.3	0.5	0.11	1600000	mg/L
MKTF-32	2/27/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-32	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-32	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	2/27/2020	Sulfate	91	2.5	1.2	600000000	mg/L
MKTF-32	2/27/2020	Chloride	400	25	12	250000000	mg/L
MKTF-32	9/21/2020	TPH GRO	0.028	0.1	0.016	10100	mg/L
MKTF-32	9/21/2020	TPH DRO	0.22	0.07	0.067	16700	mg/L
MKTF-32	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-32	9/21/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-32	9/21/2020	Fluoride, Total	0.36	0.5	0.22	1600000	mg/L
MKTF-32	9/21/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-32	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-32	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-32	9/21/2020	Sulfate	84	2.5	1.2	600000000	mg/L
MKTF-32	9/21/2020	Chloride	370	10	5	250000000	mg/L
MKTF-32	9/21/2020	Solids, Total Suspended	16	4	4	NA	mg/L
MKTF-32	12/15/2020	Bicarbonate	683	1	0.5	NA	mg/L
MKTF-32	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-32	12/15/2020	Phosphorus, Total	0.136	0.1	0.032	NA	mg/L
MKTF-32	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-32	12/15/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-32	12/15/2020	Chloride	324	20	2.4	250000000	mg/L
MKTF-32	12/15/2020	Sulfate	65.5	20	7.4	600000000	mg/L
MKTF-32	12/15/2020	TPH (C6-C10)	856	100	47	NA	ug/L
MKTF-32	12/15/2020	TPH DRO	631	140	112	16700	ug/L
MKTF-32	12/15/2020	C28-C40	ND	140	112	NA	ug/L
MKTF-32	9/21/2020	Solids, Total Suspended	16	4	4	NA	mg/L
MKTF-33	4/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-33	4/10/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	4/10/2014	TPH GRO	0.21	0.05	0.019	10100	mg/L
MKTF-33	9/23/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-33	9/23/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/23/2014	TPH GRO	0.25	0.05	0.019	10100	mg/L
MKTF-33	11/17/2014	Bromide	0.61	0.1	0.026	NA	mg/L
MKTF-33	11/17/2014	Chloride	98	10	0.43	250000000	mg/L
MKTF-33	11/17/2014	Fluoride, Total	0.31	0.1	0.015	1600000	mg/L
MKTF-33	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-33	11/17/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
MKTF-33	11/17/2014	Sulfate	360	10	1.6	600000000	mg/L
MKTF-33	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-33	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/17/2014	TPH GRO	0.36	0.25	0.096	10100	mg/L
MKTF-33	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	3/12/2015	TPH GRO	0.35	0.05	0.012	10100	mg/L
MKTF-33	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/9/2015	TPH GRO	0.42	0.05	0.012	10100	mg/L
MKTF-33	8/21/2015	Bromide	0.61	0.5	0.39	NA	mg/L
MKTF-33	8/21/2015	Chloride	95	10	2.7	250000000	mg/L
MKTF-33	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-33	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-33	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-33	8/21/2015	Sulfate	260	10	2.3	600000000	mg/L
MKTF-33	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	8/21/2015	TPH GRO	0.47	0.05	0.04	10100	mg/L
MKTF-33	11/9/2015	Bromide	0.66	0.1	0.068	NA	mg/L
MKTF-33	11/9/2015	Chloride	99	10	6.8	250000000	mg/L
MKTF-33	11/9/2015	Fluoride, Total	0.34	0.1	0.032	1600000	mg/L
MKTF-33	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-33	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-33	11/9/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-33	11/9/2015	Sulfate	290	10	6.4	600000000	mg/L
MKTF-33	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-33	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/9/2015	TPH GRO	0.53	0.05	0.012	10100	mg/L
MKTF-33	2/25/2016	Bromide	0.81	0.1	0.032	NA	mg/L
MKTF-33	2/25/2016	Chloride	100	10	0.55	250000000	mg/L
MKTF-33	2/25/2016	Fluoride, Total	0.25	0.1	0.023	1600000	mg/L
MKTF-33	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-33	2/25/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-33	2/25/2016	Sulfate	310	10	1.3	600000000	mg/L
MKTF-33	2/25/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	2/25/2016	TPH GRO	0.35	0.05	0.025	10100	mg/L
MKTF-33	6/10/2016	Bromide	0.54	0.1	0.032	NA	mg/L
MKTF-33	6/10/2016	Chloride	100	10	0.55	250000000	mg/L
MKTF-33	6/10/2016	Fluoride, Total	0.3	0.1	0.023	1600000	mg/L
MKTF-33	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-33	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-33	6/10/2016	Sulfate	340	10	2.8	600000000	mg/L
MKTF-33	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/10/2016	TPH GRO	0.69	0.05	0.025	10100	mg/L
MKTF-33	9/10/2016	Bromide	0.49	0.1	0.044	NA	mg/L
MKTF-33	9/10/2016	Chloride	94	10	1	250000000	mg/L
MKTF-33	9/10/2016	Fluoride, Total	0.13	0.1	0.05	1600000	mg/L
MKTF-33	9/10/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-33	9/10/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-33	9/10/2016	Sulfate	340	10	2.8	600000000	mg/L
MKTF-33	9/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	9/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/10/2016	TPH GRO	5.2	1	0.3	10100	mg/L
MKTF-33	11/1/2016	Bromide	0.46	0.1	0.044	NA	mg/L
MKTF-33	11/1/2016	Chloride	87	10	1	250000000	mg/L
MKTF-33	11/1/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-33	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-33	11/1/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-33	11/1/2016	Sulfate	320	10	2.8	600000000	mg/L
MKTF-33	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-33	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/1/2016	TPH GRO	0.31	0.25	0.13	10100	mg/L
MKTF-33	3/8/2017	Bromide	0.47	0.1	0.031	NA	mg/L
MKTF-33	3/8/2017	Chloride	96	10	5	250000000	mg/L
MKTF-33	3/8/2017	Fluoride, Total	0.22	0.1	0.05	1600000	mg/L
MKTF-33	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-33	3/8/2017	Nitrate & Nitrite	0.19	1	0.13	NA	mg/L
MKTF-33	3/8/2017	Sulfate	330	10	1.9	600000000	mg/L
MKTF-33	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	3/8/2017	TPH GRO	0.3	0.05	0.025	10100	mg/L
MKTF-33	6/8/2017	Bromide	0.46	0.1	0.014	NA	mg/L
MKTF-33	6/8/2017	Chloride	92	10	5	250000000	mg/L
MKTF-33	6/8/2017	Fluoride, Total	0.17	0.1	0.044	1600000	mg/L
MKTF-33	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-33	6/8/2017	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
MKTF-33	6/8/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-33	6/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	6/8/2017	TPH GRO	0.25	0.05	0.025	10100	mg/L
MKTF-33	9/25/2017	Bromide	0.68	0.5	0.073	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	9/25/2017	Chloride	93	10	5	250000000	mg/L
MKTF-33	9/25/2017	Fluoride, Total	0.33	0.5	0.22	1600000	mg/L
MKTF-33	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	9/25/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-33	9/25/2017	Sulfate	270	10	1.9	600000000	mg/L
MKTF-33	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	9/25/2017	TPH GRO	0.26	0.05	0.025	10100	mg/L
MKTF-33	11/28/2017	Bromide	0.63	0.5	0.073	NA	mg/L
MKTF-33	11/28/2017	Chloride	96	10	5	250000000	mg/L
MKTF-33	11/28/2017	Fluoride, Total	0.23	0.5	0.22	1600000	mg/L
MKTF-33	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	11/28/2017	Nitrate & Nitrite	0.32	1	0.13	NA	mg/L
MKTF-33	11/28/2017	Sulfate	250	10	1.9	600000000	mg/L
MKTF-33	11/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-33	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/28/2017	TPH GRO	0.35	0.05	0.0097	10100	mg/L
MKTF-33	2/8/2018	Bromide	0.56	0.5	0.073	NA	mg/L
MKTF-33	2/8/2018	Chloride	100	10	5	250000000	mg/L
MKTF-33	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-33	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	2/8/2018	Nitrate & Nitrite	0.18	1	0.13	NA	mg/L
MKTF-33	2/8/2018	Sulfate	280	10	1.9	600000000	mg/L
MKTF-33	2/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-33	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	2/8/2018	TPH GRO	0.22	0.05	0.0097	10100	mg/L
MKTF-33	5/10/2018	Bromide	0.55	0.1	0.027	NA	mg/L
MKTF-33	5/10/2018	Chloride	100	10	0.59	250000000	mg/L
MKTF-33	5/10/2018	Fluoride, Total	0.15	0.1	0.03	1600000	mg/L
MKTF-33	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-33	5/10/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-33	5/10/2018	Nitrogen, Nitrate	0.15	0.1	0.0066	10000000	mg/L
MKTF-33	5/10/2018	Sulfate	210	10	4.1	600000000	mg/L
MKTF-33	5/10/2018	TPH DRO	1.5	1	0.63	16700	mg/L
MKTF-33	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	5/10/2018	TPH GRO	0.5	0.05	0.0097	10100	mg/L
MKTF-33	8/30/2018	Bromide	0.6	0.5	0.13	NA	mg/L
MKTF-33	8/30/2018	Chloride	93	10	0.59	250000000	mg/L
MKTF-33	8/30/2018	Fluoride, Total	0.22	0.5	0.15	1600000	mg/L
MKTF-33	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-33	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-33	8/30/2018	Nitrogen, Nitrate	0.23	0.5	0.033	10000000	mg/L
MKTF-33	8/30/2018	Sulfate	230	2.5	1	600000000	mg/L
MKTF-33	8/30/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-33	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	8/30/2018	TPH GRO	0.49	0.1	0.019	10100	mg/L
MKTF-33	11/28/2018	Bromide	0.64	0.5	0.1	NA	mg/L
MKTF-33	11/28/2018	Chloride	97	10	10	250000000	mg/L
MKTF-33	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-33	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-33	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-33	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-33	11/28/2018	Sulfate	220	10	2.5	600000000	mg/L
MKTF-33	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-33	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-33	11/28/2018	TPH GRO	0.24	0.05	0.024	10100	mg/L
MKTF-33	5/9/2019	TPH GRO	0.21	0.05	0.0307	10100	mg/L
MKTF-33	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-33	5/9/2019	Bromide	0.68	0.5	0.088765	NA	mg/L
MKTF-33	5/9/2019	Chloride	110	10	1.25	250000000	mg/L
MKTF-33	5/9/2019	Fluoride, Total	0.33	0.5	0.25	1600000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrate	0.16	0.5	0.027	10000000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-33	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-33	5/9/2019	Sulfate	240	2.5	0.2675	600000000	mg/L
MKTF-33	5/9/2019	TPH GRO	0.31	0.05	0.0307	10100	mg/L
MKTF-33	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-33	5/9/2019	Bromide	0.7	0.5	0.088765	NA	mg/L
MKTF-33	5/9/2019	Chloride	110	10	1.25	250000000	mg/L
MKTF-33	5/9/2019	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrate	0.15	0.5	0.027	10000000	mg/L
MKTF-33	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-33	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-33	5/9/2019	Sulfate	220	2.5	0.2675	600000000	mg/L
MKTF-33	8/20/2019	TPH GRO	0.53	0.05	0.0307	10100	mg/L
MKTF-33	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-33	8/20/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-33	8/20/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
MKTF-33	8/20/2019	Chloride	110	10	10	250000000	mg/L
MKTF-33	8/20/2019	Fluoride, Total	0.29	0.5	0.073	1600000	mg/L
MKTF-33	8/20/2019	Nitrogen, Nitrate	0.14	0.5	0.025	10000000	mg/L
MKTF-33	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-33	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-33	8/20/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MKTF-33	10/24/2019	TPH GRO	0.49	0.1	0.0386	10100	mg/L
MKTF-33	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-33	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-33	10/24/2019	Bromide	0.83	0.5	0.077	NA	mg/L
MKTF-33	10/24/2019	Chloride	110	10	10	250000000	mg/L
MKTF-33	10/24/2019	Fluoride, Total	0.38	0.5	0.144909	1600000	mg/L
MKTF-33	10/24/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-33	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-33	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-33	10/24/2019	Sulfate	190	2.5	0.3345	600000000	mg/L
MKTF-33	2/28/2020	TPH GRO	0.73	0.1	0.014	10100	mg/L
MKTF-33	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-33	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-33	2/28/2020	Bromide	0.83	0.5	0.25	NA	mg/L
MKTF-33	2/28/2020	Fluoride, Total	0.27	0.5	0.11	1600000	mg/L
MKTF-33	2/28/2020	Nitrogen, Nitrate	0.31	0.5	0.11	10000000	mg/L
MKTF-33	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-33	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-33	2/28/2020	Sulfate	170	2.5	1.2	600000000	mg/L
MKTF-33	2/28/2020	Chloride	130	10	5	250000000	mg/L
MKTF-34	4/9/2014	TPH DRO	ND	1	0.57	16700	mg/L
MKTF-34	4/9/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	4/9/2014	TPH GRO	ND	0.05	0.0092	10100	mg/L
MKTF-34	9/24/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-34	9/24/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/24/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-34	11/17/2014	Bromide	2.2	0.1	0.026	NA	mg/L
MKTF-34	11/17/2014	Chloride	400	25	1.1	250000000	mg/L
MKTF-34	11/17/2014	Fluoride, Total	0.54	0.1	0.015	1600000	mg/L
MKTF-34	11/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MKTF-34	11/17/2014	Nitrate & Nitrite	6.6	1	0.083	NA	mg/L
MKTF-34	11/17/2014	Sulfate	73	10	1.6	600000000	mg/L
MKTF-34	11/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-34	11/17/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-34	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	6/8/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	6/8/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/8/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	8/18/2015	Bromide	2.3	0.1	0.077	NA	mg/L
MKTF-34	8/18/2015	Chloride	350	25	6.7	250000000	mg/L
MKTF-34	8/18/2015	Fluoride, Total	0.44	0.1	0.029	1600000	mg/L
MKTF-34	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-34	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-34	8/18/2015	Nitrogen, Nitrate	8.6	2	0.64	10000000	mg/L
MKTF-34	8/18/2015	Sulfate	100	10	2.3	600000000	mg/L
MKTF-34	8/18/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	8/18/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	11/3/2015	Bromide	1.9	0.1	0.068	NA	mg/L
MKTF-34	11/3/2015	Chloride	370	10	6.8	250000000	mg/L
MKTF-34	11/3/2015	Fluoride, Total	0.46	0.1	0.032	1600000	mg/L
MKTF-34	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-34	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-34	11/3/2015	Nitrogen, Nitrate	8.6	2	1.2	10000000	mg/L
MKTF-34	11/3/2015	Sulfate	100	10	6.4	600000000	mg/L
MKTF-34	11/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-34	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/3/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-34	2/25/2016	Bromide	2	0.1	0.032	NA	mg/L
MKTF-34	2/25/2016	Chloride	380	10	0.55	250000000	mg/L
MKTF-34	2/25/2016	Fluoride, Total	0.53	0.1	0.023	1600000	mg/L
MKTF-34	2/25/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-34	2/25/2016	Nitrate & Nitrite	18	1	0.42	NA	mg/L
MKTF-34	2/25/2016	Sulfate	110	10	1.3	600000000	mg/L
MKTF-34	2/25/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	2/25/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	2/25/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	6/10/2016	Bromide	2	0.1	0.032	NA	mg/L
MKTF-34	6/10/2016	Chloride	370	10	0.55	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	6/10/2016	Fluoride, Total	0.52	0.1	0.023	1600000	mg/L
MKTF-34	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-34	6/10/2016	Nitrate & Nitrite	7.7	1	0.46	NA	mg/L
MKTF-34	6/10/2016	Sulfate	130	10	1.3	600000000	mg/L
MKTF-34	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/10/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	9/13/2016	Bromide	1.6	0.1	0.044	NA	mg/L
MKTF-34	9/13/2016	Chloride	300	10	1	250000000	mg/L
MKTF-34	9/13/2016	Fluoride, Total	0.42	0.1	0.05	1600000	mg/L
MKTF-34	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-34	9/13/2016	Nitrate & Nitrite	9.1	1	0.46	NA	mg/L
MKTF-34	9/13/2016	Sulfate	200	10	2.8	600000000	mg/L
MKTF-34	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/13/2016	TPH GRO	0.033	0.05	0.015	10100	mg/L
MKTF-34	11/8/2016	Bromide	1.5	0.1	0.044	NA	mg/L
MKTF-34	11/8/2016	Chloride	240	10	1	250000000	mg/L
MKTF-34	11/8/2016	Fluoride, Total	0.46	0.1	0.05	1600000	mg/L
MKTF-34	11/8/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-34	11/8/2016	Nitrate & Nitrite	8.3	1	0.46	NA	mg/L
MKTF-34	11/8/2016	Sulfate	180	10	2.8	600000000	mg/L
MKTF-34	11/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-34	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/8/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	3/1/2017	Bromide	2.3	0.1	0.031	NA	mg/L
MKTF-34	3/1/2017	Chloride	310	10	5	250000000	mg/L
MKTF-34	3/1/2017	Fluoride, Total	0.45	0.1	0.05	1600000	mg/L
MKTF-34	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-34	3/1/2017	Nitrate & Nitrite	9	1	0.13	NA	mg/L
MKTF-34	3/1/2017	Sulfate	220	10	1.9	600000000	mg/L
MKTF-34	3/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	3/1/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	6/14/2017	Bromide	1.8	0.5	0.073	NA	mg/L
MKTF-34	6/14/2017	Chloride	280	10	5	250000000	mg/L
MKTF-34	6/14/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-34	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	6/14/2017	Nitrate & Nitrite	8.4	1	0.13	NA	mg/L
MKTF-34	6/14/2017	Sulfate	210	10	1.9	600000000	mg/L
MKTF-34	6/14/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	6/14/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	9/26/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-34	9/26/2017	Chloride	280	10	5	250000000	mg/L
MKTF-34	9/26/2017	Fluoride, Total	0.29	0.5	0.22	1600000	mg/L
MKTF-34	9/26/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	9/26/2017	Nitrate & Nitrite	7.6	1	0.13	NA	mg/L
MKTF-34	9/26/2017	Sulfate	220	10	1.9	600000000	mg/L
MKTF-34	9/26/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	9/26/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	9/26/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-34	12/1/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-34	12/1/2017	Chloride	270	10	5	250000000	mg/L
MKTF-34	12/1/2017	Fluoride, Total	0.54	0.5	0.22	1600000	mg/L
MKTF-34	12/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	12/1/2017	Nitrate & Nitrite	8	1	0.13	NA	mg/L
MKTF-34	12/1/2017	Sulfate	230	10	1.9	600000000	mg/L
MKTF-34	12/1/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-34	12/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	12/1/2017	TPH GRO	0.027	0.05	0.0097	10100	mg/L
MKTF-34	2/16/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-34	2/16/2018	Chloride	230	10	5	250000000	mg/L
MKTF-34	2/16/2018	Fluoride, Total	0.45	0.5	0.22	1600000	mg/L
MKTF-34	2/16/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/16/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-34	2/16/2018	Nitrogen, Nitrate	8.4	0.5	0.11	10000000	mg/L
MKTF-34	2/16/2018	Sulfate	230	10	1.9	600000000	mg/L
MKTF-34	2/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	2/16/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	2/16/2018	TPH GRO	0.012	0.05	0.0097	10100	mg/L
MKTF-34	5/4/2018	Bromide	1.2	0.1	0.027	NA	mg/L
MKTF-34	5/4/2018	Chloride	230	10	0.59	250000000	mg/L
MKTF-34	5/4/2018	Fluoride, Total	0.31	0.1	0.03	1600000	mg/L
MKTF-34	5/4/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-34	5/4/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-34	5/4/2018	Nitrogen, Nitrate	8.1	2	0.13	10000000	mg/L
MKTF-34	5/4/2018	Sulfate	250	10	4.1	600000000	mg/L
MKTF-34	5/4/2018	TPH DRO	ND	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	5/4/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	5/4/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-34	8/24/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-34	8/24/2018	Chloride	220	10	0.59	250000000	mg/L
MKTF-34	8/24/2018	Fluoride, Total	0.32	0.5	0.15	1600000	mg/L
MKTF-34	8/24/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-34	8/24/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-34	8/24/2018	Nitrogen, Nitrate	8.1	0.5	0.033	10000000	mg/L
MKTF-34	8/24/2018	Sulfate	230	10	4.1	600000000	mg/L
MKTF-34	8/24/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	8/24/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	8/24/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-34	11/28/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-34	11/28/2018	Chloride	210	10	10	250000000	mg/L
MKTF-34	11/28/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-34	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-34	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-34	11/28/2018	Nitrogen, Nitrate	8.4	0.5	0.25	10000000	mg/L
MKTF-34	11/28/2018	Sulfate	280	10	2.5	600000000	mg/L
MKTF-34	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-34	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-34	11/28/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-34	5/9/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-34	5/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-34	5/9/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-34	5/9/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MKTF-34	5/9/2019	Chloride	890	50	6.25	250000000	mg/L
MKTF-34	5/9/2019	Fluoride, Total	0.35	0.5	0.25	1600000	mg/L
MKTF-34	5/9/2019	Nitrogen, Nitrate	9.7	0.5	0.027	10000000	mg/L
MKTF-34	5/9/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-34	5/9/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-34	5/9/2019	Sulfate	60	2.5	0.2675	600000000	mg/L
MKTF-34	8/19/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-34	8/19/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-34	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-34	8/19/2019	Bromide	0.56	0.5	0.088765	NA	mg/L
MKTF-34	8/19/2019	Chloride	740	25	25	250000000	mg/L
MKTF-34	8/19/2019	Fluoride, Total	0.25	0.5	0.073	1600000	mg/L
MKTF-34	8/19/2019	Nitrogen, Nitrate	9.7	0.5	0.025	10000000	mg/L
MKTF-34	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-34	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-34	8/19/2019	Sulfate	110	2.5	0.3345	600000000	mg/L
MKTF-34	10/29/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-34	10/29/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-34	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-34	10/29/2019	Bromide	1.1	0.5	0.077	NA	mg/L
MKTF-34	10/29/2019	Chloride	450	25	25	250000000	mg/L
MKTF-34	10/29/2019	Fluoride, Total	0.5	0.5	0.144909	1600000	mg/L
MKTF-34	10/29/2019	Nitrogen, Nitrate	14	0.5	0.030387	10000000	mg/L
MKTF-34	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-34	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-34	10/29/2019	Sulfate	200	2.5	0.3345	600000000	mg/L
MKTF-34	2/5/2020	TPH GRO	ND	0.05	0.021	10100	mg/L
MKTF-34	2/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/5/2020	Bromide	ND	0.5	0.25	NA	mg/L
MKTF-34	2/5/2020	Fluoride, Total	0.56	0.5	0.11	1600000	mg/L
MKTF-34	2/5/2020	Nitrogen, Nitrate	16	0.5	0.11	10000000	mg/L
MKTF-34	2/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-34	2/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/5/2020	Sulfate	82	2.5	1.2	600000000	mg/L
MKTF-34	2/5/2020	Chloride	560	25	12	250000000	mg/L
MKTF-34	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-34	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/28/2020	Bromide	0.29	0.5	0.25	NA	mg/L
MKTF-34	2/28/2020	Fluoride, Total	0.62	0.5	0.11	1600000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-34	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/28/2020	Sulfate	52	2.5	1.2	600000000	mg/L
MKTF-34	2/28/2020	Chloride	860	25	12	250000000	mg/L
MKTF-34	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-34	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-34	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-34	2/28/2020	Bromide	0.31	0.5	0.25	NA	mg/L
MKTF-34	2/28/2020	Fluoride, Total	0.58	0.5	0.11	1600000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-34	2/28/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-34	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	2/28/2020	Sulfate	57	2.5	1.2	600000000	mg/L
MKTF-34	2/28/2020	Chloride	840	25	12	250000000	mg/L
MKTF-34	9/16/2020	TPH GRO	0.04	0.05	0.008	10100	mg/L
MKTF-34	9/16/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-34	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-34	9/16/2020	Bromide	0.92	0.5	0.25	NA	mg/L
MKTF-34	9/16/2020	Fluoride, Total	0.56	0.5	0.22	1600000	mg/L
MKTF-34	9/16/2020	Nitrogen, Nitrate	8.4	0.5	0.1	10000000	mg/L
MKTF-34	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-34	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-34	9/16/2020	Sulfate	120	2.5	1.2	600000000	mg/L
MKTF-34	9/16/2020	Chloride	490	25	12	250000000	mg/L
MKTF-35	11/21/2014	TPH DRO	3.3	1	0.83	16700	mg/L
MKTF-35	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/21/2014	TPH GRO	1.6	0.25	0.096	10100	mg/L
MKTF-35	3/17/2015	TPH DRO	6	1	0.91	16700	mg/L
MKTF-35	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	3/17/2015	TPH GRO	3.7	0.25	0.06	10100	mg/L
MKTF-35	6/4/2015	TPH DRO	2.3	1	0.91	16700	mg/L
MKTF-35	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/4/2015	TPH GRO	2.9	0.05	0.012	10100	mg/L
MKTF-35	8/18/2015	Bromide	0.33	0.1	0.077	NA	mg/L
MKTF-35	8/18/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-35	8/18/2015	Fluoride, Total	0.73	0.1	0.029	1600000	mg/L
MKTF-35	8/18/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-35	8/18/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-35	8/18/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
MKTF-35	8/18/2015	Sulfate	20	0.5	0.11	600000000	mg/L
MKTF-35	8/18/2015	TPH DRO	2.9	1	0.91	16700	mg/L
MKTF-35	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	8/18/2015	TPH GRO	4.7	0.25	0.06	10100	mg/L
MKTF-35	11/3/2015	Bromide	0.49	0.1	0.068	NA	mg/L
MKTF-35	11/3/2015	Chloride	100	10	6.8	250000000	mg/L
MKTF-35	11/3/2015	Fluoride, Total	0.79	0.1	0.032	1600000	mg/L
MKTF-35	11/3/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-35	11/3/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-35	11/3/2015	Nitrogen, Nitrate	ND	0.1	0.058	10000000	mg/L
MKTF-35	11/3/2015	Sulfate	16	0.5	0.32	600000000	mg/L
MKTF-35	11/3/2015	TPH DRO	2.8	1	0.91	16700	mg/L
MKTF-35	11/3/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/3/2015	TPH GRO	1.5	0.5	0.12	10100	mg/L
MKTF-35	2/26/2016	Bromide	0.38	0.1	0.032	NA	mg/L
MKTF-35	2/26/2016	Chloride	65	10	0.55	250000000	mg/L
MKTF-35	2/26/2016	Fluoride, Total	0.45	0.1	0.023	1600000	mg/L
MKTF-35	2/26/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-35	2/26/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-35	2/26/2016	Sulfate	99	10	1.3	600000000	mg/L
MKTF-35	2/26/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	2/26/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	2/26/2016	TPH GRO	0.87	0.25	0.13	10100	mg/L
MKTF-35	6/10/2016	Bromide	0.22	0.1	0.032	NA	mg/L
MKTF-35	6/10/2016	Chloride	51	10	0.55	250000000	mg/L
MKTF-35	6/10/2016	Fluoride, Total	0.79	0.1	0.023	1600000	mg/L
MKTF-35	6/10/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-35	6/10/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-35	6/10/2016	Sulfate	210	10	1.3	600000000	mg/L
MKTF-35	6/10/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	6/10/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/10/2016	TPH GRO	1.4	0.05	0.025	10100	mg/L
MKTF-35	9/13/2016	Bromide	0.29	0.1	0.044	NA	mg/L
MKTF-35	9/13/2016	Chloride	62	10	1	250000000	mg/L
MKTF-35	9/13/2016	Fluoride, Total	0.77	0.1	0.05	1600000	mg/L
MKTF-35	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-35	9/13/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-35	9/13/2016	Sulfate	270	10	2.8	600000000	mg/L
MKTF-35	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	9/13/2016	TPH GRO	2	0.05	0.015	10100	mg/L
MKTF-35	11/3/2016	Bromide	0.28	0.1	0.044	NA	mg/L
MKTF-35	11/3/2016	Chloride	54	10	1	250000000	mg/L
MKTF-35	11/3/2016	Fluoride, Total	0.82	0.1	0.05	1600000	mg/L
MKTF-35	11/3/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-35	11/3/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-35	11/3/2016	Sulfate	310	10	2.8	600000000	mg/L
MKTF-35	11/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-35	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/3/2016	TPH GRO	1.7	0.5	0.25	10100	mg/L
MKTF-35	3/1/2017	Bromide	0.97	0.1	0.031	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	3/1/2017	Chloride	71	10	5	250000000	mg/L
MKTF-35	3/1/2017	Fluoride, Total	0.94	0.1	0.05	1600000	mg/L
MKTF-35	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-35	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	3/1/2017	Sulfate	410	10	1.9	600000000	mg/L
MKTF-35	3/1/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-35	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	3/1/2017	TPH GRO	0.73	0.05	0.025	10100	mg/L
MKTF-35	6/14/2017	Bromide	1.6	0.5	0.073	NA	mg/L
MKTF-35	6/14/2017	Chloride	150	10	5	250000000	mg/L
MKTF-35	6/14/2017	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
MKTF-35	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	6/14/2017	Sulfate	99	2.5	0.48	600000000	mg/L
MKTF-35	6/14/2017	TPH DRO	2.1	1	0.36	16700	mg/L
MKTF-35	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	6/14/2017	TPH GRO	0.6	0.05	0.025	10100	mg/L
MKTF-35	9/27/2017	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-35	9/27/2017	Chloride	190	10	5	250000000	mg/L
MKTF-35	9/27/2017	Fluoride, Total	0.8	0.5	0.22	1600000	mg/L
MKTF-35	9/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	9/27/2017	Sulfate	38	2.5	0.48	600000000	mg/L
MKTF-35	9/27/2017	TPH DRO	1.7	1	0.36	16700	mg/L
MKTF-35	9/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	9/27/2017	TPH GRO	0.57	0.05	0.025	10100	mg/L
MKTF-35	11/30/2017	Bromide	2.6	0.5	0.073	NA	mg/L
MKTF-35	11/30/2017	Chloride	190	10	5	250000000	mg/L
MKTF-35	11/30/2017	Fluoride, Total	0.9	0.5	0.22	1600000	mg/L
MKTF-35	11/30/2017	Ortho-Phosphate	1.4	2.5	1.2	NA	mg/L
MKTF-35	11/30/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-35	11/30/2017	Sulfate	34	2.5	0.48	600000000	mg/L
MKTF-35	11/30/2017	TPH DRO	0.92	1	0.36	16700	mg/L
MKTF-35	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/30/2017	TPH GRO	0.47	0.05	0.0097	10100	mg/L
MKTF-35	2/15/2018	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-35	2/15/2018	Chloride	180	10	5	250000000	mg/L
MKTF-35	2/15/2018	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
MKTF-35	2/15/2018	Ortho-Phosphate	1.8	2.5	1.2	NA	mg/L
MKTF-35	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-35	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/15/2018	Sulfate	37	2.5	0.48	600000000	mg/L
MKTF-35	2/15/2018	TPH DRO	0.94	1	0.63	16700	mg/L
MKTF-35	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	2/15/2018	TPH GRO	0.37	0.05	0.0097	10100	mg/L
MKTF-35	5/3/2018	Bromide	1.3	0.1	0.027	NA	mg/L
MKTF-35	5/3/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-35	5/3/2018	Fluoride, Total	0.58	0.1	0.03	1600000	mg/L
MKTF-35	5/3/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-35	5/3/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-35	5/3/2018	Nitrogen, Nitrate	0.032	0.1	0.0066	10000000	mg/L
MKTF-35	5/3/2018	Sulfate	48	0.5	0.21	600000000	mg/L
MKTF-35	5/3/2018	TPH DRO	1.3	1	0.63	16700	mg/L
MKTF-35	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	5/3/2018	TPH GRO	0.44	0.05	0.0097	10100	mg/L
MKTF-35	8/23/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-35	8/23/2018	Chloride	170	10	0.59	250000000	mg/L
MKTF-35	8/23/2018	Fluoride, Total	0.67	0.5	0.15	1600000	mg/L
MKTF-35	8/23/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-35	8/23/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-35	8/23/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-35	8/23/2018	Sulfate	38	2.5	1	600000000	mg/L
MKTF-35	8/23/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-35	8/23/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	8/23/2018	TPH GRO	0.49	0.05	0.024	10100	mg/L
MKTF-35	11/28/2018	Bromide	1.3	0.5	0.1	NA	mg/L
MKTF-35	11/28/2018	Chloride	170	10	10	250000000	mg/L
MKTF-35	11/28/2018	Fluoride, Total	0.85	0.5	0.5	1600000	mg/L
MKTF-35	11/28/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-35	11/28/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-35	11/28/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-35	11/28/2018	Sulfate	39	2.5	0.63	600000000	mg/L
MKTF-35	11/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-35	11/28/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-35	11/28/2018	TPH GRO	0.72	0.05	0.024	10100	mg/L
MKTF-35	5/16/2019	TPH GRO	0.59	0.05	0.0307	10100	mg/L
MKTF-35	5/16/2019	TPH DRO	0.83	1	0.35	16700	mg/L
MKTF-35	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	5/16/2019	Bromide	0.94	0.5	0.088765	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	5/16/2019	Chloride	260	10	1.25	250000000	mg/L
MKTF-35	5/16/2019	Fluoride, Total	0.63	0.5	0.25	1600000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-35	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-35	5/16/2019	Sulfate	84	2.5	0.2675	600000000	mg/L
MKTF-35	5/16/2019	TPH GRO	0.57	0.05	0.0307	10100	mg/L
MKTF-35	5/16/2019	TPH DRO	1.6	1	0.35	16700	mg/L
MKTF-35	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	5/16/2019	Bromide	0.95	0.5	0.088765	NA	mg/L
MKTF-35	5/16/2019	Chloride	250	10	1.25	250000000	mg/L
MKTF-35	5/16/2019	Fluoride, Total	0.64	0.5	0.25	1600000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-35	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-35	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-35	5/16/2019	Sulfate	80	2.5	0.2675	600000000	mg/L
MKTF-35	8/19/2019	TPH GRO	0.56	0.05	0.0307	10100	mg/L
MKTF-35	8/19/2019	TPH DRO	0.72	1	0.35	16700	mg/L
MKTF-35	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-35	8/19/2019	Bromide	0.69	0.5	0.088765	NA	mg/L
MKTF-35	8/19/2019	Chloride	190	10	10	250000000	mg/L
MKTF-35	8/19/2019	Fluoride, Total	0.77	0.5	0.073	1600000	mg/L
MKTF-35	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-35	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	8/19/2019	Sulfate	79	2.5	0.3345	600000000	mg/L
MKTF-35	10/29/2019	TPH GRO	0.73	0.05	0.0193	10100	mg/L
MKTF-35	10/29/2019	TPH DRO	0.48	0.4	0.132	16700	mg/L
MKTF-35	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-35	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-35	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-35	10/29/2019	Fluoride, Total	0.87	0.5	0.144909	1600000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	10/29/2019	Sulfate	36	2.5	0.3345	600000000	mg/L
MKTF-35	10/29/2019	TPH GRO	0.67	0.05	0.0193	10100	mg/L
MKTF-35	10/29/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-35	10/29/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-35	10/29/2019	Bromide	1	0.5	0.077	NA	mg/L
MKTF-35	10/29/2019	Chloride	220	10	10	250000000	mg/L
MKTF-35	10/29/2019	Fluoride, Total	0.86	0.5	0.144909	1600000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-35	10/29/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-35	10/29/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-35	10/29/2019	Sulfate	36	2.5	0.3345	600000000	mg/L
MKTF-35	2/6/2020	TPH GRO	33	5	2.1	10100	mg/L
MKTF-35	2/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-35	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-35	2/6/2020	Bromide	1	0.5	0.25	NA	mg/L
MKTF-35	2/6/2020	Fluoride, Total	0.75	0.5	0.11	1600000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-35	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	2/6/2020	Chloride	240	10	5	250000000	mg/L
MKTF-35	2/6/2020	TPH GRO	33	5	2.1	10100	mg/L
MKTF-35	2/6/2020	TPH DRO	0.42	0.4	0.2	16700	mg/L
MKTF-35	2/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-35	2/6/2020	Bromide	0.69	0.5	0.25	NA	mg/L
MKTF-35	2/6/2020	Fluoride, Total	0.78	0.5	0.11	1600000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-35	2/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-35	2/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	2/6/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	2/6/2020	Chloride	210	10	5	250000000	mg/L
MKTF-35	9/16/2020	TPH GRO	13	0.5	0.08	10100	mg/L
MKTF-35	9/16/2020	TPH DRO	1.1	0.07	0.067	16700	mg/L
MKTF-35	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-35	9/16/2020	Bromide	0.75	0.5	0.25	NA	mg/L
MKTF-35	9/16/2020	Fluoride, Total	0.99	0.5	0.22	1600000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-35	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	9/16/2020	Chloride	360	10	5	250000000	mg/L
MKTF-35	9/16/2020	TPH GRO	14	0.5	0.08	10100	mg/L
MKTF-35	9/16/2020	TPH DRO	1.1	0.07	0.067	16700	mg/L
MKTF-35	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-35	9/16/2020	Bromide	0.77	0.5	0.25	NA	mg/L
MKTF-35	9/16/2020	Fluoride, Total	0.95	0.5	0.22	1600000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-35	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-35	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-35	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-35	9/16/2020	Chloride	360	10	5	250000000	mg/L
MKTF-36	11/21/2014	TPH DRO	6.8	1	0.83	16700	mg/L
MKTF-36	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/21/2014	TPH GRO	25	5	1.9	10100	mg/L
MKTF-36	3/17/2015	TPH DRO	10	1	0.91	16700	mg/L
MKTF-36	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	3/17/2015	TPH GRO	38	5	1.2	10100	mg/L
MKTF-36	6/4/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-36	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	6/4/2015	TPH GRO	30	5	1.2	10100	mg/L
MKTF-36	8/18/2015	Bromide	0.77	0.5	0.39	NA	mg/L
MKTF-36	8/18/2015	Chloride	140	10	2.7	250000000	mg/L
MKTF-36	8/18/2015	Fluoride, Total	0.6	0.5	0.15	1600000	mg/L
MKTF-36	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-36	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-36	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-36	8/18/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-36	8/18/2015	TPH DRO	14	1	0.91	16700	mg/L
MKTF-36	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	8/18/2015	TPH GRO	39	5	1.2	10100	mg/L
MKTF-36	11/8/2016	Bromide	0.66	0.5	0.22	NA	mg/L
MKTF-36	11/8/2016	Chloride	130	10	1	250000000	mg/L
MKTF-36	11/8/2016	Fluoride, Total	0.67	0.5	0.25	1600000	mg/L
MKTF-36	11/8/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-36	11/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-36	11/8/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-36	11/8/2016	TPH DRO	11	1	0.69	16700	mg/L
MKTF-36	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/8/2016	TPH GRO	40	2.5	1.3	10100	mg/L
MKTF-36	3/1/2017	Bromide	1.2	0.5	0.15	NA	mg/L
MKTF-36	3/1/2017	Chloride	140	10	5	250000000	mg/L
MKTF-36	3/1/2017	Fluoride, Total	0.6	0.5	0.25	1600000	mg/L
MKTF-36	3/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	3/1/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	3/1/2017	TPH DRO	13	1	0.36	16700	mg/L
MKTF-36	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	3/1/2017	TPH GRO	35	2.5	1.2	10100	mg/L
MKTF-36	6/14/2017	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-36	6/14/2017	Chloride	140	10	5	250000000	mg/L
MKTF-36	6/14/2017	Fluoride, Total	0.56	0.5	0.22	1600000	mg/L
MKTF-36	6/14/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	6/14/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	6/14/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	6/14/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-36	6/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	6/14/2017	TPH GRO	34	2.5	1.2	10100	mg/L
MKTF-36	9/27/2017	Bromide	0.88	0.5	0.073	NA	mg/L
MKTF-36	9/27/2017	Chloride	160	10	5	250000000	mg/L
MKTF-36	9/27/2017	Fluoride, Total	0.66	0.5	0.22	1600000	mg/L
MKTF-36	9/27/2017	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-36	9/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-36	9/27/2017	Sulfate	0.7	2.5	0.48	600000000	mg/L
MKTF-36	9/27/2017	TPH DRO	24	10	3.6	16700	mg/L
MKTF-36	9/27/2017	TPH ORO	ND	50	50	85800	mg/L
MKTF-36	9/27/2017	TPH GRO	31	2.5	1.2	10100	mg/L
MKTF-36	11/30/2017	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-36	11/30/2017	Chloride	170	10	5	250000000	mg/L
MKTF-36	11/30/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-36	11/30/2017	Ortho-Phosphate	1.6	2.5	1.2	NA	mg/L
MKTF-36	11/30/2017	Nitrate & Nitrite	0.29	1	0.13	NA	mg/L
MKTF-36	11/30/2017	Sulfate	0.51	2.5	0.48	600000000	mg/L
MKTF-36	11/30/2017	TPH DRO	12	1	0.36	16700	mg/L
MKTF-36	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	11/30/2017	TPH GRO	31	2.5	0.48	10100	mg/L
MKTF-36	2/15/2018	Bromide	0.99	0.5	0.073	NA	mg/L
MKTF-36	2/15/2018	Chloride	180	10	5	250000000	mg/L
MKTF-36	2/15/2018	Fluoride, Total	0.62	0.5	0.22	1600000	mg/L
MKTF-36	2/15/2018	Ortho-Phosphate	2.7	2.5	1.2	NA	mg/L
MKTF-36	2/15/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-36	2/15/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-36	2/15/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-36	2/15/2018	TPH DRO	10	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-36	2/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	2/15/2018	TPH GRO	27	5	0.97	10100	mg/L
MKTF-36	5/3/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-36	5/3/2018	Chloride	180	10	0.59	250000000	mg/L
MKTF-36	5/3/2018	Fluoride, Total	0.78	0.5	0.15	1600000	mg/L
MKTF-36	5/3/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-36	5/3/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-36	5/3/2018	Nitrogen, Nitrate	0.085	0.5	0.033	10000000	mg/L
MKTF-36	5/3/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-36	5/3/2018	TPH DRO	10	1	0.63	16700	mg/L
MKTF-36	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	5/3/2018	TPH GRO	26	2.5	0.48	10100	mg/L
MKTF-36	9/5/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-36	9/5/2018	Chloride	190	10	0.59	250000000	mg/L
MKTF-36	9/5/2018	Fluoride, Total	0.82	0.5	0.15	1600000	mg/L
MKTF-36	9/5/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-36	9/5/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-36	9/5/2018	Nitrogen, Nitrate	0.07	0.5	0.033	10000000	mg/L
MKTF-36	9/5/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-36	9/5/2018	TPH DRO	5.6	1	0.63	16700	mg/L
MKTF-36	9/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-36	9/5/2018	TPH GRO	25	2.5	1.2	10100	mg/L
MKTF-36	9/18/2020	TPH GRO	100	1	0.16	10100	mg/L
MKTF-36	9/18/2020	TPH DRO	15	0.7	0.67	16700	mg/L
MKTF-36	9/18/2020	TPH ORO	ND	6	6	85800	mg/L
MKTF-36	9/18/2020	Solids, Total Suspended	74	4	4	NA	mg/L
MKTF-36	9/18/2020	Bromide	0.73	0.5	0.25	NA	mg/L
MKTF-36	9/18/2020	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-36	9/18/2020	Nitrogen, Nitrate	0.11	0.5	0.1	10000000	mg/L
MKTF-36	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-36	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-36	9/18/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-36	9/18/2020	Chloride	240	10	5	250000000	mg/L
MKTF-36	9/18/2020	Solids, Total Suspended	74	4	4	NA	mg/L
MKTF-37	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-37	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	11/21/2014	TPH GRO	8.7	0.5	0.19	10100	mg/L
MKTF-37	3/17/2015	TPH DRO	4.5	1	0.91	16700	mg/L
MKTF-37	3/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	3/17/2015	TPH GRO	11	0.25	0.06	10100	mg/L
MKTF-37	6/4/2015	TPH DRO	5.7	1	0.91	16700	mg/L
MKTF-37	6/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	6/4/2015	TPH GRO	12	0.5	0.12	10100	mg/L
MKTF-37	8/18/2015	Bromide	0.8	0.5	0.39	NA	mg/L
MKTF-37	8/18/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-37	8/18/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-37	8/18/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-37	8/18/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
MKTF-37	8/18/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
MKTF-37	8/18/2015	Sulfate	49	2.5	0.57	600000000	mg/L
MKTF-37	8/18/2015	TPH DRO	39	1	0.91	16700	mg/L
MKTF-37	8/18/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	8/18/2015	TPH GRO	11	1	0.24	10100	mg/L
MKTF-37	11/3/2016	Bromide	0.6	0.1	0.044	NA	mg/L
MKTF-37	11/3/2016	Chloride	120	10	1	250000000	mg/L
MKTF-37	11/3/2016	Fluoride, Total	0.46	0.1	0.05	1600000	mg/L
MKTF-37	11/3/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-37	11/3/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-37	11/3/2016	Sulfate	56	10	2.8	600000000	mg/L
MKTF-37	11/3/2016	TPH DRO	9.3	1	0.69	16700	mg/L
MKTF-37	11/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	11/3/2016	TPH GRO	13	1	0.51	10100	mg/L
MKTF-37	3/1/2017	Bromide	1	0.1	0.031	NA	mg/L
MKTF-37	3/1/2017	Chloride	180	10	5	250000000	mg/L
MKTF-37	3/1/2017	Fluoride, Total	0.16	0.1	0.05	1600000	mg/L
MKTF-37	3/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-37	3/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-37	3/1/2017	Sulfate	12	0.5	0.096	600000000	mg/L
MKTF-37	3/1/2017	TPH DRO	6.2	1	0.36	16700	mg/L
MKTF-37	3/1/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	3/1/2017	TPH GRO	15	1	0.5	10100	mg/L
MKTF-37	5/3/2018	Bromide	0.63	0.5	0.13	NA	mg/L
MKTF-37	5/3/2018	Chloride	240	10	0.59	250000000	mg/L
MKTF-37	5/3/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-37	5/3/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-37	5/3/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-37	5/3/2018	Nitrogen, Nitrate	0.084	0.5	0.033	10000000	mg/L
MKTF-37	5/3/2018	Sulfate	23	2.5	1	600000000	mg/L
MKTF-37	5/3/2018	TPH DRO	6.1	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-37	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	5/3/2018	TPH GRO	16	2.5	0.48	10100	mg/L
MKTF-37	8/23/2018	Bromide	0.57	0.5	0.13	NA	mg/L
MKTF-37	8/23/2018	Chloride	140	10	0.59	250000000	mg/L
MKTF-37	8/23/2018	Fluoride, Total	0.47	0.5	0.15	1600000	mg/L
MKTF-37	8/23/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-37	8/23/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-37	8/23/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-37	8/23/2018	Sulfate	20	2.5	1	600000000	mg/L
MKTF-37	8/23/2018	TPH DRO	3	1	0.63	16700	mg/L
MKTF-37	8/23/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-37	8/23/2018	TPH GRO	17	1	0.49	10100	mg/L
MKTF-37	5/14/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-37	5/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-37	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-37	5/14/2019	Bromide	0.46	0.5	0.088765	NA	mg/L
MKTF-37	5/14/2019	Chloride	230	10	1.25	250000000	mg/L
MKTF-37	5/14/2019	Fluoride, Total	0.93	0.5	0.25	1600000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrate	3.5	0.5	0.027	10000000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-37	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-37	5/14/2019	Sulfate	570	10	1.07	600000000	mg/L
MKTF-37	5/14/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-37	5/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-37	5/14/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-37	5/14/2019	Bromide	0.48	0.5	0.088765	NA	mg/L
MKTF-37	5/14/2019	Chloride	240	10	1.25	250000000	mg/L
MKTF-37	5/14/2019	Fluoride, Total	0.92	0.5	0.25	1600000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrate	3.7	0.5	0.027	10000000	mg/L
MKTF-37	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
MKTF-37	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-37	5/14/2019	Sulfate	600	10	1.07	600000000	mg/L
MKTF-37	9/17/2020	TPH GRO	16	0.25	0.04	10100	mg/L
MKTF-37	9/17/2020	TPH DRO	3.5	0.07	0.067	16700	mg/L
MKTF-37	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-37	9/17/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-37	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MKTF-37	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-37	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-37	9/17/2020	Sulfate	2.1	2.5	1.2	600000000	mg/L
MKTF-37	9/17/2020	Bromide	0.57	0.5	0.25	NA	mg/L
MKTF-37	9/17/2020	Chloride	190	10	5	250000000	mg/L
MKTF-37	9/17/2020	Solids, Total Suspended	120	8	8	NA	mg/L
MKTF-37	9/17/2020	Solids, Total Suspended	120	8	8	NA	mg/L
MKTF-38	11/21/2014	TPH DRO	3.8	1	0.83	16700	mg/L
MKTF-38	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/21/2014	TPH GRO	0.12	0.05	0.019	10100	mg/L
MKTF-38	3/16/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	3/16/2015	TPH GRO	0.33	0.05	0.012	10100	mg/L
MKTF-38	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/10/2015	TPH GRO	0.2	0.05	0.012	10100	mg/L
MKTF-38	8/24/2015	Bromide	0.81	0.1	0.077	NA	mg/L
MKTF-38	8/24/2015	Chloride	210	10	2.7	250000000	mg/L
MKTF-38	8/24/2015	Fluoride, Total	0.69	0.1	0.029	1600000	mg/L
MKTF-38	8/24/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MKTF-38	8/24/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MKTF-38	8/24/2015	Nitrogen, Nitrate	3.2	0.1	0.032	10000000	mg/L
MKTF-38	8/24/2015	Sulfate	390	10	2.3	600000000	mg/L
MKTF-38	8/24/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	8/24/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	8/24/2015	TPH GRO	0.099	0.05	0.04	10100	mg/L
MKTF-38	11/9/2015	Bromide	1.1	0.1	0.068	NA	mg/L
MKTF-38	11/9/2015	Chloride	210	10	6.8	250000000	mg/L
MKTF-38	11/9/2015	Fluoride, Total	0.91	0.1	0.032	1600000	mg/L
MKTF-38	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-38	11/9/2015	Nitrogen, Nitrite	ND	0.1	0.028	1000000	mg/L
MKTF-38	11/9/2015	Nitrogen, Nitrate	2.5	0.1	0.058	10000000	mg/L
MKTF-38	11/9/2015	Sulfate	400	10	6.4	600000000	mg/L
MKTF-38	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-38	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/9/2015	TPH GRO	0.12	0.05	0.012	10100	mg/L
MKTF-38	2/29/2016	Bromide	0.75	0.1	0.032	NA	mg/L
MKTF-38	2/29/2016	Chloride	110	10	0.55	250000000	mg/L
MKTF-38	2/29/2016	Fluoride, Total	0.75	0.1	0.023	1600000	mg/L
MKTF-38	2/29/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-38	2/29/2016	Nitrate & Nitrite	7.2	1	0.42	NA	mg/L
MKTF-38	2/29/2016	Sulfate	450	10	1.3	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	2/29/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	2/29/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	2/29/2016	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-38	6/8/2016	Bromide	0.88	0.1	0.032	NA	mg/L
MKTF-38	6/8/2016	Chloride	270	10	0.55	250000000	mg/L
MKTF-38	6/8/2016	Fluoride, Total	0.7	0.1	0.023	1600000	mg/L
MKTF-38	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-38	6/8/2016	Nitrate & Nitrite	9.9	1	0.42	NA	mg/L
MKTF-38	6/8/2016	Sulfate	360	10	1.3	600000000	mg/L
MKTF-38	6/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/8/2016	TPH GRO	0.06	0.05	0.025	10100	mg/L
MKTF-38	9/13/2016	Bromide	0.6	0.1	0.044	NA	mg/L
MKTF-38	9/13/2016	Chloride	260	10	1	250000000	mg/L
MKTF-38	9/13/2016	Fluoride, Total	0.73	0.1	0.05	1600000	mg/L
MKTF-38	9/13/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-38	9/13/2016	Nitrate & Nitrite	5	1	0.46	NA	mg/L
MKTF-38	9/13/2016	Sulfate	330	10	2.8	600000000	mg/L
MKTF-38	9/13/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	9/13/2016	TPH GRO	0.09	0.05	0.015	10100	mg/L
MKTF-38	11/1/2016	Bromide	0.52	0.1	0.044	NA	mg/L
MKTF-38	11/1/2016	Chloride	200	10	1	250000000	mg/L
MKTF-38	11/1/2016	Fluoride, Total	0.82	0.1	0.05	1600000	mg/L
MKTF-38	11/1/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-38	11/1/2016	Nitrogen, Nitrite	0.14	0.1	0.052	1000000	mg/L
MKTF-38	11/1/2016	Nitrogen, Nitrate	8.8	0.1	0.041	10000000	mg/L
MKTF-38	11/1/2016	Sulfate	320	10	2.8	600000000	mg/L
MKTF-38	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-38	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/1/2016	TPH GRO	0.065	0.05	0.025	10100	mg/L
MKTF-38	3/14/2017	Bromide	1	0.1	0.031	NA	mg/L
MKTF-38	3/14/2017	Chloride	130	10	5	250000000	mg/L
MKTF-38	3/14/2017	Fluoride, Total	0.74	0.1	0.05	1600000	mg/L
MKTF-38	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-38	3/14/2017	Nitrogen, Nitrite	0.26	0.1	0.019	1000000	mg/L
MKTF-38	3/14/2017	Nitrogen, Nitrate	7.5	0.1	0.022	10000000	mg/L
MKTF-38	3/14/2017	Sulfate	380	10	1.9	600000000	mg/L
MKTF-38	3/14/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	3/14/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-38	6/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-38	6/21/2017	Chloride	280	10	5	250000000	mg/L
MKTF-38	6/21/2017	Fluoride, Total	0.79	0.5	0.22	1600000	mg/L
MKTF-38	6/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	6/21/2017	Nitrate & Nitrite	0.24	1	0.13	NA	mg/L
MKTF-38	6/21/2017	Sulfate	290	10	1.9	600000000	mg/L
MKTF-38	6/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	6/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-38	9/28/2017	Bromide	1	0.5	0.073	NA	mg/L
MKTF-38	9/28/2017	Chloride	230	10	5	250000000	mg/L
MKTF-38	9/28/2017	Fluoride, Total	0.69	0.5	0.22	1600000	mg/L
MKTF-38	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-38	9/28/2017	Nitrogen, Nitrate	0.35	0.5	0.11	10000000	mg/L
MKTF-38	9/28/2017	Sulfate	260	10	1.9	600000000	mg/L
MKTF-38	9/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	9/28/2017	TPH GRO	0.03	0.05	0.025	10100	mg/L
MKTF-38	11/30/2017	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-38	11/30/2017	Chloride	210	10	5	250000000	mg/L
MKTF-38	11/30/2017	Fluoride, Total	0.9	0.5	0.22	1600000	mg/L
MKTF-38	11/30/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	11/30/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
MKTF-38	11/30/2017	Sulfate	250	10	1.9	600000000	mg/L
MKTF-38	11/30/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-38	11/30/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/30/2017	TPH GRO	0.026	0.05	0.0097	10100	mg/L
MKTF-38	2/12/2018	Bromide	1.2	0.1	0.014	NA	mg/L
MKTF-38	2/12/2018	Chloride	210	10	5	250000000	mg/L
MKTF-38	2/12/2018	Fluoride, Total	0.71	0.5	0.22	1600000	mg/L
MKTF-38	2/12/2018	Ortho-Phosphate	1.3	2.5	1.2	NA	mg/L
MKTF-38	2/12/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
MKTF-38	2/12/2018	Nitrogen, Nitrate	2.8	0.5	0.11	10000000	mg/L
MKTF-38	2/12/2018	Sulfate	220	10	1.9	600000000	mg/L
MKTF-38	2/12/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	2/12/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	2/12/2018	TPH GRO	0.015	0.05	0.0097	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-38	5/3/2018	Bromide	0.97	0.1	0.027	NA	mg/L
MKTF-38	5/3/2018	Chloride	290	10	0.59	250000000	mg/L
MKTF-38	5/3/2018	Fluoride, Total	0.65	0.1	0.03	1600000	mg/L
MKTF-38	5/3/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-38	5/3/2018	Nitrogen, Nitrite	ND	0.1	0.048	1000000	mg/L
MKTF-38	5/3/2018	Nitrogen, Nitrate	0.4	0.1	0.0066	10000000	mg/L
MKTF-38	5/3/2018	Sulfate	320	10	4.1	600000000	mg/L
MKTF-38	5/3/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	5/3/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	5/3/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-38	8/21/2018	Bromide	1.1	0.5	0.13	NA	mg/L
MKTF-38	8/21/2018	Chloride	370	10	0.59	250000000	mg/L
MKTF-38	8/21/2018	Fluoride, Total	0.8	0.5	0.15	1600000	mg/L
MKTF-38	8/21/2018	Ortho-Phosphate	1.6	2.5	0.46	NA	mg/L
MKTF-38	8/21/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-38	8/21/2018	Nitrogen, Nitrate	1.9	0.5	0.033	10000000	mg/L
MKTF-38	8/21/2018	Sulfate	300	10	4.1	600000000	mg/L
MKTF-38	8/21/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	8/21/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	8/21/2018	TPH GRO	0.025	0.05	0.0097	10100	mg/L
MKTF-38	11/20/2018	Bromide	1	0.5	0.1	NA	mg/L
MKTF-38	11/20/2018	Chloride	240	10	10	250000000	mg/L
MKTF-38	11/20/2018	Fluoride, Total	0.81	0.5	0.5	1600000	mg/L
MKTF-38	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-38	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-38	11/20/2018	Nitrogen, Nitrate	5.9	0.5	0.25	10000000	mg/L
MKTF-38	11/20/2018	Sulfate	400	10	2.5	600000000	mg/L
MKTF-38	11/20/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-38	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-38	11/20/2018	TPH GRO	0.13	0.05	0.024	10100	mg/L
MKTF-38	6/27/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-38	6/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-38	6/27/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-38	6/27/2019	Bromide	0.57	0.5	0.088765	NA	mg/L
MKTF-38	6/27/2019	Chloride	330	10	10	250000000	mg/L
MKTF-38	6/27/2019	Fluoride, Total	0.8	0.5	0.073	1600000	mg/L
MKTF-38	6/27/2019	Nitrogen, Nitrate	4.8	0.5	0.025	10000000	mg/L
MKTF-38	6/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-38	6/27/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-38	6/27/2019	Sulfate	600	10	1.338	600000000	mg/L
MKTF-38	8/20/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-38	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-38	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-38	8/20/2019	Bromide	0.52	0.5	0.088765	NA	mg/L
MKTF-38	8/20/2019	Chloride	360	10	10	250000000	mg/L
MKTF-38	8/20/2019	Fluoride, Total	0.93	0.5	0.073	1600000	mg/L
MKTF-38	8/20/2019	Nitrogen, Nitrate	5.5	0.5	0.025	10000000	mg/L
MKTF-38	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-38	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-38	8/20/2019	Sulfate	560	10	1.338	600000000	mg/L
MKTF-38	3/5/2020	TPH GRO	1.7	0.05	0.0068	10100	mg/L
MKTF-38	3/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-38	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-38	3/5/2020	Bromide	0.69	0.5	0.25	NA	mg/L
MKTF-38	3/5/2020	Fluoride, Total	0.87	0.5	0.11	1600000	mg/L
MKTF-38	3/5/2020	Nitrogen, Nitrate	12	0.5	0.11	10000000	mg/L
MKTF-38	3/5/2020	Nitrogen, Nitrite	0.15	0.5	0.056	1000000	mg/L
MKTF-38	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	3/5/2020	Chloride	290	10	5	250000000	mg/L
MKTF-38	3/5/2020	Sulfate	420	10	5	600000000	mg/L
MKTF-38	9/19/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-38	9/19/2020	TPH DRO	0.12	0.07	0.067	16700	mg/L
MKTF-38	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-38	9/19/2020	Chloride	630	25	12	250000000	mg/L
MKTF-38	9/19/2020	Bromide	0.81	0.5	0.25	NA	mg/L
MKTF-38	9/19/2020	Fluoride, Total	1	0.5	0.22	1600000	mg/L
MKTF-38	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-38	9/19/2020	Sulfate	450	10	5	600000000	mg/L
MKTF-38	9/19/2020	Nitrate & Nitrite	11	1	0.061	NA	mg/L
MKTF-39	11/18/2014	TPH DRO	15	1	0.83	16700	mg/L
MKTF-39	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/18/2014	TPH GRO	0.39	0.25	0.096	10100	mg/L
MKTF-39	3/16/2015	TPH DRO	6.2	1	0.91	16700	mg/L
MKTF-39	3/16/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/16/2015	TPH GRO	0.21	0.05	0.012	10100	mg/L
MKTF-39	6/10/2015	TPH DRO	44	1	0.91	16700	mg/L
MKTF-39	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/10/2015	TPH GRO	0.44	0.05	0.012	10100	mg/L
MKTF-39	8/23/2015	Bromide	ND	0.5	0.39	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/23/2015	Chloride	9100	500	340	250000000	mg/L
MKTF-39	8/23/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-39	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-39	8/23/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
MKTF-39	8/23/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
MKTF-39	8/23/2015	TPH DRO	13	1	0.91	16700	mg/L
MKTF-39	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	8/23/2015	TPH GRO	0.93	0.05	0.04	10100	mg/L
MKTF-39	11/9/2015	Bromide	ND	2	1.4	NA	mg/L
MKTF-39	11/9/2015	Chloride	6400	500	340	250000000	mg/L
MKTF-39	11/9/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-39	11/9/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-39	11/9/2015	Nitrogen, Nitrite	ND	2	0.56	1000000	mg/L
MKTF-39	11/9/2015	Nitrogen, Nitrate	1	0.1	0.058	10000000	mg/L
MKTF-39	11/9/2015	Sulfate	ND	0.5	0.32	600000000	mg/L
MKTF-39	11/9/2015	TPH DRO	23	1	0.91	16700	mg/L
MKTF-39	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/9/2015	TPH GRO	0.44	0.05	0.012	10100	mg/L
MKTF-39	3/3/2016	Bromide	1	0.5	0.16	NA	mg/L
MKTF-39	3/3/2016	Chloride	2900	250	14	250000000	mg/L
MKTF-39	3/3/2016	Fluoride, Total	0.71	0.5	0.11	1600000	mg/L
MKTF-39	3/3/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-39	3/3/2016	Nitrate & Nitrite	ND	4	1.7	NA	mg/L
MKTF-39	3/3/2016	Sulfate	4.2	2.5	0.32	600000000	mg/L
MKTF-39	3/3/2016	TPH DRO	13	1	0.69	16700	mg/L
MKTF-39	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/3/2016	TPH GRO	0.46	0.05	0.025	10100	mg/L
MKTF-39	6/8/2016	Bromide	0.38	0.1	0.032	NA	mg/L
MKTF-39	6/8/2016	Chloride	2300	100	5.5	250000000	mg/L
MKTF-39	6/8/2016	Fluoride, Total	0.54	0.1	0.023	1600000	mg/L
MKTF-39	6/8/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-39	6/8/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-39	6/8/2016	Sulfate	0.21	0.5	0.064	600000000	mg/L
MKTF-39	6/8/2016	TPH DRO	19	1	0.69	16700	mg/L
MKTF-39	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/8/2016	TPH GRO	0.67	0.25	0.13	10100	mg/L
MKTF-39	9/13/2016	Bromide	2	2	0.87	NA	mg/L
MKTF-39	9/13/2016	Chloride	1900	100	10	250000000	mg/L
MKTF-39	9/13/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-39	9/13/2016	Ortho-Phosphate	5.8	10	1.5	NA	mg/L
MKTF-39	9/13/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-39	9/13/2016	Sulfate	ND	10	2.8	600000000	mg/L
MKTF-39	9/13/2016	TPH DRO	10	1	0.69	16700	mg/L
MKTF-39	9/13/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	9/13/2016	TPH GRO	1.1	0.25	0.075	10100	mg/L
MKTF-39	11/1/2016	Bromide	1.7	0.5	0.22	NA	mg/L
MKTF-39	11/1/2016	Chloride	1300	50	5.1	250000000	mg/L
MKTF-39	11/1/2016	Fluoride, Total	0.97	0.5	0.25	1600000	mg/L
MKTF-39	11/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-39	11/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
MKTF-39	11/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
MKTF-39	11/1/2016	Sulfate	ND	2.5	0.71	600000000	mg/L
MKTF-39	11/1/2016	TPH DRO	17	1	0.69	16700	mg/L
MKTF-39	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/1/2016	TPH GRO	0.36	0.1	0.051	10100	mg/L
MKTF-39	3/14/2017	Bromide	1.6	0.1	0.031	NA	mg/L
MKTF-39	3/14/2017	Chloride	1000	50	25	250000000	mg/L
MKTF-39	3/14/2017	Fluoride, Total	0.44	0.1	0.05	1600000	mg/L
MKTF-39	3/14/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-39	3/14/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
MKTF-39	3/14/2017	Nitrogen, Nitrate	0.43	0.1	0.022	10000000	mg/L
MKTF-39	3/14/2017	Sulfate	0.23	0.5	0.096	600000000	mg/L
MKTF-39	3/14/2017	TPH DRO	28	1	0.36	16700	mg/L
MKTF-39	3/14/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	3/14/2017	TPH GRO	1.5	0.25	0.12	10100	mg/L
MKTF-39	6/8/2017	Bromide	3	2	0.29	NA	mg/L
MKTF-39	6/8/2017	Chloride	790	50	25	250000000	mg/L
MKTF-39	6/8/2017	Fluoride, Total	0.87	0.1	0.044	1600000	mg/L
MKTF-39	6/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-39	6/8/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-39	6/8/2017	Sulfate	0.16	0.5	0.096	600000000	mg/L
MKTF-39	6/8/2017	TPH DRO	56	1	0.36	16700	mg/L
MKTF-39	6/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	6/8/2017	TPH GRO	0.73	0.25	0.12	10100	mg/L
MKTF-39	9/28/2017	Bromide	2.9	0.5	0.073	NA	mg/L
MKTF-39	9/28/2017	Chloride	3400	250	120	250000000	mg/L
MKTF-39	9/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-39	9/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	9/28/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	9/28/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-39	9/28/2017	Sulfate	0.49	2.5	0.48	600000000	mg/L
MKTF-39	9/28/2017	TPH DRO	28	1	0.36	16700	mg/L
MKTF-39	9/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	9/28/2017	TPH GRO	0.37	0.05	0.025	10100	mg/L
MKTF-39	11/28/2017	Bromide	3.1	0.5	0.073	NA	mg/L
MKTF-39	11/28/2017	Chloride	1900	100	50	250000000	mg/L
MKTF-39	11/28/2017	Fluoride, Total	0.46	0.5	0.22	1600000	mg/L
MKTF-39	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	11/28/2017	Nitrate & Nitrite	0.36	2	0.26	NA	mg/L
MKTF-39	11/28/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-39	11/28/2017	TPH DRO	14	1	0.36	16700	mg/L
MKTF-39	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/28/2017	TPH GRO	0.9	0.5	0.097	10100	mg/L
MKTF-39	2/8/2018	Bromide	1.9	0.5	0.073	NA	mg/L
MKTF-39	2/8/2018	Chloride	3200	100	50	250000000	mg/L
MKTF-39	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-39	2/8/2018	Ortho-Phosphate	4.3	2.5	1.2	NA	mg/L
MKTF-39	2/8/2018	Nitrate & Nitrite	1	2	0.26	NA	mg/L
MKTF-39	2/8/2018	Sulfate	ND	2.5	0.48	600000000	mg/L
MKTF-39	2/8/2018	TPH DRO	17	1	0.63	16700	mg/L
MKTF-39	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	2/8/2018	TPH GRO	0.7	0.1	0.019	10100	mg/L
MKTF-39	5/6/2018	Bromide	1.3	0.5	0.13	NA	mg/L
MKTF-39	5/6/2018	Chloride	960	50	2.9	250000000	mg/L
MKTF-39	5/6/2018	Fluoride, Total	0.86	0.5	0.15	1600000	mg/L
MKTF-39	5/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-39	5/6/2018	Nitrogen, Nitrite	0.64	0.5	0.24	1000000	mg/L
MKTF-39	5/6/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-39	5/6/2018	Sulfate	ND	2.5	1	600000000	mg/L
MKTF-39	5/6/2018	TPH DRO	17	1	0.63	16700	mg/L
MKTF-39	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	5/6/2018	TPH GRO	0.7	0.1	0.019	10100	mg/L
MKTF-39	8/21/2018	Bromide	1	0.5	0.13	NA	mg/L
MKTF-39	8/21/2018	Chloride	1600	100	5.9	250000000	mg/L
MKTF-39	8/21/2018	Fluoride, Total	0.28	0.5	0.15	1600000	mg/L
MKTF-39	8/21/2018	Ortho-Phosphate	3.1	2.5	0.46	NA	mg/L
MKTF-39	8/21/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-39	8/21/2018	Nitrogen, Nitrate	0.2	0.5	0.033	10000000	mg/L
MKTF-39	8/21/2018	Sulfate	1.1	2.5	1	600000000	mg/L
MKTF-39	8/21/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-39	8/21/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	8/21/2018	TPH GRO	0.91	0.05	0.0097	10100	mg/L
MKTF-39	11/20/2018	Bromide	0.78	0.5	0.1	NA	mg/L
MKTF-39	11/20/2018	Chloride	1900	100	100	250000000	mg/L
MKTF-39	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-39	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-39	11/20/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-39	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-39	11/20/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
MKTF-39	11/20/2018	TPH DRO	11	1	0.63	16700	mg/L
MKTF-39	11/20/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-39	11/20/2018	TPH GRO	0.25	0.05	0.024	10100	mg/L
MKTF-39	6/5/2019	TPH GRO	0.34	0.05	0.0211	10100	mg/L
MKTF-39	6/5/2019	TPH DRO	46	1	0.35	16700	mg/L
MKTF-39	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	6/5/2019	Bromide	0.46	0.5	0.088765	NA	mg/L
MKTF-39	6/5/2019	Chloride	9000	500	500	250000000	mg/L
MKTF-39	6/5/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-39	6/5/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-39	6/5/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-39	6/5/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-39	6/5/2019	Sulfate	140	2.5	0.2675	600000000	mg/L
MKTF-39	8/20/2019	TPH GRO	0.65	0.25	0.1535	10100	mg/L
MKTF-39	8/20/2019	TPH DRO	17	1	0.35	16700	mg/L
MKTF-39	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	8/20/2019	Bromide	0.45	0.5	0.088765	NA	mg/L
MKTF-39	8/20/2019	Chloride	8900	500	500	250000000	mg/L
MKTF-39	8/20/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-39	8/20/2019	Nitrogen, Nitrate & Nitrite	8.1	10	0.485	10000000	mg/L
MKTF-39	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	8/20/2019	Sulfate	4.5	2.5	0.3345	600000000	mg/L
MKTF-39	8/20/2019	TPH GRO	1.2	0.25	0.1535	10100	mg/L
MKTF-39	8/20/2019	TPH DRO	12	1	0.35	16700	mg/L
MKTF-39	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-39	8/20/2019	Bromide	0.4	0.5	0.088765	NA	mg/L
MKTF-39	8/20/2019	Chloride	8700	500	500	250000000	mg/L
MKTF-39	8/20/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-39	8/20/2019	Nitrogen, Nitrate & Nitrite	8	10	0.485	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-39	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	8/20/2019	Sulfate	8.1	2.5	0.3345	600000000	mg/L
MKTF-39	11/5/2019	TPH GRO	0.48	0.05	0.0211	10100	mg/L
MKTF-39	11/5/2019	TPH DRO	16	0.4	0.132	16700	mg/L
MKTF-39	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-39	11/5/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-39	11/5/2019	Chloride	7500	500	500	250000000	mg/L
MKTF-39	11/5/2019	Fluoride, Total	ND	2	0.579636	1600000	mg/L
MKTF-39	11/5/2019	Nitrogen, Nitrate & Nitrite	ND	10	0.485	10000000	mg/L
MKTF-39	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	11/5/2019	Sulfate	1.2	2.5	0.3345	600000000	mg/L
MKTF-39	11/5/2019	TPH GRO	0.35	0.05	0.0211	10100	mg/L
MKTF-39	11/5/2019	TPH DRO	3.3	0.4	0.132	16700	mg/L
MKTF-39	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-39	11/5/2019	Bromide	ND	0.5	0.077	NA	mg/L
MKTF-39	11/5/2019	Chloride	7500	500	500	250000000	mg/L
MKTF-39	11/5/2019	Fluoride, Total	ND	2	0.579636	1600000	mg/L
MKTF-39	11/5/2019	Nitrogen, Nitrate & Nitrite	ND	10	0.485	10000000	mg/L
MKTF-39	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-39	11/5/2019	Sulfate	1.2	2.5	0.3345	600000000	mg/L
MKTF-39	2/5/2020	TPH GRO	0.57	0.05	0.021	10100	mg/L
MKTF-39	2/5/2020	TPH DRO	1.4	0.4	0.2	16700	mg/L
MKTF-39	2/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-39	2/5/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-39	2/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	2/5/2020	Sulfate	1.3	2.5	1.2	600000000	mg/L
MKTF-39	2/5/2020	Bromide	ND	2	1	NA	mg/L
MKTF-39	2/5/2020	Chloride	7500	500	250	250000000	mg/L
MKTF-39	2/5/2020	Nitrate & Nitrite	ND	10	1.2	NA	mg/L
MKTF-39	9/19/2020	TPH GRO	0.66	0.1	0.016	10100	mg/L
MKTF-39	9/19/2020	TPH DRO	11	0.07	0.067	16700	mg/L
MKTF-39	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-39	9/19/2020	Chloride	6200	500	250	250000000	mg/L
MKTF-39	9/19/2020	Nitrate & Nitrite	1.3	10	0.61	NA	mg/L
MKTF-39	9/19/2020	Bromide	1.7	0.5	0.25	NA	mg/L
MKTF-39	9/19/2020	Fluoride, Total	0.41	0.5	0.22	1600000	mg/L
MKTF-39	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-39	9/19/2020	Sulfate	2.6	2.5	1.2	600000000	mg/L
MKTF-39	12/16/2020	Bicarbonate	716	1	0.5	NA	mg/L
MKTF-39	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-39	12/16/2020	Phosphorus, Total	0.422	0.1	0.032	NA	mg/L
MKTF-39	12/16/2020	Sulfate	32.6	1	0.37	600000000	mg/L
MKTF-39	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-39	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-39	12/16/2020	Chloride	6020	500	60	250000000	mg/L
MKTF-39	12/16/2020	TPH (C6-C10)	252	100	47	NA	ug/L
MKTF-39	12/16/2020	TPH DRO	6820	146	117	16700	ug/L
MKTF-39	12/16/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-40	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/21/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-40	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	8/21/2015	Bromide	1.7	0.5	0.39	NA	mg/L
MKTF-40	8/21/2015	Chloride	3400	250	170	250000000	mg/L
MKTF-40	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-40	8/21/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
MKTF-40	8/21/2015	Sulfate	890	10	2.3	600000000	mg/L
MKTF-40	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-40	11/4/2015	Bromide	ND	2	1.4	NA	mg/L
MKTF-40	11/4/2015	Chloride	4600	250	170	250000000	mg/L
MKTF-40	11/4/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
MKTF-40	11/4/2015	Ortho-Phosphate	ND	10	1.8	NA	mg/L
MKTF-40	11/4/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-40	11/4/2015	Sulfate	540	10	6.4	600000000	mg/L
MKTF-40	11/4/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-40	11/4/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/4/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-40	2/23/2016	Bromide	6.6	2	0.65	NA	mg/L
MKTF-40	2/23/2016	Chloride	4900	250	14	250000000	mg/L
MKTF-40	2/23/2016	Fluoride, Total	ND	0.1	0.023	1600000	mg/L
MKTF-40	2/23/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/23/2016	Nitrate & Nitrite	ND	10	4.2	NA	mg/L
MKTF-40	2/23/2016	Sulfate	520	10	1.3	600000000	mg/L
MKTF-40	2/23/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	2/23/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	2/23/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	6/9/2016	Bromide	3.4	2	0.65	NA	mg/L
MKTF-40	6/9/2016	Chloride	5300	250	14	250000000	mg/L
MKTF-40	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-40	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-40	6/9/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	6/9/2016	Sulfate	390	10	1.3	600000000	mg/L
MKTF-40	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	9/8/2016	Bromide	1.6	2	0.87	NA	mg/L
MKTF-40	9/8/2016	Chloride	5300	250	25	250000000	mg/L
MKTF-40	9/8/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-40	9/8/2016	Ortho-Phosphate	3.6	10	1.5	NA	mg/L
MKTF-40	9/8/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	9/8/2016	Sulfate	460	10	2.8	600000000	mg/L
MKTF-40	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	9/8/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
MKTF-40	10/31/2016	Bromide	ND	2	0.87	NA	mg/L
MKTF-40	10/31/2016	Chloride	3700	250	25	250000000	mg/L
MKTF-40	10/31/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-40	10/31/2016	Ortho-Phosphate	1.9	10	1.5	NA	mg/L
MKTF-40	10/31/2016	Nitrate & Nitrite	ND	4	1.8	NA	mg/L
MKTF-40	10/31/2016	Sulfate	500	10	2.8	600000000	mg/L
MKTF-40	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-40	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	3/7/2017	Bromide	0.28	0.1	0.031	NA	mg/L
MKTF-40	3/7/2017	Chloride	4200	250	120	250000000	mg/L
MKTF-40	3/7/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-40	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-40	3/7/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	3/7/2017	Sulfate	500	10	1.9	600000000	mg/L
MKTF-40	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	3/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	6/5/2017	Bromide	2.8	2	0.29	NA	mg/L
MKTF-40	6/5/2017	Chloride	4400	250	120	250000000	mg/L
MKTF-40	6/5/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-40	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-40	6/5/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	6/5/2017	Sulfate	580	10	1.9	600000000	mg/L
MKTF-40	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	9/25/2017	Bromide	3	0.5	0.073	NA	mg/L
MKTF-40	9/25/2017	Chloride	3600	250	120	250000000	mg/L
MKTF-40	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	9/25/2017	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	9/25/2017	Sulfate	590	10	1.9	600000000	mg/L
MKTF-40	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	11/21/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-40	11/21/2017	Chloride	4100	250	120	250000000	mg/L
MKTF-40	11/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	11/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	11/21/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
MKTF-40	11/21/2017	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L
MKTF-40	11/21/2017	Sulfate	590	250	48	600000000	mg/L
MKTF-40	11/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	11/21/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	2/5/2018	Bromide	1.2	0.5	0.073	NA	mg/L
MKTF-40	2/5/2018	Chloride	4000	250	120	250000000	mg/L
MKTF-40	2/5/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	2/5/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	2/5/2018	Nitrate & Nitrite	ND	4	0.52	NA	mg/L
MKTF-40	2/5/2018	Sulfate	480	10	1.9	600000000	mg/L
MKTF-40	2/5/2018	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-40	2/5/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	2/5/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-40	5/6/2018	Bromide	1.4	0.5	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	5/6/2018	Chloride	4800	10	0.59	250000000	mg/L
MKTF-40	5/6/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	5/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-40	5/6/2018	Nitrogen, Nitrite	2.4	2	0.96	1000000	mg/L
MKTF-40	5/6/2018	Nitrogen, Nitrate	0.1	0.5	0.033	10000000	mg/L
MKTF-40	5/6/2018	Sulfate	560	10	4.1	600000000	mg/L
MKTF-40	5/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	5/6/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	5/6/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-40	8/17/2018	Bromide	ND	0.5	0.13	NA	mg/L
MKTF-40	8/17/2018	Chloride	3100	100	5.9	250000000	mg/L
MKTF-40	8/17/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-40	8/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-40	8/17/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-40	8/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MKTF-40	8/17/2018	Sulfate	550	10	4.1	600000000	mg/L
MKTF-40	8/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	8/17/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	8/17/2018	TPH GRO	0.019	0.05	0.0097	10100	mg/L
MKTF-40	11/15/2018	Bromide	14	0.5	0.1	NA	mg/L
MKTF-40	11/15/2018	Chloride	2700	250	250	250000000	mg/L
MKTF-40	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-40	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-40	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-40	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-40	11/15/2018	Sulfate	610	10	2.5	600000000	mg/L
MKTF-40	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-40	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-40	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-40	2/20/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-40	2/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	2/20/2019	Bromide	0.91	0.5	0.0675	NA	mg/L
MKTF-40	2/20/2019	Chloride	3100	250	250	250000000	mg/L
MKTF-40	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-40	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
MKTF-40	2/20/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-40	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-40	2/20/2019	Sulfate	550	10	1.28	600000000	mg/L
MKTF-40	5/6/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-40	5/6/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	5/6/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	5/6/2019	Bromide	0.93	0.5	0.088765	NA	mg/L
MKTF-40	5/6/2019	Chloride	3200	250	31.25	250000000	mg/L
MKTF-40	5/6/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-40	5/6/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
MKTF-40	5/6/2019	Nitrogen, Nitrite	3.3	2	0.08984	1000000	mg/L
MKTF-40	5/6/2019	Phosphorus, Ortho	0.34	2.5	0.2	NA	mg/L
MKTF-40	5/6/2019	Sulfate	560	10	1.07	600000000	mg/L
MKTF-40	8/22/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-40	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-40	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-40	8/22/2019	Bromide	0.98	0.5	0.088765	NA	mg/L
MKTF-40	8/22/2019	Chloride	3500	250	250	250000000	mg/L
MKTF-40	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-40	8/22/2019	Nitrogen, Nitrate	0.081	0.5	0.025	10000000	mg/L
MKTF-40	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-40	8/22/2019	Sulfate	500	10	1.338	600000000	mg/L
MKTF-40	10/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-40	10/22/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-40	10/22/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-40	10/22/2019	Bromide	1.4	0.5	0.077	NA	mg/L
MKTF-40	10/22/2019	Chloride	2800	250	250	250000000	mg/L
MKTF-40	10/22/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-40	10/22/2019	Nitrogen, Nitrate	0.17	0.5	0.030387	10000000	mg/L
MKTF-40	10/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	10/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-40	10/22/2019	Sulfate	540	10	1.338	600000000	mg/L
MKTF-40	11/19/2019	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
MKTF-40	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-40	11/19/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-40	11/19/2019	Chemical Oxygen Demand	117	10	3	NA	mg/L
MKTF-40	2/28/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-40	2/28/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-40	2/28/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-40	2/28/2020	Bromide	1.2	0.5	0.25	NA	mg/L
MKTF-40	2/28/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-40	2/28/2020	Nitrogen, Nitrate	0.14	0.5	0.11	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-40	2/28/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	2/28/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-40	2/28/2020	Sulfate	530	10	5	600000000	mg/L
MKTF-40	2/28/2020	Chloride	2900	100	50	250000000	mg/L
MKTF-40	9/19/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-40	9/19/2020	TPH DRO	0.18	0.07	0.067	16700	mg/L
MKTF-40	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-40	9/19/2020	Chloride	3000	250	120	250000000	mg/L
MKTF-40	9/19/2020	Nitrate & Nitrite	ND	4	0.25	NA	mg/L
MKTF-40	9/19/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-40	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-40	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-40	9/19/2020	Sulfate	450	10	5	600000000	mg/L
MKTF-40	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-40	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-40	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-40	12/17/2020	Phosphorus, Total	0.142	0.1	0.032	NA	mg/L
MKTF-40	12/17/2020	Bicarbonate	472	1	0.5	NA	mg/L
MKTF-40	12/17/2020	Bicarbonate	438	1	0.5	NA	mg/L
MKTF-40	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-40	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-40	12/17/2020	Chloride	3160	100	12	250000000	mg/L
MKTF-40	12/17/2020	Sulfate	428	100	37	600000000	mg/L
MKTF-40	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-40	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-40	12/17/2020	Chloride	3140	100	12	250000000	mg/L
MKTF-40	12/17/2020	Sulfate	402	100	37	600000000	mg/L
MKTF-40	12/17/2020	TPH DRO	223	146	117	16700	ug/L
MKTF-40	12/17/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	12/17/2020	TPH DRO	259	146	117	16700	ug/L
MKTF-40	12/17/2020	C28-C40	ND	146	117	NA	ug/L
MKTF-40	12/17/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-40	12/17/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-41	11/18/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-41	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/18/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-41	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	6/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	8/21/2015	Bromide	2.2	0.5	0.39	NA	mg/L
MKTF-41	8/21/2015	Chloride	900	25	17	250000000	mg/L
MKTF-41	8/21/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
MKTF-41	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-41	8/21/2015	Nitrate & Nitrite	5.6	1	0.22	NA	mg/L
MKTF-41	8/21/2015	Sulfate	79	2.5	0.57	600000000	mg/L
MKTF-41	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-41	11/5/2015	Bromide	2.1	0.1	0.068	NA	mg/L
MKTF-41	11/5/2015	Chloride	830	25	17	250000000	mg/L
MKTF-41	11/5/2015	Fluoride, Total	0.35	0.1	0.032	1600000	mg/L
MKTF-41	11/5/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
MKTF-41	11/5/2015	Nitrate & Nitrite	4.2	1	0.3	NA	mg/L
MKTF-41	11/5/2015	Sulfate	68	10	6.4	600000000	mg/L
MKTF-41	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-41	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/5/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-41	2/24/2016	Bromide	4.5	2	0.65	NA	mg/L
MKTF-41	2/24/2016	Chloride	790	50	2.7	250000000	mg/L
MKTF-41	2/24/2016	Fluoride, Total	0.47	0.1	0.023	1600000	mg/L
MKTF-41	2/24/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-41	2/24/2016	Nitrate & Nitrite	4.7	1	0.42	NA	mg/L
MKTF-41	2/24/2016	Sulfate	74	10	1.3	600000000	mg/L
MKTF-41	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	6/9/2016	Bromide	2.4	0.1	0.032	NA	mg/L
MKTF-41	6/9/2016	Chloride	750	50	2.8	250000000	mg/L
MKTF-41	6/9/2016	Fluoride, Total	0.51	0.1	0.023	1600000	mg/L
MKTF-41	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-41	6/9/2016	Nitrate & Nitrite	5.6	1	0.42	NA	mg/L
MKTF-41	6/9/2016	Sulfate	71	10	1.3	600000000	mg/L
MKTF-41	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	9/9/2016	Bromide	2.3	0.1	0.044	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/9/2016	Chloride	910	25	2.5	250000000	mg/L
MKTF-41	9/9/2016	Fluoride, Total	0.29	0.1	0.05	1600000	mg/L
MKTF-41	9/9/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-41	9/9/2016	Nitrate & Nitrite	5.7	1	0.46	NA	mg/L
MKTF-41	9/9/2016	Sulfate	60	10	2.8	600000000	mg/L
MKTF-41	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
MKTF-41	10/31/2016	Bromide	5.4	2	0.87	NA	mg/L
MKTF-41	10/31/2016	Chloride	730	50	5.1	250000000	mg/L
MKTF-41	10/31/2016	Fluoride, Total	0.26	0.1	0.05	1600000	mg/L
MKTF-41	10/31/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MKTF-41	10/31/2016	Nitrate & Nitrite	5.4	1	0.46	NA	mg/L
MKTF-41	10/31/2016	Sulfate	64	10	2.8	600000000	mg/L
MKTF-41	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-41	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	3/7/2017	Bromide	2.2	0.1	0.031	NA	mg/L
MKTF-41	3/7/2017	Chloride	800	50	25	250000000	mg/L
MKTF-41	3/7/2017	Fluoride, Total	0.32	0.1	0.05	1600000	mg/L
MKTF-41	3/7/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-41	3/7/2017	Nitrate & Nitrite	3.9	1	0.13	NA	mg/L
MKTF-41	3/7/2017	Sulfate	64	10	1.9	600000000	mg/L
MKTF-41	3/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	3/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	6/6/2017	Bromide	2.2	0.1	0.014	NA	mg/L
MKTF-41	6/6/2017	Chloride	910	50	25	250000000	mg/L
MKTF-41	6/6/2017	Fluoride, Total	0.24	0.1	0.044	1600000	mg/L
MKTF-41	6/6/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-41	6/6/2017	Nitrate & Nitrite	5.4	1	0.13	NA	mg/L
MKTF-41	6/6/2017	Sulfate	66	10	1.9	600000000	mg/L
MKTF-41	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	6/6/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	9/25/2017	Bromide	2.8	0.5	0.073	NA	mg/L
MKTF-41	9/25/2017	Chloride	810	25	12	250000000	mg/L
MKTF-41	9/25/2017	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
MKTF-41	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	9/25/2017	Nitrate & Nitrite	5.3	1	0.13	NA	mg/L
MKTF-41	9/25/2017	Sulfate	65	2.5	0.48	600000000	mg/L
MKTF-41	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	9/25/2017	TPH GRO	0.029	0.05	0.025	10100	mg/L
MKTF-41	11/27/2017	Sulfate	65	2.5	0.48	600000000	mg/L
MKTF-41	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-41	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-41	11/27/2017	Bromide	2.4	0.5	0.073	NA	mg/L
MKTF-41	11/27/2017	Chloride	860	50	25	250000000	mg/L
MKTF-41	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-41	11/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	11/27/2017	Nitrate & Nitrite	5.6	1	0.13	NA	mg/L
MKTF-41	2/7/2018	Bromide	2.1	0.5	0.073	NA	mg/L
MKTF-41	2/7/2018	Chloride	790	25	12	250000000	mg/L
MKTF-41	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-41	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	2/7/2018	Nitrate & Nitrite	5.3	1	0.13	NA	mg/L
MKTF-41	2/7/2018	Sulfate	61	2.5	0.48	600000000	mg/L
MKTF-41	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	2/7/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-41	5/9/2018	Bromide	2.1	0.1	0.027	NA	mg/L
MKTF-41	5/9/2018	Chloride	840	50	2.9	250000000	mg/L
MKTF-41	5/9/2018	Fluoride, Total	0.11	0.1	0.03	1600000	mg/L
MKTF-41	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-41	5/9/2018	Nitrate & Nitrite	4.9	1	0.27	NA	mg/L
MKTF-41	5/9/2018	Sulfate	56	10	4.1	600000000	mg/L
MKTF-41	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	5/9/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-41	8/29/2018	Bromide	2.3	0.5	0.13	NA	mg/L
MKTF-41	8/29/2018	Chloride	850	50	18	250000000	mg/L
MKTF-41	8/29/2018	Fluoride, Total	0.57	0.5	0.15	1600000	mg/L
MKTF-41	8/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-41	8/29/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-41	8/29/2018	Nitrogen, Nitrate	5.5	0.5	0.033	10000000	mg/L
MKTF-41	8/29/2018	Sulfate	64	2.5	1	600000000	mg/L
MKTF-41	8/29/2018	TPH DRO	ND	1	0.63	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	8/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	8/29/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-41	11/15/2018	Bromide	2.3	0.5	0.1	NA	mg/L
MKTF-41	11/15/2018	Chloride	840	50	50	250000000	mg/L
MKTF-41	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-41	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-41	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-41	11/15/2018	Nitrogen, Nitrate	5.7	0.5	0.25	10000000	mg/L
MKTF-41	11/15/2018	Sulfate	61	2.5	0.63	600000000	mg/L
MKTF-41	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-41	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-41	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-41	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-41	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	2/13/2019	Bromide	2.2	0.5	0.0675	NA	mg/L
MKTF-41	2/13/2019	Chloride	840	50	50	250000000	mg/L
MKTF-41	2/13/2019	Fluoride, Total	0.33	0.5	0.25	1600000	mg/L
MKTF-41	2/13/2019	Nitrogen, Nitrate	5.6	0.5	0.143	10000000	mg/L
MKTF-41	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-41	2/13/2019	Phosphorus, Ortho	0.29	2.5	0.1305	NA	mg/L
MKTF-41	2/13/2019	Sulfate	61	2.5	0.32	600000000	mg/L
MKTF-41	5/7/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	5/7/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	5/7/2019	Chloride	930	50	6.25	250000000	mg/L
MKTF-41	5/7/2019	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrate	5	0.5	0.027	10000000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrite	0.78	0.5	0.02246	1000000	mg/L
MKTF-41	5/7/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-41	5/7/2019	Sulfate	61	2.5	0.2675	600000000	mg/L
MKTF-41	5/7/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	5/7/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	5/7/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	5/7/2019	Chloride	910	50	6.25	250000000	mg/L
MKTF-41	5/7/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrate	4.8	0.5	0.027	10000000	mg/L
MKTF-41	5/7/2019	Nitrogen, Nitrite	0.78	0.5	0.02246	1000000	mg/L
MKTF-41	5/7/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-41	5/7/2019	Sulfate	62	2.5	0.2675	600000000	mg/L
MKTF-41	8/22/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-41	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-41	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-41	8/22/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
MKTF-41	8/22/2019	Chloride	840	50	50	250000000	mg/L
MKTF-41	8/22/2019	Fluoride, Total	0.4	0.5	0.073	1600000	mg/L
MKTF-41	8/22/2019	Nitrogen, Nitrate	4.8	0.5	0.025	10000000	mg/L
MKTF-41	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-41	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-41	8/22/2019	Sulfate	59	2.5	0.3345	600000000	mg/L
MKTF-41	10/23/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-41	10/23/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-41	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-41	10/23/2019	Bromide	2.1	0.5	0.077	NA	mg/L
MKTF-41	10/23/2019	Chloride	800	50	50	250000000	mg/L
MKTF-41	10/23/2019	Fluoride, Total	0.44	0.5	0.144909	1600000	mg/L
MKTF-41	10/23/2019	Nitrogen, Nitrate	4.8	0.5	0.030387	10000000	mg/L
MKTF-41	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-41	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-41	10/23/2019	Sulfate	58	2.5	0.3345	600000000	mg/L
MKTF-41	2/27/2020	TPH GRO	0.028	0.05	0.0068	10100	mg/L
MKTF-41	2/27/2020	TPH DRO	0.35	0.4	0.2	16700	mg/L
MKTF-41	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-41	2/27/2020	Bromide	2.3	0.5	0.25	NA	mg/L
MKTF-41	2/27/2020	Fluoride, Total	0.37	0.5	0.11	1600000	mg/L
MKTF-41	2/27/2020	Nitrogen, Nitrate	5.3	0.5	0.11	10000000	mg/L
MKTF-41	2/27/2020	Nitrogen, Nitrite	0.19	0.5	0.056	1000000	mg/L
MKTF-41	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	2/27/2020	Sulfate	61	2.5	1.2	600000000	mg/L
MKTF-41	2/27/2020	Chloride	880	50	25	250000000	mg/L
MKTF-41	9/21/2020	TPH GRO	0.022	0.05	0.008	10100	mg/L
MKTF-41	9/21/2020	TPH DRO	0.52	0.07	0.067	16700	mg/L
MKTF-41	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-41	9/21/2020	Bromide	2.3	0.5	0.25	NA	mg/L
MKTF-41	9/21/2020	Fluoride, Total	0.36	0.5	0.22	1600000	mg/L
MKTF-41	9/21/2020	Nitrogen, Nitrate	5.4	0.5	0.1	10000000	mg/L
MKTF-41	9/21/2020	Nitrogen, Nitrite	0.25	0.5	0.07	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-41	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-41	9/21/2020	Sulfate	60	2.5	1.2	600000000	mg/L
MKTF-41	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-41	9/21/2020	Chloride	770	50	25	250000000	mg/L
MKTF-41	12/15/2020	Bicarbonate	230	1	0.5	NA	mg/L
MKTF-41	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-41	12/15/2020	Nitrogen, Nitrate	5.45	0.1	0.033	10000000	mg/L
MKTF-41	12/15/2020	Chloride	839	20	2.4	250000000	mg/L
MKTF-41	12/15/2020	Sulfate	59.5	20	7.4	600000000	mg/L
MKTF-41	12/15/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-41	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-41	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-41	12/15/2020	TPH DRO	3400	129	103	16700	ug/L
MKTF-41	12/15/2020	C28-C40	ND	129	103	NA	ug/L
MKTF-41	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-42	11/18/2014	TPH DRO	44	1	0.83	16700	mg/L
MKTF-42	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/18/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
MKTF-42	3/11/2015	TPH DRO	27	1	0.91	16700	mg/L
MKTF-42	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	3/11/2015	TPH GRO	ND	0.5	0.12	10100	mg/L
MKTF-42	6/9/2015	TPH DRO	60	1	0.91	16700	mg/L
MKTF-42	6/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/9/2015	TPH GRO	0.1	0.05	0.012	10100	mg/L
MKTF-42	8/21/2015	Bromide	2	0.5	0.39	NA	mg/L
MKTF-42	8/21/2015	Chloride	930	50	34	250000000	mg/L
MKTF-42	8/21/2015	Fluoride, Total	0.62	0.5	0.15	1600000	mg/L
MKTF-42	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-42	8/21/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MKTF-42	8/21/2015	Sulfate	130	2.5	0.57	600000000	mg/L
MKTF-42	8/21/2015	TPH DRO	52	1	0.91	16700	mg/L
MKTF-42	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	8/21/2015	TPH GRO	0.21	0.05	0.04	10100	mg/L
MKTF-42	11/5/2015	Bromide	1.7	0.5	0.34	NA	mg/L
MKTF-42	11/5/2015	Chloride	870	25	17	250000000	mg/L
MKTF-42	11/5/2015	Fluoride, Total	0.6	0.5	0.16	1600000	mg/L
MKTF-42	11/5/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-42	11/5/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-42	11/5/2015	Sulfate	120	2.5	1.6	600000000	mg/L
MKTF-42	11/5/2015	TPH DRO	45	1	0.91	16700	mg/L
MKTF-42	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/5/2015	TPH GRO	0.11	0.05	0.012	10100	mg/L
MKTF-42	2/24/2016	Bromide	2	0.5	0.16	NA	mg/L
MKTF-42	2/24/2016	Chloride	860	50	2.7	250000000	mg/L
MKTF-42	2/24/2016	Fluoride, Total	0.69	0.5	0.11	1600000	mg/L
MKTF-42	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-42	2/24/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-42	2/24/2016	Sulfate	120	2.5	0.32	600000000	mg/L
MKTF-42	2/24/2016	TPH DRO	52	1	0.69	16700	mg/L
MKTF-42	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	2/24/2016	TPH GRO	0.12	0.05	0.025	10100	mg/L
MKTF-42	6/9/2016	Bromide	3	0.5	0.16	NA	mg/L
MKTF-42	6/9/2016	Chloride	890	50	2.8	250000000	mg/L
MKTF-42	6/9/2016	Fluoride, Total	0.68	0.5	0.11	1600000	mg/L
MKTF-42	6/9/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-42	6/9/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
MKTF-42	6/9/2016	Sulfate	130	2.5	0.32	600000000	mg/L
MKTF-42	6/9/2016	TPH DRO	60	1	0.69	16700	mg/L
MKTF-42	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/9/2016	TPH GRO	0.16	0.05	0.025	10100	mg/L
MKTF-42	9/9/2016	Bromide	1.7	0.5	0.22	NA	mg/L
MKTF-42	9/9/2016	Chloride	880	50	5.1	250000000	mg/L
MKTF-42	9/9/2016	Fluoride, Total	0.43	0.5	0.25	1600000	mg/L
MKTF-42	9/9/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
MKTF-42	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MKTF-42	9/9/2016	Sulfate	110	2.5	0.71	600000000	mg/L
MKTF-42	9/9/2016	TPH DRO	62	10	6.9	16700	mg/L
MKTF-42	9/9/2016	TPH ORO	ND	50	50	85800	mg/L
MKTF-42	9/9/2016	TPH GRO	0.7	0.05	0.015	10100	mg/L
MKTF-42	10/31/2016	Bromide	3.9	0.5	0.22	NA	mg/L
MKTF-42	10/31/2016	Chloride	900	25	2.5	250000000	mg/L
MKTF-42	10/31/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-42	10/31/2016	Ortho-Phosphate	0.43	2.5	0.38	NA	mg/L
MKTF-42	10/31/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
MKTF-42	10/31/2016	Sulfate	110	2.5	0.71	600000000	mg/L
MKTF-42	10/31/2016	TPH DRO	62	1	0.69	16700	mg/L
MKTF-42	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	10/31/2016	TPH GRO	0.11	0.05	0.025	10100	mg/L
MKTF-42	3/7/2017	Bromide	1.5	0.5	0.15	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	3/7/2017	Chloride	820	50	25	250000000	mg/L
MKTF-42	3/7/2017	Fluoride, Total	0.68	0.5	0.25	1600000	mg/L
MKTF-42	3/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	3/7/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	3/7/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	3/7/2017	TPH DRO	79	1	0.36	16700	mg/L
MKTF-42	3/7/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	3/7/2017	TPH GRO	0.14	0.05	0.025	10100	mg/L
MKTF-42	6/6/2017	Bromide	2.7	0.5	0.073	NA	mg/L
MKTF-42	6/6/2017	Chloride	880	50	25	250000000	mg/L
MKTF-42	6/6/2017	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
MKTF-42	6/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	6/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	6/6/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	6/6/2017	TPH DRO	72	1	0.36	16700	mg/L
MKTF-42	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	6/6/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
MKTF-42	9/25/2017	Bromide	2	0.5	0.073	NA	mg/L
MKTF-42	9/25/2017	Chloride	820	50	25	250000000	mg/L
MKTF-42	9/25/2017	Fluoride, Total	0.6	0.5	0.22	1600000	mg/L
MKTF-42	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	9/25/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	9/25/2017	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-42	9/25/2017	TPH DRO	72	10	3.6	16700	mg/L
MKTF-42	9/25/2017	TPH ORO	ND	50	50	85800	mg/L
MKTF-42	9/25/2017	TPH GRO	0.21	0.05	0.025	10100	mg/L
MKTF-42	11/27/2017	Bromide	1.5	0.5	0.073	NA	mg/L
MKTF-42	11/27/2017	Chloride	850	50	25	250000000	mg/L
MKTF-42	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-42	11/27/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	11/27/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	11/27/2017	Sulfate	110	2.5	0.48	600000000	mg/L
MKTF-42	11/27/2017	TPH DRO	77	1	0.36	16700	mg/L
MKTF-42	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/27/2017	TPH GRO	0.19	0.05	0.025	10100	mg/L
MKTF-42	2/7/2018	Bromide	1.4	0.5	0.073	NA	mg/L
MKTF-42	2/7/2018	Chloride	810	50	25	250000000	mg/L
MKTF-42	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-42	2/7/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	2/7/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MKTF-42	2/7/2018	Sulfate	92	2.5	0.48	600000000	mg/L
MKTF-42	2/7/2018	TPH DRO	79	1	0.63	16700	mg/L
MKTF-42	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	2/7/2018	TPH GRO	0.46	0.05	0.0097	10100	mg/L
MKTF-42	5/9/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-42	5/9/2018	Chloride	920	50	2.9	250000000	mg/L
MKTF-42	5/9/2018	Fluoride, Total	0.47	0.5	0.15	1600000	mg/L
MKTF-42	5/9/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-42	5/9/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-42	5/9/2018	Sulfate	95	2.5	1	600000000	mg/L
MKTF-42	5/9/2018	TPH DRO	72	1	0.63	16700	mg/L
MKTF-42	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	5/9/2018	TPH GRO	0.4	0.05	0.0097	10100	mg/L
MKTF-42	8/29/2018	Bromide	1.6	0.5	0.13	NA	mg/L
MKTF-42	8/29/2018	Chloride	1000	50	2.9	250000000	mg/L
MKTF-42	8/29/2018	Fluoride, Total	0.94	0.5	0.15	1600000	mg/L
MKTF-42	8/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-42	8/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
MKTF-42	8/29/2018	Sulfate	98	2.5	1	600000000	mg/L
MKTF-42	8/29/2018	TPH DRO	64	1	0.63	16700	mg/L
MKTF-42	8/29/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	8/29/2018	TPH GRO	0.21	0.05	0.024	10100	mg/L
MKTF-42	11/15/2018	Bromide	1.5	0.5	0.1	NA	mg/L
MKTF-42	11/15/2018	Chloride	1100	50	50	250000000	mg/L
MKTF-42	11/15/2018	Fluoride, Total	0.89	0.5	0.5	1600000	mg/L
MKTF-42	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-42	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-42	11/15/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
MKTF-42	11/15/2018	Sulfate	87	2.5	0.63	600000000	mg/L
MKTF-42	11/15/2018	TPH DRO	63	1	0.63	16700	mg/L
MKTF-42	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-42	11/15/2018	TPH GRO	0.56	0.05	0.024	10100	mg/L
MKTF-42	2/13/2019	TPH GRO	0.34	0.05	0.0211	10100	mg/L
MKTF-42	2/13/2019	TPH DRO	67	1	0.35	16700	mg/L
MKTF-42	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	2/13/2019	Bromide	1.4	0.5	0.0675	NA	mg/L
MKTF-42	2/13/2019	Chloride	1100	50	50	250000000	mg/L
MKTF-42	2/13/2019	Fluoride, Total	1	0.5	0.25	1600000	mg/L
MKTF-42	2/13/2019	Nitrogen, Nitrate	0.15	0.5	0.143	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-42	2/13/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
MKTF-42	2/13/2019	Phosphorus, Ortho	0.22	2.5	0.1305	NA	mg/L
MKTF-42	2/13/2019	Sulfate	87	2.5	0.32	600000000	mg/L
MKTF-42	5/7/2019	TPH GRO	0.16	0.1	0.0614	10100	mg/L
MKTF-42	5/7/2019	TPH DRO	59	1	0.35	16700	mg/L
MKTF-42	5/7/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	5/7/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-42	5/7/2019	Chloride	1100	50	6.25	250000000	mg/L
MKTF-42	5/7/2019	Fluoride, Total	0.88	0.5	0.25	1600000	mg/L
MKTF-42	5/7/2019	Nitrogen, Nitrate	0.07	0.5	0.027	10000000	mg/L
MKTF-42	5/7/2019	Nitrogen, Nitrite	0.91	0.5	0.02246	1000000	mg/L
MKTF-42	5/7/2019	Phosphorus, Ortho	0.37	2.5	0.2	NA	mg/L
MKTF-42	5/7/2019	Sulfate	89	2.5	0.2675	600000000	mg/L
MKTF-42	8/22/2019	TPH GRO	0.22	0.1	0.0614	10100	mg/L
MKTF-42	8/22/2019	TPH DRO	57	1	0.35	16700	mg/L
MKTF-42	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-42	8/22/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
MKTF-42	8/22/2019	Chloride	1000	50	50	250000000	mg/L
MKTF-42	8/22/2019	Fluoride, Total	0.82	0.5	0.073	1600000	mg/L
MKTF-42	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MKTF-42	8/22/2019	Nitrogen, Nitrite	0.85	0.5	0.027	1000000	mg/L
MKTF-42	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-42	8/22/2019	Sulfate	89	2.5	0.3345	600000000	mg/L
MKTF-42	10/23/2019	TPH GRO	0.14	0.05	0.0211	10100	mg/L
MKTF-42	10/23/2019	TPH DRO	8.6	0.4	0.132	16700	mg/L
MKTF-42	10/23/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-42	10/23/2019	Bromide	1.2	0.5	0.077	NA	mg/L
MKTF-42	10/23/2019	Chloride	940	50	50	250000000	mg/L
MKTF-42	10/23/2019	Fluoride, Total	0.78	0.5	0.144909	1600000	mg/L
MKTF-42	10/23/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
MKTF-42	10/23/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-42	10/23/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-42	10/23/2019	Sulfate	83	2.5	0.3345	600000000	mg/L
MKTF-42	2/27/2020	TPH GRO	0.7	0.05	0.0068	10100	mg/L
MKTF-42	2/27/2020	TPH DRO	35	0.4	0.2	16700	mg/L
MKTF-42	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-42	2/27/2020	Bromide	1.5	0.5	0.25	NA	mg/L
MKTF-42	2/27/2020	Fluoride, Total	0.97	0.5	0.11	1600000	mg/L
MKTF-42	2/27/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-42	2/27/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-42	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	2/27/2020	Sulfate	84	2.5	1.2	600000000	mg/L
MKTF-42	2/27/2020	Chloride	1100	50	25	250000000	mg/L
MKTF-42	9/21/2020	TPH GRO	0.41	0.05	0.008	10100	mg/L
MKTF-42	9/21/2020	TPH DRO	26	0.7	0.67	16700	mg/L
MKTF-42	9/21/2020	TPH ORO	ND	6	6	85800	mg/L
MKTF-42	9/21/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-42	9/21/2020	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
MKTF-42	9/21/2020	Nitrogen, Nitrate	0.12	0.5	0.1	10000000	mg/L
MKTF-42	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-42	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-42	9/21/2020	Sulfate	100	2.5	1.2	600000000	mg/L
MKTF-42	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-42	9/21/2020	Chloride	880	50	25	250000000	mg/L
MKTF-42	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-42	12/16/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-42	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-42	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-42	12/16/2020	Bicarbonate	163	1	0.5	NA	mg/L
MKTF-42	12/16/2020	Bicarbonate	147	1	0.5	NA	mg/L
MKTF-42	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-42	12/16/2020	Fluoride, Total	1.21	1	0.3	1600000	mg/L
MKTF-42	12/16/2020	Chloride	913	50	6	250000000	mg/L
MKTF-42	12/16/2020	Sulfate	114	50	18.5	600000000	mg/L
MKTF-42	12/16/2020	Fluoride, Total	1.31	1	0.3	1600000	mg/L
MKTF-42	12/16/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-42	12/16/2020	Chloride	909	50	6	250000000	mg/L
MKTF-42	12/16/2020	Sulfate	114	50	18.5	600000000	mg/L
MKTF-42	12/16/2020	TPH DRO	**42900**	578	463	16700	ug/L
MKTF-42	12/16/2020	C28-C40	829	578	463	NA	ug/L
MKTF-42	12/16/2020	TPH DRO	**42500**	139	111	16700	ug/L
MKTF-42	12/16/2020	C28-C40	2240	139	111	NA	ug/L
MKTF-42	12/16/2020	TPH (C6-C10)	166	100	47	NA	ug/L
MKTF-42	12/16/2020	TPH (C6-C10)	181	100	47	NA	ug/L
MKTF-42	9/21/2020	Solids, Total Suspended	ND	4	4	NA	mg/L
MKTF-43	11/18/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-43	11/18/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/18/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-43	3/11/2015	TPH DRO	ND	1	0.91	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	3/11/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	3/11/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	8/21/2015	Bromide	15	2	1.5	NA	mg/L
MKTF-43	8/21/2015	Chloride	17000	1000	680	250000000	mg/L
MKTF-43	8/21/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
MKTF-43	8/21/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-43	8/21/2015	Nitrate & Nitrite	ND	10	3	NA	mg/L
MKTF-43	8/21/2015	Sulfate	1700	1000	640	600000000	mg/L
MKTF-43	8/21/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	8/21/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	8/21/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MKTF-43	11/5/2015	Bromide	11	2	1.4	NA	mg/L
MKTF-43	11/5/2015	Chloride	16000	1000	680	250000000	mg/L
MKTF-43	11/5/2015	Fluoride, Total	ND	2	0.64	1600000	mg/L
MKTF-43	11/5/2015	Ortho-Phosphate	ND	10	1.8	NA	mg/L
MKTF-43	11/5/2015	Nitrate & Nitrite	ND	10	3	NA	mg/L
MKTF-43	11/5/2015	Sulfate	1600	25	16	600000000	mg/L
MKTF-43	11/5/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-43	11/5/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/5/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-43	2/24/2016	Bromide	12	2	0.65	NA	mg/L
MKTF-43	2/24/2016	Chloride	15000	500	27	250000000	mg/L
MKTF-43	2/24/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-43	2/24/2016	Ortho-Phosphate	ND	10	4.4	NA	mg/L
MKTF-43	2/24/2016	Nitrate & Nitrite	ND	10	4.2	NA	mg/L
MKTF-43	2/24/2016	Sulfate	1200	250	32	600000000	mg/L
MKTF-43	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	6/9/2016	Bromide	20	2	0.65	NA	mg/L
MKTF-43	6/9/2016	Chloride	15000	1000	55	250000000	mg/L
MKTF-43	6/9/2016	Fluoride, Total	ND	2	0.45	1600000	mg/L
MKTF-43	6/9/2016	Ortho-Phosphate	ND	10	4.4	NA	mg/L
MKTF-43	6/9/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
MKTF-43	6/9/2016	Sulfate	1300	1000	280	600000000	mg/L
MKTF-43	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	9/9/2016	Bromide	13	2	0.87	NA	mg/L
MKTF-43	9/9/2016	Chloride	16000	1000	100	250000000	mg/L
MKTF-43	9/9/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	9/9/2016	Ortho-Phosphate	6.6	10	1.5	NA	mg/L
MKTF-43	9/9/2016	Nitrate & Nitrite	ND	10	4.6	NA	mg/L
MKTF-43	9/9/2016	Sulfate	1800	25	7.1	600000000	mg/L
MKTF-43	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	9/9/2016	TPH GRO	0.026	0.05	0.015	10100	mg/L
MKTF-43	10/31/2016	Bromide	13	10	4.4	NA	mg/L
MKTF-43	10/31/2016	Chloride	19000	1000	100	250000000	mg/L
MKTF-43	10/31/2016	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	10/31/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
MKTF-43	10/31/2016	Nitrate & Nitrite	62	20	9.2	NA	mg/L
MKTF-43	10/31/2016	Sulfate	1300	1000	280	600000000	mg/L
MKTF-43	10/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-43	10/31/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	10/31/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	3/8/2017	Bromide	10	2	0.61	NA	mg/L
MKTF-43	3/8/2017	Chloride	13000	1000	500	250000000	mg/L
MKTF-43	3/8/2017	Fluoride, Total	ND	2	1	1600000	mg/L
MKTF-43	3/8/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	3/8/2017	Nitrate & Nitrite	25	10	1.3	NA	mg/L
MKTF-43	3/8/2017	Sulfate	1000	1000	190	600000000	mg/L
MKTF-43	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	3/8/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	6/6/2017	Bromide	8.6	2	0.29	NA	mg/L
MKTF-43	6/6/2017	Chloride	12000	500	250	250000000	mg/L
MKTF-43	6/6/2017	Fluoride, Total	ND	2	0.87	1600000	mg/L
MKTF-43	6/6/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	6/6/2017	Nitrate & Nitrite	23	10	1.3	NA	mg/L
MKTF-43	6/6/2017	Sulfate	980	500	96	600000000	mg/L
MKTF-43	6/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	6/6/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	6/6/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	9/25/2017	Bromide	8	0.5	0.073	NA	mg/L
MKTF-43	9/25/2017	Chloride	9500	500	250	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	9/25/2017	Nitrate & Nitrite	13	10	1.3	NA	mg/L
MKTF-43	9/25/2017	Sulfate	1100	500	96	600000000	mg/L
MKTF-43	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	11/27/2017	Bromide	8.5	0.5	0.073	NA	mg/L
MKTF-43	11/27/2017	Chloride	12000	500	250	250000000	mg/L
MKTF-43	11/27/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	11/27/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
MKTF-43	11/27/2017	Nitrate & Nitrite	14	10	1.3	NA	mg/L
MKTF-43	11/27/2017	Sulfate	1200	25	4.8	600000000	mg/L
MKTF-43	11/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-43	11/27/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-43	2/7/2018	Bromide	4.9	0.5	0.073	NA	mg/L
MKTF-43	2/7/2018	Chloride	8500	500	250	250000000	mg/L
MKTF-43	2/7/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-43	2/7/2018	Ortho-Phosphate	3.8	2.5	1.2	NA	mg/L
MKTF-43	2/7/2018	Nitrate & Nitrite	13	10	1.3	NA	mg/L
MKTF-43	2/7/2018	Sulfate	950	500	96	600000000	mg/L
MKTF-43	2/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	2/7/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	2/7/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	5/9/2018	Bromide	4.8	2	0.54	NA	mg/L
MKTF-43	5/9/2018	Chloride	7600	500	29	250000000	mg/L
MKTF-43	5/9/2018	Fluoride, Total	ND	2	0.59	1600000	mg/L
MKTF-43	5/9/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-43	5/9/2018	Nitrate & Nitrite	6.5	4	1.1	NA	mg/L
MKTF-43	5/9/2018	Sulfate	810	10	4.1	600000000	mg/L
MKTF-43	5/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	5/9/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	5/9/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	8/30/2018	Bromide	1.2	0.5	0.13	NA	mg/L
MKTF-43	8/30/2018	Chloride	3200	250	15	250000000	mg/L
MKTF-43	8/30/2018	Fluoride, Total	0.38	0.5	0.15	1600000	mg/L
MKTF-43	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-43	8/30/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
MKTF-43	8/30/2018	Nitrogen, Nitrate	8.5	0.5	0.033	10000000	mg/L
MKTF-43	8/30/2018	Sulfate	260	10	4.1	600000000	mg/L
MKTF-43	8/30/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	8/30/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-43	11/15/2018	Bromide	1.4	0.5	0.1	NA	mg/L
MKTF-43	11/15/2018	Chloride	2600	250	250	250000000	mg/L
MKTF-43	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-43	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-43	11/15/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
MKTF-43	11/15/2018	Nitrogen, Nitrate	15	0.5	0.25	10000000	mg/L
MKTF-43	11/15/2018	Sulfate	290	10	2.5	600000000	mg/L
MKTF-43	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-43	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-43	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-43	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	2/13/2019	Bromide	2.5	2	0.27	NA	mg/L
MKTF-43	2/13/2019	Chloride	4800	250	250	250000000	mg/L
MKTF-43	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrate	18	2	0.572	10000000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-43	2/13/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
MKTF-43	2/13/2019	Sulfate	470	10	1.28	600000000	mg/L
MKTF-43	2/13/2019	Bromide	2	0.5	0.0675	NA	mg/L
MKTF-43	2/13/2019	Chloride	4300	250	250	250000000	mg/L
MKTF-43	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrate	22	0.5	0.143	10000000	mg/L
MKTF-43	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
MKTF-43	2/13/2019	Phosphorus, Ortho	0.84	2.5	0.1305	NA	mg/L
MKTF-43	2/13/2019	Sulfate	410	10	1.28	600000000	mg/L
MKTF-43	5/8/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-43	5/8/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	5/8/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
MKTF-43	5/8/2019	Chloride	3600	250	31.25	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	5/8/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
MKTF-43	5/8/2019	Nitrogen, Nitrate	19	0.5	0.027	10000000	mg/L
MKTF-43	5/8/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-43	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-43	5/8/2019	Sulfate	340	10	1.07	600000000	mg/L
MKTF-43	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	8/22/2019	Bromide	2.2	0.5	0.088765	NA	mg/L
MKTF-43	8/22/2019	Chloride	4800	250	250	250000000	mg/L
MKTF-43	8/22/2019	Fluoride, Total	0.086	0.5	0.073	1600000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrate	19	0.5	0.025	10000000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	8/22/2019	Sulfate	550	10	1.338	600000000	mg/L
MKTF-43	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-43	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-43	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-43	8/22/2019	Bromide	2.3	0.5	0.088765	NA	mg/L
MKTF-43	8/22/2019	Chloride	5100	250	250	250000000	mg/L
MKTF-43	8/22/2019	Fluoride, Total	0.074	0.5	0.073	1600000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrate	18	0.5	0.025	10000000	mg/L
MKTF-43	8/22/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	8/22/2019	Sulfate	560	10	1.338	600000000	mg/L
MKTF-43	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-43	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-43	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-43	10/24/2019	Bromide	2.4	2	0.308	NA	mg/L
MKTF-43	10/24/2019	Chloride	4900	250	250	250000000	mg/L
MKTF-43	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrate	12	0.5	0.030387	10000000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	10/24/2019	Sulfate	530	10	1.338	600000000	mg/L
MKTF-43	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-43	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-43	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-43	10/24/2019	Bromide	2.5	2	0.308	NA	mg/L
MKTF-43	10/24/2019	Chloride	5100	250	250	250000000	mg/L
MKTF-43	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrate	12	0.5	0.030387	10000000	mg/L
MKTF-43	10/24/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
MKTF-43	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-43	10/24/2019	Sulfate	540	10	1.338	600000000	mg/L
MKTF-43	2/27/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-43	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-43	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-43	2/27/2020	Bromide	3.3	0.5	0.25	NA	mg/L
MKTF-43	2/27/2020	Fluoride, Total	0.3	0.5	0.11	1600000	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-43	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-43	2/27/2020	Sulfate	620	10	5	600000000	mg/L
MKTF-43	2/27/2020	Chloride	5400	250	120	250000000	mg/L
MKTF-43	2/27/2020	TPH GRO	0.01	0.05	0.0068	10100	mg/L
MKTF-43	2/27/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-43	2/27/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-43	2/27/2020	Bromide	3.5	0.5	0.25	NA	mg/L
MKTF-43	2/27/2020	Fluoride, Total	0.29	0.5	0.11	1600000	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-43	2/27/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	2/27/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
MKTF-43	2/27/2020	Sulfate	640	10	5	600000000	mg/L
MKTF-43	2/27/2020	Chloride	5600	250	120	250000000	mg/L
MKTF-43	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-43	9/21/2020	TPH DRO	0.072	0.07	0.067	16700	mg/L
MKTF-43	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-43	9/21/2020	Bromide	6.2	0.5	0.25	NA	mg/L
MKTF-43	9/21/2020	Nitrogen, Nitrate	3.5	0.5	0.1	10000000	mg/L
MKTF-43	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-43	9/21/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
MKTF-43	9/21/2020	Solids, Total Suspended	9	4	4	NA	mg/L
MKTF-43	9/21/2020	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
MKTF-43	9/21/2020	Chloride	6900	500	250	250000000	mg/L
MKTF-43	9/21/2020	Sulfate	790	500	250	600000000	mg/L
MKTF-43	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-43	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-43	12/15/2020	Phosphorus, Total	0.171	0.1	0.032	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-43	12/15/2020	Phosphorus, Total	0.219	0.1	0.032	NA	mg/L
MKTF-43	12/15/2020	Bicarbonate	210	1	0.5	NA	mg/L
MKTF-43	12/15/2020	Bicarbonate	217	1	0.5	NA	mg/L
MKTF-43	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-43	12/15/2020	Nitrogen, Nitrate	2.76	0.1	0.033	10000000	mg/L
MKTF-43	12/15/2020	Sulfate	782	100	37	600000000	mg/L
MKTF-43	12/15/2020	Chloride	8080	500	60	250000000	mg/L
MKTF-43	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-43	12/15/2020	Nitrogen, Nitrate	2.79	0.1	0.033	10000000	mg/L
MKTF-43	12/15/2020	Sulfate	790	100	37	600000000	mg/L
MKTF-43	12/15/2020	Chloride	7610	500	60	250000000	mg/L
MKTF-43	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-43	12/15/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-43	12/15/2020	TPH DRO	276	157	125	16700	ug/L
MKTF-43	12/15/2020	C28-C40	ND	157	125	NA	ug/L
MKTF-43	12/15/2020	TPH DRO	269	156	125	16700	ug/L
MKTF-43	12/15/2020	C28-C40	ND	156	125	NA	ug/L
MKTF-43	9/21/2020	Solids, Total Suspended	9	4	4	NA	mg/L
MKTF-44	11/21/2014	TPH DRO	ND	1	0.83	16700	mg/L
MKTF-44	11/21/2014	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/21/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MKTF-44	3/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	3/12/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	3/12/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	6/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	6/10/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	8/17/2015	Bromide	0.58	0.5	0.39	NA	mg/L
MKTF-44	8/17/2015	Chloride	110	10	2.7	250000000	mg/L
MKTF-44	8/17/2015	Fluoride, Total	0.58	0.5	0.15	1600000	mg/L
MKTF-44	8/17/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
MKTF-44	8/17/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
MKTF-44	8/17/2015	Sulfate	120	2.5	0.57	600000000	mg/L
MKTF-44	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	8/17/2015	TPH GRO	ND	0.1	0.024	10100	mg/L
MKTF-44	11/9/2015	Bromide	0.63	0.5	0.34	NA	mg/L
MKTF-44	11/9/2015	Chloride	91	10	6.8	250000000	mg/L
MKTF-44	11/9/2015	Fluoride, Total	0.56	0.5	0.16	1600000	mg/L
MKTF-44	11/9/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
MKTF-44	11/9/2015	Nitrogen, Nitrite	ND	0.5	0.14	1000000	mg/L
MKTF-44	11/9/2015	Nitrogen, Nitrate	0.75	0.5	0.29	10000000	mg/L
MKTF-44	11/9/2015	Sulfate	110	2.5	1.6	600000000	mg/L
MKTF-44	11/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
MKTF-44	11/9/2015	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
MKTF-44	2/24/2016	Bromide	1.1	0.5	0.16	NA	mg/L
MKTF-44	2/24/2016	Chloride	270	10	0.55	250000000	mg/L
MKTF-44	2/24/2016	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-44	2/24/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
MKTF-44	2/24/2016	Nitrate & Nitrite	1.1	1	0.42	NA	mg/L
MKTF-44	2/24/2016	Sulfate	100	2.5	0.32	600000000	mg/L
MKTF-44	2/24/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	2/24/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	2/24/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	6/9/2016	Bromide	0.64	0.1	0.032	NA	mg/L
MKTF-44	6/9/2016	Chloride	610	25	1.4	250000000	mg/L
MKTF-44	6/9/2016	Fluoride, Total	0.29	0.1	0.023	1600000	mg/L
MKTF-44	6/9/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
MKTF-44	6/9/2016	Nitrate & Nitrite	3.6	1	0.42	NA	mg/L
MKTF-44	6/9/2016	Sulfate	96	10	1.3	600000000	mg/L
MKTF-44	6/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	6/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/9/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	9/9/2016	Bromide	0.51	0.5	0.22	NA	mg/L
MKTF-44	9/9/2016	Chloride	310	10	1	250000000	mg/L
MKTF-44	9/9/2016	Fluoride, Total	0.36	0.5	0.25	1600000	mg/L
MKTF-44	9/9/2016	Ortho-Phosphate	1.7	2.5	0.38	NA	mg/L
MKTF-44	9/9/2016	Nitrate & Nitrite	1.8	1	0.46	NA	mg/L
MKTF-44	9/9/2016	Sulfate	97	2.5	0.71	600000000	mg/L
MKTF-44	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	9/9/2016	TPH GRO	0.023	0.05	0.015	10100	mg/L
MKTF-44	11/1/2016	Bromide	1.1	0.5	0.22	NA	mg/L
MKTF-44	11/1/2016	Chloride	150	10	1	250000000	mg/L
MKTF-44	11/1/2016	Fluoride, Total	0.32	0.5	0.25	1600000	mg/L
MKTF-44	11/1/2016	Ortho-Phosphate	1.2	2.5	0.38	NA	mg/L
MKTF-44	11/1/2016	Nitrate & Nitrite	0.81	1	0.46	NA	mg/L
MKTF-44	11/1/2016	Sulfate	100	2.5	0.71	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	11/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
MKTF-44	11/1/2016	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	3/8/2017	Bromide	ND	2	0.61	NA	mg/L
MKTF-44	3/8/2017	Chloride	3500	250	120	250000000	mg/L
MKTF-44	3/8/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
MKTF-44	3/8/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-44	3/8/2017	Nitrate & Nitrite	26	4	0.52	NA	mg/L
MKTF-44	3/8/2017	Sulfate	59	10	1.9	600000000	mg/L
MKTF-44	3/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	3/8/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	3/8/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	6/5/2017	Bromide	0.4	0.1	0.014	NA	mg/L
MKTF-44	6/5/2017	Chloride	1300	50	25	250000000	mg/L
MKTF-44	6/5/2017	Fluoride, Total	ND	0.1	0.044	1600000	mg/L
MKTF-44	6/5/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MKTF-44	6/5/2017	Nitrate & Nitrite	7.6	1	0.13	NA	mg/L
MKTF-44	6/5/2017	Sulfate	80	10	1.9	600000000	mg/L
MKTF-44	6/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	6/5/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	6/5/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	9/25/2017	Bromide	1.3	0.5	0.073	NA	mg/L
MKTF-44	9/25/2017	Chloride	1100	50	25	250000000	mg/L
MKTF-44	9/25/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	9/25/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	9/25/2017	Nitrate & Nitrite	7	1	0.13	NA	mg/L
MKTF-44	9/25/2017	Sulfate	85	2.5	0.48	600000000	mg/L
MKTF-44	9/25/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	9/25/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	9/25/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MKTF-44	11/28/2017	Bromide	0.7	0.5	0.073	NA	mg/L
MKTF-44	11/28/2017	Chloride	730	25	12	250000000	mg/L
MKTF-44	11/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	11/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	11/28/2017	Nitrate & Nitrite	4.2	1	0.13	NA	mg/L
MKTF-44	11/28/2017	Sulfate	91	2.5	0.48	600000000	mg/L
MKTF-44	11/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
MKTF-44	11/28/2017	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/28/2017	TPH GRO	0.017	0.05	0.0097	10100	mg/L
MKTF-44	2/8/2018	Bromide	0.6	0.5	0.073	NA	mg/L
MKTF-44	2/8/2018	Chloride	390	10	5	250000000	mg/L
MKTF-44	2/8/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	2/8/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	2/8/2018	Nitrate & Nitrite	2.1	1	0.13	NA	mg/L
MKTF-44	2/8/2018	Sulfate	100	2.5	0.48	600000000	mg/L
MKTF-44	2/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	2/8/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	2/8/2018	TPH GRO	0.01	0.05	0.0097	10100	mg/L
MKTF-44	5/10/2018	Bromide	0.37	0.1	0.027	NA	mg/L
MKTF-44	5/10/2018	Chloride	240	10	0.59	250000000	mg/L
MKTF-44	5/10/2018	Fluoride, Total	0.16	0.1	0.03	1600000	mg/L
MKTF-44	5/10/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
MKTF-44	5/10/2018	Nitrogen, Nitrite	0.066	0.1	0.048	1000000	mg/L
MKTF-44	5/10/2018	Nitrogen, Nitrate	1.1	0.1	0.0066	10000000	mg/L
MKTF-44	5/10/2018	Sulfate	95	10	4.1	600000000	mg/L
MKTF-44	5/10/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	5/10/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	5/10/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
MKTF-44	8/30/2018	Bromide	0.53	0.5	0.13	NA	mg/L
MKTF-44	8/30/2018	Chloride	530	25	9.1	250000000	mg/L
MKTF-44	8/30/2018	Fluoride, Total	0.17	0.5	0.15	1600000	mg/L
MKTF-44	8/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MKTF-44	8/30/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MKTF-44	8/30/2018	Nitrogen, Nitrate	2.5	0.5	0.033	10000000	mg/L
MKTF-44	8/30/2018	Sulfate	96	2.5	1	600000000	mg/L
MKTF-44	8/30/2018	TPH DRO	1.7	1	0.63	16700	mg/L
MKTF-44	8/30/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	8/30/2018	TPH GRO	0.015	0.05	0.0097	10100	mg/L
MKTF-44	11/15/2018	Bromide	ND	0.5	0.1	NA	mg/L
MKTF-44	11/15/2018	Chloride	230	10	10	250000000	mg/L
MKTF-44	11/15/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
MKTF-44	11/15/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
MKTF-44	11/15/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
MKTF-44	11/15/2018	Nitrogen, Nitrate	0.57	0.5	0.25	10000000	mg/L
MKTF-44	11/15/2018	Sulfate	100	2.5	0.63	600000000	mg/L
MKTF-44	11/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
MKTF-44	11/15/2018	TPH ORO	ND	5	5	85800	mg/L
MKTF-44	11/15/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MKTF-44	2/13/2019	TPH GRO	0.022	0.05	0.0211	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-44	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	2/13/2019	Bromide	0.84	0.5	0.0675	NA	mg/L
MKTF-44	2/13/2019	Chloride	1500	100	100	250000000	mg/L
MKTF-44	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-44	2/13/2019	Nitrogen, Nitrate	9.9	0.5	0.143	10000000	mg/L
MKTF-44	2/13/2019	Nitrogen, Nitrite	0.35	0.5	0.3475	1000000	mg/L
MKTF-44	2/13/2019	Phosphorus, Ortho	0.86	2.5	0.1305	NA	mg/L
MKTF-44	2/13/2019	Sulfate	89	2.5	0.32	600000000	mg/L
MKTF-44	5/8/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
MKTF-44	5/8/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	5/8/2019	Bromide	0.87	0.5	0.088765	NA	mg/L
MKTF-44	5/8/2019	Chloride	2400	100	12.5	250000000	mg/L
MKTF-44	5/8/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
MKTF-44	5/8/2019	Nitrogen, Nitrate	14	0.5	0.027	10000000	mg/L
MKTF-44	5/8/2019	Nitrogen, Nitrite	ND	2	0.08984	1000000	mg/L
MKTF-44	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
MKTF-44	5/8/2019	Sulfate	72	2.5	0.2675	600000000	mg/L
MKTF-44	8/22/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MKTF-44	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
MKTF-44	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
MKTF-44	8/22/2019	Bromide	0.67	0.5	0.088765	NA	mg/L
MKTF-44	8/22/2019	Chloride	1500	50	50	250000000	mg/L
MKTF-44	8/22/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
MKTF-44	8/22/2019	Nitrogen, Nitrate	9	0.5	0.025	10000000	mg/L
MKTF-44	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-44	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-44	8/22/2019	Sulfate	84	2.5	0.3345	600000000	mg/L
MKTF-44	10/24/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
MKTF-44	10/24/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
MKTF-44	10/24/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
MKTF-44	10/24/2019	Bromide	0.6	0.5	0.077	NA	mg/L
MKTF-44	10/24/2019	Chloride	810	25	25	250000000	mg/L
MKTF-44	10/24/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
MKTF-44	10/24/2019	Nitrogen, Nitrate	4.9	0.5	0.030387	10000000	mg/L
MKTF-44	10/24/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MKTF-44	10/24/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MKTF-44	10/24/2019	Sulfate	91	2.5	0.3345	600000000	mg/L
MKTF-44	3/5/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-44	3/5/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-44	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-44	3/5/2020	Bromide	0.73	0.5	0.25	NA	mg/L
MKTF-44	3/5/2020	Fluoride, Total	0.2	0.5	0.11	1600000	mg/L
MKTF-44	3/5/2020	Nitrogen, Nitrate	4.6	0.5	0.11	10000000	mg/L
MKTF-44	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-44	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	3/5/2020	Sulfate	100	2.5	1.2	600000000	mg/L
MKTF-44	3/5/2020	Chloride	830	25	12	250000000	mg/L
MKTF-44	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-44	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-44	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-44	9/21/2020	Bromide	0.78	0.5	0.25	NA	mg/L
MKTF-44	9/21/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-44	9/21/2020	Nitrogen, Nitrate	5.5	0.5	0.1	10000000	mg/L
MKTF-44	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-44	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-44	9/21/2020	Sulfate	96	10	5	600000000	mg/L
MKTF-44	9/21/2020	Chloride	780	25	12	250000000	mg/L
MKTF-44	9/21/2020	Solids, Total Suspended	89	4	4	NA	mg/L
MKTF-44	12/23/2020	Bicarbonate	612	1	0.5	NA	mg/L
MKTF-44	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-44	12/23/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-44	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-44	12/23/2020	Nitrogen, Nitrate	1.85	0.1	0.033	10000000	mg/L
MKTF-44	12/23/2020	Chloride	302	10	1.2	250000000	mg/L
MKTF-44	12/23/2020	Sulfate	104	10	3.7	600000000	mg/L
MKTF-44	12/23/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-44	12/23/2020	TPH DRO	171	156	125	16700	ug/L
MKTF-44	12/23/2020	C28-C40	ND	156	125	NA	ug/L
MKTF-44	9/21/2020	Solids, Total Suspended	89	4	4	NA	mg/L
MKTF-46	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-46	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-46	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-46	3/6/2020	Bromide	0.42	0.5	0.25	NA	mg/L
MKTF-46	3/6/2020	Fluoride, Total	0.38	0.5	0.11	1600000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrate	9.3	0.5	0.11	10000000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-46	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-46	3/6/2020	Sulfate	240	10	5	600000000	mg/L
MKTF-46	3/6/2020	Chloride	570	25	12	250000000	mg/L
MKTF-46	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-46	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-46	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-46	3/6/2020	Bromide	0.41	0.5	0.25	NA	mg/L
MKTF-46	3/6/2020	Fluoride, Total	0.37	0.5	0.11	1600000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrate	9.4	0.5	0.11	10000000	mg/L
MKTF-46	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-46	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-46	3/6/2020	Sulfate	250	10	5	600000000	mg/L
MKTF-46	3/6/2020	Chloride	560	25	12	250000000	mg/L
MKTF-46	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MKTF-46	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MKTF-46	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-46	9/17/2020	Bromide	0.37	0.5	0.25	NA	mg/L
MKTF-46	9/17/2020	Fluoride, Total	0.5	0.5	0.22	1600000	mg/L
MKTF-46	9/17/2020	Nitrogen, Nitrate	7.7	0.5	0.1	10000000	mg/L
MKTF-46	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-46	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-46	9/17/2020	Sulfate	250	2.5	1.2	600000000	mg/L
MKTF-46	9/17/2020	Chloride	610	25	12	250000000	mg/L
MKTF-46	12/16/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-46	12/16/2020	Nitrogen, Nitrate	7.48	0.1	0.033	10000000	mg/L
MKTF-46	12/16/2020	Chloride	575	20	2.4	250000000	mg/L
MKTF-46	12/16/2020	Sulfate	292	20	7.4	600000000	mg/L
MKTF-46	12/16/2020	Bicarbonate	274	1	0.5	NA	mg/L
MKTF-46	12/16/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
MKTF-46	12/16/2020	Ammonia	0.589	0.05	0.024	NA	mg/L
MKTF-46	12/16/2020	TPH DRO	ND	152	122	16700	ug/L
MKTF-46	12/16/2020	C28-C40	ND	152	122	NA	ug/L
MKTF-46	12/16/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
MKTF-47	3/6/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
MKTF-47	3/6/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
MKTF-47	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-47	3/6/2020	Bromide	0.48	0.5	0.25	NA	mg/L
MKTF-47	3/6/2020	Fluoride, Total	0.76	0.5	0.11	1600000	mg/L
MKTF-47	3/6/2020	Nitrogen, Nitrate	11	0.5	0.11	10000000	mg/L
MKTF-47	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-47	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-47	3/6/2020	Chloride	380	10	5	250000000	mg/L
MKTF-47	3/6/2020	Sulfate	320	10	5	600000000	mg/L
MKTF-49	3/5/2020	TPH GRO	77	5	0.68	10100	mg/L
MKTF-49	3/5/2020	TPH DRO	1.1	0.4	0.2	16700	mg/L
MKTF-49	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-49	3/5/2020	Bromide	1.6	0.5	0.25	NA	mg/L
MKTF-49	3/5/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
MKTF-49	3/5/2020	Nitrogen, Nitrate	0.13	0.5	0.11	10000000	mg/L
MKTF-49	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-49	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-49	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-49	3/5/2020	Chloride	1000	50	25	250000000	mg/L
MKTF-49	9/20/2020	TPH GRO	97	2.5	0.4	10100	mg/L
MKTF-49	9/20/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
MKTF-49	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MKTF-49	9/20/2020	Bromide	1.3	0.5	0.25	NA	mg/L
MKTF-49	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MKTF-49	9/20/2020	Nitrogen, Nitrate	0.13	0.5	0.1	10000000	mg/L
MKTF-49	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MKTF-49	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-49	9/20/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-49	9/20/2020	Solids, Total Suspended	540	8	8	NA	mg/L
MKTF-49	9/20/2020	Chloride	1100	50	25	250000000	mg/L
MKTF-49	12/23/2020	Bicarbonate	734	1	0.5	NA	mg/L
MKTF-49	12/23/2020	Sulfate	ND	1	0.37	600000000	mg/L
MKTF-49	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
MKTF-49	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
MKTF-49	12/23/2020	Chloride	1560	100	12	250000000	mg/L
MKTF-49	12/23/2020	Phosphorus, Total	0.433	0.1	0.032	NA	mg/L
MKTF-49	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
MKTF-49	12/23/2020	TPH (C6-C10)	84600	5000	2350	NA	ug/L
MKTF-49	12/23/2020	TPH DRO	5750	147	118	16700	ug/L
MKTF-49	12/23/2020	C28-C40	ND	147	118	NA	ug/L
MKTF-49	9/20/2020	Solids, Total Suspended	540	8	8	NA	mg/L
MKTF-50	3/5/2020	TPH GRO	22	0.25	0.034	10100	mg/L
MKTF-50	3/5/2020	TPH DRO	2.9	0.4	0.2	16700	mg/L
MKTF-50	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-50	3/5/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-50	3/5/2020	Fluoride, Total	1.5	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MKTF-50	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-50	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-50	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-50	3/5/2020	Chloride	360	10	5	250000000	mg/L
MKTF-50	3/5/2020	TPH GRO	23	0.25	0.034	10100	mg/L
MKTF-50	3/5/2020	TPH DRO	4.3	0.4	0.2	16700	mg/L
MKTF-50	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
MKTF-50	3/5/2020	Bromide	2.5	0.5	0.25	NA	mg/L
MKTF-50	3/5/2020	Fluoride, Total	1.5	0.5	0.11	1600000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
MKTF-50	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
MKTF-50	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MKTF-50	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
MKTF-50	3/5/2020	Chloride	350	10	5	250000000	mg/L
MKTF-50	12/16/2020	Phosphorus, Total	0.17	0.1	0.032	NA	mg/L
MKTF-50	12/16/2020	Ammonia	0.642	0.05	0.024	NA	mg/L
MKTF-50	12/16/2020	Sulfate	11.5	1	0.37	600000000	mg/L
MKTF-50	12/16/2020	Fluoride, Total	3.3	1	0.3	1600000	mg/L
MKTF-50	12/16/2020	Nitrogen, Nitrate	4.31	0.1	0.033	10000000	mg/L
MKTF-50	12/16/2020	Chloride	665	20	2.4	250000000	mg/L
MKTF-50	12/16/2020	Bicarbonate	818	1	0.5	NA	mg/L
MKTF-50	12/16/2020	TPH (C6-C10)	17000	500	235	NA	ug/L
MKTF-50	12/16/2020	TPH DRO	7410	147	117	16700	ug/L
MKTF-50	12/16/2020	C28-C40	327	147	117	NA	ug/L
MW-1	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-1	8/24/2012	Chloride	47	10	1	250000000	mg/L
MW-1	8/24/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-1	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-1	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-1	8/24/2012	Sulfate	140	10	2.4	600000000	mg/L
MW-1	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-1	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
MW-1	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-1	9/9/2013	Bromide	ND	0.1	0.026	NA	mg/L
MW-1	9/9/2013	Chloride	44	10	3	250000000	mg/L
MW-1	9/9/2013	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
MW-1	9/9/2013	Fluoride, Total	0.61	0.1	0.033	1600000	mg/L
MW-1	9/9/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-1	9/9/2013	Nitrate & Nitrite	4.1	1	0.18	NA	mg/L
MW-1	9/9/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-1	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-1	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/9/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-1	9/16/2014	Bromide	0.11	0.1	0.022	NA	mg/L
MW-1	9/16/2014	Chloride	44	10	5	250000000	mg/L
MW-1	9/16/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	9/16/2014	Fluoride, Total	0.69	0.1	0.018	1600000	mg/L
MW-1	9/16/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-1	9/16/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MW-1	9/16/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-1	9/16/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-1	9/16/2014	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/16/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-1	8/14/2015	Bromide	ND	0.1	0.077	NA	mg/L
MW-1	8/14/2015	Chloride	23	10	2.7	250000000	mg/L
MW-1	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	8/14/2015	Fluoride, Total	0.39	0.1	0.029	1600000	mg/L
MW-1	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-1	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-1	8/14/2015	Sulfate	73	10	2.3	600000000	mg/L
MW-1	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-1	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-1	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-1	9/7/2016	Bromide	0.1	0.1	0.044	NA	mg/L
MW-1	9/7/2016	Chloride	44	10	1	250000000	mg/L
MW-1	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	9/7/2016	Fluoride, Total	0.63	0.1	0.05	1600000	mg/L
MW-1	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-1	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-1	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
MW-1	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-1	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/7/2016	TPH GRO	0.025	0.05	0.015	10100	mg/L
MW-1	9/20/2017	Bromide	0.29	0.5	0.073	NA	mg/L
MW-1	9/20/2017	Chloride	48	2.5	1.2	250000000	mg/L
MW-1	9/20/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/20/2017	Fluoride, Total	0.61	0.5	0.22	1600000	mg/L
MW-1	9/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-1	9/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-1	9/20/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-1	9/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-1	9/20/2017	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/20/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-1	9/13/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-1	9/13/2018	Chloride	48	2.5	0.91	250000000	mg/L
MW-1	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/13/2018	Fluoride, Total	0.8	0.5	0.16	1600000	mg/L
MW-1	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-1	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-1	9/13/2018	Nitrogen, Nitrate	0.049	0.5	0.033	10000000	mg/L
MW-1	9/13/2018	Sulfate	160	2.5	1	600000000	mg/L
MW-1	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-1	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-1	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-1	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-1	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-1	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-1	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-1	8/12/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-1	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-1	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
MW-1	8/12/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-1	8/12/2019	Chloride	47	2.5	2.5	250000000	mg/L
MW-1	8/12/2019	Fluoride, Total	0.73	0.5	0.073	1600000	mg/L
MW-1	8/12/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-1	8/12/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-1	8/12/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-1	8/12/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MW-1	8/12/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-1	9/22/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-1	9/22/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-1	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-1	9/22/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-1	9/22/2020	Chloride	48	2.5	1.2	250000000	mg/L
MW-1	9/22/2020	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MW-1	9/22/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MW-1	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-1	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-1	9/22/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-1	9/22/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-2	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-2	8/24/2012	Chloride	49	10	1	250000000	mg/L
MW-2	8/24/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-2	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-2	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-2	8/24/2012	Sulfate	150	10	2.4	600000000	mg/L
MW-2	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-2	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
MW-2	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-2	9/10/2013	Bromide	0.1	0.1	0.026	NA	mg/L
MW-2	9/10/2013	Chloride	50	10	3	250000000	mg/L
MW-2	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-2	9/10/2013	Fluoride, Total	0.77	0.1	0.033	1600000	mg/L
MW-2	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-2	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-2	9/10/2013	Nitrogen, Nitrate	0.11	0.1	0.016	10000000	mg/L
MW-2	9/10/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-2	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-2	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-2	9/16/2014	Bromide	0.11	0.1	0.022	NA	mg/L
MW-2	9/16/2014	Chloride	51	10	5	250000000	mg/L
MW-2	9/16/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	9/16/2014	Fluoride, Total	0.73	0.1	0.018	1600000	mg/L
MW-2	9/16/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-2	9/16/2014	Nitrate & Nitrite	21	1	0.076	NA	mg/L
MW-2	9/16/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-2	9/16/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-2	9/16/2014	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/16/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-2	8/14/2015	Bromide	ND	0.1	0.077	NA	mg/L
MW-2	8/14/2015	Chloride	35	10	2.7	250000000	mg/L
MW-2	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	8/14/2015	Fluoride, Total	0.54	0.1	0.029	1600000	mg/L
MW-2	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-2	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-2	8/14/2015	Sulfate	100	10	2.3	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-2	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-2	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-2	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-2	9/7/2016	Bromide	0.095	0.1	0.044	NA	mg/L
MW-2	9/7/2016	Chloride	50	10	1	250000000	mg/L
MW-2	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	9/7/2016	Fluoride, Total	0.66	0.1	0.05	1600000	mg/L
MW-2	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-2	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-2	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
MW-2	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-2	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/7/2016	TPH GRO	0.021	0.05	0.015	10100	mg/L
MW-2	9/20/2017	Bromide	0.28	0.5	0.073	NA	mg/L
MW-2	9/20/2017	Chloride	56	2.5	1.2	250000000	mg/L
MW-2	9/20/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/20/2017	Fluoride, Total	0.63	0.5	0.22	1600000	mg/L
MW-2	9/20/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-2	9/20/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-2	9/20/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-2	9/20/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-2	9/20/2017	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/20/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-2	9/13/2018	Bromide	0.15	0.5	0.13	NA	mg/L
MW-2	9/13/2018	Chloride	56	2.5	0.91	250000000	mg/L
MW-2	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/13/2018	Fluoride, Total	0.87	0.5	0.16	1600000	mg/L
MW-2	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-2	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-2	9/13/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-2	9/13/2018	Sulfate	170	2.5	1	600000000	mg/L
MW-2	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-2	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-2	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-2	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-2	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-2	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-2	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-2	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-2	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-2	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
MW-2	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-2	8/13/2019	Chloride	54	2.5	2.5	250000000	mg/L
MW-2	8/13/2019	Fluoride, Total	0.74	0.5	0.073	1600000	mg/L
MW-2	8/13/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-2	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-2	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-2	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
MW-2	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-2	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-2	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-2	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-2	9/18/2020	Nitrate & Nitrite	ND	1	0.061	NA	mg/L
MW-2	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-2	9/18/2020	Chloride	55	2.5	1.2	250000000	mg/L
MW-2	9/18/2020	Fluoride, Total	0.84	0.5	0.22	1600000	mg/L
MW-2	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-2	9/18/2020	Sulfate	170	2.5	1.2	600000000	mg/L
MW-2	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-4	8/21/2012	Bromide	0.11	0.1	0.074	NA	mg/L
MW-4	8/21/2012	Chloride	16	10	1	250000000	mg/L
MW-4	8/21/2012	Fluoride, Total	0.29	0.1	0.038	1600000	mg/L
MW-4	8/21/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-4	8/21/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-4	8/21/2012	Sulfate	140	10	2.4	600000000	mg/L
MW-4	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-4	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
MW-4	8/21/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-4	9/10/2013	Bromide	0.13	0.1	0.026	NA	mg/L
MW-4	9/10/2013	Chloride	18	0.5	0.15	250000000	mg/L
MW-4	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-4	9/10/2013	Fluoride, Total	0.32	0.1	0.033	1600000	mg/L
MW-4	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-4	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-4	9/10/2013	Nitrogen, Nitrate	0.14	0.1	0.016	10000000	mg/L
MW-4	9/10/2013	Sulfate	150	10	2.5	600000000	mg/L
MW-4	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-4	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/17/2014	Bromide	0.14	0.1	0.022	NA	mg/L
MW-4	9/17/2014	Chloride	18	0.5	0.25	250000000	mg/L
MW-4	9/17/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	9/17/2014	Fluoride, Total	0.31	0.1	0.018	1600000	mg/L
MW-4	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-4	9/17/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
MW-4	9/17/2014	Sulfate	140	10	1.6	600000000	mg/L
MW-4	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-4	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-4	8/17/2015	Bromide	0.13	0.1	0.077	NA	mg/L
MW-4	8/17/2015	Chloride	18	0.5	0.13	250000000	mg/L
MW-4	8/17/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	8/17/2015	Fluoride, Total	0.29	0.1	0.029	1600000	mg/L
MW-4	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-4	8/17/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-4	8/17/2015	Sulfate	140	10	2.3	600000000	mg/L
MW-4	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-4	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
MW-4	8/17/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-4	9/7/2016	Bromide	0.13	0.1	0.044	NA	mg/L
MW-4	9/7/2016	Chloride	18	0.5	0.051	250000000	mg/L
MW-4	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	9/7/2016	Fluoride, Total	0.21	0.1	0.05	1600000	mg/L
MW-4	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-4	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-4	9/7/2016	Sulfate	140	10	2.8	600000000	mg/L
MW-4	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-4	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/7/2016	TPH GRO	0.02	0.05	0.015	10100	mg/L
MW-4	9/21/2017	Bromide	0.25	0.5	0.073	NA	mg/L
MW-4	9/21/2017	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/21/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
MW-4	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-4	9/21/2017	Sulfate	160	2.5	0.48	600000000	mg/L
MW-4	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-4	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/21/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
MW-4	9/13/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-4	9/13/2018	Chloride	16	2.5	0.91	250000000	mg/L
MW-4	9/13/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/13/2018	Fluoride, Total	0.42	0.5	0.16	1600000	mg/L
MW-4	9/13/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-4	9/13/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-4	9/13/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-4	9/13/2018	Sulfate	150	2.5	1	600000000	mg/L
MW-4	9/13/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-4	9/13/2018	TPH ORO	ND	5	5	85800	mg/L
MW-4	9/13/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-4	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-4	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-4	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-4	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-4	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-4	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-4	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
MW-4	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-4	8/13/2019	Chloride	16	2.5	2.5	250000000	mg/L
MW-4	8/13/2019	Fluoride, Total	0.34	0.5	0.073	1600000	mg/L
MW-4	8/13/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
MW-4	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-4	8/13/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
MW-4	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-4	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-4	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-4	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-4	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-4	9/18/2020	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/18/2020	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-4	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/18/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-4	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-4	9/18/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-4	9/18/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-4	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-4	9/18/2020	Bromide	ND	0.5	0.25	NA	mg/L
MW-4	9/18/2020	Chloride	16	2.5	1.2	250000000	mg/L
MW-4	9/18/2020	Fluoride, Total	0.31	0.5	0.22	1600000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
MW-4	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
MW-4	9/18/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-4	9/18/2020	Sulfate	160	2.5	1.2	600000000	mg/L
MW-4	9/18/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
MW-5	8/23/2012	Bromide	ND	0.1	0.074	NA	mg/L
MW-5	8/23/2012	Chloride	55	10	1	250000000	mg/L
MW-5	8/23/2012	Fluoride, Total	0.67	0.1	0.038	1600000	mg/L
MW-5	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
MW-5	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
MW-5	8/23/2012	Sulfate	160	10	2.4	600000000	mg/L
MW-5	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
MW-5	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
MW-5	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
MW-5	9/10/2013	Bromide	0.11	0.1	0.026	NA	mg/L
MW-5	9/10/2013	Chloride	57	10	3	250000000	mg/L
MW-5	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
MW-5	9/10/2013	Fluoride, Total	0.76	0.1	0.033	1600000	mg/L
MW-5	9/10/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-5	9/10/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
MW-5	9/10/2013	Nitrogen, Nitrate	0.8	0.1	0.016	10000000	mg/L
MW-5	9/10/2013	Sulfate	160	10	2.5	600000000	mg/L
MW-5	9/10/2013	TPH DRO	ND	1	0.57	16700	mg/L
MW-5	9/10/2013	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/10/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
MW-5	9/17/2014	Bromide	0.12	0.1	0.022	NA	mg/L
MW-5	9/17/2014	Chloride	56	10	5	250000000	mg/L
MW-5	9/17/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/17/2014	Fluoride, Total	0.73	0.1	0.018	1600000	mg/L
MW-5	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
MW-5	9/17/2014	Nitrate & Nitrite	1.1	1	0.076	NA	mg/L
MW-5	9/17/2014	Sulfate	150	10	1.6	600000000	mg/L
MW-5	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
MW-5	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/17/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
MW-5	8/14/2015	Bromide	0.11	0.1	0.077	NA	mg/L
MW-5	8/14/2015	Chloride	58	10	2.7	250000000	mg/L
MW-5	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	8/14/2015	Fluoride, Total	0.72	0.1	0.029	1600000	mg/L
MW-5	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
MW-5	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
MW-5	8/14/2015	Sulfate	160	10	2.3	600000000	mg/L
MW-5	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
MW-5	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
MW-5	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
MW-5	9/7/2016	Bromide	0.095	0.1	0.044	NA	mg/L
MW-5	9/7/2016	Chloride	56	10	1	250000000	mg/L
MW-5	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/7/2016	Fluoride, Total	0.65	0.1	0.05	1600000	mg/L
MW-5	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
MW-5	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
MW-5	9/7/2016	Sulfate	160	10	2.8	600000000	mg/L
MW-5	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
MW-5	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/7/2016	TPH GRO	0.027	0.05	0.015	10100	mg/L
MW-5	9/11/2017	Bromide	0.21	0.5	0.073	NA	mg/L
MW-5	9/11/2017	Chloride	60	2.5	1.2	250000000	mg/L
MW-5	9/11/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-5	9/11/2017	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
MW-5	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
MW-5	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
MW-5	9/11/2017	Sulfate	170	2.5	0.48	600000000	mg/L
MW-5	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
MW-5	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
MW-5	9/17/2018	Bromide	ND	0.5	0.13	NA	mg/L
MW-5	9/17/2018	Chloride	63	2.5	0.91	250000000	mg/L
MW-5	9/17/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	9/17/2018	Fluoride, Total	0.7	0.5	0.16	1600000	mg/L
MW-5	9/17/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
MW-5	9/17/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
MW-5	9/17/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
MW-5	9/17/2018	Sulfate	170	2.5	1	600000000	mg/L
MW-5	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-5	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
MW-5	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
MW-5	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
MW-5	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
MW-5	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
MW-5	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
MW-5	8/14/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
MW-5	8/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
MW-5	8/14/2019	Motor Oil	ND	5	5	85800	mg/L
MW-5	8/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
MW-5	8/14/2019	Chloride	60	2.5	2.5	250000000	mg/L
MW-5	8/14/2019	Fluoride, Total	0.77	0.5	0.073	1600000	mg/L
MW-5	8/14/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
MW-5	8/14/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
MW-5	8/14/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
MW-5	8/14/2019	Sulfate	180	2.5	0.3345	600000000	mg/L
MW-5	8/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
MW-5	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
MW-5	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
MW-5	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
MW-5	9/21/2020	Bromide	0.086	0.1	0.05	NA	mg/L
MW-5	9/21/2020	Fluoride, Total	0.6	0.1	0.043	1600000	mg/L
MW-5	9/21/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
MW-5	9/21/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
MW-5	9/21/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
MW-5	9/21/2020	Chloride	54	10	5	250000000	mg/L
MW-5	9/21/2020	Sulfate	150	10	5	600000000	mg/L
MW-5	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
NAPIS-2	1/30/2012	Bromide	1.4	0.5	0.42	NA	mg/L
NAPIS-2	1/30/2012	Chloride	420	25	10	250000000	mg/L
NAPIS-2	1/30/2012	Fluoride, Total	1.1	0.5	0.15	1600000	mg/L
NAPIS-2	1/30/2012	Ortho-Phosphate	ND	2.5	0.81	NA	mg/L
NAPIS-2	1/30/2012	Nitrate & Nitrite	ND	1	0.48	NA	mg/L
NAPIS-2	1/30/2012	Sulfate	ND	2.5	1.1	600000000	mg/L
NAPIS-2	3/20/2012	Bromide	0.94	0.1	0.085	NA	mg/L
NAPIS-2	3/20/2012	Chloride	330	10	4	250000000	mg/L
NAPIS-2	3/20/2012	Fluoride, Total	0.49	0.1	0.02	1600000	mg/L
NAPIS-2	3/20/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
NAPIS-2	3/20/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
NAPIS-2	3/20/2012	Sulfate	5.3	0.5	0.23	600000000	mg/L
NAPIS-2	3/20/2012	TPH DRO	4.7	1	0.57	16700	mg/L
NAPIS-2	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/20/2012	TPH GRO	1.4	0.5	0.14	10100	mg/L
NAPIS-2	6/12/2012	Bromide	1.5	0.5	0.37	NA	mg/L
NAPIS-2	6/12/2012	Chloride	350	10	1	250000000	mg/L
NAPIS-2	6/12/2012	Fluoride, Total	1.7	0.5	0.19	1600000	mg/L
NAPIS-2	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	6/12/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	6/12/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	6/12/2012	Sulfate	7.9	2.5	0.59	600000000	mg/L
NAPIS-2	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/12/2012	TPH GRO	1.3	0.5	0.14	10100	mg/L
NAPIS-2	8/21/2012	Bromide	1.4	0.5	0.37	NA	mg/L
NAPIS-2	8/21/2012	Chloride	370	10	1	250000000	mg/L
NAPIS-2	8/21/2012	Fluoride, Total	1.6	0.5	0.19	1600000	mg/L
NAPIS-2	8/21/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	8/21/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	8/21/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	8/21/2012	Sulfate	11	2.5	0.59	600000000	mg/L
NAPIS-2	8/21/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	8/21/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/21/2012	TPH GRO	1.4	0.5	0.14	10100	mg/L
NAPIS-2	11/28/2012	Bromide	1.7	0.5	0.38	NA	mg/L
NAPIS-2	11/28/2012	Chloride	370	10	1	250000000	mg/L
NAPIS-2	11/28/2012	Fluoride, Total	1.7	0.5	0.19	1600000	mg/L
NAPIS-2	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-2	11/28/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-2	11/28/2012	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
NAPIS-2	11/28/2012	Sulfate	11	2.5	0.59	600000000	mg/L
NAPIS-2	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/28/2012	TPH GRO	0.52	0.1	0.028	10100	mg/L
NAPIS-2	3/18/2013	Bromide	1.2	0.5	0.38	NA	mg/L
NAPIS-2	3/18/2013	Chloride	270	10	1.3	250000000	mg/L
NAPIS-2	3/18/2013	Fluoride, Total	1.6	0.5	0.1	1600000	mg/L
NAPIS-2	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-2	3/18/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
NAPIS-2	3/18/2013	Sulfate	4.9	2.5	1.2	600000000	mg/L
NAPIS-2	3/18/2013	TPH DRO	2.9	1	0.4	16700	mg/L
NAPIS-2	3/18/2013	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/18/2013	TPH GRO	0.65	0.05	0.02	10100	mg/L
NAPIS-2	6/12/2013	Bromide	1.2	1	0.26	NA	mg/L
NAPIS-2	6/12/2013	Chloride	230	50	15	250000000	mg/L
NAPIS-2	6/12/2013	Fluoride, Total	1.6	1	0.33	1600000	mg/L
NAPIS-2	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
NAPIS-2	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
NAPIS-2	6/12/2013	Sulfate	7.8	5	1.2	600000000	mg/L
NAPIS-2	6/12/2013	TPH DRO	1.9	1	0.4	16700	mg/L
NAPIS-2	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/12/2013	TPH GRO	0.74	0.05	0.02	10100	mg/L
NAPIS-2	9/3/2013	Bromide	0.37	0.1	0.026	NA	mg/L
NAPIS-2	9/3/2013	Chloride	290	10	3	250000000	mg/L
NAPIS-2	9/3/2013	Fluoride, Total	1.8	0.1	0.033	1600000	mg/L
NAPIS-2	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	9/3/2013	Nitrate & Nitrite	5.2	1	0.18	NA	mg/L
NAPIS-2	9/3/2013	Sulfate	7.8	0.5	0.12	600000000	mg/L
NAPIS-2	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-2	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/3/2013	TPH GRO	0.47	0.05	0.02	10100	mg/L
NAPIS-2	11/12/2013	Bromide	1.4	0.1	0.079	NA	mg/L
NAPIS-2	11/12/2013	Chloride	260	10	7.8	250000000	mg/L
NAPIS-2	11/12/2013	Fluoride, Total	1.7	0.1	0.035	1600000	mg/L
NAPIS-2	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
NAPIS-2	11/12/2013	Nitrogen, Nitrite	ND	0.1	0.015	1000000	mg/L
NAPIS-2	11/12/2013	Nitrogen, Nitrate	ND	0.1	0.065	10000000	mg/L
NAPIS-2	11/12/2013	Sulfate	23	0.5	0.16	600000000	mg/L
NAPIS-2	11/12/2013	TPH DRO	1.4	1	0.57	16700	mg/L
NAPIS-2	11/12/2013	TPH GRO	0.41	0.05	0.02	10100	mg/L
NAPIS-2	3/10/2014	Bromide	1.6	1	0.79	NA	mg/L
NAPIS-2	3/10/2014	Chloride	220	50	39	250000000	mg/L
NAPIS-2	3/10/2014	Fluoride, Total	1.5	1	0.35	1600000	mg/L
NAPIS-2	3/10/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
NAPIS-2	3/10/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
NAPIS-2	3/10/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
NAPIS-2	3/10/2014	Sulfate	10	5	1.6	600000000	mg/L
NAPIS-2	3/10/2014	TPH DRO	1.8	1	0.57	16700	mg/L
NAPIS-2	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/10/2014	TPH GRO	0.64	0.1	0.038	10100	mg/L
NAPIS-2	6/5/2014	Bromide	0.94	0.1	0.022	NA	mg/L
NAPIS-2	6/5/2014	Chloride	330	10	5	250000000	mg/L
NAPIS-2	6/5/2014	Fluoride, Total	1.3	0.1	0.018	1600000	mg/L
NAPIS-2	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
NAPIS-2	6/5/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
NAPIS-2	6/5/2014	Sulfate	4.8	0.5	0.068	600000000	mg/L
NAPIS-2	6/5/2014	TPH DRO	1.5	1	0.57	16700	mg/L
NAPIS-2	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/5/2014	TPH GRO	0.62	0.05	0.019	10100	mg/L
NAPIS-2	9/11/2014	Bromide	1.1	0.1	0.022	NA	mg/L
NAPIS-2	9/11/2014	Chloride	360	10	5	250000000	mg/L
NAPIS-2	9/11/2014	Fluoride, Total	1.6	0.1	0.018	1600000	mg/L
NAPIS-2	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-2	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
NAPIS-2	9/11/2014	Sulfate	11	0.5	0.082	600000000	mg/L
NAPIS-2	9/11/2014	TPH DRO	1.3	1	0.83	16700	mg/L
NAPIS-2	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/11/2014	TPH GRO	0.41	0.05	0.019	10100	mg/L
NAPIS-2	11/11/2014	Bromide	1.4	0.5	0.13	NA	mg/L
NAPIS-2	11/11/2014	Chloride	330	10	0.43	250000000	mg/L
NAPIS-2	11/11/2014	Fluoride, Total	1.6	0.5	0.074	1600000	mg/L
NAPIS-2	11/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
NAPIS-2	11/11/2014	Nitrate & Nitrite	ND	1	0.083	NA	mg/L
NAPIS-2	11/11/2014	Sulfate	11	2.5	0.41	600000000	mg/L
NAPIS-2	11/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-2	11/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/11/2014	TPH GRO	0.6	0.05	0.019	10100	mg/L
NAPIS-2	3/10/2015	Bromide	1.3	0.5	0.39	NA	mg/L
NAPIS-2	3/10/2015	Chloride	300	10	2.7	250000000	mg/L
NAPIS-2	3/10/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
NAPIS-2	3/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
NAPIS-2	3/10/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
NAPIS-2	3/10/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
NAPIS-2	3/10/2015	Sulfate	7.8	2.5	0.57	600000000	mg/L
NAPIS-2	3/10/2015	TPH DRO	1.2	1	0.91	16700	mg/L
NAPIS-2	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/10/2015	TPH GRO	0.49	0.05	0.012	10100	mg/L
NAPIS-2	6/2/2015	Bromide	1.3	1	0.77	NA	mg/L
NAPIS-2	6/2/2015	Chloride	290	50	13	250000000	mg/L
NAPIS-2	6/2/2015	Fluoride, Total	2.1	1	0.29	1600000	mg/L
NAPIS-2	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
NAPIS-2	6/2/2015	Sulfate	9.9	5	1.1	600000000	mg/L
NAPIS-2	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-2	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/11/2015	Bromide	0.62	0.1	0.077	NA	mg/L
NAPIS-2	8/11/2015	Chloride	310	10	2.7	250000000	mg/L
NAPIS-2	8/11/2015	Fluoride, Total	1.6	0.1	0.029	1600000	mg/L
NAPIS-2	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-2	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
NAPIS-2	8/11/2015	Sulfate	11	0.5	0.11	600000000	mg/L
NAPIS-2	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-2	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	8/11/2015	TPH GRO	0.51	0.05	0.04	10100	mg/L
NAPIS-2	10/28/2015	Bromide	1.2	0.1	0.068	NA	mg/L
NAPIS-2	10/28/2015	Chloride	320	10	6.8	250000000	mg/L
NAPIS-2	10/28/2015	Fluoride, Total	1.7	0.1	0.032	1600000	mg/L
NAPIS-2	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
NAPIS-2	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
NAPIS-2	10/28/2015	Sulfate	13	0.5	0.32	600000000	mg/L
NAPIS-2	10/28/2015	TPH DRO	1.1	1	0.91	16700	mg/L
NAPIS-2	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	10/28/2015	TPH GRO	0.37	0.05	0.012	10100	mg/L
NAPIS-2	3/1/2016	Bromide	2.2	0.5	0.16	NA	mg/L
NAPIS-2	3/1/2016	Chloride	330	10	0.55	250000000	mg/L
NAPIS-2	3/1/2016	Fluoride, Total	1.6	0.5	0.11	1600000	mg/L
NAPIS-2	3/1/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
NAPIS-2	3/1/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
NAPIS-2	3/1/2016	Sulfate	18	2.5	0.32	600000000	mg/L
NAPIS-2	3/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-2	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	3/1/2016	TPH GRO	0.38	0.05	0.025	10100	mg/L
NAPIS-2	6/7/2016	Bromide	0.43	0.1	0.032	NA	mg/L
NAPIS-2	6/7/2016	Chloride	340	10	0.55	250000000	mg/L
NAPIS-2	6/7/2016	Fluoride, Total	1.7	0.1	0.023	1600000	mg/L
NAPIS-2	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-2	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L
NAPIS-2	6/7/2016	Sulfate	19	0.5	0.064	600000000	mg/L
NAPIS-2	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-2	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/7/2016	TPH GRO	0.44	0.05	0.025	10100	mg/L
NAPIS-2	9/1/2016	Bromide	1.3	0.5	0.22	NA	mg/L
NAPIS-2	9/1/2016	Chloride	300	10	1	250000000	mg/L
NAPIS-2	9/1/2016	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
NAPIS-2	9/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
NAPIS-2	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-2	9/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
NAPIS-2	9/1/2016	Sulfate	7.8	2.5	0.71	600000000	mg/L
NAPIS-2	9/1/2016	TPH DRO	1.1	1	0.69	16700	mg/L
NAPIS-2	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/1/2016	TPH GRO	0.75	0.05	0.025	10100	mg/L
NAPIS-2	11/14/2016	Bromide	0.97	0.1	0.044	NA	mg/L
NAPIS-2	11/14/2016	Chloride	310	10	1	250000000	mg/L
NAPIS-2	11/14/2016	Fluoride, Total	1.7	0.1	0.05	1600000	mg/L
NAPIS-2	11/14/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
NAPIS-2	11/14/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
NAPIS-2	11/14/2016	Sulfate	11	0.5	0.14	600000000	mg/L
NAPIS-2	11/14/2016	TPH DRO	1	1	0.69	16700	mg/L
NAPIS-2	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	11/14/2016	TPH GRO	0.56	0.1	0.051	10100	mg/L
NAPIS-2	2/21/2017	Bromide	1.1	0.1	0.031	NA	mg/L
NAPIS-2	2/21/2017	Chloride	250	10	5	250000000	mg/L
NAPIS-2	2/21/2017	Fluoride, Total	1.8	0.1	0.05	1600000	mg/L
NAPIS-2	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	2/21/2017	Sulfate	8.7	0.5	0.096	600000000	mg/L
NAPIS-2	2/21/2017	TPH DRO	2.4	1	0.48	16700	mg/L
NAPIS-2	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	2/21/2017	TPH GRO	0.6	0.05	0.025	10100	mg/L
NAPIS-2	6/1/2017	Bromide	1	0.1	0.014	NA	mg/L
NAPIS-2	6/1/2017	Chloride	260	10	5	250000000	mg/L
NAPIS-2	6/1/2017	Fluoride, Total	1.5	0.1	0.044	1600000	mg/L
NAPIS-2	6/1/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-2	6/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	6/1/2017	Sulfate	6.5	0.5	0.096	600000000	mg/L
NAPIS-2	6/1/2017	TPH DRO	1.2	1	0.36	16700	mg/L
NAPIS-2	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	6/1/2017	TPH GRO	0.53	0.05	0.025	10100	mg/L
NAPIS-2	9/5/2017	Bromide	1.1	0.5	0.073	NA	mg/L
NAPIS-2	9/5/2017	Chloride	280	10	5	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	9/5/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	9/5/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	9/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	9/5/2017	Sulfate	6.5	2.5	0.48	600000000	mg/L
NAPIS-2	9/5/2017	TPH DRO	1.7	1	0.36	16700	mg/L
NAPIS-2	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	9/5/2017	TPH GRO	0.63	0.05	0.025	10100	mg/L
NAPIS-2	12/4/2017	Bromide	1.1	0.5	0.073	NA	mg/L
NAPIS-2	12/4/2017	Chloride	270	10	5	250000000	mg/L
NAPIS-2	12/4/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	12/4/2017	Sulfate	6.1	2.5	0.48	600000000	mg/L
NAPIS-2	12/4/2017	TPH DRO	2.1	1	0.36	16700	mg/L
NAPIS-2	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	12/4/2017	TPH GRO	0.88	0.05	0.0097	10100	mg/L
NAPIS-2	2/9/2018	Bromide	1.2	0.5	0.073	NA	mg/L
NAPIS-2	2/9/2018	Chloride	250	10	5	250000000	mg/L
NAPIS-2	2/9/2018	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
NAPIS-2	2/9/2018	Ortho-Phosphate	1.8	2.5	1.2	NA	mg/L
NAPIS-2	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
NAPIS-2	2/9/2018	Sulfate	6	2.5	0.48	600000000	mg/L
NAPIS-2	2/9/2018	TPH DRO	1.3	1	0.63	16700	mg/L
NAPIS-2	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	2/9/2018	TPH GRO	0.81	0.05	0.0097	10100	mg/L
NAPIS-2	4/30/2018	Bromide	1	0.5	0.13	NA	mg/L
NAPIS-2	4/30/2018	Chloride	220	10	0.59	250000000	mg/L
NAPIS-2	4/30/2018	Fluoride, Total	1.6	0.5	0.15	1600000	mg/L
NAPIS-2	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-2	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
NAPIS-2	4/30/2018	Sulfate	3.6	2.5	1	600000000	mg/L
NAPIS-2	4/30/2018	TPH DRO	1.9	1	0.63	16700	mg/L
NAPIS-2	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-2	4/30/2018	TPH GRO	0.59	0.05	0.021	10100	mg/L
NAPIS-2	4/9/2019	TPH GRO	1.3	0.05	0.0211	10100	mg/L
NAPIS-2	4/9/2019	TPH DRO	1.5	1	0.35	16700	mg/L
NAPIS-2	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	4/9/2019	Bromide	0.74	0.5	0.0675	NA	mg/L
NAPIS-2	4/9/2019	Chloride	140	10	10	250000000	mg/L
NAPIS-2	4/9/2019	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
NAPIS-2	4/9/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
NAPIS-2	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-2	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-2	4/9/2019	Sulfate	4	2.5	0.32	600000000	mg/L
NAPIS-2	5/28/2019	Bromide	0.8	0.5	0.088765	NA	mg/L
NAPIS-2	5/28/2019	Chloride	150	10	10	250000000	mg/L
NAPIS-2	5/28/2019	Fluoride, Total	2.2	0.5	0.073	1600000	mg/L
NAPIS-2	5/28/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
NAPIS-2	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	5/28/2019	Sulfate	2	2.5	0.3345	600000000	mg/L
NAPIS-2	5/28/2019	TPH GRO	0.96	0.25	0.1055	10100	mg/L
NAPIS-2	5/28/2019	TPH DRO	1.9	1	0.35	16700	mg/L
NAPIS-2	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	8/22/2019	TPH GRO	1	0.05	0.0211	10100	mg/L
NAPIS-2	8/22/2019	TPH DRO	2	1	0.35	16700	mg/L
NAPIS-2	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-2	8/22/2019	Bromide	0.87	0.5	0.088765	NA	mg/L
NAPIS-2	8/22/2019	Chloride	180	10	10	250000000	mg/L
NAPIS-2	8/22/2019	Fluoride, Total	2.1	0.5	0.073	1600000	mg/L
NAPIS-2	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
NAPIS-2	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	8/22/2019	Sulfate	0.97	2.5	0.3345	600000000	mg/L
NAPIS-2	10/21/2019	TPH GRO	0.99	0.05	0.0211	10100	mg/L
NAPIS-2	10/21/2019	TPH DRO	0.18	0.4	0.132	16700	mg/L
NAPIS-2	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
NAPIS-2	10/21/2019	Bromide	0.94	0.5	0.077	NA	mg/L
NAPIS-2	10/21/2019	Chloride	180	10	10	250000000	mg/L
NAPIS-2	10/21/2019	Fluoride, Total	2.2	0.5	0.144909	1600000	mg/L
NAPIS-2	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
NAPIS-2	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-2	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-2	10/21/2019	Sulfate	1.4	2.5	0.3345	600000000	mg/L
NAPIS-2	3/4/2020	TPH GRO	1.1	0.05	0.0068	10100	mg/L
NAPIS-2	3/4/2020	TPH DRO	0.56	0.4	0.2	16700	mg/L
NAPIS-2	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
NAPIS-2	3/4/2020	Bromide	0.79	0.5	0.25	NA	mg/L
NAPIS-2	3/4/2020	Fluoride, Total	1.9	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-2	3/4/2020	Nitrogen, Nitrate	1.9	0.5	0.11	10000000	mg/L
NAPIS-2	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
NAPIS-2	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	3/4/2020	Sulfate	2.4	2.5	1.2	600000000	mg/L
NAPIS-2	3/4/2020	Chloride	150	10	5	250000000	mg/L
NAPIS-2	9/22/2020	TPH GRO	1.4	0.05	0.008	10100	mg/L
NAPIS-2	9/22/2020	TPH DRO	1.7	0.07	0.067	16700	mg/L
NAPIS-2	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
NAPIS-2	9/22/2020	Bromide	0.68	0.5	0.25	NA	mg/L
NAPIS-2	9/22/2020	Fluoride, Total	2.2	0.5	0.22	1600000	mg/L
NAPIS-2	9/22/2020	Nitrogen, Nitrate	0.2	0.5	0.1	10000000	mg/L
NAPIS-2	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
NAPIS-2	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-2	9/22/2020	Sulfate	16	2.5	1.2	600000000	mg/L
NAPIS-2	9/22/2020	Chloride	130	10	5	250000000	mg/L
NAPIS-2	12/17/2020	Bicarbonate	586	1	0.5	NA	mg/L
NAPIS-2	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
NAPIS-2	12/17/2020	Fluoride, Total	2.04	1	0.3	1600000	mg/L
NAPIS-2	12/17/2020	Chloride	173	10	1.2	250000000	mg/L
NAPIS-2	12/17/2020	Sulfate	3.97	1	0.37	600000000	mg/L
NAPIS-2	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
NAPIS-2	12/17/2020	Ammonia	0.067	0.05	0.024	NA	mg/L
NAPIS-2	12/17/2020	TPH (C6-C10)	712	100	47	NA	ug/L
NAPIS-2	12/17/2020	TPH DRO	3130	149	120	16700	ug/L
NAPIS-2	12/17/2020	C28-C40	408	149	120	NA	ug/L
NAPIS-3	3/20/2012	Bromide	4.4	0.5	0.42	NA	mg/L
NAPIS-3	3/20/2012	Chloride	970	50	20	250000000	mg/L
NAPIS-3	3/20/2012	Fluoride, Total	0.59	0.5	0.1	1600000	mg/L
NAPIS-3	3/20/2012	Ortho-Phosphate	ND	2.5	0.23	NA	mg/L
NAPIS-3	3/20/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	3/20/2012	Nitrogen, Nitrate	19	0.5	0.25	10000000	mg/L
NAPIS-3	3/20/2012	Sulfate	390	25	11	600000000	mg/L
NAPIS-3	3/20/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	3/20/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/20/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	6/12/2012	Bromide	5.3	0.5	0.37	NA	mg/L
NAPIS-3	6/12/2012	Chloride	1000	50	5.1	250000000	mg/L
NAPIS-3	6/12/2012	Fluoride, Total	0.55	0.5	0.19	1600000	mg/L
NAPIS-3	6/12/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	6/12/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	6/12/2012	Nitrogen, Nitrate	19	0.5	0.25	10000000	mg/L
NAPIS-3	6/12/2012	Sulfate	450	10	2.4	600000000	mg/L
NAPIS-3	6/12/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	6/12/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/12/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	10/2/2012	Bromide	4.9	0.5	0.38	NA	mg/L
NAPIS-3	10/2/2012	Chloride	990	50	5.1	250000000	mg/L
NAPIS-3	10/2/2012	Fluoride, Total	0.84	0.5	0.19	1600000	mg/L
NAPIS-3	10/2/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	10/2/2012	Nitrate & Nitrite	20	1	0.5	NA	mg/L
NAPIS-3	10/2/2012	Sulfate	400	10	2.4	600000000	mg/L
NAPIS-3	10/2/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	10/2/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	10/2/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
NAPIS-3	11/28/2012	Bromide	3.5	0.5	0.38	NA	mg/L
NAPIS-3	11/28/2012	Chloride	880	25	2.6	250000000	mg/L
NAPIS-3	11/28/2012	Fluoride, Total	0.68	0.5	0.19	1600000	mg/L
NAPIS-3	11/28/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
NAPIS-3	11/28/2012	Nitrogen, Nitrite	ND	0.5	0.25	1000000	mg/L
NAPIS-3	11/28/2012	Nitrogen, Nitrate	14	0.5	0.25	10000000	mg/L
NAPIS-3	11/28/2012	Sulfate	280	10	2.4	600000000	mg/L
NAPIS-3	11/28/2012	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	11/28/2012	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/28/2012	TPH GRO	ND	0.1	0.028	10100	mg/L
NAPIS-3	3/18/2013	Bromide	4.8	0.5	0.38	NA	mg/L
NAPIS-3	3/18/2013	Chloride	940	50	6.6	250000000	mg/L
NAPIS-3	3/18/2013	Fluoride, Total	1.3	0.5	0.1	1600000	mg/L
NAPIS-3	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-3	3/18/2013	Nitrate & Nitrite	17	2	0.37	NA	mg/L
NAPIS-3	3/18/2013	Sulfate	380	10	4.7	600000000	mg/L
NAPIS-3	3/18/2013	TPH DRO	ND	1	0.4	16700	mg/L
NAPIS-3	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/18/2013	TPH GRO	ND	0.1	0.039	10100	mg/L
NAPIS-3	6/12/2013	Bromide	4.8	1	0.26	NA	mg/L
NAPIS-3	6/12/2013	Chloride	940	50	15	250000000	mg/L
NAPIS-3	6/12/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
NAPIS-3	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
NAPIS-3	6/12/2013	Nitrate & Nitrite	17	1	0.18	NA	mg/L
NAPIS-3	6/12/2013	Sulfate	400	5	1.2	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	6/12/2013	TPH DRO	ND	1	0.4	16700	mg/L
NAPIS-3	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	9/3/2013	Bromide	5	0.1	0.026	NA	mg/L
NAPIS-3	9/3/2013	Chloride	980	100	30	250000000	mg/L
NAPIS-3	9/3/2013	Fluoride, Total	0.27	0.1	0.033	1600000	mg/L
NAPIS-3	9/3/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	9/3/2013	Nitrate & Nitrite	20	1	0.18	NA	mg/L
NAPIS-3	9/3/2013	Sulfate	410	10	2.5	600000000	mg/L
NAPIS-3	9/3/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	9/3/2013	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/3/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	11/12/2013	Bromide	5	0.1	0.079	NA	mg/L
NAPIS-3	11/12/2013	Chloride	990	50	39	250000000	mg/L
NAPIS-3	11/12/2013	Fluoride, Total	0.36	0.1	0.035	1600000	mg/L
NAPIS-3	11/12/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
NAPIS-3	11/12/2013	Nitrogen, Nitrite	ND	2	0.3	1000000	mg/L
NAPIS-3	11/12/2013	Nitrogen, Nitrate	20	2	1.3	10000000	mg/L
NAPIS-3	11/12/2013	Sulfate	380	25	8	600000000	mg/L
NAPIS-3	11/12/2013	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	11/12/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
NAPIS-3	3/10/2014	Bromide	4.9	0.5	0.39	NA	mg/L
NAPIS-3	3/10/2014	Chloride	920	50	39	250000000	mg/L
NAPIS-3	3/10/2014	Fluoride, Total	ND	0.5	0.17	1600000	mg/L
NAPIS-3	3/10/2014	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
NAPIS-3	3/10/2014	Nitrogen, Nitrite	ND	0.5	0.075	1000000	mg/L
NAPIS-3	3/10/2014	Nitrogen, Nitrate	20	0.5	0.33	10000000	mg/L
NAPIS-3	3/10/2014	Sulfate	430	10	3.2	600000000	mg/L
NAPIS-3	3/10/2014	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	6/5/2014	Bromide	5.3	0.1	0.022	NA	mg/L
NAPIS-3	6/5/2014	Chloride	910	50	25	250000000	mg/L
NAPIS-3	6/5/2014	Fluoride, Total	0.3	0.1	0.018	1600000	mg/L
NAPIS-3	6/5/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
NAPIS-3	6/5/2014	Nitrate & Nitrite	19	1	0.076	NA	mg/L
NAPIS-3	6/5/2014	Sulfate	400	10	1.4	600000000	mg/L
NAPIS-3	6/5/2014	TPH DRO	ND	1	0.57	16700	mg/L
NAPIS-3	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/5/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	9/11/2014	Bromide	1.2	0.1	0.022	NA	mg/L
NAPIS-3	9/11/2014	Chloride	160	10	5	250000000	mg/L
NAPIS-3	9/11/2014	Fluoride, Total	1.1	0.1	0.018	1600000	mg/L
NAPIS-3	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-3	9/11/2014	Nitrate & Nitrite	1.1	1	0.076	NA	mg/L
NAPIS-3	9/11/2014	Sulfate	61	10	1.6	600000000	mg/L
NAPIS-3	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-3	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	11/13/2014	Fluoride, Total	0.35	0.1	0.015	1600000	mg/L
NAPIS-3	11/13/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
NAPIS-3	11/13/2014	Nitrate & Nitrite	19	1	0.083	NA	mg/L
NAPIS-3	11/13/2014	Sulfate	400	10	1.6	600000000	mg/L
NAPIS-3	11/13/2014	TPH DRO	ND	1	0.83	16700	mg/L
NAPIS-3	11/13/2014	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/13/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
NAPIS-3	11/13/2014	Bromide	5.3	0.1	0.026	NA	mg/L
NAPIS-3	11/13/2014	Chloride	890	50	2.2	250000000	mg/L
NAPIS-3	3/10/2015	Bromide	5.1	0.1	0.077	NA	mg/L
NAPIS-3	3/10/2015	Chloride	940	50	13	250000000	mg/L
NAPIS-3	3/10/2015	Fluoride, Total	0.42	0.1	0.029	1600000	mg/L
NAPIS-3	3/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-3	3/10/2015	Nitrogen, Nitrite	ND	2	0.4	1000000	mg/L
NAPIS-3	3/10/2015	Nitrogen, Nitrate	20	2	0.64	10000000	mg/L
NAPIS-3	3/10/2015	Sulfate	430	10	2.3	600000000	mg/L
NAPIS-3	3/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/10/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
NAPIS-3	6/2/2015	Bromide	4.9	1	0.77	NA	mg/L
NAPIS-3	6/2/2015	Chloride	790	50	13	250000000	mg/L
NAPIS-3	6/2/2015	Fluoride, Total	ND	1	0.29	1600000	mg/L
NAPIS-3	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
NAPIS-3	6/2/2015	Nitrate & Nitrite	15	2	0.45	NA	mg/L
NAPIS-3	6/2/2015	Sulfate	440	5	1.1	600000000	mg/L
NAPIS-3	6/2/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	8/11/2015	Bromide	5.1	0.1	0.077	NA	mg/L
NAPIS-3	8/11/2015	Chloride	920	50	13	250000000	mg/L
NAPIS-3	8/11/2015	Fluoride, Total	0.28	0.1	0.029	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
NAPIS-3	8/11/2015	Nitrate & Nitrite	24	1	0.22	NA	mg/L
NAPIS-3	8/11/2015	Sulfate	380	10	2.3	600000000	mg/L
NAPIS-3	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
NAPIS-3	10/28/2015	Bromide	4.9	0.1	0.068	NA	mg/L
NAPIS-3	10/28/2015	Chloride	880	25	17	250000000	mg/L
NAPIS-3	10/28/2015	Fluoride, Total	0.6	0.1	0.032	1600000	mg/L
NAPIS-3	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
NAPIS-3	10/28/2015	Nitrate & Nitrite	15	1	0.3	NA	mg/L
NAPIS-3	10/28/2015	Sulfate	420	10	6.4	600000000	mg/L
NAPIS-3	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
NAPIS-3	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
NAPIS-3	3/1/2016	Bromide	6.4	0.1	0.032	NA	mg/L
NAPIS-3	3/1/2016	Chloride	850	50	2.7	250000000	mg/L
NAPIS-3	3/1/2016	Fluoride, Total	0.53	0.1	0.023	1600000	mg/L
NAPIS-3	3/1/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-3	3/1/2016	Nitrate & Nitrite	14	1	0.42	NA	mg/L
NAPIS-3	3/1/2016	Sulfate	350	10	1.3	600000000	mg/L
NAPIS-3	3/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	3/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	6/7/2016	Bromide	4.1	0.1	0.032	NA	mg/L
NAPIS-3	6/7/2016	Chloride	870	25	1.4	250000000	mg/L
NAPIS-3	6/7/2016	Fluoride, Total	0.56	0.1	0.023	1600000	mg/L
NAPIS-3	6/7/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
NAPIS-3	6/7/2016	Nitrate & Nitrite	14	1	0.42	NA	mg/L
NAPIS-3	6/7/2016	Sulfate	320	10	1.3	600000000	mg/L
NAPIS-3	6/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/7/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	9/1/2016	Bromide	1.7	0.5	0.22	NA	mg/L
NAPIS-3	9/1/2016	Chloride	310	10	1	250000000	mg/L
NAPIS-3	9/1/2016	Fluoride, Total	2.1	0.5	0.25	1600000	mg/L
NAPIS-3	9/1/2016	Ortho-Phosphate	1.1	2.5	0.38	NA	mg/L
NAPIS-3	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-3	9/1/2016	Nitrogen, Nitrate	5	0.5	0.2	10000000	mg/L
NAPIS-3	9/1/2016	Sulfate	210	2.5	0.71	600000000	mg/L
NAPIS-3	9/1/2016	TPH DRO	ND	1	0.69	16700	mg/L
NAPIS-3	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/1/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	11/14/2016	Bromide	4.1	0.5	0.22	NA	mg/L
NAPIS-3	11/14/2016	Chloride	320	25	2.5	250000000	mg/L
NAPIS-3	11/14/2016	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
NAPIS-3	11/14/2016	Ortho-Phosphate	0.9	2.5	0.38	NA	mg/L
NAPIS-3	11/14/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
NAPIS-3	11/14/2016	Nitrogen, Nitrate	3.5	0.5	0.2	10000000	mg/L
NAPIS-3	11/14/2016	Sulfate	230	2.5	0.71	600000000	mg/L
NAPIS-3	11/14/2016	TPH DRO	0.89	1	0.69	16700	mg/L
NAPIS-3	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	11/14/2016	TPH GRO	ND	0.1	0.051	10100	mg/L
NAPIS-3	2/21/2017	Bromide	2.3	0.1	0.031	NA	mg/L
NAPIS-3	2/21/2017	Chloride	350	25	12	250000000	mg/L
NAPIS-3	2/21/2017	Fluoride, Total	1.3	0.1	0.05	1600000	mg/L
NAPIS-3	2/21/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	2/21/2017	Nitrate & Nitrite	1.9	1	0.13	NA	mg/L
NAPIS-3	2/21/2017	Sulfate	150	10	1.9	600000000	mg/L
NAPIS-3	2/21/2017	TPH DRO	1.5	1	0.48	16700	mg/L
NAPIS-3	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	2/21/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
NAPIS-3	6/2/2017	Bromide	1.4	0.1	0.014	NA	mg/L
NAPIS-3	6/2/2017	Chloride	240	10	5	250000000	mg/L
NAPIS-3	6/2/2017	Fluoride, Total	0.72	0.1	0.044	1600000	mg/L
NAPIS-3	6/2/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
NAPIS-3	6/2/2017	Nitrate & Nitrite	0.56	1	0.13	NA	mg/L
NAPIS-3	6/2/2017	Sulfate	88	10	1.9	600000000	mg/L
NAPIS-3	6/2/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	6/2/2017	TPH GRO	0.063	0.05	0.025	10100	mg/L
NAPIS-3	9/5/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	9/5/2017	TPH GRO	0.055	0.05	0.025	10100	mg/L
NAPIS-3	12/4/2017	Bromide	1.6	0.5	0.073	NA	mg/L
NAPIS-3	12/4/2017	Chloride	260	10	5	250000000	mg/L
NAPIS-3	12/4/2017	Fluoride, Total	0.62	0.5	0.22	1600000	mg/L
NAPIS-3	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	12/4/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	12/4/2017	Sulfate	89	2.5	0.48	600000000	mg/L
NAPIS-3	12/4/2017	TPH DRO	ND	1	0.36	16700	mg/L
NAPIS-3	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	12/4/2017	TPH GRO	0.09	0.05	0.0097	10100	mg/L
NAPIS-3	2/9/2018	Bromide	1.5	0.5	0.073	NA	mg/L
NAPIS-3	2/9/2018	Chloride	220	10	5	250000000	mg/L
NAPIS-3	2/9/2018	Fluoride, Total	0.68	0.5	0.22	1600000	mg/L
NAPIS-3	2/9/2018	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
NAPIS-3	2/9/2018	Nitrate & Nitrite	0.31	1	0.13	NA	mg/L
NAPIS-3	2/9/2018	Sulfate	61	2.5	0.48	600000000	mg/L
NAPIS-3	2/9/2018	TPH DRO	ND	1	0.63	16700	mg/L
NAPIS-3	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	2/9/2018	TPH GRO	0.088	0.05	0.0097	10100	mg/L
NAPIS-3	4/30/2018	Bromide	1.4	0.5	0.13	NA	mg/L
NAPIS-3	4/30/2018	Chloride	190	10	0.59	250000000	mg/L
NAPIS-3	4/30/2018	Fluoride, Total	0.62	0.5	0.15	1600000	mg/L
NAPIS-3	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
NAPIS-3	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
NAPIS-3	4/30/2018	Sulfate	47	2.5	1	600000000	mg/L
NAPIS-3	4/30/2018	TPH DRO	ND	1	0.63	16700	mg/L
NAPIS-3	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
NAPIS-3	4/30/2018	TPH GRO	0.8	0.05	0.021	10100	mg/L
NAPIS-3	4/9/2019	TPH GRO	0.067	0.05	0.0211	10100	mg/L
NAPIS-3	4/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	4/9/2019	Bromide	2.4	0.5	0.0675	NA	mg/L
NAPIS-3	4/9/2019	Chloride	390	10	10	250000000	mg/L
NAPIS-3	4/9/2019	Fluoride, Total	0.65	0.5	0.25	1600000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrate	5.8	0.5	0.143	10000000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-3	4/9/2019	Sulfate	170	2.5	0.32	600000000	mg/L
NAPIS-3	4/9/2019	TPH GRO	0.067	0.05	0.0211	10100	mg/L
NAPIS-3	4/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	4/9/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	4/9/2019	Bromide	2.4	0.5	0.0675	NA	mg/L
NAPIS-3	4/9/2019	Chloride	390	10	10	250000000	mg/L
NAPIS-3	4/9/2019	Fluoride, Total	0.74	0.5	0.25	1600000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrate	5.7	0.5	0.143	10000000	mg/L
NAPIS-3	4/9/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
NAPIS-3	4/9/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
NAPIS-3	4/9/2019	Sulfate	170	2.5	0.32	600000000	mg/L
NAPIS-3	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	5/28/2019	TPH GRO	0.022	0.05	0.0211	10100	mg/L
NAPIS-3	5/28/2019	Bromide	2.5	0.5	0.088765	NA	mg/L
NAPIS-3	5/28/2019	Chloride	420	25	25	250000000	mg/L
NAPIS-3	5/28/2019	Fluoride, Total	0.69	0.5	0.073	1600000	mg/L
NAPIS-3	5/28/2019	Nitrogen, Nitrate	4.2	0.5	0.025	10000000	mg/L
NAPIS-3	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-3	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	5/28/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
NAPIS-3	8/22/2019	TPH GRO	0.026	0.05	0.0211	10100	mg/L
NAPIS-3	8/22/2019	TPH DRO	ND	1	0.35	16700	mg/L
NAPIS-3	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
NAPIS-3	8/22/2019	Bromide	2.5	0.5	0.088765	NA	mg/L
NAPIS-3	8/22/2019	Chloride	420	25	25	250000000	mg/L
NAPIS-3	8/22/2019	Fluoride, Total	0.63	0.5	0.073	1600000	mg/L
NAPIS-3	8/22/2019	Nitrogen, Nitrate	0.63	0.5	0.025	10000000	mg/L
NAPIS-3	8/22/2019	Nitrogen, Nitrite	0.17	0.5	0.027	1000000	mg/L
NAPIS-3	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	8/22/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
NAPIS-3	10/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
NAPIS-3	10/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
NAPIS-3	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
NAPIS-3	10/21/2019	Bromide	2.8	0.5	0.077	NA	mg/L
NAPIS-3	10/21/2019	Chloride	440	25	25	250000000	mg/L
NAPIS-3	10/21/2019	Fluoride, Total	0.67	0.5	0.144909	1600000	mg/L
NAPIS-3	10/21/2019	Nitrogen, Nitrate	4.9	0.5	0.030387	10000000	mg/L
NAPIS-3	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
NAPIS-3	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
NAPIS-3	10/21/2019	Sulfate	200	2.5	0.3345	600000000	mg/L
NAPIS-3	3/4/2020	TPH GRO	0.11	0.05	0.0068	10100	mg/L
NAPIS-3	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
NAPIS-3	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
NAPIS-3	3/4/2020	Bromide	2.4	0.5	0.25	NA	mg/L
NAPIS-3	3/4/2020	Fluoride, Total	0.62	0.5	0.11	1600000	mg/L
NAPIS-3	3/4/2020	Nitrogen, Nitrate	3.9	0.5	0.11	10000000	mg/L
NAPIS-3	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
NAPIS-3	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	3/4/2020	Sulfate	150	2.5	1.2	600000000	mg/L
NAPIS-3	3/4/2020	Chloride	360	25	12	250000000	mg/L
NAPIS-3	9/22/2020	TPH GRO	0.11	0.05	0.008	10100	mg/L
NAPIS-3	9/22/2020	TPH DRO	0.38	0.07	0.067	16700	mg/L
NAPIS-3	9/22/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
NAPIS-3	9/22/2020	Bromide	1.7	0.5	0.25	NA	mg/L
NAPIS-3	9/22/2020	Fluoride, Total	0.47	0.5	0.22	1600000	mg/L
NAPIS-3	9/22/2020	Nitrogen, Nitrate	0.85	0.5	0.1	10000000	mg/L
NAPIS-3	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
NAPIS-3	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
NAPIS-3	9/22/2020	Sulfate	63	2.5	1.2	600000000	mg/L
NAPIS-3	9/22/2020	Chloride	290	10	5	250000000	mg/L
NAPIS-3	12/17/2020	Ammonia	0.07	0.05	0.024	NA	mg/L
NAPIS-3	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
NAPIS-3	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
NAPIS-3	12/17/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
NAPIS-3	12/17/2020	Chloride	266	10	1.2	250000000	mg/L
NAPIS-3	12/17/2020	Sulfate	7.48	1	0.37	600000000	mg/L
NAPIS-3	12/17/2020	Bicarbonate	867	1	0.5	NA	mg/L
NAPIS-3	12/17/2020	TPH DRO	1560	137	110	16700	ug/L
NAPIS-3	12/17/2020	C28-C40	154	137	110	NA	ug/L
NAPIS-3	12/17/2020	TPH (C6-C10)	221	100	47	NA	ug/L
OAPIS-1	3/18/2013	Bromide	4.6	0.5	0.38	NA	mg/L
OAPIS-1	3/18/2013	Chloride	1600	100	13	250000000	mg/L
OAPIS-1	3/18/2013	Fluoride, Total	1.8	0.5	0.1	1600000	mg/L
OAPIS-1	3/18/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	3/18/2013	Nitrate & Nitrite	ND	2	0.37	NA	mg/L
OAPIS-1	3/18/2013	Sulfate	65	2.5	1.2	600000000	mg/L
OAPIS-1	3/18/2013	TPH DRO	6	1	0.4	16700	mg/L
OAPIS-1	3/18/2013	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/18/2013	TPH GRO	0.48	0.25	0.098	10100	mg/L
OAPIS-1	6/12/2013	Bromide	4.6	1	0.26	NA	mg/L
OAPIS-1	6/12/2013	Chloride	1800	50	15	250000000	mg/L
OAPIS-1	6/12/2013	Cyanide, Total	0.069	0.01	0.01	1460	mg/L
OAPIS-1	6/12/2013	Fluoride, Total	1.6	1	0.33	1600000	mg/L
OAPIS-1	6/12/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OAPIS-1	6/12/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
OAPIS-1	6/12/2013	Sulfate	41	5	1.2	600000000	mg/L
OAPIS-1	6/12/2013	TPH DRO	7.1	1	0.4	16700	mg/L
OAPIS-1	6/12/2013	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/12/2013	TPH GRO	0.94	0.25	0.098	10100	mg/L
OAPIS-1	9/3/2013	Bromide	4.2	0.5	0.13	NA	mg/L
OAPIS-1	9/3/2013	Chloride	1800	100	30	250000000	mg/L
OAPIS-1	9/3/2013	Cyanide, Total	0.087	0.01	0.005	1460	mg/L
OAPIS-1	9/3/2013	Fluoride, Total	1.6	0.5	0.17	1600000	mg/L
OAPIS-1	9/3/2013	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/3/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
OAPIS-1	9/3/2013	Sulfate	38	2.5	0.62	600000000	mg/L
OAPIS-1	9/3/2013	TPH DRO	10	1	0.57	16700	mg/L
OAPIS-1	9/3/2013	TPH ORO	7.5	5	5	85800	mg/L
OAPIS-1	9/3/2013	TPH GRO	0.73	0.05	0.02	10100	mg/L
OAPIS-1	11/11/2013	Bromide	4.3	0.5	0.39	NA	mg/L
OAPIS-1	11/11/2013	Chloride	1600	100	78	250000000	mg/L
OAPIS-1	11/11/2013	Cyanide, Total	0.076	0.01	0.005	1460	mg/L
OAPIS-1	11/11/2013	Fluoride, Total	2	0.5	0.17	1600000	mg/L
OAPIS-1	11/11/2013	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
OAPIS-1	11/11/2013	Nitrate & Nitrite	5.4	2	0.77	NA	mg/L
OAPIS-1	11/11/2013	Sulfate	38	2.5	0.8	600000000	mg/L
OAPIS-1	11/11/2013	TPH DRO	23	1	0.57	16700	mg/L
OAPIS-1	11/11/2013	TPH GRO	0.81	0.05	0.02	10100	mg/L
OAPIS-1	3/10/2014	Bromide	4.8	1	0.79	NA	mg/L
OAPIS-1	3/10/2014	Chloride	1700	100	78	250000000	mg/L
OAPIS-1	3/10/2014	Cyanide, Total	0.0846	0.01	0.01	1460	mg/L
OAPIS-1	3/10/2014	Fluoride, Total	1.7	1	0.35	1600000	mg/L
OAPIS-1	3/10/2014	Ortho-Phosphate	ND	5	2.1	NA	mg/L
OAPIS-1	3/10/2014	Nitrogen, Nitrite	ND	1	0.15	1000000	mg/L
OAPIS-1	3/10/2014	Nitrogen, Nitrate	ND	1	0.65	10000000	mg/L
OAPIS-1	3/10/2014	Sulfate	37	5	1.6	600000000	mg/L
OAPIS-1	3/10/2014	TPH DRO	6.4	1	0.57	16700	mg/L
OAPIS-1	3/10/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/10/2014	TPH GRO	0.71	0.05	0.019	10100	mg/L
OAPIS-1	6/5/2014	Bromide	6.1	0.5	0.11	NA	mg/L
OAPIS-1	6/5/2014	Chloride	1400	250	120	250000000	mg/L
OAPIS-1	6/5/2014	Cyanide, Total	0.0753	0.01	0.01	1460	mg/L
OAPIS-1	6/5/2014	Fluoride, Total	1.3	0.5	0.089	1600000	mg/L
OAPIS-1	6/5/2014	Ortho-Phosphate	ND	2.5	0.74	NA	mg/L
OAPIS-1	6/5/2014	Nitrate & Nitrite	ND	2	0.15	NA	mg/L
OAPIS-1	6/5/2014	Sulfate	22	2.5	0.34	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/5/2014	TPH DRO	11	1	0.57	16700	mg/L
OAPIS-1	6/5/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/5/2014	TPH GRO	0.7	0.05	0.019	10100	mg/L
OAPIS-1	9/12/2014	Bromide	4.8	0.5	0.11	NA	mg/L
OAPIS-1	9/12/2014	Chloride	1700	100	50	250000000	mg/L
OAPIS-1	9/12/2014	Cyanide, Total	0.0908	0.01	0.01	1460	mg/L
OAPIS-1	9/12/2014	Fluoride, Total	1.2	0.5	0.089	1600000	mg/L
OAPIS-1	9/12/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OAPIS-1	9/12/2014	Sulfate	22	2.5	0.41	600000000	mg/L
OAPIS-1	9/12/2014	TPH DRO	6.8	1	0.83	16700	mg/L
OAPIS-1	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/12/2014	TPH GRO	0.75	0.05	0.019	10100	mg/L
OAPIS-1	11/11/2014	Bromide	4.8	0.5	0.13	NA	mg/L
OAPIS-1	11/11/2014	Chloride	1700	100	4.3	250000000	mg/L
OAPIS-1	11/11/2014	Cyanide, Total	0.0587	0.01	0.01	1460	mg/L
OAPIS-1	11/11/2014	Fluoride, Total	1.9	0.5	0.074	1600000	mg/L
OAPIS-1	11/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	11/11/2014	Nitrate & Nitrite	ND	2	0.17	NA	mg/L
OAPIS-1	11/11/2014	Sulfate	23	2.5	0.41	600000000	mg/L
OAPIS-1	11/11/2014	TPH DRO	9.2	1	0.83	16700	mg/L
OAPIS-1	11/11/2014	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/11/2014	TPH GRO	0.79	0.25	0.096	10100	mg/L
OAPIS-1	3/10/2015	Bromide	5.3	0.5	0.39	NA	mg/L
OAPIS-1	3/10/2015	Chloride	1800	100	27	250000000	mg/L
OAPIS-1	3/10/2015	Cyanide, Total	0.0804	0.01	0.01	1460	mg/L
OAPIS-1	3/10/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
OAPIS-1	3/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OAPIS-1	3/10/2015	Nitrogen, Nitrite	ND	0.5	0.1	1000000	mg/L
OAPIS-1	3/10/2015	Nitrogen, Nitrate	ND	0.5	0.16	10000000	mg/L
OAPIS-1	3/10/2015	Sulfate	30	2.5	0.57	600000000	mg/L
OAPIS-1	3/10/2015	TPH DRO	6.5	1	0.91	16700	mg/L
OAPIS-1	3/10/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/10/2015	TPH GRO	0.56	0.25	0.06	10100	mg/L
OAPIS-1	6/2/2015	Bromide	5.4	1	0.77	NA	mg/L
OAPIS-1	6/2/2015	Chloride	1800	100	27	250000000	mg/L
OAPIS-1	6/2/2015	Cyanide, Total	0.0887	0.01	0.01	1460	mg/L
OAPIS-1	6/2/2015	Fluoride, Total	1.9	1	0.29	1600000	mg/L
OAPIS-1	6/2/2015	Ortho-Phosphate	ND	5	1.8	NA	mg/L
OAPIS-1	6/2/2015	Nitrate & Nitrite	ND	2	0.45	NA	mg/L
OAPIS-1	6/2/2015	Sulfate	26	5	1.1	600000000	mg/L
OAPIS-1	6/2/2015	TPH DRO	4.4	1	0.91	16700	mg/L
OAPIS-1	6/2/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	8/11/2015	Bromide	5.7	0.5	0.39	NA	mg/L
OAPIS-1	8/11/2015	Chloride	2000	100	27	250000000	mg/L
OAPIS-1	8/11/2015	Cyanide, Total	0.0796	0.01	0.01	1460	mg/L
OAPIS-1	8/11/2015	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L
OAPIS-1	8/11/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OAPIS-1	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OAPIS-1	8/11/2015	Sulfate	20	2.5	0.57	600000000	mg/L
OAPIS-1	8/11/2015	TPH DRO	3.7	1	0.91	16700	mg/L
OAPIS-1	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	8/11/2015	TPH GRO	0.86	0.25	0.2	10100	mg/L
OAPIS-1	10/29/2015	Bromide	4.7	0.5	0.341	NA	mg/L
OAPIS-1	10/29/2015	Chloride	1800	100	68	250000000	mg/L
OAPIS-1	10/29/2015	Cyanide, Total	0.0684	0.01	0.01	1460	mg/L
OAPIS-1	10/29/2015	Fluoride, Total	1.6	0.5	0.16	1600000	mg/L
OAPIS-1	10/29/2015	Ortho-Phosphate	ND	2.5	0.44	NA	mg/L
OAPIS-1	10/29/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OAPIS-1	10/29/2015	Sulfate	18	2.5	1.6	600000000	mg/L
OAPIS-1	10/29/2015	TPH DRO	7.1	1	0.91	16700	mg/L
OAPIS-1	10/29/2015	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	10/29/2015	TPH GRO	0.8	0.25	0.06	10100	mg/L
OAPIS-1	3/1/2016	Bromide	9.1	1	0.32	NA	mg/L
OAPIS-1	3/1/2016	Chloride	1700	100	5.5	250000000	mg/L
OAPIS-1	3/1/2016	Cyanide, Total	0.0867	0.01	0.01	1460	mg/L
OAPIS-1	3/1/2016	Fluoride, Total	2	1	0.23	1600000	mg/L
OAPIS-1	3/1/2016	Ortho-Phosphate	ND	5	2.2	NA	mg/L
OAPIS-1	3/1/2016	Nitrate & Nitrite	ND	2	0.84	NA	mg/L
OAPIS-1	3/1/2016	Sulfate	23	5	0.64	600000000	mg/L
OAPIS-1	3/1/2016	TPH DRO	6.1	1	0.69	16700	mg/L
OAPIS-1	3/1/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	3/1/2016	TPH GRO	0.86	0.05	0.025	10100	mg/L
OAPIS-1	6/7/2016	Bromide	2.3	0.1	0.032	NA	mg/L
OAPIS-1	6/7/2016	Chloride	1800	100	5.5	250000000	mg/L
OAPIS-1	6/7/2016	Cyanide, Total	0.093	0.01	0.01	1460	mg/L
OAPIS-1	6/7/2016	Fluoride, Total	1.6	0.5	0.11	1600000	mg/L
OAPIS-1	6/7/2016	Ortho-Phosphate	ND	2.5	1.1	NA	mg/L
OAPIS-1	6/7/2016	Nitrate & Nitrite	ND	1	0.42	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	6/7/2016	Sulfate	19	10	1.3	600000000	mg/L
OAPIS-1	6/7/2016	TPH DRO	5.2	1	0.69	16700	mg/L
OAPIS-1	6/7/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/7/2016	TPH GRO	1.2	0.05	0.025	10100	mg/L
OAPIS-1	9/1/2016	Bromide	4.7	0.5	0.22	NA	mg/L
OAPIS-1	9/1/2016	Chloride	1900	100	10	250000000	mg/L
OAPIS-1	9/1/2016	Cyanide, Total	0.106	0.01	0.01	1460	mg/L
OAPIS-1	9/1/2016	Fluoride, Total	1.2	0.5	0.25	1600000	mg/L
OAPIS-1	9/1/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	9/1/2016	Nitrogen, Nitrite	ND	0.5	0.26	1000000	mg/L
OAPIS-1	9/1/2016	Nitrogen, Nitrate	ND	0.5	0.2	10000000	mg/L
OAPIS-1	9/1/2016	Sulfate	14	2.5	0.71	600000000	mg/L
OAPIS-1	9/1/2016	TPH DRO	9.5	1	0.69	16700	mg/L
OAPIS-1	9/1/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/1/2016	TPH GRO	1.7	0.25	0.13	10100	mg/L
OAPIS-1	11/14/2016	Bromide	11	0.5	0.22	NA	mg/L
OAPIS-1	11/14/2016	Chloride	1600	100	10	250000000	mg/L
OAPIS-1	11/14/2016	Cyanide, Total	0.0837	0.01	0.01	1460	mg/L
OAPIS-1	11/14/2016	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
OAPIS-1	11/14/2016	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OAPIS-1	11/14/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
OAPIS-1	11/14/2016	Sulfate	13	2.5	0.71	600000000	mg/L
OAPIS-1	11/14/2016	TPH DRO	8.6	1	0.69	16700	mg/L
OAPIS-1	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/14/2016	TPH GRO	1.4	0.25	0.13	10100	mg/L
OAPIS-1	2/21/2017	Bromide	4.8	0.5	0.15	NA	mg/L
OAPIS-1	2/21/2017	Chloride	1400	100	50	250000000	mg/L
OAPIS-1	2/21/2017	Cyanide, Total	0.0745	0.01	0.0058	1460	mg/L
OAPIS-1	2/21/2017	Fluoride, Total	1.9	0.5	0.25	1600000	mg/L
OAPIS-1	2/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	2/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	2/21/2017	Sulfate	14	2.5	0.48	600000000	mg/L
OAPIS-1	2/21/2017	TPH DRO	12	1	0.48	16700	mg/L
OAPIS-1	2/21/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	2/21/2017	TPH GRO	0.92	0.25	0.12	10100	mg/L
OAPIS-1	6/1/2017	Bromide	4.6	0.5	0.073	NA	mg/L
OAPIS-1	6/1/2017	Chloride	1500	100	50	250000000	mg/L
OAPIS-1	6/1/2017	Cyanide, Total	0.111	0.005	0.005	1460	mg/L
OAPIS-1	6/1/2017	Fluoride, Total	1.3	0.5	0.22	1600000	mg/L
OAPIS-1	6/1/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	6/1/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	6/1/2017	Sulfate	9.4	2.5	0.48	600000000	mg/L
OAPIS-1	6/1/2017	TPH DRO	9.3	1	0.36	16700	mg/L
OAPIS-1	6/1/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	6/1/2017	TPH GRO	1.3	0.25	0.12	10100	mg/L
OAPIS-1	9/5/2017	Bromide	4	0.5	0.073	NA	mg/L
OAPIS-1	9/5/2017	Chloride	1600	100	50	250000000	mg/L
OAPIS-1	9/5/2017	Cyanide, Total	0.0844	0.005	0.005	1460	mg/L
OAPIS-1	9/5/2017	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
OAPIS-1	9/5/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/5/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	9/5/2017	Sulfate	8.7	2.5	0.48	600000000	mg/L
OAPIS-1	9/5/2017	TPH DRO	10	1	0.36	16700	mg/L
OAPIS-1	9/5/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/5/2017	TPH GRO	1.4	0.5	0.25	10100	mg/L
OAPIS-1	12/4/2017	Bromide	4	0.5	0.073	NA	mg/L
OAPIS-1	12/4/2017	Chloride	1800	50	25	250000000	mg/L
OAPIS-1	12/4/2017	Cyanide, Total	0.0746	0.005	0.005	1460	mg/L
OAPIS-1	12/4/2017	Fluoride, Total	1.5	0.5	0.22	1600000	mg/L
OAPIS-1	12/4/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	12/4/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	12/4/2017	Sulfate	9.2	2.5	0.48	600000000	mg/L
OAPIS-1	12/4/2017	TPH DRO	10	1	0.36	16700	mg/L
OAPIS-1	12/4/2017	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	12/4/2017	TPH GRO	1	0.25	0.048	10100	mg/L
OAPIS-1	2/9/2018	Bromide	4.4	0.5	0.073	NA	mg/L
OAPIS-1	2/9/2018	Chloride	1700	100	50	250000000	mg/L
OAPIS-1	2/9/2018	Cyanide, Total	0.0451	0.005	0.005	1460	mg/L
OAPIS-1	2/9/2018	Fluoride, Total	1.6	0.5	0.22	1600000	mg/L
OAPIS-1	2/9/2018	Ortho-Phosphate	2.7	2.5	1.2	NA	mg/L
OAPIS-1	2/9/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OAPIS-1	2/9/2018	Sulfate	10	2.5	0.48	600000000	mg/L
OAPIS-1	2/9/2018	TPH DRO	6.9	1	0.63	16700	mg/L
OAPIS-1	2/9/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	2/9/2018	TPH GRO	0.62	0.05	0.0097	10100	mg/L
OAPIS-1	4/30/2018	Bromide	4.2	0.5	0.13	NA	mg/L
OAPIS-1	4/30/2018	Chloride	1500	100	5.9	250000000	mg/L
OAPIS-1	4/30/2018	Cyanide, Total	0.0848	0.005	0.005	1460	mg/L
OAPIS-1	4/30/2018	Fluoride, Total	1.4	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	4/30/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	4/30/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OAPIS-1	4/30/2018	Sulfate	12	2.5	1	600000000	mg/L
OAPIS-1	4/30/2018	TPH DRO	8.9	1	0.63	16700	mg/L
OAPIS-1	4/30/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	4/30/2018	TPH GRO	0.46	0.05	0.021	10100	mg/L
OAPIS-1	9/6/2018	Bromide	4.4	0.5	0.13	NA	mg/L
OAPIS-1	9/6/2018	Chloride	1400	100	36	250000000	mg/L
OAPIS-1	9/6/2018	Cyanide, Total	0.052	0.005	0.005	1460	mg/L
OAPIS-1	9/6/2018	Fluoride, Total	1.9	0.5	0.15	1600000	mg/L
OAPIS-1	9/6/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OAPIS-1	9/6/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
OAPIS-1	9/6/2018	Sulfate	4.8	2.5	1	600000000	mg/L
OAPIS-1	9/6/2018	TPH DRO	9.8	1	0.63	16700	mg/L
OAPIS-1	9/6/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	9/6/2018	TPH GRO	0.71	0.05	0.024	10100	mg/L
OAPIS-1	11/19/2018	Bromide	4.1	0.5	0.1	NA	mg/L
OAPIS-1	11/19/2018	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	11/19/2018	Cyanide, Total	0.0888	0.005	0.005	1460	mg/L
OAPIS-1	11/19/2018	Fluoride, Total	1.7	0.5	0.5	1600000	mg/L
OAPIS-1	11/19/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OAPIS-1	11/19/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OAPIS-1	11/19/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OAPIS-1	11/19/2018	Sulfate	5.1	2.5	0.63	600000000	mg/L
OAPIS-1	11/19/2018	TPH DRO	9.9	1	0.63	16700	mg/L
OAPIS-1	11/19/2018	TPH ORO	ND	5	5	85800	mg/L
OAPIS-1	11/19/2018	TPH GRO	0.65	0.05	0.024	10100	mg/L
OAPIS-1	3/28/2019	Cyanide, Total	0.0818	0.005	0.005	1460	mg/L
OAPIS-1	3/28/2019	TPH DRO	11	1	0.35	16700	mg/L
OAPIS-1	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	3/28/2019	TPH GRO	0.68	0.1	0.0614	10100	mg/L
OAPIS-1	3/28/2019	Bromide	3.9	0.5	0.0675	NA	mg/L
OAPIS-1	3/28/2019	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	3/28/2019	Fluoride, Total	1.3	0.5	0.25	1600000	mg/L
OAPIS-1	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
OAPIS-1	3/28/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OAPIS-1	3/28/2019	Sulfate	8.1	2.5	0.32	600000000	mg/L
OAPIS-1	5/8/2019	TPH GRO	0.76	0.1	0.0614	10100	mg/L
OAPIS-1	5/8/2019	TPH DRO	11	1	0.35	16700	mg/L
OAPIS-1	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	5/8/2019	Bromide	3.8	0.5	0.088765	NA	mg/L
OAPIS-1	5/8/2019	Chloride	1600	50	6.25	250000000	mg/L
OAPIS-1	5/8/2019	Fluoride, Total	1.6	0.5	0.25	1600000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OAPIS-1	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OAPIS-1	5/8/2019	Sulfate	8.5	2.5	0.2675	600000000	mg/L
OAPIS-1	5/8/2019	Cyanide, Total	0.0794	0.005	0.005	1460	mg/L
OAPIS-1	5/8/2019	TPH GRO	0.69	0.1	0.0614	10100	mg/L
OAPIS-1	5/8/2019	TPH DRO	13	1	0.35	16700	mg/L
OAPIS-1	5/8/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	5/8/2019	Bromide	3.8	0.5	0.088765	NA	mg/L
OAPIS-1	5/8/2019	Chloride	1600	50	6.25	250000000	mg/L
OAPIS-1	5/8/2019	Fluoride, Total	1.7	0.5	0.25	1600000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OAPIS-1	5/8/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OAPIS-1	5/8/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OAPIS-1	5/8/2019	Sulfate	8.2	2.5	0.2675	600000000	mg/L
OAPIS-1	5/8/2019	Cyanide, Total	0.0811	0.005	0.005	1460	mg/L
OAPIS-1	8/22/2019	TPH GRO	0.97	0.05	0.0211	10100	mg/L
OAPIS-1	8/22/2019	TPH DRO	12	1	0.35	16700	mg/L
OAPIS-1	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	8/22/2019	Bromide	3.7	0.5	0.088765	NA	mg/L
OAPIS-1	8/22/2019	Chloride	1500	50	50	250000000	mg/L
OAPIS-1	8/22/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OAPIS-1	8/22/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
OAPIS-1	8/22/2019	Cyanide, Total	0.0658	0.005	0.005	1460	mg/L
OAPIS-1	8/22/2019	TPH GRO	0.95	0.05	0.0211	10100	mg/L
OAPIS-1	8/22/2019	TPH DRO	12	1	0.35	16700	mg/L
OAPIS-1	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OAPIS-1	8/22/2019	Bromide	3.7	0.5	0.088765	NA	mg/L
OAPIS-1	8/22/2019	Chloride	1600	50	50	250000000	mg/L
OAPIS-1	8/22/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OAPIS-1	8/22/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OAPIS-1	8/22/2019	Sulfate	4.8	2.5	0.3345	600000000	mg/L
OAPIS-1	8/22/2019	Cyanide, Total	0.0612	0.005	0.005	1460	mg/L
OAPIS-1	10/21/2019	TPH GRO	0.85	0.05	0.0211	10100	mg/L
OAPIS-1	10/21/2019	TPH DRO	1.4	0.4	0.132	16700	mg/L
OAPIS-1	10/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OAPIS-1	10/21/2019	Cyanide, Total	0.0719	0.01	0.01	1460	mg/L
OAPIS-1	10/21/2019	Bromide	3.7	0.5	0.077	NA	mg/L
OAPIS-1	10/21/2019	Chloride	1400	50	50	250000000	mg/L
OAPIS-1	10/21/2019	Fluoride, Total	1.6	0.5	0.144909	1600000	mg/L
OAPIS-1	10/21/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OAPIS-1	10/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	10/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OAPIS-1	10/21/2019	Sulfate	4.4	2.5	0.3345	600000000	mg/L
OAPIS-1	11/19/2019	Biochemical Oxygen Demand	5.7	2	2	NA	mg/L
OAPIS-1	11/19/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OAPIS-1	11/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OAPIS-1	11/19/2019	Chemical Oxygen Demand	482	10	3	NA	mg/L
OAPIS-1	3/4/2020	Bromide	4.2	0.5	0.25	NA	mg/L
OAPIS-1	3/4/2020	Fluoride, Total	1.7	0.5	0.11	1600000	mg/L
OAPIS-1	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OAPIS-1	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OAPIS-1	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	3/4/2020	Sulfate	12	2.5	1.2	600000000	mg/L
OAPIS-1	3/4/2020	Chloride	1700	50	25	250000000	mg/L
OAPIS-1	3/4/2020	Cyanide, Total	0.0892	0.01	0.003	1460	mg/L
OAPIS-1	9/22/2020	TPH GRO	0.4	0.05	0.008	10100	mg/L
OAPIS-1	9/22/2020	TPH DRO	5.8	0.07	0.067	16700	mg/L
OAPIS-1	9/22/2020	TPH ORO	1.5	0.6	0.6	85800	mg/L
OAPIS-1	9/22/2020	Bromide	4.3	0.5	0.25	NA	mg/L
OAPIS-1	9/22/2020	Fluoride, Total	1.2	0.5	0.22	1600000	mg/L
OAPIS-1	9/22/2020	Nitrogen, Nitrate	0.21	0.5	0.1	10000000	mg/L
OAPIS-1	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OAPIS-1	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OAPIS-1	9/22/2020	Sulfate	9.8	2.5	1.2	600000000	mg/L
OAPIS-1	9/22/2020	Chloride	1400	50	25	250000000	mg/L
OAPIS-1	9/22/2020	Cyanide, Total	0.0708	0.01	0.0039	1460	mg/L
OAPIS-1	12/17/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OAPIS-1	12/17/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OAPIS-1	12/17/2020	Cyanide, Total	0.067	0.005	0.0035	1460	mg/L
OAPIS-1	12/17/2020	Bicarbonate	1200	1	0.5	NA	mg/L
OAPIS-1	12/17/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OAPIS-1	12/17/2020	Fluoride, Total	1.97	1	0.3	1600000	mg/L
OAPIS-1	12/17/2020	Sulfate	10.7	10	3.7	600000000	mg/L
OAPIS-1	12/17/2020	Chloride	1420	50	6	250000000	mg/L
OAPIS-1	12/17/2020	TPH DRO	**24700**	143	115	16700	ug/L
OAPIS-1	12/17/2020	C28-C40	6410	143	115	NA	ug/L
OAPIS-1	12/17/2020	TPH (C6-C10)	460	100	47	NA	ug/L
OW-01	3/22/2012	Bromide	0.27	0.1	0.085	NA	mg/L
OW-01	3/22/2012	Chloride	62	10	4	250000000	mg/L
OW-01	3/22/2012	Fluoride, Total	0.34	0.1	0.02	1600000	mg/L
OW-01	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-01	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-01	3/22/2012	Nitrogen, Nitrate	0.33	0.1	0.05	10000000	mg/L
OW-01	3/22/2012	Sulfate	170	10	4.6	600000000	mg/L
OW-01	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	6/13/2012	Bromide	0.26	0.1	0.074	NA	mg/L
OW-01	6/13/2012	Chloride	61	10	1	250000000	mg/L
OW-01	6/13/2012	Fluoride, Total	0.34	0.1	0.038	1600000	mg/L
OW-01	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-01	6/13/2012	Sulfate	180	10	2.4	600000000	mg/L
OW-01	6/13/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-01	8/22/2012	Bromide	0.26	0.1	0.074	NA	mg/L
OW-01	8/22/2012	Chloride	62	10	1	250000000	mg/L
OW-01	8/22/2012	Fluoride, Total	0.24	0.1	0.038	1600000	mg/L
OW-01	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-01	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-01	8/22/2012	Sulfate	170	10	2.4	600000000	mg/L
OW-01	8/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	8/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	8/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	11/27/2012	Bromide	0.75	0.5	0.38	NA	mg/L
OW-01	11/27/2012	Chloride	72	2.5	0.26	250000000	mg/L
OW-01	11/27/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-01	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-01	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L

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APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	11/27/2012	Sulfate	180	2.5	0.59	600000000	mg/L
OW-01	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-01	3/19/2013	Bromide	ND	0.5	0.38	NA	mg/L
OW-01	3/19/2013	Chloride	70	2.5	0.33	250000000	mg/L
OW-01	3/19/2013	Fluoride, Total	ND	0.5	0.1	1600000	mg/L
OW-01	3/19/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-01	3/19/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
OW-01	3/19/2013	Sulfate	200	2.5	1.2	600000000	mg/L
OW-01	3/19/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-01	3/19/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/19/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	6/13/2013	Bromide	ND	1	0.26	NA	mg/L
OW-01	6/13/2013	Chloride	61	5	1.5	250000000	mg/L
OW-01	6/13/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
OW-01	6/13/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OW-01	6/13/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
OW-01	6/13/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
OW-01	6/13/2013	Sulfate	180	5	1.2	600000000	mg/L
OW-01	6/13/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-01	6/13/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/13/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	9/4/2013	Bromide	0.22	0.1	0.026	NA	mg/L
OW-01	9/4/2013	Chloride	66	10	3	250000000	mg/L
OW-01	9/4/2013	Fluoride, Total	0.3	0.1	0.033	1600000	mg/L
OW-01	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	9/4/2013	Nitrate & Nitrite	29	1	0.18	NA	mg/L
OW-01	9/4/2013	Sulfate	180	10	2.5	600000000	mg/L
OW-01	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	11/11/2013	Bromide	0.26	0.1	0.079	NA	mg/L
OW-01	11/11/2013	Chloride	65	10	7.8	250000000	mg/L
OW-01	11/11/2013	Fluoride, Total	0.28	0.1	0.035	1600000	mg/L
OW-01	11/11/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-01	11/11/2013	Nitrate & Nitrite	4.7	1	0.38	NA	mg/L
OW-01	11/11/2013	Sulfate	170	10	3.2	600000000	mg/L
OW-01	11/11/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	11/11/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-01	3/7/2014	Bromide	0.27	0.1	0.079	NA	mg/L
OW-01	3/7/2014	Chloride	65	10	7.8	250000000	mg/L
OW-01	3/7/2014	Fluoride, Total	0.3	0.1	0.035	1600000	mg/L
OW-01	3/7/2014	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-01	3/7/2014	Nitrate & Nitrite	ND	1	0.38	NA	mg/L
OW-01	3/7/2014	Sulfate	170	10	3.2	600000000	mg/L
OW-01	3/7/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	3/7/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/7/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	6/3/2014	Bromide	0.27	0.1	0.022	NA	mg/L
OW-01	6/3/2014	Chloride	66	10	5	250000000	mg/L
OW-01	6/3/2014	Fluoride, Total	0.26	0.1	0.018	1600000	mg/L
OW-01	6/3/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
OW-01	6/3/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-01	6/3/2014	Sulfate	160	10	1.4	600000000	mg/L
OW-01	6/3/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-01	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/3/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	9/11/2014	Bromide	ND	0.5	0.11	NA	mg/L
OW-01	9/11/2014	Chloride	60	10	5	250000000	mg/L
OW-01	9/11/2014	Fluoride, Total	ND	0.5	0.089	1600000	mg/L
OW-01	9/11/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
OW-01	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-01	9/11/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-01	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-01	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	11/10/2014	Bromide	0.27	0.1	0.026	NA	mg/L
OW-01	11/10/2014	Chloride	72	10	0.43	250000000	mg/L
OW-01	11/10/2014	Fluoride, Total	0.3	0.1	0.015	1600000	mg/L
OW-01	11/10/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-01	11/10/2014	Nitrogen, Nitrite	ND	0.1	0.01	1000000	mg/L
OW-01	11/10/2014	Nitrogen, Nitrate	0.3	0.1	0.0064	10000000	mg/L
OW-01	11/10/2014	Sulfate	170	10	1.6	600000000	mg/L
OW-01	11/10/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-01	11/10/2014	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/10/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-01	3/9/2015	Bromide	0.28	0.1	0.077	NA	mg/L
OW-01	3/9/2015	Chloride	67	10	2.7	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	3/9/2015	Fluoride, Total	0.23	0.1	0.029	1600000	mg/L
OW-01	3/9/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-01	3/9/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	3/9/2015	Sulfate	170	10	2.3	600000000	mg/L
OW-01	3/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	3/9/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-01	6/3/2015	Bromide	ND	0.5	0.39	NA	mg/L
OW-01	6/3/2015	Chloride	77	2.5	0.67	250000000	mg/L
OW-01	6/3/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-01	6/3/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-01	6/3/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	6/3/2015	Sulfate	190	2.5	0.57	600000000	mg/L
OW-01	6/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	6/3/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/3/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-01	8/12/2015	Bromide	0.25	0.1	0.077	NA	mg/L
OW-01	8/12/2015	Chloride	68	10	2.7	250000000	mg/L
OW-01	8/12/2015	Fluoride, Total	0.29	0.1	0.029	1600000	mg/L
OW-01	8/12/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-01	8/12/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-01	8/12/2015	Sulfate	160	10	2.3	600000000	mg/L
OW-01	8/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	8/12/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	8/12/2015	TPH GRO	ND	0.1	0.08	10100	mg/L
OW-01	10/28/2015	Bromide	0.26	0.1	0.068	NA	mg/L
OW-01	10/28/2015	Chloride	71	10	6.8	250000000	mg/L
OW-01	10/28/2015	Fluoride, Total	0.25	0.1	0.032	1600000	mg/L
OW-01	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
OW-01	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OW-01	10/28/2015	Sulfate	160	10	6.4	600000000	mg/L
OW-01	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-01	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
OW-01	10/28/2015	TPH GRO	ND	0.1	0.024	10100	mg/L
OW-01	3/3/2016	Bromide	0.42	0.1	0.032	NA	mg/L
OW-01	3/3/2016	Chloride	70	10	0.55	250000000	mg/L
OW-01	3/3/2016	Fluoride, Total	0.27	0.1	0.023	1600000	mg/L
OW-01	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-01	3/3/2016	Nitrogen, Nitrite	ND	0.1	0.042	1000000	mg/L
OW-01	3/3/2016	Nitrogen, Nitrate	0.25	0.1	0.042	10000000	mg/L
OW-01	3/3/2016	Sulfate	160	10	1.3	600000000	mg/L
OW-01	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	3/3/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	6/6/2016	Bromide	0.25	0.1	0.032	NA	mg/L
OW-01	6/6/2016	Chloride	74	10	0.55	250000000	mg/L
OW-01	6/6/2016	Fluoride, Total	0.24	0.1	0.023	1600000	mg/L
OW-01	6/6/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-01	6/6/2016	Nitrate & Nitrite	0.49	1	0.42	NA	mg/L
OW-01	6/6/2016	Sulfate	170	10	1.3	600000000	mg/L
OW-01	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	6/6/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	9/6/2016	Bromide	0.27	0.5	0.22	NA	mg/L
OW-01	9/6/2016	Chloride	83	2.5	0.25	250000000	mg/L
OW-01	9/6/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-01	9/6/2016	Ortho-Phosphate	1.1	2.5	0.38	NA	mg/L
OW-01	9/6/2016	Nitrate & Nitrite	0.72	1	0.46	NA	mg/L
OW-01	9/6/2016	Sulfate	180	2.5	0.71	600000000	mg/L
OW-01	9/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	9/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/6/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-01	11/15/2016	Bromide	0.27	0.1	0.044	NA	mg/L
OW-01	11/15/2016	Chloride	81	10	1	250000000	mg/L
OW-01	11/15/2016	Fluoride, Total	0.25	0.1	0.05	1600000	mg/L
OW-01	11/15/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
OW-01	11/15/2016	Nitrogen, Nitrite	ND	0.1	0.052	1000000	mg/L
OW-01	11/15/2016	Nitrogen, Nitrate	0.29	0.1	0.041	10000000	mg/L
OW-01	11/15/2016	Sulfate	160	10	2.8	600000000	mg/L
OW-01	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-01	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/15/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	2/27/2017	Bromide	0.27	0.1	0.031	NA	mg/L
OW-01	2/27/2017	Chloride	86	10	5	250000000	mg/L
OW-01	2/27/2017	Fluoride, Total	0.21	0.1	0.05	1600000	mg/L
OW-01	2/27/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	2/27/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
OW-01	2/27/2017	Nitrogen, Nitrate	0.28	0.1	0.022	10000000	mg/L
OW-01	2/27/2017	Sulfate	160	10	1.9	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	2/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	5/31/2017	Bromide	0.28	0.1	0.014	NA	mg/L
OW-01	5/31/2017	Chloride	91	10	5	250000000	mg/L
OW-01	5/31/2017	Fluoride, Total	0.18	0.1	0.044	1600000	mg/L
OW-01	5/31/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-01	5/31/2017	Nitrate & Nitrite	0.28	1	0.13	NA	mg/L
OW-01	5/31/2017	Sulfate	160	10	1.9	600000000	mg/L
OW-01	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	5/31/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	9/7/2017	Bromide	0.35	0.5	0.073	NA	mg/L
OW-01	9/7/2017	Chloride	110	10	5	250000000	mg/L
OW-01	9/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	9/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	9/7/2017	Nitrate & Nitrite	0.34	1	0.13	NA	mg/L
OW-01	9/7/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	9/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/7/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	12/8/2017	Bromide	0.44	0.5	0.073	NA	mg/L
OW-01	12/8/2017	Chloride	96	10	5	250000000	mg/L
OW-01	12/8/2017	Fluoride, Total	0.23	0.5	0.22	1600000	mg/L
OW-01	12/8/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	12/8/2017	Nitrate & Nitrite	0.28	1	0.13	NA	mg/L
OW-01	12/8/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	12/8/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-01	12/8/2017	TPH ORO	ND	5	5	85800	mg/L
OW-01	12/8/2017	TPH GRO	0.012	0.05	0.0097	10100	mg/L
OW-01	2/27/2018	Bromide	0.4	0.5	0.073	NA	mg/L
OW-01	2/27/2018	Chloride	94	10	5	250000000	mg/L
OW-01	2/27/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	2/27/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	2/27/2018	Nitrate & Nitrite	0.36	1	0.13	NA	mg/L
OW-01	2/27/2018	Sulfate	170	2.5	0.48	600000000	mg/L
OW-01	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	2/27/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-01	5/15/2018	Bromide	0.29	0.1	0.027	NA	mg/L
OW-01	5/15/2018	Chloride	110	10	0.59	250000000	mg/L
OW-01	5/15/2018	Fluoride, Total	0.11	0.1	0.03	1600000	mg/L
OW-01	5/15/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
OW-01	5/15/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-01	5/15/2018	Sulfate	140	10	4.1	600000000	mg/L
OW-01	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-01	9/11/2018	Bromide	ND	0.5	0.13	NA	mg/L
OW-01	9/11/2018	Chloride	110	10	3.6	250000000	mg/L
OW-01	9/11/2018	Fluoride, Total	0.19	0.5	0.16	1600000	mg/L
OW-01	9/11/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-01	9/11/2018	Nitrate & Nitrite	0.28	1	0.27	NA	mg/L
OW-01	9/11/2018	Sulfate	160	2.5	1	600000000	mg/L
OW-01	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	9/11/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-01	11/8/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-01	11/8/2018	Chloride	110	10	10	250000000	mg/L
OW-01	11/8/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-01	11/8/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-01	11/8/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-01	11/8/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-01	11/8/2018	Sulfate	170	2.5	0.63	600000000	mg/L
OW-01	11/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-01	11/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-01	11/8/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-01	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-01	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	3/27/2019	Bromide	0.31	0.5	0.0675	NA	mg/L
OW-01	3/27/2019	Chloride	98	10	10	250000000	mg/L
OW-01	3/27/2019	Fluoride, Total	0.29	0.5	0.25	1600000	mg/L
OW-01	3/27/2019	Nitrogen, Nitrate	0.3	0.5	0.143	10000000	mg/L
OW-01	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-01	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-01	3/27/2019	Sulfate	170	2.5	0.32	600000000	mg/L
OW-01	5/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	5/21/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-01	5/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	5/21/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-01	5/21/2019	Chloride	110	10	1.25	250000000	mg/L
OW-01	5/21/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-01	5/21/2019	Nitrogen, Nitrate	0.34	0.5	0.027	10000000	mg/L
OW-01	5/21/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-01	5/21/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-01	5/21/2019	Sulfate	180	2.5	0.2675	600000000	mg/L
OW-01	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	8/15/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-01	8/15/2019	Chloride	110	10	10	250000000	mg/L
OW-01	8/15/2019	Fluoride, Total	0.26	0.5	0.073	1600000	mg/L
OW-01	8/15/2019	Nitrogen, Nitrate	0.26	0.5	0.025	10000000	mg/L
OW-01	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-01	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-01	8/15/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-01	10/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-01	10/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-01	10/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-01	10/16/2019	Bromide	ND	0.5	0.077	NA	mg/L
OW-01	10/16/2019	Chloride	100	10	10	250000000	mg/L
OW-01	10/16/2019	Fluoride, Total	0.27	0.5	0.144909	1600000	mg/L
OW-01	10/16/2019	Nitrogen, Nitrate & Nitrite	0.24	1	0.0485	10000000	mg/L
OW-01	10/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-01	10/16/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-01	3/9/2020	TPH GRO	0.012	0.05	0.0068	10100	mg/L
OW-01	3/9/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-01	3/9/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-01	3/9/2020	Bromide	0.39	0.5	0.25	NA	mg/L
OW-01	3/9/2020	Fluoride, Total	0.34	0.5	0.11	1600000	mg/L
OW-01	3/9/2020	Nitrogen, Nitrate	0.3	0.5	0.11	10000000	mg/L
OW-01	3/9/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-01	3/9/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	3/9/2020	Sulfate	180	2.5	1.2	600000000	mg/L
OW-01	3/9/2020	Chloride	110	10	5	250000000	mg/L
OW-01	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-01	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-01	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-01	9/20/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-01	9/20/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-01	9/20/2020	Nitrogen, Nitrate	0.31	0.5	0.1	10000000	mg/L
OW-01	9/20/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-01	9/20/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-01	9/20/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-01	9/20/2020	Chloride	130	10	5	250000000	mg/L
OW-01	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-01	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-01	12/11/2020	Bicarbonate	406	1	0.5	NA	mg/L
OW-01	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-01	12/11/2020	Nitrogen, Nitrate	0.216	0.1	0.033	10000000	mg/L
OW-01	12/11/2020	Chloride	135	10	1.2	250000000	mg/L
OW-01	12/11/2020	Sulfate	155	10	3.7	600000000	mg/L
OW-01	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-01	12/11/2020	TPH DRO	ND	131	105	16700	ug/L
OW-01	12/11/2020	C28-C40	ND	131	105	NA	ug/L
OW-10	3/22/2012	Bromide	0.64	0.1	0.085	NA	mg/L
OW-10	3/22/2012	Chloride	260	10	4	250000000	mg/L
OW-10	3/22/2012	Fluoride, Total	0.41	0.1	0.02	1600000	mg/L
OW-10	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-10	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-10	3/22/2012	Nitrogen, Nitrate	0.59	0.1	0.05	10000000	mg/L
OW-10	3/22/2012	Sulfate	140	10	4.6	600000000	mg/L
OW-10	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/22/2012	TPH GRO	0.062	0.05	0.014	10100	mg/L
OW-10	6/13/2012	Bromide	ND	2	1.5	NA	mg/L
OW-10	6/13/2012	Chloride	980	50	5.1	250000000	mg/L
OW-10	6/13/2012	Fluoride, Total	0.31	0.1	0.038	1600000	mg/L
OW-10	6/13/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
OW-10	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-10	6/13/2012	Sulfate	160	10	2.4	600000000	mg/L
OW-10	6/13/2012	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/13/2012	TPH GRO	0.14	0.05	0.05	10100	mg/L
OW-10	8/22/2012	Bromide	0.59	0.1	0.074	NA	mg/L
OW-10	8/22/2012	Chloride	280	10	1	250000000	mg/L
OW-10	8/22/2012	Fluoride, Total	0.34	0.1	0.038	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-10	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-10	8/22/2012	Sulfate	130	10	2.4	600000000	mg/L
OW-10	8/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	8/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	8/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-10	11/27/2012	Bromide	11	0.5	0.38	NA	mg/L
OW-10	11/27/2012	Chloride	2100	100	10	250000000	mg/L
OW-10	11/27/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-10	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-10	11/27/2012	Nitrate & Nitrite	ND	4	2	NA	mg/L
OW-10	11/27/2012	Sulfate	240	2.5	0.59	600000000	mg/L
OW-10	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/27/2012	TPH GRO	0.13	0.05	0.014	10100	mg/L
OW-10	3/19/2013	Bromide	ND	0.5	0.38	NA	mg/L
OW-10	3/19/2013	Chloride	1700	100	13	250000000	mg/L
OW-10	3/19/2013	Fluoride, Total	ND	0.5	0.1	1600000	mg/L
OW-10	3/19/2013	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-10	3/19/2013	Nitrate & Nitrite	ND	1	0.19	NA	mg/L
OW-10	3/19/2013	Sulfate	230	2.5	1.2	600000000	mg/L
OW-10	3/19/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	3/19/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/19/2013	TPH GRO	0.11	0.05	0.02	10100	mg/L
OW-10	6/13/2013	Bromide	1.9	1	0.26	NA	mg/L
OW-10	6/13/2013	Chloride	2400	100	30	250000000	mg/L
OW-10	6/13/2013	Fluoride, Total	ND	1	0.33	1600000	mg/L
OW-10	6/13/2013	Ortho-Phosphate	ND	5	2.5	NA	mg/L
OW-10	6/13/2013	Nitrogen, Nitrite	ND	1	0.2	1000000	mg/L
OW-10	6/13/2013	Nitrogen, Nitrate	ND	1	0.16	10000000	mg/L
OW-10	6/13/2013	Sulfate	250	5	1.2	600000000	mg/L
OW-10	6/13/2013	TPH DRO	ND	1	0.4	16700	mg/L
OW-10	6/13/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/13/2013	TPH GRO	0.15	0.05	0.02	10100	mg/L
OW-10	9/4/2013	Bromide	0.98	0.1	0.026	NA	mg/L
OW-10	9/4/2013	Chloride	1200	50	15	250000000	mg/L
OW-10	9/4/2013	Fluoride, Total	0.19	0.1	0.033	1600000	mg/L
OW-10	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	9/4/2013	Nitrate & Nitrite	11	1	0.18	NA	mg/L
OW-10	9/4/2013	Sulfate	180	10	2.5	600000000	mg/L
OW-10	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/4/2013	TPH GRO	0.051	0.05	0.02	10100	mg/L
OW-10	11/11/2013	Bromide	0.73	0.1	0.079	NA	mg/L
OW-10	11/11/2013	Chloride	850	25	19	250000000	mg/L
OW-10	11/11/2013	Fluoride, Total	0.17	0.1	0.035	1600000	mg/L
OW-10	11/11/2013	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-10	11/11/2013	Nitrate & Nitrite	1.3	1	0.38	NA	mg/L
OW-10	11/11/2013	Sulfate	150	25	8	600000000	mg/L
OW-10	11/11/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	11/11/2013	TPH GRO	0.055	0.05	0.02	10100	mg/L
OW-10	3/7/2014	Bromide	0.43	0.1	0.079	NA	mg/L
OW-10	3/7/2014	Chloride	1200	50	39	250000000	mg/L
OW-10	3/7/2014	Fluoride, Total	0.2	0.1	0.035	1600000	mg/L
OW-10	3/7/2014	Ortho-Phosphate	ND	0.5	0.21	NA	mg/L
OW-10	3/7/2014	Nitrate & Nitrite	ND	1	0.38	NA	mg/L
OW-10	3/7/2014	Sulfate	190	10	3.2	600000000	mg/L
OW-10	3/7/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	3/7/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/7/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-10	6/3/2014	Bromide	1.2	0.1	0.022	NA	mg/L
OW-10	6/3/2014	Chloride	1500	100	50	250000000	mg/L
OW-10	6/3/2014	Fluoride, Total	ND	0.1	0.018	1600000	mg/L
OW-10	6/3/2014	Ortho-Phosphate	ND	0.5	0.15	NA	mg/L
OW-10	6/3/2014	Nitrate & Nitrite	ND	4	0.3	NA	mg/L
OW-10	6/3/2014	Sulfate	200	10	1.4	600000000	mg/L
OW-10	6/3/2014	TPH DRO	ND	1	0.57	16700	mg/L
OW-10	6/3/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/3/2014	TPH GRO	0.069	0.05	0.019	10100	mg/L
OW-10	9/12/2014	Bromide	1.4	0.1	0.022	NA	mg/L
OW-10	9/12/2014	Chloride	1500	50	25	250000000	mg/L
OW-10	9/12/2014	Fluoride, Total	0.12	0.1	0.018	1600000	mg/L
OW-10	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-10	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-10	9/12/2014	Sulfate	200	10	1.6	600000000	mg/L
OW-10	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-10	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/12/2014	TPH GRO	0.064	0.05	0.019	10100	mg/L
OW-10	11/10/2014	Bromide	0.69	0.1	0.026	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/10/2014	Chloride	1600	50	2.2	250000000	mg/L
OW-10	11/10/2014	Fluoride, Total	0.2	0.1	0.015	1600000	mg/L
OW-10	11/10/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-10	11/10/2014	Nitrogen, Nitrite	ND	2	0.2	1000000	mg/L
OW-10	11/10/2014	Nitrogen, Nitrate	0.22	0.1	0.0064	10000000	mg/L
OW-10	11/10/2014	Sulfate	200	10	1.6	600000000	mg/L
OW-10	11/10/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-10	11/10/2014	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/10/2014	TPH GRO	0.087	0.05	0.019	10100	mg/L
OW-10	3/9/2015	Bromide	1.1	0.1	0.077	NA	mg/L
OW-10	3/9/2015	Chloride	840	50	13	250000000	mg/L
OW-10	3/9/2015	Fluoride, Total	0.22	0.1	0.029	1600000	mg/L
OW-10	3/9/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-10	3/9/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	3/9/2015	Sulfate	200	10	2.3	600000000	mg/L
OW-10	3/9/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	3/9/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/9/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-10	6/3/2015	Bromide	1.6	0.5	0.39	NA	mg/L
OW-10	6/3/2015	Chloride	1500	50	13	250000000	mg/L
OW-10	6/3/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-10	6/3/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-10	6/3/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	6/3/2015	Sulfate	240	2.5	0.57	600000000	mg/L
OW-10	6/3/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	6/3/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/3/2015	TPH GRO	0.067	0.05	0.012	10100	mg/L
OW-10	8/12/2015	Bromide	2.7	2	1.5	NA	mg/L
OW-10	8/12/2015	Chloride	1900	100	27	250000000	mg/L
OW-10	8/12/2015	Fluoride, Total	ND	0.1	0.029	1600000	mg/L
OW-10	8/12/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-10	8/12/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-10	8/12/2015	Sulfate	240	10	2.3	600000000	mg/L
OW-10	8/12/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	8/12/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	8/12/2015	TPH GRO	0.064	0.05	0.04	10100	mg/L
OW-10	10/28/2015	Bromide	0.13	0.1	0.068	NA	mg/L
OW-10	10/28/2015	Chloride	1500	50	34	250000000	mg/L
OW-10	10/28/2015	Fluoride, Total	ND	0.1	0.032	1600000	mg/L
OW-10	10/28/2015	Ortho-Phosphate	ND	0.5	0.088	NA	mg/L
OW-10	10/28/2015	Nitrate & Nitrite	ND	1	0.3	NA	mg/L
OW-10	10/28/2015	Sulfate	220	10	6.4	600000000	mg/L
OW-10	10/28/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-10	10/28/2015	TPH ORO	ND	5	5	85800	mg/L
OW-10	10/28/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-10	3/3/2016	Bromide	1.3	0.1	0.032	NA	mg/L
OW-10	3/3/2016	Chloride	1100	50	2.7	250000000	mg/L
OW-10	3/3/2016	Fluoride, Total	0.2	0.1	0.023	1600000	mg/L
OW-10	3/3/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-10	3/3/2016	Nitrogen, Nitrite	ND	2	0.83	1000000	mg/L
OW-10	3/3/2016	Nitrogen, Nitrate	0.4	0.1	0.042	10000000	mg/L
OW-10	3/3/2016	Sulfate	200	10	1.3	600000000	mg/L
OW-10	3/3/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	3/3/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	3/3/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-10	6/6/2016	Bromide	0.94	0.1	0.032	NA	mg/L
OW-10	6/6/2016	Chloride	960	50	2.7	250000000	mg/L
OW-10	6/6/2016	Fluoride, Total	0.22	0.1	0.023	1600000	mg/L
OW-10	6/6/2016	Ortho-Phosphate	ND	0.5	0.22	NA	mg/L
OW-10	6/6/2016	Nitrate & Nitrite	0.49	1	0.42	NA	mg/L
OW-10	6/6/2016	Sulfate	200	10	1.3	600000000	mg/L
OW-10	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	6/6/2016	TPH GRO	0.047	0.05	0.025	10100	mg/L
OW-10	9/6/2016	Bromide	1.1	0.5	0.22	NA	mg/L
OW-10	9/6/2016	Chloride	1100	50	5.1	250000000	mg/L
OW-10	9/6/2016	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	9/6/2016	Ortho-Phosphate	1.4	2.5	0.38	NA	mg/L
OW-10	9/6/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-10	9/6/2016	Sulfate	230	2.5	0.71	600000000	mg/L
OW-10	9/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	9/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/6/2016	TPH GRO	0.04	0.05	0.015	10100	mg/L
OW-10	11/15/2016	Bromide	0.93	0.1	0.044	NA	mg/L
OW-10	11/15/2016	Chloride	550	25	2.5	250000000	mg/L
OW-10	11/15/2016	Fluoride, Total	0.2	0.1	0.05	1600000	mg/L
OW-10	11/15/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
OW-10	11/15/2016	Nitrogen, Nitrite	ND	2	1	1000000	mg/L
OW-10	11/15/2016	Nitrogen, Nitrate	0.52	0.1	0.041	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	11/15/2016	Sulfate	190	10	2.8	600000000	mg/L
OW-10	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-10	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/15/2016	TPH GRO	0.04	0.05	0.025	10100	mg/L
OW-10	2/27/2017	Bromide	0.89	0.1	0.031	NA	mg/L
OW-10	2/27/2017	Chloride	440	25	12	250000000	mg/L
OW-10	2/27/2017	Fluoride, Total	0.14	0.1	0.05	1600000	mg/L
OW-10	2/27/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	2/27/2017	Nitrogen, Nitrite	ND	2	0.39	1000000	mg/L
OW-10	2/27/2017	Nitrogen, Nitrate	0.55	0.1	0.022	10000000	mg/L
OW-10	2/27/2017	Sulfate	180	10	1.9	600000000	mg/L
OW-10	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	2/27/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-10	5/31/2017	Bromide	1.1	0.1	0.014	NA	mg/L
OW-10	5/31/2017	Chloride	870	25	12	250000000	mg/L
OW-10	5/31/2017	Fluoride, Total	0.063	0.1	0.044	1600000	mg/L
OW-10	5/31/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	5/31/2017	Nitrate & Nitrite	0.47	1	0.13	NA	mg/L
OW-10	5/31/2017	Sulfate	180	10	1.9	600000000	mg/L
OW-10	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	5/31/2017	TPH GRO	0.027	0.05	0.025	10100	mg/L
OW-10	9/7/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	9/7/2017	Chloride	740	25	12	250000000	mg/L
OW-10	9/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	9/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	9/7/2017	Nitrate & Nitrite	0.59	1	0.13	NA	mg/L
OW-10	9/7/2017	Sulfate	210	2.5	0.48	600000000	mg/L
OW-10	9/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/7/2017	TPH GRO	0.036	0.05	0.025	10100	mg/L
OW-10	12/7/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	12/7/2017	Chloride	650	25	12	250000000	mg/L
OW-10	12/7/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	12/7/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	12/7/2017	Nitrate & Nitrite	0.76	1	0.13	NA	mg/L
OW-10	12/7/2017	Sulfate	230	2.5	0.48	600000000	mg/L
OW-10	12/7/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-10	12/7/2017	TPH ORO	ND	5	5	85800	mg/L
OW-10	12/7/2017	TPH GRO	0.022	0.05	0.0097	10100	mg/L
OW-10	2/27/2018	Bromide	1.1	0.5	0.073	NA	mg/L
OW-10	2/27/2018	Chloride	390	25	12	250000000	mg/L
OW-10	2/27/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-10	2/27/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	2/27/2018	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
OW-10	2/27/2018	Sulfate	220	2.5	0.48	600000000	mg/L
OW-10	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	2/27/2018	TPH GRO	0.026	0.05	0.025	10100	mg/L
OW-10	5/15/2018	Bromide	0.23	0.1	0.027	NA	mg/L
OW-10	5/15/2018	Chloride	850	25	1.5	250000000	mg/L
OW-10	5/15/2018	Fluoride, Total	ND	0.1	0.03	1600000	mg/L
OW-10	5/15/2018	Ortho-Phosphate	ND	0.5	0.093	NA	mg/L
OW-10	5/15/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-10	5/15/2018	Sulfate	200	10	4.1	600000000	mg/L
OW-10	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-10	9/11/2018	Bromide	1.2	0.5	0.13	NA	mg/L
OW-10	9/11/2018	Chloride	830	50	18	250000000	mg/L
OW-10	9/11/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
OW-10	9/11/2018	Ortho-Phosphate	1.5	2.5	0.46	NA	mg/L
OW-10	9/11/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-10	9/11/2018	Nitrogen, Nitrate	1	0.5	0.033	10000000	mg/L
OW-10	9/11/2018	Sulfate	250	10	4.1	600000000	mg/L
OW-10	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	9/11/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-10	11/8/2018	Bromide	1	0.5	0.1	NA	mg/L
OW-10	11/8/2018	Chloride	860	50	50	250000000	mg/L
OW-10	11/8/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-10	11/8/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-10	11/8/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-10	11/8/2018	Nitrogen, Nitrate	0.94	0.5	0.066	10000000	mg/L
OW-10	11/8/2018	Sulfate	220	10	2.5	600000000	mg/L
OW-10	11/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-10	11/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-10	11/8/2018	TPH GRO	ND	0.05	0.024	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-10	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	3/27/2019	Bromide	1	0.5	0.0675	NA	mg/L
OW-10	3/27/2019	Chloride	460	25	25	250000000	mg/L
OW-10	3/27/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrate	0.94	0.5	0.143	10000000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-10	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-10	3/27/2019	Sulfate	230	2.5	0.32	600000000	mg/L
OW-10	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-10	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	3/27/2019	Bromide	0.99	0.5	0.0675	NA	mg/L
OW-10	3/27/2019	Chloride	500	25	25	250000000	mg/L
OW-10	3/27/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrate	0.91	0.5	0.143	10000000	mg/L
OW-10	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-10	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-10	3/27/2019	Sulfate	230	2.5	0.32	600000000	mg/L
OW-10	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	5/28/2019	Bromide	0.98	0.5	0.088765	NA	mg/L
OW-10	5/28/2019	Chloride	510	25	25	250000000	mg/L
OW-10	5/28/2019	Fluoride, Total	0.25	0.5	0.073	1600000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrate	0.88	0.5	0.025	10000000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	5/28/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	5/28/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	5/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	5/28/2019	Bromide	0.97	0.5	0.088765	NA	mg/L
OW-10	5/28/2019	Chloride	530	25	25	250000000	mg/L
OW-10	5/28/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrate	0.87	0.5	0.025	10000000	mg/L
OW-10	5/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	5/28/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	5/28/2019	Sulfate	180	10	1.338	600000000	mg/L
OW-10	5/28/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	5/28/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	8/15/2019	Bromide	1	0.5	0.088765	NA	mg/L
OW-10	8/15/2019	Chloride	860	25	25	250000000	mg/L
OW-10	8/15/2019	Fluoride, Total	0.19	0.5	0.073	1600000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrate	0.75	0.5	0.025	10000000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	8/15/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	8/15/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	8/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	8/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	8/15/2019	Bromide	0.97	0.5	0.088765	NA	mg/L
OW-10	8/15/2019	Chloride	840	25	25	250000000	mg/L
OW-10	8/15/2019	Fluoride, Total	0.15	0.5	0.073	1600000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrate	0.74	0.5	0.025	10000000	mg/L
OW-10	8/15/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	8/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	8/15/2019	Sulfate	220	2.5	0.3345	600000000	mg/L
OW-10	10/17/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-10	10/17/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-10	10/17/2019	Motor Oil	ND	5	5	85800	mg/L
OW-10	10/17/2019	Bromide	1	0.5	0.077	NA	mg/L
OW-10	10/17/2019	Chloride	1100	50	50	250000000	mg/L
OW-10	10/17/2019	Fluoride, Total	0.16	0.5	0.144909	1600000	mg/L
OW-10	10/17/2019	Nitrogen, Nitrate	0.75	0.5	0.030387	10000000	mg/L
OW-10	10/17/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-10	10/17/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-10	10/17/2019	Sulfate	230	2.5	0.3345	600000000	mg/L
OW-10	3/4/2020	TPH GRO	0.011	0.05	0.0068	10100	mg/L
OW-10	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-10	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-10	3/4/2020	Bromide	1.1	0.5	0.25	NA	mg/L
OW-10	3/4/2020	Nitrogen, Nitrate	0.79	0.5	0.11	10000000	mg/L
OW-10	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-10	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	3/4/2020	Sulfate	220	10	5	600000000	mg/L
OW-10	3/4/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-10	3/4/2020	Chloride	1500	50	25	250000000	mg/L
OW-10	3/4/2020	TPH GRO	0.0074	0.05	0.0068	10100	mg/L
OW-10	3/4/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-10	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-10	3/4/2020	Bromide	1.1	0.5	0.25	NA	mg/L
OW-10	3/4/2020	Nitrogen, Nitrate	0.8	0.5	0.11	10000000	mg/L
OW-10	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-10	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-10	3/4/2020	Sulfate	220	10	5	600000000	mg/L
OW-10	3/4/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-10	3/4/2020	Chloride	1400	50	25	250000000	mg/L
OW-10	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-10	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-10	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-10	9/20/2020	Chloride	620	25	12	250000000	mg/L
OW-10	9/20/2020	Bromide	0.64	0.1	0.05	NA	mg/L
OW-10	9/20/2020	Fluoride, Total	0.089	0.1	0.043	1600000	mg/L
OW-10	9/20/2020	Nitrogen, Nitrate	0.88	0.1	0.02	10000000	mg/L
OW-10	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-10	9/20/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-10	9/20/2020	Sulfate	180	10	5	600000000	mg/L
OW-10	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-10	12/11/2020	Nitrogen, Nitrate	1.13	0.1	0.033	10000000	mg/L
OW-10	12/11/2020	Chloride	348	10	1.2	250000000	mg/L
OW-10	12/11/2020	Sulfate	169	10	3.7	600000000	mg/L
OW-10	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-10	12/11/2020	Nitrogen, Nitrate	1.14	0.1	0.033	10000000	mg/L
OW-10	12/11/2020	Chloride	364	10	1.2	250000000	mg/L
OW-10	12/11/2020	Sulfate	179	10	3.7	600000000	mg/L
OW-10	12/11/2020	Bicarbonate	467	1	0.5	NA	mg/L
OW-10	12/11/2020	Bicarbonate	470	1	0.5	NA	mg/L
OW-10	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-10	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-10	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-10	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-10	12/11/2020	TPH DRO	ND	133	106	16700	ug/L
OW-10	12/11/2020	C28-C40	ND	133	106	NA	ug/L
OW-10	12/11/2020	TPH DRO	ND	143	114	16700	ug/L
OW-10	12/11/2020	C28-C40	ND	143	114	NA	ug/L
OW-10	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-10	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-11	8/22/2012	Bromide	0.21	0.1	0.074	NA	mg/L
OW-11	8/22/2012	Chloride	82	10	1	250000000	mg/L
OW-11	8/22/2012	Fluoride, Total	1.7	0.1	0.038	1600000	mg/L
OW-11	8/22/2012	Ortho-Phosphate	ND	10	6.1	NA	mg/L
OW-11	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-11	8/22/2012	Sulfate	940	25	5.9	600000000	mg/L
OW-11	9/16/2013	Bromide	0.2	0.1	0.026	NA	mg/L
OW-11	9/16/2013	Chloride	81	10	3	250000000	mg/L
OW-11	9/16/2013	Fluoride, Total	2.6	0.1	0.033	1600000	mg/L
OW-11	9/16/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-11	9/16/2013	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
OW-11	9/16/2013	Nitrogen, Nitrate	0.34	0.1	0.016	10000000	mg/L
OW-11	9/16/2013	Sulfate	960	25	6.2	600000000	mg/L
OW-11	9/12/2014	Bromide	ND	0.1	0.022	NA	mg/L
OW-11	9/12/2014	Chloride	77	10	5	250000000	mg/L
OW-11	9/12/2014	Fluoride, Total	2.3	0.1	0.018	1600000	mg/L
OW-11	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-11	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-11	9/12/2014	Sulfate	960	25	4.1	600000000	mg/L
OW-11	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-11	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/12/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-11	8/17/2015	Bromide	0.35	0.1	0.077	NA	mg/L
OW-11	8/17/2015	Chloride	100	10	2.7	250000000	mg/L
OW-11	8/17/2015	Fluoride, Total	1.9	0.1	0.029	1600000	mg/L
OW-11	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-11	8/17/2015	Nitrate & Nitrite	2.1	1	0.22	NA	mg/L
OW-11	8/17/2015	Sulfate	880	10	2.3	600000000	mg/L
OW-11	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-11	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
OW-11	8/17/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-11	9/9/2016	Bromide	0.33	0.1	0.044	NA	mg/L
OW-11	9/9/2016	Chloride	100	10	1	250000000	mg/L
OW-11	9/9/2016	Fluoride, Total	1.6	0.1	0.05	1600000	mg/L
OW-11	9/9/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
OW-11	9/9/2016	Nitrate & Nitrite	1.7	1	0.46	NA	mg/L
OW-11	9/9/2016	Sulfate	900	10	2.8	600000000	mg/L
OW-11	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-11	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-11	9/18/2017	Bromide	0.42	0.5	0.073	NA	mg/L
OW-11	9/18/2017	Chloride	97	10	5	250000000	mg/L
OW-11	9/18/2017	Fluoride, Total	1.7	0.5	0.22	1600000	mg/L
OW-11	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-11	9/18/2017	Nitrate & Nitrite	1.2	1	0.13	NA	mg/L
OW-11	9/18/2017	Sulfate	850	25	4.8	600000000	mg/L
OW-11	9/18/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-11	9/18/2017	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/18/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-11	9/18/2018	Bromide	0.28	0.5	0.13	NA	mg/L
OW-11	9/18/2018	Chloride	90	10	3.6	250000000	mg/L
OW-11	9/18/2018	Fluoride, Total	1.8	0.5	0.16	1600000	mg/L
OW-11	9/18/2018	Ortho-Phosphate	ND	10	1.9	NA	mg/L
OW-11	9/18/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-11	9/18/2018	Nitrogen, Nitrate	0.89	0.5	0.033	10000000	mg/L
OW-11	9/18/2018	Sulfate	1000	10	4.1	600000000	mg/L
OW-11	9/18/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-11	9/18/2018	TPH ORO	ND	5	5	85800	mg/L
OW-11	9/18/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-11	8/20/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-11	8/20/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-11	8/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-11	8/20/2019	Bromide	0.34	0.5	0.088765	NA	mg/L
OW-11	8/20/2019	Chloride	98	10	10	250000000	mg/L
OW-11	8/20/2019	Fluoride, Total	2	0.5	0.073	1600000	mg/L
OW-11	8/20/2019	Nitrogen, Nitrate	1.6	0.5	0.025	10000000	mg/L
OW-11	8/20/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-11	8/20/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-11	8/20/2019	Sulfate	940	10	1.338	600000000	mg/L
OW-11	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-11	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-11	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-11	9/20/2020	Sulfate	940	25	12	600000000	mg/L
OW-11	9/20/2020	Bromide	ND	0.1	0.05	NA	mg/L
OW-11	9/20/2020	Nitrogen, Nitrate	0.22	0.1	0.02	10000000	mg/L
OW-11	9/20/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-11	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-11	9/20/2020	Chloride	77	10	5	250000000	mg/L
OW-11	9/20/2020	Fluoride, Total	2.3	2	0.87	1600000	mg/L
OW-12	8/22/2012	Bromide	0.13	0.1	0.074	NA	mg/L
OW-12	8/22/2012	Chloride	16	10	1	250000000	mg/L
OW-12	8/22/2012	Fluoride, Total	0.48	0.1	0.038	1600000	mg/L
OW-12	8/22/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-12	8/22/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-12	8/22/2012	Sulfate	150	10	2.4	600000000	mg/L
OW-12	9/12/2014	Bromide	0.14	0.1	0.022	NA	mg/L
OW-12	9/12/2014	Chloride	19	0.5	0.25	250000000	mg/L
OW-12	9/12/2014	Fluoride, Total	0.47	0.1	0.018	1600000	mg/L
OW-12	9/12/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-12	9/12/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-12	9/12/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-12	9/12/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-12	9/12/2014	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/12/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-12	8/13/2015	Bromide	0.14	0.1	0.077	NA	mg/L
OW-12	8/13/2015	Chloride	18	10	2.7	250000000	mg/L
OW-12	8/13/2015	Fluoride, Total	0.49	0.1	0.029	1600000	mg/L
OW-12	8/13/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-12	8/13/2015	Nitrogen, Nitrite	ND	0.1	0.02	1000000	mg/L
OW-12	8/13/2015	Nitrogen, Nitrate	ND	0.1	0.032	10000000	mg/L
OW-12	8/13/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-12	8/13/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-12	8/13/2015	TPH ORO	ND	5	5	85800	mg/L
OW-12	8/13/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-12	9/8/2016	Bromide	0.14	0.1	0.044	NA	mg/L
OW-12	9/8/2016	Chloride	19	0.5	0.051	250000000	mg/L
OW-12	9/8/2016	Fluoride, Total	0.4	0.1	0.05	1600000	mg/L
OW-12	9/8/2016	Ortho-Phosphate	0.37	0.5	0.076	NA	mg/L
OW-12	9/8/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-12	9/8/2016	Sulfate	160	10	2.8	600000000	mg/L
OW-12	9/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-12	9/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/8/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-12	9/19/2017	Bromide	0.36	0.5	0.073	NA	mg/L
OW-12	9/19/2017	Chloride	17	2.5	1.2	250000000	mg/L
OW-12	9/19/2017	Fluoride, Total	0.52	0.5	0.22	1600000	mg/L
OW-12	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-12	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-12	9/19/2017	Nitrogen, Nitrate	0.11	0.5	0.11	10000000	mg/L
OW-12	9/19/2017	Sulfate	170	2.5	0.48	600000000	mg/L
OW-12	9/19/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-12	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/19/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-12	9/19/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-12	9/19/2018	TPH ORO	ND	5	5	85800	mg/L
OW-12	9/19/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-12	9/17/2020	TPH GRO	0.37	0.05	0.008	10100	mg/L
OW-12	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-12	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-12	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-12	9/17/2020	Nitrogen, Nitrate	7.7	2	0.4	10000000	mg/L
OW-13	8/23/2012	Bromide	0.35	0.1	0.074	NA	mg/L
OW-13	8/23/2012	Chloride	27	10	1	250000000	mg/L
OW-13	8/23/2012	Fluoride, Total	0.25	0.1	0.038	1600000	mg/L
OW-13	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-13	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-13	8/23/2012	Sulfate	150	10	2.4	600000000	mg/L
OW-13	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-13	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-13	9/4/2013	Bromide	0.39	0.1	0.026	NA	mg/L
OW-13	9/4/2013	Chloride	28	10	3	250000000	mg/L
OW-13	9/4/2013	Fluoride, Total	0.28	0.1	0.033	1600000	mg/L
OW-13	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-13	9/4/2013	Nitrate & Nitrite	2.6	1	0.18	NA	mg/L
OW-13	9/4/2013	Sulfate	160	10	2.5	600000000	mg/L
OW-13	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-13	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-13	9/15/2014	Bromide	0.39	0.1	0.022	NA	mg/L
OW-13	9/15/2014	Chloride	28	10	5	250000000	mg/L
OW-13	9/15/2014	Fluoride, Total	0.22	0.1	0.018	1600000	mg/L
OW-13	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-13	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-13	9/15/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-13	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-13	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-13	8/11/2015	Bromide	0.37	0.1	0.077	NA	mg/L
OW-13	8/11/2015	Chloride	30	10	2.7	250000000	mg/L
OW-13	8/11/2015	Fluoride, Total	0.27	0.1	0.029	1600000	mg/L
OW-13	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-13	8/11/2015	Nitrate & Nitrite	4.9	1	0.22	NA	mg/L
OW-13	8/11/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-13	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-13	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/11/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-13	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-13	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-13	10/27/2015	TPH GRO	ND	0.05	0.012	10100	mg/L
OW-13	3/4/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	3/4/2016	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-13	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	6/6/2016	TPH GRO	0.052	0.05	0.025	10100	mg/L
OW-13	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	8/31/2016	TPH GRO	0.068	0.05	0.025	10100	mg/L
OW-13	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-13	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-13	11/15/2016	TPH GRO	0.068	0.05	0.025	10100	mg/L
OW-13	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	2/27/2017	TPH GRO	0.057	0.05	0.025	10100	mg/L
OW-13	5/31/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	5/31/2017	TPH GRO	0.059	0.05	0.025	10100	mg/L
OW-13	9/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/6/2017	TPH GRO	0.074	0.05	0.025	10100	mg/L
OW-13	12/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-13	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-13	12/11/2017	TPH GRO	0.064	0.05	0.0097	10100	mg/L
OW-13	2/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/28/2018	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-13	2/28/2018	TPH GRO	0.06	0.05	0.025	10100	mg/L
OW-13	5/15/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	5/15/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-13	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	9/11/2018	TPH GRO	0.046	0.05	0.024	10100	mg/L
OW-13	11/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-13	11/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-13	2/5/2019	TPH GRO	0.042	0.05	0.0211	10100	mg/L
OW-13	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	2/5/2019	TPH GRO	0.044	0.05	0.0211	10100	mg/L
OW-13	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-13	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	5/1/2019	TPH GRO	0.048	0.05	0.0307	10100	mg/L
OW-13	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/12/2019	TPH GRO	0.064	0.05	0.0211	10100	mg/L
OW-13	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/12/2019	TPH GRO	0.061	0.05	0.0211	10100	mg/L
OW-13	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-13	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-13	8/13/2019	Chloride	57	2.5	2.5	250000000	mg/L
OW-13	8/13/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
OW-13	8/13/2019	Nitrogen, Nitrate	0.12	0.5	0.025	10000000	mg/L
OW-13	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-13	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-13	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
OW-13	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
OW-13	10/14/2019	TPH GRO	0.059	0.05	0.0193	10100	mg/L
OW-13	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-13	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-13	3/2/2020	TPH GRO	0.056	0.05	0.0068	10100	mg/L
OW-13	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-13	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-13	3/2/2020	Bromide	0.52	0.5	0.25	NA	mg/L
OW-13	3/2/2020	Chloride	36	2.5	1.2	250000000	mg/L
OW-13	3/2/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-13	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-13	3/2/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-13	3/2/2020	TPH GRO	0.053	0.05	0.0068	10100	mg/L
OW-13	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-13	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-13	3/2/2020	Bromide	0.51	0.5	0.25	NA	mg/L
OW-13	3/2/2020	Chloride	36	2.5	1.2	250000000	mg/L
OW-13	3/2/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-13	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-13	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-13	3/2/2020	Sulfate	170	2.5	1.2	600000000	mg/L
OW-13	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-13	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-13	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-13	9/17/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-13	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrate	5.06	0.05	0.018	10000000	mg/L
OW-13	12/9/2020	Nitrogen, Nitrate & Nitrite	5.06	0.5	0.18	10000000	mg/L
OW-13	12/9/2020	TPH (C6-C10)	134	100	47	NA	ug/L
OW-13	12/9/2020	TPH DRO	ND	128	103	16700	ug/L
OW-13	12/9/2020	C28-C40	ND	128	103	NA	ug/L
OW-14	8/23/2012	Bromide	2.7	0.5	0.37	NA	mg/L
OW-14	8/23/2012	Chloride	410	25	2.6	250000000	mg/L
OW-14	8/23/2012	Fluoride, Total	ND	0.5	0.19	1600000	mg/L
OW-14	8/23/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-14	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-14	8/23/2012	Sulfate	3.5	2.5	0.59	600000000	mg/L
OW-14	8/23/2012	TPH DRO	2.4	1	0.57	16700	mg/L
OW-14	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/23/2012	TPH GRO	15	0.5	0.14	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-14	9/4/2013	Bromide	2.5	0.1	0.026	NA	mg/L
OW-14	9/4/2013	Chloride	350	25	7.4	250000000	mg/L
OW-14	9/4/2013	Fluoride, Total	0.21	0.1	0.033	1600000	mg/L
OW-14	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-14	9/4/2013	Nitrate & Nitrite	5.9	1	0.18	NA	mg/L
OW-14	9/4/2013	Sulfate	3.2	0.5	0.12	600000000	mg/L
OW-14	9/4/2013	TPH DRO	7.8	1	0.57	16700	mg/L
OW-14	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/4/2013	TPH GRO	7.6	0.5	0.2	10100	mg/L
OW-14	9/15/2014	Bromide	1.5	0.1	0.022	NA	mg/L
OW-14	9/15/2014	Chloride	330	10	5	250000000	mg/L
OW-14	9/15/2014	Fluoride, Total	0.21	0.1	0.018	1600000	mg/L
OW-14	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-14	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-14	9/15/2014	Sulfate	2.6	0.5	0.082	600000000	mg/L
OW-14	9/15/2014	TPH DRO	4.5	1	0.83	16700	mg/L
OW-14	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/15/2014	TPH GRO	8.2	0.5	0.19	10100	mg/L
OW-14	8/10/2015	Bromide	2.6	0.5	0.39	NA	mg/L
OW-14	8/10/2015	Chloride	320	10	2.7	250000000	mg/L
OW-14	8/10/2015	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-14	8/10/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
OW-14	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-14	8/10/2015	Sulfate	ND	2.5	0.57	600000000	mg/L
OW-14	8/10/2015	TPH DRO	2.7	1	0.91	16700	mg/L
OW-14	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/10/2015	TPH GRO	8.7	0.5	0.4	10100	mg/L
OW-14	10/27/2015	TPH DRO	4.1	1	0.91	16700	mg/L
OW-14	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-14	10/27/2015	TPH GRO	16	1	0.24	10100	mg/L
OW-14	3/4/2016	TPH DRO	2.9	1	0.69	16700	mg/L
OW-14	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	3/4/2016	TPH GRO	27	1	0.51	10100	mg/L
OW-14	6/6/2016	TPH DRO	4.5	1	0.69	16700	mg/L
OW-14	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	6/6/2016	TPH GRO	27	1	0.51	10100	mg/L
OW-14	8/31/2016	TPH DRO	4.1	1	0.69	16700	mg/L
OW-14	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	8/31/2016	TPH GRO	31	2.5	1.3	10100	mg/L
OW-14	11/15/2016	TPH DRO	3.4	1	0.69	16700	mg/L
OW-14	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-14	11/15/2016	TPH GRO	29	2.5	1.3	10100	mg/L
OW-14	2/27/2017	TPH DRO	4.3	1	0.36	16700	mg/L
OW-14	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	2/27/2017	TPH GRO	33	2.5	1.2	10100	mg/L
OW-14	5/30/2017	TPH DRO	4.6	1	0.36	16700	mg/L
OW-14	5/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	5/30/2017	TPH GRO	35	2.5	1.2	10100	mg/L
OW-14	9/6/2017	TPH DRO	4.5	1	0.36	16700	mg/L
OW-14	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/6/2017	TPH GRO	33	0.25	0.12	10100	mg/L
OW-14	12/11/2017	TPH DRO	4.3	1	0.36	16700	mg/L
OW-14	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-14	12/11/2017	TPH GRO	31	2.5	0.48	10100	mg/L
OW-14	2/27/2018	TPH DRO	4	1	0.63	16700	mg/L
OW-14	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	2/27/2018	TPH GRO	32	2.5	1.2	10100	mg/L
OW-14	5/15/2018	TPH DRO	4.4	1	0.63	16700	mg/L
OW-14	5/15/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	5/15/2018	TPH GRO	30	2.5	0.48	10100	mg/L
OW-14	9/11/2018	TPH DRO	3.9	1	0.63	16700	mg/L
OW-14	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	9/11/2018	TPH GRO	40	2.5	1.2	10100	mg/L
OW-14	11/6/2018	TPH DRO	4.4	1	0.63	16700	mg/L
OW-14	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-14	11/6/2018	TPH GRO	33	2.5	1.2	10100	mg/L
OW-14	2/5/2019	TPH GRO	36	2.5	1.055	10100	mg/L
OW-14	2/5/2019	TPH DRO	4.3	1	0.63	16700	mg/L
OW-14	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-14	5/1/2019	TPH GRO	29	2.5	1.535	10100	mg/L
OW-14	5/1/2019	TPH DRO	4.4	1	0.35	16700	mg/L
OW-14	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	8/23/2012	Bromide	0.74	0.1	0.074	NA	mg/L
OW-29	8/23/2012	Chloride	140	10	1	250000000	mg/L
OW-29	8/23/2012	Fluoride, Total	0.37	0.1	0.038	1600000	mg/L
OW-29	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-29	8/23/2012	Nitrate & Nitrite	1	1	0.5	NA	mg/L
OW-29	8/23/2012	Sulfate	83	10	2.4	600000000	mg/L
OW-29	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/23/2012	TPH GRO	0.9	0.05	0.014	10100	mg/L
OW-29	9/4/2013	Bromide	0.94	0.1	0.026	NA	mg/L
OW-29	9/4/2013	Chloride	160	10	3	250000000	mg/L
OW-29	9/4/2013	Fluoride, Total	0.43	0.1	0.033	1600000	mg/L
OW-29	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-29	9/4/2013	Nitrate & Nitrite	3.9	1	0.18	NA	mg/L
OW-29	9/4/2013	Sulfate	84	10	2.5	600000000	mg/L
OW-29	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-29	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/4/2013	TPH GRO	0.88	0.05	0.02	10100	mg/L
OW-29	9/15/2014	Bromide	0.77	0.1	0.022	NA	mg/L
OW-29	9/15/2014	Chloride	160	10	5	250000000	mg/L
OW-29	9/15/2014	Fluoride, Total	0.3	0.1	0.018	1600000	mg/L
OW-29	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-29	9/15/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-29	9/15/2014	Sulfate	73	10	1.6	600000000	mg/L
OW-29	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-29	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/15/2014	TPH GRO	0.52	0.05	0.019	10100	mg/L
OW-29	8/11/2015	Bromide	0.56	0.1	0.077	NA	mg/L
OW-29	8/11/2015	Chloride	170	10	2.7	250000000	mg/L
OW-29	8/11/2015	Fluoride, Total	0.31	0.1	0.029	1600000	mg/L
OW-29	8/11/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-29	8/11/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-29	8/11/2015	Sulfate	70	10	2.3	600000000	mg/L
OW-29	8/11/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-29	8/11/2015	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/11/2015	TPH GRO	2.4	0.25	0.2	10100	mg/L
OW-29	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-29	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-29	10/27/2015	TPH GRO	2.6	0.25	0.06	10100	mg/L
OW-29	3/4/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	3/4/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	3/4/2016	TPH GRO	4.2	0.25	0.13	10100	mg/L
OW-29	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	6/6/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	6/6/2016	TPH GRO	4	0.5	0.25	10100	mg/L
OW-29	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	8/31/2016	TPH GRO	6.7	0.5	0.25	10100	mg/L
OW-29	11/15/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-29	11/15/2016	TPH ORO	ND	5	5	85800	mg/L
OW-29	11/15/2016	TPH GRO	6	0.5	0.25	10100	mg/L
OW-29	2/27/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	2/27/2017	TPH GRO	4.5	0.5	0.25	10100	mg/L
OW-29	5/30/2017	TPH DRO	0.51	1	0.36	16700	mg/L
OW-29	5/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	5/30/2017	TPH GRO	3.8	0.5	0.25	10100	mg/L
OW-29	9/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/6/2017	TPH GRO	3.8	0.25	0.12	10100	mg/L
OW-29	12/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-29	12/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-29	12/11/2017	TPH GRO	3.6	0.5	0.097	10100	mg/L
OW-29	2/27/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	2/27/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	2/27/2018	TPH GRO	3.5	0.25	0.12	10100	mg/L
OW-29	5/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	5/16/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	5/16/2018	TPH GRO	1.5	0.5	0.097	10100	mg/L
OW-29	9/11/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	9/11/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	9/11/2018	TPH GRO	3.5	0.25	0.12	10100	mg/L
OW-29	11/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	11/6/2018	TPH ORO	ND	5	5	85800	mg/L
OW-29	11/6/2018	TPH GRO	2.5	0.25	0.12	10100	mg/L
OW-29	2/5/2019	TPH GRO	2	0.25	0.1055	10100	mg/L
OW-29	2/5/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-29	2/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	5/1/2019	TPH GRO	2.4	0.25	0.1535	10100	mg/L
OW-29	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	5/1/2019	TPH GRO	2.4	0.25	0.1535	10100	mg/L
OW-29	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	8/12/2019	TPH GRO	3.1	0.25	0.1055	10100	mg/L
OW-29	8/12/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-29	8/12/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/14/2019	TPH GRO	2.4	0.05	0.0193	10100	mg/L
OW-29	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/14/2019	TPH GRO	2.5	0.25	0.0965	10100	mg/L
OW-29	10/14/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/14/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-29	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-29	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-29	10/15/2019	Bromide	0.21	0.5	0.077	NA	mg/L
OW-29	10/15/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-29	10/15/2019	Fluoride, Total	0.44	0.5	0.144909	1600000	mg/L
OW-29	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-29	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-29	10/15/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-29	2/24/2020	TPH GRO	2.5	0.25	0.034	10100	mg/L
OW-29	2/24/2020	TPH DRO	0.21	0.4	0.2	16700	mg/L
OW-29	2/24/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-29	2/24/2020	Nitrate & Nitrite	ND	1	0.12	NA	mg/L
OW-29	9/17/2020	TPH GRO	0.052	0.05	0.008	10100	mg/L
OW-29	9/17/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
OW-29	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-29	9/17/2020	Nitrate & Nitrite	0.23	1	0.061	NA	mg/L
OW-29	9/17/2020	TPH GRO	ND	0.25	0.04	10100	mg/L
OW-29	9/17/2020	TPH DRO	0.19	0.07	0.067	16700	mg/L
OW-29	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-29	9/17/2020	Nitrogen, Nitrate	0.34	0.1	0.02	10000000	mg/L
OW-29	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrate & Nitrite	10	0.5	0.18	10000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrate	10	0.05	0.018	10000000	mg/L
OW-29	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-29	12/9/2020	TPH DRO	292	123	98.7	16700	ug/L
OW-29	12/9/2020	C28-C40	ND	123	98.7	NA	ug/L
OW-29	12/9/2020	TPH (C6-C10)	2950	100	47	NA	ug/L
OW-30	8/23/2012	Bromide	0.35	0.1	0.074	NA	mg/L
OW-30	8/23/2012	Chloride	140	10	1	250000000	mg/L
OW-30	8/23/2012	Fluoride, Total	0.31	0.1	0.038	1600000	mg/L
OW-30	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-30	8/23/2012	Nitrate & Nitrite	1.5	1	0.5	NA	mg/L
OW-30	8/23/2012	Sulfate	53	10	2.4	600000000	mg/L
OW-30	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-30	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/23/2012	TPH GRO	1.8	0.05	0.014	10100	mg/L
OW-30	9/4/2013	Bromide	0.77	0.1	0.026	NA	mg/L
OW-30	9/4/2013	Chloride	170	10	3	250000000	mg/L
OW-30	9/4/2013	Fluoride, Total	0.26	0.1	0.033	1600000	mg/L
OW-30	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-30	9/4/2013	Nitrate & Nitrite	4.6	1	0.18	NA	mg/L
OW-30	9/4/2013	Sulfate	55	10	2.5	600000000	mg/L
OW-30	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-30	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/4/2013	TPH GRO	1.4	0.05	0.02	10100	mg/L
OW-30	9/17/2014	Bromide	0.63	0.1	0.022	NA	mg/L
OW-30	9/17/2014	Chloride	180	10	5	250000000	mg/L
OW-30	9/17/2014	Fluoride, Total	0.2	0.1	0.018	1600000	mg/L
OW-30	9/17/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-30	9/17/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
OW-30	9/17/2014	Sulfate	45	10	1.6	600000000	mg/L
OW-30	9/17/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-30	9/17/2014	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/17/2014	TPH GRO	1.3	0.25	0.096	10100	mg/L
OW-30	8/10/2015	Bromide	0.54	0.1	0.077	NA	mg/L
OW-30	8/10/2015	Chloride	180	10	2.7	250000000	mg/L
OW-30	8/10/2015	Fluoride, Total	0.23	0.1	0.029	1600000	mg/L
OW-30	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-30	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-30	8/10/2015	Sulfate	42	10	2.3	600000000	mg/L
OW-30	8/10/2015	TPH DRO	3.6	1	0.91	16700	mg/L
OW-30	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/10/2015	TPH GRO	2.1	0.05	0.04	10100	mg/L
OW-30	10/27/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-30	10/27/2015	TPH ORO	ND	5	5	85800	mg/L
OW-30	10/27/2015	TPH GRO	3.7	0.05	0.012	10100	mg/L
OW-30	3/8/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	3/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	3/8/2016	TPH GRO	4.4	0.25	0.13	10100	mg/L
OW-30	6/6/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	6/6/2016	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-30	6/6/2016	TPH GRO	4	0.5	0.25	10100	mg/L
OW-30	8/31/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	8/31/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	8/31/2016	TPH GRO	6.9	0.5	0.25	10100	mg/L
OW-30	11/14/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-30	11/14/2016	TPH ORO	ND	5	5	85800	mg/L
OW-30	11/14/2016	TPH GRO	5.2	0.5	0.25	10100	mg/L
OW-30	2/27/2017	TPH DRO	0.47	1	0.36	16700	mg/L
OW-30	2/27/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	2/27/2017	TPH GRO	4.2	0.5	0.25	10100	mg/L
OW-30	5/31/2017	TPH DRO	0.81	1	0.36	16700	mg/L
OW-30	5/31/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	5/31/2017	TPH GRO	3.5	0.5	0.25	10100	mg/L
OW-30	9/6/2017	TPH DRO	0.48	1	0.36	16700	mg/L
OW-30	9/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/6/2017	TPH GRO	3.5	0.05	0.025	10100	mg/L
OW-30	12/12/2017	TPH DRO	1.1	1	0.36	16700	mg/L
OW-30	12/12/2017	TPH ORO	ND	5	5	85800	mg/L
OW-30	12/12/2017	TPH GRO	3.7	0.5	0.097	10100	mg/L
OW-30	2/28/2018	TPH DRO	0.67	1	0.63	16700	mg/L
OW-30	2/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	2/28/2018	TPH GRO	2.9	0.05	0.025	10100	mg/L
OW-30	5/16/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-30	5/16/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	5/16/2018	TPH GRO	2.4	0.05	0.0097	10100	mg/L
OW-30	9/19/2018	TPH DRO	1.6	1	0.63	16700	mg/L
OW-30	9/19/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	9/19/2018	TPH GRO	2.8	0.25	0.12	10100	mg/L
OW-30	12/3/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-30	12/3/2018	TPH ORO	ND	5	5	85800	mg/L
OW-30	12/3/2018	TPH GRO	1.3	0.25	0.12	10100	mg/L
OW-30	3/27/2019	TPH GRO	1.9	0.25	0.1535	10100	mg/L
OW-30	3/27/2019	TPH DRO	0.92	1	0.35	16700	mg/L
OW-30	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-30	6/5/2019	TPH GRO	2.1	0.05	0.0211	10100	mg/L
OW-30	6/5/2019	TPH DRO	0.97	1	0.35	16700	mg/L
OW-30	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-30	6/5/2019	TPH GRO	2	0.05	0.0211	10100	mg/L
OW-30	6/5/2019	TPH DRO	0.92	1	0.35	16700	mg/L
OW-30	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	3/22/2012	Bromide	0.22	0.1	0.085	NA	mg/L
OW-50	3/22/2012	Chloride	27	10	4	250000000	mg/L
OW-50	3/22/2012	Fluoride, Total	0.59	0.5	0.1	1600000	mg/L
OW-50	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-50	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-50	3/22/2012	Nitrogen, Nitrate	0.15	0.1	0.05	10000000	mg/L
OW-50	3/22/2012	Sulfate	150	10	4.6	600000000	mg/L
OW-50	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	6/13/2012	Bromide	0.27	0.1	0.074	NA	mg/L
OW-50	6/13/2012	Chloride	27	10	1	250000000	mg/L
OW-50	6/13/2012	Fluoride, Total	0.54	0.1	0.038	1600000	mg/L
OW-50	6/13/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-50	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	6/13/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-50	6/13/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-50	8/23/2012	Bromide	0.22	0.1	0.074	NA	mg/L
OW-50	8/23/2012	Chloride	26	10	1	250000000	mg/L
OW-50	8/23/2012	Fluoride, Total	0.42	0.1	0.038	1600000	mg/L
OW-50	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-50	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	8/23/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-50	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	11/27/2012	Bromide	ND	0.5	0.38	NA	mg/L
OW-50	11/27/2012	Chloride	28	2.5	0.26	250000000	mg/L
OW-50	11/27/2012	Fluoride, Total	0.54	0.5	0.19	1600000	mg/L
OW-50	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-50	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-50	11/27/2012	Sulfate	160	2.5	0.59	600000000	mg/L
OW-50	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-50	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-50	9/4/2013	Bromide	0.18	0.1	0.026	NA	mg/L
OW-50	9/4/2013	Chloride	26	10	3	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	9/4/2013	Fluoride, Total	0.5	0.1	0.033	1600000	mg/L
OW-50	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-50	9/4/2013	Nitrate & Nitrite	2	1	0.18	NA	mg/L
OW-50	9/4/2013	Sulfate	140	10	2.5	600000000	mg/L
OW-50	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-50	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-50	9/15/2014	Bromide	0.26	0.1	0.022	NA	mg/L
OW-50	9/15/2014	Chloride	30	10	5	250000000	mg/L
OW-50	9/15/2014	Fluoride, Total	0.45	0.1	0.018	1600000	mg/L
OW-50	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-50	9/15/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
OW-50	9/15/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
OW-50	9/15/2014	Sulfate	150	10	1.6	600000000	mg/L
OW-50	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-50	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-50	8/10/2015	Bromide	0.36	0.1	0.077	NA	mg/L
OW-50	8/10/2015	Chloride	31	10	2.7	250000000	mg/L
OW-50	8/10/2015	Fluoride, Total	0.47	0.1	0.029	1600000	mg/L
OW-50	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-50	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-50	8/10/2015	Sulfate	150	10	2.3	600000000	mg/L
OW-50	8/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-50	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-50	8/10/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-50	9/9/2016	Bromide	0.3	0.1	0.044	NA	mg/L
OW-50	9/9/2016	Chloride	31	10	1	250000000	mg/L
OW-50	9/9/2016	Fluoride, Total	0.36	0.1	0.05	1600000	mg/L
OW-50	9/9/2016	Ortho-Phosphate	0.64	0.5	0.076	NA	mg/L
OW-50	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-50	9/9/2016	Sulfate	150	10	2.8	600000000	mg/L
OW-50	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-50	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-50	9/11/2017	Bromide	0.61	0.5	0.073	NA	mg/L
OW-50	9/11/2017	Chloride	35	2.5	1.2	250000000	mg/L
OW-50	9/11/2017	Fluoride, Total	0.37	0.5	0.22	1600000	mg/L
OW-50	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-50	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-50	9/11/2017	Sulfate	160	2.5	0.48	600000000	mg/L
OW-50	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-50	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-50	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-50	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
OW-50	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-50	11/7/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-50	11/7/2018	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-50	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-50	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-50	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-50	11/7/2018	Sulfate	170	2.5	0.63	600000000	mg/L
OW-50	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-50	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-50	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-50	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-50	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	3/27/2019	Bromide	0.36	0.5	0.0675	NA	mg/L
OW-50	3/27/2019	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	3/27/2019	Fluoride, Total	0.41	0.5	0.25	1600000	mg/L
OW-50	3/27/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-50	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-50	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-50	3/27/2019	Sulfate	170	2.5	0.32	600000000	mg/L
OW-50	5/1/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-50	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	5/1/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-50	5/1/2019	Chloride	40	2.5	0.3125	250000000	mg/L
OW-50	5/1/2019	Fluoride, Total	0.46	0.5	0.25	1600000	mg/L
OW-50	5/1/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-50	5/1/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-50	5/1/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-50	5/1/2019	Sulfate	170	2.5	0.2675	600000000	mg/L
OW-50	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-50	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-50	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	8/16/2019	Bromide	0.41	0.5	0.088765	NA	mg/L
OW-50	8/16/2019	Chloride	40	2.5	2.5	250000000	mg/L
OW-50	8/16/2019	Fluoride, Total	0.48	0.5	0.073	1600000	mg/L
OW-50	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-50	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-50	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-50	8/16/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
OW-50	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-50	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-50	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-50	10/15/2019	Bromide	0.34	0.5	0.077	NA	mg/L
OW-50	10/15/2019	Chloride	42	2.5	2.5	250000000	mg/L
OW-50	10/15/2019	Fluoride, Total	0.39	0.5	0.144909	1600000	mg/L
OW-50	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-50	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-50	10/15/2019	Sulfate	160	2.5	0.3345	600000000	mg/L
OW-50	3/2/2020	TPH GRO	0.019	0.05	0.0068	10100	mg/L
OW-50	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-50	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-50	3/2/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-50	3/2/2020	Chloride	42	2.5	1.2	250000000	mg/L
OW-50	3/2/2020	Fluoride, Total	0.42	0.5	0.11	1600000	mg/L
OW-50	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-50	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-50	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-50	3/2/2020	Sulfate	160	2.5	1.2	600000000	mg/L
OW-50	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-50	9/17/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-50	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-50	9/17/2020	Bromide	0.36	0.1	0.05	NA	mg/L
OW-50	9/17/2020	Fluoride, Total	0.46	0.1	0.043	1600000	mg/L
OW-50	9/17/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-50	9/17/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
OW-50	9/17/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-50	9/17/2020	Chloride	40	10	5	250000000	mg/L
OW-50	9/17/2020	Sulfate	140	10	5	600000000	mg/L
OW-50	12/9/2020	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
OW-50	12/9/2020	Chemical Oxygen Demand	10.3	10	6.4	NA	mg/L
OW-50	12/9/2020	Bromide	ND	5	0.55	NA	mg/L
OW-50	12/9/2020	Chloride	45.6	5	0.6	250000000	mg/L
OW-50	12/9/2020	Fluoride, Total	ND	5	1.5	1600000	mg/L
OW-50	12/9/2020	Sulfate	152	5	1.85	600000000	mg/L
OW-50	12/9/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-50	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-50	12/9/2020	Phosphorus, Ortho	0.0668	0.05	0.015	NA	mg/L
OW-50	12/9/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-50	12/9/2020	Solids, Total Suspended	98	5	0	NA	mg/L
OW-50	12/9/2020	TPH DRO	ND	129	103	16700	ug/L
OW-50	12/9/2020	C28-C40	ND	129	103	NA	ug/L
OW-50	12/9/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-50	12/9/2020	Solids, Total Suspended	98	5	0	NA	mg/L
OW-52	3/22/2012	Bromide	0.17	0.1	0.085	NA	mg/L
OW-52	3/22/2012	Chloride	26	10	4	250000000	mg/L
OW-52	3/22/2012	Fluoride, Total	0.56	0.1	0.02	1600000	mg/L
OW-52	3/22/2012	Ortho-Phosphate	ND	0.5	0.046	NA	mg/L
OW-52	3/22/2012	Nitrogen, Nitrite	ND	0.1	0.05	1000000	mg/L
OW-52	3/22/2012	Nitrogen, Nitrate	ND	0.1	0.05	10000000	mg/L
OW-52	3/22/2012	Sulfate	130	10	4.6	600000000	mg/L
OW-52	3/22/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	3/22/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	3/22/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	6/13/2012	Bromide	0.19	0.1	0.074	NA	mg/L
OW-52	6/13/2012	Chloride	27	10	1	250000000	mg/L
OW-52	6/13/2012	Fluoride, Total	0.58	0.1	0.038	1600000	mg/L
OW-52	6/13/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-52	6/13/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	6/13/2012	Sulfate	140	10	2.4	600000000	mg/L
OW-52	6/13/2012	TPH DRO	ND	1	0.4	16700	mg/L
OW-52	6/13/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	6/13/2012	TPH GRO	ND	0.05	0.05	10100	mg/L
OW-52	8/23/2012	Bromide	0.16	0.1	0.074	NA	mg/L
OW-52	8/23/2012	Chloride	25	10	1	250000000	mg/L
OW-52	8/23/2012	Fluoride, Total	0.49	0.1	0.038	1600000	mg/L
OW-52	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
OW-52	8/23/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	8/23/2012	Sulfate	120	10	2.4	600000000	mg/L
OW-52	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	8/23/2012	TPH ORO	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	8/23/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	11/27/2012	Bromide	ND	0.5	0.38	NA	mg/L
OW-52	11/27/2012	Chloride	28	2.5	0.26	250000000	mg/L
OW-52	11/27/2012	Fluoride, Total	0.64	0.5	0.19	1600000	mg/L
OW-52	11/27/2012	Ortho-Phosphate	ND	2.5	1.5	NA	mg/L
OW-52	11/27/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
OW-52	11/27/2012	Sulfate	140	2.5	0.59	600000000	mg/L
OW-52	11/27/2012	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	11/27/2012	TPH ORO	ND	5	5	85800	mg/L
OW-52	11/27/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
OW-52	9/4/2013	Bromide	0.17	0.1	0.026	NA	mg/L
OW-52	9/4/2013	Chloride	27	10	3	250000000	mg/L
OW-52	9/4/2013	Fluoride, Total	0.5	0.1	0.033	1600000	mg/L
OW-52	9/4/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-52	9/4/2013	Nitrate & Nitrite	4.6	1	0.18	NA	mg/L
OW-52	9/4/2013	Sulfate	140	10	2.5	600000000	mg/L
OW-52	9/4/2013	TPH DRO	ND	1	0.57	16700	mg/L
OW-52	9/4/2013	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/4/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
OW-52	9/15/2014	Bromide	0.19	0.1	0.022	NA	mg/L
OW-52	9/15/2014	Chloride	27	10	5	250000000	mg/L
OW-52	9/15/2014	Fluoride, Total	0.5	0.1	0.018	1600000	mg/L
OW-52	9/15/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
OW-52	9/15/2014	Nitrogen, Nitrite	ND	0.1	0.0084	1000000	mg/L
OW-52	9/15/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
OW-52	9/15/2014	Sulfate	130	10	1.6	600000000	mg/L
OW-52	9/15/2014	TPH DRO	ND	1	0.83	16700	mg/L
OW-52	9/15/2014	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/15/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
OW-52	8/10/2015	Bromide	0.28	0.1	0.077	NA	mg/L
OW-52	8/10/2015	Chloride	25	10	2.7	250000000	mg/L
OW-52	8/10/2015	Fluoride, Total	0.47	0.1	0.029	1600000	mg/L
OW-52	8/10/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
OW-52	8/10/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
OW-52	8/10/2015	Sulfate	130	10	2.3	600000000	mg/L
OW-52	8/10/2015	TPH DRO	ND	1	0.91	16700	mg/L
OW-52	8/10/2015	TPH ORO	ND	5	5	85800	mg/L
OW-52	8/10/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
OW-52	9/9/2016	Bromide	0.19	0.1	0.044	NA	mg/L
OW-52	9/9/2016	Chloride	27	10	1	250000000	mg/L
OW-52	9/9/2016	Fluoride, Total	0.38	0.1	0.05	1600000	mg/L
OW-52	9/9/2016	Ortho-Phosphate	0.53	0.5	0.076	NA	mg/L
OW-52	9/9/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
OW-52	9/9/2016	Sulfate	140	10	2.8	600000000	mg/L
OW-52	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-52	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/9/2016	TPH GRO	ND	0.05	0.015	10100	mg/L
OW-52	9/11/2017	Bromide	0.16	0.5	0.073	NA	mg/L
OW-52	9/11/2017	Chloride	25	2.5	1.2	250000000	mg/L
OW-52	9/11/2017	Fluoride, Total	0.43	0.5	0.22	1600000	mg/L
OW-52	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-52	9/11/2017	Sulfate	130	2.5	0.48	600000000	mg/L
OW-52	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-52	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-52	9/17/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-52	9/17/2018	TPH ORO	ND	5	5	85800	mg/L
OW-52	9/17/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-52	11/7/2018	Bromide	ND	0.5	0.1	NA	mg/L
OW-52	11/7/2018	Chloride	29	2.5	2.5	250000000	mg/L
OW-52	11/7/2018	Fluoride, Total	0.53	0.5	0.5	1600000	mg/L
OW-52	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-52	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-52	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-52	11/7/2018	Sulfate	150	2.5	0.63	600000000	mg/L
OW-52	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-52	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-52	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-52	3/27/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-52	3/27/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	3/27/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	3/27/2019	Bromide	0.27	0.5	0.0675	NA	mg/L
OW-52	3/27/2019	Chloride	28	2.5	2.5	250000000	mg/L
OW-52	3/27/2019	Fluoride, Total	0.5	0.5	0.25	1600000	mg/L
OW-52	3/27/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-52	3/27/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-52	3/27/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-52	3/27/2019	Sulfate	140	2.5	0.32	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-52	5/1/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-52	5/1/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	5/1/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	5/1/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	5/1/2019	Chloride	26	2.5	0.3125	250000000	mg/L
OW-52	5/1/2019	Fluoride, Total	0.52	0.5	0.25	1600000	mg/L
OW-52	5/1/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-52	5/1/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-52	5/1/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-52	5/1/2019	Sulfate	140	2.5	0.2675	600000000	mg/L
OW-52	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-52	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	8/16/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	8/16/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-52	8/16/2019	Fluoride, Total	0.53	0.5	0.073	1600000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-52	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	8/16/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	8/16/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-52	8/16/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	8/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	8/16/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-52	8/16/2019	Chloride	26	2.5	2.5	250000000	mg/L
OW-52	8/16/2019	Fluoride, Total	0.54	0.5	0.073	1600000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-52	8/16/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-52	8/16/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	8/16/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-52	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-52	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-52	10/15/2019	Bromide	0.23	0.5	0.077	NA	mg/L
OW-52	10/15/2019	Chloride	27	2.5	2.5	250000000	mg/L
OW-52	10/15/2019	Fluoride, Total	0.45	0.5	0.144909	1600000	mg/L
OW-52	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-52	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-52	10/15/2019	Sulfate	140	2.5	0.3345	600000000	mg/L
OW-52	3/2/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
OW-52	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-52	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-52	3/2/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-52	3/2/2020	Chloride	27	2.5	1.2	250000000	mg/L
OW-52	3/2/2020	Fluoride, Total	0.54	0.5	0.11	1600000	mg/L
OW-52	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-52	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-52	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	3/2/2020	Sulfate	140	2.5	1.2	600000000	mg/L
OW-52	9/17/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-52	9/17/2020	TPH DRO	0.34	0.07	0.067	16700	mg/L
OW-52	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-52	9/17/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-52	9/17/2020	Chloride	29	2.5	1.2	250000000	mg/L
OW-52	9/17/2020	Fluoride, Total	0.57	0.5	0.22	1600000	mg/L
OW-52	9/17/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-52	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-52	9/17/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-52	9/17/2020	Sulfate	140	2.5	1.2	600000000	mg/L
OW-52	12/9/2020	Solids, Total Suspended	ND	1	0	NA	mg/L
OW-52	12/9/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-52	12/9/2020	Phosphorus, Ortho	ND	0.05	0.015	NA	mg/L
OW-52	12/9/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-52	12/9/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-52	12/9/2020	Bromide	ND	5	0.55	NA	mg/L
OW-52	12/9/2020	Chloride	27.8	5	0.6	250000000	mg/L
OW-52	12/9/2020	Fluoride, Total	ND	5	1.5	1600000	mg/L
OW-52	12/9/2020	Sulfate	138	5	1.85	600000000	mg/L
OW-52	12/9/2020	Chemical Oxygen Demand	ND	10	6.4	NA	mg/L
OW-52	12/9/2020	Biochemical Oxygen Demand	ND	2	2	NA	mg/L
OW-52	12/9/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-52	12/9/2020	TPH DRO	ND	126	101	16700	ug/L
OW-52	12/9/2020	C28-C40	ND	126	101	NA	ug/L
OW-52	12/9/2020	Solids, Total Suspended	ND	1	0	NA	mg/L
OW-54	6/1/2016	Chloride	360	10	0.55	250000000	mg/L
OW-54	6/1/2016	Cyanide, Total	0.00805	0.01	0.006	1460	mg/L
OW-54	6/1/2016	Fluoride, Total	0.39	0.5	0.11	1600000	mg/L
OW-54	6/1/2016	Sulfate	86	2.5	0.32	600000000	mg/L
OW-54	6/1/2016	TPH DRO	2.3	1	0.69	16700	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	6/1/2016	TPH GRO	4.8	0.5	0.25	10100	mg/L
OW-54	9/16/2016	TPH DRO	1.6	1	0.69	16700	mg/L
OW-54	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	9/16/2016	TPH GRO	3.2	0.25	0.075	10100	mg/L
OW-54	11/9/2016	TPH DRO	1.8	1	0.69	16700	mg/L
OW-54	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-54	11/9/2016	TPH GRO	4.5	0.25	0.13	10100	mg/L
OW-54	3/29/2017	Bromide	2.1	0.1	0.031	NA	mg/L
OW-54	3/29/2017	Chloride	330	10	5	250000000	mg/L
OW-54	3/29/2017	Fluoride, Total	0.12	0.1	0.05	1600000	mg/L
OW-54	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-54	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	3/29/2017	Sulfate	42	0.5	0.096	600000000	mg/L
OW-54	3/29/2017	TPH DRO	1.7	1	0.36	16700	mg/L
OW-54	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	3/29/2017	TPH GRO	2.6	0.05	0.0097	10100	mg/L
OW-54	6/21/2017	Bromide	2.6	0.5	0.073	NA	mg/L
OW-54	6/21/2017	Chloride	300	10	5	250000000	mg/L
OW-54	6/21/2017	Fluoride, Total	0.38	0.5	0.22	1600000	mg/L
OW-54	6/21/2017	Ortho-Phosphate	1.7	2.5	1.2	NA	mg/L
OW-54	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	6/21/2017	Sulfate	40	2.5	0.48	600000000	mg/L
OW-54	6/21/2017	TPH DRO	1.9	1	0.36	16700	mg/L
OW-54	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	6/21/2017	TPH GRO	2.9	0.05	0.025	10100	mg/L
OW-54	9/11/2017	Bromide	2	0.5	0.073	NA	mg/L
OW-54	9/11/2017	Chloride	290	10	5	250000000	mg/L
OW-54	9/11/2017	Fluoride, Total	0.25	0.5	0.22	1600000	mg/L
OW-54	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-54	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-54	9/11/2017	Sulfate	31	2.5	0.48	600000000	mg/L
OW-54	9/11/2017	TPH DRO	1.7	1	0.36	16700	mg/L
OW-54	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	9/11/2017	TPH GRO	3.1	0.05	0.025	10100	mg/L
OW-54	12/6/2017	Bromide	3.3	0.5	0.073	NA	mg/L
OW-54	12/6/2017	Chloride	270	10	5	250000000	mg/L
OW-54	12/6/2017	Fluoride, Total	0.3	0.5	0.22	1600000	mg/L
OW-54	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-54	12/6/2017	Nitrate & Nitrite	0.17	1	0.13	NA	mg/L
OW-54	12/6/2017	Sulfate	34	2.5	0.48	600000000	mg/L
OW-54	12/6/2017	TPH DRO	2.4	1	0.36	16700	mg/L
OW-54	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-54	12/6/2017	TPH GRO	2.6	0.05	0.0097	10100	mg/L
OW-54	2/22/2018	Bromide	2.1	0.5	0.073	NA	mg/L
OW-54	2/22/2018	Chloride	250	10	5	250000000	mg/L
OW-54	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-54	2/22/2018	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
OW-54	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-54	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-54	2/22/2018	Sulfate	37	2.5	0.48	600000000	mg/L
OW-54	2/22/2018	TPH DRO	2.2	1	0.63	16700	mg/L
OW-54	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	2/22/2018	TPH GRO	2.4	0.25	0.12	10100	mg/L
OW-54	5/8/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-54	5/8/2018	Chloride	260	10	0.59	250000000	mg/L
OW-54	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-54	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-54	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-54	5/8/2018	Nitrogen, Nitrate	0.24	0.5	0.033	10000000	mg/L
OW-54	5/8/2018	Sulfate	34	2.5	1	600000000	mg/L
OW-54	5/8/2018	TPH DRO	1.8	1	0.63	16700	mg/L
OW-54	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	5/8/2018	TPH GRO	2.1	0.05	0.0097	10100	mg/L
OW-54	8/28/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-54	8/28/2018	Chloride	260	10	0.59	250000000	mg/L
OW-54	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-54	8/28/2018	Ortho-Phosphate	2.5	2.5	0.46	NA	mg/L
OW-54	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-54	8/28/2018	Sulfate	30	2.5	1	600000000	mg/L
OW-54	8/28/2018	TPH DRO	2.2	1	0.63	16700	mg/L
OW-54	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	8/28/2018	TPH GRO	2.1	0.05	0.024	10100	mg/L
OW-54	11/7/2018	Bromide	2.2	0.5	0.1	NA	mg/L
OW-54	11/7/2018	Chloride	250	10	10	250000000	mg/L
OW-54	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-54	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-54	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-54	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-54	11/7/2018	Sulfate	33	2.5	0.63	600000000	mg/L
OW-54	11/7/2018	TPH DRO	1.9	1	0.63	16700	mg/L
OW-54	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-54	11/7/2018	TPH GRO	1.6	0.05	0.024	10100	mg/L
OW-54	2/6/2019	TPH GRO	1.4	0.05	0.0211	10100	mg/L
OW-54	2/6/2019	Bromide	2.1	0.5	0.0675	NA	mg/L
OW-54	2/6/2019	Chloride	230	10	10	250000000	mg/L
OW-54	2/6/2019	Fluoride, Total	0.4	0.5	0.25	1600000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-54	2/6/2019	Phosphorus, Ortho	1.1	2.5	0.1305	NA	mg/L
OW-54	2/6/2019	Sulfate	30	2.5	0.32	600000000	mg/L
OW-54	2/6/2019	TPH DRO	1.6	1	0.63	16700	mg/L
OW-54	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	2/6/2019	TPH GRO	1.3	0.05	0.0211	10100	mg/L
OW-54	2/6/2019	Bromide	2.2	0.5	0.0675	NA	mg/L
OW-54	2/6/2019	Chloride	250	10	10	250000000	mg/L
OW-54	2/6/2019	Fluoride, Total	0.45	0.5	0.25	1600000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-54	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-54	2/6/2019	Phosphorus, Ortho	1.1	2.5	0.1305	NA	mg/L
OW-54	2/6/2019	Sulfate	34	2.5	0.32	600000000	mg/L
OW-54	2/6/2019	TPH DRO	1.7	1	0.63	16700	mg/L
OW-54	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	TPH GRO	1.6	0.25	0.1535	10100	mg/L
OW-54	5/2/2019	TPH DRO	1.7	1	0.35	16700	mg/L
OW-54	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-54	5/2/2019	Chloride	240	10	1.25	250000000	mg/L
OW-54	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-54	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-54	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-54	5/2/2019	Sulfate	34	2.5	0.2675	600000000	mg/L
OW-54	5/2/2019	TPH GRO	1.7	0.25	0.1535	10100	mg/L
OW-54	5/2/2019	TPH DRO	1.7	1	0.35	16700	mg/L
OW-54	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	5/2/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-54	5/2/2019	Chloride	230	10	1.25	250000000	mg/L
OW-54	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-54	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-54	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-54	5/2/2019	Sulfate	32	2.5	0.2675	600000000	mg/L
OW-54	8/21/2019	TPH GRO	1.5	0.05	0.0211	10100	mg/L
OW-54	8/21/2019	TPH DRO	2	1	0.35	16700	mg/L
OW-54	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
OW-54	8/21/2019	Chloride	210	10	10	250000000	mg/L
OW-54	8/21/2019	Fluoride, Total	0.14	0.5	0.073	1600000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-54	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-54	8/21/2019	Sulfate	29	2.5	0.3345	600000000	mg/L
OW-54	8/21/2019	TPH GRO	1.8	0.25	0.1055	10100	mg/L
OW-54	8/21/2019	TPH DRO	1.9	1	0.35	16700	mg/L
OW-54	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-54	8/21/2019	Bromide	2.2	0.5	0.088765	NA	mg/L
OW-54	8/21/2019	Chloride	210	10	10	250000000	mg/L
OW-54	8/21/2019	Fluoride, Total	0.15	0.5	0.073	1600000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrate	0.073	0.5	0.025	10000000	mg/L
OW-54	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-54	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-54	8/21/2019	Sulfate	32	2.5	0.3345	600000000	mg/L
OW-55	6/1/2016	Chloride	550	25	1.4	250000000	mg/L
OW-55	6/1/2016	Cyanide, Total	0.0161	0.01	0.006	1460	mg/L
OW-55	6/1/2016	Fluoride, Total	0.13	0.5	0.11	1600000	mg/L
OW-55	6/1/2016	Sulfate	16	2.5	0.32	600000000	mg/L
OW-55	6/1/2016	TPH DRO	7.2	1	0.69	16700	mg/L
OW-55	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	6/1/2016	TPH GRO	210	25	13	10100	mg/L
OW-55	9/16/2016	TPH DRO	5.3	1	0.69	16700	mg/L
OW-55	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	9/16/2016	TPH GRO	76	0.5	0.15	10100	mg/L
OW-55	11/9/2016	TPH DRO	3.4	1	0.69	16700	mg/L
OW-55	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-55	11/9/2016	TPH GRO	51	5	2.5	10100	mg/L
OW-55	3/29/2017	Bromide	1.1	0.1	0.031	NA	mg/L
OW-55	3/29/2017	Chloride	410	25	12	250000000	mg/L
OW-55	3/29/2017	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
OW-55	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	3/29/2017	Nitrate & Nitrite	0.73	1	0.13	NA	mg/L
OW-55	3/29/2017	Sulfate	1.2	0.5	0.096	600000000	mg/L
OW-55	3/29/2017	TPH DRO	5.4	1	0.36	16700	mg/L
OW-55	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	3/29/2017	TPH GRO	39	2.5	0.48	10100	mg/L
OW-55	6/21/2017	Bromide	1.8	0.5	0.073	NA	mg/L
OW-55	6/21/2017	Chloride	380	10	5	250000000	mg/L
OW-55	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	6/21/2017	Ortho-Phosphate	2.1	2.5	1.2	NA	mg/L
OW-55	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	6/21/2017	Sulfate	1.7	2.5	0.48	600000000	mg/L
OW-55	6/21/2017	TPH DRO	6.3	1	0.36	16700	mg/L
OW-55	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	6/21/2017	TPH GRO	42	5	2.5	10100	mg/L
OW-55	9/11/2017	Bromide	1.1	0.5	0.073	NA	mg/L
OW-55	9/11/2017	Chloride	350	25	12	250000000	mg/L
OW-55	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-55	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	9/11/2017	Sulfate	1.5	2.5	0.48	600000000	mg/L
OW-55	9/11/2017	TPH DRO	5.1	1	0.36	16700	mg/L
OW-55	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	9/11/2017	TPH GRO	46	5	2.5	10100	mg/L
OW-55	12/6/2017	Bromide	3	0.5	0.073	NA	mg/L
OW-55	12/6/2017	Chloride	380	10	5	250000000	mg/L
OW-55	12/6/2017	Fluoride, Total	0.54	0.5	0.22	1600000	mg/L
OW-55	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-55	12/6/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-55	12/6/2017	Sulfate	1.3	2.5	0.48	600000000	mg/L
OW-55	12/6/2017	TPH DRO	3.1	1	0.36	16700	mg/L
OW-55	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-55	12/6/2017	TPH GRO	26	5	0.97	10100	mg/L
OW-55	2/22/2018	Bromide	1.1	0.5	0.073	NA	mg/L
OW-55	2/22/2018	Chloride	320	10	5	250000000	mg/L
OW-55	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-55	2/22/2018	Ortho-Phosphate	2.6	2.5	1.2	NA	mg/L
OW-55	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-55	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-55	2/22/2018	Sulfate	1.6	2.5	0.48	600000000	mg/L
OW-55	2/22/2018	TPH DRO	3	1	0.63	16700	mg/L
OW-55	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	2/22/2018	TPH GRO	28	5	2.5	10100	mg/L
OW-55	5/8/2018	Bromide	1.1	0.5	0.13	NA	mg/L
OW-55	5/8/2018	Chloride	310	10	0.59	250000000	mg/L
OW-55	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-55	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-55	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-55	5/8/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
OW-55	5/8/2018	Sulfate	1.9	2.5	1	600000000	mg/L
OW-55	5/8/2018	TPH DRO	2.9	1	0.63	16700	mg/L
OW-55	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	5/8/2018	TPH GRO	24	2.5	0.48	10100	mg/L
OW-55	8/28/2018	Bromide	1.1	0.5	0.13	NA	mg/L
OW-55	8/28/2018	Chloride	300	10	0.59	250000000	mg/L
OW-55	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-55	8/28/2018	Ortho-Phosphate	3.1	2.5	0.46	NA	mg/L
OW-55	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-55	8/28/2018	Sulfate	1.9	2.5	1	600000000	mg/L
OW-55	8/28/2018	TPH DRO	3.1	1	0.63	16700	mg/L
OW-55	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	8/28/2018	TPH GRO	23	1	0.49	10100	mg/L
OW-55	11/7/2018	Bromide	1.2	0.5	0.1	NA	mg/L
OW-55	11/7/2018	Chloride	280	10	10	250000000	mg/L
OW-55	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-55	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-55	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-55	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-55	11/7/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-55	11/7/2018	TPH DRO	2.8	1	0.63	16700	mg/L
OW-55	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-55	11/7/2018	TPH GRO	21	1	0.49	10100	mg/L
OW-55	2/6/2019	TPH GRO	28	1	0.422	10100	mg/L
OW-55	2/6/2019	Bromide	1.1	0.5	0.0675	NA	mg/L
OW-55	2/6/2019	Chloride	270	10	10	250000000	mg/L
OW-55	2/6/2019	Fluoride, Total	0.27	0.5	0.25	1600000	mg/L
OW-55	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-55	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-55	2/6/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-55	2/6/2019	Sulfate	3	2.5	0.32	600000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-55	2/6/2019	TPH DRO	2.9	1	0.63	16700	mg/L
OW-55	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-55	5/2/2019	TPH GRO	23	2.5	1.535	10100	mg/L
OW-55	5/2/2019	TPH DRO	3.6	1	0.35	16700	mg/L
OW-55	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-55	5/2/2019	Bromide	1	0.5	0.088765	NA	mg/L
OW-55	5/2/2019	Chloride	270	10	1.25	250000000	mg/L
OW-55	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-55	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-55	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-55	5/2/2019	Sulfate	2.6	2.5	0.2675	600000000	mg/L
OW-56	6/1/2016	TPH DRO	1.4	1	0.69	16700	mg/L
OW-56	6/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	6/1/2016	TPH GRO	0.49	0.05	0.025	10100	mg/L
OW-56	9/16/2016	TPH DRO	0.77	1	0.69	16700	mg/L
OW-56	9/16/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	9/16/2016	TPH GRO	1.2	0.25	0.075	10100	mg/L
OW-56	11/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
OW-56	11/9/2016	TPH ORO	ND	5	5	85800	mg/L
OW-56	11/9/2016	TPH GRO	0.61	0.1	0.051	10100	mg/L
OW-56	3/29/2017	Bromide	1.8	0.1	0.031	NA	mg/L
OW-56	3/29/2017	Chloride	630	25	12	250000000	mg/L
OW-56	3/29/2017	Fluoride, Total	0.1	0.1	0.05	1600000	mg/L
OW-56	3/29/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-56	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-56	3/29/2017	Sulfate	24	0.5	0.096	600000000	mg/L
OW-56	3/29/2017	TPH DRO	0.52	1	0.36	16700	mg/L
OW-56	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	3/29/2017	TPH GRO	0.15	0.05	0.0097	10100	mg/L
OW-56	6/21/2017	Bromide	1.9	0.5	0.073	NA	mg/L
OW-56	6/21/2017	Chloride	650	25	12	250000000	mg/L
OW-56	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-56	6/21/2017	Ortho-Phosphate	1.6	2.5	1.2	NA	mg/L
OW-56	6/21/2017	Nitrate & Nitrite	0.13	1	0.13	NA	mg/L
OW-56	6/21/2017	Sulfate	23	2.5	0.48	600000000	mg/L
OW-56	6/21/2017	TPH DRO	0.84	1	0.36	16700	mg/L
OW-56	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	6/21/2017	TPH GRO	0.15	0.05	0.025	10100	mg/L
OW-56	9/11/2017	Bromide	1.7	0.5	0.073	NA	mg/L
OW-56	9/11/2017	Chloride	580	25	12	250000000	mg/L
OW-56	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-56	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	9/11/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-56	9/11/2017	Sulfate	20	2.5	0.48	600000000	mg/L
OW-56	9/11/2017	TPH DRO	0.51	1	0.36	16700	mg/L
OW-56	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	9/11/2017	TPH GRO	0.36	0.05	0.025	10100	mg/L
OW-56	12/6/2017	Bromide	3.1	0.5	0.073	NA	mg/L
OW-56	12/6/2017	Chloride	590	25	12	250000000	mg/L
OW-56	12/6/2017	Fluoride, Total	0.27	0.5	0.22	1600000	mg/L
OW-56	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	12/6/2017	Nitrate & Nitrite	0.22	1	0.13	NA	mg/L
OW-56	12/6/2017	Sulfate	18	2.5	0.48	600000000	mg/L
OW-56	12/6/2017	TPH DRO	0.83	1	0.36	16700	mg/L
OW-56	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-56	12/6/2017	TPH GRO	1	0.05	0.0097	10100	mg/L
OW-56	2/22/2018	Bromide	1.9	0.5	0.073	NA	mg/L
OW-56	2/22/2018	Chloride	620	25	12	250000000	mg/L
OW-56	2/22/2018	Fluoride, Total	0.32	0.5	0.22	1600000	mg/L
OW-56	2/22/2018	Ortho-Phosphate	1.7	2.5	1.2	NA	mg/L
OW-56	2/22/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-56	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-56	2/22/2018	Sulfate	17	2.5	0.48	600000000	mg/L
OW-56	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	2/22/2018	TPH GRO	0.13	0.05	0.025	10100	mg/L
OW-56	5/8/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-56	5/8/2018	Chloride	590	25	1.5	250000000	mg/L
OW-56	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-56	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-56	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-56	5/8/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-56	5/8/2018	Sulfate	20	2.5	1	600000000	mg/L
OW-56	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	5/8/2018	TPH GRO	0.1	0.05	0.0097	10100	mg/L
OW-56	8/28/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-56	8/28/2018	Chloride	620	25	9.1	250000000	mg/L
OW-56	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-56	8/28/2018	Ortho-Phosphate	1.9	2.5	0.46	NA	mg/L
OW-56	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-56	8/28/2018	Sulfate	21	2.5	1	600000000	mg/L
OW-56	8/28/2018	TPH DRO	0.68	1	0.63	16700	mg/L
OW-56	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	8/28/2018	TPH GRO	0.59	0.05	0.024	10100	mg/L
OW-56	11/7/2018	Bromide	2.2	0.5	0.1	NA	mg/L
OW-56	11/7/2018	Chloride	640	25	25	250000000	mg/L
OW-56	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-56	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-56	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-56	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-56	11/7/2018	Sulfate	18	2.5	0.63	600000000	mg/L
OW-56	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-56	11/7/2018	TPH GRO	0.31	0.05	0.024	10100	mg/L
OW-56	2/6/2019	TPH GRO	0.15	0.05	0.0211	10100	mg/L
OW-56	2/6/2019	Bromide	2	0.5	0.0675	NA	mg/L
OW-56	2/6/2019	Chloride	640	25	25	250000000	mg/L
OW-56	2/6/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-56	2/6/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-56	2/6/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-56	2/6/2019	Phosphorus, Ortho	0.95	2.5	0.1305	NA	mg/L
OW-56	2/6/2019	Sulfate	21	2.5	0.32	600000000	mg/L
OW-56	2/6/2019	TPH DRO	ND	1	0.63	16700	mg/L
OW-56	2/6/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	5/2/2019	TPH GRO	0.22	0.05	0.0307	10100	mg/L
OW-56	5/2/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-56	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	5/2/2019	Bromide	1.9	0.5	0.088765	NA	mg/L
OW-56	5/2/2019	Chloride	710	25	3.125	250000000	mg/L
OW-56	5/2/2019	Fluoride, Total	0.31	0.5	0.25	1600000	mg/L
OW-56	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.04746	10000000	mg/L
OW-56	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-56	5/2/2019	Sulfate	22	2.5	0.2675	600000000	mg/L
OW-56	8/21/2019	TPH GRO	0.25	0.05	0.0211	10100	mg/L
OW-56	8/21/2019	TPH DRO	0.53	1	0.35	16700	mg/L
OW-56	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	8/21/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
OW-56	8/21/2019	Chloride	660	25	25	250000000	mg/L
OW-56	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-56	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-56	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-56	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-56	8/21/2019	Sulfate	21	2.5	0.3345	600000000	mg/L
OW-56	10/15/2019	TPH GRO	0.38	0.05	0.0193	10100	mg/L
OW-56	10/15/2019	TPH DRO	0.74	1	0.35	16700	mg/L
OW-56	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-56	10/15/2019	Bromide	1.6	0.5	0.077	NA	mg/L
OW-56	10/15/2019	Chloride	550	25	25	250000000	mg/L
OW-56	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-56	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.0485	10000000	mg/L
OW-56	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-56	10/15/2019	Sulfate	20	2.5	0.3345	600000000	mg/L
OW-56	3/2/2020	TPH GRO	0.22	0.05	0.0068	10100	mg/L
OW-56	3/2/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-56	3/2/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-56	3/2/2020	Bromide	1.8	0.5	0.25	NA	mg/L
OW-56	3/2/2020	Fluoride, Total	0.36	0.5	0.11	1600000	mg/L
OW-56	3/2/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-56	3/2/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-56	3/2/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-56	3/2/2020	Sulfate	19	2.5	1.2	600000000	mg/L
OW-56	3/2/2020	Chloride	620	25	12	250000000	mg/L
OW-56	9/21/2020	TPH GRO	0.56	0.05	0.008	10100	mg/L
OW-56	9/21/2020	TPH DRO	0.76	0.07	0.067	16700	mg/L
OW-56	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-56	9/21/2020	Nitrogen, Nitrate	ND	0.1	0.02	10000000	mg/L
OW-56	9/21/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-56	12/23/2020	Sulfate	8.26	1	0.37	600000000	mg/L
OW-56	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-56	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-56	12/23/2020	Chloride	483	20	2.4	250000000	mg/L
OW-56	12/23/2020	TPH (C6-C10)	2560	100	47	NA	ug/L
OW-56	12/23/2020	TPH DRO	3380	142	113	16700	ug/L
OW-56	12/23/2020	C28-C40	160	142	113	NA	ug/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	10/1/2016	Chloride	180	10	1	250000000	mg/L
OW-57	10/1/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
OW-57	10/1/2016	Fluoride, Total	0.22	0.1	0.05	1600000	mg/L
OW-57	10/1/2016	Sulfate	6.2	0.5	0.14	600000000	mg/L
OW-57	10/1/2016	TPH DRO	9.3	1	0.69	16700	mg/L
OW-57	10/1/2016	TPH ORO	ND	5	5	85800	mg/L
OW-57	10/1/2016	TPH GRO	46	10	5.1	10100	mg/L
OW-57	11/8/2016	TPH DRO	7.8	1	0.69	16700	mg/L
OW-57	11/8/2016	TPH ORO	ND	5	5	85800	mg/L
OW-57	11/8/2016	TPH GRO	39	10	5.1	10100	mg/L
OW-57	3/30/2017	Bromide	2.2	0.1	0.031	NA	mg/L
OW-57	3/30/2017	Chloride	160	10	5	250000000	mg/L
OW-57	3/30/2017	Fluoride, Total	0.27	0.1	0.05	1600000	mg/L
OW-57	3/30/2017	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
OW-57	3/30/2017	Nitrogen, Nitrite	ND	0.1	0.019	1000000	mg/L
OW-57	3/30/2017	Nitrogen, Nitrate	0.064	0.1	0.022	10000000	mg/L
OW-57	3/30/2017	Sulfate	4.1	0.5	0.096	600000000	mg/L
OW-57	3/30/2017	TPH DRO	5.8	1	0.36	16700	mg/L
OW-57	3/30/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	3/30/2017	TPH GRO	26	5	0.97	10100	mg/L
OW-57	6/21/2017	Bromide	2.3	0.5	0.073	NA	mg/L
OW-57	6/21/2017	Chloride	170	10	5	250000000	mg/L
OW-57	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	6/21/2017	Ortho-Phosphate	2.2	2.5	1.2	NA	mg/L
OW-57	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-57	6/21/2017	Sulfate	2.3	2.5	0.48	600000000	mg/L
OW-57	6/21/2017	TPH DRO	8.3	1	0.36	16700	mg/L
OW-57	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	6/21/2017	TPH GRO	30	5	2.5	10100	mg/L
OW-57	9/19/2017	Bromide	1.9	0.5	0.073	NA	mg/L
OW-57	9/19/2017	Chloride	150	10	5	250000000	mg/L
OW-57	9/19/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-57	9/19/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-57	9/19/2017	Sulfate	1.8	2.5	0.48	600000000	mg/L
OW-57	9/19/2017	TPH DRO	9.6	1	0.36	16700	mg/L
OW-57	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	9/19/2017	TPH GRO	28	2.5	1.2	10100	mg/L
OW-57	12/6/2017	Bromide	2.5	0.5	0.073	NA	mg/L
OW-57	12/6/2017	Chloride	150	10	5	250000000	mg/L
OW-57	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	12/6/2017	Nitrate & Nitrite	0.17	1	0.13	NA	mg/L
OW-57	12/6/2017	Sulfate	1.7	2.5	0.48	600000000	mg/L
OW-57	12/6/2017	TPH DRO	8.5	1	0.36	16700	mg/L
OW-57	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-57	12/6/2017	TPH GRO	30	5	0.97	10100	mg/L
OW-57	2/20/2018	Bromide	2	0.5	0.073	NA	mg/L
OW-57	2/20/2018	Chloride	150	10	5	250000000	mg/L
OW-57	2/20/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-57	2/20/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	2/20/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-57	2/20/2018	Sulfate	1.2	2.5	0.48	600000000	mg/L
OW-57	2/20/2018	TPH DRO	8.8	1	0.63	16700	mg/L
OW-57	2/20/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	2/20/2018	TPH GRO	28	5	0.97	10100	mg/L
OW-57	5/8/2018	Bromide	2.1	0.5	0.13	NA	mg/L
OW-57	5/8/2018	Chloride	140	10	0.59	250000000	mg/L
OW-57	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-57	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-57	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-57	5/8/2018	Nitrogen, Nitrate	0.23	0.5	0.033	10000000	mg/L
OW-57	5/8/2018	Sulfate	1.5	2.5	1	600000000	mg/L
OW-57	5/8/2018	TPH DRO	8	1	0.63	16700	mg/L
OW-57	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	5/8/2018	TPH GRO	27	2.5	0.48	10100	mg/L
OW-57	8/28/2018	Bromide	2.2	0.5	0.13	NA	mg/L
OW-57	8/28/2018	Chloride	160	10	0.59	250000000	mg/L
OW-57	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-57	8/28/2018	Ortho-Phosphate	2.7	2.5	0.46	NA	mg/L
OW-57	8/28/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-57	8/28/2018	Sulfate	1.2	2.5	1	600000000	mg/L
OW-57	8/28/2018	TPH DRO	7.5	1	0.63	16700	mg/L
OW-57	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	8/28/2018	TPH GRO	29	2.5	1.2	10100	mg/L
OW-57	11/29/2018	Bromide	2.3	0.5	0.1	NA	mg/L
OW-57	11/29/2018	Chloride	160	10	10	250000000	mg/L
OW-57	11/29/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-57	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-57	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-57	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-57	11/29/2018	Sulfate	0.77	2.5	0.63	600000000	mg/L
OW-57	11/29/2018	TPH DRO	8.6	1	0.63	16700	mg/L
OW-57	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-57	11/29/2018	TPH GRO	21	1	0.49	10100	mg/L
OW-57	2/20/2019	TPH GRO	25	1	0.422	10100	mg/L
OW-57	2/20/2019	TPH DRO	6.8	1	0.35	16700	mg/L
OW-57	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	2/20/2019	Bromide	2	0.5	0.0675	NA	mg/L
OW-57	2/20/2019	Chloride	150	10	10	250000000	mg/L
OW-57	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-57	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-57	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-57	2/20/2019	Phosphorus, Ortho	1.9	2.5	0.1305	NA	mg/L
OW-57	2/20/2019	Sulfate	2.5	2.5	0.32	600000000	mg/L
OW-57	5/16/2019	TPH GRO	19	1	0.614	10100	mg/L
OW-57	5/16/2019	TPH DRO	7.8	1	0.35	16700	mg/L
OW-57	5/16/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	5/16/2019	Bromide	1.8	0.5	0.088765	NA	mg/L
OW-57	5/16/2019	Chloride	140	10	1.25	250000000	mg/L
OW-57	5/16/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-57	5/16/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-57	5/16/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-57	5/16/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-57	5/16/2019	Sulfate	1.1	2.5	0.2675	600000000	mg/L
OW-57	8/21/2019	TPH GRO	26	1	0.422	10100	mg/L
OW-57	8/21/2019	TPH DRO	8.4	1	0.35	16700	mg/L
OW-57	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-57	8/21/2019	Bromide	2.1	0.5	0.088765	NA	mg/L
OW-57	8/21/2019	Chloride	140	10	10	250000000	mg/L
OW-57	8/21/2019	Fluoride, Total	0.11	0.5	0.073	1600000	mg/L
OW-57	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-57	8/21/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-57	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-57	8/21/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-57	11/5/2019	TPH GRO	28	1	0.422	10100	mg/L
OW-57	11/5/2019	TPH DRO	3.6	0.4	0.132	16700	mg/L
OW-57	11/5/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-57	11/5/2019	Bromide	2.1	0.5	0.077	NA	mg/L
OW-57	11/5/2019	Chloride	140	10	10	250000000	mg/L
OW-57	11/5/2019	Fluoride, Total	0.17	0.5	0.144909	1600000	mg/L
OW-57	11/5/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-57	11/5/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-57	11/5/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-57	11/5/2019	Sulfate	0.64	2.5	0.3345	600000000	mg/L
OW-57	3/5/2020	TPH GRO	20	1	0.14	10100	mg/L
OW-57	3/5/2020	TPH DRO	2.9	0.4	0.2	16700	mg/L
OW-57	3/5/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-57	3/5/2020	Bromide	2.1	0.5	0.25	NA	mg/L
OW-57	3/5/2020	Fluoride, Total	0.48	0.5	0.11	1600000	mg/L
OW-57	3/5/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-57	3/5/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-57	3/5/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-57	3/5/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-57	3/5/2020	Chloride	150	10	5	250000000	mg/L
OW-57	9/18/2020	TPH GRO	33	2.5	0.4	10100	mg/L
OW-57	9/18/2020	TPH DRO	5.6	0.07	0.067	16700	mg/L
OW-57	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-57	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-57	9/18/2020	Nitrogen, Nitrate	0.27	0.5	0.1	10000000	mg/L
OW-57	12/23/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-57	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate	0.75	0.1	0.033	10000000	mg/L
OW-57	12/23/2020	Chloride	139	10	1.2	250000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate	0.082	0.05	0.018	10000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-57	12/23/2020	Nitrogen, Nitrate & Nitrite	0.082	0.05	0.018	10000000	mg/L
OW-57	12/23/2020	TPH DRO	14800	141	113	16700	ug/L
OW-57	12/23/2020	C28-C40	375	141	113	NA	ug/L
OW-57	12/23/2020	TPH (C6-C10)	24900	2000	940	NA	ug/L
OW-58	9/30/2016	Chloride	160	10	1	250000000	mg/L
OW-58	9/30/2016	Cyanide, Total	0.0273	0.01	0.01	1460	mg/L
OW-58	9/30/2016	Fluoride, Total	0.25	0.1	0.05	1600000	mg/L
OW-58	9/30/2016	Sulfate	1.2	0.5	0.14	600000000	mg/L
OW-58	9/30/2016	TPH DRO	5.6	1	0.69	16700	mg/L
OW-58	9/30/2016	TPH ORO	ND	5	5	85800	mg/L
OW-58	9/30/2016	TPH GRO	150	10	5.1	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	11/7/2016	TPH DRO	4.8	1	0.69	16700	mg/L
OW-58	11/7/2016	TPH ORO	ND	5	5	85800	mg/L
OW-58	11/7/2016	TPH GRO	120	25	13	10100	mg/L
OW-58	3/29/2017	Bromide	1.8	0.5	0.15	NA	mg/L
OW-58	3/29/2017	Chloride	150	10	5	250000000	mg/L
OW-58	3/29/2017	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	3/29/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	3/29/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	3/29/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
OW-58	3/29/2017	TPH DRO	9.2	1	0.36	16700	mg/L
OW-58	3/29/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	3/29/2017	TPH GRO	64	5	0.97	10100	mg/L
OW-58	6/21/2017	Bromide	2	0.5	0.073	NA	mg/L
OW-58	6/21/2017	Chloride	150	10	5	250000000	mg/L
OW-58	6/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	6/21/2017	Ortho-Phosphate	2.4	2.5	1.2	NA	mg/L
OW-58	6/21/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	6/21/2017	Sulfate	0.96	2.5	0.48	600000000	mg/L
OW-58	6/21/2017	TPH DRO	7.9	1	0.36	16700	mg/L
OW-58	6/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	6/21/2017	TPH GRO	80	10	5	10100	mg/L
OW-58	9/19/2017	Bromide	1.7	0.5	0.073	NA	mg/L
OW-58	9/19/2017	Chloride	130	10	5	250000000	mg/L
OW-58	9/19/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	9/19/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	9/19/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-58	9/19/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-58	9/19/2017	Sulfate	0.78	2.5	0.48	600000000	mg/L
OW-58	9/19/2017	TPH DRO	8.3	1	0.36	16700	mg/L
OW-58	9/19/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	9/19/2017	TPH GRO	85	10	5	10100	mg/L
OW-58	12/6/2017	Bromide	2.3	0.5	0.073	NA	mg/L
OW-58	12/6/2017	Chloride	140	10	5	250000000	mg/L
OW-58	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	12/6/2017	Nitrate & Nitrite	0.27	1	0.13	NA	mg/L
OW-58	12/6/2017	Sulfate	ND	2.5	0.48	600000000	mg/L
OW-58	12/6/2017	TPH DRO	6.2	1	0.36	16700	mg/L
OW-58	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-58	12/6/2017	TPH GRO	83	10	1.9	10100	mg/L
OW-58	2/20/2018	Bromide	1.8	0.5	0.073	NA	mg/L
OW-58	2/20/2018	Chloride	140	10	5	250000000	mg/L
OW-58	2/20/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-58	2/20/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58	2/20/2018	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
OW-58	2/20/2018	Sulfate	0.53	2.5	0.48	600000000	mg/L
OW-58	2/20/2018	TPH DRO	5.7	1	0.63	16700	mg/L
OW-58	2/20/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	2/20/2018	TPH GRO	77	10	1.9	10100	mg/L
OW-58	5/8/2018	Bromide	1.6	0.5	0.13	NA	mg/L
OW-58	5/8/2018	Chloride	150	10	0.59	250000000	mg/L
OW-58	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-58	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-58	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-58	5/8/2018	Nitrogen, Nitrate	0.21	0.5	0.033	10000000	mg/L
OW-58	5/8/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-58	5/8/2018	TPH DRO	5.7	1	0.63	16700	mg/L
OW-58	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	5/8/2018	TPH GRO	72	2.5	0.48	10100	mg/L
OW-58	8/28/2018	Bromide	1.8	0.5	0.13	NA	mg/L
OW-58	8/28/2018	Chloride	160	10	0.59	250000000	mg/L
OW-58	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-58	8/28/2018	Ortho-Phosphate	3.4	2.5	0.46	NA	mg/L
OW-58	8/28/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-58	8/28/2018	Nitrogen, Nitrate	0.07	0.5	0.033	10000000	mg/L
OW-58	8/28/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-58	8/28/2018	TPH DRO	5.6	1	0.63	16700	mg/L
OW-58	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	8/28/2018	TPH GRO	92	2.5	1.2	10100	mg/L
OW-58	11/29/2018	Bromide	1.9	0.5	0.1	NA	mg/L
OW-58	11/29/2018	Chloride	160	10	10	250000000	mg/L
OW-58	11/29/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-58	11/29/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-58	11/29/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-58	11/29/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-58	11/29/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-58	11/29/2018	TPH DRO	6.3	1	0.63	16700	mg/L
OW-58	11/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-58	11/29/2018	TPH GRO	69	2.5	1.2	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58	3/28/2019	TPH GRO	57	5	3.07	10100	mg/L
OW-58	3/28/2019	Bromide	1.9	0.5	0.0675	NA	mg/L
OW-58	3/28/2019	Chloride	150	10	10	250000000	mg/L
OW-58	3/28/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	3/28/2019	Nitrogen, Nitrate & Nitrite	ND	1	0.4905	10000000	mg/L
OW-58	3/28/2019	Phosphorus, Ortho	0.34	2.5	0.1305	NA	mg/L
OW-58	3/28/2019	Sulfate	ND	2.5	0.32	600000000	mg/L
OW-58	3/28/2019	TPH DRO	7.4	1	0.35	16700	mg/L
OW-58	3/28/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	6/5/2019	TPH GRO	68	5	2.11	10100	mg/L
OW-58	6/5/2019	TPH DRO	7.7	1	0.35	16700	mg/L
OW-58	6/5/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	6/5/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-58	6/5/2019	Chloride	190	10	1.25	250000000	mg/L
OW-58	6/5/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-58	6/5/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-58	6/5/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-58	6/5/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-58	6/5/2019	Sulfate	ND	2.5	0.2675	600000000	mg/L
OW-58	8/22/2019	TPH GRO	64	2.5	1.055	10100	mg/L
OW-58	8/22/2019	TPH DRO	9.2	1	0.35	16700	mg/L
OW-58	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
OW-58	8/22/2019	Bromide	1.9	0.5	0.088765	NA	mg/L
OW-58	8/22/2019	Chloride	140	10	10	250000000	mg/L
OW-58	8/22/2019	Fluoride, Total	0.28	0.5	0.073	1600000	mg/L
OW-58	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-58	8/22/2019	Nitrogen, Nitrite	0.12	0.5	0.027	1000000	mg/L
OW-58	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-58	8/22/2019	Sulfate	1.7	2.5	0.3345	600000000	mg/L
OW-58	11/18/2019	TPH GRO	75	2.5	1.055	10100	mg/L
OW-58	11/18/2019	TPH DRO	2.9	0.4	0.132	16700	mg/L
OW-58	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-58	11/18/2019	Bromide	1.8	0.5	0.077	NA	mg/L
OW-58	11/18/2019	Chloride	140	10	10	250000000	mg/L
OW-58	11/18/2019	Fluoride, Total	0.5	0.5	0.144909	1600000	mg/L
OW-58	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-58	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-58	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-58	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-58	9/17/2020	TPH GRO	78	5	0.8	10100	mg/L
OW-58	9/17/2020	TPH DRO	6.4	0.07	0.067	16700	mg/L
OW-58	9/17/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-58	9/17/2020	Nitrogen, Nitrate	0.18	0.5	0.1	10000000	mg/L
OW-58	9/17/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-58	12/22/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-58	12/22/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58	12/22/2020	Chloride	160	10	1.2	250000000	mg/L
OW-58	12/22/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-58	12/22/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-58	12/22/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58	12/22/2020	Chloride	162	10	1.2	250000000	mg/L
OW-58	12/22/2020	TPH DRO	**17400**	118	94.4	16700	ug/L
OW-58	12/22/2020	C28-C40	528	118	94.4	NA	ug/L
OW-58	12/22/2020	TPH DRO	**16800**	134	107	16700	ug/L
OW-58	12/22/2020	C28-C40	628	134	107	NA	ug/L
OW-58	12/22/2020	TPH (C6-C10)	64700	5000	2350	NA	ug/L
OW-58	12/22/2020	TPH (C6-C10)	68900	5000	2350	NA	ug/L
OW-58A	3/6/2020	TPH GRO	31	5	0.68	10100	mg/L
OW-58A	3/6/2020	TPH DRO	2.6	0.4	0.2	16700	mg/L
OW-58A	3/6/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-58A	3/6/2020	Bromide	2.3	0.5	0.25	NA	mg/L
OW-58A	3/6/2020	Fluoride, Total	0.2	0.5	0.11	1600000	mg/L
OW-58A	3/6/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-58A	3/6/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-58A	3/6/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-58A	3/6/2020	Sulfate	28	2.5	1.2	600000000	mg/L
OW-58A	3/6/2020	Chloride	190	10	5	250000000	mg/L
OW-58A	9/18/2020	TPH GRO	31	2.5	0.4	10100	mg/L
OW-58A	9/18/2020	TPH DRO	4.5	0.07	0.067	16700	mg/L
OW-58A	9/18/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-58A	9/18/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
OW-58A	9/18/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-58A	12/23/2020	Nitrogen, Nitrate & Nitrite	ND	0.05	0.018	10000000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrate	ND	0.05	0.018	10000000	mg/L
OW-58A	12/23/2020	Sulfate	8.7	1	0.37	600000000	mg/L
OW-58A	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-58A	12/23/2020	Nitrogen, Nitrate	0.128	0.1	0.033	10000000	mg/L
OW-58A	12/23/2020	Chloride	176	10	1.2	250000000	mg/L
OW-58A	12/23/2020	TPH (C6-C10)	22500	2000	940	NA	ug/L
OW-58A	12/23/2020	TPH DRO	12500	146	117	16700	ug/L
OW-58A	12/23/2020	C28-C40	ND	146	117	NA	ug/L
OW-59	6/28/2017	Bromide	3.6	0.5	0.073	NA	mg/L
OW-59	6/28/2017	Chloride	2000	100	50	250000000	mg/L
OW-59	6/28/2017	Cyanide, Total	0.0268	0.005	0.005	1460	mg/L
OW-59	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	6/28/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
OW-59	6/28/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
OW-59	6/28/2017	Sulfate	3000	100	19	600000000	mg/L
OW-59	6/28/2017	TPH DRO	0.56	1	0.36	16700	mg/L
OW-59	6/28/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	6/28/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
OW-59	9/21/2017	Bromide	3	0.5	0.073	NA	mg/L
OW-59	9/21/2017	Chloride	2000	100	50	250000000	mg/L
OW-59	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	9/21/2017	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
OW-59	9/21/2017	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	9/21/2017	Sulfate	3400	100	19	600000000	mg/L
OW-59	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-59	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	9/21/2017	TPH GRO	2.7	0.05	0.0097	10100	mg/L
OW-59	12/6/2017	Bromide	8.6	0.5	0.073	NA	mg/L
OW-59	12/6/2017	Chloride	1700	100	50	250000000	mg/L
OW-59	12/6/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	12/6/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
OW-59	12/6/2017	Sulfate	2600	100	19	600000000	mg/L
OW-59	12/6/2017	TPH DRO	0.55	1	0.36	16700	mg/L
OW-59	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-59	12/6/2017	TPH GRO	3.1	0.05	0.0097	10100	mg/L
OW-59	2/22/2018	Bromide	2.7	0.5	0.073	NA	mg/L
OW-59	2/22/2018	Chloride	1900	100	50	250000000	mg/L
OW-59	2/22/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	2/22/2018	Ortho-Phosphate	ND	10	5	NA	mg/L
OW-59	2/22/2018	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
OW-59	2/22/2018	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	2/22/2018	Sulfate	2700	100	19	600000000	mg/L
OW-59	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	2/22/2018	TPH GRO	0.13	0.05	0.025	10100	mg/L
OW-59	5/8/2018	Bromide	2.5	0.5	0.13	NA	mg/L
OW-59	5/8/2018	Chloride	1800	100	5.9	250000000	mg/L
OW-59	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-59	5/8/2018	Ortho-Phosphate	ND	25	4.6	NA	mg/L
OW-59	5/8/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
OW-59	5/8/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-59	5/8/2018	Sulfate	2400	100	41	600000000	mg/L
OW-59	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	5/8/2018	TPH GRO	2.8	0.05	0.0097	10100	mg/L
OW-59	8/28/2018	Bromide	2.8	2	0.54	NA	mg/L
OW-59	8/28/2018	Chloride	2100	100	36	250000000	mg/L
OW-59	8/28/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
OW-59	8/28/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-59	8/28/2018	Nitrate & Nitrite	ND	2	0.55	NA	mg/L
OW-59	8/28/2018	Sulfate	2600	100	41	600000000	mg/L
OW-59	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	8/28/2018	TPH GRO	0.064	0.05	0.024	10100	mg/L
OW-59	11/7/2018	Bromide	3	0.5	0.1	NA	mg/L
OW-59	11/7/2018	Chloride	2100	100	100	250000000	mg/L
OW-59	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-59	11/7/2018	Ortho-Phosphate	ND	10	10	NA	mg/L
OW-59	11/7/2018	Nitrogen, Nitrite	ND	2	0.1	1000000	mg/L
OW-59	11/7/2018	Nitrogen, Nitrate	ND	0.5	0.066	10000000	mg/L
OW-59	11/7/2018	Sulfate	2700	100	25	600000000	mg/L
OW-59	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-59	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-59	11/7/2018	TPH GRO	0.23	0.05	0.024	10100	mg/L
OW-59	2/13/2019	TPH GRO	0.43	0.05	0.0211	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-59	2/13/2019	TPH DRO	0.44	1	0.35	16700	mg/L
OW-59	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	2/13/2019	Bromide	2.9	2	0.27	NA	mg/L
OW-59	2/13/2019	Chloride	2000	100	100	250000000	mg/L
OW-59	2/13/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-59	2/13/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-59	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
OW-59	2/13/2019	Phosphorus, Ortho	ND	10	0.522	NA	mg/L
OW-59	2/13/2019	Sulfate	2600	100	12.8	600000000	mg/L
OW-59	5/2/2019	TPH GRO	2.2	0.05	0.0307	10100	mg/L
OW-59	5/2/2019	TPH DRO	0.61	1	0.35	16700	mg/L
OW-59	5/2/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	5/2/2019	Bromide	2.4	0.5	0.088765	NA	mg/L
OW-59	5/2/2019	Chloride	2100	100	12.5	250000000	mg/L
OW-59	5/2/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
OW-59	5/2/2019	Nitrogen, Nitrate & Nitrite	ND	2	0.09492	10000000	mg/L
OW-59	5/2/2019	Phosphorus, Ortho	ND	10	0.8	NA	mg/L
OW-59	5/2/2019	Sulfate	2700	100	10.7	600000000	mg/L
OW-59	8/21/2019	TPH GRO	0.35	0.05	0.0211	10100	mg/L
OW-59	8/21/2019	TPH DRO	0.38	1	0.35	16700	mg/L
OW-59	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	8/21/2019	Bromide	2	0.5	0.088765	NA	mg/L
OW-59	8/21/2019	Chloride	2100	100	100	250000000	mg/L
OW-59	8/21/2019	Fluoride, Total	ND	0.5	0.073	1600000	mg/L
OW-59	8/21/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-59	8/21/2019	Nitrogen, Nitrite	ND	2	0.108	1000000	mg/L
OW-59	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-59	8/21/2019	Sulfate	2500	100	13.38	600000000	mg/L
OW-59	10/15/2019	TPH GRO	2.3	0.05	0.0193	10100	mg/L
OW-59	10/15/2019	TPH DRO	0.58	1	0.35	16700	mg/L
OW-59	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-59	10/15/2019	Bromide	2.1	0.5	0.077	NA	mg/L
OW-59	10/15/2019	Chloride	2000	100	100	250000000	mg/L
OW-59	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-59	10/15/2019	Nitrogen, Nitrate & Nitrite	ND	2	0.097	10000000	mg/L
OW-59	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-59	10/15/2019	Sulfate	2400	100	13.38	600000000	mg/L
OW-59	3/3/2020	TPH GRO	2.8	0.05	0.0068	10100	mg/L
OW-59	3/3/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-59	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-59	3/3/2020	Bromide	2.7	0.5	0.25	NA	mg/L
OW-59	3/3/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-59	3/3/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-59	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	3/3/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
OW-59	3/3/2020	Chloride	2200	100	50	250000000	mg/L
OW-59	3/3/2020	Sulfate	2600	100	50	600000000	mg/L
OW-59	9/19/2020	TPH GRO	2.3	0.05	0.008	10100	mg/L
OW-59	9/19/2020	TPH DRO	0.21	0.07	0.067	16700	mg/L
OW-59	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-59	9/19/2020	Bromide	3.1	0.5	0.25	NA	mg/L
OW-59	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-59	9/19/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-59	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-59	9/19/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
OW-59	9/19/2020	Chloride	2000	100	50	250000000	mg/L
OW-59	9/19/2020	Sulfate	2100	100	50	600000000	mg/L
OW-59	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-59	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-59	12/23/2020	Chloride	2270	100	12	250000000	mg/L
OW-59	12/23/2020	Sulfate	2510	100	37	600000000	mg/L
OW-59	12/23/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-59	12/23/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-59	12/23/2020	Chloride	2250	100	12	250000000	mg/L
OW-59	12/23/2020	Sulfate	2450	100	37	600000000	mg/L
OW-59	12/23/2020	Bicarbonate	522	1	0.5	NA	mg/L
OW-59	12/23/2020	Bicarbonate	505	1	0.5	NA	mg/L
OW-59	12/23/2020	Phosphorus, Total	0.111	0.1	0.032	NA	mg/L
OW-59	12/23/2020	Phosphorus, Total	0.118	0.1	0.032	NA	mg/L
OW-59	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-59	12/23/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-59	12/23/2020	TPH DRO	811	140	112	16700	ug/L
OW-59	12/23/2020	C28-C40	ND	140	112	NA	ug/L
OW-59	12/23/2020	TPH DRO	919	135	108	16700	ug/L
OW-59	12/23/2020	C28-C40	ND	135	108	NA	ug/L
OW-59	12/23/2020	TPH (C6-C10)	995	100	47	NA	ug/L
OW-59	12/23/2020	TPH (C6-C10)	883	100	47	NA	ug/L
OW-60	6/28/2017	Bromide	2.4	0.5	0.073	NA	mg/L
OW-60	6/28/2017	Chloride	1600	100	50	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	6/28/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
OW-60	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	6/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	6/28/2017	Nitrate & Nitrite	3	1	0.13	NA	mg/L
OW-60	6/28/2017	Sulfate	740	10	1.9	600000000	mg/L
OW-60	6/28/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	6/28/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	6/28/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-60	9/21/2017	Bromide	4.1	0.5	0.073	NA	mg/L
OW-60	9/21/2017	Chloride	1900	100	50	250000000	mg/L
OW-60	9/21/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	9/21/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	9/21/2017	Nitrogen, Nitrite	ND	2	0.14	1000000	mg/L
OW-60	9/21/2017	Nitrogen, Nitrate	10	0.5	0.11	10000000	mg/L
OW-60	9/21/2017	Sulfate	840	10	1.9	600000000	mg/L
OW-60	9/21/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	9/21/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	9/21/2017	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-60	12/6/2017	Bromide	10	0.5	0.073	NA	mg/L
OW-60	12/6/2017	Chloride	1700	100	50	250000000	mg/L
OW-60	12/6/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
OW-60	12/6/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	12/6/2017	Nitrate & Nitrite	14	2	0.26	NA	mg/L
OW-60	12/6/2017	Sulfate	780	10	1.9	600000000	mg/L
OW-60	12/6/2017	TPH DRO	ND	1	0.36	16700	mg/L
OW-60	12/6/2017	TPH ORO	ND	5	5	85800	mg/L
OW-60	12/6/2017	TPH GRO	0.031	0.05	0.0097	10100	mg/L
OW-60	2/22/2018	Bromide	4.2	0.5	0.073	NA	mg/L
OW-60	2/22/2018	Chloride	1700	100	50	250000000	mg/L
OW-60	2/22/2018	Fluoride, Total	0.64	0.5	0.22	1600000	mg/L
OW-60	2/22/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	2/22/2018	Nitrogen, Nitrite	0.37	0.5	0.034	1000000	mg/L
OW-60	2/22/2018	Nitrogen, Nitrate	18	0.5	0.11	10000000	mg/L
OW-60	2/22/2018	Sulfate	750	10	1.9	600000000	mg/L
OW-60	2/22/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	2/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	2/22/2018	TPH GRO	ND	0.05	0.025	10100	mg/L
OW-60	5/8/2018	Bromide	4.2	0.5	0.13	NA	mg/L
OW-60	5/8/2018	Chloride	1700	100	5.9	250000000	mg/L
OW-60	5/8/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-60	5/8/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-60	5/8/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-60	5/8/2018	Nitrogen, Nitrate	19	0.5	0.033	10000000	mg/L
OW-60	5/8/2018	Sulfate	730	10	4.1	600000000	mg/L
OW-60	5/8/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	5/8/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	5/8/2018	TPH GRO	ND	0.05	0.0097	10100	mg/L
OW-60	8/28/2018	Bromide	4.4	0.5	0.13	NA	mg/L
OW-60	8/28/2018	Chloride	1800	100	36	250000000	mg/L
OW-60	8/28/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-60	8/28/2018	Ortho-Phosphate	0.9	2.5	0.46	NA	mg/L
OW-60	8/28/2018	Nitrate & Nitrite	18	1	0.27	NA	mg/L
OW-60	8/28/2018	Sulfate	760	10	4.1	600000000	mg/L
OW-60	8/28/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	8/28/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	8/28/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-60	11/7/2018	Bromide	4.7	0.5	0.1	NA	mg/L
OW-60	11/7/2018	Chloride	1500	100	100	250000000	mg/L
OW-60	11/7/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-60	11/7/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
OW-60	11/7/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-60	11/7/2018	Nitrogen, Nitrate	20	0.5	0.066	10000000	mg/L
OW-60	11/7/2018	Sulfate	740	10	2.5	600000000	mg/L
OW-60	11/7/2018	TPH DRO	ND	1	0.63	16700	mg/L
OW-60	11/7/2018	TPH ORO	ND	5	5	85800	mg/L
OW-60	11/7/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
OW-60	2/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-60	2/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	2/13/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	2/13/2019	Bromide	4.4	0.5	0.0675	NA	mg/L
OW-60	2/13/2019	Chloride	1700	100	100	250000000	mg/L
OW-60	2/13/2019	Fluoride, Total	0.41	0.5	0.25	1600000	mg/L
OW-60	2/13/2019	Nitrogen, Nitrate	16	0.5	0.143	10000000	mg/L
OW-60	2/13/2019	Nitrogen, Nitrite	ND	2	1.39	1000000	mg/L
OW-60	2/13/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-60	2/13/2019	Sulfate	740	10	1.28	600000000	mg/L
OW-60	5/2/2019	TPH GRO	ND	0.05	0.0307	10100	mg/L
OW-60	5/2/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	5/2/2019	Motor Oil	ND	5	5	85800	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-60	5/2/2019	Bromide	4.4	0.5	0.088765	NA	mg/L
OW-60	5/2/2019	Chloride	1800	100	12.5	250000000	mg/L
OW-60	5/2/2019	Fluoride, Total	0.4	0.5	0.25	1600000	mg/L
OW-60	5/2/2019	Nitrogen, Nitrate & Nitrite	15	2	0.09492	10000000	mg/L
OW-60	5/2/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-60	5/2/2019	Sulfate	640	10	1.07	600000000	mg/L
OW-60	8/21/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
OW-60	8/21/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	8/21/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	8/21/2019	Bromide	3.9	0.5	0.088765	NA	mg/L
OW-60	8/21/2019	Chloride	1800	100	100	250000000	mg/L
OW-60	8/21/2019	Fluoride, Total	0.21	0.5	0.073	1600000	mg/L
OW-60	8/21/2019	Nitrogen, Nitrate	17	0.5	0.025	10000000	mg/L
OW-60	8/21/2019	Nitrogen, Nitrite	1.8	0.5	0.027	1000000	mg/L
OW-60	8/21/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-60	8/21/2019	Sulfate	730	10	1.338	600000000	mg/L
OW-60	10/15/2019	TPH GRO	ND	0.05	0.0193	10100	mg/L
OW-60	10/15/2019	TPH DRO	ND	1	0.35	16700	mg/L
OW-60	10/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-60	10/15/2019	Bromide	4.6	0.5	0.077	NA	mg/L
OW-60	10/15/2019	Chloride	1600	100	100	250000000	mg/L
OW-60	10/15/2019	Fluoride, Total	ND	0.5	0.144909	1600000	mg/L
OW-60	10/15/2019	Nitrogen, Nitrate & Nitrite	17	1	0.0485	10000000	mg/L
OW-60	10/15/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-60	10/15/2019	Sulfate	600	100	13.38	600000000	mg/L
OW-60	3/3/2020	TPH GRO	ND	0.05	0.0068	10100	mg/L
OW-60	3/3/2020	TPH DRO	ND	0.4	0.2	16700	mg/L
OW-60	3/3/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-60	3/3/2020	Bromide	4.6	0.5	0.25	NA	mg/L
OW-60	3/3/2020	Fluoride, Total	ND	0.5	0.11	1600000	mg/L
OW-60	3/3/2020	Nitrogen, Nitrate	18	0.5	0.11	10000000	mg/L
OW-60	3/3/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	3/3/2020	Nitrogen, Nitrite	ND	2	0.22	1000000	mg/L
OW-60	3/3/2020	Sulfate	780	10	5	600000000	mg/L
OW-60	3/3/2020	Chloride	1800	100	50	250000000	mg/L
OW-60	9/21/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
OW-60	9/21/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
OW-60	9/21/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-60	9/21/2020	Bromide	4.6	0.5	0.25	NA	mg/L
OW-60	9/21/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
OW-60	9/21/2020	Nitrogen, Nitrate	18	0.5	0.1	10000000	mg/L
OW-60	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-60	9/21/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-60	9/21/2020	Sulfate	630	10	5	600000000	mg/L
OW-60	9/21/2020	Chloride	1500	100	50	250000000	mg/L
OW-60	12/15/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-60	12/15/2020	Phosphorus, Total	2.88	0.1	0.032	NA	mg/L
OW-60	12/15/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-60	12/15/2020	Nitrogen, Nitrate	19.3	0.1	0.033	10000000	mg/L
OW-60	12/15/2020	Chloride	1740	50	6	250000000	mg/L
OW-60	12/15/2020	Sulfate	647	50	18.5	600000000	mg/L
OW-60	12/15/2020	Nitrogen, Nitrate	18.5	0.5	0.165	10000000	mg/L
OW-60	12/15/2020	Bicarbonate	370	1	0.5	NA	mg/L
OW-60	12/11/2020	TPH DRO	ND	143	114	16700	ug/L
OW-60	12/11/2020	C28-C40	ND	143	114	NA	ug/L
OW-60	12/11/2020	TPH (C6-C10)	ND	100	47	NA	ug/L
OW-63	4/29/2018	Bromide	0.51	0.5	0.13	NA	mg/L
OW-63	4/29/2018	Chloride	94	10	0.59	250000000	mg/L
OW-63	4/29/2018	Fluoride, Total	ND	0.5	0.15	1600000	mg/L
OW-63	4/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-63	4/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-63	4/29/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-63	4/29/2018	TPH DRO	5.6	1	0.63	16700	mg/L
OW-63	4/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	4/29/2018	TPH GRO	29	1	0.42	10100	mg/L
OW-63	8/22/2018	Bromide	0.54	0.5	0.13	NA	mg/L
OW-63	8/22/2018	Chloride	88	10	0.59	250000000	mg/L
OW-63	8/22/2018	Fluoride, Total	0.39	0.5	0.15	1600000	mg/L
OW-63	8/22/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-63	8/22/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-63	8/22/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-63	8/22/2018	Sulfate	ND	2.5	1	600000000	mg/L
OW-63	8/22/2018	TPH DRO	5.9	1	0.63	16700	mg/L
OW-63	8/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	8/22/2018	TPH GRO	35	1	0.19	10100	mg/L
OW-63	12/3/2018	Bromide	0.54	0.5	0.1	NA	mg/L
OW-63	12/3/2018	Chloride	96	2.5	2.5	250000000	mg/L
OW-63	12/3/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
OW-63	12/3/2018	Ortho-Phosphate	2.5	2.5	2.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/3/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
OW-63	12/3/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
OW-63	12/3/2018	Sulfate	ND	2.5	0.63	600000000	mg/L
OW-63	12/3/2018	TPH DRO	6.1	1	0.63	16700	mg/L
OW-63	12/3/2018	TPH ORO	ND	5	5	85800	mg/L
OW-63	12/3/2018	TPH GRO	26	2.5	1.2	10100	mg/L
OW-63	2/20/2019	TPH GRO	28	2.5	1.055	10100	mg/L
OW-63	2/20/2019	TPH DRO	6	1	0.35	16700	mg/L
OW-63	2/20/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	2/20/2019	Bromide	0.48	0.5	0.0675	NA	mg/L
OW-63	2/20/2019	Chloride	99	2.5	2.5	250000000	mg/L
OW-63	2/20/2019	Fluoride, Total	0.42	0.5	0.25	1600000	mg/L
OW-63	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
OW-63	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
OW-63	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
OW-63	2/20/2019	Sulfate	0.4	2.5	0.32	600000000	mg/L
OW-63	5/15/2019	TPH GRO	24	1	0.614	10100	mg/L
OW-63	5/15/2019	TPH DRO	6	1	0.35	16700	mg/L
OW-63	5/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	5/15/2019	Bromide	ND	0.5	0.088765	NA	mg/L
OW-63	5/15/2019	Chloride	92	2.5	0.3125	250000000	mg/L
OW-63	5/15/2019	Fluoride, Total	0.39	0.5	0.25	1600000	mg/L
OW-63	5/15/2019	Nitrogen, Nitrate	ND	0.5	0.027	10000000	mg/L
OW-63	5/15/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
OW-63	5/15/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-63	5/15/2019	Sulfate	0.48	2.5	0.2675	600000000	mg/L
OW-63	8/19/2019	TPH GRO	27	2.5	1.535	10100	mg/L
OW-63	8/19/2019	TPH DRO	6.2	1	0.35	16700	mg/L
OW-63	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
OW-63	8/19/2019	Bromide	0.44	0.5	0.088765	NA	mg/L
OW-63	8/19/2019	Chloride	85	10	10	250000000	mg/L
OW-63	8/19/2019	Fluoride, Total	0.47	0.5	0.073	1600000	mg/L
OW-63	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-63	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	8/19/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	11/18/2019	TPH GRO	31	1	0.422	10100	mg/L
OW-63	11/18/2019	TPH DRO	2.3	0.4	0.132	16700	mg/L
OW-63	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-63	11/18/2019	Bromide	0.44	0.5	0.077	NA	mg/L
OW-63	11/18/2019	Chloride	95	2.5	2.5	250000000	mg/L
OW-63	11/18/2019	Fluoride, Total	0.46	0.5	0.144909	1600000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	11/18/2019	TPH GRO	31	1	0.422	10100	mg/L
OW-63	11/18/2019	TPH DRO	2.2	0.4	0.132	16700	mg/L
OW-63	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-63	11/18/2019	Bromide	0.42	0.5	0.077	NA	mg/L
OW-63	11/18/2019	Chloride	96	2.5	2.5	250000000	mg/L
OW-63	11/18/2019	Fluoride, Total	0.45	0.5	0.144909	1600000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-63	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-63	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-63	11/18/2019	Sulfate	ND	2.5	0.3345	600000000	mg/L
OW-63	3/4/2020	TPH GRO	23	1	0.14	10100	mg/L
OW-63	3/4/2020	TPH DRO	1.8	0.4	0.2	16700	mg/L
OW-63	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-63	3/4/2020	Bromide	ND	0.5	0.25	NA	mg/L
OW-63	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-63	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-63	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-63	3/4/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-63	3/4/2020	Chloride	86	10	5	250000000	mg/L
OW-63	3/4/2020	Fluoride, Total	0.59	0.5	0.11	1600000	mg/L
OW-63	9/16/2020	TPH GRO	29	1	0.16	10100	mg/L
OW-63	9/16/2020	TPH DRO	2.1	0.07	0.067	16700	mg/L
OW-63	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
OW-63	9/16/2020	Bromide	0.37	0.5	0.25	NA	mg/L
OW-63	9/16/2020	Chloride	87	2.5	1.2	250000000	mg/L
OW-63	9/16/2020	Fluoride, Total	0.5	0.5	0.22	1600000	mg/L
OW-63	9/16/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
OW-63	9/16/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-63	9/16/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-63	9/16/2020	Sulfate	ND	2.5	1.2	600000000	mg/L
OW-63	12/11/2020	Sulfate	ND	1	0.37	600000000	mg/L
OW-63	12/11/2020	Fluoride, Total	ND	1	0.3	1600000	mg/L
OW-63	12/11/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-63	12/11/2020	Chloride	80.9	5	0.6	250000000	mg/L
OW-63	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L
OW-63	12/11/2020	Bicarbonate	814	1	0.5	NA	mg/L
OW-63	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-63	12/11/2020	TPH (C6-C10)	23000	10000	4700	NA	ug/L
OW-63	12/11/2020	TPH DRO	5200	147	118	16700	ug/L
OW-63	12/11/2020	C28-C40	ND	147	118	NA	ug/L
OW-64	4/29/2018	Bromide	1.6	0.5	0.13	NA	mg/L
OW-64	4/29/2018	Chloride	62	2.5	0.15	250000000	mg/L
OW-64	4/29/2018	Fluoride, Total	3.7	0.5	0.15	1600000	mg/L
OW-64	4/29/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-64	4/29/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
OW-64	4/29/2018	Sulfate	40	2.5	1	600000000	mg/L
OW-64	4/29/2018	TPH DRO	2.8	1	0.63	16700	mg/L
OW-64	4/29/2018	TPH ORO	ND	5	5	85800	mg/L
OW-64	4/29/2018	TPH GRO	17	1	0.42	10100	mg/L
OW-64	8/22/2018	Bromide	1.3	0.5	0.13	NA	mg/L
OW-64	8/22/2018	Chloride	20	2.5	0.15	250000000	mg/L
OW-64	8/22/2018	Fluoride, Total	4.4	0.5	0.15	1600000	mg/L
OW-64	8/22/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
OW-64	8/22/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
OW-64	8/22/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L
OW-64	8/22/2018	Sulfate	4.3	2.5	1	600000000	mg/L
OW-64	8/22/2018	TPH DRO	1.3	1	0.63	16700	mg/L
OW-64	8/22/2018	TPH ORO	ND	5	5	85800	mg/L
OW-64	8/22/2018	TPH GRO	14	0.25	0.048	10100	mg/L
OW-64	5/15/2019	TPH GRO	5.7	0.25	0.1535	10100	mg/L
OW-64	5/15/2019	TPH DRO	0.72	1	0.35	16700	mg/L
OW-64	5/15/2019	Motor Oil	ND	5	5	85800	mg/L
OW-64	5/15/2019	Bromide	1.3	0.5	0.088765	NA	mg/L
OW-64	5/15/2019	Chloride	55	2.5	0.3125	250000000	mg/L
OW-64	5/15/2019	Fluoride, Total	4.3	0.5	0.25	1600000	mg/L
OW-64	5/15/2019	Nitrogen, Nitrate	0.42	0.5	0.027	10000000	mg/L
OW-64	5/15/2019	Nitrogen, Nitrite	0.89	0.5	0.02246	1000000	mg/L
OW-64	5/15/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
OW-64	5/15/2019	Sulfate	110	2.5	0.2675	600000000	mg/L
OW-64	8/19/2019	TPH GRO	2.5	0.5	0.307	10100	mg/L
OW-64	8/19/2019	TPH DRO	0.59	1	0.35	16700	mg/L
OW-64	8/19/2019	Motor Oil	ND	5	5	85800	mg/L
OW-64	8/19/2019	Bromide	1.6	0.5	0.088765	NA	mg/L
OW-64	8/19/2019	Chloride	41	2.5	2.5	250000000	mg/L
OW-64	8/19/2019	Fluoride, Total	4.8	0.5	0.073	1600000	mg/L
OW-64	8/19/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
OW-64	8/19/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-64	8/19/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-64	8/19/2019	Sulfate	25	2.5	0.3345	600000000	mg/L
OW-64	11/18/2019	TPH GRO	0.83	0.25	0.1055	10100	mg/L
OW-64	11/18/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
OW-64	11/18/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
OW-64	11/18/2019	Bromide	2	0.5	0.077	NA	mg/L
OW-64	11/18/2019	Chloride	93	2.5	2.5	250000000	mg/L
OW-64	11/18/2019	Fluoride, Total	4.2	0.5	0.144909	1600000	mg/L
OW-64	11/18/2019	Nitrogen, Nitrate	ND	0.5	0.030387	10000000	mg/L
OW-64	11/18/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
OW-64	11/18/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
OW-64	11/18/2019	Sulfate	72	2.5	0.3345	600000000	mg/L
OW-64	3/4/2020	TPH GRO	2.2	0.05	0.0068	10100	mg/L
OW-64	3/4/2020	TPH DRO	0.5	0.4	0.2	16700	mg/L
OW-64	3/4/2020	TPH ORO	ND	2.5	2.5	85800	mg/L
OW-64	3/4/2020	Bromide	1.4	0.5	0.25	NA	mg/L
OW-64	3/4/2020	Chloride	32	2.5	1.2	250000000	mg/L
OW-64	3/4/2020	Nitrogen, Nitrate	ND	0.5	0.11	10000000	mg/L
OW-64	3/4/2020	Nitrogen, Nitrite	ND	0.5	0.056	1000000	mg/L
OW-64	3/4/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-64	3/4/2020	Sulfate	16	2.5	1.2	600000000	mg/L
OW-64	3/4/2020	Fluoride, Total	4.8	0.5	0.11	1600000	mg/L
OW-64	9/22/2020	TPH GRO	1.3	0.05	0.008	10100	mg/L
OW-64	9/22/2020	TPH DRO	1.2	0.07	0.067	16700	mg/L
OW-64	9/22/2020	TPH ORO	6.7	0.6	0.6	85800	mg/L
OW-64	9/22/2020	Bromide	1.6	0.5	0.25	NA	mg/L
OW-64	9/22/2020	Chloride	52	2.5	1.2	250000000	mg/L
OW-64	9/22/2020	Fluoride, Total	4.7	0.5	0.22	1600000	mg/L
OW-64	9/22/2020	Nitrogen, Nitrate	0.17	0.5	0.1	10000000	mg/L
OW-64	9/22/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
OW-64	9/22/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
OW-64	9/22/2020	Sulfate	48	2.5	1.2	600000000	mg/L
OW-64	12/11/2020	Ammonia	ND	0.05	0.024	NA	mg/L
OW-64	12/11/2020	Bicarbonate	929	1	0.5	NA	mg/L
OW-64	12/11/2020	Phosphorus, Total	ND	0.1	0.032	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
OW-64	12/11/2020	Chloride	31.6	1	0.12	250000000	mg/L
OW-64	12/11/2020	Sulfate	22.3	1	0.37	600000000	mg/L
OW-64	12/11/2020	Fluoride, Total	5.37	1	0.3	1600000	mg/L
OW-64	12/11/2020	Nitrogen, Nitrate	ND	0.1	0.033	10000000	mg/L
OW-64	12/11/2020	TPH DRO	1770	145	116	16700	ug/L
OW-64	12/11/2020	C28-C40	ND	145	116	NA	ug/L
OW-64	12/11/2020	TPH (C6-C10)	591	100	47	NA	ug/L
PW-2	9/10/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-2	9/10/2014	Nitrogen, Nitrate	0.12	0.1	0.0068	10000000	mg/L
PW-2	9/18/2017	Bromide	ND	0.5	0.073	NA	mg/L
PW-2	9/18/2017	Chloride	6.8	2.5	1.2	250000000	mg/L
PW-2	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-2	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-2	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-2	9/18/2017	Nitrate & Nitrite	0.19	1	0.13	NA	mg/L
PW-2	9/18/2017	Sulfate	340	10	1.9	600000000	mg/L
PW-2	9/21/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
PW-2	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-2	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-2	12/28/2020	Nitrogen, Nitrate & Nitrite	0.096	0.05	0.018	10000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrate	0.096	0.05	0.018	10000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-2	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-2	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	8/24/2012	Bromide	ND	0.1	0.074	NA	mg/L
PW-3	8/24/2012	Chloride	29	10	1	250000000	mg/L
PW-3	8/24/2012	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-3	8/24/2012	Fluoride, Total	0.35	0.1	0.038	1600000	mg/L
PW-3	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
PW-3	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
PW-3	8/24/2012	Sulfate	740	10	2.4	600000000	mg/L
PW-3	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-3	9/10/2013	Nitrogen, Nitrate	0.15	0.1	0.016	10000000	mg/L
PW-3	9/10/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	9/10/2014	Nitrogen, Nitrate	ND	0.1	0.0068	10000000	mg/L
PW-3	8/23/2015	Bromide	0.1	0.1	0.077	NA	mg/L
PW-3	8/23/2015	Chloride	31	10	2.7	250000000	mg/L
PW-3	8/23/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	8/23/2015	Fluoride, Total	0.16	0.1	0.029	1600000	mg/L
PW-3	8/23/2015	Ortho-Phosphate	ND	2.5	0.9	NA	mg/L
PW-3	8/23/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
PW-3	8/23/2015	Sulfate	750	10	2.3	600000000	mg/L
PW-3	8/23/2015	TPH DRO	ND	1	0.91	16700	mg/L
PW-3	8/23/2015	TPH ORO	ND	5	5	85800	mg/L
PW-3	8/23/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
PW-3	8/31/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-3	8/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
PW-3	9/18/2017	Bromide	0.3	0.5	0.073	NA	mg/L
PW-3	9/18/2017	Chloride	34	2.5	1.2	250000000	mg/L
PW-3	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-3	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-3	9/18/2017	Nitrate & Nitrite	ND	1	0.13	NA	mg/L
PW-3	9/18/2017	Sulfate	770	10	1.9	600000000	mg/L
PW-3	9/19/2018	Bromide	ND	0.5	0.13	NA	mg/L
PW-3	9/19/2018	Chloride	33	2.5	0.91	250000000	mg/L
PW-3	9/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/19/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
PW-3	9/19/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
PW-3	9/19/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
PW-3	9/19/2018	Sulfate	720	10	4.1	600000000	mg/L
PW-3	11/20/2018	Bromide	ND	0.5	0.1	NA	mg/L
PW-3	11/20/2018	Chloride	34	2.5	2.5	250000000	mg/L
PW-3	11/20/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	11/20/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
PW-3	11/20/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
PW-3	11/20/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
PW-3	11/20/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
PW-3	11/20/2018	Sulfate	720	10	2.5	600000000	mg/L
PW-3	2/20/2019	Bromide	0.14	0.5	0.0675	NA	mg/L
PW-3	2/20/2019	Chloride	33	2.5	2.5	250000000	mg/L
PW-3	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-3	2/20/2019	Nitrogen, Nitrate	ND	0.5	0.143	10000000	mg/L
PW-3	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
PW-3	2/20/2019	Phosphorus, Ortho	ND	2.5	0.1305	NA	mg/L
PW-3	2/20/2019	Sulfate	730	10	1.28	600000000	mg/L
PW-3	2/20/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	5/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
PW-3	5/14/2019	Chloride	32	2.5	0.3125	250000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-3	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-3	5/14/2019	Nitrogen, Nitrate	0.13	0.5	0.027	10000000	mg/L
PW-3	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
PW-3	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
PW-3	5/14/2019	Sulfate	730	10	1.07	600000000	mg/L
PW-3	5/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	8/28/2019	Nitrogen, Nitrate	0.087	0.5	0.025	10000000	mg/L
PW-3	8/28/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-3	8/28/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-3	9/21/2020	Nitrogen, Nitrate	0.13	0.5	0.1	10000000	mg/L
PW-3	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-3	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-3	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
PW-3	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate	0.1	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate	0.185	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate & Nitrite	0.1	0.05	0.018	10000000	mg/L
PW-3	12/28/2020	Nitrogen, Nitrate & Nitrite	0.185	0.05	0.018	10000000	mg/L
PW-4	9/10/2013	Cyanide, Total	ND	0.01	0.005	1460	mg/L
PW-4	9/10/2013	Nitrogen, Nitrate	0.19	0.1	0.016	10000000	mg/L
PW-4	6/10/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-4	8/31/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
PW-4	8/31/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
PW-4	3/30/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	3/30/2017	Nitrogen, Nitrate	0.51	0.1	0.022	10000000	mg/L
PW-4	9/18/2017	Bromide	ND	0.5	0.073	NA	mg/L
PW-4	9/18/2017	Chloride	7.4	2.5	1.2	250000000	mg/L
PW-4	9/18/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	9/18/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-4	9/18/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-4	9/18/2017	Nitrate & Nitrite	0.18	1	0.13	NA	mg/L
PW-4	9/18/2017	Sulfate	410	10	1.9	600000000	mg/L
PW-4	3/1/2018	Bromide	ND	0.5	0.073	NA	mg/L
PW-4	3/1/2018	Chloride	7.5	2.5	1.2	250000000	mg/L
PW-4	3/1/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	3/1/2018	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
PW-4	3/1/2018	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
PW-4	3/1/2018	Nitrogen, Nitrite	ND	0.5	0.034	1000000	mg/L
PW-4	3/1/2018	Nitrogen, Nitrate	0.17	0.5	0.11	10000000	mg/L
PW-4	3/1/2018	Sulfate	400	10	1.9	600000000	mg/L
PW-4	9/19/2018	Bromide	ND	0.5	0.13	NA	mg/L
PW-4	9/19/2018	Chloride	7.9	2.5	0.91	250000000	mg/L
PW-4	9/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	9/19/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
PW-4	9/19/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
PW-4	9/19/2018	Nitrate & Nitrite	ND	1	0.27	NA	mg/L
PW-4	9/19/2018	Sulfate	400	10	4.1	600000000	mg/L
PW-4	11/19/2018	Bromide	ND	0.5	0.1	NA	mg/L
PW-4	11/19/2018	Chloride	7.6	2.5	2.5	250000000	mg/L
PW-4	11/19/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	11/19/2018	Fluoride, Total	ND	0.5	0.5	1600000	mg/L
PW-4	11/19/2018	Ortho-Phosphate	ND	2.5	2.5	NA	mg/L
PW-4	11/19/2018	Nitrogen, Nitrite	ND	0.5	0.025	1000000	mg/L
PW-4	11/19/2018	Nitrogen, Nitrate	ND	0.5	0.25	10000000	mg/L
PW-4	11/19/2018	Sulfate	390	10	2.5	600000000	mg/L
PW-4	2/20/2019	Bromide	0.078	0.5	0.0675	NA	mg/L
PW-4	2/20/2019	Chloride	8	2.5	2.5	250000000	mg/L
PW-4	2/20/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-4	2/20/2019	Nitrogen, Nitrate	0.15	0.5	0.143	10000000	mg/L
PW-4	2/20/2019	Nitrogen, Nitrite	ND	0.5	0.3475	1000000	mg/L
PW-4	2/20/2019	Phosphorus, Ortho	0.25	2.5	0.1305	NA	mg/L
PW-4	2/20/2019	Sulfate	410	10	1.28	600000000	mg/L
PW-4	2/20/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	5/14/2019	Bromide	ND	0.5	0.088765	NA	mg/L
PW-4	5/14/2019	Chloride	7.8	2.5	0.3125	250000000	mg/L
PW-4	5/14/2019	Fluoride, Total	ND	0.5	0.25	1600000	mg/L
PW-4	5/14/2019	Nitrogen, Nitrate	0.18	0.5	0.027	10000000	mg/L
PW-4	5/14/2019	Nitrogen, Nitrite	ND	0.5	0.02246	1000000	mg/L
PW-4	5/14/2019	Phosphorus, Ortho	ND	2.5	0.2	NA	mg/L
PW-4	5/14/2019	Sulfate	410	10	1.07	600000000	mg/L
PW-4	5/14/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	8/27/2019	Nitrogen, Nitrate	0.11	0.5	0.025	10000000	mg/L
PW-4	8/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-4	8/27/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
PW-4	8/27/2019	Nitrogen, Nitrate	0.13	0.5	0.025	10000000	mg/L
PW-4	8/27/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
PW-4	8/27/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
PW-4	9/21/2020	Nitrogen, Nitrate	0.16	0.5	0.1	10000000	mg/L
PW-4	9/21/2020	Nitrogen, Nitrite	ND	0.5	0.07	1000000	mg/L
PW-4	9/21/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
PW-4	12/28/2020	Nitrogen, Nitrate & Nitrite	0.112	0.05	0.018	10000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrate	0.112	0.05	0.018	10000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-4	12/28/2020	Nitrogen, Nitrite	ND	0.1	0.018	1000000	mg/L
PW-4	12/28/2020	Cyanide, Total	ND	0.005	0.0035	1460	mg/L
SMW-2	8/23/2012	Bromide	8.4	2	1.5	NA	mg/L
SMW-2	8/23/2012	Chloride	2400	100	10	250000000	mg/L
SMW-2	8/23/2012	Fluoride, Total	0.16	0.1	0.038	1600000	mg/L
SMW-2	8/23/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
SMW-2	8/23/2012	Nitrate & Nitrite	ND	2	1	NA	mg/L
SMW-2	8/23/2012	Sulfate	1600	25	5.9	600000000	mg/L
SMW-2	8/23/2012	TPH DRO	ND	1	0.57	16700	mg/L
SMW-2	8/23/2012	TPH ORO	ND	5	5	85800	mg/L
SMW-2	8/23/2012	TPH GRO	0.28	0.05	0.014	10100	mg/L
SMW-2	9/9/2013	Bromide	2.1	2	0.51	NA	mg/L
SMW-2	9/9/2013	Chloride	2500	100	30	250000000	mg/L
SMW-2	9/9/2013	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
SMW-2	9/9/2013	Fluoride, Total	ND	0.1	0.033	1600000	mg/L
SMW-2	9/9/2013	Ortho-Phosphate	ND	10	5	NA	mg/L
SMW-2	9/9/2013	Nitrate & Nitrite	ND	4	0.72	NA	mg/L
SMW-2	9/9/2013	Sulfate	1500	100	25	600000000	mg/L
SMW-2	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
SMW-2	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/9/2013	TPH GRO	0.15	0.05	0.02	10100	mg/L
SMW-2	9/11/2014	Bromide	2.9	2	0.44	NA	mg/L
SMW-2	9/11/2014	Chloride	2500	100	50	250000000	mg/L
SMW-2	9/11/2014	Cyanide, Total	0.0456	0.01	0.01	1460	mg/L
SMW-2	9/11/2014	Fluoride, Total	ND	2	0.36	1600000	mg/L
SMW-2	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
SMW-2	9/11/2014	Nitrate & Nitrite	ND	2	0.15	NA	mg/L
SMW-2	9/11/2014	Sulfate	1400	100	16	600000000	mg/L
SMW-2	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
SMW-2	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/11/2014	TPH GRO	0.23	0.05	0.019	10100	mg/L
SMW-2	8/17/2015	Bromide	5.1	2	1.5	NA	mg/L
SMW-2	8/17/2015	Chloride	3000	100	68	250000000	mg/L
SMW-2	8/17/2015	Cyanide, Total	0.045	0.01	0.01	1460	mg/L
SMW-2	8/17/2015	Fluoride, Total	ND	2	0.58	1600000	mg/L
SMW-2	8/17/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
SMW-2	8/17/2015	Nitrate & Nitrite	ND	4	1.2	NA	mg/L
SMW-2	8/17/2015	Sulfate	1600	50	11	600000000	mg/L
SMW-2	8/17/2015	TPH DRO	ND	1	0.91	16700	mg/L
SMW-2	8/17/2015	TPH ORO	ND	5	5	85800	mg/L
SMW-2	8/17/2015	TPH GRO	0.78	0.05	0.04	10100	mg/L
SMW-2	9/9/2016	Bromide	2.9	2	0.87	NA	mg/L
SMW-2	9/9/2016	Chloride	2500	100	10	250000000	mg/L
SMW-2	9/9/2016	Cyanide, Total	0.041	0.01	0.01	1460	mg/L
SMW-2	9/9/2016	Fluoride, Total	ND	0.1	0.05	1600000	mg/L
SMW-2	9/9/2016	Ortho-Phosphate	ND	10	1.5	NA	mg/L
SMW-2	9/9/2016	Nitrate & Nitrite	ND	2	0.92	NA	mg/L
SMW-2	9/9/2016	Sulfate	1300	100	28	600000000	mg/L
SMW-2	9/9/2016	TPH DRO	ND	1	0.69	16700	mg/L
SMW-2	9/9/2016	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/9/2016	TPH GRO	1	0.05	0.015	10100	mg/L
SMW-2	6/28/2017	Bromide	2.8	0.5	0.073	NA	mg/L
SMW-2	6/28/2017	Chloride	2600	250	120	250000000	mg/L
SMW-2	6/28/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	6/28/2017	Ortho-Phosphate	ND	10	5	NA	mg/L
SMW-2	6/28/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
SMW-2	6/28/2017	Sulfate	1500	25	4.8	600000000	mg/L
SMW-2	9/11/2017	Bromide	2.5	0.5	0.073	NA	mg/L
SMW-2	9/11/2017	Chloride	2900	100	50	250000000	mg/L
SMW-2	9/11/2017	Cyanide, Total	0.036	0.005	0.005	1460	mg/L
SMW-2	9/11/2017	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-2	9/11/2017	Nitrate & Nitrite	ND	2	0.26	NA	mg/L
SMW-2	9/11/2017	Sulfate	1400	100	19	600000000	mg/L
SMW-2	9/11/2017	TPH DRO	0.41	1	0.36	16700	mg/L
SMW-2	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/11/2017	TPH GRO	0.23	0.05	0.025	10100	mg/L
SMW-2	9/18/2018	Bromide	2.3	0.5	0.13	NA	mg/L
SMW-2	9/18/2018	Chloride	2900	250	91	250000000	mg/L
SMW-2	9/18/2018	Fluoride, Total	ND	0.5	0.16	1600000	mg/L
SMW-2	9/18/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
SMW-2	9/18/2018	Nitrogen, Nitrite	ND	2	0.96	1000000	mg/L
SMW-2	9/18/2018	Nitrogen, Nitrate	ND	0.5	0.033	10000000	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-2	9/18/2018	Sulfate	1500	250	63	600000000	mg/L
SMW-2	9/18/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-2	9/18/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-2	9/18/2018	TPH GRO	0.25	0.05	0.024	10100	mg/L
SMW-2	8/22/2019	TPH GRO	0.21	0.05	0.0211	10100	mg/L
SMW-2	8/22/2019	Bromide	2.8	0.5	0.088765	NA	mg/L
SMW-2	8/22/2019	Chloride	2900	250	250	250000000	mg/L
SMW-2	8/22/2019	Fluoride, Total	0.093	0.5	0.073	1600000	mg/L
SMW-2	8/22/2019	Nitrogen, Nitrate	ND	0.5	0.025	10000000	mg/L
SMW-2	8/22/2019	Nitrogen, Nitrite	3.3	2	0.108	1000000	mg/L
SMW-2	8/22/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
SMW-2	8/22/2019	Sulfate	1400	250	33.45	600000000	mg/L
SMW-2	8/22/2019	Cyanide, Total	0.0374	0.005	0.005	1460	mg/L
SMW-2	8/22/2019	TPH DRO	1.1	1	0.35	16700	mg/L
SMW-2	8/22/2019	Motor Oil	ND	5	5	85800	mg/L
SMW-2	9/19/2020	TPH GRO	0.57	0.05	0.008	10100	mg/L
SMW-2	9/19/2020	TPH DRO	0.1	0.07	0.067	16700	mg/L
SMW-2	9/19/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
SMW-2	9/19/2020	Chloride	2700	250	120	250000000	mg/L
SMW-2	9/19/2020	Sulfate	1200	250	120	600000000	mg/L
SMW-2	9/19/2020	Bromide	2.8	0.5	0.25	NA	mg/L
SMW-2	9/19/2020	Fluoride, Total	ND	0.5	0.22	1600000	mg/L
SMW-2	9/19/2020	Nitrogen, Nitrate	ND	0.5	0.1	10000000	mg/L
SMW-2	9/19/2020	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-2	9/19/2020	Nitrogen, Nitrite	ND	2	0.28	1000000	mg/L
SMW-2	9/19/2020	Cyanide, Total	0.0337	0.01	0.0039	1460	mg/L
SMW-4	8/24/2012	Bromide	0.35	0.1	0.074	NA	mg/L
SMW-4	8/24/2012	Chloride	58	10	1	250000000	mg/L
SMW-4	8/24/2012	Fluoride, Total	1	0.1	0.038	1600000	mg/L
SMW-4	8/24/2012	Ortho-Phosphate	ND	0.5	0.3	NA	mg/L
SMW-4	8/24/2012	Nitrate & Nitrite	ND	1	0.5	NA	mg/L
SMW-4	8/24/2012	Sulfate	150	10	2.4	600000000	mg/L
SMW-4	8/24/2012	TPH DRO	ND	1	0.57	16700	mg/L
SMW-4	8/24/2012	TPH ORO	ND	5	5	85800	mg/L
SMW-4	8/24/2012	TPH GRO	ND	0.05	0.014	10100	mg/L
SMW-4	9/9/2013	Bromide	0.16	0.1	0.026	NA	mg/L
SMW-4	9/9/2013	Chloride	59	10	3	250000000	mg/L
SMW-4	9/9/2013	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/9/2013	Fluoride, Total	0.93	0.1	0.033	1600000	mg/L
SMW-4	9/9/2013	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
SMW-4	9/9/2013	Nitrate & Nitrite	ND	1	0.18	NA	mg/L
SMW-4	9/9/2013	Sulfate	170	10	2.5	600000000	mg/L
SMW-4	9/9/2013	TPH DRO	ND	1	0.57	16700	mg/L
SMW-4	9/9/2013	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/9/2013	TPH GRO	ND	0.05	0.02	10100	mg/L
SMW-4	9/11/2014	Bromide	0.19	0.1	0.022	NA	mg/L
SMW-4	9/11/2014	Chloride	53	10	5	250000000	mg/L
SMW-4	9/11/2014	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/11/2014	Fluoride, Total	1.1	0.1	0.018	1600000	mg/L
SMW-4	9/11/2014	Ortho-Phosphate	ND	0.5	0.075	NA	mg/L
SMW-4	9/11/2014	Nitrate & Nitrite	ND	1	0.076	NA	mg/L
SMW-4	9/11/2014	Sulfate	150	10	1.6	600000000	mg/L
SMW-4	9/11/2014	TPH DRO	ND	1	0.83	16700	mg/L
SMW-4	9/11/2014	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/11/2014	TPH GRO	ND	0.05	0.019	10100	mg/L
SMW-4	8/14/2015	Bromide	0.17	0.1	0.077	NA	mg/L
SMW-4	8/14/2015	Chloride	55	10	2.7	250000000	mg/L
SMW-4	8/14/2015	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	8/14/2015	Fluoride, Total	1	0.1	0.029	1600000	mg/L
SMW-4	8/14/2015	Ortho-Phosphate	ND	0.5	0.18	NA	mg/L
SMW-4	8/14/2015	Nitrate & Nitrite	ND	1	0.22	NA	mg/L
SMW-4	8/14/2015	Sulfate	160	10	2.3	600000000	mg/L
SMW-4	8/14/2015	TPH DRO	ND	1	0.91	16700	mg/L
SMW-4	8/14/2015	TPH ORO	ND	5	5	85800	mg/L
SMW-4	8/14/2015	TPH GRO	ND	0.05	0.04	10100	mg/L
SMW-4	9/7/2016	Bromide	0.15	0.1	0.044	NA	mg/L
SMW-4	9/7/2016	Chloride	53	10	1	250000000	mg/L
SMW-4	9/7/2016	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	9/7/2016	Fluoride, Total	0.95	0.1	0.05	1600000	mg/L
SMW-4	9/7/2016	Ortho-Phosphate	ND	0.5	0.076	NA	mg/L
SMW-4	9/7/2016	Nitrate & Nitrite	ND	1	0.46	NA	mg/L
SMW-4	9/7/2016	Sulfate	150	10	2.8	600000000	mg/L
SMW-4	9/7/2016	TPH DRO	ND	1	0.69	16700	mg/L
SMW-4	9/7/2016	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/7/2016	TPH GRO	0.028	0.05	0.015	10100	mg/L
SMW-4	6/28/2017	Bromide	0.26	0.5	0.073	NA	mg/L
SMW-4	6/28/2017	Chloride	63	2.5	1.2	250000000	mg/L
SMW-4	6/28/2017	Fluoride, Total	1.1	0.5	0.22	1600000	mg/L
SMW-4	6/28/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
SMW-4	6/28/2017	Nitrate & Nitrite	0.21	1	0.13	NA	mg/L
SMW-4	6/28/2017	Sulfate	180	2.5	0.48	600000000	mg/L
SMW-4	9/11/2017	Bromide	0.15	0.5	0.073	NA	mg/L
SMW-4	9/11/2017	Chloride	56	2.5	1.2	250000000	mg/L
SMW-4	9/11/2017	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/11/2017	Fluoride, Total	0.96	0.5	0.22	1600000	mg/L
SMW-4	9/11/2017	Ortho-Phosphate	ND	2.5	1.2	NA	mg/L
SMW-4	9/11/2017	Nitrate & Nitrite	0.35	1	0.13	NA	mg/L
SMW-4	9/11/2017	Sulfate	160	2.5	0.48	600000000	mg/L
SMW-4	9/11/2017	TPH DRO	ND	1	0.36	16700	mg/L
SMW-4	9/11/2017	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/11/2017	TPH GRO	ND	0.05	0.025	10100	mg/L
SMW-4	9/12/2018	Bromide	0.21	0.5	0.13	NA	mg/L
SMW-4	9/12/2018	Chloride	59	2.5	0.91	250000000	mg/L
SMW-4	9/12/2018	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/12/2018	Fluoride, Total	0.97	0.5	0.16	1600000	mg/L
SMW-4	9/12/2018	Ortho-Phosphate	ND	2.5	0.46	NA	mg/L
SMW-4	9/12/2018	Nitrogen, Nitrite	ND	0.5	0.24	1000000	mg/L
SMW-4	9/12/2018	Nitrogen, Nitrate	0.12	0.5	0.033	10000000	mg/L
SMW-4	9/12/2018	Sulfate	160	2.5	1	600000000	mg/L
SMW-4	9/12/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-4	9/12/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-4	9/12/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
SMW-4	12/6/2018	Cyanide, Total	ND	0.01	0.01	1460	mg/L
SMW-4	12/6/2018	TPH DRO	ND	1	0.63	16700	mg/L
SMW-4	12/6/2018	TPH ORO	ND	5	5	85800	mg/L
SMW-4	12/6/2018	TPH GRO	ND	0.05	0.024	10100	mg/L
SMW-4	8/13/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
SMW-4	8/13/2019	TPH DRO	ND	1	0.35	16700	mg/L
SMW-4	8/13/2019	Motor Oil	ND	5	5	85800	mg/L
SMW-4	8/13/2019	Bromide	ND	0.5	0.088765	NA	mg/L
SMW-4	8/13/2019	Chloride	59	2.5	2.5	250000000	mg/L
SMW-4	8/13/2019	Fluoride, Total	1	0.5	0.073	1600000	mg/L
SMW-4	8/13/2019	Nitrogen, Nitrate	0.11	0.5	0.025	10000000	mg/L
SMW-4	8/13/2019	Nitrogen, Nitrite	ND	0.5	0.027	1000000	mg/L
SMW-4	8/13/2019	Phosphorus, Ortho	ND	2.5	1.25	NA	mg/L
SMW-4	8/13/2019	Sulfate	170	2.5	0.3345	600000000	mg/L
SMW-4	8/13/2019	Cyanide, Total	ND	0.005	0.005	1460	mg/L
SMW-4	9/20/2020	TPH GRO	ND	0.05	0.008	10100	mg/L
SMW-4	9/20/2020	TPH DRO	ND	0.07	0.067	16700	mg/L
SMW-4	9/20/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
SMW-4	9/20/2020	Bromide	0.12	0.1	0.05	NA	mg/L
SMW-4	9/20/2020	Fluoride, Total	0.77	0.1	0.043	1600000	mg/L
SMW-4	9/20/2020	Nitrogen, Nitrate	0.034	0.1	0.02	10000000	mg/L
SMW-4	9/20/2020	Nitrogen, Nitrite	ND	0.1	0.014	1000000	mg/L
SMW-4	9/20/2020	Ortho-Phosphate	ND	0.5	0.25	NA	mg/L
SMW-4	9/20/2020	Chloride	50	10	5	250000000	mg/L
SMW-4	9/20/2020	Sulfate	140	10	5	600000000	mg/L
SMW-4	9/20/2020	Cyanide, Total	ND	0.01	0.0039	1460	mg/L
STP-1 to EP-2	9/5/2013	Biochemical Oxygen Demand	670	2	2	NA	mg/L
STP-1 to EP-2	9/5/2013	TPH DRO	3.3	1	0.57	16700	mg/L
STP-1 to EP-2	9/5/2013	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/5/2013	TPH GRO	ND	0.5	0.2	10100	mg/L
STP-1 to EP-2	3/5/2014	Biochemical Oxygen Demand	560	2	2	NA	mg/L
STP-1 to EP-2	3/5/2014	Chemical Oxygen Demand	1500	100	100	NA	mg/L
STP-1 to EP-2	9/10/2014	Biochemical Oxygen Demand	270	2	2	NA	mg/L
STP-1 to EP-2	9/10/2014	Bromide	2.2	0.5	0.11	NA	mg/L
STP-1 to EP-2	9/10/2014	Chloride	310	10	5	250000000	mg/L
STP-1 to EP-2	9/10/2014	Chemical Oxygen Demand	1500	100	100	NA	mg/L
STP-1 to EP-2	9/10/2014	Fluoride, Total	54	2	0.36	1600000	mg/L
STP-1 to EP-2	9/10/2014	Ortho-Phosphate	ND	2.5	0.38	NA	mg/L
STP-1 to EP-2	9/10/2014	Nitrogen, Nitrite	ND	0.5	0.042	1000000	mg/L
STP-1 to EP-2	9/10/2014	Nitrogen, Nitrate	ND	0.5	0.034	10000000	mg/L
STP-1 to EP-2	9/10/2014	Sulfate	1200	25	4.1	600000000	mg/L
STP-1 to EP-2	9/10/2014	TPH DRO	2.4	1	0.83	16700	mg/L
STP-1 to EP-2	9/10/2014	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/10/2014	TPH GRO	ND	0.5	0.19	10100	mg/L
STP-1 to EP-2	11/12/2014	Biochemical Oxygen Demand	630	2	2	NA	mg/L
STP-1 to EP-2	11/12/2014	Chemical Oxygen Demand	1300	50	50	NA	mg/L
STP-1 to EP-2	8/24/2015	Biochemical Oxygen Demand	380	2	2	NA	mg/L
STP-1 to EP-2	8/24/2015	Chemical Oxygen Demand	81	5	5	NA	mg/L
STP-1 to EP-2	8/24/2015	TPH DRO	2.3	1	0.91	16700	mg/L
STP-1 to EP-2	8/24/2015	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/24/2015	TPH GRO	0.13	0.1	0.08	10100	mg/L
STP-1 to EP-2	6/8/2016	Biochemical Oxygen Demand	160	2	2	NA	mg/L
STP-1 to EP-2	6/8/2016	Chemical Oxygen Demand	410	10	10	NA	mg/L
STP-1 to EP-2	6/8/2016	TPH DRO	2	1	0.69	16700	mg/L
STP-1 to EP-2	6/8/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	6/8/2016	TPH GRO	ND	0.25	0.13	10100	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	8/30/2016	Biochemical Oxygen Demand	310	2	2	NA	mg/L
STP-1 to EP-2	8/30/2016	Chemical Oxygen Demand	660	100	30	NA	mg/L
STP-1 to EP-2	8/30/2016	TPH DRO	5.1	1	0.69	16700	mg/L
STP-1 to EP-2	8/30/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/30/2016	TPH GRO	0.22	0.5	0.15	10100	mg/L
STP-1 to EP-2	11/17/2016	Biochemical Oxygen Demand	1000	2	2	NA	mg/L
STP-1 to EP-2	11/17/2016	Chemical Oxygen Demand	1600	500	500	NA	mg/L
STP-1 to EP-2	11/17/2016	TPH DRO	0.95	1	0.69	16700	mg/L
STP-1 to EP-2	11/17/2016	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	11/17/2016	TPH GRO	ND	0.5	0.25	10100	mg/L
STP-1 to EP-2	3/30/2017	Biochemical Oxygen Demand	470	2	2	NA	mg/L
STP-1 to EP-2	3/30/2017	Chemical Oxygen Demand	1330	20	20	NA	mg/L
STP-1 to EP-2	3/30/2017	TPH DRO	11	1	0.36	16700	mg/L
STP-1 to EP-2	3/30/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	3/30/2017	TPH GRO	1.2	0.5	0.097	10100	mg/L
STP-1 to EP-2	6/2/2017	Biochemical Oxygen Demand	1200	2	2	NA	mg/L
STP-1 to EP-2	6/2/2017	Chemical Oxygen Demand	1400	20	20	NA	mg/L
STP-1 to EP-2	6/2/2017	TPH DRO	1.5	1	0.36	16700	mg/L
STP-1 to EP-2	6/2/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	6/2/2017	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	9/7/2017	Biochemical Oxygen Demand	640	2	2	NA	mg/L
STP-1 to EP-2	9/7/2017	Chemical Oxygen Demand	1100	20	20	NA	mg/L
STP-1 to EP-2	9/7/2017	TPH DRO	30	1	0.36	16700	mg/L
STP-1 to EP-2	9/7/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	9/7/2017	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	12/12/2017	Biochemical Oxygen Demand	1400	2	2	NA	mg/L
STP-1 to EP-2	12/12/2017	Chemical Oxygen Demand	2100	50	15	NA	mg/L
STP-1 to EP-2	12/12/2017	TPH DRO	3.8	1	0.36	16700	mg/L
STP-1 to EP-2	12/12/2017	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	12/12/2017	TPH GRO	0.24	0.5	0.097	10100	mg/L
STP-1 to EP-2	2/12/2018	Biochemical Oxygen Demand	780	2	2	NA	mg/L
STP-1 to EP-2	2/12/2018	Chemical Oxygen Demand	1400	20	20	NA	mg/L
STP-1 to EP-2	2/12/2018	TPH DRO	61	1	0.63	16700	mg/L
STP-1 to EP-2	2/12/2018	TPH ORO	32	5	5	85800	mg/L
STP-1 to EP-2	2/12/2018	TPH GRO	1.1	0.5	0.097	10100	mg/L
STP-1 to EP-2	5/6/2018	Biochemical Oxygen Demand	770	2	2	NA	mg/L
STP-1 to EP-2	5/6/2018	Chemical Oxygen Demand	1300	50	50	NA	mg/L
STP-1 to EP-2	5/6/2018	TPH DRO	10	1	0.63	16700	mg/L
STP-1 to EP-2	5/6/2018	TPH ORO	8.7	5	5	85800	mg/L
STP-1 to EP-2	5/6/2018	TPH GRO	0.51	0.25	0.048	10100	mg/L
STP-1 to EP-2	8/31/2018	Biochemical Oxygen Demand	1500	2	2	NA	mg/L
STP-1 to EP-2	8/31/2018	Chemical Oxygen Demand	1900	250	250	NA	mg/L
STP-1 to EP-2	8/31/2018	TPH DRO	2.7	1	0.63	16700	mg/L
STP-1 to EP-2	8/31/2018	TPH ORO	ND	5	5	85800	mg/L
STP-1 to EP-2	8/31/2018	TPH GRO	0.29	0.5	0.097	10100	mg/L
STP-1 to EP-2	11/8/2018	Biochemical Oxygen Demand	--	2	2	NA	mg/L
STP-1 to EP-2	11/8/2018	Chemical Oxygen Demand	8080	100	100	NA	mg/L
STP-1 to EP-2	11/8/2018	TPH DRO	14	1	0.63	16700	mg/L
STP-1 to EP-2	11/8/2018	TPH ORO	5.4	5	5	85800	mg/L
STP-1 to EP-2	11/8/2018	TPH GRO	ND	0.25	0.12	10100	mg/L
STP-1 to EP-2	2/7/2019	Biochemical Oxygen Demand	150	2	2	NA	mg/L
STP-1 to EP-2	2/7/2019	TPH DRO	1.2	1	0.63	16700	mg/L
STP-1 to EP-2	2/7/2019	TPH GRO	0.072	0.05	0.0211	10100	mg/L
STP-1 to EP-2	2/7/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	2/7/2019	Chemical Oxygen Demand	495	10	10	NA	mg/L
STP-1 to EP-2	5/29/2019	TPH GRO	ND	1	0.422	10100	mg/L
STP-1 to EP-2	5/29/2019	TPH DRO	2.1	1	0.35	16700	mg/L
STP-1 to EP-2	5/29/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	5/29/2019	Biochemical Oxygen Demand	1100	2	2	NA	mg/L
STP-1 to EP-2	5/29/2019	Solids, Total Suspended	36	4	4	NA	mg/L
STP-1 to EP-2	5/29/2019	Chemical Oxygen Demand	1590	50	50	NA	mg/L
STP-1 to EP-2	10/9/2019	TPH GRO	ND	0.05	0.0211	10100	mg/L
STP-1 to EP-2	10/9/2019	Biochemical Oxygen Demand	120	2	2	NA	mg/L
STP-1 to EP-2	10/9/2019	Solids, Total Suspended	41	4	4	NA	mg/L
STP-1 to EP-2	10/9/2019	TPH DRO	ND	1	0.35	16700	mg/L
STP-1 to EP-2	10/9/2019	Motor Oil	ND	5	5	85800	mg/L
STP-1 to EP-2	10/9/2019	Chemical Oxygen Demand	299	10	10	NA	mg/L
STP-1 to EP-2	11/21/2019	TPH GRO	ND	0.5	0.211	10100	mg/L
STP-1 to EP-2	11/21/2019	TPH DRO	ND	0.4	0.132	16700	mg/L
STP-1 to EP-2	11/21/2019	Motor Oil	ND	2.5	2.5	85800	mg/L
STP-1 to EP-2	11/21/2019	Solids, Total Suspended	69	4	4	NA	mg/L
STP-1 to EP-2	11/21/2019	Biochemical Oxygen Demand	1600	2	2	NA	mg/L
STP-1 to EP-2	11/21/2019	Chemical Oxygen Demand	2420	625	625	NA	mg/L
STP-1 to EP-2	9/16/2020	Biochemical Oxygen Demand	357	2	2	NA	mg/L
STP-1 to EP-2	9/16/2020	TPH GRO	ND	0.5	0.08	10100	mg/L
STP-1 to EP-2	9/16/2020	TPH DRO	0.63	0.07	0.067	16700	mg/L
STP-1 to EP-2	9/16/2020	TPH ORO	ND	0.6	0.6	85800	mg/L
STP-1 to EP-2	9/16/2020	Solids, Total Suspended	230	8	8	NA	mg/L
STP-1 to EP-2	9/16/2020	Chemical Oxygen Demand	882	125	32.5	NA	mg/L

APPENDIX C-1d. GENERAL CHEMISTRY DATA (2012 TO 2020)
GALLUP REFINERY, GALLUP, NEW MEXICO

Location	Date Sampled	Analyte	Lab Result	Lab RL	Lab MDL	Screening Level*	Lab Units
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	220	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	203	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Biochemical Oxygen Demand	40.2	2	2	NA	mg/L
STP-1 to EP-2	12/21/2020	Biochemical Oxygen Demand	39	2	2	NA	mg/L
STP-1 to EP-2	12/21/2020	Chemical Oxygen Demand	697	80	51.2	NA	mg/L
STP-1 to EP-2	12/21/2020	Chemical Oxygen Demand	679	80	51.2	NA	mg/L
STP-1 to EP-2	12/21/2020	TPH DRO	1970	149	119	16700	ug/L
STP-1 to EP-2	12/21/2020	C28-C40	1100	149	119	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH DRO	3390	143	114	16700	ug/L
STP-1 to EP-2	12/21/2020	C28-C40	1900	143	114	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH (C6-C10)	141	100	47	NA	ug/L
STP-1 to EP-2	12/21/2020	TPH (C6-C10)	154	100	47	NA	ug/L
STP-1 to EP-2	9/16/2020	Solids, Total Suspended	230	8	8	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	220	16.7	0	NA	mg/L
STP-1 to EP-2	12/21/2020	Solids, Total Suspended	203	16.7	0	NA	mg/L
STP-1 to EP-2	5/29/2019	Solids, Total Suspended	36	4	4	NA	mg/L
STP-1 to EP-2	10/9/2019	Solids, Total Suspended	41	4	4	NA	mg/L
STP-1 to EP-2	11/21/2019	Solids, Total Suspended	69	4	4	NA	mg/L

*The screening levels shown are the same as selected in Table 3-2 of the 2021 Annual Groundwater Report (NMED GW Cleanup Levels - New Mexico Environment Department Groundwater Cleanup Levels, New Mexico Administrative Code 20.6.2.2101 and 3103; 40 CFR 141.62 - Code of Federal Regulations, Chapter 40, Section 141.62 Maximum Contaminant Levels; NMED Tap Water - New Mexico Environment Department, Risk Assessment Guidance, Table A-1, Tap Water, November 2021; USEPA RSL Tap Water HQ 1.0 - United States Environmental Protection Agency Regional Screening Levels, Hazardous Quotient 1.0, November 2021; NMED TPH Levels – New Mexico Environment Department, Total Petroleum Hydrocarbons Screening Levels, Risk Assessment Guidance for Investigations and Remediation, Table 6-4, November 2021)

Bolded detections and italicized non-detections exceeded their applicable screening level

CFU/100ml - colony forming units (number of bacteria) per 100 milliliters

MDL - Method Detection Limit

mg/L - milligrams per liter

MPN/100mL - most probable number per 100 milliliters

ND - Not detected

RL - Reporting Limit

ug/L - micrograms per liter

APPENDIX C-2a. VOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
VOLATILE ORGANIC COMPOUNDS								
1,1,1,2-Tetrachloroethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,1,1-Trichloroethane	1611	138	0.22	130	1473	8.57%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
1,1,2,2-Tetrachloroethane	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
1,1,2-Trichloroethane	1611	99	0.2	3.1	1512	6.15%	Remove	Not Skinner List or MNA Compound
1,1-Dichloroethane (1,1-DCA)*	1611	450	0.23	610	1161	27.93%	**Retain**	Skinner List; All Wells; MNA Compound
1,1-Dichloroethene (1,1-DCE)*	1611	346	0.19	240	1265	21.48%	**Retain**	Site Wide COC; All Wells; MNA Compound
1,1-Dichloropropene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,2,3-Trichlorobenzene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,2,3-Trichloropropane	1540	0	0	0	1540	0.00%	Remove	Not Skinner List or MNA Compound
1,2,4-Trichlorobenzene	676	0	0	0	676	0.00%	Remove	Not Skinner List or MNA Compound
1,2,4-Trimethylbenzene	1663	640	0.12	5800	1023	38.48%	**Retain**	Detection >10%
1,2-Dibromo-3-Chloropropane	1540	0	0	0	1540	0.00%	Remove	Not Skinner List or MNA Compound
1,2-Dibromoethane (EDB)	1641	3	0.167	1.5	1638	0.18%	**Retain**	Skinner List; All Wells
1,2-Dichlorobenzene	676	2	0.37	0.52	674	0.30%	Remove	Skinner List but <10% detection
1,2-Dichloroethane (1,2-DCA)*	1611	307	0.28	163	1304	19.06%	**Retain**	Skinner List; All Wells; MNA Compound
1,2-Dichloropropane	1611	6	0.14	0.41	1605	0.37%	Remove	Not Skinner List or MNA Compound
1,3,5-Trimethylbenzene	1663	404	0.15	1900	1259	24.29%	**Retain**	Detection >10%
1,3-Dichlorobenzene	676	0	0	0	676	0.00%	Remove	Skinner List but <10% detection
1,3-Dichloropropane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
1,4-Dichlorobenzene	676	9	3.1	5.9	667	1.33%	Remove	Skinner List but <10% detection
1,4-Dioxane	20	3	2.26	19.4	17	15.00%	Remove	Skinner List as VOC, however, lab recommends 8270 for best detection limits
1-Methylnaphthalene**	676	186	0.26	270	490	27.51%	Remove	Skinner List as SVOC
2,2-Dichloropropane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
2-Butanone / Methyl Ethyl Ketone (MEK)	1611	129	0.79	2800	1482	8.01%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
2-Chloroethyl vinyl ether	1	0	0	0	1	0.00%	Remove	Not Skinner List or MNA Compound
2-Chlorotoluene	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
2-Hexanone	1611	7	2.2	110	1604	0.43%	Remove	Not Skinner List or MNA Compound
2-Methylnaphthalene**	676	136	0.19	450	540	20.12%	Remove	Skinner List as SVOC
4-Chlorotoluene	1610	1	0.5	0.5	1609	0.06%	Remove	Not Skinner List or MNA Compound
4-Methyl-2-Pentanone	1611	43	0.47	120	1568	2.67%	Remove	Not Skinner List or MNA Compound
Acetone	1611	457	0.86	12000	1154	28.37%	**Retain**	Detection >10%
Benzene*	1700	870	0.096	38000	830	51.18%	**Retain**	Skinner List; All Wells; MNA Compound
Bromobenzene	1545	0	0	0	1545	0.00%	Remove	Not Skinner List or MNA Compound
Bromodichloromethane	1611	2	0.23	0.47	1609	0.12%	Remove	Not Skinner List or MNA Compound
Bromoform	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Bromomethane	1611	9	1.1	16	1602	0.56%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
Carbon Disulfide	1611	68	0.41	1300	1543	4.22%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)

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APPENDIX C-2a. VOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
VOLATILE ORGANIC COMPOUNDS								
Carbon tetrachloride	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Chlorobenzene	1611	14	0.35	2	1597	0.87%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
Chloroethane	1611	23	0.46	85	1588	1.43%	Remove	Not Skinner List or MNA Compound
Chloroform	1611	49	0.1	9.7	1562	3.04%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
Chloromethane	1611	31	0.25	55	1580	1.92%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
cis-1,2-Dichloroethene (cis-1,2-DCE)*	1610	261	0.14	100	1349	16.21%	**Retain**	Site Wide COC; All Wells; MNA Compound
cis-1,3-Dichloropropene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Dibromochloromethane	1611	1	0.31	0.31	1610	0.06%	Remove	Not Skinner List or MNA Compound
Dibromomethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
Dichlorodifluoromethane	1610	0	0	0	1610	0.00%	Remove	Not Skinner List or MNA Compound
Ethylbenzene*	1700	754	0.098	3800	946	44.35%	**Retain**	Skinner List; All Wells; MNA Compound
Hexachlorobutadiene	676	0	0	0	676	0.00%	Remove	Not Skinner List or MNA Compound
Isopropylbenzene	1610	589	0.06	200	1021	36.58%	**Retain**	Detection >10%
Methylene Chloride	1611	29	0.11	18	1582	1.80%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
MTBE*	1698	1135	0.28	12000	563	66.84%	**Retain**	Skinner List; All Wells; MNA Compound
Naphthalene	676	197	0.1	660	479	29.14%	Remove	Skinner List as SVOC
n-Butylbenzene	1610	293	0.14	140	1317	18.20%	**Retain**	Detection >10%
n-Propylbenzene	1610	590	0.13	380	1020	36.65%	**Retain**	Detection >10%
Pentafluorobenzene	94	65	10	1000	29	69.15%	**Retain**	Detection >10%
p-Isopropyltoluene	1610	227	0.14	38	1383	14.10%	**Retain**	Detection >10%
sec-Butylbenzene	1610	388	0.12	58	1222	24.10%	**Retain**	Detection >10%
Styrene	1610	20	0.17	4.1	1590	1.24%	**Retain**	Skinner List - detected at least once in the last 5 years (2017-2021)
tert-Butylbenzene	1610	57	0.12	2.8	1553	3.54%	Remove	Not Skinner List or MNA Compound
Tetrachloroethene (PCE)*	1611	52	0.14	7.8	1559	3.23%	**Retain**	Skinner List; All Wells; MNA Compound
Toluene*	1700	589	0.067	34000	1111	34.65%	**Retain**	Skinner List; All Wells; MNA Compound
trans-1,2-Dichloroethene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
trans-1,3-Dichloropropene	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Trichloroethene (TCE)*	1611	171	0.19	300	1440	10.61%	**Retain**	Skinner List; All Wells; MNA Compound
Trichlorofluoromethane	1611	0	0	0	1611	0.00%	Remove	Not Skinner List or MNA Compound
Vinyl Chloride*	1611	99	0.29	62	1512	6.15%	**Retain**	Site Wide COC; All Wells; MNA Compound
Xylenes, Total*	1700	594	0.47	25000	1106	34.94%	**Retain**	Skinner List; All Wells; MNA Compound

COC - Constituent of concern
mg/L - milligrams per liter
MNA - Monitored natural attenuation
MTBE - Methyl tert-butyl ether
ND - No data
VOC - Volatile organic compound

Notes:
Bolded analytes are being retained on the analyte list
*Included on both VOC list and MNA list
**Compound included as optional in Skinner List
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

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APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
1,2,4-Trichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
1,2-Dichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Skinner List but <10% detection
1,2-Diphenylhydrazine	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound
1,3-Dichlorobenzene	1352	0	0	0	1352	0.00%	Remove	Skinner List but <10% detection
1,4-Dichlorobenzene	1352	8	3.1	7	1344	0.59%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
1,4-Dichlorobenzene-d4	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
1,4-Dioxane	164	99	0	210	65	60.37%	**Retain**	Skinner List; All Wells
1-Methylnaphthalene**	1326	424	0.11	7800	902	31.98%	**Retain**	Skinner List; All Wells
2,4-Dimethylphenol	1352	226	1.1	610	1126	16.72%	**Retain**	Skinner List; All Wells
2,3,4,6-Tetrachlorophenol	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
2,3,5,6-Tetrachlorophenol	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
2,4,5-Trichlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,4,6-Trichlorophenol	1352	1	19	19	1351	0.07%	**Retain**	Exceeded SSL at least once in last 5 years (2017-2021)
2,4-Dichlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,4-Dinitrophenol	1352	3	6.8	7.9	1349	0.22%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
2,4-Dinitrotoluene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2,6-Dinitrotoluene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Chloronaphthalene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Chlorophenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Methylnaphthalene**	1326	306	0.86	5600	1020	23.08%	**Retain**	Skinner List; All Wells
2-Methylphenol	1352	161	1.1	2200	1191	11.91%	**Retain**	Skinner List; All Wells
2-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
2-Nitrophenol	1352	1	5.6	5.6	1351	0.07%	Remove	Not Skinner List or MNA Compound
3,3-Dichlorobenzidine	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
3,4-Methylphenol	1303	198	0.28	4300	1105	15.20%	**Retain**	Skinner List; All Wells
3-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4,6-Dinitro-2-methylphenol	1352	1	5	5	1351	0.07%	Remove	Not Skinner List or MNA Compound
4-Bromophenyl-phenylether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Chloro-3-Methylphenol	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Chloroaniline	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
4-Chlorophenyl-phenylether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Nitroaniline	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
4-Nitrophenol	1352	1	6.4	6.4	1351	0.07%	Remove	Skinner List but <10% detection
7,12-Dimethylbenz(a)anthracene	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound
Acenaphthene	1375	85	0.14	80	1290	6.18%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Acenaphthene-d10	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Acenaphthylene	1375	5	0.39	3.6	1370	0.36%	Remove	Not Skinner List or MNA Compound
Anthracene	1375	4	0.13	1	1371	0.29%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Aniline	1352	62	3.7	160	1290	4.59%	Remove	Not Skinner List or MNA Compound
Anthracene	1375	4	0.13	1	1371	0.29%	Remove	Not Skinner List or MNA Compound
Azobenzene	1187	0	0	0	1187	0.00%	Remove	Not Skinner List or MNA Compound
Benzenethiol**	ND	ND	ND	ND	ND	ND	Remove	On optional Skinner List; not suspected as being at site and not previously analyzed

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APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
Benzidine	54	0	0	0	54	0.00%	Remove	Not Skinner List or MNA Compound
Benzo(a)anthracene**	1375	7	1.5	54	1368	0.51%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Benzo(a)pyrene**	1375	1	4	4	1374	0.07%	Remove	Skinner List but <10% detection
Benzo(b)fluoranthene**	1375	2	3.5	7.8	1373	0.15%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Benzo(g,h,i)perylene	1375	1	3.8	3.8	1374	0.07%	Remove	Not Skinner List or MNA Compound
Benzo(k)fluoranthene**	1375	0	0	0	1375	0.00%	Remove	Skinner List but <10% detection
Benzoic Acid	1347	350	0.21	190	997	25.98%	**Retain**	Detection >10%
Benzyl Alcohol	1352	16	0.49	26	1336	1.18%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroethoxy)methane	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroethyl)ether	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-chloroisopropyl)ether	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Bis(2-ethylhexyl)phthalate	1352	333	0.23	4800	1019	24.63%	**Retain**	Skinner List; All Wells
Butylbenzylphthalate	1352	23	2.6	27	1329	1.70%	Remove	Not Skinner List or MNA Compound
Carbazole	1352	127	0.22	28	1225	9.39%	Remove	Not Skinner List or MNA Compound
Chrysene**	1375	5	1.2	53	1370	0.36%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Chrysene-d12	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Dibenz(a,h)acridine**	5	0	0	0	5	0.00%	Remove	Skinner List but <10% detection
Dibenzo(a,h)anthracene**	1375	0	0	0	1375	0.00%	Remove	Skinner List but <10% detection
Dibenzofuran	1352	22	0.12	8.3	1330	1.63%	Remove	Not Skinner List or MNA Compound
Diethylphthalate	1352	9	0.69	6.8	1343	0.67%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Dimethylphthalate	1352	50	2.9	61	1302	3.70%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Di-n-butylphthalate	1352	8	2.5	3.6	1344	0.59%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Di-n-octylphthalate	1352	154	3.3	81	1198	11.39%	**Retain**	Detection >10%
Fluoranthene	1375	5	0.27	60	1370	0.36%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Fluorene	1375	124	0.25	380	1251	9.02%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Hexachlorobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Hexachlorobutadiene	1303	0	0	0	1303	0.00%	Remove	Not Skinner List or MNA Compound
Hexachlorocyclopentadiene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Hexachloroethane	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Indene**	ND	ND	ND	ND	ND	ND	Remove	On optional Skinner List; not suspected as being at site and not previously analyzed
Indeno(1,2,3-cd)pyrene**	1375	4	0.11	43	1371	0.29%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Isophorone	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
MTBE*	1698	1135	0.28	12000	563	66.84%	Remove	Skinner List as SVOC, however, lab recommends 8260 for best detection limits
Naphthalene	1375	427	0.21	2300	948	31.05%	**Retain**	Skinner List; All Wells
Naphthalene-d8	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Nitrobenzene	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodimethylamine	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodi-n-propylamine	1241	0	0	0	1241	0.00%	Remove	Not Skinner List or MNA Compound
N-Nitrosodiphenylamine	1352	0	0	0	1352	0.00%	Remove	Not Skinner List or MNA Compound
Pentachlorophenol	1352	4	3.9	25	1348	0.30%	Remove	Not Skinner List or MNA Compound
Perylene-D12	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Phenanthrene	1375	101	0.19	720	1274	7.35%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)

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APPENDIX C-2b. SEMIVOLATILE ORGANIC COMPOUND EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
SEMIVOLATILE ORGANIC COMPOUNDS								
Phenanthrene-d10	76	0	0	0	76	0.00%	Remove	Not Skinner List or MNA Compound
Phenol	1352	388	0.62	7400	964	28.70%	**Retain**	Skinner List; All Wells
Pyrene	1375	20	0.15	190	1355	1.45%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Pyridine	1352	2	0.5	16	1350	0.15%	**Retain**	Skinner List - detected at least once in last 5 years (2017-2021)
Quinoline	5	0	0	0	5	0.00%	Remove	Skinner List but <10% detection
Thiophenol	5	0	0	0	5	0.00%	Remove	Not Skinner List or MNA Compound

mg/L - milligrams per liter
MNA - Monitored natural attenuation
MTBE - Methyl tert-butyl ether
ND - No data
SVOC - Semi-volatile organic compound
VOC - Volatile Organic Compound

Notes:
Bolded analytes are being retained on the analyte list
*Included on both VOC list and MNA list
**Compound included as optional in Skinner List
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

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APPENDIX C-2c. TOTAL AND DISSOLVED METALS EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
METALS								
Aluminum, Dissolved	422	188	0.0027	21	234	44.55%	Remove	Not Skinner List or MNA Compound
Aluminum, Total	432	393	0.0026	99	39	90.97%	Remove	Not Skinner List or MNA Compound
Antimony, Dissolved	460	58	0.00022	20.2	402	12.61%	**Retain**	Skinner List; All Wells, Even Years
Antimony, Total	411	37	0.00016	0.009	374	9.00%	**Retain**	Skinner List; All Wells
Antimony, Total Recoverable	65	1	2.31	2.31	64	1.54%	Remove	Not Skinner List or MNA Compound
Arsenic, Dissolved	1033	915	0.00025	580	118	88.58%	**Retain**	Skinner List; All Wells, Even Years
Arsenic, Total	1552	1221	0.00032	0.96	331	78.67%	**Retain**	Skinner List; All Wells
Arsenic, Total Recoverable	65	46	1.48	552	19	70.77%	Remove	Not Skinner List or MNA Compound
Barium, Dissolved	1033	1026	0.0013	55	7	99.32%	**Retain**	Skinner List; All Wells, Even Years
Barium, Total	1618	1612	0.0073	67	6	99.63%	**Retain**	Skinner List; All Wells
Beryllium, Dissolved	459	107	0.00029	0.0036	352	23.31%	**Retain**	Skinner List; All Wells, Even Years
Beryllium, Total	477	183	0.00023	0.008	294	38.36%	**Retain**	Skinner List; All Wells
Boron, Dissolved	422	417	0.0091	18.8	5	98.82%	Remove	Not Skinner List or MNA Compound
Boron, Total	431	425	0.0077	18.6	6	98.61%	Remove	Not Skinner List or MNA Compound
Cadmium, Dissolved	1033	0	0	0	1033	0.00%	**Retain**	Skinner List; All Wells, Even Years
Cadmium, Total	1618	3	0.00064	0.0017	1615	0.19%	**Retain**	Skinner List; All Wells
Calcium, Dissolved	863	863	0.45	4700	0	100.00%	Remove	Not Skinner List or MNA Compound
Calcium, Total	461	460	1.4	3100	1	99.78%	Remove	Not Skinner List or MNA Compound
Chromium, Dissolved	1033	134	0.0013	2.3	899	12.97%	**Retain**	Skinner List; All Wells, Even Years
Chromium, Total	1618	536	0.0011	2.36	1082	33.13%	**Retain**	Skinner List; All Wells
Cobalt, Dissolved	426	27	0.0019	0.091	399	6.34%	**Retain**	Skinner List; All Wells, Even Years
Cobalt, Total	442	70	0.0014	0.11	372	15.84%	**Retain**	Skinner List; All Wells
Copper, Dissolved	1029	222	0.0013	0.15	807	21.57%	Remove	Not Skinner List or MNA Compound
Copper, Total	1607	442	0.0018	0.26	1165	27.50%	Remove	Not Skinner List or MNA Compound
Iron, Dissolved	1033	784	0.0089	750	249	75.90%	Remove	MNA Wells Only; remove from Metals
Iron, Total	1613	1486	0.0089	1400	127	92.13%	Remove	MNA Wells Only; remove from Metals
Lead, Dissolved	1033	338	0.000034	5.06	695	32.72%	**Retain**	Skinner List; All Wells, Even Years
Lead, Total	1552	964	0.000043	0.58	588	62.11%	**Retain**	Skinner List; All Wells
Lead, Total Recoverable	65	25	1.01	19.8	40	38.46%	Remove	Not Skinner List or MNA Compound
Magnesium, Dissolved	863	838	0.14	9200	25	97.10%	Remove	Not Skinner List or MNA Compound
Magnesium, Total	459	415	0.6	5200	44	90.41%	Remove	Not Skinner List or MNA Compound
Manganese, Dissolved	1033	1018	0.00032	76	15	98.55%	Remove	MNA Wells Only; remove from Metals
Manganese, Total	1613	1597	0.00053	81	16	99.01%	Remove	MNA Wells Only; remove from Metals
Mercury, Dissolved	64	0	0	0	64	0.00%	**Retain**	Skinner List; All Wells, Even Years
Mercury, Total	1571	437	0.000037	0.0016	1134	27.82%	**Retain**	Skinner List; All Wells
Molybdenum, Dissolved	422	67	0.0062	0.2	355	15.88%	Remove	Not Skinner List or MNA Compound
Molybdenum, Total	432	72	0.0026	0.21	360	16.67%	Remove	Not Skinner List or MNA Compound

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APPENDIX C-2c. TOTAL AND DISSOLVED METALS EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
METALS								
Nickel, Dissolved	426	277	0.0035	4.16	149	65.02%	**Retain**	Skinner List; All Wells, Even Years
Nickel, Total	443	333	0.0025	4.13	110	75.17%	**Retain**	Skinner List; All Wells
Potassium, Dissolved	863	804	0.13	7800	59	93.16%	Remove	Not Skinner List or MNA Compound
Potassium, Total	459	363	0.3	7600	96	79.08%	Remove	Not Skinner List or MNA Compound
Selenium, Dissolved	1025	540	0.00018	35.5	485	52.68%	**Retain**	Skinner List; All Wells, Even Years
Selenium, Total	1560	838	0.00014	0.47	722	53.72%	**Retain**	Skinner List; All Wells
Selenium, Total Recoverable	65	6	9.73	60	59	9.23%	Remove	Not Skinner List or MNA Compound
Silver, Dissolved	1033	380	0.0009	0.033	653	36.79%	**Retain**	Skinner List; All Wells, Even Years
Silver, Total	1618	380	0.00046	0.039	1238	23.49%	**Retain**	Skinner List; All Wells
Sodium, Dissolved	862	862	0.5	120000	0	100.00%	Remove	Not Skinner List or MNA Compound
Sodium, Total	459	459	16	99000	0	100.00%	Remove	Not Skinner List or MNA Compound
Thallium, Dissolved	449	10	0.000036	0.00069	439	2.23%	Remove	Not Skinner List or MNA Compound
Thallium, Total	393	55	0.000052	0.00041	338	13.99%	Remove	Not Skinner List or MNA Compound
Thallium, Total Recoverable	65	0	0	0	65	0.00%	Remove	Not Skinner List or MNA Compound
Uranium, Dissolved	873	792	0.000071	162	81	90.72%	Remove	Not Skinner List or MNA Compound
Uranium, Total	1391	1187	0.00007	0.28	204	85.33%	Remove	Not Skinner List or MNA Compound
Uranium, Total Recoverable	65	27	10.6	166	38	41.54%	Remove	Not Skinner List or MNA Compound
Vanadium, Dissolved	11	6	0.0022	0.045	5	54.55%	**Retain**	Skinner List; All Wells, Even Years
Vanadium, Total	18	11	0.00091	0.07	7	61.11%	**Retain**	Skinner List; All Wells
Zinc, Dissolved	1033	874	0.0026	0.62	159	84.61%	**Retain**	Skinner List; All Wells, Even Years
Zinc, Total	1618	967	0.0027	1.1	651	59.77%	**Retain**	Skinner List; All Wells

mg/L - milligrams per liter

MNA - Monitored natural attenuation

Notes:

Bolded analytes are being retained on the analyte list

Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

APPENDIX C-2d. GENERAL CHEMISTRY EVALUATION
WESTERN REFINING SOUTHWEST LLC, D/B/A MARATHON GALLUP REFINERY, GALLUP, NEW MEXICO

CONSTITUENT	TOTAL NUMBER OF SAMPLES	TOTAL NUMBER SAMPLES DETECTED	LOWEST DETECTION (mg/L)	HIGHEST DETECTION (mg/L)	TOTAL NON-DETECT	% DETECTED	RETAIN OR REMOVE	COMMENTS
GENERAL CHEMISTRY								
Ammonia	37	5	0.067	1.13	32	13.51%	Remove	Not Skinner List or MNA Compound
Bicarbonate	36	36	147	1200	0	100.00%	Remove	Not Skinner List or MNA Compound
Biochemical Oxygen Demand	214	207	2.35	1600	7	96.73%	**Retain**	Evaporation Pond Samples Only
Bromide	1283	1164	0.034	380	119	90.72%	Remove	Not Skinner List or MNA Compound
Bromide, dissolved	2	2	0.85	0.92	0	100.00%	Remove	Not Skinner List or MNA Compound
Chemical Oxygen Demand	202	201	10.3	14000	1	99.50%	**Retain**	Evaporation Pond Samples Only
Chloride	1328	1328	1.4	250000	0	100.00%	Remove	MNA Wells Only; remove from General Chemistry
Chloride, Dissolved	2	2	1900	2000	0	100.00%	Remove	Not Skinner List or MNA Compound
Coliform, E-Coli	170	161	1	24200	9	94.71%	**Retain**	Evaporation Pond Samples Only
Cyanide, Total	125	45	0.00805	0.111	80	36.00%	**Retain**	Skinner List; All Wells
Fluoride, Dissolved	2	2	0.89	0.98	0	100.00%	Remove	Not Skinner List or MNA Compound
Fluoride, Total	1328	935	0.049	270	393	70.41%	Remove	Not Skinner List or MNA Compound
Hexane Extractable Material	3	3	15	29	0	100.00%	Remove	Not Skinner List or MNA Compound; Will Use TPH ORO
Nitrogen, Nitrate	727	282	0.014	35.6	445	38.79%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrate & Nitrite	664	174	0.068	62	490	31.17%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrate, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Nitrogen, Nitrite	682	43	0.066	53	639	6.30%	Remove	MNA Wells Only; remove from General Chemistry
Nitrogen, Nitrite, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Ortho-Phosphate	1032	76	0.16	12	956	7.36%	Remove	Not Skinner List or MNA Compound and <10% detection
Orthophosphate as P, Dissolved	2	0	0	0	2	0.00%	Remove	Not Skinner List or MNA Compound and <10% detection
Phosphorus, Ortho	250	26	0.0668	1.9	224	10.40%	Remove	Not Skinner List or MNA Compound
Phosphorus, Total	37	13	0.111	2.88	24	35.14%	Remove	Not Skinner List or MNA Compound
Solids, Total Suspended	39	35	9	4180	4	89.74%	Remove	Change to field measurement of turbidity
Sulfate	1328	1221	0.14	57000	107	91.94%	Remove	MNA Wells Only; remove from General Chemistry
Sulfate, Dissolved	2	2	330	390	0	100.00%	Remove	Not Skinner List or MNA Compound
TPH DRO	1440	758	0.072	42900	682	52.64%	**Retain**	Site Wide COC; All Wells
TPH GRO	1437	1021	0.0068	84600	416	71.05%	**Retain**	Site Wide COC; All Wells
TPH ORO	1431	21	1.5	6410	1407	1.22%	**Retain**	Site Wide COC; All Wells

COC - Constituent of concern
DRO - Diesel Range Organic
GRO - Gasoline Range Organic
mg/L - milligrams per liter
MNA - Monitored natural attenuation
ORO - Oil Range Organic
P - Phosphorus
TPH - Total Petroleum Hydrocarbon

Notes:
Bolded analytes are being retained on the analyte list
Skinner List - United States Environmental Protection Agency. (1997). "Region 5 Waste Management Branch "Skinner List" Consitituents of Concern for Waste from Petroleum Processes"

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Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 202665

CONDITIONS

Operator: Western Refining Southwest LLC 539 South Main Street Findlay, OH 45840	OGRID: 267595
	Action Number: 202665
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
scwells	Accepted for Record Retention Purposes Only	3/31/2023